

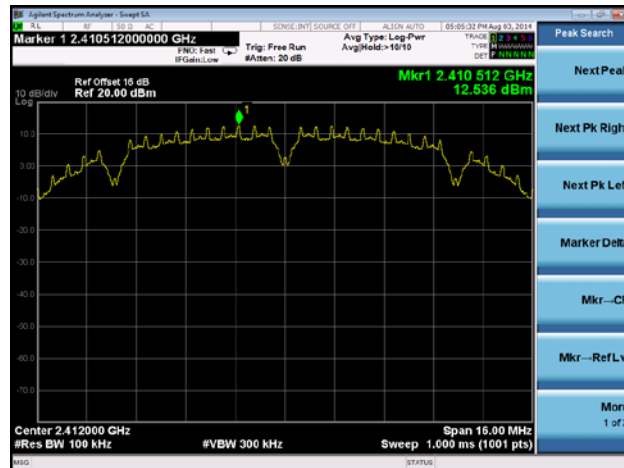
7.5.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Limit	Result
Ant 0					
11b	1	01	2412	20dBc	Pass
11b	1	06	2437	20dBc	Pass
11b	1	11	2462	20dBc	Pass
11g	6	01	2412	20dBc	Pass
11g	6	06	2437	20dBc	Pass
11g	6	11	2462	20dBc	Pass
11n-HT20	13	01	2412	20dBc	Pass
11n-HT20	13	06	2437	20dBc	Pass
11n-HT20	13	11	2462	20dBc	Pass
11n-HT40	27	03	2422	20dBc	Pass
11n-HT40	27	06	2437	20dBc	Pass
11n-HT40	27	09	2452	20dBc	Pass
Ant 1					
11b	1	01	2412	20dBc	Pass
11b	1	06	2437	20dBc	Pass
11b	1	11	2462	20dBc	Pass
11g	6	01	2412	20dBc	Pass
11g	6	06	2437	20dBc	Pass
11g	6	11	2462	20dBc	Pass
11n-HT20	13	01	2412	20dBc	Pass
11n-HT20	13	06	2437	20dBc	Pass
11n-HT20	13	11	2462	20dBc	Pass
11n-HT40	27	03	2422	20dBc	Pass
11n-HT40	27	06	2437	20dBc	Pass
11n-HT40	27	09	2452	20dBc	Pass

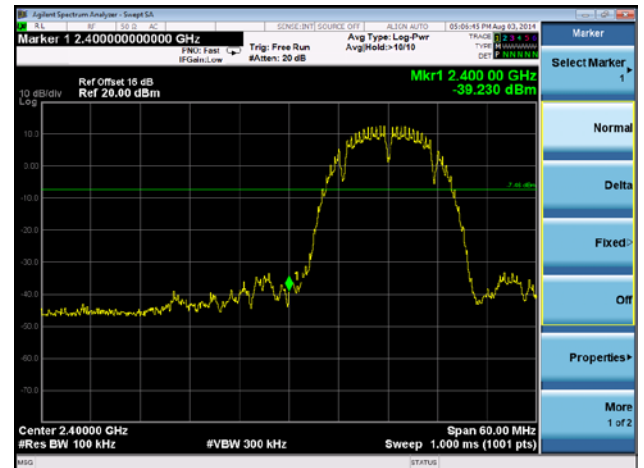
802.11b Out-of-Band Emissions - Ant 0

Channel 01 (2412MHz)

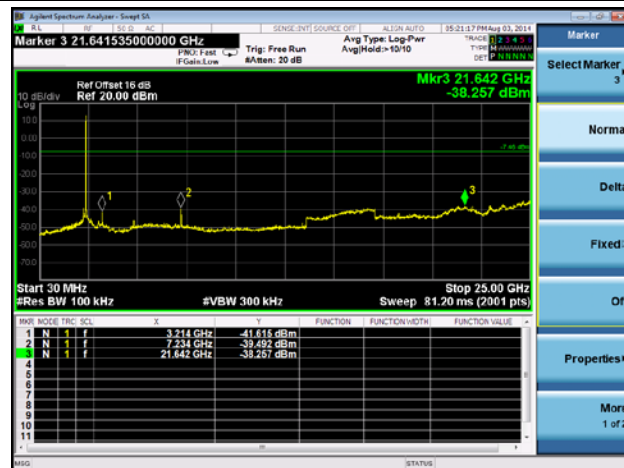
100kHz PSD Reference Level



Low Band Edge

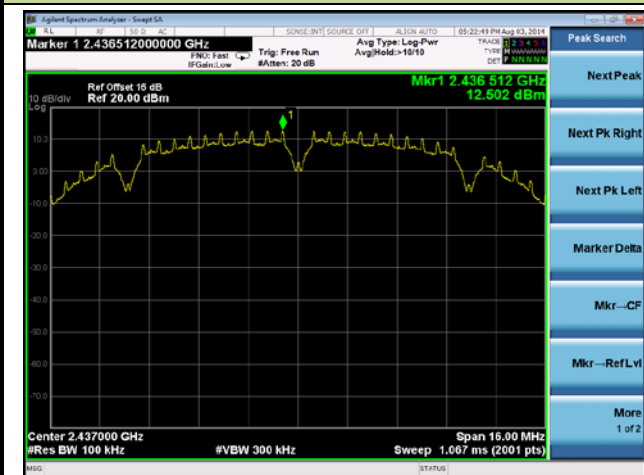


Spurious Emission

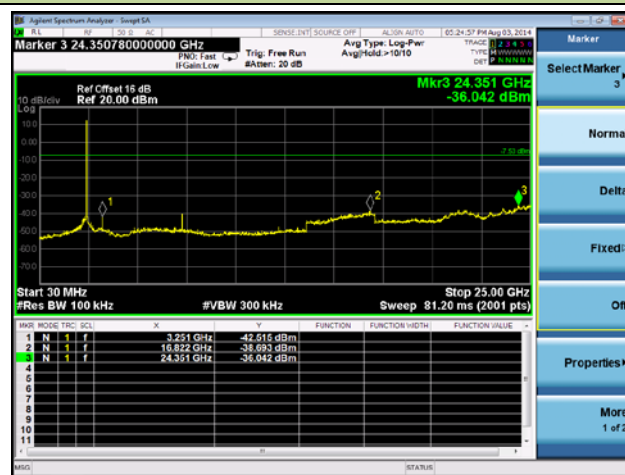


Channel 06 (2437MHz)

100kHz PSD Reference Level

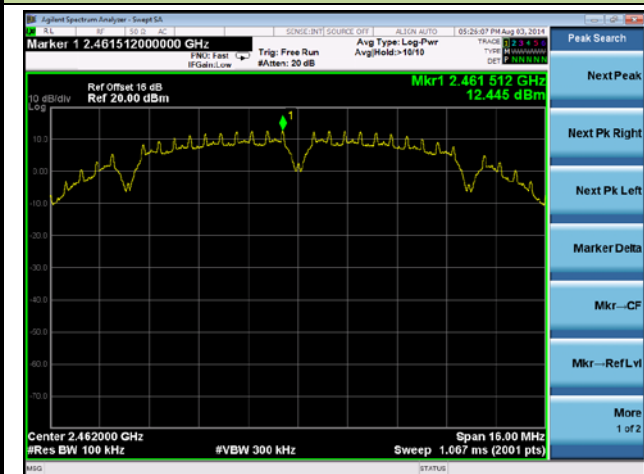


Spurious Emission

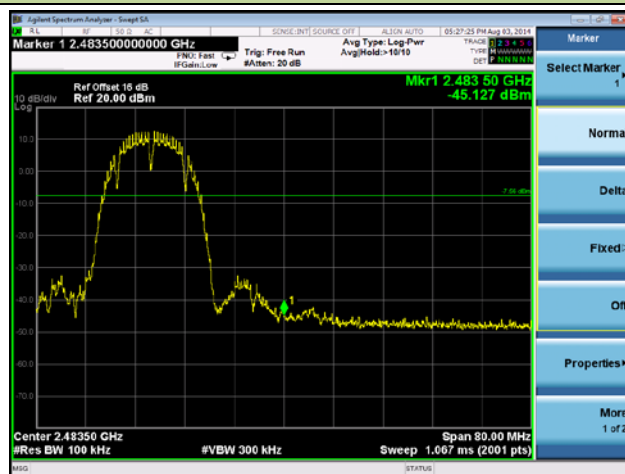


Channel 11 (2462MHz)

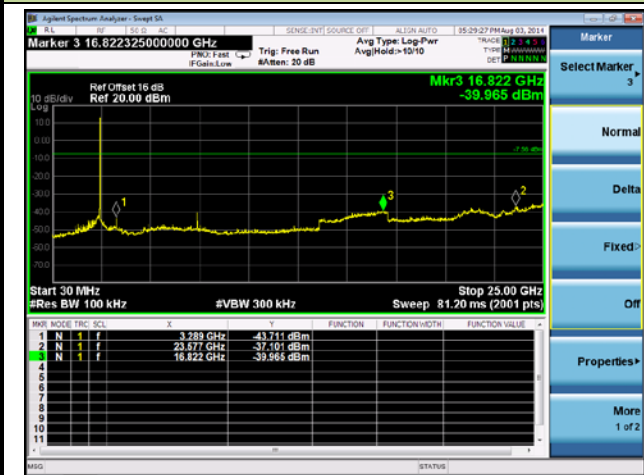
100kHz PSD Reference Level



High Band Edge



Spurious Emission



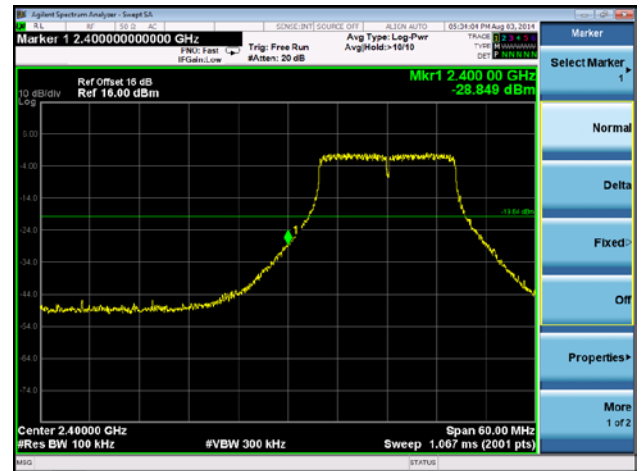
802.11g Out-of-Band Emissions - Ant 0

Channel 01 (2412MHz)

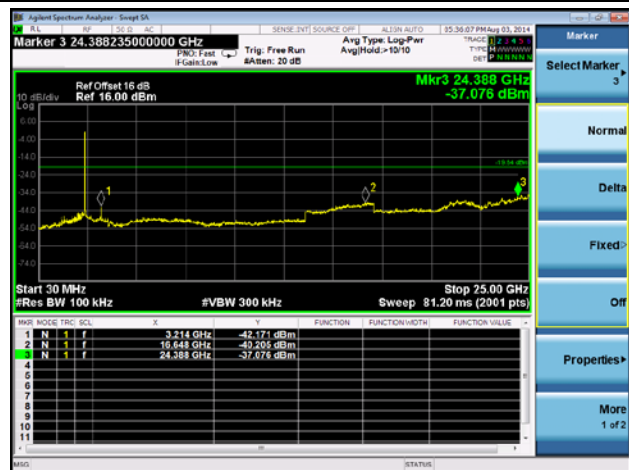
100kHz PSD Reference Level



Low Band Edge

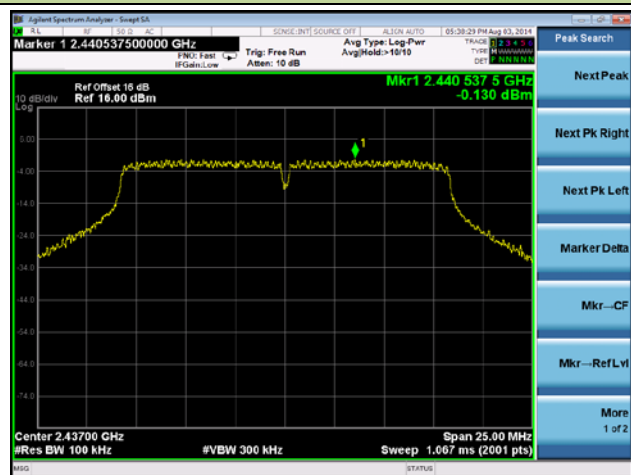


Spurious Emission

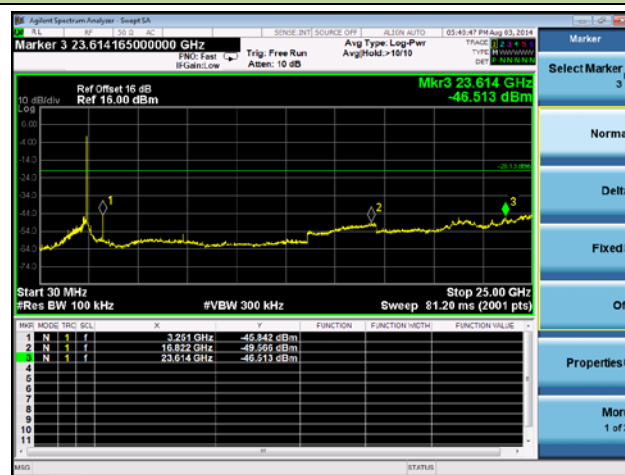


Channel 06 (2437MHz)

100kHz PSD Reference Level

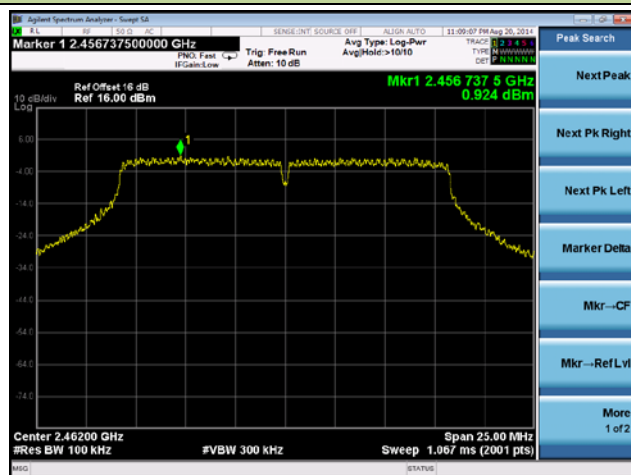


Spurious Emission

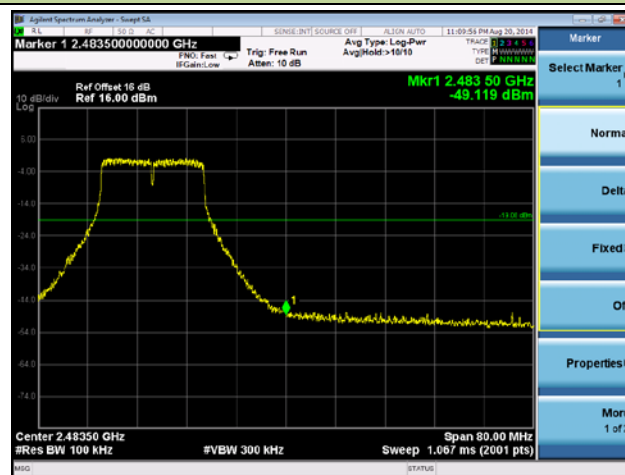


Channel 11 (2462MHz)

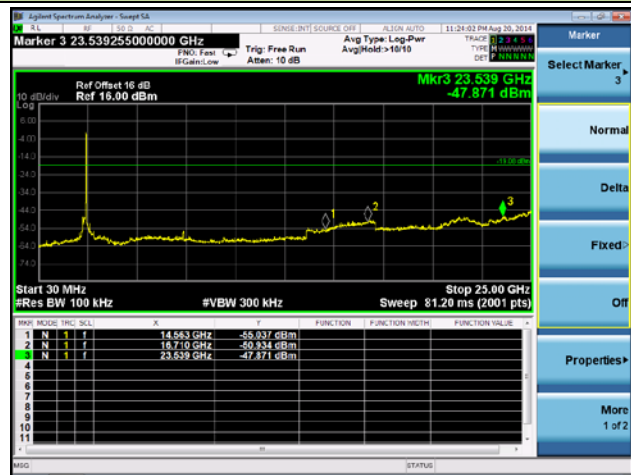
100kHz PSD Reference Level



High Band Edge



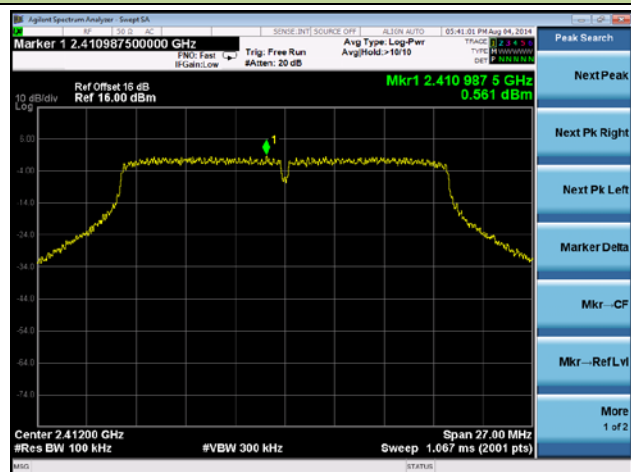
Spurious Emission



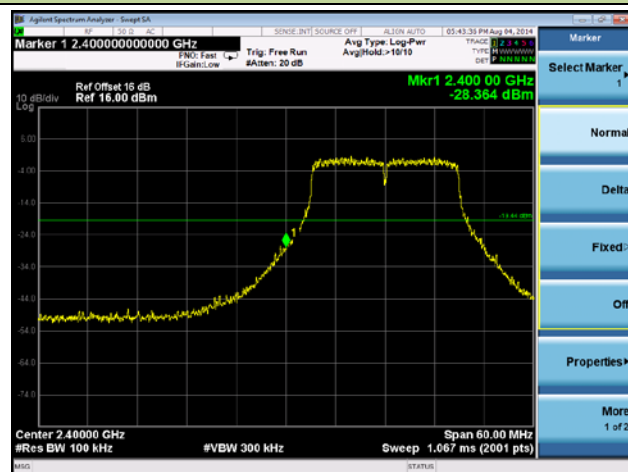
802.11n-HT20 Out-of-Band Emissions - Ant 0

Channel 01 (2412MHz)

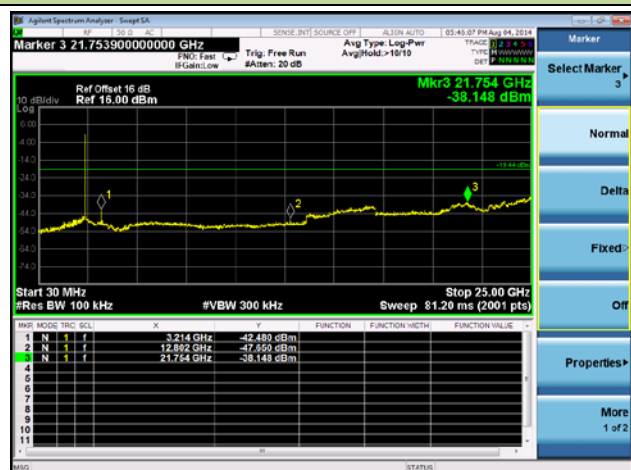
100kHz PSD Reference Level



Low Band Edge

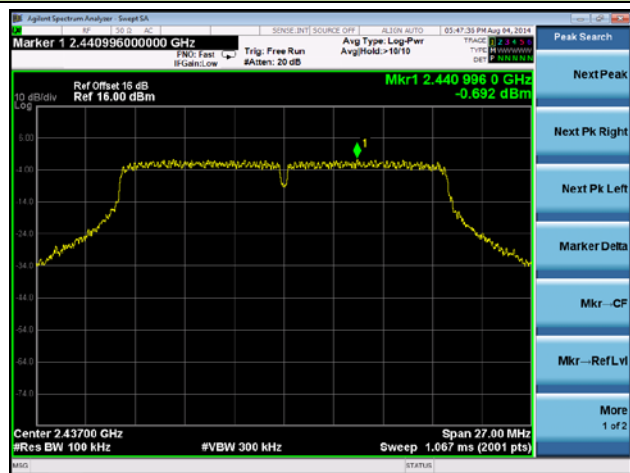


Spurious Emission

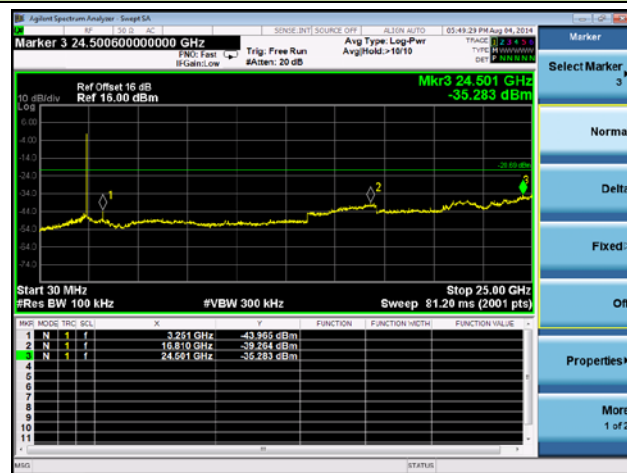


Channel 06 (2437MHz)

100kHz PSD Reference Level

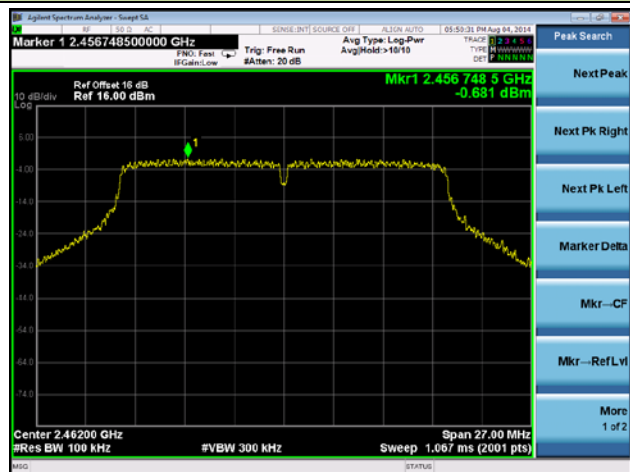


Spurious Emission

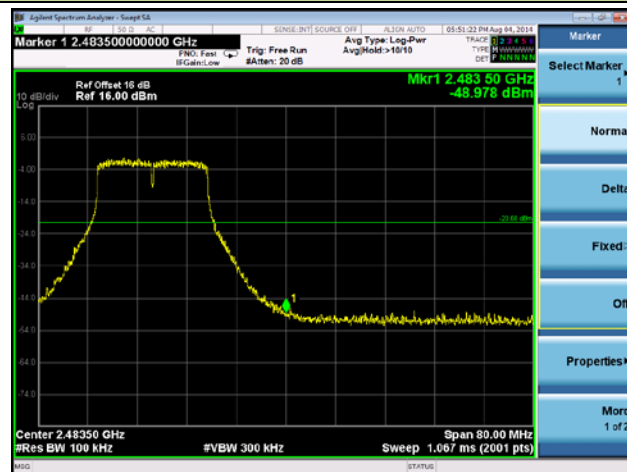


Channel 11 (2462MHz)

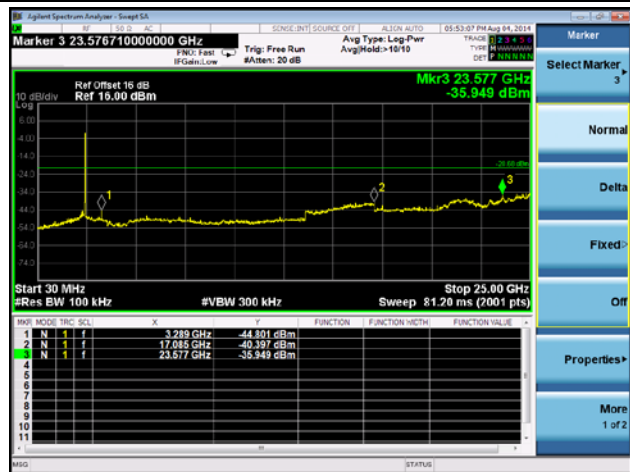
100kHz PSD Reference Level



High Band Edge



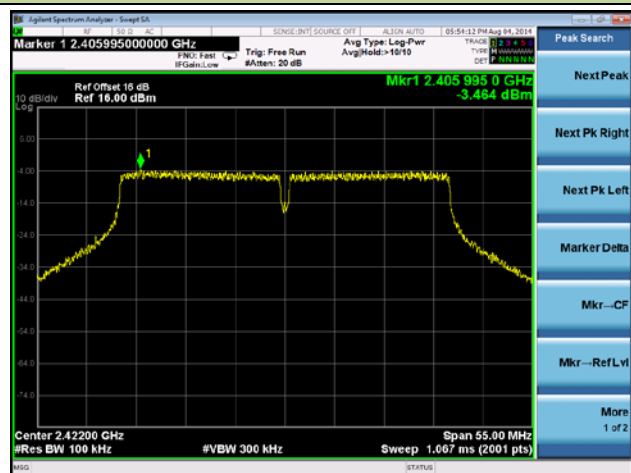
Spurious Emission



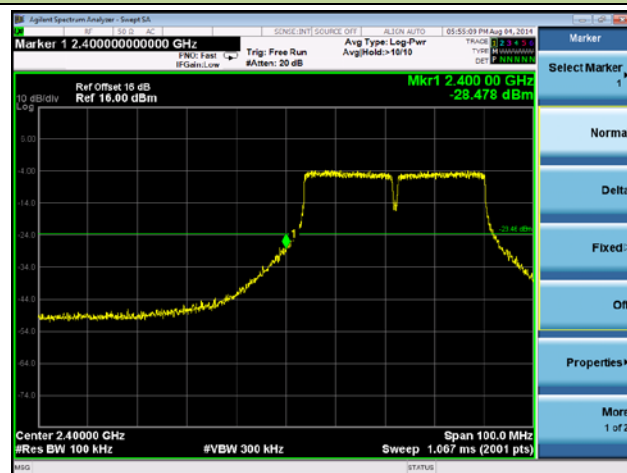
802.11n-HT40 Out-of-Band Emissions - Ant 0

Channel 03 (2422MHz)

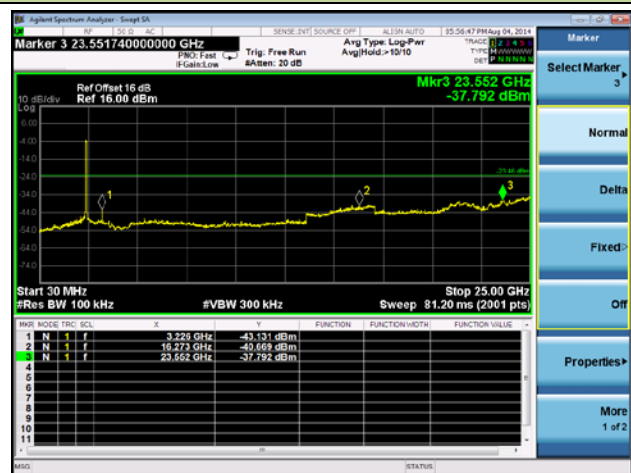
100kHz PSD Reference Level



Low Band Edge

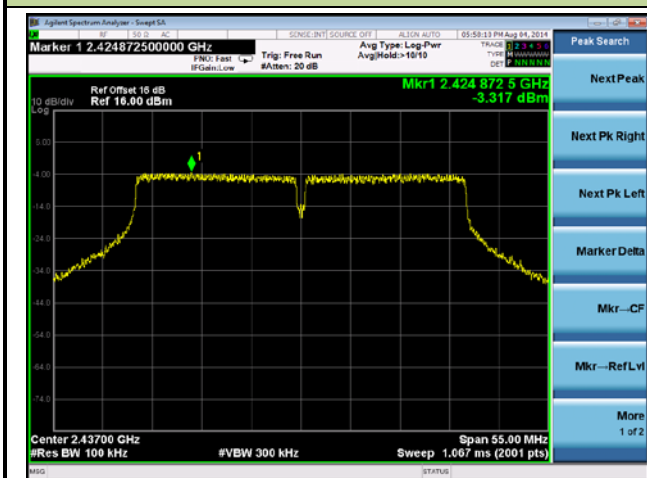


Spurious Emission

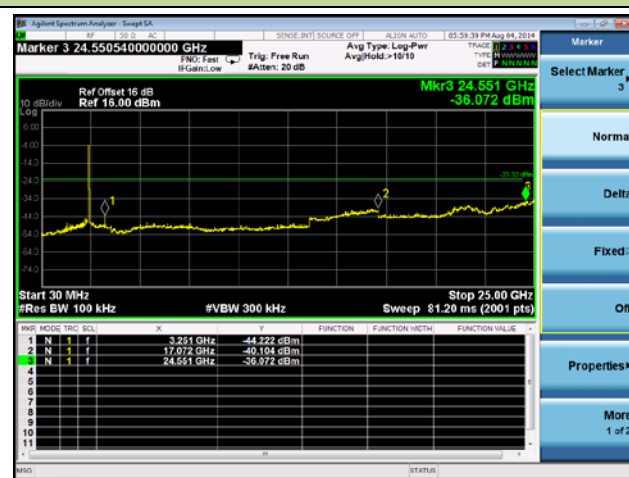


Channel 06 (2437MHz)

100kHz PSD Reference Level

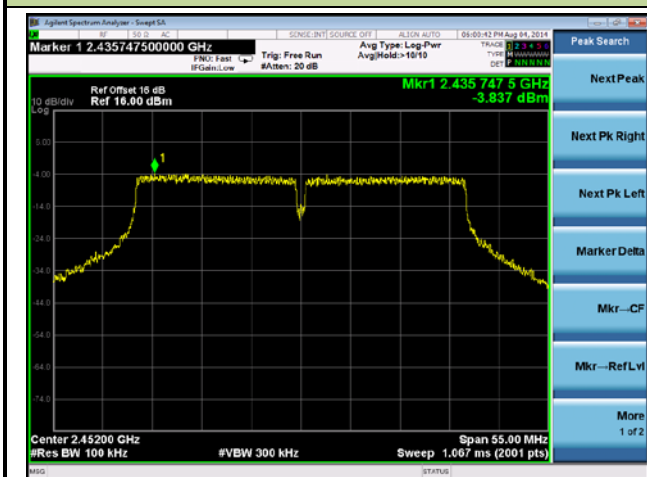


Spurious Emission

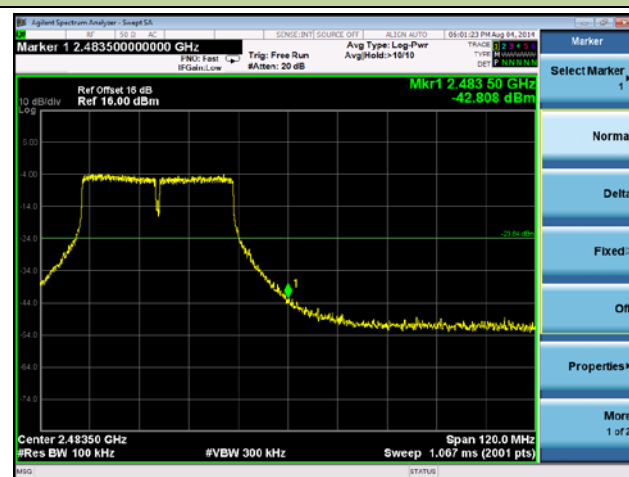


Channel 09 (2452MHz)

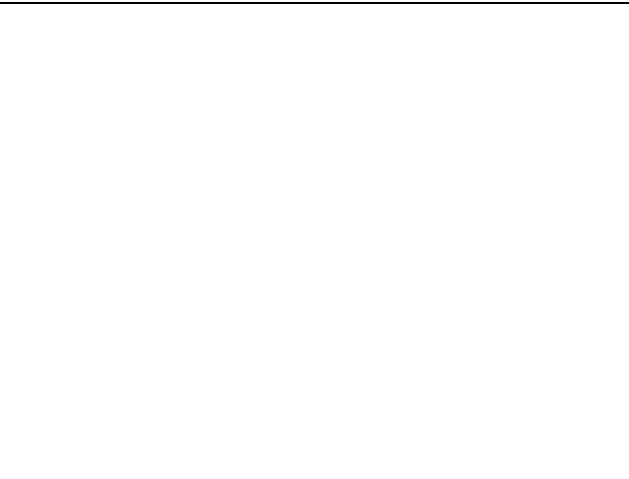
100kHz PSD Reference Level



High Band Edge



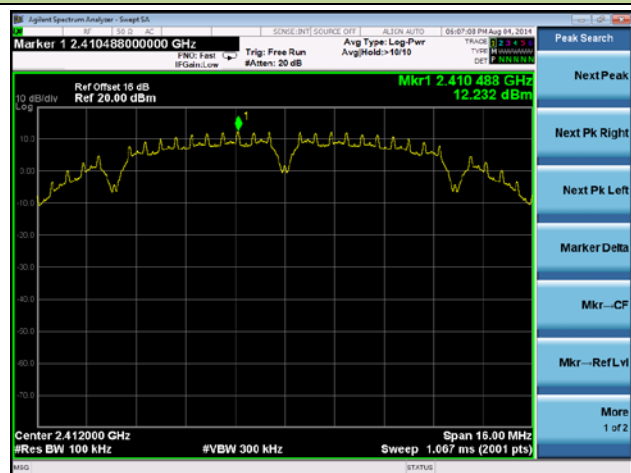
Spurious Emission



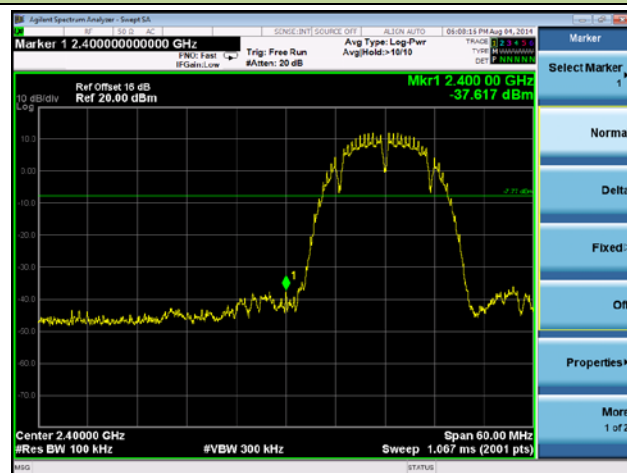
802.11b Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

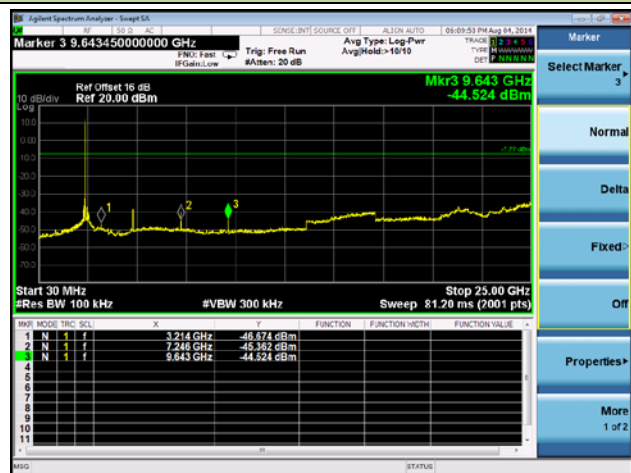
100kHz PSD Reference Level



Low Band Edge



Spurious Emission



Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission

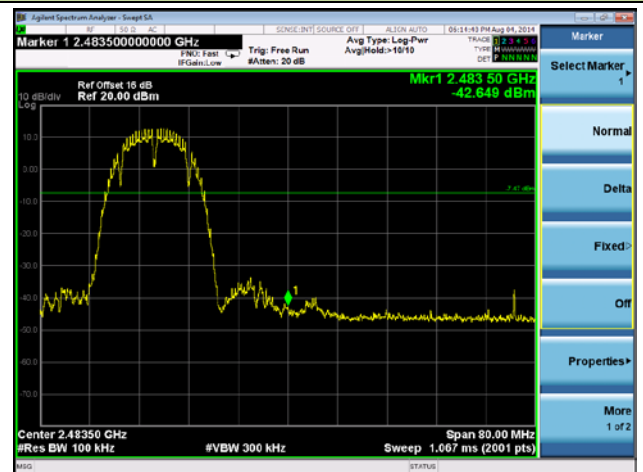


Channel 11 (2462MHz)

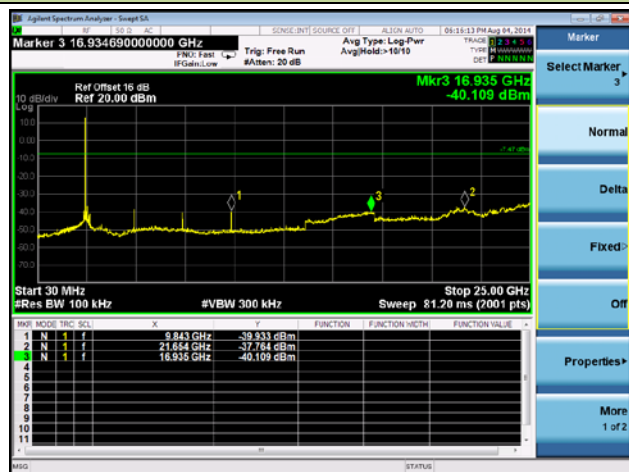
100kHz PSD Reference Level



High Band Edge



Spurious Emission



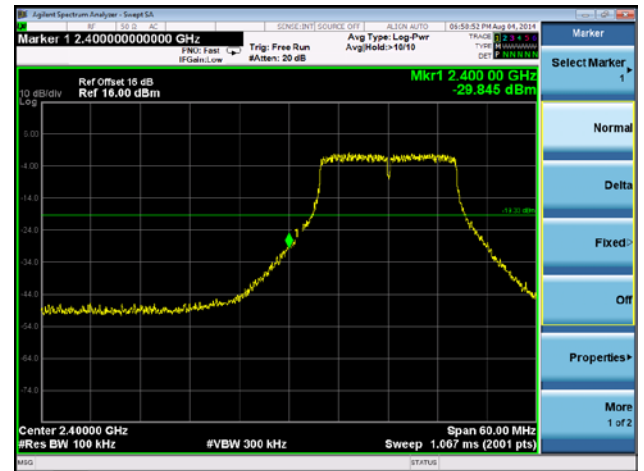
802.11g Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

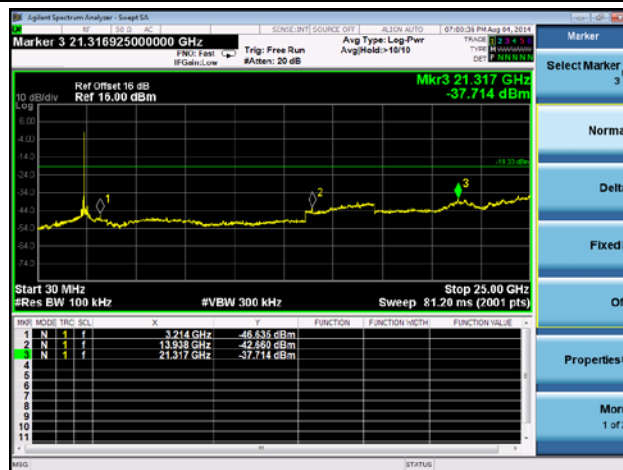
100kHz PSD Reference Level



Low Band Edge

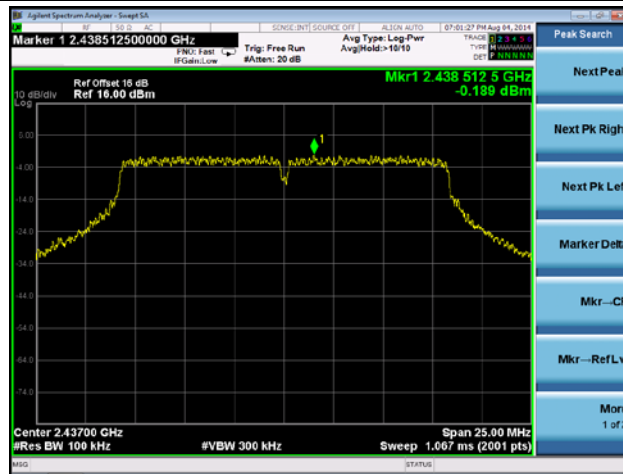


Spurious Emission



Channel 06 (2437MHz)

100kHz PSD Reference Level

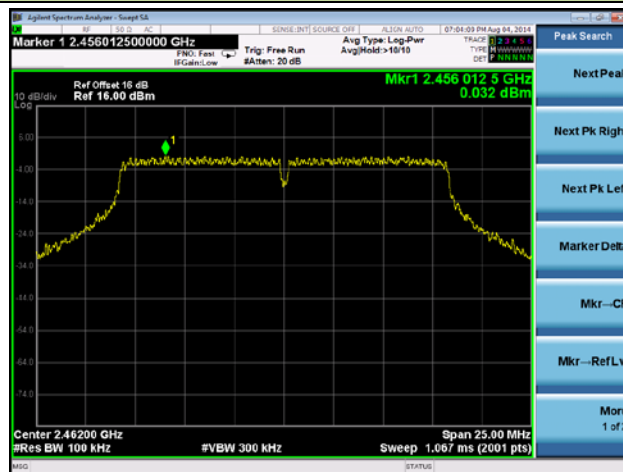


Spurious Emission

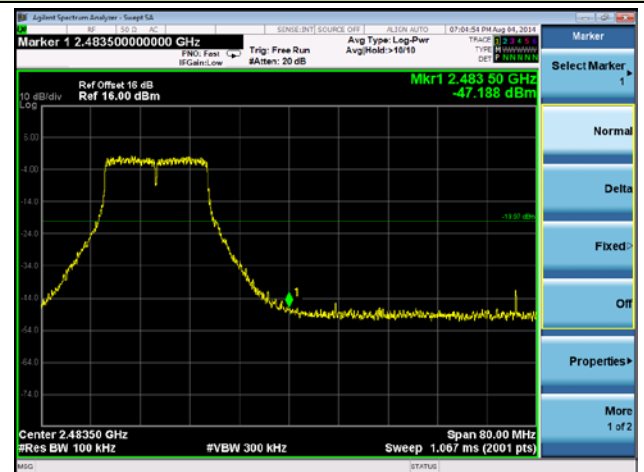


Channel 11 (2462MHz)

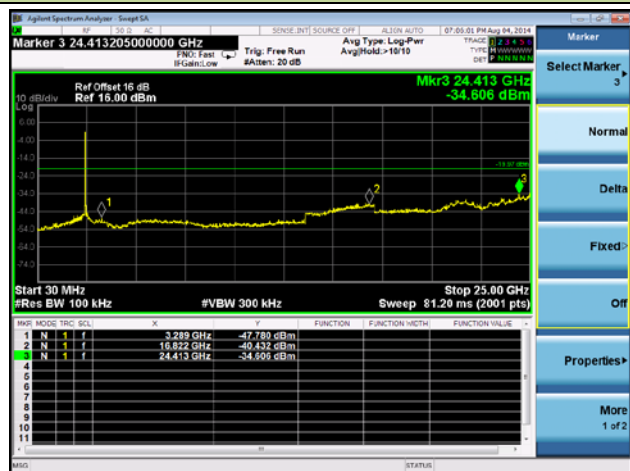
100kHz PSD Reference Level



High Band Edge



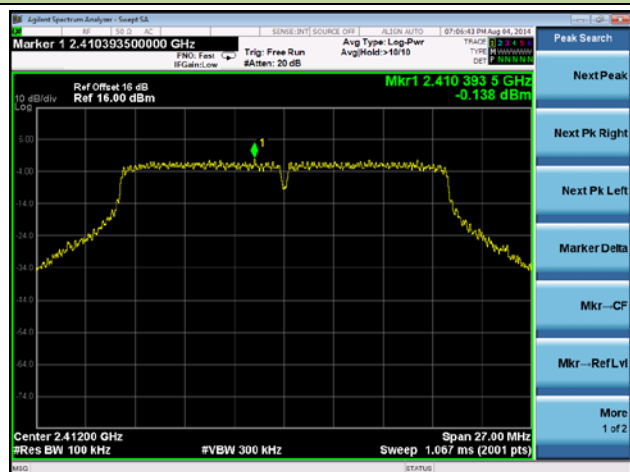
Spurious Emission



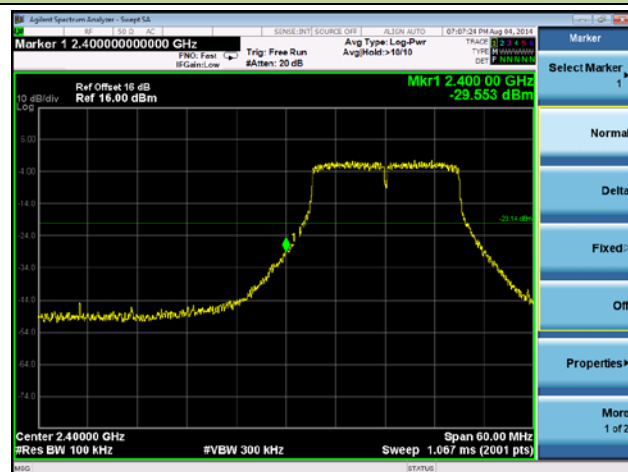
802.11n-HT20 Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

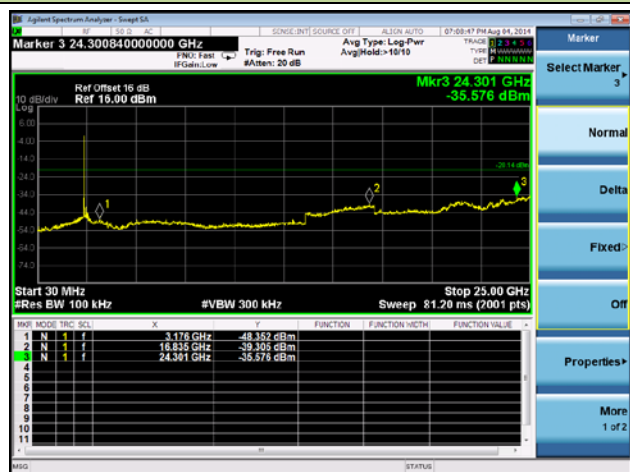
100kHz PSD Reference Level



Low Band Edge

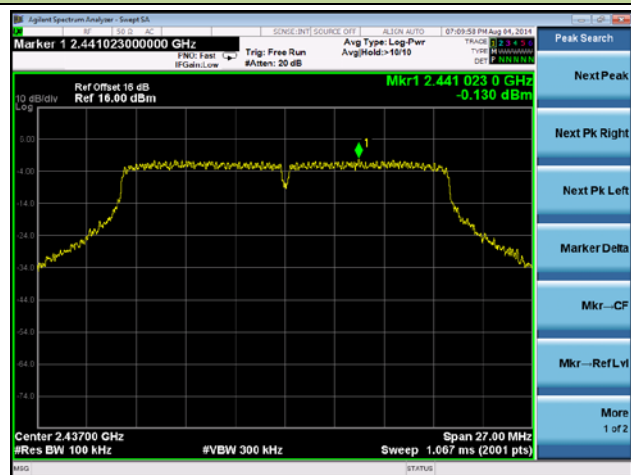


Spurious Emission

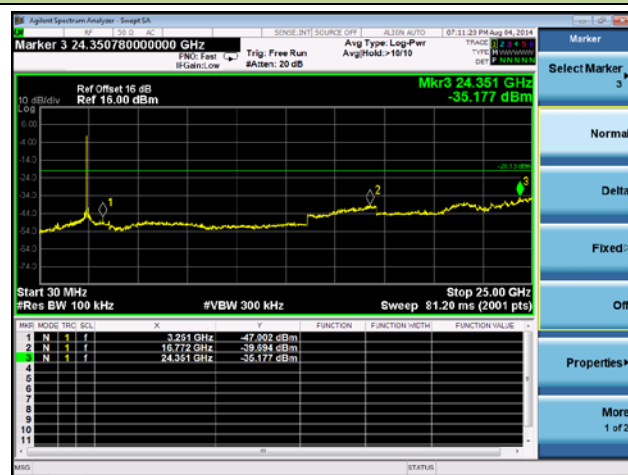


Channel 06 (2437MHz)

100kHz PSD Reference Level

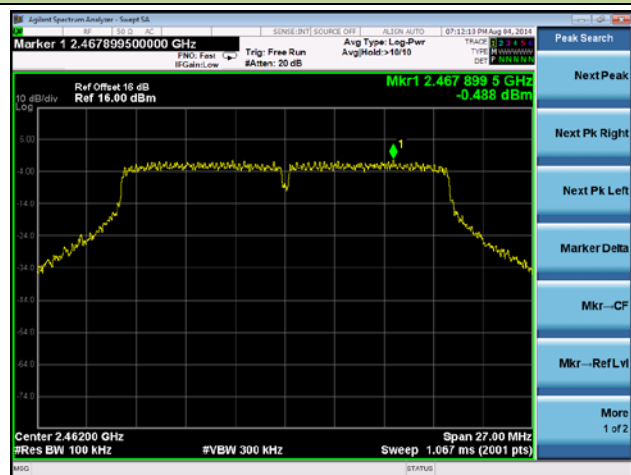


Spurious Emission

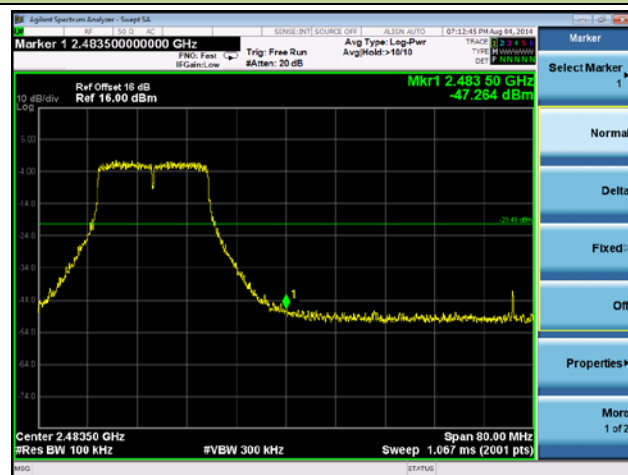


Channel 11 (2462MHz)

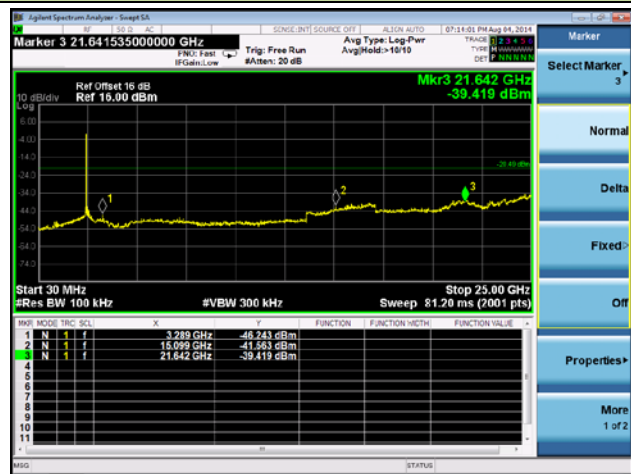
100kHz PSD Reference Level



High Band Edge



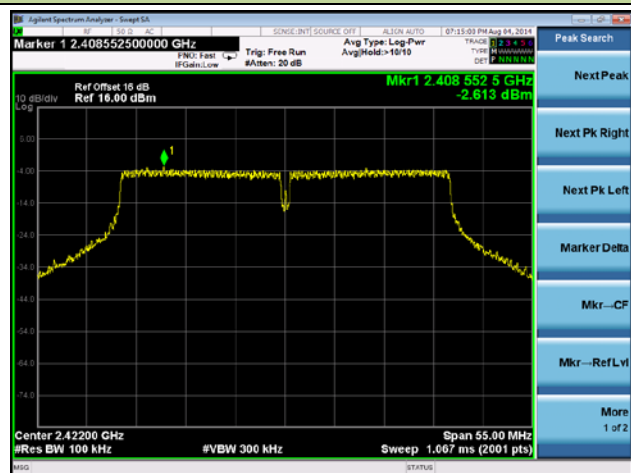
Spurious Emission



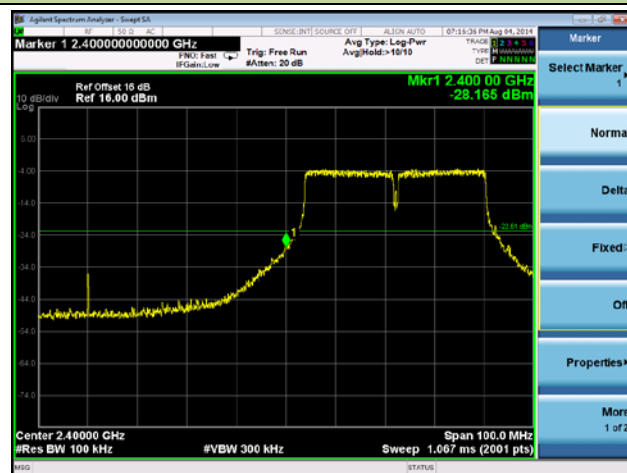
802.11n-HT40 Out-of-Band Emissions - Ant 1

Channel 03 (2422MHz)

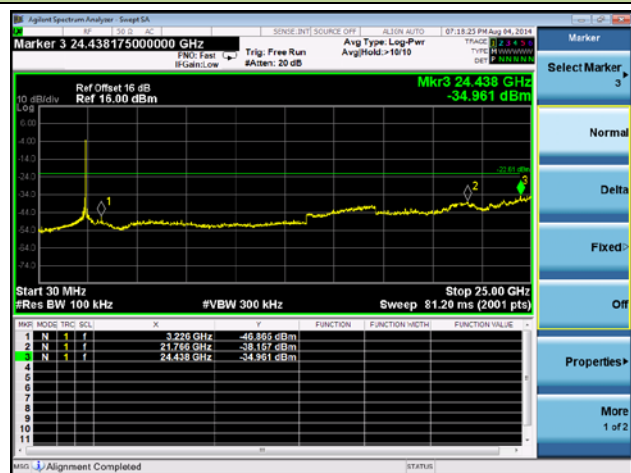
100kHz PSD Reference Level



Low Band Edge

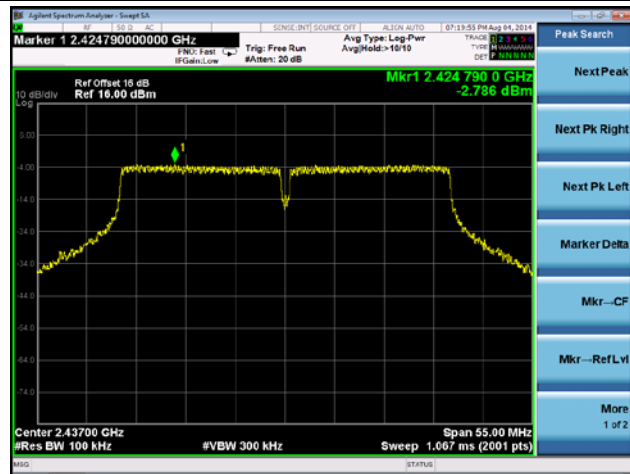


Spurious Emission



Channel 06 (2437MHz)

100kHz PSD Reference Level

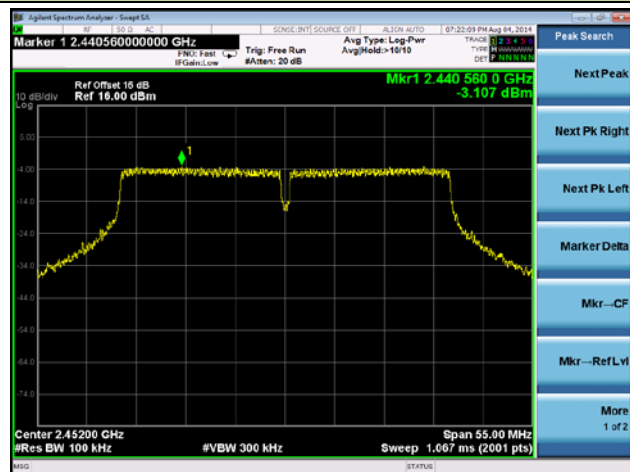


Spurious Emission

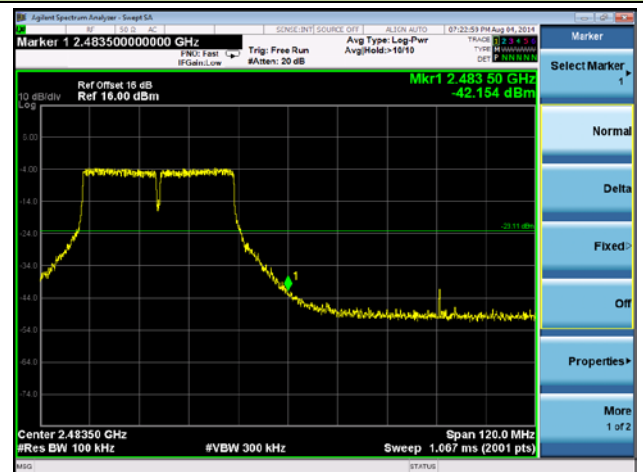


Channel 09 (2452MHz)

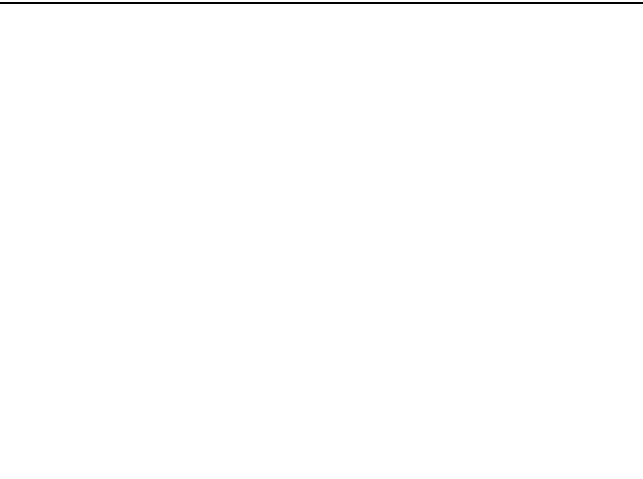
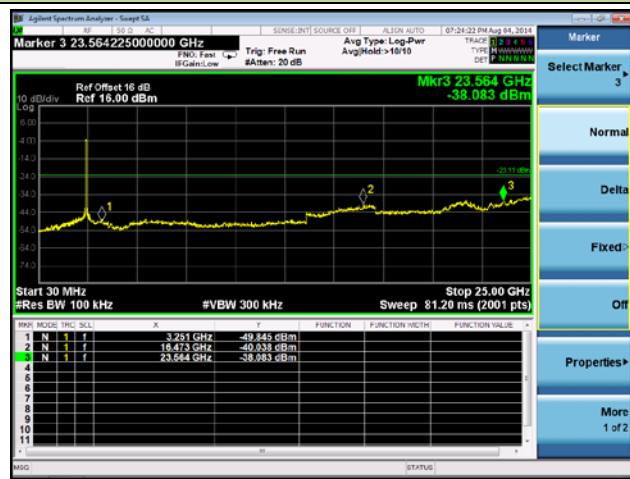
100kHz PSD Reference Level



High Band Edge



Spurious Emission



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

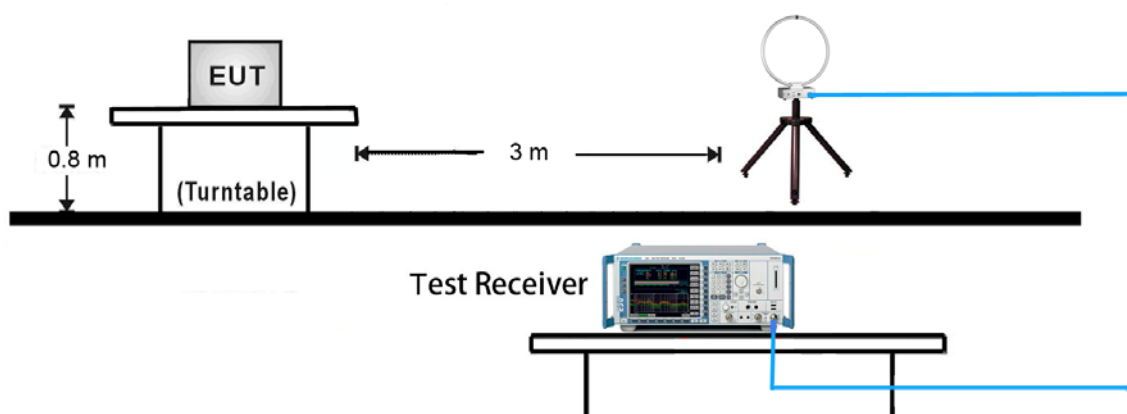
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements per Section 12.2.5.3 of KDB 558074 D01v03r02

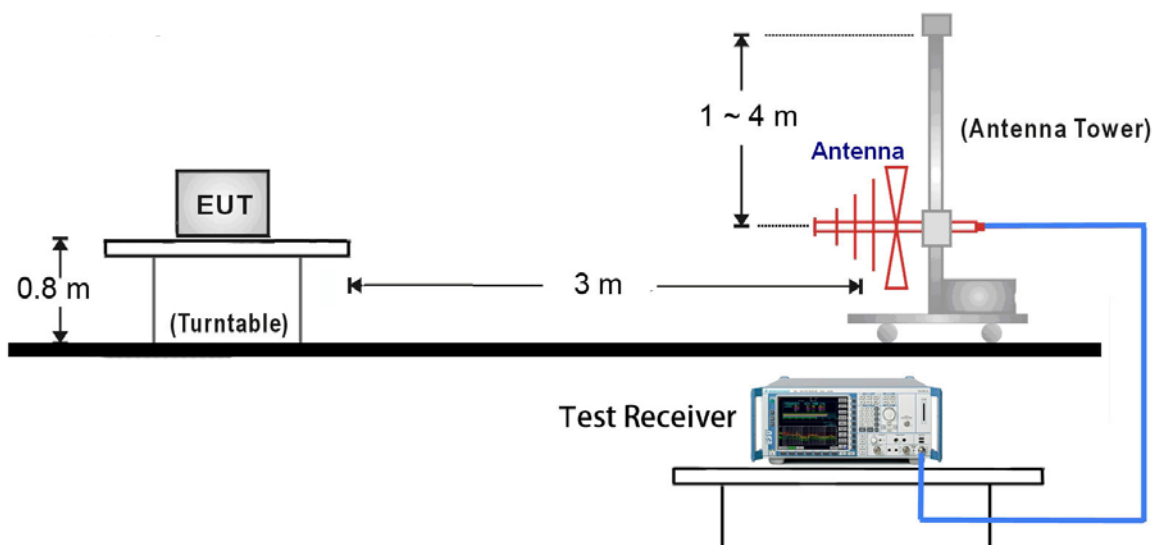
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain).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

7.6.4. Test Setup

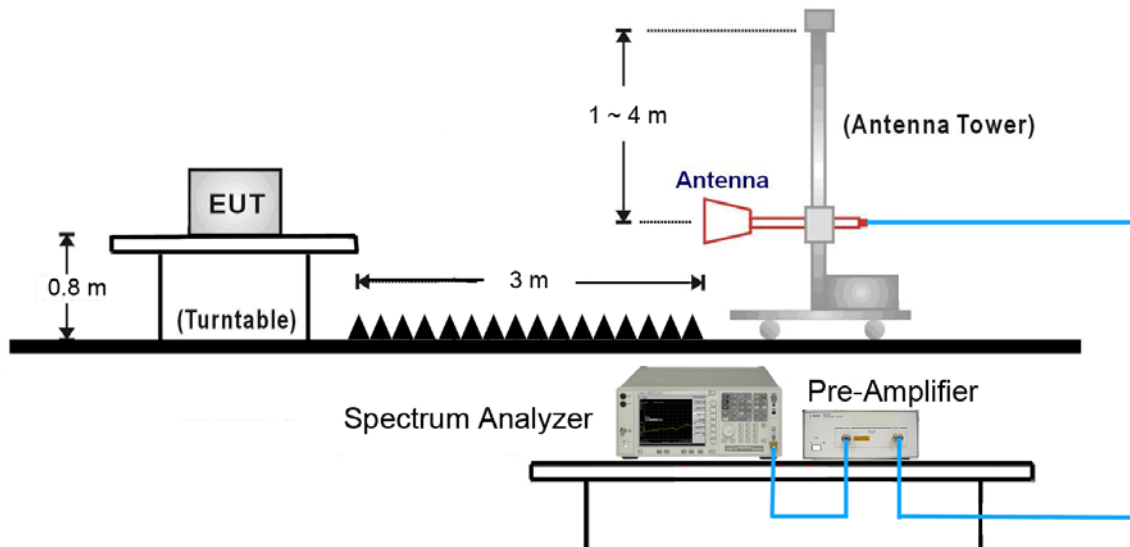
9kHz ~ 30MHz Test Setup:



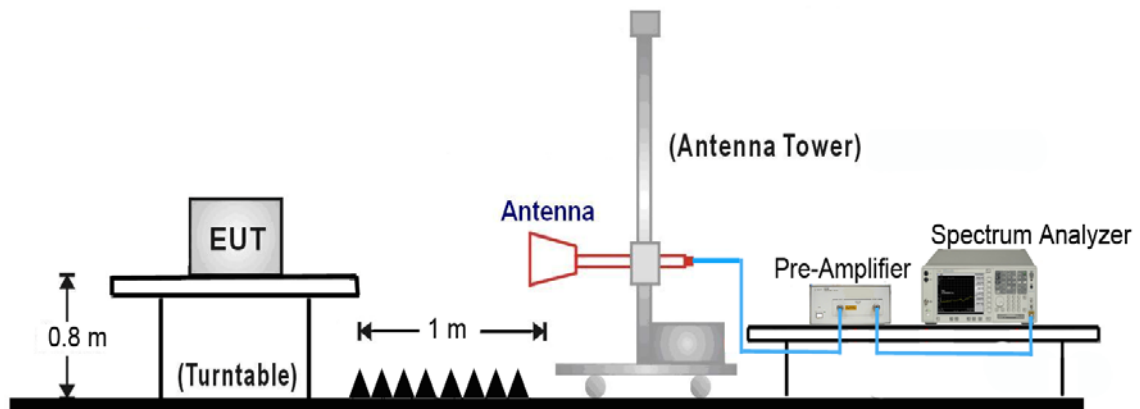
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~25GHz Test Setup:



7.6.5. Test Result

Test Mode:	802.11b – Ant 0	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
*	3176.0	43.0	-0.8	42.2	91.8	-49.6	Peak	Horizontal
*	3575.5	43.4	0.0	43.4	91.8	-48.4	Peak	Horizontal
	4213.0	42.9	1.6	44.5	74.0	-29.5	Peak	Horizontal
	4825.0	45.3	3.5	48.8	74.0	-25.2	Peak	Horizontal
*	3473.5	44.8	-0.5	44.3	91.8	-47.5	Peak	Vertical
*	4485.0	42.4	2.4	44.8	91.8	-47.0	Peak	Vertical
	4825.0	48.0	3.5	51.5	74.0	-22.5	Peak	Vertical
	5454.0	44.1	4.3	48.4	74.0	-25.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (111.8dBμV/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)

Test Mode:	802.11b – Ant 0	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
*	3218.5	45.2	-0.8	44.4	93.0	-48.6	Peak	Horizontal
*	4442.5	42.3	2.3	44.6	93.0	-48.4	Peak	Horizontal
	4876.0	46.7	3.5	50.2	74.0	-23.8	Peak	Horizontal
	7310.2	41.0	9.0	50.0	54.0	-4.0	Average	Horizontal
	7315.5	47.3	9.1	56.4	74.0	-17.6	Peak	Horizontal
*	3431.0	43.7	-0.7	43.0	93.0	-50.0	Peak	Vertical
*	4425.5	42.0	2.3	44.3	93.0	-48.7	Peak	Vertical
	4876.0	49.1	3.5	52.6	74.0	-21.4	Peak	Vertical
	7307.0	46.0	9.0	55.0	74.0	-19.0	Peak	Vertical
	7310.2	40.1	9.0	49.1	54.0	-4.9	Average	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (113.0dBμV/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)

Test Mode:	802.11b – Ant 0	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
*	3592.5	43.8	0.1	43.9	92.2	-48.3	Peak	Horizontal
*	4476.5	41.6	2.4	44.0	92.2	-48.2	Peak	Horizontal
	4927.0	45.3	3.6	48.9	74.0	-25.1	Peak	Horizontal
	7383.5	45.3	9.0	54.3	74.0	-19.7	Peak	Horizontal
	7385.2	41.3	8.9	50.2	54.0	-3.8	Average	Horizontal
*	3533.0	42.6	-0.2	42.4	92.2	-49.8	Peak	Vertical
*	4468.0	43.0	2.3	45.3	92.2	-46.9	Peak	Vertical
	4927.0	45.0	3.6	48.6	74.0	-25.4	Peak	Vertical
	7383.5	47.4	9.0	56.4	74.0	-17.6	Peak	Vertical
	7385.2	39.5	8.9	48.4	54.0	-5.6	Average	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (112.2dBμV/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)

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
*	3864.5	44.5	0.9	45.4	94.9	-49.5	Peak	Horizontal
*	4493.5	43.2	2.4	45.6	94.9	-49.3	Peak	Horizontal
	4825.0	47.8	3.5	51.3	74.0	-22.7	Peak	Horizontal
	7230.5	47.9	8.8	56.7	74.0	-17.3	Peak	Horizontal
	7235.2	40.7	8.9	49.6	54.0	-4.4	Average	Horizontal
	3941.0	43.9	1.1	45.0	74.0	-29.0	Peak	Vertical
	4824.0	47.3	3.5	50.8	54.0	-3.2	Average	Vertical
	4825.0	50.3	3.5	53.8	74.0	-20.2	Peak	Vertical
*	5760.0	42.3	4.8	47.1	94.9	-47.8	Peak	Vertical
*	7235.2	35.8	8.9	44.7	54.0	-9.3	Average	Vertical
*	7239.0	45.8	8.9	54.7	94.9	-40.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (114.9dBμV/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)

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
*	3227.0	44.0	-0.8	43.2	95.2	-52.0	Peak	Horizontal
*	4485.0	42.0	2.4	44.4	95.2	-50.8	Peak	Horizontal
	4876.0	49.1	3.5	52.6	74.0	-21.4	Peak	Horizontal
	7307.0	50.6	9.0	59.6	74.0	-14.4	Peak	Horizontal
	7310.2	40.6	9.0	49.6	54.0	-4.4	Average	Horizontal
*	3550.0	42.1	-0.1	42.0	95.2	-53.2	Peak	Vertical
*	4459.5	42.9	2.3	45.2	95.2	-50.0	Peak	Vertical
	4874.0	56.2	3.5	59.7	54.0	5.7	Average	Vertical
	4876.0	53.2	3.5	56.7	74.0	-17.3	Peak	Vertical
	7307.0	46.1	9.0	55.1	74.0	-18.9	Peak	Vertical
	7310.2	41.7	9.0	50.7	54.0	-3.3	Average	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (115.2dBμV/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)

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
*	3584.0	43.3	0.1	43.4	91.6	-48.2	Peak	Horizontal
*	4459.5	43.2	2.3	45.5	91.6	-46.1	Peak	Horizontal
	4927.0	46.4	3.6	50.0	74.0	-24.0	Peak	Horizontal
	7383.5	46.4	9.0	55.4	74.0	-18.6	Peak	Horizontal
	7385.1	35.2	8.9	44.1	54.0	-9.9	Average	Horizontal
*	3465.0	43.2	-0.5	42.7	91.6	-48.9	Peak	Vertical
*	4425.5	41.7	2.3	44.0	91.6	-47.6	Peak	Vertical
	4924.0	46.9	3.6	50.5	54.0	-3.5	Peak	Vertical
	4927.0	50.9	3.6	54.5	74.0	-19.5	Peak	Vertical
	5428.5	41.3	4.2	45.5	74.0	-28.5	Average	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (111.6dBμV/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)

Test Mode:	802.11g – Ant 0	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
*	3397.0	42.7	-0.8	41.9	86.9	-45.0	Peak	Horizontal
*	4417.0	41.8	2.2	44.0	86.9	-42.9	Peak	Horizontal
	4944.0	42.4	3.6	46.0	74.0	-28.0	Peak	Horizontal
	5377.5	43.1	3.9	47.0	74.0	-27.0	Peak	Horizontal
*	3567.0	42.5	0.0	42.5	86.9	-44.4	Peak	Vertical
*	4442.5	42.2	2.3	44.5	86.9	-42.4	Peak	Vertical
	4884.5	43.1	3.5	46.6	74.0	-27.4	Peak	Vertical
	5403.0	42.0	4.0	46.0	74.0	-28.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (106.9dBμV/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)

Test Mode:	802.11g – Ant 0	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
*	3490.5	43.4	-0.4	43.0	87.2	-44.2	Peak	Horizontal
*	4425.5	42.3	2.3	44.6	87.2	-42.6	Peak	Horizontal
	4995.0	42.4	3.9	46.3	74.0	-27.7	Peak	Horizontal
	5352.0	41.4	3.9	45.3	74.0	-28.7	Peak	Horizontal
*	3363.0	42.2	-1.0	41.2	87.2	-46.0	Peak	Vertical
*	4434.0	43.3	2.3	45.6	87.2	-41.6	Peak	Vertical
	4689.0	42.4	3.1	45.5	74.0	-28.5	Peak	Vertical
	5071.5	42.4	4.0	46.4	74.0	-27.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (107.2dBμV/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)

Test Mode:	802.11g – Ant 0	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
*	3592.5	44.0	0.1	44.1	86.8	-42.7	Peak	Horizontal
*	4485.0	41.4	2.4	43.8	86.8	-43.0	Peak	Horizontal
	5012.0	42.5	3.9	46.4	74.0	-27.6	Peak	Horizontal
	5428.5	42.0	4.2	46.2	74.0	-27.8	Peak	Horizontal
*	3507.5	42.3	-0.3	42.0	86.8	-44.8	Peak	Vertical
*	4425.5	42.5	2.3	44.8	86.8	-42.0	Peak	Vertical
	4740.0	44.5	3.3	47.8	74.0	-26.2	Peak	Vertical
	5352.0	41.6	3.9	45.5	74.0	-28.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (106.8dBμV/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)

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
*	3218.5	43.2	-0.8	42.4	88.4	-46.0	Peak	Horizontal
*	3584.0	43.4	0.1	43.5	88.4	-44.9	Peak	Horizontal
	4587.0	42.6	2.8	45.4	74.0	-28.6	Peak	Horizontal
	4952.5	42.5	3.7	46.2	74.0	-27.8	Peak	Horizontal
*	3244.0	44.0	-0.8	43.2	88.4	-45.2	Peak	Vertical
*	4451.0	41.7	2.3	44.0	88.4	-44.4	Peak	Vertical
	4799.5	43.9	3.5	47.4	74.0	-26.6	Peak	Vertical
	5360.5	41.5	3.9	45.4	74.0	-28.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (108.4dBμV/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)

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
*	3473.5	42.6	-0.5	42.1	89.3	-47.2	Peak	Horizontal
*	4425.5	42.2	2.3	44.5	89.3	-44.8	Peak	Horizontal
	4816.5	43.2	3.5	46.7	74.0	-27.3	Peak	Horizontal
	5411.5	41.8	4.0	45.8	74.0	-28.2	Peak	Horizontal
*	3567.0	44.0	0.0	44.0	89.3	-45.3	Peak	Vertical
*	4459.5	41.4	2.3	43.7	89.3	-45.6	Peak	Vertical
	4842.0	41.8	3.5	45.3	74.0	-28.7	Peak	Vertical
	5360.5	41.4	3.9	45.3	74.0	-28.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (109.3dBμV/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)

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
*	3592.5	44.4	0.1	44.5	88.7	-44.2	Peak	Horizontal
*	4493.5	42.7	2.4	45.1	88.7	-43.6	Peak	Horizontal
	4952.5	42.2	3.7	45.9	74.0	-28.1	Peak	Horizontal
	5420.0	42.8	4.1	46.9	74.0	-27.1	Peak	Horizontal
*	3108.0	43.7	-1.0	42.7	88.7	-46.0	Peak	Vertical
*	3295.0	44.0	-1.0	43.0	88.7	-45.7	Peak	Vertical
	4816.5	42.6	3.5	46.1	74.0	-27.9	Peak	Vertical
	5411.5	42.3	4.0	46.3	74.0	-27.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (108.7dBμV/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)

Test Mode:	802.11n-HT20 – Ant 0	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
*	3388.5	43.7	-0.9	42.8	87.9	-45.1	Peak	Horizontal
*	4425.5	41.5	2.3	43.8	87.9	-44.1	Peak	Horizontal
	4774.0	42.5	3.4	45.9	74.0	-28.1	Peak	Horizontal
	5012.0	41.3	3.9	45.2	74.0	-28.8	Peak	Horizontal
*	3371.5	44.0	-0.9	43.1	87.9	-44.8	Peak	Vertical
*	4451.0	41.5	2.3	43.8	87.9	-44.1	Peak	Vertical
	4740.0	43.5	3.3	46.8	74.0	-27.2	Peak	Vertical
	5071.5	41.1	4.0	45.1	74.0	-28.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (107.9dBμV/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)

Test Mode:	802.11n-HT20 – Ant 0	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
*	3550.0	42.9	-0.1	42.8	86.8	-44.0	Peak	Horizontal
*	4493.5	42.5	2.4	44.9	86.8	-41.9	Peak	Horizontal
	4740.0	43.7	3.3	47.0	74.0	-27.0	Peak	Horizontal
	5105.5	42.1	4.1	46.2	74.0	-27.8	Peak	Horizontal
*	3499.0	44.7	-0.3	44.4	86.8	-42.4	Peak	Vertical
*	4408.5	41.8	2.2	44.0	86.8	-42.8	Peak	Vertical
	4782.5	43.3	3.4	46.7	74.0	-27.3	Peak	Vertical
	5139.5	42.2	4.1	46.3	74.0	-27.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (106.8dBμV/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)

Test Mode:	802.11n-HT20 – Ant 0	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
*	3550.0	43.0	-0.1	42.9	85.8	-42.9	Peak	Horizontal
*	4425.5	41.2	2.3	43.5	85.8	-42.3	Peak	Horizontal
	5360.5	41.1	3.9	45.0	74.0	-29.0	Peak	Horizontal
	7357.8	29.1	9.0	38.1	54.0	-15.9	Average	Horizontal
	7358.0	44.3	9.0	53.3	74.0	-20.7	Peak	Horizontal
*	3592.5	44.3	0.1	44.4	85.8	-41.4	Peak	Vertical
*	4442.5	41.3	2.3	43.6	85.8	-42.2	Peak	Vertical
	4884.5	43.1	3.5	46.6	74.0	-27.4	Peak	Vertical
	5105.5	40.8	4.1	44.9	74.0	-29.1	Peak	Vertical

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

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
*	3567.0	42.1	0.0	42.1	74.3	-32.2	Peak	Horizontal
*	4442.5	41.0	2.3	43.3	74.3	-31.0	Peak	Horizontal
	4774.0	43.7	3.4	47.1	74.0	-26.9	Peak	Horizontal
	5080.0	42.7	4.0	46.7	74.0	-27.3	Peak	Horizontal
	4221.5	42.7	1.6	44.3	74.3	-30.0	Peak	Vertical
	5029.0	42.4	3.9	46.3	74.3	-28.0	Peak	Vertical
*	6397.5	43.0	6.4	49.4	74.0	-24.6	Peak	Vertical
*	7230.5	43.8	8.8	52.6	74.0	-21.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (94.3dBμV/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)

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
*	3473.5	43.6	-0.5	43.1	85.9	-42.8	Peak	Horizontal
*	4485.0	40.7	2.4	43.1	85.9	-42.8	Peak	Horizontal
	4697.5	43.0	3.1	46.1	74.0	-27.9	Peak	Horizontal
	5012.0	41.9	3.9	45.8	74.0	-28.2	Peak	Horizontal
*	3584.0	42.6	0.1	42.7	85.9	-43.2	Peak	Vertical
*	4442.5	40.4	2.3	42.7	85.9	-43.2	Peak	Vertical
	5088.5	42.2	4.0	46.2	74.0	-27.8	Peak	Vertical
	7715.0	44.7	9.0	53.7	74.0	-20.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (105.9dBμV/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)

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
*	3584.0	43.6	0.1	43.7	86.9	-43.2	Peak	Horizontal
*	4485.0	40.6	2.4	43.0	86.9	-43.9	Peak	Horizontal
	4731.5	42.7	3.2	45.9	74.0	-28.1	Peak	Horizontal
	5054.5	42.2	4.0	46.2	74.0	-27.8	Peak	Horizontal
*	3456.5	44.3	-0.6	43.7	86.9	-43.2	Peak	Vertical
*	4442.5	41.3	2.3	43.6	86.9	-43.3	Peak	Vertical
	4731.5	43.3	3.2	46.5	74.0	-27.5	Peak	Vertical
	5054.5	41.8	4.0	45.8	74.0	-28.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (106.9dBμV/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)

Test Mode:	802.11n-HT20 – Ant 0+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
*	3193.0	43.9	-0.8	43.1	87.3	-44.2	Peak	Horizontal
*	4417.0	41.8	2.2	44.0	87.3	-43.3	Peak	Horizontal
	4723.0	43.2	3.2	46.4	74.0	-27.6	Peak	Horizontal
	7230.5	43.6	8.8	52.4	74.0	-21.6	Peak	Horizontal
*	3567.0	42.2	0.0	42.2	87.3	-45.1	Peak	Vertical
*	4459.5	42.1	2.3	44.4	87.3	-42.9	Peak	Vertical
	4629.5	44.2	2.9	47.1	74.0	-26.9	Peak	Vertical
	5003.5	42.4	3.9	46.3	74.0	-27.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (107.3dBμV/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)

Test Mode:	802.11n-HT20 – Ant 0+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
*	3218.5	44.2	-0.8	43.4	87.5	-44.1	Peak	Horizontal
*	4485.0	43.1	2.4	45.5	87.5	-42.0	Peak	Horizontal
	4799.5	42.6	3.5	46.1	74.0	-27.9	Peak	Horizontal
	5360.5	42.6	3.9	46.5	74.0	-27.5	Peak	Horizontal
*	3312.0	42.9	-1.0	41.9	87.5	-45.6	Peak	Vertical
*	4442.5	42.0	2.3	44.3	87.5	-43.2	Peak	Vertical
	4706.0	42.7	3.1	45.8	74.0	-28.2	Peak	Vertical
	5063.0	42.2	4.0	46.2	74.0	-27.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (107.5dBμV/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)

Test Mode:	802.11n-HT20 – Ant 0+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	44.1	-0.8	43.3	85.4	-42.1	Peak	Horizontal
*	3584.0	43.4	0.1	43.5	85.4	-41.9	Peak	Horizontal
	4077.0	43.1	1.4	44.5	74.0	-29.5	Peak	Horizontal
	5063.0	42.9	4.0	46.9	74.0	-27.1	Peak	Horizontal
*	3312.0	44.0	-1.0	43.0	85.4	-42.4	Peak	Vertical
*	4459.5	41.6	2.3	43.9	85.4	-41.5	Peak	Vertical
	4689.0	44.8	3.1	47.9	74.0	-26.1	Peak	Vertical
	5012.0	41.9	3.9	45.8	74.0	-28.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (105.4dBμV/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)

Test Mode:	802.11n-HT40 – Ant 0	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
*	3176.0	44.8	-0.8	44.0	84.2	-40.2	Peak	Horizontal
*	4468.0	41.1	2.3	43.4	84.2	-40.8	Peak	Horizontal
	4655.0	44.3	3.0	47.3	74.0	-26.7	Peak	Horizontal
	4995.0	41.7	3.9	45.6	74.0	-28.4	Peak	Horizontal
*	3142.0	43.8	-0.8	43.0	84.2	-41.2	Peak	Vertical
*	3558.5	42.9	0.0	42.9	84.2	-41.3	Peak	Vertical
	4493.5	41.6	2.4	44.0	74.0	-30.0	Peak	Vertical
	5386.0	42.5	3.9	46.4	74.0	-27.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (104.2dBμV/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)

Test Mode:	802.11n-HT40 – Ant 0	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
*	3541.5	43.5	-0.1	43.4	84.4	-41.0	Peak	Horizontal
*	4425.5	41.6	2.3	43.9	84.4	-40.5	Peak	Horizontal
	4689.0	43.1	3.1	46.2	74.0	-27.8	Peak	Horizontal
	5428.5	41.0	4.2	45.2	74.0	-28.8	Peak	Horizontal
*	3108.0	44.3	-1.0	43.3	84.4	-41.1	Peak	Vertical
*	4459.5	41.6	2.3	43.9	84.4	-40.5	Peak	Vertical
	5088.5	42.6	4.0	46.6	74.0	-27.4	Peak	Vertical
	7315.5	44.8	9.1	53.9	74.0	-20.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (104.4dBμV/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)

Test Mode:	802.11n-HT40 – Ant 0	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
*	3567.0	41.9	0.0	41.9	81.7	-39.8	Peak	Horizontal
*	4434.0	40.4	2.3	42.7	81.7	-39.0	Peak	Horizontal
	4740.0	42.5	3.3	45.8	74.0	-28.2	Peak	Horizontal
	5020.5	42.2	3.9	46.1	74.0	-27.9	Peak	Horizontal
*	3422.5	43.4	-0.7	42.7	81.7	-39.0	Peak	Vertical
*	4425.5	41.2	2.3	43.5	81.7	-38.2	Peak	Vertical
	4774.0	43.2	3.4	46.6	74.0	-27.4	Peak	Vertical
	5046.0	42.0	4.0	46.0	74.0	-28.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (101.7dBμV/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)

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
*	3176.0	44.2	-0.8	43.4	86.0	-42.6	Peak	Horizontal
*	4442.5	41.1	2.3	43.4	86.0	-42.6	Peak	Horizontal
	4689.0	43.6	3.1	46.7	74.0	-27.3	Peak	Horizontal
	5411.5	42.2	4.0	46.2	74.0	-27.8	Peak	Horizontal
*	3159.0	43.8	-0.7	43.1	86.0	-42.9	Peak	Vertical
*	4442.5	41.1	2.3	43.4	86.0	-42.6	Peak	Vertical
	4740.0	43.0	3.3	46.3	74.0	-27.7	Peak	Vertical
	5029.0	41.2	3.9	45.1	74.0	-28.9	Peak	Vertical

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

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
*	3244.0	42.1	-0.8	41.3	86.4	-45.1	Peak	Horizontal
*	4476.5	41.1	2.4	43.5	86.4	-42.9	Peak	Horizontal
	4655.0	43.2	3.0	46.2	74.0	-27.8	Peak	Horizontal
	5080.0	42.5	4.0	46.5	74.0	-27.5	Peak	Horizontal
*	3286.5	42.7	-0.9	41.8	86.4	-44.6	Peak	Vertical
*	4425.5	41.2	2.3	43.5	86.4	-42.9	Peak	Vertical
	4884.5	43.0	3.5	46.5	74.0	-27.5	Peak	Vertical
	5454.0	42.6	4.3	46.9	74.0	-27.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (106.4dBμV/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)

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
*	3227.0	44.8	-0.8	44.0	84.1	-40.1	Peak	Horizontal
*	3422.5	42.6	-0.7	41.9	84.1	-42.2	Peak	Horizontal
	4332.0	42.5	2.0	44.5	74.0	-29.5	Peak	Horizontal
	4833.5	43.4	3.5	46.9	74.0	-27.1	Peak	Horizontal
*	3320.5	43.0	-1.0	42.0	84.1	-42.1	Peak	Vertical
*	4493.5	42.1	2.4	44.5	84.1	-39.6	Peak	Vertical
	4740.0	43.9	3.3	47.2	74.0	-26.8	Peak	Vertical
	5012.0	41.9	3.9	45.8	74.0	-28.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (104.1dBμV/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)

Test Mode:	802.11n-HT40 – Ant 0+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
*	3065.5	44.4	-1.2	43.2	84.4	-41.2	Peak	Horizontal
*	3584.0	43.1	0.1	43.2	84.4	-41.2	Peak	Horizontal
	4689.0	43.2	3.1	46.3	74.0	-27.7	Peak	Horizontal
	5403.0	41.5	4.0	45.5	74.0	-28.5	Peak	Horizontal
*	3252.5	43.8	-0.9	42.9	84.4	-41.5	Peak	Vertical
*	4451.0	42.0	2.3	44.3	84.4	-40.1	Peak	Vertical
	5012.0	41.5	3.9	45.4	74.0	-28.6	Peak	Vertical
	5445.5	41.8	4.3	46.1	74.0	-27.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (104.4dBμV/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)

Test Mode:	802.11n-HT40 – Ant 0+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
*	3524.5	43.0	-0.2	42.8	85.4	-42.6	Peak	Horizontal
*	4459.5	42.6	2.3	44.9	85.4	-40.5	Peak	Horizontal
	4663.5	43.8	3.0	46.8	74.0	-27.2	Peak	Horizontal
	5386.0	41.1	3.9	45.0	74.0	-29.0	Peak	Horizontal
*	3057.0	44.6	-1.2	43.4	85.4	-42.0	Peak	Vertical
*	4442.5	42.2	2.3	44.5	85.4	-40.9	Peak	Vertical
	4850.5	42.6	3.5	46.1	74.0	-27.9	Peak	Vertical
	5420.0	40.6	4.1	44.7	74.0	-29.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (105.4dBμV/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)

Test Mode:	802.11n-HT40 – Ant 0+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
*	3218.5	43.3	-0.8	42.5	83.2	-40.7	Peak	Horizontal
*	3550.0	42.7	-0.1	42.6	83.2	-40.6	Peak	Horizontal
	4323.5	43.1	2.0	45.1	74.0	-28.9	Peak	Horizontal
	5105.5	42.2	4.1	46.3	74.0	-27.7	Peak	Horizontal
*	3099.5	43.1	-1.1	42.0	83.2	-41.2	Peak	Vertical
*	4459.5	41.8	2.3	44.1	83.2	-39.1	Peak	Vertical
	4765.5	43.0	3.4	46.4	74.0	-27.6	Peak	Vertical
	5428.5	40.7	4.2	44.9	74.0	-29.1	Peak	Vertical

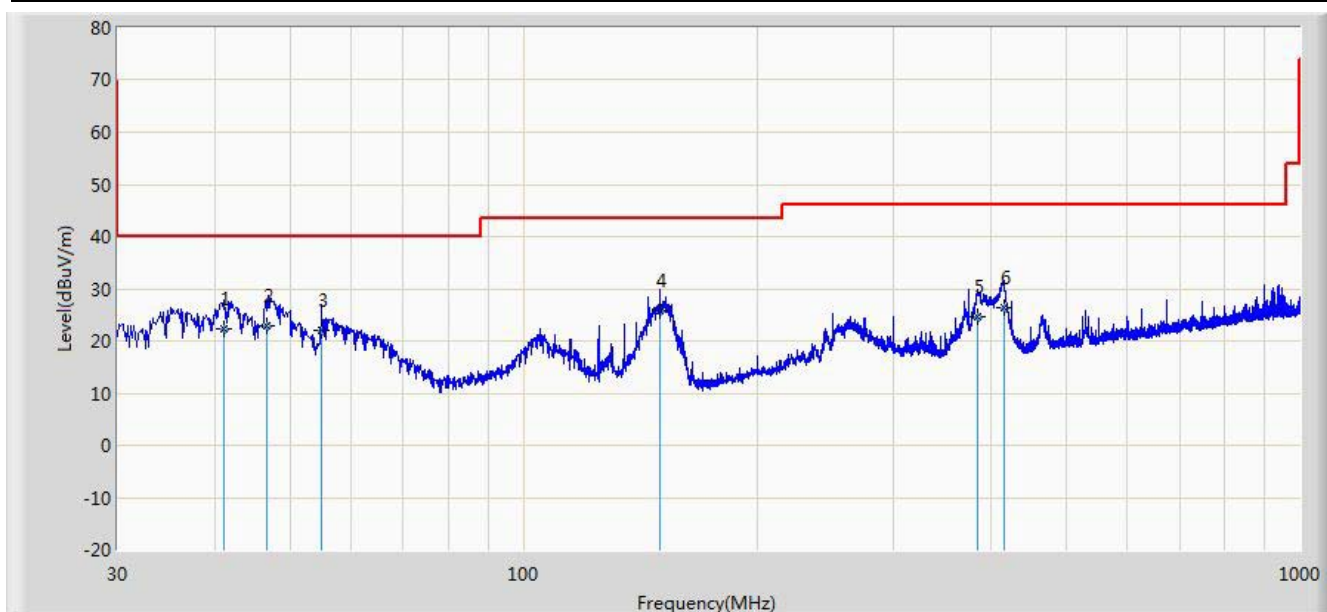
Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (103.2dBμV/m).

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:

Site: AC1	Time: 2014/12/22 - 20:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Knight Lu
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: Altum AC600	Power: AC 120V/60Hz
Worse Case Mode : Transmit by 802.11n-HT20 at channel 2412MHz	

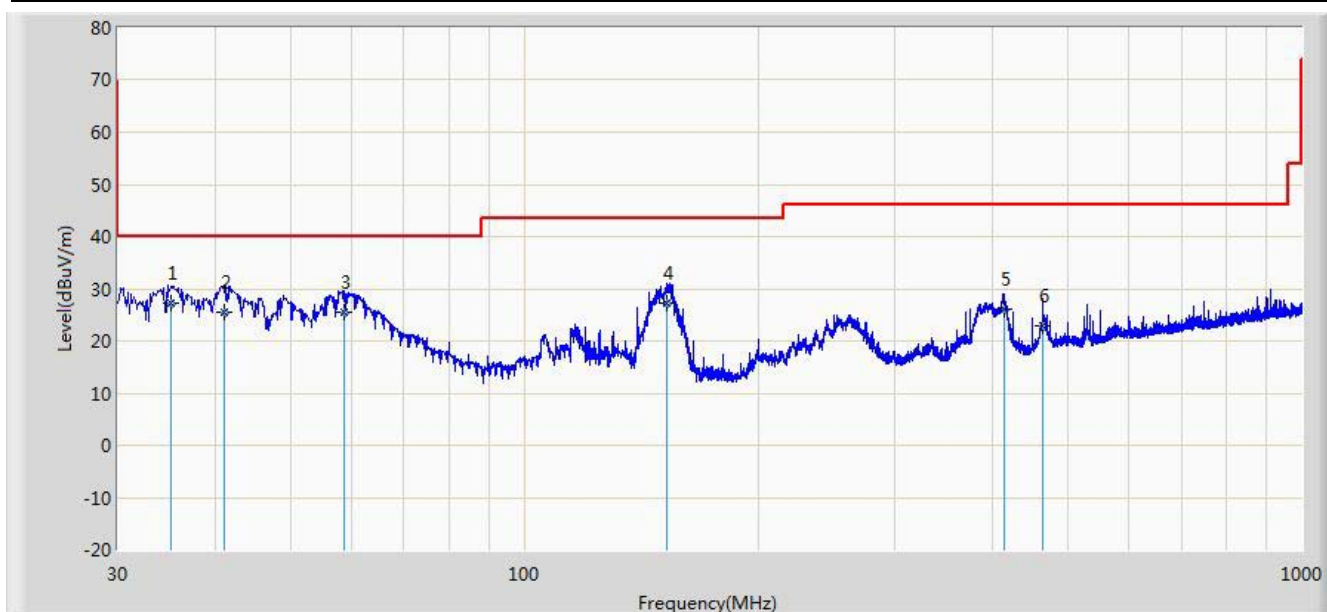


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			41.201	22.395	8.323	-17.605	40.000	14.072	QP
2		*	46.723	22.798	7.840	-17.202	40.000	14.958	QP
3			54.883	22.024	7.340	-17.976	40.000	14.684	QP
4			149.890	25.777	16.340	-17.723	43.500	9.438	QP
5			384.712	24.669	8.345	-21.331	46.000	16.323	QP
6			415.620	26.417	9.530	-19.583	46.000	16.887	QP

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

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

Site: AC1	Time: 2014/12/22 - 20:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Knight Lu
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: Altum AC600	Power: AC 120V/60Hz
Worse Case Mode : Transmit by 802.11n-HT20 at channel 2412MHz	

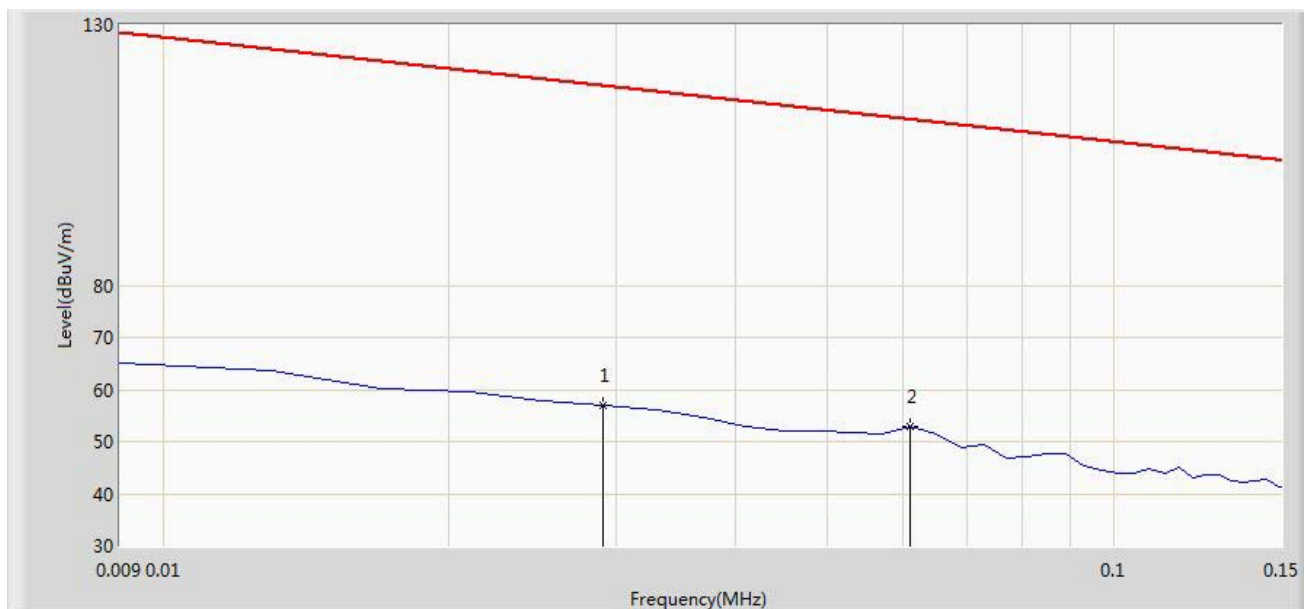


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	35.130	27.170	14.230	-12.830	40.000	12.940	QP
2			41.201	25.622	11.550	-14.378	40.000	14.072	QP
3			58.711	25.644	11.580	-14.356	40.000	14.064	QP
4			152.804	27.199	17.654	-16.301	43.500	9.545	QP
5			415.230	25.947	9.065	-20.053	46.000	16.882	QP
6			465.000	22.940	5.340	-23.060	46.000	17.600	QP

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

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

Site: AC1	Time: 2014/12/22 - 18:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: Altum AC600	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

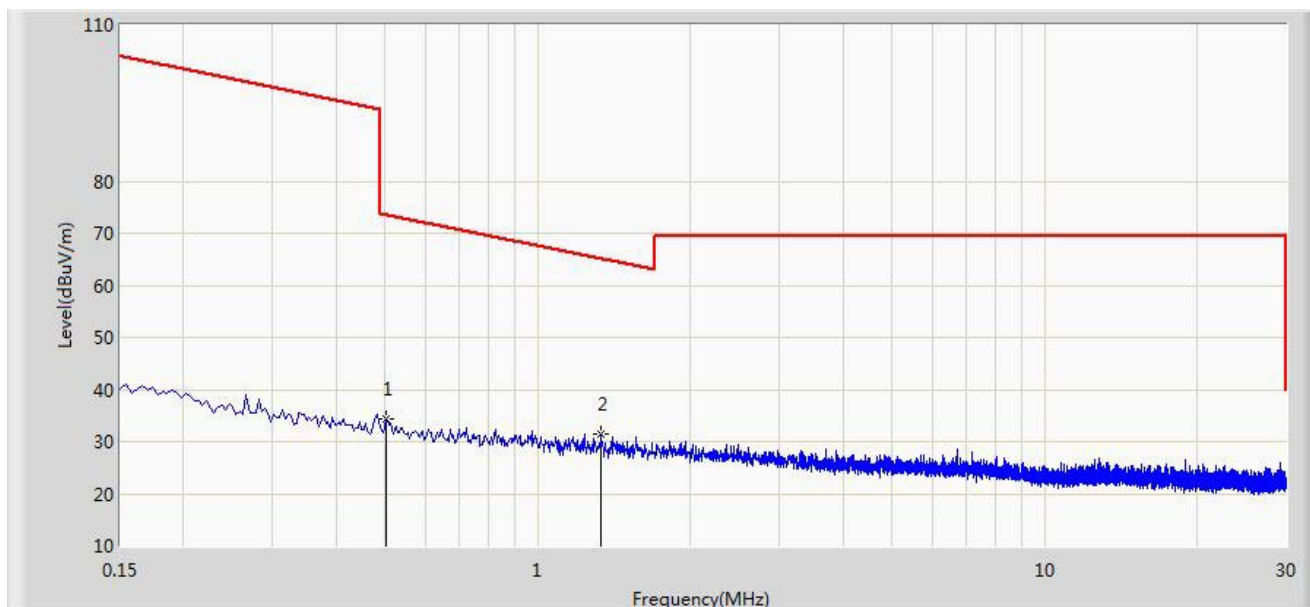


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.029	56.893	35.844	-61.818	118.711	21.049	QP
2		*	0.061	52.853	32.542	-59.399	112.252	20.311	AV

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

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

Site: AC1	Time: 2014/12/22 - 18:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: Altum AC600	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

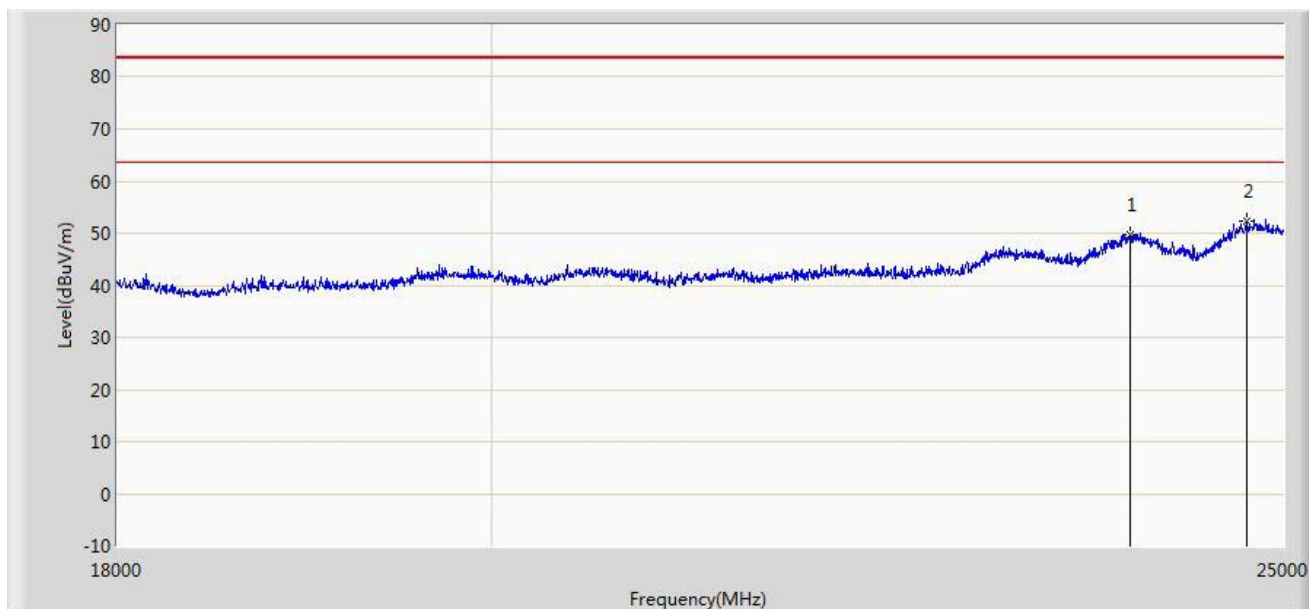


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.502	34.370	13.947	-39.220	73.590	20.423	QP
2		*	1.334	31.595	11.104	-33.530	65.125	20.491	QP

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

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

Site: AC1	Time: 2014/12/22 - 21:20
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: Altum AC600	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 18GHz~25GHz.	

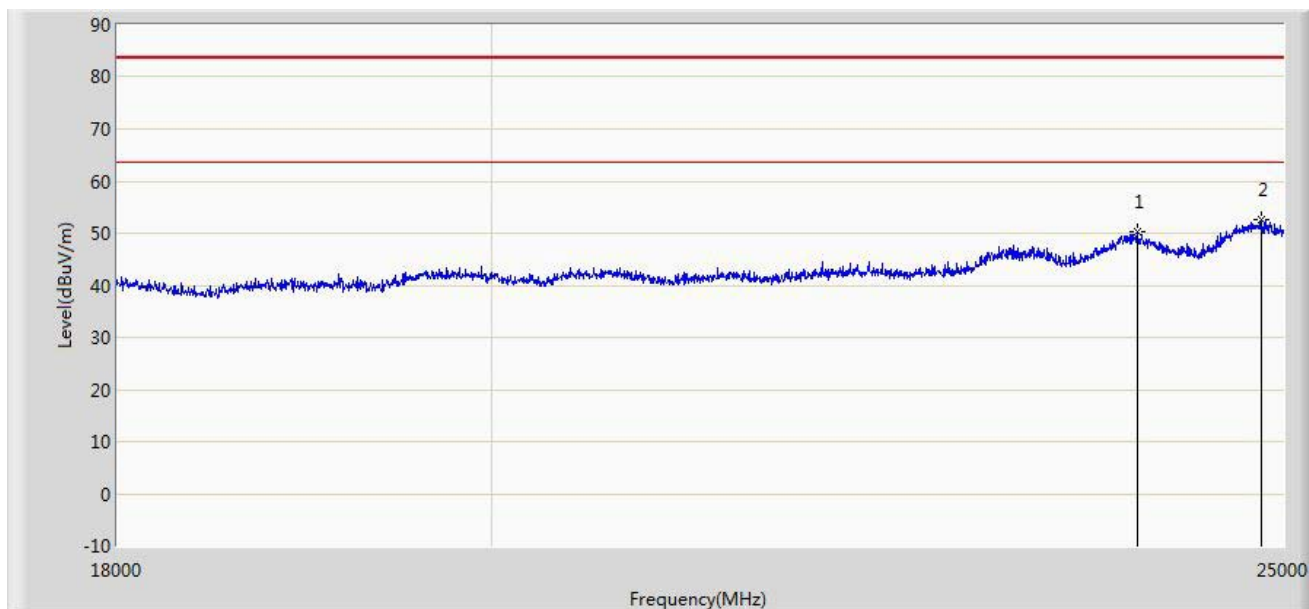


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			23943.000	49.776	35.866	-33.724	83.500	13.910	PK
2		*	24741.000	52.375	37.681	-31.125	83.500	14.694	PK

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

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

Site: AC1	Time: 2014/12/22 - 21:32
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: Altum AC600	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

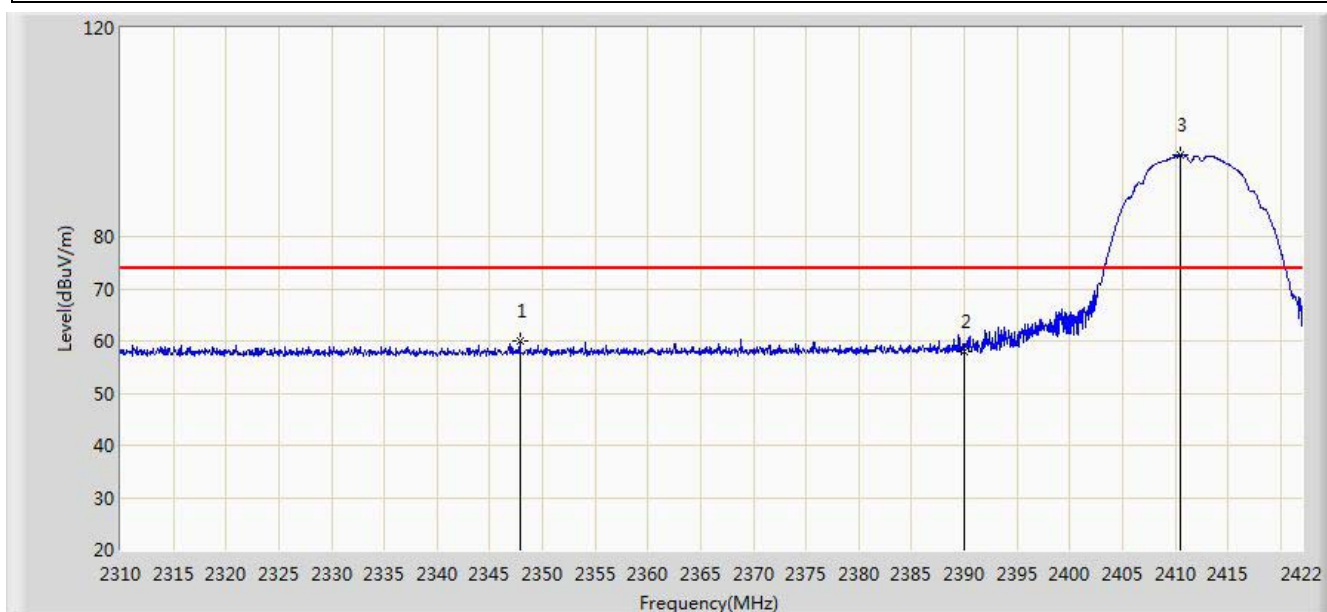
Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

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

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Result

Site: AC1	Time: 2014/12/18 - 09:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Knight Lu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Altum AC600	Power: AC 120V/60Hz
Mode 1: Transmit at channel 2412MHz by 802.11b Ant 0	

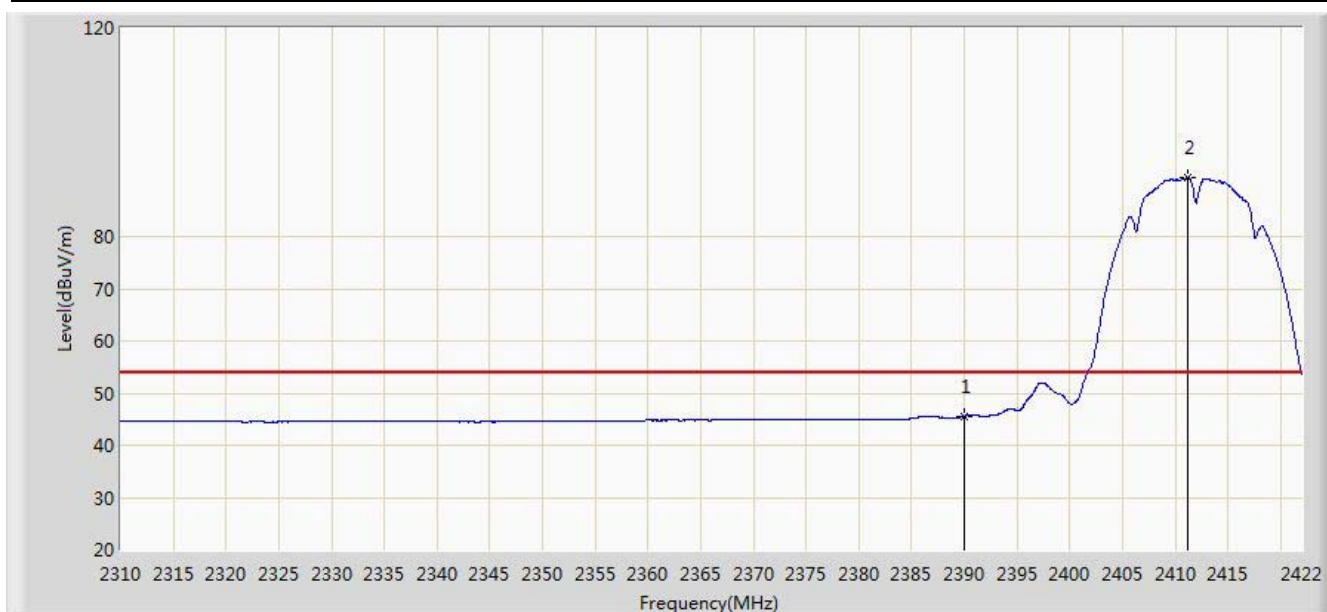


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2347.856	60.103	28.164	-13.897	74.000	31.939	PK
2			2390.000	58.053	26.197	-15.947	74.000	31.856	PK
3		*	2410.520	95.628	63.805	N/A	N/A	31.823	PK

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

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

Site: AC1	Time: 2014/12/18 - 09:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Knight Lu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Altum AC600	Power: AC 120V/60Hz
Mode 1: Transmit at channel 2412MHz by 802.11b Ant 0	

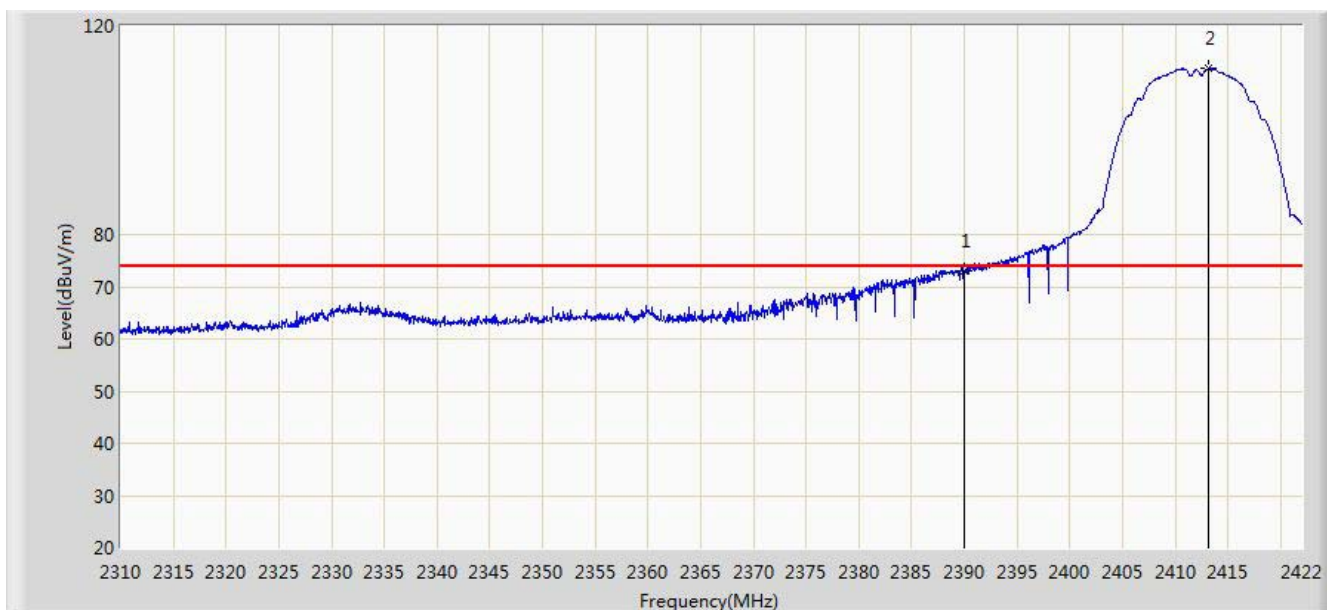


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.568	13.712	-8.432	54.000	31.856	AV
2		*	2411.136	91.387	59.565	N/A	N/A	31.822	AV

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

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

Site: AC1	Time: 2014/12/18 - 09:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Knight Lu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Altum AC600	Power: AC 120V/60Hz
Mode 1: Transmit at channel 2412MHz by 802.11b Ant 0	

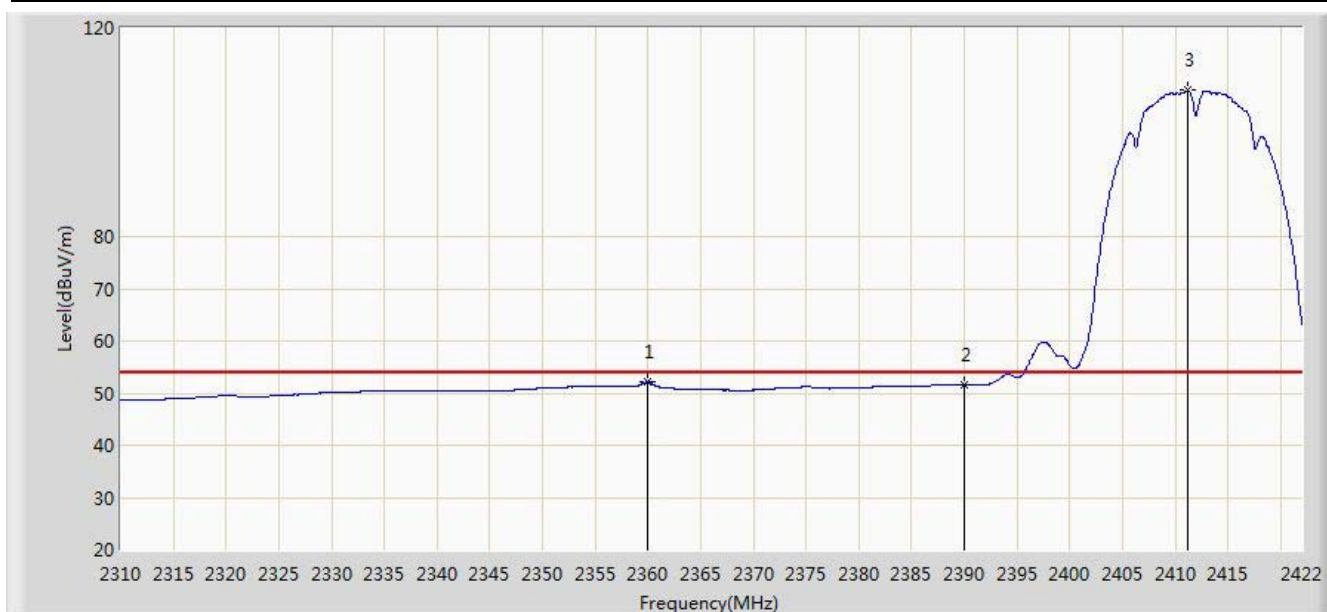


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	73.148	41.292	-0.852	74.000	31.856	PK
2		*	2413.208	111.782	79.963	N/A	N/A	31.819	PK

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

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

Site: AC1	Time: 2014/12/18 - 09:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Knight Lu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Altum AC600	Power: AC 120V/60Hz
Mode 1: Transmit at channel 2412MHz by 802.11b Ant 0	

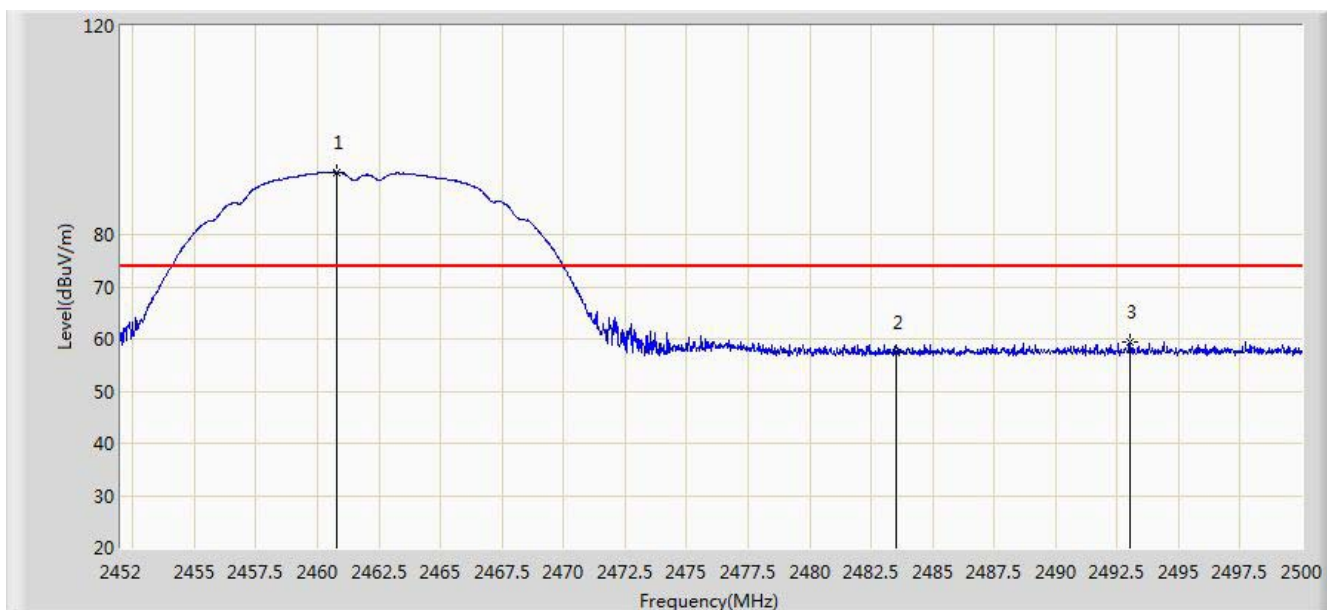


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2359.952	52.126	20.222	-1.874	54.000	31.904	AV
2			2390.000	51.695	19.839	-2.305	54.000	31.856	AV
3		*	2411.192	108.045	76.223	N/A	N/A	31.822	AV

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

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

Site: AC1	Time: 2014/12/18 - 09:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Knight Lu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Altum AC600	Power: AC 120V/60Hz
Mode 1: Transmit at channel 2462MHz by 802.11b Ant 0	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.784	91.955	60.164	N/A	N/A	31.791	PK
2			2483.500	57.366	25.519	-16.634	74.000	31.848	PK
3			2493.016	59.382	27.510	-14.618	74.000	31.873	PK

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

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

Site: AC1	Time: 2014/12/18 - 09:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Knight Lu
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Altum AC600	Power: AC 120V/60Hz
Mode 1: Transmit at channel 2462MHz by 802.11b Ant 0	

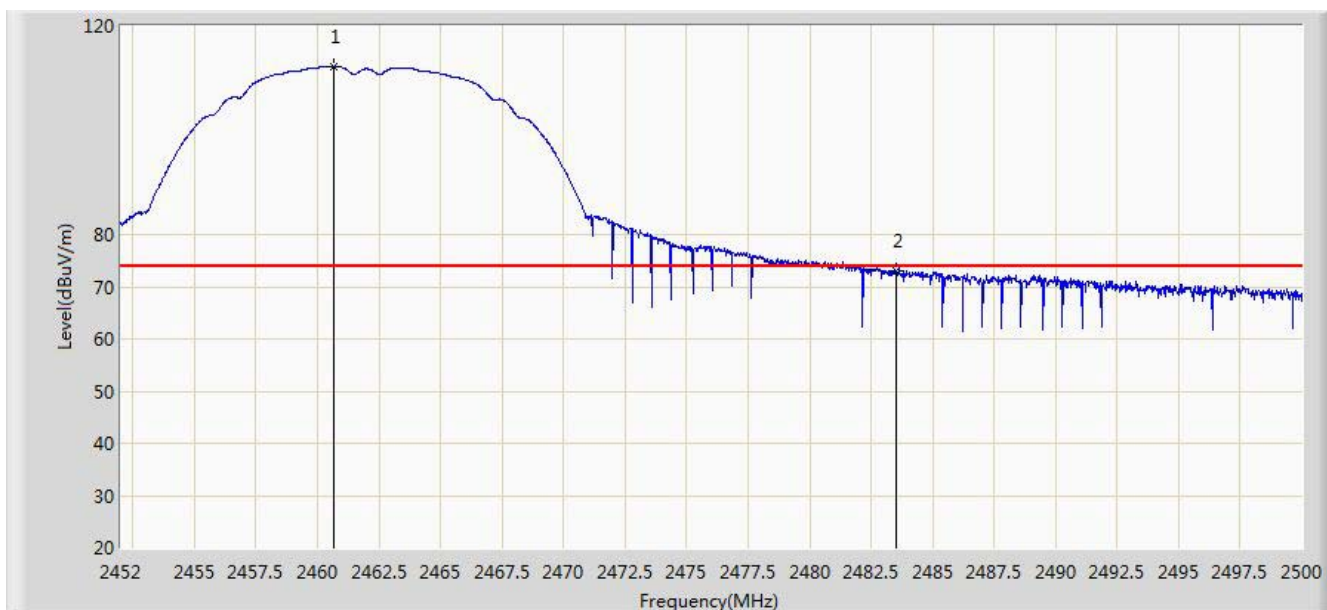


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.312	88.171	56.379	N/A	N/A	31.792	AV
2			2483.500	44.678	12.831	-9.322	54.000	31.848	AV

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

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

Site: AC1	Time: 2014/12/18 - 09:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Knight Lu
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Altum AC600	Power: AC 120V/60Hz
Mode 1: Transmit at channel 2462MHz by 802.11b Ant 0	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.640	112.225	80.434	N/A	N/A	31.791	PK
2			2483.500	73.021	41.174	-0.979	74.000	31.848	PK

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

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