

FCC ID:2BDRZ-M8

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.

2.4GWIFI:

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d 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
802.11b	2.412	7.544	5.68	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.567	5.71	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.34	5.42	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11g	2.412	8.305	6.77	8±1	9.00	7.94	<5	2.46728	3.00	YES
	2.437	8.809	7.60	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.043	6.37	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11n(HT20)	2.412	7.822	6.06	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.961	6.25	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.258	5.32	7±1	8.00	6.31	<5	1.98004	3.00	YES

BLE:1M

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d 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	0.987	1.26	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	1.861	1.53	1±1	2.00	1.58	<5	0.49514	3.00	YES
	2.480	1.368	1.37	1±1	2.00	1.58	<5	0.49918	3.00	YES

BLE:2M

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d 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	1.147	1.30	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.44	1.952	1.57	1±1	2.00	1.58	<5	0.49514	3.00	YES
	2.480	1.551	1.43	1±1	2.00	1.58	<5	0.49918	3.00	YES

Conclusion:

For the max result : $0.249272 \leq \text{FCC Limit } 3.0$ for 1g SAR.

BT+WIFI supported simultaneous transmission:

BLE+2.4GWIFI: $\sum \text{MPE Ratio} = 0.49918/3 + 2.49272/3 = 0.9973 \leq 1$, So passed.