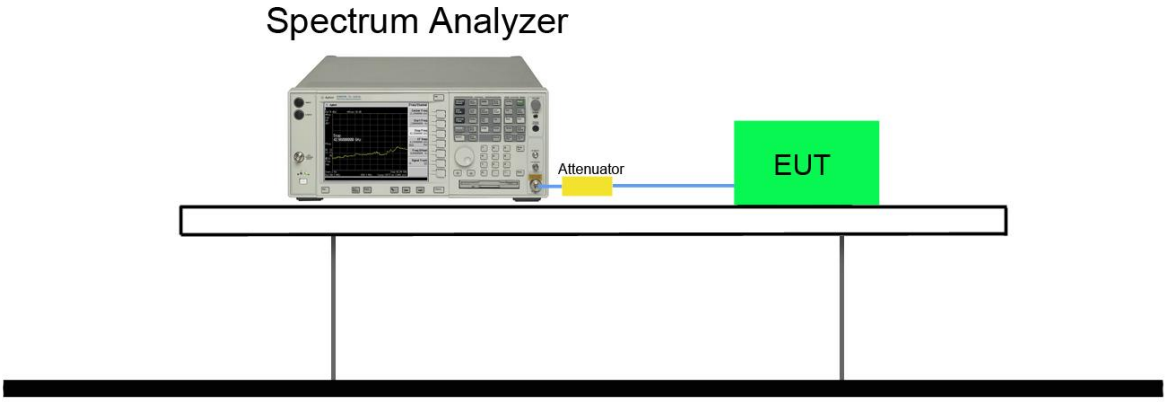
7.5.4. Test Setup



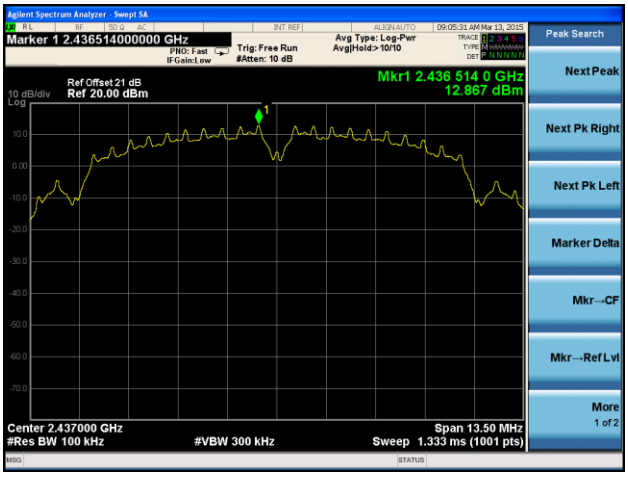
7.5.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Limit	Result
Ant 0					
802.11b	1	01	2412	30dBc	Pass
802.11b	1	06	2437	30dBc	Pass
802.11b	1	11	2462	30dBc	Pass
802.11g	6	01	2412	30dBc	Pass
802.11g	6	06	2437	30dBc	Pass
802.11g	6	11	2462	30dBc	Pass
802.11n-HT20	6.5	01	2412	30dBc	Pass
802.11n-HT20	6.5	06	2437	30dBc	Pass
802.11n-HT20	6.5	11	2462	30dBc	Pass
802.11n-HT40	13.5	03	2422	30dBc	Pass
802.11n-HT40	13.5	06	2437	30dBc	Pass
802.11n-HT40	13.5	09	2452	30dBc	Pass
Ant 1					
802.11n-HT20	6.5	01	2412	30dBc	Pass
802.11n-HT20	6.5	06	2437	30dBc	Pass
802.11n-HT20	6.5	11	2462	30dBc	Pass
802.11n-HT40	13.5	03	2422	30dBc	Pass
802.11n-HT40	13.5	06	2437	30dBc	Pass
802.11n-HT40	13.5	09	2452	30dBc	Pass

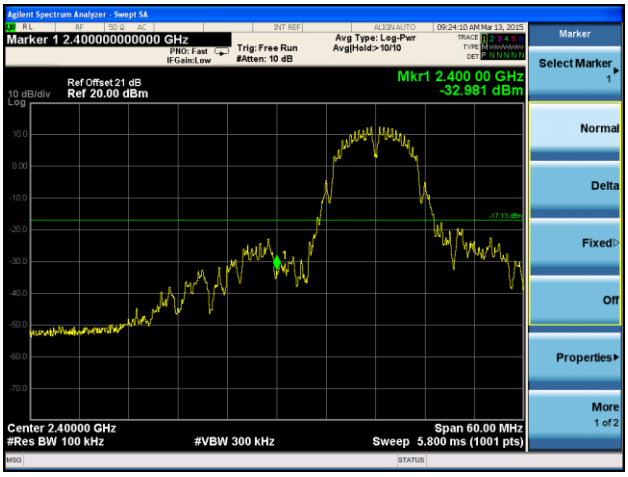
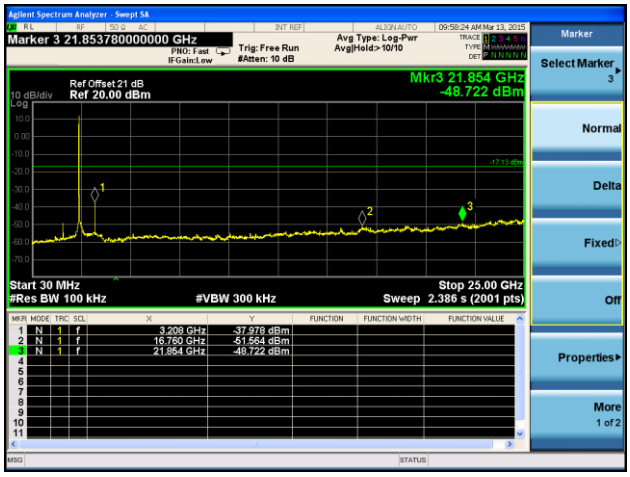
Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Limit	Result
Ant 0 / Ant 0 + 1					
802.11n-HT20	6.5	01	2412	30dBc	Pass
802.11n-HT20	6.5	06	2437	30dBc	Pass
802.11n-HT20	6.5	11	2462	30dBc	Pass
802.11n-HT40	13.5	03	2422	30dBc	Pass
802.11n-HT40	13.5	06	2437	30dBc	Pass
802.11n-HT40	13.5	09	2452	30dBc	Pass
Ant 1 / Ant 0 + 1					
802.11n-HT20	6.5	01	2412	30dBc	Pass
802.11n-HT20	6.5	06	2437	30dBc	Pass
802.11n-HT20	6.5	11	2462	30dBc	Pass
802.11n-HT40	13.5	03	2422	30dBc	Pass
802.11n-HT40	13.5	06	2437	30dBc	Pass
802.11n-HT40	13.5	09	2452	30dBc	Pass

802.11b Out-of-Band Emissions - Ant 0

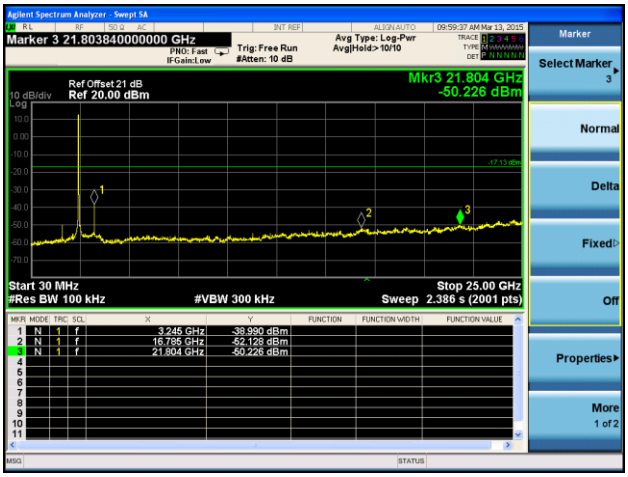
100kHz PSD reference Level

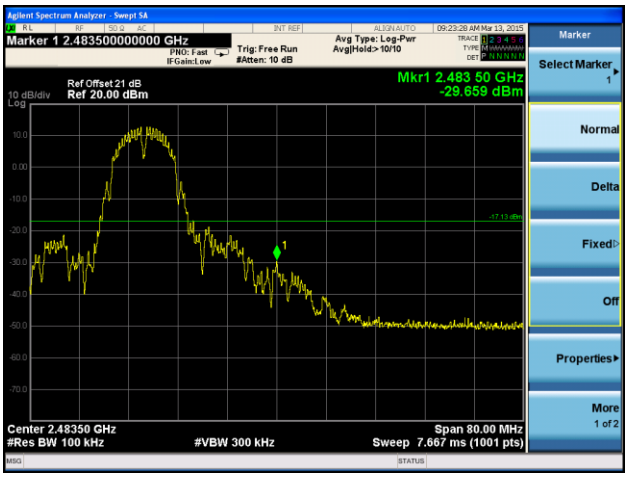
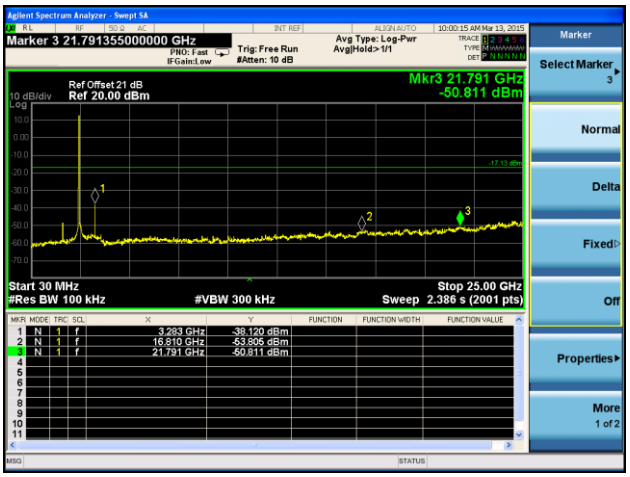


Channel 01 (2412MHz)

Low Band Edge	Spurious Emission
	

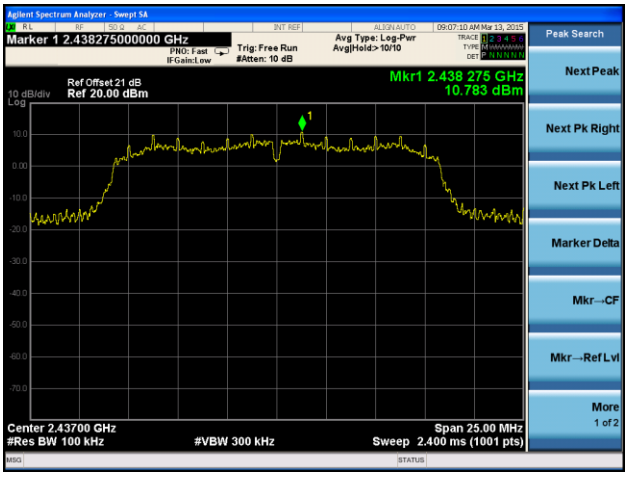
Channel 06 (2437MHz)

Spurious Emission	
	

Channel 11 (2462MHz)	
High Band Edge	**Spurious Emission**
	

802.11g Out-of-Band Emissions - Ant 0

100kHz PSD reference Level

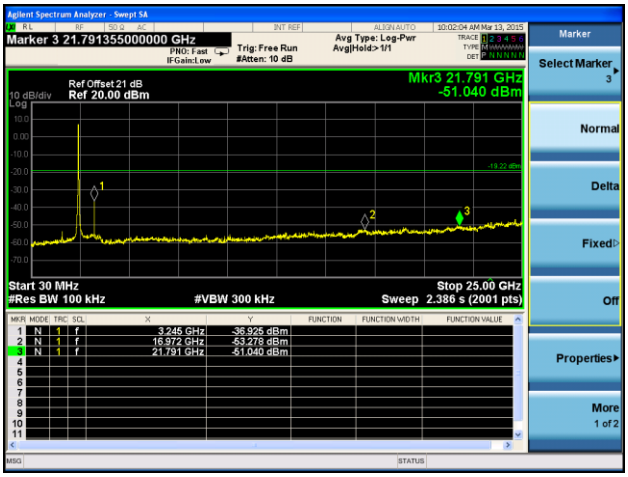


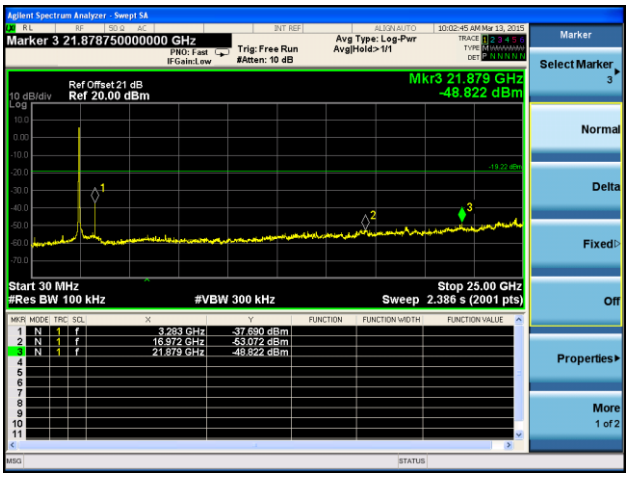
Channel 01 (2412MHz)

Low Band Edge	Spurious Emission

Channel 06 (2437MHz)

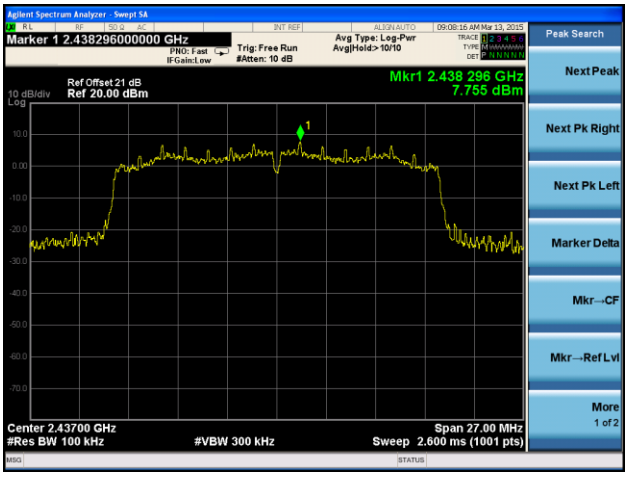
Spurious Emission



Channel 11 (2462MHz)	
High Band Edge	**Spurious Emission**
	

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

100kHz PSD reference Level

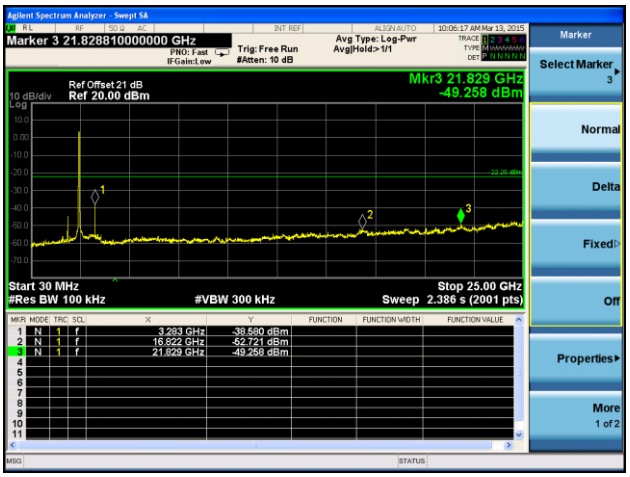


Channel 01 (2412MHz)

Low Band Edge	Spurious Emission

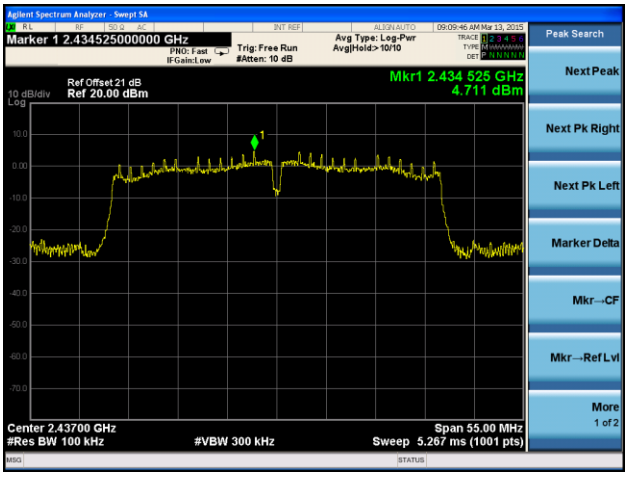
Channel 06 (2437MHz)

Spurious Emission

Channel 11 (2462MHz)	
High Band Edge	**Spurious Emission**
	

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

100kHz PSD reference Level

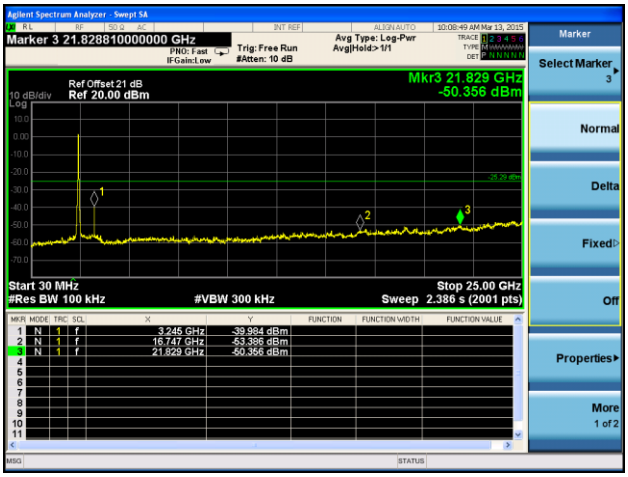


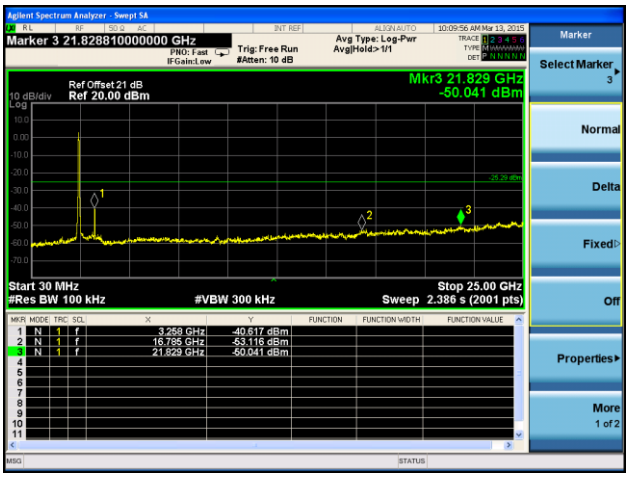
Channel 03 (2422MHz)

Low Band Edge	Spurious Emission

Channel 06 (2437MHz)

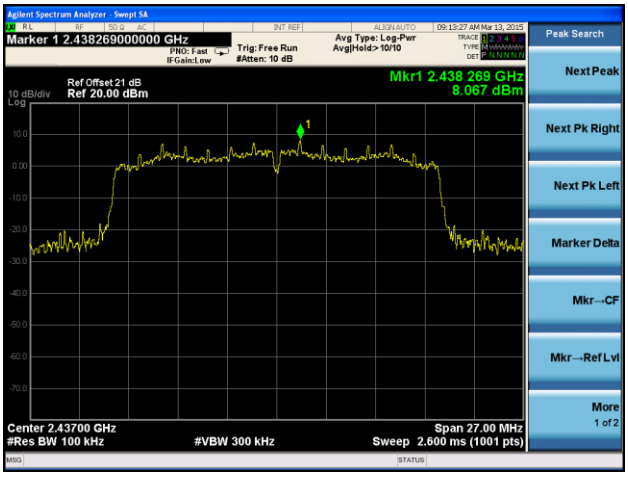
Spurious Emission



Channel 9 (2452MHz)	
High Band Edge	**Spurious Emission**
	

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

100kHz PSD reference Level

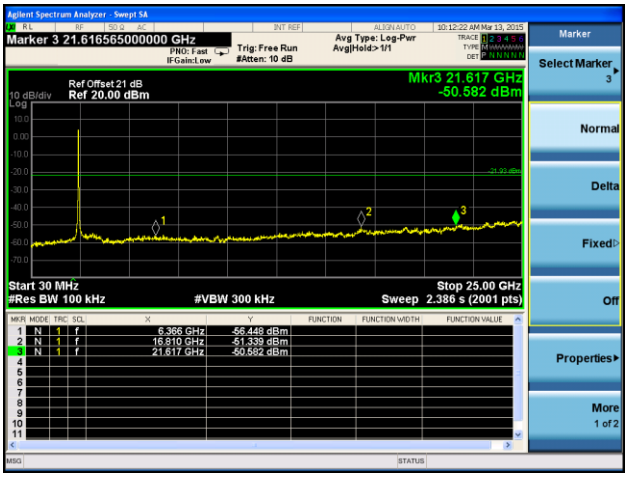


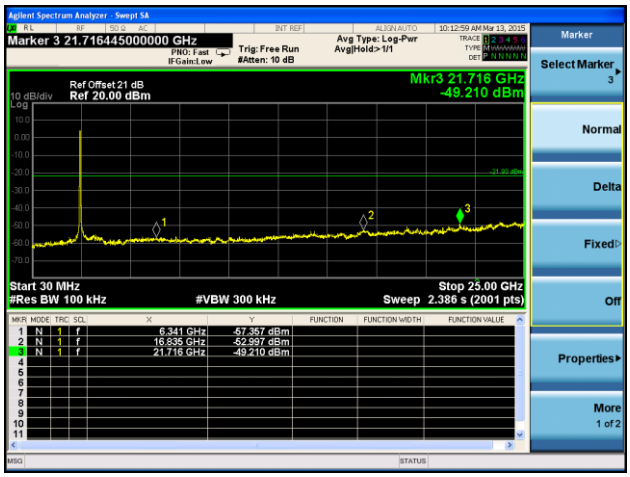
Channel 01 (2412MHz)

Low Band Edge	Spurious Emission

Channel 06 (2437MHz)

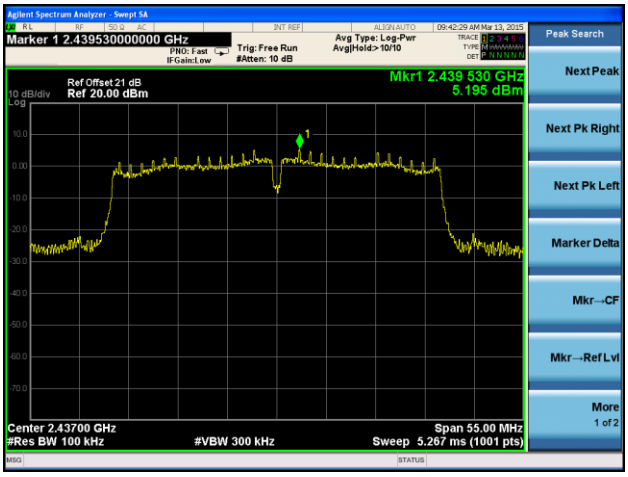
Spurious Emission



Channel 11 (2462MHz)	
High Band Edge	**Spurious Emission**
	

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

100kHz PSD reference Level



Channel 03 (2422MHz)

Low Band Edge	Spurious Emission

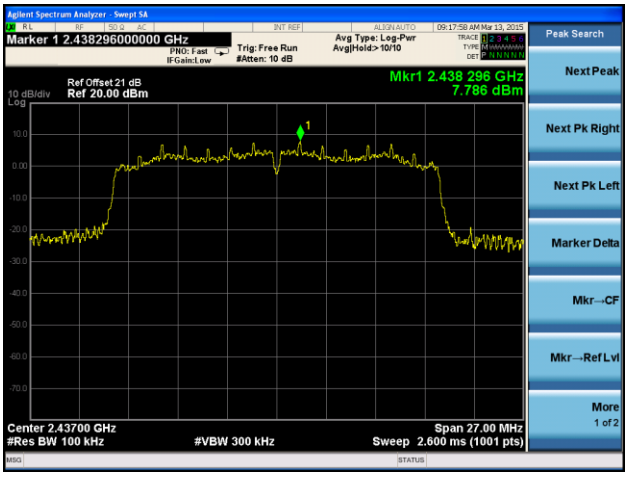
Channel 06 (2437MHz)

Spurious Emission

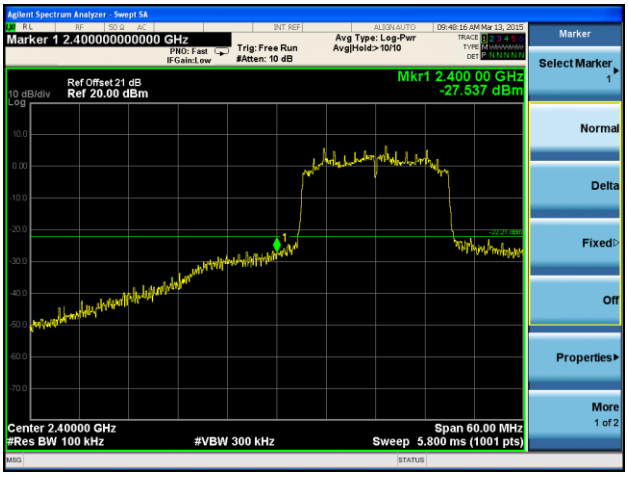
Channel 9 (2452MHz)	
High Band Edge	**Spurious Emission**

802.11n-HT20 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

100kHz PSD reference Level



Channel 01 (2412MHz)

Low Band Edge	Spurious Emission
	

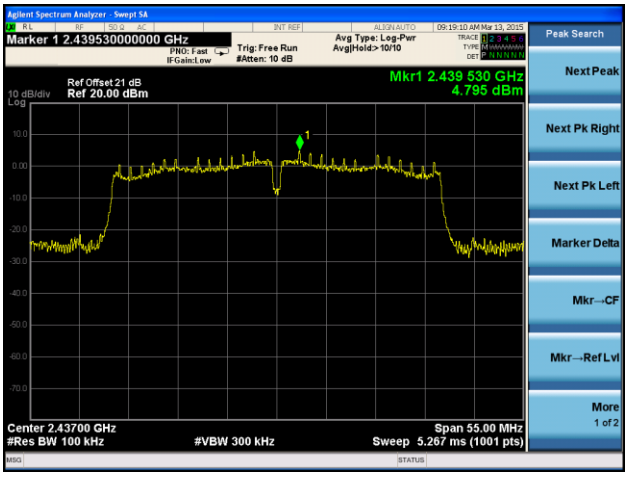
Channel 06 (2437MHz)

Spurious Emission	

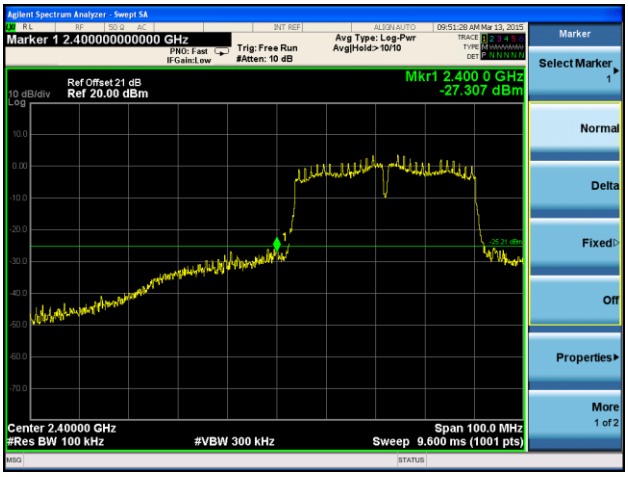
Channel 11 (2462MHz)	
High Band Edge	**Spurious Emission**

802.11n-HT40 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

100kHz PSD reference Level

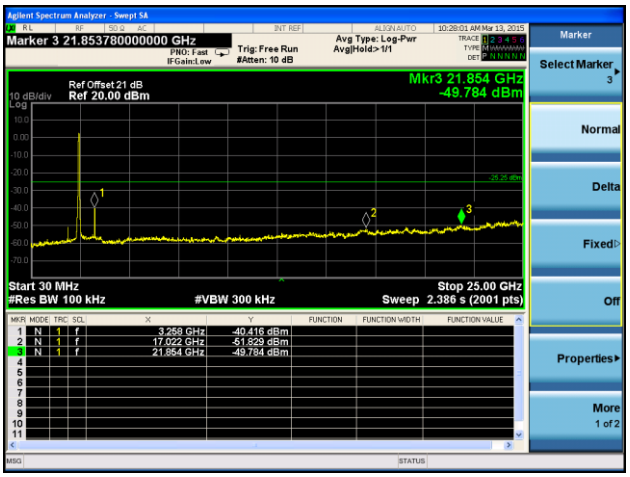


Channel 03 (2422MHz)

Low Band Edge	Spurious Emission
	

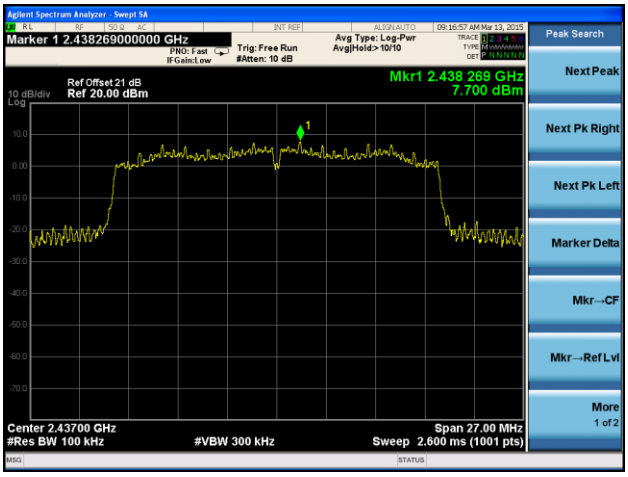
Channel 06 (2437MHz)

Spurious Emission

Channel 9 (2452MHz)	
High Band Edge	**Spurious Emission**
	

802.11n-HT20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

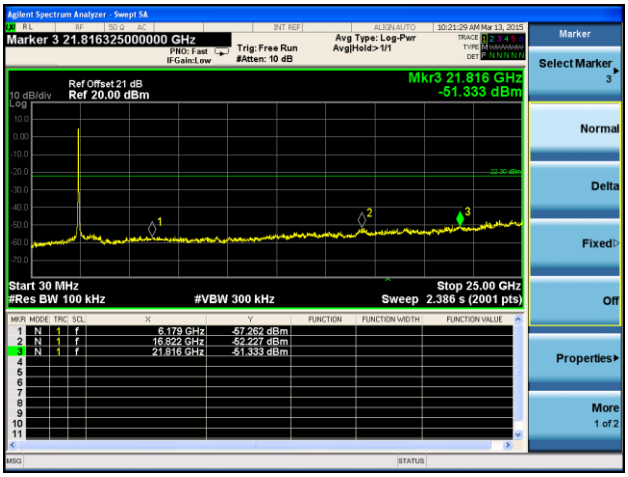
100kHz PSD reference Level

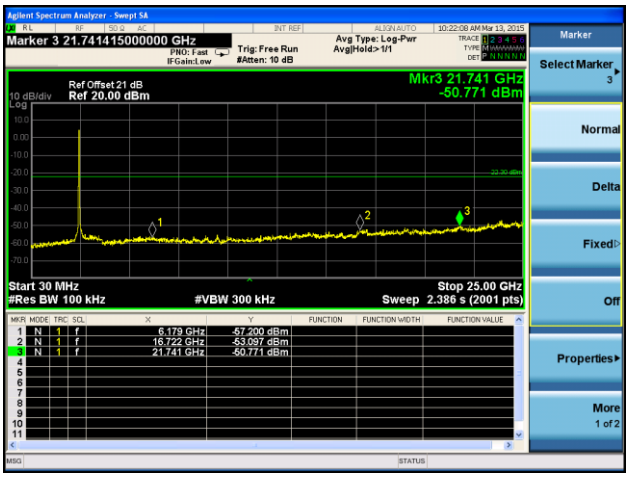


Channel 01 (2412MHz)

Low Band Edge	Spurious Emission

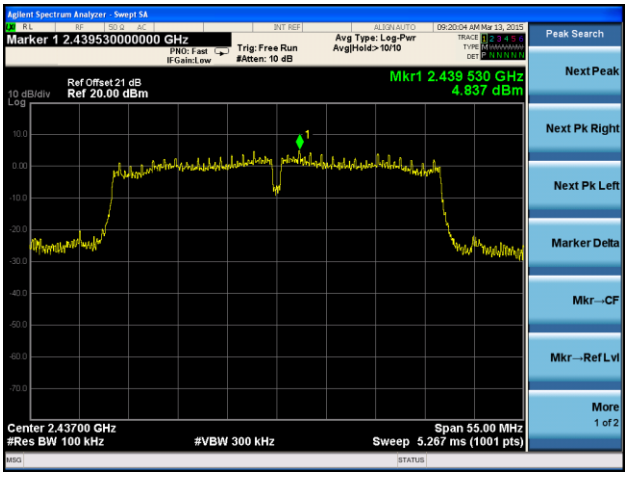
Channel 06 (2437MHz)

Spurious Emission	
	

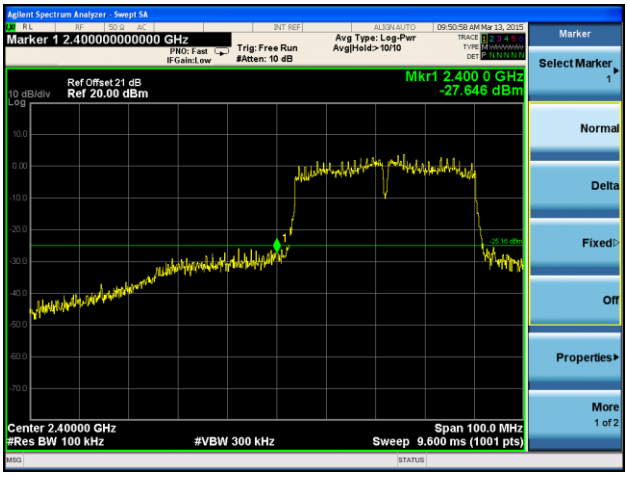
Channel 11 (2462MHz)	
High Band Edge	**Spurious Emission**
	

802.11n-HT40 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

100kHz PSD reference Level

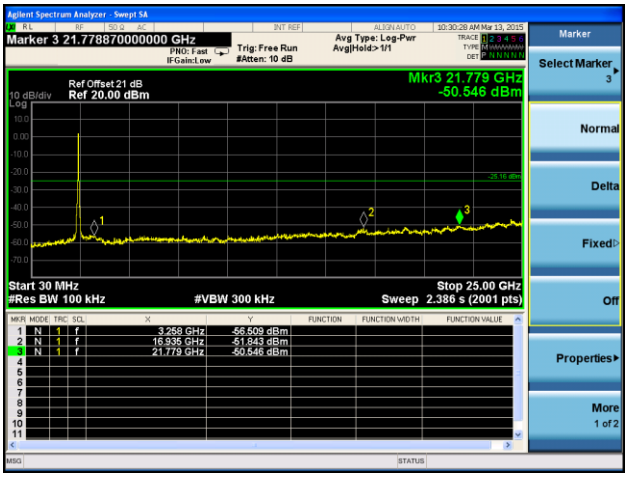


Channel 03 (2422MHz)

Low Band Edge	Spurious Emission
	

Channel 06 (2437MHz)

Spurious Emission



Channel 9 (2452MHz)	
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

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

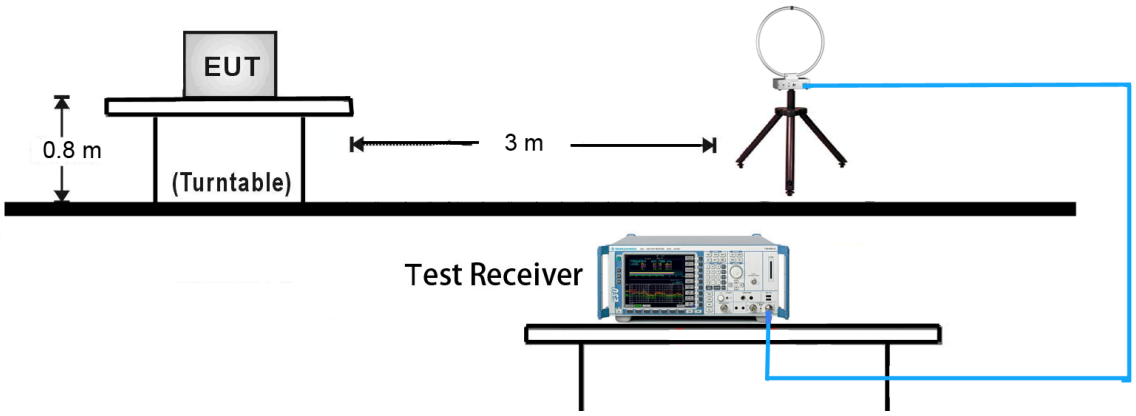
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

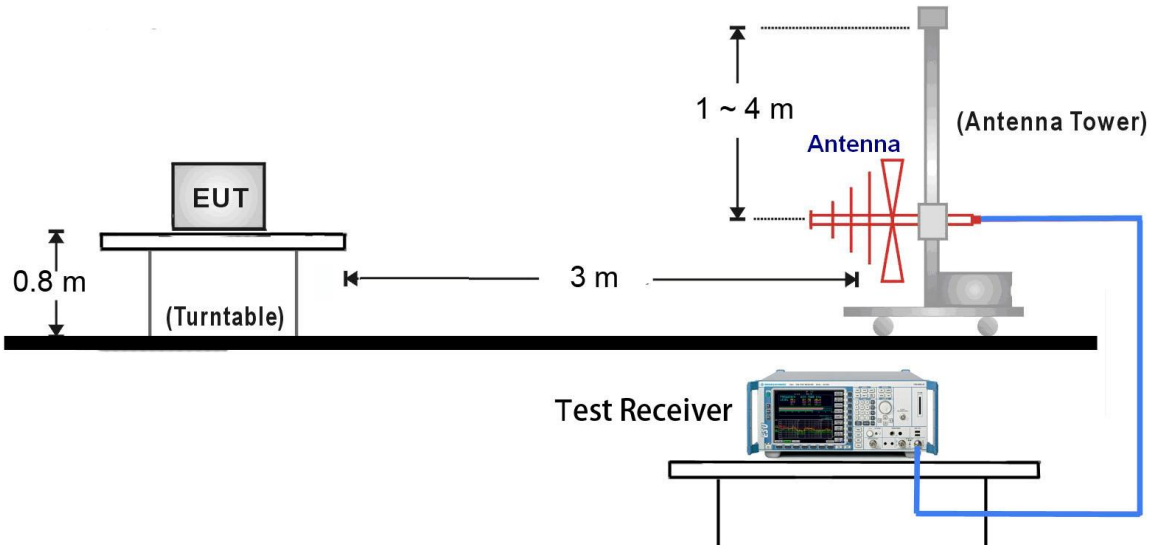
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain).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

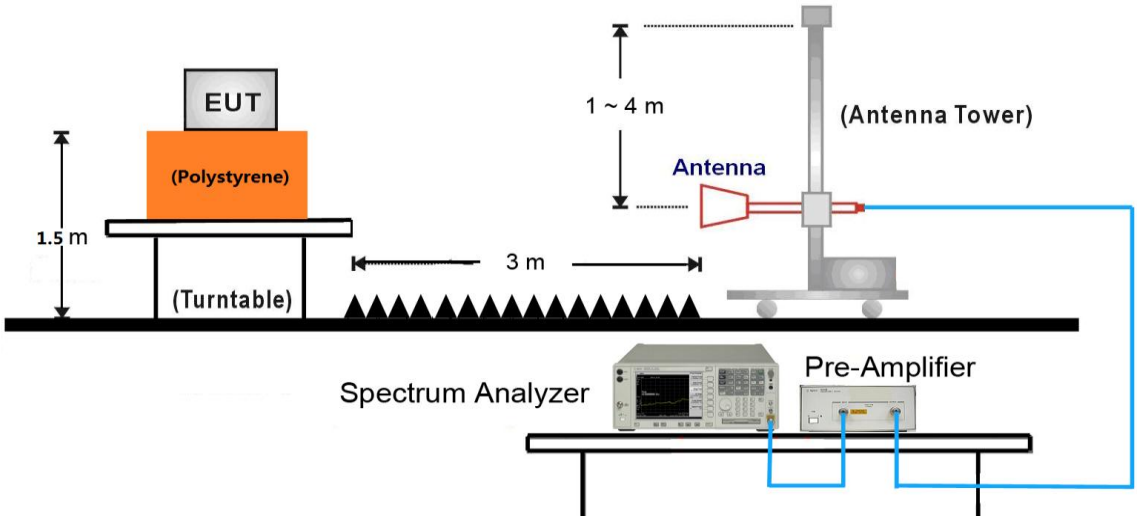
9kHz ~ 30MHz Test Setup:



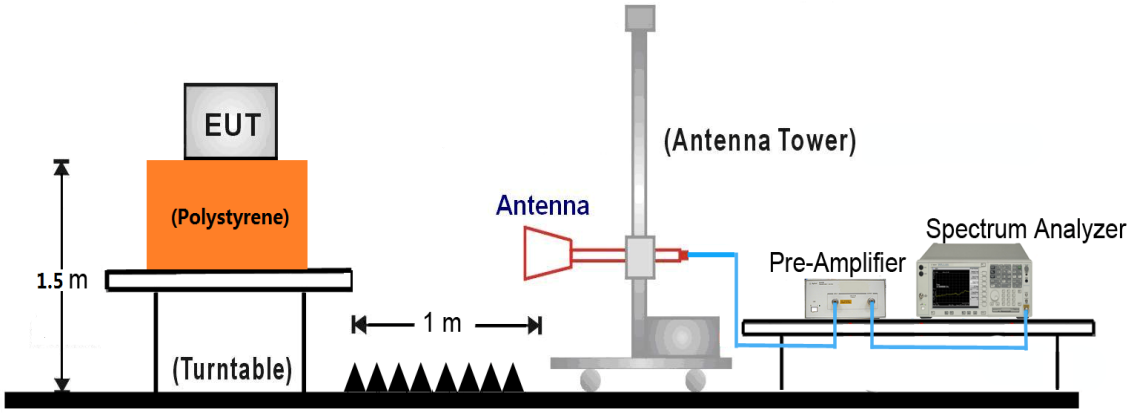
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~25GHz Test Setup:



7.6.5. Test Result

Test Mode:	802.11b - Ant 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
*	3218.5	58.4	-1.6	56.8	90.5	-33.7	Peak	Horizontal
*	4426.4	38.2	1.5	39.7	90.5	-50.8	Peak	Horizontal
	4653.3	38.2	2.2	40.4	74.0	-33.6	Peak	Horizontal
	8426.6	36.5	8.2	44.7	74.0	-29.3	Peak	Horizontal
*	3218.5	50.1	-1.6	48.5	90.5	-42.0	Peak	Vertical
*	4426.6	36.9	1.5	38.4	90.5	-52.1	Peak	Vertical
	4626.0	37.6	2.1	39.7	74.0	-34.3	Peak	Vertical
	8365.6	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 (110.5dBμV/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:	802.11b - 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
*	3162.6	39.3	-1.5	37.8	90.4	-52.6	Peak	Horizontal
*	4457.0	38.5	1.5	40.0	90.4	-50.4	Peak	Horizontal
	4653.0	37.6	2.2	39.8	74.0	-34.2	Peak	Horizontal
	8069.4	37.6	8.7	46.3	74.0	-27.7	Peak	Horizontal
*	3189.3	39.9	-1.6	38.3	90.4	-52.1	Peak	Vertical
*	4457.0	37.1	1.5	38.6	90.4	-51.8	Peak	Vertical
	4635.3	37.4	2.1	39.5	74.0	-34.5	Peak	Vertical
	8426.7	35.9	8.2	44.1	74.0	-29.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (110.4dBμV/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:	802.11b - 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
*	3156.6	40.1	-1.5	38.6	90.3	-51.7	Peak	Horizontal
*	4426.4	36.9	1.5	38.4	90.3	-51.9	Peak	Horizontal
	4896.3	37.7	2.7	40.4	74.0	-33.6	Peak	Horizontal
	8456.3	35.6	8.2	43.8	74.0	-30.2	Peak	Horizontal
*	3125.6	40.8	-1.6	39.2	90.3	-51.1	Peak	Vertical
*	4423.7	37.8	1.4	39.2	90.3	-51.1	Peak	Vertical
	4863.3	36.6	2.7	39.3	74.0	-34.7	Peak	Vertical
	8263.6	36.2	8.1	44.3	74.0	-29.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (110.3dBμV/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 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
*	3210.6	45.7	-1.6	44.1	90.4	-46.3	Peak	Horizontal
*	4456.3	37.8	1.5	39.3	90.4	-51.1	Peak	Horizontal
	4596.3	38.4	2.0	40.4	74.0	-33.6	Peak	Horizontal
	8265.3	35.7	8.1	43.8	74.0	-30.2	Peak	Horizontal
*	3156.6	39.8	-1.5	38.3	90.4	-52.1	Peak	Vertical
*	4456.3	36.9	1.5	38.4	90.4	-52.0	Peak	Vertical
	4635.3	37.5	2.1	39.6	74.0	-34.4	Peak	Vertical
	8265.4	36.0	8.1	44.1	74.0	-29.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (110.4dBμV/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 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
*	3200.6	39.5	-1.6	37.9	93.8	-55.9	Peak	Horizontal
*	4458.3	37.7	1.5	39.2	93.8	-54.6	Peak	Horizontal
	5006.6	37.6	3.0	40.6	74.0	-33.4	Peak	Horizontal
	8030.6	37.6	8.7	46.3	74.0	-27.7	Peak	Horizontal
*	3056.9	39.4	-1.9	37.5	93.8	-56.3	Peak	Vertical
*	4437.0	36.9	1.5	38.4	93.8	-55.4	Peak	Vertical
	4863.6	38.8	2.7	41.5	74.0	-32.5	Peak	Vertical
	8126.4	37.0	8.6	45.6	74.0	-28.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (113.8dBμV/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 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
*	3105.6	40.0	-1.8	38.2	88.9	-50.7	Peak	Horizontal
*	4426.6	36.9	1.5	38.4	88.9	-50.5	Peak	Horizontal
	4863.3	37.2	2.7	39.9	74.0	-34.1	Peak	Horizontal
	8256.4	36.3	8.1	44.4	74.0	-29.6	Peak	Horizontal
*	3200.6	39.1	-1.6	37.5	88.9	-51.4	Peak	Vertical
*	4426.6	37.0	1.5	38.5	88.9	-50.4	Peak	Vertical
	4936.3	35.8	2.8	38.6	74.0	-35.4	Peak	Vertical
	8400.3	35.7	8.1	43.8	74.0	-30.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (108.9dBμV/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:	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
*	3201.6	38.8	-1.6	37.2	88.0	-50.8	Peak	Horizontal
*	4456.4	37.2	1.5	38.7	88.0	-49.3	Peak	Horizontal
	4963.3	36.4	2.9	39.3	74.0	-34.7	Peak	Horizontal
	8256.4	35.5	8.1	43.6	74.0	-30.4	Peak	Horizontal
*	3201.5	39.1	-1.6	37.5	88.0	-50.5	Peak	Vertical
*	4456.4	37.6	1.5	39.1	88.0	-48.9	Peak	Vertical
	4800.3	37.4	2.7	40.1	74.0	-33.9	Peak	Vertical
	8456.6	35.0	8.2	43.2	74.0	-30.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (108.0dBμV/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-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
*	3056.6	38.8	-1.9	36.9	87.9	-51.0	Peak	Horizontal
*	4426.6	36.7	1.5	38.2	87.9	-49.7	Peak	Horizontal
	5142.7	36.0	3.3	39.3	74.0	-34.7	Peak	Horizontal
	8256.4	36.1	8.1	44.2	74.0	-29.8	Peak	Horizontal
*	3189.6	39.2	-1.6	37.6	87.9	-50.3	Peak	Vertical
*	4426.7	36.7	1.5	38.2	87.9	-49.7	Peak	Vertical
	4896.4	37.3	2.7	40.0	74.0	-34.0	Peak	Vertical
	8365.6	35.8	8.0	43.8	74.0	-30.2	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:	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
*	3156.3	38.8	-1.5	37.3	87.8	-50.5	Peak	Horizontal
*	4436.6	37.2	1.5	38.7	87.8	-49.1	Peak	Horizontal
	4896.3	36.5	2.7	39.2	74.0	-34.8	Peak	Horizontal
	8156.7	36.5	8.4	44.9	74.0	-29.1	Peak	Horizontal
*	3154.3	39.1	-1.5	37.6	87.8	-50.2	Peak	Vertical
*	4456.3	37.1	1.5	38.6	87.8	-49.2	Peak	Vertical
	4789.5	37.2	2.7	39.9	74.0	-34.1	Peak	Vertical
	8198.7	35.6	8.3	43.9	74.0	-30.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (107.8dBμV/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-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
*	3200.6	38.8	-1.6	37.2	83.6	-46.4	Peak	Horizontal
*	4453.3	37.1	1.5	38.6	83.6	-45.0	Peak	Horizontal
	4689.3	37.5	2.3	39.8	74.0	-34.2	Peak	Horizontal
	8256.3	35.4	8.1	43.5	74.0	-30.5	Peak	Horizontal
*	3244.0	47.0	-1.7	45.3	83.6	-38.3	Peak	Vertical
*	4426.6	37.3	1.5	38.8	83.6	-44.8	Peak	Vertical
	4635.6	36.9	2.1	39.0	74.0	-35.0	Peak	Vertical
	8365.7	35.3	8.0	43.3	74.0	-30.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (103.6dBμV/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:	802.11n-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
*	3184.5	45.1	-1.6	43.5	84.7	-41.2	Peak	Horizontal
*	4456.4	36.9	1.5	38.4	84.7	-46.3	Peak	Horizontal
	4896.7	36.7	2.7	39.4	74.0	-34.6	Peak	Horizontal
	8400.4	35.3	8.1	43.4	74.0	-30.6	Peak	Horizontal
*	3218.5	40.3	-1.6	38.7	84.7	-46.0	Peak	Vertical
*	4425.7	36.2	1.5	37.7	84.7	-47.0	Peak	Vertical
	4936.6	36.4	2.8	39.2	74.0	-34.8	Peak	Vertical
	8365.3	35.1	8.0	43.1	74.0	-30.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (104.7dBμV/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 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
*	3184.5	44.6	-1.6	43.0	83.7	-40.7	Peak	Horizontal
*	4426.6	36.6	1.5	38.1	83.7	-45.6	Peak	Horizontal
	4800.4	36.5	2.7	39.2	74.0	-34.8	Peak	Horizontal
	8265.2	36.2	8.1	44.3	74.0	-29.7	Peak	Horizontal
*	3102.5	38.9	-1.8	37.1	83.7	-46.6	Peak	Vertical
*	4456.3	36.8	1.5	38.3	83.7	-45.4	Peak	Vertical
	4623.5	36.9	2.1	39.0	74.0	-35.0	Peak	Vertical
	8402.3	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 (103.7dBμV/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 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
*	3156.5	38.4	-1.5	36.9	83.2	-46.3	Peak	Horizontal
*	4456.6	37.3	1.5	38.8	83.2	-44.4	Peak	Horizontal
	4685.2	37.6	2.3	39.9	74.0	-34.1	Peak	Horizontal
	8256.5	36.1	8.1	44.2	74.0	-29.8	Peak	Horizontal
*	3193.0	39.9	-1.6	38.3	83.2	-44.9	Peak	Vertical
*	4455.7	37.1	1.5	38.6	83.2	-44.6	Peak	Vertical
	5130.3	35.9	3.3	39.2	74.0	-34.8	Peak	Vertical
	8456.3	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 (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)

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	44.2	-1.6	42.6	82.6	-40.0	Peak	Horizontal
*	4423.6	36.9	1.4	38.3	82.6	-44.3	Peak	Horizontal
	4802.5	37.3	2.7	40.0	74.0	-34.0	Peak	Horizontal
	8125.6	36.3	8.6	44.9	74.0	-29.1	Peak	Horizontal
*	3215.3	39.5	-1.6	37.9	82.6	-44.7	Peak	Vertical
*	4426.6	36.2	1.5	37.7	82.6	-44.9	Peak	Vertical
	4826.6	36.9	2.7	39.6	74.0	-34.4	Peak	Vertical
	8365.6	35.6	8.0	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).

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
*	3156.3	38.6	-1.5	37.1	81.4	-44.3	Peak	Horizontal
*	4426.6	37.1	1.5	38.6	81.4	-42.8	Peak	Horizontal
	4823.6	37.0	2.7	39.7	74.0	-34.3	Peak	Horizontal
	8236.6	36.5	8.1	44.6	74.0	-29.4	Peak	Horizontal
*	3218.5	40.4	-1.6	38.8	81.4	-42.6	Peak	Vertical
*	4456.3	37.0	1.5	38.5	81.4	-42.9	Peak	Vertical
	4725.6	36.8	2.4	39.2	74.0	-34.8	Peak	Vertical
	8236.6	36.0	8.1	44.1	74.0	-29.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.4dBμV/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:	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
*	3164.3	38.8	-1.5	37.3	80.5	-43.2	Peak	Horizontal
*	4478.3	36.3	1.6	37.9	80.5	-42.6	Peak	Horizontal
	4625.6	37.0	2.1	39.1	74.0	-34.9	Peak	Horizontal
	8156.3	35.6	8.4	44.0	74.0	-30.0	Peak	Horizontal
*	3246.9	38.3	-1.7	36.6	80.5	-43.9	Peak	Vertical
*	4458.3	36.9	1.5	38.4	80.5	-42.1	Peak	Vertical
	4836.6	36.3	2.7	39.0	74.0	-35.0	Peak	Vertical
	8263.6	35.7	8.1	43.8	74.0	-30.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (100.5dBμV/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-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
*	3146.3	39.4	-1.5	37.9	78.7	-40.8	Peak	Horizontal
*	4456.9	36.9	1.5	38.4	78.7	-40.3	Peak	Horizontal
	4863.6	37.2	2.7	39.9	74.0	-34.1	Peak	Horizontal
	8256.4	35.2	8.1	43.3	74.0	-30.7	Peak	Horizontal
*	3105.6	38.7	-1.8	36.9	78.7	-41.8	Peak	Vertical
*	4456.2	36.6	1.5	38.1	78.7	-40.6	Peak	Vertical
	4835.7	37.2	2.7	39.9	74.0	-34.1	Peak	Vertical
	8256.3	35.8	8.1	43.9	74.0	-30.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (98.7dBμV/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:	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
*	3105.3	38.9	-1.8	37.1	77.9	-40.8	Peak	Horizontal
*	4457.0	36.5	1.5	38.0	77.9	-39.9	Peak	Horizontal
	4763.7	37.0	2.6	39.6	74.0	-34.4	Peak	Horizontal
	8265.3	36.2	8.1	44.3	74.0	-29.7	Peak	Horizontal
*	3246.6	38.8	-1.7	37.1	77.9	-40.8	Peak	Vertical
*	4479.6	36.9	1.6	38.5	77.9	-39.4	Peak	Vertical
	4625.3	37.1	2.1	39.2	74.0	-34.8	Peak	Vertical
	8499.6	35.4	8.3	43.7	74.0	-30.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (97.9dBμV/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
*	3165.6	38.5	-1.5	37.0	88.4	-51.4	Peak	Horizontal
*	4478.5	36.4	1.6	38.0	88.4	-50.4	Peak	Horizontal
	5016.6	36.6	3.1	39.7	74.0	-34.3	Peak	Horizontal
	8365.5	35.0	8.0	43.0	74.0	-31.0	Peak	Horizontal
*	3156.6	38.2	-1.5	36.7	88.4	-51.7	Peak	Vertical
*	4489.6	37.2	1.6	38.8	88.4	-49.6	Peak	Vertical
	5106.6	35.5	3.3	38.8	74.0	-35.2	Peak	Vertical
	8456.3	35.3	8.2	43.5	74.0	-30.5	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:	802.11n-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
*	3156.5	38.4	-1.5	36.9	88.6	-51.7	Peak	Horizontal
*	4479.3	36.9	1.6	38.5	88.6	-50.1	Peak	Horizontal
	4621.6	37.5	2.1	39.6	74.0	-34.4	Peak	Horizontal
	8203.6	35.9	8.3	44.2	74.0	-29.8	Peak	Horizontal
*	3156.6	38.8	-1.5	37.3	88.6	-51.3	Peak	Vertical
*	4479.5	36.7	1.6	38.3	88.6	-50.3	Peak	Vertical
	4621.9	36.6	2.1	38.7	74.0	-35.3	Peak	Vertical
	8265.6	35.9	8.1	44.0	74.0	-30.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (108.6dBµV/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:	802.11n-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
*	3156.9	39.0	-1.5	37.5	87.7	-50.2	Peak	Horizontal
*	4456.3	36.5	1.5	38.0	87.7	-49.7	Peak	Horizontal
	4812.7	36.8	2.7	39.5	74.0	-34.5	Peak	Horizontal
	8356.3	35.0	8.0	43.0	74.0	-31.0	Peak	Horizontal
*	3245.3	38.6	-1.7	36.9	87.7	-50.8	Peak	Vertical
*	4456.3	37.3	1.5	38.8	87.7	-48.9	Peak	Vertical
	4825.3	37.1	2.7	39.8	74.0	-34.2	Peak	Vertical
	8256.3	36.1	8.1	44.2	74.0	-29.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (107.7dBμV/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 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
*	3241.2	51.2	-1.7	49.5	83.5	-34.0	Peak	Horizontal
*	4436.3	36.9	1.5	38.4	83.5	-45.1	Peak	Horizontal
	5003.3	37.7	3.0	40.7	74.0	-33.3	Peak	Horizontal
	8356.3	35.2	8.0	43.2	74.0	-30.8	Peak	Horizontal
*	3189.3	39.8	-1.6	38.2	83.5	-45.3	Peak	Vertical
*	4496.2	36.4	1.6	38.0	83.5	-45.5	Peak	Vertical
	4763.3	37.5	2.6	40.1	74.0	-33.9	Peak	Vertical
	8356.1	35.6	8.0	43.6	74.0	-30.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (103.5dBμV/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-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
*	3156.6	38.2	-1.5	36.7	85.2	-48.5	Peak	Horizontal
*	4449.7	36.8	1.5	38.3	85.2	-46.9	Peak	Horizontal
	4625.7	37.0	2.1	39.1	74.0	-34.9	Peak	Horizontal
	8346.3	35.6	8.0	43.6	74.0	-30.4	Peak	Horizontal
*	3179.3	39.4	-1.6	37.8	85.2	-47.4	Peak	Vertical
*	4456.3	37.7	1.5	39.2	85.2	-46.0	Peak	Vertical
	4893.8	38.6	2.7	41.3	74.0	-32.7	Peak	Vertical
	8256.6	36.3	8.1	44.4	74.0	-29.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (105.2dBμV/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)