

# **Appendix 5**

## **RF Exposure Information**

**Maximum transmitter power:**

Frequency (MHz)	Maximum peak output power (dBuV/m)	Output power (mW)	Separation distance (mm)
2410	72.8	0.0057	5
2445	72.0	0.0048	5
2473	71.8	0.0045	5

**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:**

$$(0.0057/5) \cdot \sqrt{2.410} = 0.0018 < 3.0$$

$$(0.0048/5) \cdot \sqrt{2.445} = 0.0015 < 3.0$$

$$(0.0045/5) \cdot \sqrt{2.473} = 0.0014 < 3.0$$

**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 = 72.8 dBuV/m = 0.0057 mW < 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