# 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)** |
|---|---|---|
| 2402 | 1.0 | 30 |
| 2441 | 1.0 | 30 |
| 2480 | 1.0 | 30 |

## 2. EUT RF Exposure

The Max Conducted Peak Output Power is 5.97dBm (3.95mW) in 2402MHz of GFSK;

The antenna gain of this antenna is 4.74dBi.

4.74dB logarithmic terms convert to numeric result is nearly 2.98.

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

Now , R=20 cm, P=3.95mW, G=2.98;

So,S= $\frac{PG}{4R^2\pi} = \frac{3.95*2.98}{4*400*3.14}$ =0.00234 **$mW/cm^2$**

**So the MPE comply the requirement.**