

FCC ID: 2BBGN-R55

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	7.402	5.50	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.378	5.47	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.163	5.20	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11g	2.412	7.344	5.43	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.376	5.47	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.09	5.12	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT20)	2.412	7.122	5.15	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.01	5.02	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	6.426	4.39	6±1	7.00	5.01	<5	1.57280	3.00	YES
802.11n(HT40)	2.422	7.333	5.41	7±1	8.00	6.31	<5	1.96389	3.00	YES
	2.437	7.289	5.36	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.452	7.249	5.31	7±1	8.00	6.31	<5	1.97601	3.00	YES

Conclusion:

For the max result : $1.98004 \leq \text{FCC Limit } 3.0$ for 1g SAR.