



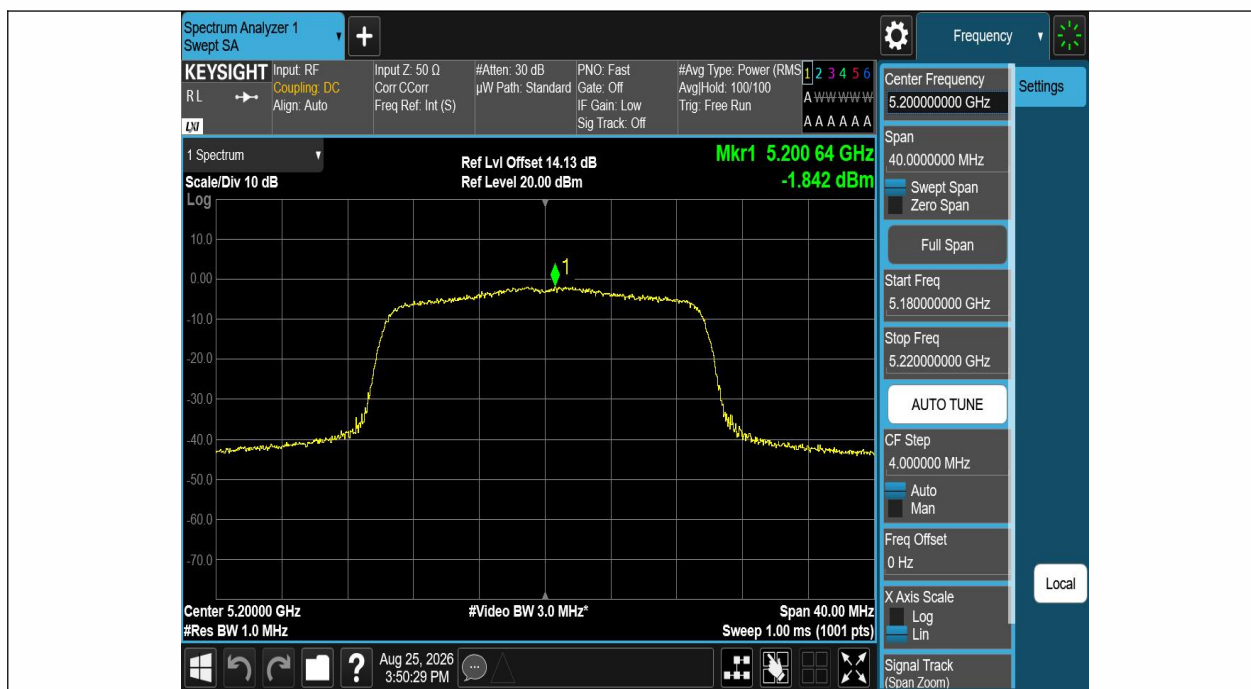




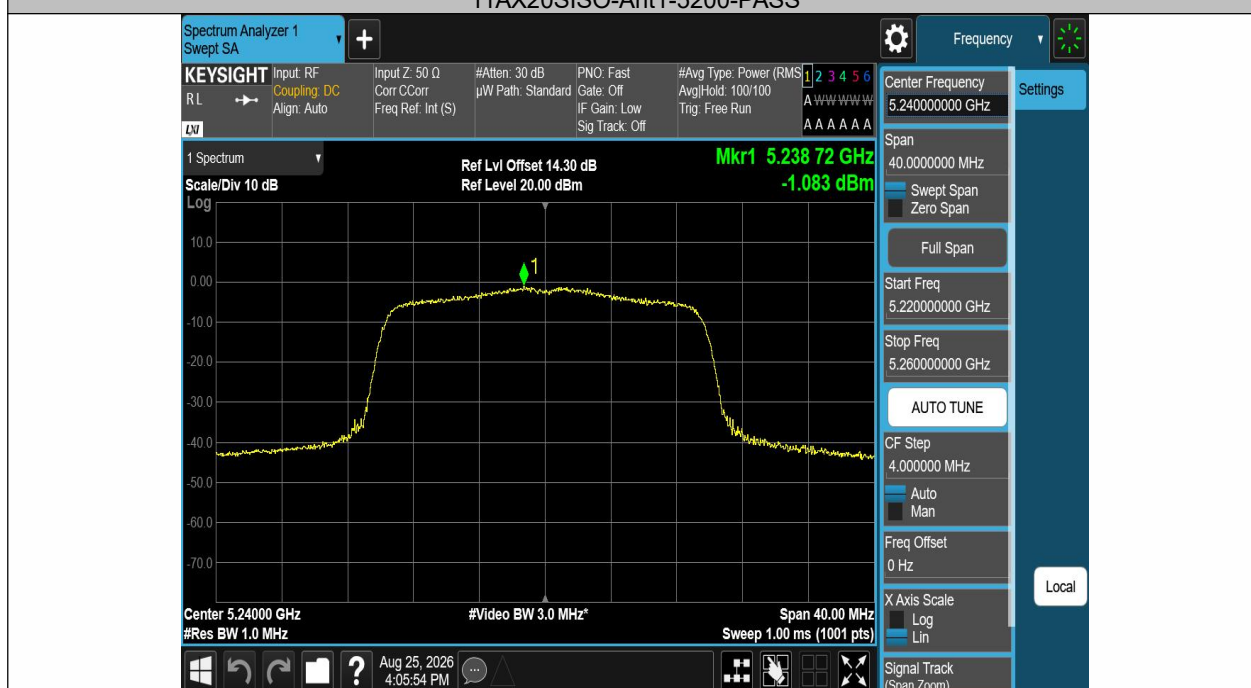








11AX20SISO-Ant1-5200-PASS



11AX20SISO-Ant1-5240-PASS



11AX20SISO-Ant1-5260-PASS

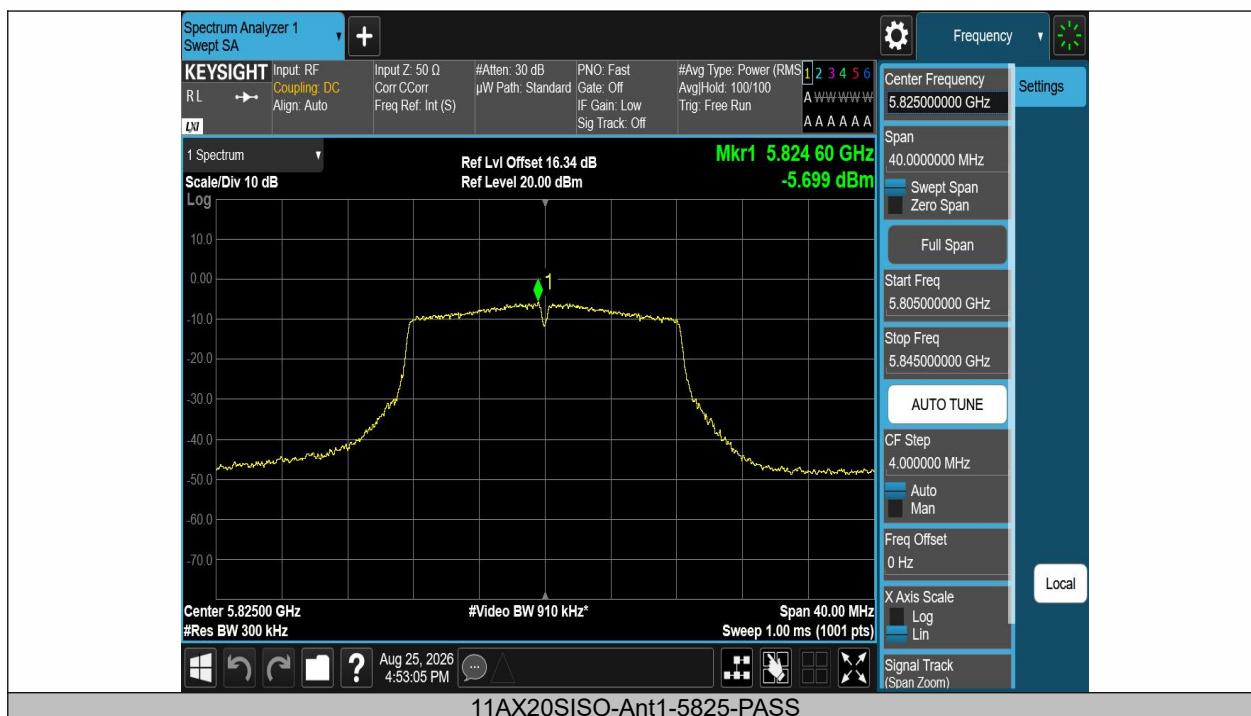


11AX20SISO-Ant1-5280-PASS









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 (uV/m)	300
0.490-1.705	2400/F(KHz)	20 log (uV/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 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 $f < 1 \text{ GHz}$ (30MHz to 1GHz), 200Hz for $f < 150\text{kHz}$ (9kHz to 150kHz), 9kHz for $f < 30\text{MHz}$ (150kHz to 30kHz).

Set the VBW > RBW.

Detector = Peak.

Trace mode = max hold.

Follow the guidelines in ANSI C63.10-2020 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: CCYF

- ☒ 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 ANT1 and MIMO as below:

ANT1:

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)
5461.942	V	54.76	-40.47	-27	-13.47
7150.534	V	56.28	-38.95	-27	-11.95
11031.36	V	58.01	-37.22	-27	-10.22
6936.783	H	56.51	-38.72	-27	-11.72
10268.3	H	58.34	-36.89	-27	-9.89
12512.93	H	56.85	-38.38	-27	-11.38

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)
5473.004	V	54.76	-40.47	-27	-13.47
6896.799	V	56.25	-38.98	-27	-11.98
10661.47	V	58.32	-36.91	-27	-9.91
5457.208	H	55.43	-39.8	-27	-12.8
6803.741	H	56.29	-38.94	-27	-11.94
11211.37	H	59.3	-35.93	-27	-8.93

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)
7454.429	V	57.22	-38.01	-27	-11.01
10215.01	V	57.53	-37.7	-27	-10.7
12909.7	V	56.66	-38.57	-27	-11.57
5471.422	H	56.18	-39.05	-27	-12.05
6815.551	H	44.76	-50.47	-27	-23.47
10303.97	H	58.08	-37.15	-27	-10.15

ANT1:

Test mode: 802.11n(20)		Frequency(MHz): 5180			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5461.942	V	54.76	74.00	-19.24	Peak
5461.942	V	41.05	54.00	-12.95	Avg
7150.534	V	56.28	74.00	-17.72	Peak
7150.534	V	43.18	54.00	-10.82	Avg
11031.36	V	58.01	74.00	-15.99	Peak
11031.36	V	45.75	54.00	-8.25	Avg
6936.783	H	56.51	74.00	-17.49	Peak
6936.783	H	43.60	54.00	-10.40	Avg
10268.30	H	58.34	74.00	-15.66	Peak
10268.30	H	46.64	54.00	-7.36	Avg
12512.93	H	56.85	74.00	-17.15	Peak
12512.93	H	46.18	54.00	-7.82	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5200			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5473.004	V	54.76	74.00	-19.24	Peak
5473.004	V	42.26	54.00	-11.74	Avg
6896.799	V	56.25	74.00	-17.75	Peak
6896.799	V	44.73	54.00	-9.27	Avg
10661.47	V	58.32	74.00	-15.68	Peak
10661.47	V	46.92	54.00	-7.08	Avg
5457.208	H	55.43	74.00	-18.57	Peak
5457.208	H	41.09	54.00	-12.91	Avg
6803.741	H	56.29	74.00	-17.71	Peak
6803.741	H	42.14	54.00	-11.86	Avg
11211.37	H	59.30	74.00	-14.70	Peak
11211.37	H	45.06	54.00	-8.94	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5240			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
7454.429	V	57.22	74.00	-16.78	Peak
7454.429	V	45.57	54.00	-8.43	Avg
10215.01	V	57.53	74.00	-16.47	Peak
10215.01	V	45.63	54.00	-8.37	Avg
12909.70	V	56.66	74.00	-17.34	Peak
12909.70	V	44.29	54.00	-9.71	Avg
5471.422	H	56.18	74.00	-17.82	Peak
5471.422	H	44.63	54.00	-9.37	Avg
6815.551	H	56.98	74.00	-17.02	Peak
6815.551	H	44.76	54.00	-9.24	Avg
10303.97	H	58.08	74.00	-15.92	Peak
10303.97	H	46.19	54.00	-7.81	Avg

● ☒ 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
5073.885	V	50.91	-44.32	-27	Pass
5149.155	H	56.58	-38.65	-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
5416.352	V	53.61	-41.62	-27	Pass
5449.847	H	53.5	-41.73	-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

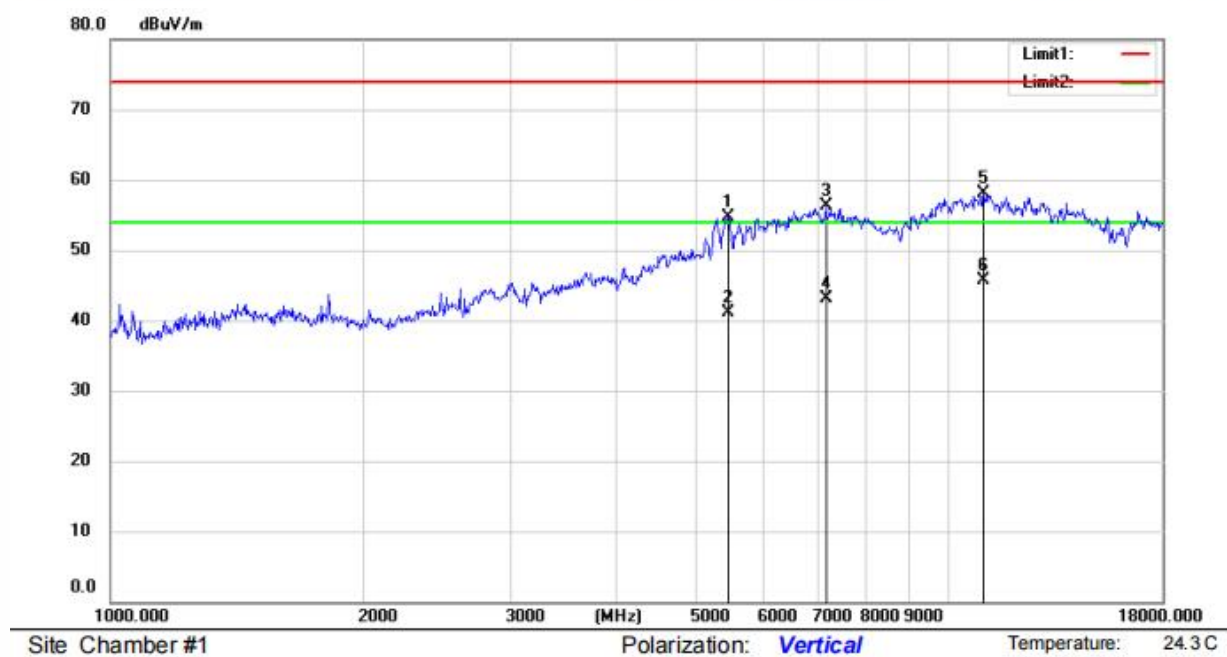
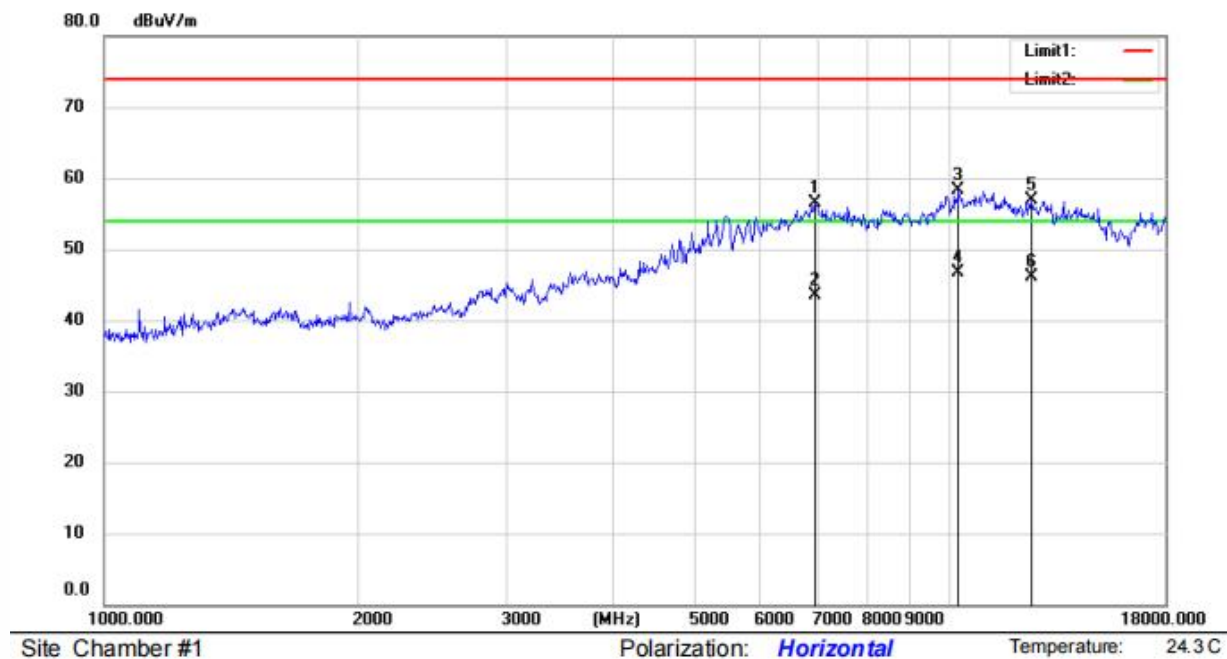
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5073.885	V	50.91	74.00	-23.09	Peak
5073.885	V	36.94	54.00	-17.06	Avg
5149.155	H	56.58	74.00	-17.42	Peak
5149.155	H	41.36	54.00	-12.64	Avg

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

Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5416.352	V	53.61	74.00	-20.39	Peak
5416.352	V	39.46	54.00	-14.54	Avg
5449.847	H	53.50	74.00	-20.50	Peak
5449.847	H	39.37	54.00	-14.63	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.

Channel 36: 5180MHz



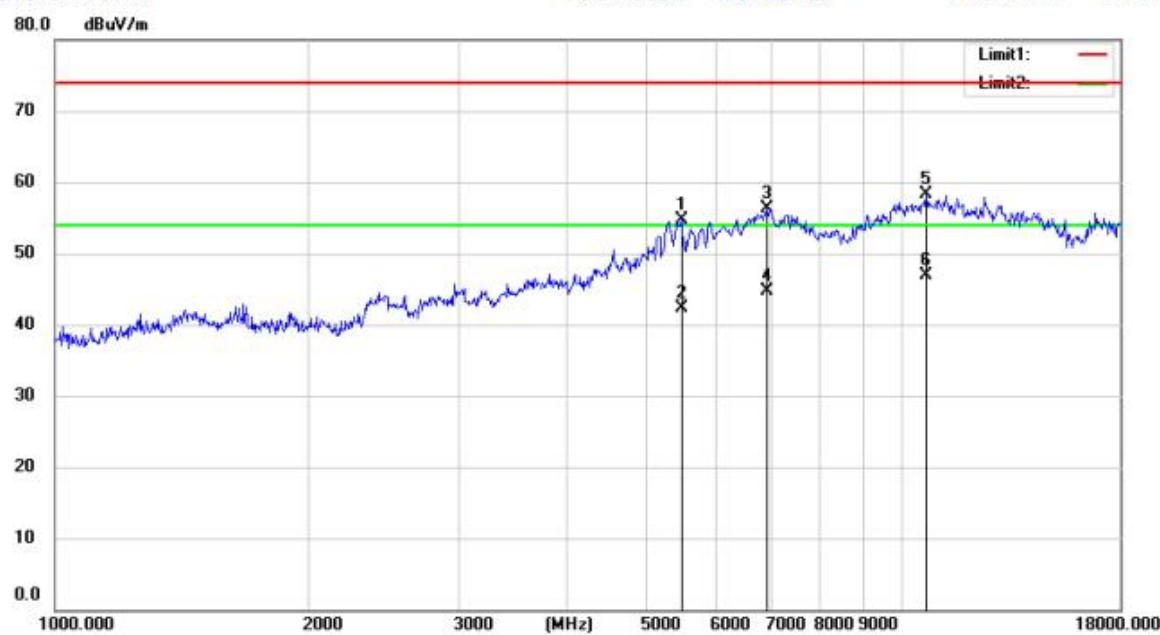
Channel 40: 5200MHz



Site Chamber #1

Polarization: **Horizontal**

Temperature: 24.3 C

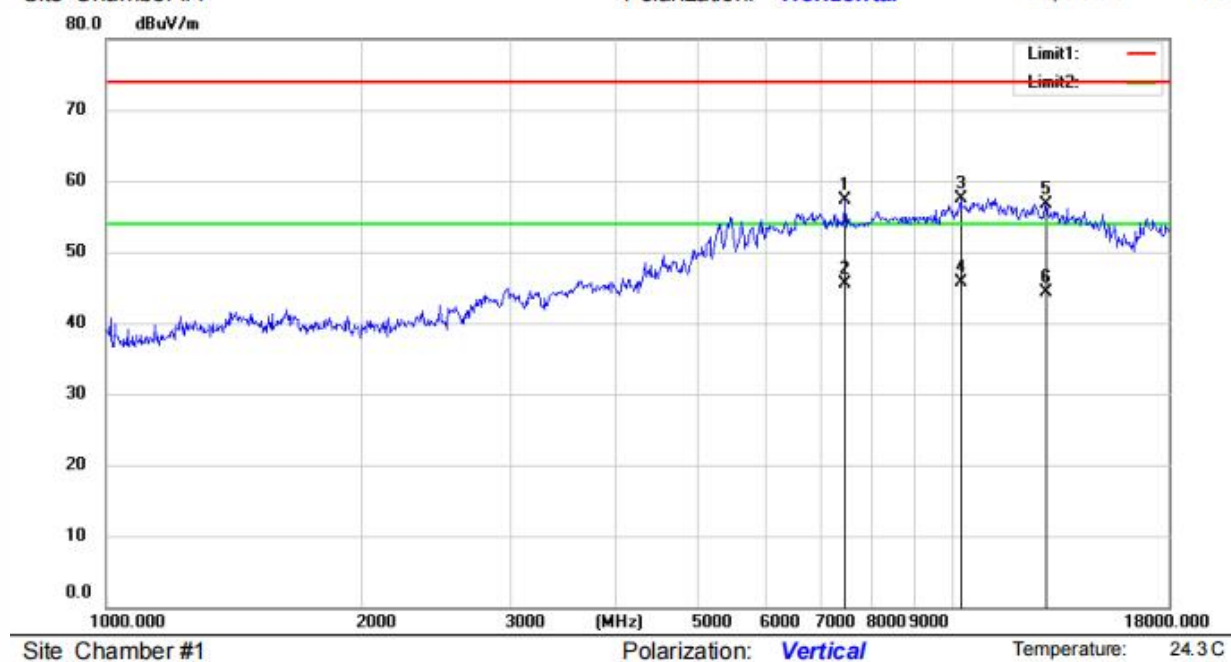
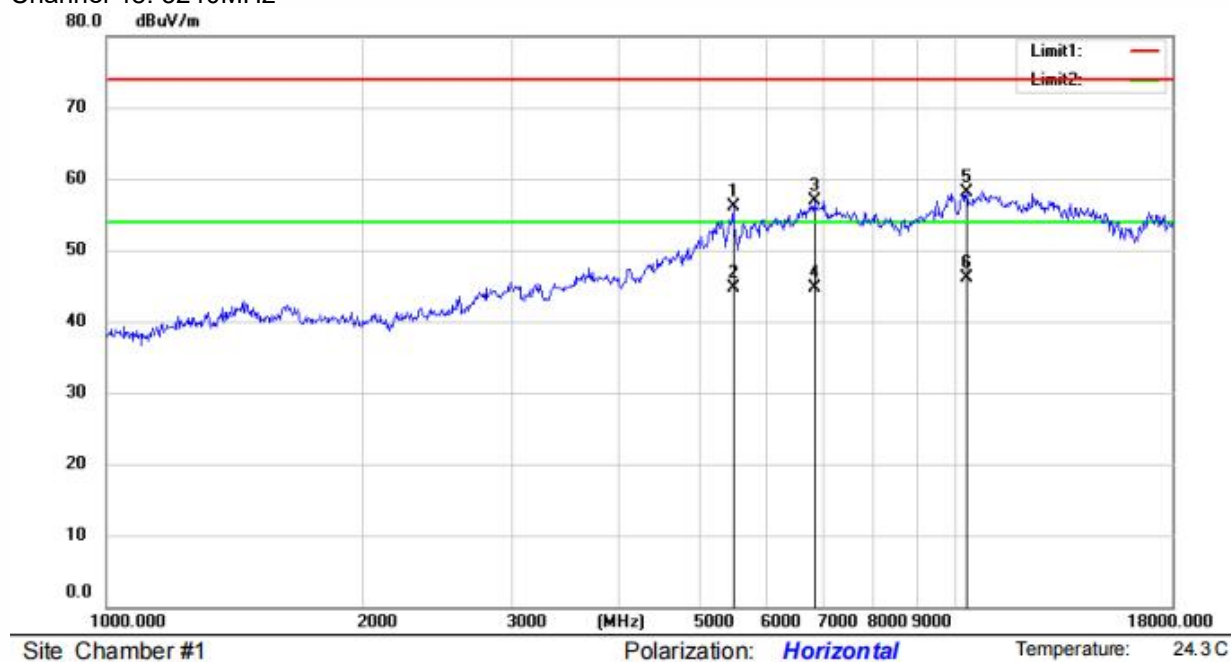


Site Chamber #1

Polarization: **Vertical**

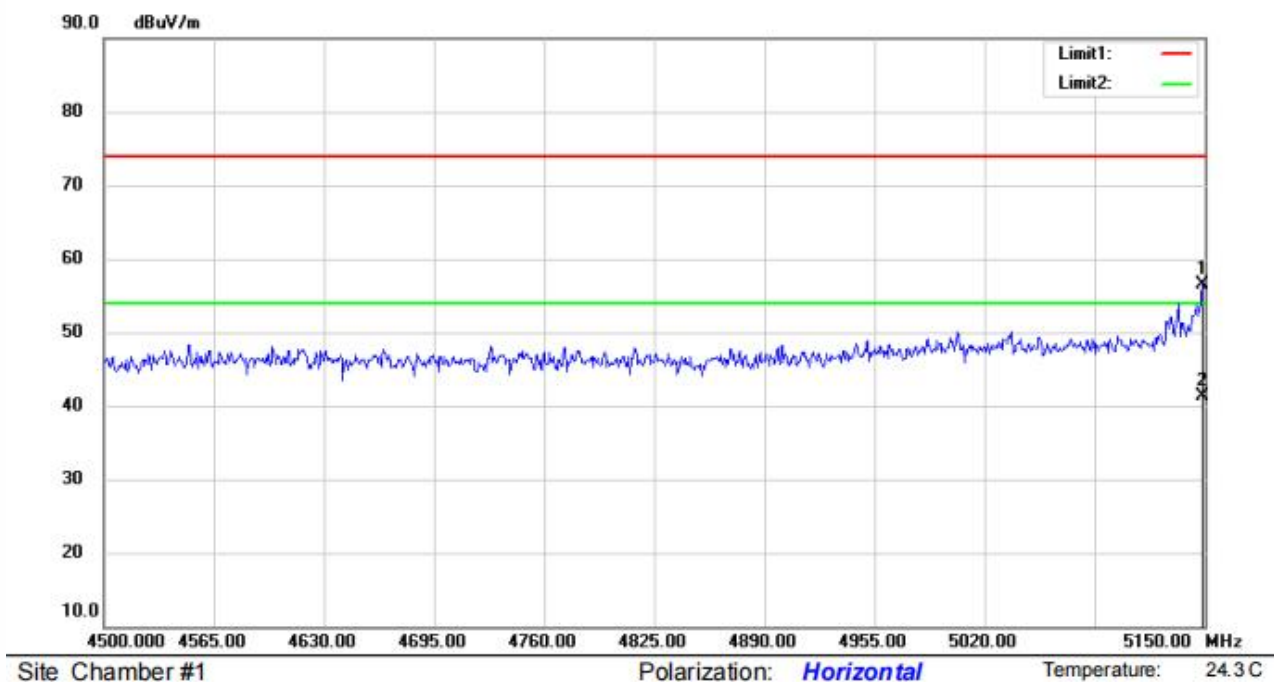
Temperature: 24.3 C

Channel 48: 5240MHz

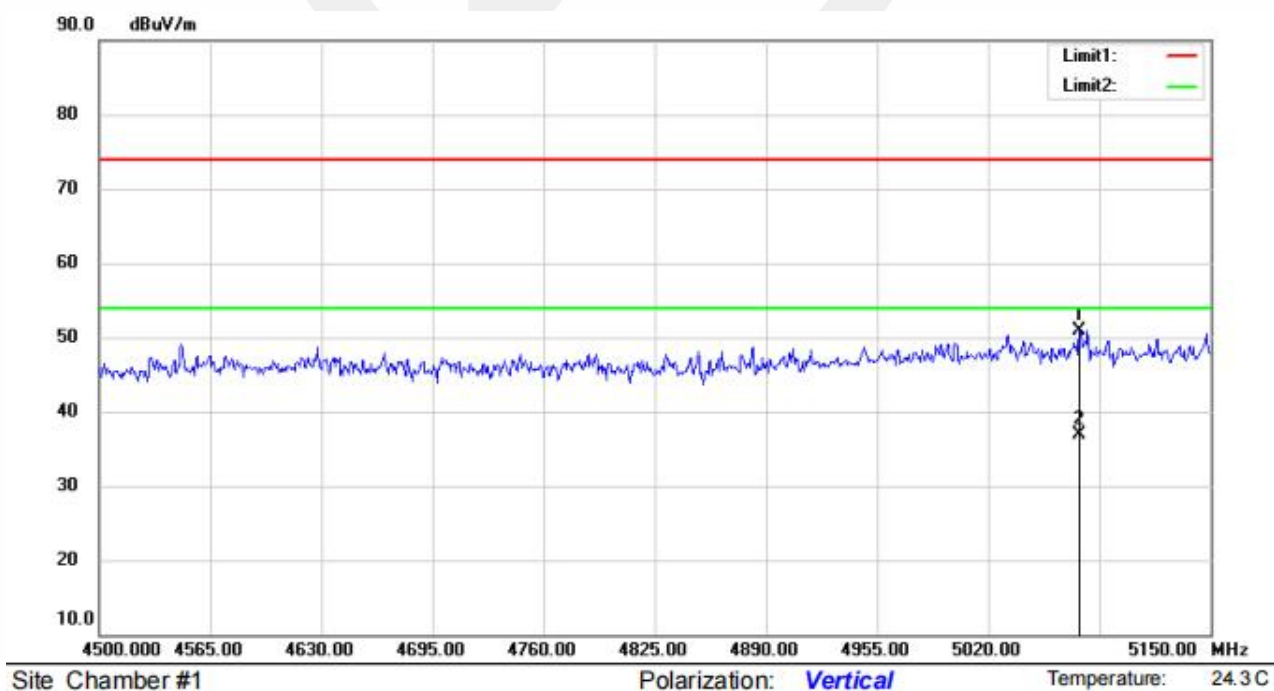


Note: Scan from 1GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed.

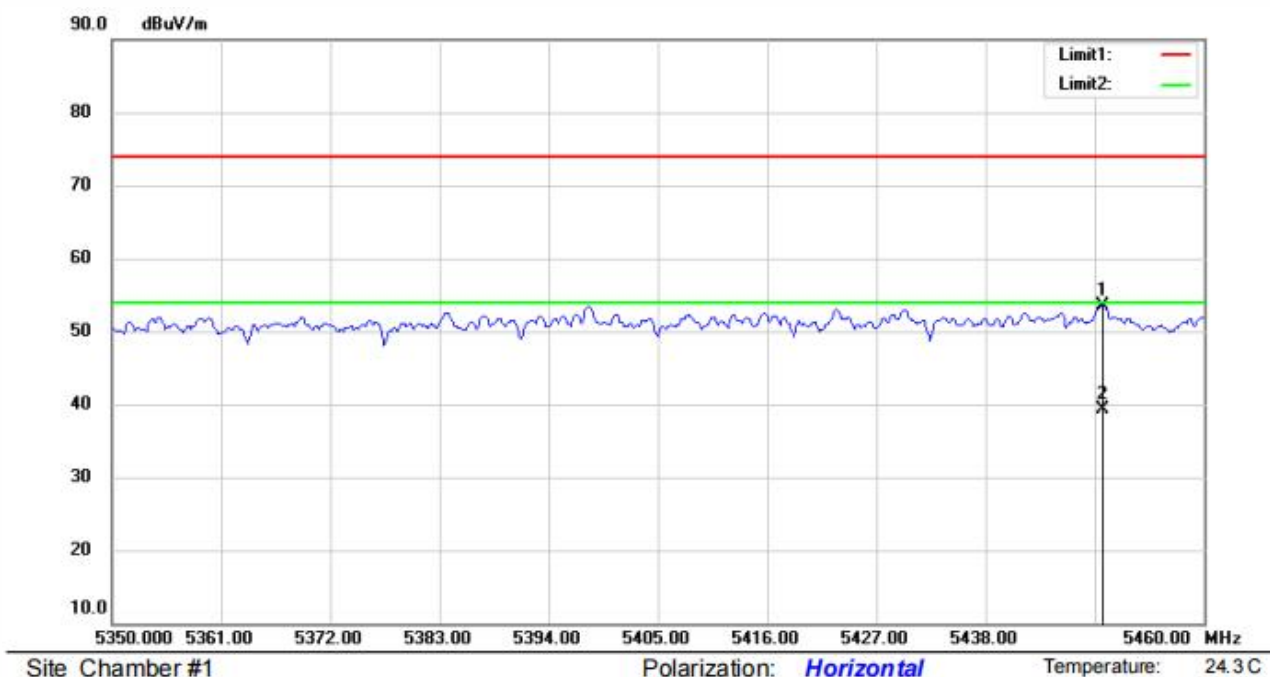
U-NII - 1
 Test Model Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11n(HT40)
☒ 5180 ☐ 5200 ☐ 5240 Ant.Pol H



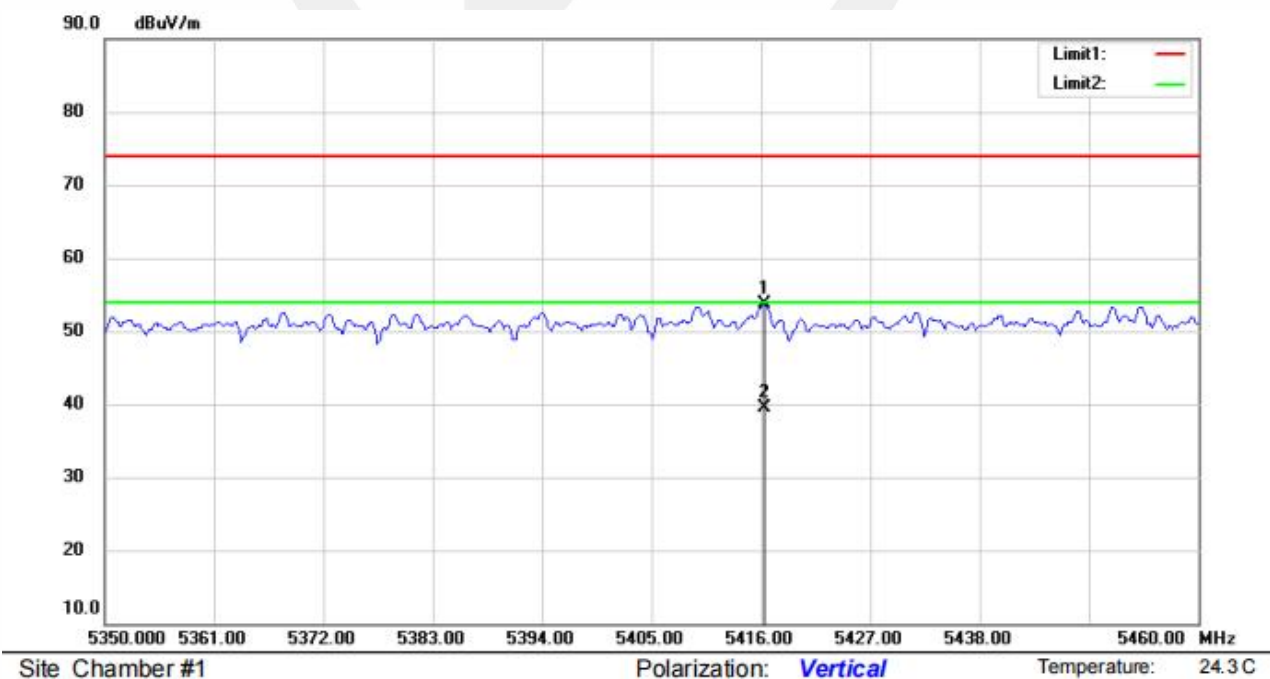
U-NII - 1
 Test Model Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)
☐ 802.11a ☒ 802.11n(HT20) ☐ 802.11n(HT40)
☒ 5180 ☐ 5200 ☐ 5240 Ant.Pol V



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



U-NII - 1			
Test Model	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 ANT1 and MIMO as below:

ANT1:

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)
6974.983	V	55.84	-39.39	-27	-12.39
11237.32	V	57.7	-37.53	-27	-10.53
12469.61	V	56.94	-38.29	-27	-11.29
5471.422	H	54.88	-40.35	-27	-13.35
6737.206	H	56.22	-39.01	-27	-12.01
10514.57	H	57.62	-37.61	-27	-10.61

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)
6583.209	V	55.93	-39.3	-27	-12.3
10667.63	V	57.53	-37.7	-27	-10.7
12505.7	V	57.31	-37.92	-27	-10.92
5487.26	H	54.45	-40.78	-27	-13.78
7138.144	H	56.08	-39.15	-27	-12.15
10333.8	H	57.67	-37.56	-27	-10.56

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)
6377.195	V	54.22	-41.01	-27	-14.01
7606.788	V	55.86	-39.37	-27	-12.37
11044.12	V	59.15	-36.08	-27	-9.08
5455.631	H	55.15	-40.08	-27	-13.08
6995.172	H	55.4	-39.83	-27	-12.83
11140.31	H	58.09	-37.14	-27	-10.14

ANT1:

Test mode: 802.11n(20)		Frequency(MHz): 5260			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6974.983	V	55.84	74.00	-18.16	Peak
6974.983	V	44.62	54.00	-9.38	Avg
11237.32	V	57.70	74.00	-16.30	Peak
11237.32	V	46.31	54.00	-7.69	Avg
12469.61	V	56.94	74.00	-17.06	Peak
12469.61	V	45.79	54.00	-8.21	Avg
5471.422	H	54.88	74.00	-19.12	Peak
5471.422	H	43.13	54.00	-10.87	Avg
6737.206	H	56.22	74.00	-17.78	Peak
6737.206	H	45.91	54.00	-8.09	Avg
10514.57	H	57.62	74.00	-16.38	Peak
10514.57	H	46.96	54.00	-7.04	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5280			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6583.209	V	55.93	74.00	-18.07	Peak
6583.209	V	44.74	54.00	-9.26	Avg
10667.63	V	57.53	74.00	-16.47	Peak
10667.63	V	46.82	54.00	-7.18	Avg
12505.70	V	57.31	74.00	-16.69	Peak
12505.70	V	46.93	54.00	-7.07	Avg
5487.260	H	54.45	74.00	-19.55	Peak
5487.260	H	43.09	54.00	-10.91	Avg
7138.144	H	56.08	74.00	-17.92	Peak
7138.144	H	45.66	54.00	-8.34	Avg
10333.80	H	57.67	74.00	-16.33	Peak
10333.80	H	46.72	54.00	-7.28	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5320			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6377.195	V	54.22	74.00	-19.78	Peak
6377.195	V	43.60	54.00	-10.40	Avg
7606.788	V	55.86	74.00	-18.14	Peak
7606.788	V	44.79	54.00	-9.21	Avg
11044.12	V	59.15	74.00	-14.85	Peak
11044.12	V	46.50	54.00	-7.50	Avg
5455.631	H	55.15	74.00	-18.85	Peak
5455.631	H	44.63	54.00	-9.37	Avg
6995.172	H	55.40	74.00	-18.60	Peak
6995.172	H	44.71	54.00	-9.29	Avg
11140.31	H	58.09	74.00	-15.91	Peak
11140.31	H	47.73	54.00	-6.27	Avg

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

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

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5144.995	V	50.45	-44.78	-27	Pass
5044.765	H	50.28	-44.95	-27	Pass

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

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5390.084	V	53.26	-41.97	-27	Pass
5370.515	H	53.8	-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(20) Frequency(MHz): 5260

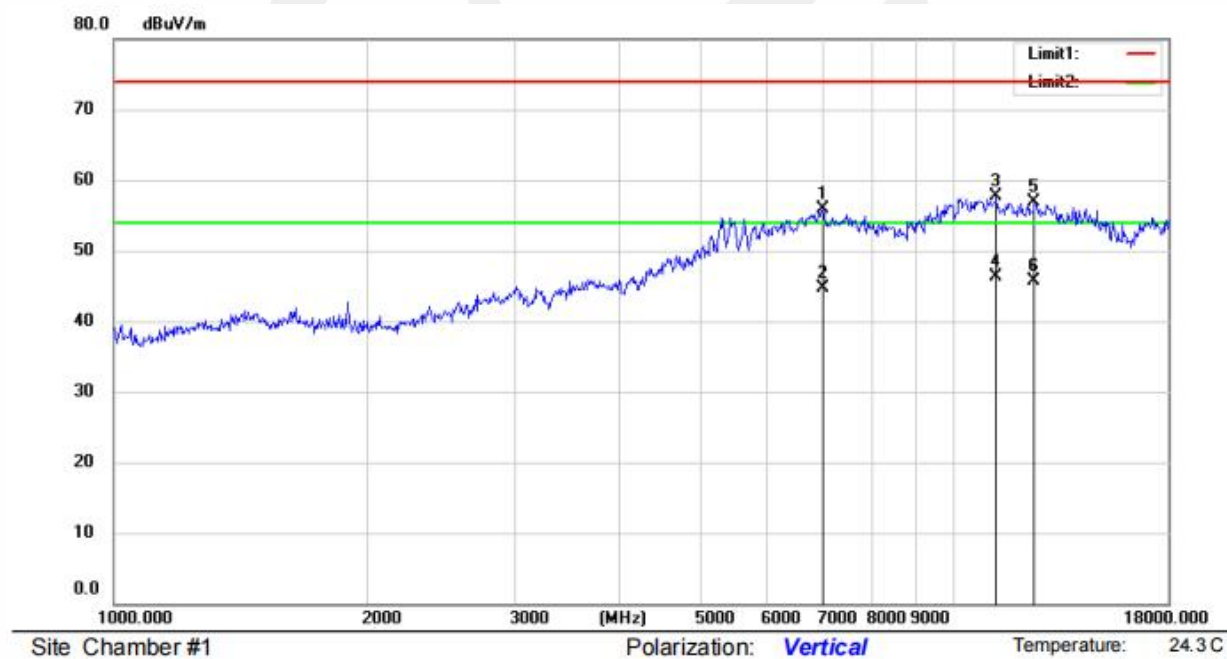
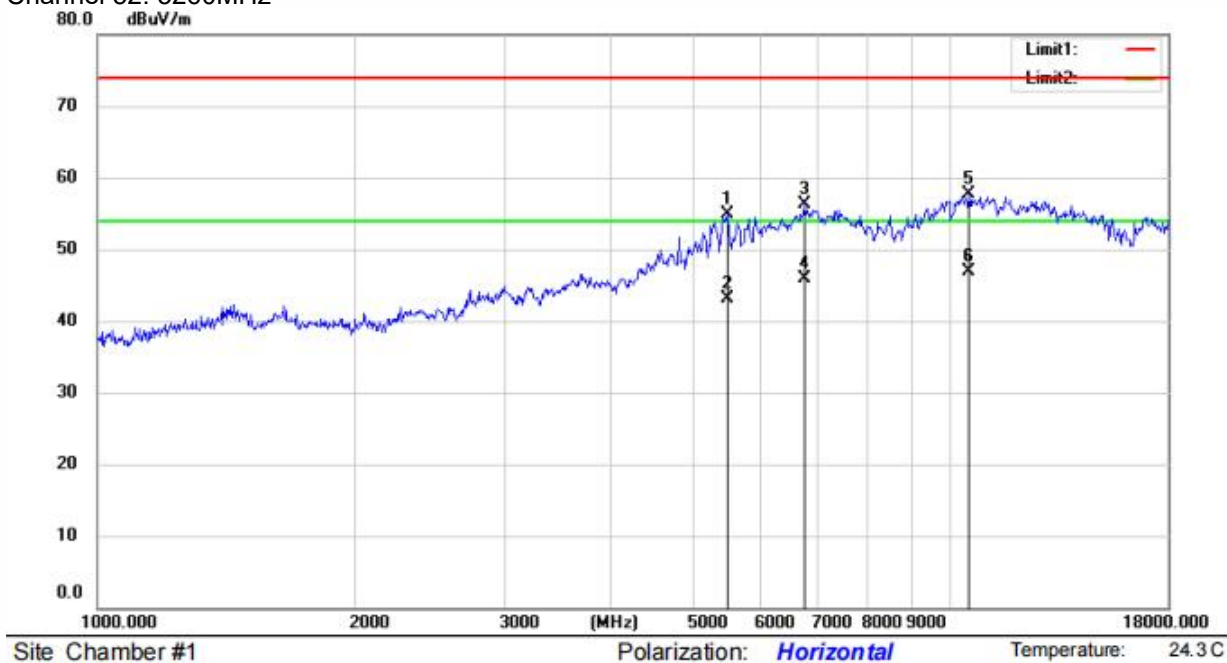
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5144.995	V	50.45	74.00	-23.55	Peak
5144.995	V	36.35	54.00	-17.65	Avg
5044.765	H	50.28	74.00	-23.72	Peak
5044.765	H	36.97	54.00	-17.03	Avg

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

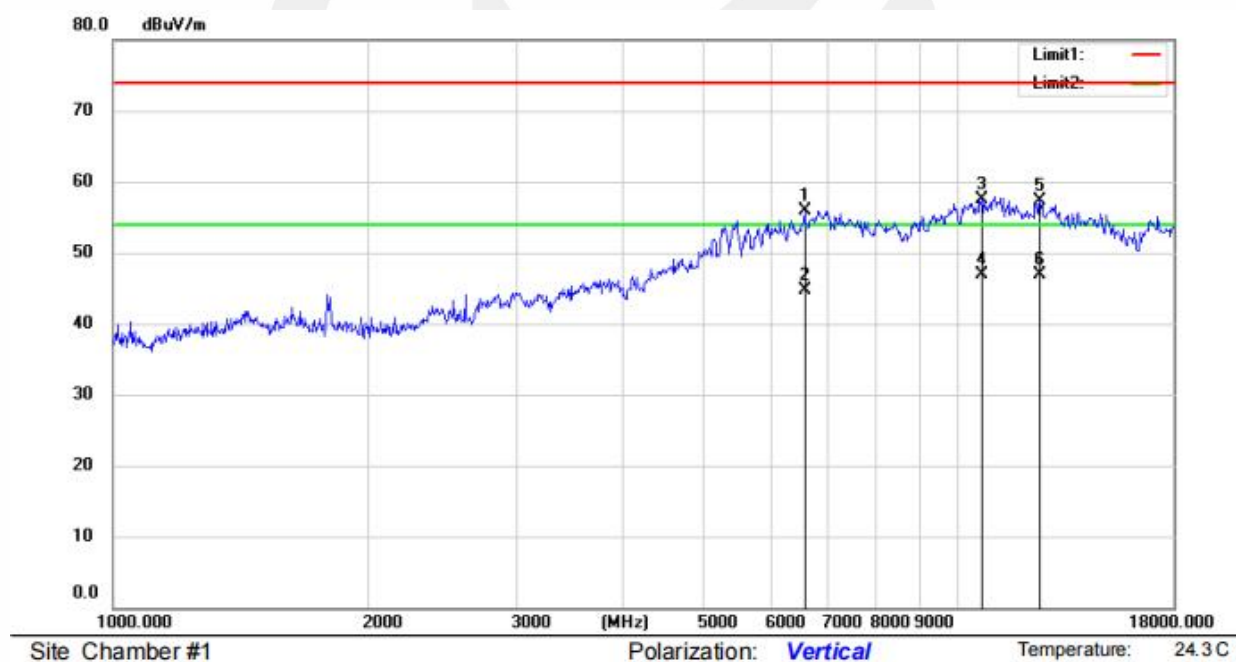
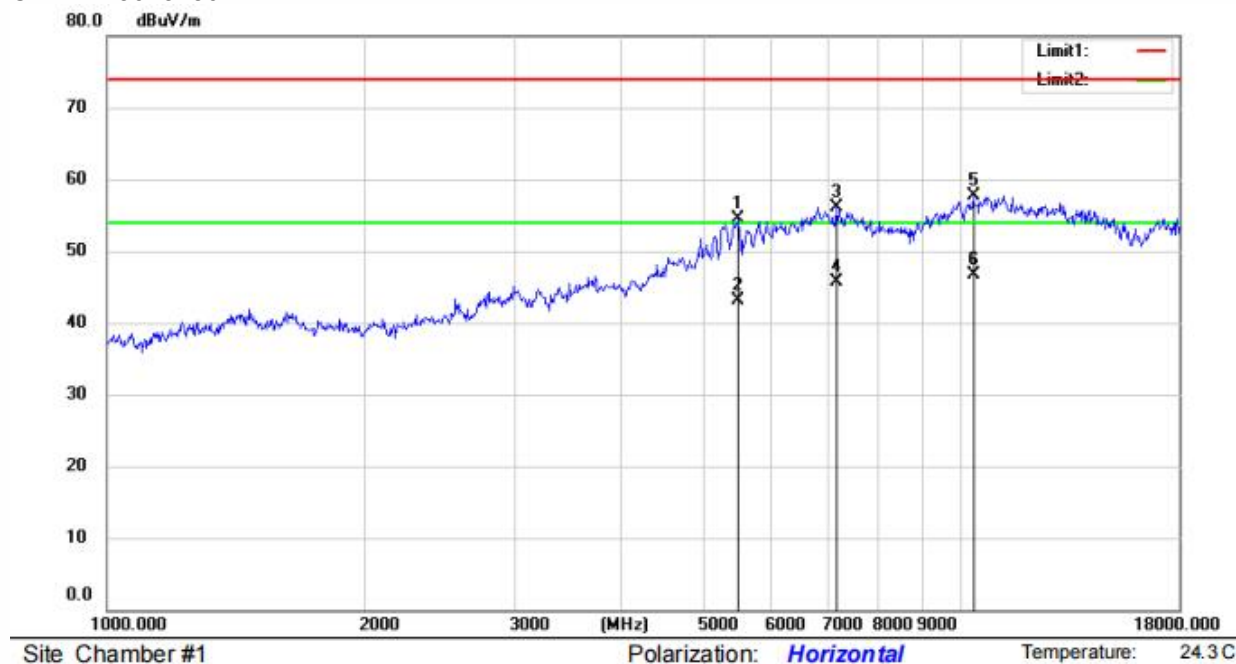
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5390.084	V	53.26	74.00	-20.74	Peak
5390.084	V	39.68	54.00	-14.32	Avg
5370.515	H	53.80	74.00	-20.20	Peak
5370.515	H	41.25	54.00	-12.75	Avg

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.

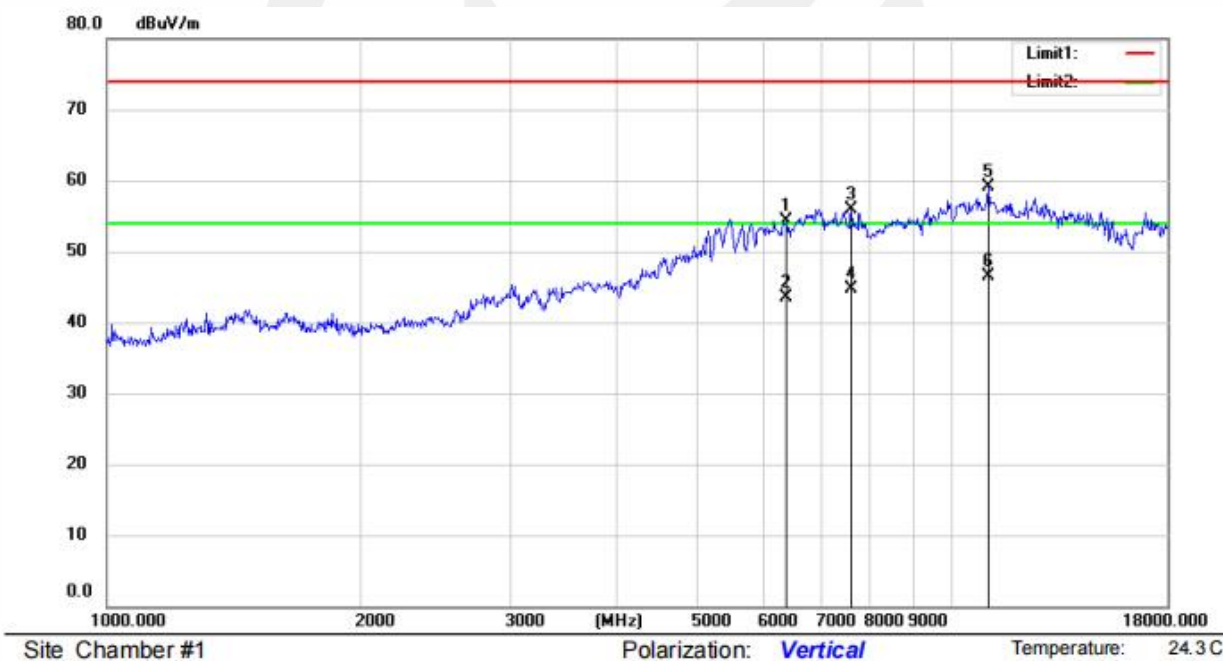
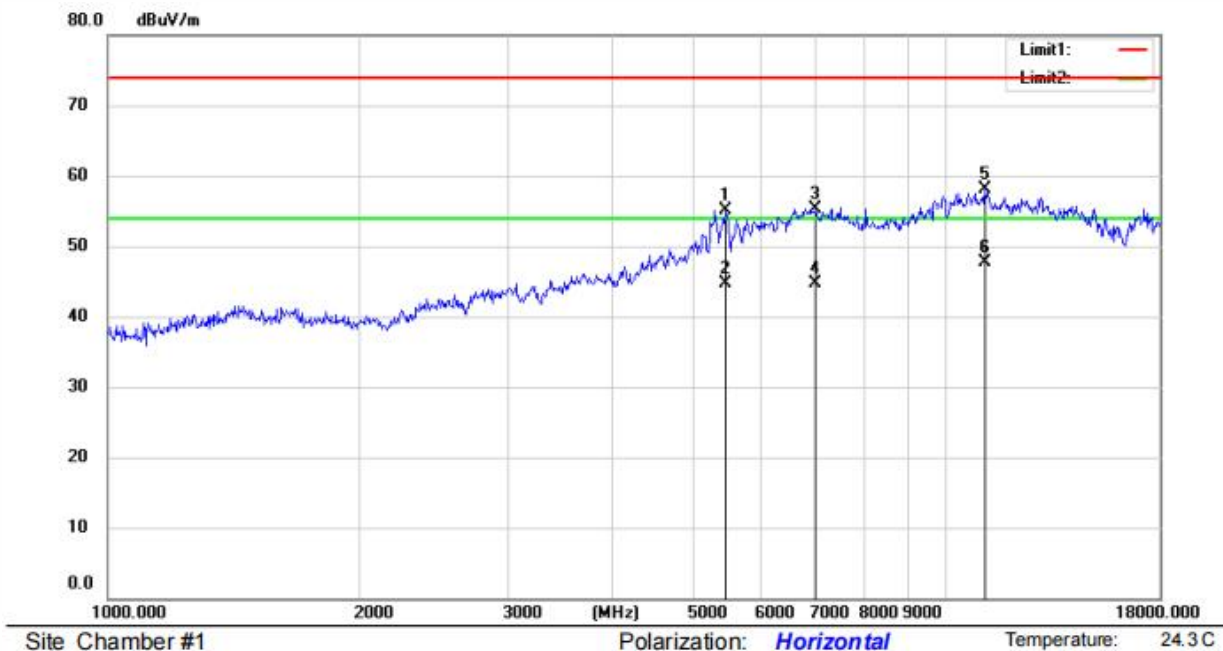
Channel 52: 5260MHz



Channel 56: 5280MHz

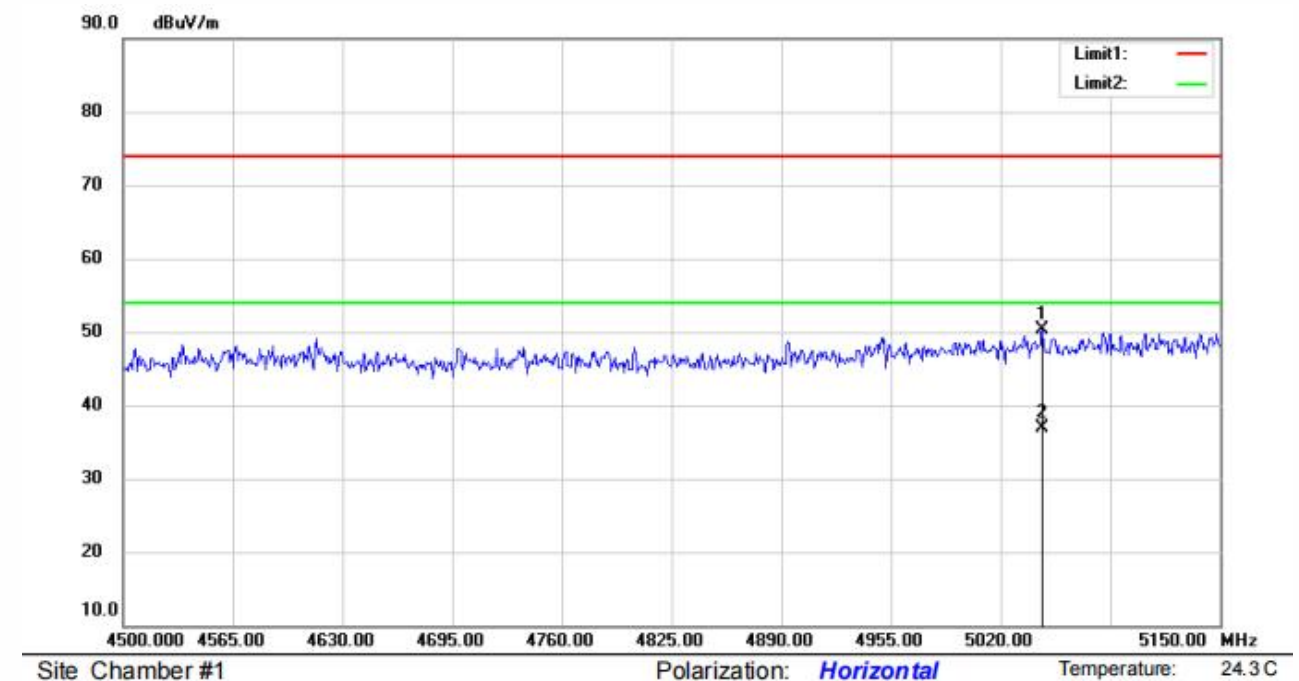


Channel 64: 5320MHz

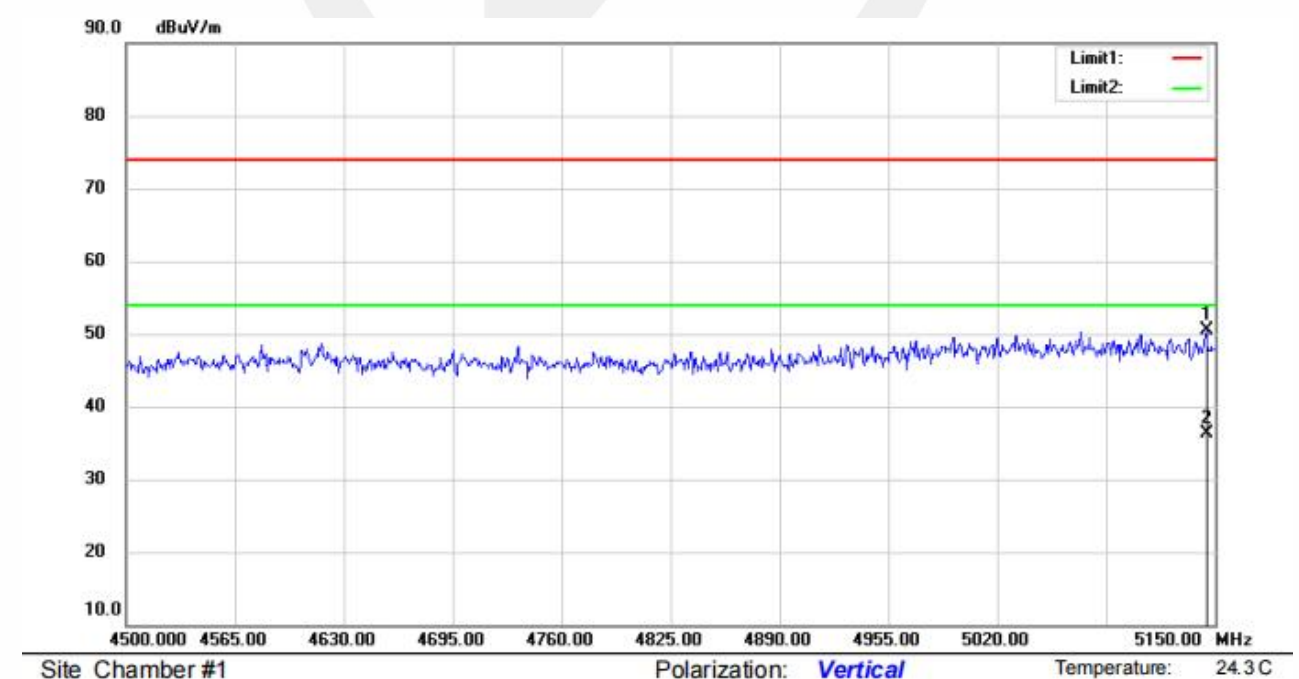


Note: Scan from 1GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed.

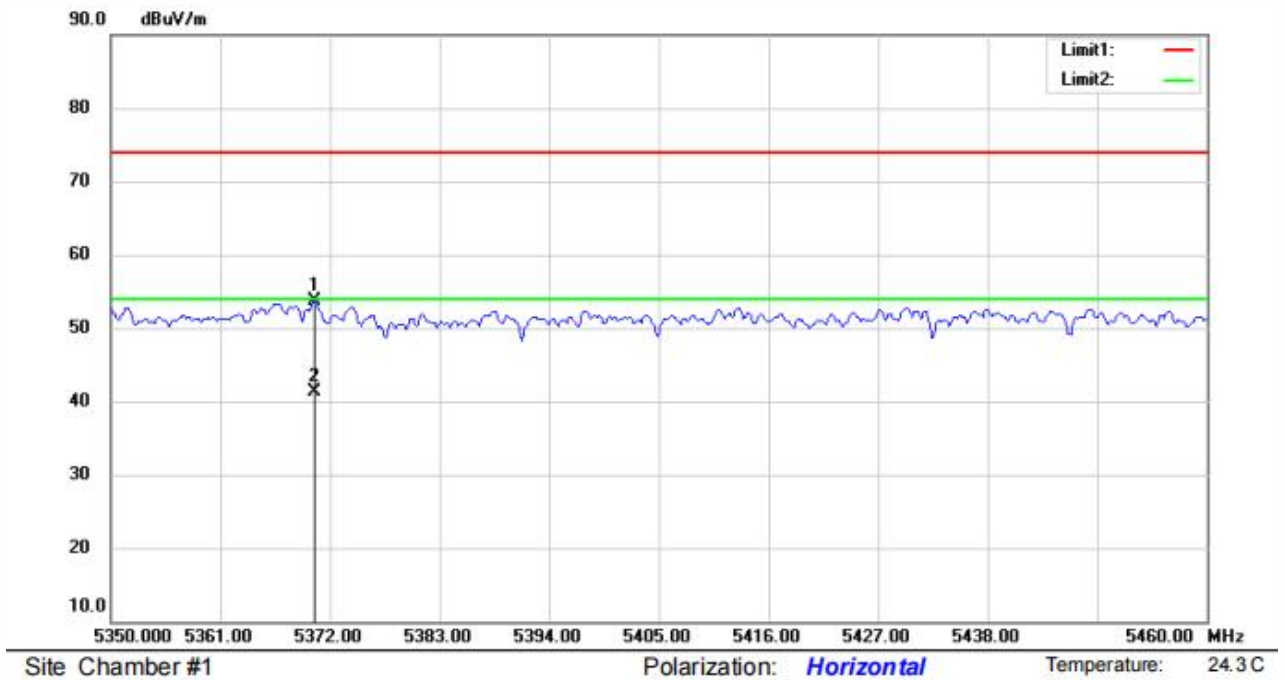
U-NII -2A			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)		
	☐ 802.11a	☒ 802.11n(HT20)	☐ 802.11 ac (VHT20)
	☒ 5260	☐ 5300	☐ 5320
	Ant.Pol		H



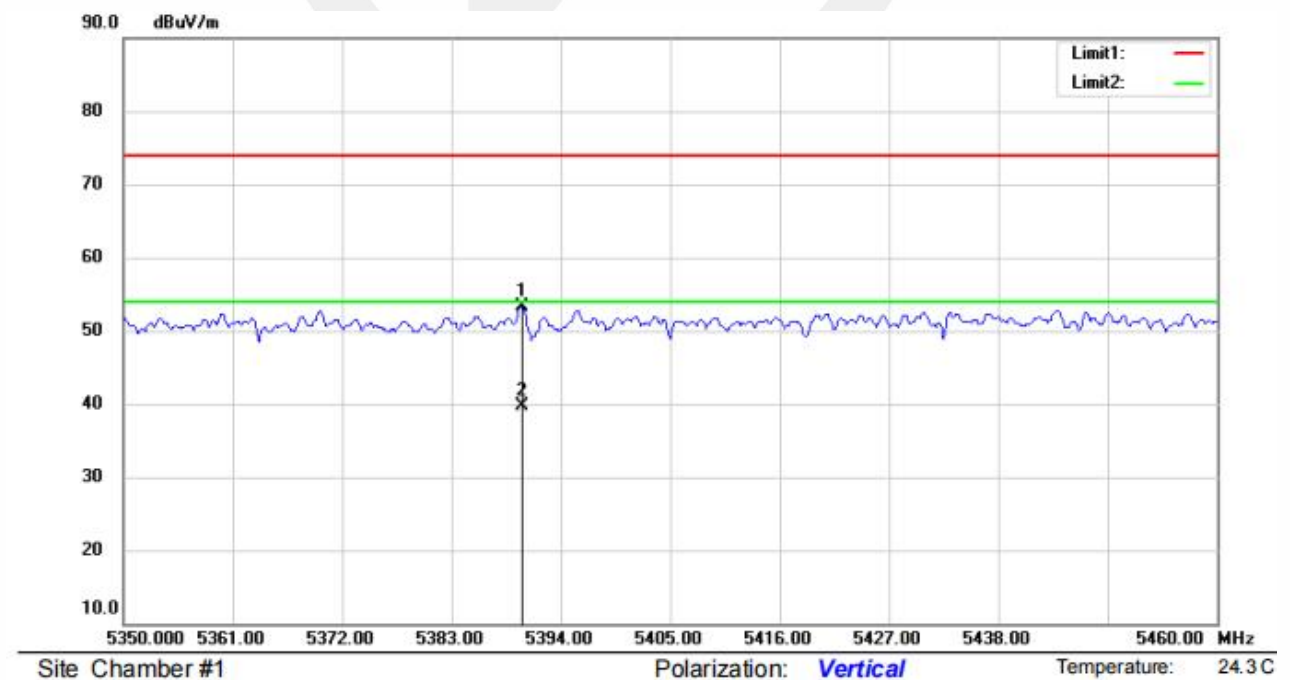
U-NII -2A			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)		
	☐ 802.11a	☒ 802.11n(HT20)	☐ 802.11 ac (VHT20)
	☒ 5260	☐ 5300	☐ 5320
	Ant.Pol		V



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



U-NII -2A			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz)		
	☐ 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 ANT1 and MIMO as below:

ANT1:

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)
6756.708	V	56.28	-38.95	-27	-11.95
10698.51	V	57.96	-37.27	-27	-10.27
11735.24	V	57.45	-37.78	-27	-10.78
5471.422	H	55.02	-40.21	-27	-13.21
6934.778	H	55.95	-39.28	-27	-12.28
10980.46	H	58.19	-37.04	-27	-10.04

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)
6974.983	V	56.02	-39.21	-27	-12.21
9725.221	V	56.1	-39.13	-27	-12.13
10667.63	V	57.66	-37.57	-27	-10.57
6835.279	H	55.6	-39.63	-27	-12.63
10333.8	H	57.64	-37.59	-27	-10.59
12541.9	H	57.18	-38.05	-27	-11.05

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)
5455.631	V	54.55	-40.68	-27	-13.68
7411.461	V	55.25	-39.98	-27	-12.98
10156.13	V	58.05	-37.18	-27	-10.18
7015.42	H	56	-39.23	-27	-12.23
9366.577	H	56.86	-38.37	-27	-11.37
11172.55	H	58.18	-37.05	-27	-10.05

ANT1:

Test mode: 802.11n(20)		Frequency(MHz): 5500			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6756.708	V	56.28	74.00	-17.72	Peak
6756.708	V	45.93	54.00	-8.07	Avg
10698.51	V	57.96	74.00	-16.04	Peak
10698.51	V	46.77	54.00	-7.23	Avg
11735.24	V	57.45	74.00	-16.55	Peak
11735.24	V	46.90	54.00	-7.10	Avg
5471.422	H	55.02	74.00	-18.98	Peak
5471.422	H	44.69	54.00	-9.31	Avg
6934.778	H	55.95	74.00	-18.05	Peak
6934.778	H	44.73	54.00	-9.27	Avg
10980.46	H	58.19	74.00	-15.81	Peak
10980.46	H	47.70	54.00	-6.30	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5580			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6974.983	V	56.02	74.00	-17.98	Peak
6974.983	V	45.80	54.00	-8.20	Avg
9725.221	V	56.10	74.00	-17.90	Peak
9725.221	V	45.76	54.00	-8.24	Avg
10667.63	V	57.66	74.00	-16.34	Peak
10667.63	V	46.66	54.00	-7.34	Avg
6835.279	H	55.60	74.00	-18.40	Peak
6835.279	H	44.72	54.00	-9.28	Avg
10333.80	H	57.64	74.00	-16.36	Peak
10333.80	H	46.19	54.00	-7.81	Avg
12541.90	H	57.18	74.00	-16.82	Peak
12541.90	H	46.92	54.00	-7.08	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5700			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5455.631	V	54.55	74.00	-19.45	Peak
5455.631	V	43.60	54.00	-10.40	Avg
7411.461	V	55.25	74.00	-18.75	Peak
7411.461	V	44.93	54.00	-9.07	Avg
10156.13	V	58.05	74.00	-15.95	Peak
10156.13	V	47.74	54.00	-6.26	Avg
7015.420	H	56.00	74.00	-18.00	Peak
7015.420	H	45.55	54.00	-8.45	Avg
9366.577	H	56.86	74.00	-17.14	Peak
9366.577	H	45.13	54.00	-8.87	Avg
11172.55	H	58.18	74.00	-15.82	Peak
11172.55	H	48.78	54.00	-5.22	Avg

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

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

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5453.175	V	50.09	-45.14	-27	Pass
5469.78	H	53.93	-41.3	-27	Pass

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

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5760.765	V	52.23	-43	-27	Pass
5725	H	57.89	-37.34	-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): 5500

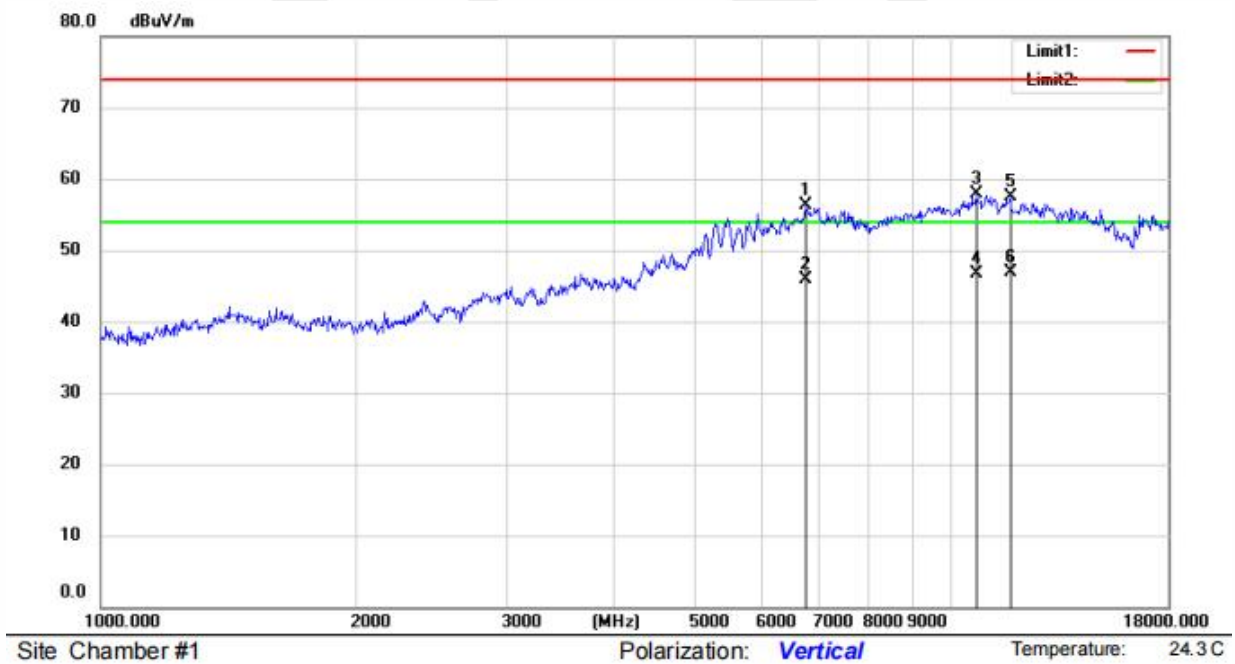
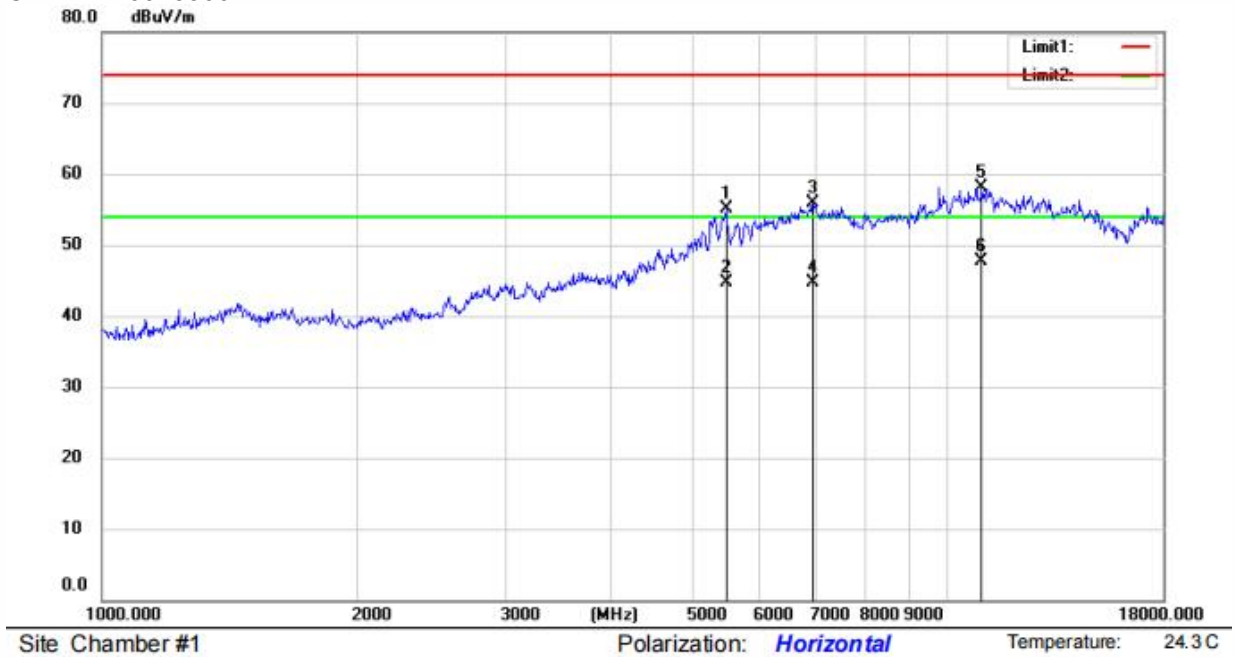
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5469.970	V	53.59	74.00	-20.41	Peak
5469.970	V	40.13	54.00	-13.87	Avg
5468.135	H	59.51	74.00	-14.49	Peak
5468.135	H	45.76	54.00	-8.24	Avg

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

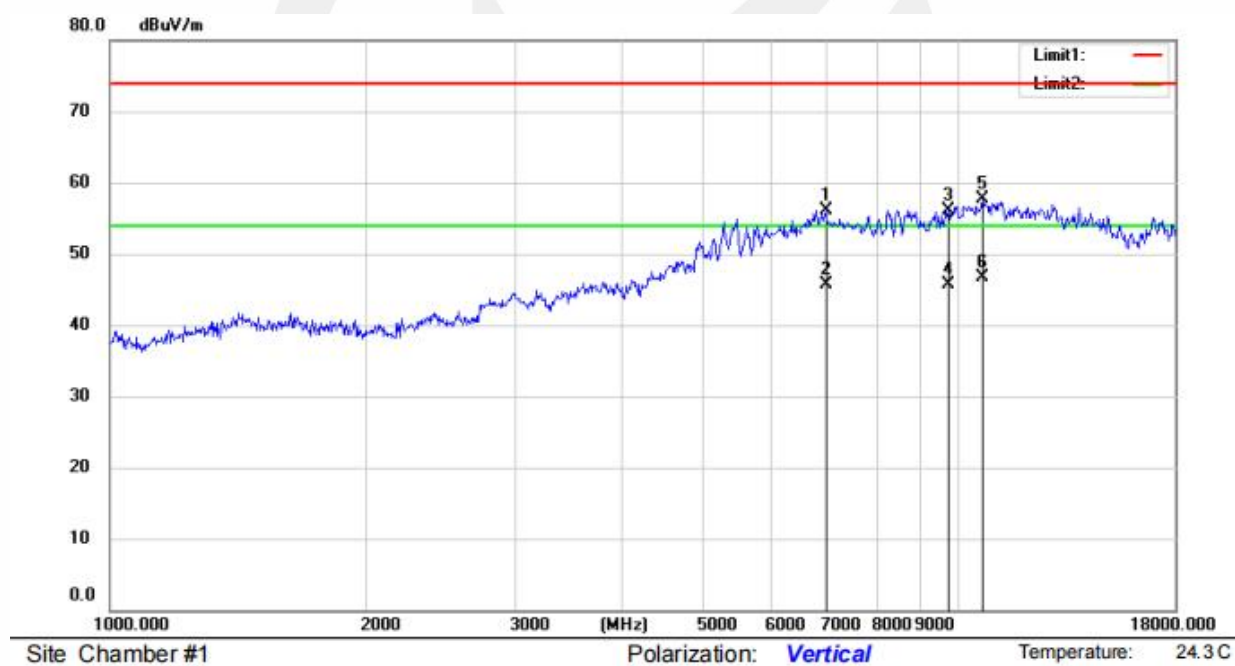
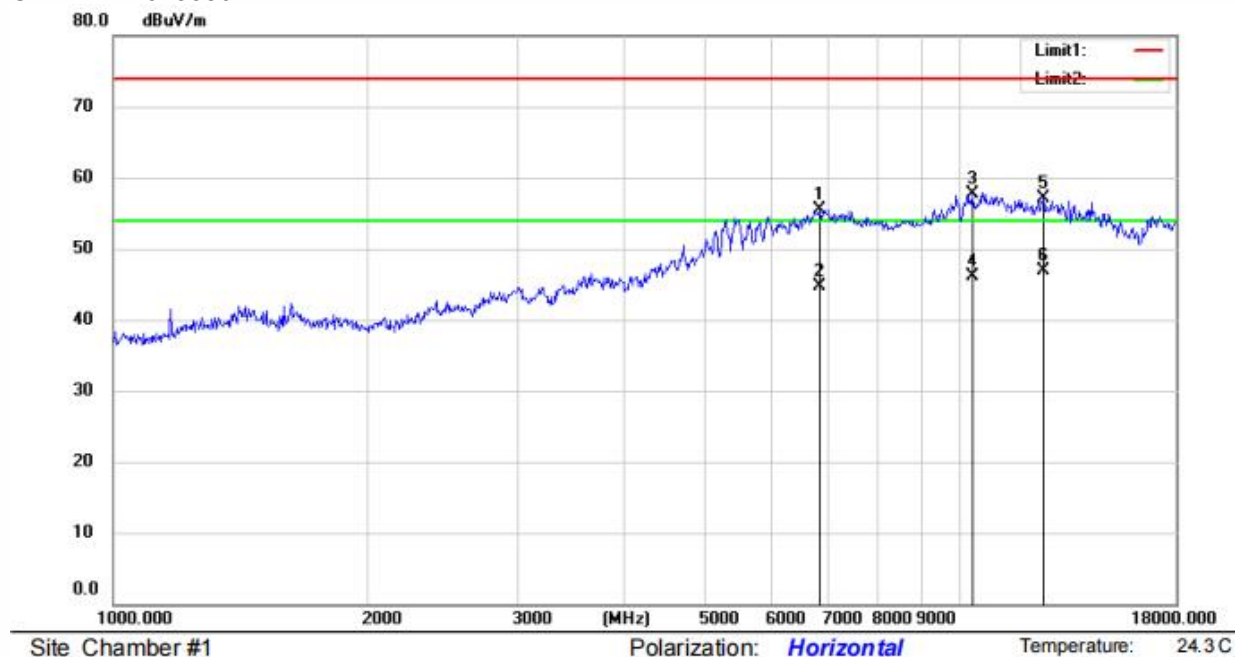
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5760.765	V	52.23	74.00	-21.77	Peak
5760.765	V	39.93	54.00	-14.07	Avg
5725.000	H	57.89	74.00	-16.11	Peak
5725.000	H	50.49	54.00	-3.51	Avg

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.

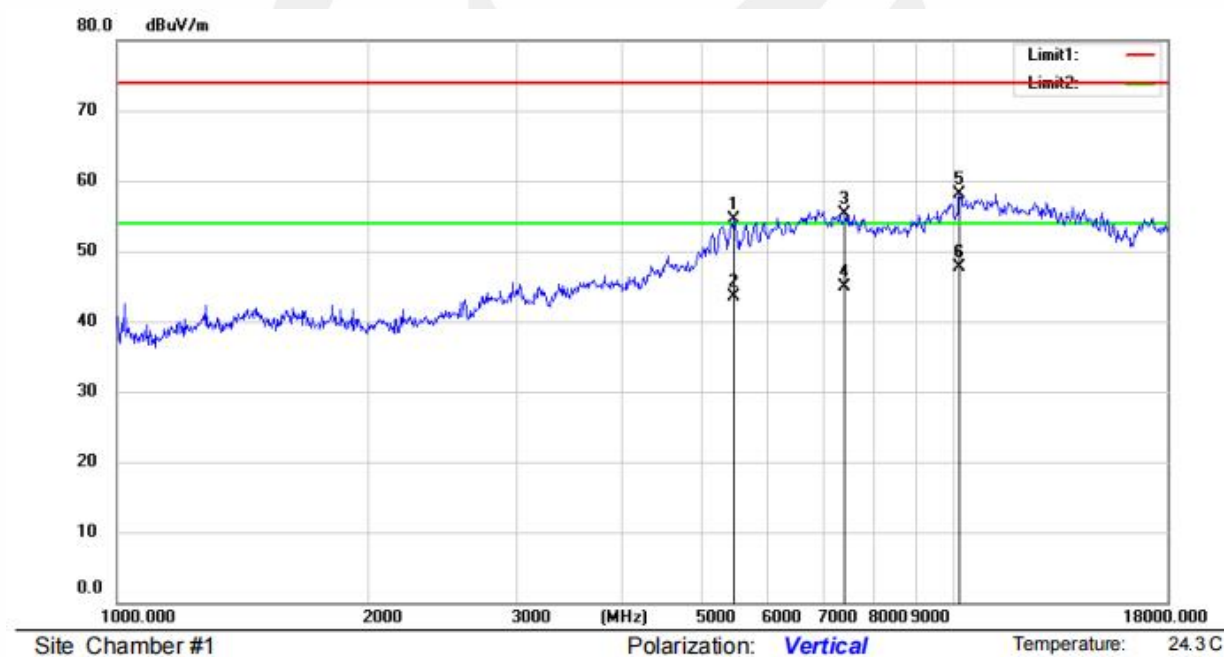
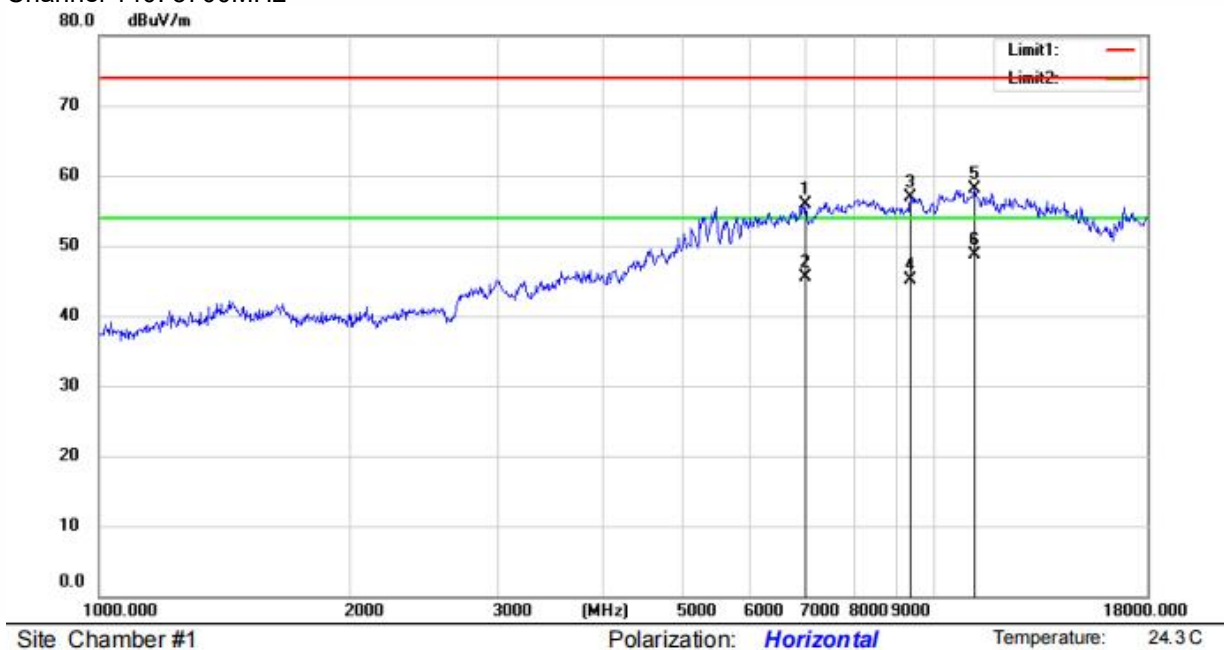
Channel 100: 5500MHz



Channel 116: 5580MHz

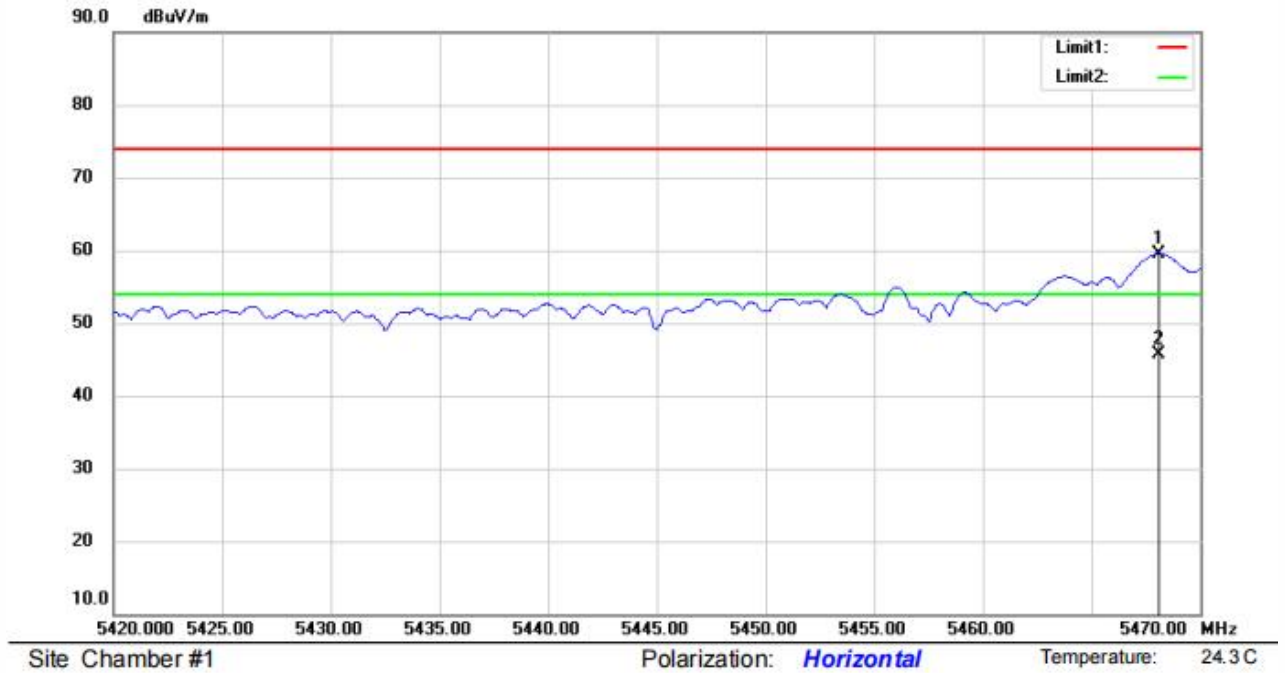


Channel 140: 5700MHz

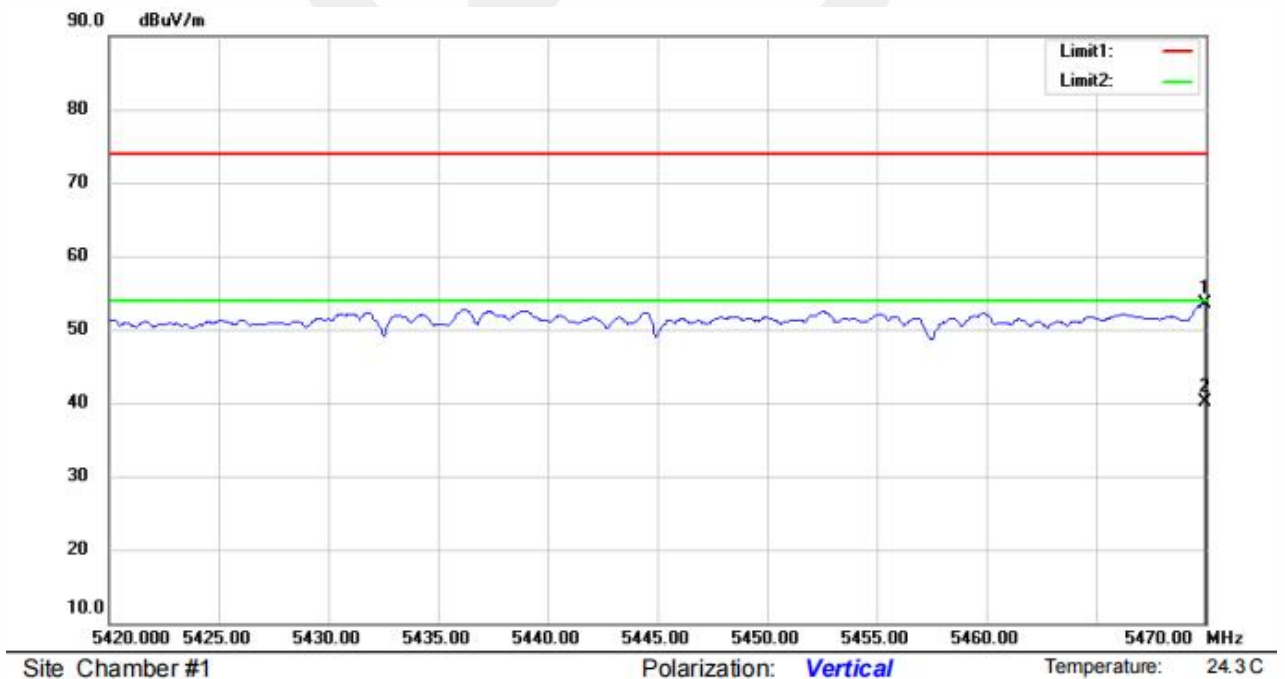


Note: Scan from 1GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed.

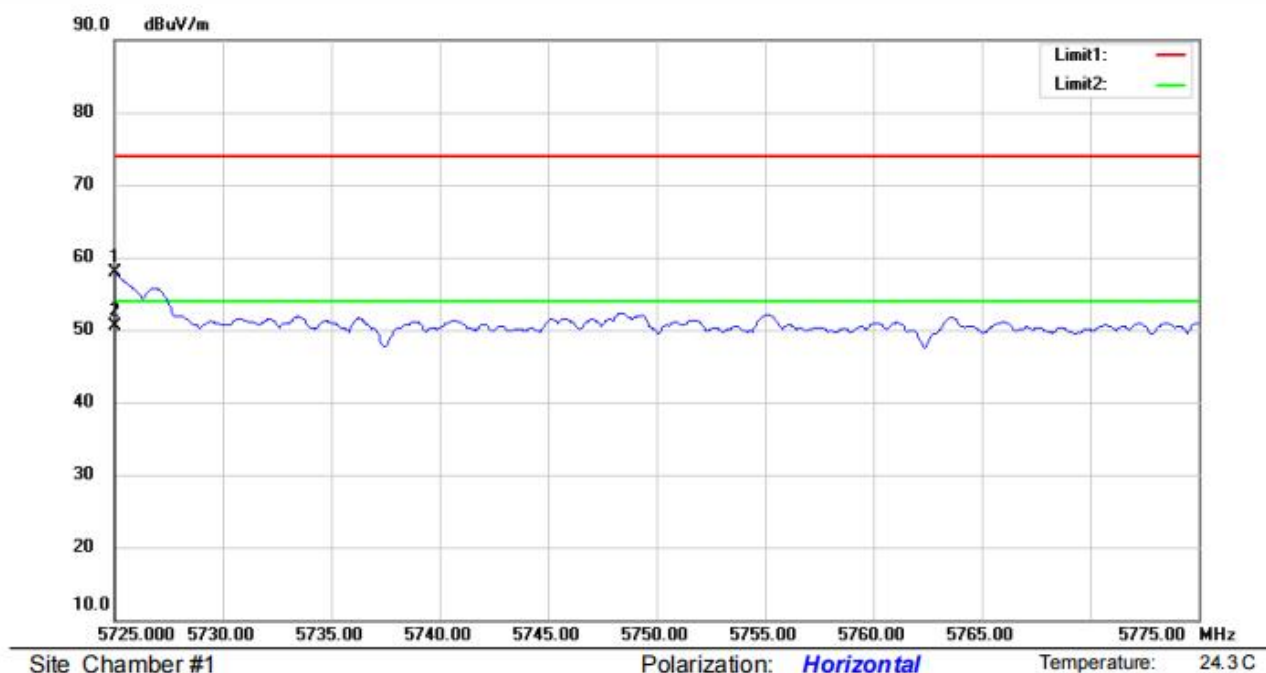
U-NII -2C			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5420-5470MHz)		
	☐ 802.11a	☒ 802.11n(HT20)	☐ 802.11 ac (VHT20)
	☒ 5500	☐ 5580	☐ 5700
	Ant.Pol		H



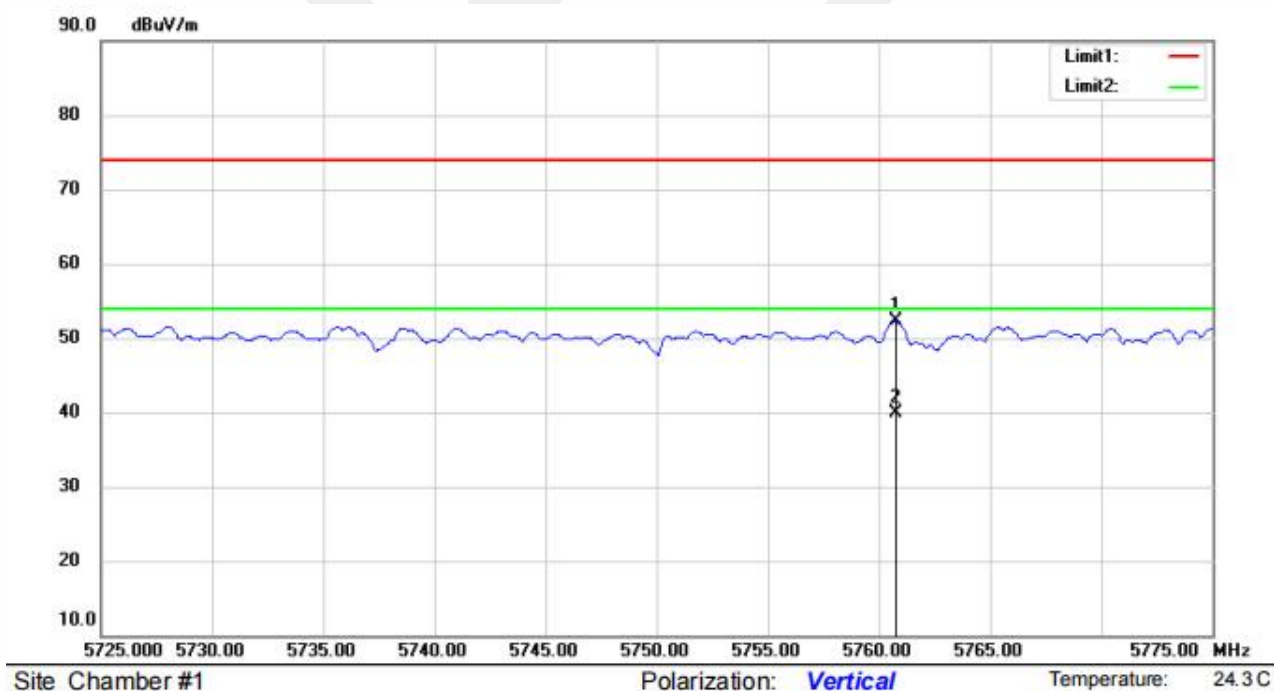
U-NII -2C			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5420-5470MHz)		
	☐ 802.11a	☒ 802.11n(HT20)	☐ 802.11 ac (VHT20)
	☒ 5500	☐ 5580	☐ 5700
	Ant.Pol		V



U-NII -2C			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5720-5775MHz)		
	☐ 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 (5720-5775MHz)		
	☐ 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 ANT1 and MIMO as below:

ANT1:

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)
6974.983	V	56.56	-38.67	-27	-11.67
9952.717	V	56.92	-38.31	-27	-11.31
10729.48	V	58.02	-37.21	-27	-10.21
6974.983	H	56.18	-39.05	-27	-12.05
9923.991	H	58.01	-37.22	-27	-10.22
11803.28	H	57.7	-37.53	-27	-10.53

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)
5471.422	V	54.6	-40.63	-27	-13.63
7221.15	V	56.25	-38.98	-27	-11.98
11237.32	V	57.63	-37.6	-27	-10.6
6995.172	H	55.85	-39.38	-27	-12.38
9923.991	H	56.68	-38.55	-27	-11.55
11237.32	H	58.27	-36.96	-27	-9.96

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)
6340.436	V	56.23	-39	-27	-12
7432.914	V	58.4	-36.83	-27	-9.83
11204.89	V	57.83	-37.4	-27	-10.4
6974.983	H	55.85	-39.38	-27	-12.38
8465.379	H	56.2	-39.03	-27	-12.03
10667.63	H	57.32	-37.91	-27	-10.91

ANT1:

Test mode: 802.11n(20)		Frequency(MHz): 5745			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6974.983	V	56.56	74.00	-17.44	Peak
6974.983	V	45.51	54.00	-8.49	Avg
9952.717	V	56.92	74.00	-17.08	Peak
9952.717	V	45.66	54.00	-8.34	Avg
10729.48	V	58.02	74.00	-15.98	Peak
10729.48	V	47.68	54.00	-6.32	Avg
6974.983	H	56.18	74.00	-17.82	Peak
6974.983	H	45.36	54.00	-8.64	Avg
9923.991	H	58.01	74.00	-15.99	Peak
9923.991	H	47.13	54.00	-6.87	Avg
11803.28	H	57.70	74.00	-16.30	Peak
11803.28	H	46.26	54.00	-7.74	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5785			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5471.422	V	54.60	74.00	-19.40	Peak
5471.422	V	42.21	54.00	-11.79	Avg
7221.150	V	56.25	74.00	-17.75	Peak
7221.150	V	44.15	54.00	-9.85	Avg
11237.32	V	57.63	74.00	-16.37	Peak
11237.32	V	45.09	54.00	-8.91	Avg
6995.172	H	55.85	74.00	-18.15	Peak
6995.172	H	43.60	54.00	-10.40	Avg
9923.991	H	56.68	74.00	-17.32	Peak
9923.991	H	44.02	54.00	-9.98	Avg
11237.32	H	58.27	74.00	-15.73	Peak
11237.32	H	46.80	54.00	-7.20	Avg

Test mode: 802.11n(20)		Frequency(MHz): 5825			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
6340.436	V	56.23	74.00	-17.77	Peak
6340.436	V	44.36	54.00	-9.64	Avg
7432.914	V	58.40	74.00	-15.60	Peak
7432.914	V	46.72	54.00	-7.28	Avg
11204.89	V	57.83	74.00	-16.17	Peak
11204.89	V	45.08	54.00	-8.92	Avg
6974.983	H	55.85	74.00	-18.15	Peak
6974.983	H	43.17	54.00	-10.83	Avg
8465.379	H	56.20	74.00	-17.80	Peak
8465.379	H	44.23	54.00	-9.77	Avg
10667.63	H	57.32	74.00	-16.68	Peak
10667.63	H	45.15	54.00	-8.85	Avg

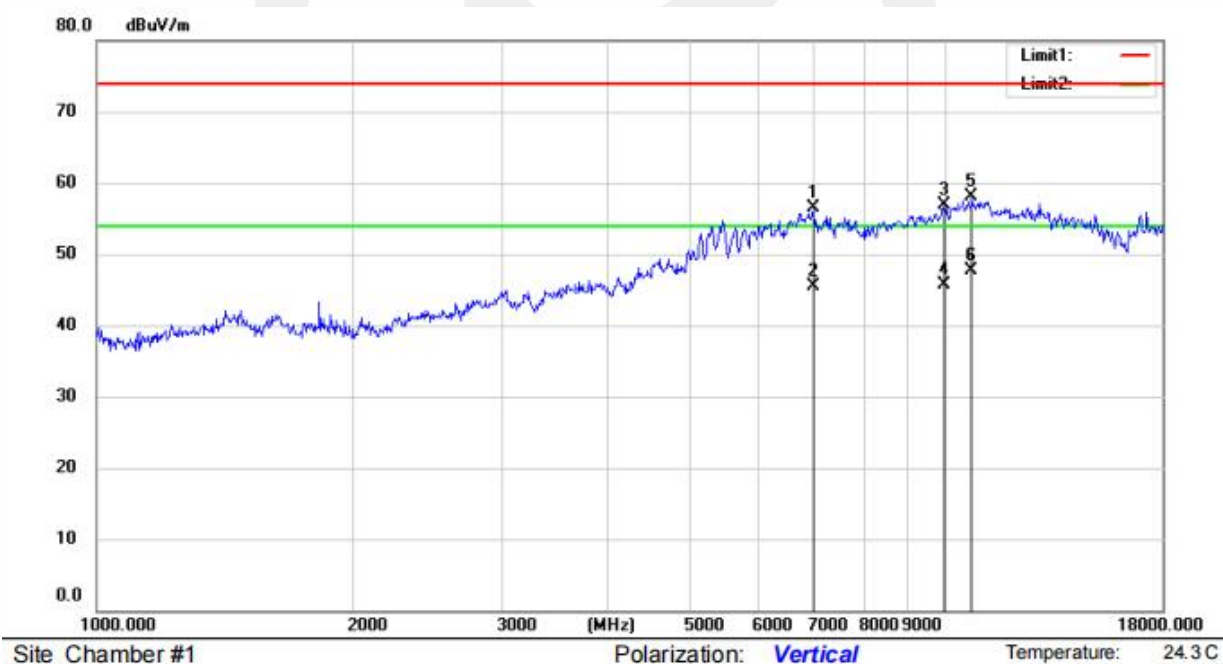
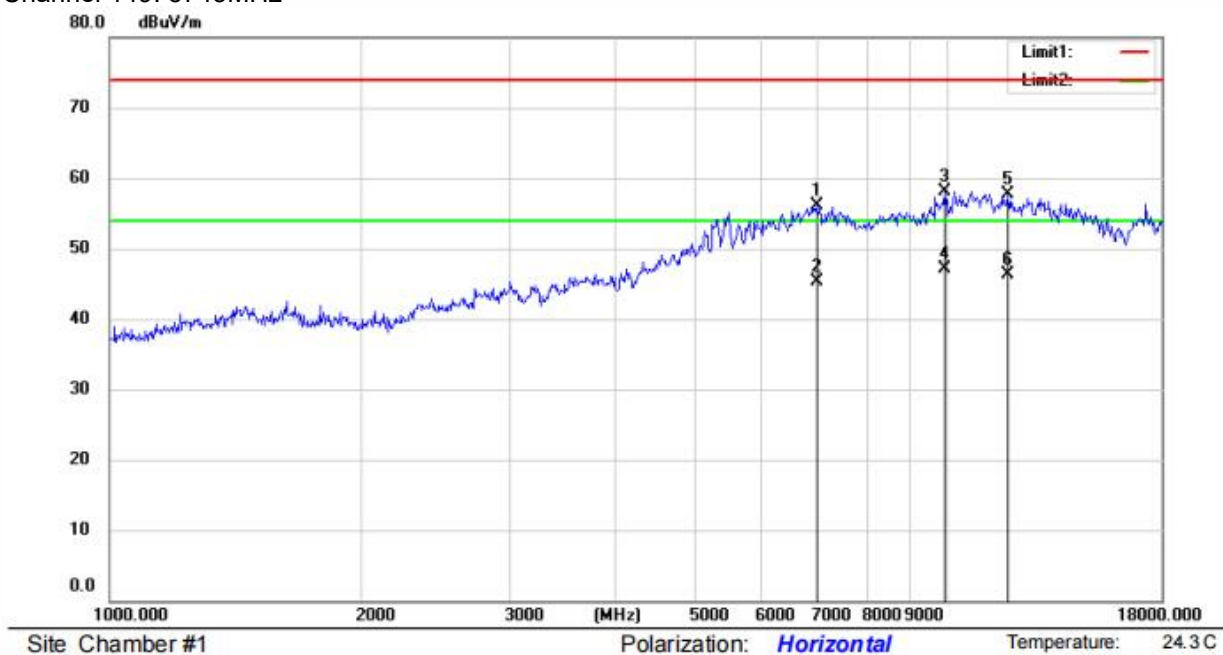
● ☒ Undesirable radiated Spurious Emission in band edge

Test mode:		802.11n(20)		Frequency:		5745	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict		
5721.775	V	54.70	-40.53	-27.00	PASS		
5724.813	H	68.64	-26.59	-27.00	PASS		

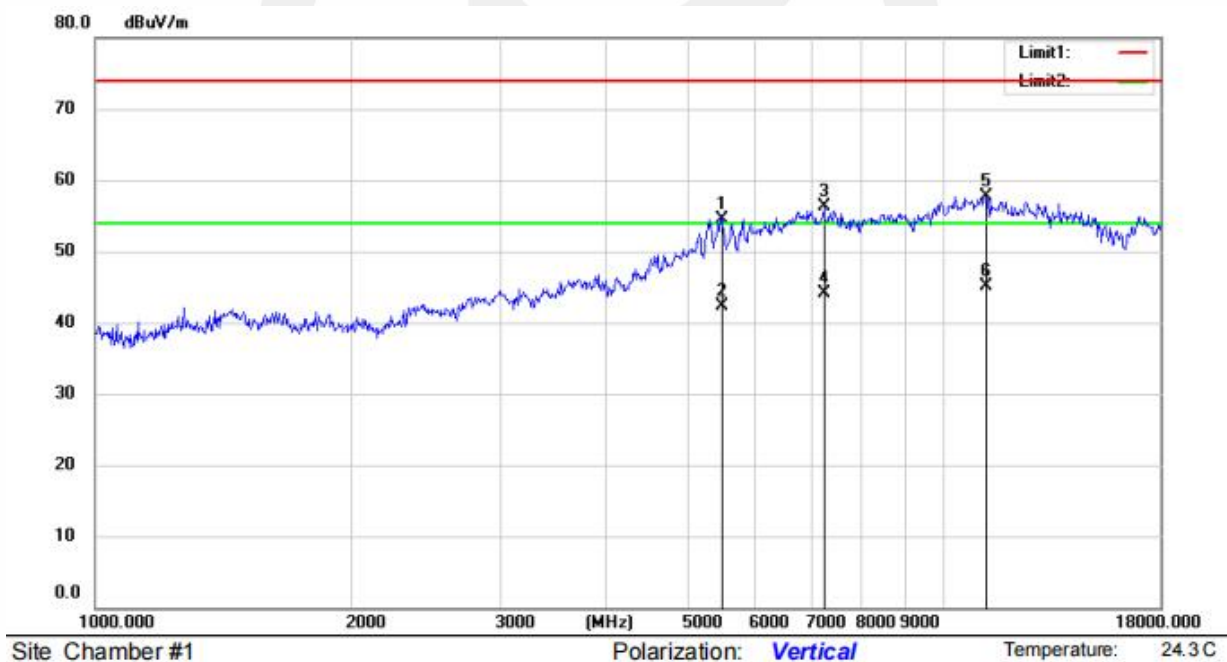
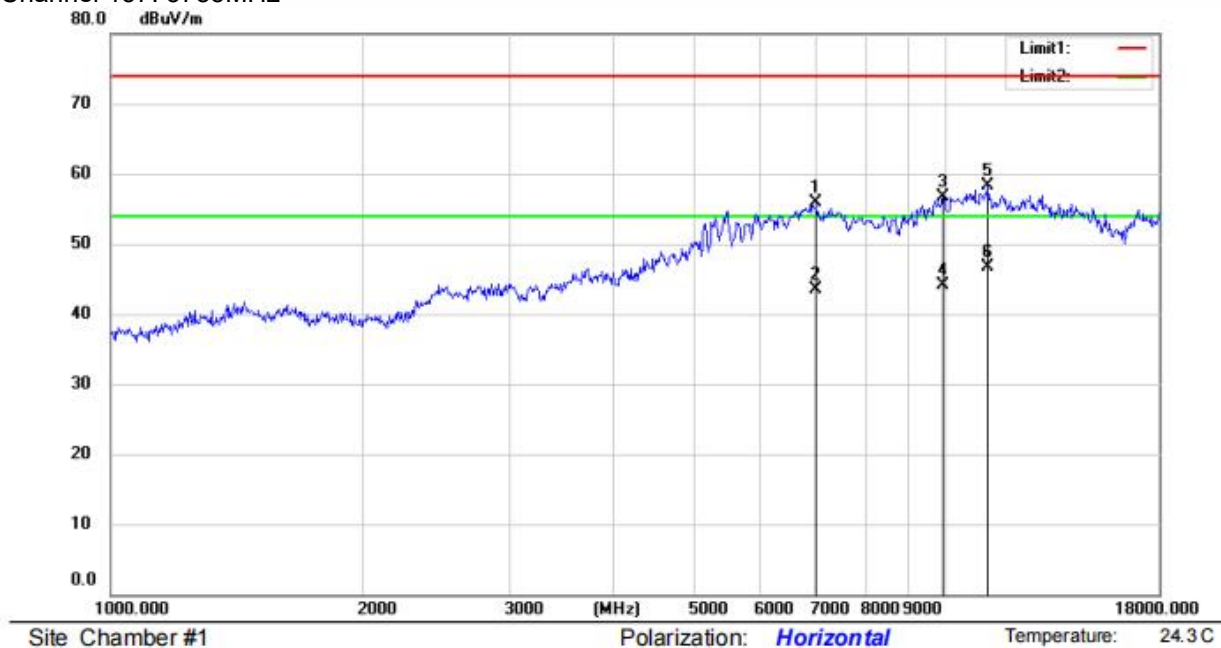
Test mode:		802.11n(20)		Frequency:		5825	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict		
5868.113	V	56.98	-38.25	-27.00	PASS		
5864.563	H	57.96	-37.27	-27.00	PASS		

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

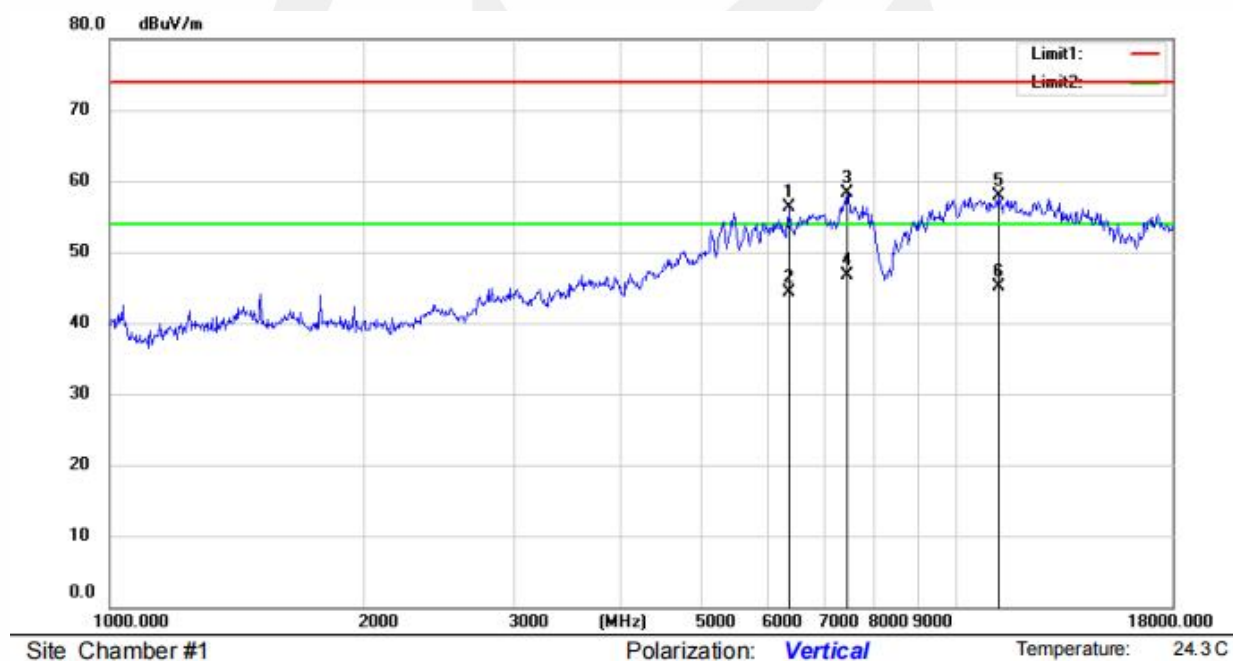
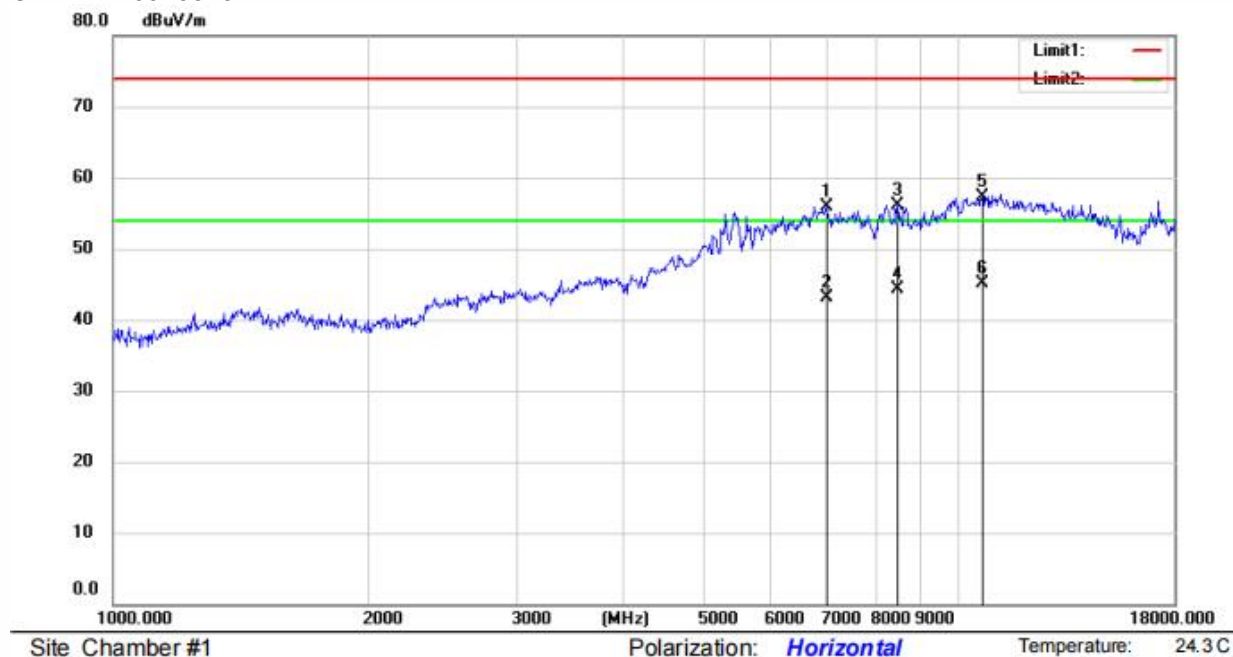
Channel 149: 5745MHz



Channel 157: 5785MHz

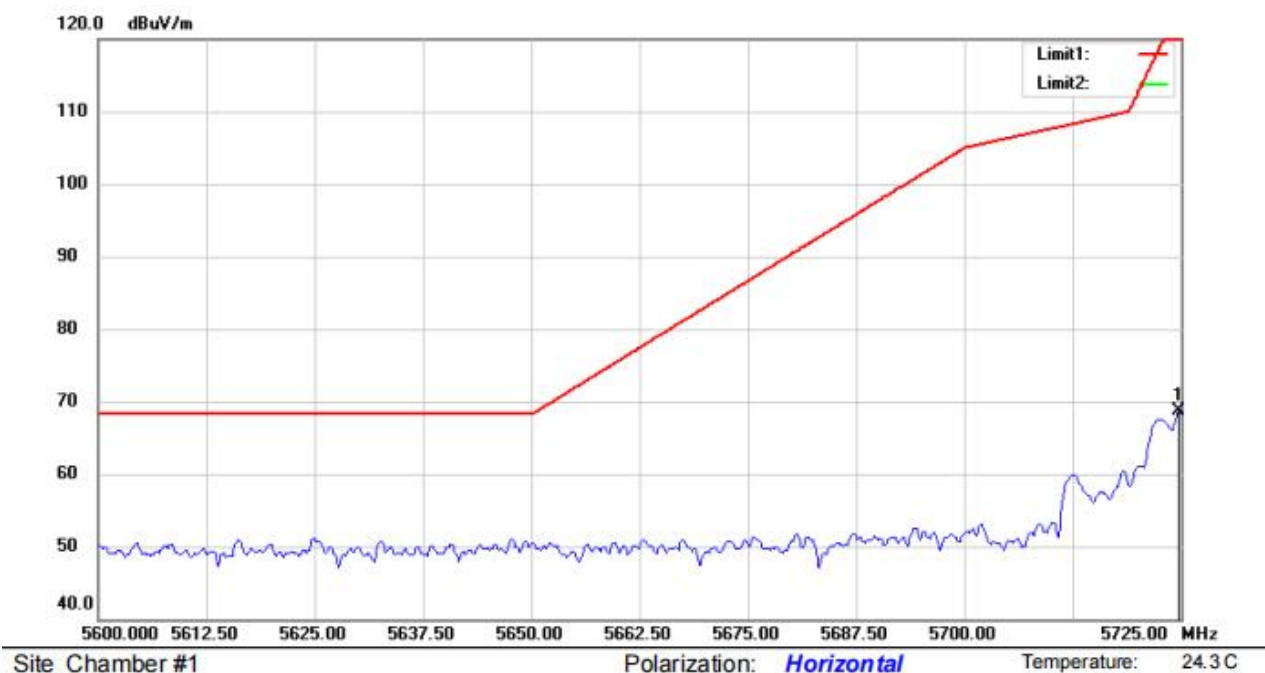


Channel 165: 5825MHz

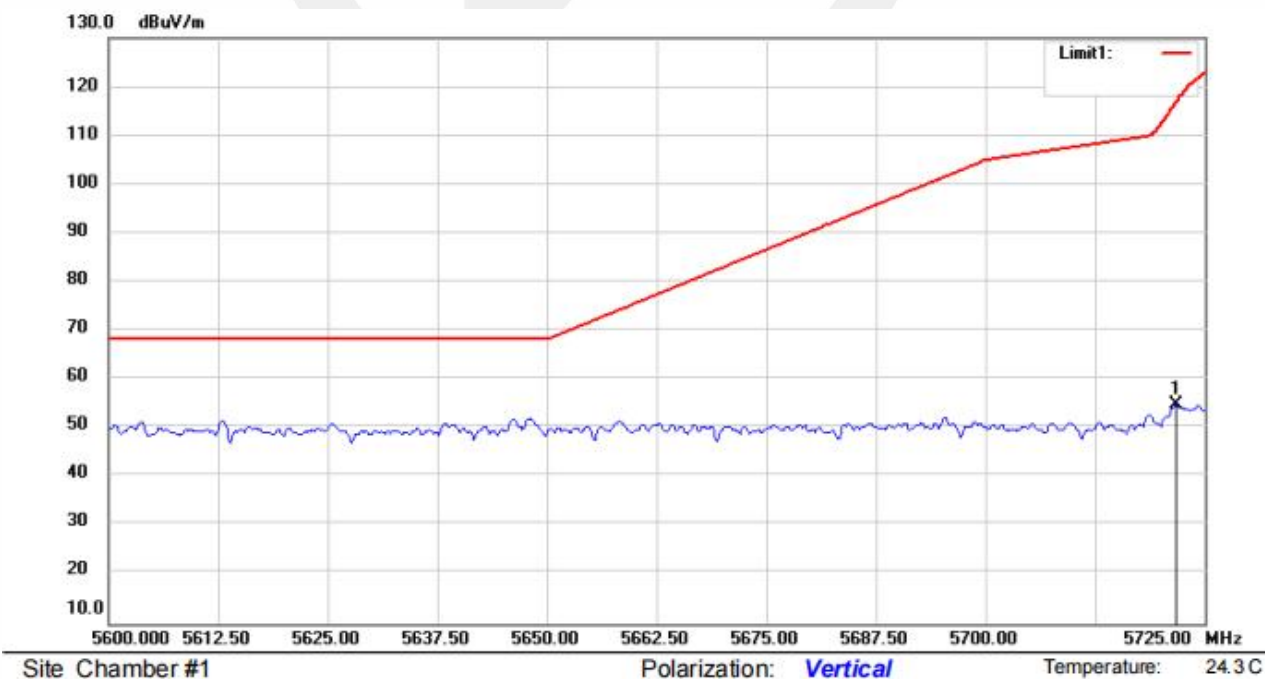


Note: Scan from 1GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed.

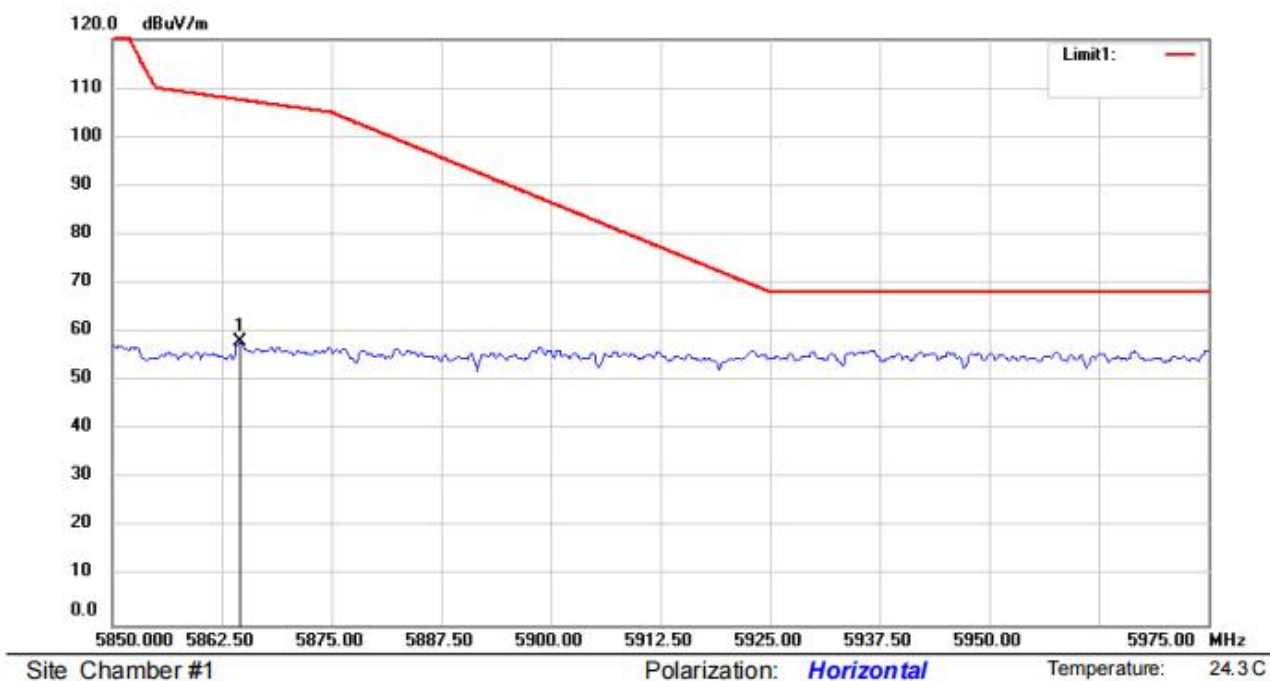
Test Model U-NII -3
 Undesirable radiated ☐ 802.11a Undesirable radiated ☒ 5745 Spurious Emission in Band Edge ☐ 802.11n(HT40)
 Ant.Pol H



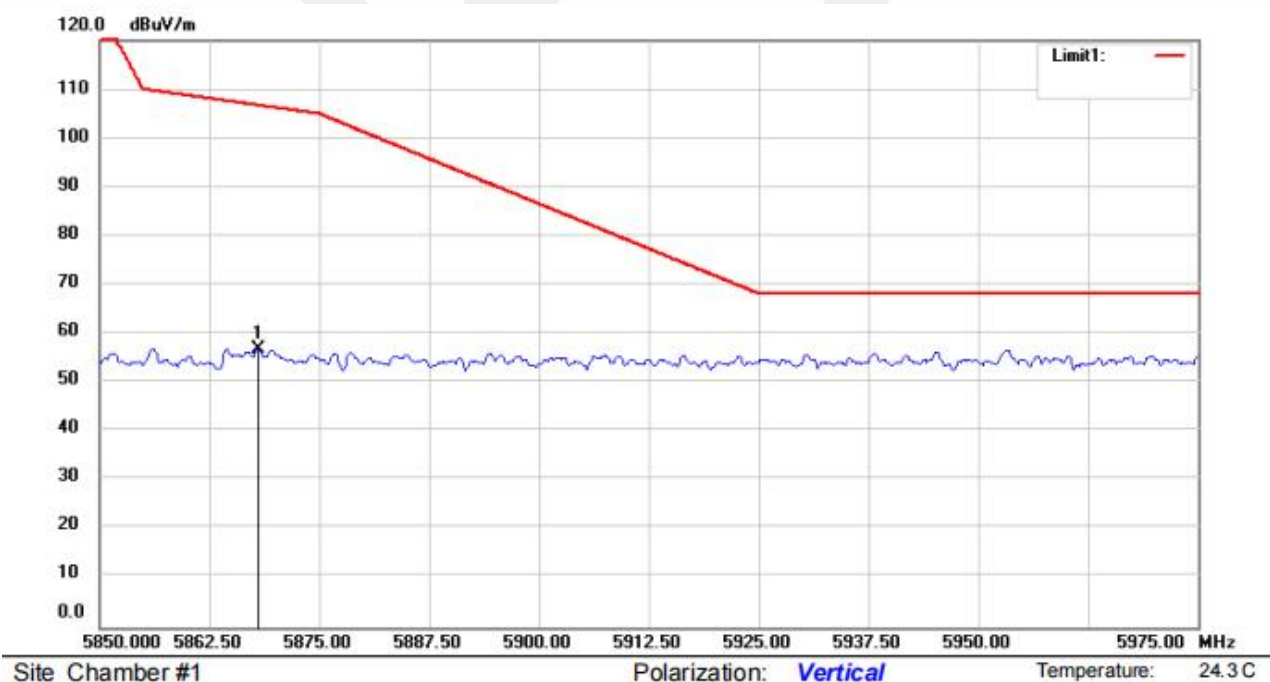
Test Model U-NII -3
 Undesirable radiated ☐ 802.11a Undesirable radiated ☒ 5745 Spurious Emission in Band Edge ☐ 802.11n(HT40)
 Ant.Pol V



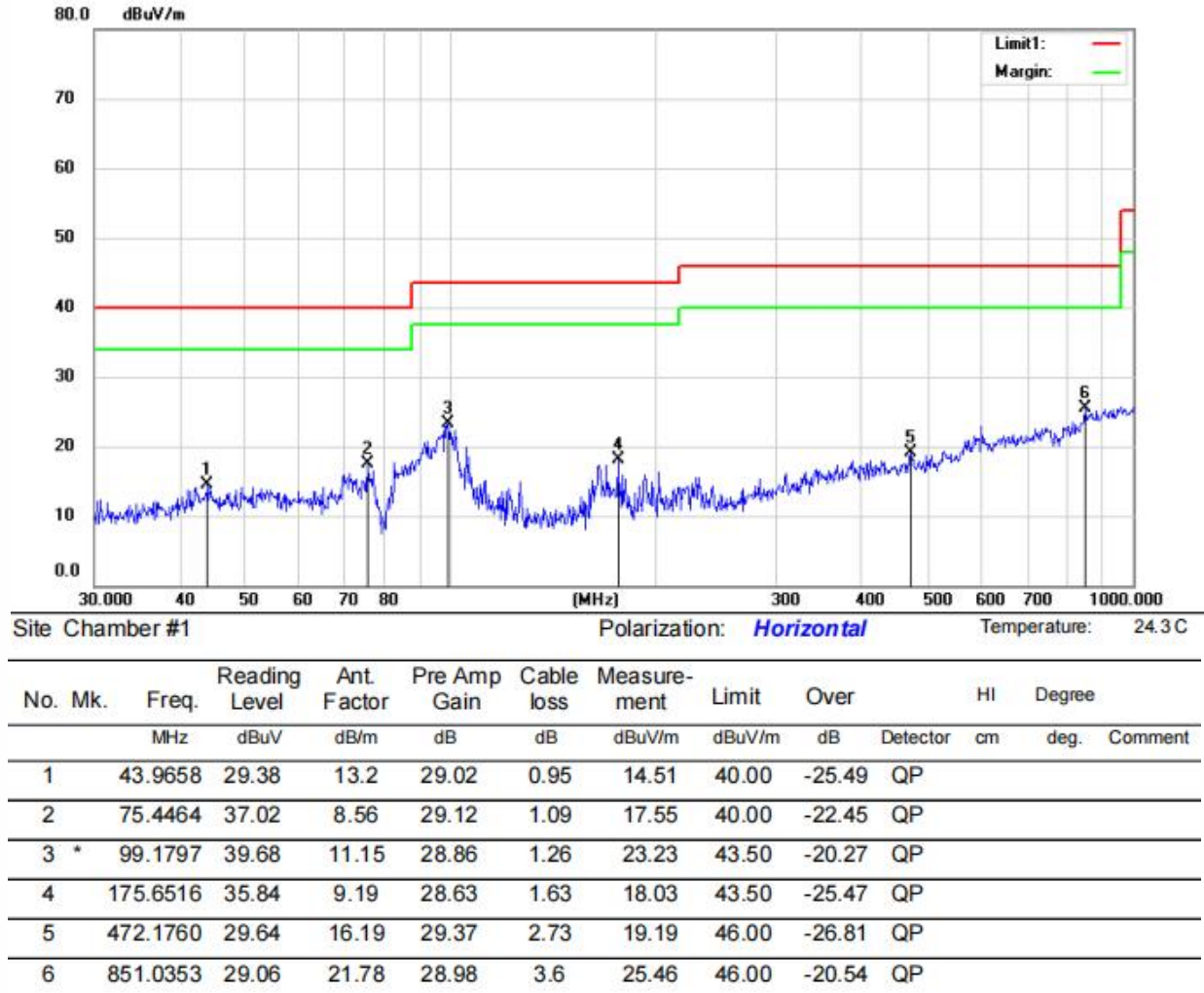
U-NII -3			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☐ 802.11a	☒ 802.11n(HT20)	☐ 802.11n(HT40)
		☒ 5825	
			Ant.Pol H



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

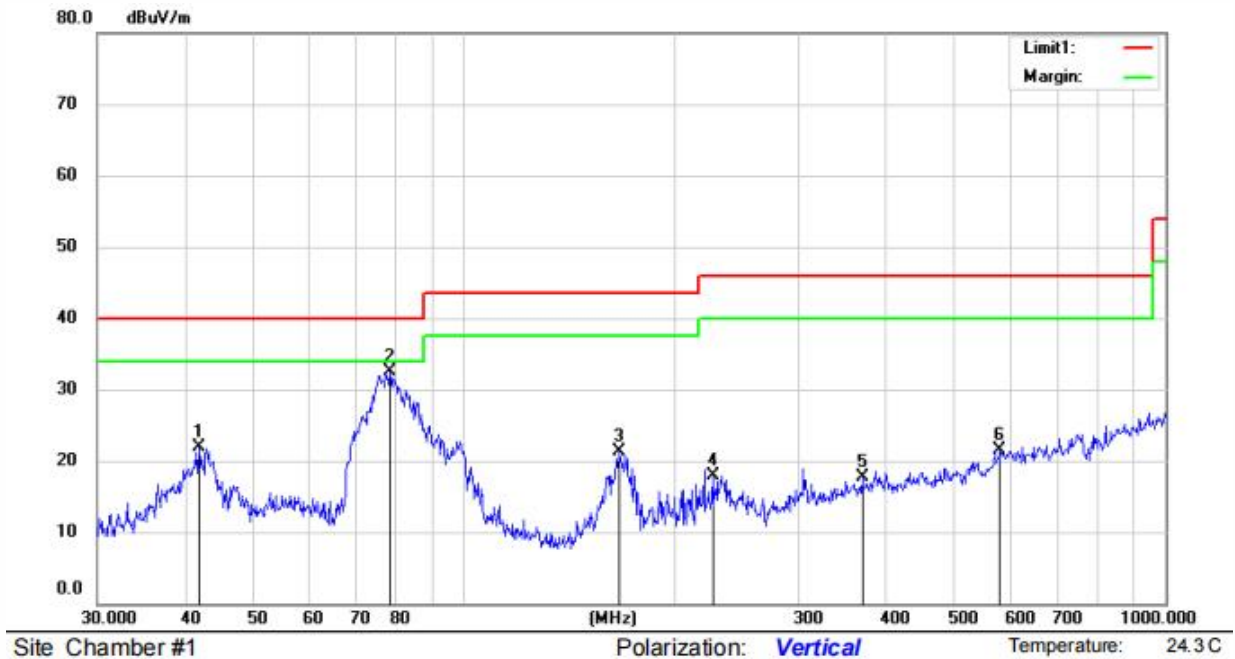


- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)
- All the antenna(Antenna 1) and modes(802.11a/n/ac/ax) have been tested and the worst(Antenna 1, 802.11a) result recorded was report as below:



*:Maximum data x:Over limit !:over margin

Operator: Hu



No.	Mk.	Freq. MHz	Reading Level dBuV	Ant. Factor dB/m	Pre Amp Gain dB	Cable loss dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	HI	Degree	Comment
1		41.8596	37.32	12.66	29.03	0.94	21.89	40.00	-18.11	QP		
2	*	78.4133	52.12	8.46	29.14	1.11	32.55	40.00	-7.45	QP		
3		166.6514	39.60	8.83	28.66	1.59	21.36	43.50	-22.14	QP		
4		226.0994	33.74	10.88	28.49	1.77	17.90	46.00	-28.10	QP		
5		369.4047	28.54	15.45	28.72	2.46	17.73	46.00	-28.27	QP		
6		580.7026	29.31	18.57	29.42	3.06	21.52	46.00	-24.48	QP		

*:Maximum data x:Over limit !:over margin

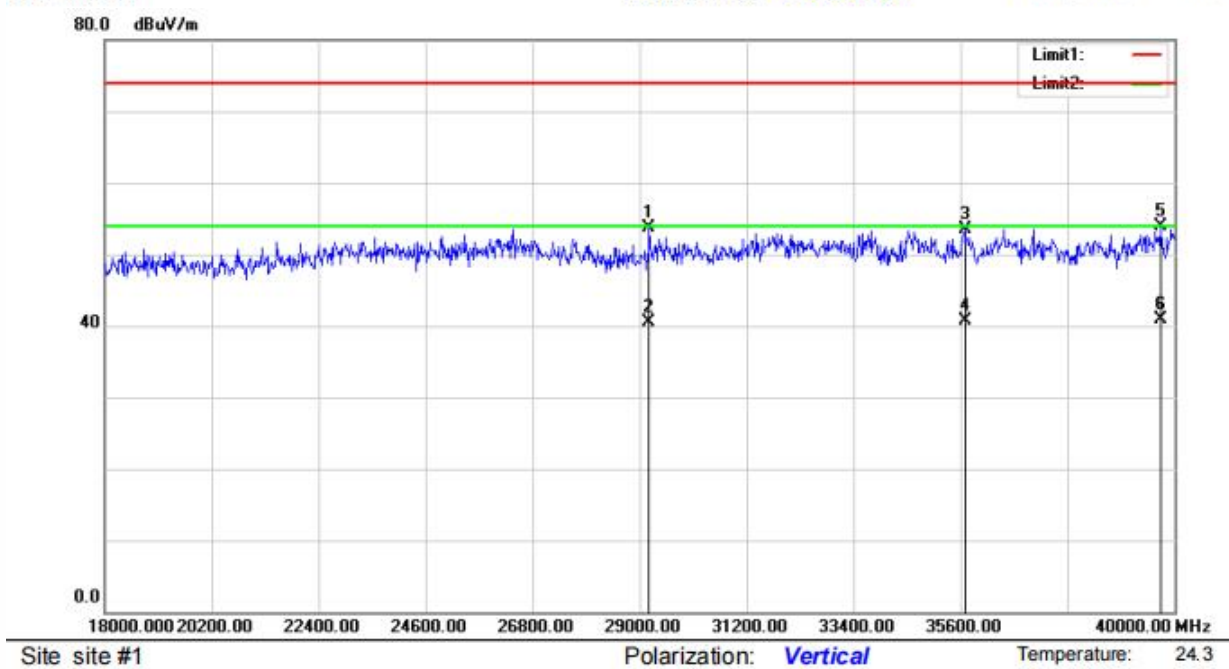
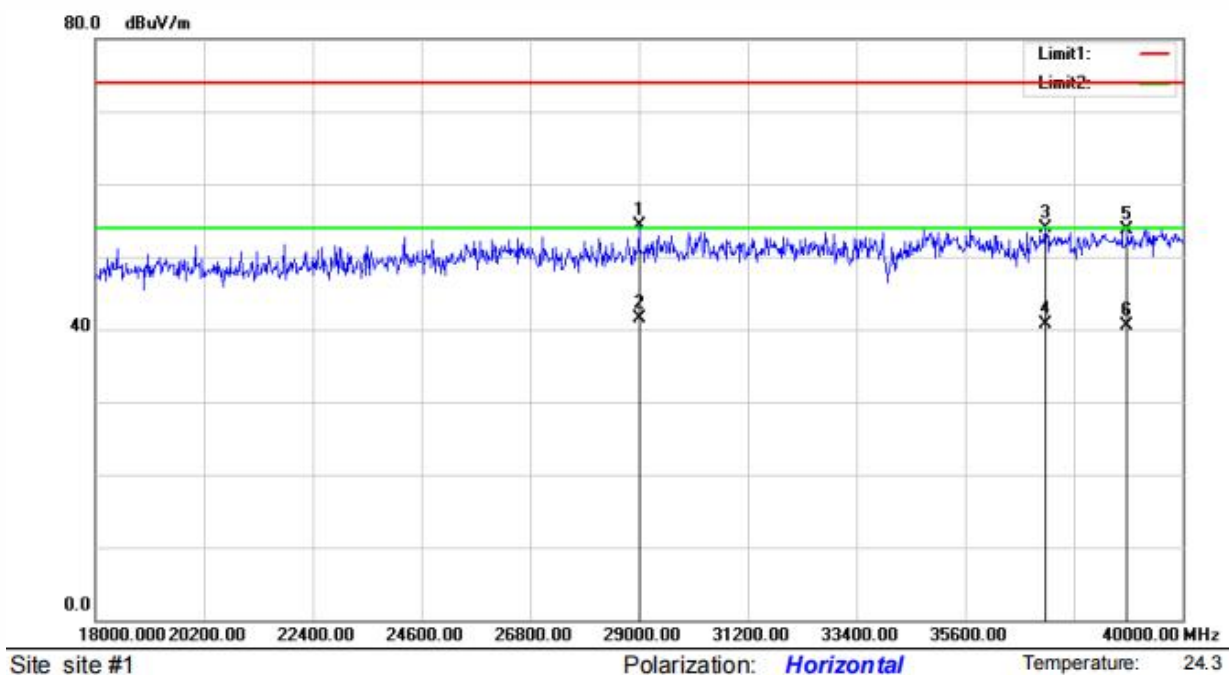
Operator: Hu

■ Spurious Emission Above 1GHz (18GHz to 40GHz)

Scan from 18GHz to 40GHz, the disturbance was very low. All the mode have been tested, and the worst result recorded was report as below:

Test mode: 802.11n(HT20) Frequency: Channel 36: 5180MHz

Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
	H/V	PK	AV	PK	AV	PK	AV
29200.20	V	53.64	40.59	74.00	54.00	-20.36	-13.41
35690.20	V	53.54	40.61	74.00	54.00	-20.46	-13.39
39722.80	V	53.87	40.88	74.00	54.00	-20.13	-13.12
29013.20	H	54.36	41.52	74.00	54.00	-19.64	-12.48
37245.60	H	53.82	40.69	74.00	54.00	-20.18	-13.31
38895.60	H	53.75	40.56	74.00	54.00	-20.25	-13.44



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

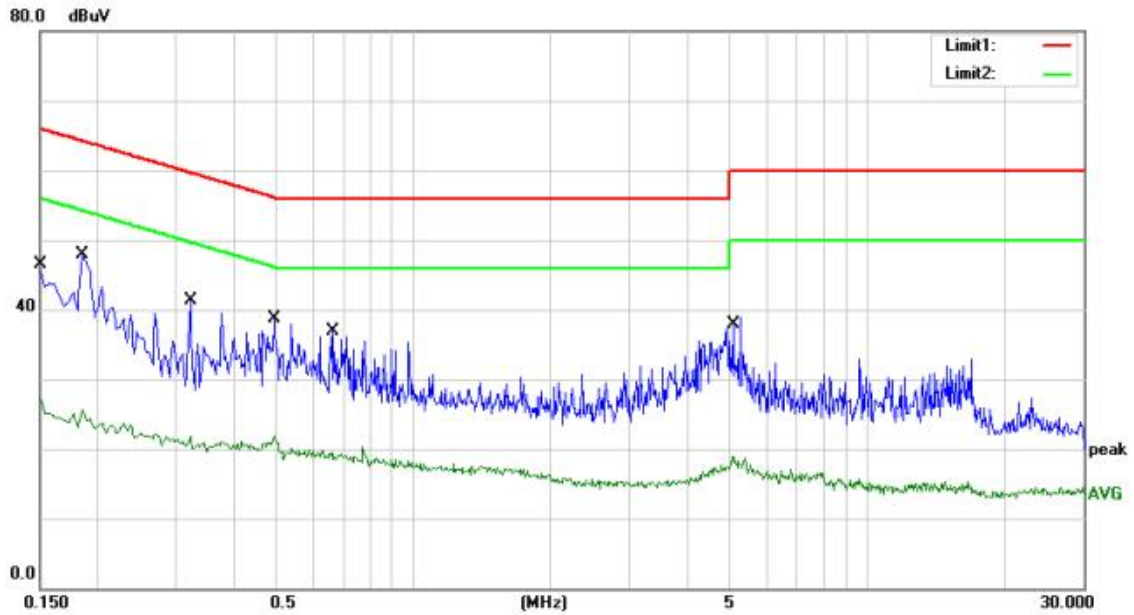
The EUT was placed on a table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Repeat above procedures until all frequency measured were complete.

8.5.5 Test Results

Temperature :	25.1℃	ATM Pressure::	1011 mbar
Humidity :	45 %	Test Engineer:	Lusi

Pass

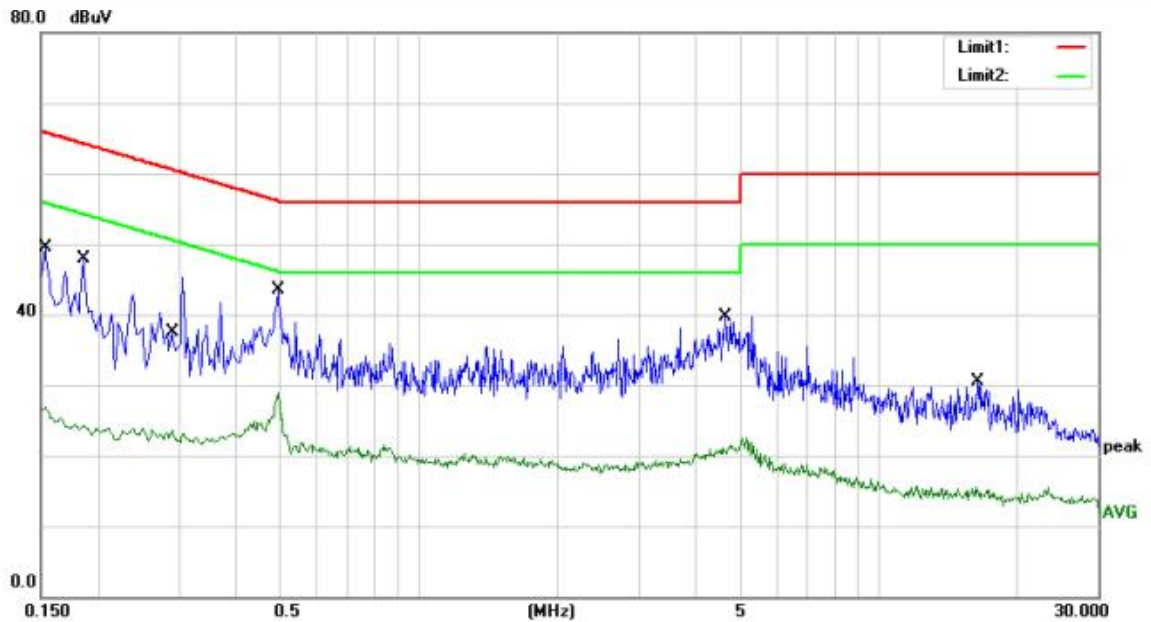
The 120V &240V voltage have been tested, and the worst result recorded was report as below:



Site site #1 Phase: L1 Temperature: 26.5

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1500	28.18	18.42	46.60	66.00	-19.40	QP	
2		0.1500	9.33	18.42	27.75	56.00	-28.25	AVG	
3	*	0.1860	29.60	18.33	47.93	64.21	-16.28	QP	
4		0.1860	7.45	18.33	25.78	54.21	-28.43	AVG	
5		0.3220	23.25	17.99	41.24	59.66	-18.42	QP	
6		0.3220	3.85	17.99	21.84	49.66	-27.82	AVG	
7		0.4940	21.17	17.56	38.73	56.10	-17.37	QP	
8		0.4940	4.42	17.56	21.98	46.10	-24.12	AVG	
9		0.6580	19.25	17.56	36.81	56.00	-19.19	QP	
10		0.6580	1.84	17.56	19.40	46.00	-26.60	AVG	
11		5.0420	21.15	17.75	38.90	60.00	-21.10	QP	
12		5.0420	1.12	17.75	18.87	50.00	-31.13	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Weishanqin



Site site #1 Phase: N Temperature: 26.5

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1540	31.18	18.41	49.59	65.78	-16.19	QP	
2		0.1540	8.50	18.41	26.91	55.78	-28.87	AVG	
3		0.1860	29.66	18.33	47.99	64.21	-16.22	QP	
4		0.1860	5.89	18.33	24.22	54.21	-29.99	AVG	
5		0.2900	27.22	18.07	45.29	60.52	-15.23	QP	
6		0.2900	5.56	18.07	23.63	50.52	-26.89	AVG	
7	*	0.4940	25.87	17.56	43.43	56.10	-12.67	QP	
8		0.4940	11.42	17.56	28.98	46.10	-17.12	AVG	
9		4.6260	21.89	17.73	39.62	56.00	-16.38	QP	
10		4.6260	3.79	17.73	21.52	46.00	-24.48	AVG	
11		16.2660	12.76	17.80	30.56	60.00	-29.44	QP	
12		16.2660	-2.31	17.80	15.49	50.00	-34.51	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Weishanqin

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
Humidity : 60 %

ATM Pressure:: 1011 mbar
Test Engineer: XXH

PASS

The EUT is PCB Antenna.

☒ Antennas use a permanently attached antenna which is not replaceable.

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 ---

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