

# Maximum Permissible Exposure Compliance Requirement

## 1. LIMITS

The limit for general population/uncontrolled exposures

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

Frequency(MHz)	Power density(mW/cm <sup>2</sup> )	Averaging time(minutes)
2402	1.0	30
2441	1.0	30
2480	1.0	30

## 2. EUT RF Exposure

The Max Conducted Peak Output Power is 5.95dBm (3.94mW) in 2402MHz of GFSK;

The antenna gain of this antenna is 3.75dBi.

3.75dB logarithmic terms convert to numeric result is nearly 2.37.

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

Now , R=20 cm, P=3.94mW, G=2.37;

$$\text{So, } S = \frac{PG}{4R^2\pi} = \frac{3.94 * 2.37}{4 * 400 * 3.14} = 0.00185 \text{ mW/cm}^2$$

**So the MPE comply the requirement.**