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 21.55dBm (142.89mW) in channel 11 of 802.11n20;

The EUT has two antennas. The max conducted peak output power of antenna 0 is 18.10dBm (64.56mW). The antenna gain of this antenna is 1.6dBi. The max conducted peak output power of antenna 1 is 18.93dBm (78.16mW). The antenna gain of this antenna is 1.8dBi.

1.6dB logarithmic terms convert to numeric result is nearly 1.51.

1.8dB logarithmic terms convert to numeric result is nearly 1.45.

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

Now , R=20 cm, P_0=64.56mW, G_0=1.45;P_1=78.16mW, G_1=1.51.

So,S= $\frac{PG}{4R^2\pi}$ = $\frac{78.16*1.51+64.56*1.45}{4*400*3.14}$ =0.042 **mW/cm^2**

So the MPE comply the requirement.