

FCC ID: 2A7LL-GW19

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	3.001	2.00	3±1	4.00	2.51	<5	0.77860	3.00	YES
	2.441	2.359	1.72	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	2.91	1.95	2±1	3.00	2.00	<5	0.62843	3.00	YES
π /4DQPSK	2.402	2.597	1.82	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	2.295	1.70	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	2.644	1.84	2±1	3.00	2.00	<5	0.62843	3.00	YES

Conclusion:

For the max result : $0.77860 \leq \text{FCC Limit } 3.0$ for 1g SAR.

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	-0.973	0.80	-0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	-0.437	0.90	-0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.805	0.83	-0±1	1.00	1.26	<5	0.39651	3.00	YES

Conclusion:

For the max result : $0.39651 \leq \text{FCC Limit } 3.0$ for 1g SAR.