

FCC ID:2A9NQSINGLE-SPEAKER

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	1.988	1.58	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	2.141	1.64	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	1.465	1.40	1±1	2.00	1.58	<5	0.49918	3.00	YES
π /4DQPSK	2.402	2.688	1.86	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	2.767	1.89	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	2.086	1.62	2±1	3.00	2.00	<5	0.62843	3.00	YES
8DQPSK	2.402	2.9	1.95	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	3.038	2.01	3±1	4.00	2.51	<5	0.78490	3.00	YES
	2.480	2.319	1.71	2±1	3.00	2.00	<5	0.62843	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	-1.178	0.76	-1±1	0.00	1.00	<5	0.30997	3.00	YES
	2.44	-0.791	0.83	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.133	0.97	0±1	1.00	1.26	<5	0.39651	3.00	YES

Conclusion:

For the max result : $0.78490 \leq \text{FCC Limit } 3.0$ for 1g SAR.