

Latitude: 39.87° North
Longitude: 75.23° West
Elevation: 6 ft.
Time Zone: UTC -05:00

File source:
USA_PA_Philadelphia.Intl.
AP.724080_TMY3.epw

I. TEMPERATURE RANGE

II. RELATIVE HUMIDITY / DEW POINT

III. SKY COVER

IV. WIND VELOCITY / DIRECTION

V. ILLUMINATION

VI. RADIATION

VII. PSYCHOMETRIC CHART

WEATHER REPORT: PHILADELPHIA, PA | TEMPERATURE

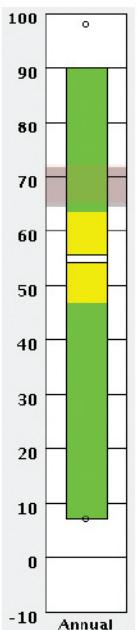
MONTHLY AVERAGE TEMPERATURE AND INTERIOR COMFORT ZONE (64.4°F - 71.6°F)

Interior Comfort Zone
64°F - 71.6°F

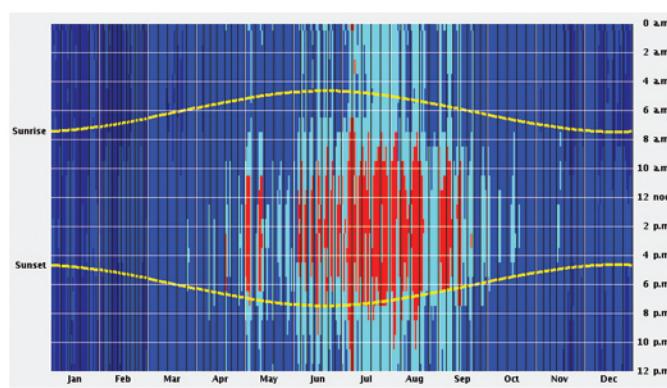
RECORDED HIGH - ○
DESIGN HIGH - ○
AVERAGE HIGH - ○
MEAN - ○
AVERAGE LOW - ○
DESIGN LOW - ○
RECORDED LOW - ○
COMFORT ZONE - ■



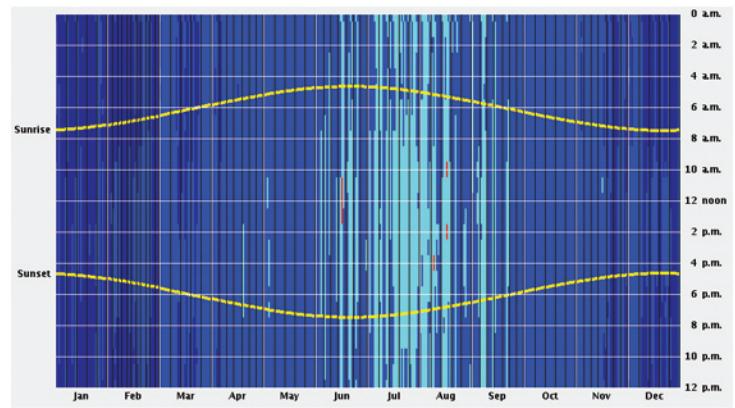
The chart on the left indicates the average monthly high and low temperatures for Philadelphia in relation to an interior comfort zone between 64.4°F to 71.6°F. On average, the outside temperature between the months of October - mid May are below the recommended interior temperature. The period between mid June to August, the outside temperature is above the interior comfort zone. The chart on the right synthesizes the monthly temperatures into a single annual reading.



DRY BULB TEMP
(degrees F)
12% < 32
60% 32 - 69
20% 69 - 81
8% 81 - 100
0% > 100

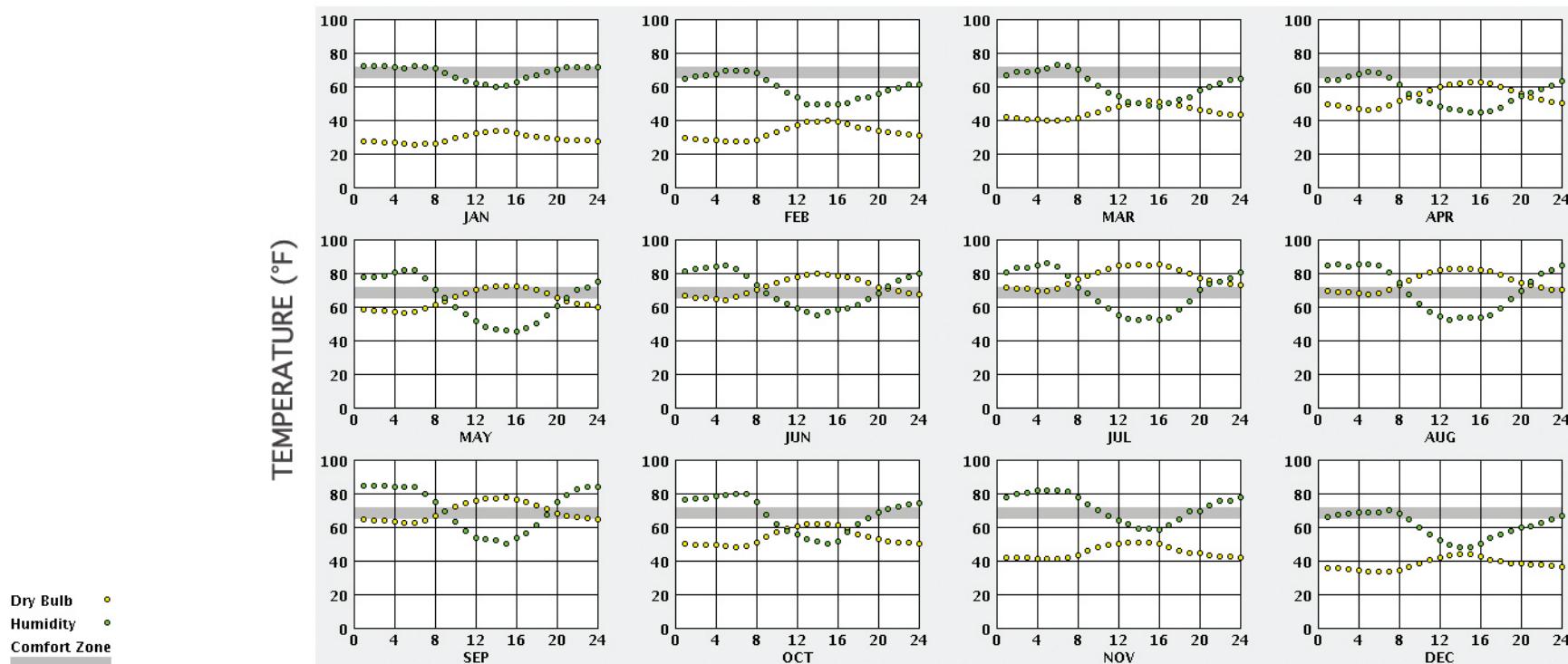


WET BULB TEMP
(degrees F)
20% < 32
67% 32 - 69
13% 69 - 81
0% 81 - 100
0% > 100



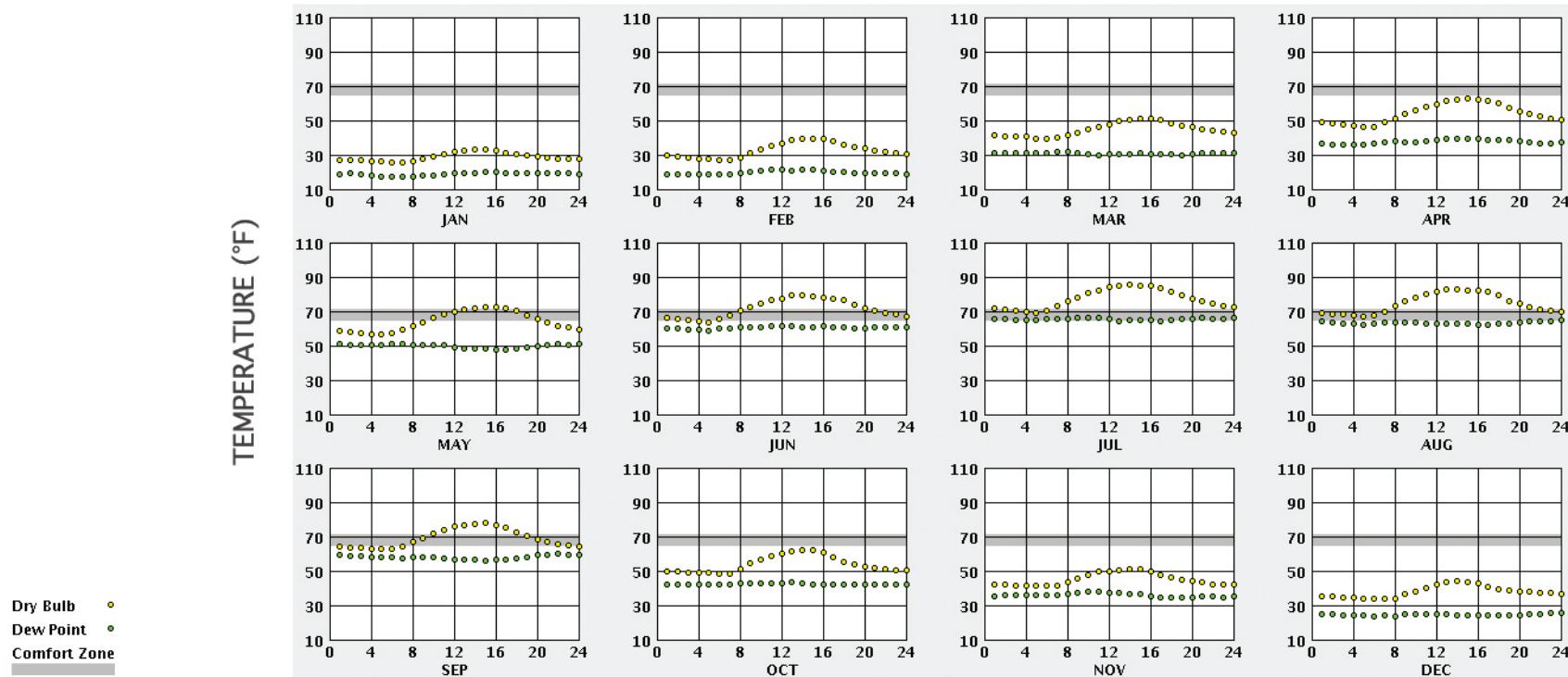
WEATHER REPORT: PHILADELPHIA, PA | RELATIVE HUMIDITY / DEW POINT

DAILY AVERAGE TEMPERATURE AND RELATIVE HUMIDITY IN RELATION TO COMFORT ZONE

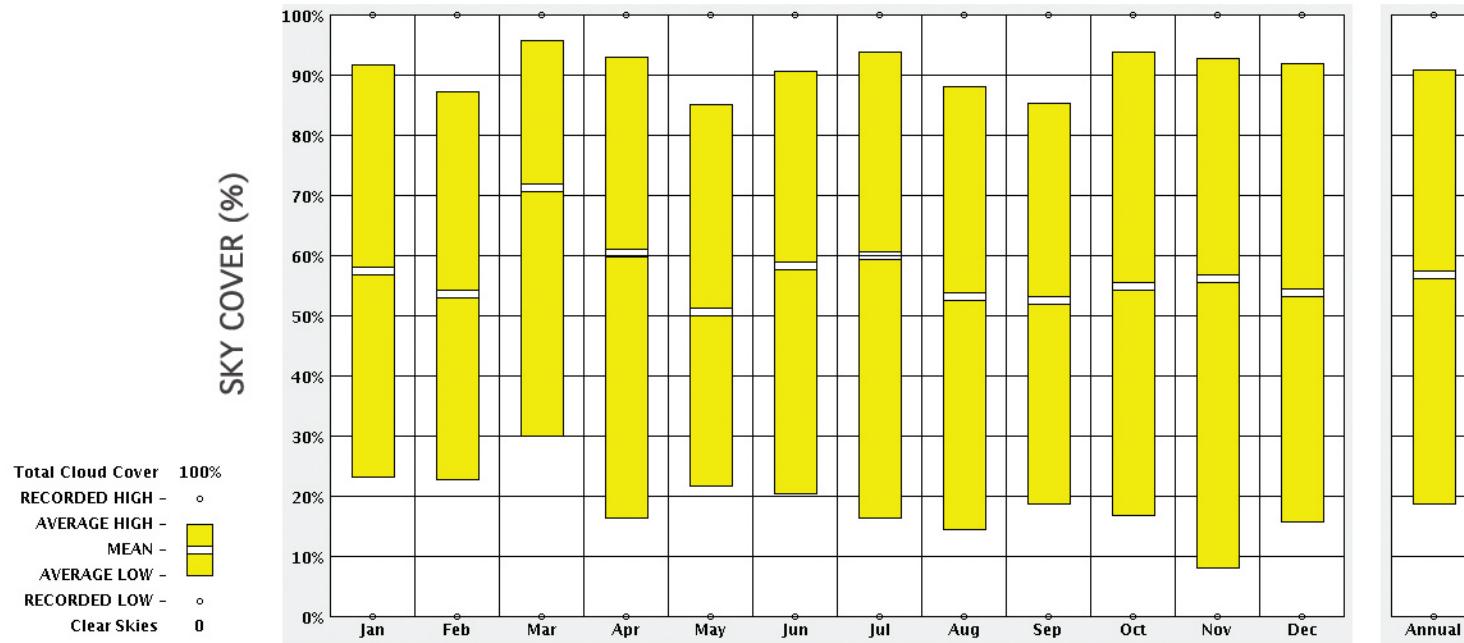


WEATHER REPORT: PHILADELPHIA, PA | RELATIVE HUMIDITY / DEW POINT

DAILY AVERAGE TEMPERATURE AND DEW POINT IN RELATION TO COMFORT ZONE

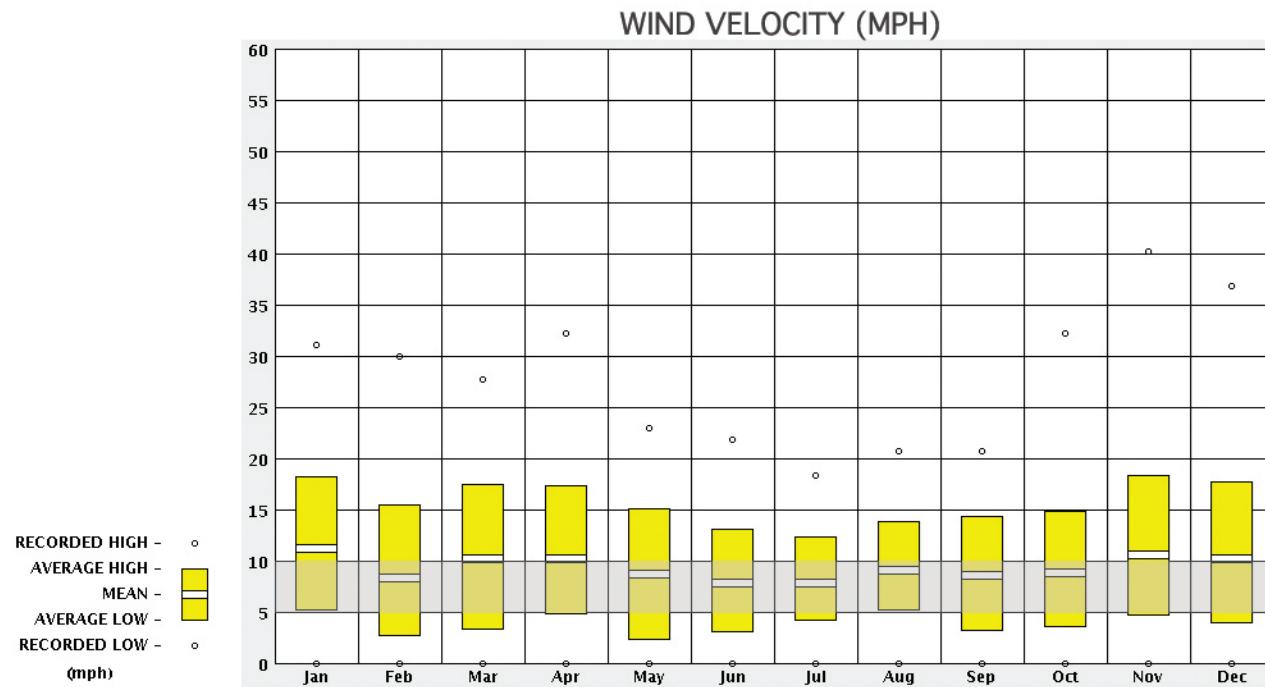


WEATHER REPORT: PHILADELPHIA, PA | SKY COVER



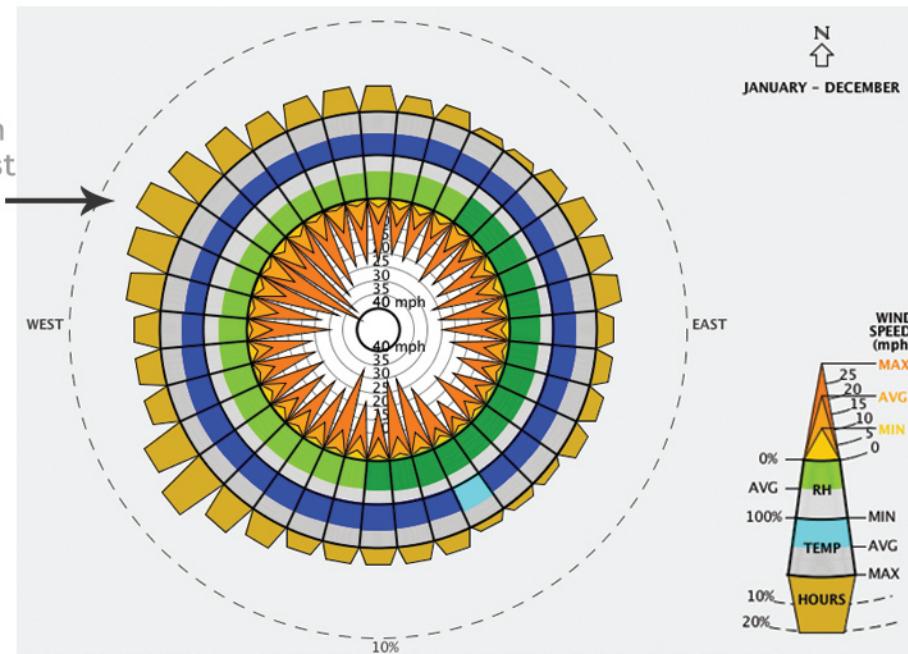
The average cloud coverage in Philadelphia is ~ 55% with a fairly consistent range throughout the year between 18% - 91%.

WEATHER REPORT: PHILADELPHIA, PA | WIND VELOCITY / DIRECTION



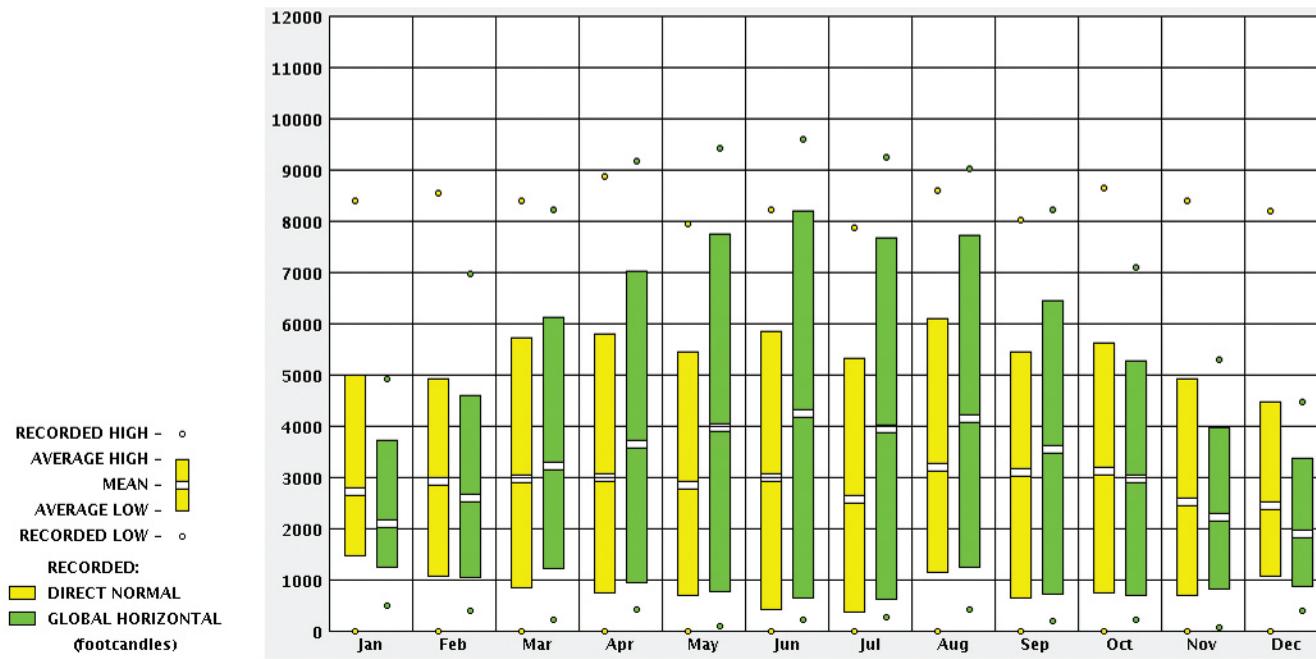
The chart on the left deals average monthly wind velocities in relation to the optimal range of 5-10 mph.

The highest winds approach the city from the north west at longer periods of time.



WEATHER REPORT: PHILADELPHIA, PA | ILLUMINATION

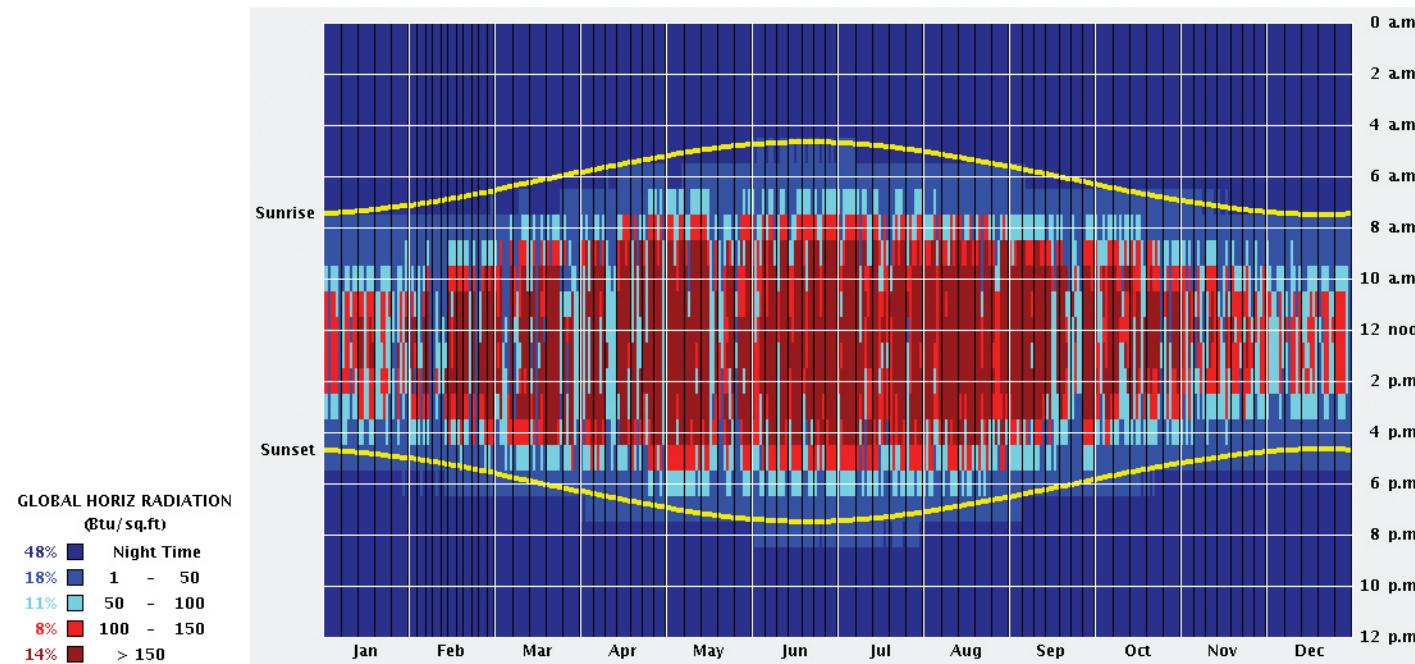
AVERGAE OUTDOOR ILLUMINATION (LUX)



The illumination refers to the brightness level. A typical clear day is approximately 10,000 lux outdoors. The recommended interior illumination depends on the distance from the window and the types of activities the space accommodates. The area closest to the window may measure 1,000 lux while the middle of the room can be reduced to approximately 25-50 lux in which additional lighting is required.

Condition	(lux)
Sunlight	107527
Full Daylight	10752
Overcast Day	1075
Very Dark Day	107
Twilight	10.8
Deep Twilight	1.08
Full Moon	0.108
Quarter Moon	0.0108
Starlight	0.0011
Overcast Night	0.0001

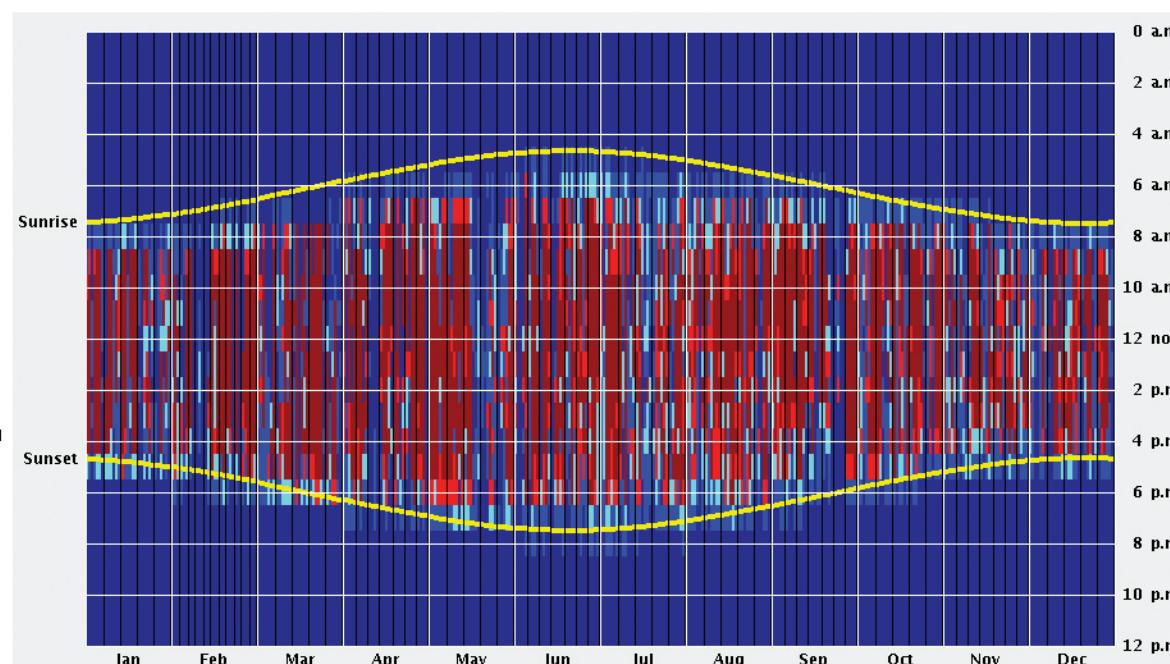
WEATHER REPORT: PHILADELPHIA, PA | RADIATION



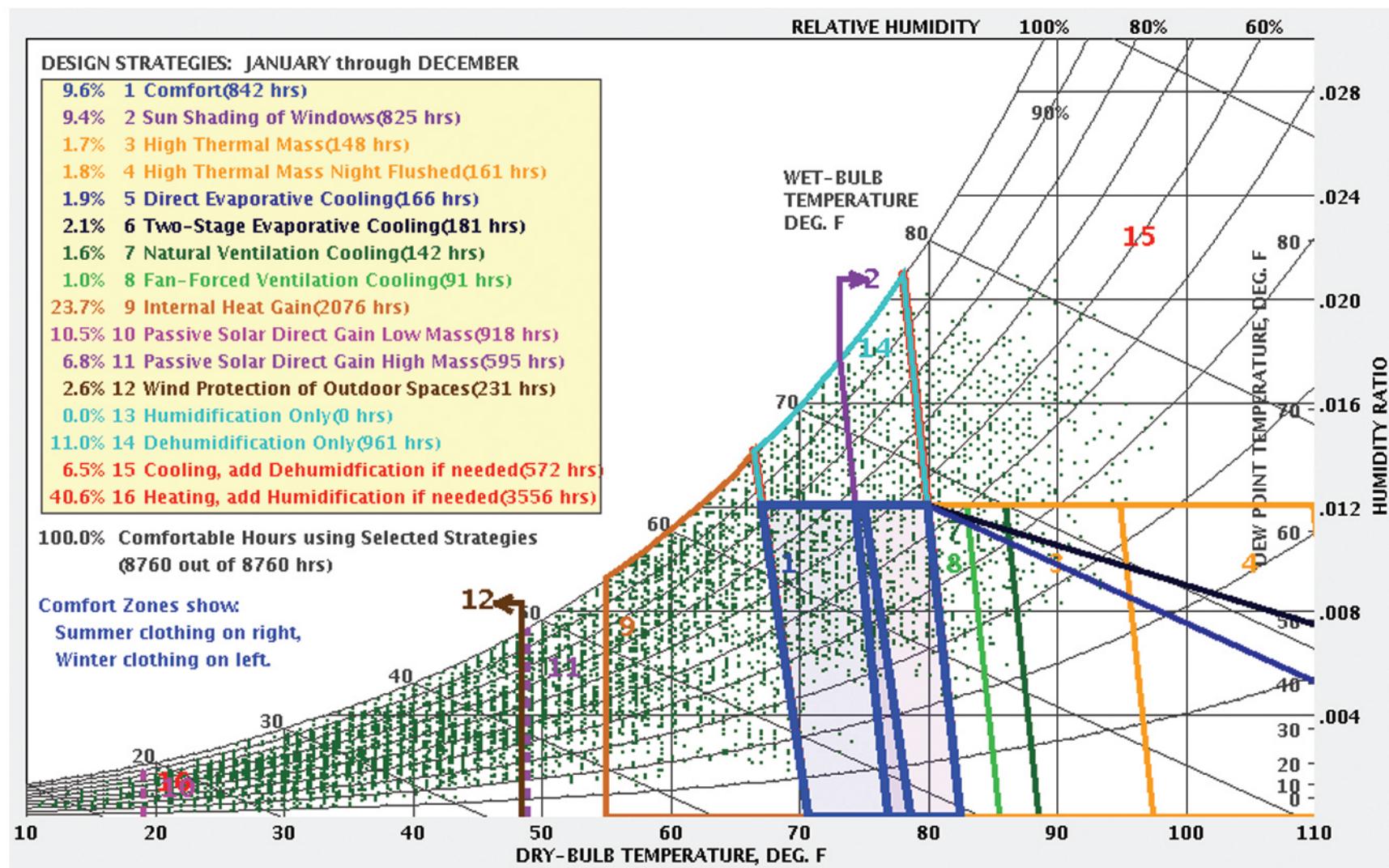
The chart above details the global radiation experienced in Philadelphia per monthly average throughout the day. The global radiation is the sum of both direct and diffuse light.

In comparison, the chart below only depicts direct radiation, i.e. radiation perpendicular to the ground.

As the global radiation is the sum, it is “redder” in value, meaning it depicts a higher level of total radiation.



WEATHER REPORT: PHILADELPHIA, PA | PSYCHOMETRIC CHART



COMFORT INDOORS
100% COMFORTABLE
0% NOT COMFORTABLE

The above chart summarizes the conditions needed to keep the indoor environment at a comfortable level in terms of temperature and humidity. It factors in clothing.