

**RF EXPOSURE EVALUATION METHOD****FCC ID: 2A64D-HEART001****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.

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Right Earbuds

1Mbps			
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)
CH00	2402	2.874	1.938
CH39	2441	3.199	2.089
CH78	2480	3.559	2.269
2Mbps			
CH00	2402	2.873	1.938
CH39	2441	3.202	2.090
CH78	2480	3.562	2.271
3Mbps			
CH00	2402	2.873	1.938
CH39	2441	3.201	2.090
CH78	2480	3.566	2.273



Left Earbuds

1Mbps			
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)
CH00	2402	3.105	2.044
CH39	2441	3.420	2.198
CH78	2480	3.673	2.330
2Mbps			
CH00	2402	3.110	2.046
CH39	2441	3.416	2.196
CH78	2480	3.666	2.326
3Mbps			
CH00	2402	3.117	2.050
CH39	2441	3.424	2.200
CH78	2480	3.671	2.329

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Test channel	Peak Output Power (dBm)	Peak Output Power (mW)
1M		
Lowest	0.507	1.124
Middle	0.841	1.214
Highest	1.248	1.333
2M		
Lowest	0.521	1.127
Middle	0.851	1.216
Highest	1.269	1.339

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Test channel	Peak Output Power (dBm)	Peak Output Power (mW)
1M		
Lowest	0.928	1.238
Middle	0.976	1.252
Highest	1.248	1.333
2M		
Lowest	0.677	1.169
Middle	0.998	1.258
Highest	1.014	1.263



Remark: The best case gain of the antenna is 2.42dBi.

2.42dBi logarithmic terms convert to numeric result is nearly 1.75

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:

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

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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
1Mbps							
CH00	2~4	4	2.512	5	2.402	0.779	3
CH39	2~4	4	2.512	5	2.441	0.785	3
CH78	2~4	4	2.512	5	2.480	0.791	3
2Mbps							
CH00	2~4	4	2.512	5	2.402	0.779	3
CH39	2~4	4	2.512	5	2.441	0.785	3
CH78	2~4	4	2.512	5	2.480	0.791	3
3Mbps							
CH00	2~4	4	2.512	5	2.402	0.779	3
CH39	2~4	4	2.512	5	2.441	0.785	3
CH78	2~4	4	2.512	5	2.480	0.791	3



Left Earbuds

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1Mbps							
CH00	2~4	4	2.512	5	2.402	0.779	3
CH39	2~4	4	2.512	5	2.441	0.785	3
CH78	2~4	4	2.512	5	2.480	0.791	3
2Mbps							
CH00	2~4	4	2.512	5	2.402	0.779	3
CH39	2~4	4	2.512	5	2.441	0.785	3
CH78	2~4	4	2.512	5	2.480	0.791	3
3Mbps							
CH00	2~4	4	2.512	5	2.402	0.779	3
CH39	2~4	4	2.512	5	2.441	0.785	3
CH78	2~4	4	2.512	5	2.480	0.791	3

BLE

Right Earbuds

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
1M							
CH00	0~2	2	1.585	5	2.402	0.491	3
CH19	0~2	2	1.585	5	2.440	0.495	3
CH39	0~2	2	1.585	5	2.480	0.499	3
2M							
CH00	0~2	2	1.585	5	2.402	0.491	3
CH19	0~2	2	1.585	5	2.440	0.495	3
CH39	0~2	2	1.585	5	2.480	0.499	3



Left Earbuds

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1M							
CH00	0~2	2	1.585	5	2.402	0.491	3
CH19	0~2	2	1.585	5	2.440	0.495	3
CH39	0~2	2	1.585	5	2.480	0.499	3
2M							
CH00	0~2	2	1.585	5	2.402	0.491	3
CH19	0~2	2	1.585	5	2.440	0.495	3
CH39	0~2	2	1.585	5	2.480	0.499	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.