

FCC ID:2BCN5-K87

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	3.603	2.29	3±1	4.00	2.51	<5	0.77860	3.00	YES
	2.441	3.441	2.21	3±1	4.00	2.51	<5	0.78490	3.00	YES
	2.480	3.386	2.18	3±1	4.00	2.51	<5	0.79114	3.00	YES
π /4DQPSK	2.402	4.359	2.73	4±1	5.00	3.16	<5	0.98020	3.00	YES
	2.441	4.214	2.64	4±1	5.00	3.16	<5	0.98813	3.00	YES
	2.480	4.111	2.58	4±1	5.00	3.16	<5	0.99599	3.00	YES
8DQPSK	2.402	4.704	2.95	4±1	5.00	3.16	<5	0.98020	3.00	YES
	2.441	4.544	2.85	4±1	5.00	3.16	<5	0.98813	3.00	YES
	2.480	4.385	2.74	4±1	5.00	3.16	<5	0.99599	3.00	YES

BLE:

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	3.102	2.04	3±1	4.00	2.51	<5	0.77860	3.00	YES
	2.44	2.892	1.95	2±1	3.00	2.00	<5	0.62334	3.00	YES
	2.480	2.856	1.93	2±1	3.00	2.00	<5	0.62843	3.00	YES

2.4GHz:

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	2.475	4.68	2.94	4±1	5.00	3.16	<5	0.99499	3.00	YES

Note: $\text{dbm} = \text{dbuv} / m - 95.2 = 100.88 - 95.2 = 5.68 \text{ dBm (ERP)}$, so the conduct peak power = $5.68 - 1 = 4.68 \text{ dBm}$

Conclusion:

For the max result : $0.99499 \leq \text{FCC Limit } 3.0$ for 1g SAR.