

RF EXPOSURE EVALUATION METHOD

FCC ID:2AGZG-AEEY08A0001

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.

Test Channel	Frequency	Maximum output power. Antenna port		output power
		(PK)	(AV)	
	(MHz)	(dBm)	(dBm)	mW
TX 5G Mode				
CH01	5728	12.74	8.37	6.871
CH09	5757	12.65	8.92	7.798
CH16	5803	12.15	8.28	6.730

Remark: The best case gain of the antenna is 1.5dBi.

1.5 dBi logarithmic terms convert to numeric result is nearly 1.41

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:

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

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
CH01	7.6~9.6	9.6	9.120	5	2.412	2.83	3
CH09	7.6~9.6	9.6	9.120	5	2.437	2.85	3
CH16	7.6~9.6	9.6	9.120	5	2.462	2.86	3

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.