



RF EXPOSURE EVALUATION METHOD

FCC ID : 2A5R2-RPT201

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.

Maximum measured transmitter power.

BLE

Test channel	Peak Output Power (dBm)	Limit(dBm)	Result
Lowest	-2.585	30.00	Pass
Middle	-1.082		
Highest	0.631		

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

0dBi 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:

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



BLE

Test Channel	Range	tune up max power (dBm)	[(max. power of channel, including tune-up tolerance, mW)	(min. test separation distance,mm)]	[f(GHz)]	Result	Limit
CH00	-1~-3	-1	0.794	5	2.402	0.246	3
CH19	-1~-3	-1	0.794	5	2.441	0.248	3
CH39	1~-1	1	1.259	5	2.480	0.396	3

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

The test Result is less than 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

Conclusion: No SAR is required.