

## MPE ESTIMATION

FCC ID: **GSS-VS19147**

### 1, 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

### 2, Estimation Result

For 2.4G /5GWIFI/BT:

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm <sup>2</sup> )
2.4G WIFI Ant 1	15.67	15±1(16)	39.81	3	2	0.01581
2.4G WIFI Ant 2	17.55	17±1(18)	63.10	3	2	0.02506
MIMO	/	/	/	/	/	0.04087
5.2G WIFI Ant 1	14.55	14±1(15)	31.62	3.68	2.33	0.01469
5.2G WIFI Ant 2	12.23	12±1(13)	19.95	3.68	2.33	0.00927
MIMO	/	/	/	/	/	0.02395
5.8G WIFI Ant 1	14.15	14±1(15)	31.623	3.68	2.33	0.01469
5.8G WIFI Ant 2	12.1	12±1(13)	19.953	3.68	2.33	0.00927
MIMO	/	/	/	/	/	0.02395
EDR	7.82	7±1(8)	6.31	1.8	1.51	0.0019
BLE	5.32	5±1(6)	3.981	1.8	1.51	0.0012

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report **HK2202220572-1E/2E/3E/4E/5E**,

2.4G antenna gain=3dBi.

5G antenna gain=3.68dBi.

BT antenna gain=1.8dBi.

WiFi and BT Simultaneous evaluation:

0.04087 mW/cm<sup>2</sup>+0.0019 mW/cm<sup>2</sup>=0.04277 mW/cm<sup>2</sup><1.

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 0.04277 mW/cm<sup>2</sup> which is < 1.0mW/cm<sup>2</sup>, RF Exposure testing is not required.

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

-----The End-----