

FCC ID: 2BQ53-T4

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.

5GWIFI:

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	7.259	5.32	6.5±1	7.50	5.62	<5	2.69572	3.00	YES
	5.785	6.676	4.65	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	7.398	5.49	6.5±1	7.50	5.62	<5	2.71443	3.00	YES
802.11n(H T20)	5.745	7.423	5.52	6.5±1	7.50	5.62	<5	2.69572	3.00	YES
	5.785	6.814	4.80	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	7.354	5.44	6.5±1	7.50	5.62	<5	2.71443	3.00	YES
802.11n(H T40)	5.755	7.092	5.12	6.5±1	7.50	5.62	<5	2.69807	3.00	YES
	5.795	7.238	5.29	6.5±1	7.50	5.62	<5	2.70743	3.00	YES

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	1.453	1.40	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.44	1.548	1.43	1±1	2.00	1.58	<5	0.49514	3.00	YES
	2.480	1.092	1.29	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	7.546	5.68	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.556	5.70	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.659	5.83	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11g	2.412	7.363	5.45	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.097	5.13	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.482	5.60	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT20)	2.412	7.476	5.59	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.566	5.71	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.41	5.51	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT40)	2.422	7.075	5.10	7±1	8.00	6.31	<5	1.96389	3.00	YES
	2.437	7.031	5.05	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.452	6.984	4.99	6±1	7.00	5.01	<5	1.56960	3.00	YES

Conclusion:

For the max result : $2.71443 \leq \text{FCC Limit } 3.0$ for 1g SAR.