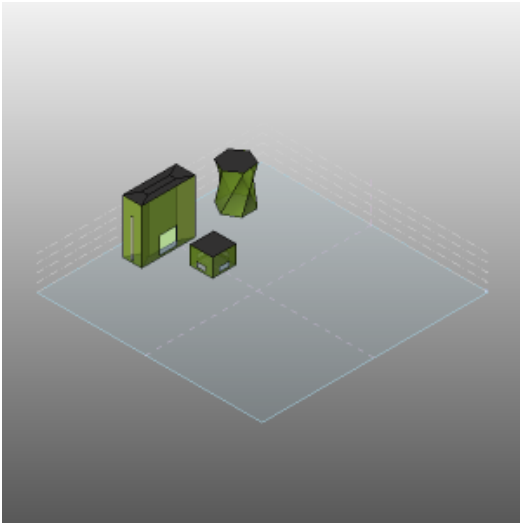


Project1

Project1 Analysis (1)

Analyzed at 11/29/2011 11:44:47 AM

Mass



Building Performance Factors

| | |
|-------------------------|--------------------------|
| Location: | Boston, MA |
| Weather Station: | 53158 |
| Outdoor Temperature: | Max: 82°F/Min: -10°F |
| Floor Area: | 3,058 sf |
| Exterior Wall Area: | 17,928 sf |
| Average Lighting Power: | 1.01 W / ft ² |
| People: | 7 people |
| Exterior Window Ratio: | 0.07 |
| Electrical Cost: | \$0.16 / kWh |
| Fuel Cost: | \$1.25 / Therm |

Energy Use Intensity

| | |
|------------------|--------------------|
| Electricity EUI: | 17 kWh / sf / yr |
| Fuel EUI: | 191 kBtu / sf / yr |
| Total EUI: | 247 kBtu / sf / yr |

Life Cycle Energy Use/Cost

| | |
|-----------------------------|----------------|
| Life Cycle Electricity Use: | 1,529,290 kWh |
| Life Cycle Fuel Use: | 174,761 Therms |
| Life Cycle Energy Cost: | \$208,973 |

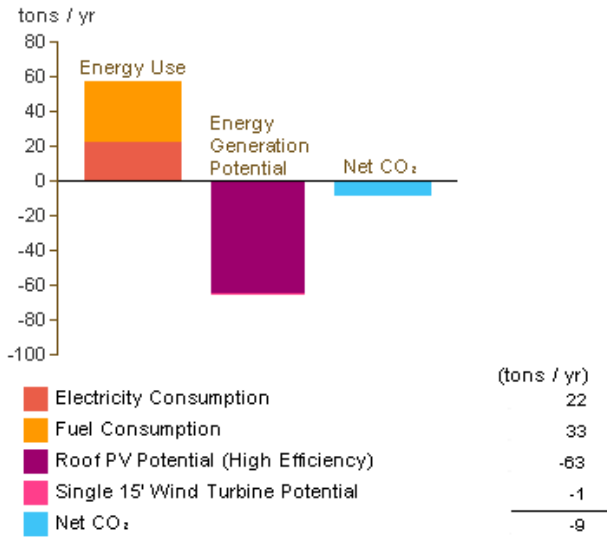
*30-year life and 6.1% discount rate for costs

Renewable Energy Potential

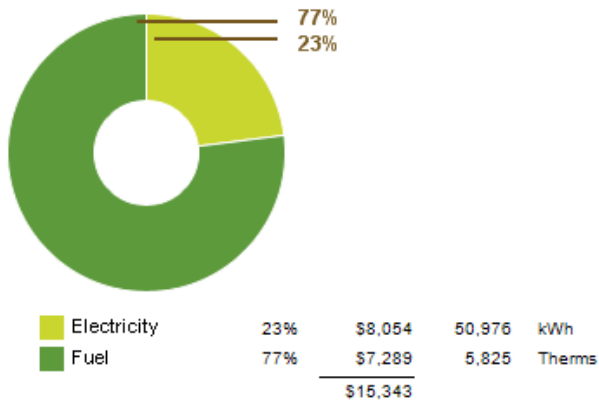
| | |
|---|------------------|
| Roof Mounted PV System (Low efficiency): | 47,190 kWh / yr |
| Roof Mounted PV System (Medium efficiency): | 94,380 kWh / yr |
| Roof Mounted PV System (High efficiency): | 141,571 kWh / yr |
| Single 15' Wind Turbine Potential: | 2,969 kWh / yr |

*PV efficiencies are assumed to be 5%, 10% and 15% for low, medium and high efficiency systems

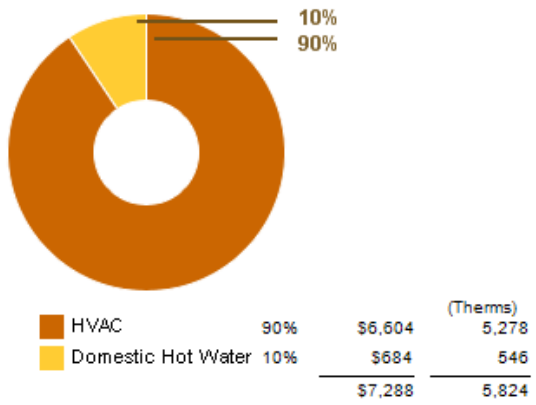
Annual Carbon Emissions



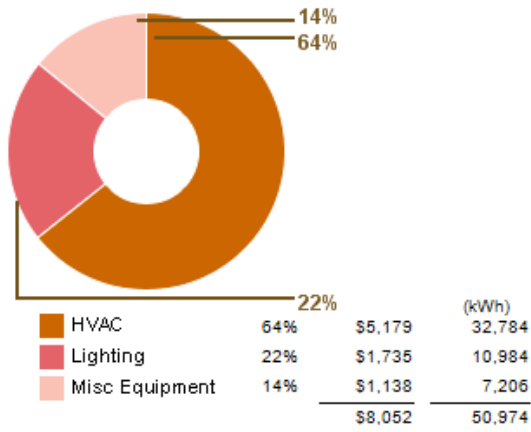
Annual Energy Use/Cost



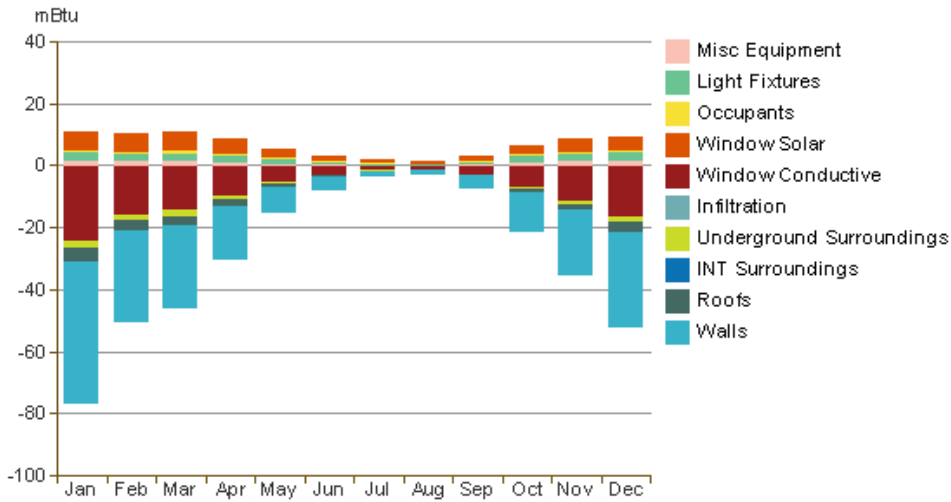
Energy Use: Fuel



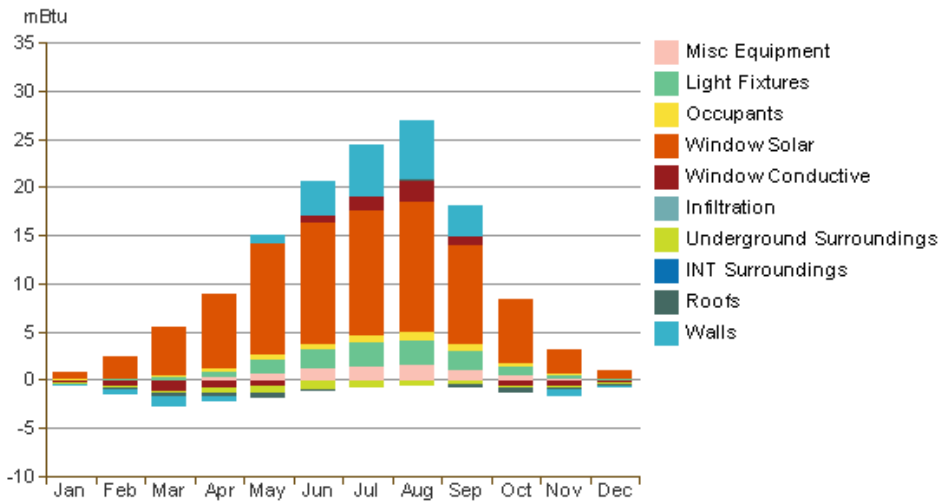
Energy Use: Electricity



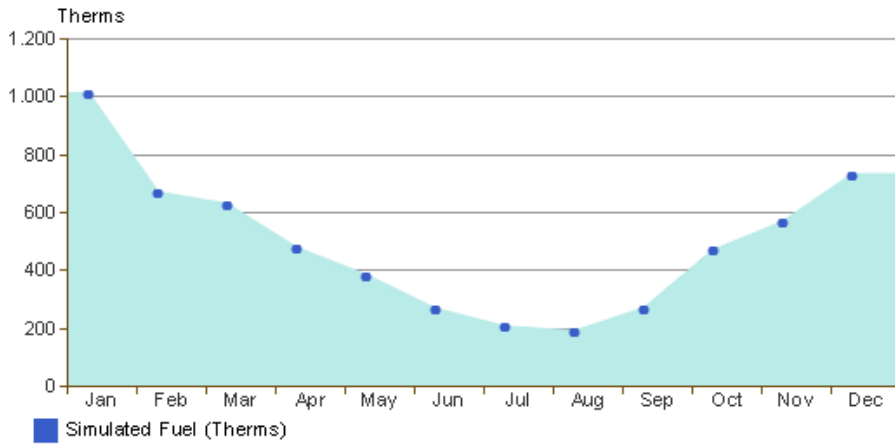
Monthly Heating Load



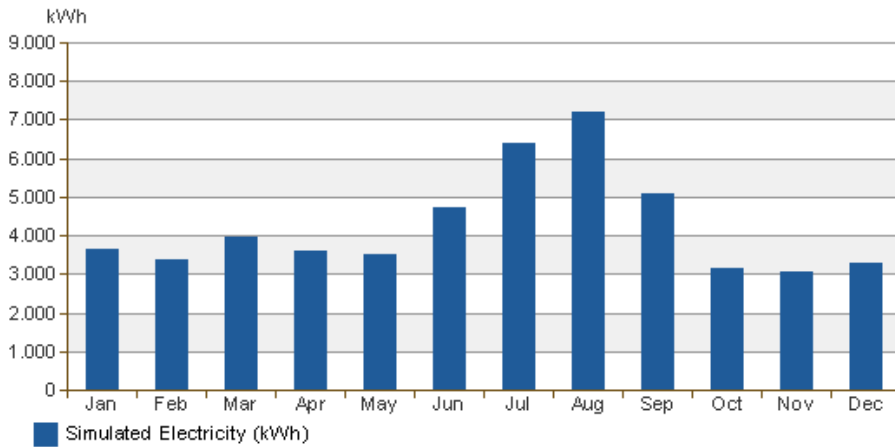
Monthly Cooling Load



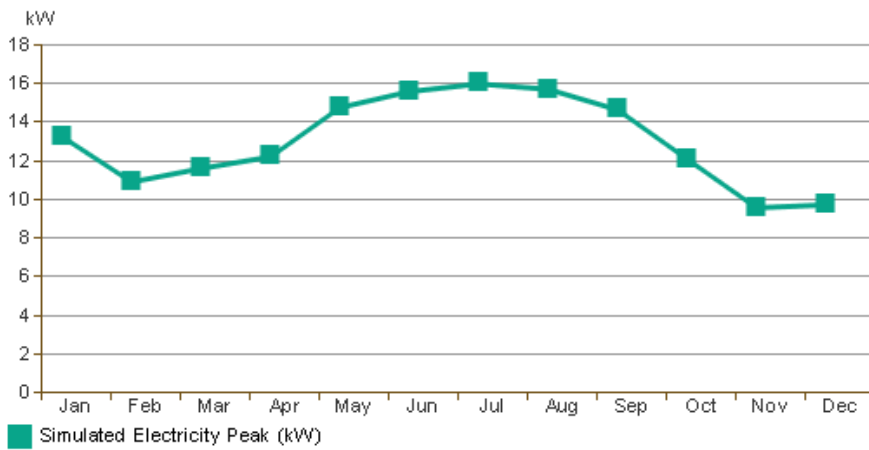
Monthly Fuel Consumption



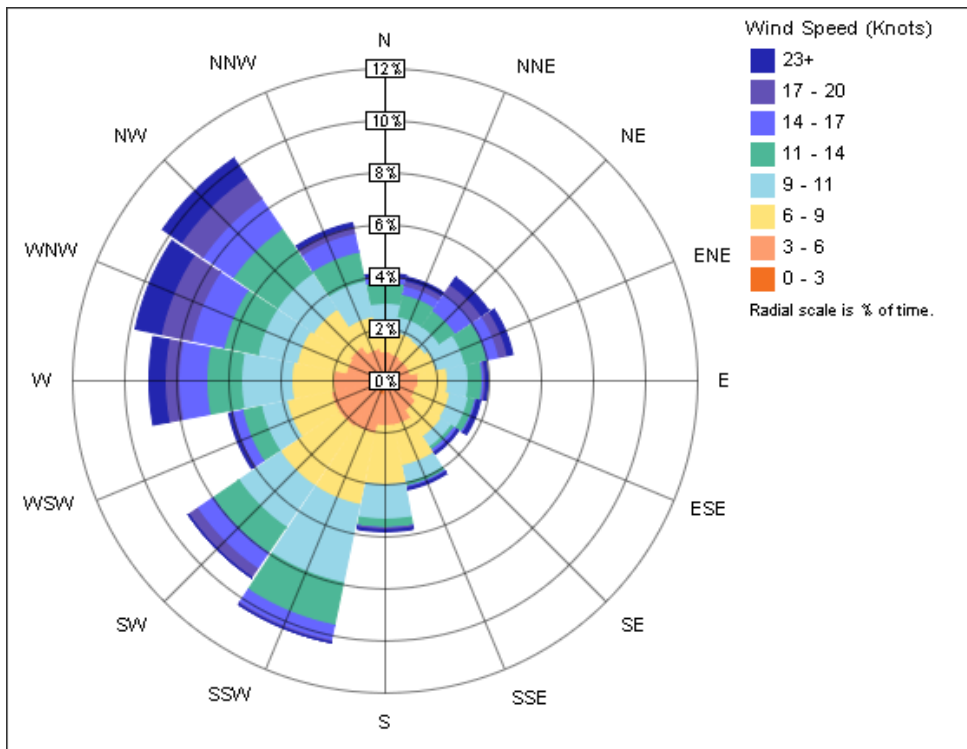
Monthly Electricity Consumption



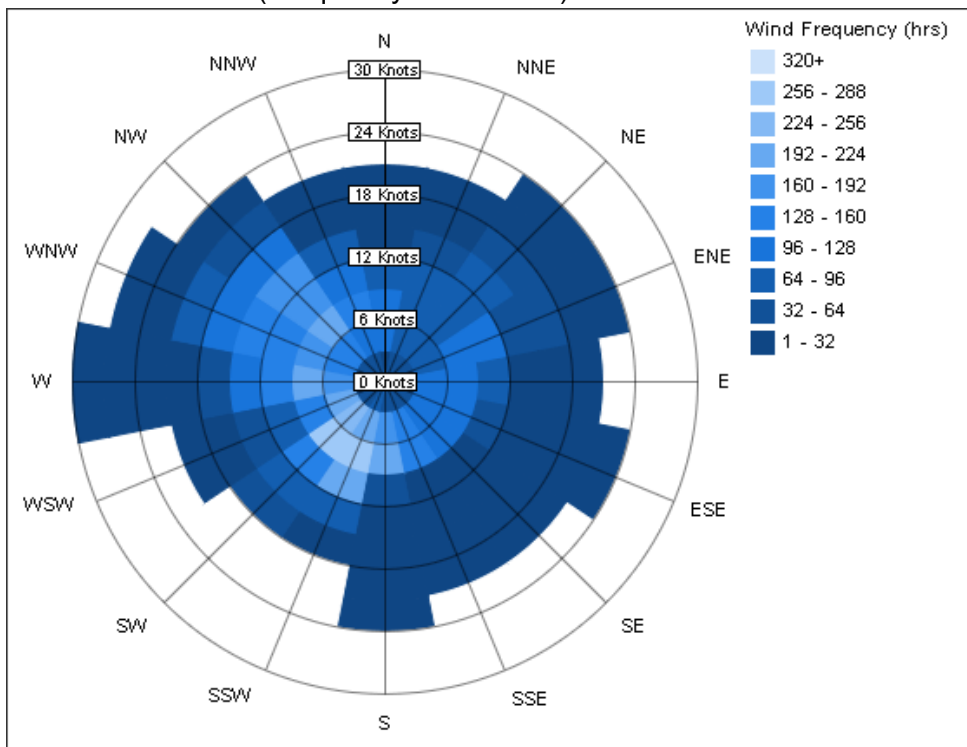
Monthly Peak Demand



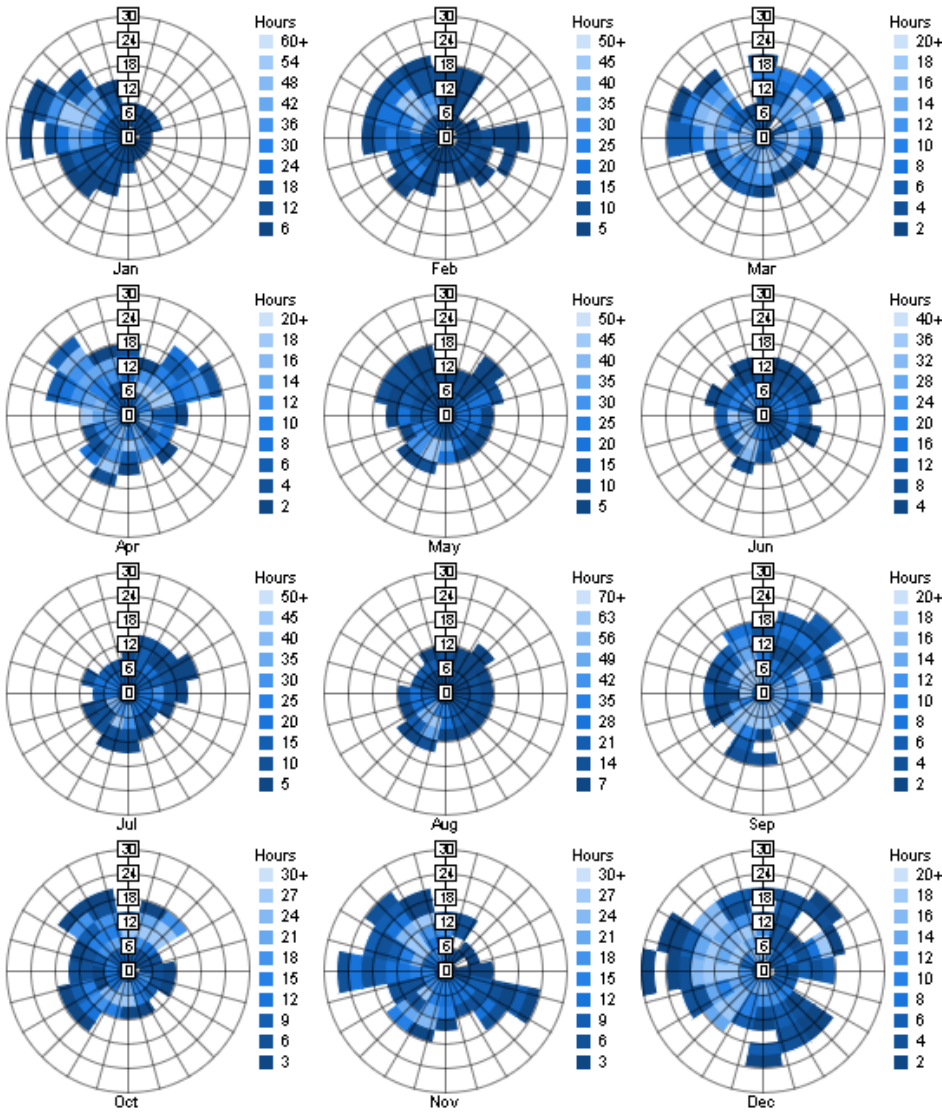
Annual Wind Rose (Speed Distribution)



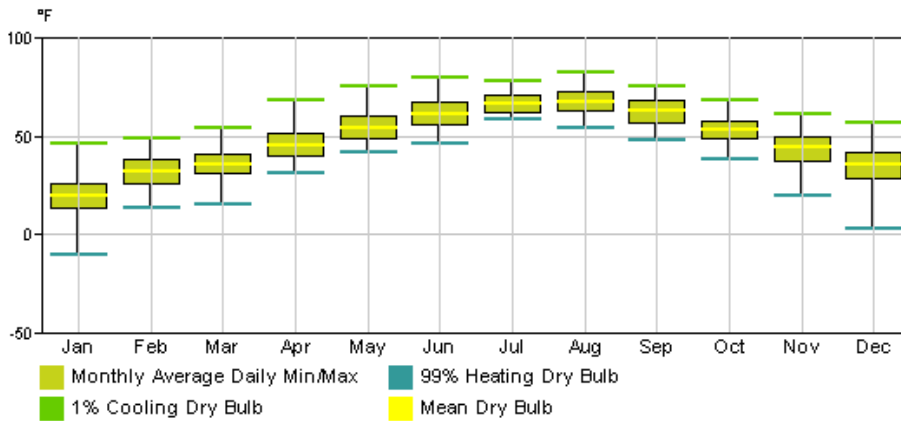
Annual Wind Rose (Frequency Distribution)



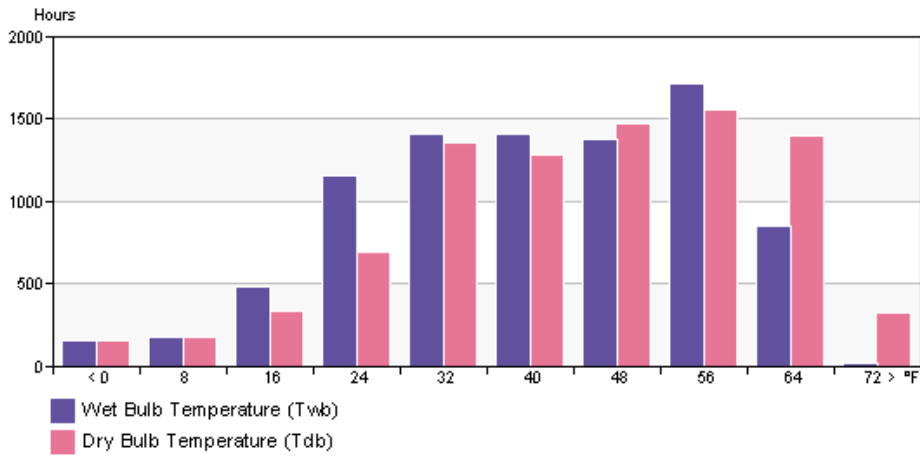
Monthly Wind Roses



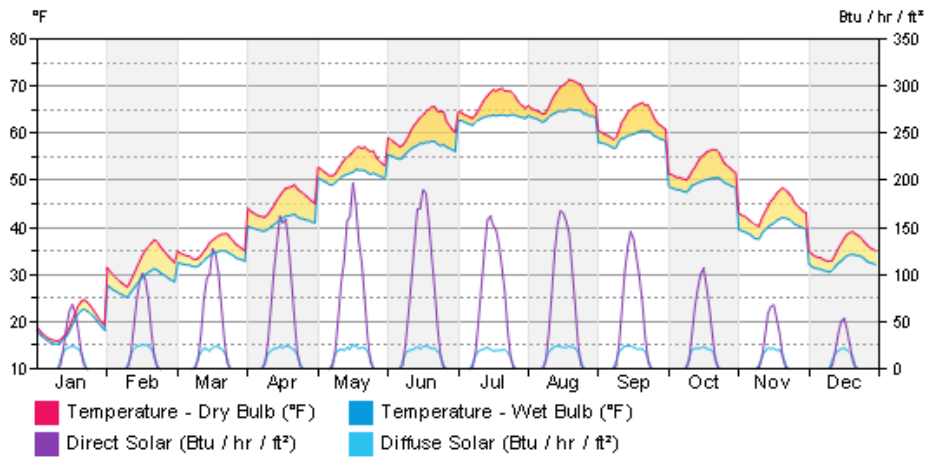
Monthly Design Data



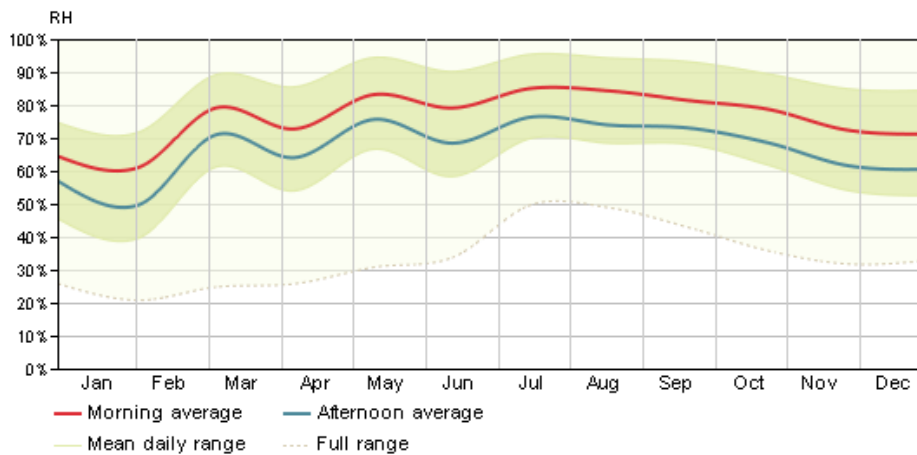
Annual Temperature Bins



Diurnal Weather Averages



Humidity



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