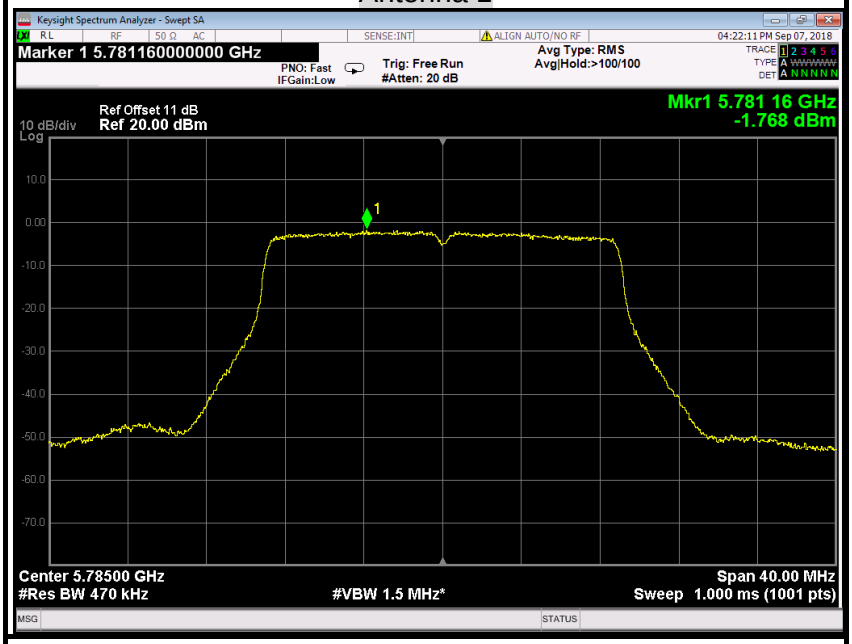
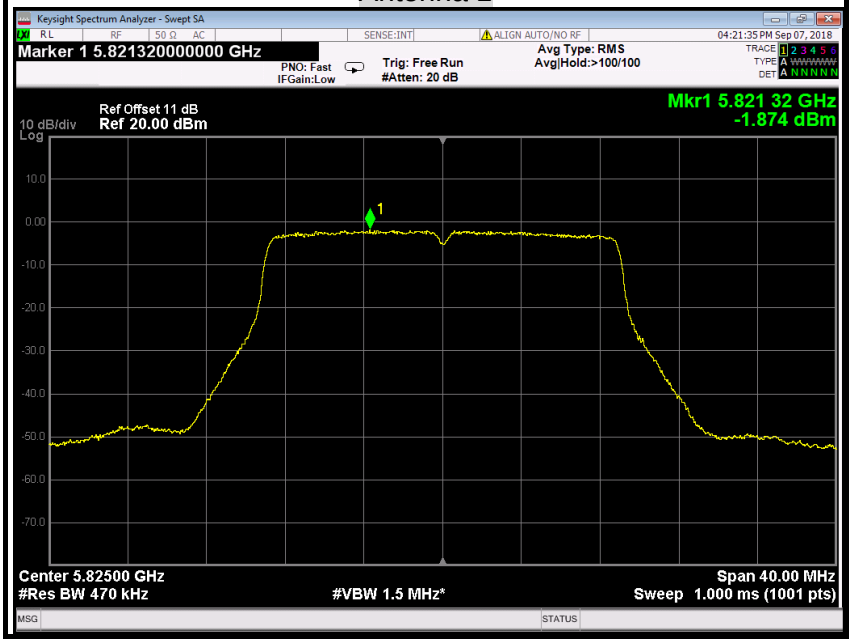
PPSD (CH Mid)

Antenna 1



PPSD (CH High)

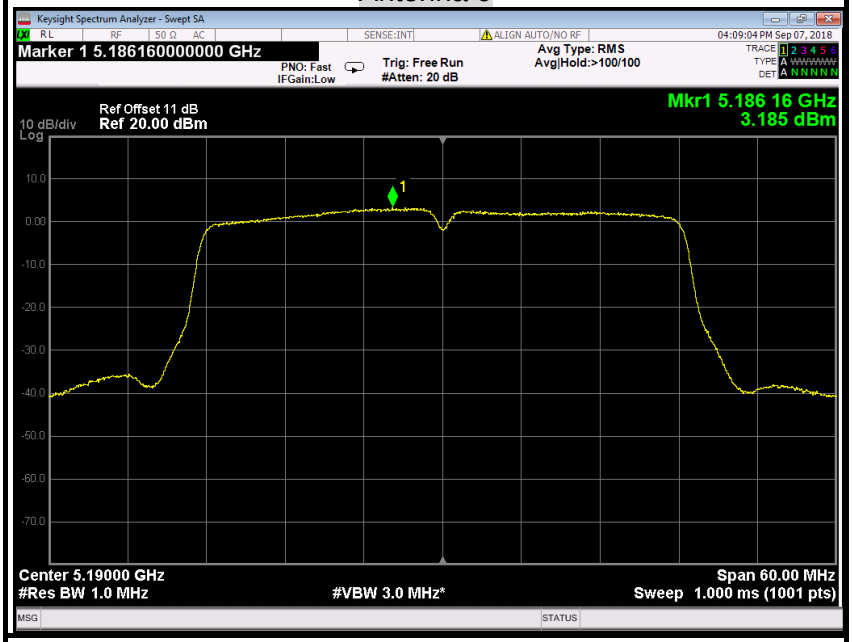
Antenna 1



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

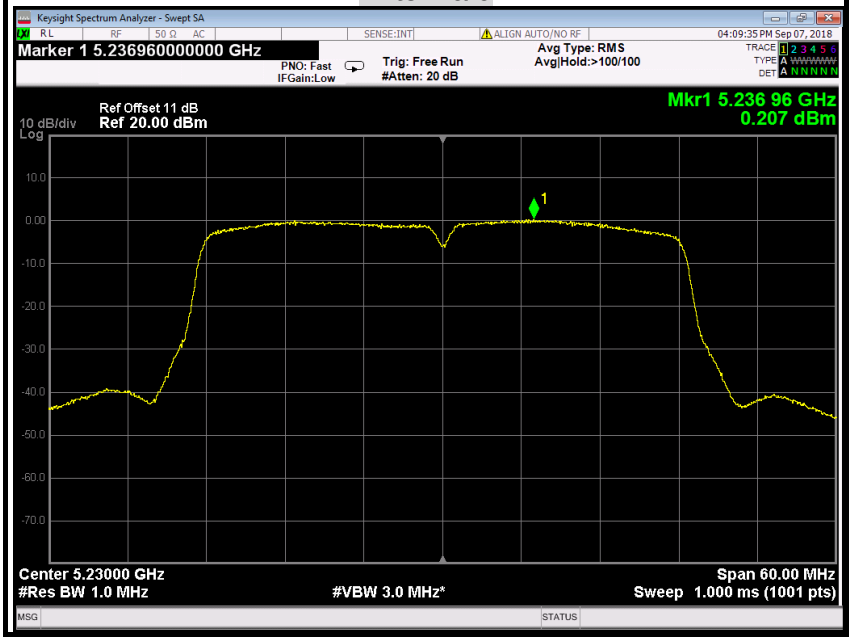
PPSD (CH Low)

Antenna 0



PPSD (CH High)

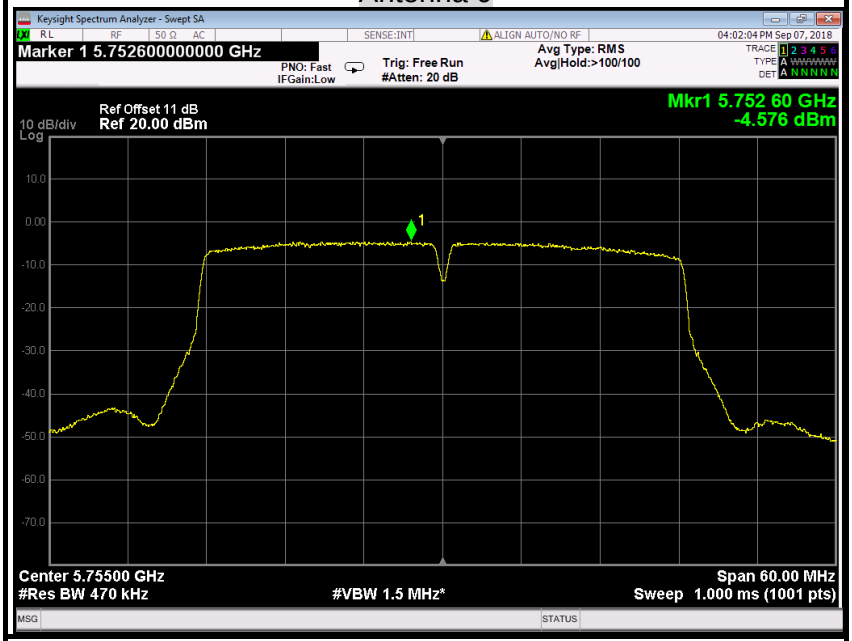
Antenna 0



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

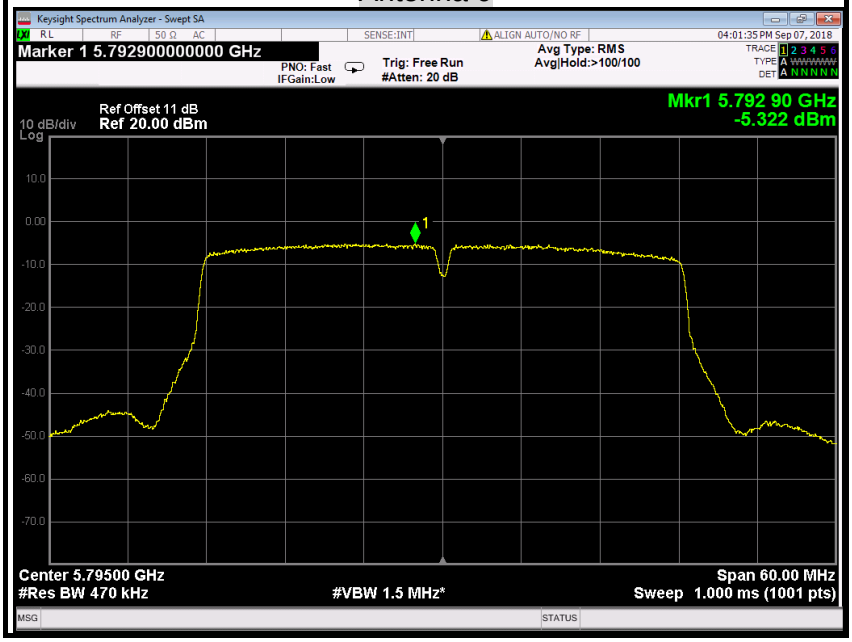
PPSD (CH Low)

Antenna 0



PPSD (CH High)

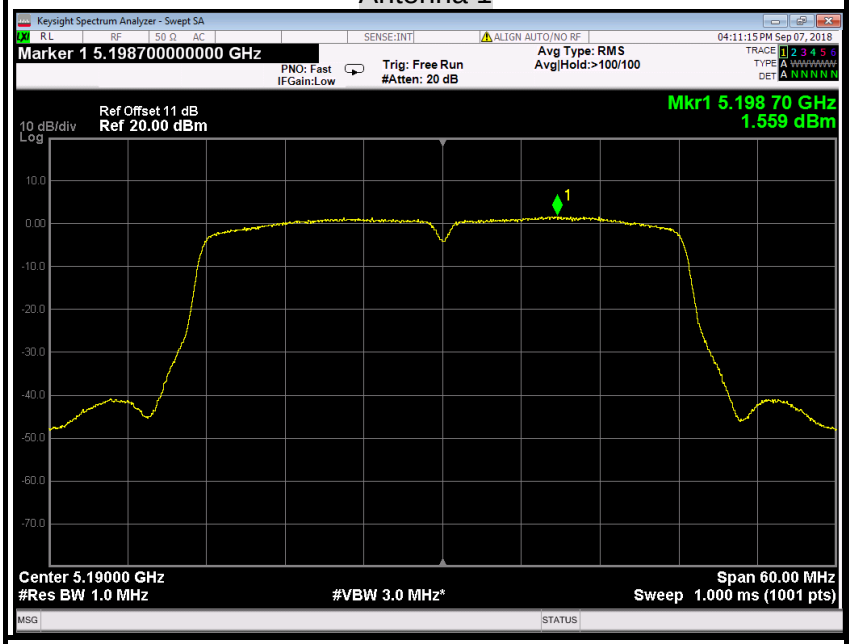
Antenna 0



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

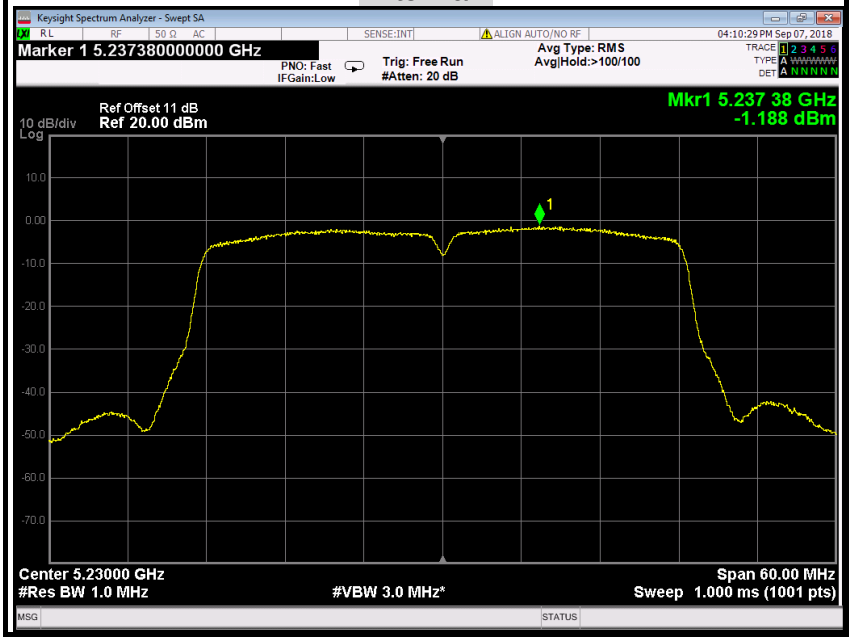
PPSD (CH Low)

Antenna 1



PPSD (CH High)

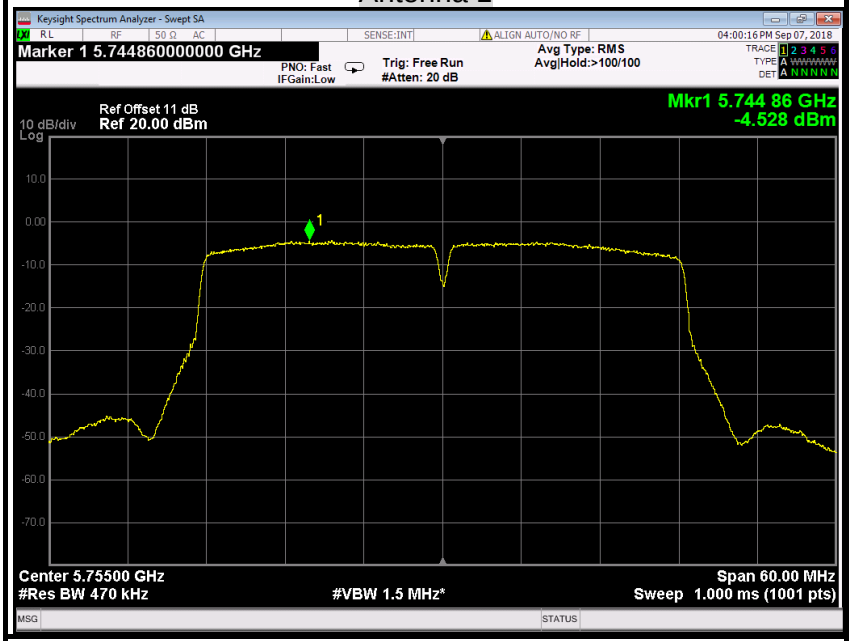
Antenna 1



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

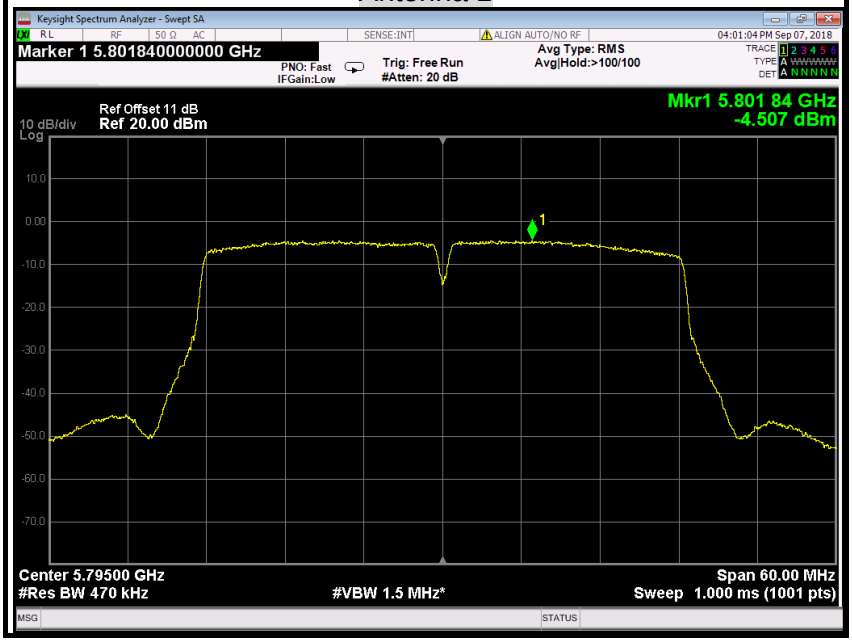
PPSD (CH Low)

Antenna 1



PPSD (CH High)

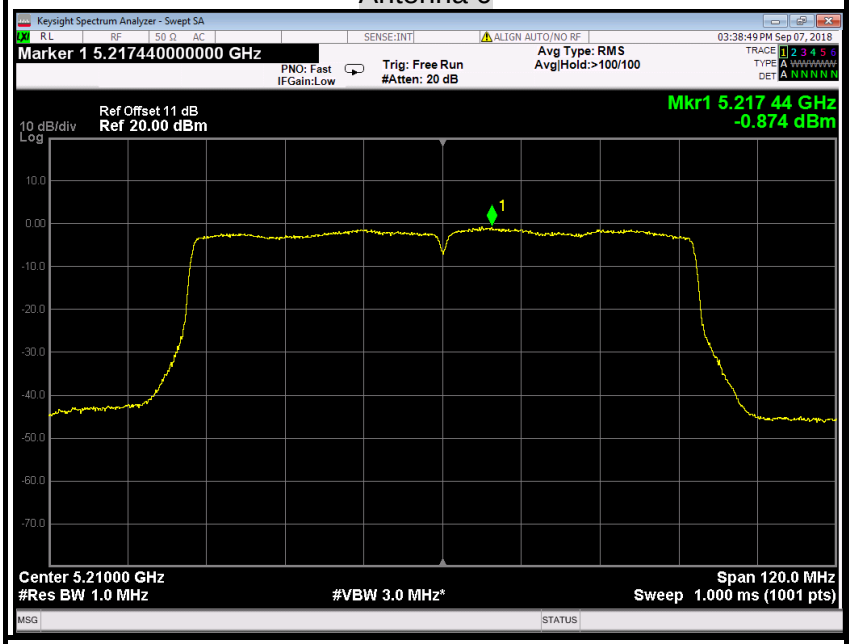
Antenna 1



IEEE 802.11ac 80 mode / 5210MHz

PPSD

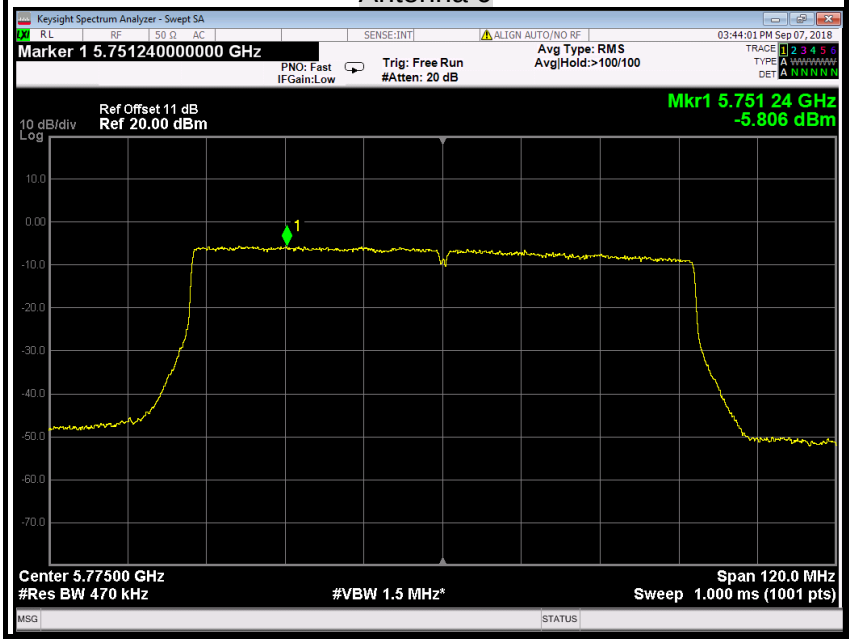
Antenna 0



IEEE 802.11ac 80 mode / 5775MHz

PPSD

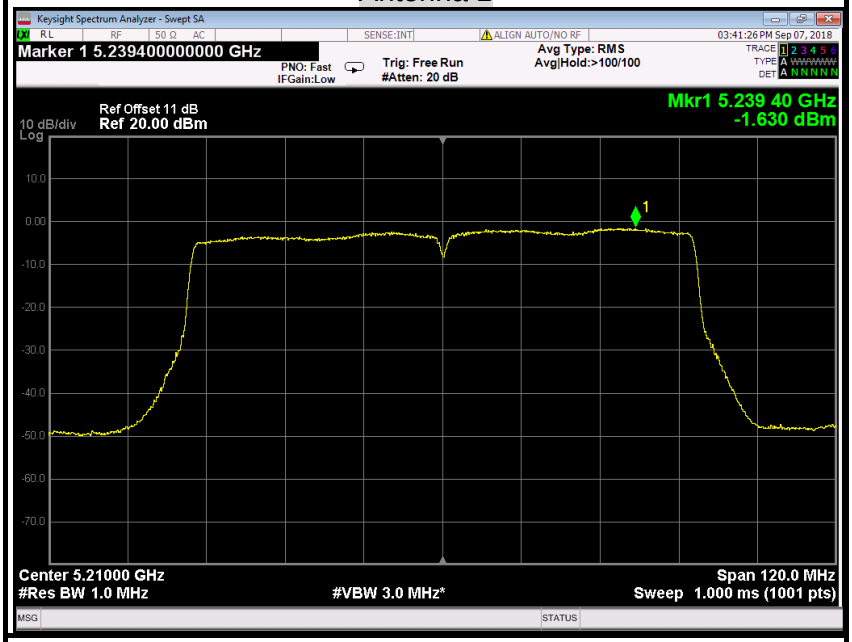
Antenna 0



IEEE 802.11ac 80 mode / 5210MHz

PPSD

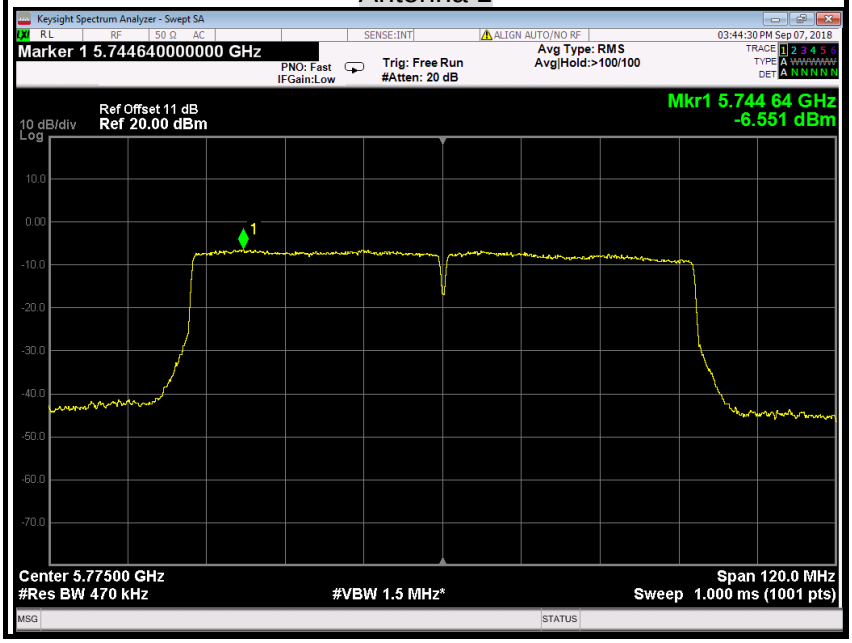
Antenna 1



IEEE 802.11ac 80 mode / 5775MHz

PPSD

Antenna 1



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

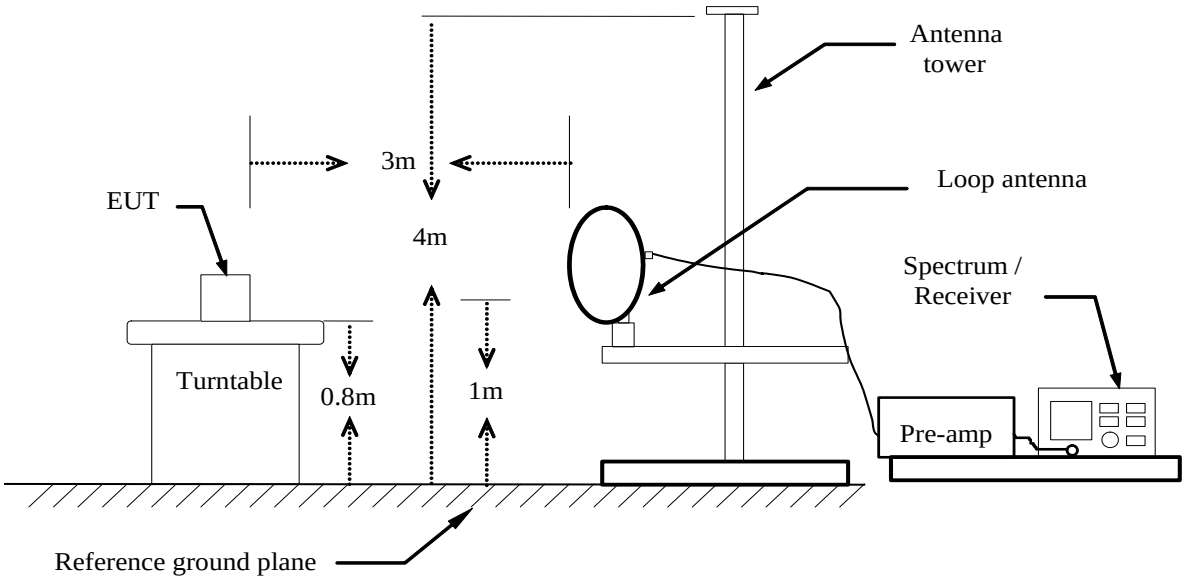
Remark: *Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of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

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

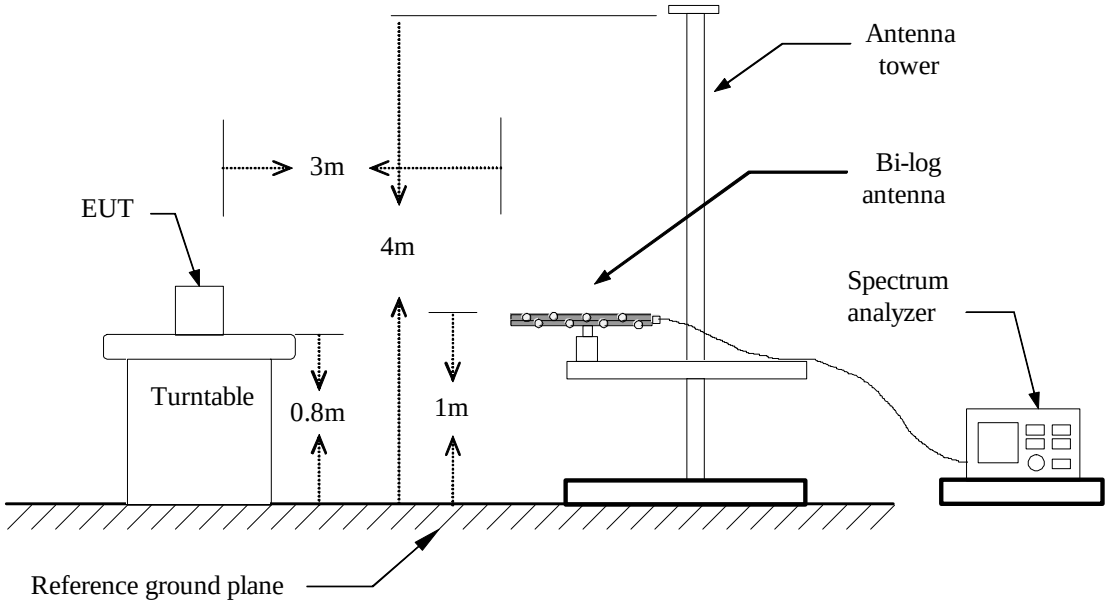
Frequency (MHz)	Field Strength (μV/m at 3-meter)	Field Strength (dBμV/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

6.7.2TEST CONFIGURATION

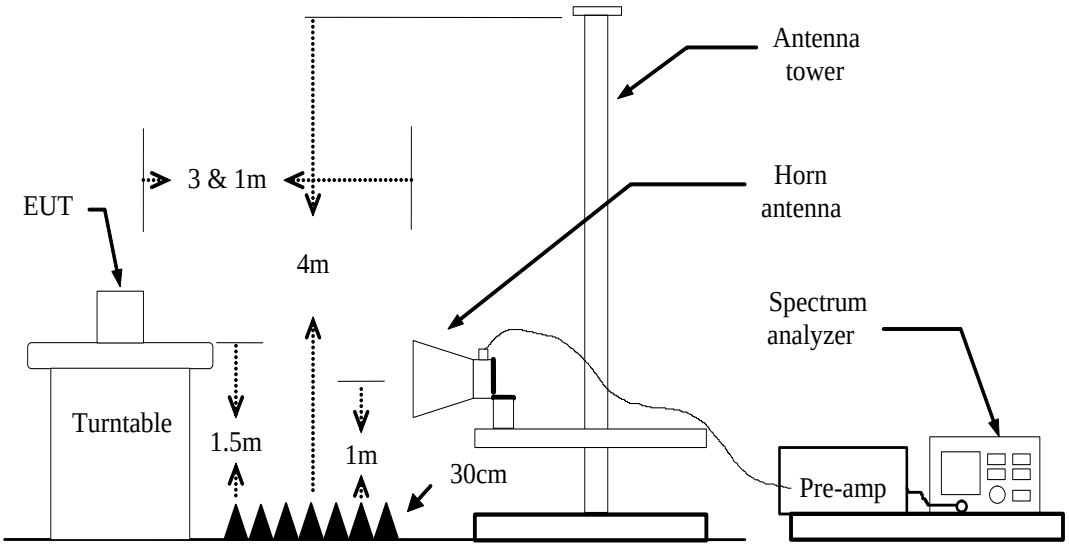
Below 30MHz



Below 1 GHz



Above 1 GHz



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

6.7.3 MEASURING SETTING

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

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

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

6.7.4TEST 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 (± 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.

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

Above 1GHz

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

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

Calculation Formula

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

6.7.6 TEST RESULTS

Below 1 GHz

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 17, 2018

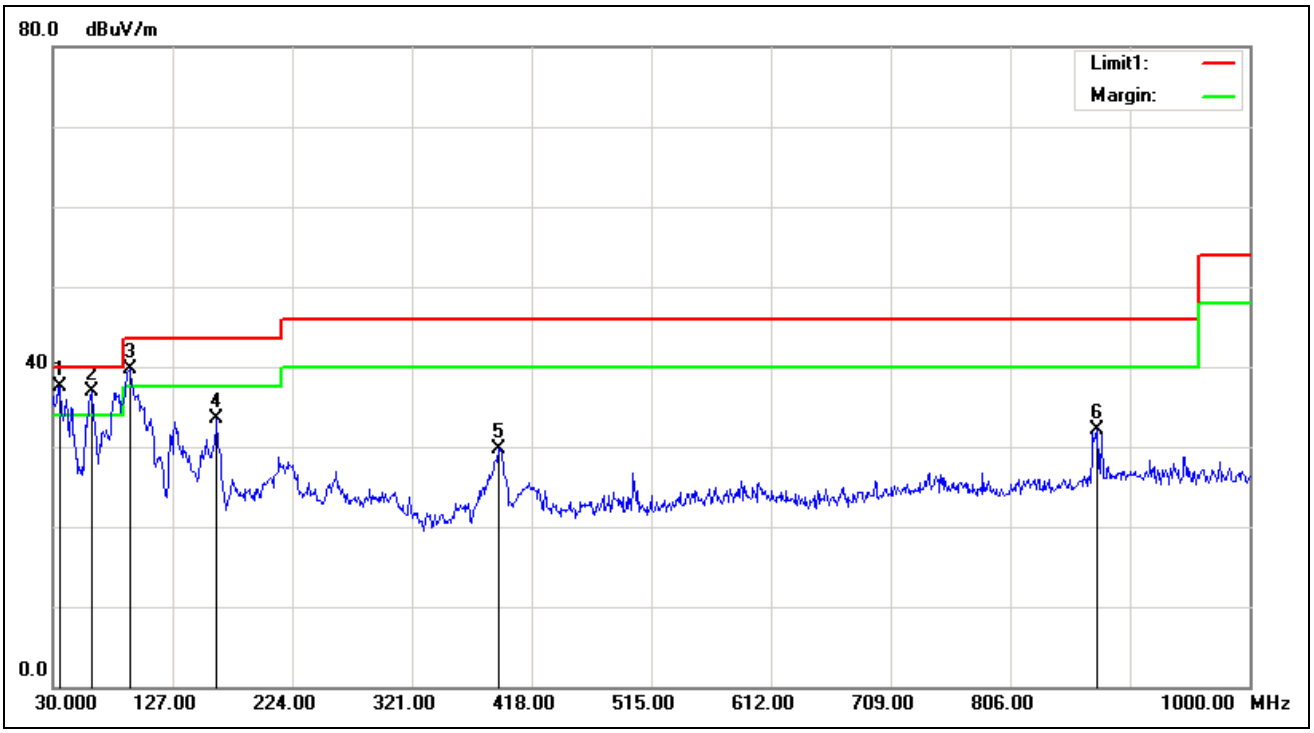
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
35.8200	52.47	-14.91	37.56	40.00	-2.44	V	QP
62.0100	61.14	-24.32	36.82	40.00	-3.18	V	QP
92.0800	64.23	-24.52	39.71	43.50	-3.79	V	QP
162.8900	56.16	-22.65	33.51	43.50	-9.99	V	QP
390.8400	46.14	-16.40	29.74	46.00	-16.26	V	QP
875.8400	42.22	-10.11	32.11	46.00	-13.89	V	QP
35.8200	52.54	-14.91	37.63	40.00	-2.37	H	QP
93.0500	58.18	-24.42	33.76	43.50	-9.74	H	QP
162.8900	64.00	-22.65	41.35	43.50	-2.15	H	QP
222.0600	56.92	-20.66	36.26	46.00	-9.74	H	QP
392.7800	53.31	-16.34	36.97	46.00	-9.03	H	QP
875.8400	44.44	-10.11	34.33	46.00	-11.67	H	QP

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

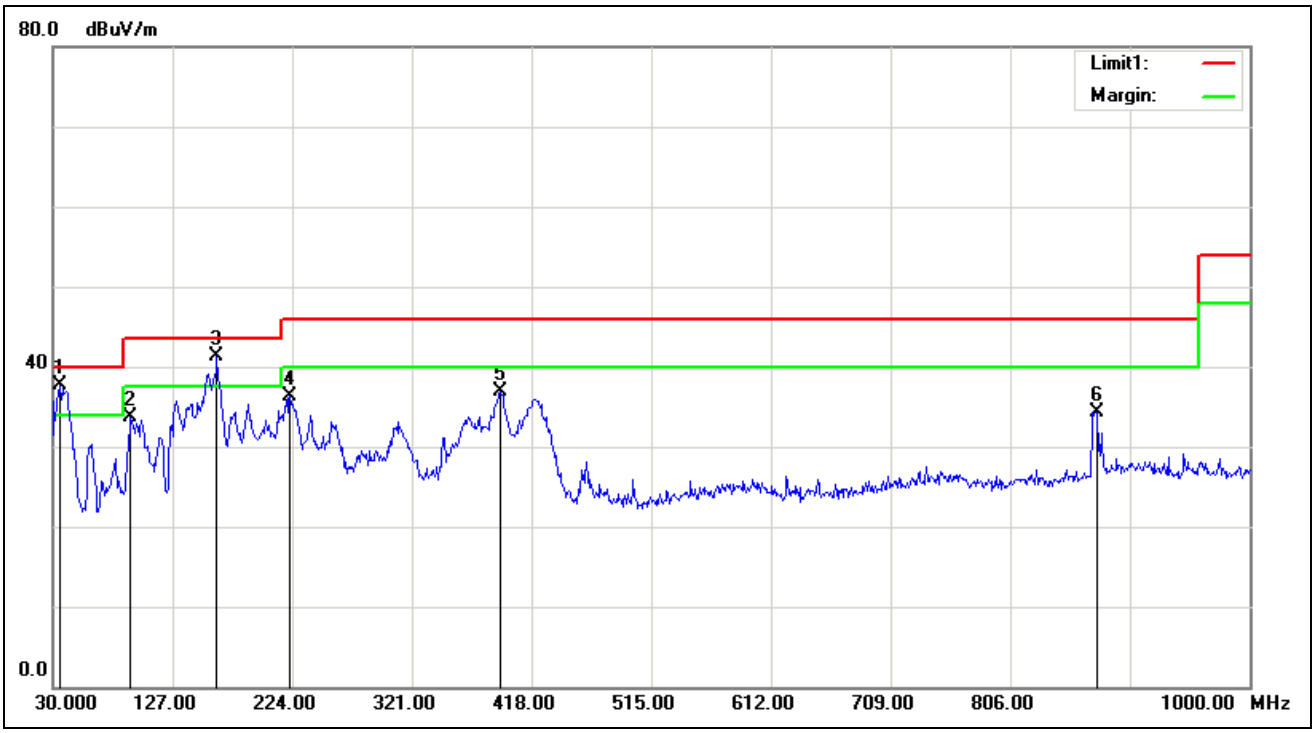
Remark:

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).*

Vertical



Horizontal



Above 1 GHz

1GHz~6GHz

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 28, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1895.000	61.14	-5.67	55.47	74.00	-18.53	V	peak
1895.000	56.06	-5.67	50.39	54.00	-3.61	V	AVG
3840.000	43.18	0.91	44.09	74.00	-29.91	V	peak
4865.000	53.98	4.54	58.52	74.00	-15.48	V	peak
4865.000	45.19	4.54	49.73	54.00	-4.27	V	AVG
5000.000	50.51	4.98	55.49	74.00	-18.51	V	peak
5000.000	47.69	4.98	52.67	54.00	-1.33	V	AVG
5175.000	50.39	5.29	55.68	74.00	-18.32	V	peak
5175.000	45.63	5.29	50.92	54.00	-3.08	V	AVG
5505.000	59.68	5.87	65.55	74.00	-8.45	V	peak
5505.000	46.10	5.87	51.97	54.00	-2.03	V	AVG
1235.000	54.08	-7.66	46.42	74.00	-27.58	H	peak
4870.000	54.07	4.56	58.63	74.00	-15.37	H	peak
4870.000	47.13	4.56	51.69	54.00	-2.31	H	AVG
4935.000	47.83	4.77	52.60	74.00	-21.40	H	peak
4935.000	44.99	4.77	49.76	54.00	-4.24	H	AVG
5000.000	50.65	4.98	55.63	74.00	-18.37	H	peak
5000.000	44.79	4.98	49.77	54.00	-4.23	H	AVG
5175.000	51.13	5.29	56.42	74.00	-17.58	H	peak
5175.000	44.22	5.29	49.51	54.00	-4.49	H	AVG
5495.000	55.56	5.86	61.42	74.00	-12.58	H	peak
5495.000	45.38	5.86	51.24	54.00	-2.76	H	AVG

Remark:

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

Above 6GHz

Antenna 0

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6912.000	36.26	7.56	43.82	74.00	-30.18	V	peak
7572.000	31.89	8.82	40.71	74.00	-33.29	V	peak
8448.000	31.97	9.40	41.37	74.00	-32.63	V	peak
9336.000	31.09	10.07	41.16	74.00	-32.84	V	peak
9912.000	30.86	11.73	42.59	74.00	-31.41	V	peak
10356.000	38.99	13.08	52.07	74.00	-21.93	V	peak
6912.000	33.16	7.56	40.72	74.00	-33.28	H	Peak
7968.000	31.63	9.59	41.22	74.00	-32.78	H	Peak
8964.000	31.76	9.12	40.88	74.00	-33.12	H	Peak
9348.000	32.15	10.10	42.25	74.00	-31.75	H	peak
10056.000	30.99	12.15	43.14	74.00	-30.86	H	peak
10356.000	32.09	13.08	45.17	74.00	-28.83	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11a / 5200MHz /(CH Mid) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6936.000	39.88	7.60	47.48	74.00	-26.52	V	peak
7704.000	31.78	9.07	40.85	74.00	-33.15	V	peak
8520.000	31.77	9.36	41.13	74.00	-32.87	V	peak
9396.000	31.02	10.24	41.26	74.00	-32.74	V	peak
9864.000	31.10	11.59	42.69	74.00	-31.31	V	peak
10404.000	38.55	13.23	51.78	74.00	-22.22	V	peak
6996.000	31.58	7.69	39.27	74.00	-34.73	H	Peak
7980.000	31.45	9.61	41.06	74.00	-32.94	H	Peak
8688.000	31.12	9.27	40.39	74.00	-33.61	H	Peak
9396.000	30.62	10.24	40.86	74.00	-33.14	H	peak
10404.000	31.83	13.23	45.06	74.00	-28.94	H	peak
11136.000	31.41	15.02	46.43	74.00	-27.57	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11a / 5240MHz /(CH High) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6564.000	32.53	6.99	39.52	74.00	-34.48	V	peak
6984.000	39.86	7.67	47.53	74.00	-26.47	V	peak
7776.000	32.20	9.21	41.41	74.00	-32.59	V	peak
8124.000	32.10	9.58	41.68	74.00	-32.32	V	peak
9696.000	30.80	11.10	41.90	74.00	-32.10	V	peak
10476.000	38.92	13.46	52.38	74.00	-21.62	V	peak
6588.000	32.63	7.03	39.66	74.00	-34.34	H	Peak
6984.000	33.86	7.67	41.53	74.00	-32.47	H	Peak
7680.000	32.08	9.03	41.11	74.00	-32.89	H	Peak
8328.000	32.41	9.47	41.88	74.00	-32.12	H	peak
9624.000	30.91	10.90	41.81	74.00	-32.19	H	peak
10476.000	32.19	13.46	45.65	74.00	-28.35	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11a / 5745MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7212.000	32.09	8.11	40.20	74.00	-33.80	V	peak
7656.000	32.67	8.98	41.65	74.00	-32.35	V	peak
8124.000	31.88	9.58	41.46	74.00	-32.54	V	peak
9048.000	31.61	9.24	40.85	74.00	-33.15	V	peak
10716.000	30.79	14.20	44.99	74.00	-29.01	V	peak
11496.000	37.44	14.86	52.30	74.00	-21.70	V	peak
7224.000	31.78	8.14	39.92	74.00	-34.08	H	Peak
7500.000	31.80	8.68	40.48	74.00	-33.52	H	Peak
8028.000	31.70	9.63	41.33	74.00	-32.67	H	Peak
8928.000	31.51	9.14	40.65	74.00	-33.35	H	peak
10560.000	30.75	13.72	44.47	74.00	-29.53	H	peak
11496.000	36.31	14.86	51.17	74.00	-22.83	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11a / 5785MHz /(CH Mid) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7380.000	31.67	8.44	40.11	74.00	-33.89	V	peak
7716.000	32.68	9.10	41.78	74.00	-32.22	V	peak
8328.000	31.77	9.47	41.24	74.00	-32.76	V	peak
9456.000	31.16	10.41	41.57	74.00	-32.43	V	peak
10248.000	30.83	12.75	43.58	74.00	-30.42	V	peak
11568.000	36.85	14.83	51.68	74.00	-22.32	V	peak
6804.000	32.39	7.38	39.77	74.00	-34.23	H	Peak
7284.000	31.94	8.25	40.19	74.00	-33.81	H	Peak
7992.000	31.63	9.63	41.26	74.00	-32.74	H	Peak
8076.000	32.61	9.61	42.22	74.00	-31.78	H	peak
8496.000	31.57	9.38	40.95	74.00	-33.05	H	peak
9840.000	30.97	11.52	42.49	74.00	-31.51	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11a / 5825MHz /(CH High) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6204.000	33.36	6.41	39.77	74.00	-34.23	V	peak
7284.000	32.02	8.25	40.27	74.00	-33.73	V	peak
7764.000	32.75	9.19	41.94	74.00	-32.06	V	peak
10152.000	30.74	12.45	43.19	74.00	-30.81	V	peak
11148.000	31.61	15.01	46.62	74.00	-27.38	V	peak
11652.000	35.59	14.79	50.38	74.00	-23.62	V	peak
6372.000	32.54	6.68	39.22	74.00	-34.78	H	Peak
7344.000	31.89	8.37	40.26	74.00	-33.74	H	Peak
8124.000	31.51	9.58	41.09	74.00	-32.91	H	Peak
8844.000	31.51	9.19	40.70	74.00	-33.30	H	peak
10008.000	30.13	12.00	42.13	74.00	-31.87	H	peak
11148.000	30.62	15.01	45.63	74.00	-28.37	H	peak

Remark:

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

Antenna 1

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6912.000	34.68	7.56	42.24	74.00	-31.76	V	peak
7296.000	32.13	8.28	40.41	74.00	-33.59	V	peak
8100.000	31.88	9.60	41.48	74.00	-32.52	V	peak
9012.000	31.62	9.13	40.75	74.00	-33.25	V	peak
9672.000	30.73	11.04	41.77	74.00	-32.23	V	peak
10356.000	35.99	13.08	49.07	74.00	-24.93	V	peak
6696.000	31.47	7.21	38.68	74.00	-35.32	H	Peak
6900.000	31.42	7.54	38.96	74.00	-35.04	H	Peak
7464.000	31.49	8.60	40.09	74.00	-33.91	H	Peak
7800.000	31.44	9.26	40.70	74.00	-33.30	H	peak
8352.000	31.52	9.46	40.98	74.00	-33.02	H	peak
8988.000	31.09	9.11	40.20	74.00	-33.80	H	peak

Remark:

7. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
8. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
9. *Average test would be performed if the peak result were greater than the average limit.*
10. *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.*
11. *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.*
12. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5200MHz /(CH Mid) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6300.000	33.14	6.57	39.71	74.00	-34.29	V	peak
6936.000	35.42	7.60	43.02	74.00	-30.98	V	peak
7632.000	31.68	8.93	40.61	74.00	-33.39	V	peak
8136.000	31.78	9.58	41.36	74.00	-32.64	V	peak
9492.000	31.76	10.52	42.28	74.00	-31.72	V	peak
10404.000	38.28	13.23	51.51	74.00	-22.49	V	peak
6576.000	31.84	7.01	38.85	74.00	-35.15	H	Peak
7284.000	31.53	8.25	39.78	74.00	-34.22	H	Peak
7644.000	31.08	8.96	40.04	74.00	-33.96	H	Peak
8124.000	31.81	9.58	41.39	74.00	-32.61	H	peak
8472.000	30.50	9.39	39.89	74.00	-34.11	H	peak
8988.000	31.44	9.11	40.55	74.00	-33.45	H	peak

Remark:

7. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
8. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
9. *Average test would be performed if the peak result were greater than the average limit.*
10. *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.*
11. *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.*
12. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5240MHz /(CH High) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6984.000	36.60	7.67	44.27	74.00	-29.73	V	peak
8052.000	31.86	9.62	41.48	74.00	-32.52	V	peak
9084.000	31.83	9.34	41.17	74.00	-32.83	V	peak
10104.000	31.46	12.30	43.76	74.00	-30.24	V	peak
10476.000	34.39	13.46	47.85	74.00	-26.15	V	peak
11280.000	31.84	14.96	46.80	74.00	-27.20	V	peak
6900.000	31.60	7.54	39.14	74.00	-34.86	H	Peak
7560.000	31.35	8.79	40.14	74.00	-33.86	H	Peak
8004.000	31.81	9.65	41.46	74.00	-32.54	H	Peak
8424.000	31.32	9.42	40.74	74.00	-33.26	H	peak
9024.000	31.19	9.17	40.36	74.00	-33.64	H	peak
10044.000	30.77	12.12	42.89	74.00	-31.11	H	peak

Remark:

7. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
8. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
9. *Average test would be performed if the peak result were greater than the average limit.*
10. *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.*
11. *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.*
12. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5745MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6924.000	31.93	7.58	39.51	74.00	-34.49	V	peak
7500.000	32.10	8.68	40.78	74.00	-33.22	V	peak
8796.000	31.54	9.21	40.75	74.00	-33.25	V	peak
9480.000	31.15	10.48	41.63	74.00	-32.37	V	peak
10176.000	30.74	12.53	43.27	74.00	-30.73	V	peak
11496.000	36.00	14.86	50.86	74.00	-23.14	V	peak
6156.000	31.54	6.33	37.87	74.00	-36.13	H	Peak
7260.000	30.98	8.21	39.19	74.00	-34.81	H	Peak
7656.000	31.36	8.98	40.34	74.00	-33.66	H	Peak
8580.000	30.79	9.33	40.12	74.00	-33.88	H	peak
8988.000	31.52	9.11	40.63	74.00	-33.37	H	peak
10044.000	30.63	12.12	42.75	74.00	-31.25	H	peak

Remark:

7. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
8. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
9. *Average test would be performed if the peak result were greater than the average limit.*
10. *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.*
11. *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.*
12. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5785MHz /(CH Mid) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6600.000	32.30	7.05	39.35	74.00	-34.65	V	peak
7344.000	31.87	8.37	40.24	74.00	-33.76	V	peak
8112.000	32.38	9.59	41.97	74.00	-32.03	V	peak
8988.000	31.86	9.11	40.97	74.00	-33.03	V	peak
10644.000	30.85	13.98	44.83	74.00	-29.17	V	peak
11568.000	37.41	14.83	52.24	74.00	-21.76	V	peak
6792.000	31.90	7.36	39.26	74.00	-34.74	H	Peak
7524.000	31.01	8.72	39.73	74.00	-34.27	H	Peak
8052.000	31.36	9.62	40.98	74.00	-33.02	H	Peak
8508.000	31.09	9.37	40.46	74.00	-33.54	H	peak
9444.000	31.22	10.38	41.60	74.00	-32.40	H	peak
10116.000	30.74	12.34	43.08	74.00	-30.92	H	peak

Remark:

7. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
8. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
9. *Average test would be performed if the peak result were greater than the average limit.*
10. *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.*
11. *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.*
12. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5825MHz /(CH High) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6144.000	33.83	6.31	40.14	74.00	-33.86	V	peak
7764.000	32.89	9.19	42.08	74.00	-31.92	V	peak
10416.000	31.15	13.27	44.42	74.00	-29.58	V	peak
11232.000	31.92	14.98	46.90	74.00	-27.10	V	peak
11652.000	37.49	14.79	52.28	74.00	-21.72	V	peak
11652.000	36.60	14.79	51.39	54.00	-2.61	V	AVG
12600.000	30.59	16.63	47.22	74.00	-26.78	V	peak
6912.000	31.27	7.56	38.83	74.00	-35.17	H	Peak
7200.000	31.37	8.09	39.46	74.00	-34.54	H	Peak
7788.000	31.00	9.24	40.24	74.00	-33.76	H	Peak
8124.000	31.39	9.58	40.97	74.00	-33.03	H	peak
9012.000	31.69	9.13	40.82	74.00	-33.18	H	peak
9564.000	30.38	10.72	41.10	74.00	-32.90	H	peak

Remark:

7. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
8. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
9. *Average test would be performed if the peak result were greater than the average limit.*
10. *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.*
11. *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.*
12. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Combine with antenna 0 and antenna 1

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5180MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6660.000	32.07	7.15	39.22	74.00	-34.78	V	peak
6912.000	38.81	7.56	46.37	74.00	-27.63	V	peak
7644.000	31.80	8.96	40.76	74.00	-33.24	V	peak
8028.000	31.82	9.63	41.45	74.00	-32.55	V	peak
9444.000	31.81	10.38	42.19	74.00	-31.81	V	peak
10368.000	38.27	13.12	51.39	74.00	-22.61	V	peak
6912.000	34.50	7.56	42.06	74.00	-31.94	H	Peak
7752.000	32.10	9.17	41.27	74.00	-32.73	H	Peak
8052.000	32.62	9.62	42.24	74.00	-31.76	H	Peak
8376.000	31.77	9.44	41.21	74.00	-32.79	H	peak
8976.000	31.55	9.11	40.66	74.00	-33.34	H	peak
9408.000	30.92	10.28	41.20	74.00	-32.80	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range 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 /(CH Mid) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6936.000	39.36	7.60	46.96	74.00	-27.04	V	peak
7584.000	31.72	8.84	40.56	74.00	-33.44	V	peak
8580.000	31.37	9.33	40.70	74.00	-33.30	V	peak
9096.000	31.32	9.38	40.70	74.00	-33.30	V	peak
9432.000	31.46	10.34	41.80	74.00	-32.20	V	peak
10404.000	37.59	13.23	50.82	74.00	-23.18	V	peak
6612.000	31.34	7.07	38.41	74.00	-35.59	H	Peak
6852.000	31.63	7.46	39.09	74.00	-34.91	H	Peak
7332.000	31.52	8.35	39.87	74.00	-34.13	H	Peak
7740.000	31.19	9.14	40.33	74.00	-33.67	H	peak
8352.000	30.82	9.46	40.28	74.00	-33.72	H	peak
8976.000	31.51	9.11	40.62	74.00	-33.38	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5240MHz /(CH High) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6984.000	38.10	7.67	45.77	74.00	-28.23	V	peak
7500.000	31.58	8.68	40.26	74.00	-33.74	V	peak
7740.000	31.94	9.14	41.08	74.00	-32.92	V	peak
8664.000	31.42	9.28	40.70	74.00	-33.30	V	peak
9324.000	30.79	10.03	40.82	74.00	-33.18	V	peak
10488.000	38.28	13.49	51.77	74.00	-22.23	V	peak
6840.000	31.62	7.44	39.06	74.00	-34.94	H	Peak
7476.000	31.27	8.63	39.90	74.00	-34.10	H	Peak
8088.000	31.78	9.60	41.38	74.00	-32.62	H	Peak
8340.000	31.56	9.46	41.02	74.00	-32.98	H	peak
9444.000	30.15	10.38	40.53	74.00	-33.47	H	peak
10680.000	30.11	14.09	44.20	74.00	-29.80	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5745MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6816.000	31.82	7.40	39.22	74.00	-34.78	V	peak
7656.000	32.47	8.98	41.45	74.00	-32.55	V	peak
8100.000	32.30	9.60	41.90	74.00	-32.10	V	peak
8544.000	31.85	9.35	41.20	74.00	-32.80	V	peak
9396.000	31.64	10.24	41.88	74.00	-32.12	V	peak
11496.000	34.40	14.86	49.26	74.00	-24.74	V	peak
6504.000	32.06	6.90	38.96	74.00	-35.04	H	Peak
6984.000	31.43	7.67	39.10	74.00	-34.90	H	Peak
7620.000	31.59	8.91	40.50	74.00	-33.50	H	Peak
8088.000	31.78	9.60	41.38	74.00	-32.62	H	peak
8508.000	30.67	9.37	40.04	74.00	-33.96	H	peak
9312.000	30.46	10.00	40.46	74.00	-33.54	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5785MHz /(CH Mid) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7188.000	31.68	8.07	39.75	74.00	-34.25	V	peak
7656.000	31.84	8.98	40.82	74.00	-33.18	V	peak
8400.000	31.99	9.43	41.42	74.00	-32.58	V	peak
9432.000	30.86	10.34	41.20	74.00	-32.80	V	peak
11016.000	30.17	15.07	45.24	74.00	-28.76	V	peak
11568.000	35.95	14.83	50.78	74.00	-23.22	V	peak
6732.000	31.82	7.27	39.09	74.00	-34.91	H	Peak
7248.000	32.09	8.18	40.27	74.00	-33.73	H	Peak
7656.000	31.72	8.98	40.70	74.00	-33.30	H	Peak
8412.000	31.75	9.42	41.17	74.00	-32.83	H	peak
9360.000	31.23	10.14	41.37	74.00	-32.63	H	peak
10056.000	31.22	12.15	43.37	74.00	-30.63	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5825MHz /(CH High) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7068.000	32.01	7.83	39.84	74.00	-34.16	V	peak
7716.000	32.48	9.10	41.58	74.00	-32.42	V	peak
8196.000	31.68	9.54	41.22	74.00	-32.78	V	peak
9420.000	31.73	10.31	42.04	74.00	-31.96	V	peak
10764.000	30.63	14.35	44.98	74.00	-29.02	V	peak
11568.000	35.82	14.83	50.65	74.00	-23.35	V	peak
7152.000	31.24	8.00	39.24	74.00	-34.76	H	Peak
7656.000	31.35	8.98	40.33	74.00	-33.67	H	Peak
8004.000	31.52	9.65	41.17	74.00	-32.83	H	Peak
8400.000	31.63	9.43	41.06	74.00	-32.94	H	peak
8964.000	31.01	9.12	40.13	74.00	-33.87	H	peak
10512.000	29.91	13.57	43.48	74.00	-30.52	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5190MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6924.000	39.23	7.58	46.81	74.00	-27.19	V	peak
8124.000	32.29	9.58	41.87	74.00	-32.13	V	peak
9000.000	31.53	9.10	40.63	74.00	-33.37	V	peak
9360.000	31.17	10.14	41.31	74.00	-32.69	V	peak
10032.000	31.02	12.08	43.10	74.00	-30.90	V	peak
10380.000	33.75	13.16	46.91	74.00	-27.09	V	peak
6552.000	31.35	6.97	38.32	74.00	-35.68	H	Peak
6972.000	35.80	7.65	43.45	74.00	-30.55	H	Peak
7608.000	31.39	8.89	40.28	74.00	-33.72	H	Peak
7920.000	30.96	9.49	40.45	74.00	-33.55	H	peak
8280.000	31.02	9.50	40.52	74.00	-33.48	H	peak
9396.000	30.53	10.24	40.77	74.00	-33.23	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5230MHz /(CH High) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6828.000	31.99	7.42	39.41	74.00	-34.59	V	peak
6972.000	38.20	7.65	45.85	74.00	-28.15	V	peak
7692.000	31.97	9.05	41.02	74.00	-32.98	V	peak
8400.000	31.76	9.43	41.19	74.00	-32.81	V	peak
8952.000	31.75	9.13	40.88	74.00	-33.12	V	peak
9420.000	31.07	10.31	41.38	74.00	-32.62	V	peak
6552.000	32.02	6.97	38.99	74.00	-35.01	H	Peak
6972.000	32.97	7.65	40.62	74.00	-33.38	H	Peak
7560.000	31.56	8.79	40.35	74.00	-33.65	H	Peak
8424.000	31.58	9.42	41.00	74.00	-33.00	H	peak
8988.000	31.69	9.11	40.80	74.00	-33.20	H	peak
9396.000	31.03	10.24	41.27	74.00	-32.73	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5755MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7296.000	32.02	8.28	40.30	74.00	-33.70	V	peak
7668.000	32.58	9.00	41.58	74.00	-32.42	V	peak
8508.000	31.16	9.37	40.53	74.00	-33.47	V	peak
9432.000	31.01	10.34	41.35	74.00	-32.65	V	peak
10344.000	30.14	13.05	43.19	74.00	-30.81	V	peak
11496.000	36.23	14.86	51.09	74.00	-22.91	V	peak
6876.000	30.93	7.50	38.43	74.00	-35.57	H	Peak
7392.000	31.35	8.46	39.81	74.00	-34.19	H	Peak
7728.000	31.19	9.12	40.31	74.00	-33.69	H	Peak
8172.000	31.66	9.56	41.22	74.00	-32.78	H	peak
9372.000	30.76	10.17	40.93	74.00	-33.07	H	peak
10152.000	30.05	12.45	42.50	74.00	-31.50	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5795MHz /(CH High) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7104.000	31.67	7.90	39.57	74.00	-34.43	V	peak
7680.000	31.76	9.03	40.79	74.00	-33.21	V	peak
8412.000	31.76	9.42	41.18	74.00	-32.82	V	peak
9444.000	31.01	10.38	41.39	74.00	-32.61	V	peak
10404.000	30.17	13.23	43.40	74.00	-30.60	V	peak
11580.000	36.17	14.82	50.99	74.00	-23.01	V	peak
6372.000	31.62	6.68	38.30	74.00	-35.70	H	Peak
7236.000	31.34	8.16	39.50	74.00	-34.50	H	Peak
7968.000	31.10	9.59	40.69	74.00	-33.31	H	Peak
8604.000	31.40	9.32	40.72	74.00	-33.28	H	peak
9144.000	30.30	9.51	39.81	74.00	-34.19	H	peak
9924.000	30.30	11.76	42.06	74.00	-31.94	H	peak

Remark:

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

Test Mode: TX / IEEE 802. 11ac 80 / 5210MHz /(CH Low) **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6948.000	39.15	7.62	46.77	74.00	-27.23	V	peak
8016.000	31.84	9.64	41.48	74.00	-32.52	V	peak
8136.000	31.89	9.58	41.47	74.00	-32.53	V	peak
8508.000	31.25	9.37	40.62	74.00	-33.38	V	peak
9012.000	32.01	9.13	41.14	74.00	-32.86	V	peak
10428.000	34.72	13.31	48.03	74.00	-25.97	V	peak
6816.000	31.33	7.40	38.73	74.00	-35.27	H	Peak
7392.000	31.25	8.46	39.71	74.00	-34.29	H	Peak
8124.000	31.53	9.58	41.11	74.00	-32.89	H	Peak
8976.000	31.28	9.11	40.39	74.00	-33.61	H	peak
9828.000	30.67	11.48	42.15	74.00	-31.85	H	peak
10572.000	30.40	13.75	44.15	74.00	-29.85	H	peak

Remark:

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

Test Mode: TX / IEEE 802.11ac 80 / 5775MHz **Tested by:** Darry Wu

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** August 6, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6792.000	32.27	7.36	39.63	74.00	-34.37	V	peak
7704.000	32.50	9.07	41.57	74.00	-32.43	V	peak
8268.000	31.73	9.50	41.23	74.00	-32.77	V	peak
9672.000	30.31	11.04	41.35	74.00	-32.65	V	peak
11136.000	31.83	15.02	46.85	74.00	-27.15	V	peak
11556.000	36.72	14.84	51.56	74.00	-22.44	V	peak
6552.000	31.80	6.97	38.77	74.00	-35.23	H	Peak
7044.000	31.96	7.79	39.75	74.00	-34.25	H	Peak
7488.000	31.69	8.65	40.34	74.00	-33.66	H	Peak
7968.000	31.62	9.59	41.21	74.00	-32.79	H	peak
8940.000	31.34	9.13	40.47	74.00	-33.53	H	peak
9336.000	31.08	10.07	41.15	74.00	-32.85	H	peak

Remark:

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

6.8 CONDUCTED UNDESIRABLE EMISSION

6.8.1 LIMIT

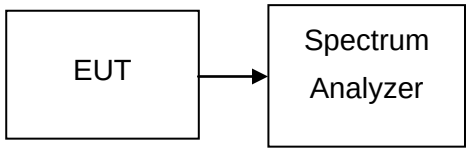
According to 15.407(b),

(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 TEST CONFIGURATION



6.8.3 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.

6.8.4 TEST RESULTS

No non-compliance noted

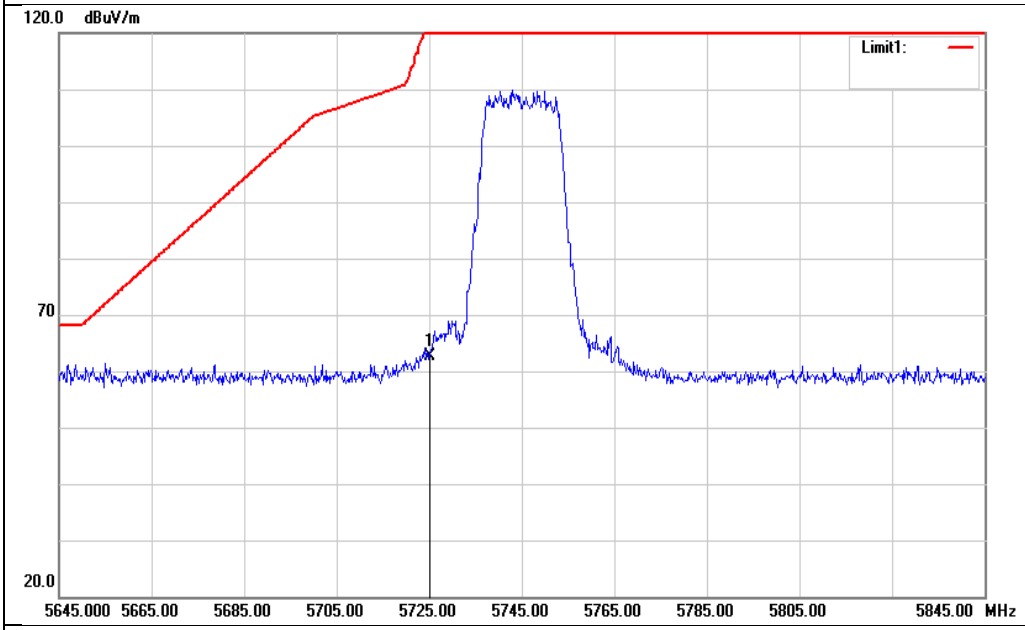
Test Plot

Antenna 0

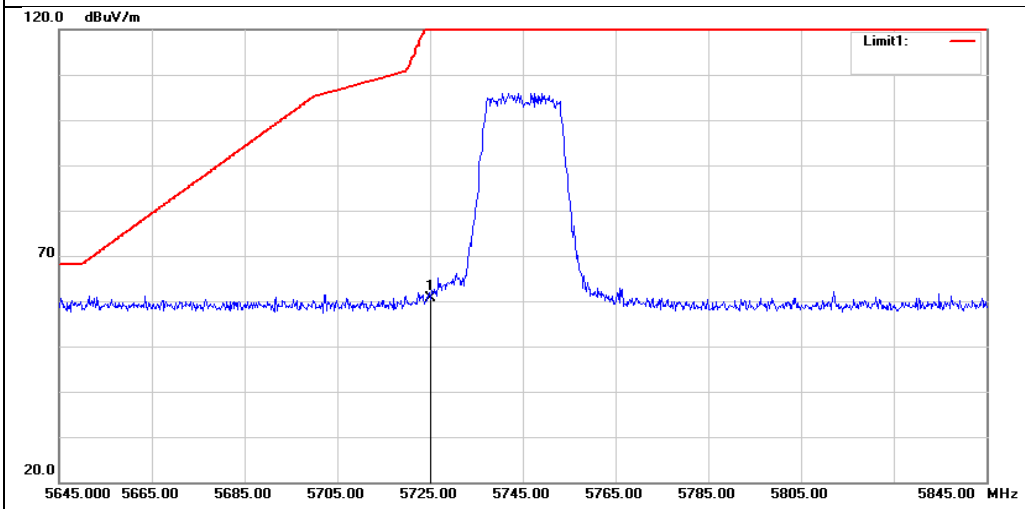
IEEE 802.11a mode / 5745 ~ 5825MHz

CH Low

Detector mode: Peak **Polarity: Vertical**



Detector mode: Peak **Polarity: Horizontal**

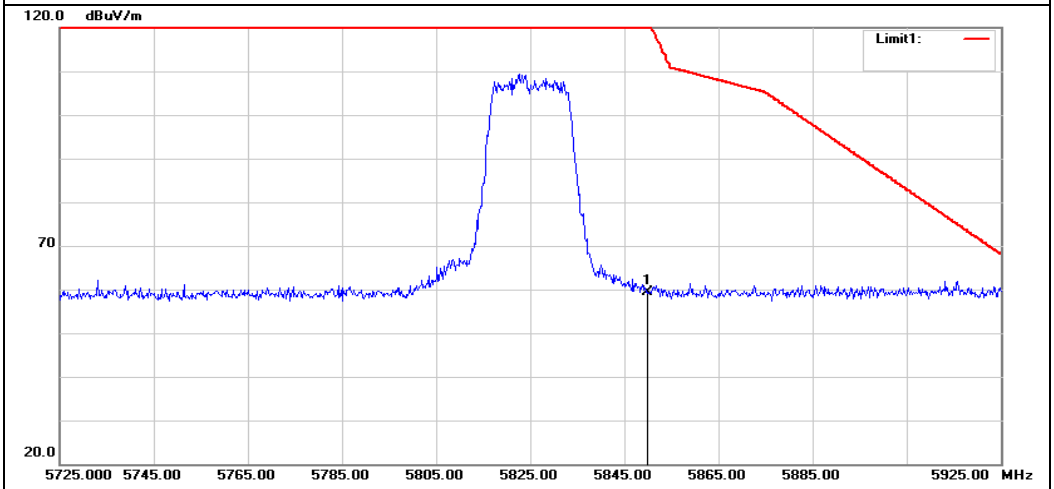


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	56.74	5.96	62.70	122.20	-59.50	Peak	Vertical
2	5725.000	54.69	5.96	60.65	122.20	-61.55	Peak	Horizontal

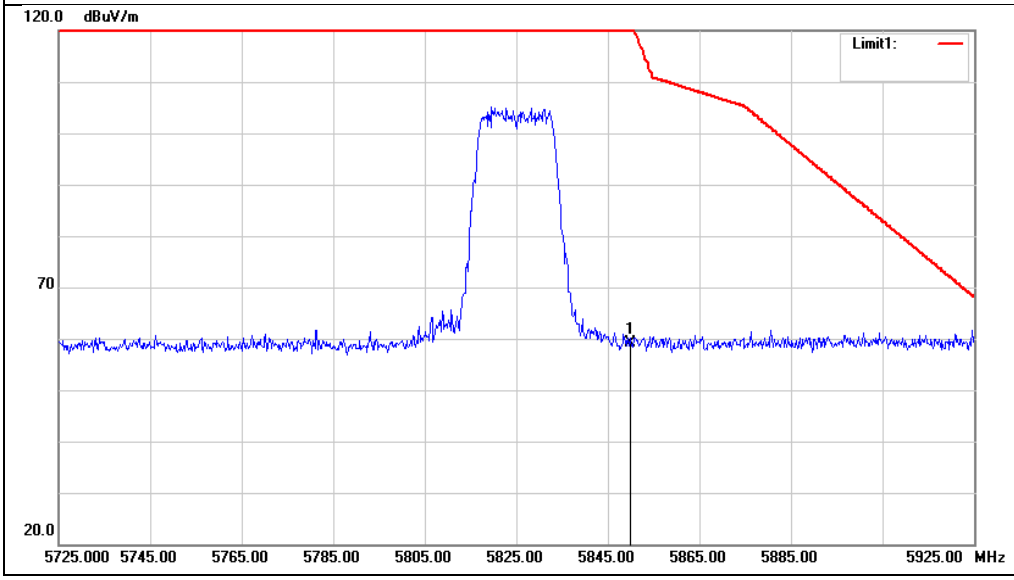
IEEE 802.11a mode / 5745 ~ 5825MHz

CH High

Detector mode: Peak **Polarity: Vertical**



Detector mode: Peak **Polarity: Horizontal**



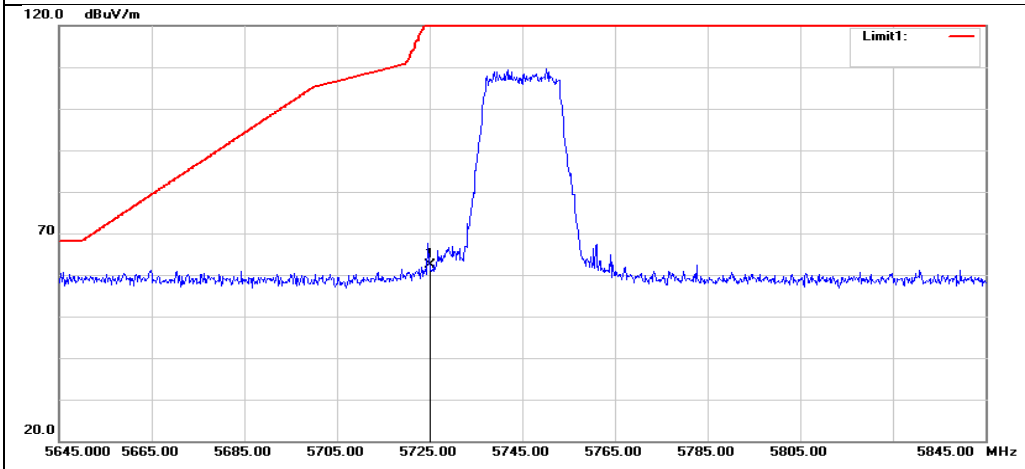
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	53.45	6.02	59.47	122.20	-62.73	Peak	Vertical
2	5850.000	53.19	6.02	59.21	122.20	-62.99	Peak	Horizontal

Antenna 1

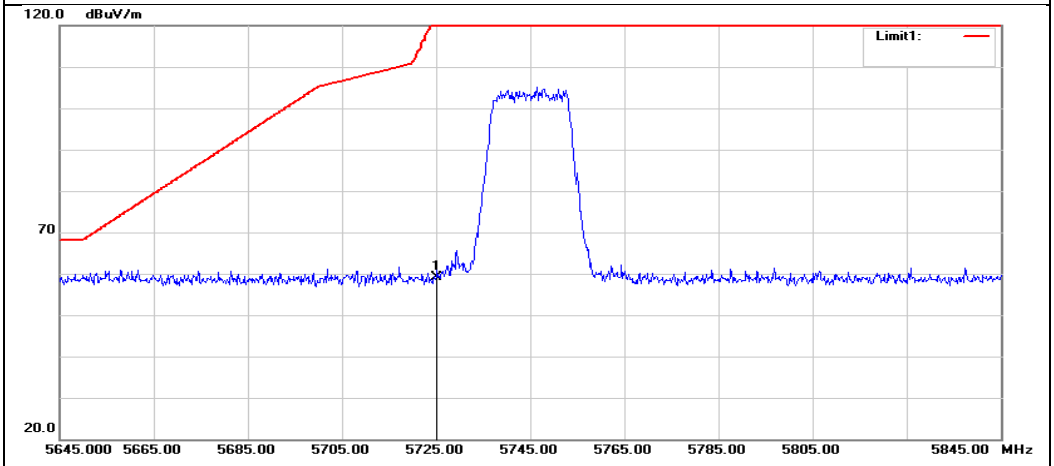
IEEE 802.11a mode / 5745 ~ 5825MHz

CH Low

Detector mode: Peak **Polarity: Vertical**



Detector mode: Peak **Polarity: Horizontal**

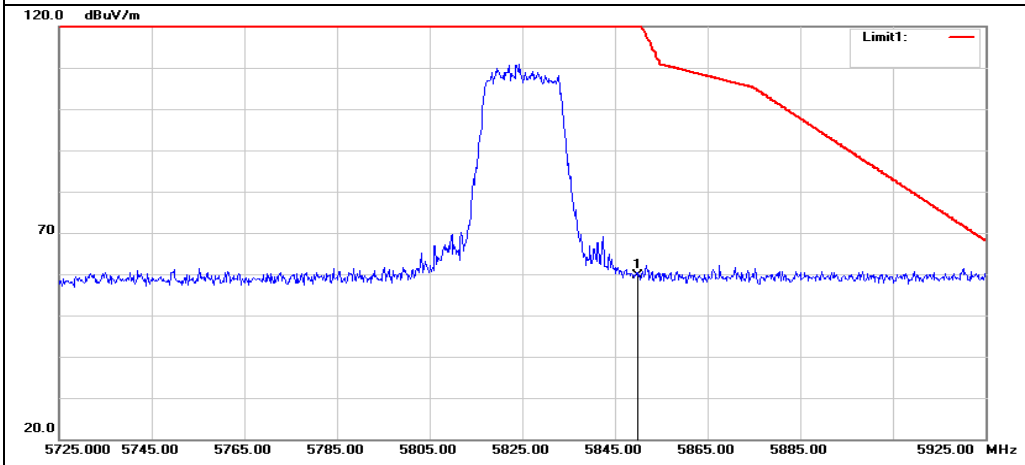


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	56.44	5.96	62.40	122.20	-59.80	Peak	Vertical
2	5725.000	53.09	5.96	59.05	122.20	-63.15	Peak	Horizontal

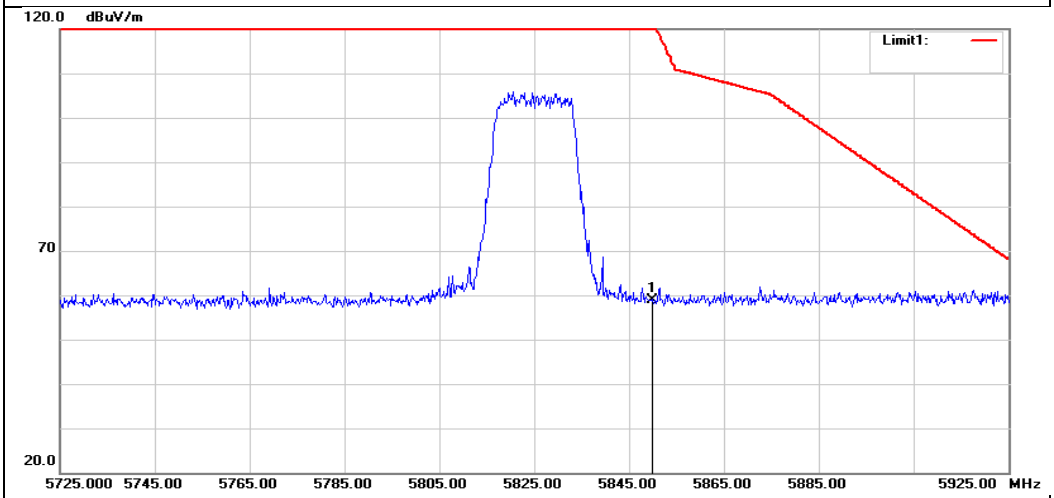
IEEE 802.11a mode / 5745 ~ 5825MHz

CH High

Detector mode: Peak **Polarity: Vertical**



Detector mode: Peak **Polarity: Horizontal**



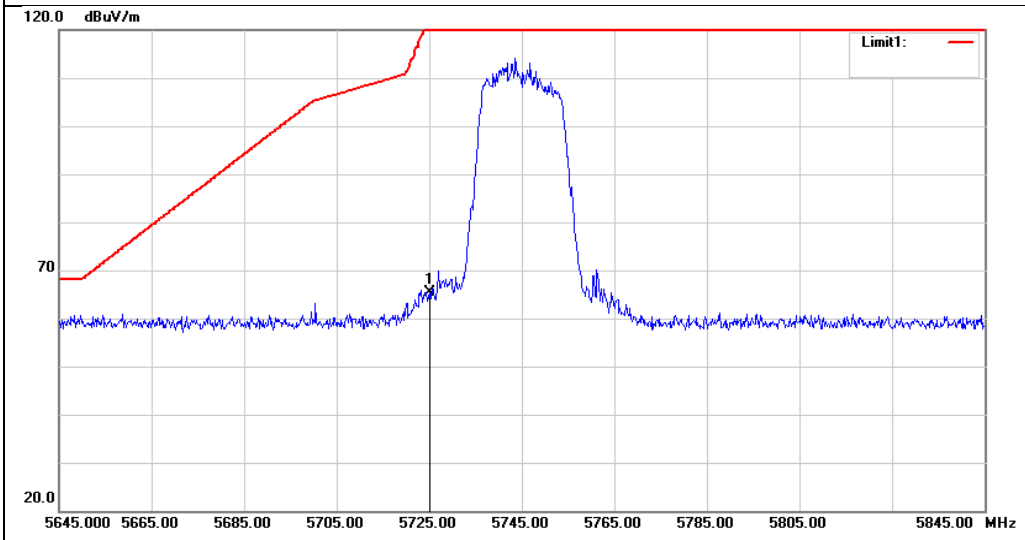
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	53.70	6.02	59.72	122.20	-62.48	Peak	Vertical
2	5850.000	52.92	6.02	58.94	122.20	-63.26	Peak	Horizontal

Combine with antenna 0 and antenna 1

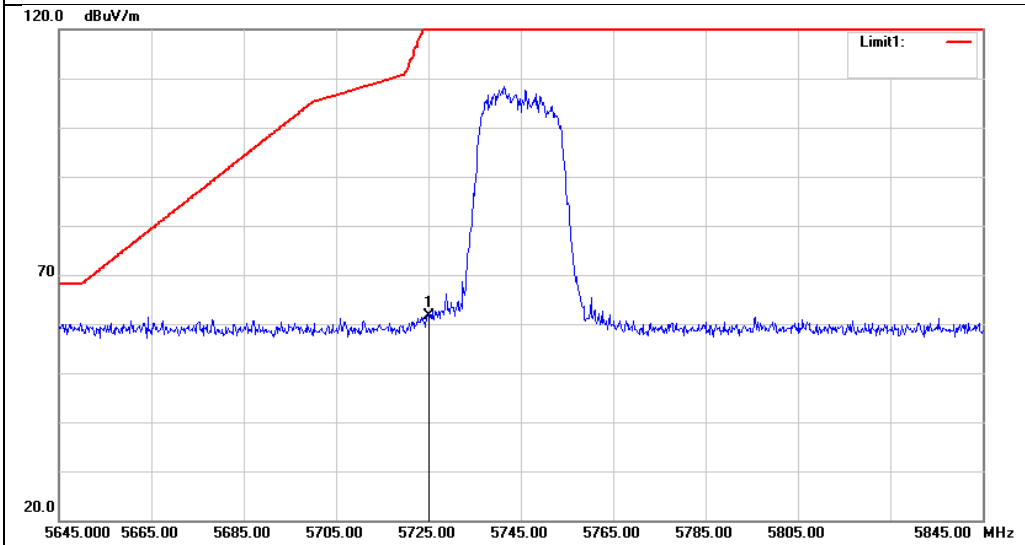
IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz

CH Low

Detector mode: Peak **Polarity: Vertical**



Detector mode: Peak **Polarity: Horizontal**

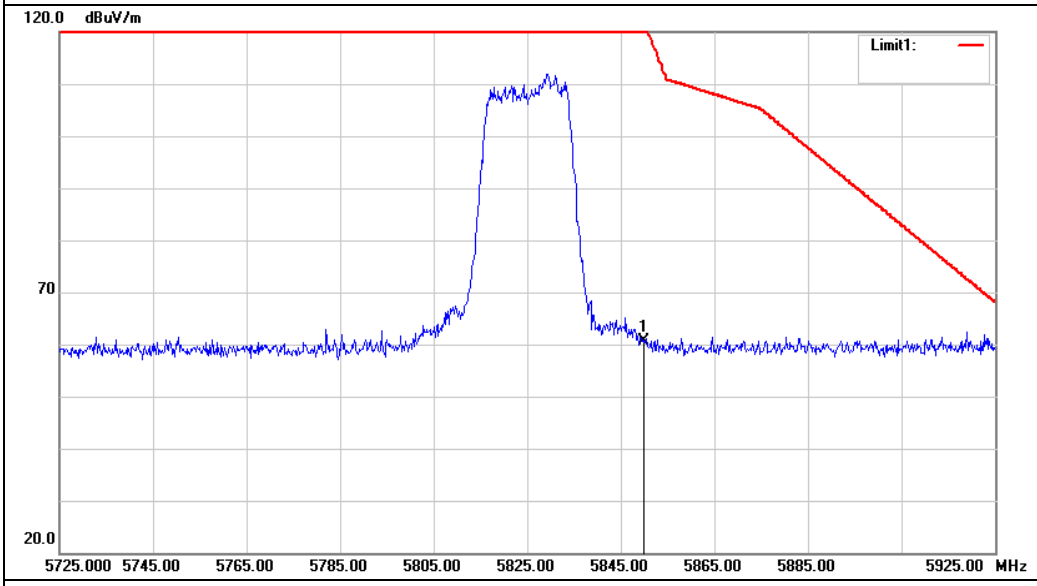


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	59.53	5.96	65.49	122.20	-56.71	Peak	Vertical
2	5725.000	55.69	5.96	61.65	122.20	-60.55	Peak	Horizontal

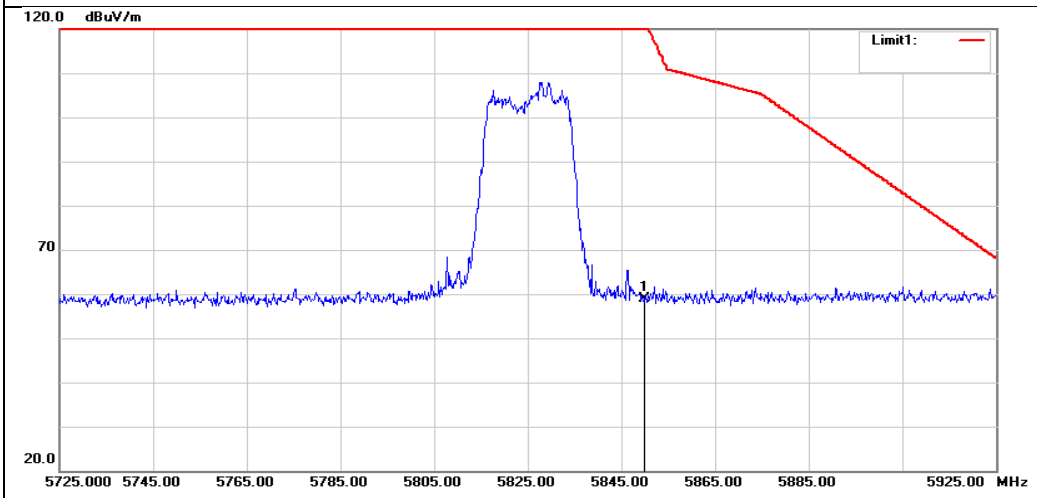
IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz

CH High

Detector mode: Peak **Polarity: Vertical**



Detector mode: Peak **Polarity: Horizontal**

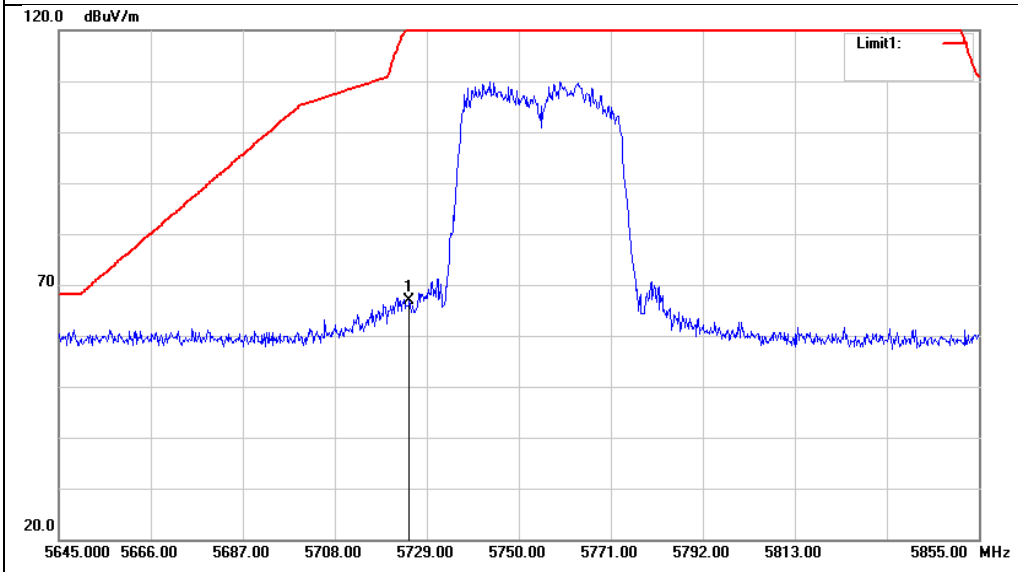


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	54.68	6.02	60.70	122.20	-61.50	Peak	Vertical
2	5850.000	52.95	6.02	58.97	122.20	-63.23	Peak	Horizontal

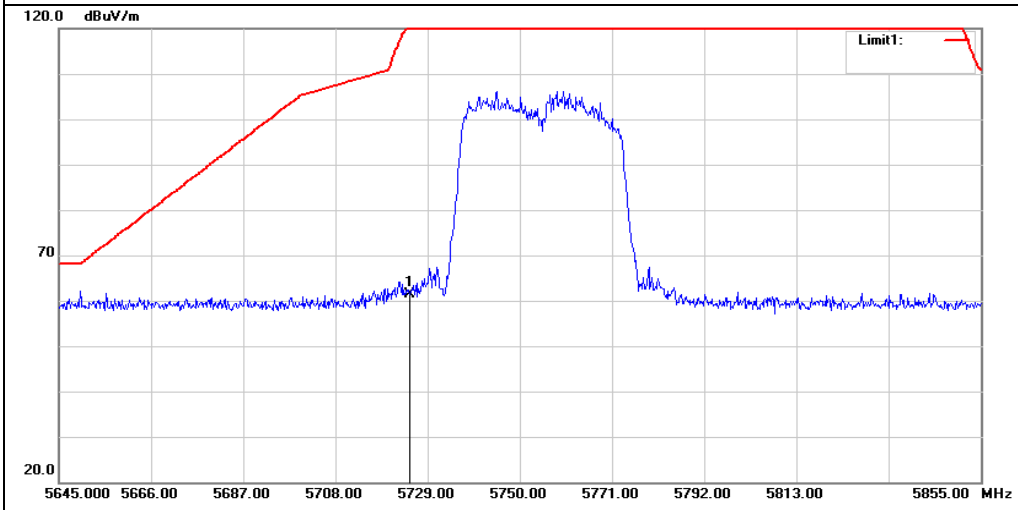
IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz

CH Low

Detector mode: Peak **Polarity: Vertical**



Detector mode: Peak **Polarity: Horizontal**

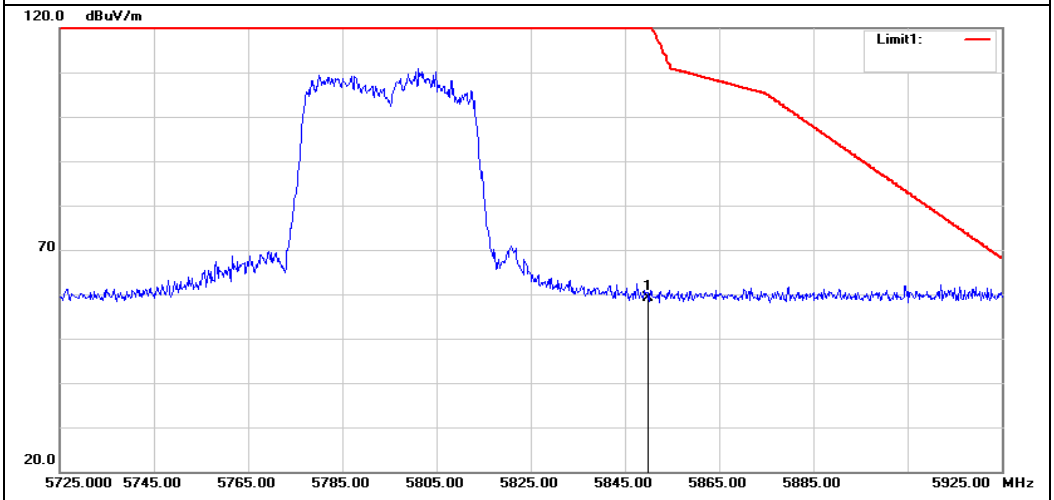


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	60.95	5.96	66.91	122.20	-55.29	Peak	Vertical
2	5725.000	55.53	5.96	61.49	122.20	-60.71	Peak	Horizontal

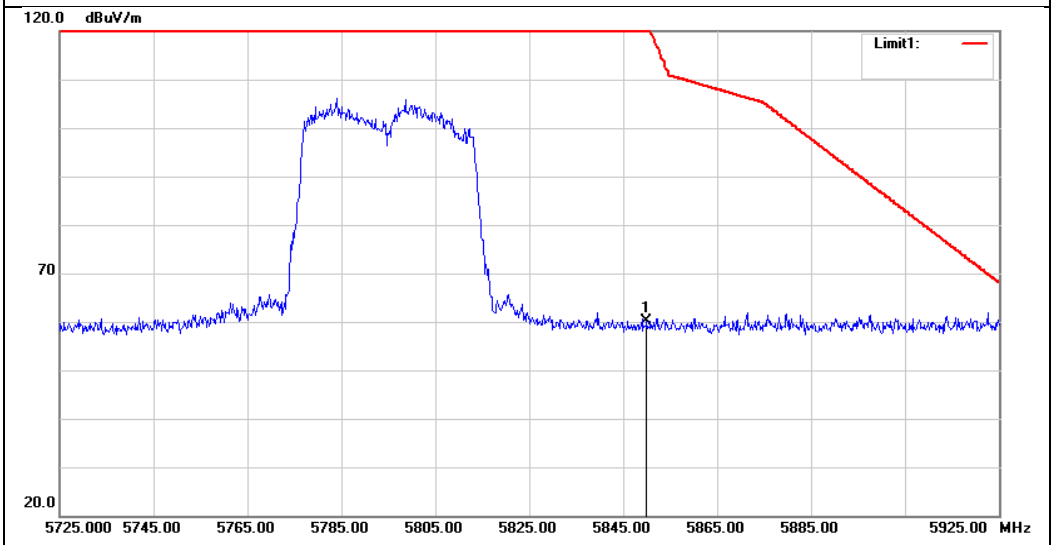
IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz

CH High

Detector mode: Peak **Polarity: Vertical**



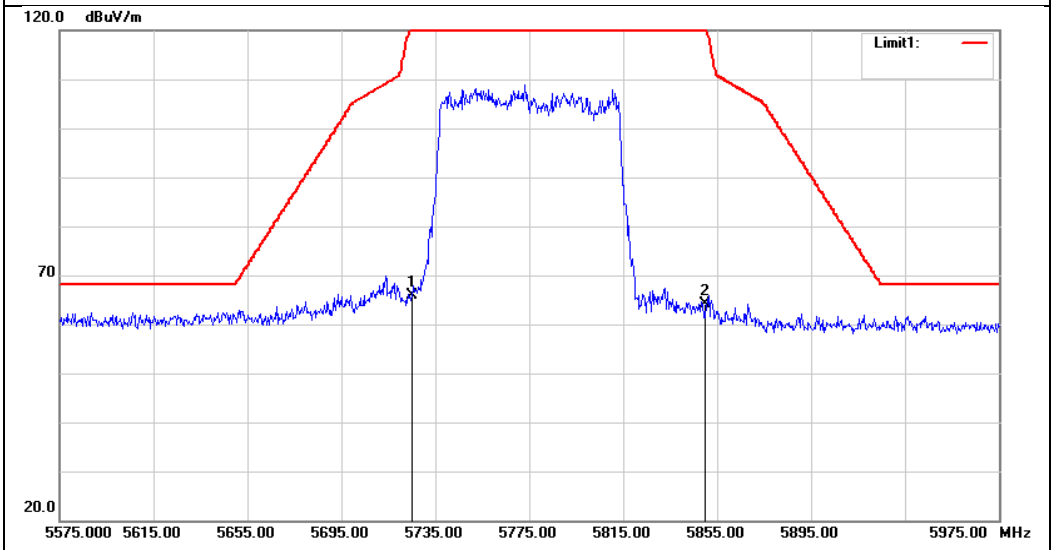
Detector mode: Peak **Polarity: Horizontal**



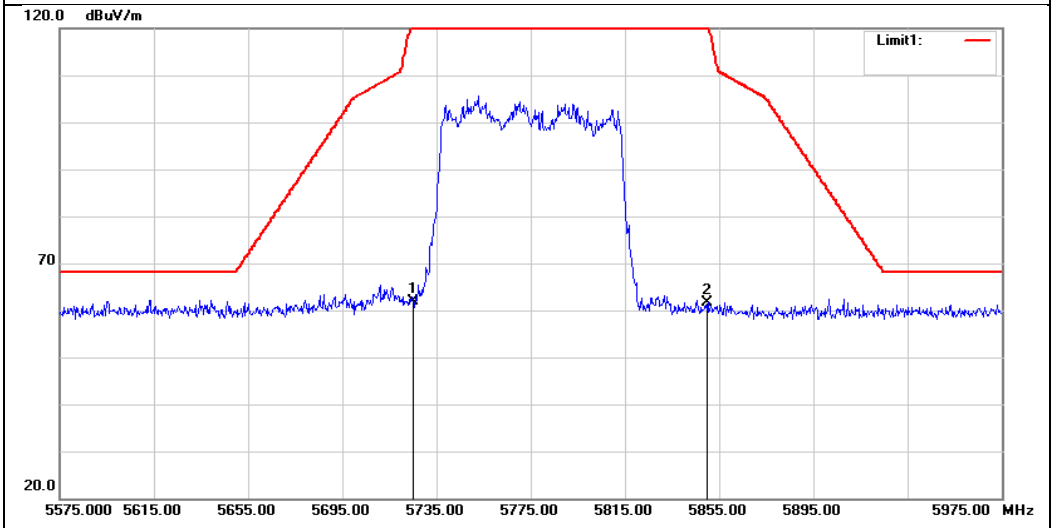
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5850.000	53.05	6.02	59.07	122.20	-63.13	Peak	Vertical
2	5850.000	54.21	6.02	60.23	122.20	-61.97	Peak	Horizontal

IEEE 802.11ac 80 mode / 5775MHz

Detector mode: Peak **Polarity: Vertical**



Detector mode: Peak **Polarity: Horizontal**



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Antenna Polar
1	5725.000	59.93	5.96	65.89	122.20	-56.31	Peak	Vertical
2	5850.000	58.11	6.02	64.13	122.20	-58.07	Peak	Vertical
1	5725.000	56.00	5.96	61.96	122.20	-60.24	Peak	Horizontal
2	5850.000	55.54	6.02	61.56	122.20	-60.64	Peak	Horizontal

6.9 POWERLINE CONDUCTED EMISSIONS

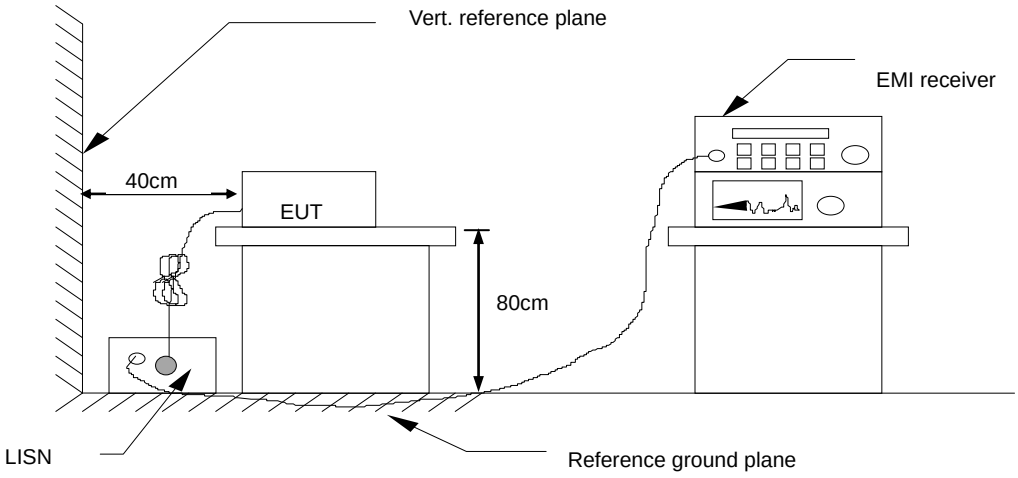
6.9.1 LIMIT

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

Frequency Range (MHz)	Limits (dBμV)	
	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 CONFIGURATION



6.9.3 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.

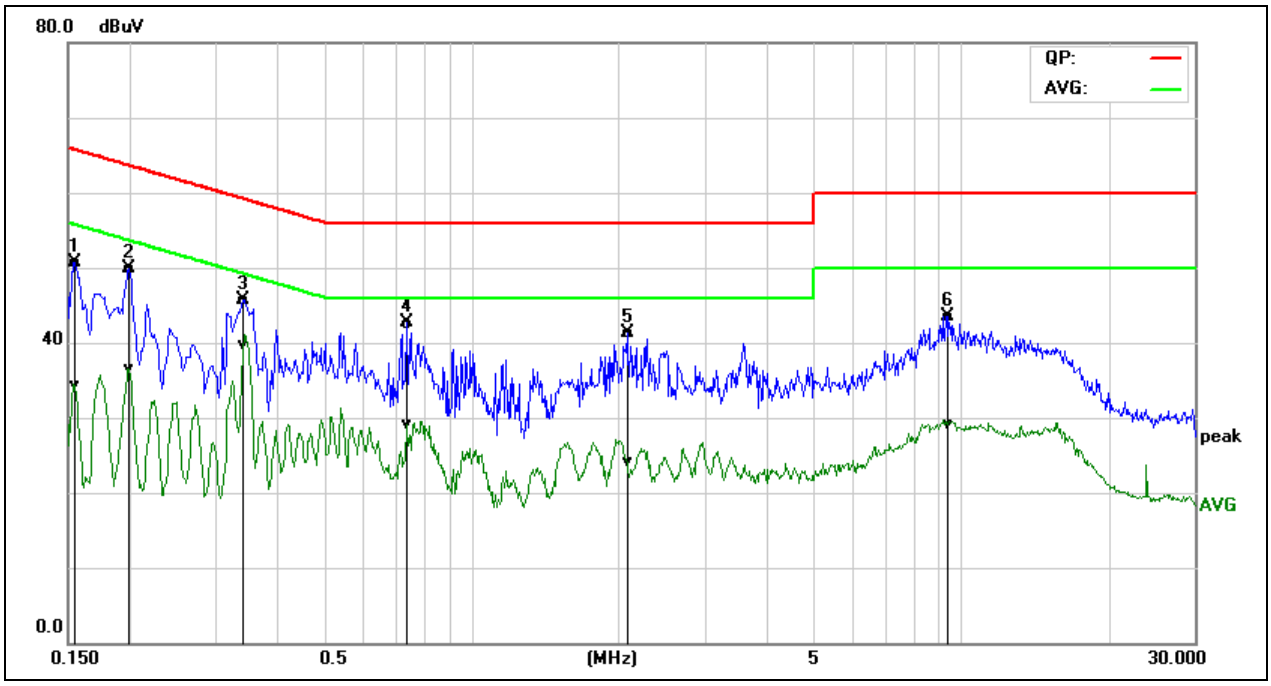
6.9.4 DATA SAMPLE

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

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

6.9.5 TEST RESULTS

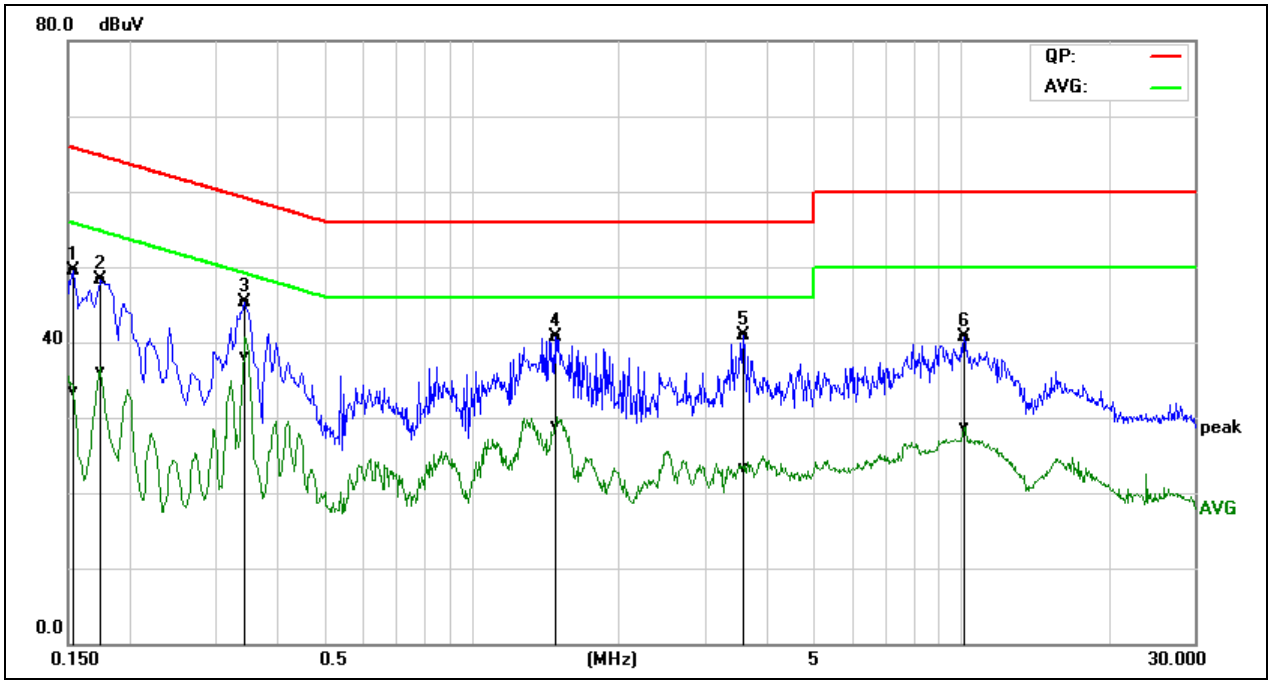
Model No.	QN-I-220	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 1
Tested by	Darry Wu	Line	L
Test Date	September 11, 2018	Test Voltage	AC 120V/60Hz



Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1547	31.13	14.66	19.62	50.75	34.28	65.74	55.74	-14.99	-21.46	Pass
0.1995	30.22	16.91	19.64	49.86	36.55	63.63	53.63	-13.77	-17.08	Pass
0.3420	26.13	20.16	19.58	45.71	39.74	59.15	49.15	-13.44	-9.41	Pass
0.7380	23.00	9.57	19.60	42.60	29.17	56.00	46.00	-13.40	-16.83	Pass
2.0780	21.55	4.39	19.72	41.27	24.11	56.00	46.00	-14.73	-21.89	Pass
9.3860	23.46	9.05	20.08	43.54	29.13	60.00	50.00	-16.46	-20.87	Pass

REMARKS: *L1 = Line One (Live Line)*

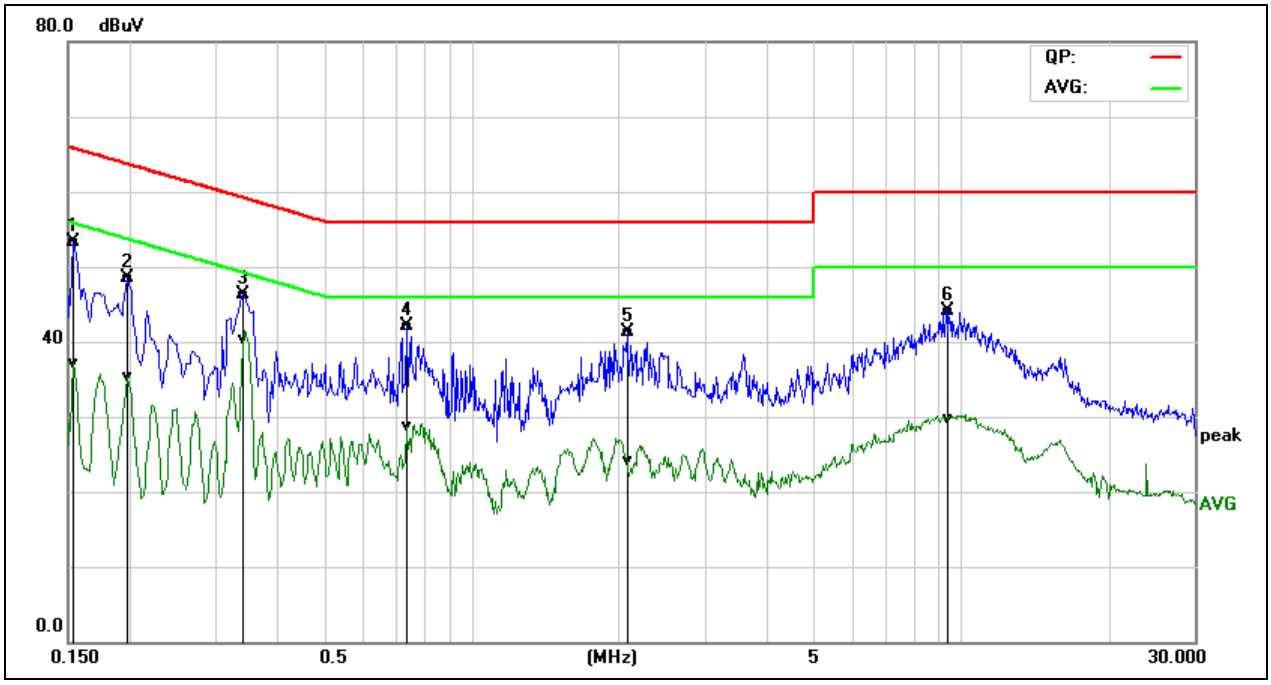
Model No.	QN-I-220	**RBW,VBW**	9 kHz
Environmental Conditions	22°C, 45% RH	**Test Mode**	Mode 1
Tested by	Darry Wu	**Line**	N
Test Date	September 11, 2018	**Test Voltage**	AC 120V/60Hz



Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1539	30.03	14.05	19.52	49.55	33.57	65.78	55.79	-16.23	-22.22	Pass
0.1748	28.70	16.53	19.53	48.23	36.06	64.72	54.73	-16.49	-18.67	Pass
0.3427	25.82	18.59	19.53	45.35	38.12	59.14	49.14	-13.79	-11.02	Pass
1.4860	21.10	9.34	19.63	40.73	28.97	56.00	46.00	-15.27	-17.03	Pass
3.5980	21.10	3.50	19.78	40.88	23.28	56.00	46.00	-15.12	-22.72	Pass
10.1660	20.54	8.59	20.14	40.68	28.73	60.00	50.00	-19.32	-21.27	Pass

REMARKS: *N = Line Two (Neutral Line)*

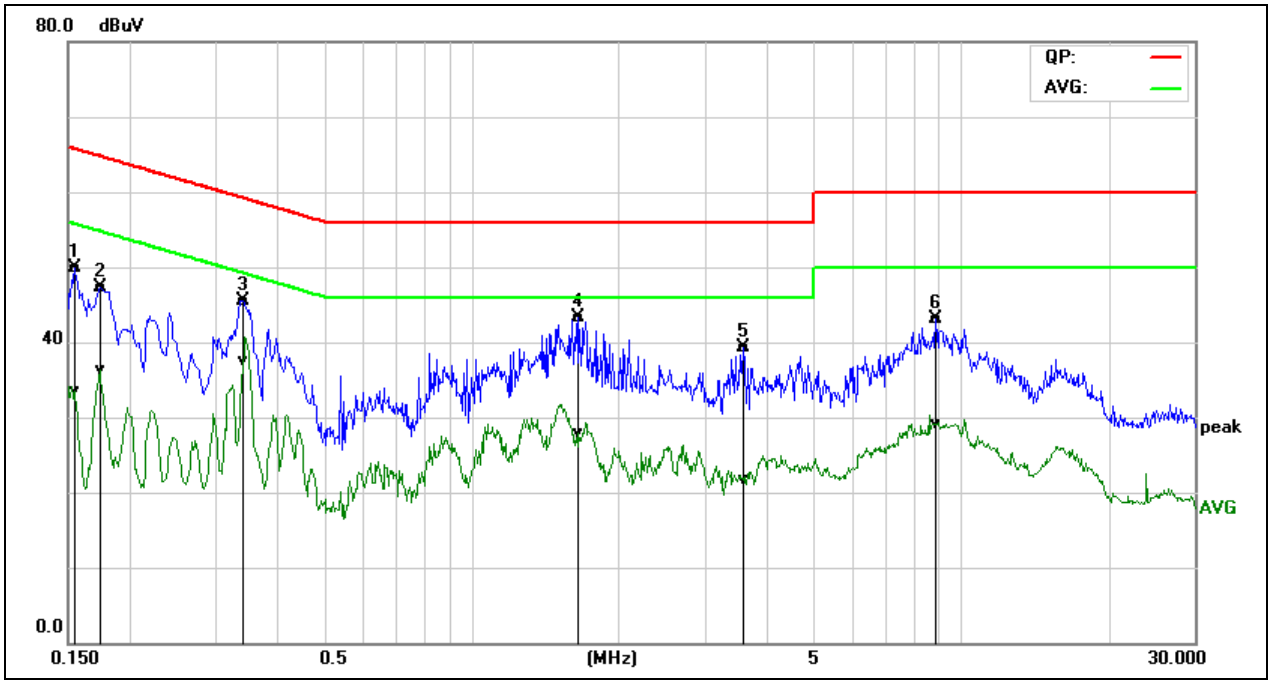
Model No.	QN-I-220	**RBW,VBW**	9 kHz
Environmental Conditions	22°C, 45% RH	**Test Mode**	Mode 2
Tested by	Darry Wu	**Line**	L
Test Date	September 11, 2018	**Test Voltage**	AC 240V/50Hz



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)	Average Margin (dB)	Remark (Pass/Fail)
0.1532	33.59	17.42	19.62	53.21	37.04	65.82	55.82	-12.61	-18.78	Pass
0.1980	28.77	15.72	19.64	48.41	35.36	63.69	53.69	-15.28	-18.33	Pass
0.3420	26.63	20.66	19.58	46.21	40.24	59.15	49.15	-12.94	-8.91	Pass
0.7380	22.50	9.07	19.60	42.10	28.67	56.00	46.00	-13.90	-17.33	Pass
2.0780	21.55	4.39	19.72	41.27	24.11	56.00	46.00	-14.73	-21.89	Pass
9.3860	23.96	9.55	20.08	44.04	29.63	60.00	50.00	-15.96	-20.37	Pass

REMARKS: *L = Line One (Live Line)*

Model No.	QN-I-220	**RBW,VBW**	9 kHz
Environmental Conditions	22°C, 45% RH	**Test Mode**	Mode 2
Tested by	Darry Wu	**Line**	N
Test Date	September 11, 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)	Average Margin (dB)	Remark (Pass/Fail)
0.1547	30.45	13.90	19.52	49.97	33.42	65.74	55.74	-15.77	-22.32	Pass
0.1740	27.86	16.75	19.53	47.39	36.28	64.76	54.77	-17.37	-18.49	Pass
0.3420	26.07	17.97	19.53	45.60	37.50	59.15	49.15	-13.55	-11.65	Pass
1.6620	23.71	8.32	19.67	43.38	27.99	56.00	46.00	-12.62	-18.01	Pass
3.5980	19.60	2.00	19.78	39.38	21.78	56.00	46.00	-16.62	-24.22	Pass
8.9100	23.01	9.09	20.03	43.04	29.12	60.00	50.00	-16.96	-20.88	Pass

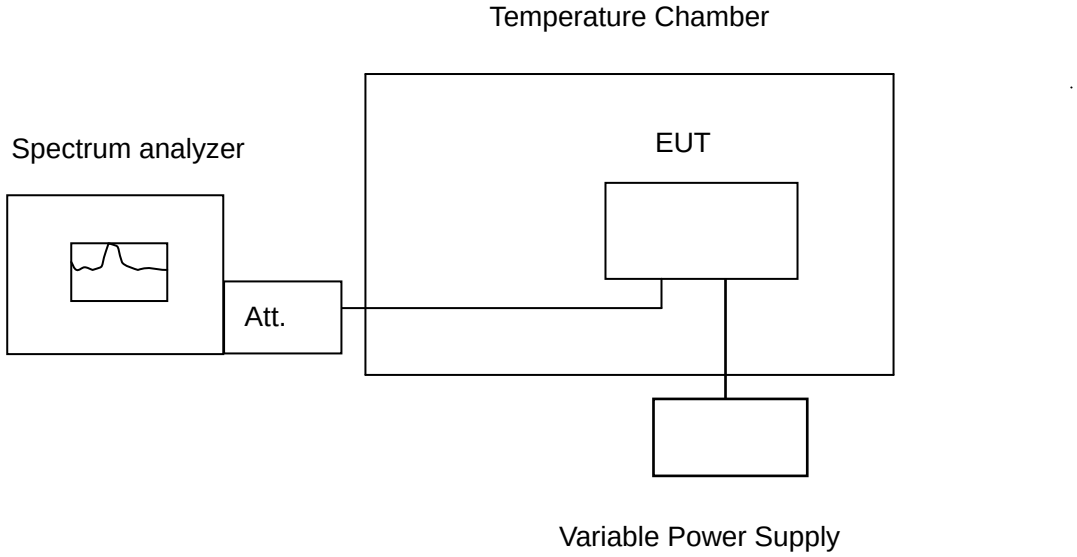
REMARKS: *N = Line Two (Neutral Line)*

6.10 FREQUENCY STABILITY

6.10.1 LIMIT

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

6.10.2 TEST CONFIGURATION



Remark: *Measurement setup for testing on Antenna connector*

6.10.3 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^{o}C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to –20^{o}C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10^{o}C increased per stage until the highest temperature of +50^{o}C reached.

6.10.4 TEST RESULTS

No non-compliance noted.

Test Data

Antenna_0

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5179.964882	5150-5250	PASS
40	120	5179.986392	5150-5250	PASS
30	120	5179.991981	5150-5250	PASS
20	120	5179.984600	5150-5250	PASS
10	120	5179.983919	5150-5250	PASS
0	120	5179.970177	5150-5250	PASS
-10	120	5179.953366	5150-5250	PASS
-20	120	5179.967703	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5179.959334	5150-5250	PASS
	120	5179.978200	5150-5250	PASS
	132	5179.971534	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5239.951061	5150-5250	PASS
40	120	5239.965387	5150-5250	PASS
30	120	5239.965817	5150-5250	PASS
20	120	5239.983400	5150-5250	PASS
10	120	5239.956376	5150-5250	PASS
0	120	5239.978511	5150-5250	PASS
-10	120	5239.990861	5150-5250	PASS
-20	120	5239.971274	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5239.981059	5150-5250	PASS
	120	5239.976500	5150-5250	PASS
	132	5239.996921	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.957947	5725-5850	PASS
40	120	5744.984427	5725-5850	PASS
30	120	5744.985912	5725-5850	PASS
20	120	5744.981800	5725-5850	PASS
10	120	5744.958763	5725-5850	PASS
0	120	5744.954127	5725-5850	PASS
-10	120	5744.999294	5725-5850	PASS
-20	120	5744.996319	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5744.984998	5725-5850	PASS
	120	5744.965900	5725-5850	PASS
	132	5744.969611	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	5824.949294	5725-5850	PASS
40	120	5824.970202	5725-5850	PASS
30	120	5824.993423	5725-5850	PASS
20	120	5824.981500	5725-5850	PASS
10	120	5824.983848	5725-5850	PASS
0	120	5824.998466	5725-5850	PASS
-10	120	5824.984375	5725-5850	PASS
-20	120	5824.983981	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5824.956579	5725-5850	PASS
	120	5824.968100	5725-5850	PASS
	132	5824.965792	5725-5850	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5179.980920	5150-5250	PASS
40	120	5179.974496	5150-5250	PASS
30	120	5179.985337	5150-5250	PASS
20	120	5179.982800	5150-5250	PASS
10	120	5179.979954	5150-5250	PASS
0	120	5179.951640	5150-5250	PASS
-10	120	5179.956999	5150-5250	PASS
-20	120	5179.957019	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5179.966262	5150-5250	PASS
	120	5179.973300	5150-5250	PASS
	132	5179.965567	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5239.999484	5150-5250	PASS
40	120	5239.963683	5150-5250	PASS
30	120	5239.956209	5150-5250	PASS
20	120	5239.982400	5150-5250	PASS
10	120	5239.958600	5150-5250	PASS
0	120	5239.950611	5150-5250	PASS
-10	120	5239.992213	5150-5250	PASS
-20	120	5239.989100	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5239.967822	5150-5250	PASS
	120	5239.965100	5150-5250	PASS
	132	5239.976100	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.978979	5725-5850	PASS
40	120	5744.979830	5725-5850	PASS
30	120	5744.969636	5725-5850	PASS
20	120	5744.980700	5725-5850	PASS
10	120	5744.960482	5725-5850	PASS
0	120	5744.951545	5725-5850	PASS
-10	120	5744.993349	5725-5850	PASS
-20	120	5744.968665	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5744.964867	5725-5850	PASS
	120	5744.961800	5725-5850	PASS
	132	5744.985301	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	5824.950428	5725-5850	PASS
40	120	5824.967661	5725-5850	PASS
30	120	5824.954911	5725-5850	PASS
20	120	5824.979700	5725-5850	PASS
10	120	5824.998383	5725-5850	PASS
0	120	5824.994701	5725-5850	PASS
-10	120	5824.974892	5725-5850	PASS
-20	120	5824.958208	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5824.970146	5725-5850	PASS
	120	5824.963200	5725-5850	PASS
	132	5824.978234	5725-5850	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5179.967670	5150-5250	PASS
40	120	5179.985420	5150-5250	PASS
30	120	5179.962523	5150-5250	PASS
20	120	5179.980300	5150-5250	PASS
10	120	5179.998134	5150-5250	PASS
0	120	5179.952291	5150-5250	PASS
-10	120	5179.972166	5150-5250	PASS
-20	120	5179.999069	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5179.993829	5150-5250	PASS
	120	5179.976200	5150-5250	PASS
	132	5179.999712	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	5239.969954	5150-5250	PASS
40	120	5239.973215	5150-5250	PASS
30	120	5239.988119	5150-5250	PASS
20	120	5239.980800	5150-5250	PASS
10	120	5239.994014	5150-5250	PASS
0	120	5239.952630	5150-5250	PASS
-10	120	5239.972185	5150-5250	PASS
-20	120	5239.964303	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5239.973374	5150-5250	PASS
	120	5239.972500	5150-5250	PASS
	132	5239.973109	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.966117	5725-5850	PASS
40	120	5744.989160	5725-5850	PASS
30	120	5744.955630	5725-5850	PASS
20	120	5744.977900	5725-5850	PASS
10	120	5744.952017	5725-5850	PASS
0	120	5744.988001	5725-5850	PASS
-10	120	5744.978806	5725-5850	PASS
-20	120	5744.964768	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5744.997113	5725-5850	PASS
	120	5744.975300	5725-5850	PASS
	132	5744.960525	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	5824.961168	5725-5850	PASS
40	120	5824.988967	5725-5850	PASS
30	120	5824.951102	5725-5850	PASS
20	120	5824.976500	5725-5850	PASS
10	120	5824.975262	5725-5850	PASS
0	120	5824.986180	5725-5850	PASS
-10	120	5824.975531	5725-5850	PASS
-20	120	5824.984371	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5824.993495	5725-5850	PASS
	120	5824.968300	5725-5850	PASS
	132	5824.982829	5725-5850	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5179.989603	5150-5250	PASS
40	120	5179.962816	5150-5250	PASS
30	120	5179.949885	5150-5250	PASS
20	120	5179.982800	5150-5250	PASS
10	120	5179.967661	5150-5250	PASS
0	120	5179.995252	5150-5250	PASS
-10	120	5179.997191	5150-5250	PASS
-20	120	5179.999084	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5179.981716	5150-5250	PASS
	120	5179.983100	5150-5250	PASS
	132	5179.977927	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	5239.955997	5150-5250	PASS
40	120	5239.951131	5150-5250	PASS
30	120	5239.956885	5150-5250	PASS
20	120	5239.982800	5150-5250	PASS
10	120	5239.964767	5150-5250	PASS
0	120	5239.960205	5150-5250	PASS
-10	120	5239.975860	5150-5250	PASS
-20	120	5239.959161	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5239.978383	5150-5250	PASS
	120	5239.976200	5150-5250	PASS
	132	5239.972127	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5744.984312	5725-5850	PASS
40	120	5744.955900	5725-5850	PASS
30	120	5744.971044	5725-5850	PASS
20	120	5744.977200	5725-5850	PASS
10	120	5744.958622	5725-5850	PASS
0	120	5744.983060	5725-5850	PASS
-10	120	5744.971827	5725-5850	PASS
-20	120	5744.951853	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5744.959104	5725-5850	PASS
	120	5744.975300	5725-5850	PASS
	132	5744.988126	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	5824.971301	5725-5850	PASS
40	120	5824.976458	5725-5850	PASS
30	120	5824.963506	5725-5850	PASS
20	120	5824.976900	5725-5850	PASS
10	120	5824.984613	5725-5850	PASS
0	120	5824.950237	5725-5850	PASS
-10	120	5824.955290	5725-5850	PASS
-20	120	5824.955631	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5824.974942	5725-5850	PASS
	120	5824.971400	5725-5850	PASS
	132	5824.960380	5725-5850	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5189.955059	5150-5250	PASS
40	120	5189.971810	5150-5250	PASS
30	120	5189.989671	5150-5250	PASS
20	120	5189.979500	5150-5250	PASS
10	120	5189.976894	5150-5250	PASS
0	120	5189.980391	5150-5250	PASS
-10	120	5189.993410	5150-5250	PASS
-20	120	5189.963534	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5189.964309	5150-5250	PASS
	120	5189.972900	5150-5250	PASS
	132	5189.991803	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5229.986529	5150-5250	PASS
40	120	5229.954581	5150-5250	PASS
30	120	5229.964518	5150-5250	PASS
20	120	5229.979100	5150-5250	PASS
10	120	5229.996913	5150-5250	PASS
0	120	5229.977573	5150-5250	PASS
-10	120	5229.992395	5150-5250	PASS
-20	120	5229.972750	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5229.951804	5150-5250	PASS
	120	5229.971800	5150-5250	PASS
	132	5229.952733	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5754.961326	5725-5850	PASS
40	120	5754.962336	5725-5850	PASS
30	120	5754.982445	5725-5850	PASS
20	120	5754.977000	5725-5850	PASS
10	120	5754.950705	5725-5850	PASS
0	120	5754.993887	5725-5850	PASS
-10	120	5754.969066	5725-5850	PASS
-20	120	5754.959342	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5754.974190	5725-5850	PASS
	120	5754.976100	5725-5850	PASS
	132	5754.983087	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	5794.993226	5725-5850	PASS
40	120	5794.967053	5725-5850	PASS
30	120	5794.957814	5725-5850	PASS
20	120	5794.976400	5725-5850	PASS
10	120	5794.997898	5725-5850	PASS
0	120	5794.961801	5725-5850	PASS
-10	120	5794.979316	5725-5850	PASS
-20	120	5794.984629	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5794.949600	5725-5850	PASS
	120	5794.962900	5725-5850	PASS
	132	5794.984409	5725-5850	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5189.987864	5150-5250	PASS
40	120	5189.999219	5150-5250	PASS
30	120	5189.950947	5150-5250	PASS
20	120	5189.979100	5150-5250	PASS
10	120	5189.990760	5150-5250	PASS
0	120	5189.949069	5150-5250	PASS
-10	120	5189.996672	5150-5250	PASS
-20	120	5189.975521	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5189.988534	5150-5250	PASS
	120	5189.982800	5150-5250	PASS
	132	5189.983256	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5229.994092	5150-5250	PASS
40	120	5229.985019	5150-5250	PASS
30	120	5229.971401	5150-5250	PASS
20	120	5229.978700	5150-5250	PASS
10	120	5229.994073	5150-5250	PASS
0	120	5229.979134	5150-5250	PASS
-10	120	5229.997136	5150-5250	PASS
-20	120	5229.952325	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5229.953273	5150-5250	PASS
	120	5229.962500	5150-5250	PASS
	132	5229.983916	5150-5250	PASS

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

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5754.995777	5725-5850	PASS
40	120	5754.976259	5725-5850	PASS
30	120	5754.962157	5725-5850	PASS
20	120	5754.976700	5725-5850	PASS
10	120	5754.966774	5725-5850	PASS
0	120	5754.973451	5725-5850	PASS
-10	120	5754.995441	5725-5850	PASS
-20	120	5754.965654	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5754.978870	5725-5850	PASS
	120	5754.962800	5725-5850	PASS
	132	5754.975540	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	5794.949243	5725-5850	PASS
40	120	5794.988512	5725-5850	PASS
30	120	5794.972144	5725-5850	PASS
20	120	5794.976600	5725-5850	PASS
10	120	5794.978709	5725-5850	PASS
0	120	5794.982628	5725-5850	PASS
-10	120	5794.957673	5725-5850	PASS
-20	120	5794.965724	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5794.994346	5725-5850	PASS
	120	5794.974300	5725-5850	PASS
	132	5794.950324	5725-5850	PASS

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IEEE 802.11ac 80 mode / 5210MHz

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5209.963751	5150-5250	PASS
40	120	5209.964441	5150-5250	PASS
30	120	5209.969045	5150-5250	PASS
20	120	5209.978600	5150-5250	PASS
10	120	5209.960179	5150-5250	PASS
0	120	5209.995018	5150-5250	PASS
-10	120	5209.973973	5150-5250	PASS
-20	120	5209.955965	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5209.994187	5150-5250	PASS
	120	5209.963800	5150-5250	PASS
	132	5209.964817	5150-5250	PASS

IEEE 802.11ac 80 mode / 5775MHz

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5774.982961	5725-5850	PASS
40	120	5774.999844	5725-5850	PASS
30	120	5774.988877	5725-5850	PASS
20	120	5774.976800	5725-5850	PASS
10	120	5774.983696	5725-5850	PASS
0	120	5774.980543	5725-5850	PASS
-10	120	5774.989283	5725-5850	PASS
-20	120	5774.993399	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5774.975105	5725-5850	PASS
	120	5774.973900	5725-5850	PASS
	132	5774.969789	5725-5850	PASS

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IEEE 802.11ac 80 mode / 5210MHz

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5209.993706	5150-5250	PASS
40	120	5209.950600	5150-5250	PASS
30	120	5209.997286	5150-5250	PASS
20	120	5209.979200	5150-5250	PASS
10	120	5209.979740	5150-5250	PASS
0	120	5209.996107	5150-5250	PASS
-10	120	5209.971120	5150-5250	PASS
-20	120	5209.991051	5150-5250	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5209.950320	5150-5250	PASS
	120	5209.982100	5150-5250	PASS
	132	5209.953099	5150-5250	PASS

IEEE 802.11ac 80 mode / 5775MHz

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
50	120	5774.951729	5725-5850	PASS
40	120	5774.973325	5725-5850	PASS
30	120	5774.996439	5725-5850	PASS
20	120	5774.976200	5725-5850	PASS
10	120	5774.976411	5725-5850	PASS
0	120	5774.959693	5725-5850	PASS
-10	120	5774.949330	5725-5850	PASS
-20	120	5774.980001	5725-5850	PASS

Environment Temperature (°C)	Volage (V)	Measured Frequency (MHz)	limit Range	Test Result
20	108	5774.973970	5725-5850	PASS
	120	5774.967300	5725-5850	PASS
	132	5774.968985	5725-5850	PASS