

6.7 RADIATED UNDESIABLE 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 (µV/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

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

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

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

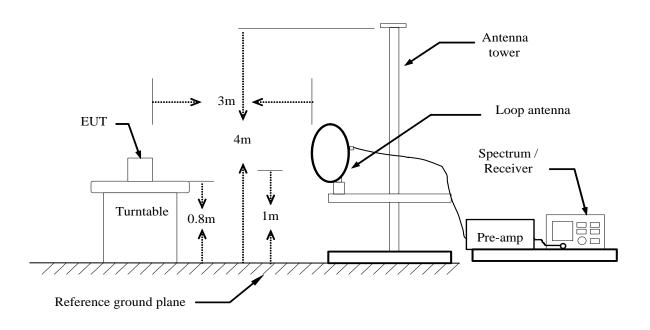


6.7.2 TEST INSTRUMENTS

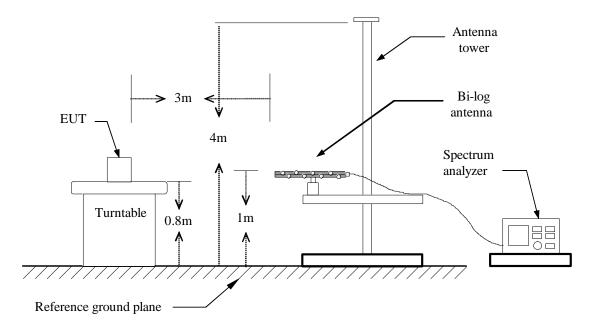
Radiated Emission Test Site 966 (2)									
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration				
PSA Series Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019				
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	02/21/2018	02/20/2019				
Amplifier	EMEC	EM330	060661	03/18/2018	03/17/2019				
High Noise Amplifier	Agilent	8449B	3008A01838	02/21/2018	02/20/2019				
Loop Antenna	COM-POWER	AL-130	121044	09/25/2017	09/24/2018				
Bilog Antenna	SCHAFFNER	CBL6143	5082	02/21/2018	02/20/2019				
Horn Antenna	SCHWARZBECK	BBHA9120	D286	02/27/2018	02/27/2019				
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170-497	02/27/2018	02/27/2019				
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	СТ	N/A	N/A	N.C.R	N.C.R				
Temp. / Humidity Meter	Anymetre	JR913	N/A	01/29/2018	01/28/2019				
Test S/W	FARAD		LZ-RF / CCS	S-SZ-3A2					

6.7.3 TEST CONFIGURATION

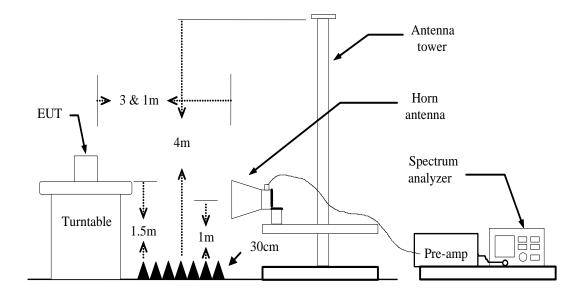
Below 30MHz



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	1MHz / 1MHz for Peak, 1 MHz / 1/T for
band)	Average
RB / VB (Emission in non-restricted	1MHz / 1MHz for Peak, 1 MHz / 1/T for
band)	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

6.7.5TEST 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°) 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 1 GHz to 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 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 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 (± 45°) 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 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 SAPLE

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 MHzReading (dBuV)= Uncorrected Analyzer / Receiver readingCorrect Factor (dB/m)= Antenna factor + Cable loss - Amplifier gainResult (dBuV/m)= Reading (dBuV) + Corr. Factor (dB/m)Limit (dBuV/m)= Limit stated in standardMargin (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

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

Calculation Formula

Margin (dB) = Result (dBuV/m) – Limits (dBuV/m) Result (dBuV/m) = Reading (dBuV) + Correction Factor Compliance Certification Services (Shenzhen) Inc.

6.7.7 TEST RESULTS

Below 1 GHz

Test Mode: <u>TX / IEEE 802.11a / 5180MHz /(CH Low)</u> Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: <u>Saber Huang</u> Date: April 11, 2018

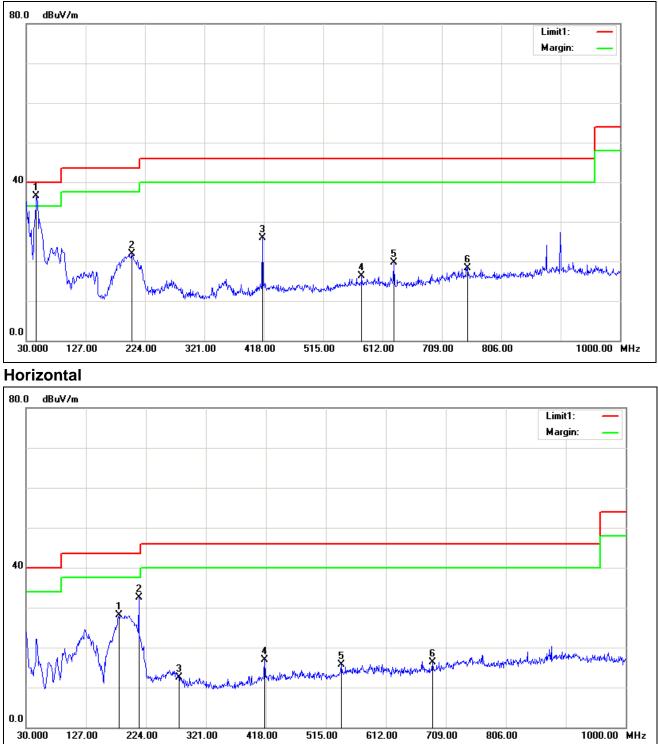
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
46.4900	56.10	-19.52	36.58	40.00	-3.42	V	QP
202.6600	44.22	-22.41	21.81	43.50	-21.69	V	QP
416.0600	41.30	-15.49	25.81	46.00	-20.19	V	QP
578.0500	29.33	-13.09	16.24	46.00	-29.76	V	QP
630.4300	32.16	-12.50	19.66	46.00	-26.34	V	QP
750.7100	29.58	-11.18	18.40	46.00	-27.60	V	QP
180.3500	51.09	-22.95	28.14	43.50	-15.36	Н	QP
212.3600	53.69	-21.24	32.45	43.50	-11.05	Н	QP
277.3500	32.86	-20.42	12.44	46.00	-33.56	Н	QP
416.0600	32.40	-15.49	16.91	46.00	-29.09	Н	QP
540.2200	29.01	-13.28	15.73	46.00	-30.27	Н	QP
687.6600	28.49	-12.25	16.24	46.00	-29.76	Н	QP

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









Above 1 GHz

1GHz~6GHz

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Tested by: <u>Saber Huang</u> Date: <u>April 11, 2018</u>

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1720.000	52.84	-6.44	46.40	74.00	-27.60	V	peak
1910.000	57.73	-5.57	52.16	74.00	-21.84	V	peak
1910.000	45.73	-5.57	40.16	54.00	-13.84	V	AVG
2410.000	51.53	-2.75	48.78	74.00	-25.22	V	peak
2460.000	53.05	-2.48	50.57	74.00	-23.43	V	peak
3335.000	44.21	-0.80	43.41	74.00	-30.59	V	peak
3995.000	43.02	1.57	44.59	74.00	-29.41	V	peak
2070.000	46.07	-4.62	41.45	74.00	-32.55	н	Peak
2410.000	47.50	-2.75	44.75	74.00	-29.25	Н	Peak
2670.000	44.82	-1.95	42.87	74.00	-31.13	Н	Peak
3170.000	52.80	-1.07	51.73	74.00	-22.27	н	peak
3655.000	43.43	0.13	43.56	74.00	-30.44	Н	peak
4760.000	45.24	4.20	49.44	74.00	-24.56	Н	peak

- 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).



Above 6GHz

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low)

Ambient temperature:<u>24°C</u>Relative humidity:<u>52% RH</u>

Tested by: <u>Saber Huang</u> Date: <u>April 11, 2018</u>

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6564.000	32.16	6.99	39.15	74.00	-34.85	V	peak
7248.000	32.15	8.18	40.33	74.00	-33.67	V	peak
7740.000	32.13	9.14	41.27	74.00	-32.73	V	peak
8376.000	32.07	9.44	41.51	74.00	-32.49	V	peak
8652.000	31.18	9.29	40.47	74.00	-33.53	V	peak
9552.000	31.19	10.69	41.88	74.00	-32.12	V	peak
6096.000	32.58	6.24	38.82	74.00	-35.18	Н	Peak
6348.000	34.37	6.64	41.01	74.00	-32.99	н	Peak
7560.000	31.78	8.79	40.57	74.00	-33.43	Н	Peak
8136.000	32.73	9.58	42.31	74.00	-31.69	Н	peak
9348.000	31.61	10.10	41.71	74.00	-32.29	Н	peak
10356.000	31.94	13.08	45.02	74.00	-28.98	н	peak

- 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)

Ambient temperature: <u>24°C</u> Relative h

Relative humidity: <u>52% RH</u>

Tested by: <u>Saber Huang</u> Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7260.000	31.20	8.21	39.41	74.00	-34.59	V	peak
8052.000	31.88	9.62	41.50	74.00	-32.50	V	peak
8988.000	31.02	9.11	40.13	74.00	-33.87	V	peak
9480.000	30.76	10.48	41.24	74.00	-32.76	V	peak
10020.000	30.80	12.04	42.84	74.00	-31.16	V	peak
10464.000	30.50	13.42	43.92	74.00	-30.08	V	peak
	•			·			
6108.000	33.06	6.25	39.31	74.00	-34.69	н	Peak
7164.000	31.16	8.02	39.18	74.00	-34.82	Н	Peak
7740.000	31.29	9.14	40.43	74.00	-33.57	Н	Peak
7992.000	31.57	9.63	41.20	74.00	-32.80	Н	peak
8592.000	30.62	9.32	39.94	74.00	-34.06	Н	peak
9564.000	30.62	10.72	41.34	74.00	-32.66	н	peak

- 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: Saber Huang Date: April 11, 2018 Ambient temperature: 24°C Relative humidity: 52% RH Correction Antenna Frequency Reading Result Limit Margin Remark Factor Pole (dBuV/m) (MHz) (dBuV) (dBuV/m) (dB) (dB/m) (V/H) 6564.000 6.99 74.00 -35.40 31.61 38.60 V peak 74.00 V 7032.000 32.20 7.76 39.96 -34.04 peak 7440.000 31.78 8.56 40.34 74.00 -33.66 V peak V 7860.000 31.16 9.38 40.54 74.00 -33.46 peak 8160.000 31.44 9.56 41.00 74.00 -33.00V peak 9012.000 31.30 9.13 40.43 74.00 -33.57 V peak 74.00 6348.000 33.69 6.64 40.33 -33.67 н Peak 7.48 74.00 Н 6864.000 31.86 39.34 -34.66Peak 40.03 74.00 Н 7320.000 31.71 8.32 -33.97 Peak

40.44

41.30

40.30

Remark:

7716.000

8076.000

8724.000

31.34

31.69

31.05

9.10

9.61

9.25

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

74.00

74.00

74.00

-33.56

-32.70

-33.70

н

н

Н

peak

peak

peak

- 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 / 5260MHz /(CH Low)

Tested by: <u>Saber</u> Huang

Date: April 11, 2018

	•						
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6780.000	32.52	7.34	39.86	74.00	-34.14	V	peak
7416.000	31.86	8.51	40.37	74.00	-33.63	V	peak
7668.000	32.50	9.00	41.50	74.00	-32.50	V	peak
8040.000	31.77	9.63	41.40	74.00	-32.60	V	peak
8988.000	31.33	9.11	40.44	74.00	-33.56	V	peak
9660.000	30.38	11.00	41.38	74.00	-32.62	V	peak
	·			·			
6348.000	33.37	6.64	40.01	74.00	-33.99	Н	Peak
6588.000	32.12	7.03	39.15	74.00	-34.85	Н	Peak
6936.000	31.31	7.60	38.91	74.00	-35.09	Н	Peak
7368.000	31.29	8.42	39.71	74.00	-34.29	Н	peak
7860.000	31.33	9.38	40.71	74.00	-33.29	н	peak
8076.000	31.75	9.61	41.36	74.00	-32.64	Н	peak

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

- 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 / 5300MHz /(CH Mid)

Ambient temperature: <u>24°C</u> Relat

Relative humidity: 52% RH

Tested by: <u>Saber Huang</u> Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7272.000	31.50	8.23	39.73	74.00	-34.27	V	peak
7728.000	31.86	9.12	40.98	74.00	-33.02	V	peak
8184.000	31.66	9.55	41.21	74.00	-32.79	V	peak
8652.000	31.20	9.29	40.49	74.00	-33.51	V	peak
9108.000	31.45	9.41	40.86	74.00	-33.14	V	peak
10008.000	30.28	12.00	42.28	74.00	-31.72	V	peak
	•			·			
6348.000	33.72	6.64	40.36	74.00	-33.64	н	Peak
6816.000	32.21	7.40	39.61	74.00	-34.39	Н	Peak
7188.000	31.74	8.07	39.81	74.00	-34.19	Н	Peak
7716.000	31.58	9.10	40.68	74.00	-33.32	Н	peak
8088.000	32.06	9.60	41.66	74.00	-32.34	н	peak
8592.000	30.86	9.32	40.18	74.00	-33.82	н	peak

- 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 / 5320MHz /(CH High)Ambient temperature: 24°CRelative humidity: 52% RH

Tested by: <u>Saber Huang</u> Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6588.000	32.04	7.03	39.07	74.00	-34.93	V	peak
6840.000	32.21	7.44	39.65	74.00	-34.35	V	peak
7188.000	31.57	8.07	39.64	74.00	-34.36	V	peak
7884.000	31.85	9.42	41.27	74.00	-32.73	V	peak
8640.000	31.69	9.30	40.99	74.00	-33.01	V	peak
9336.000	31.01	10.07	41.08	74.00	-32.92	V	peak
		· · · · · · · · · · · · · · · · · · ·					
6840.000	32.15	7.44	39.59	74.00	-34.41	Н	Peak
7704.000	31.95	9.07	41.02	74.00	-32.98	н	Peak
7980.000	32.12	9.61	41.73	74.00	-32.27	Н	Peak
8412.000	32.45	9.42	41.87	74.00	-32.13	Н	peak
8976.000	31.35	9.11	40.46	74.00	-33.54	Н	peak
10476.000	29.76	13.46	43.22	74.00	-30.78	Н	peak

- 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 / 5500MHz /(CH Low)

Ambient temperature: <u>24°C</u> Relative hun

Relative humidity: 52% RH

Tested by: <u>Saber Huang</u> Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6768.000	31.48	7.32	38.80	74.00	-35.20	V	peak
7188.000	31.38	8.07	39.45	74.00	-34.55	V	peak
7740.000	31.91	9.14	41.05	74.00	-32.95	V	peak
8088.000	31.98	9.60	41.58	74.00	-32.42	V	peak
8520.000	31.01	9.36	40.37	74.00	-33.63	V	peak
9012.000	31.24	9.13	40.37	74.00	-33.63	V	peak
7044.000	31.59	7.79	39.38	74.00	-34.62	Н	Peak
7512.000	31.19	8.70	39.89	74.00	-34.11	Н	Peak
7908.000	31.99	9.47	41.46	74.00	-32.54	Н	Peak
8136.000	31.78	9.58	41.36	74.00	-32.64	Н	peak
8580.000	31.25	9.33	40.58	74.00	-33.42	Н	peak
9360.000	31.21	10.14	41.35	74.00	-32.65	Н	peak

- 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 / 5580MHz /(CH Mid)

Ambient temperature: <u>24°C</u> Relat

Relative humidity: 52% RH

Tested by: <u>Saber Huang</u> Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6840.000	31.47	7.44	38.91	74.00	-35.09	V	peak
7248.000	31.51	8.18	39.69	74.00	-34.31	V	peak
7656.000	32.20	8.98	41.18	74.00	-32.82	V	peak
8040.000	31.75	9.63	41.38	74.00	-32.62	V	peak
8328.000	32.35	9.47	41.82	74.00	-32.18	V	peak
9372.000	30.98	10.17	41.15	74.00	-32.85	V	peak
6348.000	33.97	6.64	40.61	74.00	-33.39	н	Peak
6528.000	31.61	6.94	38.55	74.00	-35.45	Н	Peak
6840.000	31.72	7.44	39.16	74.00	-34.84	Н	peak
7740.000	31.74	9.14	40.88	74.00	-33.12	Н	peak
8232.000	31.35	9.52	40.87	74.00	-33.13	Н	peak
8940.000	32.15	9.13	41.28	74.00	-32.72	н	peak

- 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 / 5700MHz /(CH High)

Tested by: Saber Huang

Date: April 11, 2018 Ambient temperature: 24°C Relative humidity: 52% RH Correction Antenna Frequency Reading Result Limit Margin Remark Factor Pole (dBuV/m) (MHz) (dBuV) (dBuV/m) (dB) (dB/m) (V/H) 6768.000 7.32 74.00 -35.20 31.48 38.80 V peak 74.00 V 7188.000 31.38 8.07 39.45 -34.55 peak 7740.000 31.91 9.14 41.05 74.00 -32.95 V peak V 8088.000 31.98 9.60 41.58 74.00 -32.42 peak 8520.000 31.01 9.36 40.37 74.00 -33.63 V peak 9012.000 31.24 9.13 40.37 74.00 -33.63 V peak 74.00 6348.000 33.35 6.64 39.99 -34.01 н Peak 7.21 38.74 74.00 Н 6696.000 31.53 -35.26Peak 74.00 -34.41 Н 7056.000 31.78 7.81 39.59 Peak 7656.000 31.81 8.98 40.79 74.00 -33.21 н peak 41.84 9.55 74.00 н 8184.000 32.29 -32.16 peak 8940.000 31.14 9.13 40.27 74.00 -33.73 Н peak

- 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) **Ambient temperature:** 24°C **Relative humidity:** 52% RH

Tested by: <u>Saber Huang</u> Date: <u>April 11, 2</u>018

	· <u> </u>						
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6348.000	31.92	6.64	38.56	74.00	-35.44	V	peak
6732.000	31.86	7.27	39.13	74.00	-34.87	V	peak
7032.000	31.45	7.76	39.21	74.00	-34.79	V	peak
7704.000	31.71	9.07	40.78	74.00	-33.22	V	peak
7968.000	31.82	9.59	41.41	74.00	-32.59	V	peak
9024.000	31.21	9.17	40.38	74.00	-33.62	V	peak
6348.000	33.71	6.64	40.35	74.00	-33.65	Н	Peak
6588.000	31.92	7.03	38.95	74.00	-35.05	н	Peak
7044.000	31.85	7.79	39.64	74.00	-34.36	н	Peak
7464.000	31.63	8.60	40.23	74.00	-33.77	н	peak
7992.000	31.70	9.63	41.33	74.00	-32.67	н	peak
8352.000	31.38	9.46	40.84	74.00	-33.16	н	peak
		•		•	-	•	•

- 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)

Ambient temperature: <u>24°C</u> Relative

Relative humidity: <u>52% R</u>H

Tested by: <u>Saber Huang</u> Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6708.000	32.27	7.23	39.50	74.00	-34.50	V	peak
7176.000	31.50	8.04	39.54	74.00	-34.46	V	peak
7848.000	31.17	9.35	40.52	74.00	-33.48	V	peak
8568.000	30.93	9.34	40.27	74.00	-33.73	V	peak
9228.000	30.50	9.76	40.26	74.00	-33.74	V	peak
9780.000	30.01	11.35	41.36	74.00	-32.64	V	peak
6348.000	33.46	6.64	40.10	74.00	-33.90	н	Peak
6528.000	31.93	6.94	38.87	74.00	-35.13	Н	Peak
7020.000	31.47	7.74	39.21	74.00	-34.79	Н	Peak
7452.000	31.20	8.58	39.78	74.00	-34.22	Н	peak
7932.000	31.49	9.52	41.01	74.00	-32.99	н	peak
8376.000	31.89	9.44	41.33	74.00	-32.67	н	peak

- 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: Saber Huang

Date: April 11, 2018 Ambient temperature: 24°C Relative humidity: 52% RH Correction Antenna Frequency Reading Result Limit Margin Remark Factor Pole (dBuV/m) (MHz) (dBuV) (dBuV/m) (dB) (dB/m) (V/H) 7104.000 7.90 39.70 74.00 -34.30 31.80 V peak 74.00 V 7716.000 31.80 9.10 40.90 -33.10 peak 7896.000 31.51 9.45 40.96 74.00 -33.04 V peak V 8364.000 32.21 9.45 41.66 74.00 -32.34 peak 8760.000 30.82 9.23 40.05 74.00 -33.95V peak 9396.000 31.08 10.24 41.32 74.00 -32.68 V peak 74.00 6936.000 31.55 7.60 39.15 -34.85 н Peak 74.00 Н 7452.000 31.22 8.58 39.80 -34.20Peak 74.00 7980.000 31.67 9.61 41.28 -32.72 Н Peak 8484.000 31.93 9.38 41.31 74.00 -32.69н peak 9228.000 9.76 74.00 н 30.72 40.48 -33.52 peak 10344.000 42.92 74.00 -31.08 Н 29.87 13.05 peak

- 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 / 5180MHz

Tested by: Saber Huang

/(CH Low)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7212.000	32.32	8.11	40.43	74.00	-33.57	V	peak
7704.000	32.36	9.07	41.43	74.00	-32.57	V	peak
8064.000	32.19	9.61	41.80	74.00	-32.20	V	peak
8820.000	31.34	9.20	40.54	74.00	-33.46	V	peak
9348.000	31.87	10.10	41.97	74.00	-32.03	V	peak
9852.000	31.60	11.55	43.15	74.00	-30.85	V	peak
6348.000	34.48	6.64	41.12	74.00	-32.88	Н	Peak
6768.000	32.64	7.32	39.96	74.00	-34.04	Н	Peak
7272.000	31.96	8.23	40.19	74.00	-33.81	Н	Peak
8292.000	32.51	9.49	42.00	74.00	-32.00	н	peak
9780.000	30.68	11.35	42.03	74.00	-31.97	н	peak
10356.000	32.48	13.08	45.56	74.00	-28.44	Н	peak

- 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 s
- 5. hown "----" 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.
- 6. 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.
- 7. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5200MHz

Tested by: Saber Huang

/(CH	Mid)	

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6348.000	33.22	6.64	39.86	74.00	-34.14	V	peak
6840.000	32.41	7.44	39.85	74.00	-34.15	V	peak
7200.000	32.59	8.09	40.68	74.00	-33.32	V	peak
7716.000	32.76	9.10	41.86	74.00	-32.14	V	peak
8064.000	32.29	9.61	41.90	74.00	-32.10	V	peak
9420.000	31.54	10.31	41.85	74.00	-32.15	V	peak
6348.000	35.16	6.64	41.80	74.00	-32.20	н	Peak
7032.000	31.68	7.76	39.44	74.00	-34.56	н	Peak
7728.000	31.84	9.12	40.96	74.00	-33.04	н	Peak
8388.000	31.81	9.44	41.25	74.00	-32.75	н	peak
9372.000	32.07	10.17	42.24	74.00	-31.76	н	peak
10404.000	32.40	13.23	45.63	74.00	-28.37	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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

Tested by: Saber Huang

/(CH High)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7032.000	32.22	7.76	39.98	74.00	-34.02	V	peak
7488.000	31.96	8.65	40.61	74.00	-33.39	V	peak
8124.000	32.28	9.58	41.86	74.00	-32.14	V	peak
9000.000	32.03	9.10	41.13	74.00	-32.87	V	peak
9804.000	31.14	11.42	42.56	74.00	-31.44	V	peak
11160.000	31.71	15.01	46.72	74.00	-27.28	V	peak
6348.000	33.54	6.64	40.18	74.00	-33.82	Н	Peak
6840.000	31.81	7.44	39.25	74.00	-34.75	н	Peak
7212.000	32.13	8.11	40.24	74.00	-33.76	н	Peak
7896.000	32.01	9.45	41.46	74.00	-32.54	Н	peak
8724.000	31.03	9.25	40.28	74.00	-33.72	н	peak
9444.000	31.62	10.38	42.00	74.00	-32.00	Н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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 / 5260MHz

Tested by: Saber Huang

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7296.000	32.48	8.28	40.76	74.00	-33.24	V	peak
7752.000	31.74	9.17	40.91	74.00	-33.09	V	peak
8100.000	32.12	9.60	41.72	74.00	-32.28	V	peak
8964.000	31.92	9.12	41.04	74.00	-32.96	V	peak
9312.000	31.33	10.00	41.33	74.00	-32.67	V	peak
9744.000	31.31	11.24	42.55	74.00	-31.45	V	peak
7032.000	31.72	7.76	39.48	74.00	-34.52	Н	Peak
7668.000	31.65	9.00	40.65	74.00	-33.35	н	Peak
8112.000	32.48	9.59	42.07	74.00	-31.93	н	Peak
8964.000	31.99	9.12	41.11	74.00	-32.89	н	peak
9768.000	30.53	11.31	41.84	74.00	-32.16	н	peak
10680.000	31.50	14.09	45.59	74.00	-28.41	Н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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 / 5300MHz

Tested by: Saber Huang

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6348.000	34.23	6.64	40.87	74.00	-33.13	V	peak
6936.000	32.46	7.60	40.06	74.00	-33.94	V	peak
7524.000	32.18	8.72	40.90	74.00	-33.10	V	peak
8148.000	32.30	9.57	41.87	74.00	-32.13	V	peak
8424.000	32.18	9.42	41.60	74.00	-32.40	V	peak
9348.000	31.76	10.10	41.86	74.00	-32.14	V	peak
							·
6432.000	32.85	6.78	39.63	74.00	-34.37	н	Peak
6948.000	32.10	7.62	39.72	74.00	-34.28	н	Peak
7284.000	31.97	8.25	40.22	74.00	-33.78	н	Peak
7956.000	32.13	9.56	41.69	74.00	-32.31	Н	peak
8388.000	32.28	9.44	41.72	74.00	-32.28	н	peak
9012.000	32.48	9.13	41.61	74.00	-32.39	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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 / 5320MHz

Tested by: Saber Huang

/(CH High)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7128.000	32.04	7.95	39.99	74.00	-34.01	V	peak
7620.000	32.04	8.91	40.95	74.00	-33.05	V	peak
8088.000	32.26	9.60	41.86	74.00	-32.14	V	peak
8412.000	32.81	9.42	42.23	74.00	-31.77	V	peak
9324.000	32.01	10.03	42.04	74.00	-31.96	V	peak
10008.000	31.23	12.00	43.23	74.00	-30.77	V	peak
6348.000	34.52	6.64	41.16	74.00	-32.84	Н	Peak
6804.000	32.07	7.38	39.45	74.00	-34.55	н	Peak
7200.000	32.39	8.09	40.48	74.00	-33.52	н	Peak
7464.000	32.32	8.60	40.92	74.00	-33.08	Н	peak
8124.000	32.63	9.58	42.21	74.00	-31.79	н	peak
8388.000	32.23	9.44	41.67	74.00	-32.33	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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 / 5500MHz

Tested by: Saber Huang

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6768.000	32.85	7.32	40.17	74.00	-33.83	V	peak
7176.000	32.19	8.04	40.23	74.00	-33.77	V	peak
7680.000	31.99	9.03	41.02	74.00	-32.98	V	peak
7992.000	32.13	9.63	41.76	74.00	-32.24	V	peak
8076.000	32.41	9.61	42.02	74.00	-31.98	V	peak
8568.000	31.54	9.34	40.88	74.00	-33.12	V	peak
							·
6348.000	33.83	6.64	40.47	74.00	-33.53	н	Peak
6744.000	32.10	7.29	39.39	74.00	-34.61	н	Peak
6984.000	32.14	7.67	39.81	74.00	-34.19	н	Peak
7692.000	32.65	9.05	41.70	74.00	-32.30	н	peak
8016.000	32.62	9.64	42.26	74.00	-31.74	н	peak
9012.000	32.16	9.13	41.29	74.00	-32.71	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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 / 5580MHz

Tested by: Saber Huang

/(CH	ΗN	1id)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6372.000	32.65	6.68	39.33	74.00	-34.67	V	peak
7056.000	31.80	7.81	39.61	74.00	-34.39	V	peak
7728.000	32.03	9.12	41.15	74.00	-32.85	V	peak
8076.000	32.38	9.61	41.99	74.00	-32.01	V	peak
9060.000	31.67	9.27	40.94	74.00	-33.06	V	peak
9660.000	31.30	11.00	42.30	74.00	-31.70	V	peak
6852.000	32.49	7.46	39.95	74.00	-34.05	Н	Peak
7320.000	31.87	8.32	40.19	74.00	-33.81	н	Peak
7704.000	31.95	9.07	41.02	74.00	-32.98	н	Peak
8004.000	32.14	9.65	41.79	74.00	-32.21	н	peak
8412.000	31.84	9.42	41.26	74.00	-32.74	н	peak
9360.000	31.50	10.14	41.64	74.00	-32.36	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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 / 5700MHz

Tested by: Saber Huang

/(CH High)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6828.000	32.13	7.42	39.55	74.00	-34.45	V	peak
7248.000	32.18	8.18	40.36	74.00	-33.64	V	peak
7536.000	31.87	8.75	40.62	74.00	-33.38	V	peak
8028.000	32.23	9.63	41.86	74.00	-32.14	V	peak
8664.000	31.71	9.28	40.99	74.00	-33.01	V	peak
9348.000	31.51	10.10	41.61	74.00	-32.39	V	peak
6348.000	34.91	6.64	41.55	74.00	-32.45	Н	Peak
6612.000	32.85	7.07	39.92	74.00	-34.08	н	Peak
7080.000	32.22	7.86	40.08	74.00	-33.92	Н	Peak
7200.000	32.09	8.09	40.18	74.00	-33.82	н	peak
7716.000	31.95	9.10	41.05	74.00	-32.95	н	peak
7896.000	31.85	9.45	41.30	74.00	-32.70	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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

Tested by: Saber Huang

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6564.000	32.01	6.99	39.00	74.00	-35.00	V	peak
6840.000	31.98	7.44	39.42	74.00	-34.58	V	peak
7332.000	31.49	8.35	39.84	74.00	-34.16	V	peak
7656.000	31.97	8.98	40.95	74.00	-33.05	V	peak
7992.000	31.58	9.63	41.21	74.00	-32.79	V	peak
8412.000	31.77	9.42	41.19	74.00	-32.81	V	peak
							•
6348.000	34.53	6.64	41.17	74.00	-32.83	Н	Peak
6864.000	32.02	7.48	39.50	74.00	-34.50	н	Peak
7368.000	32.45	8.42	40.87	74.00	-33.13	н	Peak
7896.000	31.95	9.45	41.40	74.00	-32.60	Н	peak
8100.000	32.09	9.60	41.69	74.00	-32.31	н	peak
8568.000	31.23	9.34	40.57	74.00	-33.43	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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

Tested by: Saber Huang

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/(CH Mid)
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Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6720.000	31.67	7.25	38.92	74.00	-35.08	V	peak
7032.000	31.83	7.76	39.59	74.00	-34.41	V	peak
7488.000	32.00	8.65	40.65	74.00	-33.35	V	peak
7884.000	31.86	9.42	41.28	74.00	-32.72	V	peak
7956.000	32.35	9.56	41.91	74.00	-32.09	V	peak
8964.000	31.78	9.12	40.90	74.00	-33.10	V	peak
							•
6348.000	34.49	6.64	41.13	74.00	-32.87	Н	Peak
7200.000	31.82	8.09	39.91	74.00	-34.09	Н	Peak
7680.000	32.37	9.03	41.40	74.00	-32.60	Н	Peak
7992.000	32.09	9.63	41.72	74.00	-32.28	Н	peak
8424.000	31.57	9.42	40.99	74.00	-33.01	Н	peak
9024.000	31.79	9.17	40.96	74.00	-33.04	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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

Tested by: Saber Huang

/(CH High)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6768.000	32.82	7.32	40.14	74.00	-33.86	V	peak
7692.000	31.91	9.05	40.96	74.00	-33.04	V	peak
8100.000	32.76	9.60	42.36	74.00	-31.64	V	peak
8448.000	32.16	9.40	41.56	74.00	-32.44	V	peak
8604.000	31.49	9.32	40.81	74.00	-33.19	V	peak
9396.000	31.95	10.24	42.19	74.00	-31.81	V	peak
6984.000	32.20	7.67	39.87	74.00	-34.13	Н	Peak
7680.000	32.22	9.03	41.25	74.00	-32.75	н	Peak
8232.000	32.26	9.52	41.78	74.00	-32.22	Н	Peak
9072.000	32.74	9.31	42.05	74.00	-31.95	Н	peak
9444.000	31.68	10.38	42.06	74.00	-31.94	н	peak
10416.000	30.62	13.27	43.89	74.00	-30.11	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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 / 5190MHz

Tested by: Saber Huang

<u>/(CH Low)</u>

Ambient temperature: <u>24°C</u>

Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7272.000	32.42	8.23	40.65	74.00	-33.35	V	peak
7932.000	32.28	9.52	41.80	74.00	-32.20	V	peak
8412.000	31.90	9.42	41.32	74.00	-32.68	V	peak
9012.000	32.43	9.13	41.56	74.00	-32.44	V	peak
9720.000	31.20	11.17	42.37	74.00	-31.63	V	peak
10632.000	31.45	13.94	45.39	74.00	-28.61	V	peak
6348.000	34.18	6.64	40.82	74.00	-33.18	Н	Peak
6804.000	32.18	7.38	39.56	74.00	-34.44	Н	Peak
7212.000	32.54	8.11	40.65	74.00	-33.35	Н	Peak
7740.000	32.35	9.14	41.49	74.00	-32.51	Н	peak
8160.000	32.05	9.56	41.61	74.00	-32.39	Н	peak
8472.000	31.79	9.39	41.18	74.00	-32.82	Н	peak

- 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

Tested by: Saber Huang

/(CH High)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6348.000	32.78	6.64	39.42	74.00	-34.58	V	peak
6924.000	31.82	7.58	39.40	74.00	-34.60	V	peak
7728.000	32.25	9.12	41.37	74.00	-32.63	V	peak
8052.000	32.13	9.62	41.75	74.00	-32.25	V	peak
8580.000	31.62	9.33	40.95	74.00	-33.05	V	peak
9396.000	31.56	10.24	41.80	74.00	-32.20	V	peak
							•
6348.000	33.69	6.64	40.33	74.00	-33.67	Н	Peak
6732.000	32.16	7.27	39.43	74.00	-34.57	Н	Peak
7164.000	31.92	8.02	39.94	74.00	-34.06	Н	Peak
7692.000	32.26	9.05	41.31	74.00	-32.69	Н	peak
7944.000	32.18	9.54	41.72	74.00	-32.28	Н	peak
8412.000	32.26	9.42	41.68	74.00	-32.32	Н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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 / 5270MHz

Tested by: Saber Huang

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6108.000	32.90	6.25	39.15	74.00	-34.85	V	peak
7164.000	31.62	8.02	39.64	74.00	-34.36	V	peak
7500.000	31.64	8.68	40.32	74.00	-33.68	V	peak
8076.000	32.06	9.61	41.67	74.00	-32.33	V	peak
8376.000	31.75	9.44	41.19	74.00	-32.81	V	peak
9036.000	31.73	9.20	40.93	74.00	-33.07	V	peak
6348.000	33.54	6.64	40.18	74.00	-33.82	Н	Peak
6900.000	32.33	7.54	39.87	74.00	-34.13	н	Peak
7428.000	31.71	8.53	40.24	74.00	-33.76	н	Peak
7932.000	31.66	9.52	41.18	74.00	-32.82	н	peak
9096.000	31.64	9.38	41.02	74.00	-32.98	н	peak
9912.000	31.58	11.73	43.31	74.00	-30.69	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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 / 5310MHz

Tested by: Saber Huang

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6636.000	32.17	7.11	39.28	74.00	-34.72	V	peak
7164.000	31.81	8.02	39.83	74.00	-34.17	V	peak
7764.000	32.55	9.19	41.74	74.00	-32.26	V	peak
8148.000	31.89	9.57	41.46	74.00	-32.54	V	peak
8604.000	31.62	9.32	40.94	74.00	-33.06	V	peak
9360.000	31.50	10.14	41.64	74.00	-32.36	V	peak
6624.000	32.27	7.09	39.36	74.00	-34.64	Н	Peak
7224.000	31.83	8.14	39.97	74.00	-34.03	н	Peak
8064.000	31.90	9.61	41.51	74.00	-32.49	н	Peak
8328.000	32.18	9.47	41.65	74.00	-32.35	Н	peak
9024.000	31.84	9.17	41.01	74.00	-32.99	н	peak
9828.000	31.70	11.48	43.18	74.00	-30.82	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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 / 5510MHz

Tested by: Saber Huang

/(CH Low)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6744.000	31.83	7.29	39.12	74.00	-34.88	V	peak
7068.000	32.32	7.83	40.15	74.00	-33.85	V	peak
7992.000	32.14	9.63	41.77	74.00	-32.23	V	peak
8376.000	32.21	9.44	41.65	74.00	-32.35	V	peak
9060.000	32.41	9.27	41.68	74.00	-32.32	V	peak
9948.000	31.00	11.83	42.83	74.00	-31.17	V	peak
6780.000	32.26	7.34	39.60	74.00	-34.40	Н	Peak
7416.000	32.20	8.51	40.71	74.00	-33.29	н	Peak
7932.000	32.04	9.52	41.56	74.00	-32.44	Н	Peak
8136.000	31.73	9.58	41.31	74.00	-32.69	Н	peak
8772.000	31.58	9.23	40.81	74.00	-33.19	н	peak
9864.000	31.04	11.59	42.63	74.00	-31.37	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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 / 5550MHz

Tested by: Saber Huang

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6336.000	32.30	6.62	38.92	74.00	-35.08	V	peak
7092.000	31.52	7.88	39.40	74.00	-34.60	V	peak
7668.000	31.65	9.00	40.65	74.00	-33.35	V	peak
7932.000	31.83	9.52	41.35	74.00	-32.65	V	peak
8364.000	31.79	9.45	41.24	74.00	-32.76	V	peak
9012.000	31.59	9.13	40.72	74.00	-33.28	V	peak
6564.000	32.28	6.99	39.27	74.00	-34.73	Н	Peak
7188.000	32.80	8.07	40.87	74.00	-33.13	н	Peak
7692.000	31.76	9.05	40.81	74.00	-33.19	Н	Peak
8052.000	32.30	9.62	41.92	74.00	-32.08	Н	peak
8304.000	31.60	9.48	41.08	74.00	-32.92	н	peak
9012.000	31.94	9.13	41.07	74.00	-32.93	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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 / 5670MHz

Tested by: Saber Huang

/(CH High)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6816.000	32.01	7.40	39.41	74.00	-34.59	V	peak
7356.000	31.57	8.39	39.96	74.00	-34.04	V	peak
7752.000	31.84	9.17	41.01	74.00	-32.99	V	peak
8400.000	32.19	9.43	41.62	74.00	-32.38	V	peak
9060.000	31.71	9.27	40.98	74.00	-33.02	V	peak
10020.000	31.90	12.04	43.94	74.00	-30.06	V	peak
							•
6348.000	34.12	6.64	40.76	74.00	-33.24	Н	Peak
6780.000	31.84	7.34	39.18	74.00	-34.82	н	Peak
7416.000	31.96	8.51	40.47	74.00	-33.53	Н	Peak
7656.000	32.04	8.98	41.02	74.00	-32.98	Н	peak
8532.000	32.19	9.36	41.55	74.00	-32.45	Н	peak
9348.000	31.74	10.10	41.84	74.00	-32.16	Н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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

Tested by: Saber Huang

/(CH Low)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6636.000	31.69	7.11	38.80	74.00	-35.20	V	peak
7200.000	31.81	8.09	39.90	74.00	-34.10	V	peak
7620.000	32.05	8.91	40.96	74.00	-33.04	V	peak
8148.000	32.01	9.57	41.58	74.00	-32.42	V	peak
8352.000	31.69	9.46	41.15	74.00	-32.85	V	peak
9084.000	31.14	9.34	40.48	74.00	-33.52	V	peak
6504.000	32.02	6.90	38.92	74.00	-35.08	Н	Peak
7056.000	31.87	7.81	39.68	74.00	-34.32	н	Peak
7632.000	31.86	8.93	40.79	74.00	-33.21	н	Peak
7932.000	31.73	9.52	41.25	74.00	-32.75	н	peak
8424.000	31.71	9.42	41.13	74.00	-32.87	н	peak
9012.000	32.17	9.13	41.30	74.00	-32.70	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, 5. 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

Tested by: Saber Huang

/(CH High)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6852.000	31.49	7.46	38.95	74.00	-35.05	V	peak
7416.000	31.83	8.51	40.34	74.00	-33.66	V	peak
7680.000	31.43	9.03	40.46	74.00	-33.54	V	peak
8364.000	31.63	9.45	41.08	74.00	-32.92	V	peak
9024.000	31.24	9.17	40.41	74.00	-33.59	V	peak
9372.000	31.65	10.17	41.82	74.00	-32.18	V	peak
6348.000	34.65	6.64	41.29	74.00	-32.71	Н	Peak
7068.000	32.16	7.83	39.99	74.00	-34.01	н	Peak
7764.000	32.41	9.19	41.60	74.00	-32.40	н	Peak
8304.000	32.33	9.48	41.81	74.00	-32.19	Н	peak
9432.000	30.96	10.34	41.30	74.00	-32.70	н	peak
10692.000	31.27	14.13	45.40	74.00	-28.60	н	peak

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. 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. 11ac 80 / 5210MHz /(CH Low)

Tested by: Saber Huang

Ambient tem	perature: 2	<u>24°C</u> Re	lative humi	dity: <u>52% R</u>	<u>H</u>	Date: April	11, 2018
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6588.000	32.38	7.03	39.41	74.00	-34.59	V	peak
7236.000	32.29	8.16	40.45	74.00	-33.55	V	peak
7956.000	32.33	9.56	41.89	74.00	-32.11	V	peak
8340.000	32.16	9.46	41.62	74.00	-32.38	V	peak
9072.000	31.85	9.31	41.16	74.00	-32.84	V	peak
10032.000	31.06	12.08	43.14	74.00	-30.86	V	peak
6348.000	34.15	6.64	40.79	74.00	-33.21	н	Peak
6792.000	32.49	7.36	39.85	74.00	-34.15	н	Peak
7068.000	32.53	7.83	40.36	74.00	-33.64	н	Peak
7632.000	32.24	8.93	41.17	74.00	-32.83	Н	peak
7728.000	32.76	9.12	41.88	74.00	-32.12	н	peak
8400.000	32.10	9.43	41.53	74.00	-32.47	н	peak

- 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. 11ac 80 / 5290MHz /(CH High)

Tested by: Saber Huang

Ambient tem	perature: 2	<u>24°C</u> Re	lative humi	dity: <u>52% R</u>	<u>:Н</u>	Date: April	11, 2018
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7308.000	31.57	8.30	39.87	74.00	-34.13	V	peak
7992.000	32.04	9.63	41.67	74.00	-32.33	V	peak
8436.000	32.19	9.41	41.60	74.00	-32.40	V	peak
8988.000	31.95	9.11	41.06	74.00	-32.94	V	peak
9912.000	31.08	11.73	42.81	74.00	-31.19	V	peak
10536.000	30.94	13.64	44.58	74.00	-29.42	V	peak
				·		·	
6348.000	34.84	6.64	41.48	74.00	-32.52	н	Peak
7068.000	32.09	7.83	39.92	74.00	-34.08	Н	Peak
7692.000	32.40	9.05	41.45	74.00	-32.55	Н	Peak
7896.000	32.04	9.45	41.49	74.00	-32.51	н	peak
8448.000	31.52	9.40	40.92	74.00	-33.08	н	peak
9384.000	31.46	10.21	41.67	74.00	-32.33	н	peak

- 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. 11ac 80 / 5530MHz

Ambient temperature: <u>24°C</u> Relative hur

Relative humidity: 52% RH

Tested by: <u>Saber Huang</u> Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6828.000	32.20	7.42	39.62	74.00	-34.38	V	peak
7368.000	31.53	8.42	39.95	74.00	-34.05	V	peak
7728.000	32.47	9.12	41.59	74.00	-32.41	V	peak
8328.000	32.29	9.47	41.76	74.00	-32.24	V	peak
9012.000	31.76	9.13	40.89	74.00	-33.11	V	peak
9444.000	30.96	10.38	41.34	74.00	-32.66	V	peak
	·			·			
6348.000	33.87	6.64	40.51	74.00	-33.49	н	Peak
7092.000	31.87	7.88	39.75	74.00	-34.25	Н	Peak
7956.000	31.73	9.56	41.29	74.00	-32.71	Н	Peak
8340.000	31.96	9.46	41.42	74.00	-32.58	Н	peak
8988.000	31.65	9.11	40.76	74.00	-33.24	Н	peak
10068.000	30.76	12.19	42.95	74.00	-31.05	н	peak

- 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 802.11ac 80 / 5775MHz

Tested by: <u>Saber</u> Huang

Date: April 11, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6348.000	32.36	6.64	39.00	74.00	-35.00	V	peak
7080.000	31.65	7.86	39.51	74.00	-34.49	V	peak
7476.000	31.41	8.63	40.04	74.00	-33.96	V	peak
7932.000	31.55	9.52	41.07	74.00	-32.93	V	peak
8388.000	32.00	9.44	41.44	74.00	-32.56	V	peak
9036.000	32.26	9.20	41.46	74.00	-32.54	V	peak
							•
6348.000	33.17	6.64	39.81	74.00	-34.19	Н	Peak
6828.000	32.06	7.42	39.48	74.00	-34.52	Н	Peak
7284.000	31.66	8.25	39.91	74.00	-34.09	Н	Peak
7944.000	31.53	9.54	41.07	74.00	-32.93	н	peak
8016.000	31.94	9.64	41.58	74.00	-32.42	н	peak
9012.000	31.41	9.13	40.54	74.00	-33.46	Н	peak

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

- 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).



6.8 CONDUCTED UNDESIRABLE EMISSION

6.8.1 LIMIT

According to 15.407(b),

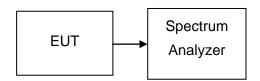
- (1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.
- (2) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- (3) The provisions of §15.205 apply to intentional radiators operating under this section.

6.8.2 MEASUREMENT EQUIPMENT USED

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Due Calibration
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019

Remark: Each piece of equipment is scheduled for calibration once a year.

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.

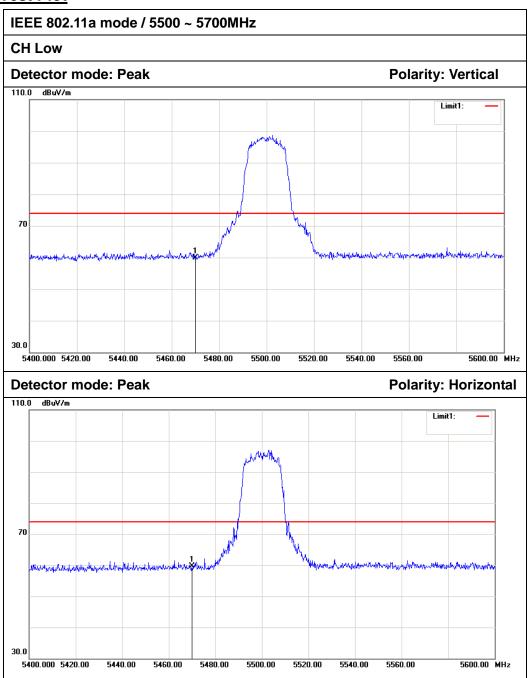
Measurements are made over the 30 MHz to 40 GHz range with the transmitter set to the lowest, middle, and highest channels.



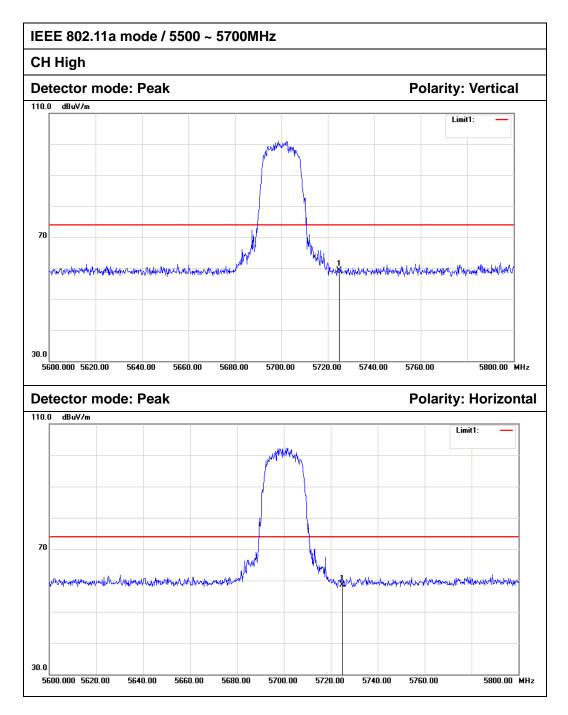
6.8.5 TEST RESULTS

No non-compliance noted



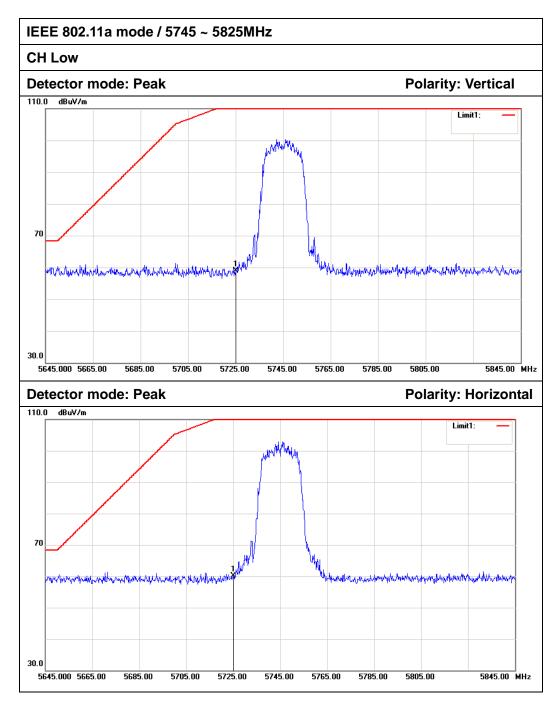


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5470.000	54.05	5.82	59.87	74.00	-14.13	Peak	Vertical
2	5470.000	53.89	5.82	59.71	74.00	-14.29	Peak	Horizontal

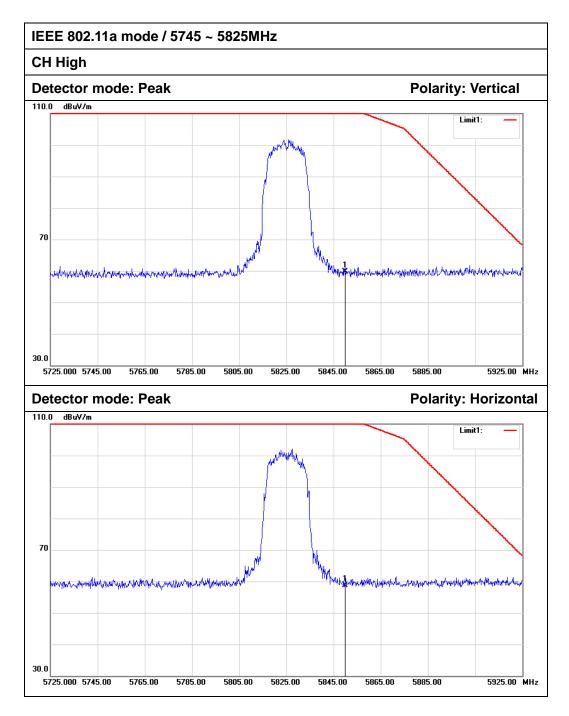


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	53.27	5.96	59.23	74.00	-14.77	Peak	Vertical
2	5725.000	52.59	5.96	58.55	74.00	-15.45	Peak	Horizontal

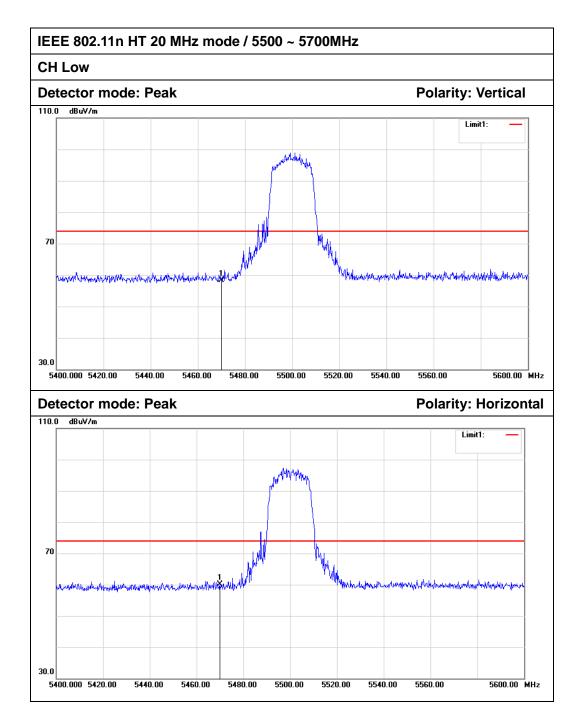




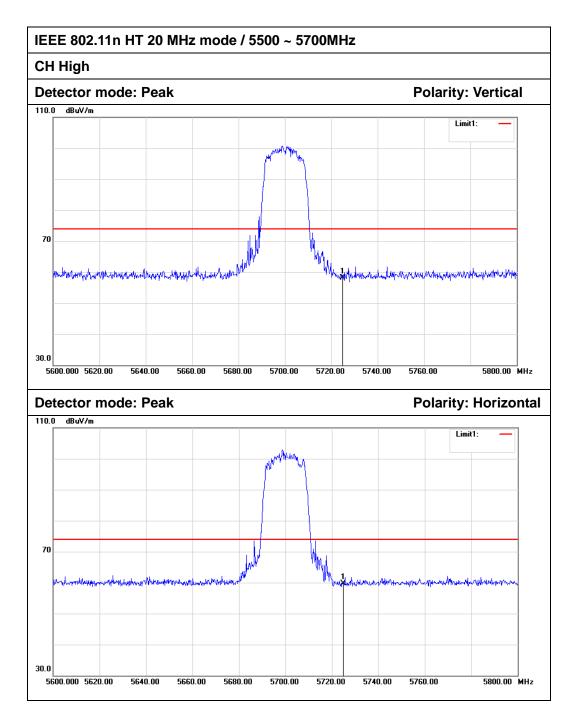
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	52.96	5.96	58.92	122.20	-63.28	Peak	Vertical
2	5725.000	54.10	5.96	60.06	122.20	-62.14	Peak	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	53.70	6.02	59.72	122.20	-62.48	Peak	Vertical
2	5850.000	52.59	6.02	58.61	122.20	-63.59	Peak	Horizontal

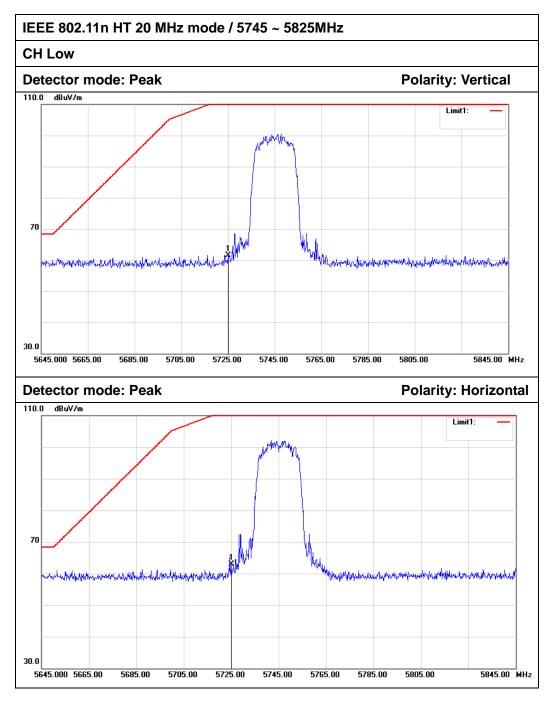


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5470.000	52.52	5.82	58.34	74.00	-15.66	Peak	Vertical
2	5470.000	54.28	5.82	60.10	74.00	-13.90	Peak	Horizontal

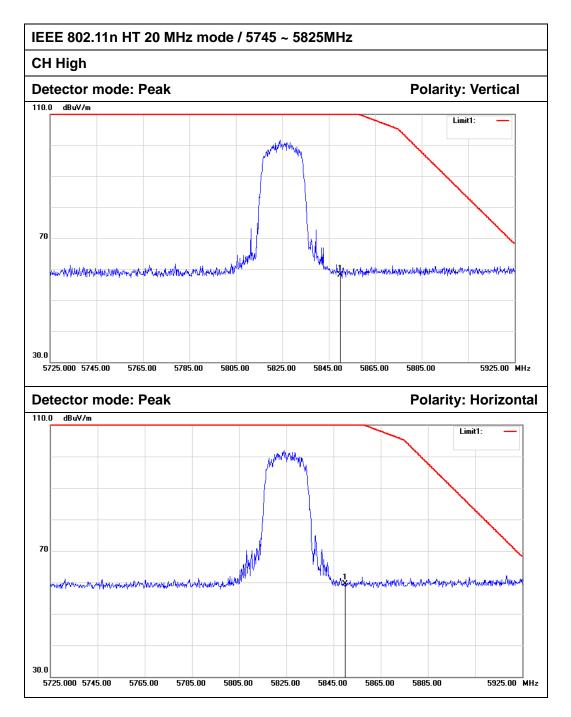


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	52.18	5.96	58.14	74.00	-15.86	Peak	Vertical
2	5725.000	53.78	5.96	59.74	74.00	-14.26	Peak	Horizontal

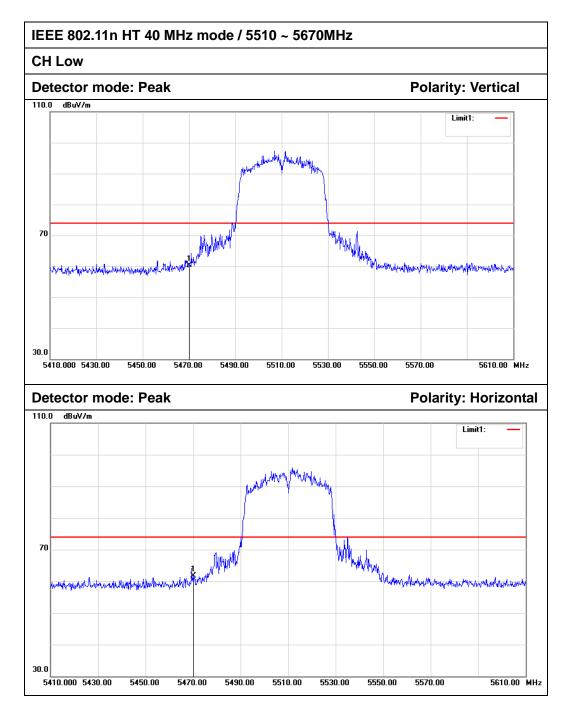
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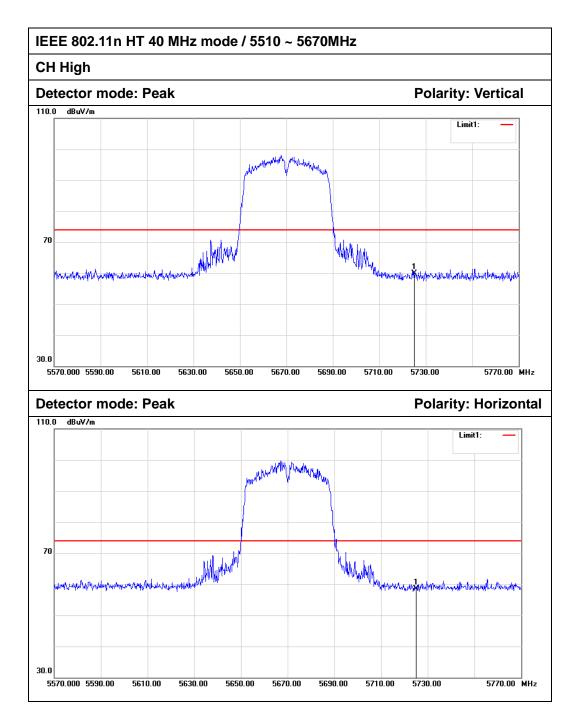
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	55.49	5.96	61.45	122.20	-60.75	Peak	Vertical
2	5725.000	56.87	5.96	62.83	122.20	-59.37	Peak	Horizontal



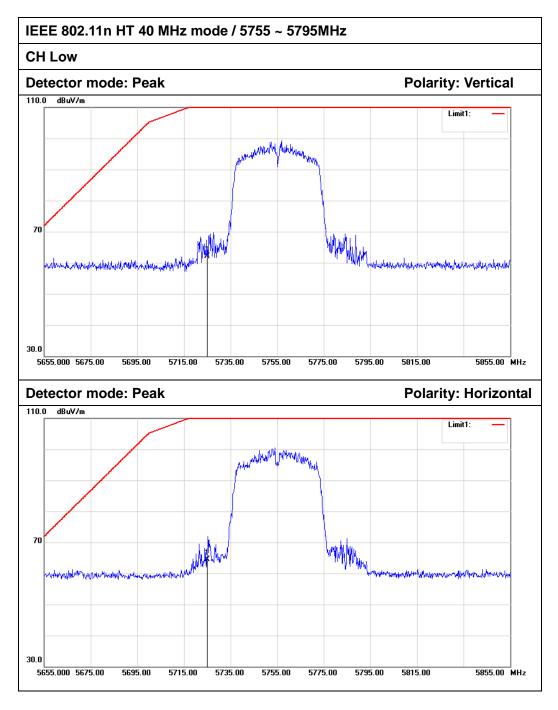
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	52.03	6.02	58.05	122.20	-64.15	Peak	Vertical
2	5850.000	53.57	6.02	59.59	122.20	-62.61	Peak	Horizontal



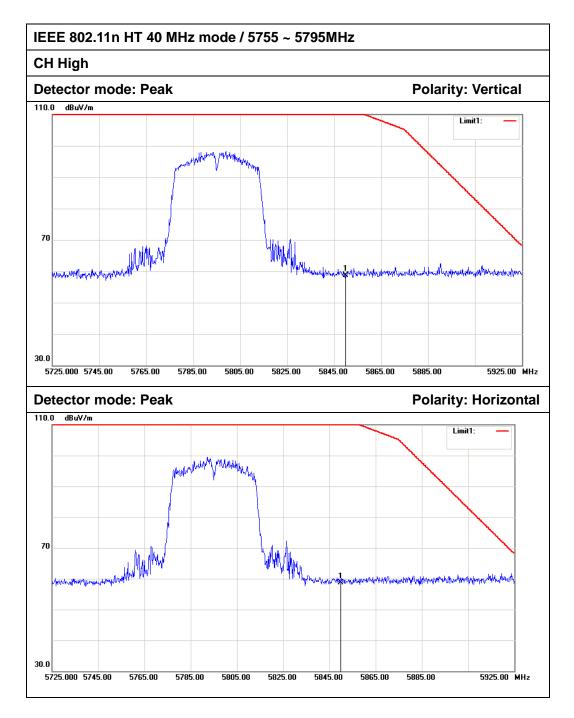
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5470.000	54.51	5.82	60.33	74.00	-13.67	Peak	Vertical
2	5470.000	55.82	5.82	61.64	74.00	-12.36	Peak	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	53.98	5.96	59.94	74.00	-14.06	Peak	Vertical
2	5725.000	52.56	5.96	58.52	74.00	-15.48	Peak	Horizontal

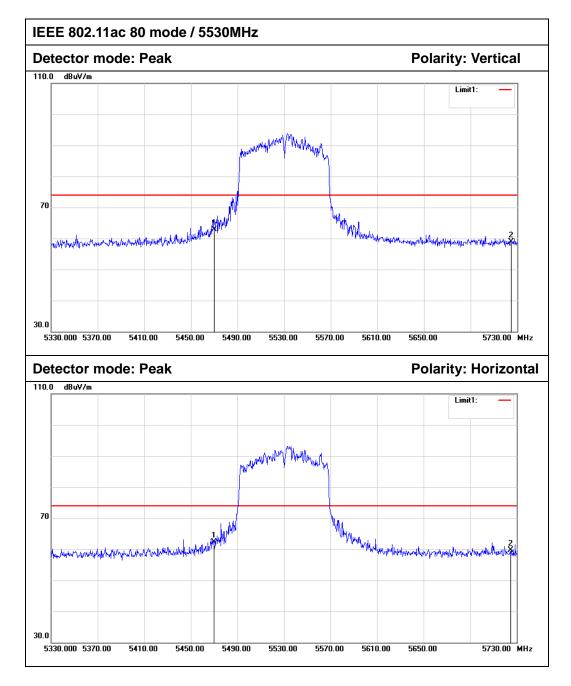


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	56.23	5.96	62.19	122.20	-60.01	Peak	Vertical
2	5725.000	58.45	5.96	64.41	122.20	-57.79	Peak	Horizontal

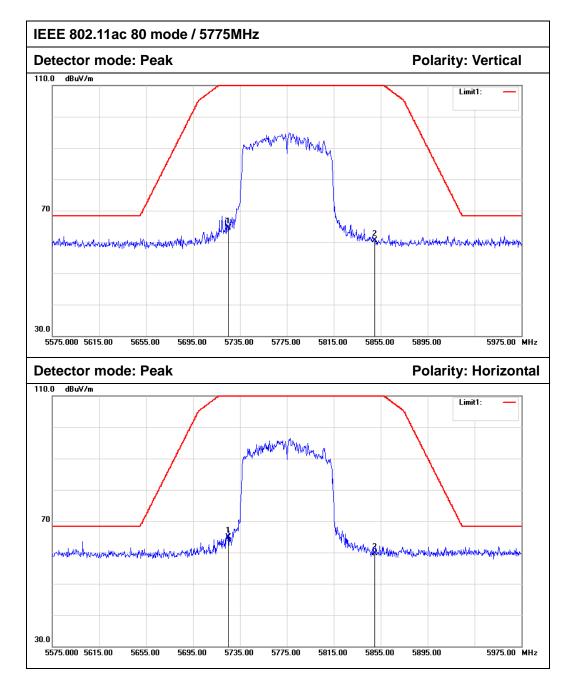


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	52.78	6.02	58.80	122.20	-63.40	Peak	Vertical
2	5850.000	52.72	6.02	58.74	122.20	-63.46	Peak	Horizontal

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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5470.000	57.15	5.82	62.97	74.00	-11.03	Peak	Vertical
2	5725.000	52.93	5.96	58.89	74.00	-15.11	Peak	Vertical
1	5470.000	56.56	5.82	62.38	74.00	-11.62	Peak	Horizontal
2	5725.000	53.75	5.96	59.71	74.00	-14.29	Peak	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	58.51	5.96	64.47	122.20	-57.73	Peak	Vertical
2	5850.000	54.50	6.02	60.52	122.20	-61.68	Peak	Vertical
1	5725.000	58.88	5.96	64.84	122.20	-57.36	Peak	Horizontal
2	5850.000	53.72	6.02	59.74	122.20	-62.46	Peak	Horizontal

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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 μ 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	Limits (dBµV)						
(MHz)	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

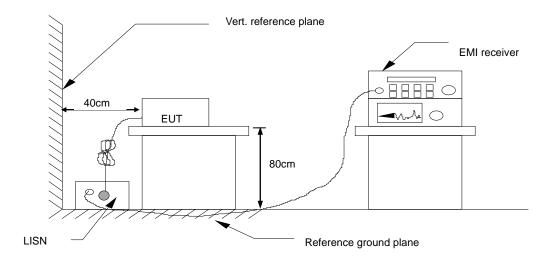
	Conducted Emission Test Site											
Name of Equipment	Manufacturer	Manufacturer Model Number Serial Numb		Last Calibration	Due Calibration							
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	01/27/2018	01/26/2019							
LISN(EUT)	ROHDE&SCHWARZ	ENV216	101543-WX	01/27/2018	01/26/2019							
LISN	EMCO	3825/2	8901-1459	01/27/2018	01/26/2019							
Temp. / Humidity Meter	VICTOR	HTC-1	N/A	01/29/2018	01/28/2019							
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.

Compliance Certification Services (Shenzhen) Inc.

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)		Average Reading (dBuV)		QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Margin	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

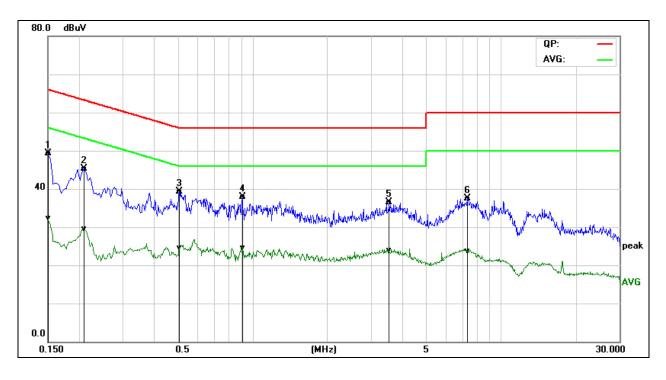
Limit = Limit stated in standard

Margin = Result (dBuV) – Limit (dBuV)



6.9.6 TEST RESULTS

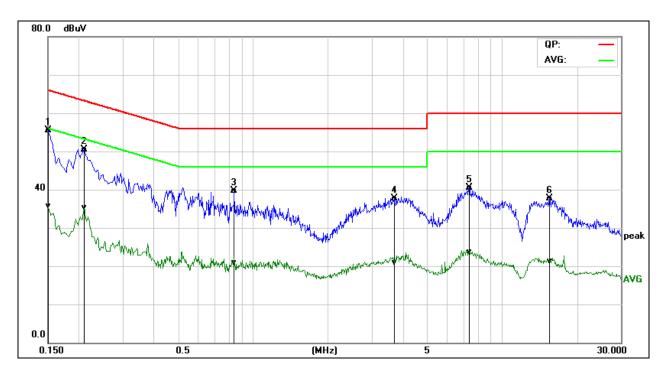
Model No.	A8002	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 4
Tested by	Eason Nie	Line	L1
Test Date	April 3, 2018	Test Voltage	AC 120V/60Hz



Frequency	QuasiPeak	Average	Correction	QuasiPeak	Average		Average			Remark
(MHz)	Reading (dBuV)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Result (dBuV)	Limit (dBuV)	Limit (dBuV)	Margin (dB)	Margin (dB)	(Pass/Fail)
0.1500	29.60	12.73	19.62	49.22	32.35	65.99	56.00	-16.77	-23.65	Pass
0.2100	25.63	9.81	19.64	45.27	29.45	63.20	53.21	-17.93	-23.76	Pass
0.5100	19.68	4.91	19.53	39.21	24.44	56.00	46.00	-16.79	-21.56	Pass
0.9100	18.27	4.94	19.57	37.84	24.51	56.00	46.00	-18.16	-21.49	Pass
3.5620	16.73	4.14	19.73	36.46	23.87	56.00	46.00	-19.54	-22.13	Pass
7.3580	17.59	3.79	19.87	37.46	23.66	60.00	50.00	-22.54	-26.34	Pass

REMARKS: L1 = Line One (Live Line)

Model No.	A8002	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 4
Tested by	Eason Nie	Line	L2
Test Date	April 3, 2018	Test Voltage	AC 120V/60Hz

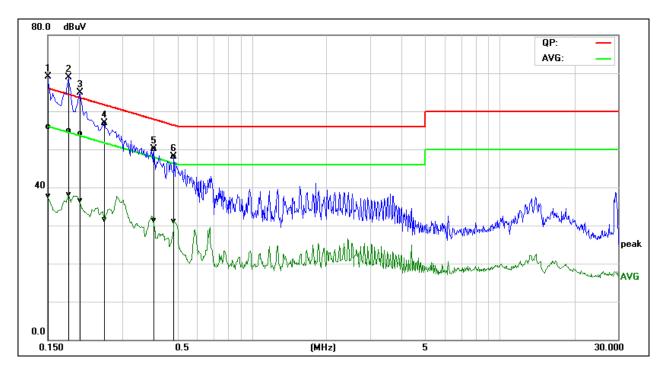


Frequency		0			0				0	Remark
(MHz)	Reading (dBuV)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Result (dBuV)	Limit (dBuV)	Limit (dBuV)	Margin (dB)	Margin (dB)	(Pass/Fail)
0.1500	36.03	16.17	19.52	55.55	35.69	65.99	56.00	-10.44	-20.31	Pass
0.2100	31.04	15.76	19.54	50.58	35.30	63.20	53.21	-12.62	-17.91	Pass
0.8420	20.17	1.41	19.58	39.75	20.99	56.00	46.00	-16.25	-25.01	Pass
3.6980	17.99	1.04	19.79	37.78	20.83	56.00	46.00	-18.22	-25.17	Pass
7.4020	20.57	3.89	19.87	40.44	23.76	60.00	50.00	-19.56	-26.24	Pass
15.4900	17.60	1.33	20.03	37.63	21.36	60.00	50.00	-22.37	-28.64	Pass

REMARKS: L2 = Line Two (Neutral Line)



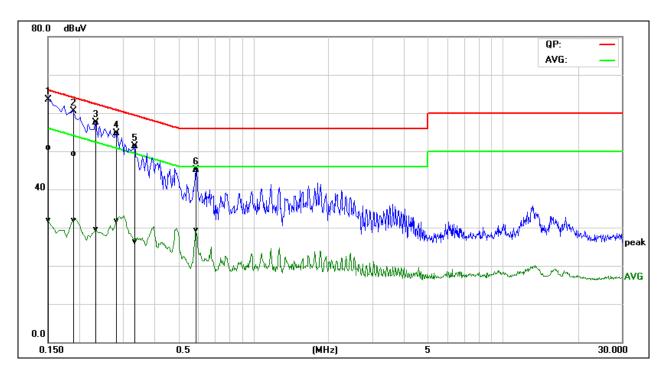
Model No.	A8002	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 22
Tested by	Eason Nie	Line	L1
Test Date	April 3, 2018	Test Voltage	AC 240V/50Hz



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)	Margin	Remark (Pass/Fail)
0.1500	36.28	18.12	19.62	55.90	37.74	65.99	56.00	-10.09	-18.26	Pass
0.1819	35.27	18.48	19.63	54.90	38.11	64.39	54.40	-9.49	-16.29	Pass
0.2020	34.46	16.79	19.64	54.10	36.43	63.52	53.53	-9.42	-17.10	Pass
0.2540	37.18	11.85	19.62	56.80	31.47	61.62	51.63	-4.82	-20.16	Pass
0.4020	30.54	11.83	19.56	50.10	31.39	57.81	47.81	-7.71	-16.42	Pass
0.4860	28.54	11.59	19.53	48.07	31.12	56.24	46.24	-8.17	-15.12	Pass

REMARKS: L1 = Line One (Live Line)

Model No.	A8002	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 22
Tested by	Eason Nie	Line	L2
Test Date	April 3, 2018	Test Voltage	AC 240V/50Hz



Frequency	QuasiPeak	Average	Correction	QuasiPeak	Average	QuasiPeak		QuasiPeak	Average	Remark
(MHz)	Reading (dBuV)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Result (dBuV)	Limit (dBuV)	Limit (dBuV)	Margin (dB)	Margin (dB)	(Pass/Fail)
0.1500	31.48	12.45	19.52	51.00	31.97	65.99	56.00	-14.99	-24.03	Pass
0.1900	29.76	12.33	19.54	49.30	31.87	64.03	54.04	-14.73	-22.17	Pass
0.2340	37.96	9.97	19.54	57.50	29.51	62.30	52.31	-4.80	-22.80	Pass
0.2819	35.26	12.22	19.54	54.80	31.76	60.76	50.76	-5.96	-19.00	Pass
0.3339	31.73	6.86	19.54	51.27	26.40	59.35	49.35	-8.08	-22.95	Pass
0.5899	25.59	9.70	19.57	45.16	29.27	56.00	46.00	-10.84	-16.73	Pass





6.10 FREQUENCY STABILITY

6.10.1 LIMIT

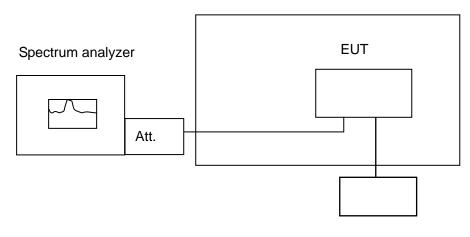
According to §15.407(g), manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the operational description.

6.10.2 TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019
DC Power Supply	DAZHENG	PS-605D	20018978	N.C.R	N.C.R
AC POWER SOUCE	UMART	HPA1010	N/A	N.C.R	N.C.R
Power Meter	Anritsu	ML2495A	1204003	02/21/2018	02/20/2019
Power Sensor	Anritsu	MA2411B	1126150	02/21/2018	02/20/2019
Temperature Chamber	TERCHY	MHG-800N	E21104	11/18/2017	11/17/2018
Temp. / Humidity Meter	Anymetre	JR913	N/A	01/29/2018	01/28/2019

6.10.3 TEST CONFIGURATION

Temperature Chamber



Variable Power Supply

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

IEEE 802.11a MHz mode / 5180 ~ 5240MHz (Low)						
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result		
50	120	5179.949075	5150-5250	PASS		
40	120	5179.989670	5150-5250	PASS		
30	120	5179.993775	5150-5250	PASS		
20	120	5180.003177	5150-5250	PASS		
10	120	5179.966302	5150-5250	PASS		
0	120	5179.994219	5150-5250	PASS		
-10	120	5179.958555	5150-5250	PASS		
-20	120	5179.958701	5150-5250	PASS		

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5179.961319	5150-5250	PASS
	120	5180.003177	5150-5250	PASS
	132	5179.964459	5150-5250	PASS

IEEE 802.11a mode / 5180 ~ 5240MHz		: (High)		
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5239.957311	5150-5250	PASS
40	120	5239.969989	5150-5250	PASS
30	120	5239.982415	5150-5250	PASS
20	120	5240.003170	5150-5250	PASS
10	120	5239.989908	5150-5250	PASS
0	120	5239.991661	5150-5250	PASS
-10	120	5239.981845	5150-5250	PASS
-20	120	5239.989901	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5239.964601	5150-5250	PASS
	120	5240.003170	5150-5250	PASS
	132	5239.978822	5150-5250	PASS

IEEE 802.11a mode / 5260 ~	(Low)			
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5259.999890	5250-5350	PASS
40	120	5259.961445	5250-5350	PASS
30	120	5259.956527	5250-5350	PASS
20	120	5260.003270	5250-5350	PASS
10	120	5259.979575	5250-5350	PASS
0	120	5259.949967	5250-5350	PASS
-10	120	5259.992988	5250-5350	PASS
-20	120	5259.971145	5250-5350	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5259.978911	5250-5350	PASS
	120	5260.003270	5250-5350	PASS
	132	5259.986252	5250-5350	PASS

IEEE 802.11a mode / 5260 ~ 5320MHz		z (High)		
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5319.968772	5250-5350	PASS
40	120	5319.953007	5250-5350	PASS
30	120	5319.953611	5250-5350	PASS
20	120	5320.003217	5250-5350	PASS
10	120	5319.991335	5250-5350	PASS
0	120	5319.972459	5250-5350	PASS
-10	120	5319.950240	5250-5350	PASS
-20	120	5319.954600	5250-5350	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5319.957148	5250-5350	PASS
	120	5320.003217	5250-5350	PASS
	132	5319.980923	5250-5350	PASS



IEEE 802.11a mode / 5500 ~	(Low)			
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5499.966416	5475-5725	PASS
40	120	5499.997847	5475-5725	PASS
30	120	5499.983456	5475-5725	PASS
20	120	5500.003350	5475-5725	PASS
10	120	5499.989007	5475-5725	PASS
0	120	5499.962575	5475-5725	PASS
-10	120	5499.956836	5475-5725	PASS
-20	120	5499.959854	5475-5725	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5499.993799	5475-5725	PASS
20	120	5500.003350	5475-5725	PASS
	132	5499.955462	5475-5725	PASS

IEEE 802.11a MHz mode / 5500 ~ 5700MHz (High)

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5699.951534	5475-5725	PASS
40	120	5699.983813	5475-5725	PASS
30	120	5699.980258	5475-5725	PASS
20	120	5700.003417	5475-5725	PASS
10	120	5699.967414	5475-5725	PASS
0	120	5699.969906	5475-5725	PASS
-10	120	5699.971058	5475-5725	PASS
-20	120	5699.963304	5475-5725	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5699.961460	5475-5725	PASS
	120	5700.003417	5475-5725	PASS
	132	5699.980155	5475-5725	PASS

IEEE 802.11a mode / 5745 ~				
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.956036	5725-5850	PASS
40	120	5744.959840	5725-5850	PASS
30	120	5744.976282	5725-5850	PASS
20	120	5745.003443	5725-5850	PASS
10	120	5744.961260	5725-5850	PASS
0	120	5744.962665	5725-5850	PASS
-10	120	5744.965576	5725-5850	PASS
-20	120	5744.960137	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5744.997351	5725-5850	PASS
20	120	5745.003443	5725-5850	PASS
	132	5744.961082	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	5824.995376	5725-5850	PASS
40	120	5824.950001	5725-5850	PASS
30	120	5824.964754	5725-5850	PASS
20	120	5825.003517	5725-5850	PASS
10	120	5824.969202	5725-5850	PASS
0	120	5824.962725	5725-5850	PASS
-10	120	5824.980897	5725-5850	PASS
-20	120	5824.977897	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5824.972294	5725-5850	PASS
20	120	5825.003517	5725-5850	PASS
	132	5824.964904	5725-5850	PASS



IEEE 802.11n HT 20 MHz mc	ode / 5180) ~ 5240MHz	(Low)

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5179.982494	5150-5250	PASS
40	120	5179.985567	5150-5250	PASS
30	120	5179.959441	5150-5250	PASS
20	120	5180.003177	5150-5250	PASS
10	120	5179.950398	5150-5250	PASS
0	120	5179.978278	5150-5250	PASS
-10	120	5179.966647	5150-5250	PASS
-20	120	5179.998325	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5179.973173	5150-5250	PASS
20	120	5180.003177	5150-5250	PASS
	132	5179.988244	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	5239.994118	5150-5250	PASS
40	120	5239.980016	5150-5250	PASS
30	120	5239.989535	5150-5250	PASS
20	120	5240.003170	5150-5250	PASS
10	120	5239.984087	5150-5250	PASS
0	120	5239.981311	5150-5250	PASS
-10	120	5239.975024	5150-5250	PASS
-20	120	5239.958160	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5239.953388	5150-5250	PASS
20	120	5240.003170	5150-5250	PASS
	132	5239.956715	5150-5250	PASS



IEEE 802.11n HT 20 MHz mode / 5260 ~ 5320MHz (Low)						
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range			

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5259.983871	5250-5350	PASS
40	120	5259.991273	5250-5350	PASS
30	120	5259.994909	5250-5350	PASS
20	120	5260.003270	5250-5350	PASS
10	120	5259.962065	5250-5350	PASS
0	120	5259.990694	5250-5350	PASS
-10	120	5259.958219	5250-5350	PASS
-20	120	5259.996778	5250-5350	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5259.978247	5250-5350	PASS
	120	5260.003270	5250-5350	PASS
	132	5259.991935	5250-5350	PASS

IEEE 802.11a mode / 5260 ~ 5320MHz		: (High)		
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5319.952929	5250-5350	PASS
40	120	5319.992420	5250-5350	PASS
30	120	5319.999569	5250-5350	PASS
20	120	5320.003217	5250-5350	PASS
10	120	5319.985975	5250-5350	PASS
0	120	5319.972506	5250-5350	PASS
-10	120	5319.998484	5250-5350	PASS
-20	120	5319.968918	5250-5350	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5319.995838	5250-5350	PASS
	120	5320.003217	5250-5350	PASS
	132	5319.974137	5250-5350	PASS

IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz (Low)						
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result		
50	120	5499.997695	5475-5725	PASS		
40	120	5499.983283	5475-5725	PASS		
30	120	5499.966301	5475-5725	PASS		
20	120	5500.003350	5475-5725	PASS		
10	120	5499.966930	5475-5725	PASS		
0	120	5499.994719	5475-5725	PASS		
-10	120	5499.949193	5475-5725	PASS		
-20	120	5499.995937	5475-5725	PASS		

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5499.973959	5475-5725	PASS
	120	5500.003350	5475-5725	PASS
	132	5499.951089	5475-5725	PASS

IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz (High)

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5699.953570	5475-5725	PASS
40	120	5699.999347	5475-5725	PASS
30	120	5699.970856	5475-5725	PASS
20	120	5700.003417	5475-5725	PASS
10	120	5699.957558	5475-5725	PASS
0	120	5699.997749	5475-5725	PASS
-10	120	5699.989220	5475-5725	PASS
-20	120	5699.970293	5475-5725	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5699.954081	5475-5725	PASS
	120	5700.003417	5475-5725	PASS
	132	5699.974710	5475-5725	PASS

IEEE 802.11n HT 20 MHz mo				
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.950110	5725-5850	PASS
40	120	5744.971553	5725-5850	PASS
30	120	5744.954592	5725-5850	PASS
20	120	5745.003443	5725-5850	PASS
10	120	5744.972741	5725-5850	PASS
0	120	5744.965380	5725-5850	PASS
-10	120	5744.981452	5725-5850	PASS
-20	120	5744.998152	5725-5850	PASS

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Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5744.971330	5725-5850	PASS
20	120	5745.003443	5725-5850	PASS
	132	5744.977922	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	5824.987816	5725-5850	PASS
40	120	5824.995199	5725-5850	PASS
30	120	5824.994810	5725-5850	PASS
20	120	5825.003517	5725-5850	PASS
10	120	5824.951712	5725-5850	PASS
0	120	5824.953042	5725-5850	PASS
-10	120	5824.960102	5725-5850	PASS
-20	120	5824.992822	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5824.995222	5725-5850	PASS
20	120	5825.003517	5725-5850	PASS
	132	5824.951999	5725-5850	PASS



IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz (Low)				
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5189.955163	5150-5250	PASS
40	120	5189.952038	5150-5250	PASS
30	120	5189.986436	5150-5250	PASS
20	120	5190.002997	5150-5250	PASS
10	120	5189.962690	5150-5250	PASS
0	120	5189.971989	5150-5250	PASS
-10	120	5189.991358	5150-5250	PASS
-20	120	5189.996237	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5189.974906	5150-5250	PASS
20	120	5190.002997	5150-5250	PASS
	132	5189.953299	5150-5250	PASS

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

		(ingi		
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5229.991203	5150-5250	PASS
40	120	5229.979288	5150-5250	PASS
30	120	5229.966284	5150-5250	PASS
20	120	5230.003163	5150-5250	PASS
10	120	5229.950060	5150-5250	PASS
0	120	5229.949555	5150-5250	PASS
-10	120	5229.973321	5150-5250	PASS
-20	120	5229.969651	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5229.985248	5150-5250	PASS
20	120	5230.003163	5150-5250	PASS
	132	5229.953934	5150-5250	PASS

IEEE 802.11n HT 40 MHz mo	de / 5270) ~ 5310MHz	(Low)

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5269.980521	5250-5350	PASS
40	120	5269.964444	5250-5350	PASS
30	120	5269.991215	5250-5350	PASS
20	120	5270.003150	5250-5350	PASS
10	120	5269.967786	5250-5350	PASS
0	120	5269.949333	5250-5350	PASS
-10	120	5269.989119	5250-5350	PASS
-20	120	5269.983211	5250-5350	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5269.991634	5250-5350	PASS
20	120	5270.003150	5250-5350	PASS
	132	5269.969176	5250-5350	PASS

IEEE 802.11n HT 40 MHz mode / 5270 ~ 5310MHz (High)

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5309.986891	5250-5350	PASS
40	120	5309.991197	5250-5350	PASS
30	120	5309.971206	5250-5350	PASS
20	120	5310.003210	5250-5350	PASS
10	120	5309.981736	5250-5350	PASS
0	120	5309.973727	5250-5350	PASS
-10	120	5309.987751	5250-5350	PASS
-20	120	5309.991391	5250-5350	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5309.949613	5250-5350	PASS
20	120	5310.003210	5250-5350	PASS
	132	5309.958420	5250-5350	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5509.957665	5475-5725	PASS
40	120	5509.963542	5475-5725	PASS
30	120	5509.973947	5475-5725	PASS
20	120	5510.003390	5475-5725	PASS
10	120	5509.962027	5475-5725	PASS
0	120	5509.990422	5475-5725	PASS
-10	120	5509.978689	5475-5725	PASS
-20	120	5509.973259	5475-5725	PASS

IEEE 802.11n HT 40 MHz mc	de / 5510) ~ 5670MHz	(Lo

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5509.999519	5475-5725	PASS
20	120	5510.003390	5475-5725	PASS
	132	5509.973579	5475-5725	PASS

IEEE 802.11n HT 40 MHz mode / 5510 ~ 5670MHz (High)

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5669.993860	5475-5725	PASS
40	120	5669.956393	5475-5725	PASS
30	120	5669.953520	5475-5725	PASS
20	120	5670.003437	5475-5725	PASS
10	120	5669.964301	5475-5725	PASS
0	120	5669.961413	5475-5725	PASS
-10	120	5669.954689	5475-5725	PASS
-20	120	5669.955112	5475-5725	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5669.985904	5475-5725	PASS
20	120	5670.003437	5475-5725	PASS
	132	5669.976018	5475-5725	PASS

IEEE 802.11h HI 40 MHZ MO	IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz (Low)					
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result		
50	120	5754.985536	5725-5850	PASS		
40	120	5754.960362	5725-5850	PASS		
30	120	5754.996855	5725-5850	PASS		
20	120	5755.003483	5725-5850	PASS		
10	120	5754.991364	5725-5850	PASS		
0	120	5754.996918	5725-5850	PASS		
-10	120	5754.949856	5725-5850	PASS		
-20	120	5754.958644	5725-5850	PASS		

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5754.959698	5725-5850	PASS
20	120	5755.003483	5725-5850	PASS
	132	5754.974287	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	5794.951356	5725-5850	PASS
40	120	5794.961730	5725-5850	PASS
30	120	5794.975920	5725-5850	PASS
20	120	5795.003570	5725-5850	PASS
10	120	5794.951783	5725-5850	PASS
0	120	5794.996920	5725-5850	PASS
-10	120	5794.984612	5725-5850	PASS
-20	120	5794.984486	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
	108	5794.956627	5725-5850	PASS
20	120	5795.003570	5725-5850	PASS
	132	5794.993674	5725-5850	PASS

IEEE 802.11ac 80 mode / 5210MHz

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5209.975835	5150-5250	PASS
40	120	5209.996013	5150-5250	PASS
30	120	5209.993873	5150-5250	PASS
20	120	5210.003137	5150-5250	PASS
10	120	5209.957594	5150-5250	PASS
0	120	5209.986403	5150-5250	PASS
-10	120	5209.963328	5150-5250	PASS
-20	120	5209.990863	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5209.989941	5150-5250	PASS
	120	5210.003137	5150-5250	PASS
	132	5209.956166	5150-5250	PASS

IEEE 802.11ac 80 mode / 5290MHz

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result	
50	120	5289.985706	5250-5350	PASS	
40	120	5289.962559	5250-5350	PASS	
30	120	5289.953005	5250-5350	PASS	
20	120	5290.003303	5250-5350	PASS	
10	120	5289.955314	5250-5350	PASS	
0	120	5289.953332	5250-5350	PASS	
-10	120	5289.980693	5250-5350	PASS	
-20	120	5289.962684	5250-5350	PASS	

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5289.987825	5250-5350	PASS
	120	5290.003303	5250-5350	PASS
	132	5289.955414	5250-5350	PASS

IEEE 802.11ac 80 mode / 5530MHz		(Low)		
Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5529.996253	5475-5725	PASS
40	120	5529.997624	5475-5725	PASS
30	120	5529.976284	5475-5725	PASS
20	120	5530.003430	5475-5725	PASS
10	120	5529.975786	5475-5725	PASS
0	120	5529.976859	5475-5725	PASS
-10	120	5529.992294	5475-5725	PASS
-20	120	5529.978314	5475-5725	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5529.985211	5475-5725	PASS
	120	5530.003430	5475-5725	PASS
	132	5529.950569	5475-5725	PASS

IEEE 802.11ac 80 mode / 5775MHz

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5774.999213	5725-5850	PASS
40	120	5774.973555	5725-5850	PASS
30	120	5774.977228	5725-5850	PASS
20	120	5775.003590	5725-5850	PASS
10	120	5774.952516	5725-5850	PASS
0	120	5774.972298	5725-5850	PASS
-10	120	5774.995422	5725-5850	PASS
-20	120	5774.975256	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5774.969151	5725-5850	PASS
	120	5775.003590	5725-5850	PASS
	132	5774.953767	5725-5850	PASS