Stefan Boltzmann constant: 5.670367 x 10-8 W · m-2 · K-4

1 L☉ = 3.846 × 1026 watts (or 3.846 × 1033 ergs per second)

5800 Kelvin

1 au = 150000000 km = 1.5 × 1011m

1 solar radii = 6.9634 \* 108 meters

L = m2 \* K4

SB Constant = W \* m-2 \* K4

F = W \* m2

σT4 = F = L/(4πr2)

(W \* m-2 \* K-4) \* K4 = W \* m-2 = ((W \* m-2 \* K-4) \* K4 \* m2) \* m-2