

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 17.74 dBm(59.43mW) in channel 1 of 802.11b;

The best case gain of the antenna is 5.0dBi.

5.0dB logarithmic terms convert to numeric result is nearly 3.16.

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

Now , R=20 cm, P=59.43mW, G=3.16.

$$\text{So, } S = \frac{PG}{4R^2\pi} = \frac{59.43 * 3.16}{4 * 400 * 3.14} = 0.04$$

So the MPE comply the requirement.