

FCC ID:2BOWC-T19

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.

BLE: Left ear:

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	1.861	1.53	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.44	2.053	1.60	2±1	3.00	2.00	<5	0.62334	3.00	YES
	2.480	1.59	1.44	1±1	2.00	1.58	<5	0.49918	3.00	YES

BLE: Right ear:

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	1.91	1.55	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.44	2.018	1.59	2±1	3.00	2.00	<5	0.62334	3.00	YES
	2.480	1.575	1.44	1±1	2.00	1.58	<5	0.49918	3.00	YES

2.4GWIFI: Left ear:

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	8.459	7.01	8±1	9.00	7.94	<5	2.46728	3.00	YES
	2.437	8.964	7.88	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.895	7.75	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11g	2.412	7.718	5.91	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	8.229	6.65	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.235	6.66	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11n(HT20)	2.412	7.376	5.47	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	8.067	6.41	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	7.861	6.11	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT40)	2.422	7.207	5.26	7±1	8.00	6.31	<5	1.96389	3.00	YES
	2.437	7.491	5.61	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.452	7.912	6.18	7±1	8.00	6.31	<5	1.97601	3.00	YES

2.4GWIFI: Right ear:

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	8.701	7.41	8±1	9.00	7.94	<5	2.46728	3.00	YES
	2.437	8.656	7.34	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.556	7.17	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11g	2.412	7.659	5.83	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	8.406	6.93	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.222	6.64	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11n(HT20)	2.412	7.598	5.75	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	8.23	6.65	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.212	6.63	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11n(HT40)	2.422	7.5	5.62	7±1	8.00	6.31	<5	1.96389	3.00	YES
	2.437	7.571	5.72	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.452	8.377	6.88	8±1	9.00	7.94	<5	2.48766	3.00	YES

Conclusion:

For the max result : $2.49272 \leq \text{FCC Limit } 3.0$ for 1g SAR.