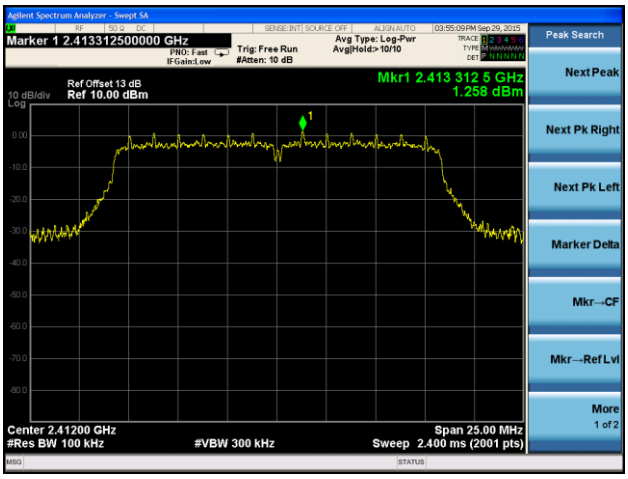
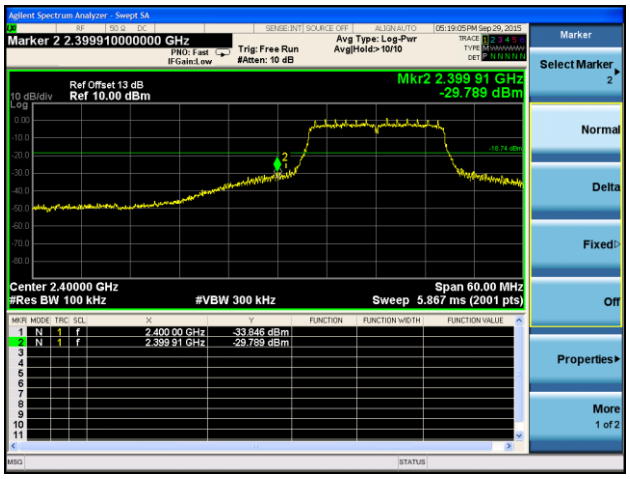
802.11g Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

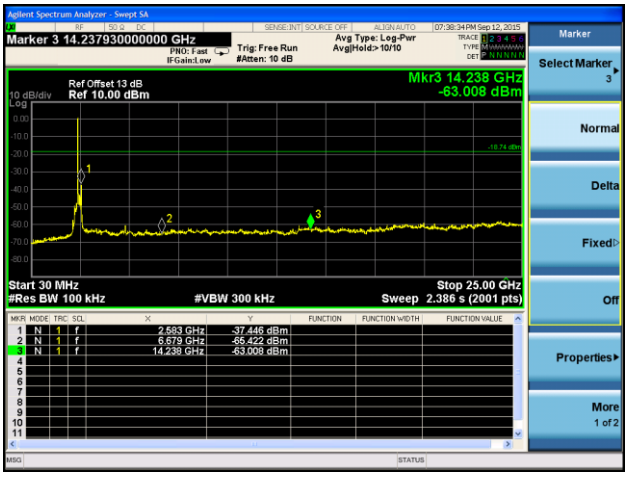
100kHz PSD Reference Level



Low Band Edge

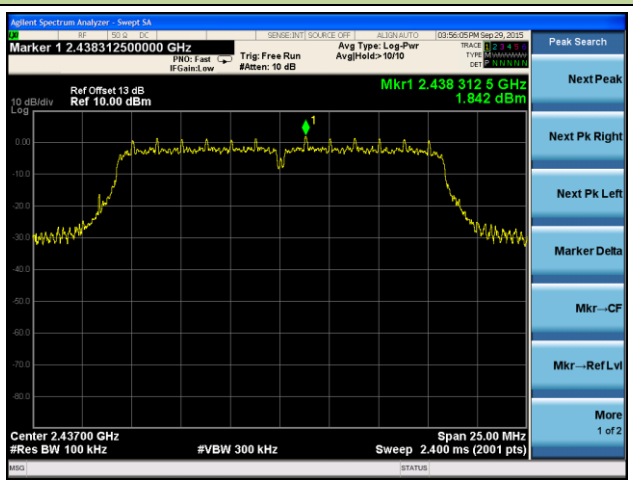


Spurious Emission

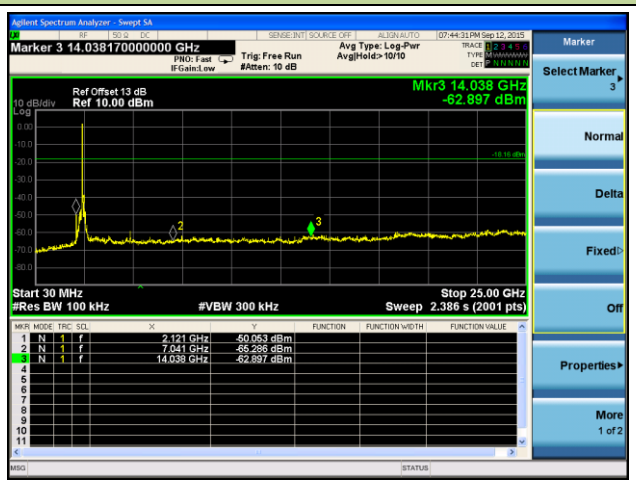


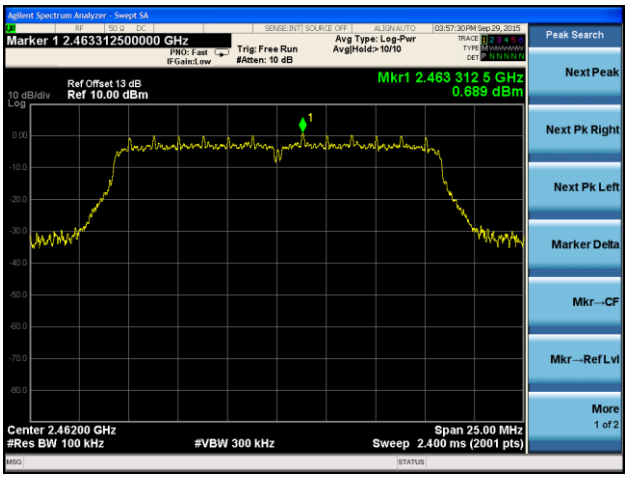
Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission



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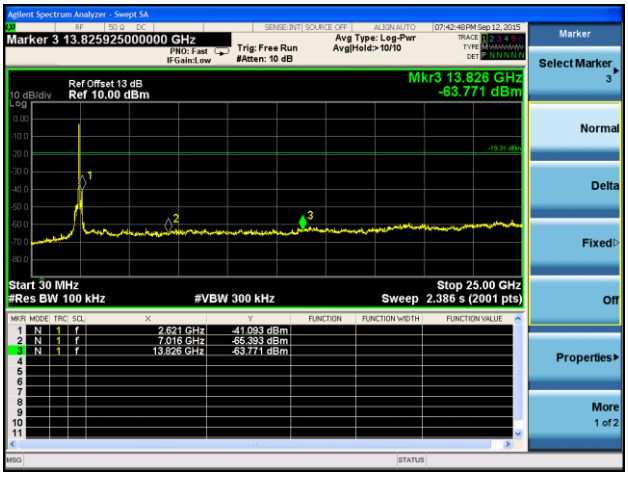
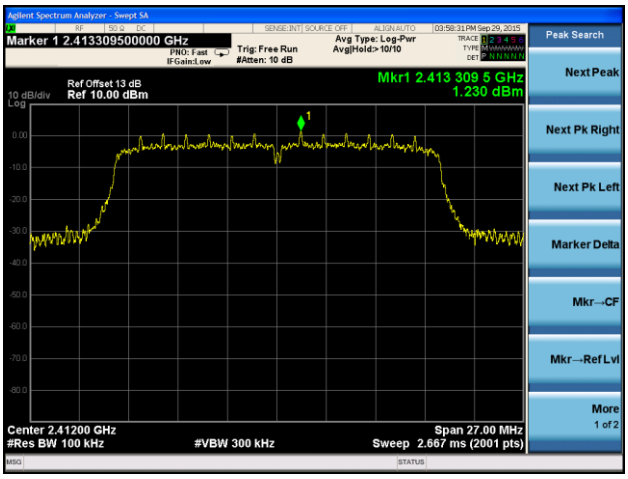
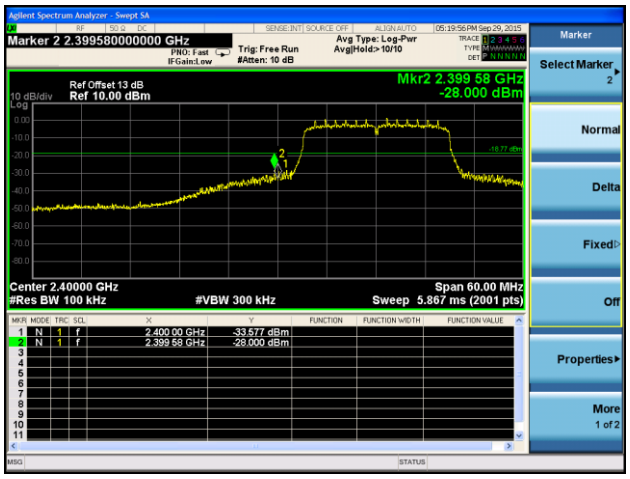
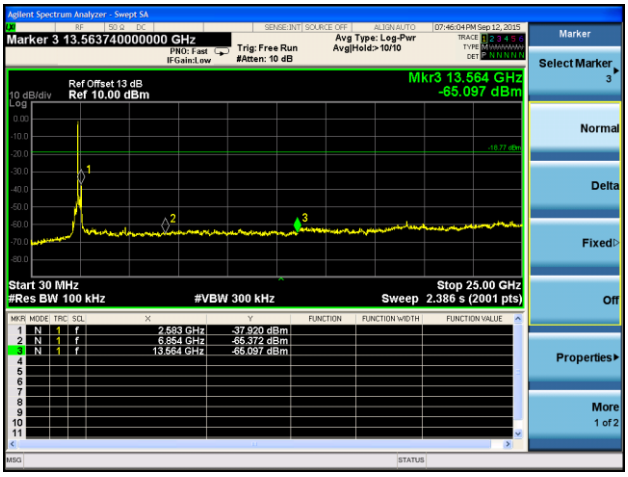
	

802.11 n-HT20 Out-of-Band Emissions - Ant 1

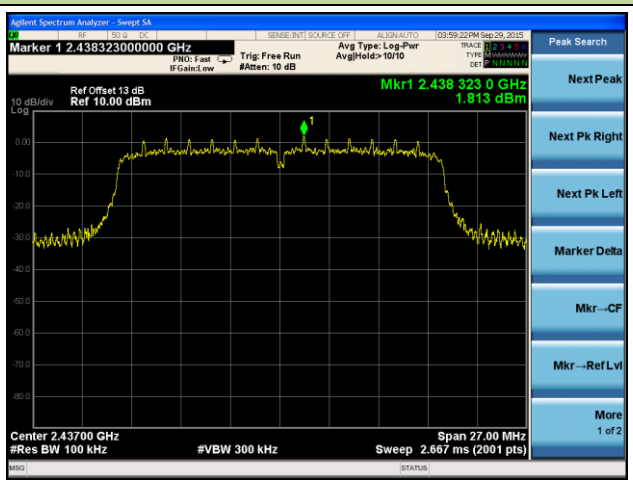
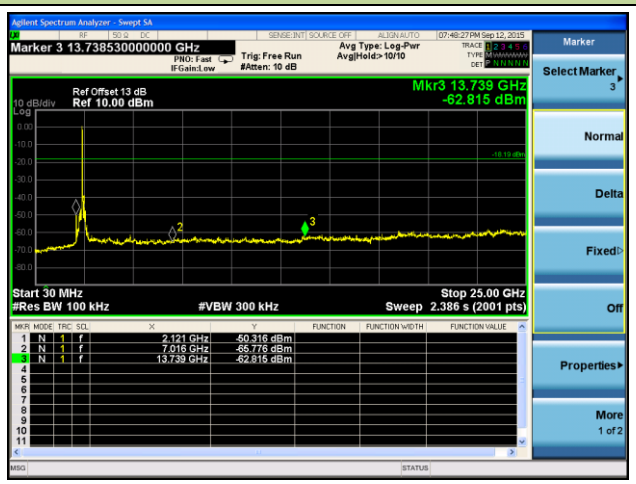
Channel 01 (2412MHz)

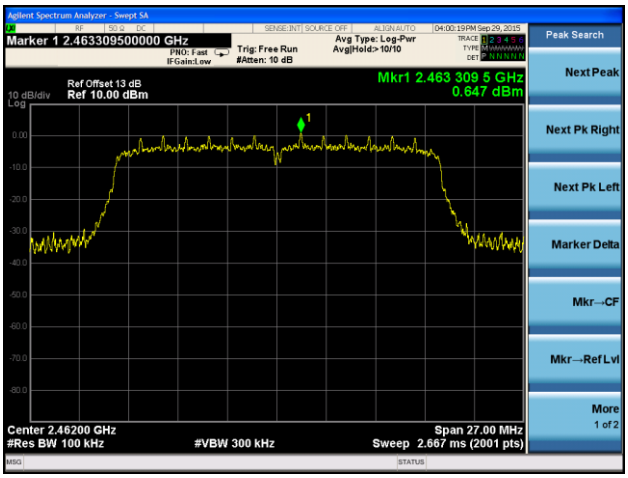
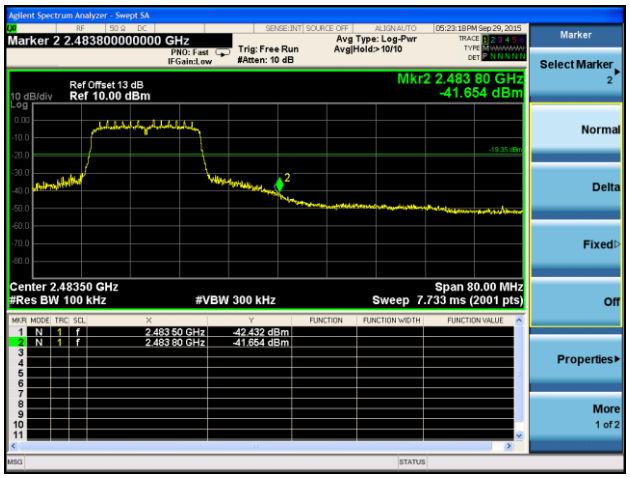
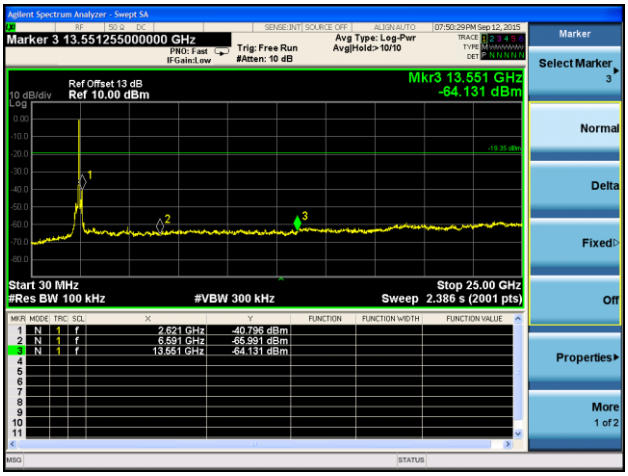
100kHz PSD Reference Level	Low Band Edge
	

Low Band Edge

Channel 06 (2437MHz)

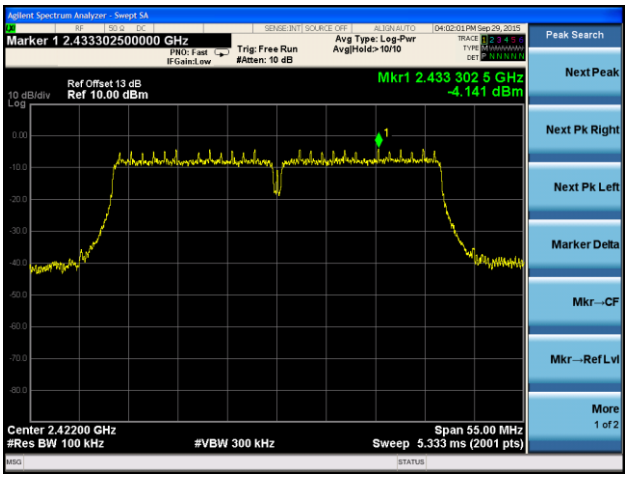
100kHz PSD Reference Level	Spurious Emission
	

Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

802.11 n-HT40 Out-of-Band Emissions - Ant 1

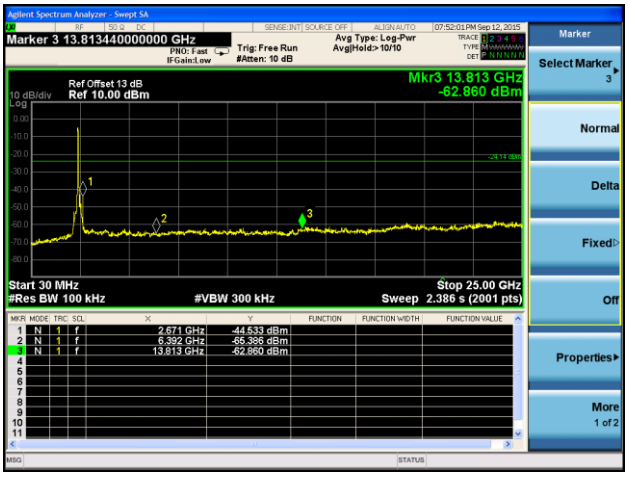
Channel 03 (2422MHz)

100kHz PSD Reference Level



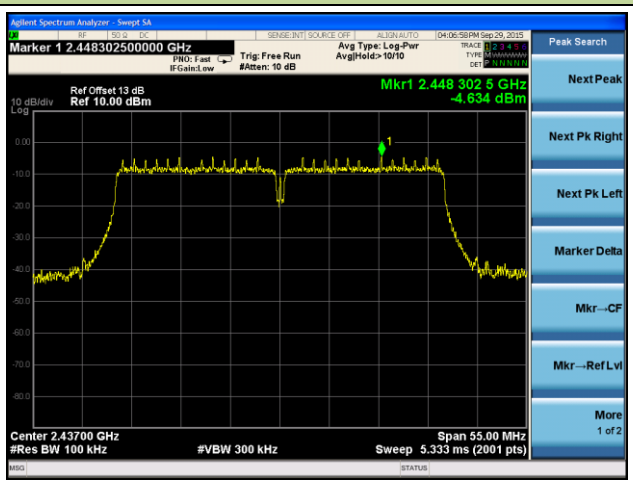
Low Band Edge

Spurious Emission

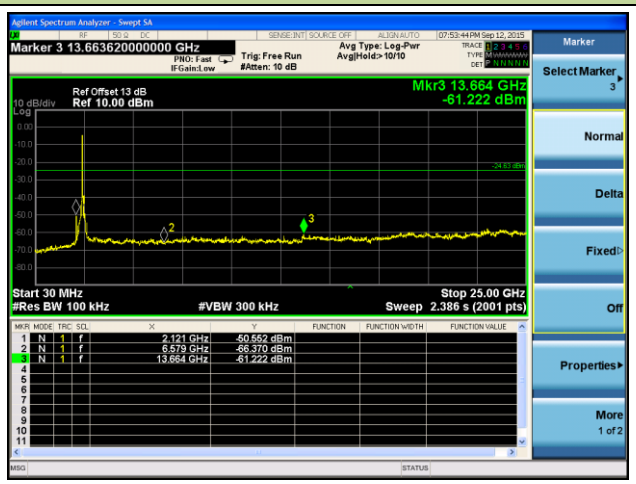


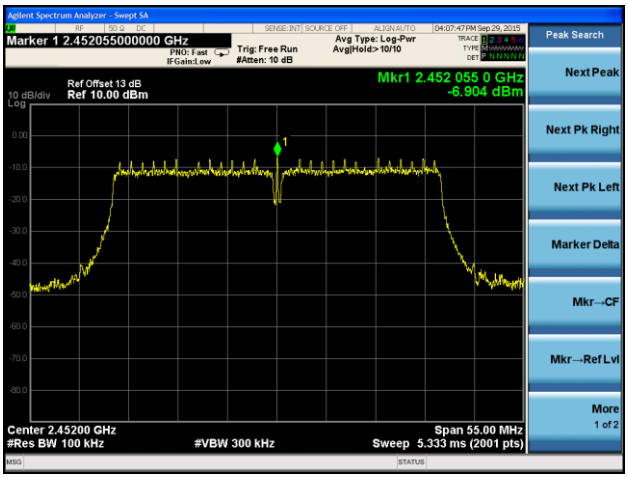
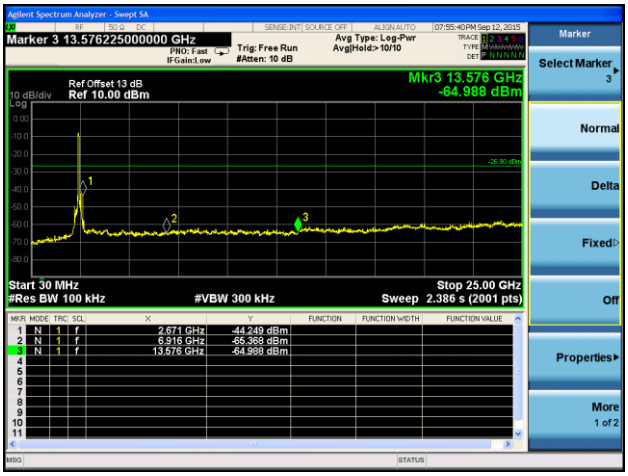
Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission

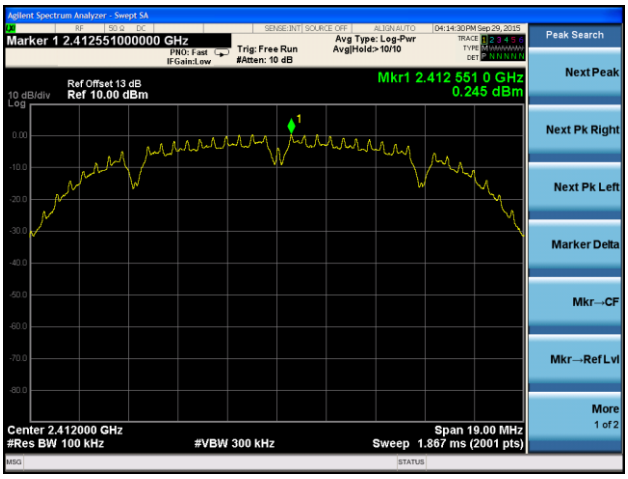


Channel 09 (2452MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

802.11b Out-of-Band Emissions - Ant 2

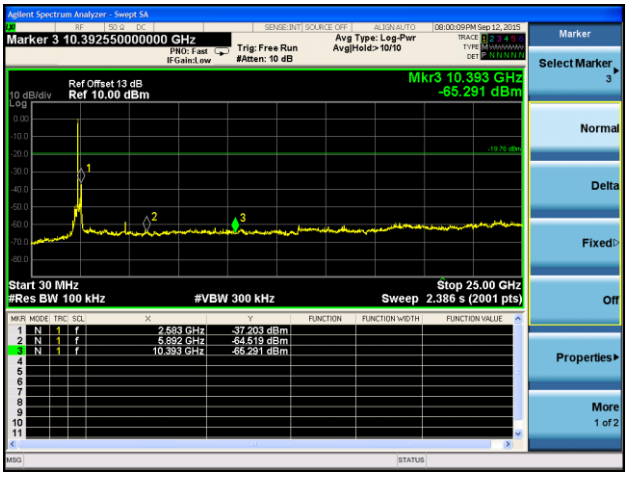
Channel 01 (2412MHz)

100kHz PSD Reference Level



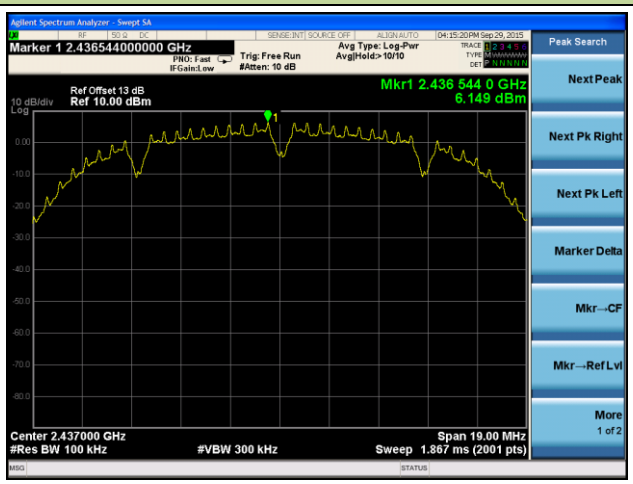
Low Band Edge

Spurious Emission

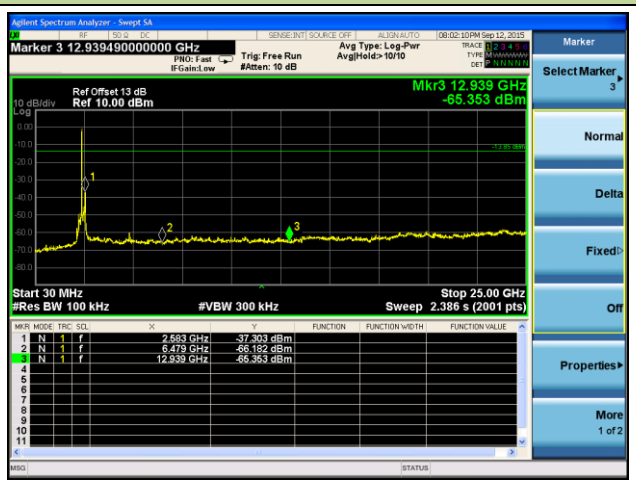


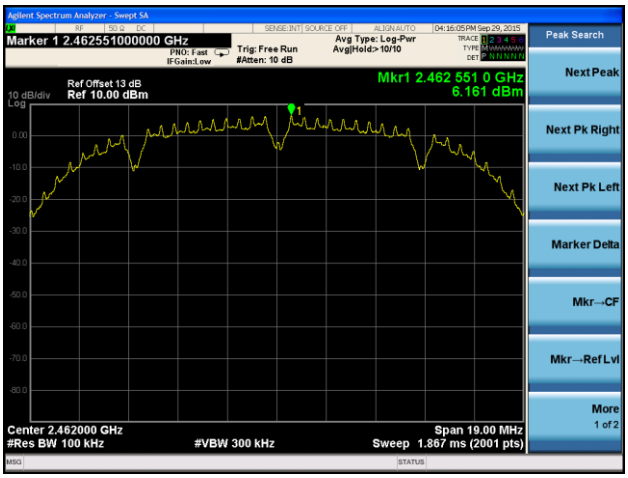
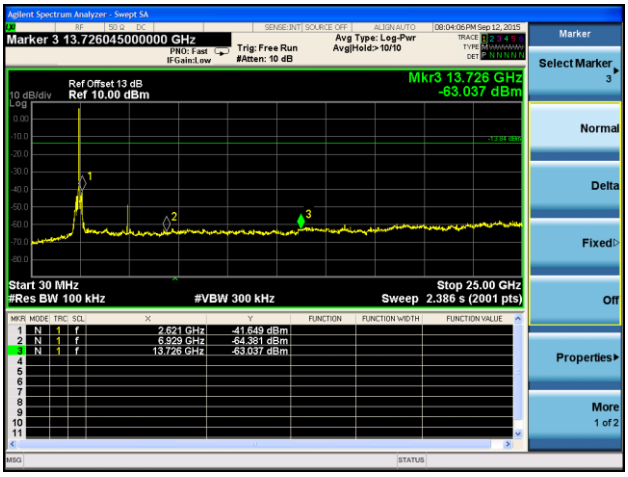
Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission

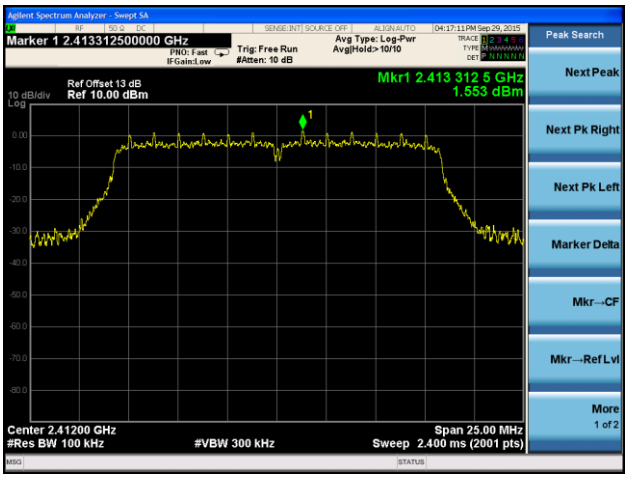


Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

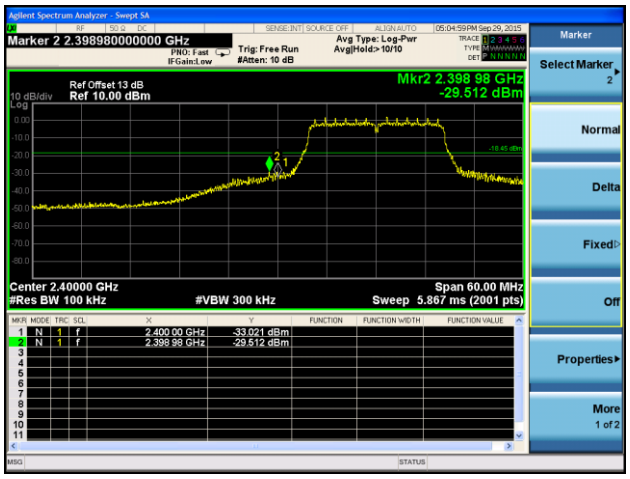
802.11g Out-of-Band Emissions - Ant 2

Channel 01 (2412MHz)

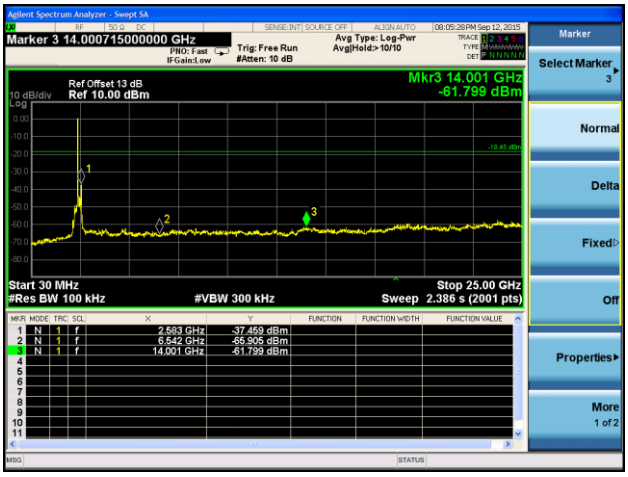
100kHz PSD Reference Level



Low Band Edge

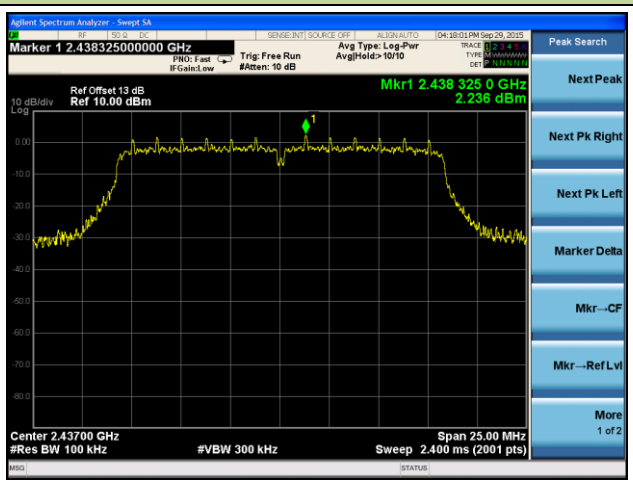


Spurious Emission

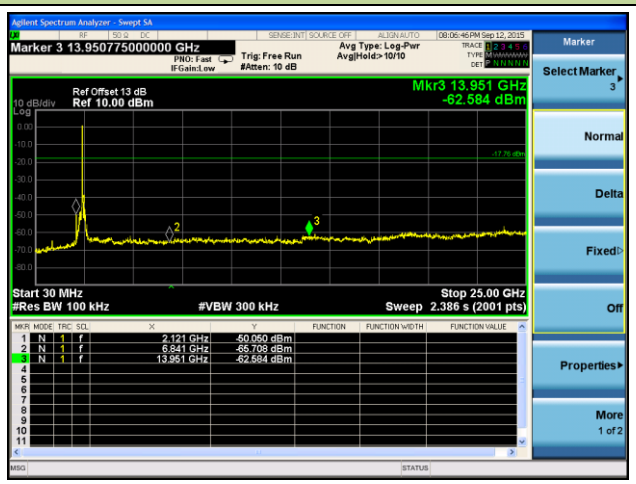


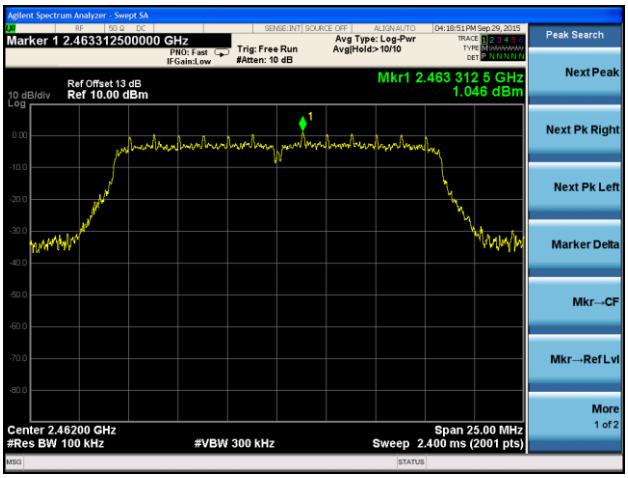
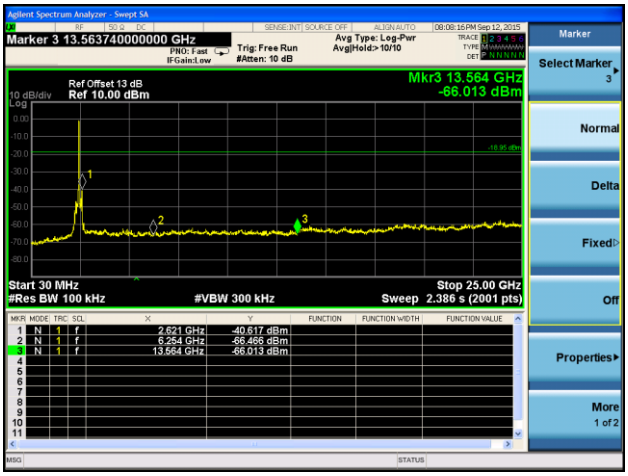
Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission

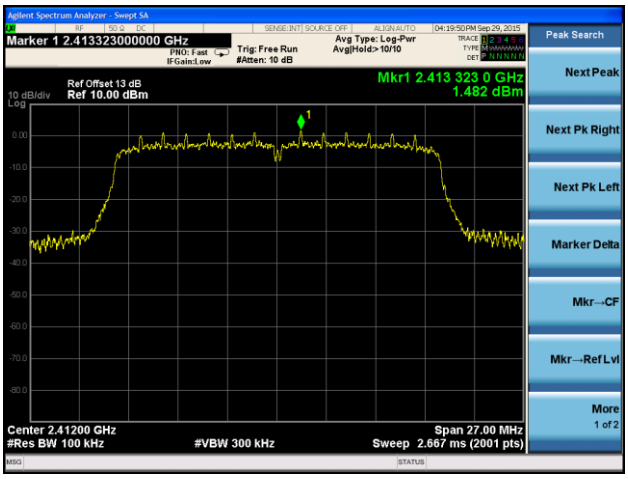


Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

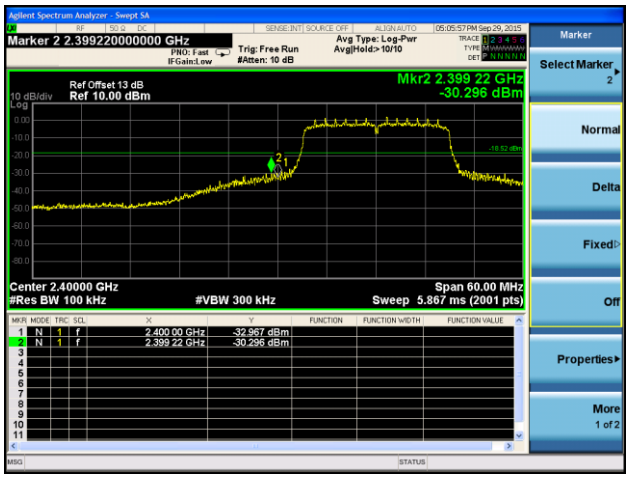
802.11 n-HT20 Out-of-Band Emissions - Ant 2

Channel 01 (2412MHz)

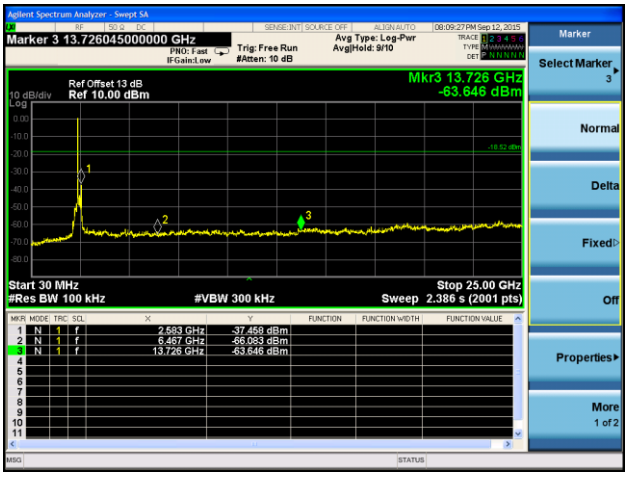
100kHz PSD Reference Level



Low Band Edge

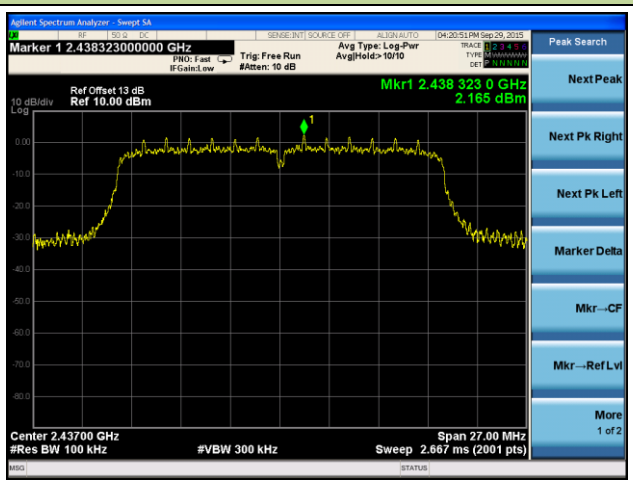


Low Band Edge

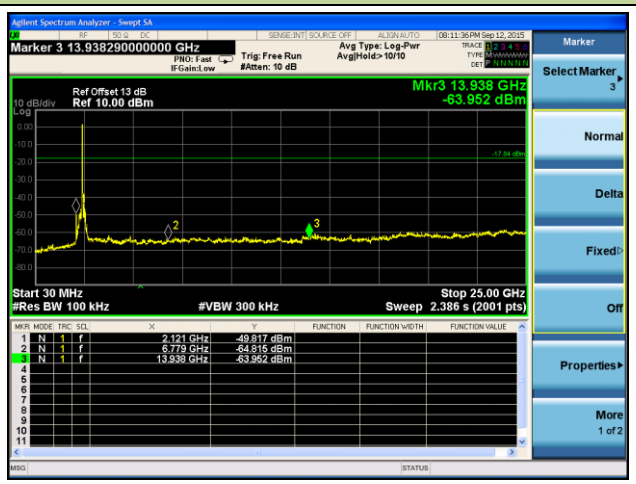


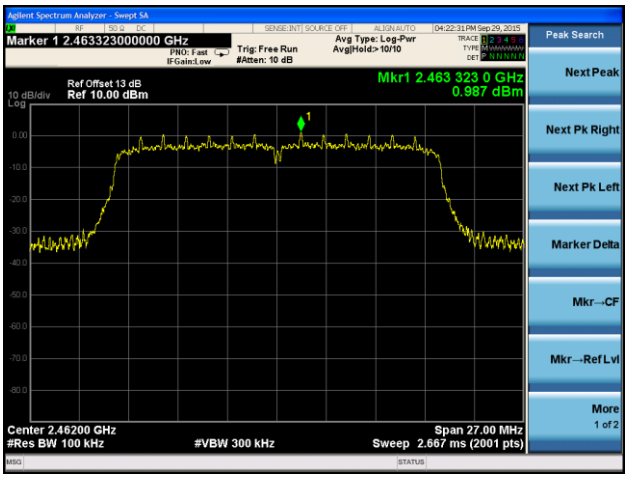
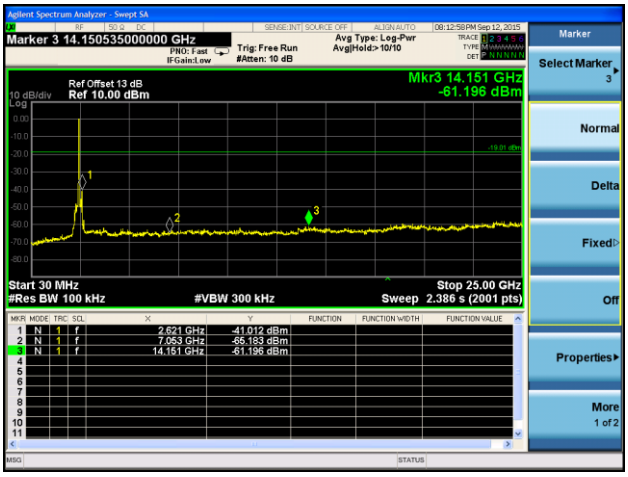
Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission

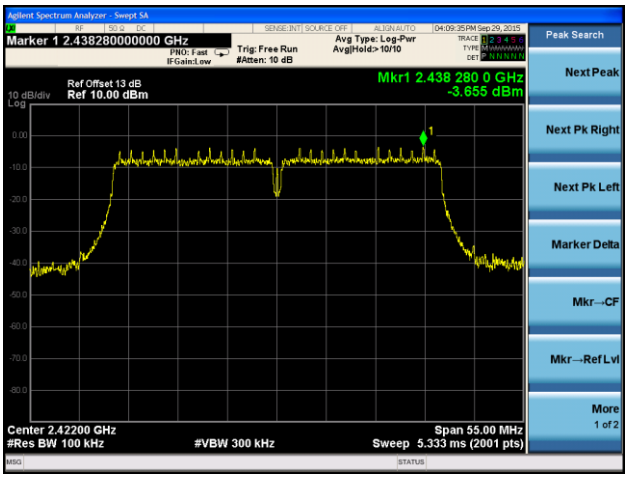


Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

802.11 n-HT40 Out-of-Band Emissions - Ant 2

Channel 03 (2422MHz)

100kHz PSD Reference Level

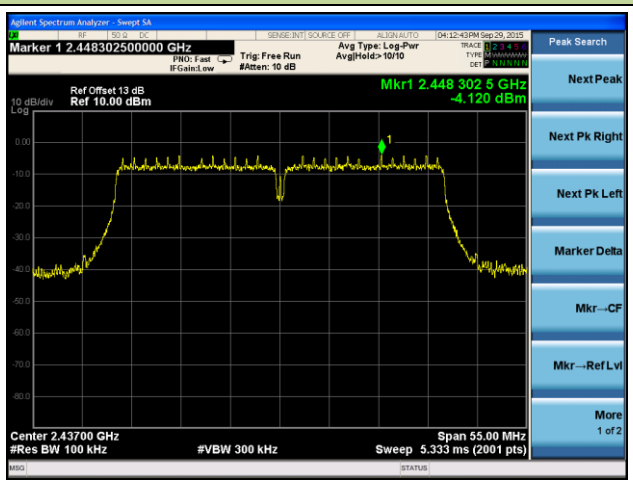


Low Band Edge

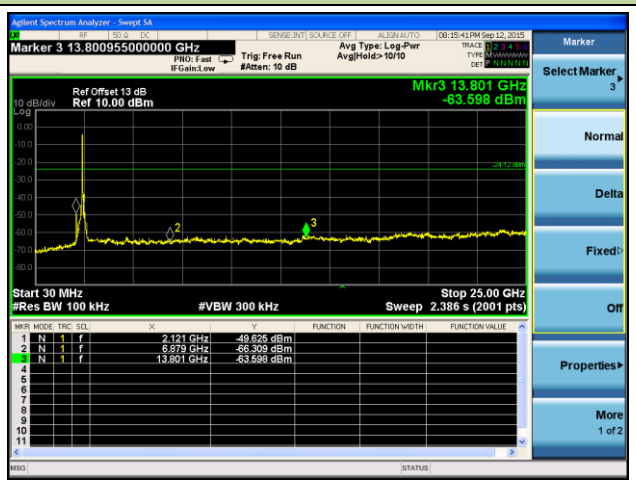
Spurious Emission

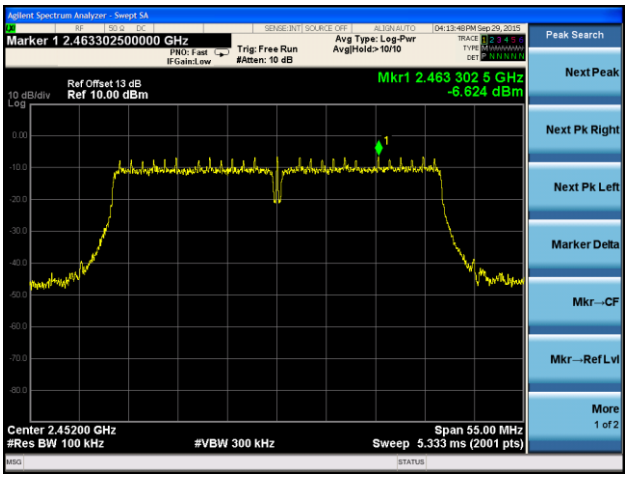
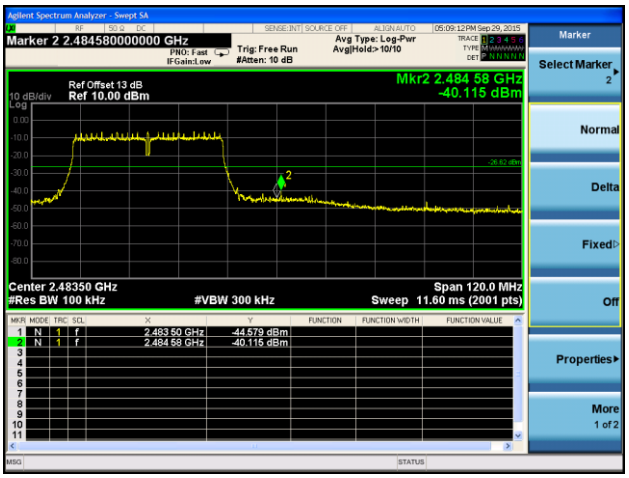
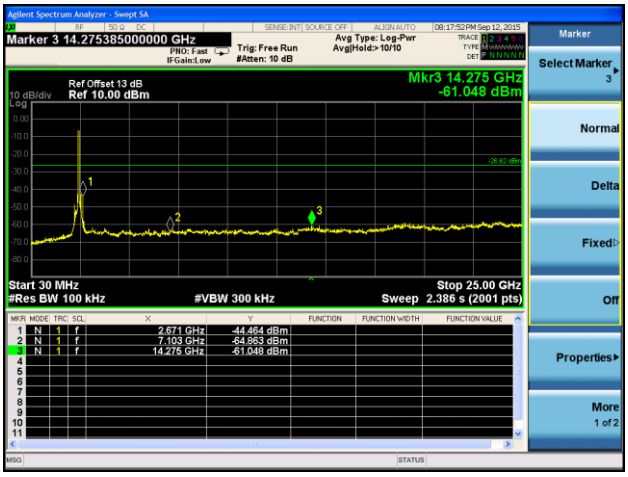
Channel 06 (2437MHz)

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 [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 D01v03r03 - Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v03r03 - Section 12.2.4 (peak power measurements)

KDB 558074 D01v03r03 - 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

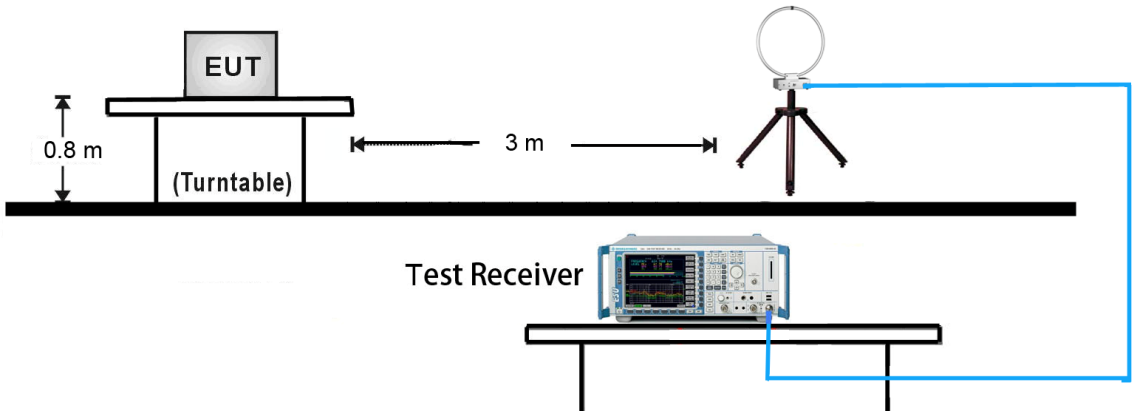
6. Sweep time = auto

7. Trace mode = max hold

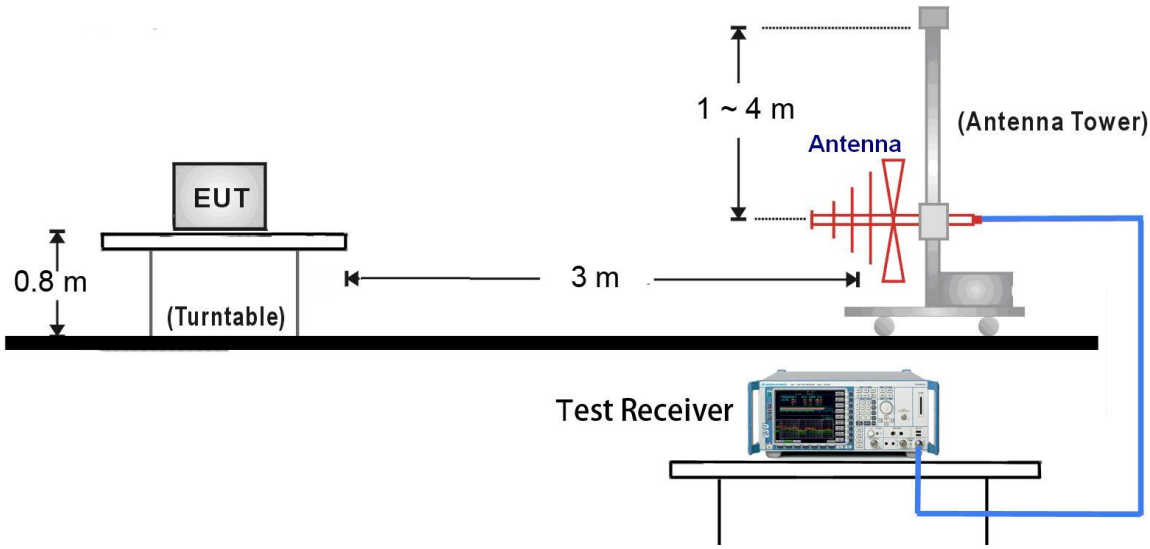
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

7.6.4. Test Setup

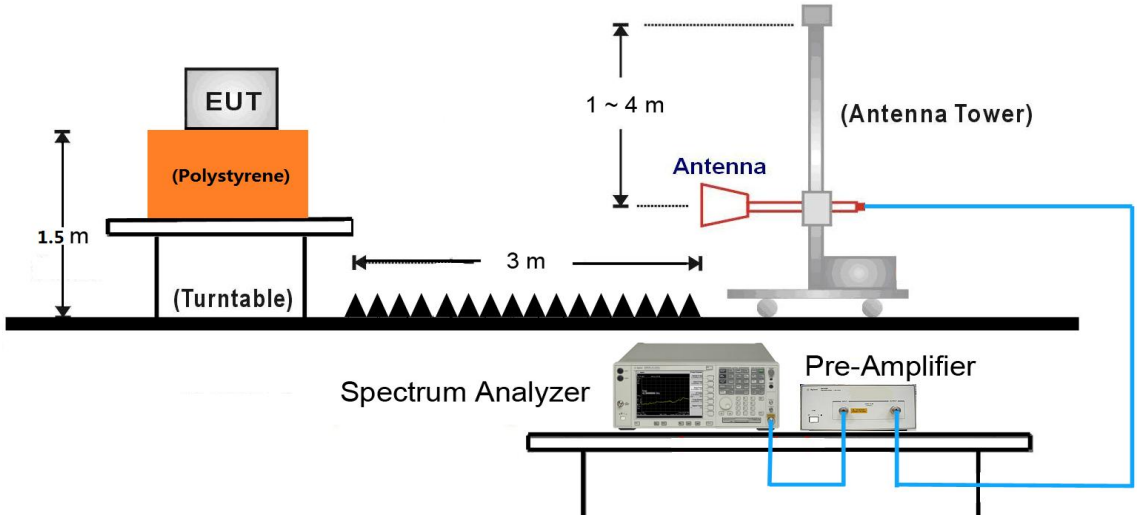
9kHz ~ 30MHz Test Setup:



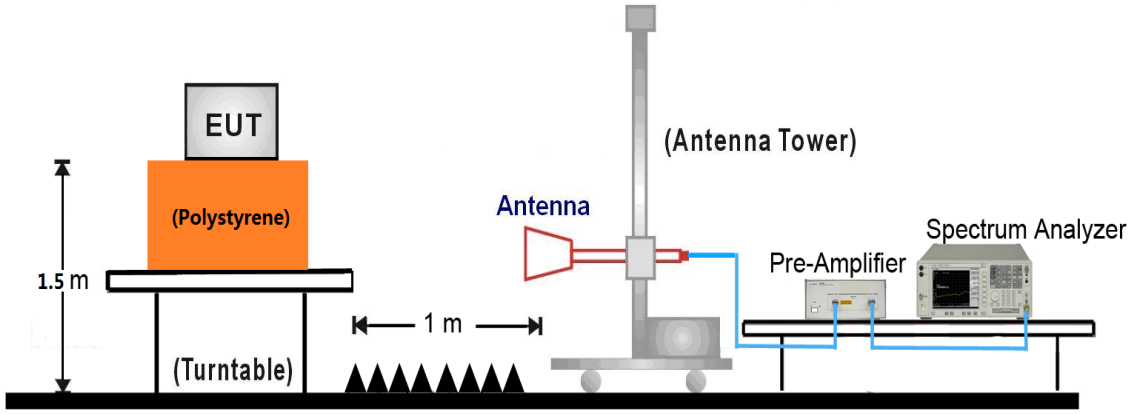
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~25GHz Test Setup:



7.6.5. Test Result

Test Mode:	802.11b – Ant 1	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
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
*	3018.0	39.1	-2.1	37.0	79.2	-42.2	Peak	Horizontal
*	3589.0	37.9	-0.7	37.2	79.2	-42.0	Peak	Horizontal
	4595.5	36.8	2.0	38.8	74.0	-35.2	Peak	Horizontal
	7528.0	36.6	8.3	44.9	74.0	-29.1	Peak	Horizontal
*	3193.0	42.1	-1.6	40.5	79.2	-38.7	Peak	Vertical
*	3578.0	38.1	-0.8	37.3	79.2	-41.9	Peak	Vertical
	4723.0	36.9	2.4	39.3	74.0	-34.7	Peak	Vertical
	7324.0	36.2	8.0	44.2	74.0	-29.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.2dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3012.0	38.7	-2.1	36.6	81.6	-45.0	Peak	Horizontal
*	3553.0	37.3	-0.9	36.4	81.6	-45.2	Peak	Horizontal
	4774.0	36.3	2.6	38.9	74.0	-35.1	Peak	Horizontal
	7502.5	36.3	8.3	44.6	74.0	-29.4	Peak	Horizontal
*	3123.0	38.7	-1.7	37.0	81.6	-44.6	Peak	Vertical
*	3578.0	37.1	-0.8	36.3	81.6	-45.3	Peak	Vertical
	4791.0	36.0	2.7	38.7	74.0	-35.3	Peak	Vertical
	7689.5	36.4	8.0	44.4	74.0	-29.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.6dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
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
*	3014.0	38.6	-2.1	36.5	83.2	-46.7	Peak	Horizontal
*	3562.0	37.1	-0.8	36.3	83.2	-46.9	Peak	Horizontal
	4893.0	35.7	2.7	38.4	74.0	-35.6	Peak	Horizontal
	7553.5	35.8	8.3	44.1	74.0	-29.9	Peak	Horizontal
*	3054.0	37.8	-2.0	35.8	83.2	-47.4	Peak	Vertical
*	3524.0	37.2	-1.0	36.2	83.2	-47.0	Peak	Vertical
	4850.5	35.9	2.7	38.6	74.0	-35.4	Peak	Vertical
	7392.0	36.1	7.9	44.0	74.0	-30.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (103.2dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
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
*	3012.3	37.8	-2.1	35.7	84.3	-48.6	Peak	Horizontal
*	3543.0	37.4	-0.9	36.5	84.3	-47.8	Peak	Horizontal
	4791.0	35.4	2.7	38.1	74.0	-35.9	Peak	Horizontal
	7468.5	35.5	8.1	43.6	74.0	-30.4	Peak	Horizontal
*	3011.0	38.9	-2.1	36.8	84.3	-47.5	Peak	Vertical
*	3576.0	36.9	-0.8	36.1	84.3	-48.2	Peak	Vertical
	4876.0	36.4	2.7	39.1	74.0	-34.9	Peak	Vertical
	7519.5	36.0	8.3	44.3	74.0	-29.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (104.3dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3068.0	37.8	-1.9	35.9	84.4	-48.5	Peak	Horizontal
*	3576.0	37.1	-0.8	36.3	84.4	-48.1	Peak	Horizontal
	4910.0	35.6	2.7	38.3	74.0	-35.7	Peak	Horizontal
	7366.5	36.2	7.9	44.1	74.0	-29.9	Peak	Horizontal
*	3018.0	38.6	-2.1	36.5	84.4	-47.9	Peak	Vertical
*	3583.0	36.9	-0.8	36.1	84.4	-48.3	Peak	Vertical
	4850.5	36.2	2.7	38.9	74.0	-35.1	Peak	Vertical
	7256.0	36.1	7.9	44.0	74.0	-30.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (104.4dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
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
*	3065.5	40.4	-1.9	38.5	84.6	-46.1	Peak	Horizontal
*	3565.0	37.4	-0.8	36.6	84.6	-48.0	Peak	Horizontal
	4833.5	36.6	2.7	39.3	74.0	-34.7	Peak	Horizontal
	7638.5	36.3	8.0	44.3	74.0	-29.7	Peak	Horizontal
*	3058.0	38.2	-1.9	36.3	84.6	-48.3	Peak	Vertical
*	3595.0	37.4	-0.7	36.7	84.6	-47.9	Peak	Vertical
	4782.5	36.2	2.7	38.9	74.0	-35.1	Peak	Vertical
	7621.5	36.2	8.0	44.2	74.0	-29.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (104.6dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
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
*	3098.0	37.8	-1.8	36.0	84.8	-48.8	Peak	Horizontal
*	3598.0	37.3	-0.7	36.6	84.8	-48.2	Peak	Horizontal
	4816.5	36.8	2.7	39.5	74.0	-34.5	Peak	Horizontal
	7570.5	36.9	8.2	45.1	74.0	-28.9	Peak	Horizontal
*	3133.5	39.4	-1.6	37.8	84.8	-47.0	Peak	Vertical
*	3592.5	38.4	-0.7	37.7	84.8	-47.1	Peak	Vertical
	4536.0	36.3	1.8	38.1	74.0	-35.9	Peak	Vertical
	8191.0	35.2	8.3	43.5	74.0	-30.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (104.8dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3184.5	39.0	-1.6	37.4	84.2	-46.8	Peak	Horizontal
*	3575.5	38.0	-0.8	37.2	84.2	-47.0	Peak	Horizontal
	4697.5	36.5	2.3	38.8	74.0	-35.2	Peak	Horizontal
	8327.0	34.2	8.0	42.2	74.0	-31.8	Peak	Horizontal
*	3125.0	38.9	-1.6	37.3	84.2	-46.9	Peak	Vertical
*	3550.0	38.1	-0.9	37.2	84.2	-47.0	Peak	Vertical
	4808.0	36.4	2.7	39.1	74.0	-34.9	Peak	Vertical
	8352.5	35.0	8.0	43.0	74.0	-31.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (104.2dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
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
*	3150.5	38.4	-1.5	36.9	83.6	-46.7	Peak	Horizontal
*	3541.5	38.0	-0.9	37.1	83.6	-46.5	Peak	Horizontal
	4731.5	37.6	2.5	40.1	74.0	-33.9	Peak	Horizontal
	8446.0	35.2	8.2	43.4	74.0	-30.6	Peak	Horizontal
*	3201.5	38.2	-1.6	36.6	83.6	-47.0	Peak	Vertical
*	3558.5	38.2	-0.8	37.4	83.6	-46.2	Peak	Vertical
	4757.0	36.1	2.6	38.7	74.0	-35.3	Peak	Vertical
	8429.0	34.8	8.2	43.0	74.0	-31.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (103.6dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	03	Test Engineer:	Roy Cheng
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
*	3142.0	39.3	-1.6	37.7	81.7	-44.0	Peak	Horizontal
*	3524.5	38.0	-1.0	37.0	81.7	-44.7	Peak	Horizontal
	4782.5	35.4	2.7	38.1	74.0	-35.9	Peak	Horizontal
	8276.0	34.7	8.1	42.8	74.0	-31.2	Peak	Horizontal
*	3159.0	38.5	-1.5	37.0	81.7	-44.7	Peak	Vertical
*	3499.0	37.8	-1.1	36.7	81.7	-45.0	Peak	Vertical
	4859.0	35.8	2.7	38.5	74.0	-35.5	Peak	Vertical
	8420.5	34.6	8.2	42.8	74.0	-31.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.7dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3133.5	37.2	-1.6	35.6	80.1	-44.5	Peak	Horizontal
*	3397.0	38.1	-1.7	36.4	80.1	-43.7	Peak	Horizontal
	4782.5	35.7	2.7	38.4	74.0	-35.6	Peak	Horizontal
	8403.5	35.2	8.1	43.3	74.0	-30.7	Peak	Horizontal
*	3176.0	39.4	-1.6	37.8	80.1	-42.3	Peak	Vertical
*	3558.5	38.0	-0.8	37.2	80.1	-42.9	Peak	Vertical
	4833.5	35.7	2.7	38.4	74.0	-35.6	Peak	Vertical
	8208.0	35.0	8.3	43.3	74.0	-30.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (100.1dBμV/m) or FCC 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 – Ant 1	Test Site:	AC1
Test Channel:	09	Test Engineer:	Roy Cheng
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
*	3184.5	39.6	-1.6	38.0	78.0	-40.0	Peak	Horizontal
*	3414.0	38.0	-1.6	36.4	78.0	-41.6	Peak	Horizontal
	4927.0	35.7	2.8	38.5	74.0	-35.5	Peak	Horizontal
	8352.5	35.7	8.0	43.7	74.0	-30.3	Peak	Horizontal
*	3176.0	38.1	-1.6	36.5	78.0	-41.5	Peak	Vertical
*	3533.0	38.0	-1.0	37.0	78.0	-41.0	Peak	Vertical
	4774.0	35.7	2.6	38.3	74.0	-35.7	Peak	Vertical
	8165.5	34.2	8.4	42.6	74.0	-31.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (98.0dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
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
*	3184.5	39.6	-1.6	38.0	82.6	-44.6	Peak	Horizontal
*	3499.0	38.6	-1.1	37.5	82.6	-45.1	Peak	Horizontal
	4825.0	35.8	2.7	38.5	74.0	-35.5	Peak	Horizontal
	8310.0	35.0	8.0	43.0	74.0	-31.0	Peak	Horizontal
*	3142.0	39.6	-1.6	38.0	82.6	-44.6	Peak	Vertical
*	3465.0	39.1	-1.3	37.8	82.6	-44.8	Peak	Vertical
	4961.0	36.2	2.9	39.1	74.0	-34.9	Peak	Vertical
	8216.5	35.4	8.2	43.6	74.0	-30.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (102.6dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3142.0	38.5	-1.6	36.9	84.5	-47.6	Peak	Horizontal
*	3456.5	37.3	-1.4	35.9	84.5	-48.6	Peak	Horizontal
	4850.5	36.2	2.7	38.9	74.0	-35.1	Peak	Horizontal
	8361.0	35.3	8.0	43.3	74.0	-30.7	Peak	Horizontal
*	3116.5	38.9	-1.7	37.2	84.5	-47.3	Peak	Vertical
*	3482.0	38.0	-1.2	36.8	84.5	-47.7	Peak	Vertical
	4901.5	37.4	2.7	40.1	74.0	-33.9	Peak	Vertical
	8293.0	34.7	8.0	42.7	74.0	-31.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (104.5dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
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
*	3074.0	37.7	-1.9	35.8	86.3	-50.5	Peak	Horizontal
*	3371.5	38.3	-1.8	36.5	86.3	-49.8	Peak	Horizontal
	4850.5	35.2	2.7	37.9	74.0	-36.1	Peak	Horizontal
	8480.0	35.6	8.3	43.9	74.0	-30.1	Peak	Horizontal
*	3108.0	36.8	-1.7	35.1	86.3	-51.2	Peak	Vertical
*	3541.5	38.5	-0.9	37.6	86.3	-48.7	Peak	Vertical
	4927.0	36.4	2.8	39.2	74.0	-34.8	Peak	Vertical
	8352.5	35.5	8.0	43.5	74.0	-30.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.3dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
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
*	3074.0	38.5	-1.9	36.6	87.8	-51.2	Peak	Horizontal
*	3490.5	38.1	-1.2	36.9	87.8	-50.9	Peak	Horizontal
	4935.5	35.9	2.8	38.7	74.0	-35.3	Peak	Horizontal
	8310.0	35.6	8.0	43.6	74.0	-30.4	Peak	Horizontal
*	3159.0	38.6	-1.5	37.1	87.8	-50.7	Peak	Vertical
*	3482.0	38.3	-1.2	37.1	87.8	-50.7	Peak	Vertical
	4910.0	35.6	2.7	38.3	74.0	-35.7	Peak	Vertical
	8454.5	35.1	8.2	43.3	74.0	-30.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (107.8dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3150.5	38.0	-1.5	36.5	87.1	-50.6	Peak	Horizontal
*	3541.5	38.1	-0.9	37.2	87.1	-49.9	Peak	Horizontal
	4782.5	35.7	2.7	38.4	74.0	-35.6	Peak	Horizontal
	8267.5	34.0	8.1	42.1	74.0	-31.9	Peak	Horizontal
*	3159.0	38.8	-1.5	37.3	87.1	-49.8	Peak	Vertical
*	3541.5	37.8	-0.9	36.9	87.1	-50.2	Peak	Vertical
	4833.5	35.7	2.7	38.4	74.0	-35.6	Peak	Vertical
	8267.5	34.0	8.1	42.1	74.0	-31.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (107.1dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
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
*	3142.0	38.3	-1.6	36.7	86.3	-49.6	Peak	Horizontal
*	3414.0	38.0	-1.6	36.4	86.3	-49.9	Peak	Horizontal
	4876.0	34.2	2.7	36.9	74.0	-37.1	Peak	Horizontal
	8216.5	34.8	8.2	43.0	74.0	-31.0	Peak	Horizontal
*	3159.0	37.8	-1.5	36.3	86.3	-50.0	Peak	Vertical
*	3516.0	37.9	-1.1	36.8	86.3	-49.5	Peak	Vertical
	4952.5	35.1	2.9	38.0	74.0	-36.0	Peak	Vertical
	8250.5	34.9	8.1	43.0	74.0	-31.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.3dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
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
*	3133.5	39.7	-1.6	38.1	87.5	-49.4	Peak	Horizontal
*	3524.5	38.1	-1.0	37.1	87.5	-50.4	Peak	Horizontal
	4901.5	35.0	2.7	37.7	74.0	-36.3	Peak	Horizontal
	8157.0	34.8	8.4	43.2	74.0	-30.8	Peak	Horizontal
*	3133.5	39.7	-1.6	38.1	87.5	-49.4	Peak	Vertical
*	3490.5	37.4	-1.2	36.2	87.5	-51.3	Peak	Vertical
	4859.0	35.8	2.7	38.5	74.0	-35.5	Peak	Vertical
	8157.0	35.2	8.4	43.6	74.0	-30.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (107.5dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3184.5	38.5	-1.6	36.9	86.3	-49.4	Peak	Horizontal
*	3482.0	37.1	-1.2	35.9	86.3	-50.4	Peak	Horizontal
	4969.5	35.9	3.0	38.9	74.0	-35.1	Peak	Horizontal
	8454.5	35.3	8.2	43.5	74.0	-30.5	Peak	Horizontal
*	3201.5	38.2	-1.6	36.6	86.3	-49.7	Peak	Vertical
*	3499.0	37.3	-1.1	36.2	86.3	-50.1	Peak	Vertical
	4867.5	35.6	2.7	38.3	74.0	-35.7	Peak	Vertical
	8225.0	34.9	8.2	43.1	74.0	-30.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.3dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
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
*	3116.5	38.2	-1.7	36.5	84.7	-48.2	Peak	Horizontal
*	3524.5	37.7	-1.0	36.7	84.7	-48.0	Peak	Horizontal
	4961.0	35.9	2.9	38.8	74.0	-35.2	Peak	Horizontal
	8148.5	35.5	8.5	44.0	74.0	-30.0	Peak	Horizontal
*	3048.5	39.4	-2.0	37.4	84.7	-47.3	Peak	Vertical
*	3516.0	38.1	-1.1	37.0	84.7	-47.7	Peak	Vertical
	5029.0	35.5	3.1	38.6	74.0	-35.4	Peak	Vertical
	8361.0	34.4	8.0	42.4	74.0	-31.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (104.7dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	03	Test Engineer:	Roy Cheng
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
*	3108.0	38.0	-1.7	36.3	82.4	-46.1	Peak	Horizontal
*	3507.5	38.4	-1.1	37.3	82.4	-45.1	Peak	Horizontal
	4808.0	36.0	2.7	38.7	74.0	-35.3	Peak	Horizontal
	8293.0	34.8	8.0	42.8	74.0	-31.2	Peak	Horizontal
*	3099.5	38.3	-1.8	36.5	82.4	-45.9	Peak	Vertical
*	3507.5	38.4	-1.1	37.3	82.4	-45.1	Peak	Vertical
	4808.0	36.0	2.7	38.7	74.0	-35.3	Peak	Vertical
	8335.5	35.4	8.0	43.4	74.0	-30.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (102.4dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3167.5	38.6	-1.5	37.1	80.6	-43.5	Peak	Horizontal
*	3482.0	38.5	-1.2	37.3	80.6	-43.3	Peak	Horizontal
	4884.5	36.4	2.7	39.1	74.0	-34.9	Peak	Horizontal
	8199.5	34.9	8.3	43.2	74.0	-30.8	Peak	Horizontal
*	3133.5	39.0	-1.6	37.4	80.6	-43.2	Peak	Vertical
*	3541.5	37.5	-0.9	36.6	80.6	-44.0	Peak	Vertical
	4893.0	35.7	2.7	38.4	74.0	-35.6	Peak	Vertical
	8208.0	35.0	8.3	43.3	74.0	-30.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (100.6dBμV/m) or FCC 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 – Ant 2	Test Site:	AC1
Test Channel:	09	Test Engineer:	Roy Cheng
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
*	3074.0	38.0	-1.9	36.1	78.7	-42.6	Peak	Horizontal
*	3524.5	38.3	-1.0	37.3	78.7	-41.4	Peak	Horizontal
	4850.5	35.7	2.7	38.4	74.0	-35.6	Peak	Horizontal
	8301.5	34.7	8.0	42.7	74.0	-31.3	Peak	Horizontal
*	3167.5	39.4	-1.5	37.9	78.7	-40.8	Peak	Vertical
*	3533.0	38.1	-1.0	37.1	78.7	-41.6	Peak	Vertical
	4884.5	35.6	2.7	38.3	74.0	-35.7	Peak	Vertical
	8250.5	35.6	8.1	43.7	74.0	-30.3	Peak	Vertical

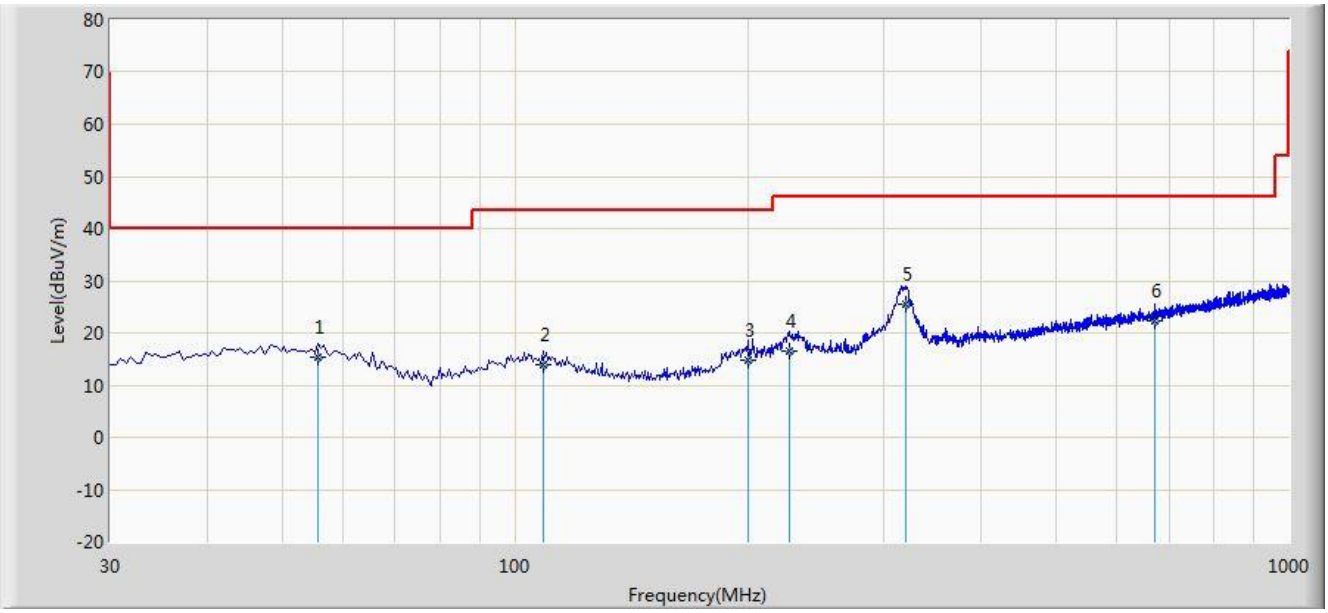
Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (98.7dBμV/m) or FCC 15.209 which is higher.

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: AC 1	Time: 2015/10/08 - 16:13
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Worse Case Mode: Transmit by 802.11g at channel 2412MHz	

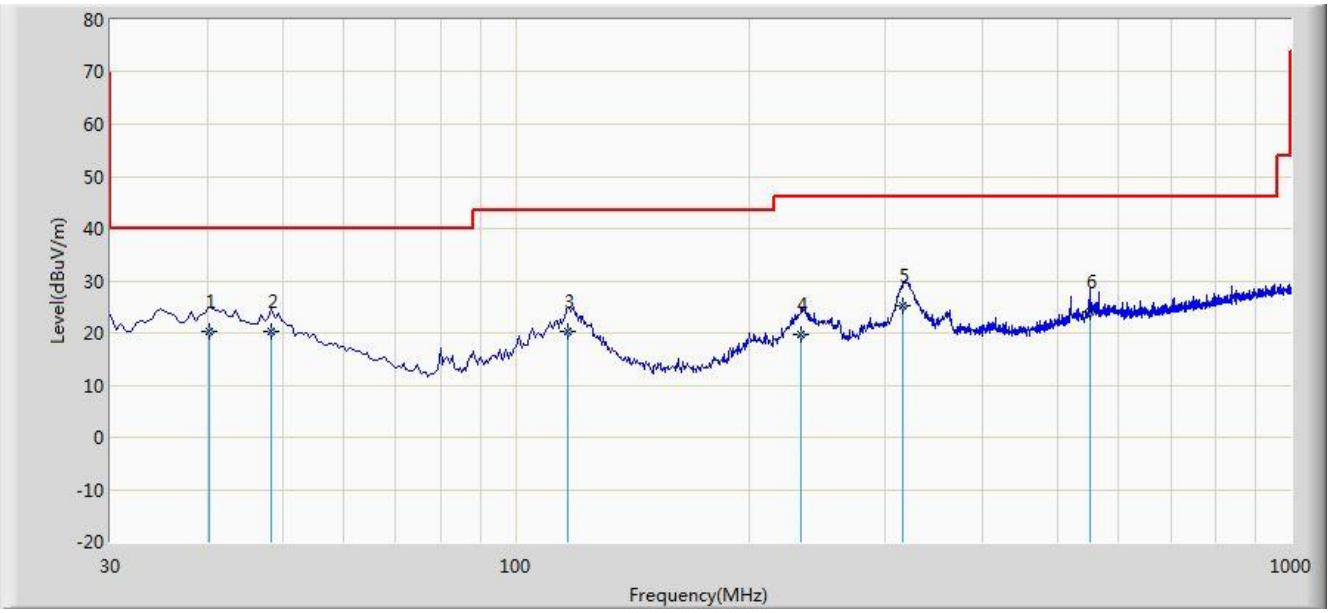


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			55.705	15.291	0.740	-24.709	40.000	14.551	QP
2			109.055	13.998	1.050	-29.502	43.500	12.948	QP
3			199.750	14.685	2.465	-28.815	43.500	12.220	QP
4			225.940	16.390	3.547	-29.610	46.000	12.843	QP
5		*	320.030	25.564	10.542	-20.436	46.000	15.022	QP
6			670.201	22.178	1.240	-23.822	46.000	20.938	QP

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

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

Site: AC 1	Time: 2015/10/08 - 16:13
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: sengled pulse flex	Power: AC 120V/60Hz
Worse Case Mode: Transmit by 802.11g at channel 2412MHz	

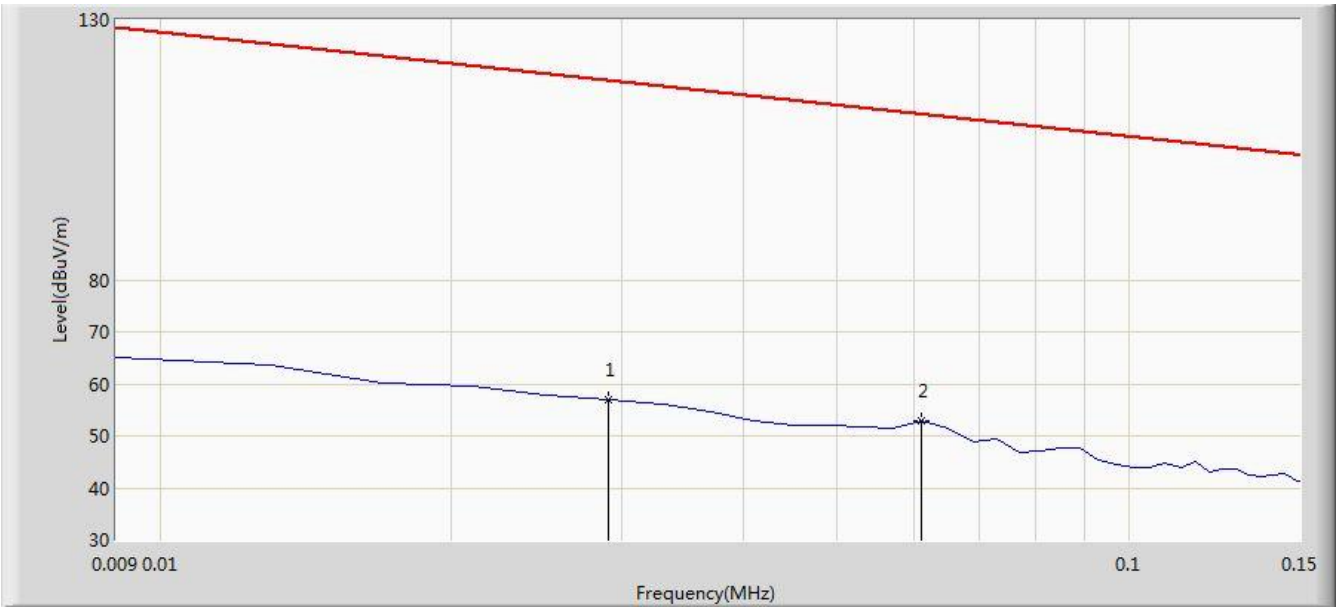


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			40.185	20.303	6.424	-19.697	40.000	13.879	QP
2		*	48.431	20.388	5.457	-19.612	40.000	14.931	QP
3			116.815	20.216	8.471	-23.284	43.500	11.745	QP
4			233.701	19.677	6.525	-26.323	46.000	13.152	QP
5			315.665	25.229	10.325	-20.771	46.000	14.904	QP
6			549.920	24.162	5.124	-21.838	46.000	19.038	QP

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

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

Site: AC1	Time: 2015/10/07 - 09:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: sengled pulse flex	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

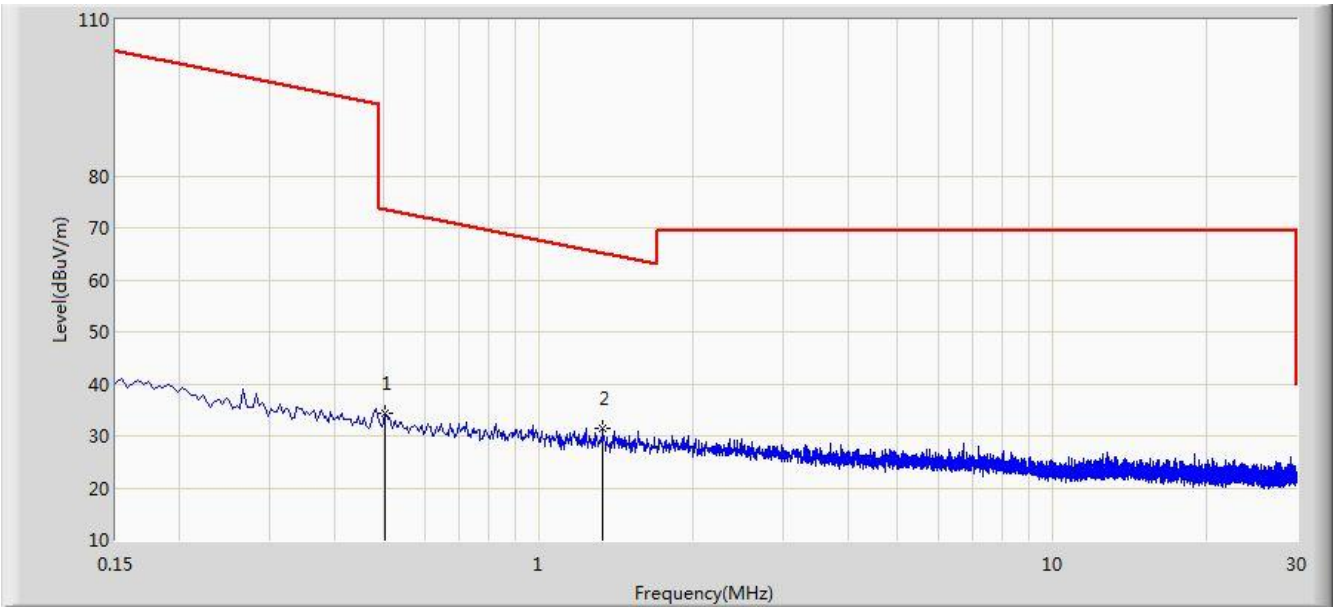


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.029	56.893	35.844	-61.463	118.356	21.049	QP
2		*	0.061	52.853	32.542	-59.045	111.898	20.311	QP

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

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

Site: AC1	Time: 2015/10/07 - 09:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: sengled pulse flex	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

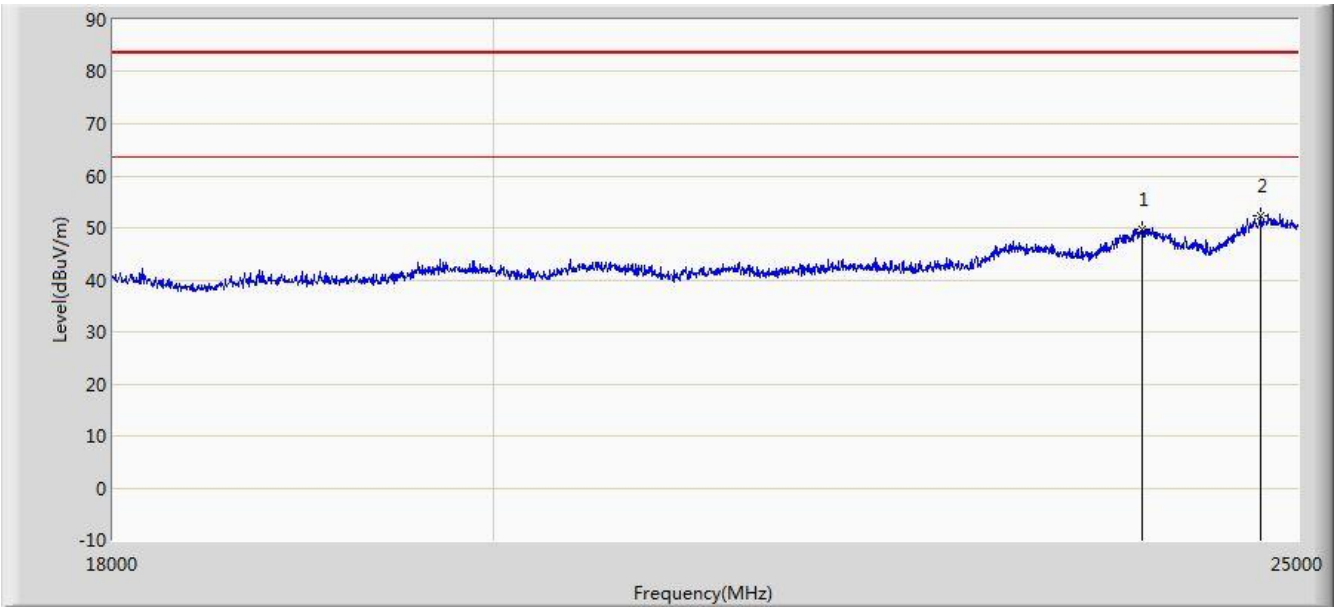


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.502	34.370	13.947	-39.220	73.590	20.423	QP
2		*	1.334	31.595	11.104	-33.530	65.125	20.491	QP

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

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

Site: AC1	Time: 2015/10/07 - 10:21
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 18GHz~25GHz.	



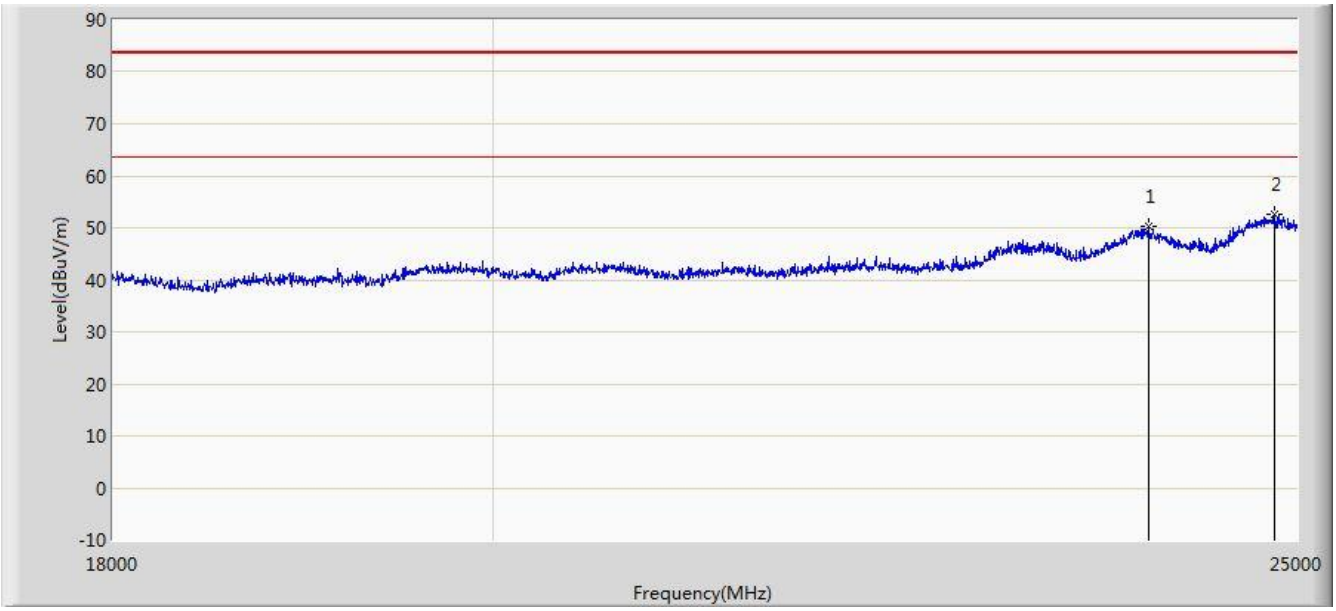
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			23943.000	49.776	35.866	-33.724	83.500	13.910	PK
2		*	24741.000	52.375	37.681	-31.125	83.500	14.694	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) – Pre-Amplifier Gain (dB)

Limit@1m = 20*Log(500uV/m) + 20*Log(3m/1m) = 63.5dBμv/m (Average detector), and 83.5dBμv/m (Peak detector).

Site: AC1	Time: 2015/10/07 - 10:21
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: sengled pulse flex	Power: AC 120V/60Hz
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			23999.000	50.379	36.435	-33.121	83.500	13.944	PK
2		*	24846.000	52.503	37.735	-30.997	83.500	14.768	PK

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

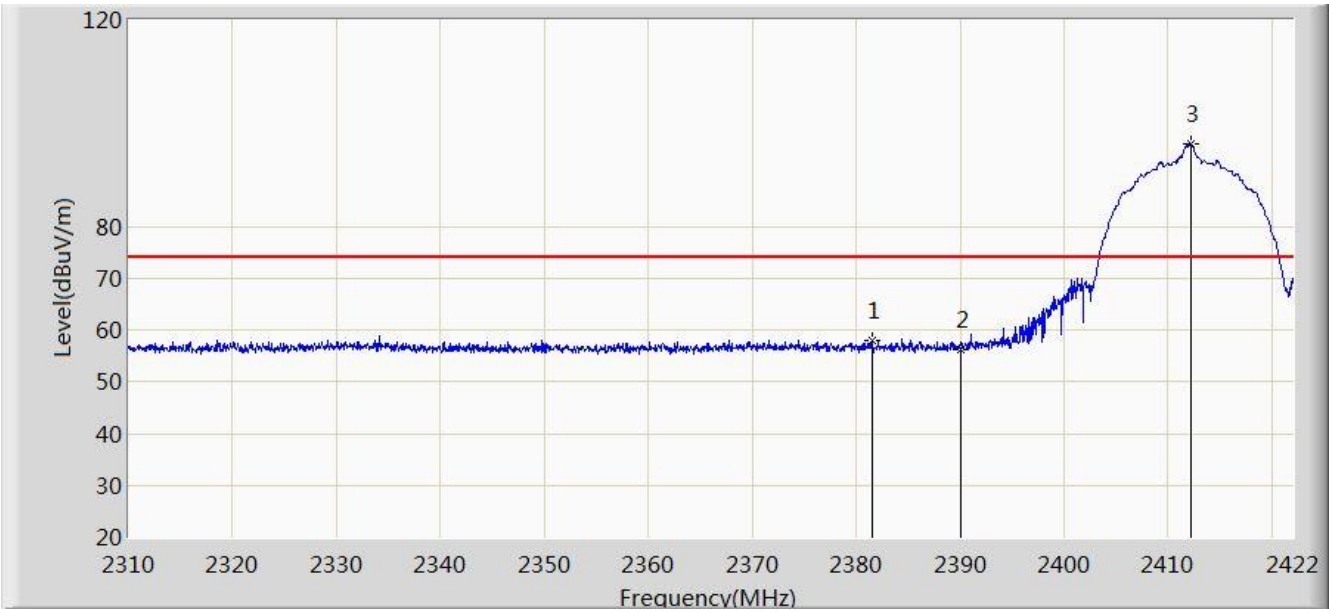
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) – Pre-Amplifier Gain (dB)

Limit@1m = 20*Log(500uV/m) + 20*Log(3m/1m) = 63.5dBμv/m (Average detector), and 83.5dBμv/m (Peak detector).

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Result

Site: AC 1	Time: 2015/09/26 - 14:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 1	

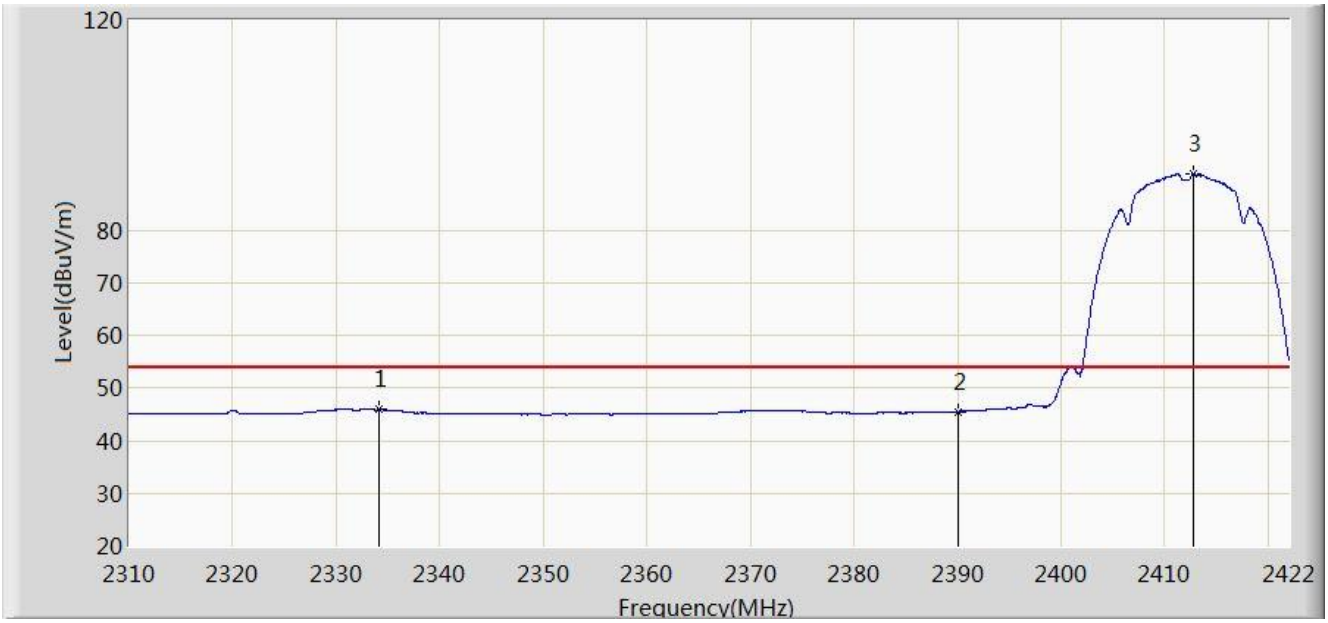


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			2381.568	58.091	26.876	-15.909	74.000	31.218	PK
2			2390.000	56.384	25.181	-17.616	74.000	31.203	PK
3		*	2412.144	95.889	64.720	N/A	N/A	31.170	PK

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

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

Site: AC 1	Time: 2015/09/26 - 14:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 1	

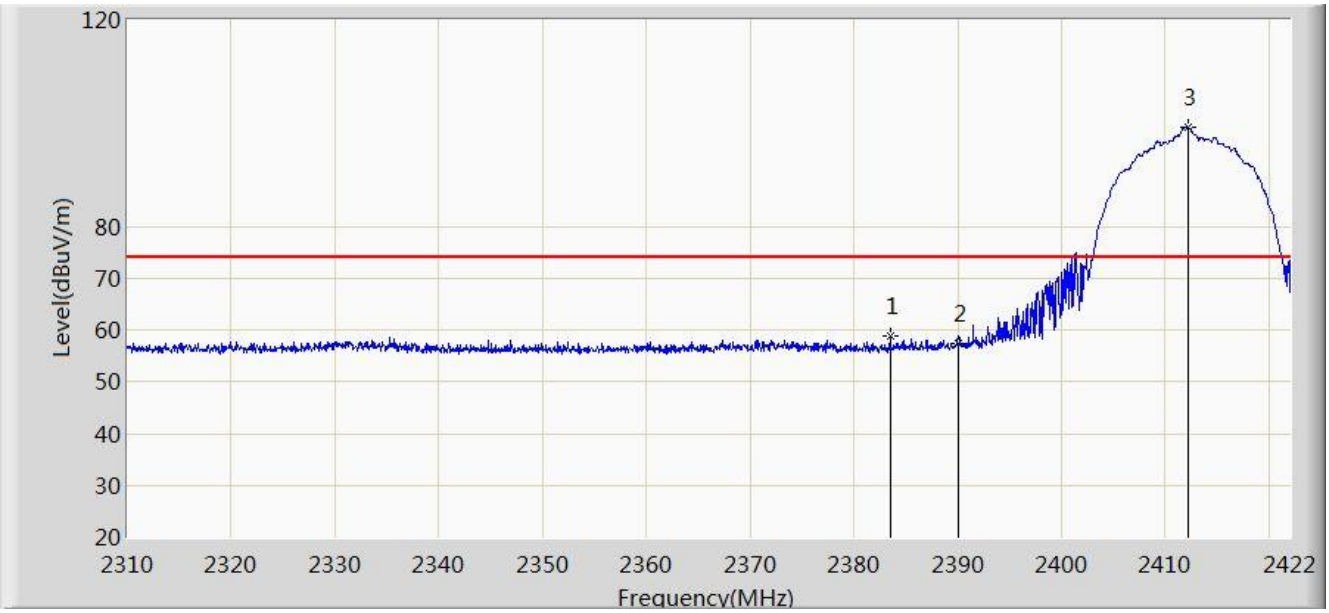


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			2334.192	45.947	14.590	-8.053	54.000	31.357	AV
2			2390.000	45.555	14.353	-8.445	54.000	31.203	AV
3		*	2412.760	90.749	59.581	N/A	N/A	31.168	AV

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

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

Site: AC 1	Time: 2015/09/26 - 14:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 1	

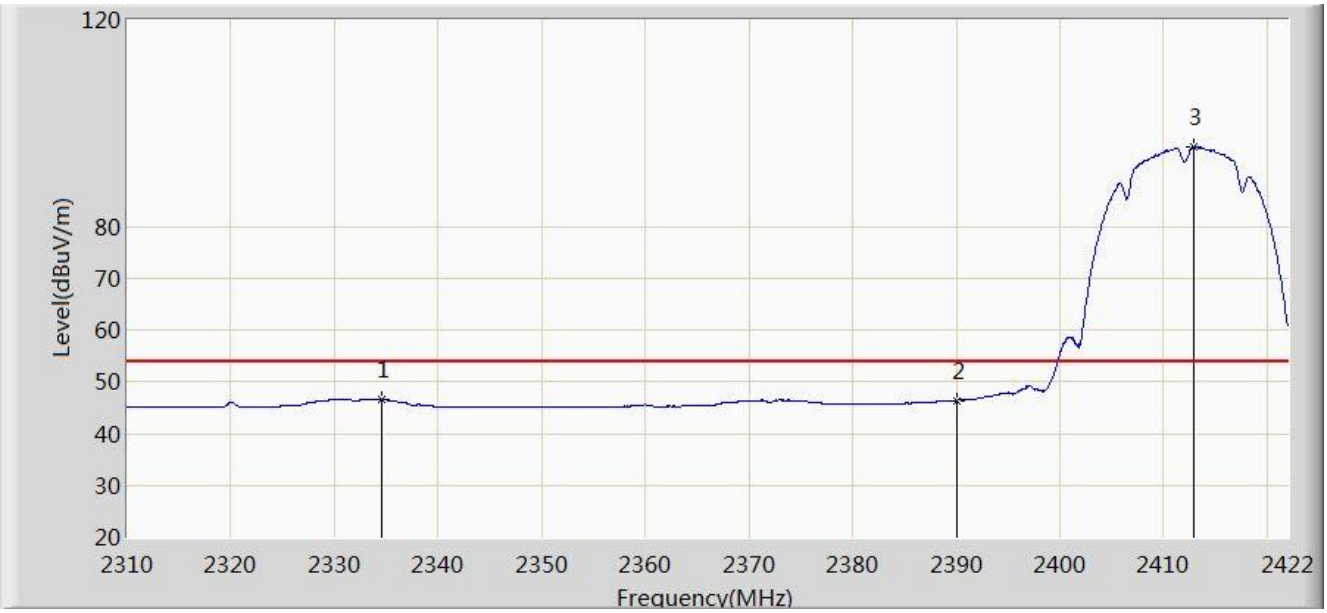


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			2383.472	58.855	27.644	-15.145	74.000	31.215	PK
2			2390.000	57.412	26.209	-16.588	74.000	31.203	PK
3		*	2412.144	99.202	68.033	N/A	N/A	31.170	PK

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

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

Site: AC 1	Time: 2015/09/26 - 14:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 1	

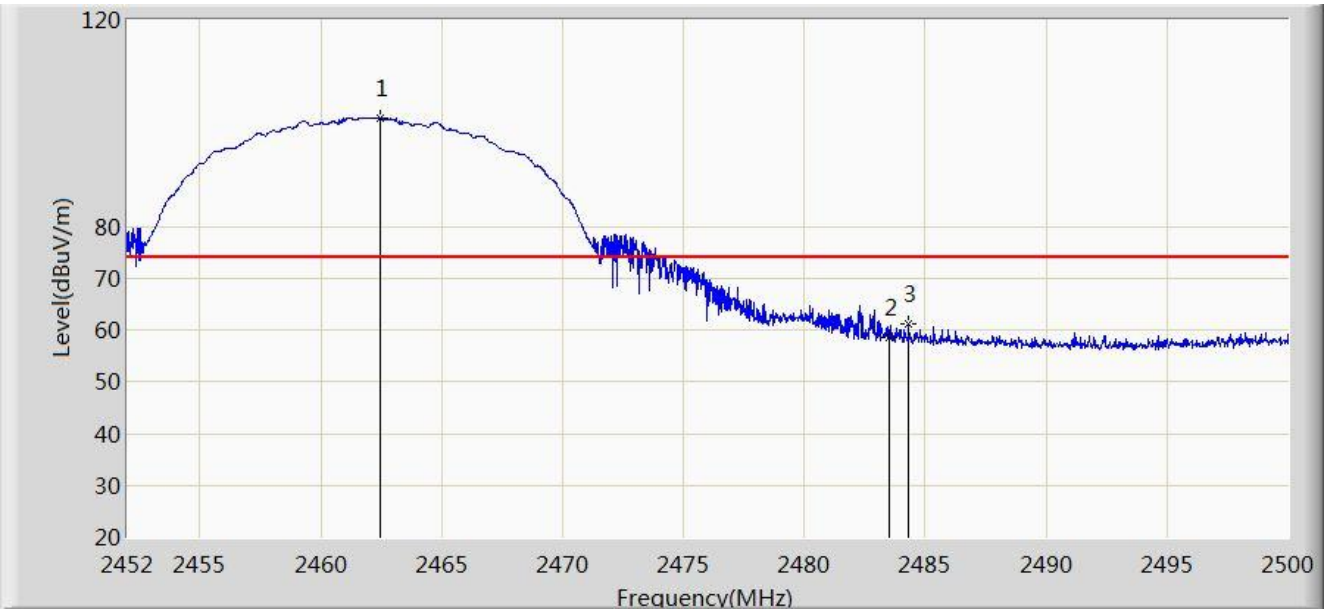


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			2334.584	46.581	15.227	-7.419	54.000	31.355	AV
2			2390.000	46.438	15.235	-7.562	54.000	31.203	AV
3		*	2412.872	95.426	64.258	N/A	N/A	31.168	AV

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

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

Site: AC 1	Time: 2015/09/26 - 14:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 1	

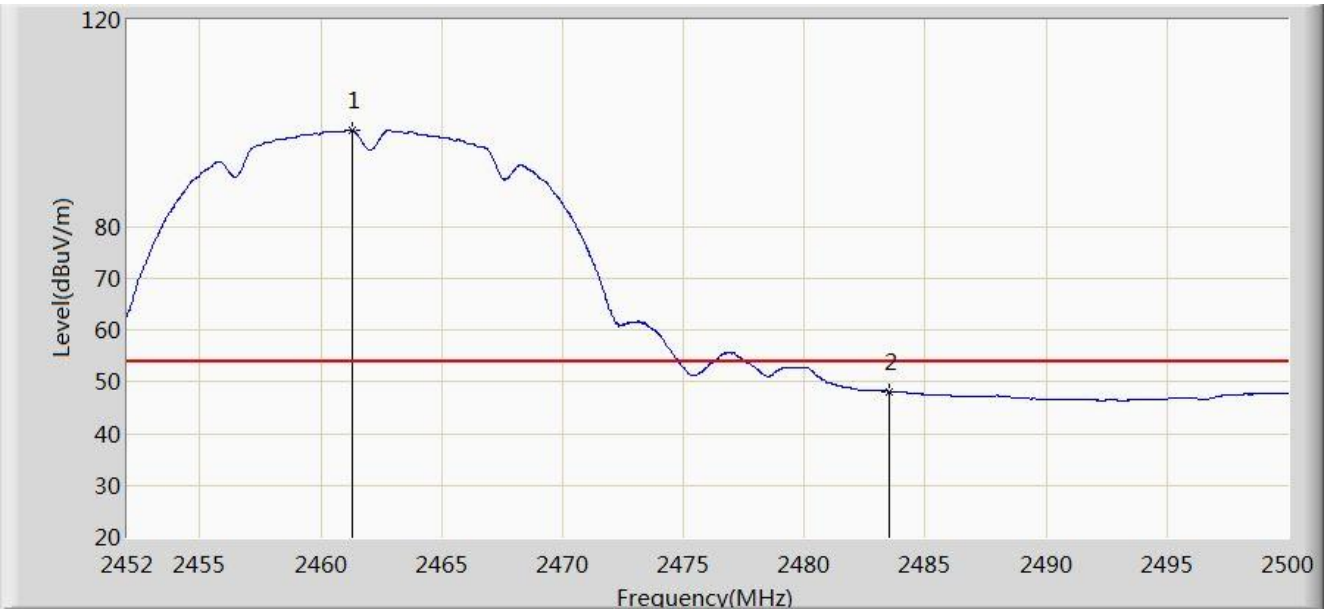


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	2462.488	101.019	69.883	N/A	N/A	31.136	PK
2			2483.500	58.564	27.370	-15.436	74.000	31.194	PK
3			2484.304	61.277	30.085	-12.723	74.000	31.195	PK

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

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

Site: AC 1	Time: 2015/09/26 - 14:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	2461.312	98.726	67.592	N/A	N/A	31.134	AV
2			2483.500	48.166	16.972	-5.834	54.000	31.194	AV

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

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