

FCC ID:2A9NQ-F117

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 calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-3.793	0.42	-3±1	-2.00	0.63	<5	0.19558	3.00	YES
	2.441	-3.561	0.44	-3±1	-2.00	0.63	<5	0.19716	3.00	YES
	2.480	-4.056	0.39	-4±1	-3.00	0.50	<5	0.15785	3.00	YES
π /4DQPSK	2.402	-3.019	0.50	-3±1	-2.00	0.63	<5	0.19558	3.00	YES
	2.441	-2.961	0.51	-2±1	-1.00	0.79	<5	0.24821	3.00	YES
	2.480	-3.409	0.46	-3±1	-2.00	0.63	<5	0.19873	3.00	YES
8DQPSK	2.402	-2.636	0.55	-2±1	-1.00	0.79	<5	0.24622	3.00	YES
	2.441	-2.531	0.56	-2±1	-1.00	0.79	<5	0.24821	3.00	YES
	2.480	-2.891	0.51	-2±1	-1.00	0.79	<5	0.25018	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 calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-2.696	0.54	-2±1	-1.00	0.79	<5	0.24622	3.00	YES
	2.44	-2.52	0.56	-2±1	-1.00	0.79	<5	0.24816	3.00	YES
	2.480	-3.133	0.49	-3±1	-2.00	0.63	<5	0.19873	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 calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-2.574	0.55	-2±1	-1.00	0.79	<5	0.24622	3.00	YES
	2.44	-2.343	0.58	-2±1	-1.00	0.79	<5	0.24816	3.00	YES
	2.480	-2.996	0.50	-2±1	-1.00	0.79	<5	0.25018	3.00	YES

Conclusion:

For the max result : $0.25018 \leq$ FCC Limit 3.0 for 1g SAR.