

FCC ID:2BKCT-C20PLUS

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: Bluetooth main control module:

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	2.639	1.84	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	3.436	2.21	3±1	4.00	2.51	<5	0.78490	3.00	YES
	2.480	3.369	2.17	3±1	4.00	2.51	<5	0.79114	3.00	YES
π /4DQPSK	2.402	3.395	2.19	3±1	4.00	2.51	<5	0.77860	3.00	YES
	2.441	4.295	2.69	4±1	5.00	3.16	<5	0.98813	3.00	YES
	2.480	4.164	2.61	4±1	5.00	3.16	<5	0.99599	3.00	YES

EDR: Radio module:

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	-1.634	0.69	-1±1	0.00	1.00	<5	0.30997	3.00	YES
	2.441	-2.181	0.61	-2±1	-1.00	0.79	<5	0.24821	3.00	YES
	2.480	-1.498	0.71	-1±1	0.00	1.00	<5	0.31496	3.00	YES
π /4DQPSK	2.402	-0.845	0.82	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.441	-1.502	0.71	-1±1	0.00	1.00	<5	0.31247	3.00	YES
	2.480	-0.824	0.83	0±1	1.00	1.26	<5	0.39651	3.00	YES

BLE: Bluetooth main control module:

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	-0.21	0.95	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.604	1.15	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	0.473	1.12	0±1	1.00	1.26	<5	0.39651	3.00	YES

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 calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-0.084	0.98	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.694	1.17	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	0.617	1.15	0±1	1.00	1.26	<5	0.39651	3.00	YES

BLE: Radio module:

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 calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-2.638	0.54	-2±1	-1.00	0.79	<5	0.24622	3.00	YES
	2.44	-3.207	0.48	-3±1	-2.00	0.63	<5	0.19712	3.00	YES
	2.480	-2.45	0.57	-2±1	-1.00	0.79	<5	0.25018	3.00	YES

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 calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-3.221	0.48	-3±1	-2.00	0.63	<5	0.19558	3.00	YES
	2.44	-3.561	0.44	-3±1	-2.00	0.63	<5	0.19712	3.00	YES
	2.480	-2.827	0.52	-2±1	-1.00	0.79	<5	0.25018	3.00	YES

Conclusion:For the max result : $0.99599 \leq \text{FCC Limit } 3.0$ for 1g SAR.