

Question:

Can we use your globe temperature to calculate mean radiant temperature?

Answer:

Thank you for your email.

We don't have much experience on "mean radiant temperature" so I only can copy a link from Wikipedia from for your reference. We don't know that is correct or not. https://en.wikipedia.org/wiki/Mean_radiant_temperature

The globe temp. we displayed on our meter is compensated to 0.15m diameter globe already so I think you may use the same formula as below to calculate. Just input the velocity of wind, Globe temp. and T_a , then you can get MRT

And for the standard globe ($D = 0.15$ m, $\varepsilon = 0.95$):

$$MRT = \left[(GT + 273)^4 + 2,5 \cdot 10^8 \cdot v_a^{0,6} (GT - T_a) \right]^{1/4} - 273$$

Hope above help. Thank you.