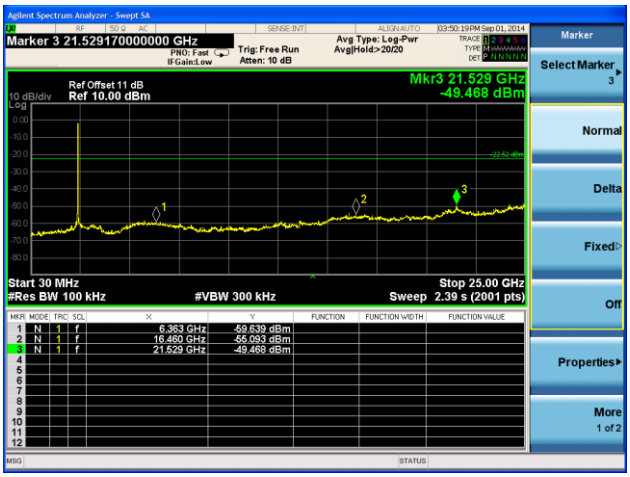
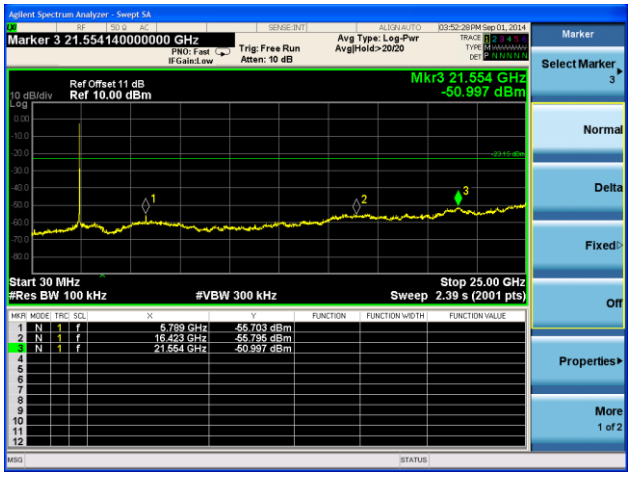
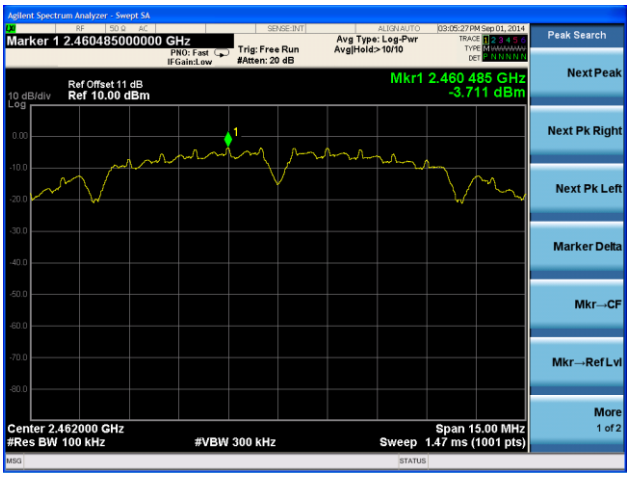
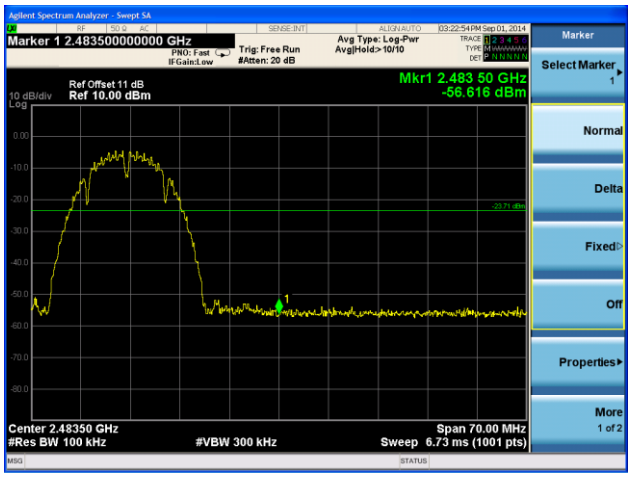
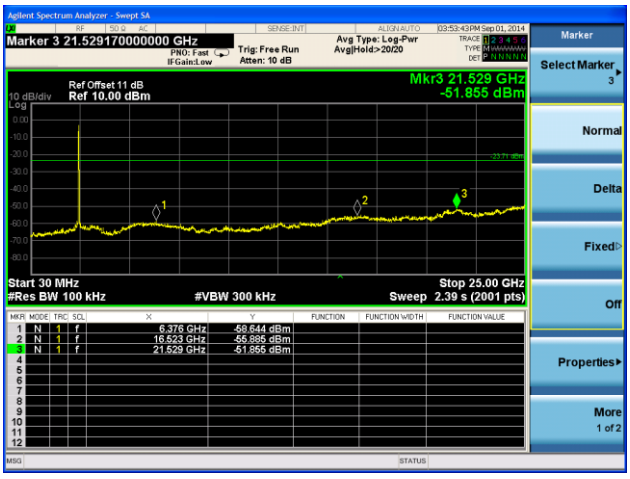
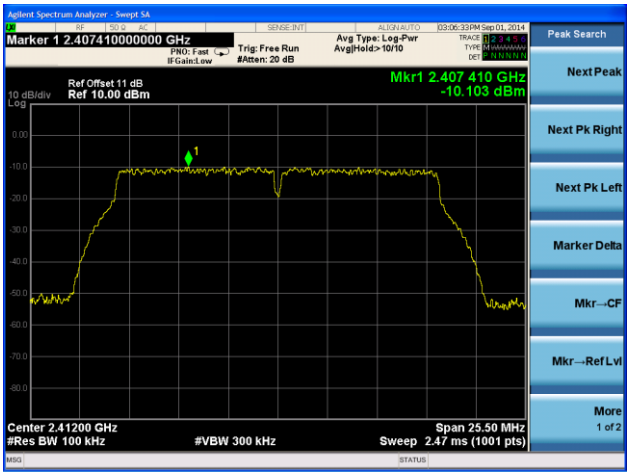
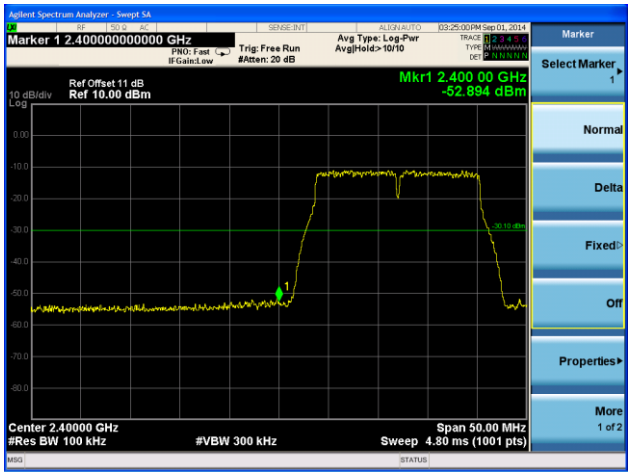
Spurious Emission 30MHz ~ 25GHz	
	

Channel 06 (2437MHz)	
100kHz PSD reference Level	**Spurious Emission 30MHz ~ 25GHz**
	

Channel 11 (2462MHz)	
100kHz PSD reference Level	**High Band Edge**
	

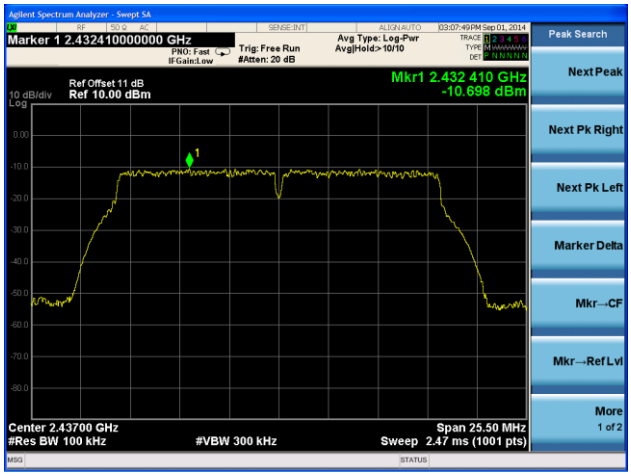
Spurious Emission 30MHz ~ 25GHz	
	

802.11g Out-of-Band Emissions	
Channel 01 (2412MHz)	
100kHz PSD reference Level	Low Band Edge
	

Spurious Emission 30MHz ~ 25GHz	
	

Channel 06 (2437MHz)

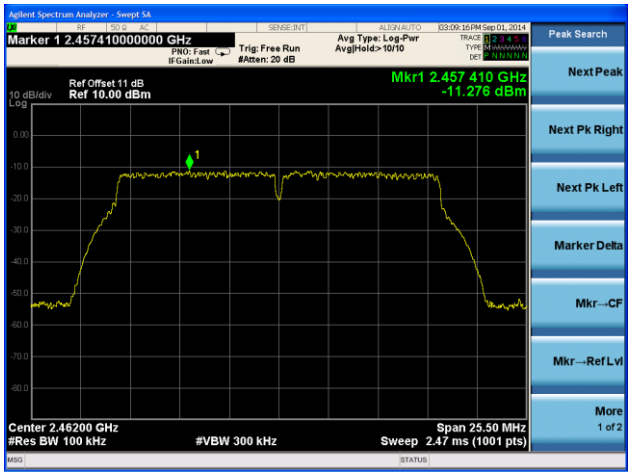
100kHz PSD reference Level



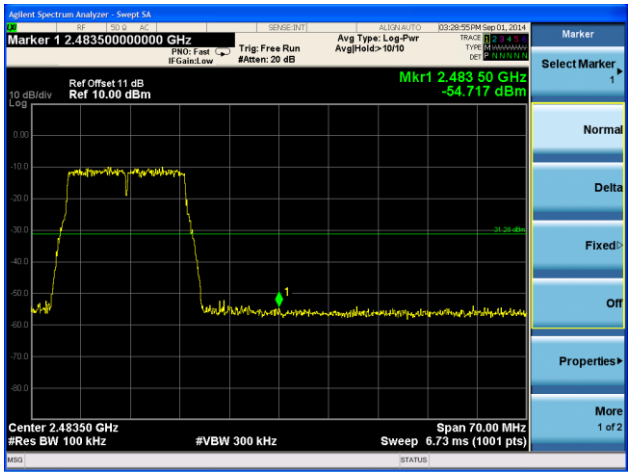
Spurious Emission 30MHz ~ 25GHz

Channel 11 (2462MHz)

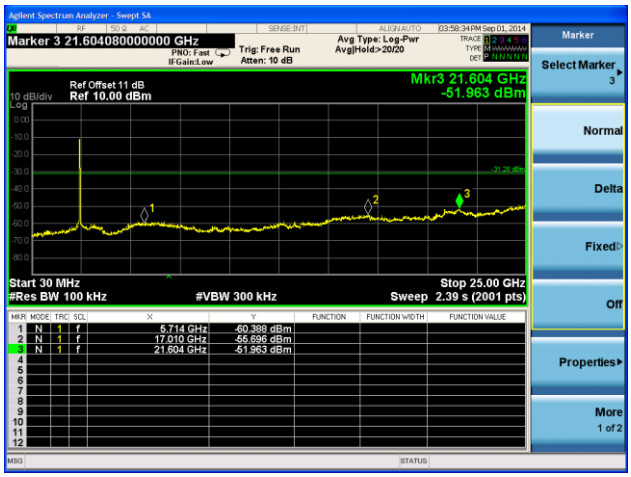
100kHz PSD reference Level



High Band Edge



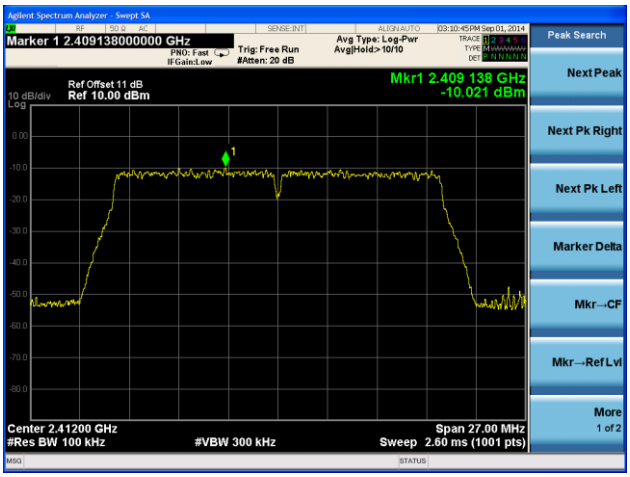
Spurious Emission 30MHz ~ 25GHz



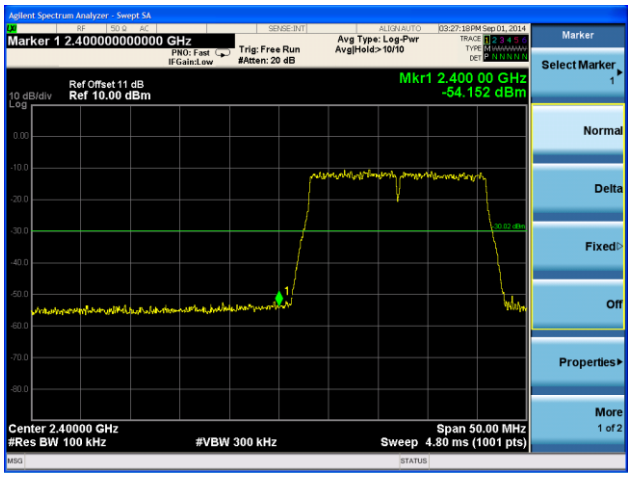
802.11n-HT20 Out-of-Band Emissions

Channel 01 (2412MHz)

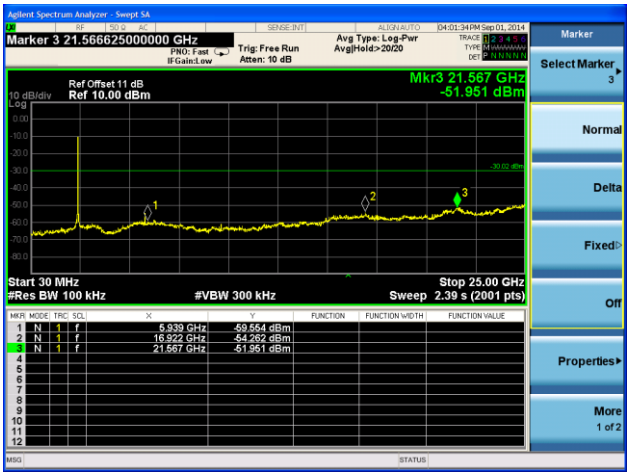
100kHz PSD reference Level



Low Band Edge

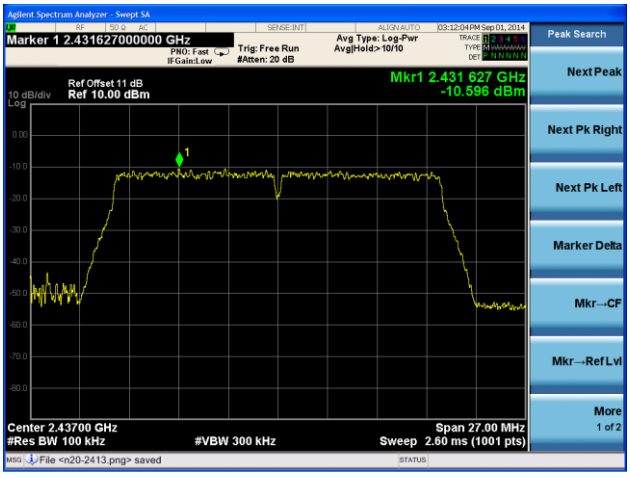


Spurious Emission 30MHz ~ 25GHz

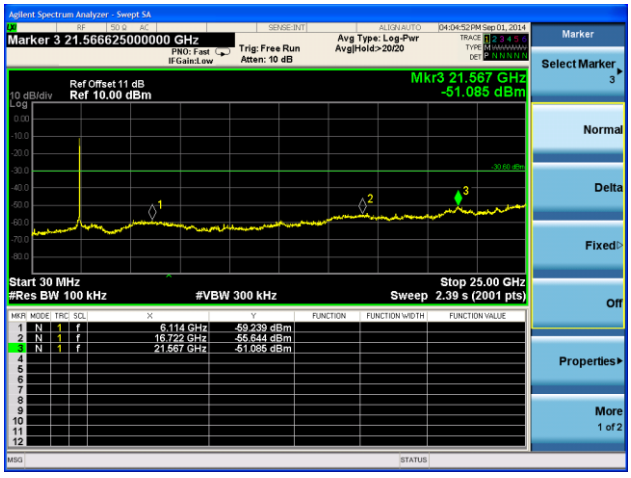


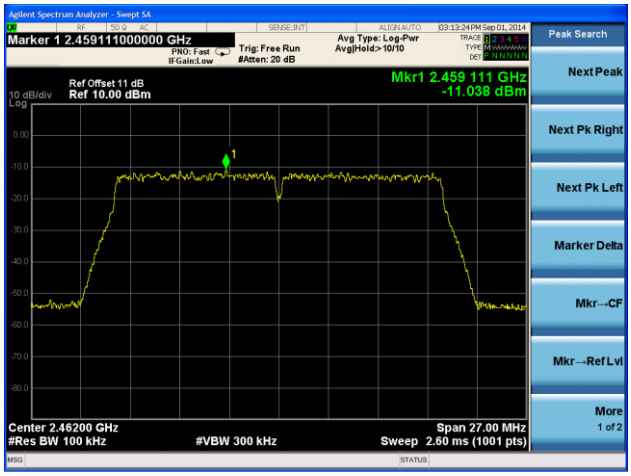
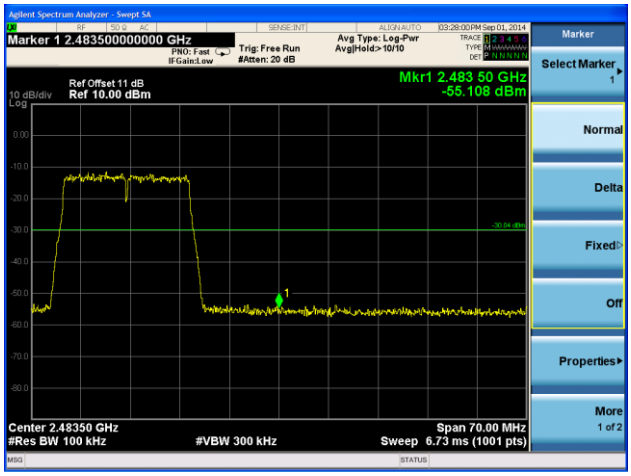
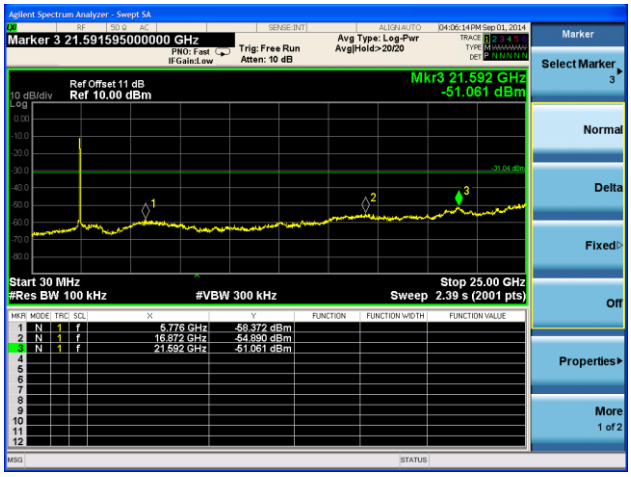
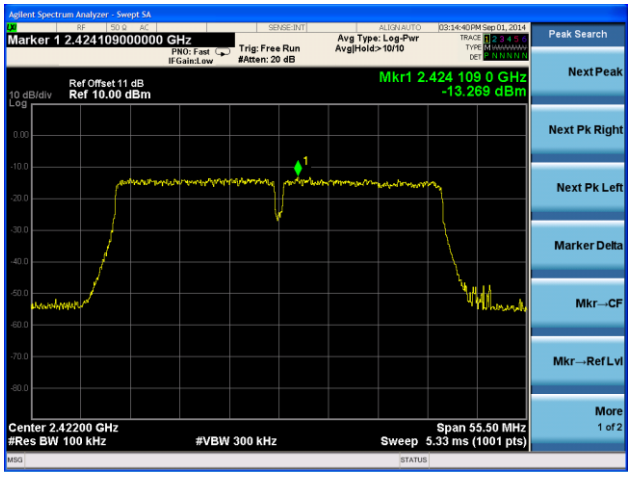
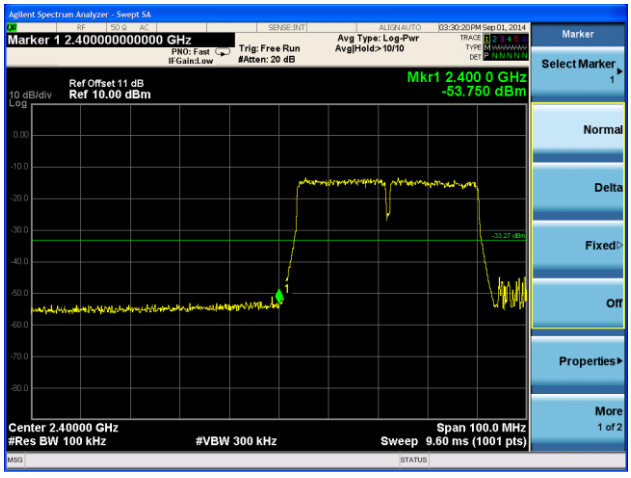
Channel 06 (2437MHz)

100kHz PSD reference Level

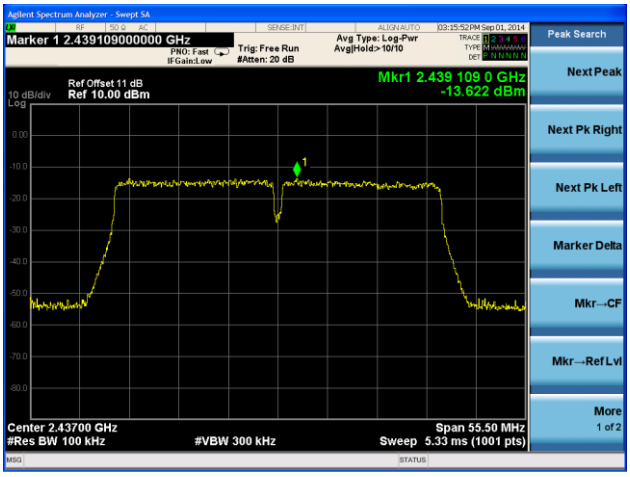
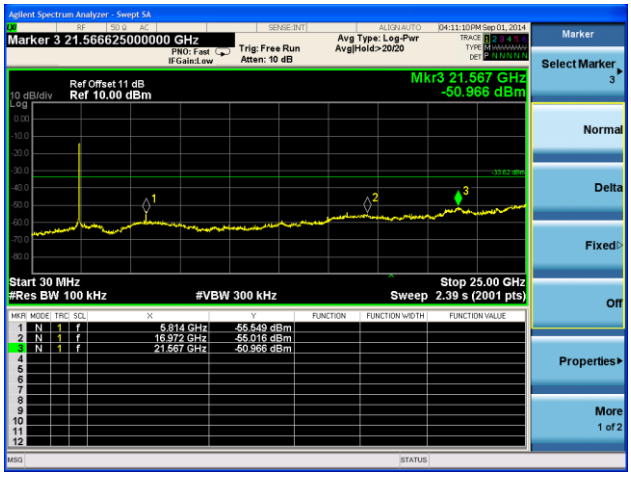


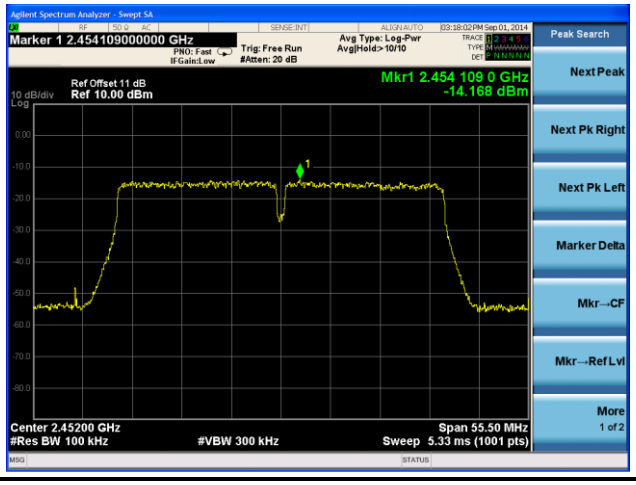
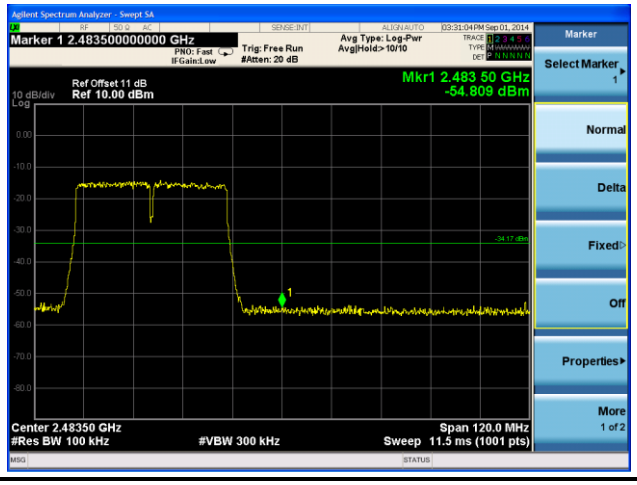
Spurious Emission 30MHz ~ 25GHz



Channel 11 (2462MHz)	
100kHz PSD reference Level	**High Band Edge**
	
Spurious Emission 30MHz ~ 25GHz	
	
802.11n-HT40 Out-of-Band Emissions	
Channel 03 (2422MHz)	
100kHz PSD reference Level	**Low Band Edge**
	

Spurious Emission 30MHz ~ 25GHz	
	

Channel 06 (2437MHz)	
100kHz PSD reference Level	Spurious Emission 30MHz ~ 25GHz
	

Channel 09 (2452MHz)	
100kHz PSD reference Level	High Band Edge
	

Spurious Emission 30MHz ~ 25GHz	
	

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 [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

7.6.2. Test Procedure Used

KDB 558074 D01v03r02 – Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v03r02 – Section 12.2.4 (peak power measurements)

KDB 558074 D01v03r02 – Section 12.2.5 (average power measurements)

7.6.3. Test Setting

Peak Field Strength Measurements per Section 12.2.4 of KDB 558074 D01v03r02

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

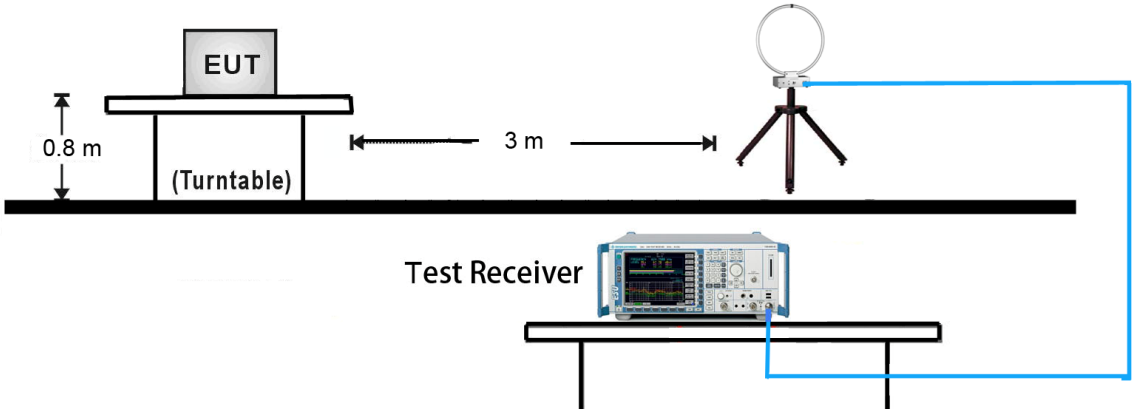
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements per Section 12.2.5.1 of KDB 558074 D01v03r02

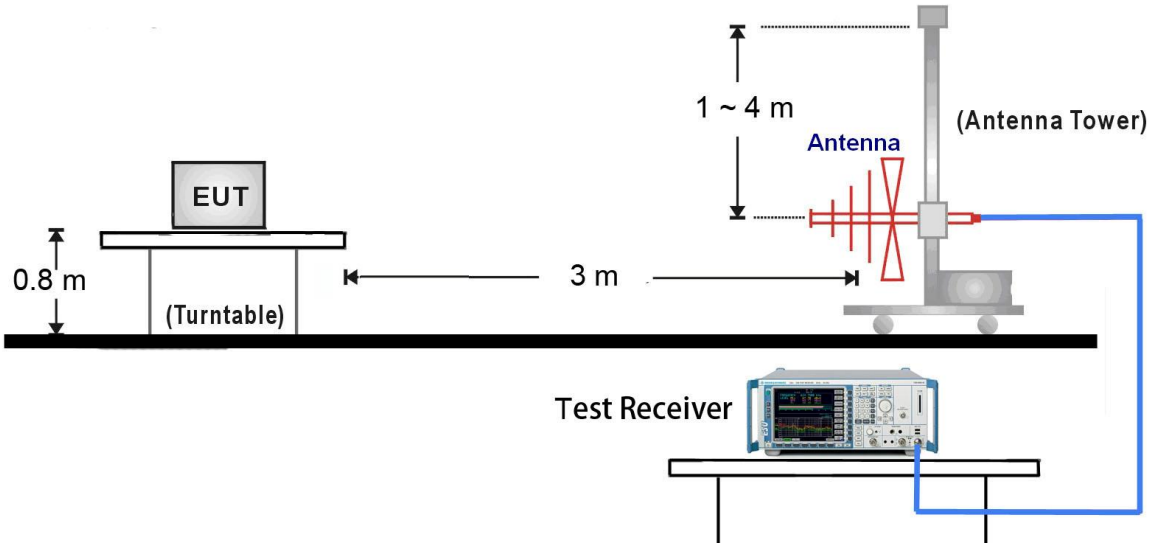
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain).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

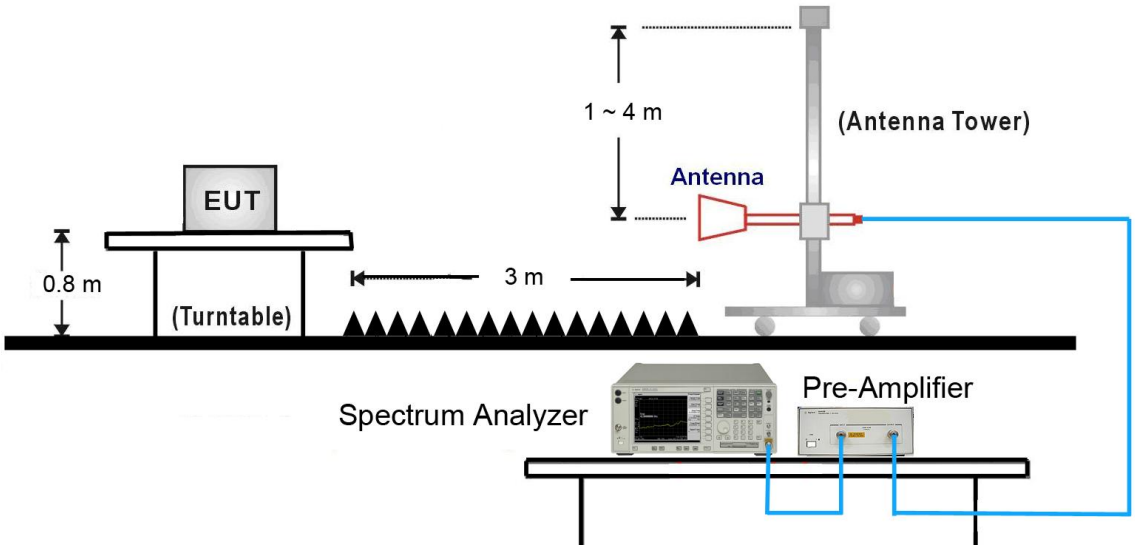
9kHz ~ 30MHz Test Setup:



30MHz ~ 1GHz Test Setup:



1GHz ~ 25GHz Test Setup:



7.6.5. Test Result

Test Mode:	802.11n-HT40	Test Site:	AC1
Test Channel:	06	Test Engineer:	Milo Li
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
*	3142.6	37.0	3.6	40.6	72.6	-32.0	Peak	Horizontal
*	4412.0	37.6	5.5	43.1	72.6	-29.5	Peak	Horizontal
	5101.2	37.4	7.1	44.5	74.0	-29.5	Peak	Horizontal
	7236.0	36.3	13.8	50.1	74.0	-23.9	Peak	Horizontal
*	3121.6	36.5	3.5	40.0	72.6	-32.6	Peak	Vertical
*	3523.6	36.1	3.9	40.0	72.6	-32.6	Peak	Vertical
	5102.7	36.4	7.1	43.5	74.0	-30.5	Peak	Vertical
	7236.0	35.5	13.8	49.3	74.0	-24.7	Peak	Vertical

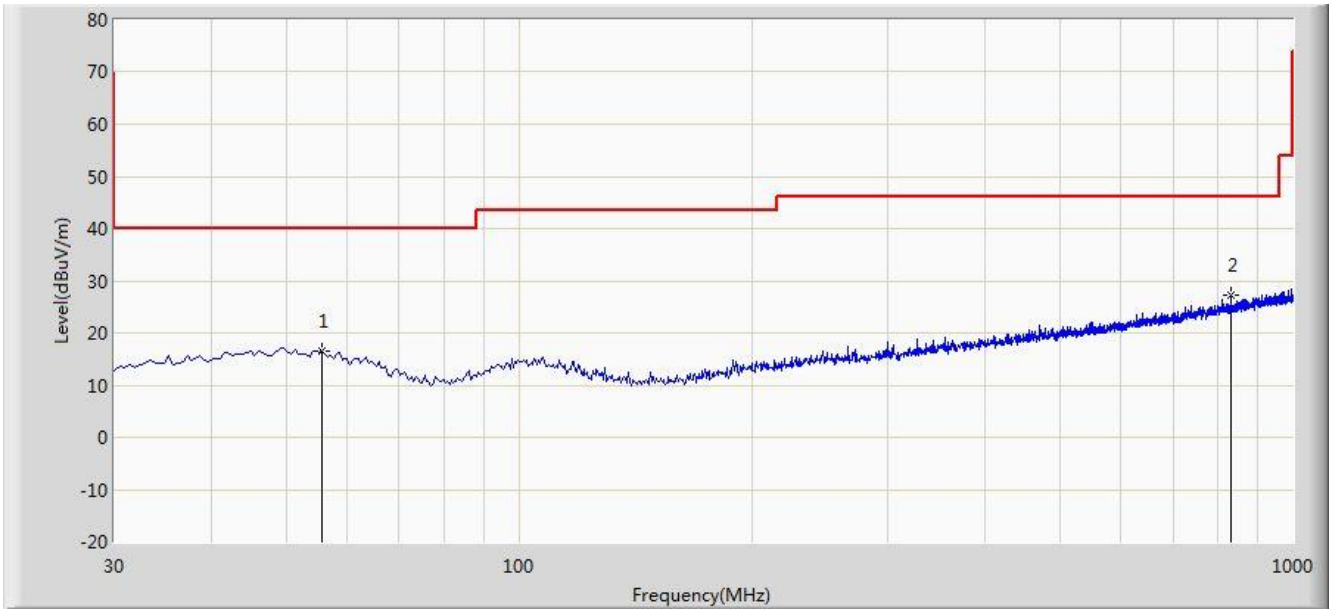
Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (92.6dBμV/m).

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:

Engineer: Milo Li	
Site: AC1	Time: 2014/09/09 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 802.11b at channel 2462MHz	

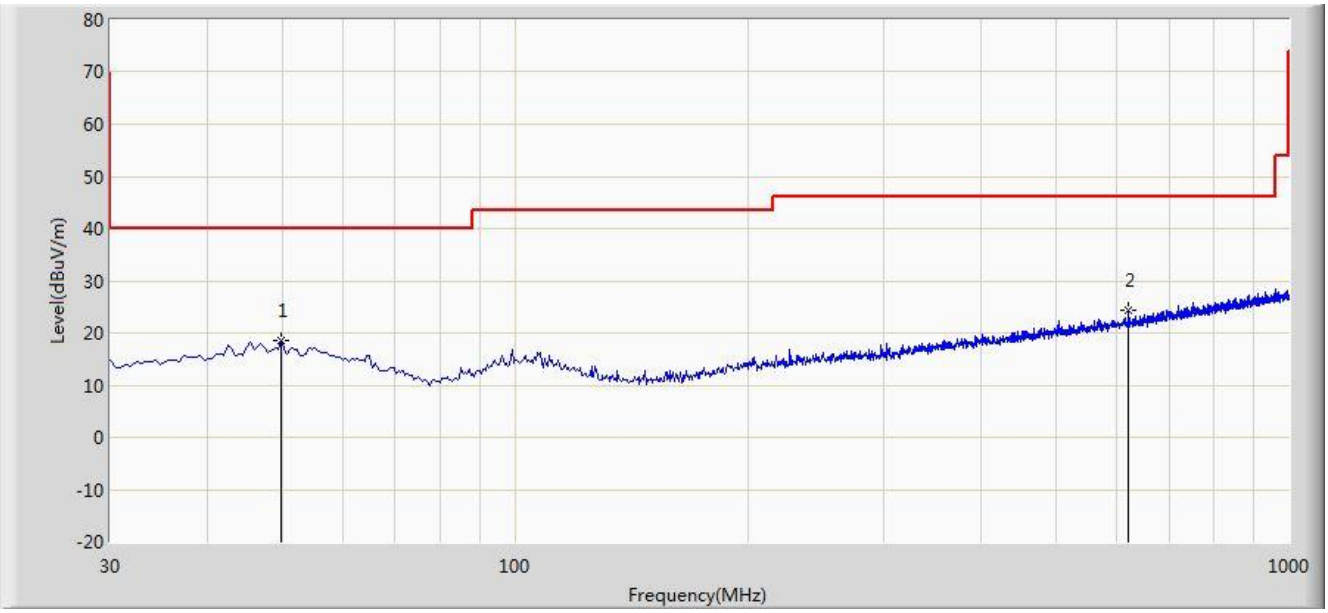


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	55.705	16.507	2.119	-23.493	40.000	14.389	QP
2			830.735	27.175	4.609	-18.825	46.000	22.566	QP

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/09 - 09:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 802.11b at channel 2462MHz	

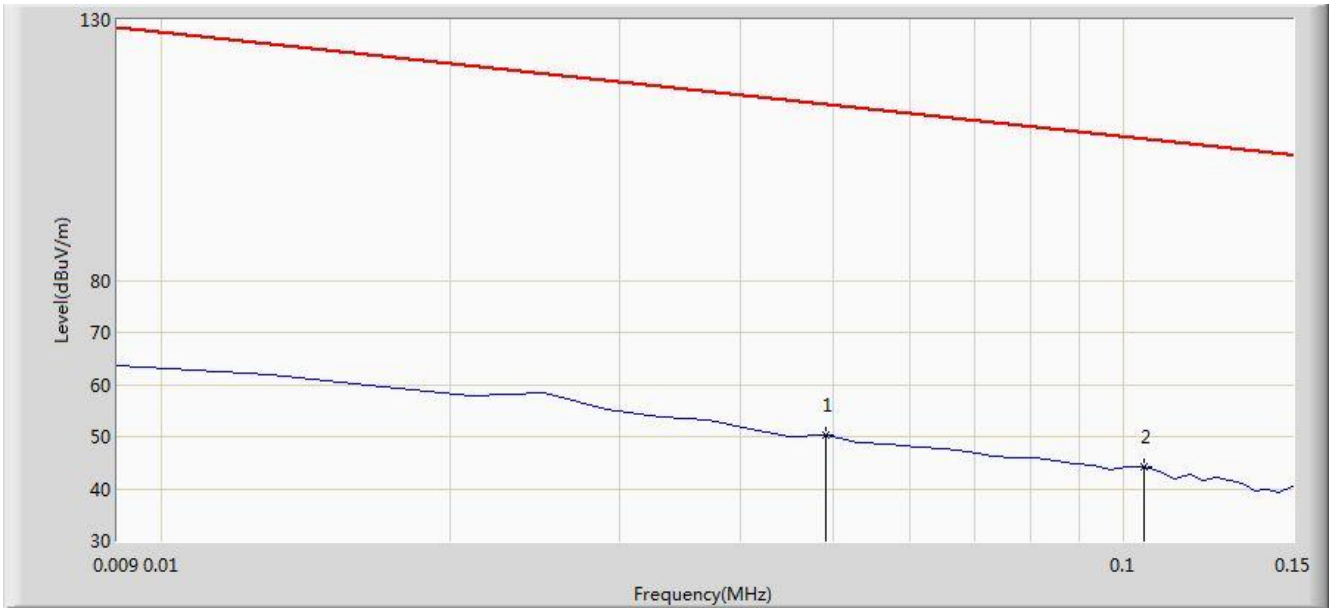


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	49.885	18.671	3.913	-21.329	40.000	14.759	QP
2			620.245	24.489	4.801	-21.511	46.000	19.688	QP

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

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

Engineer: Roy Cheng	
Site: AC1	Time: 2014/09/03 - 16:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: FMZB1519_0.009-30MHz	Polarity: Face On
EUT: meCloud WIFI Storage	Power: By Battery
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

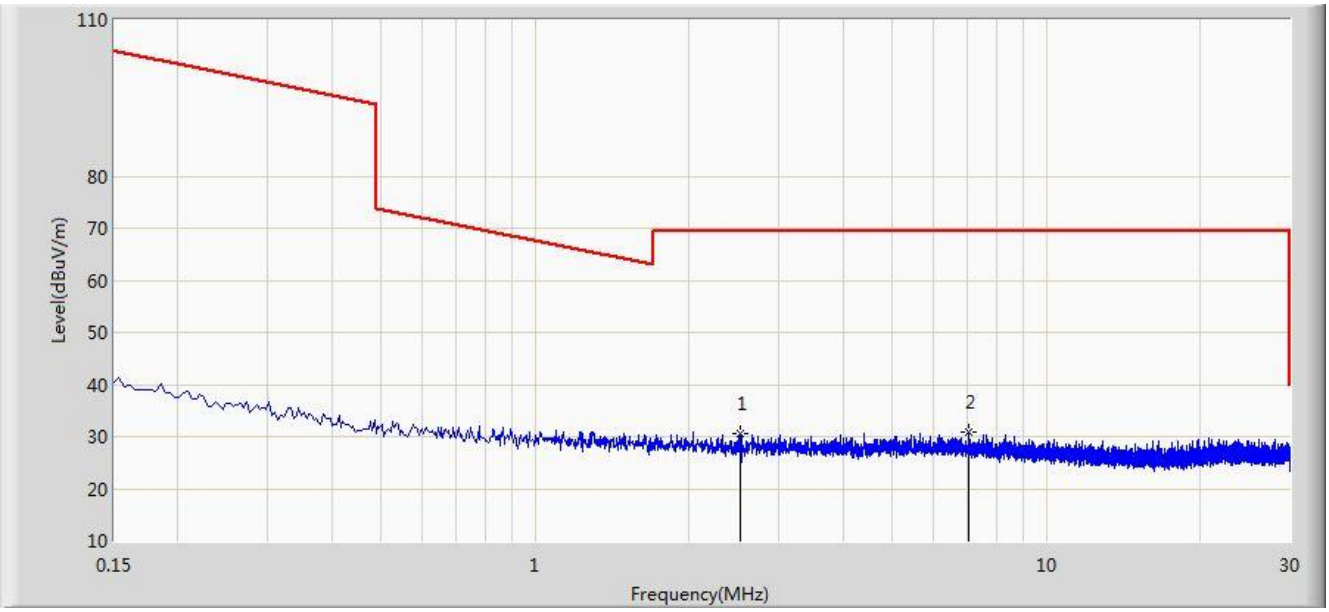


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.049	50.367	29.861	-63.422	113.789	20.505	QP
2		*	0.105	44.143	23.996	-63.029	107.173	20.147	QP

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

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

Engineer: Roy Cheng	
Site: AC1	Time: 2014/09/03 - 16:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: FMZB1519_0.009-30MHz	Polarity: Face On
EUT: meCloud WIFI Storage	Power: By Battery
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

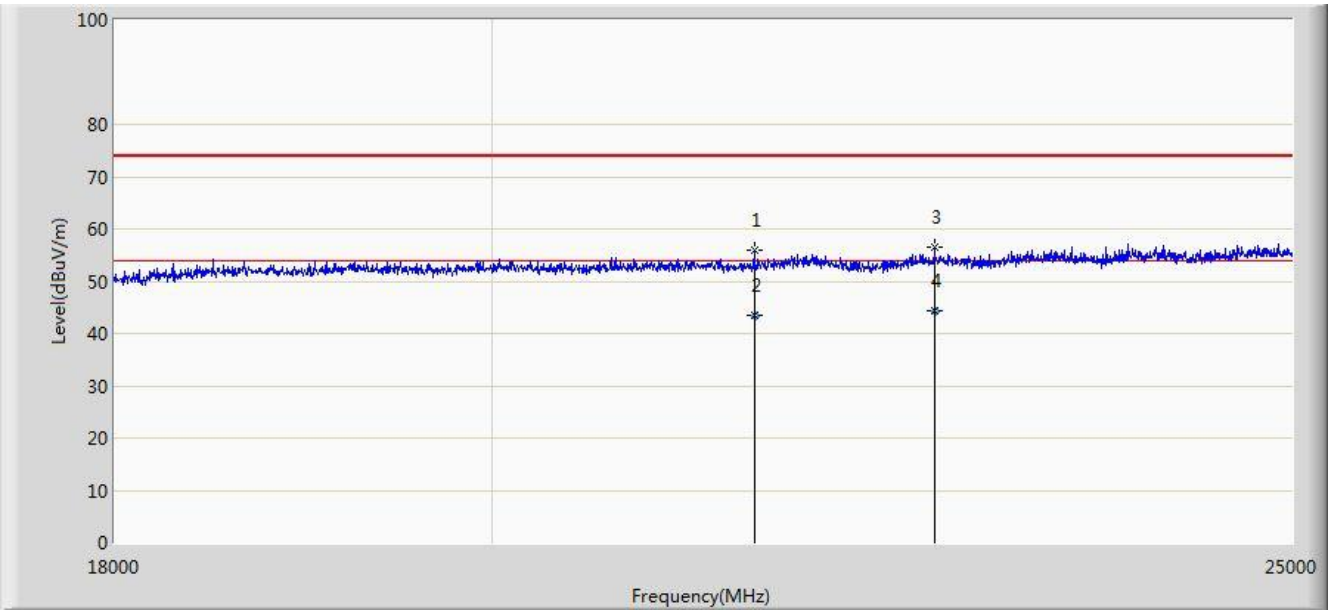


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2.513	30.495	10.336	-39.005	69.500	20.159	QP
2		*	7.041	30.974	10.579	-38.526	69.500	20.395	QP

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

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

Engineer: Roy Cheng	
Site: AC1	Time: 2014/09/03 - 17:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: meCloud WIFI Storage	Power: By Battery
Note: There is the ambient noise within frequency range 18 ~ 25GHz.	

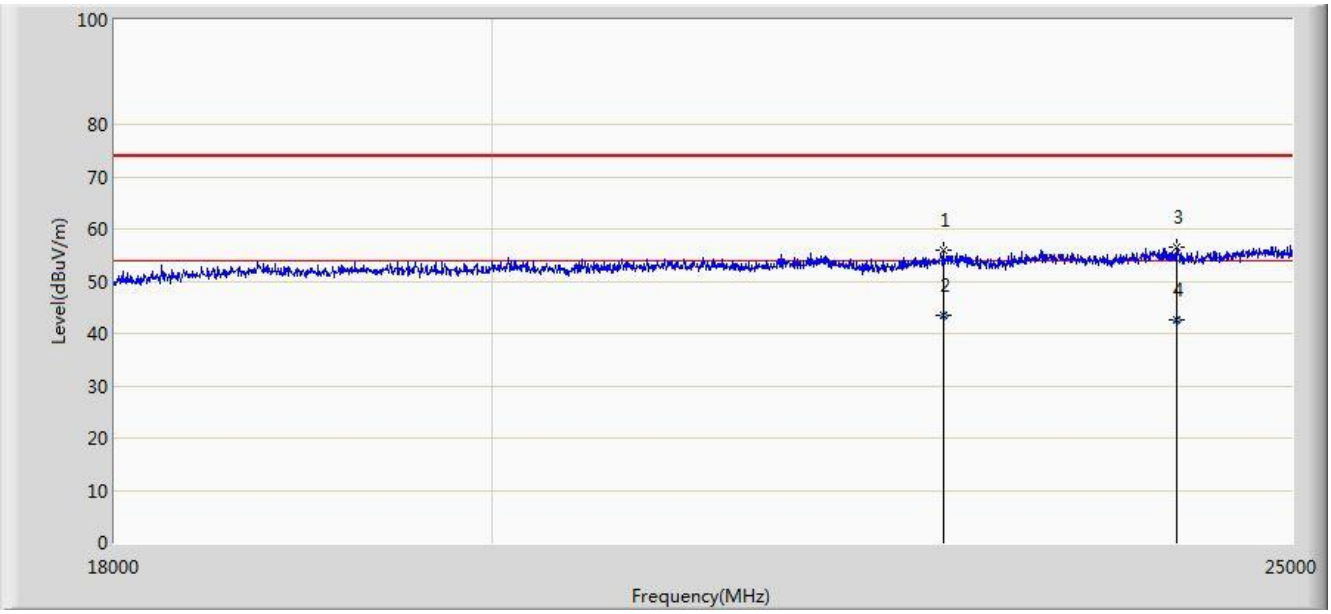


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			21517.500	55.869	17.883	-18.131	74.000	37.986	PK
2			21517.650	43.351	5.365	-10.649	54.000	37.986	AV
3			22630.500	56.509	18.223	-17.491	74.000	38.286	PK
4		*	22630.540	44.310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

Engineer: Roy Cheng	
Site: AC1	Time: 2014/09/03 - 17:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: meCloud WIFI Storage	Power: By Battery
Note: There is the ambient noise within frequency range 18 ~ 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

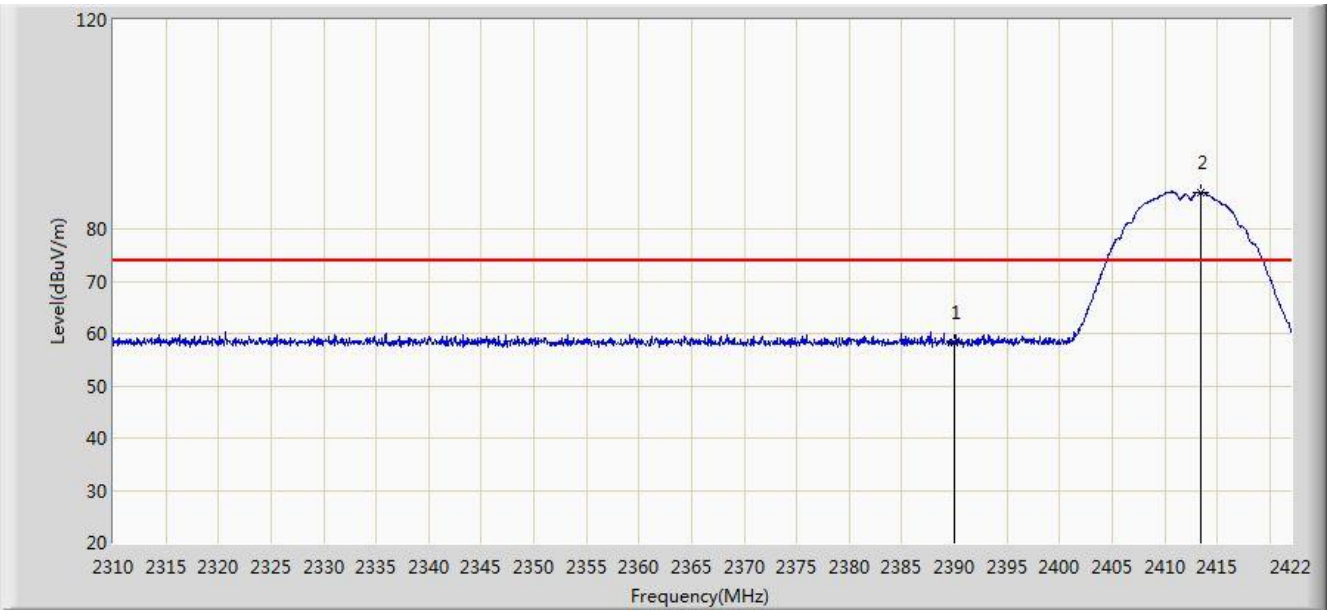
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Result

Engineer: Milo Li	
Site: AC1	Time: 2014/09/04 - 09:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 802.11b at channel 2412MHz	

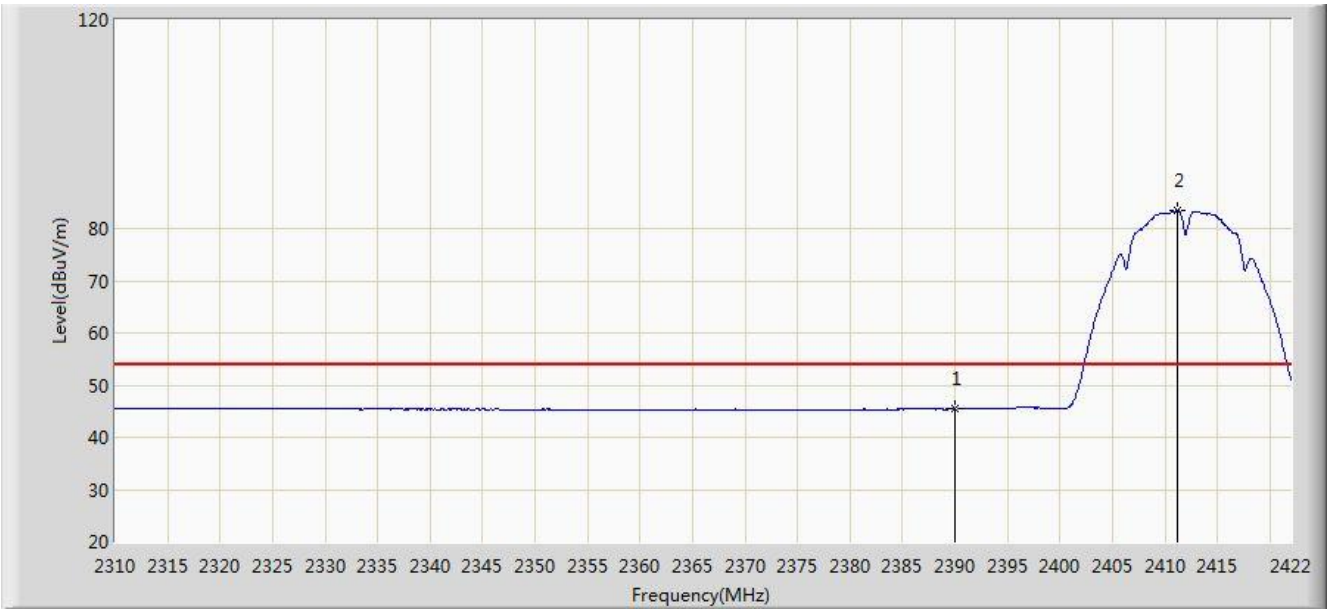


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	58.288	27.604	-15.712	74.000	30.684	PK
2		*	2413.432	87.014	56.371	N/A	N/A	30.643	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/04 - 09:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 802.11b at channel 2412MHz	

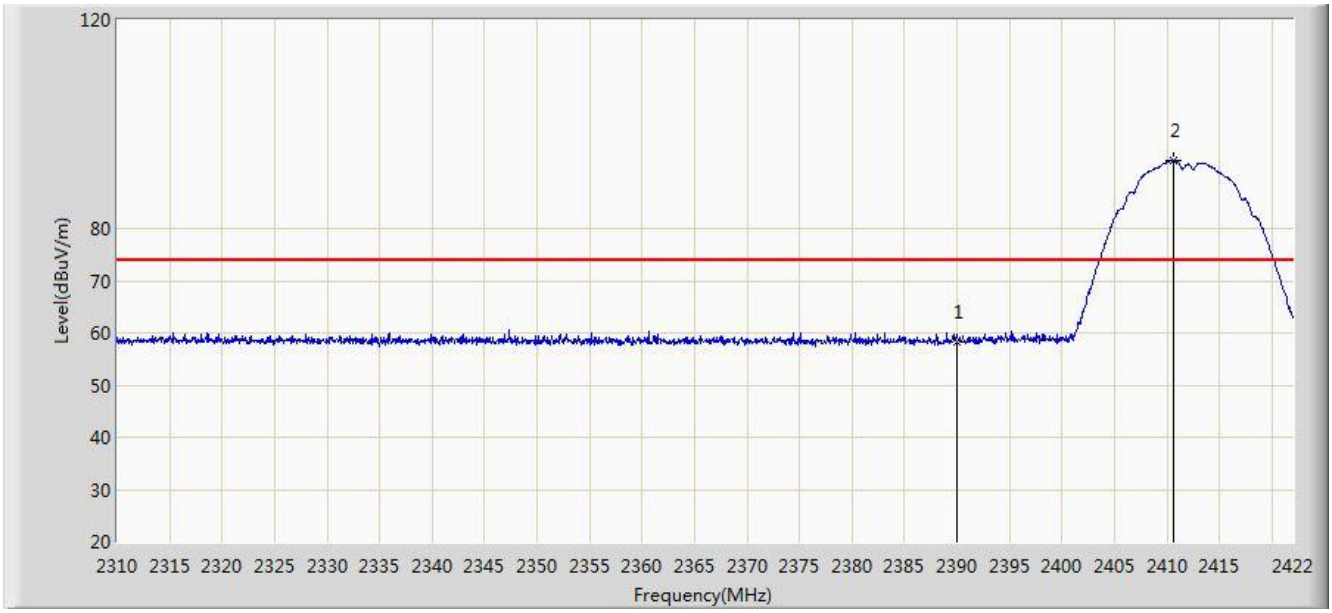


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.364	14.680	-8.636	54.000	30.684	AV
2		*	2411.192	83.515	52.869	N/A	N/A	30.646	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/04 - 10:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 802.11b at channel 2412MHz	

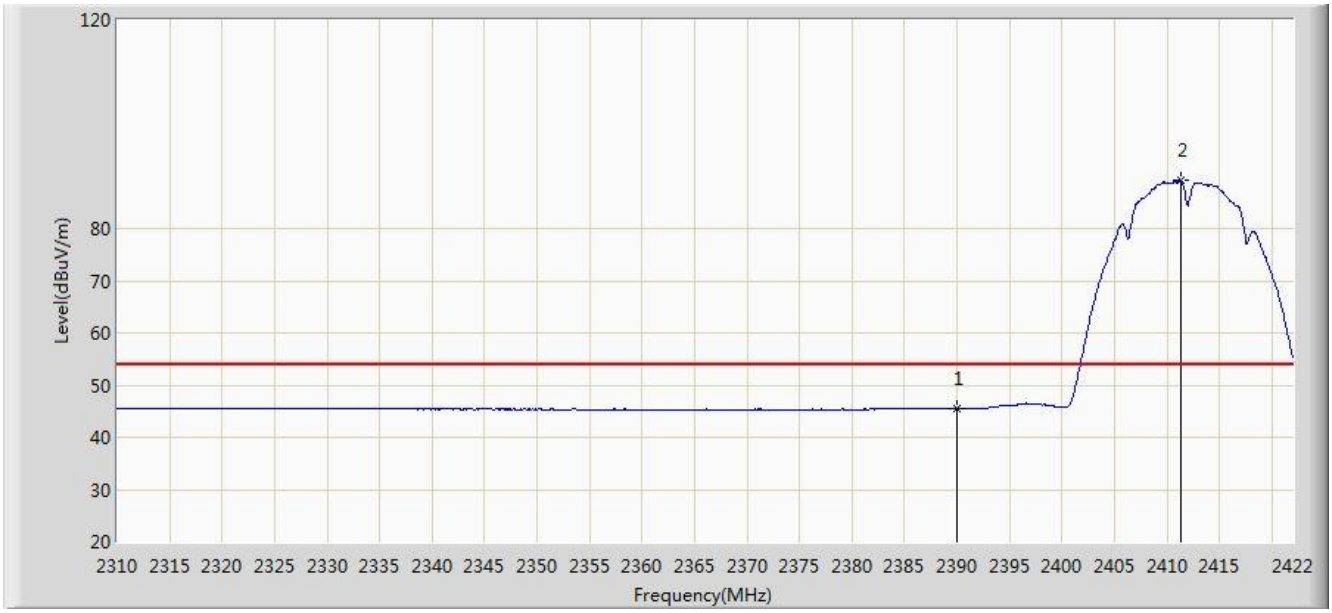


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	58.204	27.520	-15.796	74.000	30.684	PK
2		*	2410.632	92.976	62.329	N/A	N/A	30.647	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/04 - 10:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 802.11b at channel 2412MHz	

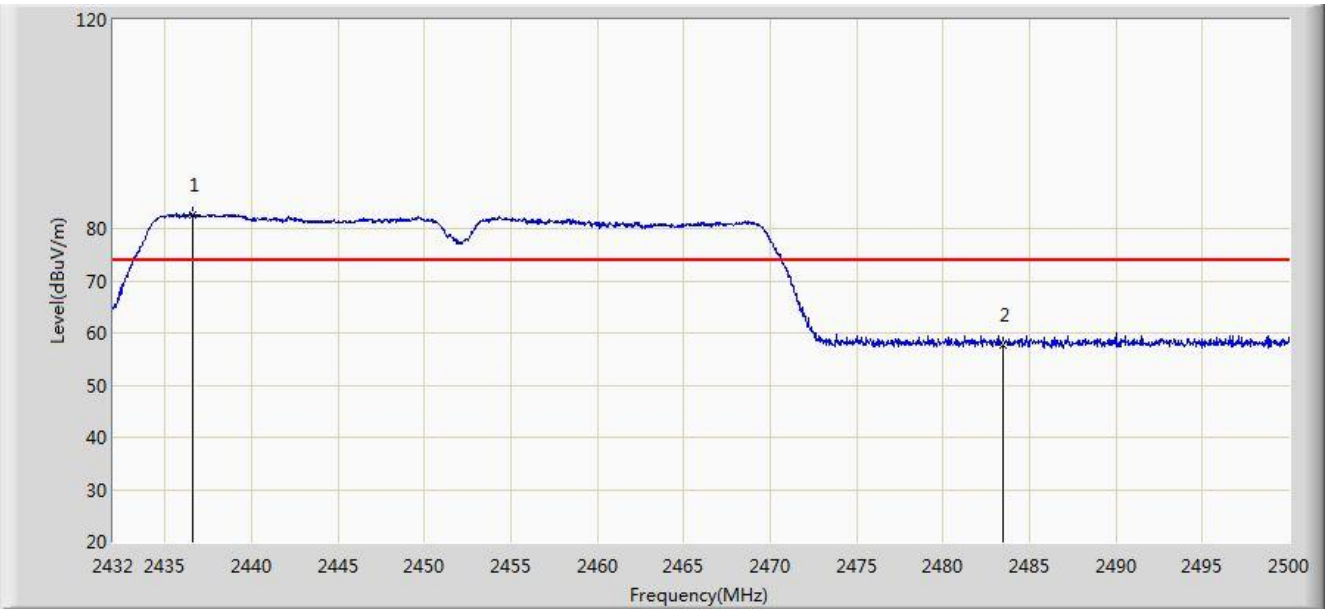


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.446	14.762	-8.554	54.000	30.684	AV
2		*	2411.304	89.186	58.540	N/A	N/A	30.646	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/04 - 11:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 802.11n-HT40 at channel 2452MHz	

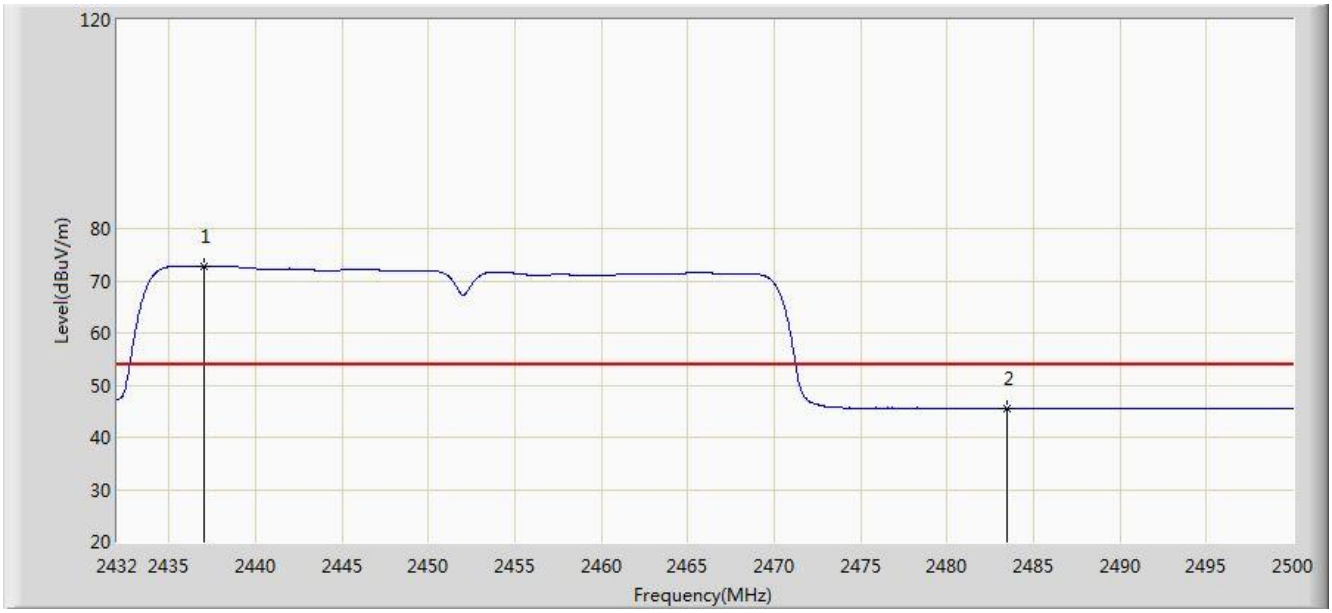


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2436.590	82.643	52.038	N/A	N/A	30.605	PK
2			2483.500	57.597	26.924	-16.403	74.000	30.673	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/04 - 11:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 802.11n-HT40 at channel 2452MHz	

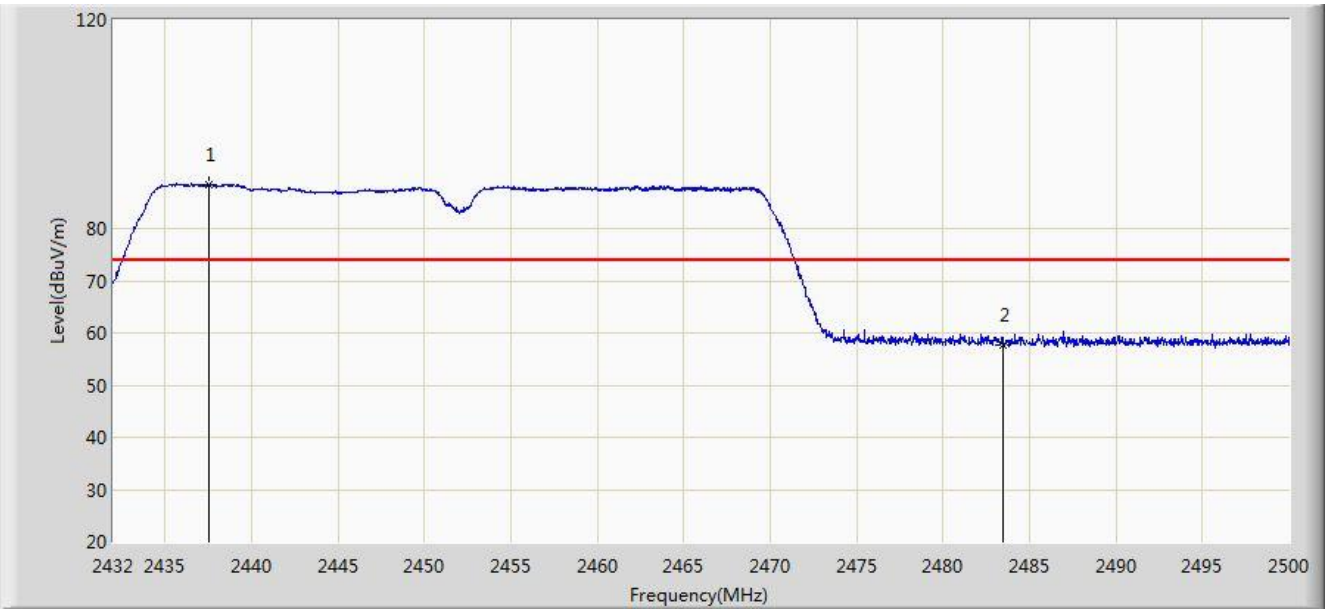


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2437.032	72.659	42.055	N/A	N/A	30.604	AV
2			2483.500	45.524	14.851	-8.476	54.000	30.673	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/04 - 11:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 802.11n-HT40 at channel 2452MHz	

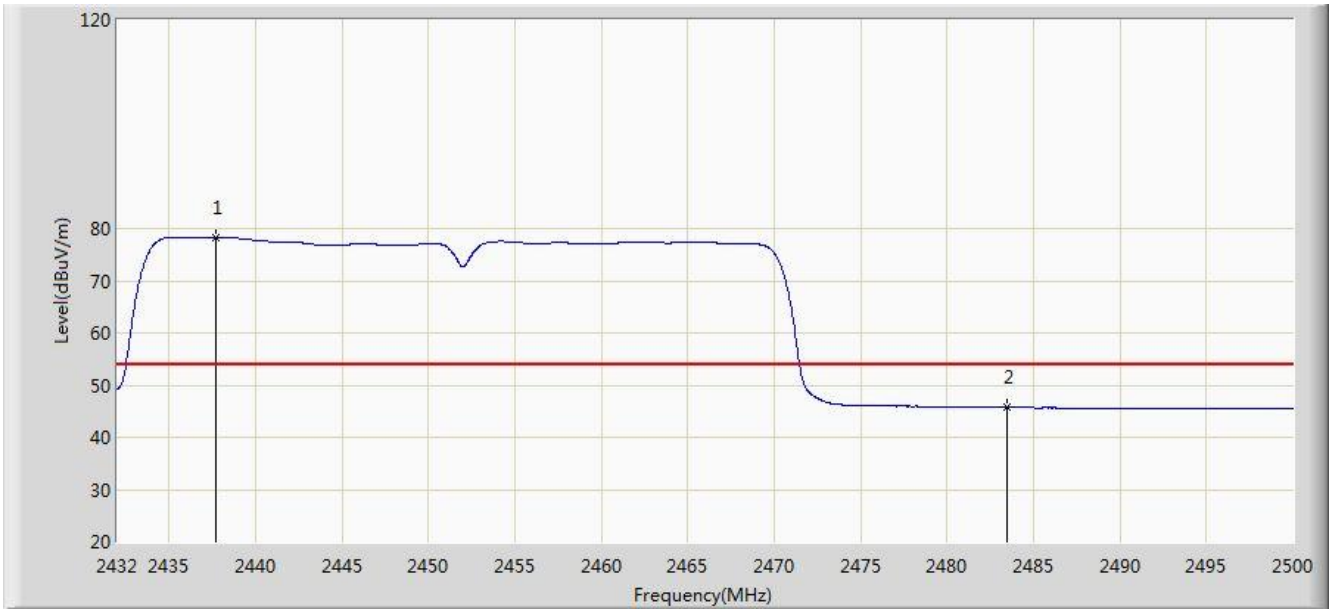


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2437.576	88.534	57.931	N/A	N/A	30.603	PK
2			2483.500	57.760	27.087	-16.240	74.000	30.673	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/04 - 11:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: meCloud WIFI Storage	Power: By Battery
Worst Case Mode: 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		*	2437.678	78.323	47.720	N/A	N/A	30.602	AV
2			2483.500	45.680	15.007	-8.320	54.000	30.673	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

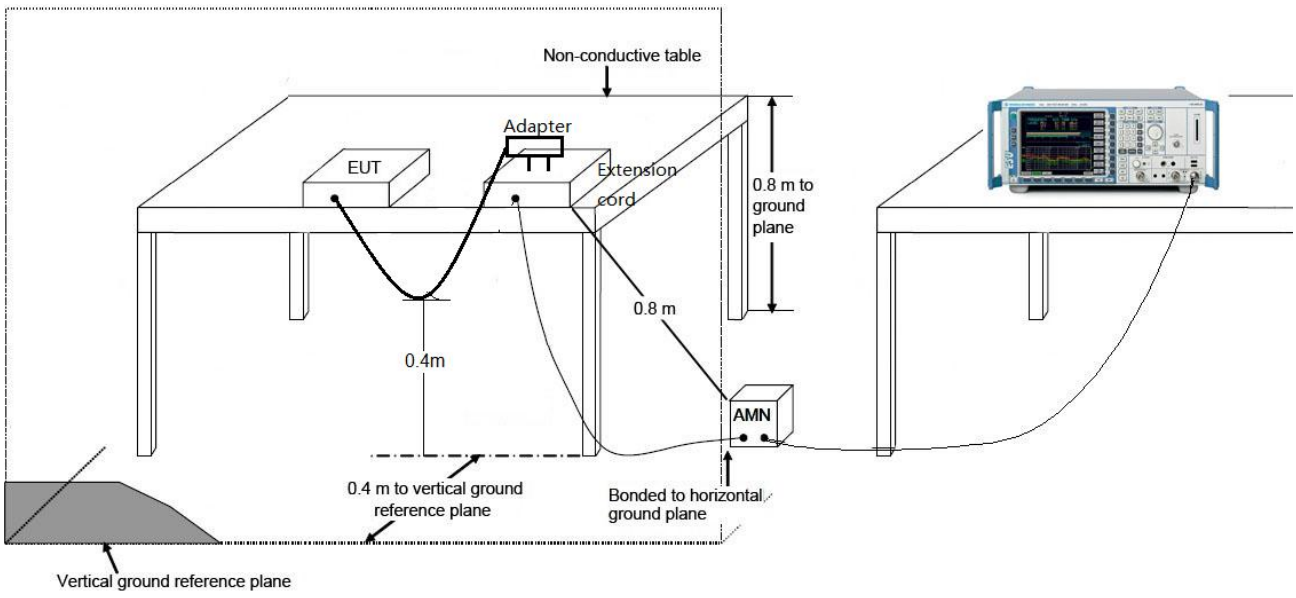
7.8.1. Test Limit

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.

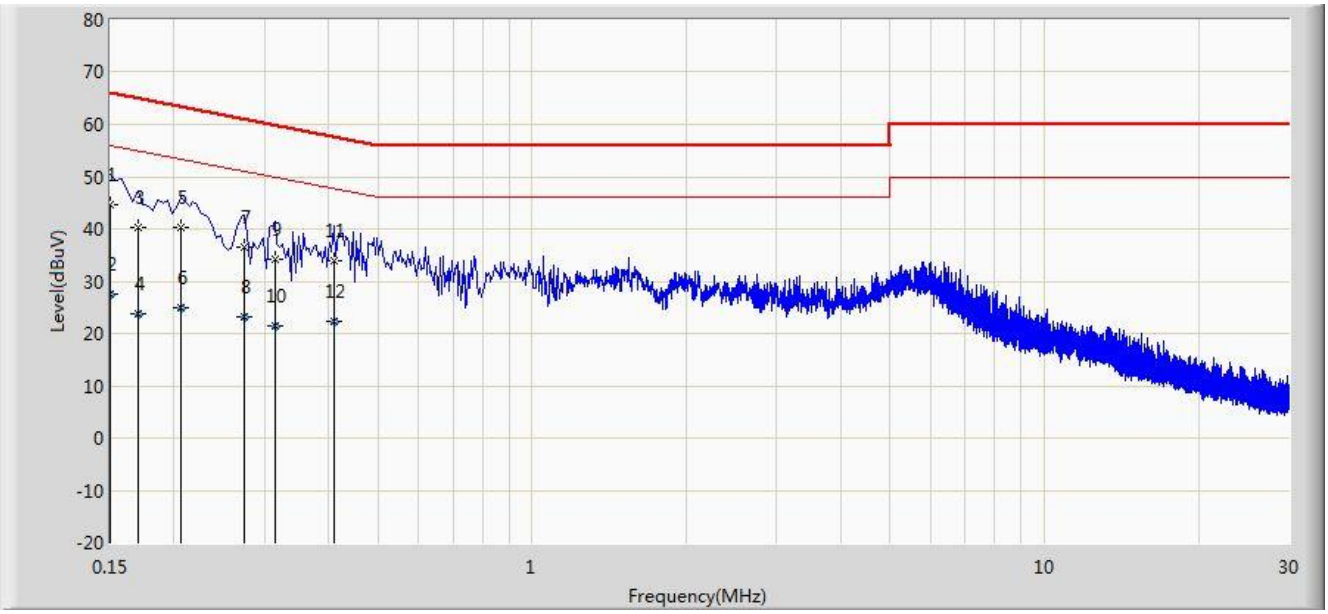
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3. Test Result

Engineer: Milo Li	
Site: SR2	Time: 2014/09/01 - 17:13
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: meCloud WIFI Storage	Power: AC 120V/60Hz
Note: Normal Operation	

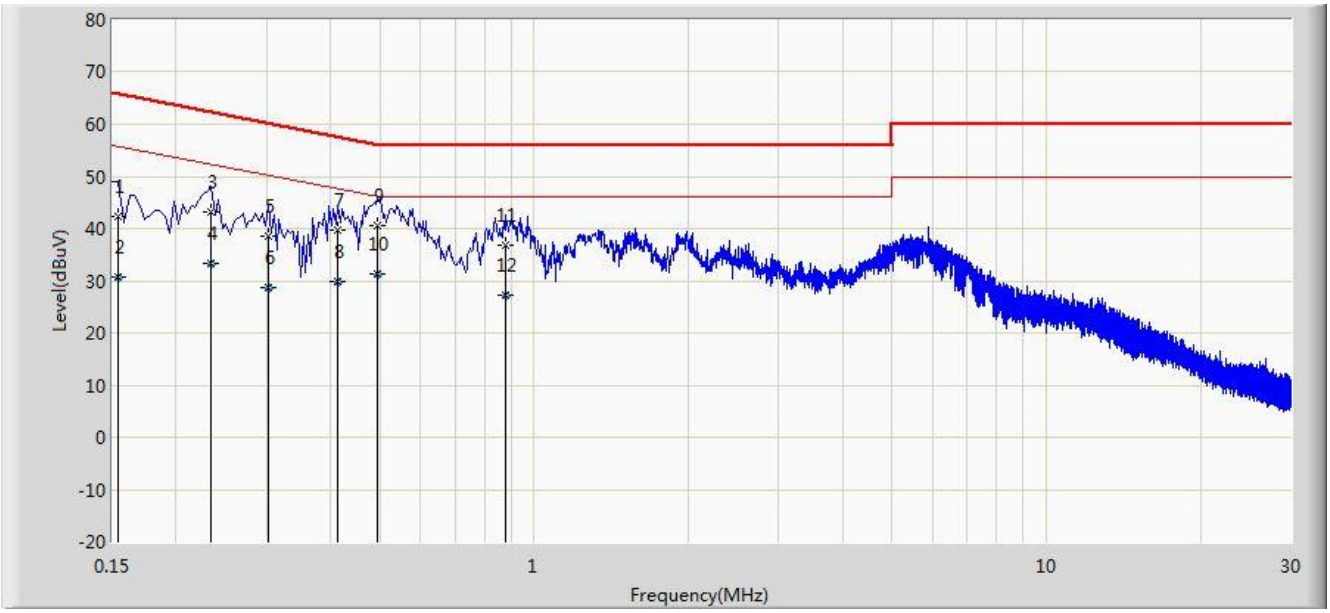


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.150	44.495	33.327	-21.505	66.000	11.168	QP
2			0.150	27.439	16.271	-28.561	56.000	11.168	AV
3			0.170	40.263	30.185	-24.697	64.960	10.078	QP
4			0.170	23.818	13.741	-31.142	54.960	10.078	AV
5			0.206	40.320	30.339	-23.045	63.365	9.981	QP
6			0.206	24.908	14.927	-28.457	53.365	9.981	AV
7			0.274	36.500	26.516	-24.496	60.996	9.983	QP
8			0.274	23.159	13.176	-27.836	50.996	9.983	AV
9			0.314	34.086	24.071	-25.778	59.864	10.015	QP
10			0.314	21.394	11.379	-28.470	49.864	10.015	AV
11			0.410	33.868	23.774	-23.781	57.648	10.093	QP
12			0.410	22.307	12.214	-25.341	47.648	10.093	AV

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

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

Engineer: Milo Li	
Site: SR2	Time: 2014/09/01 - 17:18
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: meCloud WIFI Storage	Power: AC 120V/60Hz
Note: Normal Operation	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.154	42.399	31.683	-23.383	65.781	10.716	QP
2			0.154	30.724	20.008	-25.057	55.781	10.716	AV
3			0.234	43.190	33.201	-19.117	62.307	9.989	QP
4			0.234	33.280	23.292	-19.026	52.307	9.989	AV
5			0.302	38.587	28.548	-21.600	60.188	10.039	QP
6			0.302	28.770	18.731	-21.417	50.188	10.039	AV
7			0.414	39.617	29.494	-17.951	57.568	10.123	QP
8			0.414	29.840	19.717	-17.728	47.568	10.123	AV
9			0.494	40.552	30.374	-15.548	56.100	10.178	QP
10			0.494	31.398	21.220	-14.702	46.100	10.178	AV
11			0.878	36.815	26.839	-19.185	56.000	9.976	QP
12			0.878	27.306	17.330	-18.694	46.000	9.976	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 **meCloud WIFI Storage FCC ID: 2AC4XWSD010** is in compliance with Part 15C of the FCC Rules.

The End