# 7.6 RADIATED UNDESIRABLE EMISSION

1. According to §15.209(a) & RSS-247, except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (µV/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

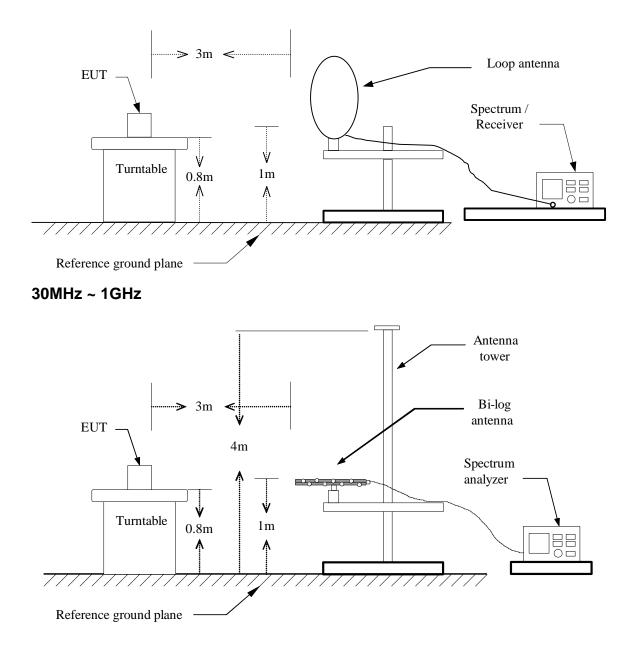
**Remark:** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

2. In the emission table above, the tighter limit applies at the band edges.

Frequency (MHz)	Field Strength (µV/m at 3-meter)	Field Strength (dBµV/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

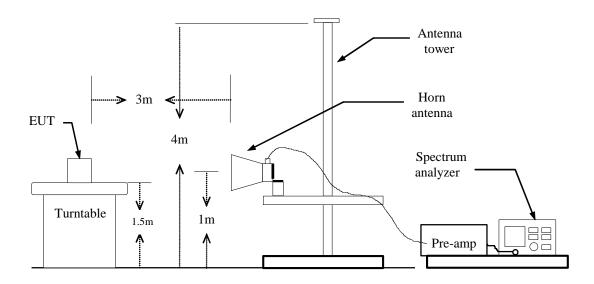
### **Test Configuration**

### 9kHz ~ 30MHz





### Above 1 GHz



# TEST PROCEDURE

- 1. The EUT is placed on a turntable, which is 1.5m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Set the spectrum analyzer in the following setting as:

Below 1GHz:

```
RBW=100kHz / VBW=300kHz / Sweep=AUTO
```

Above 1GHz:

(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
(b)AVERAGE: RBW=1MHz,
if duty cycle≥98%, VBW=10Hz.
if duty cycle<98% VBW=1/T.</li>
IEEE 802.11a mode: = 88%, VBW= 750Hz
IEEE 802.11n HT 20 MHz mode: = 78%, VBW= 1.5KHz
IEEE 802.11n HT 40 MHz mode: = 64%, VBW= 3KHz
IEEE 802.11ac VHT 80 MHz mode: = 26%, VBW= 15KHz

- 7. Repeat above procedures until the measurements for all frequencies are complete.
- Result = Spectrum Reading + cable loss(spectrum to Amp) Amp Gain + Cable loss(Amp to receive Ant) + Receive Ant

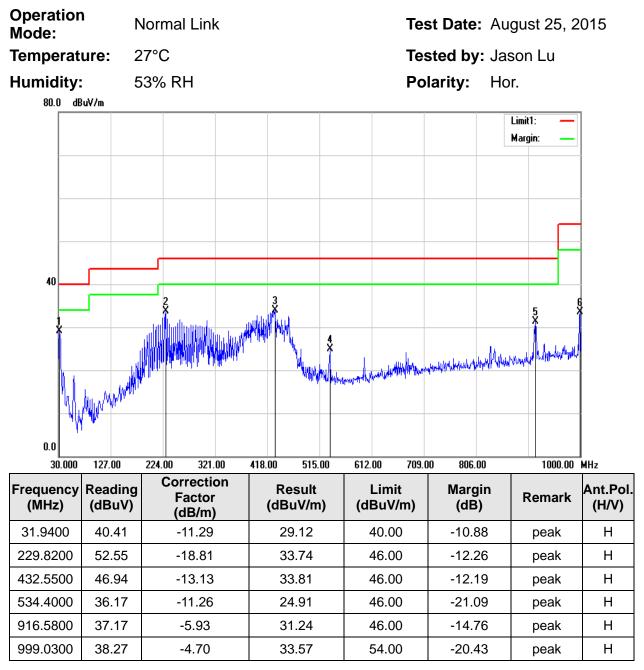
### Below 1 GHz

Operation Mode: Tomporaturo:	Normal Link 27°C			st Date: Au	-	015
Temperature:				sted by: Jas		
Humidity:	53% RH		Ро	larity: Ve	r. / Hor.	
80.0 dBu¥/m						1
					Limit1: — Margin: —	
40		3				
			5	an observer and here	E Innational University	
0.0 In Alfindate						
30.000 127.00	224.00 321.00	418.00 515.00	612.00 709.0	00 806.00	1000.00	MHz
Frequency Readir (MHz) (dBu)		Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
31.9400 42.16		30.87	40.00	-9.13	Peak	V
198.7800 46.74	-17.64	29.10	43.50	-14.40	Peak	V

(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		(H/V)
31.9400	42.16	-11.29	30.87	40.00	-9.13	Peak	V
198.7800	46.74	-17.64	29.10	43.50	-14.40	Peak	V
425.7600	47.82	-13.32	34.50	46.00	-11.50	Peak	V
534.4000	45.04	-11.26	33.78	46.00	-12.22	Peak	V
612.0000	38.48	-10.22	28.26	46.00	-17.74	Peak	V
878.7500	36.23	-6.42	29.81	46.00	-16.19	Peak	V

- 1 Measuring frequencies from 30 MHz to the 1GHz.
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
- 3 Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit or as required by the applicant.
- 4 Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5 Margin (dB) = Remark result (dBuV/m) Quasi-peak limit (dBuV/m).

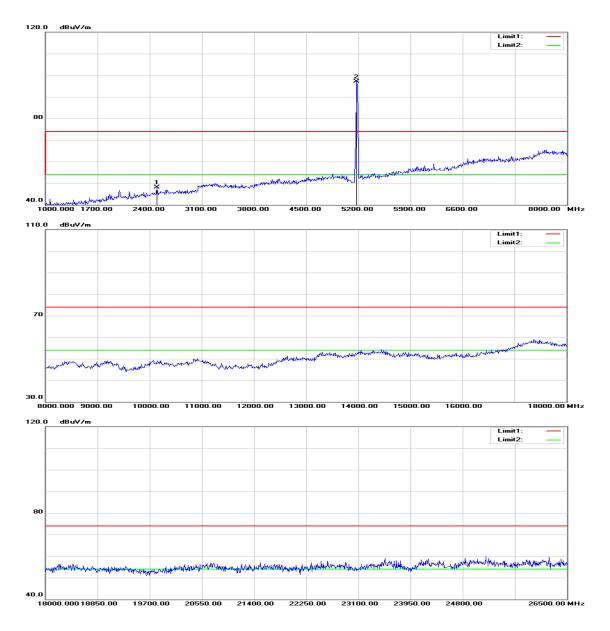


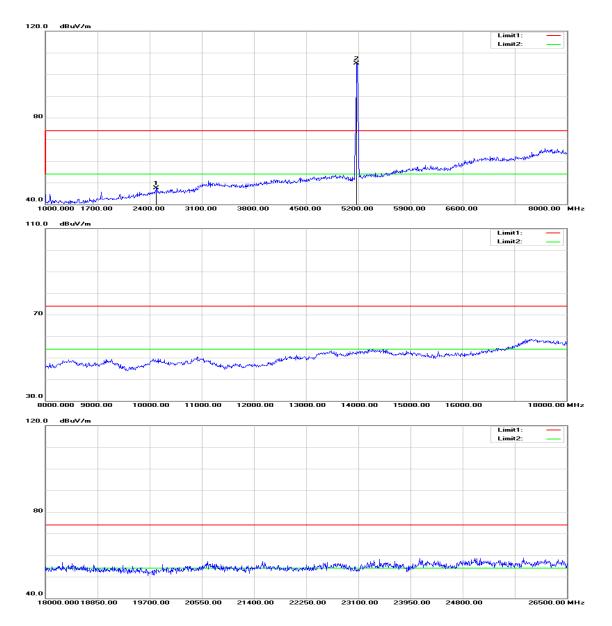


- 1. No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
- 3. Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit or as required by the applicant.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Margin (dB) = Remark result (dBuV/m) Quasi-peak limit (dBuV/m).

## Above 1 GHz

### Tx / IEEE 802.11a mode / 5180 MHz





Operation Tx / IEEE 802.11a mode / 5180 MHz

Test Date: August 25, 2015

Temperature: 27°C

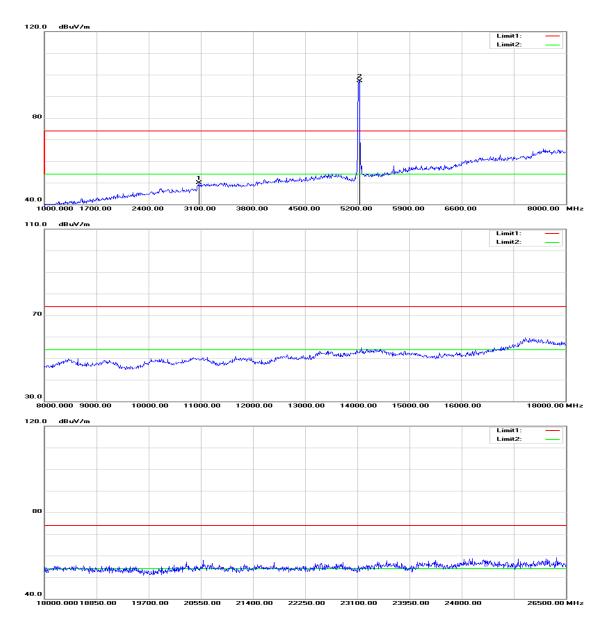
Humidity: 53% RH

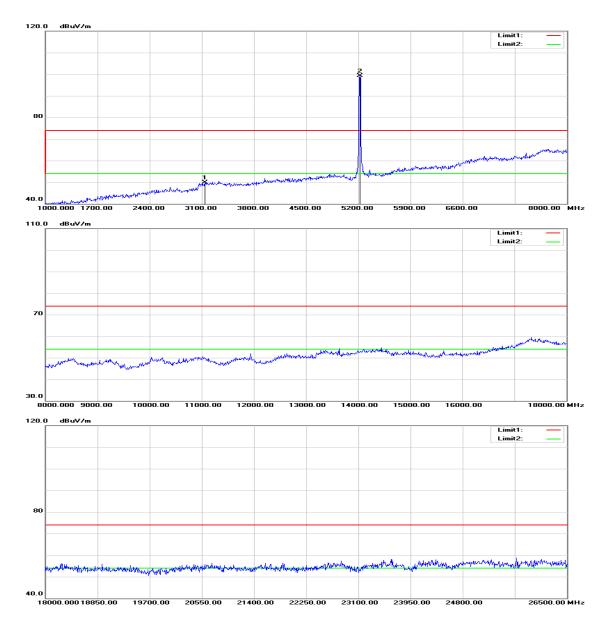
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2498.000	51.15	-3.14	48.01	74.00	-25.99	peak	V
N/A							
2491.000	50.66	-3.20	47.46	74.00	-26.54	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

## Tx / IEEE 802.11a mode / 5220 MHz





Operation Tx / IEEE 802.11a mode / 5220 MHz

Test Date: August 25, 2015

Temperature: 27°C

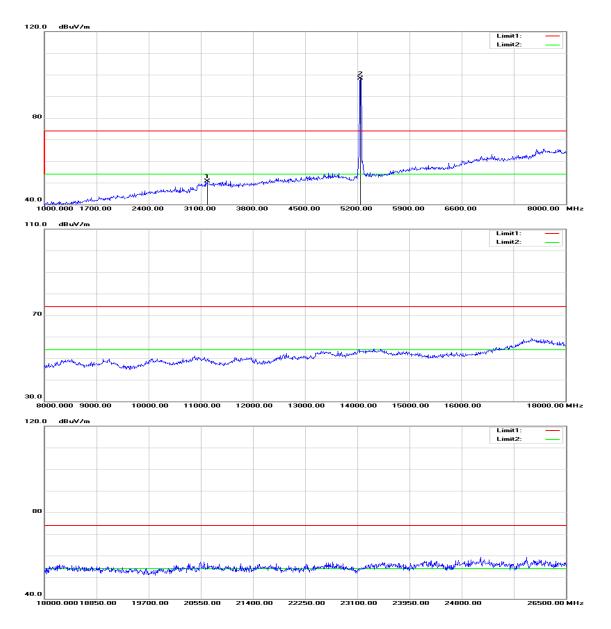
Humidity: 53% RH

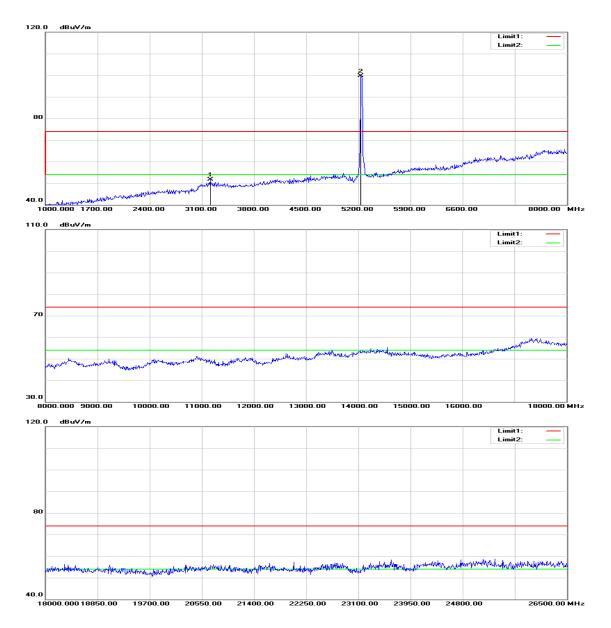
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3072.000	51.82	-1.94	49.88	74.00	-24.12	peak	V
N/A							
3142.000	51.68	-1.77	49.91	74.00	-24.09	peak	н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

## Tx / IEEE 802.11a mode / 5240 MHz





Operation Mode: Tx / IEEE 802.11a mode / 5240 MHz

Temperature: 27°C

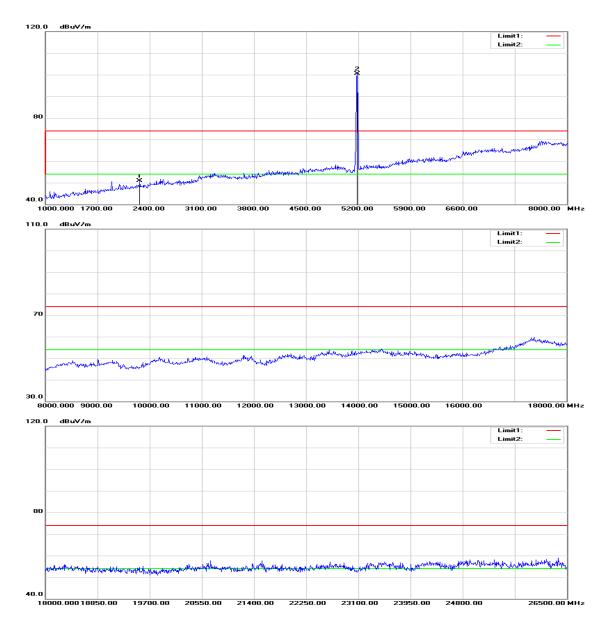
Humidity: 53% RH

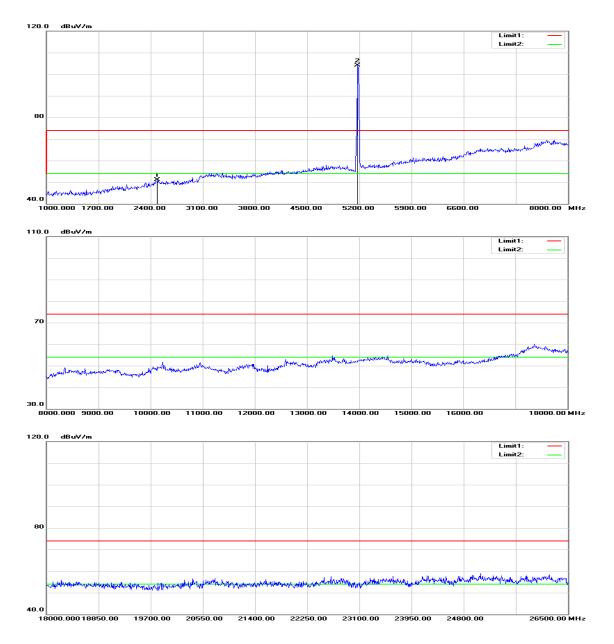
Test Date: August 25, 2015 Tested Jason Lu by: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3184.000	52.42	-1.67	50.75	74.00	-23.25	peak	V
N/A							
3212.000	53.36	-1.60	51.76	74.00	-22.24	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

## Tx / IEEE 802.11n HT 20 MHz Channel mode / 5180 MHz





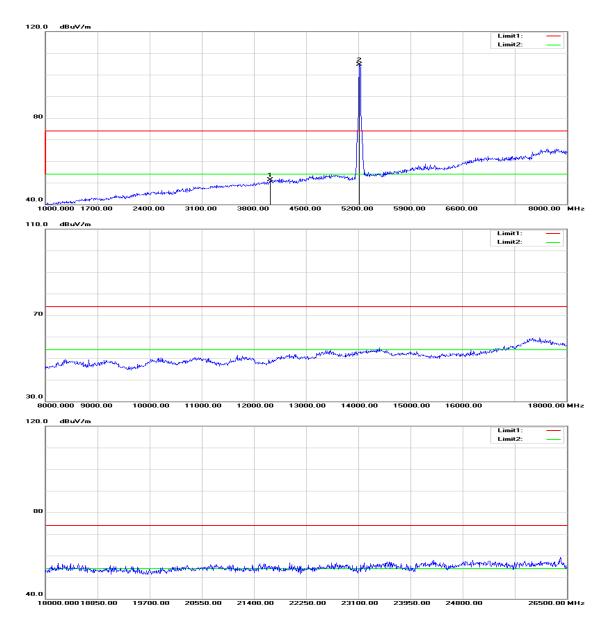
Operation Mode:	Tx / IEEE 802.11n HT 20 MHz Channel mode / 5180 MHz	Test Date:	August 2	5, 2015
Temperature:	27°C	Tested by:	: Jason Lu	
Humidity:	53% RH	Polarity:	Ver. / Hor	r.

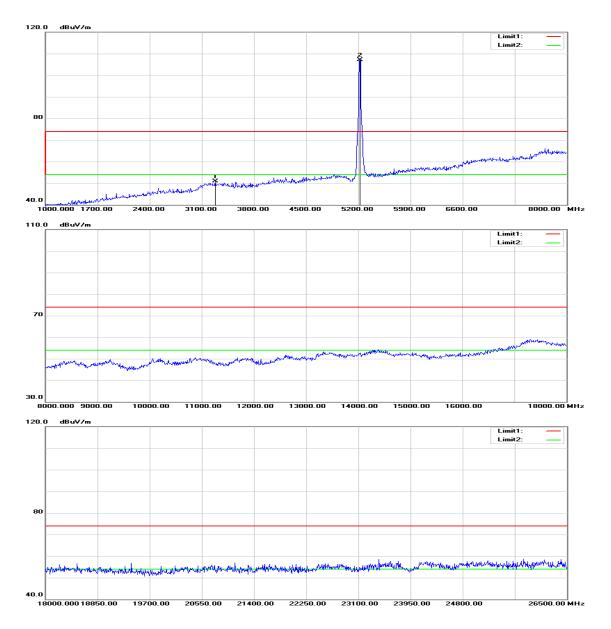
FCC ID: PPQ-WCBN4507R

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2267.000	55.19	-4.34	50.85	74.00	-23.15	peak	V
N/A							
2491.000	54.39	-3.20	51.19	74.00	-22.81	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

## Tx / IEEE 802.11n HT 20 MHz Channel mode / 5220 MHz



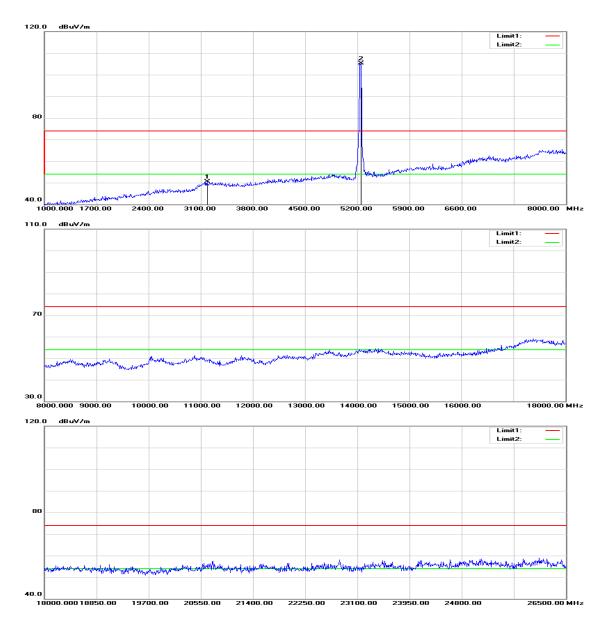


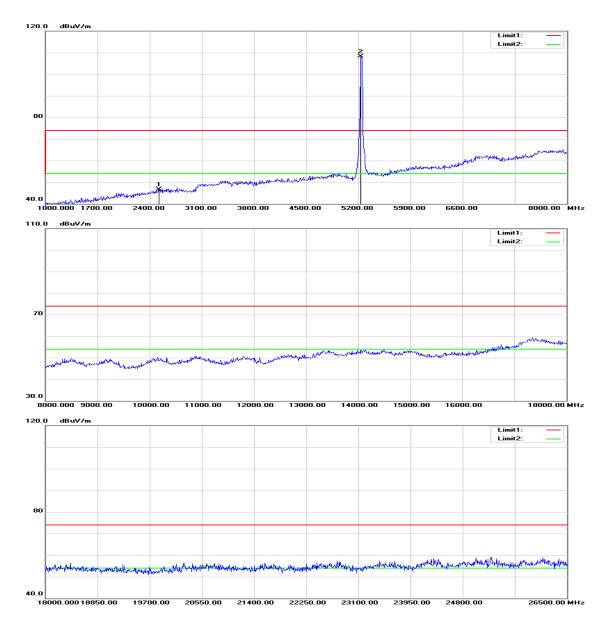
Operation Mode:	Tx / IEEE 802.11n HT 20 MHz Channel mode / 5220 MHz	Test Date:	August 25	5, 2015
Temperature:	27°C	Tested by	: Jason Lu	
Humidity:	53% RH	Polarity:	Ver. / Hor.	

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
4017.000	50.10	1.29	51.39	74.00	-22.61	peak	V
N/A							
3282.000	52.30	-1.43	50.87	74.00	-23.13	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

## Tx / IEEE 802.11n HT 20 MHz Channel mode / 5240 MHz



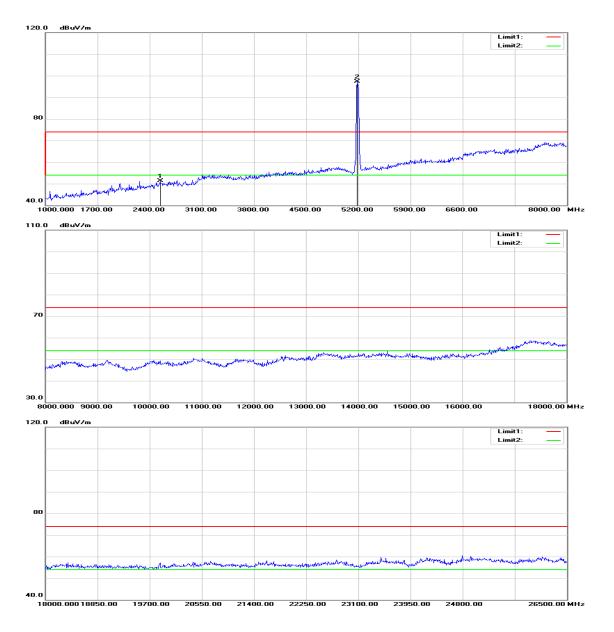


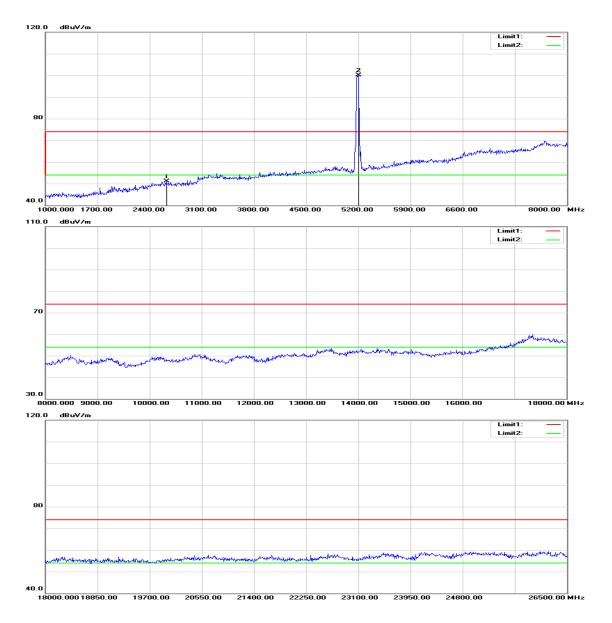
Operation Mode:	Tx / IEEE 802.11n HT 20 MHz Channel mode / 5240 MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by:	Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3184.000	52.26	-1.67	50.59	74.00	-23.41	peak	V
N/A							
2526.000	49.86	-3.07	46.79	74.00	-27.21	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

## Tx / IEEE 802.11n HT 40 MHz mode / 5190 MHz





Operation Mode:	Tx / IEEE 802.11n HT 40 MHz mode / 5190 MHz
Temperature:	27°C
Humidity:	53% RH

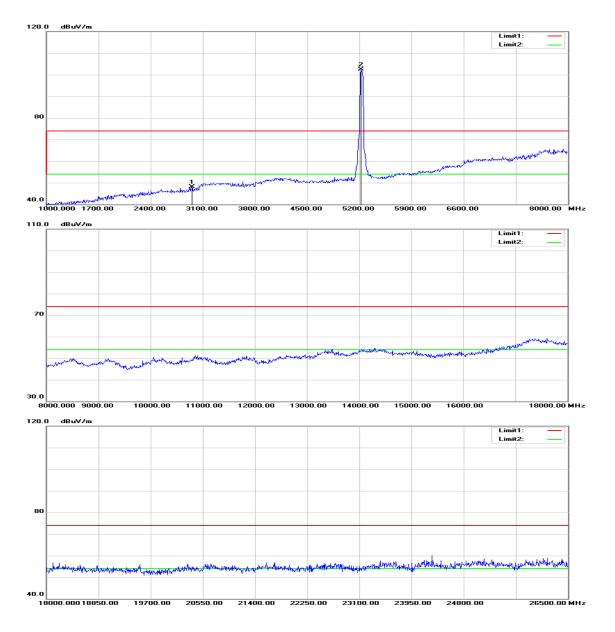
Test Date: August 25, 2015

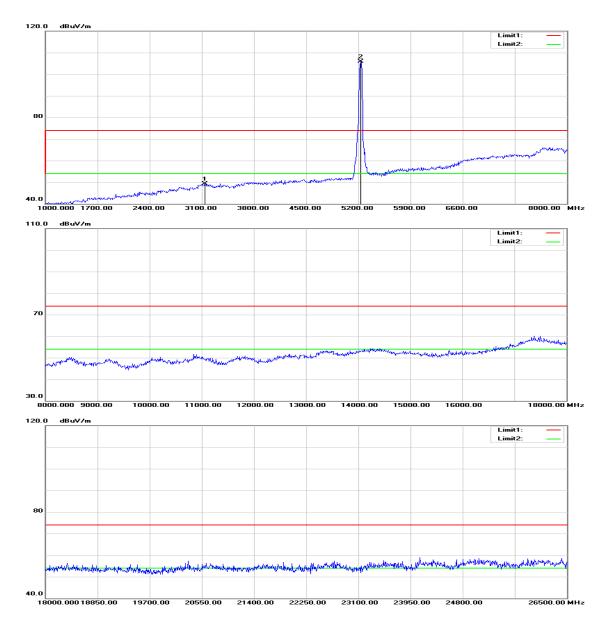
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2540.000	54.37	-3.04	51.33	74.00	-22.67	peak	V
N/A							
2624.000	53.93	-2.87	51.06	74.00	-22.94	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

## Tx / IEEE 802.11n HT 40 MHz mode / 5230 MHz



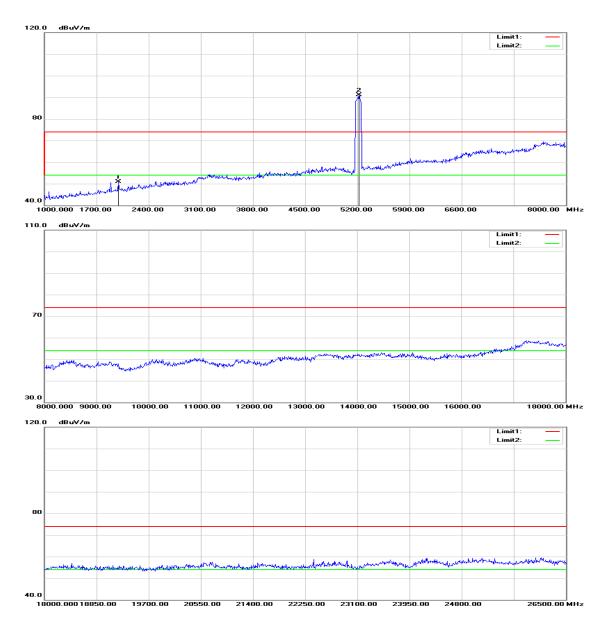


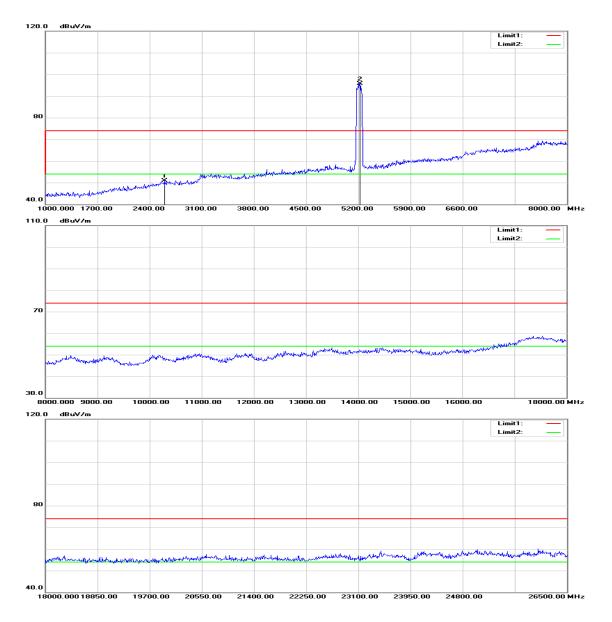
Operation Mode:	Tx / IEEE 802.11n HT 40 MHz mode / 523 MHz	0 <b>Test</b> Date:	August 25, 2015
Temperature:	27°C	Tested by:	Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2953.000	50.29	-2.20	48.09	74.00	-25.91	peak	V
N/A							
3142.000	51.05	-1.77	49.28	74.00	-24.72	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

## Tx / IEEE 802.11ac VHT 80 MHz mode / 5210MHz



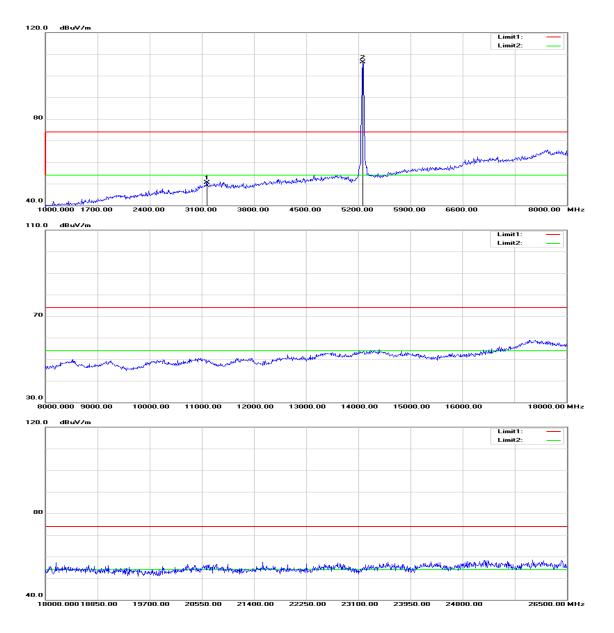


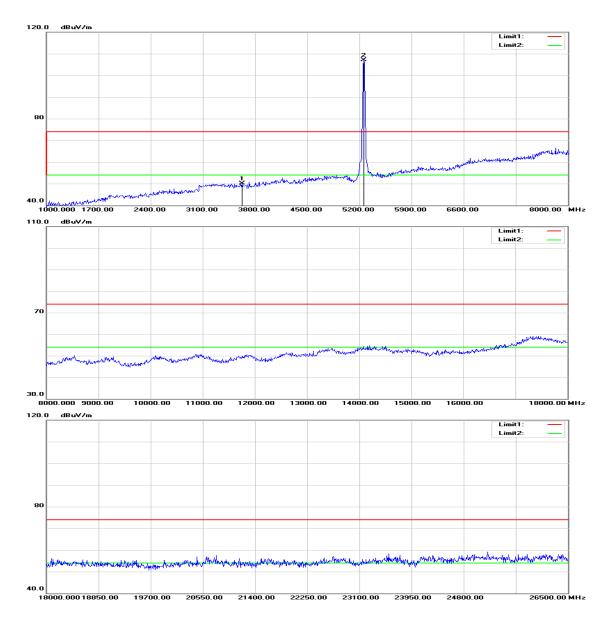
Operation Mode:	Tx / IEEE 802.11ac VHT 80 MHz mode / 5210MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by:	Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1994.000	55.91	-4.91	51.00	74.00	-23.00	peak	V
N/A							
2596.000	53.89	-2.93	50.96	74.00	-23.04	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11a mode / 5260 MHz





Operation Tx / IEEE 802.11a mode / 5260 MHz

53% RH

Test Date: August 25, 2015

Temperature: 27°C

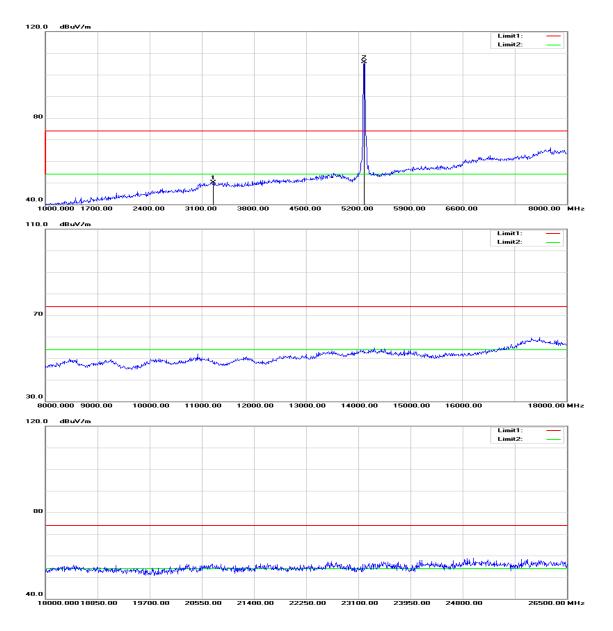
Humidity:

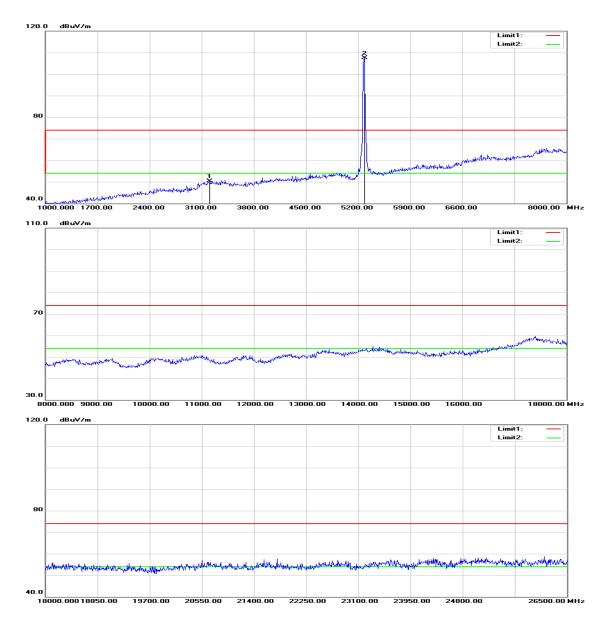
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3170.000	52.24	-1.70	50.54	74.00	-23.46	peak	V
N/A							
3625.000	50.47	-0.38	50.09	74.00	-23.91	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11a mode / 5280 MHz





Operation Tx / IEEE 802.11a mode / 5280 MHz

53% RH

Test Date: August 25, 2015

Temperature: 27°C

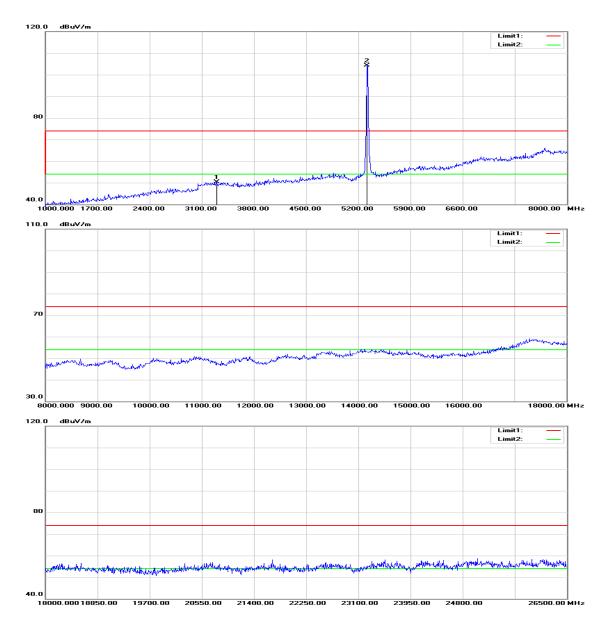
Humidity:

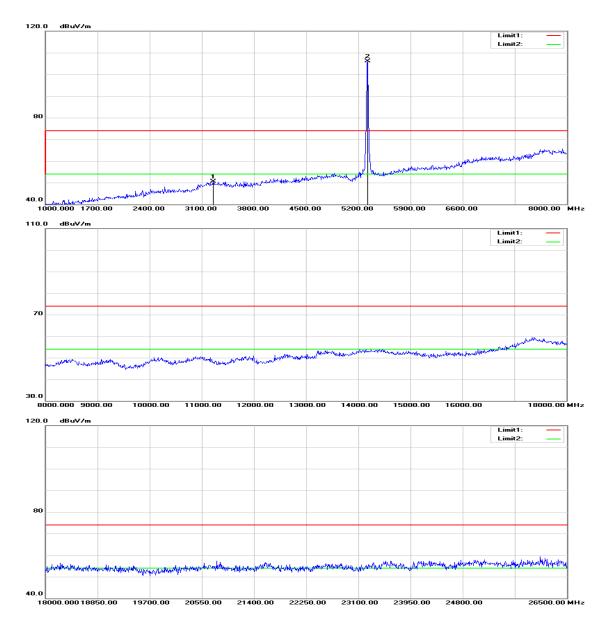
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3254.000	51.53	-1.50	50.03	74.00	-23.97	peak	V
N/A							
3205.000	51.91	-1.62	50.29	74.00	-23.71	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11a mode / 5320 MHz





Operation Mode: Tx / IEEE 802.11a mode / 5320 MHz

Temperature: 27°C

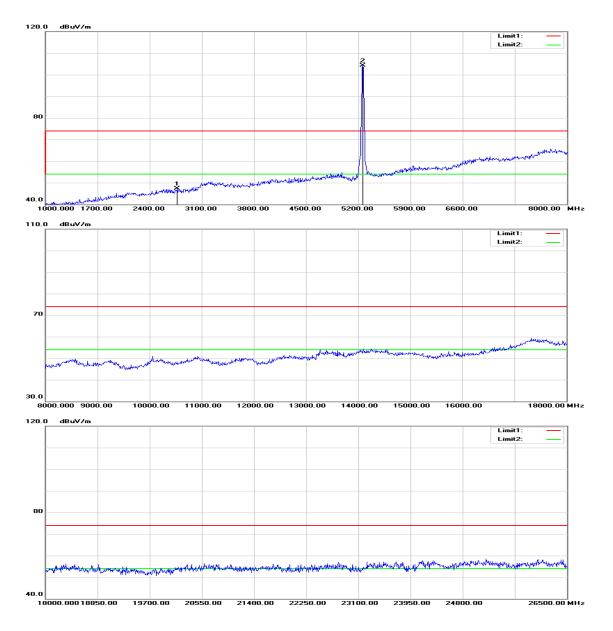
Humidity: 53% RH

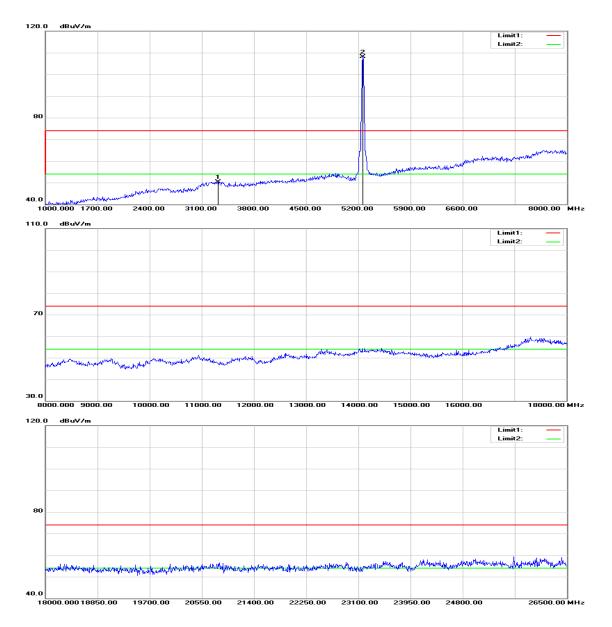
Test Date: August 25, 2015 Tested Jason Lu by: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3296.000	51.64	-1.40	50.24	74.00	-23.76	peak	V
N/A							
3254.000	52.00	-1.50	50.50	74.00	-23.50	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

# Tx / IEEE 802.11n HT 20 MHz Channel mode / 5260 MHz



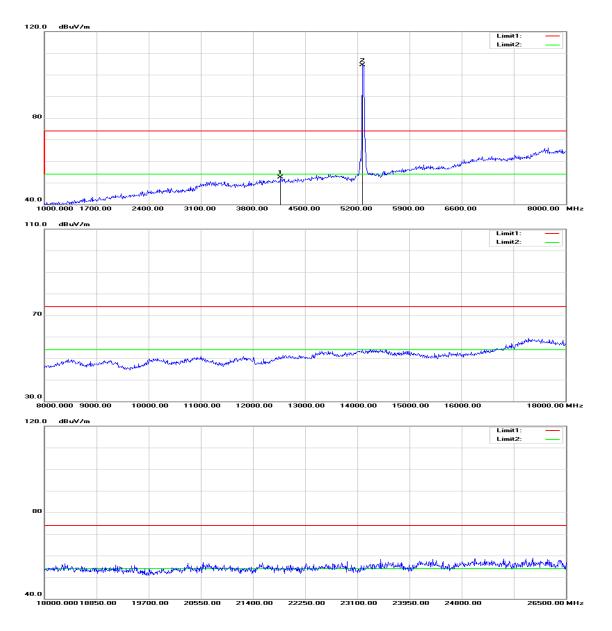


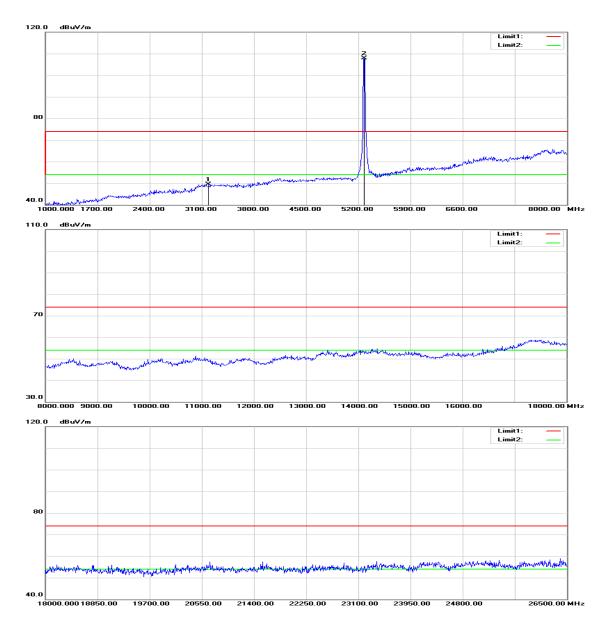
Operation Mode:	Tx / IEEE 802.11n HT 20 MHz Channel mode / 5260 MHz	Test Date: August 25, 2015
Temperature:	27°C	Tested by: Jason Lu
Humidity:	53% RH	Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2771.000	49.79	-2.57	47.22	74.00	-26.78	peak	V
N/A							
3317.000	51.64	-1.35	50.29	74.00	-23.71	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

# Tx / IEEE 802.11n HT 20 MHz Channel mode / 5280 MHz





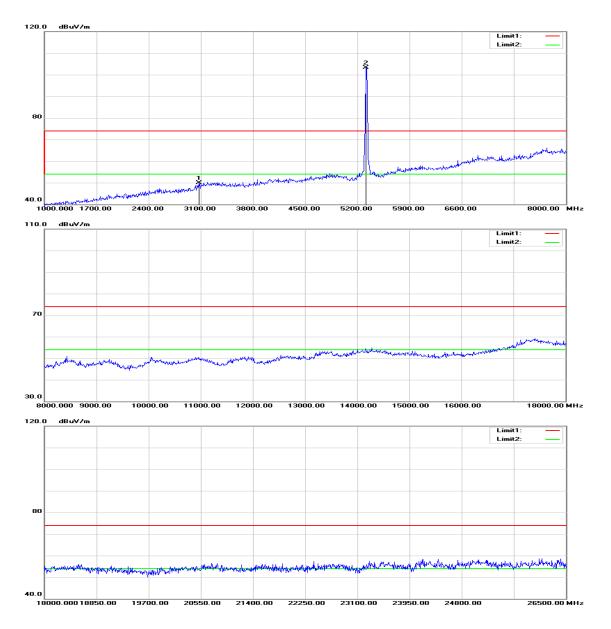
LESRF	Compliance Certific	ation Services Inc.
	FCC ID: PPQ-WCBN4507R	IC: 4491A-WCBN4507R

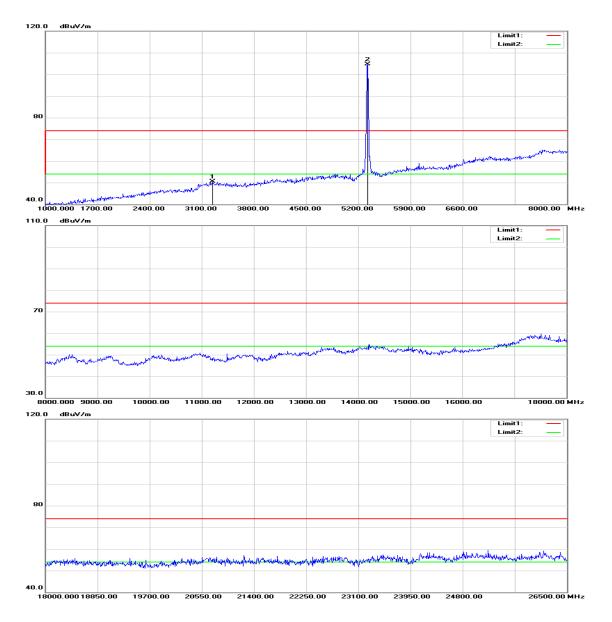
Operation Mode:	Tx / IEEE 802.11n HT 20 MH: mode / 5280 MHz	z Channel Test Date:	: August 2	5, 2015
Temperature:	27°C	Tested by	: Jason Lu	
Humidity:	53% RH	Polarity:	Ver. / Hoi	·.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
4171.000	50.70	1.88	52.58	74.00	-21.42	peak	V
N/A							
3191.000	51.16	-1.65	49.51	74.00	-24.49	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

# Tx / IEEE 802.11n HT 20 MHz Channel mode / 5320 MHz



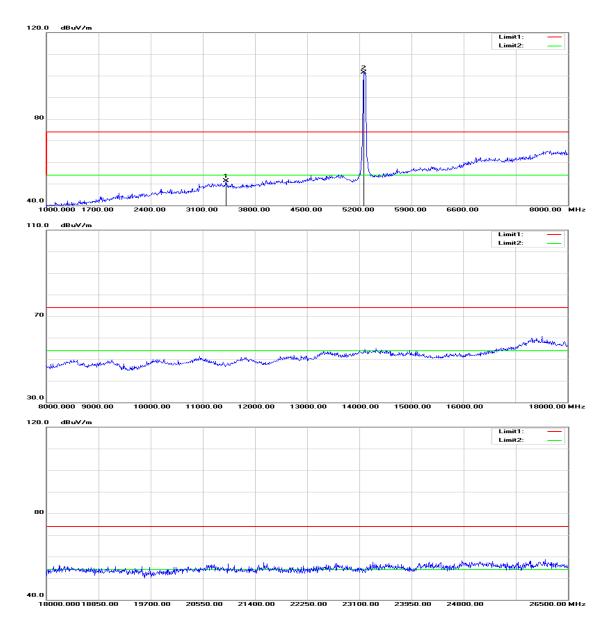


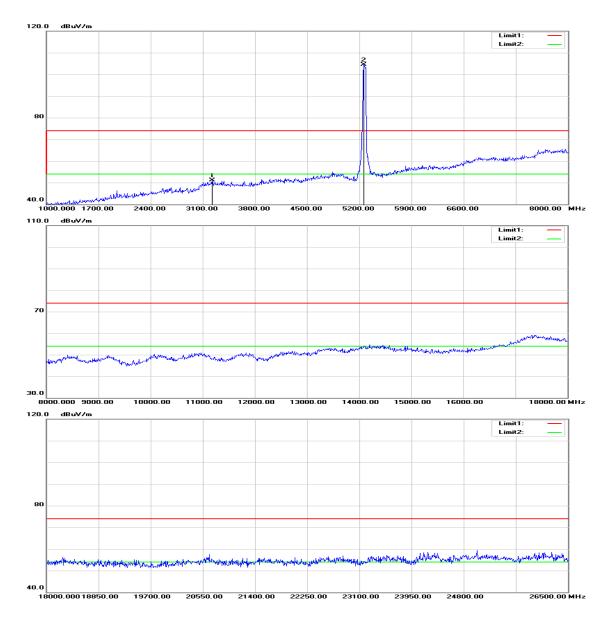
Operation Mode:	Tx / IEEE 802.11n HT 20 MHz Channel mode / 5320 MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by:	Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3072.000	51.89	-1.94	49.95	74.00	-24.05	peak	V
N/A							
3247.000	51.95	-1.52	50.43	74.00	-23.57	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

#### Tx / IEEE 802.11n HT 40 MHz mode / 5270 MHz





Operation Mode:	Tx / IEEE 802.11n HT 40 MHz mode / 5270 MHz
Temperature:	27°C
Humidity:	53% RH

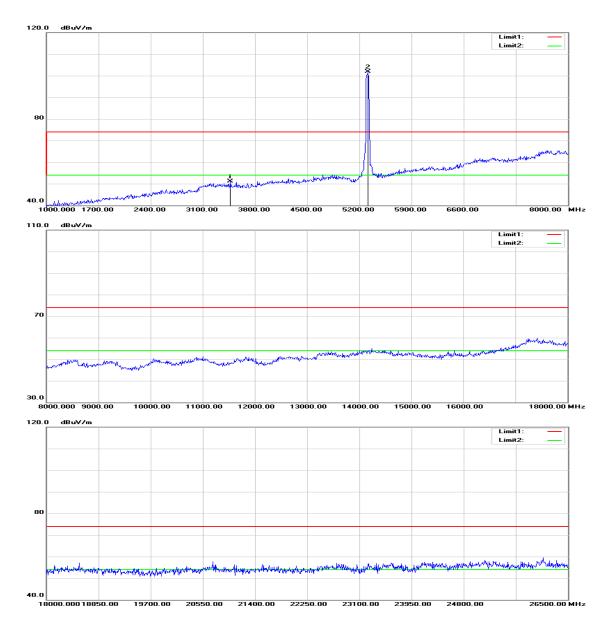
Test Date: August 25, 2015

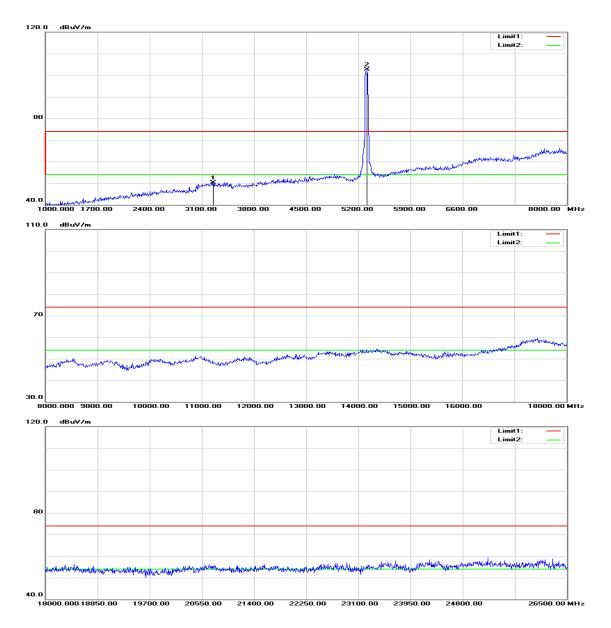
Tested by:Jason LuPolarity:Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3408.000	52.52	-1.13	51.39	74.00	-22.61	peak	V
N/A							
3226.000	52.65	-1.57	51.08	74.00	-22.92	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11n HT 40 MHz mode / 5310 MHz



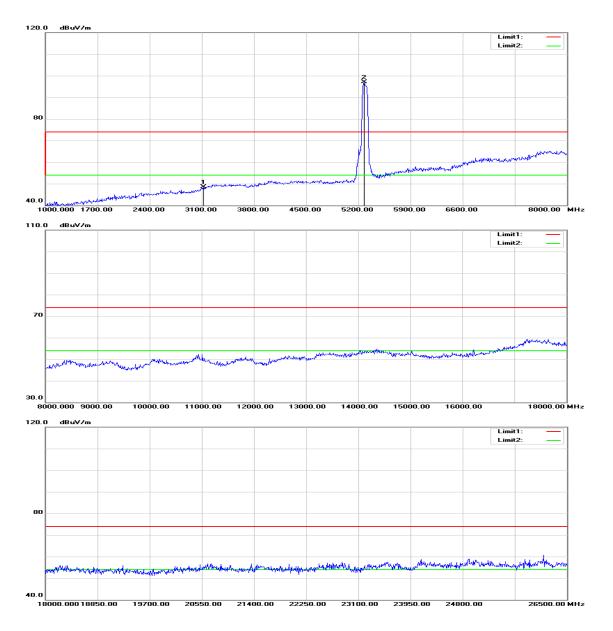


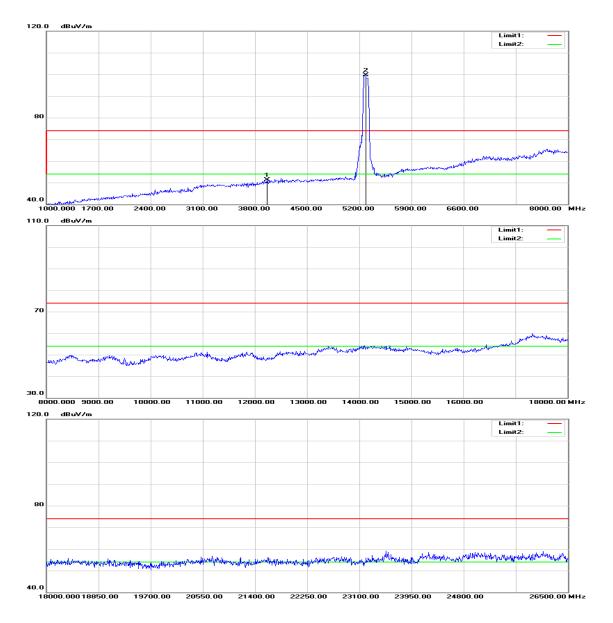
Operation Mode:	Tx / IEEE 802.11n HT 40 MHz mode / 531 MHz	0 <b>Test</b> Date:	August 25, 2015
Temperature:	27°C	Tested by:	Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3471.000	52.13	-0.98	51.15	74.00	-22.85	peak	V
N/A							
3254.000	51.81	-1.50	50.31	74.00	-23.69	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

# Tx / IEEE 802.11ac VHT 80 MHz mode / 5290 MHz



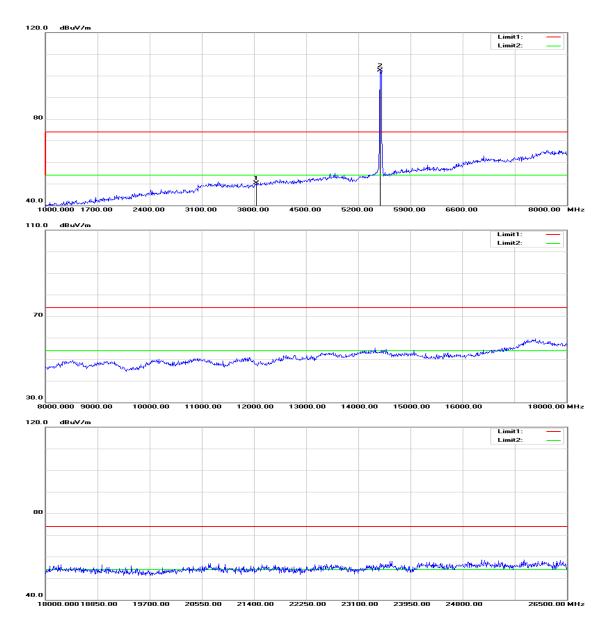


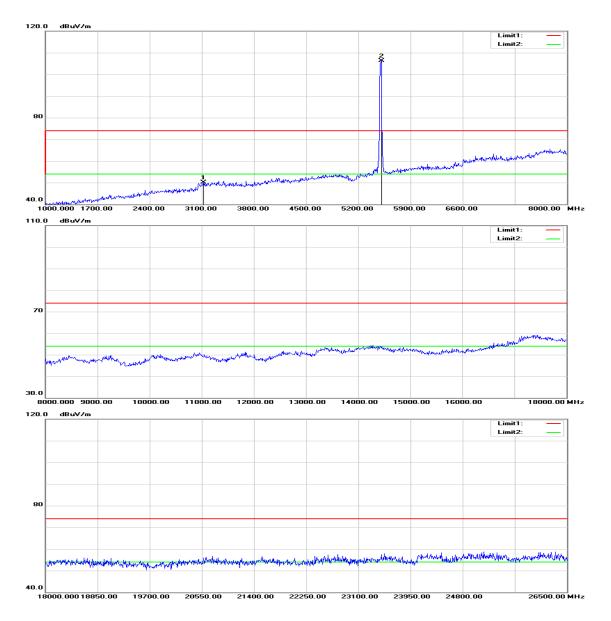
Operation Mode:	Tx / IEEE 802.11ac VHT 80 MHz mode / 5290 MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by:	Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3121.000	50.23	-1.82	48.41	74.00	-25.59	peak	V
N/A							
3961.000	50.22	1.06	51.28	74.00	-22.72	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

#### Tx / IEEE 802.11a mode / 5500 MHz





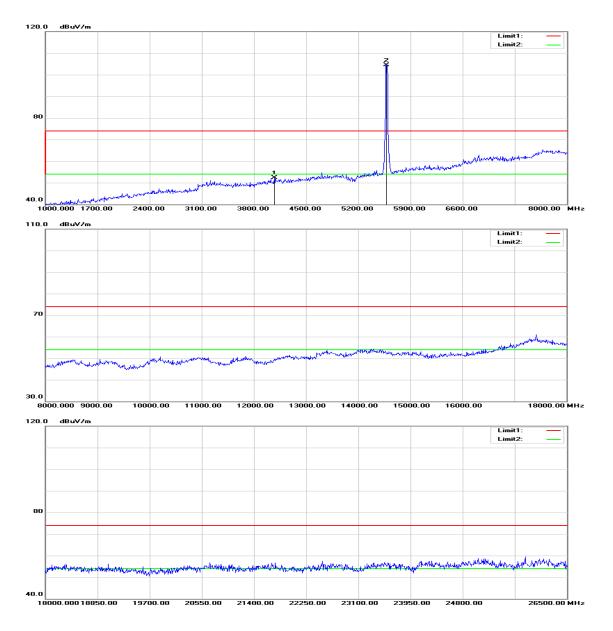
Operation Mode:	Tx / IEEE 802.11a mode / 5500 MHz	Т
Temperature:	27°C	Т
Humidity:	53% RH	F

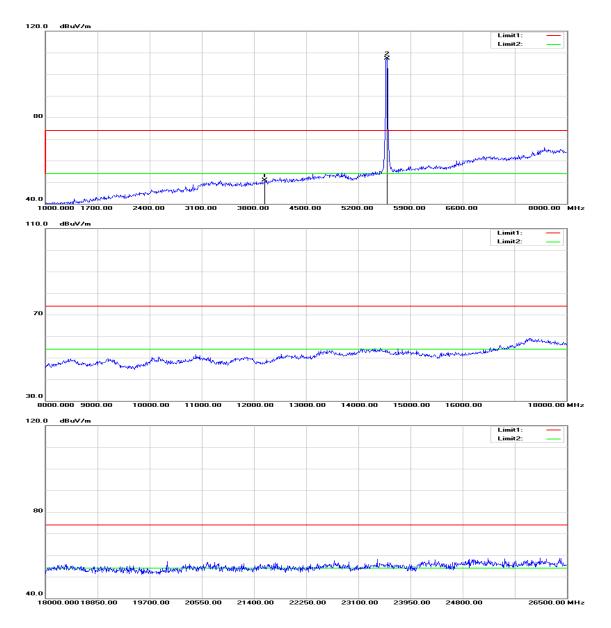
Test Date: August 25, 2015 Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3835.000	49.88	0.52	50.40	74.00	-23.60	peak	V
N/A							
3121.000	51.92	-1.82	50.10	74.00	-23.90	peak	н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

# Tx / IEEE 802.11a mode / 5580 MHz





Operation Tx / IEEE 802.11a mode / 5580 MHz

53% RH

Test Date: August 25, 2015

Temperature: 27°C

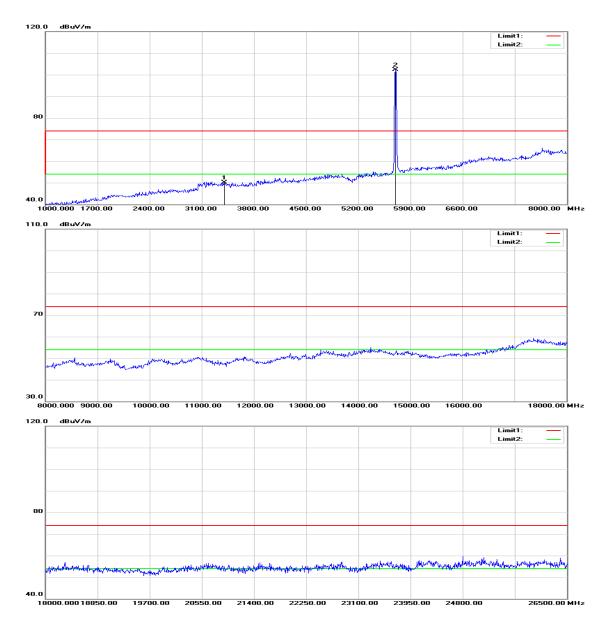
Humidity:

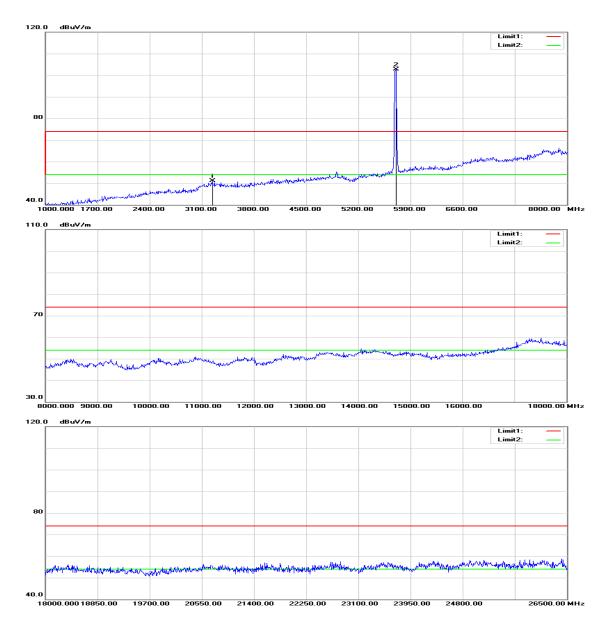
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
4073.000	50.82	1.51	52.33	74.00	-21.67	peak	V
N/A							
3947.000	49.91	1.00	50.91	74.00	-23.09	peak	н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

# Tx / IEEE 802.11a mode / 5700 MHz





Operation Tx / IEEE 802.11a mode / 5700 MHz

53% RH

Test Date: August 25, 2015

Temperature: 27°C

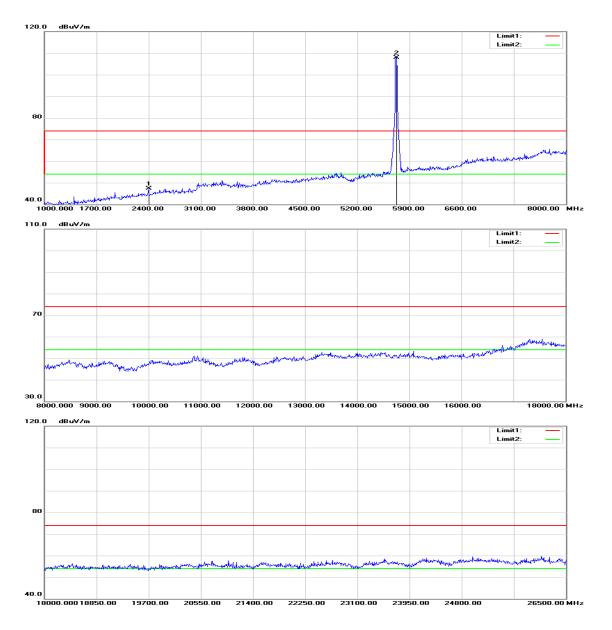
Humidity:

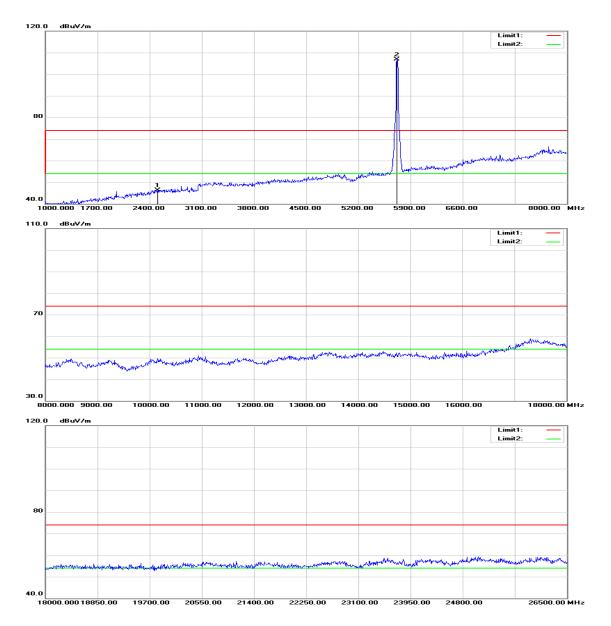
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3401.000	51.34	-1.15	50.19	74.00	-23.81	peak	V
N/A							
3240.000	52.65	-1.53	51.12	74.00	-22.88	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

# Tx / IEEE 802.11a mode / 5720 MHz





Operation Tx / IEEE 802.11a mode / 5720 MHz

53% RH

Test Date: August 25, 2015

Temperature: 27°C

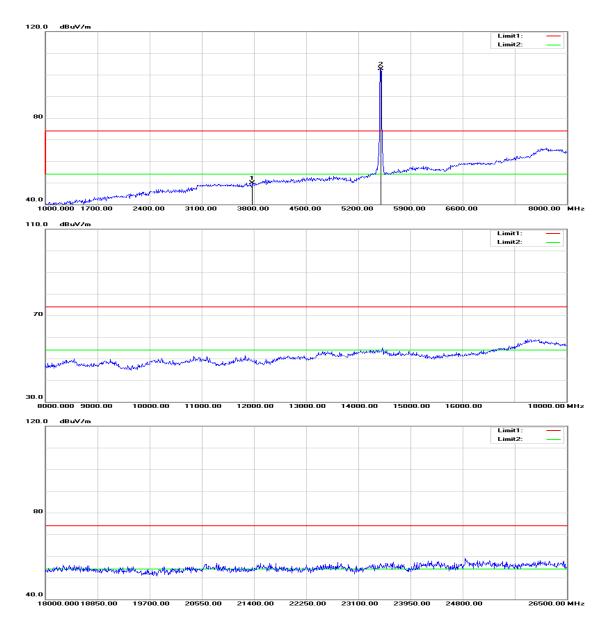
Humidity:

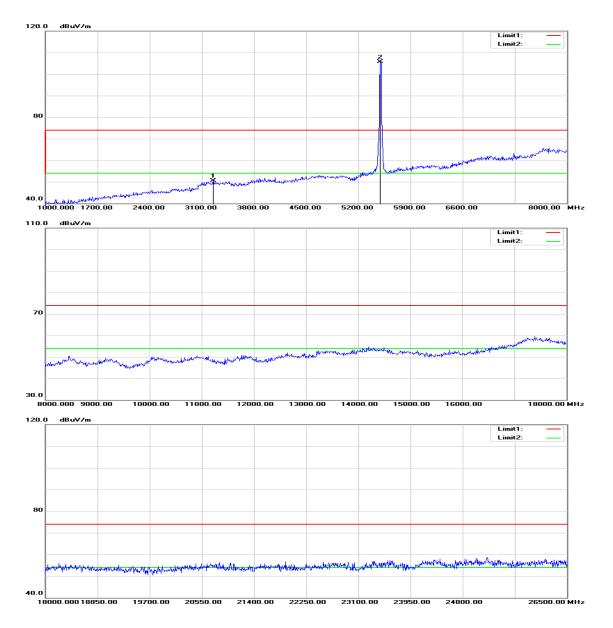
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2400.000	50.90	-3.69	47.21	74.00	-26.79	peak	V
N/A							
2505.000	49.48	-3.11	46.37	74.00	-27.63	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11n HT 20 MHz Channel mode / 5500 MHz



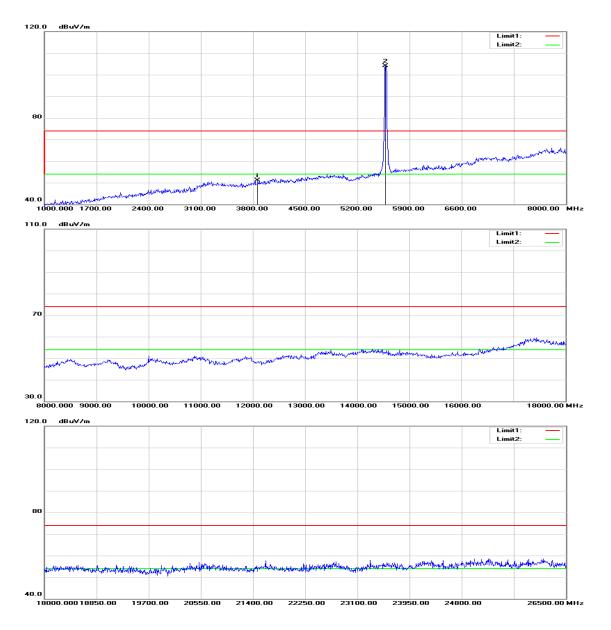


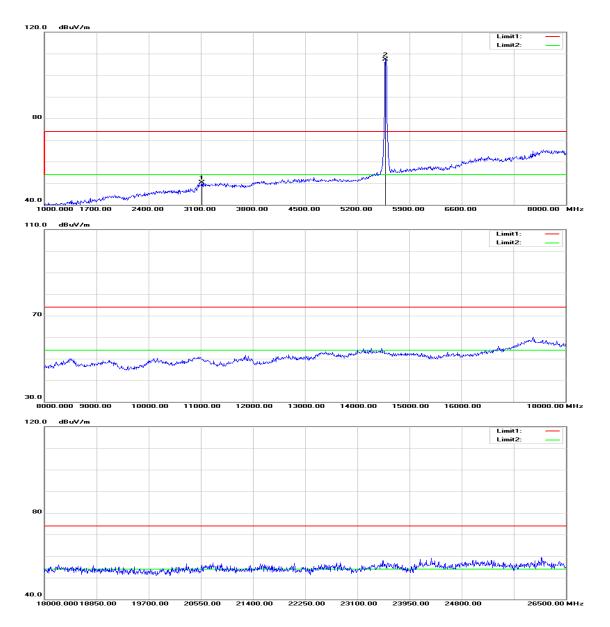
Operation Mode:	Tx / IEEE 802.11n HT 20 MHz Channel mode / 5500 MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by	: Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3779.000	49.70	0.28	49.98	74.00	-24.02	peak	V
N/A							
3254.000	52.02	-1.50	50.52	74.00	-23.48	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11n HT 20 MHz Channel mode / 5580 MHz



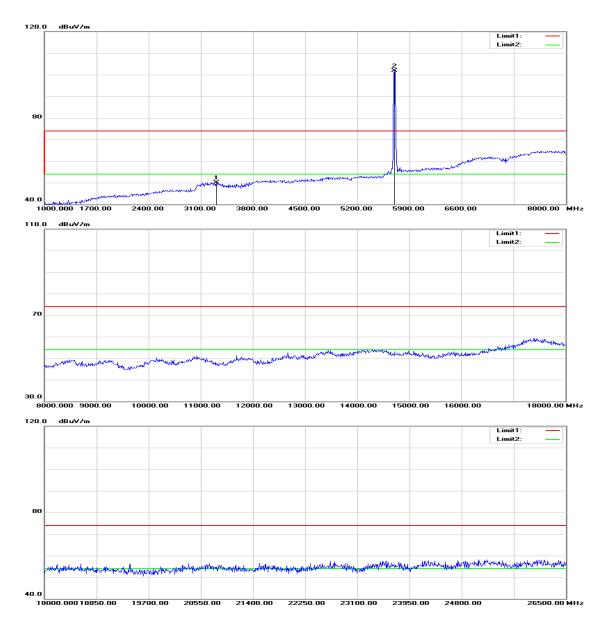


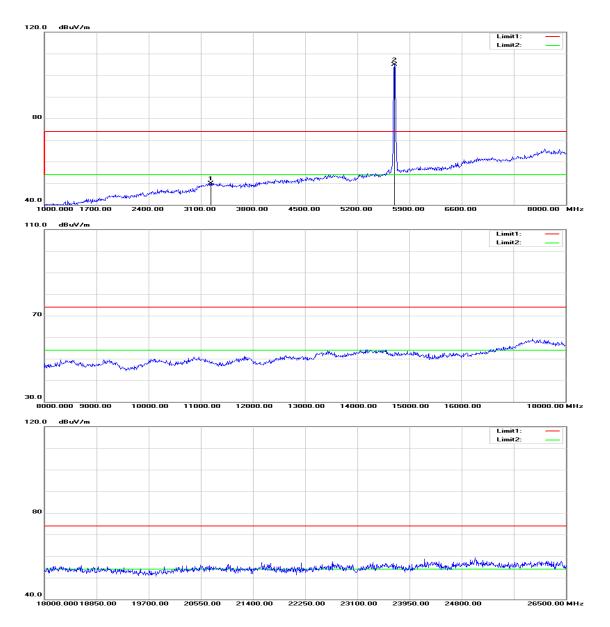
Operation Mode:	Tx / IEEE 802.11n HT 20 MHz Channel mode / 5580 MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by:	: Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3863.000	50.46	0.64	51.10	74.00	-22.90	peak	V
N/A							
3114.000	52.04	-1.84	50.20	74.00	-23.80	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11n HT 20 MHz Channel mode / 5700 MHz



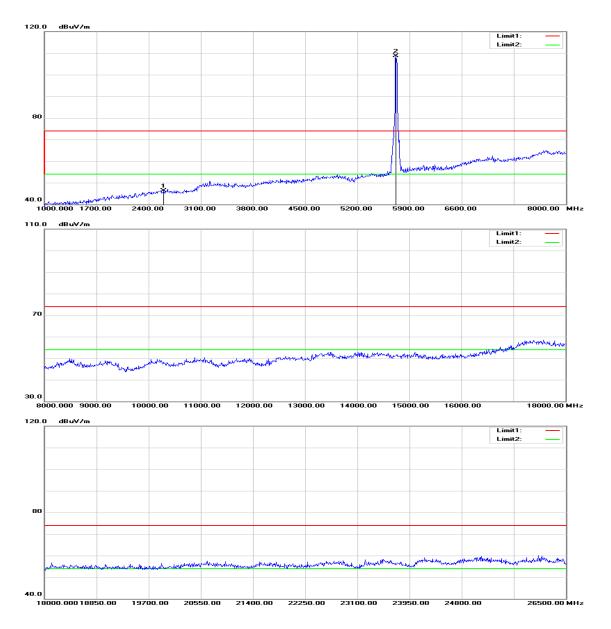


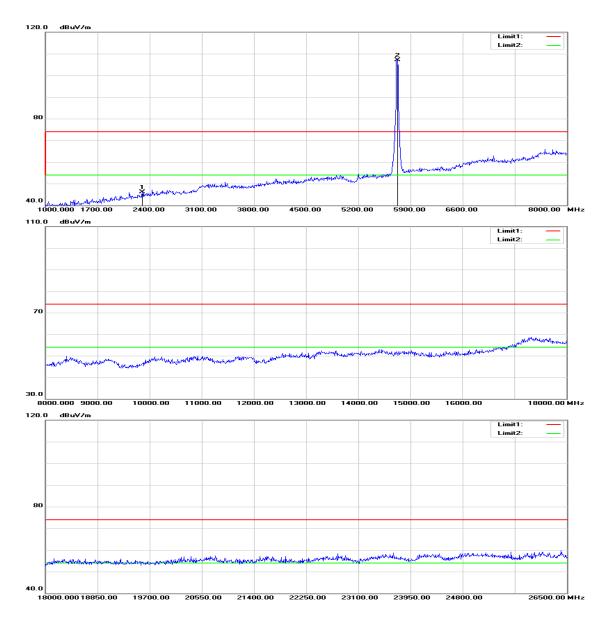
Operation Mode:	Tx / IEEE 802.11n HT 20 MHz Channel mode / 5700 MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by:	Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3310.000	51.50	-1.37	50.13	74.00	-23.87	peak	V
N/A							
3233.000	51.54	-1.55	49.99	74.00	-24.01	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

## Tx / IEEE 802.11n HT 20 MHz Channel mode / 5720 MHz



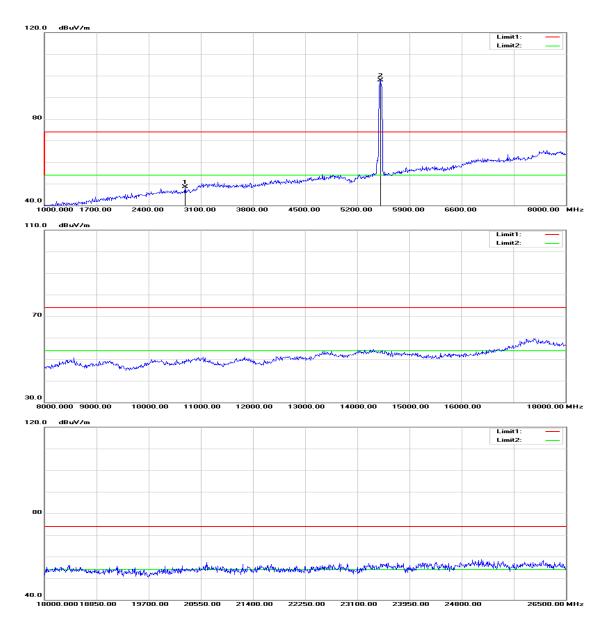


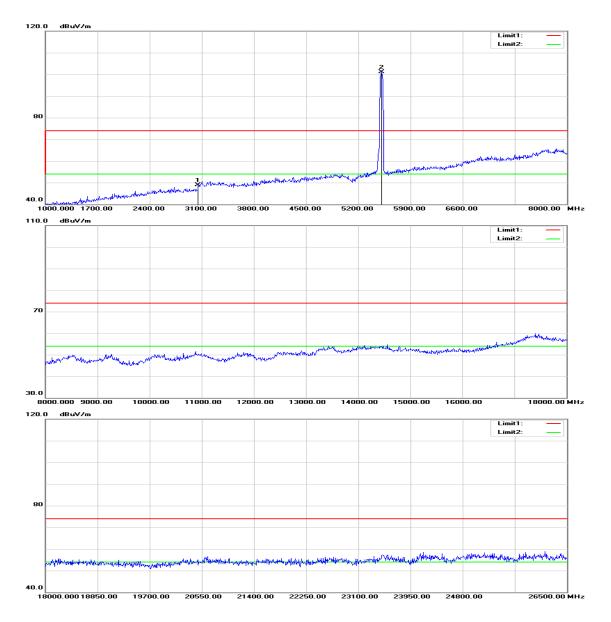
Operation Mode:	Tx / IEEE 802.11n HT 20 MHz Channel mode / 5720 MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by:	Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2603.000	49.30	-2.91	46.39	74.00	-27.61	peak	V
N/A							
2302.000	50.41	-4.29	46.12	74.00	-27.88	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11n HT 40 MHz mode / 5510 MHz





Operation Mode:	Tx / IEEE 802.11n HT 40 MHz mode / 5510 MHz
Temperature:	27°C
Humidity:	53% RH

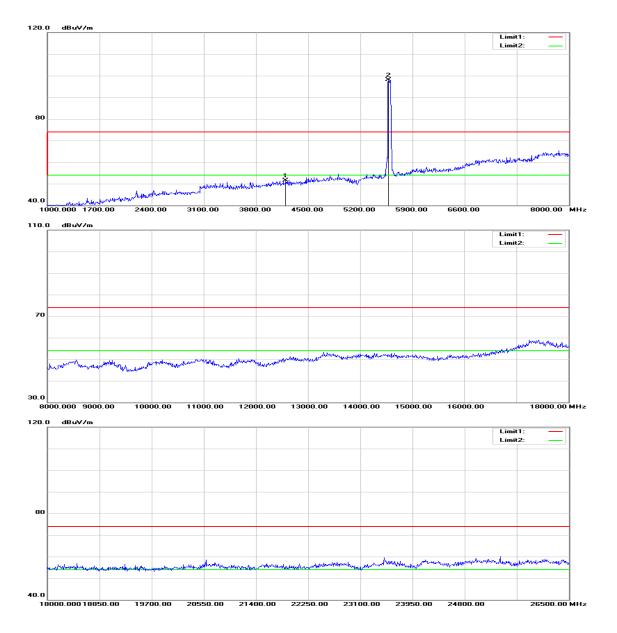
Test Date: August 25, 2015

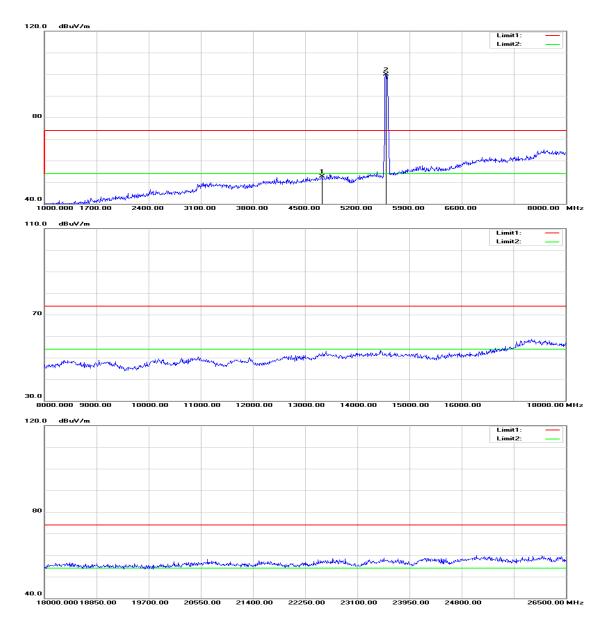
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2890.000	50.87	-2.33	48.54	74.00	-25.46	peak	V
N/A							
3051.000	50.93	-1.99	48.94	74.00	-25.06	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11n HT 40 MHz mode / 5590 MHz





Operation Mode:	Tx / IEEE 802.11n HT 40 MHz mode / 5590 MHz
Temperature:	27°C
Humidity:	53% RH

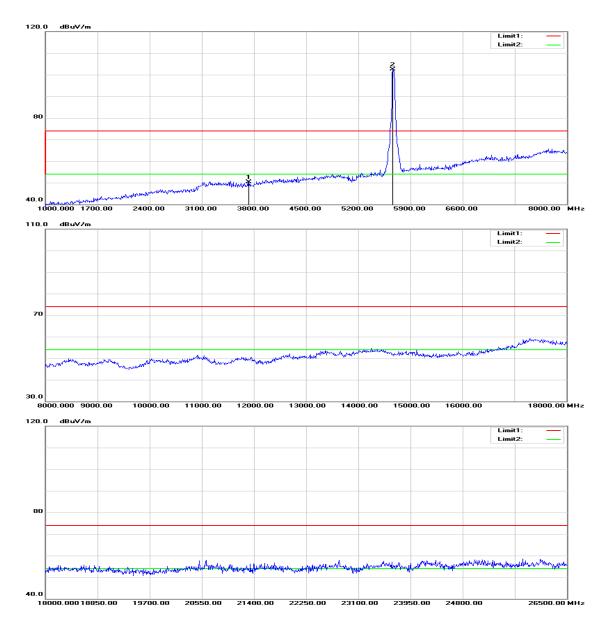
Test Date: August 25, 2015

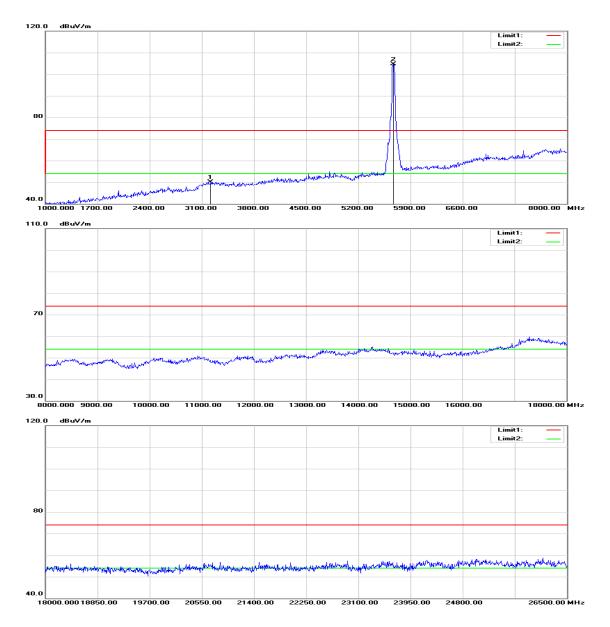
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
4199.000	49.51	1.98	51.49	74.00	-22.51	peak	V
N/A							
4724.000	48.90	3.75	52.65	74.00	-21.35	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11n HT 40 MHz mode / 5670 MHz





Operation Mode:	Tx / IEEE 802.11n HT 40 MHz mode / 5670 MHz
Temperature:	27°C
Humidity:	53% RH

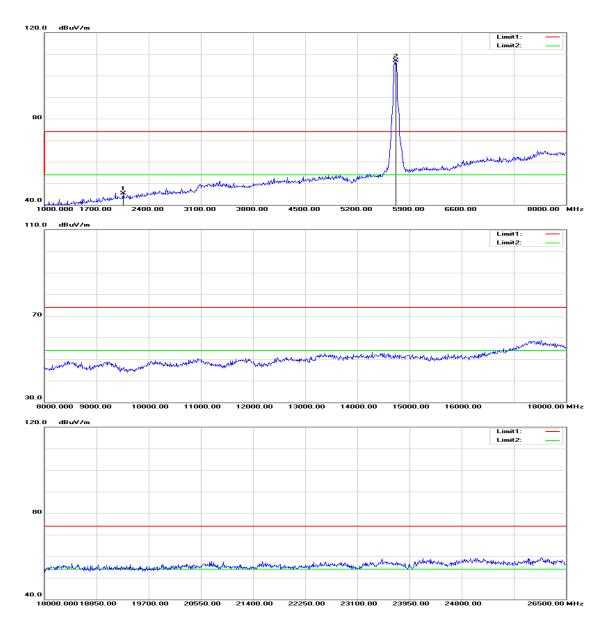
Test Date: August 25, 2015

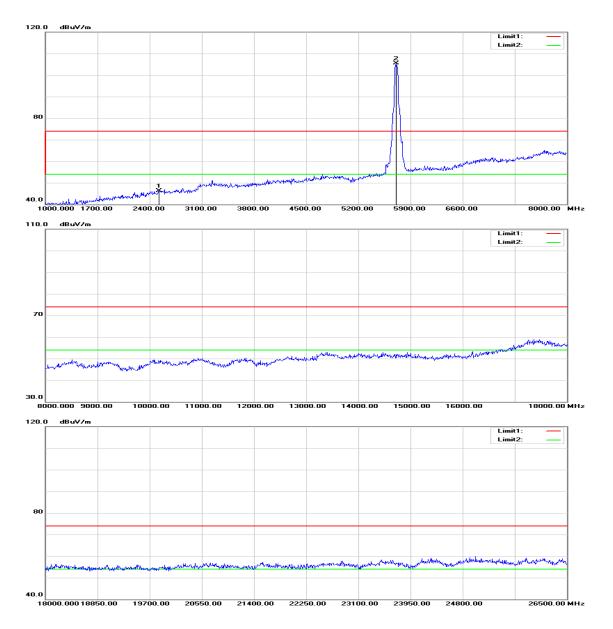
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
3730.000	50.25	0.07	50.32	74.00	-23.68	peak	V
N/A							
3219.000	51.76	-1.58	50.18	74.00	-23.82	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11n HT 40 MHz mode / 5710 MHz





Operation Mode:	Tx / IEEE 802.11n HT 40 MHz mode / 5710 MHz
Temperature:	27°C
Humidity:	53% RH

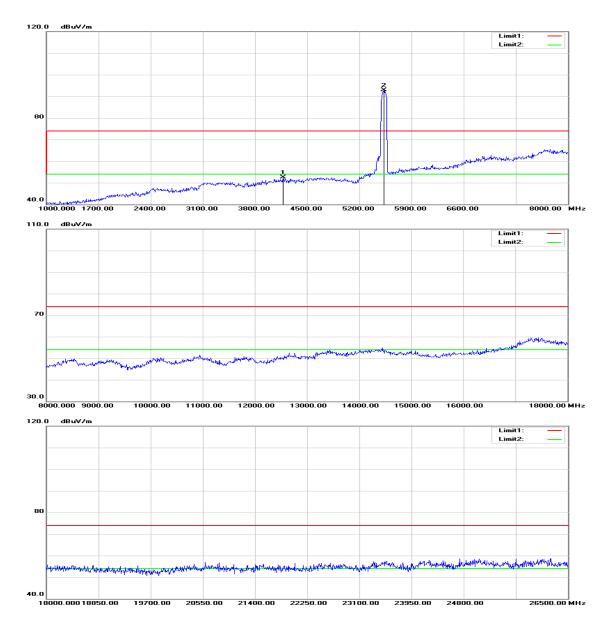
Test Date: August 25, 2015

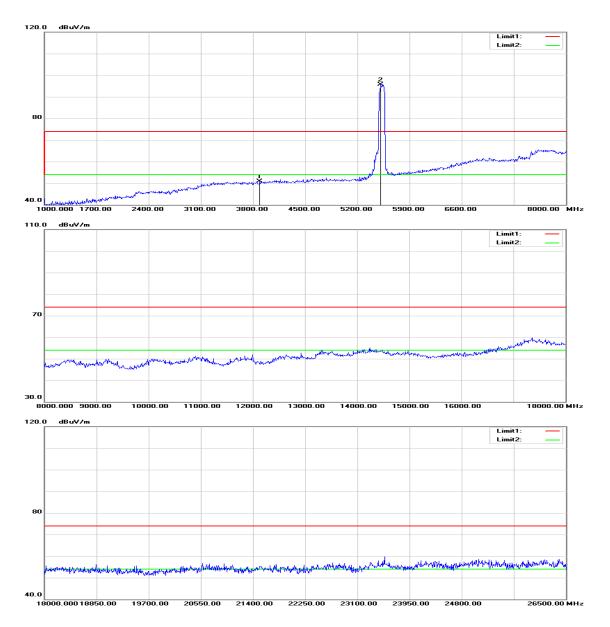
Tested by: Jason Lu Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2057.000	50.18	-4.94	45.24	74.00	-28.76	peak	V
N/A							
2526.000	49.29	-3.07	46.22	74.00	-27.78	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11ac VHT 80 MHz mode / 5530 MHz



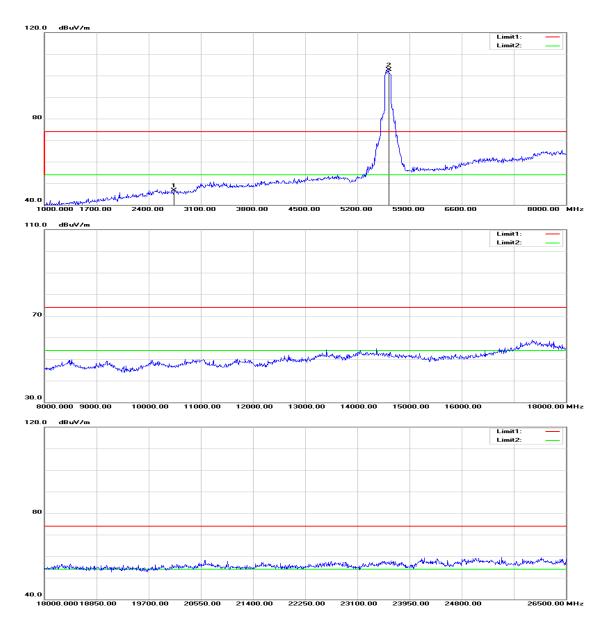


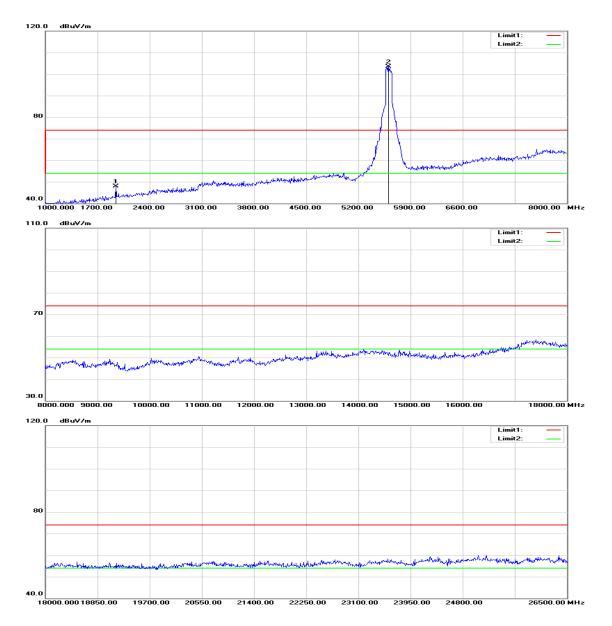
Operation Mode:	Tx / IEEE 802.11ac VHT 80 MHz mode / 5530 MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by:	: Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
4178.000	50.55	1.90	52.45	74.00	-21.55	peak	V
N/A							
3891.000	50.06	0.76	50.82	74.00	-23.18	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11ac VHT 80 MHz mode / 5610 MHz



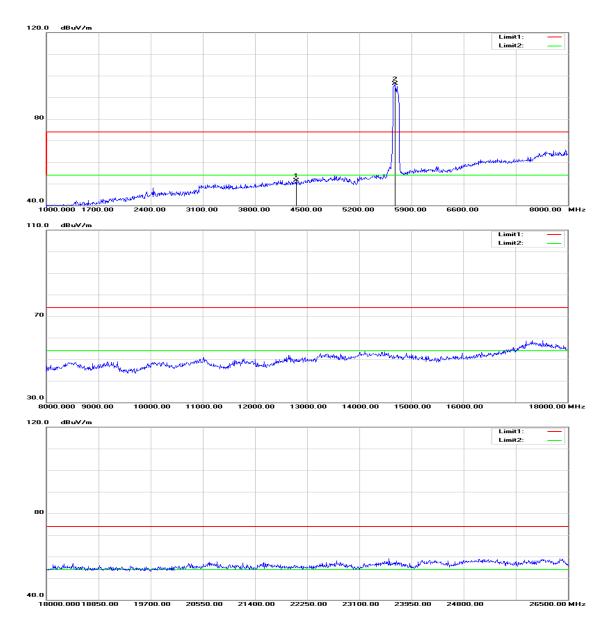


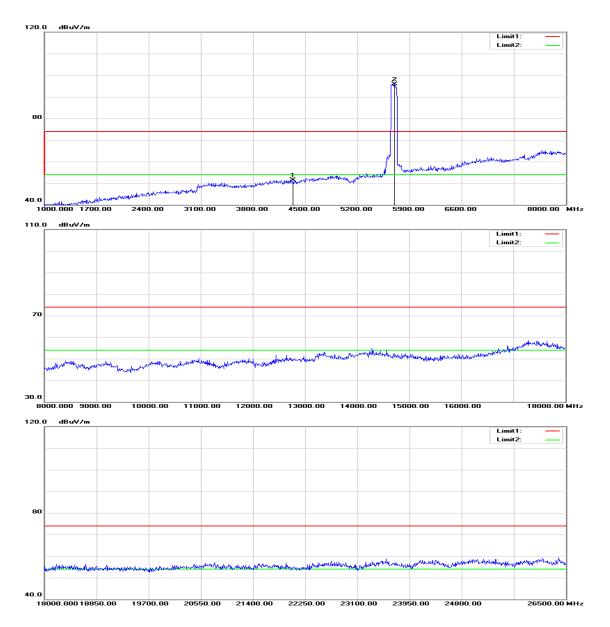
Operation Mode:	Tx / IEEE 802.11ac VHT 80 MHz mode / 5610 MHz	Test Date: August 25, 20	015
Temperature:	27°C	Tested by: Jason Lu	
Humidity:	53% RH	Polarity: Ver. / Hor.	

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2743.000	49.35	-2.63	46.72	74.00	-27.28	peak	V
N/A							
1945.000	53.02	-5.17	47.85	74.00	-26.15	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

### Tx / IEEE 802.11ac VHT 80 MHz mode / 5690 MHz





Operation Mode:	Tx / IEEE 802.11ac VHT 80 MHz mode / 5690 MHz	Test Date:	August 25, 2015
Temperature:	27°C	Tested by:	: Jason Lu
Humidity:	53% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
4353.000	49.01	2.56	51.57	74.00	-22.43	peak	V
N/A							
4339.000	49.08	2.51	51.59	74.00	-22.41	peak	Н
N/A							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).