



FCC ID:2AEKR-TG08RK

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.

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 calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	2.34	1.71	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	2.87	1.94	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	2.35	1.72	2±1	3.00	2.00	<5	0.62843	3.00	YES

BT:

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
GFSK	2.402	2.11	1.63	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	2.68	1.85	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	2.13	1.63	2±1	3.00	2.00	<5	0.62843	3.00	YES
Pi/4 DQPSK	2.402	3.38	2.18	3±1	4.00	2.51	<5	0.77860	3.00	YES
	2.441	3.95	2.48	3±1	4.00	2.51	<5	0.78490	3.00	YES
	2.480	3.36	2.17	3±1	4.00	2.51	<5	0.79114	3.00	YES
8DPSK	2.402	3.59	2.29	4±1	5.00	3.16	<5	0.98020	3.00	YES
	2.441	4.23	2.65	4±1	5.00	3.16	<5	0.98813	3.00	YES
	2.480	3.63	2.31	4±1	5.00	3.16	<5	0.99599	3.00	YES



2.4G WIFI:

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
802.11b	2.412	8.57	7.19	8±1	9.00	7.94	<5	2.46728	3.00	YES
	2.437	8.34	6.82	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.24	6.67	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11g	2.412	8.33	6.81	8±1	9.00	7.94	<5	2.46728	3.00	YES
	2.437	8.4	6.92	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.38	6.89	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11n20	2.412	7.77	5.98	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.81	6.04	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.27	5.33	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n40	2.422	7.47	5.58	7±1	8.00	6.31	<5	1.96389	3.00	YES
	2.437	7.79	6.01	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.452	7.83	6.07	7±1	8.00	6.31	<5	1.97601	3.00	YES

5.2G WIFI:

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
802.11a	5.180	6.860	4.85	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.200	7.050	5.07	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.240	6.160	4.13	7±1	8.00	6.31	<5	2.88865	3.00	YES
802.11n20	5.180	6.920	4.92	6±1	7.00	5.01	<5	2.28137	3.00	YES
	5.200	6.780	4.76	6±1	7.00	5.01	<5	2.28577	3.00	YES
	5.240	6.630	4.60	6±1	7.00	5.01	<5	2.29454	3.00	YES
802.11n40	5.190	5.360	3.44	5±1	6.00	3.98	<5	1.81390	3.00	YES
	5.230	4.640	2.91	5±1	6.00	3.98	<5	1.82088	3.00	YES
802.11ac20	5.180	7.460	5.57	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.200	7.480	5.60	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.240	6.690	4.67	7±1	8.00	6.31	<5	2.88865	3.00	YES
802.11ac40	5.190	5.250	3.35	5±1	6.00	3.98	<5	1.81390	3.00	YES
	5.230	5.660	3.68	5±1	6.00	3.98	<5	1.82088	3.00	YES
802.11ac8	5.210	4.250	2.66	4±1	5.00	3.16	<5	1.44361	3.00	YES



5.8G WIFI:

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
802.11a	5.745	6.900	4.90	5±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	6.080	4.06	5±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.650	4.62	5±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n20	5.745	6.130	4.10	5±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	6.290	4.26	5±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.630	4.60	5±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n40	5.755	6.180	4.15	5±1	7.00	5.01	<5	2.40465	3.00	YES
	5.795	6.770	4.75	5±1	7.00	5.01	<5	2.41300	3.00	YES
802.11ac20	5.745	6.370	4.34	5±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	6.570	4.54	5±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	6.440	4.41	5±1	7.00	5.01	<5	2.41923	3.00	YES
802.11ac40	5.755	6.260	4.23	5±1	7.00	5.01	<5	2.40465	3.00	YES
	5.795	6.170	4.14	5±1	7.00	5.01	<5	2.41300	3.00	YES
802.11ac8	5.775	4.660	2.92	4±1	5.00	3.16	<5	1.51987	3.00	YES

Conclusion:

For the max result : $2.88865\text{W/Kg} \leq \text{FCC Limit } 3.0 \text{ for } 1\text{g SAR.}$