

FCC ID:2BM2R-N21

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.

BLE1M:

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	0.83	1.21	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.441	0.949	1.24	0±1	1.00	1.26	<5	0.39338	3.00	YES
	2.480	1.32	1.36	1±1	2.00	1.58	<5	0.49918	3.00	YES

BLE1M:

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	0.891	1.23	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.441	1.055	1.27	1±1	2.00	1.58	<5	0.49524	3.00	YES
	2.480	1.449	1.40	1±1	2.00	1.58	<5	0.49918	3.00	YES

EDR:

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	0.781	1.20	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.441	0.924	1.24	0±1	1.00	1.26	<5	0.39338	3.00	YES
	2.480	1.274	1.34	1±1	2.00	1.58	<5	0.49918	3.00	YES
π /4DQPSK	2.402	1.441	1.39	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	1.534	1.42	1±1	2.00	1.58	<5	0.49524	3.00	YES
	2.480	1.882	1.54	1±1	2.00	1.58	<5	0.49918	3.00	YES
8DQPSK	2.402	1.799	1.51	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	1.996	1.58	1±1	2.00	1.58	<5	0.49524	3.00	YES
	2.480	-0.181	0.96	0±1	1.00	1.26	<5	0.39651	3.00	YES

Conclusion:

For the max result : $0.49918 \leq \text{FCC Limit } 3.0 \text{ for } 1\text{g SAR}.$