

L1RJJEANS

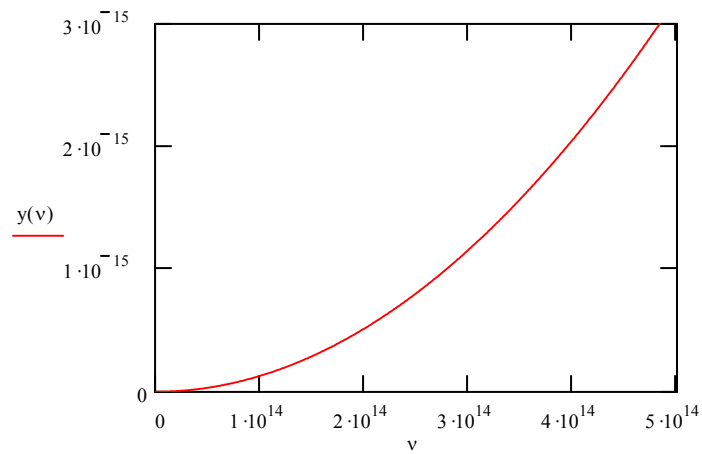
The Raleigh Jeans law gives the emitted radiation as Energy/frequency interval and per volume. It is given here as $Ws/\{(1/s)m^3\}$

$$\nu := 5 \cdot 10^{14}, 4.99 \cdot 10^{14} \dots 10^{12}$$

$$c := 3 \cdot 10^8 \cdot \frac{m}{s} \quad k := 1.38 \cdot 10^{-23} \cdot W \cdot \frac{s}{K}$$

$$T := 1000 \cdot K$$

$$y(\nu) := 8 \cdot \pi \cdot k \cdot T \cdot \frac{\nu^2}{c^3} \quad \text{given in } Ws/((1/s)m^3)$$



frequency

$3 \cdot 10^{11}$ is 1mm
 $3 \cdot 10^{14}$ is 1micron
 $3 \cdot 10^{17}$ is 1nm is 10A

frequency

$1 \cdot 10^{11}$ is 3mm
 $1 \cdot 10^{14}$ is 3micron
 $1 \cdot 10^{17}$ is 3nm is 30A