

FCC ID:2BOLZ-S09

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.

EDR:

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	1.969	1.57	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	2.108	1.62	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	1.611	1.45	1±1	2.00	1.58	<5	0.49918	3.00	YES
π /4DQPSK	2.402	2.684	1.86	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	2.807	1.91	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	2.259	1.68	2±1	3.00	2.00	<5	0.62843	3.00	YES
8DQPSK	2.402	2.995	1.99	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	3.13	2.06	3±1	4.00	2.51	<5	0.78490	3.00	YES
	2.480	2.487	1.77	2±1	3.00	2.00	<5	0.62843	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	7.567	5.71	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.003	5.02	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.405	5.50	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11g	2.412	7.076	5.10	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.121	5.15	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.513	5.64	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT20)	2.412	7.338	5.42	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.494	5.62	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.843	6.09	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT40)	2.422	7.709	5.90	7±1	8.00	6.31	<5	1.96389	3.00	YES
	2.437	7.635	5.80	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.452	7.921	6.20	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.