

# Appendix 5

## RF Exposure Information

**Maximum transmitter power:**

Frequency (MHz)	Maximum peak output power (dBuV/m)	Output power (mW)
2420	81.40	0.0414
2440	86.00	0.1194
2462	88.90	0.2329

**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* ≤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 ≤7.5 for 10-g extremity SAR, where

- f(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:**

$$(0.0414/5) \cdot \sqrt{2.420} = 0.013 < 3.0$$

$$(0.1194/5) \cdot \sqrt{2.440} = 0.037 < 3.0$$

$$(0.2329/5) \cdot \sqrt{2.462} = 0.073 < 3.0$$

**Conclusion:**

No SAR is required.

**For IC**

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

Frequency: 2450MHz

At separation distance of ≤ 5mm

Exemption limits: 4mW

**Results:**

max. power of channel = 88.90dBuV/m = 0.2329mW < 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