

FINAL REPORT

Brice Ohl

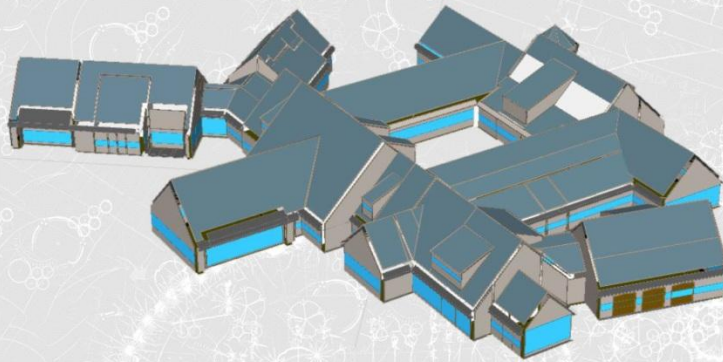
Mechanical Option

Advisor Professor Stephen Treado

Submitted 4.3.2012

*The New Offices for
RLPS Architects*

Lancaster, PA



Brice Ohl | Mechanical Option| The New Office Building for RLPS Architects | Lancaster PA
www.engr.psu.edu/ae/thesis/portfolios/2013/beo107/index.htm

+Building Statistics

Number of Stories: 1 Full ground level with mezzanine level. The mezzanine includes a small storage area and a larger area that acts as a mechanical and electrical space over a large portion of the ground level.

Total Size: 22,500 SF

Project Cost: \$1,000,000 Electrical, \$900,000 Mechanical, \$440,000 Plumbing + Fire Protection

+Mechanical Systems

The New Office Building will be utilizing a geothermal well system of 8 loops. The well system will be managed and pumped from a ground level mechanical space, while the spaces will be conditioned from terminal units typically placed in a mechanical mezzanine.



The left image is an example of the catwalk common in the mezzanine. The right image is heat pump group for a wing.

+Lighting Electrical Systems

Electrical service will be provided a new PPL Transformer sized for 300 kVA. Service to all of the panels will be 3 phase, 4 wires, and 120/208V. The artificial lighting was designed for energy efficiency and incorporates dimming schedules and occupancy sensors.



The left image shows the new transformer outside of the ground level mechanical room. The right image shows the primary distribution center in that room.

+Structure

The new office building primarily utilizes a wooden structure with some small uses of load bearing walls of block construction. The mezzanine space created by the roof frame was designed not only for structural integrity, but also houses space for MEP equipment and access via catwalks throughout most of the building.



The left image is an example of exposed structure while the right image is an example of unexposed structure in the mezzanine.

+Architecture

The site of the building is primarily independent, but is situated in a more residential area. The new office has some styles of a colonial home, but with a modern feel. One focus is an interior courtyard with water feature that is visible from all of the studio spaces.



The left image is the main entrance for employees. The right image shows the lobby and main business entrance.

+Project Team

| | |
|---------------------------|---------------------|
| Owner | RLPS Architects |
| Architects | RLPS Architects |
| General Contractor | Warfel Construction |

| | |
|-----------------------------|------------------------|
| Mechanical Engineers | Reese Engineering Inc. |
| Electrical Engineers | Reese Engineering Inc. |
| Structural Engineers | Zug & Associates, Ltd. |

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Executive Summary

The objective of this report is to review the possible implementation of a hybrid ventilation system focused around the buildings courtyard.

The first option was to use automated windows between the work spaces and the courtyard to allow additional outdoor air into the office building. The idea was that the temperate climate of Lancaster, Pa would provide some chances to reduce energy consumption by using outdoor air.

The second option was more of an addition to the first. There already exists a water feature in the courtyard. The second option was to use water feature (likely a different one) as an air cleaner to normalize the air quality of the courtyard. To aid the water feature grey water would be collected and stored in a subgrade cistern until it achieved ground temperature. Once it reaches ground temperature the water would be pumped to the water feature.

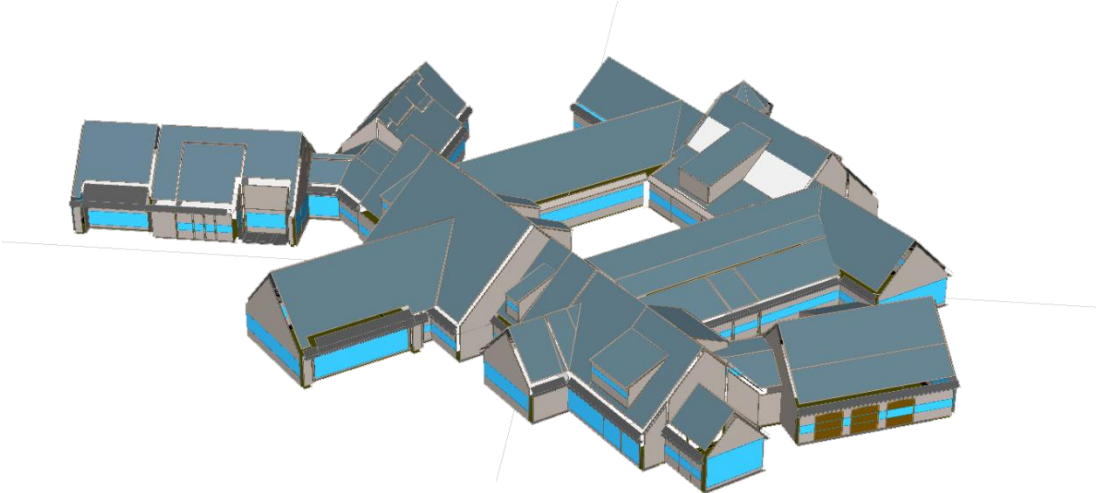
Ina addition to mechanical changes the effects of the system on the electrical system and construction costs were considered. It was found the system could be easily implemented into the buildings electrical systems. However, the construction costs reached an estimated \$261,479.

The cost of the construction of the hybrid system, in the proposed fashion proved to be too high. The generally accepted payback period range of 3 to 5 five years was far exceeded.

The final recommendation of this report was to not implement the proposed system, but to consider a less automated system that relies on the occupants and operable windows.

Building Overview

Building Description



The New Office Building for RLPS Architects is a new construction office building located in Lancaster County, PA. It totals 22,500 square feet which is split between one full ground level and a small mezzanine area, to be used for storage. The use of this building is primarily office spaces, studio space, or group work areas. Some unique features to the building include a bistro area and adjoined living room space. Additionally, there is an interior courtyard complete with a water feature. Overall, the building is classified as Business with an occupancy capacity just short of 230 people. The expected completion date is January 2013.

Architecture

The site of the building is primarily independent, but is situated in a more residential area. The new office has some styles of a colonial home, but with a modern feel. One focus is an interior courtyard with water feature that is visible from all of the studio spaces.

Occupant and Project Team

- Owner & Architects:** RLPS Architects Ltd.
- General Contractor:** Warfel Construction
- Mechanical & Electrical Engineers:** Reese Engineering Inc.
- Structural Engineers:** Zug & Associates, Ltd. Structural Engineers.
- Civil Engineers:** Harbor Engineering
- Surveyor:** Herbert, Rowland, & Grubic, Inc.
- Landscaping:** RLPS Architects Ltd.

Mechanical System Overview

1.1 Mechanical System Design Layout

Though the new office building covers just above 22,000 square feet the design is spread out which limited the ability to use a primary air handling unit. To reduce pressure losses by using extensive duct work as well as to save on the space used terminal units were used for each space. Additionally, spaces were grouped in areas designated by a letter.

Figure 1 below depicts the site orientation as well as the area designations used by the project engineer. These areas will be referenced throughout the report.

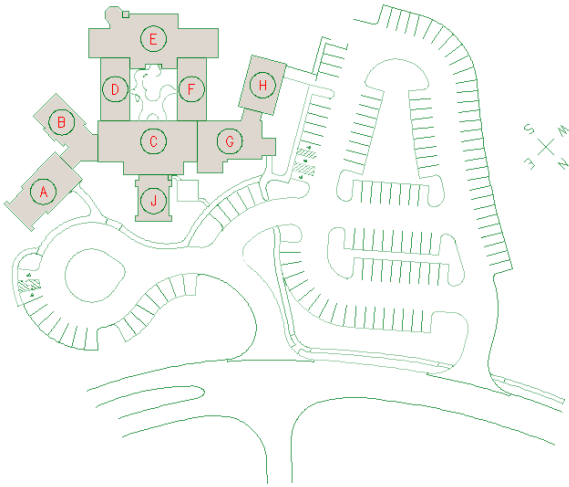


Figure 1

The primary mechanical space is on the ground level in Area G. The mechanical mezzanine that houses most of the terminal units can be entered through a storage mezzanine in Area H. The mechanical mezzanine spreads from Area H through Areas A, B, C, J, and G. Area E has a separate mechanical mezzanine that houses the ventilation units for the entire building.

Images 2 and 3 depicting the ground level mechanical space and the mechanical mezzanine areas can be found in Appendix A.

1.2 Mechanical System Air Supply Design

The air side design of the new office building is relatively simple. There are 28 water source heat pump terminal units spread throughout the building to serve mostly individual spaces. All of them save one are placed in mechanical mezzanines usually in groups of five to eight. The one terminal unit not in the mechanical mezzanine is in a ground level closet in Area C. The terminal units provide both heating and cooling capacities. These capacities vary per unit as well as the air volume flow rate which ranges from 300 CFM to 1800 CFM. The terminal units use electricity as the primary fuel source, running at 208/1/60, but varying in maximum amperage capacity with each unit.

The outdoor air is provided to the building by 4 ventilation units situated in the Area E mechanical mezzanine. These ventilation units provide the air to the various pods of terminal units through ductwork above the acoustical ceilings in the Area F and Area D.

Exhaust fans are also Part of the airside design. Due to the nature of the work being done in the new office building little exhaust is needed. However, a few spaces require localized exhaust, these areas include the restrooms, the ground level mechanical space, and the printing area.

1.3 Mechanical System Hydronic Design

The hydronic systems for the new office building are also a relatively simple process. The unique feature is the ground source well system. The well system consists of 8 closed loops that run beneath the parking lot. The loops enter the building under the carriage house doors in Area H and head to the ground level mechanical space in Area G. The pump that drives the conditioned water rests in the Area G mechanical space. There are two pumps with 300 GPM capacities. The second is a backup pump; there are mechanisms in place to prevent the pumps from running simultaneously. From the mechanical space the conditioned water is pumped to the individual terminal units where it exchanges heat. The water then circulates back through the mechanical space. To maintain regular pressure the heat pump loop also includes an expansion tank with a 80 gallon capacity.

Additionally, for cases of cooling conditions there are condensate lines and small pump with 3 GPM capacity that return condensate to the ground level mechanical space.

Figure 4 in Appendix A, depicts the well field situated below the parking lot.

Figure 5 IN Appendix A, depicts the general setup of the ground source loop as described above.

1.4 Mechanical System Modeled Performance

In addition to the physical layout of the mechanical system the performance must also be considered. Figure 6 below is a table depicting the modeled performance of the current building design with not hybrid implementations. The building was modeled using Carrier Corporation’s Hourly Analysis Program version 4.6.

| | Modeled (HAP v4.6) |
|-----------------------|--------------------|
| Cooling [tons] | 47.0 |
| Cooling [sf/ton] | 460 |
| Cooling [cfm/ton] | N/A |
| Cooling [Btuh/sf] | 26.1 |
| Heating [Btuh/sf] | 21.0 |
| Design air Flow [cfm] | 29336 |
| Supply [cfm/sf] | 1.36 |

Figure 6

The table below, Figure 7, is an analysis of the cost for running the various mechanical pieces per annum. The final column shows that the new office building relatively consistent with the national average for office buildings.

| HVAC Components | Cost [\$ /yr] | Cost per area [\$ /sf] | Percent of Total Cost [%] | National Avg. for Office Buildings [%] |
|----------------------|---------------|------------------------|---------------------------|--|
| Air System Fan | 2,274 | 0.105 | 7.1 | 5 |
| Cooling | 3,829 | 0.177 | 12.0 | 9 |
| Heating | 3,585 | 0.166 | 11.2 | 25 |
| Pumps | 3,765 | 0.174 | 11.8 | N/A |
| Non-HVAC Components | | | | |
| Lights | 8,679 | 0.402 | 27.2 | 29 |
| Electrical Equipment | 9,803 | 0.454 | 30.7 | 16 |
| Total | 31,931 | 1.477 | 100 | |

Figure 7

The final performance table, Figure 8, displays the modeled emissions for the new office building. All of the values were tested and found to be acceptable. The proposed system will unlikely reduce emissions on site unless a water sprayer configuration was selected for the water feature. The water sprayer could remove particulate matter. Otherwise the emission reductions would be offsite at the plant providing electric power due to the reduction of electrical power consumption.

| Pollutant | [lb of pollutant per kWh] | [lb pollutant/year] |
|--------------------|---------------------------|----------------------|
| CO2 | 1.64 | 1.81x10 ⁵ |
| NOx | 3.0x10 ⁻³ | 3316 |
| SOx | 8.57x10 ⁻³ | 9474 |
| Particulate Matter | 9.26x10 ⁻⁵ | 102 |

Figure 8

1.5 LEED 2009 Analysis

A LEED 2009 evaluation was performed for this project. The LEED 2009 Project checklist for New Construction. Since the project owner has not specified a level of LEED achievement yet, it was assumed that basic LEED certification was the only requirement. Let it be noted that only points that could be confirmed in the project specifications or project teams' sustainability discussions were awarded. The project has the ability to earn more credits than the ones listed below, but has not indicated a definite attempt at the other credits.

The following tables makeup the evaluation of LEED 2009 certification. The 'intent' of each credit is directly from the USGBC.

| Sustainable Sites | | Points: 7/26 |
|--|--|--------------|
| Credit | Action | Points |
| SS Prerequisite 1: Construction Activity Pollution Prevention Intent: To reduce pollution from construction activities by controlling soil erosion, waterway sedimentation and airborne dust generation. | | N/A |
| SS Credit 2: Development of Density and Community Connectivity Intent: To channel development to urban areas with existing infrastructure, protect greenfields, and preserve habitat and natural resources. | Option 2: The new office building is located across the street from a residential neighborhood. Additionally, it provides pedestrian access to the Oregon Pike and a great number of basic services. | 5 |
| SS Credit 8: Light Pollution Reduction Intent: To minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through the glare reduction and reduce development impact from lighting on nocturnal environments. | Option 1: Non-essential interior lighting has been designed for automatic lighting control. The exterior lighting has a simulated power density of 0.056 [W/SF] which is below the LEED allowable of 0.12 [W/SF]. | 1 |

| Water Efficiency | | Points: 5/10 |
|--|---|--------------|
| Credit | Action | Points |
| WE Prerequisite 1: Water Use Reduction Intent: To reduce pollution from construction activities by controlling soil erosion, waterway sedimentation and airborne dust generation. | | N/A |
| WE Credit 2: Innovative Wastewater Technologies Intent: To reduce wastewater generation and potable water demand while increasing the local aquifer recharge. | The utilization of dual flush water closets has lowered the water consumption of the new office building. Additionally, an estimated 75,777 gallons of rain water reuse helped qualify the building for 2 points. | 2 |
| WE Credit 3: Water Use Reduction Intent: To further increase water efficiency within buildings to reduce burden on municipal water supply and wastewater systems. | High efficiency fixtures were selected across the building. Current calculations by the project engineer indicate a 36% water savings, which is more than the required 35% for 3 points. | 3 |

| Energy & Atmosphere | | Points: 7/35 |
|--|--|--------------|
| Credit | Action | Points |
| EA Prerequisite 1: Fundamental Commissioning of Building Energy Systems Intent: To verify that the project's energy-related systems are installed, and calibrated to perform according to the owner's project requirements, basis of design and construction documents. | | N/A |
| EA Prerequisite 2: Minimum Energy Performance Intent: To establish the minimum level of energy efficiency for the proposed building and systems to reduce the environmental and economic impacts associated with excessive energy use. | | N/A |
| EA Prerequisite 3: Fundamental Refrigerant Management Intent: To reduce stratospheric ozone depletion. | | N/A |
| EA Credit 1: Optimize Energy Performance Intent: To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use. | The design engineer use the Performance Rating Method, defined by ASHRAE 90.1-2004, accepted by LEED to calculate predicted energy performance. | 5/10 |
| EA Credit 4: Enhanced Refrigerant Management Intent: To reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to climate change. | Option 2: The heat pumps selected were also selected with a refrigerant management provisions. The overall refrigerant impact per ton is 71.6, less than the maximum 100 for the credit. | 2 |

| Materials & Resources | | Points: xx/14 |
|---|--------|---------------|
| Credit | Action | Points |
| <p>MR Prerequisite 1: Storage and Collection of Recyclables</p> <p>Intent: To facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.</p> | | N/A |

| Indoor Environmental Quality | | Points: 5/15 |
|--|---|--------------|
| Credit | Action | Points |
| <p>IEQ Prerequisite 1: Minimum Indoor Air Quality Performance</p> <p>Intent: To prevent or minimize exposure of building occupants, indoor surfaces and ventilation air distribution systems to environmental tobacco smoke (ETS).</p> | | N/A |
| <p>IEQ Prerequisite 2: Environmental Tobacco Smoke (ETS) Control</p> <p>Intent: To establish the minimum level of energy efficiency for the proposed building and systems to reduce the environmental and economic impacts associated with excessive energy use.</p> | | N/A |
| <p>IEQ Credit 1: Outdoor Air Delivery Monitoring</p> <p>Intent: To provide capacity for ventilation system monitoring to help promote occupant comfort and well-being.</p> | CO2 monitoring is fitted in all ventilation systems, and report to the system BAS. | 1 |
| <p>IEQ Credit 2: Increased Ventilation</p> <p>Intent: To provide additional outdoor air ventilation to improve indoor air quality (IAQ) and promote occupant comfort, well-being and productivity.</p> | Option 1: All zones and terminal units were designed and sized to exceed minimum outdoor air by at least 30%. Supporting documentation was provided. | 1 |
| <p>IEQ Credit 6.1: Controllability of Systems – Thermal Comfort</p> <p>Intent: To provide a high level of thermal comfort system control by individual occupants or groups in multi-occupant spaces and promote their productivity, comfort and well-being.</p> | 80 of the 81 individual workspaces will be outfitted with lighting controls and occupancy sensors. The control options include dimming and dual level switching | 1 |

| | | |
|--|---|----------|
| <p>IEQ Credit 6.2: Outdoor Air Delivery Monitoring</p> <p>Intent: To provide capacity for ventilation system monitoring to help promote occupant comfort and well-being.</p> | <p>The specifications call for a number of full color display units to both monitor and control the BAS. The system qualifies for multi-occupant space comfort control.</p> | <p>1</p> |
| <p>IEQ Credit 7.1: Outdoor Air Delivery Monitoring</p> <p>Intent: To provide comfortable thermal environment that promotes occupant productivity and well-being.</p> | <p>The system design utilizes the four ventilation units for outdoor air, the units have the ability to regulate temperature and humidity appropriately.</p> | <p>1</p> |

The current 19 awarded credits is insufficient for LEED Certification. Remember though that LEED is not yet a goal for the owner. Also there are a number of points that could be awarded (especially in the Materials & Resources Category) that only need further documentation or verification upon construction completion.

Proposed Mechanical Redesign

1.1 Hybrid Ventilation

The primary proposal for the mechanical system was to integrate a hybrid ventilation system. This was chosen as documentation shows that both the owners and the design team were striving for a very efficient building. Additionally, the existing ground source well system has already increased the 'plant' side of the system. The hybrid ventilation was selected in hopes to improve the air delivery aspects of the mechanical systems.

The proposed design centers around the interior courtyard between Area C, Area D, Area E, and Area F. The proposed redesign was to change the Area D and Area F walls that encompass the from primarily glass panels to partitions of automated windows. The window automation would allow for outdoor air to enter the work spaces under proper weather conditions lowering the heating and cooling loads for the terminal units.

1.2 Hybrid Ventilation with Grey Water Reuse

An additional test to the implementation of a hybrid ventilation system centered around the water feature within the interior courtyard. It was proposed to use the water feature as a means of extending the possible hybrid ventilation by focusing the outdoor temperatures towards more acceptable indoor temperatures. This would be achieved by collecting grey water in a subgrade cistern where it may sit as its temperature normalizes to ground temperature much like a ground source well field. This grey water would be filtered and pumped to the water feature where it would act as an air cleaner. The goal is for the water feature to normalize the air temperature and humidity.

Proposed Electrical Breadth Study

1.1 Additional Electrical Load

With the addition of the devices required for window automation there will be an additional load that was not accounted for in the original electrical design. The number and nature of these devices will be calculated and discovered. Furthermore, the additional electrical load will possibly be integrated into the existing system.

1.2 Electrical System Reconfiguration

With the addition of the window automation electrical load it was proposed that the electrical systems could be reconfigured to accommodate this. Additionally, at times of hybrid ventilation the electrical consumptions could drop substantially, possibly allowing for reducing some electrical systems.

Proposed Construction Breadth Study

1.1 Additional Cost Estimate

The implementation of the hybrid system would obviously require additional pieces raising the construction cost. These pieces range from the grey water collection system part to the window automation devices. Moreover, there will be a need for further excavation than previously planned to place the grey water cistern below grade. All of these items will be considered for the new construction cost.

1.2 Additional Construction Time

In addition to construction cost, the time required for the additional construction was considered to ensure that the overall construction time of the building would not be extended in any great way. From the outlook the cistern placement could pose as a problem to the schedule as one must be ordered well in advance to its placement date. Additionally, the cistern will require unplanned excavation. This excavation will be away from the current design floor plan, but is a concern.

Mechanical System Redesign Methods

1.1 Weather Data

Weather data was acquired from the Trane Inc. program Trace 700. This weather data was used to find the typical outdoor conditions for each hour of the day for a standard day of each month. Based off of given dry bulb and wet bulb conditions the relative humidity, absolute humidity, and air density could be solved for using psychrometric charts.

1.2 Air Mixing Methods

To find under what conditions outdoor air could be used to the maximum, but still maintain acceptable indoor conditions. To do this air mixes were considered at 10% outdoor air intervals, starting with minimum outdoor air then proceeding to 10% outdoor air, 20% outdoor air, etc. The primary goal was to the mixed air temperature and the mixed air relative humidity to make sure it fell within acceptable ranges set forth by ASHRAE.

The temperature mixing equation used is described below:

$$T_{\text{mix}} = (T_{\text{Outdoor}} * Q_{\text{Outdoor}} + T_{\text{Heat Pump}} * Q_{\text{Heat Pump}}) / Q_{\text{Total}}$$

The process for solving for the mixed air relative humidity was slightly more difficult. Instead of one step it involved two. The first was to solve for the absolute humidity of the mix. The second step was to use psychrometric charts to find the relative humidity of the mix based of the absolute humidity and dry bulb temperature.

The absolute humidity mixing equation used is described below:

$$W_{\text{Mix}} = W_{\text{Outdoor}} + (\dot{m}_{\text{Heat Pump}} / \dot{m}_{\text{Total}}) (W_{\text{Heat Pump}} - W_{\text{Outdoor}})$$

W is the absolute humidity, \dot{m} is calculated from the volume flow rate and the air density for the given conditions. The values from the heat pump were taken from design documents and schedules.

1.3 Mixing Method Testing

To test if a particular air mixture would successfully yield acceptable temperature and humidity conditions logic functions were used in Microsoft Excel. The functions tested if the minimum design temperatures were met and the maximum design temperatures were not exceeded. The same was performed for the relative humidity. If a particular setup (E.G. Hour 2 of January at 50% Outdoor Air) was found acceptable it would be added to the total hours of hybrid ventilation at 50% outdoor air.

The tables designed and used to calculate the hybrid ventilation are in Appendix B: Hybrid Ventilation Calculations and Results.

Mechanical System Redesign Results

1.1 Assumptions for Results in Standard Conditions

To model the possible hybrid ventilation time there were several assumptions that needed to be made. These assumptions were made both within the calculations, about the physical setup of the space, and how the air was mixed.

One of the largest assumptions is that the outdoor air and the forced air will mix perfectly. This is assumed for both the mixed temperature and the mixed relative humidity. Additionally, it was assumed that the outdoor air temperature is constant within the interior courtyard. The wall between the courtyard and Area F has a stationary trellis that had its shading coefficient omitted from the calculations. Finally, the calculations were performed using the design air flow rate for the entire building. It was assumed that the mixed outdoor and forced air would spread from the areas surrounding the courtyard freely to all spaces within the building.

1.2 Results of Calculated Hybrid Time for Standard Conditions

The results of the calculated hybrid ventilation time are promising. They yield that up to 7% of all of the hours in the year 100% outdoor air could be used. As you would expect the amount of time that the various outdoor air levels can run increases as you approach the minimum rates.

Figure 9 below shows the percentage of each margin of outdoor air achievable.

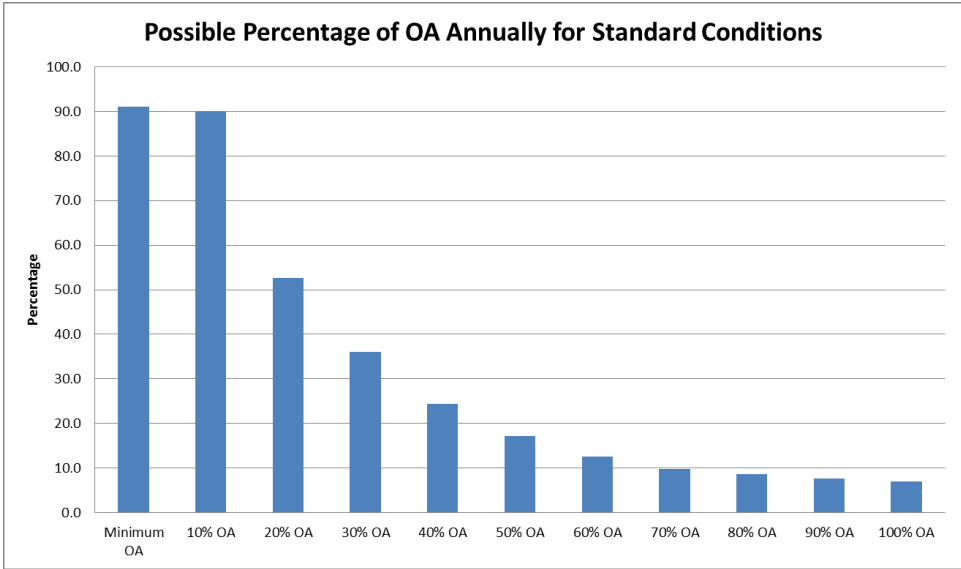


Figure 9

Figure XX in appendix A shows the complete results for the standard conditions. This includes the number of hours achievable for each outdoor air margin for both winter design conditions, summer design conditions and a combination of both.

1.3 Assumptions for Results in Water Feature Conditions

The model for hybrid conditions combined with the water feature included the same assumptions as the model for standard conditions. However, the modeling of the water feature’s results also came with some new assumptions. Firstly, there were two water feature models considered. The first option modeled the water feature as a water spraying air cleaner. This was the first choice as it would not only provide air conditioning, but also help remove particulate matter. The second option modeled the water feature as a constant temperature surface that the air could primarily have convective heat transfer with. Interestingly both models yielded similar results. For the sake of brevity, this report reflects the first option.

The assumptions made to model the air cleaner include that it would be at %60 efficiency. Standard air cleaners range from 60% to 80%. Given that the ‘air cleaner’ would in open conditions it was assumed to be on the low end of efficiency.

1.4 Results of Calculated Hybrid Time for Water Feature Conditions

The results for the water feature conditions were somewhat surprising. In the minimum to 40% outdoor air margin range the water feature did increase the number of hours possible to run hybrid ventilation. However when trying to achieve 50% outdoor air or above the water feature decreases the number of hours minutely.

Figure 10 below is shows the percentage of hours that each outdoor air margin can run annually.

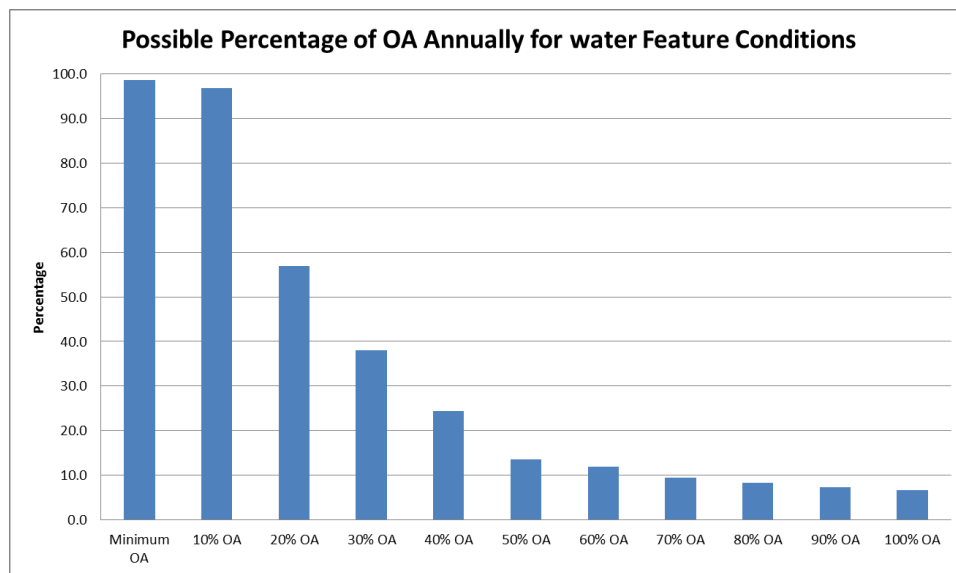


Figure 10

Figure 10 depicts the percentage of hours that each outdoor air margin can meet for both standard conditions and water feature conditions.

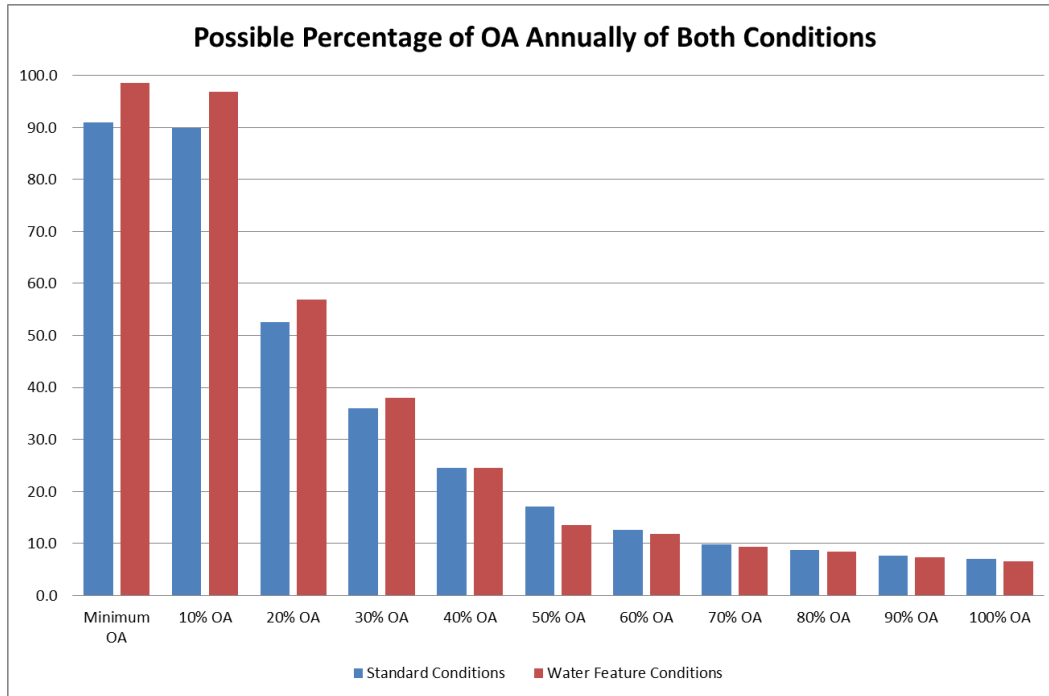


Figure 10

For a comparison of total hours for each condition search Figure 11 Appendix A.

1.5 Estimated Energy Savings from Hybrid Ventilation

The ultimate goal of the hybrid ventilation system is to save on heating and cooling loads. This will in turn lower the energy consumption of the building. Figure 12 below is a table showing the estimated energy savings that the hybrid system would provide. These values are on the extreme end of efficiency. They were calculated as though the hybrid system was always running at the peak outdoor air rate. Additionally, these calculations were based on a typical hour for each hour of each month. This does not account for poor weather or atypical weather. Finally, due to the heat pumps that were being used having such a variety the energy consumption was calculated linearly with the outdoor air use (E.G. 0% outdoor air correlates to 100% energy consumption and 100% outdoor air correlates to 0% energy consumption.) Because this is not an actuality, correction factors were use.

| Components | Current System Energy Use [kWh] | Energy Use with Hybrid Ventilation [kWh] | [%] of Current System |
|-------------------------|---------------------------------|--|-----------------------|
| Cooling Coil Compressor | 34919 | 27351 | 78.3 |
| Heating Coil Compressor | 32717 | 28496 | 87.1 |
| Terminal Fan Compressor | 20751 | 15296 | 73.7 |
| Total | 88387 | 71143 | 80 |

Figure 12

With the calculated energy savings of about 20% and the cost of electricity [\$ 0.10346] the annual savings could be up \$1,784 annually. This cost savings would likely not prove this proposal a viable option. The hopeful payback period is within 3 to 5 years, this leaves little room for the construction costs.

Electrical Breadth Analysis

1.1 Additional Electrical Load

The addition of the automated windows did add several electronic devices that the original electrical design did not call for. The basic pieces of a window automation and control system are actuator packages, motor controller, outstation controller, temperature sensors, humidity sensors, and CO₂ sensors. The actuator package is the device that physically opens the window by extending an actuator and closing the window via chain. The motor controller acts as a central control unit that receives the outdoor conditions and signals the actuators to open or close the window. The outstation controller is the device that the user can interface with, normally via a touchscreen. Select outstation controller can also be connected to building BAS systems. Temperature, humidity, and CO₂ sensors are self-explanatory, but let it be noted that they can be made in combination.

These devices can come in a variety of sizes, configurations, and names. The nomenclature this report uses was found to be common amongst several manufacturers. In addition to nomenclature and configurations these devices can vary in electrical consumption. The values used for this report were found to be typical or averaged among several manufacturers.

Moreover the quantity of devices needed rely on each other. For example a typical motor controller can handle six to eight actuators. The number of actuators depends on the number of windows and their size. Of the many possible configurations a simple one was selected. The existing building has five 9' by 8' glass partitions on two of the wall encompassing the interior courtyard. Each of these partitions was divided into sixteen 1' high by 4.5' wide windows. Each of these windows would require two actuators.

The sum of the required devices for this setup reaches over 70 amps, which caused an additional 100 amp panel to be added to the electrical configuration. This additional load could not be added to any of the existing panels as it exceeded their spare capacities. It is possible that the additional load could have been spread over the spare capacities of the existing panels. However, for the owners' sake a new panel was added so that the entire system could be controlled from one location if problems occurred. For example if an overload occurred and a fuse switched off, one location could be used, instead of tracking down two to three different panels.

The figure below, Figure 13, is a summary of the electrical load from the new devices.

| Additional Load Calculation | | | | |
|----------------------------------|-----------------------------|-----------------------------|------------------------|-----------------------|
| Number of Actuators | VA of Actuators | Number of Motor Controllers | VA of Motor Controller | |
| 320 | 24 | 40 | 500 | |
| Number of Outstation Controllers | VA of Outstation Controller | Total VA | Total Amperage | Breaker Size Selected |
| 2 | 350 | 28380 | 70 3ph | 100A |

Figure 13

Figure 14 is a table displaying the voltage drop calculation. As you can see the voltage drop for the new panel is below 3% and was found to be acceptable.

| Voltage Drop Testing | | | | |
|----------------------|-------------------|-------------------|--------------|------------|
| Estimated Length | Correction Factor | Calculated Length | Conduit | Voltage |
| 103' | 1.1 | 114' | 1.25" | 230 |
| VA | Phase | Amps | Power Factor | Wire Size |
| 28080 | 3 | 70.4 | 1 | 3 |
| Correction Factor | Factor | Voltage Drop | % Drop | Result |
| 1 | 0.017 | 1.36 | 0.59 | Acceptable |

Figure 14

1.2 Electrical System Reconfiguration

Though the original goal was to reduce the energy consumption of the new office building enough to reconfigure the electrical system this is not possible. As the results of the hybrid model show, hybrid ventilation was not achievable above 10% in several of the winter months. This means that even though some heating loads may be reduced, the peak heating load remains to be relatively the same, thus the peak electrical load would also remain the same as they occur simultaneously. Because the peak electrical load remains the same the overall system could not be reconfigured.

Construction Breadth Analysis

1.1 Additional Cost Estimates

As previously mentioned the implementation of a hybrid ventilation system would incur additional costs. These not only include the electrical devices for the window automation, but also the pieces for grey water management to feed the water feature, and the wall construction itself.

The total cost of the hybrid ventilation system is estimated to be \$261,479. The most expensive items from the list include the grey water filtration system and the windows. Though it may seem senseless to filter grey water that would only be used for a water feature it is actually a safety precaution to prevent legionellosis. That is why both a standard grey water filter and an Ultra Violet filter were selected. Normally, grey water can be used without this precaution, but the mixing of the water with outdoor air that will be used for natural ventilation was considered and ultimately the filtration systems were selected.

Figures 15 through 18 in Appendix A are tables of the mechanical systems cost by item and the percentage of the mechanical costs respectively for the original design and the proposed design.

From the tables you will find that the original cost of the mechanical systems was \$1,309,987. The additional \$261,469 is a 19.9% cost increase. Additionally, you will note that the hybrid ventilation components become the second largest mechanical cost only behind heating and cooling pipes.

1.2 Additional Construction Time

In addition to the additional cost the additional time that would be required to implement the hybrid system was considered. In total it is estimated an additional 827.8 hours would be required. Additionally, the overall schedule was considered. Thankfully, most of the items would not hinder further construction. The window automation devices, software, and electrical systems could be installed by an electrical contractor once the building proceeded to the interiors phase.

The most difficult part of the schedule adjustment would be the excavation required for the cistern and the pipe bedding for the grey water collection and water feature supply. Project documentation and a site visit did indicate that the property was greatly terra-formed to reduce some of the wetlands surrounding the property. It is estimated that the additional earthwork would only add 1 day to the construction time if all of the pieces were in place. For this to happen the cistern and excavator must be on site when the terra-forming is nearing completion. Estimates varied but the conclusion for lead time for the cistern was 1 month. The excavator can be rented from several local offices if the contractor does not already have one. This eases the burden of lead time.

Figure 19 in Appendix A is a table with detailed unit prices and total calculations.

Conclusion

The final results of this report yielded promising results in that the new office building could indeed use hybrid ventilation. An example of this is that it is estimated that 7% of the year the building could use %100 outdoor air. Additionally, the incorporation of a water feature to be used an air cleaner and a source of temperature and humidity regulation proved to be a viable option in conditions at or below 40% outdoor air.

Additionally, the electrical system reconfiguration and adjustment for the load created by the window automation was efficient. The existing system could not accommodate the additional load without dividing it among many panels. Therefore, a 100 Amp panel was added and could be drawn all the back the transformer within acceptable conditions.

Moreover, the additional construction for the hybrid system was found to be minimally invasive on the construction schedule. The only major considerations were towards the cistern, but proper planning and scheduling would make it a non-factor.

However, not all of the goals of this study were achieved. The grey water system was found to be detrimental to the number of hours that hybrid or natural ventilation could be used in outdoor air margins above 40%.

Furthermore, the construction costs of the hybrid system were very much cost prohibitive. At an estimated cost of \$261,479 and an estimated annual savings of \$1,784 the payback period was nowhere near with the acceptable 3 to 5 year range. This is in large part due to the filtration system needed to keep the water and breathable air safe. Additionally, the selected window configuration drove the cost with the number of windows required. Separate configurations were considered, but larger windows were obviously more expensive even of there were less need for the same area. The cost varied minutely.

The final recommendation of this report would be not implement the hybrid ventilation system in the proposed fashion. A much more cost acceptable solution would be to integrate outdoor weather condition sensors with the existing building automation system. A program could be used that emails the occupant under predefined conditions. This would allow for occupants to use operable windows if they so choose.

References

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NEC: 2011. Quincy, MA: National Fire Protection Association, 2010. Print.

Rsmeans, Engineering Department. *Green Building Cost Data 2013*. [S.I.]: R S Means, 2012. Print

Mechanical Cost Data 2013. N.p.: R S Means, 2012. Print.

Assemblies Cost Data 2013. N.p.: R S Means, 2012. Print.

Appendix A: General References

Figure 2 depicts the ground level mechanical spaces. This includes the primary space in Area G and the small closet housing an individual heat pump.

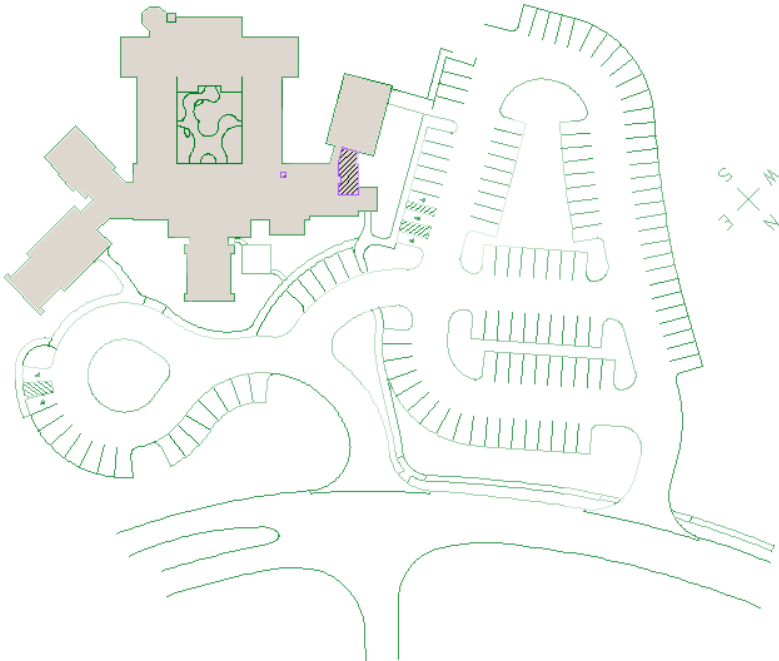


Figure 2

Figure 3 depicts the mezzanine level mechanical spaces. These areas are accessed by a mezzanine storage area in Area H. The ventilation units are isolated above the owners offices in Area E.

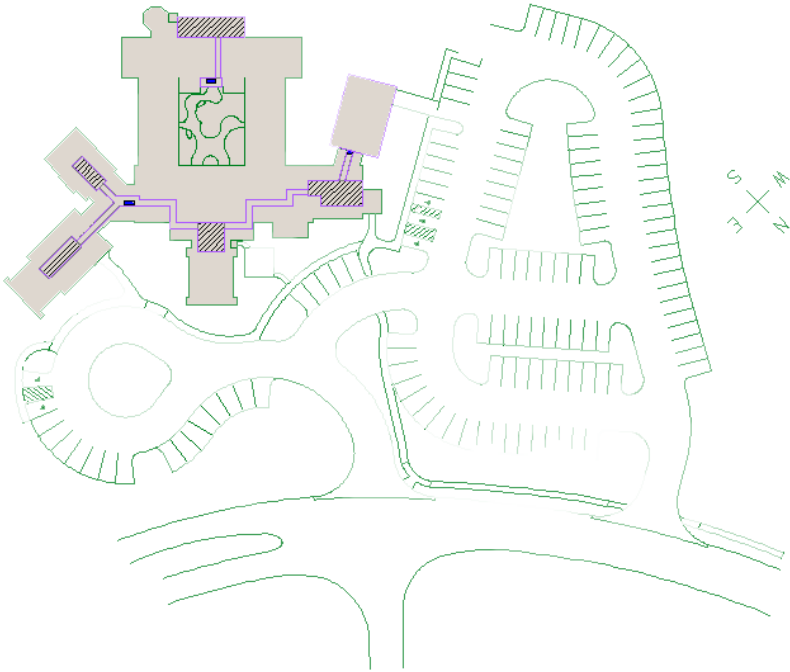


Figure 3

Figure 4 depicts the well field that is under the parking lot. The closed loops exit and enter the building under Area H end then enter the ground level mechanical space.



Figure 4

Figure 5 below is an outline of how the geothermal well is utilized. Depicted is the well, the pumps used to move the water to the heat pumps (P-1 and P-2) as well as sensors. The hubs of terminal heat pumps were simplified for this diagram.

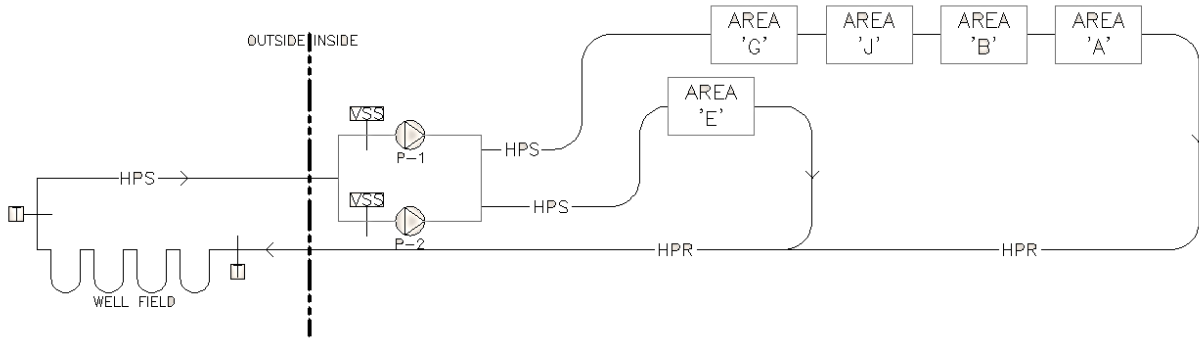


Figure 5

Figure 11 show the number of hours for both standard and water feature conditions that each outdoor air margin can be run. As you will notice the water feature conditions stop being effective after 40% outdoor air.

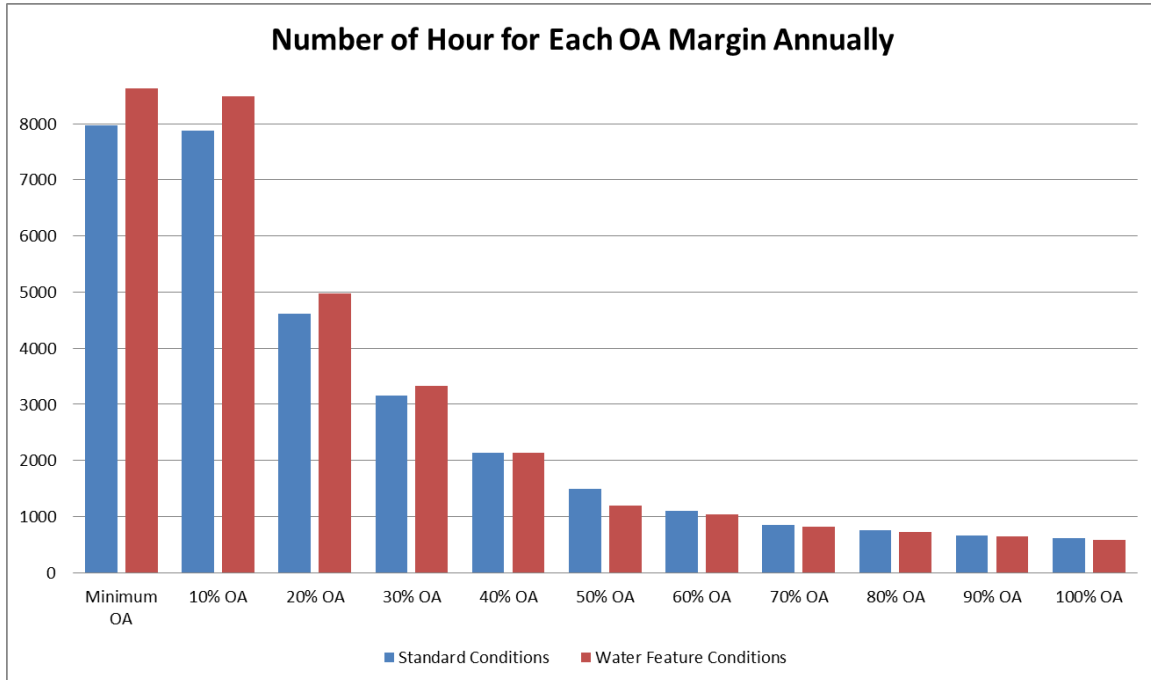


Figure 11

The tables below depict the cost breakdown of mechanical items for the original design and the proposed design. Figure 17 and Figure 18 show the percentage of mechanical costs that each item holds.

| Mechanical Item | Cost [\$] | Mechanical Item | Cost [\$] |
|----------------------|-----------|--------------------------|-----------|
| Project Coordination | 19,800* | Heating & Cooling Piping | 280,456 |
| Temporary Utilities | 24,632 | Air Handlers | 46,037 |
| Fire Protection | 153,400 | Heat Pumps | 137,862 |
| Plumbing Piping | 99,736 | Duct Work | 182,241 |
| Plumbing Specialties | 73,642 | Fans | 24,049 |
| Plumbing Fixtures | 70,213 | Air Devices | 49,654 |
| Plumbing Equipment | 39,300 | Building Controls | 128,765 |
| Total [\$] | | 1,309,987 | |
| Total [\$/SF] | | 57.67 | |

*Project Coordination omitted from total

Figure 15

| Mechanical Item | Cost [\$] | Mechanical Item | Cost [\$] |
|----------------------|-----------|--------------------------|-----------|
| Project Coordination | 19,800* | Heating & Cooling Piping | 280,456 |
| Temporary Utilities | 24,632 | Air Handlers | 46,037 |
| Fire Protection | 153,400 | Heat Pumps | 137,862 |
| Plumbing Piping | 99,736 | Duct Work | 182,241 |
| Plumbing Specialties | 73,642 | Fans | 24,049 |
| Plumbing Fixtures | 70,213 | Air Devices | 49,654 |
| Plumbing Equipment | 39,300 | Building Controls | 128,765 |
| N/A | N/A | Hybrid Ventilation | 261,479 |
| Total [\$] | | 1,571,466 | |
| Total [\$/SF] | | 69.17 | |

*Project Coordination omitted from total

Figure 16

| Mechanical Item | Percentage of Cost [%] | Mechanical Item | Percentage of Cost [%] |
|----------------------|------------------------|--------------------------|------------------------|
| Project Coordination | - | Heating & Cooling Piping | 21.4 |
| Temporary Utilities | 1.9 | Air Handlers | 3.5 |
| Fire Protection | 11.7 | Heat Pumps | 10.5 |
| Plumbing Piping | 7.6 | Duct Work | 13.9 |
| Plumbing Specialties | 5.6 | Fans | 1.8 |
| Plumbing Fixtures | 5.4 | Air Devices | 3.8 |
| Plumbing Equipment | 3.0 | Building Controls | 9.8 |
| Total Cost [\$] | | 1,309,987 | |

Figure 17

| Mechanical Item | Percentage of Cost [%] | Mechanical Item | Percentage of Cost [%] |
|----------------------|------------------------|--------------------------|------------------------|
| Project Coordination | - | Heating & Cooling Piping | 17.8 |
| Temporary Utilities | 1.6 | Air Handlers | 2.9 |
| Fire Protection | 9.8 | Heat Pumps | 8.8 |
| Plumbing Piping | 6.3 | Duct Work | 11.6 |
| Plumbing Specialties | 4.7 | Fans | 1.5 |
| Plumbing Fixtures | 4.5 | Air Devices | 3.2 |
| Plumbing Equipment | 2.5 | Building Controls | 8.2 |
| | | Hybrid Ventilation | 16.6 |
| Total Cost [\$] | | 1,309,987 | |

Figure 18

The table below, Figure 19, is the calculations for the construction cost of the hybrid system. It includes total cost, unit costs, and a summary of the labor required.

| Item | Unit Details | | | Labor Details | | | Material | | | Cost Details | | | Notes | Misc. |
|------------------------------|--------------|--------|-------|---------------|----------|-------|-----------|---------------|----------------------|--------------|--|--|-------|--------------------------------|
| | Quantity | Units | Units | Labour Hours | Material | Labor | Equipment | Cost per Unit | Total Cost | | | | | |
| Window Automation | | | | | | | | | | | | | | |
| Outstation Controller | 2 | each | | 16 | 945 | 905 | 0 | 1850 | 3700 | | | | | |
| Motor Controller | 40 | each | | 0.5 | 325 | 28.5 | 0 | 353.5 | 14140 | | | | | |
| Temperature Sensor | 40 | each | | 0.667 | 167 | 37 | 0 | 204 | 8160 | | | | | |
| Humidity Sensor | 40 | each | | 0.5 | 385 | 28 | 0 | 413 | 16520 | | | | | |
| CO2 Sensor | 40 | each | | 0.5 | 62 | 28 | 0 | 90 | 3600 | | | | | |
| Window | 160 | each | | 0 | 273 | 155 | 0 | 428 | 68480 | | | | | |
| Window Hardware | 160 | each | | 1.4 | - | - | - | - | - | | | | | Included |
| Actuator Package | 320 | each | | 1 | 219 | 56.5 | 0 | 275.5 | 88160 | | | | | |
| Control Program | 1 | each | | 0 | 0 | 0 | 0 | 36 | 36 | | | | | |
| Water Feature Supply | | | | | | | | | | | | | | |
| Cistern | 1 | each | | 6.4 | 1600 | 400 | 0 | 2000 | 2000 | | | | | Notes |
| Filtration System | 1 | each | | 8 | 40000 | 330 | 39 | 40369 | 40369 | | | | | 12,000 Gal Tank. Pump included |
| UV Filtration System | 1 | each | | 8 | 825 | 330 | 45 | 1200 | 1200 | | | | | Grey water filtration |
| Water Feature | 1 | each | | 8 | 550 | 284 | 0 | 834 | 834 | | | | | For Legionellosis Prevention |
| Pipe | 70 | L.F. | | 0.101 | 5.7 | 4.32 | 0 | 10.02 | 701.4 | | | | | Pump included |
| Grey Water Collection | | | | | | | | | | | | | | |
| Trench excavation | 500 | L.F. | | 0.011 | 0 | 0.51 | 0.09 | 0.6 | 330 | | | | | Notes |
| Pipes | 1000 | L.F. | | 0.101 | 5.7 | 4.32 | 0 | 10.02 | 11022 | | | | | x1.1 for fittings |
| Electrical Systems | | | | | | | | | | | | | | |
| Panelboard | 1 | each | | 2.222 | 147 | 115 | 0 | 262 | 262 | | | | | Notes |
| Conductors | 145 | L.F. | | 0.08 | 3.22 | 4.12 | 0 | 7.34 | 1064.3 | | | | | 100 Amp |
| Wires | 145 | C.L.F. | | 1.6 | 124 | 82.5 | 0 | 206.5 | 299,425 | | | | | 1.25" |
| Excavation of Soil | | | | | | | | | | | | | | |
| Soil Removal | 80 | C.F. | | 0.03 | 0 | 1.28 | 1.11 | 2.39 | 191.2 | | | | | Notes |
| Trench Excavation | 70 | L.F. | | 0 | 0 | 0.51 | 0.09 | 0.6 | 42 | | | | | |
| Pipe Bedding | 70 | C.F. | | 0.025 | 1.69 | 0.88 | 2.57 | 5.14 | 359.8 | | | | | |
| Backfill | 5 | C.F. | | 0.01 | 0 | 0.43 | 1.04 | 1.47 | 7.35 | | | | | |
| Total Hours | | | | 827.8 | | | | | | | | | | |
| Total Cost | | | | | | | | | \$ 261,478.48 | | | | | |

Figure 20 is a table showing the calculated number of hours each outdoor air margin could be run during the year and what percentage of the year each margin could be achieved. This table is for standard conditions.

| Standard | Minimum OA | 10% OA | 20% OA | 30% OA | 40% OA | 50% OA | 60% OA | 70% OA | 80% OA | 90% OA | 100% OA |
|---------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| January | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 24 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| February | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| Winter | 24 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| March | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 24 | 24 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| April | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Winter | 24 | 24 | 24 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| May | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 11 | 11 | 15 | 17 | 10 | 8 | 6 | 6 | 4 | 6 | 6 |
| Summer | 21 | 19 | 13 | 11 | 9 | 9 | 7 | 7 | 7 | 7 | 7 |
| June | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Winter | 6 | 7 | 11 | 12 | 8 | 4 | 3 | 3 | 2 | 2 | 2 |
| Summer | 24 | 24 | 17 | 14 | 12 | 11 | 9 | 6 | 5 | 3 | 3 |
| July | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 0 | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 24 | 24 | 24 | 18 | 13 | 5 | 3 | 0 | 0 | 0 | 0 |
| August | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 7 | 8 | 11 | 13 | 7 | 2 | 1 | 1 | 1 | 0 | 0 |
| Summer | 24 | 24 | 16 | 14 | 13 | 10 | 9 | 6 | 5 | 4 | 2 |
| September | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Winter | 11 | 11 | 14 | 16 | 10 | 9 | 5 | 4 | 3 | 2 | 2 |
| Summer | 23 | 22 | 13 | 10 | 10 | 8 | 7 | 8 | 7 | 7 | 7 |
| October | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 24 | 24 | 24 | 12 | 7 | 4 | 0 | 0 | 0 | 0 | 0 |
| Summer | 10 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| November | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Winter | 24 | 24 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| December | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 24 | 24 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hours | | | | | | | | | | | |
| Winter | 6156 | 6217 | 4121 | 2775 | 1404 | 824 | 457 | 427 | 305 | 306 | 306 |
| Summer | 4219 | 4096 | 2543 | 2053 | 1745 | 1314 | 1069 | 823 | 732 | 641 | 579 |
| Both | 7971 | 7879 | 4609 | 3158 | 2143 | 1498 | 1099 | 853 | 762 | 671 | 609 |
| Percentage of Hours | | | | | | | | | | | |
| Winter | 70.3 | 71.0 | 47.0 | 31.7 | 16.0 | 9.4 | 5.2 | 4.9 | 3.5 | 3.5 | 3.5 |
| Summer | 48.2 | 46.8 | 29.0 | 23.4 | 19.9 | 15.0 | 12.2 | 9.4 | 8.4 | 7.3 | 6.6 |
| Both | 91.0 | 89.9 | 52.6 | 36.1 | 24.5 | 17.1 | 12.5 | 9.7 | 8.7 | 7.7 | 7.0 |

Figure 20

Figure 21 is a table showing the calculated number of hours each outdoor air margin could be run during the year and what percentage of the year each margin could be achieved. This table is for water feature conditions.

| Modified | Minimum OA | 10% OA | 20% OA | 30% OA | 40% OA | 50% OA | 60% OA | 70% OA | 80% OA | 90% OA | 100% OA |
|---------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| January | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 24 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| February | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| Winter | 24 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| March | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 24 | 24 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| April | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Winter | 24 | 24 | 24 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| May | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 11 | 11 | 15 | 17 | 10 | 8 | 6 | 4 | 6 | 6 | 6 |
| Summer | 21 | 19 | 13 | 11 | 9 | 9 | 7 | 7 | 7 | 7 | 7 |
| June | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Winter | 7 | 7 | 12 | 12 | 8 | 4 | 3 | 3 | 2 | 2 | 1 |
| Summer | 24 | 24 | 17 | 14 | 12 | 11 | 9 | 6 | 5 | 3 | 3 |
| July | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 0 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 24 | 24 | 24 | 18 | 13 | 5 | 3 | 0 | 0 | 0 | 0 |
| August | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 7 | 8 | 11 | 13 | 6 | 2 | 1 | 1 | 1 | 0 | 0 |
| Summer | 24 | 24 | 16 | 14 | 13 | 10 | 9 | 6 | 5 | 4 | 2 |
| September | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Winter | 11 | 11 | 14 | 16 | 11 | 8 | 5 | 4 | 3 | 2 | 2 |
| Summer | 23 | 20 | 13 | 10 | 10 | 8 | 7 | 8 | 7 | 7 | 7 |
| October | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 24 | 24 | 24 | 12 | 7 | 4 | 0 | 0 | 0 | 0 | 0 |
| Summer | 10 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| November | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Winter | 24 | 24 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| December | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Winter | 24 | 24 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Summer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hours | | | | | | | | | | | |
| Winter | 6186 | 6217 | 4151 | 2775 | 1403 | 794 | 457 | 427 | 305 | 306 | 276 |
| Summer | 4219 | 4036 | 2543 | 2053 | 1745 | 1314 | 1069 | 823 | 732 | 641 | 579 |
| Both | 8637 | 8485 | 4983 | 3331 | 2143 | 1190 | 1038 | 823 | 732 | 641 | 579 |
| Percentage of Hours | | | | | | | | | | | |
| Winter | 70.6 | 71.0 | 47.4 | 31.7 | 16.0 | 9.1 | 5.2 | 4.9 | 3.5 | 3.5 | 3.2 |
| Summer | 48.2 | 46.1 | 29.0 | 23.4 | 19.9 | 15.0 | 12.2 | 9.4 | 8.4 | 7.3 | 6.6 |
| Both | 98.6 | 98.9 | 56.9 | 38.0 | 24.5 | 13.6 | 11.8 | 9.4 | 8.4 | 7.3 | 6.6 |

Figure 21

Figure 22 is a table depicting the differences in hours possible for each outdoor air margin for both winter and summer design conditions. Additionally, it shows the difference in percentage that each margin can be run between standard and water feature conditions.

| | Differences in Hour Achievable | | | | | | | | | | |
|--|--------------------------------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| Winter | 30.0 | 0.0 | 30.0 | 0.0 | -1.0 | -30.0 | 0.0 | 0.0 | 0.0 | 0.0 | -30.0 |
| Summer | 0.0 | -60.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Both | 666.0 | 606.0 | 374.0 | 173.0 | 0.0 | -308.0 | -61.0 | -30.0 | -30.0 | -30.0 | -30.0 |
| Difference in Percentage of Hours Achievable | | | | | | | | | | | |
| Winter | 0.34 | 0.00 | 0.34 | 0.00 | -0.01 | -0.34 | 0.00 | 0.00 | 0.00 | 0.00 | -0.34 |
| Summer | 0.00 | -0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Both | 7.60 | 6.92 | 4.27 | 1.97 | 0.00 | -3.52 | -0.70 | -0.34 | -0.34 | -0.34 | -0.34 |

Figure 22

Appendix B: Air Mixing Results for Standard Conditions

| Hour | Minimum OA | | | 10% OA | | | 20% OA | | | 30% OA | | | 40% OA | | | 50% OA | | | 60% OA | | | 70% OA | | | 80% OA | | | 90% OA | | | 100% OA | | |
|------|------------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|---------|-------|-------|
| | Tmix | Wmix | RHmix | Tmix | Wmix | RHmix | Tmix | Wmix | RHmix | Tmix | Wmix | RHmix | Tmix | Wmix | RHmix | Tmix | Wmix | RHmix | Tmix | Wmix | RHmix | Tmix | Wmix | RHmix | Tmix | Wmix | RHmix | Tmix | Wmix | RHmix | | | |
| 1 | 70.3 | 0.009 | 0.553 | 70.1 | 0.009 | 0.554 | 65.3 | 0.008 | 0.594 | 60.4 | 0.007 | 0.633 | 55.6 | 0.006 | 0.670 | 50.7 | 0.005 | 0.702 | 45.8 | 0.005 | 0.725 | 41.0 | 0.004 | 0.736 | 36.1 | 0.003 | 0.727 | 31.3 | 0.003 | 0.690 | 26.4 | 0.002 | 0.622 |
| 2 | 70.2 | 0.009 | 0.554 | 70.0 | 0.009 | 0.556 | 65.0 | 0.008 | 0.597 | 60.0 | 0.007 | 0.638 | 55.0 | 0.006 | 0.677 | 50.0 | 0.005 | 0.710 | 45.0 | 0.005 | 0.735 | 40.0 | 0.004 | 0.745 | 35.0 | 0.003 | 0.734 | 30.0 | 0.002 | 0.665 | 25.0 | 0.002 | 0.616 |
| 3 | 70.1 | 0.009 | 0.556 | 69.8 | 0.009 | 0.556 | 64.8 | 0.008 | 0.601 | 59.8 | 0.007 | 0.645 | 54.5 | 0.006 | 0.686 | 49.4 | 0.005 | 0.723 | 44.3 | 0.005 | 0.751 | 39.2 | 0.004 | 0.764 | 34.0 | 0.003 | 0.754 | 28.9 | 0.002 | 0.720 | 23.8 | 0.002 | 0.636 |
| 4 | 70.0 | 0.009 | 0.557 | 69.8 | 0.009 | 0.559 | 64.6 | 0.008 | 0.604 | 59.4 | 0.007 | 0.648 | 54.2 | 0.006 | 0.691 | 49.0 | 0.005 | 0.729 | 43.8 | 0.005 | 0.759 | 38.6 | 0.004 | 0.772 | 33.4 | 0.003 | 0.762 | 28.2 | 0.002 | 0.728 | 23.0 | 0.002 | 0.639 |
| 5 | 69.9 | 0.009 | 0.558 | 69.7 | 0.009 | 0.560 | 64.5 | 0.008 | 0.606 | 59.2 | 0.007 | 0.652 | 54.0 | 0.006 | 0.697 | 48.7 | 0.005 | 0.737 | 43.4 | 0.005 | 0.768 | 38.2 | 0.004 | 0.765 | 32.9 | 0.003 | 0.777 | 27.7 | 0.002 | 0.747 | 22.4 | 0.002 | 0.656 |
| 6 | 69.9 | 0.009 | 0.558 | 69.7 | 0.009 | 0.560 | 64.5 | 0.008 | 0.606 | 59.2 | 0.007 | 0.653 | 54.0 | 0.006 | 0.698 | 48.6 | 0.005 | 0.738 | 43.4 | 0.005 | 0.770 | 38.1 | 0.004 | 0.766 | 32.8 | 0.003 | 0.777 | 27.6 | 0.002 | 0.747 | 22.3 | 0.002 | 0.657 |
| 7 | 70.0 | 0.009 | 0.557 | 69.8 | 0.009 | 0.559 | 64.6 | 0.008 | 0.603 | 59.3 | 0.007 | 0.647 | 54.1 | 0.006 | 0.690 | 48.9 | 0.005 | 0.727 | 43.7 | 0.005 | 0.754 | 38.5 | 0.004 | 0.765 | 33.2 | 0.003 | 0.751 | 28.0 | 0.002 | 0.712 | 22.8 | 0.002 | 0.614 |
| 8 | 70.1 | 0.009 | 0.556 | 69.9 | 0.009 | 0.558 | 64.8 | 0.008 | 0.603 | 59.8 | 0.007 | 0.644 | 54.7 | 0.006 | 0.686 | 49.6 | 0.005 | 0.723 | 44.5 | 0.005 | 0.751 | 39.4 | 0.004 | 0.766 | 34.0 | 0.003 | 0.756 | 29.3 | 0.002 | 0.727 | 24.2 | 0.002 | 0.651 |
| 9 | 70.3 | 0.009 | 0.554 | 70.1 | 0.009 | 0.556 | 65.3 | 0.008 | 0.598 | 60.4 | 0.007 | 0.637 | 55.6 | 0.006 | 0.677 | 50.7 | 0.005 | 0.712 | 45.8 | 0.005 | 0.741 | 41.0 | 0.004 | 0.757 | 36.1 | 0.003 | 0.756 | 31.3 | 0.003 | 0.729 | 26.4 | 0.002 | 0.678 |
| 10 | 70.6 | 0.009 | 0.551 | 70.4 | 0.009 | 0.553 | 65.8 | 0.008 | 0.590 | 61.2 | 0.007 | 0.628 | 56.6 | 0.006 | 0.664 | 52.0 | 0.005 | 0.696 | 47.4 | 0.005 | 0.723 | 42.8 | 0.004 | 0.738 | 38.2 | 0.003 | 0.741 | 33.6 | 0.003 | 0.720 | 29.0 | 0.002 | 0.678 |
| 11 | 70.9 | 0.009 | 0.547 | 70.7 | 0.009 | 0.548 | 66.4 | 0.008 | 0.582 | 62.1 | 0.007 | 0.614 | 57.8 | 0.007 | 0.645 | 53.4 | 0.006 | 0.672 | 48.1 | 0.005 | 0.693 | 44.8 | 0.004 | 0.705 | 40.5 | 0.004 | 0.705 | 36.2 | 0.003 | 0.665 | 31.9 | 0.002 | 0.640 |
| 12 | 71.1 | 0.009 | 0.543 | 71.0 | 0.009 | 0.545 | 66.9 | 0.008 | 0.573 | 62.9 | 0.007 | 0.600 | 58.8 | 0.007 | 0.625 | 54.8 | 0.006 | 0.646 | 50.8 | 0.005 | 0.661 | 46.7 | 0.004 | 0.668 | 42.7 | 0.004 | 0.662 | 38.6 | 0.003 | 0.640 | 34.6 | 0.002 | 0.565 |
| 13 | 71.3 | 0.009 | 0.541 | 71.2 | 0.009 | 0.542 | 67.4 | 0.008 | 0.567 | 63.5 | 0.007 | 0.591 | 59.7 | 0.007 | 0.613 | 55.9 | 0.006 | 0.630 | 52.1 | 0.005 | 0.643 | 48.3 | 0.005 | 0.649 | 44.4 | 0.004 | 0.642 | 40.6 | 0.003 | 0.621 | 36.8 | 0.003 | 0.562 |
| 14 | 71.5 | 0.009 | 0.538 | 71.3 | 0.009 | 0.539 | 67.8 | 0.008 | 0.561 | 64.0 | 0.007 | 0.581 | 60.3 | 0.007 | 0.598 | 56.8 | 0.006 | 0.611 | 52.9 | 0.005 | 0.618 | 49.6 | 0.005 | 0.617 | 45.6 | 0.004 | 0.605 | 41.9 | 0.003 | 0.578 | 38.2 | 0.003 | 0.533 |
| 15 | 71.5 | 0.009 | 0.538 | 71.4 | 0.009 | 0.537 | 67.7 | 0.008 | 0.557 | 64.1 | 0.007 | 0.575 | 60.5 | 0.007 | 0.589 | 56.9 | 0.006 | 0.599 | 53.2 | 0.005 | 0.603 | 49.6 | 0.004 | 0.598 | 46.0 | 0.004 | 0.582 | 42.3 | 0.003 | 0.551 | 38.7 | 0.002 | 0.500 |
| 16 | 71.5 | 0.009 | 0.536 | 71.4 | 0.009 | 0.537 | 67.6 | 0.008 | 0.557 | 64.1 | 0.007 | 0.575 | 60.4 | 0.007 | 0.590 | 56.8 | 0.006 | 0.600 | 53.1 | 0.005 | 0.603 | 49.5 | 0.004 | 0.598 | 45.8 | 0.004 | 0.581 | 42.2 | 0.003 | 0.549 | 38.5 | 0.002 | 0.497 |
| 17 | 71.4 | 0.009 | 0.537 | 71.3 | 0.009 | 0.536 | 67.6 | 0.008 | 0.558 | 63.9 | 0.007 | 0.578 | 60.2 | 0.007 | 0.594 | 56.5 | 0.006 | 0.605 | 52.8 | 0.005 | 0.610 | 48.1 | 0.004 | 0.606 | 45.4 | 0.004 | 0.590 | 41.7 | 0.003 | 0.559 | 38.0 | 0.002 | 0.508 |
| 18 | 71.4 | 0.009 | 0.540 | 71.2 | 0.009 | 0.540 | 67.4 | 0.008 | 0.564 | 63.6 | 0.007 | 0.587 | 59.8 | 0.007 | 0.606 | 56.0 | 0.006 | 0.621 | 52.3 | 0.005 | 0.631 | 48.5 | 0.005 | 0.632 | 44.7 | 0.004 | 0.622 | 40.9 | 0.003 | 0.597 | 37.1 | 0.003 | 0.552 |
| 19 | 71.3 | 0.009 | 0.542 | 71.1 | 0.009 | 0.543 | 67.2 | 0.008 | 0.570 | 63.3 | 0.007 | 0.586 | 59.4 | 0.007 | 0.619 | 55.5 | 0.006 | 0.638 | 51.6 | 0.005 | 0.652 | 47.7 | 0.005 | 0.659 | 43.8 | 0.004 | 0.654 | 39.9 | 0.003 | 0.635 | 36.0 | 0.003 | 0.586 |
| 20 | 71.1 | 0.009 | 0.544 | 71.0 | 0.009 | 0.545 | 66.9 | 0.008 | 0.574 | 62.9 | 0.007 | 0.602 | 58.8 | 0.007 | 0.628 | 54.8 | 0.006 | 0.650 | 50.8 | 0.005 | 0.667 | 46.7 | 0.005 | 0.675 | 42.7 | 0.004 | 0.672 | 38.6 | 0.003 | 0.654 | 34.6 | 0.003 | 0.613 |
| 21 | 71.0 | 0.009 | 0.546 | 70.8 | 0.009 | 0.547 | 66.6 | 0.008 | 0.579 | 62.4 | 0.007 | 0.609 | 58.2 | 0.007 | 0.638 | 54.0 | 0.006 | 0.663 | 49.8 | 0.005 | 0.682 | 45.6 | 0.004 | 0.693 | 41.4 | 0.004 | 0.691 | 37.2 | 0.003 | 0.672 | 33.0 | 0.002 | 0.628 |
| 22 | 70.8 | 0.009 | 0.549 | 70.6 | 0.009 | 0.550 | 66.3 | 0.008 | 0.584 | 61.9 | 0.007 | 0.618 | 57.5 | 0.007 | 0.651 | 53.1 | 0.006 | 0.690 | 48.8 | 0.005 | 0.703 | 44.4 | 0.004 | 0.718 | 40.0 | 0.004 | 0.720 | 35.7 | 0.003 | 0.703 | 31.3 | 0.002 | 0.661 |
| 23 | 70.6 | 0.009 | 0.550 | 70.5 | 0.009 | 0.551 | 66.9 | 0.008 | 0.587 | 61.4 | 0.007 | 0.623 | 56.8 | 0.006 | 0.656 | 52.3 | 0.006 | 0.686 | 47.9 | 0.005 | 0.709 | 43.2 | 0.004 | 0.722 | 38.7 | 0.004 | 0.719 | 34.1 | 0.003 | 0.694 | 29.6 | 0.002 | 0.645 |
| 24 | 70.5 | 0.009 | 0.551 | 70.3 | 0.009 | 0.553 | 66.6 | 0.008 | 0.590 | 60.9 | 0.007 | 0.627 | 56.2 | 0.006 | 0.662 | 51.4 | 0.006 | 0.693 | 46.7 | 0.005 | 0.716 | 42.0 | 0.004 | 0.726 | 37.3 | 0.003 | 0.719 | 32.6 | 0.003 | 0.685 | 27.9 | 0.002 | 0.627 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmx | Wmix | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | | | | | | | | | | | |
| 1 | 70.3 | 0.009 | 0.563 | 70.2 | 0.009 | 0.565 | 85.3 | 0.008 | 0.566 | 80.5 | 0.007 | 0.565 | 58.6 | 0.006 | 0.673 | 50.8 | 0.006 | 0.707 | 45.9 | 0.005 | 0.733 | 41.1 | 0.004 | 0.747 | 38.2 | 0.003 | 0.743 | 31.4 | 0.003 | 0.712 | 28.6 | 0.002 | 0.653 |
| 2 | 70.2 | 0.009 | 0.566 | 70.0 | 0.009 | 0.567 | 85.0 | 0.008 | 0.600 | 80.1 | 0.007 | 0.543 | 55.1 | 0.006 | 0.684 | 50.1 | 0.006 | 0.722 | 45.1 | 0.005 | 0.752 | 40.1 | 0.004 | 0.770 | 35.2 | 0.003 | 0.769 | 30.2 | 0.003 | 0.745 | 25.2 | 0.002 | 0.686 |
| 3 | 70.1 | 0.009 | 0.567 | 69.9 | 0.009 | 0.568 | 84.8 | 0.008 | 0.602 | 79.8 | 0.007 | 0.546 | 54.7 | 0.006 | 0.688 | 49.6 | 0.005 | 0.727 | 44.5 | 0.005 | 0.758 | 39.4 | 0.004 | 0.775 | 34.4 | 0.003 | 0.771 | 29.3 | 0.002 | 0.745 | 24.2 | 0.002 | 0.676 |
| 4 | 70.0 | 0.009 | 0.568 | 69.8 | 0.009 | 0.569 | 84.7 | 0.008 | 0.605 | 79.5 | 0.007 | 0.551 | 54.3 | 0.006 | 0.696 | 49.1 | 0.005 | 0.736 | 44.0 | 0.005 | 0.789 | 38.8 | 0.004 | 0.789 | 33.6 | 0.003 | 0.786 | 28.5 | 0.002 | 0.763 | 23.3 | 0.002 | 0.691 |
| 5 | 70.0 | 0.009 | 0.569 | 69.8 | 0.009 | 0.569 | 84.5 | 0.008 | 0.607 | 79.3 | 0.007 | 0.554 | 54.0 | 0.006 | 0.700 | 48.8 | 0.005 | 0.743 | 43.6 | 0.005 | 0.777 | 38.3 | 0.004 | 0.797 | 33.1 | 0.003 | 0.794 | 27.8 | 0.002 | 0.772 | 22.6 | 0.002 | 0.696 |
| 6 | 69.9 | 0.009 | 0.569 | 69.7 | 0.009 | 0.569 | 84.4 | 0.008 | 0.608 | 79.2 | 0.007 | 0.557 | 53.9 | 0.006 | 0.704 | 48.6 | 0.005 | 0.747 | 43.3 | 0.005 | 0.792 | 38.0 | 0.004 | 0.803 | 32.8 | 0.003 | 0.801 | 27.5 | 0.002 | 0.781 | 22.2 | 0.002 | 0.704 |
| 7 | 69.9 | 0.009 | 0.569 | 69.7 | 0.009 | 0.569 | 84.4 | 0.008 | 0.608 | 79.1 | 0.007 | 0.555 | 53.8 | 0.006 | 0.701 | 48.6 | 0.005 | 0.745 | 43.3 | 0.005 | 0.777 | 38.0 | 0.004 | 0.795 | 32.7 | 0.003 | 0.789 | 27.4 | 0.002 | 0.764 | 22.1 | 0.002 | 0.678 |
| 8 | 70.0 | 0.009 | 0.569 | 69.8 | 0.009 | 0.569 | 84.5 | 0.008 | 0.608 | 79.3 | 0.007 | 0.555 | 54.7 | 0.006 | 0.702 | 48.8 | 0.005 | 0.745 | 43.6 | 0.005 | 0.780 | 38.3 | 0.004 | 0.801 | 33.1 | 0.003 | 0.800 | 27.8 | 0.002 | 0.780 | 22.6 | 0.002 | 0.708 |
| 9 | 70.1 | 0.009 | 0.566 | 69.9 | 0.009 | 0.568 | 84.8 | 0.008 | 0.601 | 79.8 | 0.007 | 0.545 | 54.7 | 0.006 | 0.687 | 49.6 | 0.005 | 0.725 | 44.5 | 0.005 | 0.754 | 39.4 | 0.004 | 0.770 | 34.4 | 0.003 | 0.764 | 29.3 | 0.002 | 0.736 | 24.2 | 0.002 | 0.683 |
| 10 | 70.3 | 0.009 | 0.563 | 70.2 | 0.009 | 0.564 | 85.3 | 0.008 | 0.594 | 80.5 | 0.007 | 0.532 | 55.6 | 0.006 | 0.669 | 50.8 | 0.005 | 0.701 | 45.9 | 0.005 | 0.725 | 41.1 | 0.004 | 0.735 | 36.2 | 0.003 | 0.726 | 31.4 | 0.003 | 0.689 | 26.5 | 0.002 | 0.622 |
| 11 | 70.6 | 0.009 | 0.560 | 70.4 | 0.009 | 0.561 | 85.8 | 0.008 | 0.568 | 81.3 | 0.007 | 0.521 | 56.7 | 0.006 | 0.653 | 52.1 | 0.006 | 0.681 | 47.5 | 0.005 | 0.701 | 42.9 | 0.004 | 0.710 | 38.4 | 0.003 | 0.702 | 33.8 | 0.003 | 0.669 | 29.2 | 0.002 | 0.610 |
| 12 | 70.9 | 0.009 | 0.547 | 70.7 | 0.009 | 0.548 | 86.4 | 0.008 | 0.580 | 82.1 | 0.007 | 0.511 | 57.8 | 0.006 | 0.639 | 53.4 | 0.006 | 0.684 | 49.1 | 0.005 | 0.682 | 44.8 | 0.004 | 0.690 | 40.5 | 0.004 | 0.684 | 36.2 | 0.003 | 0.659 | 31.9 | 0.002 | 0.603 |
| 13 | 71.1 | 0.009 | 0.543 | 70.9 | 0.009 | 0.544 | 86.9 | 0.008 | 0.571 | 82.8 | 0.007 | 0.507 | 58.7 | 0.006 | 0.620 | 54.6 | 0.006 | 0.638 | 50.8 | 0.005 | 0.649 | 46.5 | 0.004 | 0.651 | 42.4 | 0.004 | 0.640 | 38.4 | 0.003 | 0.610 | 34.3 | 0.002 | 0.554 |
| 14 | 71.2 | 0.009 | 0.541 | 71.1 | 0.009 | 0.542 | 87.2 | 0.008 | 0.567 | 83.2 | 0.007 | 0.500 | 59.3 | 0.007 | 0.610 | 55.4 | 0.006 | 0.626 | 51.5 | 0.005 | 0.635 | 47.6 | 0.004 | 0.635 | 43.6 | 0.004 | 0.623 | 39.7 | 0.003 | 0.594 | 35.8 | 0.002 | 0.542 |
| 15 | 71.3 | 0.009 | 0.538 | 71.1 | 0.009 | 0.540 | 87.3 | 0.008 | 0.563 | 83.4 | 0.007 | 0.504 | 59.6 | 0.006 | 0.601 | 55.7 | 0.006 | 0.614 | 51.8 | 0.005 | 0.620 | 48.0 | 0.004 | 0.616 | 44.1 | 0.004 | 0.599 | 40.3 | 0.003 | 0.564 | 36.4 | 0.002 | 0.507 |
| 16 | 71.3 | 0.009 | 0.540 | 71.1 | 0.009 | 0.541 | 87.2 | 0.008 | 0.564 | 83.4 | 0.007 | 0.506 | 59.5 | 0.007 | 0.605 | 55.6 | 0.006 | 0.619 | 51.7 | 0.005 | 0.626 | 47.8 | 0.004 | 0.623 | 44.0 | 0.004 | 0.608 | 40.1 | 0.003 | 0.578 | 36.2 | 0.002 | 0.521 |
| 17 | 71.2 | 0.009 | 0.540 | 71.0 | 0.009 | 0.541 | 87.2 | 0.008 | 0.565 | 83.2 | 0.007 | 0.507 | 59.3 | 0.006 | 0.606 | 55.4 | 0.006 | 0.619 | 51.5 | 0.005 | 0.626 | 47.6 | 0.004 | 0.623 | 43.6 | 0.004 | 0.607 | 39.7 | 0.003 | 0.573 | 35.8 | 0.002 | 0.515 |
| 18 | 71.2 | 0.009 | 0.542 | 71.0 | 0.009 | 0.543 | 87.0 | 0.008 | 0.570 | 83.0 | 0.007 | 0.505 | 59.0 | 0.007 | 0.618 | 55.0 | 0.006 | 0.636 | 51.1 | 0.005 | 0.648 | 47.1 | 0.004 | 0.651 | 43.1 | 0.004 | 0.642 | 39.1 | 0.003 | 0.615 | 35.1 | 0.002 | 0.566 |
| 19 | 71.1 | 0.009 | 0.544 | 70.9 | 0.009 | 0.545 | 86.9 | 0.008 | 0.573 | 82.8 | 0.007 | 0.501 | 58.7 | 0.007 | 0.625 | 54.6 | 0.006 | 0.646 | 50.6 | 0.005 | 0.661 | 46.5 | 0.004 | 0.667 | 42.4 | 0.004 | 0.661 | 38.4 | 0.003 | 0.637 | 34.3 | 0.002 | 0.580 |
| 20 | 71.0 | 0.009 | 0.546 | 70.8 | 0.009 | 0.547 | 86.6 | 0.008 | 0.578 | 82.5 | 0.007 | 0.508 | 58.3 | 0.007 | 0.636 | 54.1 | 0.006 | 0.660 | 49.9 | 0.005 | 0.678 | 45.7 | 0.004 | 0.668 | 41.6 | 0.004 | 0.666 | 37.4 | 0.003 | 0.665 | 33.2 | 0.002 | 0.621 |
| 21 | 70.9 | 0.009 | 0.549 | 70.7 | 0.009 | 0.550 | 86.4 | 0.008 | 0.585 | 82.1 | 0.007 | 0.519 | 57.8 | 0.007 | 0.652 | 53.4 | 0.006 | 0.682 | 49.1 | 0.005 | 0.708 | 44.8 | 0.005 | 0.725 | 40.5 | 0.004 | 0.731 | 36.2 | 0.003 | 0.720 | 31.9 | 0.003 | 0.686 |
| 22 | 70.7 | 0.009 | 0.549 | 70.6 | 0.009 | 0.550 | 86.1 | 0.008 | 0.588 | 81.7 | 0.007 | 0.520 | 57.2 | 0.006 | 0.653 | 52.8 | 0.006 | 0.682 | 48.4 | 0.005 | 0.706 | 43.9 | 0.004 | 0.719 | 39.5 | 0.004 | 0.719 | 35.0 | 0.003 | 0.689 | 30.6 | 0.002 | 0.655 |
| 23 | 70.8 | 0.009 | 0.551 | 70.4 | 0.009 | 0.552 | 85.8 | 0.008 | 0.589 | 81.3 | 0.007 | 0.525 | 56.7 | 0.006 | 0.660 | 52.1 | 0.006 | 0.691 | 47.5 | 0.005 | 0.716 | 42.9 | 0.004 | 0.731 | 38.4 | 0.004 | 0.730 | 33.8 | 0.003 | 0.706 | 29.2 | 0.002 | 0.660 |
| 24 | 70.5 | 0.009 | 0.552 | 70.3 | 0.009 | 0.554 | 85.6 | 0.008 | 0.592 | 80.8 | 0.007 | 0.530 | 56.1 | 0.006 | 0.667 | 51.4 | 0.006 | 0.700 | 46.7 | 0.005 | 0.725 | 42.0 | 0.004 | 0.740 | 37.2 | 0.003 | 0.737 | 32.5 | 0.003 | 0.709 | 27.8 | 0.002 | 0.658 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | | | | | | | | | | | |
| 1 | 71.5 | 0.009 | 0.544 | 71.3 | 0.009 | 0.546 | 67.6 | 0.008 | 0.575 | 64.0 | 0.008 | 0.585 | 60.3 | 0.007 | 0.634 | 56.6 | 0.006 | 0.682 | 52.9 | 0.006 | 0.688 | 49.2 | 0.005 | 0.710 | 45.6 | 0.005 | 0.728 | 41.9 | 0.004 | 0.735 | 38.2 | 0.004 | 0.738 |
| 2 | 71.3 | 0.009 | 0.545 | 71.1 | 0.009 | 0.546 | 67.2 | 0.008 | 0.578 | 63.4 | 0.008 | 0.589 | 59.3 | 0.007 | 0.638 | 55.6 | 0.006 | 0.686 | 51.7 | 0.006 | 0.693 | 47.8 | 0.005 | 0.714 | 44.0 | 0.004 | 0.729 | 40.1 | 0.004 | 0.731 | 36.2 | 0.003 | 0.720 |
| 3 | 71.1 | 0.009 | 0.547 | 70.9 | 0.009 | 0.548 | 66.9 | 0.008 | 0.582 | 62.8 | 0.007 | 0.615 | 58.2 | 0.007 | 0.648 | 54.7 | 0.006 | 0.679 | 50.6 | 0.006 | 0.679 | 46.6 | 0.005 | 0.729 | 42.5 | 0.004 | 0.743 | 38.5 | 0.004 | 0.746 | 34.4 | 0.003 | 0.732 |
| 4 | 71.0 | 0.009 | 0.548 | 70.8 | 0.009 | 0.550 | 66.6 | 0.008 | 0.585 | 62.4 | 0.007 | 0.619 | 58.2 | 0.007 | 0.654 | 54.0 | 0.006 | 0.685 | 49.7 | 0.005 | 0.713 | 45.5 | 0.005 | 0.735 | 41.3 | 0.004 | 0.747 | 37.1 | 0.003 | 0.746 | 32.9 | 0.003 | 0.724 |
| 5 | 70.8 | 0.009 | 0.550 | 70.7 | 0.009 | 0.551 | 66.4 | 0.008 | 0.588 | 62.0 | 0.007 | 0.625 | 57.7 | 0.007 | 0.661 | 53.4 | 0.006 | 0.695 | 49.1 | 0.005 | 0.726 | 44.8 | 0.005 | 0.750 | 40.4 | 0.004 | 0.764 | 36.1 | 0.003 | 0.763 | 31.8 | 0.003 | 0.741 |
| 6 | 70.8 | 0.009 | 0.550 | 70.6 | 0.009 | 0.552 | 66.2 | 0.008 | 0.589 | 61.8 | 0.007 | 0.625 | 57.4 | 0.007 | 0.663 | 53.1 | 0.006 | 0.697 | 48.7 | 0.005 | 0.727 | 44.3 | 0.005 | 0.750 | 39.9 | 0.004 | 0.762 | 35.5 | 0.003 | 0.758 | 31.1 | 0.003 | 0.734 |
| 7 | 70.8 | 0.009 | 0.551 | 70.6 | 0.009 | 0.553 | 66.2 | 0.008 | 0.590 | 61.8 | 0.007 | 0.629 | 57.4 | 0.007 | 0.666 | 52.9 | 0.006 | 0.702 | 48.5 | 0.005 | 0.734 | 44.1 | 0.005 | 0.759 | 39.7 | 0.004 | 0.774 | 35.3 | 0.003 | 0.773 | 30.9 | 0.003 | 0.753 |
| 8 | 70.8 | 0.009 | 0.551 | 70.6 | 0.009 | 0.553 | 66.3 | 0.008 | 0.591 | 61.9 | 0.007 | 0.630 | 57.5 | 0.007 | 0.668 | 53.1 | 0.006 | 0.705 | 48.8 | 0.005 | 0.739 | 44.4 | 0.005 | 0.762 | 40.0 | 0.004 | 0.785 | 35.7 | 0.003 | 0.789 | 31.3 | 0.003 | 0.776 |
| 9 | 70.9 | 0.009 | 0.548 | 70.8 | 0.009 | 0.550 | 66.5 | 0.008 | 0.594 | 62.3 | 0.007 | 0.619 | 58.1 | 0.007 | 0.652 | 53.9 | 0.006 | 0.683 | 49.6 | 0.005 | 0.710 | 45.4 | 0.005 | 0.731 | 41.2 | 0.004 | 0.741 | 36.9 | 0.003 | 0.736 | 32.7 | 0.003 | 0.711 |
| 10 | 71.1 | 0.009 | 0.545 | 71.0 | 0.009 | 0.546 | 67.0 | 0.008 | 0.577 | 62.9 | 0.007 | 0.607 | 58.9 | 0.007 | 0.635 | 54.9 | 0.006 | 0.661 | 50.9 | 0.005 | 0.682 | 46.9 | 0.005 | 0.696 | 42.8 | 0.004 | 0.701 | 38.8 | 0.003 | 0.691 | 34.8 | 0.003 | 0.663 |
| 11 | 71.4 | 0.009 | 0.541 | 71.2 | 0.009 | 0.543 | 67.5 | 0.008 | 0.569 | 63.7 | 0.007 | 0.595 | 60.0 | 0.007 | 0.618 | 56.2 | 0.006 | 0.639 | 52.4 | 0.005 | 0.656 | 48.7 | 0.005 | 0.666 | 44.9 | 0.004 | 0.667 | 41.2 | 0.004 | 0.656 | 37.4 | 0.003 | 0.629 |
| 12 | 71.7 | 0.009 | 0.537 | 71.5 | 0.009 | 0.538 | 68.1 | 0.008 | 0.560 | 64.6 | 0.007 | 0.581 | 61.1 | 0.007 | 0.598 | 57.6 | 0.006 | 0.614 | 54.2 | 0.005 | 0.625 | 50.7 | 0.005 | 0.630 | 47.2 | 0.004 | 0.627 | 43.8 | 0.004 | 0.613 | 40.3 | 0.003 | 0.586 |
| 13 | 72.0 | 0.009 | 0.533 | 71.8 | 0.009 | 0.534 | 68.7 | 0.008 | 0.561 | 65.5 | 0.007 | 0.567 | 62.3 | 0.007 | 0.580 | 59.1 | 0.006 | 0.591 | 56.0 | 0.005 | 0.597 | 52.8 | 0.005 | 0.598 | 49.6 | 0.004 | 0.591 | 46.5 | 0.004 | 0.576 | 43.3 | 0.003 | 0.550 |
| 14 | 72.2 | 0.009 | 0.530 | 72.1 | 0.009 | 0.531 | 69.2 | 0.008 | 0.545 | 66.3 | 0.007 | 0.557 | 63.4 | 0.007 | 0.567 | 60.5 | 0.006 | 0.574 | 57.5 | 0.005 | 0.577 | 54.6 | 0.005 | 0.576 | 51.7 | 0.005 | 0.568 | 48.8 | 0.004 | 0.553 | 45.9 | 0.003 | 0.529 |
| 15 | 72.4 | 0.009 | 0.528 | 72.3 | 0.009 | 0.528 | 69.6 | 0.008 | 0.540 | 66.8 | 0.007 | 0.550 | 64.2 | 0.007 | 0.558 | 61.5 | 0.006 | 0.563 | 58.8 | 0.005 | 0.564 | 56.1 | 0.005 | 0.561 | 53.4 | 0.005 | 0.554 | 50.7 | 0.004 | 0.539 | 48.0 | 0.004 | 0.518 |
| 16 | 72.5 | 0.009 | 0.527 | 72.4 | 0.009 | 0.527 | 69.9 | 0.008 | 0.537 | 67.3 | 0.008 | 0.546 | 64.7 | 0.007 | 0.552 | 62.1 | 0.007 | 0.556 | 59.6 | 0.006 | 0.557 | 57.0 | 0.005 | 0.554 | 54.4 | 0.005 | 0.546 | 51.9 | 0.004 | 0.533 | 49.3 | 0.004 | 0.513 |
| 17 | 72.6 | 0.009 | 0.527 | 72.5 | 0.009 | 0.527 | 70.0 | 0.008 | 0.538 | 67.4 | 0.008 | 0.547 | 64.9 | 0.007 | 0.554 | 62.4 | 0.007 | 0.559 | 59.9 | 0.006 | 0.560 | 57.4 | 0.006 | 0.558 | 54.8 | 0.005 | 0.552 | 52.3 | 0.004 | 0.541 | 49.8 | 0.004 | 0.524 |
| 18 | 72.8 | 0.009 | 0.528 | 72.5 | 0.009 | 0.529 | 69.9 | 0.008 | 0.541 | 67.4 | 0.008 | 0.545 | 64.8 | 0.007 | 0.562 | 62.3 | 0.007 | 0.570 | 59.8 | 0.006 | 0.575 | 57.2 | 0.006 | 0.577 | 54.7 | 0.005 | 0.575 | 52.1 | 0.005 | 0.569 | 49.6 | 0.004 | 0.557 |
| 19 | 72.5 | 0.009 | 0.530 | 72.4 | 0.009 | 0.531 | 69.8 | 0.008 | 0.545 | 67.2 | 0.008 | 0.559 | 64.6 | 0.007 | 0.571 | 62.0 | 0.007 | 0.581 | 59.3 | 0.006 | 0.580 | 56.7 | 0.006 | 0.585 | 54.1 | 0.005 | 0.587 | 51.5 | 0.005 | 0.585 | 48.9 | 0.004 | 0.587 |
| 20 | 72.4 | 0.009 | 0.533 | 72.3 | 0.009 | 0.533 | 69.5 | 0.008 | 0.551 | 66.8 | 0.008 | 0.568 | 64.1 | 0.007 | 0.583 | 61.4 | 0.007 | 0.589 | 58.6 | 0.006 | 0.581 | 56.9 | 0.006 | 0.620 | 53.2 | 0.005 | 0.627 | 50.4 | 0.005 | 0.629 | 47.7 | 0.004 | 0.627 |
| 21 | 72.2 | 0.009 | 0.536 | 72.1 | 0.009 | 0.537 | 69.2 | 0.008 | 0.557 | 66.4 | 0.008 | 0.578 | 63.6 | 0.007 | 0.588 | 60.6 | 0.007 | 0.617 | 57.7 | 0.006 | 0.634 | 54.8 | 0.006 | 0.650 | 52.0 | 0.005 | 0.662 | 49.1 | 0.005 | 0.671 | 46.2 | 0.004 | 0.676 |
| 22 | 72.1 | 0.009 | 0.538 | 71.9 | 0.009 | 0.538 | 68.9 | 0.008 | 0.561 | 65.8 | 0.008 | 0.584 | 62.8 | 0.007 | 0.606 | 59.7 | 0.007 | 0.627 | 56.6 | 0.006 | 0.646 | 53.6 | 0.006 | 0.663 | 50.5 | 0.005 | 0.677 | 47.5 | 0.005 | 0.686 | 44.4 | 0.004 | 0.680 |
| 23 | 71.9 | 0.009 | 0.540 | 71.7 | 0.009 | 0.541 | 68.5 | 0.008 | 0.566 | 65.2 | 0.008 | 0.592 | 62.0 | 0.007 | 0.616 | 58.7 | 0.007 | 0.640 | 55.4 | 0.006 | 0.662 | 52.2 | 0.006 | 0.682 | 48.9 | 0.005 | 0.688 | 45.7 | 0.005 | 0.708 | 42.4 | 0.004 | 0.712 |
| 24 | 71.7 | 0.009 | 0.542 | 71.5 | 0.009 | 0.543 | 68.1 | 0.008 | 0.571 | 64.6 | 0.008 | 0.599 | 61.1 | 0.007 | 0.626 | 57.6 | 0.007 | 0.653 | 54.2 | 0.006 | 0.678 | 50.7 | 0.005 | 0.698 | 47.2 | 0.005 | 0.717 | 43.8 | 0.004 | 0.728 | 40.3 | 0.004 | 0.731 |

| Hour | Minimum OA | | | 10% OA | | | 20% OA | | | 30% OA | | | 40% OA | | | 50% OA | | | 60% OA | | | 70% OA | | | 80% OA | | | 90% OA | | | 100% OA | | |
|------|------------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|---------|-------|-------|
| | Trmx | Wmrx | RHmrx | Trmx | Wmrx | RHmrx | Trmx | Wmrx | RHmrx | Trmx | Wmrx | RHmrx | Trmx | Wmrx | RHmrx | Trmx | Wmrx | RHmrx | Trmx | Wmrx | RHmrx | Trmx | Wmrx | RHmrx | Trmx | Wmrx | RHmrx | Trmx | Wmrx | RHmrx | | | |
| 1 | 72.4 | 0.009 | 0.537 | 72.3 | 0.009 | 0.538 | 89.6 | 0.009 | 0.561 | 88.8 | 0.008 | 0.565 | 64.1 | 0.008 | 0.608 | 81.4 | 0.007 | 0.632 | 59.7 | 0.007 | 0.655 | 58.0 | 0.006 | 0.678 | 53.2 | 0.006 | 0.699 | 50.5 | 0.006 | 0.720 | 47.8 | 0.005 | 0.738 |
| 2 | 72.2 | 0.009 | 0.538 | 72.1 | 0.009 | 0.539 | 89.2 | 0.009 | 0.564 | 88.3 | 0.008 | 0.568 | 63.4 | 0.008 | 0.613 | 80.5 | 0.007 | 0.637 | 57.6 | 0.007 | 0.661 | 54.7 | 0.006 | 0.684 | 51.8 | 0.006 | 0.705 | 48.9 | 0.005 | 0.724 | 46.0 | 0.005 | 0.740 |
| 3 | 72.0 | 0.009 | 0.540 | 71.9 | 0.009 | 0.541 | 88.9 | 0.009 | 0.568 | 86.8 | 0.008 | 0.572 | 62.7 | 0.008 | 0.621 | 78.6 | 0.007 | 0.648 | 56.6 | 0.007 | 0.674 | 52.5 | 0.006 | 0.698 | 50.4 | 0.006 | 0.723 | 47.4 | 0.005 | 0.743 | 44.3 | 0.005 | 0.761 |
| 4 | 71.9 | 0.009 | 0.542 | 71.8 | 0.009 | 0.543 | 88.4 | 0.008 | 0.572 | 85.3 | 0.008 | 0.576 | 61.7 | 0.007 | 0.631 | 76.9 | 0.007 | 0.661 | 55.7 | 0.006 | 0.680 | 51.8 | 0.006 | 0.718 | 48.2 | 0.006 | 0.745 | 46.0 | 0.005 | 0.768 | 42.8 | 0.005 | 0.789 |
| 5 | 71.8 | 0.009 | 0.543 | 71.7 | 0.009 | 0.544 | 88.4 | 0.008 | 0.572 | 85.0 | 0.008 | 0.580 | 61.4 | 0.007 | 0.631 | 76.4 | 0.007 | 0.660 | 55.1 | 0.006 | 0.688 | 51.8 | 0.006 | 0.716 | 48.4 | 0.005 | 0.740 | 45.1 | 0.005 | 0.761 | 41.8 | 0.004 | 0.777 |
| 6 | 71.7 | 0.009 | 0.542 | 71.6 | 0.009 | 0.543 | 88.2 | 0.008 | 0.571 | 84.8 | 0.008 | 0.580 | 61.4 | 0.007 | 0.628 | 76.0 | 0.007 | 0.655 | 54.7 | 0.006 | 0.682 | 51.3 | 0.006 | 0.706 | 47.9 | 0.005 | 0.728 | 44.5 | 0.005 | 0.742 | 41.1 | 0.004 | 0.751 |
| 7 | 71.7 | 0.009 | 0.543 | 71.6 | 0.009 | 0.544 | 88.2 | 0.008 | 0.572 | 84.8 | 0.008 | 0.602 | 61.4 | 0.007 | 0.628 | 75.0 | 0.007 | 0.660 | 54.5 | 0.006 | 0.687 | 51.1 | 0.006 | 0.713 | 47.7 | 0.005 | 0.735 | 44.3 | 0.005 | 0.753 | 40.9 | 0.004 | 0.764 |
| 8 | 71.8 | 0.009 | 0.542 | 71.6 | 0.009 | 0.543 | 88.5 | 0.008 | 0.563 | 84.9 | 0.008 | 0.600 | 61.5 | 0.007 | 0.631 | 74.1 | 0.007 | 0.657 | 54.8 | 0.006 | 0.684 | 51.4 | 0.006 | 0.709 | 48.0 | 0.005 | 0.731 | 44.7 | 0.005 | 0.748 | 41.3 | 0.004 | 0.760 |
| 9 | 71.9 | 0.009 | 0.538 | 71.8 | 0.009 | 0.539 | 88.5 | 0.008 | 0.563 | 85.3 | 0.008 | 0.586 | 62.0 | 0.007 | 0.608 | 73.8 | 0.007 | 0.628 | 56.8 | 0.006 | 0.646 | 52.3 | 0.005 | 0.681 | 49.1 | 0.005 | 0.671 | 45.8 | 0.004 | 0.675 | 42.6 | 0.004 | 0.672 |
| 10 | 72.1 | 0.009 | 0.535 | 72.0 | 0.009 | 0.535 | 88.9 | 0.008 | 0.555 | 85.9 | 0.008 | 0.573 | 62.8 | 0.007 | 0.580 | 73.0 | 0.007 | 0.605 | 56.8 | 0.006 | 0.617 | 52.7 | 0.005 | 0.626 | 50.7 | 0.005 | 0.630 | 47.6 | 0.004 | 0.627 | 44.6 | 0.004 | 0.617 |
| 11 | 72.3 | 0.009 | 0.532 | 72.2 | 0.009 | 0.532 | 89.4 | 0.008 | 0.548 | 86.6 | 0.008 | 0.563 | 62.8 | 0.007 | 0.577 | 71.0 | 0.007 | 0.588 | 58.3 | 0.006 | 0.598 | 55.5 | 0.006 | 0.603 | 52.7 | 0.005 | 0.605 | 49.9 | 0.005 | 0.602 | 47.1 | 0.004 | 0.582 |
| 12 | 72.6 | 0.009 | 0.529 | 72.5 | 0.009 | 0.530 | 90.0 | 0.008 | 0.544 | 87.4 | 0.008 | 0.566 | 64.9 | 0.007 | 0.568 | 62.4 | 0.007 | 0.577 | 59.9 | 0.006 | 0.585 | 57.4 | 0.006 | 0.590 | 54.8 | 0.005 | 0.592 | 52.3 | 0.005 | 0.590 | 49.8 | 0.004 | 0.583 |
| 13 | 72.8 | 0.009 | 0.526 | 72.8 | 0.009 | 0.527 | 90.0 | 0.009 | 0.537 | 88.3 | 0.008 | 0.546 | 66.0 | 0.008 | 0.554 | 63.8 | 0.007 | 0.560 | 61.8 | 0.007 | 0.564 | 59.3 | 0.006 | 0.568 | 57.1 | 0.006 | 0.565 | 54.8 | 0.005 | 0.562 | 52.6 | 0.005 | 0.554 |
| 14 | 73.1 | 0.009 | 0.524 | 73.0 | 0.009 | 0.524 | 91.0 | 0.009 | 0.532 | 89.0 | 0.008 | 0.539 | 67.0 | 0.008 | 0.545 | 65.0 | 0.007 | 0.550 | 63.1 | 0.007 | 0.552 | 61.1 | 0.006 | 0.554 | 59.1 | 0.006 | 0.553 | 57.1 | 0.005 | 0.549 | 55.1 | 0.005 | 0.543 |
| 15 | 73.3 | 0.009 | 0.523 | 73.2 | 0.009 | 0.523 | 91.4 | 0.009 | 0.531 | 89.6 | 0.008 | 0.537 | 67.8 | 0.008 | 0.542 | 66.0 | 0.007 | 0.547 | 64.3 | 0.007 | 0.550 | 62.5 | 0.007 | 0.552 | 60.7 | 0.006 | 0.553 | 58.9 | 0.005 | 0.551 | 57.1 | 0.005 | 0.548 |
| 16 | 73.4 | 0.009 | 0.523 | 73.3 | 0.009 | 0.523 | 91.7 | 0.009 | 0.531 | 90.0 | 0.008 | 0.537 | 69.3 | 0.008 | 0.543 | 66.6 | 0.008 | 0.548 | 65.0 | 0.007 | 0.552 | 63.3 | 0.007 | 0.556 | 61.6 | 0.006 | 0.556 | 60.0 | 0.006 | 0.556 | 59.3 | 0.006 | 0.557 |
| 17 | 73.4 | 0.009 | 0.523 | 73.4 | 0.009 | 0.523 | 91.8 | 0.009 | 0.530 | 90.1 | 0.008 | 0.539 | 68.5 | 0.008 | 0.542 | 66.9 | 0.008 | 0.547 | 65.3 | 0.007 | 0.551 | 63.7 | 0.007 | 0.556 | 62.0 | 0.007 | 0.556 | 60.4 | 0.006 | 0.557 | 58.8 | 0.006 | 0.556 |
| 18 | 73.4 | 0.009 | 0.524 | 73.4 | 0.009 | 0.524 | 91.7 | 0.009 | 0.532 | 90.1 | 0.008 | 0.539 | 68.4 | 0.008 | 0.546 | 66.8 | 0.008 | 0.552 | 65.2 | 0.007 | 0.558 | 63.5 | 0.007 | 0.562 | 61.9 | 0.007 | 0.568 | 60.2 | 0.006 | 0.568 | 58.6 | 0.006 | 0.568 |
| 19 | 73.4 | 0.009 | 0.525 | 73.3 | 0.009 | 0.526 | 91.6 | 0.009 | 0.536 | 89.9 | 0.008 | 0.545 | 68.2 | 0.008 | 0.554 | 66.5 | 0.008 | 0.563 | 64.7 | 0.007 | 0.571 | 63.0 | 0.007 | 0.578 | 61.3 | 0.007 | 0.584 | 59.6 | 0.006 | 0.590 | 57.9 | 0.006 | 0.594 |
| 20 | 73.2 | 0.009 | 0.527 | 73.2 | 0.009 | 0.528 | 91.4 | 0.009 | 0.540 | 89.5 | 0.008 | 0.552 | 67.7 | 0.008 | 0.564 | 65.9 | 0.008 | 0.575 | 64.1 | 0.007 | 0.586 | 62.3 | 0.007 | 0.597 | 60.4 | 0.007 | 0.606 | 58.8 | 0.006 | 0.615 | 56.8 | 0.006 | 0.623 |
| 21 | 73.1 | 0.009 | 0.530 | 73.0 | 0.009 | 0.530 | 91.1 | 0.009 | 0.545 | 89.1 | 0.008 | 0.560 | 67.2 | 0.008 | 0.576 | 65.2 | 0.008 | 0.588 | 63.2 | 0.007 | 0.604 | 61.3 | 0.007 | 0.618 | 59.3 | 0.007 | 0.631 | 57.4 | 0.006 | 0.644 | 55.4 | 0.006 | 0.656 |
| 22 | 73.0 | 0.009 | 0.532 | 72.9 | 0.009 | 0.533 | 90.7 | 0.009 | 0.551 | 88.6 | 0.008 | 0.568 | 66.5 | 0.008 | 0.586 | 64.4 | 0.008 | 0.604 | 62.2 | 0.007 | 0.622 | 60.1 | 0.007 | 0.640 | 58.0 | 0.007 | 0.657 | 55.8 | 0.006 | 0.674 | 53.7 | 0.006 | 0.691 |
| 23 | 72.8 | 0.009 | 0.534 | 72.7 | 0.009 | 0.534 | 90.4 | 0.009 | 0.553 | 88.0 | 0.008 | 0.572 | 66.7 | 0.008 | 0.591 | 63.4 | 0.008 | 0.610 | 61.1 | 0.007 | 0.629 | 59.8 | 0.007 | 0.647 | 56.4 | 0.006 | 0.665 | 54.1 | 0.006 | 0.682 | 51.8 | 0.006 | 0.698 |
| 24 | 72.6 | 0.009 | 0.536 | 72.5 | 0.009 | 0.536 | 90.0 | 0.009 | 0.558 | 87.4 | 0.008 | 0.579 | 64.9 | 0.008 | 0.601 | 62.4 | 0.007 | 0.623 | 59.9 | 0.007 | 0.644 | 57.4 | 0.007 | 0.665 | 54.8 | 0.006 | 0.688 | 52.3 | 0.006 | 0.705 | 49.8 | 0.005 | 0.723 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|
| | Trnx | RHmx | Trnx | RHmx | Trnx | RHmx | Trnx | RHmx | Trnx | RHmx | Trnx | RHmx | Trnx | RHmx | Trnx | RHmx | Trnx | RHmx | Trnx | RHmx | Trnx | RHmx | | | | | | | | | | | |
| 1 | 735 | 0.009 | 0.525 | 734 | 0.009 | 0.525 | 718 | 0.009 | 0.535 | 703 | 0.009 | 0.544 | 687 | 0.008 | 0.553 | 671 | 0.008 | 0.562 | 655 | 0.009 | 0.570 | 639 | 0.007 | 0.578 | 624 | 0.007 | 0.585 | 608 | 0.007 | 0.592 | 592 | 0.006 | 0.597 |
| 2 | 732 | 0.009 | 0.527 | 732 | 0.009 | 0.528 | 713 | 0.009 | 0.540 | 695 | 0.008 | 0.552 | 677 | 0.008 | 0.564 | 659 | 0.008 | 0.575 | 640 | 0.007 | 0.586 | 622 | 0.007 | 0.598 | 604 | 0.007 | 0.606 | 585 | 0.006 | 0.614 | 567 | 0.006 | 0.622 |
| 3 | 731 | 0.009 | 0.530 | 730 | 0.009 | 0.530 | 710 | 0.009 | 0.545 | 689 | 0.008 | 0.560 | 668 | 0.008 | 0.575 | 649 | 0.008 | 0.589 | 629 | 0.007 | 0.603 | 609 | 0.007 | 0.617 | 588 | 0.007 | 0.630 | 568 | 0.006 | 0.641 | 548 | 0.006 | 0.652 |
| 4 | 729 | 0.009 | 0.532 | 729 | 0.009 | 0.532 | 707 | 0.009 | 0.549 | 686 | 0.008 | 0.567 | 664 | 0.008 | 0.584 | 643 | 0.008 | 0.601 | 622 | 0.007 | 0.617 | 600 | 0.007 | 0.634 | 579 | 0.007 | 0.650 | 557 | 0.006 | 0.665 | 536 | 0.006 | 0.679 |
| 5 | 729 | 0.009 | 0.533 | 728 | 0.009 | 0.534 | 706 | 0.009 | 0.554 | 685 | 0.008 | 0.571 | 663 | 0.008 | 0.589 | 641 | 0.008 | 0.608 | 619 | 0.007 | 0.627 | 597 | 0.007 | 0.646 | 576 | 0.007 | 0.664 | 554 | 0.006 | 0.682 | 532 | 0.006 | 0.699 |
| 6 | 729 | 0.009 | 0.533 | 729 | 0.009 | 0.534 | 707 | 0.009 | 0.552 | 686 | 0.008 | 0.571 | 664 | 0.008 | 0.589 | 643 | 0.008 | 0.608 | 622 | 0.007 | 0.627 | 600 | 0.007 | 0.646 | 579 | 0.007 | 0.665 | 557 | 0.006 | 0.683 | 536 | 0.006 | 0.701 |
| 7 | 731 | 0.009 | 0.532 | 730 | 0.009 | 0.533 | 710 | 0.009 | 0.543 | 689 | 0.008 | 0.567 | 666 | 0.008 | 0.585 | 649 | 0.008 | 0.603 | 629 | 0.008 | 0.621 | 609 | 0.007 | 0.639 | 588 | 0.007 | 0.657 | 568 | 0.007 | 0.674 | 548 | 0.006 | 0.692 |
| 8 | 732 | 0.009 | 0.529 | 732 | 0.009 | 0.529 | 713 | 0.009 | 0.543 | 685 | 0.008 | 0.566 | 677 | 0.008 | 0.586 | 659 | 0.008 | 0.592 | 640 | 0.008 | 0.595 | 622 | 0.007 | 0.608 | 604 | 0.007 | 0.620 | 585 | 0.007 | 0.631 | 567 | 0.006 | 0.642 |
| 9 | 735 | 0.009 | 0.524 | 734 | 0.009 | 0.524 | 718 | 0.009 | 0.532 | 703 | 0.009 | 0.540 | 687 | 0.008 | 0.548 | 671 | 0.008 | 0.565 | 655 | 0.007 | 0.561 | 639 | 0.007 | 0.587 | 624 | 0.007 | 0.571 | 608 | 0.006 | 0.575 | 592 | 0.006 | 0.578 |
| 10 | 738 | 0.009 | 0.520 | 737 | 0.009 | 0.520 | 724 | 0.009 | 0.524 | 712 | 0.009 | 0.527 | 699 | 0.008 | 0.530 | 686 | 0.008 | 0.533 | 673 | 0.008 | 0.534 | 660 | 0.007 | 0.535 | 648 | 0.007 | 0.536 | 635 | 0.007 | 0.535 | 622 | 0.006 | 0.533 |
| 11 | 741 | 0.009 | 0.517 | 740 | 0.009 | 0.517 | 731 | 0.009 | 0.517 | 721 | 0.009 | 0.517 | 711 | 0.008 | 0.517 | 702 | 0.008 | 0.518 | 692 | 0.008 | 0.515 | 682 | 0.008 | 0.513 | 672 | 0.007 | 0.511 | 663 | 0.007 | 0.508 | 653 | 0.007 | 0.505 |
| 12 | 744 | 0.009 | 0.513 | 743 | 0.009 | 0.512 | 737 | 0.009 | 0.509 | 730 | 0.009 | 0.505 | 724 | 0.008 | 0.501 | 717 | 0.008 | 0.496 | 710 | 0.008 | 0.491 | 704 | 0.008 | 0.486 | 697 | 0.007 | 0.480 | 691 | 0.007 | 0.474 | 684 | 0.007 | 0.467 |
| 13 | 748 | 0.009 | 0.510 | 746 | 0.009 | 0.510 | 743 | 0.009 | 0.504 | 739 | 0.009 | 0.499 | 735 | 0.009 | 0.492 | 732 | 0.008 | 0.486 | 728 | 0.008 | 0.479 | 724 | 0.008 | 0.473 | 720 | 0.008 | 0.466 | 717 | 0.008 | 0.459 | 713 | 0.007 | 0.451 |
| 14 | 749 | 0.009 | 0.508 | 749 | 0.009 | 0.508 | 748 | 0.009 | 0.500 | 746 | 0.009 | 0.493 | 745 | 0.009 | 0.485 | 744 | 0.009 | 0.477 | 743 | 0.008 | 0.469 | 742 | 0.008 | 0.461 | 740 | 0.008 | 0.453 | 739 | 0.008 | 0.445 | 738 | 0.008 | 0.437 |
| 15 | 751 | 0.009 | 0.507 | 751 | 0.009 | 0.507 | 751 | 0.009 | 0.488 | 752 | 0.009 | 0.488 | 753 | 0.009 | 0.480 | 753 | 0.009 | 0.471 | 754 | 0.009 | 0.462 | 754 | 0.009 | 0.454 | 756 | 0.008 | 0.445 | 756 | 0.008 | 0.436 | 757 | 0.008 | 0.428 |
| 16 | 752 | 0.009 | 0.506 | 752 | 0.009 | 0.505 | 754 | 0.009 | 0.485 | 756 | 0.009 | 0.485 | 758 | 0.009 | 0.474 | 760 | 0.009 | 0.464 | 761 | 0.009 | 0.455 | 763 | 0.009 | 0.445 | 765 | 0.008 | 0.435 | 767 | 0.008 | 0.425 | 769 | 0.008 | 0.416 |
| 17 | 752 | 0.009 | 0.506 | 752 | 0.009 | 0.505 | 755 | 0.009 | 0.484 | 757 | 0.009 | 0.483 | 759 | 0.009 | 0.473 | 762 | 0.009 | 0.462 | 764 | 0.009 | 0.452 | 766 | 0.009 | 0.442 | 768 | 0.008 | 0.432 | 771 | 0.008 | 0.422 | 773 | 0.008 | 0.412 |
| 18 | 752 | 0.009 | 0.506 | 752 | 0.009 | 0.506 | 754 | 0.009 | 0.486 | 756 | 0.009 | 0.486 | 758 | 0.009 | 0.476 | 760 | 0.009 | 0.466 | 761 | 0.009 | 0.457 | 763 | 0.009 | 0.447 | 765 | 0.008 | 0.438 | 767 | 0.008 | 0.429 | 769 | 0.008 | 0.419 |
| 19 | 751 | 0.009 | 0.508 | 751 | 0.009 | 0.507 | 751 | 0.009 | 0.489 | 752 | 0.009 | 0.491 | 753 | 0.009 | 0.483 | 753 | 0.009 | 0.475 | 754 | 0.009 | 0.466 | 755 | 0.009 | 0.458 | 756 | 0.008 | 0.450 | 756 | 0.008 | 0.442 | 757 | 0.008 | 0.434 |
| 20 | 749 | 0.009 | 0.511 | 749 | 0.009 | 0.511 | 748 | 0.009 | 0.505 | 746 | 0.009 | 0.500 | 745 | 0.009 | 0.495 | 744 | 0.009 | 0.489 | 743 | 0.009 | 0.484 | 742 | 0.009 | 0.479 | 740 | 0.008 | 0.473 | 739 | 0.008 | 0.467 | 738 | 0.008 | 0.462 |
| 21 | 746 | 0.009 | 0.515 | 746 | 0.009 | 0.515 | 743 | 0.009 | 0.514 | 739 | 0.009 | 0.513 | 736 | 0.009 | 0.512 | 732 | 0.009 | 0.510 | 728 | 0.009 | 0.509 | 724 | 0.009 | 0.508 | 720 | 0.008 | 0.506 | 717 | 0.008 | 0.504 | 713 | 0.008 | 0.503 |
| 22 | 744 | 0.009 | 0.518 | 743 | 0.009 | 0.518 | 737 | 0.009 | 0.520 | 730 | 0.009 | 0.522 | 724 | 0.009 | 0.523 | 717 | 0.009 | 0.525 | 710 | 0.009 | 0.526 | 704 | 0.009 | 0.527 | 697 | 0.008 | 0.529 | 691 | 0.008 | 0.530 | 684 | 0.008 | 0.530 |
| 23 | 741 | 0.009 | 0.520 | 740 | 0.009 | 0.520 | 731 | 0.009 | 0.524 | 721 | 0.009 | 0.529 | 714 | 0.009 | 0.532 | 702 | 0.009 | 0.536 | 692 | 0.008 | 0.540 | 682 | 0.008 | 0.543 | 672 | 0.008 | 0.546 | 663 | 0.008 | 0.548 | 653 | 0.007 | 0.551 |
| 24 | 738 | 0.009 | 0.521 | 737 | 0.009 | 0.522 | 724 | 0.009 | 0.527 | 712 | 0.009 | 0.532 | 699 | 0.008 | 0.537 | 686 | 0.008 | 0.542 | 673 | 0.008 | 0.546 | 660 | 0.007 | 0.549 | 648 | 0.007 | 0.552 | 635 | 0.007 | 0.555 | 622 | 0.007 | 0.558 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|
| | Trmx | Wmxx | RHmxx | Trmx | RHmxx | Trmx | Wmxx | RHmxx | Trmx | Wmxx | RHmxx | Trmx | Wmxx | RHmxx | Trmx | Wmxx | RHmxx | Trmx | Wmxx | RHmxx | Trmx | Wmxx | RHmxx | |
| 1 | 74.3 | 0.010 | 0.535 | 74.3 | 0.010 | 0.536 | 73.5 | 0.010 | 0.536 | 73.1 | 0.010 | 0.536 | 72.8 | 0.010 | 0.536 | 72.1 | 0.010 | 0.536 | 71.2 | 0.010 | 0.536 | 70.5 | 0.010 | 0.536 |
| 2 | 74.1 | 0.010 | 0.534 | 74.1 | 0.010 | 0.535 | 72.8 | 0.009 | 0.534 | 72.5 | 0.009 | 0.534 | 71.6 | 0.009 | 0.534 | 70.5 | 0.009 | 0.534 | 69.5 | 0.009 | 0.534 | 68.5 | 0.009 | 0.534 |
| 3 | 73.9 | 0.010 | 0.534 | 73.9 | 0.010 | 0.534 | 72.8 | 0.009 | 0.534 | 72.5 | 0.009 | 0.534 | 71.6 | 0.009 | 0.534 | 70.5 | 0.009 | 0.534 | 69.5 | 0.009 | 0.534 | 68.5 | 0.009 | 0.534 |
| 4 | 73.8 | 0.009 | 0.535 | 73.7 | 0.009 | 0.536 | 72.3 | 0.009 | 0.536 | 72.3 | 0.009 | 0.536 | 71.2 | 0.009 | 0.536 | 70.0 | 0.009 | 0.536 | 68.8 | 0.009 | 0.536 | 67.7 | 0.009 | 0.536 |
| 5 | 73.7 | 0.010 | 0.538 | 73.7 | 0.010 | 0.538 | 72.3 | 0.009 | 0.538 | 72.3 | 0.009 | 0.538 | 71.0 | 0.009 | 0.538 | 69.6 | 0.009 | 0.538 | 68.3 | 0.009 | 0.538 | 67.2 | 0.009 | 0.538 |
| 6 | 73.7 | 0.010 | 0.538 | 73.6 | 0.010 | 0.539 | 72.3 | 0.009 | 0.539 | 72.3 | 0.009 | 0.539 | 70.9 | 0.009 | 0.539 | 69.5 | 0.009 | 0.539 | 68.1 | 0.009 | 0.539 | 67.0 | 0.009 | 0.539 |
| 7 | 73.7 | 0.010 | 0.538 | 73.7 | 0.010 | 0.538 | 72.3 | 0.009 | 0.538 | 72.3 | 0.009 | 0.538 | 71.0 | 0.009 | 0.538 | 69.7 | 0.009 | 0.538 | 68.4 | 0.009 | 0.538 | 67.3 | 0.009 | 0.538 |
| 8 | 73.8 | 0.009 | 0.534 | 73.8 | 0.009 | 0.535 | 72.6 | 0.009 | 0.535 | 72.6 | 0.009 | 0.535 | 71.3 | 0.009 | 0.535 | 70.1 | 0.009 | 0.535 | 68.9 | 0.009 | 0.535 | 67.8 | 0.009 | 0.535 |
| 9 | 74.0 | 0.009 | 0.530 | 74.0 | 0.009 | 0.531 | 72.9 | 0.009 | 0.547 | 72.9 | 0.009 | 0.547 | 71.9 | 0.009 | 0.563 | 70.9 | 0.009 | 0.580 | 69.8 | 0.009 | 0.598 | 68.8 | 0.009 | 0.635 |
| 10 | 74.2 | 0.009 | 0.526 | 74.2 | 0.009 | 0.526 | 73.4 | 0.009 | 0.537 | 73.4 | 0.009 | 0.537 | 72.8 | 0.009 | 0.549 | 71.8 | 0.009 | 0.560 | 71.0 | 0.009 | 0.572 | 70.3 | 0.009 | 0.584 |
| 11 | 74.5 | 0.010 | 0.523 | 74.5 | 0.010 | 0.523 | 74.0 | 0.009 | 0.531 | 74.0 | 0.009 | 0.531 | 73.4 | 0.009 | 0.538 | 72.9 | 0.009 | 0.547 | 72.4 | 0.009 | 0.556 | 71.9 | 0.009 | 0.572 |
| 12 | 74.8 | 0.010 | 0.521 | 74.8 | 0.010 | 0.521 | 74.5 | 0.010 | 0.527 | 74.5 | 0.010 | 0.527 | 74.3 | 0.010 | 0.532 | 74.1 | 0.010 | 0.538 | 73.8 | 0.010 | 0.543 | 73.6 | 0.010 | 0.549 |
| 13 | 75.0 | 0.010 | 0.519 | 75.0 | 0.010 | 0.520 | 75.1 | 0.010 | 0.523 | 75.1 | 0.010 | 0.523 | 75.1 | 0.010 | 0.527 | 75.2 | 0.010 | 0.531 | 75.2 | 0.010 | 0.535 | 75.2 | 0.010 | 0.543 |
| 14 | 75.3 | 0.010 | 0.518 | 75.3 | 0.010 | 0.518 | 75.6 | 0.010 | 0.519 | 75.6 | 0.010 | 0.519 | 75.8 | 0.010 | 0.521 | 76.1 | 0.010 | 0.523 | 76.4 | 0.010 | 0.525 | 76.7 | 0.010 | 0.528 |
| 15 | 75.4 | 0.010 | 0.517 | 75.5 | 0.010 | 0.517 | 75.9 | 0.010 | 0.518 | 76.4 | 0.010 | 0.518 | 76.8 | 0.010 | 0.519 | 76.8 | 0.010 | 0.520 | 77.3 | 0.010 | 0.520 | 77.8 | 0.011 | 0.521 |
| 16 | 75.6 | 0.010 | 0.514 | 75.6 | 0.010 | 0.514 | 76.2 | 0.010 | 0.512 | 76.7 | 0.010 | 0.509 | 77.3 | 0.010 | 0.507 | 77.9 | 0.010 | 0.507 | 78.5 | 0.010 | 0.505 | 78.5 | 0.010 | 0.502 |
| 17 | 75.6 | 0.010 | 0.514 | 75.6 | 0.010 | 0.514 | 76.2 | 0.010 | 0.512 | 76.9 | 0.010 | 0.510 | 77.5 | 0.010 | 0.508 | 78.1 | 0.010 | 0.507 | 78.7 | 0.011 | 0.504 | 79.3 | 0.011 | 0.502 |
| 18 | 75.8 | 0.010 | 0.515 | 75.6 | 0.010 | 0.515 | 76.2 | 0.010 | 0.515 | 76.8 | 0.010 | 0.515 | 76.8 | 0.010 | 0.514 | 77.4 | 0.010 | 0.513 | 78.0 | 0.010 | 0.512 | 78.5 | 0.011 | 0.510 |
| 19 | 75.5 | 0.010 | 0.517 | 75.5 | 0.010 | 0.517 | 76.0 | 0.010 | 0.518 | 76.5 | 0.010 | 0.518 | 76.5 | 0.010 | 0.519 | 77.0 | 0.010 | 0.520 | 77.5 | 0.010 | 0.520 | 78.1 | 0.011 | 0.521 |
| 20 | 75.4 | 0.010 | 0.522 | 75.4 | 0.010 | 0.522 | 75.7 | 0.010 | 0.528 | 76.1 | 0.010 | 0.528 | 76.5 | 0.011 | 0.534 | 76.5 | 0.011 | 0.540 | 76.8 | 0.011 | 0.546 | 77.2 | 0.011 | 0.551 |
| 21 | 75.2 | 0.010 | 0.529 | 75.2 | 0.010 | 0.529 | 75.4 | 0.010 | 0.542 | 75.6 | 0.010 | 0.542 | 75.6 | 0.010 | 0.555 | 75.8 | 0.011 | 0.568 | 76.8 | 0.011 | 0.581 | 76.1 | 0.011 | 0.593 |
| 22 | 75.0 | 0.010 | 0.531 | 75.0 | 0.010 | 0.532 | 75.0 | 0.010 | 0.548 | 74.9 | 0.010 | 0.548 | 74.9 | 0.010 | 0.564 | 74.9 | 0.011 | 0.581 | 74.9 | 0.011 | 0.597 | 74.9 | 0.011 | 0.613 |
| 23 | 74.8 | 0.010 | 0.533 | 74.7 | 0.010 | 0.533 | 74.5 | 0.010 | 0.551 | 74.2 | 0.010 | 0.551 | 74.2 | 0.010 | 0.570 | 74.0 | 0.011 | 0.588 | 73.7 | 0.011 | 0.607 | 73.4 | 0.011 | 0.626 |
| 24 | 74.5 | 0.010 | 0.534 | 74.5 | 0.010 | 0.535 | 74.0 | 0.010 | 0.555 | 73.5 | 0.010 | 0.555 | 73.5 | 0.010 | 0.575 | 73.0 | 0.010 | 0.596 | 72.5 | 0.011 | 0.618 | 72.0 | 0.011 | 0.640 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | |
|------|------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|---------|-------|-------|-------|
| | Trmx | Wmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | | |
| 1 | 74.5 | 0.010 | 0.588 | 74.5 | 0.010 | 0.538 | 74.0 | 0.010 | 0.562 | 73.5 | 0.010 | 0.588 | 73.0 | 0.011 | 0.611 | 72.5 | 0.011 | 0.638 | 72.1 | 0.011 | 0.662 | 71.6 | 0.011 | 0.688 |
| 2 | 74.4 | 0.010 | 0.538 | 74.4 | 0.010 | 0.540 | 73.7 | 0.010 | 0.586 | 73.1 | 0.010 | 0.592 | 72.6 | 0.011 | 0.618 | 71.8 | 0.011 | 0.647 | 71.2 | 0.011 | 0.676 | 70.6 | 0.011 | 0.706 |
| 3 | 74.3 | 0.010 | 0.540 | 74.3 | 0.010 | 0.541 | 73.5 | 0.010 | 0.567 | 72.8 | 0.010 | 0.595 | 72.0 | 0.010 | 0.623 | 71.3 | 0.011 | 0.652 | 70.6 | 0.011 | 0.683 | 69.8 | 0.011 | 0.714 |
| 4 | 74.2 | 0.010 | 0.542 | 74.2 | 0.010 | 0.543 | 73.4 | 0.010 | 0.571 | 72.6 | 0.010 | 0.600 | 71.8 | 0.010 | 0.631 | 71.0 | 0.011 | 0.663 | 70.1 | 0.011 | 0.696 | 69.3 | 0.011 | 0.731 |
| 5 | 74.2 | 0.010 | 0.542 | 74.2 | 0.010 | 0.543 | 73.3 | 0.010 | 0.572 | 72.5 | 0.010 | 0.603 | 71.7 | 0.010 | 0.634 | 70.8 | 0.011 | 0.667 | 70.0 | 0.011 | 0.701 | 69.2 | 0.011 | 0.737 |
| 6 | 74.2 | 0.010 | 0.544 | 74.2 | 0.010 | 0.545 | 73.4 | 0.010 | 0.576 | 72.6 | 0.010 | 0.608 | 71.9 | 0.011 | 0.642 | 71.0 | 0.011 | 0.676 | 70.3 | 0.011 | 0.712 | 69.5 | 0.012 | 0.750 |
| 7 | 74.4 | 0.010 | 0.546 | 74.3 | 0.010 | 0.547 | 73.7 | 0.010 | 0.580 | 73.0 | 0.011 | 0.614 | 72.4 | 0.011 | 0.648 | 71.7 | 0.011 | 0.686 | 71.0 | 0.012 | 0.723 | 70.4 | 0.012 | 0.762 |
| 8 | 74.6 | 0.010 | 0.543 | 74.5 | 0.010 | 0.544 | 74.1 | 0.010 | 0.574 | 73.6 | 0.011 | 0.604 | 73.2 | 0.011 | 0.635 | 72.7 | 0.011 | 0.668 | 72.2 | 0.012 | 0.699 | 71.8 | 0.012 | 0.732 |
| 9 | 74.8 | 0.010 | 0.538 | 74.8 | 0.010 | 0.539 | 74.6 | 0.010 | 0.563 | 74.4 | 0.011 | 0.586 | 74.2 | 0.011 | 0.610 | 74.0 | 0.011 | 0.635 | 73.8 | 0.012 | 0.659 | 73.6 | 0.012 | 0.684 |
| 10 | 75.1 | 0.010 | 0.536 | 75.1 | 0.010 | 0.536 | 75.2 | 0.010 | 0.557 | 75.2 | 0.011 | 0.577 | 75.3 | 0.011 | 0.598 | 75.4 | 0.012 | 0.618 | 75.5 | 0.012 | 0.638 | 75.6 | 0.012 | 0.658 |
| 11 | 75.3 | 0.010 | 0.532 | 75.4 | 0.010 | 0.533 | 75.7 | 0.010 | 0.550 | 76.1 | 0.011 | 0.567 | 76.4 | 0.011 | 0.583 | 76.8 | 0.012 | 0.598 | 77.1 | 0.012 | 0.614 | 77.5 | 0.013 | 0.628 |
| 12 | 75.6 | 0.010 | 0.530 | 75.6 | 0.010 | 0.530 | 76.2 | 0.010 | 0.544 | 76.8 | 0.011 | 0.557 | 77.4 | 0.011 | 0.570 | 78.0 | 0.012 | 0.581 | 78.7 | 0.012 | 0.592 | 79.3 | 0.013 | 0.603 |
| 13 | 75.8 | 0.010 | 0.527 | 75.8 | 0.010 | 0.528 | 76.6 | 0.011 | 0.539 | 77.4 | 0.011 | 0.549 | 78.2 | 0.012 | 0.558 | 79.0 | 0.012 | 0.567 | 79.9 | 0.013 | 0.574 | 80.7 | 0.013 | 0.581 |
| 14 | 75.9 | 0.010 | 0.525 | 75.9 | 0.010 | 0.525 | 76.9 | 0.011 | 0.533 | 77.8 | 0.011 | 0.541 | 78.8 | 0.011 | 0.547 | 79.7 | 0.012 | 0.553 | 80.6 | 0.012 | 0.558 | 81.6 | 0.013 | 0.562 |
| 15 | 75.9 | 0.010 | 0.522 | 76.0 | 0.010 | 0.522 | 77.0 | 0.010 | 0.528 | 77.9 | 0.011 | 0.534 | 78.9 | 0.011 | 0.538 | 79.9 | 0.012 | 0.542 | 80.9 | 0.012 | 0.545 | 81.9 | 0.013 | 0.547 |
| 16 | 75.9 | 0.010 | 0.520 | 76.0 | 0.010 | 0.520 | 76.9 | 0.010 | 0.524 | 77.9 | 0.011 | 0.527 | 78.8 | 0.011 | 0.530 | 79.8 | 0.012 | 0.532 | 80.8 | 0.012 | 0.533 | 81.7 | 0.012 | 0.535 |
| 17 | 75.9 | 0.010 | 0.520 | 75.9 | 0.010 | 0.520 | 76.8 | 0.010 | 0.523 | 77.7 | 0.011 | 0.526 | 78.6 | 0.011 | 0.528 | 79.5 | 0.011 | 0.531 | 80.3 | 0.012 | 0.533 | 81.2 | 0.012 | 0.534 |
| 18 | 75.8 | 0.010 | 0.520 | 75.8 | 0.010 | 0.520 | 76.6 | 0.010 | 0.523 | 77.3 | 0.011 | 0.527 | 78.1 | 0.011 | 0.529 | 78.9 | 0.011 | 0.532 | 79.7 | 0.012 | 0.534 | 80.5 | 0.012 | 0.535 |
| 19 | 75.6 | 0.010 | 0.524 | 75.6 | 0.010 | 0.525 | 76.3 | 0.010 | 0.533 | 76.9 | 0.011 | 0.541 | 77.6 | 0.011 | 0.548 | 78.2 | 0.011 | 0.556 | 78.8 | 0.012 | 0.562 | 79.5 | 0.012 | 0.568 |
| 20 | 75.5 | 0.010 | 0.529 | 75.5 | 0.010 | 0.530 | 75.9 | 0.010 | 0.544 | 76.4 | 0.011 | 0.557 | 76.9 | 0.011 | 0.569 | 77.3 | 0.012 | 0.582 | 77.8 | 0.012 | 0.593 | 78.3 | 0.013 | 0.605 |
| 21 | 75.3 | 0.010 | 0.533 | 75.3 | 0.010 | 0.534 | 75.6 | 0.010 | 0.552 | 75.8 | 0.011 | 0.568 | 76.1 | 0.011 | 0.587 | 76.4 | 0.012 | 0.604 | 76.7 | 0.012 | 0.620 | 77.0 | 0.013 | 0.636 |
| 22 | 75.1 | 0.010 | 0.534 | 75.1 | 0.010 | 0.535 | 75.2 | 0.010 | 0.554 | 75.2 | 0.011 | 0.573 | 75.3 | 0.011 | 0.591 | 75.4 | 0.011 | 0.610 | 75.5 | 0.012 | 0.629 | 75.6 | 0.012 | 0.647 |
| 23 | 74.9 | 0.010 | 0.537 | 74.9 | 0.010 | 0.538 | 74.7 | 0.010 | 0.560 | 74.8 | 0.011 | 0.582 | 74.5 | 0.011 | 0.605 | 74.3 | 0.011 | 0.627 | 74.2 | 0.012 | 0.650 | 74.1 | 0.012 | 0.673 |
| 24 | 74.7 | 0.010 | 0.537 | 74.7 | 0.010 | 0.538 | 74.4 | 0.010 | 0.580 | 74.0 | 0.010 | 0.583 | 73.7 | 0.011 | 0.606 | 73.4 | 0.011 | 0.629 | 73.1 | 0.011 | 0.653 | 72.8 | 0.012 | 0.677 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | | | | | | | | | | | |
| 1 | 74.2 | 0.010 | 0.534 | 74.2 | 0.010 | 0.535 | 73.3 | 0.010 | 0.555 | 72.5 | 0.010 | 0.575 | 71.6 | 0.010 | 0.597 | 70.8 | 0.010 | 0.619 | 69.9 | 0.010 | 0.642 | 69.1 | 0.010 | 0.666 | 68.2 | 0.010 | 0.689 | 67.4 | 0.010 | 0.717 | 66.5 | 0.010 | 0.744 |
| 2 | 74.0 | 0.010 | 0.535 | 74.0 | 0.010 | 0.535 | 72.9 | 0.010 | 0.556 | 71.9 | 0.010 | 0.577 | 70.8 | 0.010 | 0.598 | 69.8 | 0.010 | 0.620 | 68.7 | 0.010 | 0.647 | 67.7 | 0.010 | 0.672 | 66.8 | 0.010 | 0.696 | 65.8 | 0.010 | 0.725 | 64.9 | 0.010 | 0.754 |
| 3 | 73.8 | 0.010 | 0.535 | 73.8 | 0.010 | 0.536 | 72.6 | 0.009 | 0.557 | 71.3 | 0.009 | 0.579 | 70.1 | 0.009 | 0.602 | 68.9 | 0.009 | 0.626 | 67.0 | 0.009 | 0.651 | 65.6 | 0.009 | 0.677 | 65.2 | 0.009 | 0.705 | 64.0 | 0.009 | 0.734 | 62.8 | 0.009 | 0.764 |
| 4 | 73.7 | 0.009 | 0.536 | 73.7 | 0.009 | 0.537 | 72.3 | 0.009 | 0.559 | 71.0 | 0.009 | 0.583 | 69.6 | 0.009 | 0.608 | 68.3 | 0.009 | 0.634 | 67.0 | 0.009 | 0.661 | 65.6 | 0.009 | 0.689 | 64.3 | 0.009 | 0.720 | 62.9 | 0.009 | 0.751 | 61.6 | 0.009 | 0.785 |
| 5 | 73.6 | 0.009 | 0.536 | 73.6 | 0.009 | 0.537 | 72.2 | 0.009 | 0.559 | 70.7 | 0.009 | 0.583 | 69.3 | 0.009 | 0.607 | 67.9 | 0.009 | 0.633 | 66.5 | 0.009 | 0.660 | 65.1 | 0.009 | 0.688 | 63.6 | 0.009 | 0.718 | 62.2 | 0.009 | 0.749 | 60.8 | 0.009 | 0.782 |
| 6 | 73.6 | 0.009 | 0.537 | 73.6 | 0.009 | 0.538 | 72.1 | 0.009 | 0.561 | 70.7 | 0.009 | 0.586 | 69.2 | 0.009 | 0.611 | 67.8 | 0.009 | 0.639 | 66.4 | 0.009 | 0.667 | 64.9 | 0.009 | 0.697 | 63.5 | 0.009 | 0.729 | 62.0 | 0.009 | 0.761 | 60.6 | 0.009 | 0.796 |
| 7 | 73.7 | 0.010 | 0.538 | 73.8 | 0.010 | 0.538 | 72.2 | 0.009 | 0.564 | 70.8 | 0.009 | 0.591 | 69.4 | 0.009 | 0.618 | 68.0 | 0.009 | 0.647 | 66.7 | 0.009 | 0.678 | 65.3 | 0.009 | 0.711 | 63.9 | 0.009 | 0.745 | 62.5 | 0.009 | 0.781 | 61.1 | 0.009 | 0.818 |
| 8 | 73.8 | 0.010 | 0.537 | 73.8 | 0.010 | 0.537 | 72.5 | 0.010 | 0.560 | 71.3 | 0.010 | 0.584 | 70.0 | 0.010 | 0.609 | 68.8 | 0.010 | 0.638 | 67.6 | 0.010 | 0.663 | 66.3 | 0.010 | 0.692 | 65.1 | 0.010 | 0.723 | 63.8 | 0.010 | 0.754 | 62.6 | 0.010 | 0.788 |
| 9 | 74.0 | 0.010 | 0.533 | 74.0 | 0.010 | 0.533 | 73.0 | 0.010 | 0.552 | 72.0 | 0.010 | 0.571 | 71.0 | 0.010 | 0.591 | 70.0 | 0.010 | 0.612 | 68.9 | 0.010 | 0.633 | 67.9 | 0.010 | 0.656 | 66.9 | 0.010 | 0.679 | 66.9 | 0.010 | 0.703 | 64.9 | 0.010 | 0.728 |
| 10 | 74.3 | 0.010 | 0.529 | 74.3 | 0.010 | 0.529 | 73.6 | 0.010 | 0.543 | 72.8 | 0.010 | 0.567 | 72.1 | 0.010 | 0.572 | 71.4 | 0.010 | 0.587 | 70.7 | 0.010 | 0.602 | 70.0 | 0.010 | 0.618 | 69.2 | 0.010 | 0.635 | 68.5 | 0.010 | 0.652 | 67.8 | 0.010 | 0.669 |
| 11 | 74.6 | 0.010 | 0.524 | 74.6 | 0.010 | 0.525 | 74.2 | 0.010 | 0.534 | 73.8 | 0.010 | 0.543 | 73.4 | 0.010 | 0.553 | 73.0 | 0.010 | 0.563 | 72.6 | 0.010 | 0.573 | 72.2 | 0.010 | 0.583 | 71.8 | 0.010 | 0.593 | 71.4 | 0.010 | 0.603 | 71.0 | 0.010 | 0.614 |
| 12 | 74.9 | 0.010 | 0.522 | 74.9 | 0.010 | 0.522 | 74.9 | 0.010 | 0.528 | 74.8 | 0.010 | 0.535 | 74.7 | 0.010 | 0.541 | 74.7 | 0.010 | 0.548 | 74.6 | 0.010 | 0.554 | 74.5 | 0.010 | 0.561 | 74.4 | 0.010 | 0.567 | 74.4 | 0.010 | 0.574 | 74.3 | 0.010 | 0.581 |
| 13 | 75.2 | 0.010 | 0.519 | 75.2 | 0.010 | 0.519 | 75.4 | 0.010 | 0.522 | 75.4 | 0.010 | 0.525 | 75.9 | 0.010 | 0.528 | 76.1 | 0.010 | 0.532 | 76.3 | 0.010 | 0.535 | 76.5 | 0.010 | 0.538 | 76.8 | 0.011 | 0.540 | 77.0 | 0.011 | 0.543 | 77.2 | 0.011 | 0.546 |
| 14 | 75.4 | 0.010 | 0.517 | 75.5 | 0.010 | 0.517 | 75.9 | 0.010 | 0.519 | 76.4 | 0.010 | 0.521 | 76.8 | 0.010 | 0.522 | 77.3 | 0.010 | 0.523 | 77.7 | 0.011 | 0.524 | 78.2 | 0.011 | 0.525 | 78.6 | 0.011 | 0.526 | 79.1 | 0.011 | 0.527 | 79.5 | 0.011 | 0.528 |
| 15 | 75.6 | 0.010 | 0.516 | 75.6 | 0.010 | 0.517 | 76.2 | 0.010 | 0.517 | 76.8 | 0.010 | 0.518 | 77.4 | 0.010 | 0.518 | 78.0 | 0.011 | 0.518 | 78.6 | 0.011 | 0.518 | 79.2 | 0.011 | 0.518 | 79.8 | 0.011 | 0.518 | 80.4 | 0.011 | 0.517 | 81.0 | 0.012 | 0.516 |
| 16 | 75.6 | 0.010 | 0.516 | 75.7 | 0.010 | 0.516 | 76.3 | 0.010 | 0.517 | 77.0 | 0.010 | 0.517 | 77.6 | 0.010 | 0.517 | 78.3 | 0.011 | 0.516 | 78.9 | 0.011 | 0.516 | 79.6 | 0.011 | 0.515 | 80.2 | 0.011 | 0.515 | 80.9 | 0.012 | 0.514 | 81.5 | 0.012 | 0.513 |
| 17 | 75.6 | 0.010 | 0.515 | 75.6 | 0.010 | 0.515 | 76.3 | 0.010 | 0.515 | 76.9 | 0.010 | 0.514 | 77.5 | 0.010 | 0.513 | 78.2 | 0.011 | 0.512 | 78.8 | 0.011 | 0.511 | 79.4 | 0.011 | 0.510 | 80.0 | 0.011 | 0.508 | 80.7 | 0.011 | 0.507 | 81.3 | 0.012 | 0.505 |
| 18 | 75.5 | 0.010 | 0.517 | 75.6 | 0.010 | 0.517 | 76.1 | 0.010 | 0.518 | 76.7 | 0.010 | 0.519 | 77.2 | 0.010 | 0.519 | 77.8 | 0.011 | 0.520 | 78.3 | 0.011 | 0.520 | 78.9 | 0.011 | 0.520 | 79.4 | 0.011 | 0.520 | 80.0 | 0.011 | 0.520 | 80.5 | 0.012 | 0.520 |
| 19 | 75.4 | 0.010 | 0.519 | 75.4 | 0.010 | 0.519 | 75.8 | 0.010 | 0.522 | 76.3 | 0.010 | 0.526 | 76.8 | 0.010 | 0.528 | 77.1 | 0.011 | 0.531 | 77.5 | 0.011 | 0.534 | 77.9 | 0.011 | 0.537 | 78.4 | 0.011 | 0.539 | 78.8 | 0.011 | 0.541 | 79.2 | 0.012 | 0.543 |
| 20 | 75.2 | 0.010 | 0.525 | 75.3 | 0.010 | 0.525 | 75.5 | 0.010 | 0.534 | 75.8 | 0.010 | 0.543 | 76.0 | 0.011 | 0.552 | 76.3 | 0.011 | 0.558 | 76.6 | 0.011 | 0.569 | 76.8 | 0.011 | 0.577 | 77.1 | 0.012 | 0.585 | 77.3 | 0.012 | 0.593 | 77.6 | 0.012 | 0.601 |
| 21 | 75.1 | 0.010 | 0.529 | 75.1 | 0.010 | 0.530 | 75.1 | 0.010 | 0.544 | 75.2 | 0.010 | 0.568 | 75.2 | 0.011 | 0.572 | 75.3 | 0.011 | 0.586 | 75.4 | 0.011 | 0.600 | 75.4 | 0.012 | 0.614 | 75.5 | 0.012 | 0.628 | 75.5 | 0.012 | 0.642 | 75.6 | 0.012 | 0.655 |
| 22 | 74.8 | 0.010 | 0.532 | 74.8 | 0.010 | 0.533 | 74.2 | 0.010 | 0.551 | 74.5 | 0.010 | 0.568 | 74.4 | 0.011 | 0.566 | 74.2 | 0.011 | 0.604 | 74.0 | 0.011 | 0.622 | 73.9 | 0.011 | 0.641 | 73.7 | 0.012 | 0.659 | 73.6 | 0.012 | 0.678 | 73.4 | 0.012 | 0.697 |
| 23 | 74.8 | 0.010 | 0.533 | 74.8 | 0.010 | 0.534 | 74.2 | 0.010 | 0.552 | 74.8 | 0.010 | 0.571 | 74.4 | 0.010 | 0.591 | 73.0 | 0.011 | 0.611 | 72.8 | 0.011 | 0.631 | 72.2 | 0.011 | 0.652 | 71.8 | 0.011 | 0.673 | 71.4 | 0.011 | 0.694 | 71.0 | 0.012 | 0.716 |
| 24 | 74.4 | 0.010 | 0.534 | 74.4 | 0.010 | 0.535 | 73.7 | 0.010 | 0.554 | 73.1 | 0.010 | 0.574 | 72.5 | 0.010 | 0.595 | 71.8 | 0.010 | 0.617 | 71.2 | 0.010 | 0.639 | 70.6 | 0.011 | 0.662 | 70.0 | 0.011 | 0.685 | 69.3 | 0.011 | 0.709 | 68.7 | 0.011 | 0.734 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | | |
|------|------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|---------|-------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--|
| | Trmx | Wmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | | | | | | | | | | | | |
| 1 | 73.7 | 0.009 | 0.531 | 73.7 | 0.009 | 0.531 | 72.3 | 0.009 | 0.548 | 70.3 | 0.009 | 0.564 | 68.6 | 0.009 | 0.582 | 67.2 | 0.009 | 0.610 | 66.9 | 0.009 | 0.618 | 65.6 | 0.009 | 0.638 | 64.2 | 0.009 | 0.667 | 62.9 | 0.009 | 0.678 | 61.5 | 0.009 | 0.698 | |
| 2 | 73.5 | 0.009 | 0.533 | 73.4 | 0.009 | 0.533 | 71.5 | 0.009 | 0.557 | 69.8 | 0.009 | 0.579 | 68.1 | 0.009 | 0.590 | 66.4 | 0.009 | 0.627 | 64.6 | 0.009 | 0.652 | 62.9 | 0.009 | 0.678 | 61.2 | 0.009 | 0.706 | 59.4 | 0.009 | 0.735 | 57.7 | 0.009 | 0.765 | |
| 3 | 73.3 | 0.009 | 0.535 | 73.3 | 0.009 | 0.536 | 71.2 | 0.009 | 0.558 | 69.4 | 0.009 | 0.581 | 67.5 | 0.009 | 0.605 | 65.6 | 0.009 | 0.630 | 63.7 | 0.009 | 0.655 | 61.8 | 0.009 | 0.682 | 60.0 | 0.009 | 0.710 | 58.1 | 0.009 | 0.739 | 56.2 | 0.009 | 0.770 | |
| 4 | 73.2 | 0.009 | 0.536 | 73.1 | 0.009 | 0.537 | 71.0 | 0.009 | 0.558 | 69.0 | 0.009 | 0.586 | 67.0 | 0.009 | 0.612 | 65.0 | 0.009 | 0.639 | 63.1 | 0.009 | 0.667 | 61.1 | 0.009 | 0.697 | 59.1 | 0.009 | 0.728 | 57.1 | 0.009 | 0.760 | 55.1 | 0.009 | 0.794 | |
| 5 | 73.1 | 0.009 | 0.537 | 73.0 | 0.009 | 0.538 | 70.9 | 0.009 | 0.562 | 68.8 | 0.009 | 0.597 | 66.9 | 0.009 | 0.613 | 64.7 | 0.009 | 0.641 | 62.6 | 0.009 | 0.669 | 60.6 | 0.009 | 0.699 | 58.5 | 0.009 | 0.730 | 56.5 | 0.009 | 0.763 | 54.4 | 0.009 | 0.797 | |
| 6 | 73.0 | 0.009 | 0.538 | 72.9 | 0.009 | 0.538 | 70.8 | 0.009 | 0.564 | 68.8 | 0.009 | 0.589 | 66.7 | 0.009 | 0.616 | 64.6 | 0.009 | 0.645 | 62.5 | 0.009 | 0.674 | 60.4 | 0.009 | 0.705 | 58.4 | 0.009 | 0.738 | 56.3 | 0.009 | 0.772 | 54.2 | 0.009 | 0.808 | |
| 7 | 73.0 | 0.009 | 0.538 | 72.9 | 0.009 | 0.537 | 71.0 | 0.009 | 0.568 | 68.0 | 0.009 | 0.581 | 67.0 | 0.009 | 0.604 | 65.0 | 0.009 | 0.629 | 63.1 | 0.009 | 0.654 | 61.1 | 0.009 | 0.681 | 59.1 | 0.009 | 0.708 | 57.1 | 0.009 | 0.736 | 55.1 | 0.009 | 0.765 | |
| 8 | 73.1 | 0.009 | 0.530 | 73.3 | 0.009 | 0.531 | 71.5 | 0.009 | 0.547 | 69.8 | 0.009 | 0.562 | 68.1 | 0.009 | 0.579 | 66.4 | 0.009 | 0.595 | 64.6 | 0.009 | 0.612 | 62.9 | 0.009 | 0.629 | 61.2 | 0.009 | 0.646 | 59.4 | 0.009 | 0.663 | 57.7 | 0.009 | 0.680 | |
| 9 | 73.3 | 0.009 | 0.525 | 73.7 | 0.009 | 0.525 | 72.3 | 0.009 | 0.535 | 71.0 | 0.009 | 0.544 | 69.6 | 0.009 | 0.554 | 68.3 | 0.009 | 0.563 | 66.9 | 0.009 | 0.572 | 65.6 | 0.009 | 0.581 | 64.2 | 0.009 | 0.590 | 62.9 | 0.009 | 0.599 | 61.5 | 0.009 | 0.607 | |
| 10 | 73.7 | 0.009 | 0.521 | 74.1 | 0.009 | 0.521 | 73.2 | 0.009 | 0.527 | 72.3 | 0.009 | 0.532 | 71.4 | 0.009 | 0.538 | 70.5 | 0.009 | 0.543 | 69.6 | 0.009 | 0.548 | 68.7 | 0.009 | 0.553 | 67.8 | 0.009 | 0.559 | 66.9 | 0.009 | 0.563 | 66.0 | 0.009 | 0.568 | |
| 11 | 74.1 | 0.009 | 0.517 | 74.6 | 0.009 | 0.517 | 74.1 | 0.009 | 0.518 | 73.7 | 0.009 | 0.519 | 73.2 | 0.009 | 0.520 | 72.8 | 0.009 | 0.521 | 72.3 | 0.009 | 0.522 | 71.9 | 0.009 | 0.523 | 71.4 | 0.009 | 0.523 | 71.0 | 0.009 | 0.524 | 70.5 | 0.009 | 0.524 | |
| 12 | 74.9 | 0.009 | 0.512 | 74.9 | 0.009 | 0.512 | 74.9 | 0.009 | 0.508 | 74.8 | 0.009 | 0.504 | 74.7 | 0.009 | 0.500 | 74.7 | 0.009 | 0.498 | 74.6 | 0.009 | 0.492 | 74.5 | 0.009 | 0.488 | 74.4 | 0.009 | 0.484 | 74.4 | 0.009 | 0.480 | 74.3 | 0.009 | 0.475 | |
| 13 | 75.2 | 0.009 | 0.510 | 75.2 | 0.009 | 0.510 | 75.4 | 0.009 | 0.504 | 75.5 | 0.009 | 0.498 | 75.7 | 0.009 | 0.492 | 75.9 | 0.009 | 0.488 | 76.1 | 0.009 | 0.480 | 76.3 | 0.009 | 0.475 | 76.4 | 0.009 | 0.469 | 76.6 | 0.009 | 0.463 | 76.8 | 0.009 | 0.458 | |
| 14 | 75.3 | 0.009 | 0.507 | 75.3 | 0.009 | 0.507 | 75.5 | 0.009 | 0.488 | 75.8 | 0.009 | 0.488 | 76.1 | 0.009 | 0.481 | 76.3 | 0.009 | 0.472 | 76.6 | 0.009 | 0.464 | 76.9 | 0.009 | 0.456 | 77.2 | 0.009 | 0.448 | 77.4 | 0.009 | 0.440 | 77.4 | 0.009 | 0.432 | |
| 15 | 75.2 | 0.009 | 0.508 | 75.3 | 0.009 | 0.507 | 75.5 | 0.009 | 0.489 | 75.8 | 0.009 | 0.491 | 76.0 | 0.009 | 0.483 | 76.3 | 0.009 | 0.475 | 76.5 | 0.009 | 0.467 | 76.8 | 0.009 | 0.459 | 77.0 | 0.009 | 0.452 | 77.3 | 0.009 | 0.444 | 77.5 | 0.009 | 0.437 | |
| 16 | 75.2 | 0.009 | 0.507 | 75.2 | 0.009 | 0.507 | 75.4 | 0.009 | 0.488 | 75.5 | 0.009 | 0.489 | 75.7 | 0.009 | 0.480 | 75.9 | 0.009 | 0.471 | 76.1 | 0.009 | 0.462 | 76.3 | 0.009 | 0.454 | 76.4 | 0.009 | 0.445 | 76.4 | 0.009 | 0.445 | 76.6 | 0.009 | 0.438 | |
| 17 | 75.1 | 0.009 | 0.509 | 75.1 | 0.009 | 0.509 | 75.1 | 0.009 | 0.502 | 75.2 | 0.009 | 0.495 | 75.3 | 0.009 | 0.488 | 75.3 | 0.009 | 0.481 | 75.4 | 0.009 | 0.474 | 75.5 | 0.009 | 0.468 | 75.6 | 0.009 | 0.461 | 75.6 | 0.009 | 0.454 | 75.7 | 0.009 | 0.447 | |
| 18 | 74.9 | 0.010 | 0.516 | 74.9 | 0.010 | 0.516 | 74.9 | 0.009 | 0.516 | 74.8 | 0.009 | 0.515 | 74.7 | 0.009 | 0.515 | 74.7 | 0.009 | 0.515 | 74.6 | 0.009 | 0.515 | 74.5 | 0.009 | 0.515 | 74.4 | 0.009 | 0.515 | 74.4 | 0.009 | 0.515 | 74.3 | 0.009 | 0.515 | |
| 19 | 74.8 | 0.010 | 0.521 | 74.8 | 0.010 | 0.522 | 74.5 | 0.010 | 0.528 | 74.3 | 0.010 | 0.534 | 74.0 | 0.010 | 0.540 | 73.8 | 0.010 | 0.546 | 73.5 | 0.010 | 0.552 | 73.3 | 0.010 | 0.559 | 73.0 | 0.010 | 0.566 | 72.8 | 0.010 | 0.572 | 72.5 | 0.010 | 0.578 | |
| 20 | 74.8 | 0.010 | 0.525 | 74.8 | 0.010 | 0.525 | 74.1 | 0.010 | 0.536 | 73.7 | 0.010 | 0.545 | 73.2 | 0.010 | 0.555 | 72.8 | 0.010 | 0.565 | 72.3 | 0.010 | 0.575 | 71.9 | 0.010 | 0.588 | 71.4 | 0.010 | 0.597 | 71.0 | 0.010 | 0.608 | 70.5 | 0.010 | 0.619 | |
| 21 | 74.4 | 0.010 | 0.527 | 74.3 | 0.010 | 0.528 | 73.2 | 0.010 | 0.540 | 73.0 | 0.010 | 0.552 | 72.3 | 0.010 | 0.565 | 71.7 | 0.010 | 0.578 | 71.0 | 0.010 | 0.592 | 70.3 | 0.010 | 0.606 | 69.6 | 0.010 | 0.620 | 68.9 | 0.010 | 0.635 | 68.3 | 0.010 | 0.650 | |
| 22 | 74.1 | 0.009 | 0.529 | 74.1 | 0.009 | 0.528 | 73.2 | 0.009 | 0.543 | 72.3 | 0.009 | 0.558 | 71.4 | 0.009 | 0.573 | 70.5 | 0.009 | 0.589 | 69.8 | 0.009 | 0.605 | 69.7 | 0.009 | 0.621 | 69.0 | 0.009 | 0.638 | 68.2 | 0.009 | 0.656 | 68.0 | 0.009 | 0.674 | |
| 23 | 73.9 | 0.009 | 0.530 | 73.9 | 0.009 | 0.531 | 72.7 | 0.009 | 0.547 | 71.8 | 0.009 | 0.563 | 70.5 | 0.009 | 0.580 | 69.4 | 0.009 | 0.597 | 68.2 | 0.009 | 0.615 | 67.1 | 0.009 | 0.634 | 66.0 | 0.009 | 0.654 | 64.8 | 0.009 | 0.674 | 63.7 | 0.009 | 0.695 | |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmx | Wmix | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | | | | | | | | | | | |
| 1 | 72.4 | 0.009 | 0.539 | 72.3 | 0.009 | 0.539 | 89.6 | 0.009 | 0.564 | 87.0 | 0.009 | 0.589 | 64.3 | 0.008 | 0.615 | 81.6 | 0.007 | 0.641 | 59.9 | 0.007 | 0.668 | 58.2 | 0.007 | 0.694 | 53.6 | 0.006 | 0.721 | 50.9 | 0.006 | 0.748 | 48.2 | 0.005 | 0.771 |
| 2 | 72.2 | 0.009 | 0.540 | 72.1 | 0.009 | 0.541 | 89.2 | 0.009 | 0.567 | 86.3 | 0.008 | 0.593 | 63.4 | 0.008 | 0.620 | 80.5 | 0.007 | 0.648 | 57.7 | 0.007 | 0.675 | 56.8 | 0.007 | 0.702 | 51.9 | 0.006 | 0.729 | 49.0 | 0.006 | 0.753 | 46.1 | 0.005 | 0.776 |
| 3 | 72.0 | 0.009 | 0.542 | 71.9 | 0.009 | 0.543 | 88.9 | 0.009 | 0.571 | 85.8 | 0.008 | 0.599 | 62.7 | 0.008 | 0.628 | 79.6 | 0.007 | 0.656 | 56.6 | 0.007 | 0.683 | 55.8 | 0.007 | 0.710 | 50.4 | 0.006 | 0.736 | 47.4 | 0.005 | 0.762 | 44.3 | 0.005 | 0.786 |
| 4 | 71.9 | 0.009 | 0.543 | 71.8 | 0.009 | 0.544 | 88.6 | 0.009 | 0.573 | 85.3 | 0.008 | 0.603 | 62.1 | 0.008 | 0.634 | 78.9 | 0.007 | 0.665 | 55.7 | 0.007 | 0.695 | 55.0 | 0.007 | 0.726 | 49.2 | 0.006 | 0.754 | 46.0 | 0.005 | 0.781 | 42.8 | 0.005 | 0.804 |
| 5 | 71.8 | 0.009 | 0.543 | 71.7 | 0.009 | 0.545 | 88.3 | 0.009 | 0.574 | 85.0 | 0.008 | 0.605 | 61.6 | 0.007 | 0.636 | 78.3 | 0.007 | 0.667 | 55.0 | 0.006 | 0.698 | 54.6 | 0.006 | 0.727 | 48.3 | 0.005 | 0.755 | 44.9 | 0.005 | 0.779 | 41.6 | 0.004 | 0.799 |
| 6 | 71.7 | 0.009 | 0.544 | 71.6 | 0.009 | 0.546 | 88.2 | 0.009 | 0.577 | 84.8 | 0.008 | 0.609 | 61.4 | 0.007 | 0.641 | 78.0 | 0.007 | 0.674 | 54.5 | 0.006 | 0.707 | 51.1 | 0.006 | 0.739 | 47.7 | 0.005 | 0.768 | 44.3 | 0.005 | 0.795 | 40.9 | 0.004 | 0.817 |
| 7 | 71.7 | 0.009 | 0.545 | 71.6 | 0.009 | 0.546 | 88.1 | 0.008 | 0.578 | 84.7 | 0.008 | 0.609 | 61.3 | 0.007 | 0.642 | 77.9 | 0.007 | 0.675 | 54.4 | 0.006 | 0.708 | 51.0 | 0.006 | 0.739 | 47.6 | 0.005 | 0.769 | 44.1 | 0.005 | 0.796 | 40.7 | 0.004 | 0.817 |
| 8 | 71.8 | 0.009 | 0.544 | 71.6 | 0.009 | 0.545 | 88.3 | 0.008 | 0.576 | 84.9 | 0.008 | 0.607 | 61.5 | 0.007 | 0.639 | 78.1 | 0.007 | 0.672 | 54.8 | 0.006 | 0.704 | 51.4 | 0.006 | 0.735 | 48.0 | 0.005 | 0.764 | 44.7 | 0.005 | 0.791 | 41.3 | 0.004 | 0.813 |
| 9 | 71.9 | 0.009 | 0.540 | 71.8 | 0.009 | 0.541 | 88.6 | 0.008 | 0.588 | 86.5 | 0.008 | 0.594 | 63.3 | 0.007 | 0.621 | 79.1 | 0.007 | 0.647 | 55.9 | 0.006 | 0.672 | 52.7 | 0.006 | 0.698 | 49.6 | 0.005 | 0.716 | 46.4 | 0.005 | 0.734 | 43.2 | 0.004 | 0.746 |
| 10 | 72.2 | 0.009 | 0.536 | 72.1 | 0.009 | 0.537 | 89.2 | 0.008 | 0.569 | 86.3 | 0.008 | 0.576 | 63.4 | 0.007 | 0.598 | 80.5 | 0.007 | 0.617 | 57.7 | 0.006 | 0.635 | 54.8 | 0.006 | 0.660 | 51.9 | 0.005 | 0.683 | 49.0 | 0.005 | 0.711 | 46.1 | 0.004 | 0.675 |
| 11 | 72.6 | 0.009 | 0.531 | 72.5 | 0.009 | 0.531 | 89.9 | 0.008 | 0.546 | 87.4 | 0.008 | 0.560 | 64.9 | 0.007 | 0.573 | 82.4 | 0.007 | 0.595 | 59.8 | 0.006 | 0.615 | 57.3 | 0.006 | 0.633 | 54.8 | 0.006 | 0.657 | 52.2 | 0.005 | 0.683 | 49.7 | 0.005 | 0.706 |
| 12 | 72.9 | 0.009 | 0.525 | 72.9 | 0.009 | 0.525 | 90.7 | 0.009 | 0.524 | 88.6 | 0.008 | 0.541 | 66.4 | 0.008 | 0.548 | 84.3 | 0.007 | 0.552 | 62.1 | 0.007 | 0.555 | 60.0 | 0.006 | 0.555 | 57.8 | 0.006 | 0.553 | 55.7 | 0.005 | 0.549 | 53.5 | 0.005 | 0.539 |
| 13 | 73.3 | 0.009 | 0.520 | 73.2 | 0.009 | 0.520 | 91.4 | 0.009 | 0.524 | 89.8 | 0.008 | 0.527 | 67.8 | 0.008 | 0.529 | 86.0 | 0.007 | 0.529 | 64.3 | 0.007 | 0.527 | 62.5 | 0.006 | 0.523 | 60.7 | 0.006 | 0.517 | 58.9 | 0.005 | 0.509 | 57.1 | 0.005 | 0.498 |
| 14 | 73.6 | 0.009 | 0.518 | 73.5 | 0.009 | 0.518 | 92.0 | 0.009 | 0.520 | 90.5 | 0.008 | 0.521 | 69.0 | 0.008 | 0.520 | 87.5 | 0.007 | 0.519 | 68.0 | 0.007 | 0.516 | 66.4 | 0.007 | 0.512 | 63.0 | 0.006 | 0.506 | 61.5 | 0.006 | 0.499 | 60.0 | 0.005 | 0.489 |
| 15 | 73.7 | 0.009 | 0.516 | 73.7 | 0.009 | 0.516 | 92.4 | 0.009 | 0.516 | 91.1 | 0.008 | 0.514 | 69.8 | 0.008 | 0.512 | 88.5 | 0.008 | 0.509 | 67.1 | 0.007 | 0.504 | 65.8 | 0.007 | 0.499 | 64.5 | 0.006 | 0.492 | 63.2 | 0.006 | 0.483 | 61.9 | 0.006 | 0.473 |
| 16 | 73.8 | 0.009 | 0.515 | 73.8 | 0.009 | 0.515 | 92.5 | 0.009 | 0.513 | 91.3 | 0.008 | 0.510 | 70.0 | 0.008 | 0.506 | 88.8 | 0.007 | 0.501 | 67.5 | 0.007 | 0.495 | 66.3 | 0.007 | 0.487 | 65.0 | 0.006 | 0.478 | 63.8 | 0.006 | 0.468 | 62.5 | 0.005 | 0.456 |
| 17 | 73.8 | 0.009 | 0.516 | 73.7 | 0.009 | 0.516 | 92.5 | 0.009 | 0.515 | 91.2 | 0.008 | 0.514 | 69.9 | 0.008 | 0.511 | 88.6 | 0.008 | 0.508 | 67.4 | 0.007 | 0.503 | 66.1 | 0.007 | 0.498 | 64.8 | 0.006 | 0.491 | 63.6 | 0.006 | 0.483 | 62.3 | 0.006 | 0.473 |
| 18 | 73.7 | 0.009 | 0.517 | 73.7 | 0.009 | 0.517 | 92.3 | 0.009 | 0.518 | 91.0 | 0.008 | 0.518 | 71.0 | 0.008 | 0.518 | 88.3 | 0.008 | 0.516 | 67.0 | 0.007 | 0.513 | 65.6 | 0.007 | 0.509 | 64.3 | 0.006 | 0.504 | 62.9 | 0.006 | 0.497 | 61.6 | 0.006 | 0.489 |
| 19 | 73.6 | 0.009 | 0.523 | 73.6 | 0.009 | 0.523 | 92.1 | 0.009 | 0.531 | 90.7 | 0.009 | 0.538 | 69.2 | 0.008 | 0.544 | 87.8 | 0.008 | 0.551 | 68.3 | 0.008 | 0.556 | 64.9 | 0.007 | 0.562 | 63.4 | 0.007 | 0.568 | 62.0 | 0.007 | 0.570 | 60.5 | 0.006 | 0.573 |
| 20 | 73.5 | 0.009 | 0.529 | 73.4 | 0.009 | 0.528 | 91.8 | 0.009 | 0.530 | 90.2 | 0.009 | 0.553 | 69.6 | 0.008 | 0.566 | 87.0 | 0.008 | 0.579 | 67.0 | 0.008 | 0.592 | 63.7 | 0.008 | 0.604 | 62.1 | 0.007 | 0.617 | 60.5 | 0.007 | 0.629 | 59.9 | 0.007 | 0.641 |
| 21 | 73.3 | 0.009 | 0.529 | 73.2 | 0.009 | 0.530 | 91.4 | 0.009 | 0.545 | 89.8 | 0.009 | 0.569 | 67.8 | 0.008 | 0.574 | 86.0 | 0.008 | 0.589 | 64.3 | 0.008 | 0.604 | 62.6 | 0.007 | 0.618 | 60.7 | 0.007 | 0.633 | 59.9 | 0.007 | 0.647 | 57.1 | 0.007 | 0.661 |
| 22 | 73.1 | 0.009 | 0.532 | 73.0 | 0.009 | 0.532 | 91.0 | 0.009 | 0.549 | 89.0 | 0.009 | 0.566 | 67.0 | 0.008 | 0.583 | 85.0 | 0.008 | 0.601 | 63.0 | 0.008 | 0.619 | 61.0 | 0.007 | 0.636 | 59.0 | 0.007 | 0.653 | 57.0 | 0.007 | 0.670 | 55.0 | 0.006 | 0.686 |
| 23 | 72.9 | 0.009 | 0.534 | 72.8 | 0.009 | 0.535 | 90.6 | 0.009 | 0.554 | 88.3 | 0.009 | 0.574 | 66.1 | 0.008 | 0.594 | 83.9 | 0.008 | 0.614 | 61.7 | 0.007 | 0.634 | 59.5 | 0.007 | 0.655 | 57.2 | 0.007 | 0.675 | 55.0 | 0.006 | 0.695 | 52.8 | 0.006 | 0.714 |
| 24 | 72.6 | 0.009 | 0.536 | 72.6 | 0.009 | 0.537 | 90.1 | 0.009 | 0.558 | 87.7 | 0.009 | 0.580 | 65.2 | 0.008 | 0.602 | 82.8 | 0.008 | 0.624 | 60.3 | 0.007 | 0.646 | 57.9 | 0.007 | 0.668 | 55.4 | 0.006 | 0.690 | 53.0 | 0.006 | 0.712 | 50.5 | 0.006 | 0.732 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|---------|-------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmx | Wmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | Trmx | RHmrx | | | | | | | | | | | |
| 1 | 71.8 | 0.009 | 0.541 | 71.7 | 0.009 | 0.542 | 89.4 | 0.008 | 0.568 | 85.1 | 0.008 | 0.565 | 81.8 | 0.007 | 0.622 | 89.5 | 0.007 | 0.647 | 85.2 | 0.006 | 0.871 | 51.9 | 0.006 | 0.693 | 49.6 | 0.005 | 0.712 | 45.3 | 0.005 | 0.728 | 43.0 | 0.004 | 0.733 |
| 2 | 71.8 | 0.009 | 0.543 | 71.5 | 0.009 | 0.544 | 88.0 | 0.008 | 0.573 | 84.5 | 0.008 | 0.572 | 81.0 | 0.007 | 0.631 | 87.5 | 0.007 | 0.680 | 84.0 | 0.006 | 0.686 | 50.6 | 0.006 | 0.710 | 47.0 | 0.005 | 0.731 | 43.5 | 0.004 | 0.745 | 40.0 | 0.004 | 0.752 |
| 3 | 71.5 | 0.009 | 0.545 | 71.3 | 0.009 | 0.546 | 87.6 | 0.008 | 0.577 | 83.9 | 0.008 | 0.609 | 80.2 | 0.007 | 0.640 | 86.5 | 0.006 | 0.671 | 82.9 | 0.006 | 0.699 | 49.2 | 0.005 | 0.725 | 45.5 | 0.005 | 0.746 | 41.8 | 0.004 | 0.760 | 38.1 | 0.004 | 0.765 |
| 4 | 71.3 | 0.009 | 0.546 | 71.2 | 0.009 | 0.548 | 87.3 | 0.008 | 0.581 | 83.5 | 0.008 | 0.614 | 79.6 | 0.007 | 0.647 | 85.8 | 0.006 | 0.679 | 82.0 | 0.006 | 0.710 | 48.1 | 0.005 | 0.737 | 44.3 | 0.005 | 0.758 | 40.4 | 0.004 | 0.772 | 36.6 | 0.004 | 0.774 |
| 5 | 71.2 | 0.009 | 0.547 | 71.1 | 0.009 | 0.548 | 87.1 | 0.008 | 0.582 | 83.2 | 0.008 | 0.616 | 79.2 | 0.007 | 0.650 | 85.3 | 0.006 | 0.683 | 81.3 | 0.006 | 0.713 | 47.4 | 0.005 | 0.739 | 43.4 | 0.004 | 0.759 | 39.5 | 0.004 | 0.770 | 35.5 | 0.003 | 0.787 |
| 6 | 71.1 | 0.009 | 0.548 | 71.0 | 0.009 | 0.550 | 87.0 | 0.008 | 0.584 | 82.9 | 0.008 | 0.620 | 78.9 | 0.007 | 0.655 | 84.9 | 0.006 | 0.680 | 80.9 | 0.006 | 0.722 | 46.9 | 0.005 | 0.750 | 42.8 | 0.004 | 0.771 | 38.8 | 0.004 | 0.784 | 34.8 | 0.003 | 0.782 |
| 7 | 71.1 | 0.009 | 0.548 | 71.0 | 0.009 | 0.548 | 86.9 | 0.008 | 0.583 | 82.9 | 0.008 | 0.617 | 78.8 | 0.007 | 0.651 | 84.8 | 0.006 | 0.683 | 80.8 | 0.006 | 0.713 | 46.7 | 0.005 | 0.738 | 42.7 | 0.004 | 0.755 | 38.6 | 0.004 | 0.761 | 34.6 | 0.003 | 0.783 |
| 8 | 71.2 | 0.009 | 0.548 | 71.0 | 0.009 | 0.548 | 87.0 | 0.008 | 0.584 | 83.1 | 0.008 | 0.619 | 78.8 | 0.007 | 0.654 | 84.9 | 0.006 | 0.688 | 80.9 | 0.006 | 0.720 | 47.1 | 0.005 | 0.748 | 43.2 | 0.005 | 0.770 | 38.2 | 0.004 | 0.783 | 34.2 | 0.003 | 0.782 |
| 9 | 71.4 | 0.009 | 0.546 | 71.2 | 0.009 | 0.547 | 87.4 | 0.008 | 0.579 | 83.6 | 0.008 | 0.611 | 78.9 | 0.007 | 0.643 | 85.0 | 0.006 | 0.673 | 81.0 | 0.006 | 0.673 | 46.5 | 0.005 | 0.727 | 44.7 | 0.005 | 0.747 | 40.9 | 0.004 | 0.759 | 37.1 | 0.004 | 0.759 |
| 10 | 71.6 | 0.009 | 0.541 | 71.5 | 0.009 | 0.542 | 88.0 | 0.008 | 0.569 | 84.5 | 0.008 | 0.595 | 81.0 | 0.007 | 0.621 | 87.5 | 0.006 | 0.645 | 84.0 | 0.006 | 0.667 | 50.5 | 0.005 | 0.684 | 47.0 | 0.005 | 0.697 | 43.5 | 0.004 | 0.702 | 40.0 | 0.004 | 0.697 |
| 11 | 72.0 | 0.009 | 0.536 | 71.9 | 0.009 | 0.537 | 88.7 | 0.008 | 0.558 | 85.6 | 0.008 | 0.578 | 82.4 | 0.007 | 0.597 | 89.3 | 0.007 | 0.614 | 86.1 | 0.006 | 0.629 | 52.0 | 0.005 | 0.639 | 49.8 | 0.005 | 0.645 | 46.7 | 0.004 | 0.644 | 43.5 | 0.004 | 0.635 |
| 12 | 72.3 | 0.009 | 0.531 | 72.2 | 0.009 | 0.532 | 89.4 | 0.008 | 0.548 | 86.7 | 0.008 | 0.562 | 83.9 | 0.007 | 0.575 | 91.1 | 0.007 | 0.586 | 87.9 | 0.006 | 0.595 | 55.5 | 0.006 | 0.600 | 52.8 | 0.005 | 0.601 | 50.0 | 0.005 | 0.596 | 47.2 | 0.004 | 0.586 |
| 13 | 72.7 | 0.009 | 0.528 | 72.6 | 0.009 | 0.528 | 90.1 | 0.008 | 0.539 | 87.7 | 0.008 | 0.550 | 85.3 | 0.007 | 0.559 | 92.9 | 0.007 | 0.565 | 89.4 | 0.006 | 0.570 | 58.0 | 0.006 | 0.572 | 55.6 | 0.005 | 0.571 | 53.1 | 0.005 | 0.565 | 50.7 | 0.004 | 0.555 |
| 14 | 72.9 | 0.009 | 0.524 | 72.9 | 0.009 | 0.524 | 90.7 | 0.008 | 0.531 | 88.6 | 0.008 | 0.538 | 86.4 | 0.007 | 0.542 | 94.3 | 0.007 | 0.545 | 92.2 | 0.006 | 0.546 | 60.0 | 0.006 | 0.544 | 57.9 | 0.005 | 0.539 | 55.7 | 0.005 | 0.531 | 53.6 | 0.004 | 0.519 |
| 15 | 73.1 | 0.009 | 0.522 | 73.1 | 0.009 | 0.522 | 91.1 | 0.009 | 0.527 | 89.2 | 0.008 | 0.531 | 87.2 | 0.008 | 0.534 | 95.3 | 0.007 | 0.535 | 93.3 | 0.007 | 0.534 | 61.4 | 0.006 | 0.530 | 59.4 | 0.005 | 0.524 | 57.5 | 0.005 | 0.516 | 55.6 | 0.005 | 0.503 |
| 16 | 73.2 | 0.009 | 0.521 | 73.1 | 0.009 | 0.521 | 91.2 | 0.009 | 0.525 | 89.3 | 0.008 | 0.528 | 87.4 | 0.008 | 0.530 | 95.5 | 0.007 | 0.530 | 93.7 | 0.007 | 0.528 | 61.8 | 0.006 | 0.524 | 59.9 | 0.006 | 0.517 | 58.0 | 0.005 | 0.507 | 56.1 | 0.005 | 0.494 |
| 17 | 73.2 | 0.009 | 0.522 | 73.1 | 0.009 | 0.522 | 91.2 | 0.009 | 0.528 | 89.3 | 0.008 | 0.533 | 87.4 | 0.008 | 0.532 | 95.5 | 0.007 | 0.539 | 93.5 | 0.007 | 0.539 | 61.8 | 0.006 | 0.537 | 59.7 | 0.006 | 0.534 | 57.8 | 0.005 | 0.527 | 55.9 | 0.005 | 0.518 |
| 18 | 73.0 | 0.009 | 0.525 | 73.0 | 0.009 | 0.526 | 91.0 | 0.009 | 0.535 | 89.1 | 0.008 | 0.544 | 87.1 | 0.008 | 0.552 | 95.1 | 0.007 | 0.539 | 93.1 | 0.007 | 0.564 | 61.1 | 0.006 | 0.568 | 59.2 | 0.006 | 0.571 | 57.2 | 0.006 | 0.571 | 55.2 | 0.005 | 0.569 |
| 19 | 73.0 | 0.009 | 0.529 | 72.9 | 0.009 | 0.530 | 90.8 | 0.009 | 0.544 | 88.7 | 0.008 | 0.557 | 86.8 | 0.008 | 0.570 | 94.5 | 0.008 | 0.583 | 92.5 | 0.007 | 0.595 | 60.4 | 0.007 | 0.606 | 58.3 | 0.006 | 0.616 | 56.2 | 0.006 | 0.625 | 54.1 | 0.006 | 0.631 |
| 20 | 72.8 | 0.009 | 0.532 | 72.8 | 0.009 | 0.533 | 90.5 | 0.009 | 0.550 | 88.3 | 0.008 | 0.567 | 86.0 | 0.008 | 0.584 | 93.8 | 0.008 | 0.600 | 91.8 | 0.007 | 0.617 | 59.3 | 0.007 | 0.632 | 57.1 | 0.006 | 0.647 | 54.8 | 0.006 | 0.661 | 52.6 | 0.006 | 0.673 |
| 21 | 72.7 | 0.009 | 0.534 | 72.6 | 0.009 | 0.535 | 90.1 | 0.009 | 0.555 | 87.7 | 0.008 | 0.575 | 85.3 | 0.008 | 0.594 | 92.9 | 0.007 | 0.614 | 90.4 | 0.007 | 0.634 | 58.0 | 0.007 | 0.652 | 55.6 | 0.006 | 0.671 | 53.1 | 0.006 | 0.688 | 50.7 | 0.005 | 0.703 |
| 22 | 72.5 | 0.009 | 0.535 | 72.4 | 0.009 | 0.535 | 89.7 | 0.009 | 0.555 | 87.1 | 0.008 | 0.575 | 84.5 | 0.008 | 0.594 | 91.9 | 0.007 | 0.613 | 89.2 | 0.007 | 0.631 | 56.6 | 0.006 | 0.648 | 54.0 | 0.006 | 0.662 | 51.3 | 0.005 | 0.675 | 48.7 | 0.005 | 0.685 |
| 23 | 72.3 | 0.009 | 0.537 | 72.2 | 0.009 | 0.538 | 89.3 | 0.009 | 0.560 | 86.5 | 0.008 | 0.582 | 83.6 | 0.008 | 0.603 | 90.8 | 0.007 | 0.625 | 88.0 | 0.007 | 0.625 | 56.6 | 0.006 | 0.663 | 52.2 | 0.006 | 0.680 | 49.4 | 0.005 | 0.694 | 46.5 | 0.005 | 0.704 |
| 24 | 72.0 | 0.009 | 0.538 | 71.9 | 0.009 | 0.539 | 88.8 | 0.009 | 0.563 | 85.8 | 0.008 | 0.587 | 82.7 | 0.007 | 0.611 | 89.6 | 0.007 | 0.633 | 86.5 | 0.006 | 0.655 | 53.4 | 0.006 | 0.674 | 50.4 | 0.005 | 0.690 | 47.3 | 0.005 | 0.703 | 44.2 | 0.004 | 0.710 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | Trmx | RHmx | | | | | | | | | | | |
| 1 | 70.9 | 0.009 | 0.551 | 70.7 | 0.009 | 0.552 | 86.4 | 0.008 | 0.591 | 82.1 | 0.007 | 0.580 | 57.8 | 0.007 | 0.688 | 53.5 | 0.006 | 0.708 | 49.2 | 0.005 | 0.741 | 44.9 | 0.005 | 0.771 | 40.6 | 0.004 | 0.793 | 36.3 | 0.004 | 0.803 | 32.0 | 0.003 | 0.794 |
| 2 | 70.7 | 0.009 | 0.551 | 70.6 | 0.009 | 0.553 | 86.2 | 0.008 | 0.591 | 81.7 | 0.007 | 0.590 | 57.3 | 0.007 | 0.688 | 52.9 | 0.006 | 0.705 | 48.5 | 0.005 | 0.737 | 44.1 | 0.005 | 0.764 | 39.6 | 0.004 | 0.779 | 35.2 | 0.003 | 0.780 | 30.8 | 0.003 | 0.782 |
| 3 | 70.6 | 0.009 | 0.553 | 70.5 | 0.009 | 0.554 | 85.9 | 0.008 | 0.594 | 81.4 | 0.007 | 0.594 | 56.9 | 0.007 | 0.675 | 52.4 | 0.006 | 0.713 | 47.8 | 0.005 | 0.747 | 43.3 | 0.005 | 0.775 | 38.8 | 0.004 | 0.791 | 34.2 | 0.003 | 0.791 | 29.7 | 0.003 | 0.775 |
| 4 | 70.6 | 0.009 | 0.554 | 70.4 | 0.009 | 0.555 | 85.6 | 0.008 | 0.596 | 81.1 | 0.007 | 0.598 | 56.5 | 0.007 | 0.679 | 51.9 | 0.006 | 0.719 | 47.3 | 0.005 | 0.754 | 42.7 | 0.004 | 0.782 | 38.0 | 0.004 | 0.788 | 33.4 | 0.003 | 0.786 | 28.8 | 0.003 | 0.780 |
| 5 | 70.5 | 0.009 | 0.554 | 70.3 | 0.009 | 0.556 | 85.6 | 0.008 | 0.597 | 81.0 | 0.007 | 0.599 | 56.3 | 0.007 | 0.681 | 51.6 | 0.006 | 0.721 | 46.9 | 0.005 | 0.756 | 42.2 | 0.004 | 0.784 | 37.6 | 0.004 | 0.788 | 32.9 | 0.003 | 0.794 | 28.2 | 0.002 | 0.775 |
| 6 | 70.5 | 0.009 | 0.555 | 70.3 | 0.009 | 0.556 | 85.6 | 0.008 | 0.598 | 80.8 | 0.007 | 0.541 | 56.1 | 0.007 | 0.684 | 51.4 | 0.006 | 0.725 | 46.7 | 0.005 | 0.761 | 42.0 | 0.004 | 0.780 | 37.2 | 0.004 | 0.805 | 32.5 | 0.003 | 0.800 | 27.8 | 0.002 | 0.783 |
| 7 | 70.4 | 0.009 | 0.555 | 70.3 | 0.009 | 0.556 | 85.5 | 0.008 | 0.599 | 80.8 | 0.007 | 0.542 | 56.0 | 0.007 | 0.685 | 51.3 | 0.006 | 0.726 | 46.6 | 0.005 | 0.762 | 41.8 | 0.004 | 0.780 | 37.1 | 0.004 | 0.805 | 32.3 | 0.003 | 0.800 | 27.6 | 0.002 | 0.782 |
| 8 | 70.5 | 0.009 | 0.554 | 70.3 | 0.009 | 0.556 | 85.6 | 0.008 | 0.599 | 80.9 | 0.007 | 0.543 | 56.2 | 0.007 | 0.686 | 51.5 | 0.006 | 0.728 | 46.8 | 0.005 | 0.766 | 42.1 | 0.004 | 0.787 | 37.4 | 0.004 | 0.816 | 32.7 | 0.003 | 0.816 | 28.0 | 0.003 | 0.806 |
| 9 | 70.8 | 0.009 | 0.554 | 70.4 | 0.009 | 0.556 | 85.8 | 0.008 | 0.597 | 81.2 | 0.007 | 0.540 | 56.6 | 0.007 | 0.682 | 52.1 | 0.006 | 0.724 | 47.5 | 0.005 | 0.761 | 42.9 | 0.005 | 0.793 | 38.3 | 0.004 | 0.814 | 33.7 | 0.003 | 0.818 | 29.1 | 0.003 | 0.811 |
| 10 | 70.7 | 0.009 | 0.552 | 70.6 | 0.009 | 0.553 | 86.2 | 0.008 | 0.592 | 81.7 | 0.007 | 0.532 | 57.3 | 0.007 | 0.671 | 52.9 | 0.006 | 0.709 | 48.5 | 0.005 | 0.744 | 44.1 | 0.005 | 0.772 | 39.6 | 0.004 | 0.791 | 35.2 | 0.003 | 0.795 | 30.8 | 0.003 | 0.783 |
| 11 | 71.0 | 0.009 | 0.548 | 70.8 | 0.009 | 0.550 | 86.6 | 0.008 | 0.595 | 82.4 | 0.007 | 0.520 | 56.2 | 0.007 | 0.655 | 54.0 | 0.006 | 0.688 | 49.7 | 0.005 | 0.717 | 45.5 | 0.005 | 0.739 | 41.3 | 0.004 | 0.753 | 37.1 | 0.003 | 0.753 | 32.9 | 0.003 | 0.734 |
| 12 | 71.2 | 0.009 | 0.546 | 71.0 | 0.009 | 0.547 | 87.0 | 0.008 | 0.579 | 83.0 | 0.007 | 0.511 | 56.0 | 0.007 | 0.642 | 55.0 | 0.006 | 0.671 | 51.1 | 0.005 | 0.696 | 47.1 | 0.005 | 0.716 | 43.1 | 0.004 | 0.728 | 38.1 | 0.004 | 0.728 | 35.1 | 0.003 | 0.712 |
| 13 | 71.4 | 0.009 | 0.544 | 71.2 | 0.009 | 0.545 | 87.4 | 0.008 | 0.575 | 83.8 | 0.008 | 0.504 | 56.8 | 0.007 | 0.632 | 56.0 | 0.006 | 0.659 | 52.3 | 0.005 | 0.682 | 48.5 | 0.005 | 0.700 | 44.7 | 0.004 | 0.712 | 40.9 | 0.004 | 0.713 | 37.1 | 0.003 | 0.701 |
| 14 | 71.5 | 0.009 | 0.542 | 71.4 | 0.009 | 0.543 | 87.8 | 0.008 | 0.571 | 84.1 | 0.008 | 0.598 | 60.5 | 0.007 | 0.624 | 56.9 | 0.006 | 0.648 | 53.3 | 0.005 | 0.670 | 48.7 | 0.005 | 0.686 | 46.0 | 0.005 | 0.697 | 42.4 | 0.004 | 0.699 | 38.8 | 0.003 | 0.689 |
| 15 | 71.8 | 0.009 | 0.541 | 71.5 | 0.009 | 0.542 | 88.0 | 0.008 | 0.568 | 84.5 | 0.008 | 0.594 | 61.0 | 0.007 | 0.618 | 57.5 | 0.006 | 0.641 | 53.9 | 0.005 | 0.661 | 50.4 | 0.005 | 0.677 | 46.9 | 0.005 | 0.687 | 43.4 | 0.004 | 0.680 | 39.9 | 0.004 | 0.681 |
| 16 | 71.7 | 0.009 | 0.540 | 71.5 | 0.009 | 0.541 | 88.1 | 0.008 | 0.567 | 84.6 | 0.008 | 0.592 | 61.1 | 0.007 | 0.616 | 57.6 | 0.006 | 0.639 | 54.2 | 0.005 | 0.658 | 50.7 | 0.005 | 0.673 | 47.2 | 0.005 | 0.683 | 43.8 | 0.004 | 0.685 | 40.3 | 0.004 | 0.677 |
| 17 | 71.6 | 0.009 | 0.541 | 71.5 | 0.009 | 0.542 | 88.0 | 0.008 | 0.568 | 84.5 | 0.008 | 0.594 | 61.0 | 0.007 | 0.620 | 57.5 | 0.006 | 0.643 | 54.1 | 0.005 | 0.664 | 50.6 | 0.005 | 0.681 | 47.1 | 0.005 | 0.689 | 43.6 | 0.004 | 0.693 | 40.1 | 0.004 | 0.681 |
| 18 | 71.8 | 0.009 | 0.542 | 71.5 | 0.009 | 0.543 | 87.9 | 0.008 | 0.571 | 84.4 | 0.008 | 0.599 | 60.9 | 0.007 | 0.626 | 57.4 | 0.007 | 0.652 | 53.8 | 0.006 | 0.676 | 50.3 | 0.005 | 0.686 | 46.8 | 0.005 | 0.711 | 43.2 | 0.004 | 0.720 | 39.7 | 0.004 | 0.719 |
| 19 | 71.5 | 0.009 | 0.544 | 71.4 | 0.009 | 0.545 | 87.8 | 0.008 | 0.574 | 84.2 | 0.008 | 0.604 | 60.6 | 0.007 | 0.634 | 57.0 | 0.007 | 0.662 | 53.5 | 0.006 | 0.689 | 49.9 | 0.005 | 0.712 | 46.3 | 0.005 | 0.731 | 42.7 | 0.004 | 0.744 | 39.1 | 0.004 | 0.747 |
| 20 | 71.5 | 0.009 | 0.544 | 71.3 | 0.009 | 0.546 | 87.6 | 0.008 | 0.578 | 84.0 | 0.008 | 0.607 | 60.3 | 0.007 | 0.637 | 56.8 | 0.006 | 0.666 | 52.9 | 0.006 | 0.693 | 49.2 | 0.005 | 0.717 | 45.6 | 0.005 | 0.738 | 41.9 | 0.004 | 0.746 | 38.1 | 0.004 | 0.748 |
| 21 | 71.4 | 0.009 | 0.546 | 71.2 | 0.009 | 0.547 | 87.4 | 0.008 | 0.579 | 83.8 | 0.008 | 0.612 | 59.8 | 0.007 | 0.644 | 56.0 | 0.006 | 0.678 | 52.3 | 0.006 | 0.705 | 48.5 | 0.005 | 0.732 | 44.7 | 0.005 | 0.759 | 40.9 | 0.004 | 0.768 | 37.1 | 0.004 | 0.768 |
| 22 | 71.2 | 0.009 | 0.547 | 71.1 | 0.009 | 0.548 | 87.2 | 0.008 | 0.583 | 83.3 | 0.008 | 0.617 | 59.4 | 0.007 | 0.652 | 55.5 | 0.006 | 0.688 | 51.5 | 0.006 | 0.718 | 47.6 | 0.005 | 0.746 | 43.7 | 0.005 | 0.769 | 39.8 | 0.004 | 0.784 | 35.9 | 0.003 | 0.787 |
| 23 | 71.1 | 0.009 | 0.548 | 71.0 | 0.009 | 0.550 | 86.9 | 0.008 | 0.585 | 82.9 | 0.008 | 0.621 | 59.8 | 0.007 | 0.657 | 54.8 | 0.006 | 0.692 | 50.8 | 0.006 | 0.725 | 46.7 | 0.005 | 0.754 | 42.7 | 0.004 | 0.778 | 38.8 | 0.004 | 0.790 | 34.6 | 0.003 | 0.789 |
| 24 | 71.0 | 0.009 | 0.550 | 70.8 | 0.009 | 0.551 | 86.7 | 0.008 | 0.588 | 82.5 | 0.008 | 0.626 | 59.3 | 0.007 | 0.664 | 54.1 | 0.006 | 0.700 | 50.0 | 0.006 | 0.735 | 45.8 | 0.005 | 0.765 | 41.6 | 0.004 | 0.788 | 37.5 | 0.004 | 0.801 | 33.3 | 0.003 | 0.798 |

Appendix C: Air Mixture Results for Water Feature Conditions

| Hour | Minimum OA | | | 10% OA | | | 20% OA | | | 30% OA | | | 40% OA | | | 50% OA | | | 60% OA | | | 70% OA | | | 80% OA | | | 90% OA | | | 100% OA | | |
|------|------------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|---------|-------|-------|
| | Tmx | Wmix | RHmix | Tmx | Wmix | RHmix | Tmx | Wmix | RHmix | Tmx | Wmix | RHmix | Tmx | Wmix | RHmix | Tmx | Wmix | RHmix | Tmx | Wmix | RHmix | Tmx | Wmix | RHmix | Tmx | Wmix | RHmix | Tmx | Wmix | RHmix | | | |
| 1 | 70.3 | 0.009 | 0.553 | 70.1 | 0.009 | 0.555 | 65.2 | 0.008 | 0.595 | 60.4 | 0.007 | 0.634 | 55.5 | 0.006 | 0.671 | 50.6 | 0.005 | 0.704 | 45.7 | 0.005 | 0.728 | 40.8 | 0.004 | 0.740 | 36.0 | 0.003 | 0.731 | 31.1 | 0.003 | 0.695 | 26.2 | 0.002 | 0.627 |
| 2 | 70.2 | 0.009 | 0.555 | 70.0 | 0.009 | 0.556 | 65.0 | 0.008 | 0.598 | 59.9 | 0.007 | 0.639 | 54.9 | 0.006 | 0.678 | 49.9 | 0.005 | 0.713 | 44.9 | 0.005 | 0.738 | 39.9 | 0.004 | 0.748 | 34.9 | 0.003 | 0.738 | 29.8 | 0.002 | 0.701 | 24.8 | 0.002 | 0.621 |
| 3 | 70.1 | 0.009 | 0.557 | 69.9 | 0.009 | 0.559 | 64.7 | 0.008 | 0.602 | 59.6 | 0.007 | 0.646 | 54.4 | 0.006 | 0.688 | 49.3 | 0.005 | 0.728 | 44.2 | 0.005 | 0.754 | 39.0 | 0.004 | 0.768 | 33.9 | 0.003 | 0.759 | 28.7 | 0.002 | 0.726 | 23.6 | 0.002 | 0.642 |
| 4 | 70.0 | 0.009 | 0.558 | 69.8 | 0.009 | 0.559 | 64.6 | 0.008 | 0.604 | 59.3 | 0.007 | 0.650 | 54.1 | 0.006 | 0.693 | 48.9 | 0.005 | 0.732 | 43.7 | 0.005 | 0.762 | 38.5 | 0.004 | 0.777 | 33.2 | 0.003 | 0.767 | 28.0 | 0.002 | 0.735 | 22.8 | 0.002 | 0.646 |
| 5 | 69.9 | 0.009 | 0.559 | 69.7 | 0.009 | 0.561 | 64.4 | 0.008 | 0.607 | 59.2 | 0.007 | 0.654 | 53.9 | 0.006 | 0.699 | 48.6 | 0.005 | 0.740 | 43.3 | 0.005 | 0.773 | 38.0 | 0.004 | 0.790 | 32.7 | 0.003 | 0.782 | 27.5 | 0.002 | 0.754 | 22.2 | 0.002 | 0.665 |
| 6 | 69.9 | 0.009 | 0.559 | 69.7 | 0.009 | 0.561 | 64.4 | 0.008 | 0.607 | 59.1 | 0.007 | 0.654 | 53.8 | 0.006 | 0.700 | 48.5 | 0.005 | 0.741 | 43.2 | 0.005 | 0.773 | 37.9 | 0.004 | 0.790 | 32.7 | 0.003 | 0.782 | 27.4 | 0.002 | 0.754 | 22.1 | 0.002 | 0.664 |
| 7 | 70.0 | 0.009 | 0.557 | 69.8 | 0.009 | 0.559 | 64.5 | 0.008 | 0.599 | 59.3 | 0.007 | 0.649 | 54.0 | 0.006 | 0.691 | 48.8 | 0.005 | 0.728 | 43.6 | 0.005 | 0.757 | 38.3 | 0.004 | 0.768 | 33.1 | 0.003 | 0.755 | 27.8 | 0.002 | 0.734 | 22.6 | 0.002 | 0.619 |
| 8 | 70.1 | 0.009 | 0.556 | 69.9 | 0.009 | 0.558 | 64.8 | 0.008 | 0.602 | 59.7 | 0.007 | 0.648 | 54.6 | 0.006 | 0.689 | 49.5 | 0.005 | 0.725 | 44.4 | 0.005 | 0.755 | 39.3 | 0.004 | 0.770 | 34.2 | 0.003 | 0.763 | 29.1 | 0.002 | 0.734 | 24.0 | 0.002 | 0.658 |
| 9 | 70.3 | 0.009 | 0.554 | 70.1 | 0.009 | 0.556 | 65.2 | 0.008 | 0.597 | 60.4 | 0.007 | 0.639 | 55.5 | 0.006 | 0.679 | 50.6 | 0.005 | 0.715 | 45.7 | 0.005 | 0.744 | 40.8 | 0.004 | 0.761 | 35.9 | 0.003 | 0.760 | 31.1 | 0.003 | 0.735 | 26.2 | 0.002 | 0.693 |
| 10 | 70.6 | 0.009 | 0.552 | 70.4 | 0.009 | 0.553 | 65.8 | 0.008 | 0.591 | 61.1 | 0.007 | 0.629 | 56.5 | 0.006 | 0.666 | 51.9 | 0.005 | 0.699 | 49.0 | 0.005 | 0.726 | 44.7 | 0.004 | 0.743 | 38.0 | 0.004 | 0.745 | 33.4 | 0.003 | 0.725 | 28.8 | 0.002 | 0.694 |
| 11 | 70.8 | 0.009 | 0.548 | 70.7 | 0.009 | 0.549 | 66.3 | 0.008 | 0.582 | 62.0 | 0.007 | 0.615 | 57.7 | 0.007 | 0.646 | 53.4 | 0.006 | 0.674 | 49.0 | 0.005 | 0.696 | 44.7 | 0.004 | 0.709 | 40.4 | 0.004 | 0.708 | 36.1 | 0.003 | 0.689 | 31.7 | 0.002 | 0.645 |
| 12 | 71.1 | 0.009 | 0.544 | 70.9 | 0.009 | 0.545 | 66.9 | 0.008 | 0.573 | 62.8 | 0.007 | 0.601 | 58.8 | 0.007 | 0.628 | 54.7 | 0.006 | 0.647 | 50.7 | 0.005 | 0.683 | 46.6 | 0.004 | 0.670 | 42.6 | 0.004 | 0.665 | 38.5 | 0.003 | 0.643 | 34.5 | 0.002 | 0.599 |
| 13 | 71.3 | 0.009 | 0.541 | 71.2 | 0.009 | 0.542 | 67.3 | 0.008 | 0.568 | 63.5 | 0.007 | 0.592 | 59.7 | 0.007 | 0.614 | 55.8 | 0.006 | 0.632 | 52.0 | 0.005 | 0.646 | 48.2 | 0.004 | 0.650 | 44.3 | 0.004 | 0.644 | 40.5 | 0.003 | 0.624 | 36.7 | 0.003 | 0.585 |
| 14 | 71.5 | 0.009 | 0.538 | 71.3 | 0.009 | 0.539 | 67.6 | 0.008 | 0.561 | 63.9 | 0.007 | 0.581 | 60.2 | 0.007 | 0.599 | 56.5 | 0.006 | 0.612 | 52.8 | 0.005 | 0.619 | 48.2 | 0.004 | 0.618 | 45.5 | 0.004 | 0.607 | 41.8 | 0.003 | 0.581 | 38.1 | 0.003 | 0.536 |
| 15 | 71.5 | 0.009 | 0.538 | 71.3 | 0.009 | 0.537 | 67.7 | 0.008 | 0.558 | 64.1 | 0.007 | 0.576 | 60.4 | 0.007 | 0.590 | 56.8 | 0.006 | 0.600 | 53.2 | 0.005 | 0.604 | 49.5 | 0.004 | 0.600 | 45.9 | 0.004 | 0.584 | 42.2 | 0.003 | 0.553 | 38.6 | 0.002 | 0.502 |
| 16 | 71.5 | 0.009 | 0.537 | 71.3 | 0.009 | 0.537 | 67.7 | 0.008 | 0.558 | 64.0 | 0.007 | 0.576 | 60.4 | 0.007 | 0.591 | 56.7 | 0.006 | 0.601 | 53.0 | 0.005 | 0.604 | 49.4 | 0.004 | 0.599 | 45.7 | 0.004 | 0.583 | 42.1 | 0.003 | 0.551 | 38.4 | 0.002 | 0.499 |
| 17 | 71.4 | 0.009 | 0.537 | 71.3 | 0.009 | 0.538 | 67.6 | 0.008 | 0.560 | 63.9 | 0.007 | 0.579 | 60.2 | 0.007 | 0.595 | 56.5 | 0.006 | 0.606 | 52.7 | 0.005 | 0.611 | 48.0 | 0.004 | 0.607 | 45.3 | 0.004 | 0.592 | 41.6 | 0.003 | 0.561 | 37.9 | 0.002 | 0.510 |
| 18 | 71.3 | 0.009 | 0.540 | 71.2 | 0.009 | 0.541 | 67.4 | 0.008 | 0.565 | 63.6 | 0.007 | 0.587 | 59.8 | 0.007 | 0.607 | 56.0 | 0.006 | 0.633 | 52.2 | 0.005 | 0.632 | 48.4 | 0.004 | 0.634 | 44.6 | 0.004 | 0.624 | 40.8 | 0.003 | 0.599 | 37.0 | 0.003 | 0.555 |
| 19 | 71.2 | 0.009 | 0.542 | 71.1 | 0.009 | 0.543 | 67.2 | 0.008 | 0.570 | 63.3 | 0.007 | 0.596 | 59.3 | 0.007 | 0.620 | 55.4 | 0.006 | 0.640 | 51.3 | 0.005 | 0.654 | 47.6 | 0.004 | 0.651 | 43.7 | 0.004 | 0.637 | 39.8 | 0.003 | 0.638 | 35.9 | 0.003 | 0.598 |
| 20 | 71.1 | 0.009 | 0.544 | 70.9 | 0.009 | 0.545 | 66.9 | 0.008 | 0.575 | 62.8 | 0.007 | 0.603 | 58.8 | 0.007 | 0.629 | 54.7 | 0.006 | 0.652 | 50.7 | 0.005 | 0.669 | 46.6 | 0.004 | 0.678 | 42.6 | 0.004 | 0.675 | 38.5 | 0.003 | 0.657 | 34.4 | 0.003 | 0.616 |
| 21 | 70.9 | 0.009 | 0.546 | 70.8 | 0.009 | 0.547 | 66.6 | 0.008 | 0.579 | 62.4 | 0.007 | 0.610 | 58.1 | 0.007 | 0.639 | 53.9 | 0.006 | 0.665 | 49.7 | 0.005 | 0.684 | 45.5 | 0.004 | 0.696 | 41.3 | 0.004 | 0.695 | 37.1 | 0.003 | 0.676 | 32.8 | 0.002 | 0.632 |
| 22 | 70.8 | 0.009 | 0.549 | 70.6 | 0.009 | 0.550 | 66.2 | 0.008 | 0.585 | 61.8 | 0.007 | 0.620 | 57.4 | 0.007 | 0.659 | 53.1 | 0.006 | 0.682 | 48.7 | 0.005 | 0.706 | 44.3 | 0.004 | 0.721 | 39.9 | 0.004 | 0.724 | 35.5 | 0.003 | 0.707 | 31.1 | 0.002 | 0.668 |
| 23 | 70.6 | 0.009 | 0.550 | 70.4 | 0.009 | 0.552 | 65.9 | 0.008 | 0.588 | 61.3 | 0.007 | 0.624 | 56.8 | 0.006 | 0.669 | 52.2 | 0.006 | 0.688 | 47.7 | 0.005 | 0.712 | 43.1 | 0.004 | 0.725 | 38.5 | 0.004 | 0.723 | 34.0 | 0.003 | 0.698 | 29.4 | 0.002 | 0.660 |
| 24 | 70.5 | 0.009 | 0.552 | 70.3 | 0.009 | 0.553 | 65.5 | 0.008 | 0.591 | 60.9 | 0.007 | 0.628 | 56.1 | 0.006 | 0.664 | 51.4 | 0.006 | 0.695 | 46.6 | 0.005 | 0.718 | 41.9 | 0.004 | 0.730 | 37.2 | 0.003 | 0.723 | 32.4 | 0.003 | 0.690 | 27.7 | 0.002 | 0.632 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Tmx | Wm | RHmx | Tmx | Wm | RHmx | Tmx | Wm | RHmx | Tmx | Wm | RHmx | Tmx | Wm | RHmx | Tmx | Wm | RHmx | Tmx | Wm | RHmx | Tmx | Wm | RHmx | | | | | | | | | |
| 1 | 70.3 | 0.009 | 0.554 | 70.1 | 0.009 | 0.555 | 65.3 | 0.009 | 0.596 | 60.4 | 0.007 | 0.536 | 55.5 | 0.006 | 0.675 | 50.7 | 0.006 | 0.709 | 45.8 | 0.005 | 0.737 | 40.9 | 0.004 | 0.751 | 38.0 | 0.003 | 0.747 | 31.2 | 0.003 | 0.718 | 26.3 | 0.002 | 0.659 |
| 2 | 70.2 | 0.009 | 0.556 | 70.0 | 0.009 | 0.558 | 64.8 | 0.008 | 0.601 | 60.0 | 0.007 | 0.544 | 55.0 | 0.006 | 0.686 | 50.0 | 0.006 | 0.725 | 45.0 | 0.005 | 0.756 | 40.0 | 0.004 | 0.775 | 35.0 | 0.003 | 0.774 | 30.0 | 0.003 | 0.751 | 25.0 | 0.002 | 0.689 |
| 3 | 70.1 | 0.009 | 0.557 | 69.9 | 0.009 | 0.559 | 64.8 | 0.008 | 0.603 | 59.7 | 0.007 | 0.548 | 54.8 | 0.006 | 0.691 | 49.5 | 0.005 | 0.730 | 44.4 | 0.005 | 0.762 | 39.3 | 0.004 | 0.780 | 34.2 | 0.003 | 0.776 | 29.1 | 0.002 | 0.752 | 24.0 | 0.002 | 0.689 |
| 4 | 70.0 | 0.009 | 0.558 | 69.8 | 0.009 | 0.560 | 64.6 | 0.008 | 0.606 | 59.4 | 0.007 | 0.553 | 54.2 | 0.006 | 0.698 | 49.0 | 0.005 | 0.740 | 43.8 | 0.005 | 0.773 | 38.6 | 0.004 | 0.794 | 33.4 | 0.003 | 0.792 | 28.2 | 0.002 | 0.761 | 23.1 | 0.002 | 0.689 |
| 5 | 69.9 | 0.009 | 0.559 | 69.7 | 0.009 | 0.561 | 64.5 | 0.008 | 0.608 | 59.2 | 0.007 | 0.556 | 53.9 | 0.006 | 0.703 | 48.7 | 0.005 | 0.746 | 43.4 | 0.005 | 0.781 | 38.1 | 0.004 | 0.802 | 32.9 | 0.003 | 0.800 | 27.6 | 0.002 | 0.761 | 22.4 | 0.002 | 0.705 |
| 6 | 69.9 | 0.009 | 0.560 | 69.7 | 0.009 | 0.562 | 64.4 | 0.008 | 0.610 | 59.1 | 0.007 | 0.558 | 53.8 | 0.006 | 0.706 | 48.5 | 0.005 | 0.750 | 43.2 | 0.005 | 0.787 | 37.9 | 0.004 | 0.809 | 32.6 | 0.003 | 0.809 | 27.2 | 0.002 | 0.750 | 21.9 | 0.002 | 0.713 |
| 7 | 69.9 | 0.009 | 0.559 | 69.7 | 0.009 | 0.561 | 64.4 | 0.008 | 0.609 | 59.1 | 0.007 | 0.557 | 53.7 | 0.006 | 0.704 | 48.4 | 0.005 | 0.747 | 43.1 | 0.005 | 0.781 | 37.8 | 0.004 | 0.800 | 32.5 | 0.003 | 0.795 | 27.2 | 0.002 | 0.772 | 21.9 | 0.002 | 0.687 |
| 8 | 69.9 | 0.009 | 0.558 | 69.7 | 0.009 | 0.561 | 64.5 | 0.008 | 0.609 | 59.2 | 0.007 | 0.557 | 53.9 | 0.006 | 0.704 | 48.7 | 0.005 | 0.748 | 43.4 | 0.005 | 0.784 | 38.1 | 0.004 | 0.806 | 32.9 | 0.003 | 0.806 | 27.6 | 0.002 | 0.789 | 22.3 | 0.002 | 0.717 |
| 9 | 70.1 | 0.009 | 0.557 | 69.9 | 0.009 | 0.558 | 64.8 | 0.008 | 0.602 | 59.7 | 0.007 | 0.546 | 54.6 | 0.006 | 0.689 | 49.5 | 0.005 | 0.728 | 44.4 | 0.005 | 0.758 | 39.3 | 0.004 | 0.775 | 34.2 | 0.003 | 0.789 | 29.1 | 0.002 | 0.742 | 24.0 | 0.002 | 0.670 |
| 10 | 70.3 | 0.009 | 0.553 | 70.1 | 0.009 | 0.555 | 65.3 | 0.008 | 0.594 | 60.4 | 0.007 | 0.524 | 55.5 | 0.006 | 0.671 | 50.7 | 0.005 | 0.703 | 45.8 | 0.005 | 0.727 | 40.9 | 0.004 | 0.738 | 36.1 | 0.003 | 0.730 | 31.2 | 0.003 | 0.684 | 26.3 | 0.002 | 0.627 |
| 11 | 70.6 | 0.009 | 0.550 | 70.4 | 0.009 | 0.551 | 65.8 | 0.008 | 0.587 | 61.2 | 0.007 | 0.522 | 56.6 | 0.006 | 0.655 | 52.0 | 0.006 | 0.689 | 47.4 | 0.005 | 0.704 | 42.8 | 0.004 | 0.713 | 38.2 | 0.003 | 0.705 | 33.6 | 0.003 | 0.673 | 29.0 | 0.002 | 0.615 |
| 12 | 70.8 | 0.009 | 0.547 | 70.7 | 0.009 | 0.548 | 66.3 | 0.008 | 0.580 | 62.0 | 0.007 | 0.512 | 57.7 | 0.006 | 0.641 | 53.4 | 0.006 | 0.665 | 49.0 | 0.005 | 0.684 | 44.7 | 0.004 | 0.692 | 40.4 | 0.004 | 0.687 | 36.1 | 0.003 | 0.661 | 31.7 | 0.002 | 0.607 |
| 13 | 71.1 | 0.009 | 0.543 | 70.9 | 0.009 | 0.544 | 66.8 | 0.008 | 0.572 | 62.7 | 0.007 | 0.507 | 58.7 | 0.006 | 0.621 | 54.6 | 0.006 | 0.639 | 50.5 | 0.005 | 0.651 | 46.4 | 0.004 | 0.653 | 42.3 | 0.004 | 0.642 | 38.2 | 0.003 | 0.612 | 34.2 | 0.002 | 0.557 |
| 14 | 71.2 | 0.009 | 0.541 | 71.1 | 0.009 | 0.542 | 67.1 | 0.008 | 0.542 | 67.1 | 0.008 | 0.542 | 67.1 | 0.008 | 0.542 | 55.3 | 0.006 | 0.637 | 51.4 | 0.005 | 0.637 | 47.5 | 0.004 | 0.637 | 43.5 | 0.004 | 0.625 | 39.6 | 0.003 | 0.596 | 35.7 | 0.002 | 0.544 |
| 15 | 71.3 | 0.009 | 0.539 | 71.1 | 0.009 | 0.540 | 67.3 | 0.008 | 0.563 | 63.4 | 0.007 | 0.584 | 59.5 | 0.006 | 0.602 | 55.6 | 0.006 | 0.615 | 51.8 | 0.005 | 0.621 | 47.9 | 0.004 | 0.617 | 44.0 | 0.004 | 0.601 | 40.2 | 0.003 | 0.567 | 36.3 | 0.002 | 0.509 |
| 16 | 71.3 | 0.009 | 0.540 | 71.1 | 0.009 | 0.541 | 67.2 | 0.008 | 0.565 | 63.3 | 0.007 | 0.587 | 59.4 | 0.006 | 0.606 | 55.5 | 0.006 | 0.620 | 51.7 | 0.005 | 0.627 | 47.8 | 0.004 | 0.625 | 43.9 | 0.004 | 0.610 | 40.0 | 0.003 | 0.578 | 36.1 | 0.002 | 0.523 |
| 17 | 71.2 | 0.009 | 0.540 | 71.1 | 0.009 | 0.541 | 67.1 | 0.008 | 0.565 | 63.2 | 0.007 | 0.588 | 59.3 | 0.006 | 0.606 | 55.3 | 0.006 | 0.621 | 51.4 | 0.005 | 0.628 | 47.5 | 0.004 | 0.625 | 43.5 | 0.004 | 0.609 | 39.6 | 0.003 | 0.575 | 35.7 | 0.002 | 0.517 |
| 18 | 71.2 | 0.009 | 0.542 | 71.0 | 0.009 | 0.543 | 67.0 | 0.008 | 0.570 | 63.0 | 0.007 | 0.586 | 59.0 | 0.006 | 0.619 | 55.0 | 0.006 | 0.637 | 51.0 | 0.005 | 0.650 | 47.0 | 0.004 | 0.653 | 43.0 | 0.004 | 0.644 | 39.0 | 0.003 | 0.618 | 35.0 | 0.002 | 0.588 |
| 19 | 71.1 | 0.009 | 0.544 | 70.9 | 0.009 | 0.545 | 66.8 | 0.008 | 0.574 | 62.7 | 0.007 | 0.601 | 58.7 | 0.006 | 0.627 | 54.6 | 0.006 | 0.648 | 50.5 | 0.005 | 0.663 | 46.4 | 0.004 | 0.670 | 42.3 | 0.004 | 0.664 | 38.2 | 0.003 | 0.640 | 34.2 | 0.002 | 0.583 |
| 20 | 71.0 | 0.009 | 0.546 | 70.8 | 0.009 | 0.547 | 66.6 | 0.008 | 0.578 | 62.4 | 0.007 | 0.609 | 58.2 | 0.006 | 0.637 | 54.0 | 0.006 | 0.662 | 49.8 | 0.005 | 0.681 | 45.6 | 0.004 | 0.691 | 41.4 | 0.004 | 0.689 | 37.2 | 0.003 | 0.669 | 33.0 | 0.002 | 0.624 |
| 21 | 70.8 | 0.009 | 0.548 | 70.7 | 0.009 | 0.550 | 66.3 | 0.008 | 0.586 | 62.0 | 0.007 | 0.620 | 57.7 | 0.006 | 0.654 | 53.4 | 0.006 | 0.685 | 49.0 | 0.005 | 0.711 | 44.7 | 0.005 | 0.729 | 40.4 | 0.004 | 0.736 | 36.0 | 0.003 | 0.725 | 31.7 | 0.003 | 0.692 |
| 22 | 70.7 | 0.009 | 0.548 | 70.5 | 0.009 | 0.551 | 66.1 | 0.008 | 0.586 | 61.6 | 0.007 | 0.621 | 57.2 | 0.006 | 0.655 | 52.7 | 0.006 | 0.684 | 48.3 | 0.005 | 0.708 | 43.8 | 0.004 | 0.723 | 39.3 | 0.004 | 0.723 | 34.9 | 0.003 | 0.703 | 30.4 | 0.002 | 0.660 |
| 23 | 70.6 | 0.009 | 0.551 | 70.4 | 0.009 | 0.552 | 65.8 | 0.008 | 0.590 | 61.2 | 0.007 | 0.627 | 56.6 | 0.006 | 0.662 | 52.0 | 0.006 | 0.694 | 47.4 | 0.005 | 0.719 | 42.8 | 0.004 | 0.734 | 38.2 | 0.004 | 0.734 | 33.6 | 0.003 | 0.711 | 29.0 | 0.002 | 0.665 |
| 24 | 70.4 | 0.009 | 0.552 | 70.3 | 0.009 | 0.554 | 65.5 | 0.008 | 0.593 | 60.8 | 0.007 | 0.632 | 56.0 | 0.006 | 0.669 | 51.3 | 0.006 | 0.702 | 46.6 | 0.005 | 0.728 | 41.8 | 0.004 | 0.743 | 37.1 | 0.003 | 0.741 | 32.3 | 0.003 | 0.713 | 27.6 | 0.002 | 0.664 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | | | | | | | | | | | | | | |
| 1 | 71.4 | 0.009 | 0.544 | 71.3 | 0.009 | 0.545 | 67.6 | 0.008 | 0.578 | 63.9 | 0.008 | 0.596 | 60.2 | 0.007 | 0.636 | 56.5 | 0.006 | 0.684 | 52.8 | 0.006 | 0.690 | 49.1 | 0.005 | 0.713 | 45.4 | 0.005 | 0.717 | 43.8 | 0.004 | 0.732 | 39.9 | 0.004 | 0.736 | 36.0 | 0.003 | 0.725 |
| 2 | 71.3 | 0.009 | 0.546 | 71.1 | 0.009 | 0.547 | 67.2 | 0.008 | 0.583 | 63.3 | 0.008 | 0.610 | 59.4 | 0.007 | 0.641 | 55.5 | 0.006 | 0.670 | 51.6 | 0.006 | 0.696 | 47.7 | 0.005 | 0.717 | 43.8 | 0.004 | 0.733 | 42.4 | 0.004 | 0.748 | 38.3 | 0.004 | 0.751 | 34.2 | 0.003 | 0.730 |
| 3 | 71.1 | 0.009 | 0.548 | 70.9 | 0.009 | 0.549 | 66.8 | 0.008 | 0.589 | 62.8 | 0.007 | 0.617 | 58.7 | 0.007 | 0.650 | 54.6 | 0.006 | 0.682 | 50.5 | 0.006 | 0.710 | 46.4 | 0.005 | 0.733 | 42.4 | 0.004 | 0.752 | 41.1 | 0.004 | 0.752 | 36.9 | 0.003 | 0.751 | 32.7 | 0.003 | 0.730 |
| 4 | 70.9 | 0.009 | 0.548 | 70.8 | 0.009 | 0.550 | 66.5 | 0.008 | 0.586 | 62.3 | 0.007 | 0.621 | 58.1 | 0.007 | 0.665 | 53.3 | 0.006 | 0.688 | 48.9 | 0.005 | 0.729 | 44.6 | 0.005 | 0.754 | 40.3 | 0.004 | 0.769 | 35.9 | 0.003 | 0.769 | 31.6 | 0.003 | 0.748 | | | |
| 5 | 70.8 | 0.009 | 0.550 | 70.7 | 0.009 | 0.552 | 66.3 | 0.008 | 0.588 | 62.0 | 0.007 | 0.626 | 57.6 | 0.007 | 0.663 | 52.9 | 0.006 | 0.688 | 48.4 | 0.005 | 0.738 | 44.1 | 0.005 | 0.755 | 39.7 | 0.004 | 0.783 | 35.3 | 0.003 | 0.783 | 30.9 | 0.003 | 0.742 | | | |
| 6 | 70.8 | 0.009 | 0.551 | 70.6 | 0.009 | 0.552 | 66.2 | 0.008 | 0.590 | 61.8 | 0.007 | 0.628 | 57.4 | 0.007 | 0.665 | 52.9 | 0.006 | 0.700 | 48.4 | 0.005 | 0.738 | 44.0 | 0.005 | 0.754 | 39.5 | 0.004 | 0.784 | 35.1 | 0.003 | 0.779 | 30.7 | 0.003 | 0.762 | | | |
| 7 | 70.7 | 0.009 | 0.551 | 70.6 | 0.009 | 0.553 | 66.1 | 0.008 | 0.591 | 61.7 | 0.007 | 0.630 | 57.3 | 0.007 | 0.668 | 52.8 | 0.006 | 0.705 | 48.4 | 0.005 | 0.738 | 44.0 | 0.005 | 0.754 | 39.5 | 0.004 | 0.784 | 35.1 | 0.003 | 0.779 | 30.7 | 0.003 | 0.762 | | | |
| 8 | 70.8 | 0.009 | 0.552 | 70.6 | 0.009 | 0.553 | 66.2 | 0.008 | 0.592 | 61.8 | 0.007 | 0.631 | 57.4 | 0.007 | 0.671 | 53.0 | 0.006 | 0.709 | 48.6 | 0.005 | 0.743 | 44.2 | 0.005 | 0.772 | 39.8 | 0.004 | 0.792 | 35.4 | 0.003 | 0.797 | 31.0 | 0.003 | 0.765 | | | |
| 9 | 70.9 | 0.009 | 0.548 | 70.7 | 0.009 | 0.550 | 66.5 | 0.008 | 0.595 | 62.2 | 0.007 | 0.620 | 58.0 | 0.007 | 0.654 | 53.7 | 0.006 | 0.686 | 49.5 | 0.005 | 0.714 | 44.2 | 0.005 | 0.735 | 41.0 | 0.004 | 0.746 | 36.7 | 0.003 | 0.742 | 32.5 | 0.003 | 0.717 | | | |
| 10 | 71.1 | 0.009 | 0.545 | 71.0 | 0.009 | 0.548 | 66.9 | 0.008 | 0.577 | 62.9 | 0.007 | 0.608 | 58.9 | 0.007 | 0.637 | 54.8 | 0.006 | 0.663 | 50.8 | 0.005 | 0.694 | 46.7 | 0.005 | 0.698 | 42.7 | 0.004 | 0.704 | 38.7 | 0.003 | 0.695 | 34.6 | 0.003 | 0.687 | | | |
| 11 | 71.4 | 0.009 | 0.542 | 71.2 | 0.009 | 0.543 | 67.5 | 0.008 | 0.570 | 63.7 | 0.007 | 0.595 | 59.9 | 0.007 | 0.620 | 56.1 | 0.006 | 0.641 | 52.4 | 0.005 | 0.658 | 48.6 | 0.005 | 0.658 | 44.8 | 0.004 | 0.670 | 41.0 | 0.004 | 0.659 | 37.3 | 0.003 | 0.633 | | | |
| 12 | 71.7 | 0.009 | 0.538 | 71.5 | 0.009 | 0.538 | 68.0 | 0.008 | 0.561 | 64.6 | 0.007 | 0.581 | 61.1 | 0.007 | 0.600 | 57.6 | 0.006 | 0.615 | 54.1 | 0.006 | 0.627 | 50.6 | 0.005 | 0.632 | 47.1 | 0.004 | 0.629 | 43.7 | 0.004 | 0.616 | 40.2 | 0.003 | 0.589 | | | |
| 13 | 71.9 | 0.009 | 0.534 | 71.8 | 0.009 | 0.534 | 68.6 | 0.008 | 0.552 | 65.5 | 0.008 | 0.568 | 62.3 | 0.007 | 0.581 | 59.1 | 0.006 | 0.592 | 55.9 | 0.006 | 0.598 | 52.7 | 0.006 | 0.599 | 49.6 | 0.004 | 0.593 | 46.4 | 0.004 | 0.578 | 43.2 | 0.003 | 0.552 | | | |
| 14 | 72.2 | 0.009 | 0.530 | 72.1 | 0.009 | 0.531 | 69.2 | 0.008 | 0.545 | 66.2 | 0.008 | 0.557 | 63.3 | 0.007 | 0.568 | 60.4 | 0.006 | 0.575 | 57.5 | 0.006 | 0.578 | 54.6 | 0.005 | 0.577 | 51.7 | 0.005 | 0.570 | 48.7 | 0.004 | 0.555 | 45.8 | 0.004 | 0.531 | | | |
| 15 | 72.4 | 0.009 | 0.528 | 72.3 | 0.009 | 0.529 | 69.6 | 0.008 | 0.540 | 66.9 | 0.008 | 0.550 | 64.2 | 0.007 | 0.558 | 61.5 | 0.007 | 0.563 | 58.8 | 0.006 | 0.565 | 56.0 | 0.005 | 0.563 | 53.3 | 0.005 | 0.555 | 50.6 | 0.004 | 0.541 | 47.9 | 0.004 | 0.519 | | | |
| 16 | 72.5 | 0.009 | 0.527 | 72.4 | 0.009 | 0.527 | 69.8 | 0.008 | 0.538 | 67.3 | 0.008 | 0.546 | 64.7 | 0.007 | 0.553 | 62.1 | 0.007 | 0.557 | 59.5 | 0.006 | 0.558 | 56.9 | 0.005 | 0.555 | 54.4 | 0.005 | 0.548 | 51.8 | 0.004 | 0.534 | 49.2 | 0.004 | 0.514 | | | |
| 17 | 72.6 | 0.009 | 0.527 | 72.5 | 0.009 | 0.527 | 69.9 | 0.008 | 0.538 | 67.4 | 0.008 | 0.547 | 64.9 | 0.007 | 0.554 | 62.4 | 0.007 | 0.559 | 59.8 | 0.006 | 0.561 | 57.3 | 0.006 | 0.560 | 54.8 | 0.005 | 0.554 | 52.2 | 0.004 | 0.543 | 49.7 | 0.004 | 0.525 | | | |
| 18 | 72.5 | 0.009 | 0.528 | 72.5 | 0.009 | 0.529 | 69.9 | 0.008 | 0.542 | 67.4 | 0.008 | 0.546 | 64.8 | 0.007 | 0.563 | 62.3 | 0.007 | 0.570 | 59.7 | 0.006 | 0.576 | 57.2 | 0.006 | 0.578 | 54.6 | 0.005 | 0.577 | 52.1 | 0.005 | 0.570 | 49.5 | 0.004 | 0.559 | | | |
| 19 | 72.5 | 0.009 | 0.530 | 72.4 | 0.009 | 0.531 | 69.8 | 0.008 | 0.546 | 67.1 | 0.008 | 0.558 | 64.5 | 0.007 | 0.572 | 61.9 | 0.007 | 0.582 | 59.3 | 0.006 | 0.581 | 56.7 | 0.006 | 0.597 | 54.0 | 0.005 | 0.589 | 51.4 | 0.005 | 0.587 | 48.8 | 0.004 | 0.589 | | | |
| 20 | 72.4 | 0.009 | 0.533 | 72.3 | 0.009 | 0.534 | 69.5 | 0.008 | 0.534 | 66.8 | 0.008 | 0.551 | 63.8 | 0.008 | 0.568 | 61.3 | 0.007 | 0.584 | 58.6 | 0.006 | 0.611 | 55.8 | 0.006 | 0.622 | 53.1 | 0.005 | 0.629 | 50.3 | 0.005 | 0.632 | 47.6 | 0.004 | 0.629 | | | |
| 21 | 72.2 | 0.009 | 0.536 | 72.1 | 0.009 | 0.537 | 69.2 | 0.008 | 0.539 | 66.3 | 0.008 | 0.559 | 63.4 | 0.007 | 0.584 | 60.3 | 0.007 | 0.618 | 57.6 | 0.006 | 0.636 | 54.8 | 0.006 | 0.652 | 51.9 | 0.005 | 0.655 | 49.0 | 0.005 | 0.674 | 46.1 | 0.004 | 0.679 | | | |
| 22 | 72.0 | 0.009 | 0.538 | 71.9 | 0.009 | 0.539 | 68.9 | 0.008 | 0.562 | 65.8 | 0.008 | 0.565 | 62.7 | 0.007 | 0.607 | 59.6 | 0.007 | 0.628 | 56.6 | 0.006 | 0.648 | 53.5 | 0.006 | 0.665 | 50.4 | 0.005 | 0.680 | 47.3 | 0.005 | 0.689 | 44.3 | 0.004 | 0.693 | | | |
| 23 | 71.9 | 0.009 | 0.540 | 71.7 | 0.009 | 0.541 | 68.4 | 0.008 | 0.567 | 65.2 | 0.008 | 0.592 | 61.9 | 0.007 | 0.618 | 58.6 | 0.007 | 0.642 | 55.3 | 0.006 | 0.684 | 52.1 | 0.006 | 0.694 | 48.8 | 0.005 | 0.701 | 45.5 | 0.005 | 0.712 | 42.2 | 0.004 | 0.717 | | | |
| 24 | 71.6 | 0.009 | 0.542 | 71.5 | 0.009 | 0.543 | 68.0 | 0.008 | 0.572 | 64.5 | 0.008 | 0.600 | 61.0 | 0.007 | 0.628 | 57.6 | 0.007 | 0.655 | 54.1 | 0.006 | 0.690 | 50.6 | 0.005 | 0.702 | 47.1 | 0.005 | 0.720 | 43.6 | 0.004 | 0.732 | 40.1 | 0.004 | 0.736 | | | |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | | | | | | | | | | | | | | |
| 1 | 72.4 | 0.009 | 0.538 | 72.3 | 0.009 | 0.538 | 89.5 | 0.009 | 0.562 | 68.8 | 0.008 | 0.566 | 64.1 | 0.008 | 0.610 | 81.3 | 0.007 | 0.633 | 58.6 | 0.007 | 0.657 | 56.8 | 0.006 | 0.660 | 53.1 | 0.006 | 0.703 | 50.4 | 0.006 | 0.723 | 47.6 | 0.005 | 0.742 | | | |
| 2 | 72.2 | 0.009 | 0.538 | 72.1 | 0.009 | 0.540 | 89.2 | 0.009 | 0.564 | 68.3 | 0.008 | 0.568 | 63.3 | 0.008 | 0.614 | 80.4 | 0.007 | 0.639 | 57.5 | 0.007 | 0.663 | 54.6 | 0.006 | 0.687 | 51.7 | 0.006 | 0.709 | 48.8 | 0.005 | 0.728 | 45.8 | 0.005 | 0.745 | | | |
| 3 | 72.0 | 0.009 | 0.541 | 71.9 | 0.009 | 0.542 | 88.8 | 0.009 | 0.564 | 66.7 | 0.008 | 0.565 | 62.6 | 0.008 | 0.623 | 79.6 | 0.007 | 0.650 | 56.5 | 0.007 | 0.677 | 53.4 | 0.006 | 0.697 | 50.3 | 0.006 | 0.726 | 47.2 | 0.005 | 0.748 | 44.1 | 0.005 | 0.766 | | | |
| 4 | 71.9 | 0.009 | 0.543 | 71.8 | 0.009 | 0.544 | 88.5 | 0.008 | 0.573 | 66.3 | 0.008 | 0.602 | 62.0 | 0.007 | 0.633 | 78.3 | 0.007 | 0.663 | 55.5 | 0.006 | 0.693 | 52.3 | 0.006 | 0.722 | 49.1 | 0.006 | 0.750 | 45.8 | 0.005 | 0.775 | 42.6 | 0.005 | 0.796 | | | |
| 5 | 71.8 | 0.009 | 0.543 | 71.7 | 0.009 | 0.544 | 88.3 | 0.008 | 0.573 | 66.0 | 0.008 | 0.603 | 61.6 | 0.007 | 0.633 | 78.3 | 0.007 | 0.663 | 54.9 | 0.006 | 0.692 | 51.6 | 0.006 | 0.720 | 48.3 | 0.005 | 0.745 | 44.9 | 0.005 | 0.767 | 41.6 | 0.004 | 0.784 | | | |
| 6 | 71.7 | 0.009 | 0.542 | 71.6 | 0.009 | 0.544 | 88.2 | 0.008 | 0.572 | 64.8 | 0.008 | 0.601 | 61.4 | 0.007 | 0.630 | 78.0 | 0.007 | 0.658 | 54.5 | 0.006 | 0.684 | 51.1 | 0.006 | 0.709 | 47.7 | 0.005 | 0.730 | 44.3 | 0.005 | 0.747 | 40.9 | 0.004 | 0.756 | | | |
| 7 | 71.7 | 0.009 | 0.543 | 71.6 | 0.009 | 0.544 | 88.1 | 0.008 | 0.573 | 64.7 | 0.008 | 0.603 | 61.3 | 0.007 | 0.633 | 77.9 | 0.007 | 0.652 | 54.4 | 0.006 | 0.680 | 51.0 | 0.006 | 0.717 | 47.6 | 0.005 | 0.740 | 44.1 | 0.005 | 0.758 | 40.7 | 0.004 | 0.770 | | | |
| 8 | 71.7 | 0.009 | 0.543 | 71.6 | 0.009 | 0.544 | 88.2 | 0.008 | 0.572 | 64.8 | 0.008 | 0.602 | 61.4 | 0.007 | 0.631 | 78.0 | 0.007 | 0.659 | 54.7 | 0.006 | 0.687 | 51.3 | 0.006 | 0.713 | 47.9 | 0.005 | 0.735 | 44.5 | 0.005 | 0.753 | 41.1 | 0.004 | 0.765 | | | |
| 9 | 71.9 | 0.009 | 0.538 | 71.7 | 0.009 | 0.539 | 88.5 | 0.008 | 0.563 | 66.2 | 0.008 | 0.566 | 62.0 | 0.007 | 0.609 | 78.7 | 0.007 | 0.629 | 55.5 | 0.006 | 0.648 | 52.2 | 0.005 | 0.663 | 49.0 | 0.005 | 0.674 | 45.7 | 0.004 | 0.679 | 42.5 | 0.004 | 0.675 | | | |
| 10 | 72.1 | 0.009 | 0.535 | 71.9 | 0.009 | 0.536 | 88.9 | 0.008 | 0.555 | 66.8 | 0.008 | 0.574 | 62.8 | 0.007 | 0.591 | 79.7 | 0.007 | 0.606 | 56.7 | 0.006 | 0.619 | 53.6 | 0.005 | 0.627 | 50.6 | 0.005 | 0.632 | 47.5 | 0.004 | 0.630 | 44.5 | 0.004 | 0.620 | | | |
| 11 | 72.3 | 0.009 | 0.532 | 72.2 | 0.009 | 0.533 | 89.4 | 0.008 | 0.549 | 66.6 | 0.008 | 0.564 | 63.9 | 0.007 | 0.578 | 81.0 | 0.007 | 0.590 | 58.2 | 0.006 | 0.599 | 54.4 | 0.006 | 0.605 | 52.6 | 0.005 | 0.607 | 49.8 | 0.005 | 0.604 | 47.0 | 0.004 | 0.594 | | | |
| 12 | 72.6 | 0.009 | 0.530 | 72.5 | 0.009 | 0.530 | 89.9 | 0.008 | 0.544 | 67.4 | 0.008 | 0.557 | 64.9 | 0.007 | 0.568 | 82.3 | 0.007 | 0.578 | 59.8 | 0.006 | 0.586 | 57.3 | 0.006 | 0.591 | 54.8 | 0.005 | 0.594 | 52.2 | 0.005 | 0.592 | 49.7 | 0.004 | 0.585 | | | |
| 13 | 72.8 | 0.009 | 0.526 | 72.8 | 0.009 | 0.527 | 90.5 | 0.008 | 0.537 | 68.3 | 0.008 | 0.546 | 66.0 | 0.008 | 0.546 | 83.8 | 0.007 | 0.561 | 61.5 | 0.007 | 0.565 | 59.3 | 0.006 | 0.567 | 57.0 | 0.006 | 0.567 | 54.8 | 0.005 | 0.563 | 52.5 | 0.005 | 0.555 | | | |
| 14 | 73.1 | 0.009 | 0.524 | 73.0 | 0.009 | 0.524 | 91.0 | 0.008 | 0.532 | 69.0 | 0.008 | 0.540 | 67.0 | 0.008 | 0.546 | 85.0 | 0.007 | 0.550 | 63.0 | 0.007 | 0.553 | 61.0 | 0.006 | 0.555 | 59.0 | 0.006 | 0.554 | 57.0 | 0.005 | 0.550 | 55.0 | 0.005 | 0.544 | | | |
| 15 | 73.3 | 0.009 | 0.523 | 73.2 | 0.009 | 0.524 | 91.4 | 0.008 | 0.531 | 69.6 | 0.008 | 0.537 | 67.8 | 0.008 | 0.543 | 86.0 | 0.007 | 0.548 | 64.2 | 0.007 | 0.551 | 62.4 | 0.007 | 0.553 | 60.6 | 0.006 | 0.554 | 58.8 | 0.006 | 0.553 | 57.0 | 0.005 | 0.548 | | | |
| 16 | 73.4 | 0.009 | 0.523 | 73.3 | 0.009 | 0.523 | 91.6 | 0.008 | 0.531 | 70.0 | 0.008 | 0.538 | 68.3 | 0.008 | 0.544 | 86.8 | 0.008 | 0.549 | 64.9 | 0.007 | 0.553 | 63.3 | 0.007 | 0.557 | 61.6 | 0.008 | 0.559 | 59.9 | 0.008 | 0.560 | 58.2 | 0.006 | 0.559 | | | |
| 17 | 73.4 | 0.009 | 0.523 | 73.4 | 0.009 | 0.523 | 91.7 | 0.008 | 0.530 | 70.1 | 0.008 | 0.537 | 68.5 | 0.008 | 0.542 | 86.8 | 0.008 | 0.548 | 65.2 | 0.007 | 0.552 | 63.6 | 0.007 | 0.555 | 62.0 | 0.007 | 0.557 | 60.3 | 0.006 | 0.558 | 58.7 | 0.006 | 0.558 | | | |
| 18 | 73.4 | 0.009 | 0.524 | 73.4 | 0.009 | 0.524 | 91.7 | 0.008 | 0.532 | 70.1 | 0.008 | 0.540 | 68.4 | 0.008 | 0.547 | 86.8 | 0.008 | 0.553 | 65.1 | 0.007 | 0.559 | 63.5 | 0.007 | 0.563 | 61.8 | 0.007 | 0.567 | 60.2 | 0.006 | 0.570 | 58.5 | 0.006 | 0.571 | | | |
| 19 | 73.3 | 0.009 | 0.525 | 73.3 | 0.009 | 0.526 | 91.6 | 0.008 | 0.536 | 69.8 | 0.008 | 0.545 | 68.1 | 0.008 | 0.555 | 86.4 | 0.008 | 0.563 | 64.7 | 0.007 | 0.572 | 63.0 | 0.007 | 0.579 | 61.3 | 0.007 | 0.586 | 59.5 | 0.006 | 0.591 | 57.8 | 0.006 | 0.596 | | | |
| 20 | 73.2 | 0.009 | 0.528 | 73.2 | 0.009 | 0.529 | 91.3 | 0.009 | 0.529 | 71.3 | 0.009 | 0.540 | 69.5 | 0.008 | 0.553 | 87.7 | 0.008 | 0.564 | 65.9 | 0.008 | 0.576 | 65.2 | 0.008 | 0.580 | 64.0 | 0.007 | 0.587 | 62.2 | 0.007 | 0.598 | 60.4 | 0.007 | 0.603 | 58.5 | 0.006 | 0.617 |
| 21 | 73.1 | 0.009 | 0.530 | 73.0 | 0.009 | 0.531 | 91.1 | 0.009 | 0.546 | 69.1 | 0.008 | 0.561 | 67.1 | 0.008 | 0.576 | 85.2 | 0.008 | 0.580 | 63.2 | 0.007 | 0.605 | 61.2 | 0.007 | 0.619 | 59.2 | 0.007 | 0.633 | 57.3 | 0.006 | 0.646 | 55.3 | 0.006 | 0.659 | | | |
| 22 | 72.9 | 0.009 | 0.533 | 72.9 | 0.009 | 0.533 | 90.3 | 0.009 | 0.551 | 68.6 | 0.008 | 0.569 | 66.4 | 0.008 | 0.587 | 84.3 | 0.008 | 0.606 | 62.2 | 0.007 | 0.624 | 60.0 | 0.007 | 0.642 | 57.9 | 0.007 | 0.660 | 55.7 | 0.006 | 0.677 | 53.6 | 0.006 | 0.693 | | | |
| 23 | 72.8 | 0.009 | 0.534 | 72.7 | 0.009 | 0.534 | 89.0 | 0.008 | 0.554 | 69.0 | 0.008 | 0.573 | 66.7 | 0.008 | 0.592 | 83.3 | 0.008 | 0.612 | 61.0 | 0.007 | 0.631 | 59.7 | 0.007 | 0.649 | 56.3 | 0.006 | 0.669 | 54.0 | 0.006 | 0.685 | 51.7 | 0.006 | 0.701 | | | |
| 24 | 72.6 | 0.009 | 0.536 | 72.5 | 0.009 | 0.537 | 89.9 | 0.009 | 0.556 | 67.4 | 0.008 | 0.580 | 64.9 | 0.008 | 0.602 | 82.3 | 0.007 | 0.624 | 59.8 | 0.007 | 0.646 | 57.3 | 0.007 | 0.668 | 54.7 | 0.006 | 0.693 | 52.2 | 0.006 | 0.708 | 49.7 | 0.005 | 0.727 | | | |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Tmx | WmX | RHmX | Tmx | WmX | RHmX | Tmx | WmX | RHmX | Tmx | WmX | RHmX | Tmx | WmX | RHmX | Tmx | WmX | RHmX | Tmx | WmX | RHmX | Tmx | WmX | RHmX | | | | | | | | | | | | |
| 1 | 73.6 | 0.009 | 0.525 | 73.4 | 0.009 | 0.526 | 71.8 | 0.009 | 0.535 | 70.2 | 0.009 | 0.545 | 69.6 | 0.008 | 0.554 | 67.1 | 0.008 | 0.563 | 65.5 | 0.008 | 0.571 | 63.9 | 0.007 | 0.579 | 62.3 | 0.007 | 0.579 | 60.7 | 0.007 | 0.583 | 59.1 | 0.006 | 0.589 | | | |
| 2 | 73.2 | 0.009 | 0.528 | 73.2 | 0.009 | 0.528 | 71.3 | 0.009 | 0.540 | 69.5 | 0.008 | 0.552 | 67.8 | 0.008 | 0.564 | 65.8 | 0.008 | 0.576 | 64.8 | 0.008 | 0.580 | 62.8 | 0.007 | 0.587 | 62.1 | 0.007 | 0.597 | 60.3 | 0.007 | 0.607 | 58.5 | 0.006 | 0.616 | 56.6 | 0.006 | 0.624 |
| 3 | 73.0 | 0.009 | 0.530 | 73.0 | 0.009 | 0.531 | 70.9 | 0.009 | 0.546 | 68.9 | 0.008 | 0.561 | 66.9 | 0.008 | 0.576 | 64.8 | 0.008 | 0.590 | 64.2 | 0.008 | 0.602 | 62.1 | 0.007 | 0.619 | 59.9 | 0.007 | 0.636 | 57.8 | 0.007 | 0.652 | 55.6 | 0.006 | 0.667 | 53.5 | 0.006 | 0.682 |
| 4 | 72.9 | 0.009 | 0.532 | 72.8 | 0.009 | 0.533 | 70.7 | 0.009 | 0.550 | 68.4 | 0.008 | 0.567 | 66.4 | 0.008 | 0.584 | 64.2 | 0.008 | 0.602 | 64.0 | 0.008 | 0.619 | 61.8 | 0.007 | 0.639 | 59.7 | 0.007 | 0.656 | 57.5 | 0.007 | 0.666 | 55.3 | 0.006 | 0.685 | 53.1 | 0.006 | 0.702 |
| 5 | 72.9 | 0.009 | 0.533 | 72.8 | 0.009 | 0.534 | 70.6 | 0.009 | 0.552 | 68.4 | 0.008 | 0.571 | 66.2 | 0.008 | 0.590 | 64.0 | 0.008 | 0.609 | 64.2 | 0.008 | 0.610 | 62.1 | 0.007 | 0.632 | 59.8 | 0.007 | 0.648 | 57.8 | 0.007 | 0.667 | 55.6 | 0.006 | 0.686 | 53.5 | 0.006 | 0.704 |
| 6 | 72.9 | 0.009 | 0.533 | 72.8 | 0.009 | 0.534 | 70.7 | 0.009 | 0.552 | 68.5 | 0.008 | 0.571 | 66.4 | 0.008 | 0.590 | 64.2 | 0.008 | 0.610 | 64.2 | 0.008 | 0.610 | 62.1 | 0.007 | 0.632 | 59.8 | 0.007 | 0.648 | 57.8 | 0.007 | 0.667 | 55.6 | 0.006 | 0.686 | 53.5 | 0.006 | 0.704 |
| 7 | 73.0 | 0.009 | 0.532 | 73.0 | 0.009 | 0.533 | 70.9 | 0.009 | 0.550 | 68.9 | 0.008 | 0.568 | 66.9 | 0.008 | 0.586 | 64.8 | 0.008 | 0.604 | 64.8 | 0.008 | 0.604 | 62.8 | 0.008 | 0.622 | 60.8 | 0.007 | 0.641 | 58.7 | 0.007 | 0.659 | 56.7 | 0.007 | 0.677 | 54.7 | 0.006 | 0.694 |
| 8 | 73.2 | 0.009 | 0.529 | 73.2 | 0.009 | 0.529 | 71.3 | 0.009 | 0.543 | 69.5 | 0.008 | 0.556 | 67.6 | 0.008 | 0.570 | 65.8 | 0.008 | 0.583 | 65.8 | 0.008 | 0.583 | 64.0 | 0.008 | 0.596 | 62.1 | 0.007 | 0.609 | 60.3 | 0.007 | 0.622 | 58.4 | 0.007 | 0.633 | 56.6 | 0.006 | 0.644 |
| 9 | 73.5 | 0.009 | 0.524 | 73.4 | 0.009 | 0.524 | 71.8 | 0.009 | 0.533 | 70.2 | 0.008 | 0.541 | 68.7 | 0.008 | 0.548 | 67.1 | 0.008 | 0.555 | 67.1 | 0.008 | 0.555 | 65.5 | 0.007 | 0.562 | 63.9 | 0.007 | 0.568 | 62.3 | 0.007 | 0.573 | 60.7 | 0.006 | 0.577 | 59.1 | 0.006 | 0.580 |
| 10 | 73.8 | 0.009 | 0.520 | 73.7 | 0.009 | 0.520 | 72.4 | 0.009 | 0.524 | 71.1 | 0.008 | 0.528 | 69.9 | 0.008 | 0.531 | 68.6 | 0.008 | 0.533 | 68.6 | 0.008 | 0.533 | 67.3 | 0.008 | 0.535 | 66.0 | 0.007 | 0.536 | 64.7 | 0.007 | 0.537 | 63.4 | 0.007 | 0.538 | 62.1 | 0.006 | 0.535 |
| 11 | 74.1 | 0.009 | 0.517 | 74.0 | 0.009 | 0.517 | 73.0 | 0.009 | 0.517 | 72.1 | 0.009 | 0.518 | 71.1 | 0.008 | 0.516 | 70.1 | 0.008 | 0.517 | 70.1 | 0.008 | 0.517 | 69.1 | 0.008 | 0.518 | 68.2 | 0.008 | 0.514 | 67.2 | 0.007 | 0.512 | 66.2 | 0.007 | 0.509 | 65.2 | 0.007 | 0.506 |
| 12 | 74.4 | 0.009 | 0.513 | 74.3 | 0.009 | 0.513 | 73.7 | 0.009 | 0.508 | 73.0 | 0.009 | 0.505 | 72.3 | 0.008 | 0.501 | 71.7 | 0.008 | 0.497 | 71.7 | 0.008 | 0.497 | 71.0 | 0.008 | 0.492 | 70.3 | 0.008 | 0.485 | 69.7 | 0.007 | 0.480 | 69.0 | 0.007 | 0.474 | 68.4 | 0.007 | 0.467 |
| 13 | 74.6 | 0.009 | 0.510 | 74.6 | 0.009 | 0.510 | 74.3 | 0.009 | 0.505 | 73.9 | 0.009 | 0.498 | 73.5 | 0.009 | 0.493 | 73.1 | 0.009 | 0.486 | 73.1 | 0.009 | 0.486 | 72.8 | 0.008 | 0.480 | 72.4 | 0.008 | 0.473 | 72.0 | 0.008 | 0.466 | 71.6 | 0.008 | 0.459 | 71.3 | 0.007 | 0.452 |
| 14 | 74.9 | 0.009 | 0.508 | 74.9 | 0.009 | 0.508 | 74.8 | 0.009 | 0.501 | 74.6 | 0.009 | 0.493 | 74.5 | 0.009 | 0.485 | 74.4 | 0.009 | 0.478 | 74.4 | 0.009 | 0.478 | 74.3 | 0.008 | 0.470 | 74.1 | 0.008 | 0.462 | 74.0 | 0.008 | 0.454 | 73.9 | 0.008 | 0.446 | 73.8 | 0.008 | 0.438 |
| 15 | 75.1 | 0.009 | 0.507 | 75.1 | 0.009 | 0.507 | 75.1 | 0.009 | 0.498 | 75.2 | 0.009 | 0.488 | 75.3 | 0.009 | 0.480 | 75.3 | 0.009 | 0.471 | 75.4 | 0.009 | 0.471 | 75.4 | 0.009 | 0.463 | 75.5 | 0.009 | 0.454 | 75.5 | 0.008 | 0.445 | 75.6 | 0.008 | 0.437 | 75.6 | 0.008 | 0.428 |
| 16 | 75.2 | 0.009 | 0.506 | 75.2 | 0.009 | 0.505 | 75.4 | 0.009 | 0.495 | 75.6 | 0.009 | 0.485 | 75.7 | 0.009 | 0.475 | 75.9 | 0.009 | 0.465 | 76.1 | 0.009 | 0.465 | 76.1 | 0.009 | 0.455 | 76.3 | 0.009 | 0.445 | 76.5 | 0.008 | 0.435 | 76.7 | 0.008 | 0.426 | 76.9 | 0.008 | 0.416 |
| 17 | 75.2 | 0.009 | 0.506 | 75.2 | 0.009 | 0.505 | 75.5 | 0.009 | 0.494 | 75.7 | 0.009 | 0.483 | 75.9 | 0.009 | 0.473 | 76.1 | 0.009 | 0.463 | 76.4 | 0.009 | 0.463 | 76.4 | 0.009 | 0.452 | 76.6 | 0.009 | 0.442 | 76.8 | 0.008 | 0.432 | 77.0 | 0.008 | 0.422 | 77.3 | 0.008 | 0.413 |
| 18 | 75.2 | 0.009 | 0.506 | 75.2 | 0.009 | 0.506 | 75.4 | 0.009 | 0.496 | 75.6 | 0.009 | 0.486 | 75.7 | 0.009 | 0.476 | 75.9 | 0.009 | 0.467 | 76.1 | 0.009 | 0.467 | 76.3 | 0.009 | 0.457 | 76.5 | 0.009 | 0.448 | 76.5 | 0.008 | 0.438 | 76.7 | 0.008 | 0.429 | 76.9 | 0.008 | 0.420 |
| 19 | 75.1 | 0.009 | 0.508 | 75.1 | 0.009 | 0.507 | 75.1 | 0.009 | 0.498 | 75.2 | 0.009 | 0.491 | 75.3 | 0.009 | 0.483 | 75.3 | 0.009 | 0.475 | 75.4 | 0.009 | 0.475 | 75.4 | 0.009 | 0.467 | 75.5 | 0.009 | 0.459 | 75.5 | 0.008 | 0.451 | 75.6 | 0.008 | 0.443 | 75.6 | 0.008 | 0.435 |
| 20 | 74.9 | 0.009 | 0.511 | 74.9 | 0.009 | 0.511 | 74.8 | 0.009 | 0.505 | 74.6 | 0.009 | 0.500 | 74.5 | 0.009 | 0.495 | 74.4 | 0.009 | 0.490 | 74.4 | 0.009 | 0.490 | 74.4 | 0.009 | 0.484 | 74.1 | 0.009 | 0.479 | 74.0 | 0.008 | 0.474 | 73.9 | 0.008 | 0.468 | 73.8 | 0.008 | 0.463 |
| 21 | 74.6 | 0.009 | 0.516 | 74.6 | 0.009 | 0.516 | 74.2 | 0.009 | 0.514 | 73.9 | 0.009 | 0.513 | 73.5 | 0.009 | 0.512 | 73.1 | 0.009 | 0.511 | 73.1 | 0.009 | 0.511 | 72.7 | 0.009 | 0.510 | 72.4 | 0.009 | 0.508 | 72.0 | 0.008 | 0.507 | 71.6 | 0.008 | 0.505 | 71.2 | 0.008 | 0.504 |
| 22 | 74.4 | 0.009 | 0.518 | 74.3 | 0.009 | 0.518 | 73.7 | 0.009 | 0.520 | 73.0 | 0.009 | 0.520 | 72.3 | 0.009 | 0.524 | 71.7 | 0.009 | 0.525 | 71.7 | 0.009 | 0.525 | 71.0 | 0.008 | 0.527 | 70.3 | 0.008 | 0.528 | 69.7 | 0.008 | 0.529 | 69.0 | 0.008 | 0.531 | 68.3 | 0.008 | 0.531 |
| 23 | 74.1 | 0.009 | 0.520 | 74.0 | 0.009 | 0.520 | 73.0 | 0.009 | 0.525 | 72.1 | 0.009 | 0.529 | 71.1 | 0.009 | 0.533 | 70.1 | 0.009 | 0.537 | 70.1 | 0.009 | 0.537 | 69.1 | 0.008 | 0.540 | 68.2 | 0.008 | 0.544 | 67.2 | 0.008 | 0.547 | 66.2 | 0.008 | 0.550 | 65.2 | 0.007 | 0.552 |
| 24 | 73.8 | 0.009 | 0.521 | 73.7 | 0.009 | 0.522 | 72.4 | 0.009 | 0.527 | 71.1 | 0.009 | 0.533 | 69.9 | 0.008 | 0.538 | 68.6 | 0.008 | 0.542 | 68.6 | 0.008 | 0.542 | 67.3 | 0.008 | 0.547 | 66.0 | 0.007 | 0.550 | 64.7 | 0.007 | 0.553 | 63.4 | 0.007 | 0.556 | 62.1 | 0.007 | 0.558 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Tmx | Wmfx | RHmfx | Tmx | Wmfx | RHmfx | Tmx | Wmfx | RHmfx | Tmx | Wmfx | RHmfx | Tmx | Wmfx | RHmfx | Tmx | Wmfx | RHmfx | Tmx | Wmfx | RHmfx | Tmx | Wmfx | RHmfx | | | | | | | | | |
| 1 | 74.3 | 0.010 | 0.536 | 74.3 | 0.010 | 0.536 | 73.5 | 0.010 | 0.556 | 72.8 | 0.010 | 0.560 | 72.0 | 0.010 | 0.603 | 71.3 | 0.010 | 0.627 | 70.5 | 0.010 | 0.652 | 69.8 | 0.011 | 0.678 | 69.1 | 0.011 | 0.704 | 68.3 | 0.011 | 0.732 | 67.6 | 0.011 | 0.760 |
| 2 | 74.1 | 0.010 | 0.534 | 74.0 | 0.010 | 0.535 | 73.1 | 0.010 | 0.555 | 72.1 | 0.010 | 0.576 | 71.2 | 0.010 | 0.598 | 70.2 | 0.010 | 0.621 | 69.3 | 0.010 | 0.644 | 68.3 | 0.010 | 0.669 | 67.4 | 0.010 | 0.694 | 66.4 | 0.010 | 0.721 | 65.5 | 0.010 | 0.748 |
| 3 | 73.9 | 0.010 | 0.534 | 73.9 | 0.010 | 0.535 | 72.7 | 0.009 | 0.554 | 71.6 | 0.009 | 0.575 | 70.5 | 0.009 | 0.597 | 69.3 | 0.009 | 0.619 | 68.2 | 0.009 | 0.642 | 67.1 | 0.009 | 0.667 | 65.9 | 0.009 | 0.692 | 64.8 | 0.009 | 0.718 | 63.7 | 0.009 | 0.746 |
| 4 | 73.8 | 0.009 | 0.535 | 73.7 | 0.009 | 0.536 | 72.5 | 0.009 | 0.556 | 71.2 | 0.009 | 0.580 | 69.9 | 0.009 | 0.604 | 68.6 | 0.009 | 0.628 | 67.4 | 0.009 | 0.654 | 66.1 | 0.009 | 0.681 | 64.8 | 0.009 | 0.710 | 63.5 | 0.009 | 0.739 | 62.3 | 0.009 | 0.771 |
| 5 | 73.7 | 0.010 | 0.538 | 73.6 | 0.010 | 0.539 | 72.3 | 0.009 | 0.563 | 70.9 | 0.009 | 0.588 | 69.5 | 0.009 | 0.615 | 68.2 | 0.009 | 0.643 | 66.8 | 0.009 | 0.673 | 65.3 | 0.009 | 0.704 | 64.1 | 0.009 | 0.737 | 62.7 | 0.009 | 0.772 | 61.3 | 0.009 | 0.808 |
| 6 | 73.7 | 0.010 | 0.538 | 73.6 | 0.010 | 0.539 | 72.2 | 0.009 | 0.564 | 70.8 | 0.009 | 0.590 | 69.4 | 0.009 | 0.617 | 68.1 | 0.009 | 0.646 | 66.7 | 0.009 | 0.676 | 65.3 | 0.009 | 0.708 | 63.9 | 0.009 | 0.741 | 62.5 | 0.009 | 0.777 | 61.1 | 0.009 | 0.814 |
| 7 | 73.7 | 0.010 | 0.538 | 73.7 | 0.010 | 0.539 | 72.3 | 0.010 | 0.564 | 71.0 | 0.010 | 0.590 | 69.6 | 0.010 | 0.617 | 68.3 | 0.009 | 0.646 | 66.8 | 0.009 | 0.676 | 65.6 | 0.009 | 0.708 | 64.2 | 0.009 | 0.741 | 62.9 | 0.009 | 0.777 | 61.5 | 0.009 | 0.814 |
| 8 | 73.8 | 0.009 | 0.534 | 73.8 | 0.009 | 0.535 | 72.5 | 0.009 | 0.555 | 71.3 | 0.009 | 0.576 | 70.1 | 0.009 | 0.598 | 68.8 | 0.009 | 0.621 | 67.6 | 0.009 | 0.645 | 66.4 | 0.009 | 0.670 | 65.1 | 0.009 | 0.696 | 63.9 | 0.009 | 0.724 | 62.7 | 0.009 | 0.752 |
| 9 | 74.0 | 0.009 | 0.531 | 74.0 | 0.009 | 0.531 | 72.9 | 0.009 | 0.547 | 71.9 | 0.009 | 0.564 | 70.8 | 0.009 | 0.581 | 69.8 | 0.009 | 0.599 | 68.8 | 0.009 | 0.617 | 67.7 | 0.009 | 0.638 | 66.7 | 0.009 | 0.656 | 65.6 | 0.009 | 0.676 | 64.6 | 0.009 | 0.698 |
| 10 | 74.2 | 0.009 | 0.526 | 74.2 | 0.009 | 0.526 | 73.4 | 0.009 | 0.538 | 72.6 | 0.009 | 0.549 | 71.8 | 0.009 | 0.561 | 71.0 | 0.009 | 0.573 | 70.2 | 0.009 | 0.585 | 69.4 | 0.009 | 0.597 | 68.6 | 0.009 | 0.610 | 67.8 | 0.009 | 0.623 | 67.0 | 0.009 | 0.637 |
| 11 | 74.5 | 0.010 | 0.523 | 74.5 | 0.010 | 0.523 | 73.9 | 0.009 | 0.531 | 73.4 | 0.009 | 0.540 | 72.9 | 0.009 | 0.546 | 72.4 | 0.009 | 0.556 | 71.8 | 0.009 | 0.565 | 71.3 | 0.009 | 0.573 | 70.8 | 0.009 | 0.582 | 70.3 | 0.009 | 0.591 | 69.7 | 0.009 | 0.600 |
| 12 | 74.8 | 0.010 | 0.521 | 74.8 | 0.010 | 0.521 | 74.5 | 0.010 | 0.527 | 74.3 | 0.010 | 0.532 | 74.1 | 0.010 | 0.538 | 73.8 | 0.010 | 0.544 | 73.6 | 0.010 | 0.550 | 73.3 | 0.010 | 0.555 | 73.1 | 0.010 | 0.561 | 72.9 | 0.010 | 0.567 | 72.6 | 0.010 | 0.573 |
| 13 | 75.0 | 0.010 | 0.519 | 75.0 | 0.010 | 0.520 | 75.1 | 0.010 | 0.524 | 75.1 | 0.010 | 0.528 | 75.1 | 0.010 | 0.531 | 75.2 | 0.010 | 0.535 | 75.2 | 0.010 | 0.538 | 75.2 | 0.010 | 0.543 | 75.3 | 0.010 | 0.547 | 75.3 | 0.010 | 0.551 | 75.3 | 0.010 | 0.555 |
| 14 | 75.3 | 0.010 | 0.518 | 75.3 | 0.010 | 0.518 | 75.6 | 0.010 | 0.520 | 75.8 | 0.010 | 0.522 | 76.1 | 0.010 | 0.523 | 76.4 | 0.010 | 0.525 | 76.4 | 0.010 | 0.527 | 76.7 | 0.010 | 0.527 | 76.9 | 0.010 | 0.528 | 77.2 | 0.010 | 0.530 | 77.5 | 0.010 | 0.533 |
| 15 | 75.4 | 0.010 | 0.517 | 75.5 | 0.010 | 0.517 | 75.9 | 0.010 | 0.518 | 76.4 | 0.010 | 0.519 | 76.8 | 0.010 | 0.520 | 77.3 | 0.010 | 0.521 | 77.7 | 0.010 | 0.521 | 78.2 | 0.011 | 0.522 | 78.6 | 0.011 | 0.522 | 79.1 | 0.011 | 0.523 | 79.5 | 0.011 | 0.523 |
| 16 | 75.6 | 0.010 | 0.514 | 75.6 | 0.010 | 0.514 | 76.2 | 0.010 | 0.512 | 76.7 | 0.010 | 0.510 | 77.3 | 0.010 | 0.507 | 77.9 | 0.010 | 0.505 | 78.5 | 0.010 | 0.503 | 79.0 | 0.011 | 0.501 | 79.6 | 0.011 | 0.498 | 80.2 | 0.011 | 0.496 | 80.8 | 0.011 | 0.493 |
| 17 | 75.6 | 0.010 | 0.514 | 75.6 | 0.010 | 0.514 | 76.2 | 0.010 | 0.512 | 76.8 | 0.010 | 0.511 | 77.5 | 0.010 | 0.508 | 78.1 | 0.010 | 0.507 | 78.7 | 0.011 | 0.505 | 79.3 | 0.011 | 0.503 | 79.9 | 0.011 | 0.501 | 80.5 | 0.011 | 0.498 | 81.1 | 0.011 | 0.496 |
| 18 | 75.6 | 0.010 | 0.515 | 75.6 | 0.010 | 0.515 | 76.2 | 0.010 | 0.515 | 76.8 | 0.010 | 0.514 | 77.3 | 0.010 | 0.513 | 77.9 | 0.010 | 0.513 | 78.5 | 0.011 | 0.512 | 79.1 | 0.011 | 0.511 | 79.7 | 0.011 | 0.509 | 80.3 | 0.011 | 0.508 | 80.9 | 0.011 | 0.507 |
| 19 | 75.5 | 0.010 | 0.517 | 75.5 | 0.010 | 0.517 | 76.0 | 0.010 | 0.518 | 76.5 | 0.010 | 0.519 | 77.0 | 0.010 | 0.520 | 77.5 | 0.010 | 0.521 | 78.0 | 0.011 | 0.521 | 78.5 | 0.011 | 0.522 | 79.0 | 0.011 | 0.522 | 79.5 | 0.011 | 0.522 | 80.0 | 0.011 | 0.522 |
| 20 | 75.3 | 0.010 | 0.522 | 75.4 | 0.010 | 0.522 | 75.7 | 0.010 | 0.529 | 76.1 | 0.010 | 0.535 | 76.5 | 0.011 | 0.541 | 76.8 | 0.011 | 0.546 | 77.2 | 0.011 | 0.552 | 77.5 | 0.011 | 0.557 | 77.9 | 0.011 | 0.562 | 78.3 | 0.012 | 0.567 | 78.6 | 0.012 | 0.572 |
| 21 | 75.2 | 0.010 | 0.528 | 75.2 | 0.010 | 0.529 | 75.4 | 0.010 | 0.542 | 75.5 | 0.010 | 0.566 | 75.7 | 0.011 | 0.568 | 75.9 | 0.011 | 0.568 | 76.1 | 0.011 | 0.594 | 76.3 | 0.012 | 0.606 | 76.5 | 0.012 | 0.619 | 76.8 | 0.012 | 0.631 | 76.8 | 0.013 | 0.643 |
| 22 | 75.0 | 0.010 | 0.531 | 75.0 | 0.010 | 0.532 | 74.9 | 0.010 | 0.548 | 74.9 | 0.010 | 0.565 | 74.9 | 0.011 | 0.568 | 74.9 | 0.011 | 0.588 | 74.8 | 0.011 | 0.614 | 74.8 | 0.012 | 0.631 | 74.8 | 0.012 | 0.647 | 74.7 | 0.012 | 0.664 | 74.7 | 0.013 | 0.680 |
| 23 | 74.7 | 0.010 | 0.533 | 74.7 | 0.010 | 0.534 | 74.5 | 0.010 | 0.552 | 74.2 | 0.010 | 0.570 | 73.9 | 0.011 | 0.589 | 73.7 | 0.011 | 0.608 | 73.4 | 0.011 | 0.627 | 73.4 | 0.011 | 0.647 | 72.8 | 0.011 | 0.666 | 72.6 | 0.012 | 0.687 | 72.3 | 0.012 | 0.707 |
| 24 | 74.5 | 0.010 | 0.534 | 74.5 | 0.010 | 0.535 | 74.0 | 0.010 | 0.555 | 73.5 | 0.010 | 0.576 | 73.0 | 0.010 | 0.597 | 72.4 | 0.011 | 0.619 | 71.9 | 0.011 | 0.641 | 71.4 | 0.011 | 0.664 | 70.9 | 0.011 | 0.689 | 70.4 | 0.011 | 0.712 | 69.9 | 0.011 | 0.736 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|
| | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | | |
| 1 | 74.6 | 0.010 | 0.538 | 74.5 | 0.010 | 0.539 | 74.0 | 0.010 | 0.538 | 73.5 | 0.010 | 0.537 | 73.0 | 0.011 | 0.537 | 72.5 | 0.011 | 0.538 | 72.0 | 0.011 | 0.539 | 71.5 | 0.011 | 0.539 |
| 2 | 74.4 | 0.010 | 0.540 | 74.4 | 0.010 | 0.541 | 73.7 | 0.010 | 0.538 | 73.1 | 0.010 | 0.539 | 72.4 | 0.011 | 0.539 | 71.8 | 0.011 | 0.540 | 71.1 | 0.011 | 0.538 | 70.5 | 0.011 | 0.538 |
| 3 | 74.3 | 0.010 | 0.540 | 74.2 | 0.010 | 0.541 | 73.5 | 0.010 | 0.538 | 72.7 | 0.010 | 0.536 | 72.0 | 0.010 | 0.536 | 71.2 | 0.011 | 0.534 | 70.5 | 0.011 | 0.535 | 69.7 | 0.011 | 0.535 |
| 4 | 74.2 | 0.010 | 0.542 | 74.2 | 0.010 | 0.543 | 73.3 | 0.010 | 0.537 | 72.5 | 0.010 | 0.532 | 71.7 | 0.010 | 0.533 | 70.9 | 0.011 | 0.535 | 70.0 | 0.011 | 0.536 | 69.2 | 0.011 | 0.536 |
| 5 | 74.2 | 0.010 | 0.543 | 74.1 | 0.010 | 0.544 | 73.3 | 0.010 | 0.537 | 72.4 | 0.010 | 0.534 | 71.6 | 0.010 | 0.535 | 70.7 | 0.011 | 0.536 | 69.9 | 0.011 | 0.537 | 69.0 | 0.011 | 0.537 |
| 6 | 74.2 | 0.010 | 0.545 | 74.2 | 0.010 | 0.546 | 73.4 | 0.010 | 0.537 | 72.6 | 0.010 | 0.530 | 71.7 | 0.011 | 0.534 | 70.9 | 0.011 | 0.535 | 70.1 | 0.011 | 0.536 | 69.2 | 0.012 | 0.536 |
| 7 | 74.3 | 0.010 | 0.547 | 74.3 | 0.010 | 0.548 | 73.6 | 0.010 | 0.541 | 72.9 | 0.011 | 0.536 | 72.3 | 0.011 | 0.536 | 71.6 | 0.011 | 0.538 | 70.9 | 0.012 | 0.537 | 70.2 | 0.012 | 0.537 |
| 8 | 74.5 | 0.010 | 0.543 | 74.5 | 0.010 | 0.545 | 74.0 | 0.010 | 0.537 | 73.6 | 0.011 | 0.535 | 73.1 | 0.011 | 0.536 | 72.6 | 0.011 | 0.538 | 72.1 | 0.012 | 0.536 | 71.7 | 0.012 | 0.536 |
| 9 | 74.8 | 0.010 | 0.538 | 74.8 | 0.010 | 0.539 | 74.6 | 0.010 | 0.538 | 74.4 | 0.011 | 0.537 | 74.2 | 0.011 | 0.538 | 73.9 | 0.011 | 0.538 | 73.7 | 0.012 | 0.538 | 73.5 | 0.012 | 0.538 |
| 10 | 75.1 | 0.010 | 0.536 | 75.1 | 0.010 | 0.537 | 75.1 | 0.010 | 0.537 | 75.2 | 0.011 | 0.538 | 75.3 | 0.011 | 0.538 | 75.4 | 0.012 | 0.539 | 75.4 | 0.012 | 0.539 | 75.5 | 0.012 | 0.539 |
| 11 | 75.3 | 0.010 | 0.533 | 75.3 | 0.010 | 0.533 | 75.7 | 0.010 | 0.530 | 76.0 | 0.011 | 0.537 | 76.4 | 0.011 | 0.538 | 76.7 | 0.012 | 0.539 | 77.1 | 0.012 | 0.540 | 77.4 | 0.013 | 0.539 |
| 12 | 75.6 | 0.010 | 0.530 | 75.6 | 0.010 | 0.530 | 76.2 | 0.010 | 0.534 | 76.8 | 0.011 | 0.537 | 77.4 | 0.011 | 0.537 | 78.0 | 0.012 | 0.537 | 78.6 | 0.012 | 0.533 | 79.2 | 0.013 | 0.533 |
| 13 | 75.8 | 0.010 | 0.527 | 75.8 | 0.010 | 0.528 | 76.6 | 0.011 | 0.538 | 77.4 | 0.011 | 0.548 | 78.2 | 0.012 | 0.548 | 79.0 | 0.012 | 0.548 | 79.8 | 0.013 | 0.545 | 80.6 | 0.013 | 0.545 |
| 14 | 75.9 | 0.010 | 0.525 | 75.9 | 0.010 | 0.525 | 76.9 | 0.011 | 0.533 | 77.8 | 0.011 | 0.541 | 78.7 | 0.011 | 0.547 | 79.7 | 0.012 | 0.543 | 80.6 | 0.012 | 0.538 | 81.5 | 0.013 | 0.538 |
| 15 | 75.9 | 0.010 | 0.522 | 76.0 | 0.010 | 0.523 | 77.0 | 0.010 | 0.528 | 77.9 | 0.011 | 0.534 | 78.9 | 0.011 | 0.538 | 79.9 | 0.012 | 0.542 | 80.9 | 0.012 | 0.545 | 81.8 | 0.013 | 0.545 |
| 16 | 75.9 | 0.010 | 0.520 | 76.0 | 0.010 | 0.520 | 76.9 | 0.010 | 0.524 | 77.9 | 0.011 | 0.527 | 78.8 | 0.011 | 0.530 | 79.8 | 0.012 | 0.532 | 80.7 | 0.012 | 0.534 | 81.7 | 0.012 | 0.535 |
| 17 | 75.9 | 0.010 | 0.520 | 75.9 | 0.010 | 0.520 | 76.8 | 0.010 | 0.524 | 77.7 | 0.011 | 0.527 | 78.5 | 0.011 | 0.528 | 79.4 | 0.011 | 0.531 | 80.3 | 0.012 | 0.533 | 81.2 | 0.012 | 0.534 |
| 18 | 75.7 | 0.010 | 0.520 | 75.8 | 0.010 | 0.520 | 76.6 | 0.010 | 0.524 | 77.3 | 0.011 | 0.527 | 78.1 | 0.011 | 0.530 | 78.9 | 0.011 | 0.532 | 79.7 | 0.012 | 0.534 | 80.4 | 0.012 | 0.534 |
| 19 | 75.6 | 0.010 | 0.525 | 75.6 | 0.010 | 0.525 | 76.3 | 0.010 | 0.534 | 76.9 | 0.011 | 0.542 | 77.5 | 0.011 | 0.548 | 78.2 | 0.011 | 0.556 | 78.8 | 0.012 | 0.563 | 79.4 | 0.012 | 0.568 |
| 20 | 75.4 | 0.010 | 0.529 | 75.5 | 0.010 | 0.530 | 75.9 | 0.010 | 0.544 | 76.4 | 0.011 | 0.557 | 76.9 | 0.011 | 0.570 | 77.3 | 0.012 | 0.582 | 77.8 | 0.012 | 0.594 | 78.2 | 0.013 | 0.608 |
| 21 | 75.3 | 0.010 | 0.533 | 75.3 | 0.010 | 0.534 | 75.5 | 0.010 | 0.552 | 75.8 | 0.011 | 0.570 | 76.1 | 0.011 | 0.587 | 76.4 | 0.012 | 0.604 | 76.6 | 0.012 | 0.621 | 76.9 | 0.013 | 0.637 |
| 22 | 75.1 | 0.010 | 0.534 | 75.1 | 0.010 | 0.535 | 75.1 | 0.010 | 0.554 | 75.2 | 0.011 | 0.573 | 75.3 | 0.011 | 0.592 | 75.4 | 0.011 | 0.611 | 75.4 | 0.012 | 0.630 | 75.5 | 0.012 | 0.648 |
| 23 | 74.9 | 0.010 | 0.537 | 74.9 | 0.010 | 0.538 | 74.7 | 0.010 | 0.580 | 74.6 | 0.011 | 0.583 | 74.4 | 0.011 | 0.605 | 74.3 | 0.011 | 0.628 | 74.2 | 0.012 | 0.651 | 74.0 | 0.012 | 0.675 |
| 24 | 74.7 | 0.010 | 0.537 | 74.7 | 0.010 | 0.538 | 74.3 | 0.010 | 0.580 | 74.0 | 0.010 | 0.583 | 73.7 | 0.011 | 0.607 | 73.3 | 0.011 | 0.630 | 73.0 | 0.011 | 0.655 | 72.7 | 0.012 | 0.679 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | | | | | | | | | | | |
| 1 | 74.2 | 0.010 | 0.534 | 74.1 | 0.010 | 0.535 | 73.3 | 0.010 | 0.555 | 72.4 | 0.010 | 0.576 | 71.6 | 0.010 | 0.598 | 70.7 | 0.010 | 0.620 | 69.8 | 0.010 | 0.644 | 69.0 | 0.010 | 0.668 | 68.1 | 0.009 | 0.691 | 67.2 | 0.010 | 0.719 | 66.4 | 0.010 | 0.747 |
| 2 | 74.0 | 0.010 | 0.535 | 73.9 | 0.010 | 0.536 | 72.9 | 0.010 | 0.556 | 71.8 | 0.010 | 0.578 | 70.8 | 0.010 | 0.600 | 69.7 | 0.010 | 0.624 | 68.8 | 0.010 | 0.649 | 67.6 | 0.010 | 0.674 | 66.5 | 0.009 | 0.699 | 65.4 | 0.010 | 0.729 | 64.4 | 0.010 | 0.758 |
| 3 | 73.8 | 0.010 | 0.535 | 73.8 | 0.010 | 0.536 | 72.5 | 0.009 | 0.557 | 71.3 | 0.009 | 0.580 | 70.1 | 0.009 | 0.603 | 68.8 | 0.009 | 0.627 | 67.6 | 0.009 | 0.653 | 66.4 | 0.009 | 0.679 | 65.1 | 0.009 | 0.707 | 63.9 | 0.009 | 0.737 | 62.7 | 0.009 | 0.767 |
| 4 | 73.7 | 0.009 | 0.537 | 73.6 | 0.009 | 0.537 | 72.3 | 0.009 | 0.560 | 70.9 | 0.009 | 0.584 | 69.6 | 0.009 | 0.608 | 68.2 | 0.009 | 0.636 | 66.9 | 0.009 | 0.663 | 65.5 | 0.009 | 0.692 | 64.2 | 0.009 | 0.723 | 62.8 | 0.009 | 0.755 | 61.4 | 0.009 | 0.789 |
| 5 | 73.6 | 0.009 | 0.536 | 73.6 | 0.009 | 0.537 | 72.1 | 0.009 | 0.562 | 70.7 | 0.009 | 0.583 | 69.3 | 0.009 | 0.608 | 67.8 | 0.009 | 0.634 | 66.4 | 0.009 | 0.662 | 65.0 | 0.009 | 0.691 | 63.5 | 0.009 | 0.721 | 62.1 | 0.009 | 0.753 | 60.6 | 0.009 | 0.788 |
| 6 | 73.6 | 0.009 | 0.537 | 73.5 | 0.009 | 0.538 | 72.1 | 0.009 | 0.562 | 70.6 | 0.009 | 0.587 | 69.2 | 0.009 | 0.613 | 67.7 | 0.009 | 0.640 | 66.3 | 0.009 | 0.669 | 64.8 | 0.009 | 0.698 | 63.3 | 0.009 | 0.731 | 61.9 | 0.009 | 0.765 | 60.4 | 0.009 | 0.801 |
| 7 | 73.6 | 0.010 | 0.538 | 73.6 | 0.010 | 0.540 | 72.2 | 0.009 | 0.565 | 70.8 | 0.009 | 0.592 | 69.4 | 0.009 | 0.620 | 68.0 | 0.009 | 0.649 | 66.5 | 0.009 | 0.681 | 65.1 | 0.009 | 0.714 | 63.7 | 0.009 | 0.748 | 62.3 | 0.009 | 0.785 | 60.9 | 0.009 | 0.824 |
| 8 | 73.8 | 0.010 | 0.537 | 73.7 | 0.010 | 0.538 | 72.5 | 0.010 | 0.561 | 71.2 | 0.010 | 0.585 | 70.0 | 0.010 | 0.611 | 68.7 | 0.010 | 0.637 | 67.5 | 0.010 | 0.665 | 66.2 | 0.010 | 0.695 | 65.0 | 0.010 | 0.726 | 63.7 | 0.010 | 0.768 | 62.4 | 0.010 | 0.792 |
| 9 | 74.0 | 0.010 | 0.533 | 74.0 | 0.010 | 0.534 | 73.0 | 0.010 | 0.552 | 71.9 | 0.010 | 0.572 | 70.9 | 0.010 | 0.592 | 69.9 | 0.010 | 0.613 | 68.9 | 0.010 | 0.635 | 67.9 | 0.010 | 0.657 | 66.8 | 0.010 | 0.681 | 65.8 | 0.010 | 0.708 | 64.8 | 0.010 | 0.731 |
| 10 | 74.3 | 0.010 | 0.529 | 74.3 | 0.010 | 0.529 | 73.5 | 0.010 | 0.543 | 72.8 | 0.010 | 0.568 | 72.1 | 0.010 | 0.572 | 71.4 | 0.010 | 0.588 | 70.6 | 0.010 | 0.603 | 69.9 | 0.010 | 0.620 | 69.2 | 0.010 | 0.635 | 68.4 | 0.010 | 0.653 | 67.7 | 0.010 | 0.671 |
| 11 | 74.6 | 0.010 | 0.524 | 74.6 | 0.010 | 0.525 | 74.2 | 0.010 | 0.524 | 73.8 | 0.010 | 0.544 | 73.4 | 0.010 | 0.553 | 73.0 | 0.010 | 0.563 | 72.6 | 0.010 | 0.573 | 72.2 | 0.010 | 0.584 | 71.7 | 0.010 | 0.594 | 71.3 | 0.010 | 0.605 | 70.9 | 0.010 | 0.615 |
| 12 | 74.9 | 0.010 | 0.522 | 74.9 | 0.010 | 0.522 | 74.8 | 0.010 | 0.528 | 74.8 | 0.010 | 0.535 | 74.7 | 0.010 | 0.542 | 74.6 | 0.010 | 0.548 | 74.5 | 0.010 | 0.555 | 74.5 | 0.010 | 0.562 | 74.4 | 0.010 | 0.568 | 74.4 | 0.010 | 0.568 | 74.2 | 0.010 | 0.582 |
| 13 | 75.2 | 0.010 | 0.519 | 75.2 | 0.010 | 0.519 | 75.4 | 0.010 | 0.522 | 75.6 | 0.010 | 0.526 | 75.9 | 0.010 | 0.529 | 76.1 | 0.010 | 0.532 | 76.3 | 0.010 | 0.535 | 76.5 | 0.010 | 0.538 | 76.7 | 0.011 | 0.541 | 76.9 | 0.011 | 0.544 | 77.1 | 0.011 | 0.547 |
| 14 | 75.4 | 0.010 | 0.517 | 75.4 | 0.010 | 0.518 | 75.9 | 0.010 | 0.519 | 76.3 | 0.010 | 0.521 | 76.8 | 0.010 | 0.522 | 77.2 | 0.010 | 0.524 | 77.7 | 0.011 | 0.525 | 78.1 | 0.011 | 0.526 | 78.6 | 0.011 | 0.527 | 79.0 | 0.011 | 0.528 | 79.5 | 0.011 | 0.528 |
| 15 | 75.6 | 0.010 | 0.517 | 75.6 | 0.010 | 0.517 | 76.2 | 0.010 | 0.517 | 76.8 | 0.010 | 0.518 | 77.4 | 0.010 | 0.518 | 78.0 | 0.011 | 0.518 | 78.6 | 0.011 | 0.518 | 79.2 | 0.011 | 0.518 | 79.8 | 0.011 | 0.518 | 80.4 | 0.011 | 0.518 | 81.0 | 0.012 | 0.517 |
| 16 | 75.6 | 0.010 | 0.516 | 75.6 | 0.010 | 0.516 | 76.3 | 0.010 | 0.517 | 76.9 | 0.010 | 0.517 | 77.6 | 0.010 | 0.517 | 78.2 | 0.011 | 0.517 | 78.9 | 0.011 | 0.518 | 79.5 | 0.011 | 0.518 | 80.2 | 0.011 | 0.515 | 80.8 | 0.012 | 0.514 | 81.5 | 0.012 | 0.513 |
| 17 | 75.6 | 0.010 | 0.515 | 75.6 | 0.010 | 0.515 | 76.3 | 0.010 | 0.515 | 76.9 | 0.010 | 0.514 | 77.5 | 0.010 | 0.513 | 78.1 | 0.011 | 0.512 | 78.8 | 0.011 | 0.511 | 79.4 | 0.011 | 0.511 | 80.0 | 0.011 | 0.509 | 80.6 | 0.011 | 0.507 | 81.3 | 0.012 | 0.506 |
| 18 | 75.5 | 0.010 | 0.517 | 75.5 | 0.010 | 0.517 | 76.1 | 0.010 | 0.518 | 76.6 | 0.010 | 0.519 | 77.2 | 0.010 | 0.519 | 77.7 | 0.011 | 0.520 | 78.3 | 0.011 | 0.520 | 78.8 | 0.011 | 0.520 | 79.4 | 0.011 | 0.521 | 79.9 | 0.011 | 0.521 | 80.5 | 0.012 | 0.521 |
| 19 | 75.4 | 0.010 | 0.519 | 75.4 | 0.010 | 0.519 | 75.8 | 0.010 | 0.523 | 76.2 | 0.010 | 0.526 | 76.7 | 0.010 | 0.529 | 77.1 | 0.011 | 0.532 | 77.5 | 0.011 | 0.535 | 77.9 | 0.011 | 0.537 | 78.3 | 0.011 | 0.540 | 78.7 | 0.011 | 0.542 | 79.1 | 0.012 | 0.544 |
| 20 | 75.2 | 0.010 | 0.525 | 75.3 | 0.010 | 0.525 | 75.5 | 0.010 | 0.524 | 75.8 | 0.010 | 0.544 | 76.0 | 0.011 | 0.552 | 76.3 | 0.011 | 0.561 | 76.5 | 0.011 | 0.570 | 76.8 | 0.011 | 0.578 | 77.0 | 0.012 | 0.586 | 77.3 | 0.012 | 0.594 | 77.5 | 0.012 | 0.602 |
| 21 | 75.0 | 0.010 | 0.528 | 75.1 | 0.010 | 0.530 | 75.1 | 0.010 | 0.544 | 75.2 | 0.010 | 0.558 | 75.2 | 0.011 | 0.573 | 75.3 | 0.011 | 0.587 | 75.3 | 0.011 | 0.601 | 75.4 | 0.012 | 0.615 | 75.4 | 0.012 | 0.629 | 75.5 | 0.012 | 0.643 | 75.5 | 0.012 | 0.657 |
| 22 | 74.8 | 0.010 | 0.533 | 74.8 | 0.010 | 0.533 | 74.7 | 0.010 | 0.551 | 74.5 | 0.010 | 0.568 | 74.3 | 0.011 | 0.587 | 74.2 | 0.011 | 0.605 | 74.0 | 0.011 | 0.624 | 73.8 | 0.011 | 0.642 | 73.7 | 0.012 | 0.661 | 73.5 | 0.012 | 0.680 | 73.3 | 0.012 | 0.699 |
| 23 | 74.8 | 0.010 | 0.533 | 74.6 | 0.010 | 0.534 | 74.2 | 0.010 | 0.553 | 73.8 | 0.010 | 0.572 | 73.4 | 0.010 | 0.592 | 73.0 | 0.011 | 0.612 | 72.5 | 0.011 | 0.632 | 72.1 | 0.011 | 0.653 | 71.7 | 0.011 | 0.674 | 71.3 | 0.011 | 0.696 | 70.9 | 0.012 | 0.718 |
| 24 | 74.4 | 0.010 | 0.534 | 74.4 | 0.010 | 0.535 | 73.7 | 0.010 | 0.555 | 73.1 | 0.010 | 0.575 | 72.4 | 0.010 | 0.596 | 71.8 | 0.010 | 0.618 | 71.2 | 0.010 | 0.640 | 70.5 | 0.011 | 0.663 | 69.9 | 0.011 | 0.687 | 69.2 | 0.011 | 0.712 | 68.6 | 0.011 | 0.737 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | | | | | | | | | | | |
| 1 | 73.7 | 0.009 | 0.531 | 73.6 | 0.009 | 0.532 | 72.3 | 0.009 | 0.549 | 70.9 | 0.009 | 0.565 | 69.6 | 0.009 | 0.583 | 68.2 | 0.009 | 0.601 | 66.8 | 0.009 | 0.620 | 65.5 | 0.009 | 0.639 | 64.1 | 0.008 | 0.659 | 62.8 | 0.008 | 0.680 | 61.4 | 0.008 | 0.702 |
| 2 | 73.5 | 0.009 | 0.535 | 73.4 | 0.009 | 0.533 | 71.9 | 0.009 | 0.552 | 70.3 | 0.009 | 0.571 | 68.7 | 0.009 | 0.591 | 67.1 | 0.009 | 0.612 | 65.6 | 0.008 | 0.633 | 64.0 | 0.008 | 0.655 | 62.4 | 0.008 | 0.678 | 60.9 | 0.008 | 0.702 | 59.3 | 0.008 | 0.727 |
| 3 | 73.3 | 0.009 | 0.536 | 73.3 | 0.009 | 0.536 | 71.5 | 0.009 | 0.558 | 69.8 | 0.009 | 0.580 | 68.0 | 0.009 | 0.604 | 66.3 | 0.009 | 0.628 | 64.5 | 0.008 | 0.654 | 62.8 | 0.008 | 0.681 | 61.0 | 0.008 | 0.709 | 59.3 | 0.008 | 0.738 | 57.6 | 0.008 | 0.769 |
| 4 | 73.2 | 0.009 | 0.536 | 73.1 | 0.009 | 0.537 | 71.2 | 0.009 | 0.559 | 69.3 | 0.009 | 0.582 | 67.4 | 0.009 | 0.606 | 65.5 | 0.008 | 0.631 | 63.6 | 0.008 | 0.657 | 61.7 | 0.008 | 0.685 | 59.8 | 0.008 | 0.713 | 57.9 | 0.008 | 0.743 | 56.1 | 0.007 | 0.774 |
| 5 | 73.1 | 0.009 | 0.538 | 73.0 | 0.009 | 0.538 | 71.0 | 0.009 | 0.562 | 69.0 | 0.009 | 0.587 | 67.0 | 0.009 | 0.613 | 65.0 | 0.008 | 0.641 | 63.0 | 0.008 | 0.670 | 60.9 | 0.008 | 0.700 | 58.9 | 0.008 | 0.731 | 56.9 | 0.008 | 0.764 | 54.9 | 0.007 | 0.799 |
| 6 | 73.0 | 0.009 | 0.538 | 72.9 | 0.009 | 0.539 | 70.8 | 0.009 | 0.563 | 68.8 | 0.009 | 0.588 | 66.7 | 0.009 | 0.615 | 64.6 | 0.008 | 0.643 | 62.5 | 0.008 | 0.672 | 60.5 | 0.008 | 0.702 | 58.4 | 0.008 | 0.734 | 56.3 | 0.007 | 0.767 | 54.2 | 0.007 | 0.802 |
| 7 | 73.0 | 0.009 | 0.538 | 72.9 | 0.009 | 0.539 | 70.8 | 0.009 | 0.564 | 68.7 | 0.009 | 0.590 | 66.6 | 0.009 | 0.618 | 64.5 | 0.008 | 0.647 | 62.4 | 0.008 | 0.677 | 60.3 | 0.008 | 0.709 | 58.2 | 0.008 | 0.742 | 56.1 | 0.007 | 0.777 | 54.0 | 0.007 | 0.813 |
| 8 | 73.1 | 0.009 | 0.536 | 73.0 | 0.009 | 0.537 | 71.0 | 0.009 | 0.559 | 69.0 | 0.009 | 0.582 | 67.0 | 0.009 | 0.606 | 65.0 | 0.008 | 0.630 | 63.0 | 0.008 | 0.656 | 61.0 | 0.008 | 0.683 | 59.0 | 0.008 | 0.711 | 56.9 | 0.007 | 0.740 | 54.9 | 0.007 | 0.769 |
| 9 | 73.3 | 0.009 | 0.531 | 73.3 | 0.009 | 0.531 | 71.5 | 0.009 | 0.547 | 69.8 | 0.009 | 0.563 | 68.0 | 0.009 | 0.579 | 66.3 | 0.008 | 0.598 | 64.6 | 0.008 | 0.613 | 62.8 | 0.008 | 0.630 | 61.1 | 0.007 | 0.648 | 59.3 | 0.007 | 0.665 | 57.6 | 0.007 | 0.682 |
| 10 | 73.7 | 0.009 | 0.525 | 73.6 | 0.009 | 0.525 | 72.3 | 0.009 | 0.536 | 70.9 | 0.009 | 0.545 | 69.6 | 0.009 | 0.554 | 68.2 | 0.008 | 0.564 | 66.9 | 0.008 | 0.573 | 65.5 | 0.008 | 0.582 | 64.1 | 0.008 | 0.592 | 62.8 | 0.007 | 0.600 | 61.4 | 0.007 | 0.609 |
| 11 | 74.1 | 0.009 | 0.521 | 74.1 | 0.009 | 0.521 | 73.2 | 0.009 | 0.527 | 72.3 | 0.009 | 0.533 | 71.4 | 0.009 | 0.538 | 70.5 | 0.009 | 0.544 | 69.6 | 0.009 | 0.549 | 68.7 | 0.009 | 0.554 | 67.7 | 0.008 | 0.560 | 66.8 | 0.008 | 0.565 | 65.9 | 0.008 | 0.570 |
| 12 | 74.6 | 0.009 | 0.517 | 74.5 | 0.009 | 0.517 | 74.1 | 0.009 | 0.518 | 73.6 | 0.009 | 0.519 | 73.2 | 0.009 | 0.520 | 72.7 | 0.009 | 0.521 | 72.3 | 0.009 | 0.522 | 71.8 | 0.009 | 0.523 | 71.4 | 0.009 | 0.524 | 70.9 | 0.008 | 0.525 | 70.4 | 0.008 | 0.525 |
| 13 | 74.9 | 0.009 | 0.512 | 74.9 | 0.009 | 0.508 | 74.9 | 0.009 | 0.508 | 74.8 | 0.009 | 0.504 | 74.7 | 0.009 | 0.500 | 74.6 | 0.009 | 0.498 | 74.6 | 0.009 | 0.492 | 74.5 | 0.009 | 0.488 | 74.4 | 0.009 | 0.484 | 74.3 | 0.009 | 0.480 | 74.3 | 0.009 | 0.476 |
| 14 | 75.2 | 0.009 | 0.510 | 75.2 | 0.009 | 0.510 | 75.4 | 0.009 | 0.504 | 75.5 | 0.009 | 0.498 | 75.7 | 0.009 | 0.492 | 75.9 | 0.009 | 0.486 | 76.1 | 0.009 | 0.481 | 76.2 | 0.009 | 0.475 | 76.4 | 0.009 | 0.470 | 76.6 | 0.009 | 0.464 | 76.8 | 0.009 | 0.459 |
| 15 | 75.3 | 0.009 | 0.507 | 75.3 | 0.009 | 0.507 | 75.5 | 0.009 | 0.488 | 75.8 | 0.009 | 0.488 | 76.1 | 0.009 | 0.481 | 76.3 | 0.009 | 0.473 | 76.6 | 0.009 | 0.464 | 76.9 | 0.009 | 0.456 | 77.1 | 0.009 | 0.448 | 77.4 | 0.009 | 0.440 | 77.6 | 0.009 | 0.432 |
| 16 | 75.2 | 0.009 | 0.508 | 75.2 | 0.009 | 0.507 | 75.5 | 0.009 | 0.489 | 75.7 | 0.009 | 0.491 | 76.0 | 0.009 | 0.483 | 76.2 | 0.009 | 0.475 | 76.5 | 0.009 | 0.467 | 76.7 | 0.009 | 0.460 | 77.0 | 0.009 | 0.452 | 77.2 | 0.009 | 0.445 | 77.5 | 0.009 | 0.437 |
| 17 | 75.2 | 0.009 | 0.507 | 75.2 | 0.009 | 0.507 | 75.4 | 0.009 | 0.488 | 75.5 | 0.009 | 0.489 | 75.7 | 0.009 | 0.480 | 75.9 | 0.009 | 0.471 | 76.1 | 0.009 | 0.463 | 76.2 | 0.009 | 0.454 | 76.4 | 0.009 | 0.446 | 76.6 | 0.009 | 0.437 | 76.8 | 0.009 | 0.429 |
| 18 | 75.1 | 0.009 | 0.508 | 75.1 | 0.009 | 0.509 | 75.1 | 0.009 | 0.502 | 75.2 | 0.009 | 0.495 | 75.3 | 0.009 | 0.488 | 75.3 | 0.009 | 0.482 | 75.4 | 0.009 | 0.475 | 75.5 | 0.009 | 0.468 | 75.5 | 0.009 | 0.461 | 75.6 | 0.009 | 0.455 | 75.6 | 0.009 | 0.448 |
| 19 | 74.9 | 0.010 | 0.516 | 74.9 | 0.010 | 0.516 | 74.8 | 0.009 | 0.516 | 74.8 | 0.009 | 0.516 | 74.7 | 0.009 | 0.516 | 74.6 | 0.009 | 0.516 | 74.5 | 0.009 | 0.516 | 74.5 | 0.009 | 0.516 | 74.4 | 0.009 | 0.516 | 74.3 | 0.009 | 0.516 | 74.2 | 0.009 | 0.516 |
| 20 | 74.8 | 0.010 | 0.521 | 74.7 | 0.010 | 0.522 | 74.5 | 0.010 | 0.528 | 74.2 | 0.010 | 0.534 | 74.0 | 0.010 | 0.540 | 73.7 | 0.010 | 0.547 | 73.5 | 0.010 | 0.553 | 73.2 | 0.010 | 0.560 | 73.0 | 0.010 | 0.568 | 72.7 | 0.010 | 0.573 | 72.4 | 0.010 | 0.580 |
| 21 | 74.6 | 0.010 | 0.525 | 74.5 | 0.010 | 0.526 | 74.1 | 0.010 | 0.538 | 73.6 | 0.010 | 0.545 | 73.2 | 0.010 | 0.555 | 72.7 | 0.010 | 0.566 | 72.3 | 0.010 | 0.576 | 71.8 | 0.010 | 0.587 | 71.3 | 0.010 | 0.598 | 70.9 | 0.010 | 0.609 | 70.4 | 0.010 | 0.621 |
| 22 | 74.3 | 0.010 | 0.527 | 74.3 | 0.010 | 0.528 | 73.6 | 0.010 | 0.540 | 73.0 | 0.010 | 0.553 | 72.3 | 0.010 | 0.566 | 71.6 | 0.010 | 0.579 | 70.9 | 0.010 | 0.593 | 70.3 | 0.010 | 0.607 | 69.6 | 0.010 | 0.621 | 68.9 | 0.010 | 0.636 | 68.2 | 0.010 | 0.652 |
| 23 | 74.1 | 0.009 | 0.529 | 74.1 | 0.009 | 0.530 | 73.2 | 0.009 | 0.544 | 72.3 | 0.009 | 0.559 | 71.4 | 0.009 | 0.574 | 70.5 | 0.009 | 0.589 | 69.5 | 0.009 | 0.606 | 68.6 | 0.009 | 0.622 | 67.7 | 0.009 | 0.640 | 66.8 | 0.009 | 0.657 | 65.9 | 0.009 | 0.676 |
| 24 | 73.9 | 0.009 | 0.530 | 73.9 | 0.009 | 0.531 | 72.7 | 0.009 | 0.547 | 71.6 | 0.009 | 0.564 | 70.4 | 0.009 | 0.581 | 69.3 | 0.009 | 0.598 | 68.2 | 0.009 | 0.617 | 67.0 | 0.009 | 0.636 | 65.9 | 0.009 | 0.655 | 64.7 | 0.009 | 0.676 | 63.6 | 0.009 | 0.692 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | Trmk | RHmk | | | | | | | | | | | |
| 1 | 72.4 | 0.009 | 0.539 | 72.3 | 0.009 | 0.540 | 89.6 | 0.009 | 0.565 | 68.9 | 0.008 | 0.590 | 64.2 | 0.008 | 0.617 | 61.5 | 0.007 | 0.643 | 58.8 | 0.007 | 0.670 | 56.1 | 0.007 | 0.697 | 53.4 | 0.006 | 0.724 | 50.7 | 0.006 | 0.751 | 48.0 | 0.005 | 0.778 |
| 2 | 72.2 | 0.009 | 0.540 | 72.1 | 0.009 | 0.541 | 89.2 | 0.009 | 0.567 | 68.3 | 0.008 | 0.594 | 63.4 | 0.008 | 0.622 | 60.5 | 0.007 | 0.650 | 57.5 | 0.007 | 0.678 | 54.6 | 0.006 | 0.705 | 51.7 | 0.006 | 0.732 | 48.9 | 0.006 | 0.758 | 45.9 | 0.005 | 0.782 |
| 3 | 72.0 | 0.009 | 0.542 | 71.9 | 0.009 | 0.543 | 88.8 | 0.009 | 0.571 | 66.7 | 0.008 | 0.601 | 62.6 | 0.008 | 0.630 | 59.5 | 0.007 | 0.661 | 56.4 | 0.007 | 0.691 | 53.4 | 0.006 | 0.721 | 50.3 | 0.006 | 0.750 | 47.2 | 0.005 | 0.778 | 44.1 | 0.005 | 0.803 |
| 4 | 71.9 | 0.009 | 0.543 | 71.8 | 0.009 | 0.544 | 88.5 | 0.009 | 0.574 | 66.3 | 0.008 | 0.605 | 62.0 | 0.008 | 0.636 | 58.8 | 0.007 | 0.667 | 55.5 | 0.007 | 0.698 | 52.3 | 0.006 | 0.730 | 49.0 | 0.006 | 0.760 | 45.8 | 0.005 | 0.787 | 42.6 | 0.005 | 0.811 |
| 5 | 71.8 | 0.009 | 0.544 | 71.6 | 0.009 | 0.545 | 88.3 | 0.008 | 0.575 | 64.9 | 0.008 | 0.606 | 61.5 | 0.007 | 0.638 | 58.2 | 0.007 | 0.670 | 54.8 | 0.006 | 0.701 | 51.5 | 0.006 | 0.731 | 48.1 | 0.005 | 0.760 | 44.7 | 0.005 | 0.785 | 41.4 | 0.004 | 0.806 |
| 6 | 71.7 | 0.009 | 0.545 | 71.6 | 0.009 | 0.546 | 88.1 | 0.008 | 0.578 | 64.7 | 0.008 | 0.610 | 61.3 | 0.007 | 0.644 | 57.8 | 0.007 | 0.677 | 54.4 | 0.006 | 0.711 | 50.8 | 0.006 | 0.743 | 47.4 | 0.005 | 0.774 | 44.1 | 0.005 | 0.802 | 40.6 | 0.004 | 0.826 |
| 7 | 71.7 | 0.009 | 0.545 | 71.5 | 0.009 | 0.546 | 88.1 | 0.008 | 0.578 | 64.6 | 0.008 | 0.611 | 61.2 | 0.007 | 0.644 | 57.7 | 0.007 | 0.678 | 54.3 | 0.006 | 0.712 | 50.8 | 0.006 | 0.744 | 47.4 | 0.005 | 0.775 | 43.9 | 0.005 | 0.803 | 40.4 | 0.004 | 0.826 |
| 8 | 71.7 | 0.009 | 0.545 | 71.6 | 0.009 | 0.546 | 88.2 | 0.008 | 0.577 | 64.8 | 0.008 | 0.609 | 61.4 | 0.007 | 0.642 | 58.0 | 0.007 | 0.675 | 54.6 | 0.006 | 0.708 | 51.2 | 0.006 | 0.740 | 47.8 | 0.005 | 0.770 | 44.4 | 0.005 | 0.798 | 41.0 | 0.004 | 0.821 |
| 9 | 71.9 | 0.009 | 0.541 | 71.8 | 0.009 | 0.542 | 88.6 | 0.008 | 0.588 | 65.4 | 0.008 | 0.595 | 62.2 | 0.007 | 0.622 | 59.0 | 0.007 | 0.649 | 55.8 | 0.006 | 0.675 | 52.6 | 0.006 | 0.698 | 49.4 | 0.005 | 0.720 | 46.2 | 0.005 | 0.738 | 43.0 | 0.004 | 0.751 |
| 10 | 72.2 | 0.009 | 0.536 | 72.1 | 0.009 | 0.537 | 89.2 | 0.008 | 0.558 | 66.3 | 0.008 | 0.578 | 63.4 | 0.007 | 0.589 | 60.5 | 0.007 | 0.619 | 57.6 | 0.006 | 0.636 | 54.7 | 0.006 | 0.652 | 51.8 | 0.005 | 0.665 | 48.9 | 0.005 | 0.674 | 46.0 | 0.004 | 0.678 |
| 11 | 72.6 | 0.009 | 0.531 | 72.5 | 0.009 | 0.531 | 89.9 | 0.008 | 0.546 | 67.4 | 0.008 | 0.561 | 64.8 | 0.007 | 0.574 | 62.3 | 0.007 | 0.586 | 59.8 | 0.006 | 0.596 | 57.2 | 0.006 | 0.604 | 54.7 | 0.006 | 0.609 | 52.1 | 0.005 | 0.611 | 49.6 | 0.005 | 0.608 |
| 12 | 72.9 | 0.009 | 0.525 | 72.8 | 0.009 | 0.525 | 70.7 | 0.009 | 0.534 | 68.5 | 0.008 | 0.542 | 66.4 | 0.008 | 0.548 | 64.2 | 0.007 | 0.553 | 62.1 | 0.007 | 0.556 | 59.9 | 0.006 | 0.557 | 57.7 | 0.006 | 0.554 | 55.6 | 0.005 | 0.549 | 53.4 | 0.005 | 0.540 |
| 13 | 73.3 | 0.009 | 0.520 | 73.2 | 0.009 | 0.521 | 71.4 | 0.009 | 0.525 | 69.6 | 0.008 | 0.527 | 67.8 | 0.008 | 0.528 | 66.0 | 0.007 | 0.529 | 64.2 | 0.007 | 0.528 | 62.4 | 0.006 | 0.524 | 60.6 | 0.006 | 0.518 | 58.8 | 0.005 | 0.510 | 57.0 | 0.005 | 0.489 |
| 14 | 73.6 | 0.009 | 0.518 | 73.5 | 0.009 | 0.518 | 72.0 | 0.009 | 0.520 | 70.5 | 0.008 | 0.521 | 69.0 | 0.008 | 0.521 | 67.5 | 0.007 | 0.519 | 65.0 | 0.007 | 0.517 | 64.5 | 0.007 | 0.513 | 63.0 | 0.006 | 0.507 | 61.4 | 0.006 | 0.500 | 59.9 | 0.005 | 0.490 |
| 15 | 73.7 | 0.009 | 0.516 | 73.7 | 0.009 | 0.516 | 72.4 | 0.009 | 0.516 | 71.1 | 0.008 | 0.515 | 69.7 | 0.008 | 0.513 | 68.4 | 0.008 | 0.509 | 67.1 | 0.007 | 0.505 | 65.8 | 0.007 | 0.500 | 64.5 | 0.006 | 0.493 | 63.2 | 0.006 | 0.484 | 61.8 | 0.006 | 0.474 |
| 16 | 73.8 | 0.009 | 0.515 | 73.7 | 0.009 | 0.515 | 72.5 | 0.009 | 0.513 | 71.2 | 0.008 | 0.510 | 70.0 | 0.008 | 0.506 | 68.7 | 0.007 | 0.501 | 67.5 | 0.007 | 0.495 | 66.2 | 0.007 | 0.488 | 65.0 | 0.006 | 0.479 | 63.7 | 0.006 | 0.469 | 62.4 | 0.005 | 0.457 |
| 17 | 73.8 | 0.009 | 0.516 | 73.7 | 0.009 | 0.516 | 72.4 | 0.009 | 0.515 | 71.2 | 0.008 | 0.514 | 69.9 | 0.008 | 0.512 | 68.8 | 0.008 | 0.508 | 67.3 | 0.007 | 0.504 | 66.1 | 0.007 | 0.498 | 64.8 | 0.006 | 0.492 | 63.5 | 0.006 | 0.483 | 62.2 | 0.006 | 0.474 |
| 18 | 73.7 | 0.009 | 0.517 | 73.7 | 0.009 | 0.517 | 72.3 | 0.009 | 0.518 | 71.0 | 0.008 | 0.518 | 69.6 | 0.008 | 0.518 | 68.3 | 0.008 | 0.518 | 66.9 | 0.007 | 0.513 | 66.6 | 0.007 | 0.509 | 64.2 | 0.006 | 0.504 | 62.9 | 0.006 | 0.498 | 61.5 | 0.006 | 0.490 |
| 19 | 73.6 | 0.009 | 0.523 | 73.5 | 0.009 | 0.523 | 72.1 | 0.009 | 0.531 | 70.6 | 0.008 | 0.538 | 69.2 | 0.008 | 0.545 | 67.7 | 0.008 | 0.551 | 66.3 | 0.008 | 0.557 | 64.8 | 0.007 | 0.563 | 63.3 | 0.007 | 0.567 | 61.9 | 0.007 | 0.571 | 60.4 | 0.006 | 0.574 |
| 20 | 73.4 | 0.009 | 0.528 | 73.4 | 0.009 | 0.528 | 71.8 | 0.009 | 0.528 | 70.1 | 0.008 | 0.541 | 68.5 | 0.008 | 0.547 | 66.9 | 0.008 | 0.550 | 65.3 | 0.008 | 0.553 | 63.7 | 0.008 | 0.555 | 62.0 | 0.007 | 0.558 | 60.4 | 0.007 | 0.561 | 58.9 | 0.007 | 0.564 |
| 21 | 73.3 | 0.009 | 0.530 | 73.2 | 0.009 | 0.530 | 71.4 | 0.009 | 0.541 | 69.6 | 0.008 | 0.549 | 67.8 | 0.008 | 0.556 | 66.0 | 0.008 | 0.560 | 64.2 | 0.008 | 0.560 | 62.9 | 0.008 | 0.562 | 61.6 | 0.007 | 0.565 | 59.9 | 0.007 | 0.567 | 57.1 | 0.007 | 0.569 |
| 22 | 73.1 | 0.009 | 0.532 | 73.0 | 0.009 | 0.532 | 71.0 | 0.009 | 0.549 | 69.0 | 0.008 | 0.549 | 68.0 | 0.008 | 0.549 | 66.4 | 0.008 | 0.549 | 64.9 | 0.008 | 0.549 | 63.9 | 0.008 | 0.549 | 62.9 | 0.008 | 0.549 | 61.9 | 0.008 | 0.549 | 60.9 | 0.007 | 0.549 |
| 23 | 72.9 | 0.009 | 0.534 | 72.8 | 0.009 | 0.534 | 70.5 | 0.009 | 0.554 | 68.3 | 0.008 | 0.575 | 66.1 | 0.008 | 0.584 | 64.9 | 0.008 | 0.615 | 63.8 | 0.008 | 0.615 | 62.9 | 0.008 | 0.615 | 61.8 | 0.007 | 0.615 | 60.7 | 0.007 | 0.615 | 59.4 | 0.007 | 0.615 |
| 24 | 72.6 | 0.009 | 0.536 | 72.5 | 0.009 | 0.537 | 70.1 | 0.009 | 0.556 | 67.6 | 0.008 | 0.580 | 65.1 | 0.008 | 0.603 | 62.7 | 0.008 | 0.626 | 60.2 | 0.007 | 0.648 | 57.8 | 0.007 | 0.671 | 55.3 | 0.006 | 0.693 | 52.8 | 0.006 | 0.715 | 50.4 | 0.006 | 0.736 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|
| | Trnk | RHnk | Trnk | RHnk | Trnk | RHnk | Trnk | RHnk | Trnk | RHnk | Trnk | RHnk | Trnk | RHnk | Trnk | RHnk | Trnk | RHnk | Trnk | RHnk | Trnk | RHnk | | |
| 1 | 71.8 | 0.009 | 0.541 | 71.7 | 0.009 | 0.542 | 89.4 | 0.009 | 0.569 | 65.0 | 0.008 | 0.596 | 61.7 | 0.007 | 0.623 | 58.4 | 0.007 | 0.649 | 55.1 | 0.006 | 0.674 | 51.8 | 0.006 | 0.698 |
| 2 | 71.8 | 0.009 | 0.543 | 71.5 | 0.009 | 0.544 | 88.0 | 0.008 | 0.578 | 64.4 | 0.008 | 0.604 | 60.9 | 0.007 | 0.633 | 57.4 | 0.007 | 0.662 | 53.9 | 0.006 | 0.689 | 50.4 | 0.006 | 0.714 |
| 3 | 71.4 | 0.009 | 0.546 | 71.3 | 0.009 | 0.546 | 87.6 | 0.008 | 0.578 | 63.9 | 0.008 | 0.610 | 60.2 | 0.007 | 0.642 | 56.4 | 0.006 | 0.673 | 52.7 | 0.006 | 0.703 | 49.0 | 0.006 | 0.729 |
| 4 | 71.3 | 0.009 | 0.547 | 71.1 | 0.009 | 0.548 | 87.3 | 0.008 | 0.581 | 63.4 | 0.008 | 0.615 | 59.5 | 0.007 | 0.648 | 55.7 | 0.006 | 0.682 | 51.8 | 0.006 | 0.713 | 48.0 | 0.006 | 0.741 |
| 5 | 71.2 | 0.009 | 0.548 | 71.0 | 0.009 | 0.549 | 87.1 | 0.008 | 0.583 | 63.1 | 0.008 | 0.618 | 59.1 | 0.007 | 0.652 | 55.1 | 0.006 | 0.685 | 51.2 | 0.006 | 0.717 | 47.2 | 0.006 | 0.744 |
| 6 | 71.1 | 0.009 | 0.548 | 71.0 | 0.009 | 0.550 | 86.9 | 0.008 | 0.585 | 62.9 | 0.008 | 0.621 | 58.8 | 0.007 | 0.657 | 54.8 | 0.006 | 0.693 | 50.7 | 0.006 | 0.728 | 46.7 | 0.006 | 0.755 |
| 7 | 71.1 | 0.009 | 0.548 | 70.9 | 0.009 | 0.549 | 86.9 | 0.008 | 0.584 | 62.8 | 0.008 | 0.619 | 58.7 | 0.007 | 0.653 | 54.7 | 0.006 | 0.688 | 50.6 | 0.006 | 0.716 | 46.6 | 0.006 | 0.742 |
| 8 | 71.1 | 0.009 | 0.548 | 71.0 | 0.009 | 0.550 | 87.0 | 0.008 | 0.585 | 63.0 | 0.008 | 0.620 | 59.0 | 0.007 | 0.656 | 55.0 | 0.006 | 0.691 | 51.0 | 0.006 | 0.723 | 47.0 | 0.006 | 0.752 |
| 9 | 71.3 | 0.009 | 0.546 | 71.2 | 0.009 | 0.547 | 87.4 | 0.008 | 0.579 | 63.6 | 0.008 | 0.612 | 59.8 | 0.007 | 0.645 | 55.9 | 0.006 | 0.678 | 52.1 | 0.006 | 0.705 | 48.3 | 0.006 | 0.731 |
| 10 | 71.6 | 0.009 | 0.542 | 71.5 | 0.009 | 0.543 | 88.0 | 0.008 | 0.570 | 64.5 | 0.008 | 0.596 | 60.9 | 0.007 | 0.622 | 57.4 | 0.006 | 0.647 | 53.9 | 0.006 | 0.689 | 50.4 | 0.006 | 0.697 |
| 11 | 72.0 | 0.009 | 0.536 | 71.8 | 0.009 | 0.537 | 88.7 | 0.008 | 0.559 | 65.5 | 0.008 | 0.579 | 62.4 | 0.007 | 0.598 | 59.2 | 0.007 | 0.616 | 56.0 | 0.006 | 0.630 | 52.9 | 0.006 | 0.641 |
| 12 | 72.3 | 0.009 | 0.532 | 72.2 | 0.009 | 0.532 | 89.4 | 0.008 | 0.549 | 66.6 | 0.008 | 0.563 | 63.8 | 0.007 | 0.576 | 61.1 | 0.007 | 0.587 | 58.3 | 0.006 | 0.598 | 55.5 | 0.006 | 0.601 |
| 13 | 72.7 | 0.009 | 0.528 | 72.6 | 0.009 | 0.528 | 90.1 | 0.008 | 0.540 | 67.7 | 0.008 | 0.550 | 65.2 | 0.007 | 0.559 | 62.8 | 0.007 | 0.568 | 60.4 | 0.006 | 0.571 | 57.9 | 0.006 | 0.573 |
| 14 | 72.9 | 0.009 | 0.524 | 72.9 | 0.009 | 0.524 | 90.7 | 0.008 | 0.532 | 68.6 | 0.008 | 0.538 | 66.4 | 0.007 | 0.543 | 64.3 | 0.007 | 0.546 | 62.1 | 0.006 | 0.547 | 60.0 | 0.006 | 0.545 |
| 15 | 73.1 | 0.009 | 0.522 | 73.0 | 0.009 | 0.522 | 91.1 | 0.008 | 0.527 | 69.1 | 0.008 | 0.531 | 67.2 | 0.008 | 0.534 | 65.2 | 0.007 | 0.535 | 63.3 | 0.007 | 0.534 | 61.3 | 0.006 | 0.531 |
| 16 | 73.2 | 0.009 | 0.521 | 73.1 | 0.009 | 0.521 | 91.2 | 0.008 | 0.525 | 69.3 | 0.008 | 0.529 | 67.4 | 0.008 | 0.530 | 65.5 | 0.007 | 0.530 | 63.6 | 0.007 | 0.529 | 61.7 | 0.006 | 0.525 |
| 17 | 73.2 | 0.009 | 0.522 | 73.1 | 0.009 | 0.523 | 91.2 | 0.008 | 0.523 | 69.2 | 0.008 | 0.533 | 67.3 | 0.008 | 0.537 | 65.4 | 0.007 | 0.539 | 63.5 | 0.007 | 0.540 | 61.6 | 0.006 | 0.538 |
| 18 | 73.1 | 0.009 | 0.525 | 73.0 | 0.009 | 0.526 | 91.0 | 0.008 | 0.536 | 69.0 | 0.008 | 0.544 | 68.7 | 0.008 | 0.544 | 65.1 | 0.007 | 0.539 | 63.1 | 0.007 | 0.545 | 61.1 | 0.006 | 0.546 |
| 19 | 73.0 | 0.009 | 0.529 | 72.9 | 0.009 | 0.530 | 90.8 | 0.008 | 0.544 | 68.7 | 0.008 | 0.558 | 68.6 | 0.008 | 0.571 | 64.5 | 0.008 | 0.584 | 62.4 | 0.007 | 0.598 | 60.3 | 0.007 | 0.608 |
| 20 | 72.8 | 0.009 | 0.532 | 72.7 | 0.009 | 0.533 | 90.5 | 0.008 | 0.550 | 68.2 | 0.008 | 0.567 | 68.0 | 0.008 | 0.585 | 63.7 | 0.008 | 0.602 | 61.5 | 0.007 | 0.618 | 59.2 | 0.007 | 0.634 |
| 21 | 72.7 | 0.009 | 0.535 | 72.6 | 0.009 | 0.536 | 90.1 | 0.008 | 0.555 | 67.7 | 0.008 | 0.575 | 65.2 | 0.008 | 0.595 | 62.8 | 0.008 | 0.616 | 60.3 | 0.007 | 0.635 | 57.9 | 0.007 | 0.655 |
| 22 | 72.5 | 0.009 | 0.535 | 72.4 | 0.009 | 0.536 | 89.7 | 0.008 | 0.556 | 67.1 | 0.008 | 0.575 | 64.4 | 0.008 | 0.595 | 61.8 | 0.007 | 0.614 | 59.1 | 0.007 | 0.633 | 56.5 | 0.006 | 0.650 |
| 23 | 72.2 | 0.009 | 0.537 | 72.1 | 0.009 | 0.538 | 89.3 | 0.008 | 0.560 | 66.4 | 0.008 | 0.583 | 63.5 | 0.008 | 0.605 | 60.7 | 0.007 | 0.626 | 57.8 | 0.007 | 0.647 | 54.9 | 0.006 | 0.668 |
| 24 | 72.0 | 0.009 | 0.539 | 71.9 | 0.009 | 0.540 | 88.8 | 0.008 | 0.564 | 65.7 | 0.008 | 0.588 | 62.6 | 0.007 | 0.612 | 59.5 | 0.007 | 0.635 | 56.4 | 0.006 | 0.657 | 53.3 | 0.006 | 0.677 |

| Hour | Minimum OA | | 10% OA | | 20% OA | | 30% OA | | 40% OA | | 50% OA | | 60% OA | | 70% OA | | 80% OA | | 90% OA | | 100% OA | | | | | | | | | | | | |
|------|------------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|--------|------|--------|-------|--------|-------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | Tmx | RHmx | | | | | | | | | | | |
| 1 | 70.8 | 0.009 | 0.562 | 70.7 | 0.009 | 0.563 | 69.3 | 0.009 | 0.562 | 67.0 | 0.007 | 0.531 | 57.7 | 0.007 | 0.671 | 53.4 | 0.006 | 0.710 | 49.0 | 0.005 | 0.746 | 44.7 | 0.005 | 0.772 | 40.4 | 0.004 | 0.800 | 36.0 | 0.004 | 0.811 | 31.7 | 0.003 | 0.805 |
| 2 | 70.7 | 0.009 | 0.552 | 70.6 | 0.009 | 0.553 | 69.1 | 0.008 | 0.592 | 61.7 | 0.007 | 0.632 | 52.8 | 0.007 | 0.671 | 52.8 | 0.006 | 0.708 | 48.3 | 0.005 | 0.742 | 43.9 | 0.005 | 0.769 | 39.4 | 0.004 | 0.785 | 35.0 | 0.003 | 0.787 | 30.5 | 0.003 | 0.771 |
| 3 | 70.6 | 0.009 | 0.553 | 70.4 | 0.009 | 0.555 | 65.9 | 0.008 | 0.596 | 61.3 | 0.007 | 0.636 | 56.8 | 0.007 | 0.677 | 52.2 | 0.006 | 0.716 | 47.7 | 0.005 | 0.752 | 43.1 | 0.005 | 0.780 | 38.5 | 0.004 | 0.798 | 34.0 | 0.003 | 0.798 | 29.4 | 0.003 | 0.785 |
| 4 | 70.5 | 0.009 | 0.554 | 70.4 | 0.009 | 0.556 | 65.7 | 0.008 | 0.597 | 61.1 | 0.007 | 0.640 | 56.4 | 0.007 | 0.682 | 51.8 | 0.006 | 0.723 | 47.1 | 0.005 | 0.759 | 42.5 | 0.004 | 0.788 | 37.8 | 0.004 | 0.805 | 33.2 | 0.003 | 0.804 | 28.5 | 0.003 | 0.791 |
| 5 | 70.5 | 0.009 | 0.555 | 70.3 | 0.009 | 0.556 | 65.6 | 0.008 | 0.598 | 60.9 | 0.007 | 0.641 | 56.2 | 0.007 | 0.684 | 51.5 | 0.006 | 0.725 | 46.7 | 0.005 | 0.761 | 42.0 | 0.004 | 0.790 | 37.3 | 0.004 | 0.806 | 32.6 | 0.003 | 0.802 | 27.9 | 0.002 | 0.788 |
| 6 | 70.4 | 0.009 | 0.555 | 70.2 | 0.009 | 0.557 | 65.5 | 0.008 | 0.600 | 60.7 | 0.007 | 0.643 | 56.0 | 0.007 | 0.687 | 51.2 | 0.006 | 0.729 | 46.5 | 0.005 | 0.766 | 41.7 | 0.004 | 0.796 | 37.0 | 0.004 | 0.812 | 32.2 | 0.003 | 0.809 | 27.5 | 0.002 | 0.795 |
| 7 | 70.4 | 0.009 | 0.555 | 70.2 | 0.009 | 0.557 | 65.5 | 0.008 | 0.600 | 60.7 | 0.007 | 0.644 | 55.9 | 0.007 | 0.688 | 51.2 | 0.006 | 0.730 | 46.4 | 0.005 | 0.767 | 41.6 | 0.004 | 0.797 | 36.8 | 0.004 | 0.813 | 32.1 | 0.003 | 0.809 | 27.3 | 0.002 | 0.793 |
| 8 | 70.4 | 0.009 | 0.556 | 70.3 | 0.009 | 0.557 | 65.5 | 0.008 | 0.600 | 60.8 | 0.007 | 0.645 | 56.1 | 0.007 | 0.690 | 51.3 | 0.006 | 0.733 | 46.6 | 0.005 | 0.772 | 41.9 | 0.004 | 0.804 | 37.1 | 0.004 | 0.825 | 32.4 | 0.003 | 0.826 | 27.7 | 0.003 | 0.819 |
| 9 | 70.6 | 0.009 | 0.555 | 70.4 | 0.009 | 0.556 | 65.8 | 0.008 | 0.598 | 61.1 | 0.007 | 0.642 | 56.5 | 0.007 | 0.685 | 51.9 | 0.006 | 0.728 | 47.3 | 0.005 | 0.767 | 42.6 | 0.005 | 0.800 | 38.0 | 0.004 | 0.822 | 33.4 | 0.003 | 0.828 | 28.8 | 0.003 | 0.824 |
| 10 | 70.7 | 0.009 | 0.552 | 70.6 | 0.009 | 0.554 | 66.1 | 0.008 | 0.593 | 61.7 | 0.007 | 0.624 | 57.2 | 0.007 | 0.674 | 52.8 | 0.006 | 0.713 | 48.3 | 0.005 | 0.748 | 43.9 | 0.005 | 0.778 | 39.4 | 0.004 | 0.798 | 35.0 | 0.003 | 0.803 | 30.5 | 0.003 | 0.793 |
| 11 | 70.9 | 0.009 | 0.548 | 70.8 | 0.009 | 0.550 | 66.5 | 0.008 | 0.588 | 62.3 | 0.007 | 0.622 | 58.1 | 0.007 | 0.657 | 53.8 | 0.006 | 0.680 | 49.6 | 0.005 | 0.720 | 45.4 | 0.005 | 0.744 | 41.1 | 0.004 | 0.768 | 36.8 | 0.003 | 0.769 | 32.7 | 0.003 | 0.740 |
| 12 | 71.1 | 0.009 | 0.546 | 71.0 | 0.009 | 0.548 | 67.0 | 0.008 | 0.580 | 63.0 | 0.007 | 0.612 | 59.0 | 0.007 | 0.644 | 55.0 | 0.006 | 0.673 | 50.9 | 0.005 | 0.699 | 46.9 | 0.005 | 0.720 | 42.9 | 0.004 | 0.732 | 38.9 | 0.004 | 0.733 | 34.9 | 0.003 | 0.717 |
| 13 | 71.3 | 0.009 | 0.544 | 71.2 | 0.009 | 0.545 | 67.4 | 0.008 | 0.575 | 63.6 | 0.008 | 0.605 | 59.8 | 0.007 | 0.634 | 56.0 | 0.006 | 0.661 | 52.2 | 0.005 | 0.685 | 48.5 | 0.005 | 0.703 | 44.5 | 0.004 | 0.715 | 40.7 | 0.004 | 0.717 | 36.9 | 0.003 | 0.706 |
| 14 | 71.5 | 0.009 | 0.542 | 71.4 | 0.009 | 0.543 | 67.7 | 0.008 | 0.571 | 64.1 | 0.008 | 0.599 | 60.5 | 0.007 | 0.625 | 56.8 | 0.006 | 0.650 | 53.2 | 0.005 | 0.672 | 49.5 | 0.005 | 0.699 | 45.9 | 0.005 | 0.700 | 42.3 | 0.004 | 0.703 | 38.6 | 0.003 | 0.694 |
| 15 | 71.6 | 0.009 | 0.541 | 71.5 | 0.009 | 0.542 | 68.0 | 0.008 | 0.569 | 64.4 | 0.008 | 0.585 | 60.9 | 0.007 | 0.620 | 57.4 | 0.006 | 0.643 | 53.9 | 0.005 | 0.663 | 50.3 | 0.005 | 0.680 | 46.8 | 0.005 | 0.690 | 43.3 | 0.004 | 0.693 | 39.8 | 0.004 | 0.685 |
| 16 | 71.8 | 0.009 | 0.541 | 71.5 | 0.009 | 0.542 | 68.0 | 0.008 | 0.568 | 64.5 | 0.008 | 0.593 | 61.1 | 0.007 | 0.617 | 57.6 | 0.006 | 0.640 | 54.1 | 0.005 | 0.660 | 50.6 | 0.005 | 0.678 | 47.1 | 0.005 | 0.686 | 43.8 | 0.004 | 0.689 | 40.1 | 0.004 | 0.681 |
| 17 | 71.8 | 0.009 | 0.541 | 71.5 | 0.009 | 0.542 | 68.0 | 0.008 | 0.568 | 64.5 | 0.008 | 0.595 | 61.0 | 0.007 | 0.621 | 57.5 | 0.006 | 0.645 | 54.0 | 0.005 | 0.666 | 50.5 | 0.005 | 0.684 | 46.9 | 0.005 | 0.696 | 43.4 | 0.004 | 0.701 | 39.9 | 0.004 | 0.695 |
| 18 | 71.8 | 0.009 | 0.542 | 71.5 | 0.009 | 0.544 | 67.9 | 0.008 | 0.572 | 64.4 | 0.008 | 0.600 | 60.8 | 0.007 | 0.628 | 57.3 | 0.006 | 0.654 | 53.7 | 0.005 | 0.678 | 50.2 | 0.005 | 0.699 | 46.6 | 0.005 | 0.715 | 43.1 | 0.004 | 0.724 | 39.5 | 0.004 | 0.723 |
| 19 | 71.5 | 0.009 | 0.544 | 71.4 | 0.009 | 0.545 | 67.8 | 0.008 | 0.575 | 64.2 | 0.008 | 0.605 | 60.6 | 0.007 | 0.635 | 56.9 | 0.007 | 0.664 | 53.3 | 0.006 | 0.692 | 49.7 | 0.005 | 0.716 | 46.1 | 0.005 | 0.736 | 42.5 | 0.004 | 0.748 | 38.9 | 0.004 | 0.753 |
| 20 | 71.4 | 0.009 | 0.545 | 71.3 | 0.009 | 0.546 | 67.6 | 0.008 | 0.577 | 63.9 | 0.008 | 0.608 | 60.2 | 0.007 | 0.639 | 56.5 | 0.006 | 0.669 | 52.8 | 0.005 | 0.698 | 49.3 | 0.005 | 0.721 | 45.4 | 0.005 | 0.741 | 41.7 | 0.004 | 0.753 | 38.0 | 0.004 | 0.755 |
| 21 | 71.3 | 0.009 | 0.546 | 71.2 | 0.009 | 0.547 | 67.4 | 0.008 | 0.580 | 63.6 | 0.008 | 0.613 | 59.7 | 0.007 | 0.646 | 55.9 | 0.006 | 0.678 | 52.1 | 0.005 | 0.709 | 48.3 | 0.005 | 0.736 | 44.5 | 0.005 | 0.758 | 40.7 | 0.004 | 0.772 | 36.9 | 0.004 | 0.775 |
| 22 | 71.2 | 0.009 | 0.548 | 71.1 | 0.009 | 0.549 | 67.1 | 0.008 | 0.584 | 63.2 | 0.008 | 0.619 | 59.3 | 0.007 | 0.654 | 55.3 | 0.006 | 0.689 | 51.4 | 0.005 | 0.721 | 47.5 | 0.005 | 0.751 | 43.5 | 0.005 | 0.775 | 39.6 | 0.004 | 0.791 | 35.7 | 0.003 | 0.795 |
| 23 | 71.1 | 0.009 | 0.548 | 70.9 | 0.009 | 0.550 | 66.9 | 0.008 | 0.588 | 62.8 | 0.008 | 0.623 | 58.7 | 0.007 | 0.660 | 54.7 | 0.006 | 0.695 | 50.6 | 0.005 | 0.729 | 46.5 | 0.005 | 0.759 | 42.5 | 0.004 | 0.783 | 38.4 | 0.004 | 0.797 | 34.3 | 0.003 | 0.797 |
| 24 | 71.0 | 0.009 | 0.550 | 70.8 | 0.009 | 0.552 | 66.6 | 0.008 | 0.588 | 62.4 | 0.008 | 0.628 | 58.2 | 0.007 | 0.666 | 54.0 | 0.006 | 0.704 | 48.8 | 0.005 | 0.740 | 45.6 | 0.005 | 0.771 | 41.4 | 0.004 | 0.785 | 37.2 | 0.004 | 0.809 | 33.0 | 0.003 | 0.807 |