

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.

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	1.844	1.53	2.5±1	3.5	2.24	<5	0.69393	3.00	YES
	2.441	1.57	1.44	2.5±1	3.5	2.24	<5	0.69954	3.00	YES
	2.480	3.049	2.02	2.5±1	3.5	2.24	<5	0.70511	3.00	YES
$\pi/4$ -DQPSK	2.402	3.839	2.42	3.5±1	4.5	2.82	<5	0.87361	3.00	YES
	2.441	3.563	2.27	3.5±1	4.5	2.82	<5	0.88067	3.00	YES
	2.480	3.585	2.28	3.5±1	4.5	2.82	<5	0.88768	3.00	YES
8-DQPSK	2.402	4.059	2.55	3.5±1	4.5	2.82	<5	0.87361	3.00	YES
	2.441	3.877	2.44	3.5±1	4.5	2.82	<5	0.88067	3.00	YES
	2.480	3.858	2.43	3.5±1	4.5	2.82	<5	0.88768	3.00	YES
BLE	2.402	1.249	1.33	1.5±1	2.5	1.78	<5	0.55121	3.00	YES
	2.440	0.925	1.24	1.5±1	2.5	1.78	<5	0.55555	3.00	YES
	2.480	2.527	1.79	2.5±1	3.5	2.24	<5	0.70511	3.00	YES

Conclusion:

For the max result : $0.88768 \leq 3.0$ for 1g SAR, SAR is not required.



Signature:

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