

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	-1.61	0.69	0+1	1.00	1.26	<5	0.238	3.00	YES
	2.441	-1.05	0.79	0+1	1.00	1.26	<5	0.273	3.00	YES
	2.480	-1.64	0.69	0+1	1.00	1.26	<5	0.240	3.00	YES
π/4-DQPSK	2.402	1.47	1.40	1+1	2.00	1.58	<5	0.483	3.00	YES
	2.441	1.88	1.54	1+1	2.00	1.58	<5	0.535	3.00	YES
	2.480	1.49	1.41	1+1	2.00	1.58	<5	0.493	3.00	YES
8-DPSK	2.402	2.02	1.59	1+1	2.00	1.58	<5	0.548	3.00	YES
	2.441	1.84	1.53	1+1	2.00	1.58	<5	0.530	3.00	YES
	2.480	1.36	1.37	1+1	2.00	1.58	<5	0.479	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	0.42	1.10	1+1	2.00	1.58	<5	0.379	3.00	YES
	2.441	1.04	1.27	1+1	2.00	1.58	<5	0.441	3.00	YES
	2.480	0.69	1.17	1+1	2.00	1.58	<5	0.410	3.00	YES
BLE(2M)	2.402	0.23	1.05	1+1	2.00	1.58	<5	0.363	3.00	YES
	2.441	0.88	1.22	1+1	2.00	1.58	<5	0.425	3.00	YES
	2.480	0.94	1.24	1+1	2.00	1.58	<5	0.435	3.00	YES

Conclusion:

For the max result : $0.548 \leq$ FCC Limit 3.0 for 1g SAR.