RF exposure evaluation

§ 2.1093 Radiofrequency radiation exposure evaluation: Portable Devices.

According to § 15.247(i) and § 1.1307b(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the commission's guidance.

The 1-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g 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
- When the minimum test separation distance is < 5 mm, a distance of 5 mm according is applied to determine SAR test exclusion.
- · The result is rounded to one decimal place for comparison

Channel	Frequency (GHz)	Tune up Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up Power (mW)
CH 00	2.402	-3.46±1	-2.46	0.57
CH 39	2.441	-1.25±1	-0.25	0.94
CH 78	2.480	-1.7±1	-0.7	0.85

exclusion Max. Test Frequency Power thresholds Channel Power distance Result (GHz) (dBm) for 1-g (mW) (mm) SAR CH 39 2.441 -0.25 0.94 0.295 3.0

Result:

Base on the calculation value, No SAR measurement is required.