

FCC ID:2BRXX-U8

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 V06

The 1-g SAR 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 calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

BLE 1M:

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculation	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	1.438	1.39	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	1.627	1.45	1±1	2.00	1.58	<5	0.49524	3.00	YES
	2.480	1.132	1.30	1±1	2.00	1.58	<5	0.49918	3.00	YES

BLE 2M:

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculation	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	1.558	1.43	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	1.792	1.51	1±1	2.00	1.58	<5	0.49524	3.00	YES
	2.480	1.3	1.35	1±1	2.00	1.58	<5	0.49918	3.00	YES

RFID:

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculation	SAR Exclusion threshold	SAR test exclusion
ASK	0.90275	9.19	8.30	9±1	10.00	10.00	<5	1.90026	3.00	YES
	0.91475	9.031	8.00	9±1	10.00	10.00	<5	1.91285	3.00	YES
	0.92725	8.951	7.85	9±1	10.00	10.00	<5	1.92588	3.00	YES

Conclusion:

For the max result : $1.92588 \leq \text{FCC Limit } 3.0$ for 1g SAR.