

Maximum Permissible Exposure Compliance Requirement

1. LIMITS

The limit for general population/uncontrolled exposures

Frequency	Power density(mW/cm ²)	Averaging time(minutes)
300MHz~1.5GHz	F/1500	30
1.5GHz~100GHz	1.0	30

Frequency(MHz)	Power density(mW/cm ²)	Averaging time(minutes)
2412	1.0	30
2437	1.0	30
2462	1.0	30

2. EUT RF Exposure

The Max Conducted Peak Output Power is 25.26dBm (335.7mW) in channel 1 of 802.11g;

The antenna gain of this antenna 1 is 3dBi.

3dB logarithmic terms convert to numeric result is nearly 2.

According to the formula $S = \frac{PG}{4R^2\pi}$, we can calculate S which is MPE.

Now , R=20 cm, P=335.7mW, G=2

$$\text{So, } S = \frac{PG}{4R^2\pi} = \frac{335.7 * 2}{4 * 400 * 3.14} = 0.134 \text{ mW/cm}^2$$

So the MPE comply the requirement.