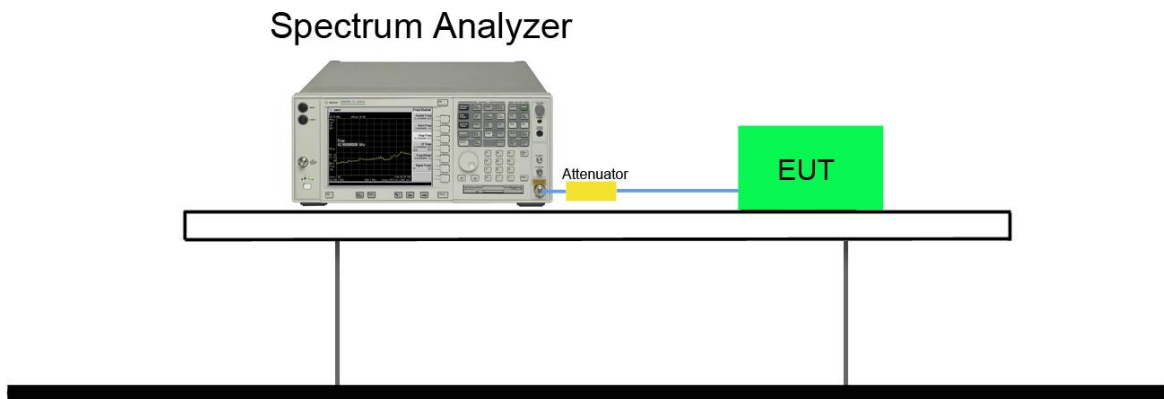
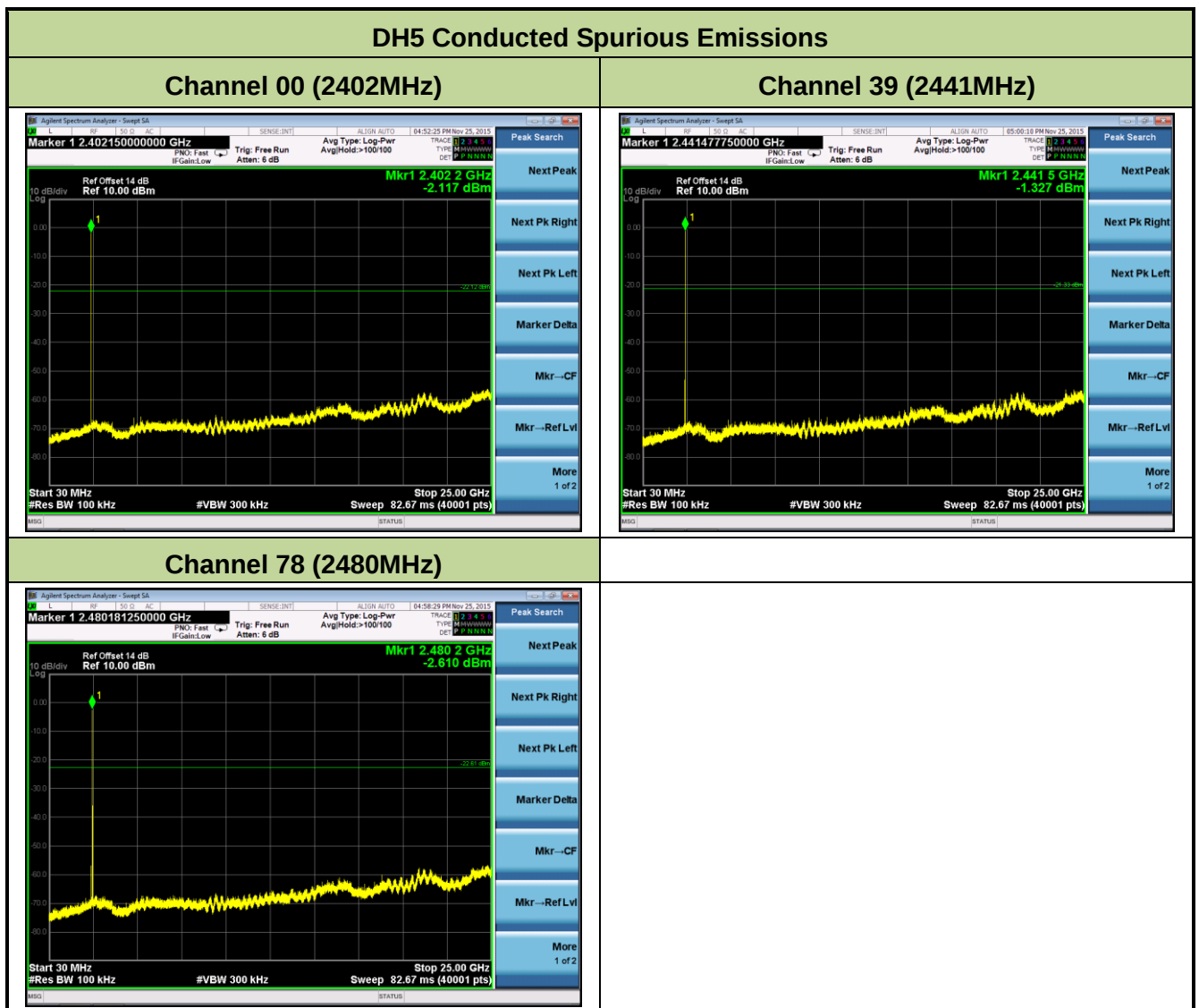


7.8.4. Test Setup



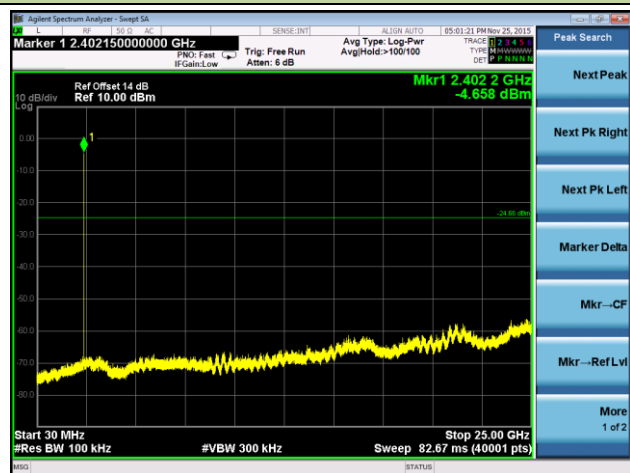
7.8.5. Test Result

Test Mode	Channel No.	Frequency (MHz)	Limit (MHz)	Result
DH5	00	2402	20dBc	Pass
DH5	39	2441	20dBc	Pass
DH5	78	2480	20dBc	Pass
2DH5	00	2402	20dBc	Pass
2DH5	39	2441	20dBc	Pass
2DH5	78	2480	20dBc	Pass
3DH5	00	2402	20dBc	Pass
3DH5	39	2441	20dBc	Pass
3DH5	78	2480	20dBc	Pass

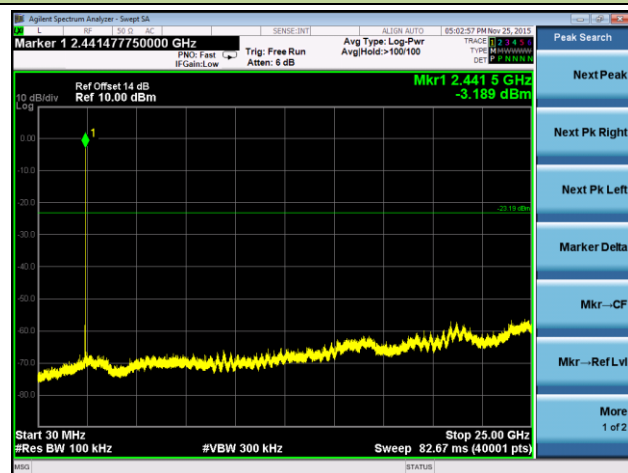


2DH5 Conducted Spurious Emissions

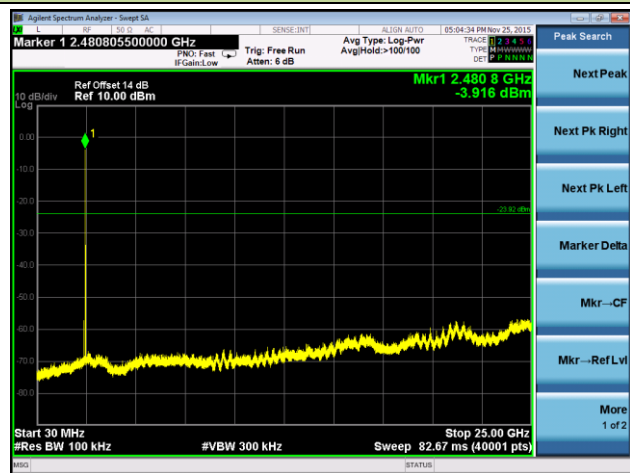
Channel 00 (2402MHz)



Channel 39 (2441MHz)

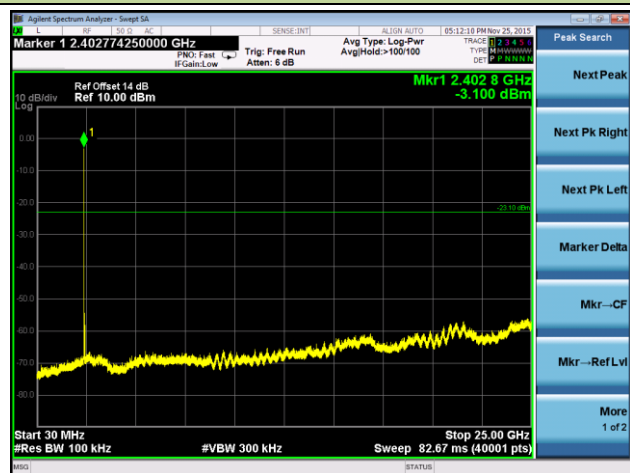


Channel 78 (2480MHz)

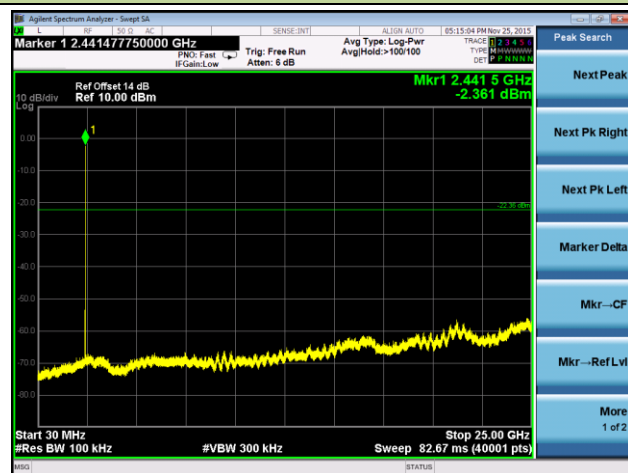


3DH5 Conducted Spurious Emissions

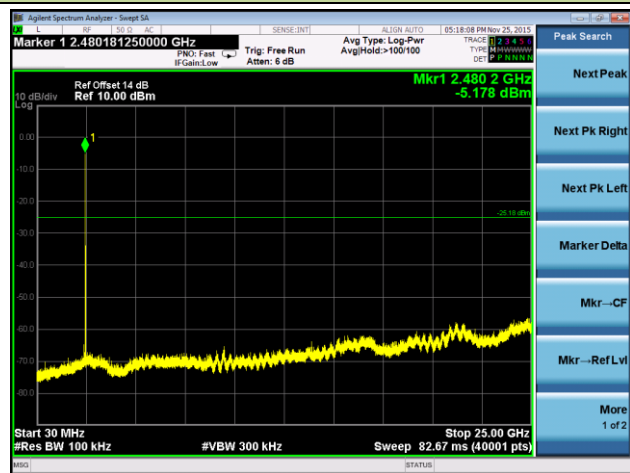
Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)



7.9. Radiated Spurious Emission Measurement

7.9.1. 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 [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

7.9.2. Test Procedure Used

ANSI C63.10-2013 - Section 11.12.1

7.9.3. 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 = 3 * RBW
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

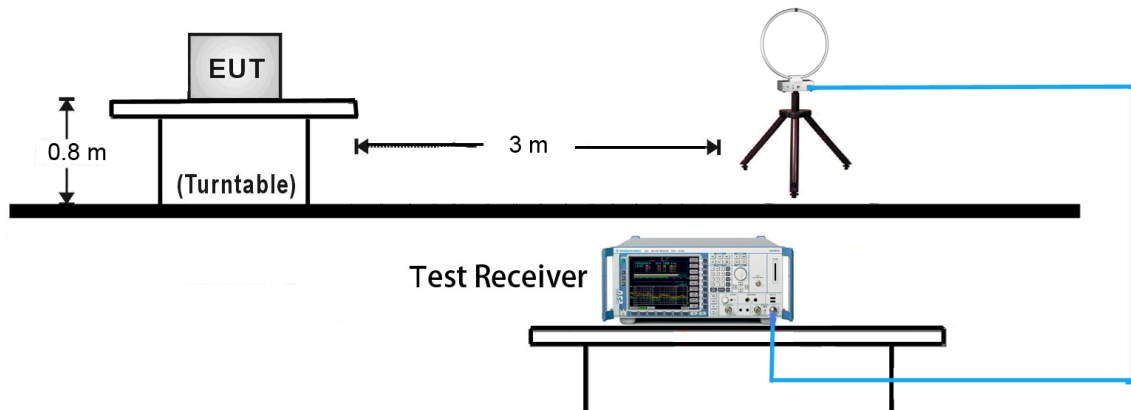
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

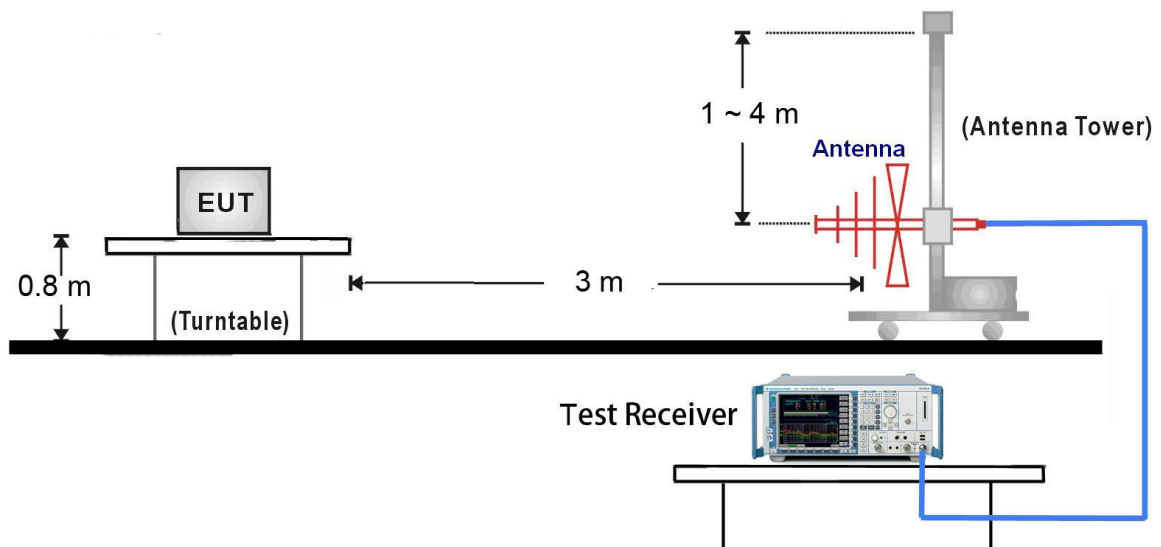
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). 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

7.9.4. Test Setup

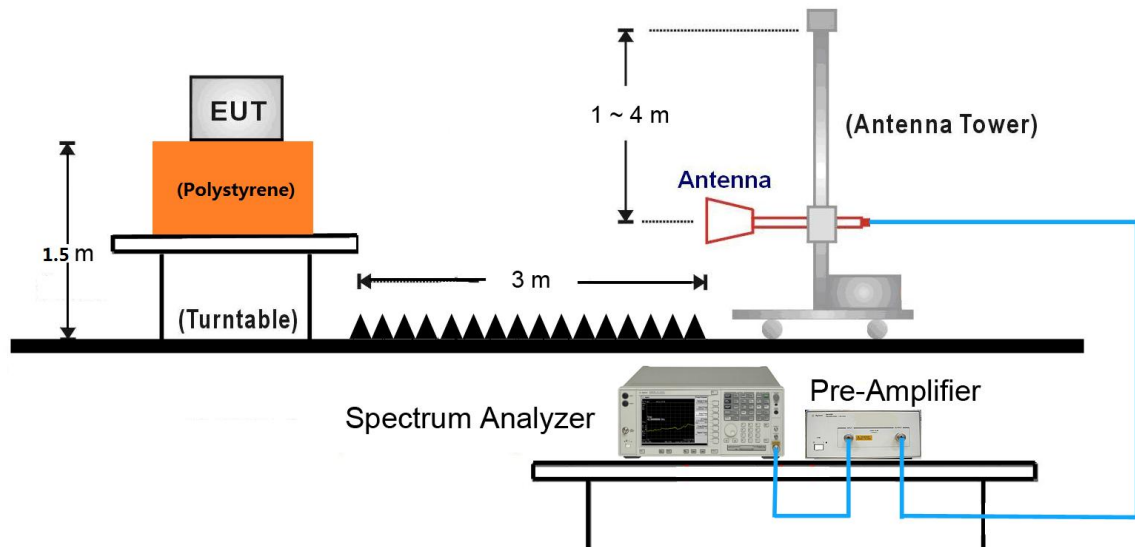
9kHz ~ 30MHz Test Setup:



30MHz ~ 1GHz Test Setup:



1GHz ~ 25GHz Test Setup:



7.9.5. Test Result

Test Mode:	2DH5	Test Site:	AC1
Test Channel:	00	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. The worst case of Radiated Spurious Emission. 3. 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
*	3108.0	39.5	-1.7	37.8	74.0	-36.2	Peak	Horizontal
*	3537.0	38.7	-1.0	37.7	74.0	-36.3	Peak	Horizontal
	4808.0	40.1	2.7	42.8	74.0	-31.2	Peak	Horizontal
	7273.0	35.9	8.0	43.9	74.0	-30.1	Peak	Horizontal
*	3078.0	38.8	-1.9	36.9	74.0	-37.1	Peak	Vertical
*	3576.0	38.7	-0.8	37.9	74.0	-36.1	Peak	Vertical
	4808.0	40.5	2.7	43.2	74.0	-30.8	Peak	Vertical
	7341.0	36.3	8.0	44.3	74.0	-29.7	Peak	Vertical

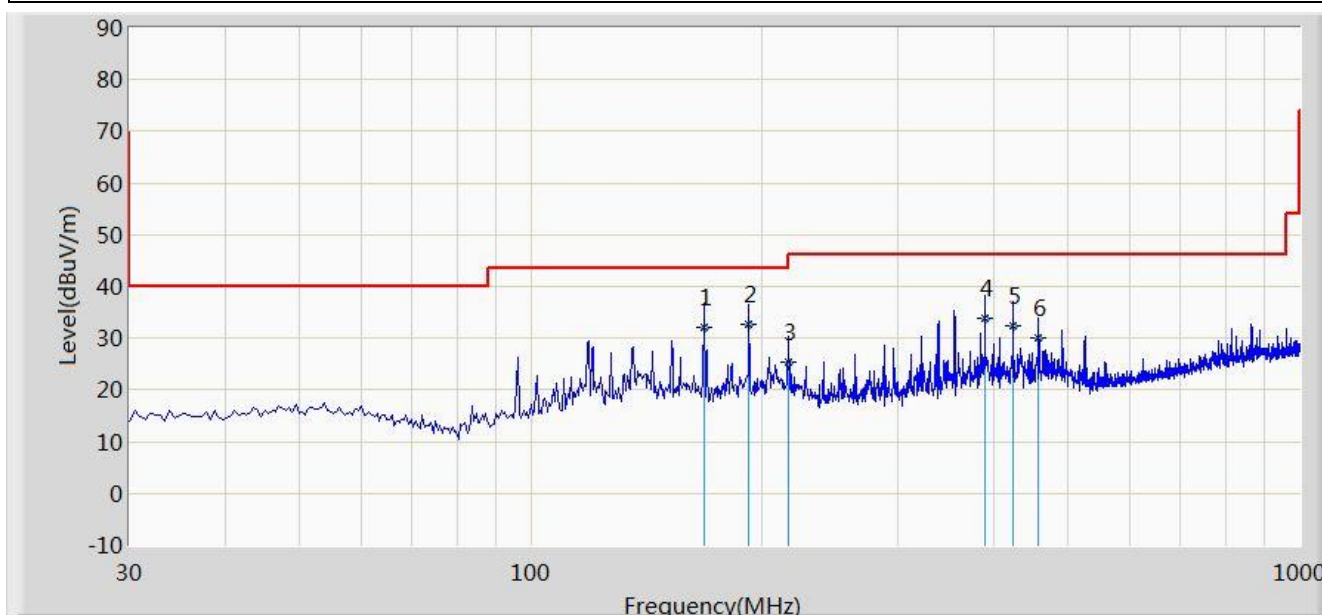
Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (79.2dBμV/m) or 15.209 which is higher.

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

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

The worst case of Radiated Emission 9KHz ~ 1GHz and 18GHz ~ 25GHz:

Site: AC1	Time: 2015/11/26 - 18:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Line Chen
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at Channel 2402MHz by 2DH5	

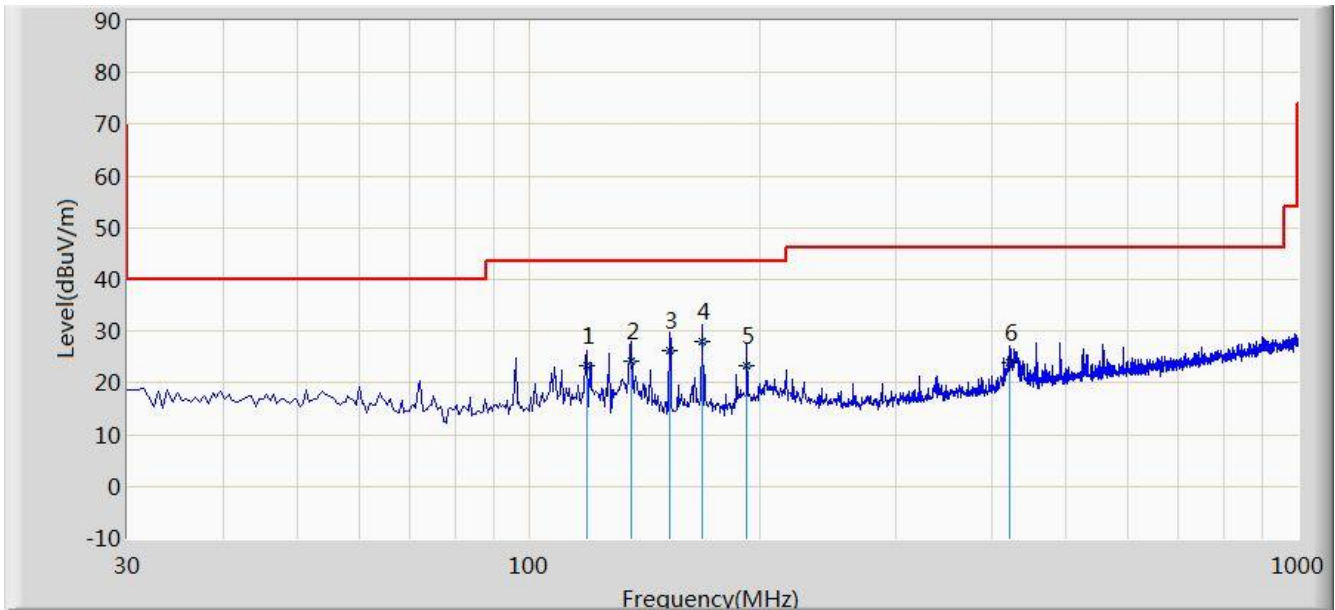


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		168.225	32.080	21.943	-11.420	43.500	10.137	QP
2	*	191.991	32.722	20.854	-10.778	43.500	11.868	QP
3		216.240	25.506	12.965	-20.494	46.000	12.541	QP
4		389.385	33.840	17.347	-12.160	46.000	16.493	QP
5		423.335	32.521	15.459	-13.479	46.000	17.062	QP
6		457.285	30.189	12.652	-15.811	46.000	17.537	QP

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

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

Site: AC1	Time: 2015/11/26 - 18:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Line Chen
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at Channel 2402MHz by 2DH5	

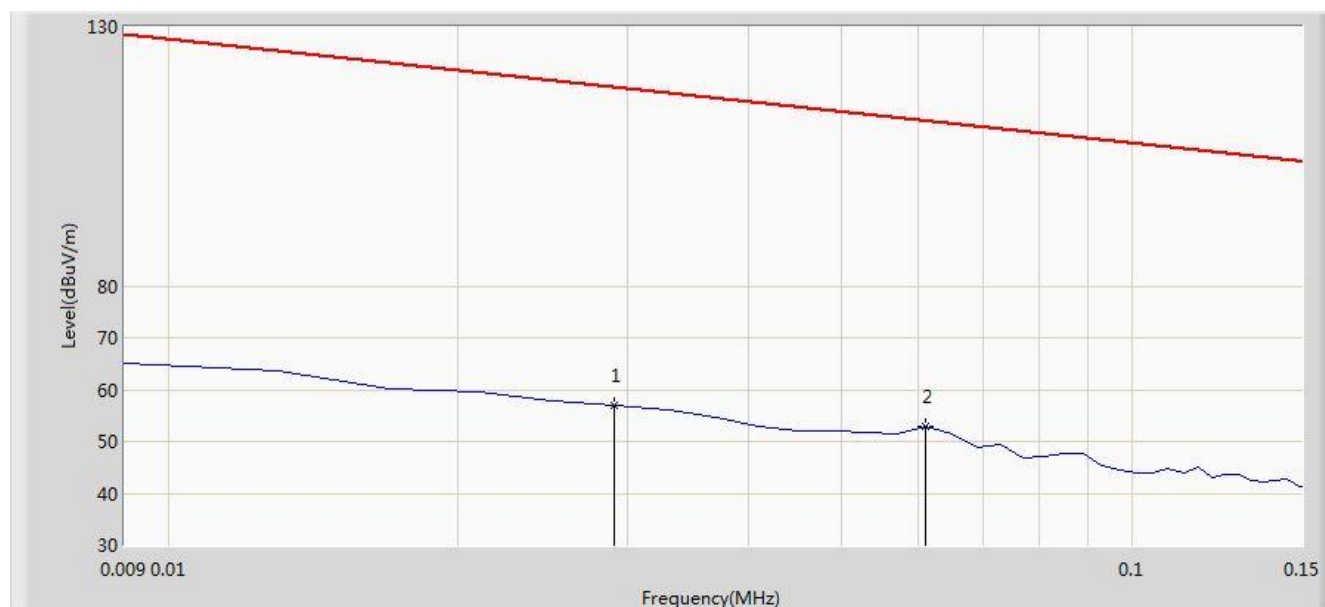


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		118.755	23.273	11.854	-20.227	43.500	11.419	QP
2		135.730	24.087	14.457	-19.413	43.500	9.630	QP
3		152.220	26.343	16.821	-17.157	43.500	9.522	QP
4	*	168.225	27.979	17.842	-15.521	43.500	10.137	QP
5		191.990	23.215	11.347	-20.285	43.500	11.868	QP
6		420.910	23.776	6.743	-22.224	46.000	17.033	QP

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

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

Site: AC1	Time: 2015/11/27 - 15:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Line Chen
Probe: FMZB1519_0.009-30MHz	Polarity: Face On
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

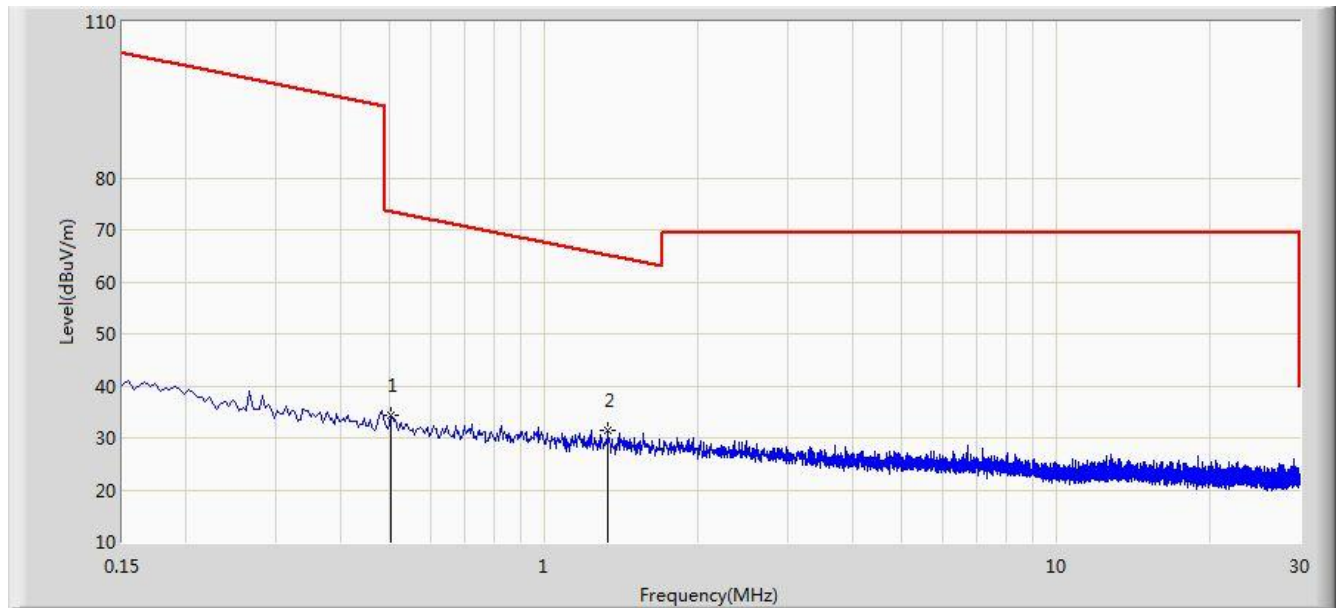


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.029	56.893	35.844	-61.463	118.356	21.049	PK
2		*	0.061	52.853	32.542	-59.045	111.898	20.311	PK

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

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

Site: AC1	Time: 2015/11/27 - 15:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Line Chen
Probe: FMZB1519_0.009-30MHz	Polarity: Face On
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

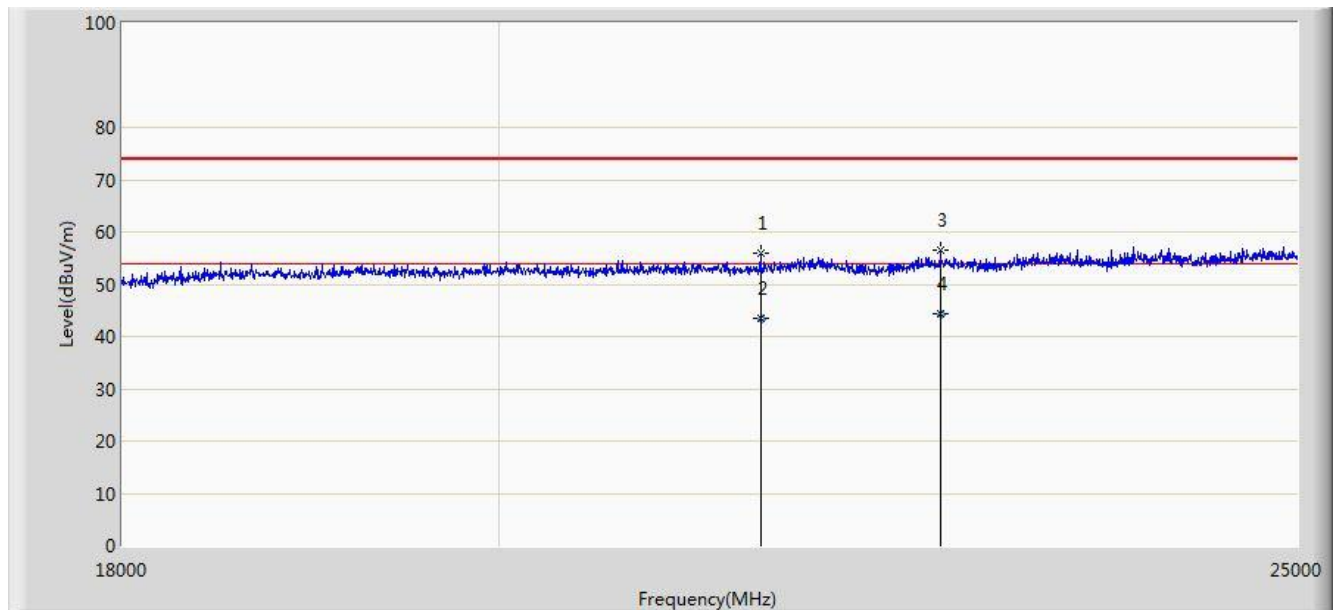


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.502	34.370	13.947	-39.220	73.590	20.423	QP
2		*	1.334	31.595	11.104	-33.530	65.125	20.491	QP

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

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

Site: AC1	Time: 2015/11/27 - 15:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Line Chen
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Note: There is the ambient noise within frequency range 18GHz~25GHz.	

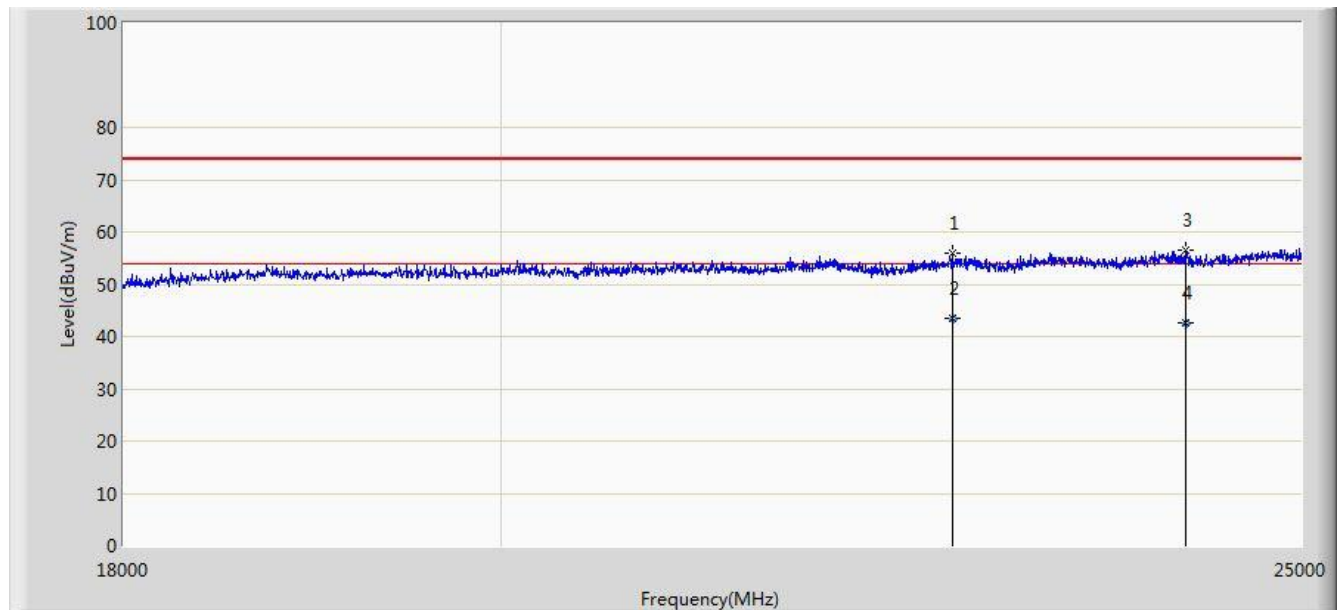


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			21517.500	55.869	17.883	-18.131	74.000	37.986	PK
2			21517.650	43.351	5.365	-10.649	54.000	37.986	AV
3			22630.500	56.509	18.223	-17.491	74.000	38.286	PK
4		*	22630.540	44.310	6.024	-9.690	54.000	38.286	AV

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

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

Site: AC1	Time: 2015/11/27 - 16:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Line Chen
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Note: There is the ambient noise within frequency range 18GHz~25GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			22686.500	55.811	17.457	-18.189	74.000	38.354	PK
2			22686.540	43.598	5.244	-10.402	54.000	38.354	AV
3			24205.500	56.430	17.607	-17.570	74.000	38.823	PK
4		*	24205.658	42.518	3.695	-11.482	54.000	38.823	AV

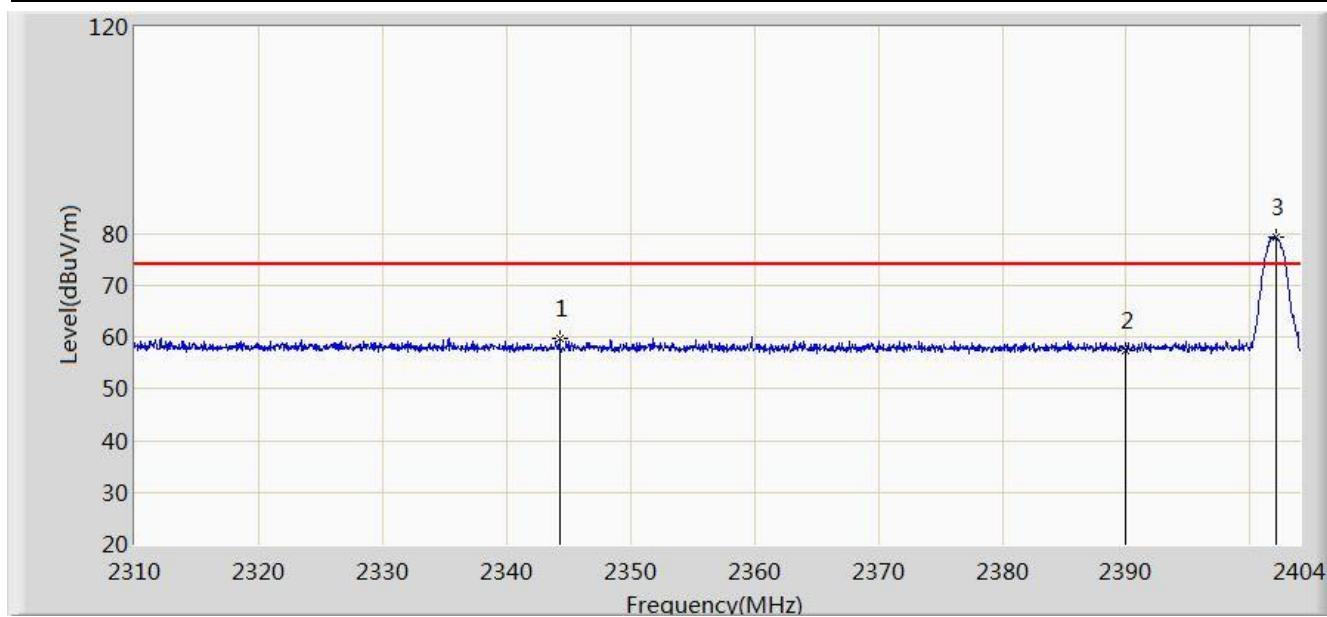
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

7.10. Radiated Restricted Band Edge Measurement

7.10.1. Test Result

Site: AC 1	Time: 2015/11/26 - 17:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at channel 2402MHz by 2DH5	

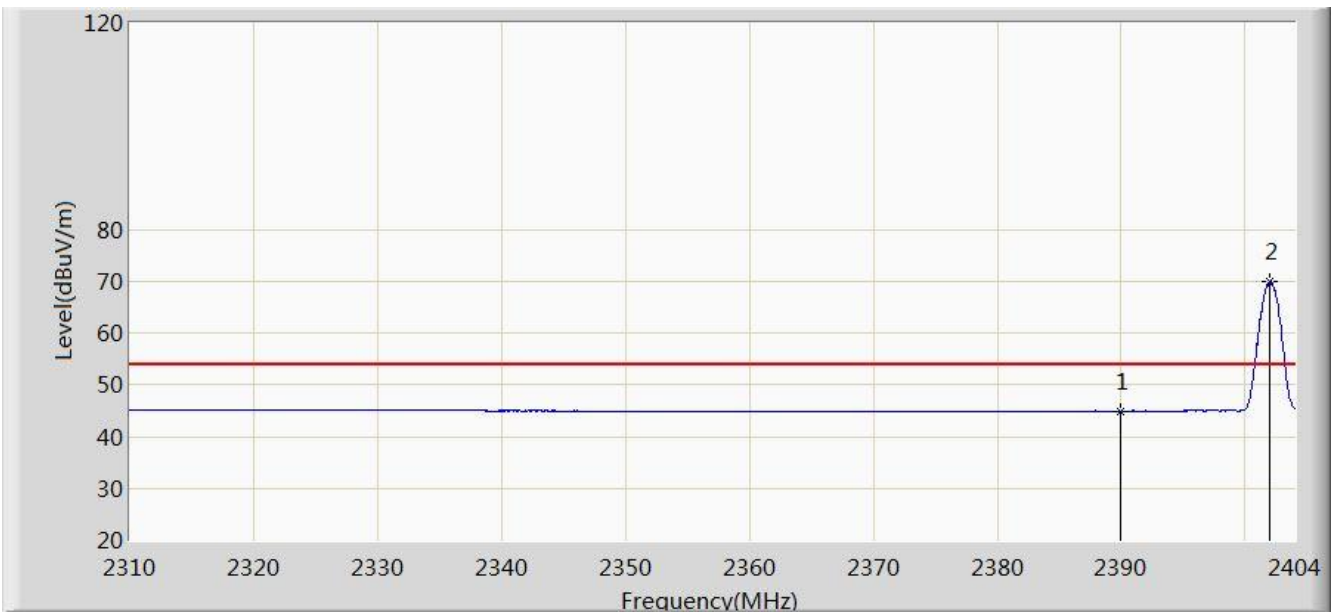


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2344.263	59.805	28.491	-14.195	74.000	31.315	PK
2			2390.000	57.470	26.267	-16.530	74.000	31.203	PK
3		*	2402.073	79.225	48.041	N/A	N/A	31.184	PK

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

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

Site: AC 1	Time: 2015/11/26 - 17:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at channel 2402MHz by 2DH5	

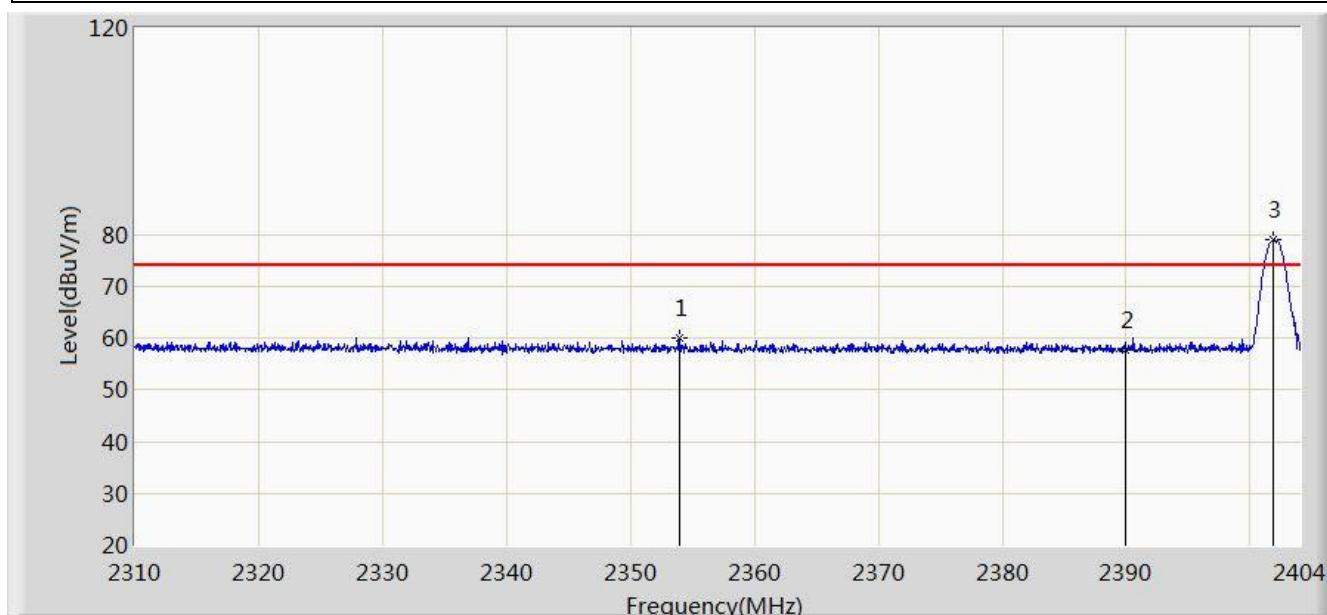


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	44.969	13.766	-9.031	54.000	31.203	AV
2		*	2401.932	69.908	38.724	N/A	N/A	31.184	AV

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

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

Site: AC 1	Time: 2015/11/26 - 17:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at channel 2402MHz by 2DH5	

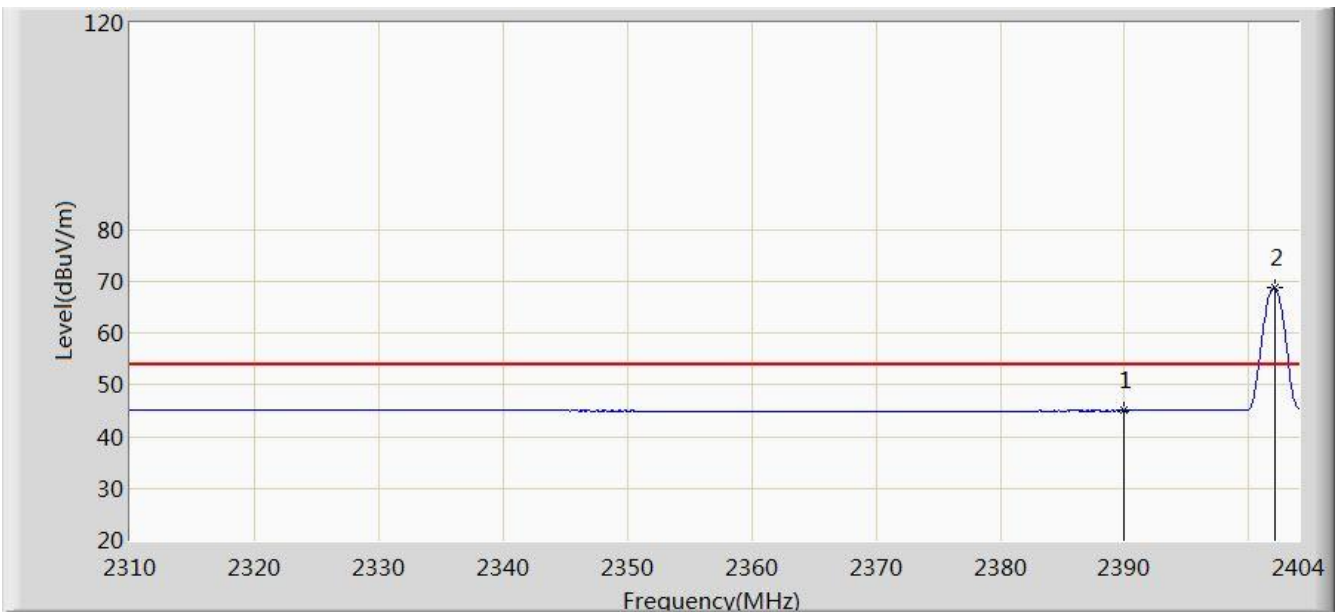


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2353.945	60.127	28.849	-13.873	74.000	31.277	PK
2			2390.000	57.648	26.445	-16.352	74.000	31.203	PK
3		*	2401.838	78.924	47.740	N/A	N/A	31.184	PK

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

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

Site: AC 1	Time: 2015/11/26 - 17:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at channel 2402MHz by 2DH5	

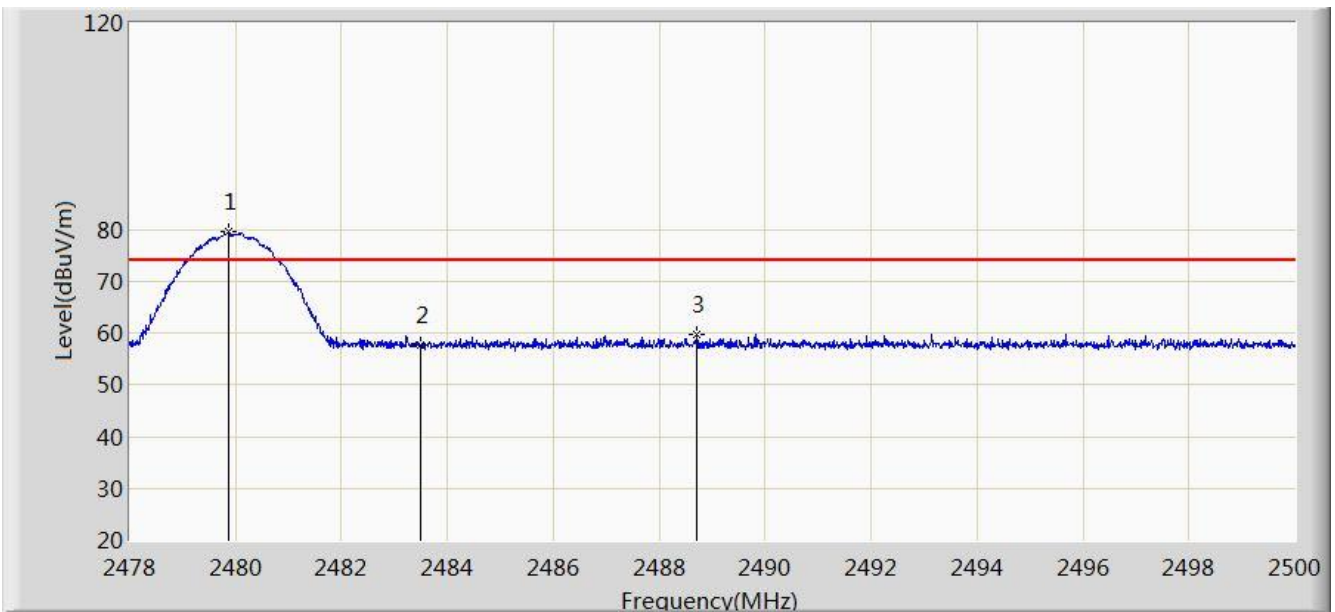


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.004	13.801	-8.996	54.000	31.203	AV
2		*	2402.073	68.741	37.557	N/A	N/A	31.184	AV

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

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

Site: AC 1	Time: 2015/11/26 - 18:13
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at channel 2480MHz by 3DH5	

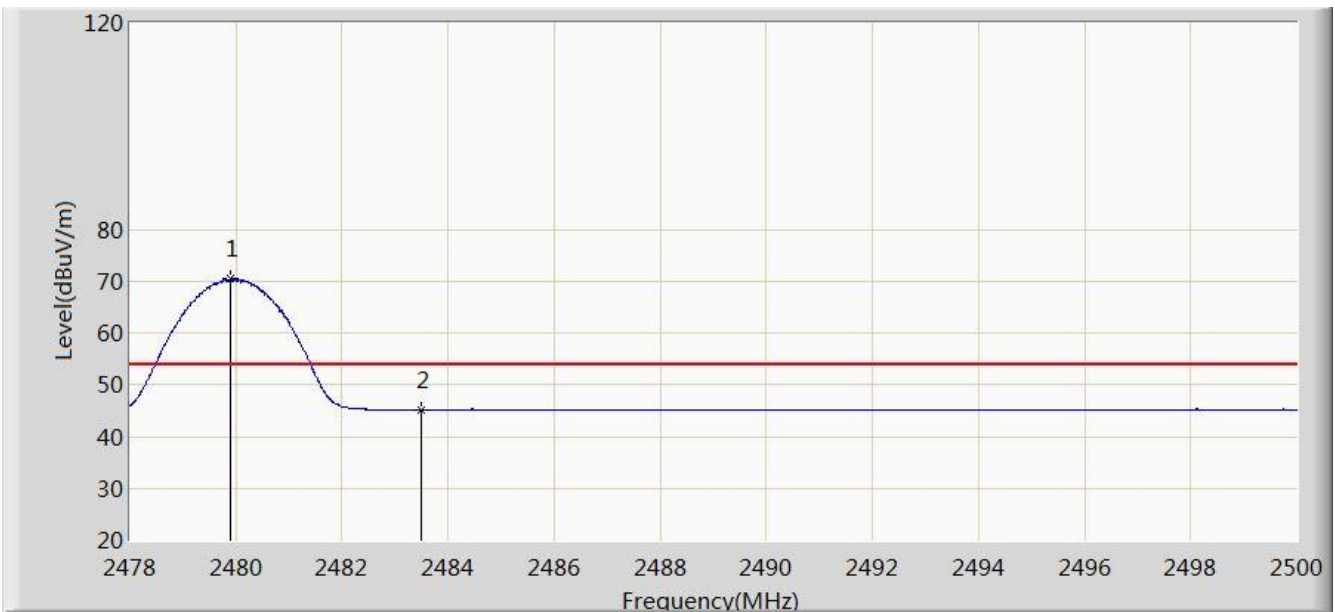


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.870	79.556	48.372	N/A	N/A	31.184	PK
2			2483.500	57.627	26.434	-16.373	74.000	31.194	PK
3			2488.714	59.840	28.633	-14.160	74.000	31.207	PK

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

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

Site: AC 1	Time: 2015/11/26 - 18:14
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at channel 2480MHz by 3DH5	

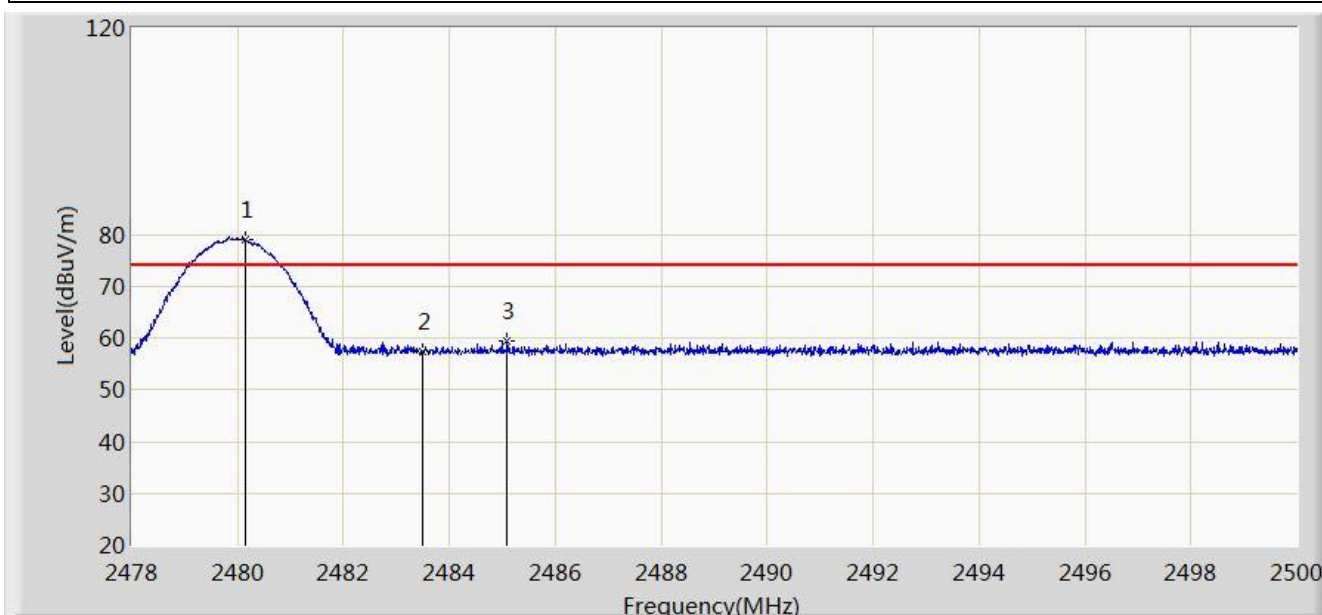


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.903	70.489	39.305	N/A	N/A	31.184	AV
2			2483.500	45.153	13.960	-8.847	54.000	31.194	AV

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

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

Site: AC 1	Time: 2015/11/26 - 18:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at channel 2480MHz by 3DH5	

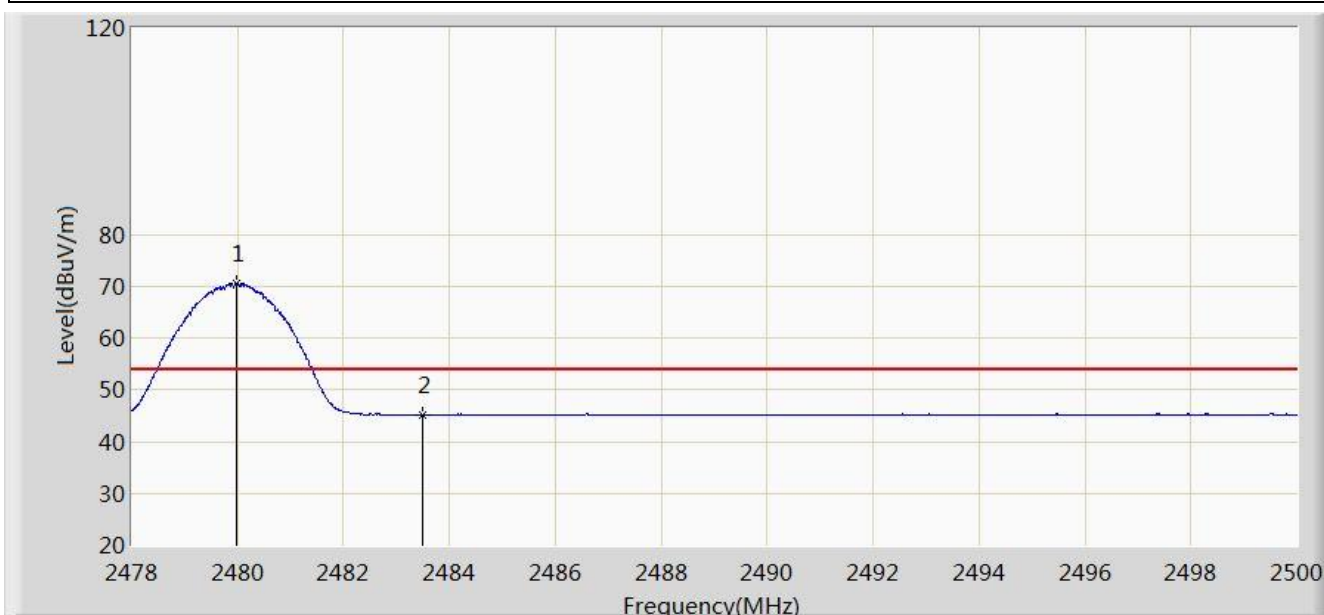


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.156	79.173	47.988	N/A	N/A	31.185	PK
2			2483.500	57.391	26.198	-16.609	74.000	31.194	PK
3			2485.095	59.613	28.415	-14.387	74.000	31.197	PK

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

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

Site: AC 1	Time: 2015/11/26 - 18:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: All-In-One CD Player with Bluetooth	Power: By USB
Worse Case Mode: Transmit at channel 2480MHz by 3DH5	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.969	70.471	39.287	N/A	N/A	31.184	AV
2			2483.500	45.184	13.991	-8.816	54.000	31.194	AV

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

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

7.11. AC Conducted Emissions Measurement

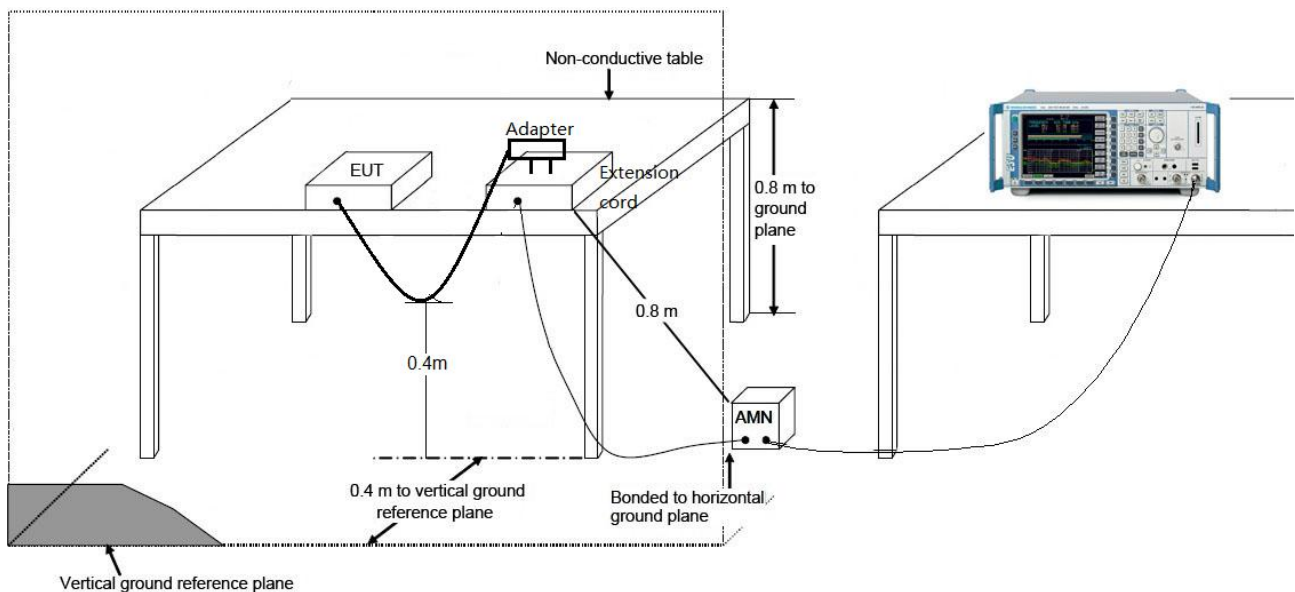
7.11.1. Test Limit

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

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

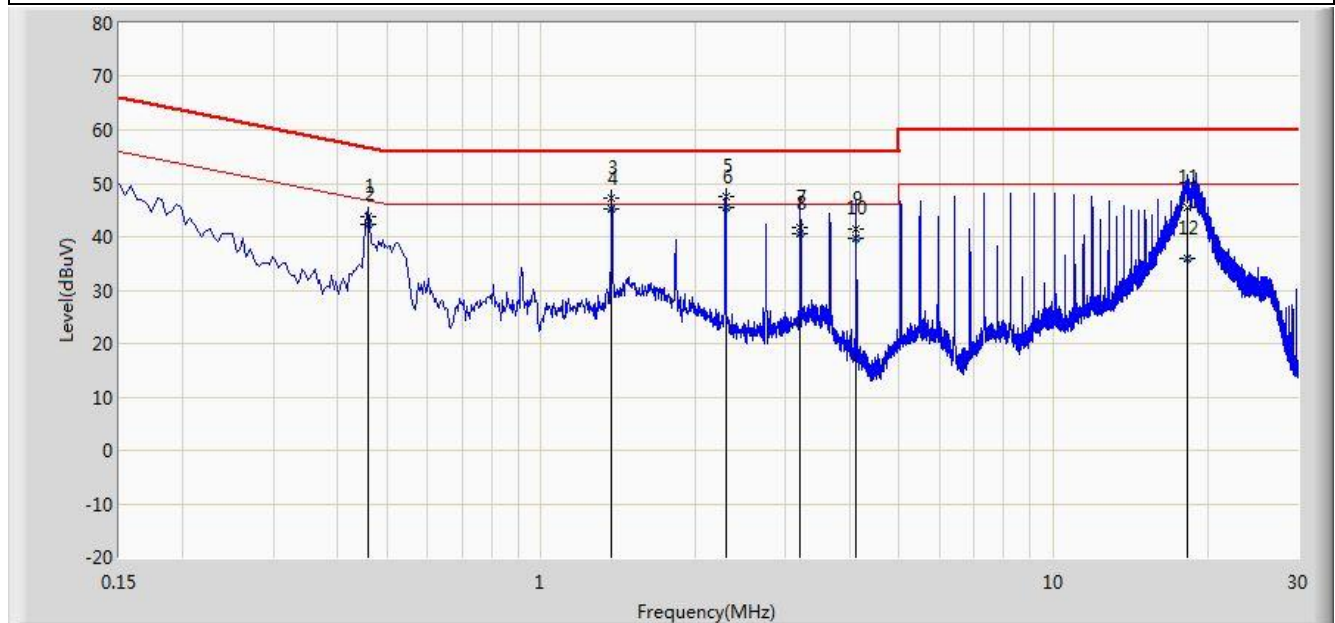
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.11.2. Test Setup



7.11.3. Test Result

Site: SR2	Time: 2015/11/27 - 17:21
Limit: FCC_Part15.207_CE_AC Power	Engineer: Line Chen
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: All-In-One CD Player with Bluetooth	Power: AC 120V/60Hz
Worse Mode: Transmit at Channel 2402MHz By 2DH5	

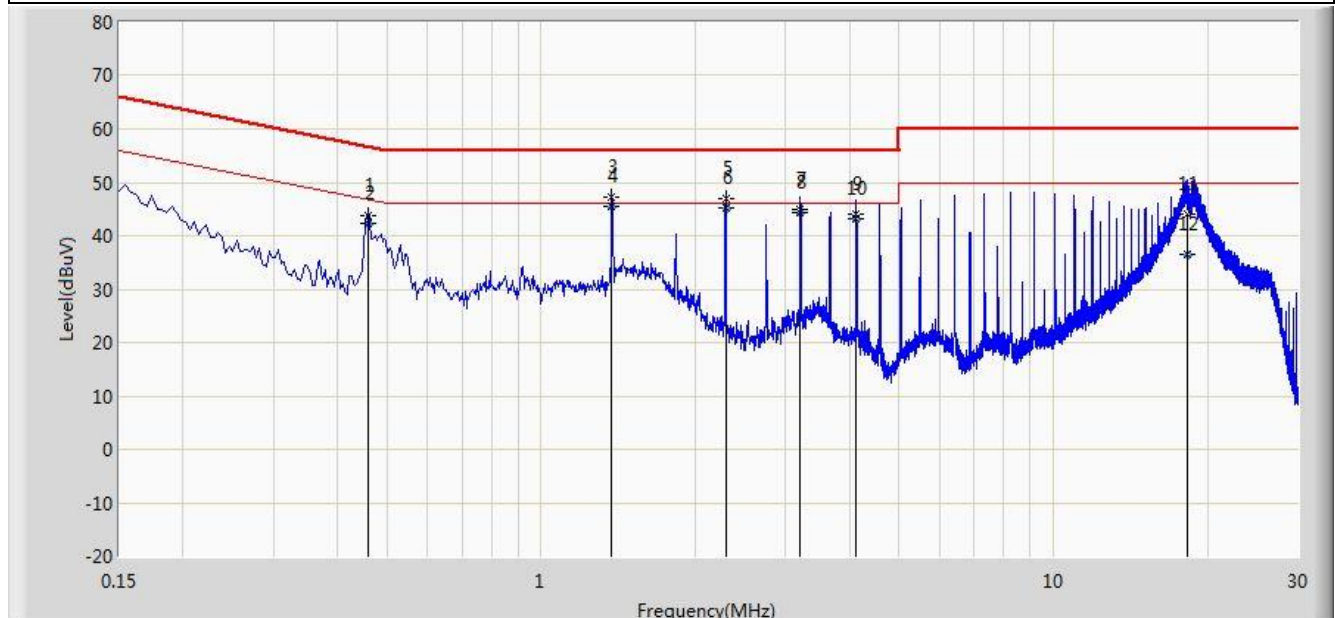


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.458	43.639	33.506	-13.090	56.729	10.133	QP
2			0.458	42.342	32.210	-4.387	46.729	10.133	AV
3			1.374	47.274	37.380	-8.726	56.000	9.894	QP
4			1.374	45.164	35.270	-0.836	46.000	9.894	AV
5			2.290	47.663	37.800	-8.337	56.000	9.863	QP
6		*	2.290	45.493	35.630	-0.507	46.000	9.863	AV
7			3.202	41.782	31.915	-14.218	56.000	9.868	QP
8			3.202	40.502	30.634	-5.498	46.000	9.868	AV
9			4.118	41.376	31.405	-14.624	56.000	9.971	QP
10			4.118	39.767	29.796	-6.233	46.000	9.971	AV
11			18.246	45.555	35.454	-14.445	60.000	10.101	QP
12			18.246	35.827	25.726	-14.173	50.000	10.101	AV

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

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

Site: SR2	Time: 2015/11/27 - 17:27
Limit: FCC_Part15.207_CE_AC Power	Engineer: Line Chen
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: All-In-One CD Player with Bluetooth	Power: AC 120V/60Hz
Worse Mode: Transmit at Channel 2402MHz By 2DH5	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.458	43.799	33.643	-12.930	56.729	10.156	QP
2			0.458	42.329	32.173	-4.400	46.729	10.156	AV
3			1.374	47.195	37.300	-8.805	56.000	9.895	QP
4		*	1.374	45.419	35.524	-0.581	46.000	9.895	AV
5			2.290	46.966	37.100	-9.034	56.000	9.866	QP
6			2.290	45.266	35.400	-0.734	46.000	9.866	AV
7			3.206	44.960	35.087	-11.040	56.000	9.873	QP
8			3.206	44.315	34.442	-1.685	46.000	9.873	AV
9			4.122	44.091	34.112	-11.909	56.000	9.979	QP
10			4.122	43.153	33.173	-2.847	46.000	9.979	AV
11			18.230	44.042	33.903	-15.958	60.000	10.138	QP
12			18.230	36.509	26.370	-13.491	50.000	10.138	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 **All-In-One CD Player with Bluetooth FCC ID: 2AGG4LA620** is in compliance with Part 15C of the FCC Rules.

The End