

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 [V/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

For RSS-Gen Section 8.10 Requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 8.10 of RSS-Gen, must also comply with the radiated emission limits specified in Section 8.9.

Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.009 ~ 0.110	240 ~ 285	9.0 ~ 9.2
2.1735 ~ 2.1905	322 ~ 335.4	9.3 ~ 9.5
3.020 ~ 3.026	399.9 ~ 410	10.6 ~ 12.7
4.125 ~ 4.128	608 ~ 614	13.25 ~ 13.4
4.17725 ~ 4.17775	960 ~ 1427	14.47 ~ 14.5
4.20725 ~ 4.20775	1435 ~ 1626.5	15.35 ~ 16.2
5.677 ~ 5.683	1645.5 ~ 1646.5	17.7 ~ 21.4
6.215 ~ 6.218	1660 ~ 1710	22.01 ~ 23.12
6.26775 ~ 6.26825	1718.8 ~ 1722.2	23.6 ~ 24.0
6.31175 ~ 6.31225	2200 ~ 2300	31.2 ~ 31.8
8.291 ~ 8.294	2310 ~ 2390	36.43 ~ 36.5
8.362 ~ 8.366	2655 ~ 2900	Above 38.6
8.37625 ~ 8.38675	3260 ~ 3267	--
8.41425 ~ 8.41475	3332 ~ 3339	
12.29 ~ 12.293	334.5 ~ 3358	
12.51975 ~ 12.52025	3500 ~ 4400	
12.57675 ~ 12.57725	4500 ~ 5150	
13.36 ~ 13.41	5350 ~ 5460	
16.42 ~ 16.423	7250 ~ 7750	
16.69475 ~ 16.69525	8025 ~ 8500	
16.80425 ~ 16.80475	--	
25.5 ~ 25.67		
37.5 ~ 38.25		
73 ~ 74.6		
74.8 ~ 75.2		
108 ~ 138		
156.52475 ~ 156.525225		
156.7 ~ 156.9		

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

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

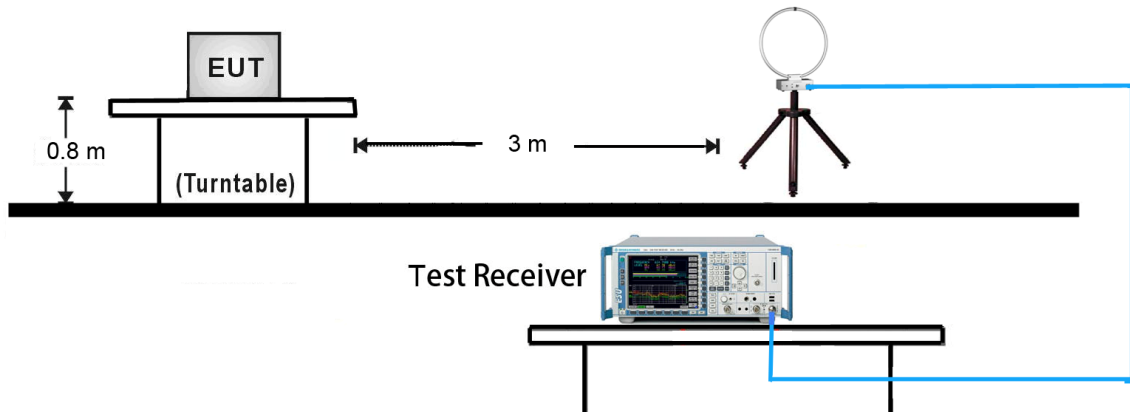
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

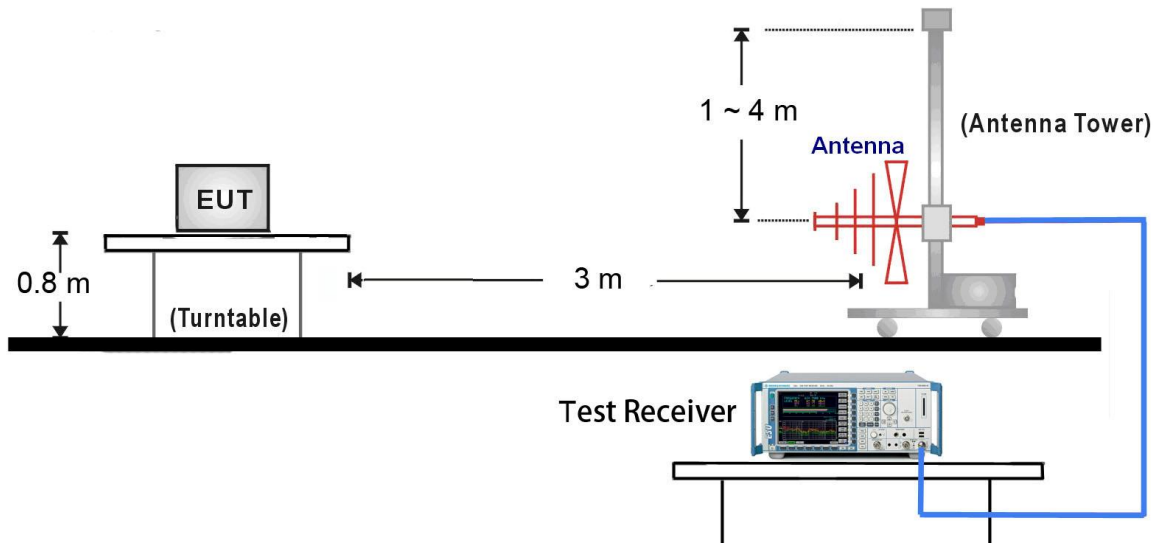
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz. If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4.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

7.6.4. Test Setup

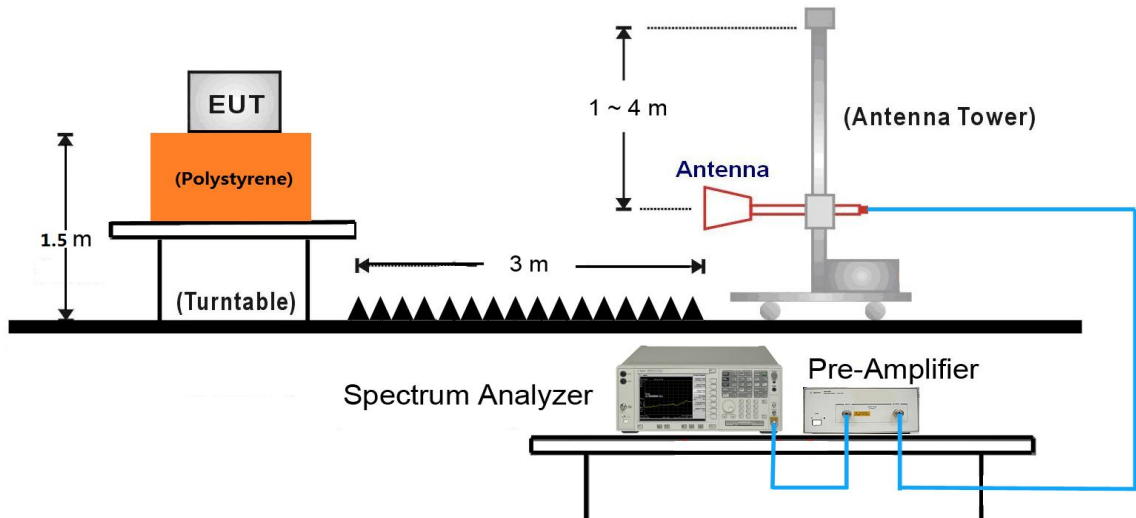
9kHz ~ 30MHz Test Setup:



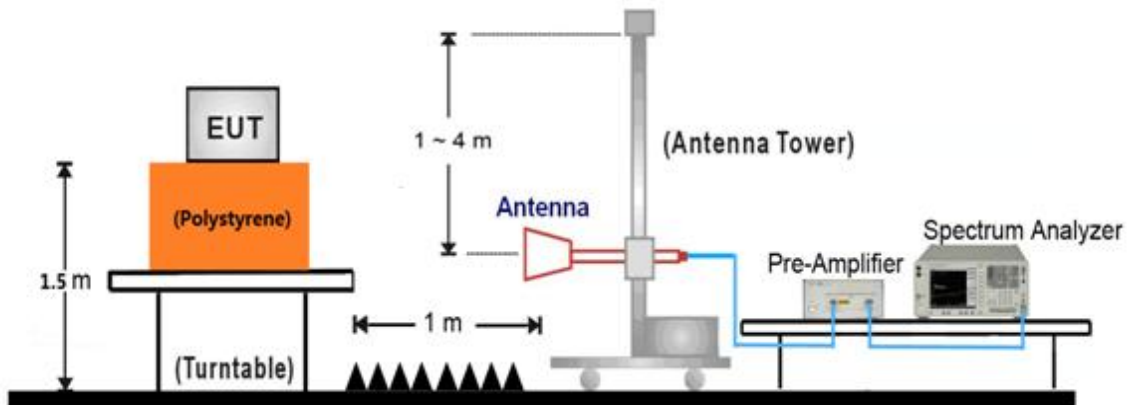
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~ 25GHz Test Setup:



7.6.5. Test Result

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	01	Test Engineer:	Will Yan
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4825.0	40.0	2.7	42.7	74.0	-31.3	Peak	Horizontal
*	7230.5	42.2	7.8	50.0	87.8	-37.8	Peak	Horizontal
	9109.0	37.4	9.4	46.8	74.0	-27.2	Peak	Horizontal
*	9600.2	34.4	10.9	45.3	87.8	-42.5	Peak	Horizontal
	5418.3	35.4	3.3	38.7	74.0	-35.3	Peak	Vertical
*	7239.0	38.9	7.8	46.7	87.8	-41.1	Peak	Vertical
	9182.3	34.9	10.0	44.9	74.0	-29.1	Peak	Vertical
*	12817.3	33.9	11.8	45.7	87.8	-42.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (107.8dB μ V/m) or 15.209 which is higher.

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

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

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	06	Test Engineer:	Will Yan
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	7307.0	43.2	8.0	51.2	74.0	-22.8	Peak	Horizontal
*	8627.3	35.5	8.8	44.3	89.7	-45.4	Peak	Horizontal
	9182.4	35.1	10.0	45.1	74.0	-28.9	Peak	Horizontal
*	12718.3	33.9	11.7	45.6	89.7	-44.1	Peak	Horizontal
	4829.3	35.2	2.7	37.9	74.0	-36.1	Peak	Vertical
*	6829.3	34.5	6.2	40.7	89.7	-49.0	Peak	Vertical
	9182.4	34.2	10.0	44.2	74.0	-29.8	Peak	Vertical
*	12718.3	33.9	11.7	45.6	89.7	-44.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (109.7dB μ V/m) or 15.209 which is higher.

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

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

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	11	Test Engineer:	Will Yan
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4927.0	39.0	2.8	41.8	74.0	-32.2	Peak	Horizontal
*	6102.2	33.7	4.3	38.0	83.6	-45.6	Peak	Horizontal
	7383.5	42.2	7.9	50.1	74.0	-23.9	Peak	Horizontal
*	12783.3	33.5	11.7	45.2	83.6	-38.4	Peak	Horizontal
	7383.5	37.5	7.9	45.4	74.0	-28.6	Peak	Vertical
*	8632.3	34.4	8.8	43.2	83.6	-40.4	Peak	Vertical
	9420.3	33.5	10.6	44.1	74.0	-29.9	Peak	Vertical
*	12728.3	32.9	11.6	44.5	83.6	-39.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (103.6dB μ V/m) or 15.209 which is higher.

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

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

Test Mode:	802.11g	Test Site:	AC1
Test Channel:	01	Test Engineer:	Will Yan
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
	4829.4	36.2	2.7	38.9	74.0	-35.1	Peak	Horizontal
*	7230.5	45.5	7.8	53.3	85.9	-32.6	Peak	Horizontal
	9182.2	33.6	10.0	43.6	74.0	-30.4	Peak	Horizontal
*	12728.2	32.7	11.6	44.3	85.9	-41.6	Peak	Horizontal
	4820.3	34.7	2.7	37.4	74.0	-36.6	Peak	Vertical
*	6928.4	33.6	6.6	40.2	85.9	-45.7	Peak	Vertical
	9488.4	33.8	10.6	44.4	74.0	-29.6	Peak	Vertical
*	12738.3	33.3	11.7	45.0	85.9	-40.9	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)

Test Mode:	802.11g	Test Site:	AC1
Test Channel:	06	Test Engineer:	Will Yan
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
	7308.5	46.6	8.0	54.6	74.0	-19.4	Peak	Horizontal
	7308.5	34.0	8.0	42.0	54.0	-12.0	Average	Horizontal
*	8637.3	34.3	8.8	43.1	88.6	-45.5	Peak	Horizontal
	9428.4	33.9	10.5	44.4	74.0	-29.6	Peak	Horizontal
*	12728.2	33.1	11.6	44.7	88.6	-43.9	Peak	Horizontal
	4827.3	35.6	2.7	38.3	74.0	-35.7	Peak	Vertical
*	6281.3	34.2	4.9	39.1	88.6	-49.5	Peak	Vertical
	7307.0	38.7	8.0	46.7	74.0	-27.3	Peak	Vertical
*	12718.1	33.8	11.7	45.5	88.6	-43.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (108.6dBμV/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:	Will Yan
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4827.2	35.1	2.7	37.8	74.0	-36.2	Peak	Horizontal
*	6029.3	34.5	4.1	38.6	86.5	-47.9	Peak	Horizontal
	7383.5	42.8	7.9	50.7	74.0	-23.3	Peak	Horizontal
*	9283.3	33.8	10.3	44.1	86.5	-42.4	Peak	Horizontal
	4829.1	35.4	2.7	38.1	74.0	-35.9	Peak	Vertical
*	6172.1	33.6	4.6	38.2	86.5	-48.3	Peak	Vertical
	7383.5	37.9	7.9	45.8	74.0	-28.2	Peak	Vertical
*	9218.2	34.3	10.1	44.4	86.5	-42.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.5dB μ V/m) or 15.209 which is higher.

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

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

Test Mode:	802.11n-HT20	Test Site:	AC1
Test Channel:	01	Test Engineer:	Will Yan
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
	4829.2	36.9	2.7	39.6	74.0	-34.4	Peak	Horizontal
*	7239.0	44.7	7.8	52.5	86.4	-33.9	Peak	Horizontal
	9182.3	34.8	10.0	44.8	74.0	-29.2	Peak	Horizontal
*	9628.3	34.1	11.0	45.1	86.4	-41.3	Peak	Horizontal
	4829.2	35.3	2.7	38.0	74.0	-36.0	Peak	Vertical
*	7230.5	36.8	7.8	44.6	86.4	-41.8	Peak	Vertical
	9182.2	34.0	10.0	44.0	74.0	-30.0	Peak	Vertical
*	12738.3	33.8	11.7	45.5	86.4	-40.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.4dBμV/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:	Will Yan
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4722.3	34.9	2.4	37.3	74.0	-36.7	Peak	Horizontal
*	6039.3	34.5	4.1	38.6	88.5	-49.9	Peak	Horizontal
	7307.0	44.3	8.0	52.3	74.0	-21.7	Peak	Horizontal
*	9482.4	34.1	10.6	44.7	88.5	-43.8	Peak	Horizontal
	4728.4	34.2	2.5	36.7	74.0	-37.3	Peak	Vertical
*	6172.4	33.4	4.6	38.0	88.5	-50.5	Peak	Vertical
	7307.0	38.1	8.0	46.1	74.0	-27.9	Peak	Vertical
*	9273.9	33.4	10.3	43.7	88.5	-44.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (108.5dB μ V/m) or 15.209 which is higher.

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

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

Test Mode:	802.11n-HT20	Test Site:	AC1
Test Channel:	11	Test Engineer:	Will Yan
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4829.3	35.0	2.7	37.7	74.0	-36.3	Peak	Horizontal
*	6023.2	34.3	4.2	38.5	86.9	-48.4	Peak	Horizontal
	7383.5	42.0	7.9	49.9	74.0	-24.1	Peak	Horizontal
*	9683.3	33.2	10.9	44.1	86.9	-42.8	Peak	Horizontal
	4829.4	35.0	2.7	37.7	74.0	-36.3	Peak	Vertical
*	6039.0	34.6	4.1	38.7	86.9	-48.2	Peak	Vertical
	7582.3	34.6	8.2	42.8	74.0	-31.2	Peak	Vertical
*	9683.3	34.0	10.9	44.9	86.9	-42.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.9dB μ V/m) or 15.209 which is higher.

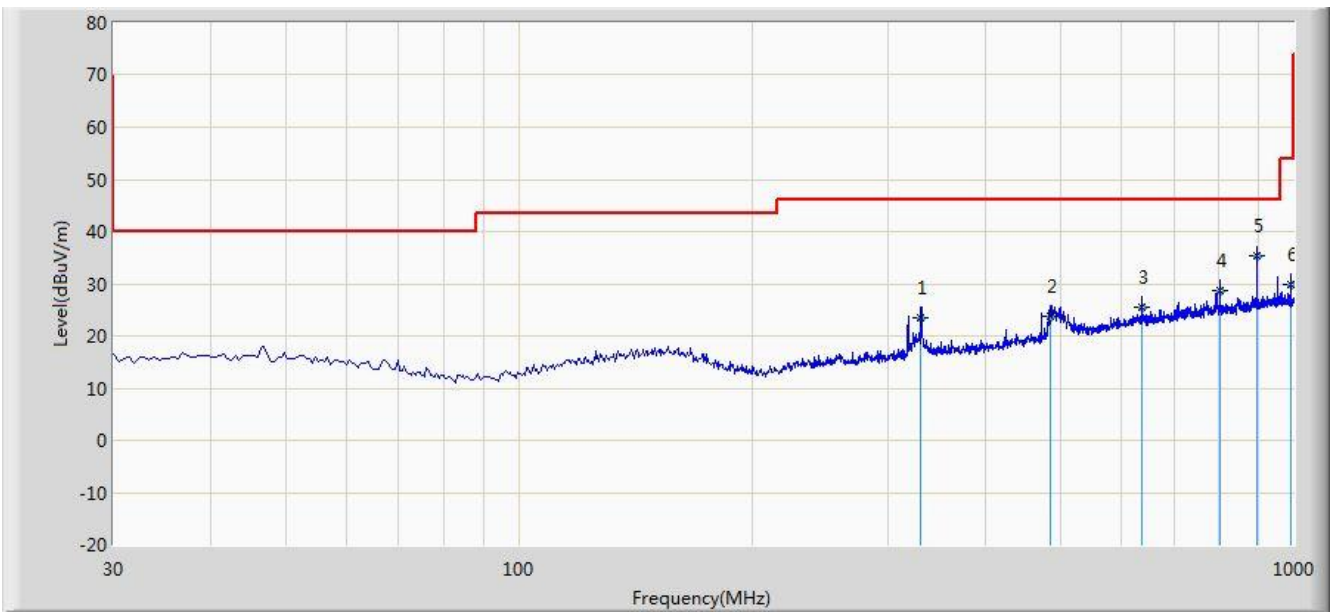
Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

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

The worst case of Radiated Emission below 1GHz:

Site: AC1	Time: 2017/12/11 - 16:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz

Note: There is the worst case within frequency range 30MHz~1GHz.



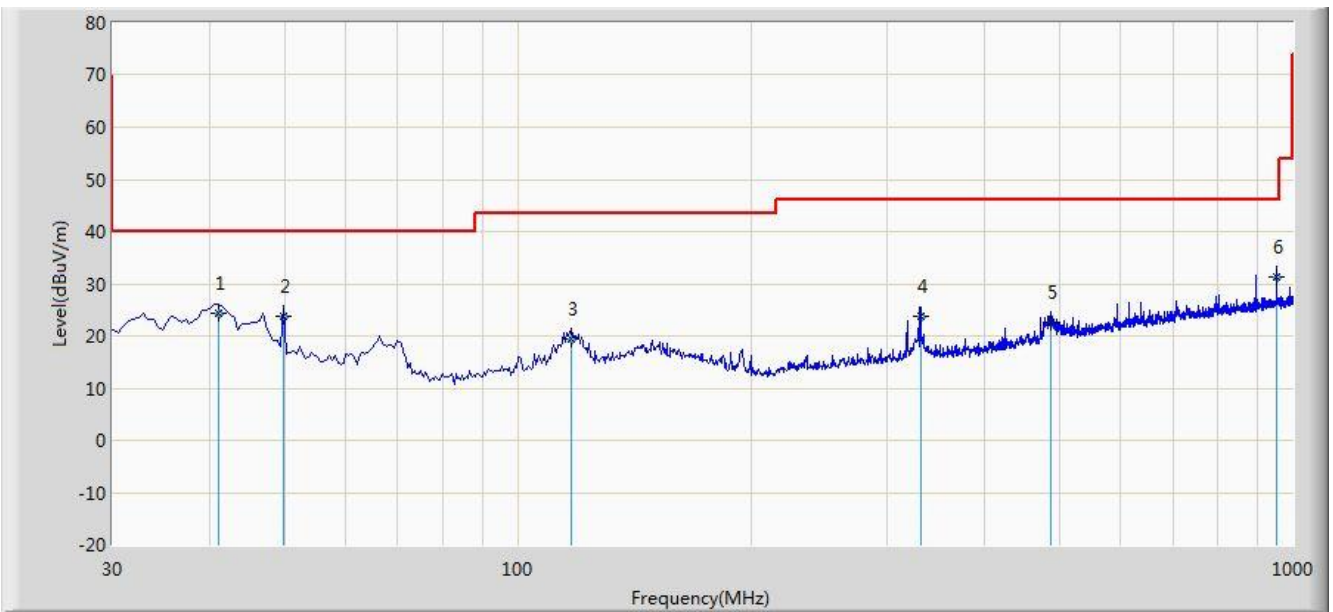
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			330.215	23.458	8.273	-22.542	46.000	15.185	QP
2			485.900	23.789	5.427	-22.211	46.000	18.361	QP
3			636.250	25.395	4.131	-20.605	46.000	21.264	QP
4			803.090	28.738	5.396	-17.262	46.000	23.342	QP
5			897.665	35.223	10.831	-10.777	46.000	24.392	QP
6			991.755	29.867	4.726	-24.133	54.000	25.142	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 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

Site: AC1	Time: 2017/12/11 - 16:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Note: There is the worst case within frequency range 30MHz~1GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			41.155	24.230	9.678	-15.770	40.000	14.552	QP
2			49.885	23.814	9.627	-16.186	40.000	14.187	QP
3			117.300	19.528	6.597	-23.972	43.500	12.931	QP
4			330.700	23.650	8.455	-22.350	46.000	15.195	QP
5			488.325	22.698	4.301	-23.302	46.000	18.397	QP
6			954.410	31.275	6.256	-14.725	46.000	25.019	QP

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

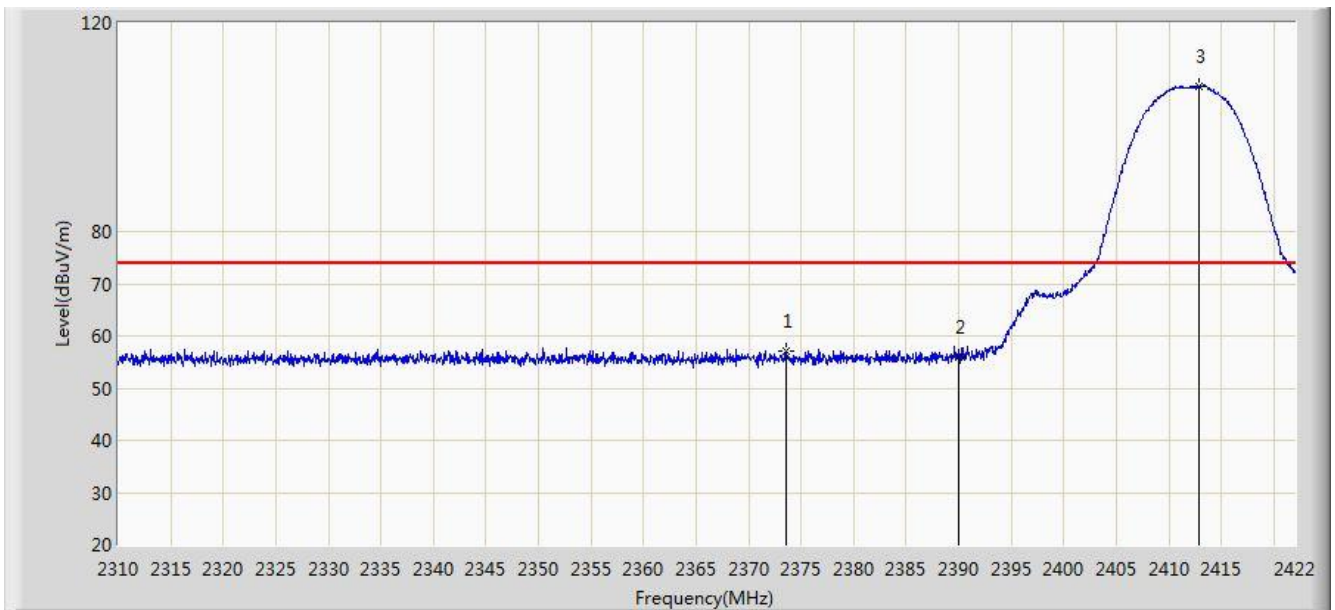
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The 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 Result

Site: AC1	Time: 2017/11/29 - 18:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz	

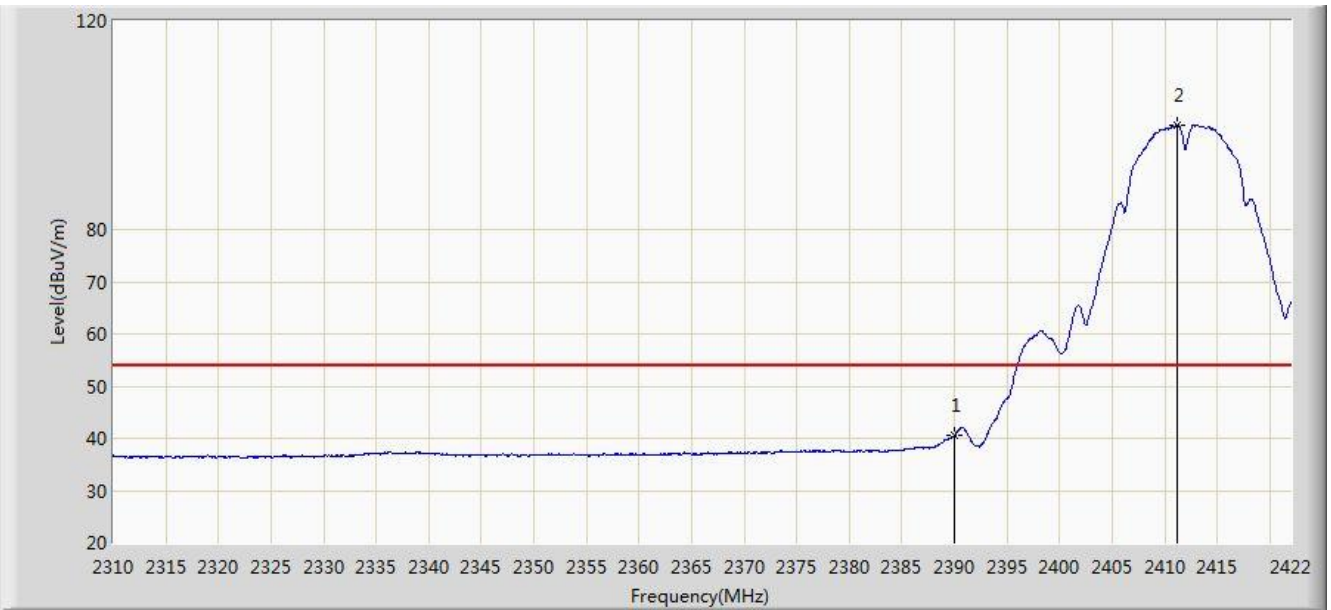


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2373.616	57.128	25.895	-16.872	74.000	31.233	PK
2			2390.000	55.990	24.787	-18.010	74.000	31.203	PK
3		*	2412.872	107.801	76.633	N/A	N/A	31.168	PK

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

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

Site: AC1	Time: 2017/11/29 - 18:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz	

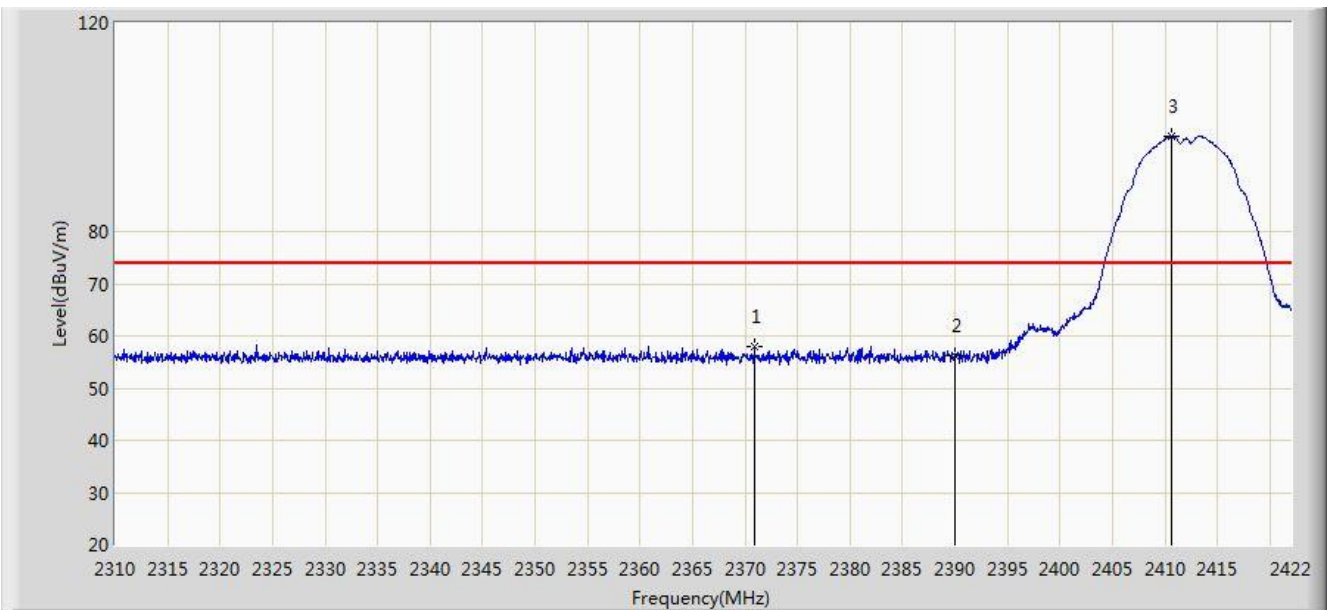


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	40.556	9.353	-13.444	54.000	31.203	AV
2		*	2411.136	100.021	68.850	N/A	N/A	31.171	AV

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

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

Site: AC1	Time: 2017/11/29 - 19:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz	

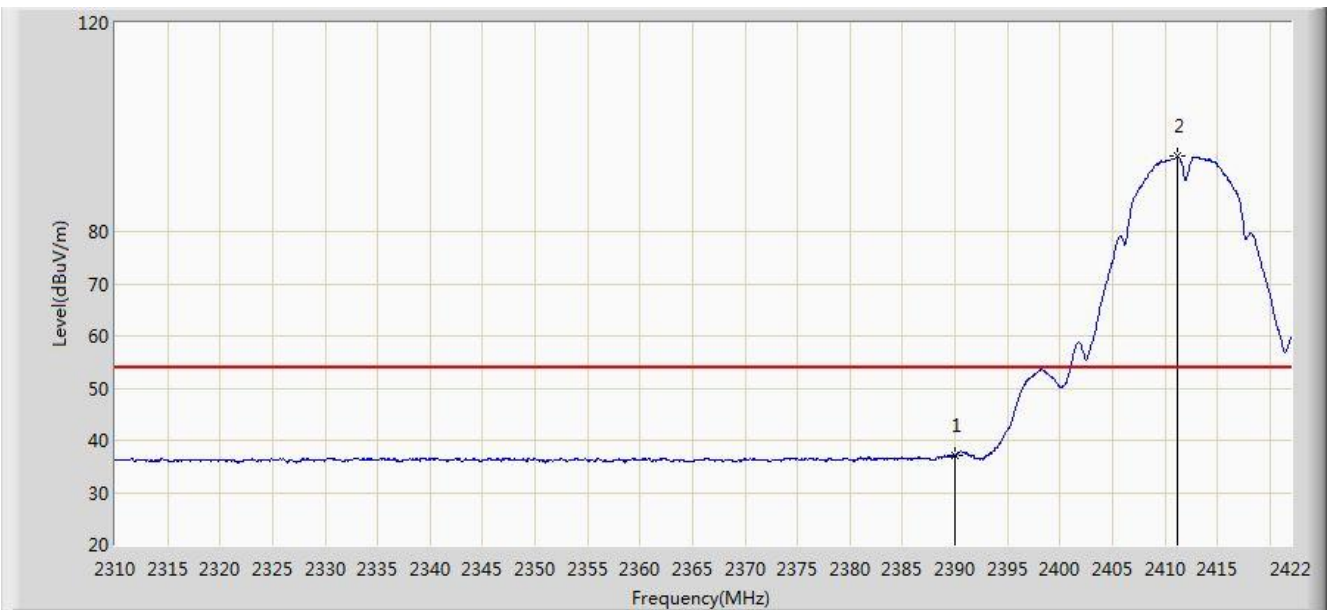


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2370.872	57.988	26.750	-16.012	74.000	31.239	PK
2			2390.000	56.242	25.039	-17.758	74.000	31.203	PK
3		*	2410.632	98.174	67.002	N/A	N/A	31.172	PK

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

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

Site: AC1	Time: 2017/11/29 - 19:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz	

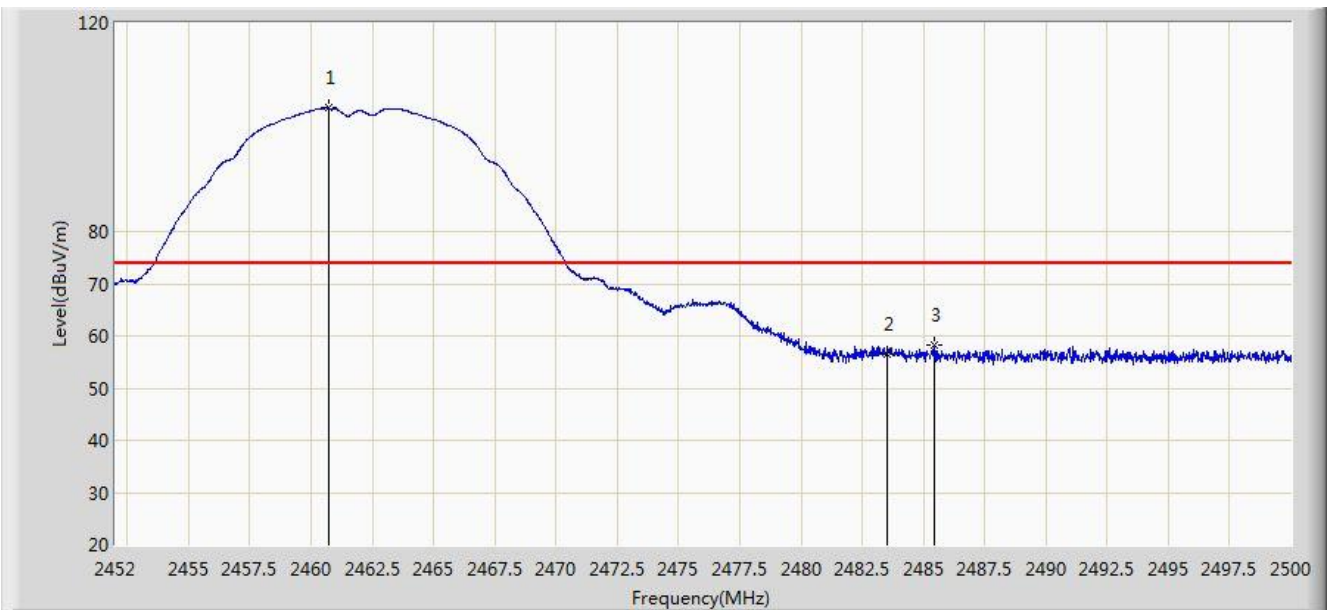


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	37.091	5.888	-16.909	54.000	31.203	AV
2		*	2411.248	94.396	63.225	N/A	N/A	31.171	AV

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

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

Site: AC1	Time: 2017/11/29 - 19:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
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		*	2460.712	103.631	72.498	N/A	N/A	31.133	PK
2			2483.500	56.621	25.428	-17.379	74.000	31.194	PK
3			2485.456	58.209	27.011	-15.791	74.000	31.198	PK

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

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

Site: AC1	Time: 2017/11/29 - 19:08
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz	

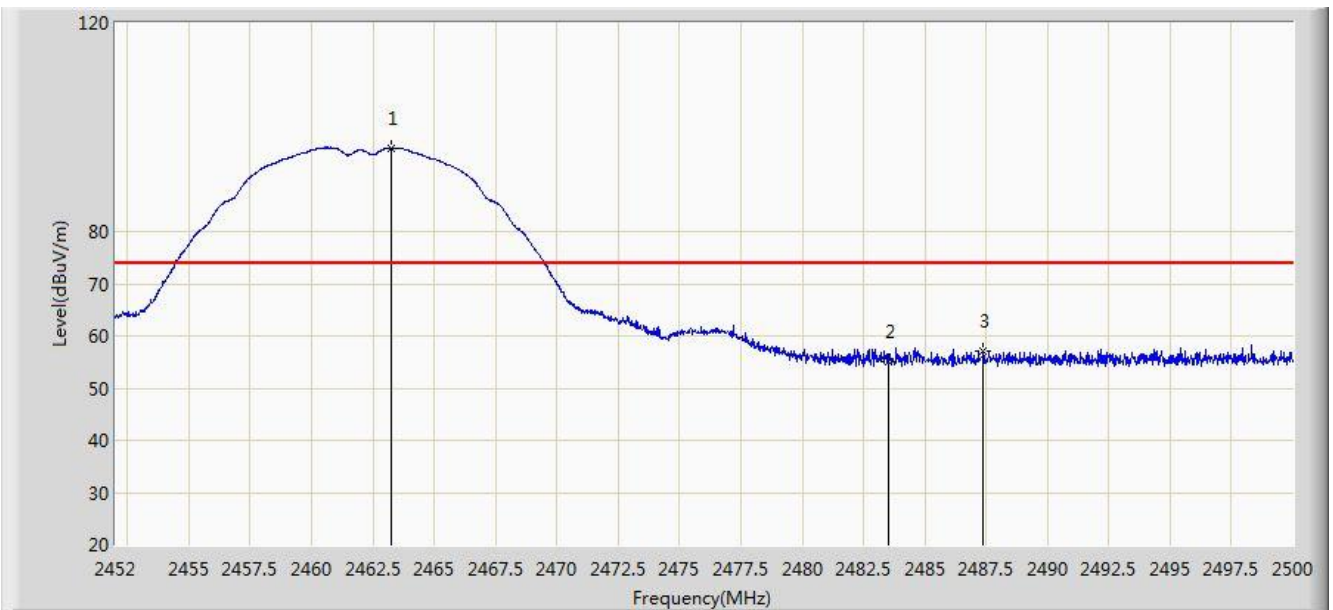


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.240	99.757	68.623	N/A	N/A	31.134	AV
2			2483.500	43.396	12.203	-10.604	54.000	31.194	AV

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

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

Site: AC1	Time: 2017/11/29 - 19:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
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		*	2463.256	95.987	64.849	N/A	N/A	31.138	PK
2			2483.500	55.049	23.856	-18.951	74.000	31.194	PK
3			2487.376	57.203	25.999	-16.797	74.000	31.204	PK

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

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

Site: AC1	Time: 2017/11/29 - 19:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz	

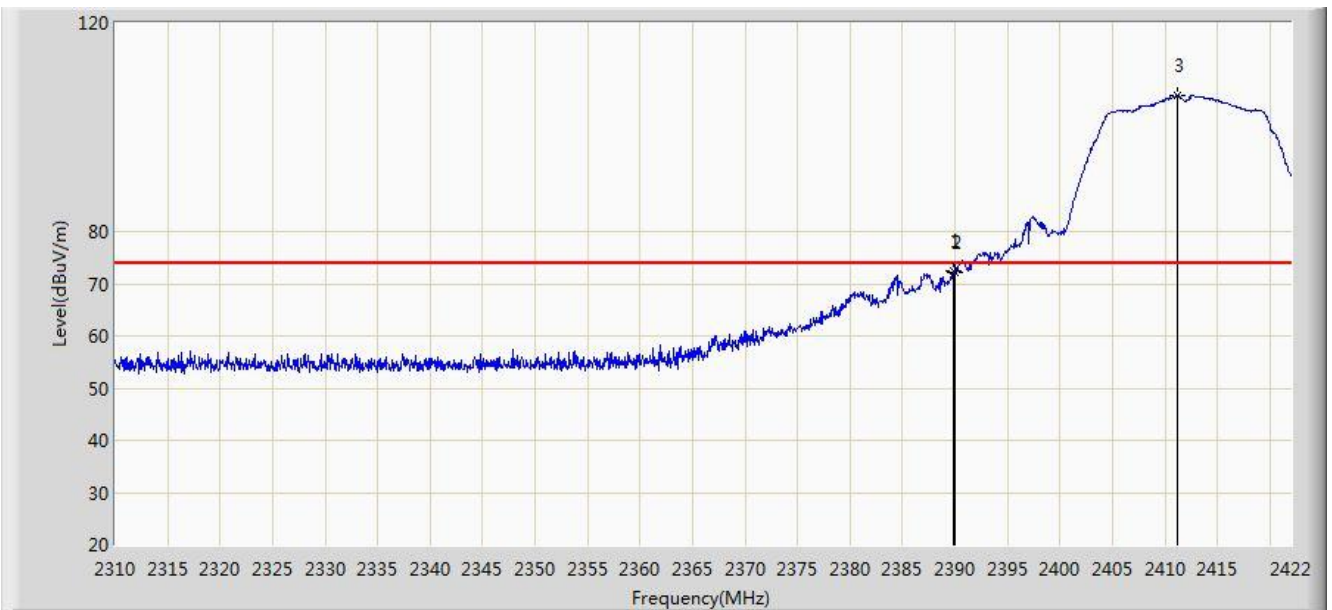


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.240	92.341	61.207	N/A	N/A	31.134	AV
2			2483.500	38.156	6.963	-15.844	54.000	31.194	AV

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

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

Site: AC1	Time: 2017/11/29 - 19:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz	

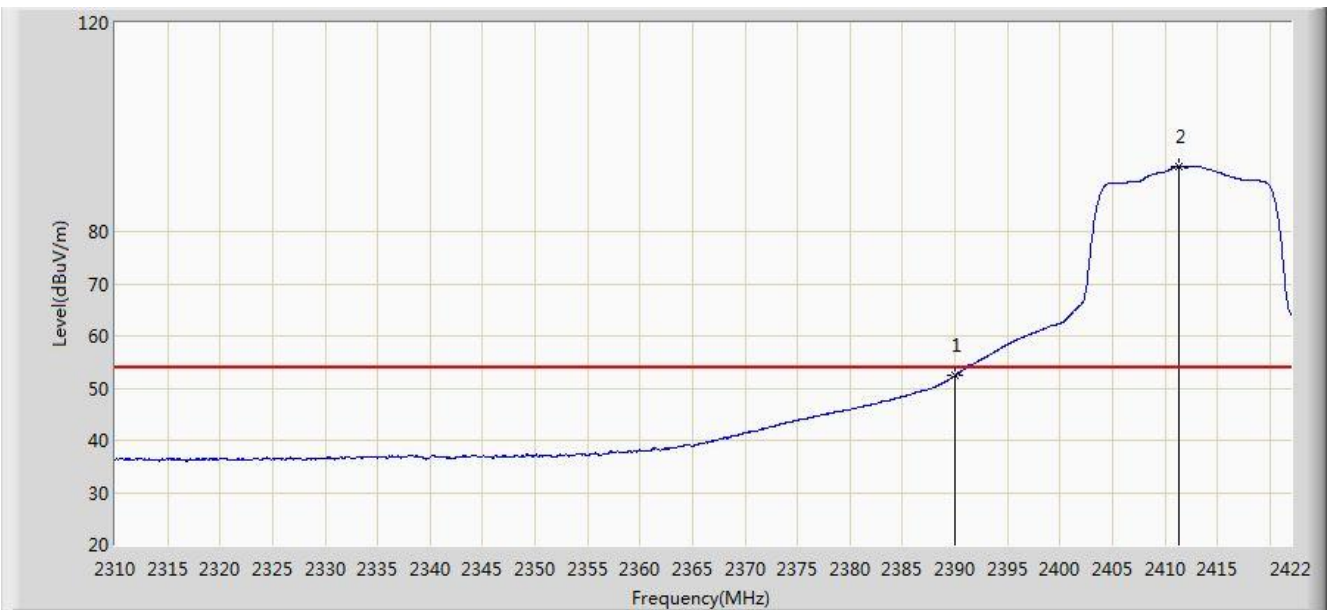


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.912	72.372	41.169	-1.628	74.000	31.203	PK
2			2390.000	72.171	40.968	-1.829	74.000	31.203	PK
3		*	2411.136	105.980	74.809	N/A	N/A	31.171	PK

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

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

Site: AC1	Time: 2017/11/29 - 19:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
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	52.420	21.217	-1.580	54.000	31.203	AV
2		*	2411.304	92.477	61.306	N/A	N/A	31.171	AV

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

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

Site: AC1	Time: 2017/11/29 - 19:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz	

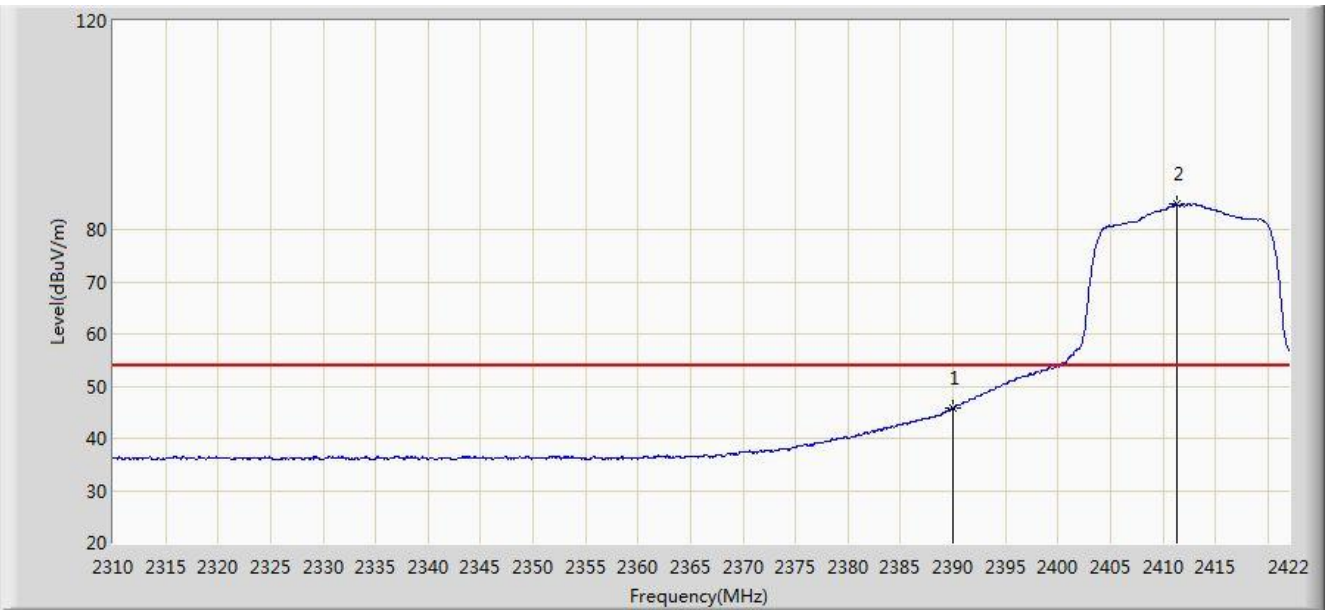


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2384.144	63.862	32.649	-10.138	74.000	31.213	PK
2			2390.000	63.238	32.035	-10.762	74.000	31.203	PK
3		*	2411.080	98.779	67.608	N/A	N/A	31.171	PK

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

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

Site: AC1	Time: 2017/11/29 - 19:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz	

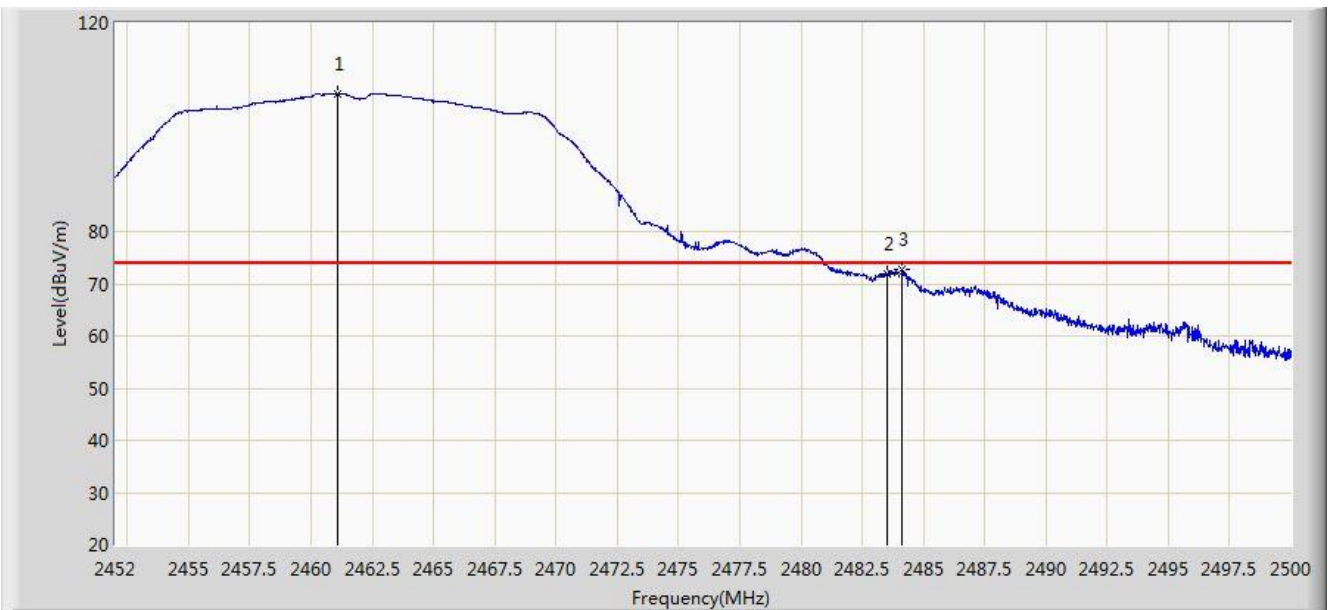


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.752	14.549	-8.248	54.000	31.203	AV
2		*	2411.304	84.793	53.622	N/A	N/A	31.171	AV

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

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

Site: AC1	Time: 2017/11/29 - 19:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz	

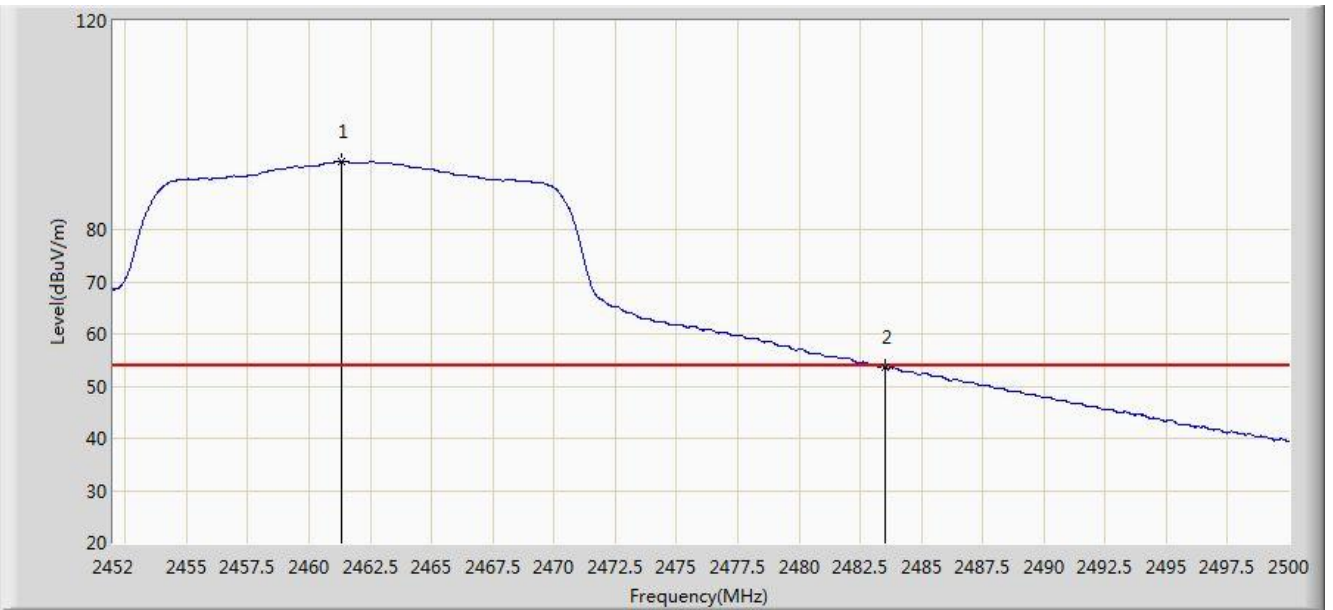


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.072	106.473	75.339	N/A	N/A	31.134	PK
2			2483.500	71.961	40.768	-2.039	74.000	31.194	PK
3			2484.136	72.670	41.475	-1.330	74.000	31.195	PK

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

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

Site: AC1	Time: 2017/11/29 - 19:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
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		*	2461.312	93.142	62.008	N/A	N/A	31.134	AV
2			2483.500	53.710	22.517	-0.290	54.000	31.194	AV

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

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

Site: AC1	Time: 2017/11/29 - 19:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz	

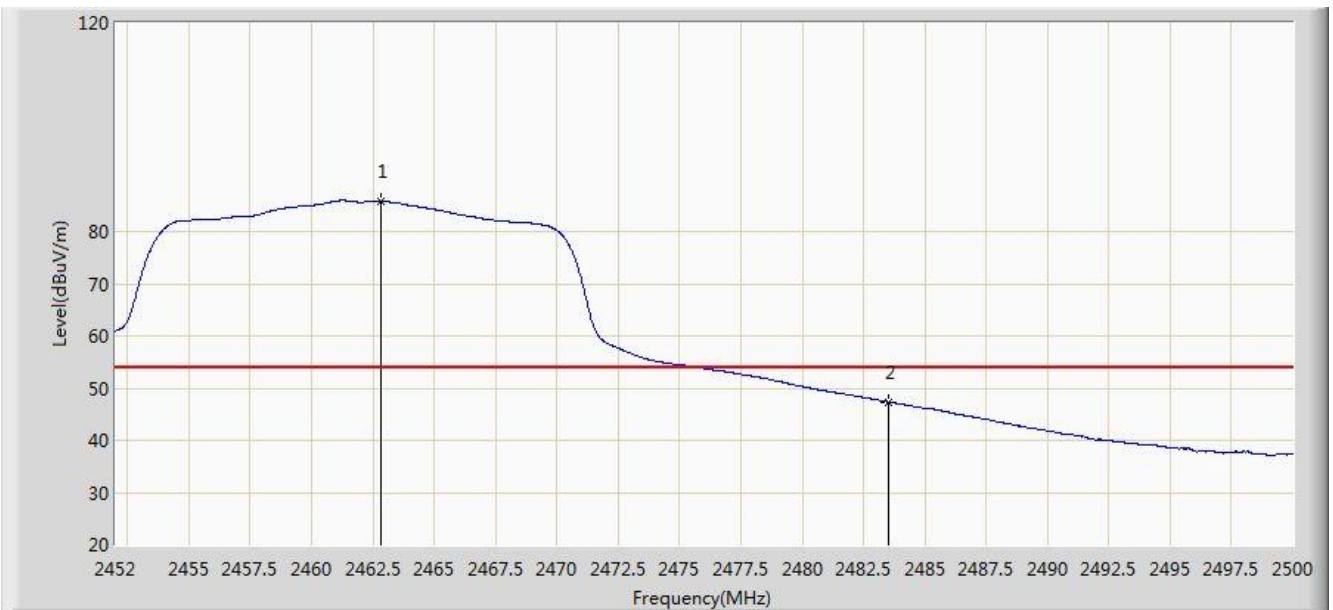


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.168	98.576	67.442	N/A	N/A	31.134	PK
2			2483.500	62.681	31.488	-11.319	74.000	31.194	PK
3			2483.824	65.026	33.832	-8.974	74.000	31.194	PK

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

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

Site: AC1	Time: 2017/11/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz	

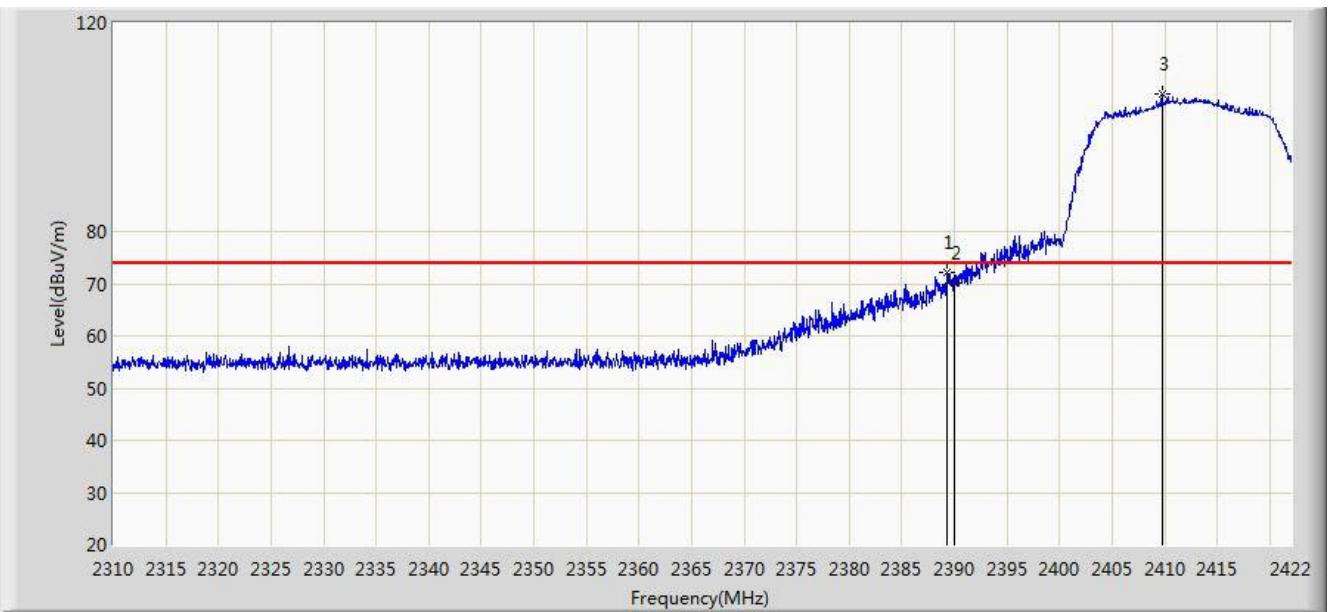


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.800	85.787	54.650	N/A	N/A	31.137	AV
2			2483.500	47.383	16.190	-6.617	54.000	31.194	AV

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

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

Site: AC1	Time: 2017/11/29 - 19:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	

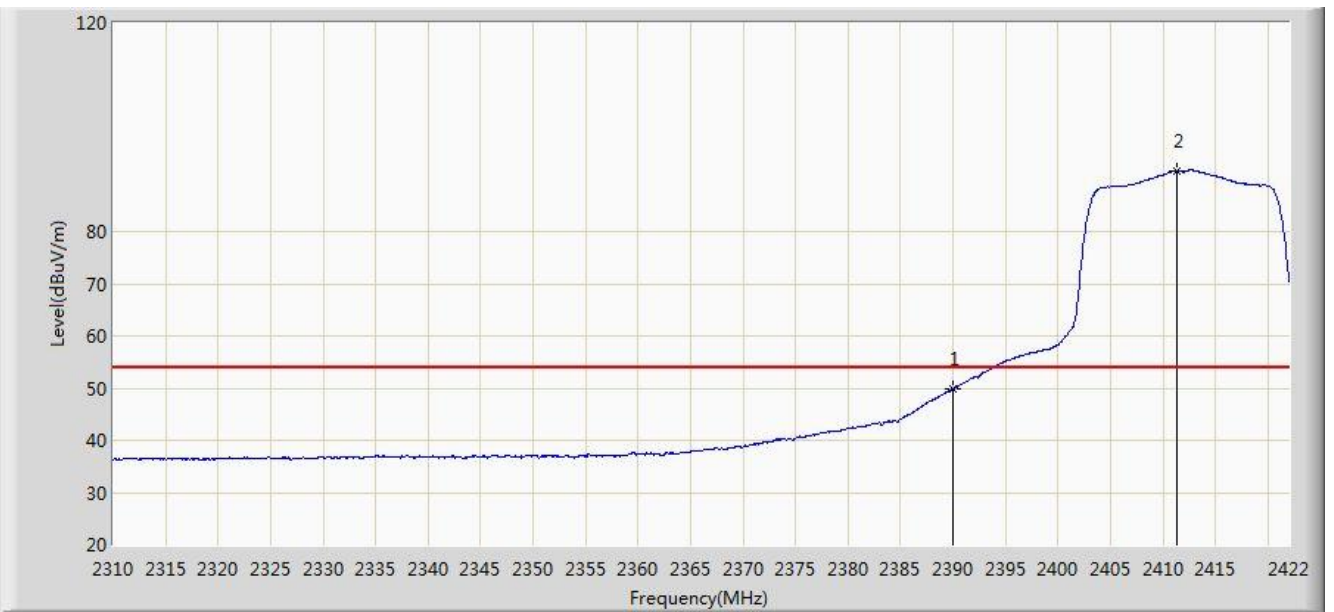


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.352	72.308	41.104	-1.692	74.000	31.203	PK
2			2390.000	70.246	39.043	-3.754	74.000	31.203	PK
3		*	2409.736	106.367	75.194	N/A	N/A	31.173	PK

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

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

Site: AC1	Time: 2017/11/29 - 19:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	

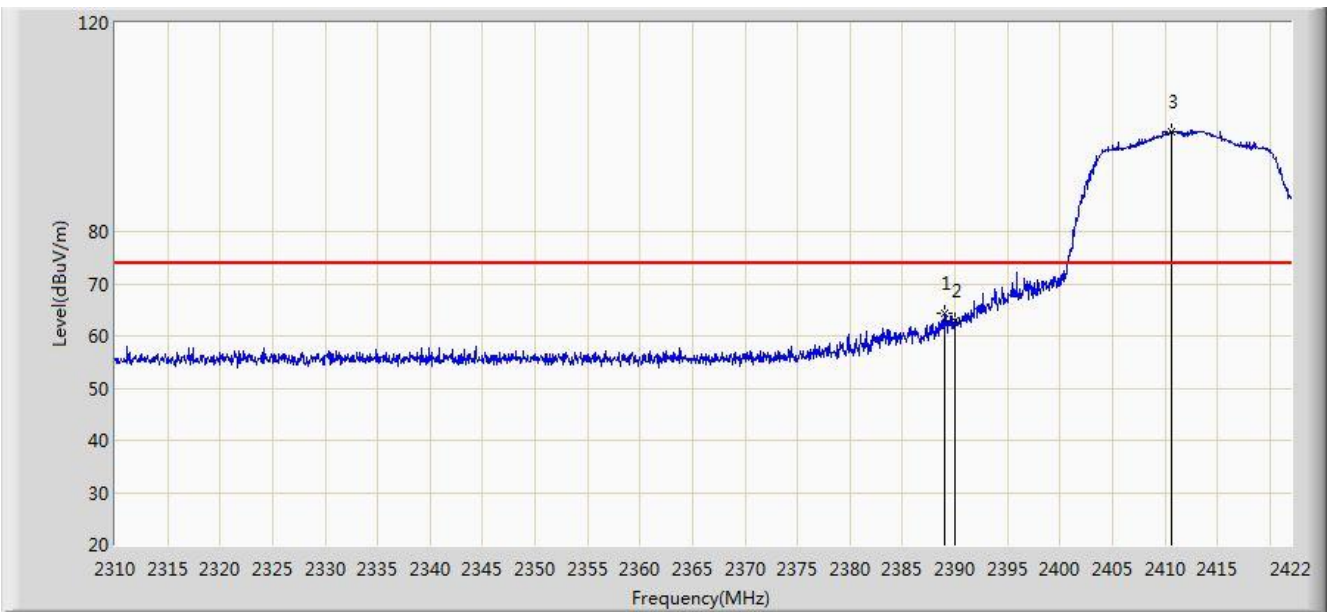


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.867	18.664	-4.133	54.000	31.203	AV
2		*	2411.304	91.664	60.493	N/A	N/A	31.171	AV

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

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

Site: AC1	Time: 2017/11/29 - 19:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	

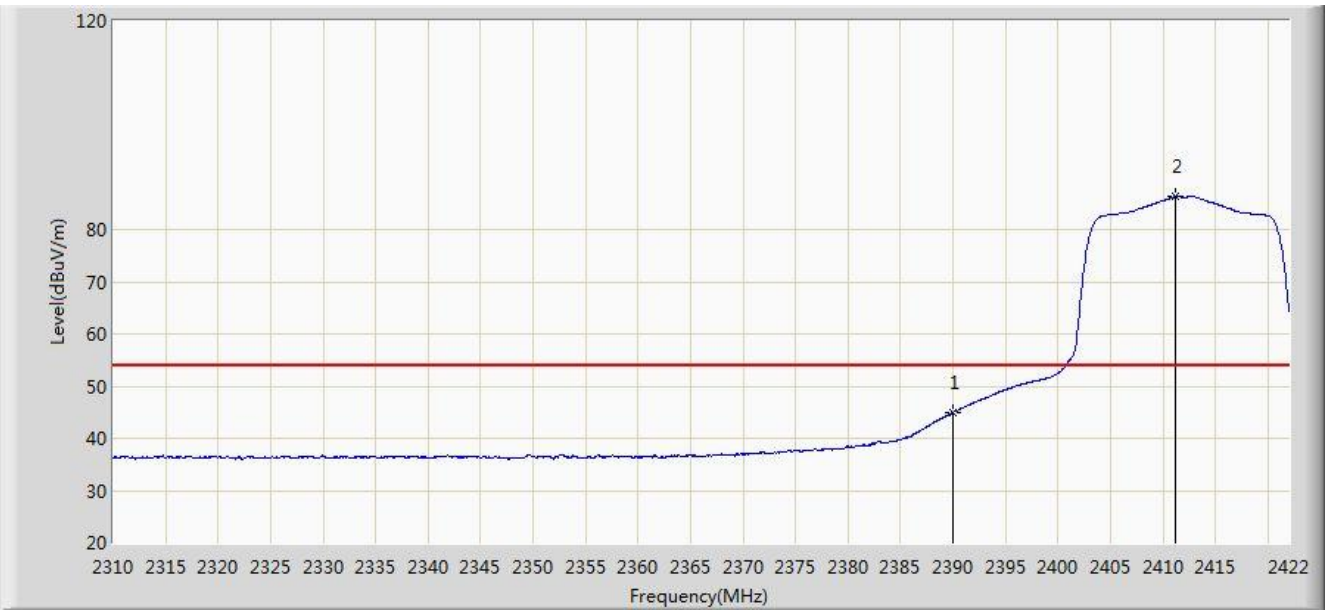


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.960	64.484	33.279	-9.516	74.000	31.204	PK
2			2390.000	62.792	31.589	-11.208	74.000	31.203	PK
3		*	2410.632	99.070	67.898	N/A	N/A	31.172	PK

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

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

Site: AC1	Time: 2017/11/29 - 19:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	

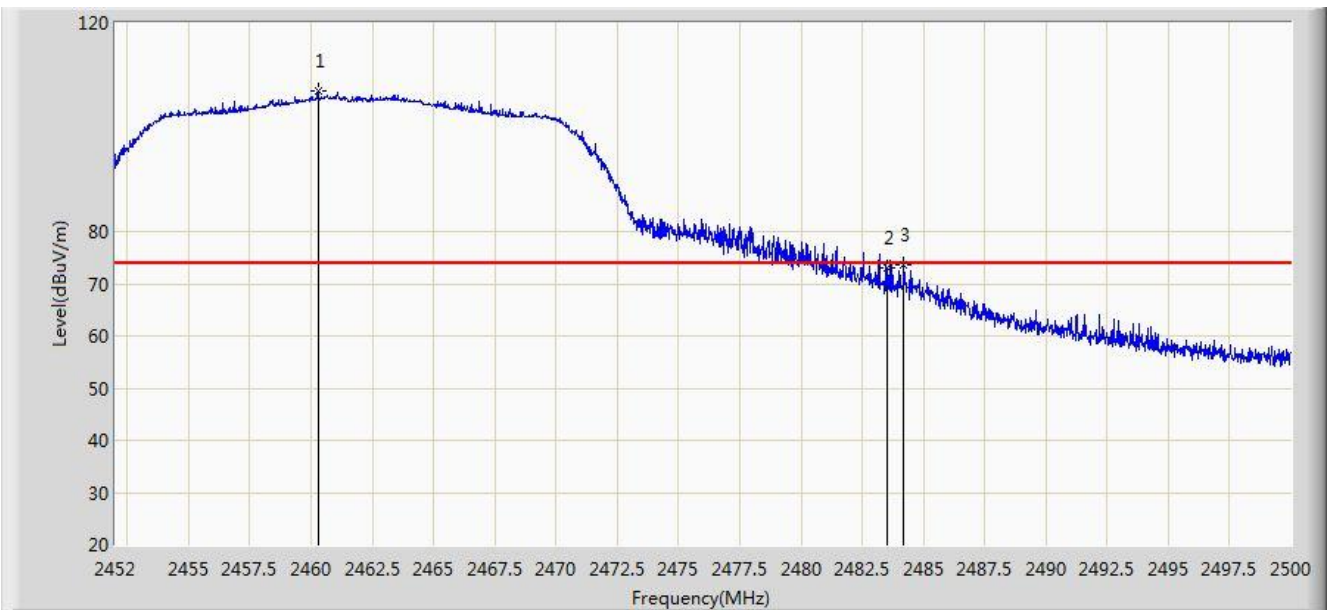


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	44.997	13.794	-9.003	54.000	31.203	AV
2		*	2411.136	86.313	55.142	N/A	N/A	31.171	AV

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

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

Site: AC1	Time: 2017/11/29 - 20:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz	

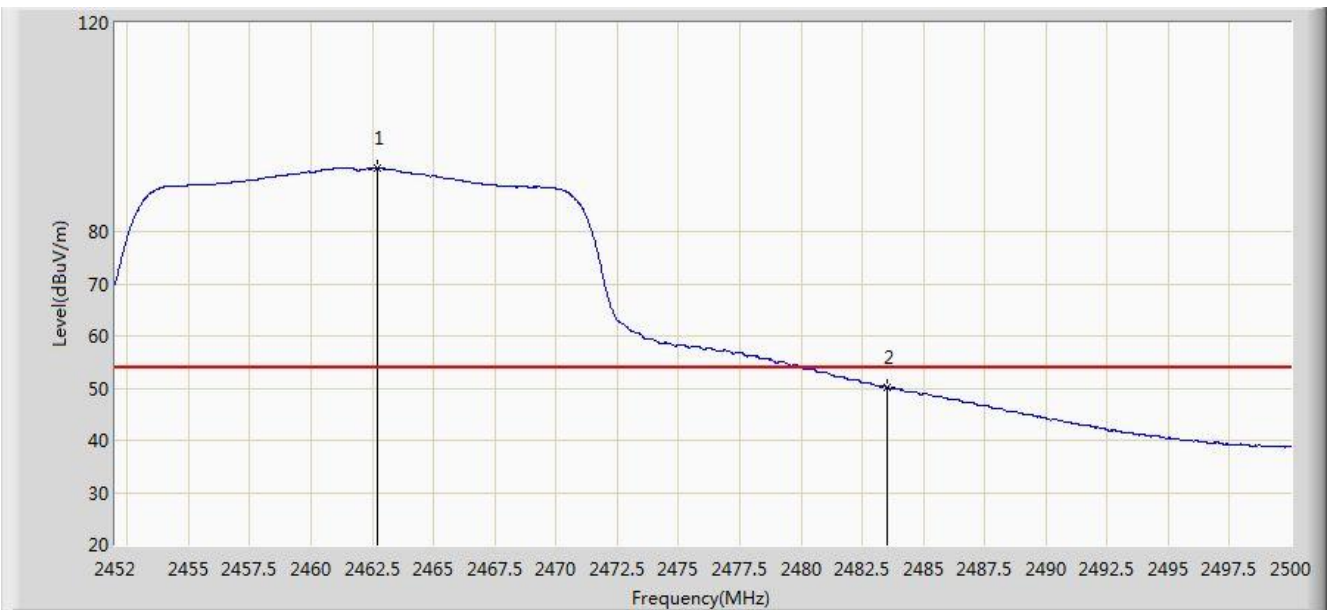


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.280	106.924	75.792	N/A	N/A	31.132	PK
2			2483.500	73.188	41.995	-0.812	74.000	31.194	PK
3			2484.184	73.711	42.516	-0.289	74.000	31.195	PK

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

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

Site: AC1	Time: 2017/11/29 - 20:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz	

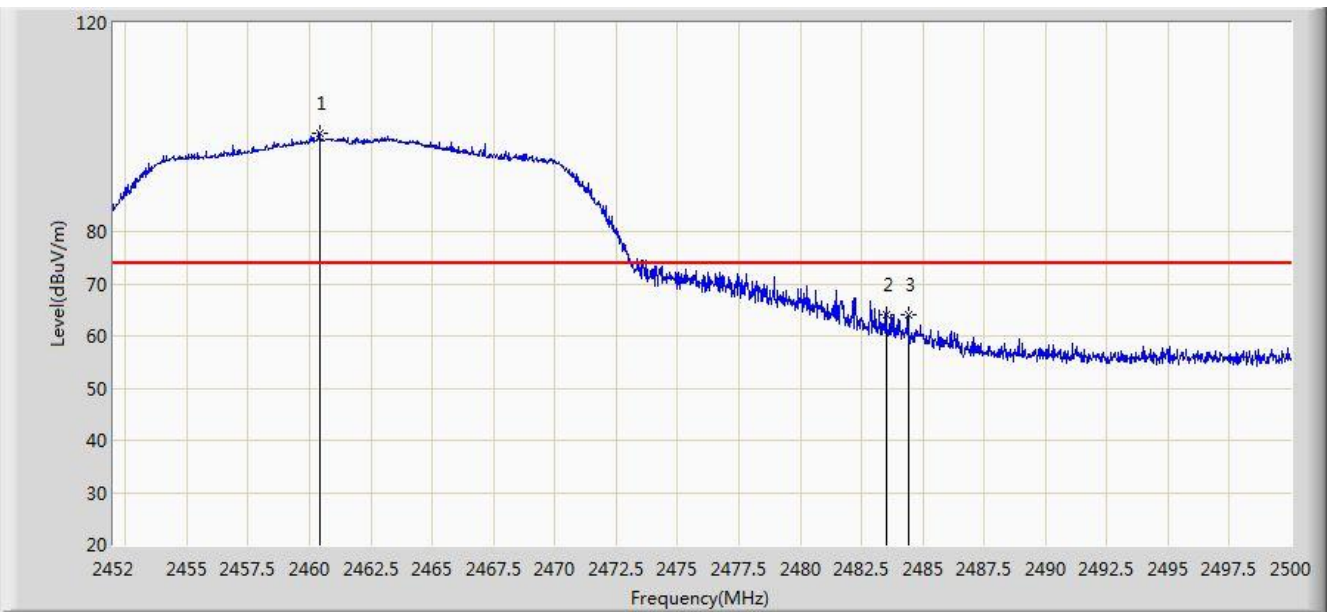


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.728	92.155	61.018	N/A	N/A	31.137	AV
2			2483.500	50.273	19.080	-3.727	54.000	31.194	AV

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

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

Site: AC1	Time: 2017/11/29 - 20:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz	

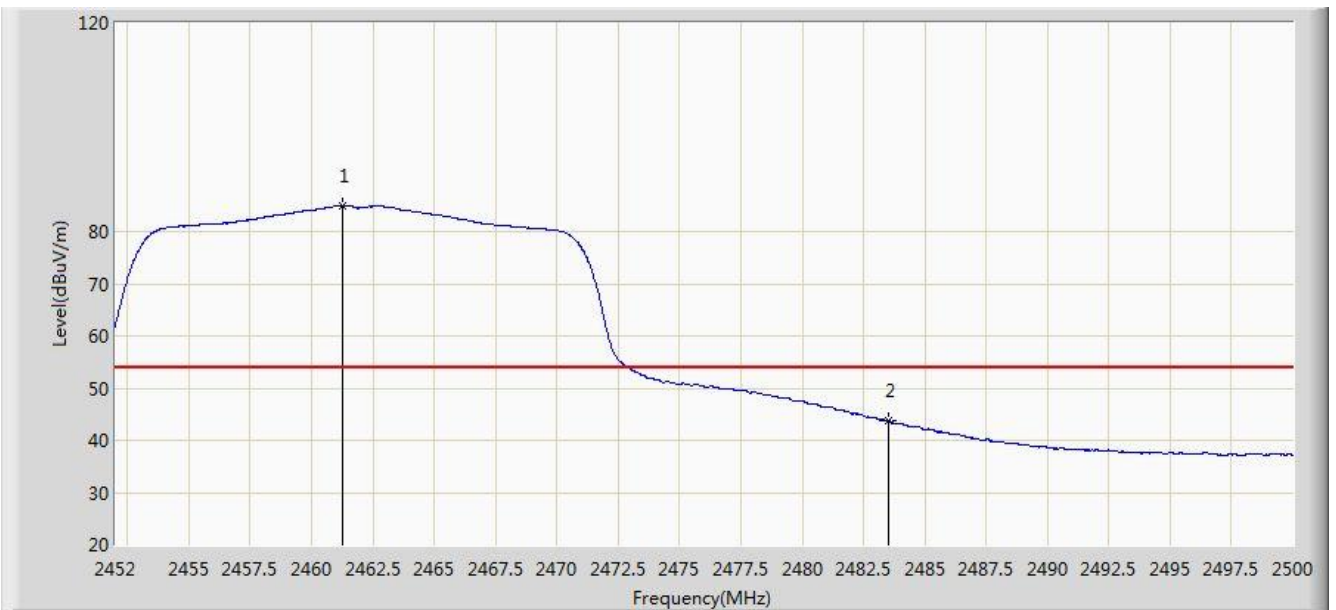


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.424	98.791	67.658	N/A	N/A	31.133	PK
2			2483.500	64.004	32.811	-9.996	74.000	31.194	PK
3			2484.424	64.052	32.856	-9.948	74.000	31.195	PK

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

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

Site: AC1	Time: 2017/11/29 - 20:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Alex Ma
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		*	2461.240	84.897	53.763	N/A	N/A	31.134	AV
2			2483.500	43.723	12.530	-10.277	54.000	31.194	AV

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

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

7.8. AC Conducted Emissions Measurement

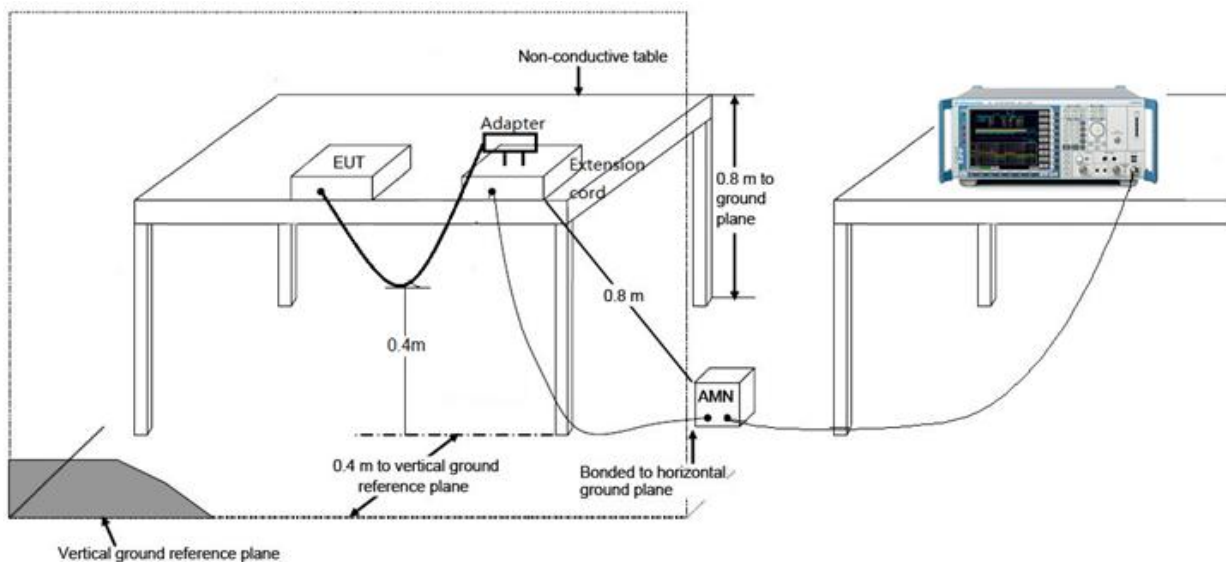
7.8.1. Test Limit

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.

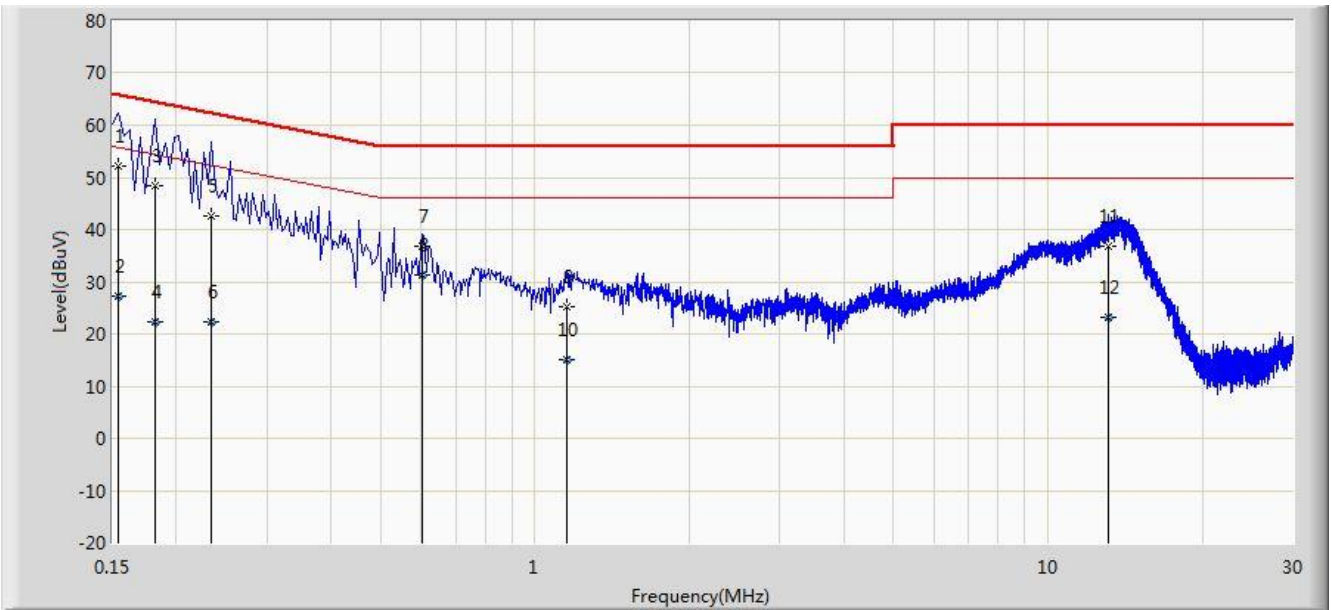
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3. Test Result

Site: SR2	Time: 2017/12/13 - 13:26
Limit: FCC_Part15.207_CE_AC Power	Engineer: Cat Hu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Mode 1	

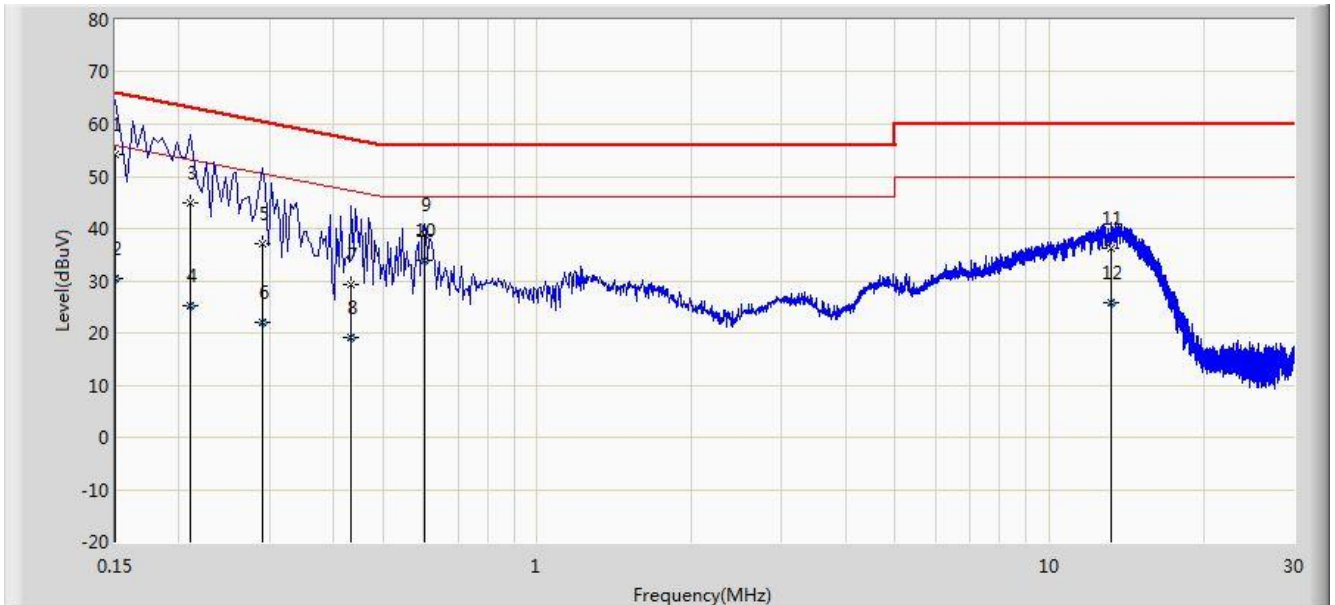


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.154	52.281	41.541	-13.501	65.781	10.740	QP
2			0.154	27.129	16.389	-28.652	55.781	10.740	AV
3			0.182	48.330	38.282	-16.064	64.394	10.048	QP
4			0.182	22.424	12.376	-31.969	54.394	10.048	AV
5			0.234	42.714	32.763	-19.593	62.307	9.951	QP
6			0.234	22.261	12.311	-30.045	52.307	9.951	AV
7			0.602	36.798	26.684	-19.202	56.000	10.114	QP
8			0.602	31.341	21.228	-14.659	46.000	10.114	AV
9			1.154	25.351	15.448	-30.649	56.000	9.904	QP
10			1.154	15.108	5.204	-30.892	46.000	9.904	AV
11			13.086	36.877	26.804	-23.123	60.000	10.073	QP
12			13.086	23.122	13.049	-26.878	50.000	10.073	AV

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

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

Site: SR2	Time: 2017/12/13 - 15:35
Limit: FCC_Part15.207_CE_AC Power	Engineer: Bruce Wang
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Cassia Bluetooth Router	Power: AC 120V/60Hz
Test Mode: Mode 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.150	54.157	43.015	-11.843	66.000	11.142	QP
2			0.150	30.365	19.223	-25.635	56.000	11.142	AV
3			0.210	44.993	34.998	-18.213	63.205	9.995	QP
4			0.210	25.098	15.103	-28.107	53.205	9.995	AV
5			0.290	37.233	27.202	-23.292	60.524	10.030	QP
6			0.290	21.952	11.921	-28.573	50.524	10.030	AV
7			0.434	29.353	19.215	-27.823	57.176	10.138	QP
8			0.434	19.134	8.996	-28.042	47.176	10.138	AV
9			0.602	38.717	28.587	-17.283	56.000	10.130	QP
10			0.602	33.921	23.791	-12.079	46.000	10.130	AV
11			13.238	36.252	26.156	-23.748	60.000	10.096	QP
12			13.238	25.917	15.820	-24.083	50.000	10.096	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 IC Rules.

————— The End —————