MPE ESTIMATION

FCC ID: 2BBAWPFD-002

1. Limit for General Population/Uncontrolled Exposures

Frequency	Power Density(mW/cm2)	Averaging Time(minutes)
300MHz-1.5GHz	F/1500	30
1.5GHz-100GHz	1.0	30

Note: F= Frequency in MHz

2. Estimation Result

2.4G WiFi: Worst case

Mode	Max PK Output Power(dBm)	Tune Up Power(dBm)	Max Tune Up Power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)	Power Density (mW/cm2) Limit	Result
11b 2412MHz	15.80	16±1(17)	50.119	1.95	1.5668	0.015622	1.0	PASS
Note: $Pd = \frac{Pout * G}{4\pi r^2}$								
Note: The estimation distance is 20cm.								
Note: PK Output power=conducted power.								

5G WiFi: Worst case

Mode	Max PK Output Power(dBm)	Tune Up Power(dBm)	Max Tune Up Power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)	Power Density (mW/cm2) Limit	Result
Band 1	14.57	15±1(16)	39.811	1.97	1.574	0.012466	1.0	PASS
Band 4	14.63	15±1(16)	39.811	-0.76	0.8395	0.006649	1.0	PASS
Note: $Pd = \frac{Pout * G}{4\pi r^2}$								
Note: The estimation distance is 20cm.								
Note: PK Output power=conducted power.								

BLE: Worst case

Mode	Reading result (dBμV)	Conducted power(dBm)	Tune Up Power(dBm)	Max Tune Up Power (mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)	Power Density (mW/cm2) Limit	Result
GFSK 2402MHz	101.5	6.3	6±1(7)	5.012	1.95	1.5668	0.001562	1.0	PASS
Note: $Pd = \frac{Pout * G}{4\pi r^2}$									
Note: The estimation distance is 20cm.									
Note: Conducted power = Reading result -95.2									

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