

FCC ID:2BOQ2-T1S

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:

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	1.544	1.43	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	1.667	1.47	1±1	2.00	1.58	<5	0.49524	3.00	YES
	2.480	1.161	1.31	1±1	2.00	1.58	<5	0.49918	3.00	YES

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	6.973	4.98	6±1	7.00	5.01	<5	1.55675	3.00	YES
	2.437	6.503	4.47	6±1	7.00	5.01	<5	1.56480	3.00	YES
	2.462	6.384	4.35	6±1	7.00	5.01	<5	1.57280	3.00	YES
802.11g	2.412	7.909	6.18	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.022	5.04	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	6.807	4.79	6±1	7.00	5.01	<5	1.57280	3.00	YES
802.11n(HT20)	2.412	7.289	5.36	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.043	5.06	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	6.762	4.74	6±1	7.00	5.01	<5	1.57280	3.00	YES
802.11n(HT40)	2.422	6.708	4.69	6±1	7.00	5.01	<5	1.55997	3.00	YES
	2.437	6.608	4.58	6±1	7.00	5.01	<5	1.56480	3.00	YES
	2.452	6.949	4.95	6±1	7.00	5.01	<5	1.56960	3.00	YES

5.2GWIFI:

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
802.11a20	5.18	7.572	5.72	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.2	7.984	6.29	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.24	7.396	5.49	7±1	8.00	6.31	<5	2.88865	3.00	YES
802.11n(HT20)	5.18	7.099	5.13	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.2	7.479	5.60	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.24	7.443	5.55	7±1	8.00	6.31	<5	2.88865	3.00	YES
802.11n(HT40)	5.19	7.144	5.18	7±1	8.00	6.31	<5	2.87484	3.00	YES
	5.23	7.231	5.29	7±1	8.00	6.31	<5	2.88590	3.00	YES

5.8GWIFI:

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
802.11a20	5.745	6.743	4.72	6±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	6.587	4.56	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.395	4.36	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n(HT20)	5.745	7.314	5.39	6.5±1	7.50	5.62	<5	2.69572	3.00	YES
	5.785	6.39	4.36	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.22	4.19	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n(HT40)	5.755	7.227	5.28	6.5±1	7.50	5.62	<5	2.69807	3.00	YES
	5.795	6.342	4.31	6±1	7.00	5.01	<5	2.41300	3.00	YES

Conclusion:

For the max result : $2.88865 \leq \text{FCC Limit } 3.0$ for 1g SAR.