

6.6. Radiated Spurious Emission Measurement

6.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in below table.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.6.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

6.6.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

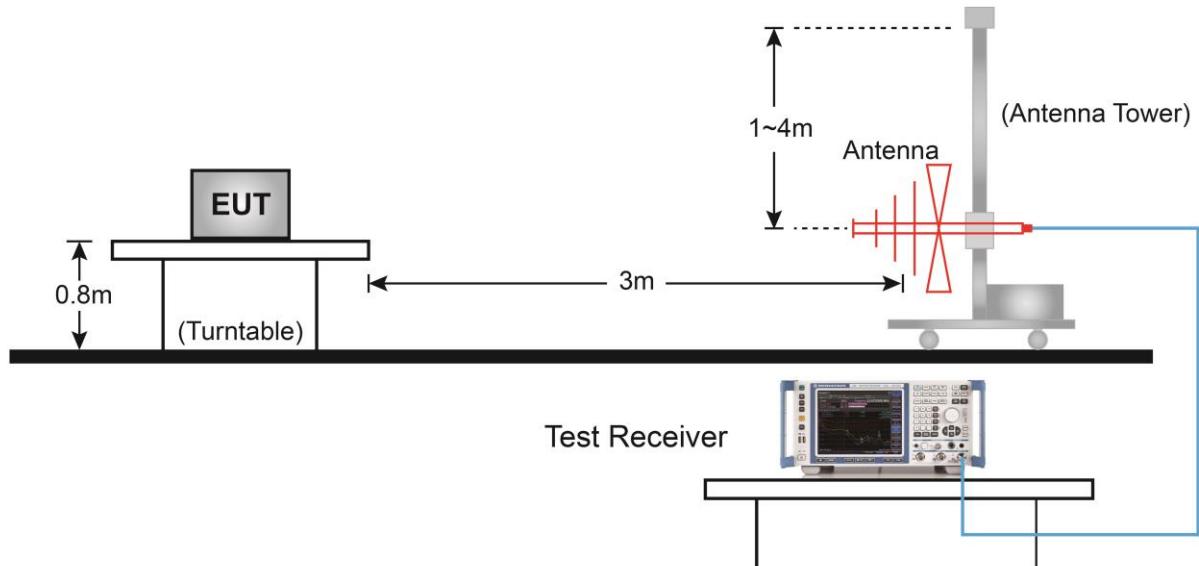
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz

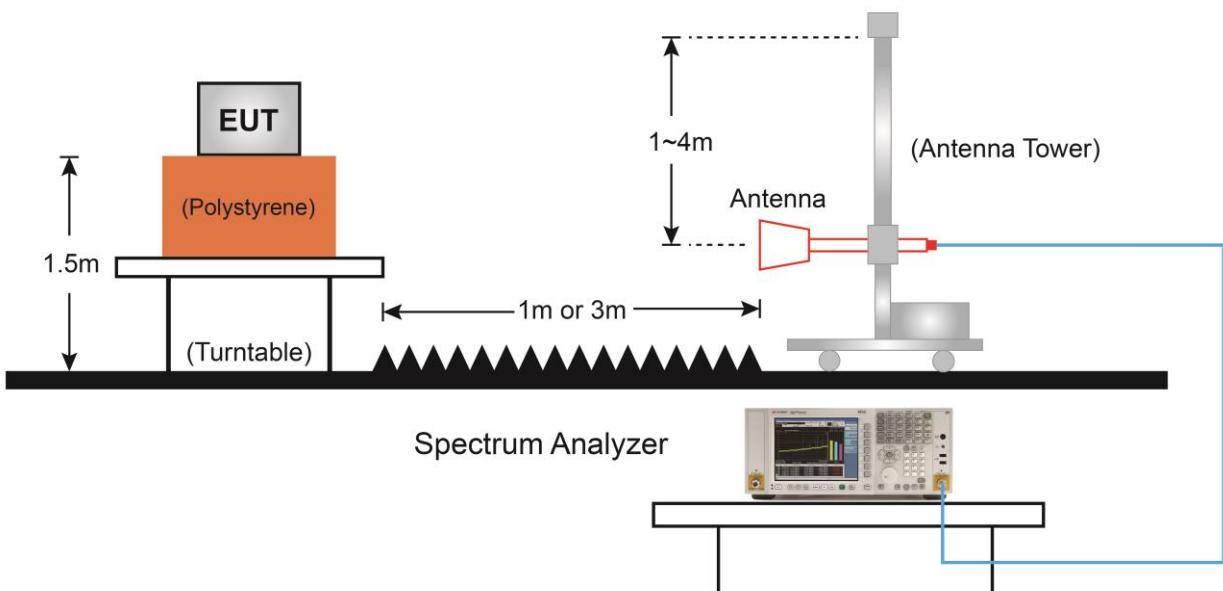
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.6.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.6.5. Test Result

Product	Wireless Sports Headphones	Test Engineer	Silence Liu
Test Site	NS-AC1	Test Date	2021/02/05
Test Mode:	BLE - 1Mbps	Test Channel:	00
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4808.0	40.3	1.8	42.1	74.0	-31.9	Peak	Horizontal
*	7205.0	36.8	9.1	45.9	74.0	-28.1	Peak	Horizontal
	8165.5	35.9	10.5	46.4	74.0	-27.6	Peak	Horizontal
*	10163.0	35.6	13.6	49.2	74.0	-24.8	Peak	Horizontal
	4808.0	42.6	1.8	44.4	74.0	-29.6	Peak	Vertical
*	7205.0	38.2	9.1	47.3	74.0	-26.7	Peak	Vertical
	8301.5	35.0	10.6	45.6	74.0	-28.4	Peak	Vertical
*	10086.5	35.2	13.1	48.3	74.0	-25.7	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Wireless Sports Headphones	Test Engineer	Silence Liu
Test Site	NS-AC1	Test Date	2021/02/05
Test Mode:	BLE - 1Mbps	Test Channel:	19
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4876.0	42.8	1.7	44.5	74.0	-29.5	Peak	Horizontal
*	7757.5	36.2	10.0	46.2	74.0	-27.8	Peak	Horizontal
	8225.0	36.5	10.7	47.2	74.0	-26.8	Peak	Horizontal
*	9789.0	37.3	11.8	49.1	74.0	-24.9	Peak	Horizontal
	4876.0	44.8	1.7	46.5	74.0	-27.5	Peak	Vertical
*	6202.0	36.7	5.3	42.0	74.0	-32.0	Peak	Vertical
	7315.5	37.3	9.3	46.6	74.0	-27.4	Peak	Vertical
*	9993.0	36.4	12.7	49.1	74.0	-24.9	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Wireless Sports Headphones	Test Engineer	Silence Liu
Test Site	NS-AC1	Test Date	2021/02/05
Test Mode:	BLE - 1Mbps	Test Channel:	39
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4961.0	40.9	1.8	42.7	74.0	-31.3	Peak	Horizontal
*	6423.0	37.2	6.0	43.2	74.0	-30.8	Peak	Horizontal
	7494.0	35.6	9.5	45.1	74.0	-28.9	Peak	Horizontal
*	8556.5	36.4	11.0	47.4	74.0	-26.6	Peak	Horizontal
	4961.0	43.9	1.8	45.7	74.0	-28.3	Peak	Vertical
*	6414.5	37.4	5.9	43.3	74.0	-30.7	Peak	Vertical
	7528.0	35.6	9.6	45.2	74.0	-28.8	Peak	Vertical
*	8650.0	35.5	11.4	46.9	74.0	-27.1	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Wireless Sports Headphones	Test Engineer	Silence Liu
Test Site	NS-AC1	Test Date	2021/02/05
Test Mode:	BLE - 2Mbps	Test Channel:	00
Remark:	3. Average measurement was not performed if peak level lower than average limit. 4. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4799.5	39.9	1.7	41.6	74.0	-32.4	Peak	Horizontal
*	6329.5	37.5	5.4	42.9	74.0	-31.1	Peak	Horizontal
	7511.0	34.3	9.8	44.1	74.0	-29.9	Peak	Horizontal
*	7970.0	36.8	10.1	46.9	74.0	-27.1	Peak	Horizontal
	4799.5	41.6	1.7	43.3	74.0	-30.7	Peak	Vertical
*	7205.0	38.3	9.1	47.4	74.0	-26.6	Peak	Vertical
	8208.0	34.3	10.4	44.7	74.0	-29.3	Peak	Vertical
*	9610.5	35.9	12.0	47.9	74.0	-26.1	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Wireless Sports Headphones	Test Engineer	Silence Liu
Test Site	NS-AC1	Test Date	2021/02/05
Test Mode:	BLE - 2Mbps	Test Channel:	19
Remark:	3. Average measurement was not performed if peak level lower than average limit. 4. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4884.5	44.1	1.7	45.8	74.0	-28.2	Peak	Horizontal
*	6176.5	37.4	5.1	42.5	74.0	-31.5	Peak	Horizontal
	8072.0	35.9	10.7	46.6	74.0	-27.4	Peak	Horizontal
*	9942.0	35.0	12.9	47.9	74.0	-26.1	Peak	Horizontal
	4884.5	45.2	1.7	46.9	74.0	-27.1	Peak	Vertical
*	6100.0	36.6	5.2	41.8	74.0	-32.2	Peak	Vertical
	7519.5	35.2	9.7	44.9	74.0	-29.1	Peak	Vertical
*	7919.0	36.8	10.1	46.9	74.0	-27.1	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Wireless Sports Headphones	Test Engineer	Silence Liu
Test Site	NS-AC1	Test Date	2021/02/05
Test Mode:	BLE - 2Mbps	Test Channel:	39
Remark:	3. Average measurement was not performed if peak level lower than average limit. 4. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4961.0	39.8	1.8	41.6	74.0	-32.4	Peak	Horizontal
*	6202.0	37.5	5.3	42.8	74.0	-31.2	Peak	Horizontal
	7468.5	34.7	9.4	44.1	74.0	-29.9	Peak	Horizontal
*	7868.0	37.3	9.7	47.0	74.0	-27.0	Peak	Horizontal
	4961.0	43.9	1.8	45.7	74.0	-28.3	Peak	Vertical
*	7783.0	36.2	9.9	46.1	74.0	-27.9	Peak	Vertical
	8344.0	36.3	10.4	46.7	74.0	-27.3	Peak	Vertical
*	9772.0	36.5	12.2	48.7	74.0	-25.3	Peak	Vertical

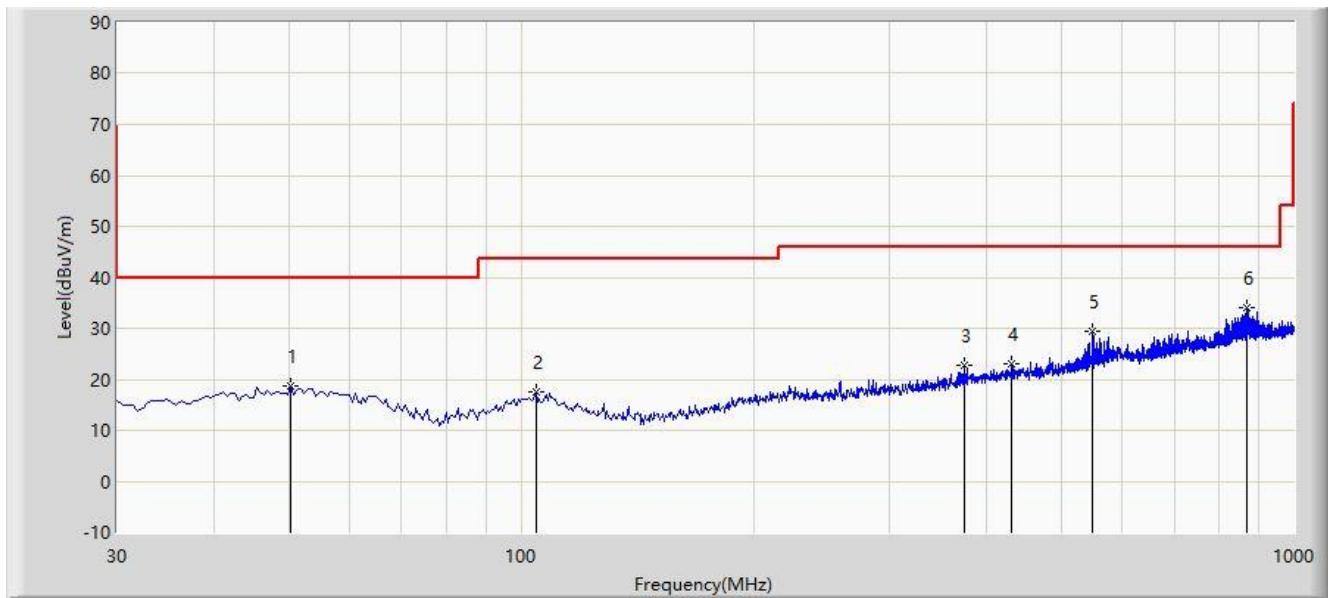
Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The worst case of Radiated Emission below 1GHz:

Site: NS-AC1	Time: 2021/02/04 - 10:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Louie Liu
Probe: NS-AC1_VULB9162	Polarity: Horizontal
EUT: Wireless Sports Headphones	Power: By Battery
Worse Case Mode: Transmit by BLE - 1Mbps at channel 2402MHz	



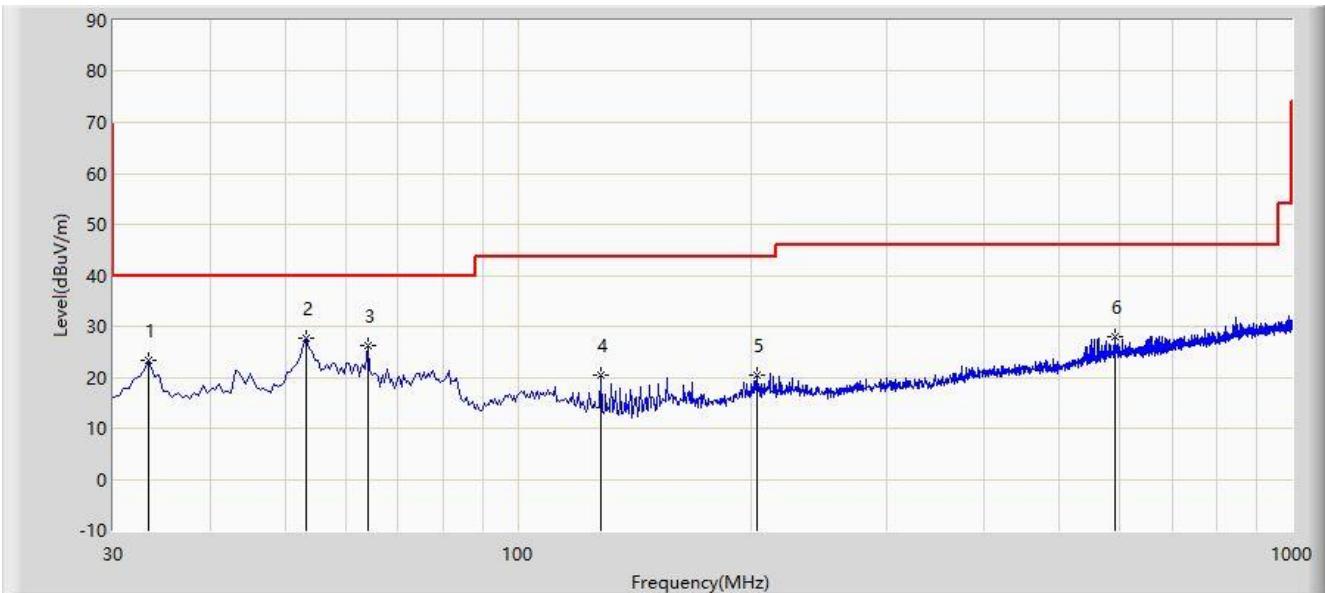
No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	50.370	18.809	-0.648	-21.191	40.000	19.457	PK
2			104.690	17.393	-0.729	-26.107	43.500	18.122	PK
3			373.865	22.827	1.951	-23.173	46.000	20.876	PK
4			431.580	23.139	1.248	-22.861	46.000	21.891	PK
5			547.980	29.535	5.821	-16.465	46.000	23.714	PK
6			870.020	34.199	5.818	-11.801	46.000	28.381	PK

Note 1: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The amplitude of radiated emissions (frequency range from 9kHz ~ 30MHz, 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site: NS-AC1	Time: 2021/02/04 - 10:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Louie Liu
Probe: NS-AC1_VULB9162	Polarity: Vertical
EUT: Wireless Sports Headphones	Power: By Battery
Worse Case Mode: Transmit by BLE - 1Mbps at channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Margin (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			33.395	23.409	6.972	-16.591	40.000	16.437	PK
2			53.280	27.577	7.929	-12.423	40.000	19.648	PK
3			63.950	26.360	8.598	-13.640	40.000	17.762	PK
4			127.970	20.522	5.601	-22.978	43.500	14.921	PK
5		*	203.630	20.491	2.979	-23.009	43.500	17.512	PK
6			592.115	28.068	3.399	-17.932	46.000	24.669	PK

Note 1: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The amplitude of radiated emissions (frequency range from 9kHz ~ 30MHz, 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

6.7. Radiated Restricted Band Edge Measurement

6.7.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in below table.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.7.2. Test Procedure Used

ANSI C63.10-2013 - Section 6.3 & 6.6 & 6.10

6.7.3. Test Setting

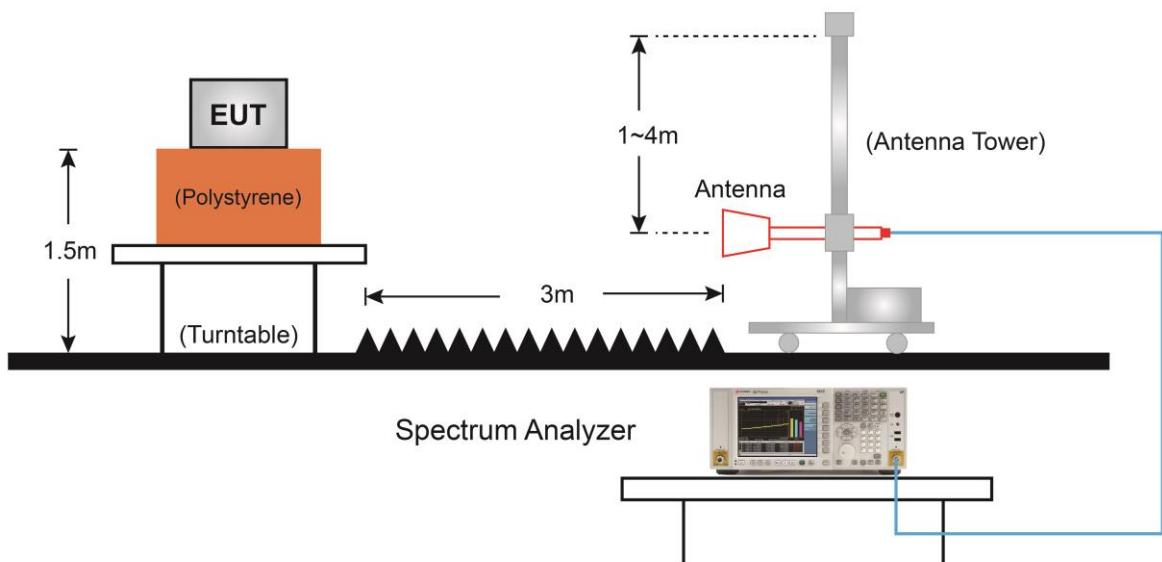
Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Field Strength Measurements

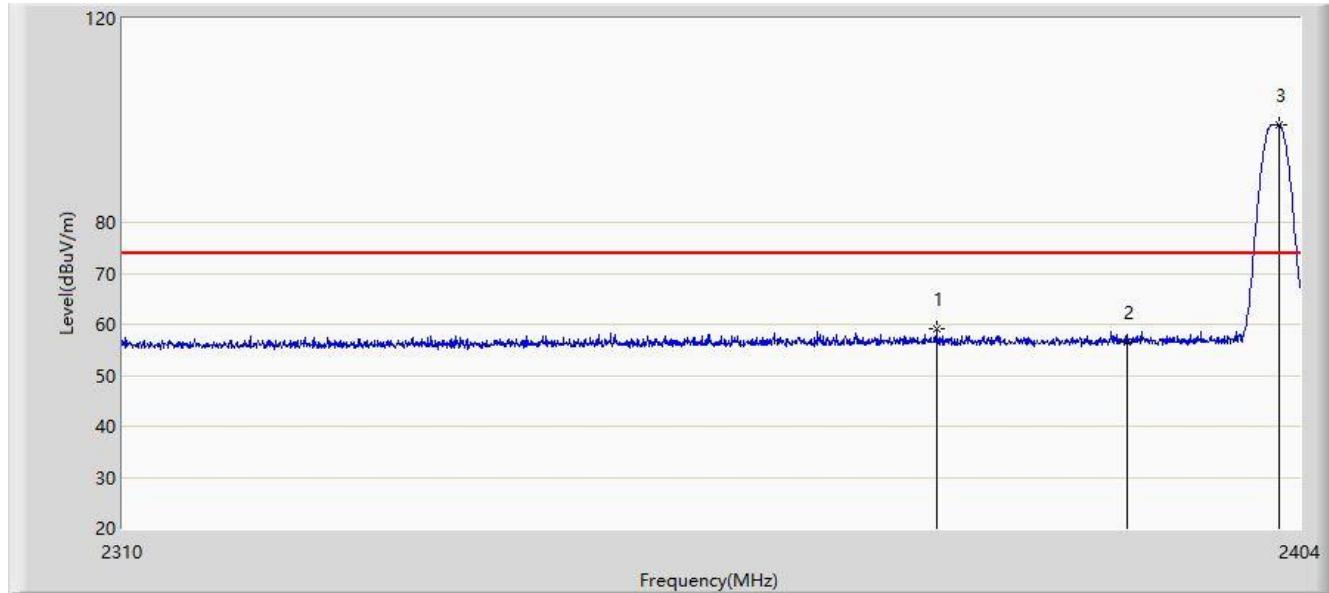
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10Hz
4. If the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$. T is the minimum transmission duration
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

6.7.4. Test Setup



6.7.5. Test Result

Site: NS-AC1	Time: 2021/02/05 - 09:45
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 1Mbps at channel 2402MHz	

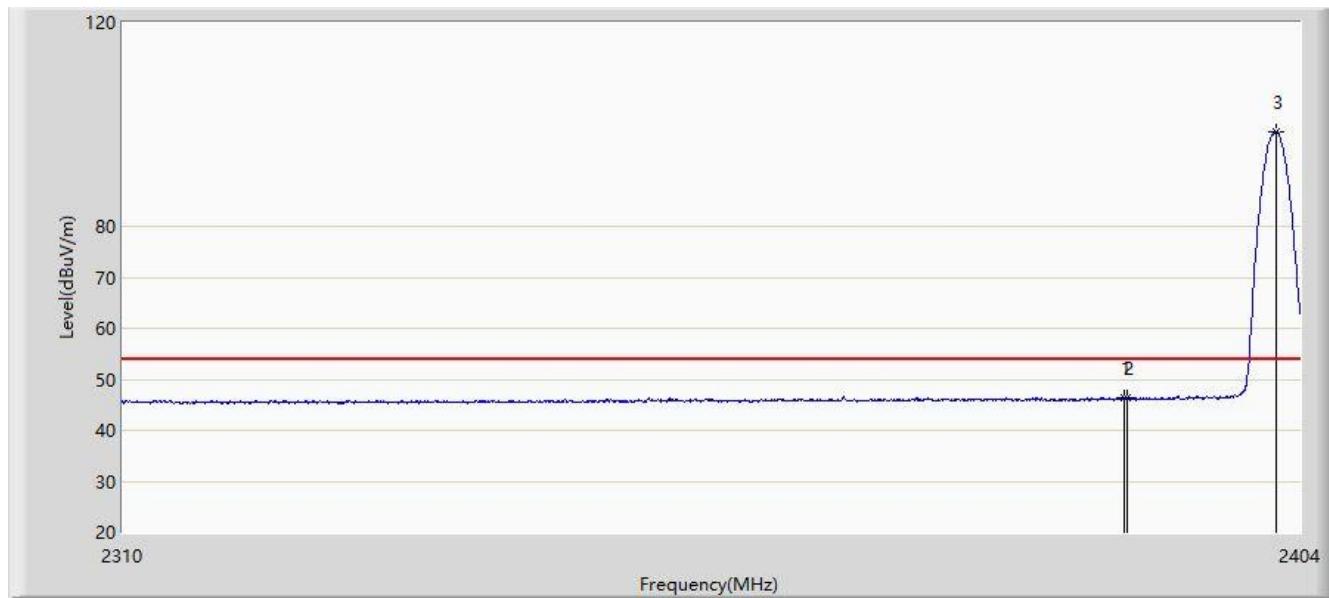


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Margin (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			2374.578	59.028	29.571	-14.972	74.000	29.457	PK
2			2390.000	56.537	27.055	-17.463	74.000	29.482	PK
3		*	2402.308	99.194	69.681	N/A	N/A	29.513	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 09:51
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 1Mbps at channel 2402MHz	

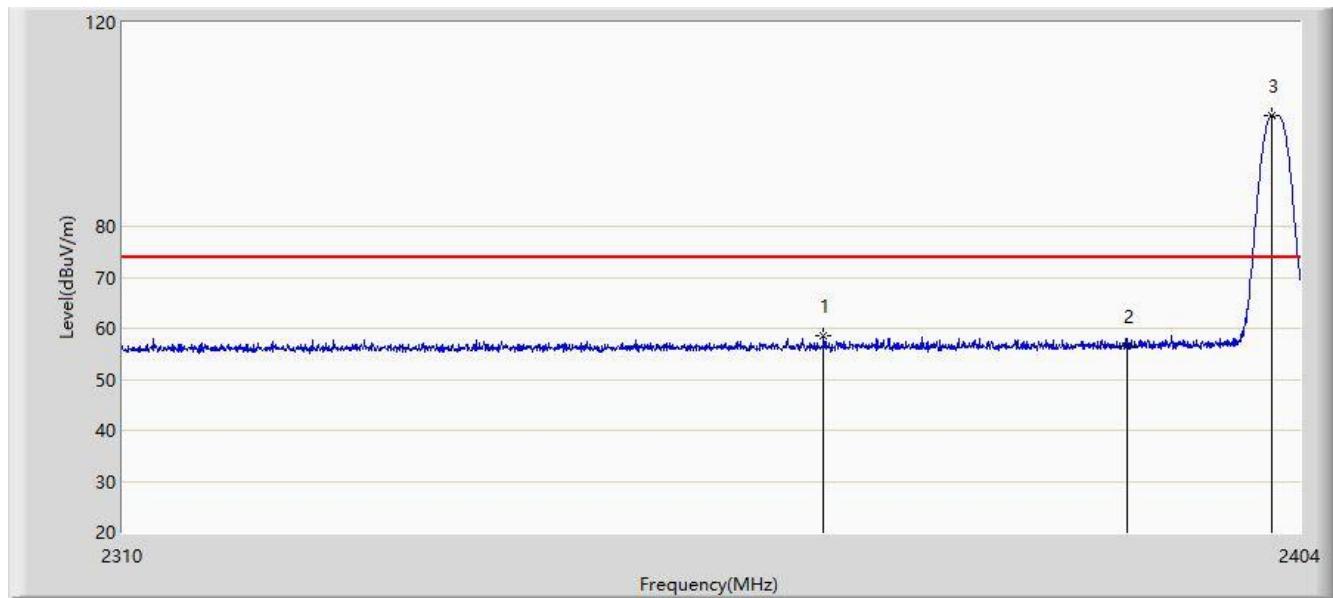


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2389.712	46.412	16.930	-7.588	54.000	29.482	AV
2			2390.000	46.276	16.794	-7.724	54.000	29.482	AV
3		*	2402.026	98.601	69.089	N/A	N/A	29.512	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 09:54
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 1Mbps at channel 2402MHz	

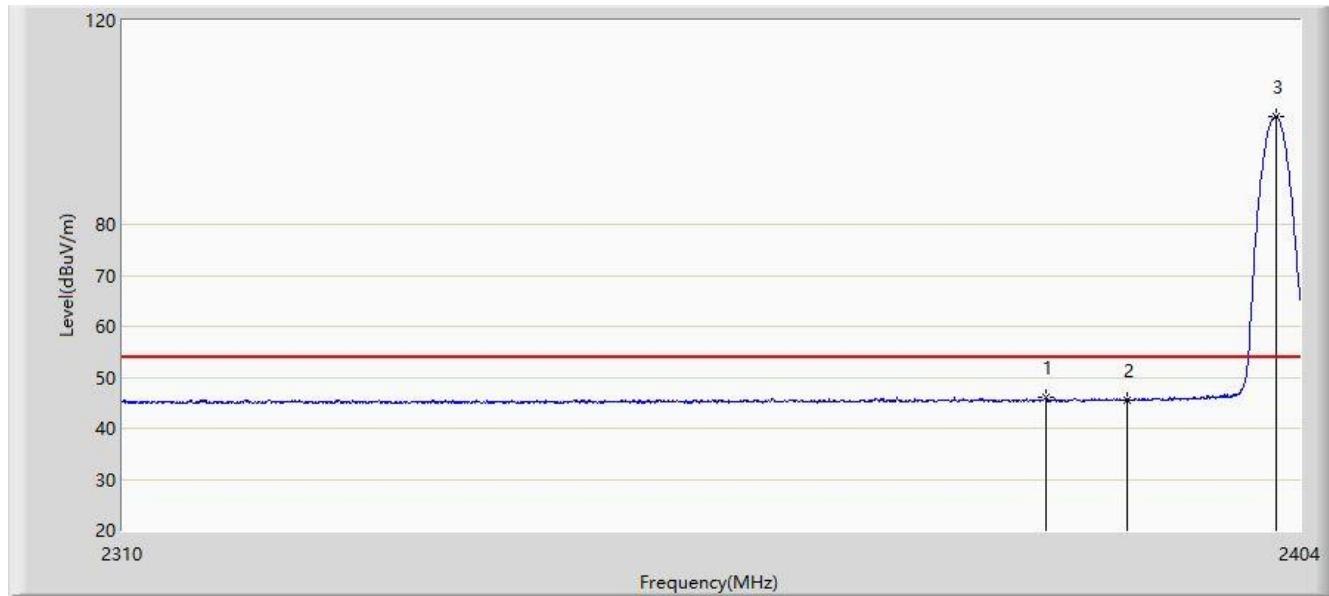


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2365.554	58.494	29.056	-15.506	74.000	29.438	PK
2			2390.000	56.597	27.115	-17.403	74.000	29.482	PK
3	*	*	2401.697	101.728	72.217	N/A	N/A	29.512	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 09:57
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 1Mbps at channel 2402MHz	

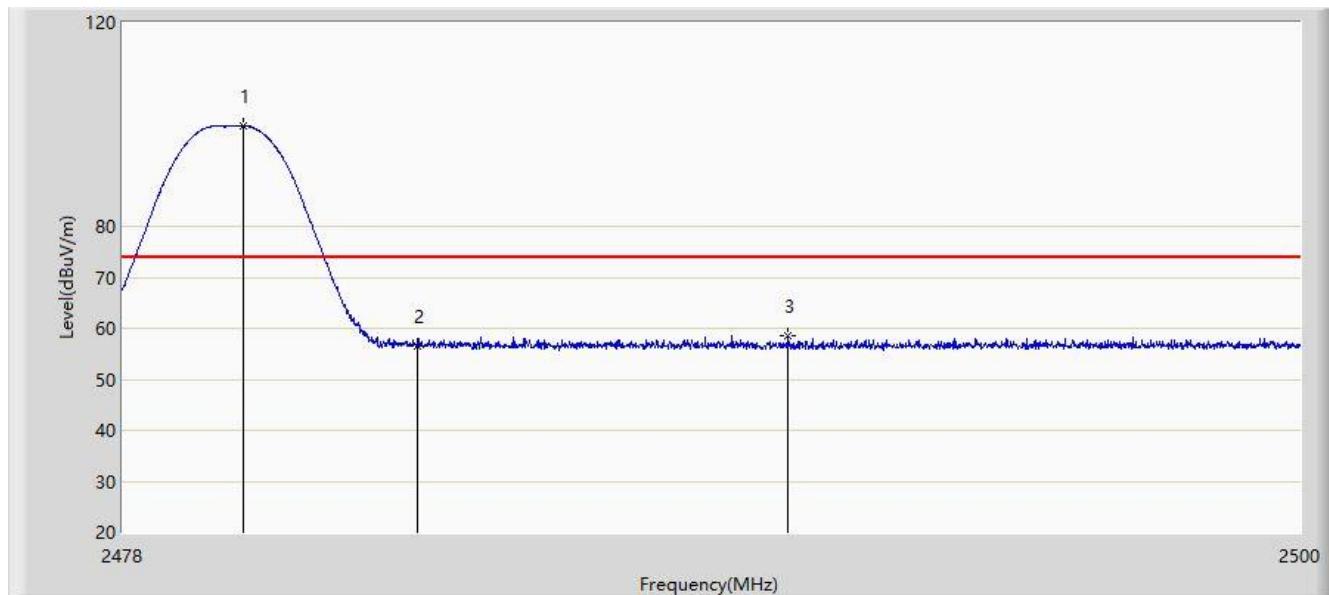


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2383.367	45.965	16.493	-8.035	54.000	29.471	AV
2			2390.000	45.544	16.062	-8.456	54.000	29.482	AV
3		*	2402.026	101.153	71.641	N/A	N/A	29.512	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 09:58
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 1Mbps at channel 2480MHz	

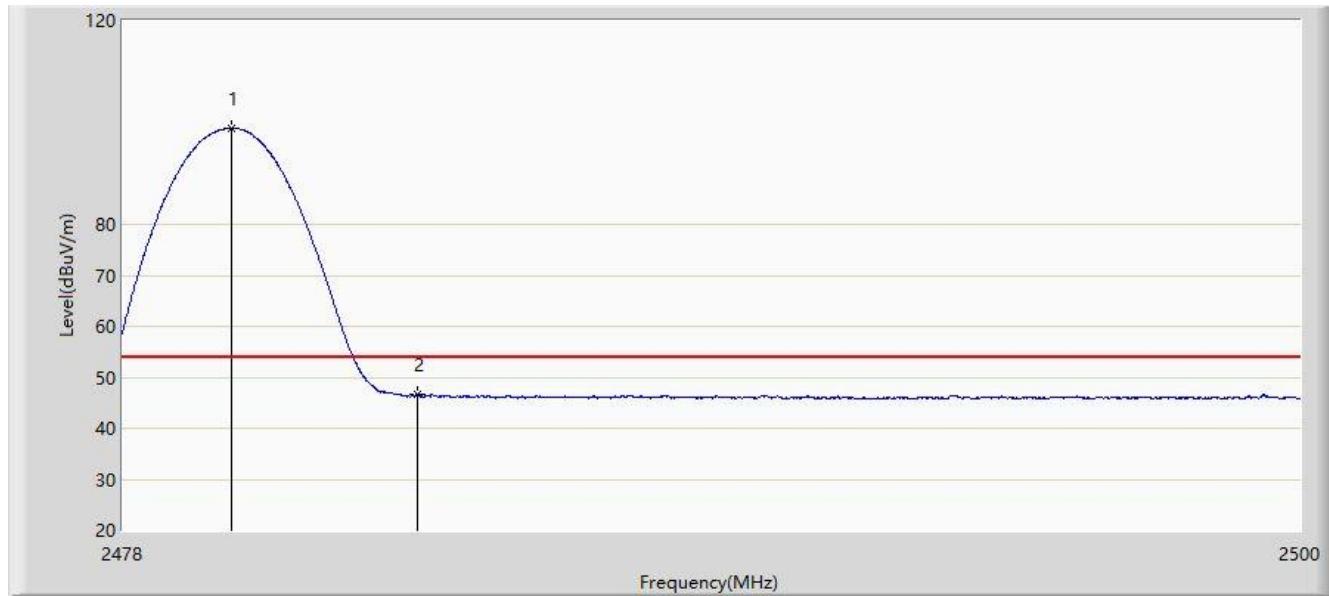


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1		*	2480.244	99.706	70.045	N/A	N/A	29.660	PK
2			2483.500	56.473	26.811	-17.527	74.000	29.662	PK
3			2490.419	58.679	29.015	-15.321	74.000	29.663	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:08
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 1Mbps at channel 2480MHz	

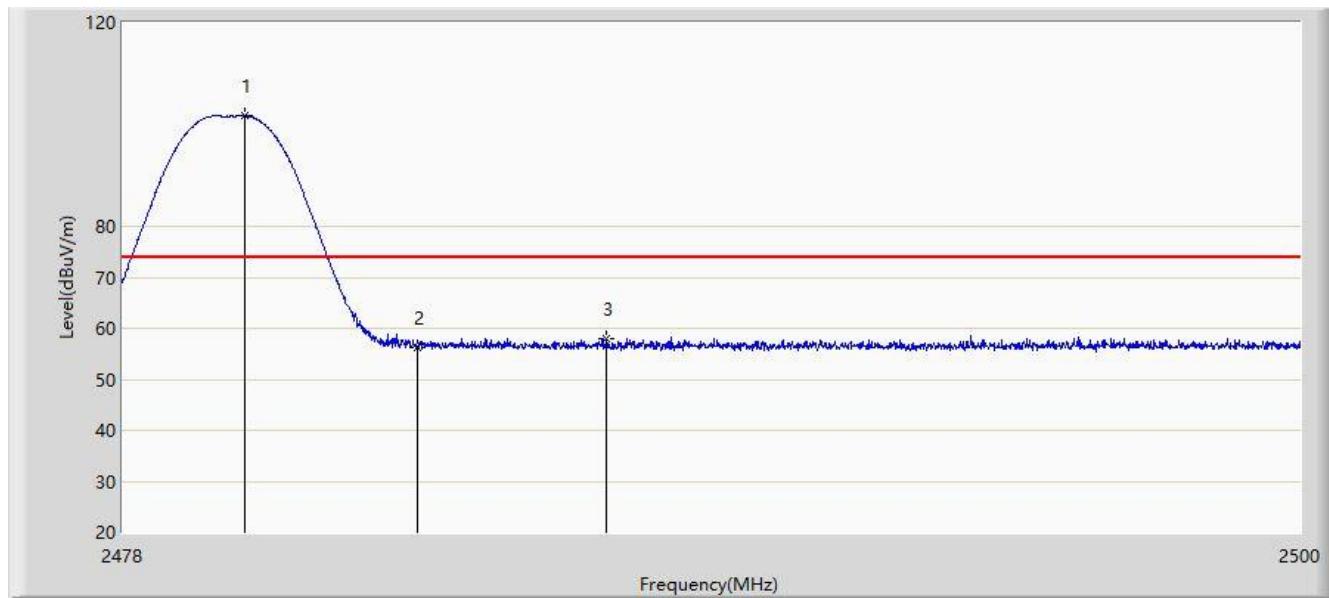


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1		*	2480.024	98.926	69.265	N/A	N/A	29.661	AV
2			2483.500	46.734	17.072	-7.266	54.000	29.662	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:09
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 1Mbps at channel 2480MHz	

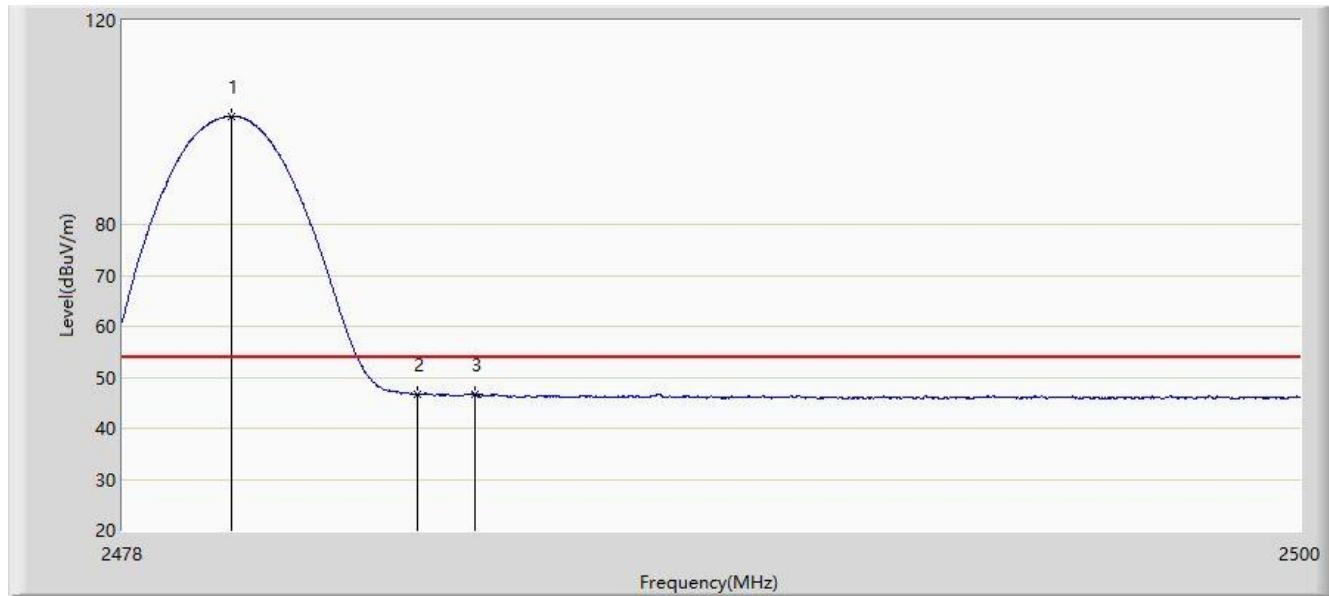


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1		*	2480.277	101.688	72.027	N/A	N/A	29.660	PK
2			2483.500	56.302	26.640	-17.698	74.000	29.662	PK
3			2487.031	58.070	28.407	-15.930	74.000	29.663	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:11
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 1Mbps at channel 2480MHz	

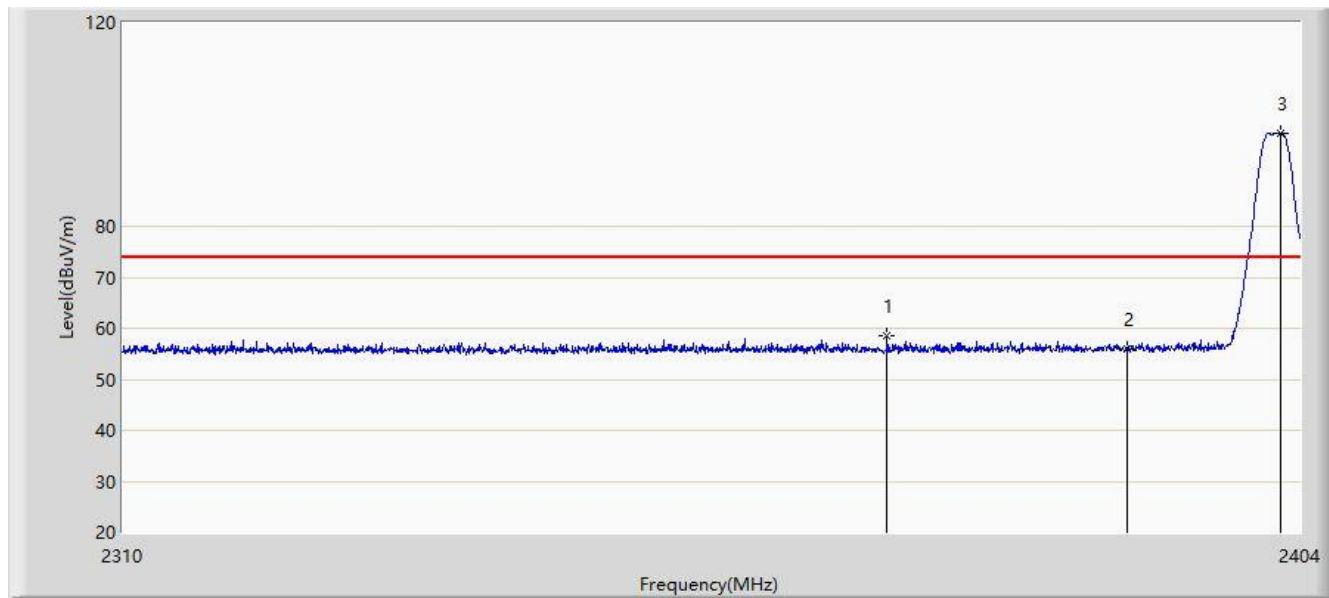


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1		*	2480.024	101.256	71.595	N/A	N/A	29.661	AV
2			2483.500	46.654	16.992	-7.346	54.000	29.662	AV
3			2484.556	46.743	17.081	-7.257	54.000	29.662	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:12
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 2Mbps at channel 2402MHz	

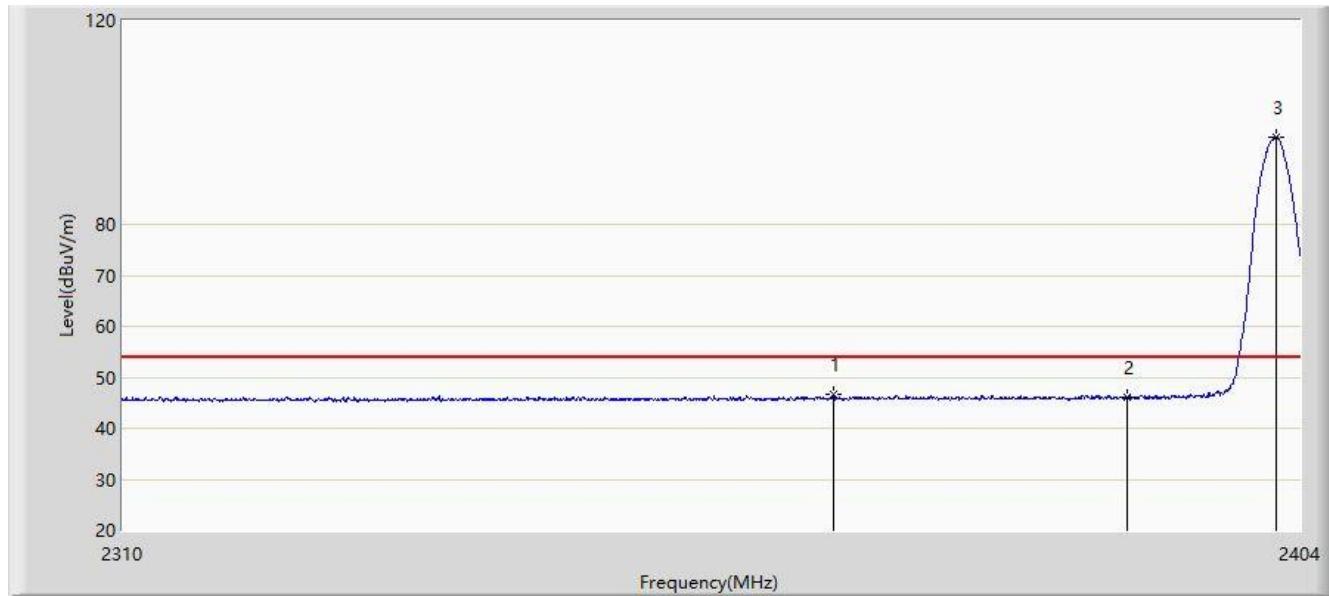


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2370.583	58.424	28.976	-15.576	74.000	29.449	PK
2			2390.000	56.060	26.578	-17.940	74.000	29.482	PK
3		*	2402.496	98.378	68.864	N/A	N/A	29.513	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:17
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 2Mbps at channel 2402MHz	

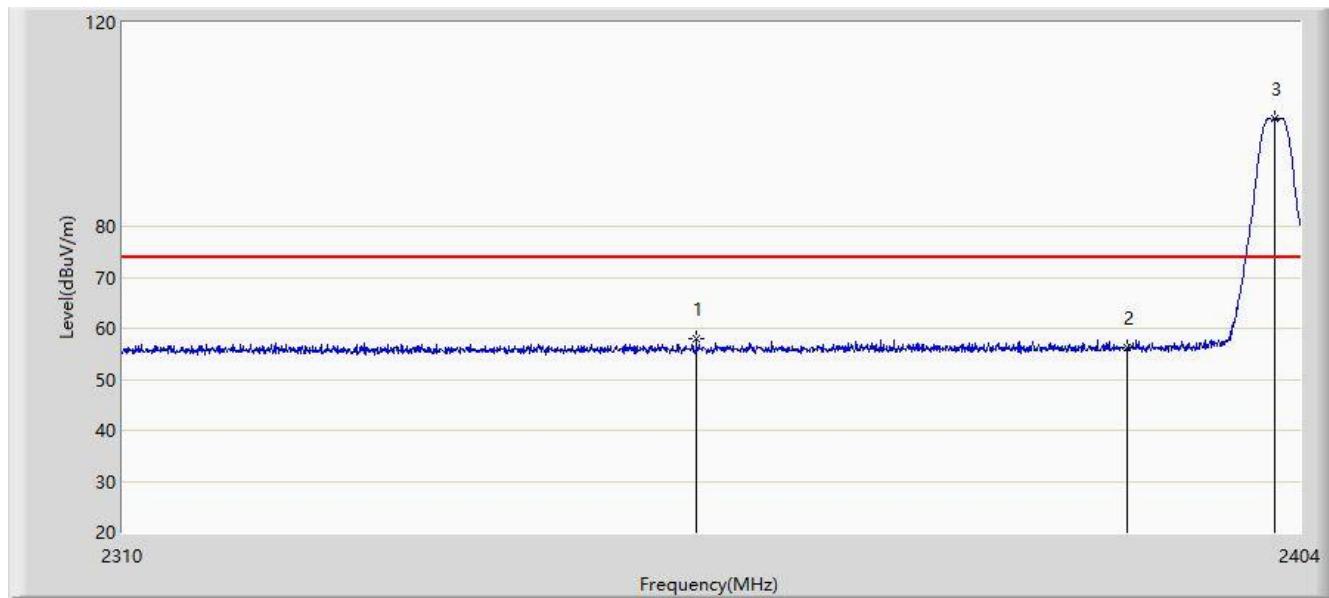


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2366.353	46.638	17.199	-7.362	54.000	29.439	AV
2			2390.000	45.977	16.495	-8.023	54.000	29.482	AV
3		*	2402.026	97.124	67.612	N/A	N/A	29.512	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:18
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 2Mbps at channel 2402MHz	

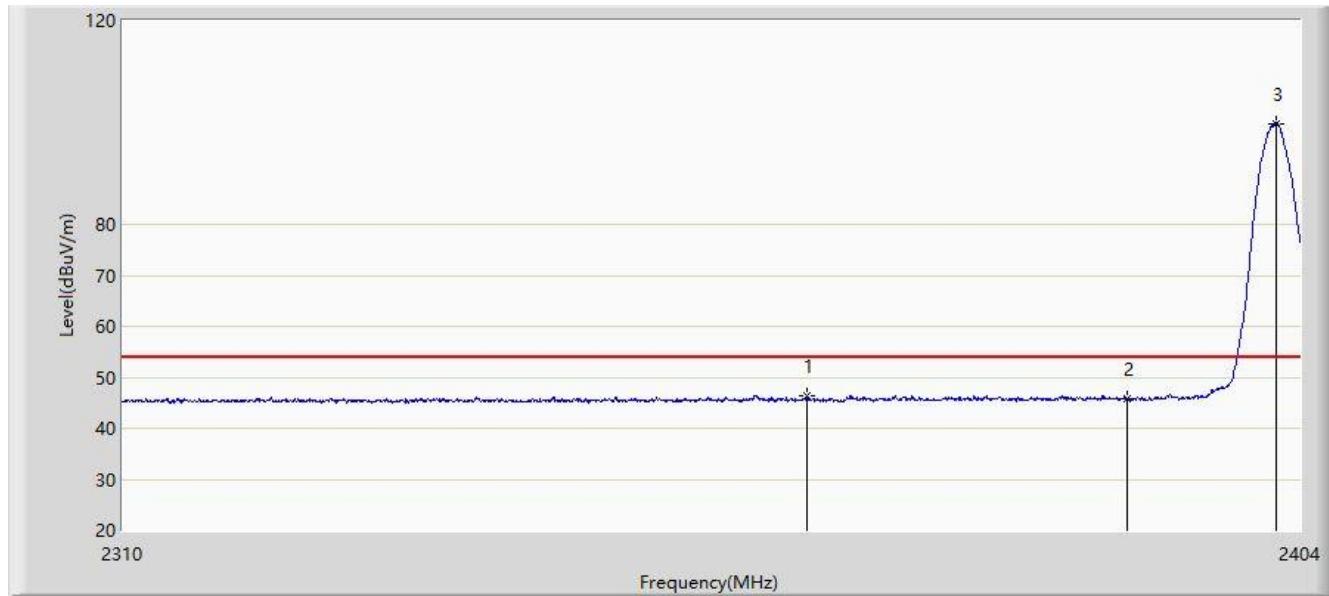


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2355.355	58.109	28.690	-15.891	74.000	29.419	PK
2			2390.000	56.286	26.804	-17.714	74.000	29.482	PK
3		*	2401.979	101.248	71.736	N/A	N/A	29.512	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:20
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 2Mbps at channel 2402MHz	

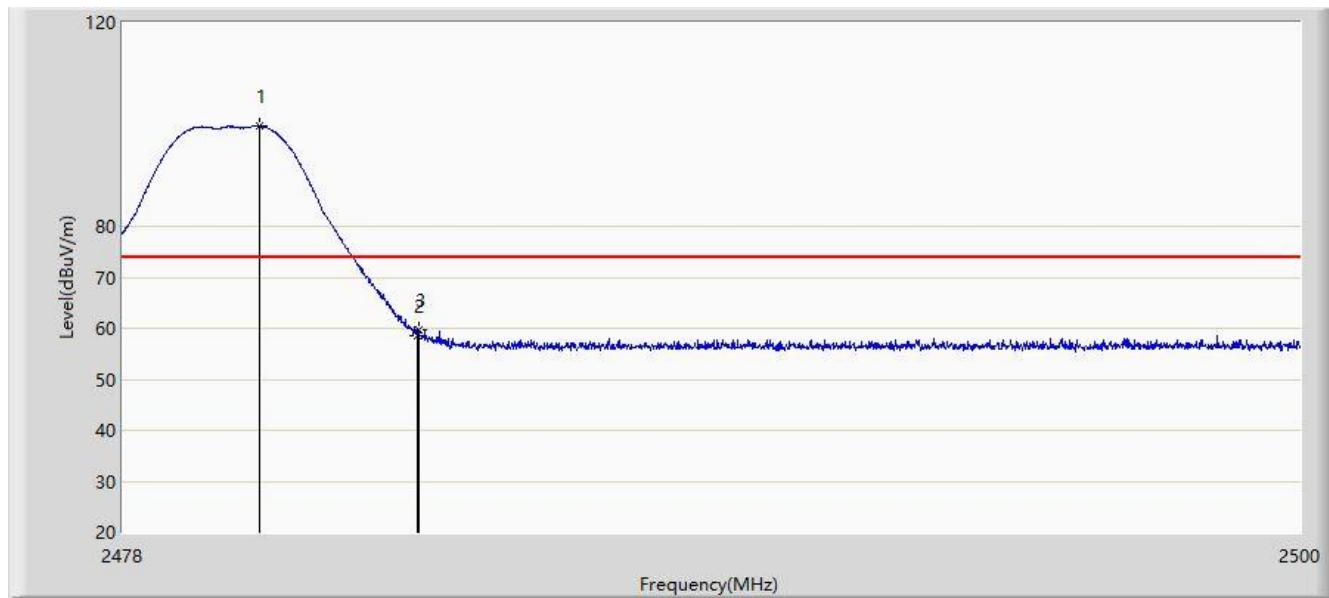


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2364.191	46.270	16.835	-7.730	54.000	29.435	AV
2			2390.000	45.831	16.349	-8.169	54.000	29.482	AV
3		*	2402.026	99.850	70.338	N/A	N/A	29.512	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:21
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 2Mbps at channel 2480MHz	

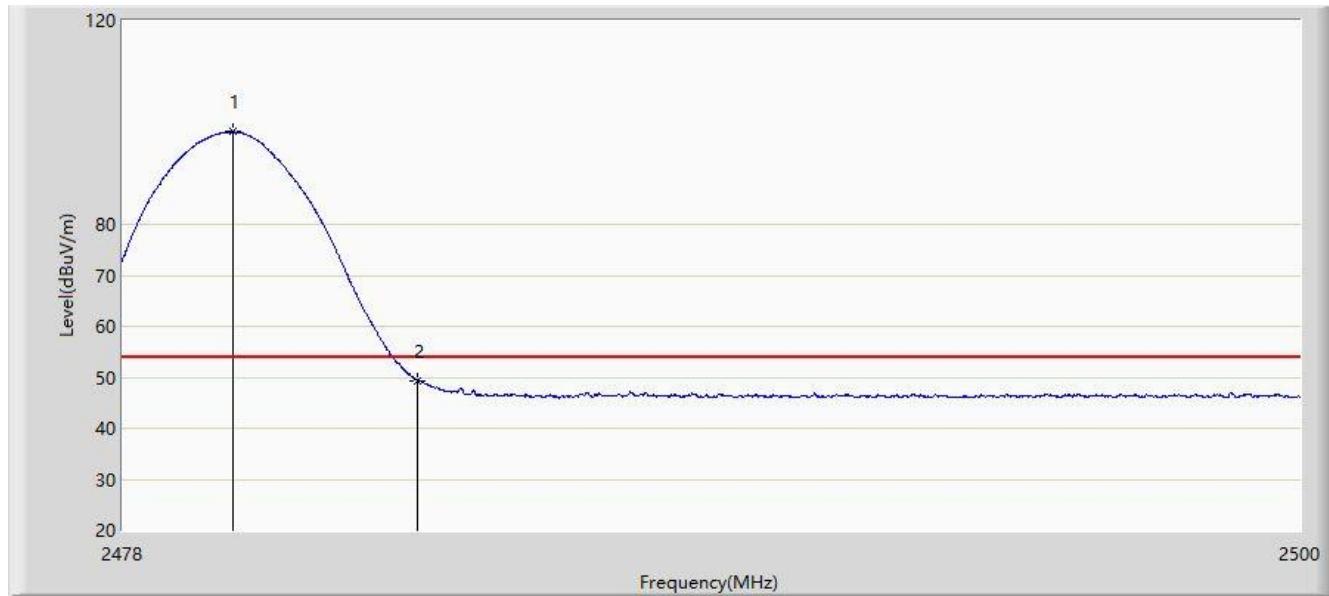


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1		*	2480.541	99.686	70.025	N/A	N/A	29.661	PK
2			2483.500	58.449	28.787	-15.551	74.000	29.662	PK
3			2483.522	59.650	29.988	-14.350	74.000	29.662	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:24
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 2Mbps at channel 2480MHz	

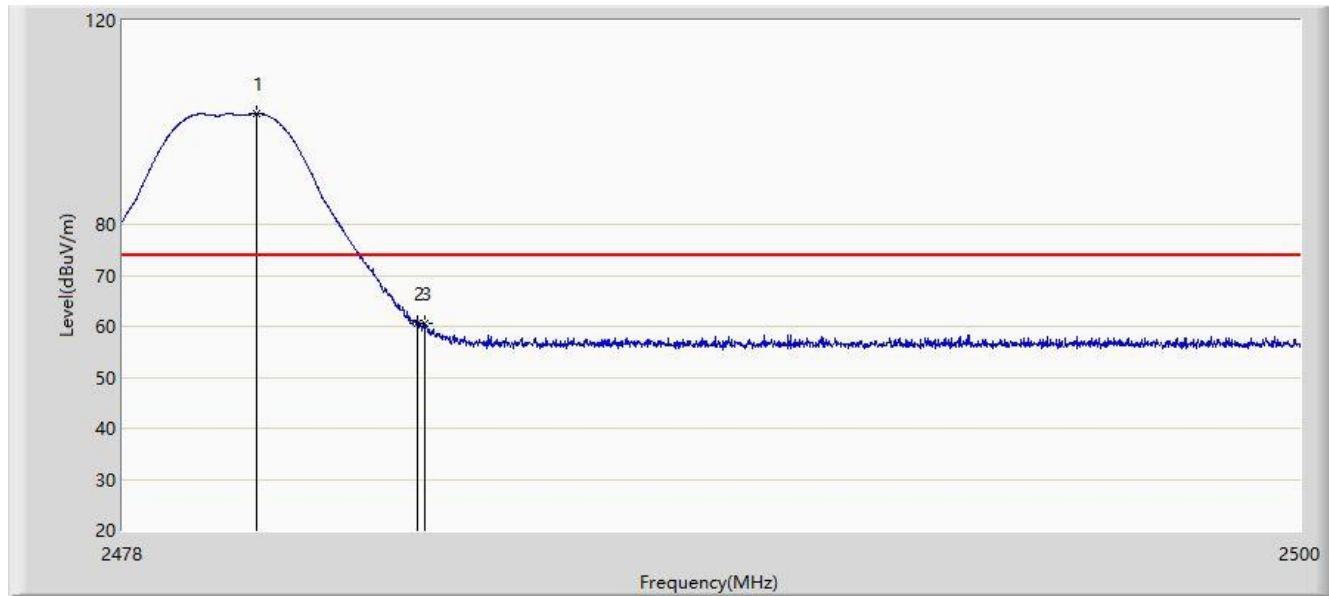


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Margin (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1		*	2480.057	98.128	68.467	N/A	N/A	29.661	AV
2			2483.500	49.350	19.688	-4.650	54.000	29.662	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:25
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 2Mbps at channel 2480MHz	

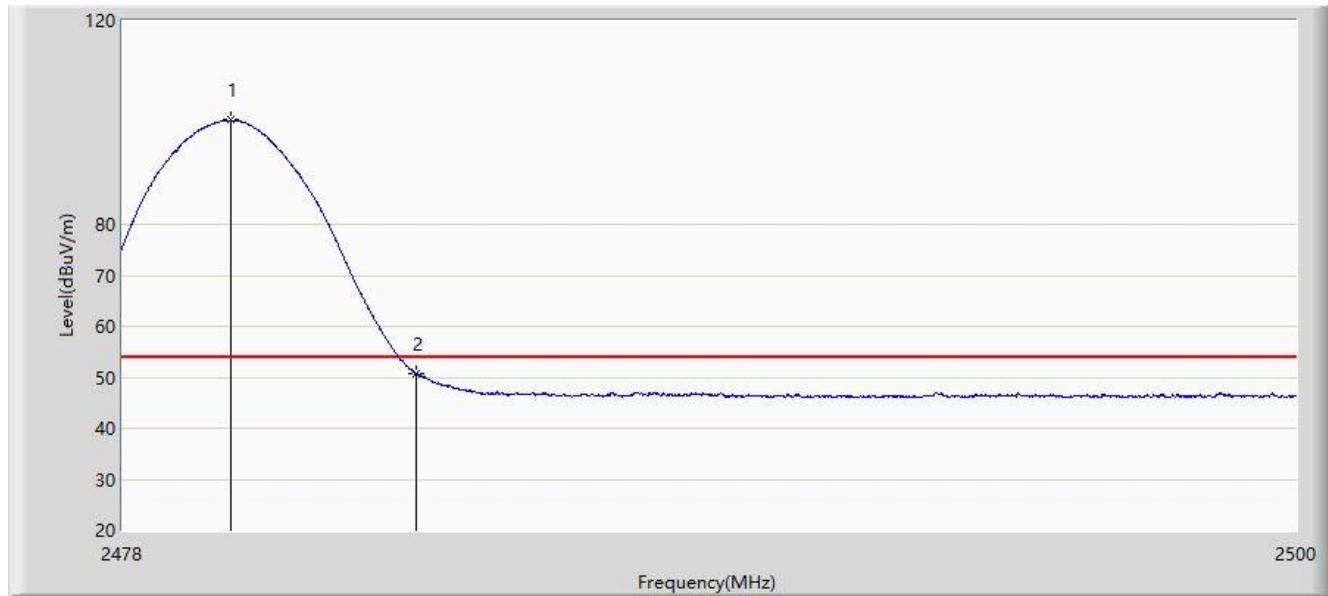


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1		*	2480.508	101.703	72.042	N/A	N/A	29.661	PK
2			2483.500	60.519	30.857	-13.481	74.000	29.662	PK
3			2483.621	60.562	30.900	-13.438	74.000	29.662	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2021/02/05 - 10:27
Limit: FCC_Part15_15.209_RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: Wireless Sports Headphones	Power: By Battery
Test Mode: Transmit by BLE - 2Mbps at channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1		*	2480.024	100.441	70.780	N/A	N/A	29.661	AV
2			2483.500	50.718	21.056	-3.282	54.000	29.662	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

6.8. AC Conducted Emissions Measurement

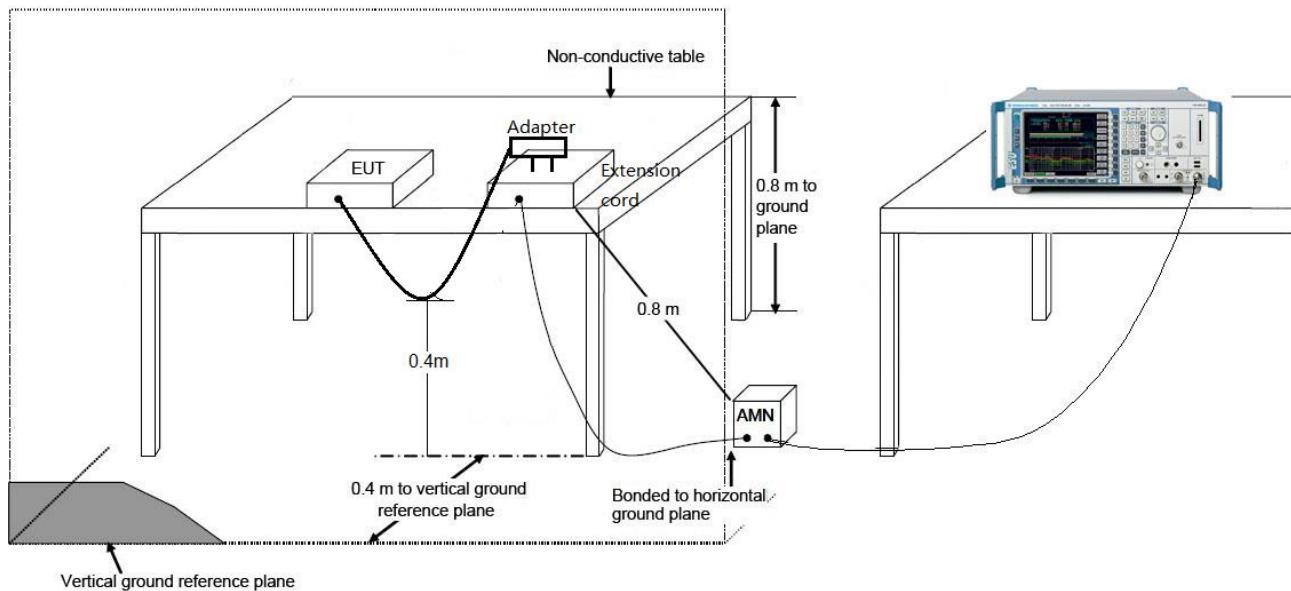
6.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	Average (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

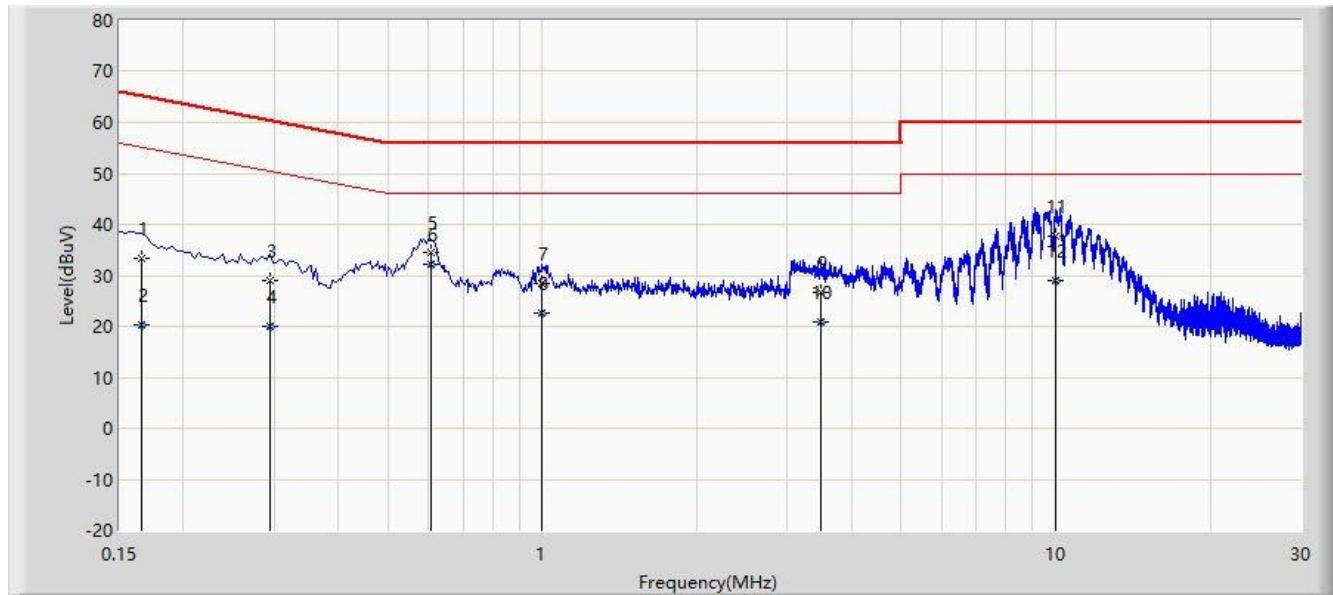
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

6.8.2. Test Setup



6.8.3. Test Result

Site: NS-SR2	Time: 2021/02/04 - 17:43
Limit: FCC_Part15.207_CE_AC Power	Engineer: Selina Zhang
Probe: ENV216_102494_Filter On	Polarity: Line
EUT: Wireless Sports Headphones	Power: AC 120V/60Hz
Test Mode: Transmit by BLE at Channel 2440MHz	

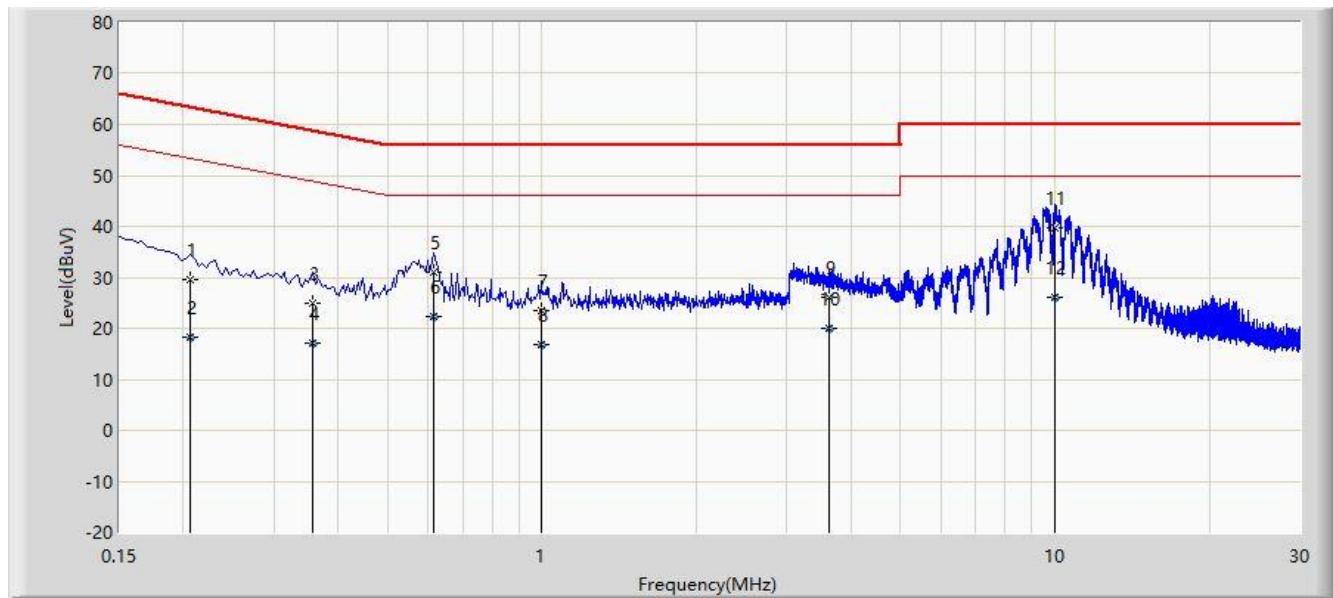


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V)	Reading Level (dB μ V)	Margin (dB)	Limit (dB μ V)	Factor (dB)	Type
1			0.166	33.290	23.003	-31.868	65.158	10.287	QP
2			0.166	20.432	10.145	-34.726	55.158	10.287	AV
3			0.294	28.932	19.214	-31.479	60.411	9.719	QP
4			0.294	19.922	10.204	-30.488	50.411	9.719	AV
5			0.606	34.599	24.663	-21.401	56.000	9.936	QP
6	*		0.606	32.257	22.321	-13.743	46.000	9.936	AV
7			0.998	28.473	18.684	-27.527	56.000	9.790	QP
8			0.998	22.697	12.907	-23.303	46.000	9.790	AV
9			3.494	26.769	17.062	-29.231	56.000	9.707	QP
10			3.494	20.836	11.129	-25.164	46.000	9.707	AV
11			9.974	37.600	27.792	-22.400	60.000	9.808	QP
12			9.974	28.901	19.093	-21.099	50.000	9.808	AV

Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Site: NS-SR2	Time: 2021/02/04 - 17:45
Limit: FCC_Part15.207_CE_AC Power	Engineer: Selina Zhang
Probe: ENV216_102494_Filter On	Polarity: Neutral
EUT: Wireless Sports Headphones	Power: AC 120V/60Hz
Test Mode: Transmit by BLE at Channel 2440MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V)	Reading Level (dB μ V)	Margin (dB)	Limit (dB μ V)	Factor (dB)	Type
1			0.206	29.623	19.845	-33.742	63.365	9.779	QP
2			0.206	18.192	8.413	-35.173	53.365	9.779	AV
3			0.358	24.818	14.932	-33.956	58.775	9.887	QP
4			0.358	16.979	7.092	-31.796	48.775	9.887	AV
5			0.614	30.900	20.969	-25.100	56.000	9.932	QP
6			0.614	22.339	12.407	-23.661	46.000	9.932	AV
7			0.994	23.412	13.623	-32.588	56.000	9.790	QP
8			0.994	16.954	7.164	-29.046	46.000	9.790	AV
9			3.626	26.095	16.399	-29.905	56.000	9.696	QP
10			3.626	20.127	10.432	-25.873	46.000	9.696	AV
11	*		9.998	39.741	29.914	-20.259	60.000	9.827	QP
12			9.998	26.104	16.277	-23.896	50.000	9.827	AV

Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

7. CONCLUSION

The data collected relate only the item(s) tested and show that unit is compliance with Part 15C of the FCC Rules.

The End

Appendix A - Test Setup Photograph

Refer to "2102RSU023-UT" file.

Appendix B - EUT Photograph

Refer to "2102RSU023-UE" file.