

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	-0.36	0.92	0+1	1.00	1.26	<5	0.317	3.00	YES
	2.441	0.40	1.10	0+1	1.00	1.26	<5	0.381	3.00	YES
	2.480	0.53	1.13	0+1	1.00	1.26	<5	0.395	3.00	YES
π/4-DQPSK	2.402	0.39	1.09	0+1	1.00	1.26	<5	0.377	3.00	YES
	2.441	1.14	1.30	1+1	2.00	1.58	<5	0.451	3.00	YES
	2.480	1.21	1.32	1+1	2.00	1.58	<5	0.462	3.00	YES
8-DPSK	2.402	-0.53	0.89	0+1	1.00	1.26	<5	0.305	3.00	YES
	2.441	0.33	1.08	0+1	1.00	1.26	<5	0.375	3.00	YES
	2.480	0.45	1.11	0+1	1.00	1.26	<5	0.388	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	-2.88	0.52	0+1	1.00	1.26	<5	0.177	3.00	YES
	2.441	-2.09	0.62	0+1	1.00	1.26	<5	0.215	3.00	YES
	2.480	-1.91	0.64	0+1	1.00	1.26	<5	0.225	3.00	YES
BLE(2M)	2.402	-2.83	0.52	0+1	1.00	1.26	<5	0.180	3.00	YES
	2.441	-2.04	0.63	0+1	1.00	1.26	<5	0.217	3.00	YES
	2.480	-1.84	0.65	0+1	1.00	1.26	<5	0.229	3.00	YES

Conclusion:

For the max result : $0.462 \leq$ FCC Limit 3.0 for 1g SAR.