

Case Study - 15 Ton Split Unit

HP - Boise, ID



28%

Annual Energy Savings



31,600

Annual kWh Savings



\$3,800

Annual \$ Savings

See reverse side for notes on savings calculations



Bluon Energy converted a 15 ton Liebert split system at HP's internal datacenter at their Boise HQ. HP used the Liebert system as a test case for Bluon TdX 20 and its claims.

HP witnessed Bluon TdX 20 perform as promised with notable increase in cooling capacity vs. R-22 and as a result a significant reduction in energy consumption (via run time reduction).



"Bluon is at the forefront of tackling energy efficiency in our existing heating and air conditioning infrastructure."

- **Leonardo DiCaprio**, Bluon Investor & Board Advisor

EQUIPMENT

HVAC Unit

Liebert 15 Ton Split Ton with TXV Valve

Indoor Unit Model

VH199AUAG00

TEST DATES

R-22

Collected over 33 minutes, 19 seconds on 07/12/2017

Bluon TdX 20 (R-458A)

Collected over 33 minutes, 19 seconds on 07/12/2017

TEST METHODOLOGY

Data was collected from side-by-side systems feeding the same server room during the same period of time. Averages calculated with system running.

NOTES

Increase in cooling capacity, results in decreased run time. The condensing unit utilizes a Sporlan OROA-5-215 head pressure control valve with a large receiver.

Bluon TdX 20 (R-458A)

R-22

| | | |
|--------------------------------|---------|---------|
| Avg. Outside Air (F°) | 88 - 92 | 88 - 92 |
| Avg. Current (amps) | 24.6 | 20.2 |
| Avg. Suction Line (psig) | 54.2 | 73.6 |
| Avg. Discharge Line (psig) | 230.1 | 229.9 |
| Avg. Liquid Line Temp (F°) | 97.6 | 100.9 |
| Avg. Suction Line Temp (F°) | 57.6 | 60.9 |
| Avg. Return Air Temp (F°) | 70.5 | 72.8 |
| Avg. Supply Air Temp (F°) | 60.6 | 65.7 |
| Capacity (kW) | 5.5 | 4 |
| Power In (kW) | 13.1 | 12.1 |



Bluon TdX 20 is only R-22 replacement solution that upgrades your equipment, saving you money every month.

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