

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  $\leq 50$  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:

- $f(\text{GHZ})$  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	6.04	4.02	4+1	5.00	3.16	<5	1.384	3.00	YES
	2.441	4.97	3.14	3+1	4.00	2.51	<5	1.090	3.00	YES
	2.480	3.61	2.30	2+1	3.00	2.00	<5	0.804	3.00	YES
$\pi/4$ -DQPSK	2.402	8.15	6.53	6+1	7.00	5.01	<5	2.249	3.00	YES
	2.441	7.00	5.01	5+1	6.00	3.98	<5	1.740	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	7.73	5.93	5+1	6.00	3.98	<5	2.042	3.00	YES
	2.441	6.85	4.84	4+1	5.00	3.16	<5	1.681	3.00	YES
	2.480	5.86	3.85	3+1	4.00	2.51	<5	1.349	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	6.09	4.06	4+1	5.00	3.16	<5	1.400	3.00	YES
	2.441	5.07	3.21	3+1	4.00	2.51	<5	1.116	3.00	YES
	2.480	4.07	2.55	2+1	3.00	2.00	<5	0.893	3.00	YES

**Conclusion:**

For the max result :  $2.249 \leq$  FCC Limit 3.0 for 1g SAR.