

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  $\leq 7.5$  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)	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	6.50	4.47	6+1	7.00	5.01	<5	1.538	3.00	YES
	2.441	6.35	4.32	6+1	7.00	5.01	<5	1.498	3.00	YES
	2.480	5.55	3.59	5+1	6.00	3.98	<5	1.256	3.00	YES
π/4-DQPSK	2.402	7.16	5.20	7+1	8.00	6.31	<5	1.791	3.00	YES
	2.441	7.02	5.04	7+1	8.00	6.31	<5	1.748	3.00	YES
	2.480	6.28	4.25	6+1	7.00	5.01	<5	1.486	3.00	YES
8-DPSK	2.402	7.31	5.38	7+1	8.00	6.31	<5	1.854	3.00	YES
	2.441	7.30	5.37	7+1	8.00	6.31	<5	1.865	3.00	YES
	2.480	6.55	4.52	6+1	7.00	5.01	<5	1.581	3.00	YES

BLE:

Test Mode	Channel Frequency (GHz)	Conducted power (dBm)	Conducted 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
BLE(1M)	2.402	6.51	4.48	6+1	7.00	5.01	<5	1.542	3.00	YES
	2.441	6.49	4.46	6+1	7.00	5.01	<5	1.547	3.00	YES
	2.480	5.82	3.82	5+1	6.00	3.98	<5	1.337	3.00	YES
BLE(2M)	2.402	6.66	4.63	6+1	7.00	5.01	<5	1.596	3.00	YES
	2.441	6.61	4.58	6+1	7.00	5.01	<5	1.591	3.00	YES
	2.480	5.91	3.90	6+1	7.00	5.01	<5	1.365	3.00	YES

**Conclusion:**

For the max result : 1.865 ≤ FCC Limit 3.0 for 1g SAR.