

FCC ID: 2A7BSRGB10MAX

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 calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	2.993	1.99	3±1	4.00	2.51	<5	0.77860	3.00	YES
	2.441	3.12	2.05	3±1	4.00	2.51	<5	0.78490	3.00	YES
	2.480	3.443	2.21	3±1	4.00	2.51	<5	0.79114	3.00	YES
π /4DQPSK	2.402	2.817	1.91	3±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	2.698	1.86	3±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	3.131	2.06	3±1	4.00	2.51	<5	0.79114	3.00	YES
8DQPSK	2.402	3.043	2.02	3±1	4.00	2.51	<5	0.77860	3.00	YES
	2.441	2.754	1.89	3±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	3.089	2.04	3±1	4.00	2.51	<5	0.79114	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 calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-0.462	0.90	-1±1	0.00	1.00	<5	0.30997	3.00	YES
	2.44	-1.097	0.78	-1±1	0.00	1.00	<5	0.31241	3.00	YES
	2.480	-0.395	0.91	-1±1	0.00	1.00	<5	0.31496	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 calculatio n	SAR Exclusion threshold	SAR test exclusion
802.11b	2.412	7.286	5.35	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.651	5.82	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.531	5.66	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11g	2.412	6.624	4.60	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	6.546	4.51	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	6.528	4.50	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT20)	2.412	6.387	4.35	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	6.56	4.53	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	6.39	4.36	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT40)	2.422	5.153	3.28	6±1	7.00	5.01	<6	1.55997	3.00	YES
	2.437	5.535	3.58	6±1	7.00	5.01	<7	1.56480	3.00	YES
	2.452	5.343	3.42	6±1	7.00	5.01	<8	1.56960	3.00	YES

Conclusion:

BT+WIFI supported simultaneous transmission:

BT+2.4GWIFI=0.79114+1.98004=2.77118≤3, So passed.