

RF EXPOSURE EVALUATION METHOD

FCC ID:2A5DVJYS-P5235

SAR Test Exclusion Thresholds for 100 MHz - 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

The 1-g 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

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Remark: The best case gain of the antenna is 0dBi.

0 dBi logarithmic terms convert to numeric result is nearly 1.0

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$

BT:

Transmit Frequency (GHz)	Mode	Measured Power (dBm)	Tune-up power (dBm)	Max tune-up power (dBm)	Result calculation	1g SAR
2.402	GFSK	0.5	0±1	1	0.390	3
2.441		0.32	0±1	1	0.393	3
2.480		0.11	0±1	1	0.396	3
2.402	Π/4 DQPSK	-0.54	0±1	1	0.390	3
2.441		-0.74	0±1	1	0.393	3
2.480		-1.07	-1±1	0	0.315	3
2.402	8DPSK	-0.24	0±1	1	0.390	3
2.441		-0.44	0±1	1	0.393	3
2.480		-0.57	0±1	1	0.396	3

Conclusion:

For the max result: $0.396 \leq 3.0$ for 1g SAR, No SAR is required.