

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	5.73	3.74	3+1	4.00	2.51	<5	1.288	3.00	YES
	2.441	4.58	2.87	2+1	3.00	2.00	<5	0.997	3.00	YES
	2.480	3.54	2.26	2+1	3.00	2.00	<5	0.791	3.00	YES
$\pi/4$ -DQPSK	2.402	7.84	6.08	6+1	7.00	5.01	<5	2.094	3.00	YES
	2.441	6.62	4.59	4+1	5.00	3.16	<5	1.594	3.00	YES
	2.480	5.75	3.76	3+1	4.00	2.51	<5	1.315	3.00	YES
8-DPSK	2.402	7.50	5.62	5+1	6.00	3.98	<5	1.937	3.00	YES
	2.441	6.57	4.54	4+1	5.00	3.16	<5	1.576	3.00	YES
	2.480	5.72	3.73	3+1	4.00	2.51	<5	1.306	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	5.76	3.77	3+1	4.00	2.51	<5	1.297	3.00	YES
	2.441	4.61	2.89	2+1	3.00	2.00	<5	1.004	3.00	YES
	2.480	3.67	2.33	2+1	3.00	2.00	<5	0.815	3.00	YES

Conclusion:

For the max result : $2.094 \leq$ FCC Limit 3.0 for 1g SAR.