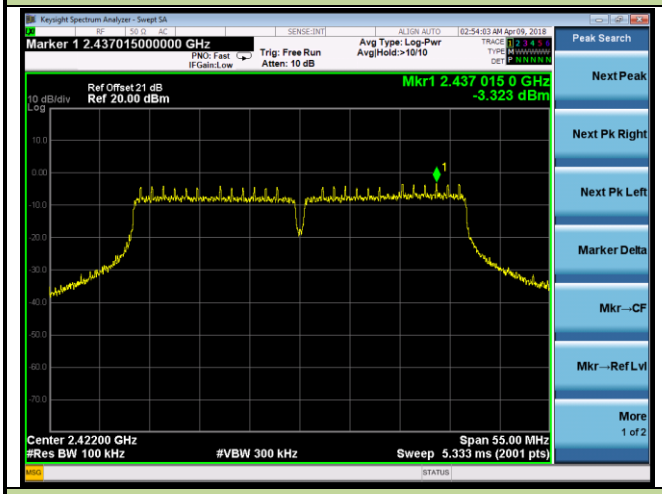
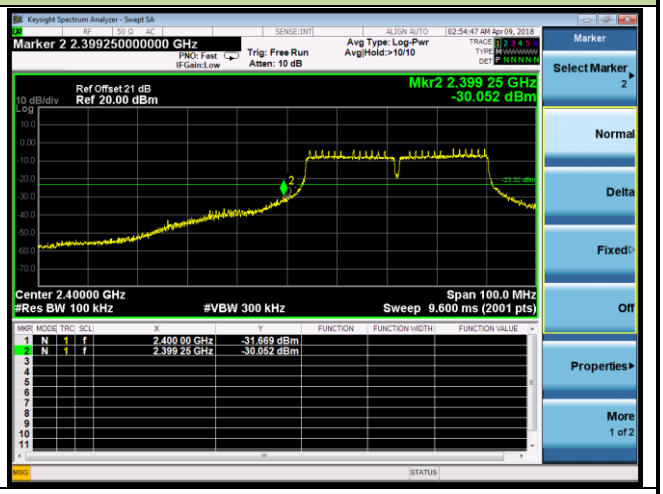
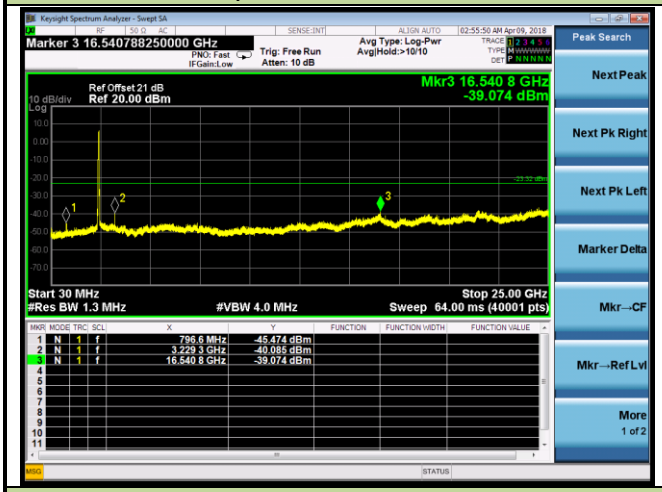
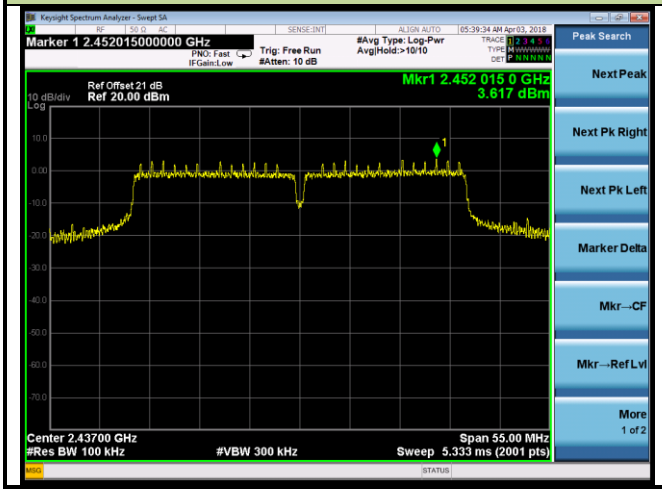
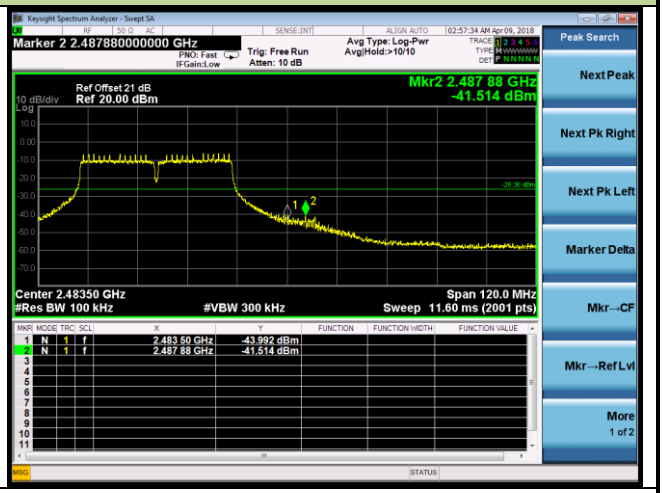
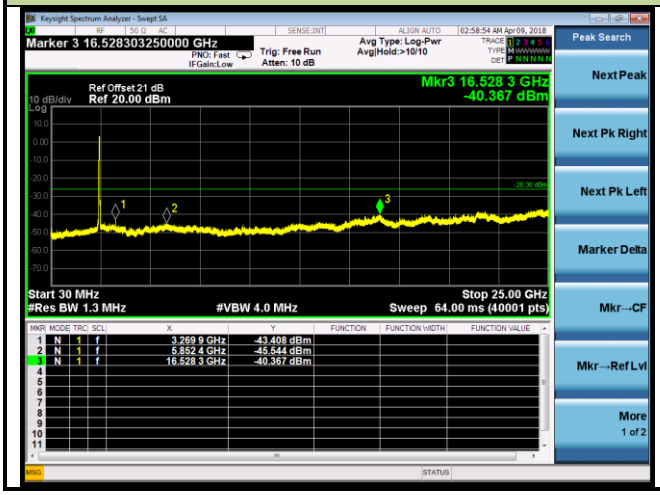
802.11n-HT40 Out-of-Band Emissions	
Channel 03 (2422MHz)	
100kHz PSD reference Level	Low Band Edge
	
Spurious Emission	
	
Channel 06 (2437MHz)	
100kHz PSD reference Level	Spurious Emission
	

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 47 CFR 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

KDB 558074 D01v04 - Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v04 - Section 12.2.4 (peak power measurements)

KDB 558074 D01v04 - Section 12.2.5 (average power measurements)

7.6.3.Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple

6. Trace mode = max hold
7. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

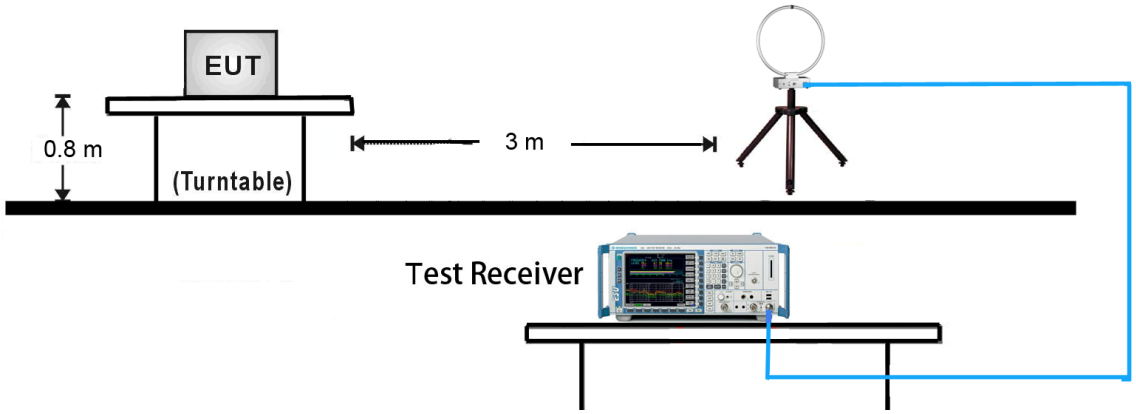
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

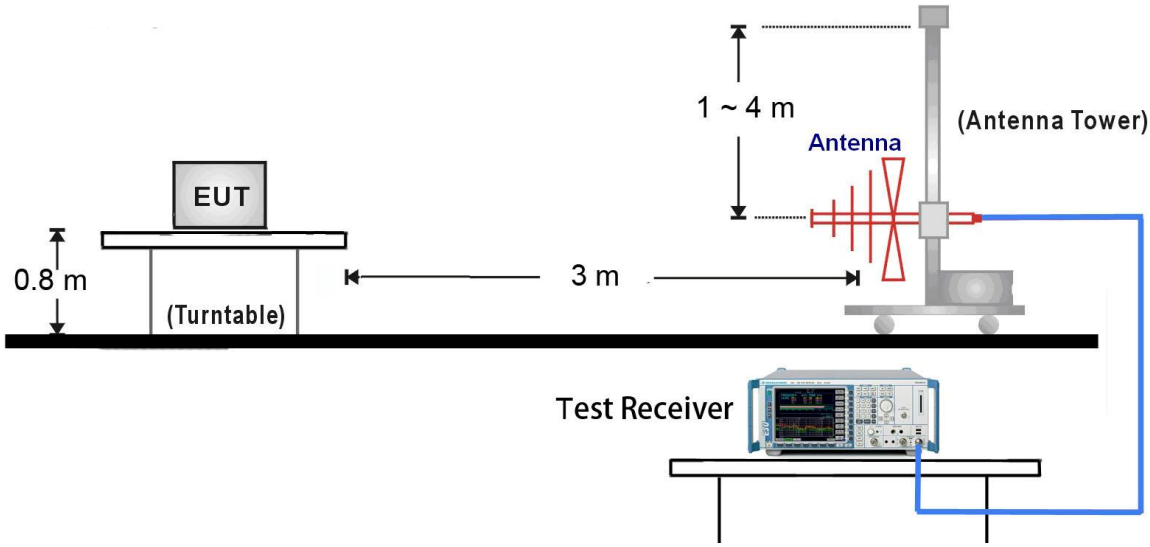
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

7.6.4.Test Setup

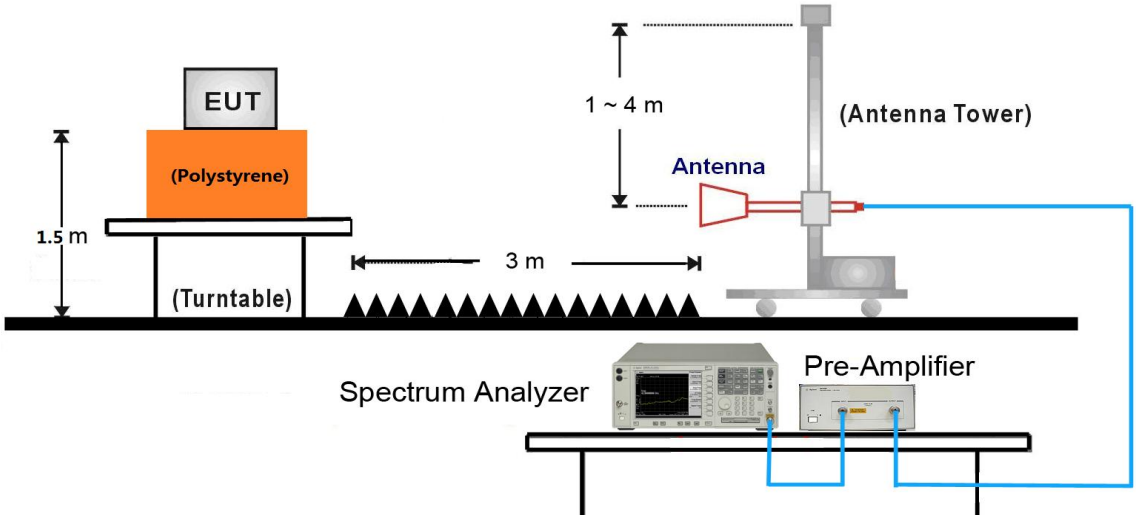
9kHz ~ 30MHz Test Setup:



30MHz ~ 1GHz Test Setup:



1GHz ~ 25GHz Test Setup:



7.6.5.Test Result

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	01	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4017.5	39.7	3.4	43.1	74.0	-30.9	Peak	Horizontal
	4825.0	43.7	5.9	49.6	74.0	-24.4	Peak	Horizontal
*	6278.5	37.0	8.6	45.6	87.0	-41.4	Peak	Horizontal
*	7239.0	37.9	12.7	50.6	87.0	-36.4	Peak	Horizontal
	3992.0	39.4	3.2	42.6	74.0	-31.4	Peak	Vertical
	4825.0	44.8	5.9	50.7	74.0	-23.3	Peak	Vertical
*	5811.0	37.3	7.6	44.9	87.0	-42.1	Peak	Vertical
*	6550.5	36.7	10.2	46.9	87.0	-40.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (107.0dBμV/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)

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	06	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3975.0	39.1	3.1	42.2	74.0	-31.8	Peak	Horizontal
	4874.0	46.0	6.0	52.0	54.0	-2.0	Average	Horizontal
	4876.0	47.1	6.0	53.1	74.0	-20.9	Peak	Horizontal
*	6312.5	37.3	8.8	46.1	88.0	-41.9	Peak	Horizontal
*	7145.5	37.1	12.4	49.5	88.0	-38.5	Peak	Horizontal
	4068.5	39.6	3.5	43.1	74.0	-30.9	Peak	Vertical
	4874.0	47.6	6.0	53.6	54.0	-0.4	Average	Vertical
	4876.0	49.0	6.0	55.0	74.0	-19.0	Peak	Vertical
*	6329.5	37.2	9.0	46.2	88.0	-41.8	Peak	Vertical
*	7128.5	36.7	12.3	49.0	88.0	-39.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (108.0dBμV/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)

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	11	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4051.5	39.2	3.5	42.7	74.0	-31.3	Peak	Horizontal
	4927.0	45.9	6.1	52.0	74.0	-22.0	Peak	Horizontal
*	5930.0	37.2	7.8	45.0	85.8	-40.8	Peak	Horizontal
*	6610.0	36.8	10.2	47.0	85.8	-38.8	Peak	Horizontal
	4238.5	38.3	4.1	42.4	74.0	-31.6	Peak	Vertical
	4927.0	45.8	6.1	51.9	74.0	-22.1	Peak	Vertical
*	5785.5	37.8	7.5	45.3	85.8	-40.5	Peak	Vertical
*	6576.0	36.7	10.2	46.9	85.8	-38.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (105.8dBμV/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)

Test Mode:	802.11g	Test Site:	AC1
Test Channel:	01	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4051.5	39.2	3.5	42.7	74.0	-31.3	Peak	Horizontal
	4816.5	38.8	5.9	44.7	74.0	-29.3	Peak	Horizontal
*	5998.0	37.0	8.0	45.0	87.5	-42.5	Peak	Horizontal
*	6661.0	36.5	10.0	46.5	87.5	-41.0	Peak	Horizontal
	3864.5	39.9	2.9	42.8	74.0	-31.2	Peak	Vertical
	4816.5	39.9	5.9	45.8	74.0	-28.2	Peak	Vertical
*	6023.5	37.1	7.9	45.0	87.5	-42.5	Peak	Vertical
*	6703.5	34.7	10.1	44.8	87.5	-42.7	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)

Test Mode:	802.11g	Test Site:	AC1
Test Channel:	06	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	43.9	6.0	49.9	74.0	-24.1	Peak	Horizontal
	7307.0	38.8	12.5	51.3	74.0	-22.7	Peak	Horizontal
*	7953.0	35.8	13.5	49.3	86.6	-37.3	Peak	Horizontal
*	8726.5	36.2	13.0	49.2	86.6	-37.4	Peak	Horizontal
	4051.5	38.7	3.5	42.2	74.0	-31.8	Peak	Vertical
	4873.5	35.3	6.0	41.3	54.0	-12.7	Average	Vertical
	4876.0	46.3	6.0	52.3	74.0	-21.7	Peak	Vertical
*	6227.5	37.1	8.6	45.7	86.6	-40.9	Peak	Vertical
*	6916.0	36.5	10.9	47.4	86.6	-39.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.6dBμV/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)

Test Mode:	802.11g	Test Site:	AC1
Test Channel:	11	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3992.0	39.3	3.2	42.5	74.0	-31.5	Peak	Horizontal
	4927.0	37.9	6.1	44.0	74.0	-30.0	Peak	Horizontal
*	5955.5	36.5	7.9	44.4	86.1	-41.7	Peak	Horizontal
*	7154.0	38.1	12.4	50.5	86.1	-35.6	Peak	Horizontal
	3771.0	38.9	2.5	41.4	74.0	-32.6	Peak	Vertical
	4927.0	38.3	6.1	44.4	74.0	-29.6	Peak	Vertical
*	5726.0	36.6	7.3	43.9	86.1	-42.2	Peak	Vertical
*	6508.0	36.3	9.9	46.2	86.1	-39.9	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)

Test Mode:	802.11n-HT20	Test Site:	AC1
Test Channel:	01	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4043.0	38.9	3.5	42.4	74.0	-31.6	Peak	Horizontal
	4825.0	38.3	5.9	44.2	74.0	-29.8	Peak	Horizontal
*	6465.5	37.4	9.8	47.2	86.0	-38.8	Peak	Horizontal
*	7145.5	37.8	12.4	50.2	86.0	-35.8	Peak	Horizontal
	4323.5	38.0	4.4	42.4	74.0	-31.6	Peak	Vertical
	4816.5	37.3	5.9	43.2	74.0	-30.8	Peak	Vertical
*	5972.5	36.8	7.9	44.7	86.0	-41.3	Peak	Vertical
*	6372.0	37.0	9.1	46.1	86.0	-39.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.0dBμV/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)

Test Mode:	802.11n-HT20	Test Site:	AC1
Test Channel:	06	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4111.0	38.0	3.7	41.7	74.0	-32.3	Peak	Horizontal
	4876.0	44.0	6.0	50.0	74.0	-24.0	Peak	Horizontal
*	5862.0	36.3	7.8	44.1	90.7	-46.6	Peak	Horizontal
*	6584.5	36.6	10.2	46.8	90.7	-43.9	Peak	Horizontal
	4170.5	38.6	3.9	42.5	74.0	-31.5	Peak	Vertical
	4876.0	44.8	6.0	50.8	74.0	-23.2	Peak	Vertical
*	5692.0	37.5	7.1	44.6	90.7	-46.1	Peak	Vertical
*	6533.5	36.4	10.0	46.4	90.7	-44.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (110.7dBμV/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)

Test Mode:	802.11n-HT20	Test Site:	AC1
Test Channel:	11	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4000.5	38.7	3.3	42.0	74.0	-32.0	Peak	Horizontal
	4910.0	37.2	6.1	43.3	74.0	-30.7	Peak	Horizontal
*	5862.0	37.5	7.8	45.3	84.8	-39.5	Peak	Horizontal
*	6992.5	37.1	11.2	48.3	84.8	-36.5	Peak	Horizontal
	4238.5	37.9	4.1	42.0	74.0	-32.0	Peak	Vertical
	4833.5	37.6	5.9	43.5	74.0	-30.5	Peak	Vertical
*	6338.0	37.0	9.0	46.0	84.8	-38.8	Peak	Vertical
*	6618.5	36.6	10.1	46.7	84.8	-38.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (104.8dBμV/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)

Test Mode:	802.11n-HT40	Test Site:	AC1
Test Channel:	03	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4051.5	38.3	3.5	41.8	74.0	-32.2	Peak	Horizontal
	4697.5	37.4	5.5	42.9	74.0	-31.1	Peak	Horizontal
*	5998.0	36.8	8.0	44.8	82.0	-37.2	Peak	Horizontal
*	6584.5	36.2	10.2	46.4	82.0	-35.6	Peak	Horizontal
	4085.5	38.7	3.5	42.2	74.0	-31.8	Peak	Vertical
	4791.0	37.1	5.8	42.9	74.0	-31.1	Peak	Vertical
*	6431.5	37.5	9.5	47.0	82.0	-35.0	Peak	Vertical
*	7179.5	36.5	12.5	49.0	82.0	-33.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (102.0dBμV/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)

Test Mode:	802.11n-HT40	Test Site:	AC1
Test Channel:	06	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4000.5	39.1	3.3	42.4	74.0	-31.6	Peak	Horizontal
	4876.0	42.1	6.0	48.1	74.0	-25.9	Peak	Horizontal
*	5964.0	36.8	7.9	44.7	75.1	-30.4	Peak	Horizontal
*	6329.5	36.6	9.0	45.6	75.1	-29.5	Peak	Horizontal
	3958.0	39.2	3.1	42.3	74.0	-31.7	Peak	Vertical
	4884.5	42.8	6.0	48.8	74.0	-25.2	Peak	Vertical
*	6244.5	36.9	8.6	45.5	75.1	-29.6	Peak	Vertical
*	6865.0	37.2	10.6	47.8	75.1	-27.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (95.1dBμV/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)

Test Mode:	802.11n-HT40	Test Site:	AC1
Test Channel:	09	Test Engineer:	Snake Ni
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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3813.5	38.9	2.8	41.7	74.0	-32.3	Peak	Horizontal
	4612.5	37.6	5.2	42.8	74.0	-31.2	Peak	Horizontal
*	6287.0	37.1	8.7	45.8	80.8	-35.0	Peak	Horizontal
*	7052.0	36.8	11.8	48.6	80.8	-32.2	Peak	Horizontal
	3958.0	38.3	3.1	41.4	74.0	-32.6	Peak	Vertical
	4910.0	37.5	6.1	43.6	74.0	-30.4	Peak	Vertical
*	6236.0	36.5	8.6	45.1	80.8	-35.7	Peak	Vertical
*	6873.5	36.6	10.6	47.2	80.8	-33.6	Peak	Vertical

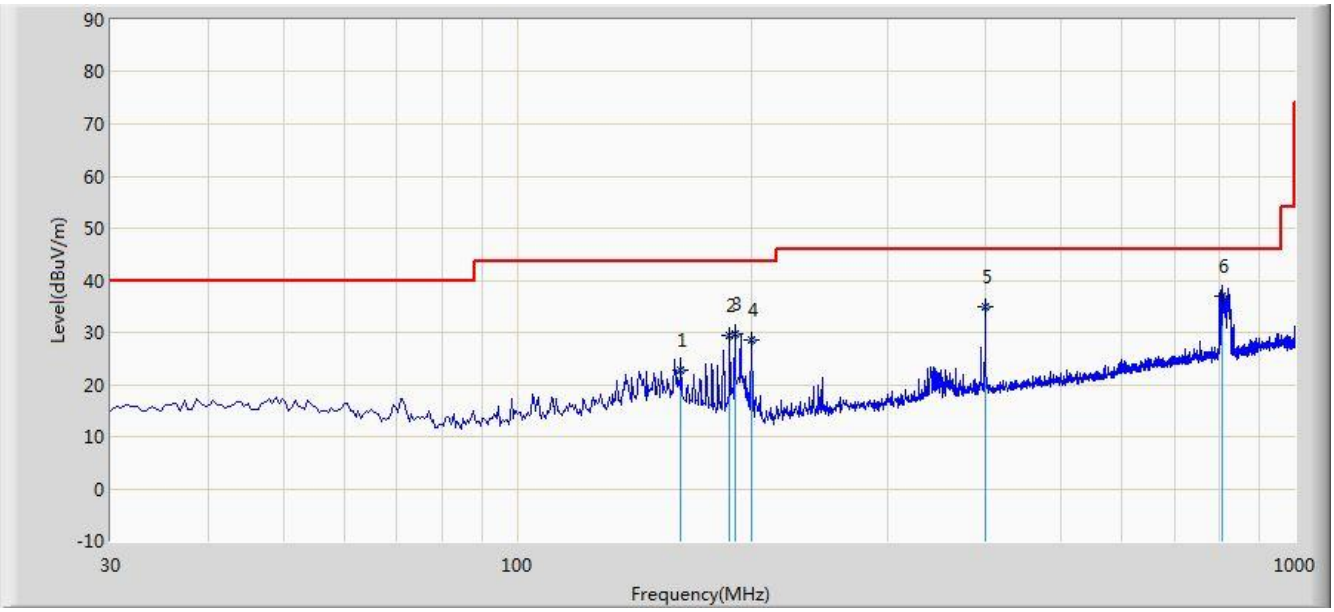
Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (100.8dBμV/m) or 15.209 which is higher.

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: 2018/04/08 - 14:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Worst Case Mode: Transmit at Channel 2412MHz by 802.11b	



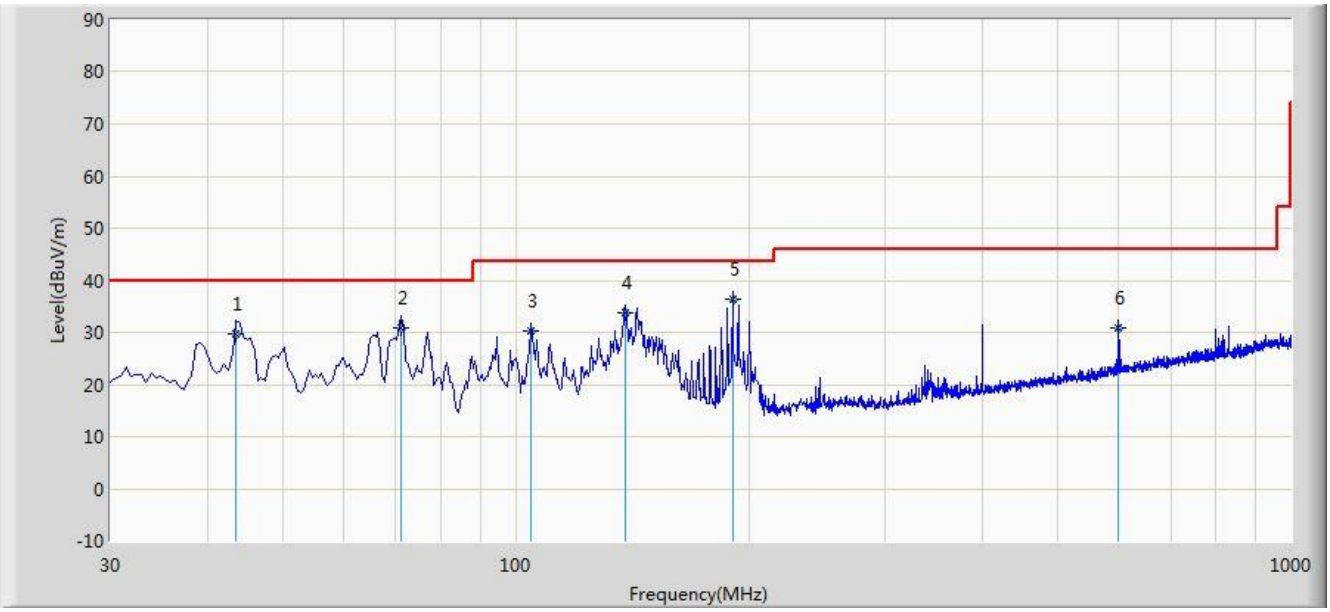
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			162.410	22.790	7.554	-20.710	43.500	15.236	QP
2			187.625	29.402	17.224	-14.098	43.500	12.177	QP
3			190.535	29.646	17.778	-13.854	43.500	11.868	QP
4			199.750	28.649	17.258	-14.851	43.500	11.391	QP
5			400.055	34.935	18.125	-11.065	46.000	16.810	QP
6		*	807.455	36.898	13.215	-9.102	46.000	23.683	QP

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + 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 30dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

Site: AC1	Time: 2018/04/08 - 14:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Worst Case Mode: Transmit at Channel 2412MHz by 802.11b	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			43.580	29.584	15.128	-10.416	40.000	14.456	QP
2			71.225	30.748	19.236	-9.252	40.000	11.512	QP
3			104.690	30.223	18.552	-13.277	43.500	11.671	QP
4			138.640	33.887	19.254	-9.613	43.500	14.633	QP
5		*	190.535	36.315	24.447	-7.185	43.500	11.868	QP
6			599.875	30.814	9.968	-15.186	46.000	20.846	QP

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

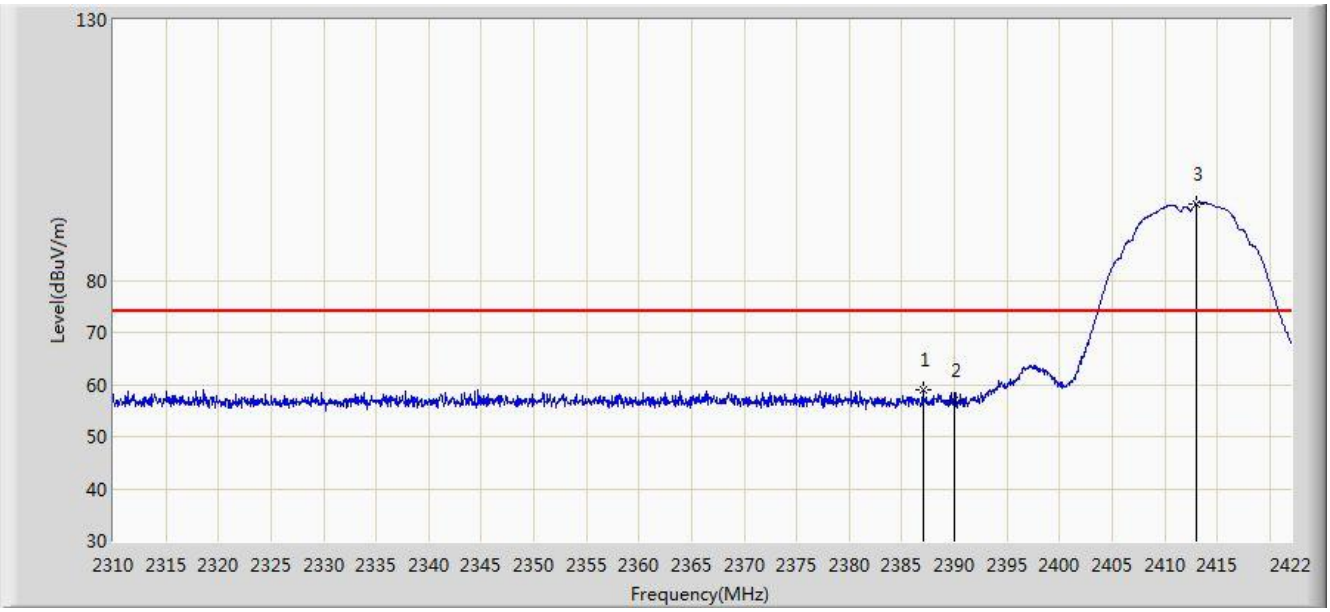
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 30dB 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 Result

Site: AC1	Time: 2018/04/09 - 04:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2412MHz	

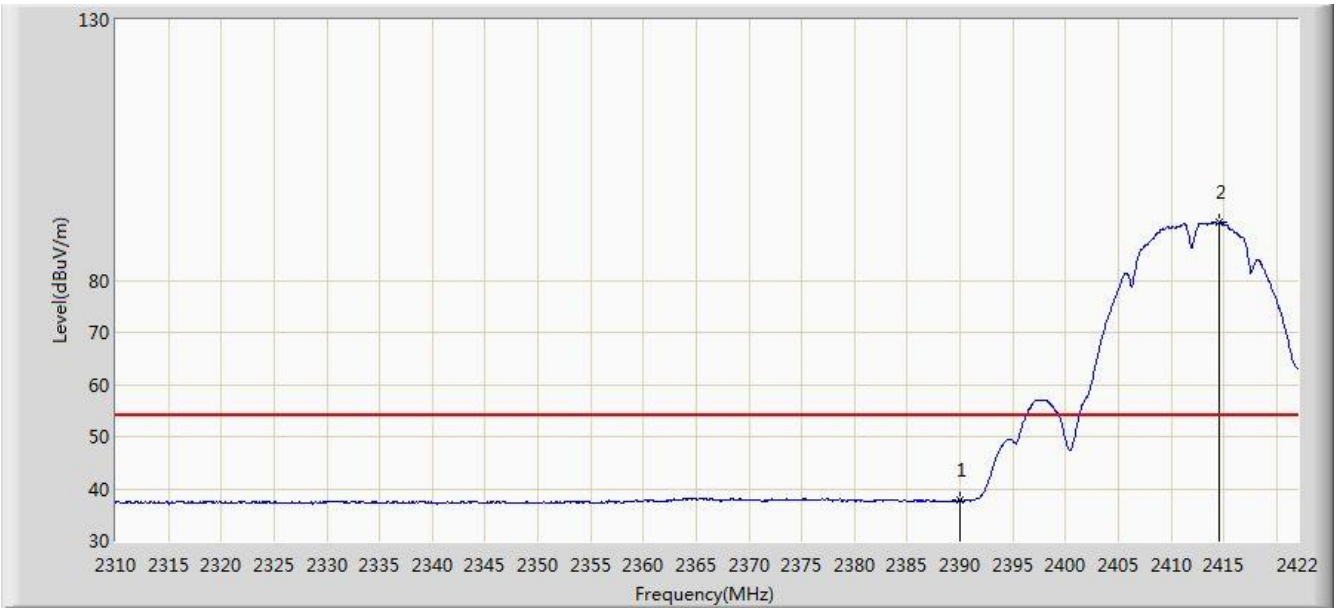


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.000	59.034	26.703	-14.966	74.000	32.331	PK
2			2390.000	56.988	24.661	-17.012	74.000	32.327	PK
3			2413.040	94.774	62.490	N/A	N/A	32.284	PK

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

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

Site: AC1	Time: 2018/04/09 - 04:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2412MHz	

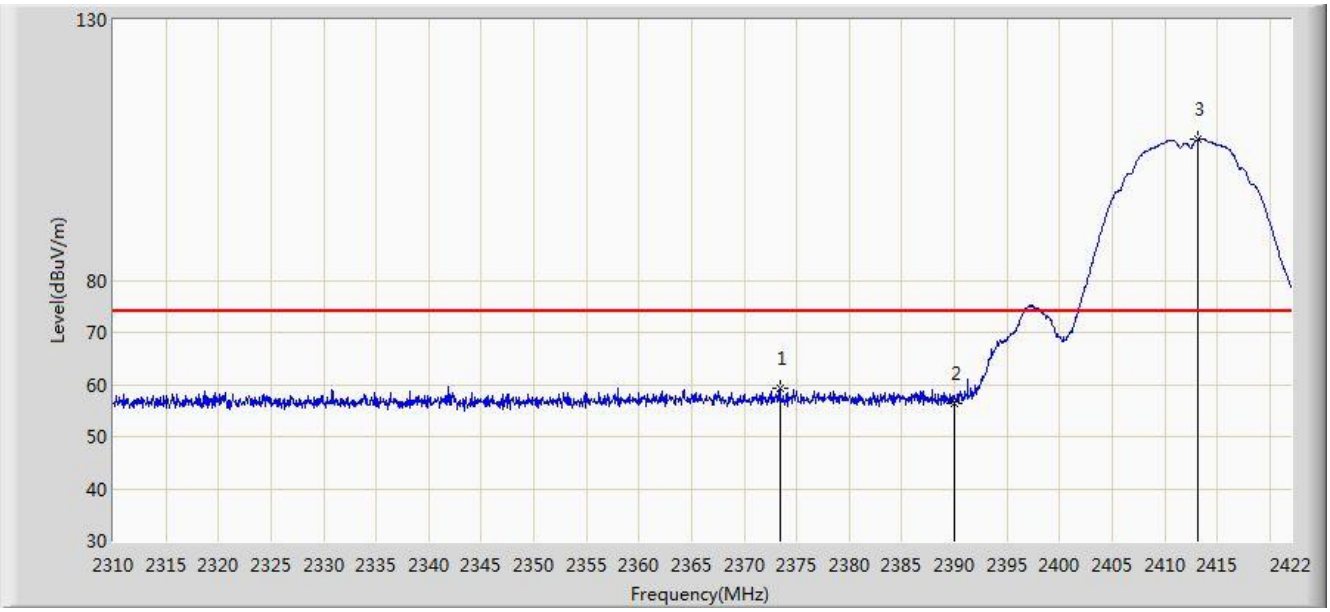


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	37.770	5.443	-16.230	54.000	32.327	AV
2			2414.608	91.154	58.870	N/A	N/A	32.284	AV

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

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

Site: AC1	Time: 2018/04/09 - 04:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2412MHz	

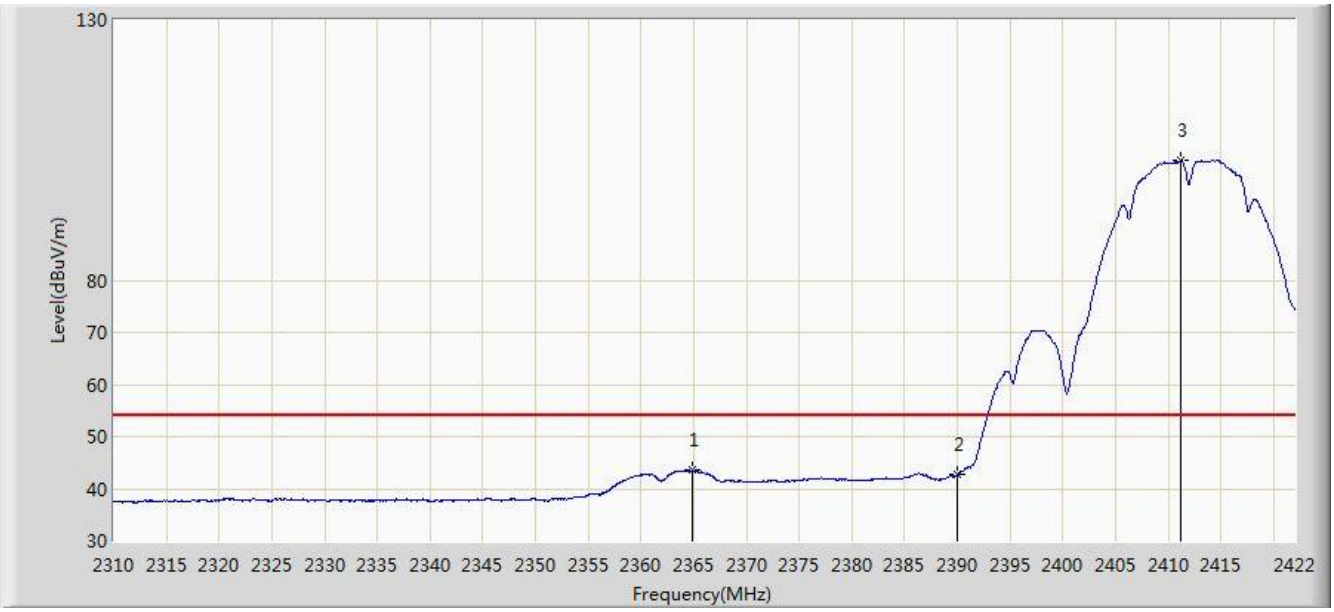


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2373.448	59.210	26.859	-14.790	74.000	32.351	PK
2			2390.000	56.482	24.155	-17.518	74.000	32.327	PK
3			2413.208	106.991	74.707	N/A	N/A	32.284	PK

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

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

Site: AC1	Time: 2018/04/09 - 04:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2412MHz	

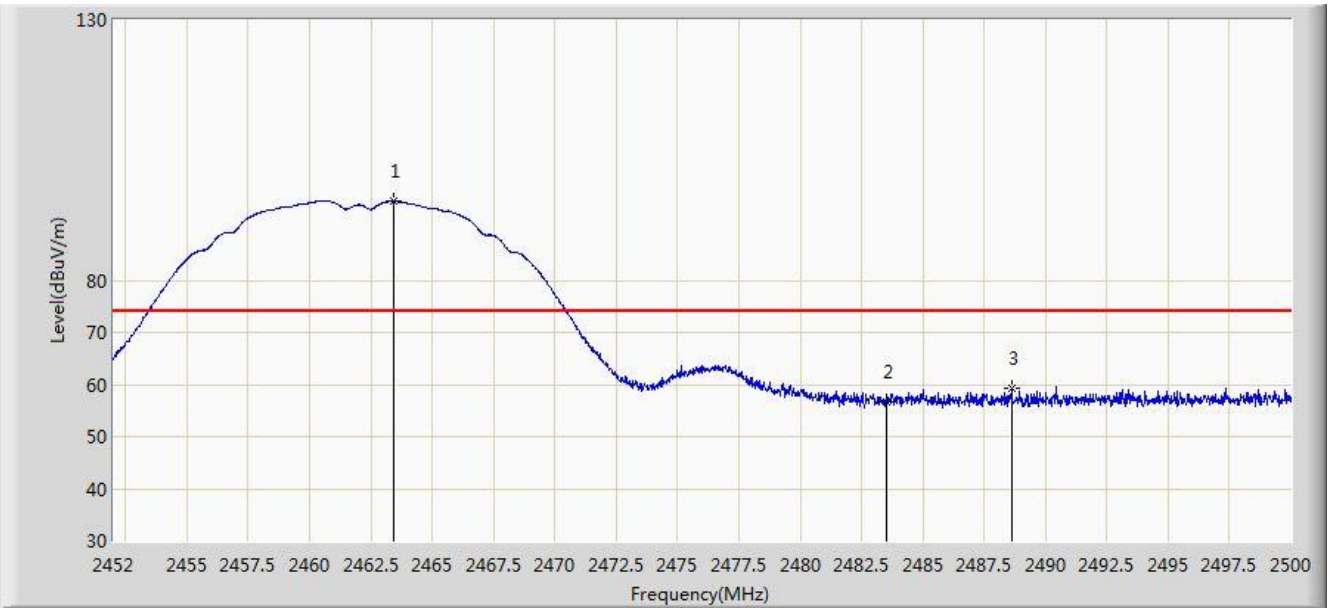


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2364.880	43.538	11.170	-10.462	54.000	32.367	AV
2			2390.000	42.646	10.319	-11.354	54.000	32.327	AV
3			2411.136	102.989	70.704	N/A	N/A	32.285	AV

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

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

Site: AC1	Time: 2018/04/09 - 04:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2463.400	95.117	62.834	N/A	N/A	32.283	PK
2			2483.500	56.699	24.360	-17.301	74.000	32.340	PK
3			2488.624	59.386	27.027	-14.614	74.000	32.359	PK

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

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

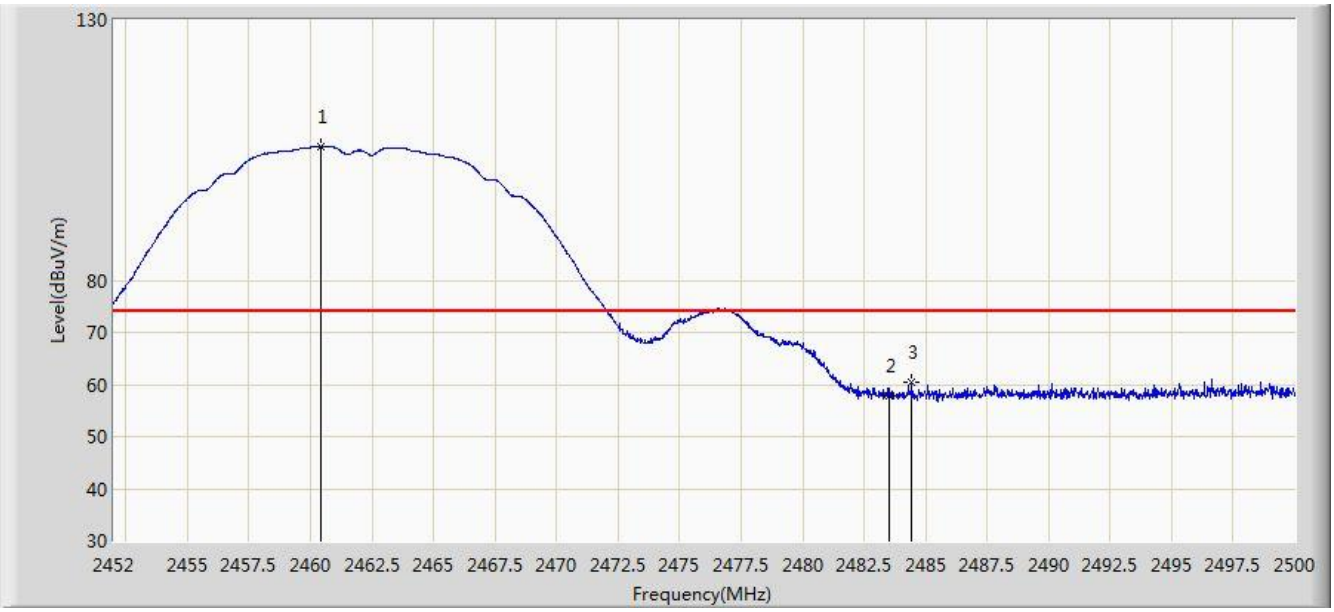
Site: AC1	Time: 2018/04/09 - 04:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2462MHz	

No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2461.096	91.371	59.092	N/A	N/A	32.279	AV
2			2483.500	38.315	5.976	-15.685	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 04:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2460.400	105.771	73.494	N/A	N/A	32.277	PK
2			2483.500	57.913	25.574	-16.087	74.000	32.340	PK
3			2484.424	60.474	28.131	-13.526	74.000	32.342	PK

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

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

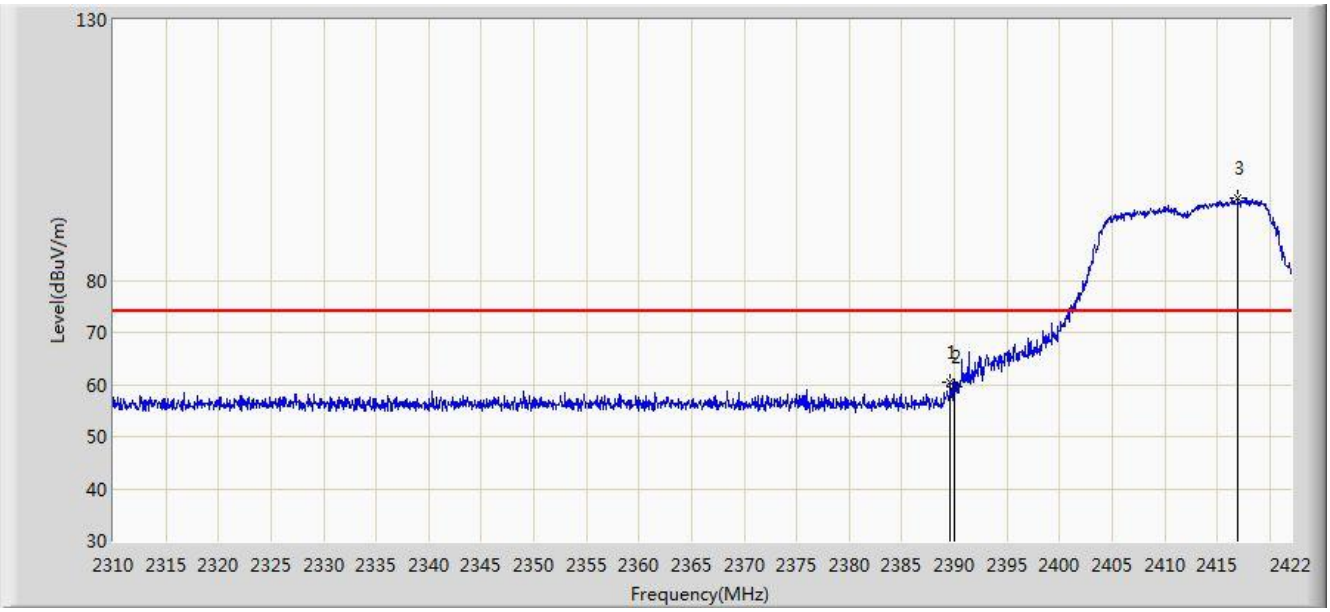
Site: AC1	Time: 2018/04/09 - 04:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2462MHz	

No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2461.072	101.748	69.470	N/A	N/A	32.279	AV
2			2483.500	44.694	12.355	-9.306	54.000	32.340	AV
3			2487.736	45.139	12.783	-8.861	54.000	32.355	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2412MHz	

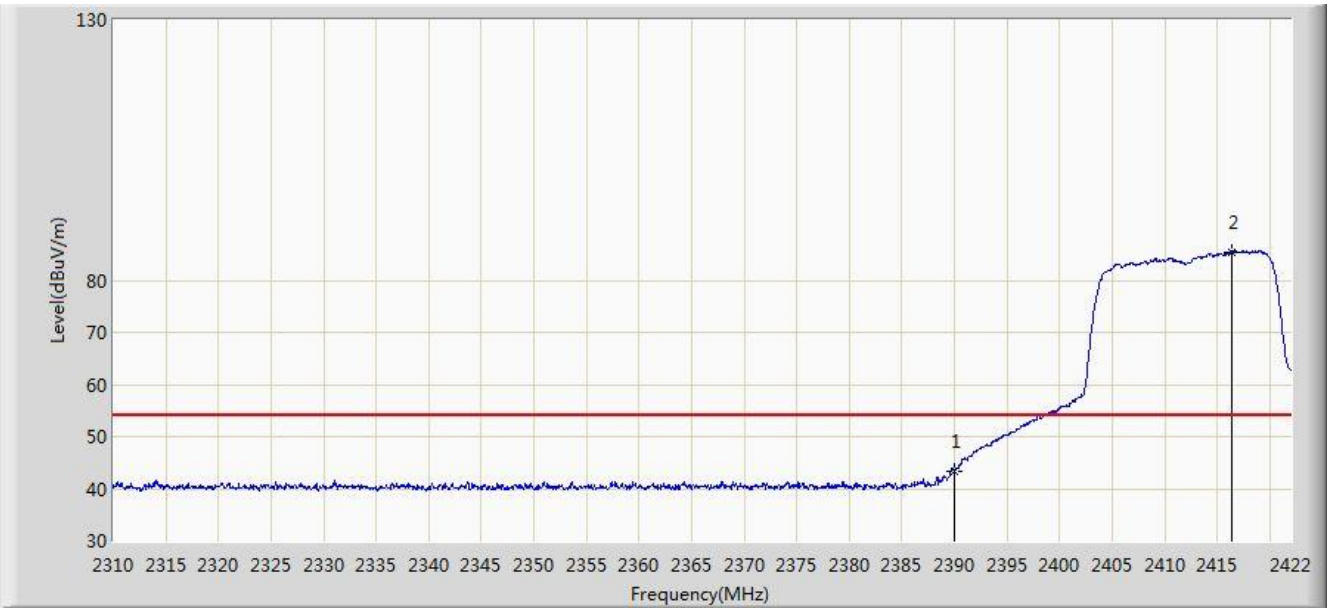


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.576	60.533	28.206	-13.467	74.000	32.328	PK
2			2390.000	59.485	27.158	-14.515	74.000	32.327	PK
3			2416.960	95.920	63.637	N/A	N/A	32.283	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2412MHz	

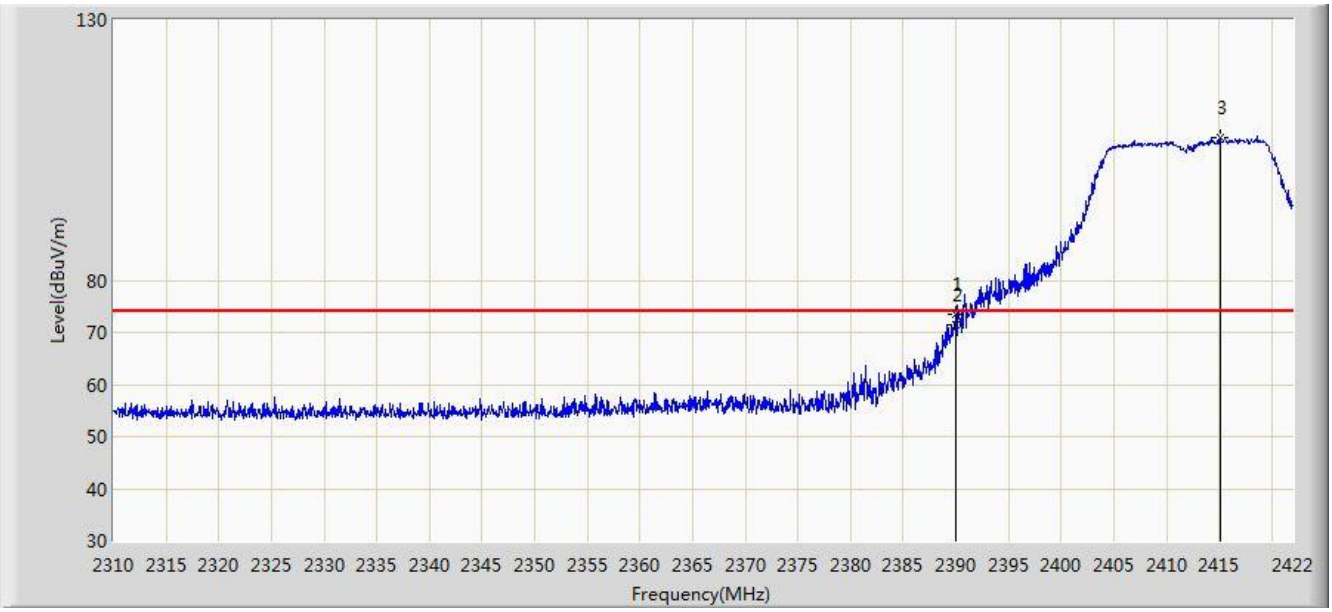


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	43.359	11.032	-10.641	54.000	32.327	AV
2			2416.400	85.500	53.217	N/A	N/A	32.282	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2412MHz	

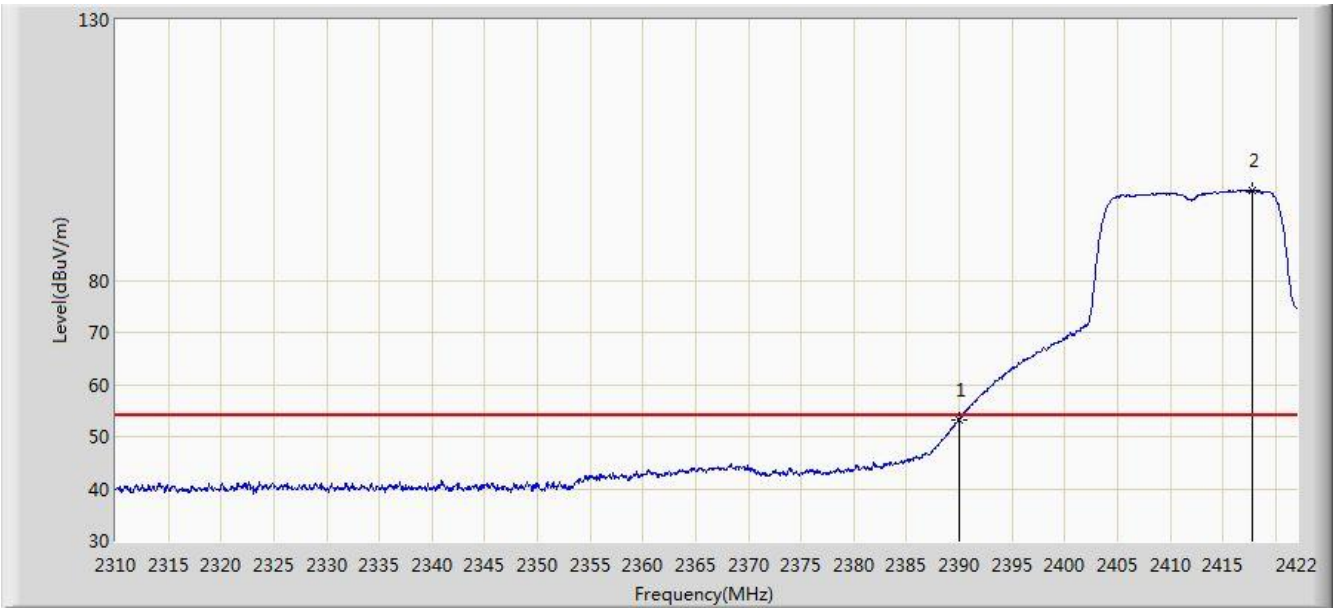


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.968	73.403	41.076	-0.597	74.000	32.327	PK
2			2390.000	71.380	39.053	-2.620	74.000	32.327	PK
3			2415.056	107.499	75.215	N/A	N/A	32.284	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2412MHz	

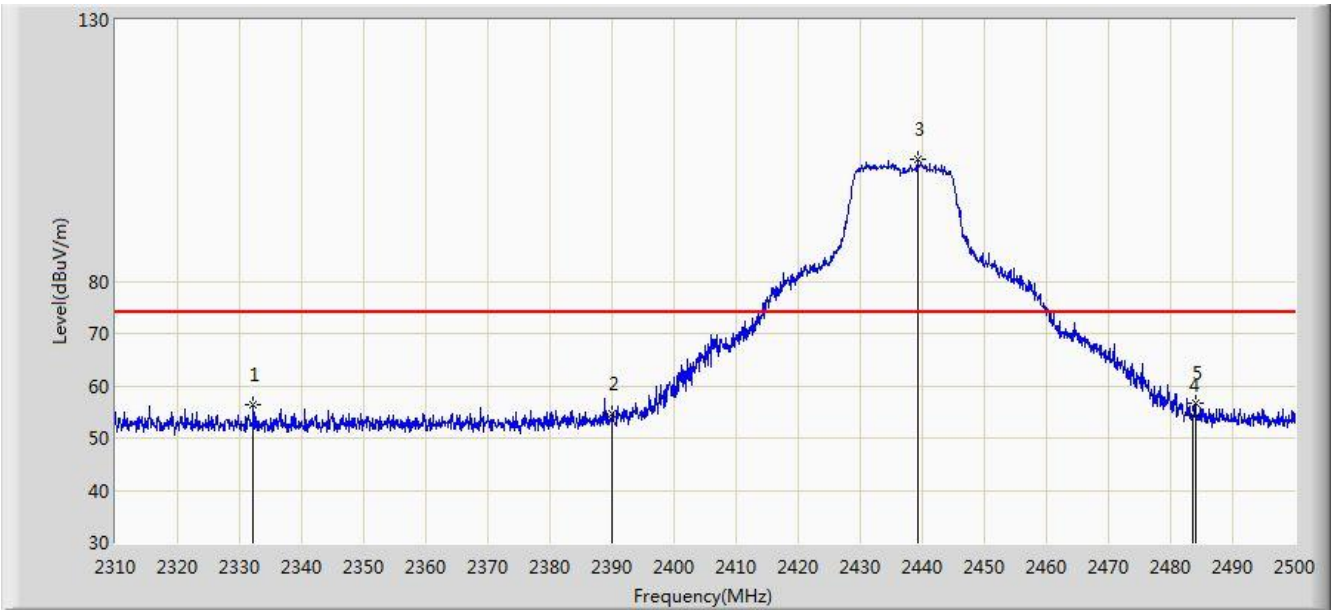


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.235	20.908	-0.765	54.000	32.327	AV
2			2417.744	97.313	65.031	N/A	N/A	32.282	AV

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

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

Site: AC1	Time: 2018/04/10 - 09:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2437MHz	

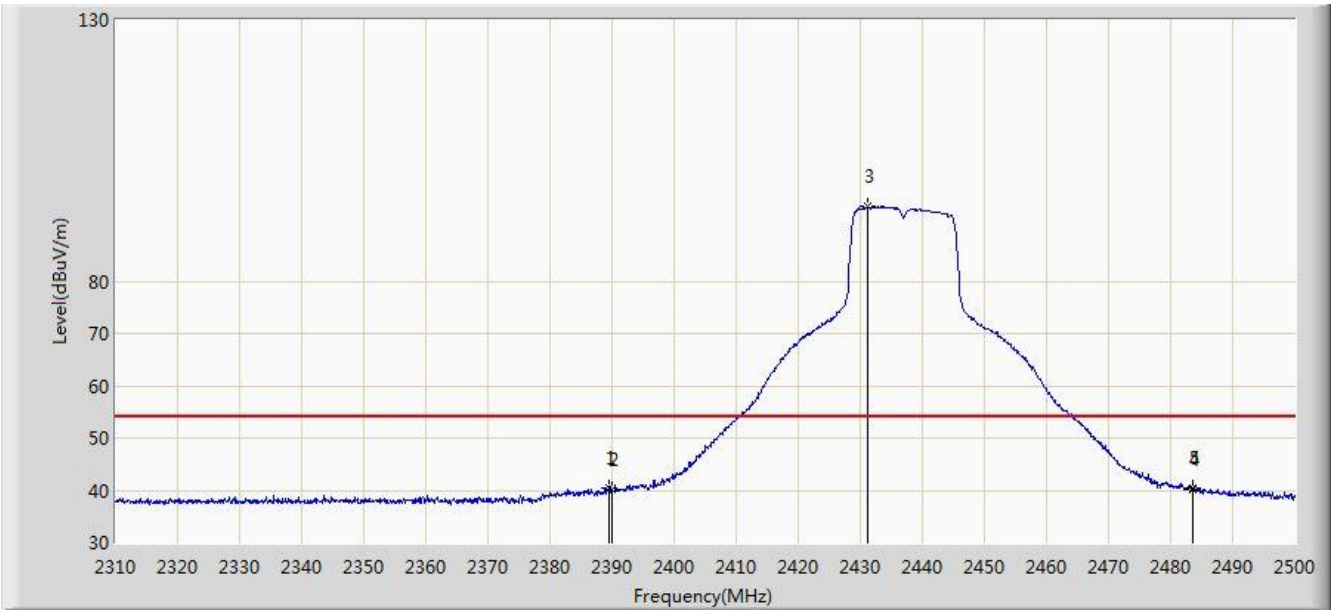


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2332.230	56.263	23.798	-17.737	74.000	32.465	PK
2			2390.000	54.567	22.240	-19.433	74.000	32.327	PK
3		*	2439.200	103.242	70.983	N/A	N/A	32.260	PK
4			2483.500	54.212	21.873	-19.788	74.000	32.340	PK
5			2484.040	56.562	24.221	-17.438	74.000	32.342	PK

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

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

Site: AC1	Time: 2018/04/10 - 09:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2437MHz	

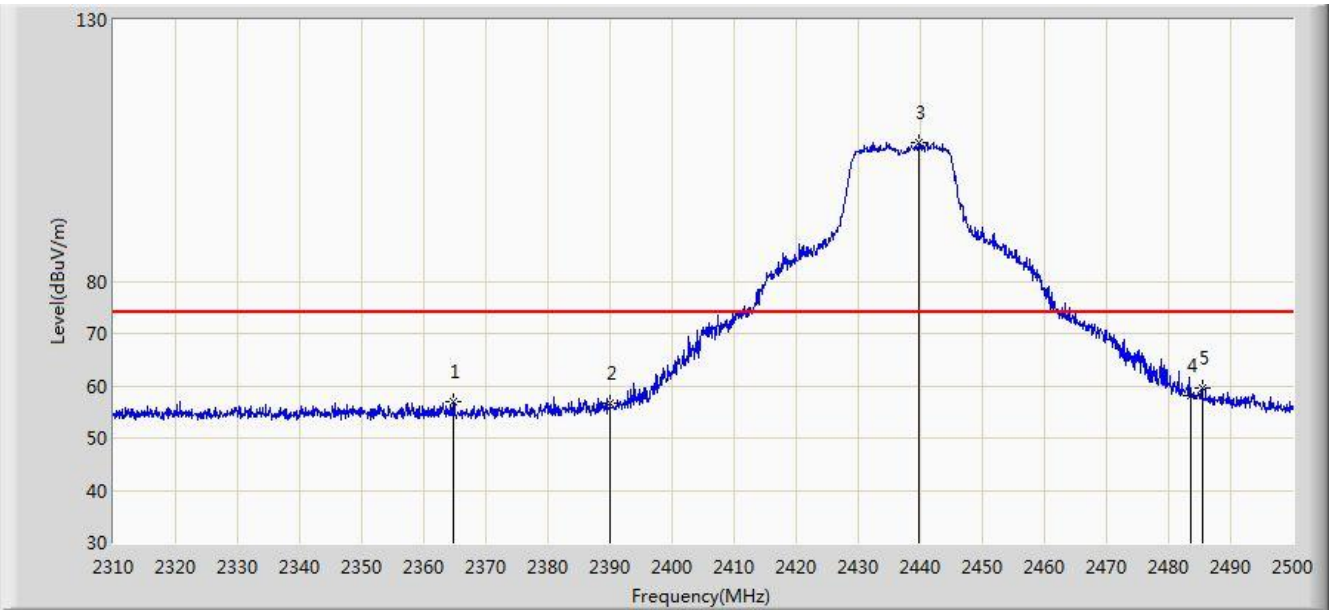


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.610	40.391	8.064	-13.609	54.000	32.328	AV
2			2390.000	40.131	7.804	-13.869	54.000	32.327	AV
3		*	2431.125	94.219	61.946	N/A	N/A	32.272	AV
4			2483.500	40.267	7.928	-13.733	54.000	32.340	AV
5			2483.565	40.561	8.222	-13.439	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/10 - 09:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2437MHz	

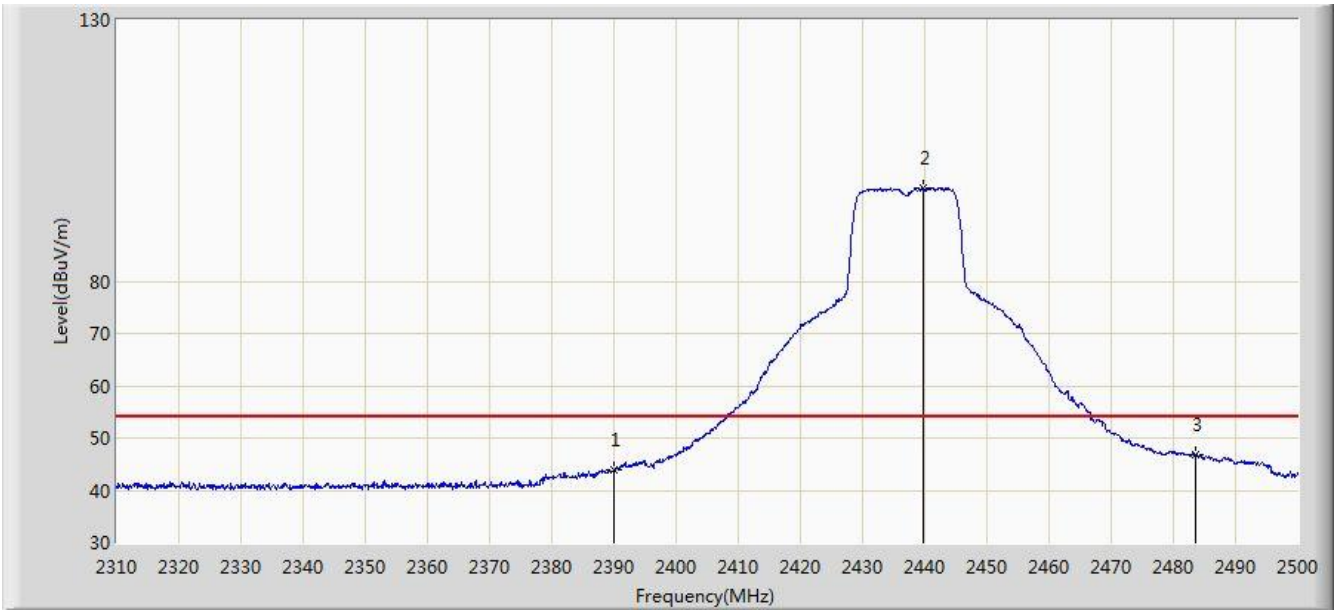


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2364.720	57.008	24.640	-16.992	74.000	32.367	PK
2			2390.000	56.611	24.284	-17.389	74.000	32.327	PK
3		*	2439.675	106.627	74.368	N/A	N/A	32.259	PK
4			2483.500	58.140	25.801	-15.860	74.000	32.340	PK
5			2485.465	59.644	27.297	-14.356	74.000	32.347	PK

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

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

Site: AC1	Time: 2018/04/10 - 09:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2437MHz	

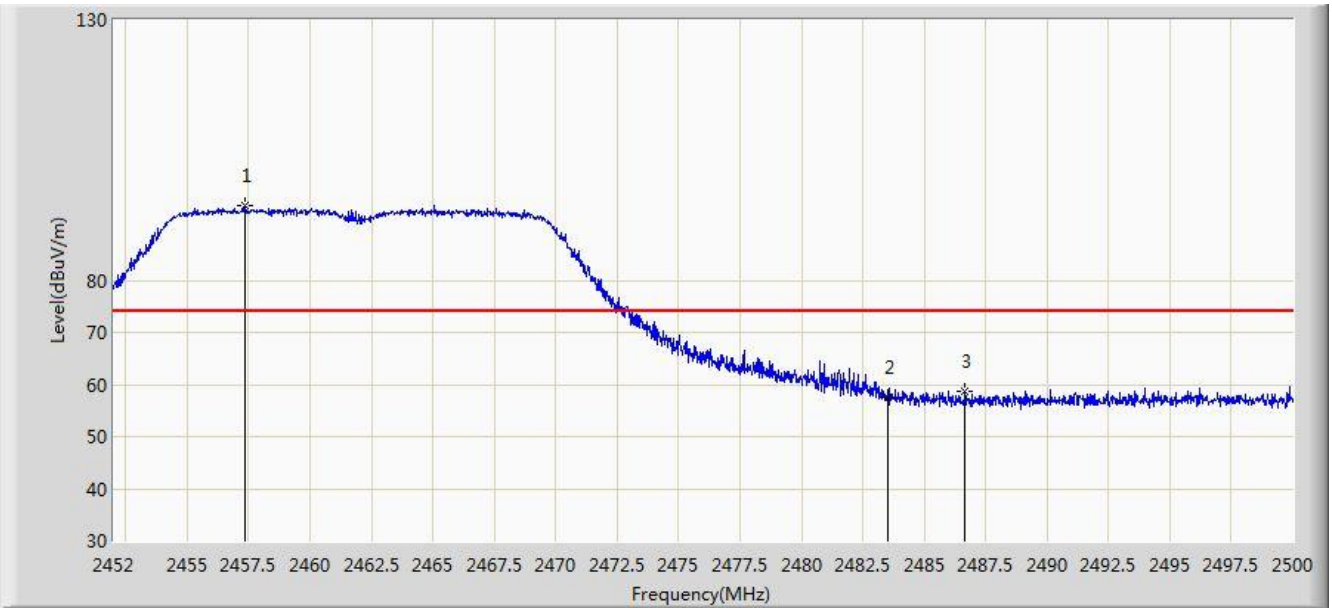


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	43.828	11.501	-10.172	54.000	32.327	AV
2		*	2439.675	97.906	65.647	N/A	N/A	32.259	AV
3			2483.500	46.765	14.426	-7.235	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2462MHz	

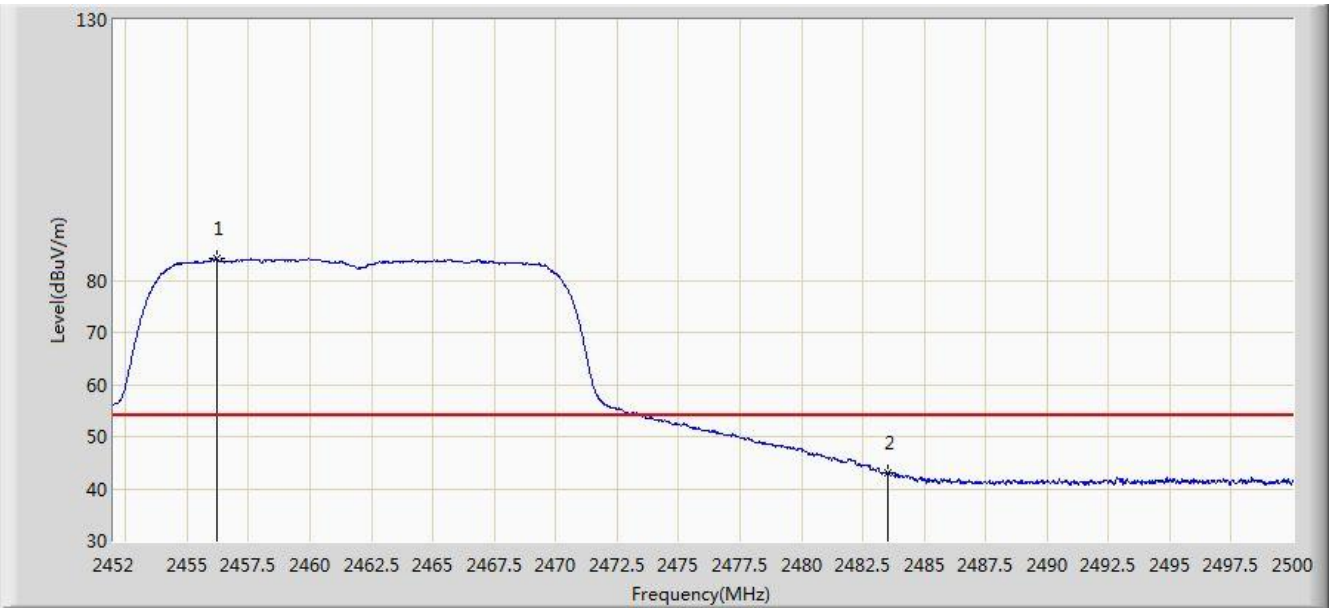


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2457.328	94.279	62.008	N/A	N/A	32.271	PK
2			2483.500	57.427	25.088	-16.573	74.000	32.340	PK
3			2486.656	58.822	26.470	-15.178	74.000	32.351	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2462MHz	

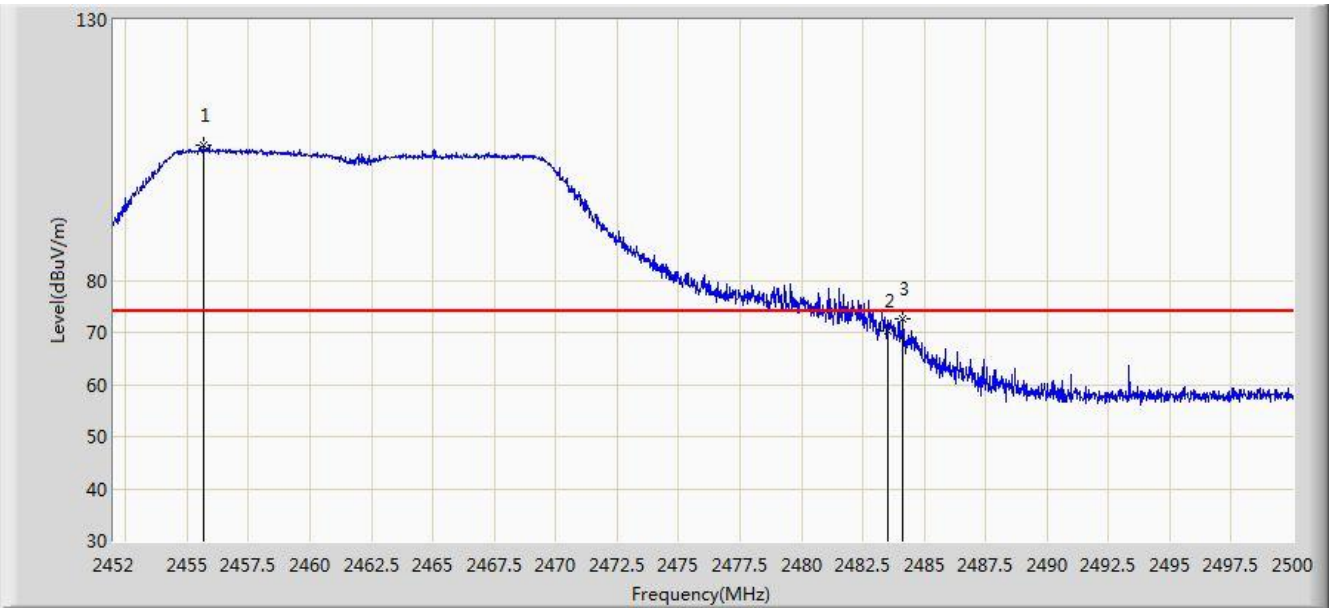


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2456.200	84.202	51.933	N/A	N/A	32.269	AV
2			2483.500	42.957	10.618	-11.043	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2462MHz	

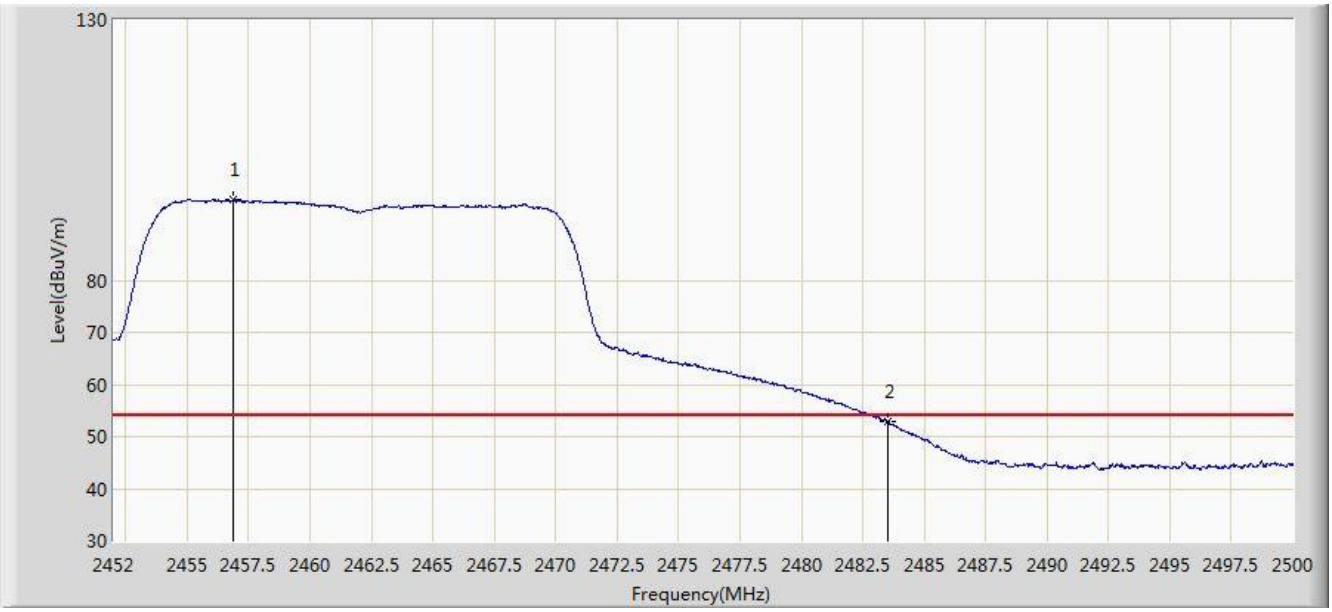


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2455.696	106.074	73.806	N/A	N/A	32.268	PK
2			2483.500	70.209	37.870	-3.791	74.000	32.340	PK
3			2484.136	72.476	40.134	-1.524	74.000	32.342	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:13
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2462MHz	

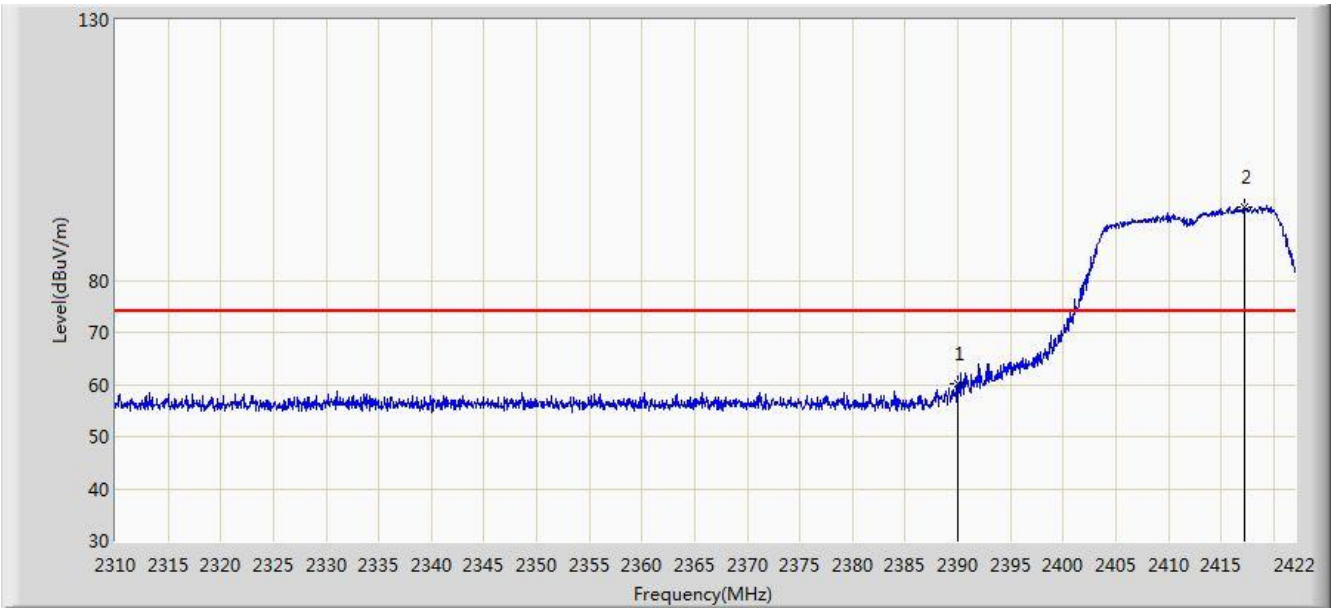


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2456.872	95.392	63.122	N/A	N/A	32.270	AV
2			2483.500	52.857	20.518	-1.143	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	

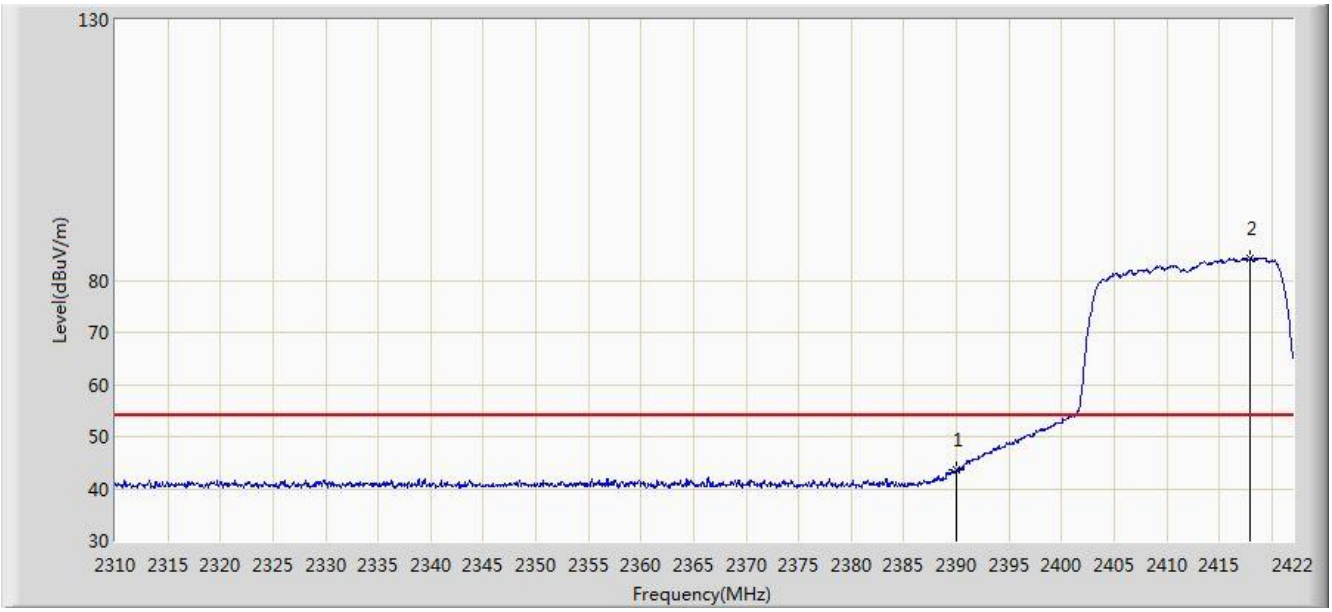


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	60.028	27.701	-13.972	74.000	32.327	PK
2			2417.296	93.965	61.682	N/A	N/A	32.282	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	

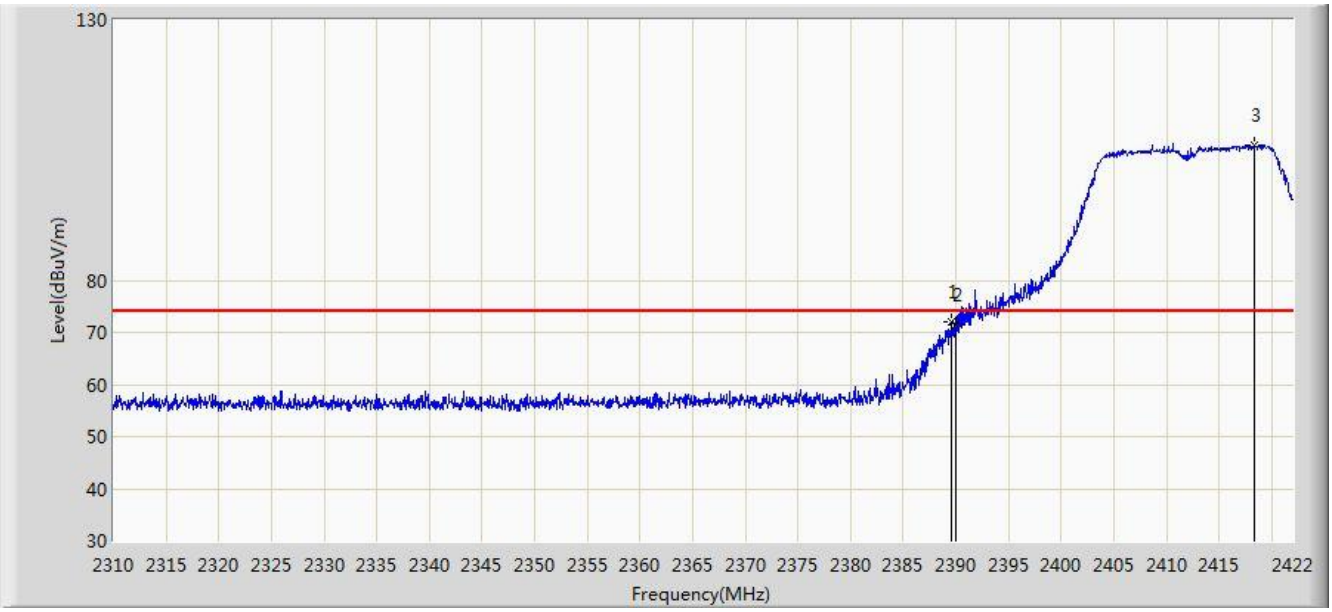


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	43.520	11.193	-10.480	54.000	32.327	AV
2			2417.968	84.230	51.948	N/A	N/A	32.283	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	

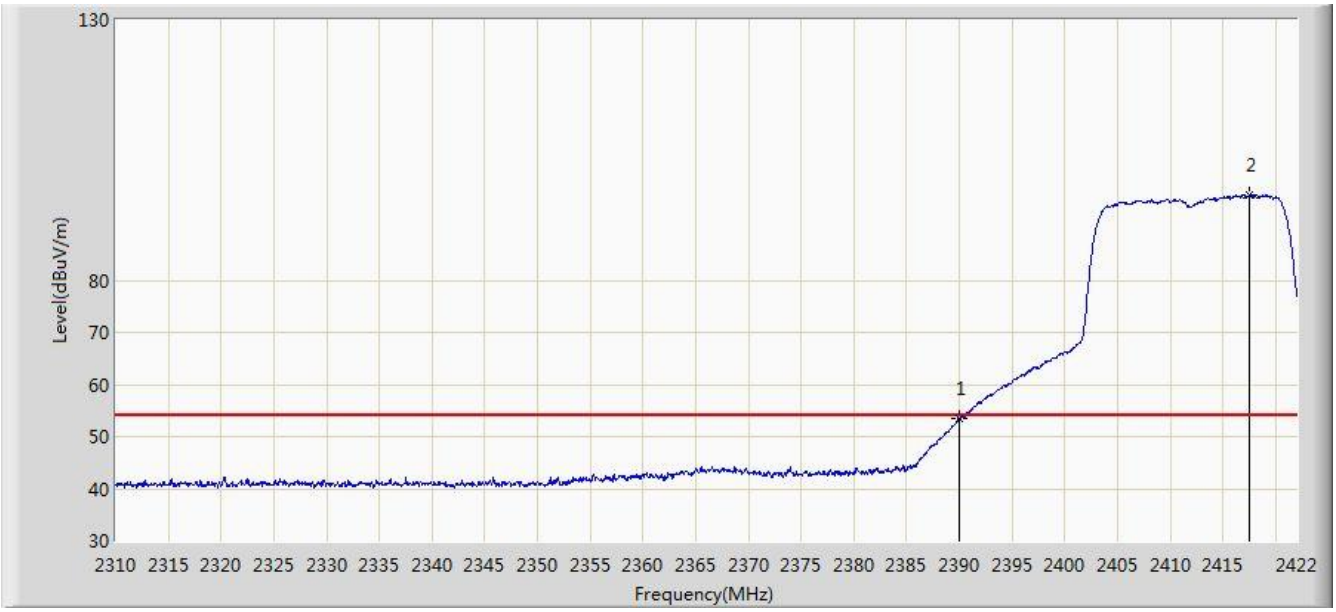


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.632	71.997	39.670	-2.003	74.000	32.328	PK
2			2390.000	71.420	39.093	-2.580	74.000	32.327	PK
3			2418.416	105.979	73.697	N/A	N/A	32.282	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	

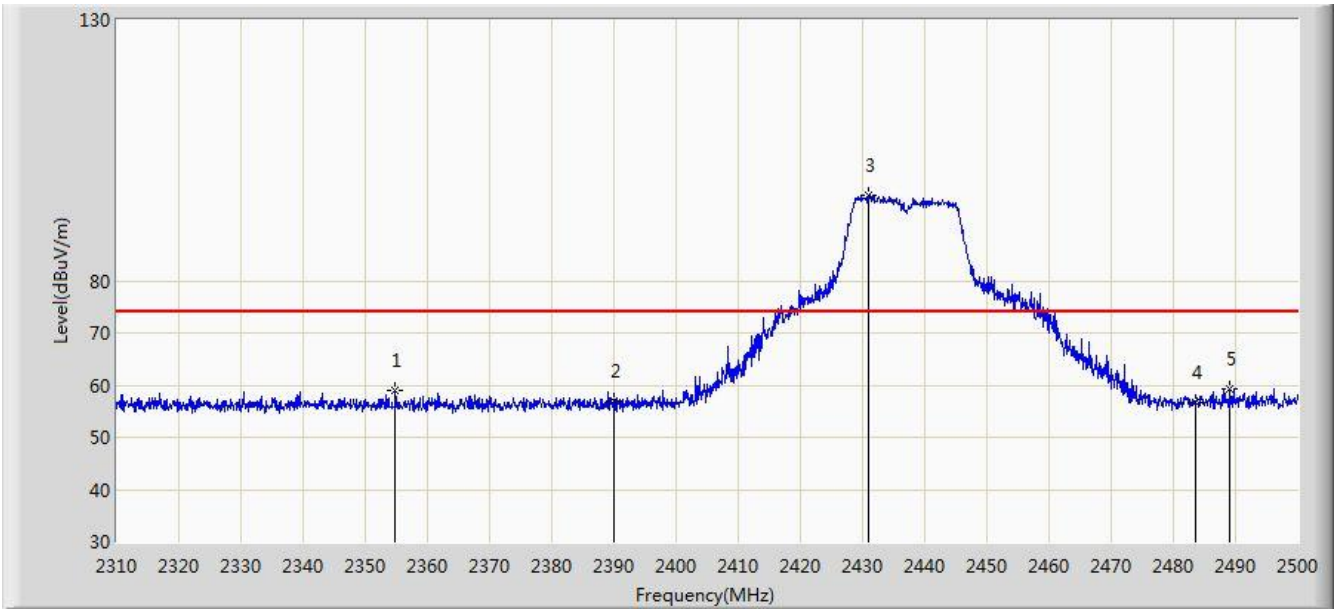


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.374	21.047	-0.626	54.000	32.327	AV
2			2417.520	96.312	64.030	N/A	N/A	32.283	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2437MHz	

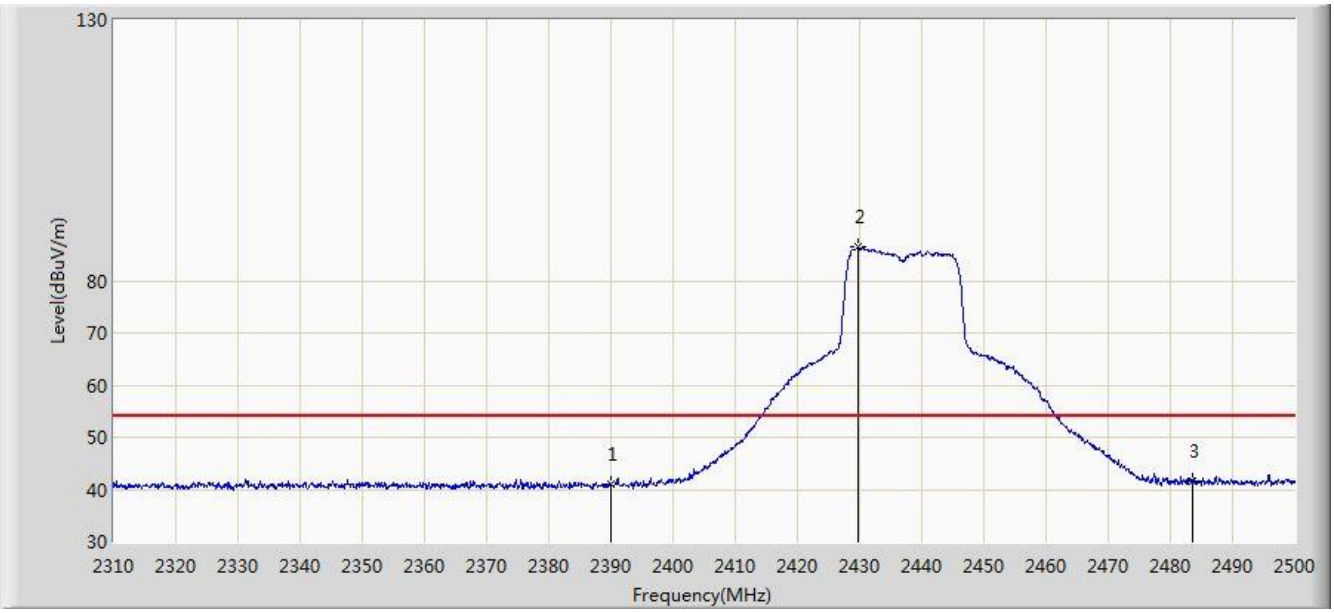


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2354.745	58.885	26.498	-15.115	74.000	32.387	PK
2			2390.000	57.034	24.707	-16.966	74.000	32.327	PK
3			2430.840	96.470	64.197	N/A	N/A	32.273	PK
4			2483.500	56.540	24.201	-17.460	74.000	32.340	PK
5			2489.075	59.344	26.983	-14.656	74.000	32.361	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2437MHz	

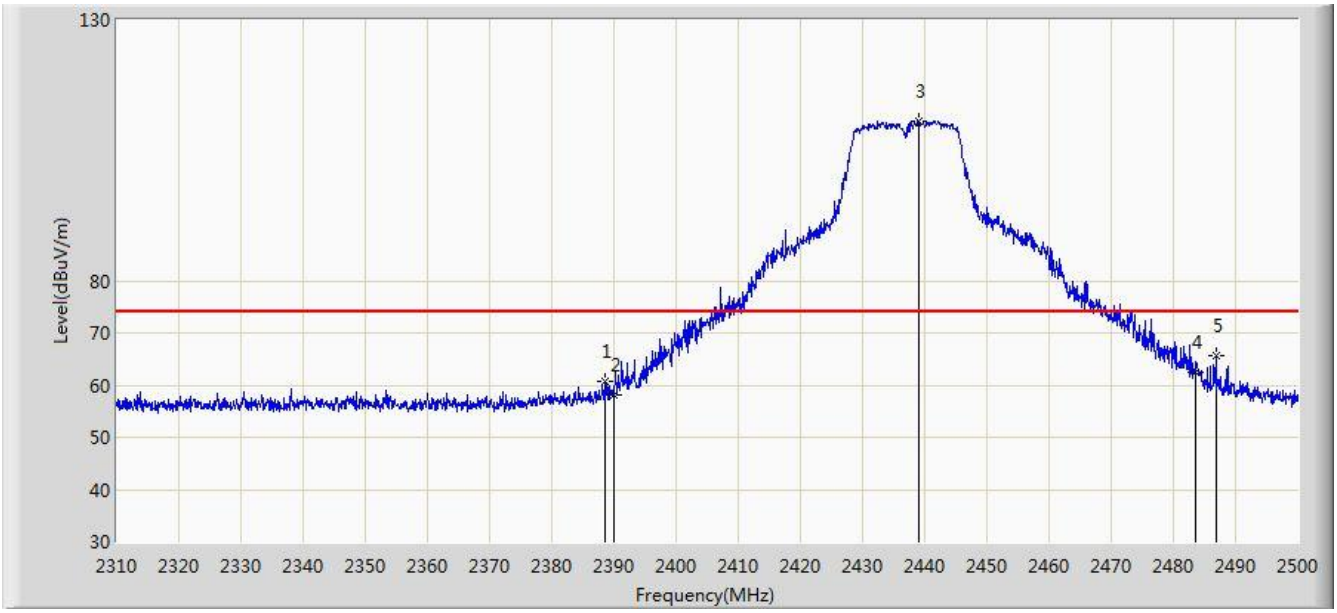


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	40.878	8.551	-13.122	54.000	32.327	AV
2			2429.700	86.379	54.104	N/A	N/A	32.275	AV
3			2483.500	41.670	9.331	-12.330	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2437MHz	

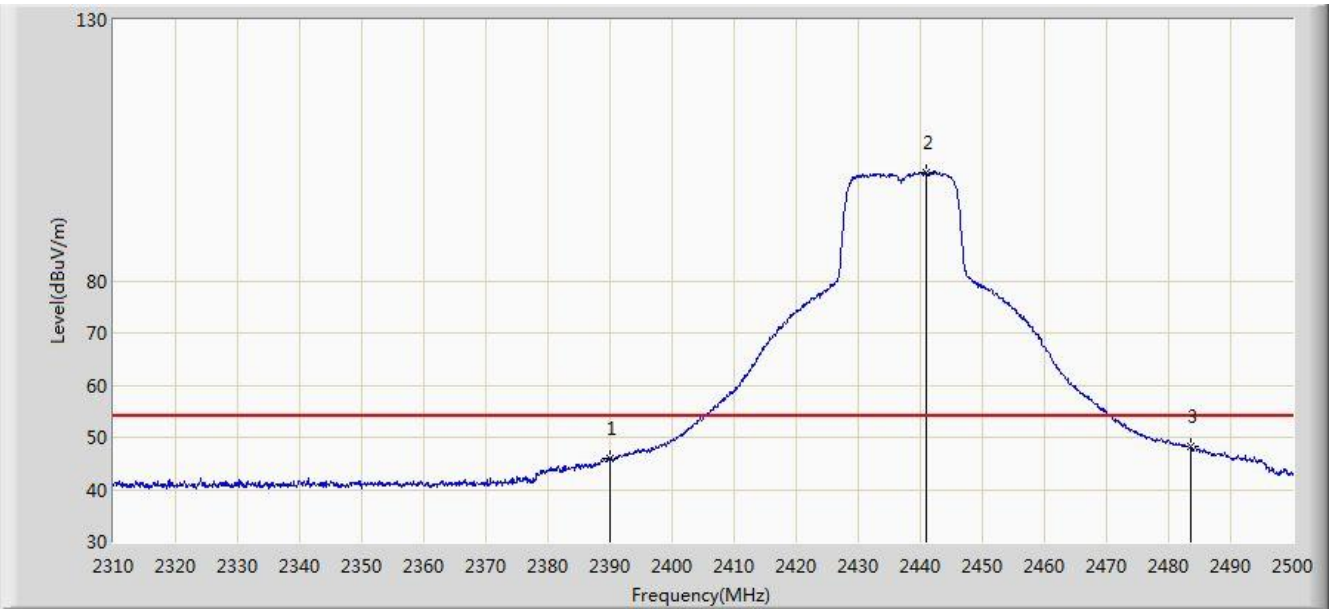


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.470	60.786	28.457	-13.214	74.000	32.329	PK
2			2390.000	58.141	25.814	-15.859	74.000	32.327	PK
3			2439.010	110.685	78.425	N/A	N/A	32.259	PK
4			2483.500	62.422	30.083	-11.578	74.000	32.340	PK
5			2486.795	65.706	33.354	-8.294	74.000	32.353	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2437MHz	

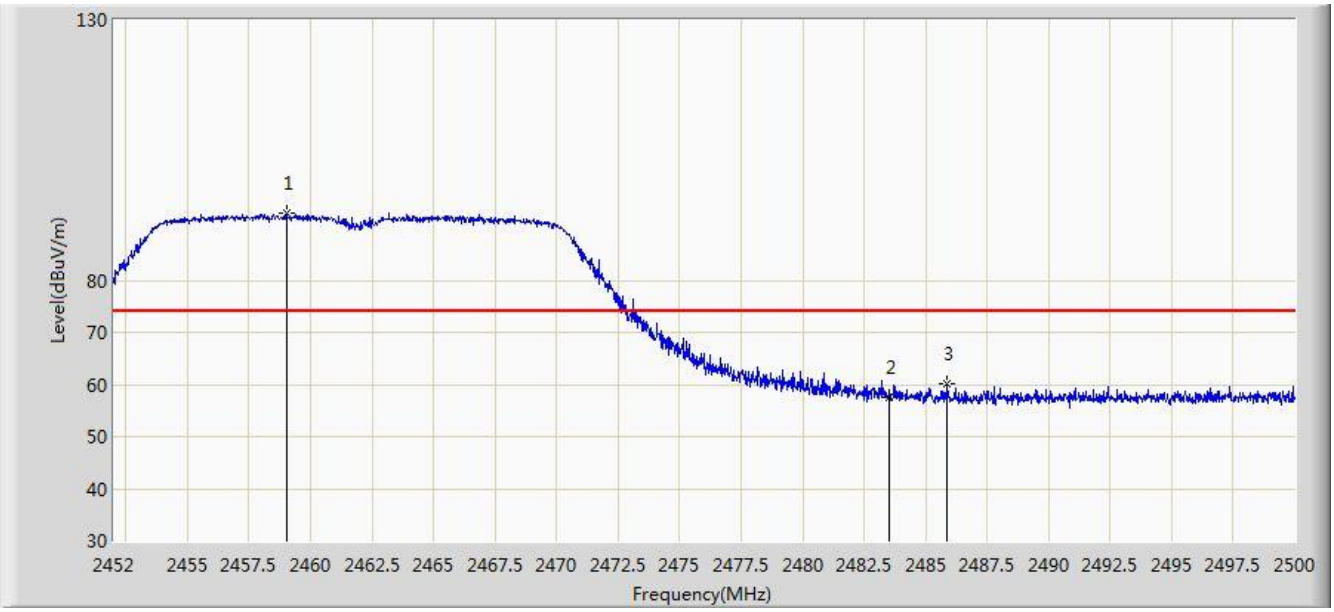


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.806	13.479	-8.194	54.000	32.327	AV
2			2440.910	100.726	68.470	N/A	N/A	32.257	AV
3			2483.500	48.211	15.872	-5.789	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz	

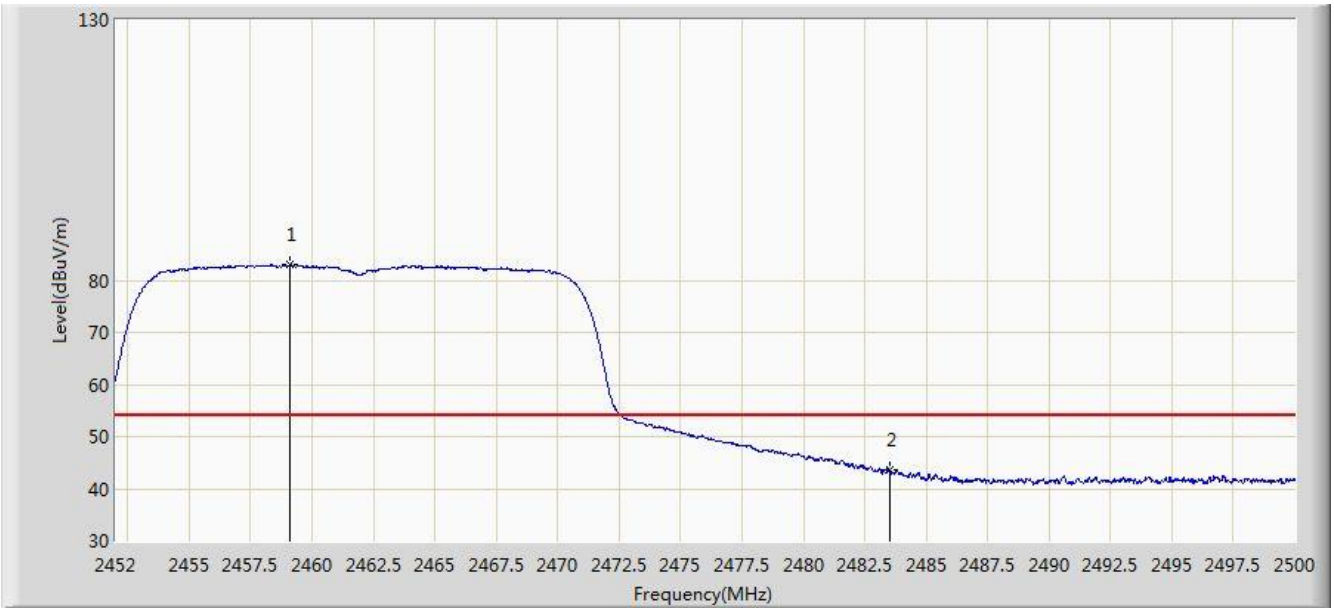


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2459.008	92.956	60.682	N/A	N/A	32.275	PK
2			2483.500	57.612	25.273	-16.388	74.000	32.340	PK
3			2485.888	60.059	27.710	-13.941	74.000	32.349	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz	

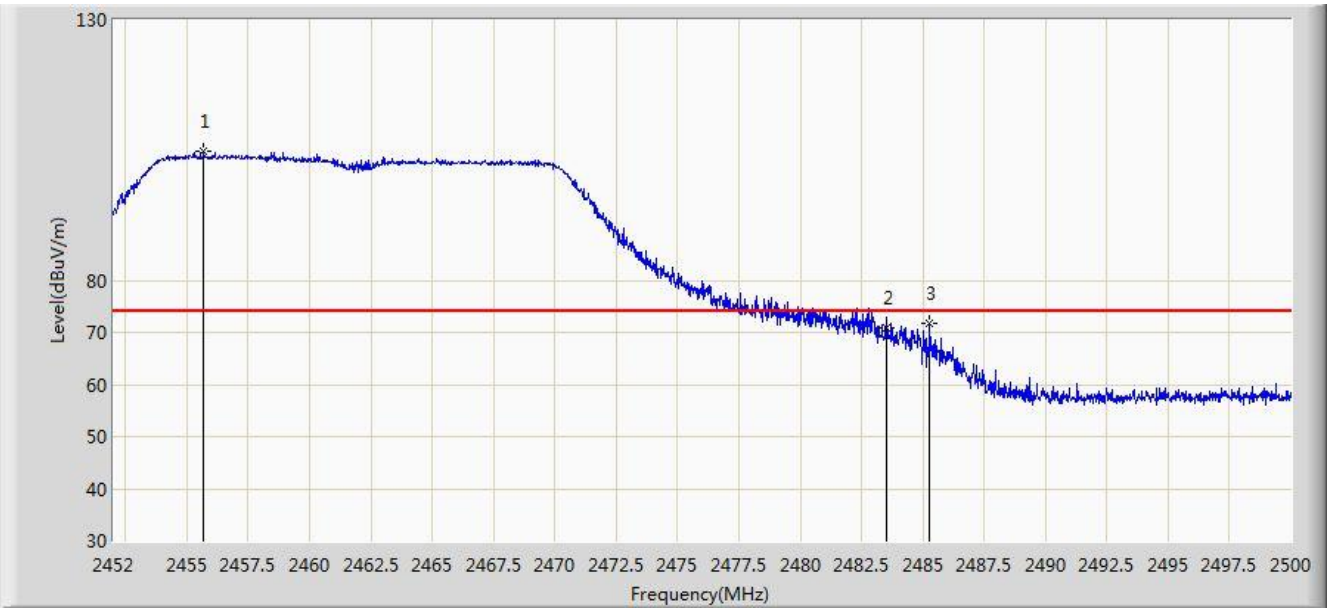


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2459.104	82.955	50.680	N/A	N/A	32.275	AV
2			2483.500	43.727	11.388	-10.273	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 05:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz	

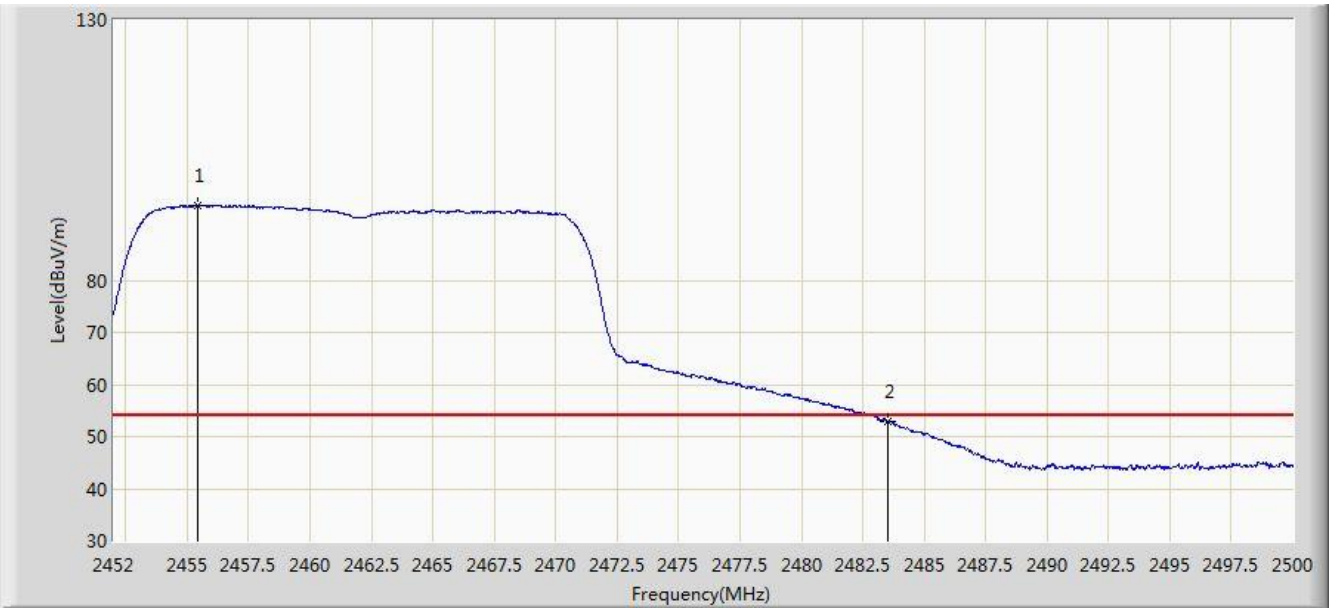


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2455.696	104.821	72.553	N/A	N/A	32.268	PK
2			2483.500	70.818	38.479	-3.182	74.000	32.340	PK
3			2485.264	71.797	39.451	-2.203	74.000	32.346	PK

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

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

Site: AC1	Time: 2018/04/09 - 05:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz	

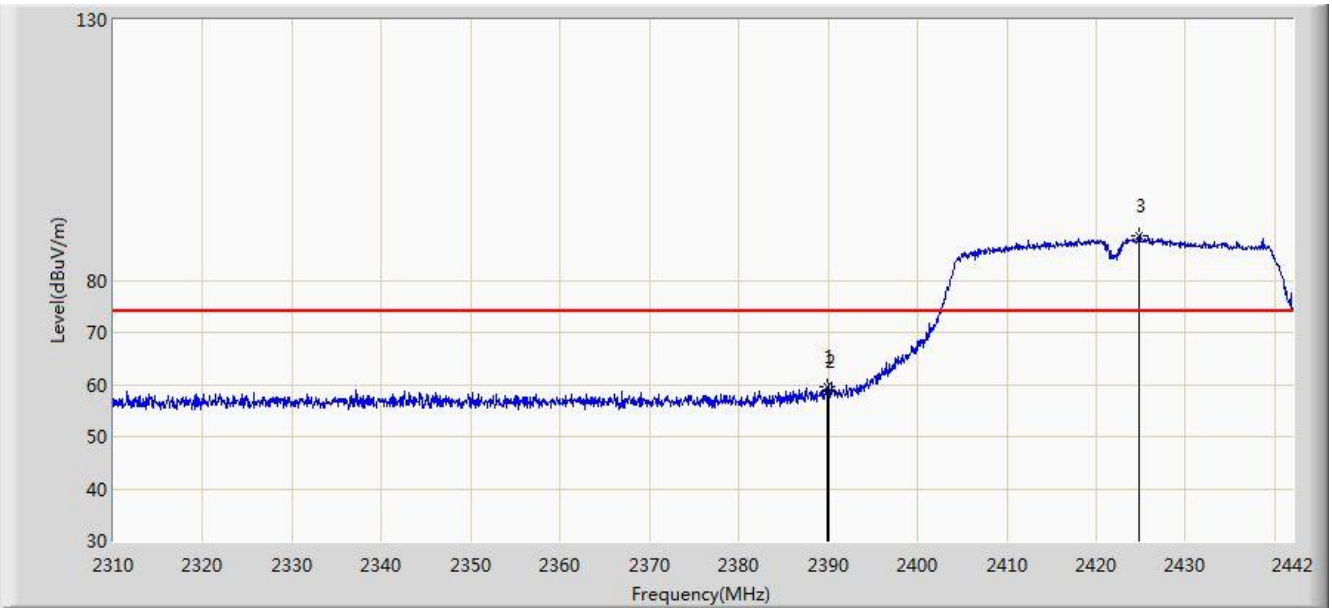


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2455.408	94.322	62.055	N/A	N/A	32.267	AV
2			2483.500	52.819	20.480	-1.181	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 06:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz	

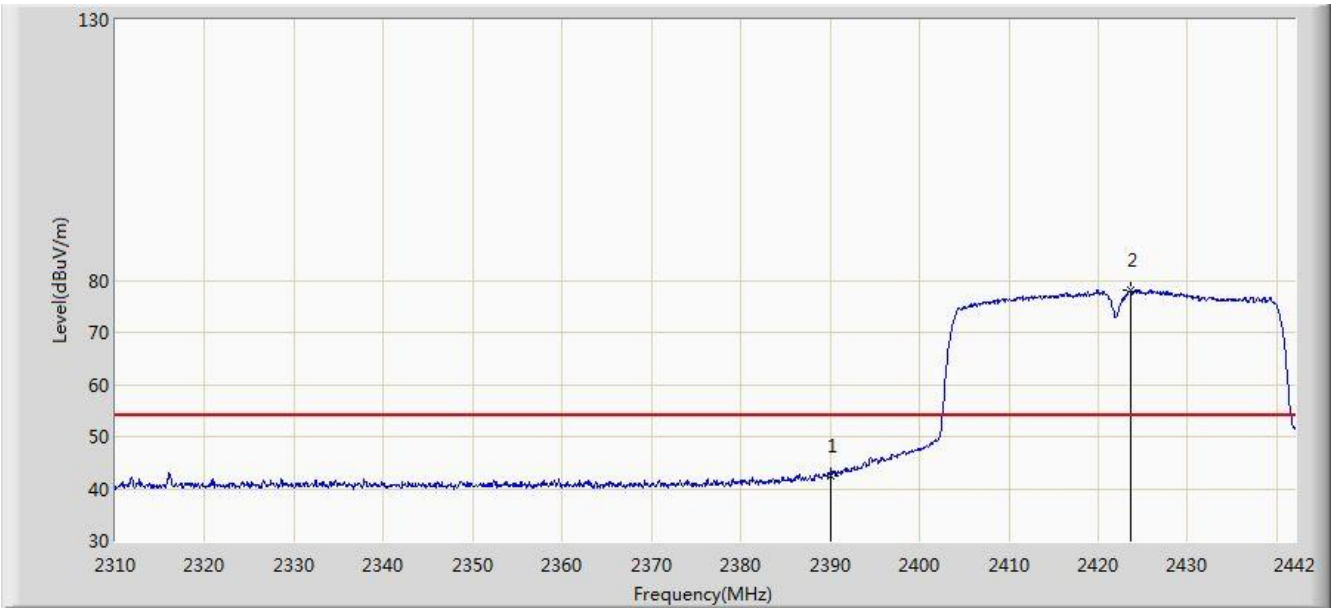


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.860	59.537	27.210	-14.463	74.000	32.327	PK
2			2390.000	58.743	26.416	-15.257	74.000	32.327	PK
3			2424.774	88.460	56.181	N/A	N/A	32.280	PK

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

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

Site: AC1	Time: 2018/04/09 - 06:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz	

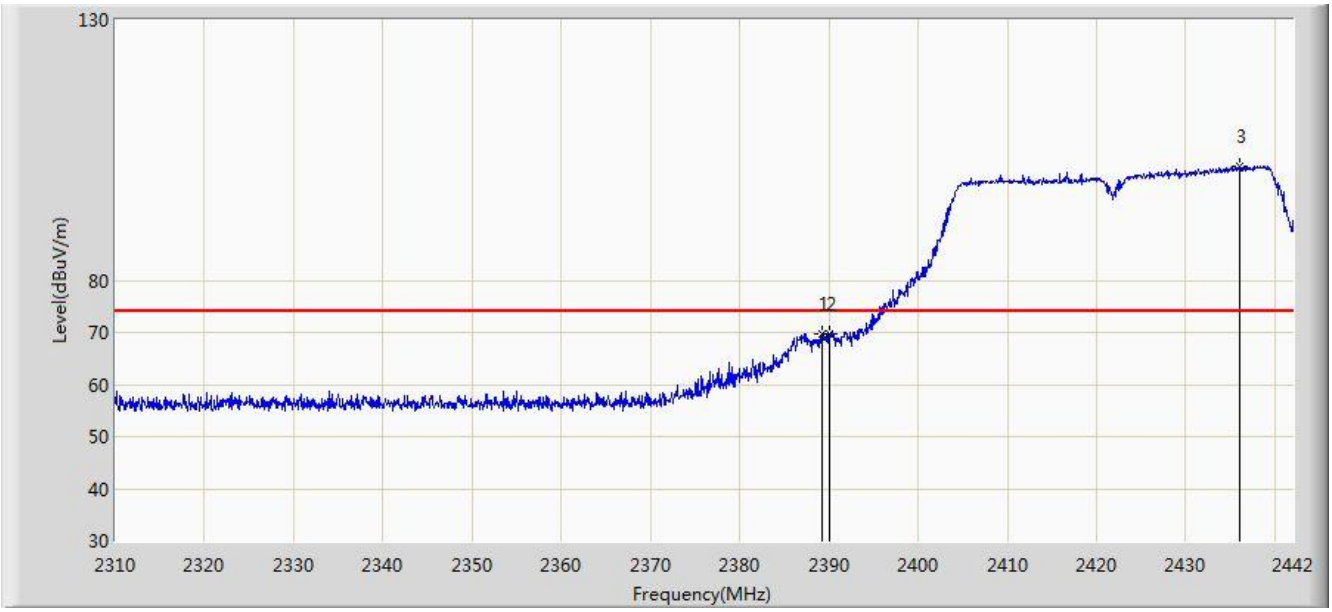


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	42.589	10.262	-11.411	54.000	32.327	AV
2			2423.718	78.042	45.762	N/A	N/A	32.280	AV

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

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

Site: AC1	Time: 2018/04/09 - 06:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz	

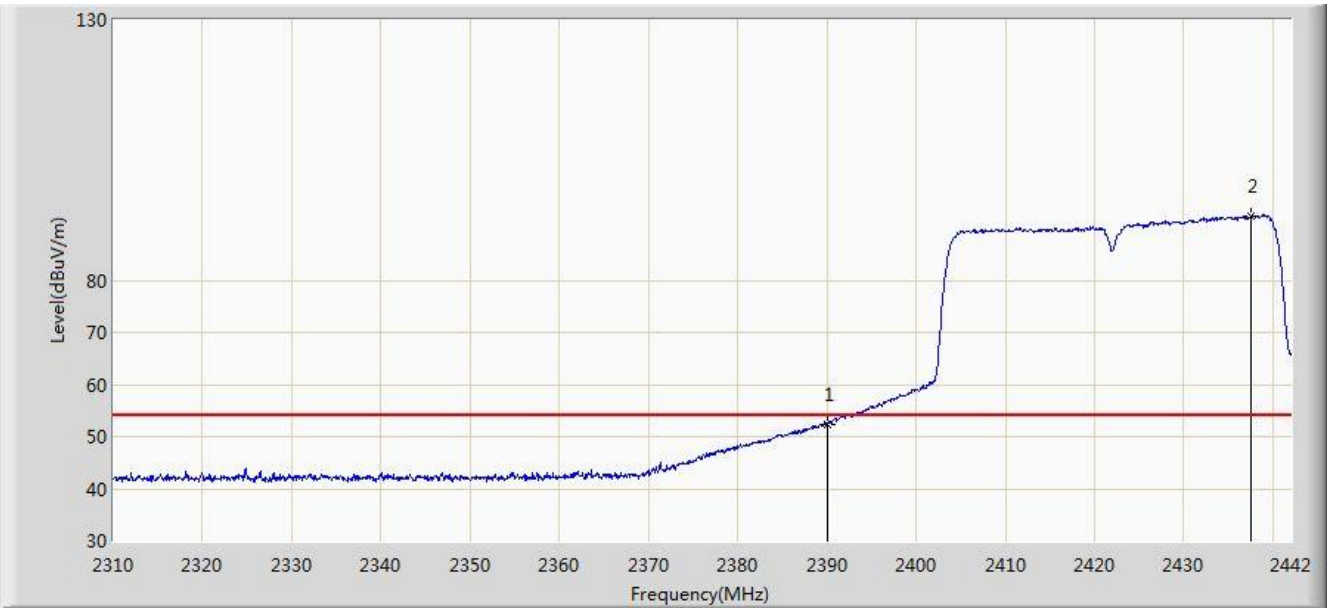


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.200	69.779	37.451	-4.221	74.000	32.328	PK
2			2390.000	69.665	37.338	-4.335	74.000	32.327	PK
3			2435.994	101.964	69.699	N/A	N/A	32.265	PK

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

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

Site: AC1	Time: 2018/04/09 - 06:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz	

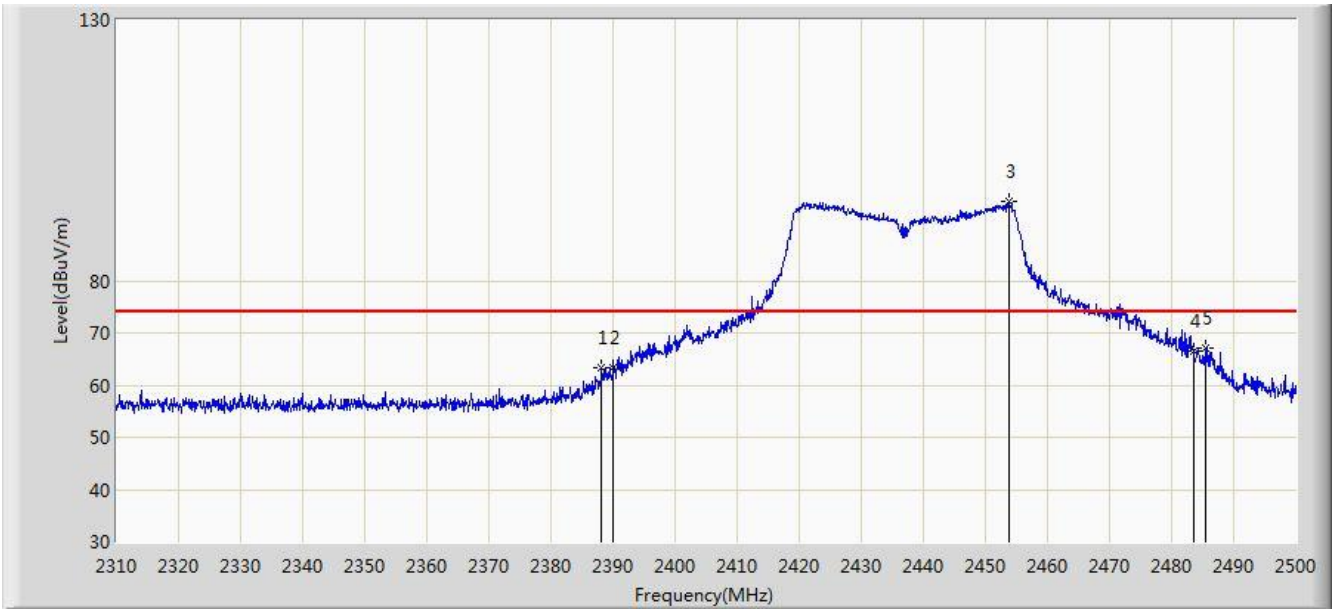


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.286	19.959	-1.714	54.000	32.327	AV
2			2437.578	92.310	60.048	N/A	N/A	32.262	AV

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

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

Site: AC1	Time: 2018/04/09 - 06:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2437MHz	

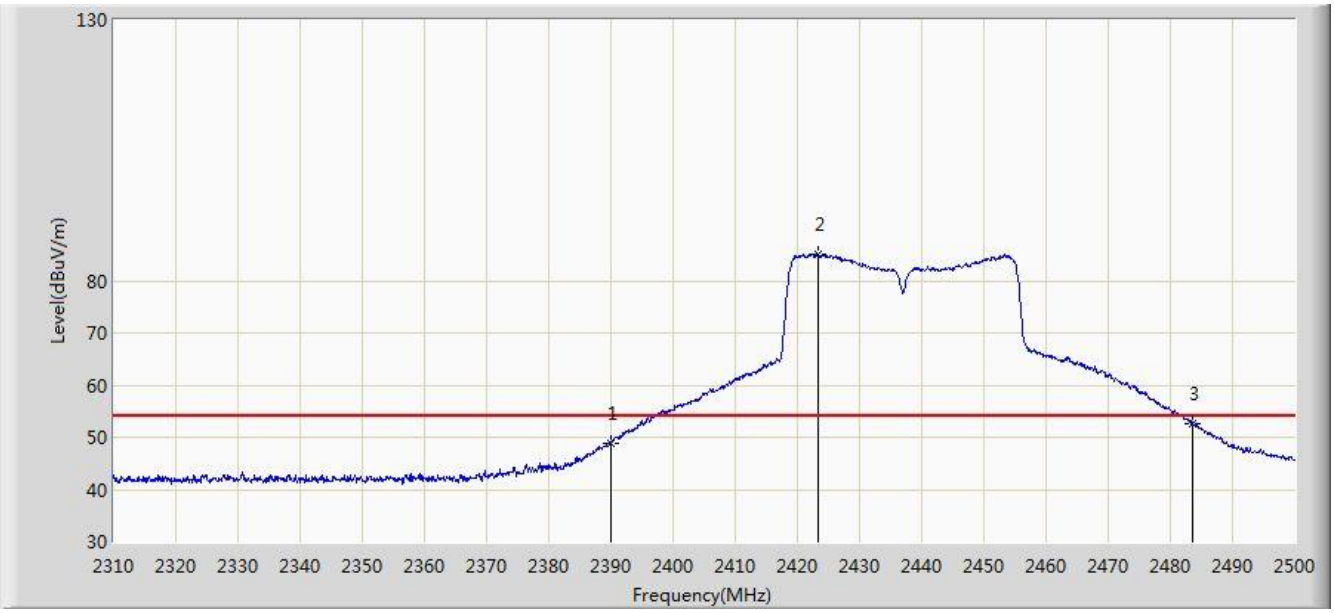


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.090	63.364	31.035	-10.636	74.000	32.330	PK
2			2390.000	63.330	31.003	-10.670	74.000	32.327	PK
3			2453.735	95.104	62.840	N/A	N/A	32.264	PK
4			2483.500	66.494	34.155	-7.506	74.000	32.340	PK
5			2485.465	67.194	34.847	-6.806	74.000	32.347	PK

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

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

Site: AC1	Time: 2018/04/09 - 06:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2437MHz	

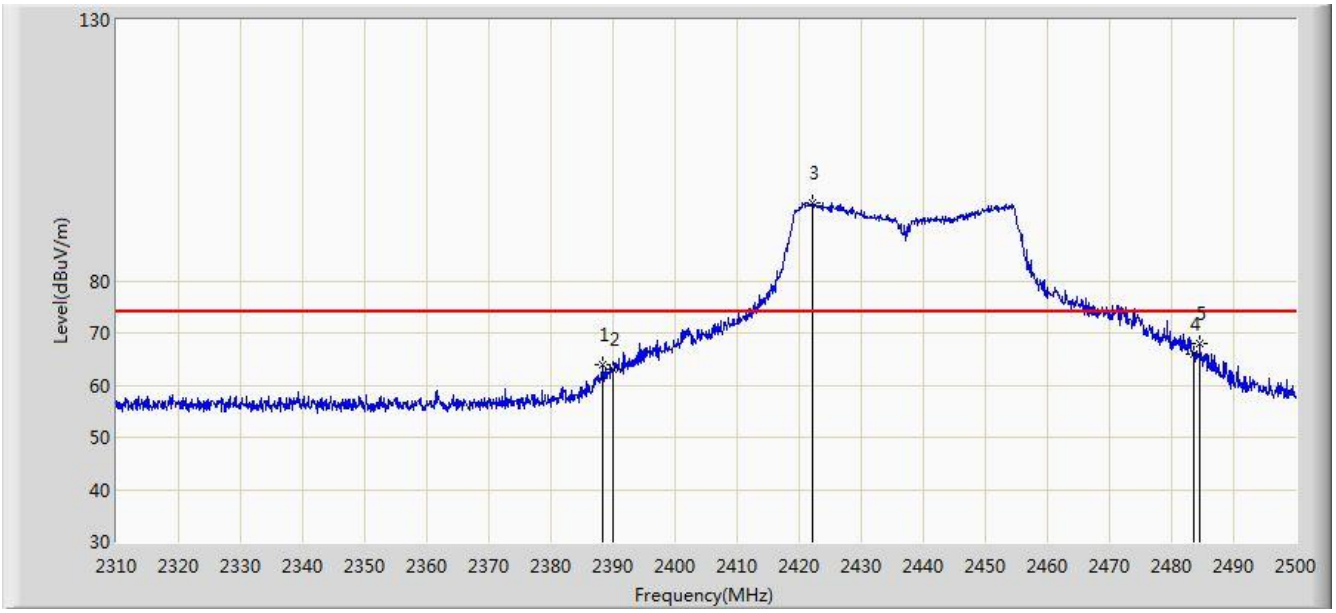


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.960	16.633	-5.040	54.000	32.327	AV
2			2423.240	85.147	52.867	N/A	N/A	32.280	AV
3			2483.500	52.534	20.195	-1.466	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 06:25
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2437MHz	

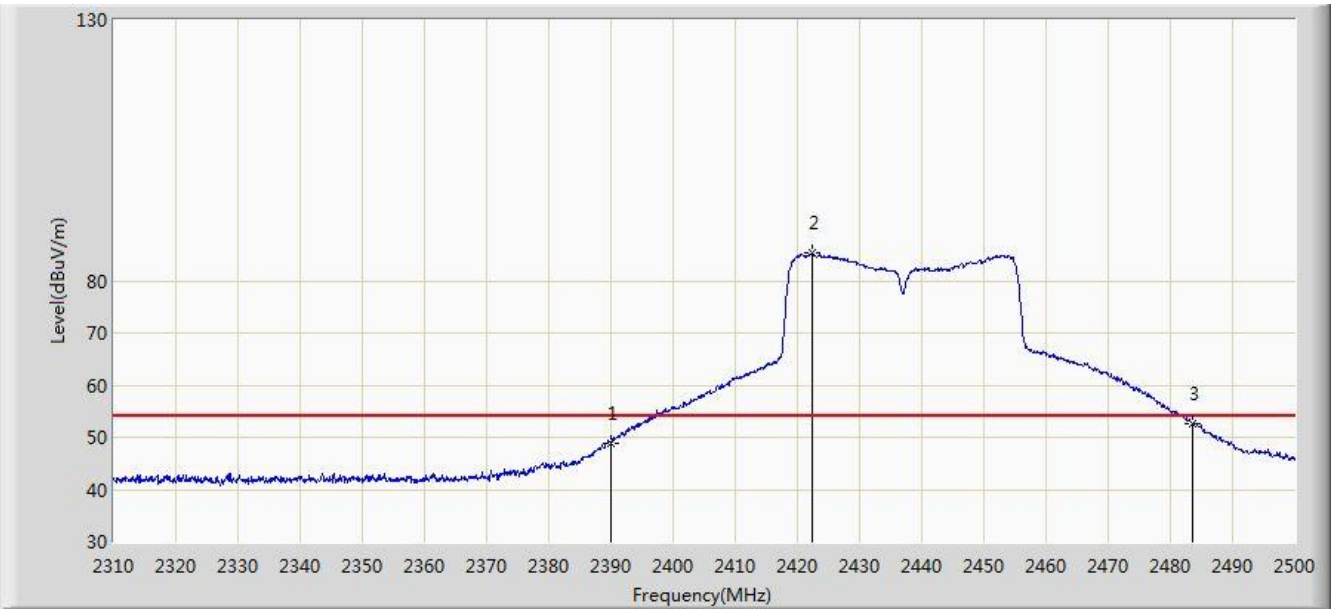


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.280	63.998	31.669	-10.002	74.000	32.329	PK
2			2390.000	62.954	30.627	-11.046	74.000	32.327	PK
3			2422.195	94.895	62.615	N/A	N/A	32.281	PK
4			2483.500	66.022	33.683	-7.978	74.000	32.340	PK
5			2484.610	68.094	35.750	-5.906	74.000	32.344	PK

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

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

Site: AC1	Time: 2018/04/09 - 06:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2437MHz	

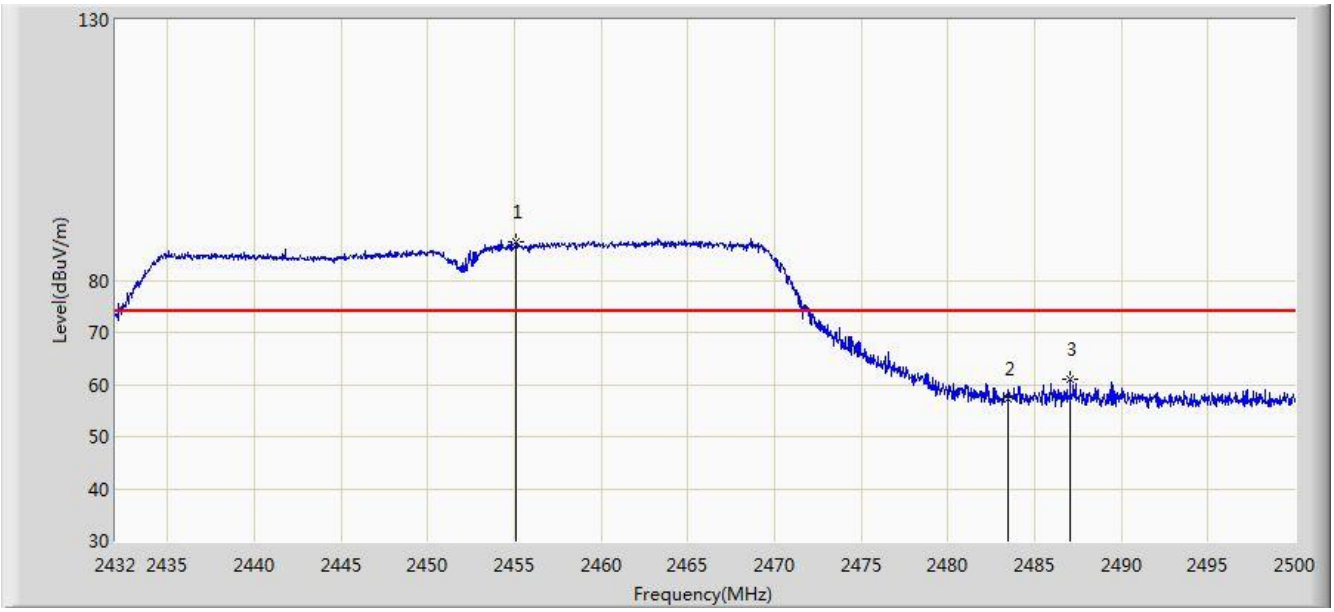


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.975	16.648	-5.025	54.000	32.327	AV
2			2422.480	85.255	52.975	N/A	N/A	32.280	AV
3			2483.500	52.610	20.271	-1.390	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 06:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz	

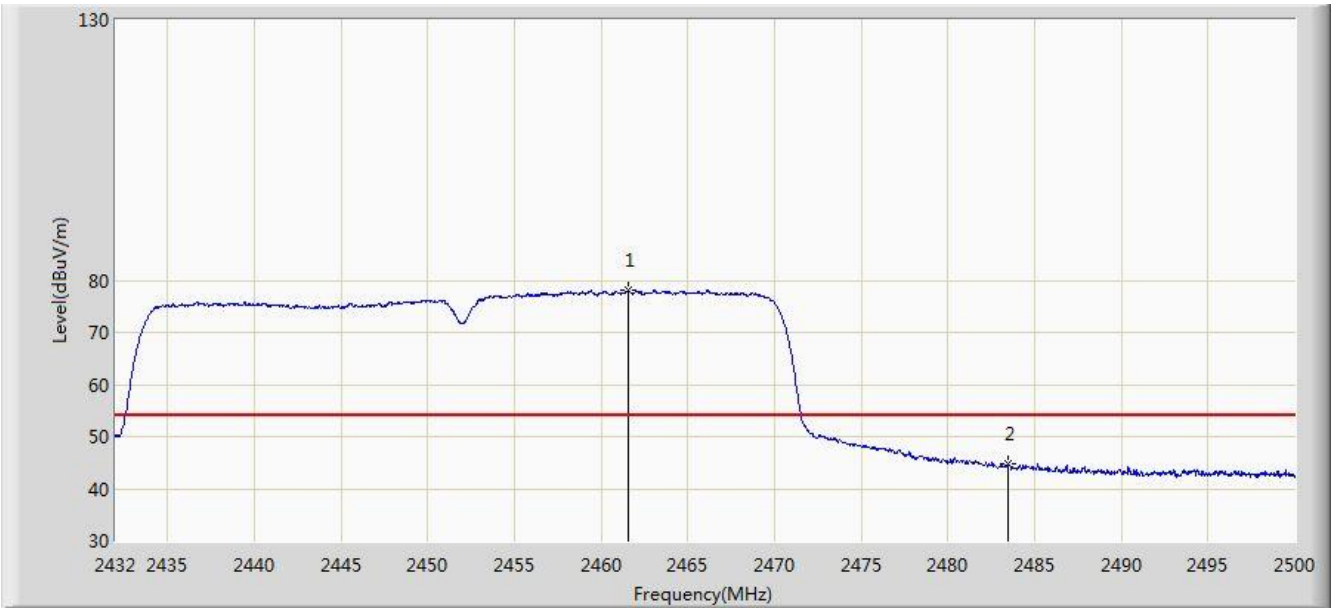


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2455.120	87.373	55.107	N/A	N/A	32.266	PK
2			2483.500	57.311	24.972	-16.689	74.000	32.340	PK
3			2487.046	61.084	28.731	-12.916	74.000	32.353	PK

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

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

Site: AC1	Time: 2018/04/09 - 06:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz	

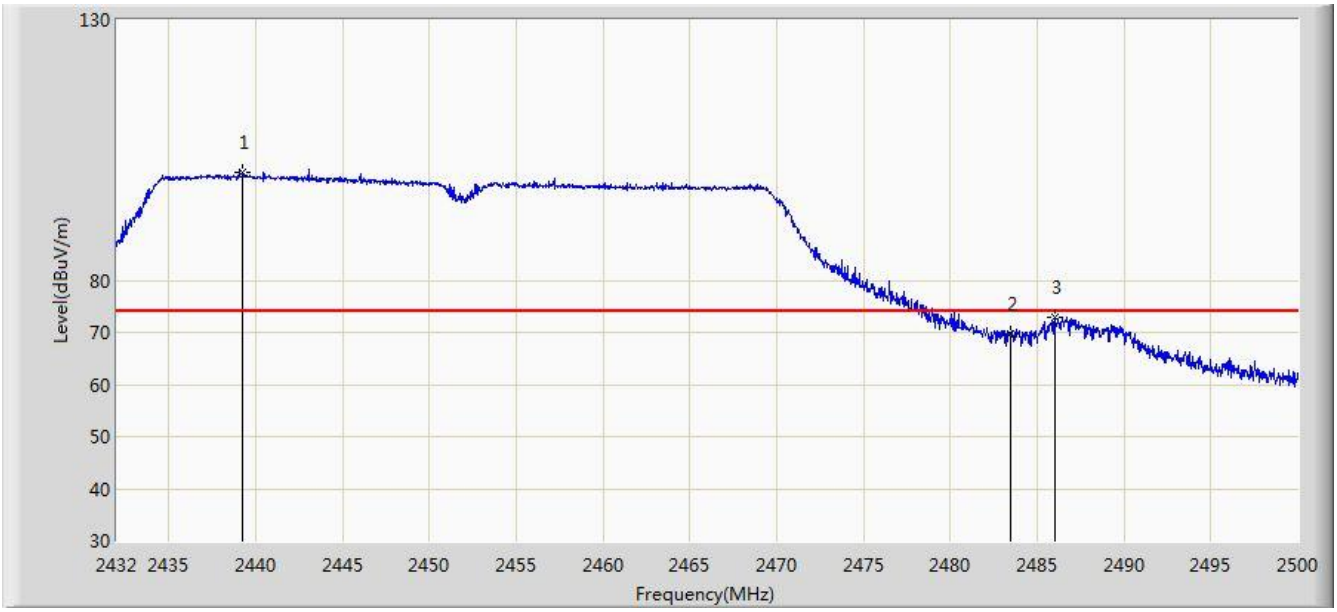


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2461.546	78.019	45.740	N/A	N/A	32.279	AV
2			2483.500	44.753	12.414	-9.247	54.000	32.340	AV

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

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

Site: AC1	Time: 2018/04/09 - 06:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz	

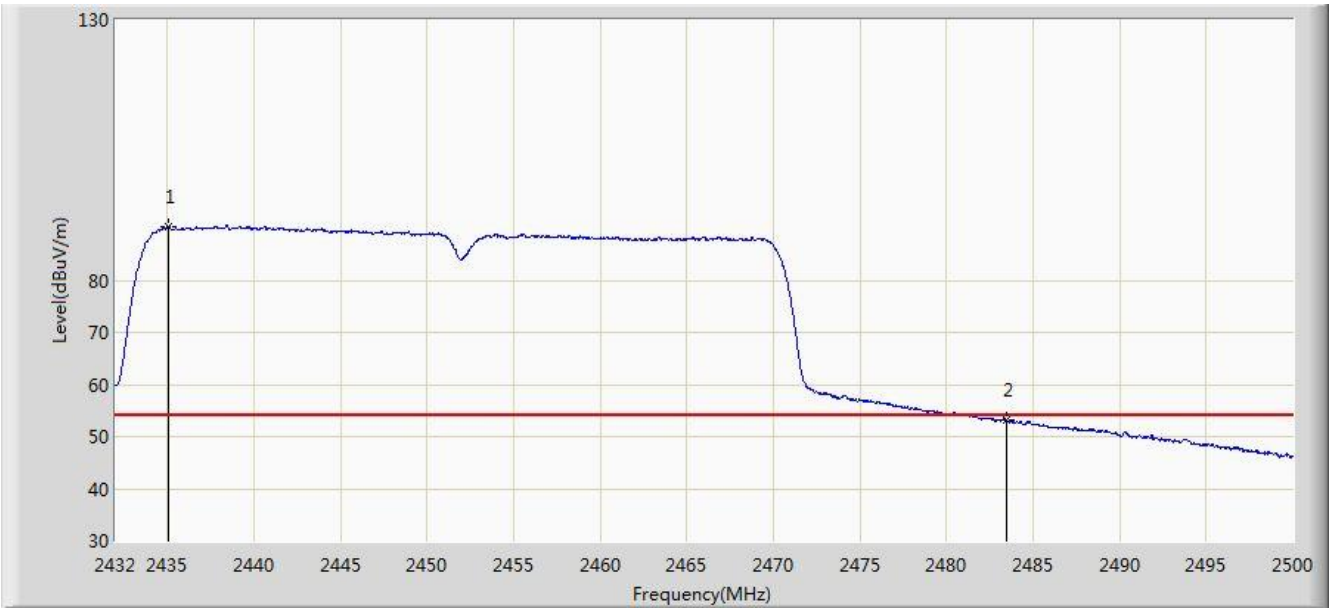


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2439.276	100.790	68.531	N/A	N/A	32.260	PK
2			2483.500	69.764	37.425	-4.236	74.000	32.340	PK
3			2486.026	72.926	40.577	-1.074	74.000	32.349	PK

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

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

Site: AC1	Time: 2018/04/09 - 06:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2435.060	90.422	58.156	N/A	N/A	32.266	AV
2			2483.500	53.205	20.866	-0.795	54.000	32.340	AV

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

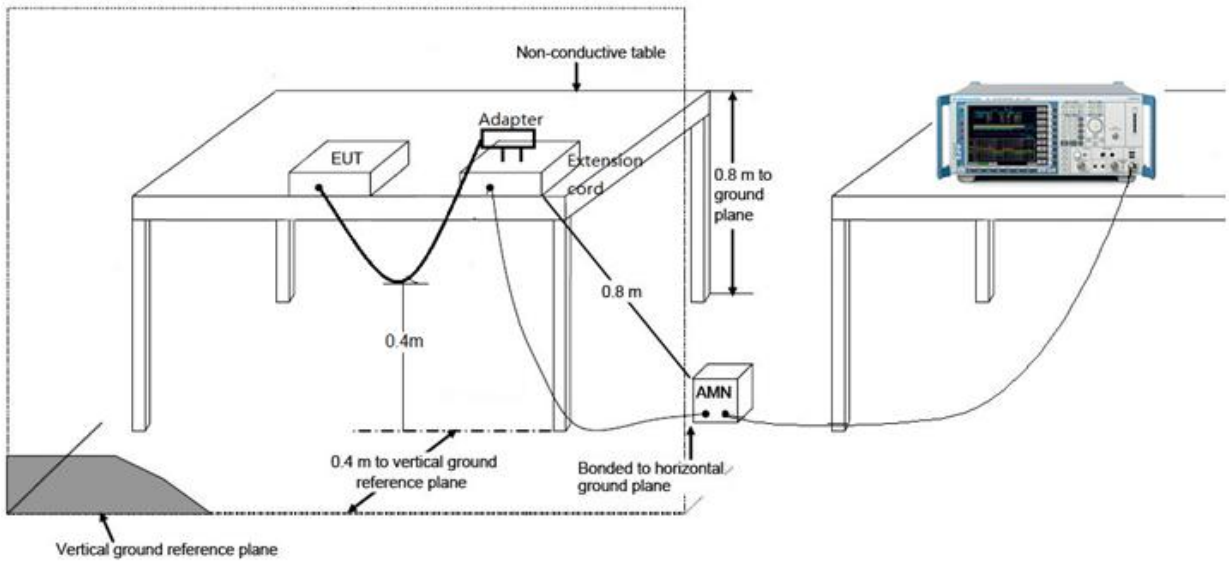
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

7.8. AC Conducted Emissions Measurement

7.8.1.Test Limit

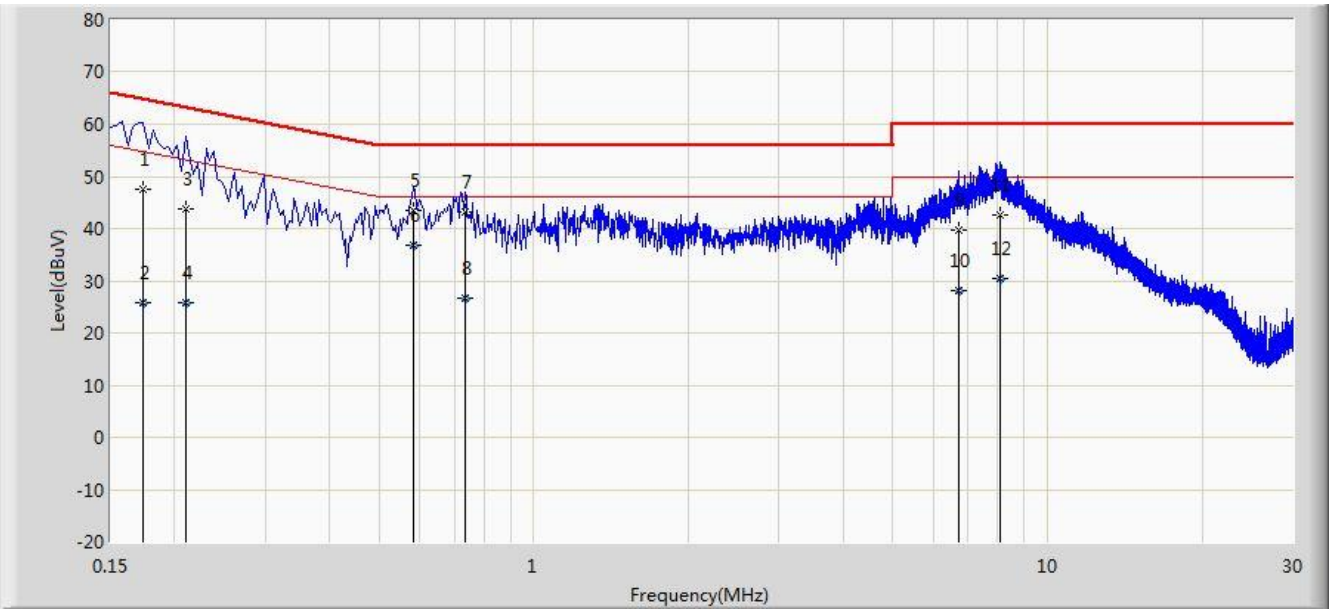
FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 ~ 0.50	66 ~ 56	56 ~ 46
0.50 ~ 5.0	56	46
5.0 ~ 30	60	50
Note 1: The lower limit shall apply at the transition frequencies. Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.		

7.8.2.Test Setup



7.8.3.Test Result

Site: SR2	Time: 2018/04/11 - 15:50
Limit: FCC_Part15.207_CE_AC Power	Engineer: Polly Zong
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode 1	

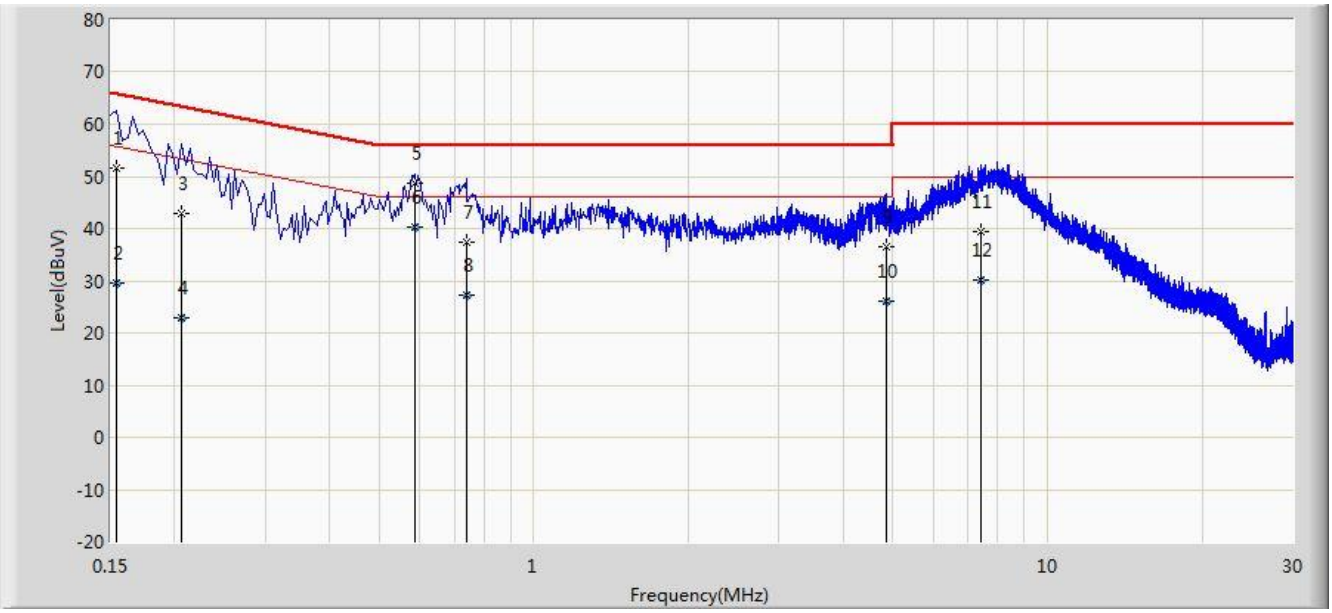


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.174	47.409	37.341	-17.359	64.767	10.068	QP
2			0.174	25.800	15.732	-28.967	54.767	10.068	AV
3			0.210	43.730	33.761	-19.475	63.205	9.969	QP
4			0.210	25.870	15.901	-27.335	53.205	9.969	AV
5			0.582	43.438	33.314	-12.562	56.000	10.124	QP
6		*	0.582	36.719	26.595	-9.281	46.000	10.124	AV
7			0.734	43.079	33.033	-12.921	56.000	10.046	QP
8			0.734	26.777	16.732	-19.223	46.000	10.046	AV
9			6.726	39.589	29.441	-20.411	60.000	10.148	QP
10			6.726	28.173	18.025	-21.827	50.000	10.148	AV
11			8.058	42.635	32.463	-17.365	60.000	10.172	QP
12			8.058	30.404	20.232	-19.596	50.000	10.172	AV

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

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

Site: SR2	Time: 2018/04/11 - 16:01
Limit: FCC_Part15.207_CE_AC Power	Engineer: Polly Zong
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	51.588	40.872	-14.193	65.781	10.716	QP
2			0.154	29.669	18.953	-26.113	55.781	10.716	AV
3			0.206	42.853	32.852	-20.512	63.365	10.001	QP
4			0.206	22.984	12.983	-30.381	53.365	10.001	AV
5			0.586	48.795	38.656	-7.205	56.000	10.139	QP
6		*	0.586	40.393	30.254	-5.607	46.000	10.139	AV
7			0.738	37.400	27.346	-18.600	56.000	10.054	QP
8			0.738	27.264	17.210	-18.736	46.000	10.054	AV
9			4.858	36.634	26.599	-19.366	56.000	10.035	QP
10			4.858	26.127	16.092	-19.873	46.000	10.035	AV
11			7.426	39.346	29.163	-20.654	60.000	10.183	QP
12			7.426	30.274	20.091	-19.726	50.000	10.183	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 **Cassia Bluetooth Router** is in compliance with Part 15C of the FCC Rules and ISED Rules.

The End