

FCC ID: W8U-RC813A

Portable device

According to §15.247(e)(i) and §1.1307(b)(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 guidelines.

According to KDB447498 D01 General RF Exposure Guidance V05

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:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

$f(\text{GHz})$ 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;

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz.

We used a distance 5mm to calculated

Maximum measured transmitter power:

Transmit Frequency (GHz)	Mode	Measured power (dBm)	Tune-up power (dBm)	Max tune-up power (dBm)	Result calculation	1-g SAR
2.402	BLE_1M GFSK	1.46	1.0±1	2.0	0.4913	7.5
2.440	BLE_1M GFSK	1.80	1.0±1	2.0	0.4951	7.5
2.480	BLE_1M GFSK	1.53	1.0±1	2.0	0.4992	7.5
2.402	BLE_2M GFSK	1.5	1.0±1	2.0	0.4913	7.5
2.440	BLE_2M GFSK	1.83	1.0±1	2.0	0.4951	7.5
2.480	BLE_2M GFSK	1.55	1.0±1	2.0	0.4992	7.5

Conclusion:

For the max result : $0.4992 \leq 3.0$ for 1-g SAR extremity SAR, No SAR is required.

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