

**SAR evaluation**  
**FCC ID: 2BGSH-6011-01003**

MPE Calculation Method

$$E \text{ (V/m)} = (30 \cdot P \cdot G)^{0.5} / d$$

$$\text{Power Density: } P_d \text{ (W/m}^2\text{)} = E^2 / 377$$

E = Electric Field (V/m)

P = Peak RF output Power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$P_d = (30 \cdot P \cdot G) / (377 \cdot d^2)$$

From the peak EUT RF output power, the minimum mobile separation distance,  $d=0.2\text{m}$ , as well

as the gain of the used antenna, the RF power density can be obtained.

**Calculated WIFI Result and Limit (WORSE CASE IS AS BELOW)**

Antenna Gain (Numeric)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.33 (3.67dBi)	0.86 (-0.66dBm)	0.0004	1	Compiles

Note:

Antenna Gain: 3.67dBi

Antenna Gain (Numeric): 2.33dBi

ERP=-0.66+3.67-2.15=0.86dBm(1.22mW)