RF EXPOSURE EVALUATION METHOD

FCC ID:2BHMA-J01

According to KDB 447498 D01 General RF Exposure Guidance v06

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:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,where
f(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.

BT

Left earphone

1Mbps			
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)
CH00	2402	0.283	1.067
CH39	2441	-0.521	0.887
CH78	2480	-1.829	0.656
2Mbps			
CH00	2402	0.912	1.234
CH39	2441	0.140	1.033
CH78	2480	-1.120	0.773

Right earphone

1Mbps			
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)
CH00	2402	0.324	1.077
CH39	2441	-0.482	0.895
CH78	2480	-1.808	0.659
2Mbps			
CH00	2402	0.902	1.231
CH39	2441	0.143	1.033
CH78	2480	-1.144	0.768

BLE

Left earphone

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)
CH00	2402	3.032	2.010
CH19	2440	2.371	1.726
CH39	2480	1.016	1.264

Right earphone

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)
CH00	2402	3.103	2.043
CH19	2440	2.438	1.753
CH39	2480	1.078	1.282

Remark: The best case gain of the antenna is 3.12dBi.
1.2 dBi logarithmic terms convert to numeric result is nearly 2.05

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:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,mm)] • [√f(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
BT- Left earphone							
1Mbps							
CH00	1~-1	1	1.259	5	2.402	0.390	3
CH39	1~-1	1	1.259	5	2.441	0.393	3
CH78	0~-2	0	1.000	5	2.480	0.315	3
2Mbps							
CH00	1~-1	1	1.259	5	2.402	0.390	3
CH39	1~-1	1	1.259	5	2.441	0.393	3
CH78	0~-2	0	1.000	5	2.480	0.315	3
BT- Right earphone							
1Mbps							
CH00	1~-1	1	1.259	5	2.402	0.390	3
CH39	1~-1	1	1.259	5	2.441	0.393	3
CH78	0~-2	0	1.000	5	2.480	0.315	3
2Mbps							
CH00	1~-1	1	1.259	5	2.402	0.390	3
CH39	1~-1	1	1.259	5	2.441	0.393	3
CH78	0~-2	0	1.000	5	2.480	0.315	3

BLE- Left earphone							
CH00	4~2	4	2.512	5	2.402	0.779	3
CH39	3~1	3	1.995	5	2.440	0.623	3
CH78	2~0	2	1.585	5	2.480	0.499	3
BLE- Right earphone							
CH00	4~2	4	2.512	5	2.402	0.779	3
CH39	3~1	3	1.995	5	2.440	0.623	3
CH78	2~0	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.