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An Evaluation of Induction Heating in Healthcare Food Industry

Barrett Alexander Hampton
Western Kentucky University, barretthampton@yahoo.com

AN EVALUATION OF INDUCTION HEATING IN HEALTHCARE FOOD INDUSTRY

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AN EVALUATION OF INDUCTION HEATING IN HEALTHCARE FOOD INDUSTRY

Date Recommended

Dr. Daniel Jackson (Thesis Director)

Dr. Brent Askins

Shahnaz Aly

Dean, The Graduate School

4/16/18
Date

I dedicate this work to my wife and two daughters without whom I would have no reason to become a better man.

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AN EVALUATION OF INDUCTION HEATING IN HEALTHCARE FOOD INDUSTRY

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Directed by: Dr. Daniel Jackson, Dr. Brent Askins and Shahnaz Aly

School of Engineering and Applied Science Western Kentucky University

This thesis addresses the problem healthcare facilities are having in maintaining proper food temperatures while transporting meals to patients after food has left the kitchen area. Induction heat has been a known method for generating heat for many years. The commercial food industry currently uses this technology, which is beginning to appear in the residential sector as well because of developments made by manufacturers. This study focuses on the top commercial brand models of induction heaters and the supporting materials currently used to create heat sources to maintain food temperatures in hospitals and long term care facilities.

The research in this thesis includes data recorded from 6,000 total induction cycles from the 3 leading induction heating models. The focus of the research was to gather data concerning the models' reliability to consistently create the intended inducement of radio frequency waves as well as deliver consistent temperature reactions from the recorded induction cycles. There were 18,000 temperature data points recorded during different time intervals for each of the induction cycles for the entire study. The results indicate the current technology not only is reliable in creating inductions fields but also in delivering consistent temperatures in the supporting materials being heated.

Introduction

Induction has been used historically as a fast heating process to treat large metal products and requires no direct contact to create or transfer heat to a surface (Rudnev et al., 2003). The speed and consistent application of heat transfer that has been derived by modern manufacturing induction practices makes it a logical use of existing technology to be applied in maintaining temperatures of food in the healthcare market. However, the focus for commercial equipment manufacturers has been to market products that can consistently maintain desired food temperatures, particularly in the healthcare industry. Traditionally, heating foods was accomplished by physically applying heat to areas where food is stored, in order to reach a certain temperature, and then working to deliver that food to the patient in a timely manner or before it cooled to temperatures that would be deemed too cold for consumption. If the food was too cold, before it was served to the patient, then it was typically micro waved in order to reheat the food. However, reheating food in the microwave is not only detrimental, but it also degrades food quality, texture, and visual presentation (Harvard Health, 2015). As a result, the effort demanded to deliver all foods to all patients, while the food is still at an ideal temperature, has resulted in an increased cost of labor. This is because healthcare facilities have had to hire additional workers to meet the demands placed on the nutrition department related to safe temperatures and speed of food delivery (Aladdin, 2013).

Problem Statement

The problem for healthcare facilities is finding a reliable system that can deliver consistent food temperatures. There are regulations and satisfaction levels that are in place to strongly encourage hospitals and long term care systems to ensure patient foods are safe, and that starts with temperatures. This study was to evaluate the systems currently in use and document the source of the induction systems' ability to consistently deliver those temperatures.

Significance of the Research

Research marks were met by employing the quantitative research method. This research project was conducted with the postpositive view, as it is supportive of the scientific method. The primary focus was to collect data and process that information statistically in order to apply it to the hypothesis developed for the consistency and reliability of induction heating technology. The testing data gathered was used to directly confirm the proposed hypothesis 1 and 2 (Creswell, 2009). This research did support the theory that currently designed systems of induction heating technology have the ability to provide consistent temperatures and induction reliability demanded by the healthcare industry, and is supported by statistical data collected to perform over time. Summarization of the findings does further support the business efforts of manufacturers to continue to gain market share in the healthcare food industry using these existing technologies. The results from the documented induction cycles added to the value of the relationship between meeting expectations accompanied with consistent performance and continued presence in the marketplace. This research will also support the hypothesis that the systems supporting materials, ferrous metal and induction pellets for example,

can hold up over time and consistent exposure to induction cycling. The collection of data that confirms both temperature benchmarks and minimal induction failures did present statistical evidence that indicates that the support equipment has long lasting reliability and can be considered consistent enough for performance of food warming use in the healthcare field. The technology, through repeated consistency and performance measurements, should be an area of continued support by induction equipment manufacturers through invested capital and forward movements in development and quality improvement efforts.

Purpose of the Research

The purpose of the research was to evaluate a selection of leading commercial grade induction activators and their supporting system materials in order to record temperature generation results related to the performance consistency. There are multiple timed temperature points to be observed and measured during the induction activation process. The technology has been refined over the years, and changes in conducting the radio frequency have become more advanced. This research captured initial and desired set point temperature readings created from the induction process on the supporting materials. Repeated induction testing of the same materials with a focus on physical reactions during maximum cycle tests was intended for evaluating the consistency of temperatures generated over time. The secondary part of the research was to identify, during intervals of equal activation cycles, how the supporting materials may be affected physically by observing any signs of wear or degradation and possibly any signs of heat loss after being used for multiple induction cycles over time. The evaluations also recorded the ability of the induction activators to repeatedly heat the supporting materials

of the system through counting the number of cycles without errors, system failures, or inconsistency in the ability to reach desired set points temperatures set by the manufacturer.

The main goal of the research was to collect temperature performance data regarding the consistency of the existing induction heating systems. The ability to consistently generate heat through induction relates to solving the main problem with delivering appropriately heated food to patients in the healthcare industry. The information recorded from this study demonstrates whether the induction models tested do show evidence of meeting or exceeding performance expectations to generate a consistent heat source for patient food delivery. Performance consistency and ability to meet expectations are critical parts of not only satisfying patients but satisfying healthcare facilities within the marketplace. The impact of the data collected from these temperature testing sessions should also support efforts of future research and development into the current use of the technology as manufacturers continue to set goals of acquiring an increase in market share within the healthcare food industry.

Hypotheses or Research Questions

H1: The commercial induction activators can perform at maximum design parameters and produce a low number of statistical errors or system failures when creating the desired radio frequency field during induction cycles.

H2: The supporting material of each induction system can perform consistently as designed by reaching temperature benchmark measurements consistently over time as well as avoiding any physical signs of degradation of heat activation or deterioration of the induction activators and supporting materials in terms of both their heating generations and their physical aesthetics.

Assumptions

The assumptions for this study are:

1. The systems currently on the market are being designed for daily use at the highest rated capacity. This study will focus directly on each induction activator as it relates to the amount of cycles possible under recommended heat settings, without interruption of malfunction.

2. The systems created for the commercial market, which include both the induction activators and supporting materials for the system, can perform under the design parameters set by the manufacturers. This study attempted to show that the induction process can hold up repetitious activation as prescribed for each individual model, as well as the consistent performance expectations.

Limitations and Delimitations

The three limitations for this research were:

1. The ability to maintain preferred electrical supply to the induction activator as prescribed by each of the manufacturers during testing periods. The reality is that this is not a factor easily controlled because the electricity itself is controlled by the power company and not our circuits alone.

2. The amount of acquired supporting system material, induction pellets or other ferrous cookware, will be limited to access provided by the manufacturers.

3. Lab access times for carrying out complete induction cycle testing, without interrupting current manufacturing processes.

The delimitations for the research were:

There are currently many manufacturers of induction heating systems in the marketplace. This research project, however, only used a sample based on three accessible commercial grade systems from the following manufacturers: Aladdin Temp-Rite™ and Carlise-Dinex™. The induction units tested from Aladdin Temp-Rite were models IND600 and the Advantage models. The Smart-Therm II was the single model tested from Carlise-Dinex. The leading residential grade systems, Electrolux™ and NuWave™ were not available for testing, due to financial constraints, so they were excluded from the induction system evaluations considered in the current performance comparison.

Definition of Terms

Electrical Current: The flow of an electrical charge. The currents cause joule heating for incandescent lighting, but they also create magnetic fields, which are used in generators and inductors (Davies & Simpson, 1979).

Electromagnetic Force (EMF): The physical field created by electrically charged objects. This field can have direct effect on the behavior of other objects within the area the field is generated (Rudnev et al., 2003).

Ferrous Metal: Metal that is or contains divalent iron (Merriam-Webster, 2016).

Induction Activator: Cooking device that contains elements to emit and control a radio frequency required to create the induction heating process or maintain a specified temperature (Aladdin Temp-Rite, 2015).

Induction Heating: The means of creating heat through use of a high frequency electromagnetic field. A metallic object can be placed inside the field and cause the makeup of the metal object to become agitated on the surface, causing a displacement of heat (Shields, 1969).

Induction Pellet: Induction supporting diskette that contains ferrous metal and receives radio frequency from induction heating process, which results in heat output and retention (Aladdin Temp-Rite, 2013).

Megahertz (MHz): A measurement unit for frequency. It is the number of oscillations an electromagnetic field measured per second. An electromagnetic field, more specifically radiation, is measured by frequency (Quan, 1992).

Radiant Heat: The thermal radiation generated by thermal motion of charged particles from electromagnetic radiation (Lewis et al., 2004).

Radio Frequency: Any of the electromagnetic wave frequencies that lie in the range extending from below 3 kilohertz to about 300 gigahertz and that include the frequencies used for communications signals (Merriam-Webster, 2016).

Review of Literature

General Principles of Induction

The concept of induction based heat originated in 1831 when Michael Faraday discovered it while experimenting with coils wrapped in wire. According to Rudnev et al. (2003), Faraday had concluded that an electrical current can be induced in one coil without physically touching the other coil simply by changing the magnetic field surrounding the metals. More specifically, Faraday's Law states that the electro-motive force induced in a circuit is directly proportional to the time rate of change of magnetic flux through the circuit (Rudnev et al., 2003). One of the byproducts of this process was the generation of heat. The technology found its industrial use during the World War II era, when the increased demand for metal manufacturing required a faster way to deliver heat treatment to large scale production in the creation of metal components like engine and other machined parts. Induction technology was a good fit due to its refined ability to control a consistent application of heat.

Factors related to Induction Efficacy and Efficiency

Factors that are considered related to the efficiency of the induction process are dependent not only on the creation of the radio frequency field, but also the supporting physical factors of the materials being induced. The induction process applies most of the activity, approximately 80%, of creating heat on the surface of the conductive metal being agitated (Shields, 1969). This insinuates that the physical size and thickness of the metal is important in the overall efficacy of the process because thinner pieces would be induced more rapidly than larger ones. The makeup of the metal is equally important to the amount used on the induction coil because the amount of natural resistance varies

from metal to metal. For example, the natural resistance of steel is different than that of copper. More specifically, non-ferrous metals like copper, brass, and aluminum will require more time to heat because they are good conductors and have very little resistance to the electrical currents, but this would be an ineffective use of the induction coil. As such, less conductive metals should be preferred. Finally, the amount of time required to induce the desired temperature also factors into the lifespan of the induction coil, which directly affects the longevity of any product using induction technology to produce heat (Rudnev et al., 2003).

Variables in Induction Heating

The efficiency of an induction heating process, used in any application, can depend on a multitude of variables, including the power supply, materials being heated and exiting temperature. The easiest test for efficiency and longevity is the power supplies for each of the induction heating systems by repeatedly putting each system through a maximum number, and intensity, of induction cycles. The perspective for this testing is to show the ability for each system to be used as prescribed by the manufacturers recommended duty cycle and not as a comparison with the other units' performance. The demand for each system will come from the variables of the design and makeup of the supporting materials.

In this research, the supporting materials for each manufacturer may produce different levels of heat depending on the type of material employed within each respective system. The type of material being heated as well as the dimensions of the heated material directly affect the amount of time the metal has to be induced before generating heat, as well as how much of that heat can be retained (Souley, 2010). The

nature of each supporting system's pellets will directly affect not only the speed at which the desired maximum temperature can be achieved, but also the retention of a heated state, or the efficacy of the heat. Ferrous metals will be used in the most efficient systems. It is easier to heat magnetic or ferrous materials over standard metals because the ferrous metals produce heat through the hysteresis effect (Davies & Simpson, 1979). When the induction process is started, ferrous metals offer a naturally occurring resistance to the alternating electrical fields being generated by the induction heating process. Another factor, which will vary from model to model, is the method and frequency used to create heat.

There are two schools of thought, or methods, for generating heat. Higher frequencies help to reach target temperatures faster, but lower frequencies may provide greater efficacy, or longer lasting heat. More specifically,

> Frequencies of 100 to 400 kHz produce relatively high-energy heat, ideal for quickly heating small parts or the surface/skin of larger parts. For deep, penetrating heat, longer heating cycles at lower frequencies of 5 to 30 kHz have been shown to be most effective. (United Induction Heating Machine Limited, 2013, p. 3)

Results that reflect one of these methods as a best practice should be considered further. The resistance also can increase if the material is heated already before induction, as a hot piece of metal tends to be more receptive to the induction process than a colder one (Aladdin, 2013). This means that the preparation of supporting materials or the environment in which they are designed to be used can have an effect on the how effective the supporting material can be heated and should be measurable for longevity in

the areas of heat retention and degradation. The speed at which the metals can be heated can vary greatly depending on the thickness and overall size. Thicker parts would bring a greater requirement on the induction activator, whereas small, thin parts will absorb the heat more rapidly with fewer burdens to reach maximum temperatures (Zinn, 1988).

The Use of Electricity as a Food Heating Method

Historically, preparing food has carried a high energy demand. A variety of methods has been developed for the preparation of food. In recent times, electrical heating processes have been considered the fastest and least energy demanding method of preparing food. Electricity has the ability to generate high temperatures rapidly. Generally, two methods have been used most prominently for both the cooking and the continued heating of foods in a large-scale environment, such as a hospital: microwaving and induction cooking. It is important to understand the differences, advantages and disadvantages of both options.

Microwave Food Technology Basics

Microwaves heat food by exposing the food to electromagnetic radiation on the microwave frequency wave. This causes polar molecules in the food to move, or rotate, creating dielectric heat, or thermal energy (Quan et al., 1992). However, their application in a professional or large-scale cooking setting is somewhat limited by the fact that foods are merely boiled or heated. It is impossible to get the crisped effect of frying, baking, browning, or glazing in the microwave setting. As such, microwaving alone does not provide a full-bodied flavor, or full textured product, and many of the foods cooked in this method can be considered sub-par when compared to traditionally heated foods (Johnson, 1992).

Advantages and Disadvantages of Microwave cooking

Studies have demonstrated the advantage of microwave cooking and its broader application in both large and small-scale cooking scenarios. More specifically, the primary benefits of microwave cooking are speed and convenience (Hui, 2006). The reality is that microwaves allow a small amount of food to be cooked, or reheated, very rapidly. Also, microwave cooking is safe, with an automatically timed shut off and low heat risk, and saves up to 80% on electricity use, when compared to other electric heating methods (Terlip, 2014). However, there is substantial doubt regarding whether or not these benefits are sufficient enough to outweigh the distinct disadvantages of microwave cooking applications. The disadvantages of microwave cooking are diverse. First and foremost is the growing concern about the quality of food after it has been micro waved. Microwaving leads to uneven heating, a lack of browning and crisping, and may cause the food to dry out or to become soggy, in terms of texture, as a result of the overcooking and the way that it is reheated (Hiu, 2006). As such, presentation and food quality at the time of its delivery may be undermined by microwave cooking and are major concerns for those delivering food to consumers, like the food scenario in a healthcare setting.

There is also some evidence that microwaving food may degrade its overall nutrition value. A study by Thompson (2003) found that it reduced the bioavailability of nutrients and rendered the protein in many meats without value for consumption. However, this point is not one where all scientists have met consensus. This was also true of the destruction of some of the most valuable properties of milk, and even more so breast milk, which is broken down in detrimental ways by the microwave-based rewarming process (Quan et al., 1992).

In contrast, an early study in microwave impact on the availability of vitamins and minerals in foods found that there was virtually no difference in the nutritional values of micro waved foods when compared with traditionally cooked options (Cross, Fung, & Decareau, 1982). This has more recently been reiterated by healthcare professionals from Harvard, who stated that some nutrients break down, no matter what way that the food is prepared, and that in fact, microwaving may be more effective at preserving nutrients, like Vitamin C, than many more traditional methods that require higher temperature or boil the food, leaching out important nutrients ("Microwave Cooking and Nutrition," 2015). As such, the assumption that microwaving is detrimental to the overall nutritional value of a food may or may not be a concern for those in the health food industry. Additionally, there is some concern about a person's exposure to residual food by products if eating microwave food long-term (Quan et al., 1992). This includes residues left in the food from the packaging that it is warmed in or products used on the food to try to increase their crispiness, browning, or flavor.

Similar to these studies, there is increased evidence that eating micro waved foods many increase one's individual risk of cancer. According to Kopp's 1998 forensic research, micro waved foods may lead to an increased risk of stomach and intestinal cancer and may be linked to the increase rate of colon cancer in the United States. It is also linked to an increase of total cancerous cells in human blood, paired with a weakened immune system (Quan et al., 1992). As such, the overall safety of the foods has been drawn into question. This means that it is imperative for businesses in healthcare, such as hospitals, to seek alternative means to warm food or keep it at the ideal serving temperature without the use of microwaves.

Induction food heating basics

Induction heat, which was described previously as it relates to the basic development of induction technology, has also become quite popular as a means of heating food. Induction can be used for melting, hardening, braising, and a variety of other food textures. It is currently as popular in cooking ranges as gas and other stove top options because it is efficient, clean, and safe. The AC current flows to a coil that is in close proximity to the conducting surface, which allows the coils to heat to the desired temperature (See figure 2).

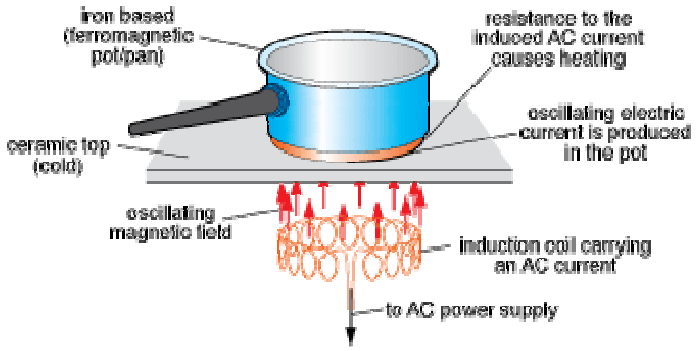

Figure 1. Basic Diagram of Induction Cooking Top (State of New South Wales, 2007)

Advantages and Disadvantages of Induction cooking

There are a variety of distinct advantages to induction cooking. First, it does not expose the food to radiation the way that microwaving does and so does not have the health and safety concerns, as it relates to cancer and food breakdown that arise when using microwave technologies. Additionally, the coil itself stays cool, and there is no shock hazard at the cooking surface, making it a significantly safer cooking surface than most other cooking surface types (Janeway, 2017). It also has a lower constant power output and higher efficiency, which can lead to significant cost savings.

In terms of cooking use, it cooks evenly and has flexible temperature control to allow for food to be evenly heated and delivered at the desired temperature every time. It also has the ability to create a variety of different cooking finishes, like a traditional range, yielding a larger variety of textures and flavors and delivering a more attractive final product overall (Rudnev et al., 2003). This makes it excellent for delivering a higher quality product in a more commercialized setting. The primary disadvantage of induction cooking is the initial cost of the heating apparatus itself and the need for specialized cooking equipment. In general, the heating surface requires magnetic cookware to work correctly, and as a result, the standard stainless-steel cookware in most healthcare institutions may not be usable on the surface and may require replacement (Rudnev et al., 2003).

Commercial Market Use: Induction Heat in Healthcare Foods

Kitchens in the healthcare environment are not only large and fast paced, but unlike public restaurants, they are regulated heavily as it relates to both handing and temperature practices. These factors along with the abundant number of hospitals in the United States have opened up a market that continuously looks for efficiencies that do not sacrifice the temperature or quality of the food product. In the mid-1990s, the existing insulation plates, domes and trays being used by leaders in the industry, Aladdin Temp-Rite, LLC and Dinex, Inc. were combined with a heated pellet diskette in order to keep heat in and around the food while being transported. That diskette was heated through the same speedy induction process that is used in the metals and automotive industry for heat treatment of materials. The activator was designed to generate a sustainable electromagnetic force (EMF) that could heat up diskettes impregnated within insulated

plastic pellet. Aladdin Temp-Rite's Heat On Demand ™ system was born through the use of the same elements normally required for induction, only in a much smaller scale (Aladdin, 2013). The original activation device (see Figure 2) contained an inverter and coil (primary side of the transformer) that when adequately powered could create a magnetic field that would agitate the metal diskette (secondary side of the transformer) for approximately 12-15 seconds. The 12-15 seconds, controlled by a timer, was enough to cause the diskette to heat the pellet upwards of 200 to 240 degrees Fahrenheit within 90 seconds after the induction process was finished.

Figure 2. Original Inductive Heat Activator (Aladdin Temp-Rite, 2013)

The original induction product line has been expanded significantly. The total number of induction heating models available for commercial use for healthcare facilities is now 5. The different features include varying electrical capacity and induction cycle speed.

Understanding induction Cooking Basics

As previously mentioned, the induction cooking surface, or warming surface, generates heat by placing a cooking vessel on a magnetic induction pellet. Induction then

takes place of the thermal induction that occurs when a pan is set over an open flame or on top of a traditional electric heating range. The inductive heat directly heats only the vessel, and a rapid increase in temperature is achieved, one that is similar in speed to a microwave but which provides a more traditional heating of the food within the cooking vessel. Because of the overall simplicity of the design, induction can be used in a range or as part of a larger cooking system, like is seen in the kitchen of a healthcare establishment, but can also be placed in a single unit, like a warmer (Fields, 2011).

Food Safety Demands

The FDA has established strict guidelines in relation to how to handle and serve prepared food. Strictly maintaining the temperatures that are set at every stage protects consumers from the risk of food poisoning that occurs because food was mishandled and reached temperatures that allowed bacterial growth (Illinois Department of Public Health, 2017). Foods most at risk of having bacterial growth include poultry, eggs, dairy products, seafood, raw spouts, rice, potatoes, certain cut melons, and a variety of other foods (Illinois Department of Public Health, 2017). When cooking, foods must not only reach a target temperature but also maintain that temperature for a set amount of time, as seen in Table 1. Furthermore, if food combines multiple ingredients, it must meet the cooking demand of the food with the most stringent set of standards attached to it. The temperature must be measured in the thickest part of the food to ensure the whole piece of meat, or other food, reached the target temperature.

Beef roast	145º F for minimum of 3 minutes **or**
	140º F for 12 minutes **or**
	130º F for 21 minutes
Beef, steaks, pork, ham, fish, seafood (filets, chops or intact pieces), bacon	145º F for minimum of 15 seconds
Ground beef or pork, chopped/flaked meat	155º F for minimum of 15 seconds
Poultry, stuffed foods	165º F for minimum of 15 seconds
Eggs	
Cooked to hold	155º F for minimum of 15 seconds
Cooked to order	145º F for minimum of 15 seconds
Foods cooked in microwave	165º F, hold for minimum of 2 minutes
Fruits, vegetables	135º F (no minimum time)

Figure 3. FDA Cooking Requirement Source:(Illinois Department of Public Health, 2017).

There are also requirements for preventing food from cooling beyond a certain point, holding the food at an appropriate temperature, and reheating food in a safe way. All of these demands also can be met via the use of the induction. With regard to allowing food to cool, or holding foods, hot food must remain 135º F or above (Illinois Department of Public Health, 2017). When it falls below this point, there is a greater risk of the bacteria replicating in the food. Food must be kept covered, stirred frequently, and stored in a way that is designed to ensure that temperature maintains a safe temperature.

The actual food temperature must be measured at least every 2 hours and should never be reheated in the holding container that it cooled in, which is often an area in which food is mismanaged when it is micro waved (Illinois Department of Public Health, 2017). When reheating, food temperature should be tested in much the same manner as in initial cooking, to ensure that all of the food in the serving is completely heated, or heating is through, even and complete. The reheated food should reach a minimum of 165 ° F regardless of food type. It should then be kept covered and served rapidly to ensure temperature is maintained. The food should not be reheated more than once (Illinois Department of Public Health, 2017).

Performance Expectations

The type of commercial head induction systems of interest to the current study have several performance expectations to consider. Specifically, manufacturers describe performance, and facilities seek to gain the benefits of performance as it relates to the amount of electricity saved, the ability to hold the food at the desired temperature for a prolonged period of time, the heat emitted by the unit, the length of the heating cycle, and the space the unit demands (Aladdin Temp-Rite, 2017). While each unit has different performance specifications, generally, the buyer will desire electricity savings and ability to hold food at the desired temperature to be maximized, while heating cycle, heat release, and demanded space are minimized.

Methodology

Participants

The induction heating models that were used in the study included multiple models of commercial grade induction systems made by Aladdin Temp-Rite™ & Carlise-Dinex™. Induction heating systems from each of these manufacturers were tested and evaluated for reliability to generate heat from their induction coils and also temperature consistency from the supporting materials, as it relates to the maximum performance specified by the manufacturers. The unit samples for each commercial designed induction system will be manufactured by Aladdin Temp-Rite and Carlise-Dinex. The induction units tested from Aladdin Temp-Rite include the IND600 and the Advantage models. The Smart-Therm II is the only model tested from Carlise-Dinex. It should be noted that while Electrolux and NuWave recently introduced induction heating systems to the market, these are more residential in design and are not appropriate to the current study.

Variables

1. Ambient test room temperature
2. Fluorescent lighting and frequency emissions
3. Electrical supply stability (208 volt – 3 phase)
4. Starting induction pellet temperature
5. Instrument Calibration

Instrumentation and Materials

The temperature generated by each induction coil and induced on the supporting materials was recorded and measured with a calibrated Omega™ Digital Thermometer equipped with a surface thermocouple temperature sensor capable of displaying temperatures between -60^{o} to 400^{o} F. The measurements of samples of the supporting materials (for example, pellets, metal diskettes, and ferrous pans) were taken using a calibrated Starrett™ 6" dial caliper with ability to measure to one thousandth of a meter. An Extech™ stop watch, with ability to record to tenths of a second, was used to document time. This provides verified and academically acceptable means of measuring all the related performance parameters, ensuring consistency, in the way that they are measured, across all models.

Procedures

All three induction heating systems were tested under maximum settings to see if the performance stands up to the maximum expectations established by the brand for that unit. All data was recorded separately for each system, in accordance with the duty cycle rating, recommended by each manufacturer, which would represent 15-25% of a life expectancy for each individual system. This should be sufficient to establish the consistency and longevity of the unit, and the durability of the support elements. More specifically, the first of the evaluations were conducted on the ability of the induction coil to consistently create the induction process without error or failure. The heat created by the process for each of the supporting materials was recorded at identical times, as measured by the stopwatch, in order to determine if the material to take longer to reach same temperature after being induced by the induction coil so that any degradation can be

documented. If the induction system slows, over successive uses, it could be indicative of degradation in the system. In addition to the heat creation and consistency, the shape and size of each induction systems supporting material also was observed after returning to ambient temperature in order to determine any areas of deformation or deflection that may affect the function of the system over time.

Method of Data Analysis

Descriptive analysis will be used for each of the physical recordings of all four induction heaters and their supporting materials. There will be baseline measurements for each characteristic of the system as they exist before the induction process testing and any deviation from those original marks will be displayed linearly to show deviations from each baseline. Inferential statistical analysis of all data will be conducted, since the recordings are based on a percentage of the expected life cycle of each system, to support the summarization on projected longevity of induction heating technology. The individual system's ability to display consistent performance and retention of physical characteristics, or to maintain the appearance and quality of performance it had when new, directly correlated to how the degree to which induction heating technology displays longevity in the food cooking and preparation industry. The determination as to whether the systems evaluated are not only reliably reaching desired temperatures but doing it consistently over time comes directly from the results of the statistical data. The data recorded on the induction heater's ability to create the induction process and do so with minimum errors also weighs into the confidence a healthcare facility has on the induction heater and its supporting induction pellets.

Threats to Validity

Threats to validity for this study were (1) fluctuations in the electrical supply for each induction coil, (2) instruments getting out of calibration and creating inaccurate readings, and (3) data being recorded and kept incorrectly. If the electrical supply has fluctuations, the induction coil can be exposed to more strain to create the designed radio frequency field. To limit this fluctuation, the electrical supply legs were checked before and after each testing period so that each period was ensured to have been conducted and recorded under identical environments. If any of the instruments shifted out of calibration, the data being taken during the induction periods would be corrupted, which would cause inaccurate recordings (Creswell, 2009). To reduce the likelihood of this occurring, the instrument was calibrated regularly to verify it was working to original specifications. To eliminate the loss of recordings of data, a computer spreadsheet was to be used for each recording period in lieu of keeping data for each period with handwritten measurements. An unknown factor when originally testing was discovered in effecting the frequency of the induction activators. Frequency from fluorescent lights can actual reduce the frequency output from the induction activator by up to .05 percent. The fluorescent lights were turned off for each testing period.

Findings and Results

Quantitative and qualitative data was collected according to the previously outlined methodology and used to statistically and systematically study in signs of degradation or deteriorating performance in all three models. This data is summarized below, as it relates to the findings for each unit.

Quantitative Summary

The first unit tested was the Smart-Therm II. This unit went through a series of cycle tests, beginning in September and continuing through April. Three specific measurements were taken: coil temperature, base internal temperature, and radiant temperature. For the unit to be considered well performing, average performance should remain within the expected norm, and should not deteriorate over time. The expected coil temperature for the Smart-Therm II is 155-165, at 30 seconds. The average results were calculated, for 25 cycles, on two devices, labeled A and B, on each date. The results, as demonstrated in Table 1, show that while the average temperature is similar in April, as it was at onset in September, the standard deviation, or distance from the mean, of each performance gets significantly higher, which may indicate deterioration with the consistency of performance. The data results are still well within the expected performance for the unit. This consistency is also visible demonstrated in Figure 4.

Table 1:

Smart-Therm II - 30 second performance

Date	Average	Standard Deviation
12-Sep	168.51	3.0574
13-Sep	165.68	3.127
22-Sep	165.94	3.3311
23-Sep	168.50	2.40381
26-Sep	166.76	3.127756
27-Sep	165.602	3.20411
3-Oct	165.872	3.713024
17-Oct	166.52	3.670622
24-Oct	165.17	3.519175
1-Nov	166.512	3.341125
7-Nov	166.054	3.562171
14-Nov	166.622	3.73474
21-Nov	166.418	3.348084
5-Dec	166.44	2.9211
6-Dec	165.384	3.498125
12-Dec	166.172	3.39718
13-Dec	167.106	3.145804
19-Dec	166.096	3.512657
2-Jan	165.578	3.700926
9-Jan	166.328	3.134081
16-Jan	166.23	3.340918
23-Jan	165.99	3.246715
30-Jan	166.32	3.238354
6-Feb	165.472	3.4983

Date	Average	Standard Deviation
7-Feb	166.05	3.400915
13-Feb	166.776	3.405312
20-Feb	164.978	3.356644
21-Feb	165.764	2.930401
27-Feb	166.752	3.3031364
28-Feb	165.95	3.633925
5- Mar	165.476	3.730599
6-Mar	166.142	3.699536
12-Mar	165.08	3.73538
19-Mar	165.95	3.423821
26-Mar	166.52	3.508881
2-Apr	166.93	3.503599
3-Apr	165.928	3.582215
9-Apr	165.42	3.324185
16-Apr	165.704	3.266338
23-Apr	166.164	3.14706

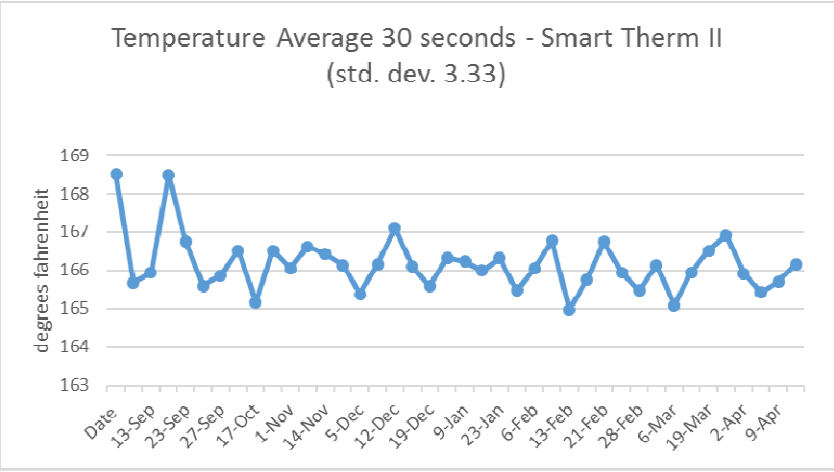

Figure 4. Temperature Averages 30 seconds

Similar consistency was found in the 60 and 120 second testings of base internal temperature and radiant. The expected radiant temp for this unit was 215 to 230 at 120 seconds, and of the base internal it was 350 to 380 at 60 seconds. Performance data was maintained within this target level for all average test scores (Figures 5 and 6), and overall the unit showed a total of 23 errors, with errors occurring more frequently in the earliest tests as compared to the cycles taken at the end of the experiment. The initial test temperatures taken were without the electrical control device engaged; it was corrected for all remaining induction tests.

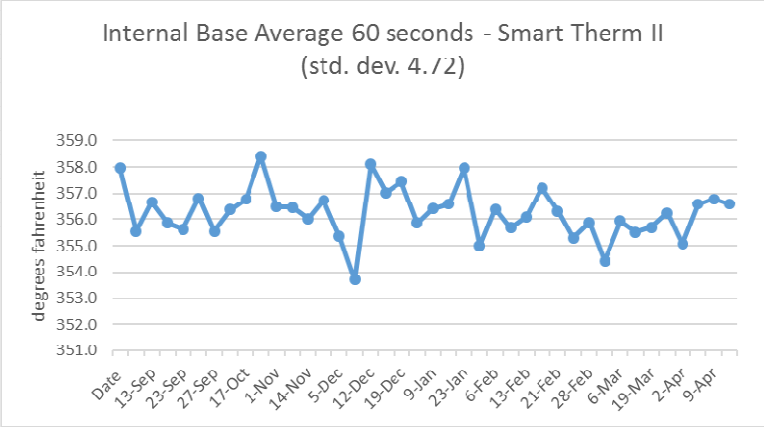

Figure 5. Internal Base Averages – 60 seconds

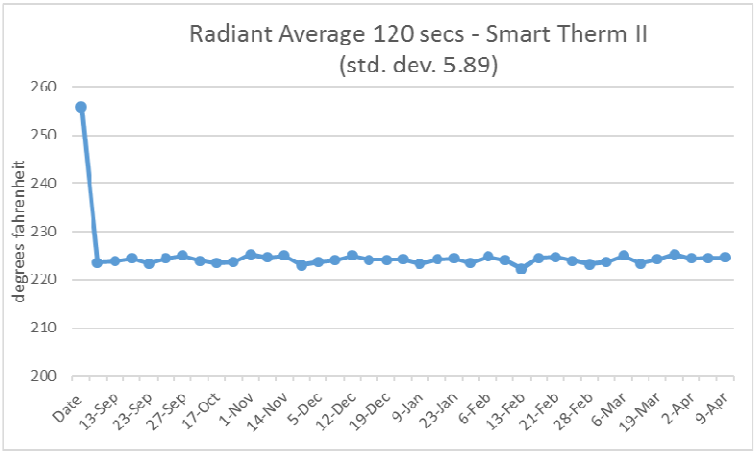

Figure 6. Radiant Averages – 120 seconds

Table 2:

60 sec and 120 sec Averages for Smart-Therm II

Date	60 sec. avg.	Std. Deviation	Date	120 sec. avg.	Std. Deviation
12-Sep	358.0	5.703242	12-Sep	255.9551	7.799766
13-Sep	355.549	6.2721	13-Sep	223.5265	4.768253
22-Sep	356.6612	6.454418	22-Sep	223.7918	4.228033
23-Sep	355.8612	4.20475	23-Sep	224.4041	3.811259
26-Sep	355.6265	5.250453	26-Sep	223.3388	4.31087
27-Sep	356.8265	5.139712	27-Sep	224.3755	4.954509
3-Oct	355.5571	6.275966	3-Oct	224.9959	4.32699
17-Oct	356.3735	5.890351	17-Oct	223.902	4.449971
24-Oct	356.7592	5.892919	24-Oct	223.4653	4.559205
1-Nov	358.4061	6.510663	1-Nov	223.6429	4.614308
7-Nov	356.4837	5.490747	7-Nov	225.2327	4.869538
14-Nov	356.4531	5.987235	11-Nov	224.5612	5.01853
21-Nov	356.0204	5.743603	21-Nov	224.9653	5.070183
5-Dec	356.7327	5.812491	5-Dec	222.9878	5.136609
6-Dec	355.351	4.785911	6-Dec	223.6918	5.160202
12-Dec	353.7143	5.68941	12-Dec	224.0551	5.340338
13-Dec	358.1	6.057615	13-Dec	224.9592	4.556848
19-Dec	357.0388	6.452869	19-Dec	224.0755	4.361358
2-Jan	357.4571	5.902888	2-Jan	224.1347	4.231107

Date	60 sec. avg.	Std. Deviation	Date	120 sec. avg.	Std. Deviation
9-Jan	355.8551	5.684029	9-Jan	224.2061	4.813688
16-Jan	356.4061	6.474515	16-Jan	223.2694	4.198892
23-Jan	356.5878	6.151676	23-Jan	224.2	4.177246
30-Jan	357.9551	5.703242	30-Jan	224.4061	4.831124
6-Feb	355.0082	5.797355	6-Feb	223.4653	4.755085
7-Feb	356.3898	5.506814	7-Feb	224.7429	4.487352
13-Feb	355.6816	6.529577	13-Feb	223.9837	5.000463
20-Feb	356.0878	6.046339	20-Feb	222.2939	4.20963
21-Feb	357.2122	6.27345	21-Feb	224.5041	4.596714
27-Feb	356.3122	6.187137	27-Feb	224.6612	5.102653
28-Feb	355.3061	6.163865	28-Feb	223.8959	4.444945
5-Mar	355.8796	6.042637	5-Mar	223.2082	5.05217
6-Mar	354.4286	6.105267	6-Mar	223.6959	4.287236
12-Mar	355.9367	6.237958	12-Mar	224.9408	4.724142
19-Mar	355.5102	5.992929	19-Mar	223.3469	4.495263
26-Mar	355.702	6.19623	26-Mar	224.2204	4.968184
2-Apr	356.2408	5.990432	2-Apr	225.249	4.452017
3-Apr	355.0755	5.707765	3-Apr	224.3531	4.626503
9-Apr	356.5837	5.494426	9-Apr	224.5265	4.483793
16-Apr	356.7776	6.029257	16-Apr	224.5551	4.815369
23-Apr	356.5918	5.982281	23-Apr	224.249	4.78156

Performance for the IND 600 also operated within the expected intervals and without any clear signs of degradation. The expected level of performance at 30 seconds ranged from a coil temperature of 165 to 180. All performance, as seen in Table 3 and Figure 7 below, however, with a standard deviation over 5, showed significantly more fluctuation in performance than the previous, Smart-Therm, model.

Table 3:

Average and Standard Deviation at 30 seconds for IND 600

Date	Average	Standard Deviation
12-Sep	172.772	5.066993
13-Sep	173.92	5.791062
22-Sep	173.48	5.22999
23-Sep	172.954	4.882508
26-Sep	172.614	5.647053
27-Sep	171.57	5.28107
3-Oct	173.268	5.373767
17-Oct	172.912	5.197293
24-Oct	172.376	4.612442
1-Nov	171.854	4.593875
7-Nov	172.216	5.385438
14-Nov	172.658	5.396039
21-Nov	173.4	4.995838
5-Dec	172.808	5.436979
6-Dec	172.848	5.35482
12-Dec	172.962	5.168709
13-Dec	174.48	5.039921

Date	Average	Standard Deviation
19-Dec	172.828	5.288971
2-Jan	171.31	5.072563
9-Jan	173.464	5.307005
16-Jan	173.222	5.242949
23-Jan	172.256	5.040919
30-Jan	171.958	4.431212
6-Feb	173.35	5.627797
7-Feb	172.112	5.274567
13-Feb	172.452	5.20443
20-Feb	172.382	5.374744
21-Feb	171.446	5.220123
27-Feb	173.972	4.749317
28-Feb	173.154	5.735302
5-Mar	174.66	5.450871
6-Mar	172.534	5.476773
12-Mar	174.062	4.772123
19-Mar	174.798	5.359197
26-Mar	172.042	5.296984
2-Apr	173.444	4.931862
3-Apr	173.486	4.978996
9-Apr	172.096	5.350849
16-Apr	173.086	5.048089
23-Apr	172.786	5.285452

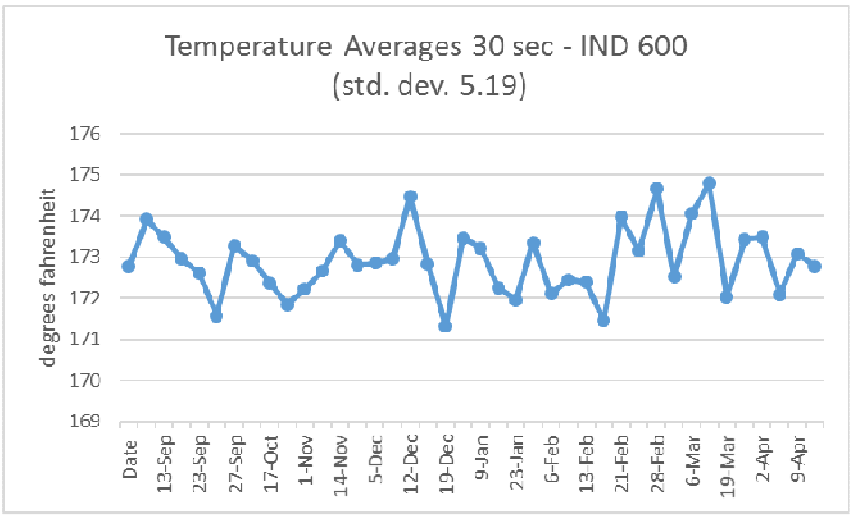

Figure 7. Temperature Averages – 30 seconds

Similar consistency was found in the 60 and 120 second testings of base internal temperature and radiant. The expected radiant temp for this unit was 225-245, at 120 seconds and of the base internal it was 380 to 420, at 60 seconds. Performance data was maintained within this target level for all average test scores (Figures 8 and 9), and overall the unit showed a total of 31 errors, with errors occurring more frequently in the earliest tests as compared to the cycles taken at the end of the experiment.

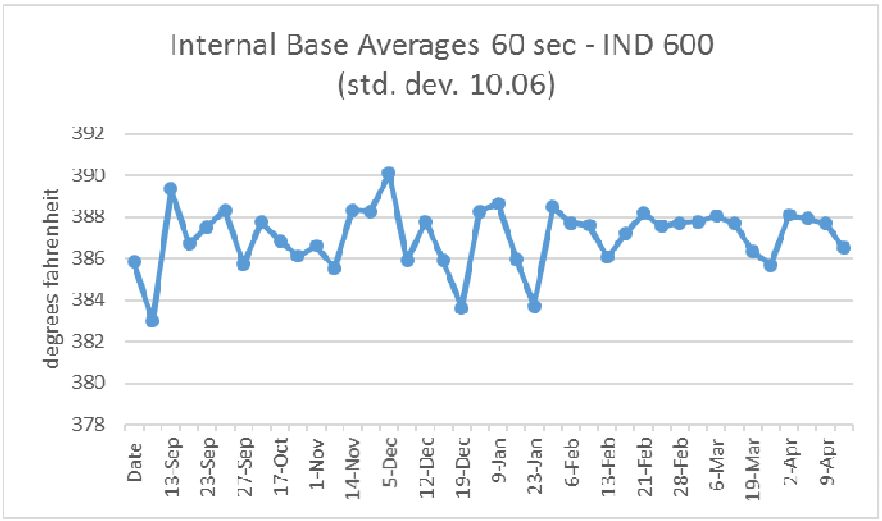

Figure 8. Internal Base Averages – 60 seconds

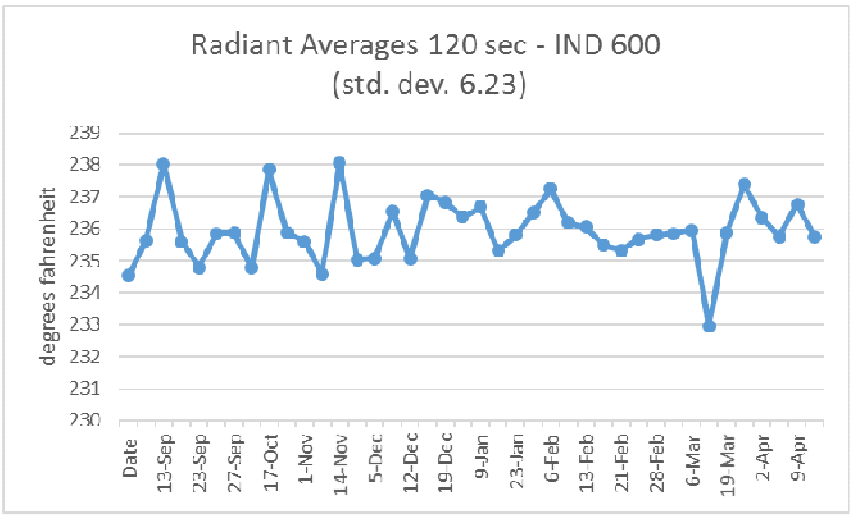

Figure 9. Radiant Averages – 120 seconds

Table 4:

60 & 120 second averages for IND 600

Date	60 Second Average	Standard Deviation	120 Second Avg.	Standard Deviation
12-Sep	385.838	10.26886	234.532	6.528995
13-Sep	382.984	9.886483	235.648	5.509274
22-Sep	389.33	9.394706	238.034	6.371769
23-Sep	386.698	10.15328	235.616	5.844497
26-Sep	387.508	9.847941	234.8	6.383698
27-Sep	388.33	10.04204	235.848	7.096936
3-Oct	385.72	9.387204	235.878	6.911448
17-Oct	387.76	10.275	234.788	6.060681
24-Oct	386.856	10.28115	237.84	6.405373
1-Nov	386.092	11.11458	235.88	5.244082
7-Nov	386.588	9.592969	235.606	5.616775
14-Nov	385.532	10.15109	234.594	6.01117
21-Nov	388.32	10.61648	238.058	6.279971
5-Dec	388.276	10.12234	235.04	6.587959

Date	60 Second Average	Standard Deviation	120 Second Avg.	Standard Deviation
6-Dec	390.094	9.01189	235.076	6.016263
12-Dec	385.89	10.2246	236.536	6.451535
13-Dec	387.774	9.702882	235.058	6.187927
19-Dec	385.882	10.54238	237.056	6.140819
2-Jan	383.618	9.07217	236.846	6.202974
9-Jan	388.242	10.81749	236.364	6.69844
16-Jan	388.662	9.843778	236.68	6.24804
23-Jan	385.932	9.205595	235.312	5.951357
30-Jan	383.712	10.73439	235.804	6.506857
6-Feb	388.46	11.88944	236.504	6.241281
7-Feb	387.714	9.832335	237.252	6.901601
13-Feb	387.596	9.274071	236.184	6.380043
20-Feb	386.042	9.123094	236.046	6.466412
21-Feb	387.192	9.869911	235.492	6.177794
27-Feb	388.18	9.623949	235.334	6.354671
28-Feb	387.522	9.309829	235.678	5.481835
5-Mar	387.734	9.745186	235.796	6.282387
6-Mar	387.762	10.62608	235.85	5.93819
12-Mar	388.032	9.088684	235.968	6.207912
19-Mar	387.692	10.20325	232.958	5.309504
26-Mar	386.334	10.84368	235.894	6.344932
2-Apr	385.696	9.193975	237.38	6.440342
3-Apr	388.082	10.28176	236.346	6.455082
9-Apr	387.904	11.35114	235.75	6.130163
16-Apr	387.696	11.34162	236.776	6.347174
23-Apr	386.478	10.70946	235.732	6.535425

Finally, the test was repeated for the Advantage unit. The Advantage showed the highest temperature variation as demonstrated by its substantially higher standard deviation, as well as the highest overall error rate with 32 errors. However, in spite of these potential warning signs, it did perform within the recommended window for all tested periods. The 30 second coil test, depicted in Figure 10 and Table 5 below, had an expected performance range of 175 to 200 degrees Fahrenheit.

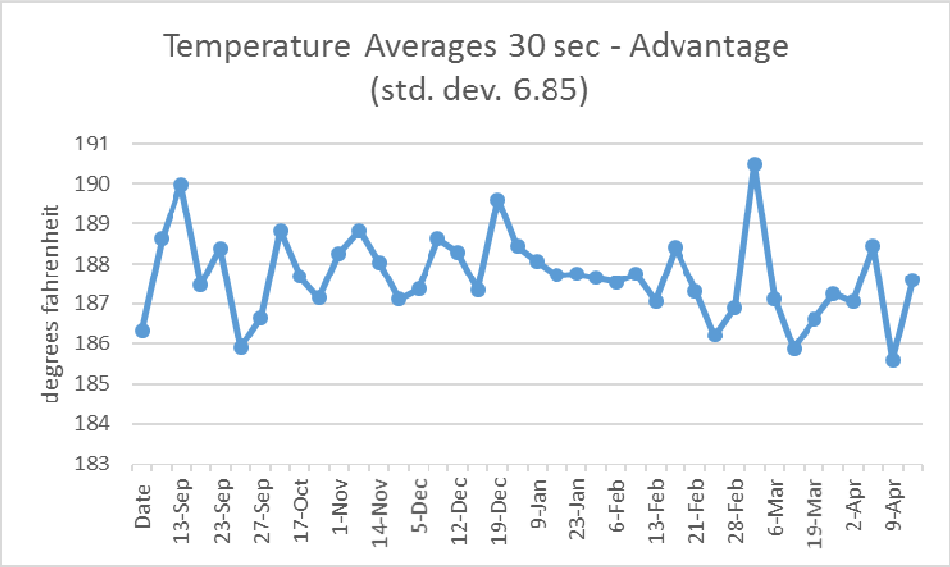

Figure 10. Temperature Averages – 30 seconds

Table 5:

Advantage- 30 second performance

Date	Average	Standard Deviation
12-Sep	186.342	6.880817
13-Sep	188.616	6.871866
22-Sep	189.986	6.696686
23-Sep	187.472	6.33331
26-Sep	188.38	7.426008
27-Sep	185.916	6.743956
3-Oct	186.664	6.285531
17-Oct	188.828	7.469834
24-Oct	187.682	7.2707
1-Nov	187.15	6.658085
7-Nov	188.264	7.264262
14-Nov	188.83	6.786818
21-Nov	188.046	7.04753
5-Dec	187.12	6.892286
6-Dec	187.36	7.363505
12-Dec	188.612	6.256825
13-Dec	188.284	6.106598
19-Dec	187.35	8.009376
2-Jan	189.604	6.501998
9-Jan	188.426	6.980854
16-Jan	188.048	7.062273
23-Jan	187.71	7.068387
30-Jan	187.746	6.725361
6-Feb	187.648	6.862805

Date	Average	Standard Deviation
7-Feb	187.532	7.037825
13-Feb	187.736	7.075189
20-Feb	187.072	7.165976
21-Feb	188.406	6.608915
27-Feb	187.312	6.753981
28-Feb	186.212	6.151183
5-Mar	186.916	6.290798
6-Mar	190.46	6.989936
12-Mar	187.13	7.073168
19-Mar	185.886	6.456005
26-Mar	186.608	7.322427
2-Apr	187.26	5.832529
3-Apr	187.046	6.786611
9-Apr	188.432	6.789034
16-Apr	185.602	6.745887
23-Apr	187.606	7.375294

The model also passed the test, when the 60 and 120 second testing of base internal temperature and radiant were conducted. The expected radiant temp for this unit was 245-265, at 120 seconds and of the base internal it was 500 to 550, at 60 seconds. Performance data was maintained within this target level for all average test scores (Figures 11 and 12).

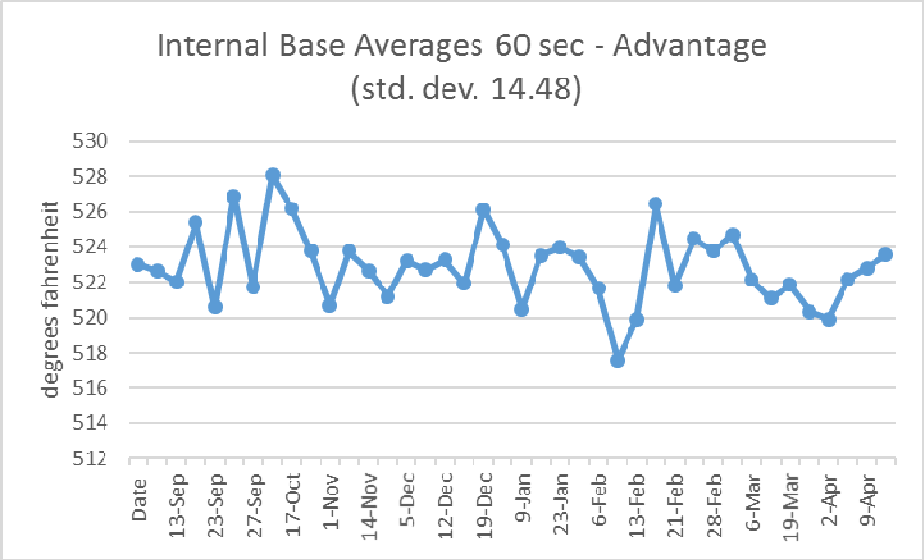

Figure 11. Internal Base Averages – 60 seconds

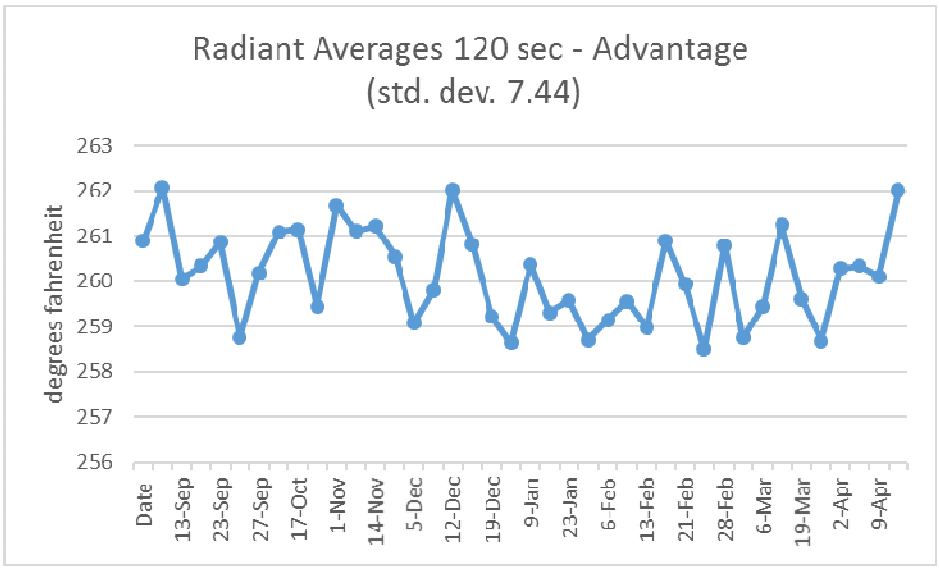

Figure 12. Radiant Averages – 120 seconds

Table 6:

Advantage- 60 and 120 sec averages for Advantage

Date	60 seconds Average	Standard Deviation	120 seconds Avg.	Standard Deviation
12-Sep	523.04	15.82372	260.894	7.778494
13-Sep	522.63	15.41369	262.072	7.356005
22-Sep	522.024	14.18837	260.064	6.656328
23-Sep	525.4	13.38445	260.342	7.325219
26-Sep	520.578	13.19217	260.864	6.861917
27-Sep	526.888	14.6499	258.754	7.695823
3-Oct	521.746	12.71879	260.192	7.21728
17-Oct	528.07	16.86335	261.096	8.089671
24-Oct	526.178	14.45873	261.15	7.406112
1-Nov	523.784	14.86498	259.446	8.00303
7-Nov	520.684	15.12925	261.67	7.087771
14-Nov	523.75	15.53809	261.11	7.782628
21-Nov	522.688	16.7776	261.228	7.612359
5-Dec	521.204	13.58152	260.558	6.65751
6-Dec	523.24	14.25861	259.08	8.245605
12-Dec	522.718	13.77994	259.808	6.704501
13-Dec	523.284	15.0927	262.022	6.682374
19-Dec	521.928	12.99723	260.83	6.821855
2-Jan	526.12	15.01732	259.222	8.056185
9-Jan	524.126	13.12669	258.642	7.438443
16-Jan	520.476	13.2939	260.394	7.05043
23-Jan	523.528	15.00617	259.312	8.891786
30-Jan	523.976	15.08197	259.596	7.699376
6-Feb	523.44	14.49198	258.712	8.339176

Date	60 seconds Average	Standard Deviation	120 seconds Avg.	Standard Deviation
7-Feb	521.648	14.90071	259.16	7.441478
13-Feb	517.596	15.14468	259.564	6.70608
20-Feb	519.894	13.79683	258.988	7.081713
21-Feb	526.428	14.71311	260.892	7.603206
27-Feb	521.812	14.71355	259.938	7.694853
28-Feb	524.48	13.44565	258.51	7.594636
5-Mar	523.766	13.1481	260.8	7.774522
6-Mar	524.706	13.13332	258.75	7.221032
12-Mar	522.142	13.6241	259.46	7.895822
19-Mar	521.076	15.70624	261.256	7.841254
26-Mar	521.864	14.56907	259.62	7.064022
2-Apr	520.352	14.11526	258.694	7.815841
3-Apr	519.936	15.55241	260.29	7.308796
9-Apr	522.18	15.23332	260.344	6.549539
16-Apr	522.798	14.33511	260.116	7.030515
23-Apr	523.556	14.69182	262.018	7.702615

Conclusion

Discovery

The first part of hypothesis proved to be true with positive results from the data supporting the induction process. In over 8 months of testing, the errors resulted in only 86 errors over the 6,000 recorded induction cycles. Those statistics prove that the induction heater models tested combined had only a 1.4% error rate. The errors recorded early in all testing sets were potentially an issue when testing began; however, it was discovered to be caused by operator error. The diskettes (induction pellets) must be set flat on the induction activators surface to be correctly energized with radio frequency; otherwise, the units would sometimes detect them and start induction process before the units were completely centered and flat, which would cause errors.

The second part of the hypothesis proved positive as the desired temperature timed samples either met or exceeded the desired set points at the two minute marker for all tests recorded. The recorded and summarized temperature information supports the idea that the induction activator models tested and the supporting materials do have the ability to show consistent reliability to healthcare facilities. There were no signs either by performance consistency or any physical deformations of the induction systems during the testing periods. One small environmental element was discovered in-between testing periods dealing with other frequencies within the test room itself. The emissions from the fluorescent lights can affect the desired output frequency of the induction activators. While the frequency from lighting was enough to be detected, it did not appear to affect the actual temperature data being recorded. The lights were left off for all data recorded within this project in order to eliminate any possibility.

Continuation

All three induction activator models performed repeatedly within their manufacturers' desired performance guidelines. The temperature recordings are a great sign that the technology being manufactured and sold in the healthcare market from the leading brands are functionally meeting the expectations of the customers. The need for keeping hot food hot during transfer from hospital kitchens to the patient room will continue to fuel the amount of investment companies like Aladdin Temp Rite, LLC and Carlise-Dinex spend in the areas of remedying that need. The induction activators tested in this recorded data are proof that the time and money invested are meeting both design standard also satisfying customer expectations.

Deviations detected in the study are a sign that the induction process should continue to have efforts focused on a tighter consistency in temperatures. That could be in the firmware of the controller but also the thickness of the pellets. Future research and development on the devices may also need to focus on adjusting to electrical fluctuations, as the test environment used in the study is not reflective of the varying electrical grids across North America. A spike or drop in voltage can cause big movements in amperage, which could affect the induction activation but also lead to possibly shorter life spans of the units themselves. While this study focuses more on the activators performance with a standard set of induction pellets, continued efforts to test other ferrous metal could lead longer and faster temperature changes resulting in more efficient system.

Appendix A: All Data Recorded

	Smart Therm II								
Date	12-Sep				**Date**	13-Sep			
Temp	Coil	Base Internal		Radiant	**Temp**	Coil	Base Internal		Radiant
Expected	155-165	345-365		215-230	**Expected**	155-165	350-380		215-230
Qty	30 secs	60 secs		120 secs	**Qty**	30 secs	60 secs		120 secs
1a	170.1	350.2		219.0	**1a**	162.4	348.1		217.0
2a	168.0	350.1		248.6	**2a**	165.5	348.3		217.0
3a	167.8	353.3		259.6	**3a**	162.6	347.4		220.8
4a	171.0	350.2		255.7	**4a**	161.5	354.6		231.2
5a	170.2	350.1		248.1	**5a**	167.5	347.8		220.0
6a	168.0	363.1		261.8	**6a**	163.2	347.9		228.5
7a	168.0	359.0		262.5	**7a**	164.0	358.0		225.0
8a	168.4	358.3		252.2	**8a**	164.8	348.6		222.4
9a	169.2	358.6		247.9	**9a**	169.6	359.8		225.0
10a	169.4	358.9		255.2	**10a**	166.3	361.8		218.3
11a	167.9	351.2		255.4	**11a**	163.7	363.0		229.0
12a	168.4	350.1		255.8	**12a**	168.5	355.2		228.4
13a	169.9	350.9		263.8	**13a**	162.9	366.4		225.3
14a	170.2	355.6		256.5	**14a**	161.8	354.9		222.3
15a	167.7	368.1		267.9	**15a**	171.3	364.3		231.6
16a	170.0	360.6		254.8	**16a**	168.3	352.0		228.4
17a	169.1	360.4		252.7	**17a**	160.3	348.5		230.7
18a	167.3	353.1		249.6	**18a**	165.6	357.8		219.8
19a	168.4	353.3		258.9	**19a**	170.4	365.4		220.8
20a	167.4	353.3		271.7	**20a**	167.7	364.9		216.8
21a	167.2	352.1		257.0	**21a**	161.9	349.7		229.0
22a	170.1	357.6		256.0	**22a**	167.9	352.0		216.6
23a	169.8	357.9		255.6	**23a**	164.4	367.0		226.5
24a	169.7	350.3		261.0	**24a**	171.6	350.1		226.6
25a	169.4	350.9		255.0	**25a**	166.8	349.0		227.4
1b	168.9	351.7		262.8	**1b**	163.2	364.3		223.6
2b	168.8	352.2		252.2	**2b**	169.0	361.5		226.8
3b	170.2	359.9		259.4	**3b**	165.2	355.3		218.1
4b	170.5	359.5		254.5	**4b**	164.3	357.4		218.9
5b	168.9	358.6		249.0	**5b**	164.3	354.0		218.9
6b	169.9	352.9		253.8	**6b**	163.9	352.5		225.7
7b	169.6	355.0		254.3	**7b**	162.1	352.0		220.5
8b	168.0	354.8		251.0	**8b**	166.9	353.0		229.0
9b	169.0	354.1		252.5	**9b**	160.6	351.2		225.0
10b	169.3	352.1		258.3	**10b**	167.0	366.8		231.1
11b	169.2	354.1		270.0	**11b**	164.5	348.7		224.9
12b	168.7	354.6		250.7	**12b**	171.7	348.8		224.1
13b	168.7	352.9		257.1	**13b**	167.3	356.7		227.7
14b	167.4	357.1		251.0	**14b**	170.7	355.9		231.0
15b	164.4	358.0		260.7	**15b**	165.4	353.0		220.0
16b	166.0	360.1		267.1	**16b**	163.0	364.5		217.7
17b	164.6	355.5		264.8	**17b**	171.1	359.2		216.0
18b	165.2	360.2		260.0	**18b**	162.4	357.0		223.9
19b	165.9	363.2		257.4	**19b**	164.6	353.4		228.6
20b	170.0	358.3		260.9	**20b**	171.4	359.8		219.7
21b	170.3	357.5		258.1	**21b**	167.9	350.7		217.0
22b	169.7	355.2		250.6	**22b**	163.6	349.0		224.0
23b	165.8	360.5		255.3	**23b**	164.2	367.0		216.0
24b	166.7	362.0		248.0	**24b**	164.2	347.7		220.2
25b	167.2	360.8		267.0	**25b**	165.0	348.0		216.0
Errors	1				**Errors**	1			
	168.5	355.9		256.0		165.7	355.5		223.5

Date	22-Sep					**Date**	23-Sep				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	166.2		354.2		228.3	**1a**	169.4		350.2		218.5
2a	171.4		351.0		225.5	**2a**	166.2		350.1		226.1
3a	170.4		366.8		225.9	**3a**	169.0		353.3		225.4
4a	170.4		353.0		232.0	**4a**	165.1		350.2		231.9
5a	164.2		364.5		226.8	**5a**	172.1		350.1		222.0
6a	163.1		348.0		226.3	**6a**	165.5		363.1		223.1
7a	170.2		362.3		222.1	**7a**	171.2		359.0		219.9
8a	165.0		360.7		220.0	**8a**	169.3		358.3		220.8
9a	160.7		355.9		226.6	**9a**	172.2		358.6		221.7
10a	165.0		357.4		221.5	**10a**	168.6		358.9		230.2
11a	167.0		356.2		227.3	**11a**	166.5		351.2		230.1
12a	171.4		364.3		219.1	**12a**	166.0		350.1		229.8
13a	166.3		360.1		221.1	**13a**	167.2		350.9		225.0
14a	166.8		362.8		222.2	**14a**	168.4		355.6		229.6
15a	164.0		348.4		219.2	**15a**	169.0		368.1		224.8
16a	165.1		362.8		217.5	**16a**	171.1		360.6		225.6
17a	161.7		347.6		230.0	**17a**	166.6		360.4		227.3
18a	167.4		353.6		229.7	**18a**	165.9		353.1		224.0
19a	166.8		354.9		219.9	**19a**	171.0		353.3		224.3
20a	164.3		360.0		230.8	**20a**	168.3		353.3		220.2
21a	161.9		352.0		229.2	**21a**	166.4		352.1		227.2
22a	165.0		354.5		224.0	**22a**	171.0		357.6		223.3
23a	165.3		366.9		221.8	**23a**	172.0		357.9		219.9
24a	166.6		363.8		222.0	**24a**	172.1		350.3		220.6
25a	161.5		365.8		226.2	**25a**	165.7		350.9		221.3
1b	161.0		356.3		221.6	**1b**	171.6		351.7		231.0
2b	161.0		349.7		223.8	**2b**	166.8		352.2		229.8
3b	162.7		346.5		221.4	**3b**	171.0		359.9		224.1
4b	171.6		352.5		221.3	**4b**	169.0		359.5		221.8
5b	163.3		355.0		221.2	**5b**	167.6		358.6		223.4
6b	161.9		364.3		227.8	**6b**	172.3		352.9		223.7
7b	167.1		360.3		223.1	**7b**	167.7		355.0		226.1
8b	163.7		363.8		219.7	**8b**	166.8		354.8		227.0
9b	171.0		348.1		216.2	**9b**	171.1		354.1		222.3
10b	171.5		352.9		228.8	**10b**	169.0		352.1		221.5
11b	171.0		350.9		219.0	**11b**	167.7		354.1		229.5
12b	165.9		352.5		227.3	**12b**	165.3		354.6		222.0
13b	160.8		360.0		226.1	**13b**	172.2		352.9		218.7
14b	168.2		357.7		220.1	**14b**	166.0		357.1		216.9
15b	162.7		366.8		217.3	**15b**	169.1		358.0		225.5
16b	166.0		365.7		222.4	**16b**	165.5		360.1		227.3
17b	165.7		354.5		217.2	**17b**	166.7		355.5		228.5
18b	165.9		349.9		229.0	**18b**	171.0		360.2		227.1
19b	169.0		349.7		223.2	**19b**	165.5		363.2		226.3
20b	171.8		366.3		218.1	**20b**	165.0		358.3		220.1
21b	169.8		363.0		230.1	**21b**	169.3		357.5		219.2
22b	165.6		347.0		220.1	**22b**	172.2		355.2		217.9
23b	165.2		346.6		231.2	**23b**	165.6		360.5		228.3
24b	163.6		348.9		224.8	**24b**	169.0		362.0		225.2
25b	163.1		347.4		217.8	**25b**	166.6		360.8		222.9
Errors	2					**Errors**	0				
	166.0		356.7		223.8		168.5		355.9		224.4

Date	26-Sep					**Date**	27-Sep				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	167.0		351.7		230.0	**1a**	160.5		357.0		227.1
2a	169.3		361.0		217.2	**2a**	170.6		357.0		222.1
3a	167.9		352.3		229.9	**3a**	160.2		360.5		217.4
4a	170.8		352.3		220.4	**4a**	167.0		354.5		224.3
5a	169.5		360.6		223.8	**5a**	165.0		352.7		222.6
6a	170.1		354.4		226.4	**6a**	162.1		362.0		221.8
7a	167.2		364.5		222.1	**7a**	162.0		355.8		223.9
8a	163.1		357.0		216.1	**8a**	165.0		348.4		228.7
9a	166.0		354.0		226.4	**9a**	165.6		358.6		225.1
10a	162.4		354.5		225.0	**10a**	171.3		359.2		225.1
11a	165.1		353.4		226.6	**11a**	166.0		350.0		230.0
12a	170.5		347.3		229.0	**12a**	171.4		359.3		229.2
13a	164.4		364.0		222.2	**13a**	163.1		352.6		217.4
14a	167.5		350.7		218.9	**14a**	169.8		356.0		227.2
15a	168.8		352.2		219.5	**15a**	165.9		364.0		218.7
16a	167.0		363.8		228.3	**16a**	164.7		356.1		221.4
17a	168.5		354.9		218.6	**17a**	166.4		358.7		226.1
18a	168.4		356.0		222.3	**18a**	167.1		357.2		225.0
19a	163.0		348.6		216.8	**19a**	165.0		351.9		224.2
20a	172.0		355.0		221.7	**20a**	161.0		354.8		218.2
21a	167.4		357.1		219.0	**21a**	167.1		349.2		218.2
22a	163.1		348.3		231.2	**22a**	164.7		357.9		216.9
23a	161.6		357.9		220.9	**23a**	164.5		350.2		227.4
24a	167.0		346.0		216.9	**24a**	170.3		352.0		228.8
25a	169.2		360.9		222.1	**25a**	166.6		359.1		230.0
1b	167.7		356.1		227.7	**1b**	166.0		362.1		217.4
2b	161.0		366.2		227.3	**2b**	165.8		351.0		231.9
3b	167.4		352.9		218.0	**3b**	166.5		361.9		227.7
4b	169.0		361.0		227.9	**4b**	171.1		354.5		231.9
5b	170.0		360.5		222.6	**5b**	166.7		362.9		231.9
6b	169.3		354.6		223.1	**6b**	160.2		364.3		220.7
7b	161.8		356.8		223.1	**7b**	162.2		354.8		225.5
8b	164.0		358.5		224.9	**8b**	168.5		364.0		229.7
9b	161.3		350.1		218.4	**9b**	168.6		354.4		231.9
10b	171.9		360.7		228.8	**10b**	164.0		361.0		220.0
11b	169.9		354.4		217.4	**11b**	164.0		349.0		217.4
12b	169.8		347.2		222.3	**12b**	168.0		359.5		221.5
13b	162.7		356.3		226.9	**13b**	163.2		366.0		228.2
14b	168.2		361.4		230.9	**14b**	160.0		356.9		227.2
15b	167.1		365.7		229.5	**15b**	160.2		346.0		229.1
16b	162.4		356.4		222.2	**16b**	165.9		361.5		219.0
17b	168.9		348.7		226.6	**17b**	171.3		360.3		216.7
18b	164.4		363.0		217.3	**18b**	162.5		347.1		217.5
19b	164.8		349.6		217.2	**19b**	165.6		352.8		217.4
20b	167.2		355.0		222.5	**20b**	162.1		360.0		226.0
21b	160.9		356.2		224.7	**21b**	166.9		355.5		219.0
22b	171.1		348.0		220.6	**22b**	166.8		353.0		231.3
23b	169.4		349.3		227.1	**23b**	170.4		364.5		229.0
24b	166.8		358.7		225.3	**24b**	164.0		366.8		229.7
25b	164.2		357.6		231.0	**25b**	166.7		362.8		217.0
Errors	0					**Errors**	1				
	166.8		355.6		223.3		165.6		356.8		224.4

Date	3-Oct					**Date**	17-Oct				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	171.4		354.6		225.7	**1a**	170.0		347.2		218.7
2a	169.1		348.6		224.3	**2a**	170.1		359.0		226.1
3a	163.7		348.8		224.0	**3a**	162.0		366.0		226.0
4a	163.0		358.0		231.3	**4a**	172.0		364.5		221.0
5a	171.0		364.0		231.4	**5a**	172.0		356.5		224.0
6a	168.1		346.0		230.4	**6a**	171.1		353.4		219.6
7a	162.8		346.6		224.4	**7a**	162.4		362.0		229.0
8a	162.4		349.0		221.2	**8a**	163.7		348.8		227.7
9a	161.0		360.2		225.8	**9a**	163.7		348.5		216.0
10a	161.8		360.6		231.8	**10a**	165.4		349.1		227.8
11a	160.1		346.3		220.6	**11a**	171.8		360.8		216.9
12a	168.9		366.1		225.5	**12a**	170.8		359.0		229.3
13a	168.1		358.7		230.0	**13a**	168.4		360.0		223.1
14a	170.0		352.6		229.8	**14a**	162.4		359.1		221.5
15a	165.6		351.4		222.0	**15a**	163.6		348.0		221.3
16a	164.6		359.9		228.8	**16a**	162.5		354.9		216.1
17a	167.2		350.1		216.5	**17a**	171.9		358.0		231.8
18a	165.2		366.1		219.9	**18a**	165.9		362.0		223.3
19a	170.2		353.9		224.2	**19a**	170.4		348.8		222.9
20a	172.0		365.0		217.6	**20a**	162.0		361.2		227.3
21a	164.8		355.0		227.6	**21a**	170.7		362.1		224.6
22a	170.6		358.9		220.6	**22a**	170.5		352.8		231.4
23a	168.8		361.9		231.7	**23a**	169.0		362.0		222.0
24a	168.0		363.0		222.8	**24a**	165.4		355.0		221.7
25a	160.5		364.5		217.1	**25a**	165.8		361.1		230.0
1b	170.0		355.5		225.8	**1b**	168.6		359.5		225.8
2b	160.5		356.1		220.2	**2b**	168.3		359.7		222.3
3b	170.6		348.9		228.1	**3b**	161.7		346.7		221.2
4b	161.9		349.2		225.0	**4b**	164.7		355.4		220.4
5b	165.4		357.0		229.9	**5b**	168.5		357.0		223.2
6b	163.3		366.0		226.0	**6b**	161.6		346.6		216.0
7b	162.1		352.0		230.4	**7b**	168.2		357.1		230.0
8b	161.8		355.5		223.2	**8b**	165.7		354.6		225.3
9b	164.7		355.0		221.0	**9b**	167.2		363.2		219.2
10b	166.6		361.2		219.2	**10b**	160.4		350.3		220.3
11b	167.0		349.3		230.2	**11b**	170.8		350.0		229.0
12b	166.3		354.8		220.3	**12b**	160.8		349.7		226.2
13b	170.8		365.0		222.0	**13b**	162.5		350.6		221.2
14b	168.6		350.0		216.4	**14b**	160.5		361.0		221.0
15b	160.8		346.5		224.9	**15b**	165.7		346.8		225.9
16b	164.0		356.2		226.0	**16b**	165.8		362.9		227.0
17b	163.9		353.4		222.0	**17b**	171.0		350.7		229.5
18b	161.2		346.5		226.4	**18b**	165.4		364.9		231.9
19b	162.6		348.2		225.0	**19b**	169.0		361.6		217.6
20b	171.1		365.7		222.2	**20b**	163.5		355.3		230.3
21b	170.0		352.8		231.2	**21b**	170.4		363.0		217.1
22b	167.6		355.7		228.5	**22b**	162.5		363.8		226.0
23b	171.1		349.3		227.4	**23b**	165.5		349.1		224.7
24b	160.6		362.7		228.5	**24b**	163.6		363.0		221.0
25b	162.2		366.1		229.6	**25b**	170.6		359.0		229.0
Errors	1					**Errors**	0				
	165.9		355.6		225.0		166.4		356.4		223.9

Date	24-Oct					**Date**	1-Nov				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	163.5		346.7		221.8	**1a**	168.0		366.7		219.9
2a	163.7		355.0		229.0	**2a**	160.4		364.1		222.1
3a	170.9		357.0		222.2	**3a**	166.0		358.5		218.6
4a	161.1		349.4		224.5	**4a**	168.5		356.0		218.1
5a	168.5		352.3		229.7	**5a**	161.6		365.0		220.5
6a	163.8		366.3		225.0	**6a**	171.6		363.5		226.1
7a	171.1		363.2		228.3	**7a**	172.0		365.0		220.7
8a	166.6		360.3		227.7	**8a**	163.0		365.0		219.6
9a	165.3		350.7		220.0	**9a**	170.5		360.1		221.8
10a	170.0		365.7		222.6	**10a**	160.2		366.7		225.2
11a	166.9		354.2		231.3	**11a**	170.1		351.0		229.8
12a	169.4		351.0		228.3	**12a**	160.1		364.5		218.7
13a	171.4		359.0		218.9	**13a**	165.8		350.6		218.6
14a	161.8		351.0		218.7	**14a**	166.2		358.3		216.9
15a	161.2		351.2		216.5	**15a**	168.0		354.8		222.0
16a	163.9		365.2		222.6	**16a**	169.5		348.0		232.0
17a	160.4		365.0		217.4	**17a**	170.0		346.0		221.4
18a	163.3		353.0		225.1	**18a**	165.4		363.1		224.4
19a	163.0		364.6		216.8	**19a**	162.4		352.9		230.2
20a	169.0		349.4		223.1	**20a**	167.2		363.5		219.1
21a	160.0		355.9		228.6	**21a**	170.0		366.5		232.0
22a	162.8		349.8		217.3	**22a**	165.9		348.7		220.5
23a	161.3		349.6		224.3	**23a**	165.3		352.7		221.6
24a	165.6		355.9		224.6	**24a**	168.9		359.8		220.1
25a	166.1		365.9		219.5	**25a**	167.5		347.2		225.5
1b	168.2		350.5		228.1	**1b**	166.6		360.8		230.4
2b	169.3		351.8		217.6	**2b**	160.2		364.8		218.5
3b	162.7		353.0		227.7	**3b**	165.2		355.7		230.7
4b	169.3		361.7		223.0	**4b**	161.0		359.9		228.2
5b	166.9		364.4		220.0	**5b**	171.5		349.0		218.2
6b	160.0		359.8		227.0	**6b**	167.2		353.5		217.1
7b	164.5		358.5		219.5	**7b**	166.1		366.0		226.3
8b	163.0		362.1		231.0	**8b**	170.4		358.8		227.2
9b	168.0		347.1		217.6	**9b**	168.5		362.0		217.0
10b	169.0		359.7		223.4	**10b**	166.4		351.6		225.9
11b	161.0		358.8		216.4	**11b**	166.5		359.6		218.0
12b	163.2		366.1		218.1	**12b**	165.3		365.8		226.2
13b	169.5		356.6		226.1	**13b**	169.2		367.0		227.6
14b	160.2		356.3		217.0	**14b**	166.6		365.0		222.3
15b	164.1		360.8		217.3	**15b**	166.1		355.0		228.7
16b	164.4		356.5		223.8	**16b**	165.3		359.1		227.0
17b	164.1		363.6		231.4	**17b**	160.3		365.0		229.3
18b	160.9		353.7		222.9	**18b**	167.0		366.8		220.8
19b	160.1		347.3		221.6	**19b**	170.2		354.7		232.0
20b	170.1		353.1		225.7	**20b**	161.7		363.2		218.7
21b	164.8		362.4		223.8	**21b**	169.7		353.0		224.0
22b	167.8		348.7		228.0	**22b**	164.5		347.5		229.5
23b	165.4		361.3		231.4	**23b**	166.5		351.1		224.0
24b	160.9		360.1		227.6	**24b**	169.5		348.8		225.5
25b	170.5		349.9		227.5	**25b**	170.0		349.6		225.1
Errors	0					**Errors**	0				
	165.1		356.8		223.5		166.4		358.4		223.6

Date	7-Nov					Date	14-Nov				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	Expected	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	169.3		358.6		226.7	1a	164.2		360.4		216.7
2a	165.3		354.2		217.3	2a	161.9		353.2		222.5
3a	169.2		363.0		231.5	3a	169.9		352.0		222.8
4a	163.0		349.8		227.9	4a	168.7		365.9		231.0
5a	161.0		364.8		230.3	5a	160.9		362.0		229.2
6a	169.3		355.5		231.4	6a	169.0		356.6		225.2
7a	161.0		352.0		221.6	7a	170.5		364.9		227.6
8a	164.0		354.0		230.5	8a	161.4		355.0		219.7
9a	164.9		348.0		216.0	9a	160.1		363.0		218.9
10a	163.9		360.6		228.2	10a	168.4		363.8		220.8
11a	170.8		351.2		231.7	11a	170.9		362.2		230.9
12a	161.5		365.8		228.9	12a	162.4		347.2		231.6
13a	165.2		352.3		225.1	13a	166.2		350.1		223.3
14a	161.3		364.2		222.9	14a	171.9		364.2		231.6
15a	170.0		358.9		231.2	15a	165.5		356.5		230.2
16a	171.2		361.4		216.6	16a	169.8		352.8		230.1
17a	163.3		359.2		218.6	17a	161.8		364.8		231.0
18a	170.2		351.6		229.4	18a	169.5		352.1		225.7
19a	162.0		354.8		227.9	19a	170.4		352.4		225.1
20a	171.6		352.5		219.2	20a	163.1		351.5		219.6
21a	167.0		349.9		222.2	21a	161.3		357.8		227.3
22a	168.4		363.8		227.6	22a	171.5		355.6		229.0
23a	168.2		359.4		223.6	23a	168.0		353.8		225.7
24a	166.7		359.8		226.3	24a	166.0		355.9		220.9
25a	161.8		363.5		231.4	25a	165.7		351.2		231.7
1b	169.3		352.0		231.7	1b	167.0		346.8		219.0
2b	163.0		363.9		224.5	2b	167.9		360.5		216.3
3b	169.6		352.6		218.4	3b	168.6		365.5		220.1
4b	161.0		352.0		227.6	4b	167.0		357.3		227.3
5b	167.8		352.9		217.0	5b	168.9		348.1		230.1
6b	169.0		361.9		225.3	6b	162.0		349.7		229.3
7b	161.6		355.9		220.0	7b	169.8		354.4		216.9
8b	168.2		359.0		216.7	8b	160.5		357.3		217.8
9b	162.5		361.3		222.3	9b	163.9		363.3		224.9
10b	172.0		346.9		229.4	10b	162.0		366.0		228.0
11b	168.6		351.1		227.5	11b	170.1		346.4		227.5
12b	168.5		347.2		230.0	12b	169.2		363.7		230.6
13b	165.0		363.6		219.4	13b	169.5		354.0		228.2
14b	170.3		361.8		228.3	14b	163.3		359.6		224.0
15b	161.3		349.9		230.2	15b	169.3		347.4		217.2
16b	166.5		354.3		228.9	16b	171.4		353.7		221.1
17b	171.5		352.5		225.0	17b	162.0		353.3		221.0
18b	161.7		363.6		224.0	18b	171.2		366.6		231.7
19b	162.4		349.3		225.0	19b	169.7		358.2		216.3
20b	164.4		361.5		230.3	20b	164.7		356.7		216.6
21b	167.1		352.1		223.5	21b	171.6		354.9		224.0
22b	167.6		357.9		219.3	22b	161.6		362.6		226.6
23b	161.2		351.8		229.2	23b	163.0		347.5		219.0
24b	169.5		363.9		218.9	24b	165.9		347.8		221.9
25b	163.0		366.0		227.0	25b	172.0		354.2		229.0
Errors	1					Errors	1				
	166.1		356.5		225.2		166.5		356.5		224.6

Date	21-Nov					Date	5-Dec				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	Expected	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	165.4		366.3		222.7	1a	167.6		360.2		227.0
2a	160.9		361.0		229.1	2a	162.8		354.6		216.3
3a	171.3		357.0		226.5	3a	165.7		364.7		221.1
4a	167.4		351.8		220.0	4a	167.7		366.2		216.3
5a	169.8		361.5		222.3	5a	167.6		359.1		216.2
6a	168.4		349.2		232.0	6a	164.1		355.4		229.5
7a	162.0		346.3		217.3	7a	161.5		365.8		229.6
8a	167.8		351.1		216.9	8a	165.7		353.9		225.7
9a	169.1		354.4		231.7	9a	168.9		353.4		224.4
10a	168.9		347.3		219.4	10a	164.5		358.5		216.3
11a	166.0		363.0		226.5	11a	163.8		358.0		225.5
12a	163.6		362.4		220.4	12a	166.0		355.4		218.6
13a	162.2		360.4		230.6	13a	167.9		366.5		216.2
14a	164.4		349.2		220.4	14a	167.5		365.1		219.1
15a	165.4		354.8		219.0	15a	161.2		367.0		217.3
16a	169.7		355.6		227.2	16a	168.3		359.4		231.0
17a	166.8		352.6		228.7	17a	162.1		355.9		226.0
18a	161.0		346.4		229.8	18a	162.3		348.0		229.8
19a	165.1		361.4		217.2	19a	171.0		352.8		231.3
20a	164.3		365.7		230.4	20a	166.6		351.1		218.1
21a	165.4		348.9		231.4	21a	162.2		352.0		219.8
22a	169.7		359.0		221.1	22a	165.0		347.0		217.0
23a	166.9		359.0		231.6	23a	162.3		353.2		225.0
24a	167.4		360.5		218.7	24a	168.4		356.6		227.4
25a	160.9		364.0		231.4	25a	163.5		354.0		218.0
1b	171.1		356.0		228.1	1b	164.0		356.6		225.0
2b	171.4		364.9		228.2	2b	171.3		347.3		220.3
3b	163.2		349.8		228.4	3b	171.6		346.5		231.1
4b	160.2		353.4		231.0	4b	169.2		359.0		227.2
5b	166.9		352.3		230.1	5b	162.0		355.5		226.0
6b	166.9		351.2		224.9	6b	167.7		351.0		216.7
7b	168.8		359.0		224.6	7b	166.2		363.7		228.9
8b	164.3		353.5		230.0	8b	163.5		364.5		226.1
9b	162.1		356.2		222.8	9b	170.2		348.4		216.0
10b	160.1		366.2		225.7	10b	168.6		366.0		221.9
11b	170.3		354.4		219.6	11b	164.7		359.7		220.1
12b	167.8		356.2		218.3	12b	169.7		360.6		216.8
13b	171.0		348.0		230.9	13b	161.0		362.5		216.9
14b	164.9		353.4		230.6	14b	169.0		349.6		222.6
15b	171.7		354.1		226.4	15b	169.7		357.9		229.0
16b	165.1		360.2		222.4	16b	161.2		353.8		224.0
17b	169.4		357.5		216.6	17b	166.0		346.3		225.1
18b	170.5		349.7		218.4	18b	163.4		352.9		217.6
19b	163.6		360.0		226.7	19b	166.6		359.4		228.2
20b	164.8		348.4		227.5	20b	171.4		362.4		230.6
21b	169.2		363.4		217.9	21b	163.6		356.7		224.1
22b	166.2		364.7		227.4	22b	170.1		358.5		230.4
23b	169.2		351.0		216.7	23b	167.6		357.6		216.9
24b	162.0		352.7		227.8	24b	170.0		349.7		222.4
25b	170.4		355.4		219.4	25b	164.7		358.9		218.0
Errors	3					Errors	2				
	166.3		356.0		225.0		166.2		356.7		223.0

Date	6-Dec					**Date**	12-Dec				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	168.1		350.4		232.0	**1a**	168.5		360.4		232.0
2a	162.4		362.0		220.3	**2a**	170.7		351.6		230.6
3a	170.6		363.6		216.4	**3a**	171.0		354.2		228.1
4a	163.2		349.5		218.3	**4a**	166.0		346.7		217.8
5a	161.5		359.3		221.7	**5a**	162.5		355.3		226.0
6a	169.6		349.7		219.0	**6a**	164.0		358.2		230.5
7a	168.5		358.0		225.7	**7a**	169.4		355.0		219.7
8a	165.0		351.2		228.0	**8a**	169.4		365.8		220.1
9a	171.8		359.8		230.8	**9a**	160.1		351.6		225.8
10a	165.4		363.2		216.6	**10a**	170.6		352.8		216.1
11a	170.0		358.1		221.5	**11a**	161.3		349.3		216.2
12a	170.9		360.1		227.8	**12a**	162.6		351.0		221.8
13a	162.1		348.2		226.0	**13a**	166.3		362.1		229.4
14a	168.0		355.3		217.2	**14a**	167.0		349.7		228.8
15a	167.0		353.0		221.5	**15a**	160.8		351.9		228.2
16a	163.5		349.1		230.3	**16a**	164.0		357.3		223.1
17a	161.8		352.7		224.2	**17a**	169.9		357.6		227.3
18a	164.8		356.5		228.6	**18a**	168.7		348.4		217.5
19a	162.1		346.1		227.1	**19a**	169.6		348.4		218.2
20a	164.8		351.6		228.3	**20a**	162.5		354.7		219.5
21a	162.0		360.0		229.9	**21a**	168.2		353.6		226.4
22a	166.1		347.0		230.1	**22a**	170.1		349.3		224.0
23a	163.0		359.0		224.7	**23a**	167.6		346.1		216.3
24a	161.8		354.9		220.5	**24a**	162.0		362.4		216.6
25a	171.7		356.2		216.7	**25a**	161.9		347.1		216.4
1b	164.1		362.3		217.4	**1b**	168.8		353.2		232.0
2b	171.0		349.8		219.4	**2b**	166.1		364.2		220.6
3b	161.7		354.4		218.3	**3b**	169.4		359.0		224.3
4b	164.5		358.0		229.1	**4b**	160.3		360.6		231.7
5b	161.9		349.2		222.3	**5b**	167.6		346.2		220.5
6b	160.2		364.3		217.5	**6b**	166.0		351.0		223.1
7b	163.3		358.3		224.2	**7b**	171.2		356.8		230.2
8b	162.1		351.4		216.1	**8b**	163.1		357.0		228.7
9b	161.6		351.6		230.6	**9b**	167.7		349.0		217.3
10b	166.2		357.3		225.3	**10b**	171.2		366.7		224.7
11b	161.1		353.2		220.1	**11b**	168.3		362.2		217.5
12b	170.5		361.7		220.7	**12b**	163.0		348.6		229.3
13b	168.5		355.3		229.6	**13b**	161.7		348.0		226.5
14b	168.5		362.3		231.8	**14b**	164.5		353.7		217.3
15b	162.0		355.1		217.5	**15b**	161.9		347.0		225.4
16b	169.5		354.0		216.3	**16b**	167.2		347.0		228.2
17b	164.4		354.3		231.9	**17b**	164.8		356.7		227.8
18b	163.0		360.2		220.3	**18b**	165.8		347.0		230.6
19b	165.0		349.7		228.8	**19b**	168.8		354.6		222.0
20b	161.3		357.4		223.9	**20b**	160.1		347.4		230.3
21b	167.9		357.8		224.1	**21b**	164.0		348.6		218.1
22b	168.8		357.6		227.2	**22b**	168.4		354.0		228.6
23b	164.8		348.9		228.9	**23b**	169.8		363.4		231.4
24b	170.6		353.6		216.4	**24b**	168.5		349.6		216.2
25b	161.0		366.8		231.0	**25b**	165.7		355.3		224.3
Errors	0					**Errors**	0				
	165.5		355.4		223.7		166.2		353.7		224.1

Date	13-Dec					Date	19-Dec				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	Expected	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	169.5		357.8		225.0	1a	168.7		361.7		230.6
2a	167.0		366.6		230.3	2a	171.3		361.0		228.9
3a	161.1		348.2		216.0	3a	160.7		360.1		227.8
4a	166.4		366.9		226.6	4a	166.6		360.1		230.3
5a	165.7		353.0		220.3	5a	164.9		353.8		219.9
6a	168.9		361.0		231.9	6a	165.7		359.5		226.3
7a	171.9		365.9		218.6	7a	171.8		354.3		219.0
8a	168.7		362.0		229.2	8a	164.2		356.5		224.6
9a	169.2		352.9		222.8	9a	171.0		347.6		225.9
10a	170.0		364.2		216.4	10a	165.0		356.7		217.4
11a	160.4		362.4		228.7	11a	163.4		346.5		221.2
12a	169.1		355.7		222.7	12a	164.5		359.3		221.0
13a	166.7		366.9		227.3	13a	167.6		346.4		224.3
14a	171.5		354.2		216.3	14a	168.8		365.8		217.5
15a	164.0		366.5		227.8	15a	167.0		346.5		220.0
16a	169.0		354.0		226.4	16a	169.0		355.8		224.5
17a	165.4		350.8		219.1	17a	165.1		366.7		228.1
18a	167.5		355.2		229.1	18a	161.8		365.8		224.2
19a	168.2		350.3		229.4	19a	165.3		363.4		220.3
20a	169.7		359.1		217.7	20a	160.6		353.3		226.0
21a	171.6		362.9		223.9	21a	169.3		362.3		220.0
22a	167.3		355.3		225.0	22a	160.7		366.4		222.5
23a	163.3		363.8		226.8	23a	168.0		352.8		224.9
24a	170.4		346.5		227.8	24a	167.7		352.2		227.0
25a	166.0		364.8		226.4	25a	166.2		358.0		224.2
1b	167.2		360.0		219.5	1b	169.5		357.5		230.0
2b	165.1		349.6		225.8	2b	170.6		359.4		223.4
3b	171.9		356.1		229.5	3b	162.0		364.7		227.2
4b	167.9		355.8		230.6	4b	161.9		364.2		230.4
5b	162.5		353.0		225.8	5b	170.9		355.2		231.9
6b	167.4		359.8		218.0	6b	166.5		366.8		223.2
7b	168.8		348.5		221.2	7b	165.3		367.0		227.2
8b	167.3		358.4		224.5	8b	161.3		357.6		229.5
9b	161.1		362.5		231.5	9b	171.4		352.4		216.5
10b	165.2		359.5		224.1	10b	162.1		358.7		217.8
11b	171.4		353.1		217.1	11b	172.0		349.0		229.3
12b	168.9		363.5		227.3	12b	164.2		358.1		217.5
13b	162.1		364.0		219.7	13b	171.2		349.8		222.5
14b	163.5		351.4		221.6	14b	169.4		356.0		218.0
15b	171.1		350.9		228.0	15b	170.1		346.8		229.9
16b	164.5		351.6		224.0	16b	163.1		354.2		228.0
17b	168.2		363.2		227.0	17b	164.6		359.5		225.0
18b	162.7		352.0		230.3	18b	164.0		366.5		221.5
19b	170.1		366.8		229.4	19b	167.6		346.1		221.9
20b	168.8		365.1		231.2	20b	162.8		347.7		221.0
21b	165.4		357.5		220.8	21b	161.8		365.6		219.0
22b	160.8		349.0		227.6	22b	161.3		347.0		231.8
23b	166.7		364.1		227.0	23b	167.6		353.0		220.8
24b	170.2		364.6		230.0	24b	160.7		359.6		220.0
25b	168.0		355.4		225.7	25b	168.0		364.0		224.0
Errors	0					Errors	1				
	167.1		358.1		225.0		166.1		357.0		224.1

Date	2-Jan					**Date**	9-Jan				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	165.9		365.1		228.7	**1a**	170.6		346.9		231.3
2a	169.0		365.3		227.0	**2a**	162.9		361.1		231.7
3a	166.5		347.6		222.6	**3a**	163.0		351.3		217.3
4a	166.5		359.0		216.1	**4a**	170.0		353.1		229.4
5a	160.9		350.0		222.9	**5a**	167.2		360.9		217.6
6a	161.4		362.1		229.3	**6a**	167.5		362.7		230.9
7a	168.4		353.8		220.0	**7a**	163.6		366.8		231.5
8a	171.0		363.1		220.0	**8a**	171.7		351.9		219.0
9a	171.8		365.9		228.0	**9a**	167.7		349.6		223.4
10a	163.2		363.3		221.2	**10a**	165.9		352.4		224.3
11a	169.9		347.8		231.1	**11a**	162.8		362.6		218.6
12a	163.0		351.0		223.4	**12a**	165.0		354.1		216.3
13a	160.0		348.9		227.9	**13a**	169.2		347.3		220.8
14a	164.0		363.2		220.2	**14a**	164.7		361.5		225.9
15a	171.8		355.3		218.0	**15a**	162.0		351.4		223.1
16a	163.0		348.9		228.5	**16a**	162.9		354.6		230.0
17a	161.5		352.9		223.2	**17a**	167.7		347.3		224.8
18a	168.0		365.5		216.2	**18a**	167.2		360.2		219.1
19a	171.0		347.3		223.2	**19a**	169.9		360.5		224.7
20a	163.3		355.0		226.3	**20a**	161.0		358.4		219.4
21a	166.2		354.5		224.6	**21a**	169.8		348.0		219.0
22a	164.5		360.7		226.8	**22a**	160.0		354.6		230.0
23a	170.6		365.5		223.4	**23a**	166.0		366.3		217.0
24a	160.0		362.6		223.3	**24a**	166.0		346.9		219.8
25a	171.4		363.5		217.3	**25a**	170.7		354.2		220.2
1b	166.1		352.2		230.5	**1b**	160.4		346.5		217.8
2b	160.4		361.1		224.0	**2b**	162.3		358.5		225.8
3b	170.1		346.6		224.6	**3b**	166.0		352.0		231.3
4b	167.0		359.1		229.0	**4b**	163.0		358.3		225.7
5b	164.2		357.1		218.3	**5b**	168.0		357.4		229.8
6b	164.1		346.6		222.6	**6b**	166.0		361.9		219.7
7b	166.6		355.9		228.2	**7b**	165.7		363.9		231.4
8b	160.4		353.5		221.5	**8b**	167.6		357.6		220.3
9b	161.0		357.7		229.1	**9b**	166.6		354.2		223.9
10b	166.0		362.0		221.6	**10b**	166.1		356.5		227.0
11b	168.0		352.2		228.6	**11b**	171.8		355.8		226.3
12b	164.4		359.0		217.3	**12b**	171.1		355.5		219.1
13b	160.0		361.0		223.0	**13b**	168.2		354.3		228.5
14b	162.1		363.0		230.1	**14b**	168.9		355.0		216.5
15b	171.5		359.4		226.8	**15b**	166.8		352.9		228.9
16b	163.3		362.0		230.8	**16b**	171.0		348.4		222.8
17b	160.9		363.1		217.2	**17b**	164.7		361.7		228.1
18b	165.0		352.0		222.5	**18b**	167.0		362.9		225.4
19b	164.8		352.7		218.0	**19b**	162.3		364.7		227.0
20b	162.1		360.8		229.4	**20b**	170.8		354.4		226.9
21b	168.6		356.9		224.3	**21b**	168.5		364.1		230.0
22b	168.8		359.9		227.0	**22b**	165.0		358.0		224.5
23b	170.2		366.5		224.2	**23b**	165.7		351.3		219.4
24b	167.9		357.3		224.8	**24b**	165.6		346.5		224.9
25b	162.6		358.0		217.2	**25b**	162.3		353.6		216.2
Errors	1					**Errors**	0				
	165.6		357.5		224.1		166.4		355.9		224.2

Date	16-Jan					**Date**	23-Jan				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	169.7		359.9		230.0	**1a**	164.6		362.9		226.1
2a	162.7		346.0		221.0	**2a**	163.1		352.9		224.4
3a	170.0		355.0		222.9	**3a**	170.1		358.2		218.9
4a	169.9		361.9		225.1	**4a**	163.3		352.2		225.5
5a	170.7		359.5		223.7	**5a**	166.7		348.2		216.6
6a	169.4		361.0		224.9	**6a**	165.6		362.4		222.8
7a	161.3		360.5		222.1	**7a**	171.0		356.8		222.8
8a	161.0		365.7		216.0	**8a**	166.0		364.1		230.1
9a	169.0		346.0		223.5	**9a**	169.5		352.9		231.5
10a	164.0		359.9		220.1	**10a**	171.0		355.2		217.4
11a	161.3		346.5		218.4	**11a**	165.1		355.4		228.6
12a	165.4		355.9		223.0	**12a**	162.7		365.3		221.9
13a	163.3		364.9		223.5	**13a**	163.8		357.0		224.2
14a	168.5		362.0		228.1	**14a**	170.0		366.0		219.1
15a	165.5		362.3		230.4	**15a**	171.0		365.0		217.3
16a	161.2		365.6		226.0	**16a**	160.1		359.0		217.8
17a	160.4		347.7		222.6	**17a**	169.7		349.5		222.7
18a	169.9		347.7		224.2	**18a**	160.6		353.8		225.4
19a	166.4		355.8		225.1	**19a**	163.9		350.6		221.7
20a	171.0		351.9		224.0	**20a**	167.5		362.6		228.0
21a	171.7		347.3		226.0	**21a**	165.9		348.3		218.7
22a	166.3		360.7		230.1	**22a**	162.7		361.8		221.0
23a	168.6		364.0		220.0	**23a**	161.0		366.9		230.9
24a	164.8		357.5		221.6	**24a**	170.4		357.5		222.0
25a	163.3		352.5		223.1	**25a**	168.8		352.3		229.2
1b	164.1		359.2		217.0	**1b**	162.6		349.8		217.8
2b	168.5		366.0		219.0	**2b**	161.7		365.9		227.3
3b	165.0		358.9		230.3	**3b**	167.7		353.2		224.2
4b	163.0		361.2		226.8	**4b**	165.7		351.0		230.4
5b	168.6		358.0		220.4	**5b**	166.6		356.1		227.9
6b	167.8		365.6		219.9	**6b**	170.2		348.7		219.7
7b	161.0		349.0		231.8	**7b**	162.1		352.7		225.5
8b	165.7		350.7		221.0	**8b**	163.0		362.8		225.0
9b	167.7		346.8		221.8	**9b**	166.3		360.5		226.6
10b	163.9		363.2		216.1	**10b**	165.0		364.0		227.0
11b	169.4		359.5		229.7	**11b**	170.3		346.7		224.6
12b	165.6		349.3		222.2	**12b**	162.9		350.0		225.0
13b	165.1		360.9		219.2	**13b**	164.3		356.1		226.3
14b	162.3		348.2		219.8	**14b**	162.7		366.9		219.6
15b	168.7		356.9		230.2	**15b**	167.3		362.1		229.8
16b	163.5		349.3		217.1	**16b**	166.4		351.4		219.3
17b	165.6		355.6		224.0	**17b**	168.4		350.5		225.0
18b	169.6		352.8		227.9	**18b**	161.0		362.0		220.2
19b	168.2		354.8		223.0	**19b**	165.5		356.2		229.3
20b	171.5		364.8		216.6	**20b**	168.3		350.1		231.0
21b	165.0		351.6		227.0	**21b**	167.5		366.7		222.5
22b	161.2		366.7		218.2	**22b**	170.5		349.1		221.5
23b	169.0		349.0		226.8	**23b**	165.0		348.0		227.4
24b	171.9		348.2		219.0	**24b**	171.2		355.5		228.3
25b	164.3		354.8		224.0	**25b**	163.3		360.2		224.0
Errors	1					**Errors**	2				
	166.3		356.4		223.3		166.0		356.6		224.2

Date	30-Jan					Date	6-Feb				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	Expected	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	165.7		366.1		222.3	1a	163.2		366.6		219.4
2a	160.5		359.6		226.5	2a	161.1		354.7		216.4
3a	161.9		361.8		225.3	3a	168.7		356.0		228.0
4a	170.0		365.7		217.3	4a	166.0		348.8		216.5
5a	169.9		349.0		231.7	5a	160.4		353.9		230.4
6a	166.9		353.0		225.6	6a	161.5		364.6		222.7
7a	163.0		365.2		224.0	7a	164.2		347.0		218.0
8a	165.3		360.4		218.5	8a	163.2		350.5		220.9
9a	163.6		353.9		229.7	9a	163.0		360.4		225.6
10a	168.8		352.0		220.8	10a	168.1		362.1		219.1
11a	161.0		362.7		228.6	11a	164.2		365.3		228.3
12a	166.0		350.0		216.8	12a	160.8		359.9		229.0
13a	170.8		357.8		219.6	13a	164.1		348.0		229.5
14a	168.3		365.8		231.9	14a	160.6		360.9		225.8
15a	168.9		356.3		232.0	15a	171.3		348.0		231.3
16a	170.9		364.5		218.7	16a	167.0		355.6		216.3
17a	168.4		364.5		220.1	17a	161.3		353.0		228.0
18a	164.3		363.5		220.2	18a	164.6		346.2		217.9
19a	164.0		352.2		219.4	19a	169.0		350.1		227.2
20a	165.2		348.5		225.3	20a	160.2		363.6		219.8
21a	169.1		364.4		222.1	21a	165.3		351.6		227.5
22a	170.2		347.0		228.0	22a	169.0		354.6		221.6
23a	164.2		357.0		223.1	23a	164.0		363.7		219.1
24a	169.1		354.8		218.3	24a	169.7		349.9		231.0
25a	170.4		356.9		222.2	25a	169.1		348.6		228.5
1b	165.7		355.0		219.8	1b	164.0		363.5		219.0
2b	166.3		359.3		231.6	2b	160.6		350.1		231.1
3b	166.8		352.5		221.5	3b	160.5		361.0		231.0
4b	168.7		354.9		225.0	4b	171.3		347.0		221.9
5b	163.9		360.7		216.9	5b	165.0		351.1		222.0
6b	162.4		363.0		228.1	6b	168.3		346.7		223.2
7b	160.0		365.9		229.0	7b	163.0		355.0		218.8
8b	162.0		351.7		230.4	8b	164.8		359.8		217.7
9b	169.0		357.0		224.7	9b	164.0		352.9		219.6
10b	166.9		357.4		223.5	10b	170.7		359.6		216.8
11b	161.0		346.8		231.3	11b	164.2		353.6		220.1
12b	167.7		363.3		226.7	12b	171.9		351.0		227.4
13b	170.8		350.6		223.2	13b	169.0		350.6		219.5
14b	170.9		357.0		229.7	14b	169.4		352.4		223.7
15b	165.0		364.3		216.6	15b	161.1		352.6		227.0
16b	170.9		360.6		231.6	16b	168.1		347.8		218.2
17b	166.7		365.0		219.2	17b	165.3		361.2		225.7
18b	161.7		354.8		228.0	18b	169.4		353.7		224.1
19b	166.1		362.0		225.9	19b	162.6		363.4		217.8
20b	161.3		362.6		224.0	20b	166.5		353.3		224.2
21b	167.7		363.9		228.8	21b	168.6		358.4		230.4
22b	171.1		352.5		231.9	22b	163.1		351.0		228.7
23b	166.0		356.6		216.6	23b	168.6		361.8		221.4
24b	166.0		349.8		223.9	24b	162.9		354.3		222.7
25b	165.0		349.6		226.4	25b	171.1		358.2		228.9
Errors	1					Errors	1				
	166.3		358.0		224.4		165.4		355.0		223.5

Date	7-Feb					**Date**	13-Feb				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	163.1		361.3		225.0	**1a**	169.7		351.3		219.0
2a	163.6		358.7		219.0	**2a**	163.8		347.3		220.2
3a	169.6		360.4		218.4	**3a**	172.0		356.0		217.0
4a	166.8		366.0		220.2	**4a**	165.5		355.1		225.4
5a	163.5		361.2		229.5	**5a**	166.4		347.0		229.1
6a	160.3		360.4		229.8	**6a**	167.3		363.0		229.0
7a	169.7		347.5		219.2	**7a**	166.5		348.5		229.4
8a	171.0		354.2		221.4	**8a**	166.0		351.3		226.0
9a	169.4		354.5		221.6	**9a**	161.0		356.4		230.3
10a	165.1		351.3		219.8	**10a**	171.5		353.9		217.5
11a	171.4		351.2		222.4	**11a**	164.0		352.9		230.5
12a	161.4		366.0		224.4	**12a**	163.4		348.4		219.0
13a	167.0		364.8		231.0	**13a**	162.6		364.7		218.3
14a	161.7		357.5		222.9	**14a**	169.7		356.9		221.5
15a	169.0		354.5		224.9	**15a**	170.6		348.6		216.8
16a	165.1		353.0		225.0	**16a**	170.1		350.0		231.3
17a	164.7		354.4		216.3	**17a**	169.3		346.9		217.9
18a	166.0		362.0		228.9	**18a**	169.7		353.0		218.4
19a	167.8		356.0		230.2	**19a**	163.2		350.0		229.0
20a	171.0		353.1		231.2	**20a**	167.6		366.6		221.0
21a	163.9		347.6		224.9	**21a**	169.0		347.2		216.2
22a	168.1		352.4		228.7	**22a**	170.0		360.9		220.6
23a	161.3		355.0		217.3	**23a**	169.3		353.4		230.0
24a	168.2		355.8		229.8	**24a**	162.4		352.2		223.0
25a	169.8		357.2		221.3	**25a**	167.7		365.2		230.3
1b	161.1		355.8		225.7	**1b**	167.0		361.5		218.6
2b	169.2		350.1		230.0	**2b**	170.7		347.5		230.1
3b	161.3		363.2		228.0	**3b**	169.8		358.7		218.4
4b	161.1		363.2		220.0	**4b**	163.0		348.9		227.7
5b	167.0		359.2		230.6	**5b**	160.7		364.3		231.6
6b	166.2		360.3		225.8	**6b**	167.1		347.7		222.7
7b	168.0		351.3		230.8	**7b**	171.9		365.8		228.9
8b	167.0		364.5		229.7	**8b**	160.2		353.0		221.0
9b	161.1		363.2		224.5	**9b**	164.5		363.0		224.0
10b	171.5		358.9		218.0	**10b**	162.1		364.3		225.6
11b	168.3		351.4		225.3	**11b**	169.3		355.1		230.5
12b	167.0		348.1		225.5	**12b**	171.1		348.5		217.4
13b	172.0		349.7		218.2	**13b**	169.7		359.9		219.0
14b	165.6		358.5		229.7	**14b**	166.4		360.9		227.2
15b	161.4		356.8		228.3	**15b**	161.3		348.0		221.9
16b	162.7		366.0		230.4	**16b**	165.5		352.4		220.0
17b	163.9		347.2		217.9	**17b**	167.8		359.9		231.7
18b	169.5		361.4		230.3	**18b**	170.9		364.7		230.4
19b	164.6		352.4		224.4	**19b**	163.7		366.2		227.9
20b	161.9		347.2		218.9	**20b**	166.4		349.8		218.4
21b	164.0		348.5		223.2	**21b**	163.6		356.1		225.7
22b	170.5		354.4		225.8	**22b**	168.3		365.9		224.7
23b	168.6		354.0		227.2	**23b**	168.1		355.0		223.9
24b	167.1		361.8		221.1	**24b**	161.1		364.6		221.2
25b	163.4		363.5		225.0	**25b**	170.3		346.9		222.7
Errors	0					**Errors**	0				
	166.1		356.4		224.7		166.7		355.7		224.0

Date	20-Feb					**Date**	21-Feb				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	161.5		366.3		217.4	**1a**	167.0		361.2		220.0
2a	160.9		353.3		231.5	**2a**	166.7		350.9		220.9
3a	170.5		362.0		227.0	**3a**	167.2		346.9		229.5
4a	161.4		353.1		228.8	**4a**	163.0		366.2		226.9
5a	160.7		366.1		222.9	**5a**	164.3		348.6		228.0
6a	161.6		356.2		227.7	**6a**	160.1		354.0		218.3
7a	167.8		360.6		217.4	**7a**	162.0		348.2		230.0
8a	165.0		349.4		226.0	**8a**	165.9		357.0		222.7
9a	163.7		347.3		218.1	**9a**	165.5		346.6		223.0
10a	161.9		349.8		216.1	**10a**	167.2		356.2		228.8
11a	165.3		363.2		216.1	**11a**	164.9		364.1		231.0
12a	170.7		351.0		217.6	**12a**	167.0		356.5		219.2
13a	161.2		366.9		225.3	**13a**	165.4		363.8		226.3
14a	164.0		360.9		226.2	**14a**	164.6		350.3		222.5
15a	162.9		358.0		222.7	**15a**	162.5		365.8		231.8
16a	164.2		354.4		219.1	**16a**	168.0		349.3		218.9
17a	164.9		357.3		217.6	**17a**	165.3		362.4		220.8
18a	160.9		352.8		221.5	**18a**	160.3		361.9		224.4
19a	163.0		363.0		219.3	**19a**	169.0		352.0		224.9
20a	167.5		363.0		231.1	**20a**	170.8		360.1		229.5
21a	165.8		351.9		223.0	**21a**	162.9		355.8		229.1
22a	170.0		362.9		222.2	**22a**	165.7		357.6		231.6
23a	168.8		357.3		222.0	**23a**	166.7		349.1		218.0
24a	167.5		364.0		216.3	**24a**	168.8		365.0		228.1
25a	163.8		347.4		228.7	**25a**	165.1		354.4		226.2
1b	171.9		358.0		221.4	**1b**	171.4		360.9		229.2
2b	166.0		350.1		227.6	**2b**	169.0		352.0		216.2
3b	171.9		347.1		220.7	**3b**	162.6		351.6		220.6
4b	160.0		348.3		223.5	**4b**	171.5		364.7		225.8
5b	166.3		353.5		221.0	**5b**	167.0		352.0		224.2
6b	164.5		355.1		222.0	**6b**	165.0		346.1		229.9
7b	160.3		351.0		220.8	**7b**	168.5		362.4		230.9
8b	165.0		365.3		220.5	**8b**	161.3		361.9		229.2
9b	160.3		359.5		222.2	**9b**	164.6		361.7		226.5
10b	169.0		347.7		218.6	**10b**	168.3		354.9		226.3
11b	161.0		350.0		220.1	**11b**	163.5		366.7		219.7
12b	167.5		346.6		222.0	**12b**	168.0		363.2		225.2
13b	161.2		351.3		225.8	**13b**	168.1		364.1		225.0
14b	164.8		356.5		216.0	**14b**	161.3		363.7		216.9
15b	165.8		364.0		219.0	**15b**	161.0		349.8		219.4
16b	161.9		362.7		223.1	**16b**	167.1		351.9		226.4
17b	166.1		358.9		227.0	**17b**	163.3		366.6		218.1
18b	164.5		357.2		217.6	**18b**	166.9		350.4		227.1
19b	166.6		353.2		230.4	**19b**	168.7		356.6		229.8
20b	167.0		351.2		220.4	**20b**	161.0		360.0		227.3
21b	163.9		353.3		223.0	**21b**	168.7		365.1		217.3
22b	170.0		364.6		228.4	**22b**	165.2		359.9		220.9
23b	170.3		356.7		221.4	**23b**	165.1		351.9		221.7
24b	161.9		348.4		218.3	**24b**	164.7		361.4		216.7
25b	165.7		349.7		228.0	**25b**	170.5		352.0		217.3
Errors	0					**Errors**	0				
	165.0		356.1		222.3		165.7		357.2		224.5

Date	27-Feb					**Date**	28-Feb				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	163.1		353.0		229.6	**1a**	164.5		360.0		226.5
2a	164.6		346.1		227.5	**2a**	170.0		349.1		219.8
3a	160.4		353.9		231.9	**3a**	164.1		356.1		221.0
4a	168.5		347.0		231.2	**4a**	165.2		363.0		216.4
5a	167.7		364.5		230.1	**5a**	165.4		366.1		222.7
6a	162.4		362.8		226.5	**6a**	160.7		364.8		227.0
7a	170.2		356.2		217.0	**7a**	167.0		355.1		222.6
8a	167.6		361.0		216.3	**8a**	162.5		347.6		231.1
9a	169.4		351.8		218.3	**9a**	168.3		352.3		224.9
10a	164.8		364.9		222.0	**10a**	161.5		353.2		230.8
11a	163.2		354.5		219.8	**11a**	160.6		358.4		224.9
12a	166.1		349.0		226.5	**12a**	161.5		353.8		217.8
13a	165.6		359.4		216.2	**13a**	166.0		349.8		221.8
14a	168.9		355.4		216.3	**14a**	169.3		363.1		222.5
15a	170.7		350.6		219.6	**15a**	170.1		352.7		225.4
16a	171.7		355.2		232.0	**16a**	171.2		351.2		222.6
17a	166.1		355.0		225.2	**17a**	170.5		355.5		216.9
18a	170.0		359.5		226.5	**18a**	164.1		348.2		216.5
19a	170.5		348.3		216.9	**19a**	169.7		365.2		218.8
20a	171.0		366.0		217.7	**20a**	170.1		348.5		221.0
21a	168.4		364.5		230.0	**21a**	170.0		348.2		227.5
22a	163.4		355.1		220.7	**22a**	162.8		361.7		225.0
23a	171.0		356.2		217.2	**23a**	164.0		347.5		223.2
24a	165.6		351.9		229.4	**24a**	162.2		357.5		229.2
25a	161.7		365.6		217.5	**25a**	162.2		349.8		221.7
1b	170.9		352.5		227.3	**1b**	163.7		355.3		228.5
2b	160.9		361.8		221.8	**2b**	164.2		360.8		216.8
3b	169.3		350.0		230.1	**3b**	161.8		354.8		224.4
4b	160.5		347.1		221.2	**4b**	162.6		364.5		225.0
5b	165.8		352.3		217.7	**5b**	169.4		353.4		217.3
6b	166.9		360.0		222.0	**6b**	162.7		351.6		225.1
7b	169.3		359.3		224.8	**7b**	161.8		350.4		229.3
8b	168.4		348.4		231.8	**8b**	162.8		366.5		216.7
9b	163.2		346.1		222.7	**9b**	165.0		349.0		220.0
10b	160.6		348.5		223.2	**10b**	168.4		352.0		222.4
11b	171.0		364.0		227.3	**11b**	164.9		359.8		228.8
12b	165.4		364.6		229.6	**12b**	164.8		366.4		231.0
13b	163.0		351.2		229.6	**13b**	160.0		347.6		230.3
14b	166.6		360.9		227.0	**14b**	169.3		349.0		226.0
15b	170.2		357.7		231.0	**15b**	171.0		350.8		218.7
16b	165.6		366.7		225.4	**16b**	166.0		351.6		228.7
17b	170.0		351.3		224.5	**17b**	165.5		364.1		225.4
18b	167.9		360.4		225.5	**18b**	171.0		346.2		227.2
19b	169.3		356.7		230.9	**19b**	160.7		358.8		218.6
20b	162.4		364.9		229.9	**20b**	171.0		350.4		224.0
21b	168.6		352.3		220.5	**21b**	171.0		354.3		227.3
22b	168.8		364.1		231.4	**22b**	167.4		359.1		229.3
23b	163.8		349.1		226.7	**23b**	165.6		365.4		221.1
24b	170.0		362.0		224.6	**24b**	171.8		349.8		231.4
25b	166.6		357.5		230.0	**25b**	171.6		359.4		229.2
Errors	0					**Errors**	0				
	166.8		356.3		224.7		165.8		355.3		223.9

Date	5-Mar					**Date**	6-Mar				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	166.7		350.0		221.0	**1a**	170.6		348.5		227.0
2a	162.0		365.7		218.3	**2a**	164.0		358.8		222.0
3a	171.6		359.3		222.5	**3a**	163.8		351.3		222.4
4a	169.0		346.8		218.0	**4a**	170.1		349.9		228.6
5a	161.8		355.5		220.0	**5a**	163.2		347.8		225.8
6a	162.6		360.1		218.1	**6a**	168.9		363.7		225.0
7a	161.1		347.4		229.3	**7a**	160.3		348.8		228.5
8a	163.4		366.8		227.4	**8a**	172.0		363.9		220.2
9a	161.9		361.0		217.1	**9a**	164.8		347.9		227.9
10a	169.0		350.0		230.6	**10a**	161.4		365.7		225.5
11a	164.4		360.8		230.4	**11a**	165.2		352.6		222.0
12a	164.9		354.9		218.2	**12a**	168.5		357.8		230.2
13a	161.4		356.6		218.5	**13a**	171.1		356.8		218.4
14a	167.1		353.8		219.7	**14a**	170.0		354.5		225.5
15a	162.8		362.0		220.7	**15a**	164.1		362.6		222.1
16a	169.5		362.7		217.6	**16a**	162.4		367.0		227.0
17a	166.6		363.6		216.7	**17a**	164.6		359.5		216.6
18a	161.9		355.8		220.3	**18a**	168.0		349.3		217.3
19a	166.6		348.0		217.4	**19a**	160.1		346.3		218.7
20a	163.9		347.2		229.8	**20a**	170.3		352.1		227.0
21a	169.5		354.3		229.7	**21a**	167.2		346.6		227.1
22a	160.6		365.7		225.5	**22a**	169.7		358.7		224.9
23a	169.7		359.0		228.6	**23a**	161.2		356.6		228.2
24a	170.7		355.3		219.0	**24a**	163.4		353.5		220.6
25a	161.0		355.0		225.8	**25a**	163.4		348.5		227.2
1b	166.5		346.7		216.9	**1b**	160.5		354.4		221.2
2b	163.3		359.9		224.0	**2b**	169.1		364.7		231.6
3b	172.0		348.1		230.9	**3b**	169.4		352.3		229.1
4b	166.6		349.0		226.5	**4b**	170.5		346.0		218.7
5b	168.0		359.0		220.4	**5b**	162.6		356.8		226.5
6b	170.7		358.0		220.7	**6b**	165.9		352.4		223.0
7b	164.6		359.3		228.9	**7b**	170.9		349.5		220.1
8b	165.5		355.5		217.9	**8b**	160.9		355.4		227.6
9b	161.5		358.0		228.0	**9b**	171.6		346.9		219.4
10b	170.4		364.4		217.8	**10b**	171.1		347.8		227.6
11b	160.3		358.6		227.0	**11b**	169.8		357.0		222.5
12b	170.3		346.8		228.0	**12b**	164.8		358.8		232.0
13b	171.8		359.6		216.2	**13b**	167.9		366.8		216.7
14b	167.9		351.1		218.7	**14b**	170.0		355.6		221.9
15b	160.2		347.8		220.7	**15b**	162.7		365.9		217.1
16b	161.7		359.7		228.2	**16b**	170.2		349.0		224.3
17b	166.8		349.6		219.6	**17b**	165.1		350.7		216.4
18b	160.4		362.5		221.0	**18b**	170.2		348.0		218.1
19b	169.9		346.9		226.6	**19b**	165.5		357.6		224.1
20b	164.4		360.0		230.1	**20b**	160.0		347.1		219.8
21b	160.9		362.0		218.3	**21b**	161.6		347.8		231.3
22b	167.0		346.6		231.6	**22b**	164.6		356.3		222.8
23b	162.7		350.8		231.4	**23b**	166.4		357.2		222.6
24b	169.8		360.9		227.6	**24b**	163.5		354.3		221.0
25b	160.9		366.6		227.0	**25b**	164.0		346.9		225.6
Errors	1					**Errors**	1				
	165.6		355.9		223.2		166.2		354.4		223.7

Date	12-Mar					**Date**	19-Mar				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	168.1		360.0		229.4	**1a**	162.9		354.0		222.5
2a	170.9		364.4		226.9	**2a**	164.7		351.0		217.7
3a	162.9		355.3		228.5	**3a**	160.1		350.9		217.0
4a	161.6		348.3		217.7	**4a**	168.3		351.3		218.0
5a	161.9		360.3		225.9	**5a**	166.3		362.2		225.3
6a	167.0		352.0		227.3	**6a**	165.1		360.1		231.0
7a	161.0		354.9		229.3	**7a**	165.0		346.3		221.3
8a	161.1		346.6		228.0	**8a**	166.4		348.5		218.1
9a	162.9		356.4		232.0	**9a**	162.8		347.8		226.3
10a	170.0		363.4		225.9	**10a**	170.3		358.6		217.6
11a	171.1		363.9		231.4	**11a**	167.2		348.1		216.3
12a	163.8		351.3		222.0	**12a**	172.0		354.3		222.8
13a	162.0		367.0		223.2	**13a**	162.2		366.2		220.5
14a	163.2		361.4		221.8	**14a**	171.4		365.2		231.6
15a	162.9		347.6		225.8	**15a**	170.4		359.0		225.6
16a	167.0		348.0		222.9	**16a**	168.0		347.2		220.4
17a	169.4		348.1		230.1	**17a**	165.2		352.2		223.8
18a	160.1		362.6		217.8	**18a**	164.9		349.4		219.2
19a	161.4		348.0		228.2	**19a**	168.3		355.0		228.1
20a	162.9		346.0		232.0	**20a**	163.3		356.3		225.7
21a	160.7		366.7		222.5	**21a**	170.9		355.9		225.8
22a	167.6		364.3		227.4	**22a**	160.1		349.0		222.0
23a	160.3		360.5		221.6	**23a**	168.9		357.8		219.3
24a	164.3		346.1		225.9	**24a**	161.9		350.9		227.2
25a	168.8		350.6		218.3	**25a**	162.6		366.1		225.8
1b	163.5		352.9		223.4	**1b**	164.8		347.1		217.1
2b	162.9		358.9		218.2	**2b**	168.0		353.6		229.8
3b	160.7		364.6		227.3	**3b**	163.8		354.4		227.0
4b	168.0		361.9		217.2	**4b**	166.9		350.8		216.5
5b	160.5		357.3		219.7	**5b**	171.0		356.9		223.6
6b	170.9		350.6		231.3	**6b**	162.6		347.8		222.6
7b	161.1		358.1		223.8	**7b**	168.2		359.0		219.9
8b	162.8		352.7		221.8	**8b**	165.2		352.6		216.8
9b	167.8		350.2		231.5	**9b**	168.8		358.3		227.0
10b	161.6		356.5		228.1	**10b**	162.8		361.0		222.6
11b	160.8		360.8		227.0	**11b**	160.4		354.5		223.0
12b	170.1		354.2		226.9	**12b**	167.6		362.6		216.0
13b	168.4		362.0		220.1	**13b**	161.4		364.3		225.3
14b	168.4		351.5		221.0	**14b**	162.6		354.8		219.6
15b	161.1		354.4		216.7	**15b**	170.6		363.1		224.3
16b	162.0		347.8		217.1	**16b**	160.5		354.4		220.8
17b	164.0		350.6		218.3	**17b**	170.3		366.1		225.6
18b	168.0		360.1		230.9	**18b**	170.9		362.8		226.9
19b	167.3		366.6		231.2	**19b**	166.3		353.4		230.9
20b	169.3		350.6		224.7	**20b**	162.9		356.5		232.0
21b	163.2		355.0		222.8	**21b**	170.0		346.0		227.2
22b	165.9		356.7		219.6	**22b**	164.0		361.8		224.2
23b	169.3		351.0		230.1	**23b**	168.4		349.1		231.4
24b	171.7		362.2		231.6	**24b**	163.0		365.8		225.0
25b	171.8		364.6		227.0	**25b**	167.3		358.6		227.2
Errors	1					**Errors**	0				
	164.9		355.9		224.9		165.9		355.5		223.3

Date	26-Mar					**Date**	2-Apr				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	166.7		361.2		227.4	**1a**	166.7		361.5		230.4
2a	169.7		360.0		224.9	**2a**	169.1		352.3		231.0
3a	162.9		356.8		216.6	**3a**	171.1		354.1		218.3
4a	160.8		361.1		225.2	**4a**	164.1		349.4		223.9
5a	163.6		354.3		223.4	**5a**	167.2		349.2		226.0
6a	163.4		349.5		230.2	**6a**	170.4		353.8		225.7
7a	169.7		363.1		227.0	**7a**	169.4		366.7		229.6
8a	170.4		356.2		221.7	**8a**	163.8		353.1		227.4
9a	163.5		349.1		221.4	**9a**	169.3		357.8		216.5
10a	163.9		366.0		230.8	**10a**	170.2		349.3		228.0
11a	163.9		354.9		220.6	**11a**	167.0		350.3		231.8
12a	171.8		346.5		228.0	**12a**	169.1		353.3		228.8
13a	171.0		358.9		228.6	**13a**	162.1		359.7		225.9
14a	165.1		346.0		225.0	**14a**	172.0		365.3		220.5
15a	170.3		365.3		225.0	**15a**	161.5		349.7		229.7
16a	166.1		346.9		231.3	**16a**	169.9		364.2		220.3
17a	164.8		358.9		231.5	**17a**	162.4		357.1		230.6
18a	168.2		351.2		216.6	**18a**	169.8		349.2		228.2
19a	168.9		365.0		230.1	**19a**	171.8		367.0		227.0
20a	165.8		352.9		225.2	**20a**	169.0		355.7		225.2
21a	169.2		347.3		225.4	**21a**	161.5		365.6		219.0
22a	161.9		350.0		231.3	**22a**	171.0		357.4		223.0
23a	164.6		352.3		216.5	**23a**	172.0		361.4		217.9
24a	164.9		347.4		218.7	**24a**	166.9		353.4		223.4
25a	161.0		361.3		230.6	**25a**	169.0		361.8		217.3
1b	167.0		365.0		227.6	**1b**	162.7		351.0		231.7
2b	164.2		355.7		230.0	**2b**	162.5		346.1		230.5
3b	170.1		352.3		217.0	**3b**	171.0		350.6		224.0
4b	165.0		346.2		225.6	**4b**	161.4		350.0		222.0
5b	160.5		355.2		218.3	**5b**	165.5		362.7		221.5
6b	167.8		362.0		221.0	**6b**	171.4		366.6		223.1
7b	162.0		347.9		221.0	**7b**	160.9		360.3		220.7
8b	166.1		355.5		229.4	**8b**	165.0		351.7		225.0
9b	160.5		366.5		220.2	**9b**	164.9		347.5		223.4
10b	171.3		357.8		218.2	**10b**	166.8		363.6		222.0
11b	165.6		347.7		223.0	**11b**	160.0		353.5		218.3
12b	167.9		346.5		217.0	**12b**	168.0		354.8		228.1
13b	169.4		363.0		229.1	**13b**	167.6		359.0		228.1
14b	171.4		356.1		224.3	**14b**	164.1		353.5		229.1
15b	160.1		347.3		230.1	**15b**	171.0		350.6		231.6
16b	171.7		353.1		216.6	**16b**	167.2		348.3		224.0
17b	171.1		360.5		220.0	**17b**	170.5		351.6		231.3
18b	166.8		355.6		216.6	**18b**	167.9		360.7		229.1
19b	165.2		366.5		228.8	**19b**	165.0		364.7		226.0
20b	170.8		356.5		225.0	**20b**	168.8		360.2		225.3
21b	171.0		356.8		221.8	**21b**	167.6		363.1		219.5
22b	166.5		355.3		217.0	**22b**	165.6		356.3		231.8
23b	170.9		357.9		224.8	**23b**	161.1		350.1		219.0
24b	168.3		360.4		231.4	**24b**	163.7		361.0		226.7
25b	162.7		351.1		216.9	**25b**	170.0		362.3		225.8
Errors	0					**Errors**	0				
	166.6		355.7		224.2		166.9		356.2		225.2

Date	3-Apr					**Date**	9-Apr				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	165.4		350.5		217.8	**1a**	167.0		346.3		222.3
2a	161.0		361.4		226.0	**2a**	164.7		349.6		230.9
3a	167.4		354.5		231.1	**3a**	165.0		352.6		222.3
4a	165.0		346.9		229.4	**4a**	160.8		357.1		231.3
5a	170.9		346.1		219.0	**5a**	170.0		351.1		221.8
6a	168.8		364.5		223.4	**6a**	168.5		346.0		225.0
7a	170.0		351.1		223.6	**7a**	164.8		359.0		223.9
8a	162.9		366.5		221.0	**8a**	162.7		351.5		226.2
9a	170.5		360.0		225.6	**9a**	165.9		364.4		224.0
10a	160.4		348.2		220.1	**10a**	167.6		357.6		230.0
11a	167.0		355.0		217.2	**11a**	165.4		363.7		224.9
12a	164.2		352.0		231.3	**12a**	166.3		356.7		224.4
13a	167.2		349.9		231.9	**13a**	161.9		361.1		224.5
14a	168.1		349.8		221.2	**14a**	164.5		352.4		228.0
15a	162.1		360.3		220.0	**15a**	167.8		357.9		222.7
16a	171.7		351.5		221.4	**16a**	163.0		359.4		219.8
17a	162.0		360.1		223.4	**17a**	170.8		363.4		218.6
18a	162.9		352.0		231.6	**18a**	163.3		362.1		221.8
19a	164.1		354.2		223.9	**19a**	168.2		358.3		218.6
20a	160.1		347.7		229.7	**20a**	167.8		363.3		230.4
21a	161.7		351.7		231.4	**21a**	166.7		365.4		231.4
22a	170.8		349.3		221.1	**22a**	168.1		359.0		228.0
23a	160.6		358.1		230.1	**23a**	162.6		364.9		223.0
24a	164.1		363.9		217.9	**24a**	161.4		359.7		221.4
25a	163.7		353.9		225.3	**25a**	163.1		350.8		216.0
1b	167.5		348.7		228.9	**1b**	162.0		359.1		217.1
2b	166.1		359.0		221.0	**2b**	167.0		365.4		222.0
3b	170.9		348.7		217.0	**3b**	170.3		355.0		216.2
4b	167.9		349.9		228.5	**4b**	168.3		351.4		228.2
5b	165.8		364.9		222.7	**5b**	164.4		357.4		230.4
6b	169.4		351.7		230.1	**6b**	170.1		356.7		228.0
7b	161.8		359.7		228.6	**7b**	160.9		359.0		231.5
8b	160.0		350.7		218.0	**8b**	163.4		359.3		223.6
9b	163.5		363.2		222.3	**9b**	169.2		360.0		219.4
10b	168.9		357.2		220.0	**10b**	161.9		351.0		216.6
11b	164.0		346.2		224.8	**11b**	167.8		351.6		231.4
12b	161.7		361.9		224.6	**12b**	160.1		362.8		221.6
13b	168.5		359.7		223.3	**13b**	169.4		347.2		227.4
14b	170.0		364.0		226.2	**14b**	162.0		356.9		220.2
15b	166.8		350.9		231.0	**15b**	160.9		354.3		225.6
16b	161.6		354.2		231.6	**16b**	160.5		359.0		225.0
17b	167.2		349.9		228.9	**17b**	167.0		360.2		231.0
18b	167.9		365.3		223.0	**18b**	160.2		359.3		224.0
19b	163.2		354.8		219.5	**19b**	161.1		353.9		219.0
20b	166.0		358.0		216.7	**20b**	170.7		346.5		225.7
21b	170.7		351.7		224.5	**21b**	170.0		350.6		225.5
22b	171.2		359.0		218.7	**22b**	165.9		352.2		222.5
23b	162.3		355.0		225.0	**23b**	169.9		347.1		232.0
24b	170.9		355.3		224.0	**24b**	162.0		363.4		226.7
25b	170.0		351.8		230.3	**25b**	168.1		365.4		216.9
Errors	0					**Errors**	0				
	165.8		355.1		224.4		165.4		356.6		224.5

Date	16-Apr					**Date**	23-Apr				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	155-165		350-380		215-230	**Expected**	155-165		350-380		215-230
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	162.8		359.7		230.5	**1a**	165.4		351.8		217.0
2a	164.1		365.1		229.2	**2a**	170.0		352.5		223.3
3a	162.4		350.8		218.0	**3a**	171.6		348.8		223.0
4a	171.4		357.9		218.8	**4a**	167.0		350.7		217.0
5a	169.4		364.0		219.3	**5a**	171.9		365.8		230.4
6a	170.0		347.2		227.6	**6a**	162.0		354.5		231.6
7a	170.9		360.3		226.2	**7a**	163.4		357.8		217.3
8a	165.0		358.4		229.0	**8a**	165.8		347.7		221.7
9a	165.5		353.6		220.8	**9a**	162.9		366.4		227.1
10a	166.9		362.9		217.0	**10a**	168.9		366.5		219.3
11a	166.8		358.7		221.3	**11a**	165.7		355.0		224.9
12a	165.4		361.3		230.1	**12a**	164.5		353.0		223.7
13a	164.2		362.0		219.7	**13a**	160.4		356.0		231.8
14a	162.2		352.1		230.2	**14a**	169.0		365.5		226.0
15a	168.0		362.4		222.4	**15a**	163.2		364.0		225.9
16a	169.0		351.9		216.1	**16a**	164.6		354.3		228.3
17a	165.6		364.7		223.0	**17a**	166.0		350.0		226.9
18a	163.7		366.8		223.8	**18a**	169.0		355.2		225.2
19a	170.2		346.1		223.6	**19a**	165.8		362.3		231.9
20a	163.6		352.5		218.4	**20a**	166.0		349.3		217.4
21a	161.6		365.6		223.7	**21a**	171.2		355.4		220.1
22a	161.7		358.1		226.5	**22a**	169.2		363.4		228.7
23a	171.0		363.2		229.4	**23a**	171.4		357.8		231.2
24a	162.1		352.2		224.6	**24a**	163.5		346.7		221.4
25a	168.4		359.3		217.7	**25a**	167.3		358.6		230.7
1b	163.6		352.7		232.0	**1b**	165.7		364.3		225.0
2b	161.0		349.0		218.3	**2b**	170.4		346.1		223.5
3b	163.5		365.0		227.1	**3b**	162.0		361.4		224.7
4b	164.6		354.5		227.9	**4b**	170.8		359.5		228.8
5b	169.5		359.0		220.4	**5b**	165.7		346.0		223.4
6b	170.1		346.8		221.7	**6b**	169.9		350.7		227.8
7b	160.1		358.2		222.1	**7b**	160.6		361.1		218.4
8b	166.6		346.0		228.8	**8b**	169.1		360.7		223.5
9b	165.5		361.4		224.0	**9b**	166.0		356.9		218.1
10b	167.7		355.6		230.4	**10b**	163.8		362.0		228.3
11b	166.8		349.5		222.4	**11b**	168.2		361.9		217.2
12b	160.7		349.4		231.7	**12b**	162.0		358.5		217.0
13b	160.5		360.9		229.9	**13b**	164.2		363.9		220.7
14b	166.8		351.8		231.5	**14b**	164.9		361.5		227.0
15b	164.2		351.4		216.2	**15b**	167.8		362.1		221.8
16b	167.2		363.0		222.1	**16b**	163.4		352.1		226.4
17b	160.3		351.5		229.5	**17b**	165.3		353.6		216.2
18b	169.7		363.5		228.2	**18b**	162.4		346.9		217.4
19b	167.0		354.0		220.2	**19b**	169.0		351.3		229.2
20b	166.0		364.7		228.9	**20b**	167.3		364.6		225.9
21b	171.2		358.6		220.1	**21b**	162.3		355.8		230.6
22b	164.4		346.9		230.8	**22b**	168.0		350.3		224.0
23b	166.5		359.8		230.5	**23b**	168.4		354.5		220.1
24b	161.5		352.1		221.6	**24b**	164.0		358.3		231.4
25b	168.3		362.5		227.5	**25b**	161.3		361.8		227.1
Errors	0					**Errors**	0				
	165.7		356.8		224.6		166.3		356.6		224.2

IND 600

	IND 600											
Date	12-Sep					**Date**	13-Sep					
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant	
Expected	165-180		380-420		225-245	**Expected**	165-180		380-420		225-245	
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs	
1a	171.1		377.9		231.8	**1a**	176.4		372.2		237.4	
2a	181.3		377.3		246.5	**2a**	180.7		377.3		242.0	
3a	174.1		389.9		232.3	**3a**	170.9		370.5		244.8	
4a	174.6		396.0		244.8	**4a**	179.1		374.6		233.7	
5a	171.2		393.1		237.6	**5a**	174.0		374.0		240.0	
6a	170.1		385.8		231.1	**6a**	171.0		393.3		238.6	
7a	172.3		403.0		231.3	**7a**	181.1		374.3		234.0	
8a	164.2		379.2		231.1	**8a**	179.7		382.9		227.8	
9a	171.9		404.6		228.4	**9a**	171.2		370.9		234.9	
10a	181.0		393.1		227.2	**10a**	181.2		396.6		240.0	
11a	166.0		382.0		233.8	**11a**	166.0		381.3		232.8	
12a	174.7		372.2		241.9	**12a**	166.9		402.5		233.7	
13a	168.5		375.4		244.9	**13a**	174.3		371.7		231.7	
14a	170.4		398.6		239.0	**14a**	181.3		370.7		230.0	
15a	173.2		395.3		242.8	**15a**	172.7		381.9		229.0	
16a	174.6		373.0		238.9	**16a**	173.0		370.8		246.8	
17a	181.9		378.3		226.5	**17a**	179.0		387.5		241.9	
18a	165.4		378.0		242.8	**18a**	168.0		386.0		229.2	
19a	177.4		385.6		225.4	**19a**	165.1		379.7		239.3	
20a	169.0		388.0		240.2	**20a**	164.2		372.5		226.3	
21a	173.9		383.4		244.6	**21a**	167.2		371.5		231.0	
22a	168.7		401.3		226.0	**22a**	179.1		373.8		227.1	
23a	171.6		373.9		233.2	**23a**	165.0		381.0		239.9	
24a	181.2		400.2		231.8	**24a**	169.9		375.0		233.2	
25a	172.5		379.6		233.7	**25a**	170.1		378.0		240.3	
1b	178.5		395.3		237.3	**1b**	164.4		386.1		243.1	
2b	180.9		396.4		226.3	**2b**	182.0		381.1		230.9	
3b	165.1		382.3		232.5	**3b**	172.8		404.6		240.5	
4b	174.7		379.2		225.0	**4b**	180.4		374.4		231.8	
5b	172.4		392.7		235.0	**5b**	174.5		396.9		231.1	
6b	174.7		381.5		238.1	**6b**	177.8		376.0		239.0	
7b	180.8		386.9		231.8	**7b**	173.0		373.4		227.0	
8b	166.3		403.3		225.5	**8b**	173.3		377.4		231.6	
9b	172.7		382.5		234.3	**9b**	179.9		372.0		231.3	
10b	168.0		376.1		238.0	**10b**	176.8		384.8		236.0	
11b	179.1		371.1		243.8	**11b**	177.8		404.5		236.8	
12b	168.6		372.1		242.4	**12b**	166.2		386.2		242.7	
13b	164.1		402.6		231.9	**13b**	181.0		403.0		230.7	
14b	164.6		375.6		238.0	**14b**	165.6		385.7		243.6	
15b	169.6		374.0		230.3	**15b**	173.8		389.2		233.2	
16b	178.0		379.0		231.8	**16b**	181.2		386.8		245.8	
17b	176.6		379.9		246.8	**17b**	174.0		374.6		233.8	
18b	165.3		376.0		226.2	**18b**	172.8		390.2		238.9	
19b	171.0		395.0		229.5	**19b**	181.0		388.4		239.2	
20b	179.0		375.2		247.0	**20b**	164.1		392.0		227.8	
21b	175.6		390.7		228.4	**21b**	180.8		390.8		245.3	
22b	174.0		404.3		227.7	**22b**	170.0		380.1		235.5	
23b	178.3		387.6		226.7	**23b**	180.0		394.4		230.0	
24b	167.6		371.3		231.7	**24b**	166.0		388.9		234.0	
25b	172.3		396.6		233.0	**25b**	179.7		397.2		237.4	
Errors	0						0					

Date	22-Sep					Date	23-Sep				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	167.3		389.8		242.6	1a	170.7		385.0		230.8
2a	175.8		400.5		246.7	2a	173.4		382.0		238.0
3a	164.7		384.0		242.3	3a	175.8		374.1		232.1
4a	179.6		402.3		231.4	4a	171.7		393.2		237.8
5a	165.2		390.8		244.4	5a	176.2		373.4		240.8
6a	166.5		400.5		238.9	6a	180.7		403.8		227.7
7a	176.1		400.4		227.1	7a	178.4		396.7		235.4
8a	180.9		372.4		239.7	8a	167.0		401.6		241.2
9a	180.0		373.5		242.8	9a	181.3		401.5		244.6
10a	177.1		382.3		241.6	10a	177.5		382.5		229.8
11a	173.0		396.5		233.6	11a	165.5		378.8		243.4
12a	176.7		390.5		234.9	12a	174.3		379.1		226.0
13a	175.7		384.2		241.2	13a	179.0		396.0		238.0
14a	172.2		374.4		239.0	14a	180.1		383.9		231.4
15a	181.6		404.0		232.8	15a	180.2		382.7		233.2
16a	171.7		383.5		238.0	16a	175.1		371.2		244.1
17a	165.9		399.3		243.7	17a	179.1		384.3		240.7
18a	167.3		401.0		244.3	18a	174.2		400.7		235.2
19a	169.0		392.0		245.7	19a	177.2		384.2		229.2
20a	179.6		380.2		226.0	20a	171.0		370.4		242.4
21a	168.1		383.1		246.7	21a	173.4		391.1		232.0
22a	177.4		404.0		235.7	22a	169.2		381.4		244.7
23a	169.2		401.4		242.2	23a	167.3		392.7		238.8
24a	168.5		380.8		245.9	24a	168.7		400.1		238.0
25a	177.7		388.8		225.6	25a	165.0		400.7		228.4
1b	179.4		373.5		244.1	1b	176.7		371.0		243.3
2b	173.1		391.2		236.0	2b	164.8		382.1		238.9
3b	175.4		393.3		233.5	3b	174.7		388.7		230.6
4b	166.0		394.1		246.3	4b	171.9		404.0		230.7
5b	172.2		390.0		238.6	5b	173.9		386.3		245.8
6b	170.3		382.9		231.0	6b	164.9		388.4		225.1
7b	172.2		387.3		234.7	7b	167.0		391.4		240.9
8b	165.4		374.0		230.7	8b	169.4		374.3		231.6
9b	176.4		401.4		243.4	9b	169.6		373.6		239.7
10b	173.1		375.0		229.0	10b	171.8		396.9		239.6
11b	166.3		391.0		246.8	11b	177.0		403.3		225.9
12b	169.7		391.5		230.6	12b	168.0		371.2		233.7
13b	181.8		399.7		247.0	13b	170.8		371.8		240.8
14b	164.0		400.3		234.4	14b	174.8		382.7		240.4
15b	180.3		384.5		241.5	15b	176.9		385.0		238.9
16b	181.4		395.0		240.9	16b	181.2		388.8		233.1
17b	178.7		381.2		242.5	17b	166.9		397.7		240.9
18b	172.9		377.5		225.1	18b	178.2		380.9		233.5
19b	175.8		389.3		229.7	19b	167.9		377.9		228.6
20b	177.1		386.2		228.0	20b	171.4		382.0		233.0
21b	174.1		385.0		238.0	21b	164.8		402.6		242.8
22b	179.4		392.5		238.5	22b	179.7		384.0		232.9
23b	171.4		392.4		243.8	23b	170.0		387.5		233.5
24b	178.6		403.5		234.0	24b	172.2		376.0		227.0
25b	172.2		374.0		240.8	25b	171.2		395.7		225.9
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Date	26-Sep					Date	27-Sep				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	177.1		371.2		228.3	1a	170.9		380.0		238.2
2a	168.9		375.3		229.7	2a	174.3		391.3		226.2
3a	180.2		390.1		238.8	3a	170.7		372.0		227.6
4a	181.1		374.0		236.4	4a	174.7		390.5		227.5
5a	169.9		397.3		231.7	5a	164.0		372.1		237.0
6a	169.2		394.5		242.4	6a	173.7		385.0		228.6
7a	174.7		394.2		226.3	7a	174.6		384.2		234.2
8a	166.5		400.1		243.0	8a	165.0		404.4		236.0
9a	177.0		384.3		228.7	9a	165.2		390.2		232.3
10a	181.1		393.2		235.6	10a	178.1		398.8		231.6
11a	174.4		404.2		245.0	11a	176.7		392.8		225.6
12a	174.2		370.2		225.9	12a	176.4		377.2		241.5
13a	170.1		394.0		231.1	13a	167.4		380.0		246.0
14a	176.9		399.2		229.0	14a	167.2		378.7		243.5
15a	165.6		381.9		241.6	15a	177.2		399.0		244.9
16a	173.0		405.0		236.7	16a	181.0		391.6		238.4
17a	164.7		377.4		236.0	17a	179.8		393.1		226.6
18a	167.1		398.0		229.3	18a	172.9		396.7		231.1
19a	177.1		380.9		230.5	19a	166.1		402.7		241.8
20a	170.3		388.4		226.2	20a	172.5		394.1		229.2
21a	180.3		375.1		232.4	21a	165.8		397.1		241.0
22a	167.0		380.3		227.6	22a	166.8		390.0		228.6
23a	168.4		391.1		243.0	23a	177.2		386.0		244.9
24a	174.7		397.4		236.0	24a	165.0		375.5		235.2
25a	177.9		378.6		236.7	25a	164.7		380.9		239.7
1b	164.5		386.3		230.7	1b	177.1		384.9		243.2
2b	181.1		392.4		235.6	2b	176.3		395.9		230.2
3b	172.1		396.5		230.0	3b	165.7		388.8		236.8
4b	169.0		370.9		227.8	4b	166.1		371.9		227.8
5b	172.9		376.7		226.5	5b	166.8		373.3		246.3
6b	177.4		391.2		246.3	6b	167.4		377.3		229.4
7b	174.9		384.8		230.9	7b	165.0		389.7		227.1
8b	174.5		387.0		230.0	8b	177.2		376.1		245.0
9b	179.9		372.2		234.4	9b	175.7		399.3		228.3
10b	164.0		375.7		240.0	10b	174.5		375.1		232.6
11b	181.8		386.3		242.2	11b	172.7		401.4		235.2
12b	166.2		385.0		233.6	12b	177.0		374.9		240.4
13b	171.6		385.5		225.6	13b	179.0		399.1		245.6
14b	168.0		389.0		244.1	14b	175.9		383.4		225.7
15b	181.5		383.6		235.5	15b	179.0		384.4		243.7
16b	172.1		370.4		243.7	16b	167.5		404.7		239.6
17b	168.4		403.0		239.8	17b	167.5		401.6		225.2
18b	171.0		401.0		232.5	18b	174.8		404.9		231.1
19b	181.0		401.8		227.4	19b	164.4		379.8		228.0
20b	181.2		384.3		243.8	20b	167.3		390.2		238.0
21b	164.4		382.7		245.3	21b	170.5		379.6		245.7
22b	165.4		386.1		238.9	22b	171.9		404.0		246.4
23b	164.4		396.9		237.0	23b	166.4		379.8		245.7
24b	170.1		398.7		225.0	24b	180.6		394.5		245.8
25b	165.9		391.5		245.5	25b	164.3		398.0		232.4
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Date	3-Oct				Date	17-Oct			
Temp	Coil	Base Internal		Radiant	Temp	Coil	Base Internal		Radiant
Expected	165-180	380-420		225-245	Expected	165-180	380-420		225-245
Qty	30 secs	60 secs		120 secs	Qty	30 secs	60 secs		120 secs
1a	169.9	382.5		226.3	1a	169.7	375.2		232.0
2a	173.7	375.6		233.6	2a	172.8	397.2		231.2
3a	167.8	385.9		228.1	3a	175.8	373.1		244.0
4a	164.4	404.4		245.7	4a	175.3	404.9		234.9
5a	165.7	389.8		239.0	5a	164.1	374.8		233.8
6a	177.8	381.4		228.2	6a	174.5	397.9		242.7
7a	170.8	377.6		237.5	7a	165.6	380.4		236.7
8a	176.9	379.7		227.1	8a	170.2	388.4		231.0
9a	171.2	389.3		240.2	9a	175.8	383.6		226.9
10a	178.6	390.6		226.0	10a	171.5	404.1		239.6
11a	166.8	380.5		228.6	11a	170.8	403.0		227.5
12a	176.3	391.8		226.4	12a	174.1	381.0		241.8
13a	169.9	377.0		237.3	13a	168.8	384.8		243.6
14a	175.0	375.5		244.8	14a	174.1	375.9		225.4
15a	173.2	384.3		242.0	15a	177.8	373.4		232.2
16a	180.7	382.5		239.8	16a	179.1	390.8		235.3
17a	166.9	395.9		244.8	17a	177.1	376.1		231.5
18a	169.9	392.2		237.6	18a	165.0	379.9		236.0
19a	175.0	404.1		225.6	19a	166.6	386.1		236.7
20a	166.8	375.1		230.5	20a	178.8	397.0		228.6
21a	165.1	381.3		244.3	21a	172.2	397.2		235.4
22a	182.0	379.4		227.0	22a	176.3	373.5		225.7
23a	174.6	395.9		244.7	23a	174.3	387.9		226.4
24a	168.8	378.7		244.0	24a	179.9	395.7		233.0
25a	168.0	376.0		242.3	25a	171.1	386.3		240.5
1b	168.1	392.0		245.0	1b	177.2	401.5		225.7
2b	178.1	390.9		231.5	2b	168.8	395.1		244.5
3b	170.0	390.5		246.4	3b	179.6	389.9		246.3
4b	169.3	394.0		237.9	4b	179.1	402.5		240.5
5b	171.1	404.6		226.7	5b	164.7	387.9		239.0
6b	164.2	393.9		226.0	6b	180.5	387.2		235.0
7b	178.8	403.8		240.7	7b	171.4	399.7		235.7
8b	180.4	377.0		236.6	8b	175.9	384.2		230.0
9b	182.0	379.3		225.0	9b	176.4	403.1		234.5
10b	178.2	373.2		235.5	10b	181.2	395.5		236.2
11b	165.0	383.1		235.0	11b	167.9	390.9		242.8
12b	176.3	370.8		228.5	12b	176.0	387.7		236.6
13b	180.9	392.4		231.2	13b	173.0	373.9		234.8
14b	181.3	377.9		234.8	14b	181.1	378.7		235.0
15b	171.3	383.0		231.3	15b	165.8	378.0		225.3
16b	169.4	381.0		246.9	16b	177.3	370.4		232.2
17b	167.5	398.3		232.8	17b	165.2	374.9		226.9
18b	171.6	394.8		243.5	18b	171.6	396.1		242.5
19b	175.2	372.0		245.7	19b	164.1	403.9		231.7
20b	175.4	370.6		231.6	20b	166.4	386.3		226.0
21b	180.9	391.2		237.1	21b	174.8	383.3		231.5
22b	180.2	379.8		241.6	22b	166.1	370.8		227.7
23b	178.9	395.0		232.5	23b	174.2	390.0		245.5
24b	174.2	373.7		235.7	24b	181.0	385.8		235.8
25b	179.3	396.2		243.0	25b	165.0	402.5		245.3
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Date	24-Oct					Date	1-Nov				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	178.0		380.3		238.5	1a	169.0		372.9		242.3
2a	170.5		390.5		246.8	2a	175.8		383.7		237.7
3a	167.4		374.3		242.4	3a	171.5		387.3		246.8
4a	180.7		370.1		231.0	4a	167.3		385.3		229.8
5a	175.2		382.3		227.0	5a	171.2		379.3		235.6
6a	165.0		385.3		225.6	6a	175.0		402.5		234.9
7a	176.0		399.3		245.0	7a	170.0		387.6		241.3
8a	177.1		397.6		243.3	8a	173.4		385.4		241.7
9a	169.0		378.4		229.7	9a	169.0		404.5		240.7
10a	171.0		390.5		238.4	10a	181.2		371.7		237.3
11a	168.3		399.8		240.8	11a	170.4		383.1		229.8
12a	174.7		371.5		243.4	12a	175.8		389.8		240.4
13a	176.4		391.9		238.0	13a	178.5		402.6		236.5
14a	167.1		375.1		243.4	14a	180.3		372.7		237.8
15a	172.4		371.1		236.0	15a	178.7		404.0		228.0
16a	169.1		385.7		233.6	16a	171.3		385.0		234.8
17a	171.4		397.9		241.5	17a	172.1		388.0		227.7
18a	175.0		393.3		241.3	18a	176.0		376.2		228.0
19a	175.5		374.7		228.4	19a	169.9		385.6		241.3
20a	165.0		370.4		234.9	20a	164.4		398.5		234.4
21a	169.3		396.2		245.3	21a	165.0		385.1		243.5
22a	175.2		401.0		231.0	22a	167.5		372.9		239.6
23a	172.3		386.6		238.0	23a	178.5		394.7		239.7
24a	170.5		396.3		244.4	24a	166.5		371.7		234.6
25a	172.2		387.0		246.6	25a	176.7		374.1		233.6
1b	171.7		382.7		246.5	1b	166.2		390.9		232.9
2b	181.5		393.0		243.7	2b	176.6		402.1		237.3
3b	170.3		400.0		236.2	3b	176.6		377.7		233.0
4b	171.9		373.2		227.3	4b	167.4		395.8		237.4
5b	165.7		375.4		235.1	5b	169.7		375.8		231.7
6b	164.2		397.0		239.5	6b	173.0		372.1		236.2
7b	171.4		375.4		228.4	7b	167.3		371.6		240.2
8b	176.3		402.7		232.7	8b	166.6		401.2		243.9
9b	165.6		379.3		226.4	9b	167.7		370.7		238.7
10b	167.7		370.6		231.1	10b	174.2		371.5		235.3
11b	174.0		403.5		241.1	11b	180.3		376.8		229.8
12b	171.4		390.8		241.4	12b	166.8		386.7		236.5
13b	175.6		373.9		245.0	13b	165.3		393.5		238.5
14b	173.1		388.0		244.8	14b	170.5		385.0		240.3
15b	168.2		380.8		235.2	15b	172.6		370.5		233.6
16b	180.7		403.0		242.0	16b	171.0		402.3		227.9
17b	172.9		387.7		244.8	17b	176.8		375.0		227.1
18b	177.7		382.2		245.7	18b	178.5		390.8		226.2
19b	166.0		388.8		226.3	19b	169.6		385.4		240.8
20b	181.2		381.9		231.0	20b	164.1		372.5		232.2
21b	166.1		389.0		236.1	21b	169.0		402.9		228.1
22b	176.1		398.0		244.6	22b	169.1		396.5		245.4
23b	170.0		382.0		241.7	23b	173.2		395.1		236.2
24b	175.6		403.7		238.2	24b	175.0		404.5		239.5
25b	179.6		393.1		232.9	25b	170.6		393.5		227.5
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Date	7-Nov					Date	14-Nov				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	176.4		381.6		239.4	1a	181.5		396.1		246.8
2a	168.2		392.2		244.7	2a	172.0		386.2		233.0
3a	168.7		396.6		237.3	3a	170.8		393.5		234.1
4a	168.2		378.1		241.0	4a	168.2		399.0		228.1
5a	175.7		379.8		231.0	5a	179.2		402.6		227.3
6a	176.7		389.7		226.9	6a	165.9		378.0		242.0
7a	178.9		398.8		231.2	7a	175.1		371.1		241.1
8a	165.1		373.9		241.6	8a	177.0		379.7		228.1
9a	180.1		386.0		239.4	9a	170.4		373.7		234.4
10a	171.3		403.5		227.4	10a	169.5		398.1		244.1
11a	170.5		398.0		229.7	11a	173.4		394.1		237.9
12a	182.0		374.6		233.8	12a	177.0		370.0		234.5
13a	164.4		377.5		232.7	13a	173.2		388.4		236.7
14a	171.1		382.6		231.0	14a	178.5		388.3		228.2
15a	176.8		373.0		228.4	15a	167.5		389.2		231.0
16a	172.0		402.4		240.0	16a	169.2		404.0		233.2
17a	165.6		372.1		237.0	17a	173.1		376.7		230.3
18a	167.7		375.7		235.8	18a	167.1		380.7		232.9
19a	169.6		378.3		234.6	19a	172.0		381.2		233.6
20a	176.0		387.1		228.7	20a	168.4		395.9		236.5
21a	180.4		378.0		240.3	21a	172.0		396.7		233.8
22a	170.6		386.0		238.8	22a	178.7		385.0		226.1
23a	178.2		380.5		241.2	23a	164.0		373.9		227.0
24a	170.7		373.1		244.8	24a	181.0		401.0		228.8
25a	164.4		402.5		244.1	25a	168.7		372.0		226.3
1b	166.5		394.3		244.5	1b	164.5		390.3		230.1
2b	181.3		399.7		241.4	2b	172.8		381.7		237.2
3b	173.9		381.0		245.6	3b	174.3		393.9		244.6
4b	167.2		385.2		237.2	4b	170.1		373.0		240.8
5b	169.0		372.8		230.5	5b	180.4		396.0		234.1
6b	180.3		403.0		236.7	6b	181.2		373.6		239.9
7b	178.5		385.6		234.7	7b	166.0		374.1		226.7
8b	168.6		388.9		228.5	8b	175.3		381.2		233.2
9b	179.0		382.0		228.2	9b	174.0		375.9		246.8
10b	180.3		387.0		228.1	10b	179.7		377.5		237.9
11b	167.8		388.0		231.4	11b	179.2		399.6		225.1
12b	164.2		379.9		232.3	12b	166.1		395.1		242.6
13b	168.6		394.2		233.5	13b	165.7		386.8		241.0
14b	177.7		403.8		230.4	14b	168.3		370.9		242.5
15b	170.7		394.9		234.4	15b	169.2		374.2		230.9
16b	172.7		393.5		239.3	16b	164.3		371.3		225.6
17b	177.9		391.2		234.7	17b	167.9		373.0		230.2
18b	169.4		393.0		241.0	18b	181.0		385.8		240.7
19b	165.7		374.3		229.9	19b	166.0		399.0		235.4
20b	165.9		401.8		225.0	20b	180.9		398.5		232.8
21b	177.0		387.5		237.0	21b	167.9		378.8		235.2
22b	174.0		387.4		236.9	22b	170.8		388.5		225.5
23b	165.8		388.0		231.2	23b	180.0		389.5		241.9
24b	174.6		374.5		243.5	24b	180.0		392.7		240.1
25b	164.9		376.3		243.6	25b	173.9		380.6		233.1
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Date	21-Nov					Date	5-Dec				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	170.5		402.8		230.2	1a	168.4		386.3		226.9
2a	176.7		374.5		237.8	2a	179.0		388.4		226.2
3a	164.1		379.5		236.0	3a	178.3		402.3		227.0
4a	167.3		389.0		244.7	4a	167.4		391.4		236.1
5a	164.4		390.4		241.6	5a	179.7		389.9		241.6
6a	165.2		376.1		241.7	6a	180.4		381.6		228.3
7a	167.6		371.3		243.5	7a	178.4		404.6		239.9
8a	173.5		403.5		238.9	8a	174.3		395.7		241.3
9a	172.6		391.9		236.0	9a	164.1		384.8		234.0
10a	171.2		379.9		229.0	10a	180.2		392.3		230.8
11a	180.3		401.9		230.4	11a	175.4		398.7		240.5
12a	177.3		371.6		245.7	12a	179.7		398.0		226.5
13a	170.5		375.7		244.2	13a	167.8		381.0		241.8
14a	181.9		384.6		242.2	14a	171.4		374.9		245.2
15a	164.0		374.5		244.6	15a	165.3		372.1		242.0
16a	176.8		395.1		238.1	16a	170.2		382.0		231.4
17a	180.1		401.6		241.0	17a	173.1		381.1		243.1
18a	172.8		398.7		244.6	18a	167.7		386.8		247.0
19a	173.5		389.8		239.7	19a	164.8		376.6		238.1
20a	173.2		387.1		236.6	20a	168.0		404.5		241.3
21a	178.5		373.0		230.8	21a	177.7		393.3		229.5
22a	180.9		394.4		242.7	22a	170.7		402.1		234.0
23a	172.5		397.6		237.0	23a	174.7		380.7		245.3
24a	181.1		381.9		242.8	24a	181.5		391.0		240.0
25a	176.6		393.6		240.8	25a	174.4		370.8		225.6
1b	175.7		378.2		235.9	1b	165.0		403.5		227.3
2b	180.1		399.5		246.7	2b	168.2		404.5		227.5
3b	177.0		404.6		241.4	3b	170.2		403.9		237.5
4b	173.6		396.2		246.5	4b	180.9		370.9		227.6
5b	167.2		391.8		236.0	5b	173.7		402.0		232.1
6b	177.2		402.0		229.5	6b	177.3		396.9		237.2
7b	175.9		395.2		245.3	7b	166.5		392.8		226.4
8b	172.9		404.8		245.0	8b	178.7		379.5		236.0
9b	172.2		402.0		225.7	9b	164.9		387.7		243.4
10b	178.0		380.4		233.9	10b	179.4		389.6		226.6
11b	174.4		401.6		235.8	11b	174.8		384.4		238.5
12b	170.0		395.9		245.0	12b	181.9		402.0		241.2
13b	176.6		377.6		242.2	13b	170.6		391.5		228.4
14b	171.0		376.9		242.0	14b	166.9		385.1		227.4
15b	171.1		375.0		244.0	15b	170.2		379.0		227.3
16b	168.9		391.9		241.6	16b	177.0		371.8		246.9
17b	181.1		387.0		226.3	17b	171.4		378.7		227.4
18b	171.4		402.8		230.5	18b	175.5		393.2		236.4
19b	167.4		381.0		225.8	19b	170.5		396.1		240.6
20b	175.8		383.8		225.5	20b	166.2		378.1		237.8
21b	167.0		387.6		236.5	21b	178.6		378.8		232.7
22b	169.1		373.6		227.5	22b	166.9		374.2		227.7
23b	180.2		393.1		231.5	23b	170.2		397.0		234.9
24b	177.0		373.2		244.3	24b	164.9		380.7		241.0
25b	166.1		380.3		237.9	25b	177.4		381.0		238.8
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Date	6-Dec					Date	12-Dec				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	176.0		387.0		230.7	1a	170.9		394.3		237.1
2a	171.8		375.9		225.2	2a	178.1		399.0		244.0
3a	176.4		385.1		227.6	3a	174.9		397.9		238.3
4a	171.7		402.4		239.6	4a	164.6		381.5		228.4
5a	176.2		400.0		227.7	5a	171.4		375.1		239.1
6a	171.3		403.2		227.2	6a	178.2		384.4		241.1
7a	169.0		397.7		238.8	7a	180.9		371.0		237.3
8a	166.5		398.6		242.3	8a	167.4		390.0		232.2
9a	171.0		399.8		235.4	9a	168.0		373.3		246.5
10a	180.3		382.8		237.7	10a	170.6		393.2		227.6
11a	168.0		395.9		233.4	11a	165.6		392.8		246.9
12a	174.1		388.5		228.2	12a	164.0		392.9		235.0
13a	182.0		394.1		232.0	13a	181.8		386.2		230.5
14a	170.7		378.1		242.6	14a	171.5		381.3		242.4
15a	171.4		393.9		230.9	15a	180.4		380.5		232.4
16a	180.6		396.0		242.8	16a	164.5		397.0		226.2
17a	173.0		386.4		230.9	17a	168.0		380.7		235.7
18a	174.6		375.7		231.0	18a	167.4		393.7		235.7
19a	168.6		400.8		240.3	19a	176.4		392.8		226.7
20a	177.7		392.7		226.5	20a	166.6		404.0		243.4
21a	167.4		380.7		238.1	21a	180.5		370.7		225.4
22a	165.8		386.4		242.9	22a	172.1		399.4		237.8
23a	169.0		392.1		236.9	23a	174.1		375.0		235.5
24a	165.4		392.0		246.4	24a	166.6		376.4		245.1
25a	176.3		392.8		228.9	25a	168.1		390.7		229.0
1b	180.7		397.0		238.0	1b	180.2		392.0		225.7
2b	166.6		397.9		240.8	2b	177.6		370.9		227.0
3b	176.3		396.4		234.8	3b	175.4		373.9		240.6
4b	170.0		400.5		239.9	4b	180.3		403.8		246.1
5b	170.0		397.8		232.7	5b	166.3		403.6		228.1
6b	180.4		374.5		227.2	6b	174.4		388.8		232.7
7b	165.0		383.1		237.3	7b	165.0		371.4		241.0
8b	166.2		404.3		227.2	8b	168.0		376.9		229.5
9b	181.7		384.1		228.6	9b	171.8		396.1		244.3
10b	164.4		389.8		231.8	10b	177.1		375.0		243.8
11b	164.7		404.0		239.2	11b	174.8		375.8		239.0
12b	179.7		400.1		246.4	12b	169.0		383.0		240.3
13b	175.9		390.9		238.6	13b	175.6		378.3		226.1
14b	167.0		387.8		226.6	14b	178.7		374.4		241.1
15b	180.0		379.6		234.3	15b	177.7		403.7		243.5
16b	168.2		384.0		239.0	16b	168.9		387.2		241.6
17b	178.1		378.5		241.0	17b	172.8		399.7		236.1
18b	179.4		395.9		227.2	18b	178.9		390.8		244.0
19b	169.1		373.2		242.6	19b	169.0		377.2		232.2
20b	169.1		373.7		231.8	20b	173.0		381.5		243.8
21b	181.4		374.3		242.0	21b	175.7		383.7		231.3
22b	178.4		382.5		245.4	22b	178.0		388.4		235.9
23b	168.0		388.2		233.7	23b	174.3		374.2		243.6
24b	173.0		399.7		228.7	24b	174.3		374.4		236.7
25b	174.3		388.3		235.0	25b	178.7		396.0		233.5
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Date	13-Dec					Date	19-Dec				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	181.0		394.8		232.7	1a	167.2		385.7		236.3
2a	179.6		397.2		238.3	2a	170.5		382.7		226.3
3a	178.5		392.0		229.5	3a	178.2		379.9		238.4
4a	169.6		372.5		241.3	4a	177.0		393.3		231.3
5a	166.5		400.8		235.4	5a	177.5		372.0		246.5
6a	178.1		396.1		246.6	6a	169.7		384.5		231.8
7a	181.4		375.4		235.3	7a	173.8		375.9		239.3
8a	169.3		377.7		240.3	8a	175.9		392.4		228.7
9a	176.0		370.0		234.7	9a	175.0		401.6		245.2
10a	180.0		380.0		227.4	10a	177.3		396.8		240.3
11a	172.8		397.4		229.0	11a	165.6		396.9		244.3
12a	170.0		387.9		228.4	12a	176.2		394.4		236.4
13a	180.1		392.6		236.5	13a	177.0		400.2		231.2
14a	166.6		388.5		227.0	14a	172.0		375.3		236.6
15a	171.0		385.9		245.4	15a	177.1		380.5		244.8
16a	173.4		391.0		232.7	16a	180.0		395.6		232.4
17a	181.4		396.4		229.4	17a	164.0		393.6		246.6
18a	165.8		397.6		234.5	18a	181.3		386.5		230.9
19a	171.3		388.8		227.6	19a	169.4		401.9		238.5
20a	181.3		384.0		243.6	20a	164.9		374.0		228.6
21a	169.0		387.0		227.7	21a	169.4		374.8		231.3
22a	167.0		403.8		239.8	22a	178.7		398.8		230.8
23a	171.7		390.4		235.8	23a	170.0		374.0		240.0
24a	168.0		404.6		245.1	24a	171.0		390.4		231.7
25a	175.3		381.2		242.8	25a	166.5		374.8		239.8
1b	168.4		394.7		231.9	1b	182.0		398.7		238.0
2b	178.9		404.4		230.7	2b	169.0		382.6		240.1
3b	181.1		383.5		228.1	3b	172.8		372.0		237.7
4b	180.6		377.7		229.6	4b	179.0		397.5		238.3
5b	178.9		397.5		227.5	5b	166.2		382.6		245.6
6b	175.8		399.7		238.6	6b	180.2		386.4		244.3
7b	166.0		391.3		225.0	7b	164.2		397.6		225.8
8b	170.8		375.9		240.1	8b	165.1		373.0		245.0
9b	179.9		371.9		226.2	9b	173.2		370.8		228.4
10b	175.4		395.8		238.5	10b	179.1		374.0		239.9
11b	181.6		382.9		230.5	11b	178.2		397.0		237.0
12b	178.0		377.2		244.3	12b	175.5		379.3		230.0
13b	174.2		379.9		227.7	13b	169.7		401.7		242.4
14b	166.9		404.8		240.1	14b	174.6		404.0		237.5
15b	170.6		380.7		240.5	15b	176.0		373.8		238.4
16b	169.9		379.0		227.8	16b	165.1		370.6		244.6
17b	171.9		381.4		235.0	17b	165.2		372.2		236.1
18b	175.6		389.1		231.4	18b	169.7		379.3		230.4
19b	173.3		384.0		246.0	19b	167.9		374.5		238.0
20b	181.9		380.9		237.8	20b	178.0		380.6		246.8
21b	174.3		381.9		242.0	21b	180.2		383.2		231.5
22b	178.4		404.0		237.8	22b	167.6		398.4		226.2
23b	175.3		375.1		238.7	23b	175.8		397.5		244.8
24b	173.0		373.2		228.9	24b	174.9		391.8		233.0
25b	178.6		388.6		241.4	25b	167.0		378.5		245.0
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Date	2-Jan					**Date**	9-Jan				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	**Expected**	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	178.5		378.0		242.0	**1a**	171.3		398.0		233.4
2a	164.0		394.1		244.6	**2a**	180.3		385.6		236.0
3a	176.8		396.0		235.4	**3a**	177.4		396.4		231.4
4a	166.4		373.0		239.0	**4a**	169.6		391.8		226.8
5a	181.0		392.3		228.9	**5a**	165.0		399.7		244.6
6a	164.8		382.4		229.4	**6a**	170.3		386.8		235.7
7a	171.3		394.7		234.5	**7a**	170.0		404.0		244.2
8a	175.3		393.1		228.0	**8a**	171.9		373.9		238.9
9a	173.1		389.6		234.7	**9a**	169.0		402.7		239.3
10a	167.8		393.6		246.9	**10a**	177.0		402.1		234.8
11a	175.4		386.4		240.4	**11a**	177.6		397.4		243.6
12a	164.5		386.0		227.2	**12a**	177.6		399.3		237.8
13a	175.8		402.0		232.6	**13a**	164.0		398.0		233.3
14a	169.5		385.4		240.4	**14a**	171.0		375.0		233.2
15a	167.5		395.5		239.3	**15a**	181.0		403.6		242.9
16a	168.3		379.8		245.5	**16a**	164.9		394.4		242.2
17a	180.1		374.5		227.6	**17a**	176.3		377.9		231.0
18a	181.0		402.1		234.9	**18a**	176.4		396.0		243.2
19a	165.3		375.0		232.5	**19a**	169.2		381.6		245.9
20a	168.1		384.0		225.1	**20a**	166.6		400.4		240.4
21a	166.2		379.0		238.8	**21a**	180.3		385.3		235.6
22a	175.0		372.4		229.5	**22a**	176.5		375.1		241.0
23a	168.0		375.0		241.3	**23a**	176.3		398.5		237.8
24a	174.4		386.0		237.1	**24a**	174.9		392.4		225.3
25a	177.0		393.0		228.9	**25a**	173.0		380.7		245.0
1b	177.9		384.1		245.8	**1b**	180.0		377.0		245.3
2b	164.6		370.3		232.7	**2b**	169.0		378.0		234.2
3b	173.4		374.6		244.5	**3b**	174.6		392.6		242.7
4b	164.2		390.0		235.0	**4b**	173.5		397.1		230.0
5b	169.0		392.9		235.2	**5b**	173.0		381.3		225.5
6b	171.5		370.7		236.5	**6b**	181.6		399.9		225.5
7b	164.8		370.7		242.0	**7b**	166.0		372.0		230.8
8b	164.1		370.3		243.3	**8b**	167.0		370.4		226.6
9b	177.3		396.4		244.9	**9b**	181.0		384.1		236.5
10b	166.8		375.7		240.9	**10b**	181.0		370.5		236.0
11b	170.0		372.3		243.7	**11b**	173.7		375.0		232.5
12b	169.5		371.8		233.0	**12b**	181.1		382.3		243.2
13b	177.4		371.9		231.2	**13b**	165.3		402.6		229.7
14b	173.8		387.2		230.8	**14b**	164.4		380.6		244.0
15b	173.0		384.1		232.0	**15b**	168.5		400.3		245.4
16b	174.0		382.4		231.5	**16b**	176.4		374.8		238.6
17b	170.9		390.0		238.3	**17b**	179.1		383.8		236.3
18b	164.0		382.4		226.1	**18b**	165.7		392.4		228.0
19b	180.0		386.6		240.7	**19b**	180.8		379.7		228.7
20b	170.6		394.3		238.0	**20b**	177.4		387.3		225.9
21b	166.0		385.0		246.9	**21b**	176.2		400.5		246.7
22b	168.9		372.2		233.6	**22b**	168.1		376.9		229.6
23b	171.0		373.8		246.3	**23b**	172.0		377.0		246.5
24b	175.4		387.4		238.8	**24b**	174.2		404.9		225.4
25b	172.3		380.9		246.1	**25b**	176.2		374.5		241.3
	1						0				

Date	16-Jan					Date	23-Jan				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	180.1		393.3		234.0	1a	177.2		402.7		230.6
2a	181.4		394.6		243.4	2a	173.2		385.4		236.0
3a	169.1		396.5		230.2	3a	175.7		380.3		242.4
4a	172.3		387.0		240.1	4a	167.7		385.0		228.9
5a	173.8		373.6		246.0	5a	166.9		374.2		241.6
6a	166.7		392.0		227.5	6a	166.0		386.8		236.9
7a	175.8		387.4		227.6	7a	168.2		389.1		242.1
8a	169.1		393.0		238.0	8a	181.6		395.8		228.7
9a	180.9		389.1		238.5	9a	175.0		397.1		227.5
10a	177.6		404.0		234.0	10a	178.8		399.9		228.3
11a	166.0		402.0		246.5	11a	177.3		381.3		225.9
12a	167.7		379.2		226.0	12a	175.3		403.2		236.0
13a	168.3		377.6		233.9	13a	169.8		371.2		233.2
14a	177.1		386.7		238.9	14a	177.3		380.8		235.5
15a	168.0		396.0		245.9	15a	170.9		398.0		234.1
16a	182.0		400.6		238.2	16a	171.9		396.9		241.0
17a	171.0		374.0		231.0	17a	168.8		380.4		238.6
18a	168.9		376.6		232.5	18a	177.5		399.9		243.9
19a	179.1		374.4		229.7	19a	165.2		376.7		225.2
20a	172.0		386.9		231.3	20a	170.8		387.3		235.8
21a	173.6		381.9		228.1	21a	170.0		403.2		244.9
22a	170.6		378.0		232.9	22a	164.7		397.2		229.0
23a	181.8		404.6		226.1	23a	164.7		381.3		234.4
24a	180.5		387.1		231.3	24a	172.7		380.9		244.0
25a	164.2		393.1		233.7	25a	164.3		374.7		242.5
1b	172.6		384.8		231.3	1b	173.1		370.4		225.3
2b	179.1		390.8		246.1	2b	171.7		390.3		231.0
3b	174.0		404.8		225.6	3b	179.5		378.4		243.3
4b	180.9		386.2		245.0	4b	180.0		389.0		228.5
5b	172.6		390.0		229.2	5b	170.4		376.1		240.8
6b	166.4		381.1		244.1	6b	165.0		381.3		236.9
7b	172.4		404.9		234.4	7b	180.4		384.7		245.1
8b	167.6		403.8		235.5	8b	174.5		387.8		235.5
9b	164.9		379.0		243.8	9b	177.1		383.0		240.6
10b	173.4		402.1		233.6	10b	169.3		398.9		235.4
11b	165.7		382.3		244.5	11b	169.5		381.0		232.7
12b	176.9		391.0		241.6	12b	167.8		373.2		240.6
13b	169.4		391.7		236.1	13b	171.9		391.0		232.8
14b	170.9		379.9		239.0	14b	174.0		380.1		231.8
15b	180.5		374.7		244.6	15b	181.0		373.3		232.4
16b	175.4		400.6		241.8	16b	167.6		375.8		236.2
17b	169.5		400.4		243.0	17b	178.5		380.9		242.1
18b	167.3		373.0		242.5	18b	180.1		381.2		229.2
19b	165.1		402.7		242.9	19b	169.2		393.4		230.9
20b	175.1		386.4		231.8	20b	165.6		394.4		227.2
21b	173.8		383.4		234.0	21b	171.2		383.1		241.7
22b	179.7		376.1		242.9	22b	178.1		387.4		245.2
23b	177.0		383.1		234.4	23b	171.8		394.0		230.1
24b	178.6		396.4		243.7	24b	166.1		387.8		235.6
25b	174.7		374.7		237.3	25b	167.9		370.8		227.7
	2						2				

Date	30-Jan					Date	6-Feb				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	176.8		403.3		246.0	1a	165.0		371.4		236.4
2a	166.5		371.1		245.3	2a	174.1		372.4		232.0
3a	174.1		371.6		241.0	3a	166.0		391.2		242.4
4a	170.1		398.4		227.0	4a	180.6		383.7		245.2
5a	179.3		379.0		228.0	5a	175.0		373.4		242.1
6a	169.3		371.0		236.7	6a	176.0		402.2		239.9
7a	180.7		370.2		229.0	7a	174.8		404.9		243.0
8a	174.5		375.5		238.0	8a	180.0		398.6		240.2
9a	172.5		400.0		234.1	9a	165.9		400.7		235.3
10a	164.4		374.5		230.7	10a	180.9		398.0		236.4
11a	166.9		378.0		233.5	11a	168.1		371.6		237.1
12a	177.2		373.7		234.7	12a	172.1		392.3		235.9
13a	165.7		377.2		243.6	13a	179.5		400.6		237.0
14a	169.1		382.6		239.5	14a	171.0		380.2		226.9
15a	165.6		376.9		228.0	15a	180.5		398.0		225.3
16a	168.3		371.5		242.9	16a	164.0		404.5		245.4
17a	175.8		382.6		242.4	17a	181.9		370.6		235.7
18a	168.4		374.2		237.7	18a	168.6		401.4		233.2
19a	180.8		380.1		227.0	19a	171.5		396.8		246.5
20a	173.3		373.1		228.0	20a	180.6		378.4		239.0
21a	173.1		396.5		236.0	21a	177.0		370.6		234.4
22a	167.1		398.6		246.3	22a	172.3		372.8		236.0
23a	178.4		381.0		233.0	23a	178.0		377.1		237.0
24a	174.8		386.0		240.2	24a	171.9		392.1		231.0
25a	170.0		390.2		226.0	25a	175.4		391.5		244.9
1b	172.5		402.3		237.2	1b	171.7		401.4		238.5
2b	166.7		401.3		245.8	2b	175.2		396.6		226.2
3b	174.7		403.5		228.4	3b	174.5		392.3		228.0
4b	176.9		379.0		240.9	4b	167.3		382.7		238.8
5b	165.5		376.7		240.5	5b	181.5		393.1		225.1
6b	171.1		404.5		239.5	6b	178.8		402.1		225.0
7b	175.7		376.8		244.4	7b	169.1		403.8		227.4
8b	172.9		370.1		246.2	8b	169.0		390.8		230.2
9b	170.1		371.0		228.1	9b	180.4		401.3		241.1
10b	172.4		375.7		229.9	10b	164.2		404.0		239.9
11b	167.8		399.4		233.2	11b	174.6		382.0		243.3
12b	164.6		383.1		226.2	12b	181.1		400.3		235.8
13b	170.8		386.5		244.0	13b	171.1		374.0		228.5
14b	178.7		383.9		228.0	14b	168.4		383.5		245.0
15b	171.5		377.2		235.2	15b	174.1		393.0		240.0
16b	168.2		377.3		230.0	16b	164.5		373.0		237.7
17b	169.2		400.0		242.1	17b	164.0		381.6		236.9
18b	170.9		385.3		230.3	18b	169.0		371.5		228.5
19b	169.3		373.8		228.0	19b	166.2		370.7		239.0
20b	176.1		397.4		229.9	20b	167.0		384.0		226.2
21b	179.0		380.5		246.0	21b	172.0		401.5		247.0
22b	167.6		377.0		239.4	22b	176.5		370.4		235.6
23b	176.5		386.7		234.3	23b	173.0		389.1		239.5
24b	172.8		390.9		237.1	24b	181.8		382.4		246.3
25b	173.7		388.9		231.0	25b	181.8		402.9		237.5
	1						1				

Date	7-Feb					Date	13-Feb				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	172.8		402.0		226.2	1a	164.9		372.3		242.4
2a	169.6		375.1		226.3	2a	181.6		375.1		233.1
3a	164.1		392.9		242.1	3a	166.8		390.3		226.0
4a	165.0		375.0		234.4	4a	177.7		393.9		227.4
5a	167.3		402.4		234.5	5a	176.0		382.0		228.5
6a	169.7		398.8		240.8	6a	172.3		378.1		233.0
7a	166.8		397.5		245.8	7a	180.6		389.6		238.4
8a	170.7		397.6		235.8	8a	172.7		375.5		233.9
9a	173.1		391.0		230.1	9a	171.1		383.7		241.9
10a	175.7		397.4		230.8	10a	180.1		374.0		242.2
11a	177.1		398.5		236.5	11a	169.8		371.7		247.0
12a	174.0		379.5		232.6	12a	168.0		396.0		225.1
13a	171.5		381.5		236.3	13a	165.0		383.1		243.5
14a	166.9		378.4		232.0	14a	168.7		387.0		227.4
15a	173.4		399.0		227.8	15a	173.3		399.4		234.5
16a	168.8		385.4		243.4	16a	166.5		377.8		234.6
17a	181.0		376.9		231.0	17a	166.3		386.1		226.4
18a	170.8		394.4		244.9	18a	179.1		387.3		244.2
19a	166.4		386.0		243.9	19a	181.6		388.5		238.4
20a	169.1		374.2		227.8	20a	178.3		401.4		235.1
21a	168.3		373.5		241.7	21a	171.0		391.0		228.7
22a	164.2		382.3		246.0	22a	169.5		402.2		238.9
23a	179.3		400.1		234.0	23a	170.9		402.5		225.6
24a	165.8		404.5		244.1	24a	165.0		398.3		232.3
25a	166.5		382.1		240.6	25a	177.3		383.0		237.8
1b	168.2		380.1		242.5	1b	165.3		399.7		232.1
2b	179.3		392.1		238.4	2b	166.3		374.9		235.5
3b	169.4		375.1		226.4	3b	178.9		371.9		243.0
4b	175.0		382.3		241.1	4b	180.8		378.3		233.6
5b	173.3		404.5		245.6	5b	167.9		385.8		244.1
6b	179.4		377.8		246.8	6b	177.6		380.7		230.0
7b	179.7		384.1		232.5	7b	175.5		393.6		232.0
8b	175.4		393.2		237.7	8b	175.9		379.4		228.2
9b	165.4		388.2		247.0	9b	175.3		397.0		242.6
10b	181.8		393.1		226.9	10b	167.8		392.0		226.3
11b	177.1		377.2		246.8	11b	171.4		397.9		227.0
12b	181.0		378.4		243.6	12b	166.8		382.7		244.7
13b	164.4		374.9		229.8	13b	171.9		393.1		238.4
14b	170.0		393.6		237.0	14b	167.1		403.9		244.2
15b	171.1		404.0		226.4	15b	168.5		394.9		239.8
16b	175.6		395.1		243.3	16b	178.3		399.3		244.4
17b	168.0		389.8		246.4	17b	168.6		401.0		244.1
18b	178.0		374.0		232.0	18b	172.4		386.6		238.5
19b	166.4		384.4		230.4	19b	165.0		376.0		238.6
20b	173.2		391.7		245.1	20b	178.0		389.3		239.2
21b	177.0		372.1		244.2	21b	169.1		382.0		239.9
22b	181.0		382.9		240.0	22b	173.0		377.4		243.8
23b	176.3		379.7		226.0	23b	175.5		386.4		236.1
24b	164.9		390.9		233.6	24b	180.0		394.0		243.9
25b	176.8		400.5		243.7	25b	171.6		392.2		232.9
	0						0				

Date	20-Feb					Date	21-Feb				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	179.9		379.6		229.0	1a	166.4		376.7		242.0
2a	166.0		372.6		233.9	2a	164.4		375.9		241.7
3a	173.0		386.4		246.7	3a	166.0		401.2		234.4
4a	177.2		390.0		238.1	4a	172.1		385.4		245.9
5a	174.0		376.8		234.9	5a	165.7		404.1		234.4
6a	172.7		370.0		237.0	6a	174.0		400.5		226.9
7a	171.3		389.8		237.9	7a	164.0		377.8		230.2
8a	175.3		381.0		246.5	8a	174.9		381.0		241.9
9a	170.0		384.0		233.6	9a	166.8		391.8		241.5
10a	166.5		400.9		226.5	10a	168.0		396.0		227.0
11a	167.1		384.3		225.5	11a	179.1		397.8		229.6
12a	166.0		391.7		238.5	12a	167.1		398.4		227.6
13a	171.8		388.0		227.1	13a	179.6		392.7		227.1
14a	181.6		387.5		239.0	14a	177.7		373.3		240.4
15a	166.4		372.2		230.6	15a	167.8		394.5		232.5
16a	165.2		380.5		233.3	16a	166.4		395.3		227.6
17a	174.0		391.2		232.1	17a	172.5		381.0		236.6
18a	177.7		386.4		236.9	18a	177.6		395.6		228.0
19a	172.3		394.6		242.2	19a	179.1		388.7		235.3
20a	178.9		374.6		233.9	20a	170.7		402.6		240.0
21a	179.2		379.5		241.0	21a	165.0		384.2		228.3
22a	166.0		391.0		246.5	22a	179.0		394.0		229.7
23a	180.1		386.0		235.7	23a	179.0		376.6		226.9
24a	180.4		375.3		237.9	24a	170.4		396.0		232.9
25a	173.4		391.8		246.4	25a	170.5		385.7		238.4
1b	176.3		385.3		231.0	1b	164.2		380.1		243.7
2b	168.7		381.2		226.5	2b	166.8		389.1		236.9
3b	174.1		400.5		242.3	3b	167.8		401.1		229.7
4b	176.1		394.5		232.5	4b	171.6		375.4		242.8
5b	179.5		383.0		235.3	5b	180.4		403.0		245.2
6b	175.3		375.4		227.0	6b	173.5		380.5		235.5
7b	178.0		381.6		235.1	7b	166.4		398.8		237.0
8b	165.1		391.9		226.7	8b	166.1		375.8		232.0
9b	180.0		403.5		245.1	9b	177.8		382.5		235.5
10b	165.2		373.3		241.7	10b	171.8		380.4		230.2
11b	171.8		371.8		243.7	11b	175.7		372.5		246.0
12b	166.2		402.9		240.8	12b	176.7		383.6		245.3
13b	168.6		388.6		234.3	13b	169.6		394.1		236.6
14b	165.0		376.3		229.4	14b	169.2		380.0		245.7
15b	166.6		384.0		246.8	15b	179.6		394.9		233.4
16b	174.9		386.8		235.2	16b	177.0		391.2		237.1
17b	181.5		375.9		245.4	17b	181.0		378.1		225.5
18b	167.0		384.4		235.6	18b	175.1		375.9		232.2
19b	166.3		403.1		226.9	19b	170.3		370.5		242.6
20b	169.6		400.7		241.6	20b	165.4		389.6		232.0
21b	170.0		376.9		225.5	21b	166.0		380.4		246.6
22b	170.0		385.2		232.0	22b	166.3		371.7		233.9
23b	169.2		396.8		245.1	23b	166.7		383.5		229.4
24b	166.5		392.0		229.0	24b	172.0		377.0		236.1
25b	181.6		400.8		237.1	25b	171.5		403.1		236.9
	0						0				

Date	27-Feb					Date	28-Feb				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	Expected	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	167.6		375.4		228.1	1a	171.0		399.1		245.1
2a	174.1		393.6		237.2	2a	172.0		373.9		233.2
3a	177.6		389.3		237.7	3a	167.9		389.8		227.1
4a	171.1		374.6		243.8	4a	166.9		395.8		237.0
5a	170.1		396.8		234.0	5a	179.5		376.2		228.1
6a	178.7		384.4		236.6	6a	166.7		377.0		244.9
7a	177.0		373.1		232.0	7a	179.8		400.0		229.2
8a	175.8		390.9		232.6	8a	175.0		401.8		226.8
9a	178.3		374.3		225.5	9a	180.2		384.1		240.3
10a	169.0		375.6		229.1	10a	181.8		377.2		236.3
11a	166.0		395.5		226.7	11a	174.1		374.6		237.9
12a	178.2		388.9		244.7	12a	164.2		376.3		243.0
13a	179.7		375.9		229.3	13a	172.2		401.7		234.9
14a	173.0		385.3		246.1	14a	179.8		380.2		228.7
15a	176.9		383.9		225.1	15a	181.0		384.2		228.7
16a	171.9		381.1		228.7	16a	173.6		385.3		241.0
17a	166.8		389.5		229.9	17a	180.5		381.1		238.2
18a	179.8		391.1		225.6	18a	166.8		402.3		235.1
19a	168.0		403.7		237.4	19a	170.3		393.8		238.8
20a	176.2		385.1		237.2	20a	172.5		398.0		237.8
21a	169.9		395.4		242.4	21a	167.5		386.9		239.0
22a	166.9		373.6		228.3	22a	179.1		396.3		232.1
23a	175.8		395.3		240.6	23a	167.2		373.4		237.4
24a	177.4		391.7		225.2	24a	179.3		391.0		241.0
25a	176.8		391.8		229.2	25a	180.2		375.7		241.4
1b	174.6		399.7		229.1	1b	179.0		390.8		228.9
2b	173.5		381.0		235.5	2b	165.9		381.5		240.2
3b	167.9		374.6		231.8	3b	181.0		373.0		238.0
4b	181.8		371.8		238.0	4b	179.4		402.2		243.0
5b	176.2		401.0		236.7	5b	164.0		383.5		232.8
6b	178.1		389.0		235.4	6b	179.8		400.9		232.8
7b	174.5		394.1		228.1	7b	174.3		382.0		229.4
8b	181.0		404.3		241.5	8b	180.6		383.1		228.0
9b	171.3		386.0		234.0	9b	170.0		382.7		238.0
10b	174.0		402.7		237.0	10b	167.2		383.2		229.1
11b	165.8		386.9		241.4	11b	174.3		382.3		231.0
12b	174.6		398.4		245.2	12b	165.0		389.8		238.0
13b	179.3		370.2		241.1	13b	172.2		397.1		237.2
14b	181.3		396.1		237.3	14b	179.1		387.8		225.0
15b	167.7		373.5		245.8	15b	173.2		391.9		235.2
16b	178.2		400.8		238.3	16b	168.2		387.5		233.5
17b	175.2		387.9		234.0	17b	174.7		375.0		239.2
18b	180.9		385.5		235.9	18b	178.6		386.5		228.7
19b	180.4		397.6		242.8	19b	165.5		391.2		237.5
20b	166.0		387.5		230.2	20b	165.0		399.1		239.0
21b	168.5		385.3		244.0	21b	171.0		400.2		231.1
22b	173.9		386.2		229.7	22b	169.6		400.8		244.7
23b	168.9		388.6		247.0	23b	164.1		392.3		233.2
24b	174.3		404.6		230.3	24b	169.3		372.0		242.4
25b	168.1		399.9		243.6	25b	177.6		384.0		245.0
	0						0				

Date	5-Mar					**Date**	6-Mar				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	**Expected**	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	181.1		389.3		232.0	**1a**	175.8		393.8		228.4
2a	180.8		375.1		236.0	**2a**	168.2		375.4		236.0
3a	165.4		386.9		245.1	**3a**	176.9		400.0		238.3
4a	177.3		384.3		242.3	**4a**	168.6		373.0		227.4
5a	176.0		402.0		233.9	**5a**	174.0		382.0		243.4
6a	174.3		403.0		227.6	**6a**	179.5		373.0		237.5
7a	175.8		379.4		225.1	**7a**	164.8		374.9		230.5
8a	164.3		383.7		238.2	**8a**	175.6		382.0		237.8
9a	180.9		374.8		240.9	**9a**	170.6		380.8		232.3
10a	180.1		398.2		239.8	**10a**	181.2		384.2		227.4
11a	178.9		374.7		227.0	**11a**	164.0		375.6		231.9
12a	179.0		377.6		237.0	**12a**	175.4		404.0		241.2
13a	175.9		376.8		238.5	**13a**	172.5		377.1		244.0
14a	175.0		385.4		231.8	**14a**	164.2		404.9		242.6
15a	166.5		395.1		229.4	**15a**	176.7		403.7		236.0
16a	177.8		394.9		246.9	**16a**	180.3		380.1		237.3
17a	164.1		399.3		226.9	**17a**	168.5		387.0		238.5
18a	166.3		379.2		227.3	**18a**	172.3		379.2		236.9
19a	167.9		381.2		229.2	**19a**	165.2		398.0		240.9
20a	178.9		374.7		226.4	**20a**	172.4		373.3		238.2
21a	181.3		387.8		228.7	**21a**	174.0		395.4		242.0
22a	178.5		400.0		226.2	**22a**	177.9		375.3		234.1
23a	166.6		393.3		235.4	**23a**	172.2		399.4		226.4
24a	176.4		396.9		243.7	**24a**	178.0		374.5		230.6
25a	171.1		386.4		231.9	**25a**	167.7		396.6		225.1
1b	181.0		379.2		245.9	**1b**	166.9		399.6		240.5
2b	180.0		389.9		234.0	**2b**	170.4		384.7		229.0
3b	170.1		370.7		233.5	**3b**	173.2		372.7		237.2
4b	172.2		394.4		243.0	**4b**	166.0		391.4		247.0
5b	167.7		399.0		227.8	**5b**	171.6		395.0		240.8
6b	180.8		399.5		235.8	**6b**	178.0		384.9		238.0
7b	176.3		397.9		239.1	**7b**	180.4		402.5		229.7
8b	181.3		392.9		236.2	**8b**	179.2		378.2		231.2
9b	176.7		377.2		229.6	**9b**	164.2		397.8		233.4
10b	179.5		371.0		236.1	**10b**	173.5		372.4		228.7
11b	166.5		381.0		242.6	**11b**	178.9		384.0		231.7
12b	166.2		388.1		243.8	**12b**	165.3		391.0		226.7
13b	175.5		398.7		244.1	**13b**	181.5		400.1		233.3
14b	170.7		399.2		230.7	**14b**	171.6		378.5		246.0
15b	181.7		404.8		232.9	**15b**	167.4		380.8		246.9
16b	182.0		370.6		227.6	**16b**	177.6		404.9		237.9
17b	169.4		395.4		237.0	**17b**	167.9		398.8		240.4
18b	170.1		378.5		235.4	**18b**	166.1		387.0		239.0
19b	174.0		384.0		240.2	**19b**	181.5		382.3		244.1
20b	178.0		403.1		246.8	**20b**	180.0		387.0		226.2
21b	180.0		391.5		239.3	**21b**	164.8		390.0		234.4
22b	169.7		387.8		241.5	**22b**	175.5		381.3		238.0
23b	172.7		379.1		242.3	**23b**	173.9		404.3		227.9
24b	176.6		389.7		242.2	**24b**	170.5		404.1		237.5
25b	174.1		383.5		235.2	**25b**	164.3		391.6		242.3
	0						2				

Date	12-Mar					**Date**	19-Mar				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	**Expected**	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	171.6		389.0		229.7	**1a**	171.9		401.4		228.5
2a	166.1		402.8		241.7	**2a**	180.5		403.9		230.2
3a	167.5		399.6		245.8	**3a**	177.3		395.9		225.7
4a	169.9		398.4		239.0	**4a**	176.4		390.3		230.0
5a	181.9		382.8		227.8	**5a**	178.3		389.4		242.6
6a	173.5		370.1		238.2	**6a**	174.8		383.4		233.5
7a	176.7		385.4		244.2	**7a**	181.9		396.3		233.4
8a	176.1		402.7		237.0	**8a**	179.3		376.9		233.6
9a	171.9		379.6		242.0	**9a**	178.2		386.1		240.0
10a	179.9		403.5		241.0	**10a**	177.1		389.4		228.7
11a	175.7		377.9		245.4	**11a**	172.3		374.7		226.9
12a	178.1		387.3		231.5	**12a**	181.0		402.1		230.0
13a	174.3		397.0		246.0	**13a**	177.4		389.8		227.9
14a	165.5		373.8		235.0	**14a**	171.5		380.0		240.8
15a	174.0		381.7		242.0	**15a**	171.0		401.4		241.8
16a	169.0		384.1		242.9	**16a**	171.9		373.5		227.3
17a	179.0		398.1		229.0	**17a**	180.8		397.0		237.9
18a	180.3		384.4		241.1	**18a**	170.2		381.5		227.5
19a	178.9		399.0		226.2	**19a**	179.6		372.0		236.7
20a	171.3		388.8		238.4	**20a**	181.9		398.5		233.0
21a	174.9		388.4		242.1	**21a**	168.1		371.9		228.8
22a	181.6		376.1		228.8	**22a**	171.2		384.2		240.2
23a	175.7		387.6		244.1	**23a**	174.1		372.1		228.3
24a	175.7		398.7		234.8	**24a**	166.8		401.0		226.2
25a	173.5		375.3		239.6	**25a**	173.3		378.0		234.2
1b	166.0		388.6		232.4	**1b**	181.1		380.6		231.0
2b	176.3		388.1		233.7	**2b**	165.2		380.7		226.4
3b	175.7		389.7		225.6	**3b**	172.0		379.6		240.9
4b	173.7		386.9		233.0	**4b**	167.4		402.1		237.1
5b	180.5		376.8		226.2	**5b**	164.9		370.3		238.8
6b	165.9		398.5		241.1	**6b**	165.5		386.0		240.5
7b	174.0		383.4		228.1	**7b**	181.8		400.3		238.4
8b	180.7		376.3		240.3	**8b**	177.8		379.7		226.1
9b	175.2		371.9		231.5	**9b**	176.2		376.9		235.9
10b	179.1		394.4		232.8	**10b**	178.8		394.6		234.5
11b	180.8		401.4		228.0	**11b**	178.2		381.4		225.4
12b	181.0		391.0		242.9	**12b**	181.7		396.3		241.3
13b	173.4		393.2		246.3	**13b**	169.7		396.6		230.5
14b	167.8		393.6		228.0	**14b**	178.9		388.7		244.5
15b	174.4		382.0		232.9	**15b**	174.9		379.1		230.0
16b	171.0		376.2		237.0	**16b**	179.8		383.2		230.4
17b	172.7		396.8		226.0	**17b**	167.0		400.4		233.4
18b	172.9		387.9		237.4	**18b**	176.9		392.7		226.4
19b	166.5		399.2		227.0	**19b**	170.5		373.7		233.6
20b	167.0		385.0		234.7	**20b**	175.5		403.7		237.3
21b	165.8		385.3		240.1	**21b**	181.1		392.4		233.9
22b	169.9		401.3		238.9	**22b**	165.6		386.8		230.5
23b	179.3		380.7		229.9	**23b**	181.4		384.9		227.8
24b	175.8		378.0		236.3	**24b**	164.4		379.0		231.6
25b	175.1		383.3		235.0	**25b**	176.8		404.2		228.0
	1						1				

Date	26-Mar					**Date**	2-Apr				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	**Expected**	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	169.2		394.4		229.9	**1a**	181.1		384.9		245.2
2a	175.9		390.7		242.3	**2a**	168.4		393.1		237.0
3a	165.5		379.6		241.2	**3a**	169.7		393.0		246.0
4a	165.8		372.6		227.8	**4a**	164.0		378.7		246.1
5a	164.7		404.1		243.4	**5a**	173.8		399.9		226.8
6a	174.9		384.7		246.7	**6a**	173.1		388.5		236.8
7a	178.9		399.2		240.6	**7a**	170.0		400.6		240.2
8a	165.7		374.3		232.4	**8a**	174.5		376.2		232.2
9a	180.1		376.0		231.9	**9a**	177.5		378.0		229.4
10a	171.9		378.9		225.9	**10a**	170.0		373.8		237.9
11a	165.5		373.3		239.4	**11a**	178.2		371.4		246.8
12a	173.3		404.7		234.0	**12a**	173.3		382.7		242.1
13a	176.8		377.3		239.2	**13a**	166.5		393.0		236.2
14a	166.6		402.3		242.0	**14a**	169.8		377.2		235.9
15a	165.4		404.5		246.6	**15a**	164.7		371.7		246.4
16a	164.0		370.9		234.0	**16a**	175.0		400.9		229.3
17a	164.7		374.4		238.2	**17a**	166.5		376.4		239.0
18a	180.4		395.9		240.8	**18a**	180.6		400.7		226.0
19a	173.5		380.3		235.0	**19a**	179.8		384.4		239.8
20a	181.5		384.4		232.3	**20a**	177.0		370.7		230.1
21a	166.9		373.4		236.6	**21a**	180.7		378.0		242.4
22a	164.5		384.3		238.0	**22a**	180.7		371.9		243.5
23a	169.3		401.6		239.2	**23a**	178.3		381.8		237.3
24a	176.5		382.6		232.0	**24a**	177.4		383.9		240.3
25a	165.1		380.0		238.7	**25a**	176.1		386.7		239.0
1b	175.1		400.2		245.6	**1b**	174.8		389.4		243.2
2b	168.0		400.0		232.3	**2b**	179.2		372.2		226.0
3b	174.4		377.0		227.3	**3b**	176.0		399.0		240.1
4b	180.0		379.6		227.0	**4b**	166.0		395.8		237.1
5b	178.0		370.0		225.8	**5b**	169.1		386.0		234.5
6b	180.1		399.6		245.2	**6b**	177.9		374.6		237.8
7b	173.3		372.1		237.9	**7b**	171.9		376.0		225.8
8b	178.4		381.0		237.3	**8b**	170.9		388.2		230.0
9b	166.4		383.7		228.7	**9b**	165.2		399.3		240.2
10b	172.6		398.0		230.3	**10b**	167.6		383.1		244.7
11b	175.0		383.5		245.4	**11b**	182.0		381.9		229.3
12b	168.5		380.2		229.0	**12b**	168.3		385.5		242.5
13b	167.6		405.0		233.2	**13b**	176.4		376.7		238.0
14b	171.2		373.1		238.7	**14b**	171.6		387.0		225.6
15b	176.2		392.7		227.2	**15b**	172.1		392.1		243.1
16b	169.0		398.0		245.9	**16b**	175.2		387.9		225.1
17b	176.1		385.0		225.6	**17b**	172.4		386.6		233.1
18b	176.6		381.6		233.0	**18b**	176.3		399.4		235.0
19b	175.0		400.8		234.9	**19b**	173.9		375.0		247.0
20b	168.6		391.8		230.7	**20b**	180.5		389.6		245.6
21b	171.4		372.0		231.0	**21b**	170.6		403.0		231.0
22b	173.8		386.3		227.7	**22b**	179.0		383.0		240.6
23b	176.0		389.0		246.8	**23b**	166.6		391.4		238.8
24b	178.8		379.9		239.2	**24b**	171.0		393.2		239.5
25b	165.4		392.2		240.9	**25b**	171.0		390.8		243.7
	1						1				

Date	3-Apr					**Date**	9-Apr				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	165-180		370-405		225-245	**Expected**	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	169.0		371.0		229.0	**1a**	167.0		371.1		236.9
2a	166.8		393.4		234.0	**2a**	167.5		397.0		233.4
3a	176.5		404.0		236.7	**3a**	178.4		388.8		230.2
4a	178.0		383.4		227.3	**4a**	169.0		400.5		246.9
5a	165.0		401.0		234.9	**5a**	173.6		398.6		241.3
6a	172.2		372.0		236.0	**6a**	165.5		388.3		233.3
7a	172.8		387.8		238.4	**7a**	176.5		383.5		236.1
8a	176.8		382.0		244.4	**8a**	164.1		381.6		232.8
9a	166.0		392.9		244.0	**9a**	165.8		379.5		243.3
10a	168.2		372.8		242.1	**10a**	175.3		380.8		245.6
11a	176.9		393.6		231.1	**11a**	165.7		386.9		239.0
12a	176.1		394.5		243.3	**12a**	169.4		388.5		240.3
13a	175.0		399.5		227.9	**13a**	167.0		381.3		226.2
14a	169.4		377.4		237.6	**14a**	169.0		374.4		245.7
15a	172.0		383.8		236.1	**15a**	179.7		388.4		232.5
16a	166.0		388.6		244.2	**16a**	173.8		388.0		240.6
17a	177.4		377.8		234.3	**17a**	171.9		372.9		228.5
18a	177.7		390.1		244.4	**18a**	171.2		404.5		245.3
19a	165.5		396.3		227.8	**19a**	180.4		401.1		233.1
20a	180.9		388.7		245.0	**20a**	166.5		394.5		229.8
21a	165.6		404.1		244.3	**21a**	176.0		403.7		236.2
22a	177.5		400.6		247.0	**22a**	181.6		401.5		232.4
23a	170.7		398.7		238.6	**23a**	172.3		405.0		230.0
24a	178.4		389.5		236.7	**24a**	180.4		381.0		243.7
25a	174.0		388.7		226.4	**25a**	168.7		403.4		243.3
1b	173.9		386.8		233.7	**1b**	176.1		389.0		235.8
2b	174.1		404.7		242.2	**2b**	168.8		402.8		242.5
3b	174.9		377.9		236.9	**3b**	175.9		372.7		226.7
4b	167.0		375.6		228.7	**4b**	174.0		370.0		229.2
5b	176.2		392.3		231.1	**5b**	174.0		377.4		232.5
6b	181.7		390.0		237.8	**6b**	171.3		404.4		227.0
7b	177.9		402.1		236.8	**7b**	164.0		385.0		228.4
8b	169.6		373.9		225.4	**8b**	180.3		370.0		233.4
9b	180.6		374.9		242.8	**9b**	176.4		372.7		235.0
10b	179.6		371.7		241.3	**10b**	179.3		400.5		230.0
11b	172.0		392.8		226.5	**11b**	171.1		375.4		236.8
12b	168.3		372.3		227.2	**12b**	171.3		388.5		226.0
13b	179.4		392.5		246.6	**13b**	164.3		401.6		237.9
14b	165.6		378.5		243.0	**14b**	170.3		397.0		232.5
15b	179.4		395.8		243.9	**15b**	180.2		392.8		234.1
16b	172.1		376.0		236.5	**16b**	166.0		372.7		239.8
17b	181.7		392.7		238.1	**17b**	167.3		382.0		234.0
18b	172.3		400.1		225.8	**18b**	181.5		374.6		238.1
19b	175.0		401.6		238.6	**19b**	167.0		371.9		244.4
20b	169.0		380.0		234.9	**20b**	166.0		386.6		225.0
21b	178.8		374.4		245.4	**21b**	176.0		393.7		244.0
22b	166.6		402.4		230.3	**22b**	164.0		372.9		239.2
23b	170.6		380.3		233.4	**23b**	173.2		394.7		230.3
24b	179.6		396.6		232.9	**24b**	171.3		400.7		246.2
25b	174.0		386.0		226.0	**25b**	178.9		400.8		232.3
	1						0				

Date	16-Apr					**Date**	23-Apr				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	165-180		380-420		225-245	**Expected**	165-180		380-420		225-245
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	164.0		391.2		245.5	**1a**	173.0		380.1		229.0
2a	165.0		377.5		233.4	**2a**	175.6		387.1		245.1
3a	169.6		385.4		235.7	**3a**	164.5		401.7		231.0
4a	175.8		372.3		235.3	**4a**	175.9		393.0		241.0
5a	178.4		400.5		246.7	**5a**	172.0		387.5		239.7
6a	179.0		392.9		229.6	**6a**	173.2		399.7		225.4
7a	177.1		390.6		231.0	**7a**	171.2		379.7		230.2
8a	180.8		394.5		241.5	**8a**	172.0		372.0		244.7
9a	174.0		402.7		226.1	**9a**	174.0		375.1		229.3
10a	176.1		400.4		227.0	**10a**	164.5		371.9		241.5
11a	168.2		397.8		246.6	**11a**	171.7		371.3		239.8
12a	180.1		404.0		242.6	**12a**	168.5		372.5		243.9
13a	175.0		375.0		237.8	**13a**	181.9		390.8		240.0
14a	178.6		392.8		244.1	**14a**	165.2		388.0		228.8
15a	164.4		376.7		234.1	**15a**	166.6		388.4		228.4
16a	174.7		375.6		225.8	**16a**	173.9		371.2		232.3
17a	168.0		373.5		239.3	**17a**	181.1		394.8		226.5
18a	178.0		375.3		229.1	**18a**	174.5		390.3		232.4
19a	175.8		372.7		239.7	**19a**	167.8		371.4		230.3
20a	170.9		387.9		239.0	**20a**	164.5		376.2		238.7
21a	169.9		391.7		234.5	**21a**	177.2		372.1		245.1
22a	166.2		379.2		241.5	**22a**	177.9		381.2		232.0
23a	165.3		402.0		235.4	**23a**	176.9		377.9		241.5
24a	176.0		386.6		245.9	**24a**	165.0		373.8		242.1
25a	175.7		371.2		240.5	**25a**	179.8		374.5		234.4
1b	180.7		399.3		238.4	**1b**	170.9		374.0		226.8
2b	171.4		398.8		230.6	**2b**	165.0		383.0		242.2
3b	169.5		400.9		244.0	**3b**	168.6		373.9		243.8
4b	169.0		377.0		236.2	**4b**	179.5		405.0		225.9
5b	177.6		401.0		237.5	**5b**	181.5		394.3		231.5
6b	164.2		390.5		237.9	**6b**	180.0		387.9		244.5
7b	174.6		370.1		227.7	**7b**	167.0		384.7		238.0
8b	180.4		400.9		228.2	**8b**	178.4		379.2		234.2
9b	169.1		403.0		234.0	**9b**	175.7		400.8		235.8
10b	178.7		376.0		242.8	**10b**	169.2		404.7		233.8
11b	170.3		403.0		246.7	**11b**	179.9		388.2		230.4
12b	169.9		386.2		234.0	**12b**	169.8		388.0		243.7
13b	168.4		392.8		243.3	**13b**	166.9		395.1		245.8
14b	166.3		402.6		233.2	**14b**	173.8		391.9		243.2
15b	174.7		382.0		239.0	**15b**	173.1		403.6		242.5
16b	166.4		400.9		226.5	**16b**	173.3		390.0		233.2
17b	177.3		386.3		246.0	**17b**	180.9		400.0		230.8
18b	176.0		370.6		240.4	**18b**	173.1		400.8		243.9
19b	171.0		401.4		229.5	**19b**	168.4		377.2		244.0
20b	179.3		374.1		246.9	**20b**	167.1		400.0		232.8
21b	173.9		372.6		229.6	**21b**	176.8		378.1		227.0
22b	179.3		386.9		226.2	**22b**	180.9		395.7		234.3
23b	177.0		382.5		238.0	**23b**	168.3		386.1		225.9
24b	168.1		371.7		235.8	**24b**	175.8		403.5		232.2
25b	174.6		383.7		238.7	**25b**	167.0		396.0		227.3
	1						0				

Advantage

	Advantage									
Date	12-Sep				**Date**	13-Sep				
Temp	Coil		Base Internal	Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550	245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs	120 secs	**Qty**	30 secs		60 secs		120 secs
1a	197.9		505.0	255.0	**1a**	196.6		524.9		250.2
2a	193.3		540.5	267.7	**2a**	183.2		521.7		262.6
3a	189.0		518.0	251.0	**3a**	195.2		509.9		263.7
4a	193.3		513.7	252.8	**4a**	195.4		501.2		264.0
5a	179.7		539.4	259.1	**5a**	199.1		501.0		271.8
6a	195.5		547.2	251.3	**6a**	195.7		506.1		266.8
7a	182.0		503.3	264.1	**7a**	192.3		509.5		268.7
8a	178.0		507.1	253.8	**8a**	186.4		497.1		264.9
9a	176.6		548.5	257.4	**9a**	179.5		523.1		268.9
10a	196.5		543.6	262.9	**10a**	185.0		546.3		258.2
11a	182.0		500.5	270.3	**11a**	190.1		538.0		252.3
12a	176.5		533.2	271.3	**12a**	195.0		511.7		261.6
13a	182.5		502.6	262.0	**13a**	191.6		517.4		270.0
14a	192.0		509.0	270.3	**14a**	190.3		531.0		264.2
15a	178.9		544.8	248.5	**15a**	177.3		519.7		271.2
16a	181.3		528.2	260.9	**16a**	182.7		530.1		255.8
17a	190.2		504.6	271.0	**17a**	197.4		510.9		265.6
18a	187.2		508.0	255.6	**18a**	197.0		514.7		264.2
19a	194.4		512.5	260.6	**19a**	177.0		520.4		265.4
20a	179.4		541.0	272.1	**20a**	186.3		499.7		247.3
21a	187.5		506.6	257.2	**21a**	195.7		539.6		265.2
22a	193.0		501.5	269.3	**22a**	190.0		545.5		258.3
23a	194.0		549.0	266.1	**23a**	195.2		541.8		256.1
24a	199.9		521.0	253.8	**24a**	178.0		518.4		270.9
25a	181.6		535.5	263.4	**25a**	187.5		546.6		262.5
1b	193.1		500.7	247.3	**1b**	189.7		507.7		260.7
2b	186.5		513.0	270.6	**2b**	198.1		498.1		269.3
3b	197.0		532.7	253.2	**3b**	184.7		526.5		265.6
4b	185.5		500.3	266.5	**4b**	183.1		513.6		272.4
5b	176.3		504.1	248.0	**5b**	184.4		539.0		272.5
6b	189.7		526.3	267.6	**6b**	176.9		526.5		257.0
7b	185.8		521.7	252.8	**7b**	188.1		547.9		254.3
8b	185.7		526.0	252.2	**8b**	184.0		520.4		260.7
9b	197.2		514.4	262.1	**9b**	198.4		547.3		269.3
10b	176.2		544.0	251.0	**10b**	186.3		538.7		247.1
11b	187.7		527.1	249.5	**11b**	193.8		500.2		248.1
12b	187.8		508.9	257.8	**12b**	184.0		503.9		273.0
13b	176.5		544.5	256.5	**13b**	190.5		519.5		253.0
14b	187.7		544.5	264.6	**14b**	176.7		539.8		262.4
15b	178.8		531.1	271.7	**15b**	178.8		513.0		250.5
16b	192.5		508.0	272.9	**16b**	184.9		510.9		264.0
17b	191.5		521.6	268.4	**17b**	192.4		513.0		265.8
18b	177.6		540.9	264.8	**18b**	178.0		512.4		254.5
19b	186.2		545.2	265.8	**19b**	192.7		511.6		256.5
20b	192.6		528.2	267.8	**20b**	193.1		530.9		253.1
21b	177.0		518.0	258.5	**21b**	186.5		545.6		264.6
22b	180.1		537.0	258.2	**22b**	196.1		526.0		266.3
23b	185.2		517.8	272.6	**23b**	177.4		521.1		268.6
24b	180.4		525.7	248.8	**24b**	197.0		546.3		272.6
25b	180.3		506.0	268.0	**25b**	195.7		545.3		251.3
Errors	1					1				

Date	22-Sep					**Date**	23-Sep				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	191.9		500.0		260.3	**1a**	186.9		512.8		248.4
2a	179.0		523.4		253.9	**2a**	187.2		515.0		254.6
3a	183.6		536.8		250.4	**3a**	183.2		543.4		273.0
4a	194.1		537.8		253.2	**4a**	198.0		512.0		259.0
5a	189.6		519.7		261.9	**5a**	182.6		544.5		251.9
6a	188.9		514.5		257.0	**6a**	180.5		515.6		264.7
7a	195.0		499.8		263.2	**7a**	184.1		537.0		255.3
8a	198.3		512.4		264.8	**8a**	188.0		517.7		249.9
9a	184.0		537.3		267.8	**9a**	183.9		530.0		269.4
10a	194.7		524.2		256.1	**10a**	197.0		517.3		259.2
11a	199.3		502.8		267.7	**11a**	195.6		518.5		253.6
12a	198.6		543.2		263.7	**12a**	179.9		537.6		251.4
13a	190.0		522.2		261.0	**13a**	184.0		500.1		263.2
14a	182.2		521.6		259.0	**14a**	197.7		524.0		255.5
15a	187.9		529.3		250.5	**15a**	188.9		540.1		261.0
16a	195.3		503.8		259.4	**16a**	180.3		504.7		256.7
17a	182.3		500.4		262.9	**17a**	196.5		541.9		268.5
18a	186.5		521.2		265.4	**18a**	189.3		511.2		268.7
19a	197.1		513.1		268.7	**19a**	190.0		517.8		270.7
20a	199.0		538.3		273.0	**20a**	177.5		533.2		259.3
21a	188.7		547.7		252.9	**21a**	179.9		533.9		254.6
22a	199.7		541.2		259.1	**22a**	184.0		512.6		257.1
23a	178.0		515.4		251.0	**23a**	177.6		536.7		252.1
24a	188.4		524.8		261.2	**24a**	190.3		507.1		271.8
25a	177.2		516.3		259.3	**25a**	179.6		512.0		270.0
1b	186.5		523.0		267.7	**1b**	190.0		503.0		263.0
2b	193.8		520.3		266.7	**2b**	176.8		515.8		254.3
3b	191.7		513.5		268.4	**3b**	178.1		504.0		270.2
4b	177.0		536.2		261.6	**4b**	195.0		547.8		269.5
5b	195.6		533.0		269.7	**5b**	198.7		511.3		266.0
6b	194.7		541.6		251.5	**6b**	186.4		528.7		269.7
7b	199.9		534.9		252.1	**7b**	197.2		503.7		268.0
8b	199.0		511.5		266.0	**8b**	193.3		546.6		248.0
9b	194.0		514.0		251.8	**9b**	181.2		532.2		263.4
10b	185.9		523.5		271.8	**10b**	196.2		529.9		270.2
11b	194.9		520.0		267.4	**11b**	195.7		548.0		261.9
12b	190.6		533.5		252.5	**12b**	192.6		531.0		252.5
13b	186.4		531.6		255.3	**13b**	186.1		526.2		262.2
14b	187.5		505.2		265.3	**14b**	190.0		520.6		260.4
15b	196.1		500.4		258.9	**15b**	186.2		526.5		264.6
16b	195.0		498.2		263.0	**16b**	192.3		533.8		259.1
17b	179.9		534.4		265.1	**17b**	190.0		527.1		247.2
18b	188.2		541.9		264.9	**18b**	191.1		528.0		266.4
19b	178.9		516.3		251.2	**19b**	182.1		517.4		253.3
20b	192.0		502.1		252.7	**20b**	180.0		538.2		261.9
21b	196.0		517.6		249.3	**21b**	194.9		522.4		254.2
22b	179.2		507.1		260.0	**22b**	184.4		525.0		254.1
23b	182.8		547.5		265.7	**23b**	184.7		545.2		249.0
24b	195.9		506.7		248.2	**24b**	185.5		538.0		259.7
25b	188.5		540.0		253.0	**25b**	182.6		542.9		268.7
	1						1				

Date	26-Sep					Date	27-Sep				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	196.8		532.7		268.9	1a	181.3		529.1		261.0
2a	192.5		546.0		267.5	2a	191.4		498.8		253.3
3a	176.9		538.6		261.1	3a	176.0		543.0		270.0
4a	198.8		516.5		259.8	4a	192.0		506.3		251.3
5a	198.0		523.1		259.6	5a	178.6		512.2		252.4
6a	185.6		536.7		255.2	6a	181.9		541.1		266.1
7a	195.8		512.8		257.0	7a	197.9		542.0		261.8
8a	197.2		519.0		253.6	8a	187.6		515.8		266.5
9a	181.9		511.1		257.9	9a	180.7		545.0		262.5
10a	180.7		512.0		248.6	10a	197.0		536.6		256.9
11a	190.0		526.3		256.0	11a	196.7		511.0		249.7
12a	176.8		501.6		270.2	12a	178.7		499.9		259.2
13a	189.8		522.2		270.4	13a	198.9		528.0		265.3
14a	199.8		499.8		257.1	14a	176.4		501.5		269.7
15a	199.8		525.7		250.8	15a	193.5		524.0		259.9
16a	177.7		516.3		266.8	16a	180.7		541.5		265.9
17a	181.0		532.7		253.2	17a	185.0		523.9		270.2
18a	181.8		516.3		259.3	18a	190.9		502.0		253.4
19a	190.9		508.0		258.1	19a	190.7		537.5		269.0
20a	188.9		499.9		251.8	20a	186.3		533.4		249.3
21a	199.0		529.7		251.9	21a	179.9		539.1		252.7
22a	183.1		540.1		260.0	22a	179.1		519.0		248.5
23a	180.2		514.7		251.6	23a	197.0		541.9		266.2
24a	176.8		521.1		259.9	24a	182.2		522.0		254.1
25a	184.7		507.8		267.7	25a	182.4		540.0		248.6
1b	191.5		526.0		261.7	1b	181.0		498.5		250.4
2b	194.0		505.0		266.7	2b	192.6		512.0		269.8
3b	188.4		515.9		251.3	3b	189.7		517.3		250.9
4b	199.2		512.0		262.6	4b	178.0		545.3		249.1
5b	183.8		507.1		266.0	5b	196.2		527.3		254.5
6b	178.1		526.5		272.3	6b	179.2		533.3		262.2
7b	196.6		515.7		266.0	7b	192.1		517.0		262.4
8b	192.1		516.2		253.6	8b	186.1		516.0		257.0
9b	189.2		512.8		253.0	9b	182.9		539.6		249.2
10b	195.8		499.6		272.9	10b	179.5		544.9		260.0
11b	185.2		516.6		270.6	11b	188.0		541.9		251.9
12b	195.1		525.2		267.7	12b	187.6		545.7		271.0
13b	177.1		548.8		256.0	13b	177.8		529.0		273.0
14b	184.2		530.6		259.9	14b	179.2		521.5		256.2
15b	189.2		518.0		267.9	15b	179.5		519.5		258.0
16b	182.2		537.0		266.0	16b	185.0		527.9		267.5
17b	191.3		503.9		272.7	17b	178.8		543.8		249.1
18b	195.6		542.8		257.0	18b	177.5		529.8		248.4
19b	195.0		507.4		252.2	19b	183.5		500.7		262.0
20b	192.8		536.3		252.0	20b	193.4		535.6		250.4
21b	191.3		505.3		266.9	21b	189.9		547.9		252.0
22b	181.0		539.3		262.6	22b	193.1		530.2		250.6
23b	191.9		516.3		266.5	23b	187.0		537.2		266.3
24b	176.9		543.9		268.3	24b	195.6		511.8		260.6
25b	177.0		510.0		256.8	25b	179.8		536.1		271.7
	2						2				

Date	3-Oct					**Date**	17-Oct				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	195.5		525.3		269.8	**1a**	184.1		538.2		250.2
2a	196.0		525.0		257.4	**2a**	194.1		498.7		261.1
3a	189.1		501.6		263.8	**3a**	194.3		505.4		263.8
4a	181.4		506.9		258.0	**4a**	179.5		540.0		263.0
5a	188.4		532.9		260.2	**5a**	196.5		538.3		254.7
6a	178.6		518.8		268.1	**6a**	199.8		544.2		257.9
7a	197.5		511.0		269.6	**7a**	195.4		545.8		257.7
8a	183.0		536.3		264.9	**8a**	194.4		499.4		249.6
9a	183.8		528.5		261.0	**9a**	194.7		545.8		253.3
10a	189.7		506.9		269.4	**10a**	186.1		525.7		271.0
11a	185.2		508.7		270.3	**11a**	194.7		524.1		269.0
12a	186.0		519.7		261.3	**12a**	182.5		503.6		256.4
13a	177.1		512.9		253.9	**13a**	182.5		527.4		271.1
14a	192.6		521.2		256.6	**14a**	195.1		505.3		247.0
15a	179.7		530.4		256.8	**15a**	188.0		545.0		262.9
16a	184.0		518.0		256.5	**16a**	192.5		502.3		256.5
17a	181.9		524.3		252.4	**17a**	197.0		542.8		264.4
18a	180.0		502.0		252.4	**18a**	181.4		531.1		266.8
19a	179.4		540.2		253.4	**19a**	181.5		548.0		256.2
20a	196.4		531.6		264.2	**20a**	186.7		515.4		271.4
21a	179.6		515.6		250.5	**21a**	181.5		511.2		266.0
22a	188.9		543.2		253.8	**22a**	178.2		513.4		263.4
23a	196.6		518.7		254.7	**23a**	186.3		548.4		249.0
24a	193.3		542.3		258.1	**24a**	178.0		537.5		251.4
25a	182.8		512.5		266.0	**25a**	190.3		525.3		259.0
1b	192.0		516.2		249.5	**1b**	197.0		512.1		271.0
2b	197.5		538.5		253.4	**2b**	192.5		545.4		268.8
3b	186.2		543.2		257.0	**3b**	196.5		542.0		272.8
4b	179.2		525.2		266.6	**4b**	195.9		546.9		267.3
5b	181.2		540.2		252.2	**5b**	179.6		508.5		260.7
6b	189.6		522.8		268.9	**6b**	199.2		548.1		272.4
7b	185.7		530.5		271.5	**7b**	199.1		537.5		264.0
8b	183.5		505.3		254.0	**8b**	195.7		547.0		263.0
9b	183.0		530.4		251.3	**9b**	177.7		548.6		256.0
10b	176.5		509.8		268.8	**10b**	178.5		543.9		262.8
11b	182.4		534.2		252.5	**11b**	196.7		548.4		256.3
12b	195.0		519.9		268.7	**12b**	176.8		544.1		266.5
13b	196.0		507.2		263.0	**13b**	186.0		541.8		252.5
14b	199.4		506.1		260.3	**14b**	196.2		505.3		270.1
15b	188.1		500.3		260.8	**15b**	179.4		518.4		247.3
16b	182.1		517.0		272.0	**16b**	191.7		536.2		267.6
17b	182.1		533.9		268.3	**17b**	199.3		526.0		247.4
18b	184.4		498.3		270.0	**18b**	178.8		521.0		265.6
19b	187.7		512.6		260.4	**19b**	190.1		511.0		270.6
20b	187.7		536.6		251.3	**20b**	184.3		536.7		272.6
21b	180.1		528.7		255.4	**21b**	197.1		503.9		269.4
22b	191.8		520.7		247.8	**22b**	186.0		541.4		248.6
23b	189.0		539.6		265.8	**23b**	194.9		502.2		250.4
24b	190.1		530.7		247.2	**24b**	177.5		514.8		248.8
25b	176.4		504.9		269.8	**25b**	179.8		510.0		269.5
	1						1				

Date	24-Oct					Date	1-Nov				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	176.4		513.8		253.7	1a	183.9		531.1		253.5
2a	186.7		504.5		266.5	2a	178.5		517.0		254.0
3a	194.7		515.4		263.5	3a	190.2		517.6		265.5
4a	178.5		506.5		265.7	4a	187.3		539.1		247.2
5a	192.4		514.3		267.6	5a	189.1		541.3		247.2
6a	181.7		541.6		250.8	6a	181.5		547.9		268.9
7a	178.2		500.7		260.8	7a	184.9		510.1		251.6
8a	194.8		527.3		255.2	8a	177.3		520.0		256.5
9a	199.2		544.4		272.0	9a	185.0		515.9		265.0
10a	188.0		543.9		264.7	10a	182.3		540.1		248.7
11a	199.6		526.7		267.0	11a	189.3		506.2		266.1
12a	199.1		542.4		269.8	12a	184.1		499.0		272.8
13a	186.5		526.8		261.1	13a	189.0		522.0		265.3
14a	195.8		534.0		266.2	14a	198.9		517.8		249.3
15a	177.2		541.0		252.7	15a	176.1		509.5		248.9
16a	187.4		498.3		248.3	16a	193.5		536.1		267.4
17a	187.2		545.1		258.4	17a	189.0		509.7		254.1
18a	179.1		534.7		271.0	18a	178.6		540.0		260.4
19a	197.6		515.0		253.4	19a	195.1		544.3		272.0
20a	178.8		519.7		253.6	20a	179.9		545.7		254.1
21a	196.4		521.8		262.6	21a	191.0		505.2		262.1
22a	195.7		533.1		272.1	22a	187.4		511.7		252.0
23a	196.2		540.6		268.1	23a	185.0		500.8		271.7
24a	189.8		522.8		254.6	24a	193.7		546.1		264.0
25a	195.8		530.2		269.6	25a	188.2		522.7		247.9
1b	180.3		527.3		258.3	1b	196.9		503.9		257.4
2b	187.4		543.1		261.8	2b	185.6		505.6		249.6
3b	180.6		525.2		263.5	3b	195.1		541.1		259.0
4b	178.9		548.8		258.8	4b	191.2		529.1		272.0
5b	193.8		532.1		271.0	5b	199.5		498.3		250.0
6b	187.8		516.7		260.7	6b	196.5		547.7		265.9
7b	178.6		543.7		247.0	7b	181.5		544.0		259.4
8b	180.0		536.3		250.3	8b	185.2		505.4		271.6
9b	191.8		541.0		265.0	9b	187.4		522.7		254.1
10b	176.1		520.2		272.0	10b	191.6		518.3		265.3
11b	192.7		546.6		264.2	11b	186.3		505.3		258.2
12b	193.5		516.4		257.3	12b	176.2		536.4		261.3
13b	188.3		503.2		256.0	13b	178.5		525.2		263.0
14b	183.0		543.0		268.8	14b	177.0		522.8		251.4
15b	190.0		518.0		272.5	15b	190.4		511.8		263.4
16b	199.4		510.0		272.4	16b	183.4		531.8		268.1
17b	182.0		536.8		264.1	17b	183.7		548.7		262.5
18b	181.6		526.8		251.5	18b	199.8		542.7		255.2
19b	192.6		505.5		262.3	19b	199.3		518.0		255.1
20b	187.9		503.0		261.2	20b	177.2		517.8		247.0
21b	182.5		531.1		259.8	21b	182.6		532.1		270.0
22b	178.2		523.6		248.8	22b	181.1		518.0		259.6
23b	184.1		510.9		249.9	23b	191.0		515.9		249.0
24b	183.2		548.0		261.3	24b	185.0		518.6		269.6
25b	197.0		507.0		250.0	25b	196.7		531.1		268.4
	0						0				

Date	7-Nov					Date	14-Nov				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	198.4		502.6		270.5	1a	181.8		507.3		251.0
2a	184.0		544.8		265.0	2a	193.0		548.0		248.0
3a	185.1		513.7		250.9	3a	179.2		527.9		268.5
4a	184.1		503.2		257.6	4a	182.9		502.3		257.9
5a	196.6		523.7		254.9	5a	188.8		543.7		256.0
6a	187.5		520.5		256.9	6a	184.7		541.4		261.0
7a	191.4		532.0		257.3	7a	193.5		511.7		267.9
8a	182.0		546.6		254.4	8a	180.5		524.6		265.6
9a	195.2		500.7		259.1	9a	192.3		544.0		248.7
10a	182.0		543.5		255.4	10a	188.9		505.1		269.0
11a	180.8		503.7		269.0	11a	184.7		544.9		264.1
12a	179.5		535.3		252.4	12a	183.9		536.0		248.0
13a	181.0		537.0		255.4	13a	178.6		514.0		266.3
14a	197.2		512.9		269.0	14a	190.7		521.0		270.0
15a	183.4		537.5		272.2	15a	189.6		509.8		271.6
16a	187.4		547.0		265.5	16a	181.1		514.8		272.0
17a	199.7		503.0		264.8	17a	189.0		504.9		267.9
18a	182.6		517.9		264.2	18a	198.5		508.6		250.3
19a	195.8		514.6		268.8	19a	199.0		531.0		272.3
20a	176.1		528.0		264.6	20a	193.0		508.2		251.4
21a	199.9		511.0		272.4	21a	195.9		536.0		259.1
22a	180.5		514.0		264.8	22a	183.4		503.0		252.8
23a	198.5		534.8		268.4	23a	178.4		502.6		265.4
24a	184.0		541.4		267.0	24a	176.5		506.8		252.3
25a	192.4		510.8		250.3	25a	193.6		545.9		252.5
1b	176.7		546.0		256.6	1b	199.9		537.2		268.1
2b	194.3		541.8		258.0	2b	192.7		518.4		262.5
3b	188.5		509.9		267.0	3b	196.7		534.9		262.9
4b	193.5		520.3		254.7	4b	190.2		535.3		269.8
5b	176.4		503.1		271.7	5b	183.3		533.0		265.6
6b	199.0		501.8		249.3	6b	199.3		542.7		272.6
7b	192.3		510.4		251.8	7b	197.7		538.6		265.1
8b	181.2		524.9		265.1	8b	197.1		544.3		250.8
9b	185.3		519.0		254.4	9b	179.0		547.5		262.5
10b	200.0		530.3		250.2	10b	182.6		513.9		259.5
11b	176.6		502.7		267.9	11b	195.9		506.4		267.5
12b	187.6		532.2		269.0	12b	192.9		504.5		270.9
13b	195.6		505.0		259.8	13b	195.9		533.2		261.2
14b	198.8		546.8		260.4	14b	185.4		548.9		255.3
15b	194.0		510.6		270.5	15b	176.7		537.0		264.7
16b	182.2		503.1		265.3	16b	178.3		527.8		271.8
17b	187.3		529.6		262.5	17b	194.2		510.6		258.6
18b	182.5		503.4		255.2	18b	194.1		498.1		251.9
19b	187.1		510.3		259.6	19b	187.6		504.0		272.1
20b	181.4		512.5		272.0	20b	189.6		510.0		256.9
21b	191.0		534.8		270.0	21b	188.0		518.6		253.6
22b	189.5		528.7		269.5	22b	192.7		530.5		251.0
23b	179.4		522.0		266.7	23b	195.7		532.8		252.3
24b	190.9		503.7		249.5	24b	181.6		514.1		264.9
25b	197.0		501.1		256.0	25b	192.9		521.7		253.8
	0						2				

Date	21-Nov					Date	5-Dec				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	195.0		509.1		248.1	1a	189.0		533.1		266.3
2a	197.2		544.3		266.6	2a	180.5		502.4		264.9
3a	176.2		538.0		265.7	3a	199.8		507.8		261.3
4a	189.2		525.7		264.0	4a	190.6		537.3		271.0
5a	192.0		547.5		252.3	5a	196.8		545.4		267.0
6a	196.9		537.8		267.2	6a	194.6		539.8		258.5
7a	186.5		501.8		267.2	7a	180.6		528.4		251.1
8a	199.3		542.8		265.6	8a	177.8		513.0		251.3
9a	197.4		498.6		267.4	9a	188.9		520.1		270.9
10a	186.0		509.3		260.3	10a	195.5		546.0		270.3
11a	191.5		530.5		248.0	11a	188.6		512.9		267.6
12a	176.0		513.9		270.5	12a	176.3		498.9		256.3
13a	184.6		503.2		254.4	13a	199.6		521.6		250.0
14a	181.0		531.6		248.7	14a	179.6		537.7		267.7
15a	195.8		498.4		250.5	15a	199.8		533.3		268.6
16a	189.9		513.5		256.8	16a	194.1		524.8		263.2
17a	186.0		499.3		253.4	17a	183.2		513.4		255.6
18a	189.2		519.2		259.3	18a	197.2		507.2		254.6
19a	184.2		530.7		262.5	19a	186.4		520.0		262.0
20a	191.1		538.3		272.7	20a	179.4		507.9		253.8
21a	191.7		515.0		265.3	21a	193.6		509.0		257.0
22a	189.0		546.5		271.0	22a	177.9		532.9		270.4
23a	193.6		525.7		262.8	23a	189.1		501.4		259.3
24a	196.3		518.2		248.2	24a	191.2		529.9		259.4
25a	178.6		547.6		264.2	25a	184.0		534.8		260.5
1b	196.0		548.4		263.1	1b	190.4		510.8		252.9
2b	185.8		531.9		259.9	2b	184.7		512.9		247.5
3b	186.8		546.0		264.0	3b	189.9		517.7		255.4
4b	188.8		531.1		257.3	4b	182.7		518.4		264.0
5b	189.4		536.8		261.0	5b	191.0		507.7		264.9
6b	199.0		534.4		251.8	6b	193.4		541.4		266.5
7b	178.5		504.0		248.7	7b	193.5		528.7		258.1
8b	176.6		533.6		272.2	8b	196.7		541.8		270.0
9b	198.4		499.4		269.9	9b	186.2		532.9		258.8
10b	183.3		506.7		271.8	10b	183.4		523.7		268.5
11b	182.4		548.9		250.0	11b	176.8		542.6		267.0
12b	179.5		525.6		268.0	12b	181.0		520.5		265.6
13b	184.3		518.9		266.9	13b	184.5		509.0		260.7
14b	198.0		502.5		254.8	14b	186.1		515.9		250.8
15b	176.2		498.4		263.0	15b	178.3		521.8		254.2
16b	185.7		514.6		260.9	16b	179.9		530.0		249.4
17b	191.0		533.7		272.4	17b	187.2		516.6		271.2
18b	177.0		539.1		268.5	18b	191.0		500.1		259.5
19b	180.1		503.7		248.6	19b	184.8		501.7		250.0
20b	197.5		542.3		265.1	20b	189.3		507.0		252.8
21b	177.2		497.0		271.7	21b	182.0		513.3		262.3
22b	191.0		519.0		263.3	22b	195.8		501.9		261.6
23b	186.7		509.7		252.8	23b	176.7		546.4		258.6
24b	194.8		524.1		262.3	24b	180.4		519.1		258.2
25b	184.1		498.1		260.7	25b	176.2		519.3		260.8
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Date	6-Dec					Date	12-Dec				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	183.5		535.6		250.3	1a	180.9		516.2		268.0
2a	184.0		503.9		254.4	2a	189.2		541.1		268.8
3a	190.9		548.7		270.3	3a	183.1		533.9		261.1
4a	177.4		501.8		272.3	4a	185.3		523.3		260.0
5a	199.0		533.5		251.7	5a	184.9		511.6		267.7
6a	177.0		516.2		262.2	6a	186.0		543.0		249.5
7a	187.6		520.8		263.5	7a	192.3		503.9		262.1
8a	188.5		532.0		270.0	8a	178.5		536.5		259.4
9a	197.0		527.8		249.6	9a	179.5		538.4		251.4
10a	178.4		506.8		253.0	10a	199.2		531.2		248.9
11a	197.3		539.0		260.1	11a	198.2		518.5		256.0
12a	183.4		543.0		251.9	12a	195.1		524.0		260.0
13a	193.0		533.6		248.4	13a	187.8		546.2		269.1
14a	197.8		533.1		253.7	14a	184.3		510.1		268.6
15a	184.3		513.4		247.5	15a	192.9		511.7		258.0
16a	192.9		525.1		257.3	16a	193.0		511.0		271.0
17a	180.1		516.3		251.4	17a	191.7		501.6		252.0
18a	187.6		533.0		249.0	18a	197.2		500.3		271.5
19a	176.3		517.2		261.5	19a	193.2		509.0		268.7
20a	198.0		549.0		270.6	20a	188.2		523.8		254.6
21a	193.1		539.1		248.3	21a	180.6		510.3		257.6
22a	195.2		508.4		253.9	22a	190.4		518.0		250.6
23a	187.5		520.3		272.0	23a	190.7		533.0		249.1
24a	185.8		532.1		270.2	24a	185.5		535.3		270.3
25a	176.5		511.0		254.7	25a	193.2		522.0		264.4
1b	190.7		519.6		257.9	1b	189.0		521.1		255.5
2b	187.0		505.2		260.6	2b	184.3		546.9		254.3
3b	191.1		531.7		247.4	3b	192.4		511.0		271.0
4b	194.1		508.7		267.4	4b	183.8		499.7		253.0
5b	180.3		503.4		265.5	5b	198.3		524.1		257.7
6b	181.6		526.2		266.5	6b	199.9		520.7		261.9
7b	178.2		518.0		262.2	7b	184.7		525.8		255.6
8b	190.2		535.1		270.8	8b	197.9		528.0		252.6
9b	183.3		500.5		257.2	9b	188.0		520.7		250.9
10b	177.1		525.4		255.3	10b	189.9		539.0		261.5
11b	187.4		519.1		270.6	11b	186.6		508.8		248.5
12b	194.2		543.8		269.4	12b	195.4		545.0		255.9
13b	193.7		522.9		260.6	13b	184.1		505.7		260.0
14b	190.8		501.0		271.8	14b	186.0		539.7		254.7
15b	187.5		522.8		248.0	15b	178.0		497.6		258.8
16b	177.5		545.5		267.1	16b	197.5		516.3		267.3
17b	176.3		522.2		262.0	17b	199.0		519.1		252.9
18b	186.9		535.9		256.9	18b	179.4		510.3		264.0
19b	176.8		532.8		249.6	19b	182.0		541.6		259.0
20b	198.9		506.4		272.8	20b	185.7		538.0		259.1
21b	177.0		499.0		248.9	21b	191.5		516.2		262.0
22b	199.9		539.6		259.6	22b	192.7		534.4		266.6
23b	185.7		510.5		251.3	23b	176.0		515.8		259.0
24b	199.7		502.9		254.8	24b	183.0		543.6		263.3
25b	190.0		543.1		252.0	25b	184.6		512.9		266.9
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Date	13-Dec					**Date**	19-Dec				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	185.9		531.0		262.6	**1a**	187.0		512.4		253.9
2a	194.2		520.0		254.9	**2a**	195.3		504.0		263.0
3a	182.0		503.0		261.6	**3a**	195.8		532.0		263.8
4a	184.0		542.9		260.2	**4a**	182.0		508.5		266.7
5a	196.4		504.8		267.0	**5a**	190.6		503.3		249.2
6a	190.0		524.4		256.0	**6a**	188.2		523.3		255.7
7a	190.3		536.6		270.1	**7a**	197.6		537.5		265.6
8a	192.6		501.6		268.4	**8a**	194.7		527.1		266.4
9a	191.1		498.7		257.7	**9a**	193.9		522.6		265.3
10a	196.7		498.6		269.8	**10a**	184.6		530.3		256.0
11a	186.3		498.7		257.0	**11a**	182.4		514.9		255.9
12a	183.0		507.6		253.4	**12a**	176.1		527.2		252.0
13a	194.3		505.4		270.3	**13a**	178.0		546.1		260.6
14a	179.5		543.5		262.3	**14a**	191.9		523.1		266.2
15a	197.2		518.5		265.9	**15a**	196.4		543.9		265.9
16a	196.0		548.1		252.7	**16a**	197.8		523.3		251.7
17a	184.1		532.3		270.0	**17a**	184.0		501.4		268.0
18a	183.6		540.0		254.5	**18a**	189.7		520.9		268.5
19a	189.1		515.0		255.2	**19a**	180.0		520.5		248.6
20a	190.4		510.7		251.5	**20a**	177.3		504.7		265.3
21a	181.2		548.7		250.6	**21a**	183.5		512.2		256.4
22a	193.3		540.4		263.3	**22a**	176.2		542.1		256.1
23a	197.0		520.6		261.1	**23a**	189.2		538.1		260.0
24a	185.4		544.2		262.7	**24a**	186.1		524.0		250.4
25a	176.3		527.5		270.4	**25a**	176.7		548.7		251.6
1b	190.7		542.0		253.1	**1b**	197.5		523.2		250.0
2b	197.4		514.9		251.2	**2b**	199.7		505.2		250.4
3b	188.7		531.4		260.2	**3b**	179.7		514.0		270.0
4b	179.4		512.0		260.4	**4b**	176.8		529.6		262.1
5b	192.8		514.5		268.4	**5b**	177.4		508.1		272.3
6b	185.9		545.8		265.1	**6b**	182.9		532.7		255.9
7b	191.3		546.9		259.0	**7b**	179.5		537.2		270.2
8b	178.7		500.8		260.0	**8b**	198.2		504.7		252.0
9b	181.1		514.9		269.5	**9b**	177.9		518.4		267.9
10b	193.0		520.2		272.4	**10b**	180.8		538.7		264.4
11b	195.0		515.6		269.7	**11b**	197.4		541.6		257.7
12b	183.1		523.8		264.4	**12b**	196.4		503.7		251.0
13b	180.4		528.0		259.1	**13b**	199.8		510.4		262.5
14b	193.0		513.1		253.2	**14b**	188.5		520.6		270.8
15b	187.0		528.1		264.0	**15b**	198.4		521.0		257.5
16b	199.0		529.5		255.2	**16b**	183.1		514.7		261.0
17b	179.3		521.9		269.4	**17b**	178.6		542.1		256.8
18b	185.8		519.7		273.0	**18b**	182.7		517.2		264.9
19b	191.9		524.3		262.8	**19b**	198.9		529.3		263.4
20b	178.2		544.9		248.4	**20b**	195.5		528.5		262.0
21b	185.6		539.2		260.9	**21b**	181.7		501.4		264.7
22b	194.8		511.6		270.0	**22b**	188.4		523.6		263.1
23b	188.2		517.1		271.5	**23b**	197.1		510.8		272.3
24b	181.2		537.9		263.3	**24b**	177.6		508.2		266.0
25b	192.8		503.3		267.7	**25b**	178.0		519.4		269.8
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Date	2-Jan					Date	9-Jan				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	190.7		548.7		248.4	1a	196.6		526.5		248.9
2a	191.6		500.0		256.0	2a	193.5		497.7		252.0
3a	181.1		519.4		251.0	3a	187.1		534.0		256.2
4a	195.2		514.2		256.7	4a	178.9		528.9		270.4
5a	183.2		509.3		251.8	5a	192.0		508.0		249.3
6a	192.0		500.0		253.4	6a	191.9		507.6		255.4
7a	190.0		514.7		251.6	7a	195.6		529.6		251.5
8a	184.3		511.5		251.4	8a	196.4		520.1		253.2
9a	181.0		514.3		254.5	9a	193.6		526.0		252.0
10a	192.6		537.0		252.7	10a	176.9		506.1		252.4
11a	184.2		528.2		249.2	11a	191.2		538.8		261.0
12a	191.7		545.0		253.6	12a	192.7		518.8		251.0
13a	186.2		516.5		248.8	13a	187.2		519.6		261.7
14a	190.4		520.0		268.8	14a	190.4		516.7		265.0
15a	189.3		532.1		266.5	15a	197.0		542.5		253.4
16a	198.5		514.5		271.6	16a	177.1		534.1		248.9
17a	192.0		544.9		259.8	17a	179.0		514.0		256.3
18a	199.1		542.8		250.1	18a	194.8		516.3		271.3
19a	198.5		547.9		272.8	19a	181.9		514.2		269.1
20a	178.1		544.4		260.6	20a	179.8		513.3		268.2
21a	182.9		541.7		248.9	21a	185.0		539.9		268.2
22a	196.2		500.4		255.2	22a	194.9		545.5		249.1
23a	195.9		542.9		271.4	23a	195.1		531.8		255.6
24a	190.7		540.7		263.1	24a	179.9		540.8		251.9
25a	179.8		527.1		262.0	25a	179.0		521.0		265.1
1b	180.5		505.7		249.4	1b	193.9		500.5		260.7
2b	180.2		522.6		267.8	2b	196.6		521.3		269.7
3b	200.0		504.9		253.2	3b	185.4		525.4		257.0
4b	196.6		533.8		253.7	4b	193.5		545.6		272.3
5b	195.6		537.5		255.8	5b	180.4		528.7		263.0
6b	176.7		498.8		263.7	6b	196.6		502.3		268.5
7b	196.4		539.8		254.2	7b	185.4		527.6		252.4
8b	195.2		525.2		271.9	8b	195.1		531.5		248.2
9b	197.0		545.2		263.9	9b	184.0		541.4		249.0
10b	193.6		508.6		262.6	10b	194.1		543.7		272.0
11b	183.4		527.1		263.0	11b	176.8		537.0		267.3
12b	197.9		516.0		253.0	12b	197.7		530.7		266.2
13b	178.2		529.2		250.6	13b	195.9		521.2		263.2
14b	187.2		504.5		264.4	14b	182.1		525.5		257.7
15b	195.0		549.0		249.6	15b	185.0		504.4		252.4
16b	184.9		516.2		269.0	16b	194.5		516.0		262.6
17b	190.0		533.0		265.3	17b	181.5		534.5		258.7
18b	190.2		540.0		271.4	18b	189.2		502.4		259.8
19b	197.7		526.0		271.7	19b	181.4		528.3		254.2
20b	196.0		546.6		264.0	20b	178.8		523.7		248.6
21b	184.3		529.8		269.1	21b	184.5		508.7		262.5
22b	191.1		516.8		257.3	22b	193.6		536.2		260.5
23b	182.2		533.0		269.9	23b	192.4		514.3		262.9
24b	184.8		537.2		269.7	24b	198.4		548.4		247.6
25b	190.3		521.3		247.0	25b	177.0		515.2		258.0
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Date	16-Jan					Date	23-Jan				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	176.6		532.0		249.0	1a	192.5		504.3		270.6
2a	189.4		510.5		262.7	2a	189.7		509.2		247.1
3a	196.8		501.3		266.2	3a	194.2		518.2		265.0
4a	187.0		500.7		261.8	4a	195.3		524.4		254.8
5a	182.6		504.2		260.9	5a	176.7		546.7		265.8
6a	180.2		519.2		247.1	6a	192.9		498.3		247.2
7a	189.4		520.3		271.3	7a	191.8		508.7		251.5
8a	189.0		525.4		262.0	8a	190.3		523.1		255.6
9a	186.2		499.6		262.1	9a	176.9		518.3		249.9
10a	178.7		524.1		263.5	10a	199.5		522.6		249.1
11a	190.2		524.2		270.4	11a	183.3		537.3		253.0
12a	176.1		517.2		258.9	12a	193.0		548.6		264.3
13a	180.9		527.3		265.5	13a	181.3		503.9		247.4
14a	181.0		532.0		254.9	14a	180.5		542.8		253.0
15a	176.1		532.6		251.8	15a	197.5		538.7		260.3
16a	186.9		533.4		267.6	16a	183.2		504.2		256.7
17a	177.3		502.3		267.5	17a	195.6		529.9		248.5
18a	191.2		518.4		254.4	18a	199.0		540.5		247.6
19a	186.8		532.2		248.3	19a	189.0		534.0		269.2
20a	182.6		523.7		252.4	20a	185.3		510.6		266.1
21a	196.0		528.3		267.2	21a	184.0		520.9		260.6
22a	195.2		539.4		250.7	22a	183.3		518.3		256.2
23a	192.2		514.2		255.0	23a	190.0		515.0		260.1
24a	198.9		503.9		269.4	24a	189.0		505.5		250.3
25a	183.3		503.7		270.9	25a	179.6		502.0		272.8
1b	191.0		503.0		262.0	1b	180.1		532.9		271.2
2b	191.8		517.6		248.7	2b	197.8		522.3		250.7
3b	189.5		515.0		255.1	3b	178.6		530.3		250.8
4b	198.4		539.8		251.5	4b	188.6		499.7		250.8
5b	187.0		508.0		259.1	5b	186.1		520.7		272.0
6b	186.3		501.0		249.7	6b	193.1		522.2		270.4
7b	199.1		537.8		257.1	7b	195.1		534.6		249.9
8b	199.4		509.0		271.4	8b	195.7		514.0		247.2
9b	197.8		543.2		272.5	9b	199.6		539.2		272.5
10b	197.5		510.1		255.8	10b	177.6		547.0		267.6
11b	178.0		535.3		262.4	11b	177.0		501.0		270.1
12b	179.9		524.7		256.0	12b	189.1		537.0		269.0
13b	191.0		538.0		263.4	13b	179.7		541.1		264.3
14b	183.1		538.0		268.9	14b	177.0		525.8		255.6
15b	197.2		541.3		264.4	15b	177.5		522.4		270.8
16b	178.3		521.8		266.6	16b	178.5		548.9		271.1
17b	192.5		536.3		257.0	17b	191.0		523.9		251.6
18b	196.3		509.0		260.9	18b	186.1		504.0		271.8
19b	194.2		535.0		268.4	19b	185.4		523.6		272.3
20b	189.0		507.1		265.3	20b	185.7		540.8		251.3
21b	190.0		531.0		257.7	21b	194.4		544.1		268.3
22b	179.0		500.3		258.3	22b	197.0		511.8		252.2
23b	197.2		507.3		267.6	23b	185.0		544.9		258.6
24b	184.0		525.7		254.1	24b	181.1		515.0		255.7
25b	184.3		518.4		254.3	25b	195.3		503.2		257.1
	2						1				

Date	30-Jan					Date	6-Feb				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	191.6		507.3		256.8	1a	186.3		544.3		256.8
2a	193.8		511.2		259.0	2a	190.0		504.1		247.6
3a	190.8		514.3		249.4	3a	195.0		537.1		247.1
4a	186.7		522.0		264.7	4a	187.0		545.6		254.1
5a	185.7		543.2		266.0	5a	193.6		501.4		269.1
6a	185.0		543.6		247.4	6a	193.5		497.2		272.5
7a	180.1		530.8		247.5	7a	196.9		528.4		259.3
8a	180.0		512.5		261.6	8a	196.8		520.8		266.8
9a	177.5		504.2		265.0	9a	199.7		535.3		256.2
10a	188.9		522.9		263.4	10a	178.5		516.9		257.3
11a	197.9		497.8		271.0	11a	192.8		518.8		247.8
12a	190.9		502.8		256.1	12a	176.9		512.5		273.0
13a	177.8		536.0		270.4	13a	182.1		500.6		265.7
14a	194.1		541.4		260.9	14a	177.8		503.2		255.3
15a	177.3		516.9		253.5	15a	195.1		538.3		263.0
16a	189.9		518.8		250.0	16a	182.4		518.1		260.7
17a	182.2		530.2		255.9	17a	193.6		543.5		266.0
18a	181.3		508.0		266.1	18a	195.1		547.3		270.4
19a	178.5		522.6		270.6	19a	185.2		511.5		261.6
20a	193.2		509.2		261.8	20a	177.3		546.0		252.2
21a	178.3		537.2		256.9	21a	197.5		534.5		261.6
22a	186.7		533.9		261.7	22a	184.5		529.4		250.0
23a	184.0		535.4		261.8	23a	178.0		514.7		268.5
24a	188.6		513.6		251.9	24a	184.6		523.6		247.5
25a	178.7		534.8		258.0	25a	179.5		517.7		251.7
1b	193.5		499.0		271.2	1b	192.4		527.5		257.0
2b	189.4		523.4		266.1	2b	196.1		504.6		248.0
3b	190.7		529.6		272.9	3b	186.0		538.6		265.9
4b	191.4		497.8		262.4	4b	181.2		537.0		257.4
5b	186.9		502.0		258.0	5b	193.4		517.9		248.2
6b	177.6		545.9		272.1	6b	189.2		507.1		255.0
7b	176.0		541.4		265.8	7b	184.1		547.4		248.0
8b	178.8		534.0		269.9	8b	181.6		500.6		256.9
9b	181.0		529.7		270.3	9b	186.1		529.7		264.5
10b	197.6		506.3		261.0	10b	182.4		508.4		268.8
11b	190.0		530.4		247.2	11b	179.7		512.6		248.0
12b	197.5		500.0		256.1	12b	198.7		503.3		247.2
13b	194.1		548.6		251.5	13b	176.2		540.3		254.4
14b	193.5		547.5		264.1	14b	187.5		519.0		254.6
15b	192.5		531.8		247.6	15b	197.9		530.7		247.9
16b	198.7		529.0		254.0	16b	193.8		527.0		254.3
17b	191.4		547.4		253.1	17b	181.8		527.9		267.1
18b	196.4		501.7		255.0	18b	191.7		541.5		270.3
19b	188.4		533.5		249.6	19b	182.4		502.0		250.4
20b	192.0		527.5		252.4	20b	184.0		537.8		267.7
21b	187.7		529.3		254.5	21b	178.1		523.9		251.7
22b	185.1		511.5		262.3	22b	196.6		525.6		268.5
23b	199.9		525.4		247.5	23b	190.0		528.2		258.1
24b	196.6		544.0		272.6	24b	187.6		525.0		270.9
25b	181.1		531.5		255.2	25b	184.2		517.6		273.0
	1						0				

Date	7-Feb					Date	13-Feb				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	186.7		513.7		248.0	1a	176.2		520.1		267.0
2a	190.1		514.7		266.8	2a	199.7		497.3		256.1
3a	183.4		543.0		267.0	3a	185.1		512.4		247.7
4a	187.8		546.6		262.0	4a	180.9		531.2		262.2
5a	177.6		526.1		249.0	5a	180.9		538.1		254.3
6a	178.6		510.2		264.8	6a	197.8		544.0		262.0
7a	195.1		528.9		258.4	7a	177.7		497.9		263.2
8a	198.7		524.4		261.7	8a	177.7		546.3		251.9
9a	182.0		520.6		256.0	9a	191.2		511.3		265.8
10a	181.9		543.4		251.0	10a	194.3		517.1		268.1
11a	197.4		516.3		268.8	11a	196.8		499.7		262.9
12a	197.0		517.1		264.1	12a	177.4		499.1		264.6
13a	197.7		502.2		259.1	13a	180.0		509.6		254.2
14a	176.4		516.7		248.4	14a	193.1		534.5		258.6
15a	186.8		514.2		250.4	15a	185.9		497.2		267.5
16a	191.4		530.4		266.8	16a	184.0		513.1		257.0
17a	194.1		534.6		269.6	17a	191.8		535.2		256.9
18a	182.1		532.9		253.1	18a	194.7		544.6		247.9
19a	184.5		544.1		249.5	19a	196.8		500.7		258.0
20a	178.5		530.6		251.3	20a	194.0		502.5		249.6
21a	187.1		515.7		271.6	21a	182.0		511.0		265.4
22a	197.6		544.9		250.1	22a	177.0		507.9		262.3
23a	176.6		540.3		260.6	23a	199.2		508.1		250.3
24a	197.0		499.1		251.1	24a	188.3		522.8		254.5
25a	187.1		523.6		272.2	25a	179.7		537.3		270.6
1b	183.5		543.7		267.8	1b	190.1		503.0		262.3
2b	186.1		504.5		256.0	2b	189.0		533.8		265.1
3b	179.8		511.9		254.5	3b	183.0		510.4		259.5
4b	184.8		517.5		264.1	4b	185.4		507.4		271.8
5b	193.7		532.9		269.3	5b	194.0		507.9		268.1
6b	177.8		541.0		270.5	6b	178.9		511.9		260.4
7b	197.0		498.9		249.0	7b	181.6		501.2		258.6
8b	176.5		541.4		262.7	8b	187.6		548.1		259.8
9b	193.8		499.8		254.2	9b	193.4		526.0		253.0
10b	192.6		517.6		255.0	10b	198.0		538.7		271.4
11b	185.2		510.5		262.0	11b	192.4		519.9		253.4
12b	181.1		505.9		259.5	12b	199.2		525.3		262.0
13b	179.8		504.2		253.7	13b	191.5		504.4		249.0
14b	179.7		517.0		258.0	14b	183.3		528.0		264.7
15b	188.6		518.5		248.9	15b	178.3		501.0		248.2
16b	183.5		503.9		271.6	16b	193.8		512.5		258.4
17b	197.8		511.0		249.1	17b	182.0		531.2		252.4
18b	199.4		506.2		258.4	18b	181.8		504.1		269.7
19b	184.4		543.5		265.2	19b	195.3		529.0		268.0
20b	189.0		538.2		254.3	20b	178.9		505.6		260.4
21b	192.7		516.8		261.1	21b	190.8		520.4		249.6
22b	187.3		513.9		261.8	22b	182.0		528.7		252.6
23b	193.6		504.1		249.7	23b	192.0		504.8		264.3
24b	195.7		500.1		266.3	24b	188.4		538.3		257.0
25b	180.0		545.1		263.9	25b	193.9		499.2		259.9
	2						2				

Date	20-Feb					Date	21-Feb				
Temp	Coil		Base Internal		Radiant	Temp	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	Expected	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	Qty	30 secs		60 secs		120 secs
1a	176.6		548.9		254.6	1a	195.8		498.7		256.1
2a	180.0		521.0		268.3	2a	181.2		531.9		268.4
3a	180.8		518.3		264.3	3a	177.0		534.4		259.0
4a	184.0		520.7		269.1	4a	182.1		522.3		269.1
5a	194.6		509.9		256.1	5a	181.5		536.3		268.9
6a	183.1		504.6		249.0	6a	199.4		528.4		257.9
7a	194.5		527.8		260.1	7a	194.1		545.8		268.3
8a	191.6		538.8		262.6	8a	193.8		534.8		264.1
9a	185.0		537.3		259.6	9a	178.0		521.4		260.5
10a	196.0		508.0		270.8	10a	187.4		510.9		260.0
11a	182.0		497.6		257.9	11a	184.8		517.1		260.0
12a	199.6		541.8		249.2	12a	179.6		545.7		269.6
13a	180.3		533.2		264.9	13a	185.9		546.3		262.2
14a	180.7		512.2		261.0	14a	188.1		535.0		263.0
15a	177.0		529.5		249.1	15a	187.6		518.8		264.5
16a	180.5		521.7		255.7	16a	186.4		505.2		252.0
17a	181.0		523.1		248.1	17a	190.0		514.0		261.4
18a	182.2		529.6		254.9	18a	197.8		516.4		247.6
19a	180.7		500.2		253.1	19a	196.1		522.2		266.9
20a	176.9		516.1		254.8	20a	189.5		531.9		250.1
21a	198.4		508.5		268.2	21a	191.4		501.3		260.2
22a	179.1		515.9		258.1	22a	177.6		542.0		261.0
23a	192.8		521.0		252.5	23a	194.5		517.0		258.4
24a	187.2		529.7		247.3	24a	183.9		505.0		266.0
25a	176.9		534.9		262.4	25a	178.2		517.9		269.5
1b	195.5		534.5		273.0	1b	188.3		522.4		259.0
2b	179.2		526.6		256.0	2b	185.0		539.4		248.0
3b	176.3		514.7		268.1	3b	194.2		539.6		249.2
4b	182.0		534.0		253.7	4b	191.3		530.4		268.8
5b	185.5		506.1		249.7	5b	190.3		537.6		271.7
6b	189.6		548.9		252.8	6b	192.2		539.5		265.4
7b	196.2		508.0		249.3	7b	180.0		533.9		248.0
8b	190.9		508.9		267.0	8b	176.2		538.6		247.3
9b	184.6		516.7		258.6	9b	189.1		546.7		272.2
10b	188.8		509.5		255.5	10b	186.7		546.4		255.2
11b	199.0		510.0		254.0	11b	177.5		522.0		268.4
12b	186.1		507.4		264.5	12b	194.5		514.6		271.6
13b	199.5		498.1		249.6	13b	197.4		539.8		254.0
14b	186.5		535.8		256.0	14b	191.5		520.8		251.8
15b	184.8		514.6		256.0	15b	179.1		522.4		252.0
16b	191.4		503.7		269.4	16b	192.0		547.6		253.0
17b	194.8		505.0		266.5	17b	196.8		548.8		249.1
18b	179.6		523.6		272.7	18b	184.2		501.8		253.8
19b	194.6		534.1		259.2	19b	199.5		506.8		259.9
20b	199.0		541.3		269.2	20b	188.3		545.9		258.5
21b	186.3		501.3		260.1	21b	196.1		512.9		267.4
22b	198.0		516.2		261.9	22b	190.4		504.5		272.0
23b	185.6		503.8		259.9	23b	198.8		498.0		271.7
24b	185.8		504.9		262.8	24b	188.6		528.0		266.0
25b	192.5		536.7		252.2	25b	190.6		532.3		265.9
	2						0				

Date	27-Feb					**Date**	28-Feb				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	195.6		502.2		261.0	**1a**	193.8		510.5		268.2
2a	195.6		499.1		270.1	**2a**	177.8		514.1		258.2
3a	190.5		523.0		266.7	**3a**	180.2		543.5		259.5
4a	182.3		511.6		270.0	**4a**	185.6		513.2		255.5
5a	184.9		511.5		260.5	**5a**	182.4		517.9		247.7
6a	191.1		530.7		251.7	**6a**	188.3		523.0		268.2
7a	197.6		523.9		270.6	**7a**	183.0		500.2		268.9
8a	178.4		528.7		254.2	**8a**	179.0		534.7		257.0
9a	192.4		546.5		248.1	**9a**	191.9		548.0		258.9
10a	180.1		548.0		268.8	**10a**	188.0		529.0		255.3
11a	178.5		532.8		257.2	**11a**	177.4		518.5		256.1
12a	176.1		524.5		270.2	**12a**	190.0		539.4		270.4
13a	180.4		535.6		252.8	**13a**	184.3		518.2		259.4
14a	185.6		546.4		270.6	**14a**	183.9		528.9		251.2
15a	191.0		534.2		271.6	**15a**	195.0		541.5		251.3
16a	180.0		519.5		266.0	**16a**	179.5		526.7		262.3
17a	186.0		523.1		249.6	**17a**	193.6		540.4		270.0
18a	177.9		544.6		257.5	**18a**	178.6		528.0		259.8
19a	194.0		539.5		267.3	**19a**	182.6		544.3		262.6
20a	191.0		509.0		247.8	**20a**	194.7		527.0		258.8
21a	180.9		503.4		257.0	**21a**	193.4		535.8		264.3
22a	194.7		526.7		270.6	**22a**	180.9		505.5		251.2
23a	197.0		505.5		249.0	**23a**	182.2		548.7		247.6
24a	187.0		499.4		270.6	**24a**	182.0		522.8		249.1
25a	190.6		527.4		264.7	**25a**	188.9		503.7		248.9
1b	186.0		530.6		251.5	**1b**	197.5		525.4		250.6
2b	183.9		530.0		252.0	**2b**	184.7		528.3		251.3
3b	182.8		507.0		252.9	**3b**	183.4		516.1		251.2
4b	198.9		524.2		264.8	**4b**	176.5		528.9		270.6
5b	196.4		513.4		259.0	**5b**	194.6		535.2		252.0
6b	178.1		521.9		250.7	**6b**	184.9		543.2		256.6
7b	188.4		520.2		271.9	**7b**	190.0		517.6		254.4
8b	190.0		509.6		253.1	**8b**	184.7		517.1		257.0
9b	199.0		529.3		261.7	**9b**	188.0		545.5		257.9
10b	183.3		500.1		263.2	**10b**	179.6		544.1		264.5
11b	188.4		537.7		261.4	**11b**	188.5		526.7		262.0
12b	182.9		530.8		264.1	**12b**	177.3		515.9		248.1
13b	176.4		524.8		250.3	**13b**	191.3		517.1		264.9
14b	184.8		505.6		261.0	**14b**	192.1		510.0		269.0
15b	189.0		536.6		251.0	**15b**	191.1		521.0		257.4
16b	195.9		518.7		266.3	**16b**	179.2		510.0		247.0
17b	191.7		539.5		252.5	**17b**	176.1		509.0		256.8
18b	192.8		544.9		272.0	**18b**	196.8		508.7		262.0
19b	196.4		506.0		258.5	**19b**	185.3		517.7		270.4
20b	179.4		512.1		259.5	**20b**	181.7		509.4		271.4
21b	176.7		508.6		259.4	**21b**	188.6		524.1		269.5
22b	194.7		497.4		255.0	**22b**	195.2		532.5		247.3
23b	179.1		505.0		251.5	**23b**	191.0		507.1		247.8
24b	186.4		499.4		249.8	**24b**	179.6		546.8		255.5
25b	185.0		540.4		259.6	**25b**	195.9		503.1		269.9
	1						0				

Date	5-Mar					**Date**	6-Mar				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	188.9		532.9		257.6	**1a**	199.4		524.4		272.9
2a	195.5		515.9		266.2	**2a**	181.5		509.0		248.8
3a	184.4		508.3		252.6	**3a**	199.8		521.3		270.6
4a	182.8		521.3		261.2	**4a**	186.6		514.3		258.7
5a	189.6		535.0		264.8	**5a**	194.3		532.4		252.3
6a	185.1		508.8		251.4	**6a**	177.1		506.4		262.2
7a	194.9		521.0		264.1	**7a**	190.0		536.8		266.0
8a	179.2		543.7		268.7	**8a**	183.6		540.9		247.4
9a	193.6		497.9		249.6	**9a**	199.2		512.5		249.1
10a	192.1		512.7		271.1	**10a**	195.3		535.7		259.2
11a	177.0		525.4		248.6	**11a**	197.9		548.0		263.3
12a	185.0		504.1		261.7	**12a**	186.8		509.7		251.7
13a	179.0		500.8		271.1	**13a**	198.7		520.1		263.8
14a	189.7		532.7		272.8	**14a**	197.7		530.6		253.3
15a	191.7		541.4		257.0	**15a**	180.3		532.8		255.0
16a	188.4		519.0		262.3	**16a**	179.3		544.1		269.3
17a	193.2		538.0		249.7	**17a**	178.6		515.5		253.0
18a	187.1		533.2		263.5	**18a**	200.0		530.9		266.3
19a	193.9		518.9		260.3	**19a**	199.2		544.6		252.0
20a	195.0		503.0		251.6	**20a**	186.3		529.7		256.0
21a	188.5		535.0		253.4	**21a**	182.3		520.8		256.5
22a	176.7		520.0		266.2	**22a**	195.9		545.5		264.5
23a	176.6		528.2		269.5	**23a**	181.9		503.0		265.7
24a	191.3		547.9		249.5	**24a**	194.6		521.2		265.0
25a	179.6		502.3		256.6	**25a**	196.3		512.4		259.9
1b	194.4		516.3		270.1	**1b**	194.5		548.3		255.7
2b	187.4		534.9		271.5	**2b**	192.2		524.5		252.2
3b	183.7		533.5		271.3	**3b**	194.6		532.0		266.3
4b	191.6		523.7		258.1	**4b**	192.3		531.7		256.0
5b	190.9		518.9		254.1	**5b**	196.0		528.8		253.8
6b	188.5		516.8		261.3	**6b**	198.1		518.1		254.0
7b	176.5		546.5		265.3	**7b**	187.6		525.3		255.8
8b	184.1		521.5		270.4	**8b**	196.4		504.6		258.5
9b	182.7		525.5		260.6	**9b**	186.2		524.1		249.6
10b	195.9		538.1		266.8	**10b**	190.3		514.1		272.9
11b	181.6		522.3		248.9	**11b**	179.7		524.0		250.9
12b	190.2		500.5		268.0	**12b**	198.1		505.7		249.9
13b	187.5		533.0		253.7	**13b**	191.2		521.4		262.9
14b	176.8		524.6		249.0	**14b**	192.5		547.1		262.4
15b	185.6		527.4		268.4	**15b**	193.1		529.2		254.6
16b	177.0		542.3		250.7	**16b**	182.6		526.6		255.9
17b	199.2		517.3		251.5	**17b**	179.4		543.0		250.3
18b	177.8		523.1		268.7	**18b**	188.8		509.7		252.7
19b	181.0		548.8		256.7	**19b**	197.8		523.5		247.1
20b	198.0		511.4		264.3	**20b**	196.4		544.4		261.0
21b	189.4		540.9		271.2	**21b**	187.0		516.0		270.5
22b	182.3		523.9		266.7	**22b**	195.7		502.4		272.0
23b	193.4		522.1		247.3	**23b**	180.9		523.9		266.6
24b	183.8		509.0		264.1	**24b**	181.1		499.5		265.2
25b	187.7		518.6		260.2	**25b**	187.9		524.8		258.2
	0						0				

Date	12-Mar					**Date**	19-Mar				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	194.0		530.4		260.6	**1a**	190.8		506.8		258.8
2a	196.7		516.8		249.5	**2a**	180.7		535.0		264.3
3a	177.2		518.0		263.7	**3a**	183.0		501.6		262.5
4a	181.7		511.0		262.3	**4a**	185.8		548.6		268.8
5a	198.8		526.4		254.2	**5a**	199.0		521.9		270.0
6a	181.3		526.0		247.2	**6a**	179.6		518.2		269.2
7a	196.1		530.3		256.1	**7a**	197.3		546.3		258.9
8a	179.0		525.5		251.0	**8a**	180.7		545.4		248.7
9a	191.9		517.5		250.8	**9a**	179.7		514.8		254.2
10a	190.5		524.0		263.4	**10a**	187.3		520.0		253.4
11a	181.1		545.1		272.9	**11a**	183.6		520.0		257.9
12a	196.8		548.4		260.9	**12a**	179.7		537.1		268.0
13a	192.2		527.8		259.8	**13a**	178.6		519.3		250.3
14a	178.6		540.0		261.0	**14a**	186.0		538.0		253.9
15a	177.0		526.0		261.2	**15a**	178.6		530.7		247.7
16a	193.0		532.6		251.9	**16a**	190.7		508.0		252.4
17a	177.4		501.7		261.2	**17a**	188.6		497.4		271.8
18a	197.1		523.9		253.9	**18a**	181.7		519.9		247.9
19a	190.3		529.3		265.0	**19a**	180.7		540.6		249.3
20a	193.1		498.1		271.6	**20a**	192.9		535.9		267.1
21a	181.1		532.0		247.0	**21a**	183.4		526.0		257.2
22a	193.5		501.0		249.3	**22a**	178.1		511.3		252.0
23a	180.0		524.0		258.0	**23a**	181.0		505.1		265.2
24a	187.7		523.1		269.6	**24a**	195.6		543.0		270.1
25a	177.5		504.1		261.5	**25a**	182.0		500.2		268.7
1b	178.1		533.7		269.3	**1b**	183.9		529.7		266.9
2b	192.5		528.1		252.3	**2b**	187.0		508.4		258.3
3b	187.9		512.5		272.0	**3b**	176.8		503.5		269.2
4b	183.3		514.4		256.9	**4b**	176.4		497.6		268.1
5b	184.1		545.0		251.5	**5b**	194.2		503.0		263.3
6b	192.0		503.6		272.2	**6b**	178.0		513.1		265.9
7b	200.0		522.9		259.7	**7b**	185.6		533.7		269.5
8b	192.5		529.5		250.4	**8b**	178.5		504.3		265.7
9b	185.3		532.6		249.8	**9b**	192.6		498.8		257.1
10b	183.2		539.1		257.7	**10b**	199.7		499.3		253.3
11b	192.8		535.8		264.7	**11b**	186.5		529.0		256.4
12b	184.9		501.6		261.9	**12b**	185.5		545.9		256.2
13b	193.5		509.2		257.7	**13b**	188.9		515.9		272.7
14b	185.1		529.2		256.4	**14b**	187.4		507.6		257.4
15b	181.6		507.3		269.0	**15b**	190.5		545.0		263.1
16b	184.8		510.5		262.9	**16b**	179.3		532.2		271.8
17b	180.3		506.3		272.5	**17b**	198.7		520.5		249.0
18b	185.1		508.0		270.5	**18b**	189.1		497.5		263.6
19b	191.4		529.0		247.7	**19b**	188.2		532.0		269.4
20b	180.2		505.6		269.6	**20b**	199.5		517.5		270.1
21b	176.1		544.0		249.1	**21b**	183.5		512.0		270.3
22b	183.2		497.5		266.0	**22b**	181.2		529.6		271.4
23b	178.8		530.0		247.4	**23b**	183.1		539.4		249.4
24b	196.7		540.8		268.7	**24b**	193.0		540.7		252.0
25b	199.5		507.9		253.5	**25b**	182.1		506.5		264.4
	1						1				

Date	26-Mar					**Date**	2-Apr				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	187.9		497.0		259.9	**1a**	183.8		511.3		262.3
2a	196.8		530.6		253.8	**2a**	180.7		524.6		267.1
3a	198.3		519.9		268.1	**3a**	187.1		537.8		268.0
4a	180.7		511.5		271.8	**4a**	198.6		532.0		252.3
5a	183.2		511.4		263.8	**5a**	187.5		510.9		250.0
6a	176.8		497.8		265.9	**6a**	187.1		541.2		262.0
7a	188.1		508.6		264.0	**7a**	196.6		521.1		264.8
8a	185.6		522.1		265.0	**8a**	188.9		538.0		264.9
9a	176.4		508.3		252.2	**9a**	193.4		505.8		247.4
10a	179.0		527.3		252.0	**10a**	185.4		530.6		272.0
11a	194.5		538.0		253.0	**11a**	194.7		508.7		254.2
12a	199.1		530.7		254.4	**12a**	193.5		499.2		251.8
13a	194.9		534.6		254.0	**13a**	185.1		508.2		262.4
14a	195.6		545.8		267.0	**14a**	192.0		503.2		256.0
15a	192.7		506.9		262.9	**15a**	185.9		525.1		268.6
16a	184.0		518.6		249.6	**16a**	198.9		516.0		253.8
17a	181.6		542.6		255.4	**17a**	180.5		530.1		252.2
18a	196.3		502.3		261.1	**18a**	185.0		505.5		250.2
19a	189.5		532.5		269.2	**19a**	178.4		524.7		260.2
20a	185.8		543.1		248.8	**20a**	185.2		523.7		271.4
21a	177.2		531.7		256.2	**21a**	184.9		547.2		257.6
22a	196.9		545.0		270.9	**22a**	195.9		507.3		248.6
23a	179.9		529.5		264.5	**23a**	190.8		498.1		250.3
24a	192.2		514.6		268.4	**24a**	188.6		535.0		253.3
25a	188.8		522.6		270.8	**25a**	186.9		504.9		271.3
1b	182.0		542.2		269.3	**1b**	181.6		543.1		270.6
2b	187.2		513.7		259.3	**2b**	193.8		503.6		249.2
3b	179.0		502.4		249.1	**3b**	186.6		504.0		252.3
4b	176.1		503.0		265.0	**4b**	176.0		533.3		261.2
5b	197.0		545.0		260.3	**5b**	183.7		528.6		272.0
6b	178.3		521.3		256.0	**6b**	190.5		515.0		269.9
7b	199.4		536.7		248.5	**7b**	186.3		519.8		256.0
8b	182.5		530.0		263.9	**8b**	189.8		523.0		248.0
9b	177.6		514.5		265.2	**9b**	179.9		529.4		259.2
10b	186.1		501.8		263.6	**10b**	182.4		506.8		255.9
11b	195.0		500.4		258.9	**11b**	177.7		500.0		271.3
12b	193.9		522.2		260.2	**12b**	176.5		512.0		247.9
13b	178.1		532.4		252.0	**13b**	199.8		538.6		258.8
14b	183.1		541.0		261.6	**14b**	188.8		503.1		248.0
15b	177.1		516.2		254.8	**15b**	192.0		504.0		262.2
16b	192.6		525.4		252.9	**16b**	187.8		521.8		259.1
17b	184.1		518.7		257.5	**17b**	181.1		548.6		265.6
18b	179.7		540.5		261.2	**18b**	193.3		503.1		254.2
19b	198.9		501.2		249.0	**19b**	184.0		524.6		258.0
20b	189.1		504.9		253.1	**20b**	189.3		537.1		247.0
21b	186.6		507.9		249.5	**21b**	183.7		543.4		252.0
22b	183.8		543.4		270.7	**22b**	184.5		521.0		257.0
23b	179.3		524.7		266.4	**23b**	178.6		516.3		259.6
24b	178.1		514.9		262.9	**24b**	189.6		517.8		271.0
25b	184.0		515.8		247.4	**25b**	190.3		529.4		256.0
	1						0				

Date	3-Apr					**Date**	9-Apr				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	188.2		508.5		259.5	**1a**	198.4		499.7		260.9
2a	191.2		512.9		249.7	**2a**	194.7		527.0		268.7
3a	181.5		503.9		257.1	**3a**	195.2		538.0		254.4
4a	182.0		528.7		266.1	**4a**	181.8		536.1		260.8
5a	183.4		523.2		264.4	**5a**	193.0		543.8		269.4
6a	197.3		500.2		253.5	**6a**	184.1		501.3		264.3
7a	191.0		497.3		251.6	**7a**	194.1		509.4		267.1
8a	195.0		539.4		255.8	**8a**	195.4		518.4		271.2
9a	193.7		504.4		255.9	**9a**	197.8		501.1		250.1
10a	194.2		537.8		253.6	**10a**	181.7		536.3		256.7
11a	176.6		545.1		250.4	**11a**	179.3		503.1		266.6
12a	186.3		535.8		256.2	**12a**	176.7		544.4		257.6
13a	178.6		544.4		247.9	**13a**	186.2		505.5		260.2
14a	191.8		528.8		256.3	**14a**	185.5		539.5		248.4
15a	191.1		504.9		268.7	**15a**	186.6		512.7		266.7
16a	184.9		518.8		252.0	**16a**	185.4		526.4		267.2
17a	178.3		530.0		250.0	**17a**	194.1		541.2		265.2
18a	196.7		497.5		272.1	**18a**	194.5		547.4		268.0
19a	192.4		519.0		269.5	**19a**	186.0		525.6		258.6
20a	178.5		512.9		261.1	**20a**	191.3		546.6		271.2
21a	180.0		511.8		266.0	**21a**	195.8		508.4		254.1
22a	194.3		516.9		260.1	**22a**	180.0		508.2		254.8
23a	196.7		527.0		266.9	**23a**	187.0		527.2		265.7
24a	181.0		532.1		260.4	**24a**	191.0		542.9		256.2
25a	184.2		499.3		261.4	**25a**	195.0		529.6		255.7
1b	190.7		512.3		268.7	**1b**	195.9		528.0		266.2
2b	185.2		526.2		273.0	**2b**	198.3		509.3		259.0
3b	194.5		537.2		258.9	**3b**	198.9		516.1		266.7
4b	185.2		547.7		272.0	**4b**	191.0		521.6		254.0
5b	185.9		520.6		257.4	**5b**	177.2		537.8		259.0
6b	197.6		497.7		259.1	**6b**	196.4		524.9		261.3
7b	182.4		531.2		263.1	**7b**	182.3		522.0		257.1
8b	197.5		498.6		252.1	**8b**	195.5		540.8		251.8
9b	191.4		537.5		259.0	**9b**	179.7		536.8		263.4
10b	179.5		524.0		258.0	**10b**	184.4		504.4		267.7
11b	180.1		529.3		271.8	**11b**	182.1		497.5		270.9
12b	180.3		527.1		261.3	**12b**	190.8		506.4		264.7
13b	180.2		518.6		255.9	**13b**	194.0		527.0		260.9
14b	186.7		500.5		263.7	**14b**	182.5		538.4		257.7
15b	199.0		507.8		272.5	**15b**	188.0		542.0		261.0
16b	192.4		520.2		271.0	**16b**	195.6		508.8		248.2
17b	196.5		498.9		267.7	**17b**	190.4		512.8		251.1
18b	178.7		533.7		250.7	**18b**	180.6		518.7		264.5
19b	195.1		503.2		249.7	**19b**	178.5		504.9		261.2
20b	179.7		549.0		269.0	**20b**	180.4		516.7		257.2
21b	179.3		501.5		264.8	**21b**	184.4		499.0		252.3
22b	184.4		532.3		248.5	**22b**	176.4		509.3		258.1
23b	178.8		505.5		263.6	**23b**	182.8		542.7		266.0
24b	179.0		547.4		253.1	**24b**	187.0		510.1		247.2
25b	183.3		508.2		263.7	**25b**	197.9		513.2		250.2
	1						0				

Date	16-Apr					**Date**	23-Apr				
Temp	Coil		Base Internal		Radiant	**Temp**	Coil		Base Internal		Radiant
Expected	175-200		500-550		245-265	**Expected**	175-200		500-550		245-265
Qty	30 secs		60 secs		120 secs	**Qty**	30 secs		60 secs		120 secs
1a	176.4		506.0		251.0	**1a**	196.8		517.5		273.0
2a	178.9		545.3		263.0	**2a**	179.2		539.8		269.5
3a	195.6		530.0		248.3	**3a**	176.4		510.5		269.7
4a	177.7		497.7		266.6	**4a**	177.5		547.1		262.0
5a	181.5		500.7		248.5	**5a**	198.9		516.1		253.5
6a	181.4		518.6		260.3	**6a**	182.6		506.2		272.9
7a	176.4		541.3		257.9	**7a**	176.9		516.8		260.0
8a	189.5		502.8		255.4	**8a**	193.6		527.8		254.2
9a	188.0		525.3		262.7	**9a**	189.0		537.7		251.2
10a	193.7		511.6		255.8	**10a**	179.5		521.3		264.9
11a	198.2		536.2		269.6	**11a**	179.2		530.8		247.7
12a	177.8		511.4		254.6	**12a**	190.0		539.8		256.4
13a	193.4		542.0		268.7	**13a**	194.6		532.9		272.5
14a	181.4		536.7		253.0	**14a**	178.9		523.2		256.8
15a	182.6		508.0		262.3	**15a**	196.8		508.0		263.3
16a	181.8		522.7		262.1	**16a**	189.3		519.0		255.9
17a	199.0		536.6		264.4	**17a**	176.0		508.1		247.1
18a	194.7		516.4		265.1	**18a**	193.4		531.3		263.7
19a	179.1		524.0		270.8	**19a**	192.8		538.0		269.0
20a	180.3		508.2		258.0	**20a**	195.4		500.0		261.3
21a	191.0		542.9		265.6	**21a**	197.2		542.3		262.0
22a	179.5		498.7		248.3	**22a**	195.3		536.0		266.4
23a	184.0		539.0		251.0	**23a**	185.2		524.1		254.6
24a	183.8		533.8		257.7	**24a**	197.0		528.4		251.9
25a	176.1		532.4		272.3	**25a**	182.9		538.0		271.5
1b	185.2		520.9		252.8	**1b**	192.4		538.7		271.6
2b	177.3		498.3		248.8	**2b**	182.9		536.3		263.2
3b	193.4		543.2		255.7	**3b**	187.2		534.3		268.0
4b	182.3		531.0		265.8	**4b**	195.4		512.8		271.6
5b	180.4		511.8		267.4	**5b**	180.2		524.3		270.4
6b	195.0		520.9		262.9	**6b**	198.0		504.7		268.8
7b	194.3		512.2		261.8	**7b**	180.0		546.3		253.5
8b	177.0		504.0		249.4	**8b**	199.9		541.1		268.5
9b	187.7		517.8		261.5	**9b**	192.1		525.7		262.3
10b	183.7		527.6		266.2	**10b**	187.6		540.4		249.4
11b	191.3		540.3		261.2	**11b**	185.9		498.4		267.0
12b	184.7		529.0		254.1	**12b**	190.2		509.5		260.9
13b	191.9		545.4		255.4	**13b**	183.4		512.3		252.3
14b	188.7		532.9		264.4	**14b**	198.6		535.0		255.2
15b	184.9		530.0		265.0	**15b**	190.1		500.8		252.9
16b	188.7		504.4		252.9	**16b**	191.1		512.9		272.9
17b	179.0		521.8		255.9	**17b**	177.9		524.0		268.7
18b	199.3		521.0		271.8	**18b**	177.0		502.6		259.6
19b	193.6		537.0		266.9	**19b**	181.1		499.2		266.4
20b	185.0		539.9		265.7	**20b**	194.3		506.7		257.5
21b	176.4		513.7		248.3	**21b**	184.2		530.1		271.8
22b	183.6		512.7		255.9	**22b**	176.6		544.5		254.2
23b	189.4		531.6		269.2	**23b**	180.3		543.5		269.0
24b	178.3		525.6		263.7	**24b**	190.1		500.0		263.1
25b	187.2		498.6		270.1	**25b**	189.4		513.0		251.1
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