



Chiller Replacement Report



Device Information

| | |
|-----------------------------|---------------------------------|
| Chiller Number | 4415Q24810 |
| Location Name | Eight Flags Energy LLC |
| Location City | Fernandina Beach |
| Postal Code | 32034-4280 |
| Site Address | 22 Gum St, Fernandina Beach, FL |
| Time-zone | America/New_York |
| Year of Manufacturing (Age) | 2015(9 Years) |
| Model Number | 19XRV6Z6647DLFH64 |
| Report Duration | 2022-02-23 ~ 2023-12-24 |
| Chiller Run Hours | 56,508 |



Chiller Replacement Report

Summary

As part of Carrier's connected chiller program our command center experts continuously monitor performance and health of your chiller and its major components to provide real time feedback and less operational disruption.

Your chiller serial number **4415Q24810** was evaluated for Chiller Replacement Analysis. Further Analysis is performed from the real time data from **2022-02-23 to 2023-12-24**. The design efficiency of current chiller is **0.51 kW/T**. The overall efficiency of this chiller is **0.52 kW/T**. Replacing this with a Carrier Aqua Series Water Cooled Chillers can improve the overall efficiency to **0.43 kW/T**. This replacement can improve the chiller efficiency by **17%**. The chiller is running at low loads (<60% RLA) for **30%** during the analysis period and this replacement can enhance design integrated part-load values (IPLV) to as low as **0.37 kW/T**.

Chiller Replacement Benefits:

- Improved Efficiency
- Reduces operating expenses.
- Easy to maintain.
- Quiet operation
- Reliable operation
- Environmentally sustainable refrigerant
- ASHRAE 90.1 compliant
- High-efficiency optimization
- Diagnostic controls

Based on the performance of the chiller operation versus measured parameters, Carrier recommends further evaluation of the Chiller Replacement by our certified technician. This will ensure optimal performance of the Chiller.



Chiller Replacement Report

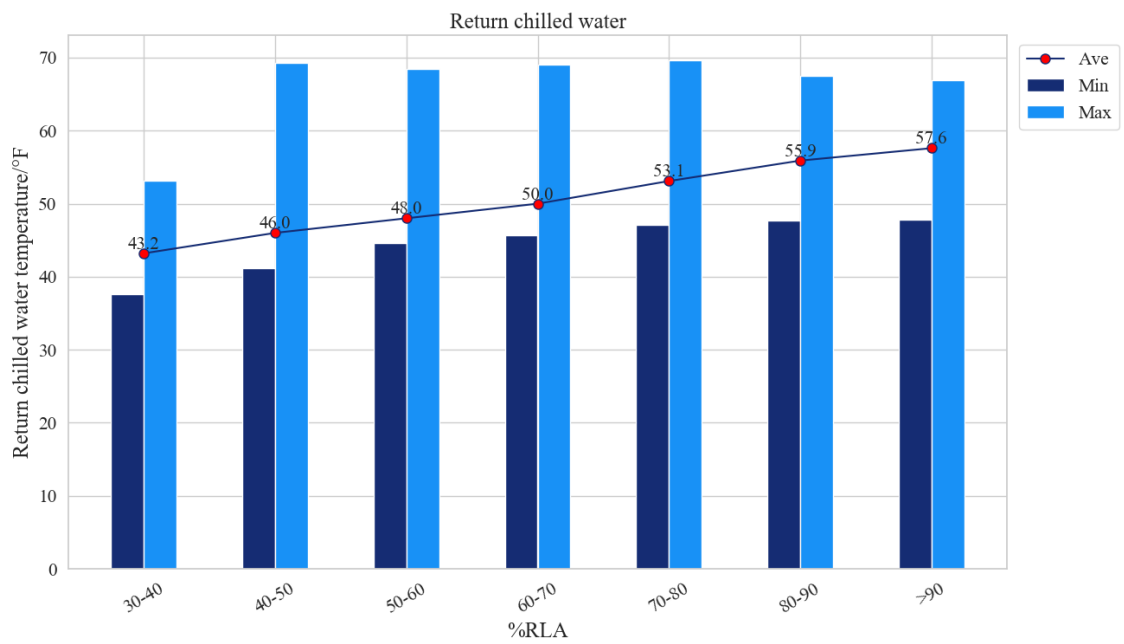
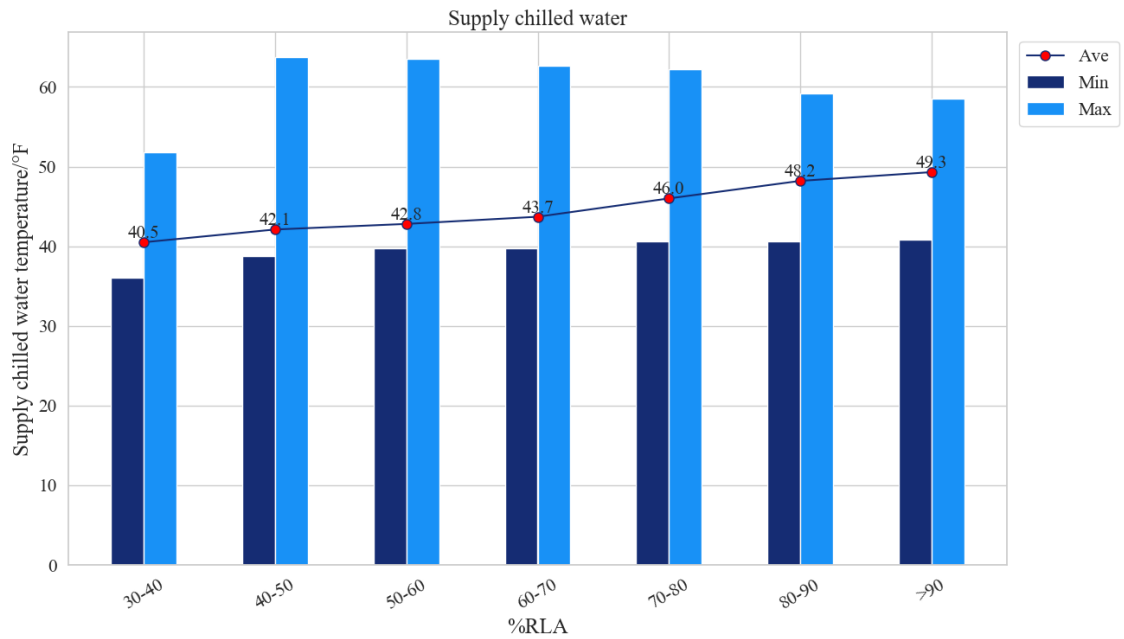
Alarm/Setpoint Analysis

There are no alarms during this period.

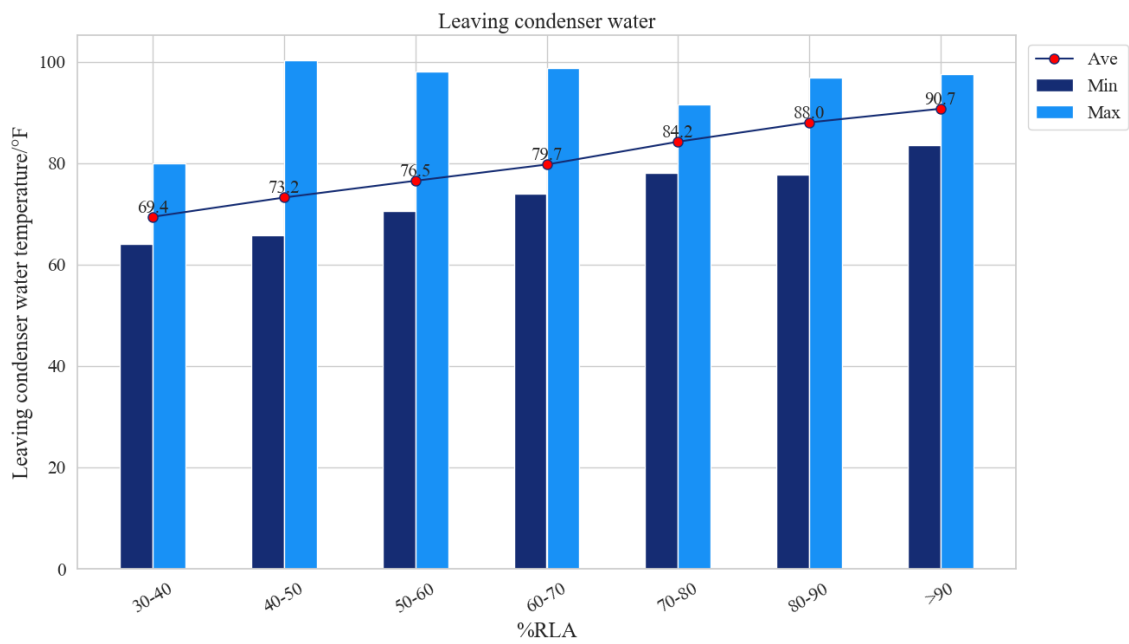
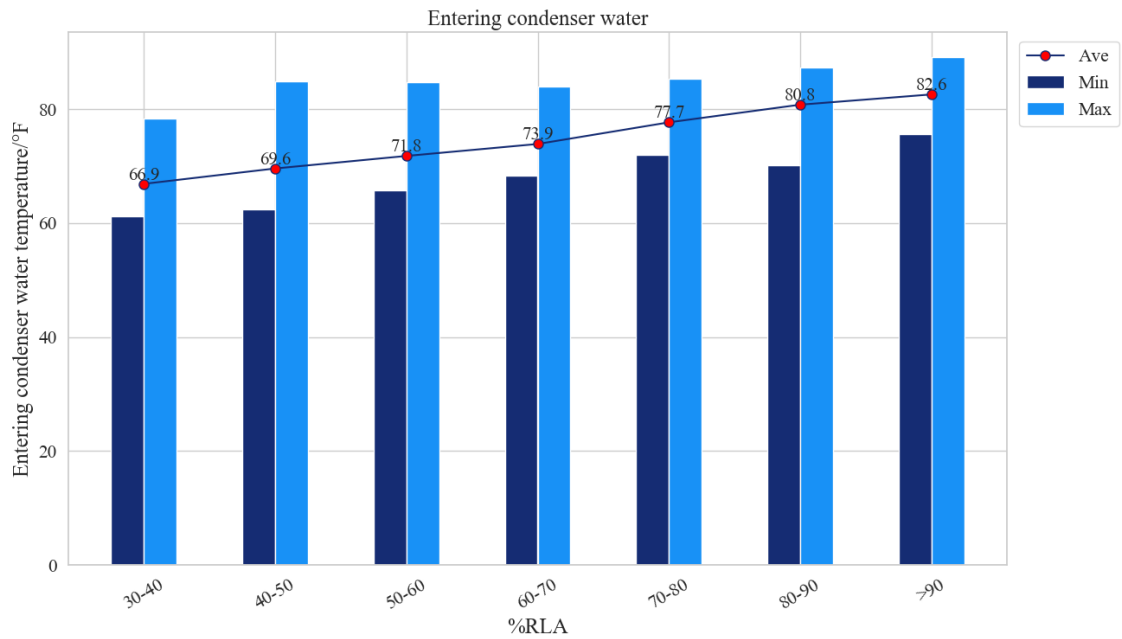
The analysis result show that setpoint not meeting **1%** of time.



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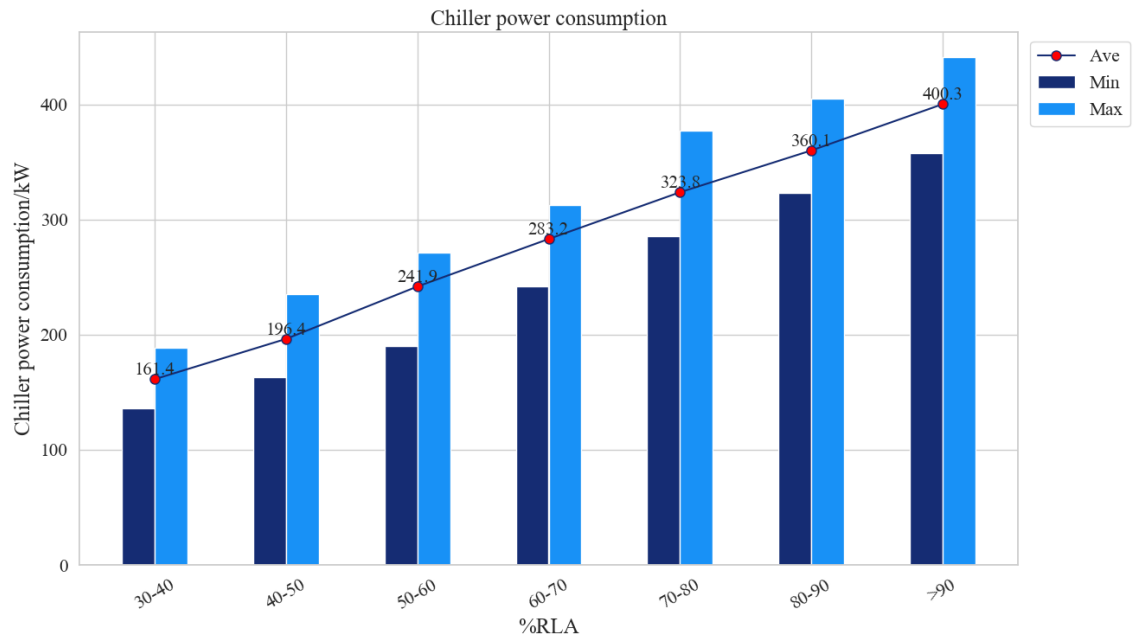
Chiller Replacement Report



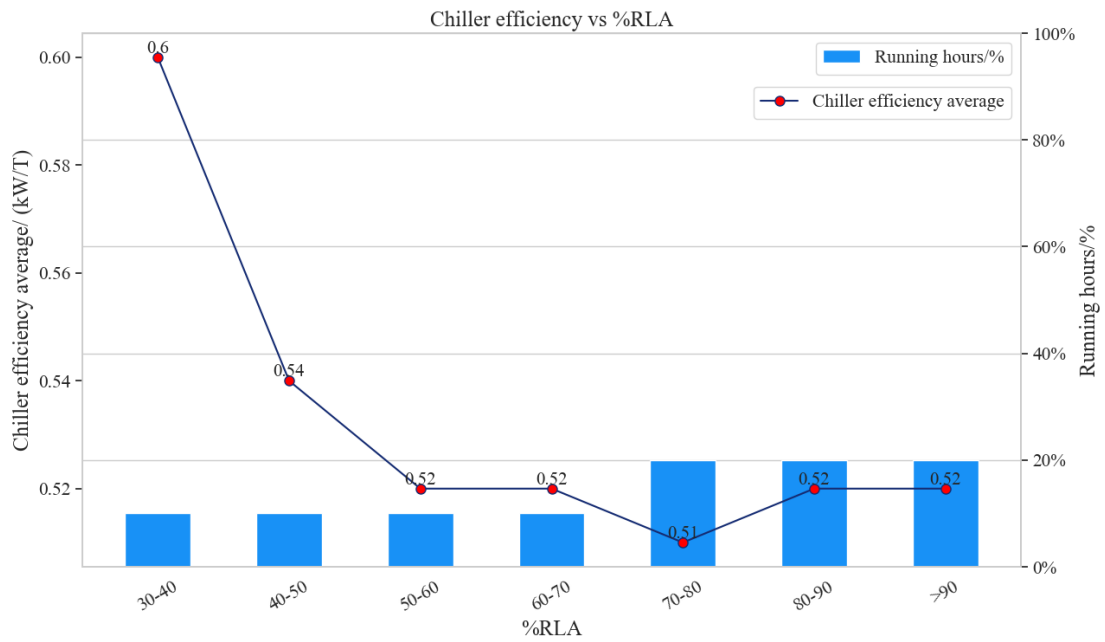
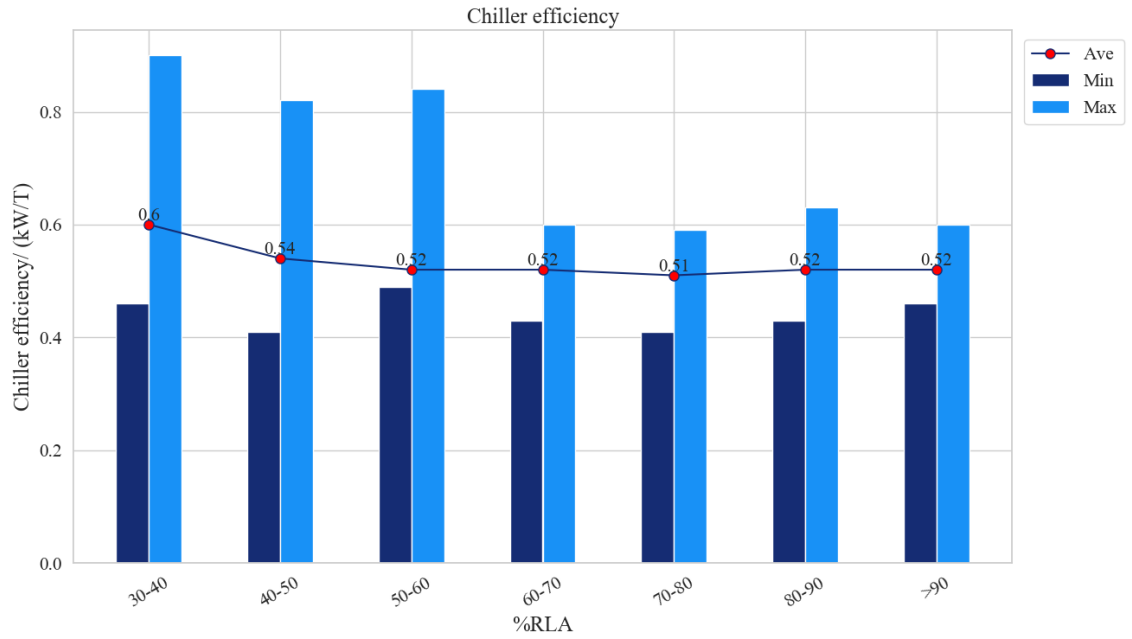
Comments

The Average Cooler supply water temperature is between 40.5 to 49.3 (°F) and the average Condenser entering water temperature is between 66.9 to 82.6 (°F).

Chiller Replacement Report

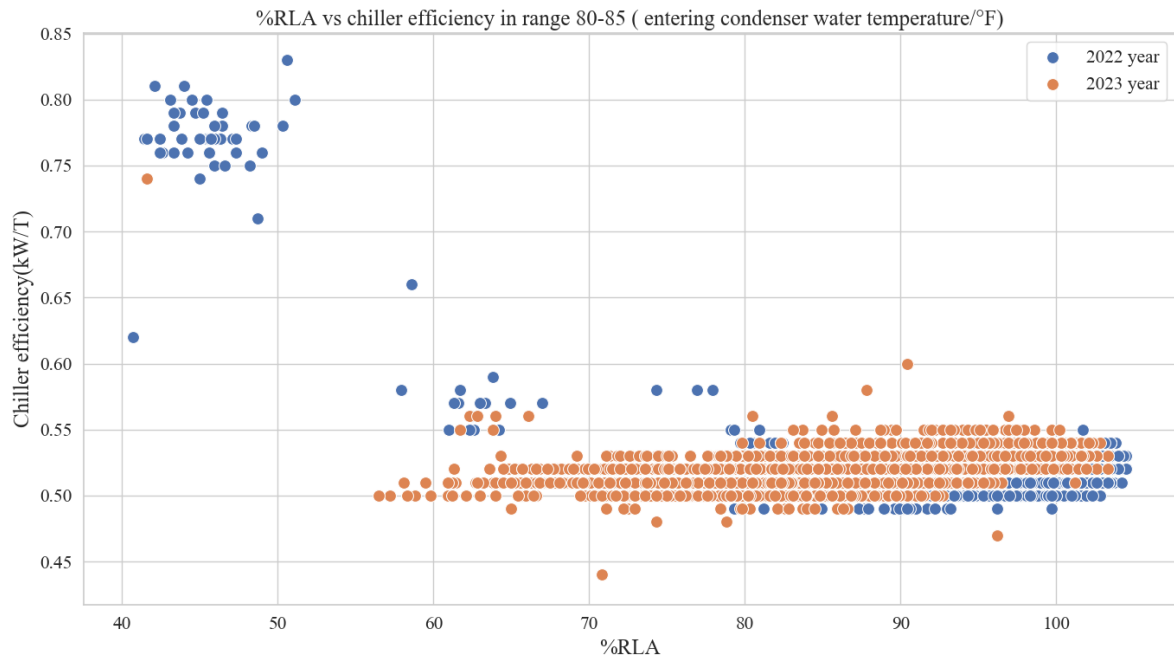
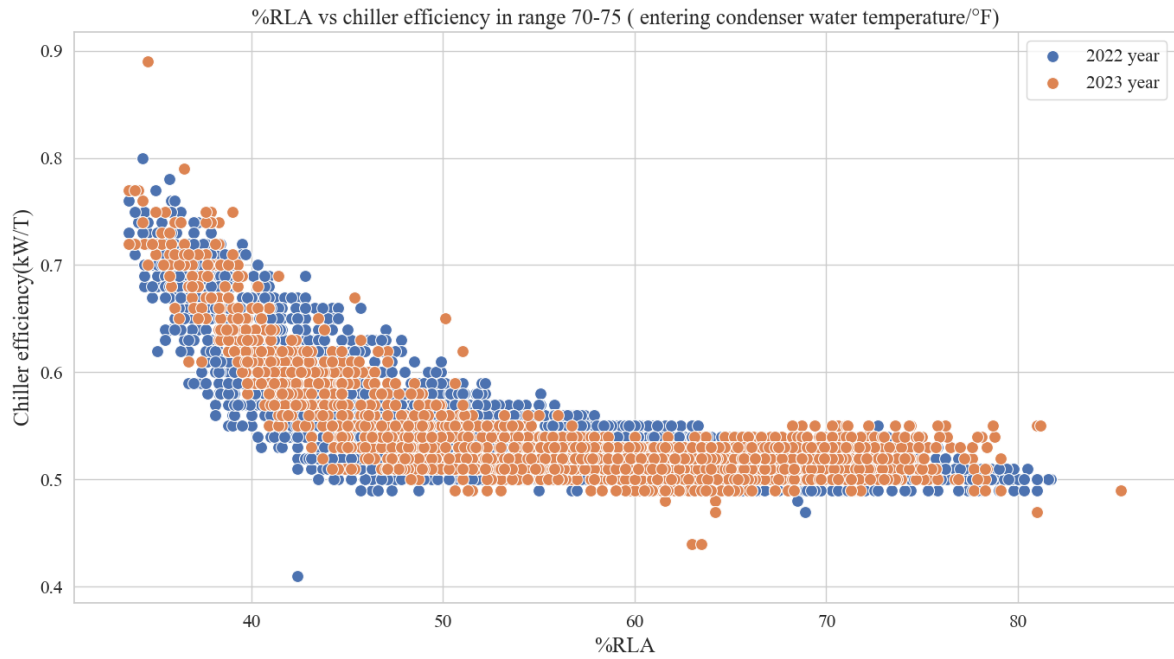


Chiller Replacement Report

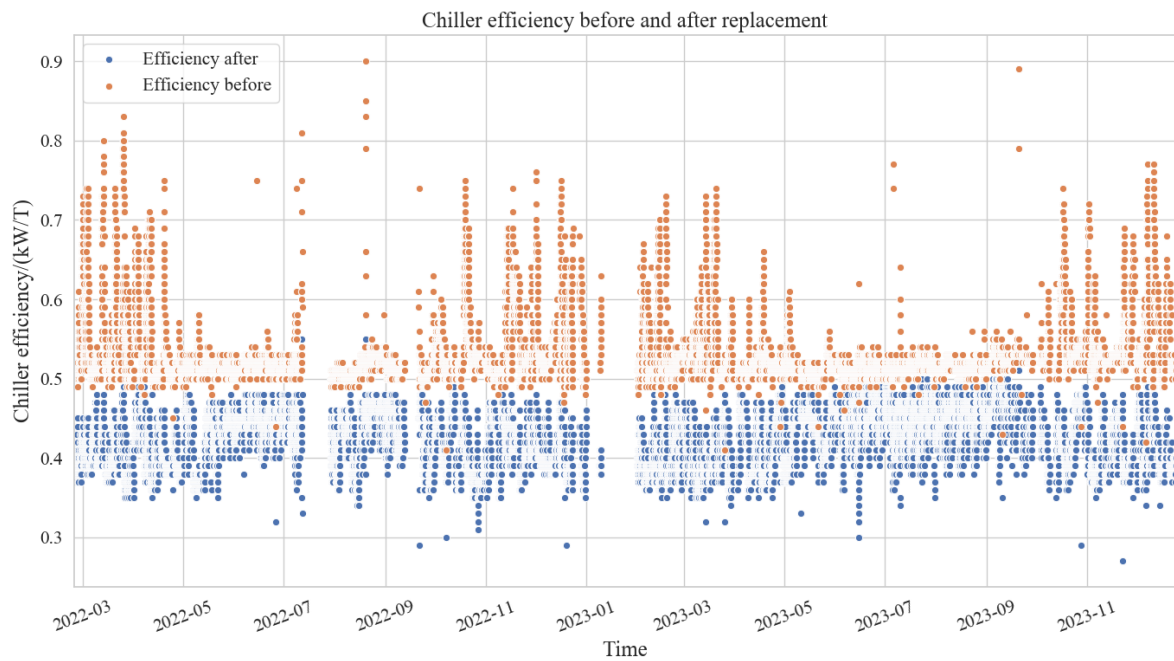
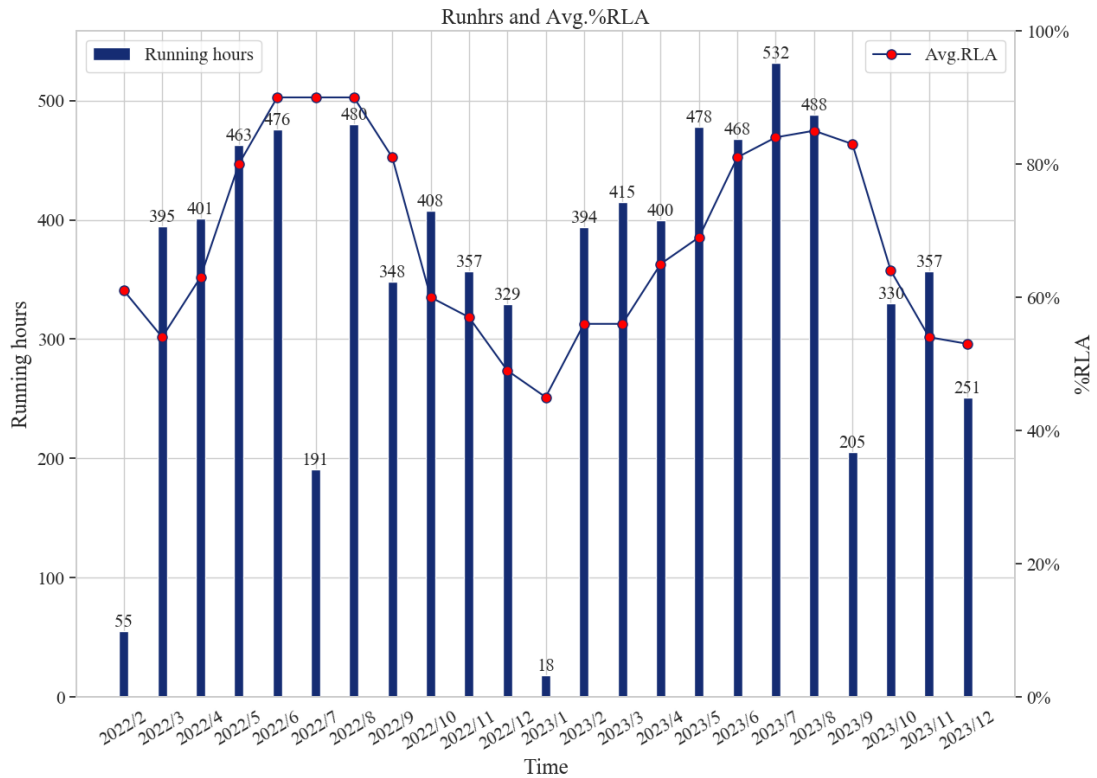




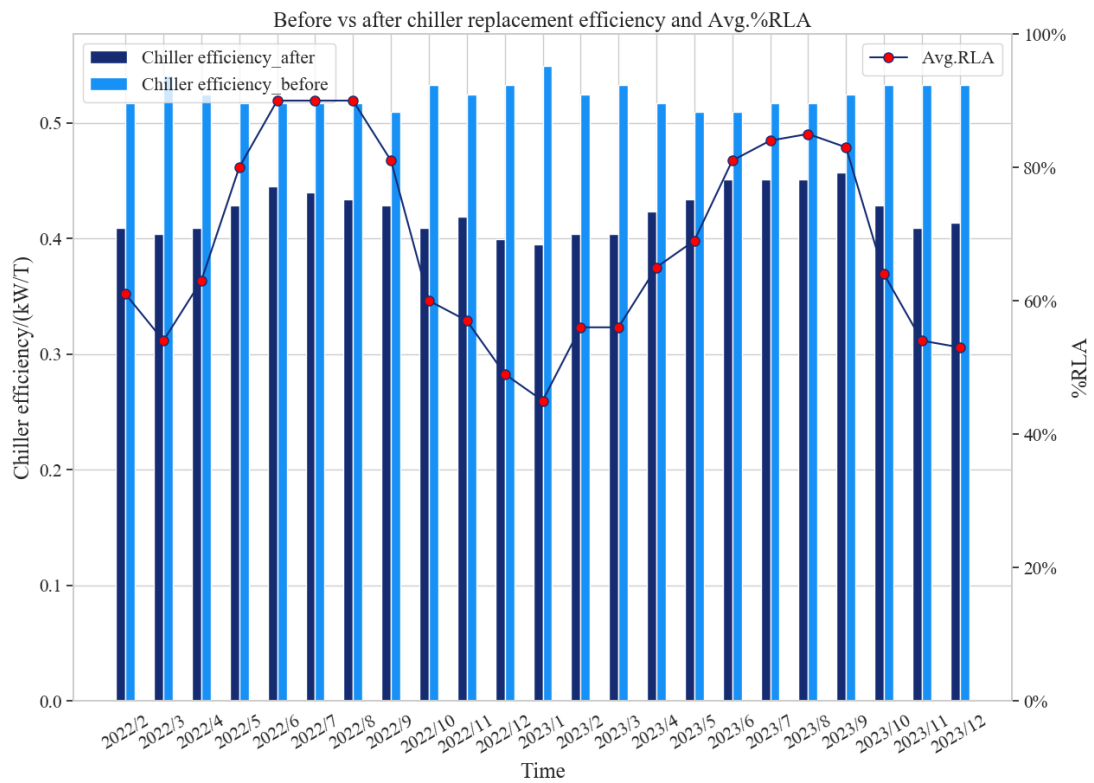
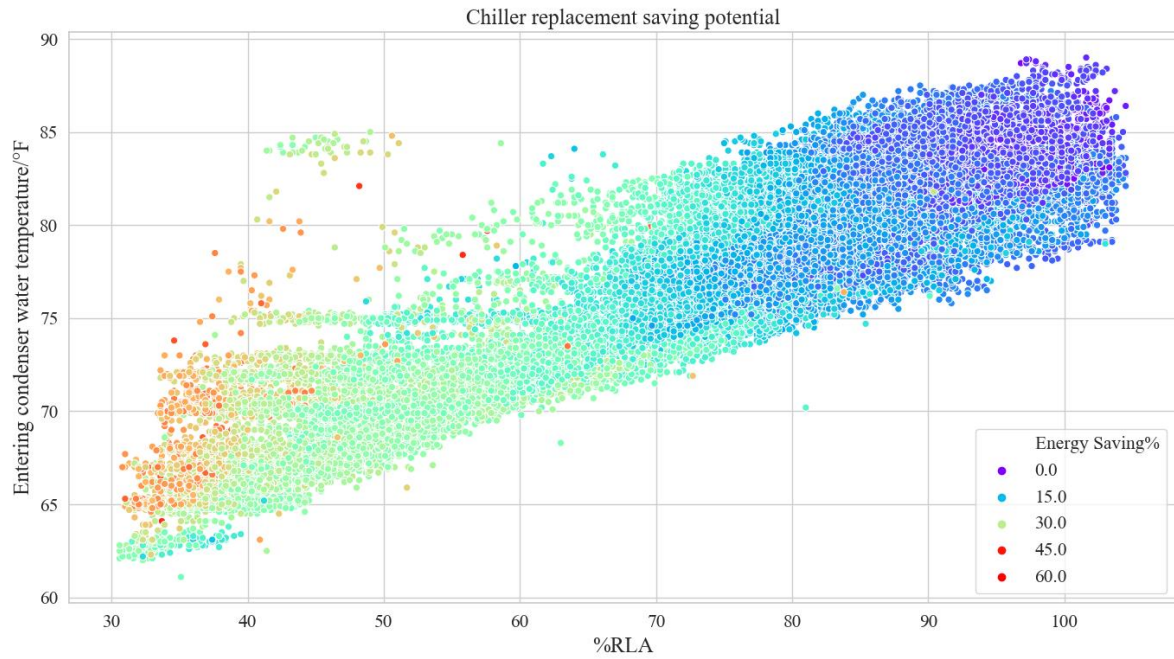
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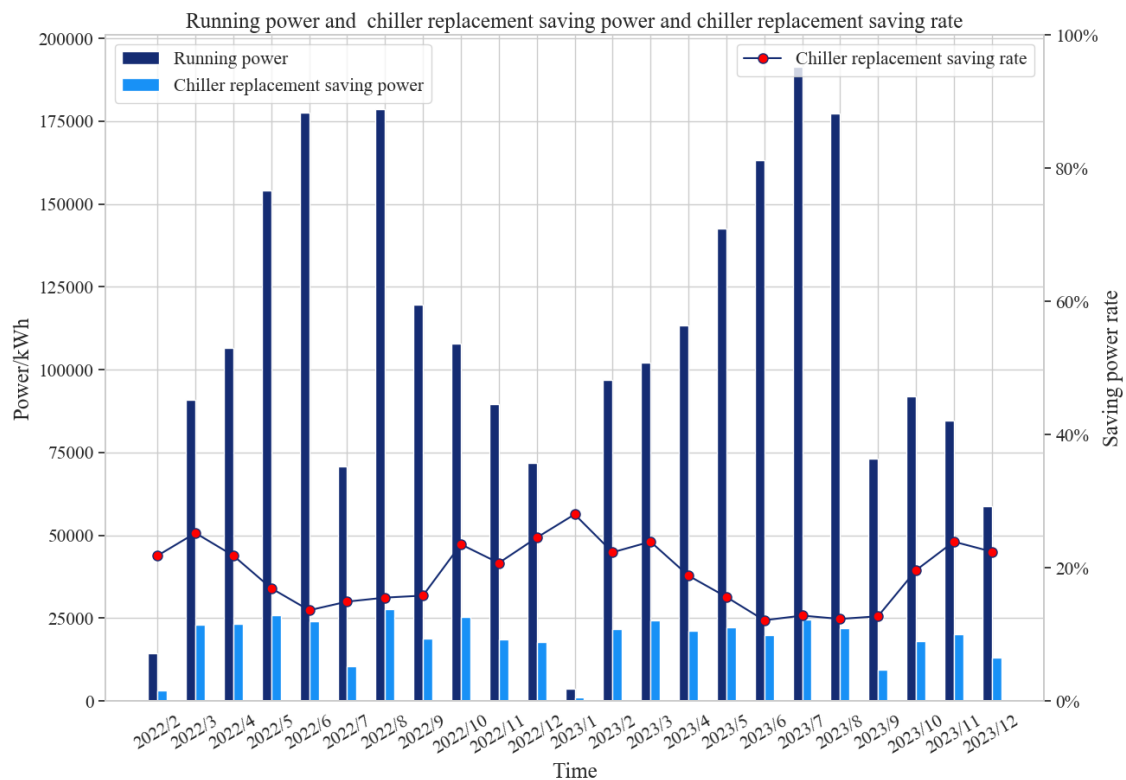
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Chiller Sub System Health

| Chiller # | Condenser Health (Good/Stage of Degradation) | Evaporator Health (Good/Stage of Degradation) | Compressor Performance (Good/Stage of Degradation) | Ref leak (Good/Stage of Degradation) | Condenser Water Flow Issue (Yes/No) | Evaporator Water Flow Issue (Yes/No) |
|------------|-------------------------------------------------|--------------------------------------------------|-------------------------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|
| 4415Q24810 | | | | | | |

| | |
|----|-----------------------|
| S1 | No action required |
| S2 | Plan to clean/fix |
| S3 | Clean/Fix immediately |
| S4 | - |

Summary

Energy Efficiency Improve

18%

Energy Savings

435,114 kWh

Energy Savings/per year

237,394 kWh

Investment pay-back period

9.7 Years