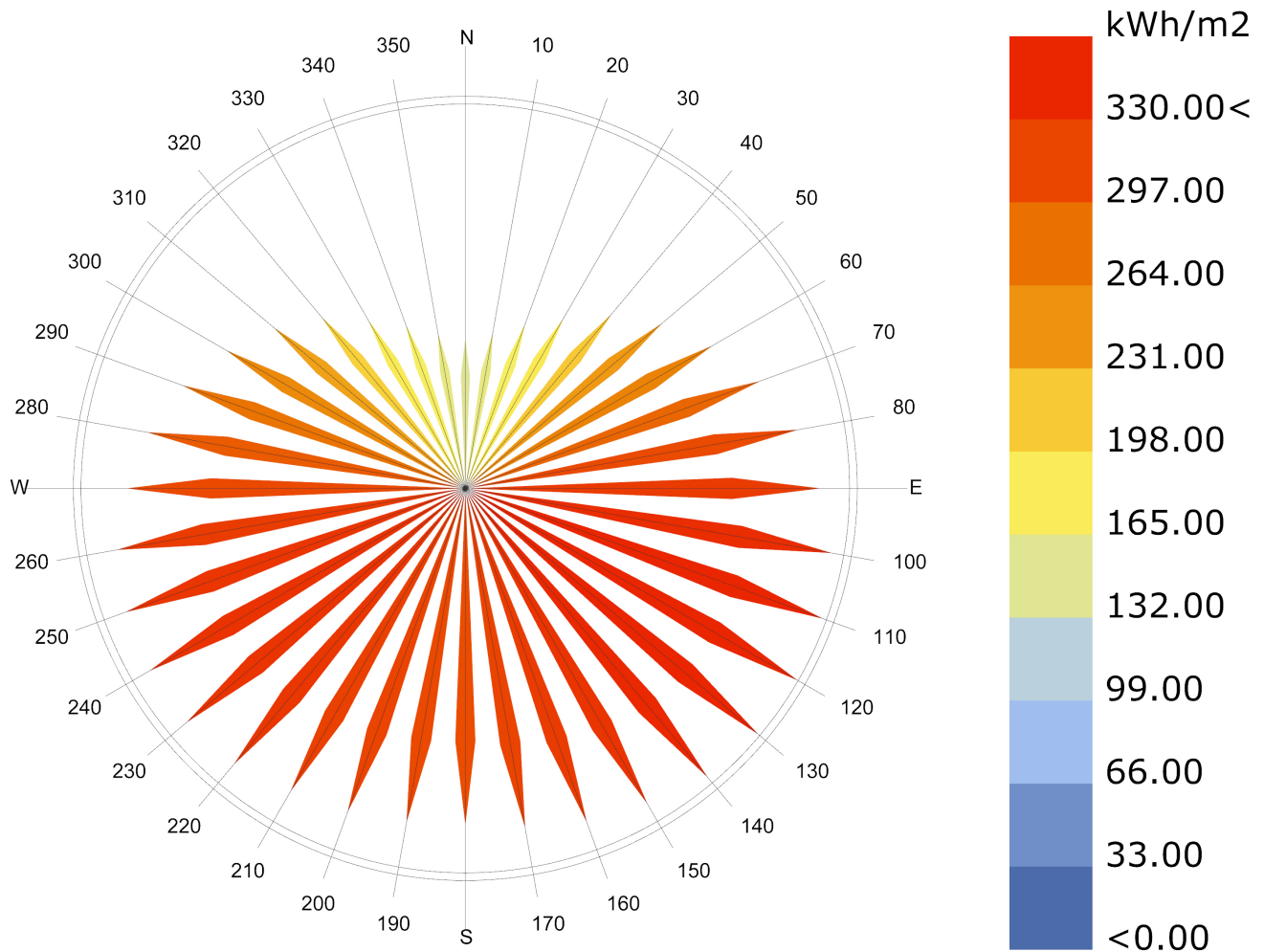


## RADIATION ROSE



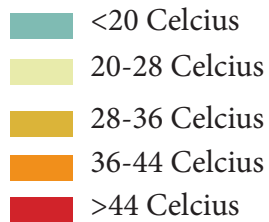
Total Radiation(kWh/m<sup>2</sup>)  
 Philadelphia\_International\_Ap\_PA\_USA  
 1 JUN 1:00 - 30 SEP 24:00

## CONCLUSION

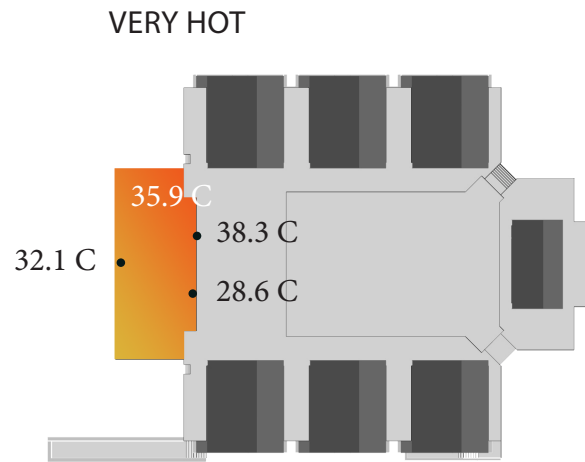
Plant trees to provide shade for people sitting on the concrete bench.  
 Add another layer of material which absorb less heat to the top of metal bench.

## DIFFERENCE

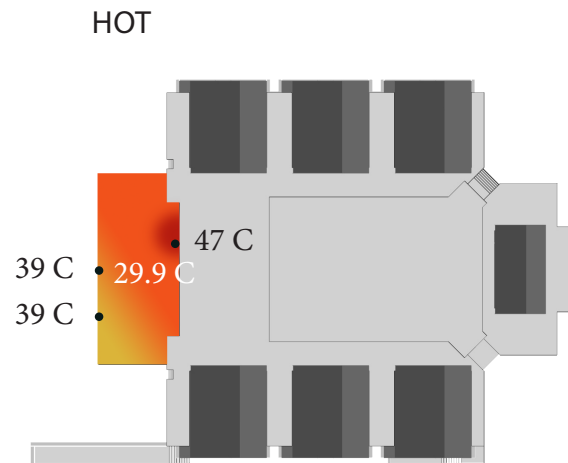
Surface Temperature: about 5-8 degree difference between the local weather report and the on site temperature.  
 Dry Bulb Temperature: about 3-5 degree difference among three measurements.



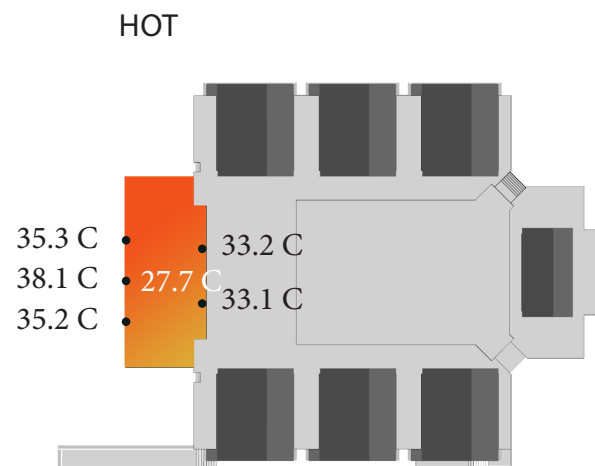
REPORTED	MEASURED
Temp.: 26	Temp.: 24.6
Humidity: 69%	Humidity: 41.2%
Wind: 0.8 m/s	Wind: 1.4 m/s



REPORTED	MEASURED
Temp.: 28	Temp.: 26.6
Humidity: 50%	Humidity: 50.5%
Wind: 2 m/s	Wind: 1.3 m/s



REPORTED	MEASURED
Temp.: 31	Temp.: 22.3
Humidity: 46%	Humidity: 60.5%
Wind: 2 m/s	Wind: 1 m/s





10:30

The area is under a lot of sunlight, while there is no shading provided by clouds, resulting in the area being really hot.



13:30

There is shading provided by the clouds, therefore the temperature is lower compared to morning. However, the surface temperature of the benches is hotter due to longer exposure to the sunlight.



16:30

The weather turned from sunny to cloudy. The temperature is the lowest amongst the three measurements. It's about to rain, so the humidity level increases.