

FCC ID: 2AEHH-W522

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	1.369	1.37	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	0.215	1.05	0±1	1.00	1.26	<5	0.39338	3.00	YES
	2.480	-0.498	0.89	0±1	1.00	1.26	<5	0.39651	3.00	YES
π /4DQPSK	2.402	1.854	1.53	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	0.668	1.17	0±1	1.00	1.26	<5	0.39338	3.00	YES
	2.480	0.006	1.00	0±1	1.00	1.26	<5	0.39651	3.00	YES
8DQPSK	2.402	2.411	1.74	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	1.261	1.34	1±1	2.00	1.58	<5	0.49524	3.00	YES
	2.480	0.678	1.17	0±1	1.00	1.26	<5	0.39651	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	-1.461	0.71	-1±1	0.00	1.00	<5	0.30997	3.00	YES
	2.44	-2.065	0.62	-2±1	-1.00	0.79	<5	0.24816	3.00	YES
	2.480	-2.175	0.61	-2±1	-1.00	0.79	<5	0.25018	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	4.56	2.86	4±1	5.00	3.16	<5	0.98224	3.00	YES
	2.437	4.468	2.80	4±1	5.00	3.16	<5	0.98732	3.00	YES
	2.462	4.463	2.79	4±1	5.00	3.16	<5	0.99237	3.00	YES
802.11g	2.412	3.689	2.34	3±1	4.00	2.51	<5	0.78022	3.00	YES
	2.437	3.58	2.28	3±1	4.00	2.51	<5	0.78426	3.00	YES
	2.462	3.624	2.30	3±1	4.00	2.51	<5	0.78827	3.00	YES
802.11n(HT20)	2.412	3.694	2.34	3±1	4.00	2.51	<5	0.78022	3.00	YES
	2.437	3.661	2.32	3±1	4.00	2.51	<5	0.78426	3.00	YES
	2.462	3.481	2.23	3±1	4.00	2.51	<5	0.78827	3.00	YES

Conclusion:

BT+WIFI supported simultaneous transmission:

BT+2.4GWIFI=0.61847+0.99237=1.61084≤3, So passed.