

# **Appendix 5**

## **RF Exposure Information**

**Maximum transmitter power:**

Frequency (MHz)	Maximum average output power (dBm)	Output power (W)
2446	-12.3	0.000058
2458	-11.9	0.000064
2474	-11.8	0.000066

**For FCC**

According to KDB 447498 D01:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances*  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

**Result:**

$$(0.058/5) \cdot \sqrt{2.446} = 0.018 < 3.0$$

$$(0.064/5) \cdot \sqrt{2.458} = 0.020 < 3.0$$

$$(0.066/5) \cdot \sqrt{2.474} = 0.020 < 3.0$$

**Conclusion:**

No SAR is required.

**For ISED**

According to table 1 in RSS-102 Issue 5, below exemption limit is applied

Frequency: 2450MHz

At separation distance of  $\leq 5$ mm

Exemption limits: 4mW

**Results:**

max. power of channel = 0.066mW < 4mW

**Conclusion:**

The maximum peak output power of the transmitter is less than the SAR evaluation exemption threshold and hence it complies with the RSS-102 RF exposure requirement