

MPE Calculation

FCC ID: T8N7405JV

RF Exposure Requirements: 47CFR§1.1307(b)
RF Radiation Exposure Limits: 47CFR§1.1310
RF Radiation Exposure Guidelines: 47CFR§2.1091
EUT Frequency Band: 2412 – 2462MHz
Limits for General Population/Uncontrolled Exposure in the band of: 1500 – 100000MHz
Power Density Limit: 1.0mW/cm²;

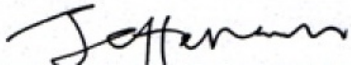
Equation: $S = PG/4\pi R^2$
Where, S=Power Density
P=Power Input to Antenna
G=Antenna Gain
R=distance to the center of radiated antenna

For 802.11b-Low Channel (2412MHz):
Power=16.13dBm, Antenna Gain=2.5dBi, Prediction distance 20cm
 $S = (41.02 * 1.78) / (4 * 3.14 * 20^2) = 0.0145 \text{ mW/cm}^2$

For 802.11g-Low Channel (2412MHz):
Power=14.32dBm, Antenna Gain=2.5dBi, Prediction distance 20cm
 $S = (27.04 * 1.78) / (4 * 3.14 * 20^2) = 0.0096 \text{ mW/cm}^2$

Result

The above result had shown that device complied with 1.0mW/cm² Power density requirement for distance of 20 cm.

Completed By: 
Data: 2012-05-03