

FCC ID: 2BRWR-WX02ST

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.

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	7.806	6.03	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.2	7.364	5.45	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.24	7.296	5.37	7±1	8.00	6.31	<5	2.88865	3.00	YES
802.11n(HT20)	5.18	7.607	5.76	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.2	7.686	5.87	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.24	6.496	4.46	6±1	7.00	5.01	<5	2.29454	3.00	YES
802.11n(HT40)	5.19	3.896	2.45	3±1	4.00	2.51	<5	1.14449	3.00	YES
	5.23	6.669	4.64	6±1	7.00	5.01	<5	2.29235	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	4.721	2.97	4±1	5.00	3.16	<5	1.51592	3.00	YES
	5.785	6.078	4.05	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.423	4.39	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n(HT20)	5.745	5.778	3.78	5±1	6.00	3.98	<5	1.90842	3.00	YES
	5.785	5.85	3.85	5±1	6.00	3.98	<5	1.91506	3.00	YES
	5.825	6.69	4.67	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n(HT40)	5.755	2.579	1.81	2±1	3.00	2.00	<5	0.95731	3.00	YES
	5.795	1.694	1.48	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.