

FCC ID:2ASW3-E10

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:ANT1

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	6.089	4.06	6±1	7.00	5.01	<5	1.55675	3.00	YES
	2.437	6.949	4.95	6±1	7.00	5.01	<5	1.56480	3.00	YES
	2.462	6.924	4.92	6±1	7.00	5.01	<5	1.57280	3.00	YES
802.11g	2.412	6.567	4.54	6±1	7.00	5.01	<5	1.55675	3.00	YES
	2.437	6.283	4.25	6±1	7.00	5.01	<5	1.56480	3.00	YES
	2.462	6.147	4.12	6±1	7.00	5.01	<5	1.57280	3.00	YES

2.4GWIFI:ANT2

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	6.576	4.55	6±1	7.00	5.01	<5	1.55675	3.00	YES
	2.437	6.721	4.70	6±1	7.00	5.01	<5	1.56480	3.00	YES
	2.462	6.564	4.53	6±1	7.00	5.01	<5	1.57280	3.00	YES
802.11g	2.412	5.654	3.68	5±1	6.00	3.98	<5	1.23657	3.00	YES
	2.437	5.957	3.94	5±1	6.00	3.98	<5	1.24296	3.00	YES
	2.462	5.881	3.87	5±1	6.00	3.98	<5	1.24932	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
802.11n(HT20)	2.412	9.11	8.15	8.5±1	9.50	8.91	<5	2.76834	3.00	YES
	2.437	8.993	7.93	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.971	7.89	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11n(HT40)	2.422	8.857	7.69	8±1	9.00	7.94	<5	2.47239	3.00	YES
	2.437	9.171	8.26	8.5±1	9.50	8.91	<5	2.78264	3.00	YES
	2.452	9.218	8.35	8.5±1	9.50	8.91	<5	2.79120	3.00	YES

5GWIFI:ANT1

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	3.537	2.26	3±1	4.00	2.51	<5	1.20413	3.00	YES
	5.785	3.598	2.29	3±1	4.00	2.51	<5	1.20832	3.00	YES
	5.825	3.451	2.21	3±1	4.00	2.51	<5	1.21249	3.00	YES

5GWIFI:ANT2

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	3.753	2.37	3±1	4.00	2.51	<5	1.20413	3.00	YES
	5.785	3.226	2.10	3±1	4.00	2.51	<5	1.20832	3.00	YES
	5.825	3.721	2.36	3±1	4.00	2.51	<5	1.21249	3.00	YES

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 calculatio n	SAR Exclusion threshold	SAR test exclusion
802.11ac20	5.745	6.681	4.66	6±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	6.238	4.21	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.696	4.67	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11ac40	5.755	6.69	4.67	6±1	7.00	5.01	<5	2.40465	3.00	YES
	5.795	6.574	4.54	6±1	7.00	5.01	<5	2.41300	3.00	YES
802.11ac80	5.775	6.17	4.14	6±1	7.00	5.01	<5	2.40883	3.00	YES
802.11n(HT20)	5.745	6.382	4.35	6±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	6.441	4.41	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.451	4.42	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n(HT40)	5.755	6.996	5.01	6±1	7.00	5.01	<5	2.40465	3.00	YES
	5.795	6.857	4.85	6±1	7.00	5.01	<5	2.41300	3.00	YES

Conclusion:

For the max result : $2.79120 \leq \text{FCC Limit } 3.0$ for 1g SAR.