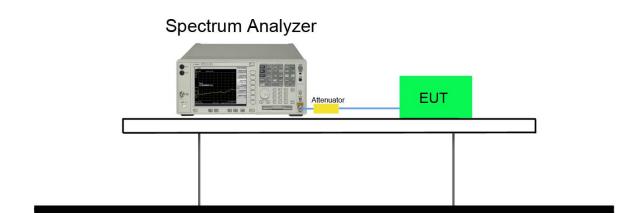




# 7.5.4. Test Setup





# 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				



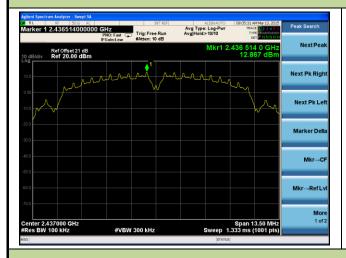


Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Limit	Result				
Ant 0 / Ant 0 + 1	Ant 0 / Ant 0 + 1								
802.11n-HT20	6.5	01	2412	30dBc	Pass				
802.11n-HT20	6.5	06	2437	30dBc	Pass				
802.11n-HT20	6.5	11	2462	30dBc	Pass				
802.11n-HT40	13.5	03	2422	30dBc	Pass				
802.11n-HT40	13.5	06	2437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

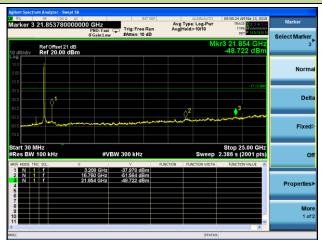


# **Channel 01 (2412MHz)**

#### **Low Band Edge**

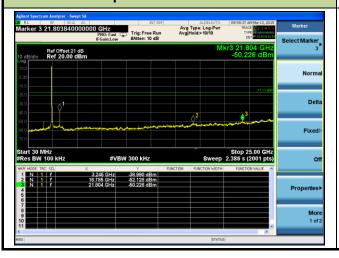


### **Spurious Emission**



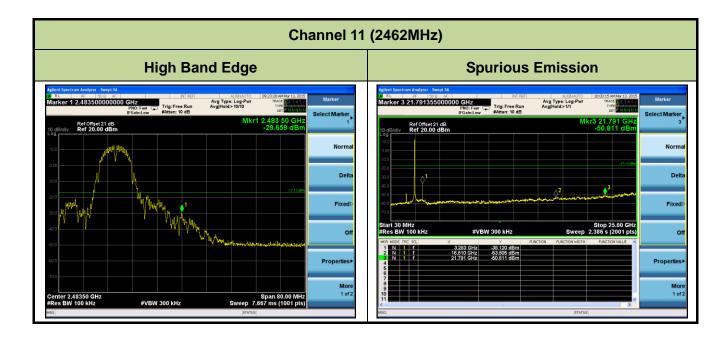
### **Channel 06 (2437MHz)**

### **Spurious Emission**



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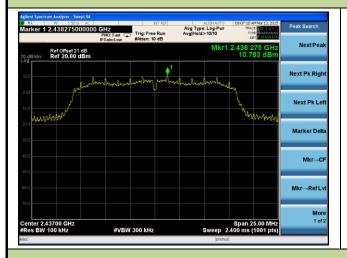






# 802.11g Out-of-Band Emissions - Ant 0

### 100kHz PSD reference Level

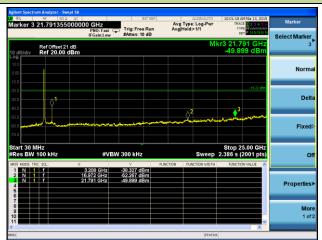


# **Channel 01 (2412MHz)**

#### **Low Band Edge**



### **Spurious Emission**



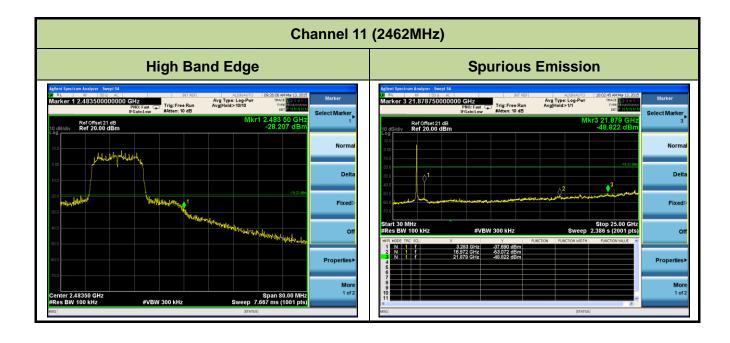
### **Channel 06 (2437MHz)**

### **Spurious Emission**

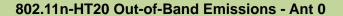


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#### 100kHz PSD reference Level

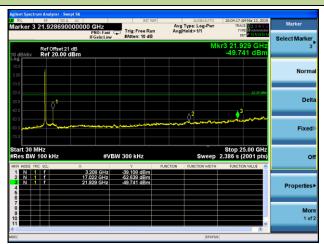


# **Channel 01 (2412MHz)**

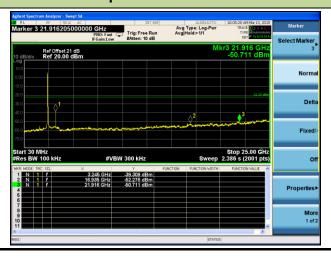
#### **Low Band Edge**



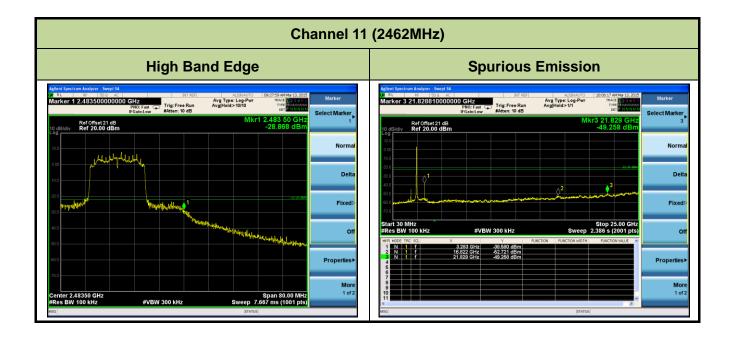
### **Spurious Emission**



### **Channel 06 (2437MHz)**









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

#### 100kHz PSD reference Level



# **Channel 03 (2422MHz)**

#### **Low Band Edge**

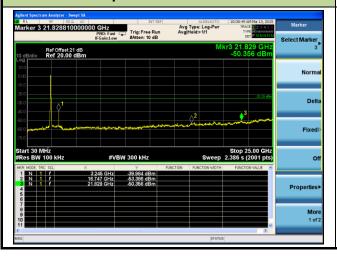




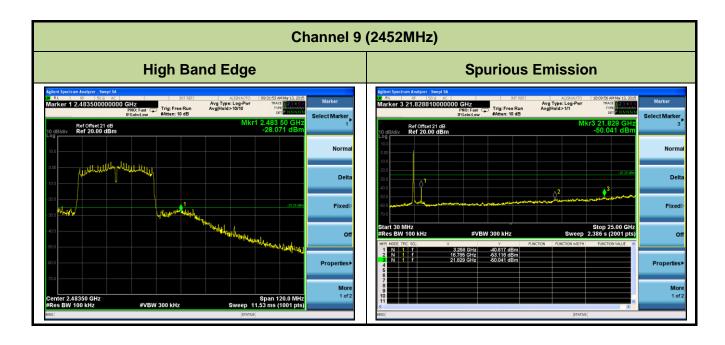
### **Spurious Emission**



### **Channel 06 (2437MHz)**









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

#### 100kHz PSD reference Level

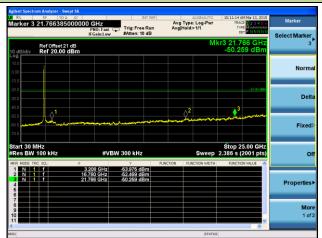


# **Channel 01 (2412MHz)**

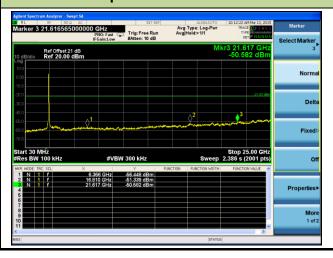
#### **Low Band Edge**



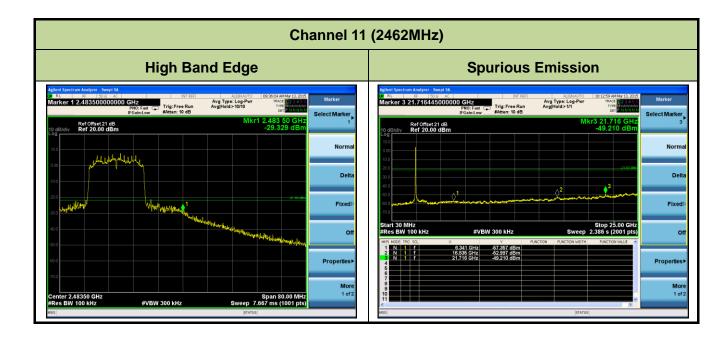
### **Spurious Emission**



### **Channel 06 (2437MHz)**









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

#### 100kHz PSD reference Level



# **Channel 03 (2422MHz)**

#### **Low Band Edge**

# Low Balla Lage



### **Spurious Emission**



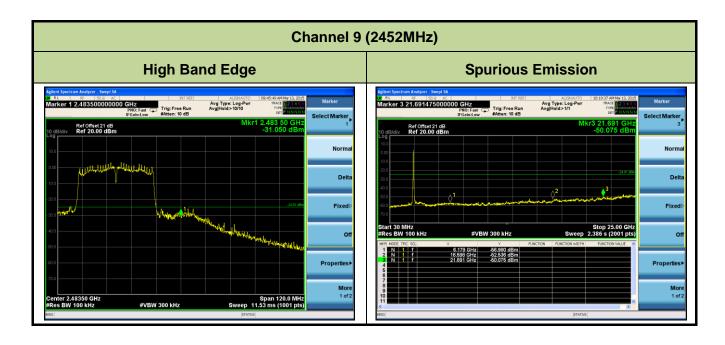
### **Channel 06 (2437MHz)**

### **Spurious Emission**

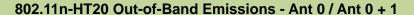


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#### 100kHz PSD reference Level

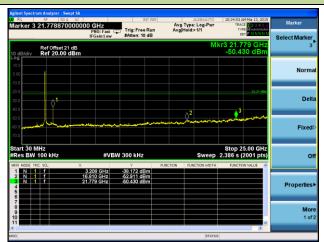


# **Channel 01 (2412MHz)**

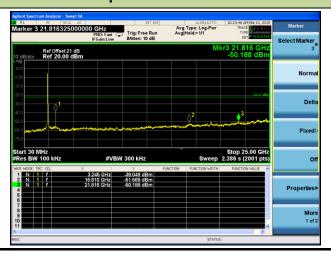
#### **Low Band Edge**



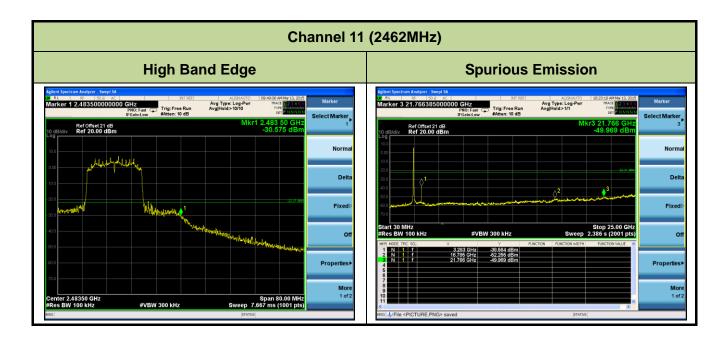
### **Spurious Emission**



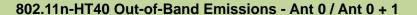
# **Channel 06 (2437MHz)**



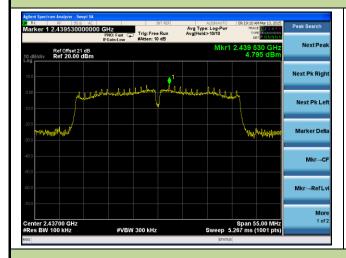






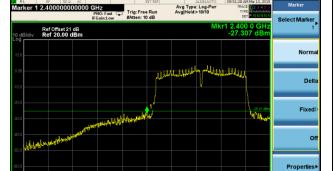


#### 100kHz PSD reference Level



# **Channel 03 (2422MHz)**

#### **Low Band Edge**



### **Spurious Emission**



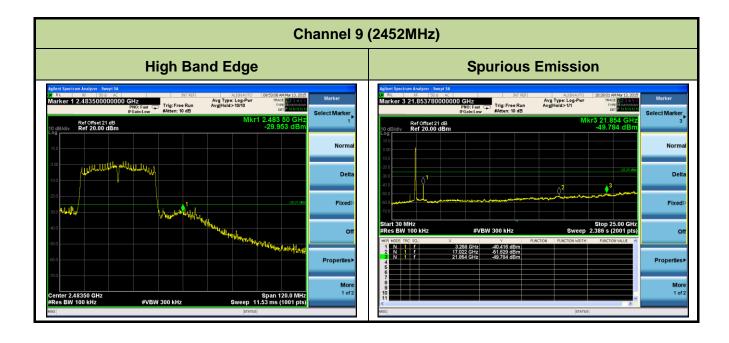
### **Channel 06 (2437MHz)**

### **Spurious Emission**



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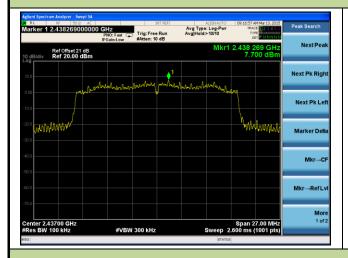






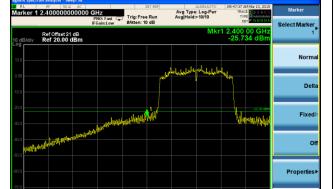
#### 802.11n-HT20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

#### 100kHz PSD reference Level

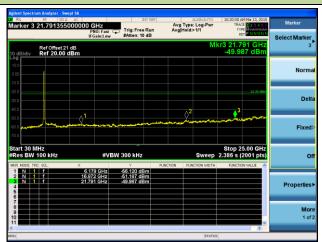


# **Channel 01 (2412MHz)**

#### **Low Band Edge**



### **Spurious Emission**



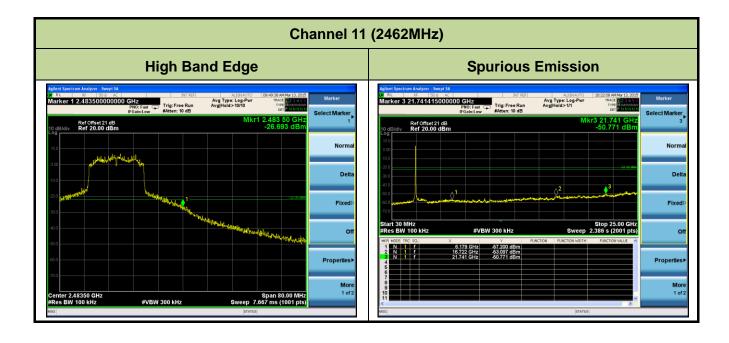
### **Channel 06 (2437MHz)**

### **Spurious Emission**

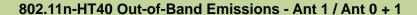


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#### 100kHz PSD reference Level

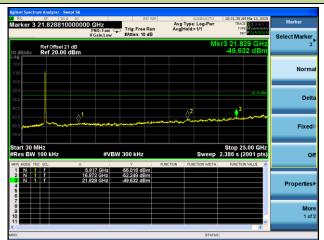


# **Channel 03 (2422MHz)**

#### **Low Band Edge**

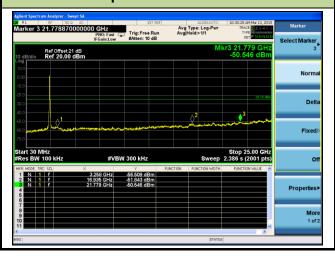


### **Spurious Emission**



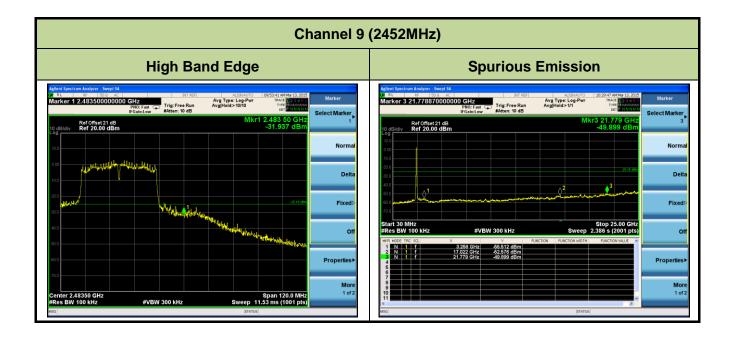
### **Channel 06 (2437MHz)**

### **Spurious Emission**



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Report No.: 1502RSU00501



# 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**

- 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

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- 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**

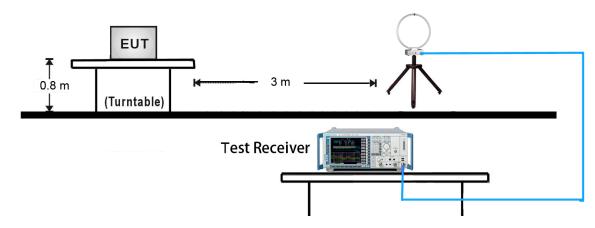
- Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW ≥ 1/T
- 4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain).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

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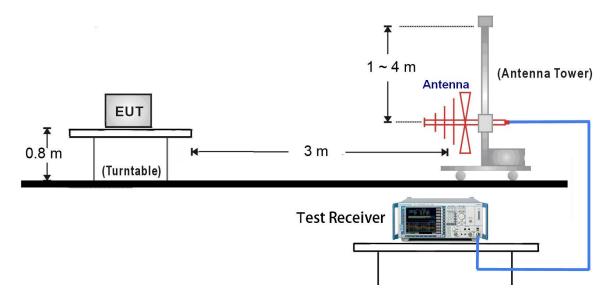


# 7.6.4. Test Setup

# 9kHz ~ 30MHz Test Setup:

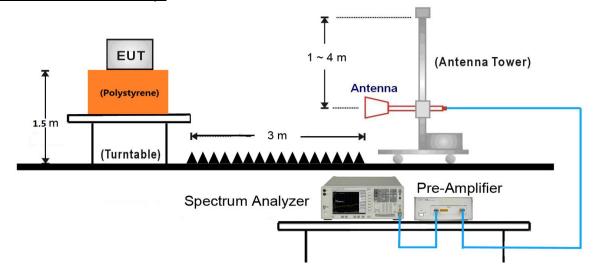


# 30MHz ~ 1GHz Test Setup:

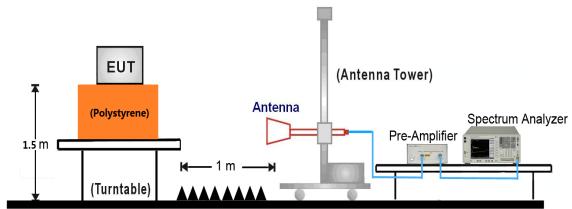


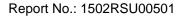


### 1GHz ~ 18GHz Test Setup:



# 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:	Average measurement was not performed if peak level lower than average						
	limit.						
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.						

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
	(1711 12)	(dBµV)	(db)	(dBµV/m)	(αδμν/π)	(db)		
*	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)

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Test Mode:	802.11b - Ant 0	Test Site:	AC1					
Test Channel:	06	Test Engineer:	Roy Cheng					
Remark:	Average measurement was not performed if peak level lower than average							
	limit.							
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11b - Ant 0	Test Site:	AC1					
Test Channel:	11	Test Engineer:	Roy Cheng					
Remark:	Average measurement was not performed if peak level lower than average							
	limit.							
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11g - Ant 0	Test Site:	AC1					
Test Channel:	01	Test Engineer:	Roy Cheng					
Remark:	Average measurement was not performed if peak level lower than average							
	limit.							
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	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)

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Test Mode:	802.11g - Ant 0	Test Site:	AC1				
Test Channel:	06	Test Engineer:	Roy Cheng				
Remark:	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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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	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT20 - Ant 0	Test Site:	AC1				
Test Channel:	01	Test Engineer:	Roy Cheng				
Remark:	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	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT20 - Ant 0	Test Site:	AC1				
Test Channel:	06	Test Engineer:	Roy Cheng				
Remark:	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	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT20 - Ant 0	Test Site:	AC1				
Test Channel:	11	Test Engineer:	Roy Cheng				
Remark:	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	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT40 - Ant 0	Test Site:	AC1					
Test Channel:	03	Test Engineer:	Roy Cheng					
Remark:	1. Average measurement was no	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT40 - Ant 0	Test Site:	AC1					
Test Channel:	06	Test Engineer:	Roy Cheng					
Remark:	1. Average measurement was no	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT40 - Ant 0	Test Site:	AC1					
Test Channel:	09	Test Engineer:	Roy Cheng					
Remark:	1. Average measurement was no	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT20 - Ant 1	Test Site:	AC1					
Test Channel:	01	Test Engineer:	Roy Cheng					
Remark:	1. Average measurement was no	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	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT20 - Ant 1	Test Site:	AC1					
Test Channel:	06	Test Engineer:	Roy Cheng					
Remark:	1. Average measurement was no	. Average measurement was not performed if peak level lower than average						
	limit.							
	2. Other frequency was 20dB bel	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT20 - Ant 1	Test Site:	AC1				
Test Channel:	11	Test Engineer:	Roy Cheng				
Remark:	1. Average measurement was no	t 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	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT40 - Ant 1	Test Site:	AC1						
Test Channel:	03	Test Engineer:	Roy Cheng						
Remark:	1. Average measurement was no	Average measurement was not performed if peak level lower than average							
	limit.								
	2. Other frequency was 20dB bel	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT40 - Ant 1	Test Site:	AC1						
Test Channel:	06	Test Engineer:	Roy Cheng						
Remark:	1. Average measurement was no	Average measurement was not performed if peak level lower than average							
	limit.								
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.								

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT40 - Ant 1	Test Site:	AC1						
Test Channel:	09	Test Engineer:	Roy Cheng						
Remark:	1. Average measurement was no	Average measurement was not performed if peak level lower than average							
	limit.								
	2. Other frequency was 20dB bel	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Site:	AC1						
Test Channel:	01	Test Engineer:	Roy Cheng						
Remark:	1. Average measurement was no	Average measurement was not performed if peak level lower than average							
	limit.								
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.								

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Site:	AC1						
Test Channel:	06	Test Engineer:	Roy Cheng						
Remark:	1. Average measurement was no	Average measurement was not performed if peak level lower than average							
	limit.								
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.								

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Site:	AC1						
Test Channel:	11	Test Engineer:	Roy Cheng						
Remark:	1. Average measurement was no	Average measurement was not performed if peak level lower than average							
	limit.								
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.								

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Site:	AC1			
Test Channel:	03	Test Engineer:	Roy Cheng			
Remark:	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	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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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	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	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  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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