

Exhibit: RF Exposure – FCC

1 FCC Exposure

The device is a fixed device intended to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure and the body of the user or nearby persons. The EUT contains a 2400 – 2468 MHz FHSS transmitter.

2 General SAR test exclusion guidance:

As per FCC KDB 447498 Section 4.3.1 b), the SAR Test Exclusion Threshold for 100MHz to 6 GHz at test separation distances > 50 mm is determined by:

- 1) {[Power allowed at *numeric threshold* for 50 mm)] + [(test separation distance – 50 mm) (f(MHz)/150)]} mW, for 100 MHz to 1500 MHz
- 2) {[Power allowed at *numeric threshold* for 50 mm)] + [(test separation distance – 50 mm)*10]} mW, for > 1500 MHz and < 6 GHz

where:

Power allowed at *numeric threshold* for 50 mm (for 1-g SAR) is given by:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] [\sqrt{f(\text{GHz})}] < 3.0$$

$$(\text{max power of channel, including tune-up tolerance, mW}) < [3.0 / \sqrt{f(\text{GHz})}] \times [\text{min. test separation distance, mm}]$$

Note that above formulas f is expressed in [GHz]

3 SAR Calculations: 2405-2484 MHz FHSS transmitter

Power allowed at *numeric threshold* for 50 mm:

$$(\text{max power of channel, including tune-up tolerance, mW}) < [3.0 / \sqrt{(2.484)}] \times [50 \text{ mm}]$$

$$(\text{max power of channel, including tune-up tolerance, mW}) < 95.6 \text{ mW}$$

Therefore, SAR Exclusion for 200 mm test distance is:

$$\{[\text{Power allowed at } \textit{numeric threshold} \text{ for } 50 \text{ mm}]\} + [(\text{test separation distance} - 50 \text{ mm}) \\ (f_{\text{MHz}}/150)]\} \text{ mW, for } 100 \text{ MHz to } 1500 \text{ MHz}$$

$$[95.6 \text{ mW}] + [(200 \text{ mm} - 50 \text{ mm}) \times (2484 \text{ MHz}/150)] \\ = 2579.6 \text{ mW}$$

The EUT meets the SAR Exclusion Threshold. Peak conducted power of FHSS transmitter was measured to be 17.71dBm (59mW), with the antenna gain of 2.3dB, the EIRP will be 20.01dBm (100.23mW) which is below the 2579.6 mW threshold.