

Appendix 5

RF Exposure Information

Maximum transmitter power:

Frequency (MHz)	Maximum peak output power (dBm)	Output power(mW)
13.560	-57.27	1.88e-6
2402	2.35	1.718
2440	1.98	1.578
2480	1.19	1.315

According to KDB 447498 D01:

RFID

The threshold for frequency 13.560MHz and *test separation distances* ≤ 50 mm is:443mW

BLE

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 calculation²⁵
- 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:

$$(1.718/5) \cdot \sqrt{2.402} = 0.533 < 3.0$$

$$(1.578/5) \cdot \sqrt{2.440} = 0.493 < 3.0$$

$$(1.315/5) \cdot \sqrt{2.480} = 0.414 < 3.0$$

Overall Conclusion:

No SAR is required.