

## Appendix 5

### RF Exposure Information

**Maximum transmitter power:**

| Frequency<br>(MHz) | Maximum peak output power<br>(dBuV/m) | Output power<br>(mW) |
|--------------------|---------------------------------------|----------------------|
| 2404               | 89.30                                 | 0.2553               |
| 2440               | 89.70                                 | 0.2800               |
| 2480               | 88.50                                 | 0.2124               |

**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:**

$$(0.2553/5) * \sqrt{2.404} = 0.079 < 3.0$$

$$(0.2800/5) * \sqrt{2.440} = 0.087 < 3.0$$

$$(0.2124/5) * \sqrt{2.480} = 0.067 < 3.0$$

**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  $\leq$  5mm

Exemption limits: 4mW

**Results:**

max. power of channel = 89.70dBuV/m = 0.2800mW  $<$  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