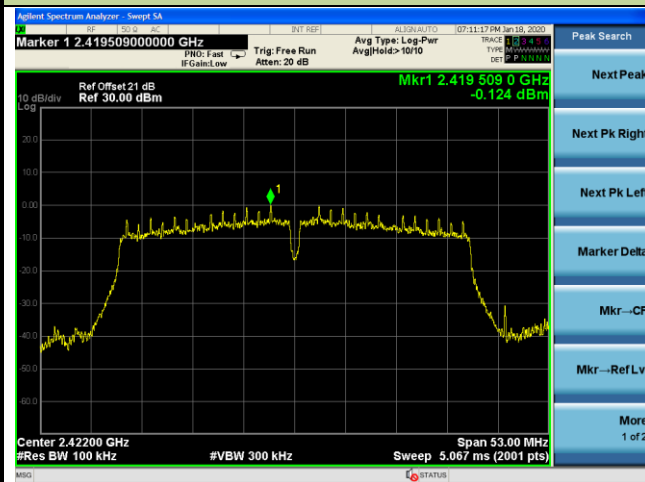


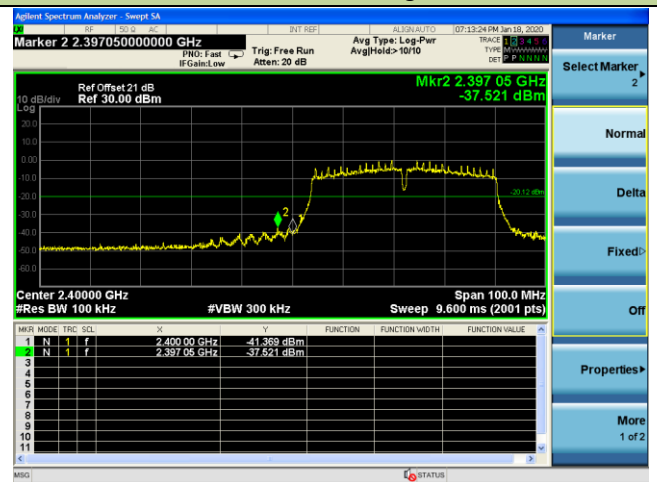
802.11n-HT40 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 03 (2422MHz)

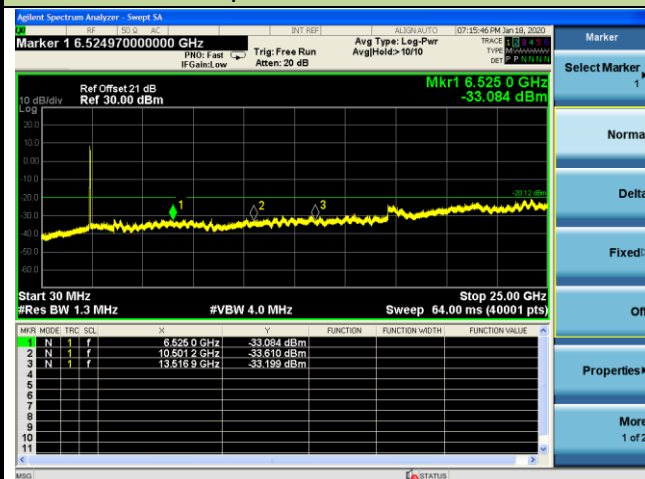
100kHz PSD reference Level



Low Band Edge



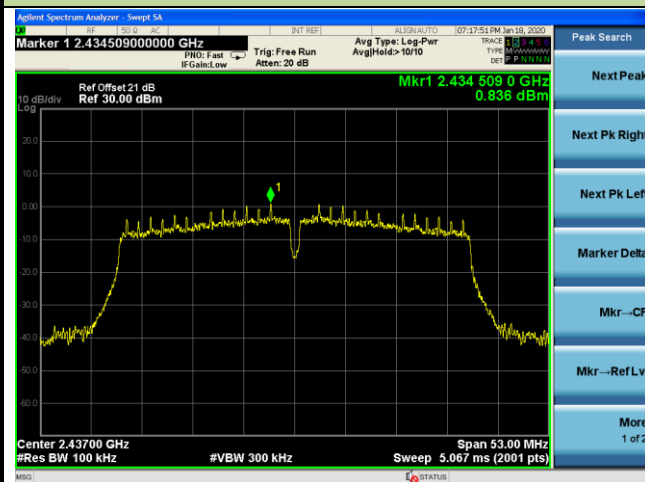
Spurious Emission



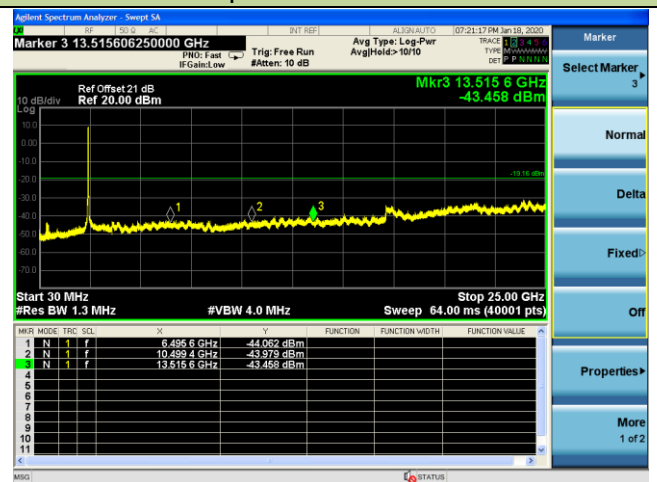
802.11n-HT40 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 06 (2437MHz)

100kHz PSD reference Level



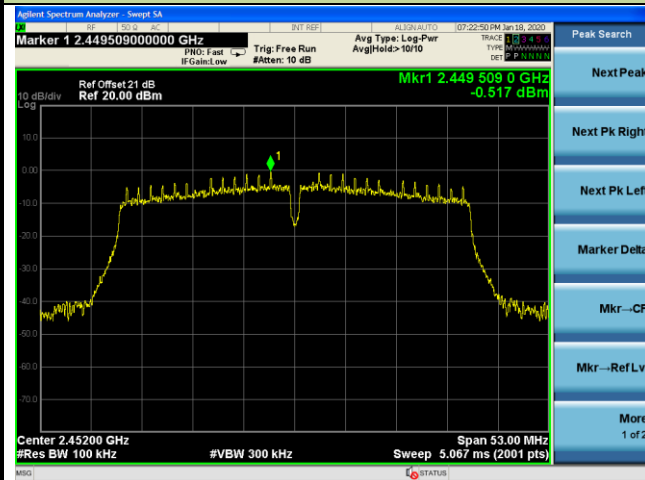
Spurious Emission



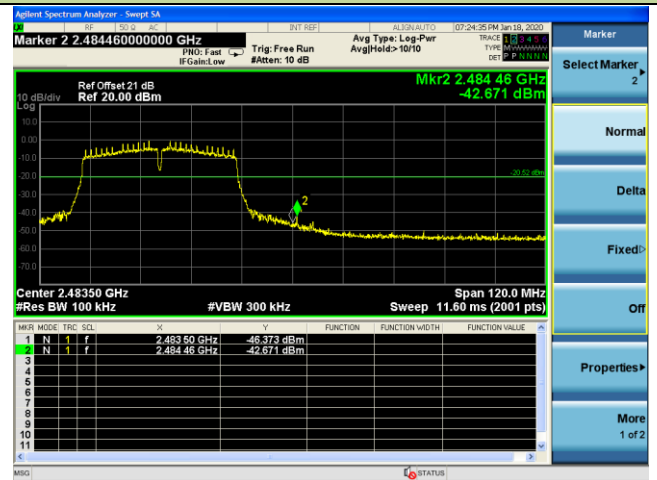
802.11n-HT40 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 09 (2452MHz)

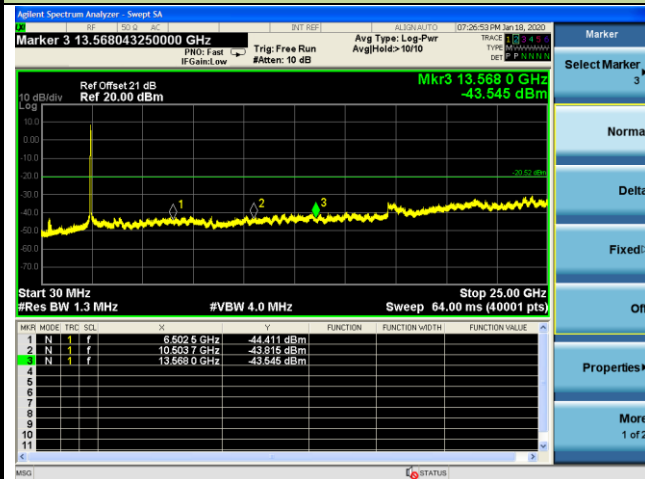
100kHz PSD reference Level



High Band Edge



Spurious Emission



7.6. Radiated Spurious Emission Measurement

7.6.1. Test Limit

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 Table per Section 15.209.

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

7.6.2. 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)

7.6.3. 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
> 1000MHz	1MHz

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

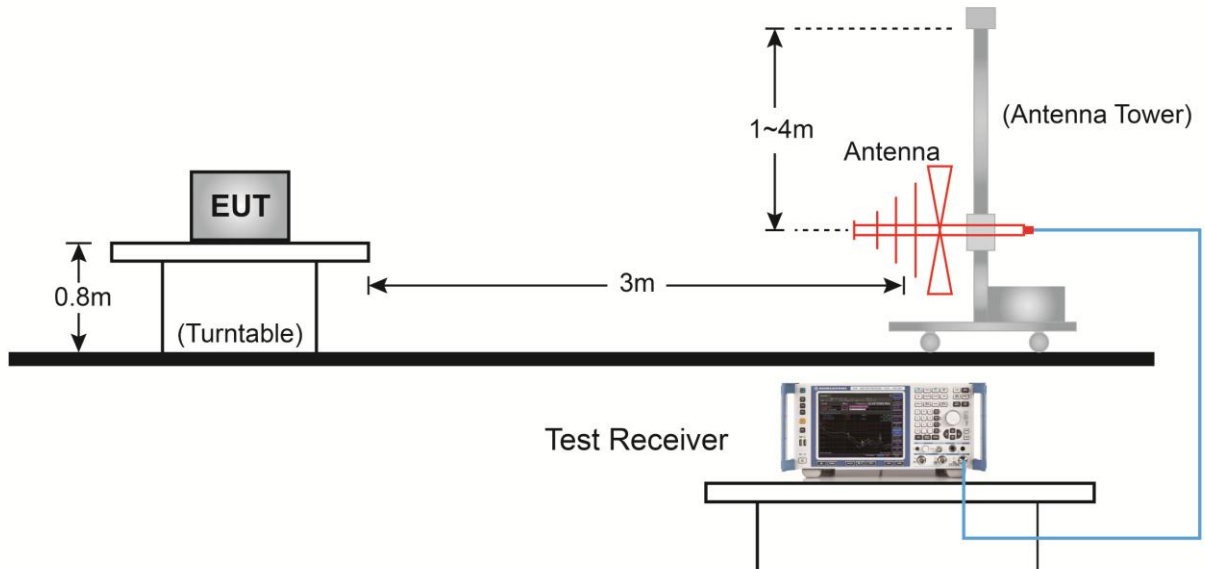
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

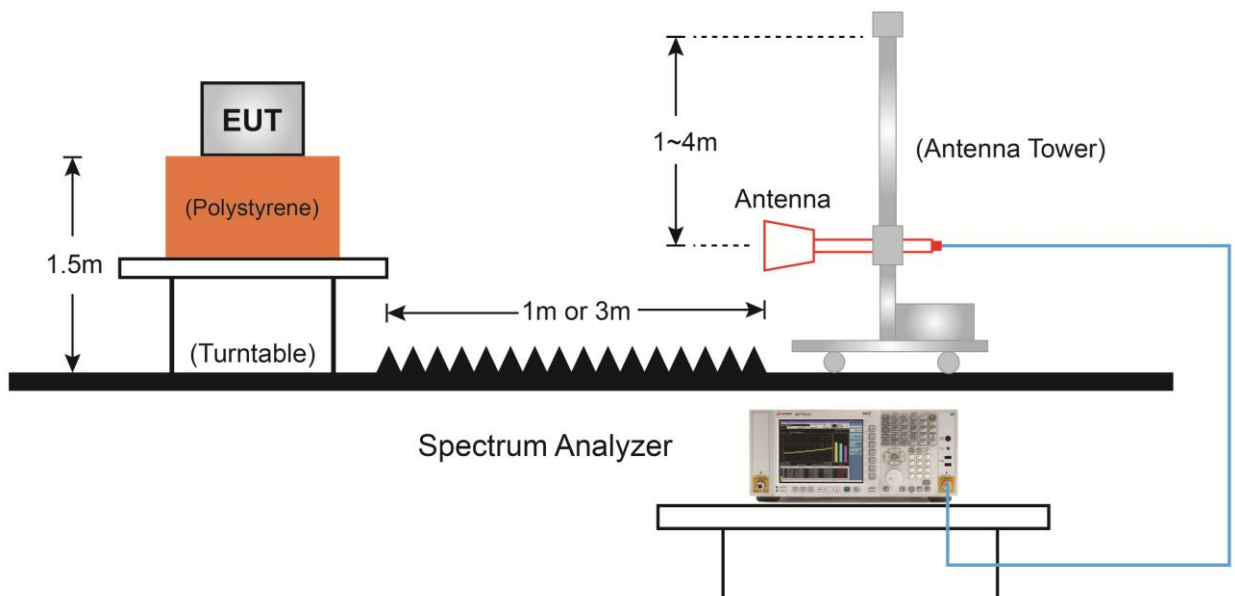
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4.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

7.6.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



7.6.5. Test Result

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11b - Ant 0 + 1	Test Channel	01
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	42.5	6.1	48.6	74.0	-25.4	Peak	Horizontal
*	5828.0	33.8	7.8	41.6	84.1	-42.5	Peak	Horizontal
	7596.0	33.8	11.8	45.6	74.0	-28.4	Peak	Horizontal
*	10384.0	32.4	17.6	50.0	84.1	-34.1	Peak	Horizontal
	4825.0	49.0	6.1	55.1	74.0	-18.9	Peak	Vertical
	4824.1	47.6	6.0	53.6	54.0	-0.4	Average	Vertical
*	6644.0	33.7	9.6	43.3	84.1	-40.8	Peak	Vertical
	8242.0	33.5	12.2	45.7	74.0	-28.3	Peak	Vertical
*	10231.0	32.1	17.2	49.3	84.1	-34.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (104.1dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11b - Ant 0 + 1	Test Channel	06
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	46.9	5.9	52.8	74.0	-21.2	Peak	Horizontal
*	6525.0	33.6	9.6	43.2	88.3	-45.1	Peak	Horizontal
	8352.5	32.3	12.3	44.6	74.0	-29.4	Peak	Horizontal
*	9899.5	31.1	16.9	48.0	88.3	-40.3	Peak	Horizontal
	4876.0	48.4	5.9	54.3	74.0	-19.7	Peak	Vertical
	4874.1	47.2	5.9	53.1	54.0	-0.9	Average	Vertical
*	6499.5	33.1	9.5	42.6	88.3	-45.7	Peak	Vertical
	8165.5	33.2	12.4	45.6	74.0	-28.4	Peak	Vertical
*	9899.5	32.1	16.9	49.0	88.3	-39.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (108.3dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11b - Ant 0 + 1	Test Channel	11
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4927.0	48.7	6.1	54.8	74.0	-19.2	Peak	Horizontal
	4924.0	47.0	6.1	53.1	54.0	-0.9	Average	Horizontal
*	6491.0	32.7	9.4	42.1	87.5	-45.4	Peak	Horizontal
	8165.5	33.5	12.4	45.9	74.0	-28.1	Peak	Horizontal
*	9840.0	32.5	16.9	49.4	87.5	-38.1	Peak	Horizontal
	4927.0	48.7	6.1	54.8	74.0	-19.2	Peak	Vertical
	4924.1	47.5	6.1	53.6	54.0	-0.4	Average	Vertical
*	6508.0	33.1	9.7	42.8	87.5	-44.7	Peak	Vertical
	8344.0	34.4	12.2	46.6	74.0	-27.4	Peak	Vertical
*	9925.0	31.7	16.8	48.5	87.5	-39.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (107.5dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11g - Ant 0 + 1	Test Channel	01
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	56.7	6.1	62.8	74.0	-11.2	Peak	Horizontal
	4824.1	47.3	6.0	53.3	54.0	-0.7	Average	Horizontal
*	6542.0	33.8	9.5	43.3	91.3	-48.0	Peak	Horizontal
	8157.0	33.2	12.5	45.7	74.0	-28.3	Peak	Horizontal
*	10231.0	32.4	17.2	49.6	91.3	-41.7	Peak	Horizontal
	4825.0	57.5	6.1	63.6	74.0	-10.4	Peak	Vertical
	4825.3	45.9	6.1	52.0	54.0	-2.0	Average	Vertical
*	6074.5	34.0	8.0	42.0	91.3	-49.3	Peak	Vertical
	8182.5	34.6	12.4	47.0	74.0	-27.0	Peak	Vertical
*	10197.0	32.8	17.1	49.9	91.3	-41.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (111.3dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11g - Ant 0 + 1	Test Channel	06
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4867.5	52.4	5.9	58.3	74.0	-15.7	Peak	Horizontal
	4875.9	43.9	5.9	49.8	54.0	-4.2	Average	Horizontal
*	6329.5	33.5	8.7	42.2	92.6	-50.4	Peak	Horizontal
	8242.0	34.1	12.2	46.3	74.0	-27.7	Peak	Horizontal
*	9959.0	33.1	16.8	49.9	92.6	-42.7	Peak	Horizontal
	4867.5	56.6	5.9	62.5	74.0	-11.5	Peak	Vertical
	4871.7	46.7	5.9	52.6	54.0	-1.4	Average	Vertical
*	6516.5	33.2	9.6	42.8	92.6	-49.8	Peak	Vertical
	7596.0	34.0	11.8	45.8	74.0	-28.2	Peak	Vertical
*	9959.0	32.4	16.8	49.2	92.6	-43.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (112.6BμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11g - Ant 0 + 1	Test Channel	11
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4927.0	51.9	6.1	58.0	74.0	-16.0	Peak	Horizontal
	4925.6	42.1	6.1	48.2	54.0	-5.8	Average	Horizontal
*	5870.5	34.0	7.6	41.6	91.5	-49.9	Peak	Horizontal
	7528.0	34.0	11.8	45.8	74.0	-28.2	Peak	Horizontal
*	9950.5	32.6	16.9	49.5	91.5	-42.0	Peak	Horizontal
	4918.5	54.2	6.1	60.3	74.0	-13.7	Peak	Vertical
	4921.7	44.8	6.1	50.9	54.0	-3.1	Average	Vertical
*	6576.0	33.8	9.7	43.5	91.5	-48.0	Peak	Vertical
	8131.5	32.9	12.5	45.4	74.0	-28.6	Peak	Vertical
*	9908.0	32.4	16.9	49.3	91.5	-42.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (111.5dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11n-HT20 - Ant 0 + 1	Test Channel	01
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	55.6	6.1	61.7	74.0	-12.3	Peak	Horizontal
	4822.6	45.0	6.0	51.0	54.0	-3.0	Average	Horizontal
*	5870.5	33.6	7.6	41.2	89.9	-48.7	Peak	Horizontal
	8174.0	33.9	12.4	46.3	74.0	-27.7	Peak	Horizontal
*	10146.0	33.1	16.7	49.8	89.9	-40.1	Peak	Horizontal
	4816.5	57.9	5.9	63.8	74.0	-10.2	Peak	Vertical
	4822.1	44.5	6.0	50.5	54.0	-3.5	Average	Vertical
*	6066.0	33.7	7.9	41.6	89.9	-48.3	Peak	Vertical
	7604.5	34.0	11.8	45.8	74.0	-28.2	Peak	Vertical
*	9959.0	32.6	16.8	49.4	89.9	-40.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (109.9dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11n-HT20 - Ant 0 + 1	Test Channel	06
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	54.5	5.9	60.4	74.0	-13.6	Peak	Horizontal
*	4872.3	43.0	5.9	48.9	54.0	-5.1	Average	Horizontal
	6508.0	33.0	9.7	42.7	91.6	-48.9	Peak	Horizontal
	8242.0	33.9	12.2	46.1	74.0	-27.9	Peak	Horizontal
	9967.5	32.6	16.7	49.3	91.6	-42.3	Peak	Horizontal
	4876.0	55.1	5.9	61.0	74.0	-13.0	Peak	Vertical
*	4873.0	45.0	5.9	50.9	54.0	-3.1	Average	Vertical
	5972.5	32.3	7.7	40.0	91.6	-51.6	Peak	Vertical
	7596.0	34.2	11.8	46.0	74.0	-28.0	Peak	Vertical
	9908.0	32.0	16.9	48.9	91.6	-42.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (111.6dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11n-HT20 - Ant 0 + 1	Test Channel	11
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4918.5	51.7	6.1	57.8	74.0	-16.2	Peak	Horizontal
	4922.3	41.3	6.1	47.4	54.0	-6.6	Average	Horizontal
*	6508.0	33.4	9.7	43.1	90.2	-47.1	Peak	Horizontal
	7307.0	34.1	11.7	45.8	74.0	-28.2	Peak	Horizontal
*	10384.0	32.9	17.6	50.5	90.2	-39.7	Peak	Horizontal
	4918.5	54.8	6.1	60.9	74.0	-13.1	Peak	Vertical
	4922.8	43.3	6.1	49.4	54.0	-4.6	Average	Vertical
*	6525.0	33.1	9.6	42.7	90.2	-47.5	Peak	Vertical
	8369.5	31.2	12.3	43.5	74.0	-30.5	Peak	Vertical
*	10163.0	32.7	16.9	49.6	90.2	-40.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (110.2dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11n-HT40 - Ant 0 + 1	Test Channel	03
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4842.0	49.1	5.9	55.0	74.0	-19.0	Peak	Horizontal
	4845.0	40.0	5.9	45.9	54.0	-8.1	Average	Horizontal
*	6525.0	33.6	9.6	43.2	86.1	-42.9	Peak	Horizontal
	8157.0	33.6	12.5	46.1	74.0	-27.9	Peak	Horizontal
*	9933.5	32.7	16.9	49.6	86.1	-36.5	Peak	Horizontal
	4842.0	53.3	5.9	59.2	74.0	-14.8	Peak	Vertical
	4843.5	42.1	5.9	48.0	54.0	-6.0	Average	Vertical
*	6066.0	33.2	7.9	41.1	86.1	-45.0	Peak	Vertical
	7604.5	34.3	11.8	46.1	74.0	-27.9	Peak	Vertical
*	9908.0	32.4	16.9	49.3	86.1	-36.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.1dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11n-HT40 - Ant 0 + 1	Test Channel	06
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	49.7	5.9	55.6	74.0	-18.4	Peak	Horizontal
	4874.8	39.7	5.9	45.6	54.0	-8.4	Average	Horizontal
*	6440.0	33.8	9.2	43.0	87.9	-44.9	Peak	Horizontal
	7596.0	34.3	11.8	46.1	74.0	-27.9	Peak	Horizontal
*	10231.0	33.0	17.2	50.2	87.9	-37.7	Peak	Horizontal
	4876.0	50.4	5.9	56.3	74.0	-17.7	Peak	Vertical
	4873.2	42.1	5.9	48.0	54.0	-6.0	Average	Vertical
*	6159.5	33.3	8.2	41.5	87.9	-46.4	Peak	Vertical
	7596.0	33.5	11.8	45.3	74.0	-28.7	Peak	Vertical
*	10129.0	32.4	16.9	49.3	87.9	-38.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (107.9dBμV/m) or 15.209 which is higher.

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

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

Product	TRIFIBOOST	Temperature	25°C
Test Engineer	David Lv	Relative Humidity	52%
Test Site	AC1	Test Date	2020/01/18
Test Mode	802.11n-HT40 - Ant 0 + 1	Test Channel	09
Note	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4910.0	46.3	6.2	52.5	74.0	-21.5	Peak	Horizontal
*	5870.5	34.1	7.6	41.7	85.9	-44.2	Peak	Horizontal
	7596.0	34.0	11.8	45.8	74.0	-28.2	Peak	Horizontal
*	10358.5	32.4	17.5	49.9	85.9	-36.0	Peak	Horizontal
	4901.5	51.3	6.1	57.4	74.0	-16.6	Peak	Vertical
	4905.3	40.4	6.1	46.5	54.0	-7.5	Average	Vertical
*	6108.5	33.3	8.1	41.4	85.9	-44.5	Peak	Vertical
	7596.0	34.7	11.8	46.5	74.0	-27.5	Peak	Vertical
*	9950.5	32.7	16.9	49.6	85.9	-36.3	Peak	Vertical

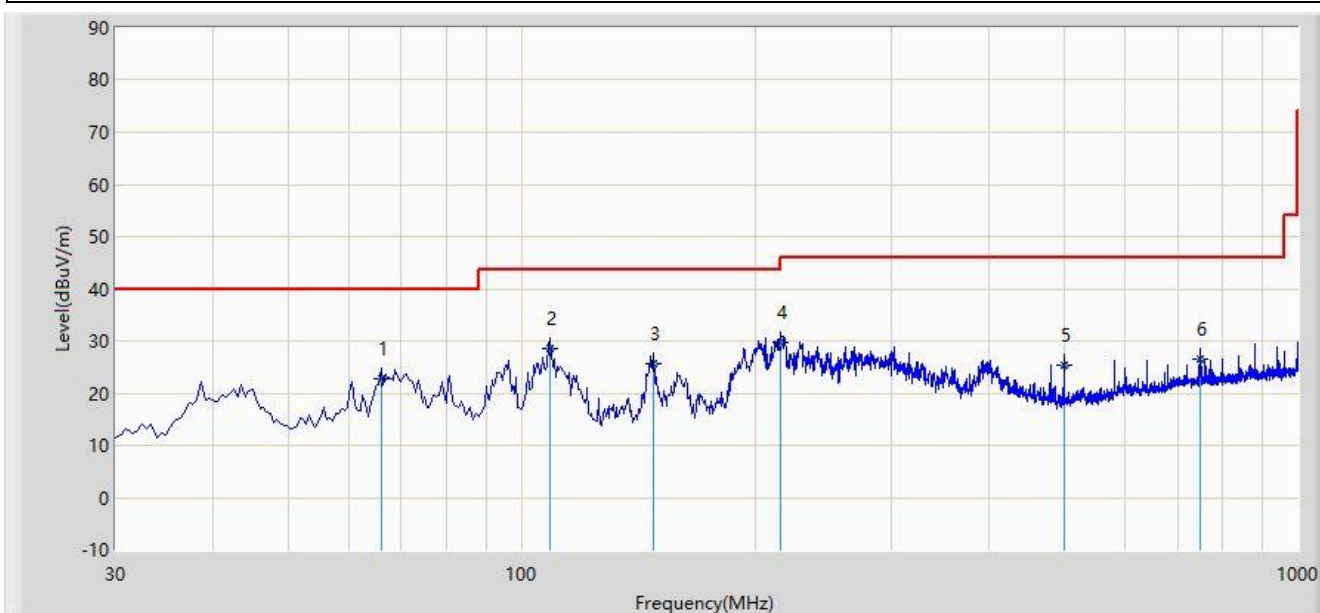
Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (105.9dBμV/m) or 15.209 which is higher.

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

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

The Worst Case of Radiated Emission below 1GHz:

Site: AC1	Time: 2020/01/13 - 18:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Dillon Diao
Probe: AC1_VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Worst Case Mode: There is the worst case within frequency range 30MHz~1GHz.	



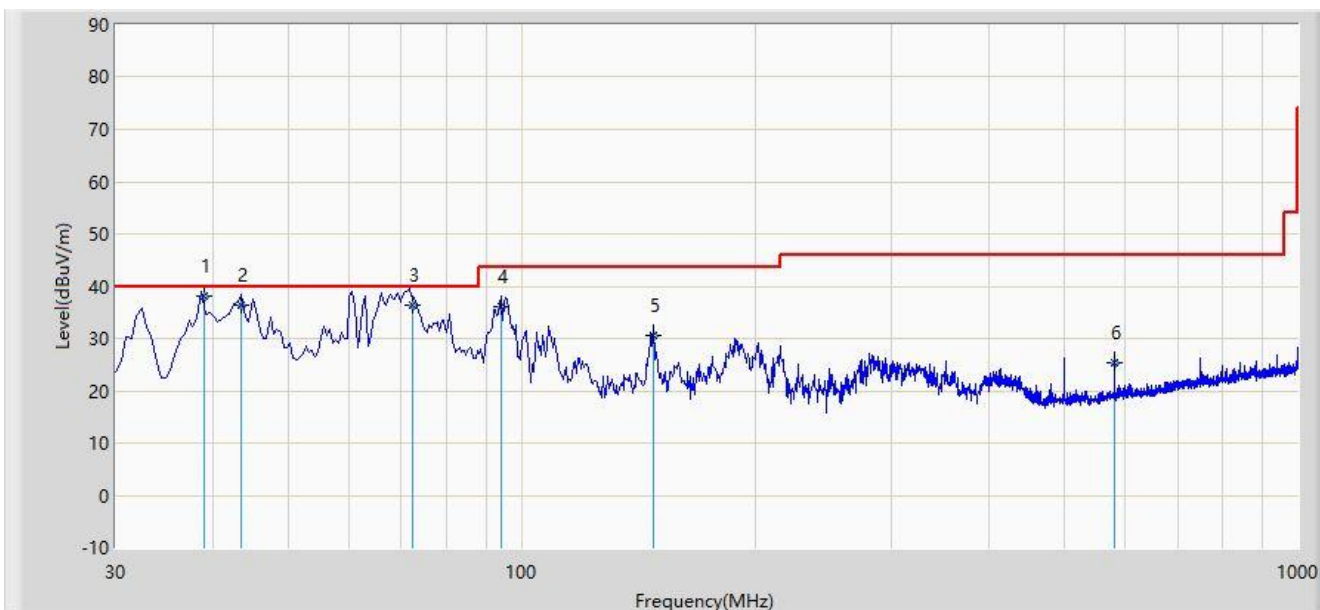
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			65.890	22.715	10.401	-17.285	40.000	12.313	QP
2			109.055	28.665	16.712	-14.835	43.500	11.954	QP
3			147.855	25.553	10.463	-17.947	43.500	15.090	QP
4		*	215.270	29.714	18.043	-13.786	43.500	11.671	QP
5			500.000	25.425	6.933	-20.575	46.000	18.492	QP
6			750.225	26.664	3.889	-19.336	46.000	22.774	QP

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

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

Site: AC1	Time: 2020/01/13 - 18:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Dillon Diao
Probe: AC1_VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Worst Case Mode: There is the worst case within frequency range 30MHz~1GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	39.010	37.998	23.535	-2.002	40.000	14.464	QP
2			43.580	36.479	22.140	-3.521	40.000	14.339	QP
3			72.410	36.506	25.322	-3.494	40.000	11.184	QP
4			94.020	36.062	25.491	-7.438	43.500	10.570	QP
5			147.855	30.502	15.412	-12.998	43.500	15.090	QP
6			579.990	25.454	5.323	-20.546	46.000	20.131	QP

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

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

7.7. Radiated Restricted Band Edge Measurement

7.7.1. 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 Table per Section 15.209.

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

7.7.2.Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

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

7.7.3.Test Setting

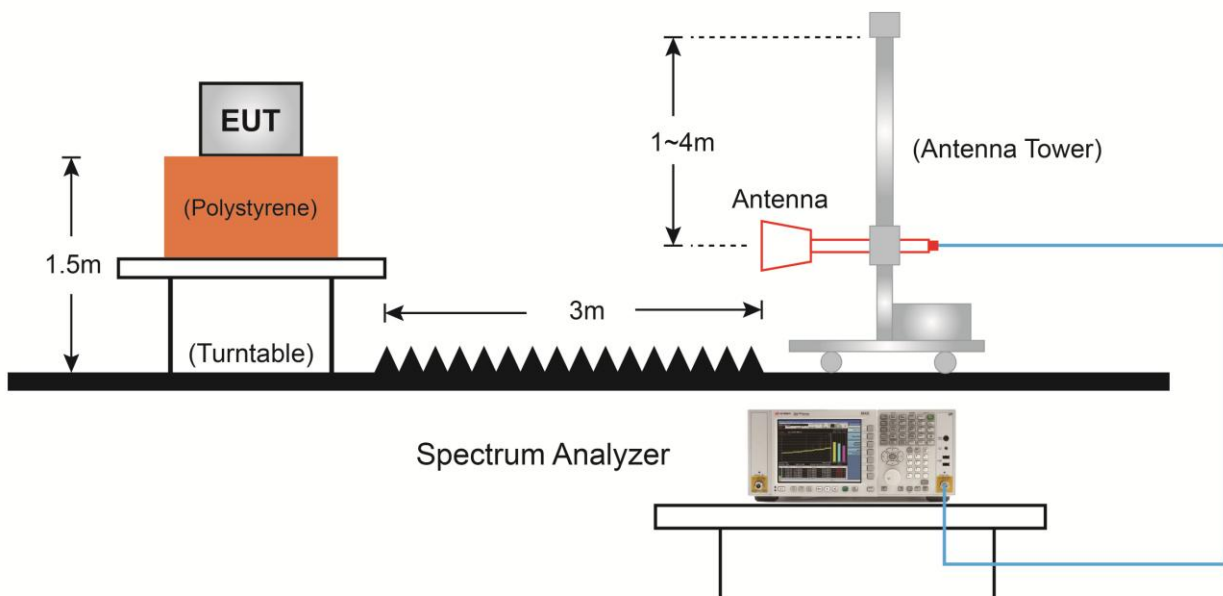
Peak Field Strength Measurements

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 Measurements above 1GHz (Method VB)

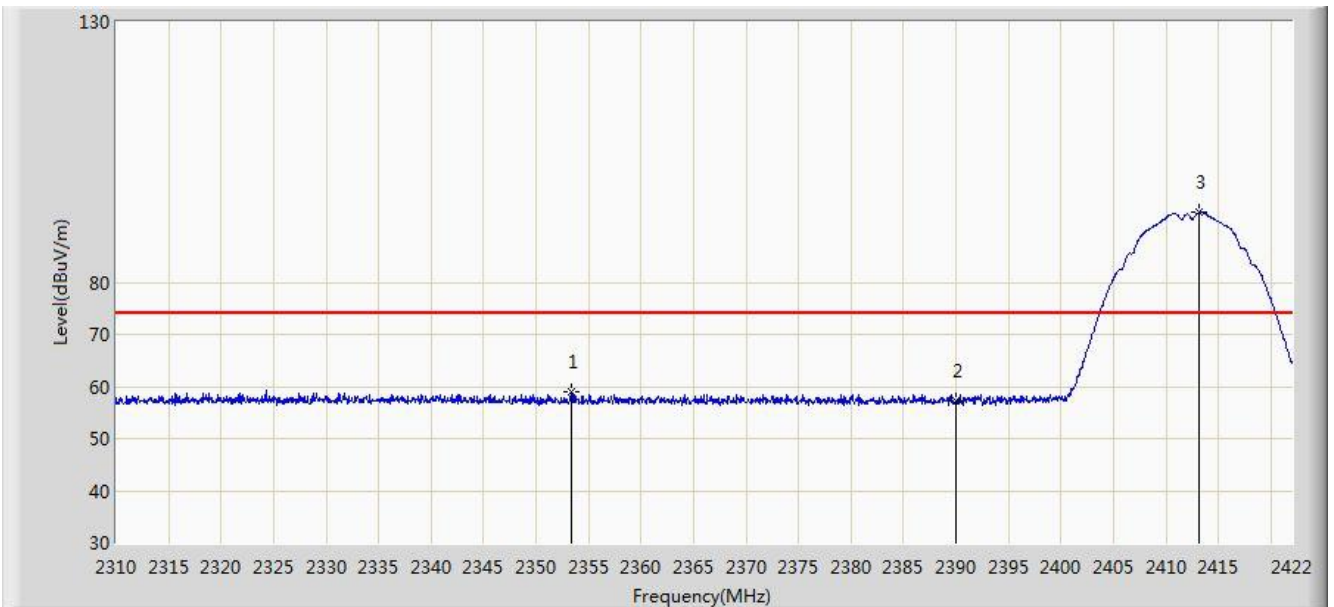
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4.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

7.7.4.Test Setup



7.7.5.Test Result

Site: AC1	Time: 2020/01/17 - 18:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11b at channel 2412MHz Ant 0 + 1	

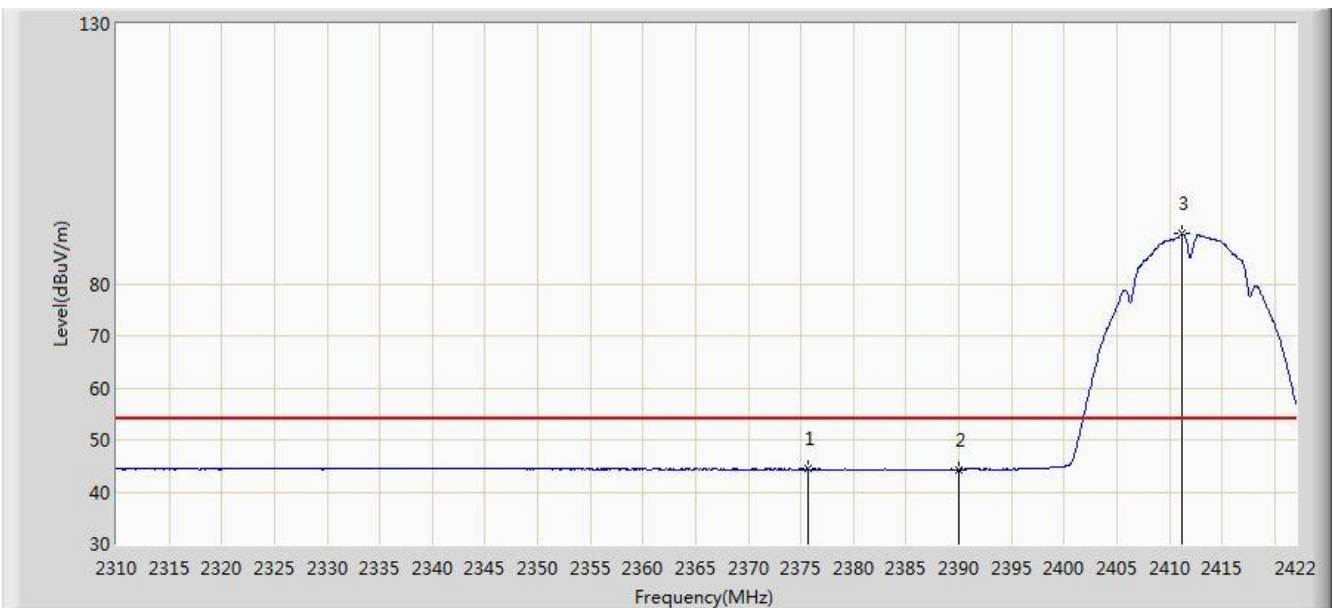


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2353.400	58.925	26.797	-15.075	74.000	32.127	PK
2			2390.000	57.186	25.114	-16.814	74.000	32.072	PK
3		*	2413.152	93.482	61.396	N/A	N/A	32.086	PK

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

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

Site: AC1	Time: 2020/01/17 - 18:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11b at channel 2412MHz Ant 0 + 1	

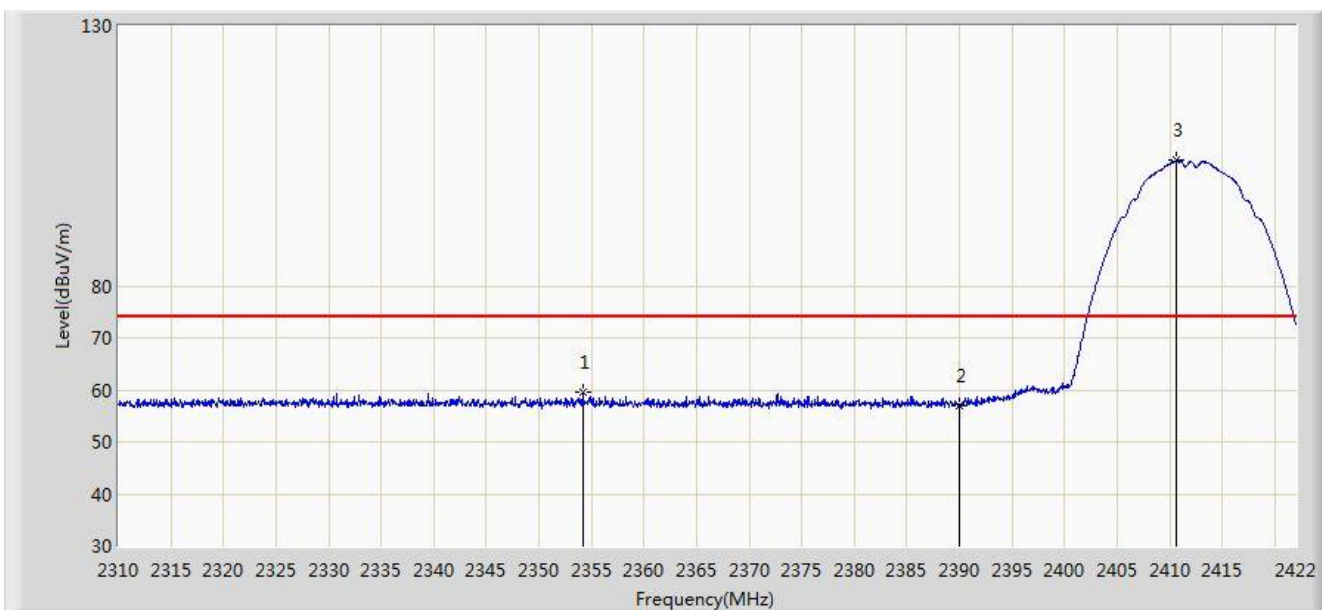


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2375.632	44.414	12.334	-9.586	54.000	32.080	AV
2			2390.000	44.341	12.269	-9.659	54.000	32.072	AV
3		*	2411.248	89.566	57.485	N/A	N/A	32.082	AV

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

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

Site: AC1	Time: 2020/01/17 - 19:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11b at channel 2412MHz Ant 0 + 1	

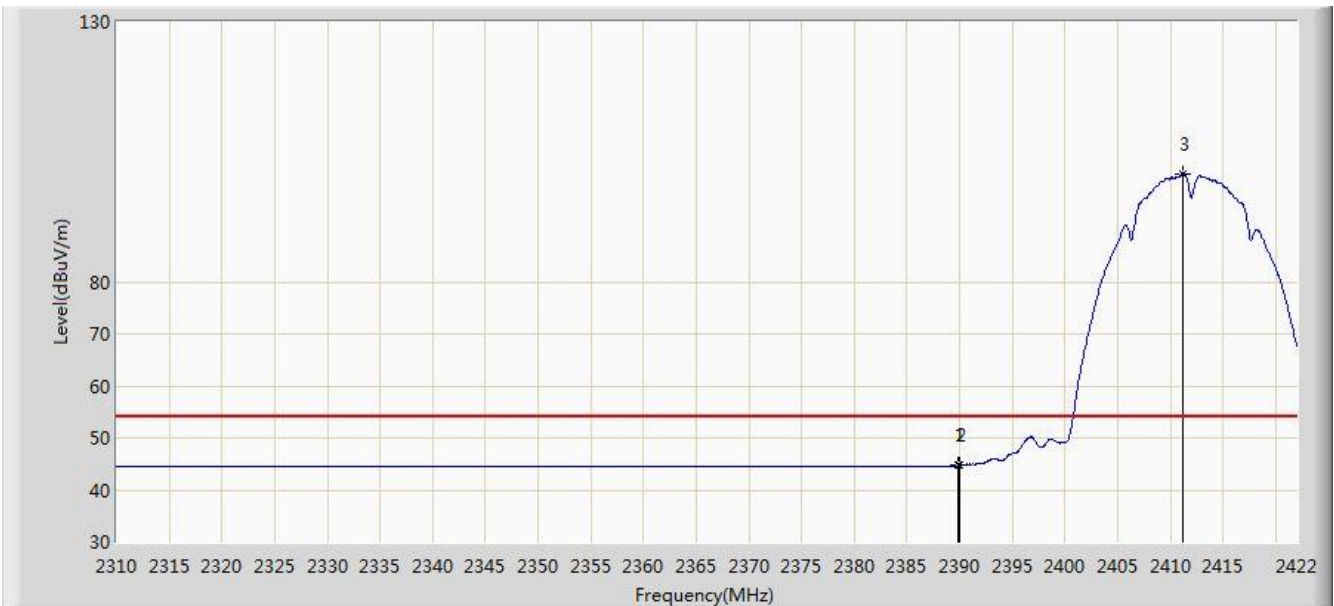


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2354.184	59.643	27.516	-14.357	74.000	32.127	PK
2			2390.000	57.101	25.029	-16.899	74.000	32.072	PK
3		*	2410.632	104.065	71.984	N/A	N/A	32.081	PK

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

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

Site: AC1	Time: 2020/01/17 - 19:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11b at channel 2412MHz Ant 0 + 1	

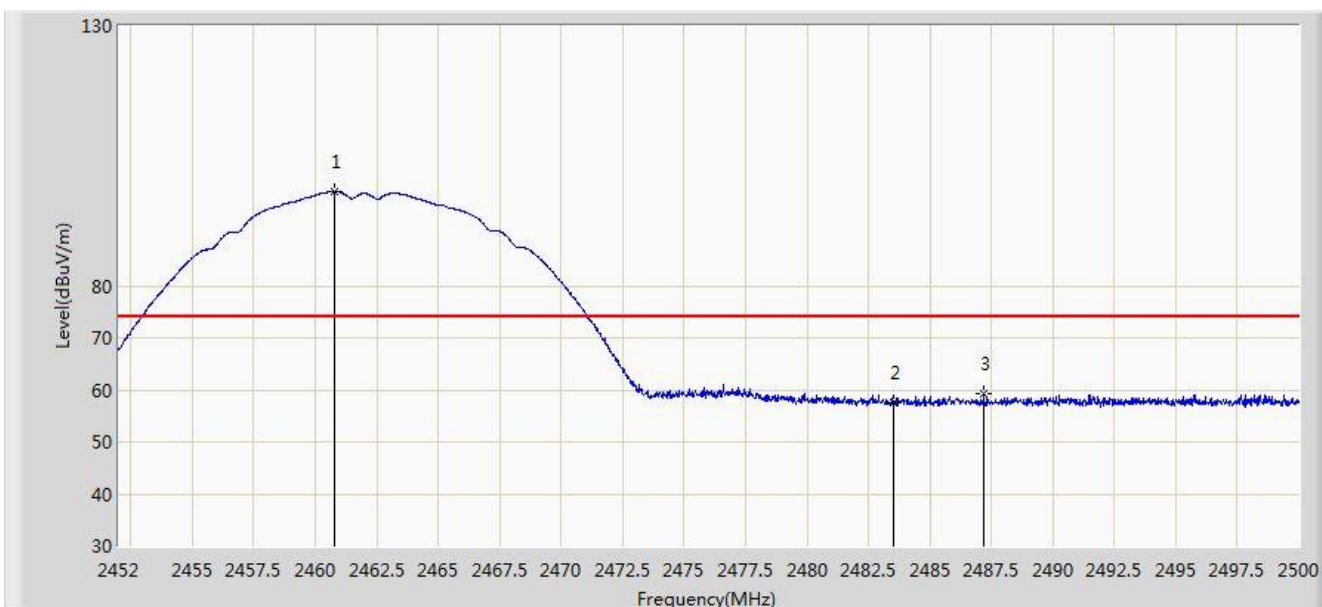


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.856	44.709	12.637	-9.291	54.000	32.072	AV
2			2390.000	44.667	12.595	-9.333	54.000	32.072	AV
3		*	2411.248	100.787	68.706	N/A	N/A	32.082	AV

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

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

Site: AC1	Time: 2020/01/17 - 19:11
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11b at channel 2462MHz Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.784	98.059	65.979	N/A	N/A	32.080	PK
2			2483.500	57.483	25.446	-16.517	74.000	32.037	PK
3			2487.184	59.267	27.237	-14.733	74.000	32.030	PK

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

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

Site: AC1	Time: 2020/01/17 - 19:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11b at channel 2462MHz Ant 0 + 1	

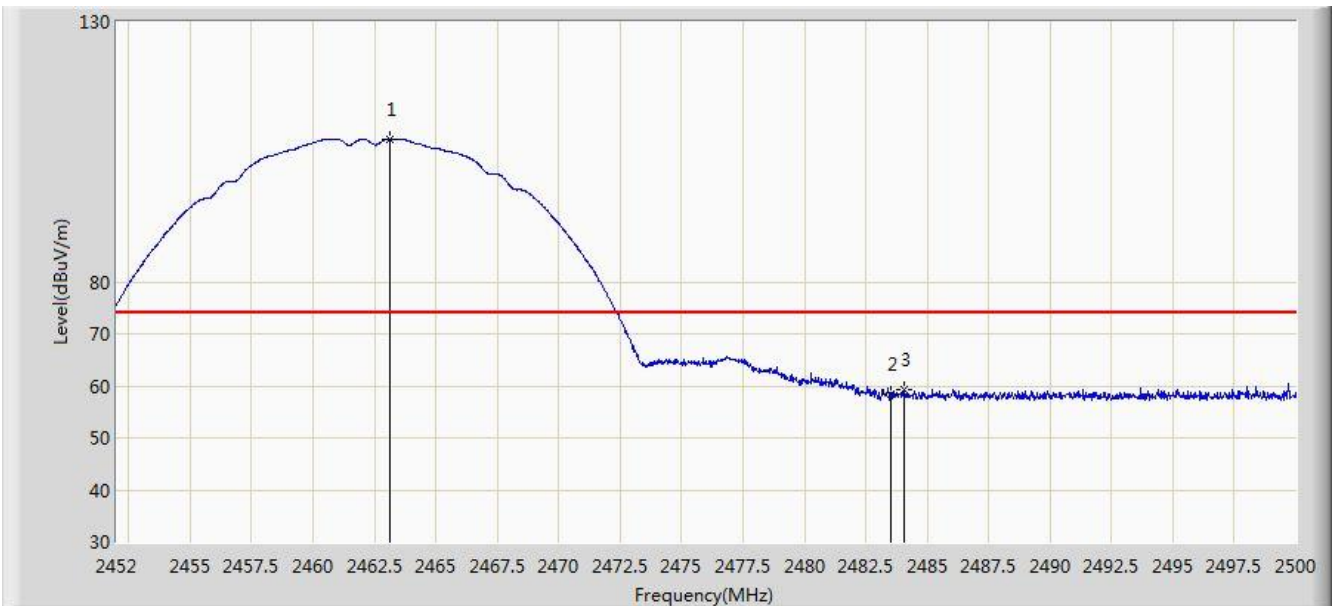


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.216	94.598	62.518	N/A	N/A	32.081	AV
2			2483.500	44.779	12.742	-9.221	54.000	32.037	AV
3			2484.568	44.863	12.828	-9.137	54.000	32.035	AV

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

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

Site: AC1	Time: 2020/01/17 - 19:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11b at channel 2462MHz Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.136	107.520	75.442	N/A	N/A	32.078	PK
2			2483.500	58.485	26.448	-15.515	74.000	32.037	PK
3			2484.088	59.182	27.146	-14.818	74.000	32.036	PK

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

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

Site: AC1	Time: 2020/01/17 - 19:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11b at channel 2462MHz Ant 0 + 1	

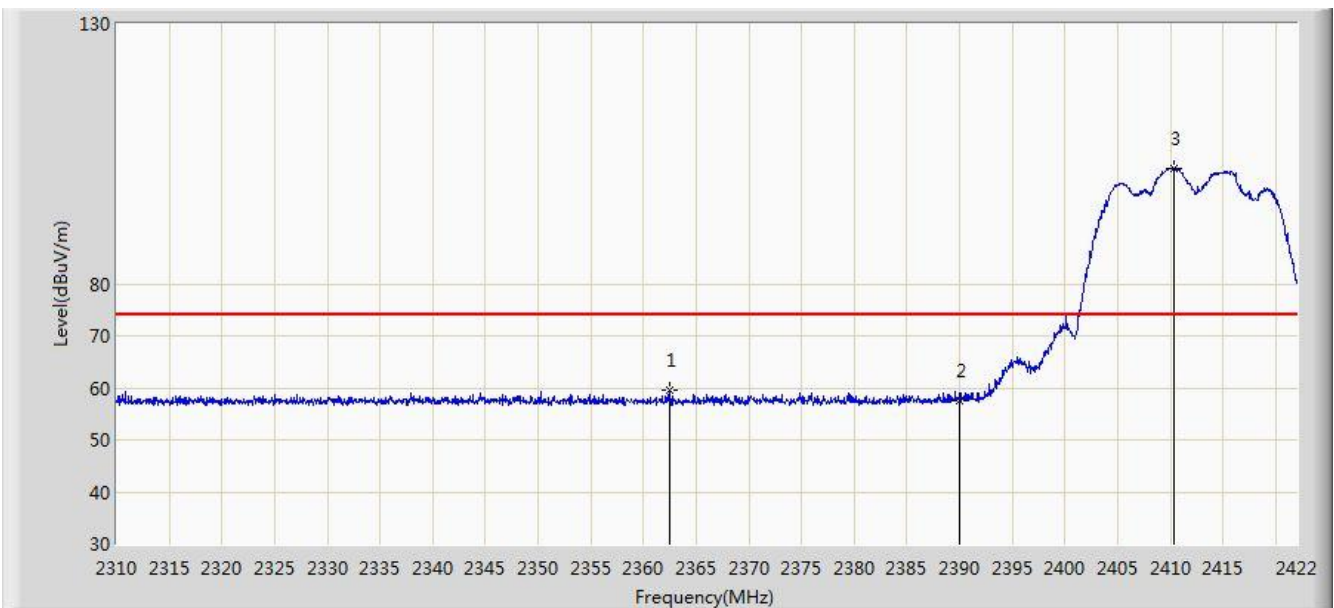


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.240	103.833	71.753	N/A	N/A	32.081	AV
2			2483.500	45.609	13.572	-8.391	54.000	32.037	AV
3			2483.632	45.663	13.626	-8.337	54.000	32.036	AV

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

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

Site: AC1	Time: 2020/01/17 - 19:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11g at channel 2412MHz Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2362.472	59.680	27.565	-14.320	74.000	32.115	PK
2			2390.000	57.610	25.538	-16.390	74.000	32.072	PK
3		*	2410.352	102.317	70.237	N/A	N/A	32.080	PK

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

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

Site: AC1	Time: 2020/01/17 - 19:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11g at channel 2412MHz Ant 0 + 1	

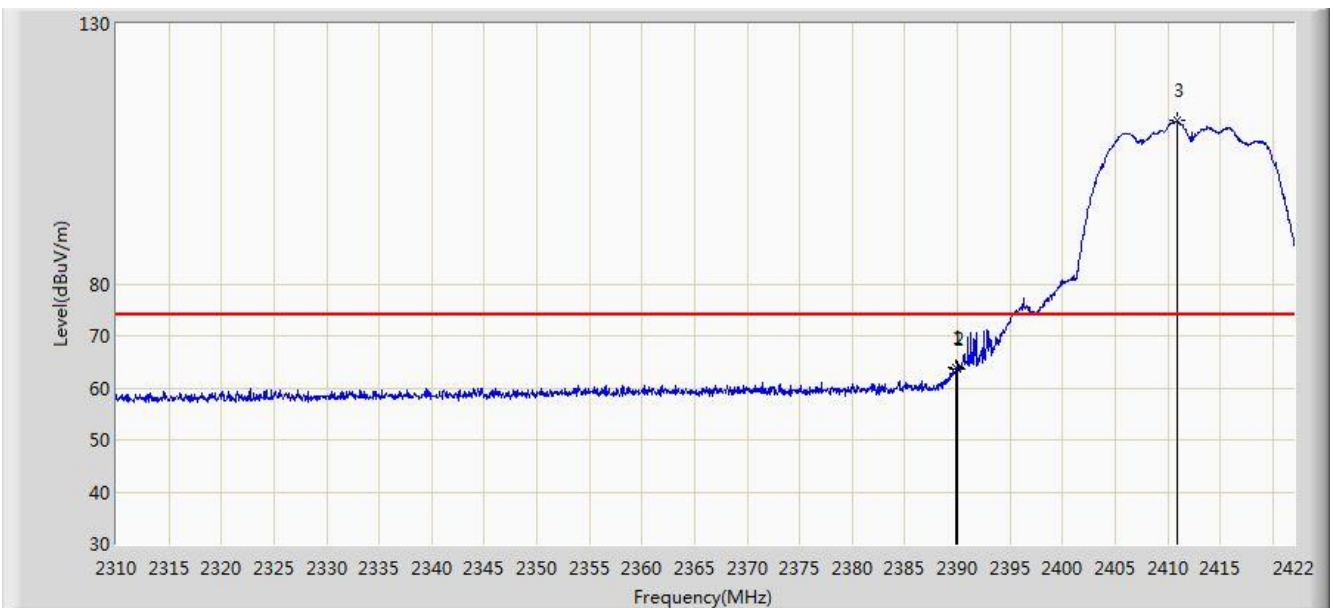


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.128	45.649	13.577	-8.351	54.000	32.072	AV
2			2390.000	45.559	13.487	-8.441	54.000	32.072	AV
3		*	2410.352	92.786	60.706	N/A	N/A	32.080	AV

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

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

Site: AC1	Time: 2020/01/17 - 19:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11g at channel 2412MHz Ant 0 + 1	

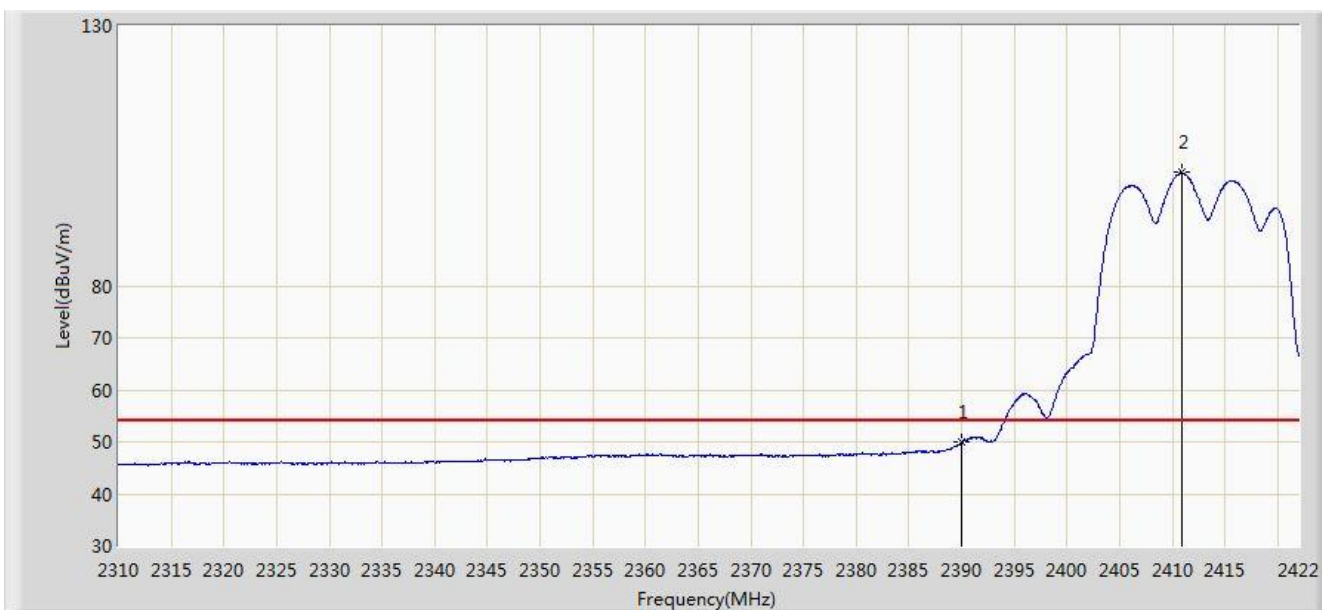


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.912	64.010	31.938	-9.990	74.000	32.072	PK
2			2390.000	63.498	31.426	-10.502	74.000	32.072	PK
3		*	2410.856	111.310	79.229	N/A	N/A	32.080	PK

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

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

Site: AC1	Time: 2020/01/17 - 19:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11g at channel 2412MHz Ant 0 + 1	

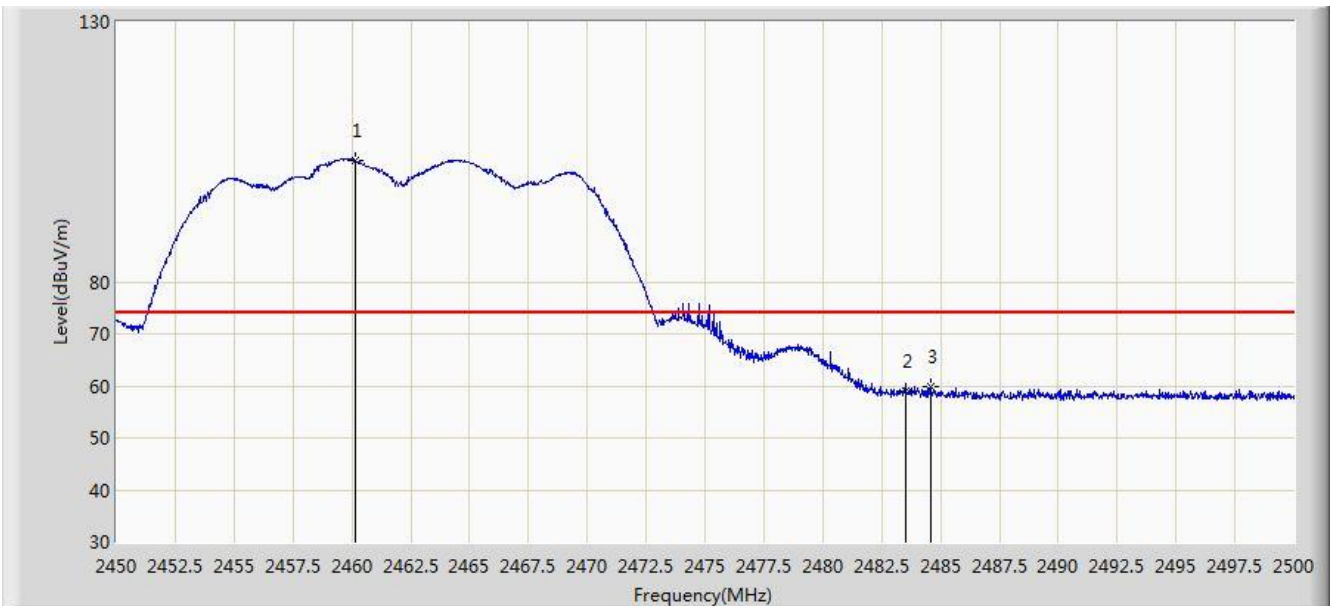


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.896	17.824	-4.104	54.000	32.072	AV
2		*	2410.856	101.798	69.717	N/A	N/A	32.080	AV

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

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

Site: AC1	Time: 2020/01/17 - 19:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11g at channel 2462MHz Ant 0 + 1	

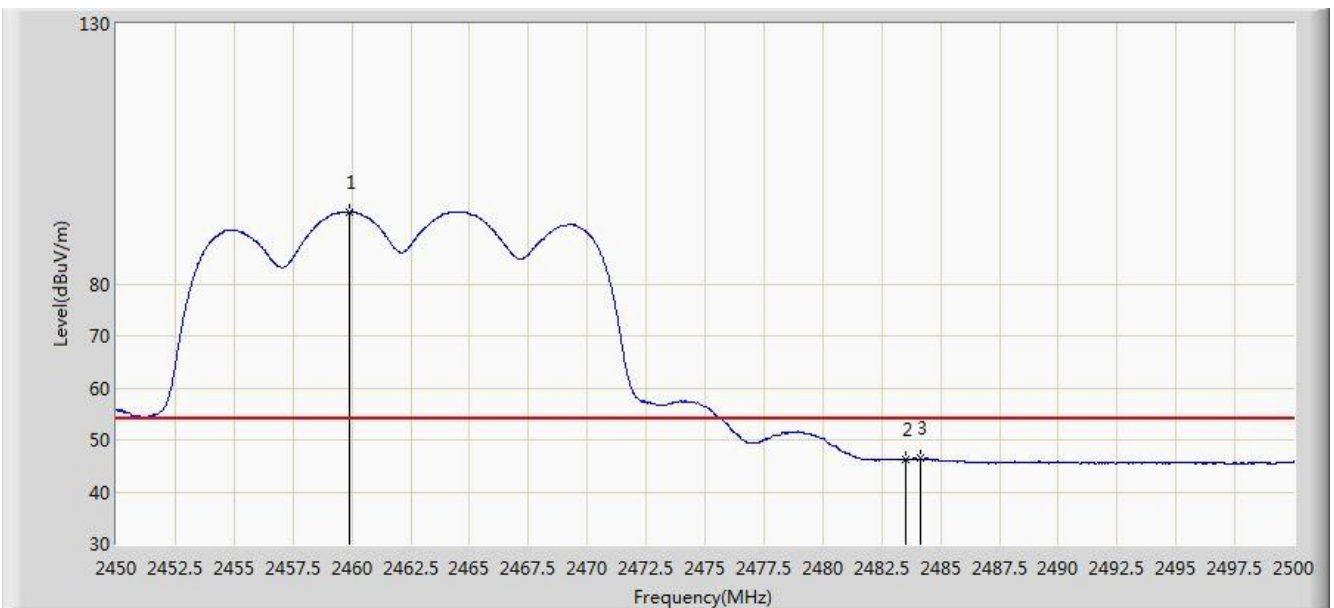


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.150	103.204	71.124	N/A	N/A	32.080	PK
2			2483.500	58.929	26.892	-15.071	74.000	32.037	PK
3			2484.575	59.898	27.863	-14.102	74.000	32.035	PK

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

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

Site: AC1	Time: 2020/01/17 - 19:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11g at channel 2462MHz Ant 0 + 1	

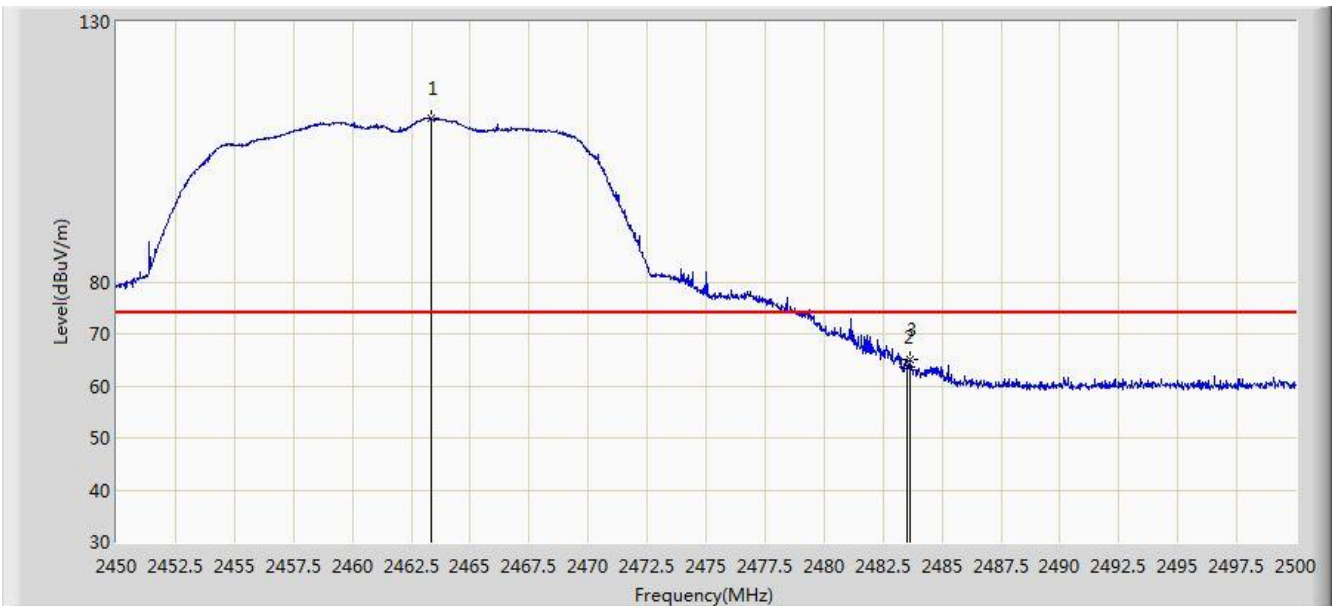


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.925	93.906	61.826	N/A	N/A	32.080	AV
2			2483.500	46.349	14.312	-7.651	54.000	32.037	AV
3			2484.125	46.377	14.341	-7.623	54.000	32.036	AV

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

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

Site: AC1	Time: 2020/01/17 - 19:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11g at channel 2462MHz Ant 0 + 1	

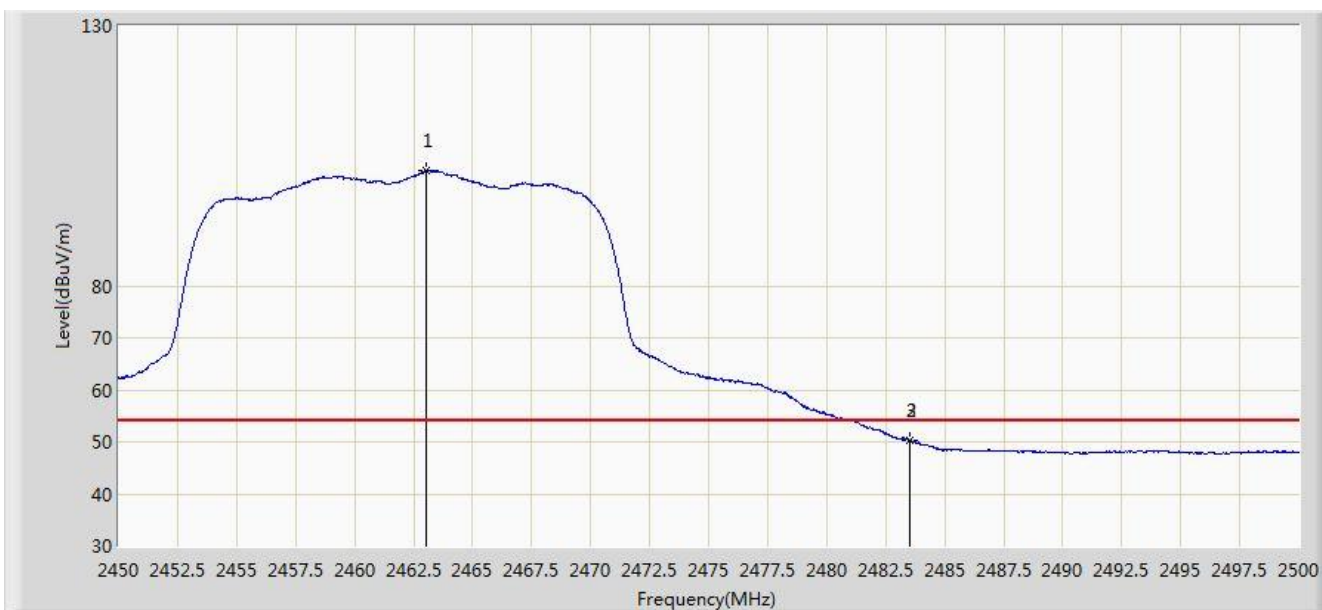


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.325	111.545	79.467	N/A	N/A	32.078	PK
2			2483.500	63.580	31.543	-10.420	74.000	32.037	PK
3			2483.625	65.029	32.992	-8.971	74.000	32.036	PK

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

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

Site: AC1	Time: 2020/01/17 - 19:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11g at channel 2462MHz Ant 0 + 1	

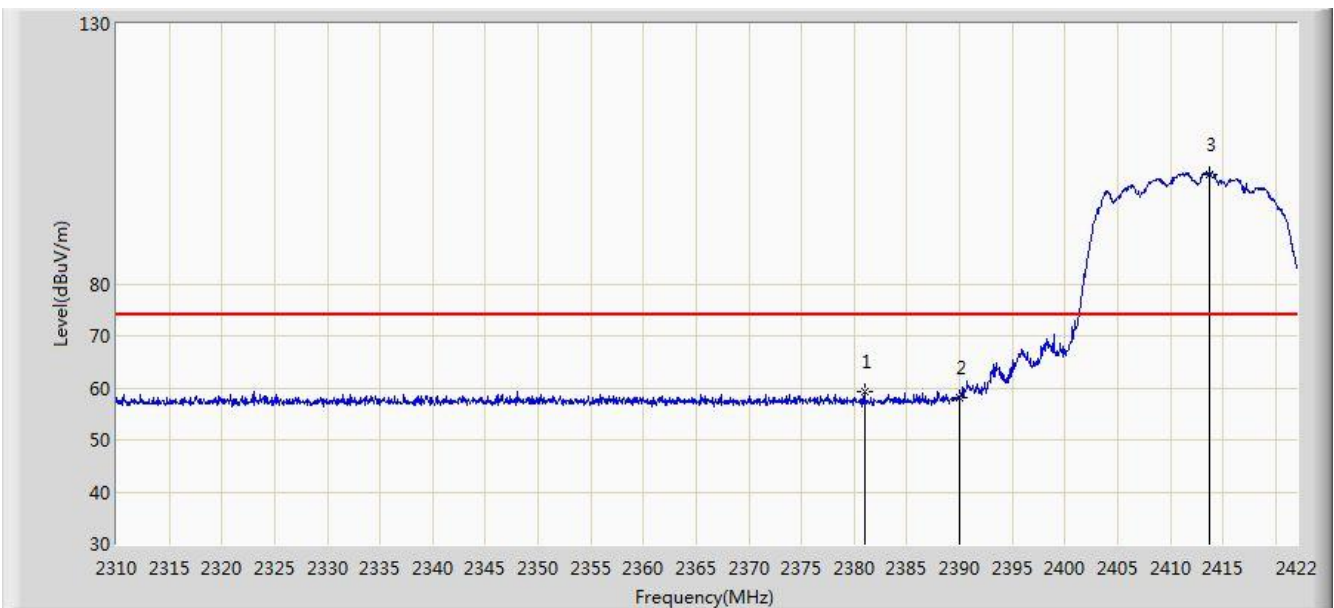


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.025	102.123	70.045	N/A	N/A	32.079	AV
2			2483.500	50.396	18.359	-3.604	54.000	32.037	AV
3			2483.525	50.407	18.370	-3.593	54.000	32.037	AV

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

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

Site: AC1	Time: 2020/01/17 - 20:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT20 at channel 2412MHz Ant 0 + 1	

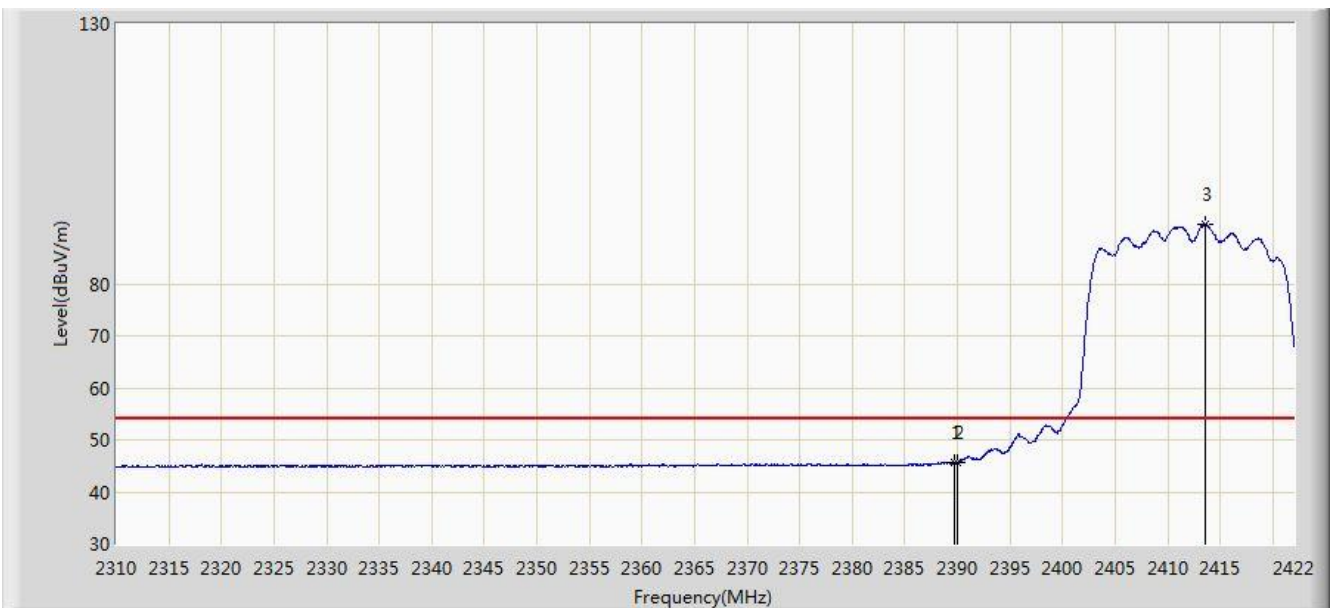


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2381.008	59.285	27.210	-14.715	74.000	32.075	PK
2			2390.000	58.119	26.047	-15.881	74.000	32.072	PK
3		*	2413.768	100.896	68.808	N/A	N/A	32.089	PK

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

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

Site: AC1	Time: 2020/01/17 - 20:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT20 at channel 2412MHz Ant 0 + 1	

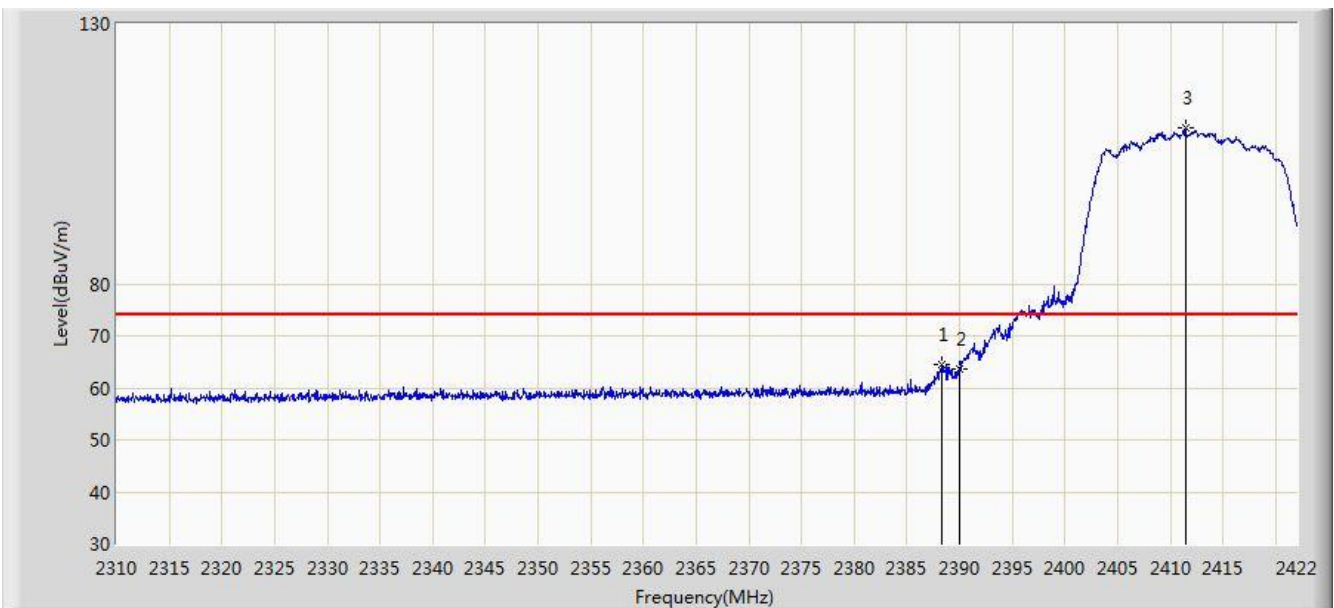


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.744	45.702	13.630	-8.298	54.000	32.072	AV
2			2390.000	45.653	13.581	-8.347	54.000	32.072	AV
3		*	2413.600	91.546	59.458	N/A	N/A	32.088	AV

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

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

Site: AC1	Time: 2020/01/17 - 20:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT20 at channel 2412MHz Ant 0 + 1	

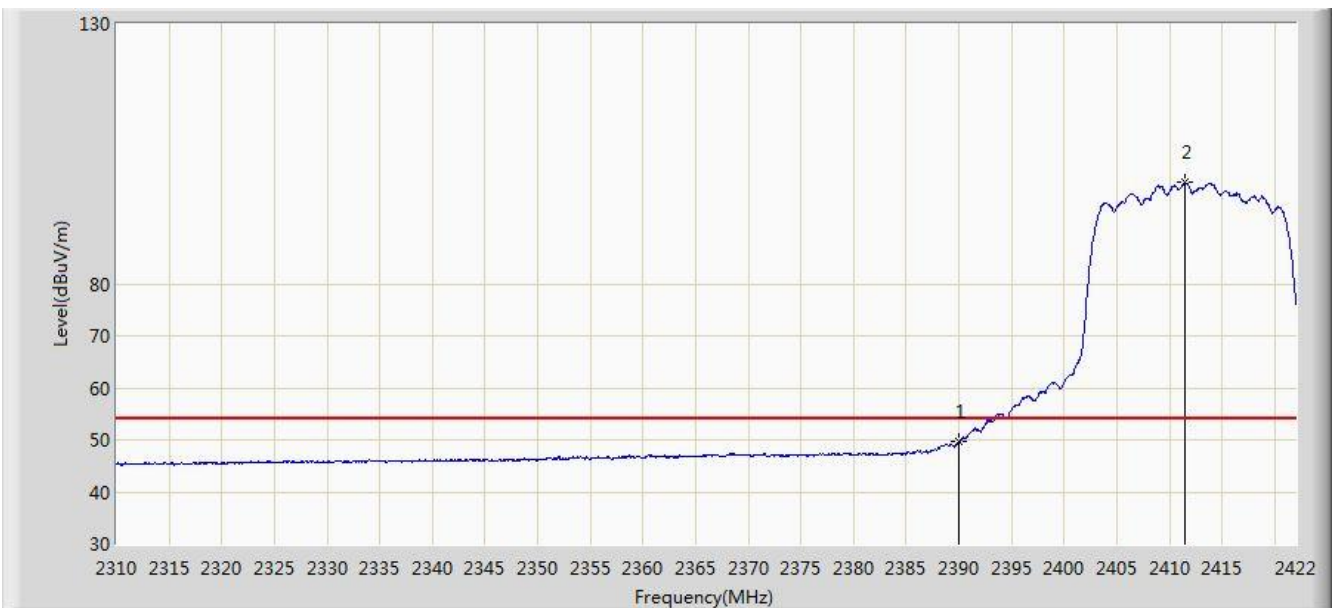


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.288	64.349	32.277	-9.651	74.000	32.073	PK
2			2390.000	63.545	31.473	-10.455	74.000	32.072	PK
3		*	2411.416	109.927	77.845	N/A	N/A	32.081	PK

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

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

Site: AC1	Time: 2020/01/17 - 20:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT20 at channel 2412MHz Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.597	17.525	-4.403	54.000	32.072	AV
2		*	2411.528	99.439	67.357	N/A	N/A	32.082	AV

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

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

Site: AC1	Time: 2020/01/17 - 20:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT20 at channel 2462MHz Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.648	102.873	70.793	N/A	N/A	32.081	PK
2			2483.500	60.542	28.505	-13.458	74.000	32.037	PK
3			2483.560	60.941	28.904	-13.059	74.000	32.037	PK

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

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

Site: AC1	Time: 2020/01/17 - 20:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT20 at channel 2462MHz Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.472	92.609	60.531	N/A	N/A	32.077	AV
2			2483.500	47.077	15.040	-6.923	54.000	32.037	AV

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

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

Site: AC1	Time: 2020/01/17 - 20:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT20 at channel 2462MHz Ant 0 + 1	

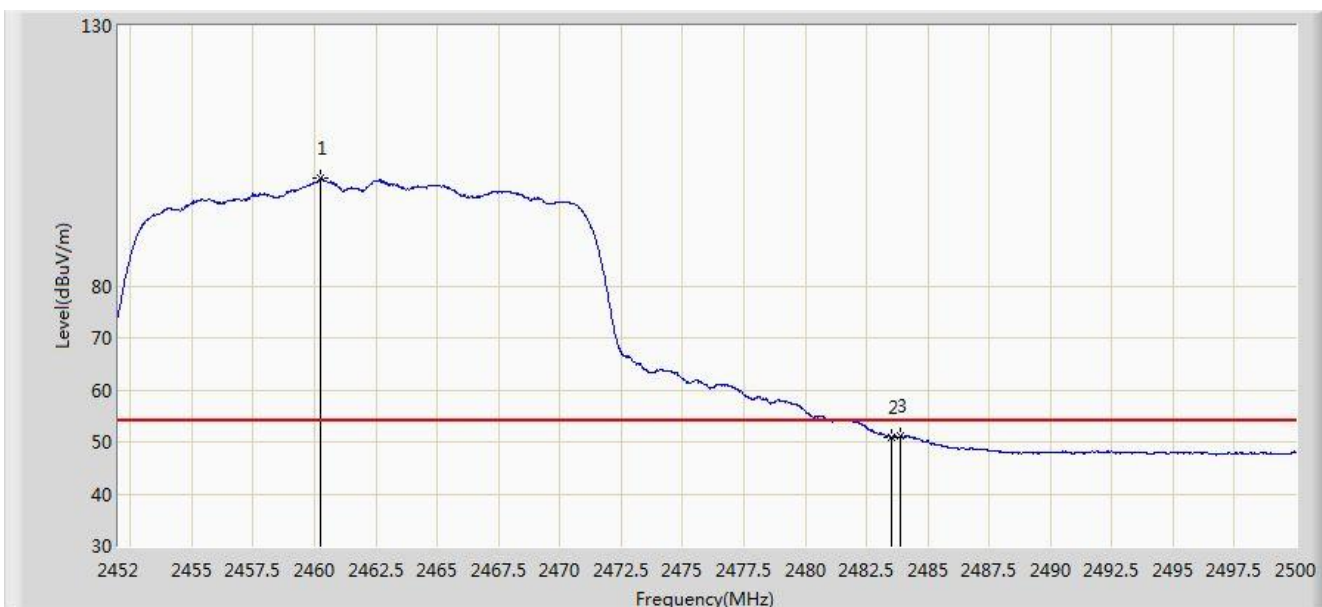


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.512	110.178	78.098	N/A	N/A	32.080	PK
2			2483.500	66.561	34.524	-7.439	74.000	32.037	PK
3			2483.584	67.496	35.459	-6.504	74.000	32.037	PK

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

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

Site: AC1	Time: 2020/01/17 - 21:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT20 at channel 2462MHz Ant 0 + 1	

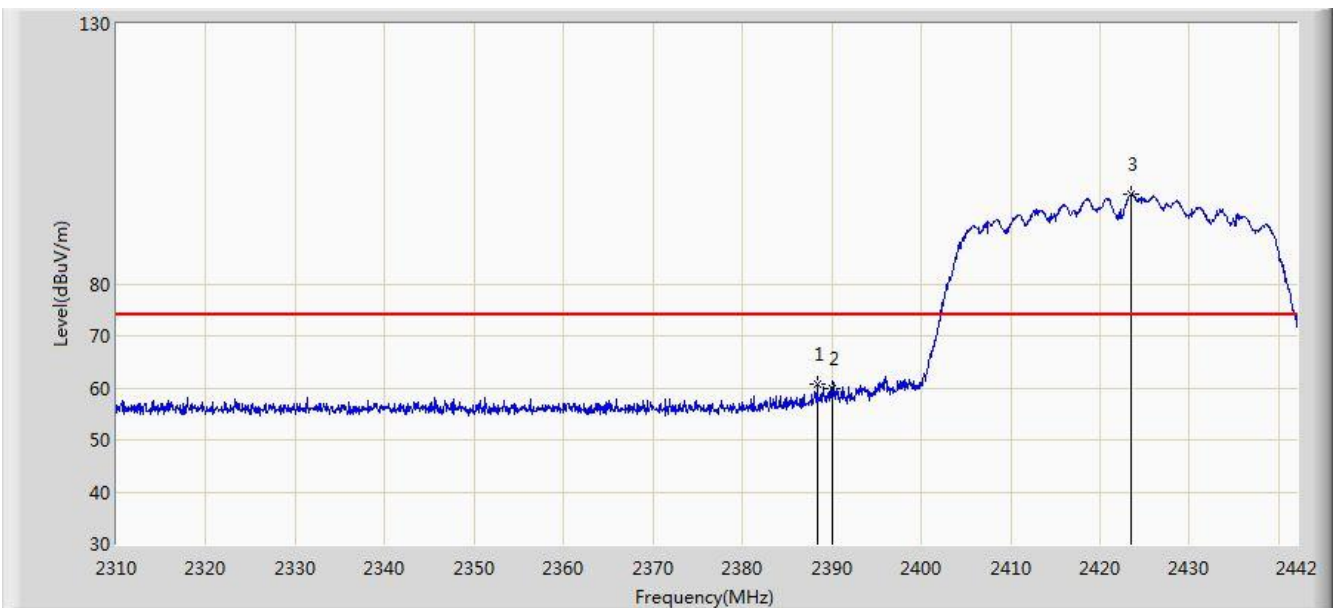


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.256	100.635	68.555	N/A	N/A	32.079	AV
2			2483.500	50.984	18.947	-3.016	54.000	32.037	AV
3			2483.896	51.155	19.119	-2.845	54.000	32.036	AV

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

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

Site: AC1	Time: 2020/01/17 - 20:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11 n-HT40 at channel 2422MHz Ant 0 + 1	

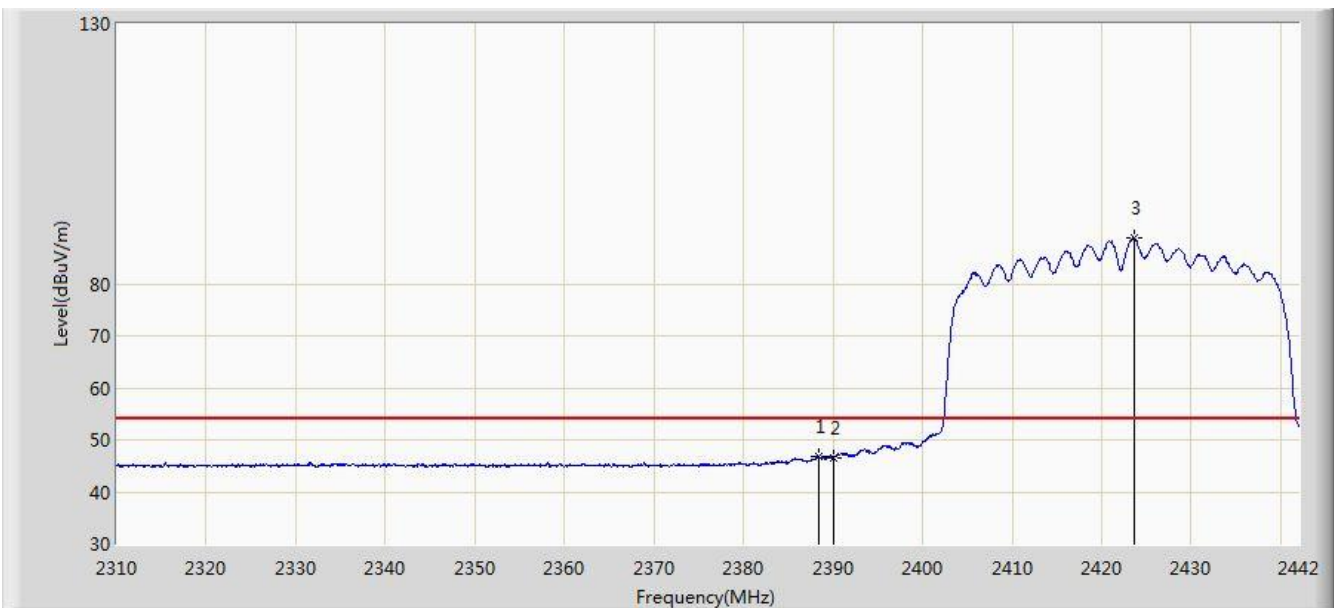


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.342	60.826	28.754	-13.174	74.000	32.073	PK
2			2390.000	59.772	27.700	-14.228	74.000	32.072	PK
3		*	2423.520	97.261	65.147	N/A	N/A	32.114	PK

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

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

Site: AC1	Time: 2020/01/17 - 20:25
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11 n-HT40 at channel 2422MHz Ant 0 + 1	

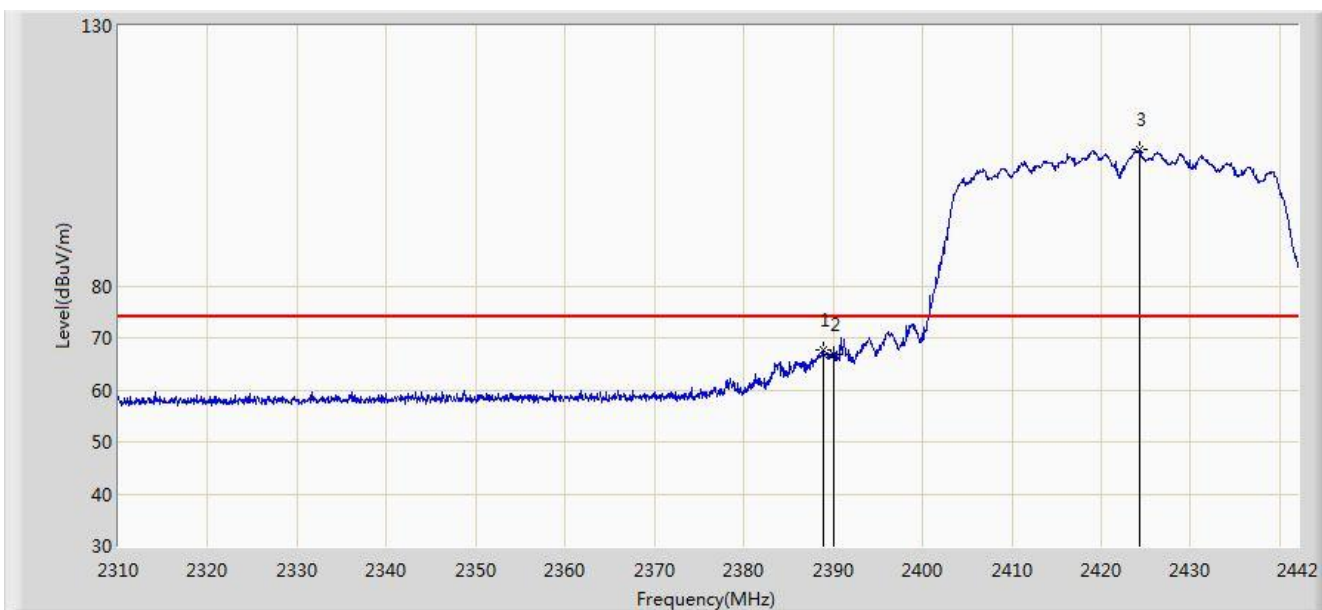


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.408	46.760	14.688	-7.240	54.000	32.072	AV
2			2390.000	46.621	14.549	-7.379	54.000	32.072	AV
3		*	2423.586	88.792	56.678	N/A	N/A	32.114	AV

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

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

Site: AC1	Time: 2020/01/17 - 20:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11 n-HT40 at channel 2422MHz Ant 0 + 1	

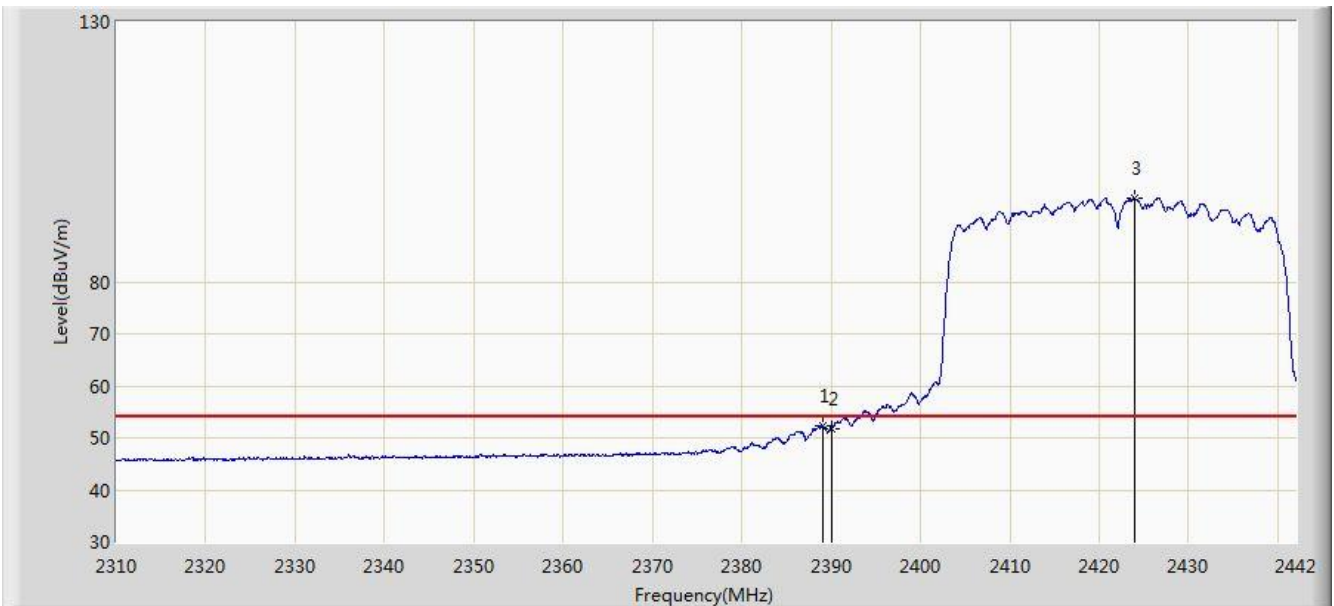


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.870	67.582	35.510	-6.418	74.000	32.072	PK
2			2390.000	66.767	34.695	-7.233	74.000	32.072	PK
3		*	2424.312	106.125	74.009	N/A	N/A	32.116	PK

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

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

Site: AC1	Time: 2020/01/17 - 20:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11 n-HT40 at channel 2422MHz Ant 0 + 1	

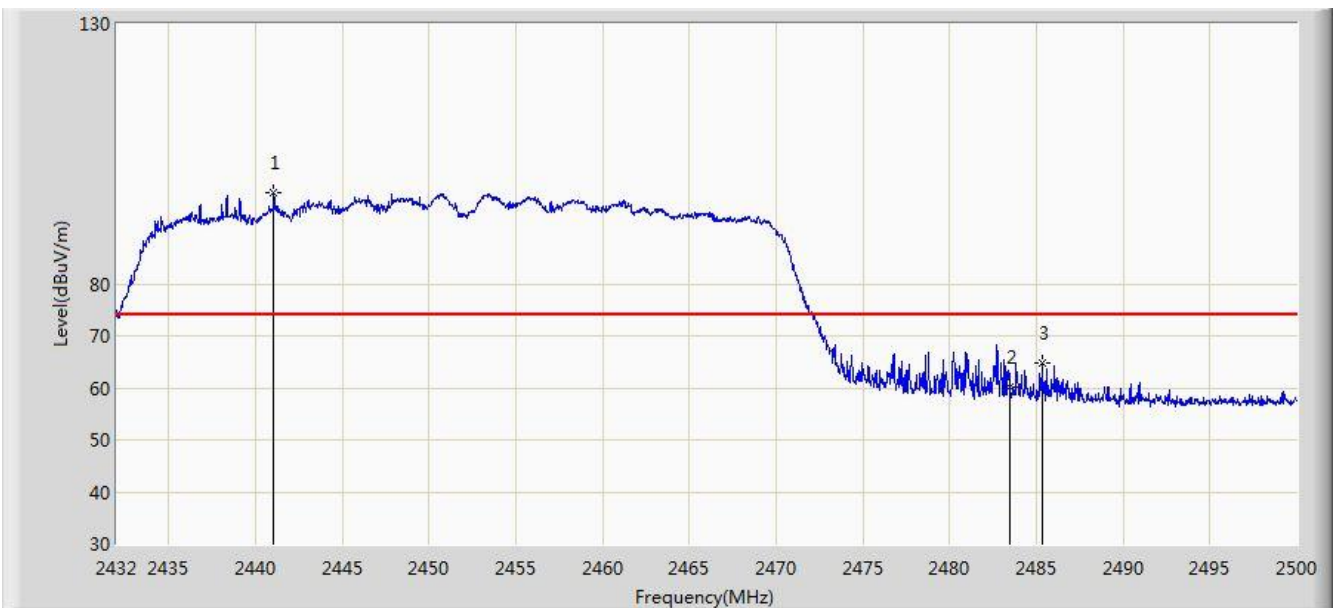


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.002	52.236	20.164	-1.764	54.000	32.072	AV
2			2390.000	51.739	19.667	-2.261	54.000	32.072	AV
3		*	2423.916	96.143	64.028	N/A	N/A	32.115	AV

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

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

Site: AC1	Time: 2020/01/17 - 20:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT40 at channel 2452MHz Ant 0 + 1	

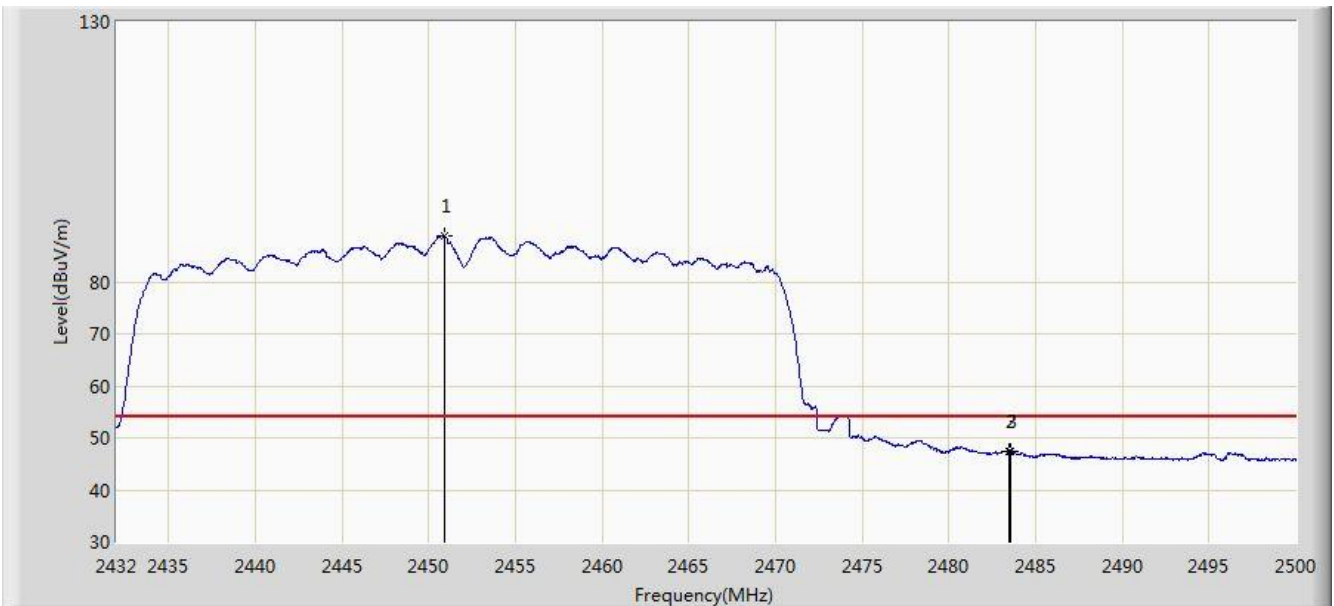


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2441.044	97.424	65.338	N/A	N/A	32.085	PK
2			2483.500	60.029	27.992	-13.971	74.000	32.037	PK
3			2485.346	64.848	32.815	-9.152	74.000	32.033	PK

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

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

Site: AC1	Time: 2020/01/17 - 20:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT40 at channel 2452MHz Ant 0 + 1	

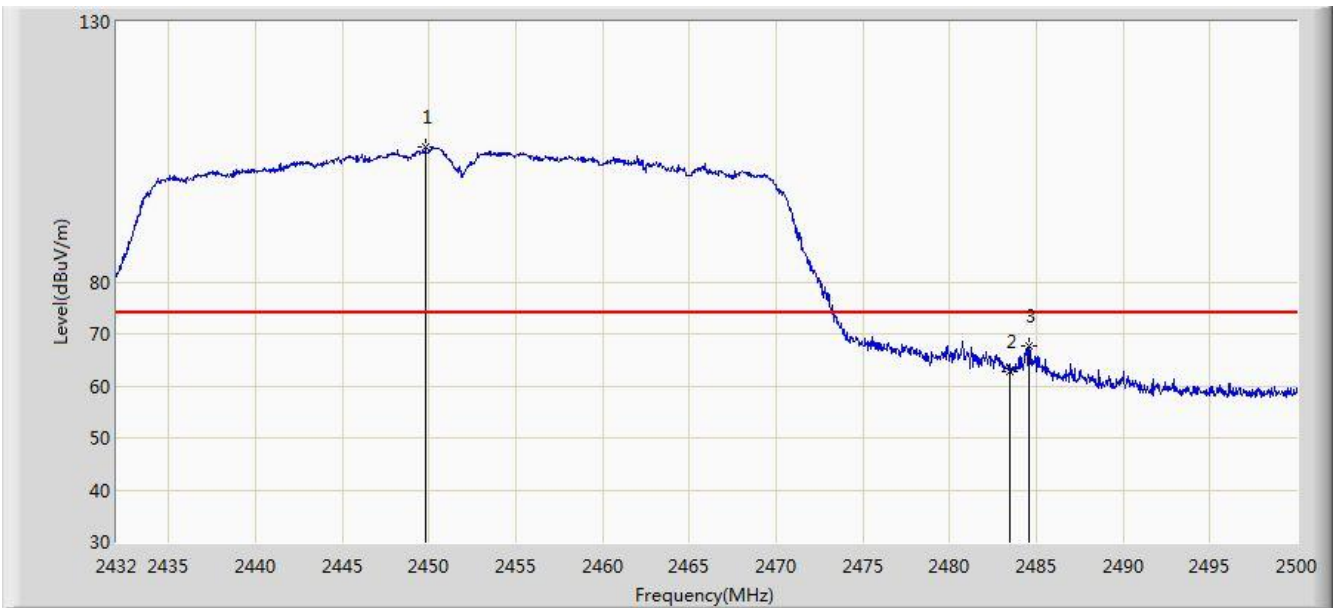


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2450.904	88.939	56.863	34.939	54.000	32.076	AV
2			2483.500	47.306	16.737	-6.694	54.000	30.569	AV
3			2483.544	47.427	15.390	-6.573	54.000	32.037	AV

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

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

Site: AC1	Time: 2020/01/17 - 20:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT40 at channel 2452MHz Ant 0 + 1	

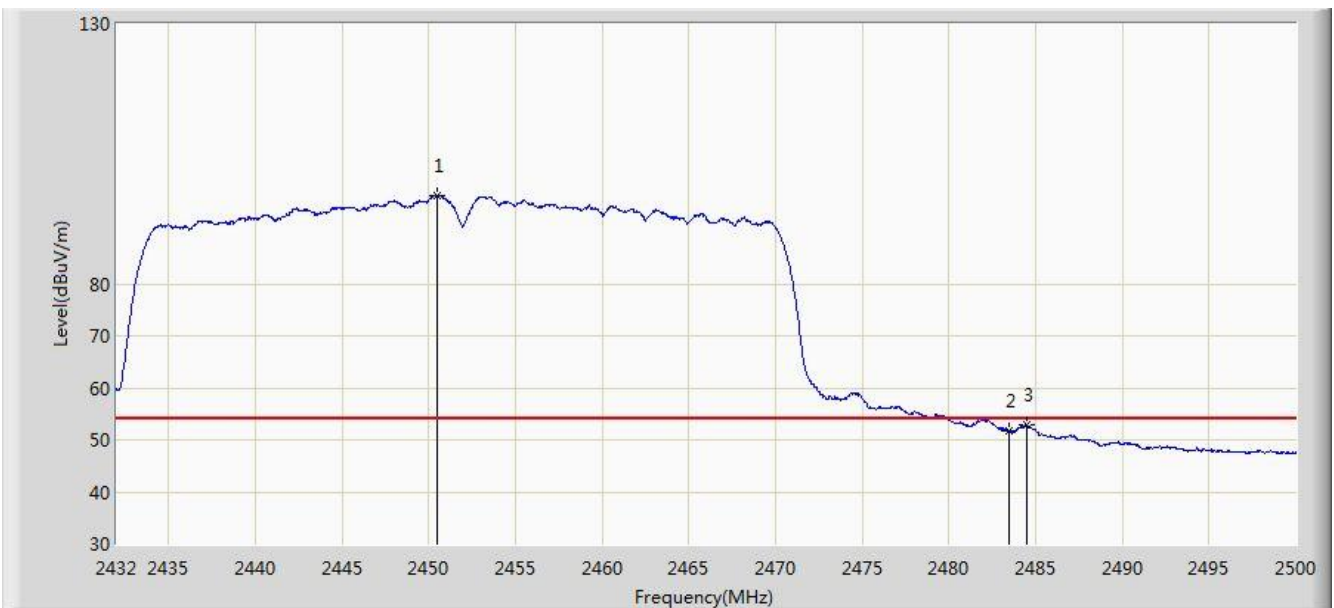


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2449.816	105.858	73.782	N/A	N/A	32.075	PK
2			2483.500	62.802	30.765	-11.198	74.000	32.037	PK
3			2484.564	67.718	35.683	-6.282	74.000	32.035	PK

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

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

Site: AC1	Time: 2020/01/17 - 20:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Larry Yan
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Note: Transmit by 802.11n-HT40 at channel 2452MHz Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2450.496	97.040	64.964	N/A	N/A	32.076	AV
2			2483.500	51.596	19.559	-2.404	54.000	32.037	AV
3			2484.462	52.885	20.850	-1.115	54.000	32.035	AV

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

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

7.8. AC Conducted Emissions Measurement

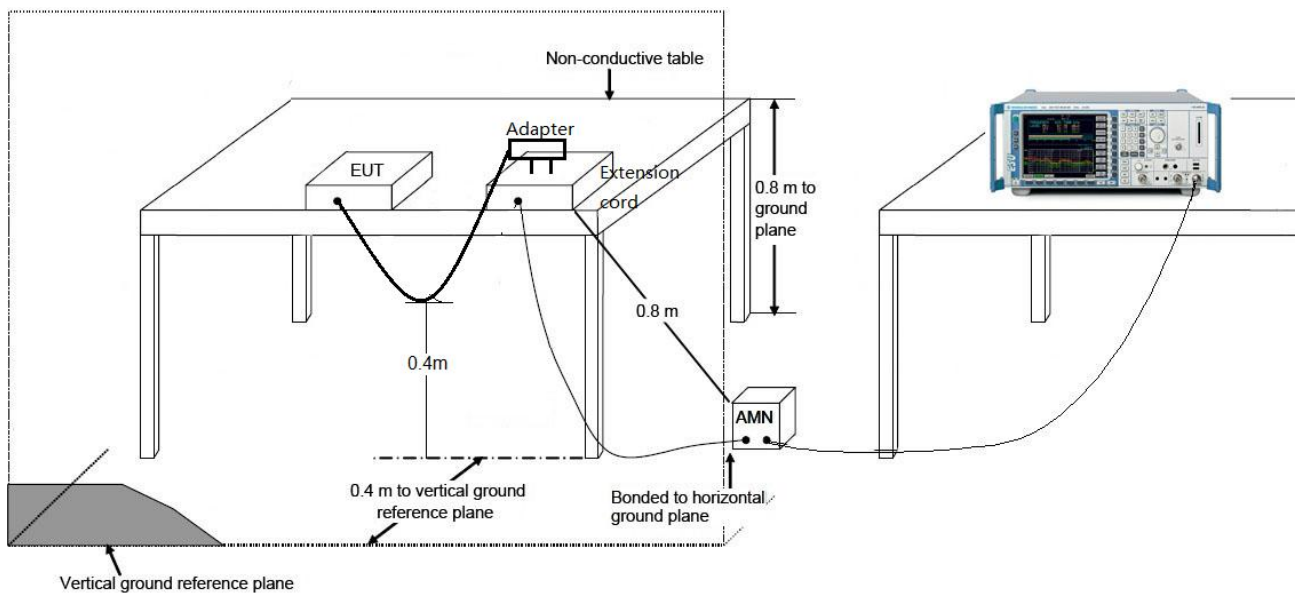
7.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
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.

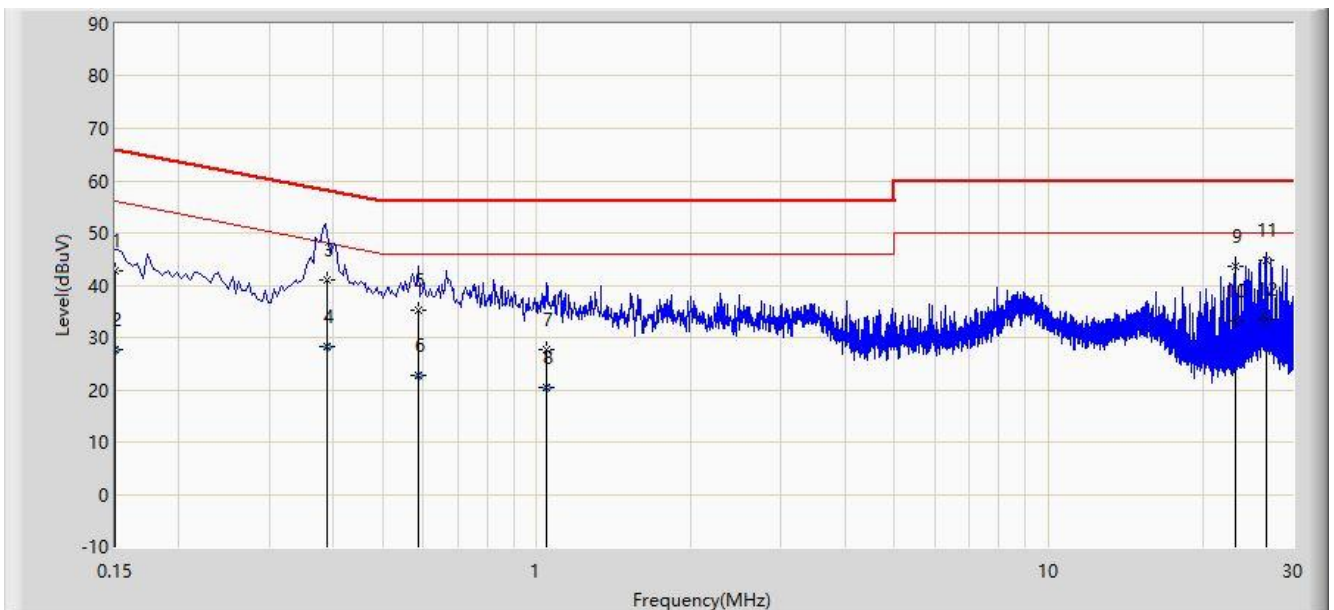
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3.Test Result

Site: SR2	Time: 2020/01/07 - 18:06
Limit: FCC_Part15.207_CE_AC Power	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Test Mode 1	

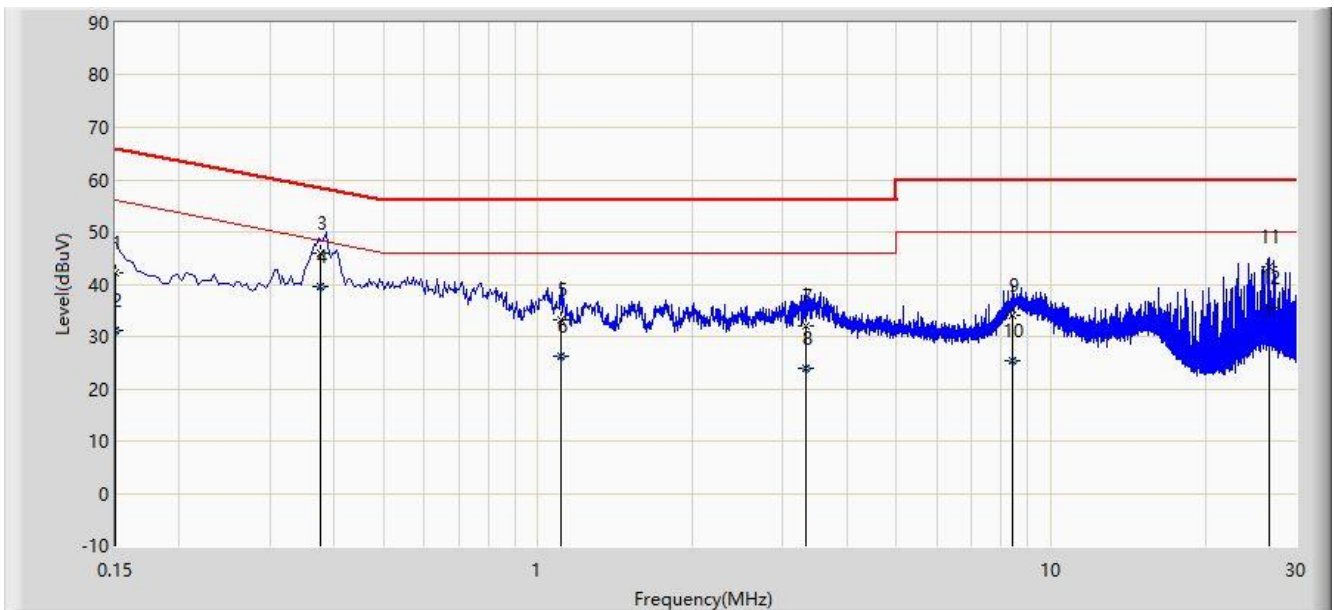


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	42.614	29.536	-23.386	66.000	13.078	QP
2			0.150	27.642	14.564	-28.358	56.000	13.078	AV
3			0.389	41.074	31.133	-17.011	58.086	9.941	QP
4			0.389	28.136	18.195	-19.950	48.086	9.941	AV
5			0.586	35.334	25.383	-20.666	56.000	9.951	QP
6			0.586	22.733	12.782	-23.267	46.000	9.951	AV
7			1.042	27.583	17.804	-28.417	56.000	9.779	QP
8			1.042	20.291	10.512	-25.709	46.000	9.779	AV
9			23.126	43.754	33.810	-16.246	60.000	9.944	QP
10			23.126	33.315	23.371	-16.685	50.000	9.944	AV
11		*	26.610	44.696	34.737	-15.304	60.000	9.959	QP
12			26.610	33.428	23.469	-16.572	50.000	9.959	AV

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

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

Site: SR2	Time: 2020/01/07 - 18:22
Limit: FCC_Part15.207_CE_AC Power	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: TRIFIBOOST	Power: AC 120V/60Hz
Test Mode 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	42.273	29.190	-23.727	66.000	13.084	QP
2			0.150	31.090	18.006	-24.910	56.000	13.084	AV
3			0.376	45.942	36.021	-12.417	58.358	9.921	QP
4		*	0.376	39.495	29.575	-8.863	48.358	9.921	AV
5			1.110	33.330	23.567	-22.670	56.000	9.763	QP
6			1.110	26.251	16.488	-19.749	46.000	9.763	AV
7			3.338	32.054	22.361	-23.946	56.000	9.693	QP
8			3.338	23.922	14.229	-22.078	46.000	9.693	AV
9			8.426	33.916	24.129	-26.084	60.000	9.787	QP
10			8.426	25.502	15.715	-24.498	50.000	9.787	AV
11			26.610	43.452	33.393	-16.548	60.000	10.059	QP
12			26.610	35.415	25.355	-14.585	50.000	10.059	AV

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

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

8. CONCLUSION

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

The End

Appendix A - Test Setup Photograph

Refer to “2001RSU019-UT” file.

Appendix B - EUT Photograph

Refer to “ 2001RSU019-UE” file.