

# **MPE ESTIMATION**

#### FCC ID: 2ACFF-UC3101R

### 1, Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm <sup>2</sup> )	Averaging time(minutes)		
300MHz1.5GHz	F/1500	30		
1.5GHz100GHz	1.0	30		

Note: F= Frequency in MHz

## 2, Estimation Result

#### WIFI

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (numerical)	MPE (mW/cm²)
2.4G WIFI	13.1	13±1(14)	25.119	2	1.5849	0.00792
5.2G WIFI	15.47	15±1(16)	39.811	1	1.2589	0.00998
5.8G WIFI	12.54	12±1(13)	19.953	1	1.2589	0.00500

$$Pd = \frac{Pout * G}{4\pi r^2}$$

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report **HK2005211112-1E/2E/3E**, antenna gain=2dBi/1dBi

simultaneously MPE

 $2.4G \text{ WIFI MPE}_{(max)} = 0.00792 \text{ (mW/cm}^2)$ 

5G WIFI MPE  $_{(max)}$ = 0.00998(mW/cm<sup>2</sup>)

simultaneously MPE=0.00792+0.00998=0.01790(mW/cm<sup>2</sup>)

when the minimum test separation distance is >20 cm, a distance of 20 cm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.01790 mW/cm<sup>2</sup> which is< 1.0mW/cm<sup>2</sup>, RF Exposure testing is not required.

