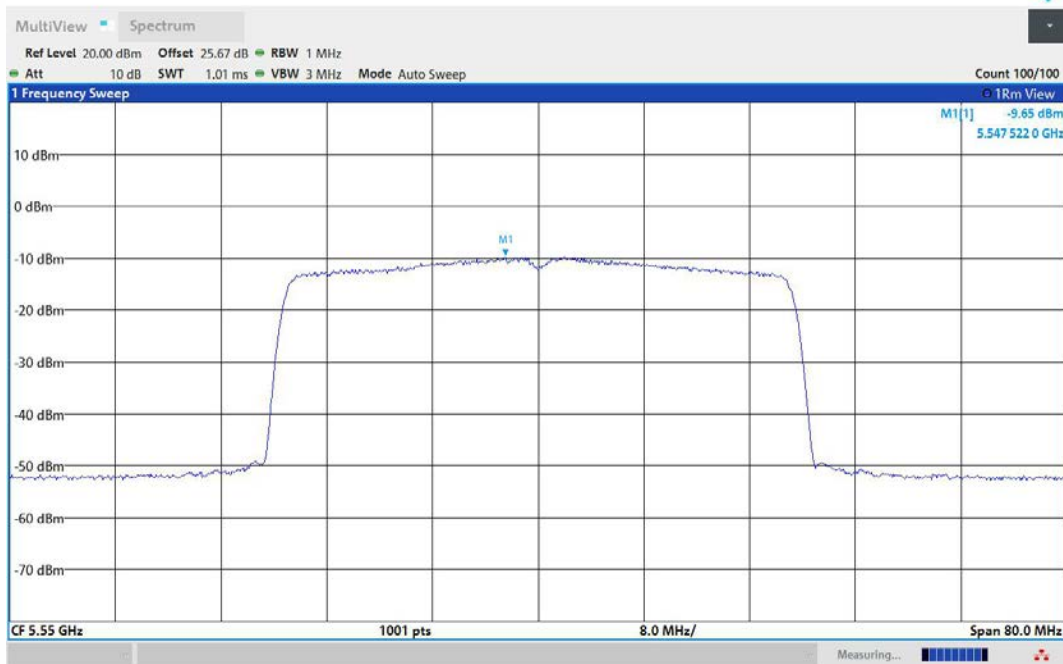
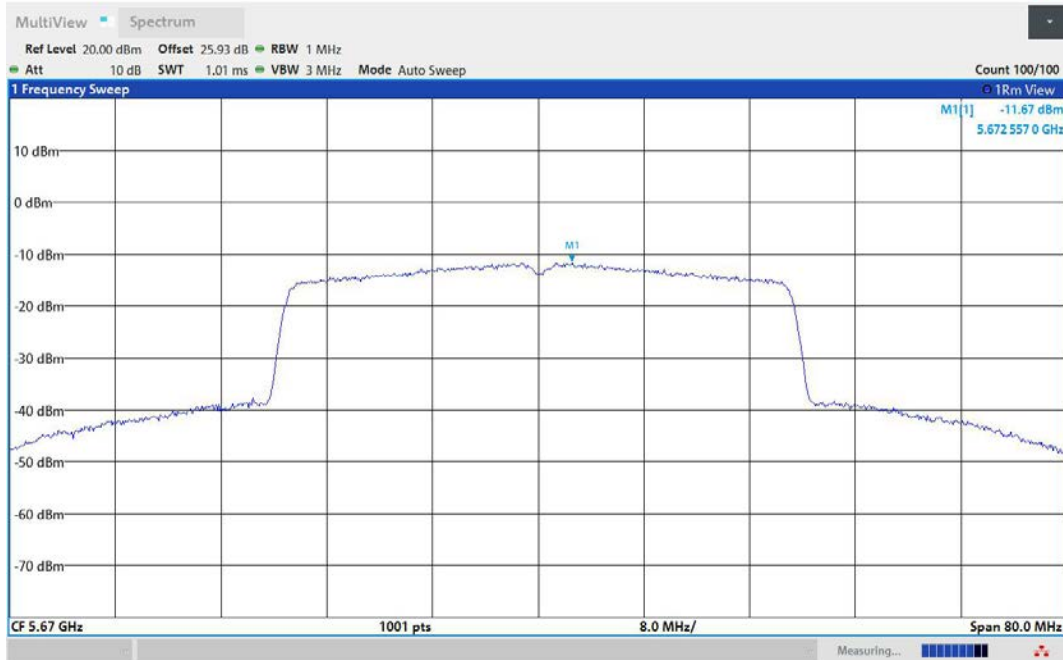
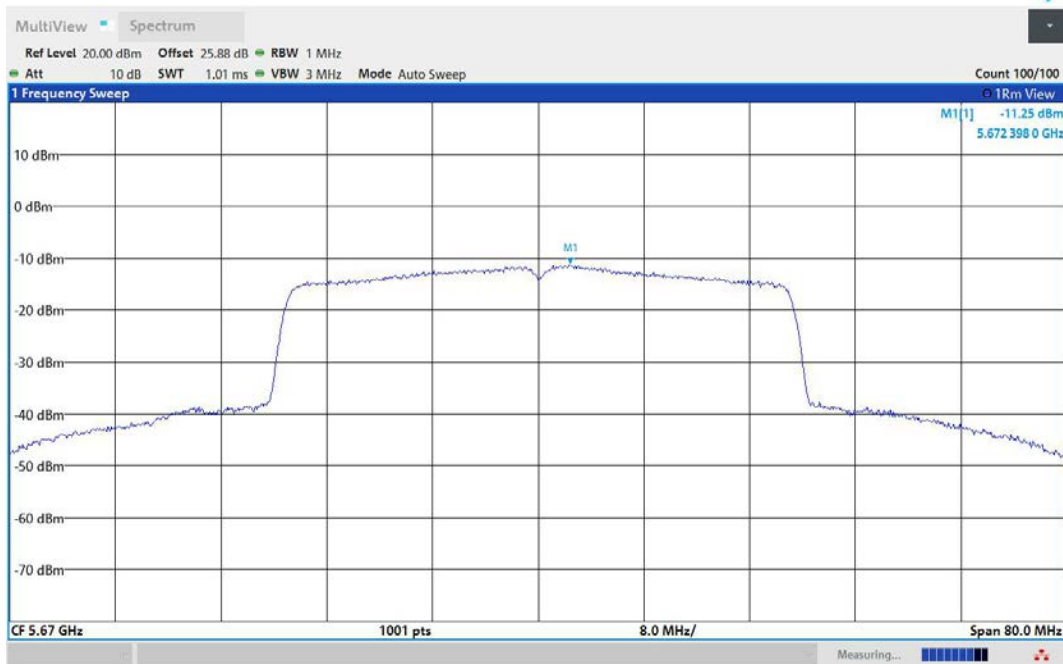




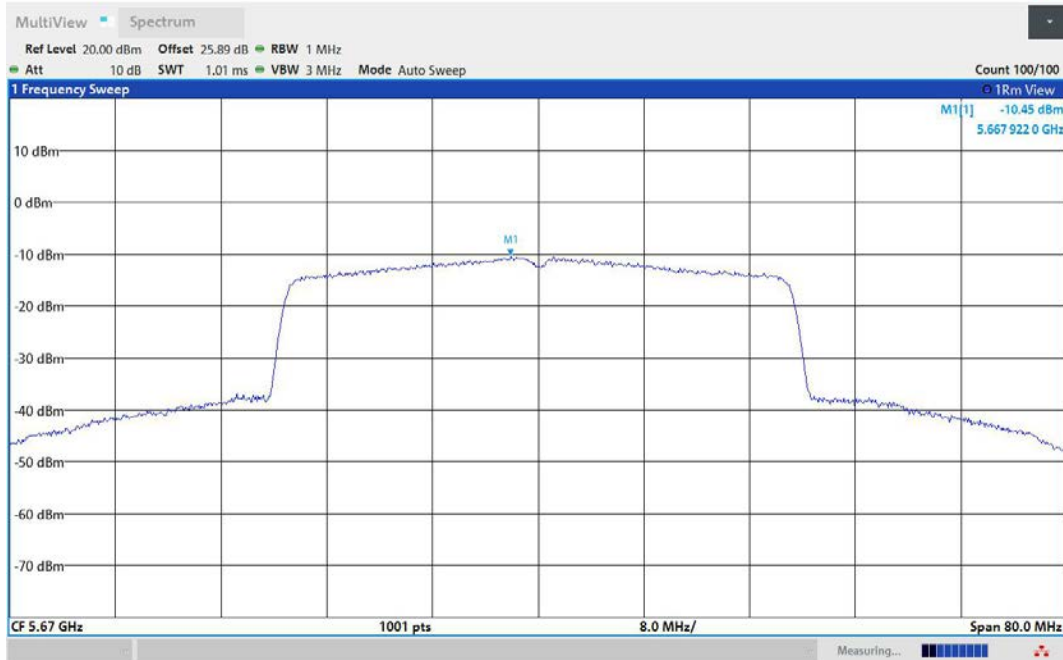
11AX40MIMO-Ant3-5550-PASS



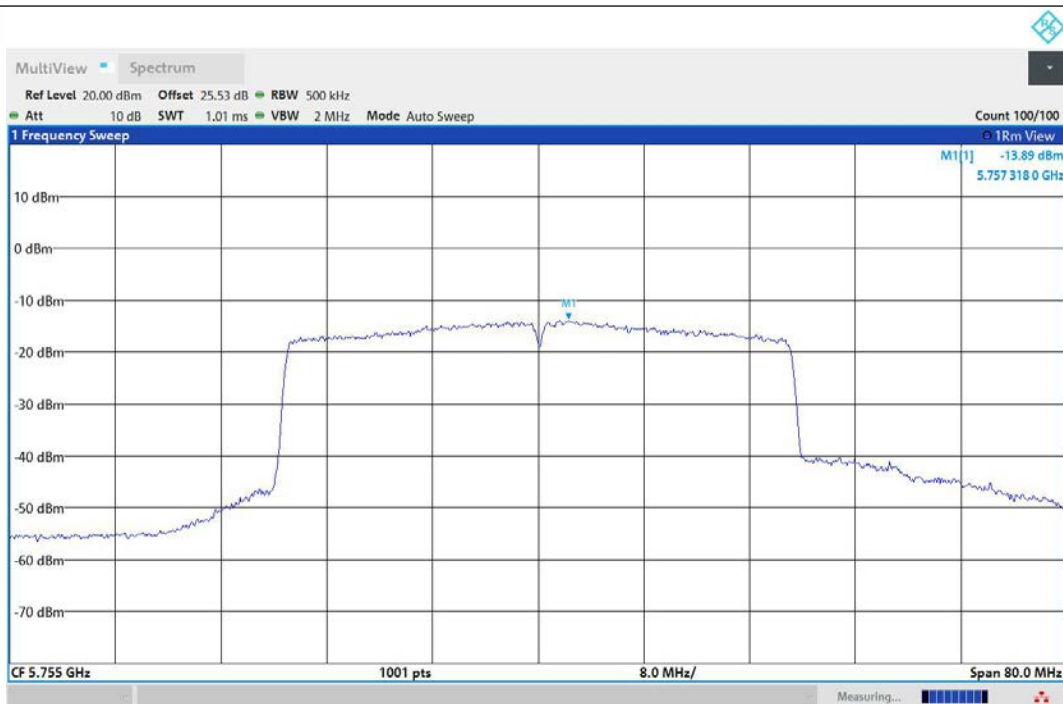
11AX40MIMO-Ant1-5670-PASS



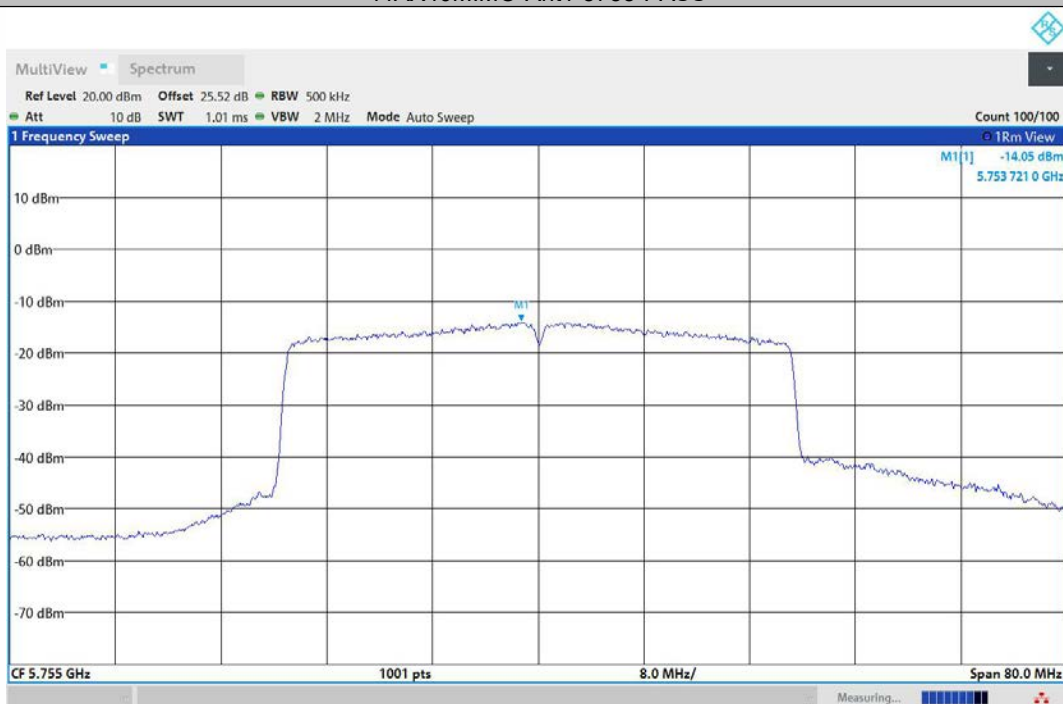
11AX40MIMO-Ant2-5670-PASS



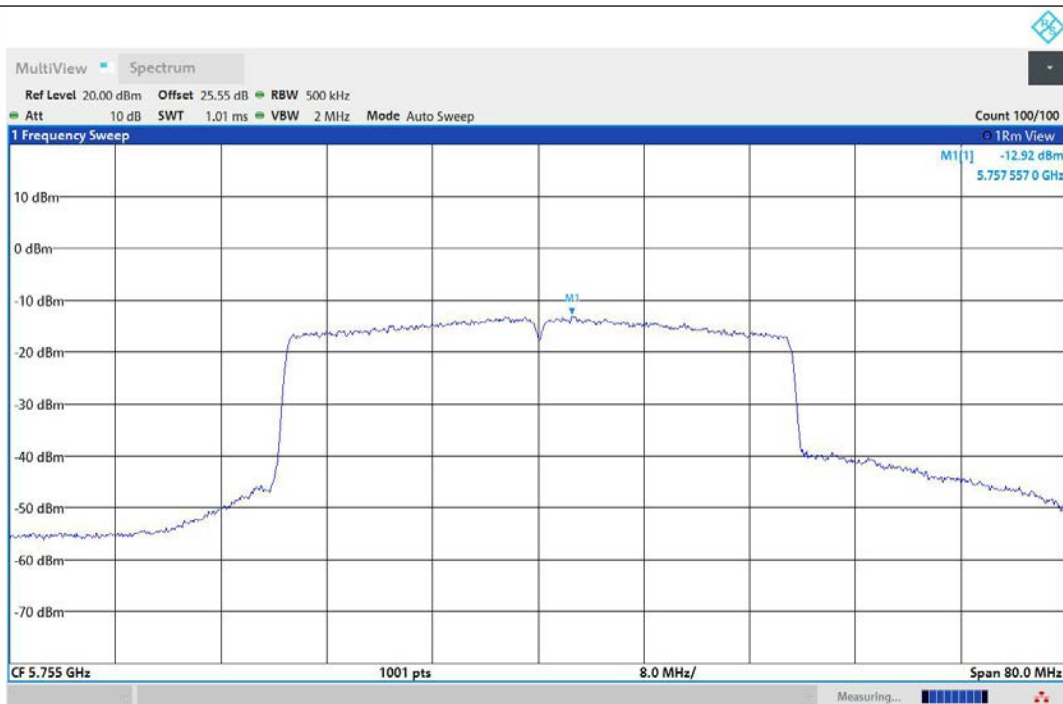
11AX40MIMO-Ant3-5670-PASS



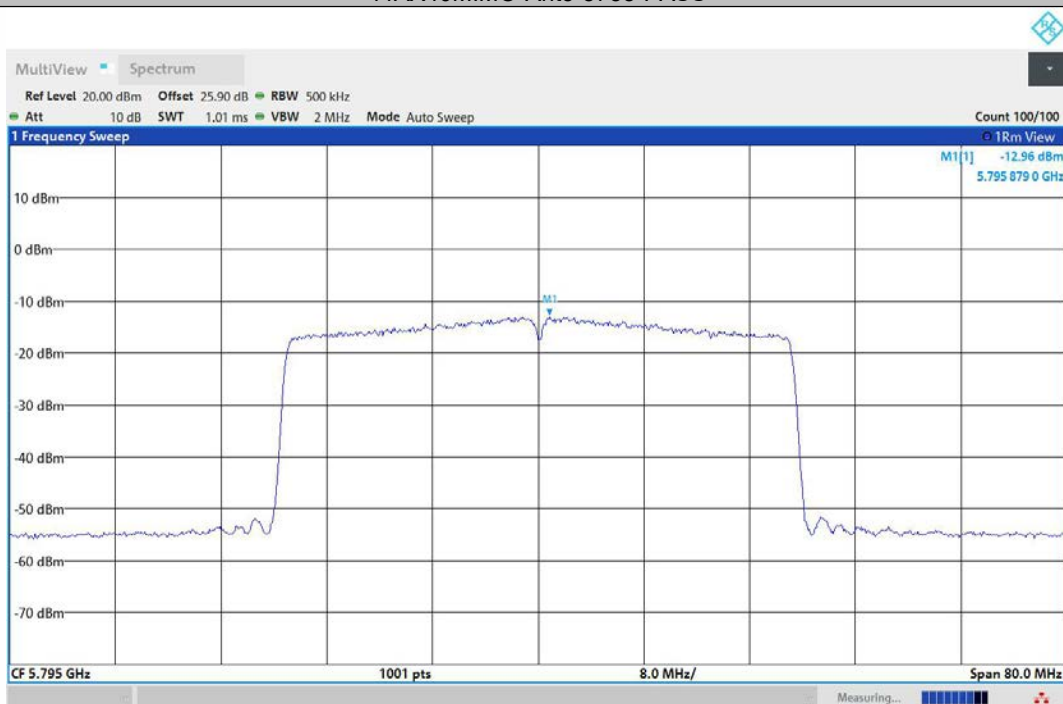
11AX40MIMO-Ant1-5755-PASS



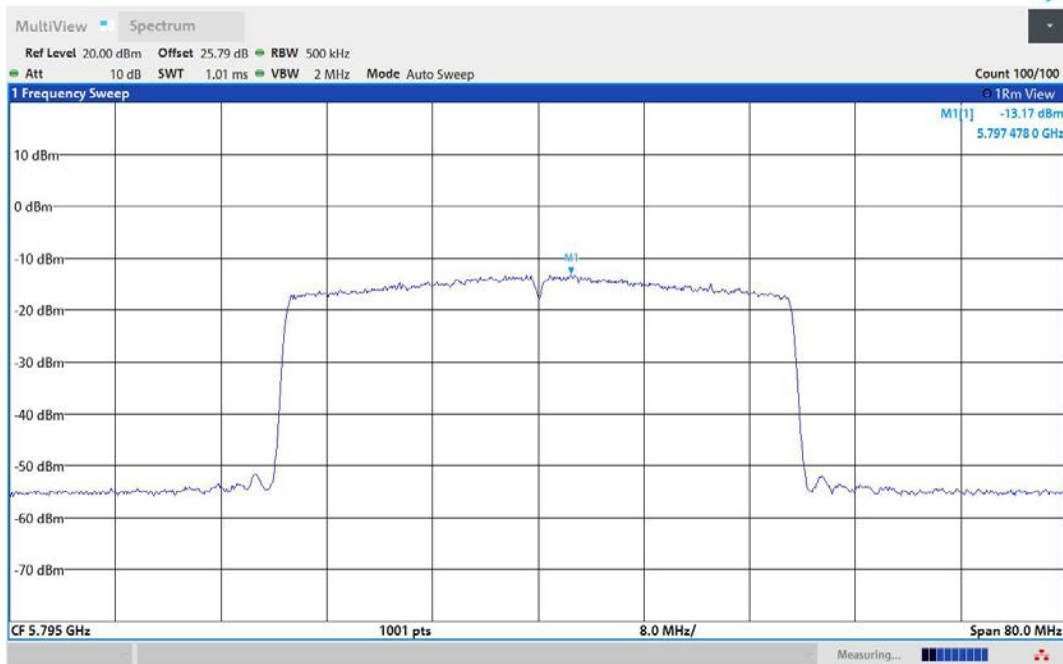
11AX40MIMO-Ant2-5755-PASS



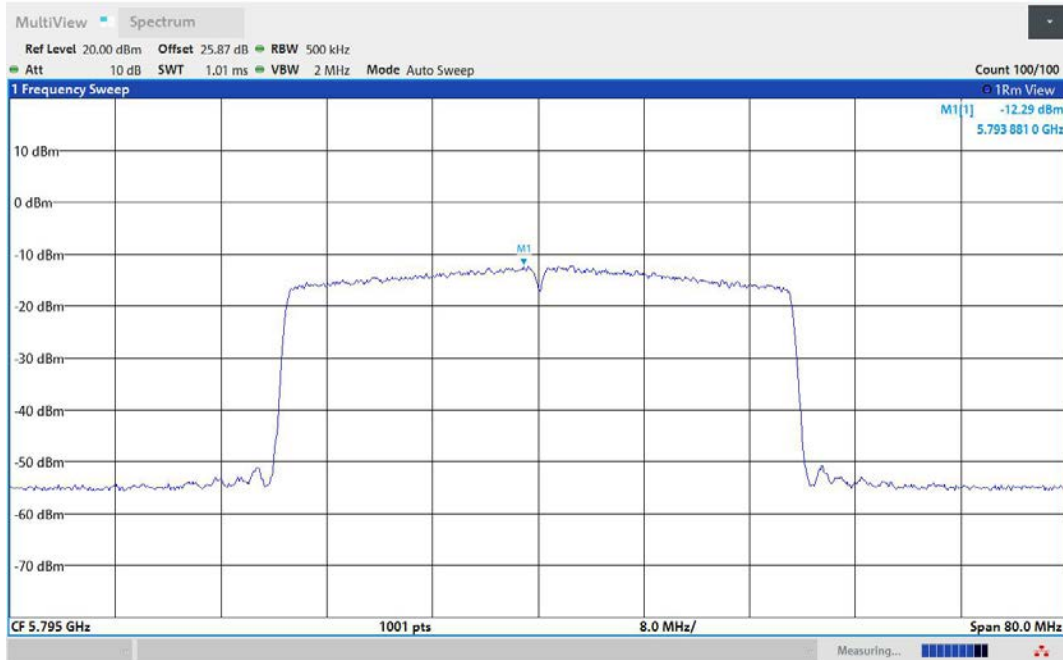
11AX40MIMO-Ant3-5755-PASS



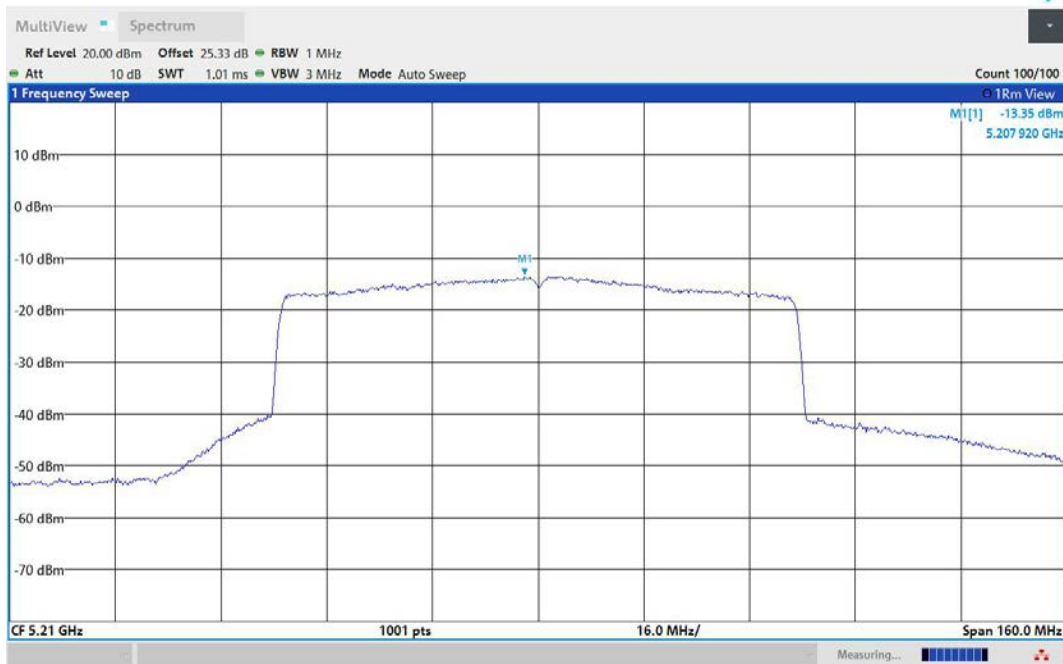
11AX40MIMO-Ant1-5795-PASS



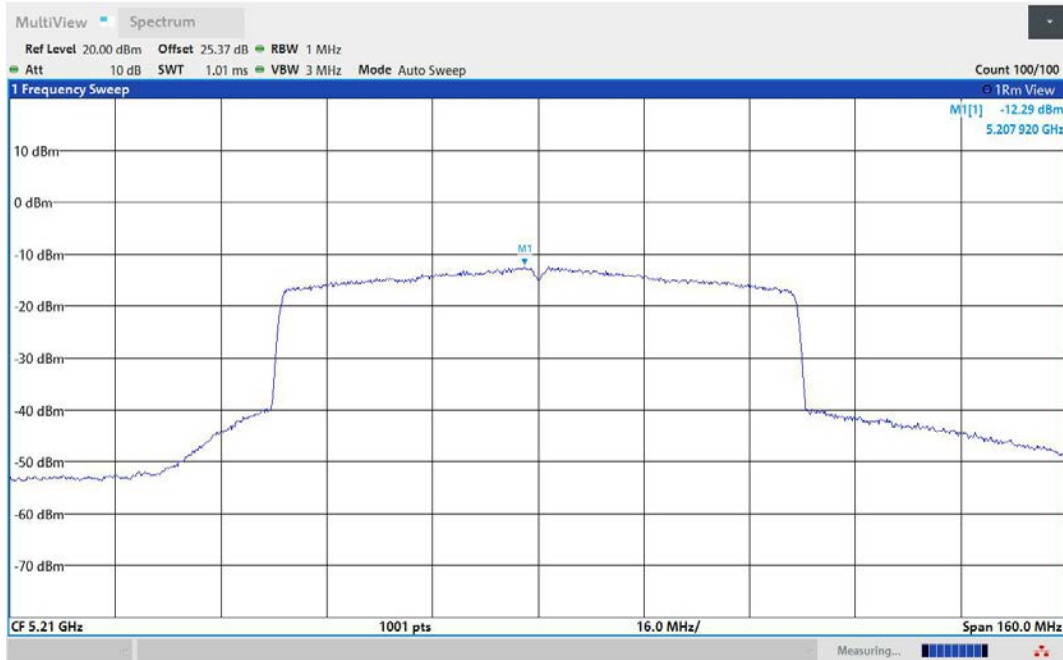
11AX40MIMO-Ant2-5795-PASS



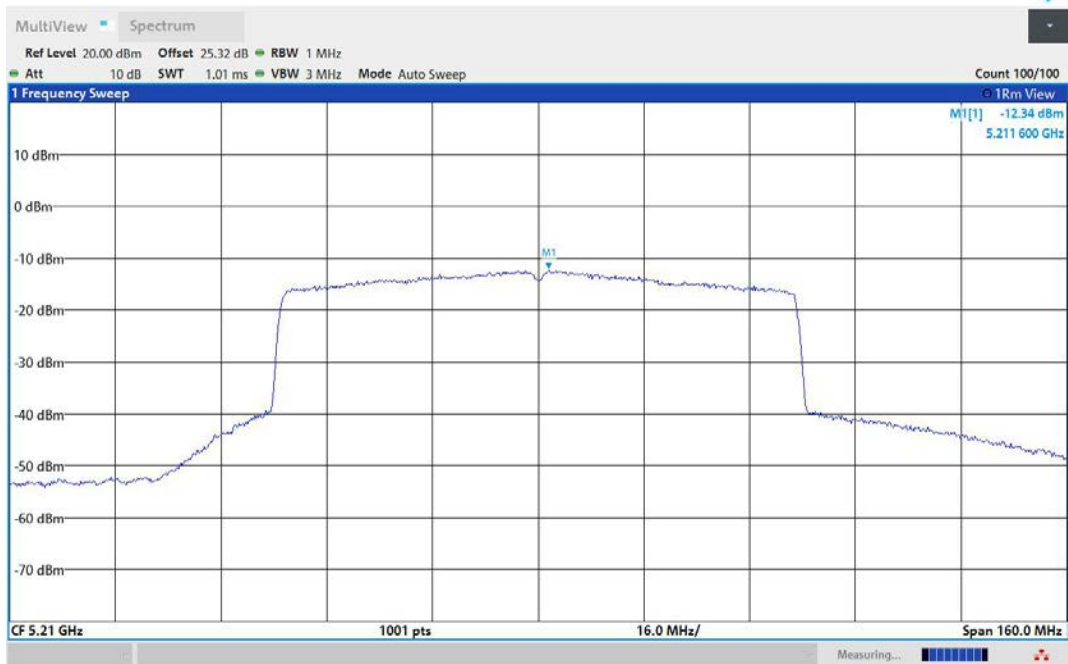
11AX40MIMO-Ant3-5795-PASS



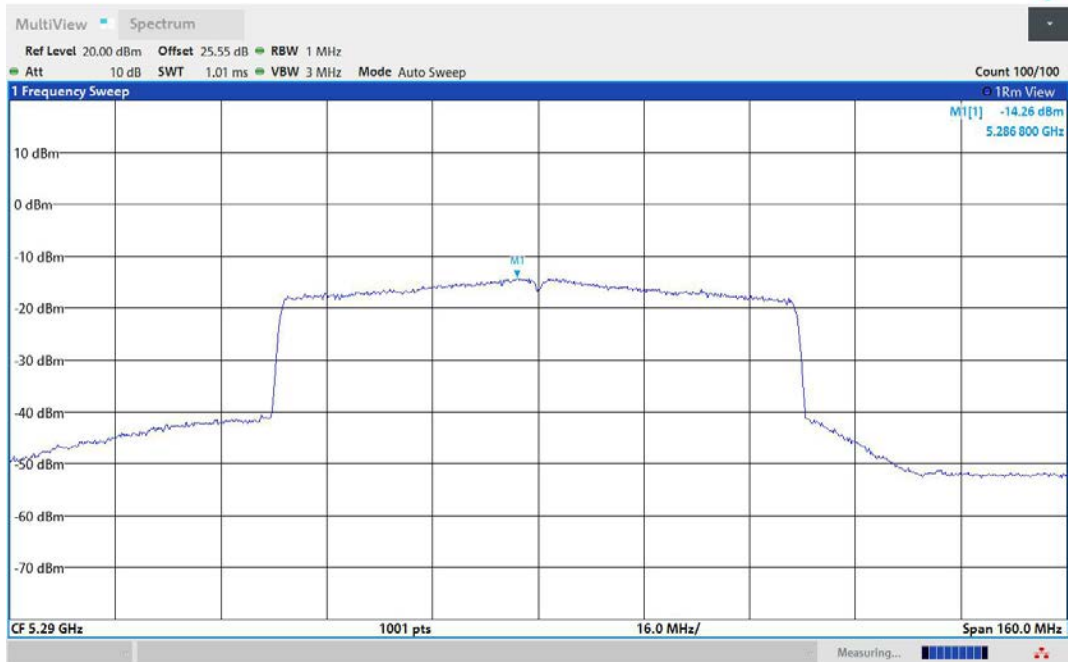
11AX80MIMO-Ant1-5210-PASS



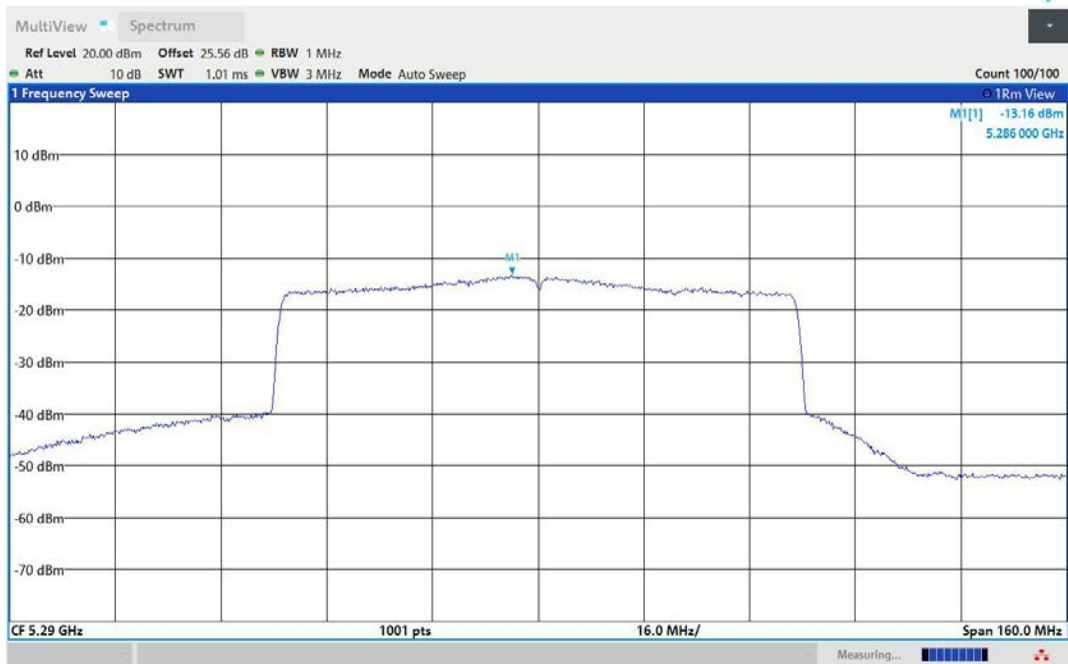
11AX80MIMO-Ant2-5210-PASS



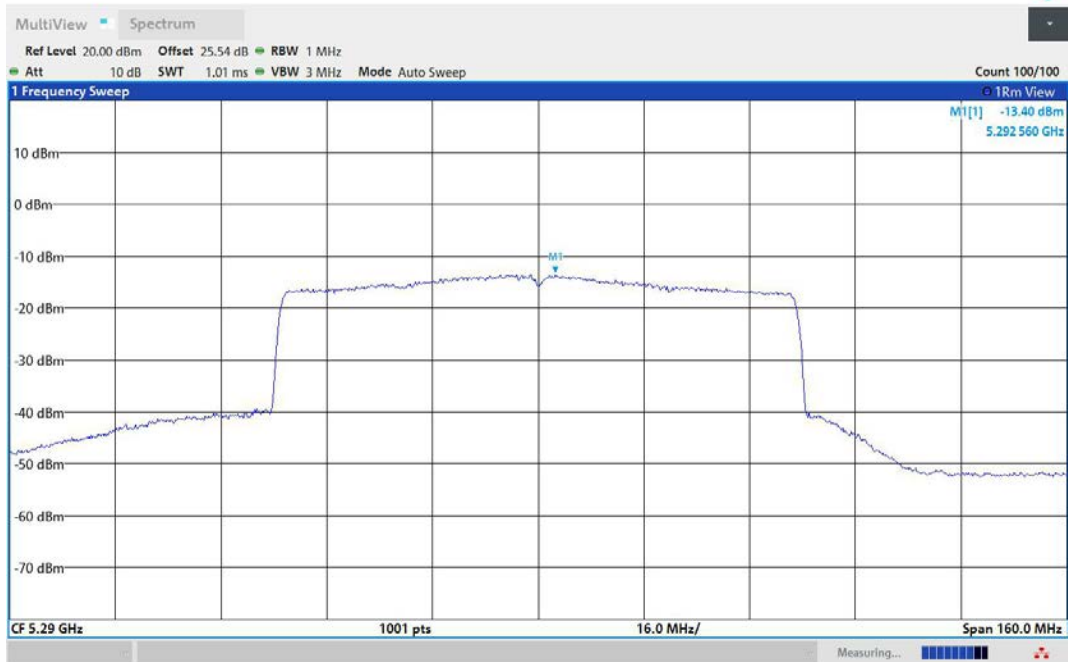
11AX80MIMO-Ant3-5210-PASS



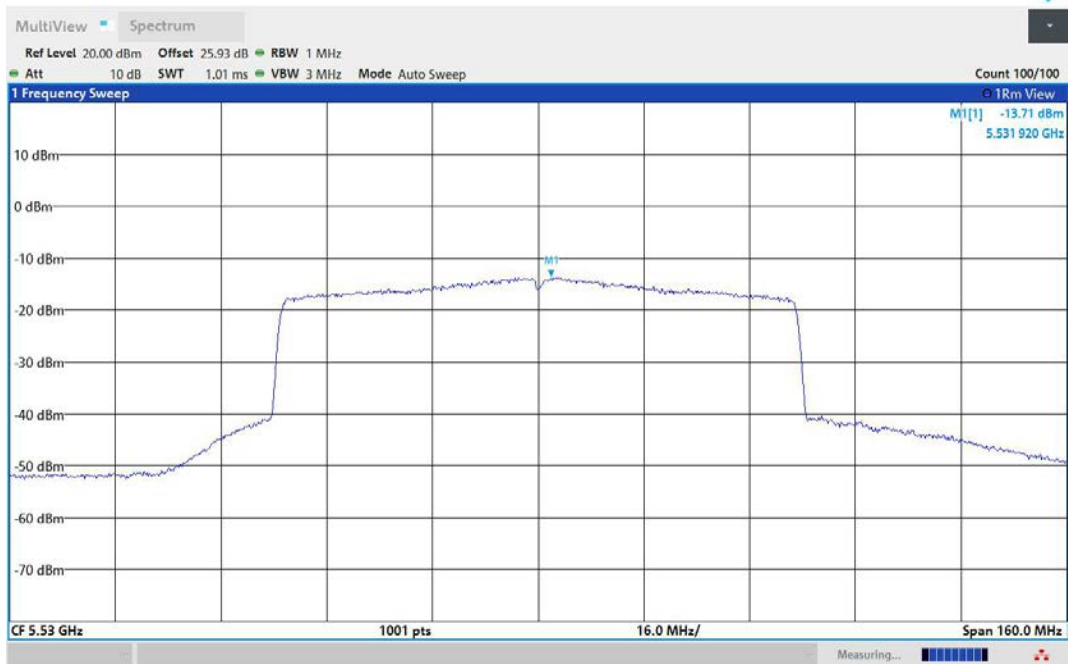
11AX80MIMO-Ant1-5290-PASS



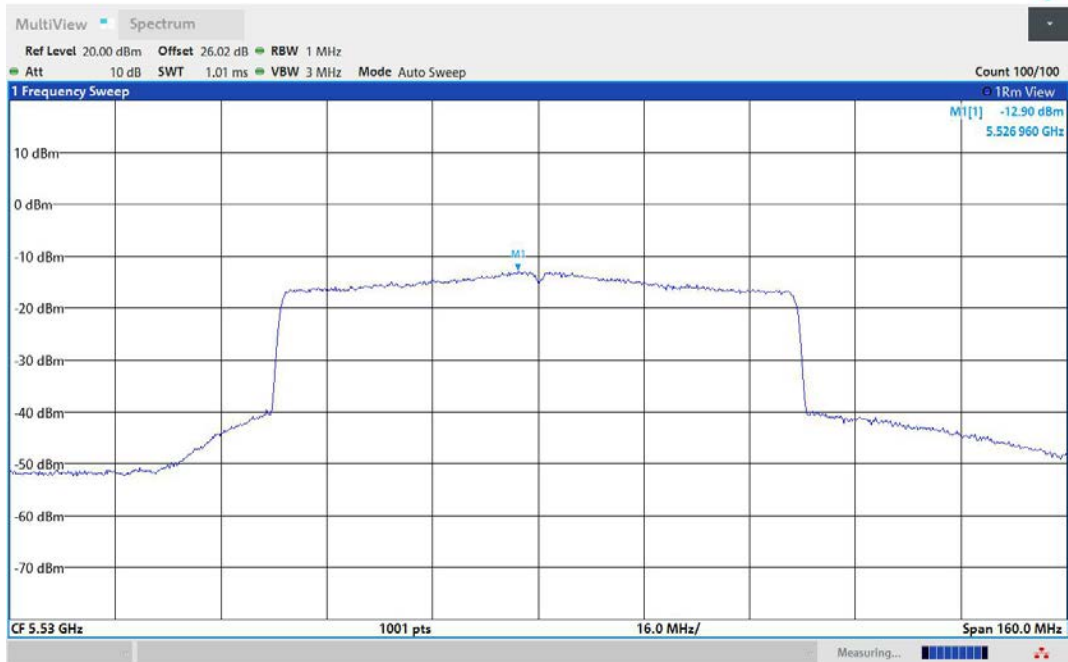
11AX80MIMO-Ant2-5290-PASS



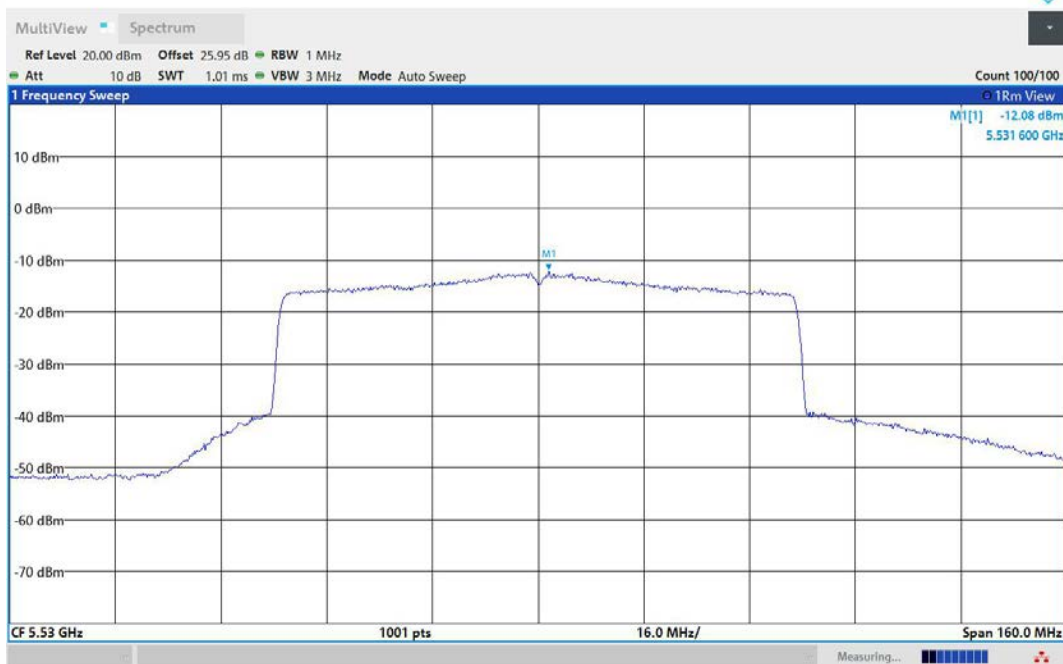
11AX80MIMO-Ant3-5290-PASS



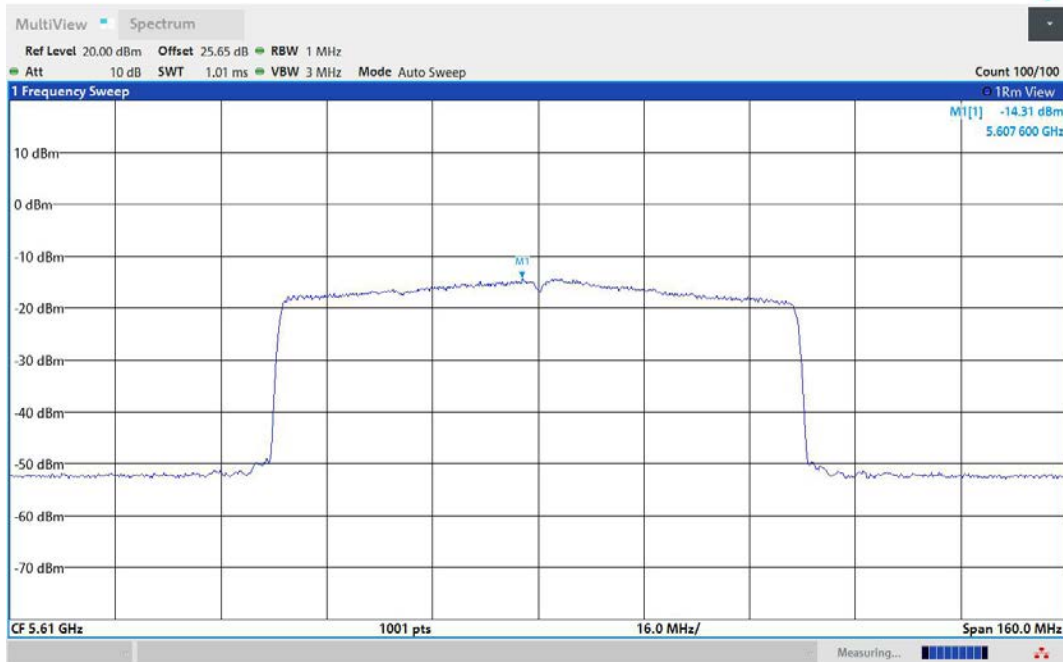
11AX80MIMO-Ant1-5530-PASS



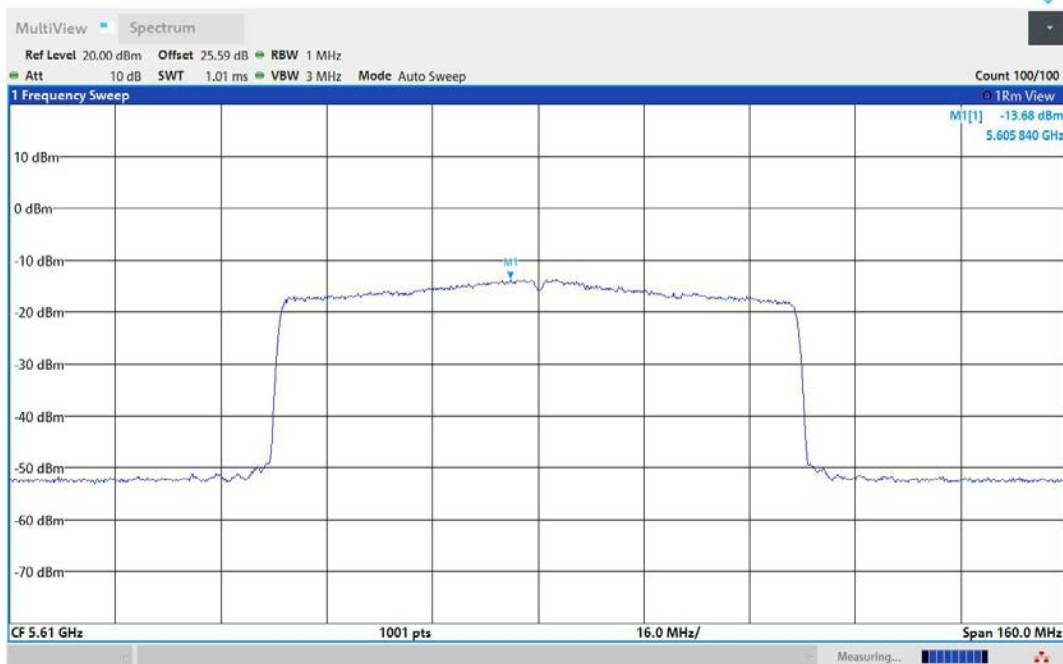
11AX80MIMO-Ant2-5530-PASS



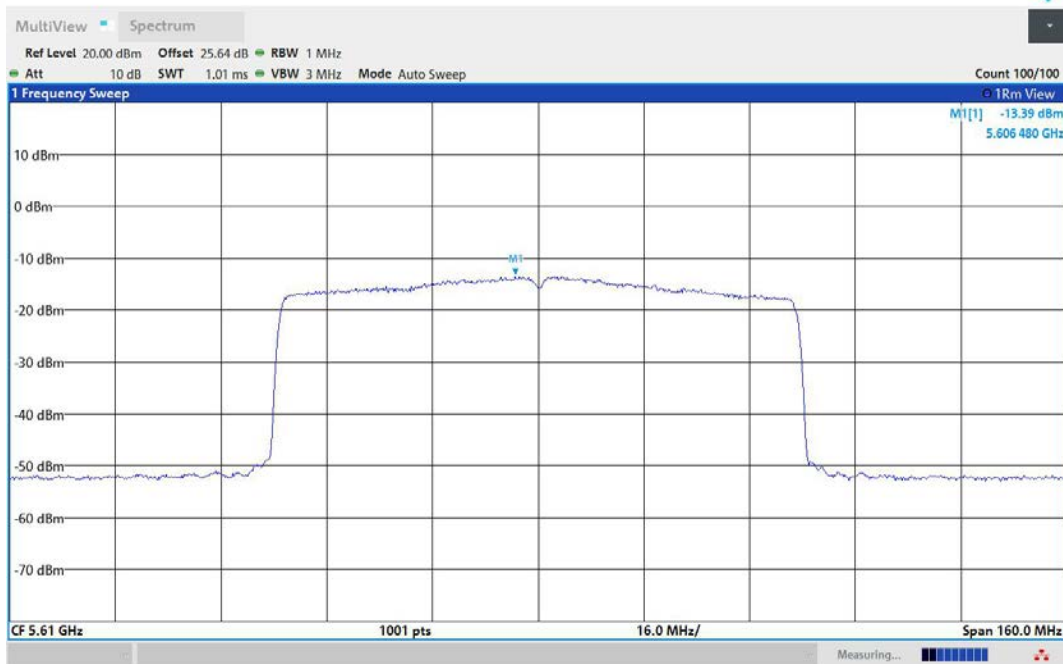
11AX80MIMO-Ant3-5530-PASS



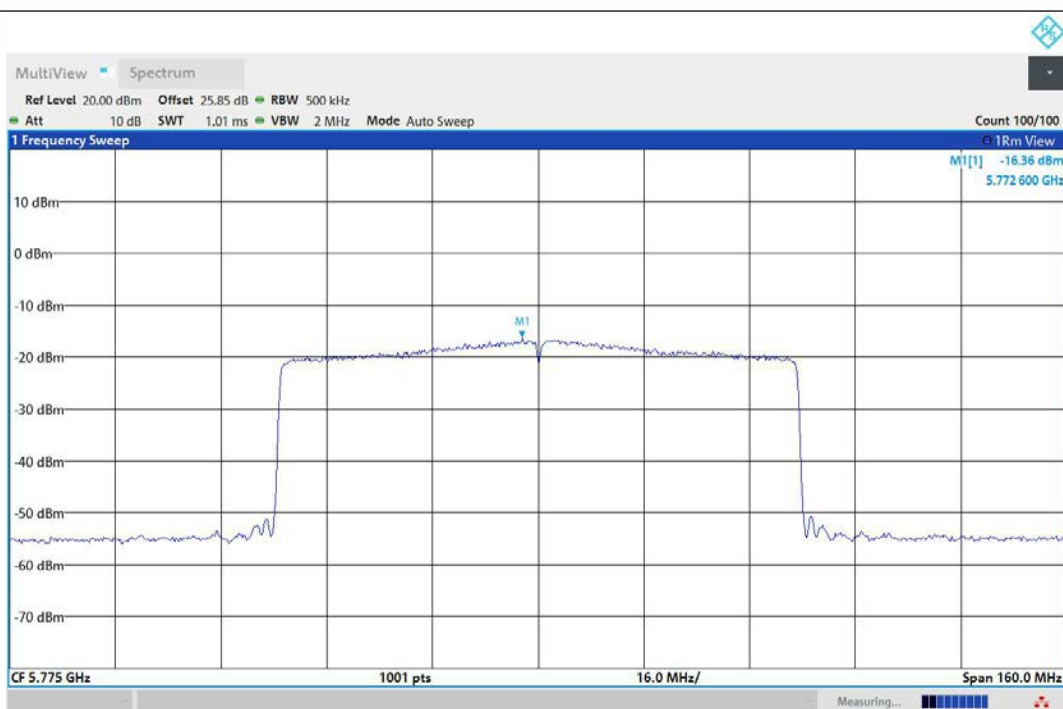
11AX80MIMO-Ant1-5610-PASS



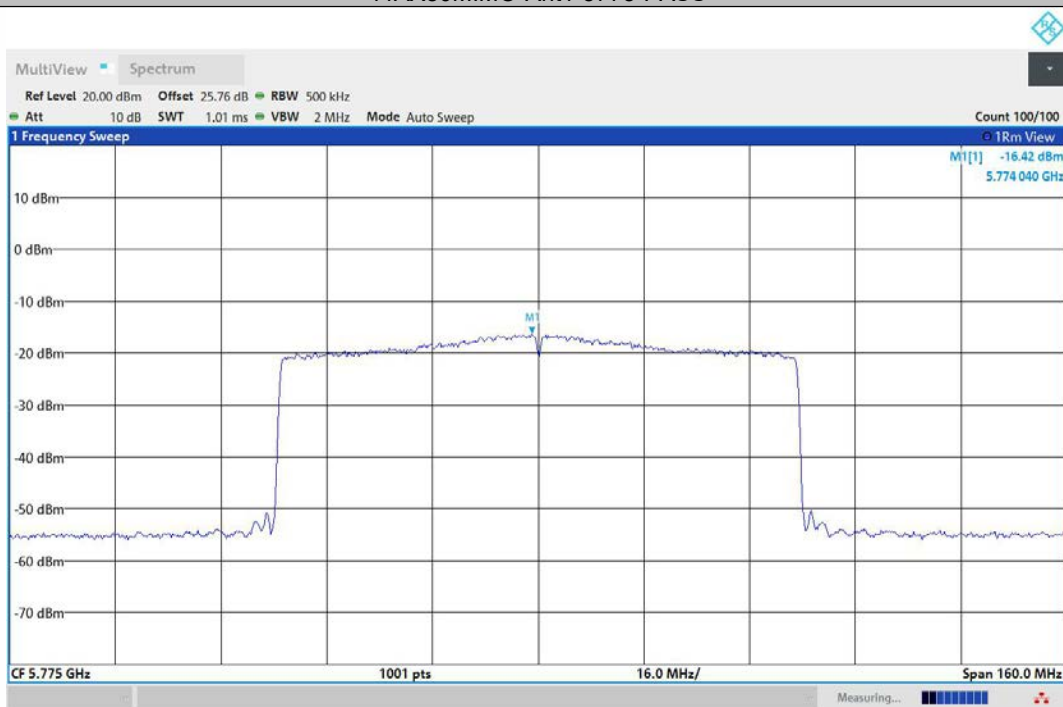
11AX80MIMO-Ant2-5610-PASS



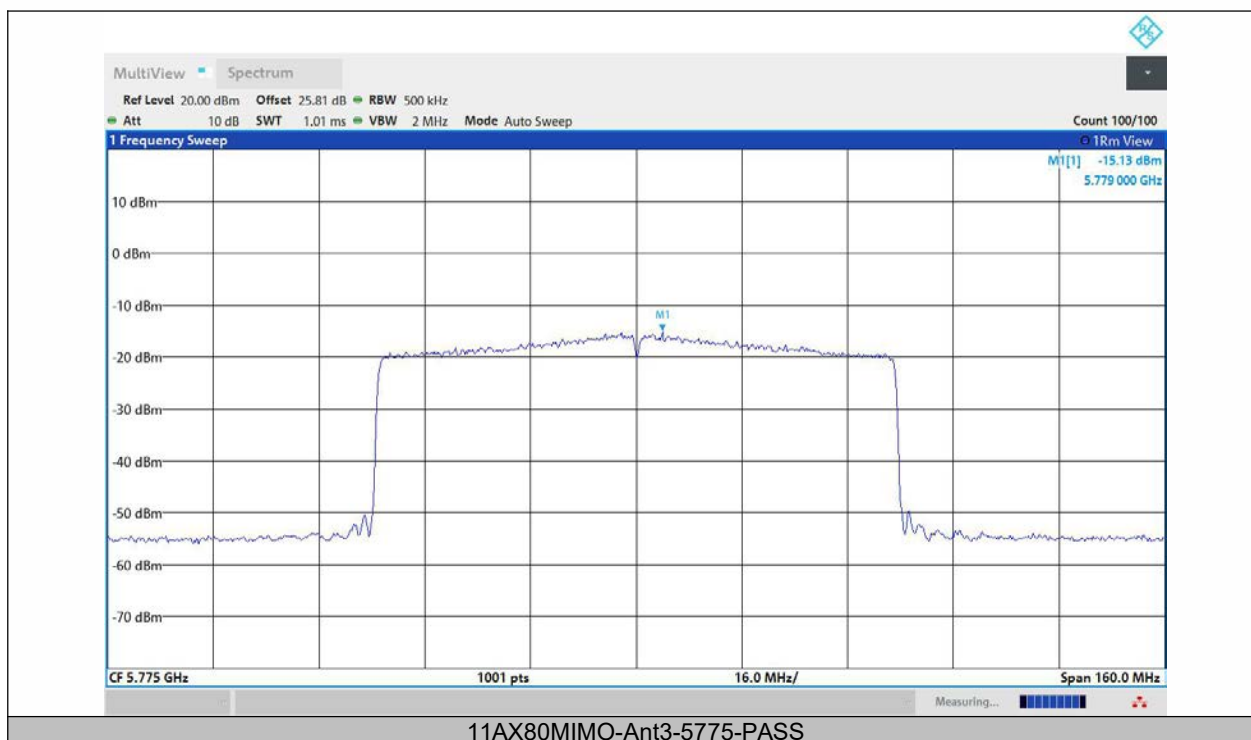
11AX80MIMO-Ant3-5610-PASS



11AX80MIMO-Ant1-5775-PASS



11AX80MIMO-Ant2-5775-PASS



8.4 UNDESIRABLE RADIATED SPURIOUS EMISSION

8.4.1 Applicable Standard

According to FCC Part 15.407 (b)
According to 789033 D02 Section II(G)

8.4.2 Conformance Limit

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 e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: 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.

The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

Restricted Frequency(MHz)	Field Strength ($\mu\text{V/m}$)	Field Strength (dB $\mu\text{V/m}$)	Measurement Distance
0.009-0.490	2400/F(KHz)	20 log ($\mu\text{V/m}$)	300
0.490-1.705	2400/F(KHz)	20 log ($\mu\text{V/m}$)	30
1.705-30	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The provisions of §15.205 apply to intentional radiators operating under this section, 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

- Remark:
1. Emission level in dBuV/m=20 log (uV/m)
 2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
 3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of ξ 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

8.4.3 Test Configuration

Test according to clause 6.2 radio frequency test setup 2.

8.4.4 Test Procedure

■ Unwanted Emissions Measurements below 1000 MHz

Compliance shall be demonstrated using CISPR quasi-peak detection; however, peak detection is permitted as an alternative to quasi-peak detection.

The EUT was placed on a turn table which is 0.8m above ground plane.

And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

Repeat above procedures until all frequency measured was complete.

We use software control the EUT, Let EUT hopping on and transmit with highest power, All the modes have been tested and the worst result was reported.

Use the following spectrum analyzer settings:

Set RBW=120kHz for $f < 1$ GHz(30MHz to 1GHz), 200Hz for $f < 150$ KHz(9KHz to 150KHz), 9KHz for $f < 30$ MHz (150KHz to 30KHz).

Set the VBW > RBW.

Detector = Peak.

Trace mode = max hold.

Follow the guidelines in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data.

Repeat above procedures until all frequency measured was complete.

■ Unwanted Maximum peak Emissions Measurements above 1000 MHz

Maximum emission levels are measured by setting the analyzer as follows:

RBW = 1 MHz.

VBW $\geq$ 3 MHz.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately 1/x, where x is the duty cycle. For example, at 50 percent duty cycle, the measurement time will increase by a factor of two relative to measurement time for continuous transmission.

■ Unwanted Average Emissions Measurements above 1000 MHz

Method VB (Averaging using reduced video bandwidth): Alternative method.

RBW = 1 MHz.

Video bandwidth. • If the EUT is configured to transmit with duty cycle $\geq$ 98 percent, set VBW $\leq$ RBW/100 (i.e., 10 kHz) but not less than 10 Hz.

• If the EUT duty cycle is < 98 percent, set VBW $\geq$ 1/T, where T is defined in section II.B.1.a).

Video bandwidth mode or display mode • The instrument shall be set to ensure that video filtering is applied in the power domain. Typically, this requires setting the detector mode to RMS and setting the Average-VBW Type to Power (RMS).

• As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of $1/x$, where x is the duty cycle. For example, use at least 200 traces if the duty cycle is 25 percent. (If a specific emission is demonstrated to be continuous—i.e., 100 percent duty cycle—rather than turning on and off with the transmit cycle, at least 50 traces shall be averaged).

■ Band edge measurements.

Unwanted band-edge emissions may be measured using either of the special band-edge measurement techniques (the marker-delta or integration methods) described below. Note that the marker-delta method is primarily a radiated measurement technique that requires the 99% occupied bandwidth edge to be within 2 MHz of the authorized band edge, whereas the integration method can be used in either a radiated or conducted measurement without any special requirement with regards to the displacement of the unwanted emission(s) relative to the authorized bandwidth.

Marker-Delta Method.

The marker-delta method, as described in ANSI C63.10, can be used to perform measurements of the radiated unwanted emissions level of emissions provided that the 99% occupied bandwidth of the fundamental is within 2 MHz of the authorized band-edge.

8.4.5 Test Results

Temperature : 25°C
Humidity : 60 %

ATM Pressure:: 1011 mbar
Test Engineer: CZF

- ☒ For Undesirable radiated Spurious Emission in U-NII – 1
 - ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)
- All of the configurations or modes are tested, the data of the worst case is recorded in the report.
Highest gain of each antenna and highest output power is ANT2 and MIMO as below:

ANT2:

Test mode: 802.11n(20) Frequency(MHz): 5180

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8288.42	V	58.21	-37.02	-27	10.02
12796.6	V	61.62	-33.61	-27	6.61
17978.9	V	67.98	-27.25	-27	0.25
8288.00	H	53.46	-41.77	-27	14.77
12815.6	H	60.93	-34.3	-27	7.3
17995.9	H	65.11	-30.12	-27	3.12

Test mode: 802.11n(20) Frequency(MHz): 5200

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8320.43	V	58.34	-36.89	-27	9.89
11536.6	V	59.93	-35.3	-27	8.3
17973.9	V	66.64	-28.59	-27	1.59
8320.43	H	55.33	-39.9	-27	12.9
13180.7	H	62.34	-32.89	-27	5.89
17979.9	H	67.15	-28.08	-27	1.08

Test mode: 802.11n(20) Frequency(MHz): 5240

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8384.43	V	56.55	-38.68	-27	11.68
10483.5	V	59.42	-35.81	-27	8.81
17989.9	V	66.46	-28.77	-27	1.77
7295.37	H	53.27	-41.96	-27	14.96
11553.6	H	59.14	-36.09	-27	9.09
18000	H	67.81	-27.42	-27	0.42

MIMO:

Test mode: 802.11n(20) Frequency(MHz): 5180

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8287.0300	V	58.08	-37.15	-27	10.15
12795.2100	V	61.46	-33.77	-27	6.77
17980.1800	V	67.95	-27.28	-27	0.28
8299.6900	H	53.38	-41.85	-27	14.85
12827.2900	H	60.72	-34.51	-27	7.51
18007.5900	H	64.95	-30.28	-27	3.28

Test mode: 802.11n(20) Frequency(MHz): 5200

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8319.0400	V	58.21	-37.02	-27	10.02
11535.2100	V	59.77	-35.46	-27	8.46
17975.1800	V	66.61	-28.62	-27	1.62
8332.1200	H	55.25	-39.98	-27	12.98
13192.3900	H	62.13	-33.10	-27	6.10
17991.5900	H	66.99	-28.24	-27	1.24

Test mode: 802.11n(20) Frequency(MHz): 5240

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8383.0400	V	56.42	-38.81	-27	11.81
10482.1100	V	59.26	-35.97	-27	8.97
17991.1800	V	66.43	-28.80	-27	1.80
7307.0600	H	53.19	-42.04	-27	15.04
11565.2900	H	58.93	-36.30	-27	9.30
18011.6900	H	67.65	-27.58	-27	0.58

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

ANT2:

Test mode: 802.11n(20)		Frequency(MHz): 5180			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8288.42	V	58.21	74.00	15.79	Peak
12796.6	V	61.62	74.00	12.38	Peak
17978.9	V	67.98	74.00	6.02	Peak
8287.90	V	53.37	54.00	0.63	Avg
12796.6	V	47.20	54.00	6.80	Avg
17978.9	V	46.31	54.00	7.69	Avg
8288.00	H	53.46	74.00	20.54	Peak
12815.6	H	60.93	74.00	13.07	Peak
17995.9	H	65.11	74.00	8.89	Peak
8287.84	H	44.38	54.00	9.62	Avg
12815.6	H	46.90	54.00	7.10	Avg
17995.9	H	46.84	54.00	7.16	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5200			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8320.43	V	58.34	74.00	15.66	Peak
11536.6	V	59.93	74.00	14.07	Peak
17973.9	V	66.64	74.00	7.36	Peak
8320.43	V	53.19	54.00	0.81	Avg
11536.6	V	42.99	54.00	11.01	Avg
17973.9	V	46.05	54.00	7.95	Avg
8320.43	H	55.33	74.00	18.67	Peak
13180.7	H	62.34	74.00	11.66	Peak
17979.9	H	67.15	74.00	6.85	Peak
8320.43	H	47.18	54.00	6.82	Avg
13180.7	H	46.35	54.00	7.65	Avg
17979.9	H	46.22	54.00	7.78	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5240			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8384.43	V	56.55	74.00	17.45	Peak
10483.5	V	59.42	74.00	14.58	Peak
17989.9	V	66.46	74.00	7.54	Peak
8384.43	V	52.68	54.00	1.32	Avg
10487.3	V	47.24	54.00	6.76	Avg
17989.9	V	47.10	54.00	6.90	Avg
7295.37	H	53.27	74.00	20.73	Peak
11553.6	H	59.14	74.00	14.86	Peak
18000	H	67.81	74.00	6.19	Peak
7295.37	H	39.72	54.00	14.28	Avg
11553.6	H	42.82	54.00	11.18	Avg
18000	H	47.22	54.00	6.78	Avg

MIMO:

Test mode: 802.11n(20)		Frequency(MHz): 5180			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8287.0300	V	58.08	74.00	15.92	Peak
12795.2100	V	61.46	74.00	12.54	Peak
17980.1800	V	67.95	74.00	6.05	Peak
8289.1800	V	53.35	54.00	0.65	Avg
12794.3500	V	46.94	54.00	7.06	Avg
17976.6500	V	46.12	54.00	7.88	Avg
8299.6900	H	53.38	74.00	20.62	Peak
12827.2900	H	60.72	74.00	13.28	Peak
18007.5900	H	64.95	74.00	9.05	Peak
8299.5300	H	44.24	54.00	9.76	Avg
12812.2900	H	46.72	54.00	7.28	Avg
17992.5900	H	46.71	54.00	7.29	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5200			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8319.0400	V	58.21	74.00	15.79	Peak
11535.2100	V	59.77	74.00	14.23	Peak
17975.1800	V	66.61	74.00	7.39	Peak
8321.7100	V	53.17	54.00	0.83	Avg
11534.3500	V	42.73	54.00	11.27	Avg
17971.6500	V	45.86	54.00	8.14	Avg
8332.1200	H	55.25	74.00	18.75	Peak
13192.3900	H	62.13	74.00	11.87	Peak
17991.5900	H	66.99	74.00	7.01	Peak
8332.1200	H	47.04	54.00	6.96	Avg
13177.3900	H	46.17	54.00	7.83	Avg
17976.5900	H	46.09	54.00	7.91	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5240			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8383.0400	V	56.42	74.00	17.58	Peak
10482.1100	V	59.26	74.00	14.74	Peak
17991.1800	V	66.43	74.00	7.57	Peak
8385.7100	V	52.66	54.00	1.34	Avg
10485.0500	V	46.98	54.00	7.02	Avg
17987.6500	V	46.91	54.00	7.09	Avg
7307.0600	H	53.19	74.00	20.81	Peak
11565.2900	H	58.93	74.00	15.07	Peak
18011.6900	H	67.65	74.00	6.35	Peak
7307.0600	H	39.58	54.00	14.42	Avg
11550.2900	H	42.64	54.00	11.36	Avg
17996.6900	H	47.09	54.00	6.91	Avg

- Note:**
- (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
 - (2) Emission Level= Reading Level+Correct Factor +Cable Loss.
 - (3) Correct Factor= Ant_F + Cab_L - Preamp
 - (4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11n(20) Frequency(MHz): 5180

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5146.83	V	54.86	-40.37	-27	Pass
5141.95	H	53.82	-41.41	-27	Pass

Test mode: 802.11n(20) Frequency(MHz): 5240

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5351.33	V	53.25	-41.98	-27	Pass
5350.96	H	53.23	-42	-27	Pass

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

Test mode: 802.11n(20) Frequency(MHz): 5180

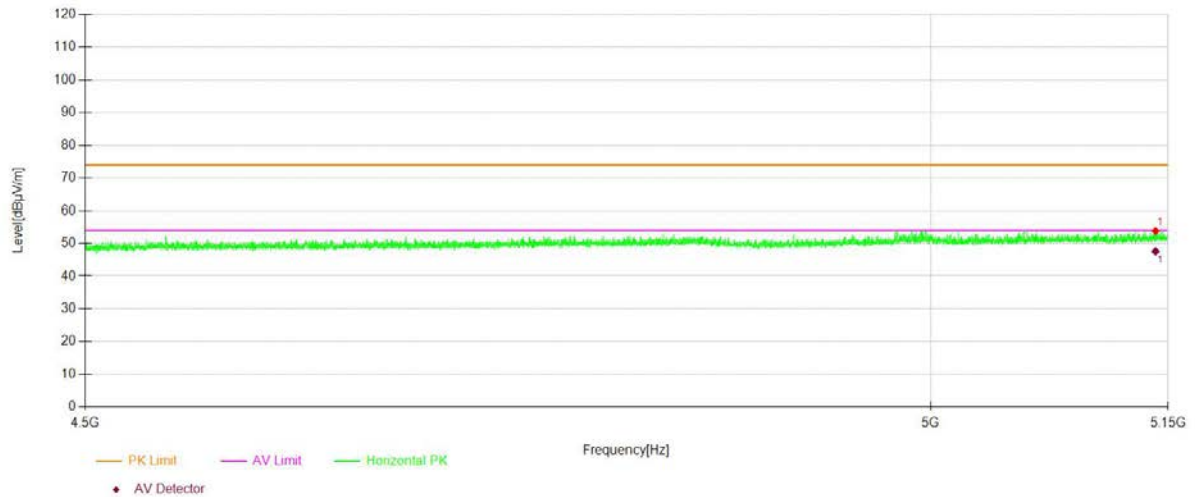
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5146.83	V	54.86	74.00	19.14	Peak
5146.83	V	46.42	54.00	7.58	Avg
5141.95	H	53.82	74.00	20.18	Peak
5141.95	H	47.60	54.00	6.40	Avg

Test mode: 802.11n(20) Frequency(MHz): 5240

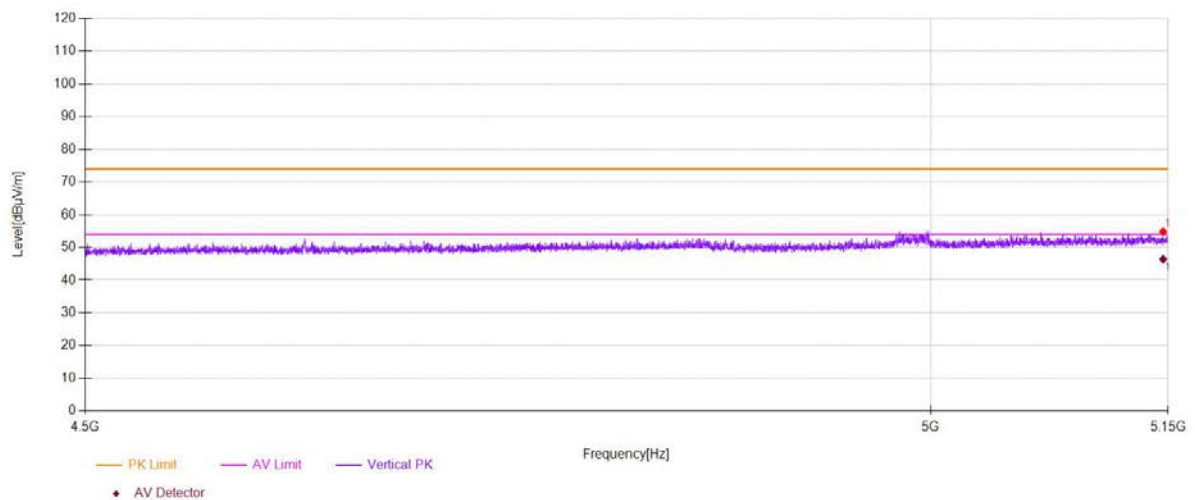
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5351.33	V	53.25	74.00	20.75	Peak
5351.33	V	47.62	54.00	6.38	Avg
5350.96	H	53.23	74.00	20.77	Peak
5350.96	H	47.07	54.00	6.93	Avg

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

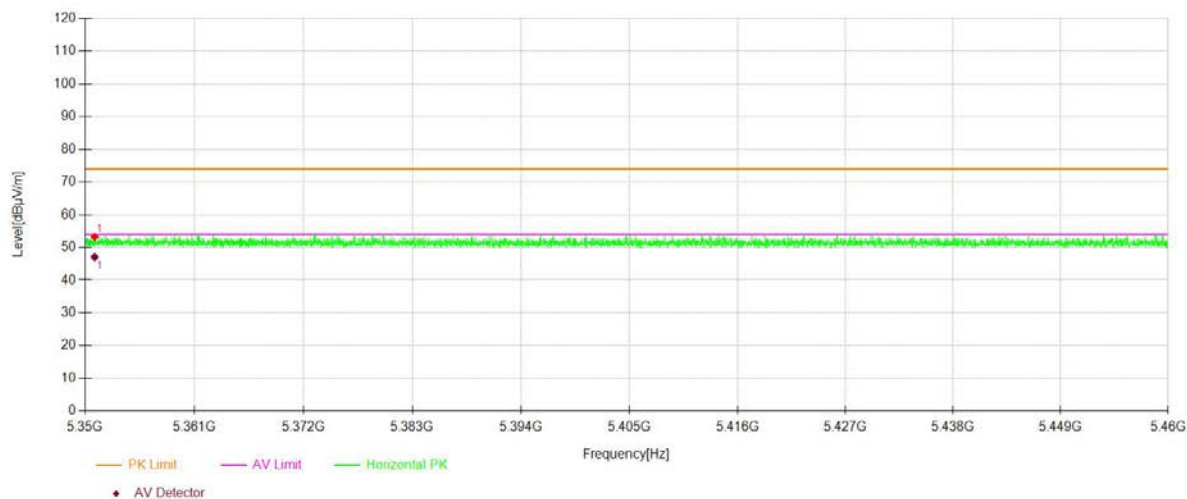
Test Model U-NII - 1
Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11n(HT40)
☒ 5180 ☐ 5200 ☐ 5240 Ant.Pol H



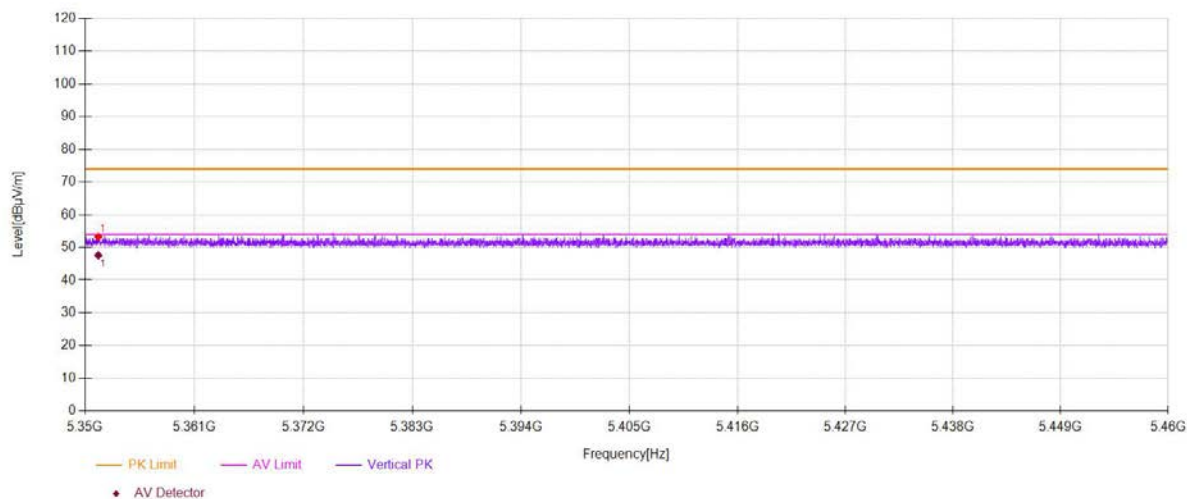
Test Model U-NII - 1
Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11n(HT40)
☒ 5180 ☐ 5200 ☐ 5240 Ant.Pol V



Test Model U-NII - 1
Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11n(HT40)
☐ 5180 ☐ 5200 ☒ 5240 Ant.Pol H



Test Model U-NII - 1
Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11n(HT40)
☐ 5180 ☐ 5200 ☒ 5240 Ant.Pol V



- ☒ For Undesirable radiated Spurious Emission in U-NII -2A
- ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

All of the configurations or modes are tested, the data of the worst case is recorded in the report.
Highest gain of each antenna and highest output power is ANT2 and MIMO as below:

ANT2:

Test mode: 802.11n(20) Frequency(MHz): 5260

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8415.43	V	56.57	-38.66	-27	11.66
13188.7	V	61.54	-33.69	-27	6.69
17988.9	V	68.06	-27.17	-27	0.17
9011.47	H	54.99	-40.24	-27	13.24
11520.6	H	59.23	-36	-27	9
17989.9	H	66.58	-28.65	-27	1.65

Test mode: 802.11n(20) Frequency(MHz): 5280

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8448.43	V	56.42	-38.81	-27	11.81
11524.6	V	58.42	-36.81	-27	9.81
18000	V	66.44	-28.79	-27	1.79
8710.45	H	54.92	-40.31	-27	13.31
11510.6	H	58.92	-36.31	-27	9.31
17989.9	H	66.53	-28.7	-27	1.7

Test mode: 802.11n(20) Frequency(MHz): 5320

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8512.44	V	54.45	-40.78	-27	13.78
11541.6	V	58.89	-36.34	-27	9.34
17988.9	V	67.56	-27.67	-27	0.67
8134.41	H	54.25	-40.98	-27	13.98
12030.6	H	58.81	-36.42	-27	9.42
17979.9	H	66.32	-28.91	-27	1.91

MIMO:

Test mode: 802.11n(20) Frequency(MHz): 5260

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8414.0400	V	56.44	-38.79	-27	11.79
13187.3100	V	61.38	-33.85	-27	6.85
17990.1800	V	68.03	-27.20	-27	0.20
9023.1600	H	54.91	-40.32	-27	13.32
11532.2900	H	59.02	-36.21	-27	9.21
18001.5900	H	66.42	-28.81	-27	1.81

Test mode: 802.11n(20) Frequency(MHz): 5280

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8511.0500	V	56.29	-38.94	-27	11.94
11540.2100	V	58.26	-36.97	-27	9.97
17990.1800	V	66.41	-28.82	-27	1.82
8146.1000	H	54.84	-40.39	-27	13.39
12042.2900	H	58.71	-36.52	-27	9.52
17991.5900	H	66.37	-28.86	-27	1.86

Test mode: 802.11n(20) Frequency(MHz): 5320

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8511.0500	V	54.32	-40.91	-27	13.91
11540.2100	V	58.73	-36.50	-27	9.50
17990.1800	V	67.53	-27.70	-27	0.70
8146.1000	H	54.17	-41.06	-27	14.06
12042.2900	H	58.6	-36.63	-27	9.63
17991.5900	H	66.16	-29.07	-27	2.07

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

ANT2:

Test mode: 802.11n(20)		Frequency(MHz): 5260			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8415.43	V	56.57	74.00	17.43	Peak
13188.7	V	61.54	74.00	12.46	Peak
17988.9	V	68.06	74.00	5.94	Peak
8415.43	V	52.58	54.00	1.42	Avg
13188.7	V	46.26	54.00	7.74	Avg
17988.9	V	46.63	54.00	7.37	Avg
9011.47	H	54.99	74.00	19.01	Peak
11520.6	H	59.23	74.00	14.77	Peak
17989.9	H	66.58	74.00	7.42	Peak
9011.47	H	41.06	54.00	12.94	Avg
11520.6	H	43.34	54.00	10.66	Avg
17989.9	H	46.53	54.00	7.47	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5280			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8448.43	V	56.42	74.00	17.58	Peak
11524.6	V	58.42	74.00	15.58	Peak
18000	V	66.44	74.00	7.56	Peak
8448.43	V	52.45	54.00	1.55	Avg
11524.6	V	43.60	54.00	10.40	Avg
18000	V	46.83	54.00	7.17	Avg
8710.45	H	54.92	74.00	19.08	Peak
11510.6	H	58.92	74.00	15.08	Peak
17989.9	H	66.53	74.00	7.47	Peak
8710.45	H	40.54	54.00	13.46	Avg
11510.6	H	43.53	54.00	10.47	Avg
17989.9	H	46.53	54.00	7.47	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5320			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8512.44	V	54.45	74.00	19.55	Peak
11541.6	V	58.89	74.00	15.11	Peak
17988.9	V	67.56	74.00	6.44	Peak
8512.44	V	50.79	54.00	3.21	Avg
11541.6	V	42.99	54.00	11.01	Avg
17988.9	V	46.59	54.00	7.41	Avg
8134.41	H	54.25	74.00	19.75	Peak
12030.6	H	58.81	74.00	15.19	Peak
17979.9	H	66.32	74.00	7.68	Peak
8134.41	H	39.14	54.00	14.86	Avg
12030.6	H	42.91	54.00	11.09	Avg
17979.9	H	46.20	54.00	7.80	Avg

MIMO:

Test mode: 802.11n(20)		Frequency(MHz): 5260			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8414.0400	V	56.44	74.00	17.56	Peak
13187.3100	V	61.38	74.00	12.62	Peak
17990.1800	V	68.03	74.00	5.97	Peak
8416.7100	V	52.56	54.00	1.44	Avg
13186.4500	V	46.00	54.00	8.00	Avg
17986.6500	V	46.44	54.00	7.56	Avg
9023.1600	H	54.91	74.00	19.09	Peak
11532.2900	H	59.02	74.00	14.98	Peak
18001.5900	H	66.42	74.00	7.58	Peak
9023.1600	H	40.92	54.00	13.08	Avg
11517.2900	H	43.16	54.00	10.84	Avg
17986.5900	H	46.40	54.00	7.60	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5280			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8511.0500	V	56.29	74.00	17.71	Peak
11540.2100	V	58.26	74.00	15.74	Peak
17990.1800	V	66.41	74.00	7.59	Peak
8513.7200	V	52.43	54.00	1.57	Avg
11539.3500	V	43.34	54.00	10.66	Avg
17986.6500	V	46.64	54.00	7.36	Avg
8146.1000	H	54.84	74.00	19.16	Peak
12042.2900	H	58.71	74.00	15.29	Peak
17991.5900	H	66.37	74.00	7.63	Peak
8146.1000	H	40.40	54.00	13.60	Avg
12027.2900	H	43.35	54.00	10.65	Avg
17976.3900	H	45.98	54.00	8.02	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5320			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8511.0500	V	54.32	74.00	19.68	Peak
11540.2100	V	58.73	74.00	15.27	Peak
17990.1800	V	67.53	74.00	6.47	Peak
8513.7200	V	50.77	54.00	3.23	Avg
11539.3500	V	42.73	54.00	11.27	Avg
17986.6500	V	46.40	54.00	7.60	Avg
8146.1000	H	54.17	74.00	19.83	Peak
12042.2900	H	58.60	74.00	15.40	Peak
17991.5900	H	66.16	74.00	7.84	Peak
8146.1000	H	39.00	54.00	15.00	Avg
12027.2900	H	42.73	54.00	11.27	Avg
17976.5900	H	46.07	54.00	7.93	Avg

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11n(HT20) Frequency(MHz): 5260

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5135.94	V	53.47	-41.76	-27	Pass
5149.51	H	53.68	-41.55	-27	Pass

Test mode: 802.11n(HT20) Frequency(MHz): 5320

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5351.87	V	54.95	-40.28	-27	Pass
5353.32	H	53.80	-41.43	-27	Pass

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
 (2) Emission Level= Reading Level+Correct Factor +Cable Loss.
 (3) Correct Factor= Ant_F + Cab_L - Preamp
 (4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
 d is the measurement distance in 3 meters

Test mode: 802.11n(HT20) Frequency(MHz): 5260

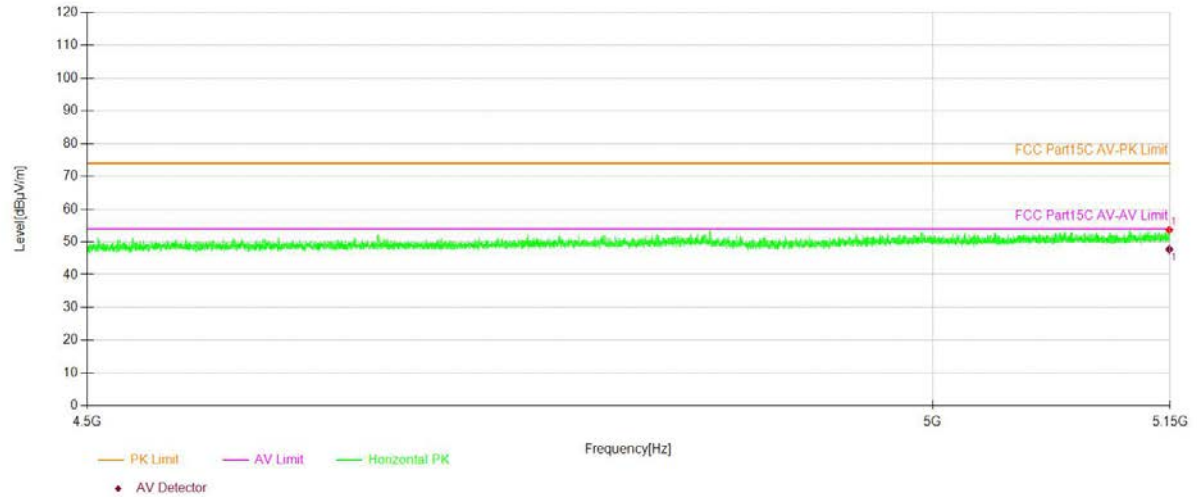
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5135.94	V	53.47	74.00	20.53	Peak
5135.94	V	47.07	54.00	6.93	Avg
5149.51	H	53.68	74.00	20.32	Peak
5149.51	H	47.73	54.00	6.27	Avg

Test mode: 802.11n(HT20) Frequency(MHz): 5320

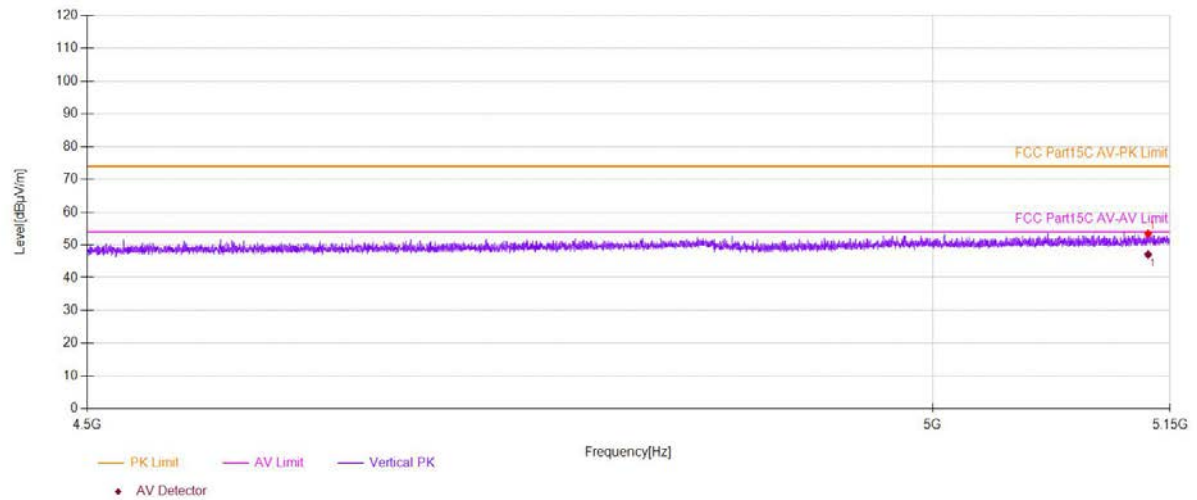
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5351.87	V	54.95	74.00	19.05	Peak
5351.87	V	47.49	54.00	6.51	Avg
5353.32	H	53.80	74.00	20.20	Peak
5353.32	H	47.39	54.00	6.61	Avg

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
 (2) Emission Level= Reading Level+Correct Factor +Cable Loss.
 (3) Correct Factor= Ant_F + Cab_L - Preamp
 (4)The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

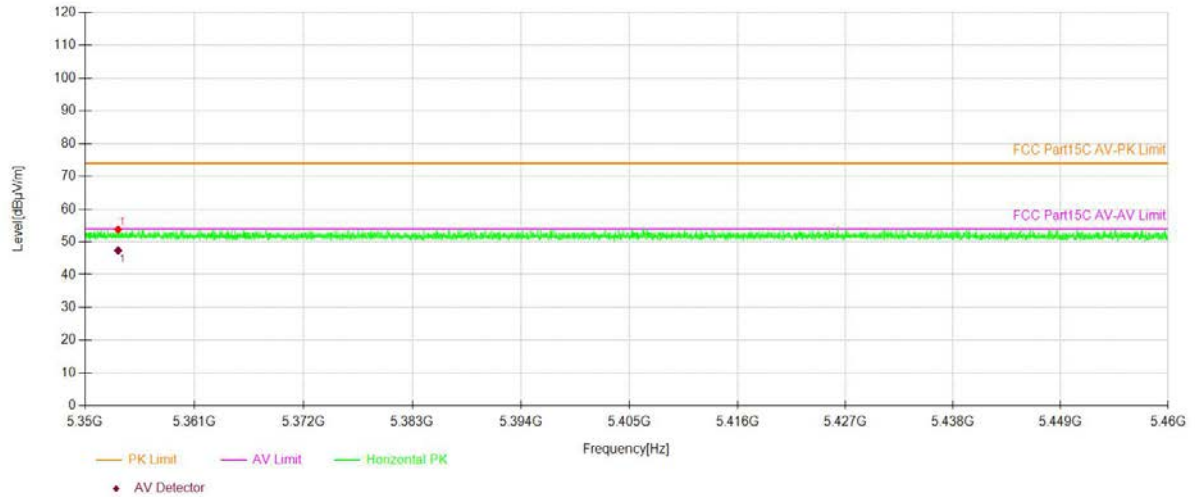
Test Model U-NII -2A
Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11 ac (VHT20)
☒ 5260 ☐ 5300 ☐ 5320 Ant.Pol H



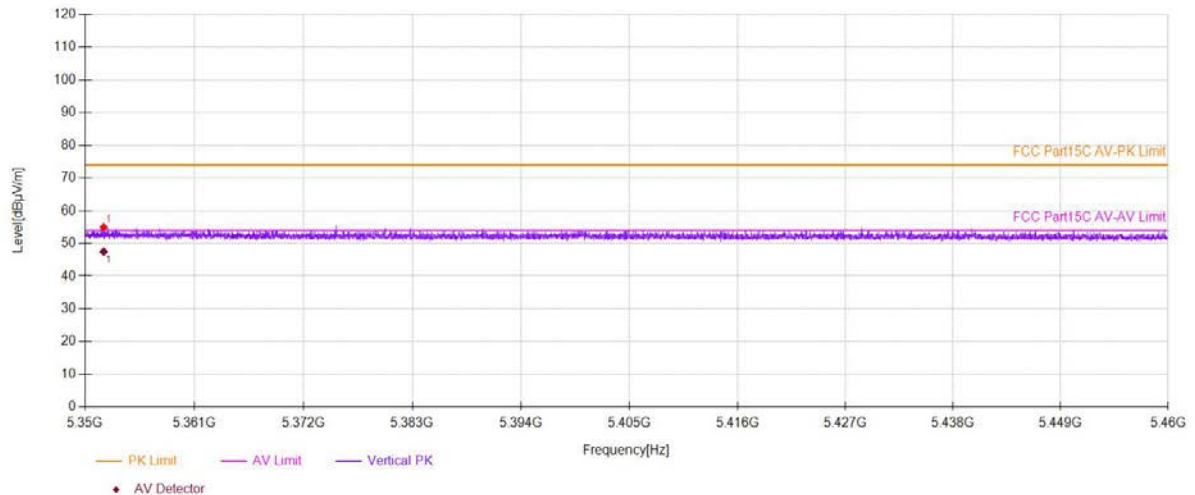
Test Model U-NII -2A
Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11 ac (VHT20)
☒ 5260 ☐ 5300 ☐ 5320 Ant.Pol V



Test Model U-NII -2A
Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11 ac (VHT20)
☐ 5260 ☐ 5300 ☒ 5320 Ant.Pol H



Test Model U-NII -2A
Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11 ac (VHT20)
☐ 5260 ☐ 5300 ☒ 5320 Ant.Pol V



- ☒ For Undesirable radiated Spurious Emission in U-NII -2C
 - ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)
- All of the configurations or modes are tested, the data of the worst case is recorded in the report.
Highest gain of each antenna and highest output power is ANT2 and MIMO as below:

ANT2:

Test mode: 802.11n(20) Frequency(MHz): 5500

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8800.00	V	53.25	-41.98	-27	14.98
13140.7	V	61.18	-34.05	-27	7.05
17973.9	V	66.46	-28.77	-27	1.77
7735.39	H	54.90	-40.33	-27	13.33
11567.6	H	59.07	-36.16	-27	9.16
17988.9	H	66.70	-28.53	-27	1.53

Test mode: 802.11n(20) Frequency(MHz): 5580

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8927.46	V	55.39	-39.84	-27	12.84
13213.7	V	62.19	-33.04	-27	6.04
18000	V	66.74	-28.49	-27	1.49
8928.00	H	52.58	-42.65	-27	15.65
12789.6	H	61.27	-33.96	-27	6.96
17992.9	H	66.21	-29.02	-27	2.02

Test mode: 802.11n(20) Frequency(MHz): 5700

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
9119.47	V	55.47	-39.76	-27	12.76
12023.6	V	58.97	-36.26	-27	9.26
17974.9	V	66.87	-28.36	-27	1.36
7786.39	H	54.00	-41.23	-27	14.23
10737.5	H	58.64	-36.59	-27	9.59
17998.9	H	66.90	-28.33	-27	1.33

MIMO:

Test mode: 802.11n(20) Frequency(MHz): 5500

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8798.6100	V	53.12	-42.11	-27	15.11
13139.3100	V	61.02	-34.21	-27	7.21
17975.1800	V	66.43	-28.80	-27	1.80
7747.0800	H	54.82	-40.41	-27	13.41
11579.2900	H	58.86	-36.37	-27	9.37
18000.5900	H	66.54	-28.69	-27	1.69

Test mode: 802.11n(20) Frequency(MHz): 5580

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8926.0700	V	55.26	-39.97	-27	12.97
13212.3100	V	62.03	-33.20	-27	6.20
18001.2800	V	66.71	-28.52	-27	1.52
8939.6900	H	52.5	-42.73	-27	15.73
12801.2900	H	61.06	-34.17	-27	7.17
18004.5900	H	66.05	-29.18	-27	2.18

Test mode: 802.11n(20) Frequency(MHz): 5700

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
9118.0800	V	55.34	-39.89	-27	12.89
12022.2100	V	58.81	-36.42	-27	9.42
17976.1800	V	66.84	-28.39	-27	1.39
7798.0800	H	53.92	-41.31	-27	14.31
10749.1900	H	58.43	-36.80	-27	9.80
18010.5900	H	66.74	-28.49	-27	1.49

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

ANT2:

Test mode: 802.11n(20)		Frequency(MHz): 5500			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8800.00	V	53.25	74.00	20.75	Peak
13140.7	V	61.18	74.00	12.82	Peak
17973.9	V	66.46	74.00	7.54	Peak
8799.91	V	48.49	54.00	5.51	Avg
13140.7	V	46.48	54.00	7.52	Avg
17973.9	V	46.02	54.00	7.98	Avg
7735.39	H	54.90	74.00	19.10	Peak
11567.6	H	59.07	74.00	14.93	Peak
17988.9	H	66.70	74.00	7.30	Peak
7735.39	H	39.25	54.00	14.75	Avg
11567.6	H	42.60	54.00	11.40	Avg
17988.9	H	46.64	54.00	7.36	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5580			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8927.46	V	55.39	74.00	18.61	Peak
13213.7	V	62.19	74.00	11.81	Peak
18000	V	66.74	74.00	7.26	Peak
8927.88	V	48.25	54.00	5.75	Avg
13213.7	V	45.86	54.00	8.14	Avg
18000	V	47.06	54.00	6.94	Avg
8928.00	H	52.58	74.00	21.42	Peak
12789.6	H	61.27	74.00	12.73	Peak
17992.9	H	66.21	74.00	7.79	Peak
8927.85	H	42.45	54.00	11.55	Avg
12789.6	H	47.05	54.00	6.95	Avg
17992.9	H	46.75	54.00	7.25	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5700			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
9119.47	V	55.47	74.00	18.53	Peak
12023.6	V	58.97	74.00	15.03	Peak
17974.9	V	66.87	74.00	7.13	Peak
9119.86	V	50.21	54.00	3.79	Avg
12023.6	V	42.83	54.00	11.17	Avg
17974.9	V	46.04	54.00	7.96	Avg
7786.39	H	54.00	74.00	20.00	Peak
10737.5	H	58.64	74.00	15.36	Peak
17998.9	H	66.90	74.00	7.10	Peak
7786.39	H	38.79	54.00	15.21	Avg
10737.5	H	43.46	54.00	10.54	Avg
17998.9	H	46.78	54.00	7.22	Avg

MIMO:

Test mode: 802.11n(20)		Frequency(MHz): 5500			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8798.6100	V	53.12	74.00	20.88	Peak
13139.3100	V	61.02	74.00	12.98	Peak
17975.1800	V	66.43	74.00	7.57	Peak
8801.1900	V	48.47	54.00	5.53	Avg
13138.4500	V	46.22	54.00	7.78	Avg
17971.6500	V	45.83	54.00	8.17	Avg
7747.0800	H	54.82	74.00	19.18	Peak
11579.2900	H	58.86	74.00	15.14	Peak
18000.5900	H	66.54	74.00	7.46	Peak
7747.0800	H	39.11	54.00	14.89	Avg
11564.2900	H	42.42	54.00	11.58	Avg
17985.5900	H	46.51	54.00	7.49	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5580			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
8926.0700	V	55.26	74.00	18.74	Peak
13212.3100	V	62.03	74.00	11.97	Peak
18001.2800	V	66.71	74.00	7.29	Peak
8929.1600	V	48.23	54.00	5.77	Avg
13211.4500	V	45.60	54.00	8.40	Avg
17997.7500	V	46.87	54.00	7.13	Avg
8939.6900	H	52.50	74.00	21.50	Peak
12801.2900	H	61.06	74.00	12.94	Peak
18004.5900	H	66.05	74.00	7.95	Peak
8939.5400	H	42.31	54.00	11.69	Avg
12786.2900	H	46.87	54.00	7.13	Avg
17989.5900	H	46.62	54.00	7.38	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5700			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
9118.0800	V	55.34	74.00	18.66	Peak
12022.2100	V	58.81	74.00	15.19	Peak
17976.1800	V	66.84	74.00	7.16	Peak
9121.1400	V	50.19	54.00	3.81	Avg
12021.3500	V	42.57	54.00	11.43	Avg
17972.6500	V	45.85	54.00	8.15	Avg
7798.0800	H	53.92	74.00	20.08	Peak
10749.1900	H	58.43	74.00	15.57	Peak
18010.5900	H	66.74	74.00	7.26	Peak
7798.0800	H	38.65	54.00	15.35	Avg
10734.1900	H	43.28	54.00	10.72	Avg
17995.5900	H	46.65	54.00	7.35	Avg

- Note:**
- (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
 - (2) Emission Level= Reading Level+Correct Factor +Cable Loss.
 - (3) Correct Factor= Ant_F + Cab_L - Preamp
 - (4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11n(HT20) Frequency(MHz): 5500

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5469	V	53.78	-41.45	-27	Pass
5468.48	H	52.84	-42.39	-27	Pass

Test mode: 802.11n(HT20) Frequency(MHz): 5700

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5725.29	V	54.22	-41.01	-27	Pass
5726.56	H	52.99	-42.24	-27	Pass

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

Test mode: 802.11n(HT20) Frequency(MHz): 5500

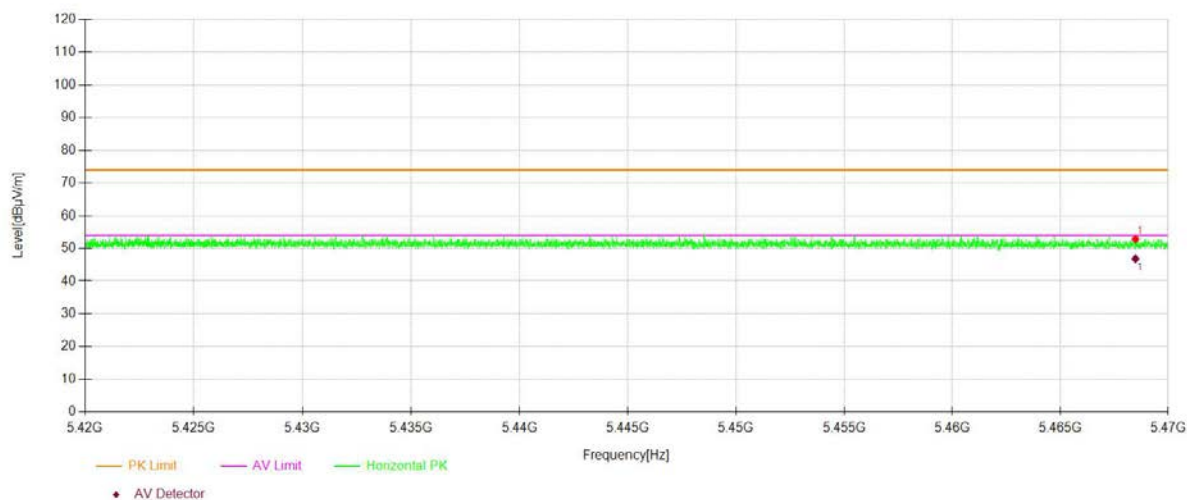
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5469	V	53.78	74.00	20.22	Peak
5469	V	46.48	54.00	7.52	Avg
5468.48	H	52.84	74.00	21.16	Peak
5468.48	H	46.86	54.00	7.14	Avg

Test mode: 802.11n(HT20) Frequency(MHz): 5700

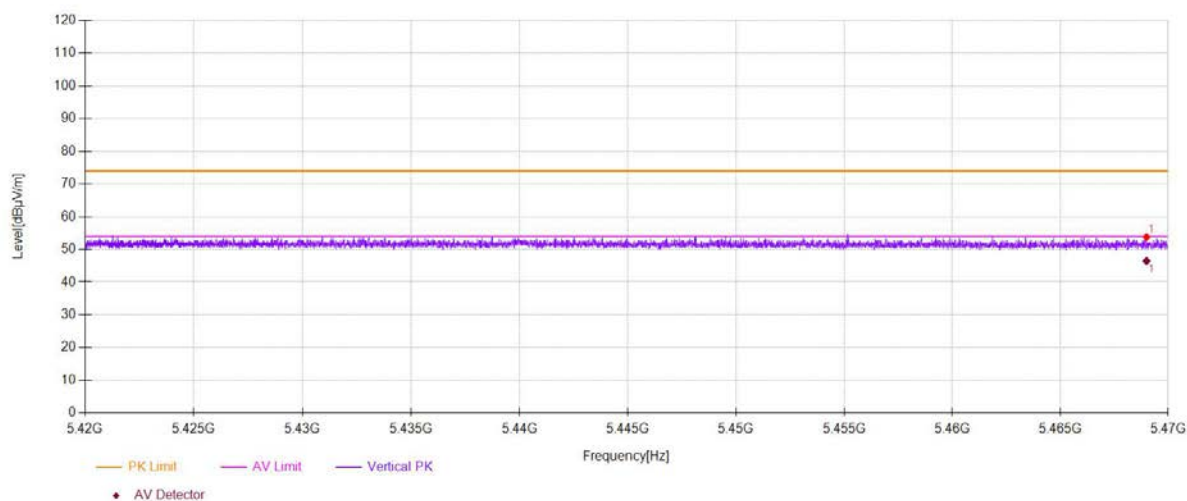
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5725.29	V	54.22	74.00	19.78	Peak
5725.29	V	46.43	54.00	7.57	Avg
5726.56	H	52.99	74.00	21.01	Peak
5726.56	H	46.29	54.00	7.71	Avg

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

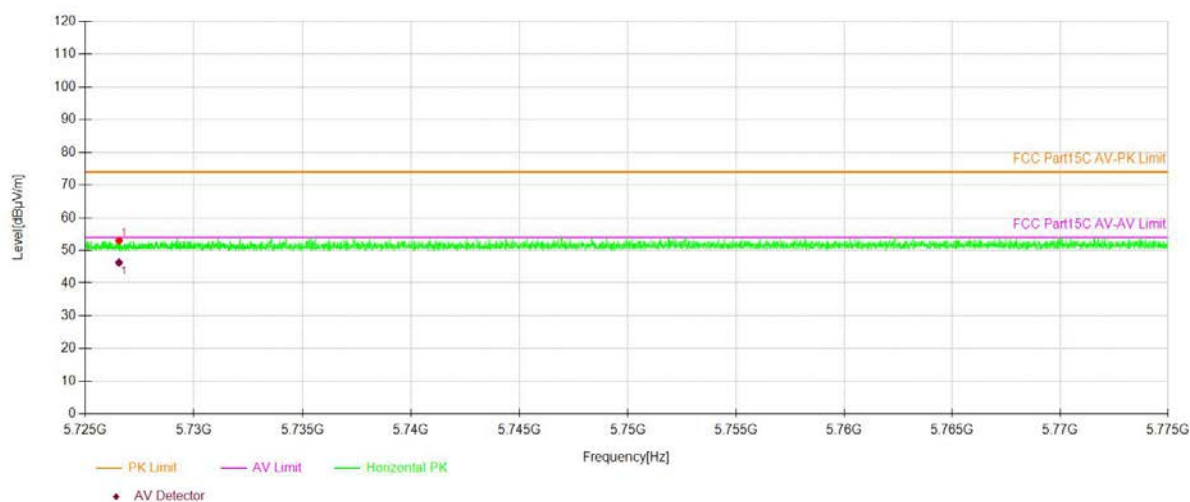
Test Model U-NII -2C
Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11 ac (VHT20)
☒ 5500 ☐ 5580 ☐ 5700 Ant.Pol H



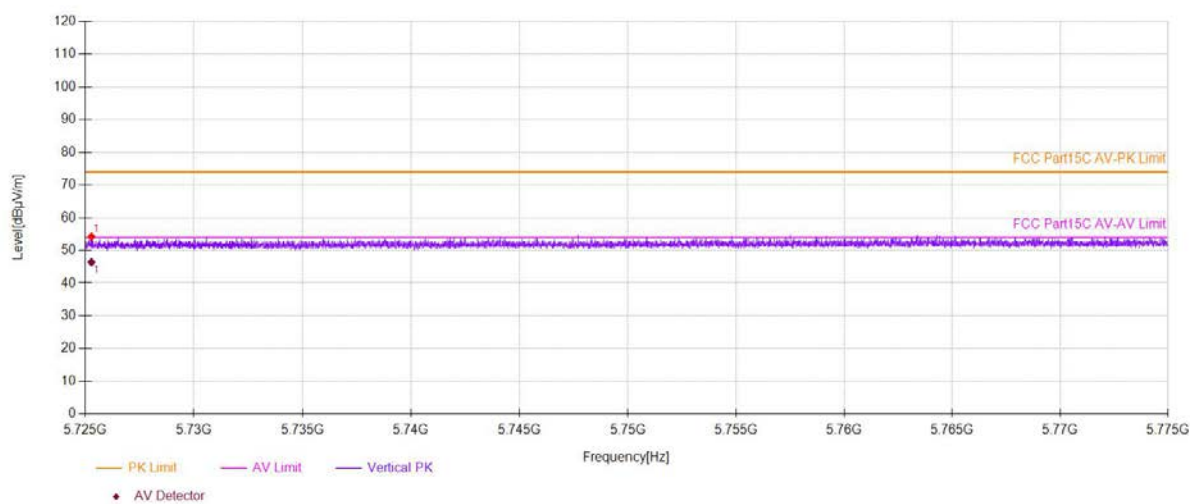
Test Model U-NII -2C
Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11 ac (VHT20)
☒ 5500 ☐ 5580 ☐ 5700 Ant.Pol V



U-NII -2C			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)		
	☐ 802.11a	☒ 802.11n(HT20)	☐ 802.11 ac (VHT20)
	☐ 5500	☐ 5580	☒ 5700
			Ant.Pol H



U-NII -2C			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)		
	☐ 802.11a	☒ 802.11n(HT20)	☐ 802.11 ac (VHT20)
	☐ 5500	☐ 5580	☒ 5700
			Ant.Pol V



- ☒ For Undesirable radiated Spurious Emission in U-NII -3

☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

All of the configurations or modes are tested, the data of the worst case is recorded in the report.
Highest gain of each antenna and highest output power is ANT2 and MIMO as below:

ANT2:

Test mode: 802.11n(20) Frequency(MHz): 5745

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
9192.48	V	55.37	-39.86	-27	12.86
12516.6	V	59.67	-35.56	-27	8.56
17984.9	V	66.77	-28.46	-27	1.46
8229.42	H	54.57	-40.66	-27	13.66
11544.6	H	58.83	-36.4	-27	9.4
17996.9	H	66.45	-28.78	-27	1.78

Test mode: 802.11n(20) Frequency(MHz): 5785

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
9256.48	V	54.87	-40.36	-27	13.36
11571.6	V	61.66	-33.57	-27	6.57
17970.9	V	67.08	-28.15	-27	1.15
9961.52	H	57.89	-37.34	-27	10.34
12796.6	H	61.26	-33.97	-27	6.97
17987.9	H	67.49	-27.74	-27	0.74

Test mode: 802.11n(20) Frequency(MHz): 5825

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
9320.00	V	52.49	-42.74	-27	15.74
13132.7	V	61.27	-33.96	-27	6.96
17991.9	V	67.41	-27.82	-27	0.82
10091.5	H	58.47	-36.76	-27	9.76
13135.7	H	62.87	-32.36	-27	5.36
17997.9	H	67.48	-27.75	-27	0.75

MIMO:

Test mode: 802.11n(20) Frequency(MHz): 5745

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
9191.0900	V	55.24	-39.99	-27	12.99
12515.2100	V	59.51	-35.72	-27	8.72
17986.1800	V	66.74	-28.49	-27	1.49
8241.1100	H	54.49	-40.74	-27	13.74
11556.2900	H	58.62	-36.61	-27	9.61
18008.5900	H	66.29	-28.94	-27	1.94

Test mode: 802.11n(20) Frequency(MHz): 5785

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
9255.0900	V	54.74	-40.49	-27	13.49
11570.2100	V	61.5	-33.73	-27	6.73
17972.1800	V	67.05	-28.18	-27	1.18
9973.2100	H	57.81	-37.42	-27	10.42
12808.2900	H	61.05	-34.18	-27	7.18
17999.5900	H	67.33	-27.90	-27	0.90

Test mode: 802.11n(20) Frequency(MHz): 5825

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
9318.6100	V	52.36	-42.87	-27	15.87
13131.3100	V	61.11	-34.12	-27	7.12
17993.1800	V	67.38	-27.85	-27	0.85
10103.1900	H	58.39	-36.84	-27	9.84
13147.3900	H	62.66	-32.57	-27	5.57
18009.5900	H	67.32	-27.91	-27	0.91

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

ANT2:

Test mode: 802.11n(20)		Frequency(MHz): 5745			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
9192.48	V	55.37	74.00	18.63	Peak
12516.6	V	59.67	74.00	14.33	Peak
17984.9	V	66.77	74.00	7.23	Peak
9191.90	V	47.33	54.00	6.67	Avg
12516.6	V	45.81	54.00	8.19	Avg
17984.9	V	46.47	54.00	7.53	Avg
8229.42	H	54.57	74.00	19.43	Peak
11544.6	H	58.83	74.00	15.17	Peak
17996.9	H	66.45	74.00	7.55	Peak
8229.42	H	38.77	54.00	15.23	Avg
11544.6	H	42.91	54.00	11.09	Avg
17996.9	H	46.71	54.00	7.29	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5785			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
9256.48	V	54.87	74.00	19.13	Peak
11571.6	V	61.66	74.00	12.34	Peak
17970.9	V	67.08	74.00	6.92	Peak
9255.92	V	45.00	54.00	9.00	Avg
11569.5	V	48.07	54.00	5.93	Avg
17970.9	V	46.53	54.00	7.47	Avg
9961.52	H	57.89	74.00	16.11	Peak
12796.6	H	61.26	74.00	12.74	Peak
17987.9	H	67.49	74.00	6.51	Peak
9961.52	H	44.88	54.00	9.12	Avg
12796.6	H	47.29	54.00	6.71	Avg
17987.9	H	46.51	54.00	7.49	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5825			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
9320.00	V	52.49	74.00	21.51	Peak
13132.7	V	61.27	74.00	12.73	Peak
17991.9	V	67.41	74.00	6.59	Peak
9322.77	V	47.35	54.00	6.65	Avg
13132.7	V	46.33	54.00	7.67	Avg
17991.9	V	46.56	54.00	7.44	Avg
10091.5	H	58.47	74.00	15.53	Peak
13135.7	H	62.87	74.00	11.13	Peak
17997.9	H	67.48	74.00	6.52	Peak
10091.5	H	46.05	54.00	7.95	Avg
13135.7	H	46.48	54.00	7.52	Avg
17997.9	H	46.77	54.00	7.23	Avg

MIMO:

Test mode: 802.11n(20)		Frequency(MHz): 5745			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
9191.0900	V	55.24	74.00	18.76	Peak
12515.2100	V	59.51	74.00	14.49	Peak
17986.1800	V	66.74	74.00	7.26	Peak
9193.1800	V	47.31	54.00	6.69	Avg
12514.3500	V	45.55	54.00	8.45	Avg
17982.6500	V	46.28	54.00	7.72	Avg
8241.1100	H	54.49	74.00	19.51	Peak
11556.2900	H	58.62	74.00	15.38	Peak
18008.5900	H	66.29	74.00	7.71	Peak
8241.1100	H	38.63	54.00	15.37	Avg
11541.2900	H	42.73	54.00	11.27	Avg
17993.5900	H	46.58	54.00	7.42	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5785			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
9255.0900	V	54.74	74.00	19.26	Peak
11570.2100	V	61.50	74.00	12.50	Peak
17972.1800	V	67.05	74.00	6.95	Peak
9257.2000	V	44.98	54.00	9.02	Avg
11567.2500	V	47.81	54.00	6.19	Avg
17968.6500	V	46.34	54.00	7.66	Avg
9973.2100	H	57.81	74.00	16.19	Peak
12808.2900	H	61.05	74.00	12.95	Peak
17999.5900	H	67.33	74.00	6.67	Peak
9973.2100	H	44.74	54.00	9.26	Avg
12793.2900	H	47.11	54.00	6.89	Avg
17984.5900	H	46.38	54.00	7.62	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5825			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
9318.6100	V	52.36	74.00	21.64	Peak
13131.3100	V	61.11	74.00	12.89	Peak
17993.1800	V	67.38	74.00	6.62	Peak
9324.0500	V	47.33	54.00	6.67	Avg
13130.4500	V	46.07	54.00	7.93	Avg
17989.6500	V	46.37	54.00	7.63	Avg
10103.1900	H	58.39	74.00	15.61	Peak
13147.3900	H	62.66	74.00	11.34	Peak
18009.5900	H	67.32	74.00	6.68	Peak
10103.1900	H	45.91	54.00	8.09	Avg
13132.3900	H	46.30	54.00	7.70	Avg
17994.5900	H	46.64	54.00	7.36	Avg

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Spurious Emission in band edge

Test mode:		802.11n(HT20)		Frequency:		5745	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict		
5724.31	V	56.20	-39.03	-27	PASS		
5724.43	H	53.19	-42.04	-27	PASS		

Test mode:		802.11n(HT20)		Frequency:		5825	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict		
5851.12	V	54.37	-40.86	-27	PASS		
5853.00	H	54.29	-40.94	-27	PASS		

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).

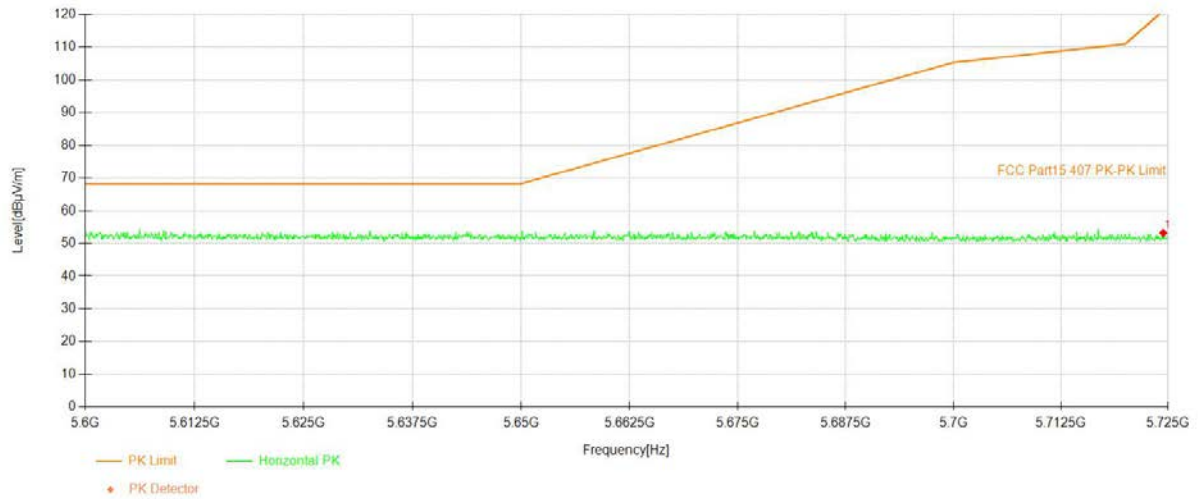
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.

(3) Correct Factor= Ant_F + Cab_L - Preamp

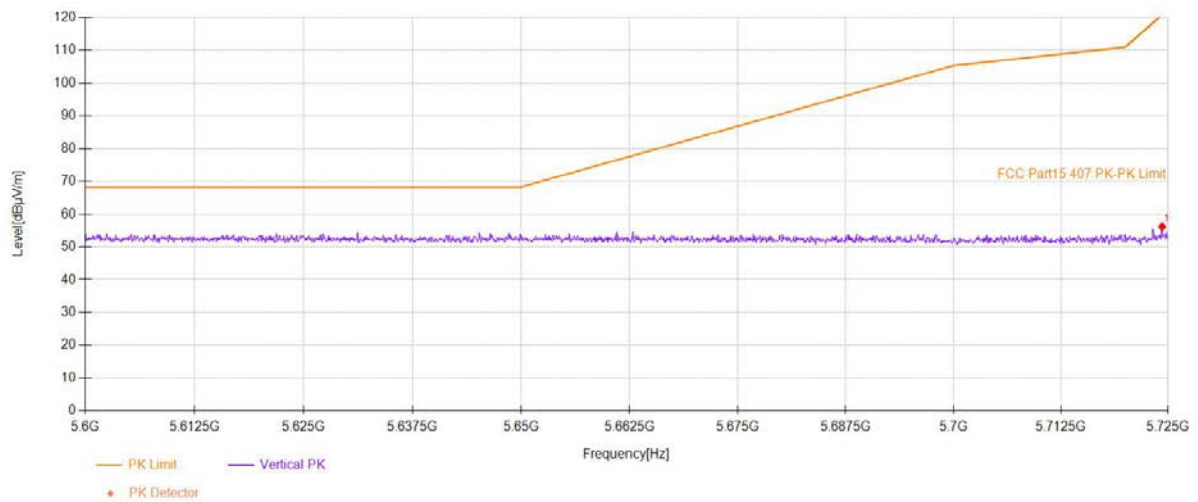
(4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77

d is the measurement distance in 3 meters

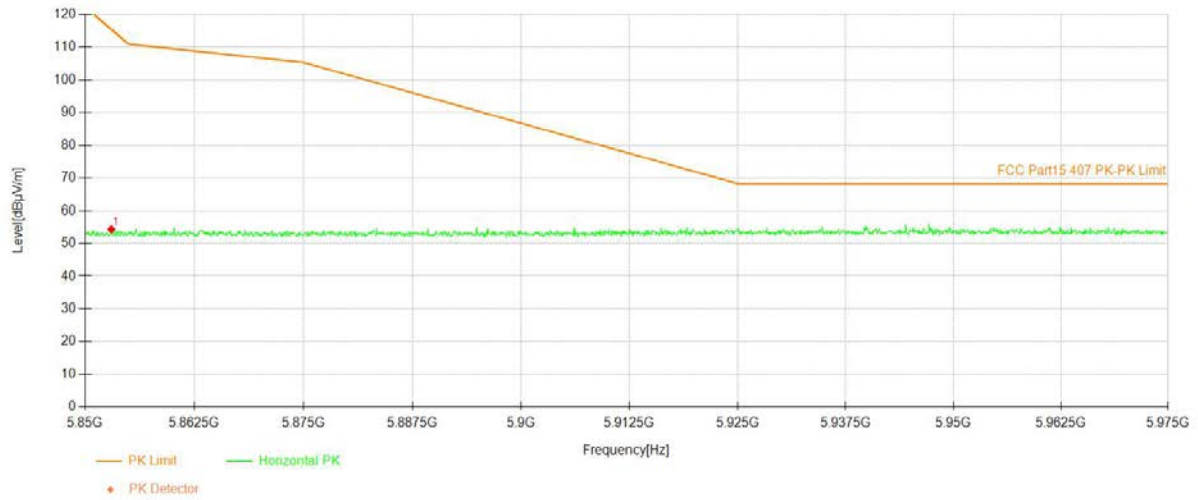
Test Model U-NII -3
 Undesirable radiated ☐ 802.11a Undesirable radiated ☒ 5745 Spurious Emission in Band Edge ☐ 802.11n(HT20) ☐ 802.11n(HT40)
 Ant.Pol H



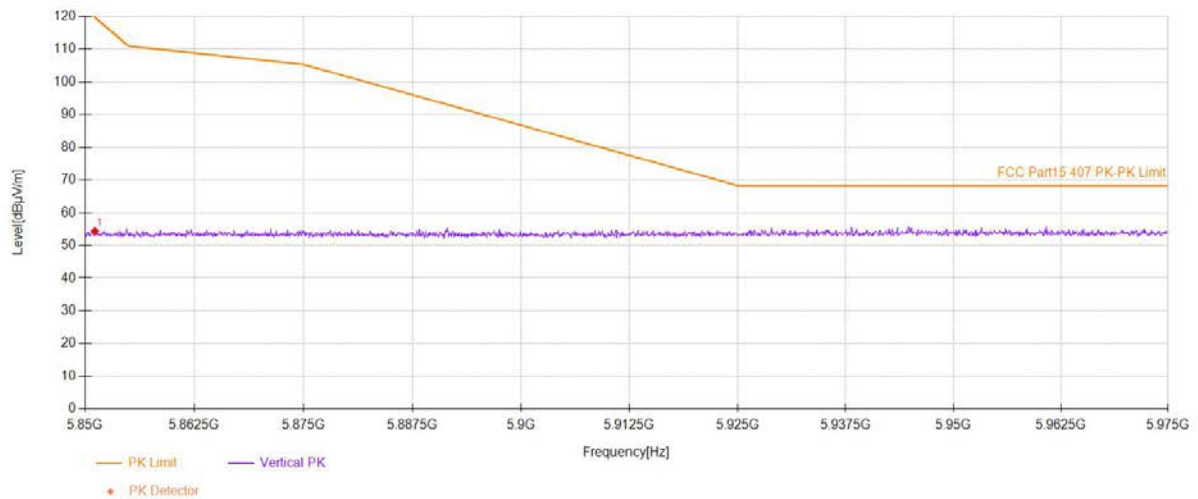
Test Model U-NII -3
 Undesirable radiated ☐ 802.11a Undesirable radiated ☒ 5745 Spurious Emission in Band Edge ☐ 802.11n(HT20) ☐ 802.11n(HT40)
 Ant.Pol V



Test Model U-NII -3
Undesirable radiated Undesirable radiated Spurious Emission in Band Edge
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11n(HT40)
☒ 5825 Ant.Pol H

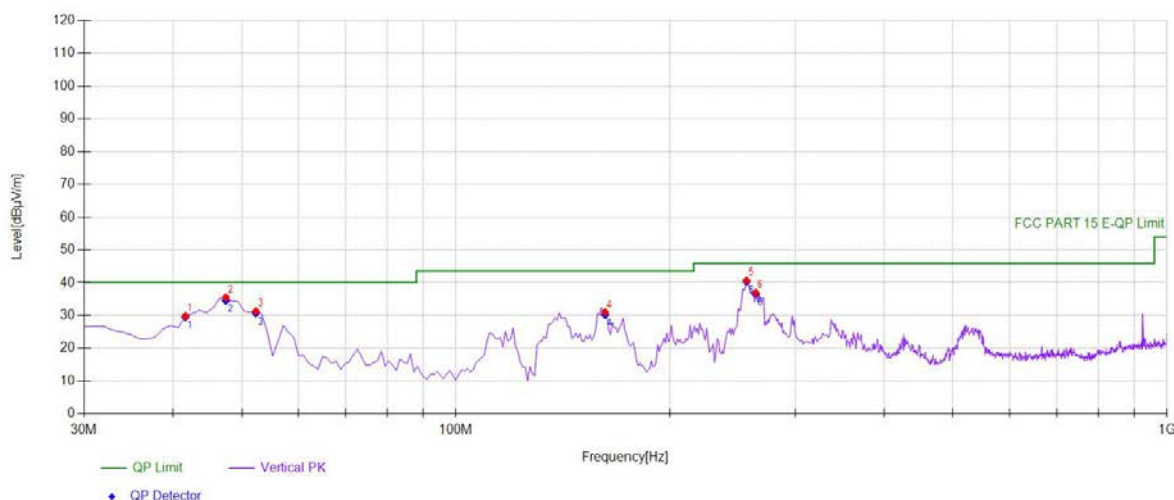


Test Model U-NII -3
Undesirable radiated Undesirable radiated Spurious Emission in Band Edge
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11n(HT40)
☒ 5825 Ant.Pol V



- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)
All of the configurations or modes are tested, the data of the worst case is recorded in the report.

Test mode: 802.11A(20) Frequency(MHz): 5180

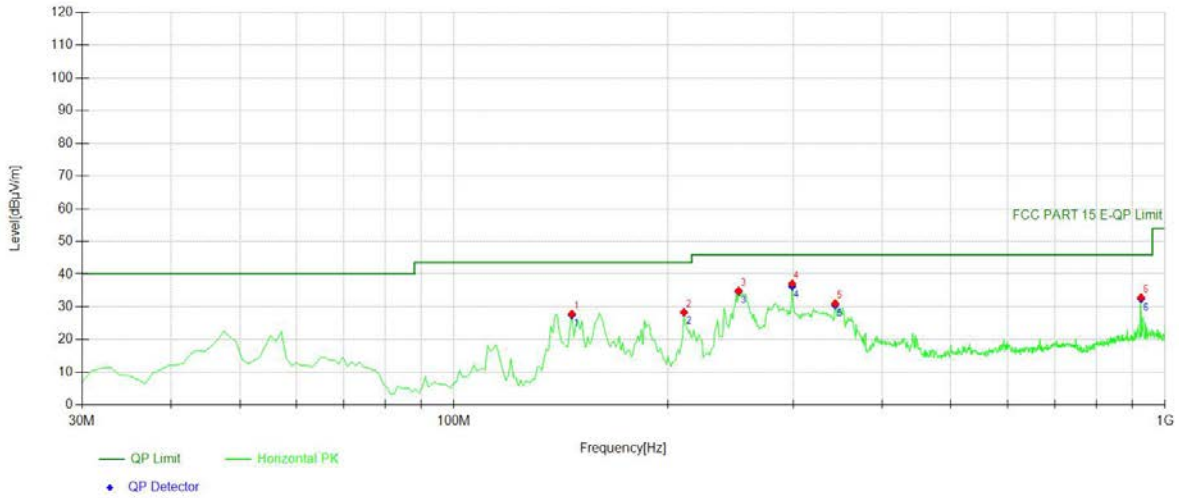


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	41.6517	53.03	-23.22	29.81	PK	40.00	10.19	Vertical
2	47.4775	57.84	-22.39	35.45	PK	40.00	4.55	Vertical
3	52.3323	53.60	-22.34	31.26	PK	40.00	8.74	Vertical
4	162.052	56.33	-25.35	30.98	PK	43.50	12.52	Vertical
5	256.236	62.41	-21.71	40.70	PK	46.00	5.30	Vertical
6	264.004	58.47	-21.53	36.94	PK	46.00	9.06	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	41.6517	-23.22	29.51	40.00	10.49
2	47.4775	-22.39	34.51	40.00	5.49
3	52.3323	-22.34	30.68	40.00	9.32
4	162.0521	-25.35	30.23	43.50	13.27
5	256.2362	-21.71	40.31	46.00	5.69
6	264.004	-21.53	36.55	46.00	9.45



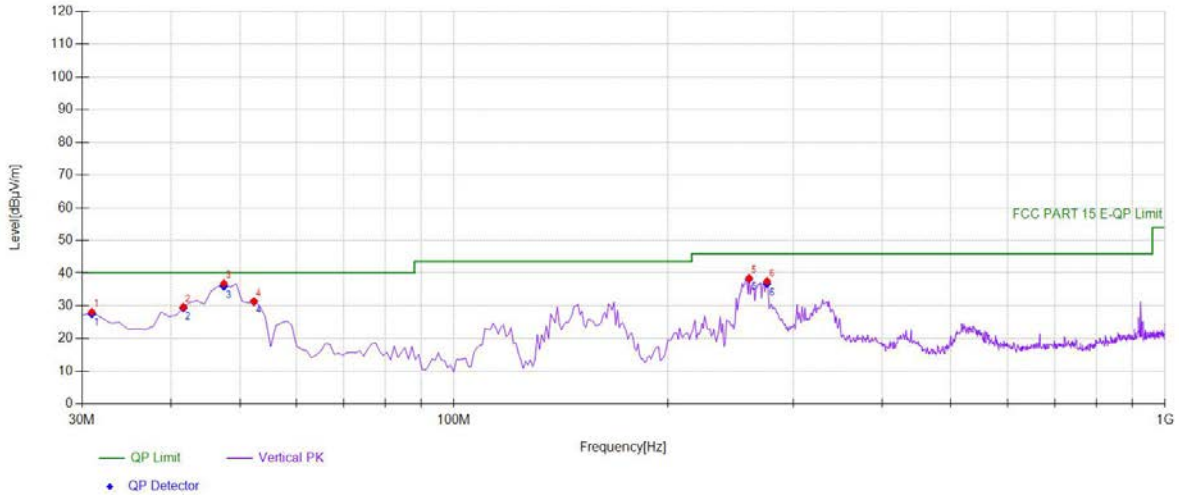
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	146.516	53.54	-25.65	27.89	PK	43.50	15.61	Horizontal
2	210.600	51.26	-22.94	28.32	PK	43.50	15.18	Horizontal
3	251.381	56.63	-21.75	34.88	PK	46.00	11.12	Horizontal
4	298.959	57.09	-20.00	37.09	PK	46.00	8.91	Horizontal
5	343.623	49.31	-18.30	31.01	PK	46.00	14.99	Horizontal
6	925.235	41.58	-8.70	32.88	PK	46.00	13.12	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	146.5165	-25.65	27.51	43.50	15.99
2	210.6006	-22.94	28.30	43.50	15.20
3	251.3814	-21.75	34.70	46.00	11.30
4	298.959	-20.00	36.27	46.00	9.73
5	343.6236	-18.30	30.55	46.00	15.45
6	925.2352	-8.70	32.42	46.00	13.58

Test mode: 802.11A(20) Frequency(MHz): 5200

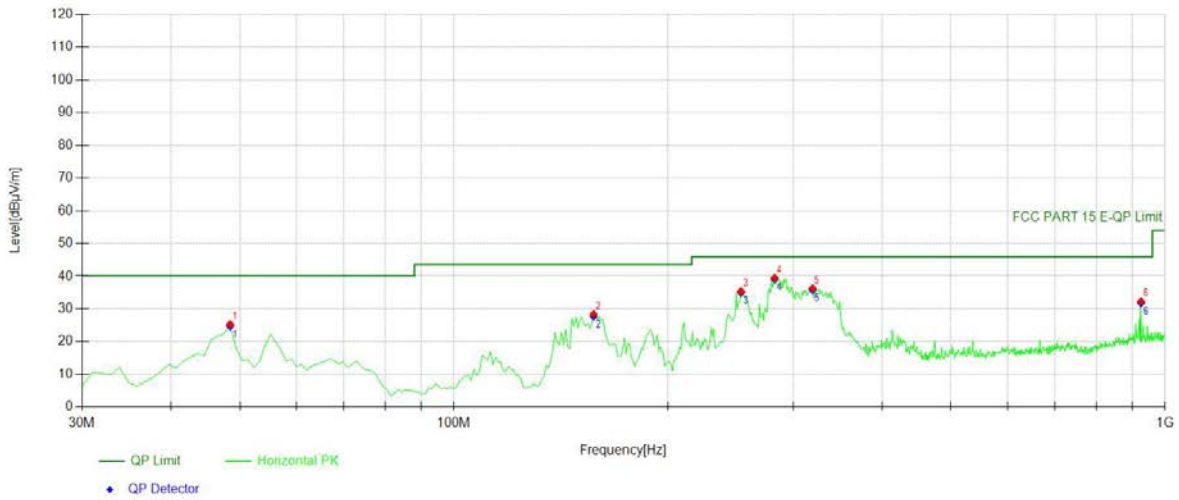


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	30.971	52.80	-24.67	28.13	PK	40.00	11.87	Vertical
2	41.6517	52.88	-23.22	29.66	PK	40.00	10.34	Vertical
3	47.4775	59.25	-22.39	36.86	PK	40.00	3.14	Vertical
4	52.3323	53.74	-22.34	31.40	PK	40.00	8.60	Vertical
5	260.120	60.08	-21.67	38.41	PK	46.00	7.59	Vertical
6	275.655	58.54	-21.02	37.52	PK	46.00	8.48	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	30.971	-24.67	27.46	40.00	12.54
2	41.6517	-23.22	29.35	40.00	10.65
3	47.4775	-22.39	35.91	40.00	4.09
4	52.3323	-22.34	31.28	40.00	8.72
5	260.1201	-21.67	38.29	46.00	7.71
6	275.6557	-21.02	36.76	46.00	9.24



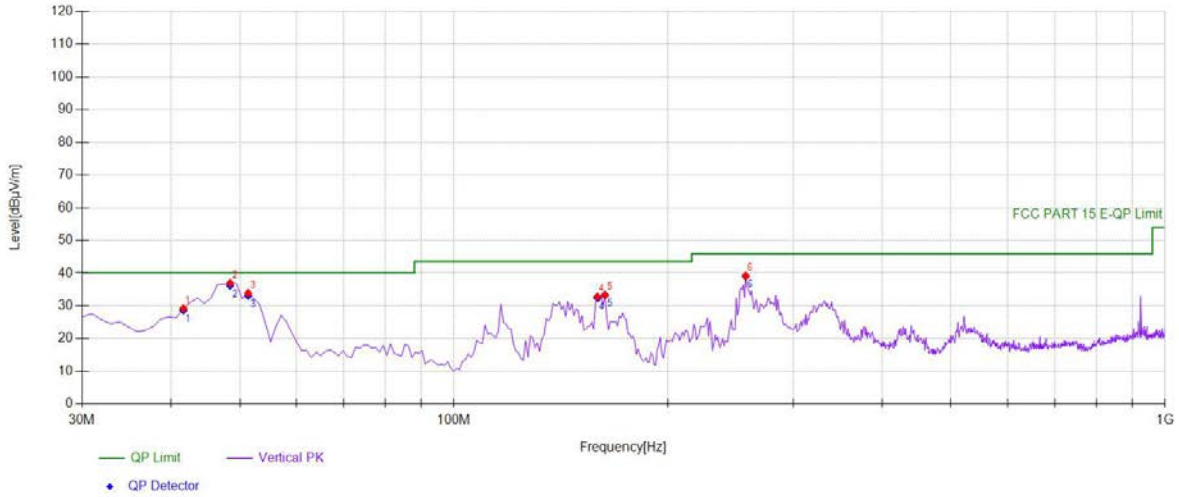
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	48.4484	47.53	-22.24	25.29	PK	40.00	14.71	Horizontal
2	157.197	53.87	-25.46	28.41	PK	43.50	15.09	Horizontal
3	253.323	57.09	-21.74	35.35	PK	46.00	10.65	Horizontal
4	282.452	60.13	-20.69	39.44	PK	46.00	6.56	Horizontal
5	319.349	55.88	-19.59	36.29	PK	46.00	9.71	Horizontal
6	925.235	41.00	-8.70	32.30	PK	46.00	13.70	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	48.4484	-22.24	24.76	40.00	15.24
2	157.1972	-25.46	27.71	43.50	15.79
3	253.3233	-21.74	35.01	46.00	10.99
4	282.4525	-20.69	39.10	46.00	6.90
5	319.3493	-19.59	35.79	46.00	10.21
6	925.2352	-8.70	31.80	46.00	14.20

Test mode: 802.11A(20) Frequency(MHz): 5240

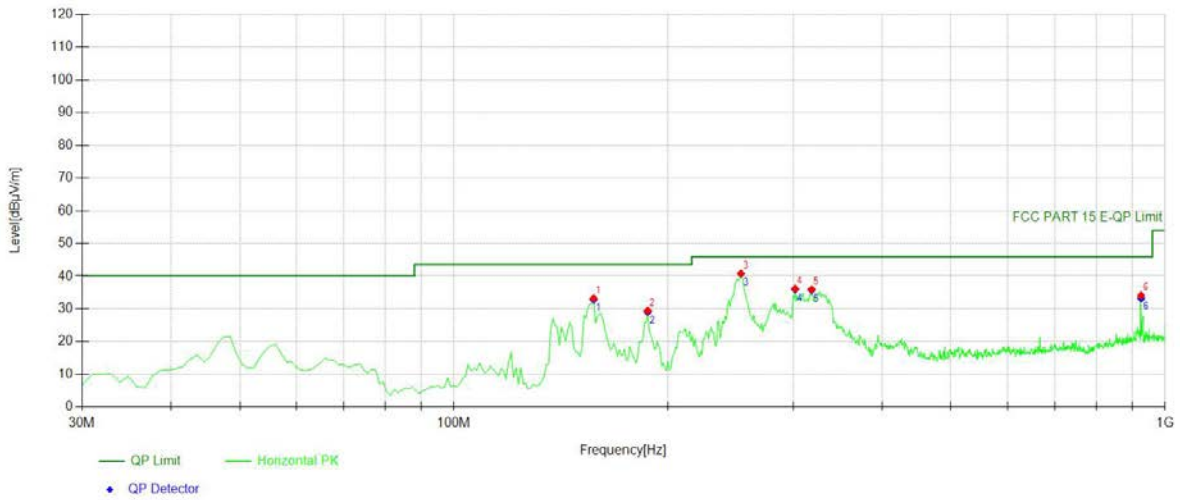


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	41.6517	52.42	-23.22	29.20	PK	40.00	10.80	Vertical
2	48.4484	59.19	-22.24	36.95	PK	40.00	3.05	Vertical
3	51.3614	56.10	-22.21	33.89	PK	40.00	6.11	Vertical
4	159.139	58.26	-25.43	32.83	PK	43.50	10.67	Vertical
5	163.023	58.66	-25.31	33.35	PK	43.50	10.15	Vertical
6	257.207	60.84	-21.71	39.13	PK	46.00	6.87	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	41.6517	-23.22	28.59	40.00	11.41
2	48.4484	-22.24	36.17	40.00	3.83
3	51.3614	-22.21	33.11	40.00	6.89
4	159.1391	-25.43	32.41	43.50	11.09
5	163.023	-25.31	33.29	43.50	10.21
6	257.2072	-21.71	39.07	46.00	6.93



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	157.197	58.67	-25.46	33.21	PK	43.50	10.29	Horizontal
2	187.297	53.68	-24.22	29.46	PK	43.50	14.04	Horizontal
3	253.323	62.54	-21.74	40.80	PK	46.00	5.20	Horizontal
4	301.871	56.06	-19.91	36.15	PK	46.00	9.85	Horizontal
5	318.378	55.53	-19.60	35.93	PK	46.00	10.07	Horizontal
6	925.235	42.78	-8.70	34.08	PK	46.00	11.92	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	157.1972	-25.46	32.82	43.50	10.68
2	187.2973	-24.22	29.07	43.50	14.43
3	253.3233	-21.74	40.77	46.00	5.23
4	301.8719	-19.91	35.95	46.00	10.05
5	318.3784	-19.60	35.73	46.00	10.27
6	925.2352	-8.70	33.24	46.00	12.76

8.5 POWER LINE CONDUCTED EMISSIONS

8.5.1 Applicable Standard

According to FCC Part 15.207(a)

8.5.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

8.5.3 Test Configuration

Test according to clause 6.3 conducted emission test setup

8.5.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.

Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Repeat above procedures until all frequency measured were complete.

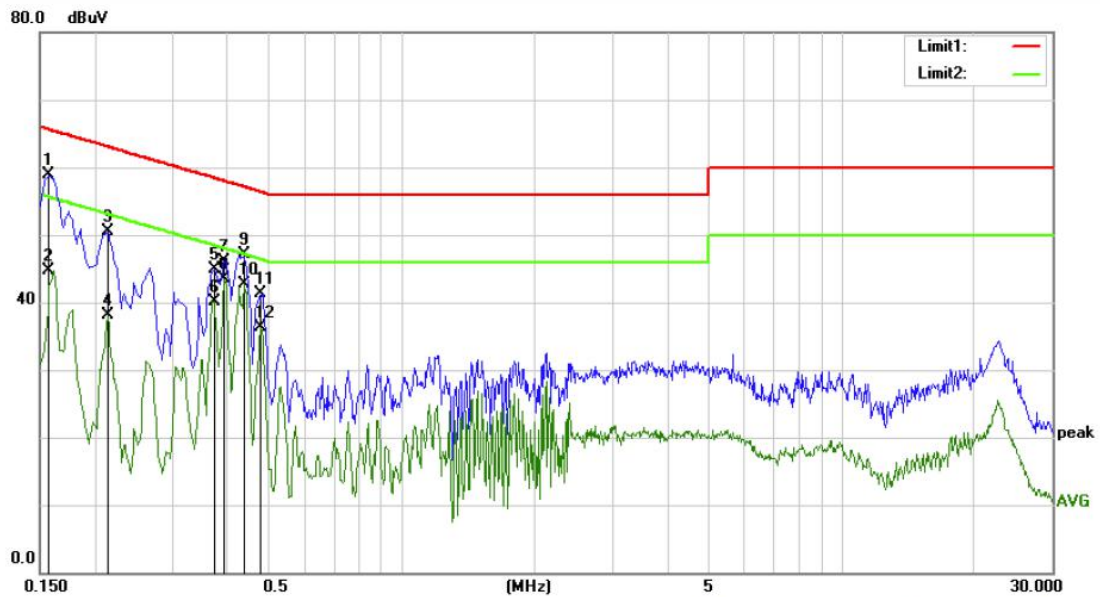
8.5.5 Test Results

Temperature : 24.8°C
Humidity : 48%

ATM Pressure: 1011 mbar
Test Engineer: KK

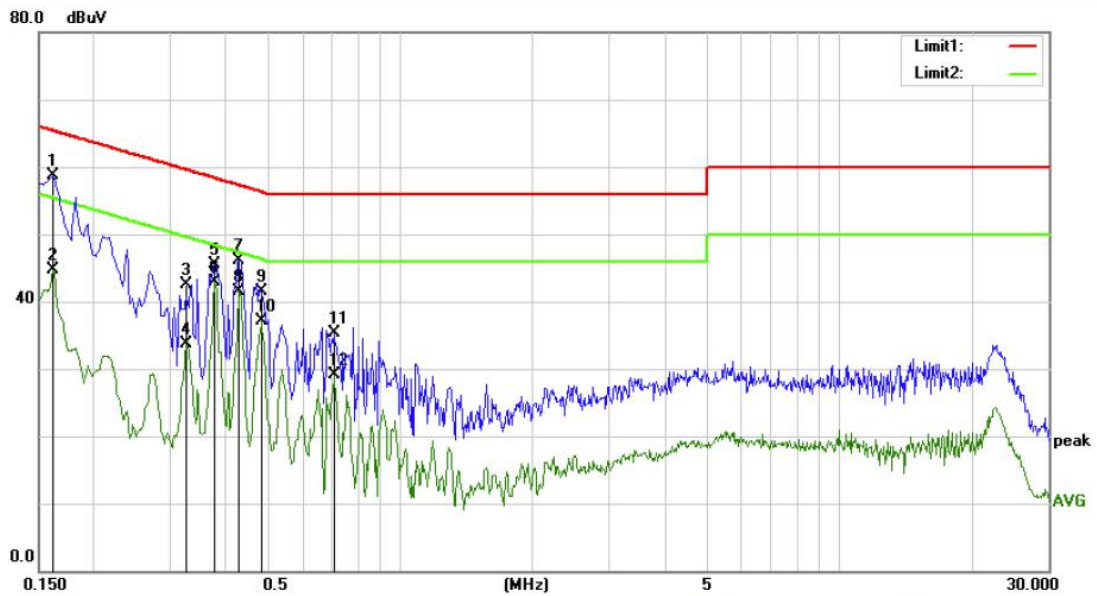
Pass

The all voltage have been tested, and the worst result recorded was report as below.



Site Conduction 2# Phase: **N** Temperature: 24.8

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1580	48.16	10.69	58.85	65.57	-6.72	QP	
2		0.1580	33.99	10.69	44.68	55.57	-10.89	AVG	
3		0.2140	39.85	10.66	50.51	63.05	-12.54	QP	
4		0.2140	27.49	10.66	38.15	53.05	-14.90	AVG	
5		0.3740	34.16	10.71	44.87	58.41	-13.54	QP	
6		0.3740	29.44	10.71	40.15	48.41	-8.26	AVG	
7		0.3940	35.46	10.72	46.18	57.98	-11.80	QP	
8		0.3940	32.69	10.72	43.41	47.98	-4.57	AVG	
9		0.4380	36.29	10.72	47.01	57.10	-10.09	QP	
10	*	0.4380	31.89	10.72	42.61	47.10	-4.49	AVG	
11		0.4780	30.65	10.74	41.39	56.37	-14.98	QP	
12		0.4780	25.55	10.74	36.29	46.37	-10.08	AVG	



Site Conduction 2#				Phase: L1		Temperature: 24.8		
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			
			dBuV	dB	dBuV	dBuV	dB	Detector Comment
1		0.1620	48.02	10.69	58.71	65.36	-6.65	QP
2		0.1620	34.08	10.69	44.77	55.36	-10.59	AVG
3		0.3260	31.85	10.70	42.55	59.55	-17.00	QP
4		0.3260	22.97	10.70	33.67	49.55	-15.88	AVG
5		0.3780	34.84	10.71	45.55	58.32	-12.77	QP
6	*	0.3780	32.21	10.71	42.92	48.32	-5.40	AVG
7		0.4300	35.35	10.72	46.07	57.25	-11.18	QP
8		0.4300	30.81	10.72	41.53	47.25	-5.72	AVG
9		0.4820	30.85	10.74	41.59	56.30	-14.71	QP
10		0.4820	26.37	10.74	37.11	46.30	-9.19	AVG
11		0.7060	24.63	10.74	35.37	56.00	-20.63	QP
12		0.7060	18.34	10.74	29.08	46.00	-16.92	AVG

8.6 ANTENNA APPLICATION

8.6.1 Antenna Requirement

Standard	Requirement
FCC CRF Part 15.203	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

8.6.2 Result

Temperature : 25°C ATM Pressure:: 1011 mbar
Humidity : 60 % Test Engineer: GJ

PASS

The EUT is integrated antenna, antenna gain is Ant1: 5.63dBi, Ant2: 5.80dBi, Ant3: 5.56dBi.

- ☒ Antennas use a permanently attached antenna which is not replaceable.
- ☐ Not using a standard antenna jack or electrical connector for antenna replacement
- ☐ The antenna has to be professionally installed (please provide method of installation)

Which in accordance to section 15.203, please refer to the internal photos.

Detail of factor for radiated emission:

Frequency(MHz)	Ant_F(dB)	Cab_L(dB)	Preamp(dB)	Correct Factor(dB)
0.009	20.6	0.03	\	20.63
0.15	20.7	0.1	\	20.8
1	20.9	0.15	\	21.05
10	20.1	0.28	\	20.38
30	18.8	0.45	\	19.25
30	11.7	0.62	27.9	-15.58
100	12.5	1.02	27.8	-14.28
300	12.9	1.91	27.5	-12.69
600	19.2	2.92	27	-4.88
800	21.1	3.54	26.6	-1.96
1000	22.3	4.17	26.2	0.27
1000	25.6	1.76	41.4	-14.04
3000	28.9	3.27	43.2	-11.03
5000	31.1	4.2	44.6	-9.3
8000	36.2	5.95	44.7	-2.55
10000	38.4	6.3	43.9	0.8
12000	38.5	7.14	42.3	3.34
15000	40.2	8.15	41.4	6.95
18000	45.4	9.02	41.3	13.12
18000	37.9	1.81	47.9	-8.19
21000	37.9	1.95	48.7	-8.85
25000	39.3	2.01	42.8	-1.49
28000	39.6	2.16	46.0	-4.24
31000	41.2	2.24	44.5	-1.06
34000	41.5	2.29	46.6	-2.81
37000	43.8	2.30	46.4	-0.3
40000	43.2	2.50	42.2	3.5

--- End of Report ---

声 明 Statement

1. 本报告无授权批准人签字及“检验检测专用章”无效。
1. This report is invalid without the signature of the authorized approver and "special seal for testing".
2. 未经许可本报告不得部分复制。
2. This report shall not be copied partly without authorization.
3. 本报告的检测结果仅对送测样品有效，委托方对样品的代表性和资料的真实性负责。
3. The test results or observations are applicable only to tested sample. Client shall be responsible for representativeness of the sample and authenticity of the material.
4. 本检测报告中检测项目标注有特殊符号则该项目不在资质认定范围内，仅作为客户委托、科研、教学或内部质量控制等目的使用。
4. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
5. 本检测报告以实测值进行符合性判定，未考虑不确定度所带来的风险，本实验室不承担相关责任，特别约定、标准或规范中有明确规定的除外。
5. The test results or observations are provided in accordance with measured value, without taking risks caused by uncertainty into account. Without explicit stipulation in special agreements, standards or regulations, EMTEK shall not assume any responsibility.
6. 对本检验报告若有异议，请于收到报告之日起 20 日内提出。
6. Objections shall be raised within 20 days from the date receiving the report.