

FCC ID:2BTQU-X1

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.

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	0.26	1.06	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.441	2.372	1.73	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	-1.176	0.76	-1±1	0.00	1.00	<5	0.31496	3.00	YES
π /4DQPSK	2.402	1.168	1.31	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	3.202	2.09	3±1	4.00	2.51	<5	0.78490	3.00	YES
	2.480	-0.328	0.93	0±1	1.00	1.26	<5	0.39651	3.00	YES
8DQPSK	2.402	1.515	1.42	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	3.547	2.26	3±1	4.00	2.51	<5	0.78490	3.00	YES
	2.480	-0.002	1.00	0±1	1.00	1.26	<5	0.39651	3.00	YES

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	4.283	2.68	4±1	5.00	3.16	<5	0.98020	3.00	YES
	2.44	6.533	4.50	6±1	7.00	5.01	<5	1.56576	3.00	YES
	2.480	2.745	1.88	2±1	3.00	2.00	<5	0.62843	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	4.31	2.70	4±1	5.00	3.16	<5	0.98020	3.00	YES
	2.44	6.58	4.55	6±1	7.00	5.01	<5	1.56576	3.00	YES
	2.480	2.77	1.89	2±1	3.00	2.00	<5	0.62843	3.00	YES

Conclusion:

For the max result : $1.56576 \leq \text{FCC Limit } 3.0$ for 1g SAR.