

MPE ESTIMATION

FCC ID: **2ASJ3-ATS4**

1, 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

2, Estimation Result

For BT/WIFI:

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
EDR	1.55	1±1(2)	1.58	3	2.0	0.00063
BLE	9.41	9±1(10)	10	3	2.0	0.00397
2.4G WIFI ANT.1	14.68	14±1(15)	31.62	3	2.0	0.01256
2.4G WIFI ANT.2	14.70	14±1(15)	31.62	3	2.0	0.01256
MIMO	/	/	/	/	/	0.02512
5.2G WIFI ANT.1	7.20	7±1(8)	6.31	3	2.0	0.00251
5.2G WIFI ANT.2	8.32	8±1(9)	7.94	3	2.0	0.00315
MIMO	/	/	/	/	/	0.00566

$$Pd = \frac{P_{out} * G}{4\pi r^2} ;$$

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK2401180403-1E/-2E/3E/4E,

BT antenna gain=3dBi

2.4G antenna gain=3dBi.

5.2G antenna gain=3dBi.

BT MPE (max)= 0.00397 (mW/cm²)

2.4G WIFI MPE (max)= 0.02512 (mW/cm²)

simultaneously MPE=0.00397+0.02512=0.02909(mW/cm²)

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 0.02909 which is < 1.0, RF Exposure testing is not required.

Note: the device could not transmit simultaneously in 2.4G and 5G.

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