



Chiller Replacement Report



Device Information

Chiller Number	1913Q22565
Location Name	Praxair Burns Harbor
Location City	Chesterton
Postal Code	46304
Site Address	1224 W North Boo Rd
Time-zone	America/Chicago
Year of Manufacturing (Age)	2013(11 Years)
Model Number	19XR65674C7DFH66S
Report Duration	2022-08-02 ~ 2023-11-21
Chiller Run Hours	Not available in telemetry



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 **1913Q22565** was evaluated for Chiller Replacement Analysis. Further Analysis is performed from the real time data from **2022-08-02 to 2023-11-21**. The design efficiency of current chiller is **0.8 kW/T**. The overall efficiency of this chiller is **0.7 kW/T**. Replacing this with a Carrier Aqua Series Water Cooled Chillers can improve the overall efficiency to **0.46 kW/T**. This replacement can improve the chiller efficiency by **34%**. The chiller is running at low loads (<60% RLA) for **22%** during the analysis period and this replacement can enhance design integrated part-load values (IPLV) to as low as **0.38 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

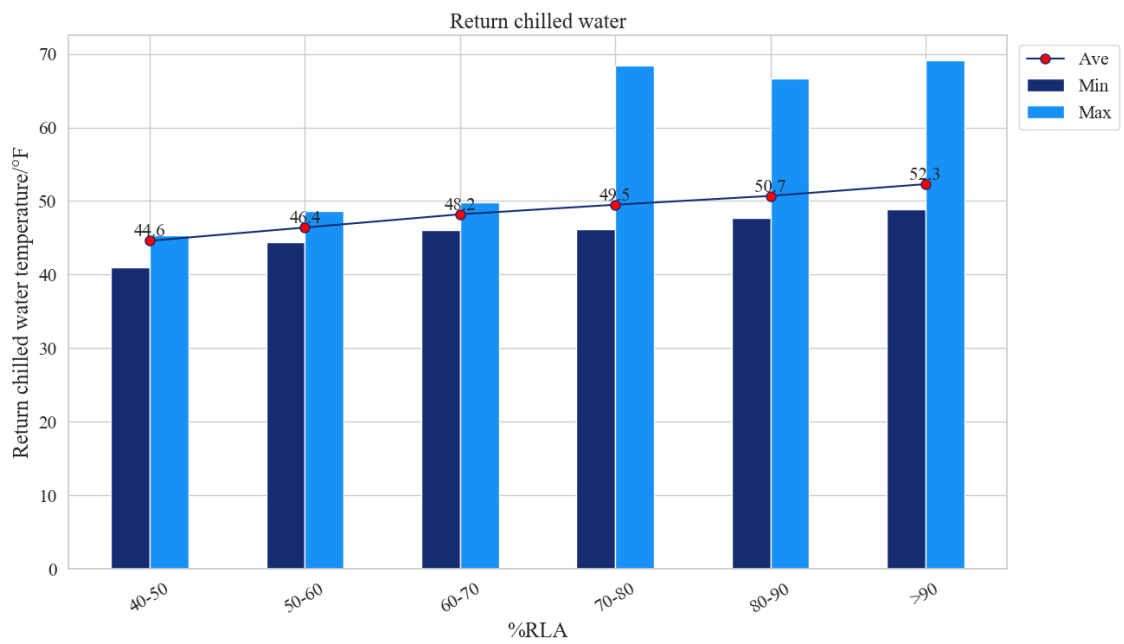
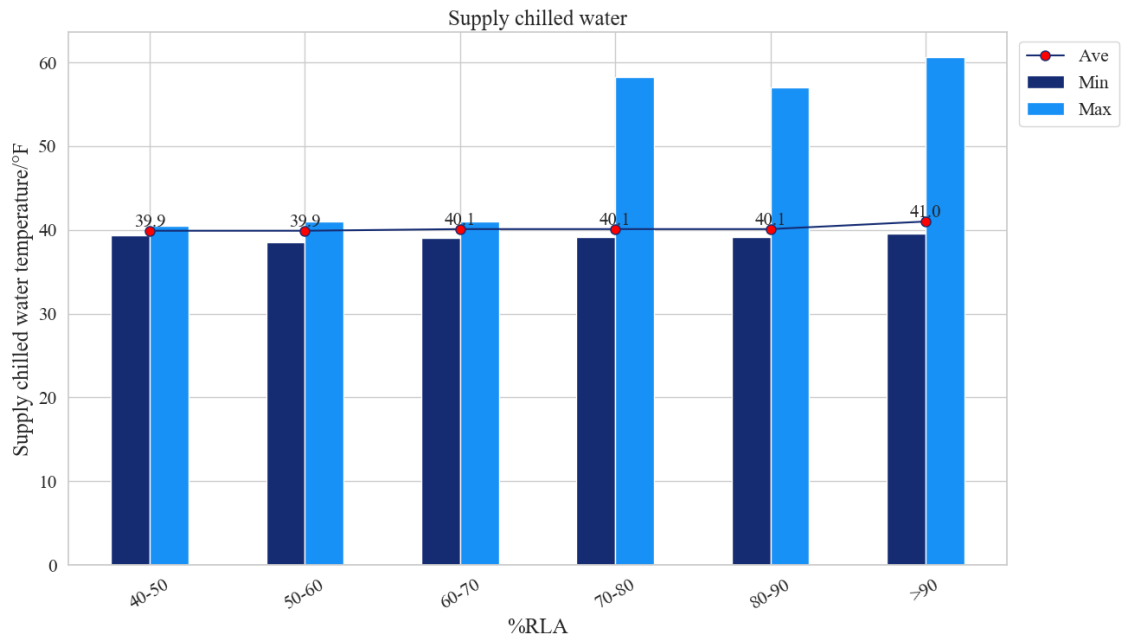
Alarm/Setpoint Analysis

There are no alarms during this period.

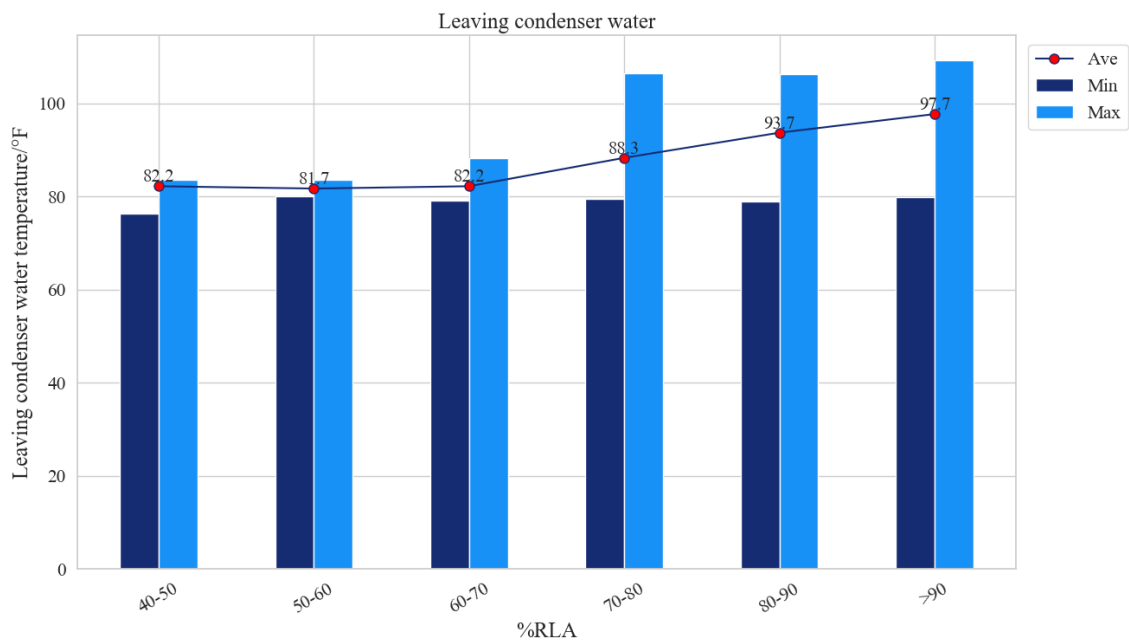
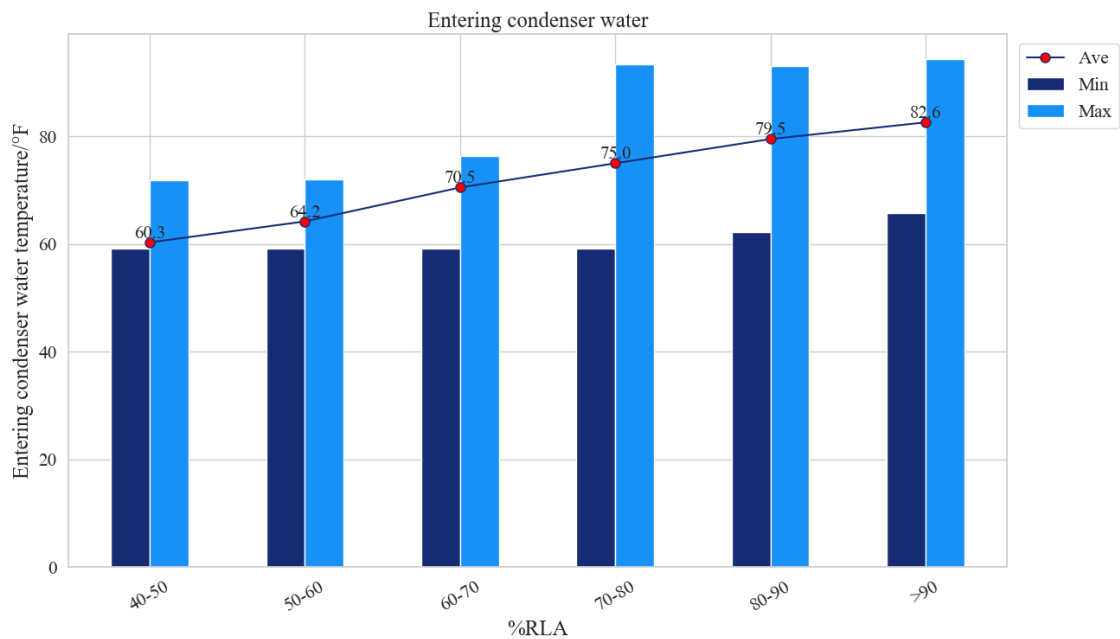
The analysis result show that setpoint not meeting **1%** of time.



Chiller Replacement Report



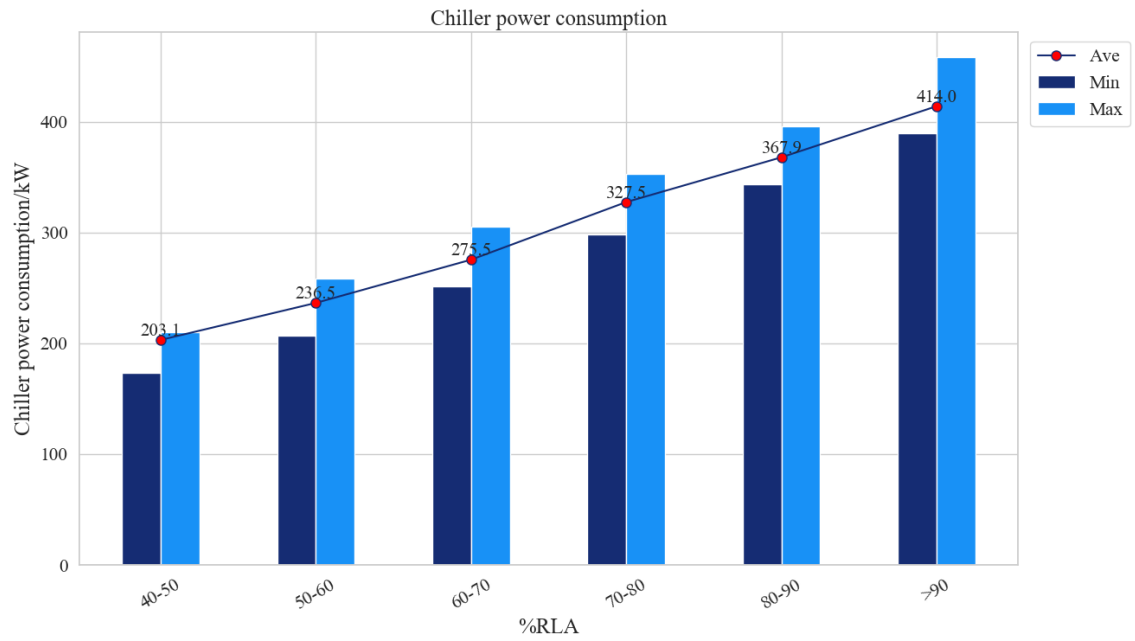
Chiller Replacement Report



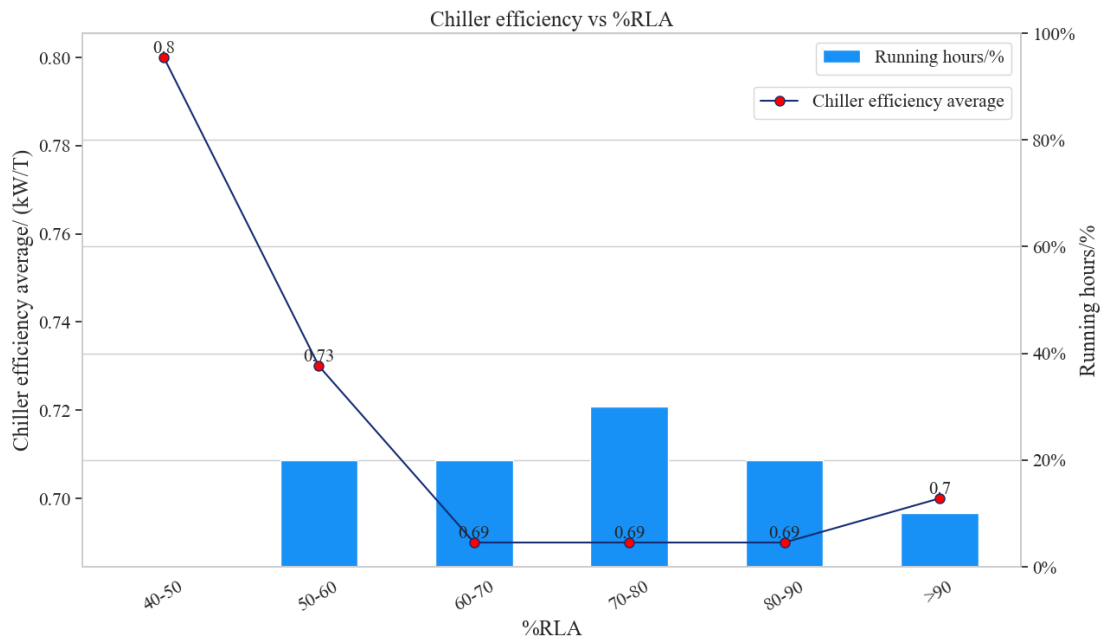
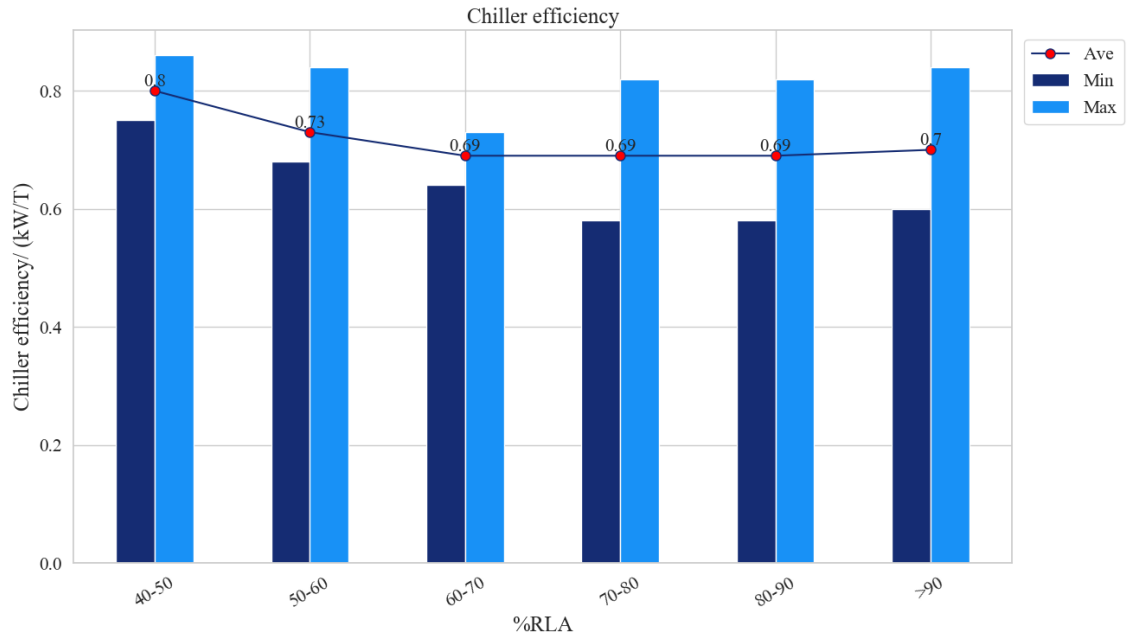
Comments

The Average Cooler supply water temperature is between 39.9 to 41 (°F) and the average Condenser entering water temperature is between 60.3 to 82.6 (°F).

Chiller Replacement Report

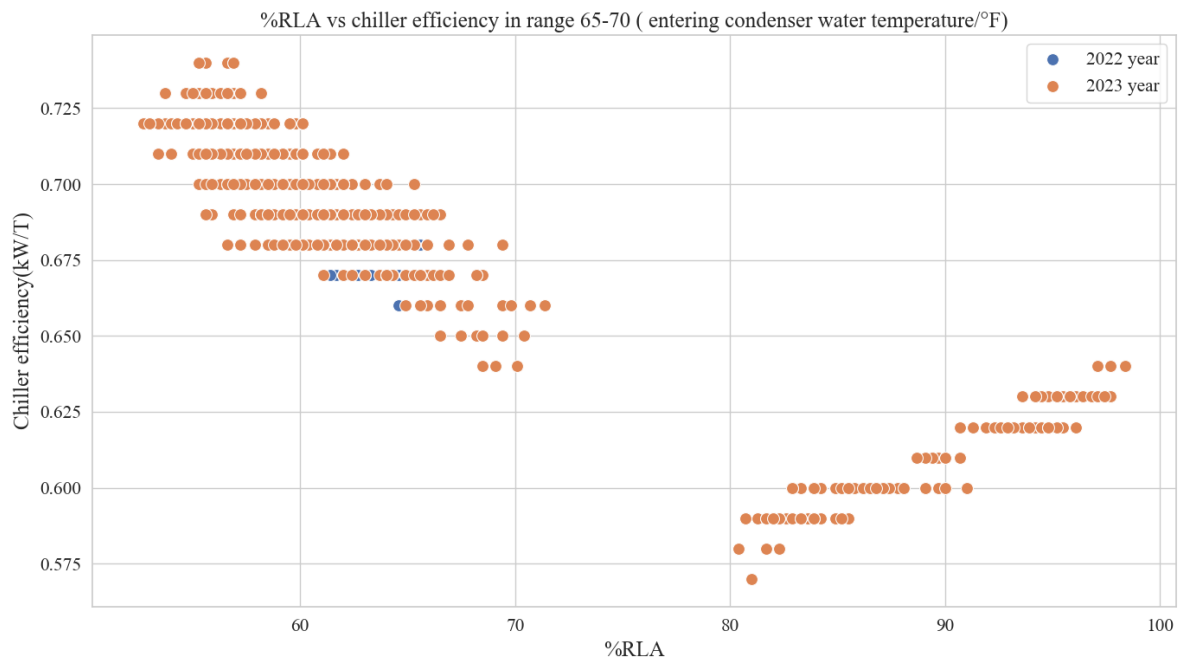
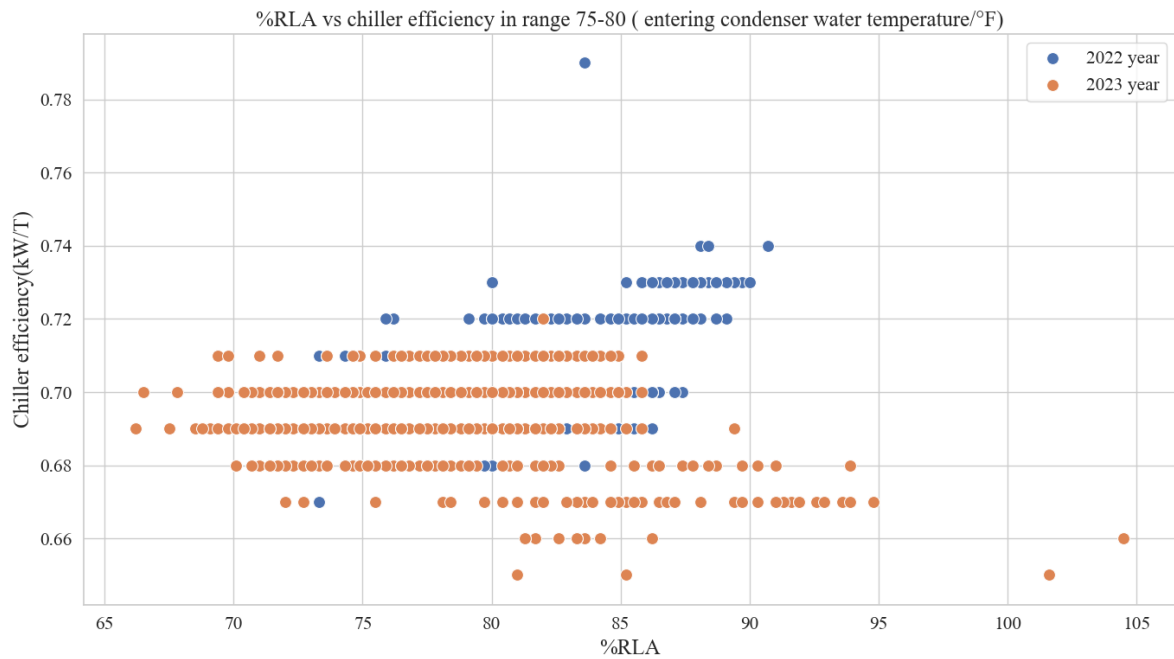


Chiller Replacement Report



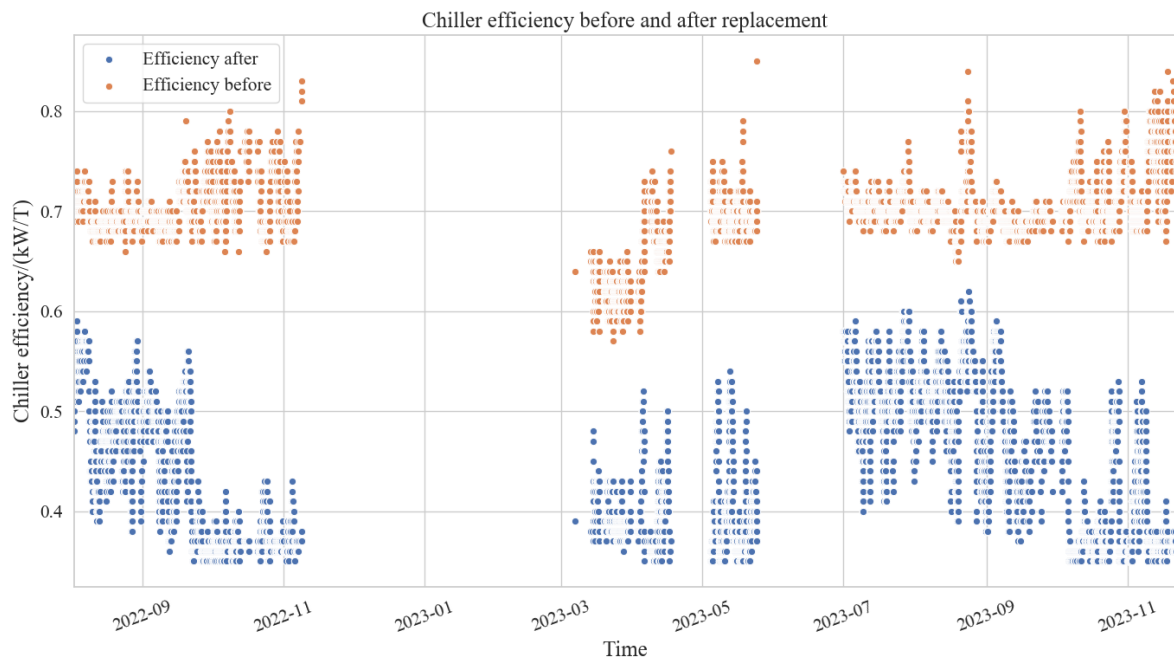
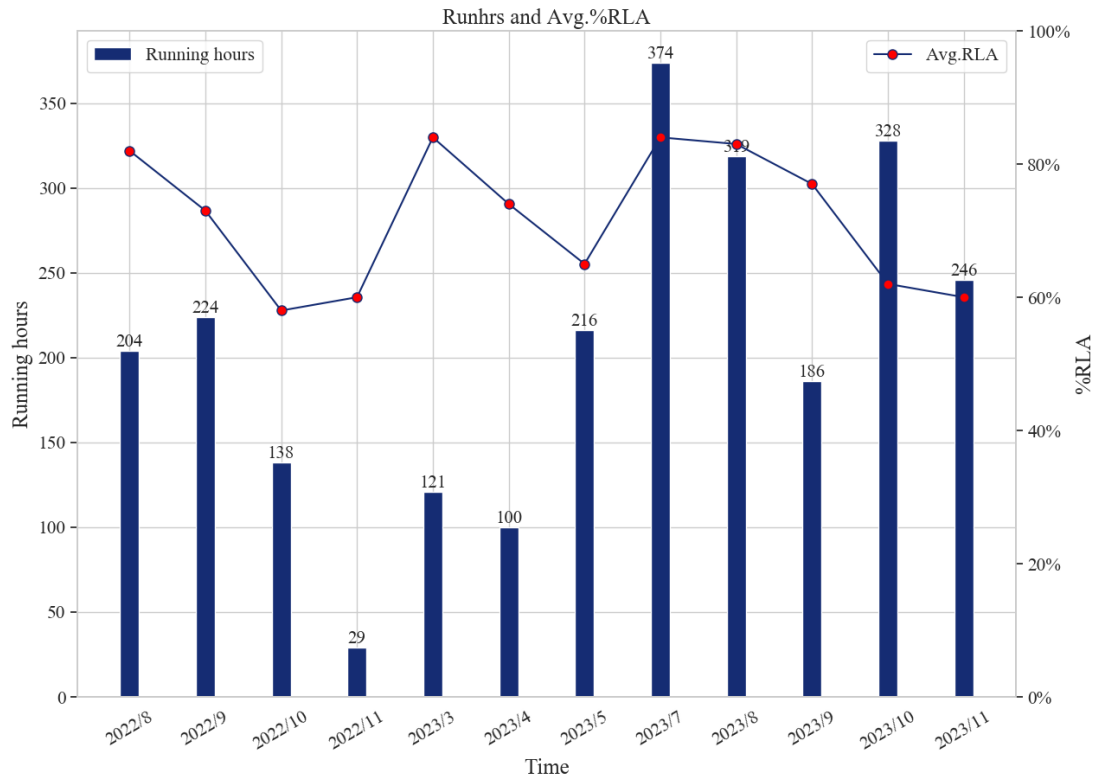


Chiller Replacement Report

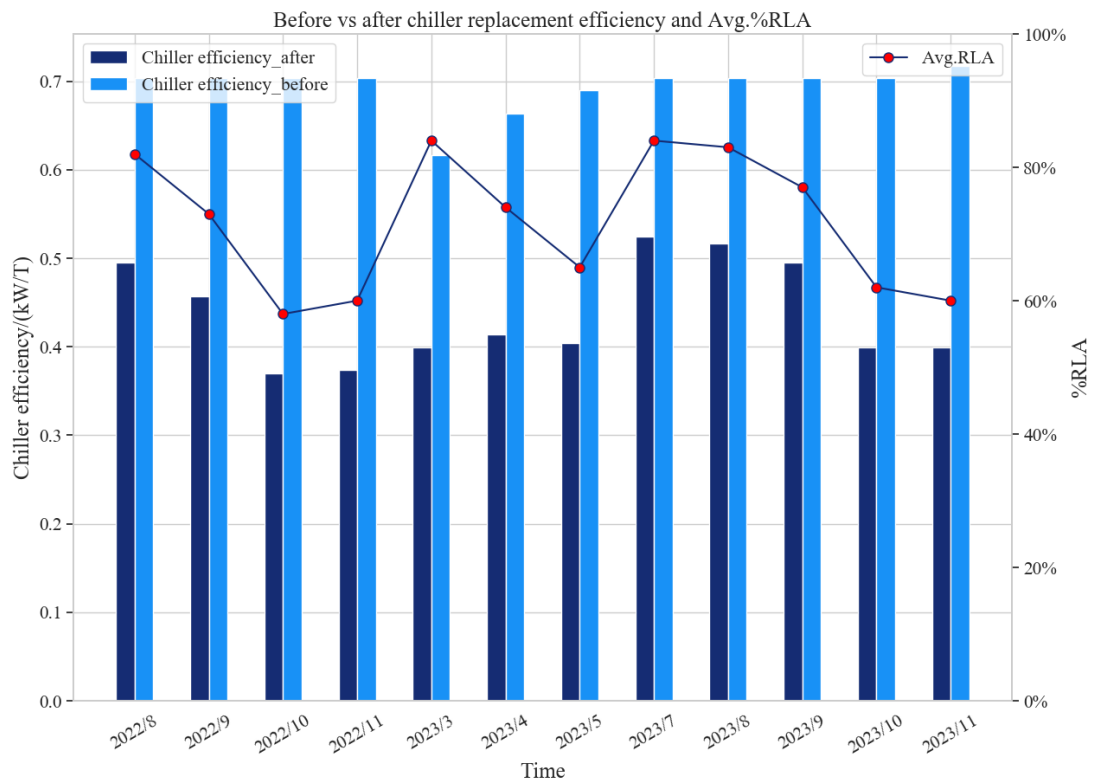
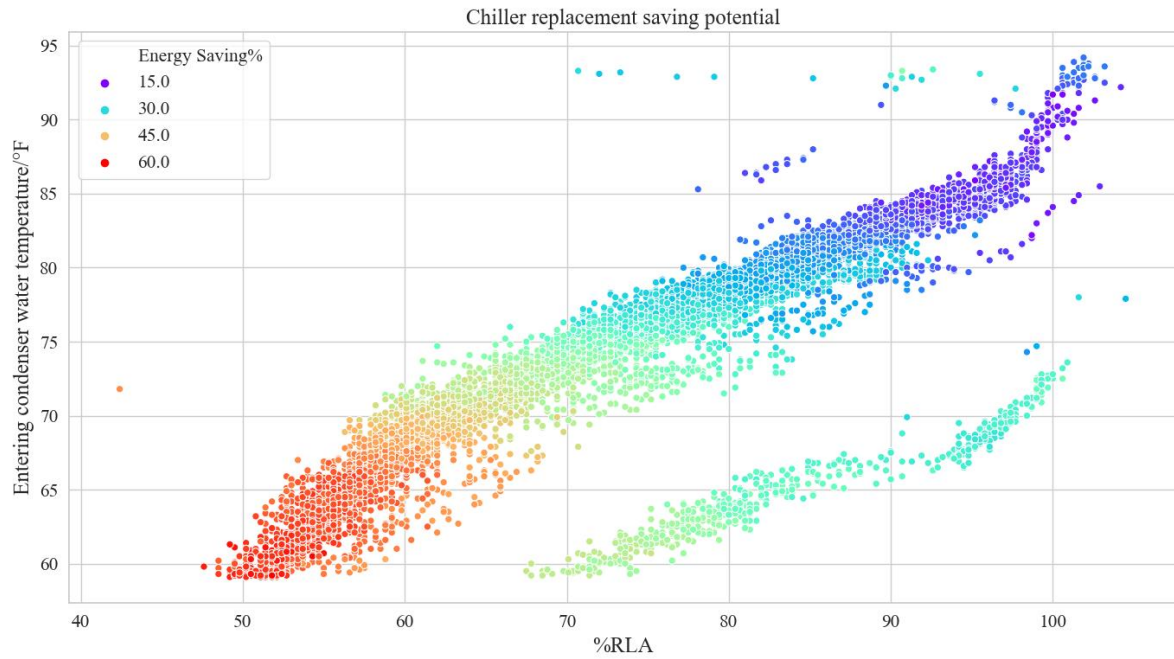




Chiller Replacement Report



Chiller Replacement Report



Chiller Replacement Report



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)
1913Q22565						

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

Summary

Energy Efficiency Improve

34%

Energy Savings

266,933 kWh

Energy Savings/per year

204,686 kWh

Investment pay-back period

7 Years