

FCC ID: 2BRWR-WX02SR

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	7.48	5.60	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	6.657	4.63	6±1	7.00	5.01	<5	1.56480	3.00	YES
	2.462	6.859	4.85	6±1	7.00	5.01	<5	1.57280	3.00	YES
802.11g	2.412	7.713	5.91	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.565	5.71	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.262	5.32	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT20)	2.412	6.417	4.38	6±1	7.00	5.01	<5	1.55675	3.00	YES
	2.437	7.17	5.21	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.058	5.08	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT40)	2.422	5.859	3.85	5±1	6.00	3.98	<5	1.23913	3.00	YES
	2.437	7.732	5.93	7±1	7.00	5.01	<5	1.56480	3.00	YES
	2.452	5.613	3.64	5±1	6.00	3.98	<5	1.24678	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	7.812	6.04	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.2	7.3	5.37	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.24	7.127	5.16	7±1	8.00	6.31	<5	2.88865	3.00	YES
802.11n(HT20)	5.18	7.533	5.67	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.2	7.603	5.76	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.24	6.463	4.43	6±1	7.00	5.01	<5	2.29454	3.00	YES
802.11n(HT40)	5.19	4.025	2.53	4±1	5.00	3.16	<5	1.44083	3.00	YES
	5.23	6.675	4.65	6±1	7.00	5.01	<5	2.29235	3.00	YES

5.8GWIFI:

Shenzhen CTB Testing Co., Ltd.

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 calculatio n	SAR Exclusion threshold	SAR test exclusion
802.11a20	5.745	4.638	2.91	4±1	5.00	3.16	<5	1.51592	3.00	YES
	5.785	6.165	4.14	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.461	4.43	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n(HT20)	5.745	5.923	3.91	5±1	6.00	3.98	<5	1.90842	3.00	YES
	5.785	5.889	3.88	5±1	6.00	3.98	<5	1.91506	3.00	YES
	5.825	6.61	4.58	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n(HT40)	5.755	2.714	1.87	2±1	3.00	2.00	<5	0.95731	3.00	YES
	5.795	1.613	1.45	1±1	2.00	1.58	<5	0.76306	3.00	YES

Conclusion:

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