

FCC ID: 2A4PD-PM225

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 calculatio n	SAR Exclusion threshold	SAR test exclusion
802.11a20	5.18	6.126	4.10	6±1	7.00	5.01	<5	2.28137	3.00	YES
	5.2	6.351	4.32	6±1	7.00	5.01	<5	2.28577	3.00	YES
	5.24	6.432	4.40	6±1	7.00	5.01	<5	2.29454	3.00	YES
802.11ac20	5.18	5.845	3.84	6±1	7.00	5.01	<5	2.28137	3.00	YES
	5.2	5.991	3.97	6±1	7.00	5.01	<5	2.28577	3.00	YES
	5.24	6.031	4.01	6±1	7.00	5.01	<5	2.29454	3.00	YES
802.11n(HT 20)	5.18	5.882	3.87	6±1	7.00	5.01	<5	2.28137	3.00	YES
	5.2	6.059	4.04	6±1	7.00	5.01	<5	2.28577	3.00	YES
	5.24	6.09	4.06	6±1	7.00	5.01	<5	2.29454	3.00	YES
802.11ac40	5.19	6.182	4.15	6±1	7.00	5.01	<5	2.28357	3.00	YES
	5.23	6.238	4.21	6±1	7.00	5.01	<5	2.29235	3.00	YES
802.11n40	5.19	6.197	4.17	6±1	7.00	5.01	<5	2.28357	3.00	YES
	5.23	6.255	4.22	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 calculatio n	SAR Exclusion threshold	SAR test exclusion
802.11a20	5.745	6.25	4.22	6±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	5.608	3.64	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.032	4.01	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11ac20	5.745	5.811	3.81	6±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	6.144	4.12	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.857	4.85	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n(HT 20)	5.745	5.786	3.79	6±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	6.206	4.17	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.71	4.69	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11ac40	5.755	6.371	4.34	6±1	7.00	5.01	<5	2.40465	3.00	YES
	5.795	6.125	4.10	6±1	7.00	5.01	<5	2.41300	3.00	YES
802.11n40	5.755	6.598	4.57	6±1	7.00	5.01	<5	2.40465	3.00	YES
	5.795	6.175	4.14	6±1	7.00	5.01	<5	2.41300	3.00	YES

Conclusion:

For the max result : $2.41923 \leq \text{FCC Limit } 3.0$ for 1g SAR.