

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.

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	2.31	1.70	1+1	2.00	1.58	<5	0.586	3.00	YES
	2.441	1.24	1.33	1+1	2.00	1.58	<5	0.462	3.00	YES
	2.480	-0.56	0.88	0+1	1.00	1.26	<5	0.308	3.00	YES
π/4-DQPSK	2.402	2.68	1.85	1+1	2.00	1.58	<5	0.638	3.00	YES
	2.441	1.69	1.48	1+1	2.00	1.58	<5	0.512	3.00	YES
	2.480	-0.20	0.95	0+1	1.00	1.26	<5	0.334	3.00	YES
8-DPSK	2.402	2.89	1.95	1+1	2.00	1.58	<5	0.670	3.00	YES
	2.441	1.68	1.47	1+1	2.00	1.58	<5	0.511	3.00	YES
	2.480	-0.07	0.98	0+1	1.00	1.26	<5	0.344	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	2.42	1.75	1+1	2.00	1.58	<5	0.601	3.00	YES
	2.441	1.49	1.41	1+1	2.00	1.58	<5	0.489	3.00	YES
	2.480	-0.24	0.95	0+1	1.00	1.26	<5	0.331	3.00	YES
BLE(2M)	2.402	2.48	1.77	1+1	2.00	1.58	<5	0.610	3.00	YES
	2.441	1.50	1.41	1+1	2.00	1.58	<5	0.490	3.00	YES
	2.480	-0.33	0.93	0+1	1.00	1.26	<5	0.324	3.00	YES

Conclusion:

For the max result : $0.670 \leq$ FCC Limit 3.0 for 1g SAR.