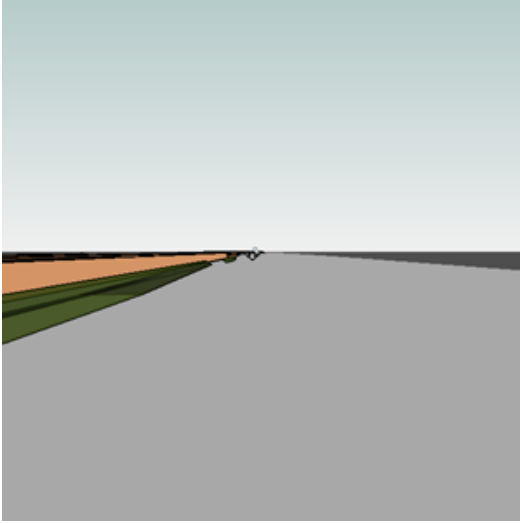


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IPOTESI 5

Analyzed at 6/14/2012 10:55:06 AM

Mass



Building Performance Factors

Location:	Via Amleto Palermi, 00139 Roma, Italia
Weather Station:	160240
Outdoor Temperature:	Max: 37°C/Min: -2°C
Floor Area:	6,066 m ²
Exterior Wall Area:	6,859 m ²
Average Lighting Power:	10.44 W / m ²
People:	972 people
Exterior Window Ratio:	0.30
Electrical Cost:	\$0.28 / kWh
Fuel Cost:	\$1.41 / Therm

Energy Use Intensity

Electricity EUI:	178 kWh / sm / yr
Fuel EUI:	991 MJ / sm / yr
Total EUI:	1,632 MJ / sm / yr

Life Cycle Energy Use/Cost

Life Cycle Electricity Use:	39,548,760 kWh
Life Cycle Fuel Use:	220,103,858 MJ
Life Cycle Energy Cost:	\$6,288,444

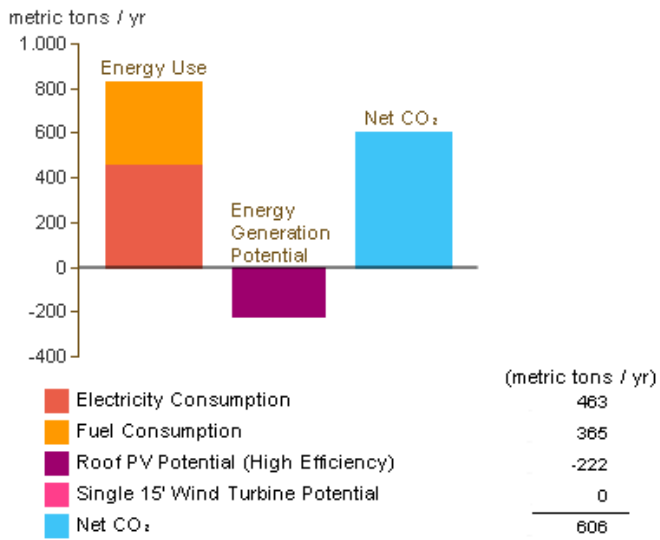
*30-year life and 6.1% discount rate for costs

Renewable Energy Potential

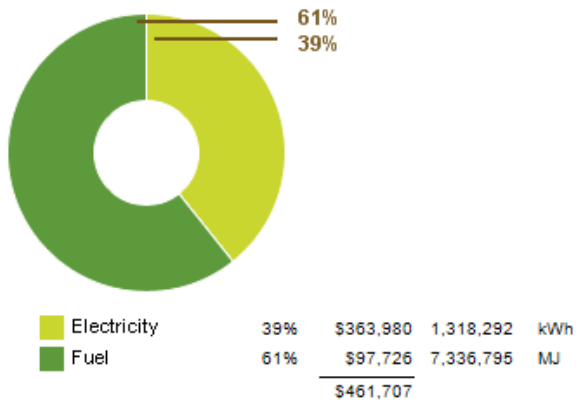
Roof Mounted PV System (Low efficiency):	211,028 kWh / yr
Roof Mounted PV System (Medium efficiency):	422,055 kWh / yr
Roof Mounted PV System (High efficiency):	633,083 kWh / yr
Single 15' Wind Turbine Potential:	837 kWh / yr

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

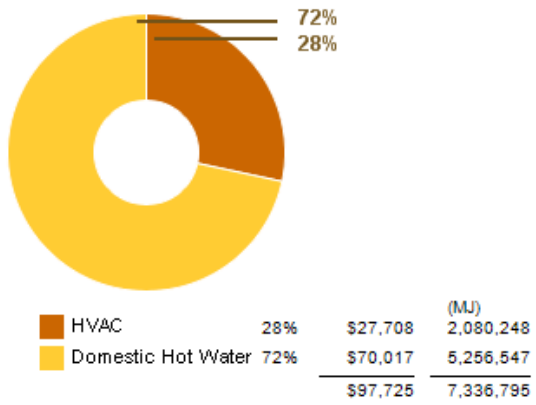
Annual Carbon Emissions



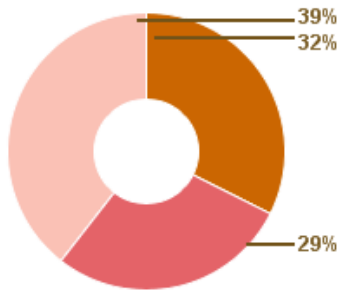
Annual Energy Use/Cost



Energy Use: Fuel

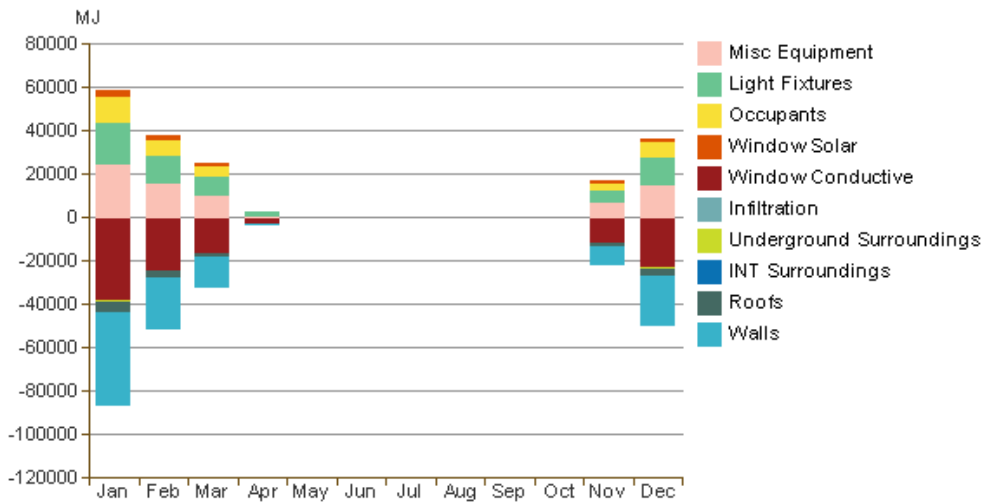


Energy Use: Electricity

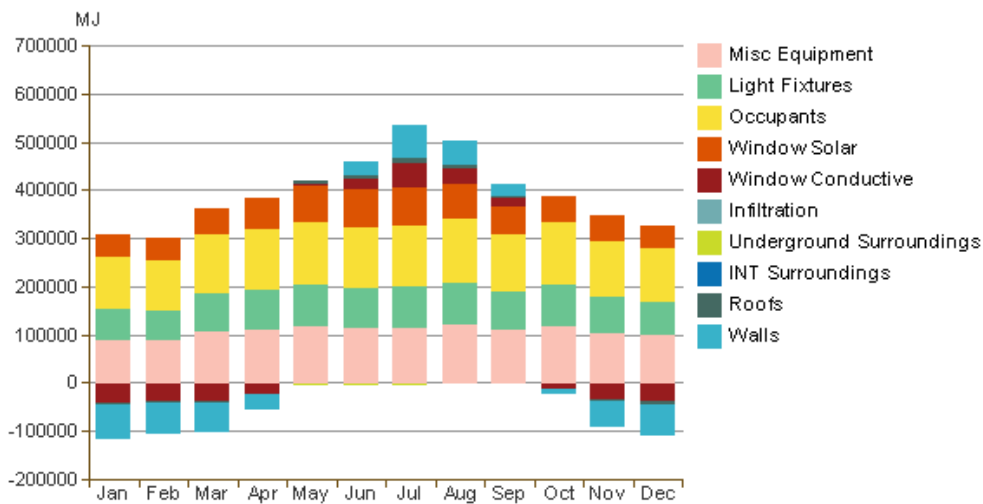


			(kWh)
HVAC	32%	\$117,315	424,901
Lighting	29%	\$101,929	369,175
Misc Equipment	39%	\$142,856	517,408
		\$362,100	1,311,484

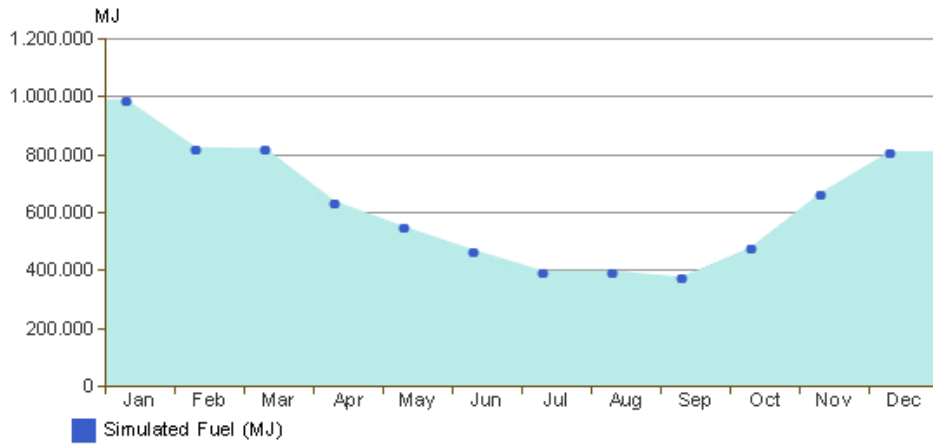
Monthly Heating Load



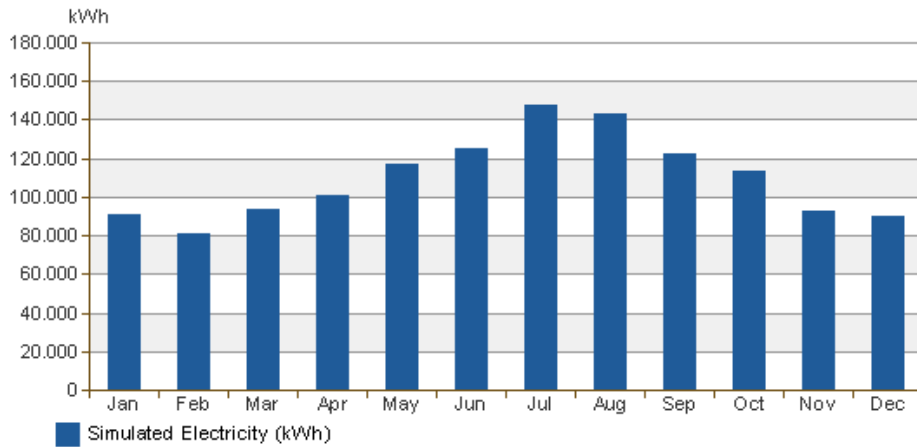
Monthly Cooling Load



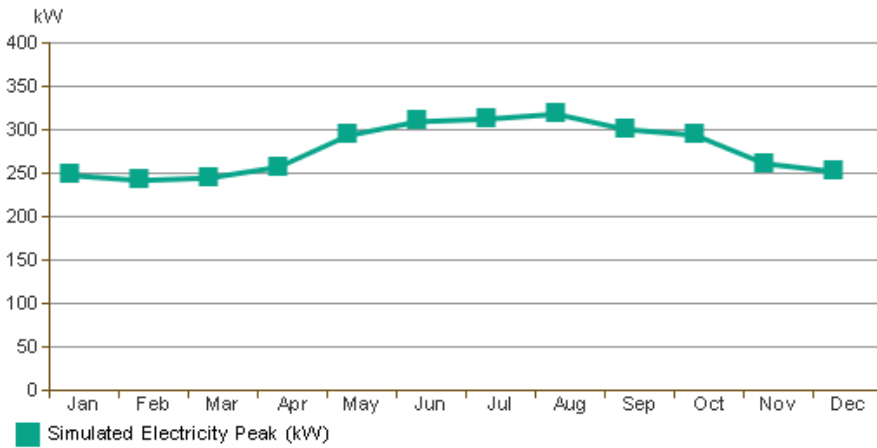
Monthly Fuel Consumption



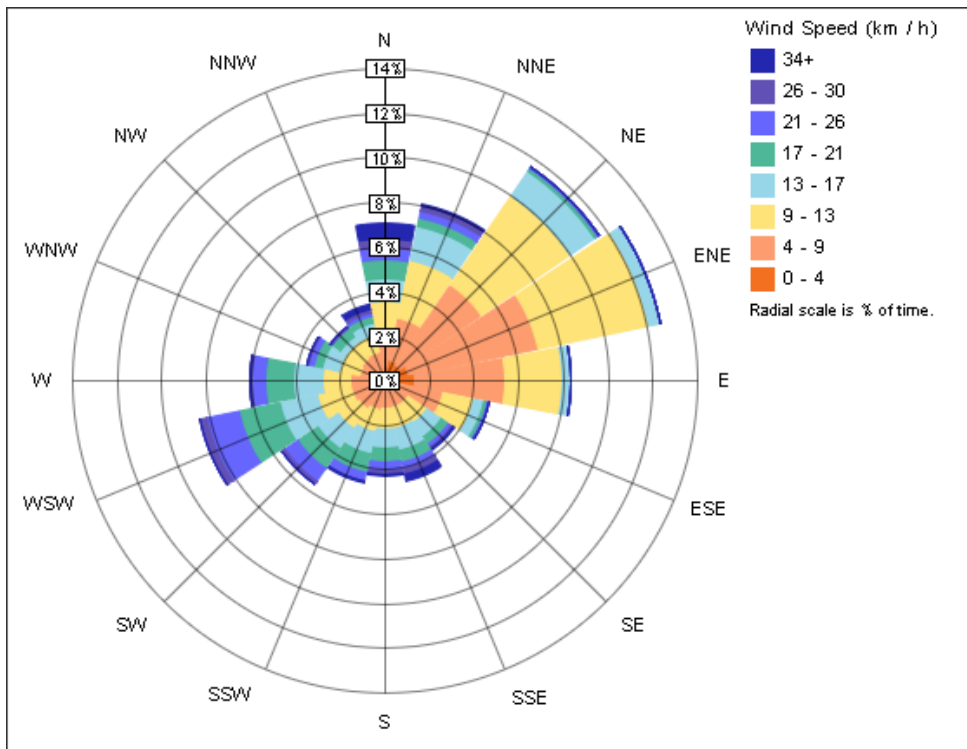
Monthly Electricity Consumption



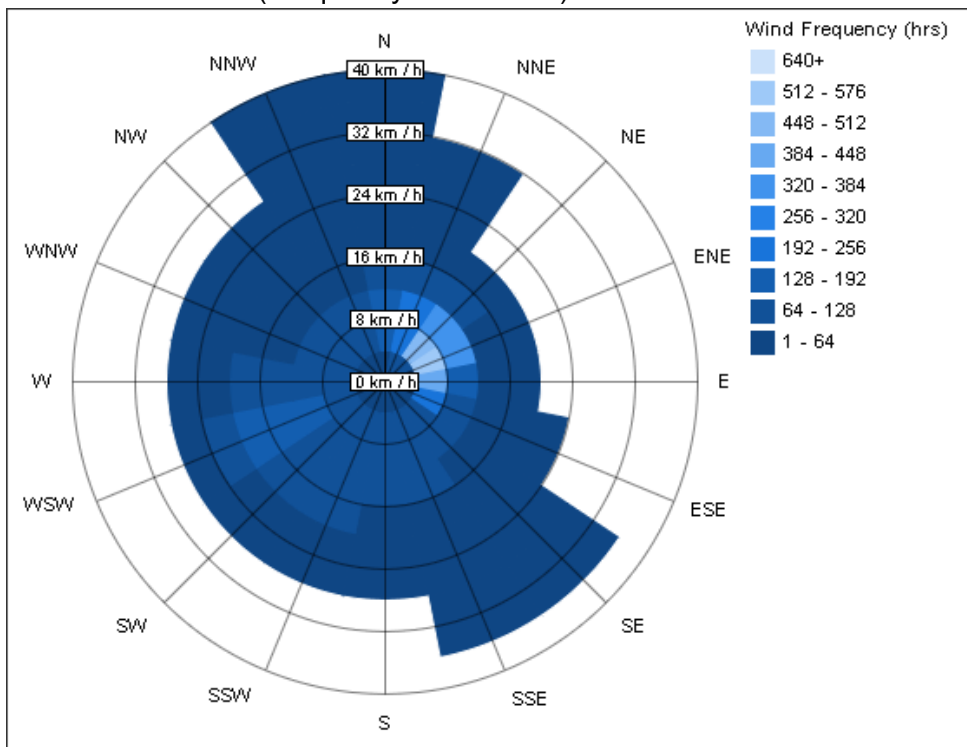
Monthly Peak Demand



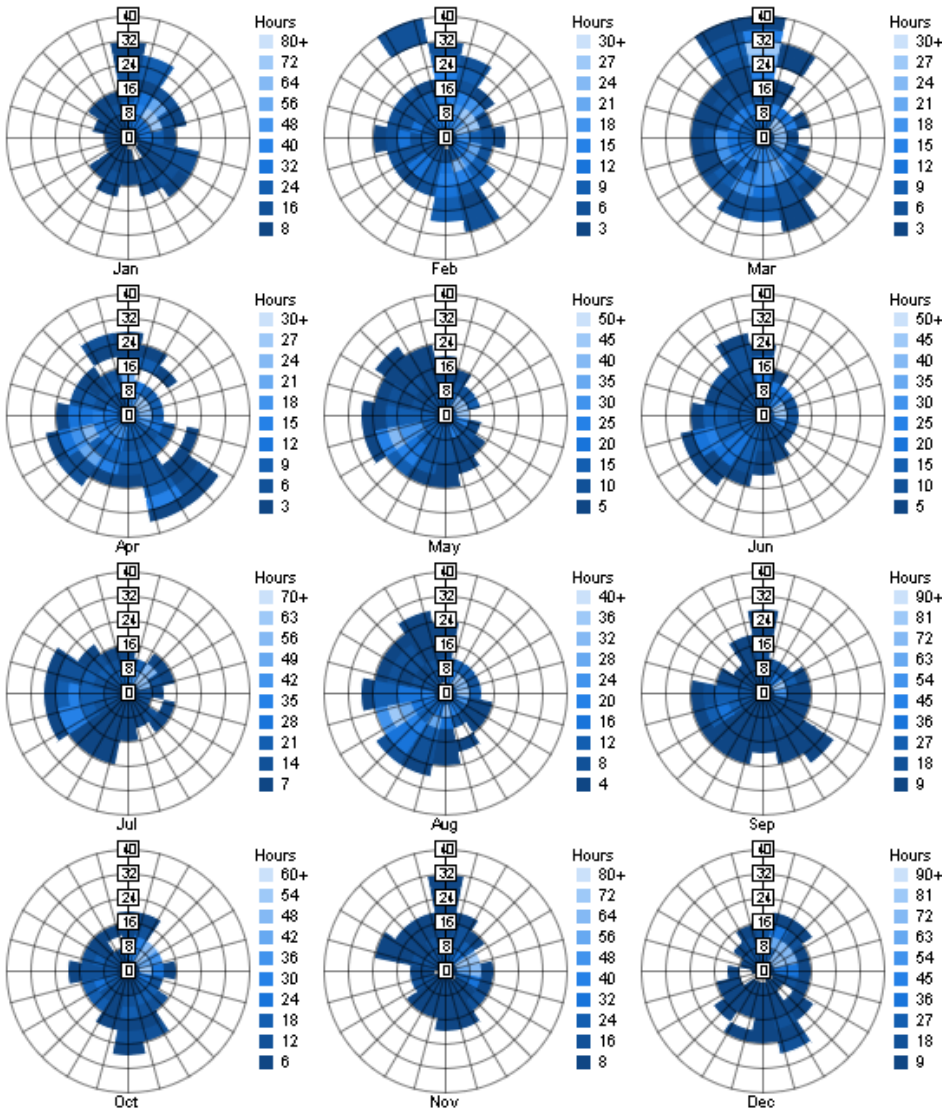
Annual Wind Rose (Speed Distribution)



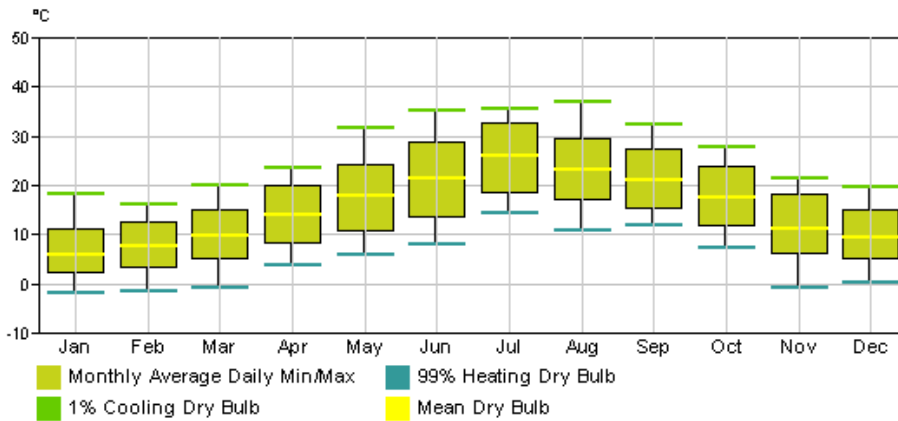
Annual Wind Rose (Frequency Distribution)



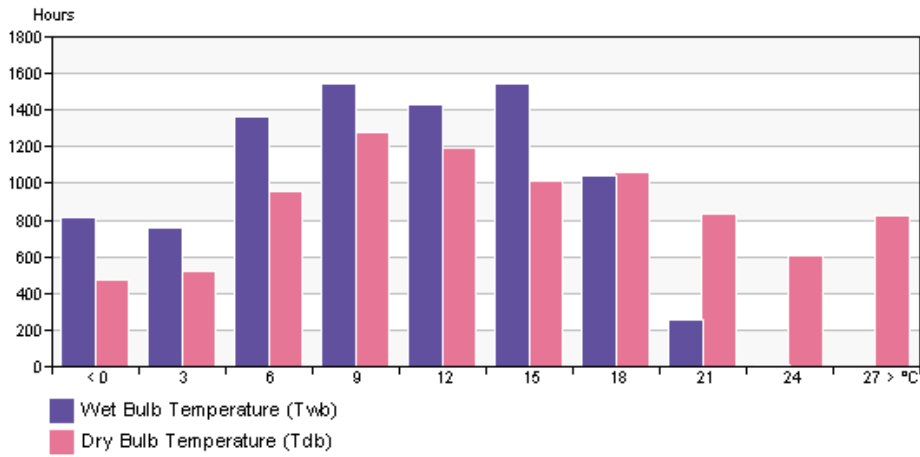
Monthly Wind Roses



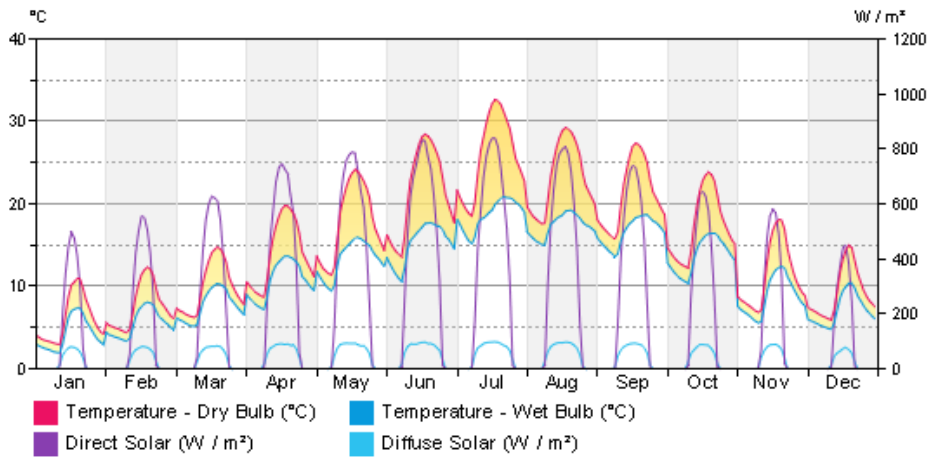
Monthly Design Data



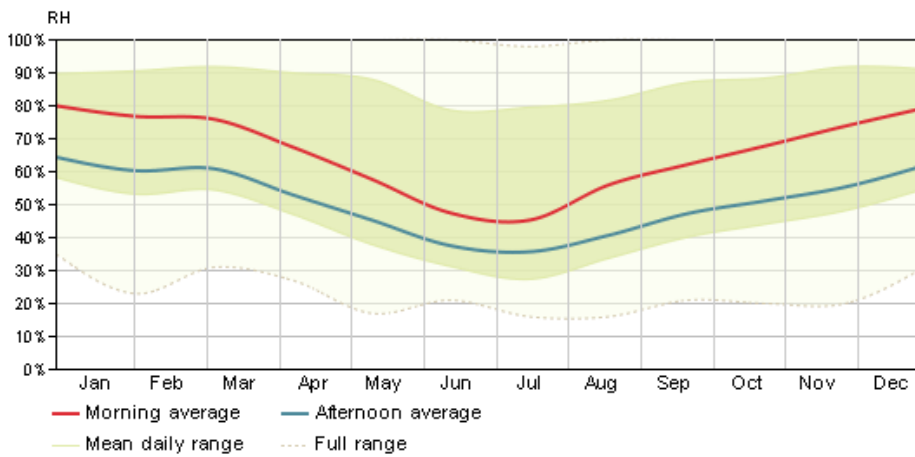
Annual Temperature Bins



Diurnal Weather Averages



Humidity



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