

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(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.

BT:

Test Mode	Channel Frequency (GHz)	Conducted power (dBm)	Conducted power (mW)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculation	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	9.52	8.95	10.00	10.00	5.00	3.10	7.50	YES
	2.441	9.05	8.04	10.00	10.00	5.00	3.12	7.50	YES
	2.480	8.22	6.64	10.00	10.00	5.00	3.15	7.50	YES
π/4-DQPSK	2.402	9.46	8.83	10.00	10.00	5.00	3.10	7.50	YES
	2.441	9.50	8.91	10.00	10.00	5.00	3.12	7.50	YES
	2.480	8.62	7.28	10.00	10.00	5.00	3.15	7.50	YES
8-DPSK	2.402	9.37	8.65	10.00	10.00	5.00	3.10	7.50	YES
	2.441	9.70	9.33	10.00	10.00	5.00	3.12	7.50	YES
	2.480	8.84	7.66	10.00	10.00	5.00	3.15	7.50	YES

BLE:

Test Mode	Channel Frequency (GHz)	Conducted power (dBm)	Conducted power (mW)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculation	SAR Exclusion threshold	SAR test exclusion
BLE(1M)	2.402	9.27	8.45	9.50	8.91	5.00	2.76	7.50	YES
	2.441	9.12	8.17	9.50	8.91	5.00	2.78	7.50	YES
	2.480	8.22	6.64	9.50	8.91	5.00	2.81	7.50	YES

Conclusion:

For the max result : $3.15 \leq$ FCC Limit 7.5 for 10g SAR.