

Appendix 5

RF Exposure Information

FCC ID : YFACARHYB51000
IC ID : 12260A-CARHYB51000
HVIN : CARHYB51000

Maximum transmitter power

Bluetooth Transmitter

Frequency (MHz)	Maximum peak output power (dBm)	Output power (mW)
2402	-7.87	0.163
2440	-7.46	0.179
2480	-7.58	0.175

Note: The maximum peak field strength was taken from table of "Subclause 15.247(b)(3) / RSS-247 5.4 – Maximum Peak Conducted Output Power".

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* ≤ 5 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$
 ≤ 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:

Bluetooth Transmitter

$$(0.163/5) \cdot \sqrt{2.402} = 0.051 < 3.0$$

$$(0.179/5) \cdot \sqrt{2.440} = 0.056 < 3.0$$

$$(0.175/5) \cdot \sqrt{2.480} = 0.055 < 3.0$$

Conclusion:

No SAR is required.

For ISED

According to table 11 in RSS-102 Issue 6, below exemption limit is applied:

Frequency: 2440 MHz

At separation distance ≤ 5mm

Exemption limits: 3mW

Results:

max. power of channels = 0.179 mW < 3mW

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.