RFID-based Blood Bag Monitor Research

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning

Sincerely

Yucheng Zhou

Acknowledgement

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Abstract

Medical errors occur during the blood transfusion are considered to be a major issue in the healthcare industry and may lead to a fatal consequence to the patient life. RFID technology is a feasible solution for this kind of issues. It provides both tracking and identification methods to ensure the quality of the blood products during the storage and transportation as well as the patient safety in the transfusion.

In this research, we adopted the design science and experiment testing methodologies to create four different experiments in order to evaluate the performance of RFID technology in the blood bag storage phase. Some fundamental properties of the proposed RFID system has been tested in a simulated hospital blood bank situation, including the maximum detection range of tags and the maximum readable number of tags. Moreover, the best location for attaching the tag has been defined as well as the impact of the liquid on RFID has been measured. In addition, two different storage methods have been applied to the experiment so as to figure out a better one for the blood bag identification.

The positive results of the experiment results indicate that RIFD technology can monitor the blood location during the fridge storage in the blood bank. Besides, some of the factors which may affect the performance of RFID system have been mentioned in this study. Also, a RFID-base fridge has been proposed and the next process in the blood transfusion has been designed in the future work.

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List of Abbreviations and Acronyms

AIDC: Automated identification and data capture systems

BCMA: Barcode medication administration

DSMR: Design Science Methodology Research

EAS: Electronic Article Surveillance

ER: Emergency Room

HF: High Frequency

HIS: Hospital Information System

ICT: Information and Communication Technologies

IEC: International Electrotechnical Commission

IFF: Identification of Friend or Foe

ISDT: Information Systems Design Theories

ISO: International Standards Organization

LF: Low Frequency

LTS: Location Tracking System

PMTS: Patient Management and Tracking System

POA: Point of Act

RF: Radio Frequency

RFID: Radio frequency identification

RHMS: RFID-based Healthcare Management System

ROI: Return on Investment

UHF: Ultra High Frequency

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Chapter 1. Introduction

Medical errors are believed to be one of the major issues in the healthcare industry. A report written by the Institute of Medicine of the National Academies pointed out that approximately 1.5 million people are injured annually because of medical errors. 400,000 of these errors are drug-related and can be prevented from happening in the hospital (Liss, 2006). Among them, blood transfusion errors are considered a serious form of medical error and have long been a main concern for hospitals. Generally, an ABO transfusion error may occur at a frequency of 1 in 13,000 transfusions. (Dzik et al., 2003). According to MacIvor, Triulzi, & Yazer (2009), the New York State Department of Health received 54 reports of ABO-incompatible blood transfusions across 22 months, three of them had deadly consequences. Based on these figures, the ABO incompatible transfusion-related deaths are estimated to be more than 40 every year in the United States. One of the main issues in blood transfusion is that the blood products are not labeled correctly. Sharma, Kumar, & Agnihotri (2001) indicated that almost 80% of the blood transfusion errors are related to bedside errors or labeling errors. Moreover, blood requests received by the New Zealand Blood Service between 2006 and 2007 demonstrated that the overall error rate of the blood samples are 4.1%. (NZblood, 2009), whereby 52.7% of them are label-related issues. Most of these problems are caused by human factors. This is because the blood handling process includes several manual steps (Dalton & Rossini, 2005).

Automated identification and data capture systems (AIDC) are considered feasible solutions for reducing human errors and ensuring patient safety during the blood transfusion process in the hospital. Two different technologies have been used in the healthcare field; these are barcode and Radio frequency identification (RFID). Barcode technology has been widely adopted for decades and has been proved its capability of decreasing the transfusion errors. However, some limitations have been found in this technology and impede its expansion. Compared to the barcode system, RFID has plenty of advantages. First, RFID does not require line-of-sight. Second, it can read multiple tags simultaneously. Third, the chip memory is much larger, which can contain more information in the tag (Davis, Geiger, Gutierrez, Heaser, & Veeramani, 2009). Besides, the RFID system can also improve workflow, save time and cost as well as reduce the possibility of equipment thefts in the hospital.

In order to assure the blood products' efficacy and safety, they must be kept at precise temperatures during transport and storage. However, due to the patient needs, the blood units may be removed from the refrigerator and returned for several times. According to ShockWatch (2013), poor temperature management in the cold chain led to the loss of two percent of all the blood anually. So temperature control is the key to ensure the

blood quailty. Swedberg (2014) reported that the RFID technology could reduce the blood waste and saved around US$ 515,500 per year in the blood banks. Since, RFID can not only reduce human errors but also reduce blood waste, the implementation of RFID technology in blood tracking is a decent subject for research.

1.1 Research Objective and Questions

The aim of this research is to propose an RFID-based solution for blood tracking, more precisely, for the beginning stage of blood bag storage in the hospital blood bank. To achieve this objective, many academic resources regarding the fields of RFID technology in healthcare are explored. Although some articles discuss the related blood tracking area, hardly any of them describe how RFID systems are deployed during the blood bag storage stage. Moreover, the implementation of RFID technology is an under-researched area for New Zealand hospitals. Hence, it is a suitable research objective. A simulation consisting of several experiments are conducted to answer the following research questions.

1.   Can the blood bag location be monitored by RFID systems in the blood bank?

The answer to this question will indicate whether RFID technology is a feasible solution for monitoring the movement of blood bags. If the question can be answered positively, we can then think about the next question.

2.   How can the movement of Blood bags be monitored in and out of fridges?

This question leads us to create a suitable experiment to evaluate the proposed solution.

3.   What kind of factors may influence the performance of an RFID system in the blood bank?

The last question is used to unveil the possible elements that may alter the accuracy of the proposed RFID system. These findings can then contribute to further studies in this area.

1.2 Thesis Structure

The structure of this thesis consists of six chapters, which begin with the chapter of introduction.

Chapter 2 presents a literature review that gives an overview of RFID, implementation in the healthcare area, the benefits of and barriers to RFID deployment as well as some case studies of RFID-based blood tracking.

Chapter 3 selects appropriate research methodologies for this study. The advantages of these chosen methodologies are explained in this chapter. Additionally, how our research is related to each step of the process model is also described in detail. Moreover, how the equipment applied in the experiments was decided upon is discussed in the section part of the chapter, followed by explanations of the reader setup, the scenario setup and the experiment procedure for each experiment.

Chapters 4 demonstrates the results of all four experiments and compares the outcomes of different storage methods.

Chapter 5 summarizes the entire research. The research questions we proposed in the first chapter are answered and the limitations of experiments are also discussed.

The last research chapter, Chapter 6 describes the design for improvement of the solution as well as the next step of the whole RFID blood transfusion system.

Chapter 2. Literature Review

In Section 2.1, an overview of RFID technology is described. It includes discussions of the background of RFID, the components of RFID, the frequency it adopts and its usage in the cold chain area. Section 2.2 presents some of the RFID implementations within the healthcare industry. Section 2.3 demonstrates the advantages and drawbacks of the RFID adoption in healthcare. While Section 2.4 studies the use of RFID technology in blood tracking.

2.1 RFID System Overview

Radio frequency identification (RFID) is a subset of a group that refers to a variety of information technologies that can help the computing system to identify objects, locations and persons automatically. RFID uses electromagnetic radiation to identify entities through the air interface without any physical intervention (Knels, Ashford, Bidet, Böcker, Briggs, Bruce, ..., et al., 2010; Kumar, Livermont, & McKewan, 2010; Roussos, 2008; WITSA, 2006). It has aroused considerable interest within a large number of different fields, such as Retail, Security, Public Transportation, Banking and Healthcare. The attraction of this application is that it can increase security, enhance access control and reduce labor requirements (Yang, Rida, Traille, & Tentzeris, 2008).

2.1.1 Brief background of RFID

The concept of RFID technology can be traced back to the early 1900s when Ernst F.W. Alexanderson illustrated the continuous radio wave and signal transmission (Landt, 2005). RFID can be thought of as the combination of radio technology and radar. One of the first applications that utilized RFID was the IFF (the Identification of Friend or Foe) system developed for military aircraft during World War II (Scherjon, 2011).

The commercial use of RFID emerged during the period between the 1960s and 1970s. Three companies (Sensormatic, Checkpoint and Knogo) created an electronic article surveillance (EAS) device to prevent the theft of merchandise. This equipment used the microwave frequency (a type of radio frequency) to detect the presence of the tag (Ustundag, 2013). The rapid development of RFID technology accelerated from the 1970s onwards, at which time developers, inventors, firms, colleges and governments started to focus on RFID applications. Researchers were able to reduce the size, power

consumption and cost of the RFID system as well as increase its reading range (Srivastava, 2005).

An increasing commercial demand for RFID technology has forced the need for standards. During the 1990s, many standardization procedures were initiated by the International Standards Organization (ISO) and the International Electrotechnical Commission (IEC). Other radio frequencies such as low frequency (LF), high frequency (HF) and ultra high frequency (UHF) were used in RFID applications during this decade (Chawla & Dong Sam, 2007).

A large-scale adoption of RFID technology occurred during the first decade of the 21st century when companies like Wal-Mart began to recognize the advantage of RFID for the business supply chain (The Economist, 2003). The EPC global standard was released in 2005, and currently, more than a thousand Wal-Mart stores have already deployed the RFID system according to this standard (Chawla & Dong Sam, 2007).

2.1.2 Components of RFID System

A typical RFID system usually contains three components. This includes a transponder to carry data (the RFID tag), an interrogator the read the data transmitted from tag (the RFID reader) and a host computer to store and analyze the data. Figure 2.1 presents an example of the RFID system. The host computer acts as an interface between the RFID system and user applications. The focus of this section will be on the RFID tag and reader.
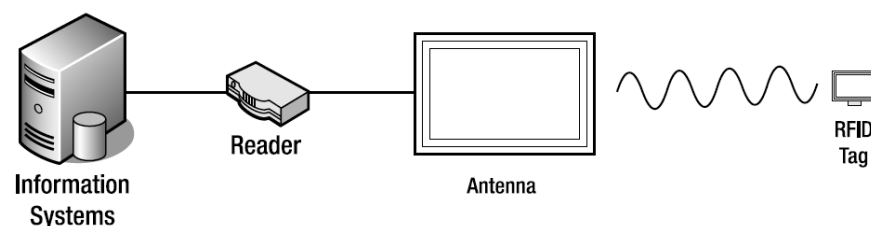
Figure 2.1 Example of RFID system

2.1.2.1 RFID Tag

RFID tags usually consist of two main elements: the antenna and digital circuitry. Physical packaging such as a paper label or plastic shell always surrounds the integrated circuit in order to protect these physical parts. The reading range is determined by the

antenna. Two kinds of aerials are primarily adopted for radio frequency transmission; one is linear, and the other one is circular. The former generally has twice the reading range of the latter at any given power level, but is very sensitive to the orientation of the tag (Beckner, Simms, & Venkatesh, 2009). Figure 2.2 demonstrates examples of RFID tags.
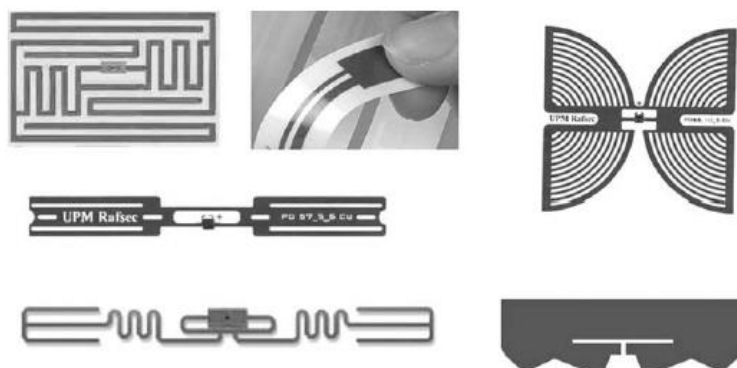
Figure 2.2 Different types of RFID tags

RFID tags can be classified into different categories based on criteria that affects the properties of the tag. A common way to distinguish them is on the basis of their power source: Passive, Semi-Passive and Active (Glover & Bhaṭṭa, 2006).

Passive RFID tags do not have their own power supply. They harvest the power required for their internal circuits from radio frequency (RF) signals generated by the RFID reader. Because of this, they have a shorter reading range than active tags. These tags can only be operated when the interrogator transmits energy. On the other hand, because they have no internal power supply, there is no electrical expiration in passive tags. This gives the tag an almost infinite working life. Moreover, since they require no additional parts other than essential components, the cost of producing passive tags is very low.

Active RFID tags, however, contain built-in batteries to power the tags themselves. These tags have a longer range and larger memories than the passive tags. Active tags can also be used in harsh environments and have a strong resistance to radio frequency pollution. Furthermore, additional sensors can be added to the active tags so that they can monitor temperature, humidity and physical shock. That said, active tags are larger than passive tags and their cost is approximately 100 times higher than passive tags. Although their battery life may last up to several years, the tags stop working when the batteries lose power (Curty, Declercq, Dehollain, & Joehl, 2007; Kabachinski, 2005; Weinstein, 2005).

The third type of RFID tag is called a semi-passive tag. It also has a built-in battery. However, unlike active tags, they do not use battery energy to transmit the signal to the

reader. The battery is utilized to power the addition function, which acts as a sensor, and then record the data extracted from it. Hence, they adopt the same reading method as passive tags, but with a higher transfer speed (Kumar, Reinitz, Simunovic, Sandeep, & Franzon, 2009; Lozano-Nieto, 2010).

2.1.2.2 RFID Reader

The RFID reader, also recognized as an RFID interrogator, is essentially a radio frequency transmitter and receiver. It captures data from the RFID tags and uploads the material to the host computers for further processing. The reader is controlled by a microprocessor or digital signal processor. This control unit is also used to encrypt and decrypt the signal from the tag. It usually connects with one or more antennae that emit radio waves to trigger RFID tags as well as read and write data (Brown, 2007).

Types of RFID reader vary, based on its size and features. The reader can be mounted in a fixed place such as dock doors in a warehouse or beside a conveyor line in a factory. It also can be made into a portable device for mobile usage. However, this kind of reader has a short detection range due to its small antenna (Kator, 2008; Zebra, n.d.).

2.1.3 Frequency range of RFID

The operating frequency of RFID technology can normally be divided into four classes: Low Frequency (LF), High Frequency (HF), Ultra-High Frequency (UHF) and microwave frequency. The reading range and adoption area of an RFID system varies according to its frequency. Table 2.1 shows the features of each frequency.

Frequency range	135 KHz [LF]	13.56 MHz [HF]	860–960 MHz [UHF]	2.45GHz [Microwave]
Relevant standards	ISO 11784 & 11785 ISO/IEC 18000-2 SO 14223-1	ISO/IEC 18000-3 EPC class-1 ISO 15693 ISO 14443 (A/B)	ISO/IEC 18000-6 EPC class-0, class-1	ISO/IEC 18000-4

Typical read range	<0.5 m	~1 m	~4–5 m	~1 m
Tag type	Passive-inductive coupling	Passive-inductive coupling	Passive or active	Passive or active
Typical applications	Access control, animal tagging, vehicle immobilizer	Smart cards, access control, payment ID, item-level tagging, baggage control, biometrics, libraries, transport, apparel	Supply chain pallet- and box-level tagging, baggage handling, electronic toll collection	Electronic toll collection, cold chain management, environment monitoring

Table 2.1 Features of Radio Frequency (Lewis, 2004)

2.1.4 RFID Cold Chain

'Cold chain' refers to a supply chain system that maintains a low-temperature environment for perishable products. Food and Pharmaceutical products are the main industries for this context. Managing the cold chain usually requires a huge investment in equipment to maintain the temperature at a storage or transportation stage. A key issue for the cold chain is the lack of an effective real-time information system. RFID technology can address this by providing a dynamic information exchange at item level. It can transmit and store environmental data about the product in cold chain, without any delay (Rollo & Gnoni, 2010).

Abad et al. (2009) ran a test to track chilled fish in South Africa. Since RFID tags can resist the temperature of frozen foods, it can be a very useful means of tracing whether the temperature is maintained at an acceptable level as the product moves between the producer and the consumer. Because of the extreme environment, the tags had to be protected by IP65 standard housing boxes before being put into the boxes full of fish. Those tags were placed inside the box to make sure of the accuracy of real-time detection. Both temperature and relative humidity were measured from outside without

any need to open the box. In this case, the logistic chain was able control the food safety during the transportation.

The adoption of RFID in cold chain can not only ensure the quality of goods but also improve customer satisfaction. However, there are still challenges to deploying this technology. Cost is a big issue and the lack of global standards is another concern (Silvia & David, 2008).

2.2 RFID Applications in Healthcare Domain

The healthcare sector nowadays has gained a lot of benefit from the effective use of Information and Communication Technologies (ICT) in areas such as optimizing patient data access, monitoring public health trends and creating high-tech jobs, which leads to a better service for ubiquitous healthcare. This concept is based on the idea of healthcare for everyone, at anytime and anywhere, improving both the coverage and quality of healthcare. (Payton, Pare, Le Rouge, & Reddy, 2011; Varshney, 2005). In recent years, RFID has played an important role in widening healthcare innovation. According to Frost and Sullivan, the investment of healthcare industries in RFID technology will increase the scale of innovation approximately six-fold within seven years (Barnes, 2006).

Several literature reviews have classified the current applications of RFID technology within the healthcare field (Cheon-Pyo & Shim, 2010; Iadanza, 2009; van Oranje-Nassau et al., 2009; Wamba, Anand, & Carter, 2013; Yao, Chu, & Li, 2012). There is no industry-wide consensus on the classification and researchers operate with different understandings of the category. Hence, only some of the common applications are summarized in the following paragraphs along with a description of their implementation. These applications are Asset Management and Identity Management.

2.2.1 Asset Management

Asset and equipment tracking is believed to be one of the most common applications of RFID technology in healthcare (Wamba, Anand, & Carter, 2013). Industry experts have highlighted an estimated expense of $4,000 per hospital bed each year due to the theft of hospital devices and supplies. With over 975,000 beds in the U.S., the total cost of these losses reached approximately $3.9 billion (van Lieshout et al., 2007). Asset management usually comprises two parts: asset localization and asset monitoring. Both are used to track and maintain the position and status of valuable hospital equipment.

The adoption of an RFID asset tracking system can reduce this kind of loss by improving the visibility of these medical devices, which then enhances cost efficiency within the healthcare industry.

Shirehjini, Yassine, & Shirmohammadi (2012) adopted a Passive RFID-based positioning system for tracking medical equipment. In their design, the RFID tags were embedded into the floor plate in grid form to indicate coordinates. Meanwhile, the RFID reader was attached under the mobile object to capture location and orientation data. This system has optimized implementation while at the same time maintaining the accuracy of detection. However, when coverage increases, more sensors need to be installed, which leads to an additional expense for the system.

Mun, Kantrowitz, Carmel, Mason, & Engels (2007), on the other hand, utilized an Active RFID system to track equipment such as infusion pumps, beds and wheelchairs. As a result of comparisons between the detection range and reaction speed request, they came to the conclusion that a passive RFID system was limited by its need to extensively deploy readers. Since active tags have a much better performance than passive tags, their design could instead minimize the number of readers required in the hospital.

2.2.2 Identity Management

Identity management is another important area for the deployment of RFID systems in the healthcare sector. It mainly concentrates on identifying, tracking and monitoring people within the hospital. The people tracked can usually be separated into two classes; staff, and patients. Staff-related RFID systems can improve the scheduling and utilization of hospital staff, reduce human error, optimize workflow, save labor and manage the administration of drug procurement.

The focus of the Patient-related RFID system is to prevent misidentification and enhance patient safety. The RFID tags are usually attached to patients on their wristband for individual tracking and locating. The importance of using patient identification can be revealed through its advantage over other methods of recording patient information. Tags can store information directly extracted from patients and can be easily displayed by the RFID reader. Although other methods of patient information recognition can be easily implemented, such as verbal statements and handwritten notes, they are more likely to lead to confusion due to mistakes in human memory and the incorrect translation of written records.

A Patient Management and Tracking System (PMTS) was developed by Kim, Kim, Kim, and Yoo (2008) in order to track the location of patients. They also added another

function to manage the examination room waiting list according to tag detection at the entrance. In this instance, the patient ID was automatically inserted or removed from the waiting-list system. The system has proved its efficiency, but there are still some issues that need to be overcome. First, is the cost involved in implementing such a system and a second issue is privacy. Since patient information is stored in the tag, there is potentially a concern about the inappropriate use of personal information.

Similarly, patient identification can be very useful especially in the most important department within the hospital, the emergency room (ER). It is the place for the treatment of patients with accident injuries or serious sicknesses. Those people must receive appropriate treatment and care from both physicians and nurses as soon as possible. Different levels of medical needs are frequently requested on a daily basis (Huang, Chu, Lin, & Kuo, 2010; Pérez et al., 2012). RFID technology can successfully detect the patients' position and reduce the excessively long waiting time before treatment. Moreover, it can capture every patient's departure to improve the workflow of the ER department. Hospital personnel have positively evaluated adoption of the RFID system. Both researchers pointed out that the RFID system should be customized for a particular environment in order to attain high levels of productivity

Other applications of RFID technology deployed in the healthcare domain include Inventory Management and Sensing. Blood Tracking can be considered a subset of Asset Management and is discussed in Section 2.4.

2.2.3 RFID Implementation

RFID technology can be integrated into the existing Hospital Information System (HIS) to improve the efficiency of procedures in the hospital. However, the implementation of such system may vary due to the specific requirement of each hospital. Several methods of deploying the RFID system are described below.

In 2009, a comprehensive four-phase approach to designing and implementing an RFID-based blood tracking system was conducted by Davis, Geiger, Gutierrez, Heaser, & Veeramani. The first stage of this method was to investigate the current process and workflow of an existing hospital system in order to estimate the feasibility of deploying RFID applications. In the second phase, a prototype was developed and tested in the lab environment to ensure its functionality. After that, the system had a pilot test that was held in a realistic hospital area. Once the system verified the benefit to blood transfusions, it was deployed across the entire hospital. This method offers a more empirical way to develop an RFID system.

Although RFID is used to strengthen the efficiency of hospital functions, dramatic changes may occur when integrating this technology with the existing hospital system. A group of researchers (Fisher & Monahan, 2008) adopted unstructured participant observation and interview methodologies to analyze these issues. These qualitative research methods had a great advantage over quantitative methods because they were able to obtain information from areas that do not have much practical data available. Therefore, everyday routines within the hospital were easily identified. The results indicated that there were two main constraints preventing the hospital from adopting an RFID system. First was that the system itself could not meet the specific requirements of hospitals. Systems provided by vendors are standardized, thus restricting modification. However, the different needs of various hospitals may have been caused by a number of factors. The other issue was that staff in the hospital were not prepared to use the new system. Instead of increasing operational efficiency immediately, most hospitals were forced to employ technicians or train their staff to master the system in the first instance. As with other reviews, the researchers suggested that the RFID system should be customized to suit the needs of each hospital. This approach provided a sociological perspective on understanding the issues when implementing the RFID system within a hospital.

2.3 Benefits and Barriers of RFID Adoption in Healthcare Industry

2.3.1 Benefits

As mentioned in the previous section, RFID applications have been adopted to solve difficult issues within the healthcare sector. In order to examine the business value of RFID technology, the benefits of implementing this kind of system should also be considered. Some of these benefits are listed below.

2.3.1.1 Cost and Time Saving

As healthcare expenses increase, questions of how to reduce costs within the hospital domain become a major task for industry experts. RFID technology can be utilized to track valuable medical equipment and assets in order to reduce the expenses of device loss or theft. According to Agility Healthcare Solutions CEO Fran Dirksmeier, a 200-bed hospital can save around U.S. $600,000 per year from less shrinkage and fewer rentals (Wicks, Visich & Li, 2006).

Moreover, it can improve the productivity of hospital staff. With RFID-tagged equipment, medical personnel can spend less time finding equipment and therefore make more extensive use of these devices (Glabman, 2004). In addition, staff can identify the patients' positions in real-time as well as being able to more effectively and precisely monitor their examination and medical treatment. Hence, staff can take care of more people during their daily activities. When comparing the RFID system to the common paper-based hospital system, researchers indicated that the time for completing work was dramatically reduced, especially when administrating the blood transfusion process. Furthermore, since RFID tags can be erased and written thousands of times, they can be reused after high-temperature sterilization (Cerlinca, Turcu, Turcu, & Cerlinca, 2010).

2.3.1.2 Improve Patient Safety

Patient safety is considered the most vital part of the healthcare domain. As highlighted by Vanany and Shaharoun (2008) each year more than 40,000 patients die due to medical errors caused by both humans and systemic issues. RFID applications can be applied to improve patient safety by matching and confirming the right process with the right treatment for the right patient (Wang, 2010).

For instance, Ohashi, Ota, Ohno-Machado and Tanaka (2010) designed an RFID-based point of care system using a combination of active and passive RFID tags to monitor medicine administration and blood transfusions at patient's bedsides. Compared to the existing Barcode medication administration (BCMA) system, an RFID system can give immediate access to patient information, even if the tags are under the blanket while patients sleep. The system can also automatically respond to interrupted or canceled administrations, which can prevent medical errors and the subsequent risk of harm for patients.

Moreover, RFID technology can send automatic notification to physicians when detecting possible human errors before the situation becomes dangerous (Cangialosi, Monaly, & Yang, 2007). Several researchers indicated that RFID tags have been attached to surgical medical products to avoid items being left inside a patient's body during surgery (Koschan, Li, Visich, Khumawala, & Zhang, 2006; Nath, Reynolds, & Want, 2006). In addition, equipment and assets can be easily found with the help of RFID tags, so that a patient's life may be saved in the case of an emergency.

2.3.1.3 Improve Workflow

Since information can be automatically recorded on the RFID tags during medical transfusion procedures, the location of patients and medical equipment can be detected and analyzed. Thus, difficulties in the current workflow of the hospital can be discovered and the process of medical treatment can then be optimized (Kumar Livermont & McKewan, 2010).

The case studies of Tzeng, Chen and Pai (2008) revealed that RFID systems can be used to record doctor and patient treatment times. Thus, the distribution of manpower can be improved. When the RFID is given to the patient, all of the patient's information has already been linked to the hospital information system. In this case, the doctors can make important decisions immediately because they can access the patient's health history. The procedures of the Emergency Room (ER) are always urgent. With an RFID system, hospital personnel can be reminded to move on to the next patient as soon as possible. Therefore, patients that have lower priority status do not need to wait too long in provisional observation areas. This can increase the satisfaction of patients. Moreover, many manual operations such as data entry and current status display can be eliminated by implementing an RFID system.

2.3.2 Barriers

Despite those benefits mentioned above, the implementation of an RFID system within the healthcare field still faces many barriers. Apart from the common issues experienced when developing any information system, hospital RFID systems often contain sensitive personal data and have to be deployed in highly hygienic conditions, which makes the development of such systems more challenging. Some of the main barriers to deploying these systems are outlined in the following section.

2.3.2.1 Technology Limitations

Technical limitations are one of the main factors that slow down the phase of RFID adoption within the healthcare domain. First, the hospital environment is a place that includes a large number of different radiation-emitting medical devices, such as X-ray machines, MRI units and pacemakers. Hence, the potential for interference between the RFID system and other electromagnetic devices may affect implementation of the technology in hospital areas. The adoption of wireless systems within healthcare is limited for the same reasons (Buyurgan, Landry, & Philippe, 2013). A survey conducted by Ashar and Ferriter (2007) revealed that RFID technology sharing the

same frequencies with WPAN devices that may lead to interference within dense wireless environments. Houliston (2005) stated that devices like surgical diathermy machines generate high levels of EMR and may override the transition signal from low-power RFID readers.

Second, the lack of industry standards is another major challenge for RFID deployment in hospitals. RFID readers have not yet been standardized (Cheon-Pyo & Shim, 2010; Reiner & Sullivan, 2005). Different countries adopt different UHF frequency bands according to their own frequency standards. Furthermore, the implementation of RFID technology has not been generalized, it varies from system type (active and passive) to frequency band (i.e., HF, UHF, microwave, etc.) throughout the industry (Buyurgan, Landry, & Philippe, 2013). Hospitals may have to purchase multiple RFID systems and thus have difficulties maintaining compatibility.

2.3.2.2 Financial Issues

Cost is another major factor that interferes with the acceptance of RFID technology. Although the prices of RFID products have reduced in recent years, deploying such systems still require a huge investment right from the start and may be too expensive for those hospitals with limited budgets. The cost normally comprises hardware (including server, database, RFID readers etc.), software, middleware, RFID tags, the expenses of integrating RFID system with existing hospital information system, as well as staff training (Coustasse, Tomblin, & Slack, 2013; Ngai, Moon, Chan, Yeung, & Lee, 2010; Angela M. Wicks, Visich, & Li, 2006).

At present, even passive RFID tags are more expensive than barcodes, not to mention the charging of active RFID tags. Al Nahas & Deogun (2007) consider that RFID hospital applications that can tag all medicines at dose-level may not be feasible due to the cost of tags. Besides, system maintenance such as replacing active tags may also entail substantial cost. Furthermore, those hospitals that have either older infrastructures or an incomplete wireless network will suffer more when adopting such technology. The return on investment (ROI) is quite unclear and usually requires a long-term payback period (Ting, Kwok, Tsang, & Lee, 2011).

2.3.2.3 Privacy Issues

Invasion of privacy is also a key issue when building the RFID system (Zare Mehrjerdi, 2010). Since each tag has a unique ID, if the data is accessible via this tag ID, people

who know the tag data can obtain the personal information of the patient, including name, address, therapy program, illness etc. All of this data is highly sensitive. Researchers are already aware of these issues and are trying to design security protocols to enhance patient information safety (Chien, Yang, Wu, & Lee, 2011). However, the violation of privacy is still a possibility with these kinds of proposed protocols. Hence, certain levels of encryption are needed to protect the data. Najera, Lopez, & Roman (2011) suggest using dynamic authentication keys for the tags which should be periodically changed. Reading devices should have a local cache containing the latest keys, which can be valid for a certain time before expiration. Users should also approve authentication before accessing their information. However, this kind of security option may increase the cost of RFID tags or readers (Wicks, Visich, & Li, 2006). Besides, the communication between RFID readers and patient tags can be vulnerable because the forward channel is much longer then than the backward channel (Weippl, Holzinger, & Tjoa, 2006). Similar to authentication keys, tag IDs should constantly be updated to prevent them from being tracked.

2.4 RFID in Blood Tracking

Blood transfusion has been a common life saving approach for the treatment of patients with severe conditions and in need of blood from others (Torpy, Lynm, & Golub, 2012). Despite the development of modern technology significantly facilitating the process of blood transfusion, risks such as the mismatch of blood type and disqualification of blood quality still exist. The misuse of blood bags could cause serious inconvenience including the transmission of infectious diseases such as AIDS and the rejection of blood transfusions. The employment of RFID technology in healthcare is an appropriate solution for enhancing patient safety and improving the efficiency of blood transfusion (Knels et al., 2010).

2.4.1 Blood Transfusion Model

Hohberger, Davis, Briggs, Gutierrez, & Veeramani (2012) have demonstrated a typical blood transfusion model based on RFID technology. Their system included the whole process of blood transfusion, from donation sites to hospital transfusion sites. The procedure was separated into three main stages: donation site, blood center site and transfusion site.

The blood was first collected at the donation site. Both the blood bag and the transfer containers had already been tagged. A portable terminal was used to initialize the tag.

The donator's information was assigned to the tag of the blood bag while the container's tag recorded all of the blood bags that were put inside it. Both the tag data of the blood bag and the container was sent to a temporary mobile database, ready to transfer to the blood center database for an automatic check-in.

After the container arrived at the blood center, the readers ran a donation check on both the RFID tags of the container and the blood product. This saved over 2000 hours of labor per year when compared to the barcode system. This is because the barcode system needed to record the donation one by one while the RFID system allowed multiple readings simultaneously. Then the product was labeled and stored in inventory. Meanwhile, its information was uploaded to a database that allowed the blood center and hospital to exchange blood storage information.

The last step of the process occurred at the hospital site, which included the range of activities from blood bank storage to transfusion at the patient's bedside. Since the whole process of blood transfusion occurs on an extremely large-scale, our research is mainly focused on this part of the process. Because blood bags have already been tagged in the blood center, the blood bank in the hospital can use the same storage procedure (check in, inventory management) as the blood center. A three-way matching operation is required for the RFID system. Patient information, transfusion order and the right blood unit needs to be matched before the transfusion. Figure 2.3 illustrated the whole process in this part. Usually, when a nurse scans the patient wristband, an inquiry has been sent the hospital information system to find out whether an approved transfusion order has been made for the patient. Once the order is confirmed, patient information is then assigned to the blood unit. Before transfusion, a handheld reader is utilized at the bedside to compare the data from blood products to information on the patient's wristband. When the transfusion process is finished, the result is updated onto the wristband at the same time as data on the tag of the blood bag is deleted.
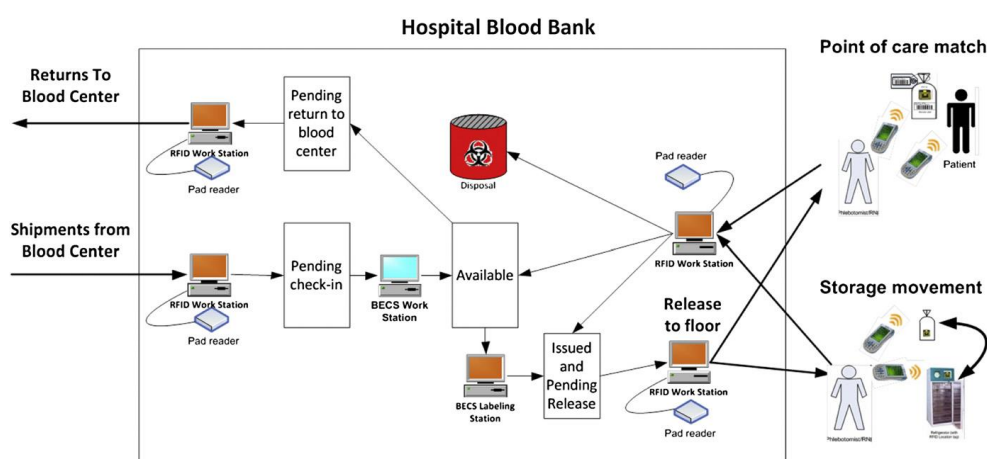
Figure 2.3 Blood Transfusion Process in Hospital Domain (Hohberger, Davis, Briggs, Gutierrez, & Veeramani, 2012)

2.4.2   Case Studies of RFID-based Blood Tracking

2.4.2.1 Case Study: Bar code and radio-frequency technologies can increase safety and efficiency of blood transfusions.

In order to create an error-free blood transfusion environment, Sandler, Langeberg, Carty, & Dohnalek (2006) proposed two different electronic technology solutions; barcode, and RFID. Since the barcode system is still the main way of monitoring the blood transfusion process within healthcare systems, it is necessary to understand how it works and then compare it with the RFID system.

A barcoding blood transfusion system usually contains a hand-held laser scanner, a label printer to generate the barcode label and software to verify the transfusion process. Once a blood transfusion has been ordered, the nurse prints a unique wristband for the intended patient. Meanwhile, staff generate a barcode label that can be attached to the blood bag afterward. Then, both the transfusion order and the label are sent to the blood bank. The data is then entered into the hospital system. A pilot testing of this system was run in both inpatient and outpatient departments. The results indicated that this technology does indeed facilitate the verification of blood transfusions. However, nurses found it hard to get used to the equipment and software and there was a risk of them losing confidence when transfusions occurred infrequently.

Moreover, researchers used a three-way comparison of bedside "double check" verifications that compared the RFID system with a traditional visual check and barcode scanning in order to evaluate their performance. Although RFID scans take a few minutes longer than a visual verification, they can avoid delay when the second nurse is not available to check their status. Importantly, such a system is faster and more reliable than other barcoding systems in the hospital situations because of its resistance to food spills, crinkles and water during bathing.

2.4.2.2 Case Study: System for tracing of blood transfusions and RFID

Bocchi & Di Giacomo (2007) designed an automatic identification system to track blood products. The fundamental idea of the system was to match every blood bag with a specific patient. The researchers built a system that comprised of independent modules in order to minimize the effort of integration within the existing Hospital Information System.

The system was based on the discontinuous connection between hand-held devices and the information system, because there was a possibility of the process interfering with other medical equipment if the hospital adopted a full-scale wireless network. Essential data was stored on the RFID tag and transmitted to the database when handheld devices were connected to the wired network. The whole procedure was divided into four steps. First, each patient was given an RFID wristband that contained their personal information. Then, a blood unit was attached with an RFID tag that included the prescription and unique patient ID. Third, the system monitored the complete delivery process. When the blood unit was transferred from one operator to another, the tracking system required the identification of both operators as well as the blood container by reading their ID cards and the RFID tag attached to the storage device. Fourth, the system forced a three-way verification of the blood product, the patient and the nurse before the transfusion.

2.4.2.3 Case Study: IT can improve healthcare management for patient safety - minimizing risk of blood transfusion with Point-of-Act-System

Akiyama and Koshio (2011) indicate that current auto-identification technology cannot ensure the safety of patients and blood units. Therefore, they designed a Point of Act (POA) system to minimize the risk of blood transfusion by confirming the five rights of transfusion, ensuring the correct steps of process and enabling the adverse tracking of blood products.

The system extracted the complete data from each medical action. Information was updated in real-time so that the system could manage the hospital instead of estimating the value of its status. Hospital staff were also not allowed to start the next process of transfusion without completing the current step. This ensured that the whole activity was occurring at the right time. Furthermore, the POA system linked the hospital transfusion management server with the public server. Thus, when the nurse detected infected blood products during the transfusion, the system could trace back the source of blood units.

The result of the system evaluation showed that such systems could ensure the traceability of all blood products during the transfusion. The evaluation showed that no medical error occurred during the experiment. Moreover, researchers found that the POA system noticeably reduced the time taken to finish each task as compared to the old paper-based system.

2.4.2.4 Case Study: Using RFID technologies to reduce blood transfusion

errors

Similarly, San Raffaele Hospital proposed an RFID solution to eliminate incorrect labeling as well as manual paper-based identification during blood transfusions (Dalton & Rossini, 2005). However, in this instance the system adopted a wireless network for information exchange. This system consisted of two separate procedures; the Donation part, and the Transfusion part. During donation, the donator is given an RFID-based wristband that contains his personal information. Staff then read and copy the data to the blood bag with a portable RFID reader. After that, they scan their badges to indicate their status as operators. Verification is made twice before and after the donation. In the transfusion phase, nurses at the bedside match the blood product with the patient's wristband twice to guarantee accuracy. If all of the information is consistent, the transfusion is approved for processing. Otherwise, an error is indicated and this prevents transfusion. After the transfusion, information is sent back to the blood center. This study demonstrated several benefits of the designed system. For example, productivity increased by 27%, while work time was reduced by nearly 90 minutes each day. Moreover, the transfusion accuracy improved by an average of 41 percent.

2.4.2.5 Case Study: Location Based Blood Bag Management using active

RFID and Ubiquitous Sensor Network

As mentioned in the previous section, an active tag can extend capability by adding a sensor for temperature monitoring. It is extremely useful for maintaining blood products at a certain temperature in hospitals. Because of inadequate transportation or storage, blood can deteriorate very quickly. Normally, the red corpuscle turns hemolytic within 30 minutes after being taken from a refrigerator and left at room temperature. Hence, it is essential to control blood temperature in order to maintain quality. In our research, we did not use temperature measuring tags due to the cost. But we monitored the location of the blood bags instead (whether inside or outside the fridge). In this case, we can still identify which blood unit might have the possibility of deterioration.

Kim et al. (2007) developed a Location Tracking System (LTS) to improve time and temperature control, as well as the tracking procedure. The transfusion process started with the refrigerator in the hospital blood bank. Once the blood bag arrived at the blood bank, an active RFID sensor tag was immediately attached to the bag. As soon as blood was required for transfusion, the host computer updated the information collected

during storage to the database and activated the sensor to monitor blood temperature during transportation. The sensor connected with the tags via Zigbee RF communications and constantly reported the temperature until it arrived at its destination. With LTS tracking, the host computer was able to update the latest position of the container to HIS and then estimated the arrival time as the tag passed through each detection point. Once delivered, the nurse at a bedside can compare the temperature recorded on the tag with original data in the blood bank to ensure blood quality.

The researchers proved that the system could gather more accurate data than the existing fragmentary management system. It provided a way of monitoring the real-time temperature fluctuation of blood units. However, the researchers also pointed out some limitations of the designed system. For instance, the cost of active tags was excessively expensive, and the battery life was not long enough for practical adoption.

Chapter 3. Methodology

The goal of this research is to investigate the actual usage of an RFID system during the hospital blood transfusion process, especially the storage aspect of the blood bank. In order to create an effective piece of research, a feasible methodology is required for this study. There are two different types of methodologies that have been adopted in this research: Design Science and Experimental Research. Design Science is the main methodology for the research while Experimental Testing is the methodology for evaluating the experiment result. The concept and how we decided to use these methodologies is mentioned in the first part of this chapter.

The second part of this chapter describes the hardware and software we adopted for the experiments. This is followed by the reader setup, scenario setup and the experimental procedure we designed for each experiment.

3.1 Design Science

Design Science is a research methodology for information technology. It is the science that tries to improve existing systems, solve problems or even contribute to better human life through the designed solution. The major task of this methodology is to define problems, then generate and evaluate the solution (Dresch, Lacerda, & Antunes, 2015; March & Storey, 2008). The problem here is not purely knowledge-oriented, but also based on field problems. It is the 'real' situation, which can or should be ameliorated (van Aken, 2013). In order to provide an answer to the problem, an innovative artifact is created so that new knowledge can become a part of the scientific evidence. Moreover, the new knowledge should be integrated with existing knowledge in the field in order to provide some innovative insights (Johannesson & Perjons, 2014b). The IT artifacts can be defined into five classes: constructs, models, methods, instantiations and better design theories (Hevner & Chatterjee, 2010).

Ngai, Poon, Suk, and Ng (2009) created a prototype of the RFID-based Healthcare Management System (RHMS) based on Information Systems Design Theories (ISDTs). This methodology can enhance the reliability of system development and uses principles to guide the design process. The system was built according to the four essential components of ISDT. First, the researchers used kernel theories to deal with the system design requirements. Second, a meta-requirements method was utilized to let the researchers understand the current processes and operational environments within the hospital. After that, they exploited a meta-design approach to build a general framework for the system which is easy to modify. Finally, a design method test was conducted to evaluate the feasibility of the developed system. This approach provided a theoretically grounded basis for building an RFID healthcare system.

Unlike the case study above, the process model of Design Science Methodology Research (DSMR) contains six different stages in a nominal sequence (Ostrowski, Helfert, & Hossain, 2011; Peffers, Tuunanen, Rothenberger, & Chatterjee, 2007). The components of this model is shown in Figure 3.1.
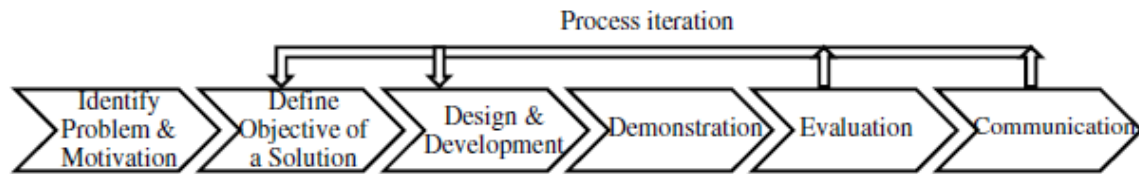
Figure 3.1 DSRM Process Model (Ostrowski, Helfert, & Shuyan, 2012)

Since Design Science is the main methodology adopted in this research, each step of the DSRM Process Model is discussed in detail in the following paragraphs.

Problem Identification and Motivation

According to the DSRM process model above, the first stage is to investigate and define a practical research problem. In our study, problem identification is based on the literature review and the case study we read through in Section 2.3 and Section 2.4.

Solution Definition

In this phase, the analyzed problem is transformed to the outline of a proposed solution. This study was designed to measure the RFID performance of blood storage. Although there was no prototype created in this research, the experiments were considered the basis of the solution. Thus, the requirement of the designed experiment should be defined here.

The first requirement is the cost of the experiment. Not only because we had limited funds for this research, but also the cost efficiency is an important indicator of the success implementation of RFID system. According to Ayre (2012), the price of basic RFID tags has dropped below 20 cents each. Therefore, it is feasible to adopt multiple tags during the experiment. However, the equipment for detecting RFID tags can increase the cost dramatically; expect to spend $2,000 to $10,000 for different types of devices. So it was not worthwhile buying a new reader, we just used the RFID reader we have in the RFID lab. In addition, the experiment was focused on blood bag storage in hospital environments. Therefore, a fridge was considered an important piece of equipment for the simulation. Since a normal household refrigerator may cost over 1,000 dollars and have no use after we finished the experiment, it was not appropriate to buy such equipment. Thus, a fridge in the school kitchen became a suitable option for the research. One reader was able to fulfill the detection assignment for the chosen fridge.

The detection rate is a crucial element in the RFID experiment. Jeffery, Garofalakis and Franklin (2006) conducted an experiment for RFID detection with multiple tags. They concluded the reading rate stay constant when multiple tags were used in the major reading zone. The detection rate remained at approximately 80%. Once the value was below 80%, it then dropped off linearly until tags were out of the reading range. Therefore, we used the same standard for our experiment to maintain a high detection probabilities.

It was also essential to determine the size of the tag population for the experiment. This is the number of RFID tags adopted in an experiment. As described above, Jeffery, Garofalakis, & Franklin (2006) indicated that the detection rate of multiple reading has a certain degree consistency. Up to 25 tags can remain in the major read region within the reading zone, which is around 80% detection rate. Since our research only used a standard RFID reader, we just

defined the maximum size of the tag population as 25 in order to maintain the accuracy of detection. However, whether or not the reader can actually read this number of tags remained to be tested in the experiment section.

The detection range is considered another important criteria for the RFID experiment. However, the read range is subject to the testing environment, such as the attached objects and antenna orientation (Rao, Nikitin, & Lam, 2005). Therefore, it is hard to determine the requirements for reading the tag. However, the tag we adopted in this research was a UHF tag, so it should have a reading range of between one and 12 meters. The actual detection range was tested in Experiment 1. Table 3.1 presents the requirements we defined in this phase for evaluation of the experiment.

Requirement	Value
Cost	Standard Budget
Detection Rate	Over 80%
Tag Population	No more than 25
Range	1~ 12 meters

Table 3.1 Research requirements for the experiment

Design & Development

According to the methodological framework of design science, the activities of methodology-based projects can be categorised into at least five typical kinds of design science research: Problem-Focused Design Science Research, Requirement-Focused Design Science Research, Requirements and Development-Focused Design Science Research, Development and Evaluation-Focused Design Science Research and Evaluation-Focused Design Science Research (Johannesson & Perjons, 2014a). Usually not all of them are studied in depth for this kind of project, only one or two classes need to be concentrated on, while others categories can be treated more lightly. This research mainly focuses on Evaluation-Focused Design Science Research. Although no artifact is developed, it can be considered a part of a larger design science project, which in our case, is the blood bank storage inside the whole RFID blood transfusion system. Moreover, the discoveries in this research may lead to the development of an RFID-based automatic detection fridge.

Demonstration

The main purpose of this stage is to demonstrate a proposed artifact to solve some aspects of the problem. In our study, four designed experiments of RFID-based simulation are the key components of the demonstration.

Evaluation

The Evaluation part measures the performance of the designed artifact for solving existing problems. As explained above, this study draws from Evaluation-Focused Design Science Research. In order to observe the outcome accurately, Experimental Testing is a useful methodology to run through the study.

Communication

The last step of Design Science Research is to demonstrate the importance of the problem as well as the design, utility and effectiveness of the artifact to relevant audiences, in this case, either Technology-oriented or Management-oriented (Alan, March, Park, & Ram, 2004). The structure of this thesis follows such a process, which involves problem definition (research question), literature review, hypothesis development (experiment design), data collection (RFID tag detection), result analysis, discussion and conclusion.

3.2 Experimental Testing

Experimental Testing was mainly used to concentrate on evaluating the experiment we created in this research. It is a methodology that is guided by hypotheses indicating the causal effect between two or even more variables (OCCUPYTHEORY, 2014). The relationship between known variables is the main focus for experimental research. It is usually conducted in a laboratory-controlled environment, which tends to have higher internal validity.

The main components of an experimental study design are: manipulation, control, and randomization (Macdonald & Abraham, 2011). Manipulation allows the researcher to initialize, implement and terminate the experiment process subjectively. Control is defined as the ability to decide which specific object receives particular treatment at a desired time. Randomization can be divided into two separate processes: subjects make a random selection and randomly assign treatment and control conditions to subjects.

The advantages of experimental research can be easily identified. First, because it controls independent variables, the unwanted variable can be removed. Second, due to the manipulation of variables, a cause and effect relationship can be easily determined. Third, it can offer insights into instruction methods. Fourth, the experimental research is repeatable so that the outcomes can be examined multiple times. However, since the experiment is mostly conducted in a laboratory setting, the outcomes may not be able to be generalized to the practical environment (Joseph, n.d.). In addition, human error may occur during the experiment and affect the efficiency of the results.

In this research, a simulation of blood bag storage was conducted. The lab environment was modified to match the hospital circumstances. Variables such as detection time, move distance and horizon level were rigorously controlled.

3.3 Device Selection

In this section, the devices we selected for the experiments are described. Both containers and blood bags were adopted for the simulation. Other equipment included RFID reader, tag and the corresponding software.

3.3.1 Container

Two different sizes of containers were used in this research. The first one had a dimension of 9cm (W) x 13cm (H) x 7cm (D). It was able to store approximately 700ml liquid. The second one was half the size of the first one. Initially, we only selected the larger container for the experiments. However, the reality of hospital environment is that hundreds of blood units are stored in one fridge. This means that, multiple tags need to be detected simultaneously. Therefore, the containers need to be small enough to stack up and fit into each layer of the fridge. Thus, we selected the smaller one for the simulation process in Experiment 3 and 4. Figure 3.2 shows two sizes of containers.

Figure 3.2 Two sizes of container

3.3.2 Blood Bag

After the simulation experiment with containers, we used real blood bags in experiment four to measure whether the performance of the RFID system between bags and the container would be different. The Compoflex blood bag system we selected utilized a CPDA-1 preservation solution, which allows blood storage for up to 35 days. The dimension of this blood bag is 10.5 cm(W) x 22.5cm (H). The sample of this blood bag is presented in Figure 3.3. The main features of these blood bags are listed in Table 3.2.

Single, double, triple, quadruple blood bag systems available
Variety of bag sizes and configurations, e. g. top-top and top-bottom systems
Round bag shape for increased yield of blood components during separation
16G siliconized super-thin wall and sharp needles for smooth punctures and high blood flow rates
CPDA-1 or CPD/SAG-M anticoagulant preservation for 35 days or 42 days whole blood storage, respectively
Special foil (optional) for platelet storage up to 5 days
Optional segment number tube laser printing
Soft flexible kink resistant PVC tubing
PVC label (tamper proof and writeable)
Available also with pre-donation sampling system

Table 3.2 Main features table for Compoflex blood bag system (Compoflex, n.d.)

Figure 3.3 Compoflex blood bag

3.3.3 RFID Reader

Due to the high cost of RFID readers and the requirements of multiple tag reading, we decided to use one UHF RFID reader during all the research experiments. This is because the experiment we designed only used one fridge for the simulation. Thus, only one reader was suitable for the study. Moreover, the cost of setting multiple readers was quite high; more than our budget would allow. Additionally, in a real blood bank thousands of blood bags are stored in fridges, thus multiple tags detection is more realistic than single tag detection within the hospital domain. However, the deployment of this kind of RFID system in the hospital may require multiple readers.

Since this is a blood transfusion process, the tags frequently move. Hence, a fixed reader is a more appropriate selection than either a mobile or a handheld reader. This kind of reader also provides strong transmission power to trigger passive RFID tags and has a longer reading range. The reader chosen in this study is an Impinj Speedway Revolution R220 UHF RFID Reader (Figure 3.4).

Figure 3.4 Impinj Speedway Revolution R220 UHF RFID Reader

The dimensions of the Impinj Speedway Revolution R220 UHF RFID Reader are 19.5cm (H) x 17.53cm (W) x 3.05cm (D). Multiple antenna connections are available for the reader. The operation frequency of this reader ranges from 860 to 960MHz. It can be connected through Ethernet and support EPCglobal UHF Class 1 Gen 2 standard (Impinj, 2012). The main features of this reader are demonstrated in Table 3.3.

Air Interface Protocol	EPCglobal UHF Class 1 Gen 2 (ISO 18000-6C)
Operating Frequency	UHF 860- 960 MHz, region dependent
Transmit Power (POE)	+10.0 to +30.0 dBm

Transmit Power (External DC Power):	+10.0 to +32.5 dBm
Max Read Sensitivity:	-82 dBm
Max Read Distance:	N/A
Max Read Rate:	N/A
Data Interface:	RS-232, ethernet
Power Source (POE)	IEEE 802.3af
Power Source (Power Adapter)	+24 VDC @ 800mA
GPIO	4 GPI optically isolated 3-30V/ 4 GPO optically isolated, 0-30V
Antenna Ports	2 RP-TNC, monostatic
Dimensions	7.5 x 6.9 x 1.2 in (190.5 x 175.3 x 30.5 mm)
Weight	1.5 lbs (680 g)
IP Rating	IP 52
Operating Temperature	-20 ℃ to +50 ℃
Host API	.NET
Demo Software	MultiReader Software

Table 3.3 Main features table for Speedway Revolution R220 UHF RFID Reader

3.3.4 RFID Tags

As described in the previous section, RFID tags are one of the essential components in an RFID system. For this research, tags were attached to the objects at all times in order to monitor their position in real time. Considering the large demand on RFID tags when deploying the RFID system within a real hospital environment, the passive RFID tags were a more realistic selection than active RFID tags. Although active tags can provide a longer detection range, they are much more expensive than passive tags. Moreover, since all of the blood bags are transferred in an indoor environment, there is no need to use long reading ranges.

UHF RFID tags were chosen for this experiment. Although previous researchers had adopted HF tags for blood transfusion, UHF seems to be a more suitable selection at present. According to Victor (n.d.), the technology of adopting UHF in blood bag is mature. UHF tags not only have a longer detecting distance when compared to HF tags, but also have a lower cost than HF tags. Besides, the UHF tag is capable of operating both far field and near field while HF can only be used in near field. This longer distance allows the detection of multiple blood bags as soon as they pass through a reading point.

Two UHF tags were applied to the first experiment in order to find out the better one for the following experiment. The first one was the UPM Raflatac DogBone tag. It has an operation range between 860 to 960 MHz with the dimensions of 9.7cm x 2.7cm. It uses an EPC Class 1 Gen 2 IC chip. The main features of this passive RFID tag are shown in Table 3.4.

Antenna size	93 x 23 mm / 3.66 x 0.91 inch
Die-cut size	97 x 27 mm / 3.82 x 1.06 inch
Web width	100 mm / 3.94 inch
Integrated circuit (IC)	EPC Class 1 Gen 2 compliant
EPC memory	96 bit
Operating frequency	860–960 MHz
Data retention	100,000 cycle / 50 years
Operating temperature	-40 ℃ to 85 ℃
	-40 ℉ to 185 ℉
Bending diameter (D)	> 50 mm, tension max. 10 N
Static pressure (P)	<10 MPa

Available formats	Dry, wet, tag
Adhesive – temperature	Solvent-free permanent adhesive min. -10 ℃ to 120 ℃ min. 14 ℉ to 248 ℉

Table 3.4 Main features table for UPM Raflatac DogBone tag (UPM, 2009)

The second tag we selected was the UPM ShortDipole tag. The operating range for this tag is also 860-960, which matched the frequency of the RFID reader we used in this research. This IC chip is different from the previous one, which used the Impinj Monza 4. The main features of this UHF tag are shown in Table 3.5.

Antenna size	93 x 11 mm / 3.66 x 0.43"
Die-cut size	97 x 15 mm / 3.82 x 0.59"
Web width	100 mm / 3.94"
Integrated circuit (IC)	Impinj Monza 4
EPC memory	up to 496 bit
User memory	512 bit
Operating frequency	860–960 MHz
Data retention	100,000 cycle / 50 years
Operating temperature	-40 ℃ to 85 ℃ -40 ℉ to 185 ℉
Bending diameter (D)	> 50 mm, tension max. 10 N
Static pressure (P)	<10 MPa
Available formats	Dry, wet, tag
Adhesive – temperature	Solvent-free permanent adhesive min. -10 ℃ to 120 ℃ min. 14 ℉ to 248 ℉

Table 3.5 Main features table for UPM ShortDipole tag (UPM, 2011)

3.3.5 Reader Software

Although we had decided on the proper hardware for the experiment, we still needed an adequate form of software to configure the RFID. We decided to use the Impinj MultiReader software, which was specifically designed for the RFID reader we adopted here. It allowed the computer to display the data that the reader had extracted from the tags. The data could also be transferred into different formats such as Excel or a text file, for further analysis. The user interface of this software is shown in Figure 3.5.
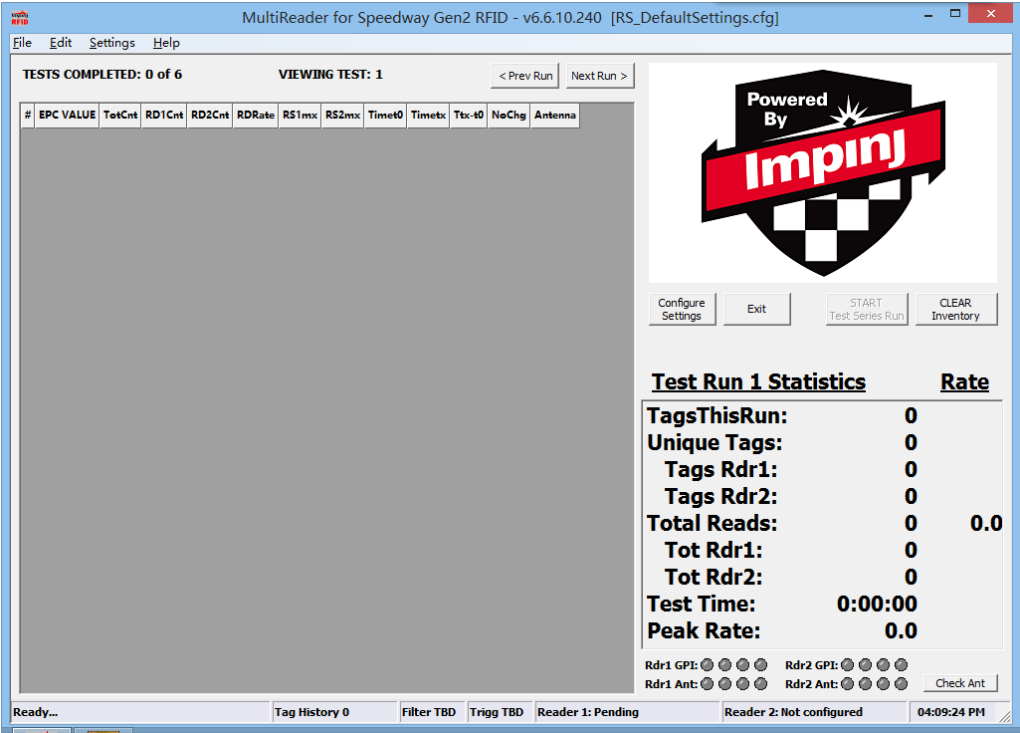
Figure 3.5 Impinj MultiReader UI

3.4 Experiment Setup

3.4.1 Experiment 1

In order to propose an efficient RFID solution for safe blood transfusion, the properties of RFID tags should be tested at the beginning. In this first experiment, we set up two separate tests to find out the reading range and readable number of the proposed RFID system. The result of this experiment is found in Section 4.1.

3.4.1.1 Reader setup

The reader software provided two modes with which to search the tag, one is Dual Target mode and the other is Single Target with Suppression. Combined with different session values, it can configure the time and frequency of tag detection. In Dual Target mode, the reader changes the status of the tag. Each RFID tag has an inventory flag that can be changed from either A to B or B to A. The reader first reads the tag that contains flag A. After that, it swaps the flag to B. When all of the tags with flag A have been read, the reader then reads the B tags and enacts the same procedure as previously. It continues the routine until the user stops the program. However, in Single Target mode, the reader only reads a tag once and does not change its status. A demonstration of two search modes is shown in Figure 3.6.
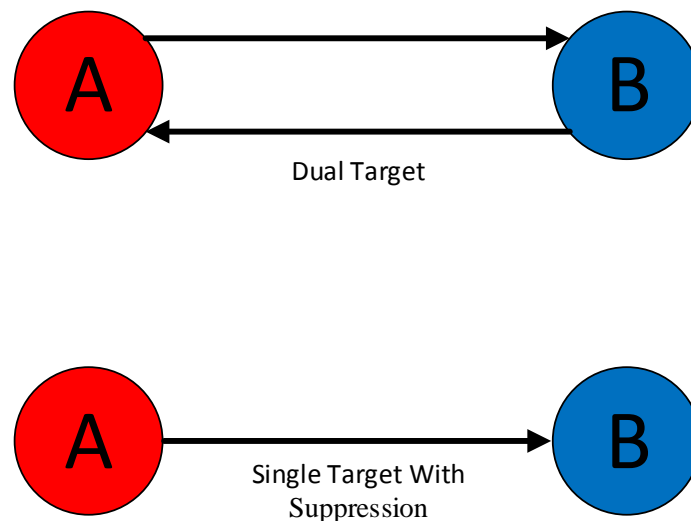
Figure 3.6 Two search modes

In Experiment 1, tests were focused on the reading range. Therefore, the Dual Target mode was more practical because the position of the tags kept changing until they could not be detected. If we utilized the Single Target mode, we needed to manually stop and run the reader each time the tag location was altered.

The transmission power of the reader was set as its default value, which is 30 dBm. It is the maximum power that the reader can output (already included the cable loss). Such power is chosen because the aim of the first experiment was to test the readable range of tags. If the reader does not transmit enough power, the tag may not be able to transfer the data back or may not even be triggered. Therefore, we wanted to eliminate the factors that may influence the result. In addition, the following experiment used the same transmission power in order to get the best outcomes. Moreover, the reader adopted in this research operated under the ETSI standard (which transmits a frequency of between 865 MHz and 868 MHz).

3.4.1.2 Scenario setup

In this experiment, we put the reader and antenna on the top of a cabinet. Meanwhile, the tag was initially put on a table that directly faced the antenna. However, the reading range of a UHF tag was much longer than the length of the table, so we had to merge three tables in a line to extend the distance. There was no horizontal difference between the table and the cabinet. Both of them had a height of 80 cm. Jones, Gao, Pei and Chung (n.d.) have pointed out that when the tag and the aerial are placed at the same horizontal line the RFID system performs better.

Since the aim of this experiment is to examine the detection range of the RFID tags, a far field operation has been adopted in order to achieve a long reading range (Glover & Bhaṭṭa, 2006). A gap was purposefully created between the cabinet and the table. According to Lau and Liu (2013), RFID tags should be kept a certain distance away from the antenna for far field detection. In this case, researchers recommend that the distance should be longer than one wavelength. The following equation was used to calculate wavelength (λ) and frequency (f):

$$\lambda = \frac{c}{f}$$

Where c represents the speed of light ($3 * 10^8$ m/s).

As mentioned above, the reader adopted for this research operates under the ETSI standard (with a transmission frequency of between 865 MHz and 868 MHz). Based on the above equation, the wavelength for this RFID signal is approximately 35 cm. Hence,

the distance between the reader's antenna and RFID tags should be no less than 35 cm for testing the far field. The scenario setup for the first experiment is illustrated in Figure 3.7.
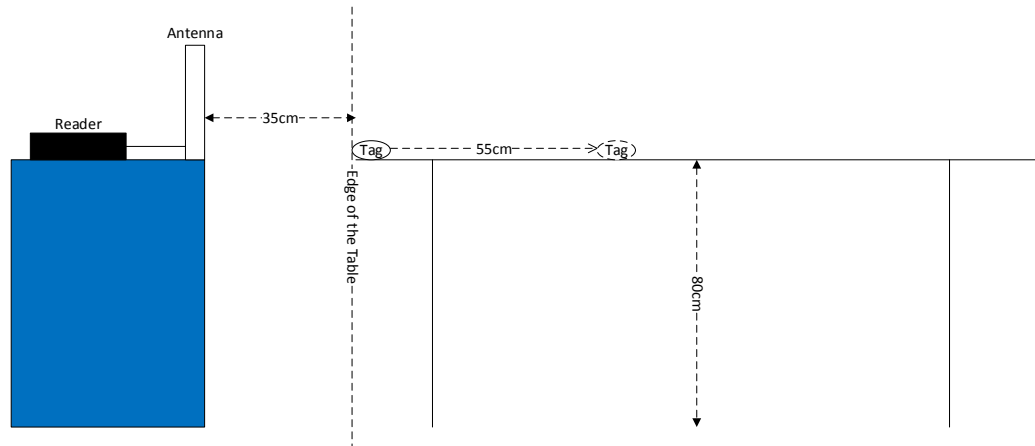
Figure 3.7 Scenario setup for tag range detection

3.4.1.3 Experiment procedure

In the first part of Experiment 1, the available reading range of a tag was measured directly. The tag was initially placed at the edge of the table. As we can see from Figure 3.7, when the experiment began, the reader transmitted an RF signal to activate the tag so that it could transfer the data back. Once the tag information was received by the reader, it was considered a successful detection. Then, the reading distance was increased by 55cm for the next transmission until the tag could not be detected by the reader. After that, the range decreased by 5cm until the reader could extract the signal. In this study, since we considered the reader to be a fixed detection device, we only needed to move the tag to increase the reading range. Both of the selected RFID tags were tested so that we could choose a more suitable one for the following experiments.

The goal of the second part of Experiment 1 was to figure out the number of tags that could be read by the RFID reader. Tags were placed at the minimum reading distance. We kept adding the tags into the reading zone until the reader could not display anymore tag IDs. After we confirmed the maximum readable number of tags, we tested the extent to which the number of tags had influence on the reading range. The procedure was almost the same as the first part of the experiment. However, we knew it was possible that if distance increased, some of the tags might not be able to read by the reader. Hence, we decided to record specific distances during the experiment. These distances

were measured at the first time the signal of the tags was lost, lost signals for 1/3 of the tags and lost signals for half of the tags. Even if the tags did not reach their longest reading distance, a reading rate of less than 50% would be useless in the real-world environment. This meant that once the tags were attached to the blood bag, half of them might not be detected by the reader from this distance. Five tags were selected for the first round. After this, we added 5 more tags to the next round, and restarted the experiment to follow the same step as the first round. The number of tags was grew by five at each round until the reader's maximum readable numbers was reached. As mentioned above, the outcome of this experiment can be found in Section 4.1.

3.4.2 Experiment 2

The aim of Experiment 2 was to do a simple simulation that imitated blood bag storage in the blood bank. This experiment was focused on the fundamental property of the RFID system, the reading range. We wanted to ascertain whether the components of blood influenced the performance of the RFID system. The result of this experiment is displayed in Section 4.2.

3.4.2.1 Reader setup

The configuration of the reader remained the same since we still needed to record its reading range. The Dual Target mode was selected to track the tag while it was in a dynamic state. The transmission power of the reader was set to its maximum value. We also took cable loss into account.

3.4.2.2 Scenario setup

The scenario in this experiment could be separated into two parts. In the first part, the setup was exactly the same as the previous experiment. The reader was placed on a cabinet as a fixed detection device and both the reader and the tag were maintained at an identical horizontal level. The radio frequency of the reader was unchanged so that the gap between the table and cabinet was still 35cm. At the same time, the tag was attached to the container instead of being directly placed on the table. Two containers were used in this test. One was filled with water, while the other was filled with energy drink. In order to find out whether different tag locations would vary the performance of the RFID system, five possible positions were determined: the top of the container, front, side (left and right side considered as one direction), back and bottom. The reason we only selected the external position is that the material of the RFID tag might have been a potential hazard to the blood unit. The whole setup and the sides of the container are displayed in Figure 3.8.

Figure 3.8 Scenario setup for tag reading in open space

In the second part, the whole experiment was held in the school kitchen. The main objective of this part of the experiment was to figure out the readable range of the RFID system when the blood bags are stored in a blood bank. Therefore, during the simulation, the containers were placed in a household refrigerator. The temperature inside was set to 1℃ which meets the requirements for blood bag storage. Because Red Blood Cell and plasma components must be stored between 1 and 6℃ (The University of Michigan Hospitals & Health Center, 2009), the reader was placed on a cupboard. Since the fridge itself was hard to move, the only acceptable option was to shift the position of the antenna. Thus, we decided to put the aerial on a chair to ensure the aerial's stability during the experiment and while extending the distance. Similarly, the starting point was 35 cm away from the fridge door. Figure 3.9 shows the experiment environment in the kitchen.

Figure 3.9 Scenario setup for tag reading inside the fridge

3.4.2.3 Experiment procedure

The first experiment procedure followed the same step of testing the tag's reading range. The container was placed at the edge of the table with its front side directly facing the antenna. Once the reader began to transmit an RF signal within the reading range of the tag, the tag would send back its ID. When the reader received the data, the distance between the tag and the antenna was increased by 55cm for the next detection. As soon as the tag could not be read by the reader, the gap was narrowed by 5cm until the tag was back inside the reading range. After confirming the readable distance for one side, the tag then was attached to another side of the container until all external sides were tested. In this instance, the side that led to better tag performance was used in the next experiment. The direction of the container itself should not be changed through the whole experiment. Both liquids were tested separately to measure their own influence on RFID.

For the second part of the experiment, the tag was attached to the best location on the container identified in part one. The containers were placed in the fridge one by one. The RF signals needed to penetrate through the fridge door before it triggered the tag. This might reduce the operational range of RFID tag. Therefore, the distance the antenna moved each time largely decreased. We defined 20cm for each movement. That meant that after each successful reading, the aerial was pulled away for another 20cm. Similarly, when the reader failed to detect the tag, the space that the antenna needed to recede was cut down to 1cm. This made the outcome more precise. Both of the parts were run for 10 rounds to ensure their consistency. The process for this part of experiment is shown in Figure 3.10. The data we gained in this experiment is discussed in Section 4.2.
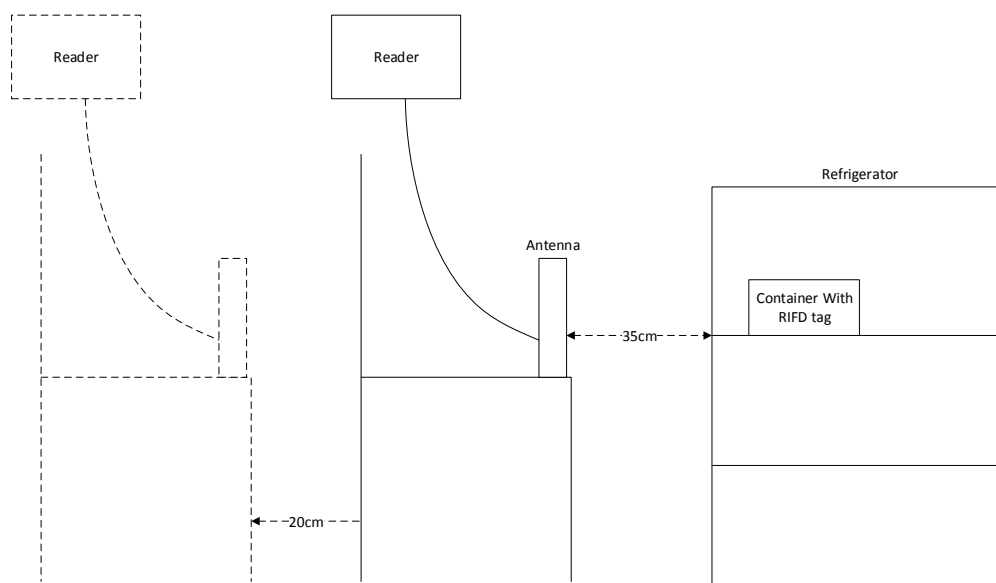
Figure 3.10 Experiment procedure for fridge range testing

3.4.3 Experiment 3

The objective of this experiment was to track the containers' location, inside and outside of the fridge. As we described in the previous section, smaller containers were used in this experiment because of the multiple reading required within a real hospital environment. In addition, two storage methods were tested to decide which ones would perform better for the RFID system. The experiment result is shown in Section 4.3.

3.4.3.1 Reader setup

In Experiment 3, we did not apply the Dual Target mode to search for the tag signal. This was despite the mode allowing us to continuously track the tag without any hand operation. Yet, at the same time, it generated numerous reading records. This worked well since we did not need to analyse the data in Experiment 1 and 2. However, the goal of Experiment 3was to use the RFID tag to find out whether the blood unit is inside the fridge or not. Thus, the Single Target mode was selected instead to minimize the volume of tracking records. As explained, this mode read all tags with inventory flag A at first and then switch them to flag B. After that, the tag status remained silent.

There were three session values available in this mode, Session 1, 2 and 3. The timing diagram below demonstrates that the tag status changed when it moved around the reading area. A and B represents the status of the two inventories. In Session 1, after the tag had been read and moved to flag B, the program kept the tag in that state for a certain time period and then push it back to A so that the tag could be detected again. This distinct time period was determined by the EPC GEN2 standard, which ranged from 500ms to 5 seconds (TS1 is the persistent time of one state for session one). The time varied because of the different model or types. As for the tag we utilized in Experiment 3, this value is approximately 1 second. It means that this type of tag can be read every second in Single Target mode with Session 1. Session 2 and 3 will only read the tag once and keep it in B state as long as it is in the detection area. Once the tag is out of the reading range, it will still be kept in B state for a period of time. This time is also defined by the EPC GEN2 standard with a minimum of 2 seconds and a maximum of 60s (TS2/3 stand for the persistence in time of session 2 and 3). This means the reader may not be able to read the tag once the blood unit has been taken out of the fridge. Thus, Single Target mode with Session 1 is a more appropriate method with which to measure Experiment 3.

In Experiment 3, multiple runs need to be tested with each round so that we can get proper results for the RFID performance in blood storage. After deciding to adopt the

Single Target mode in Experiment 3, we needed to change the Run Mode. Test Run was the mode we selected. This mode allowed us to setup start time and over time, as well as the delay time in between. In this instance, we did not need to start and stop the reader manually since it was fully automatic. Hence, we were able to conduct a series of tests without interruption. Ten runs were conducted in one round of experiment so that containers could be put inside and taken out the fridge on purpose. Each run lasted for 30 seconds. There were also 10 second gaps between each run that allowed us to change the containers' location.
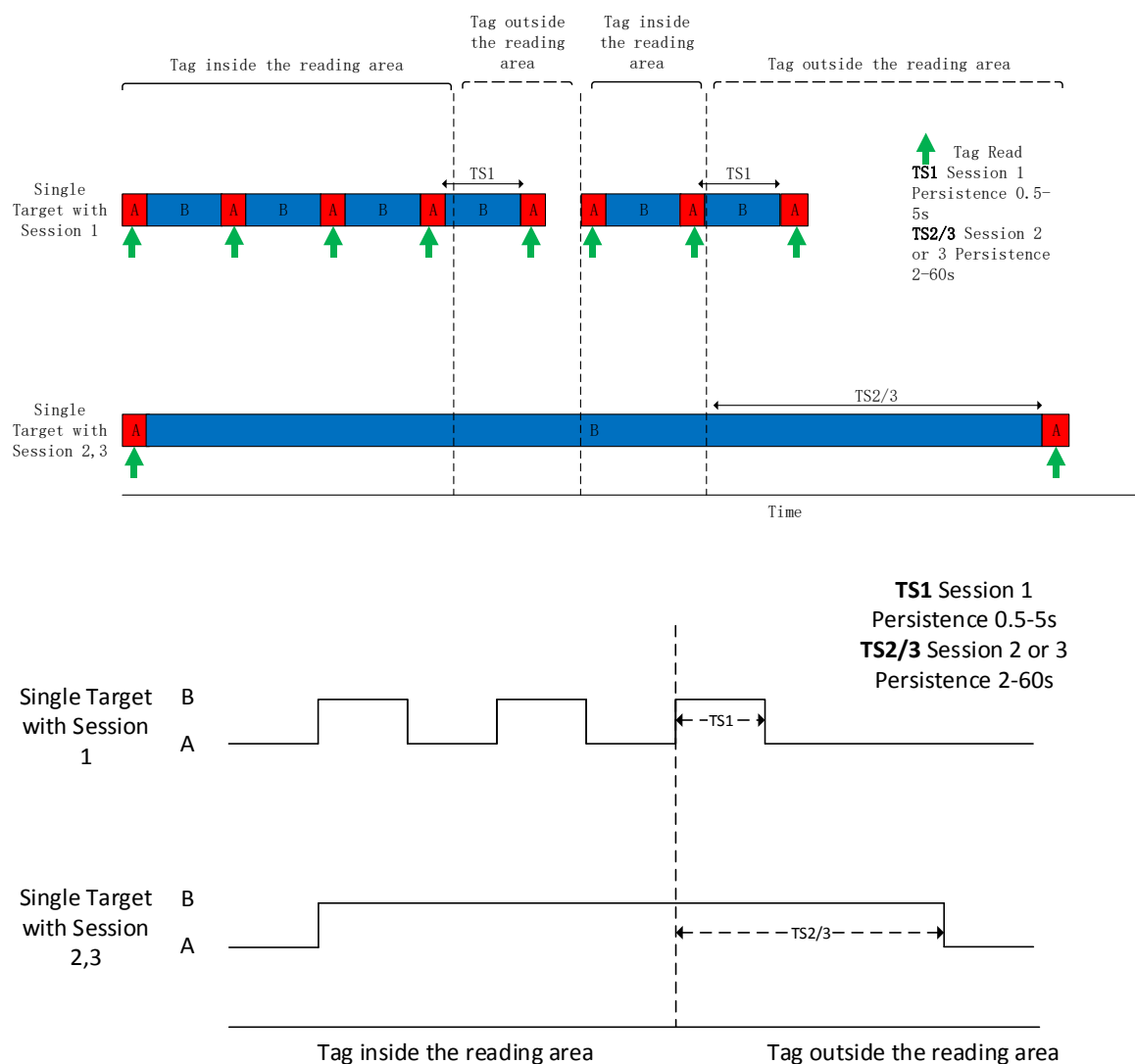
Figure 3.11 Tag status change timing diagram

3.4.3.2 Scenario setup

Initially, the scenario setup was the same as we tested the reading range of the tag inside the fridge. However, the reader couldn't detect any tag signal once the fridge was closed. As the reader was able to get data from the tag in the previous experiment, two possible factors that may have influenced the test. One was that the container we adopted was smaller than the previous container. The other was the different fridge we used for the test. According to the result of Experiment 2, we selected another fridge in order to eliminate the factors that might affect the experiment. We did Experiment 3 in a university staff kitchen, for there were less people moving around and almost nothing left inside the fridge. Therefore, a different scenario setup was needed for this experiment.

We selected a near field operation in this experiment. This operation was selected for two reasons. The first one was that it worked well when the tracking objects were surrounded by metal or liquid (Fuschini, Piersanti, Sydanheimo, Ukkonen, & Falciasecca, 2010). The second one was that this time, in order to successfully read the tag, the antenna was put inside the fridge. The inner space was not long enough, so the near field operation was more feasible than far field operation for this scenario. The fridge door needed to be closed when running the experiment, so that the wire connecting the aerial to the reader came from the crevice of the door. As we tested in previous experiments, the tags were attached to the front side of the containers in order to gain the best performance. All together five containers were used in this research and each of them was filled with approximately 200ml of energy drinks to particularly simulate a conducting fluid like blood. These containers were placed directly onto the aerial. However, due to the latch hook on the back side of the antenna, the containers slid off from the slippery incline. Because there were three layers in the fridge, the container and the antenna were placed separately. The tags were set on the first layer while the aerial facing towards the bottom of those containers were placed on a second layer. Multiple containers were deployed in the fridge and there were two different ways to store them. The first way was to place them in a line of five containers divided into two parts; three containers were arranged in one line while the others were arranged in another line. The second way was to stack the containers. Similar to the first way, three containers were stacked in a row then the other two were stacked together. Each way was tested several times. As we can see from Figure 3.12, containers presented with a dash line utilize the first storage method, while the containers with a solid line uses the second method.
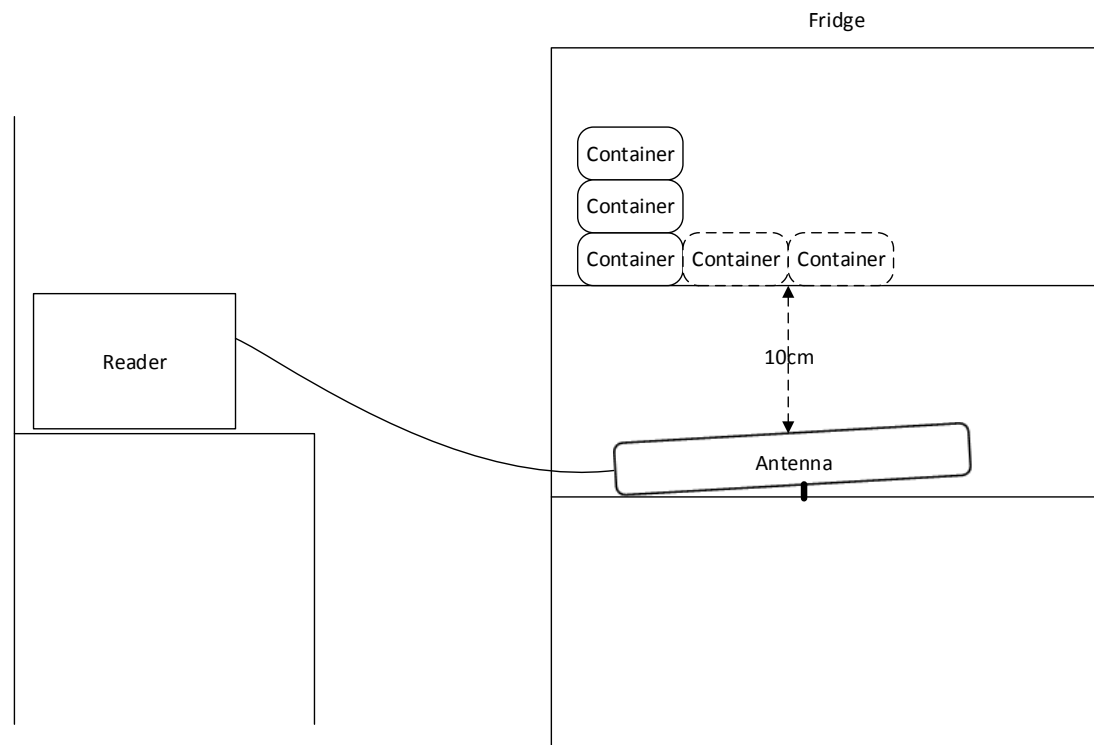
Figure 3.12 Scenario setup for multiple tag detection

3.4.3.3 Experiment procedure

As the scenario setup demonstrates, five containers with energy drinks were used in this experiment. Each container's EPC ID was modified so that they could be easily recognized. At first run, a container was put inside the fridge before the reader begins transmitting the signal. Once the fridge door was closed, the reader was able to begin detecting. A timer of 30 seconds was set for the detection. If the reader was able to continuously receive the data from the tag, then we understood that the container was inside the fridge. There was 10 seconds delay during each run so that we could adjust the numbers of containers in the fridge. With the second run, another container was placed in the fridge. We repeated the above operations until all five containers were placed inside the fridge. After the fifth run, we reversed the operation. The containers were taken out one by one from each run until all of the containers were outside of the fridge. The aerial remained in the fridge for tag reading. Since a frequency wave cannot penetrate through the fridge door, the long-term container's signal was lost during one running period as the container was outside of the fridge. Moreover, all of the containers were taken out of the fridge during the last run, so that the reader was completely silenced.

As we can saw from Figure 3.13, the length of time that the container remain in the fridge was different in order to emphasize the importance of transitions. The solid lines

represented the time when the containers were placed inside the fridge. Tag 1 was placed in the fridge at the beginning of the experiment and taken out at the end of Run 9. Tag 2 was stored in the fridge from the end of Run 1 and then taken out before Run 8. Tag 3 stayed in the fridge from Run 3 to Run 7. Tag 4 remained in the fridge for 3 runs: Run 4, Run 5 and Run 6. Tag 5 was only left in the fridge for one run, which was Run 5.
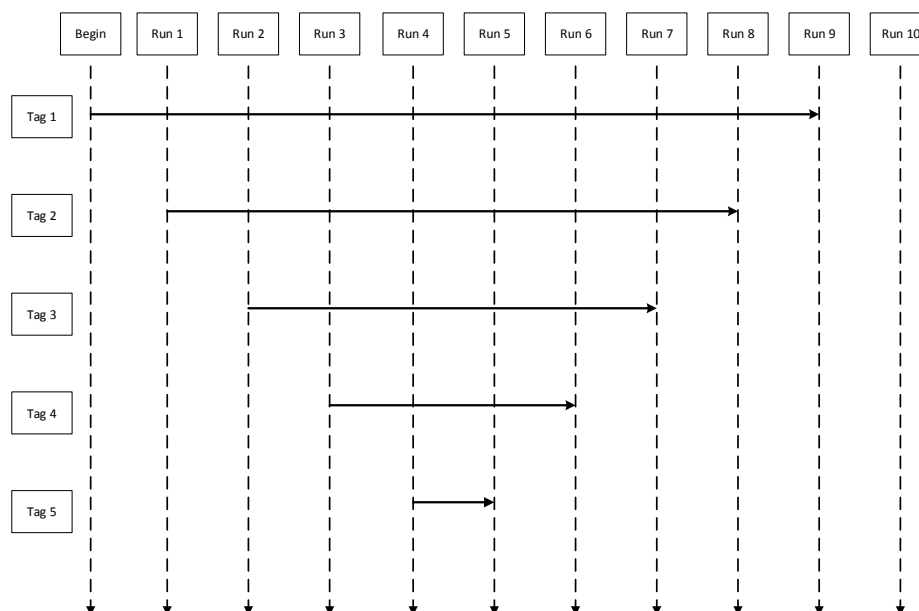
Figure 3.13 Tag Location Time Sequence Diagram

Containers filled with energy drink		
Parallel Placement	Section 4.3.1	Round 1
	Section 4.3.2	Round 2
	Section 4.3.3	Round 3
Stacked	Section 4.3.4	Round 4
	Section 4.3.5	Round 5

Table 3.6 Experiment result link for container storage

As pointed out in the previous section, the containers were placed in two different ways and altogether, five rounds were run for this experiment. Table 3.6 shows the results of Experiment 3. Both options were tested during the experiment to determine which one worked better for the containers.

3.4.4 Experiment 4

Experiment 4 used an actual blood bag to simulate storage in the blood bank. Thus, we were able to determine whether the performance of an RFID system between the bags and the container was different. There were three bags in total used for the experiment. Two storage methods in the previous experiment were tested to determine a more feasible one for the RFID system. The outcomes of this experiment are presented in Section 4.4.

3.4.4.1 Reader setup

Since this experiment was examining the performance of the RFID blood bag during fridge storage, the reader configuration remained the same as in Experiment 3. A Single Target mode during Session 1 was applied to detect the RFID tag. The Test Run mode was still selected for multiple rounds of testing, but the numbers of runs were reduced because the number of blood bags we used in this experiment dropped to three. In this instance, six detection runs were conducted in one round.

3.4.4.2 Scenario setup

In the scenario setup, because there were different testing objects, the only parameter should be reconsidered was the tag location. Figure 3.14 shows the sample bag we made for the research. The blood bag had only two sides, the front and the back side. We decided to stick the tag on the front side (the side with blood information) because it was easier to identify. Moreover, in commercial contexts, the required data can be directly printed onto the tag. This was attached to the bottom of the blood bag so that the tag wouldn't cover the label. The blood bags we used were unopened. Each blood bag contained at most 1000ml of liquid inside. We kept the blood bag empty during the first part of the experiment while injecting approximately 600ml of energy drink into each bag during the second part of the experiment. In order to ensure the consistency of all experiments, the energy drink as well as the RFID tags were the same ones that were used in previous experiments.
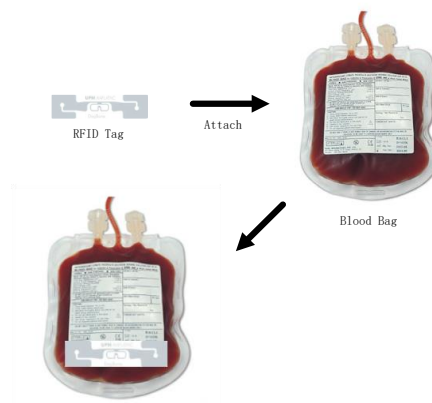
Figure 3.14 RFID attached blood bag

3.4.4.3 Experiment procedure

The procedure for this experiment was the same as the container procedure. Testing objects are the only difference in this experiment. Figure 3.15 and 3.16 show the two storage methods that we adopted for the experiment. First was the Parallel Placement, where each blood bag was placed into the fridge one by one at the same level. Second is the Stacked mode, where each blood bag was put on top of another one.
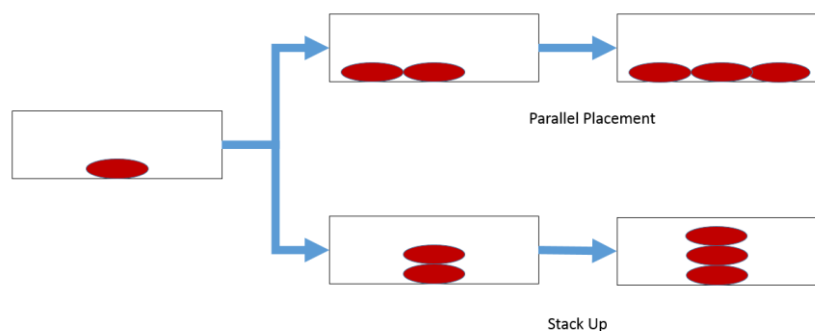
Figure 3.15 Two storage methods

Figure 3.16 Storage methods demonstration

As mentioned above, the number of runs were reduced in this experiment. Figure 3.17 uses a time sequence diagram to illustrate the change of tag location. Similar to the diagram for the containers, the solid lines represent the time within which the blood bags are stored inside the fridge. It can be seen that blood bag 1 has been put inside the fridge at the start of Run 1 and was not taken out of the fridge until the end of Run 5. Blood bag 2 remained in the fridge from Run 2 to Run 4. Blood bag 3 however only stayed in the fridge for one run, which is Run 3.
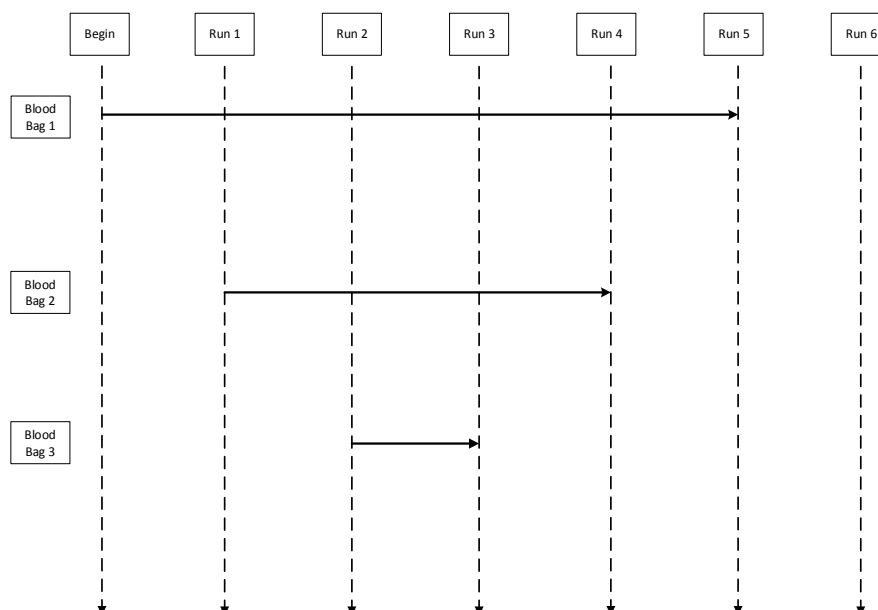
Figure 3.17 Blood Bag Location Time Sequence Diagram

As with Experiment 3, multiple rounds were tested in order to ensure the validity of outcomes. Altogether 12 rounds were held. The Empty blood bags and blood bags filled with energy drinks each had 6 rounds of experiment. Because the blood bags in this experiment were placed in two different ways (parallel placement and stacked), both options were measured for 3 rounds each to determine which method worked better for the containers. The result section for Experiment 4 is listed in Table 3.7.

Empty blood bag			Blood bag with energy drink		
Parallel Placement	Section 4.4.1.1	Round 1	Parallel Placement	Section 4.4.2.1	Round 7
	Section 4.4.1.2	Round 2		Section 4.4.2.2	Round 8
	Section 4.4.1.3	Round 3		Section 4.4.2.3	Round 9
Stacked	Section 4.4.1.4	Round 4	Stacked	Section 4.4.2.4	Round 10
	Section 4.4.1.5	Round 5		Section 4.4.2.5	Round 11
	Section 4.4.1.6	Round 6		Section 4.4.2.6	Round 12

Table 3.7 Experiment result link for blood bag storage

Chapter 4. Experiment Result

4.1 Experiment 1

As described in Section 4.2.1, the purpose of this experiment was to figure out the fundamental properties of the proposed RFID system. This was because the detection range and the total readable number were totally different as a consequence of the RFID reader and tags we selected.

Maximum reading distance		
Experiment No.	DogBone (m)	ShortDipole (m)
1	5.85	6.60
2	5.95	6.60
3	5.90	6.50
4	5.70	6.65
5	5.85	6.55
6	6.05	6.55
7	5.95	6.60
8	5.90	6.50
9	5.90	6.55
10	5.85	6.55
Average	5.89	6.565

Table 4.1 Maximum reading distance

In this experiment, the readable range of both selected RFID tags were tested. This part of the experiment was run for ten times. Table 4.1 shows the maximum reading distance of both RFID tags for each round. The average value of the distance was also calculated. From the table above, it can be seen that the longest detection range for the DogBone tag is 6.05 while the longest one in the ShortDipole tag is 6.65. Moreover, the average maximum detection range for DogBone is 5.89m, and is 6.565m for ShortDipole. The difference between the actual reading range of these two tags is about 67cm. However, these ranges are much shorter than the distance mentioned by UPM (the manufacturer), which is 9.2m and 8.8m respectively. The difference between the results was mainly

because of the testing environment. Although the readable distance was shorter than the theoretical value, it was still feasible for the designed RFID system. Despite the detection range of the DogBone tag being shorter than the ShortDiople tag, it was still suitable for our experiments. Furthermore, the size of the DogBone tag is almost a third of the size of the ShortDiople tag. Considering the tracking objects adopted for this research, such as containers and blood bags, a smaller tag is more convenient for the test. Hence, only the DogBone tag was used for the following experiments.

Failed reading distance			
Tag numbers	First Loss (m)	1/3 Loss (m)	Half Loss (m)
5	3.15	N.A.	3.30
10	2.15	N.A.	3.10
15	1.95	2.80	3.00
20	1.90	2.35	2.80
25	1.85	2.30	2.70

Table 4.2 Failed reading distance

The second part of the experiment was focused on finding out the maximum readable number of tags for the RFID reader. As designed in Section 3.4.1.3, we kept adding tags to the reading zone until the reader couldn't recognize the tag ID. The ID was not displayed on the computer when we try to put the 26th tag into the detection range. Thus, it is believed that the maximum reading number in this experiment is 25 tags in total. It matches the requirement we defined in Section 4.1.

After the maximum number had been determined, the experiment was divided into five categories. Within each category, the number of tags increased until the reader reached its maximum value. Each category was tested five times. The table listed above gave the average value of this experiment. Firstly, it is obvious that the reading range of multiple tags is dramatically shorter than the reading range for a single one, only half of the original length. Moreover, the reading range demonstrates an inverse trend to the number of tags. With the numbers increasing, the distance becomes shorter and shorter. So multiple reading do have an impact on the detection range. This is because when the number of tags inside the reading zone increases, the inter-tag distance drops and therefore the tags inference with each other (Youn, Ali, Sharif, & Chhetria, 2009).

Another interesting discovery with this experiment is that the signal was quickly lost in the first two categories. Usually, only one or two tags couldn't be read when first signal

loss happened. After that, there was no other signal loss until the tags reached a place when the reader was suddenly unable to receive half of their signal. This is the reason why the 1/3 signal loss was not recorded in the first two classes. However, in the remaining three categories, the signal gradually became lost when the distance increased.

4.2 Experiment 2

In Experiment 2, since we decided to use containers for RFID tracking simulation, the best location on the container was determined in order to have a better performance on RIFD system. Also, the maximum readable range for fridge storage were tested. Both water and energy drinks were used in order to find out whether blood would have an impact on the RFID system.

As identified in Section 3.4.2, all six external sides of the container were measured. Each side was tested 10 times. Table 4.3 contains the result of each side.

Water \ Experiment No.	Top (m)	Front (m)	Side (m)	Back (m)	Bottom (m)
1	5.65	5.65	5.85	5.45	Not Detected
2	5.70	5.65	6.05	5.45	Not Detected
3	5.85	5.75	5.65	5.30	Not Detected
4	5.75	5.65	5.70	5.35	Not Detected
5	5.80	5.85	5.70	5.35	Not Detected
6	5.75	5.65	5.75	5.35	Not Detected
7	5.70	5.70	5.65	5.25	Not Detected
8	5.50	5.85	5.55	5.30	Not Detected
9	5.55	5.70	5.60	5.40	Not Detected
10	5.65	5.65	5.65	5.35	Not Detected
Average	5.69	5.71	5.715	5.355	Not Detected

Table 4.3 Maximum reading range of water in open space

The values in the Table stand for the maximum reading range of the water-filled container in open space. We can see that the average maximum detection distances of top, front and side are almost the same. Meanwhile, in the previous experiment the maximum reading range of this tag itself was measured at 5.89m. The original value is quite close to the number here. This reveals that the tag did not receive much impact when it was attached to these directions. However, when the tag was pasted to the back side of the container, the reading distance was reduced by almost 35cm. It can be seen that the radio frequency will be interfered with when penetrating water. In addition, the tag cannot be detected even at the start point while attached to the bottom side.

Energy Drink \ Experiment No	Top (m)	Front (m)	Side (m)	Back (m)	Bottom (m)
1	5.35	5.45	3.55	2.25	Not Detected
2	5.40	5.60	3.20	1.90	Not Detected
3	5.20	5.40	3.30	1.75	Not Detected
4	5.25	5.45	3.60	2.00	Not Detected
5	5.35	5.45	3.50	1.95	Not Detected
6	5.35	5.50	3.50	1.80	Not Detected
7	5.55	5.35	3.55	1.85	Not Detected
8	5.40	5.40	3.60	1.85	Not Detected
9	5.35	5.50	3.40	1.90	Not Detected
10	5.30	5.45	3.55	1.90	Not Detected
Average	5.35	5.455	3.475	1.915	Not Detected

Table 4.4 Maximum reading range of energy drink in open space

The table above shows the maximum reading range of the tag when attached to the energy drink in open space. Obviously, the value of every direction is shorter when compared to the distance with water. The average range of top and front is 5.35 and 5.455 respectively, which is still close to the water sample. However, the range of the side shows a significant decrease, nearly 2.3m less than the one with water. Furthermore, the back side tag is almost useless since it is only a third of the length when the tag is behind water. Yet the tag sticking to the bottom cannot be detected.

To sum up, the front and the top are the most effective tag locations for both liquids. Between them, the front side has a little more advantage over the top. Thus, the tag was attached to the front side of the second part. Additionally, the elements in the energy drink do have an impact on RFID detection, especially when the frequency wave needs to penetrate through the liquid. Thus, the interference should be taken into consideration when conducting an experiment with actual blood.
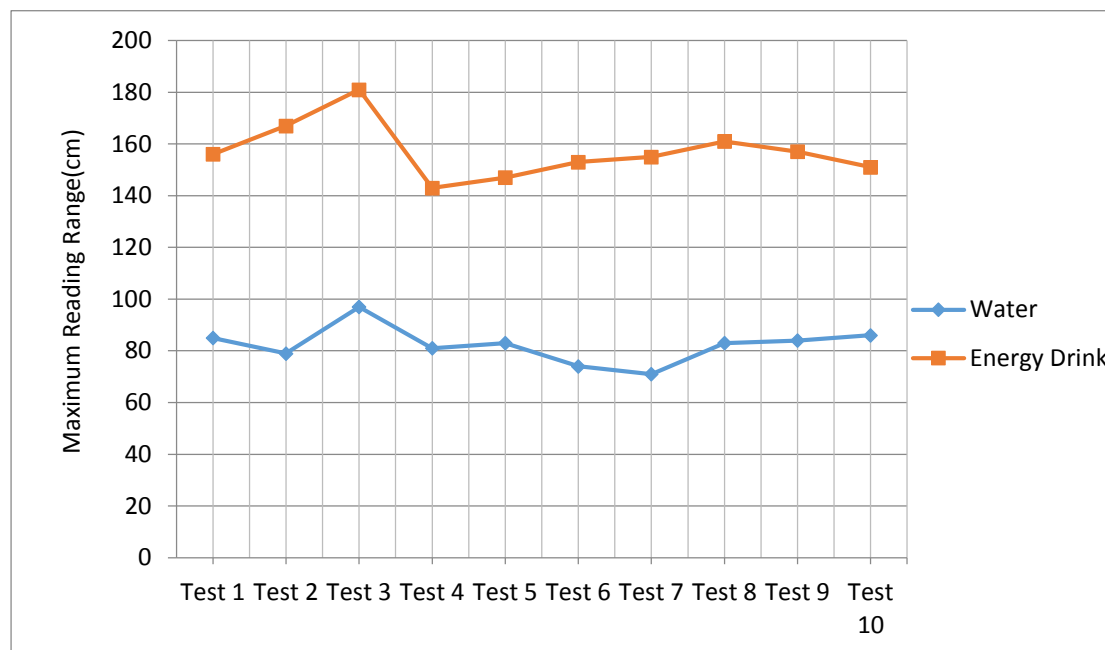
Figure 4.1 Maximum reading range of both liquids in the fridge

Figure 4.1 shows the maximum detection range for the RFID tags when the container was put into the fridge. The blue line represents the container filled with water while the yellow line represents the container filled with energy drinks. Each point stands for the maximum distance of one round. It can be seen from the line chart that the reading ranges have a sharp reduction for both liquids, as we estimated. The range of water in the container is between 73cm and 97cm. However, the range of energy drink in the container is between 141cm and 180cm. It shows a complete opposite trend when compared to the results in the open space. Although the average range of the tags on the energy drink drop to merely 1.57m, it is still twice the value of the one with water container.

Such results are affected by several factors. First of all, because we use the fridge in the school kitchen, it was not completely empty. People had already put goods in the fridge. These items may interfere with the radio frequency. Also people were moving around the kitchen during the experiment which may cause some interference. In addition, the temperature difference between the fridge and open space may vary according to the function of RFID tags. All of the issues above may have caused the opposite trend.

4.3 Experiment 3

In Experiment 3, the detection of a containers' location was conducted. Five containers were adopted in this experiment. The energy drink was used because the liquid is closer to real blood than pure water. Considering the results of previous experiments, the performance of RFID tags using energy drinks is weaker than on water. The gap can be minimized through a well-designed scenario (such as choosing the best location for the tag).

Moreover, there are two storage methods established for this experiment. One is parallel placement while the other one is the stacked method. Both storage methods are tested to decide which has the better performance for the RFID system.

Ideally, tag records should be exactly the same as the positions of the containers. The tag should be detected when the containers are inside the fridge, and should be lost when the containers are taken out. Figure 4.2 and Table 4.5 shows the perfect situation for tag detection in this experiment, based on the time sequence diagram described in Section 4.2.3.3.
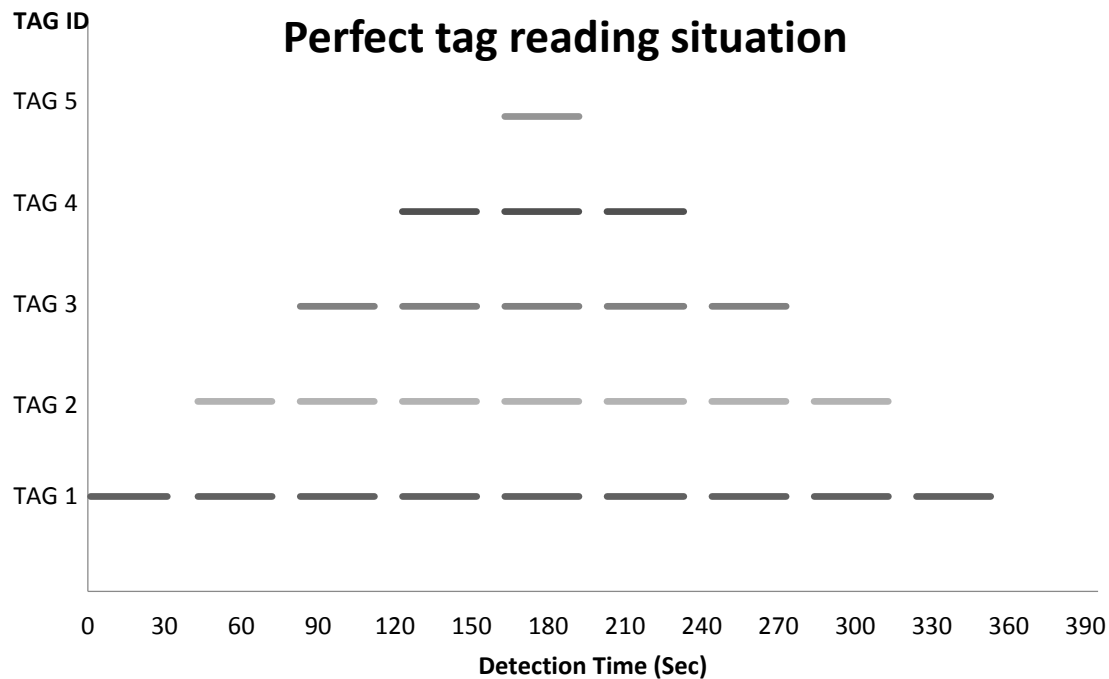
Figure 4.2 Perfect tag reading graph for container

As we can see from Figure 4.2, each line in the diagram represents all the records during a single running time. The gaps between those lines are the break we used to adjust the number of containers in the fridge. As we see from Figure 4.2, tag 1 is the first container that was put in the fridge. It was detected for nine runs because it was the last one to be

taken out of the fridge. The rest can be deduced by analogy. Tag 2 was put in at run 2 and taken out at run 8 while Tag 3 was put in at run 3 and taken out at run 7. Therefore, tag 5 will only stay in the fridge for a single run.

	Container in the fridge	Container not in the fridge
Tag detected	755	0
Tag not detected	0	755

Table 4.5 Confusion matrix of perfect identify situation

The confusion matrix we utilized here indicates the circumstances of tag reading in a perfect situation. In this instance, both the tag detected and the container actually in the fridge is true positive; the tag detected, but container not in the fridge stands for false positive; the tag not detected, but container actually in the fridge represent false negative; and neither tag detected nor container in the fridge is true negative. In an ideal situation, both true positive and false negative should be perfectly recorded while the other two should remain 0.

The total detected number here is determined by an assumption. We found that the frequency tag detection is approximately 1 second per read per tag. Hence, a 30 second run should have 30 reads for each tag. All 5 tags will have 25 runs during one round, which take the total count to 750. We add five more counts because sometimes the reader will operate an extra second before it stops. This does not happen frequently, so only five more tag records are assumed to be detected for a perfect read. If the time and number of containers staying inside or outside of the fridge are the same, the total number not detected should also be 755.

In a real experiment, it is impossible to get such perfect result because of many factors. This perfect situation only compares with the actual data we gain from the reader in order to study the difference between those data streams. If there are some errors occurring during the experiment, it can be seen clearly during the comparison.

4.3.1 Round 1
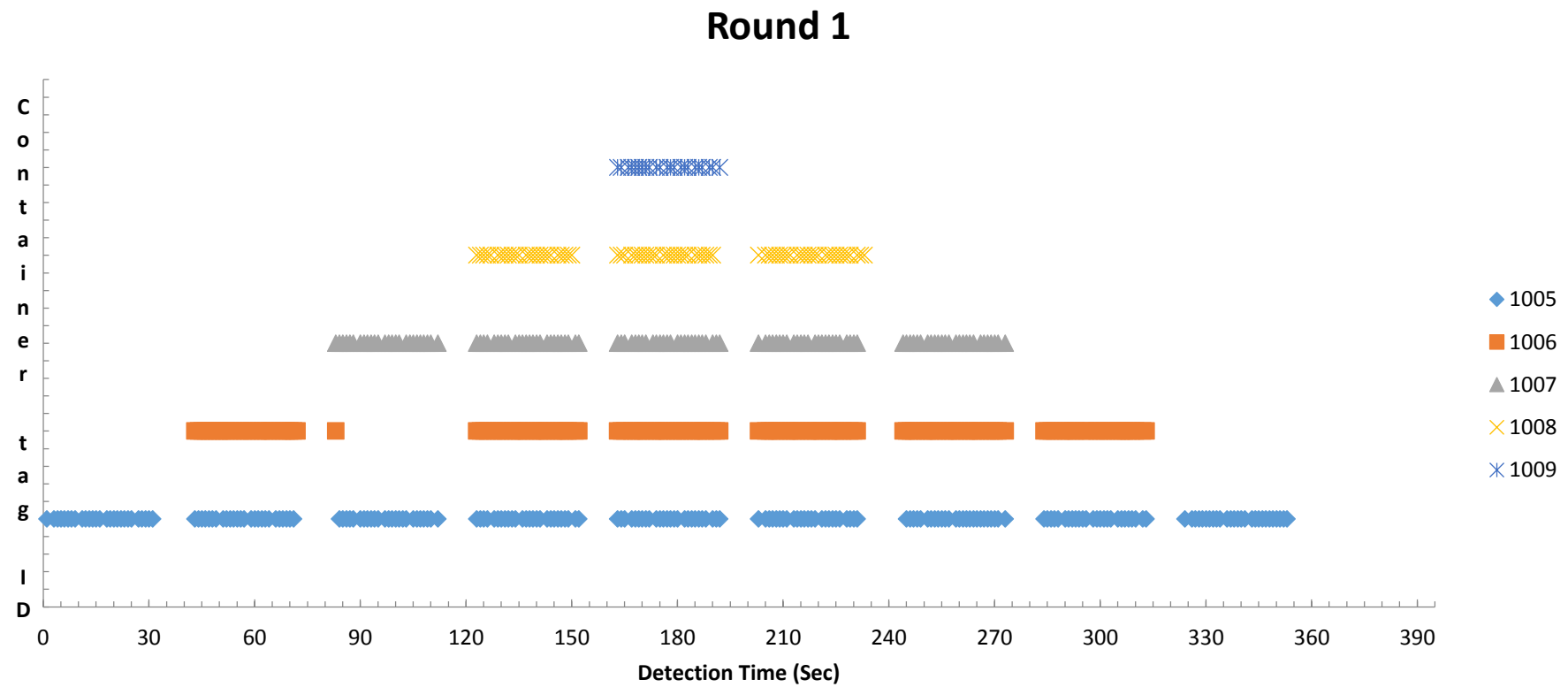
Figure 4.3 Tag detection experiment (Round 1)

	Container in the fridge	Container not in the fridge
Tag detected	615	0
Tag not detected	140	755

Table 4.6 Confusion matrix of tag detection round 1

In Round 1, the containers were stored in the fridge in a line. It can be seen from Figure 4.3 that altogether 615 tag IDs were read. Since the perfect tag detection number in this experiment is 755, the actual detection rate in this round is 81.5%. Although this rate is relatively high, there were still over 100 tag IDs that were not extracted by the reader. This is the difference between a real detection and the ideal reading. In Run 2, the tag ID 1006 was only detected once while remaining unreadable the rest of time. In this case, we may think the container was taken out the fridge during Run 2.

However, as we can see from the graph, the other tag IDs had similar trends when compared with the perfect detection graph. We could easily figure out whether the container is inside the fridge or not despite the fact that some of the tag readings were missing. Meanwhile, Table 4.6 demonstrates that the true negative rate was 100% correct, which means the condition of the containers taken out of the fridge was completely recorded.

4.3.2 Round 2
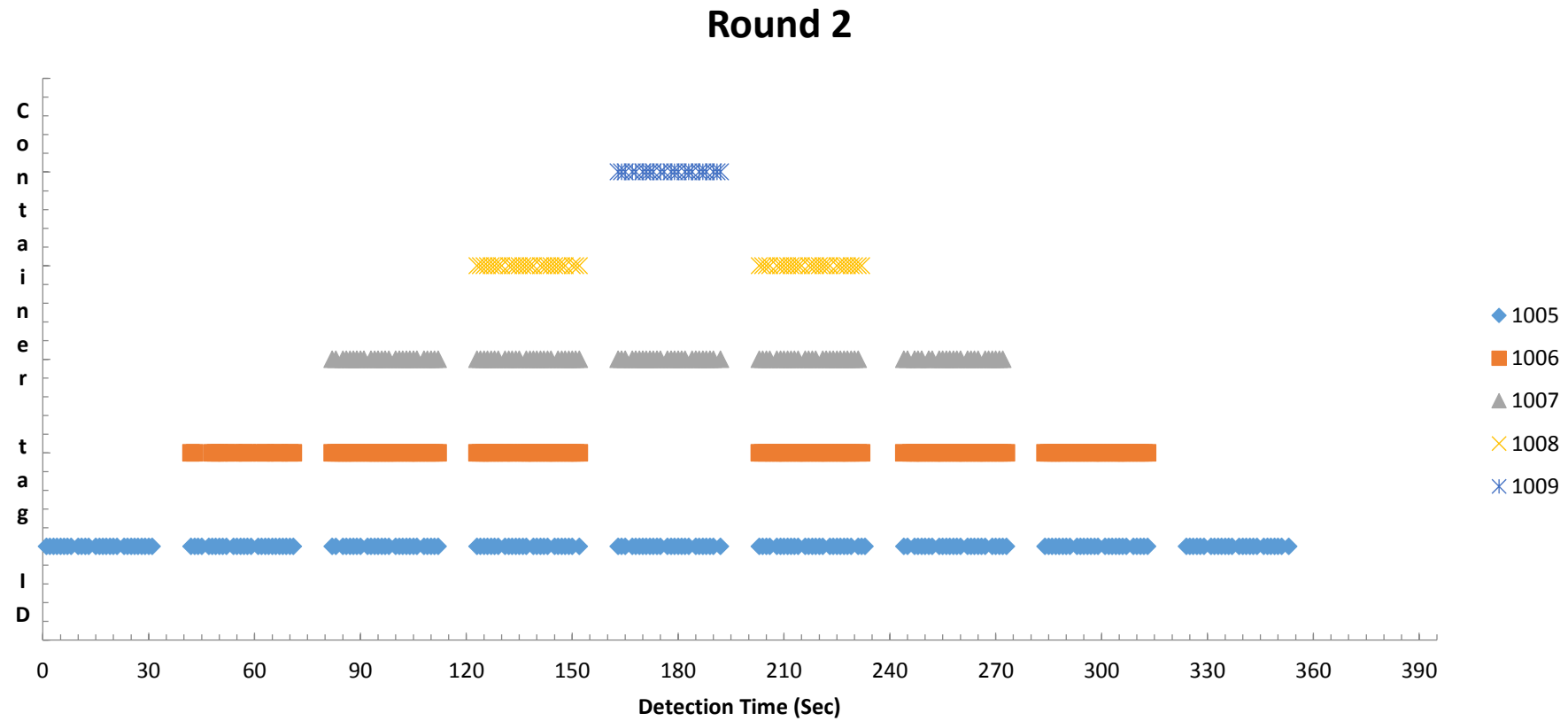
Figure 4.4 Tag detection experiment (Round 2)

	Container in the fridge	Container not in the fridge
Tag detected	591	0
Tag not detected	164	755

Table 4.7 Confusion matrix of tag detection round 2

In the second round, the containers were stored in the same way as the previous round. The table indicates that 591 tag IDs were successfully detected at this time, which leads to a detection rate of 78% overall. This is slightly less than Round 1. Figure 4.4 revealed that both tag 1006 and 1008 were not detected in run 5. However, those two containers were still inside the fridge during this run. These missing records were the main reason that the detection rate was decreased. To make the matter worse, our recognition of the container's location may be misguided by the lost data. Since both tag detections for 1006 had errors in the first round, the tag needed to be replaced with a new tag in order to inspect whether this tag itself has quality issues.

Except for those errors that occurred in this round, the other containers' location can still can be clearly identified from the graph above. Similar to Round 1, the false negative and true positive remain 100% and 0% respectively.

4.3.3 Round 3
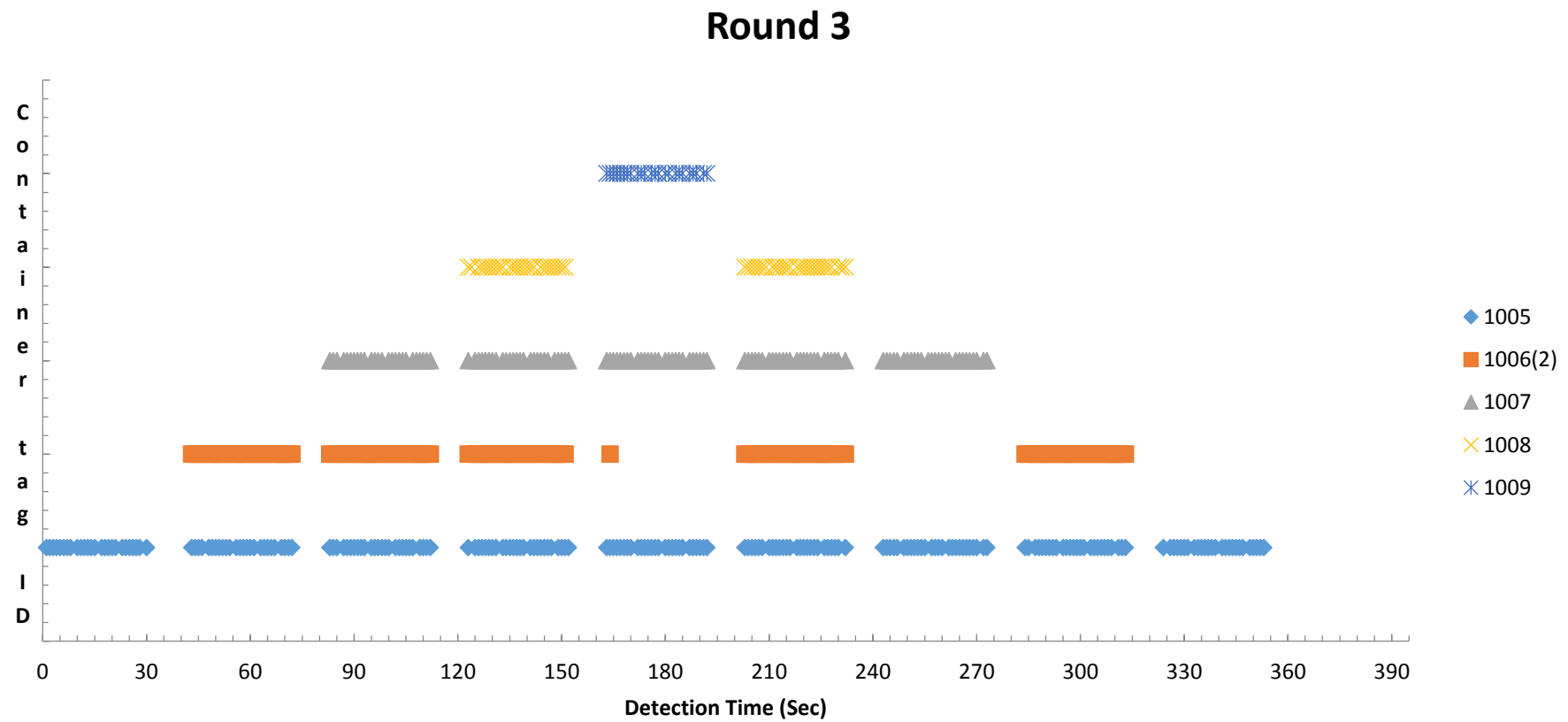
Figure 4.5 Tag detection experiment (Round 3)

	Container in the fridge	Container not in the fridge
Tag detected	574	0
Tag not detected	181	755

Table 4.8 Confusion matrix of tag detection round 3

In this round, the tag 1006 was replaced with a new tag that was identified as 1006(2). As we mentioned in the previous round, this was because we wanted to find out whether or not the storage method or the tag quality itself had impact on the detection rate. The containers were put in a line in Round 3 and other settings were kept unchanged.

The result of Figure 4.5 shows that tag 1006(2) was also unable to be recorded during run 5 and run 7. What's more, tag 1008 was missing in run five as well. The overall true positive tag count in Table 4.8 is 574. Thus, the detection rate of Round 3 is approximately 76%, which is the worst rate among the first three rounds. Since we had already eliminated the possibility of bad tag quality leading to a low detection rate, it seems to be the storage method that altered the outcome. Therefore, a second way of placing the containers in the fridge was tested in the next two rounds to verify our hypothesis.

4.3.4 Round 4
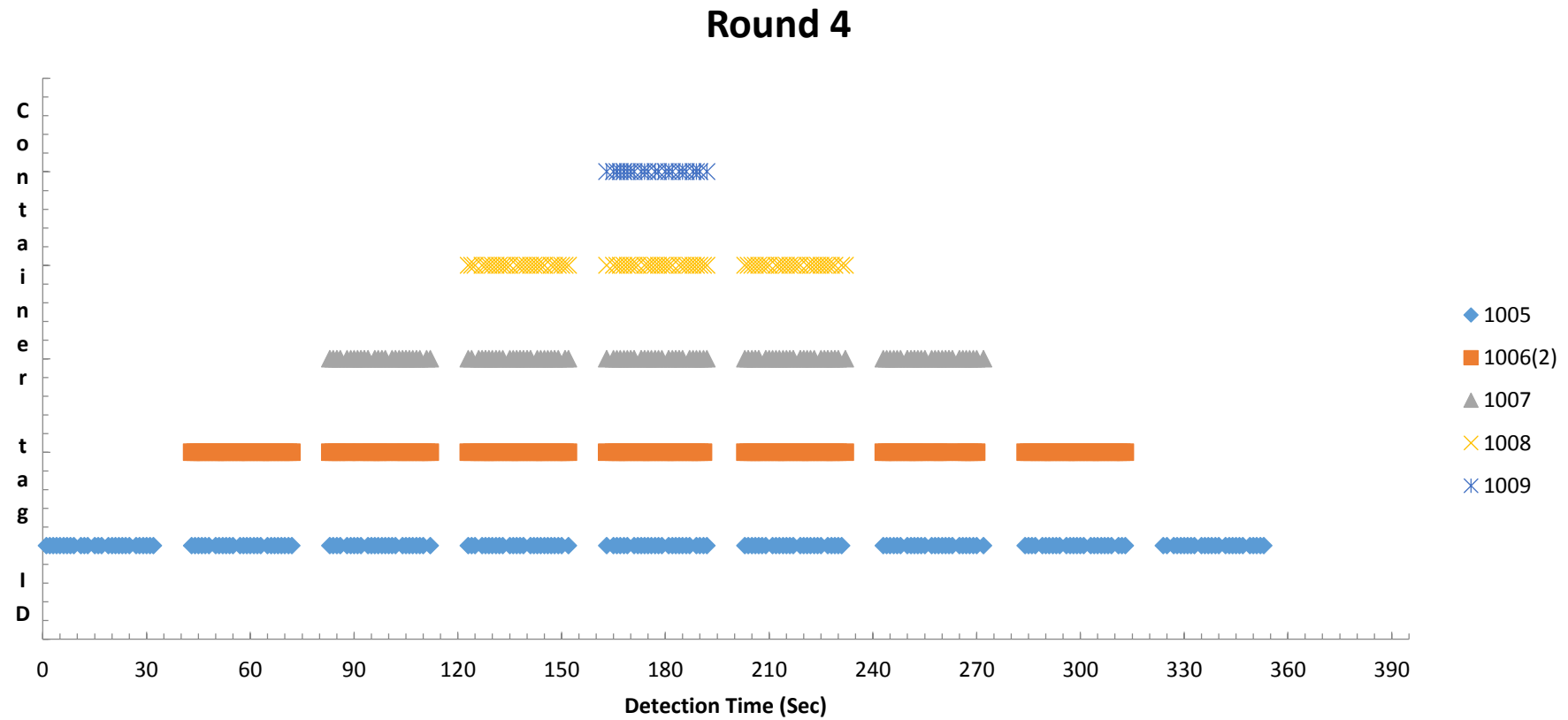
Figure 4.6 Tag detection experiment (Round 4)

	Container in the fridge	Container not in the fridge
Tag detected	646	0
Tag not detected	109	755

Table 4.9 Confusion matrix of tag detection round 4

The containers were stacked up instead of being placed in parallel during Round 4. It can be seen from Figure 4.6 that the whole detection activity was almost the same as the perfect situation. All of the containers' locations were classified precisely. There was no blank space in any runs of this round.

The confusion matrix in Table 4.9 also provides positive outcomes. 646 tag IDs altogether were detected in this round. Thus, the detection rate reached 85.6%. This value was higher than any of the previous rounds. As predicted, the condition when containers are outside the fridge was still 100% correct. Since it was only one test, we were not able to confirm that the storage method we adopted here was better. Therefore, we needed to run another round with all of the settings remaining the same to ensure its validity.

4.3.5 Round 5
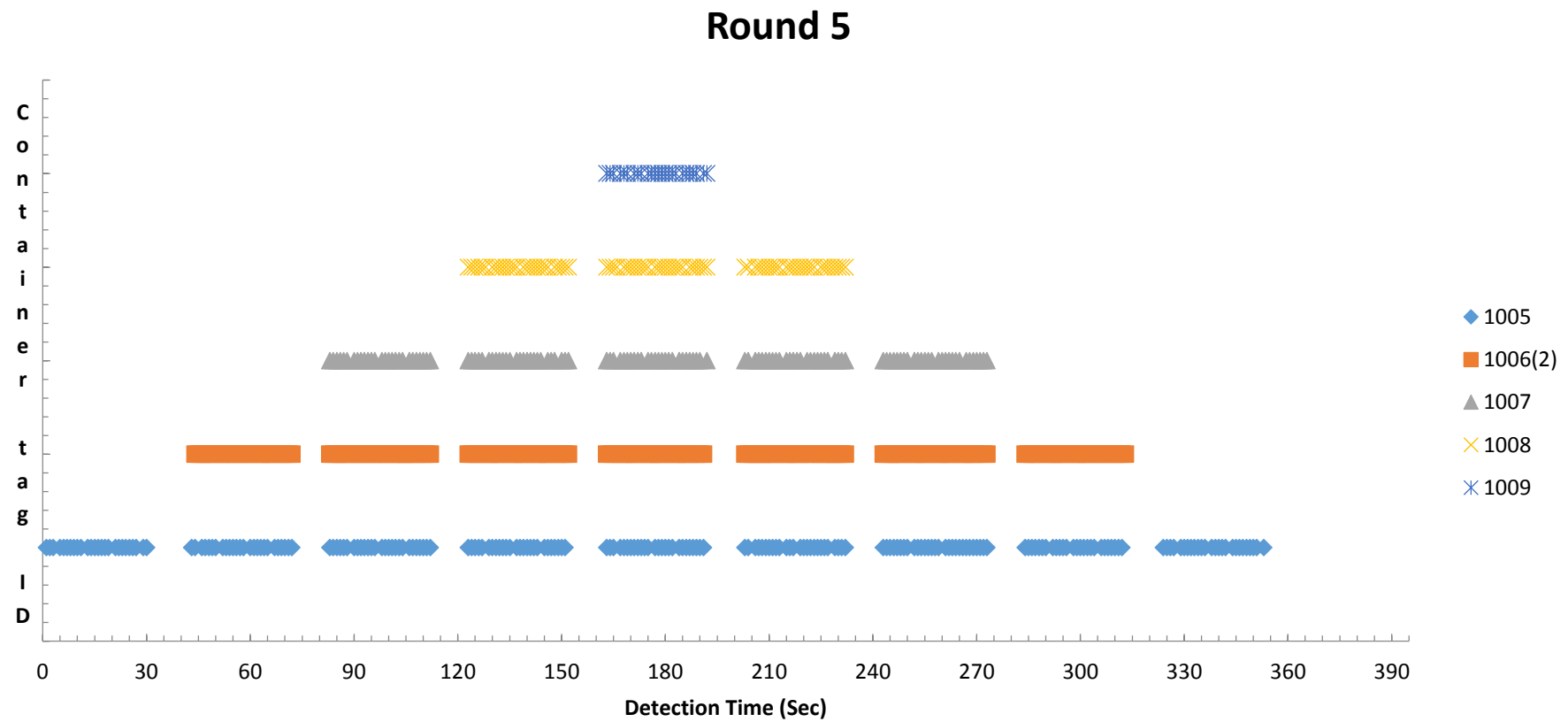
Figure 4.7 Tag detection experiment (Round 5)

	Container in the fridge	Container not in the fridge
Tag detected	659	0
Tag not detected	96	755

Table 4.10 Confusion matrix of tag detection round 5

Similar to Round 4, the containers were also stacked up together in this round. Figure 4.7 revealed that the tag moving actions in Round 5 were successfully recorded. Like the previous round, the identified containers' position was 100% accurate and there was no error in this round.

Table 4.10 shows that the correct classified tag IDs were 659 in total, which means the detection rate was up to 87.3%. This is even higher than the former round and the highest value among all five rounds. Only 95 tag IDs were not detected at this time and there was almost no effect on container recognition. Undoubtedly, the container outside the fridge was 100% not detected during the whole round. Both two rounds with stacked storage had a better performance than the other method and there is strong evidence to support our hypothesis.

From all five rounds of this experiment, it can be concluded that the research was used to figure out the blood bag's location when stored in the blood bank. However, the storage method is rather important when tracking multiple targets. The detection rates of parallel placement are lower than the stacked method due to the reading errors that occurred in each round. In this case, the stacked method is considered to be a more stable storage method for the RFID-based blood tracking system.

Since the tracking objects in this experiment is the container, the performance of the RFID system in the real blood bag needed to be tested in the next experiment. Experiments with both storage methods were conducted in order to verify the results we made here.

4.4 Experiment 4

As pointed out in the previous section, this experiment followed the same procedure as the previous one. In order to make the experiment more realistic, the blood bag was tested instead of containers. Both the empty blood bag and energy drink-filled blood bag were tested in this experiment. Altogether, 12 rounds were held. The tag detection data of each round was recorded and attach to the Appendix.

Theoretically, all of the blood bags should be continuously detected and recorded when they stay inside the fridge. Likewise, these bags should not be read as soon as they left the fridge. For this experiment, the objects were given the same reading status as the containers. A perfect reading situation graph was also created for the experiment and is shown below.
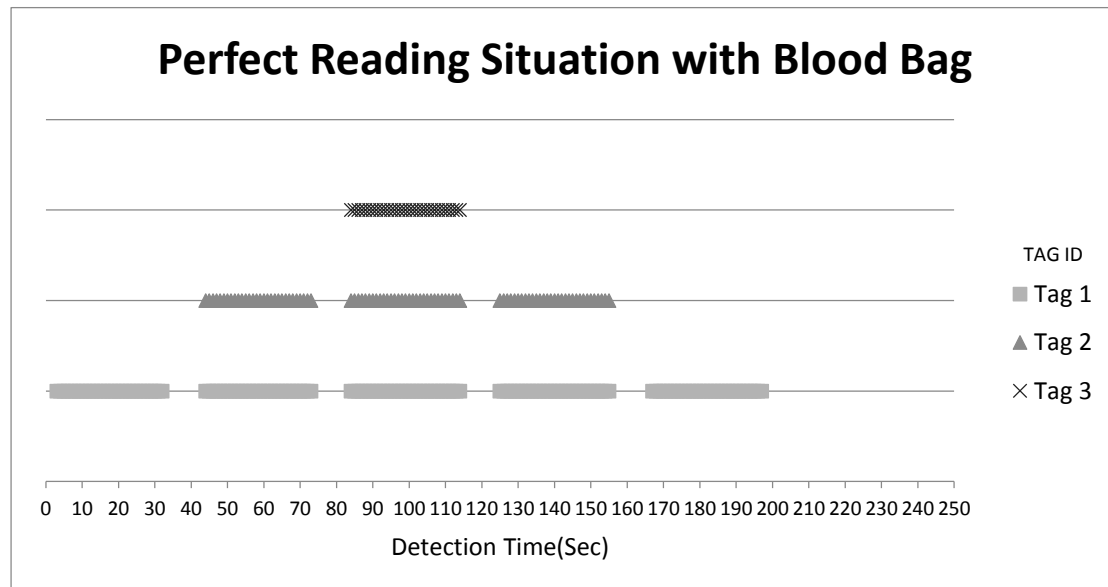
Figure 4.8 Perfect tag reading graph for blood bag

This diagram is analogous to the container's experiment except for the number of run times. Since we only used three blood bags in this experiment, the total number of run times have been reduced to six. As we can see from the diagram, tag 1 is expected to be present during the first five runs, while tags 2 and tag 3 are expected to be present for three runs and one run respectively. As we discussed earlier, the actual tag detection rate will be different from this chart. With each round, we will gather the real-time data generated by the reader to compare it with this chart. In this instance, we can analyse the performance of these systems through blood transfusion.

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	275	0
Tag not detected	0	275

Table 4.11 Confusion matrix of perfect identify situation for blood bag

Likewise, the confusion matrix presented here points out the perfect detection result for the blood bag. Both the tag detected and the blood bag that is actually in the fridge is true positive, the tag detected but the blood bag not in the fridge stands for false positive, the tag not detected but the blood bag actually in the fridge represent a false negative, neither the tag detected nor the blood bag in the fridge is true negative. In an ideal situation, both the true positive and false negative values should be perfectly recorded while the other two values should remain 0.

The total detected number in this instance is also based on the number of tags we adopted in this experiment. Since we have used three blood bags, the total number of runs in one round is nine. In this case, using the same method of calculation, the total count of tag records should be 270. As explained in experiment three, five more counts are added because of the extra operation time for the reader. Similarly, the time and number of blood bags staying inside or outside of the fridge are the same, both numbers are 275.

4.4.1 Empty Blood Bag

This experiment has been divided into two parts. In the first part, the objects we tested were the new blood bags, which has not been injected with any liquid. Each round took approximately four minutes to complete. All tag IDs were recorded by RFID readers. This analysis is based on the data we collected during the experiment.

4.4.1.1 Round1
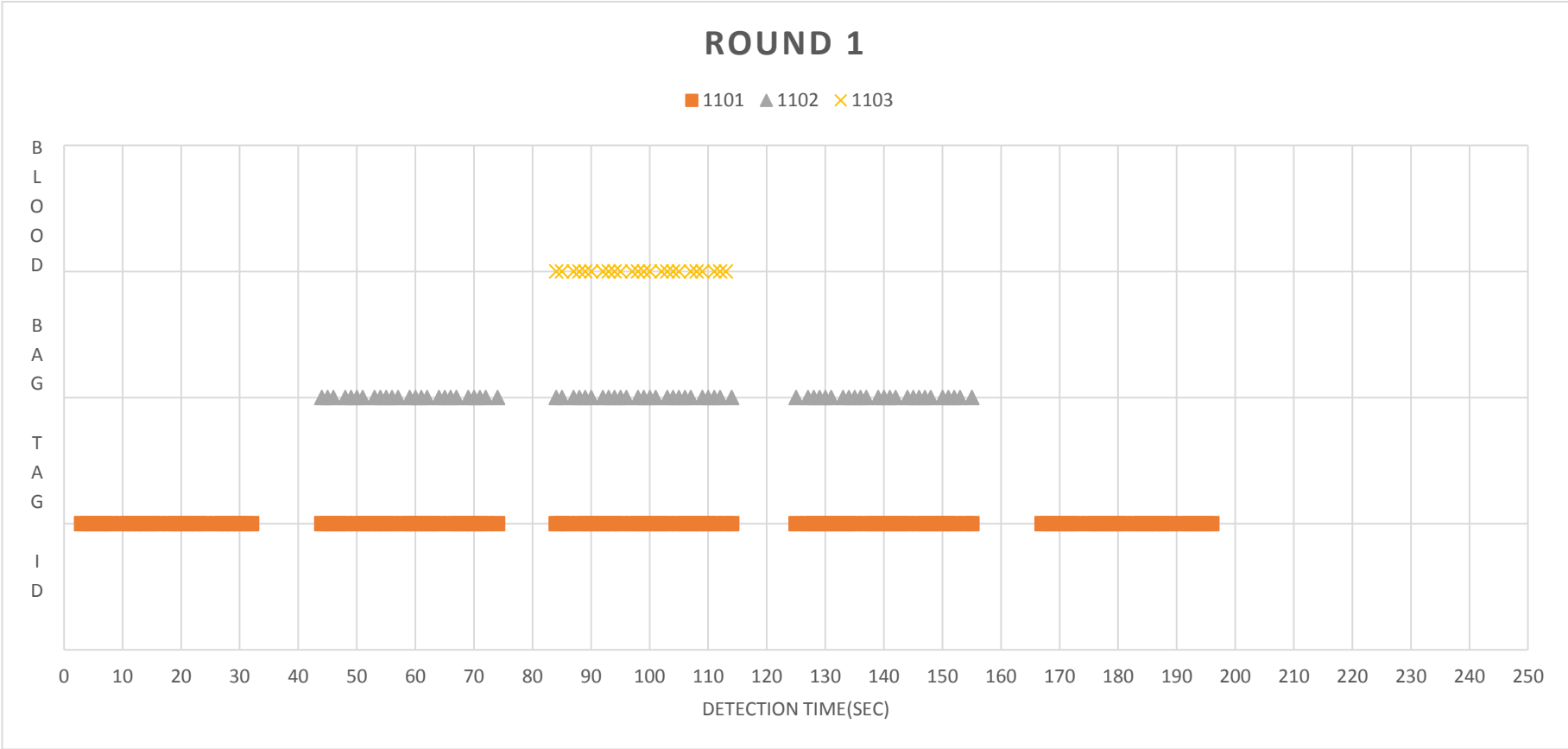
Figure 4.9 Empty blood bag detection (Round 1)

Tag ID	Detection Rate
1101	90%
1102	83.3%
1103	80%

Table 4.12 Single tag detection rate Round 1

In order to figure out whether the detection rate was different for each object, we decided to take the reading data of each third run into consideration. All three blood bags were put inside the fridge and detected by the reader. The table above demonstrates that the detection rate of tag 1101, 1102, 1103 in Round 1 were 90%, 83.3% and 80% respectively. Tag 1103 had a lower reading rate than 1101, exactly 10%. Although it seems like a lot, there were only three different records difference across 30 seconds of detection. Besides, even the lowest rate among these three tags is still good enough for a practice use of RFID technology.

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	234	0
Tag not detected	41	275

Table 4.13 Confusion matrix of tag detection round 1

In the first round, the blood bags were placed at the same level. It can be seen from Table 4.13 that altogether 234 RFID signals were recorded across 4 minutes. We used the same equation as a previous experiment for calculations that which lead to a detection rate of 85.1%. Moreover, the blood bags were 100% unreadable once they left the fridge. This numerical value is sufficiently high that we can confirm where the blood bags were during the experiment. Meanwhile, the graph presented in Figure 4.9 also indicted that all of the tags were clearly recorded. The figure is very similar to the perfect one we created earlier, so we considered it was a successful round.

4.4.1.2 Round 2
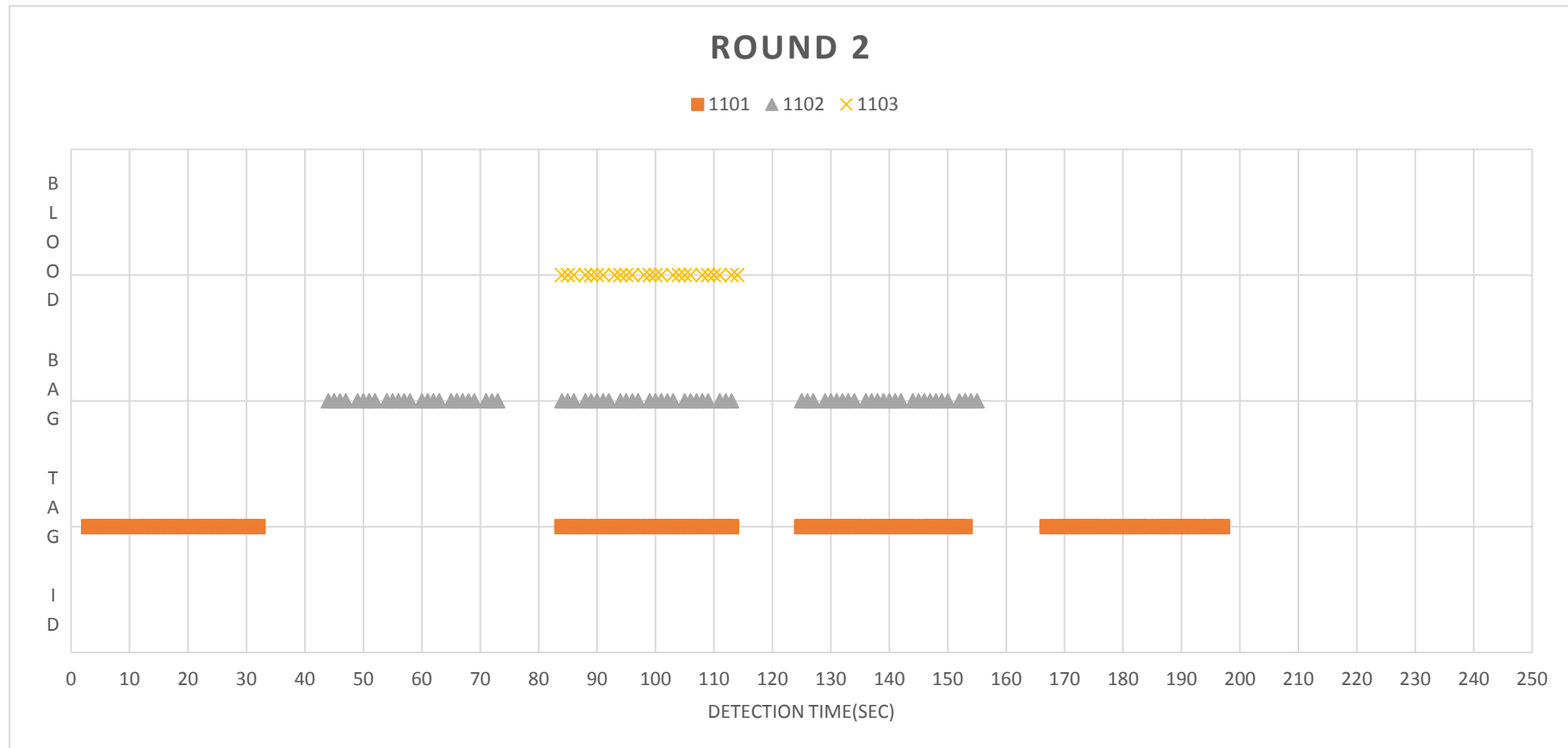
Figure 4.10 Empty blood bag detection (Round 2)

Tag ID	Detection Rate
1101	90%
1102	83.3%
1103	83.3%

Table 4.14 Single tag detection rate Round 2

In Round 2, the detection rates of three purposed blood bags have been listed above. This data was extracted from the Run as we mentioned in the previous round. As we can see from Table 4.14, the reading accuracy of tag 1101 and 1102 remain the same as the last round, while 1103 slightly increased its rate by 3.3%. The difference between the objects is still tiny. The RFID performance remained relatively high in this round as well.

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	210	0
Tag not detected	65	275

Table 4.15 Confusion matrix of tag detection Round 2

Figure 4.10 showed the tracking records of blood bags in Round 2. Those bags were still arranged in parallel. It can been seen clearly from the graph that blood bag 1101 was recognized as being located outside of the fridge in Run 2. However, the bag was actually placed inside the fridge in this run. Like Experiment 3, one possible reason for this failure was that the quality of the tag itself was unstable. We decided to keep the tag activated during the next round. If the bag could not be detected again, then we could confirm that tag 1101 was dysfunctional. Another possible reason was the same as in a previous experiment where it was discovered that the storage method had impacted on the RFID performance.

The influence can also be identified in Table 4.15. 210 tags in total were detected during this period. The detection rate was 76.4%, which was approximately 10% less than the first round. It happened to be the same values that recorded a loss in Run 2. However, some more rounds were needed to figure out the reason for this misclassification.

4.4.1.3 Round 3
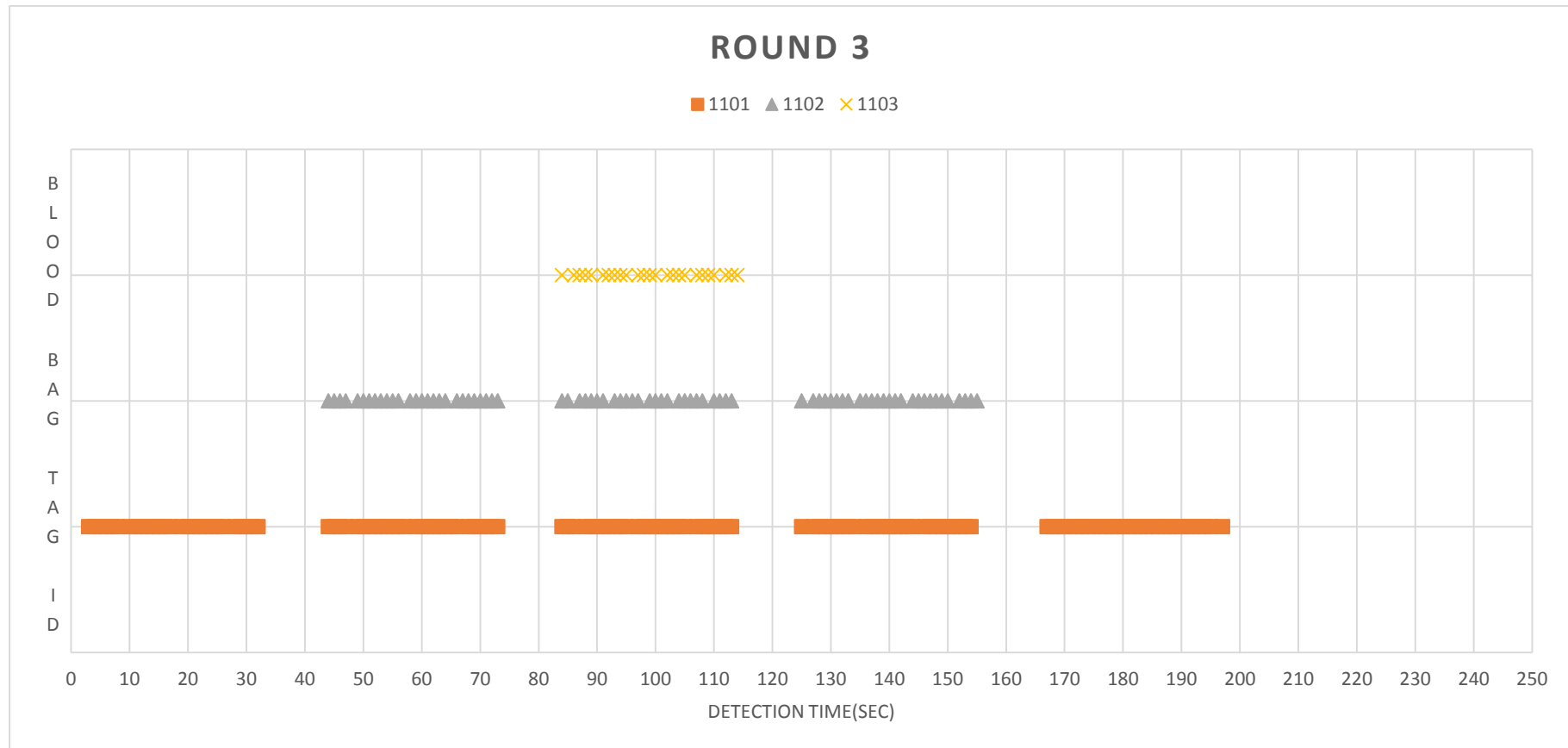
Figure 4.11 Empty blood bag detection (Round 3)

Tag ID	Detection Rate
1101	90%
1102	83.3%
1103	83.3%

Table 4.16 Single tag detection rate Round 3

The table above indicates the reading accuracy of the three tags in Round 3. The average rate for this round was 85.5%. Moreover, each tag detection rate was exactly the same as Round 2, which meant that the performance of these tags was still high-class. Since the detection rate of all three rounds was maintained at the same level and the discrepancy between each tag was less than 10%, we thought the tags in this experiment had no performance difference. However, whether a different storage method might alter the conclusion we made still needed to be tested.

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	242	0
Tag not detected	33	275

Table 4.17 Confusion matrix of tag detection Round 3

In this round, we used the same experiment configuration as the previous two rounds. It was hard to tell the difference between Figure 4.11 and the perfect reading situation graph because all of the blood bags' locations were successfully tracked in Round 3. The confusion matrix in Table 4.17 also proved its validity. 242 out of 275 tags were read in this round. 88% of the correct read was the highest value among all of the rounds in parallel storage.

From the data we gathered for the three rounds of the experiment, it could be concluded that all of the blood bags' activities outside of the fridge were recorded by the RFID reader. So there was no misclassification for true negative and false negative in the confusion matrix. The only thing that concerned us here was the misclassification for false positive, which was the situation when the blood bag was inside the fridge but unable to be read. It will came up as a mistake during the blood transfusion. Since the tagged bag 1101 was successfully detected in this round, the storage method was considered to have a higher priority as the source of this problem. So another three rounds were conducted to test the second storage method in order to find out the best solution for blood tracking.

4.4.1.4 Round 4
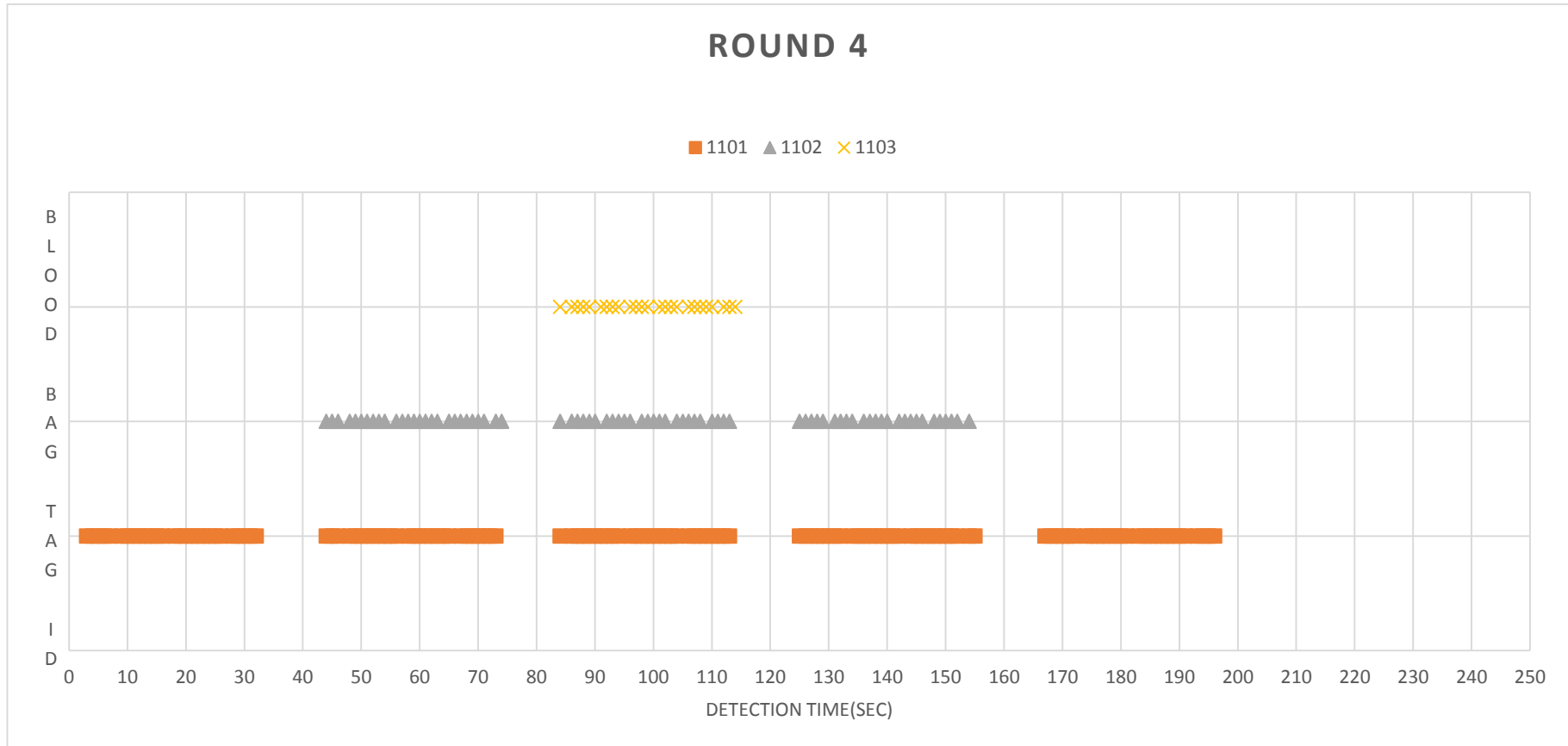
Figure 4.12 Empty blood bag detection (Round 4)

Tag ID	Detection Rate
1101	90%
1102	83.3%
1103	83.3%

Table 4.18 Single tag detection rate Round 4

From Round 4, the storage method was shifted to a stacked placement. The session where all three tags were put in the fridge was still used for measuring the accuracy of each bag. Table 4.18 revealed the detection rate of every tag in this round. As we can see, the result was still the same as the last two rounds, which were applied with the parallel placement. Since the tags averaged 85.1% true positive reading accuracy, we thought that all of the tag qualities adopted in this experiment were good enough and would have no impact on the overall performance of the RFID system. Two more rounds were applied to prove its correctness.

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	238	0
Tag not detected	37	275

Table 4.19 Confusion matrix of tag detection Round 4

Figure 4.12 indicated that all of the tagged blood bags were successfully read in this round. Each bag's tag ID emerged and disappeared according to the operations we did during the experiment. This meant all of the activities in Round 4 were 100% captured by the reader. Even when compared to the perfect reading situation, Figure 4.12 demonstrated a very similar trend. From the counts presented in Table 4.19, it was noted that the detection rate reached 86.55%. Only 37 tag IDs were not detected during this round. As we explained in the previous experiment, these slight misclassifications did not affect the detection of the RFID system.

4.4.1.5 Round 5
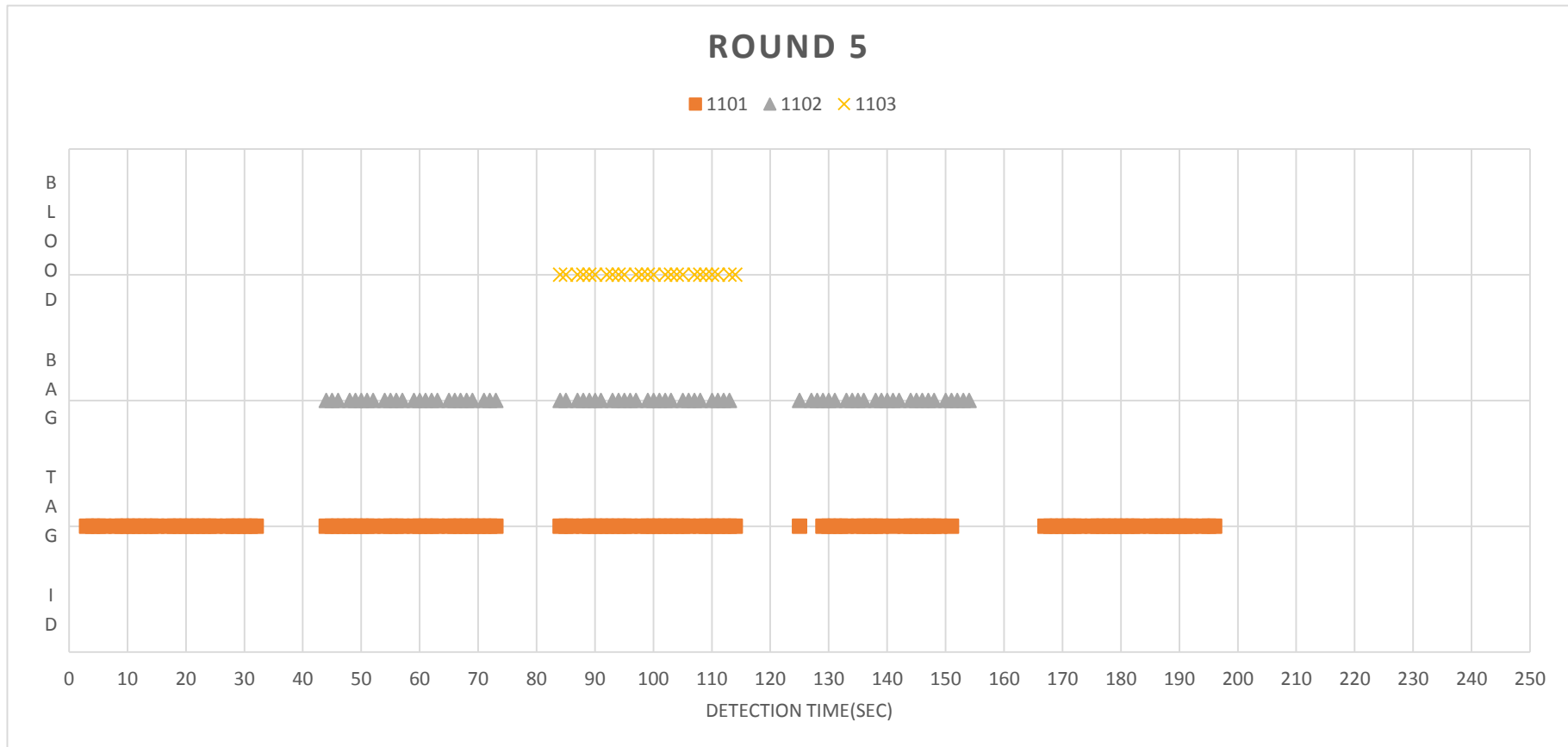
Figure 4.13 Empty blood bag detection (Round 5)

Tag ID	Detection Rate
1101	93.3%
1102	83.3%
1103	83.3%

Table 4.20 Single tag detection rate Round 5

Table 4.20 presents the detection rate for each tagged bag in Run 3 of Round 5. Similar to the previous rounds, the correct percentage was still comparatively high. Furthermore, the detection rate of tag 1101 increased by 3.3% and became the highest value of all the testing rounds. As we discussed earlier, the performance of selected tags had little fluctuation and highly functional.

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	229	0
Tag not detected	46	275

Table 4.21 Confusion matrix of tag detection Round 5

In this round, the blood bags were also stacked together. Figure 4.13 contains information about the detection activities of all blood bags in Round 5. The graph had the similar features to the perfect detection figure with the exception of Run 4. It could be seen clearly that there was a small blank space in the detection records of tag 1101. Although it did not impair the judgment of the bag's location, it may have affected the overall detection rate of this round's test. Table 4.21 verified that the rate was affected. 229 tag ID were read in this round. So the detection rate dropped to 83.3%, which was the lowest value among all of the rounds where the location of bags were successfully identified. All of the activities outside of the fridge disappeared, as we predicted.

4.4.1.6 Round 6
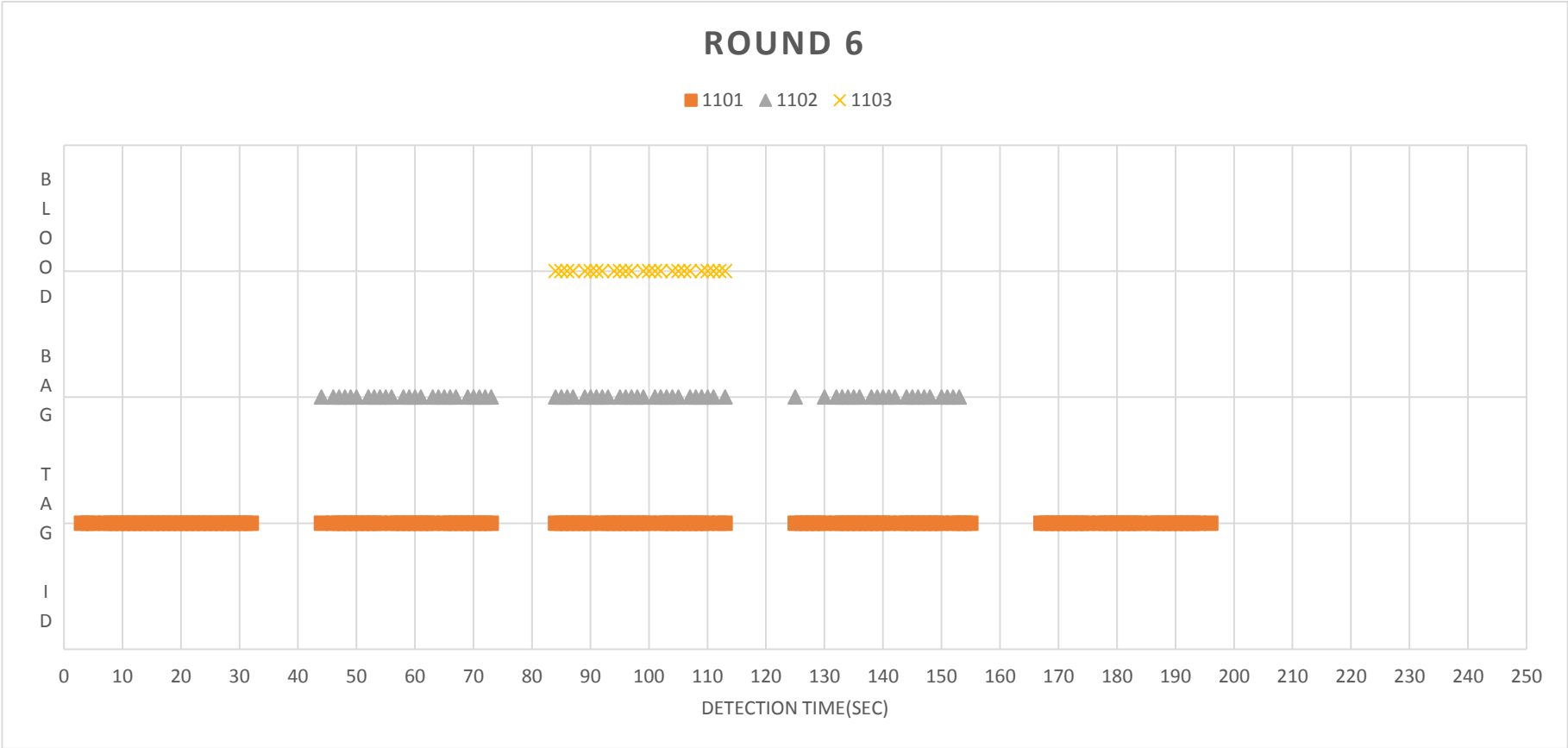
Figure 4.14 Empty blood bag detection (Round 6)

Tag ID	Detection Rate
1101	90%
1102	83.3%
1103	83.3%

Table 4.22 Single Tag Detection Rate Round 6

The detection rate illustrated in Table 4.22 was exactly the same as Rounds 2, 3 and 4. As usual, the outcomes remained at an extremely high value. From all of the rounds we tested, it appeared that the detection rate of each tag was qualified for the experiment (no less than 80%) and had no quality issues. Although there was an accuracy difference between distinct tags, the disparity was small enough to be ignored. Hence, we can confirm that the performance of RFID tags was stable.

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	234	0
Tag not detected	41	275

Table 4.23 Confusion matrix of tag fetection Round 6

Figure 4.14 presents the last round of the detection activity in the first part of the experiment. It utilized the same storage method in Rounds 4 and 5. Similar to Round 5, the graph illustrated almost the same reading result as the perfect situation. From Table 4.23, we can see that 234 tag IDs were detected. Hence, the detection rate in this round was approximately 85.1%. This value still stood at a considerably high level, which met the requirement of blood bag tracking.

All of the experiments of made so far suggested that the detection rate of the RFID attached blood bags was between 83.3% and 88%. Although some of the tag IDs were not detected during one running time, the existence of the blood bags could still be easily identified. However, because of the missing reading in Round 2, the detection rate in this round dropped to 76.4%. Since the tag IDs were unable to be read during this run, the blood bag's location was falsely recognized. Except that, there was no accuracy difference (the detection rate was almost the same) between the two storage methods. We wondered if the missed reading in Round 2 accidently happened or whether the storage method did have the influence on the performance of RFID system. In this case, further investigation needed to be established during the second part of the experiment.

4.4.2 Blood Bag with Energy Drinks

In the second part of the experiment, the blood bag was filled with energy drinks. The purpose of this part of experiment was to simulate the impact of blood on RFID performance. Like the first part, each round in this part also took about four minutes to complete. The analysis below is based on the data we collected during the experiment.

4.4.2.1 Round 7
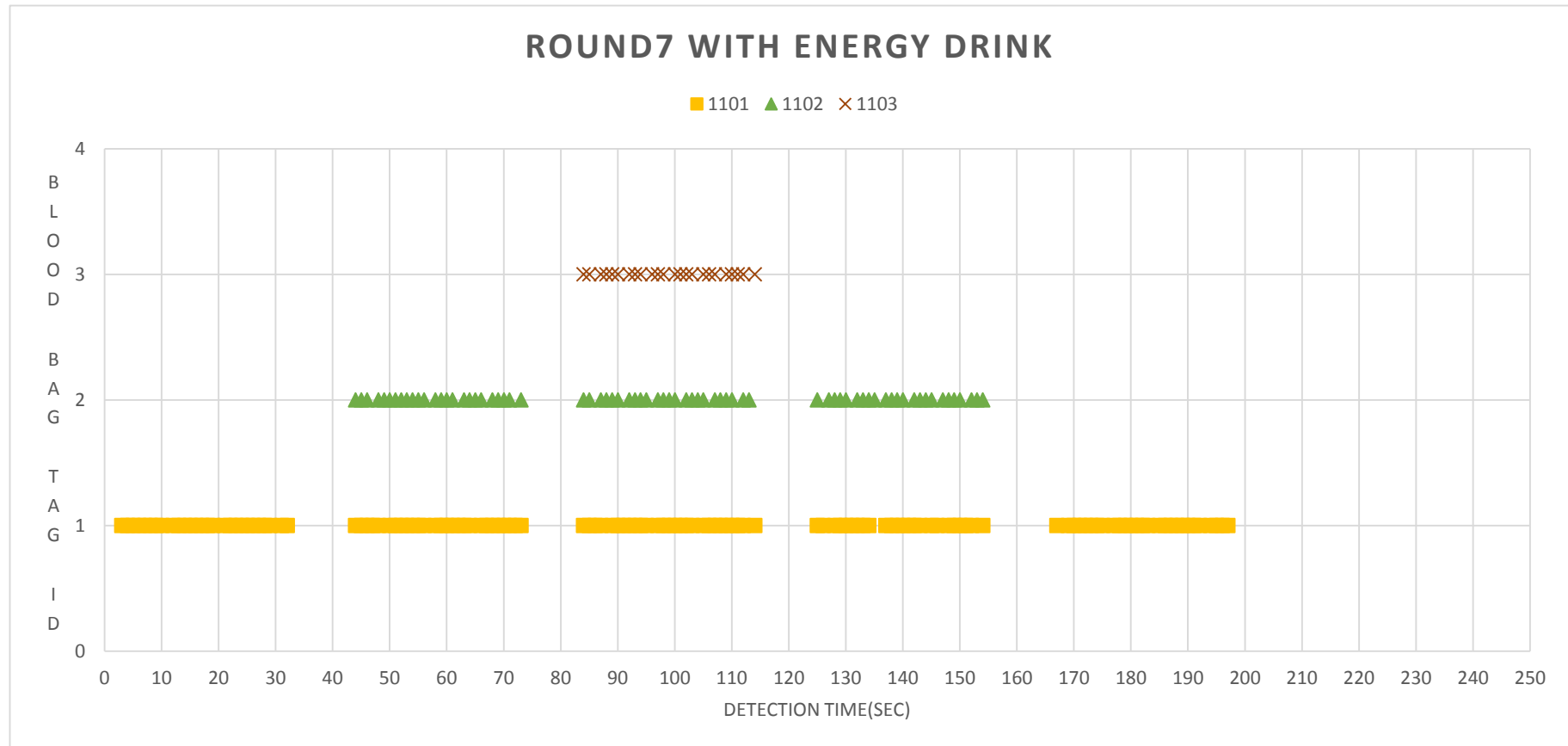
Figure 4.15 Blood bag with energy drinks Detection (Round 7)

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	229	0
Tag not detected	46	275

Table 4.24 Confusion matrix of tag detection (Energy Drinks) Round 7

In the first round of the second part of the experiment, the blood bags were stored in the fridge in a line. As we can see from Figure 4.15 all of the blood bags locations were successfully detected. No error occurred during this round of the experiment. Each bag appeared only when they were put into the fridge. In order to understand the performance of the RFID tagged bags, we used the confusion matrix above to calculate the detection rate of this round. It should be noted that the detection rate was still very high. The true positive value in Table 4.24 was approximately 83.3% correct, while the true negative was 100% correct.

The detection rate and the reading trend (which means that all of the bags outside the fridge were 100% not read when bags inside the fridge cannot be 100% recorded) were almost the same as the previous part of the experiment. Since this was the first round of the experiment, it was hard to say that the energy drinks did not affect the detection rate. Several more rounds needed to be completed in order to arrive at a conclusion.

4.4.2.2 Round 8
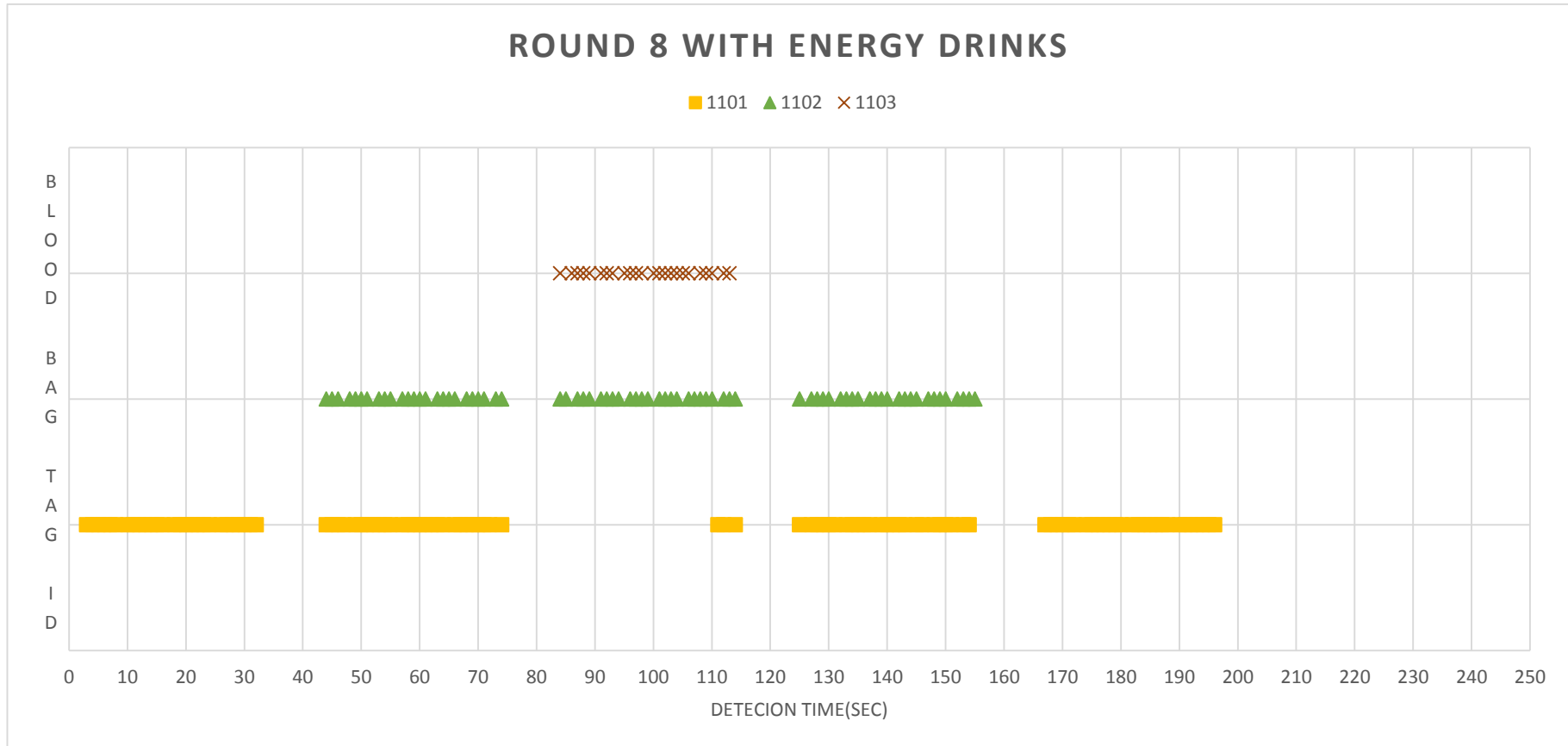
Figure 4.16 Blood bag with energy drinks Detection (Round 8)

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	207	0
Tag not detected	68	275

Table 4.25 Confusion matrix of tag detection (Energy Drinks) Round 8

This round of the experiment stored the blood bags in the same way as the previous round. The graph in Figure 4.16 clearly indicates the storage activities in Round 8. During the simulation, it was clear that an error occurred in Run 3. Tag 1101 could not be read until the last few seconds of the run. In this case, the location of the blood bag wasn't identified since very few records indicated that the bag was inside the fridge. Other than that, the rest of the graph was quite normal and the objects were easily discerned. The confusion matrix listed in Table 4.25 illustrates that the detection rate was affected by the error that occurred in Run 3. Only 207 tag IDs were read in this round, which lead to a detection rate of 75.3%. On the basis of the first part of the experiment, we knew that the average detection rate of a successful detection round (where no errors occur) for this experiment setup should have been over 80%.

Since the errors only happened in the first part of the experiment using the first storage method, we thought it might be the storage method which altered the result of RFID blood bags detection. Hence, the detection rate and error rate of the stacked storage method was a key component for verifying the hypothesis.

4.4.2.3 Round 9
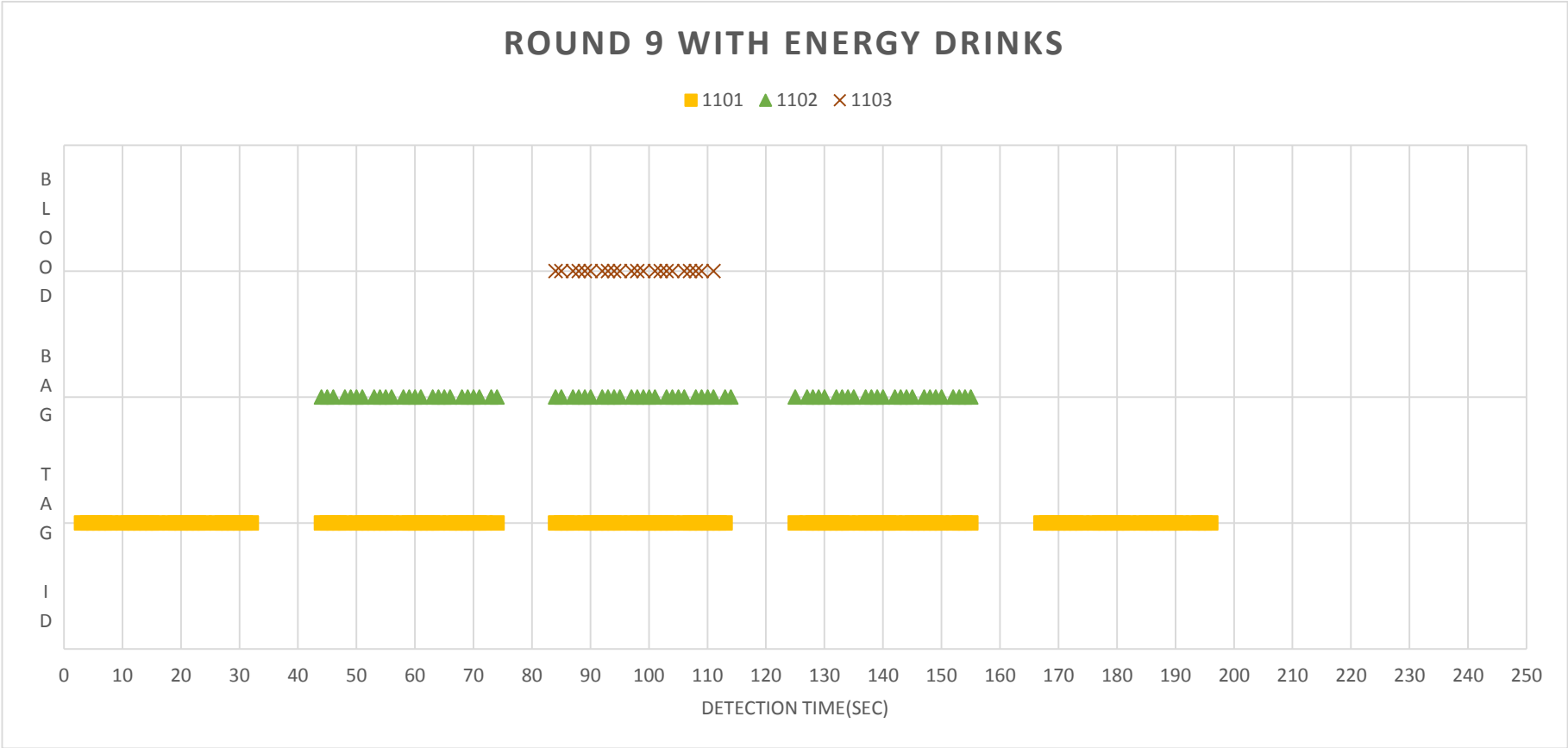
Figure 4.17 Blood bag with energy drinks Detection (Round 9)

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	232	0
Tag not detected	43	275

Table 4.26 Confusion matrix of tag detection (Energy Drinks) Round 9

In order to prove that tag 1101 was still functional, we carried out one more round to test the first storage method. Figure 4.17 demonstrated clearly that all tagged blood bags were detected in this round. No errors occurred in this corresponding time period. Hence, it was believed that the quality of tag 1101 was still reliable. The whole graph was quite similar to the perfect detection situation. Although there were some tag IDs that did not present in the experiment, it did not influence the tracking of items. As discussed earlier, the detection rate for one detection round without any errors should have been be over 80%.

The result of this round confirmed this argument. From the confusion matrix in Table 4.26, it could be seen that altogether 232 tags IDs were read during the session. Therefore, the detection rate for this round was 84.4%, which was inside the accuracy range we summarized in the first part of the experiment.

4.4.2.4 Round 10
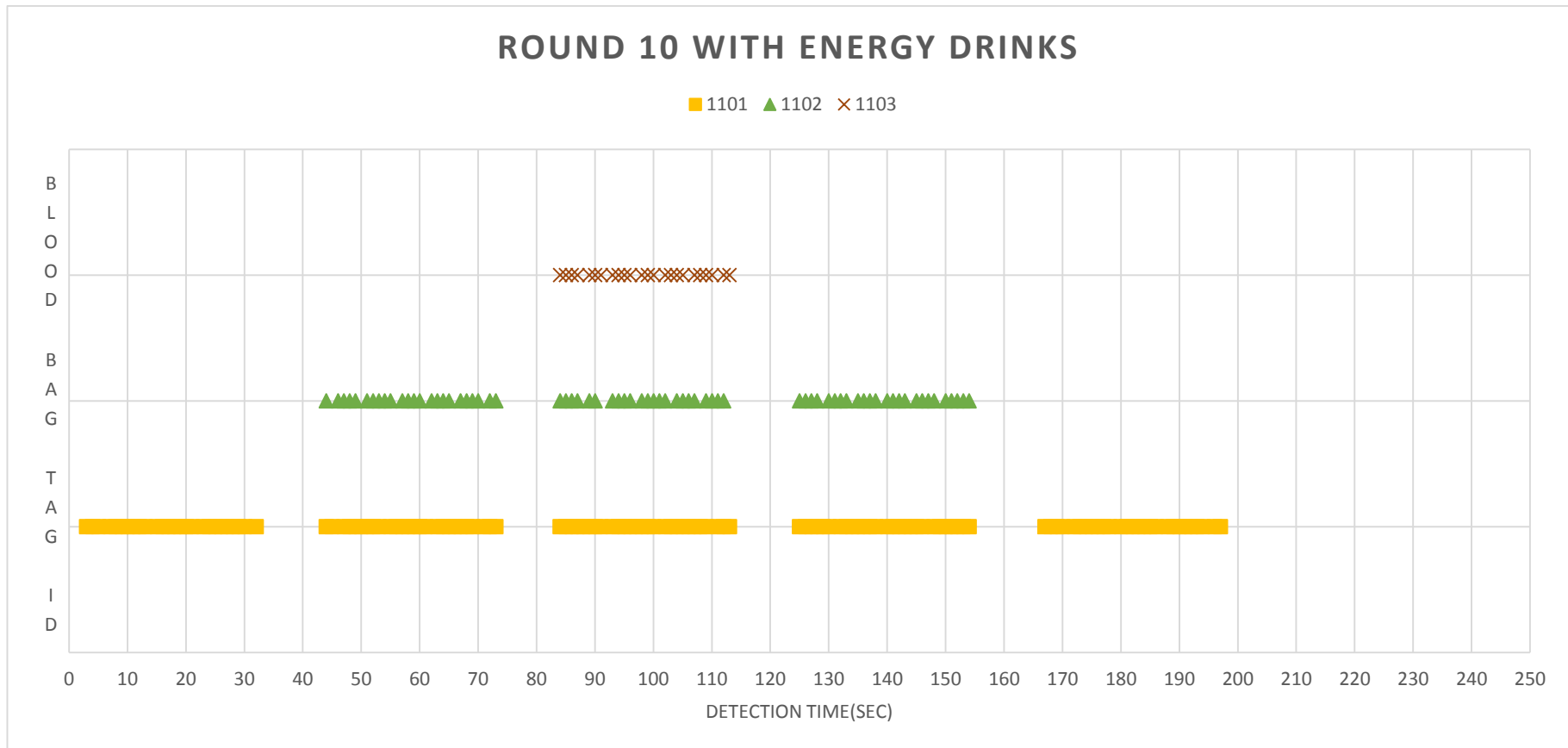
Figure 4.18 Blood Bag with Energy Drinks Detection (Round 10)

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	229	0
Tag not detected	46	275

Table 4.27 Confusion matrix of tag detection (Energy Drinks) Round 10

With this round, the second storage method was adopted for testing the detection rate of an RFID tagged blood bag. As we can see from Figure 4.18, all tracking objects were detected during the reading session. They kept being recorded when they were placed inside the fridge. Meanwhile, the signal disappeared as soon as they left the fridge. Similar to Round 9, no error occurred during this round.

The true positive value stated in Table 4.27 indicates that 220 tag IDs were read in this round. The detection rate of the attached blood bags was 83.3%, which was the acceptable value, as we expected. Moreover, the true negative and false negative were still 100% and 0% respectively.

4.4.2.5 Round 11
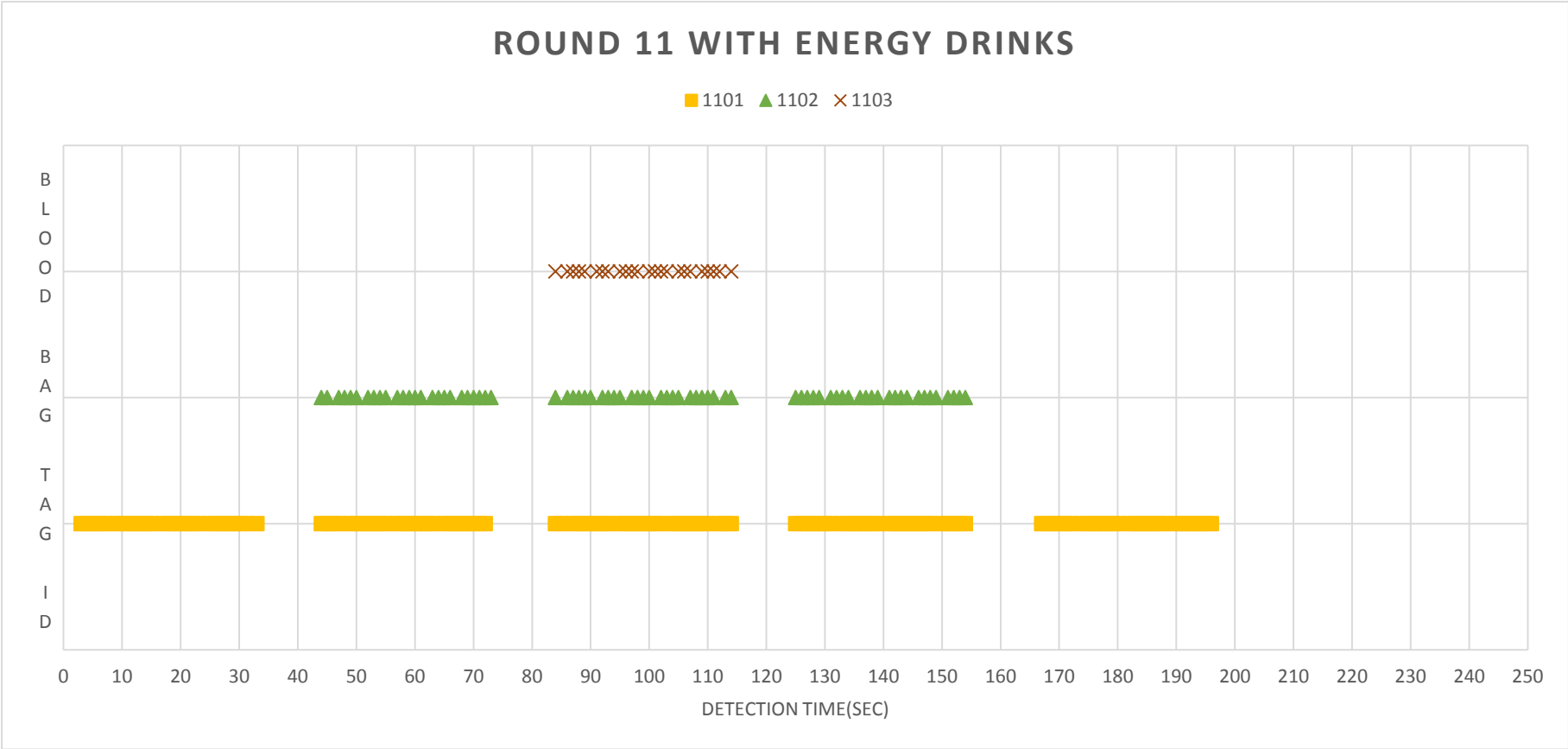
Figure 4.19 Blood bag with energy drinks detection (Round 11)

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	233	0
Tag not detected	42	275

Table 4.28 Confusion matrix of tag detection (Energy Drinks) Round 11

Similar to the previous round, the blood bags were also stacked in this round. Figure 15 revealed that all blood bags were detected in Round 11. Other than the minority of missing Tag IDs, the graph for Figure 4.19 was very close to the perfect detection graph, which meant the objects' position was captured on time.

The true positive value of Table 4.28 was slightly higher than the previous round. Hence, the detection rate based on the confusion matrix of Round 11 became 84.7%. Since all of the two rounds of experiments with second storage methods did not have any error during the detection session, the result was quite close to our hypothesis. It was the storage method that caused some errors in detection activities. In that case, we needed to operate one more round to ensure the outcomes.

4.4.2.6 Round 12
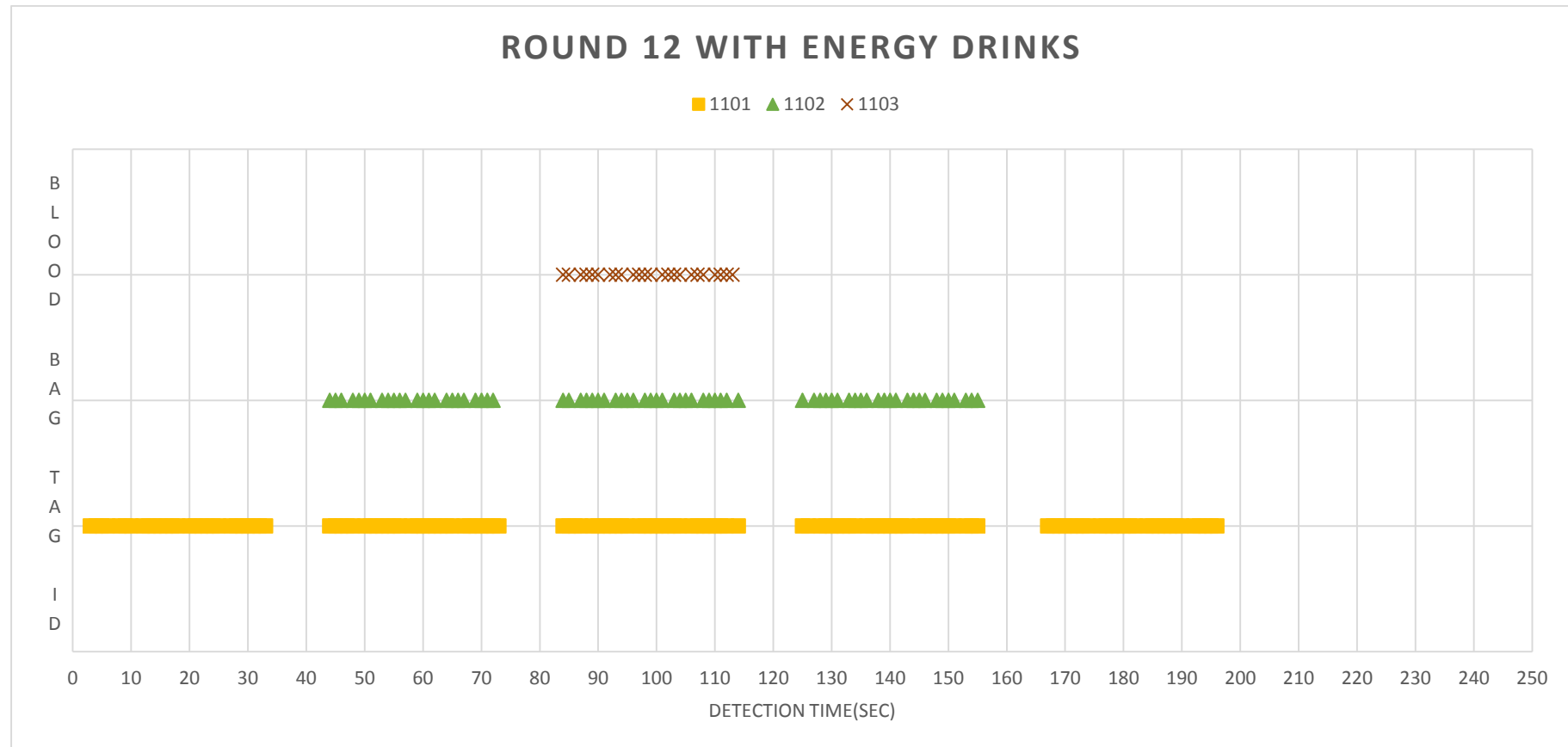
Figure 4.20 Blood bag with energy drinks Detection (Round 12)

	Blood bag in the fridge	Blood bag not in the fridge
Tag detected	233	0
Tag not detected	42	275

Table 4.29 Confusion matrix of tag detection (Energy Drinks) Round 12

Figure 4.20 demonstrated the last round detection activities of blood bags. Similar to Round 10 and Round 11, there was no large missing area during the detection period. This meant that all of the location changes of the blood bags could be accurately recorded by the RFID reader. From the confusion matrix in Table 4.29, it can be calculated that the detection rate for this round was 84.7%, which was exactly the same as Round 11. As we mentioned many times, this detection rate was high enough to identify blood transfusion activities.

Empty blood bag			Blood bag with energy drink		
Parallel Placement	Round 1	85.1%	Parallel Placement	Round 7	83.3%
	Round 2	76.4%		Round 8	75.3%
	Round 3	88%		Round 9	84.4%
Stacked	Round 4	86.55%	Stacked	Round 10	83.3%
	Round 5	83.3%		Round 11	84.7%
	Round 6	85.1%		Round 12	84.7%

Table 4.30 Comparison table for two storage methods

The result of both two parts of this experiment indicated that there was no detection rate difference between the two storage methods. As we can saw from Table 4.30, most of the detection rates were maintained at 80% to 85%. The accuracy of those two methods was very close in all two parts. Moreover, the energy drinks we used to replace the real blood did not have any impact on the detection performance. Both first and second parts of the experiment had the same result of detection. When we compared the detection rate of the same storage method in different objects (with or without energy drinks), the outcome was quite similar. However, the only drawback in this experiment was the long-term missing reading. To make matters worse, both errors occurred using the parallel storage method. It can be seen from the table above, that once the long term missed reading occurred, the detection rate dropped below 80%. This fulfilled the requirement we defined in Section 3.1. In this case, we concluded that even if the detection rate of two storage methods were equal, the stacked method was more stable than parallel storage. Thus the stacked method is more suitable for RFID blood bag storage.

Chapter 5. Conclusion

This chapter, Section 5.1 presents a brief summary of this research. Section 5.2 is used to answer all three of the research questions we defined in the first chapter. Section 5.3 lists the limitation we obtained from this study.

5.1 Summary

This study conducted research on an RFID-based blood tracking system as an appropriate solution to ensure the safety of blood transfusion. Since the whole system is a large-scale project, this study is mainly focused on the tracking process in the blood bank, which is the blood bag storage/removal phase. The location of the blood bags needed to be monitored because the blood deteriorates very fast under indoor temperature. As mentioned in Section 2.4.2, the red corpuscle turns hemolytic within 30 minutes after being taken from a refrigerator. Thus, the hospitals need to confirm whether the blood bag is inside or outside the fridge in order to ensure the blood quality.

Firstly, we applied a literature review to understand the basic principles of RFID technology as well as the current status of RIFD implementation in healthcare environments. In addition, the advantages and drawbacks of the RFID system in hospital contexts were described. A typical RFID-based blood transfusion model has been discussed in this research, followed by some case studies.

In order to present proper research for RFID-based blood tracking, we selected Design Science and Experimental Testing as the methodologies for this study. The experiment was designed based on the DSRM Process Model and several requirements were defined for the experiment. Because the study was based on Evaluation-Focused Design Science Research, Experimental Testing was applied to evaluate the experiments we created in this research.

Four different experiments were carried out so that we could build a suitable RFID system for the blood storage. The first experiment aimed to determine the maximum detection range of the chosen RFID tags as well as the maximum number of tags that could be detected within the reading zone. The second experiment was used to decide the best location for the attachment of RFID tags. We also explored whether different liquid had the impact on the performance of RFID technology. In order to simulate blood storage in the hospital, we adopted containers as blood bags and manually controlled their movements. Two different storage methods were deployed so that we could select the best one for actual implementation in the future. For the last experiment,

the procedure was exactly the same as the previous one, except that the tracking objects were turned into real blood bags.

Some interesting findings emerged through the analysis and evaluation of experiment results. Meanwhile, the limitations of current experiments were discussed followed by some recommendations for creating the artifact and the next steps for the development of a large-scale RFID-based blood transfusion system.

5.2 Answer to the Research Questions

Three research questions were established in the first chapter. The first question was "Can the blood bag location be monitored by an RFID system in the blood bank?" The outcomes from experiments indicated that RFID technology is a feasible solution for detecting the positions of blood bags in the hospital blood bank fridge. On the basis of experiment results, successful detection rates for simulation in the fridge storage were all over 80%, which met the requirements we defined in the Design Science section (Section 3.1). Therefore, it is concluded that the blood bag location can be monitored by an RFID system in the blood bank.

In order to answer the question "How can the movement of Blood bags be monitored in and out of fridges?", we designed two different types of experiments to track the blood bags. First, we tried to detect the blood bags from outside the fridge. Although the simulation succeeded the first time, the result was totally opposite to the experiment we did in the open space. What's more, when we moved the experiment to another fridge, the tags were not able to be detected at all. In this case, we believed that the first method was not appropriate for tracking the blood bag. Hence, we proposed a second method, which put the antenna inside the fridge. This would guarantee that the objects inside the fridge were readable. All of the RFID attached containers and blood bag were detected during the test. Meanwhile, when the tracking objects were taken out of the fridge, the missing target was immediately reflected on the host computer. This was a feasible approach for monitoring the movement of blood bags in the blood bank.

For this case, the procedure of the answer is described as follows. First of all, each blood bag is attached with a passive tag on its front side. Then the antenna is put inside the fridge, more precisely, it is placed on the shelf right below the blood bags. The wire is passed through the door slot and connected to the reader. When the system activates, the reader keeps detecting the tag signal inside the fridge. Thus, once the blood bag is put in the fridge, the tag ID of this bag is captured constantly by the reader. As soon as the blood bag is removed from the fridge, the ID disappears from the reader and remains

silent until the blood bag is sent back to the fridge again. In this way, the blood bag can be located accurately during the blood storage phase.

The third question established in Chapter One was: "What kind of factor may influence the performance of RFID system in the blood bank?" We identified three factors that impacted on the performance of RFID systems in the blood bank. Firstly, the number of tags used in the experiment could affect the system. As we discussed in the first experiment, the distance of RF signal attenuation became shorter and shorter as the number of tags in the reading zone increased.

Secondly, we found that the attached tag position on the objects altered the reading range of the designed system. From Experiment 2, we concluded that the top and front sides of the container are the two most suitable places for labelling the RFID tag. Since a blood bag does not have top, the front side is the best location to stick the tag.

Thirdly, different storage approaches were tested when the blood bags were placed inside the fridge to test the effects of storage on RFID performance. We applied two distinct storage methods in this research. One method involved parallel placement, which placed all of the objects on the same level. The other method was to stack the objects, which placed the objects on top of each other, one by one. The results of Experiment 3 and Experiment 4 revealed that the stacked approach had an advantage over the parallel placement method. This is because the outcomes of stacking were more stable. Although the detection rates of both storage methods are very close, parallel placement can effect sustained missed readings which lead to a misidentification of the object's location. Both containers and blood bags demonstrated the same result. Since we had already eliminated the possibility of poor quality tags, it could be confirmed that the storage approach affects the performance of RFID-based blood bag tracking.

To sum up, this research proposed a feasible solution based on RFID technology for monitoring blood bag storage in the refrigerator of the hospital blood bank. This system can ensure blood quality and safety at the early stages of the blood transfusion process.

5.3 Limitation

5.3.1 Number of tags

The number of tags is one of the main issues for this research. Since this is a simulation of blood bag storage in the fridge, we only used one reader with a maximum readable number of 25 tags. In addition, because of the limited resources for containers and blood

bags, we adopted even less tags in the fridge storage experiments. However, in a real situation, there are multiple refrigerators in one hospital blood bank and each fridge is capable of a large number of blood bags. Thus, blood bag detection in a real blood bank is a much larger project and may have different results compare to our experiments.

5.3.2 Reading Range

Reading range is another limitation in this research. It is a key element in the design of RFID system. However, this value can be affected by the environment that it is deployed within. As we established in Section 4.1, the single tag reading range found in Experiment 1 is more than five meters. The detection range of multiple tags is shorter than the range of a single one. The more tags we put in the reading zone, the shorter range they had. This was because the tags interfered with each other. Moreover, the liquid the tag refers to also has influence on the reader's performance. According to the results in Experiment 2 (Section 4.2), the reading distance of the energy drink is slightly shorter than pure water. This will be a consideration when the RFID system experiment is located in a real blood bank. There are a large number of blood bags in a blood fridge that contain real blood. These factors may reduce the detection range that exists in that environment.

5.3.3 Refrigerator

The fridges adopted in this research are all common household appliances. They are quite different from the real refrigerators used in hospitals. One of the main differences is the fridge door. The door of kitchen fridges are made of metal while the one in the blood bank is made of glass. The size of the fridge is another distinction. The hospital fridge is almost twice the height of those we used in the experiments, which means there are more layers in each fridge. Each layer is composed of a drawer that contains many more tags than we used in the experiments. Thus, the performance of the RFID system may be different from the current reader and antenna we used in this study.

Chapter 6. Future work

Initially, we proposed an experiment to measure the maximum readable range of an RFID system that was located outside when the blood bags were placed inside the fridge. This meant that we could track blood bag storage without modifying the fridge. Knowing the readable distance can help us to design an RFID system based on the interior space in the blood bank. However, as we found in Experiment 3, detection from outside the fridge is either very unstable, or incapable of producing any results. Thus, we put the antenna inside the fridge to ensure that it was capable of making readings. Although this setup provides a stable solution for RFID detection of the blood bags, it is only considered a temporary design.

To solve this, we came up with an idea of embedding the antenna itself into the refrigerator. The aerial can be inlayed in the bottom side of the fridge. This is because blood bags have to be put in the drawer for convenient access and certain distances were determined between layers. No drawer was placed right on the top of the bottom side. Thus, it would be practical to embed the antenna in the bottom side of the fridge. Moreover, the surface area of the bottom side is much bigger than the antenna we utilized in the experiments. Thus, we could make use of a larger aerial in order to enhance the reading range as well as the reliability of detection. We could make a hole in the back of the fridge while carefully avoiding the cooling mechanism. The wire connecting the antenna to the reader would pass through this hole and the surrounding of the hole could be sealed in order to maintain the low temperature of fridge.

In this experiment, we only used one UHF RFID reader throughout all of the experiments. Furthermore, as we concluded from Experiment 1, the reader can only detect as many as 25 tags. However, there are multiple fridges in a hospital blood bank and each of them contains hundreds of blood products. Thus, it would be essential to have multiple readers in the blood bank for our system. Given this, in the future, we would prefer to use a more powerful RFID reader, which could monitor at least all of the attached blood bags in two fridges. All of the readers could connect directly to the converted fridge, displaying the data in the host computer through the Ethernet. The computer would upload the data modification to the HIS in real-time. In this case, we could ensure the location of the blood units. Figure 5.1 presents the converted fridge and sample tracking system for blood transportation.
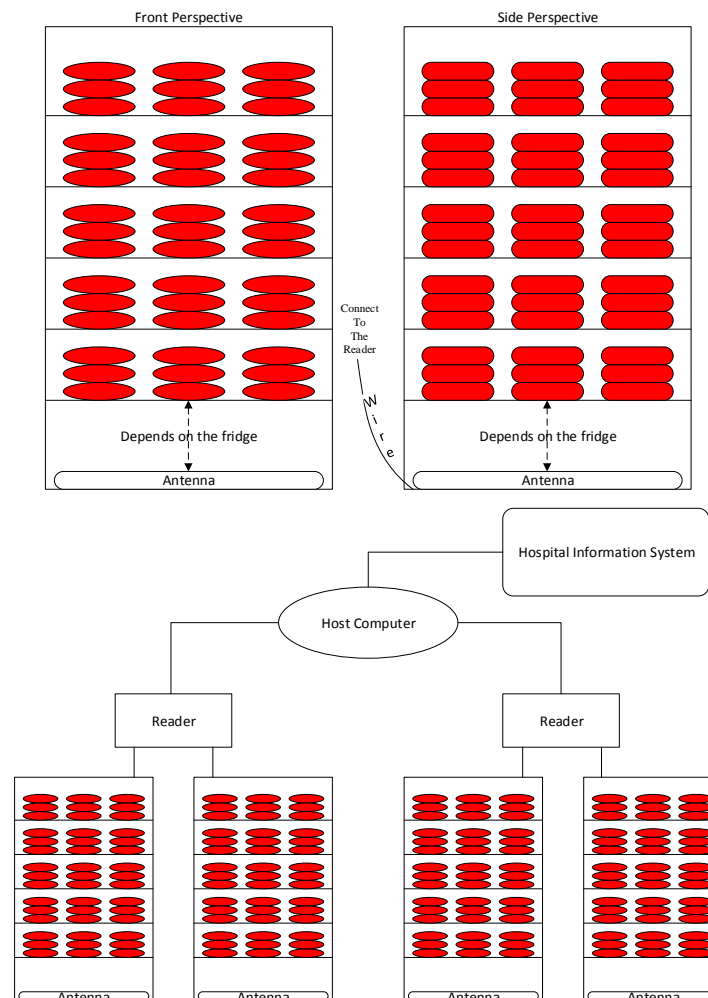
Figure 6.1 Antenna attached fridge and the proposed blood bank monitoring system

Since the absence of blood bags can be detected as soon as they leave the refrigerator, we can develop an additional function for calculating the length of time when these bags expose to normal room temperatures. Because the reader software can already present the current time during detection, the only thing that needs to be done here is to record the second when the RFID tag signal is lost. As mentioned in Section 2.4, the red corpuscle turns hemolytic within 30 minutes after being taken out from a refrigerator and left at the room temperature. Therefore, we can design a timer function for the RFID system. Once the blood bag has been outside of the fridge for more than 30 minutes, the blood bag information could be uploaded to the hospital information system immediately and a warning message would be sent to hospital staff for forbidding the use of this blood unit.

After blood storage in the blood bank, the next step in a blood transfusion process is transportation from the blood bank to the ward. The container plays the main role in this procedure. Although it was not possible to attach each blood bag with active RFID tags (because of the high cost), it is possible to attach these kinds of tags to the

containers, because the number of containers is much less than the blood bags. If the blood bags have to be taken out of the fridge during transportation, it is necessary to investigate whether the container could keep the interior temperature at an acceptable level. Some RFID readers will be placed in each corner of the hospital, acting as checkpoints. When the container passes through these points, the reader will update the current location to the HIS. As mentioned in the literature review, active tags have longer detection range than passive ones. It is much easier to detect the container than the blood bags inside in a wide open place. Moreover, each container can carry several blood bags and can be reused after transfusion. Therefore, attaching the containers with active RFID sensor tags is an appropriate option for developing the RFID system. Combined with the timer we designed above, it can be considered a double insurance to ensure blood safety.

All of the above future works will run through some experiments to validate their feasibility. The converted RFID-based refrigerator will be tested following the same procedure as Experiment 3 and Experiment 4, which is described in Section 3.4.3 and 3.4.4. Furthermore, blood bags that contain real blood will be used in these experiments.

Chapter 7. References

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Chapter 8. Appendix

8.1 Appendix A: Blood tracking with Containers

8.1.1 Round 1 with Containers

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1005	2:39:43 PM	0	-42	0	866.9	30	1
0x1005	2:39:45 PM	0	-42	0	867.5	30	1
0x1005	2:39:46 PM	0	-42	0	865.7	30	1
0x1005	2:39:47 PM	0	-42	0	866.3	30	1
0x1005	2:39:48 PM	0	-42	0	866.9	30	1
0x1005	2:39:49 PM	0	-42	0	867.5	30	1
0x1005	2:39:50 PM	0	-42	0	865.7	30	1
0x1005	2:39:51 PM	0	-42	0	866.3	30	1
0x1005	2:39:53 PM	0	-42	0	866.9	30	1
0x1005	2:39:54 PM	0	-42	0	867.5	30	1
0x1005	2:39:55 PM	0	-42	0	865.7	30	1
0x1005	2:39:56 PM	0	-42	0	866.3	30	1
0x1005	2:39:57 PM	0	-42	0	866.9	30	1
0x1005	2:39:58 PM	0	-42	0	867.5	30	1
0x1005	2:40:00 PM	0	-42	0	865.7	30	1
0x1005	2:40:01 PM	0	-42	0	866.3	30	1
0x1005	2:40:02 PM	0	-42	0	866.9	30	1
0x1005	2:40:03 PM	0	-42	0	867.5	30	1
0x1005	2:40:04 PM	0	-42	0	865.7	30	1
0x1005	2:40:05 PM	0	-42	0	866.3	30	1
0x1005	2:40:07 PM	0	-42	0	866.9	30	1
0x1005	2:40:08 PM	0	-42	0	867.5	30	1
0x1005	2:40:09 PM	0	-42	0	865.7	30	1
0x1005	2:40:10 PM	0	-42	0	866.3	30	1
0x1005	2:40:11 PM	0	-42	0	866.9	30	1
0x1005	2:40:12 PM	0	-42	0	867.5	30	1
0x1005	2:40:24 PM	1	-41	0	866.3	30	1
0x1005	2:40:25 PM	1	-42	0	866.9	30	1
0x1005	2:40:26 PM	1	-42	0	867.5	30	1
0x1005	2:40:27 PM	1	-42	0	865.7	30	1
0x1005	2:40:28 PM	1	-42	0	865.7	30	1
0x1005	2:40:29 PM	1	-42	0	865.7	30	1
0x1005	2:40:31 PM	1	-42	0	865.7	30	1
0x1005	2:40:32 PM	1	-42	0	866.3	30	1
0x1005	2:40:33 PM	1	-42	0	866.3	30	1
0x1005	2:40:34 PM	1	-42	0	866.3	30	1
0x1005	2:40:35 PM	1	-42	0	866.9	30	1
0x1005	2:40:36 PM	1	-42	0	866.9	30	1
0x1005	2:40:37 PM	1	-42	0	866.9	30	1
0x1005	2:40:39 PM	1	-42	0	867.5	30	1
0x1005	2:40:40 PM	1	-42	0	867.5	30	1
0x1005	2:40:41 PM	1	-42	0	867.5	30	1
0x1005	2:40:42 PM	1	-42	0	867.5	30	1
0x1005	2:40:43 PM	1	-42	0	865.7	30	1
0x1005	2:40:44 PM	1	-42	0	865.7	30	1
0x1005	2:40:46 PM	1	-42	0	865.7	30	1
0x1005	2:40:47 PM	1	-42	0	866.3	30	1

0x1005	2:40:48 PM	1	-41	0	866.9	30	1
0x1005	2:40:49 PM	1	-42	0	867.5	30	1
0x1005	2:40:50 PM	1	-42	0	865.7	30	1
0x1005	2:40:51 PM	1	-42	0	866.3	30	1
0x1005	2:40:53 PM	1	-42	0	866.3	30	1
0x1006	2:40:24 PM	1	-52	0	866.3	30	1
0x1006	2:40:25 PM	1	-51	0	866.9	30	1
0x1006	2:40:26 PM	1	-51	0	867.5	30	1
0x1006	2:40:27 PM	1	-52	0	865.7	30	1
0x1006	2:40:28 PM	1	-52	0	865.7	30	1
0x1006	2:40:30 PM	1	-52	0	865.7	30	1
0x1006	2:40:31 PM	1	-52	0	866.3	30	1
0x1006	2:40:32 PM	1	-52	0	866.3	30	1
0x1006	2:40:33 PM	1	-52	0	866.3	30	1
0x1006	2:40:34 PM	1	-52	0	866.3	30	1
0x1006	2:40:36 PM	1	-51	0	866.9	30	1
0x1006	2:40:37 PM	1	-51	0	866.9	30	1
0x1006	2:40:38 PM	1	-51	0	866.9	30	1
0x1006	2:40:39 PM	1	-51	0	867.5	30	1
0x1006	2:40:41 PM	1	-51	0	867.5	30	1
0x1006	2:40:42 PM	1	-51	0	867.5	30	1
0x1006	2:40:43 PM	1	-52	0	865.7	30	1
0x1006	2:40:44 PM	1	-52	0	865.7	30	1
0x1006	2:40:45 PM	1	-52	0	865.7	30	1
0x1006	2:40:47 PM	1	-52	0	866.3	30	1
0x1006	2:40:48 PM	1	-51	0	866.9	30	1
0x1006	2:40:49 PM	1	-51	0	867.5	30	1
0x1006	2:40:50 PM	1	-52	0	865.7	30	1
0x1006	2:40:52 PM	1	-52	0	866.3	30	1
0x1006	2:40:53 PM	1	-52	0	866.3	30	1
0x1005	2:41:04 PM	2	-42	0	867.5	30	1
0x1005	2:41:05 PM	2	-42	0	867.5	30	1
0x1005	2:41:06 PM	2	-42	0	865.7	30	1
0x1005	2:41:07 PM	2	-42	0	866.3	30	1
0x1005	2:41:08 PM	2	-42	0	866.9	30	1
0x1005	2:41:10 PM	2	-42	0	867.5	30	1
0x1005	2:41:11 PM	2	-42	0	865.7	30	1
0x1005	2:41:12 PM	2	-42	0	866.3	30	1
0x1005	2:41:13 PM	2	-42	0	866.9	30	1
0x1005	2:41:14 PM	2	-42	0	867.5	30	1
0x1005	2:41:15 PM	2	-42	0	865.7	30	1
0x1005	2:41:17 PM	2	-42	0	866.3	30	1
0x1005	2:41:18 PM	2	-42	0	866.9	30	1
0x1005	2:41:19 PM	2	-42	0	867.5	30	1
0x1005	2:41:20 PM	2	-42	0	865.7	30	1
0x1005	2:41:21 PM	2	-42	0	866.3	30	1
0x1005	2:41:22 PM	2	-42	0	866.9	30	1
0x1005	2:41:23 PM	2	-42	0	867.5	30	1
0x1005	2:41:25 PM	2	-42	0	865.7	30	1
0x1005	2:41:26 PM	2	-42	0	866.3	30	1
0x1005	2:41:27 PM	2	-42	0	866.9	30	1
0x1005	2:41:28 PM	2	-42	0	867.5	30	1
0x1005	2:41:29 PM	2	-42	0	865.7	30	1
0x1005	2:41:30 PM	2	-42	0	866.3	30	1
0x1005	2:41:32 PM	2	-42	0	866.9	30	1
0x1005	2:41:33 PM	2	-42	0	867.5	30	1
0x1006	2:41:04 PM	2	-62	0	867.5	30	1
0x1007	2:41:04 PM	2	-51	0	867.5	30	1
0x1007	2:41:05 PM	2	-52	0	867.5	30	1
0x1007	2:41:06 PM	2	-52	0	865.7	30	1

0x1007	2:41:07 PM	2	-51	0	866.3	30	1
0x1007	2:41:08 PM	2	-51	0	866.9	30	1
0x1007	2:41:10 PM	2	-51	0	867.5	30	1
0x1007	2:41:11 PM	2	-52	0	865.7	30	1
0x1007	2:41:12 PM	2	-51	0	866.3	30	1
0x1007	2:41:13 PM	2	-51	0	866.9	30	1
0x1007	2:41:14 PM	2	-51	0	867.5	30	1
0x1007	2:41:15 PM	2	-52	0	865.7	30	1
0x1007	2:41:17 PM	2	-52	0	866.3	30	1
0x1007	2:41:18 PM	2	-51	0	866.9	30	1
0x1007	2:41:19 PM	2	-51	0	867.5	30	1
0x1007	2:41:20 PM	2	-52	0	865.7	30	1
0x1007	2:41:21 PM	2	-52	0	866.3	30	1
0x1007	2:41:22 PM	2	-51	0	866.9	30	1
0x1007	2:41:23 PM	2	-51	0	867.5	30	1
0x1007	2:41:25 PM	2	-52	0	865.7	30	1
0x1007	2:41:26 PM	2	-52	0	866.3	30	1
0x1007	2:41:27 PM	2	-51	0	866.9	30	1
0x1007	2:41:28 PM	2	-51	0	867.5	30	1
0x1007	2:41:29 PM	2	-52	0	865.7	30	1
0x1007	2:41:30 PM	2	-51	0	866.3	30	1
0x1007	2:41:32 PM	2	-51	0	866.9	30	1
0x1007	2:41:33 PM	2	-51	0	867.5	30	1
0x1005	2:41:44 PM	3	-43	0	866.3	30	1
0x1005	2:41:45 PM	3	-43	0	866.9	30	1
0x1005	2:41:46 PM	3	-43	0	867.5	30	1
0x1005	2:41:48 PM	3	-43	0	867.5	30	1
0x1005	2:41:49 PM	3	-43	0	867.5	30	1
0x1005	2:41:50 PM	3	-43	0	867.5	30	1
0x1005	2:41:51 PM	3	-43	0	865.7	30	1
0x1005	2:41:52 PM	3	-43	0	865.7	30	1
0x1005	2:41:53 PM	3	-43	0	865.7	30	1
0x1005	2:41:54 PM	3	-43	0	866.3	30	1
0x1005	2:41:56 PM	3	-43	0	866.3	30	1
0x1005	2:41:57 PM	3	-43	0	866.3	30	1
0x1005	2:41:58 PM	3	-43	0	866.9	30	1
0x1005	2:41:59 PM	3	-43	0	866.9	30	1
0x1005	2:42:00 PM	3	-43	0	866.9	30	1
0x1005	2:42:01 PM	3	-43	0	866.9	30	1
0x1005	2:42:03 PM	3	-43	0	867.5	30	1
0x1005	2:42:04 PM	3	-43	0	867.5	30	1
0x1005	2:42:05 PM	3	-43	0	867.5	30	1
0x1005	2:42:06 PM	3	-43	0	865.7	30	1
0x1005	2:42:07 PM	3	-43	0	865.7	30	1
0x1005	2:42:08 PM	3	-43	0	865.7	30	1
0x1005	2:42:09 PM	3	-43	0	866.3	30	1
0x1005	2:42:11 PM	3	-43	0	866.3	30	1
0x1005	2:42:12 PM	3	-43	0	866.3	30	1
0x1005	2:42:13 PM	3	-43	0	866.3	30	1
0x1006	2:41:44 PM	3	-50	0	866.3	30	1
0x1006	2:41:45 PM	3	-51	0	866.9	30	1
0x1006	2:41:46 PM	3	-51	0	867.5	30	1
0x1006	2:41:48 PM	3	-51	0	867.5	30	1
0x1006	2:41:49 PM	3	-51	0	867.5	30	1
0x1006	2:41:50 PM	3	-51	0	867.5	30	1
0x1006	2:41:51 PM	3	-51	0	865.7	30	1
0x1006	2:41:53 PM	3	-51	0	865.7	30	1
0x1006	2:41:54 PM	3	-51	0	865.7	30	1
0x1006	2:41:55 PM	3	-51	0	866.3	30	1
0x1006	2:41:56 PM	3	-51	0	866.3	30	1

0x1006	2:41:57 PM	3	-51	0	866.3	30	1
0x1006	2:41:59 PM	3	-51	0	866.9	30	1
0x1006	2:42:00 PM	3	-51	0	866.9	30	1
0x1006	2:42:01 PM	3	-51	0	866.9	30	1
0x1006	2:42:02 PM	3	-51	0	867.5	30	1
0x1006	2:42:03 PM	3	-51	0	867.5	30	1
0x1006	2:42:05 PM	3	-51	0	867.5	30	1
0x1006	2:42:06 PM	3	-51	0	865.7	30	1
0x1006	2:42:07 PM	3	-51	0	865.7	30	1
0x1006	2:42:08 PM	3	-51	0	865.7	30	1
0x1006	2:42:09 PM	3	-51	0	866.3	30	1
0x1006	2:42:11 PM	3	-51	0	866.3	30	1
0x1006	2:42:12 PM	3	-51	0	866.3	30	1
0x1006	2:42:13 PM	3	-51	0	866.9	30	1
0x1007	2:41:44 PM	3	-50	0	866.3	30	1
0x1007	2:41:45 PM	3	-50	0	866.9	30	1
0x1007	2:41:46 PM	3	-50	0	867.5	30	1
0x1007	2:41:48 PM	3	-50	0	867.5	30	1
0x1007	2:41:49 PM	3	-50	0	867.5	30	1
0x1007	2:41:50 PM	3	-50	0	867.5	30	1
0x1007	2:41:51 PM	3	-51	0	865.7	30	1
0x1007	2:41:52 PM	3	-51	0	865.7	30	1
0x1007	2:41:53 PM	3	-51	0	865.7	30	1
0x1007	2:41:54 PM	3	-51	0	866.3	30	1
0x1007	2:41:56 PM	3	-51	0	866.3	30	1
0x1007	2:41:57 PM	3	-50	0	866.3	30	1
0x1007	2:41:58 PM	3	-50	0	866.9	30	1
0x1007	2:41:59 PM	3	-50	0	866.9	30	1
0x1007	2:42:00 PM	3	-50	0	866.9	30	1
0x1007	2:42:01 PM	3	-50	0	866.9	30	1
0x1007	2:42:03 PM	3	-50	0	867.5	30	1
0x1007	2:42:04 PM	3	-50	0	867.5	30	1
0x1007	2:42:05 PM	3	-50	0	867.5	30	1
0x1007	2:42:06 PM	3	-51	0	865.7	30	1
0x1007	2:42:07 PM	3	-51	0	865.7	30	1
0x1007	2:42:08 PM	3	-51	0	865.7	30	1
0x1007	2:42:09 PM	3	-51	0	866.3	30	1
0x1007	2:42:11 PM	3	-51	0	866.3	30	1
0x1007	2:42:12 PM	3	-51	0	866.3	30	1
0x1007	2:42:13 PM	3	-51	0	866.3	30	1
0x1008	2:41:44 PM	3	-47	0	866.3	30	1
0x1008	2:41:45 PM	3	-47	0	866.9	30	1
0x1008	2:41:46 PM	3	-47	0	867.5	30	1
0x1008	2:41:47 PM	3	-47	0	867.5	30	1
0x1008	2:41:49 PM	3	-47	0	867.5	30	1
0x1008	2:41:50 PM	3	-47	0	867.5	30	1
0x1008	2:41:51 PM	3	-47	0	865.7	30	1
0x1008	2:41:52 PM	3	-47	0	865.7	30	1
0x1008	2:41:53 PM	3	-47	0	865.7	30	1
0x1008	2:41:54 PM	3	-47	0	866.3	30	1
0x1008	2:41:55 PM	3	-47	0	866.3	30	1
0x1008	2:41:57 PM	3	-47	0	866.3	30	1
0x1008	2:41:58 PM	3	-47	0	866.3	30	1
0x1008	2:41:59 PM	3	-47	0	866.9	30	1
0x1008	2:42:00 PM	3	-47	0	866.9	30	1
0x1008	2:42:01 PM	3	-47	0	866.9	30	1
0x1008	2:42:02 PM	3	-47	0	867.5	30	1
0x1008	2:42:03 PM	3	-47	0	867.5	30	1
0x1008	2:42:04 PM	3	-47	0	867.5	30	1
0x1008	2:42:06 PM	3	-47	0	865.7	30	1

0x1008	2:42:07 PM	3	-47	0	865.7	30	1
0x1008	2:42:08 PM	3	-47	0	865.7	30	1
0x1008	2:42:09 PM	3	-47	0	865.7	30	1
0x1008	2:42:10 PM	3	-47	0	866.3	30	1
0x1008	2:42:11 PM	3	-47	0	866.3	30	1
0x1008	2:42:12 PM	3	-47	0	866.3	30	1
0x1008	2:42:14 PM	3	-47	0	866.9	30	1
0x1005	2:42:24 PM	4	-43	0	865.7	30	1
0x1005	2:42:25 PM	4	-43	0	866.3	30	1
0x1005	2:42:27 PM	4	-44	0	866.3	30	1
0x1005	2:42:28 PM	4	-44	0	866.3	30	1
0x1005	2:42:29 PM	4	-44	0	866.3	30	1
0x1005	2:42:30 PM	4	-44	0	866.9	30	1
0x1005	2:42:31 PM	4	-44	0	866.9	30	1
0x1005	2:42:32 PM	4	-44	0	866.9	30	1
0x1005	2:42:34 PM	4	-44	0	867.5	30	1
0x1005	2:42:35 PM	4	-44	0	867.5	30	1
0x1005	2:42:36 PM	4	-44	0	867.5	30	1
0x1005	2:42:37 PM	4	-44	0	865.7	30	1
0x1005	2:42:38 PM	4	-44	0	865.7	30	1
0x1005	2:42:39 PM	4	-44	0	865.7	30	1
0x1005	2:42:40 PM	4	-44	0	865.7	30	1
0x1005	2:42:42 PM	4	-44	0	866.3	30	1
0x1005	2:42:43 PM	4	-44	0	866.3	30	1
0x1005	2:42:44 PM	4	-44	0	866.3	30	1
0x1005	2:42:45 PM	4	-44	0	866.9	30	1
0x1005	2:42:46 PM	4	-44	0	866.9	30	1
0x1005	2:42:47 PM	4	-44	0	866.9	30	1
0x1005	2:42:48 PM	4	-44	0	867.5	30	1
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0x1005	2:42:51 PM	4	-44	0	867.5	30	1
0x1005	2:42:52 PM	4	-44	0	867.5	30	1
0x1005	2:42:53 PM	4	-44	0	865.7	30	1
0x1006	2:42:24 PM	4	-53	0	865.7	30	1
0x1006	2:42:25 PM	4	-54	0	866.3	30	1
0x1006	2:42:27 PM	4	-54	0	866.3	30	1
0x1006	2:42:28 PM	4	-54	0	866.3	30	1
0x1006	2:42:29 PM	4	-54	0	866.3	30	1
0x1006	2:42:30 PM	4	-54	0	866.9	30	1
0x1006	2:42:31 PM	4	-54	0	866.9	30	1
0x1006	2:42:33 PM	4	-54	0	866.9	30	1
0x1006	2:42:34 PM	4	-54	0	867.5	30	1
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0x1006	2:42:36 PM	4	-54	0	867.5	30	1
0x1006	2:42:37 PM	4	-54	0	865.7	30	1
0x1006	2:42:39 PM	4	-54	0	865.7	30	1
0x1006	2:42:40 PM	4	-54	0	865.7	30	1
0x1006	2:42:41 PM	4	-54	0	866.3	30	1
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0x1006	2:42:44 PM	4	-54	0	866.3	30	1
0x1006	2:42:45 PM	4	-54	0	866.9	30	1
0x1006	2:42:46 PM	4	-54	0	866.9	30	1
0x1006	2:42:47 PM	4	-54	0	866.9	30	1
0x1006	2:42:48 PM	4	-54	0	867.5	30	1
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0x1006	2:42:51 PM	4	-54	0	867.5	30	1
0x1006	2:42:52 PM	4	-54	0	865.7	30	1
0x1006	2:42:53 PM	4	-54	0	865.7	30	1
0x1007	2:42:24 PM	4	-50	0	865.7	30	1
0x1007	2:42:25 PM	4	-51	0	866.3	30	1

0x1007	2:42:27 PM	4	-50	0	866.3	30	1
0x1007	2:42:28 PM	4	-50	0	866.3	30	1
0x1007	2:42:29 PM	4	-50	0	866.3	30	1
0x1007	2:42:30 PM	4	-50	0	866.9	30	1
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0x1008	2:42:33 PM	4	-53	0	867.5	30	1
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0x1009	2:42:30 PM	4	-45	0	866.9	30	1
0x1009	2:42:31 PM	4	-45	0	866.9	30	1
0x1009	2:42:32 PM	4	-45	0	866.9	30	1
0x1009	2:42:34 PM	4	-45	0	867.5	30	1

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0x1009	2:42:37 PM	4	-45	0	867.5	30	1
0x1009	2:42:38 PM	4	-44	0	865.7	30	1
0x1009	2:42:39 PM	4	-44	0	865.7	30	1
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0x1009	2:42:53 PM	4	-44	0	865.7	30	1
0x1005	2:43:04 PM	5	-43	0	866.9	30	1
0x1005	2:43:06 PM	5	-43	0	867.5	30	1
0x1005	2:43:07 PM	5	-43	0	865.7	30	1
0x1005	2:43:08 PM	5	-43	0	865.7	30	1
0x1005	2:43:09 PM	5	-43	0	865.7	30	1
0x1005	2:43:10 PM	5	-43	0	865.7	30	1
0x1005	2:43:11 PM	5	-43	0	866.3	30	1
0x1005	2:43:13 PM	5	-43	0	866.3	30	1
0x1005	2:43:14 PM	5	-43	0	866.3	30	1
0x1005	2:43:15 PM	5	-43	0	866.9	30	1
0x1005	2:43:16 PM	5	-43	0	866.9	30	1
0x1005	2:43:17 PM	5	-43	0	866.9	30	1
0x1005	2:43:18 PM	5	-43	0	867.5	30	1
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0x1006	2:43:09 PM	5	-55	0	865.7	30	1
0x1006	2:43:11 PM	5	-55	0	865.7	30	1
0x1006	2:43:12 PM	5	-54	0	866.3	30	1
0x1006	2:43:13 PM	5	-54	0	866.3	30	1
0x1006	2:43:14 PM	5	-54	0	866.3	30	1
0x1006	2:43:15 PM	5	-54	0	866.9	30	1
0x1006	2:43:17 PM	5	-54	0	866.9	30	1
0x1006	2:43:18 PM	5	-54	0	866.9	30	1
0x1006	2:43:19 PM	5	-54	0	867.5	30	1
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0x1006	2:43:27 PM	5	-54	0	866.3	30	1

0x1006	2:43:29 PM	5	-54	0	866.3	30	1
0x1006	2:43:30 PM	5	-54	0	866.9	30	1
0x1006	2:43:31 PM	5	-54	0	866.9	30	1
0x1006	2:43:32 PM	5	-54	0	866.9	30	1
0x1006	2:43:33 PM	5	-54	0	867.5	30	1
0x1007	2:43:04 PM	5	-51	0	866.9	30	1
0x1007	2:43:06 PM	5	-51	0	867.5	30	1
0x1007	2:43:07 PM	5	-51	0	865.7	30	1
0x1007	2:43:08 PM	5	-51	0	865.7	30	1
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0x1007	2:43:11 PM	5	-51	0	866.3	30	1
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0x1007	2:43:14 PM	5	-51	0	866.3	30	1
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0x1007	2:43:19 PM	5	-51	0	867.5	30	1
0x1007	2:43:21 PM	5	-51	0	867.5	30	1
0x1007	2:43:22 PM	5	-51	0	867.5	30	1
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0x1007	2:43:24 PM	5	-51	0	865.7	30	1
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0x1007	2:43:29 PM	5	-51	0	866.3	30	1
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0x1007	2:43:32 PM	5	-51	0	866.9	30	1
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0x1008	2:43:06 PM	5	-47	0	867.5	30	1
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0x1008	2:43:08 PM	5	-46	0	865.7	30	1
0x1008	2:43:09 PM	5	-46	0	865.7	30	1
0x1008	2:43:10 PM	5	-46	0	865.7	30	1
0x1008	2:43:11 PM	5	-46	0	866.3	30	1
0x1008	2:43:12 PM	5	-46	0	866.3	30	1
0x1008	2:43:14 PM	5	-46	0	866.3	30	1
0x1008	2:43:15 PM	5	-47	0	866.9	30	1
0x1008	2:43:16 PM	5	-47	0	866.9	30	1
0x1008	2:43:17 PM	5	-47	0	866.9	30	1
0x1008	2:43:18 PM	5	-47	0	866.9	30	1
0x1008	2:43:19 PM	5	-47	0	867.5	30	1
0x1008	2:43:20 PM	5	-47	0	867.5	30	1
0x1008	2:43:22 PM	5	-47	0	867.5	30	1
0x1008	2:43:23 PM	5	-46	0	865.7	30	1
0x1008	2:43:24 PM	5	-46	0	865.7	30	1
0x1008	2:43:25 PM	5	-46	0	865.7	30	1
0x1008	2:43:26 PM	5	-46	0	866.3	30	1
0x1008	2:43:27 PM	5	-46	0	866.3	30	1
0x1008	2:43:28 PM	5	-46	0	866.3	30	1
0x1008	2:43:29 PM	5	-46	0	866.3	30	1
0x1008	2:43:31 PM	5	-47	0	866.9	30	1
0x1008	2:43:32 PM	5	-47	0	866.9	30	1
0x1008	2:43:33 PM	5	-47	0	866.9	30	1
0x1008	2:43:34 PM	5	-47	0	867.5	30	1
0x1005	2:43:45 PM	6	-42	0	866.3	30	1
0x1005	2:43:46 PM	6	-42	0	866.9	30	1

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0x1005	2:43:47 PM	6	-42	0	867.5	30	1
0x1005	2:43:48 PM	6	-42	0	865.7	30	1
0x1005	2:43:49 PM	6	-42	0	865.7	30	1
0x1005	2:43:51 PM	6	-42	0	865.7	30	1
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0x1005	2:43:53 PM	6	-42	0	866.3	30	1
0x1005	2:43:54 PM	6	-42	0	866.3	30	1
0x1005	2:43:55 PM	6	-42	0	866.3	30	1
0x1005	2:43:56 PM	6	-42	0	866.9	30	1
0x1005	2:43:57 PM	6	-42	0	866.9	30	1
0x1005	2:43:59 PM	6	-42	0	866.9	30	1
0x1005	2:44:00 PM	6	-42	0	867.5	30	1
0x1005	2:44:01 PM	6	-42	0	867.5	30	1
0x1005	2:44:02 PM	6	-42	0	867.5	30	1
0x1005	2:44:03 PM	6	-42	0	867.5	30	1
0x1005	2:44:04 PM	6	-42	0	865.7	30	1
0x1005	2:44:06 PM	6	-42	0	865.7	30	1
0x1005	2:44:07 PM	6	-42	0	865.7	30	1
0x1005	2:44:08 PM	6	-42	0	866.3	30	1
0x1005	2:44:09 PM	6	-42	0	866.3	30	1
0x1005	2:44:10 PM	6	-42	0	866.9	30	1
0x1005	2:44:11 PM	6	-42	0	867.5	30	1
0x1005	2:44:13 PM	6	-42	0	865.7	30	1
0x1005	2:44:14 PM	6	-42	0	866.3	30	1
0x1006	2:43:45 PM	6	-55	0	866.3	30	1
0x1006	2:43:46 PM	6	-55	0	866.9	30	1
0x1006	2:43:47 PM	6	-55	0	867.5	30	1
0x1006	2:43:48 PM	6	-56	0	865.7	30	1
0x1006	2:43:50 PM	6	-56	0	865.7	30	1
0x1006	2:43:51 PM	6	-56	0	865.7	30	1
0x1006	2:43:52 PM	6	-55	0	866.3	30	1
0x1006	2:43:53 PM	6	-56	0	866.3	30	1
0x1006	2:43:54 PM	6	-56	0	866.3	30	1
0x1006	2:43:56 PM	6	-56	0	866.3	30	1
0x1006	2:43:57 PM	6	-55	0	866.9	30	1
0x1006	2:43:58 PM	6	-55	0	866.9	30	1
0x1006	2:43:59 PM	6	-55	0	866.9	30	1
0x1006	2:44:00 PM	6	-55	0	867.5	30	1
0x1006	2:44:02 PM	6	-55	0	867.5	30	1
0x1006	2:44:03 PM	6	-55	0	867.5	30	1
0x1006	2:44:04 PM	6	-56	0	865.7	30	1
0x1006	2:44:05 PM	6	-56	0	865.7	30	1
0x1006	2:44:06 PM	6	-56	0	865.7	30	1
0x1006	2:44:08 PM	6	-55	0	866.3	30	1
0x1006	2:44:09 PM	6	-56	0	866.3	30	1
0x1006	2:44:10 PM	6	-55	0	866.9	30	1
0x1006	2:44:11 PM	6	-55	0	867.5	30	1
0x1006	2:44:13 PM	6	-56	0	865.7	30	1
0x1006	2:44:14 PM	6	-55	0	866.3	30	1
0x1007	2:43:45 PM	6	-52	0	866.3	30	1
0x1007	2:43:46 PM	6	-52	0	866.9	30	1
0x1007	2:43:47 PM	6	-52	0	867.5	30	1
0x1007	2:43:48 PM	6	-53	0	865.7	30	1
0x1007	2:43:49 PM	6	-53	0	865.7	30	1
0x1007	2:43:51 PM	6	-53	0	865.7	30	1
0x1007	2:43:52 PM	6	-53	0	865.7	30	1
0x1007	2:43:53 PM	6	-53	0	866.3	30	1
0x1007	2:43:54 PM	6	-53	0	866.3	30	1
0x1007	2:43:55 PM	6	-53	0	866.3	30	1
0x1007	2:43:56 PM	6	-52	0	866.9	30	1

0x1007	2:43:57 PM	6	-52	0	866.9	30	1
0x1007	2:43:59 PM	6	-53	0	866.9	30	1
0x1007	2:44:00 PM	6	-52	0	867.5	30	1
0x1007	2:44:01 PM	6	-52	0	867.5	30	1
0x1007	2:44:02 PM	6	-52	0	867.5	30	1
0x1007	2:44:03 PM	6	-52	0	867.5	30	1
0x1007	2:44:04 PM	6	-53	0	865.7	30	1
0x1007	2:44:06 PM	6	-53	0	865.7	30	1
0x1007	2:44:07 PM	6	-53	0	865.7	30	1
0x1007	2:44:08 PM	6	-53	0	866.3	30	1
0x1007	2:44:09 PM	6	-53	0	866.3	30	1
0x1007	2:44:10 PM	6	-52	0	866.9	30	1
0x1007	2:44:11 PM	6	-52	0	867.5	30	1
0x1007	2:44:13 PM	6	-53	0	865.7	30	1
0x1007	2:44:14 PM	6	-53	0	866.3	30	1
0x1005	2:44:25 PM	7	-42	0	867.5	30	1
0x1005	2:44:26 PM	7	-42	0	865.7	30	1
0x1005	2:44:27 PM	7	-42	0	866.3	30	1
0x1005	2:44:28 PM	7	-42	0	866.9	30	1
0x1005	2:44:30 PM	7	-42	0	866.9	30	1
0x1005	2:44:31 PM	7	-42	0	866.9	30	1
0x1005	2:44:32 PM	7	-42	0	866.9	30	1
0x1005	2:44:33 PM	7	-42	0	867.5	30	1
0x1005	2:44:34 PM	7	-42	0	867.5	30	1
0x1005	2:44:35 PM	7	-42	0	867.5	30	1
0x1005	2:44:36 PM	7	-42	0	865.7	30	1
0x1005	2:44:38 PM	7	-42	0	865.7	30	1
0x1005	2:44:39 PM	7	-42	0	865.7	30	1
0x1005	2:44:40 PM	7	-42	0	866.3	30	1
0x1005	2:44:41 PM	7	-42	0	866.3	30	1
0x1005	2:44:42 PM	7	-42	0	866.3	30	1
0x1005	2:44:43 PM	7	-42	0	866.3	30	1
0x1005	2:44:45 PM	7	-42	0	866.9	30	1
0x1005	2:44:46 PM	7	-42	0	866.9	30	1
0x1005	2:44:47 PM	7	-42	0	866.9	30	1
0x1005	2:44:48 PM	7	-42	0	867.5	30	1
0x1005	2:44:49 PM	7	-42	0	865.7	30	1
0x1005	2:44:50 PM	7	-42	0	866.3	30	1
0x1005	2:44:52 PM	7	-42	0	866.9	30	1
0x1005	2:44:53 PM	7	-42	0	867.5	30	1
0x1005	2:44:54 PM	7	-42	0	867.5	30	1
0x1006	2:44:25 PM	7	-43	0	867.5	30	1
0x1006	2:44:26 PM	7	-43	0	865.7	30	1
0x1006	2:44:27 PM	7	-43	0	866.3	30	1
0x1006	2:44:29 PM	7	-43	0	866.9	30	1
0x1006	2:44:30 PM	7	-43	0	866.9	30	1
0x1006	2:44:31 PM	7	-43	0	866.9	30	1
0x1006	2:44:32 PM	7	-43	0	867.5	30	1
0x1006	2:44:33 PM	7	-43	0	867.5	30	1
0x1006	2:44:35 PM	7	-43	0	867.5	30	1
0x1006	2:44:36 PM	7	-43	0	867.5	30	1
0x1006	2:44:37 PM	7	-43	0	865.7	30	1
0x1006	2:44:38 PM	7	-43	0	865.7	30	1
0x1006	2:44:39 PM	7	-43	0	865.7	30	1
0x1006	2:44:41 PM	7	-43	0	866.3	30	1
0x1006	2:44:42 PM	7	-43	0	866.3	30	1
0x1006	2:44:43 PM	7	-43	0	866.3	30	1
0x1006	2:44:44 PM	7	-43	0	866.9	30	1
0x1006	2:44:46 PM	7	-43	0	866.9	30	1
0x1006	2:44:47 PM	7	-43	0	866.9	30	1

0x1006	2:44:48 PM	7	-43	0	867.5	30	1
0x1006	2:44:49 PM	7	-43	0	865.7	30	1
0x1006	2:44:50 PM	7	-43	0	866.3	30	1
0x1006	2:44:52 PM	7	-43	0	866.9	30	1
0x1006	2:44:53 PM	7	-43	0	867.5	30	1
0x1006	2:44:54 PM	7	-43	0	867.5	30	1
0x1005	2:45:05 PM	8	-41	0	866.3	30	1
0x1005	2:45:06 PM	8	-42	0	866.9	30	1
0x1005	2:45:08 PM	8	-42	0	867.5	30	1
0x1005	2:45:09 PM	8	-42	0	865.7	30	1
0x1005	2:45:10 PM	8	-42	0	866.3	30	1
0x1005	2:45:11 PM	8	-42	0	866.9	30	1
0x1005	2:45:12 PM	8	-42	0	867.5	30	1
0x1005	2:45:13 PM	8	-42	0	865.7	30	1
0x1005	2:45:14 PM	8	-41	0	866.3	30	1
0x1005	2:45:16 PM	8	-42	0	866.9	30	1
0x1005	2:45:17 PM	8	-42	0	867.5	30	1
0x1005	2:45:18 PM	8	-42	0	865.7	30	1
0x1005	2:45:19 PM	8	-42	0	866.3	30	1
0x1005	2:45:20 PM	8	-42	0	866.9	30	1
0x1005	2:45:21 PM	8	-42	0	867.5	30	1
0x1005	2:45:23 PM	8	-42	0	865.7	30	1
0x1005	2:45:24 PM	8	-42	0	866.3	30	1
0x1005	2:45:25 PM	8	-42	0	866.9	30	1
0x1005	2:45:26 PM	8	-42	0	867.5	30	1
0x1005	2:45:27 PM	8	-42	0	865.7	30	1
0x1005	2:45:28 PM	8	-42	0	866.3	30	1
0x1005	2:45:30 PM	8	-42	0	866.9	30	1
0x1005	2:45:31 PM	8	-42	0	867.5	30	1
0x1005	2:45:32 PM	8	-42	0	865.7	30	1
0x1005	2:45:33 PM	8	-42	0	866.3	30	1
0x1005	2:45:34 PM	8	-42	0	866.9	30	1

8.1.2 Round 2 with Containers

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1005	2:57:51 PM	0	-44	0	866.3	30	1
0x1005	2:57:52 PM	0	-44	0	866.9	30	1
0x1005	2:57:53 PM	0	-44	0	867.5	30	1
0x1005	2:57:54 PM	0	-44	0	865.7	30	1
0x1005	2:57:56 PM	0	-44	0	866.3	30	1
0x1005	2:57:57 PM	0	-44	0	866.9	30	1
0x1005	2:57:58 PM	0	-44	0	867.5	30	1
0x1005	2:57:59 PM	0	-44	0	865.7	30	1
0x1005	2:58:00 PM	0	-44	0	866.3	30	1
0x1005	2:58:01 PM	0	-44	0	866.9	30	1
0x1005	2:58:03 PM	0	-44	0	867.5	30	1
0x1005	2:58:04 PM	0	-44	0	865.7	30	1
0x1005	2:58:05 PM	0	-44	0	866.3	30	1
0x1005	2:58:06 PM	0	-44	0	866.9	30	1
0x1005	2:58:07 PM	0	-44	0	867.5	30	1
0x1005	2:58:08 PM	0	-44	0	865.7	30	1
0x1005	2:58:09 PM	0	-44	0	866.3	30	1
0x1005	2:58:11 PM	0	-44	0	866.9	30	1
0x1005	2:58:12 PM	0	-44	0	867.5	30	1
0x1005	2:58:13 PM	0	-44	0	865.7	30	1

0x1005	2:58:14 PM	0	-44	0	866.3	30	1
0x1005	2:58:15 PM	0	-44	0	866.9	30	1
0x1005	2:58:16 PM	0	-44	0	867.5	30	1
0x1005	2:58:17 PM	0	-44	0	867.5	30	1
0x1005	2:58:18 PM	0	-44	0	867.5	30	1
0x1005	2:58:19 PM	0	-44	0	867.5	30	1
0x1005	2:58:20 PM	0	-44	0	865.7	30	1
0x1005	2:58:31 PM	1	-44	0	866.9	30	1
0x1005	2:58:32 PM	1	-45	0	866.9	30	1
0x1005	2:58:33 PM	1	-44	0	867.5	30	1
0x1005	2:58:35 PM	1	-44	0	867.5	30	1
0x1005	2:58:36 PM	1	-44	0	865.7	30	1
0x1005	2:58:37 PM	1	-44	0	866.3	30	1
0x1005	2:58:38 PM	1	-44	0	866.9	30	1
0x1005	2:58:39 PM	1	-44	0	867.5	30	1
0x1005	2:58:40 PM	1	-44	0	865.7	30	1
0x1005	2:58:42 PM	1	-44	0	866.3	30	1
0x1005	2:58:43 PM	1	-45	0	866.9	30	1
0x1005	2:58:44 PM	1	-44	0	867.5	30	1
0x1005	2:58:45 PM	1	-44	0	865.7	30	1
0x1005	2:58:46 PM	1	-44	0	866.3	30	1
0x1005	2:58:47 PM	1	-44	0	866.9	30	1
0x1005	2:58:49 PM	1	-44	0	867.5	30	1
0x1005	2:58:50 PM	1	-44	0	865.7	30	1
0x1005	2:58:51 PM	1	-44	0	866.3	30	1
0x1005	2:58:52 PM	1	-44	0	866.9	30	1
0x1005	2:58:53 PM	1	-44	0	867.5	30	1
0x1005	2:58:54 PM	1	-44	0	865.7	30	1
0x1005	2:58:55 PM	1	-44	0	866.3	30	1
0x1005	2:58:57 PM	1	-44	0	866.9	30	1
0x1005	2:58:58 PM	1	-44	0	867.5	30	1
0x1005	2:58:59 PM	1	-44	0	865.7	30	1
0x1005	2:59:00 PM	1	-44	0	866.3	30	1
0x1005	2:59:11 PM	2	-45	0	865.7	30	1
0x1005	2:59:13 PM	2	-45	0	866.3	30	1
0x1005	2:59:14 PM	2	-45	0	866.9	30	1
0x1005	2:59:15 PM	2	-45	0	867.5	30	1
0x1005	2:59:16 PM	2	-45	0	867.5	30	1
0x1005	2:59:17 PM	2	-45	0	867.5	30	1
0x1005	2:59:18 PM	2	-45	0	867.5	30	1
0x1005	2:59:20 PM	2	-45	0	865.7	30	1
0x1005	2:59:21 PM	2	-45	0	865.7	30	1
0x1005	2:59:22 PM	2	-45	0	865.7	30	1
0x1005	2:59:23 PM	2	-45	0	866.3	30	1
0x1005	2:59:24 PM	2	-45	0	866.3	30	1
0x1005	2:59:25 PM	2	-45	0	866.3	30	1
0x1005	2:59:26 PM	2	-45	0	866.9	30	1
0x1005	2:59:28 PM	2	-45	0	866.9	30	1
0x1005	2:59:29 PM	2	-45	0	866.9	30	1
0x1005	2:59:30 PM	2	-45	0	866.9	30	1
0x1005	2:59:31 PM	2	-45	0	867.5	30	1
0x1005	2:59:32 PM	2	-45	0	867.5	30	1
0x1005	2:59:33 PM	2	-45	0	867.5	30	1
0x1005	2:59:34 PM	2	-45	0	865.7	30	1
0x1005	2:59:36 PM	2	-45	0	865.7	30	1
0x1005	2:59:37 PM	2	-45	0	865.7	30	1
0x1005	2:59:38 PM	2	-45	0	866.3	30	1
0x1005	2:59:39 PM	2	-45	0	866.9	30	1
0x1005	2:59:40 PM	2	-45	0	867.5	30	1
0x1005	2:59:52 PM	3	-48	0	866.9	30	1

0x1005	2:59:53 PM	3	-48	0	867.5	30	1
0x1005	2:59:54 PM	3	-47	0	865.7	30	1
0x1005	2:59:55 PM	3	-47	0	865.7	30	1
0x1005	2:59:56 PM	3	-47	0	865.7	30	1
0x1005	2:59:57 PM	3	-47	0	865.7	30	1
0x1005	2:59:59 PM	3	-48	0	866.3	30	1
0x1005	3:00:00 PM	3	-48	0	866.3	30	1
0x1005	3:00:01 PM	3	-48	0	866.3	30	1
0x1005	3:00:02 PM	3	-48	0	866.9	30	1
0x1005	3:00:03 PM	3	-48	0	866.9	30	1
0x1005	3:00:04 PM	3	-48	0	866.9	30	1
0x1005	3:00:05 PM	3	-48	0	867.5	30	1
0x1005	3:00:07 PM	3	-48	0	867.5	30	1
0x1005	3:00:08 PM	3	-48	0	867.5	30	1
0x1005	3:00:09 PM	3	-48	0	867.5	30	1
0x1005	3:00:10 PM	3	-48	0	865.7	30	1
0x1005	3:00:11 PM	3	-48	0	865.7	30	1
0x1005	3:00:12 PM	3	-47	0	865.7	30	1
0x1005	3:00:13 PM	3	-48	0	866.3	30	1
0x1005	3:00:15 PM	3	-48	0	866.3	30	1
0x1005	3:00:16 PM	3	-48	0	866.3	30	1
0x1005	3:00:17 PM	3	-48	0	866.9	30	1
0x1005	3:00:18 PM	3	-48	0	866.9	30	1
0x1005	3:00:19 PM	3	-48	0	866.9	30	1
0x1005	3:00:20 PM	3	-48	0	866.9	30	1
0x1005	3:00:22 PM	3	-48	0	867.5	30	1
0x1005	3:00:32 PM	4	-48	0	866.3	30	1
0x1005	3:00:33 PM	4	-48	0	866.9	30	1
0x1005	3:00:34 PM	4	-48	0	866.9	30	1
0x1005	3:00:35 PM	4	-48	0	866.9	30	1
0x1005	3:00:37 PM	4	-48	0	866.9	30	1
0x1005	3:00:38 PM	4	-48	0	867.5	30	1
0x1005	3:00:39 PM	4	-48	0	867.5	30	1
0x1005	3:00:40 PM	4	-48	0	865.7	30	1
0x1005	3:00:41 PM	4	-48	0	866.3	30	1
0x1005	3:00:42 PM	4	-48	0	866.3	30	1
0x1005	3:00:43 PM	4	-48	0	866.3	30	1
0x1005	3:00:45 PM	4	-48	0	866.3	30	1
0x1005	3:00:46 PM	4	-48	0	866.9	30	1
0x1005	3:00:47 PM	4	-49	0	867.5	30	1
0x1005	3:00:48 PM	4	-48	0	865.7	30	1
0x1005	3:00:49 PM	4	-48	0	865.7	30	1
0x1005	3:00:50 PM	4	-48	0	865.7	30	1
0x1005	3:00:51 PM	4	-48	0	865.7	30	1
0x1005	3:00:53 PM	4	-48	0	866.3	30	1
0x1005	3:00:54 PM	4	-48	0	866.3	30	1
0x1005	3:00:55 PM	4	-48	0	866.9	30	1
0x1005	3:00:56 PM	4	-48	0	867.5	30	1
0x1005	3:00:57 PM	4	-48	0	867.5	30	1
0x1005	3:00:58 PM	4	-48	0	867.5	30	1
0x1005	3:01:00 PM	4	-48	0	867.5	30	1
0x1005	3:01:01 PM	4	-48	0	865.7	30	1
0x1005	3:01:12 PM	5	-48	0	867.5	30	1
0x1005	3:01:13 PM	5	-48	0	865.7	30	1
0x1005	3:01:14 PM	5	-48	0	866.3	30	1
0x1005	3:01:16 PM	5	-48	0	866.3	30	1
0x1005	3:01:17 PM	5	-48	0	866.3	30	1
0x1005	3:01:18 PM	5	-48	0	866.3	30	1
0x1005	3:01:19 PM	5	-48	0	866.9	30	1
0x1005	3:01:20 PM	5	-48	0	866.9	30	1

0x1005	3:01:21 PM	5	-48	0	866.9	30	1
0x1005	3:01:22 PM	5	-48	0	867.5	30	1
0x1005	3:01:24 PM	5	-48	0	867.5	30	1
0x1005	3:01:25 PM	5	-48	0	867.5	30	1
0x1005	3:01:26 PM	5	-48	0	865.7	30	1
0x1005	3:01:27 PM	5	-48	0	865.7	30	1
0x1005	3:01:28 PM	5	-48	0	865.7	30	1
0x1005	3:01:29 PM	5	-48	0	865.7	30	1
0x1005	3:01:31 PM	5	-48	0	866.3	30	1
0x1005	3:01:32 PM	5	-48	0	866.3	30	1
0x1005	3:01:33 PM	5	-48	0	866.3	30	1
0x1005	3:01:34 PM	5	-48	0	866.9	30	1
0x1005	3:01:35 PM	5	-48	0	866.9	30	1
0x1005	3:01:36 PM	5	-48	0	866.9	30	1
0x1005	3:01:37 PM	5	-48	0	867.5	30	1
0x1005	3:01:39 PM	5	-48	0	867.5	30	1
0x1005	3:01:40 PM	5	-48	0	867.5	30	1
0x1005	3:01:41 PM	5	-48	0	867.5	30	1
0x1005	3:01:42 PM	5	-48	0	865.7	30	1
0x1005	3:01:52 PM	6	-47	0	866.9	30	1
0x1005	3:01:53 PM	6	-48	0	867.5	30	1
0x1005	3:01:55 PM	6	-47	0	865.7	30	1
0x1005	3:01:56 PM	6	-48	0	866.3	30	1
0x1005	3:01:57 PM	6	-48	0	866.3	30	1
0x1005	3:01:58 PM	6	-47	0	866.3	30	1
0x1005	3:01:59 PM	6	-48	0	866.3	30	1
0x1005	3:02:00 PM	6	-48	0	866.9	30	1
0x1005	3:02:02 PM	6	-48	0	866.9	30	1
0x1005	3:02:03 PM	6	-48	0	866.9	30	1
0x1005	3:02:04 PM	6	-48	0	867.5	30	1
0x1005	3:02:05 PM	6	-48	0	867.5	30	1
0x1005	3:02:06 PM	6	-48	0	867.5	30	1
0x1005	3:02:07 PM	6	-47	0	865.7	30	1
0x1005	3:02:08 PM	6	-47	0	865.7	30	1
0x1005	3:02:10 PM	6	-47	0	865.7	30	1
0x1005	3:02:11 PM	6	-47	0	865.7	30	1
0x1005	3:02:12 PM	6	-47	0	866.3	30	1
0x1005	3:02:13 PM	6	-47	0	866.3	30	1
0x1005	3:02:14 PM	6	-47	0	866.3	30	1
0x1005	3:02:15 PM	6	-48	0	866.9	30	1
0x1005	3:02:17 PM	6	-48	0	866.9	30	1
0x1005	3:02:18 PM	6	-48	0	866.9	30	1
0x1005	3:02:19 PM	6	-48	0	867.5	30	1
0x1005	3:02:20 PM	6	-47	0	865.7	30	1
0x1005	3:02:21 PM	6	-47	0	866.3	30	1
0x1005	3:02:33 PM	7	-44	0	865.7	30	1
0x1005	3:02:34 PM	7	-44	0	866.3	30	1
0x1005	3:02:35 PM	7	-44	0	866.9	30	1
0x1005	3:02:36 PM	7	-44	0	866.9	30	1
0x1005	3:02:37 PM	7	-44	0	866.9	30	1
0x1005	3:02:38 PM	7	-44	0	866.9	30	1
0x1005	3:02:39 PM	7	-44	0	867.5	30	1
0x1005	3:02:41 PM	7	-44	0	867.5	30	1
0x1005	3:02:42 PM	7	-44	0	867.5	30	1
0x1005	3:02:43 PM	7	-44	0	865.7	30	1
0x1005	3:02:44 PM	7	-44	0	865.7	30	1
0x1005	3:02:45 PM	7	-44	0	865.7	30	1
0x1005	3:02:46 PM	7	-44	0	866.3	30	1
0x1005	3:02:47 PM	7	-44	0	866.3	30	1
0x1005	3:02:49 PM	7	-44	0	866.3	30	1

0x1005	3:02:50 PM	7	-44	0	866.3	30	1
0x1005	3:02:51 PM	7	-44	0	866.9	30	1
0x1005	3:02:52 PM	7	-44	0	866.9	30	1
0x1005	3:02:53 PM	7	-44	0	866.9	30	1
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0x1005	3:02:57 PM	7	-44	0	867.5	30	1
0x1005	3:02:58 PM	7	-44	0	865.7	30	1
0x1005	3:02:59 PM	7	-44	0	866.3	30	1
0x1005	3:03:00 PM	7	-44	0	866.9	30	1
0x1005	3:03:01 PM	7	-44	0	867.5	30	1
0x1005	3:03:02 PM	7	-44	0	865.7	30	1
0x1005	3:03:13 PM	8	-49	0	866.9	30	1
0x1005	3:03:14 PM	8	-49	0	867.5	30	1
0x1005	3:03:15 PM	8	-48	0	865.7	30	1
0x1005	3:03:16 PM	8	-49	0	866.3	30	1
0x1005	3:03:17 PM	8	-49	0	866.9	30	1
0x1005	3:03:19 PM	8	-49	0	867.5	30	1
0x1005	3:03:20 PM	8	-49	0	865.7	30	1
0x1005	3:03:21 PM	8	-49	0	866.3	30	1
0x1005	3:03:22 PM	8	-49	0	866.9	30	1
0x1005	3:03:23 PM	8	-49	0	867.5	30	1
0x1005	3:03:24 PM	8	-48	0	865.7	30	1
0x1005	3:03:25 PM	8	-49	0	866.3	30	1
0x1005	3:03:27 PM	8	-49	0	866.9	30	1
0x1005	3:03:28 PM	8	-49	0	867.5	30	1
0x1005	3:03:29 PM	8	-49	0	865.7	30	1
0x1005	3:03:30 PM	8	-49	0	866.3	30	1
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0x1005	3:03:37 PM	8	-49	0	867.5	30	1
0x1005	3:03:38 PM	8	-48	0	865.7	30	1
0x1005	3:03:39 PM	8	-49	0	866.3	30	1
0x1005	3:03:41 PM	8	-49	0	866.9	30	1
0x1005	3:03:42 PM	8	-49	0	867.5	30	1
0x1006	2:58:31 PM	1	-61	0	866.9	30	1
0x1006	2:58:32 PM	1	-61	0	866.9	30	1
0x1006	2:58:36 PM	1	-59	0	865.7	30	1
0x1006	2:58:37 PM	1	-62	0	866.3	30	1
0x1006	2:58:38 PM	1	-62	0	866.9	30	1
0x1006	2:58:40 PM	1	-59	0	865.7	30	1
0x1006	2:58:42 PM	1	-60	0	866.3	30	1
0x1006	2:58:45 PM	1	-59	0	865.7	30	1
0x1006	2:58:46 PM	1	-61	0	866.3	30	1
0x1006	2:58:50 PM	1	-59	0	865.7	30	1
0x1006	2:58:51 PM	1	-61	0	866.3	30	1
0x1006	2:58:54 PM	1	-59	0	865.7	30	1
0x1006	2:58:55 PM	1	-61	0	866.3	30	1
0x1006	2:58:59 PM	1	-59	0	865.7	30	1
0x1006	2:59:00 PM	1	-61	0	866.3	30	1
0x1006	2:59:11 PM	2	-52	0	865.7	30	1
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0x1006	2:59:14 PM	2	-53	0	866.9	30	1
0x1006	2:59:15 PM	2	-53	0	867.5	30	1
0x1006	2:59:16 PM	2	-53	0	867.5	30	1
0x1006	2:59:17 PM	2	-53	0	867.5	30	1
0x1006	2:59:19 PM	2	-53	0	867.5	30	1

0x1006	2:59:20 PM	2	-52	0	865.7	30	1
0x1006	2:59:21 PM	2	-52	0	865.7	30	1
0x1006	2:59:22 PM	2	-52	0	865.7	30	1
0x1006	2:59:23 PM	2	-52	0	866.3	30	1
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0x1006	2:59:28 PM	2	-53	0	866.9	30	1
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0x1006	3:00:05 PM	3	-53	0	866.9	30	1
0x1006	3:00:06 PM	3	-54	0	867.5	30	1
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0x1006	3:01:16 PM	5	-53	0	866.3	30	1
0x1006	3:01:17 PM	5	-53	0	866.3	30	1
0x1006	3:01:18 PM	5	-53	0	866.3	30	1
0x1006	3:01:19 PM	5	-53	0	866.9	30	1
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0x1006	3:01:22 PM	5	-53	0	866.9	30	1
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0x1006	3:01:28 PM	5	-52	0	865.7	30	1
0x1006	3:01:29 PM	5	-52	0	865.7	30	1
0x1006	3:01:30 PM	5	-53	0	866.3	30	1

0x1006	3:01:31 PM	5	-53	0	866.3	30	1
0x1006	3:01:33 PM	5	-53	0	866.3	30	1
0x1006	3:01:34 PM	5	-53	0	866.9	30	1
0x1006	3:01:35 PM	5	-53	0	866.9	30	1
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0x1006	3:02:01 PM	6	-55	0	866.9	30	1
0x1006	3:02:02 PM	6	-55	0	866.9	30	1
0x1006	3:02:03 PM	6	-55	0	866.9	30	1
0x1006	3:02:04 PM	6	-56	0	867.5	30	1
0x1006	3:02:06 PM	6	-56	0	867.5	30	1
0x1006	3:02:07 PM	6	-56	0	867.5	30	1
0x1006	3:02:08 PM	6	-54	0	865.7	30	1
0x1006	3:02:09 PM	6	-54	0	865.7	30	1
0x1006	3:02:10 PM	6	-54	0	865.7	30	1
0x1006	3:02:12 PM	6	-54	0	866.3	30	1
0x1006	3:02:13 PM	6	-54	0	866.3	30	1
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0x1006	3:02:18 PM	6	-55	0	866.9	30	1
0x1006	3:02:19 PM	6	-56	0	867.5	30	1
0x1006	3:02:20 PM	6	-54	0	865.7	30	1
0x1006	3:02:21 PM	6	-54	0	866.3	30	1
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0x1006	3:02:41 PM	7	-56	0	867.5	30	1
0x1006	3:02:42 PM	7	-56	0	867.5	30	1
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0x1006	3:02:45 PM	7	-54	0	865.7	30	1
0x1006	3:02:46 PM	7	-54	0	865.7	30	1
0x1006	3:02:47 PM	7	-54	0	866.3	30	1
0x1006	3:02:48 PM	7	-54	0	866.3	30	1
0x1006	3:02:49 PM	7	-54	0	866.3	30	1
0x1006	3:02:51 PM	7	-55	0	866.9	30	1
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0x1006	3:02:59 PM	7	-54	0	866.3	30	1
0x1006	3:03:00 PM	7	-55	0	866.9	30	1
0x1006	3:03:01 PM	7	-56	0	867.5	30	1
0x1006	3:03:02 PM	7	-54	0	865.7	30	1

0x1007	2:59:11 PM	2	-47	0	865.7	30	1
0x1007	2:59:13 PM	2	-47	0	866.3	30	1
0x1007	2:59:14 PM	2	-48	0	866.9	30	1
0x1007	2:59:15 PM	2	-47	0	867.5	30	1
0x1007	2:59:16 PM	2	-47	0	867.5	30	1
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0x1007	2:59:21 PM	2	-47	0	865.7	30	1
0x1007	2:59:22 PM	2	-47	0	865.7	30	1
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0x1007	2:59:36 PM	2	-47	0	865.7	30	1
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0x1007	2:59:38 PM	2	-47	0	866.3	30	1
0x1007	2:59:39 PM	2	-47	0	866.9	30	1
0x1007	2:59:40 PM	2	-47	0	867.5	30	1
0x1007	2:59:41 PM	2	-47	0	865.7	30	1
0x1007	2:59:52 PM	3	-48	0	866.9	30	1
0x1007	2:59:53 PM	3	-48	0	867.5	30	1
0x1007	2:59:54 PM	3	-47	0	865.7	30	1
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0x1007	3:00:07 PM	3	-48	0	867.5	30	1
0x1007	3:00:08 PM	3	-48	0	867.5	30	1
0x1007	3:00:09 PM	3	-48	0	867.5	30	1
0x1007	3:00:10 PM	3	-47	0	865.7	30	1
0x1007	3:00:11 PM	3	-47	0	865.7	30	1
0x1007	3:00:12 PM	3	-47	0	865.7	30	1
0x1007	3:00:14 PM	3	-48	0	866.3	30	1
0x1007	3:00:15 PM	3	-48	0	866.3	30	1
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0x1007	3:00:19 PM	3	-48	0	866.9	30	1
0x1007	3:00:20 PM	3	-48	0	866.9	30	1
0x1007	3:00:22 PM	3	-48	0	867.5	30	1
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0x1007	3:00:35 PM	4	-49	0	866.9	30	1
0x1007	3:00:37 PM	4	-49	0	866.9	30	1
0x1007	3:00:38 PM	4	-49	0	867.5	30	1

0x1007	3:00:39 PM	4	-49	0	867.5	30	1
0x1007	3:00:40 PM	4	-48	0	865.7	30	1
0x1007	3:00:41 PM	4	-49	0	866.3	30	1
0x1007	3:00:42 PM	4	-49	0	866.3	30	1
0x1007	3:00:43 PM	4	-49	0	866.3	30	1
0x1007	3:00:45 PM	4	-48	0	866.3	30	1
0x1007	3:00:46 PM	4	-49	0	866.9	30	1
0x1007	3:00:47 PM	4	-49	0	867.5	30	1
0x1007	3:00:48 PM	4	-49	0	865.7	30	1
0x1007	3:00:49 PM	4	-49	0	865.7	30	1
0x1007	3:00:50 PM	4	-49	0	865.7	30	1
0x1007	3:00:52 PM	4	-49	0	865.7	30	1
0x1007	3:00:53 PM	4	-49	0	866.3	30	1
0x1007	3:00:54 PM	4	-49	0	866.3	30	1
0x1007	3:00:55 PM	4	-49	0	866.9	30	1
0x1007	3:00:56 PM	4	-49	0	867.5	30	1
0x1007	3:00:57 PM	4	-49	0	867.5	30	1
0x1007	3:00:58 PM	4	-49	0	867.5	30	1
0x1007	3:01:00 PM	4	-49	0	867.5	30	1
0x1007	3:01:01 PM	4	-49	0	865.7	30	1
0x1007	3:01:12 PM	5	-48	0	867.5	30	1
0x1007	3:01:13 PM	5	-47	0	865.7	30	1
0x1007	3:01:14 PM	5	-48	0	866.3	30	1
0x1007	3:01:16 PM	5	-48	0	866.3	30	1
0x1007	3:01:17 PM	5	-48	0	866.3	30	1
0x1007	3:01:18 PM	5	-48	0	866.3	30	1
0x1007	3:01:19 PM	5	-48	0	866.9	30	1
0x1007	3:01:20 PM	5	-48	0	866.9	30	1
0x1007	3:01:21 PM	5	-48	0	866.9	30	1
0x1007	3:01:22 PM	5	-48	0	867.5	30	1
0x1007	3:01:24 PM	5	-48	0	867.5	30	1
0x1007	3:01:25 PM	5	-48	0	867.5	30	1
0x1007	3:01:26 PM	5	-47	0	865.7	30	1
0x1007	3:01:27 PM	5	-47	0	865.7	30	1
0x1007	3:01:28 PM	5	-47	0	865.7	30	1
0x1007	3:01:29 PM	5	-47	0	865.7	30	1
0x1007	3:01:31 PM	5	-48	0	866.3	30	1
0x1007	3:01:32 PM	5	-48	0	866.3	30	1
0x1007	3:01:33 PM	5	-48	0	866.3	30	1
0x1007	3:01:34 PM	5	-48	0	866.9	30	1
0x1007	3:01:35 PM	5	-48	0	866.9	30	1
0x1007	3:01:36 PM	5	-48	0	866.9	30	1
0x1007	3:01:37 PM	5	-48	0	867.5	30	1
0x1007	3:01:39 PM	5	-48	0	867.5	30	1
0x1007	3:01:40 PM	5	-48	0	867.5	30	1
0x1007	3:01:41 PM	5	-48	0	867.5	30	1
0x1007	3:01:52 PM	6	-45	0	866.9	30	1
0x1007	3:01:53 PM	6	-46	0	867.5	30	1
0x1007	3:01:55 PM	6	-46	0	865.7	30	1
0x1007	3:01:56 PM	6	-46	0	866.3	30	1
0x1007	3:01:57 PM	6	-46	0	866.3	30	1
0x1007	3:01:58 PM	6	-46	0	866.3	30	1
0x1007	3:01:59 PM	6	-46	0	866.3	30	1
0x1007	3:02:00 PM	6	-46	0	866.9	30	1
0x1007	3:02:02 PM	6	-46	0	866.9	30	1
0x1007	3:02:03 PM	6	-46	0	866.9	30	1
0x1007	3:02:04 PM	6	-46	0	867.5	30	1
0x1007	3:02:05 PM	6	-46	0	867.5	30	1
0x1007	3:02:06 PM	6	-46	0	867.5	30	1
0x1007	3:02:07 PM	6	-46	0	865.7	30	1

0x1007	3:02:08 PM	6	-46	0	865.7	30	1
0x1007	3:02:10 PM	6	-46	0	865.7	30	1
0x1007	3:02:11 PM	6	-46	0	865.7	30	1
0x1007	3:02:12 PM	6	-46	0	866.3	30	1
0x1007	3:02:13 PM	6	-46	0	866.3	30	1
0x1007	3:02:14 PM	6	-46	0	866.3	30	1
0x1007	3:02:15 PM	6	-46	0	866.9	30	1
0x1007	3:02:17 PM	6	-46	0	866.9	30	1
0x1007	3:02:18 PM	6	-46	0	866.9	30	1
0x1007	3:02:19 PM	6	-46	0	867.5	30	1
0x1007	3:02:20 PM	6	-46	0	865.7	30	1
0x1007	3:02:21 PM	6	-46	0	866.3	30	1
0x1008	2:59:52 PM	3	-51	0	866.9	30	1
0x1008	2:59:53 PM	3	-52	0	867.5	30	1
0x1008	2:59:54 PM	3	-51	0	865.7	30	1
0x1008	2:59:55 PM	3	-51	0	865.7	30	1
0x1008	2:59:56 PM	3	-51	0	865.7	30	1
0x1008	2:59:57 PM	3	-51	0	865.7	30	1
0x1008	2:59:58 PM	3	-51	0	866.3	30	1
0x1008	3:00:00 PM	3	-51	0	866.3	30	1
0x1008	3:00:01 PM	3	-51	0	866.3	30	1
0x1008	3:00:02 PM	3	-51	0	866.9	30	1
0x1008	3:00:03 PM	3	-51	0	866.9	30	1
0x1008	3:00:04 PM	3	-51	0	866.9	30	1
0x1008	3:00:05 PM	3	-51	0	866.9	30	1
0x1008	3:00:06 PM	3	-51	0	867.5	30	1
0x1008	3:00:07 PM	3	-52	0	867.5	30	1
0x1008	3:00:09 PM	3	-51	0	867.5	30	1
0x1008	3:00:10 PM	3	-51	0	865.7	30	1
0x1008	3:00:11 PM	3	-51	0	865.7	30	1
0x1008	3:00:12 PM	3	-51	0	865.7	30	1
0x1008	3:00:13 PM	3	-51	0	866.3	30	1
0x1008	3:00:14 PM	3	-51	0	866.3	30	1
0x1008	3:00:15 PM	3	-51	0	866.3	30	1
0x1008	3:00:16 PM	3	-51	0	866.3	30	1
0x1008	3:00:18 PM	3	-51	0	866.9	30	1
0x1008	3:00:19 PM	3	-51	0	866.9	30	1
0x1008	3:00:20 PM	3	-51	0	866.9	30	1
0x1008	3:00:21 PM	3	-52	0	867.5	30	1
0x1008	3:01:12 PM	5	-50	0	867.5	30	1
0x1008	3:01:13 PM	5	-50	0	865.7	30	1
0x1008	3:01:14 PM	5	-50	0	866.3	30	1
0x1008	3:01:16 PM	5	-50	0	866.3	30	1
0x1008	3:01:17 PM	5	-50	0	866.3	30	1
0x1008	3:01:18 PM	5	-50	0	866.3	30	1
0x1008	3:01:19 PM	5	-50	0	866.9	30	1
0x1008	3:01:20 PM	5	-50	0	866.9	30	1
0x1008	3:01:21 PM	5	-50	0	866.9	30	1
0x1008	3:01:22 PM	5	-50	0	867.5	30	1
0x1008	3:01:23 PM	5	-50	0	867.5	30	1
0x1008	3:01:25 PM	5	-50	0	867.5	30	1
0x1008	3:01:26 PM	5	-50	0	867.5	30	1
0x1008	3:01:27 PM	5	-50	0	865.7	30	1
0x1008	3:01:28 PM	5	-50	0	865.7	30	1
0x1008	3:01:29 PM	5	-50	0	865.7	30	1
0x1008	3:01:30 PM	5	-50	0	866.3	30	1
0x1008	3:01:31 PM	5	-50	0	866.3	30	1
0x1008	3:01:33 PM	5	-50	0	866.3	30	1
0x1008	3:01:34 PM	5	-50	0	866.9	30	1
0x1008	3:01:35 PM	5	-50	0	866.9	30	1

0x1008	3:01:36 PM	5	-50	0	866.9	30	1
0x1008	3:01:37 PM	5	-50	0	866.9	30	1
0x1008	3:01:38 PM	5	-51	0	867.5	30	1
0x1008	3:01:39 PM	5	-50	0	867.5	30	1
0x1008	3:01:40 PM	5	-50	0	867.5	30	1
0x1008	3:01:42 PM	5	-50	0	865.7	30	1
0x1009	3:00:32 PM	4	-44	0	866.3	30	1
0x1009	3:00:33 PM	4	-44	0	866.9	30	1
0x1009	3:00:35 PM	4	-44	0	866.9	30	1
0x1009	3:00:36 PM	4	-44	0	866.9	30	1
0x1009	3:00:37 PM	4	-44	0	867.5	30	1
0x1009	3:00:39 PM	4	-44	0	867.5	30	1
0x1009	3:00:40 PM	4	-44	0	865.7	30	1
0x1009	3:00:41 PM	4	-44	0	866.3	30	1
0x1009	3:00:43 PM	4	-44	0	866.3	30	1
0x1009	3:00:44 PM	4	-44	0	866.3	30	1
0x1009	3:00:46 PM	4	-44	0	866.9	30	1
0x1009	3:00:47 PM	4	-44	0	867.5	30	1
0x1009	3:00:48 PM	4	-44	0	865.7	30	1
0x1009	3:00:50 PM	4	-44	0	865.7	30	1
0x1009	3:00:51 PM	4	-44	0	865.7	30	1
0x1009	3:00:52 PM	4	-44	0	866.3	30	1
0x1009	3:00:54 PM	4	-44	0	866.3	30	1
0x1009	3:00:55 PM	4	-44	0	866.9	30	1
0x1009	3:00:56 PM	4	-44	0	867.5	30	1
0x1009	3:00:58 PM	4	-44	0	867.5	30	1
0x1009	3:00:59 PM	4	-44	0	867.5	30	1
0x1009	3:01:00 PM	4	-44	0	865.7	30	1
0x1009	3:01:02 PM	4	-44	0	866.3	30	1

8.1.3 Round 3 with Containers

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1005	3:09:10 p.m.	0	-42	0	867.5	30	1
0x1005	3:09:11 p.m.	0	-42	0	865.7	30	1
0x1005	3:09:12 p.m.	0	-42	0	866.3	30	1
0x1005	3:09:13 p.m.	0	-42	0	866.9	30	1
0x1005	3:09:14 p.m.	0	-42	0	867.5	30	1
0x1005	3:09:15 p.m.	0	-42	0	865.7	30	1
0x1005	3:09:17 p.m.	0	-42	0	866.3	30	1
0x1005	3:09:18 p.m.	0	-42	0	866.9	30	1
0x1005	3:09:19 p.m.	0	-42	0	867.5	30	1
0x1005	3:09:20 p.m.	0	-42	0	865.7	30	1
0x1005	3:09:21 p.m.	0	-42	0	866.3	30	1
0x1005	3:09:22 p.m.	0	-42	0	866.9	30	1
0x1005	3:09:24 p.m.	0	-42	0	867.5	30	1
0x1005	3:09:25 p.m.	0	-42	0	865.7	30	1
0x1005	3:09:26 p.m.	0	-42	0	866.3	30	1
0x1005	3:09:27 p.m.	0	-42	0	866.9	30	1
0x1005	3:09:28 p.m.	0	-42	0	867.5	30	1
0x1005	3:09:29 p.m.	0	-42	0	865.7	30	1
0x1005	3:09:30 p.m.	0	-42	0	866.3	30	1
0x1005	3:09:32 p.m.	0	-42	0	866.9	30	1
0x1005	3:09:33 p.m.	0	-42	0	867.5	30	1
0x1005	3:09:34 p.m.	0	-42	0	865.7	30	1

0x1005	3:09:35 p.m.	0	-42	0	866.3	30	1
0x1005	3:09:36 p.m.	0	-42	0	866.9	30	1
0x1005	3:09:37 p.m.	0	-42	0	867.5	30	1
0x1005	3:09:39 p.m.	0	-42	0	865.7	30	1
0x1005	3:09:50 p.m.	1	-44	0	867.5	30	1
0x1005	3:09:51 p.m.	1	-44	0	865.7	30	1
0x1005	3:09:52 p.m.	1	-44	0	866.3	30	1
0x1005	3:09:53 p.m.	1	-44	0	866.9	30	1
0x1005	3:09:55 p.m.	1	-44	0	867.5	30	1
0x1005	3:09:56 p.m.	1	-44	0	865.7	30	1
0x1005	3:09:57 p.m.	1	-44	0	865.7	30	1
0x1005	3:09:58 p.m.	1	-44	0	865.7	30	1
0x1005	3:09:59 p.m.	1	-44	0	865.7	30	1
0x1005	3:10:00 p.m.	1	-44	0	866.3	30	1
0x1005	3:10:01 p.m.	1	-44	0	866.3	30	1
0x1005	3:10:03 p.m.	1	-44	0	866.3	30	1
0x1005	3:10:04 p.m.	1	-44	0	866.9	30	1
0x1005	3:10:05 p.m.	1	-44	0	866.9	30	1
0x1005	3:10:06 p.m.	1	-44	0	866.9	30	1
0x1005	3:10:07 p.m.	1	-44	0	867.5	30	1
0x1005	3:10:08 p.m.	1	-44	0	867.5	30	1
0x1005	3:10:10 p.m.	1	-44	0	867.5	30	1
0x1005	3:10:11 p.m.	1	-44	0	867.5	30	1
0x1005	3:10:12 p.m.	1	-44	0	865.7	30	1
0x1005	3:10:13 p.m.	1	-44	0	865.7	30	1
0x1005	3:10:14 p.m.	1	-44	0	865.7	30	1
0x1005	3:10:15 p.m.	1	-44	0	866.3	30	1
0x1005	3:10:16 p.m.	1	-44	0	866.3	30	1
0x1005	3:10:18 p.m.	1	-44	0	866.3	30	1
0x1005	3:10:19 p.m.	1	-44	0	866.9	30	1
0x1005	3:10:30 p.m.	2	-44	0	865.7	30	1
0x1005	3:10:31 p.m.	2	-45	0	866.3	30	1
0x1005	3:10:32 p.m.	2	-45	0	866.9	30	1
0x1005	3:10:34 p.m.	2	-45	0	867.5	30	1
0x1005	3:10:35 p.m.	2	-44	0	865.7	30	1
0x1005	3:10:36 p.m.	2	-44	0	865.7	30	1
0x1005	3:10:37 p.m.	2	-44	0	865.7	30	1
0x1005	3:10:38 p.m.	2	-44	0	865.7	30	1
0x1005	3:10:39 p.m.	2	-45	0	866.3	30	1
0x1005	3:10:40 p.m.	2	-45	0	866.3	30	1
0x1005	3:10:42 p.m.	2	-45	0	866.3	30	1
0x1005	3:10:43 p.m.	2	-45	0	866.9	30	1
0x1005	3:10:44 p.m.	2	-45	0	866.9	30	1
0x1005	3:10:45 p.m.	2	-45	0	866.9	30	1
0x1005	3:10:46 p.m.	2	-45	0	867.5	30	1
0x1005	3:10:47 p.m.	2	-45	0	867.5	30	1
0x1005	3:10:49 p.m.	2	-45	0	867.5	30	1
0x1005	3:10:50 p.m.	2	-45	0	867.5	30	1
0x1005	3:10:51 p.m.	2	-44	0	865.7	30	1
0x1005	3:10:52 p.m.	2	-44	0	865.7	30	1
0x1005	3:10:53 p.m.	2	-44	0	865.7	30	1
0x1005	3:10:54 p.m.	2	-45	0	866.3	30	1
0x1005	3:10:56 p.m.	2	-45	0	866.3	30	1
0x1005	3:10:57 p.m.	2	-45	0	866.3	30	1
0x1005	3:10:58 p.m.	2	-45	0	866.9	30	1
0x1005	3:10:59 p.m.	2	-45	0	866.9	30	1
0x1005	3:11:10 p.m.	3	-47	0	865.7	30	1

0x1005	3:11:12 p.m.	3	-47	0	866.3	30	1
0x1005	3:11:13 p.m.	3	-47	0	866.9	30	1
0x1005	3:11:14 p.m.	3	-47	0	866.9	30	1
0x1005	3:11:15 p.m.	3	-47	0	866.9	30	1
0x1005	3:11:16 p.m.	3	-47	0	866.9	30	1
0x1005	3:11:17 p.m.	3	-48	0	867.5	30	1
0x1005	3:11:18 p.m.	3	-48	0	867.5	30	1
0x1005	3:11:20 p.m.	3	-48	0	867.5	30	1
0x1005	3:11:21 p.m.	3	-47	0	865.7	30	1
0x1005	3:11:22 p.m.	3	-47	0	865.7	30	1
0x1005	3:11:23 p.m.	3	-47	0	865.7	30	1
0x1005	3:11:24 p.m.	3	-47	0	866.3	30	1
0x1005	3:11:25 p.m.	3	-47	0	866.3	30	1
0x1005	3:11:26 p.m.	3	-47	0	866.3	30	1
0x1005	3:11:28 p.m.	3	-47	0	866.3	30	1
0x1005	3:11:29 p.m.	3	-47	0	866.9	30	1
0x1005	3:11:30 p.m.	3	-47	0	866.9	30	1
0x1005	3:11:31 p.m.	3	-47	0	866.9	30	1
0x1005	3:11:32 p.m.	3	-48	0	867.5	30	1
0x1005	3:11:33 p.m.	3	-48	0	867.5	30	1
0x1005	3:11:34 p.m.	3	-48	0	867.5	30	1
0x1005	3:11:36 p.m.	3	-47	0	865.7	30	1
0x1005	3:11:37 p.m.	3	-47	0	865.7	30	1
0x1005	3:11:38 p.m.	3	-47	0	865.7	30	1
0x1005	3:11:39 p.m.	3	-47	0	865.7	30	1
0x1005	3:11:40 p.m.	3	-47	0	866.3	30	1
0x1005	3:11:51 p.m.	4	-48	0	867.5	30	1
0x1005	3:11:52 p.m.	4	-48	0	867.5	30	1
0x1005	3:11:53 p.m.	4	-48	0	867.5	30	1
0x1005	3:11:54 p.m.	4	-48	0	867.5	30	1
0x1005	3:11:55 p.m.	4	-47	0	865.7	30	1
0x1005	3:11:56 p.m.	4	-47	0	865.7	30	1
0x1005	3:11:57 p.m.	4	-48	0	866.3	30	1
0x1005	3:11:59 p.m.	4	-48	0	866.9	30	1
0x1005	3:12:00 p.m.	4	-48	0	867.5	30	1
0x1005	3:12:01 p.m.	4	-48	0	867.5	30	1
0x1005	3:12:02 p.m.	4	-48	0	867.5	30	1
0x1005	3:12:03 p.m.	4	-48	0	867.5	30	1
0x1005	3:12:04 p.m.	4	-47	0	865.7	30	1
0x1005	3:12:05 p.m.	4	-48	0	866.3	30	1
0x1005	3:12:07 p.m.	4	-48	0	866.9	30	1
0x1005	3:12:08 p.m.	4	-48	0	866.9	30	1
0x1005	3:12:09 p.m.	4	-48	0	866.9	30	1
0x1005	3:12:10 p.m.	4	-48	0	866.9	30	1
0x1005	3:12:11 p.m.	4	-48	0	867.5	30	1
0x1005	3:12:12 p.m.	4	-48	0	867.5	30	1
0x1005	3:12:14 p.m.	4	-47	0	865.7	30	1
0x1005	3:12:15 p.m.	4	-48	0	866.3	30	1
0x1005	3:12:16 p.m.	4	-48	0	866.3	30	1
0x1005	3:12:17 p.m.	4	-48	0	866.3	30	1
0x1005	3:12:18 p.m.	4	-48	0	866.3	30	1
0x1005	3:12:19 p.m.	4	-48	0	866.9	30	1
0x1005	3:12:20 p.m.	4	-48	0	867.5	30	1
0x1005	3:12:31 p.m.	5	-48	0	866.3	30	1
0x1005	3:12:32 p.m.	5	-48	0	866.9	30	1
0x1005	3:12:33 p.m.	5	-48	0	866.9	30	1
0x1005	3:12:34 p.m.	5	-48	0	866.9	30	1

0x1005	3:12:35 p.m.	5	-48	0	866.9	30	1
0x1005	3:12:37 p.m.	5	-48	0	867.5	30	1
0x1005	3:12:38 p.m.	5	-48	0	867.5	30	1
0x1005	3:12:39 p.m.	5	-48	0	867.5	30	1
0x1005	3:12:40 p.m.	5	-47	0	865.7	30	1
0x1005	3:12:41 p.m.	5	-47	0	865.7	30	1
0x1005	3:12:42 p.m.	5	-47	0	865.7	30	1
0x1005	3:12:43 p.m.	5	-48	0	866.3	30	1
0x1005	3:12:45 p.m.	5	-48	0	866.3	30	1
0x1005	3:12:46 p.m.	5	-48	0	866.3	30	1
0x1005	3:12:47 p.m.	5	-48	0	866.3	30	1
0x1005	3:12:48 p.m.	5	-48	0	866.9	30	1
0x1005	3:12:49 p.m.	5	-48	0	866.9	30	1
0x1005	3:12:50 p.m.	5	-48	0	866.9	30	1
0x1005	3:12:51 p.m.	5	-48	0	867.5	30	1
0x1005	3:12:53 p.m.	5	-48	0	867.5	30	1
0x1005	3:12:54 p.m.	5	-48	0	867.5	30	1
0x1005	3:12:55 p.m.	5	-47	0	865.7	30	1
0x1005	3:12:56 p.m.	5	-47	0	865.7	30	1
0x1005	3:12:57 p.m.	5	-47	0	865.7	30	1
0x1005	3:12:58 p.m.	5	-47	0	865.7	30	1
0x1005	3:12:59 p.m.	5	-48	0	866.3	30	1
0x1005	3:13:01 p.m.	5	-48	0	866.3	30	1
0x1005	3:13:11 p.m.	6	-48	0	867.5	30	1
0x1005	3:13:12 p.m.	6	-47	0	865.7	30	1
0x1005	3:13:13 p.m.	6	-47	0	865.7	30	1
0x1005	3:13:14 p.m.	6	-47	0	865.7	30	1
0x1005	3:13:16 p.m.	6	-47	0	865.7	30	1
0x1005	3:13:17 p.m.	6	-47	0	866.3	30	1
0x1005	3:13:18 p.m.	6	-48	0	866.3	30	1
0x1005	3:13:19 p.m.	6	-47	0	866.3	30	1
0x1005	3:13:20 p.m.	6	-48	0	866.9	30	1
0x1005	3:13:21 p.m.	6	-48	0	866.9	30	1
0x1005	3:13:22 p.m.	6	-48	0	866.9	30	1
0x1005	3:13:24 p.m.	6	-48	0	867.5	30	1
0x1005	3:13:25 p.m.	6	-48	0	867.5	30	1
0x1005	3:13:26 p.m.	6	-47	0	865.7	30	1
0x1005	3:13:27 p.m.	6	-48	0	866.3	30	1
0x1005	3:13:28 p.m.	6	-48	0	866.3	30	1
0x1005	3:13:29 p.m.	6	-48	0	866.3	30	1
0x1005	3:13:31 p.m.	6	-48	0	866.3	30	1
0x1005	3:13:32 p.m.	6	-48	0	866.9	30	1
0x1005	3:13:33 p.m.	6	-48	0	866.9	30	1
0x1005	3:13:34 p.m.	6	-48	0	867.5	30	1
0x1005	3:13:35 p.m.	6	-47	0	865.7	30	1
0x1005	3:13:36 p.m.	6	-47	0	865.7	30	1
0x1005	3:13:37 p.m.	6	-47	0	865.7	30	1
0x1005	3:13:39 p.m.	6	-47	0	865.7	30	1
0x1005	3:13:40 p.m.	6	-48	0	866.3	30	1
0x1005	3:13:41 p.m.	6	-48	0	866.3	30	1
0x1005	3:13:51 p.m.	7	-47	0	867.5	30	1
0x1005	3:13:52 p.m.	7	-47	0	865.7	30	1
0x1005	3:13:54 p.m.	7	-47	0	865.7	30	1
0x1005	3:13:55 p.m.	7	-47	0	865.7	30	1
0x1005	3:13:56 p.m.	7	-47	0	865.7	30	1
0x1005	3:13:57 p.m.	7	-47	0	866.3	30	1
0x1005	3:13:58 p.m.	7	-47	0	866.3	30	1

0x1005	3:13:59 p.m.	7	-47	0	866.3	30	1
0x1005	3:14:00 p.m.	7	-47	0	866.9	30	1
0x1005	3:14:02 p.m.	7	-47	0	866.9	30	1
0x1005	3:14:03 p.m.	7	-47	0	866.9	30	1
0x1005	3:14:04 p.m.	7	-47	0	867.5	30	1
0x1005	3:14:05 p.m.	7	-47	0	867.5	30	1
0x1005	3:14:06 p.m.	7	-47	0	867.5	30	1
0x1005	3:14:07 p.m.	7	-47	0	867.5	30	1
0x1005	3:14:08 p.m.	7	-47	0	865.7	30	1
0x1005	3:14:10 p.m.	7	-47	0	865.7	30	1
0x1005	3:14:11 p.m.	7	-47	0	865.7	30	1
0x1005	3:14:12 p.m.	7	-47	0	866.3	30	1
0x1005	3:14:13 p.m.	7	-47	0	866.3	30	1
0x1005	3:14:14 p.m.	7	-47	0	866.3	30	1
0x1005	3:14:15 p.m.	7	-47	0	866.9	30	1
0x1005	3:14:16 p.m.	7	-47	0	866.9	30	1
0x1005	3:14:18 p.m.	7	-47	0	866.9	30	1
0x1005	3:14:19 p.m.	7	-47	0	866.9	30	1
0x1005	3:14:20 p.m.	7	-47	0	867.5	30	1
0x1005	3:14:21 p.m.	7	-47	0	867.5	30	1
0x1005	3:14:31 p.m.	8	-48	0	866.3	30	1
0x1005	3:14:33 p.m.	8	-48	0	866.9	30	1
0x1005	3:14:34 p.m.	8	-48	0	866.9	30	1
0x1005	3:14:35 p.m.	8	-48	0	866.9	30	1
0x1005	3:14:36 p.m.	8	-48	0	866.9	30	1
0x1005	3:14:37 p.m.	8	-48	0	867.5	30	1
0x1005	3:14:38 p.m.	8	-48	0	867.5	30	1
0x1005	3:14:40 p.m.	8	-48	0	865.7	30	1
0x1005	3:14:41 p.m.	8	-48	0	866.3	30	1
0x1005	3:14:42 p.m.	8	-48	0	866.3	30	1
0x1005	3:14:43 p.m.	8	-48	0	866.3	30	1
0x1005	3:14:44 p.m.	8	-48	0	866.3	30	1
0x1005	3:14:45 p.m.	8	-48	0	866.9	30	1
0x1005	3:14:46 p.m.	8	-49	0	867.5	30	1
0x1005	3:14:48 p.m.	8	-48	0	865.7	30	1
0x1005	3:14:49 p.m.	8	-48	0	865.7	30	1
0x1005	3:14:50 p.m.	8	-48	0	865.7	30	1
0x1005	3:14:51 p.m.	8	-48	0	865.7	30	1
0x1005	3:14:52 p.m.	8	-48	0	866.3	30	1
0x1005	3:14:53 p.m.	8	-48	0	866.3	30	1
0x1005	3:14:54 p.m.	8	-48	0	866.9	30	1
0x1005	3:14:56 p.m.	8	-48	0	867.5	30	1
0x1005	3:14:57 p.m.	8	-48	0	867.5	30	1
0x1005	3:14:58 p.m.	8	-48	0	867.5	30	1
0x1005	3:14:59 p.m.	8	-48	0	867.5	30	1
0x1005	3:15:00 p.m.	8	-48	0	865.7	30	1
0x10062000	3:09:50 p.m.	1	-48	0	867.5	30	1
0x10062000	3:09:51 p.m.	1	-50	0	865.7	30	1
0x10062000	3:09:52 p.m.	1	-49	0	866.3	30	1
0x10062000	3:09:53 p.m.	1	-49	0	866.9	30	1
0x10062000	3:09:55 p.m.	1	-49	0	867.5	30	1
0x10062000	3:09:56 p.m.	1	-50	0	865.7	30	1
0x10062000	3:09:57 p.m.	1	-50	0	865.7	30	1
0x10062000	3:09:58 p.m.	1	-50	0	865.7	30	1
0x10062000	3:09:59 p.m.	1	-50	0	865.7	30	1
0x10062000	3:10:00 p.m.	1	-49	0	866.3	30	1
0x10062000	3:10:02 p.m.	1	-49	0	866.3	30	1

0x10062000	3:10:03 p.m.	1	-49	0	866.3	30	1
0x10062000	3:10:04 p.m.	1	-49	0	866.9	30	1
0x10062000	3:10:05 p.m.	1	-49	0	866.9	30	1
0x10062000	3:10:06 p.m.	1	-49	0	866.9	30	1
0x10062000	3:10:08 p.m.	1	-49	0	867.5	30	1
0x10062000	3:10:09 p.m.	1	-49	0	867.5	30	1
0x10062000	3:10:10 p.m.	1	-49	0	867.5	30	1
0x10062000	3:10:11 p.m.	1	-50	0	865.7	30	1
0x10062000	3:10:12 p.m.	1	-50	0	865.7	30	1
0x10062000	3:10:13 p.m.	1	-50	0	865.7	30	1
0x10062000	3:10:15 p.m.	1	-50	0	865.7	30	1
0x10062000	3:10:16 p.m.	1	-49	0	866.3	30	1
0x10062000	3:10:17 p.m.	1	-49	0	866.3	30	1
0x10062000	3:10:18 p.m.	1	-49	0	866.3	30	1
0x10062000	3:10:19 p.m.	1	-49	0	866.9	30	1
0x10062000	3:10:30 p.m.	2	-49	0	865.7	30	1
0x10062000	3:10:31 p.m.	2	-49	0	866.3	30	1
0x10062000	3:10:32 p.m.	2	-49	0	866.9	30	1
0x10062000	3:10:34 p.m.	2	-49	0	867.5	30	1
0x10062000	3:10:35 p.m.	2	-49	0	865.7	30	1
0x10062000	3:10:36 p.m.	2	-50	0	865.7	30	1
0x10062000	3:10:37 p.m.	2	-49	0	865.7	30	1
0x10062000	3:10:38 p.m.	2	-49	0	865.7	30	1
0x10062000	3:10:40 p.m.	2	-49	0	866.3	30	1
0x10062000	3:10:41 p.m.	2	-49	0	866.3	30	1
0x10062000	3:10:42 p.m.	2	-50	0	866.3	30	1
0x10062000	3:10:43 p.m.	2	-49	0	866.9	30	1
0x10062000	3:10:44 p.m.	2	-49	0	866.9	30	1
0x10062000	3:10:45 p.m.	2	-49	0	866.9	30	1
0x10062000	3:10:47 p.m.	2	-49	0	867.5	30	1
0x10062000	3:10:48 p.m.	2	-49	0	867.5	30	1
0x10062000	3:10:49 p.m.	2	-49	0	867.5	30	1
0x10062000	3:10:50 p.m.	2	-49	0	865.7	30	1
0x10062000	3:10:51 p.m.	2	-49	0	865.7	30	1
0x10062000	3:10:52 p.m.	2	-49	0	865.7	30	1
0x10062000	3:10:54 p.m.	2	-49	0	865.7	30	1
0x10062000	3:10:55 p.m.	2	-49	0	866.3	30	1
0x10062000	3:10:56 p.m.	2	-49	0	866.3	30	1
0x10062000	3:10:57 p.m.	2	-49	0	866.3	30	1
0x10062000	3:10:58 p.m.	2	-49	0	866.9	30	1
0x10062000	3:10:59 p.m.	2	-49	0	866.9	30	1
0x10062000	3:11:10 p.m.	3	-56	0	865.7	30	1
0x10062000	3:11:12 p.m.	3	-56	0	866.3	30	1
0x10062000	3:11:13 p.m.	3	-56	0	866.9	30	1
0x10062000	3:11:14 p.m.	3	-56	0	866.9	30	1
0x10062000	3:11:15 p.m.	3	-56	0	866.9	30	1
0x10062000	3:11:16 p.m.	3	-56	0	866.9	30	1
0x10062000	3:11:17 p.m.	3	-57	0	867.5	30	1
0x10062000	3:11:19 p.m.	3	-56	0	867.5	30	1
0x10062000	3:11:20 p.m.	3	-57	0	867.5	30	1
0x10062000	3:11:21 p.m.	3	-56	0	865.7	30	1
0x10062000	3:11:22 p.m.	3	-56	0	865.7	30	1
0x10062000	3:11:23 p.m.	3	-56	0	865.7	30	1
0x10062000	3:11:24 p.m.	3	-56	0	866.3	30	1
0x10062000	3:11:26 p.m.	3	-56	0	866.3	30	1
0x10062000	3:11:27 p.m.	3	-56	0	866.3	30	1
0x10062000	3:11:28 p.m.	3	-56	0	866.9	30	1

0x10062000	3:11:29 p.m.	3	-56	0	866.9	30	1
0x10062000	3:11:30 p.m.	3	-57	0	866.9	30	1
0x10062000	3:11:31 p.m.	3	-57	0	866.9	30	1
0x10062000	3:11:33 p.m.	3	-56	0	867.5	30	1
0x10062000	3:11:34 p.m.	3	-57	0	867.5	30	1
0x10062000	3:11:35 p.m.	3	-56	0	867.5	30	1
0x10062000	3:11:36 p.m.	3	-56	0	865.7	30	1
0x10062000	3:11:37 p.m.	3	-56	0	865.7	30	1
0x10062000	3:11:38 p.m.	3	-56	0	865.7	30	1
0x10062000	3:11:40 p.m.	3	-56	0	866.3	30	1
0x10062000	3:11:52 p.m.	4	-62	0	867.5	30	1
0x10062000	3:12:31 p.m.	5	-56	0	866.3	30	1
0x10062000	3:12:32 p.m.	5	-56	0	866.9	30	1
0x10062000	3:12:33 p.m.	5	-56	0	866.9	30	1
0x10062000	3:12:34 p.m.	5	-56	0	866.9	30	1
0x10062000	3:12:35 p.m.	5	-56	0	866.9	30	1
0x10062000	3:12:37 p.m.	5	-56	0	867.5	30	1
0x10062000	3:12:38 p.m.	5	-56	0	867.5	30	1
0x10062000	3:12:39 p.m.	5	-56	0	867.5	30	1
0x10062000	3:12:40 p.m.	5	-57	0	865.7	30	1
0x10062000	3:12:41 p.m.	5	-57	0	865.7	30	1
0x10062000	3:12:42 p.m.	5	-57	0	865.7	30	1
0x10062000	3:12:44 p.m.	5	-56	0	866.3	30	1
0x10062000	3:12:45 p.m.	5	-56	0	866.3	30	1
0x10062000	3:12:46 p.m.	5	-56	0	866.3	30	1
0x10062000	3:12:47 p.m.	5	-56	0	866.9	30	1
0x10062000	3:12:48 p.m.	5	-56	0	866.9	30	1
0x10062000	3:12:49 p.m.	5	-56	0	866.9	30	1
0x10062000	3:12:51 p.m.	5	-56	0	866.9	30	1
0x10062000	3:12:52 p.m.	5	-56	0	867.5	30	1
0x10062000	3:12:53 p.m.	5	-56	0	867.5	30	1
0x10062000	3:12:54 p.m.	5	-56	0	867.5	30	1
0x10062000	3:12:55 p.m.	5	-57	0	865.7	30	1
0x10062000	3:12:56 p.m.	5	-57	0	865.7	30	1
0x10062000	3:12:58 p.m.	5	-56	0	865.7	30	1
0x10062000	3:12:59 p.m.	5	-56	0	866.3	30	1
0x10062000	3:13:00 p.m.	5	-56	0	866.3	30	1
0x10062000	3:13:51 p.m.	7	-49	0	867.5	30	1
0x10062000	3:13:52 p.m.	7	-49	0	865.7	30	1
0x10062000	3:13:54 p.m.	7	-49	0	865.7	30	1
0x10062000	3:13:55 p.m.	7	-49	0	865.7	30	1
0x10062000	3:13:56 p.m.	7	-49	0	865.7	30	1
0x10062000	3:13:57 p.m.	7	-49	0	866.3	30	1
0x10062000	3:13:58 p.m.	7	-49	0	866.3	30	1
0x10062000	3:13:59 p.m.	7	-49	0	866.3	30	1
0x10062000	3:14:01 p.m.	7	-49	0	866.9	30	1
0x10062000	3:14:02 p.m.	7	-49	0	866.9	30	1
0x10062000	3:14:03 p.m.	7	-49	0	866.9	30	1
0x10062000	3:14:04 p.m.	7	-49	0	867.5	30	1
0x10062000	3:14:05 p.m.	7	-49	0	867.5	30	1
0x10062000	3:14:06 p.m.	7	-49	0	867.5	30	1
0x10062000	3:14:08 p.m.	7	-49	0	865.7	30	1
0x10062000	3:14:09 p.m.	7	-49	0	865.7	30	1
0x10062000	3:14:10 p.m.	7	-49	0	865.7	30	1
0x10062000	3:14:11 p.m.	7	-49	0	865.7	30	1
0x10062000	3:14:12 p.m.	7	-49	0	866.3	30	1
0x10062000	3:14:13 p.m.	7	-49	0	866.3	30	1

0x10062000	3:14:15 p.m.	7	-49	0	866.3	30	1
0x10062000	3:14:16 p.m.	7	-49	0	866.9	30	1
0x10062000	3:14:17 p.m.	7	-49	0	866.9	30	1
0x10062000	3:14:18 p.m.	7	-49	0	866.9	30	1
0x10062000	3:14:19 p.m.	7	-49	0	867.5	30	1
0x10062000	3:14:20 p.m.	7	-49	0	867.5	30	1
0x1007	3:10:30 p.m.	2	-48	0	865.7	30	1
0x1007	3:10:31 p.m.	2	-47	0	866.3	30	1
0x1007	3:10:32 p.m.	2	-47	0	866.9	30	1
0x1007	3:10:34 p.m.	2	-47	0	867.5	30	1
0x1007	3:10:35 p.m.	2	-47	0	865.7	30	1
0x1007	3:10:36 p.m.	2	-47	0	865.7	30	1
0x1007	3:10:37 p.m.	2	-47	0	865.7	30	1
0x1007	3:10:38 p.m.	2	-47	0	865.7	30	1
0x1007	3:10:39 p.m.	2	-47	0	866.3	30	1
0x1007	3:10:40 p.m.	2	-47	0	866.3	30	1
0x1007	3:10:42 p.m.	2	-47	0	866.3	30	1
0x1007	3:10:43 p.m.	2	-47	0	866.9	30	1
0x1007	3:10:44 p.m.	2	-47	0	866.9	30	1
0x1007	3:10:45 p.m.	2	-47	0	866.9	30	1
0x1007	3:10:46 p.m.	2	-47	0	867.5	30	1
0x1007	3:10:47 p.m.	2	-47	0	867.5	30	1
0x1007	3:10:49 p.m.	2	-47	0	867.5	30	1
0x1007	3:10:50 p.m.	2	-47	0	867.5	30	1
0x1007	3:10:51 p.m.	2	-47	0	865.7	30	1
0x1007	3:10:52 p.m.	2	-47	0	865.7	30	1
0x1007	3:10:53 p.m.	2	-47	0	865.7	30	1
0x1007	3:10:54 p.m.	2	-47	0	866.3	30	1
0x1007	3:10:56 p.m.	2	-47	0	866.3	30	1
0x1007	3:10:57 p.m.	2	-47	0	866.3	30	1
0x1007	3:10:58 p.m.	2	-47	0	866.9	30	1
0x1007	3:10:59 p.m.	2	-47	0	866.9	30	1
0x1007	3:11:10 p.m.	3	-48	0	865.7	30	1
0x1007	3:11:12 p.m.	3	-48	0	866.3	30	1
0x1007	3:11:13 p.m.	3	-48	0	866.9	30	1
0x1007	3:11:14 p.m.	3	-48	0	866.9	30	1
0x1007	3:11:15 p.m.	3	-48	0	866.9	30	1
0x1007	3:11:16 p.m.	3	-48	0	866.9	30	1
0x1007	3:11:17 p.m.	3	-48	0	867.5	30	1
0x1007	3:11:18 p.m.	3	-48	0	867.5	30	1
0x1007	3:11:20 p.m.	3	-48	0	867.5	30	1
0x1007	3:11:21 p.m.	3	-48	0	865.7	30	1
0x1007	3:11:22 p.m.	3	-48	0	865.7	30	1
0x1007	3:11:23 p.m.	3	-48	0	865.7	30	1
0x1007	3:11:24 p.m.	3	-48	0	866.3	30	1
0x1007	3:11:25 p.m.	3	-48	0	866.3	30	1
0x1007	3:11:26 p.m.	3	-48	0	866.3	30	1
0x1007	3:11:28 p.m.	3	-48	0	866.3	30	1
0x1007	3:11:29 p.m.	3	-48	0	866.9	30	1
0x1007	3:11:30 p.m.	3	-48	0	866.9	30	1
0x1007	3:11:31 p.m.	3	-48	0	866.9	30	1
0x1007	3:11:32 p.m.	3	-48	0	867.5	30	1
0x1007	3:11:33 p.m.	3	-48	0	867.5	30	1
0x1007	3:11:35 p.m.	3	-48	0	867.5	30	1
0x1007	3:11:36 p.m.	3	-48	0	865.7	30	1
0x1007	3:11:37 p.m.	3	-48	0	865.7	30	1
0x1007	3:11:38 p.m.	3	-48	0	865.7	30	1

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0x1007	3:11:39 p.m.	3	-48	0	865.7	30	1
0x1007	3:11:40 p.m.	3	-48	0	866.3	30	1
0x1007	3:11:51 p.m.	4	-49	0	867.5	30	1
0x1007	3:11:52 p.m.	4	-49	0	867.5	30	1
0x1007	3:11:53 p.m.	4	-49	0	867.5	30	1
0x1007	3:11:54 p.m.	4	-49	0	867.5	30	1
0x1007	3:11:55 p.m.	4	-49	0	865.7	30	1
0x1007	3:11:56 p.m.	4	-49	0	865.7	30	1
0x1007	3:11:57 p.m.	4	-49	0	866.3	30	1
0x1007	3:11:59 p.m.	4	-49	0	866.9	30	1
0x1007	3:12:00 p.m.	4	-49	0	867.5	30	1
0x1007	3:12:01 p.m.	4	-49	0	867.5	30	1
0x1007	3:12:02 p.m.	4	-49	0	867.5	30	1
0x1007	3:12:03 p.m.	4	-49	0	867.5	30	1
0x1007	3:12:04 p.m.	4	-49	0	865.7	30	1
0x1007	3:12:05 p.m.	4	-49	0	866.3	30	1
0x1007	3:12:07 p.m.	4	-49	0	866.9	30	1
0x1007	3:12:08 p.m.	4	-49	0	866.9	30	1
0x1007	3:12:09 p.m.	4	-49	0	866.9	30	1
0x1007	3:12:10 p.m.	4	-49	0	866.9	30	1
0x1007	3:12:11 p.m.	4	-49	0	867.5	30	1
0x1007	3:12:12 p.m.	4	-49	0	867.5	30	1
0x1007	3:12:14 p.m.	4	-49	0	865.7	30	1
0x1007	3:12:15 p.m.	4	-49	0	866.3	30	1
0x1007	3:12:16 p.m.	4	-49	0	866.3	30	1
0x1007	3:12:17 p.m.	4	-49	0	866.3	30	1
0x1007	3:12:18 p.m.	4	-49	0	866.3	30	1
0x1007	3:12:19 p.m.	4	-49	0	866.9	30	1
0x1007	3:12:31 p.m.	5	-48	0	866.3	30	1
0x1007	3:12:32 p.m.	5	-48	0	866.9	30	1
0x1007	3:12:33 p.m.	5	-48	0	866.9	30	1
0x1007	3:12:34 p.m.	5	-48	0	866.9	30	1
0x1007	3:12:35 p.m.	5	-48	0	866.9	30	1
0x1007	3:12:37 p.m.	5	-48	0	867.5	30	1
0x1007	3:12:38 p.m.	5	-48	0	867.5	30	1
0x1007	3:12:39 p.m.	5	-49	0	867.5	30	1
0x1007	3:12:40 p.m.	5	-48	0	865.7	30	1
0x1007	3:12:41 p.m.	5	-48	0	865.7	30	1
0x1007	3:12:42 p.m.	5	-48	0	865.7	30	1
0x1007	3:12:43 p.m.	5	-48	0	866.3	30	1
0x1007	3:12:45 p.m.	5	-48	0	866.3	30	1
0x1007	3:12:46 p.m.	5	-48	0	866.3	30	1
0x1007	3:12:47 p.m.	5	-48	0	866.3	30	1
0x1007	3:12:48 p.m.	5	-48	0	866.9	30	1
0x1007	3:12:49 p.m.	5	-48	0	866.9	30	1
0x1007	3:12:50 p.m.	5	-48	0	866.9	30	1
0x1007	3:12:51 p.m.	5	-48	0	867.5	30	1
0x1007	3:12:53 p.m.	5	-48	0	867.5	30	1
0x1007	3:12:54 p.m.	5	-48	0	867.5	30	1
0x1007	3:12:55 p.m.	5	-48	0	865.7	30	1
0x1007	3:12:56 p.m.	5	-48	0	865.7	30	1
0x1007	3:12:57 p.m.	5	-48	0	865.7	30	1
0x1007	3:12:58 p.m.	5	-48	0	865.7	30	1
0x1007	3:12:59 p.m.	5	-48	0	866.3	30	1
0x1007	3:13:01 p.m.	5	-48	0	866.3	30	1
0x1007	3:13:11 p.m.	6	-49	0	867.5	30	1
0x1007	3:13:12 p.m.	6	-49	0	865.7	30	1

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0x1007	3:13:13 p.m.	6	-49	0	865.7	30	1
0x1007	3:13:14 p.m.	6	-49	0	865.7	30	1
0x1007	3:13:16 p.m.	6	-50	0	865.7	30	1
0x1007	3:13:17 p.m.	6	-49	0	866.3	30	1
0x1007	3:13:18 p.m.	6	-49	0	866.3	30	1
0x1007	3:13:19 p.m.	6	-49	0	866.3	30	1
0x1007	3:13:20 p.m.	6	-49	0	866.9	30	1
0x1007	3:13:21 p.m.	6	-49	0	866.9	30	1
0x1007	3:13:23 p.m.	6	-49	0	866.9	30	1
0x1007	3:13:24 p.m.	6	-49	0	867.5	30	1
0x1007	3:13:25 p.m.	6	-49	0	867.5	30	1
0x1007	3:13:26 p.m.	6	-49	0	865.7	30	1
0x1007	3:13:27 p.m.	6	-49	0	866.3	30	1
0x1007	3:13:28 p.m.	6	-49	0	866.3	30	1
0x1007	3:13:29 p.m.	6	-49	0	866.3	30	1
0x1007	3:13:31 p.m.	6	-49	0	866.3	30	1
0x1007	3:13:32 p.m.	6	-49	0	866.9	30	1
0x1007	3:13:33 p.m.	6	-49	0	866.9	30	1
0x1007	3:13:34 p.m.	6	-49	0	867.5	30	1
0x1007	3:13:35 p.m.	6	-49	0	865.7	30	1
0x1007	3:13:36 p.m.	6	-49	0	865.7	30	1
0x1007	3:13:37 p.m.	6	-49	0	865.7	30	1
0x1007	3:13:39 p.m.	6	-49	0	865.7	30	1
0x1007	3:13:40 p.m.	6	-49	0	866.3	30	1
0x1007	3:13:41 p.m.	6	-49	0	866.3	30	1
0x1008	3:11:10 p.m.	3	-49	0	865.7	30	1
0x1008	3:11:11 p.m.	3	-50	0	866.3	30	1
0x1008	3:11:13 p.m.	3	-50	0	866.9	30	1
0x1008	3:11:14 p.m.	3	-50	0	866.9	30	1
0x1008	3:11:15 p.m.	3	-50	0	866.9	30	1
0x1008	3:11:16 p.m.	3	-50	0	866.9	30	1
0x1008	3:11:17 p.m.	3	-50	0	867.5	30	1
0x1008	3:11:18 p.m.	3	-50	0	867.5	30	1
0x1008	3:11:19 p.m.	3	-50	0	867.5	30	1
0x1008	3:11:20 p.m.	3	-49	0	865.7	30	1
0x1008	3:11:22 p.m.	3	-49	0	865.7	30	1
0x1008	3:11:23 p.m.	3	-49	0	865.7	30	1
0x1008	3:11:24 p.m.	3	-49	0	865.7	30	1
0x1008	3:11:25 p.m.	3	-50	0	866.3	30	1
0x1008	3:11:26 p.m.	3	-50	0	866.3	30	1
0x1008	3:11:27 p.m.	3	-50	0	866.3	30	1
0x1008	3:11:28 p.m.	3	-50	0	866.9	30	1
0x1008	3:11:29 p.m.	3	-50	0	866.9	30	1
0x1008	3:11:31 p.m.	3	-50	0	866.9	30	1
0x1008	3:11:32 p.m.	3	-50	0	867.5	30	1
0x1008	3:11:33 p.m.	3	-50	0	867.5	30	1
0x1008	3:11:34 p.m.	3	-50	0	867.5	30	1
0x1008	3:11:35 p.m.	3	-50	0	867.5	30	1
0x1008	3:11:36 p.m.	3	-49	0	865.7	30	1
0x1008	3:11:37 p.m.	3	-49	0	865.7	30	1
0x1008	3:11:38 p.m.	3	-49	0	865.7	30	1
0x1008	3:11:40 p.m.	3	-50	0	866.3	30	1
0x1008	3:12:31 p.m.	5	-49	0	866.3	30	1
0x1008	3:12:32 p.m.	5	-49	0	866.9	30	1
0x1008	3:12:33 p.m.	5	-49	0	866.9	30	1
0x1008	3:12:34 p.m.	5	-49	0	866.9	30	1
0x1008	3:12:35 p.m.	5	-49	0	866.9	30	1

0x1008	3:12:36 p.m.	5	-49	0	867.5	30	1
0x1008	3:12:38 p.m.	5	-49	0	867.5	30	1
0x1008	3:12:39 p.m.	5	-49	0	867.5	30	1
0x1008	3:12:40 p.m.	5	-48	0	865.7	30	1
0x1008	3:12:41 p.m.	5	-48	0	865.7	30	1
0x1008	3:12:42 p.m.	5	-48	0	865.7	30	1
0x1008	3:12:43 p.m.	5	-48	0	865.7	30	1
0x1008	3:12:44 p.m.	5	-48	0	866.3	30	1
0x1008	3:12:45 p.m.	5	-48	0	866.3	30	1
0x1008	3:12:47 p.m.	5	-48	0	866.3	30	1
0x1008	3:12:48 p.m.	5	-49	0	866.9	30	1
0x1008	3:12:49 p.m.	5	-49	0	866.9	30	1
0x1008	3:12:50 p.m.	5	-49	0	866.9	30	1
0x1008	3:12:51 p.m.	5	-49	0	867.5	30	1
0x1008	3:12:52 p.m.	5	-49	0	867.5	30	1
0x1008	3:12:53 p.m.	5	-49	0	867.5	30	1
0x1008	3:12:54 p.m.	5	-49	0	867.5	30	1
0x1008	3:12:55 p.m.	5	-48	0	865.7	30	1
0x1008	3:12:57 p.m.	5	-48	0	865.7	30	1
0x1008	3:12:58 p.m.	5	-48	0	865.7	30	1
0x1008	3:12:59 p.m.	5	-48	0	866.3	30	1
0x1008	3:13:00 p.m.	5	-48	0	866.3	30	1
0x1009	3:11:51 p.m.	4	-43	0	867.5	30	1
0x1009	3:11:52 p.m.	4	-44	0	867.5	30	1
0x1009	3:11:53 p.m.	4	-44	0	867.5	30	1
0x1009	3:11:55 p.m.	4	-44	0	865.7	30	1
0x1009	3:11:56 p.m.	4	-44	0	865.7	30	1
0x1009	3:11:57 p.m.	4	-44	0	866.3	30	1
0x1009	3:11:59 p.m.	4	-44	0	866.9	30	1
0x1009	3:12:00 p.m.	4	-44	0	867.5	30	1
0x1009	3:12:01 p.m.	4	-44	0	867.5	30	1
0x1009	3:12:03 p.m.	4	-44	0	867.5	30	1
0x1009	3:12:04 p.m.	4	-44	0	865.7	30	1
0x1009	3:12:05 p.m.	4	-44	0	866.3	30	1
0x1009	3:12:07 p.m.	4	-44	0	866.9	30	1
0x1009	3:12:08 p.m.	4	-44	0	866.9	30	1
0x1009	3:12:10 p.m.	4	-44	0	866.9	30	1
0x1009	3:12:11 p.m.	4	-44	0	867.5	30	1
0x1009	3:12:12 p.m.	4	-44	0	867.5	30	1
0x1009	3:12:14 p.m.	4	-44	0	865.7	30	1
0x1009	3:12:15 p.m.	4	-44	0	866.3	30	1
0x1009	3:12:16 p.m.	4	-44	0	866.3	30	1
0x1009	3:12:18 p.m.	4	-44	0	866.3	30	1
0x1009	3:12:19 p.m.	4	-44	0	866.9	30	1
0x1009	3:12:20 p.m.	4	-44	0	867.5	30	1

8.1.4 Round 4 with Containers

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1005	3:26:20 p.m.	0	-52	0	867.5	30	1
0x1005	3:26:21 p.m.	0	-51	0	865.7	30	1
0x1005	3:26:22 p.m.	0	-51	0	866.3	30	1
0x1005	3:26:23 p.m.	0	-51	0	866.9	30	1
0x1005	3:26:24 p.m.	0	-51	0	867.5	30	1

0x1005	3:26:25 p.m.	0	-51	0	865.7	30	1
0x1005	3:26:26 p.m.	0	-51	0	866.3	30	1
0x1005	3:26:28 p.m.	0	-52	0	866.9	30	1
0x1005	3:26:29 p.m.	0	-52	0	867.5	30	1
0x1005	3:26:30 p.m.	0	-51	0	865.7	30	1
0x1005	3:26:31 p.m.	0	-51	0	866.3	30	1
0x1005	3:26:32 p.m.	0	-51	0	866.9	30	1
0x1005	3:26:33 p.m.	0	-52	0	867.5	30	1
0x1005	3:26:34 p.m.	0	-51	0	865.7	30	1
0x1005	3:26:36 p.m.	0	-51	0	866.3	30	1
0x1005	3:26:37 p.m.	0	-51	0	866.9	30	1
0x1005	3:26:38 p.m.	0	-52	0	867.5	30	1
0x1005	3:26:39 p.m.	0	-51	0	865.7	30	1
0x1005	3:26:40 p.m.	0	-51	0	866.3	30	1
0x1005	3:26:41 p.m.	0	-51	0	866.9	30	1
0x1005	3:26:42 p.m.	0	-52	0	867.5	30	1
0x1005	3:26:44 p.m.	0	-51	0	865.7	30	1
0x1005	3:26:45 p.m.	0	-51	0	866.3	30	1
0x1005	3:26:46 p.m.	0	-51	0	866.9	30	1
0x1005	3:26:47 p.m.	0	-52	0	867.5	30	1
0x1005	3:26:48 p.m.	0	-51	0	865.7	30	1
0x1005	3:26:49 p.m.	0	-51	0	866.3	30	1
0x1005	3:27:00 p.m.	1	-48	0	867.5	30	1
0x1005	3:27:01 p.m.	1	-48	0	865.7	30	1
0x1005	3:27:02 p.m.	1	-48	0	866.3	30	1
0x1005	3:27:03 p.m.	1	-48	0	866.9	30	1
0x1005	3:27:04 p.m.	1	-48	0	867.5	30	1
0x1005	3:27:05 p.m.	1	-48	0	867.5	30	1
0x1005	3:27:07 p.m.	1	-48	0	867.5	30	1
0x1005	3:27:08 p.m.	1	-48	0	867.5	30	1
0x1005	3:27:09 p.m.	1	-49	0	865.7	30	1
0x1005	3:27:10 p.m.	1	-49	0	865.7	30	1
0x1005	3:27:11 p.m.	1	-49	0	865.7	30	1
0x1005	3:27:12 p.m.	1	-49	0	866.3	30	1
0x1005	3:27:14 p.m.	1	-48	0	866.3	30	1
0x1005	3:27:15 p.m.	1	-48	0	866.3	30	1
0x1005	3:27:16 p.m.	1	-48	0	866.9	30	1
0x1005	3:27:17 p.m.	1	-48	0	866.9	30	1
0x1005	3:27:18 p.m.	1	-48	0	866.9	30	1
0x1005	3:27:19 p.m.	1	-48	0	866.9	30	1
0x1005	3:27:20 p.m.	1	-48	0	867.5	30	1
0x1005	3:27:22 p.m.	1	-48	0	867.5	30	1
0x1005	3:27:23 p.m.	1	-48	0	867.5	30	1
0x1005	3:27:24 p.m.	1	-49	0	865.7	30	1
0x1005	3:27:25 p.m.	1	-49	0	865.7	30	1
0x1005	3:27:26 p.m.	1	-49	0	865.7	30	1
0x1005	3:27:27 p.m.	1	-49	0	866.3	30	1
0x1005	3:27:28 p.m.	1	-49	0	866.3	30	1
0x1005	3:27:30 p.m.	1	-48	0	866.3	30	1
0x1005	3:27:40 p.m.	2	-55	0	867.5	30	1
0x1005	3:27:41 p.m.	2	-57	0	865.7	30	1
0x1005	3:27:42 p.m.	2	-55	0	866.3	30	1
0x1005	3:27:43 p.m.	2	-55	0	866.9	30	1
0x1005	3:27:45 p.m.	2	-54	0	867.5	30	1
0x1005	3:27:46 p.m.	2	-54	0	867.5	30	1
0x1005	3:27:47 p.m.	2	-54	0	867.5	30	1
0x1005	3:27:48 p.m.	2	-54	0	867.5	30	1
0x1005	3:27:49 p.m.	2	-56	0	865.7	30	1
0x1005	3:27:50 p.m.	2	-56	0	865.7	30	1
0x1005	3:27:51 p.m.	2	-56	0	865.7	30	1

0x1005	3:27:53 p.m.	2	-55	0	866.3	30	1
0x1005	3:27:54 p.m.	2	-55	0	866.3	30	1
0x1005	3:27:55 p.m.	2	-56	0	866.3	30	1
0x1005	3:27:56 p.m.	2	-55	0	866.9	30	1
0x1005	3:27:57 p.m.	2	-55	0	866.9	30	1
0x1005	3:27:58 p.m.	2	-55	0	866.9	30	1
0x1005	3:27:59 p.m.	2	-55	0	866.9	30	1
0x1005	3:28:01 p.m.	2	-54	0	867.5	30	1
0x1005	3:28:02 p.m.	2	-54	0	867.5	30	1
0x1005	3:28:03 p.m.	2	-54	0	867.5	30	1
0x1005	3:28:04 p.m.	2	-56	0	865.7	30	1
0x1005	3:28:05 p.m.	2	-56	0	865.7	30	1
0x1005	3:28:06 p.m.	2	-56	0	865.7	30	1
0x1005	3:28:07 p.m.	2	-55	0	866.3	30	1
0x1005	3:28:09 p.m.	2	-55	0	866.3	30	1
0x1005	3:28:10 p.m.	2	-55	0	866.3	30	1
0x1005	3:28:20 p.m.	3	-48	0	867.5	30	1
0x1005	3:28:21 p.m.	3	-49	0	865.7	30	1
0x1005	3:28:22 p.m.	3	-48	0	866.3	30	1
0x1005	3:28:24 p.m.	3	-48	0	866.3	30	1
0x1005	3:28:25 p.m.	3	-48	0	866.3	30	1
0x1005	3:28:26 p.m.	3	-49	0	866.3	30	1
0x1005	3:28:27 p.m.	3	-48	0	866.9	30	1
0x1005	3:28:28 p.m.	3	-48	0	866.9	30	1
0x1005	3:28:29 p.m.	3	-48	0	866.9	30	1
0x1005	3:28:30 p.m.	3	-48	0	867.5	30	1
0x1005	3:28:32 p.m.	3	-48	0	867.5	30	1
0x1005	3:28:33 p.m.	3	-48	0	867.5	30	1
0x1005	3:28:34 p.m.	3	-49	0	865.7	30	1
0x1005	3:28:35 p.m.	3	-49	0	865.7	30	1
0x1005	3:28:36 p.m.	3	-49	0	865.7	30	1
0x1005	3:28:37 p.m.	3	-49	0	865.7	30	1
0x1005	3:28:38 p.m.	3	-49	0	866.3	30	1
0x1005	3:28:40 p.m.	3	-48	0	866.3	30	1
0x1005	3:28:41 p.m.	3	-48	0	866.3	30	1
0x1005	3:28:42 p.m.	3	-48	0	866.9	30	1
0x1005	3:28:43 p.m.	3	-48	0	866.9	30	1
0x1005	3:28:44 p.m.	3	-48	0	866.9	30	1
0x1005	3:28:45 p.m.	3	-48	0	866.9	30	1
0x1005	3:28:46 p.m.	3	-48	0	867.5	30	1
0x1005	3:28:47 p.m.	3	-48	0	867.5	30	1
0x1005	3:28:49 p.m.	3	-48	0	867.5	30	1
0x1005	3:28:50 p.m.	3	-49	0	865.7	30	1
0x1005	3:29:00 p.m.	4	-49	0	866.9	30	1
0x1005	3:29:02 p.m.	4	-49	0	867.5	30	1
0x1005	3:29:03 p.m.	4	-49	0	867.5	30	1
0x1005	3:29:04 p.m.	4	-49	0	867.5	30	1
0x1005	3:29:05 p.m.	4	-49	0	867.5	30	1
0x1005	3:29:06 p.m.	4	-49	0	865.7	30	1
0x1005	3:29:07 p.m.	4	-49	0	865.7	30	1
0x1005	3:29:08 p.m.	4	-49	0	865.7	30	1
0x1005	3:29:10 p.m.	4	-49	0	866.3	30	1
0x1005	3:29:11 p.m.	4	-49	0	866.3	30	1
0x1005	3:29:12 p.m.	4	-49	0	866.3	30	1
0x1005	3:29:13 p.m.	4	-49	0	866.9	30	1
0x1005	3:29:14 p.m.	4	-49	0	866.9	30	1
0x1005	3:29:15 p.m.	4	-49	0	866.9	30	1
0x1005	3:29:16 p.m.	4	-49	0	866.9	30	1
0x1005	3:29:18 p.m.	4	-49	0	867.5	30	1
0x1005	3:29:19 p.m.	4	-49	0	867.5	30	1

0x1005	3:29:20 p.m.	4	-49	0	867.5	30	1
0x1005	3:29:21 p.m.	4	-49	0	865.7	30	1
0x1005	3:29:22 p.m.	4	-49	0	865.7	30	1
0x1005	3:29:23 p.m.	4	-49	0	865.7	30	1
0x1005	3:29:24 p.m.	4	-49	0	866.3	30	1
0x1005	3:29:26 p.m.	4	-49	0	866.3	30	1
0x1005	3:29:27 p.m.	4	-49	0	866.3	30	1
0x1005	3:29:28 p.m.	4	-49	0	866.3	30	1
0x1005	3:29:29 p.m.	4	-49	0	866.9	30	1
0x1005	3:29:30 p.m.	4	-49	0	866.9	30	1
0x1005	3:29:41 p.m.	5	-48	0	865.7	30	1
0x1005	3:29:42 p.m.	5	-49	0	866.3	30	1
0x1005	3:29:43 p.m.	5	-48	0	866.9	30	1
0x1005	3:29:44 p.m.	5	-48	0	866.9	30	1
0x1005	3:29:45 p.m.	5	-48	0	866.9	30	1
0x1005	3:29:46 p.m.	5	-48	0	866.9	30	1
0x1005	3:29:48 p.m.	5	-48	0	867.5	30	1
0x1005	3:29:49 p.m.	5	-48	0	867.5	30	1
0x1005	3:29:50 p.m.	5	-48	0	867.5	30	1
0x1005	3:29:51 p.m.	5	-49	0	865.7	30	1
0x1005	3:29:52 p.m.	5	-49	0	865.7	30	1
0x1005	3:29:53 p.m.	5	-49	0	865.7	30	1
0x1005	3:29:54 p.m.	5	-48	0	866.3	30	1
0x1005	3:29:56 p.m.	5	-48	0	866.3	30	1
0x1005	3:29:57 p.m.	5	-48	0	866.3	30	1
0x1005	3:29:58 p.m.	5	-49	0	866.3	30	1
0x1005	3:29:59 p.m.	5	-48	0	866.9	30	1
0x1005	3:30:00 p.m.	5	-48	0	866.9	30	1
0x1005	3:30:01 p.m.	5	-48	0	866.9	30	1
0x1005	3:30:02 p.m.	5	-48	0	867.5	30	1
0x1005	3:30:04 p.m.	5	-48	0	867.5	30	1
0x1005	3:30:05 p.m.	5	-48	0	867.5	30	1
0x1005	3:30:06 p.m.	5	-49	0	865.7	30	1
0x1005	3:30:07 p.m.	5	-49	0	865.7	30	1
0x1005	3:30:08 p.m.	5	-49	0	865.7	30	1
0x1005	3:30:09 p.m.	5	-49	0	865.7	30	1
0x1005	3:30:10 p.m.	5	-48	0	866.3	30	1
0x1005	3:30:21 p.m.	6	-46	0	867.5	30	1
0x1005	3:30:22 p.m.	6	-46	0	865.7	30	1
0x1005	3:30:23 p.m.	6	-46	0	866.3	30	1
0x1005	3:30:24 p.m.	6	-46	0	866.9	30	1
0x1005	3:30:25 p.m.	6	-46	0	867.5	30	1
0x1005	3:30:27 p.m.	6	-46	0	865.7	30	1
0x1005	3:30:28 p.m.	6	-46	0	866.3	30	1
0x1005	3:30:29 p.m.	6	-46	0	866.9	30	1
0x1005	3:30:30 p.m.	6	-46	0	867.5	30	1
0x1005	3:30:31 p.m.	6	-46	0	865.7	30	1
0x1005	3:30:32 p.m.	6	-46	0	866.3	30	1
0x1005	3:30:34 p.m.	6	-46	0	866.9	30	1
0x1005	3:30:35 p.m.	6	-46	0	867.5	30	1
0x1005	3:30:36 p.m.	6	-46	0	867.5	30	1
0x1005	3:30:37 p.m.	6	-46	0	867.5	30	1
0x1005	3:30:38 p.m.	6	-46	0	867.5	30	1
0x1005	3:30:39 p.m.	6	-46	0	865.7	30	1
0x1005	3:30:40 p.m.	6	-46	0	866.3	30	1
0x1005	3:30:42 p.m.	6	-46	0	866.9	30	1
0x1005	3:30:43 p.m.	6	-46	0	867.5	30	1
0x1005	3:30:44 p.m.	6	-46	0	865.7	30	1
0x1005	3:30:45 p.m.	6	-46	0	866.3	30	1
0x1005	3:30:46 p.m.	6	-46	0	866.9	30	1

0x1005	3:30:47 p.m.	6	-46	0	867.5	30	1
0x1005	3:30:49 p.m.	6	-46	0	865.7	30	1
0x1005	3:30:50 p.m.	6	-46	0	866.3	30	1
0x1005	3:31:01 p.m.	7	-42	0	865.7	30	1
0x1005	3:31:02 p.m.	7	-43	0	866.3	30	1
0x1005	3:31:03 p.m.	7	-43	0	866.9	30	1
0x1005	3:31:04 p.m.	7	-43	0	867.5	30	1
0x1005	3:31:06 p.m.	7	-43	0	865.7	30	1
0x1005	3:31:07 p.m.	7	-43	0	866.3	30	1
0x1005	3:31:08 p.m.	7	-43	0	866.9	30	1
0x1005	3:31:09 p.m.	7	-43	0	867.5	30	1
0x1005	3:31:10 p.m.	7	-43	0	865.7	30	1
0x1005	3:31:11 p.m.	7	-43	0	866.3	30	1
0x1005	3:31:13 p.m.	7	-43	0	866.3	30	1
0x1005	3:31:14 p.m.	7	-43	0	866.3	30	1
0x1005	3:31:15 p.m.	7	-43	0	866.3	30	1
0x1005	3:31:16 p.m.	7	-43	0	866.9	30	1
0x1005	3:31:17 p.m.	7	-43	0	866.9	30	1
0x1005	3:31:18 p.m.	7	-43	0	866.9	30	1
0x1005	3:31:20 p.m.	7	-43	0	867.5	30	1
0x1005	3:31:21 p.m.	7	-43	0	867.5	30	1
0x1005	3:31:22 p.m.	7	-43	0	867.5	30	1
0x1005	3:31:23 p.m.	7	-43	0	865.7	30	1
0x1005	3:31:24 p.m.	7	-43	0	865.7	30	1
0x1005	3:31:25 p.m.	7	-43	0	865.7	30	1
0x1005	3:31:26 p.m.	7	-43	0	865.7	30	1
0x1005	3:31:28 p.m.	7	-43	0	866.3	30	1
0x1005	3:31:29 p.m.	7	-43	0	866.3	30	1
0x1005	3:31:30 p.m.	7	-43	0	866.3	30	1
0x1005	3:31:31 p.m.	7	-43	0	866.9	30	1
0x1005	3:31:41 p.m.	8	-42	0	865.7	30	1
0x1005	3:31:42 p.m.	8	-43	0	866.3	30	1
0x1005	3:31:44 p.m.	8	-42	0	866.9	30	1
0x1005	3:31:45 p.m.	8	-43	0	867.5	30	1
0x1005	3:31:46 p.m.	8	-42	0	865.7	30	1
0x1005	3:31:47 p.m.	8	-43	0	866.3	30	1
0x1005	3:31:48 p.m.	8	-43	0	866.9	30	1
0x1005	3:31:49 p.m.	8	-43	0	867.5	30	1
0x1005	3:31:50 p.m.	8	-42	0	865.7	30	1
0x1005	3:31:52 p.m.	8	-43	0	866.3	30	1
0x1005	3:31:53 p.m.	8	-43	0	866.9	30	1
0x1005	3:31:54 p.m.	8	-43	0	867.5	30	1
0x1005	3:31:55 p.m.	8	-42	0	865.7	30	1
0x1005	3:31:56 p.m.	8	-42	0	866.3	30	1
0x1005	3:31:57 p.m.	8	-43	0	866.9	30	1
0x1005	3:31:59 p.m.	8	-43	0	867.5	30	1
0x1005	3:32:00 p.m.	8	-42	0	865.7	30	1
0x1005	3:32:01 p.m.	8	-43	0	866.3	30	1
0x1005	3:32:02 p.m.	8	-43	0	866.9	30	1
0x1005	3:32:03 p.m.	8	-43	0	867.5	30	1
0x1005	3:32:04 p.m.	8	-42	0	865.7	30	1
0x1005	3:32:06 p.m.	8	-42	0	866.3	30	1
0x1005	3:32:07 p.m.	8	-43	0	866.9	30	1
0x1005	3:32:08 p.m.	8	-43	0	867.5	30	1
0x1005	3:32:09 p.m.	8	-42	0	865.7	30	1
0x1005	3:32:10 p.m.	8	-42	0	866.3	30	1
0x10062000	3:27:00 p.m.	1	-58	0	867.5	30	1
0x10062000	3:27:01 p.m.	1	-58	0	865.7	30	1
0x10062000	3:27:02 p.m.	1	-58	0	866.3	30	1
0x10062000	3:27:03 p.m.	1	-58	0	866.9	30	1

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0x10062000	3:27:04 p.m.	1	-58	0	867.5	30	1
0x10062000	3:27:06 p.m.	1	-59	0	867.5	30	1
0x10062000	3:27:07 p.m.	1	-59	0	867.5	30	1
0x10062000	3:27:08 p.m.	1	-59	0	867.5	30	1
0x10062000	3:27:09 p.m.	1	-58	0	865.7	30	1
0x10062000	3:27:10 p.m.	1	-58	0	865.7	30	1
0x10062000	3:27:11 p.m.	1	-58	0	865.7	30	1
0x10062000	3:27:13 p.m.	1	-58	0	866.3	30	1
0x10062000	3:27:14 p.m.	1	-58	0	866.3	30	1
0x10062000	3:27:15 p.m.	1	-58	0	866.3	30	1
0x10062000	3:27:16 p.m.	1	-59	0	866.9	30	1
0x10062000	3:27:17 p.m.	1	-58	0	866.9	30	1
0x10062000	3:27:19 p.m.	1	-58	0	866.9	30	1
0x10062000	3:27:20 p.m.	1	-59	0	867.5	30	1
0x10062000	3:27:21 p.m.	1	-59	0	867.5	30	1
0x10062000	3:27:22 p.m.	1	-59	0	867.5	30	1
0x10062000	3:27:23 p.m.	1	-58	0	867.5	30	1
0x10062000	3:27:24 p.m.	1	-58	0	865.7	30	1
0x10062000	3:27:26 p.m.	1	-58	0	865.7	30	1
0x10062000	3:27:27 p.m.	1	-58	0	865.7	30	1
0x10062000	3:27:28 p.m.	1	-58	0	866.3	30	1
0x10062000	3:27:29 p.m.	1	-58	0	866.3	30	1
0x10062000	3:27:40 p.m.	2	-55	0	867.5	30	1
0x10062000	3:27:41 p.m.	2	-54	0	865.7	30	1
0x10062000	3:27:42 p.m.	2	-55	0	866.3	30	1
0x10062000	3:27:43 p.m.	2	-55	0	866.9	30	1
0x10062000	3:27:45 p.m.	2	-56	0	867.5	30	1
0x10062000	3:27:46 p.m.	2	-56	0	867.5	30	1
0x10062000	3:27:47 p.m.	2	-56	0	867.5	30	1
0x10062000	3:27:48 p.m.	2	-55	0	867.5	30	1
0x10062000	3:27:49 p.m.	2	-55	0	865.7	30	1
0x10062000	3:27:51 p.m.	2	-55	0	865.7	30	1
0x10062000	3:27:52 p.m.	2	-55	0	865.7	30	1
0x10062000	3:27:53 p.m.	2	-55	0	866.3	30	1
0x10062000	3:27:54 p.m.	2	-55	0	866.3	30	1
0x10062000	3:27:55 p.m.	2	-55	0	866.3	30	1
0x10062000	3:27:56 p.m.	2	-55	0	866.9	30	1
0x10062000	3:27:58 p.m.	2	-54	0	866.9	30	1
0x10062000	3:27:59 p.m.	2	-54	0	866.9	30	1
0x10062000	3:28:00 p.m.	2	-54	0	867.5	30	1
0x10062000	3:28:01 p.m.	2	-53	0	867.5	30	1
0x10062000	3:28:02 p.m.	2	-53	0	867.5	30	1
0x10062000	3:28:03 p.m.	2	-53	0	867.5	30	1
0x10062000	3:28:05 p.m.	2	-53	0	865.7	30	1
0x10062000	3:28:06 p.m.	2	-52	0	865.7	30	1
0x10062000	3:28:07 p.m.	2	-52	0	865.7	30	1
0x10062000	3:28:08 p.m.	2	-52	0	866.3	30	1
0x10062000	3:28:09 p.m.	2	-52	0	866.3	30	1
0x10062000	3:28:20 p.m.	3	-51	0	867.5	30	1
0x10062000	3:28:21 p.m.	3	-51	0	865.7	30	1
0x10062000	3:28:23 p.m.	3	-51	0	866.3	30	1
0x10062000	3:28:24 p.m.	3	-52	0	866.3	30	1
0x10062000	3:28:25 p.m.	3	-52	0	866.3	30	1
0x10062000	3:28:26 p.m.	3	-51	0	866.3	30	1
0x10062000	3:28:27 p.m.	3	-51	0	866.9	30	1
0x10062000	3:28:28 p.m.	3	-51	0	866.9	30	1
0x10062000	3:28:29 p.m.	3	-51	0	866.9	30	1
0x10062000	3:28:31 p.m.	3	-51	0	867.5	30	1
0x10062000	3:28:32 p.m.	3	-51	0	867.5	30	1
0x10062000	3:28:33 p.m.	3	-51	0	867.5	30	1

0x10062000	3:28:34 p.m.	3	-52	0	865.7	30	1
0x10062000	3:28:35 p.m.	3	-52	0	865.7	30	1
0x10062000	3:28:36 p.m.	3	-52	0	865.7	30	1
0x10062000	3:28:38 p.m.	3	-52	0	865.7	30	1
0x10062000	3:28:39 p.m.	3	-52	0	866.3	30	1
0x10062000	3:28:40 p.m.	3	-52	0	866.3	30	1
0x10062000	3:28:41 p.m.	3	-52	0	866.3	30	1
0x10062000	3:28:42 p.m.	3	-51	0	866.9	30	1
0x10062000	3:28:43 p.m.	3	-52	0	866.9	30	1
0x10062000	3:28:45 p.m.	3	-51	0	866.9	30	1
0x10062000	3:28:46 p.m.	3	-51	0	867.5	30	1
0x10062000	3:28:47 p.m.	3	-51	0	867.5	30	1
0x10062000	3:28:48 p.m.	3	-52	0	867.5	30	1
0x10062000	3:28:49 p.m.	3	-52	0	865.7	30	1
0x10062000	3:29:00 p.m.	4	-51	0	866.9	30	1
0x10062000	3:29:02 p.m.	4	-52	0	867.5	30	1
0x10062000	3:29:03 p.m.	4	-51	0	867.5	30	1
0x10062000	3:29:04 p.m.	4	-52	0	867.5	30	1
0x10062000	3:29:05 p.m.	4	-52	0	867.5	30	1
0x10062000	3:29:06 p.m.	4	-52	0	865.7	30	1
0x10062000	3:29:07 p.m.	4	-52	0	865.7	30	1
0x10062000	3:29:09 p.m.	4	-52	0	865.7	30	1
0x10062000	3:29:10 p.m.	4	-52	0	866.3	30	1
0x10062000	3:29:11 p.m.	4	-52	0	866.3	30	1
0x10062000	3:29:12 p.m.	4	-52	0	866.3	30	1
0x10062000	3:29:13 p.m.	4	-52	0	866.9	30	1
0x10062000	3:29:14 p.m.	4	-52	0	866.9	30	1
0x10062000	3:29:16 p.m.	4	-52	0	866.9	30	1
0x10062000	3:29:17 p.m.	4	-52	0	867.5	30	1
0x10062000	3:29:18 p.m.	4	-52	0	867.5	30	1
0x10062000	3:29:19 p.m.	4	-52	0	867.5	30	1
0x10062000	3:29:20 p.m.	4	-52	0	867.5	30	1
0x10062000	3:29:21 p.m.	4	-52	0	865.7	30	1
0x10062000	3:29:23 p.m.	4	-52	0	865.7	30	1
0x10062000	3:29:24 p.m.	4	-52	0	865.7	30	1
0x10062000	3:29:25 p.m.	4	-52	0	866.3	30	1
0x10062000	3:29:26 p.m.	4	-52	0	866.3	30	1
0x10062000	3:29:27 p.m.	4	-52	0	866.3	30	1
0x10062000	3:29:28 p.m.	4	-52	0	866.9	30	1
0x10062000	3:29:30 p.m.	4	-52	0	866.9	30	1
0x10062000	3:29:41 p.m.	5	-53	0	865.7	30	1
0x10062000	3:29:42 p.m.	5	-52	0	866.3	30	1
0x10062000	3:29:43 p.m.	5	-52	0	866.9	30	1
0x10062000	3:29:44 p.m.	5	-52	0	866.9	30	1
0x10062000	3:29:45 p.m.	5	-52	0	866.9	30	1
0x10062000	3:29:46 p.m.	5	-52	0	866.9	30	1
0x10062000	3:29:48 p.m.	5	-52	0	867.5	30	1
0x10062000	3:29:49 p.m.	5	-52	0	867.5	30	1
0x10062000	3:29:50 p.m.	5	-52	0	867.5	30	1
0x10062000	3:29:51 p.m.	5	-52	0	865.7	30	1
0x10062000	3:29:52 p.m.	5	-52	0	865.7	30	1
0x10062000	3:29:53 p.m.	5	-53	0	865.7	30	1
0x10062000	3:29:55 p.m.	5	-52	0	866.3	30	1
0x10062000	3:29:56 p.m.	5	-52	0	866.3	30	1
0x10062000	3:29:57 p.m.	5	-52	0	866.3	30	1
0x10062000	3:29:58 p.m.	5	-52	0	866.9	30	1
0x10062000	3:29:59 p.m.	5	-52	0	866.9	30	1
0x10062000	3:30:00 p.m.	5	-52	0	866.9	30	1
0x10062000	3:30:02 p.m.	5	-52	0	866.9	30	1
0x10062000	3:30:03 p.m.	5	-52	0	867.5	30	1

0x10062000	3:30:04 p.m.	5	-52	0	867.5	30	1
0x10062000	3:30:05 p.m.	5	-52	0	867.5	30	1
0x10062000	3:30:06 p.m.	5	-52	0	865.7	30	1
0x10062000	3:30:07 p.m.	5	-53	0	865.7	30	1
0x10062000	3:30:09 p.m.	5	-53	0	865.7	30	1
0x10062000	3:30:10 p.m.	5	-52	0	866.3	30	1
0x10062000	3:30:21 p.m.	6	-60	0	867.5	30	1
0x10062000	3:30:22 p.m.	6	-62	0	865.7	30	1
0x10062000	3:30:23 p.m.	6	-62	0	866.3	30	1
0x10062000	3:30:24 p.m.	6	-62	0	866.9	30	1
0x10062000	3:30:26 p.m.	6	-62	0	867.5	30	1
0x10062000	3:30:28 p.m.	6	-63	0	866.3	30	1
0x10062000	3:30:29 p.m.	6	-62	0	866.9	30	1
0x10062000	3:30:30 p.m.	6	-62	0	867.5	30	1
0x10062000	3:30:32 p.m.	6	-63	0	866.3	30	1
0x10062000	3:30:34 p.m.	6	-62	0	866.9	30	1
0x10062000	3:30:35 p.m.	6	-61	0	867.5	30	1
0x10062000	3:30:36 p.m.	6	-62	0	867.5	30	1
0x10062000	3:30:37 p.m.	6	-62	0	867.5	30	1
0x10062000	3:30:38 p.m.	6	-62	0	867.5	30	1
0x10062000	3:30:42 p.m.	6	-63	0	866.9	30	1
0x10062000	3:30:43 p.m.	6	-62	0	867.5	30	1
0x10062000	3:30:46 p.m.	6	-63	0	866.9	30	1
0x10062000	3:30:47 p.m.	6	-62	0	867.5	30	1
0x10062000	3:30:51 p.m.	6	-63	0	866.9	30	1
0x10062000	3:31:01 p.m.	7	-55	0	865.7	30	1
0x10062000	3:31:02 p.m.	7	-55	0	866.3	30	1
0x10062000	3:31:03 p.m.	7	-56	0	866.9	30	1
0x10062000	3:31:05 p.m.	7	-58	0	867.5	30	1
0x10062000	3:31:06 p.m.	7	-55	0	865.7	30	1
0x10062000	3:31:07 p.m.	7	-55	0	866.3	30	1
0x10062000	3:31:08 p.m.	7	-56	0	866.9	30	1
0x10062000	3:31:09 p.m.	7	-57	0	867.5	30	1
0x10062000	3:31:10 p.m.	7	-55	0	865.7	30	1
0x10062000	3:31:12 p.m.	7	-55	0	866.3	30	1
0x10062000	3:31:13 p.m.	7	-55	0	866.3	30	1
0x10062000	3:31:14 p.m.	7	-55	0	866.3	30	1
0x10062000	3:31:15 p.m.	7	-55	0	866.3	30	1
0x10062000	3:31:16 p.m.	7	-56	0	866.9	30	1
0x10062000	3:31:17 p.m.	7	-56	0	866.9	30	1
0x10062000	3:31:19 p.m.	7	-56	0	866.9	30	1
0x10062000	3:31:20 p.m.	7	-57	0	867.5	30	1
0x10062000	3:31:21 p.m.	7	-57	0	867.5	30	1
0x10062000	3:31:22 p.m.	7	-57	0	867.5	30	1
0x10062000	3:31:23 p.m.	7	-55	0	865.7	30	1
0x10062000	3:31:24 p.m.	7	-55	0	865.7	30	1
0x10062000	3:31:26 p.m.	7	-55	0	865.7	30	1
0x10062000	3:31:27 p.m.	7	-55	0	866.3	30	1
0x10062000	3:31:28 p.m.	7	-55	0	866.3	30	1
0x10062000	3:31:29 p.m.	7	-55	0	866.3	30	1
0x10062000	3:31:30 p.m.	7	-55	0	866.3	30	1
0x1007	3:27:40 p.m.	2	-46	0	867.5	30	1
0x1007	3:27:41 p.m.	2	-46	0	865.7	30	1
0x1007	3:27:42 p.m.	2	-46	0	866.3	30	1
0x1007	3:27:43 p.m.	2	-46	0	866.9	30	1
0x1007	3:27:45 p.m.	2	-46	0	867.5	30	1
0x1007	3:27:46 p.m.	2	-45	0	867.5	30	1
0x1007	3:27:47 p.m.	2	-45	0	867.5	30	1
0x1007	3:27:48 p.m.	2	-46	0	867.5	30	1
0x1007	3:27:49 p.m.	2	-45	0	865.7	30	1

0x1007	3:27:50 p.m.	2	-45	0	865.7	30	1
0x1007	3:27:51 p.m.	2	-45	0	865.7	30	1
0x1007	3:27:53 p.m.	2	-45	0	866.3	30	1
0x1007	3:27:54 p.m.	2	-45	0	866.3	30	1
0x1007	3:27:55 p.m.	2	-45	0	866.3	30	1
0x1007	3:27:56 p.m.	2	-46	0	866.9	30	1
0x1007	3:27:57 p.m.	2	-46	0	866.9	30	1
0x1007	3:27:58 p.m.	2	-45	0	866.9	30	1
0x1007	3:28:00 p.m.	2	-46	0	866.9	30	1
0x1007	3:28:01 p.m.	2	-46	0	867.5	30	1
0x1007	3:28:02 p.m.	2	-46	0	867.5	30	1
0x1007	3:28:03 p.m.	2	-46	0	867.5	30	1
0x1007	3:28:04 p.m.	2	-45	0	865.7	30	1
0x1007	3:28:05 p.m.	2	-45	0	865.7	30	1
0x1007	3:28:06 p.m.	2	-45	0	865.7	30	1
0x1007	3:28:08 p.m.	2	-45	0	866.3	30	1
0x1007	3:28:09 p.m.	2	-45	0	866.3	30	1
0x1007	3:28:10 p.m.	2	-45	0	866.3	30	1
0x1007	3:28:20 p.m.	3	-45	0	867.5	30	1
0x1007	3:28:21 p.m.	3	-45	0	865.7	30	1
0x1007	3:28:23 p.m.	3	-46	0	866.3	30	1
0x1007	3:28:24 p.m.	3	-46	0	866.3	30	1
0x1007	3:28:25 p.m.	3	-46	0	866.3	30	1
0x1007	3:28:26 p.m.	3	-46	0	866.3	30	1
0x1007	3:28:27 p.m.	3	-45	0	866.9	30	1
0x1007	3:28:28 p.m.	3	-45	0	866.9	30	1
0x1007	3:28:29 p.m.	3	-45	0	866.9	30	1
0x1007	3:28:30 p.m.	3	-46	0	867.5	30	1
0x1007	3:28:32 p.m.	3	-46	0	867.5	30	1
0x1007	3:28:33 p.m.	3	-46	0	867.5	30	1
0x1007	3:28:34 p.m.	3	-46	0	865.7	30	1
0x1007	3:28:35 p.m.	3	-46	0	865.7	30	1
0x1007	3:28:36 p.m.	3	-46	0	865.7	30	1
0x1007	3:28:37 p.m.	3	-46	0	865.7	30	1
0x1007	3:28:38 p.m.	3	-46	0	866.3	30	1
0x1007	3:28:40 p.m.	3	-46	0	866.3	30	1
0x1007	3:28:41 p.m.	3	-46	0	866.3	30	1
0x1007	3:28:42 p.m.	3	-45	0	866.9	30	1
0x1007	3:28:43 p.m.	3	-45	0	866.9	30	1
0x1007	3:28:44 p.m.	3	-45	0	866.9	30	1
0x1007	3:28:45 p.m.	3	-46	0	867.5	30	1
0x1007	3:28:46 p.m.	3	-46	0	867.5	30	1
0x1007	3:28:48 p.m.	3	-46	0	867.5	30	1
0x1007	3:28:49 p.m.	3	-46	0	867.5	30	1
0x1007	3:28:50 p.m.	3	-46	0	865.7	30	1
0x1007	3:29:00 p.m.	4	-46	0	866.9	30	1
0x1007	3:29:02 p.m.	4	-46	0	867.5	30	1
0x1007	3:29:03 p.m.	4	-47	0	867.5	30	1
0x1007	3:29:04 p.m.	4	-47	0	867.5	30	1
0x1007	3:29:05 p.m.	4	-47	0	867.5	30	1
0x1007	3:29:06 p.m.	4	-47	0	865.7	30	1
0x1007	3:29:07 p.m.	4	-47	0	865.7	30	1
0x1007	3:29:08 p.m.	4	-47	0	865.7	30	1
0x1007	3:29:10 p.m.	4	-47	0	866.3	30	1
0x1007	3:29:11 p.m.	4	-47	0	866.3	30	1
0x1007	3:29:12 p.m.	4	-47	0	866.3	30	1
0x1007	3:29:13 p.m.	4	-47	0	866.9	30	1
0x1007	3:29:14 p.m.	4	-47	0	866.9	30	1
0x1007	3:29:15 p.m.	4	-47	0	866.9	30	1
0x1007	3:29:16 p.m.	4	-47	0	866.9	30	1

0x1007	3:29:18 p.m.	4	-47	0	867.5	30	1
0x1007	3:29:19 p.m.	4	-47	0	867.5	30	1
0x1007	3:29:20 p.m.	4	-47	0	867.5	30	1
0x1007	3:29:21 p.m.	4	-47	0	865.7	30	1
0x1007	3:29:22 p.m.	4	-47	0	865.7	30	1
0x1007	3:29:23 p.m.	4	-47	0	865.7	30	1
0x1007	3:29:24 p.m.	4	-47	0	866.3	30	1
0x1007	3:29:26 p.m.	4	-47	0	866.3	30	1
0x1007	3:29:27 p.m.	4	-47	0	866.3	30	1
0x1007	3:29:28 p.m.	4	-47	0	866.3	30	1
0x1007	3:29:29 p.m.	4	-47	0	866.9	30	1
0x1007	3:29:30 p.m.	4	-47	0	866.9	30	1
0x1007	3:29:41 p.m.	5	-45	0	865.7	30	1
0x1007	3:29:42 p.m.	5	-45	0	866.3	30	1
0x1007	3:29:43 p.m.	5	-45	0	866.9	30	1
0x1007	3:29:44 p.m.	5	-45	0	866.9	30	1
0x1007	3:29:45 p.m.	5	-45	0	866.9	30	1
0x1007	3:29:46 p.m.	5	-45	0	866.9	30	1
0x1007	3:29:48 p.m.	5	-45	0	867.5	30	1
0x1007	3:29:49 p.m.	5	-45	0	867.5	30	1
0x1007	3:29:50 p.m.	5	-45	0	867.5	30	1
0x1007	3:29:51 p.m.	5	-45	0	865.7	30	1
0x1007	3:29:52 p.m.	5	-45	0	865.7	30	1
0x1007	3:29:53 p.m.	5	-45	0	865.7	30	1
0x1007	3:29:54 p.m.	5	-45	0	866.3	30	1
0x1007	3:29:56 p.m.	5	-45	0	866.3	30	1
0x1007	3:29:57 p.m.	5	-45	0	866.3	30	1
0x1007	3:29:58 p.m.	5	-45	0	866.3	30	1
0x1007	3:29:59 p.m.	5	-45	0	866.9	30	1
0x1007	3:30:00 p.m.	5	-45	0	866.9	30	1
0x1007	3:30:01 p.m.	5	-45	0	866.9	30	1
0x1007	3:30:02 p.m.	5	-45	0	867.5	30	1
0x1007	3:30:04 p.m.	5	-45	0	867.5	30	1
0x1007	3:30:05 p.m.	5	-45	0	867.5	30	1
0x1007	3:30:06 p.m.	5	-45	0	865.7	30	1
0x1007	3:30:07 p.m.	5	-45	0	865.7	30	1
0x1007	3:30:08 p.m.	5	-45	0	865.7	30	1
0x1007	3:30:09 p.m.	5	-45	0	865.7	30	1
0x1007	3:30:11 p.m.	5	-45	0	866.3	30	1
0x1007	3:30:21 p.m.	6	-44	0	867.5	30	1
0x1007	3:30:22 p.m.	6	-45	0	865.7	30	1
0x1007	3:30:23 p.m.	6	-45	0	866.3	30	1
0x1007	3:30:24 p.m.	6	-45	0	866.9	30	1
0x1007	3:30:25 p.m.	6	-45	0	867.5	30	1
0x1007	3:30:27 p.m.	6	-44	0	865.7	30	1
0x1007	3:30:28 p.m.	6	-45	0	866.3	30	1
0x1007	3:30:29 p.m.	6	-45	0	866.9	30	1
0x1007	3:30:30 p.m.	6	-45	0	867.5	30	1
0x1007	3:30:31 p.m.	6	-45	0	865.7	30	1
0x1007	3:30:32 p.m.	6	-45	0	866.3	30	1
0x1007	3:30:34 p.m.	6	-45	0	866.9	30	1
0x1007	3:30:35 p.m.	6	-45	0	867.5	30	1
0x1007	3:30:36 p.m.	6	-45	0	867.5	30	1
0x1007	3:30:37 p.m.	6	-45	0	867.5	30	1
0x1007	3:30:38 p.m.	6	-45	0	867.5	30	1
0x1007	3:30:39 p.m.	6	-45	0	865.7	30	1
0x1007	3:30:40 p.m.	6	-45	0	866.3	30	1
0x1007	3:30:42 p.m.	6	-45	0	866.9	30	1
0x1007	3:30:43 p.m.	6	-45	0	867.5	30	1
0x1007	3:30:44 p.m.	6	-45	0	865.7	30	1

0x1007	3:30:45 p.m.	6	-45	0	866.3	30	1
0x1007	3:30:46 p.m.	6	-45	0	866.9	30	1
0x1007	3:30:47 p.m.	6	-45	0	867.5	30	1
0x1007	3:30:49 p.m.	6	-45	0	865.7	30	1
0x1007	3:30:50 p.m.	6	-45	0	866.3	30	1
0x1008	3:28:20 p.m.	3	-48	0	867.5	30	1
0x1008	3:28:21 p.m.	3	-48	0	865.7	30	1
0x1008	3:28:22 p.m.	3	-48	0	866.3	30	1
0x1008	3:28:24 p.m.	3	-48	0	866.3	30	1
0x1008	3:28:25 p.m.	3	-48	0	866.3	30	1
0x1008	3:28:26 p.m.	3	-48	0	866.3	30	1
0x1008	3:28:27 p.m.	3	-48	0	866.9	30	1
0x1008	3:28:28 p.m.	3	-48	0	866.9	30	1
0x1008	3:28:29 p.m.	3	-48	0	866.9	30	1
0x1008	3:28:30 p.m.	3	-48	0	867.5	30	1
0x1008	3:28:31 p.m.	3	-48	0	867.5	30	1
0x1008	3:28:32 p.m.	3	-48	0	867.5	30	1
0x1008	3:28:34 p.m.	3	-48	0	867.5	30	1
0x1008	3:28:35 p.m.	3	-47	0	865.7	30	1
0x1008	3:28:36 p.m.	3	-48	0	865.7	30	1
0x1008	3:28:37 p.m.	3	-47	0	865.7	30	1
0x1008	3:28:38 p.m.	3	-48	0	866.3	30	1
0x1008	3:28:39 p.m.	3	-48	0	866.3	30	1
0x1008	3:28:40 p.m.	3	-48	0	866.3	30	1
0x1008	3:28:41 p.m.	3	-48	0	866.3	30	1
0x1008	3:28:42 p.m.	3	-48	0	866.9	30	1
0x1008	3:28:44 p.m.	3	-48	0	866.9	30	1
0x1008	3:28:45 p.m.	3	-48	0	866.9	30	1
0x1008	3:28:46 p.m.	3	-48	0	867.5	30	1
0x1008	3:28:47 p.m.	3	-48	0	867.5	30	1
0x1008	3:28:48 p.m.	3	-49	0	867.5	30	1
0x1008	3:28:49 p.m.	3	-47	0	865.7	30	1
0x1008	3:29:00 p.m.	4	-44	0	866.9	30	1
0x1008	3:29:02 p.m.	4	-45	0	867.5	30	1
0x1008	3:29:03 p.m.	4	-45	0	867.5	30	1
0x1008	3:29:04 p.m.	4	-45	0	867.5	30	1
0x1008	3:29:05 p.m.	4	-45	0	867.5	30	1
0x1008	3:29:06 p.m.	4	-44	0	865.7	30	1
0x1008	3:29:07 p.m.	4	-44	0	865.7	30	1
0x1008	3:29:08 p.m.	4	-44	0	865.7	30	1
0x1008	3:29:09 p.m.	4	-44	0	866.3	30	1
0x1008	3:29:11 p.m.	4	-44	0	866.3	30	1
0x1008	3:29:12 p.m.	4	-44	0	866.3	30	1
0x1008	3:29:13 p.m.	4	-44	0	866.3	30	1
0x1008	3:29:14 p.m.	4	-45	0	866.9	30	1
0x1008	3:29:15 p.m.	4	-45	0	866.9	30	1
0x1008	3:29:16 p.m.	4	-44	0	866.9	30	1
0x1008	3:29:17 p.m.	4	-45	0	867.5	30	1
0x1008	3:29:18 p.m.	4	-45	0	867.5	30	1
0x1008	3:29:19 p.m.	4	-45	0	867.5	30	1
0x1008	3:29:21 p.m.	4	-44	0	865.7	30	1
0x1008	3:29:22 p.m.	4	-44	0	865.7	30	1
0x1008	3:29:23 p.m.	4	-44	0	865.7	30	1
0x1008	3:29:24 p.m.	4	-44	0	865.7	30	1
0x1008	3:29:25 p.m.	4	-44	0	866.3	30	1
0x1008	3:29:26 p.m.	4	-44	0	866.3	30	1
0x1008	3:29:27 p.m.	4	-44	0	866.3	30	1
0x1008	3:29:28 p.m.	4	-45	0	866.9	30	1
0x1008	3:29:29 p.m.	4	-45	0	866.9	30	1
0x1008	3:29:41 p.m.	5	-47	0	865.7	30	1

0x1008	3:29:42 p.m.	5	-47	0	866.3	30	1
0x1008	3:29:43 p.m.	5	-47	0	866.9	30	1
0x1008	3:29:44 p.m.	5	-47	0	866.9	30	1
0x1008	3:29:45 p.m.	5	-47	0	866.9	30	1
0x1008	3:29:46 p.m.	5	-47	0	866.9	30	1
0x1008	3:29:47 p.m.	5	-48	0	867.5	30	1
0x1008	3:29:49 p.m.	5	-48	0	867.5	30	1
0x1008	3:29:50 p.m.	5	-48	0	867.5	30	1
0x1008	3:29:51 p.m.	5	-47	0	865.7	30	1
0x1008	3:29:52 p.m.	5	-47	0	865.7	30	1
0x1008	3:29:53 p.m.	5	-47	0	865.7	30	1
0x1008	3:29:54 p.m.	5	-47	0	865.7	30	1
0x1008	3:29:55 p.m.	5	-47	0	866.3	30	1
0x1008	3:29:56 p.m.	5	-47	0	866.3	30	1
0x1008	3:29:58 p.m.	5	-47	0	866.3	30	1
0x1008	3:29:59 p.m.	5	-47	0	866.9	30	1
0x1008	3:30:00 p.m.	5	-47	0	866.9	30	1
0x1008	3:30:01 p.m.	5	-47	0	866.9	30	1
0x1008	3:30:02 p.m.	5	-48	0	867.5	30	1
0x1008	3:30:03 p.m.	5	-48	0	867.5	30	1
0x1008	3:30:04 p.m.	5	-48	0	867.5	30	1
0x1008	3:30:05 p.m.	5	-48	0	867.5	30	1
0x1008	3:30:06 p.m.	5	-47	0	865.7	30	1
0x1008	3:30:08 p.m.	5	-47	0	865.7	30	1
0x1008	3:30:09 p.m.	5	-47	0	865.7	30	1
0x1008	3:30:10 p.m.	5	-47	0	866.3	30	1
0x1009	3:29:00 p.m.	4	-42	0	866.9	30	1
0x1009	3:29:02 p.m.	4	-42	0	867.5	30	1
0x1009	3:29:03 p.m.	4	-42	0	867.5	30	1
0x1009	3:29:04 p.m.	4	-42	0	867.5	30	1
0x1009	3:29:06 p.m.	4	-42	0	865.7	30	1
0x1009	3:29:07 p.m.	4	-42	0	865.7	30	1
0x1009	3:29:08 p.m.	4	-42	0	865.7	30	1
0x1009	3:29:10 p.m.	4	-42	0	866.3	30	1
0x1009	3:29:11 p.m.	4	-42	0	866.3	30	1
0x1009	3:29:12 p.m.	4	-42	0	866.3	30	1
0x1009	3:29:14 p.m.	4	-42	0	866.9	30	1
0x1009	3:29:15 p.m.	4	-42	0	866.9	30	1
0x1009	3:29:17 p.m.	4	-42	0	866.9	30	1
0x1009	3:29:18 p.m.	4	-42	0	867.5	30	1
0x1009	3:29:19 p.m.	4	-42	0	867.5	30	1
0x1009	3:29:21 p.m.	4	-42	0	865.7	30	1
0x1009	3:29:22 p.m.	4	-42	0	865.7	30	1
0x1009	3:29:23 p.m.	4	-42	0	865.7	30	1
0x1009	3:29:25 p.m.	4	-42	0	866.3	30	1
0x1009	3:29:26 p.m.	4	-42	0	866.3	30	1
0x1009	3:29:27 p.m.	4	-42	0	866.3	30	1
0x1009	3:29:29 p.m.	4	-42	0	866.9	30	1
0x1009	3:29:30 p.m.	4	-42	0	866.9	30	1

8.1.5 Round 5 with Containers

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1005	3:33:46 p.m.	0	-43	0	867.5	30	1
0x1005	3:33:47 p.m.	0	-42	0	865.7	30	1
0x1005	3:33:48 p.m.	0	-43	0	866.3	30	1

0x1005	3:33:50 p.m.	0	-43	0	866.9	30	1
0x1005	3:33:51 p.m.	0	-43	0	867.5	30	1
0x1005	3:33:52 p.m.	0	-42	0	865.7	30	1
0x1005	3:33:53 p.m.	0	-43	0	866.3	30	1
0x1005	3:33:54 p.m.	0	-43	0	866.9	30	1
0x1005	3:33:55 p.m.	0	-43	0	867.5	30	1
0x1005	3:33:56 p.m.	0	-42	0	865.7	30	1
0x1005	3:33:58 p.m.	0	-43	0	866.3	30	1
0x1005	3:33:59 p.m.	0	-43	0	866.9	30	1
0x1005	3:34:00 p.m.	0	-43	0	867.5	30	1
0x1005	3:34:01 p.m.	0	-42	0	865.7	30	1
0x1005	3:34:02 p.m.	0	-43	0	866.3	30	1
0x1005	3:34:03 p.m.	0	-43	0	866.9	30	1
0x1005	3:34:04 p.m.	0	-43	0	867.5	30	1
0x1005	3:34:06 p.m.	0	-42	0	865.7	30	1
0x1005	3:34:07 p.m.	0	-43	0	866.3	30	1
0x1005	3:34:08 p.m.	0	-43	0	866.9	30	1
0x1005	3:34:09 p.m.	0	-43	0	867.5	30	1
0x1005	3:34:10 p.m.	0	-42	0	865.7	30	1
0x1005	3:34:11 p.m.	0	-43	0	866.3	30	1
0x1005	3:34:12 p.m.	0	-43	0	866.9	30	1
0x1005	3:34:14 p.m.	0	-43	0	867.5	30	1
0x1005	3:34:15 p.m.	0	-42	0	865.7	30	1
0x1005	3:34:16 p.m.	0	-43	0	866.3	30	1
0x1005	3:34:26 p.m.	1	-43	0	867.5	30	1
0x1005	3:34:28 p.m.	1	-43	0	865.7	30	1
0x1005	3:34:29 p.m.	1	-43	0	866.3	30	1
0x1005	3:34:30 p.m.	1	-43	0	866.9	30	1
0x1005	3:34:31 p.m.	1	-43	0	867.5	30	1
0x1005	3:34:32 p.m.	1	-43	0	867.5	30	1
0x1005	3:34:33 p.m.	1	-43	0	867.5	30	1
0x1005	3:34:34 p.m.	1	-43	0	867.5	30	1
0x1005	3:34:36 p.m.	1	-43	0	865.7	30	1
0x1005	3:34:37 p.m.	1	-43	0	865.7	30	1
0x1005	3:34:38 p.m.	1	-43	0	865.7	30	1
0x1005	3:34:39 p.m.	1	-43	0	866.3	30	1
0x1005	3:34:40 p.m.	1	-43	0	866.3	30	1
0x1005	3:34:41 p.m.	1	-43	0	866.3	30	1
0x1005	3:34:42 p.m.	1	-43	0	866.9	30	1
0x1005	3:34:44 p.m.	1	-43	0	866.9	30	1
0x1005	3:34:45 p.m.	1	-43	0	866.9	30	1
0x1005	3:34:46 p.m.	1	-43	0	866.9	30	1
0x1005	3:34:47 p.m.	1	-43	0	867.5	30	1
0x1005	3:34:48 p.m.	1	-43	0	867.5	30	1
0x1005	3:34:49 p.m.	1	-43	0	867.5	30	1
0x1005	3:34:51 p.m.	1	-43	0	865.7	30	1
0x1005	3:34:52 p.m.	1	-43	0	865.7	30	1
0x1005	3:34:53 p.m.	1	-43	0	865.7	30	1
0x1005	3:34:54 p.m.	1	-43	0	866.3	30	1
0x1005	3:34:55 p.m.	1	-43	0	866.3	30	1
0x1005	3:34:56 p.m.	1	-43	0	866.3	30	1
0x1005	3:35:07 p.m.	2	-44	0	867.5	30	1
0x1005	3:35:08 p.m.	2	-44	0	865.7	30	1
0x1005	3:35:09 p.m.	2	-44	0	866.3	30	1
0x1005	3:35:10 p.m.	2	-45	0	866.9	30	1
0x1005	3:35:11 p.m.	2	-45	0	867.5	30	1
0x1005	3:35:12 p.m.	2	-44	0	865.7	30	1
0x1005	3:35:14 p.m.	2	-45	0	866.3	30	1
0x1005	3:35:15 p.m.	2	-44	0	866.3	30	1
0x1005	3:35:16 p.m.	2	-45	0	866.3	30	1

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0x1005	3:35:17 p.m.	2	-45	0	866.3	30	1
0x1005	3:35:18 p.m.	2	-45	0	866.9	30	1
0x1005	3:35:19 p.m.	2	-45	0	866.9	30	1
0x1005	3:35:20 p.m.	2	-45	0	866.9	30	1
0x1005	3:35:22 p.m.	2	-45	0	867.5	30	1
0x1005	3:35:23 p.m.	2	-45	0	867.5	30	1
0x1005	3:35:24 p.m.	2	-45	0	867.5	30	1
0x1005	3:35:25 p.m.	2	-44	0	865.7	30	1
0x1005	3:35:26 p.m.	2	-44	0	865.7	30	1
0x1005	3:35:27 p.m.	2	-44	0	865.7	30	1
0x1005	3:35:28 p.m.	2	-44	0	865.7	30	1
0x1005	3:35:30 p.m.	2	-44	0	866.3	30	1
0x1005	3:35:31 p.m.	2	-44	0	866.3	30	1
0x1005	3:35:32 p.m.	2	-44	0	866.3	30	1
0x1005	3:35:33 p.m.	2	-45	0	866.9	30	1
0x1005	3:35:34 p.m.	2	-45	0	866.9	30	1
0x1005	3:35:35 p.m.	2	-45	0	866.9	30	1
0x1005	3:35:36 p.m.	2	-45	0	867.5	30	1
0x1005	3:35:47 p.m.	3	-52	0	866.3	30	1
0x1005	3:35:48 p.m.	3	-53	0	866.9	30	1
0x1005	3:35:49 p.m.	3	-52	0	867.5	30	1
0x1005	3:35:50 p.m.	3	-52	0	867.5	30	1
0x1005	3:35:51 p.m.	3	-52	0	867.5	30	1
0x1005	3:35:53 p.m.	3	-52	0	867.5	30	1
0x1005	3:35:54 p.m.	3	-53	0	865.7	30	1
0x1005	3:35:55 p.m.	3	-53	0	865.7	30	1
0x1005	3:35:56 p.m.	3	-53	0	865.7	30	1
0x1005	3:35:57 p.m.	3	-52	0	866.3	30	1
0x1005	3:35:58 p.m.	3	-52	0	866.3	30	1
0x1005	3:35:59 p.m.	3	-52	0	866.3	30	1
0x1005	3:36:01 p.m.	3	-52	0	866.9	30	1
0x1005	3:36:02 p.m.	3	-52	0	866.9	30	1
0x1005	3:36:03 p.m.	3	-52	0	866.9	30	1
0x1005	3:36:04 p.m.	3	-52	0	866.9	30	1
0x1005	3:36:05 p.m.	3	-52	0	867.5	30	1
0x1005	3:36:06 p.m.	3	-52	0	867.5	30	1
0x1005	3:36:07 p.m.	3	-52	0	867.5	30	1
0x1005	3:36:09 p.m.	3	-53	0	865.7	30	1
0x1005	3:36:10 p.m.	3	-53	0	865.7	30	1
0x1005	3:36:11 p.m.	3	-53	0	865.7	30	1
0x1005	3:36:12 p.m.	3	-52	0	866.3	30	1
0x1005	3:36:13 p.m.	3	-52	0	866.3	30	1
0x1005	3:36:14 p.m.	3	-52	0	866.3	30	1
0x1005	3:36:15 p.m.	3	-52	0	866.3	30	1
0x1005	3:36:17 p.m.	3	-52	0	866.9	30	1
0x1005	3:36:27 p.m.	4	-54	0	865.7	30	1
0x1005	3:36:28 p.m.	4	-55	0	866.3	30	1
0x1005	3:36:29 p.m.	4	-56	0	866.3	30	1
0x1005	3:36:31 p.m.	4	-56	0	866.3	30	1
0x1005	3:36:32 p.m.	4	-56	0	866.3	30	1
0x1005	3:36:33 p.m.	4	-56	0	866.9	30	1
0x1005	3:36:34 p.m.	4	-56	0	866.9	30	1
0x1005	3:36:35 p.m.	4	-56	0	866.9	30	1
0x1005	3:36:36 p.m.	4	-55	0	867.5	30	1
0x1005	3:36:37 p.m.	4	-55	0	867.5	30	1
0x1005	3:36:38 p.m.	4	-55	0	867.5	30	1
0x1005	3:36:40 p.m.	4	-56	0	865.7	30	1
0x1005	3:36:41 p.m.	4	-56	0	865.7	30	1
0x1005	3:36:42 p.m.	4	-56	0	865.7	30	1
0x1005	3:36:43 p.m.	4	-56	0	865.7	30	1

0x1005	3:36:44 p.m.	4	-56	0	866.3	30	1
0x1005	3:36:45 p.m.	4	-56	0	866.3	30	1
0x1005	3:36:46 p.m.	4	-56	0	866.3	30	1
0x1005	3:36:48 p.m.	4	-56	0	866.9	30	1
0x1005	3:36:49 p.m.	4	-56	0	866.9	30	1
0x1005	3:36:50 p.m.	4	-56	0	866.9	30	1
0x1005	3:36:51 p.m.	4	-56	0	866.9	30	1
0x1005	3:36:52 p.m.	4	-55	0	867.5	30	1
0x1005	3:36:53 p.m.	4	-55	0	867.5	30	1
0x1005	3:36:54 p.m.	4	-55	0	867.5	30	1
0x1005	3:36:55 p.m.	4	-56	0	865.7	30	1
0x1005	3:36:57 p.m.	4	-56	0	865.7	30	1
0x1005	3:37:07 p.m.	5	-51	0	866.9	30	1
0x1005	3:37:08 p.m.	5	-51	0	867.5	30	1
0x1005	3:37:10 p.m.	5	-52	0	865.7	30	1
0x1005	3:37:11 p.m.	5	-52	0	865.7	30	1
0x1005	3:37:12 p.m.	5	-52	0	865.7	30	1
0x1005	3:37:13 p.m.	5	-52	0	865.7	30	1
0x1005	3:37:14 p.m.	5	-52	0	866.3	30	1
0x1005	3:37:15 p.m.	5	-52	0	866.3	30	1
0x1005	3:37:16 p.m.	5	-52	0	866.3	30	1
0x1005	3:37:18 p.m.	5	-52	0	866.9	30	1
0x1005	3:37:19 p.m.	5	-52	0	866.9	30	1
0x1005	3:37:20 p.m.	5	-52	0	866.9	30	1
0x1005	3:37:21 p.m.	5	-51	0	867.5	30	1
0x1005	3:37:22 p.m.	5	-51	0	867.5	30	1
0x1005	3:37:23 p.m.	5	-51	0	867.5	30	1
0x1005	3:37:25 p.m.	5	-51	0	867.5	30	1
0x1005	3:37:26 p.m.	5	-52	0	865.7	30	1
0x1005	3:37:27 p.m.	5	-52	0	865.7	30	1
0x1005	3:37:28 p.m.	5	-52	0	865.7	30	1
0x1005	3:37:29 p.m.	5	-52	0	866.3	30	1
0x1005	3:37:30 p.m.	5	-52	0	866.3	30	1
0x1005	3:37:31 p.m.	5	-52	0	866.3	30	1
0x1005	3:37:33 p.m.	5	-52	0	866.9	30	1
0x1005	3:37:34 p.m.	5	-52	0	866.9	30	1
0x1005	3:37:35 p.m.	5	-52	0	866.9	30	1
0x1005	3:37:36 p.m.	5	-52	0	866.9	30	1
0x1005	3:37:37 p.m.	5	-51	0	867.5	30	1
0x1005	3:37:48 p.m.	6	-43	0	866.3	30	1
0x1005	3:37:49 p.m.	6	-43	0	866.9	30	1
0x1005	3:37:50 p.m.	6	-43	0	867.5	30	1
0x1005	3:37:51 p.m.	6	-42	0	865.7	30	1
0x1005	3:37:52 p.m.	6	-42	0	866.3	30	1
0x1005	3:37:53 p.m.	6	-42	0	866.9	30	1
0x1005	3:37:54 p.m.	6	-42	0	867.5	30	1
0x1005	3:37:56 p.m.	6	-42	0	865.7	30	1
0x1005	3:37:57 p.m.	6	-42	0	865.7	30	1
0x1005	3:37:58 p.m.	6	-42	0	865.7	30	1
0x1005	3:37:59 p.m.	6	-42	0	865.7	30	1
0x1005	3:38:00 p.m.	6	-42	0	866.3	30	1
0x1005	3:38:01 p.m.	6	-42	0	866.3	30	1
0x1005	3:38:02 p.m.	6	-42	0	866.3	30	1
0x1005	3:38:04 p.m.	6	-43	0	866.9	30	1
0x1005	3:38:05 p.m.	6	-43	0	866.9	30	1
0x1005	3:38:06 p.m.	6	-43	0	866.9	30	1
0x1005	3:38:07 p.m.	6	-42	0	867.5	30	1
0x1005	3:38:08 p.m.	6	-43	0	867.5	30	1
0x1005	3:38:09 p.m.	6	-43	0	867.5	30	1
0x1005	3:38:11 p.m.	6	-43	0	867.5	30	1

0x1005	3:38:12 p.m.	6	-42	0	865.7	30	1
0x1005	3:38:13 p.m.	6	-42	0	865.7	30	1
0x1005	3:38:14 p.m.	6	-42	0	865.7	30	1
0x1005	3:38:15 p.m.	6	-42	0	866.3	30	1
0x1005	3:38:16 p.m.	6	-42	0	866.3	30	1
0x1005	3:38:17 p.m.	6	-42	0	866.3	30	1
0x1005	3:38:28 p.m.	7	-42	0	867.5	30	1
0x1005	3:38:29 p.m.	7	-42	0	865.7	30	1
0x1005	3:38:30 p.m.	7	-43	0	866.3	30	1
0x1005	3:38:31 p.m.	7	-42	0	866.9	30	1
0x1005	3:38:32 p.m.	7	-42	0	867.5	30	1
0x1005	3:38:33 p.m.	7	-42	0	865.7	30	1
0x1005	3:38:35 p.m.	7	-43	0	866.3	30	1
0x1005	3:38:36 p.m.	7	-42	0	866.9	30	1
0x1005	3:38:37 p.m.	7	-42	0	866.9	30	1
0x1005	3:38:38 p.m.	7	-42	0	866.9	30	1
0x1005	3:38:39 p.m.	7	-43	0	866.9	30	1
0x1005	3:38:40 p.m.	7	-43	0	867.5	30	1
0x1005	3:38:42 p.m.	7	-42	0	867.5	30	1
0x1005	3:38:43 p.m.	7	-43	0	867.5	30	1
0x1005	3:38:44 p.m.	7	-42	0	865.7	30	1
0x1005	3:38:45 p.m.	7	-42	0	865.7	30	1
0x1005	3:38:46 p.m.	7	-42	0	865.7	30	1
0x1005	3:38:47 p.m.	7	-42	0	866.3	30	1
0x1005	3:38:48 p.m.	7	-43	0	866.3	30	1
0x1005	3:38:50 p.m.	7	-43	0	866.3	30	1
0x1005	3:38:51 p.m.	7	-43	0	866.3	30	1
0x1005	3:38:52 p.m.	7	-43	0	866.9	30	1
0x1005	3:38:53 p.m.	7	-42	0	866.9	30	1
0x1005	3:38:54 p.m.	7	-42	0	866.9	30	1
0x1005	3:38:55 p.m.	7	-42	0	867.5	30	1
0x1005	3:38:56 p.m.	7	-43	0	867.5	30	1
0x1005	3:38:58 p.m.	7	-43	0	867.5	30	1
0x1005	3:39:08 p.m.	8	-41	0	866.3	30	1
0x1005	3:39:09 p.m.	8	-42	0	866.9	30	1
0x1005	3:39:10 p.m.	8	-42	0	867.5	30	1
0x1005	3:39:11 p.m.	8	-42	0	865.7	30	1
0x1005	3:39:13 p.m.	8	-42	0	866.3	30	1
0x1005	3:39:14 p.m.	8	-42	0	866.9	30	1
0x1005	3:39:15 p.m.	8	-42	0	867.5	30	1
0x1005	3:39:16 p.m.	8	-42	0	865.7	30	1
0x1005	3:39:17 p.m.	8	-42	0	866.3	30	1
0x1005	3:39:18 p.m.	8	-42	0	866.9	30	1
0x1005	3:39:19 p.m.	8	-42	0	867.5	30	1
0x1005	3:39:21 p.m.	8	-42	0	865.7	30	1
0x1005	3:39:22 p.m.	8	-42	0	866.3	30	1
0x1005	3:39:23 p.m.	8	-42	0	866.9	30	1
0x1005	3:39:24 p.m.	8	-42	0	867.5	30	1
0x1005	3:39:25 p.m.	8	-42	0	865.7	30	1
0x1005	3:39:26 p.m.	8	-42	0	866.3	30	1
0x1005	3:39:28 p.m.	8	-42	0	866.9	30	1
0x1005	3:39:29 p.m.	8	-42	0	867.5	30	1
0x1005	3:39:30 p.m.	8	-42	0	865.7	30	1
0x1005	3:39:31 p.m.	8	-42	0	866.3	30	1
0x1005	3:39:32 p.m.	8	-42	0	866.9	30	1
0x1005	3:39:33 p.m.	8	-42	0	867.5	30	1
0x1005	3:39:34 p.m.	8	-42	0	865.7	30	1
0x1005	3:39:36 p.m.	8	-42	0	866.3	30	1
0x1005	3:39:37 p.m.	8	-42	0	866.9	30	1
0x10062000	3:34:26 p.m.	1	-62	0	867.5	30	1

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0x10062000	3:34:28 p.m.	1	-57	0	865.7	30	1
0x10062000	3:34:29 p.m.	1	-58	0	866.3	30	1
0x10062000	3:34:30 p.m.	1	-59	0	866.9	30	1
0x10062000	3:34:31 p.m.	1	-61	0	867.5	30	1
0x10062000	3:34:32 p.m.	1	-61	0	867.5	30	1
0x10062000	3:34:33 p.m.	1	-61	0	867.5	30	1
0x10062000	3:34:35 p.m.	1	-61	0	867.5	30	1
0x10062000	3:34:36 p.m.	1	-57	0	865.7	30	1
0x10062000	3:34:37 p.m.	1	-57	0	865.7	30	1
0x10062000	3:34:38 p.m.	1	-57	0	865.7	30	1
0x10062000	3:34:39 p.m.	1	-58	0	866.3	30	1
0x10062000	3:34:41 p.m.	1	-58	0	866.3	30	1
0x10062000	3:34:42 p.m.	1	-58	0	866.3	30	1
0x10062000	3:34:43 p.m.	1	-59	0	866.9	30	1
0x10062000	3:34:44 p.m.	1	-59	0	866.9	30	1
0x10062000	3:34:45 p.m.	1	-59	0	866.9	30	1
0x10062000	3:34:46 p.m.	1	-61	0	867.5	30	1
0x10062000	3:34:48 p.m.	1	-61	0	867.5	30	1
0x10062000	3:34:49 p.m.	1	-61	0	867.5	30	1
0x10062000	3:34:50 p.m.	1	-61	0	867.5	30	1
0x10062000	3:34:51 p.m.	1	-57	0	865.7	30	1
0x10062000	3:34:52 p.m.	1	-56	0	865.7	30	1
0x10062000	3:34:53 p.m.	1	-56	0	865.7	30	1
0x10062000	3:34:55 p.m.	1	-58	0	866.3	30	1
0x10062000	3:34:56 p.m.	1	-58	0	866.3	30	1
0x10062000	3:35:07 p.m.	2	-48	0	867.5	30	1
0x10062000	3:35:08 p.m.	2	-48	0	865.7	30	1
0x10062000	3:35:09 p.m.	2	-48	0	866.3	30	1
0x10062000	3:35:10 p.m.	2	-48	0	866.9	30	1
0x10062000	3:35:11 p.m.	2	-49	0	867.5	30	1
0x10062000	3:35:12 p.m.	2	-48	0	865.7	30	1
0x10062000	3:35:14 p.m.	2	-48	0	866.3	30	1
0x10062000	3:35:15 p.m.	2	-48	0	866.3	30	1
0x10062000	3:35:16 p.m.	2	-48	0	866.3	30	1
0x10062000	3:35:17 p.m.	2	-48	0	866.3	30	1
0x10062000	3:35:18 p.m.	2	-48	0	866.9	30	1
0x10062000	3:35:20 p.m.	2	-49	0	866.9	30	1
0x10062000	3:35:21 p.m.	2	-48	0	866.9	30	1
0x10062000	3:35:22 p.m.	2	-48	0	867.5	30	1
0x10062000	3:35:23 p.m.	2	-49	0	867.5	30	1
0x10062000	3:35:24 p.m.	2	-48	0	867.5	30	1
0x10062000	3:35:25 p.m.	2	-48	0	865.7	30	1
0x10062000	3:35:27 p.m.	2	-48	0	865.7	30	1
0x10062000	3:35:28 p.m.	2	-48	0	865.7	30	1
0x10062000	3:35:29 p.m.	2	-48	0	866.3	30	1
0x10062000	3:35:30 p.m.	2	-48	0	866.3	30	1
0x10062000	3:35:31 p.m.	2	-48	0	866.3	30	1
0x10062000	3:35:32 p.m.	2	-48	0	866.3	30	1
0x10062000	3:35:34 p.m.	2	-48	0	866.9	30	1
0x10062000	3:35:35 p.m.	2	-48	0	866.9	30	1
0x10062000	3:35:36 p.m.	2	-48	0	866.9	30	1
0x10062000	3:35:47 p.m.	3	-48	0	866.3	30	1
0x10062000	3:35:48 p.m.	3	-48	0	866.9	30	1
0x10062000	3:35:49 p.m.	3	-48	0	867.5	30	1
0x10062000	3:35:50 p.m.	3	-48	0	867.5	30	1
0x10062000	3:35:52 p.m.	3	-48	0	867.5	30	1
0x10062000	3:35:53 p.m.	3	-48	0	867.5	30	1
0x10062000	3:35:54 p.m.	3	-48	0	865.7	30	1
0x10062000	3:35:55 p.m.	3	-48	0	865.7	30	1
0x10062000	3:35:56 p.m.	3	-48	0	865.7	30	1

0x10062000	3:35:57 p.m.	3	-48	0	866.3	30	1
0x10062000	3:35:59 p.m.	3	-48	0	866.3	30	1
0x10062000	3:36:00 p.m.	3	-48	0	866.3	30	1
0x10062000	3:36:01 p.m.	3	-48	0	866.9	30	1
0x10062000	3:36:02 p.m.	3	-48	0	866.9	30	1
0x10062000	3:36:03 p.m.	3	-48	0	866.9	30	1
0x10062000	3:36:04 p.m.	3	-48	0	867.5	30	1
0x10062000	3:36:06 p.m.	3	-48	0	867.5	30	1
0x10062000	3:36:07 p.m.	3	-48	0	867.5	30	1
0x10062000	3:36:08 p.m.	3	-48	0	867.5	30	1
0x10062000	3:36:09 p.m.	3	-48	0	865.7	30	1
0x10062000	3:36:10 p.m.	3	-48	0	865.7	30	1
0x10062000	3:36:11 p.m.	3	-48	0	865.7	30	1
0x10062000	3:36:13 p.m.	3	-48	0	866.3	30	1
0x10062000	3:36:14 p.m.	3	-48	0	866.3	30	1
0x10062000	3:36:15 p.m.	3	-48	0	866.3	30	1
0x10062000	3:36:16 p.m.	3	-48	0	866.9	30	1
0x10062000	3:36:27 p.m.	4	-48	0	865.7	30	1
0x10062000	3:36:28 p.m.	4	-48	0	866.3	30	1
0x10062000	3:36:29 p.m.	4	-48	0	866.3	30	1
0x10062000	3:36:31 p.m.	4	-48	0	866.3	30	1
0x10062000	3:36:32 p.m.	4	-48	0	866.3	30	1
0x10062000	3:36:33 p.m.	4	-48	0	866.9	30	1
0x10062000	3:36:34 p.m.	4	-48	0	866.9	30	1
0x10062000	3:36:35 p.m.	4	-48	0	866.9	30	1
0x10062000	3:36:36 p.m.	4	-48	0	867.5	30	1
0x10062000	3:36:38 p.m.	4	-48	0	867.5	30	1
0x10062000	3:36:39 p.m.	4	-48	0	867.5	30	1
0x10062000	3:36:40 p.m.	4	-48	0	865.7	30	1
0x10062000	3:36:41 p.m.	4	-48	0	865.7	30	1
0x10062000	3:36:42 p.m.	4	-48	0	865.7	30	1
0x10062000	3:36:43 p.m.	4	-48	0	865.7	30	1
0x10062000	3:36:44 p.m.	4	-48	0	866.3	30	1
0x10062000	3:36:46 p.m.	4	-48	0	866.3	30	1
0x10062000	3:36:47 p.m.	4	-48	0	866.3	30	1
0x10062000	3:36:48 p.m.	4	-48	0	866.9	30	1
0x10062000	3:36:49 p.m.	4	-48	0	866.9	30	1
0x10062000	3:36:50 p.m.	4	-48	0	866.9	30	1
0x10062000	3:36:51 p.m.	4	-48	0	867.5	30	1
0x10062000	3:36:53 p.m.	4	-48	0	867.5	30	1
0x10062000	3:36:54 p.m.	4	-48	0	867.5	30	1
0x10062000	3:36:55 p.m.	4	-48	0	865.7	30	1
0x10062000	3:36:56 p.m.	4	-48	0	865.7	30	1
0x10062000	3:37:07 p.m.	5	-49	0	866.9	30	1
0x10062000	3:37:08 p.m.	5	-49	0	867.5	30	1
0x10062000	3:37:10 p.m.	5	-49	0	865.7	30	1
0x10062000	3:37:11 p.m.	5	-49	0	865.7	30	1
0x10062000	3:37:12 p.m.	5	-49	0	865.7	30	1
0x10062000	3:37:13 p.m.	5	-49	0	865.7	30	1
0x10062000	3:37:14 p.m.	5	-49	0	866.3	30	1
0x10062000	3:37:15 p.m.	5	-49	0	866.3	30	1
0x10062000	3:37:17 p.m.	5	-49	0	866.3	30	1
0x10062000	3:37:18 p.m.	5	-49	0	866.9	30	1
0x10062000	3:37:19 p.m.	5	-49	0	866.9	30	1
0x10062000	3:37:20 p.m.	5	-49	0	866.9	30	1
0x10062000	3:37:21 p.m.	5	-49	0	867.5	30	1
0x10062000	3:37:22 p.m.	5	-49	0	867.5	30	1
0x10062000	3:37:24 p.m.	5	-49	0	867.5	30	1
0x10062000	3:37:25 p.m.	5	-49	0	865.7	30	1
0x10062000	3:37:26 p.m.	5	-49	0	865.7	30	1

0x10062000	3:37:27 p.m.	5	-49	0	865.7	30	1
0x10062000	3:37:28 p.m.	5	-49	0	865.7	30	1
0x10062000	3:37:29 p.m.	5	-49	0	866.3	30	1
0x10062000	3:37:31 p.m.	5	-49	0	866.3	30	1
0x10062000	3:37:32 p.m.	5	-49	0	866.3	30	1
0x10062000	3:37:33 p.m.	5	-49	0	866.9	30	1
0x10062000	3:37:34 p.m.	5	-49	0	866.9	30	1
0x10062000	3:37:35 p.m.	5	-49	0	866.9	30	1
0x10062000	3:37:36 p.m.	5	-49	0	867.5	30	1
0x10062000	3:37:48 p.m.	6	-58	0	866.3	30	1
0x10062000	3:37:49 p.m.	6	-60	0	866.9	30	1
0x10062000	3:37:50 p.m.	6	-57	0	867.5	30	1
0x10062000	3:37:51 p.m.	6	-56	0	865.7	30	1
0x10062000	3:37:52 p.m.	6	-56	0	866.3	30	1
0x10062000	3:37:53 p.m.	6	-57	0	866.9	30	1
0x10062000	3:37:55 p.m.	6	-57	0	867.5	30	1
0x10062000	3:37:56 p.m.	6	-56	0	865.7	30	1
0x10062000	3:37:57 p.m.	6	-56	0	865.7	30	1
0x10062000	3:37:58 p.m.	6	-56	0	865.7	30	1
0x10062000	3:37:59 p.m.	6	-56	0	865.7	30	1
0x10062000	3:38:00 p.m.	6	-57	0	866.3	30	1
0x10062000	3:38:02 p.m.	6	-57	0	866.3	30	1
0x10062000	3:38:03 p.m.	6	-57	0	866.3	30	1
0x10062000	3:38:04 p.m.	6	-57	0	866.9	30	1
0x10062000	3:38:05 p.m.	6	-57	0	866.9	30	1
0x10062000	3:38:06 p.m.	6	-57	0	866.9	30	1
0x10062000	3:38:07 p.m.	6	-57	0	867.5	30	1
0x10062000	3:38:09 p.m.	6	-57	0	867.5	30	1
0x10062000	3:38:10 p.m.	6	-57	0	867.5	30	1
0x10062000	3:38:11 p.m.	6	-56	0	865.7	30	1
0x10062000	3:38:12 p.m.	6	-56	0	865.7	30	1
0x10062000	3:38:13 p.m.	6	-56	0	865.7	30	1
0x10062000	3:38:14 p.m.	6	-56	0	865.7	30	1
0x10062000	3:38:16 p.m.	6	-57	0	866.3	30	1
0x10062000	3:38:17 p.m.	6	-57	0	866.3	30	1
0x10062000	3:38:28 p.m.	7	-60	0	867.5	30	1
0x10062000	3:38:29 p.m.	7	-56	0	865.7	30	1
0x10062000	3:38:30 p.m.	7	-57	0	866.3	30	1
0x10062000	3:38:31 p.m.	7	-58	0	866.9	30	1
0x10062000	3:38:32 p.m.	7	-61	0	867.5	30	1
0x10062000	3:38:34 p.m.	7	-56	0	865.7	30	1
0x10062000	3:38:35 p.m.	7	-57	0	866.3	30	1
0x10062000	3:38:36 p.m.	7	-58	0	866.9	30	1
0x10062000	3:38:37 p.m.	7	-58	0	866.9	30	1
0x10062000	3:38:38 p.m.	7	-59	0	866.9	30	1
0x10062000	3:38:39 p.m.	7	-58	0	866.9	30	1
0x10062000	3:38:41 p.m.	7	-60	0	867.5	30	1
0x10062000	3:38:42 p.m.	7	-60	0	867.5	30	1
0x10062000	3:38:43 p.m.	7	-60	0	867.5	30	1
0x10062000	3:38:44 p.m.	7	-56	0	865.7	30	1
0x10062000	3:38:45 p.m.	7	-56	0	865.7	30	1
0x10062000	3:38:46 p.m.	7	-56	0	865.7	30	1
0x10062000	3:38:48 p.m.	7	-57	0	866.3	30	1
0x10062000	3:38:49 p.m.	7	-57	0	866.3	30	1
0x10062000	3:38:50 p.m.	7	-57	0	866.3	30	1
0x10062000	3:38:51 p.m.	7	-58	0	866.9	30	1
0x10062000	3:38:52 p.m.	7	-58	0	866.9	30	1
0x10062000	3:38:54 p.m.	7	-58	0	866.9	30	1
0x10062000	3:38:55 p.m.	7	-58	0	866.9	30	1
0x10062000	3:38:56 p.m.	7	-60	0	867.5	30	1

0x10062000	3:38:57 p.m.	7	-60	0	867.5	30	1
0x1007	3:35:07 p.m.	2	-45	0	867.5	30	1
0x1007	3:35:08 p.m.	2	-45	0	865.7	30	1
0x1007	3:35:09 p.m.	2	-44	0	866.3	30	1
0x1007	3:35:10 p.m.	2	-44	0	866.9	30	1
0x1007	3:35:11 p.m.	2	-44	0	867.5	30	1
0x1007	3:35:12 p.m.	2	-44	0	865.7	30	1
0x1007	3:35:14 p.m.	2	-44	0	866.3	30	1
0x1007	3:35:15 p.m.	2	-44	0	866.3	30	1
0x1007	3:35:16 p.m.	2	-44	0	866.3	30	1
0x1007	3:35:17 p.m.	2	-44	0	866.3	30	1
0x1007	3:35:18 p.m.	2	-44	0	866.9	30	1
0x1007	3:35:19 p.m.	2	-44	0	866.9	30	1
0x1007	3:35:20 p.m.	2	-44	0	866.9	30	1
0x1007	3:35:22 p.m.	2	-44	0	867.5	30	1
0x1007	3:35:23 p.m.	2	-44	0	867.5	30	1
0x1007	3:35:24 p.m.	2	-44	0	867.5	30	1
0x1007	3:35:25 p.m.	2	-44	0	865.7	30	1
0x1007	3:35:26 p.m.	2	-44	0	865.7	30	1
0x1007	3:35:27 p.m.	2	-44	0	865.7	30	1
0x1007	3:35:28 p.m.	2	-44	0	865.7	30	1
0x1007	3:35:30 p.m.	2	-44	0	866.3	30	1
0x1007	3:35:31 p.m.	2	-44	0	866.3	30	1
0x1007	3:35:32 p.m.	2	-44	0	866.3	30	1
0x1007	3:35:33 p.m.	2	-44	0	866.9	30	1
0x1007	3:35:34 p.m.	2	-44	0	866.9	30	1
0x1007	3:35:35 p.m.	2	-44	0	866.9	30	1
0x1007	3:35:36 p.m.	2	-44	0	867.5	30	1
0x1007	3:35:47 p.m.	3	-50	0	866.3	30	1
0x1007	3:35:48 p.m.	3	-50	0	866.9	30	1
0x1007	3:35:49 p.m.	3	-50	0	867.5	30	1
0x1007	3:35:50 p.m.	3	-50	0	867.5	30	1
0x1007	3:35:51 p.m.	3	-50	0	867.5	30	1
0x1007	3:35:53 p.m.	3	-50	0	867.5	30	1
0x1007	3:35:54 p.m.	3	-50	0	865.7	30	1
0x1007	3:35:55 p.m.	3	-51	0	865.7	30	1
0x1007	3:35:56 p.m.	3	-51	0	865.7	30	1
0x1007	3:35:57 p.m.	3	-50	0	866.3	30	1
0x1007	3:35:58 p.m.	3	-50	0	866.3	30	1
0x1007	3:35:59 p.m.	3	-50	0	866.3	30	1
0x1007	3:36:01 p.m.	3	-50	0	866.9	30	1
0x1007	3:36:02 p.m.	3	-50	0	866.9	30	1
0x1007	3:36:03 p.m.	3	-50	0	866.9	30	1
0x1007	3:36:04 p.m.	3	-50	0	866.9	30	1
0x1007	3:36:05 p.m.	3	-50	0	867.5	30	1
0x1007	3:36:06 p.m.	3	-50	0	867.5	30	1
0x1007	3:36:07 p.m.	3	-50	0	867.5	30	1
0x1007	3:36:09 p.m.	3	-50	0	865.7	30	1
0x1007	3:36:10 p.m.	3	-50	0	865.7	30	1
0x1007	3:36:11 p.m.	3	-50	0	865.7	30	1
0x1007	3:36:12 p.m.	3	-50	0	866.3	30	1
0x1007	3:36:13 p.m.	3	-50	0	866.3	30	1
0x1007	3:36:14 p.m.	3	-50	0	866.3	30	1
0x1007	3:36:16 p.m.	3	-50	0	866.3	30	1
0x1007	3:36:17 p.m.	3	-50	0	866.9	30	1
0x1007	3:36:27 p.m.	4	-50	0	865.7	30	1
0x1007	3:36:28 p.m.	4	-51	0	866.3	30	1
0x1007	3:36:29 p.m.	4	-52	0	866.3	30	1
0x1007	3:36:31 p.m.	4	-52	0	866.3	30	1
0x1007	3:36:32 p.m.	4	-52	0	866.3	30	1

0x1007	3:36:33 p.m.	4	-52	0	866.9	30	1
0x1007	3:36:34 p.m.	4	-52	0	866.9	30	1
0x1007	3:36:35 p.m.	4	-52	0	866.9	30	1
0x1007	3:36:36 p.m.	4	-52	0	867.5	30	1
0x1007	3:36:37 p.m.	4	-52	0	867.5	30	1
0x1007	3:36:39 p.m.	4	-52	0	867.5	30	1
0x1007	3:36:40 p.m.	4	-51	0	865.7	30	1
0x1007	3:36:41 p.m.	4	-51	0	865.7	30	1
0x1007	3:36:42 p.m.	4	-51	0	865.7	30	1
0x1007	3:36:43 p.m.	4	-51	0	865.7	30	1
0x1007	3:36:44 p.m.	4	-52	0	866.3	30	1
0x1007	3:36:45 p.m.	4	-51	0	866.3	30	1
0x1007	3:36:46 p.m.	4	-51	0	866.3	30	1
0x1007	3:36:48 p.m.	4	-52	0	866.9	30	1
0x1007	3:36:49 p.m.	4	-52	0	866.9	30	1
0x1007	3:36:50 p.m.	4	-52	0	866.9	30	1
0x1007	3:36:51 p.m.	4	-52	0	867.5	30	1
0x1007	3:36:52 p.m.	4	-52	0	867.5	30	1
0x1007	3:36:53 p.m.	4	-52	0	867.5	30	1
0x1007	3:36:54 p.m.	4	-52	0	867.5	30	1
0x1007	3:36:56 p.m.	4	-51	0	865.7	30	1
0x1007	3:36:57 p.m.	4	-51	0	865.7	30	1
0x1007	3:37:07 p.m.	5	-50	0	866.9	30	1
0x1007	3:37:08 p.m.	5	-50	0	867.5	30	1
0x1007	3:37:10 p.m.	5	-50	0	865.7	30	1
0x1007	3:37:11 p.m.	5	-50	0	865.7	30	1
0x1007	3:37:12 p.m.	5	-50	0	865.7	30	1
0x1007	3:37:13 p.m.	5	-50	0	865.7	30	1
0x1007	3:37:14 p.m.	5	-50	0	866.3	30	1
0x1007	3:37:15 p.m.	5	-50	0	866.3	30	1
0x1007	3:37:16 p.m.	5	-50	0	866.3	30	1
0x1007	3:37:18 p.m.	5	-50	0	866.9	30	1
0x1007	3:37:19 p.m.	5	-51	0	866.9	30	1
0x1007	3:37:20 p.m.	5	-50	0	866.9	30	1
0x1007	3:37:21 p.m.	5	-50	0	867.5	30	1
0x1007	3:37:22 p.m.	5	-50	0	867.5	30	1
0x1007	3:37:23 p.m.	5	-50	0	867.5	30	1
0x1007	3:37:25 p.m.	5	-50	0	867.5	30	1
0x1007	3:37:26 p.m.	5	-50	0	865.7	30	1
0x1007	3:37:27 p.m.	5	-50	0	865.7	30	1
0x1007	3:37:28 p.m.	5	-50	0	865.7	30	1
0x1007	3:37:29 p.m.	5	-50	0	866.3	30	1
0x1007	3:37:30 p.m.	5	-50	0	866.3	30	1
0x1007	3:37:31 p.m.	5	-50	0	866.3	30	1
0x1007	3:37:33 p.m.	5	-50	0	866.9	30	1
0x1007	3:37:34 p.m.	5	-50	0	866.9	30	1
0x1007	3:37:35 p.m.	5	-50	0	866.9	30	1
0x1007	3:37:36 p.m.	5	-50	0	866.9	30	1
0x1007	3:37:37 p.m.	5	-50	0	867.5	30	1
0x1007	3:37:48 p.m.	6	-45	0	866.3	30	1
0x1007	3:37:49 p.m.	6	-48	0	866.9	30	1
0x1007	3:37:50 p.m.	6	-48	0	867.5	30	1
0x1007	3:37:51 p.m.	6	-48	0	865.7	30	1
0x1007	3:37:52 p.m.	6	-48	0	866.3	30	1
0x1007	3:37:53 p.m.	6	-48	0	866.9	30	1
0x1007	3:37:54 p.m.	6	-48	0	867.5	30	1
0x1007	3:37:56 p.m.	6	-48	0	865.7	30	1
0x1007	3:37:57 p.m.	6	-49	0	865.7	30	1
0x1007	3:37:58 p.m.	6	-49	0	865.7	30	1
0x1007	3:37:59 p.m.	6	-48	0	865.7	30	1

0x1007	3:38:00 p.m.	6	-48	0	866.3	30	1
0x1007	3:38:01 p.m.	6	-48	0	866.3	30	1
0x1007	3:38:03 p.m.	6	-48	0	866.3	30	1
0x1007	3:38:04 p.m.	6	-48	0	866.9	30	1
0x1007	3:38:05 p.m.	6	-48	0	866.9	30	1
0x1007	3:38:06 p.m.	6	-48	0	866.9	30	1
0x1007	3:38:07 p.m.	6	-48	0	867.5	30	1
0x1007	3:38:08 p.m.	6	-48	0	867.5	30	1
0x1007	3:38:09 p.m.	6	-48	0	867.5	30	1
0x1007	3:38:11 p.m.	6	-48	0	867.5	30	1
0x1007	3:38:12 p.m.	6	-48	0	865.7	30	1
0x1007	3:38:13 p.m.	6	-48	0	865.7	30	1
0x1007	3:38:14 p.m.	6	-48	0	865.7	30	1
0x1007	3:38:15 p.m.	6	-48	0	866.3	30	1
0x1007	3:38:16 p.m.	6	-48	0	866.3	30	1
0x1008	3:35:47 p.m.	3	-56	0	866.3	30	1
0x1008	3:35:48 p.m.	3	-56	0	866.9	30	1
0x1008	3:35:49 p.m.	3	-57	0	867.5	30	1
0x1008	3:35:50 p.m.	3	-57	0	867.5	30	1
0x1008	3:35:51 p.m.	3	-57	0	867.5	30	1
0x1008	3:35:52 p.m.	3	-57	0	867.5	30	1
0x1008	3:35:54 p.m.	3	-56	0	865.7	30	1
0x1008	3:35:55 p.m.	3	-56	0	865.7	30	1
0x1008	3:35:56 p.m.	3	-56	0	865.7	30	1
0x1008	3:35:57 p.m.	3	-56	0	866.3	30	1
0x1008	3:35:58 p.m.	3	-56	0	866.3	30	1
0x1008	3:35:59 p.m.	3	-56	0	866.3	30	1
0x1008	3:36:00 p.m.	3	-56	0	866.3	30	1
0x1008	3:36:01 p.m.	3	-56	0	866.9	30	1
0x1008	3:36:03 p.m.	3	-56	0	866.9	30	1
0x1008	3:36:04 p.m.	3	-56	0	866.9	30	1
0x1008	3:36:05 p.m.	3	-57	0	867.5	30	1
0x1008	3:36:06 p.m.	3	-57	0	867.5	30	1
0x1008	3:36:07 p.m.	3	-57	0	867.5	30	1
0x1008	3:36:08 p.m.	3	-55	0	865.7	30	1
0x1008	3:36:09 p.m.	3	-55	0	865.7	30	1
0x1008	3:36:10 p.m.	3	-55	0	865.7	30	1
0x1008	3:36:12 p.m.	3	-55	0	865.7	30	1
0x1008	3:36:13 p.m.	3	-56	0	866.3	30	1
0x1008	3:36:14 p.m.	3	-56	0	866.3	30	1
0x1008	3:36:15 p.m.	3	-56	0	866.3	30	1
0x1008	3:36:16 p.m.	3	-56	0	866.9	30	1
0x1008	3:36:27 p.m.	4	-51	0	865.7	30	1
0x1008	3:36:28 p.m.	4	-51	0	866.3	30	1
0x1008	3:36:29 p.m.	4	-51	0	866.3	30	1
0x1008	3:36:30 p.m.	4	-51	0	866.3	30	1
0x1008	3:36:32 p.m.	4	-51	0	866.3	30	1
0x1008	3:36:33 p.m.	4	-51	0	866.9	30	1
0x1008	3:36:34 p.m.	4	-51	0	866.9	30	1
0x1008	3:36:35 p.m.	4	-51	0	866.9	30	1
0x1008	3:36:36 p.m.	4	-51	0	867.5	30	1
0x1008	3:36:37 p.m.	4	-51	0	867.5	30	1
0x1008	3:36:38 p.m.	4	-51	0	867.5	30	1
0x1008	3:36:39 p.m.	4	-51	0	867.5	30	1
0x1008	3:36:41 p.m.	4	-51	0	865.7	30	1
0x1008	3:36:42 p.m.	4	-51	0	865.7	30	1
0x1008	3:36:43 p.m.	4	-51	0	865.7	30	1
0x1008	3:36:44 p.m.	4	-51	0	866.3	30	1
0x1008	3:36:45 p.m.	4	-51	0	866.3	30	1
0x1008	3:36:46 p.m.	4	-51	0	866.3	30	1

0x1008	3:36:47 p.m.	4	-51	0	866.3	30	1
0x1008	3:36:48 p.m.	4	-51	0	866.9	30	1
0x1008	3:36:49 p.m.	4	-51	0	866.9	30	1
0x1008	3:36:51 p.m.	4	-51	0	866.9	30	1
0x1008	3:36:52 p.m.	4	-51	0	867.5	30	1
0x1008	3:36:53 p.m.	4	-51	0	867.5	30	1
0x1008	3:36:54 p.m.	4	-51	0	867.5	30	1
0x1008	3:36:55 p.m.	4	-51	0	865.7	30	1
0x1008	3:36:56 p.m.	4	-51	0	865.7	30	1
0x1008	3:37:07 p.m.	5	-60	0	866.9	30	1
0x1008	3:37:08 p.m.	5	-60	0	867.5	30	1
0x1008	3:37:10 p.m.	5	-57	0	865.7	30	1
0x1008	3:37:11 p.m.	5	-57	0	865.7	30	1
0x1008	3:37:12 p.m.	5	-56	0	865.7	30	1
0x1008	3:37:13 p.m.	5	-56	0	865.7	30	1
0x1008	3:37:14 p.m.	5	-57	0	866.3	30	1
0x1008	3:37:15 p.m.	5	-57	0	866.3	30	1
0x1008	3:37:16 p.m.	5	-57	0	866.3	30	1
0x1008	3:37:17 p.m.	5	-58	0	866.9	30	1
0x1008	3:37:19 p.m.	5	-58	0	866.9	30	1
0x1008	3:37:20 p.m.	5	-58	0	866.9	30	1
0x1008	3:37:21 p.m.	5	-58	0	866.9	30	1
0x1008	3:37:22 p.m.	5	-59	0	867.5	30	1
0x1008	3:37:23 p.m.	5	-59	0	867.5	30	1
0x1008	3:37:24 p.m.	5	-59	0	867.5	30	1
0x1008	3:37:25 p.m.	5	-56	0	865.7	30	1
0x1008	3:37:26 p.m.	5	-56	0	865.7	30	1
0x1008	3:37:27 p.m.	5	-56	0	865.7	30	1
0x1008	3:37:29 p.m.	5	-57	0	866.3	30	1
0x1008	3:37:30 p.m.	5	-57	0	866.3	30	1
0x1008	3:37:31 p.m.	5	-57	0	866.3	30	1
0x1008	3:37:32 p.m.	5	-57	0	866.3	30	1
0x1008	3:37:33 p.m.	5	-58	0	866.9	30	1
0x1008	3:37:34 p.m.	5	-58	0	866.9	30	1
0x1008	3:37:35 p.m.	5	-58	0	866.9	30	1
0x1008	3:37:36 p.m.	5	-59	0	867.5	30	1
0x1009	3:36:27 p.m.	4	-42	0	865.7	30	1
0x1009	3:36:28 p.m.	4	-42	0	866.3	30	1
0x1009	3:36:30 p.m.	4	-42	0	866.3	30	1
0x1009	3:36:31 p.m.	4	-42	0	866.3	30	1
0x1009	3:36:32 p.m.	4	-42	0	866.9	30	1
0x1009	3:36:34 p.m.	4	-42	0	866.9	30	1
0x1009	3:36:35 p.m.	4	-42	0	866.9	30	1
0x1009	3:36:36 p.m.	4	-42	0	867.5	30	1
0x1009	3:36:38 p.m.	4	-42	0	867.5	30	1
0x1009	3:36:39 p.m.	4	-42	0	867.5	30	1
0x1009	3:36:40 p.m.	4	-42	0	865.7	30	1
0x1009	3:36:42 p.m.	4	-42	0	865.7	30	1
0x1009	3:36:43 p.m.	4	-42	0	865.7	30	1
0x1009	3:36:44 p.m.	4	-42	0	866.3	30	1
0x1009	3:36:46 p.m.	4	-42	0	866.3	30	1
0x1009	3:36:47 p.m.	4	-42	0	866.3	30	1
0x1009	3:36:48 p.m.	4	-42	0	866.9	30	1
0x1009	3:36:50 p.m.	4	-42	0	866.9	30	1
0x1009	3:36:51 p.m.	4	-42	0	867.5	30	1
0x1009	3:36:52 p.m.	4	-42	0	867.5	30	1
0x1009	3:36:54 p.m.	4	-43	0	867.5	30	1
0x1009	3:36:55 p.m.	4	-42	0	865.7	30	1
0x1009	3:36:56 p.m.	4	-42	0	865.7	30	1

8.2 Appendix B: Blood tracking with Blood Bags

8.2.1 Round 1 with Empty Blood Bag

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:26:54 PM	0	-48	0	865.7	30	1
0x1101	2:26:55 PM	0	-48	0	866.3	30	1
0x1101	2:26:56 PM	0	-48	0	866.9	30	1
0x1101	2:26:57 PM	0	-48	0	867.5	30	1
0x1101	2:26:58 PM	0	-48	0	865.7	30	1
0x1101	2:26:59 PM	0	-48	0	866.3	30	1
0x1101	2:27:01 PM	0	-48	0	866.3	30	1
0x1101	2:27:02 PM	0	-48	0	866.3	30	1
0x1101	2:27:03 PM	0	-48	0	866.9	30	1
0x1101	2:27:04 PM	0	-48	0	867.5	30	1
0x1101	2:27:05 PM	0	-48	0	865.7	30	1
0x1101	2:27:06 PM	0	-48	0	866.3	30	1
0x1101	2:27:07 PM	0	-48	0	866.9	30	1
0x1101	2:27:09 PM	0	-48	0	867.5	30	1
0x1101	2:27:10 PM	0	-48	0	865.7	30	1
0x1101	2:27:11 PM	0	-48	0	866.3	30	1
0x1101	2:27:12 PM	0	-48	0	866.9	30	1
0x1101	2:27:13 PM	0	-48	0	867.5	30	1
0x1101	2:27:14 PM	0	-48	0	865.7	30	1
0x1101	2:27:15 PM	0	-48	0	866.3	30	1
0x1101	2:27:17 PM	0	-48	0	866.9	30	1
0x1101	2:27:18 PM	0	-48	0	867.5	30	1
0x1101	2:27:19 PM	0	-48	0	865.7	30	1
0x1101	2:27:20 PM	0	-48	0	866.3	30	1
0x1101	2:27:21 PM	0	-48	0	866.9	30	1
0x1101	2:27:22 PM	0	-48	0	867.5	30	1
0x1101	2:27:23 PM	0	-48	0	865.7	30	1
0x1101	2:27:34 PM	1	-46	0	866.9	30	1
0x1101	2:27:35 PM	1	-46	0	867.5	30	1
0x1101	2:27:36 PM	1	-47	0	865.7	30	1
0x1101	2:27:37 PM	1	-47	0	865.7	30	1
0x1101	2:27:38 PM	1	-47	0	865.7	30	1
0x1101	2:27:40 PM	1	-47	0	865.7	30	1
0x1101	2:27:41 PM	1	-47	0	866.3	30	1
0x1101	2:27:42 PM	1	-47	0	866.3	30	1
0x1101	2:27:43 PM	1	-47	0	866.3	30	1
0x1101	2:27:44 PM	1	-47	0	866.9	30	1
0x1101	2:27:45 PM	1	-47	0	866.9	30	1
0x1101	2:27:46 PM	1	-47	0	866.9	30	1
0x1101	2:27:48 PM	1	-47	0	866.9	30	1
0x1101	2:27:49 PM	1	-47	0	865.7	30	1
0x1101	2:27:50 PM	1	-47	0	866.3	30	1
0x1101	2:27:51 PM	1	-47	0	866.9	30	1
0x1101	2:27:52 PM	1	-47	0	866.9	30	1
0x1101	2:27:53 PM	1	-47	0	866.9	30	1
0x1101	2:27:54 PM	1	-47	0	866.9	30	1
0x1101	2:27:56 PM	1	-47	0	867.5	30	1
0x1101	2:27:57 PM	1	-47	0	867.5	30	1
0x1101	2:27:58 PM	1	-47	0	867.5	30	1
0x1101	2:27:59 PM	1	-47	0	865.7	30	1
0x1101	2:28:00 PM	1	-47	0	865.7	30	1

0x1101	2:28:01 PM	1	-47	0	865.7	30	1
0x1101	2:28:02 PM	1	-47	0	866.3	30	1
0x1101	2:28:04 PM	1	-47	0	866.9	30	1
0x1101	2:28:14 PM	2	-52	0	865.7	30	1
0x1101	2:28:15 PM	2	-52	0	866.3	30	1
0x1101	2:28:16 PM	2	-52	0	866.3	30	1
0x1101	2:28:18 PM	2	-52	0	866.3	30	1
0x1101	2:28:19 PM	2	-52	0	866.3	30	1
0x1101	2:28:20 PM	2	-52	0	866.9	30	1
0x1101	2:28:21 PM	2	-52	0	866.9	30	1
0x1101	2:28:22 PM	2	-52	0	866.9	30	1
0x1101	2:28:23 PM	2	-52	0	867.5	30	1
0x1101	2:28:24 PM	2	-52	0	867.5	30	1
0x1101	2:28:25 PM	2	-52	0	867.5	30	1
0x1101	2:28:27 PM	2	-52	0	865.7	30	1
0x1101	2:28:28 PM	2	-52	0	865.7	30	1
0x1101	2:28:29 PM	2	-52	0	865.7	30	1
0x1101	2:28:30 PM	2	-52	0	865.7	30	1
0x1101	2:28:31 PM	2	-52	0	866.3	30	1
0x1101	2:28:32 PM	2	-52	0	866.3	30	1
0x1101	2:28:33 PM	2	-52	0	866.3	30	1
0x1101	2:28:35 PM	2	-52	0	866.9	30	1
0x1101	2:28:36 PM	2	-52	0	866.9	30	1
0x1101	2:28:37 PM	2	-52	0	866.9	30	1
0x1101	2:28:38 PM	2	-52	0	867.5	30	1
0x1101	2:28:39 PM	2	-52	0	867.5	30	1
0x1101	2:28:40 PM	2	-52	0	867.5	30	1
0x1101	2:28:41 PM	2	-52	0	867.5	30	1
0x1101	2:28:43 PM	2	-52	0	865.7	30	1
0x1101	2:28:44 PM	2	-52	0	865.7	30	1
0x1101	2:28:54 PM	3	-47	0	866.9	30	1
0x1101	2:28:56 PM	3	-47	0	867.5	30	1
0x1101	2:28:57 PM	3	-47	0	865.7	30	1
0x1101	2:28:58 PM	3	-47	0	865.7	30	1
0x1101	2:28:59 PM	3	-47	0	865.7	30	1
0x1101	2:29:00 PM	3	-47	0	865.7	30	1
0x1101	2:29:01 PM	3	-47	0	866.3	30	1
0x1101	2:29:02 PM	3	-47	0	866.3	30	1
0x1101	2:29:03 PM	3	-47	0	866.3	30	1
0x1101	2:29:04 PM	3	-47	0	866.9	30	1
0x1101	2:29:06 PM	3	-47	0	866.9	30	1
0x1101	2:29:07 PM	3	-47	0	866.9	30	1
0x1101	2:29:08 PM	3	-47	0	866.9	30	1
0x1101	2:29:09 PM	3	-47	0	867.5	30	1
0x1101	2:29:10 PM	3	-47	0	865.7	30	1
0x1101	2:29:11 PM	3	-47	0	866.3	30	1
0x1101	2:29:12 PM	3	-47	0	866.3	30	1
0x1101	2:29:13 PM	3	-47	0	866.3	30	1
0x1101	2:29:15 PM	3	-47	0	866.3	30	1
0x1101	2:29:16 PM	3	-47	0	866.9	30	1
0x1101	2:29:17 PM	3	-47	0	866.9	30	1
0x1101	2:29:18 PM	3	-47	0	866.9	30	1
0x1101	2:29:19 PM	3	-47	0	867.5	30	1
0x1101	2:29:20 PM	3	-47	0	867.5	30	1
0x1101	2:29:21 PM	3	-47	0	867.5	30	1
0x1101	2:29:23 PM	3	-47	0	867.5	30	1
0x1101	2:29:24 PM	3	-47	0	865.7	30	1
0x1101	2:29:35 PM	4	-48	0	866.9	30	1
0x1101	2:29:36 PM	4	-48	0	866.9	30	1
0x1101	2:29:37 PM	4	-48	0	866.9	30	1

0x1101	2:29:38 PM	4	-48	0	867.5	30	1
0x1101	2:29:39 PM	4	-48	0	865.7	30	1
0x1101	2:29:40 PM	4	-48	0	865.7	30	1
0x1101	2:29:41 PM	4	-48	0	865.7	30	1
0x1101	2:29:43 PM	4	-48	0	865.7	30	1
0x1101	2:29:44 PM	4	-48	0	866.3	30	1
0x1101	2:29:45 PM	4	-48	0	866.3	30	1
0x1101	2:29:46 PM	4	-48	0	866.3	30	1
0x1101	2:29:47 PM	4	-48	0	866.9	30	1
0x1101	2:29:48 PM	4	-48	0	867.5	30	1
0x1101	2:29:49 PM	4	-48	0	867.5	30	1
0x1101	2:29:51 PM	4	-48	0	867.5	30	1
0x1101	2:29:52 PM	4	-48	0	867.5	30	1
0x1101	2:29:53 PM	4	-48	0	865.7	30	1
0x1101	2:29:54 PM	4	-48	0	865.7	30	1
0x1101	2:29:55 PM	4	-48	0	865.7	30	1
0x1101	2:29:56 PM	4	-48	0	866.3	30	1
0x1101	2:29:57 PM	4	-48	0	866.3	30	1
0x1101	2:29:59 PM	4	-48	0	866.9	30	1
0x1101	2:30:00 PM	4	-48	0	867.5	30	1
0x1101	2:30:01 PM	4	-48	0	867.5	30	1
0x1101	2:30:02 PM	4	-48	0	867.5	30	1
0x1101	2:30:03 PM	4	-48	0	867.5	30	1
0x1101	2:30:04 PM	4	-48	0	865.7	30	1
0x1102	2:27:34 PM	1	-42	0	866.9	30	1
0x1102	2:27:35 PM	1	-42	0	867.5	30	1
0x1102	2:27:36 PM	1	-43	0	865.7	30	1
0x1102	2:27:38 PM	1	-43	0	865.7	30	1
0x1102	2:27:39 PM	1	-43	0	865.7	30	1
0x1102	2:27:40 PM	1	-43	0	866.3	30	1
0x1102	2:27:41 PM	1	-43	0	866.3	30	1
0x1102	2:27:43 PM	1	-43	0	866.3	30	1
0x1102	2:27:44 PM	1	-43	0	866.3	30	1
0x1102	2:27:45 PM	1	-43	0	866.9	30	1
0x1102	2:27:46 PM	1	-43	0	866.9	30	1
0x1102	2:27:47 PM	1	-43	0	866.9	30	1
0x1102	2:27:49 PM	1	-43	0	865.7	30	1
0x1102	2:27:50 PM	1	-43	0	866.3	30	1
0x1102	2:27:51 PM	1	-43	0	866.9	30	1
0x1102	2:27:52 PM	1	-42	0	866.9	30	1
0x1102	2:27:54 PM	1	-43	0	866.9	30	1
0x1102	2:27:55 PM	1	-42	0	867.5	30	1
0x1102	2:27:56 PM	1	-42	0	867.5	30	1
0x1102	2:27:57 PM	1	-42	0	867.5	30	1
0x1102	2:27:59 PM	1	-42	0	867.5	30	1
0x1102	2:28:00 PM	1	-43	0	865.7	30	1
0x1102	2:28:01 PM	1	-42	0	865.7	30	1
0x1102	2:28:02 PM	1	-42	0	865.7	30	1
0x1102	2:28:04 PM	1	-43	0	866.9	30	1
0x1102	2:28:14 PM	2	-44	0	865.7	30	1
0x1102	2:28:15 PM	2	-45	0	866.3	30	1
0x1102	2:28:17 PM	2	-45	0	866.3	30	1
0x1102	2:28:18 PM	2	-45	0	866.3	30	1
0x1102	2:28:19 PM	2	-45	0	866.9	30	1
0x1102	2:28:20 PM	2	-45	0	866.9	30	1
0x1102	2:28:22 PM	2	-45	0	866.9	30	1
0x1102	2:28:23 PM	2	-45	0	866.9	30	1
0x1102	2:28:24 PM	2	-45	0	867.5	30	1
0x1102	2:28:25 PM	2	-45	0	867.5	30	1
0x1102	2:28:26 PM	2	-44	0	867.5	30	1

0x1102	2:28:28 PM	2	-44	0	865.7	30	1
0x1102	2:28:29 PM	2	-44	0	865.7	30	1
0x1102	2:28:30 PM	2	-44	0	865.7	30	1
0x1102	2:28:31 PM	2	-44	0	866.3	30	1
0x1102	2:28:33 PM	2	-44	0	866.3	30	1
0x1102	2:28:34 PM	2	-44	0	866.3	30	1
0x1102	2:28:35 PM	2	-44	0	866.9	30	1
0x1102	2:28:36 PM	2	-44	0	866.9	30	1
0x1102	2:28:37 PM	2	-44	0	866.9	30	1
0x1102	2:28:39 PM	2	-44	0	867.5	30	1
0x1102	2:28:40 PM	2	-44	0	867.5	30	1
0x1102	2:28:41 PM	2	-44	0	867.5	30	1
0x1102	2:28:42 PM	2	-44	0	865.7	30	1
0x1102	2:28:44 PM	2	-44	0	865.7	30	1
0x1102	2:28:54 PM	3	-43	0	866.9	30	1
0x1102	2:28:56 PM	3	-43	0	867.5	30	1
0x1102	2:28:57 PM	3	-43	0	865.7	30	1
0x1102	2:28:58 PM	3	-43	0	865.7	30	1
0x1102	2:28:59 PM	3	-43	0	865.7	30	1
0x1102	2:29:00 PM	3	-43	0	865.7	30	1
0x1102	2:29:02 PM	3	-43	0	866.3	30	1
0x1102	2:29:03 PM	3	-43	0	866.3	30	1
0x1102	2:29:04 PM	3	-43	0	866.3	30	1
0x1102	2:29:05 PM	3	-43	0	866.9	30	1
0x1102	2:29:06 PM	3	-43	0	866.9	30	1
0x1102	2:29:08 PM	3	-43	0	866.9	30	1
0x1102	2:29:09 PM	3	-43	0	867.5	30	1
0x1102	2:29:10 PM	3	-43	0	865.7	30	1
0x1102	2:29:11 PM	3	-43	0	866.3	30	1
0x1102	2:29:13 PM	3	-43	0	866.3	30	1
0x1102	2:29:14 PM	3	-43	0	866.3	30	1
0x1102	2:29:15 PM	3	-43	0	866.3	30	1
0x1102	2:29:16 PM	3	-43	0	866.9	30	1
0x1102	2:29:17 PM	3	-43	0	866.9	30	1
0x1102	2:29:19 PM	3	-43	0	866.9	30	1
0x1102	2:29:20 PM	3	-43	0	867.5	30	1
0x1102	2:29:21 PM	3	-43	0	867.5	30	1
0x1102	2:29:22 PM	3	-43	0	867.5	30	1
0x1102	2:29:24 PM	3	-43	0	865.7	30	1
0x1103	2:28:14 PM	2	-41	0	865.7	30	1
0x1103	2:28:15 PM	2	-42	0	866.3	30	1
0x1103	2:28:17 PM	2	-42	0	866.3	30	1
0x1103	2:28:18 PM	2	-42	0	866.3	30	1
0x1103	2:28:19 PM	2	-42	0	866.9	30	1
0x1103	2:28:20 PM	2	-42	0	866.9	30	1
0x1103	2:28:22 PM	2	-42	0	866.9	30	1
0x1103	2:28:23 PM	2	-42	0	867.5	30	1
0x1103	2:28:24 PM	2	-42	0	867.5	30	1
0x1103	2:28:25 PM	2	-42	0	867.5	30	1
0x1103	2:28:27 PM	2	-42	0	865.7	30	1
0x1103	2:28:28 PM	2	-42	0	865.7	30	1
0x1103	2:28:29 PM	2	-42	0	865.7	30	1
0x1103	2:28:30 PM	2	-42	0	866.3	30	1
0x1103	2:28:32 PM	2	-42	0	866.3	30	1
0x1103	2:28:33 PM	2	-42	0	866.3	30	1
0x1103	2:28:34 PM	2	-42	0	866.9	30	1
0x1103	2:28:35 PM	2	-42	0	866.9	30	1
0x1103	2:28:37 PM	2	-42	0	866.9	30	1
0x1103	2:28:38 PM	2	-42	0	867.5	30	1
0x1103	2:28:39 PM	2	-42	0	867.5	30	1

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1103	2:28:41 PM	2	-42	0	867.5	30	1
0x1103	2:28:42 PM	2	-42	0	867.5	30	1
0x1103	2:28:43 PM	2	-42	0	865.7	30	1

8.2.2 Round 2 with Empty Blood Bag

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:36:12 PM	0	-56	0	865.7	30	1
0x1101	2:36:13 PM	0	-56	0	866.3	30	1
0x1101	2:36:14 PM	0	-57	0	866.9	30	1
0x1101	2:36:15 PM	0	-58	0	867.5	30	1
0x1101	2:36:16 PM	0	-57	0	865.7	30	1
0x1101	2:36:17 PM	0	-57	0	866.3	30	1
0x1101	2:36:18 PM	0	-58	0	866.9	30	1
0x1101	2:36:19 PM	0	-58	0	867.5	30	1
0x1101	2:36:21 PM	0	-57	0	865.7	30	1
0x1101	2:36:22 PM	0	-57	0	866.3	30	1
0x1101	2:36:23 PM	0	-57	0	866.9	30	1
0x1101	2:36:24 PM	0	-58	0	867.5	30	1
0x1101	2:36:25 PM	0	-57	0	865.7	30	1
0x1101	2:36:26 PM	0	-57	0	866.3	30	1
0x1101	2:36:27 PM	0	-58	0	866.9	30	1
0x1101	2:36:28 PM	0	-58	0	867.5	30	1
0x1101	2:36:30 PM	0	-57	0	865.7	30	1
0x1101	2:36:31 PM	0	-57	0	866.3	30	1
0x1101	2:36:32 PM	0	-58	0	866.9	30	1
0x1101	2:36:33 PM	0	-58	0	867.5	30	1
0x1101	2:36:34 PM	0	-57	0	865.7	30	1
0x1101	2:36:35 PM	0	-57	0	866.3	30	1
0x1101	2:36:36 PM	0	-58	0	866.9	30	1
0x1101	2:36:37 PM	0	-58	0	867.5	30	1
0x1101	2:36:39 PM	0	-57	0	865.7	30	1
0x1101	2:36:40 PM	0	-57	0	866.3	30	1
0x1101	2:36:41 PM	0	-58	0	866.9	30	1
0x1101	2:37:32 PM	2	-60	0	866.9	30	1
0x1101	2:37:33 PM	2	-57	0	866.9	30	1
0x1101	2:37:34 PM	2	-56	0	866.9	30	1
0x1101	2:37:35 PM	2	-57	0	866.9	30	1
0x1101	2:37:36 PM	2	-56	0	867.5	30	1
0x1101	2:37:38 PM	2	-55	0	867.5	30	1
0x1101	2:37:39 PM	2	-56	0	867.5	30	1
0x1101	2:37:40 PM	2	-57	0	865.7	30	1
0x1101	2:37:41 PM	2	-56	0	865.7	30	1
0x1101	2:37:42 PM	2	-56	0	865.7	30	1
0x1101	2:37:43 PM	2	-56	0	865.7	30	1
0x1101	2:37:44 PM	2	-56	0	866.3	30	1
0x1101	2:37:45 PM	2	-56	0	866.3	30	1
0x1101	2:37:47 PM	2	-55	0	866.3	30	1
0x1101	2:37:48 PM	2	-55	0	866.9	30	1
0x1101	2:37:49 PM	2	-55	0	866.9	30	1
0x1101	2:37:50 PM	2	-55	0	866.9	30	1
0x1101	2:37:51 PM	2	-55	0	866.9	30	1
0x1101	2:37:52 PM	2	-54	0	867.5	30	1
0x1101	2:37:53 PM	2	-55	0	867.5	30	1
0x1101	2:37:54 PM	2	-54	0	867.5	30	1
0x1101	2:37:55 PM	2	-55	0	865.7	30	1

0x1101	2:37:57 PM	2	-55	0	865.7	30	1
0x1101	2:37:58 PM	2	-55	0	865.7	30	1
0x1101	2:37:59 PM	2	-55	0	866.3	30	1
0x1101	2:38:00 PM	2	-55	0	866.3	30	1
0x1101	2:38:01 PM	2	-55	0	866.3	30	1
0x1101	2:38:12 PM	3	-58	0	867.5	30	1
0x1101	2:38:13 PM	3	-50	0	867.5	30	1
0x1101	2:38:14 PM	3	-56	0	867.5	30	1
0x1101	2:38:16 PM	3	-57	0	867.5	30	1
0x1101	2:38:17 PM	3	-55	0	865.7	30	1
0x1101	2:38:18 PM	3	-54	0	865.7	30	1
0x1101	2:38:19 PM	3	-54	0	865.7	30	1
0x1101	2:38:20 PM	3	-53	0	866.3	30	1
0x1101	2:38:21 PM	3	-53	0	866.3	30	1
0x1101	2:38:22 PM	3	-52	0	866.3	30	1
0x1101	2:38:23 PM	3	-52	0	866.3	30	1
0x1101	2:38:25 PM	3	-52	0	866.9	30	1
0x1101	2:38:26 PM	3	-52	0	866.9	30	1
0x1101	2:38:27 PM	3	-52	0	866.9	30	1
0x1101	2:38:28 PM	3	-52	0	867.5	30	1
0x1101	2:38:29 PM	3	-52	0	867.5	30	1
0x1101	2:38:30 PM	3	-52	0	867.5	30	1
0x1101	2:38:31 PM	3	-52	0	865.7	30	1
0x1101	2:38:32 PM	3	-52	0	865.7	30	1
0x1101	2:38:34 PM	3	-52	0	865.7	30	1
0x1101	2:38:35 PM	3	-53	0	865.7	30	1
0x1101	2:38:36 PM	3	-52	0	866.3	30	1
0x1101	2:38:37 PM	3	-52	0	866.3	30	1
0x1101	2:38:38 PM	3	-52	0	866.3	30	1
0x1101	2:38:39 PM	3	-52	0	866.9	30	1
0x1101	2:38:40 PM	3	-52	0	866.9	30	1
0x1101	2:38:41 PM	3	-52	0	866.9	30	1
0x1101	2:38:52 PM	4	-50	0	865.7	30	1
0x1101	2:38:54 PM	4	-49	0	865.7	30	1
0x1101	2:38:55 PM	4	-50	0	865.7	30	1
0x1101	2:38:56 PM	4	-50	0	865.7	30	1
0x1101	2:38:57 PM	4	-50	0	866.3	30	1
0x1101	2:38:58 PM	4	-51	0	866.3	30	1
0x1101	2:38:59 PM	4	-49	0	866.9	30	1
0x1101	2:39:00 PM	4	-49	0	866.9	30	1
0x1101	2:39:01 PM	4	-50	0	866.9	30	1
0x1101	2:39:03 PM	4	-50	0	866.9	30	1
0x1101	2:39:04 PM	4	-50	0	867.5	30	1
0x1101	2:39:05 PM	4	-50	0	867.5	30	1
0x1101	2:39:06 PM	4	-50	0	867.5	30	1
0x1101	2:39:07 PM	4	-49	0	865.7	30	1
0x1101	2:39:08 PM	4	-49	0	865.7	30	1
0x1101	2:39:09 PM	4	-49	0	865.7	30	1
0x1101	2:39:11 PM	4	-49	0	866.3	30	1
0x1101	2:39:12 PM	4	-50	0	866.3	30	1
0x1101	2:39:13 PM	4	-50	0	866.3	30	1
0x1101	2:39:14 PM	4	-49	0	866.9	30	1
0x1101	2:39:15 PM	4	-50	0	867.5	30	1
0x1101	2:39:16 PM	4	-50	0	867.5	30	1
0x1101	2:39:17 PM	4	-48	0	865.7	30	1
0x1101	2:39:18 PM	4	-49	0	865.7	30	1
0x1101	2:39:20 PM	4	-50	0	865.7	30	1
0x1101	2:39:21 PM	4	-49	0	865.7	30	1
0x1101	2:39:22 PM	4	-49	0	866.3	30	1
0x1102	2:36:52 PM	1	-42	0	865.7	30	1

0x1102	2:36:53 PM	1	-42	0	866.3	30	1
0x1102	2:36:54 PM	1	-42	0	866.9	30	1
0x1102	2:36:55 PM	1	-42	0	867.5	30	1
0x1102	2:36:57 PM	1	-42	0	865.7	30	1
0x1102	2:36:58 PM	1	-42	0	866.3	30	1
0x1102	2:36:59 PM	1	-42	0	866.9	30	1
0x1102	2:37:00 PM	1	-42	0	867.5	30	1
0x1102	2:37:02 PM	1	-42	0	865.7	30	1
0x1102	2:37:03 PM	1	-42	0	866.3	30	1
0x1102	2:37:04 PM	1	-42	0	866.9	30	1
0x1102	2:37:05 PM	1	-42	0	867.5	30	1
0x1102	2:37:06 PM	1	-42	0	865.7	30	1
0x1102	2:37:08 PM	1	-42	0	866.3	30	1
0x1102	2:37:09 PM	1	-42	0	866.9	30	1
0x1102	2:37:10 PM	1	-42	0	867.5	30	1
0x1102	2:37:11 PM	1	-42	0	865.7	30	1
0x1102	2:37:13 PM	1	-42	0	866.3	30	1
0x1102	2:37:14 PM	1	-42	0	866.9	30	1
0x1102	2:37:15 PM	1	-42	0	867.5	30	1
0x1102	2:37:16 PM	1	-42	0	865.7	30	1
0x1102	2:37:17 PM	1	-42	0	866.3	30	1
0x1102	2:37:19 PM	1	-42	0	866.9	30	1
0x1102	2:37:20 PM	1	-42	0	867.5	30	1
0x1102	2:37:21 PM	1	-42	0	865.7	30	1
0x1102	2:37:32 PM	2	-44	0	866.9	30	1
0x1102	2:37:33 PM	2	-45	0	866.9	30	1
0x1102	2:37:34 PM	2	-44	0	866.9	30	1
0x1102	2:37:36 PM	2	-44	0	866.9	30	1
0x1102	2:37:37 PM	2	-44	0	867.5	30	1
0x1102	2:37:38 PM	2	-44	0	867.5	30	1
0x1102	2:37:39 PM	2	-44	0	867.5	30	1
0x1102	2:37:40 PM	2	-44	0	865.7	30	1
0x1102	2:37:42 PM	2	-44	0	865.7	30	1
0x1102	2:37:43 PM	2	-44	0	865.7	30	1
0x1102	2:37:44 PM	2	-44	0	866.3	30	1
0x1102	2:37:45 PM	2	-44	0	866.3	30	1
0x1102	2:37:47 PM	2	-44	0	866.3	30	1
0x1102	2:37:48 PM	2	-44	0	866.9	30	1
0x1102	2:37:49 PM	2	-44	0	866.9	30	1
0x1102	2:37:50 PM	2	-44	0	866.9	30	1
0x1102	2:37:51 PM	2	-44	0	867.5	30	1
0x1102	2:37:53 PM	2	-44	0	867.5	30	1
0x1102	2:37:54 PM	2	-44	0	867.5	30	1
0x1102	2:37:55 PM	2	-44	0	865.7	30	1
0x1102	2:37:56 PM	2	-44	0	865.7	30	1
0x1102	2:37:57 PM	2	-44	0	865.7	30	1
0x1102	2:37:59 PM	2	-44	0	866.3	30	1
0x1102	2:38:00 PM	2	-44	0	866.3	30	1
0x1102	2:38:01 PM	2	-43	0	866.3	30	1
0x1102	2:38:12 PM	3	-45	0	867.5	30	1
0x1102	2:38:13 PM	3	-41	0	867.5	30	1
0x1102	2:38:14 PM	3	-41	0	867.5	30	1
0x1102	2:38:16 PM	3	-41	0	867.5	30	1
0x1102	2:38:17 PM	3	-40	0	865.7	30	1
0x1102	2:38:18 PM	3	-41	0	865.7	30	1
0x1102	2:38:19 PM	3	-41	0	865.7	30	1
0x1102	2:38:20 PM	3	-41	0	866.3	30	1
0x1102	2:38:21 PM	3	-41	0	866.3	30	1
0x1102	2:38:23 PM	3	-41	0	866.3	30	1
0x1102	2:38:24 PM	3	-41	0	866.9	30	1

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1102	2:38:25 PM	3	-41	0	866.9	30	1
0x1102	2:38:26 PM	3	-41	0	866.9	30	1
0x1102	2:38:27 PM	3	-41	0	866.9	30	1
0x1102	2:38:28 PM	3	-41	0	867.5	30	1
0x1102	2:38:29 PM	3	-41	0	867.5	30	1
0x1102	2:38:31 PM	3	-41	0	867.5	30	1
0x1102	2:38:32 PM	3	-41	0	865.7	30	1
0x1102	2:38:33 PM	3	-41	0	865.7	30	1
0x1102	2:38:34 PM	3	-41	0	865.7	30	1
0x1102	2:38:35 PM	3	-41	0	866.3	30	1
0x1102	2:38:36 PM	3	-41	0	866.3	30	1
0x1102	2:38:37 PM	3	-41	0	866.3	30	1
0x1102	2:38:39 PM	3	-41	0	866.3	30	1
0x1102	2:38:40 PM	3	-41	0	866.9	30	1
0x1102	2:38:41 PM	3	-41	0	866.9	30	1
0x1102	2:38:42 PM	3	-41	0	866.9	30	1
0x1103	2:37:32 PM	2	-42	0	866.9	30	1
0x1103	2:37:33 PM	2	-42	0	866.9	30	1
0x1103	2:37:34 PM	2	-42	0	866.9	30	1
0x1103	2:37:36 PM	2	-42	0	866.9	30	1
0x1103	2:37:37 PM	2	-42	0	867.5	30	1
0x1103	2:37:38 PM	2	-42	0	867.5	30	1
0x1103	2:37:39 PM	2	-42	0	867.5	30	1
0x1103	2:37:41 PM	2	-42	0	865.7	30	1
0x1103	2:37:42 PM	2	-42	0	865.7	30	1
0x1103	2:37:43 PM	2	-42	0	865.7	30	1
0x1103	2:37:44 PM	2	-42	0	866.3	30	1
0x1103	2:37:46 PM	2	-42	0	866.3	30	1
0x1103	2:37:47 PM	2	-42	0	866.3	30	1
0x1103	2:37:48 PM	2	-42	0	866.9	30	1
0x1103	2:37:49 PM	2	-42	0	866.9	30	1
0x1103	2:37:51 PM	2	-42	0	866.9	30	1
0x1103	2:37:52 PM	2	-42	0	867.5	30	1
0x1103	2:37:53 PM	2	-42	0	867.5	30	1
0x1103	2:37:54 PM	2	-42	0	867.5	30	1
0x1103	2:37:56 PM	2	-42	0	865.7	30	1
0x1103	2:37:57 PM	2	-42	0	865.7	30	1
0x1103	2:37:58 PM	2	-42	0	865.7	30	1
0x1103	2:37:59 PM	2	-42	0	866.3	30	1
0x1103	2:38:01 PM	2	-42	0	866.3	30	1
0x1103	2:38:02 PM	2	-42	0	866.3	30	1

8.2.3 Round 3 with Empty Blood Bag

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:41:21 PM	0	-44	0	866.3	30	1
0x1101	2:41:22 PM	0	-41	0	866.9	30	1
0x1101	2:41:23 PM	0	-43	0	866.9	30	1
0x1101	2:41:24 PM	0	-42	0	866.9	30	1
0x1101	2:41:25 PM	0	-43	0	867.5	30	1
0x1101	2:41:26 PM	0	-42	0	865.7	30	1
0x1101	2:41:28 PM	0	-42	0	865.7	30	1
0x1101	2:41:29 PM	0	-40	0	865.7	30	1
0x1101	2:41:30 PM	0	-42	0	865.7	30	1
0x1101	2:41:31 PM	0	-42	0	866.3	30	1
0x1101	2:41:32 PM	0	-42	0	866.9	30	1

0x1101	2:41:33 PM	0	-42	0	866.9	30	1
0x1101	2:41:34 PM	0	-42	0	867.5	30	1
0x1101	2:41:35 PM	0	-42	0	867.5	30	1
0x1101	2:41:37 PM	0	-40	0	865.7	30	1
0x1101	2:41:38 PM	0	-42	0	866.3	30	1
0x1101	2:41:39 PM	0	-42	0	866.3	30	1
0x1101	2:41:40 PM	0	-42	0	866.9	30	1
0x1101	2:41:41 PM	0	-42	0	867.5	30	1
0x1101	2:41:42 PM	0	-42	0	865.7	30	1
0x1101	2:41:43 PM	0	-41	0	866.3	30	1
0x1101	2:41:44 PM	0	-42	0	866.3	30	1
0x1101	2:41:46 PM	0	-42	0	866.3	30	1
0x1101	2:41:47 PM	0	-42	0	866.3	30	1
0x1101	2:41:48 PM	0	-42	0	866.9	30	1
0x1101	2:41:49 PM	0	-42	0	867.5	30	1
0x1101	2:41:50 PM	0	-42	0	867.5	30	1
0x1101	2:42:01 PM	1	-46	0	866.3	30	1
0x1101	2:42:02 PM	1	-46	0	866.9	30	1
0x1101	2:42:03 PM	1	-47	0	866.9	30	1
0x1101	2:42:04 PM	1	-48	0	866.9	30	1
0x1101	2:42:06 PM	1	-48	0	866.9	30	1
0x1101	2:42:07 PM	1	-48	0	867.5	30	1
0x1101	2:42:08 PM	1	-48	0	867.5	30	1
0x1101	2:42:09 PM	1	-48	0	867.5	30	1
0x1101	2:42:10 PM	1	-48	0	865.7	30	1
0x1101	2:42:11 PM	1	-49	0	865.7	30	1
0x1101	2:42:12 PM	1	-48	0	865.7	30	1
0x1101	2:42:13 PM	1	-48	0	865.7	30	1
0x1101	2:42:14 PM	1	-48	0	866.3	30	1
0x1101	2:42:16 PM	1	-48	0	866.3	30	1
0x1101	2:42:17 PM	1	-48	0	866.3	30	1
0x1101	2:42:18 PM	1	-48	0	866.9	30	1
0x1101	2:42:19 PM	1	-49	0	866.9	30	1
0x1101	2:42:20 PM	1	-44	0	866.9	30	1
0x1101	2:42:21 PM	1	-48	0	867.5	30	1
0x1101	2:42:22 PM	1	-48	0	867.5	30	1
0x1101	2:42:23 PM	1	-48	0	867.5	30	1
0x1101	2:42:25 PM	1	-48	0	867.5	30	1
0x1101	2:42:26 PM	1	-48	0	865.7	30	1
0x1101	2:42:27 PM	1	-48	0	865.7	30	1
0x1101	2:42:28 PM	1	-48	0	865.7	30	1
0x1101	2:42:29 PM	1	-48	0	866.3	30	1
0x1101	2:42:30 PM	1	-48	0	866.3	30	1
0x1101	2:42:41 PM	2	-44	0	867.5	30	1
0x1101	2:42:42 PM	2	-44	0	865.7	30	1
0x1101	2:42:43 PM	2	-44	0	865.7	30	1
0x1101	2:42:45 PM	2	-44	0	865.7	30	1
0x1101	2:42:46 PM	2	-43	0	865.7	30	1
0x1101	2:42:47 PM	2	-44	0	866.3	30	1
0x1101	2:42:48 PM	2	-44	0	866.3	30	1
0x1101	2:42:49 PM	2	-44	0	866.3	30	1
0x1101	2:42:50 PM	2	-44	0	866.9	30	1
0x1101	2:42:51 PM	2	-44	0	866.9	30	1
0x1101	2:42:52 PM	2	-44	0	866.9	30	1
0x1101	2:42:54 PM	2	-44	0	866.9	30	1
0x1101	2:42:55 PM	2	-44	0	867.5	30	1
0x1101	2:42:56 PM	2	-43	0	867.5	30	1
0x1101	2:42:57 PM	2	-44	0	867.5	30	1
0x1101	2:42:58 PM	2	-43	0	865.7	30	1
0x1101	2:42:59 PM	2	-44	0	865.7	30	1

0x1101	2:43:00 PM	2	-44	0	865.7	30	1
0x1101	2:43:01 PM	2	-44	0	865.7	30	1
0x1101	2:43:02 PM	2	-44	0	866.3	30	1
0x1101	2:43:04 PM	2	-44	0	866.3	30	1
0x1101	2:43:05 PM	2	-44	0	866.3	30	1
0x1101	2:43:06 PM	2	-43	0	866.9	30	1
0x1101	2:43:07 PM	2	-44	0	866.9	30	1
0x1101	2:43:08 PM	2	-44	0	866.9	30	1
0x1101	2:43:09 PM	2	-44	0	867.5	30	1
0x1101	2:43:10 PM	2	-44	0	867.5	30	1
0x1101	2:43:21 PM	3	-42	0	866.3	30	1
0x1101	2:43:23 PM	3	-42	0	866.3	30	1
0x1101	2:43:24 PM	3	-42	0	866.3	30	1
0x1101	2:43:25 PM	3	-43	0	866.3	30	1
0x1101	2:43:26 PM	3	-42	0	866.9	30	1
0x1101	2:43:27 PM	3	-42	0	866.9	30	1
0x1101	2:43:28 PM	3	-42	0	866.9	30	1
0x1101	2:43:29 PM	3	-42	0	867.5	30	1
0x1101	2:43:30 PM	3	-42	0	867.5	30	1
0x1101	2:43:32 PM	3	-42	0	867.5	30	1
0x1101	2:43:33 PM	3	-42	0	867.5	30	1
0x1101	2:43:34 PM	3	-42	0	865.7	30	1
0x1101	2:43:35 PM	3	-42	0	865.7	30	1
0x1101	2:43:36 PM	3	-42	0	865.7	30	1
0x1101	2:43:37 PM	3	-42	0	866.3	30	1
0x1101	2:43:38 PM	3	-42	0	866.3	30	1
0x1101	2:43:39 PM	3	-42	0	866.3	30	1
0x1101	2:43:40 PM	3	-42	0	866.3	30	1
0x1101	2:43:42 PM	3	-42	0	866.9	30	1
0x1101	2:43:43 PM	3	-42	0	866.9	30	1
0x1101	2:43:44 PM	3	-43	0	866.9	30	1
0x1101	2:43:45 PM	3	-42	0	867.5	30	1
0x1101	2:43:46 PM	3	-42	0	867.5	30	1
0x1101	2:43:47 PM	3	-42	0	867.5	30	1
0x1101	2:43:48 PM	3	-42	0	865.7	30	1
0x1101	2:43:49 PM	3	-42	0	865.7	30	1
0x1101	2:43:50 PM	3	-42	0	865.7	30	1
0x1101	2:44:02 PM	4	-41	0	866.9	30	1
0x1101	2:44:03 PM	4	-41	0	866.9	30	1
0x1101	2:44:04 PM	4	-41	0	867.5	30	1
0x1101	2:44:05 PM	4	-41	0	865.7	30	1
0x1101	2:44:06 PM	4	-41	0	865.7	30	1
0x1101	2:44:07 PM	4	-41	0	865.7	30	1
0x1101	2:44:08 PM	4	-41	0	865.7	30	1
0x1101	2:44:09 PM	4	-42	0	866.3	30	1
0x1101	2:44:10 PM	4	-42	0	866.3	30	1
0x1101	2:44:11 PM	4	-42	0	866.3	30	1
0x1101	2:44:12 PM	4	-41	0	866.3	30	1
0x1101	2:44:13 PM	4	-41	0	866.9	30	1
0x1101	2:44:14 PM	4	-41	0	866.9	30	1
0x1101	2:44:15 PM	4	-42	0	866.9	30	1
0x1101	2:44:16 PM	4	-41	0	867.5	30	1
0x1101	2:44:17 PM	4	-42	0	867.5	30	1
0x1101	2:44:18 PM	4	-41	0	865.7	30	1
0x1101	2:44:19 PM	4	-41	0	865.7	30	1
0x1101	2:44:20 PM	4	-41	0	865.7	30	1
0x1101	2:44:21 PM	4	-42	0	865.7	30	1
0x1101	2:44:22 PM	4	-41	0	866.3	30	1
0x1101	2:44:23 PM	4	-41	0	866.3	30	1
0x1101	2:44:24 PM	4	-41	0	866.3	30	1

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0x1101	2:44:25 PM	4	-41	0	866.3	30	1
0x1101	2:44:26 PM	4	-41	0	866.9	30	1
0x1101	2:44:27 PM	4	-41	0	866.9	30	1
0x1101	2:44:28 PM	4	-41	0	866.9	30	1
0x1101	2:44:29 PM	4	-41	0	866.9	30	1
0x1101	2:44:30 PM	4	-41	0	867.5	30	1
0x1101	2:44:32 PM	4	-41	0	865.7	30	1
0x1102	2:42:01 PM	1	-41	0	866.3	30	1
0x1102	2:42:02 PM	1	-41	0	866.9	30	1
0x1102	2:42:03 PM	1	-41	0	866.9	30	1
0x1102	2:42:04 PM	1	-41	0	866.9	30	1
0x1102	2:42:06 PM	1	-41	0	866.9	30	1
0x1102	2:42:07 PM	1	-41	0	867.5	30	1
0x1102	2:42:08 PM	1	-41	0	867.5	30	1
0x1102	2:42:09 PM	1	-41	0	867.5	30	1
0x1102	2:42:10 PM	1	-41	0	865.7	30	1
0x1102	2:42:11 PM	1	-41	0	865.7	30	1
0x1102	2:42:12 PM	1	-41	0	865.7	30	1
0x1102	2:42:13 PM	1	-41	0	865.7	30	1
0x1102	2:42:15 PM	1	-41	0	866.3	30	1
0x1102	2:42:16 PM	1	-41	0	866.3	30	1
0x1102	2:42:17 PM	1	-41	0	866.3	30	1
0x1102	2:42:18 PM	1	-41	0	866.9	30	1
0x1102	2:42:19 PM	1	-41	0	866.9	30	1
0x1102	2:42:20 PM	1	-41	0	866.9	30	1
0x1102	2:42:21 PM	1	-41	0	867.5	30	1
0x1102	2:42:23 PM	1	-41	0	867.5	30	1
0x1102	2:42:24 PM	1	-41	0	867.5	30	1
0x1102	2:42:25 PM	1	-41	0	867.5	30	1
0x1102	2:42:26 PM	1	-41	0	865.7	30	1
0x1102	2:42:27 PM	1	-41	0	865.7	30	1
0x1102	2:42:28 PM	1	-41	0	865.7	30	1
0x1102	2:42:29 PM	1	-41	0	866.3	30	1
0x1102	2:42:30 PM	1	-41	0	866.3	30	1
0x1102	2:42:41 PM	2	-42	0	867.5	30	1
0x1102	2:42:42 PM	2	-41	0	865.7	30	1
0x1102	2:42:44 PM	2	-41	0	865.7	30	1
0x1102	2:42:45 PM	2	-41	0	865.7	30	1
0x1102	2:42:46 PM	2	-41	0	865.7	30	1
0x1102	2:42:47 PM	2	-41	0	866.3	30	1
0x1102	2:42:48 PM	2	-41	0	866.3	30	1
0x1102	2:42:50 PM	2	-41	0	866.3	30	1
0x1102	2:42:51 PM	2	-41	0	866.9	30	1
0x1102	2:42:52 PM	2	-41	0	866.9	30	1
0x1102	2:42:53 PM	2	-41	0	866.9	30	1
0x1102	2:42:54 PM	2	-41	0	867.5	30	1
0x1102	2:42:56 PM	2	-41	0	867.5	30	1
0x1102	2:42:57 PM	2	-41	0	867.5	30	1
0x1102	2:42:58 PM	2	-42	0	865.7	30	1
0x1102	2:42:59 PM	2	-41	0	865.7	30	1
0x1102	2:43:01 PM	2	-41	0	865.7	30	1
0x1102	2:43:02 PM	2	-41	0	866.3	30	1
0x1102	2:43:03 PM	2	-41	0	866.3	30	1
0x1102	2:43:04 PM	2	-41	0	866.3	30	1
0x1102	2:43:05 PM	2	-41	0	866.9	30	1
0x1102	2:43:07 PM	2	-42	0	866.9	30	1
0x1102	2:43:08 PM	2	-42	0	866.9	30	1
0x1102	2:43:09 PM	2	-41	0	866.9	30	1
0x1102	2:43:10 PM	2	-41	0	867.5	30	1
0x1102	2:43:21 PM	3	-42	0	866.3	30	1

0x1102	2:43:23 PM	3	-38	0	866.3	30	1
0x1102	2:43:24 PM	3	-39	0	866.3	30	1
0x1102	2:43:25 PM	3	-41	0	866.3	30	1
0x1102	2:43:26 PM	3	-41	0	866.9	30	1
0x1102	2:43:27 PM	3	-40	0	866.9	30	1
0x1102	2:43:28 PM	3	-41	0	866.9	30	1
0x1102	2:43:29 PM	3	-40	0	867.5	30	1
0x1102	2:43:31 PM	3	-40	0	867.5	30	1
0x1102	2:43:32 PM	3	-40	0	867.5	30	1
0x1102	2:43:33 PM	3	-40	0	867.5	30	1
0x1102	2:43:34 PM	3	-40	0	865.7	30	1
0x1102	2:43:35 PM	3	-40	0	865.7	30	1
0x1102	2:43:36 PM	3	-40	0	865.7	30	1
0x1102	2:43:37 PM	3	-40	0	866.3	30	1
0x1102	2:43:38 PM	3	-41	0	866.3	30	1
0x1102	2:43:40 PM	3	-40	0	866.3	30	1
0x1102	2:43:41 PM	3	-40	0	866.9	30	1
0x1102	2:43:42 PM	3	-40	0	866.9	30	1
0x1102	2:43:43 PM	3	-40	0	866.9	30	1
0x1102	2:43:44 PM	3	-41	0	866.9	30	1
0x1102	2:43:45 PM	3	-38	0	867.5	30	1
0x1102	2:43:46 PM	3	-40	0	867.5	30	1
0x1102	2:43:48 PM	3	-41	0	867.5	30	1
0x1102	2:43:49 PM	3	-40	0	865.7	30	1
0x1102	2:43:50 PM	3	-39	0	865.7	30	1
0x1102	2:43:51 PM	3	-40	0	865.7	30	1
0x1103	2:42:41 PM	2	-42	0	867.5	30	1
0x1103	2:42:43 PM	2	-42	0	865.7	30	1
0x1103	2:42:44 PM	2	-42	0	865.7	30	1
0x1103	2:42:45 PM	2	-42	0	865.7	30	1
0x1103	2:42:46 PM	2	-42	0	866.3	30	1
0x1103	2:42:48 PM	2	-42	0	866.3	30	1
0x1103	2:42:49 PM	2	-42	0	866.3	30	1
0x1103	2:42:50 PM	2	-42	0	866.3	30	1
0x1103	2:42:51 PM	2	-42	0	866.9	30	1
0x1103	2:42:52 PM	2	-42	0	866.9	30	1
0x1103	2:42:54 PM	2	-42	0	866.9	30	1
0x1103	2:42:55 PM	2	-42	0	867.5	30	1
0x1103	2:42:56 PM	2	-42	0	867.5	30	1
0x1103	2:42:57 PM	2	-42	0	867.5	30	1
0x1103	2:42:59 PM	2	-42	0	865.7	30	1
0x1103	2:43:00 PM	2	-42	0	865.7	30	1
0x1103	2:43:01 PM	2	-42	0	865.7	30	1
0x1103	2:43:02 PM	2	-42	0	866.3	30	1
0x1103	2:43:04 PM	2	-42	0	866.3	30	1
0x1103	2:43:05 PM	2	-42	0	866.3	30	1
0x1103	2:43:06 PM	2	-42	0	866.9	30	1
0x1103	2:43:07 PM	2	-42	0	866.9	30	1
0x1103	2:43:09 PM	2	-42	0	866.9	30	1
0x1103	2:43:10 PM	2	-42	0	867.5	30	1
0x1103	2:43:11 PM	2	-42	0	867.5	30	1

8.2.4 Round 4 with Empty Blood Bag

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:46:07 PM	0	-45	0	866.9	30	1

0x1101	2:46:08 PM	0	-49	0	866.9	30	1
0x1101	2:46:09 PM	0	-44	0	866.9	30	1
0x1101	2:46:10 PM	0	-49	0	866.9	30	1
0x1101	2:46:11 PM	0	-50	0	867.5	30	1
0x1101	2:46:13 PM	0	-50	0	867.5	30	1
0x1101	2:46:14 PM	0	-50	0	867.5	30	1
0x1101	2:46:15 PM	0	-50	0	865.7	30	1
0x1101	2:46:16 PM	0	-50	0	865.7	30	1
0x1101	2:46:17 PM	0	-50	0	866.3	30	1
0x1101	2:46:18 PM	0	-50	0	866.9	30	1
0x1101	2:46:19 PM	0	-50	0	866.9	30	1
0x1101	2:46:20 PM	0	-50	0	866.9	30	1
0x1101	2:46:22 PM	0	-50	0	866.9	30	1
0x1101	2:46:23 PM	0	-50	0	867.5	30	1
0x1101	2:46:24 PM	0	-50	0	867.5	30	1
0x1101	2:46:25 PM	0	-50	0	867.5	30	1
0x1101	2:46:26 PM	0	-50	0	865.7	30	1
0x1101	2:46:27 PM	0	-49	0	866.3	30	1
0x1101	2:46:28 PM	0	-49	0	866.3	30	1
0x1101	2:46:29 PM	0	-49	0	866.3	30	1
0x1101	2:46:30 PM	0	-49	0	866.9	30	1
0x1101	2:46:32 PM	0	-50	0	866.9	30	1
0x1101	2:46:33 PM	0	-49	0	866.9	30	1
0x1101	2:46:34 PM	0	-50	0	866.9	30	1
0x1101	2:46:35 PM	0	-49	0	867.5	30	1
0x1101	2:46:36 PM	0	-49	0	867.5	30	1
0x1101	2:46:47 PM	1	-42	0	866.3	30	1
0x1101	2:46:48 PM	1	-42	0	866.3	30	1
0x1101	2:46:49 PM	1	-42	0	866.3	30	1
0x1101	2:46:51 PM	1	-42	0	866.3	30	1
0x1101	2:46:52 PM	1	-42	0	866.9	30	1
0x1101	2:46:53 PM	1	-42	0	866.9	30	1
0x1101	2:46:54 PM	1	-42	0	866.9	30	1
0x1101	2:46:55 PM	1	-42	0	867.5	30	1
0x1101	2:46:56 PM	1	-42	0	867.5	30	1
0x1101	2:46:57 PM	1	-42	0	867.5	30	1
0x1101	2:46:58 PM	1	-42	0	867.5	30	1
0x1101	2:46:59 PM	1	-42	0	865.7	30	1
0x1101	2:47:01 PM	1	-42	0	865.7	30	1
0x1101	2:47:02 PM	1	-42	0	865.7	30	1
0x1101	2:47:03 PM	1	-42	0	866.3	30	1
0x1101	2:47:04 PM	1	-42	0	866.3	30	1
0x1101	2:47:05 PM	1	-42	0	866.3	30	1
0x1101	2:47:06 PM	1	-42	0	866.3	30	1
0x1101	2:47:07 PM	1	-42	0	866.9	30	1
0x1101	2:47:08 PM	1	-42	0	866.9	30	1
0x1101	2:47:10 PM	1	-42	0	866.9	30	1
0x1101	2:47:11 PM	1	-42	0	867.5	30	1
0x1101	2:47:12 PM	1	-42	0	867.5	30	1
0x1101	2:47:13 PM	1	-42	0	867.5	30	1
0x1101	2:47:14 PM	1	-42	0	865.7	30	1
0x1101	2:47:15 PM	1	-42	0	865.7	30	1
0x1101	2:47:16 PM	1	-42	0	865.7	30	1
0x1101	2:47:27 PM	2	-44	0	866.9	30	1
0x1101	2:47:29 PM	2	-44	0	866.9	30	1
0x1101	2:47:30 PM	2	-42	0	866.9	30	1
0x1101	2:47:31 PM	2	-45	0	866.9	30	1
0x1101	2:47:32 PM	2	-45	0	867.5	30	1
0x1101	2:47:33 PM	2	-45	0	867.5	30	1
0x1101	2:47:34 PM	2	-45	0	867.5	30	1

0x1101	2:47:35 PM	2	-45	0	865.7	30	1
0x1101	2:47:36 PM	2	-45	0	865.7	30	1
0x1101	2:47:37 PM	2	-45	0	865.7	30	1
0x1101	2:47:39 PM	2	-45	0	865.7	30	1
0x1101	2:47:40 PM	2	-45	0	866.3	30	1
0x1101	2:47:41 PM	2	-45	0	866.3	30	1
0x1101	2:47:42 PM	2	-45	0	866.3	30	1
0x1101	2:47:43 PM	2	-46	0	866.9	30	1
0x1101	2:47:44 PM	2	-46	0	866.9	30	1
0x1101	2:47:45 PM	2	-42	0	866.9	30	1
0x1101	2:47:46 PM	2	-45	0	866.9	30	1
0x1101	2:47:47 PM	2	-45	0	867.5	30	1
0x1101	2:47:49 PM	2	-46	0	867.5	30	1
0x1101	2:47:50 PM	2	-46	0	867.5	30	1
0x1101	2:47:51 PM	2	-46	0	865.7	30	1
0x1101	2:47:52 PM	2	-46	0	865.7	30	1
0x1101	2:47:53 PM	2	-46	0	865.7	30	1
0x1101	2:47:54 PM	2	-45	0	866.3	30	1
0x1101	2:47:55 PM	2	-45	0	866.3	30	1
0x1101	2:47:56 PM	2	-45	0	866.3	30	1
0x1101	2:48:08 PM	3	-45	0	867.5	30	1
0x1101	2:48:09 PM	3	-45	0	867.5	30	1
0x1101	2:48:10 PM	3	-45	0	867.5	30	1
0x1101	2:48:11 PM	3	-45	0	867.5	30	1
0x1101	2:48:12 PM	3	-45	0	865.7	30	1
0x1101	2:48:13 PM	3	-39	0	865.7	30	1
0x1101	2:48:14 PM	3	-45	0	865.7	30	1
0x1101	2:48:15 PM	3	-45	0	866.3	30	1
0x1101	2:48:17 PM	3	-45	0	866.3	30	1
0x1101	2:48:18 PM	3	-45	0	866.3	30	1
0x1101	2:48:19 PM	3	-45	0	866.3	30	1
0x1101	2:48:20 PM	3	-45	0	866.9	30	1
0x1101	2:48:21 PM	3	-45	0	866.9	30	1
0x1101	2:48:22 PM	3	-45	0	866.9	30	1
0x1101	2:48:23 PM	3	-45	0	867.5	30	1
0x1101	2:48:24 PM	3	-45	0	867.5	30	1
0x1101	2:48:25 PM	3	-45	0	867.5	30	1
0x1101	2:48:27 PM	3	-45	0	867.5	30	1
0x1101	2:48:28 PM	3	-45	0	865.7	30	1
0x1101	2:48:29 PM	3	-45	0	865.7	30	1
0x1101	2:48:30 PM	3	-45	0	865.7	30	1
0x1101	2:48:31 PM	3	-45	0	866.3	30	1
0x1101	2:48:32 PM	3	-45	0	866.3	30	1
0x1101	2:48:33 PM	3	-45	0	866.3	30	1
0x1101	2:48:34 PM	3	-45	0	866.9	30	1
0x1101	2:48:35 PM	3	-45	0	866.9	30	1
0x1101	2:48:37 PM	3	-45	0	867.5	30	1
0x1101	2:48:38 PM	3	-45	0	867.5	30	1
0x1101	2:48:48 PM	4	-42	0	866.3	30	1
0x1101	2:48:49 PM	4	-42	0	866.3	30	1
0x1101	2:48:50 PM	4	-42	0	866.9	30	1
0x1101	2:48:51 PM	4	-42	0	866.9	30	1
0x1101	2:48:52 PM	4	-42	0	867.5	30	1
0x1101	2:48:53 PM	4	-42	0	867.5	30	1
0x1101	2:48:55 PM	4	-42	0	867.5	30	1
0x1101	2:48:56 PM	4	-42	0	867.5	30	1
0x1101	2:48:57 PM	4	-42	0	865.7	30	1
0x1101	2:48:58 PM	4	-42	0	866.3	30	1
0x1101	2:48:59 PM	4	-42	0	866.3	30	1
0x1101	2:49:00 PM	4	-42	0	866.9	30	1

0x1101	2:49:01 PM	4	-42	0	867.5	30	1
0x1101	2:49:02 PM	4	-41	0	867.5	30	1
0x1101	2:49:04 PM	4	-42	0	867.5	30	1
0x1101	2:49:05 PM	4	-42	0	867.5	30	1
0x1101	2:49:06 PM	4	-42	0	865.7	30	1
0x1101	2:49:07 PM	4	-42	0	866.3	30	1
0x1101	2:49:08 PM	4	-42	0	866.3	30	1
0x1101	2:49:09 PM	4	-42	0	866.3	30	1
0x1101	2:49:10 PM	4	-42	0	866.9	30	1
0x1101	2:49:11 PM	4	-42	0	867.5	30	1
0x1101	2:49:12 PM	4	-42	0	867.5	30	1
0x1101	2:49:14 PM	4	-42	0	865.7	30	1
0x1101	2:49:15 PM	4	-42	0	866.3	30	1
0x1101	2:49:16 PM	4	-42	0	866.9	30	1
0x1101	2:49:17 PM	4	-42	0	866.9	30	1
0x1102	2:46:47 PM	1	-41	0	866.3	30	1
0x1102	2:46:48 PM	1	-42	0	866.3	30	1
0x1102	2:46:49 PM	1	-41	0	866.3	30	1
0x1102	2:46:51 PM	1	-41	0	866.3	30	1
0x1102	2:46:52 PM	1	-41	0	866.9	30	1
0x1102	2:46:53 PM	1	-41	0	866.9	30	1
0x1102	2:46:54 PM	1	-41	0	866.9	30	1
0x1102	2:46:55 PM	1	-41	0	867.5	30	1
0x1102	2:46:56 PM	1	-41	0	867.5	30	1
0x1102	2:46:57 PM	1	-41	0	867.5	30	1
0x1102	2:46:59 PM	1	-41	0	867.5	30	1
0x1102	2:47:00 PM	1	-41	0	865.7	30	1
0x1102	2:47:01 PM	1	-41	0	865.7	30	1
0x1102	2:47:02 PM	1	-41	0	865.7	30	1
0x1102	2:47:03 PM	1	-41	0	866.3	30	1
0x1102	2:47:04 PM	1	-41	0	866.3	30	1
0x1102	2:47:05 PM	1	-41	0	866.3	30	1
0x1102	2:47:06 PM	1	-41	0	866.9	30	1
0x1102	2:47:08 PM	1	-41	0	866.9	30	1
0x1102	2:47:09 PM	1	-41	0	866.9	30	1
0x1102	2:47:10 PM	1	-41	0	866.9	30	1
0x1102	2:47:11 PM	1	-41	0	867.5	30	1
0x1102	2:47:12 PM	1	-41	0	867.5	30	1
0x1102	2:47:13 PM	1	-41	0	867.5	30	1
0x1102	2:47:13 PM	1	-41	0	867.5	30	1
0x1102	2:47:14 PM	1	-41	0	865.7	30	1
0x1102	2:47:16 PM	1	-41	0	865.7	30	1
0x1102	2:47:17 PM	1	-41	0	865.7	30	1
0x1102	2:47:27 PM	2	-42	0	866.9	30	1
0x1102	2:47:29 PM	2	-44	0	866.9	30	1
0x1102	2:47:30 PM	2	-42	0	866.9	30	1
0x1102	2:47:31 PM	2	-42	0	866.9	30	1
0x1102	2:47:32 PM	2	-42	0	867.5	30	1
0x1102	2:47:33 PM	2	-42	0	867.5	30	1
0x1102	2:47:35 PM	2	-42	0	867.5	30	1
0x1102	2:47:36 PM	2	-42	0	865.7	30	1
0x1102	2:47:37 PM	2	-42	0	865.7	30	1
0x1102	2:47:38 PM	2	-42	0	865.7	30	1
0x1102	2:47:39 PM	2	-42	0	866.3	30	1
0x1102	2:47:41 PM	2	-42	0	866.3	30	1
0x1102	2:47:42 PM	2	-42	0	866.3	30	1
0x1102	2:47:43 PM	2	-42	0	866.9	30	1
0x1102	2:47:44 PM	2	-42	0	866.9	30	1
0x1102	2:47:45 PM	2	-42	0	866.9	30	1
0x1102	2:47:47 PM	2	-42	0	867.5	30	1

0x1102	2:47:48 PM	2	-42	0	867.5	30	1
0x1102	2:47:49 PM	2	-42	0	867.5	30	1
0x1102	2:47:50 PM	2	-42	0	867.5	30	1
0x1102	2:47:51 PM	2	-42	0	865.7	30	1
0x1102	2:47:53 PM	2	-42	0	865.7	30	1
0x1102	2:47:54 PM	2	-42	0	865.7	30	1
0x1102	2:47:55 PM	2	-42	0	866.3	30	1
0x1102	2:47:56 PM	2	-42	0	866.3	30	1
0x1102	2:48:08 PM	3	-43	0	867.5	30	1
0x1102	2:48:09 PM	3	-43	0	867.5	30	1
0x1102	2:48:10 PM	3	-43	0	867.5	30	1
0x1102	2:48:11 PM	3	-43	0	867.5	30	1
0x1102	2:48:12 PM	3	-43	0	865.7	30	1
0x1102	2:48:14 PM	3	-43	0	865.7	30	1
0x1102	2:48:15 PM	3	-43	0	865.7	30	1
0x1102	2:48:16 PM	3	-43	0	866.3	30	1
0x1102	2:48:17 PM	3	-43	0	866.3	30	1
0x1102	2:48:19 PM	3	-43	0	866.3	30	1
0x1102	2:48:20 PM	3	-43	0	866.9	30	1
0x1102	2:48:21 PM	3	-43	0	866.9	30	1
0x1102	2:48:22 PM	3	-43	0	866.9	30	1
0x1102	2:48:23 PM	3	-43	0	867.5	30	1
0x1102	2:48:25 PM	3	-43	0	867.5	30	1
0x1102	2:48:26 PM	3	-43	0	867.5	30	1
0x1102	2:48:27 PM	3	-43	0	865.7	30	1
0x1102	2:48:28 PM	3	-43	0	865.7	30	1
0x1102	2:48:29 PM	3	-43	0	865.7	30	1
0x1102	2:48:31 PM	3	-43	0	866.3	30	1
0x1102	2:48:32 PM	3	-43	0	866.3	30	1
0x1102	2:48:33 PM	3	-43	0	866.3	30	1
0x1102	2:48:34 PM	3	-43	0	866.3	30	1
0x1102	2:48:35 PM	3	-43	0	866.9	30	1
0x1102	2:48:37 PM	3	-43	0	867.5	30	1
0x1103	2:46:48 PM	1	-61	0	866.3	30	1
0x1103	2:47:27 PM	2	-45	0	866.9	30	1
0x1103	2:47:29 PM	2	-49	0	866.9	30	1
0x1103	2:47:30 PM	2	-46	0	866.9	30	1
0x1103	2:47:31 PM	2	-45	0	866.9	30	1
0x1103	2:47:32 PM	2	-45	0	867.5	30	1
0x1103	2:47:34 PM	2	-45	0	867.5	30	1
0x1103	2:47:35 PM	2	-45	0	867.5	30	1
0x1103	2:47:36 PM	2	-45	0	865.7	30	1
0x1103	2:47:37 PM	2	-45	0	865.7	30	1
0x1103	2:47:39 PM	2	-45	0	865.7	30	1
0x1103	2:47:40 PM	2	-45	0	866.3	30	1
0x1103	2:47:41 PM	2	-45	0	866.3	30	1
0x1103	2:47:42 PM	2	-45	0	866.3	30	1
0x1103	2:47:44 PM	2	-45	0	866.9	30	1
0x1103	2:47:45 PM	2	-45	0	866.9	30	1
0x1103	2:47:46 PM	2	-45	0	866.9	30	1
0x1103	2:47:47 PM	2	-45	0	867.5	30	1
0x1103	2:47:49 PM	2	-44	0	867.5	30	1
0x1103	2:47:50 PM	2	-45	0	867.5	30	1
0x1103	2:47:51 PM	2	-46	0	865.7	30	1
0x1103	2:47:52 PM	2	-46	0	865.7	30	1
0x1103	2:47:53 PM	2	-46	0	865.7	30	1
0x1103	2:47:55 PM	2	-45	0	866.3	30	1
0x1103	2:47:56 PM	2	-45	0	866.3	30	1
0x1103	2:47:57 PM	2	-45	0	866.3	30	1

8.2.5 Round 5 with Empty Blood Bag

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:51:50 PM	0	-61	0	867.5	30	1
0x1101	2:51:51 PM	0	-59	0	867.5	30	1
0x1101	2:51:52 PM	0	-58	0	867.5	30	1
0x1101	2:51:53 PM	0	-58	0	867.5	30	1
0x1101	2:51:55 PM	0	-58	0	865.7	30	1
0x1101	2:51:56 PM	0	-58	0	865.7	30	1
0x1101	2:51:57 PM	0	-58	0	865.7	30	1
0x1101	2:51:58 PM	0	-57	0	866.3	30	1
0x1101	2:51:59 PM	0	-58	0	866.3	30	1
0x1101	2:52:00 PM	0	-58	0	866.3	30	1
0x1101	2:52:01 PM	0	-58	0	866.9	30	1
0x1101	2:52:02 PM	0	-58	0	866.9	30	1
0x1101	2:52:04 PM	0	-58	0	867.5	30	1
0x1101	2:52:05 PM	0	-58	0	867.5	30	1
0x1101	2:52:06 PM	0	-58	0	865.7	30	1
0x1101	2:52:07 PM	0	-59	0	866.3	30	1
0x1101	2:52:08 PM	0	-58	0	866.9	30	1
0x1101	2:52:09 PM	0	-59	0	866.9	30	1
0x1101	2:52:10 PM	0	-58	0	866.9	30	1
0x1101	2:52:11 PM	0	-58	0	866.9	30	1
0x1101	2:52:12 PM	0	-58	0	867.5	30	1
0x1101	2:52:14 PM	0	-58	0	867.5	30	1
0x1101	2:52:15 PM	0	-58	0	867.5	30	1
0x1101	2:52:16 PM	0	-58	0	865.7	30	1
0x1101	2:52:17 PM	0	-58	0	865.7	30	1
0x1101	2:52:18 PM	0	-58	0	865.7	30	1
0x1101	2:52:19 PM	0	-58	0	865.7	30	1
0x1101	2:52:30 PM	1	-48	0	867.5	30	1
0x1101	2:52:31 PM	1	-48	0	867.5	30	1
0x1101	2:52:32 PM	1	-48	0	865.7	30	1
0x1101	2:52:33 PM	1	-48	0	865.7	30	1
0x1101	2:52:34 PM	1	-48	0	865.7	30	1
0x1101	2:52:35 PM	1	-48	0	865.7	30	1
0x1101	2:52:36 PM	1	-48	0	865.7	30	1
0x1101	2:52:37 PM	1	-48	0	866.3	30	1
0x1101	2:52:38 PM	1	-48	0	866.3	30	1
0x1101	2:52:40 PM	1	-48	0	866.3	30	1
0x1101	2:52:41 PM	1	-47	0	866.9	30	1
0x1101	2:52:42 PM	1	-47	0	866.9	30	1
0x1101	2:52:43 PM	1	-47	0	866.9	30	1
0x1101	2:52:45 PM	1	-47	0	867.5	30	1
0x1101	2:52:46 PM	1	-47	0	867.5	30	1
0x1101	2:52:47 PM	1	-47	0	867.5	30	1
0x1101	2:52:48 PM	1	-47	0	865.7	30	1
0x1101	2:52:49 PM	1	-47	0	865.7	30	1
0x1101	2:52:51 PM	1	-47	0	865.7	30	1
0x1101	2:52:52 PM	1	-47	0	866.3	30	1
0x1101	2:52:53 PM	1	-47	0	866.3	30	1
0x1101	2:52:54 PM	1	-42	0	866.3	30	1
0x1101	2:52:55 PM	1	-47	0	866.9	30	1
0x1101	2:52:56 PM	1	-47	0	866.9	30	1
0x1101	2:52:57 PM	1	-46	0	866.9	30	1
0x1101	2:52:58 PM	1	-46	0	866.9	30	1
0x1101	2:52:59 PM	1	-46	0	867.5	30	1
0x1101	2:53:10 PM	2	-54	0	866.3	30	1

0x1101	2:53:11 PM	2	-52	0	866.3	30	1
0x1101	2:53:12 PM	2	-52	0	866.3	30	1
0x1101	2:53:14 PM	2	-51	0	866.3	30	1
0x1101	2:53:15 PM	2	-51	0	866.9	30	1
0x1101	2:53:16 PM	2	-52	0	866.9	30	1
0x1101	2:53:17 PM	2	-52	0	866.9	30	1
0x1101	2:53:18 PM	2	-52	0	867.5	30	1
0x1101	2:53:19 PM	2	-52	0	867.5	30	1
0x1101	2:53:20 PM	2	-52	0	867.5	30	1
0x1101	2:53:21 PM	2	-52	0	867.5	30	1
0x1101	2:53:22 PM	2	-52	0	865.7	30	1
0x1101	2:53:24 PM	2	-52	0	865.7	30	1
0x1101	2:53:25 PM	2	-52	0	865.7	30	1
0x1101	2:53:26 PM	2	-52	0	866.3	30	1
0x1101	2:53:27 PM	2	-52	0	866.3	30	1
0x1101	2:53:28 PM	2	-52	0	866.3	30	1
0x1101	2:53:29 PM	2	-52	0	866.3	30	1
0x1101	2:53:30 PM	2	-52	0	866.9	30	1
0x1101	2:53:31 PM	2	-52	0	866.9	30	1
0x1101	2:53:32 PM	2	-52	0	866.9	30	1
0x1101	2:53:34 PM	2	-52	0	867.5	30	1
0x1101	2:53:35 PM	2	-52	0	867.5	30	1
0x1101	2:53:36 PM	2	-52	0	867.5	30	1
0x1101	2:53:37 PM	2	-52	0	867.5	30	1
0x1101	2:53:38 PM	2	-52	0	865.7	30	1
0x1101	2:53:39 PM	2	-52	0	865.7	30	1
0x1101	2:53:40 PM	2	-53	0	865.7	30	1
0x1101	2:53:50 PM	3	-44	0	866.9	30	1
0x1101	2:53:54 PM	3	-60	0	865.7	30	1
0x1101	2:53:55 PM	3	-59	0	865.7	30	1
0x1101	2:53:56 PM	3	-60	0	865.7	30	1
0x1101	2:53:57 PM	3	-59	0	865.7	30	1
0x1101	2:53:58 PM	3	-60	0	866.3	30	1
0x1101	2:54:00 PM	3	-61	0	866.3	30	1
0x1101	2:54:01 PM	3	-61	0	866.3	30	1
0x1101	2:54:02 PM	3	-61	0	866.9	30	1
0x1101	2:54:03 PM	3	-61	0	866.9	30	1
0x1101	2:54:04 PM	3	-61	0	866.9	30	1
0x1101	2:54:08 PM	3	-60	0	867.5	30	1
0x1101	2:54:10 PM	3	-60	0	865.7	30	1
0x1101	2:54:11 PM	3	-60	0	865.7	30	1
0x1101	2:54:12 PM	3	-60	0	865.7	30	1
0x1101	2:54:13 PM	3	-61	0	866.3	30	1
0x1101	2:54:14 PM	3	-60	0	866.3	30	1
0x1101	2:54:15 PM	3	-60	0	866.3	30	1
0x1101	2:54:16 PM	3	-60	0	866.3	30	1
0x1101	2:54:18 PM	3	-61	0	866.9	30	1
0x1101	2:54:31 PM	4	-61	0	866.3	30	1
0x1101	2:54:32 PM	4	-59	0	866.9	30	1
0x1101	2:54:33 PM	4	-59	0	866.9	30	1
0x1101	2:54:34 PM	4	-58	0	867.5	30	1
0x1101	2:54:35 PM	4	-59	0	865.7	30	1
0x1101	2:54:36 PM	4	-59	0	865.7	30	1
0x1101	2:54:37 PM	4	-59	0	865.7	30	1
0x1101	2:54:39 PM	4	-59	0	865.7	30	1
0x1101	2:54:40 PM	4	-59	0	866.3	30	1
0x1101	2:54:41 PM	4	-59	0	866.9	30	1
0x1101	2:54:42 PM	4	-58	0	866.9	30	1
0x1101	2:54:43 PM	4	-58	0	866.9	30	1
0x1101	2:54:44 PM	4	-59	0	866.9	30	1

0x1101	2:54:45 PM	4	-58	0	867.5	30	1
0x1101	2:54:46 PM	4	-59	0	867.5	30	1
0x1101	2:54:47 PM	4	-58	0	867.5	30	1
0x1101	2:54:49 PM	4	-60	0	865.7	30	1
0x1101	2:54:50 PM	4	-59	0	865.7	30	1
0x1101	2:54:51 PM	4	-58	0	865.7	30	1
0x1101	2:54:52 PM	4	-59	0	865.7	30	1
0x1101	2:54:53 PM	4	-59	0	866.3	30	1
0x1101	2:54:54 PM	4	-59	0	866.9	30	1
0x1101	2:54:55 PM	4	-58	0	866.9	30	1
0x1101	2:54:56 PM	4	-58	0	866.9	30	1
0x1101	2:54:58 PM	4	-59	0	867.5	30	1
0x1101	2:54:59 PM	4	-59	0	865.7	30	1
0x1101	2:55:00 PM	4	-59	0	865.7	30	1
0x1102	2:52:30 PM	1	-48	0	867.5	30	1
0x1102	2:52:31 PM	1	-48	0	867.5	30	1
0x1102	2:52:32 PM	1	-48	0	865.7	30	1
0x1102	2:52:34 PM	1	-48	0	865.7	30	1
0x1102	2:52:35 PM	1	-48	0	865.7	30	1
0x1102	2:52:36 PM	1	-48	0	865.7	30	1
0x1102	2:52:37 PM	1	-48	0	866.3	30	1
0x1102	2:52:38 PM	1	-48	0	866.3	30	1
0x1102	2:52:40 PM	1	-48	0	866.3	30	1
0x1102	2:52:41 PM	1	-47	0	866.9	30	1
0x1102	2:52:42 PM	1	-47	0	866.9	30	1
0x1102	2:52:43 PM	1	-47	0	866.9	30	1
0x1102	2:52:45 PM	1	-47	0	867.5	30	1
0x1102	2:52:46 PM	1	-47	0	867.5	30	1
0x1102	2:52:47 PM	1	-47	0	867.5	30	1
0x1102	2:52:48 PM	1	-47	0	865.7	30	1
0x1102	2:52:49 PM	1	-47	0	865.7	30	1
0x1102	2:52:51 PM	1	-47	0	865.7	30	1
0x1102	2:52:52 PM	1	-47	0	866.3	30	1
0x1102	2:52:53 PM	1	-47	0	866.3	30	1
0x1102	2:52:54 PM	1	-42	0	866.3	30	1
0x1102	2:52:55 PM	1	-47	0	866.9	30	1
0x1102	2:52:57 PM	1	-46	0	866.9	30	1
0x1102	2:52:58 PM	1	-46	0	866.9	30	1
0x1102	2:52:59 PM	1	-46	0	867.5	30	1
0x1102	2:53:10 PM	2	-42	0	866.3	30	1
0x1102	2:53:11 PM	2	-46	0	866.3	30	1
0x1102	2:53:13 PM	2	-45	0	866.3	30	1
0x1102	2:53:14 PM	2	-45	0	866.3	30	1
0x1102	2:53:15 PM	2	-45	0	866.9	30	1
0x1102	2:53:16 PM	2	-45	0	866.9	30	1
0x1102	2:53:17 PM	2	-45	0	866.9	30	1
0x1102	2:53:19 PM	2	-45	0	867.5	30	1
0x1102	2:53:20 PM	2	-45	0	867.5	30	1
0x1102	2:53:21 PM	2	-45	0	867.5	30	1
0x1102	2:53:22 PM	2	-45	0	865.7	30	1
0x1102	2:53:23 PM	2	-40	0	865.7	30	1
0x1102	2:53:25 PM	2	-45	0	865.7	30	1
0x1102	2:53:26 PM	2	-45	0	866.3	30	1
0x1102	2:53:27 PM	2	-45	0	866.3	30	1
0x1102	2:53:28 PM	2	-45	0	866.3	30	1
0x1102	2:53:29 PM	2	-45	0	866.9	30	1
0x1102	2:53:31 PM	2	-45	0	866.9	30	1
0x1102	2:53:32 PM	2	-45	0	866.9	30	1
0x1102	2:53:33 PM	2	-45	0	867.5	30	1
0x1102	2:53:34 PM	2	-45	0	867.5	30	1

0x1102	2:53:36 PM	2	-45	0	867.5	30	1
0x1102	2:53:37 PM	2	-45	0	867.5	30	1
0x1102	2:53:38 PM	2	-45	0	865.7	30	1
0x1102	2:53:39 PM	2	-45	0	865.7	30	1
0x1102	2:53:50 PM	3	-42	0	866.9	30	1
0x1102	2:53:52 PM	3	-45	0	867.5	30	1
0x1102	2:53:53 PM	3	-50	0	867.5	30	1
0x1102	2:53:54 PM	3	-50	0	865.7	30	1
0x1102	2:53:55 PM	3	-50	0	865.7	30	1
0x1102	2:53:56 PM	3	-50	0	865.7	30	1
0x1102	2:53:58 PM	3	-50	0	865.7	30	1
0x1102	2:53:59 PM	3	-50	0	866.3	30	1
0x1102	2:54:00 PM	3	-50	0	866.3	30	1
0x1102	2:54:01 PM	3	-50	0	866.3	30	1
0x1102	2:54:03 PM	3	-50	0	866.9	30	1
0x1102	2:54:04 PM	3	-50	0	866.9	30	1
0x1102	2:54:05 PM	3	-50	0	866.9	30	1
0x1102	2:54:06 PM	3	-49	0	867.5	30	1
0x1102	2:54:07 PM	3	-49	0	867.5	30	1
0x1102	2:54:09 PM	3	-50	0	867.5	30	1
0x1102	2:54:10 PM	3	-50	0	865.7	30	1
0x1102	2:54:11 PM	3	-50	0	865.7	30	1
0x1102	2:54:12 PM	3	-50	0	865.7	30	1
0x1102	2:54:13 PM	3	-50	0	866.3	30	1
0x1102	2:54:15 PM	3	-50	0	866.3	30	1
0x1102	2:54:16 PM	3	-50	0	866.3	30	1
0x1102	2:54:17 PM	3	-50	0	866.9	30	1
0x1102	2:54:18 PM	3	-50	0	866.9	30	1
0x1102	2:54:19 PM	3	-49	0	867.5	30	1
0x1103	2:53:10 PM	2	-42	0	866.3	30	1
0x1103	2:53:11 PM	2	-42	0	866.3	30	1
0x1103	2:53:13 PM	2	-43	0	866.3	30	1
0x1103	2:53:14 PM	2	-43	0	866.3	30	1
0x1103	2:53:15 PM	2	-40	0	866.9	30	1
0x1103	2:53:16 PM	2	-43	0	866.9	30	1
0x1103	2:53:18 PM	2	-43	0	866.9	30	1
0x1103	2:53:19 PM	2	-43	0	867.5	30	1
0x1103	2:53:20 PM	2	-43	0	867.5	30	1
0x1103	2:53:21 PM	2	-43	0	867.5	30	1
0x1103	2:53:23 PM	2	-43	0	865.7	30	1
0x1103	2:53:24 PM	2	-43	0	865.7	30	1
0x1103	2:53:25 PM	2	-43	0	865.7	30	1
0x1103	2:53:26 PM	2	-43	0	866.3	30	1
0x1103	2:53:28 PM	2	-43	0	866.3	30	1
0x1103	2:53:29 PM	2	-43	0	866.3	30	1
0x1103	2:53:30 PM	2	-43	0	866.9	30	1
0x1103	2:53:31 PM	2	-43	0	866.9	30	1
0x1103	2:53:33 PM	2	-43	0	866.9	30	1
0x1103	2:53:34 PM	2	-43	0	867.5	30	1
0x1103	2:53:35 PM	2	-43	0	867.5	30	1
0x1103	2:53:36 PM	2	-43	0	867.5	30	1
0x1103	2:53:37 PM	2	-43	0	865.7	30	1
0x1103	2:53:39 PM	2	-43	0	865.7	30	1
0x1103	2:53:40 PM	2	-43	0	865.7	30	1

8.2.6 Round 6 with Empty Blood Bag

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:57:23 PM	0	-41	0	866.9	30	1
0x1101	2:57:24 PM	0	-41	0	866.9	30	1
0x1101	2:57:25 PM	0	-41	0	867.5	30	1
0x1101	2:57:27 PM	0	-41	0	865.7	30	1
0x1101	2:57:28 PM	0	-41	0	865.7	30	1
0x1101	2:57:29 PM	0	-41	0	865.7	30	1
0x1101	2:57:30 PM	0	-41	0	865.7	30	1
0x1101	2:57:31 PM	0	-41	0	866.3	30	1
0x1101	2:57:32 PM	0	-41	0	866.3	30	1
0x1101	2:57:33 PM	0	-41	0	866.3	30	1
0x1101	2:57:34 PM	0	-41	0	866.9	30	1
0x1101	2:57:35 PM	0	-41	0	866.9	30	1
0x1101	2:57:36 PM	0	-41	0	866.9	30	1
0x1101	2:57:37 PM	0	-41	0	866.9	30	1
0x1101	2:57:38 PM	0	-41	0	867.5	30	1
0x1101	2:57:39 PM	0	-41	0	867.5	30	1
0x1101	2:57:40 PM	0	-41	0	867.5	30	1
0x1101	2:57:41 PM	0	-41	0	867.5	30	1
0x1101	2:57:42 PM	0	-41	0	865.7	30	1
0x1101	2:57:43 PM	0	-41	0	865.7	30	1
0x1101	2:57:44 PM	0	-41	0	865.7	30	1
0x1101	2:57:45 PM	0	-41	0	865.7	30	1
0x1101	2:57:46 PM	0	-41	0	866.3	30	1
0x1101	2:57:47 PM	0	-41	0	866.3	30	1
0x1101	2:57:48 PM	0	-41	0	866.3	30	1
0x1101	2:57:49 PM	0	-41	0	866.3	30	1
0x1101	2:57:50 PM	0	-41	0	866.9	30	1
0x1101	2:57:51 PM	0	-41	0	866.9	30	1
0x1101	2:57:52 PM	0	-41	0	866.9	30	1
0x1101	2:57:53 PM	0	-41	0	866.9	30	1
0x1101	2:58:03 PM	1	-49	0	866.3	30	1
0x1101	2:58:05 PM	1	-49	0	866.9	30	1
0x1101	2:58:06 PM	1	-53	0	866.9	30	1
0x1101	2:58:07 PM	1	-52	0	866.9	30	1
0x1101	2:58:08 PM	1	-52	0	866.9	30	1
0x1101	2:58:09 PM	1	-52	0	867.5	30	1
0x1101	2:58:10 PM	1	-51	0	867.5	30	1
0x1101	2:58:11 PM	1	-52	0	867.5	30	1
0x1101	2:58:12 PM	1	-53	0	865.7	30	1
0x1101	2:58:13 PM	1	-53	0	865.7	30	1
0x1101	2:58:15 PM	1	-53	0	865.7	30	1
0x1101	2:58:16 PM	1	-53	0	865.7	30	1
0x1101	2:58:17 PM	1	-52	0	866.3	30	1
0x1101	2:58:18 PM	1	-52	0	866.3	30	1
0x1101	2:58:19 PM	1	-52	0	866.3	30	1
0x1101	2:58:20 PM	1	-52	0	866.9	30	1
0x1101	2:58:21 PM	1	-52	0	866.9	30	1
0x1101	2:58:22 PM	1	-52	0	866.9	30	1
0x1101	2:58:24 PM	1	-52	0	866.9	30	1
0x1101	2:58:25 PM	1	-52	0	867.5	30	1
0x1101	2:58:26 PM	1	-52	0	867.5	30	1
0x1101	2:58:27 PM	1	-52	0	867.5	30	1
0x1101	2:58:28 PM	1	-53	0	865.7	30	1
0x1101	2:58:29 PM	1	-53	0	865.7	30	1
0x1101	2:58:30 PM	1	-53	0	865.7	30	1

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0x1101	2:58:31 PM	1	-53	0	866.3	30	1
0x1101	2:58:32 PM	1	-53	0	866.3	30	1
0x1101	2:58:44 PM	2	-47	0	867.5	30	1
0x1101	2:58:45 PM	2	-46	0	865.7	30	1
0x1101	2:58:46 PM	2	-46	0	865.7	30	1
0x1101	2:58:47 PM	2	-46	0	865.7	30	1
0x1101	2:58:48 PM	2	-45	0	865.7	30	1
0x1101	2:58:49 PM	2	-46	0	866.3	30	1
0x1101	2:58:50 PM	2	-45	0	866.3	30	1
0x1101	2:58:52 PM	2	-45	0	866.3	30	1
0x1101	2:58:53 PM	2	-46	0	866.9	30	1
0x1101	2:58:54 PM	2	-46	0	866.9	30	1
0x1101	2:58:55 PM	2	-46	0	866.9	30	1
0x1101	2:58:56 PM	2	-45	0	866.9	30	1
0x1101	2:58:57 PM	2	-46	0	867.5	30	1
0x1101	2:58:58 PM	2	-46	0	867.5	30	1
0x1101	2:58:59 PM	2	-46	0	867.5	30	1
0x1101	2:59:00 PM	2	-45	0	865.7	30	1
0x1101	2:59:02 PM	2	-45	0	865.7	30	1
0x1101	2:59:03 PM	2	-45	0	865.7	30	1
0x1101	2:59:04 PM	2	-45	0	865.7	30	1
0x1101	2:59:05 PM	2	-45	0	866.3	30	1
0x1101	2:59:06 PM	2	-45	0	866.3	30	1
0x1101	2:59:07 PM	2	-45	0	866.3	30	1
0x1101	2:59:08 PM	2	-45	0	866.9	30	1
0x1101	2:59:09 PM	2	-45	0	866.9	30	1
0x1101	2:59:10 PM	2	-45	0	866.9	30	1
0x1101	2:59:12 PM	2	-45	0	867.5	30	1
0x1101	2:59:13 PM	2	-45	0	867.5	30	1
0x1101	2:59:24 PM	3	-42	0	866.3	30	1
0x1101	2:59:25 PM	3	-36	0	866.9	30	1
0x1101	2:59:26 PM	3	-42	0	866.9	30	1
0x1101	2:59:27 PM	3	-42	0	866.9	30	1
0x1101	2:59:28 PM	3	-42	0	866.9	30	1
0x1101	2:59:29 PM	3	-42	0	867.5	30	1
0x1101	2:59:31 PM	3	-42	0	867.5	30	1
0x1101	2:59:32 PM	3	-46	0	867.5	30	1
0x1101	2:59:33 PM	3	-44	0	865.7	30	1
0x1101	2:59:34 PM	3	-46	0	866.3	30	1
0x1101	2:59:35 PM	3	-49	0	866.3	30	1
0x1101	2:59:36 PM	3	-49	0	866.3	30	1
0x1101	2:59:37 PM	3	-49	0	866.3	30	1
0x1101	2:59:38 PM	3	-49	0	866.9	30	1
0x1101	2:59:39 PM	3	-48	0	866.9	30	1
0x1101	2:59:40 PM	3	-49	0	866.9	30	1
0x1101	2:59:42 PM	3	-48	0	867.5	30	1
0x1101	2:59:43 PM	3	-48	0	867.5	30	1
0x1101	2:59:44 PM	3	-48	0	867.5	30	1
0x1101	2:59:45 PM	3	-48	0	867.5	30	1
0x1101	2:59:46 PM	3	-46	0	865.7	30	1
0x1101	2:59:47 PM	3	-50	0	865.7	30	1
0x1101	2:59:48 PM	3	-50	0	865.7	30	1
0x1101	2:59:49 PM	3	-49	0	866.3	30	1
0x1101	2:59:51 PM	3	-49	0	866.3	30	1
0x1101	2:59:52 PM	3	-49	0	866.3	30	1
0x1101	2:59:53 PM	3	-49	0	866.3	30	1
0x1101	2:59:54 PM	3	-49	0	866.9	30	1
0x1101	3:00:04 PM	4	-43	0	865.7	30	1
0x1101	3:00:05 PM	4	-43	0	866.3	30	1
0x1101	3:00:07 PM	4	-51	0	866.3	30	1

0x1101	3:00:08 PM	4	-50	0	866.3	30	1
0x1101	3:00:09 PM	4	-50	0	866.3	30	1
0x1101	3:00:10 PM	4	-50	0	867.5	30	1
0x1101	3:00:11 PM	4	-49	0	867.5	30	1
0x1101	3:00:12 PM	4	-50	0	865.7	30	1
0x1101	3:00:13 PM	4	-50	0	865.7	30	1
0x1101	3:00:15 PM	4	-50	0	866.3	30	1
0x1101	3:00:16 PM	4	-50	0	866.3	30	1
0x1101	3:00:17 PM	4	-50	0	866.9	30	1
0x1101	3:00:18 PM	4	-49	0	867.5	30	1
0x1101	3:00:19 PM	4	-50	0	865.7	30	1
0x1101	3:00:20 PM	4	-50	0	865.7	30	1
0x1101	3:00:21 PM	4	-50	0	865.7	30	1
0x1101	3:00:22 PM	4	-50	0	866.3	30	1
0x1101	3:00:24 PM	4	-50	0	866.3	30	1
0x1101	3:00:25 PM	4	-50	0	866.9	30	1
0x1101	3:00:26 PM	4	-50	0	866.9	30	1
0x1101	3:00:27 PM	4	-49	0	867.5	30	1
0x1101	3:00:28 PM	4	-50	0	865.7	30	1
0x1101	3:00:29 PM	4	-50	0	866.3	30	1
0x1101	3:00:30 PM	4	-50	0	866.3	30	1
0x1101	3:00:31 PM	4	-50	0	866.3	30	1
0x1101	3:00:32 PM	4	-50	0	866.3	30	1
0x1101	3:00:34 PM	4	-50	0	866.9	30	1
0x1102	2:58:03 PM	1	-43	0	866.3	30	1
0x1102	2:58:05 PM	1	-44	0	866.9	30	1
0x1102	2:58:06 PM	1	-45	0	866.9	30	1
0x1102	2:58:07 PM	1	-45	0	866.9	30	1
0x1102	2:58:08 PM	1	-45	0	866.9	30	1
0x1102	2:58:09 PM	1	-46	0	867.5	30	1
0x1102	2:58:11 PM	1	-46	0	867.5	30	1
0x1102	2:58:12 PM	1	-46	0	867.5	30	1
0x1102	2:58:13 PM	1	-46	0	865.7	30	1
0x1102	2:58:14 PM	1	-46	0	865.7	30	1
0x1102	2:58:15 PM	1	-46	0	865.7	30	1
0x1102	2:58:17 PM	1	-46	0	866.3	30	1
0x1102	2:58:18 PM	1	-46	0	866.3	30	1
0x1102	2:58:19 PM	1	-46	0	866.3	30	1
0x1102	2:58:20 PM	1	-46	0	866.9	30	1
0x1102	2:58:22 PM	1	-46	0	866.9	30	1
0x1102	2:58:23 PM	1	-46	0	866.9	30	1
0x1102	2:58:24 PM	1	-42	0	867.5	30	1
0x1102	2:58:25 PM	1	-46	0	867.5	30	1
0x1102	2:58:26 PM	1	-46	0	867.5	30	1
0x1102	2:58:28 PM	1	-46	0	865.7	30	1
0x1102	2:58:29 PM	1	-46	0	865.7	30	1
0x1102	2:58:30 PM	1	-46	0	865.7	30	1
0x1102	2:58:31 PM	1	-46	0	866.3	30	1
0x1102	2:58:32 PM	1	-46	0	866.3	30	1
0x1102	2:58:44 PM	2	-47	0	867.5	30	1
0x1102	2:58:45 PM	2	-43	0	865.7	30	1
0x1102	2:58:46 PM	2	-43	0	865.7	30	1
0x1102	2:58:47 PM	2	-43	0	865.7	30	1
0x1102	2:58:49 PM	2	-43	0	865.7	30	1
0x1102	2:58:50 PM	2	-43	0	866.3	30	1
0x1102	2:58:51 PM	2	-43	0	866.3	30	1
0x1102	2:58:52 PM	2	-43	0	866.3	30	1
0x1102	2:58:53 PM	2	-43	0	866.9	30	1
0x1102	2:58:55 PM	2	-43	0	866.9	30	1
0x1102	2:58:56 PM	2	-43	0	866.9	30	1

0x1102	2:58:57 PM	2	-43	0	867.5	30	1
0x1102	2:58:58 PM	2	-43	0	867.5	30	1
0x1102	2:58:59 PM	2	-43	0	867.5	30	1
0x1102	2:59:01 PM	2	-43	0	865.7	30	1
0x1102	2:59:02 PM	2	-43	0	865.7	30	1
0x1102	2:59:03 PM	2	-43	0	865.7	30	1
0x1102	2:59:04 PM	2	-43	0	866.3	30	1
0x1102	2:59:05 PM	2	-43	0	866.3	30	1
0x1102	2:59:07 PM	2	-43	0	866.3	30	1
0x1102	2:59:08 PM	2	-43	0	866.9	30	1
0x1102	2:59:09 PM	2	-43	0	866.9	30	1
0x1102	2:59:10 PM	2	-43	0	866.9	30	1
0x1102	2:59:11 PM	2	-43	0	867.5	30	1
0x1102	2:59:13 PM	2	-43	0	867.5	30	1
0x1102	2:59:24 PM	3	-50	0	866.3	30	1
0x1102	2:59:26 PM	3	-60	0	866.9	30	1
0x1102	2:59:30 PM	3	-50	0	867.5	30	1
0x1102	2:59:32 PM	3	-42	0	867.5	30	1
0x1102	2:59:33 PM	3	-42	0	865.7	30	1
0x1102	2:59:34 PM	3	-42	0	866.3	30	1
0x1102	2:59:35 PM	3	-42	0	866.3	30	1
0x1102	2:59:36 PM	3	-42	0	866.3	30	1
0x1102	2:59:38 PM	3	-42	0	866.3	30	1
0x1102	2:59:39 PM	3	-42	0	866.9	30	1
0x1102	2:59:40 PM	3	-42	0	866.9	30	1
0x1102	2:59:41 PM	3	-42	0	866.9	30	1
0x1102	2:59:42 PM	3	-42	0	867.5	30	1
0x1102	2:59:44 PM	3	-42	0	867.5	30	1
0x1102	2:59:45 PM	3	-42	0	867.5	30	1
0x1102	2:59:46 PM	3	-42	0	865.7	30	1
0x1102	2:59:47 PM	3	-42	0	865.7	30	1
0x1102	2:59:48 PM	3	-42	0	865.7	30	1
0x1102	2:59:50 PM	3	-42	0	866.3	30	1
0x1102	2:59:51 PM	3	-42	0	866.3	30	1
0x1102	2:59:52 PM	3	-42	0	866.3	30	1
0x1102	2:59:53 PM	3	-42	0	866.9	30	1
0x1102	3:00:04 PM	4	-41	0	865.7	30	1
0x1102	3:00:05 PM	4	-42	0	866.3	30	1
0x1103	2:58:44 PM	2	-43	0	867.5	30	1
0x1103	2:58:45 PM	2	-42	0	865.7	30	1
0x1103	2:58:46 PM	2	-42	0	865.7	30	1
0x1103	2:58:47 PM	2	-42	0	865.7	30	1
0x1103	2:58:49 PM	2	-42	0	866.3	30	1
0x1103	2:58:50 PM	2	-42	0	866.3	30	1
0x1103	2:58:51 PM	2	-42	0	866.3	30	1
0x1103	2:58:52 PM	2	-42	0	866.3	30	1
0x1103	2:58:54 PM	2	-42	0	866.9	30	1
0x1103	2:58:55 PM	2	-42	0	866.9	30	1
0x1103	2:58:56 PM	2	-42	0	866.9	30	1
0x1103	2:58:57 PM	2	-42	0	867.5	30	1
0x1103	2:58:59 PM	2	-42	0	867.5	30	1
0x1103	2:59:00 PM	2	-42	0	867.5	30	1
0x1103	2:59:01 PM	2	-42	0	865.7	30	1
0x1103	2:59:02 PM	2	-42	0	865.7	30	1
0x1103	2:59:04 PM	2	-42	0	865.7	30	1
0x1103	2:59:05 PM	2	-42	0	866.3	30	1
0x1103	2:59:06 PM	2	-42	0	866.3	30	1
0x1103	2:59:07 PM	2	-42	0	866.3	30	1
0x1103	2:59:09 PM	2	-42	0	866.9	30	1
0x1103	2:59:10 PM	2	-42	0	866.9	30	1

0x1103	2:59:11 PM	2	-42	0	866.9	30	1
0x1103	2:59:12 PM	2	-42	0	867.5	30	1
0x1103	2:59:13 PM	2	-42	0	867.5	30	1

8.2.7 Round 7 of Blood Bag with Energy Drink

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:34:49 PM	0	-47	0	865.7	30	1
0x1101	2:34:50 PM	0	-47	0	866.3	30	1
0x1101	2:34:51 PM	0	-47	0	866.9	30	1
0x1101	2:34:52 PM	0	-47	0	867.5	30	1
0x1101	2:34:53 PM	0	-47	0	865.7	30	1
0x1101	2:34:54 PM	0	-47	0	866.3	30	1
0x1101	2:34:55 PM	0	-47	0	866.9	30	1
0x1101	2:34:56 PM	0	-47	0	867.5	30	1
0x1101	2:34:58 PM	0	-47	0	865.7	30	1
0x1101	2:34:59 PM	0	-47	0	866.3	30	1
0x1101	2:35:00 PM	0	-47	0	866.9	30	1
0x1101	2:35:01 PM	0	-47	0	867.5	30	1
0x1101	2:35:02 PM	0	-47	0	865.7	30	1
0x1101	2:35:03 PM	0	-47	0	866.3	30	1
0x1101	2:35:04 PM	0	-47	0	866.9	30	1
0x1101	2:35:05 PM	0	-47	0	867.5	30	1
0x1101	2:35:07 PM	0	-47	0	865.7	30	1
0x1101	2:35:08 PM	0	-47	0	866.3	30	1
0x1101	2:35:09 PM	0	-47	0	866.9	30	1
0x1101	2:35:10 PM	0	-47	0	867.5	30	1
0x1101	2:35:11 PM	0	-47	0	865.7	30	1
0x1101	2:35:12 PM	0	-47	0	866.3	30	1
0x1101	2:35:13 PM	0	-47	0	866.9	30	1
0x1101	2:35:14 PM	0	-47	0	867.5	30	1
0x1101	2:35:15 PM	0	-47	0	865.7	30	1
0x1101	2:35:17 PM	0	-47	0	866.3	30	1
0x1101	2:35:18 PM	0	-47	0	866.9	30	1
0x1101	2:35:29 PM	1	-52	0	865.7	30	1
0x1101	2:35:30 PM	1	-52	0	866.3	30	1
0x1101	2:35:31 PM	1	-52	0	866.3	30	1
0x1101	2:35:32 PM	1	-52	0	866.3	30	1
0x1101	2:35:33 PM	1	-52	0	866.3	30	1
0x1101	2:35:35 PM	1	-52	0	866.9	30	1
0x1101	2:35:36 PM	1	-52	0	866.9	30	1
0x1101	2:35:37 PM	1	-52	0	866.9	30	1
0x1101	2:35:38 PM	1	-52	0	867.5	30	1
0x1101	2:35:39 PM	1	-52	0	867.5	30	1
0x1101	2:35:40 PM	1	-52	0	867.5	30	1
0x1101	2:35:41 PM	1	-52	0	865.7	30	1
0x1101	2:35:43 PM	1	-52	0	866.3	30	1
0x1101	2:35:44 PM	1	-52	0	866.9	30	1
0x1101	2:35:45 PM	1	-52	0	866.9	30	1
0x1101	2:35:46 PM	1	-52	0	866.9	30	1
0x1101	2:35:47 PM	1	-52	0	866.9	30	1
0x1101	2:35:48 PM	1	-52	0	867.5	30	1
0x1101	2:35:49 PM	1	-52	0	867.5	30	1
0x1101	2:35:51 PM	1	-52	0	867.5	30	1
0x1101	2:35:52 PM	1	-52	0	865.7	30	1
0x1101	2:35:53 PM	1	-51	0	865.7	30	1

0x1101	2:35:54 PM	1	-52	0	866.3	30	1
0x1101	2:35:55 PM	1	-52	0	866.9	30	1
0x1101	2:35:56 PM	1	-52	0	867.5	30	1
0x1101	2:35:57 PM	1	-52	0	867.5	30	1
0x1101	2:35:58 PM	1	-52	0	867.5	30	1
0x1101	2:36:09 PM	2	-56	0	866.3	30	1
0x1101	2:36:10 PM	2	-57	0	866.9	30	1
0x1101	2:36:11 PM	2	-57	0	866.9	30	1
0x1101	2:36:12 PM	2	-57	0	866.9	30	1
0x1101	2:36:14 PM	2	-57	0	866.9	30	1
0x1101	2:36:15 PM	2	-57	0	867.5	30	1
0x1101	2:36:16 PM	2	-57	0	867.5	30	1
0x1101	2:36:17 PM	2	-57	0	867.5	30	1
0x1101	2:36:18 PM	2	-56	0	865.7	30	1
0x1101	2:36:19 PM	2	-56	0	865.7	30	1
0x1101	2:36:20 PM	2	-56	0	865.7	30	1
0x1101	2:36:22 PM	2	-56	0	866.3	30	1
0x1101	2:36:23 PM	2	-56	0	866.3	30	1
0x1101	2:36:24 PM	2	-56	0	866.3	30	1
0x1101	2:36:25 PM	2	-56	0	866.3	30	1
0x1101	2:36:26 PM	2	-57	0	866.9	30	1
0x1101	2:36:27 PM	2	-57	0	866.9	30	1
0x1101	2:36:28 PM	2	-57	0	866.9	30	1
0x1101	2:36:30 PM	2	-57	0	867.5	30	1
0x1101	2:36:31 PM	2	-57	0	867.5	30	1
0x1101	2:36:32 PM	2	-57	0	867.5	30	1
0x1101	2:36:33 PM	2	-57	0	867.5	30	1
0x1101	2:36:34 PM	2	-56	0	865.7	30	1
0x1101	2:36:35 PM	2	-56	0	865.7	30	1
0x1101	2:36:36 PM	2	-56	0	865.7	30	1
0x1101	2:36:37 PM	2	-56	0	866.3	30	1
0x1101	2:36:39 PM	2	-56	0	866.3	30	1
0x1101	2:36:50 PM	3	-60	0	865.7	30	1
0x1101	2:36:51 PM	3	-60	0	865.7	30	1
0x1101	2:36:53 PM	3	-60	0	865.7	30	1
0x1101	2:36:54 PM	3	-59	0	865.7	30	1
0x1101	2:36:55 PM	3	-60	0	866.3	30	1
0x1101	2:36:56 PM	3	-61	0	866.3	30	1
0x1101	2:36:57 PM	3	-61	0	866.3	30	1
0x1101	2:36:58 PM	3	-61	0	866.9	30	1
0x1101	2:36:59 PM	3	-61	0	866.9	30	1
0x1101	2:37:02 PM	3	-59	0	865.7	30	1
0x1101	2:37:03 PM	3	-59	0	865.7	30	1
0x1101	2:37:04 PM	3	-59	0	865.7	30	1
0x1101	2:37:05 PM	3	-59	0	865.7	30	1
0x1101	2:37:06 PM	3	-61	0	866.3	30	1
0x1101	2:37:07 PM	3	-60	0	866.3	30	1
0x1101	2:37:08 PM	3	-60	0	866.3	30	1
0x1101	2:37:10 PM	3	-61	0	866.9	30	1
0x1101	2:37:11 PM	3	-61	0	866.9	30	1
0x1101	2:37:13 PM	3	-59	0	865.7	30	1
0x1101	2:37:14 PM	3	-59	0	865.7	30	1
0x1101	2:37:15 PM	3	-59	0	865.7	30	1
0x1101	2:37:16 PM	3	-59	0	865.7	30	1
0x1101	2:37:17 PM	3	-60	0	866.3	30	1
0x1101	2:37:19 PM	3	-60	0	866.3	30	1
0x1101	2:37:29 PM	4	-46	0	867.5	30	1
0x1101	2:37:31 PM	4	-46	0	865.7	30	1
0x1101	2:37:32 PM	4	-46	0	866.3	30	1
0x1101	2:37:33 PM	4	-46	0	866.9	30	1

0x1101	2:37:34 PM	4	-46	0	867.5	30	1
0x1101	2:37:35 PM	4	-46	0	865.7	30	1
0x1101	2:37:36 PM	4	-46	0	866.3	30	1
0x1101	2:37:37 PM	4	-46	0	866.9	30	1
0x1101	2:37:39 PM	4	-46	0	867.5	30	1
0x1101	2:37:40 PM	4	-46	0	865.7	30	1
0x1101	2:37:41 PM	4	-46	0	866.3	30	1
0x1101	2:37:42 PM	4	-46	0	866.9	30	1
0x1101	2:37:43 PM	4	-46	0	867.5	30	1
0x1101	2:37:44 PM	4	-46	0	865.7	30	1
0x1101	2:37:45 PM	4	-46	0	866.3	30	1
0x1101	2:37:47 PM	4	-46	0	866.9	30	1
0x1101	2:37:48 PM	4	-46	0	867.5	30	1
0x1101	2:37:49 PM	4	-46	0	865.7	30	1
0x1101	2:37:50 PM	4	-46	0	866.3	30	1
0x1101	2:37:51 PM	4	-46	0	866.9	30	1
0x1101	2:37:52 PM	4	-46	0	867.5	30	1
0x1101	2:37:53 PM	4	-46	0	865.7	30	1
0x1101	2:37:54 PM	4	-45	0	866.3	30	1
0x1101	2:37:56 PM	4	-46	0	866.9	30	1
0x1101	2:37:57 PM	4	-46	0	867.5	30	1
0x1101	2:37:58 PM	4	-46	0	865.7	30	1
0x1101	2:37:59 PM	4	-45	0	866.3	30	1
0x1102	2:35:29 PM	1	-52	0	865.7	30	1
0x1102	2:35:30 PM	1	-53	0	866.3	30	1
0x1102	2:35:31 PM	1	-54	0	866.3	30	1
0x1102	2:35:33 PM	1	-54	0	866.3	30	1
0x1102	2:35:34 PM	1	-55	0	866.9	30	1
0x1102	2:35:35 PM	1	-55	0	866.9	30	1
0x1102	2:35:36 PM	1	-55	0	866.9	30	1
0x1102	2:35:38 PM	1	-55	0	867.5	30	1
0x1102	2:35:39 PM	1	-55	0	867.5	30	1
0x1102	2:35:40 PM	1	-55	0	867.5	30	1
0x1102	2:35:41 PM	1	-53	0	865.7	30	1
0x1102	2:35:43 PM	1	-54	0	866.3	30	1
0x1102	2:35:44 PM	1	-54	0	866.9	30	1
0x1102	2:35:45 PM	1	-54	0	866.9	30	1
0x1102	2:35:46 PM	1	-54	0	866.9	30	1
0x1102	2:35:48 PM	1	-55	0	867.5	30	1
0x1102	2:35:49 PM	1	-55	0	867.5	30	1
0x1102	2:35:50 PM	1	-54	0	867.5	30	1
0x1102	2:35:51 PM	1	-53	0	865.7	30	1
0x1102	2:35:53 PM	1	-53	0	865.7	30	1
0x1102	2:35:54 PM	1	-54	0	866.3	30	1
0x1102	2:35:55 PM	1	-54	0	866.9	30	1
0x1102	2:35:56 PM	1	-54	0	867.5	30	1
0x1102	2:35:58 PM	1	-54	0	867.5	30	1
0x1102	2:36:09 PM	2	-55	0	866.3	30	1
0x1102	2:36:10 PM	2	-56	0	866.9	30	1
0x1102	2:36:12 PM	2	-55	0	866.9	30	1
0x1102	2:36:13 PM	2	-56	0	866.9	30	1
0x1102	2:36:14 PM	2	-55	0	867.5	30	1
0x1102	2:36:15 PM	2	-55	0	867.5	30	1
0x1102	2:36:17 PM	2	-55	0	867.5	30	1
0x1102	2:36:18 PM	2	-55	0	865.7	30	1
0x1102	2:36:19 PM	2	-55	0	865.7	30	1
0x1102	2:36:20 PM	2	-55	0	865.7	30	1
0x1102	2:36:22 PM	2	-55	0	866.3	30	1
0x1102	2:36:23 PM	2	-55	0	866.3	30	1
0x1102	2:36:24 PM	2	-55	0	866.3	30	1

0x1102	2:36:25 PM	2	-55	0	866.3	30	1
0x1102	2:36:27 PM	2	-55	0	866.9	30	1
0x1102	2:36:28 PM	2	-55	0	866.9	30	1
0x1102	2:36:29 PM	2	-55	0	866.9	30	1
0x1102	2:36:30 PM	2	-55	0	867.5	30	1
0x1102	2:36:32 PM	2	-54	0	867.5	30	1
0x1102	2:36:33 PM	2	-54	0	867.5	30	1
0x1102	2:36:34 PM	2	-55	0	865.7	30	1
0x1102	2:36:35 PM	2	-55	0	865.7	30	1
0x1102	2:36:37 PM	2	-55	0	865.7	30	1
0x1102	2:36:38 PM	2	-55	0	866.3	30	1
0x1102	2:36:49 PM	3	-55	0	867.5	30	1
0x1102	2:36:51 PM	3	-55	0	865.7	30	1
0x1102	2:36:52 PM	3	-55	0	865.7	30	1
0x1102	2:36:53 PM	3	-55	0	865.7	30	1
0x1102	2:36:54 PM	3	-56	0	866.3	30	1
0x1102	2:36:56 PM	3	-55	0	866.3	30	1
0x1102	2:36:57 PM	3	-56	0	866.3	30	1
0x1102	2:36:58 PM	3	-56	0	866.9	30	1
0x1102	2:36:59 PM	3	-56	0	866.9	30	1
0x1102	2:37:01 PM	3	-56	0	867.5	30	1
0x1102	2:37:02 PM	3	-55	0	865.7	30	1
0x1102	2:37:03 PM	3	-56	0	865.7	30	1
0x1102	2:37:04 PM	3	-56	0	865.7	30	1
0x1102	2:37:06 PM	3	-56	0	866.3	30	1
0x1102	2:37:07 PM	3	-56	0	866.3	30	1
0x1102	2:37:08 PM	3	-56	0	866.3	30	1
0x1102	2:37:09 PM	3	-56	0	866.9	30	1
0x1102	2:37:11 PM	3	-56	0	866.9	30	1
0x1102	2:37:12 PM	3	-56	0	867.5	30	1
0x1102	2:37:13 PM	3	-56	0	865.7	30	1
0x1102	2:37:14 PM	3	-56	0	865.7	30	1
0x1102	2:37:16 PM	3	-56	0	865.7	30	1
0x1102	2:37:17 PM	3	-56	0	866.3	30	1
0x1102	2:37:18 PM	3	-56	0	866.3	30	1
0x1103	2:36:09 PM	2	-59	0	866.3	30	1
0x1103	2:36:10 PM	2	-59	0	866.9	30	1
0x1103	2:36:12 PM	2	-60	0	866.9	30	1
0x1103	2:36:13 PM	2	-60	0	866.9	30	1
0x1103	2:36:14 PM	2	-60	0	867.5	30	1
0x1103	2:36:15 PM	2	-60	0	867.5	30	1
0x1103	2:36:17 PM	2	-60	0	867.5	30	1
0x1103	2:36:18 PM	2	-59	0	865.7	30	1
0x1103	2:36:19 PM	2	-59	0	865.7	30	1
0x1103	2:36:21 PM	2	-59	0	865.7	30	1
0x1103	2:36:22 PM	2	-59	0	866.3	30	1
0x1103	2:36:23 PM	2	-59	0	866.3	30	1
0x1103	2:36:25 PM	2	-59	0	866.3	30	1
0x1103	2:36:26 PM	2	-59	0	866.9	30	1
0x1103	2:36:27 PM	2	-60	0	866.9	30	1
0x1103	2:36:28 PM	2	-59	0	866.9	30	1
0x1103	2:36:30 PM	2	-60	0	867.5	30	1
0x1103	2:36:31 PM	2	-60	0	867.5	30	1
0x1103	2:36:32 PM	2	-60	0	867.5	30	1
0x1103	2:36:34 PM	2	-59	0	865.7	30	1
0x1103	2:36:35 PM	2	-59	0	865.7	30	1
0x1103	2:36:36 PM	2	-59	0	865.7	30	1
0x1103	2:36:37 PM	2	-59	0	866.3	30	1
0x1103	2:36:39 PM	2	-59	0	866.3	30	1

8.2.8 Round 8 of Blood Bag with Energy Drink

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:41:16 PM	0	-45	0	867.5	30	1
0x1101	2:41:17 PM	0	-45	0	865.7	30	1
0x1101	2:41:18 PM	0	-45	0	866.3	30	1
0x1101	2:41:19 PM	0	-45	0	866.3	30	1
0x1101	2:41:20 PM	0	-45	0	866.9	30	1
0x1101	2:41:21 PM	0	-45	0	866.9	30	1
0x1101	2:41:23 PM	0	-45	0	867.5	30	1
0x1101	2:41:24 PM	0	-45	0	865.7	30	1
0x1101	2:41:25 PM	0	-45	0	866.3	30	1
0x1101	2:41:26 PM	0	-45	0	866.9	30	1
0x1101	2:41:27 PM	0	-45	0	867.5	30	1
0x1101	2:41:28 PM	0	-45	0	865.7	30	1
0x1101	2:41:29 PM	0	-45	0	866.3	30	1
0x1101	2:41:31 PM	0	-45	0	866.9	30	1
0x1101	2:41:32 PM	0	-45	0	867.5	30	1
0x1101	2:41:33 PM	0	-45	0	865.7	30	1
0x1101	2:41:34 PM	0	-45	0	866.3	30	1
0x1101	2:41:35 PM	0	-45	0	866.9	30	1
0x1101	2:41:36 PM	0	-45	0	867.5	30	1
0x1101	2:41:37 PM	0	-45	0	865.7	30	1
0x1101	2:41:39 PM	0	-45	0	866.3	30	1
0x1101	2:41:40 PM	0	-45	0	866.9	30	1
0x1101	2:41:41 PM	0	-45	0	867.5	30	1
0x1101	2:41:42 PM	0	-45	0	865.7	30	1
0x1101	2:41:43 PM	0	-45	0	866.3	30	1
0x1101	2:41:44 PM	0	-45	0	866.9	30	1
0x1101	2:41:45 PM	0	-45	0	867.5	30	1
0x1101	2:41:56 PM	1	-59	0	866.3	30	1
0x1101	2:41:57 PM	1	-60	0	866.9	30	1
0x1101	2:41:58 PM	1	-59	0	866.9	30	1
0x1101	2:41:59 PM	1	-59	0	866.9	30	1
0x1101	2:42:01 PM	1	-59	0	866.9	30	1
0x1101	2:42:02 PM	1	-59	0	867.5	30	1
0x1101	2:42:03 PM	1	-59	0	867.5	30	1
0x1101	2:42:04 PM	1	-59	0	867.5	30	1
0x1101	2:42:05 PM	1	-59	0	865.7	30	1
0x1101	2:42:06 PM	1	-59	0	865.7	30	1
0x1101	2:42:07 PM	1	-59	0	865.7	30	1
0x1101	2:42:09 PM	1	-59	0	866.3	30	1
0x1101	2:42:10 PM	1	-59	0	866.9	30	1
0x1101	2:42:11 PM	1	-59	0	867.5	30	1
0x1101	2:42:12 PM	1	-59	0	867.5	30	1
0x1101	2:42:13 PM	1	-59	0	867.5	30	1
0x1101	2:42:14 PM	1	-59	0	867.5	30	1
0x1101	2:42:15 PM	1	-59	0	865.7	30	1
0x1101	2:42:16 PM	1	-59	0	865.7	30	1
0x1101	2:42:18 PM	1	-59	0	865.7	30	1
0x1101	2:42:19 PM	1	-59	0	866.3	30	1
0x1101	2:42:20 PM	1	-59	0	866.3	30	1
0x1101	2:42:21 PM	1	-59	0	866.9	30	1
0x1101	2:42:22 PM	1	-59	0	867.5	30	1
0x1101	2:42:23 PM	1	-59	0	865.7	30	1
0x1101	2:42:24 PM	1	-59	0	865.7	30	1
0x1101	2:42:26 PM	1	-59	0	865.7	30	1
0x1101	2:42:59 PM	2	-56	0	865.7	30	1

0x1101	2:43:00 PM	2	-53	0	866.3	30	1
0x1101	2:43:02 PM	2	-53	0	866.3	30	1
0x1101	2:43:03 PM	2	-52	0	866.3	30	1
0x1101	2:43:16 PM	3	-61	0	865.7	30	1
0x1101	2:43:18 PM	3	-61	0	866.3	30	1
0x1101	2:43:19 PM	3	-61	0	866.9	30	1
0x1101	2:43:20 PM	3	-61	0	866.9	30	1
0x1101	2:43:21 PM	3	-61	0	866.9	30	1
0x1101	2:43:22 PM	3	-61	0	866.9	30	1
0x1101	2:43:24 PM	3	-60	0	865.7	30	1
0x1101	2:43:25 PM	3	-60	0	865.7	30	1
0x1101	2:43:26 PM	3	-60	0	865.7	30	1
0x1101	2:43:27 PM	3	-60	0	865.7	30	1
0x1101	2:43:28 PM	3	-61	0	866.3	30	1
0x1101	2:43:30 PM	3	-61	0	866.3	30	1
0x1101	2:43:31 PM	3	-61	0	866.3	30	1
0x1101	2:43:32 PM	3	-61	0	866.9	30	1
0x1101	2:43:33 PM	3	-61	0	866.9	30	1
0x1101	2:43:34 PM	3	-61	0	866.9	30	1
0x1101	2:43:36 PM	3	-60	0	865.7	30	1
0x1101	2:43:37 PM	3	-60	0	865.7	30	1
0x1101	2:43:39 PM	3	-60	0	865.7	30	1
0x1101	2:43:40 PM	3	-60	0	865.7	30	1
0x1101	2:43:41 PM	3	-61	0	866.3	30	1
0x1101	2:43:42 PM	3	-61	0	866.3	30	1
0x1101	2:43:44 PM	3	-61	0	866.3	30	1
0x1101	2:43:45 PM	3	-61	0	866.9	30	1
0x1101	2:43:57 PM	4	-45	0	866.3	30	1
0x1101	2:43:58 PM	4	-45	0	866.9	30	1
0x1101	2:43:59 PM	4	-45	0	867.5	30	1
0x1101	2:44:00 PM	4	-45	0	865.7	30	1
0x1101	2:44:01 PM	4	-45	0	866.3	30	1
0x1101	2:44:02 PM	4	-45	0	866.9	30	1
0x1101	2:44:04 PM	4	-45	0	867.5	30	1
0x1101	2:44:05 PM	4	-45	0	865.7	30	1
0x1101	2:44:06 PM	4	-45	0	866.3	30	1
0x1101	2:44:07 PM	4	-45	0	866.9	30	1
0x1101	2:44:08 PM	4	-45	0	867.5	30	1
0x1101	2:44:09 PM	4	-45	0	865.7	30	1
0x1101	2:44:10 PM	4	-45	0	866.3	30	1
0x1101	2:44:12 PM	4	-45	0	866.9	30	1
0x1101	2:44:13 PM	4	-45	0	867.5	30	1
0x1101	2:44:14 PM	4	-45	0	865.7	30	1
0x1101	2:44:15 PM	4	-45	0	866.3	30	1
0x1101	2:44:16 PM	4	-45	0	866.9	30	1
0x1101	2:44:17 PM	4	-45	0	867.5	30	1
0x1101	2:44:18 PM	4	-45	0	865.7	30	1
0x1101	2:44:20 PM	4	-45	0	866.3	30	1
0x1101	2:44:21 PM	4	-45	0	866.9	30	1
0x1101	2:44:22 PM	4	-45	0	867.5	30	1
0x1101	2:44:23 PM	4	-45	0	865.7	30	1
0x1101	2:44:24 PM	4	-45	0	866.3	30	1
0x1101	2:44:25 PM	4	-45	0	866.9	30	1
0x1101	2:44:26 PM	4	-45	0	867.5	30	1
0x1102	2:41:56 PM	1	-55	0	866.3	30	1
0x1102	2:41:57 PM	1	-56	0	866.9	30	1
0x1102	2:41:58 PM	1	-55	0	866.9	30	1
0x1102	2:42:00 PM	1	-55	0	866.9	30	1
0x1102	2:42:01 PM	1	-55	0	867.5	30	1
0x1102	2:42:02 PM	1	-56	0	867.5	30	1

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0x1102	2:42:03 PM	1	-55	0	867.5	30	1
0x1102	2:42:05 PM	1	-54	0	865.7	30	1
0x1102	2:42:06 PM	1	-54	0	865.7	30	1
0x1102	2:42:07 PM	1	-54	0	865.7	30	1
0x1102	2:42:09 PM	1	-54	0	866.3	30	1
0x1102	2:42:10 PM	1	-55	0	866.9	30	1
0x1102	2:42:11 PM	1	-55	0	867.5	30	1
0x1102	2:42:12 PM	1	-55	0	867.5	30	1
0x1102	2:42:13 PM	1	-55	0	867.5	30	1
0x1102	2:42:15 PM	1	-54	0	865.7	30	1
0x1102	2:42:16 PM	1	-53	0	865.7	30	1
0x1102	2:42:17 PM	1	-54	0	865.7	30	1
0x1102	2:42:18 PM	1	-54	0	866.3	30	1
0x1102	2:42:20 PM	1	-54	0	866.3	30	1
0x1102	2:42:21 PM	1	-55	0	866.9	30	1
0x1102	2:42:22 PM	1	-55	0	867.5	30	1
0x1102	2:42:23 PM	1	-53	0	865.7	30	1
0x1102	2:42:25 PM	1	-53	0	865.7	30	1
0x1102	2:42:26 PM	1	-53	0	865.7	30	1
0x1102	2:42:36 PM	2	-51	0	866.9	30	1
0x1102	2:42:37 PM	2	-51	0	867.5	30	1
0x1102	2:42:39 PM	2	-52	0	865.7	30	1
0x1102	2:42:40 PM	2	-52	0	866.3	30	1
0x1102	2:42:41 PM	2	-52	0	866.9	30	1
0x1102	2:42:43 PM	2	-51	0	867.5	30	1
0x1102	2:42:44 PM	2	-52	0	865.7	30	1
0x1102	2:42:45 PM	2	-52	0	866.3	30	1
0x1102	2:42:46 PM	2	-52	0	866.3	30	1
0x1102	2:42:48 PM	2	-52	0	866.3	30	1
0x1102	2:42:49 PM	2	-52	0	866.3	30	1
0x1102	2:42:50 PM	2	-51	0	866.9	30	1
0x1102	2:42:51 PM	2	-51	0	866.9	30	1
0x1102	2:42:53 PM	2	-51	0	866.9	30	1
0x1102	2:42:54 PM	2	-51	0	867.5	30	1
0x1102	2:42:55 PM	2	-51	0	867.5	30	1
0x1102	2:42:56 PM	2	-51	0	867.5	30	1
0x1102	2:42:58 PM	2	-52	0	865.7	30	1
0x1102	2:42:59 PM	2	-51	0	865.7	30	1
0x1102	2:43:00 PM	2	-42	0	865.7	30	1
0x1102	2:43:01 PM	2	-42	0	866.3	30	1
0x1102	2:43:02 PM	2	-42	0	866.3	30	1
0x1102	2:43:04 PM	2	-52	0	866.3	30	1
0x1102	2:43:05 PM	2	-52	0	866.9	30	1
0x1102	2:43:06 PM	2	-52	0	866.9	30	1
0x1102	2:43:16 PM	3	-51	0	865.7	30	1
0x1102	2:43:18 PM	3	-52	0	866.3	30	1
0x1102	2:43:19 PM	3	-52	0	866.9	30	1
0x1102	2:43:20 PM	3	-52	0	866.9	30	1
0x1102	2:43:21 PM	3	-52	0	866.9	30	1
0x1102	2:43:23 PM	3	-52	0	867.5	30	1
0x1102	2:43:24 PM	3	-51	0	865.7	30	1
0x1102	2:43:25 PM	3	-51	0	865.7	30	1
0x1102	2:43:26 PM	3	-51	0	865.7	30	1
0x1102	2:43:28 PM	3	-52	0	866.3	30	1
0x1102	2:43:29 PM	3	-52	0	866.3	30	1
0x1102	2:43:30 PM	3	-52	0	866.3	30	1
0x1102	2:43:31 PM	3	-52	0	866.9	30	1
0x1102	2:43:33 PM	3	-52	0	866.9	30	1
0x1102	2:43:34 PM	3	-52	0	866.9	30	1
0x1102	2:43:35 PM	3	-52	0	867.5	30	1

0x1102	2:43:36 PM	3	-51	0	865.7	30	1
0x1102	2:43:38 PM	3	-51	0	865.7	30	1
0x1102	2:43:39 PM	3	-51	0	865.7	30	1
0x1102	2:43:40 PM	3	-52	0	866.3	30	1
0x1102	2:43:41 PM	3	-52	0	866.3	30	1
0x1102	2:43:43 PM	3	-52	0	866.3	30	1
0x1102	2:43:44 PM	3	-52	0	866.9	30	1
0x1102	2:43:45 PM	3	-52	0	866.9	30	1
0x1102	2:43:46 PM	3	-52	0	867.5	30	1
0x1103	2:42:36 PM	2	-59	0	866.9	30	1
0x1103	2:42:38 PM	2	-59	0	867.5	30	1
0x1103	2:42:39 PM	2	-60	0	865.7	30	1
0x1103	2:42:40 PM	2	-59	0	866.3	30	1
0x1103	2:42:41 PM	2	-59	0	866.9	30	1
0x1103	2:42:43 PM	2	-59	0	867.5	30	1
0x1103	2:42:44 PM	2	-59	0	865.7	30	1
0x1103	2:42:45 PM	2	-59	0	866.3	30	1
0x1103	2:42:47 PM	2	-59	0	866.3	30	1
0x1103	2:42:48 PM	2	-59	0	866.3	30	1
0x1103	2:42:49 PM	2	-59	0	866.9	30	1
0x1103	2:42:50 PM	2	-59	0	866.9	30	1
0x1103	2:42:52 PM	2	-59	0	866.9	30	1
0x1103	2:42:53 PM	2	-59	0	867.5	30	1
0x1103	2:42:54 PM	2	-59	0	867.5	30	1
0x1103	2:42:56 PM	2	-59	0	867.5	30	1
0x1103	2:42:57 PM	2	-59	0	865.7	30	1
0x1103	2:42:58 PM	2	-59	0	865.7	30	1
0x1103	2:42:59 PM	2	-51	0	865.7	30	1
0x1103	2:43:01 PM	2	-49	0	866.3	30	1
0x1103	2:43:02 PM	2	-50	0	866.3	30	1
0x1103	2:43:03 PM	2	-60	0	866.3	30	1
0x1103	2:43:05 PM	2	-58	0	866.9	30	1
0x1103	2:43:06 PM	2	-58	0	866.9	30	1

8.2.9 Round 9 of Blood Bag with Energy Drink

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:48:10 PM	0	-47	0	866.3	30	1
0x1101	2:48:11 PM	0	-47	0	866.9	30	1
0x1101	2:48:12 PM	0	-46	0	867.5	30	1
0x1101	2:48:13 PM	0	-47	0	865.7	30	1
0x1101	2:48:14 PM	0	-47	0	866.3	30	1
0x1101	2:48:15 PM	0	-47	0	866.9	30	1
0x1101	2:48:17 PM	0	-46	0	867.5	30	1
0x1101	2:48:18 PM	0	-47	0	865.7	30	1
0x1101	2:48:19 PM	0	-47	0	866.3	30	1
0x1101	2:48:20 PM	0	-47	0	866.9	30	1
0x1101	2:48:21 PM	0	-46	0	867.5	30	1
0x1101	2:48:22 PM	0	-47	0	865.7	30	1
0x1101	2:48:23 PM	0	-47	0	866.3	30	1
0x1101	2:48:25 PM	0	-47	0	866.9	30	1
0x1101	2:48:26 PM	0	-46	0	867.5	30	1
0x1101	2:48:27 PM	0	-47	0	865.7	30	1
0x1101	2:48:28 PM	0	-47	0	866.3	30	1
0x1101	2:48:29 PM	0	-47	0	866.9	30	1
0x1101	2:48:30 PM	0	-46	0	867.5	30	1

0x1101	2:48:31 PM	0	-47	0	865.7	30	1
0x1101	2:48:33 PM	0	-47	0	866.3	30	1
0x1101	2:48:34 PM	0	-46	0	866.9	30	1
0x1101	2:48:35 PM	0	-46	0	867.5	30	1
0x1101	2:48:36 PM	0	-47	0	865.7	30	1
0x1101	2:48:37 PM	0	-47	0	866.3	30	1
0x1101	2:48:38 PM	0	-47	0	866.9	30	1
0x1101	2:48:39 PM	0	-46	0	867.5	30	1
0x1101	2:48:50 PM	1	-57	0	866.3	30	1
0x1101	2:48:51 PM	1	-57	0	866.9	30	1
0x1101	2:48:52 PM	1	-57	0	867.5	30	1
0x1101	2:48:53 PM	1	-57	0	867.5	30	1
0x1101	2:48:54 PM	1	-57	0	867.5	30	1
0x1101	2:48:56 PM	1	-57	0	867.5	30	1
0x1101	2:48:57 PM	1	-56	0	865.7	30	1
0x1101	2:48:58 PM	1	-56	0	865.7	30	1
0x1101	2:48:59 PM	1	-56	0	865.7	30	1
0x1101	2:49:00 PM	1	-56	0	866.3	30	1
0x1101	2:49:01 PM	1	-56	0	866.3	30	1
0x1101	2:49:02 PM	1	-57	0	866.9	30	1
0x1101	2:49:04 PM	1	-57	0	867.5	30	1
0x1101	2:49:05 PM	1	-56	0	865.7	30	1
0x1101	2:49:06 PM	1	-56	0	865.7	30	1
0x1101	2:49:07 PM	1	-56	0	865.7	30	1
0x1101	2:49:08 PM	1	-56	0	865.7	30	1
0x1101	2:49:09 PM	1	-56	0	866.3	30	1
0x1101	2:49:10 PM	1	-56	0	866.3	30	1
0x1101	2:49:12 PM	1	-56	0	866.3	30	1
0x1101	2:49:13 PM	1	-57	0	866.9	30	1
0x1101	2:49:14 PM	1	-57	0	866.9	30	1
0x1101	2:49:15 PM	1	-57	0	866.9	30	1
0x1101	2:49:16 PM	1	-57	0	867.5	30	1
0x1101	2:49:17 PM	1	-56	0	865.7	30	1
0x1101	2:49:18 PM	1	-56	0	866.3	30	1
0x1101	2:49:20 PM	1	-56	0	866.3	30	1
0x1101	2:49:30 PM	2	-54	0	867.5	30	1
0x1101	2:49:31 PM	2	-52	0	865.7	30	1
0x1101	2:49:32 PM	2	-52	0	865.7	30	1
0x1101	2:49:33 PM	2	-60	0	865.7	30	1
0x1101	2:49:35 PM	2	-54	0	865.7	30	1
0x1101	2:49:36 PM	2	-53	0	866.3	30	1
0x1101	2:49:37 PM	2	-53	0	866.3	30	1
0x1101	2:49:38 PM	2	-53	0	866.3	30	1
0x1101	2:49:39 PM	2	-53	0	866.9	30	1
0x1101	2:49:40 PM	2	-53	0	866.9	30	1
0x1101	2:49:41 PM	2	-53	0	866.9	30	1
0x1101	2:49:43 PM	2	-53	0	866.9	30	1
0x1101	2:49:44 PM	2	-52	0	867.5	30	1
0x1101	2:49:45 PM	2	-53	0	867.5	30	1
0x1101	2:49:46 PM	2	-52	0	867.5	30	1
0x1101	2:49:47 PM	2	-53	0	865.7	30	1
0x1101	2:49:48 PM	2	-53	0	865.7	30	1
0x1101	2:49:49 PM	2	-53	0	865.7	30	1
0x1101	2:49:50 PM	2	-53	0	866.3	30	1
0x1101	2:49:52 PM	2	-53	0	866.3	30	1
0x1101	2:49:53 PM	2	-53	0	866.3	30	1
0x1101	2:49:54 PM	2	-53	0	866.3	30	1
0x1101	2:49:55 PM	2	-53	0	866.9	30	1
0x1101	2:49:56 PM	2	-53	0	866.9	30	1
0x1101	2:49:57 PM	2	-53	0	866.9	30	1

0x1101	2:49:58 PM	2	-53	0	867.5	30	1
0x1101	2:49:59 PM	2	-53	0	867.5	30	1
0x1101	2:50:10 PM	3	-50	0	866.3	30	1
0x1101	2:50:12 PM	3	-50	0	866.9	30	1
0x1101	2:50:13 PM	3	-50	0	867.5	30	1
0x1101	2:50:14 PM	3	-50	0	867.5	30	1
0x1101	2:50:15 PM	3	-50	0	867.5	30	1
0x1101	2:50:16 PM	3	-50	0	867.5	30	1
0x1101	2:50:17 PM	3	-50	0	865.7	30	1
0x1101	2:50:18 PM	3	-50	0	865.7	30	1
0x1101	2:50:19 PM	3	-50	0	865.7	30	1
0x1101	2:50:21 PM	3	-50	0	866.3	30	1
0x1101	2:50:22 PM	3	-50	0	866.3	30	1
0x1101	2:50:23 PM	3	-50	0	866.9	30	1
0x1101	2:50:24 PM	3	-50	0	867.5	30	1
0x1101	2:50:25 PM	3	-50	0	865.7	30	1
0x1101	2:50:26 PM	3	-50	0	865.7	30	1
0x1101	2:50:27 PM	3	-50	0	865.7	30	1
0x1101	2:50:29 PM	3	-50	0	865.7	30	1
0x1101	2:50:30 PM	3	-50	0	866.3	30	1
0x1101	2:50:31 PM	3	-50	0	866.3	30	1
0x1101	2:50:32 PM	3	-50	0	866.3	30	1
0x1101	2:50:33 PM	3	-50	0	866.9	30	1
0x1101	2:50:34 PM	3	-50	0	866.9	30	1
0x1101	2:50:35 PM	3	-50	0	866.9	30	1
0x1101	2:50:37 PM	3	-51	0	867.5	30	1
0x1101	2:50:38 PM	3	-50	0	865.7	30	1
0x1101	2:50:39 PM	3	-50	0	866.3	30	1
0x1101	2:50:40 PM	3	-50	0	866.3	30	1
0x1101	2:50:51 PM	4	-47	0	867.5	30	1
0x1101	2:50:52 PM	4	-47	0	865.7	30	1
0x1101	2:50:53 PM	4	-47	0	866.3	30	1
0x1101	2:50:54 PM	4	-47	0	866.9	30	1
0x1101	2:50:55 PM	4	-47	0	867.5	30	1
0x1101	2:50:56 PM	4	-47	0	865.7	30	1
0x1101	2:50:57 PM	4	-47	0	866.3	30	1
0x1101	2:50:58 PM	4	-47	0	866.9	30	1
0x1101	2:51:00 PM	4	-47	0	867.5	30	1
0x1101	2:51:01 PM	4	-47	0	865.7	30	1
0x1101	2:51:02 PM	4	-47	0	866.3	30	1
0x1101	2:51:03 PM	4	-47	0	866.9	30	1
0x1101	2:51:04 PM	4	-47	0	867.5	30	1
0x1101	2:51:05 PM	4	-47	0	865.7	30	1
0x1101	2:51:06 PM	4	-47	0	866.3	30	1
0x1101	2:51:08 PM	4	-47	0	866.9	30	1
0x1101	2:51:09 PM	4	-47	0	867.5	30	1
0x1101	2:51:10 PM	4	-47	0	865.7	30	1
0x1101	2:51:11 PM	4	-47	0	866.3	30	1
0x1101	2:51:12 PM	4	-47	0	866.9	30	1
0x1101	2:51:13 PM	4	-47	0	867.5	30	1
0x1101	2:51:14 PM	4	-47	0	865.7	30	1
0x1101	2:51:15 PM	4	-47	0	866.3	30	1
0x1101	2:51:17 PM	4	-47	0	866.9	30	1
0x1101	2:51:18 PM	4	-47	0	867.5	30	1
0x1101	2:51:19 PM	4	-47	0	865.7	30	1
0x1101	2:51:20 PM	4	-47	0	866.3	30	1
0x1102	2:48:50 PM	1	-47	0	866.3	30	1
0x1102	2:48:51 PM	1	-47	0	866.9	30	1
0x1102	2:48:52 PM	1	-47	0	867.5	30	1
0x1102	2:48:54 PM	1	-47	0	867.5	30	1

0x1102	2:48:55 PM	1	-47	0	867.5	30	1
0x1102	2:48:56 PM	1	-48	0	865.7	30	1
0x1102	2:48:57 PM	1	-48	0	865.7	30	1
0x1102	2:48:59 PM	1	-48	0	865.7	30	1
0x1102	2:49:00 PM	1	-47	0	866.3	30	1
0x1102	2:49:01 PM	1	-47	0	866.3	30	1
0x1102	2:49:02 PM	1	-47	0	866.9	30	1
0x1102	2:49:04 PM	1	-47	0	867.5	30	1
0x1102	2:49:05 PM	1	-48	0	865.7	30	1
0x1102	2:49:06 PM	1	-48	0	865.7	30	1
0x1102	2:49:07 PM	1	-48	0	865.7	30	1
0x1102	2:49:09 PM	1	-47	0	866.3	30	1
0x1102	2:49:10 PM	1	-47	0	866.3	30	1
0x1102	2:49:11 PM	1	-47	0	866.3	30	1
0x1102	2:49:12 PM	1	-47	0	866.9	30	1
0x1102	2:49:14 PM	1	-47	0	866.9	30	1
0x1102	2:49:15 PM	1	-47	0	866.9	30	1
0x1102	2:49:16 PM	1	-47	0	867.5	30	1
0x1102	2:49:17 PM	1	-48	0	865.7	30	1
0x1102	2:49:19 PM	1	-47	0	866.3	30	1
0x1102	2:49:20 PM	1	-47	0	866.3	30	1
0x1102	2:49:30 PM	2	-47	0	867.5	30	1
0x1102	2:49:31 PM	2	-47	0	865.7	30	1
0x1102	2:49:33 PM	2	-47	0	865.7	30	1
0x1102	2:49:34 PM	2	-44	0	865.7	30	1
0x1102	2:49:35 PM	2	-44	0	866.3	30	1
0x1102	2:49:36 PM	2	-44	0	866.3	30	1
0x1102	2:49:38 PM	2	-44	0	866.3	30	1
0x1102	2:49:39 PM	2	-44	0	866.3	30	1
0x1102	2:49:40 PM	2	-44	0	866.9	30	1
0x1102	2:49:41 PM	2	-44	0	866.9	30	1
0x1102	2:49:43 PM	2	-44	0	866.9	30	1
0x1102	2:49:44 PM	2	-44	0	867.5	30	1
0x1102	2:49:45 PM	2	-44	0	867.5	30	1
0x1102	2:49:46 PM	2	-44	0	867.5	30	1
0x1102	2:49:47 PM	2	-43	0	865.7	30	1
0x1102	2:49:49 PM	2	-43	0	865.7	30	1
0x1102	2:49:50 PM	2	-44	0	865.7	30	1
0x1102	2:49:51 PM	2	-44	0	866.3	30	1
0x1102	2:49:52 PM	2	-44	0	866.3	30	1
0x1102	2:49:54 PM	2	-44	0	866.3	30	1
0x1102	2:49:55 PM	2	-44	0	866.9	30	1
0x1102	2:49:56 PM	2	-44	0	866.9	30	1
0x1102	2:49:57 PM	2	-44	0	866.9	30	1
0x1102	2:49:59 PM	2	-44	0	867.5	30	1
0x1102	2:50:00 PM	2	-44	0	867.5	30	1
0x1102	2:50:10 PM	3	-46	0	866.3	30	1
0x1102	2:50:12 PM	3	-46	0	866.9	30	1
0x1102	2:50:13 PM	3	-47	0	867.5	30	1
0x1102	2:50:14 PM	3	-47	0	867.5	30	1
0x1102	2:50:15 PM	3	-47	0	867.5	30	1
0x1102	2:50:17 PM	3	-47	0	865.7	30	1
0x1102	2:50:18 PM	3	-47	0	865.7	30	1
0x1102	2:50:19 PM	3	-47	0	865.7	30	1
0x1102	2:50:20 PM	3	-47	0	866.3	30	1
0x1102	2:50:22 PM	3	-47	0	866.3	30	1
0x1102	2:50:23 PM	3	-47	0	866.9	30	1
0x1102	2:50:24 PM	3	-46	0	867.5	30	1
0x1102	2:50:25 PM	3	-47	0	865.7	30	1
0x1102	2:50:27 PM	3	-47	0	865.7	30	1

0x1102	2:50:28 PM	3	-47	0	865.7	30	1
0x1102	2:50:29 PM	3	-47	0	866.3	30	1
0x1102	2:50:30 PM	3	-47	0	866.3	30	1
0x1102	2:50:32 PM	3	-47	0	866.3	30	1
0x1102	2:50:33 PM	3	-47	0	866.9	30	1
0x1102	2:50:34 PM	3	-47	0	866.9	30	1
0x1102	2:50:35 PM	3	-47	0	866.9	30	1
0x1102	2:50:37 PM	3	-47	0	867.5	30	1
0x1102	2:50:38 PM	3	-47	0	865.7	30	1
0x1102	2:50:39 PM	3	-47	0	866.3	30	1
0x1102	2:50:40 PM	3	-47	0	866.3	30	1
0x1103	2:49:33 PM	2	-60	0	865.7	30	1
0x1103	2:49:34 PM	2	-48	0	865.7	30	1
0x1103	2:49:36 PM	2	-48	0	866.3	30	1
0x1103	2:49:37 PM	2	-48	0	866.3	30	1
0x1103	2:49:38 PM	2	-48	0	866.3	30	1
0x1103	2:49:39 PM	2	-48	0	866.9	30	1
0x1103	2:49:41 PM	2	-48	0	866.9	30	1
0x1103	2:49:42 PM	2	-48	0	866.9	30	1
0x1103	2:49:43 PM	2	-48	0	867.5	30	1
0x1103	2:49:44 PM	2	-48	0	867.5	30	1
0x1103	2:49:46 PM	2	-48	0	867.5	30	1
0x1103	2:49:47 PM	2	-48	0	865.7	30	1
0x1103	2:49:48 PM	2	-48	0	865.7	30	1
0x1103	2:49:50 PM	2	-48	0	865.7	30	1
0x1103	2:49:51 PM	2	-48	0	866.3	30	1
0x1103	2:49:52 PM	2	-48	0	866.3	30	1
0x1103	2:49:53 PM	2	-46	0	866.3	30	1
0x1103	2:49:55 PM	2	-48	0	866.9	30	1
0x1103	2:49:56 PM	2	-48	0	866.9	30	1
0x1103	2:49:57 PM	2	-48	0	866.9	30	1
0x1103	2:49:58 PM	2	-48	0	867.5	30	1
0x1103	2:50:00 PM	2	-48	0	867.5	30	1

8.2.10 Round 10 of Blood Bag with Energy Drink

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	2:55:18 PM	0	-46	0	865.7	30	1
0x1101	2:55:19 PM	0	-46	0	866.3	30	1
0x1101	2:55:20 PM	0	-46	0	866.9	30	1
0x1101	2:55:22 PM	0	-46	0	867.5	30	1
0x1101	2:55:23 PM	0	-46	0	865.7	30	1
0x1101	2:55:24 PM	0	-46	0	866.3	30	1
0x1101	2:55:25 PM	0	-46	0	866.9	30	1
0x1101	2:55:26 PM	0	-46	0	866.9	30	1
0x1101	2:55:27 PM	0	-46	0	866.9	30	1
0x1101	2:55:28 PM	0	-46	0	866.9	30	1
0x1101	2:55:30 PM	0	-46	0	867.5	30	1
0x1101	2:55:31 PM	0	-46	0	865.7	30	1
0x1101	2:55:32 PM	0	-46	0	866.3	30	1
0x1101	2:55:33 PM	0	-46	0	866.9	30	1
0x1101	2:55:34 PM	0	-46	0	866.9	30	1
0x1101	2:55:35 PM	0	-46	0	867.5	30	1
0x1101	2:55:36 PM	0	-46	0	865.7	30	1
0x1101	2:55:38 PM	0	-46	0	866.3	30	1
0x1101	2:55:39 PM	0	-46	0	866.9	30	1

0x1101	2:55:40 PM	0	-46	0	866.9	30	1
0x1101	2:55:41 PM	0	-46	0	866.9	30	1
0x1101	2:55:42 PM	0	-46	0	867.5	30	1
0x1101	2:55:43 PM	0	-46	0	865.7	30	1
0x1101	2:55:44 PM	0	-46	0	866.3	30	1
0x1101	2:55:45 PM	0	-46	0	866.9	30	1
0x1101	2:55:47 PM	0	-46	0	867.5	30	1
0x1101	2:55:48 PM	0	-46	0	865.7	30	1
0x1101	2:55:58 PM	1	-49	0	866.9	30	1
0x1101	2:55:59 PM	1	-49	0	867.5	30	1
0x1101	2:56:01 PM	1	-49	0	867.5	30	1
0x1101	2:56:02 PM	1	-49	0	867.5	30	1
0x1101	2:56:03 PM	1	-49	0	867.5	30	1
0x1101	2:56:04 PM	1	-49	0	865.7	30	1
0x1101	2:56:05 PM	1	-49	0	865.7	30	1
0x1101	2:56:06 PM	1	-49	0	865.7	30	1
0x1101	2:56:07 PM	1	-49	0	866.3	30	1
0x1101	2:56:09 PM	1	-49	0	866.3	30	1
0x1101	2:56:10 PM	1	-49	0	866.3	30	1
0x1101	2:56:11 PM	1	-49	0	866.9	30	1
0x1101	2:56:12 PM	1	-49	0	867.5	30	1
0x1101	2:56:13 PM	1	-49	0	865.7	30	1
0x1101	2:56:14 PM	1	-49	0	866.3	30	1
0x1101	2:56:15 PM	1	-49	0	866.3	30	1
0x1101	2:56:17 PM	1	-49	0	866.3	30	1
0x1101	2:56:18 PM	1	-49	0	866.3	30	1
0x1101	2:56:19 PM	1	-49	0	866.9	30	1
0x1101	2:56:20 PM	1	-49	0	866.9	30	1
0x1101	2:56:21 PM	1	-49	0	866.9	30	1
0x1101	2:56:22 PM	1	-49	0	867.5	30	1
0x1101	2:56:23 PM	1	-49	0	867.5	30	1
0x1101	2:56:25 PM	1	-49	0	867.5	30	1
0x1101	2:56:26 PM	1	-49	0	865.7	30	1
0x1101	2:56:27 PM	1	-49	0	866.3	30	1
0x1101	2:56:28 PM	1	-49	0	866.9	30	1
0x1101	2:56:39 PM	2	-47	0	865.7	30	1
0x1101	2:56:40 PM	2	-47	0	866.3	30	1
0x1101	2:56:41 PM	2	-46	0	866.3	30	1
0x1101	2:56:42 PM	2	-46	0	866.3	30	1
0x1101	2:56:43 PM	2	-46	0	866.3	30	1
0x1101	2:56:44 PM	2	-46	0	866.9	30	1
0x1101	2:56:45 PM	2	-47	0	866.9	30	1
0x1101	2:56:46 PM	2	-48	0	866.9	30	1
0x1101	2:56:48 PM	2	-48	0	867.5	30	1
0x1101	2:56:49 PM	2	-50	0	867.5	30	1
0x1101	2:56:50 PM	2	-50	0	867.5	30	1
0x1101	2:56:51 PM	2	-52	0	867.5	30	1
0x1101	2:56:52 PM	2	-55	0	865.7	30	1
0x1101	2:56:53 PM	2	-50	0	865.7	30	1
0x1101	2:56:54 PM	2	-50	0	865.7	30	1
0x1101	2:56:55 PM	2	-45	0	866.3	30	1
0x1101	2:56:57 PM	2	-48	0	866.3	30	1
0x1101	2:56:58 PM	2	-46	0	866.3	30	1
0x1101	2:56:59 PM	2	-45	0	866.9	30	1
0x1101	2:57:00 PM	2	-44	0	866.9	30	1
0x1101	2:57:01 PM	2	-44	0	866.9	30	1
0x1101	2:57:02 PM	2	-43	0	866.9	30	1
0x1101	2:57:03 PM	2	-45	0	867.5	30	1
0x1101	2:57:04 PM	2	-45	0	867.5	30	1
0x1101	2:57:06 PM	2	-44	0	867.5	30	1

0x1101	2:57:07 PM	2	-44	0	865.7	30	1
0x1101	2:57:08 PM	2	-44	0	865.7	30	1
0x1101	2:57:19 PM	3	-42	0	866.9	30	1
0x1101	2:57:20 PM	3	-42	0	867.5	30	1
0x1101	2:57:21 PM	3	-42	0	867.5	30	1
0x1101	2:57:22 PM	3	-42	0	867.5	30	1
0x1101	2:57:23 PM	3	-42	0	867.5	30	1
0x1101	2:57:24 PM	3	-42	0	865.7	30	1
0x1101	2:57:26 PM	3	-42	0	865.7	30	1
0x1101	2:57:27 PM	3	-42	0	865.7	30	1
0x1101	2:57:28 PM	3	-42	0	866.3	30	1
0x1101	2:57:29 PM	3	-42	0	866.3	30	1
0x1101	2:57:30 PM	3	-42	0	866.3	30	1
0x1101	2:57:31 PM	3	-42	0	866.9	30	1
0x1101	2:57:32 PM	3	-42	0	867.5	30	1
0x1101	2:57:34 PM	3	-42	0	865.7	30	1
0x1101	2:57:35 PM	3	-42	0	866.3	30	1
0x1101	2:57:36 PM	3	-42	0	866.3	30	1
0x1101	2:57:37 PM	3	-42	0	866.3	30	1
0x1101	2:57:38 PM	3	-42	0	866.3	30	1
0x1101	2:57:39 PM	3	-43	0	866.9	30	1
0x1101	2:57:40 PM	3	-43	0	866.9	30	1
0x1101	2:57:42 PM	3	-43	0	866.9	30	1
0x1101	2:57:43 PM	3	-43	0	867.5	30	1
0x1101	2:57:44 PM	3	-43	0	867.5	30	1
0x1101	2:57:45 PM	3	-43	0	867.5	30	1
0x1101	2:57:46 PM	3	-43	0	865.7	30	1
0x1101	2:57:47 PM	3	-43	0	866.3	30	1
0x1101	2:57:48 PM	3	-43	0	866.9	30	1
0x1101	2:57:59 PM	4	-45	0	865.7	30	1
0x1101	2:58:00 PM	4	-45	0	866.3	30	1
0x1101	2:58:01 PM	4	-45	0	866.9	30	1
0x1101	2:58:02 PM	4	-45	0	867.5	30	1
0x1101	2:58:04 PM	4	-45	0	865.7	30	1
0x1101	2:58:05 PM	4	-45	0	866.3	30	1
0x1101	2:58:06 PM	4	-45	0	866.9	30	1
0x1101	2:58:07 PM	4	-45	0	867.5	30	1
0x1101	2:58:08 PM	4	-45	0	865.7	30	1
0x1101	2:58:09 PM	4	-45	0	866.3	30	1
0x1101	2:58:10 PM	4	-45	0	866.9	30	1
0x1101	2:58:12 PM	4	-45	0	867.5	30	1
0x1101	2:58:13 PM	4	-45	0	865.7	30	1
0x1101	2:58:14 PM	4	-45	0	866.3	30	1
0x1101	2:58:15 PM	4	-45	0	866.9	30	1
0x1101	2:58:16 PM	4	-45	0	867.5	30	1
0x1101	2:58:17 PM	4	-45	0	865.7	30	1
0x1101	2:58:18 PM	4	-45	0	866.3	30	1
0x1101	2:58:20 PM	4	-45	0	866.9	30	1
0x1101	2:58:21 PM	4	-45	0	867.5	30	1
0x1101	2:58:22 PM	4	-45	0	865.7	30	1
0x1101	2:58:23 PM	4	-45	0	866.3	30	1
0x1101	2:58:24 PM	4	-45	0	866.9	30	1
0x1101	2:58:25 PM	4	-45	0	867.5	30	1
0x1101	2:58:26 PM	4	-45	0	865.7	30	1
0x1101	2:58:28 PM	4	-45	0	866.3	30	1
0x1101	2:58:29 PM	4	-45	0	866.9	30	1
0x1102	2:55:58 PM	1	-53	0	866.9	30	1
0x1102	2:56:00 PM	1	-53	0	867.5	30	1
0x1102	2:56:01 PM	1	-53	0	867.5	30	1
0x1102	2:56:02 PM	1	-53	0	867.5	30	1

0x1102	2:56:03 PM	1	-53	0	865.7	30	1
0x1102	2:56:05 PM	1	-53	0	865.7	30	1
0x1102	2:56:06 PM	1	-53	0	865.7	30	1
0x1102	2:56:07 PM	1	-53	0	866.3	30	1
0x1102	2:56:08 PM	1	-53	0	866.3	30	1
0x1102	2:56:09 PM	1	-53	0	866.3	30	1
0x1102	2:56:11 PM	1	-53	0	866.3	30	1
0x1102	2:56:12 PM	1	-53	0	867.5	30	1
0x1102	2:56:13 PM	1	-53	0	865.7	30	1
0x1102	2:56:14 PM	1	-53	0	866.3	30	1
0x1102	2:56:16 PM	1	-53	0	866.3	30	1
0x1102	2:56:17 PM	1	-53	0	866.3	30	1
0x1102	2:56:18 PM	1	-53	0	866.9	30	1
0x1102	2:56:19 PM	1	-53	0	866.9	30	1
0x1102	2:56:21 PM	1	-53	0	866.9	30	1
0x1102	2:56:22 PM	1	-53	0	867.5	30	1
0x1102	2:56:23 PM	1	-53	0	867.5	30	1
0x1102	2:56:24 PM	1	-53	0	867.5	30	1
0x1102	2:56:26 PM	1	-53	0	867.5	30	1
0x1102	2:56:27 PM	1	-53	0	866.3	30	1
0x1102	2:56:28 PM	1	-53	0	866.9	30	1
0x1102	2:56:39 PM	2	-48	0	865.7	30	1
0x1102	2:56:40 PM	2	-48	0	866.3	30	1
0x1102	2:56:41 PM	2	-49	0	866.3	30	1
0x1102	2:56:42 PM	2	-49	0	866.3	30	1
0x1102	2:56:44 PM	2	-51	0	866.9	30	1
0x1102	2:56:45 PM	2	-57	0	866.9	30	1
0x1102	2:56:48 PM	2	-57	0	867.5	30	1
0x1102	2:56:49 PM	2	-47	0	867.5	30	1
0x1102	2:56:50 PM	2	-54	0	867.5	30	1
0x1102	2:56:51 PM	2	-52	0	865.7	30	1
0x1102	2:56:53 PM	2	-58	0	865.7	30	1
0x1102	2:56:54 PM	2	-55	0	865.7	30	1
0x1102	2:56:55 PM	2	-50	0	866.3	30	1
0x1102	2:56:56 PM	2	-46	0	866.3	30	1
0x1102	2:56:57 PM	2	-51	0	866.3	30	1
0x1102	2:56:59 PM	2	-49	0	866.9	30	1
0x1102	2:57:00 PM	2	-52	0	866.9	30	1
0x1102	2:57:01 PM	2	-52	0	866.9	30	1
0x1102	2:57:02 PM	2	-50	0	866.9	30	1
0x1102	2:57:04 PM	2	-50	0	867.5	30	1
0x1102	2:57:05 PM	2	-51	0	867.5	30	1
0x1102	2:57:06 PM	2	-53	0	867.5	30	1
0x1102	2:57:07 PM	2	-53	0	865.7	30	1
0x1102	2:57:19 PM	3	-43	0	866.9	30	1
0x1102	2:57:20 PM	3	-43	0	867.5	30	1
0x1102	2:57:21 PM	3	-43	0	867.5	30	1
0x1102	2:57:22 PM	3	-43	0	867.5	30	1
0x1102	2:57:24 PM	3	-43	0	865.7	30	1
0x1102	2:57:25 PM	3	-43	0	865.7	30	1
0x1102	2:57:26 PM	3	-43	0	865.7	30	1
0x1102	2:57:27 PM	3	-43	0	866.3	30	1
0x1102	2:57:29 PM	3	-43	0	866.3	30	1
0x1102	2:57:30 PM	3	-43	0	866.3	30	1
0x1102	2:57:31 PM	3	-43	0	866.3	30	1
0x1102	2:57:32 PM	3	-43	0	867.5	30	1
0x1102	2:57:34 PM	3	-43	0	865.7	30	1
0x1102	2:57:35 PM	3	-43	0	866.3	30	1
0x1102	2:57:36 PM	3	-43	0	866.3	30	1
0x1102	2:57:37 PM	3	-43	0	866.3	30	1

0x1102	2:57:39 PM	3	-43	0	866.9	30	1
0x1102	2:57:40 PM	3	-43	0	866.9	30	1
0x1102	2:57:41 PM	3	-43	0	866.9	30	1
0x1102	2:57:42 PM	3	-43	0	867.5	30	1
0x1102	2:57:44 PM	3	-43	0	867.5	30	1
0x1102	2:57:45 PM	3	-43	0	867.5	30	1
0x1102	2:57:46 PM	3	-44	0	867.5	30	1
0x1102	2:57:47 PM	3	-43	0	866.3	30	1
0x1102	2:57:48 PM	3	-43	0	866.9	30	1
0x1103	2:56:39 PM	2	-53	0	865.7	30	1
0x1103	2:56:40 PM	2	-52	0	866.3	30	1
0x1103	2:56:41 PM	2	-52	0	866.3	30	1
0x1103	2:56:42 PM	2	-52	0	866.3	30	1
0x1103	2:56:44 PM	2	-52	0	866.9	30	1
0x1103	2:56:45 PM	2	-51	0	866.9	30	1
0x1103	2:56:46 PM	2	-44	0	866.9	30	1
0x1103	2:56:48 PM	2	-45	0	867.5	30	1
0x1103	2:56:49 PM	2	-49	0	867.5	30	1
0x1103	2:56:50 PM	2	-50	0	867.5	30	1
0x1103	2:56:51 PM	2	-50	0	865.7	30	1
0x1103	2:56:53 PM	2	-50	0	865.7	30	1
0x1103	2:56:54 PM	2	-51	0	865.7	30	1
0x1103	2:56:55 PM	2	-52	0	866.3	30	1
0x1103	2:56:57 PM	2	-55	0	866.3	30	1
0x1103	2:56:58 PM	2	-58	0	866.3	30	1
0x1103	2:56:59 PM	2	-49	0	866.9	30	1
0x1103	2:57:00 PM	2	-50	0	866.9	30	1
0x1103	2:57:02 PM	2	-47	0	866.9	30	1
0x1103	2:57:03 PM	2	-51	0	867.5	30	1
0x1103	2:57:04 PM	2	-50	0	867.5	30	1
0x1103	2:57:05 PM	2	-60	0	867.5	30	1
0x1103	2:57:07 PM	2	-52	0	865.7	30	1
0x1103	2:57:08 PM	2	-52	0	865.7	30	1

8.2.11 Round 11 of Blood Bag with Energy Drink

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	3:04:35 PM	0	-46	0	865.7	30	1
0x1101	3:04:36 PM	0	-46	0	866.3	30	1
0x1101	3:04:37 PM	0	-46	0	866.9	30	1
0x1101	3:04:38 PM	0	-46	0	867.5	30	1
0x1101	3:04:39 PM	0	-46	0	865.7	30	1
0x1101	3:04:41 PM	0	-46	0	866.3	30	1
0x1101	3:04:42 PM	0	-46	0	866.9	30	1
0x1101	3:04:43 PM	0	-46	0	867.5	30	1
0x1101	3:04:44 PM	0	-46	0	865.7	30	1
0x1101	3:04:45 PM	0	-46	0	866.3	30	1
0x1101	3:04:46 PM	0	-46	0	866.9	30	1
0x1101	3:04:47 PM	0	-46	0	867.5	30	1
0x1101	3:04:49 PM	0	-46	0	865.7	30	1
0x1101	3:04:50 PM	0	-46	0	866.3	30	1
0x1101	3:04:51 PM	0	-46	0	866.9	30	1
0x1101	3:04:52 PM	0	-46	0	867.5	30	1
0x1101	3:04:53 PM	0	-46	0	865.7	30	1
0x1101	3:04:54 PM	0	-46	0	866.3	30	1
0x1101	3:04:55 PM	0	-46	0	866.9	30	1

0x1101	3:04:57 PM	0	-46	0	867.5	30	1
0x1101	3:04:58 PM	0	-46	0	865.7	30	1
0x1101	3:04:59 PM	0	-46	0	866.3	30	1
0x1101	3:05:00 PM	0	-46	0	866.9	30	1
0x1101	3:05:01 PM	0	-46	0	867.5	30	1
0x1101	3:05:02 PM	0	-46	0	865.7	30	1
0x1101	3:05:03 PM	0	-46	0	866.3	30	1
0x1101	3:05:05 PM	0	-46	0	866.9	30	1
0x1101	3:05:15 PM	1	-47	0	865.7	30	1
0x1101	3:05:16 PM	1	-47	0	866.3	30	1
0x1101	3:05:17 PM	1	-47	0	866.3	30	1
0x1101	3:05:18 PM	1	-47	0	866.3	30	1
0x1101	3:05:20 PM	1	-47	0	866.3	30	1
0x1101	3:05:21 PM	1	-47	0	866.9	30	1
0x1101	3:05:22 PM	1	-47	0	866.9	30	1
0x1101	3:05:23 PM	1	-47	0	866.9	30	1
0x1101	3:05:24 PM	1	-47	0	867.5	30	1
0x1101	3:05:25 PM	1	-47	0	867.5	30	1
0x1101	3:05:26 PM	1	-47	0	867.5	30	1
0x1101	3:05:28 PM	1	-47	0	865.7	30	1
0x1101	3:05:29 PM	1	-47	0	866.3	30	1
0x1101	3:05:30 PM	1	-47	0	866.9	30	1
0x1101	3:05:31 PM	1	-47	0	866.9	30	1
0x1101	3:05:32 PM	1	-47	0	866.9	30	1
0x1101	3:05:33 PM	1	-47	0	866.9	30	1
0x1101	3:05:34 PM	1	-47	0	867.5	30	1
0x1101	3:05:36 PM	1	-47	0	867.5	30	1
0x1101	3:05:37 PM	1	-47	0	867.5	30	1
0x1101	3:05:38 PM	1	-47	0	865.7	30	1
0x1101	3:05:39 PM	1	-47	0	865.7	30	1
0x1101	3:05:40 PM	1	-47	0	865.7	30	1
0x1101	3:05:41 PM	1	-47	0	866.3	30	1
0x1101	3:05:42 PM	1	-47	0	866.9	30	1
0x1101	3:05:43 PM	1	-47	0	867.5	30	1
0x1101	3:05:45 PM	1	-47	0	865.7	30	1
0x1101	3:05:55 PM	2	-46	0	866.9	30	1
0x1101	3:05:56 PM	2	-47	0	867.5	30	1
0x1101	3:05:58 PM	2	-47	0	867.5	30	1
0x1101	3:05:59 PM	2	-47	0	867.5	30	1
0x1101	3:06:00 PM	2	-47	0	867.5	30	1
0x1101	3:06:01 PM	2	-46	0	865.7	30	1
0x1101	3:06:02 PM	2	-46	0	865.7	30	1
0x1101	3:06:03 PM	2	-46	0	865.7	30	1
0x1101	3:06:04 PM	2	-47	0	866.3	30	1
0x1101	3:06:06 PM	2	-47	0	866.3	30	1
0x1101	3:06:07 PM	2	-47	0	866.3	30	1
0x1101	3:06:08 PM	2	-47	0	866.9	30	1
0x1101	3:06:09 PM	2	-47	0	866.9	30	1
0x1101	3:06:10 PM	2	-47	0	866.9	30	1
0x1101	3:06:11 PM	2	-47	0	866.9	30	1
0x1101	3:06:12 PM	2	-47	0	867.5	30	1
0x1101	3:06:13 PM	2	-47	0	867.5	30	1
0x1101	3:06:15 PM	2	-47	0	867.5	30	1
0x1101	3:06:16 PM	2	-46	0	865.7	30	1
0x1101	3:06:17 PM	2	-47	0	865.7	30	1
0x1101	3:06:18 PM	2	-47	0	865.7	30	1
0x1101	3:06:19 PM	2	-46	0	865.7	30	1
0x1101	3:06:20 PM	2	-47	0	866.3	30	1
0x1101	3:06:21 PM	2	-47	0	866.3	30	1
0x1101	3:06:23 PM	2	-47	0	866.3	30	1

0x1101	3:06:24 PM	2	-47	0	866.9	30	1
0x1101	3:06:25 PM	2	-47	0	866.9	30	1
0x1101	3:06:36 PM	3	-47	0	865.7	30	1
0x1101	3:06:37 PM	3	-47	0	866.3	30	1
0x1101	3:06:38 PM	3	-47	0	866.3	30	1
0x1101	3:06:39 PM	3	-47	0	866.3	30	1
0x1101	3:06:40 PM	3	-47	0	866.3	30	1
0x1101	3:06:41 PM	3	-47	0	866.9	30	1
0x1101	3:06:42 PM	3	-47	0	866.9	30	1
0x1101	3:06:44 PM	3	-47	0	866.9	30	1
0x1101	3:06:45 PM	3	-47	0	867.5	30	1
0x1101	3:06:46 PM	3	-47	0	867.5	30	1
0x1101	3:06:47 PM	3	-47	0	867.5	30	1
0x1101	3:06:48 PM	3	-47	0	865.7	30	1
0x1101	3:06:49 PM	3	-47	0	866.3	30	1
0x1101	3:06:50 PM	3	-47	0	866.9	30	1
0x1101	3:06:52 PM	3	-47	0	867.5	30	1
0x1101	3:06:53 PM	3	-47	0	867.5	30	1
0x1101	3:06:54 PM	3	-47	0	867.5	30	1
0x1101	3:06:55 PM	3	-47	0	867.5	30	1
0x1101	3:06:56 PM	3	-47	0	865.7	30	1
0x1101	3:06:57 PM	3	-47	0	865.7	30	1
0x1101	3:06:58 PM	3	-47	0	865.7	30	1
0x1101	3:06:59 PM	3	-47	0	866.3	30	1
0x1101	3:07:01 PM	3	-47	0	866.3	30	1
0x1101	3:07:02 PM	3	-47	0	866.3	30	1
0x1101	3:07:03 PM	3	-47	0	866.9	30	1
0x1101	3:07:04 PM	3	-47	0	867.5	30	1
0x1101	3:07:05 PM	3	-47	0	865.7	30	1
0x1101	3:07:16 PM	4	-46	0	866.9	30	1
0x1101	3:07:17 PM	4	-47	0	867.5	30	1
0x1101	3:07:18 PM	4	-46	0	865.7	30	1
0x1101	3:07:19 PM	4	-46	0	866.3	30	1
0x1101	3:07:20 PM	4	-47	0	866.9	30	1
0x1101	3:07:21 PM	4	-47	0	867.5	30	1
0x1101	3:07:23 PM	4	-46	0	865.7	30	1
0x1101	3:07:24 PM	4	-47	0	866.3	30	1
0x1101	3:07:25 PM	4	-46	0	866.9	30	1
0x1101	3:07:26 PM	4	-47	0	867.5	30	1
0x1101	3:07:27 PM	4	-46	0	865.7	30	1
0x1101	3:07:28 PM	4	-46	0	866.3	30	1
0x1101	3:07:29 PM	4	-46	0	866.9	30	1
0x1101	3:07:31 PM	4	-47	0	867.5	30	1
0x1101	3:07:32 PM	4	-47	0	865.7	30	1
0x1101	3:07:33 PM	4	-46	0	866.3	30	1
0x1101	3:07:34 PM	4	-47	0	866.9	30	1
0x1101	3:07:35 PM	4	-47	0	867.5	30	1
0x1101	3:07:36 PM	4	-46	0	865.7	30	1
0x1101	3:07:37 PM	4	-46	0	866.3	30	1
0x1101	3:07:39 PM	4	-46	0	866.9	30	1
0x1101	3:07:40 PM	4	-47	0	867.5	30	1
0x1101	3:07:41 PM	4	-47	0	865.7	30	1
0x1101	3:07:42 PM	4	-46	0	866.3	30	1
0x1101	3:07:43 PM	4	-47	0	866.9	30	1
0x1101	3:07:44 PM	4	-47	0	867.5	30	1
0x1101	3:07:45 PM	4	-46	0	865.7	30	1
0x1102	3:05:15 PM	1	-49	0	865.7	30	1
0x1102	3:05:16 PM	1	-48	0	866.3	30	1
0x1102	3:05:18 PM	1	-48	0	866.3	30	1
0x1102	3:05:19 PM	1	-48	0	866.3	30	1

0x1102	3:05:20 PM	1	-48	0	866.9	30	1
0x1102	3:05:21 PM	1	-48	0	866.9	30	1
0x1102	3:05:23 PM	1	-48	0	866.9	30	1
0x1102	3:05:24 PM	1	-48	0	867.5	30	1
0x1102	3:05:25 PM	1	-48	0	867.5	30	1
0x1102	3:05:26 PM	1	-48	0	867.5	30	1
0x1102	3:05:28 PM	1	-48	0	865.7	30	1
0x1102	3:05:29 PM	1	-49	0	866.3	30	1
0x1102	3:05:30 PM	1	-48	0	866.9	30	1
0x1102	3:05:31 PM	1	-48	0	866.9	30	1
0x1102	3:05:32 PM	1	-48	0	866.9	30	1
0x1102	3:05:34 PM	1	-48	0	867.5	30	1
0x1102	3:05:35 PM	1	-48	0	867.5	30	1
0x1102	3:05:36 PM	1	-48	0	867.5	30	1
0x1102	3:05:37 PM	1	-48	0	865.7	30	1
0x1102	3:05:39 PM	1	-48	0	865.7	30	1
0x1102	3:05:40 PM	1	-48	0	865.7	30	1
0x1102	3:05:41 PM	1	-48	0	865.7	30	1
0x1102	3:05:42 PM	1	-48	0	866.9	30	1
0x1102	3:05:44 PM	1	-48	0	867.5	30	1
0x1102	3:05:45 PM	1	-48	0	865.7	30	1
0x1102	3:05:55 PM	2	-55	0	866.9	30	1
0x1102	3:05:57 PM	2	-56	0	867.5	30	1
0x1102	3:05:58 PM	2	-55	0	867.5	30	1
0x1102	3:05:59 PM	2	-55	0	867.5	30	1
0x1102	3:06:00 PM	2	-55	0	865.7	30	1
0x1102	3:06:01 PM	2	-55	0	865.7	30	1
0x1102	3:06:03 PM	2	-55	0	865.7	30	1
0x1102	3:06:04 PM	2	-55	0	865.7	30	1
0x1102	3:06:05 PM	2	-55	0	866.3	30	1
0x1102	3:06:06 PM	2	-55	0	866.3	30	1
0x1102	3:06:08 PM	2	-55	0	866.3	30	1
0x1102	3:06:09 PM	2	-55	0	866.9	30	1
0x1102	3:06:10 PM	2	-54	0	866.9	30	1
0x1102	3:06:11 PM	2	-54	0	866.9	30	1
0x1102	3:06:13 PM	2	-54	0	867.5	30	1
0x1102	3:06:14 PM	2	-54	0	867.5	30	1
0x1102	3:06:15 PM	2	-54	0	867.5	30	1
0x1102	3:06:16 PM	2	-54	0	865.7	30	1
0x1102	3:06:18 PM	2	-54	0	865.7	30	1
0x1102	3:06:19 PM	2	-54	0	865.7	30	1
0x1102	3:06:20 PM	2	-54	0	866.3	30	1
0x1102	3:06:21 PM	2	-54	0	866.3	30	1
0x1102	3:06:22 PM	2	-54	0	866.3	30	1
0x1102	3:06:24 PM	2	-54	0	866.9	30	1
0x1102	3:06:25 PM	2	-54	0	866.9	30	1
0x1102	3:06:36 PM	3	-48	0	865.7	30	1
0x1102	3:06:37 PM	3	-48	0	866.3	30	1
0x1102	3:06:38 PM	3	-48	0	866.3	30	1
0x1102	3:06:39 PM	3	-48	0	866.3	30	1
0x1102	3:06:40 PM	3	-48	0	866.9	30	1
0x1102	3:06:42 PM	3	-48	0	866.9	30	1
0x1102	3:06:43 PM	3	-48	0	866.9	30	1
0x1102	3:06:44 PM	3	-49	0	867.5	30	1
0x1102	3:06:45 PM	3	-49	0	867.5	30	1
0x1102	3:06:47 PM	3	-49	0	867.5	30	1
0x1102	3:06:48 PM	3	-49	0	867.5	30	1
0x1102	3:06:49 PM	3	-48	0	866.3	30	1
0x1102	3:06:50 PM	3	-48	0	866.9	30	1
0x1102	3:06:52 PM	3	-49	0	867.5	30	1

0x1102	3:06:53 PM	3	-49	0	867.5	30	1
0x1102	3:06:54 PM	3	-49	0	867.5	30	1
0x1102	3:06:55 PM	3	-48	0	865.7	30	1
0x1102	3:06:57 PM	3	-48	0	865.7	30	1
0x1102	3:06:58 PM	3	-48	0	865.7	30	1
0x1102	3:06:59 PM	3	-48	0	866.3	30	1
0x1102	3:07:00 PM	3	-48	0	866.3	30	1
0x1102	3:07:02 PM	3	-48	0	866.3	30	1
0x1102	3:07:03 PM	3	-48	0	866.9	30	1
0x1102	3:07:04 PM	3	-48	0	867.5	30	1
0x1102	3:07:05 PM	3	-48	0	865.7	30	1
0x1103	3:05:55 PM	2	-47	0	866.9	30	1
0x1103	3:05:57 PM	2	-47	0	867.5	30	1
0x1103	3:05:58 PM	2	-47	0	867.5	30	1
0x1103	3:05:59 PM	2	-47	0	867.5	30	1
0x1103	3:06:00 PM	2	-47	0	865.7	30	1
0x1103	3:06:02 PM	2	-47	0	865.7	30	1
0x1103	3:06:03 PM	2	-47	0	865.7	30	1
0x1103	3:06:04 PM	2	-47	0	866.3	30	1
0x1103	3:06:06 PM	2	-47	0	866.3	30	1
0x1103	3:06:07 PM	2	-47	0	866.3	30	1
0x1103	3:06:08 PM	2	-47	0	866.9	30	1
0x1103	3:06:09 PM	2	-47	0	866.9	30	1
0x1103	3:06:11 PM	2	-47	0	866.9	30	1
0x1103	3:06:12 PM	2	-47	0	867.5	30	1
0x1103	3:06:13 PM	2	-47	0	867.5	30	1
0x1103	3:06:14 PM	2	-47	0	867.5	30	1
0x1103	3:06:16 PM	2	-47	0	865.7	30	1
0x1103	3:06:17 PM	2	-47	0	865.7	30	1
0x1103	3:06:18 PM	2	-47	0	865.7	30	1
0x1103	3:06:20 PM	2	-47	0	866.3	30	1
0x1103	3:06:21 PM	2	-47	0	866.3	30	1
0x1103	3:06:22 PM	2	-47	0	866.3	30	1
0x1103	3:06:23 PM	2	-47	0	866.9	30	1
0x1103	3:06:25 PM	2	-47	0	866.9	30	1

8.2.12 Round 12 of Blood Bag with Energy Drink

EPCValue	Real Time	RunNum	RSSI	Reader	Frequency	Power	Antenna
0x1101	3:08:19 PM	0	-46	0	866.9	30	1
0x1101	3:08:20 PM	0	-47	0	867.5	30	1
0x1101	3:08:21 PM	0	-46	0	865.7	30	1
0x1101	3:08:22 PM	0	-46	0	866.3	30	1
0x1101	3:08:23 PM	0	-46	0	866.9	30	1
0x1101	3:08:24 PM	0	-47	0	867.5	30	1
0x1101	3:08:25 PM	0	-46	0	865.7	30	1
0x1101	3:08:27 PM	0	-46	0	866.3	30	1
0x1101	3:08:28 PM	0	-46	0	866.9	30	1
0x1101	3:08:29 PM	0	-47	0	867.5	30	1
0x1101	3:08:30 PM	0	-46	0	865.7	30	1
0x1101	3:08:31 PM	0	-46	0	866.3	30	1
0x1101	3:08:32 PM	0	-46	0	866.9	30	1
0x1101	3:08:33 PM	0	-47	0	867.5	30	1
0x1101	3:08:35 PM	0	-46	0	865.7	30	1
0x1101	3:08:36 PM	0	-46	0	866.3	30	1
0x1101	3:08:37 PM	0	-46	0	866.9	30	1

0x1101	3:08:38 PM	0	-47	0	867.5	30	1
0x1101	3:08:39 PM	0	-46	0	865.7	30	1
0x1101	3:08:40 PM	0	-46	0	866.3	30	1
0x1101	3:08:42 PM	0	-46	0	866.9	30	1
0x1101	3:08:43 PM	0	-47	0	867.5	30	1
0x1101	3:08:44 PM	0	-46	0	865.7	30	1
0x1101	3:08:45 PM	0	-46	0	866.3	30	1
0x1101	3:08:46 PM	0	-46	0	866.9	30	1
0x1101	3:08:47 PM	0	-47	0	867.5	30	1
0x1101	3:08:48 PM	0	-46	0	865.7	30	1
0x1101	3:08:59 PM	1	-47	0	866.9	30	1
0x1101	3:09:00 PM	1	-47	0	867.5	30	1
0x1101	3:09:01 PM	1	-47	0	865.7	30	1
0x1101	3:09:02 PM	1	-47	0	865.7	30	1
0x1101	3:09:03 PM	1	-47	0	865.7	30	1
0x1101	3:09:05 PM	1	-47	0	865.7	30	1
0x1101	3:09:06 PM	1	-47	0	866.3	30	1
0x1101	3:09:07 PM	1	-47	0	866.3	30	1
0x1101	3:09:08 PM	1	-47	0	866.3	30	1
0x1101	3:09:09 PM	1	-47	0	866.9	30	1
0x1101	3:09:10 PM	1	-47	0	866.9	30	1
0x1101	3:09:11 PM	1	-47	0	866.9	30	1
0x1101	3:09:13 PM	1	-47	0	867.5	30	1
0x1101	3:09:14 PM	1	-47	0	865.7	30	1
0x1101	3:09:15 PM	1	-47	0	866.3	30	1
0x1101	3:09:16 PM	1	-47	0	866.3	30	1
0x1101	3:09:17 PM	1	-47	0	866.3	30	1
0x1101	3:09:18 PM	1	-47	0	866.3	30	1
0x1101	3:09:19 PM	1	-47	0	866.9	30	1
0x1101	3:09:20 PM	1	-47	0	866.9	30	1
0x1101	3:09:22 PM	1	-47	0	866.9	30	1
0x1101	3:09:23 PM	1	-47	0	867.5	30	1
0x1101	3:09:24 PM	1	-47	0	867.5	30	1
0x1101	3:09:25 PM	1	-47	0	867.5	30	1
0x1101	3:09:26 PM	1	-47	0	865.7	30	1
0x1101	3:09:27 PM	1	-47	0	866.3	30	1
0x1101	3:09:28 PM	1	-47	0	866.9	30	1
0x1101	3:09:39 PM	2	-45	0	865.7	30	1
0x1101	3:09:40 PM	2	-44	0	866.3	30	1
0x1101	3:09:41 PM	2	-47	0	866.3	30	1
0x1101	3:09:42 PM	2	-47	0	866.3	30	1
0x1101	3:09:44 PM	2	-47	0	866.3	30	1
0x1101	3:09:45 PM	2	-47	0	866.9	30	1
0x1101	3:09:46 PM	2	-47	0	866.9	30	1
0x1101	3:09:47 PM	2	-47	0	866.9	30	1
0x1101	3:09:48 PM	2	-47	0	867.5	30	1
0x1101	3:09:49 PM	2	-48	0	867.5	30	1
0x1101	3:09:50 PM	2	-48	0	867.5	30	1
0x1101	3:09:52 PM	2	-48	0	867.5	30	1
0x1101	3:09:53 PM	2	-47	0	865.7	30	1
0x1101	3:09:54 PM	2	-47	0	865.7	30	1
0x1101	3:09:55 PM	2	-47	0	865.7	30	1
0x1101	3:09:56 PM	2	-48	0	866.3	30	1
0x1101	3:09:57 PM	2	-48	0	866.3	30	1
0x1101	3:09:58 PM	2	-48	0	866.3	30	1
0x1101	3:09:59 PM	2	-48	0	866.9	30	1
0x1101	3:10:01 PM	2	-48	0	866.9	30	1
0x1101	3:10:02 PM	2	-48	0	866.9	30	1
0x1101	3:10:03 PM	2	-48	0	866.9	30	1
0x1101	3:10:04 PM	2	-48	0	867.5	30	1

0x1101	3:10:05 PM	2	-48	0	867.5	30	1
0x1101	3:10:06 PM	2	-48	0	867.5	30	1
0x1101	3:10:07 PM	2	-48	0	865.7	30	1
0x1101	3:10:09 PM	2	-48	0	865.7	30	1
0x1101	3:10:19 PM	3	-47	0	866.9	30	1
0x1101	3:10:20 PM	3	-48	0	867.5	30	1
0x1101	3:10:22 PM	3	-48	0	867.5	30	1
0x1101	3:10:23 PM	3	-48	0	867.5	30	1
0x1101	3:10:24 PM	3	-48	0	867.5	30	1
0x1101	3:10:25 PM	3	-47	0	865.7	30	1
0x1101	3:10:26 PM	3	-47	0	865.7	30	1
0x1101	3:10:27 PM	3	-47	0	865.7	30	1
0x1101	3:10:28 PM	3	-47	0	866.3	30	1
0x1101	3:10:30 PM	3	-48	0	866.3	30	1
0x1101	3:10:31 PM	3	-47	0	866.3	30	1
0x1101	3:10:32 PM	3	-48	0	866.9	30	1
0x1101	3:10:33 PM	3	-48	0	867.5	30	1
0x1101	3:10:34 PM	3	-47	0	865.7	30	1
0x1101	3:10:35 PM	3	-47	0	866.3	30	1
0x1101	3:10:36 PM	3	-48	0	866.3	30	1
0x1101	3:10:37 PM	3	-48	0	866.3	30	1
0x1101	3:10:39 PM	3	-47	0	866.3	30	1
0x1101	3:10:40 PM	3	-48	0	866.9	30	1
0x1101	3:10:41 PM	3	-48	0	866.9	30	1
0x1101	3:10:42 PM	3	-48	0	866.9	30	1
0x1101	3:10:43 PM	3	-48	0	867.5	30	1
0x1101	3:10:44 PM	3	-48	0	867.5	30	1
0x1101	3:10:45 PM	3	-48	0	867.5	30	1
0x1101	3:10:47 PM	3	-47	0	865.7	30	1
0x1101	3:10:48 PM	3	-47	0	866.3	30	1
0x1101	3:10:49 PM	3	-47	0	866.9	30	1
0x1101	3:11:00 PM	4	-46	0	865.7	30	1
0x1101	3:11:01 PM	4	-46	0	866.3	30	1
0x1101	3:11:02 PM	4	-46	0	866.9	30	1
0x1101	3:11:03 PM	4	-46	0	867.5	30	1
0x1101	3:11:04 PM	4	-46	0	865.7	30	1
0x1101	3:11:05 PM	4	-46	0	866.3	30	1
0x1101	3:11:06 PM	4	-46	0	866.9	30	1
0x1101	3:11:07 PM	4	-46	0	867.5	30	1
0x1101	3:11:09 PM	4	-46	0	865.7	30	1
0x1101	3:11:10 PM	4	-46	0	866.3	30	1
0x1101	3:11:11 PM	4	-46	0	866.9	30	1
0x1101	3:11:12 PM	4	-46	0	867.5	30	1
0x1101	3:11:13 PM	4	-46	0	865.7	30	1
0x1101	3:11:14 PM	4	-46	0	866.3	30	1
0x1101	3:11:15 PM	4	-46	0	866.9	30	1
0x1101	3:11:17 PM	4	-46	0	867.5	30	1
0x1101	3:11:18 PM	4	-46	0	865.7	30	1
0x1101	3:11:19 PM	4	-46	0	866.3	30	1
0x1101	3:11:20 PM	4	-46	0	866.9	30	1
0x1101	3:11:21 PM	4	-46	0	867.5	30	1
0x1101	3:11:22 PM	4	-46	0	865.7	30	1
0x1101	3:11:23 PM	4	-46	0	866.3	30	1
0x1101	3:11:25 PM	4	-46	0	866.9	30	1
0x1101	3:11:26 PM	4	-46	0	867.5	30	1
0x1101	3:11:27 PM	4	-46	0	865.7	30	1
0x1101	3:11:28 PM	4	-46	0	866.3	30	1
0x1101	3:11:29 PM	4	-46	0	866.9	30	1
0x1102	3:08:59 PM	1	-48	0	866.9	30	1
0x1102	3:09:00 PM	1	-48	0	867.5	30	1

0x1102	3:09:01 PM	1	-48	0	865.7	30	1
0x1102	3:09:03 PM	1	-48	0	865.7	30	1
0x1102	3:09:04 PM	1	-48	0	865.7	30	1
0x1102	3:09:05 PM	1	-48	0	866.3	30	1
0x1102	3:09:06 PM	1	-48	0	866.3	30	1
0x1102	3:09:08 PM	1	-48	0	866.3	30	1
0x1102	3:09:09 PM	1	-48	0	866.9	30	1
0x1102	3:09:10 PM	1	-48	0	866.9	30	1
0x1102	3:09:11 PM	1	-48	0	866.9	30	1
0x1102	3:09:12 PM	1	-48	0	867.5	30	1
0x1102	3:09:14 PM	1	-48	0	865.7	30	1
0x1102	3:09:15 PM	1	-48	0	866.3	30	1
0x1102	3:09:16 PM	1	-48	0	866.3	30	1
0x1102	3:09:17 PM	1	-48	0	866.3	30	1
0x1102	3:09:19 PM	1	-48	0	866.9	30	1
0x1102	3:09:20 PM	1	-48	0	866.9	30	1
0x1102	3:09:21 PM	1	-48	0	866.9	30	1
0x1102	3:09:22 PM	1	-48	0	867.5	30	1
0x1102	3:09:24 PM	1	-48	0	867.5	30	1
0x1102	3:09:25 PM	1	-48	0	867.5	30	1
0x1102	3:09:26 PM	1	-48	0	865.7	30	1
0x1102	3:09:27 PM	1	-49	0	866.3	30	1
0x1102	3:09:29 PM	1	-48	0	866.9	30	1
0x1102	3:09:39 PM	2	-46	0	865.7	30	1
0x1102	3:09:40 PM	2	-50	0	866.3	30	1
0x1102	3:09:42 PM	2	-50	0	866.3	30	1
0x1102	3:09:43 PM	2	-50	0	866.3	30	1
0x1102	3:09:44 PM	2	-50	0	866.9	30	1
0x1102	3:09:45 PM	2	-50	0	866.9	30	1
0x1102	3:09:46 PM	2	-50	0	866.9	30	1
0x1102	3:09:48 PM	2	-50	0	866.9	30	1
0x1102	3:09:49 PM	2	-50	0	867.5	30	1
0x1102	3:09:50 PM	2	-50	0	867.5	30	1
0x1102	3:09:51 PM	2	-50	0	867.5	30	1
0x1102	3:09:53 PM	2	-50	0	865.7	30	1
0x1102	3:09:54 PM	2	-50	0	865.7	30	1
0x1102	3:09:55 PM	2	-49	0	865.7	30	1
0x1102	3:09:56 PM	2	-50	0	866.3	30	1
0x1102	3:09:58 PM	2	-50	0	866.3	30	1
0x1102	3:09:59 PM	2	-50	0	866.3	30	1
0x1102	3:10:00 PM	2	-50	0	866.9	30	1
0x1102	3:10:01 PM	2	-50	0	866.9	30	1
0x1102	3:10:03 PM	2	-50	0	866.9	30	1
0x1102	3:10:04 PM	2	-50	0	867.5	30	1
0x1102	3:10:05 PM	2	-50	0	867.5	30	1
0x1102	3:10:06 PM	2	-50	0	867.5	30	1
0x1102	3:10:07 PM	2	-49	0	865.7	30	1
0x1102	3:10:09 PM	2	-49	0	865.7	30	1
0x1102	3:10:19 PM	3	-48	0	866.9	30	1
0x1102	3:10:21 PM	3	-49	0	867.5	30	1
0x1102	3:10:22 PM	3	-49	0	867.5	30	1
0x1102	3:10:23 PM	3	-49	0	867.5	30	1
0x1102	3:10:24 PM	3	-49	0	865.7	30	1
0x1102	3:10:25 PM	3	-49	0	865.7	30	1
0x1102	3:10:27 PM	3	-49	0	865.7	30	1
0x1102	3:10:28 PM	3	-48	0	866.3	30	1
0x1102	3:10:29 PM	3	-49	0	866.3	30	1
0x1102	3:10:30 PM	3	-48	0	866.3	30	1
0x1102	3:10:32 PM	3	-48	0	866.3	30	1
0x1102	3:10:33 PM	3	-49	0	867.5	30	1

0x1102	3:10:34 PM	3	-49	0	865.7	30	1
0x1102	3:10:35 PM	3	-49	0	866.3	30	1
0x1102	3:10:37 PM	3	-49	0	866.3	30	1
0x1102	3:10:38 PM	3	-48	0	866.3	30	1
0x1102	3:10:39 PM	3	-48	0	866.9	30	1
0x1102	3:10:40 PM	3	-48	0	866.9	30	1
0x1102	3:10:42 PM	3	-48	0	866.9	30	1
0x1102	3:10:43 PM	3	-49	0	867.5	30	1
0x1102	3:10:44 PM	3	-49	0	867.5	30	1
0x1102	3:10:45 PM	3	-49	0	867.5	30	1
0x1102	3:10:47 PM	3	-49	0	865.7	30	1
0x1102	3:10:48 PM	3	-48	0	866.3	30	1
0x1102	3:10:49 PM	3	-48	0	866.9	30	1
0x1103	3:09:39 PM	2	-49	0	865.7	30	1
0x1103	3:09:40 PM	2	-49	0	866.3	30	1
0x1103	3:09:42 PM	2	-50	0	866.3	30	1
0x1103	3:09:43 PM	2	-49	0	866.3	30	1
0x1103	3:09:44 PM	2	-50	0	866.9	30	1
0x1103	3:09:45 PM	2	-50	0	866.9	30	1
0x1103	3:09:47 PM	2	-50	0	866.9	30	1
0x1103	3:09:48 PM	2	-50	0	867.5	30	1
0x1103	3:09:49 PM	2	-50	0	867.5	30	1
0x1103	3:09:51 PM	2	-50	0	867.5	30	1
0x1103	3:09:52 PM	2	-50	0	865.7	30	1
0x1103	3:09:53 PM	2	-50	0	865.7	30	1
0x1103	3:09:54 PM	2	-50	0	865.7	30	1
0x1103	3:09:56 PM	2	-50	0	866.3	30	1
0x1103	3:09:57 PM	2	-50	0	866.3	30	1
0x1103	3:09:58 PM	2	-50	0	866.3	30	1
0x1103	3:09:59 PM	2	-50	0	866.9	30	1
0x1103	3:10:01 PM	2	-50	0	866.9	30	1
0x1103	3:10:02 PM	2	-50	0	866.9	30	1
0x1103	3:10:03 PM	2	-50	0	867.5	30	1
0x1103	3:10:05 PM	2	-51	0	867.5	30	1
0x1103	3:10:06 PM	2	-51	0	867.5	30	1
0x1103	3:10:07 PM	2	-50	0	865.7	30	1
0x1103	3:10:08 PM	2	-50	0	865.7	30	1