

## 1. Safety Human exposure

### 1.1 Radio Frequency Exposure Compliance

#### 1.1.1 Electromagnetic Fields

**RESULT:****Passed**

Test standard : FCC KDB Publication 447498

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

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$$S = \frac{P_G}{4\pi R^2}$$

Power to Antenna (mW)	Antenna Gain (dBi)	Antenna Gain (numeric)	Power Density at 20cm (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
43	2	1.58	0.0135	1.0	Pass