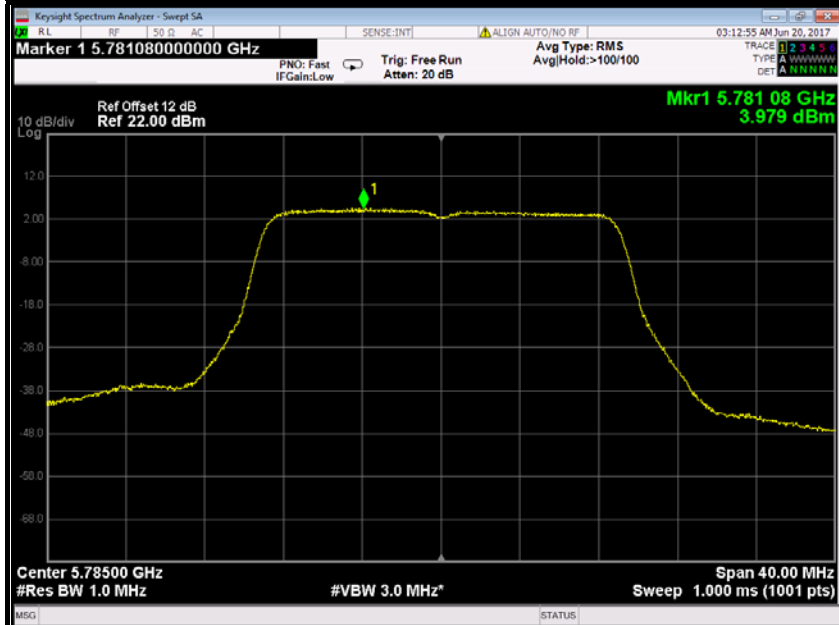
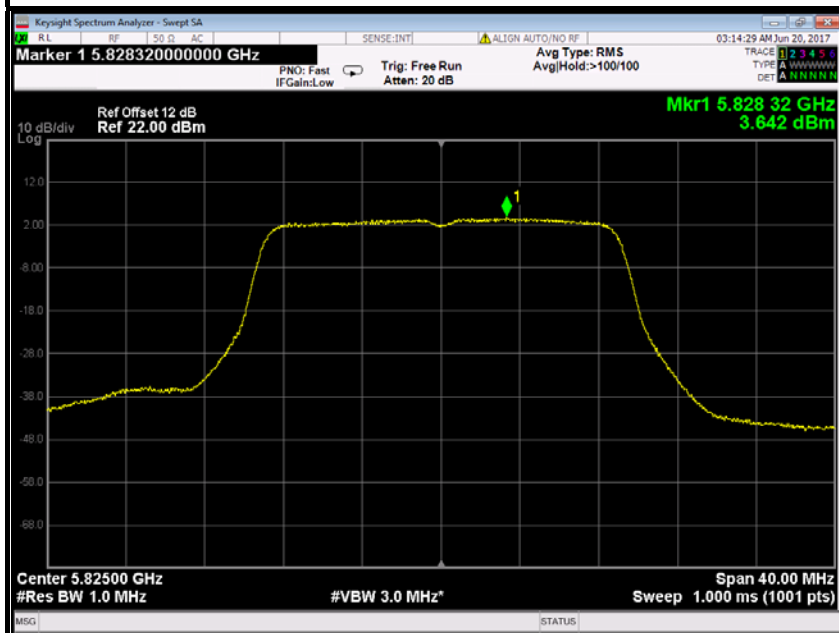




### PPSD (CH Mid)



### PPSD (CH High)

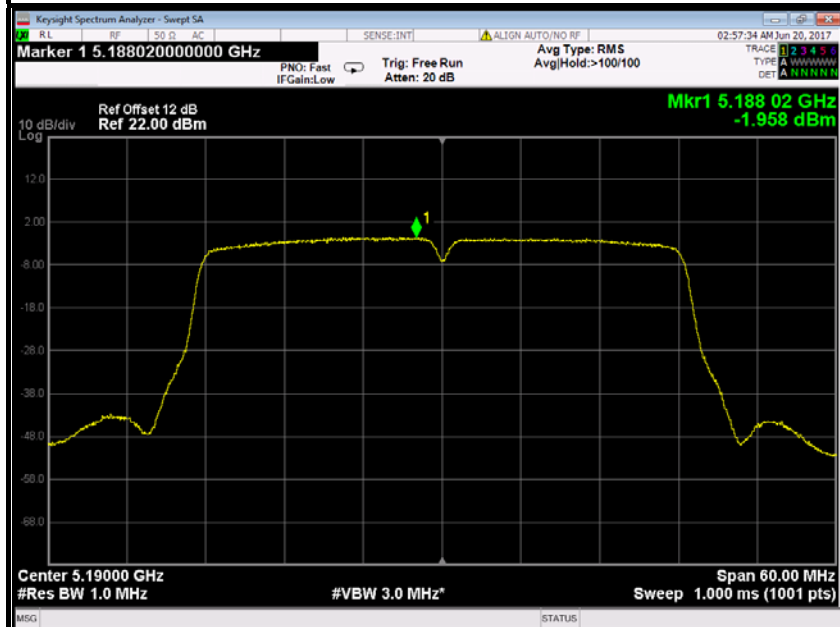




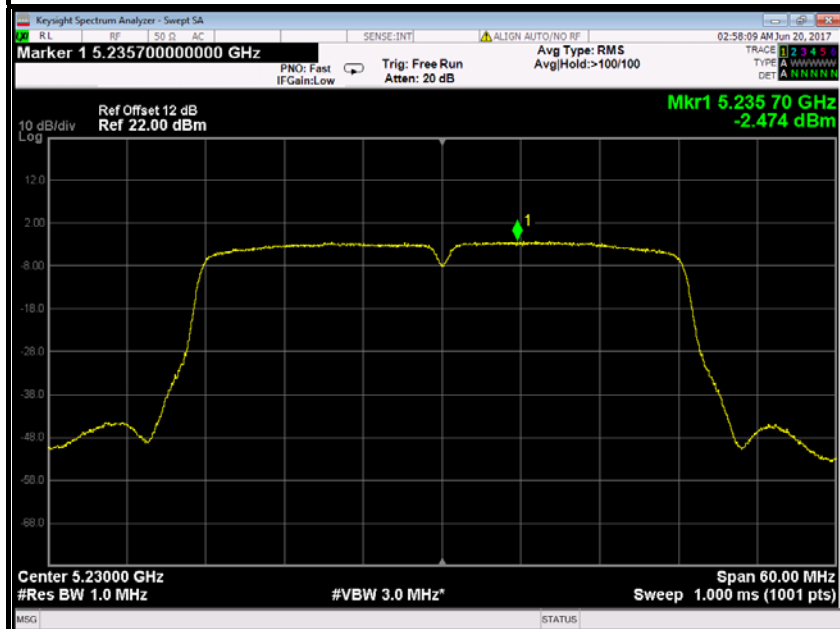
## Antenna 0

IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz

### PPSD (CH Low)



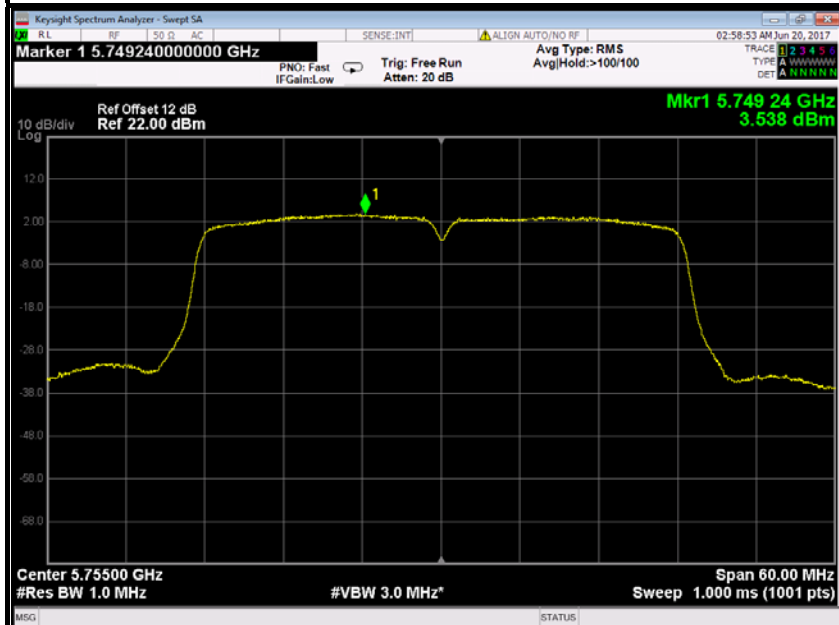
### PPSD (CH High)



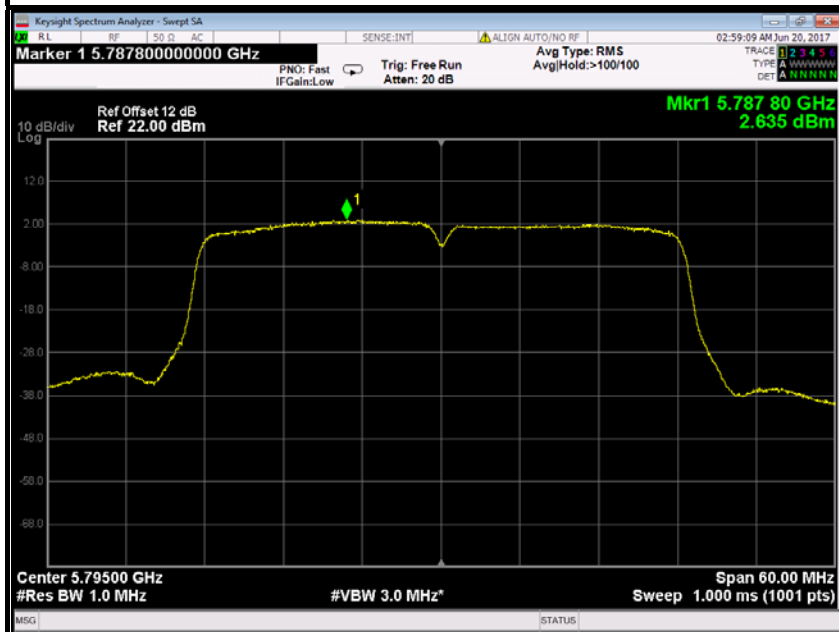


IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz

PPSD (CH Low)



PPSD (CH High)

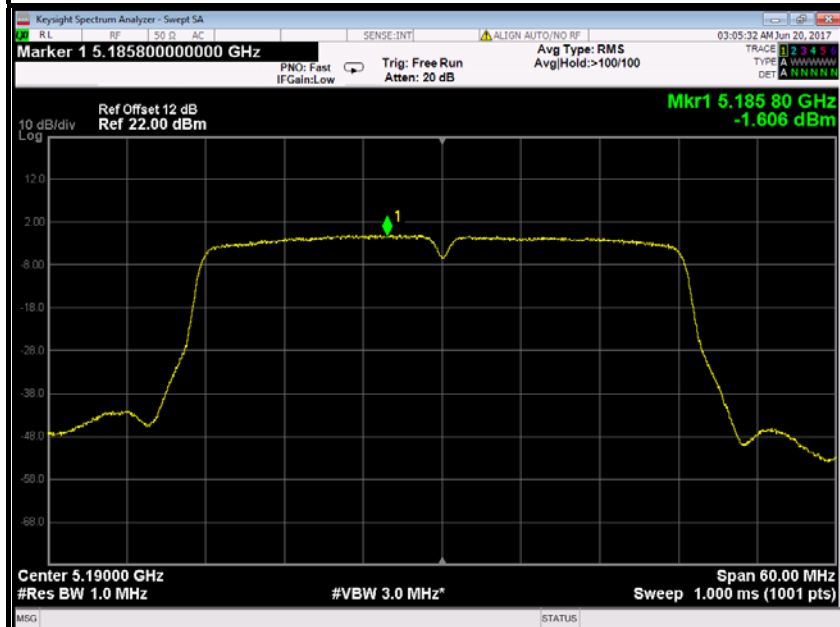




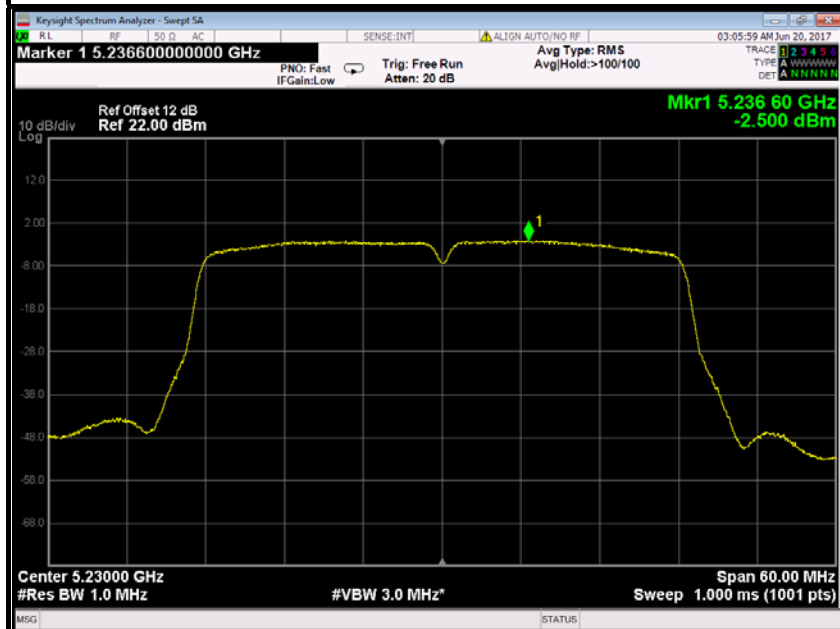
### Antenna 1

IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz

#### PPSD (CH Low)



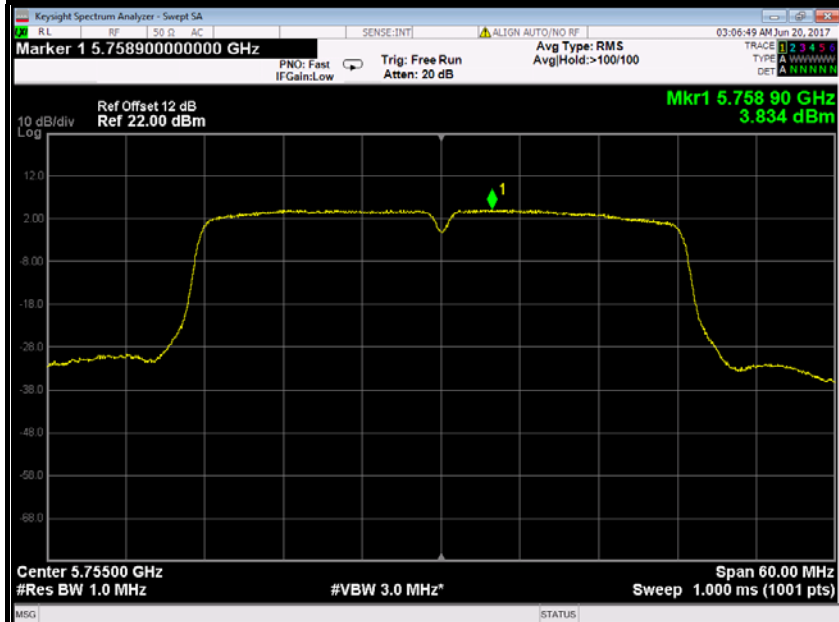
#### PPSD (CH High)



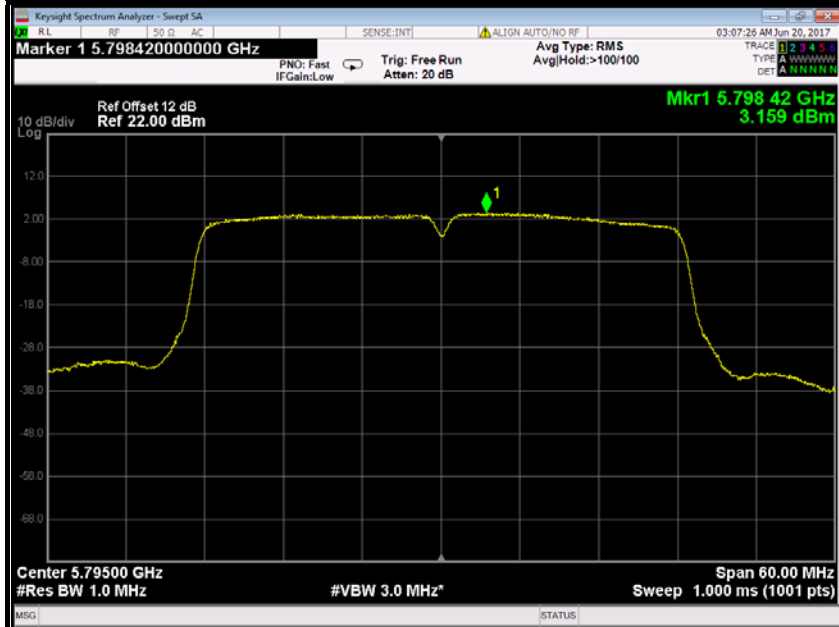


IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz

PPSD (CH Low)



PPSD (CH High)

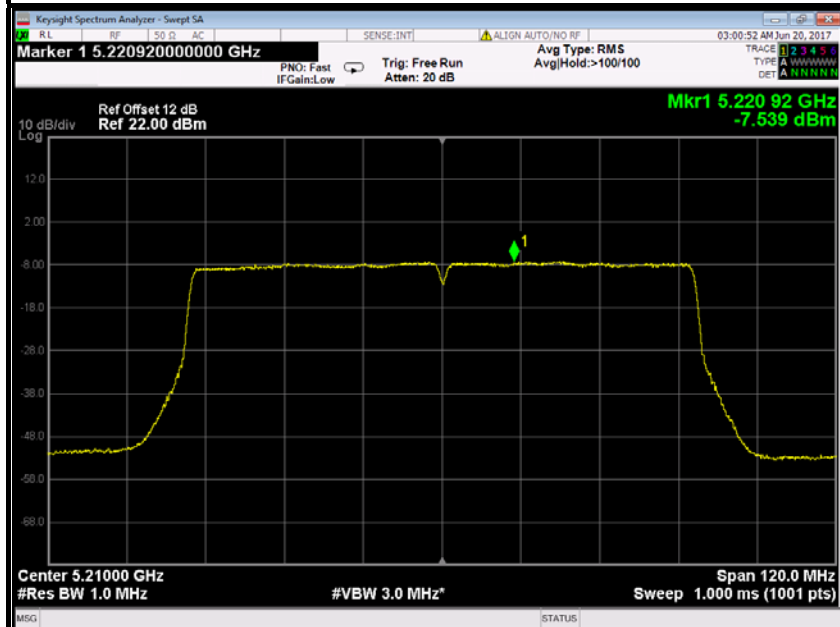




### Antenna 0

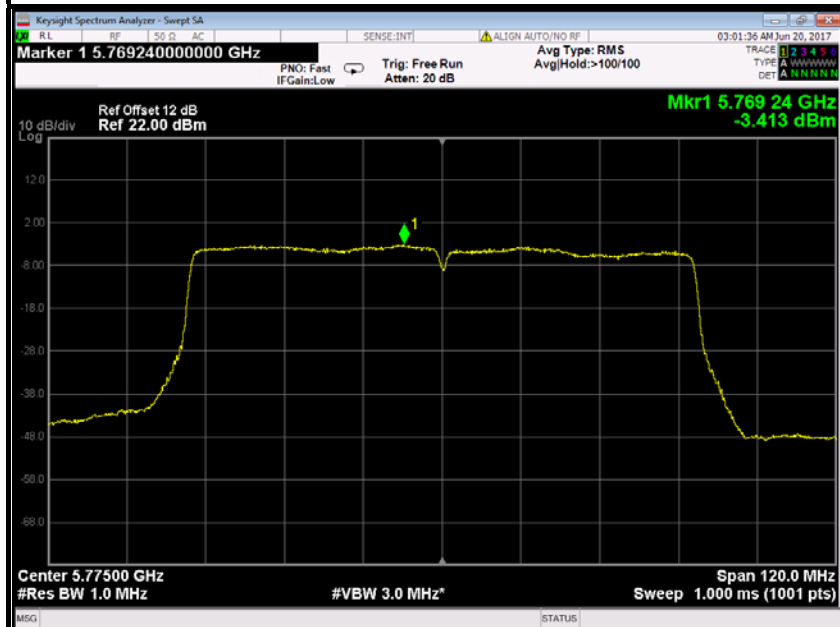
IEEE 802.11ac 80 mode / 5210MHz

#### PPSD



IEEE 802.11ac 80 mode / 5775MHz

#### PPSD

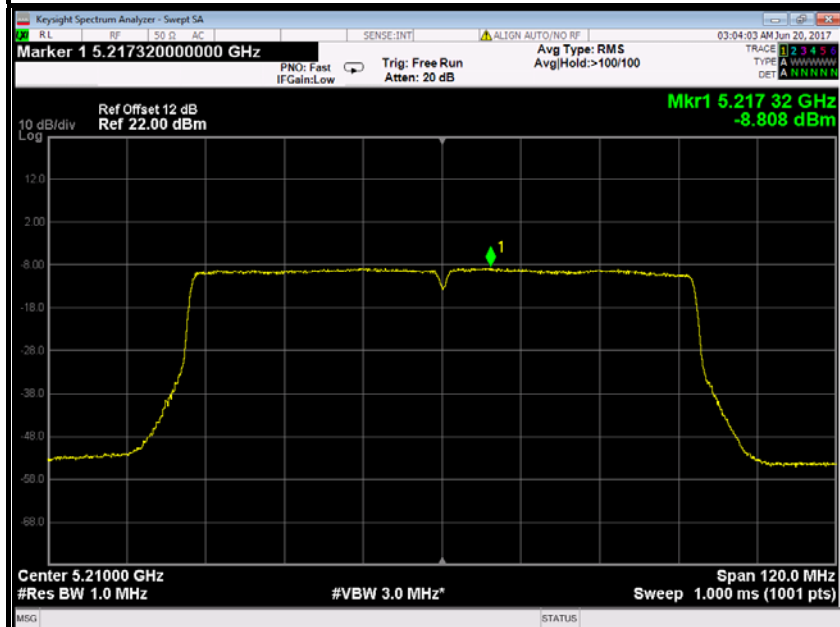




### Antenna 1

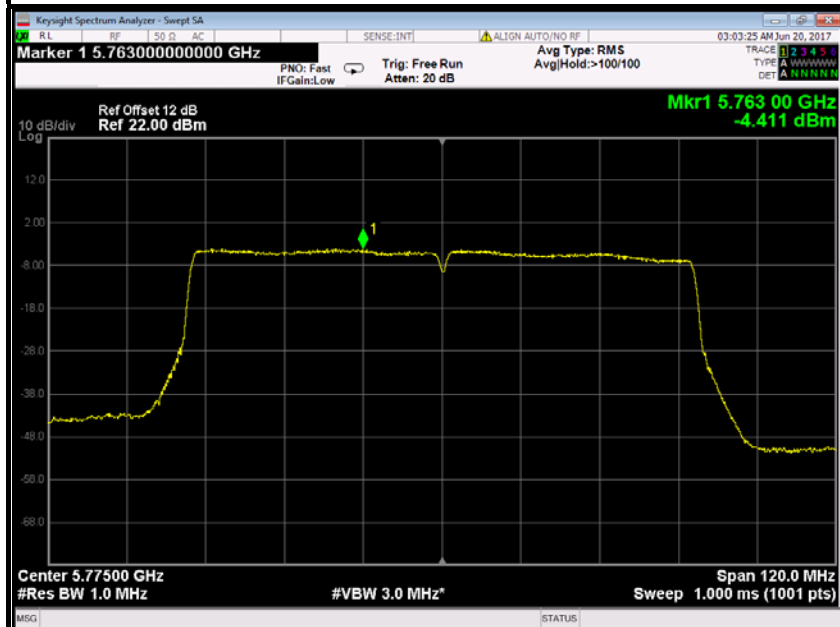
IEEE 802.11ac 80 mode / 5210MHz

#### PPSD



IEEE 802.11ac 80 mode / 5775MHz

#### PPSD





## 6.7 RADIATED UNDESIRABLE EMISSION

### 6.7.1 LIMIT

1. According to §15.209(a), 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 ( $\mu\text{V/m}$ )	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 ( $\mu\text{V/m}$ at 3-meter)	Field Strength ( $\text{dB}\mu\text{V/m}$ at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54



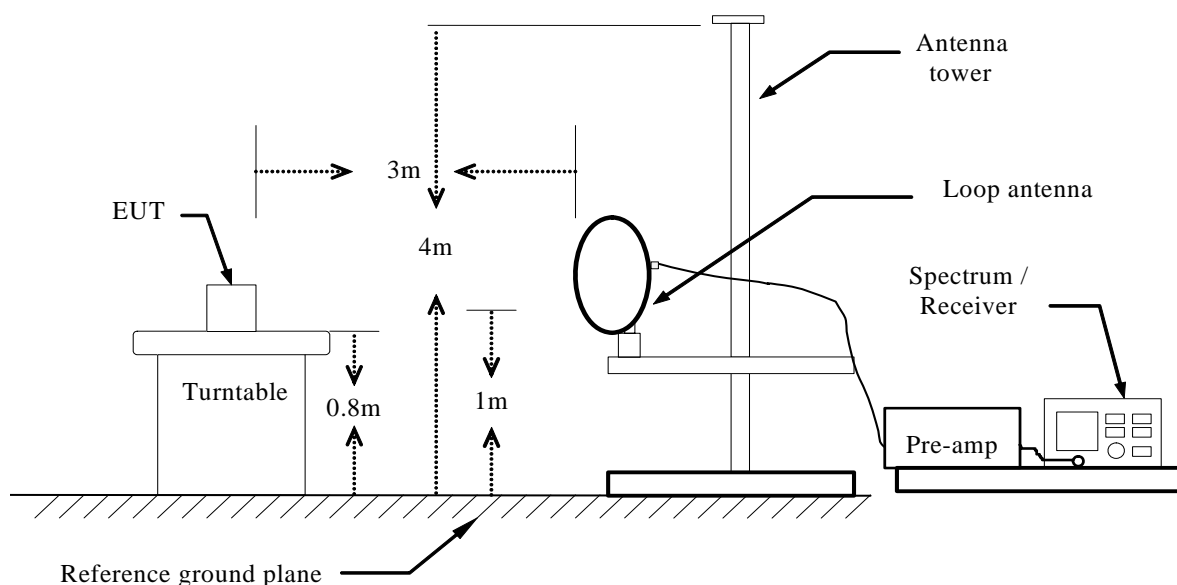


## 6.7.2 TEST INSTRUMENTS

Radiated Emission Test Site 966(2)					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
PSA Series Spectrum Analyzer	Agilent	E4446A	US44300399	02/21/2017	02/20/2018
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	02/21/2017	02/20/2018
Amplifier	EMEC	EM330	060661	03/18/2017	03/17/2018
High Noise Amplifier	Agilent	8449B	3008A01838	02/21/2017	02/20/2018
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170-497	02/28/2017	02/27/2018
Bilog Antenna	SCHAFFNER	CBL6143	5082	02/21/2017	02/20/2018
Horn Antenna	SCHWARZBECK	BBHA9120	D286	02/28/2017	02/27/2018
Loop Antenna	COM-POWER	AL-130	121044	09/25/2016	09/24/2017
Turn Table	N/A	N/A	N/A	N.C.R	N.C.R
Controller	Sunol Sciences	SC104V	022310-1	N.C.R	N.C.R
Controller	CT	N/A	N/A	N.C.R	N.C.R
Temp. / Humidity Meter	Anymetre	JR913	N/A	02/21/2017	02/20/2018
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R
Test S/W	FARAD	LZ-RF / CCS-SZ-3A2			

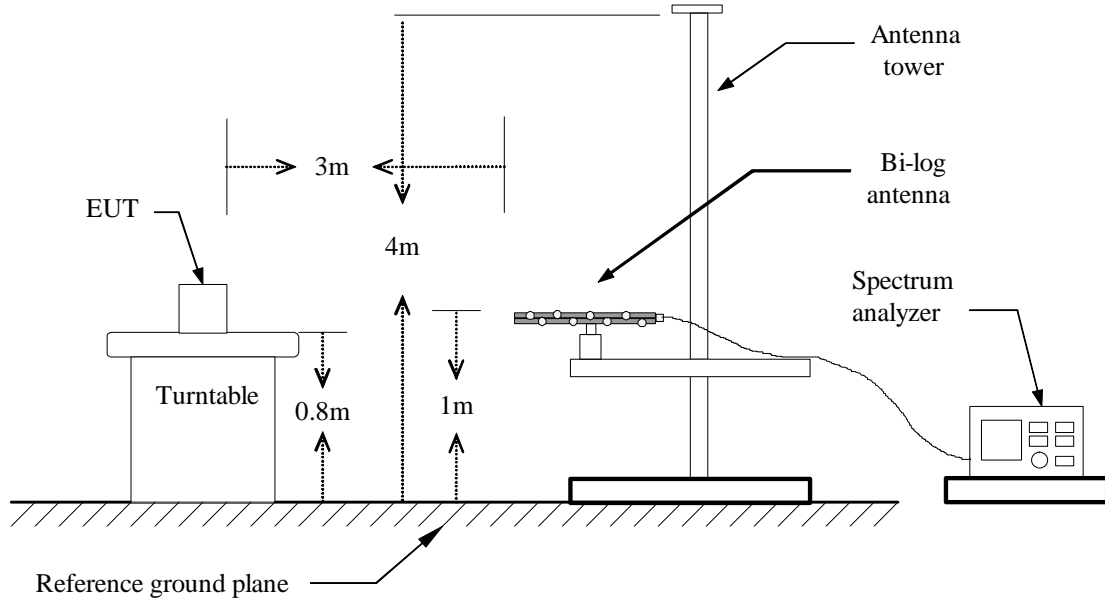
## 6.7.3 TEST CONFIGURATION

### Below 30MHz

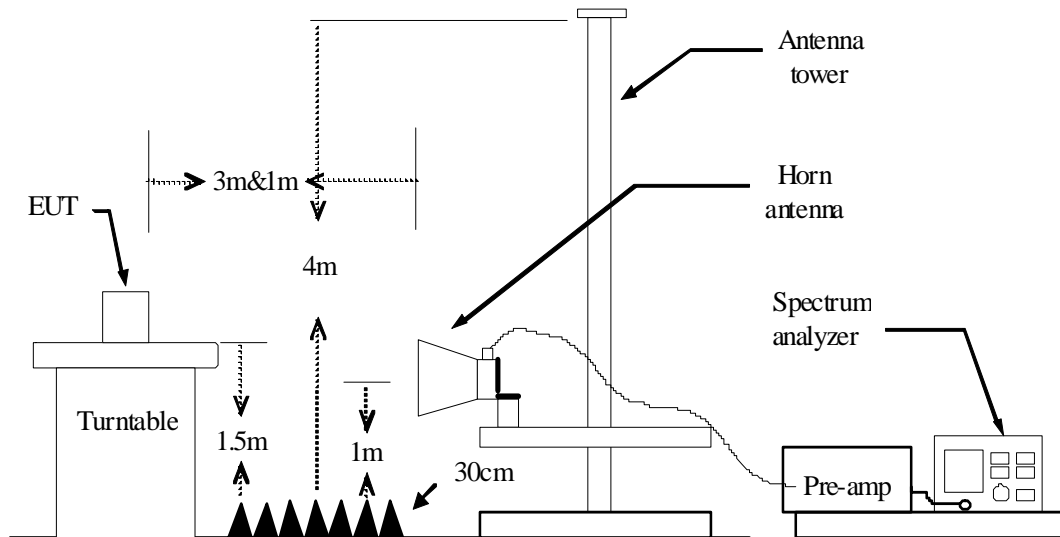




### **Below 1 GHz**



### **Above 1 GHz**



For the actual test configuration, please refer to the related item – Photographs of the TEST CONFIGURATION.



#### 6.7.4 MEASURING SETTING

The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP/AVG
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP/AVG
Start ~ Stop Frequency	30MHz~1000MHz / RB 100kHz for QP

#### 6.7.5 TEST PROCEDURE

##### 1) Sequence of testing 9 kHz to 30 MHz

###### Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.
- If the EUT is a floor standing device, it is placed on the ground.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions.
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 3 meter.
- The EUT was set into operation.

###### Pre measurement:

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna height is 0.8 meter.
- At each turntable position the analyzer sweeps with peak detection to find the



maximum of all emissions

**Final measurement:**

--- Identified emissions during the pre measurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).

--- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement and the limit will be stored.

**2) Sequence of testing 30 MHz to 1 GHz**

**Setup:**

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

**Pre measurement:**

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height changes from 1 to 3 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.



**Final measurement:**

- The final measurement will be performed with minimum the six highest peaks.
- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position ( $\pm 45^\circ$ ) and antenna movement between 1 and 4 meter.
- The final measurement will be done with QP detector with an EMI receiver.
- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

**3) Sequence of testing above 1 GHz**

**Setup:**

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 3 meter.
- The EUT was set into operation.

**Pre measurement:**

- The turntable rotates from  $0^\circ$  to  $315^\circ$  using  $45^\circ$  steps.
- The antenna is polarized vertical and horizontal.
- The antenna height scan range is 1 meter to 2.5 meter.
- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.



**Final measurement:**

- The final measurement will be performed with minimum the six highest peaks.
- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position ( $\pm 45^\circ$ ) and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.
- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement with marked maximum final measurements and the limit will be stored.

**4) Sequence of testing above 18 GHz**

**Setup:**

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 1 & 3 meter.
- The EUT was set into operation.

**Pre measurement:**

- The antenna is moved spherical over the EUT in different polarisations of the antenna.

**Final measurement:**

- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

**6.7.6 DATA SAMPLE****Below 1GHz**

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
XXX.XXXX	36.37	-12.20	24.17	40.00	-15.83	V	QP

Frequency (MHz) = Emission frequency in MHz  
Reading (dBuV) = Uncorrected Analyzer / Receiver reading  
Correct Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain  
Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)  
Limit (dBuV/m) = Limit stated in standard  
Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)  
Q.P. = Quasi-peak Reading

**Above 1GHz**

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
XXXX.XXXX	62.09	-11.42	50.67	74.00	-23.33	V	Peak
XXXX.XXXX	49.78	-11.42	38.36	54.00	-15.64	V	AVG

Frequency (MHz) = Emission frequency in MHz  
Reading (dBuV) = Uncorrected Analyzer / Receiver reading  
Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain  
Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)  
Limit (dBuV/m) = Limit stated in standard  
Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)  
Peak = Peak Reading  
AVG = Average Reading

**Calculation Formula**

Margin (dB) = Result (dBuV/m) – Limits (dBuV/m)  
Result (dBuV/m) = Reading (dBuV) + Correction Factor

**6.7.7 TEST RESULTS****Below 1 GHz****Antenna 1****Test Mode:** TX / IEEE 802.11a / 5180MHz / (CH Low)**Tested by:** Darry Wu**Ambient temperature:** 24°C **Relative humidity:** 52% RH**Date:** June 19, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
41.6400	58.25	-19.52	38.73	40.00	-1.27	V	QP
48.4300	56.33	-18.84	37.49	40.00	-2.51	V	QP
77.5300	53.47	-16.21	37.26	40.00	-2.74	V	QP
98.8700	52.10	-15.40	36.70	43.50	-6.80	V	QP
195.8700	44.30	-10.34	33.96	43.50	-9.54	V	QP
434.4900	42.58	-5.55	37.03	46.00	-8.97	V	QP
80.4400	48.37	-15.97	32.40	40.00	-7.60	H	QP
98.8700	50.56	-15.40	35.16	43.50	-8.34	H	QP
195.8700	48.23	-10.34	37.89	43.50	-5.61	H	QP
289.9600	43.37	-8.38	34.99	46.00	-11.01	H	QP
325.8500	44.95	-8.15	36.80	46.00	-9.20	H	QP
434.4900	34.57	-5.55	29.02	46.00	-16.98	H	QP

Pre-scan all mode and recorded the worst case results in this report (802.11a Antenna 0(Low Mid)).

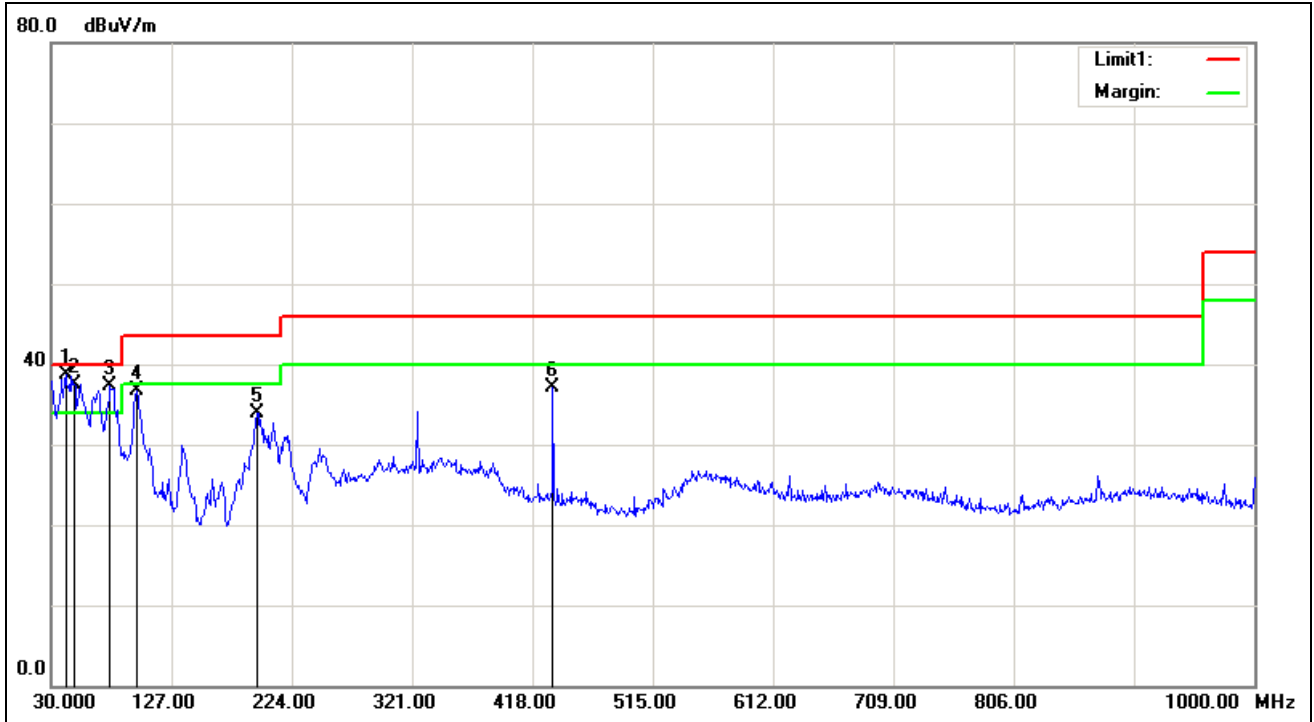
**Remark:**

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.
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) – Quasi-peak limit (dBuV/m).

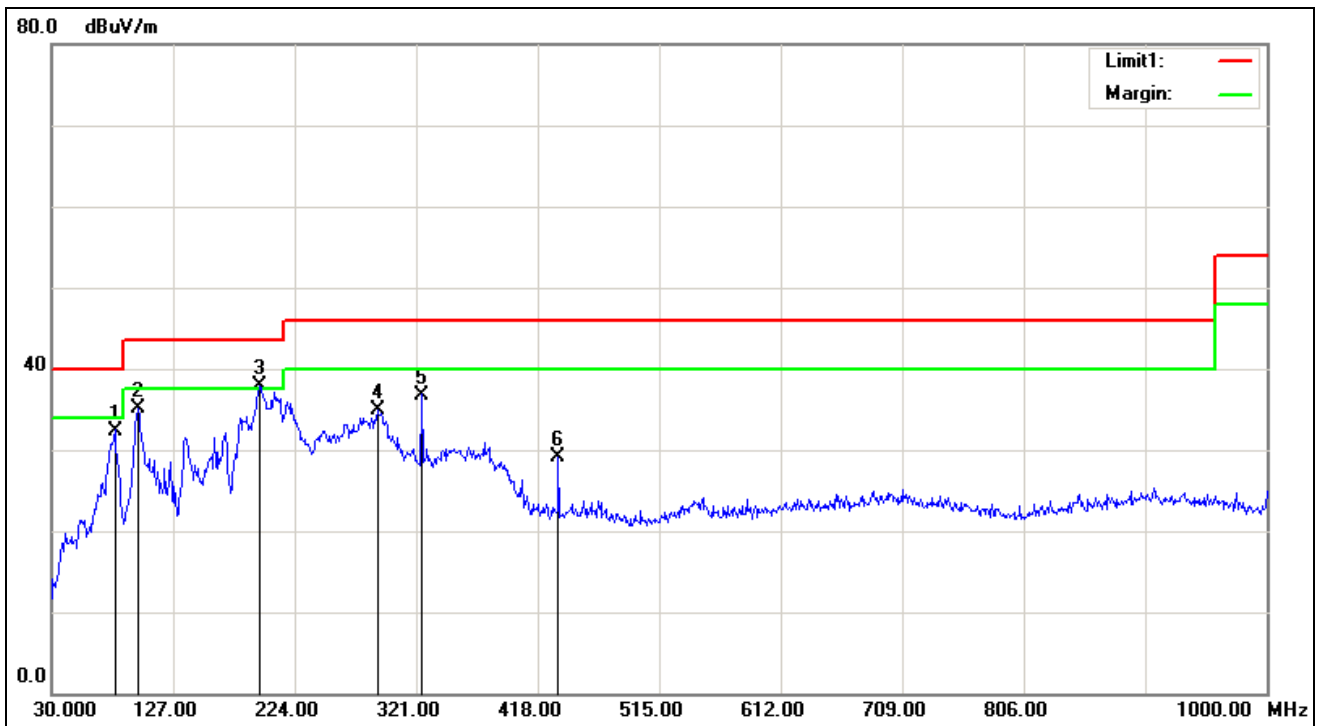




## Vertical



## Horizontal



**Above 1 GHz****1GHz~6GHz (Combine with Antenna 0 and Antenna 1)****Test Mode:** TX / IEEE 802.11n HT 20 MHz / 5180MHz /(CH Low)**Tested by:** Darry Wu**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** March 10, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1240.000	46.48	-7.64	38.84	68.23	-29.39	V	peak
2605.000	43.52	-2.07	41.45	68.23	-26.78	V	peak
2725.000	43.07	-1.85	41.22	68.23	-27.01	V	peak
3460.000	42.37	-0.59	41.78	68.23	-26.45	V	peak
4860.000	45.30	4.52	49.82	68.23	-18.41	V	peak
5500.000	46.73	5.87	52.60	68.23	-15.63	V	peak
5500.000	43.49	5.87	49.36	54.00	-4.64	V	AVG
1305.000	46.32	-7.41	38.91	68.23	-29.32	H	Peak
1725.000	45.22	-6.43	38.79	68.23	-29.44	H	Peak
2395.000	42.73	-2.84	39.89	68.23	-28.34	H	Peak
3460.000	43.32	-0.59	42.73	68.23	-25.50	H	peak
5175.000	42.99	5.29	48.28	68.23	-19.95	H	peak
5505.000	50.29	5.87	56.16	68.23	-12.07	H	peak
5505.000	44.50	5.87	50.37	54.00	-3.63	H	AVG

**Remark:**

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.  $\text{Margin (dB)} = \text{Remark result (dBuV/m)} - \text{Average limit (dBuV/m)}$ .

**Above 6GHz****Antenna 0****Test Mode:** TX / IEEE 802.11a / 5180MHz /(CH Low)**Tested by:** Darry Wu**Ambient temperature:** 24°C **Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6912.000	36.23	7.56	43.79	68.23	-24.44	V	peak
8208.000	29.69	9.54	39.23	68.23	-29.00	V	peak
9996.000	29.44	11.97	41.41	68.23	-26.82	V	peak
10356.000	29.45	13.08	42.53	68.23	-25.70	V	peak
11136.000	29.04	15.02	44.06	68.23	-24.17	V	peak
12276.000	28.96	15.55	44.51	68.23	-23.72	V	peak
6912.000	43.51	7.56	51.07	68.23	-17.16	H	Peak
7860.000	29.85	9.38	39.23	68.23	-29.00	H	Peak
10140.000	29.70	12.41	42.11	68.23	-26.12	H	Peak
10956.000	29.03	14.94	43.97	68.23	-24.26	H	peak
11148.000	29.04	15.01	44.05	68.23	-24.18	H	peak
12516.000	28.67	16.35	45.02	68.23	-23.21	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5200MHz /(CH Mid)

Tested by: Darry Wu

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6936.000	36.80	7.60	44.40	68.23	-23.83	V	peak
7752.000	30.56	9.17	39.73	68.23	-28.50	V	peak
9444.000	30.13	10.38	40.51	68.23	-27.72	V	peak
9972.000	29.74	11.90	41.64	68.23	-26.59	V	peak
10476.000	29.17	13.46	42.63	68.23	-25.60	V	peak
11136.000	29.32	15.02	44.34	68.23	-23.89	V	peak
6936.000	44.03	7.60	51.63	68.23	-16.60	H	Peak
8172.000	29.71	9.56	39.27	68.23	-28.96	H	Peak
9468.000	30.17	10.45	40.62	68.23	-27.61	H	Peak
10632.000	29.30	13.94	43.24	68.23	-24.99	H	peak
11172.000	28.74	15.00	43.74	68.23	-24.49	H	peak
11688.000	29.20	14.78	43.98	68.23	-24.25	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5240MHz /(CH High)

Tested by: Darry Wu

Ambient temperature: 24°C Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6984.000	37.09	7.67	44.76	68.23	-23.47	V	peak
8616.000	29.77	9.31	39.08	68.23	-29.15	V	peak
9672.000	29.73	11.04	40.77	68.23	-27.46	V	peak
10548.000	28.77	13.68	42.45	68.23	-25.78	V	peak
11028.000	28.84	15.07	43.91	68.23	-24.32	V	peak
11700.000	29.41	14.77	44.18	68.23	-24.05	V	peak
6984.000	44.02	7.67	51.69	68.23	-16.54	H	Peak
9300.000	29.27	9.96	39.23	68.23	-29.00	H	Peak
10044.000	29.23	12.12	41.35	68.23	-26.88	H	Peak
10884.000	29.25	14.72	43.97	68.23	-24.26	H	peak
12156.000	28.85	15.16	44.01	68.23	-24.22	H	peak
12912.000	27.75	17.66	45.41	68.23	-22.82	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5745MHz /(CH Low)

Tested by: Darry Wu

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7020.000	29.57	7.74	37.31	74.00	-36.69	V	peak
7800.000	29.93	9.26	39.19	74.00	-34.81	V	peak
9732.000	29.45	11.21	40.66	74.00	-33.34	V	peak
10812.000	28.12	14.50	42.62	74.00	-31.38	V	peak
11616.000	28.80	14.81	43.61	74.00	-30.39	V	peak
12528.000	28.25	16.39	44.64	74.00	-29.36	V	peak
6060.000	33.15	6.18	39.33	74.00	-34.67	H	Peak
7656.000	34.21	8.98	43.19	74.00	-30.81	H	Peak
9024.000	30.24	9.17	39.41	74.00	-34.59	H	Peak
10956.000	28.94	14.94	43.88	74.00	-30.12	H	peak
11496.000	29.25	14.86	44.11	74.00	-29.89	H	peak
12528.000	28.31	16.39	44.70	74.00	-29.30	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5785MHz /(CH Mid)

Tested by: Darry Wu

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7644.000	30.12	8.96	39.08	74.00	-34.92	V	peak
10104.000	29.05	12.30	41.35	74.00	-32.65	V	peak
10632.000	29.07	13.94	43.01	74.00	-30.99	V	peak
11136.000	28.88	15.02	43.90	74.00	-30.10	V	peak
11868.000	29.10	14.70	43.80	74.00	-30.20	V	peak
12492.000	28.39	16.27	44.66	74.00	-29.34	V	peak
6108.000	32.47	6.25	38.72	74.00	-35.28	H	Peak
7716.000	34.12	9.10	43.22	74.00	-30.78	H	Peak
9744.000	29.43	11.24	40.67	74.00	-33.33	H	Peak
10068.000	29.70	12.19	41.89	74.00	-32.11	H	peak
10512.000	28.46	13.57	42.03	74.00	-31.97	H	peak
11688.000	29.21	14.78	43.99	74.00	-30.01	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5825MHz /(CH High)

Tested by: Darry Wu

Ambient temperature: 24°C Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7728.000	29.96	9.12	39.08	74.00	-34.92	V	peak
9276.000	29.62	9.89	39.51	74.00	-34.49	V	peak
9948.000	29.76	11.83	41.59	74.00	-32.41	V	peak
10608.000	29.28	13.86	43.14	74.00	-30.86	V	peak
10908.000	28.45	14.79	43.24	74.00	-30.76	V	peak
11280.000	28.93	14.96	43.89	74.00	-30.11	V	peak
6144.000	32.71	6.31	39.02	74.00	-34.98	H	Peak
7764.000	33.56	9.19	42.75	74.00	-31.25	H	Peak
10392.000	29.12	13.20	42.32	74.00	-31.68	H	Peak
10956.000	28.86	14.94	43.80	74.00	-30.20	H	peak
11652.000	29.05	14.79	43.84	74.00	-30.16	H	peak
12888.000	27.66	17.58	45.24	74.00	-28.76	H	peak

**Remark:**

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).



**Antenna 1****Test Mode:** TX / IEEE 802.11a / 5180MHz /(CH Low)**Tested by:** Darry Wu**Ambient temperature:** 24°C **Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6912.000	38.54	7.56	46.10	68.23	-22.13	V	peak
7908.000	29.54	9.47	39.01	68.23	-29.22	V	peak
9744.000	29.84	11.24	41.08	68.23	-27.15	V	peak
10572.000	29.30	13.75	43.05	68.23	-25.18	V	peak
11652.000	28.97	14.79	43.76	68.23	-24.47	V	peak
12504.000	28.35	16.31	44.66	68.23	-23.57	V	peak
6912.000	31.11	7.56	38.67	68.23	-29.56	H	Peak
8172.000	29.83	9.56	39.39	68.23	-28.84	H	Peak
9936.000	29.65	11.80	41.45	68.23	-26.78	H	Peak
10608.000	29.38	13.86	43.24	68.23	-24.99	H	peak
10992.000	28.58	15.06	43.64	68.23	-24.59	H	peak
12564.000	28.05	16.51	44.56	68.23	-23.67	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5200MHz /(CH Mid)

Tested by: Darry Wu

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6936.000	38.95	7.60	46.55	68.23	-21.68	V	peak
8196.000	29.76	9.54	39.30	68.23	-28.93	V	peak
9756.000	30.12	11.28	41.40	68.23	-26.83	V	peak
9984.000	29.63	11.93	41.56	68.23	-26.67	V	peak
11136.000	29.02	15.02	44.04	68.23	-24.19	V	peak
11904.000	29.70	14.68	44.38	68.23	-23.85	V	peak
6936.000	32.13	7.60	39.73	68.23	-28.50	H	Peak
8400.000	29.64	9.43	39.07	68.23	-29.16	H	Peak
9768.000	29.75	11.31	41.06	68.23	-27.17	H	Peak
10356.000	28.68	13.08	41.76	68.23	-26.47	H	peak
10920.000	28.36	14.83	43.19	68.23	-25.04	H	peak
11616.000	28.83	14.81	43.64	68.23	-24.59	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5240MHz /(CH High)

Tested by: Darry Wu

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6984.000	38.21	7.67	45.88	68.23	-22.35	V	peak
8172.000	30.01	9.56	39.57	68.23	-28.66	V	peak
9360.000	30.18	10.14	40.32	68.23	-27.91	V	peak
9924.000	29.38	11.76	41.14	68.23	-27.09	V	peak
10572.000	28.91	13.75	42.66	68.23	-25.57	V	peak
11268.000	28.94	14.96	43.90	68.23	-24.33	V	peak
6984.000	32.39	7.67	40.06	68.23	-28.17	H	Peak
8220.000	30.09	9.53	39.62	68.23	-28.61	H	Peak
10140.000	29.35	12.41	41.76	68.23	-26.47	H	Peak
11136.000	28.92	15.02	43.94	68.23	-24.29	H	peak
12912.000	28.37	17.66	46.03	68.23	-22.20	H	peak
13272.000	27.60	18.67	46.27	68.23	-21.96	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5745MHz /(CH Low)

Tested by: Darry Wu

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6696.000	29.49	7.21	36.70	74.00	-37.30	V	peak
7656.000	30.29	8.98	39.27	74.00	-34.73	V	peak
9996.000	29.48	11.97	41.45	74.00	-32.55	V	peak
10560.000	28.62	13.72	42.34	74.00	-31.66	V	peak
11556.000	29.18	14.84	44.02	74.00	-29.98	V	peak
12552.000	27.99	16.47	44.46	74.00	-29.54	V	peak
7656.000	32.36	8.98	41.34	74.00	-32.66	H	Peak
8160.000	29.64	9.56	39.20	74.00	-34.80	H	Peak
9456.000	30.00	10.41	40.41	74.00	-33.59	H	Peak
9744.000	29.73	11.24	40.97	74.00	-33.03	H	peak
10896.000	28.87	14.76	43.63	74.00	-30.37	H	peak
11268.000	28.86	14.96	43.82	74.00	-30.18	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5785MHz /(CH Mid)

Tested by: Darry Wu

Ambient temperature: 24°C Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7416.000	29.80	8.51	38.31	68.23	-29.92	V	peak
9096.000	29.77	9.38	39.15	68.23	-29.08	V	peak
10560.000	28.62	13.72	42.34	68.23	-25.89	V	peak
11256.000	28.70	14.97	43.67	68.23	-24.56	V	peak
11664.000	28.97	14.79	43.76	68.23	-24.47	V	peak
12708.000	27.92	16.98	44.90	68.23	-23.33	V	peak
6384.000	29.35	6.70	36.05	68.23	-32.18	H	Peak
7716.000	32.89	9.10	41.99	68.23	-26.24	H	Peak
9456.000	29.84	10.41	40.25	68.23	-27.98	H	Peak
10008.000	29.30	12.00	41.30	68.23	-26.93	H	peak
10992.000	28.21	15.06	43.27	68.23	-24.96	H	peak
11364.000	28.73	14.92	43.65	68.23	-24.58	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11a / 5825MHz /(CH High)

Tested by: Darry Wu

Ambient temperature: 24°C Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7740.000	29.81	9.14	38.95	68.23	-29.28	V	peak
9372.000	29.99	10.17	40.16	68.23	-28.07	V	peak
10008.000	29.83	12.00	41.83	68.23	-26.40	V	peak
10608.000	29.36	13.86	43.22	68.23	-25.01	V	peak
11136.000	28.57	15.02	43.59	68.23	-24.64	V	peak
11880.000	28.77	14.69	43.46	68.23	-24.77	V	peak
7092.000	29.44	7.88	37.32	68.23	-30.91	H	Peak
7764.000	32.66	9.19	41.85	68.23	-26.38	H	Peak
9468.000	29.98	10.45	40.43	68.23	-27.80	H	Peak
10140.000	29.12	12.41	41.53	68.23	-26.70	H	peak
10584.000	28.94	13.79	42.73	68.23	-25.50	H	peak
11676.000	29.04	14.78	43.82	68.23	-24.41	H	peak

**Remark:**

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).

**Combine with Antenna 0 and Antenna 1****Test Mode:** TX / IEEE 802.11n HT 20 MHz / 5180MHz /(CH Low) **Tested by:** Darry Wu**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6912.000	38.64	7.56	46.20	68.23	-22.03	V	peak
7824.000	29.79	9.31	39.10	68.23	-29.13	V	peak
9768.000	29.96	11.31	41.27	68.23	-26.96	V	peak
11136.000	29.08	15.02	44.10	68.23	-24.13	V	peak
11640.000	29.24	14.80	44.04	68.23	-24.19	V	peak
12336.000	28.66	15.75	44.41	68.23	-23.82	V	peak
6912.000	41.45	7.56	49.01	68.23	-19.22	H	Peak
7812.000	30.49	9.28	39.77	68.23	-28.46	H	Peak
9732.000	29.95	11.21	41.16	68.23	-27.07	H	Peak
10368.000	29.68	13.12	42.80	68.23	-25.43	H	peak
11136.000	28.64	15.02	43.66	68.23	-24.57	H	peak
11616.000	29.03	14.81	43.84	68.23	-24.39	H	peak

**Remark:**

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).





Test Mode: TX / IEEE 802.11n HT 20 MHz / 5200MHz /(CH Mid)

Tested by: Darry Wu

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6936.000	39.07	7.60	46.67	68.23	-21.56	V	peak
7860.000	29.65	9.38	39.03	68.23	-29.20	V	peak
10404.000	29.77	13.23	43.00	68.23	-25.23	V	peak
11004.000	28.95	15.08	44.03	68.23	-24.20	V	peak
11280.000	28.85	14.96	43.81	68.23	-24.42	V	peak
12912.000	28.33	17.66	45.99	68.23	-22.24	V	peak
6936.000	42.19	7.60	49.79	68.23	-18.44	H	Peak
7704.000	30.08	9.07	39.15	68.23	-29.08	H	Peak
9348.000	30.47	10.10	40.57	68.23	-27.66	H	Peak
9924.000	29.31	11.76	41.07	68.23	-27.16	H	peak
10920.000	28.69	14.83	43.52	68.23	-24.71	H	peak
12276.000	29.07	15.55	44.62	68.23	-23.61	H	peak

**Remark:**

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).



**Test Mode:** TX / IEEE 802.11n HT 20 MHz / 5240MHz /(CH High)**Tested by:** Darry Wu**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6984.000	38.87	7.67	46.54	68.23	-21.69	V	peak
7836.000	29.98	9.33	39.31	68.23	-28.92	V	peak
9996.000	29.44	11.97	41.41	68.23	-26.82	V	peak
11016.000	28.85	15.07	43.92	68.23	-24.31	V	peak
11724.000	28.89	14.76	43.65	68.23	-24.58	V	peak
12672.000	28.16	16.86	45.02	68.23	-23.21	V	peak
6984.000	42.35	7.67	50.02	68.23	-18.21	H	Peak
7704.000	30.17	9.07	39.24	68.23	-28.99	H	Peak
8472.000	29.72	9.39	39.11	68.23	-29.12	H	Peak
9960.000	29.90	11.86	41.76	68.23	-26.47	H	peak
11064.000	28.55	15.05	43.60	68.23	-24.63	H	peak
12504.000	28.32	16.31	44.63	68.23	-23.60	H	peak

**Remark:**

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).

**Test Mode:** TX / IEEE 802.11n HT 20 MHz / 5745MHz /(CH Low)**Tested by:** Darry Wu**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7656.000	34.35	8.98	43.33	74.00	-30.67	V	peak
9768.000	29.62	11.31	40.93	74.00	-33.07	V	peak
10608.000	28.94	13.86	42.80	74.00	-31.20	V	peak
11016.000	28.71	15.07	43.78	74.00	-30.22	V	peak
11484.000	29.18	14.87	44.05	74.00	-29.95	V	peak
12360.000	28.61	15.83	44.44	74.00	-29.56	V	peak
6696.000	29.74	7.21	36.95	68.23	-31.28	H	Peak
7656.000	30.61	8.98	39.59	68.23	-28.64	H	Peak
9324.000	29.31	10.03	39.34	68.23	-28.89	H	Peak
10572.000	29.30	13.75	43.05	68.23	-25.18	H	peak
11496.000	28.88	14.86	43.74	68.23	-24.49	H	peak
12204.000	28.97	15.32	44.29	68.23	-23.94	H	peak

**Remark:**

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).

**Test Mode:** TX / IEEE 802.11n HT 20 MHz / 5785MHz /(CH Mid)**Tested by:** Darry Wu**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7716.000	35.10	9.10	44.20	68.23	-24.03	V	peak
9468.000	30.41	10.45	40.86	68.23	-27.37	V	peak
9972.000	29.71	11.90	41.61	68.23	-26.62	V	peak
11136.000	28.65	15.02	43.67	68.23	-24.56	V	peak
11568.000	29.43	14.83	44.26	68.23	-23.97	V	peak
12240.000	29.02	15.43	44.45	68.23	-23.78	V	peak
6108.000	32.91	6.25	39.16	68.23	-29.07	H	Peak
7716.000	34.02	9.10	43.12	68.23	-25.11	H	Peak
9972.000	29.29	11.90	41.19	68.23	-27.04	H	Peak
10620.000	29.07	13.90	42.97	68.23	-25.26	H	peak
11136.000	28.91	15.02	43.93	68.23	-24.30	H	peak
11568.000	29.96	14.83	44.79	68.23	-23.44	H	peak

**Remark:**

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).

**Test Mode:** TX / IEEE 802.11n HT 20 MHz / 5825MHz /(CH High)**Tested by:** Darry Wu**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6144.000	33.09	6.31	39.40	68.23	-28.83	V	peak
7764.000	33.30	9.19	42.49	68.23	-25.74	V	peak
10368.000	28.95	13.12	42.07	68.23	-26.16	V	peak
10968.000	28.40	14.98	43.38	68.23	-24.85	V	peak
11220.000	29.02	14.98	44.00	68.23	-24.23	V	peak
11652.000	30.04	14.79	44.83	68.23	-23.40	V	peak
6144.000	32.90	6.31	39.21	68.23	-29.02	H	Peak
7764.000	34.01	9.19	43.20	68.23	-25.03	H	Peak
9756.000	30.05	11.28	41.33	68.23	-26.90	H	Peak
10572.000	29.65	13.75	43.40	68.23	-24.83	H	peak
11136.000	28.82	15.02	43.84	68.23	-24.39	H	peak
11652.000	29.61	14.79	44.40	68.23	-23.83	H	peak

**Remark:**

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).

**Combine with Antenna 0 and Antenna 1****Test Mode:** TX / IEEE 802.11n HT 40 MHz / 5190MHz /(CH Low)**Tested by:** Darry Wu**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6924.000	38.51	7.58	46.09	68.23	-22.14	V	peak
8136.000	29.77	9.58	39.35	68.23	-28.88	V	peak
8484.000	30.17	9.38	39.55	68.23	-28.68	V	peak
9756.000	29.92	11.28	41.20	68.23	-27.03	V	peak
10920.000	28.66	14.83	43.49	68.23	-24.74	V	peak
11280.000	28.85	14.96	43.81	68.23	-24.42	V	peak
6924.000	41.20	7.58	48.78	68.23	-19.45	H	Peak
7824.000	29.84	9.31	39.15	68.23	-29.08	H	Peak
8448.000	29.93	9.40	39.33	68.23	-28.90	H	Peak
10368.000	29.51	13.12	42.63	68.23	-25.60	H	peak
10620.000	29.25	13.90	43.15	68.23	-25.08	H	peak
11136.000	29.19	15.02	44.21	68.23	-24.02	H	peak

**Remark:**

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).



Test Mode: TX / IEEE 802.11n HT 40 MHz / 5230MHz /(CH High)

Tested by: Darry Wu

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6972.000	38.01	7.65	45.66	68.23	-22.57	V	peak
8208.000	29.77	9.54	39.31	68.23	-28.92	V	peak
9456.000	30.35	10.41	40.76	68.23	-27.47	V	peak
10824.000	28.72	14.53	43.25	68.23	-24.98	V	peak
11352.000	28.85	14.93	43.78	68.23	-24.45	V	peak
12924.000	27.72	17.70	45.42	68.23	-22.81	V	peak
6972.000	41.39	7.65	49.04	68.23	-19.19	H	Peak
8196.000	29.89	9.54	39.43	68.23	-28.80	H	Peak
9912.000	29.61	11.73	41.34	68.23	-26.89	H	Peak
10668.000	28.98	14.05	43.03	68.23	-25.20	H	peak
11136.000	28.60	15.02	43.62	68.23	-24.61	H	peak
11496.000	29.28	14.86	44.14	68.23	-24.09	H	peak

**Remark:**

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).

**Test Mode:** TX / IEEE 802.11n HT 40 MHz / 5755MHz /(CH Low)**Tested by:** Darry Wu**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7668.000	34.70	9.00	43.70	68.23	-24.53	V	peak
8748.000	29.77	9.24	39.01	68.23	-29.22	V	peak
9756.000	29.93	11.28	41.21	68.23	-27.02	V	peak
11136.000	28.97	15.02	43.99	68.23	-24.24	V	peak
11628.000	29.19	14.80	43.99	68.23	-24.24	V	peak
12840.000	27.57	17.42	44.99	68.23	-23.24	V	peak
7668.000	34.48	9.00	43.48	68.23	-24.75	H	Peak
9756.000	30.24	11.28	41.52	68.23	-26.71	H	Peak
10560.000	28.78	13.72	42.50	68.23	-25.73	H	Peak
11280.000	28.67	14.96	43.63	68.23	-24.60	H	peak
12240.000	29.15	15.43	44.58	68.23	-23.65	H	peak
12852.000	27.89	17.46	45.35	68.23	-22.88	H	peak

**Remark:**

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).





Test Mode: TX / IEEE 802.11n HT 40 MHz / 5795MHz / (CH High)

Tested by: Darry Wu

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7728.000	33.06	9.12	42.18	68.23	-26.05	V	peak
9780.000	29.29	11.35	40.64	68.23	-27.59	V	peak
11136.000	29.05	15.02	44.07	68.23	-24.16	V	peak
11592.000	28.93	14.82	43.75	68.23	-24.48	V	peak
12540.000	28.24	16.43	44.67	68.23	-23.56	V	peak
13032.000	27.37	18.03	45.40	68.23	-22.83	V	peak
7728.000	34.27	9.12	43.39	68.23	-24.84	H	Peak
9960.000	29.71	11.86	41.57	68.23	-26.66	H	Peak
10848.000	28.73	14.61	43.34	68.23	-24.89	H	Peak
11268.000	28.99	14.96	43.95	68.23	-24.28	H	peak
12192.000	28.96	15.28	44.24	68.23	-23.99	H	peak
13164.000	27.23	18.38	45.61	68.23	-22.62	H	peak

**Remark:**

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).



**Combine with Antenna 0 and Antenna 1****Test Mode:** TX / IEEE 802.11ac 80 / 5210MHz**Tested by:** Darry Wu**Ambient temperature:** 24°C**Relative humidity:** 52% RH**Date:** June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6948.000	38.76	7.62	46.38	68.23	-21.85	V	peak
8244.000	29.56	9.52	39.08	68.23	-29.15	V	peak
10392.000	28.94	13.20	42.14	68.23	-26.09	V	peak
11136.000	28.72	15.02	43.74	68.23	-24.49	V	peak
12360.000	28.82	15.83	44.65	68.23	-23.58	V	peak
13116.000	27.25	18.26	45.51	68.23	-22.72	V	peak
6948.000	41.37	7.62	48.99	68.23	-19.24	H	Peak
7788.000	30.96	9.24	40.20	68.23	-28.03	H	Peak
9708.000	29.43	11.14	40.57	68.23	-27.66	H	Peak
10584.000	29.22	13.79	43.01	68.23	-25.22	H	peak
11256.000	28.75	14.97	43.72	68.23	-24.51	H	peak
12780.000	27.36	17.22	44.58	68.23	-23.65	H	peak

Remark:

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.  $\text{Margin (dB)} = \text{Remark result (dBuV/m)} - \text{Average limit (dBuV/m)}$ .

Test Mode: TX / IEEE 802.11ac 80 / 5775MHzTested by: Darry WuAmbient temperature: 24°CRelative humidity: 52% RHDate: June 15, 2017

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7704.000	34.11	9.07	43.18	68.23	-25.05	V	peak
9636.000	30.13	10.93	41.06	68.23	-27.17	V	peak
10416.000	29.03	13.27	42.30	68.23	-25.93	V	peak
10632.000	28.69	13.94	42.63	68.23	-25.60	V	peak
11136.000	28.93	15.02	43.95	68.23	-24.28	V	peak
11628.000	29.38	14.80	44.18	68.23	-24.05	V	peak
7704.000	33.57	9.07	42.64	68.23	-25.59	H	Peak
8796.000	30.03	9.21	39.24	68.23	-28.99	H	Peak
9108.000	29.90	9.41	39.31	68.23	-28.92	H	Peak
10632.000	28.84	13.94	42.78	68.23	-25.45	H	peak
10992.000	28.91	15.06	43.97	68.23	-24.26	H	peak
12984.000	27.95	17.90	45.85	68.23	-22.38	H	peak

**Remark:**

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.  $\text{Margin (dB)} = \text{Remark result (dBuV/m)} - \text{Average limit (dBuV/m)}$ .



## 6.8 CONDUCTED UNDESIRABLE EMISSION

### 6.8.1 LIMIT

FCC 15.407			
Frequency Band (MHz)	Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength (3m) (dBuV/m)
5725~5850	< 5650	-27	68.2
	5650~5700	-27~10	68.2~105.2
	5700~5720	10~15.6	105.2~110.8
	5720~5725	15.6~27	110.8~122.2
	5850~5855	27~15.6	122.2~110.8
	5855~5875	15.6~10	110.8~105.2
	5875~5925	10~-27	105.2~68.2
	>5925	-27	68.2

**Note:**

- (i) Section 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and 2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27dBm/MHz. However, an out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz dBm/MHz peak emission limit.

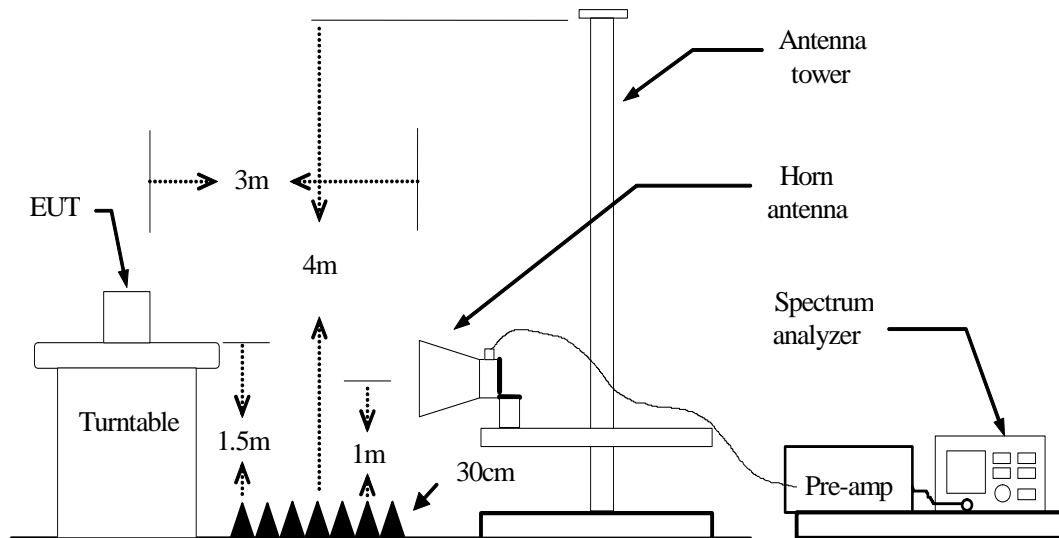
**6.8.2 MEASUREMENT EQUIPMENT USED**

Radiated Emission Test Site 966(2)					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
PSA Series Spectrum Analyzer	Agilent	N9010A	MY52221469	02/21/2017	02/20/2018
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	02/21/2017	02/20/2018
Amplifier	EMEC	EM330	060661	03/18/2017	03/17/2018
High Noise Amplifier	Agilent	8449B	3008A01838	02/21/2017	02/20/2018
Loop Antenna	COM-POWER	AL-130	121044	09/25/2016	09/24/2017
Bilog Antenna	SCHAFFNER	CBL6143	5082	02/21/2017	02/20/2018
Horn Antenna	SCHWARZBECK	BBHA9120	D286	02/21/2017	02/20/2018
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170-497	02/28/2017	02/27/2018
Turn Table	N/A	N/A	N/A	N.C.R	N.C.R
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R
Controller	Sunol Sciences	SC104V	022310-1	N.C.R	N.C.R
Controller	CT	N/A	N/A	N.C.R	N.C.R
Temp. / Humidity Meter	Anymetre	JR913	N/A	02/21/2017	02/20/2018
Test S/W	FARAD	LZ-RF / CCS-SZ-3A2			

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.  
2. The FCC Site Registration number is 101879.  
3. N.C.R = No Calibration Required.



### 6.8.3 TEST CONFIGURATION



### 6.8.4 TEST PROCEDURE

Conducted RF measurements of the transmitter output were made to confirm that the EUT antenna port conducted emissions meet the specified limit and to identify any spurious signals that require further investigation or measurements on the radiated emissions site.

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 1MHz. The video bandwidth is set to 3MHz. Peak detection measurements are compared to the average EIRP limit, adjusted for the maximum antenna gain. If necessary, additional average detection measurements are made.

Measurements are made over the 30 MHz to 40 GHz range with the transmitter set to the lowest, middle, and highest channels.



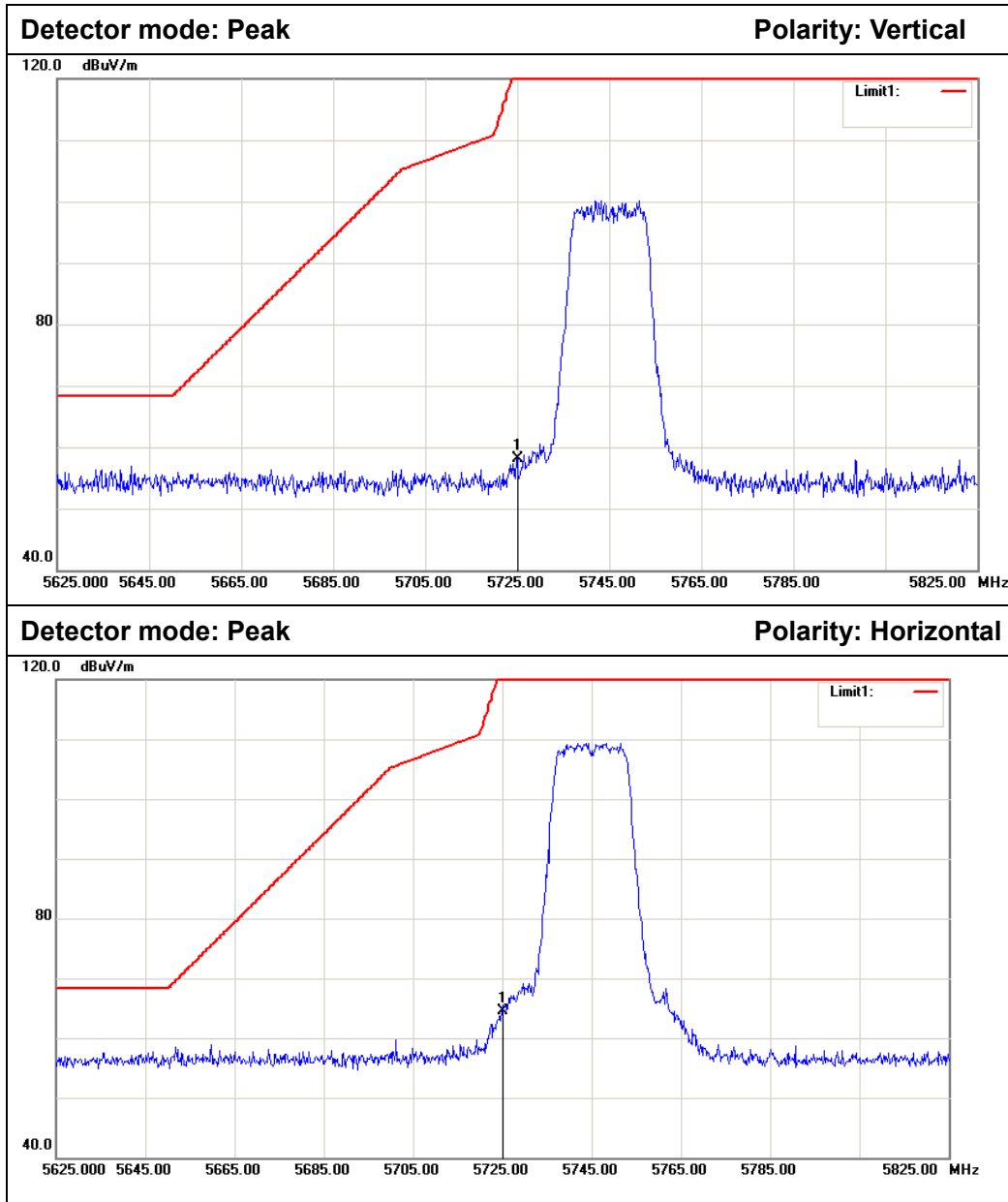
## 6.8.5 TEST RESULTS

No non-compliance noted

### Test Plot

#### Antenna 0

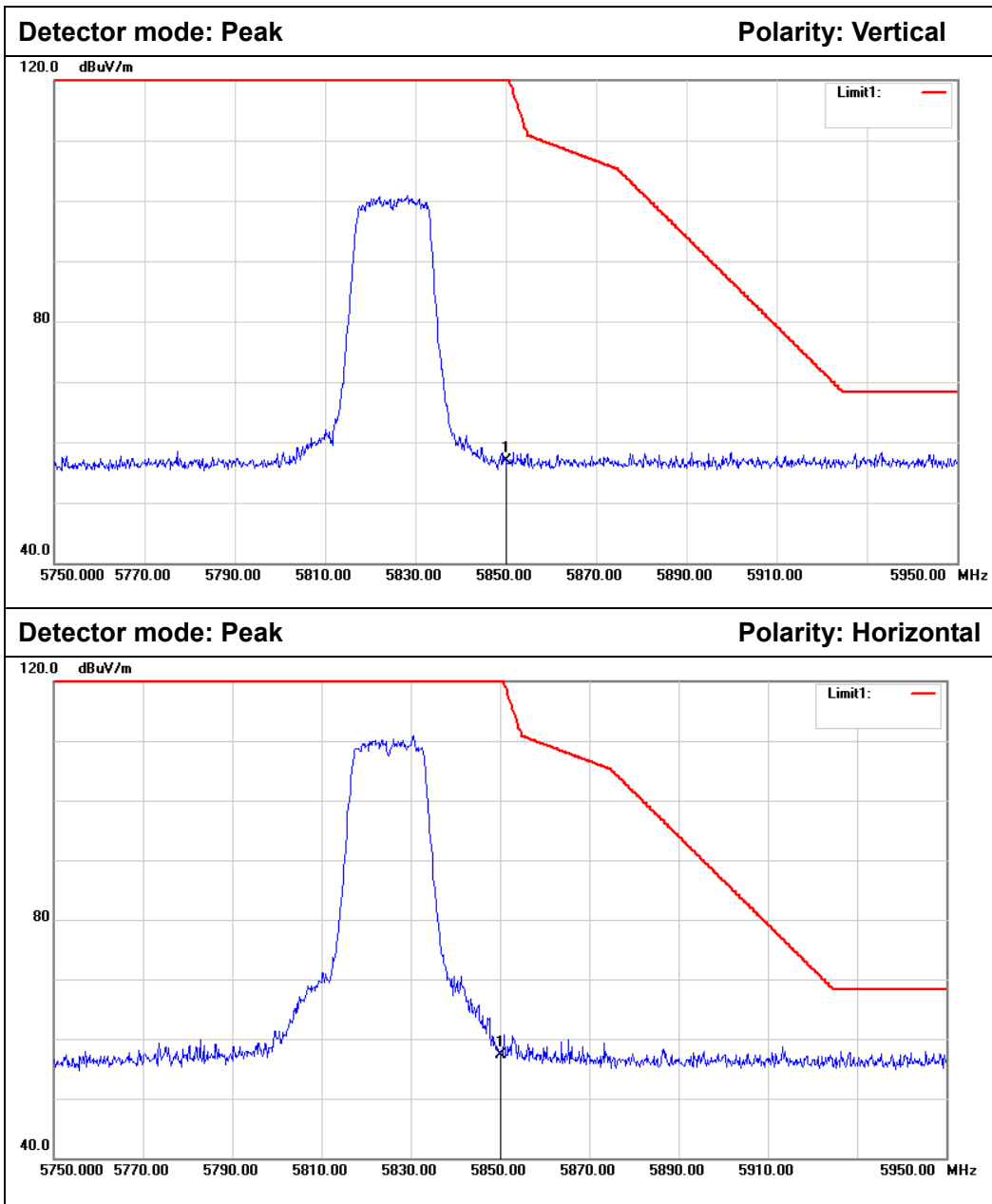
IEEE 802.11a mode / 5625 ~ 5825MHz



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	52.10	5.96	58.06	122.20	-64.14	Peak	Vertical
1	5725.000	58.60	5.96	64.56	122.20	-57.64	Peak	Horizontal



IEEE 802.11a mode / mode/5750~ 5950MHz

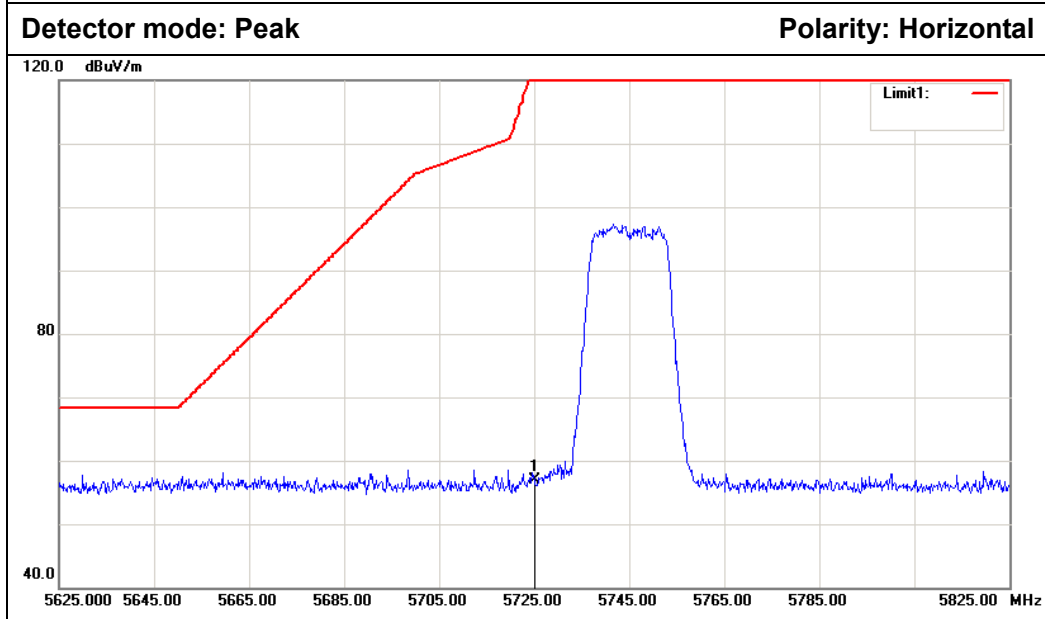
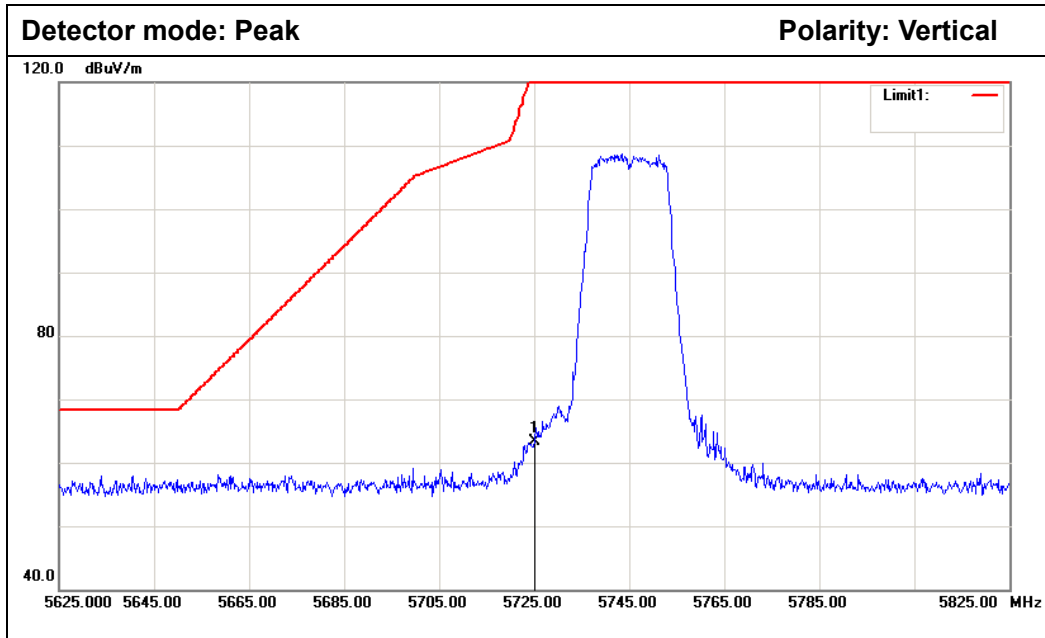


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	50.88	6.02	56.90	122.20	-65.30	Peak	Vertical
1	5850.000	51.31	6.02	57.33	122.20	-64.87	Peak	Horizontal



## Antenna 1

IEEE 802.11a mode / 5625 ~ 5825MHz

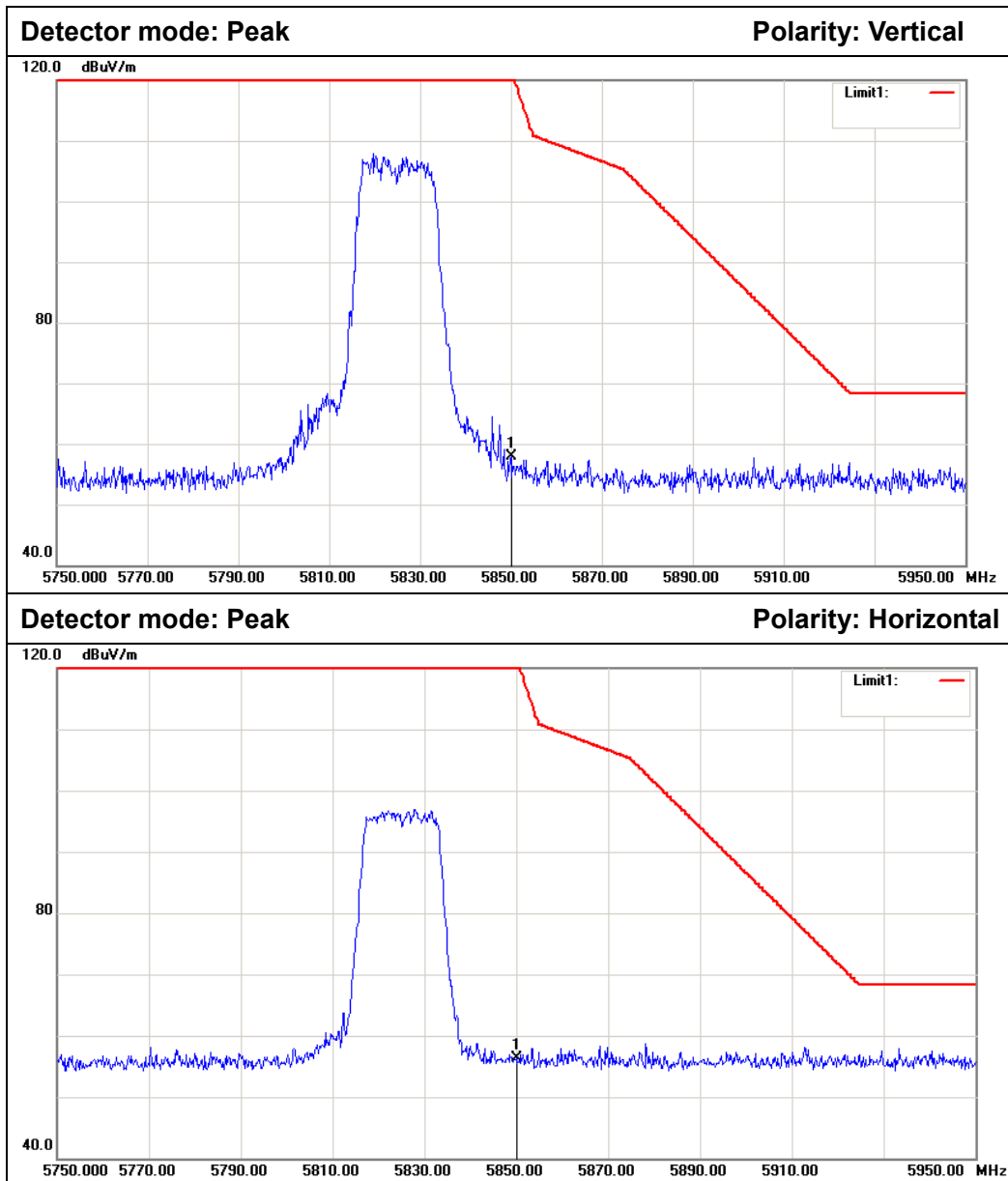


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	57.38	5.96	63.34	122.20	-58.86	Peak	Vertical
1	5725.000	50.85	5.96	56.81	122.20	-65.39	Peak	Horizontal





IEEE 802.11a mode / mode/5750~ 5950MHz

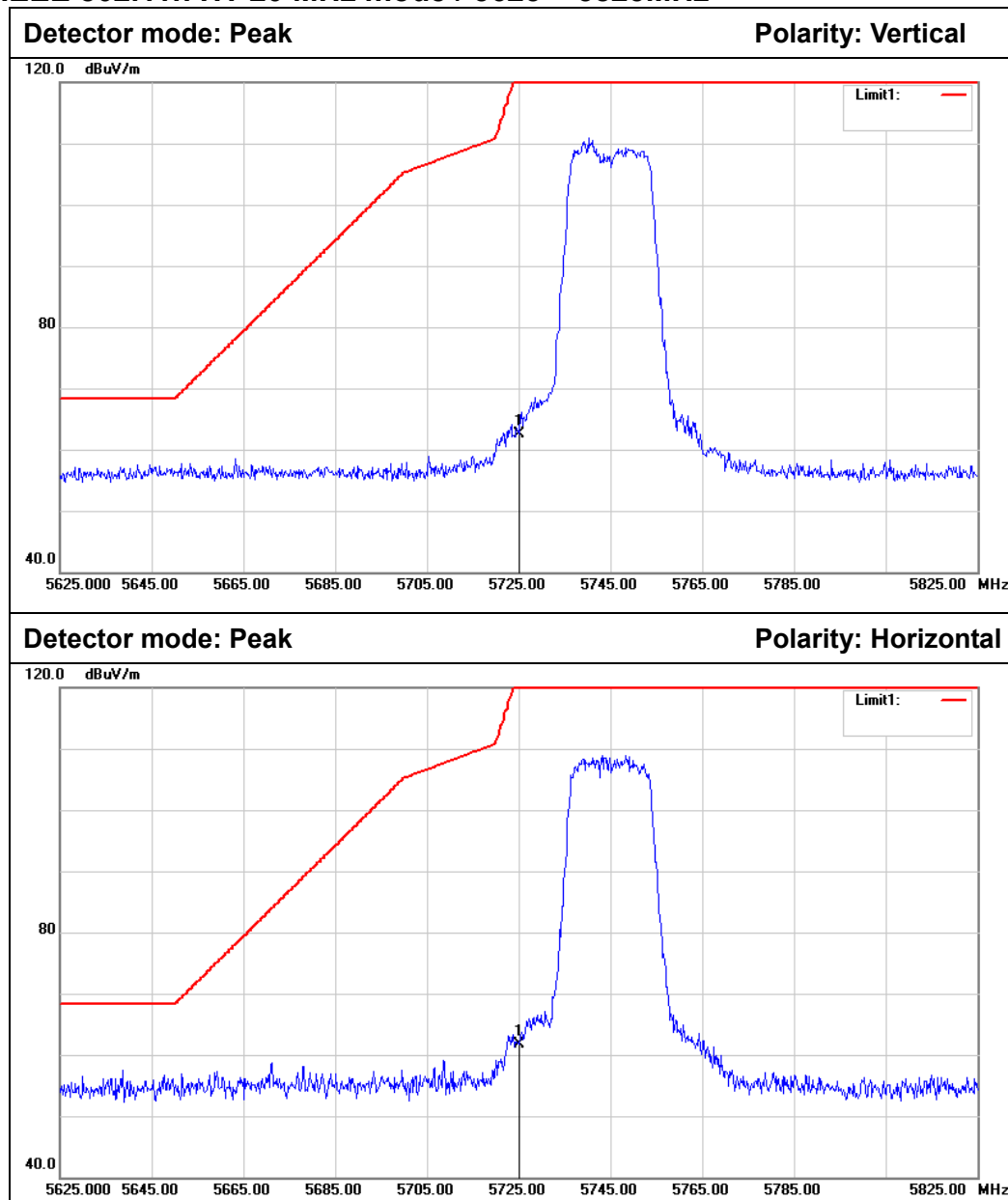


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	51.82	6.02	57.84	122.20	-64.36	Peak	Vertical
1	5850.000	50.24	6.02	56.26	122.20	-65.94	Peak	Horizontal



Combine with Antenna 0 and Antenna 1

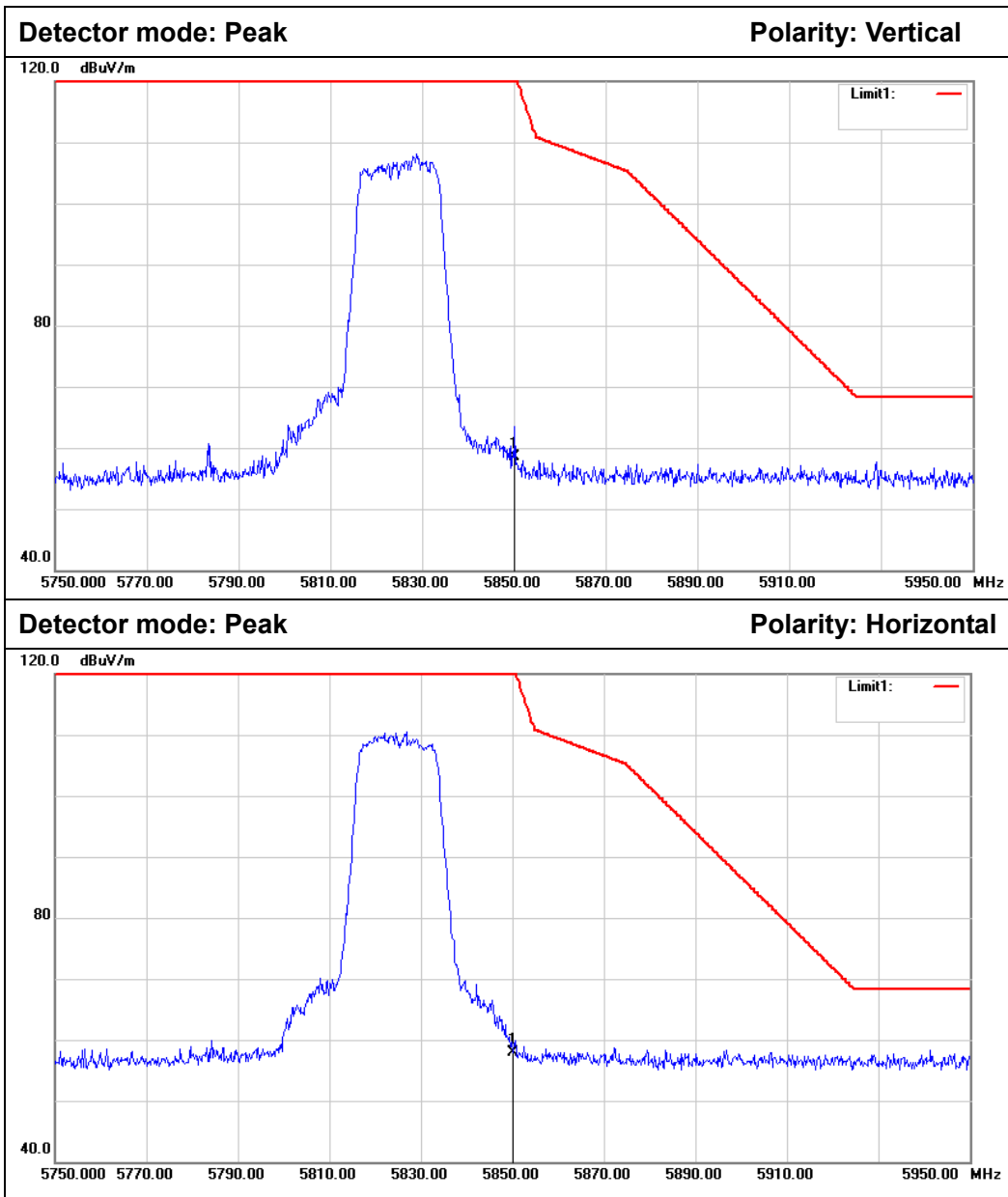
IEEE 802.11n HT 20 MHz mode / 5625 ~ 5825MHz



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	56.52	5.96	62.48	122.20	-59.72	Peak	Vertical
1	5725.000	55.84	5.96	61.80	122.20	-60.40	Peak	Horizontal



IEEE 802.11n HT 20 MHz mode / 5750~ 5950MHz

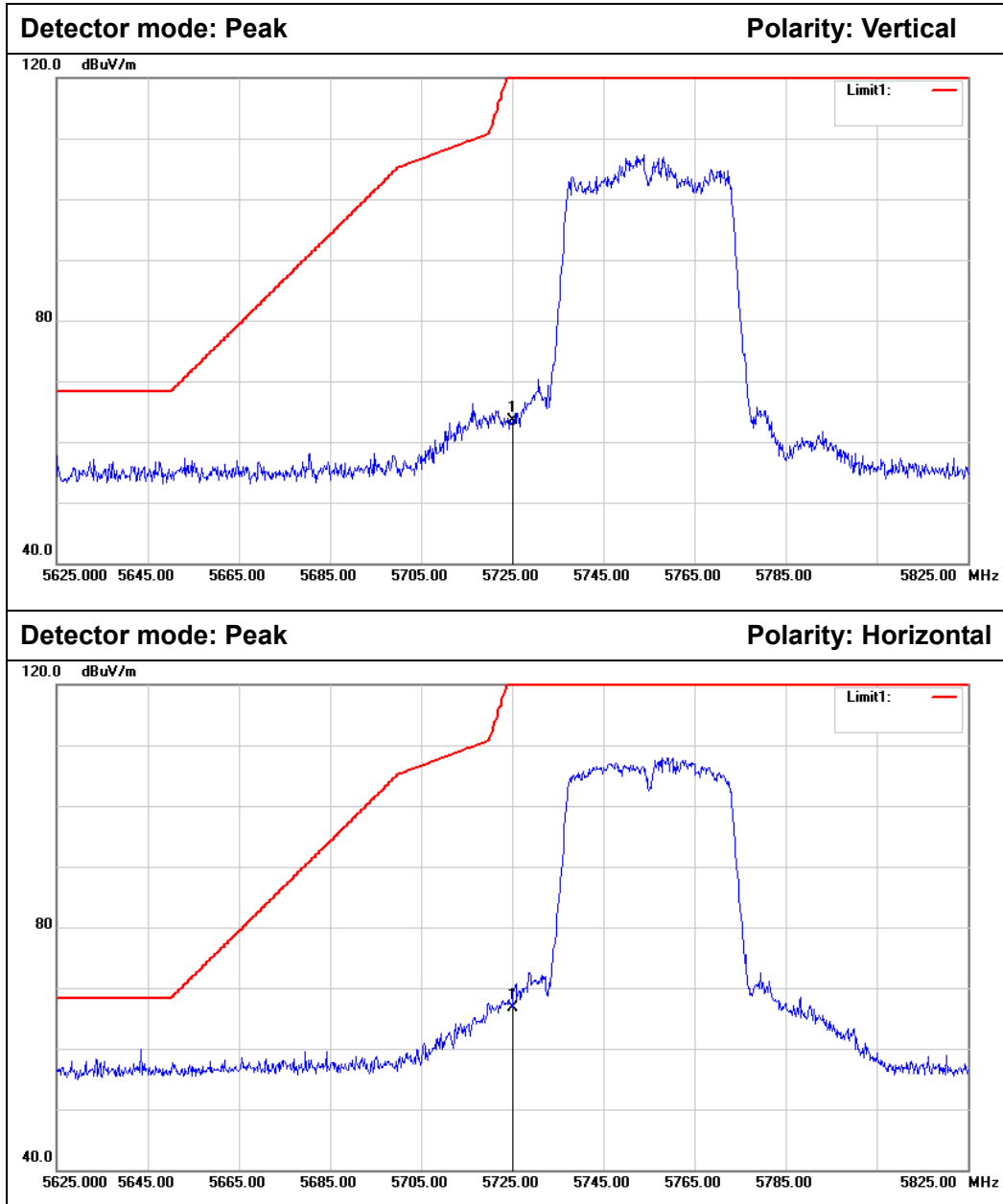


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	52.52	6.02	58.54	122.20	-63.66	Peak	Vertical
1	5850.000	51.93	6.02	57.95	122.20	-64.25	Peak	Horizontal



Combine with Antenna 0 and Antenna 1

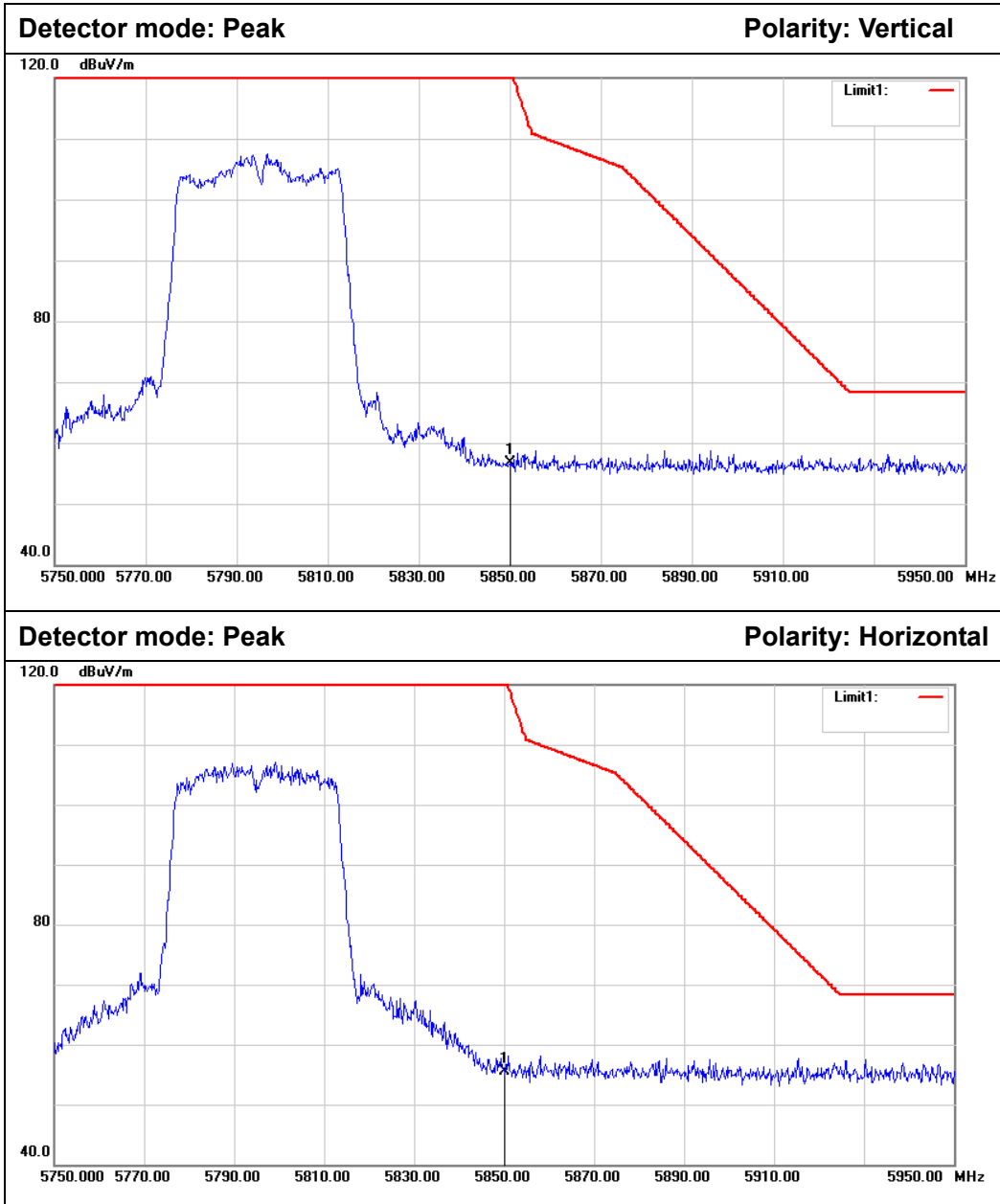
IEEE 802.11n HT 40 MHz mode / 5625 ~ 5825MHz



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	57.45	5.96	63.41	122.20	-58.79	Peak	Vertical
1	5725.000	60.65	5.96	66.61	122.20	-55.59	Peak	Horizontal



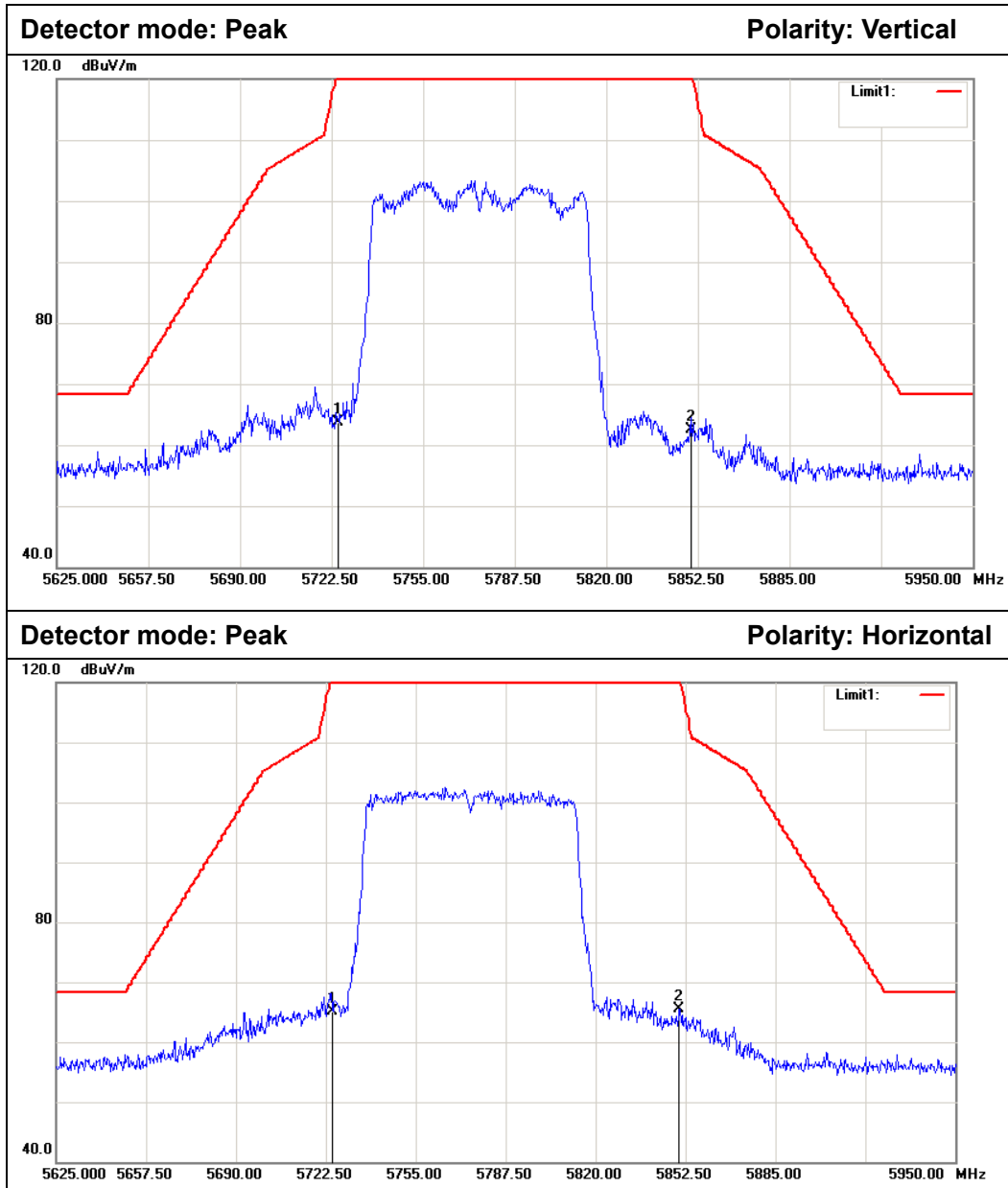
IEEE 802.11n HT 40 MHz mode / 5750~ 5950MHz



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	50.63	6.02	56.65	122.20	-65.55	Peak	Vertical
1	5850.000	49.50	6.02	55.52	122.20	-66.68	Peak	Horizontal



Combine with Antenna 0 and Antenna 1  
IEEE 802.11ac 80 mode / 5625 ~ 5950MHz



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	57.80	5.96	63.76	122.20	-58.44	Peak	Vertical
2	5850.000	56.56	6.02	62.58	122.20	-59.62	Peak	Vertical
1	5725.000	59.05	5.96	65.01	122.20	-57.19	Peak	Horizontal
2	5850.000	59.51	6.02	65.53	122.20	-56.67	Peak	Horizontal



## 6.9 POWERLINE CONDUCTED EMISSIONS

### 6.9.1 LIMIT

According to §15.207(a), except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Limits (dB $\mu$ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

\* Decreases with the logarithm of the frequency.

### 6.9.2 TEST INSTRUMENTS

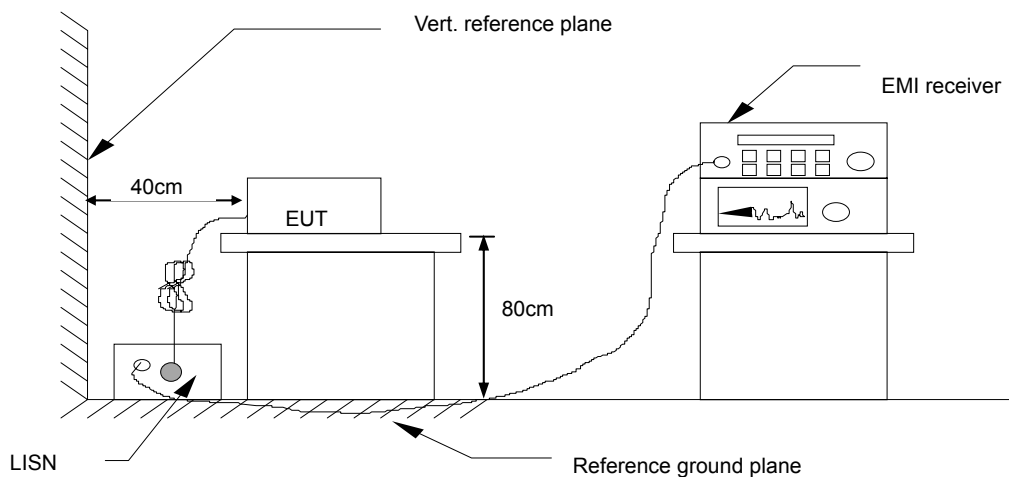
Conducted Emission Test Site					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	02/21/2016	02/20/2017
LISN(EUT)	ROHDE&SCHWARZ	ENV216	101543-WX	02/21/2016	02/20/2017
LISN	EMCO	3825/2	8901-1459	02/21/2016	02/20/2017
Temp. / Humidity Meter	VICTOR	HTC-1	N/A	02/21/2016	02/20/2017
Test S/W	FARAD	EZ-EMC/ CCS-3A1-CE			

**NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. N.C.R = No Calibration Request.



### 6.9.3 TEST CONFIGURATION



### 6.9.4 TEST PROCEDURE

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

### 6.9.5 DATA SAMPLE

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XXXX	32.69	25.65	11.52	44.21	37.17	65.78	55.79	-21.57	-18.62	Pass

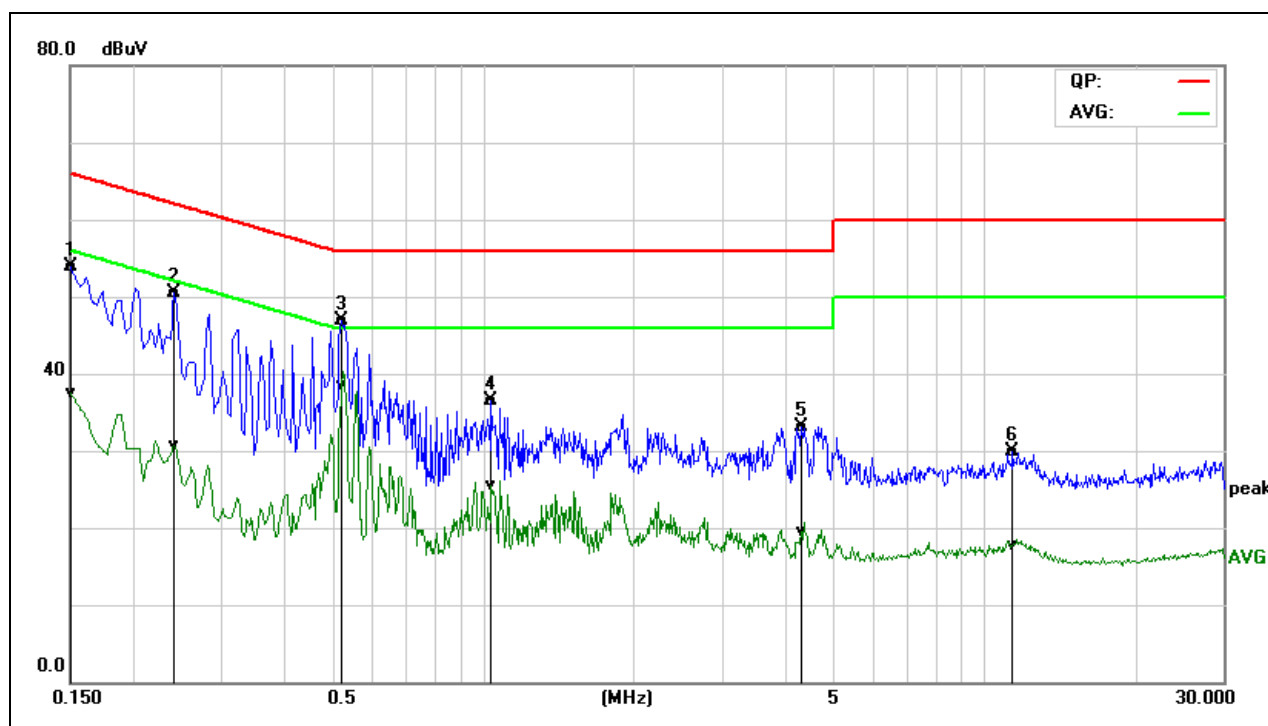
Factor = Insertion loss of LISN + Cable Loss  
Result = Quasi-peak Reading/ Average Reading + Factor  
Limit = Limit stated in standard  
Margin = Result (dBuV) – Limit (dBuV)





## 6.9.6 TEST RESULTS

Model No.	ASW120	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 2
Tested by	David Dong	Line	L1
Test Date	May 23, 2017	Test Voltage	AC 120V/60Hz

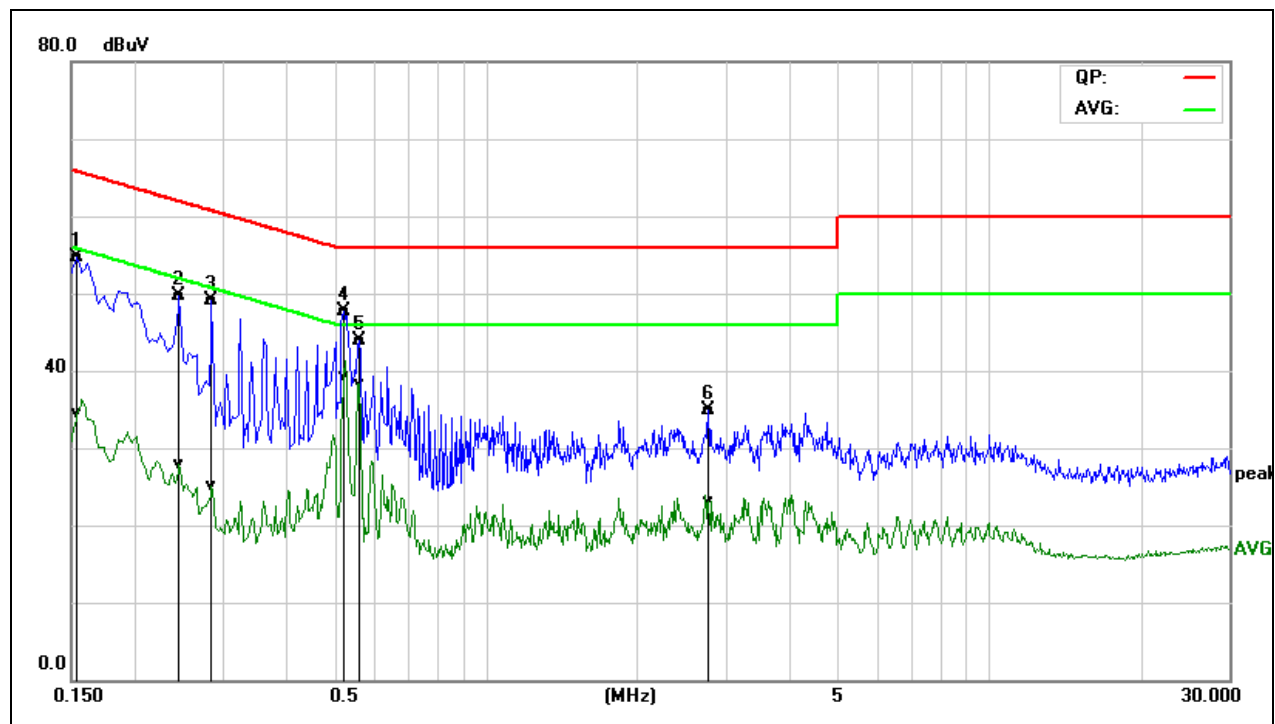


Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1500	34.22	17.95	19.62	53.84	37.57	65.99	56.00	-12.15	-18.43	Pass
0.2420	30.87	11.11	19.63	50.50	30.74	62.02	52.03	-11.52	-21.29	Pass
0.5220	27.40	19.01	19.54	46.94	38.55	56.00	46.00	-9.06	-7.45	Pass
1.0420	16.88	5.90	19.55	36.43	25.45	56.00	46.00	-19.57	-20.55	Pass
4.3340	13.39	-0.17	19.73	33.12	19.56	56.00	46.00	-22.88	-26.44	Pass
11.4340	9.82	-2.45	20.11	29.93	17.66	60.00	50.00	-30.07	-32.34	Pass

REMARKS: L1 = Line One (Live Line)



Model No.	ASW120	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 2
Tested by	David Dong	Line	L2
Test Date	May 23, 2017	Test Voltage	AC 120V/60Hz

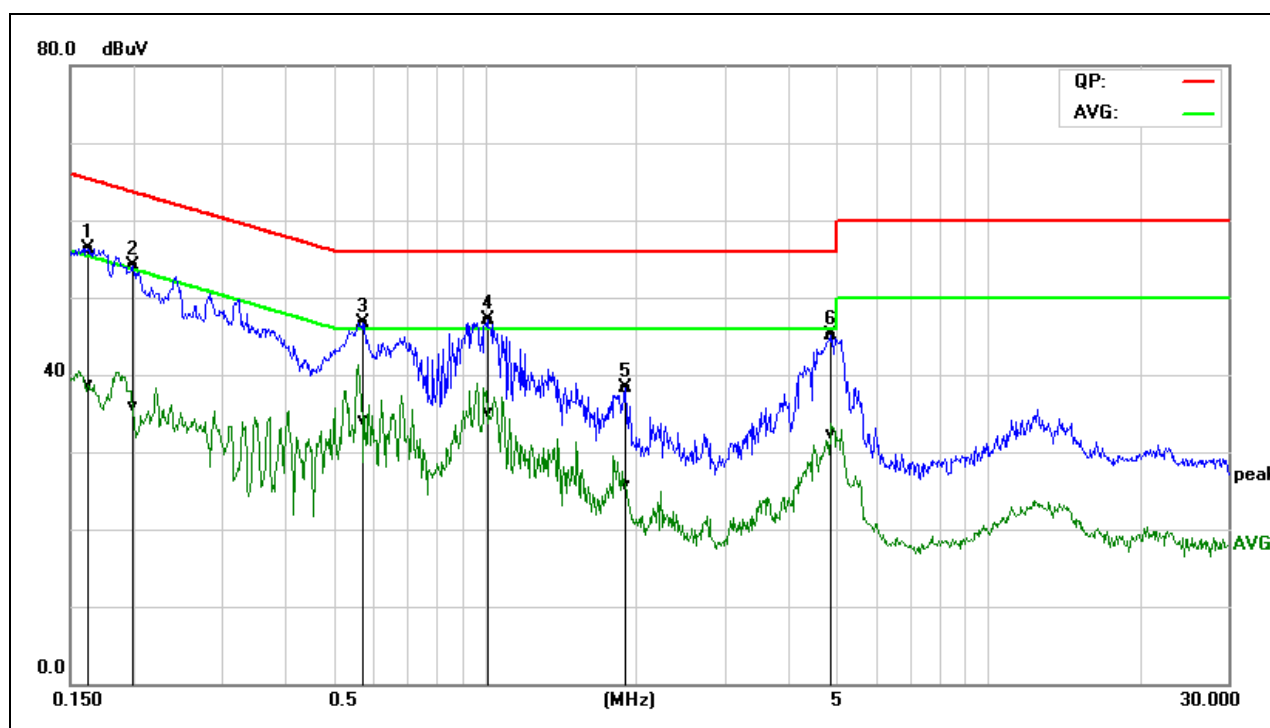


Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1539	35.21	14.89	19.52	54.73	34.41	65.78	55.79	-11.05	-21.38	Pass
0.2460	30.19	8.40	19.54	49.73	27.94	61.89	51.89	-12.16	-23.95	Pass
0.2860	29.51	5.55	19.54	49.05	25.09	60.64	50.64	-11.59	-25.55	Pass
0.5220	28.07	19.80	19.54	47.61	39.34	56.00	46.00	-8.39	-6.66	Pass
0.5620	24.33	18.81	19.55	43.88	38.36	56.00	46.00	-12.12	-7.64	Pass
2.7700	15.18	3.35	19.75	34.93	23.10	56.00	46.00	-21.07	-22.90	Pass

REMARKS: L2 = Line Two (Neutral Line)



Model No.	ASW120	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 3
Tested by	David Dong	Line	L1
Test Date	May 23, 2017	Test Voltage	AC 240V/50Hz

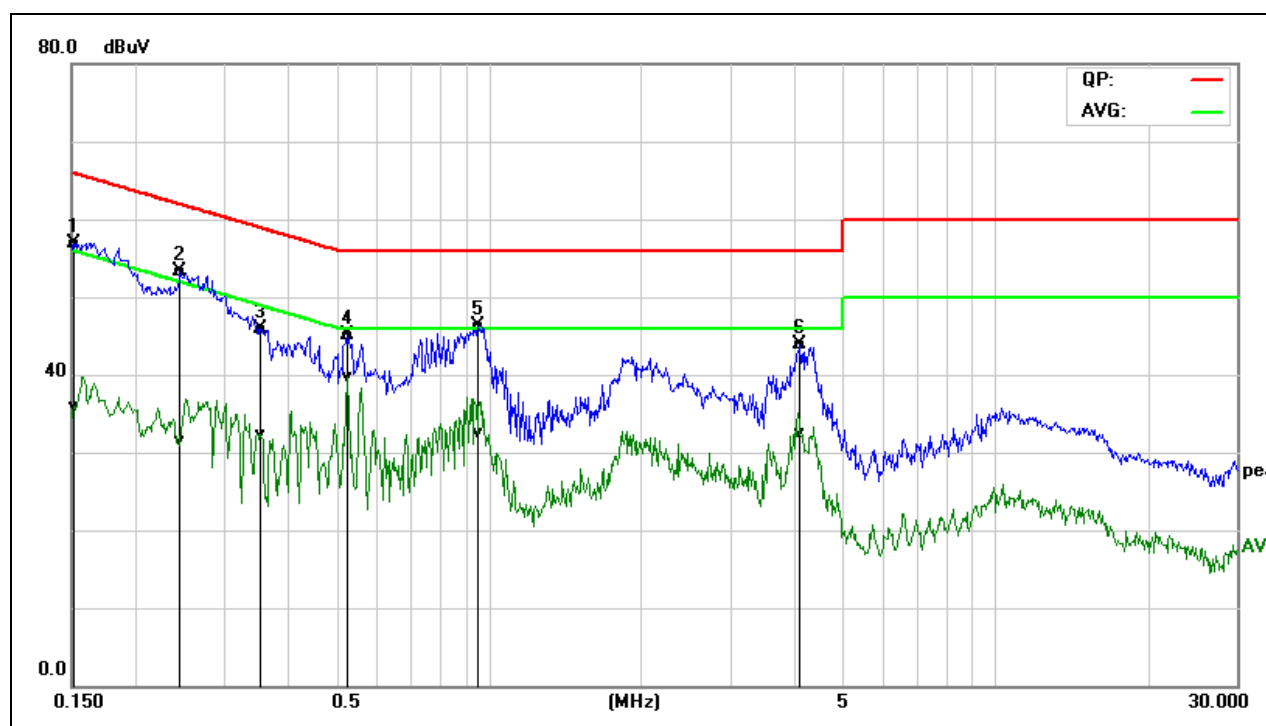


Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1621	36.76	18.99	19.62	56.38	38.61	65.35	55.36	-8.97	-16.75	Pass
0.1995	34.49	16.23	19.64	54.13	35.87	63.63	53.63	-9.50	-17.76	Pass
0.5701	27.20	14.48	19.56	46.76	34.04	56.00	46.00	-9.24	-11.96	Pass
1.0140	27.52	15.65	19.55	47.07	35.20	56.00	46.00	-8.93	-10.80	Pass
1.9060	18.55	6.02	19.70	38.25	25.72	56.00	46.00	-17.75	-20.28	Pass
4.8540	25.35	12.65	19.73	45.08	32.38	56.00	46.00	-10.92	-13.62	Pass

REMARKS: L1 = Line One (Live Line)



Model No.	ASW120	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 3
Tested by	David Dong	Line	L2
Test Date	May 23, 2017	Test Voltage	AC 240V/50Hz



Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1516	37.47	16.31	19.52	56.99	35.83	65.91	55.91	-8.92	-20.08	Pass
0.2460	33.69	11.90	19.54	53.23	31.44	61.89	51.89	-8.66	-20.45	Pass
0.3540	26.43	12.75	19.53	45.96	32.28	58.87	48.87	-12.91	-16.59	Pass
0.5260	25.61	20.23	19.54	45.15	39.77	56.00	46.00	-10.85	-6.23	Pass
0.9500	26.79	12.89	19.56	46.35	32.45	56.00	46.00	-9.65	-13.55	Pass
4.1140	24.13	12.66	19.80	43.93	32.46	56.00	46.00	-12.07	-13.54	Pass

REMARKS: L2 = Line Two (Neutral Line)



## 6.10 FREQUENCY STABILITY

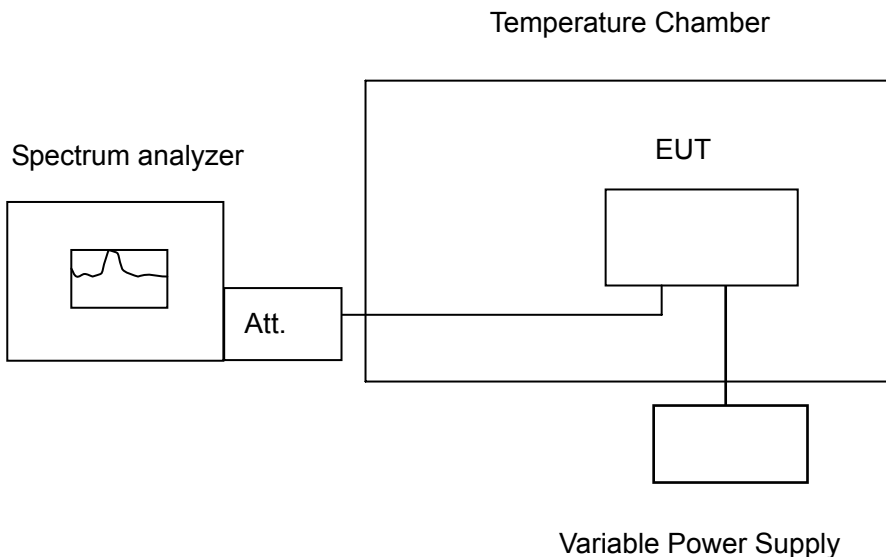
### 6.10.1 LIMIT

According to §15.407(g), manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the operational description.

### 6.10.2 TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
Spectrum Analyzer	Agilent	N9010A	MY52221469	02/21/2017	02/20/2018
DC Power Supply	DAZHENG	PS-605D	20018978	N.C.R	N.C.R
AC POWER SOURCE	UMART	HPA1010	N/A	N.C.R	N.C.R
Power Meter	Anritsu	ML2495A	1204003	02/21/2017	02/20/2018
Power Sensor	Anritsu	MA2411B	1126150	02/21/2017	02/20/2018
Temperature Chamber	TERCHY	MHG-800N	E21104	11/18/2016	11/17/2017
Temp. / Humidity Meter	Anymetre	JR913	N/A	02/21/2017	02/20/2018

### 6.10.3 TEST CONFIGURATION



**Remark:** Measurement setup for testing on Antenna connector



#### 6.10.4 TEST PROCEDURE

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -20°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

#### 6.10.5 TEST RESULTS

*No non-compliance noted.*

**Test Data**  
**Antenna 0****IEEE 802.11a MHz mode / 5180 ~ 5240MHz (Low)**

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5179.986085	5150-5250	PASS
40	120	5179.993014	5150-5250	PASS
30	120	5179.960121	5150-5250	PASS
20	120	5179.997620	5150-5250	PASS
10	120	5179.953528	5150-5250	PASS
0	120	5179.979556	5150-5250	PASS
-10	120	5179.977851	5150-5250	PASS
-20	120	5179.955249	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5179.949609	5150-5250	PASS
	120	5179.989300	5150-5250	PASS
	132	5179.987906	5150-5250	PASS

**IEEE 802.11a MHz mode / 5180 ~ 5240MHz (High)**

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5239.974769	5150-5250	PASS
40	120	5239.971484	5150-5250	PASS
30	120	5239.966273	5150-5250	PASS
20	120	5239.996879	5150-5250	PASS
10	120	5239.975974	5150-5250	PASS
0	120	5239.983011	5150-5250	PASS
-10	120	5239.975383	5150-5250	PASS
-20	120	5239.969195	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5239.985854	5150-5250	PASS
	120	5239.998200	5150-5250	PASS
	132	5239.964263	5150-5250	PASS



## IEEE 802.11a mode / 5745 ~ 5825MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.966587	5725-5850	PASS
40	120	5744.951268	5725-5850	PASS
30	120	5744.958444	5725-5850	PASS
20	120	5744.996300	5725-5850	PASS
10	120	5744.955940	5725-5850	PASS
0	120	5744.973652	5725-5850	PASS
-10	120	5744.968513	5725-5850	PASS
-20	120	5744.984630	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5744.968038	5725-5850	PASS
	120	5744.987300	5725-5850	PASS
	132	5744.960131	5725-5850	PASS

## IEEE 802.11a mode / 5745 ~ 5825MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.954515	5725-5850	PASS
40	120	5744.987300	5725-5850	PASS
30	120	5744.984624	5725-5850	PASS
20	120	5824.992650	5725-5850	PASS
10	120	5824.988896	5725-5850	PASS
0	120	5824.978326	5725-5850	PASS
-10	120	5824.987154	5725-5850	PASS
-20	120	5824.953937	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5824.989000	5725-5850	PASS
	120	5824.978500	5725-5850	PASS
	132	5824.979014	5725-5850	PASS



**Antenna 1****IEEE 802.11a MHz mode / 5180 ~ 5240MHz (Low)**

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5179.968096	5150-5250	PASS
40	120	5179.961640	5150-5250	PASS
30	120	5179.964833	5150-5250	PASS
20	120	5179.986900	5150-5250	PASS
10	120	5179.969168	5150-5250	PASS
0	120	5179.979790	5150-5250	PASS
-10	120	5179.998847	5150-5250	PASS
-20	120	5179.976098	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5179.971651	5150-5250	PASS
	120	5179.992500	5150-5250	PASS
	132	5179.978387	5150-5250	PASS

**IEEE 802.11a MHz mode / 5180 ~ 5240MHz (High)**

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5239.963428	5150-5250	PASS
40	120	5239.999584	5150-5250	PASS
30	120	5239.981481	5150-5250	PASS
20	120	5239.996710	5150-5250	PASS
10	120	5239.984418	5150-5250	PASS
0	120	5239.985556	5150-5250	PASS
-10	120	5239.992679	5150-5250	PASS
-20	120	5239.980587	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5239.992230	5150-5250	PASS
	120	5239.997690	5150-5250	PASS
	132	5239.993381	5150-5250	PASS



## IEEE 802.11a MHz mode / 5745 ~ 5825MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.957613	5725-5850	PASS
40	120	5744.964979	5725-5850	PASS
30	120	5744.964076	5725-5850	PASS
20	120	5744.986800	5725-5850	PASS
10	120	5744.985762	5725-5850	PASS
0	120	5744.965288	5725-5850	PASS
-10	120	5744.954755	5725-5850	PASS
-20	120	5744.995014	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5744.976346	5725-5850	PASS
	120	5744.986930	5725-5850	PASS
	132	5744.977917	5725-5850	PASS

## IEEE 802.11a MHz mode / 5745 ~ 5825MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5824.980794	5725-5850	PASS
40	120	5824.986017	5725-5850	PASS
30	120	5824.992004	5725-5850	PASS
20	120	5824.998500	5725-5850	PASS
10	120	5824.952551	5725-5850	PASS
0	120	5824.982671	5725-5850	PASS
-10	120	5824.978150	5725-5850	PASS
-20	120	5824.975729	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5824.985084	5725-5850	PASS
	120	5824.997300	5725-5850	PASS
	132	5824.967009	5725-5850	PASS



## Antenna 0

## IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5179.991031	5150-5250	PASS
40	120	5179.968246	5150-5250	PASS
30	120	5179.983021	5150-5250	PASS
20	120	5179.996100	5150-5250	PASS
10	120	5179.954175	5150-5250	PASS
0	120	5179.976045	5150-5250	PASS
-10	120	5179.971403	5150-5250	PASS
-20	120	5179.987600	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5179.968612	5150-5250	PASS
	120	5179.995200	5150-5250	PASS
	132	5179.980768	5150-5250	PASS

## IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5239.972636	5150-5250	PASS
40	120	5239.985750	5150-5250	PASS
30	120	5239.973652	5150-5250	PASS
20	120	5239.995800	5150-5250	PASS
10	120	5239.950520	5150-5250	PASS
0	120	5239.981314	5150-5250	PASS
-10	120	5239.957247	5150-5250	PASS
-20	120	5239.952554	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5239.981469	5150-5250	PASS
	120	5239.993250	5150-5250	PASS
	132	5239.966697	5150-5250	PASS



## IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.979879	5725-5850	PASS
40	120	5744.984902	5725-5850	PASS
30	120	5744.982335	5725-5850	PASS
20	120	5744.978600	5725-5850	PASS
10	120	5744.992869	5725-5850	PASS
0	120	5744.965627	5725-5850	PASS
-10	120	5744.993807	5725-5850	PASS
-20	120	5744.980508	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5744.986277	5725-5850	PASS
	120	5744.998200	5725-5850	PASS
	132	5744.980544	5725-5850	PASS

## IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5824.974327	5725-5850	PASS
40	120	5824.963140	5725-5850	PASS
30	120	5824.988830	5725-5850	PASS
20	120	5824.986300	5725-5850	PASS
10	120	5824.990632	5725-5850	PASS
0	120	5824.954709	5725-5850	PASS
-10	120	5824.965172	5725-5850	PASS
-20	120	5824.975310	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5824.975389	5725-5850	PASS
	120	5824.972600	5725-5850	PASS
	132	5824.959601	5725-5850	PASS



## Antenna 1

## IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5179.993818	5150-5250	PASS
40	120	5179.964026	5150-5250	PASS
30	120	5179.968166	5150-5250	PASS
20	120	5179.993300	5150-5250	PASS
10	120	5179.983171	5150-5250	PASS
0	120	5179.993921	5150-5250	PASS
-10	120	5179.962650	5150-5250	PASS
-20	120	5179.979096	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5179.999706	5150-5250	PASS
	120	5179.992800	5150-5250	PASS
	132	5179.978229	5150-5250	PASS

## IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5239.969587	5150-5250	PASS
40	120	5239.981632	5150-5250	PASS
30	120	5239.959677	5150-5250	PASS
20	120	5239.997160	5150-5250	PASS
10	120	5239.949491	5150-5250	PASS
0	120	5239.961831	5150-5250	PASS
-10	120	5239.971539	5150-5250	PASS
-20	120	5239.952617	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5239.988510	5150-5250	PASS
	120	5239.993490	5150-5250	PASS
	132	5239.991047	5150-5250	PASS



## IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.967016	5725-5850	PASS
40	120	5744.966335	5725-5850	PASS
30	120	5744.963262	5725-5850	PASS
20	120	5744.972500	5725-5850	PASS
10	120	5744.965799	5725-5850	PASS
0	120	5744.956523	5725-5850	PASS
-10	120	5744.992714	5725-5850	PASS
-20	120	5744.972099	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5744.952547	5725-5850	PASS
	120	5744.963800	5725-5850	PASS
	132	5744.963380	5725-5850	PASS

## IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5824.995153	5725-5850	PASS
40	120	5824.974075	5725-5850	PASS
30	120	5824.981485	5725-5850	PASS
20	120	5824.972500	5725-5850	PASS
10	120	5824.949620	5725-5850	PASS
0	120	5824.954973	5725-5850	PASS
-10	120	5824.966881	5725-5850	PASS
-20	120	5824.950312	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5824.981328	5725-5850	PASS
	120	5824.984200	5725-5850	PASS
	132	5824.981916	5725-5850	PASS



## Antenna 0

## IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5189.982668	5150-5250	PASS
40	120	5189.968723	5150-5250	PASS
30	120	5189.992039	5150-5250	PASS
20	120	5189.993800	5150-5250	PASS
10	120	5189.998709	5150-5250	PASS
0	120	5189.993035	5150-5250	PASS
-10	120	5189.980302	5150-5250	PASS
-20	120	5189.996945	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5189.971641	5150-5250	PASS
	120	5189.976200	5150-5250	PASS
	132	5189.979583	5150-5250	PASS

## IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5229.991218	5150-5250	PASS
40	120	5229.952622	5150-5250	PASS
30	120	5229.958246	5150-5250	PASS
20	120	5230.000200	5150-5250	PASS
10	120	5229.981773	5150-5250	PASS
0	120	5229.982458	5150-5250	PASS
-10	120	5229.966890	5150-5250	PASS
-20	120	5229.994665	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5229.983413	5150-5250	PASS
	120	5230.006150	5150-5250	PASS
	132	5229.981453	5150-5250	PASS



## IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5754.989347	5725-5850	PASS
40	120	5754.949167	5725-5850	PASS
30	120	5754.984243	5725-5850	PASS
20	120	5754.992700	5725-5850	PASS
10	120	5754.988190	5725-5850	PASS
0	120	5754.955352	5725-5850	PASS
-10	120	5754.952375	5725-5850	PASS
-20	120	5754.987013	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5754.979372	5725-5850	PASS
	120	5754.993800	5725-5850	PASS
	132	5754.996615	5725-5850	PASS

## IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5794.998457	5725-5850	PASS
40	120	5794.963616	5725-5850	PASS
30	120	5794.979294	5725-5850	PASS
20	120	5794.982630	5725-5850	PASS
10	120	5794.954739	5725-5850	PASS
0	120	5794.949839	5725-5850	PASS
-10	120	5794.997736	5725-5850	PASS
-20	120	5794.981055	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5794.951030	5725-5850	PASS
	120	5794.984600	5725-5850	PASS
	132	5794.964804	5725-5850	PASS





## Antenna 1

## IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5189.963970	5150-5250	PASS
40	120	5189.977434	5150-5250	PASS
30	120	5189.988296	5150-5250	PASS
20	120	5189.995100	5150-5250	PASS
10	120	5189.957996	5150-5250	PASS
0	120	5189.999728	5150-5250	PASS
-10	120	5189.985319	5150-5250	PASS
-20	120	5189.973521	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5189.950346	5150-5250	PASS
	120	5189.942600	5150-5250	PASS
	132	5189.979489	5150-5250	PASS

## IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5229.962558	5150-5250	PASS
40	120	5229.987547	5150-5250	PASS
30	120	5229.983777	5150-5250	PASS
20	120	5230.001700	5150-5250	PASS
10	120	5229.973138	5150-5250	PASS
0	120	5229.965518	5150-5250	PASS
-10	120	5229.978202	5150-5250	PASS
-20	120	5229.991748	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5229.982463	5150-5250	PASS
	120	5230.000200	5150-5250	PASS
	132	5229.970090	5150-5250	PASS



## IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz (Low)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5754.953514	5725-5850	PASS
40	120	5754.984602	5725-5850	PASS
30	120	5754.981971	5725-5850	PASS
20	120	5754.997300	5725-5850	PASS
10	120	5754.965820	5725-5850	PASS
0	120	5754.993005	5725-5850	PASS
-10	120	5754.957035	5725-5850	PASS
-20	120	5754.994475	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5754.993523	5725-5850	PASS
	120	5754.992600	5725-5850	PASS
	132	5754.992298	5725-5850	PASS

## IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz (High)

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5794.951013	5725-5850	PASS
40	120	5794.976623	5725-5850	PASS
30	120	5794.951107	5725-5850	PASS
20	120	5794.976900	5725-5850	PASS
10	120	5794.968653	5725-5850	PASS
0	120	5794.981298	5725-5850	PASS
-10	120	5794.952148	5725-5850	PASS
-20	120	5794.964196	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5794.968926	5725-5850	PASS
	120	5794.983600	5725-5850	PASS
	132	5794.978850	5725-5850	PASS



## Antenna 0

## IEEE 802.11ac 80 mode / 5210MHz

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5209.960512	5150-5250	PASS
40	120	5209.963100	5150-5250	PASS
30	120	5209.995598	5150-5250	PASS
20	120	5209.983300	5150-5250	PASS
10	120	5209.989853	5150-5250	PASS
0	120	5209.990649	5150-5250	PASS
-10	120	5209.994342	5150-5250	PASS
-20	120	5209.958194	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5209.989868	5150-5250	PASS
	120	5209.986100	5150-5250	PASS
	132	5209.950636	5150-5250	PASS

## IEEE 802.11ac 80 mode / 5775MHz

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5774.957535	5725-5850	PASS
40	120	5774.969800	5725-5850	PASS
30	120	5774.957273	5725-5850	PASS
20	120	5774.953700	5725-5850	PASS
10	120	5774.992179	5725-5850	PASS
0	120	5774.953301	5725-5850	PASS
-10	120	5774.977411	5725-5850	PASS
-20	120	5774.979866	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5774.978770	5725-5850	PASS
	120	5774.945800	5725-5850	PASS
	132	5774.984138	5725-5850	PASS



## Antenna 1

## IEEE 802.11ac 80 mode / 5210MHz

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5209.993955	5150-5250	PASS
40	120	5209.987024	5150-5250	PASS
30	120	5209.987402	5150-5250	PASS
20	120	5209.986100	5150-5250	PASS
10	120	5209.966955	5150-5250	PASS
0	120	5209.996047	5150-5250	PASS
-10	120	5209.959065	5150-5250	PASS
-20	120	5209.992695	5150-5250	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5209.966810	5150-5250	PASS
	120	5209.982500	5150-5250	PASS
	132	5209.969006	5150-5250	PASS

## IEEE 802.11ac 80 mode / 5775MHz

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5774.982708	5725-5850	PASS
40	120	5774.977807	5725-5850	PASS
30	120	5774.958464	5725-5850	PASS
20	120	5774.943300	5725-5850	PASS
10	120	5774.950285	5725-5850	PASS
0	120	5774.984898	5725-5850	PASS
-10	120	5774.997597	5725-5850	PASS
-20	120	5774.982479	5725-5850	PASS

Environment Temperature ( °C )	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5774.974382	5725-5850	PASS
	120	5774.972500	5725-5850	PASS
	132	5774.980986	5725-5850	PASS