

1. Safety Human exposure

1.1 Radio Frequency Exposure Compliance

1.1.1 Electromagnetic Fields

RESULT:
Pass

Test standard : RSS-102 Issue 5 March 2015
 FCC KDB Publication 447498 D01 v06
 FCC KDB Publication 447498 D03 v01
 FCC Part 2 (Section 2.1091)

MPE Calculation Formula:

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

Calculation Result for Single antenna transmissions:

Operation Frequency (MHz)	Max. Output Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2450MHz	4.02	2.5	20	0.000893	1
5800MHz	8.32	3.2	20	0.002823	1

Calculation Result for Multi antenna transmissions:

Condition	Power Density (mW/cm ²)	Limit (mW/cm ²)
Bluetooth + WiFi	0.003716	1

Conclusion:

Therefore the maximum calculations of above situations are less than the Power Density Limit.