

# **Appendix 5**

## **RF Exposure Information**

### Maximum transmitter power:

Frequency (MHz)	Maximum peak output power (dBuV/m)	Output power (mW)
2409	78.60	0.0217
2458	74.90	0.0093

#### 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

- $f(\text{GHz})$  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:**

$$(0.0217/5) \cdot \sqrt{2.409} = 0.007 < 3.0$$

$$(0.0093/5) \cdot \sqrt{2.458} = 0.003 < 3.0$$

#### **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:**

$$\text{max. power of channel} = 78.60 \text{ dBuV/m} = 0.0217 \text{ mW} < 4 \text{ mW}$$

#### **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