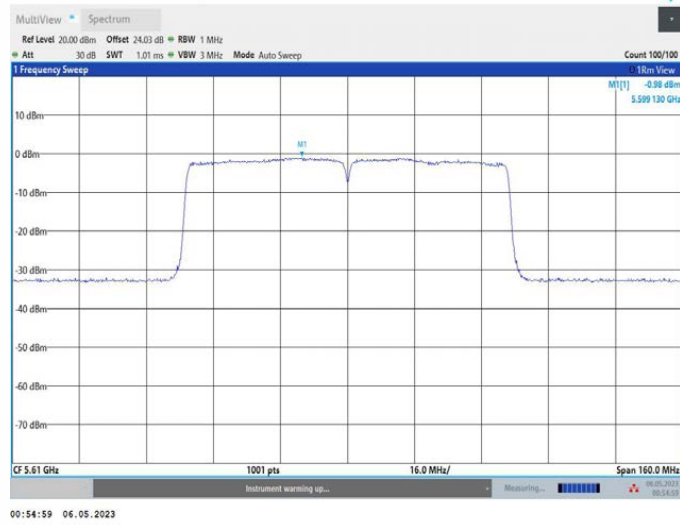
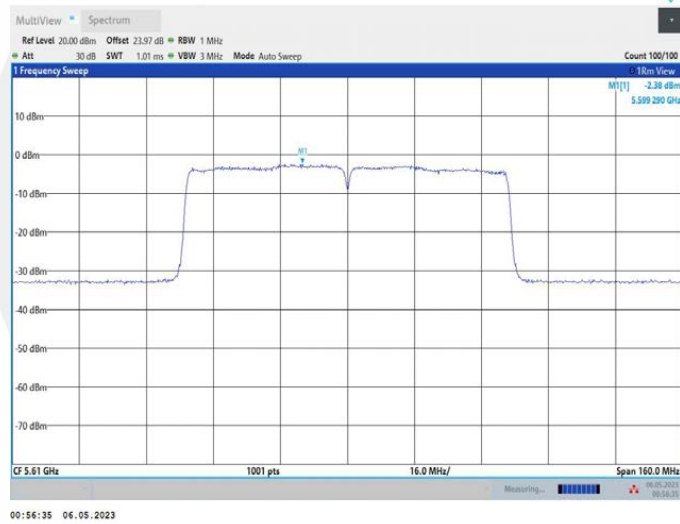


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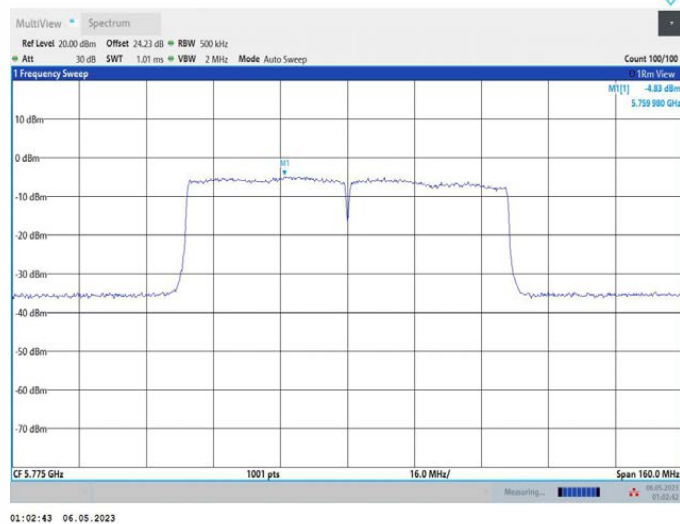
00:54:59 06.05.2023

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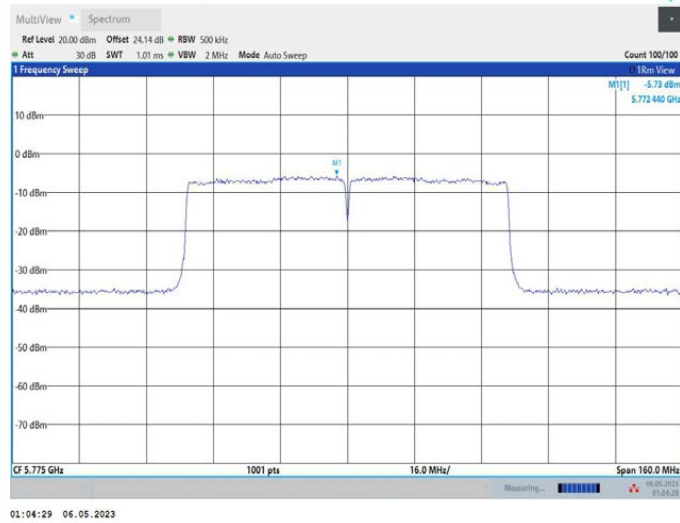
00:56:35 06.05.2023

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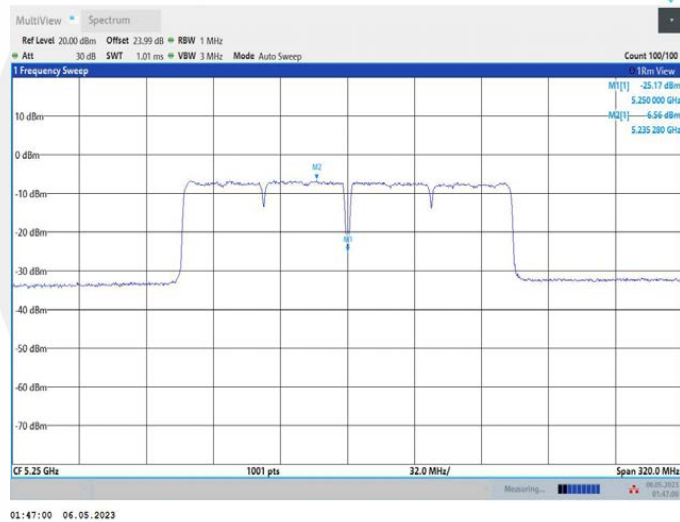


01:02:43 06.05.2023

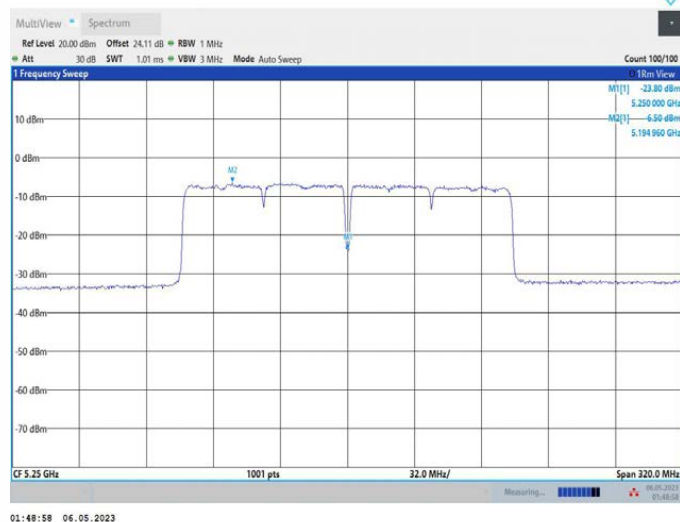
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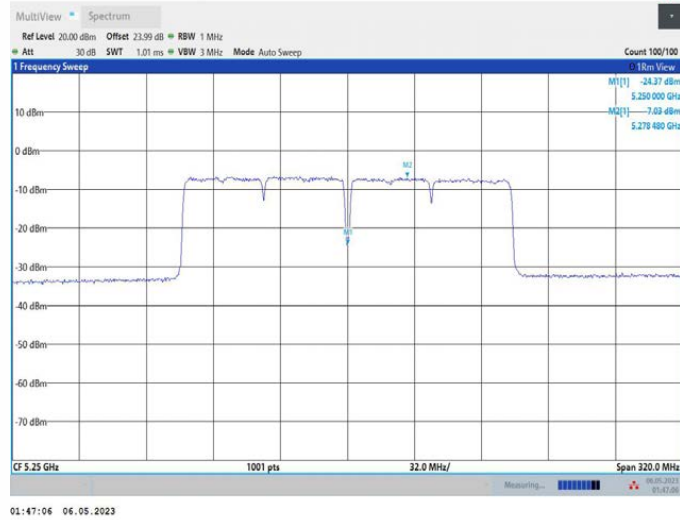
## 11AC160MIMO\_Ant1\_5250\_UNII-1



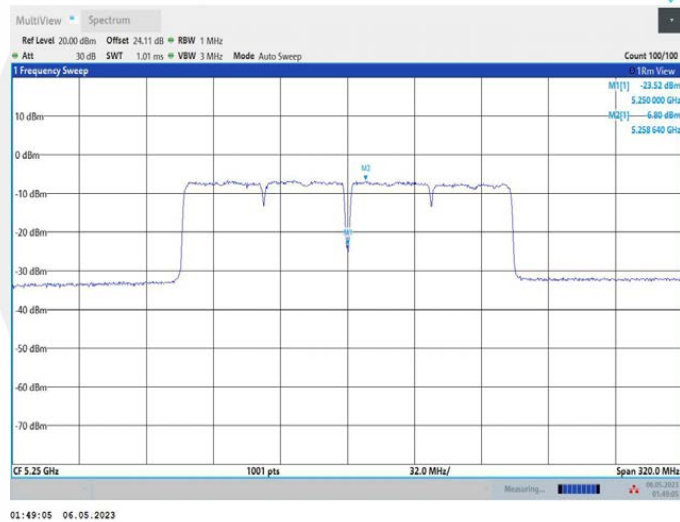
## 11AC160MIMO\_Ant2\_5250\_UNII-1



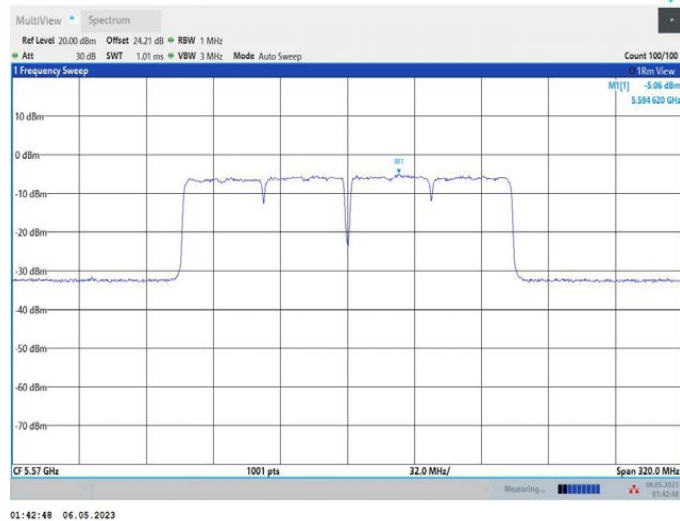
## 11AC160MIMO\_Ant1\_5250\_UNII-2A



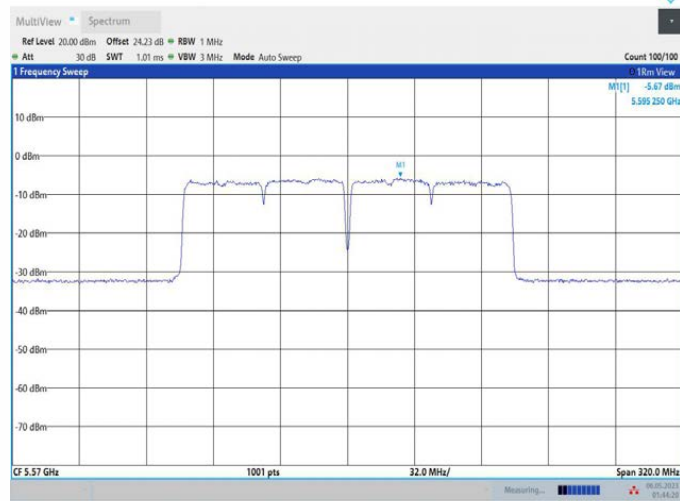
## 11AC160MIMO\_Ant2\_5250\_UNII-2A



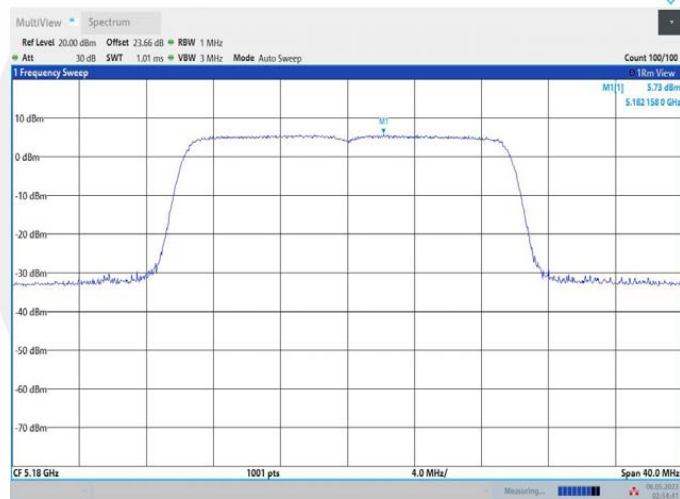
## 11AC160MIMO\_Ant1\_5570



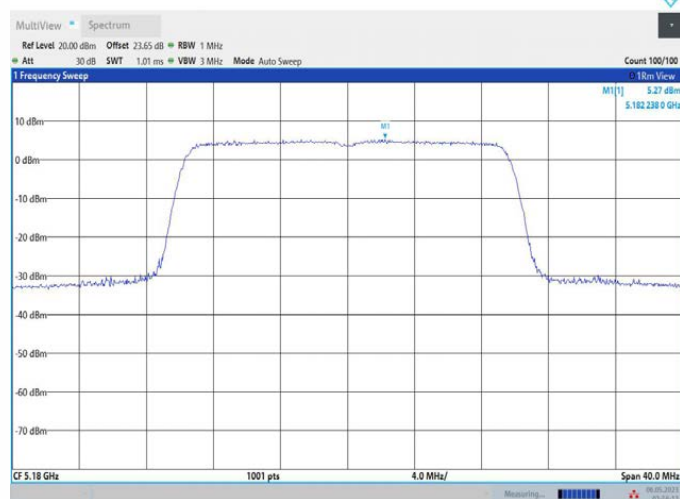
## 11AC160MIMO\_Ant2\_5570



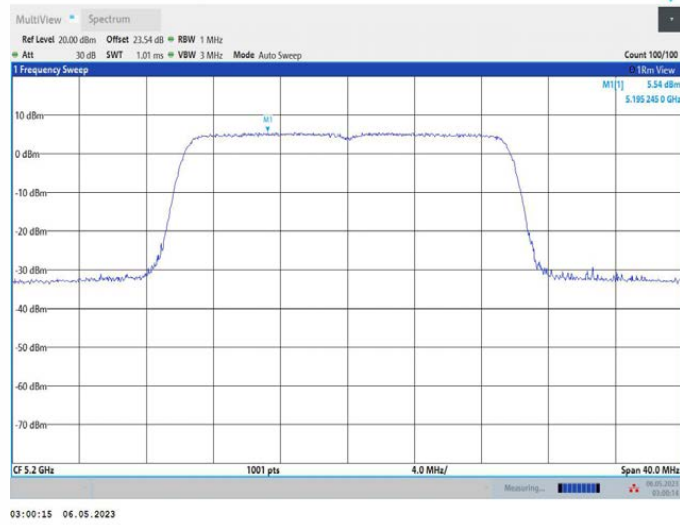
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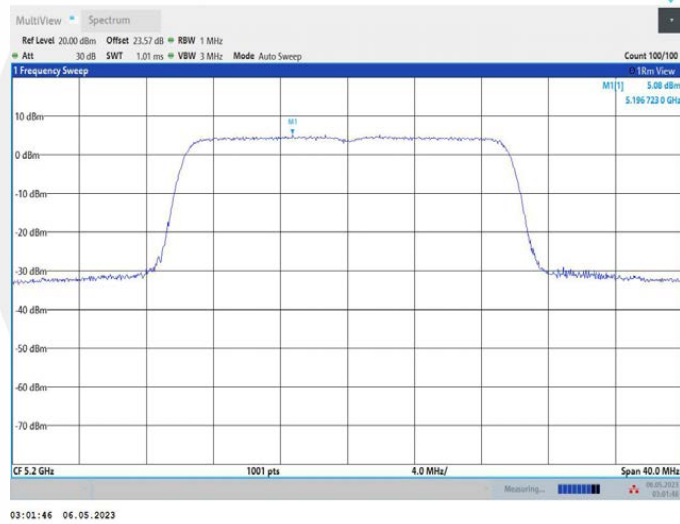
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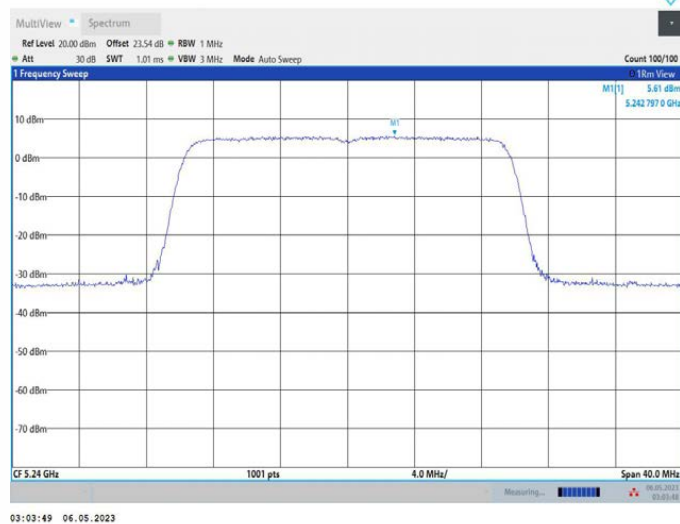
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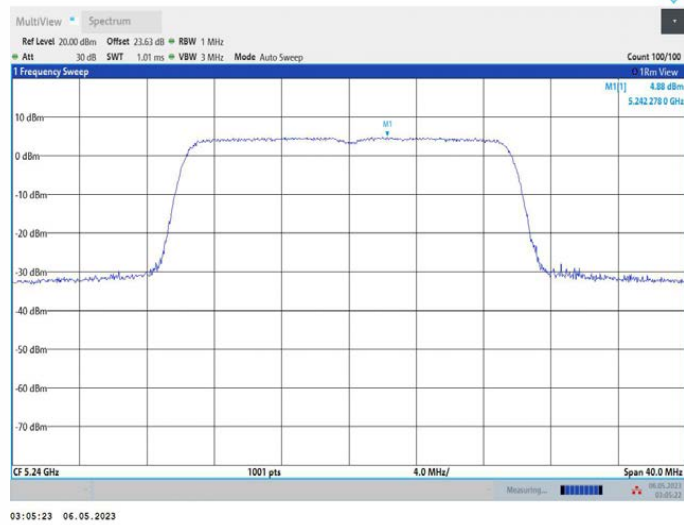
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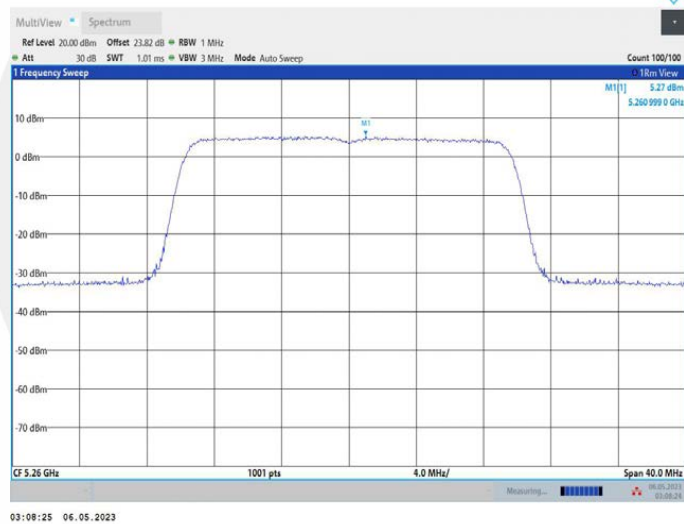
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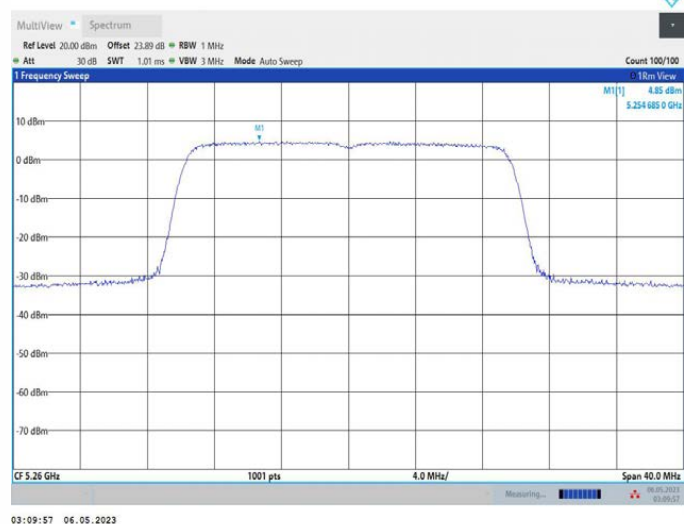
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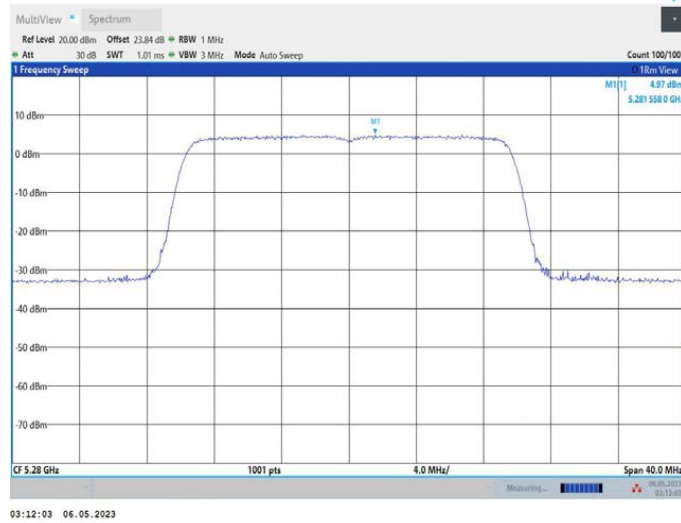
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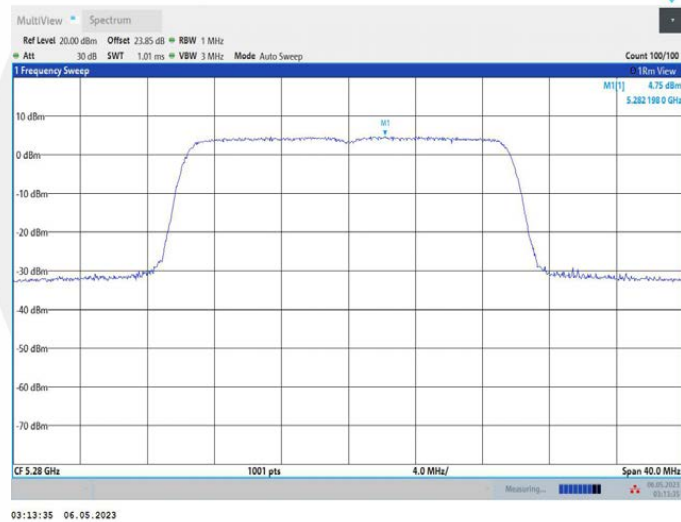
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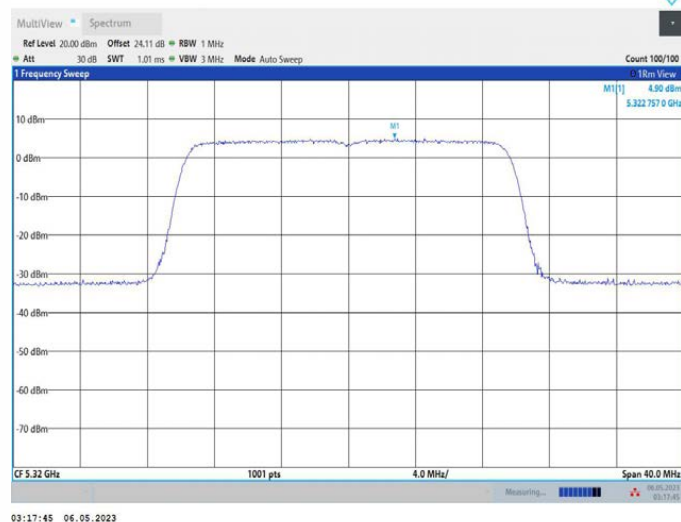
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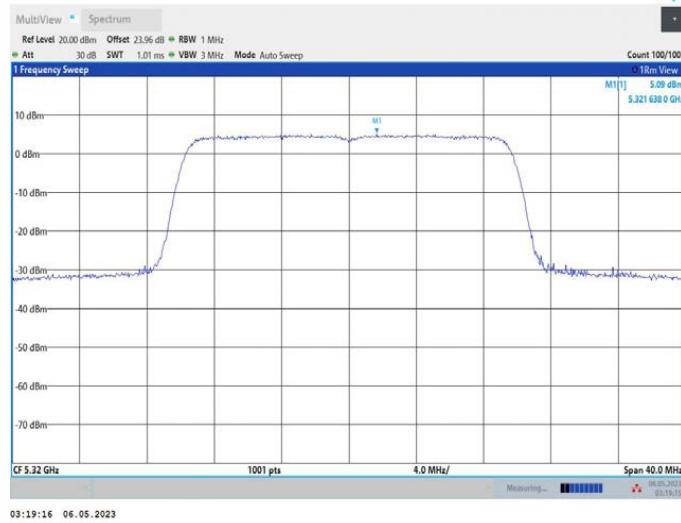
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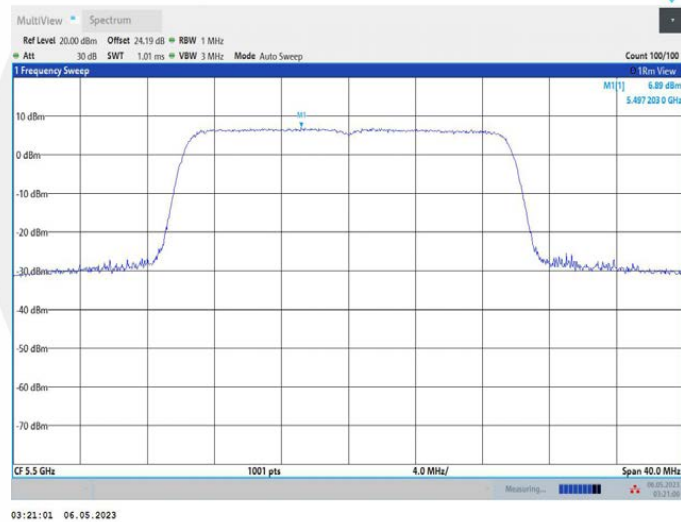
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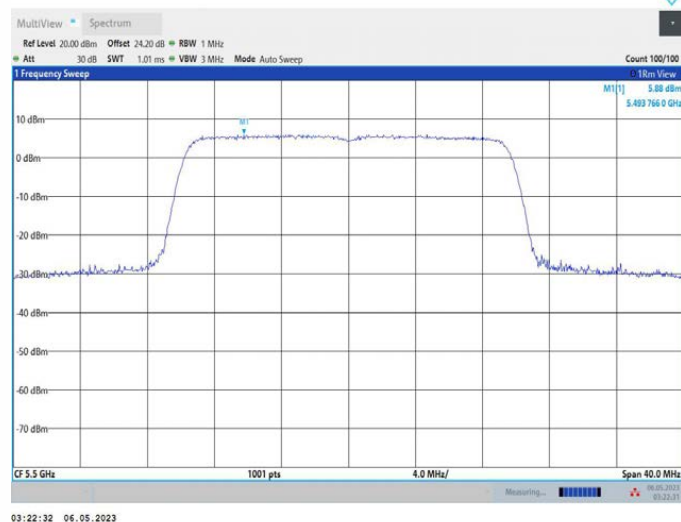
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## 11AX20MIMO\_Ant1\_5500

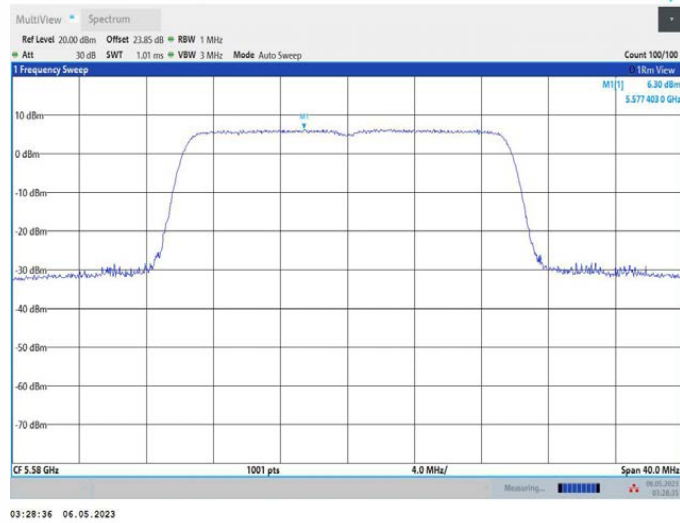


## 11AX20MIMO\_Ant2\_5500

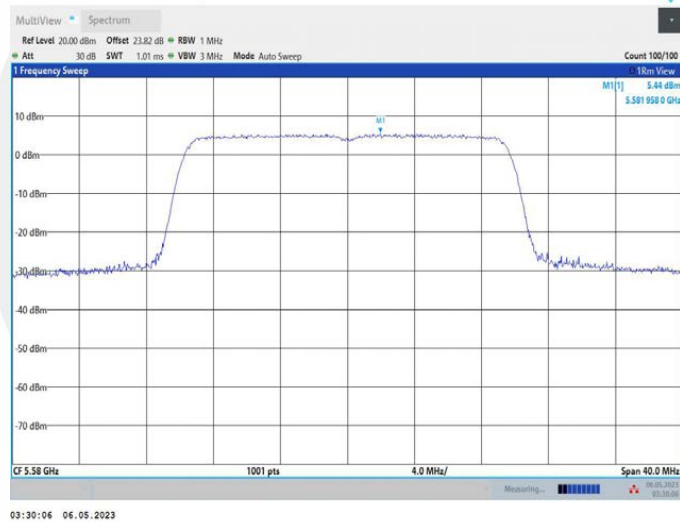




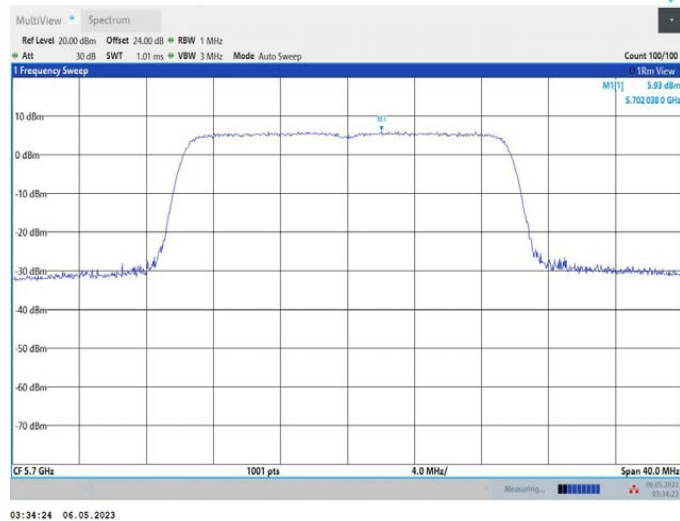
## 11AX20MIMO\_Ant1\_5580



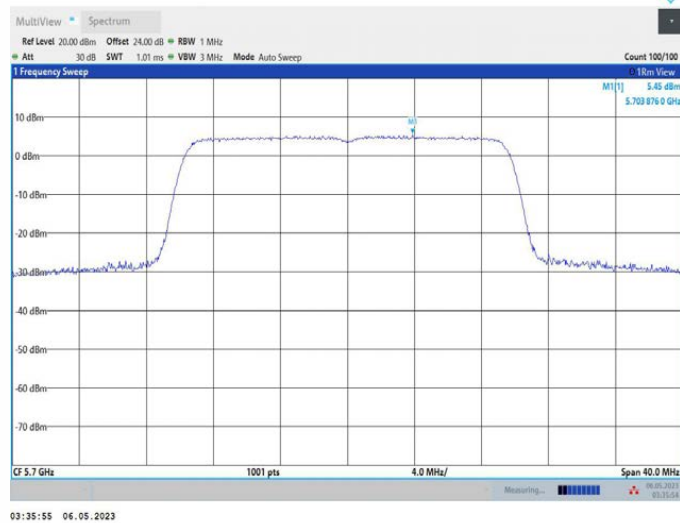
## 11AX20MIMO\_Ant2\_5580



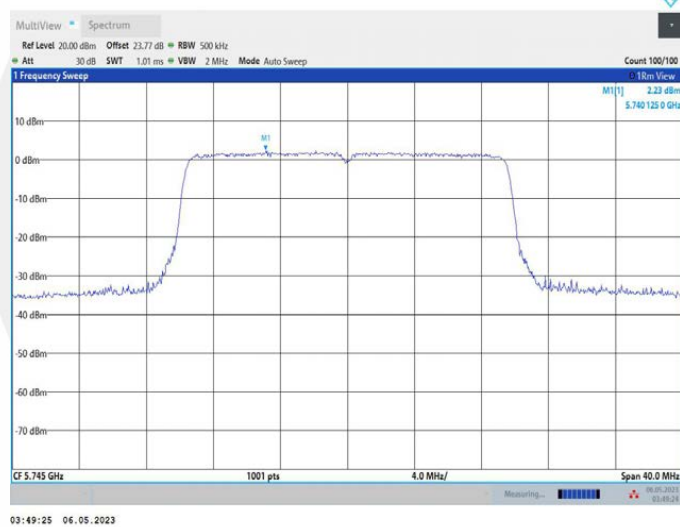
## 11AX20MIMO\_Ant1\_5700



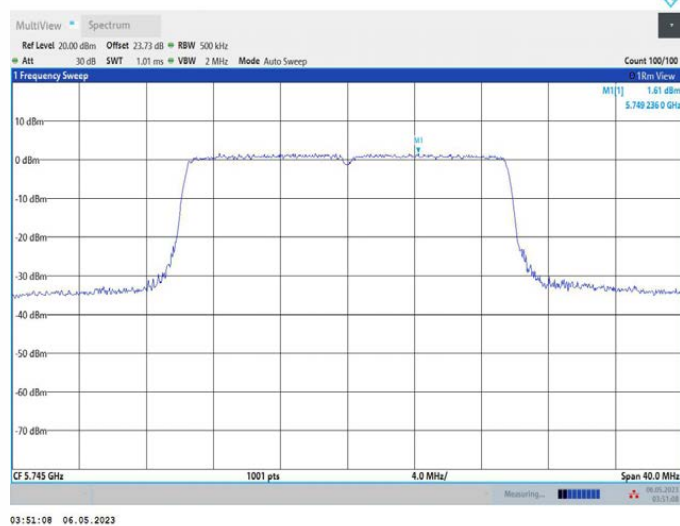
## 11AX20MIMO\_Ant2\_5700



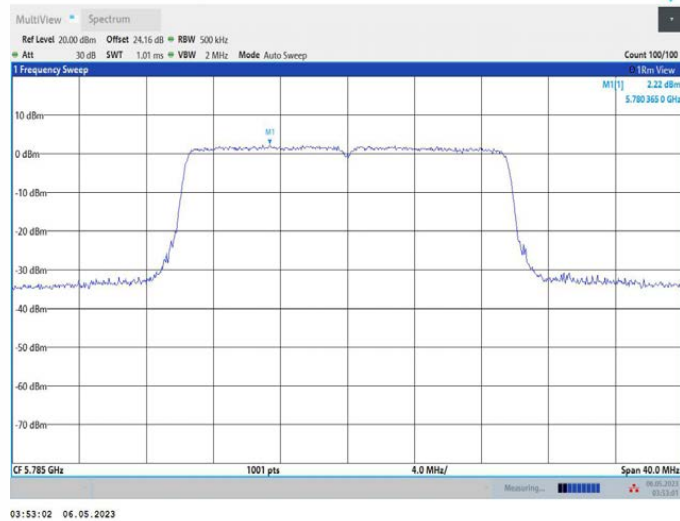
## 11AX20MIMO\_Ant1\_5745



## 11AX20MIMO\_Ant2\_5745

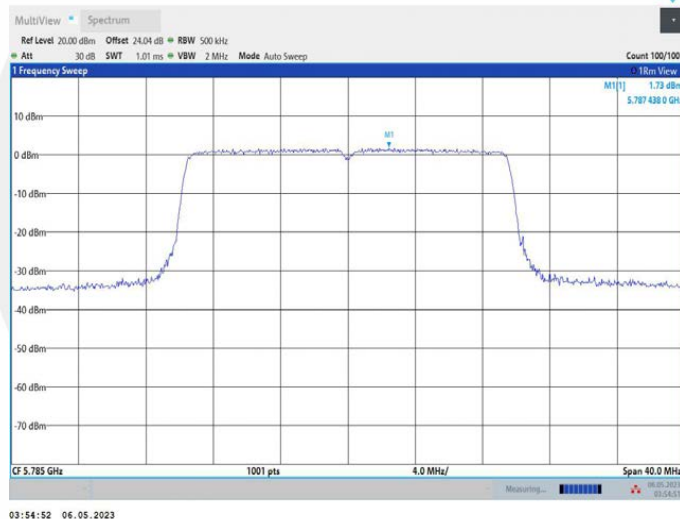


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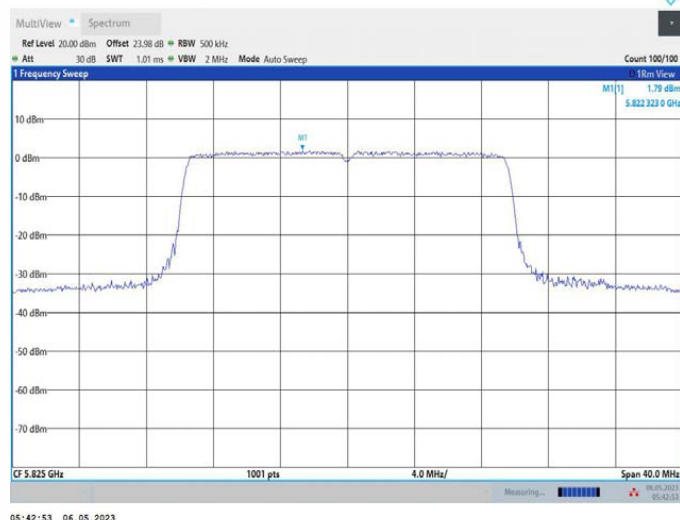
03:53:02 06.05.2023

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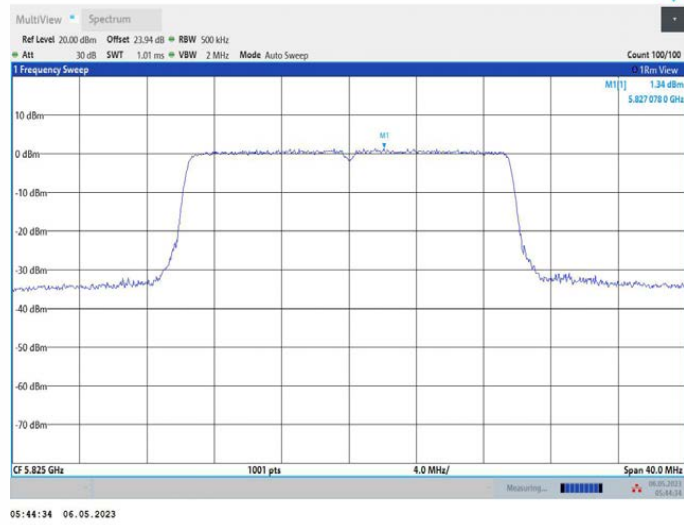
03:54:52 06.05.2023

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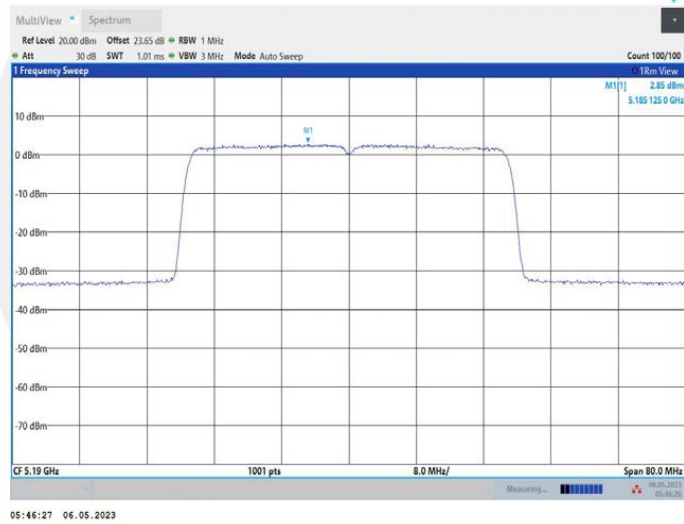


05:42:53 06.05.2023

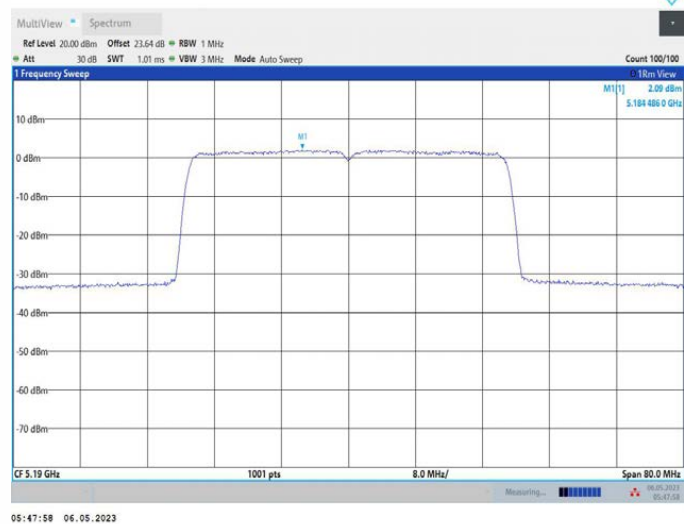
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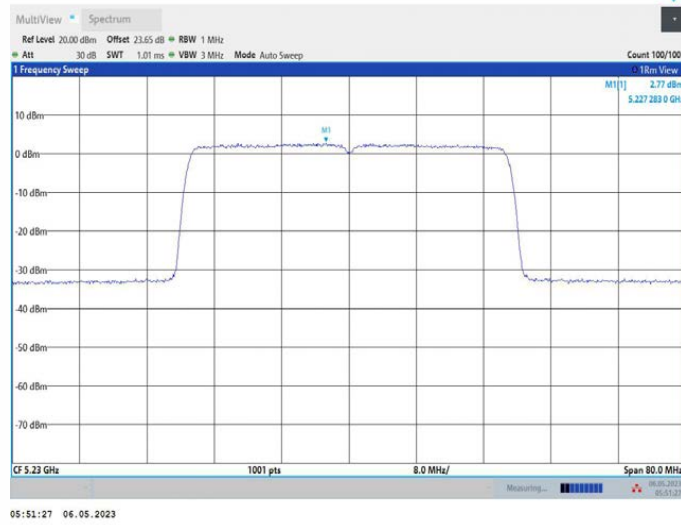
## 11AX40MIMO\_Ant1\_5190



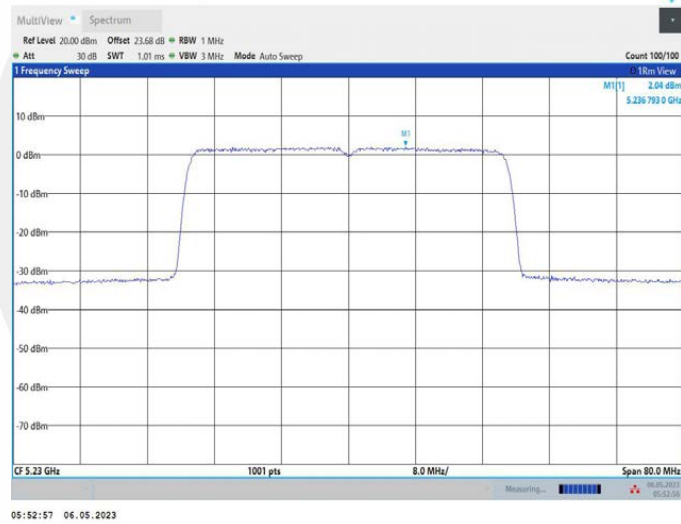
## 11AX40MIMO\_Ant2\_5190



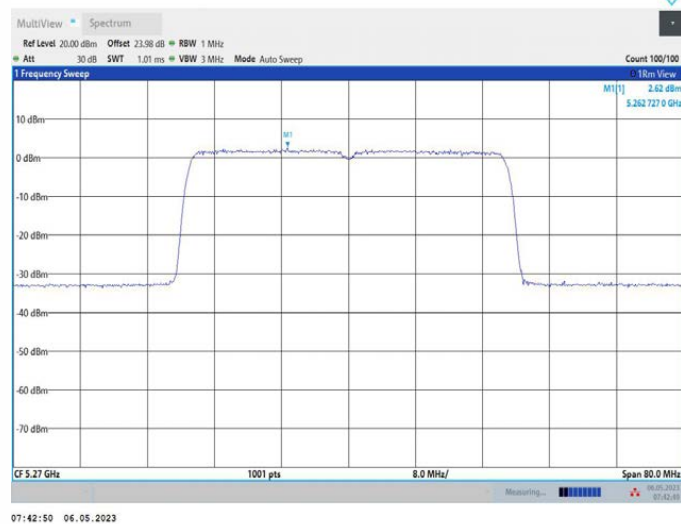
## 11AX40MIMO\_Ant1\_5230



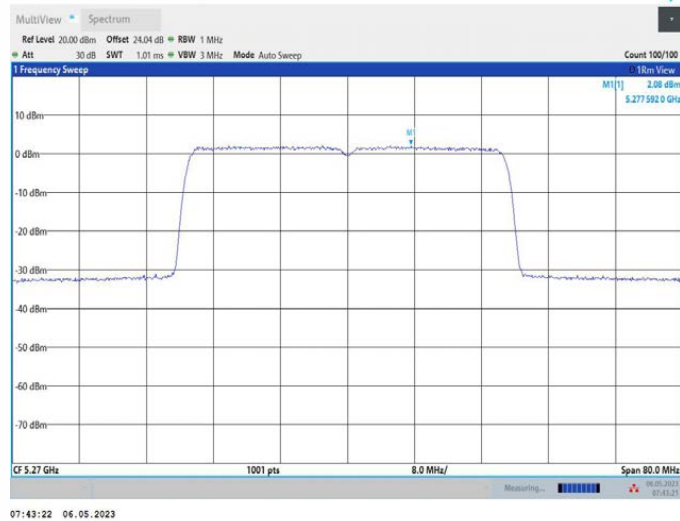
## 11AX40MIMO\_Ant2\_5230



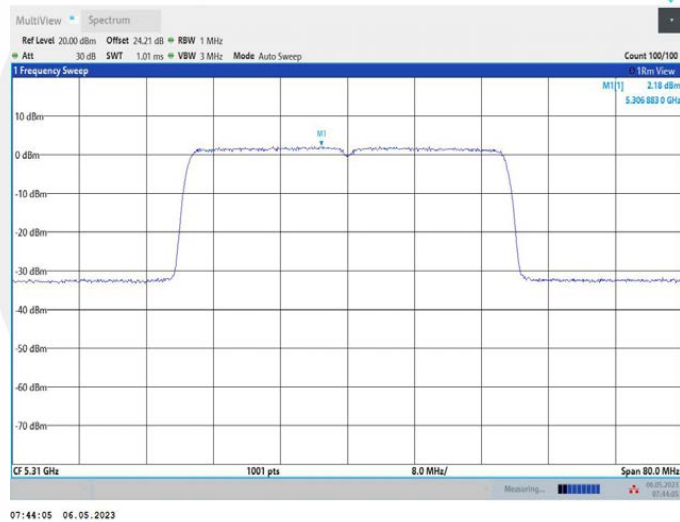
## 11AX40MIMO\_Ant1\_5270



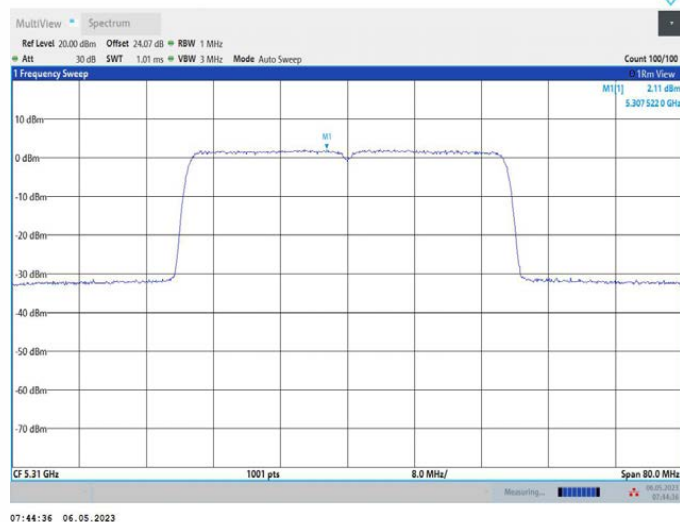
## 11AX40MIMO\_Ant2\_5270



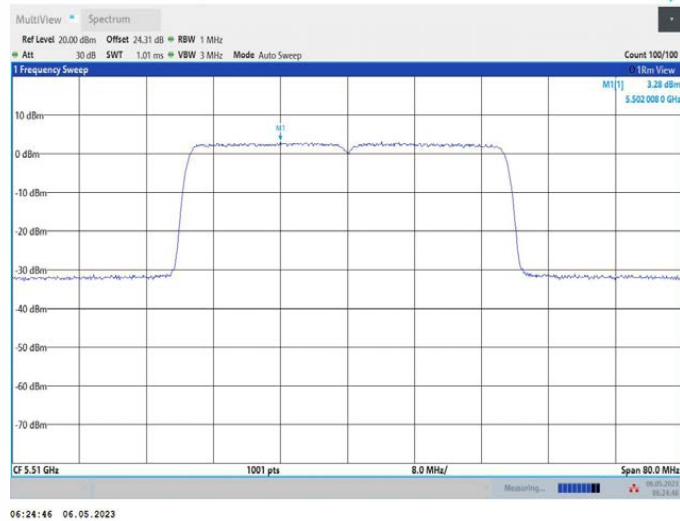
## 11AX40MIMO\_Ant1\_5310



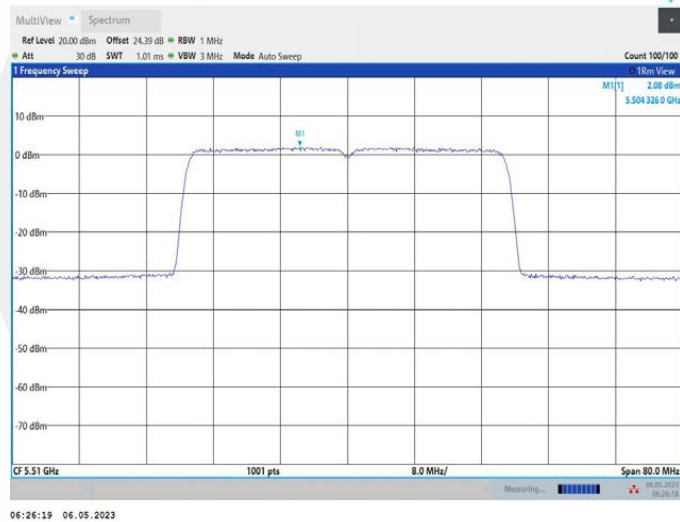
## 11AX40MIMO\_Ant2\_5310



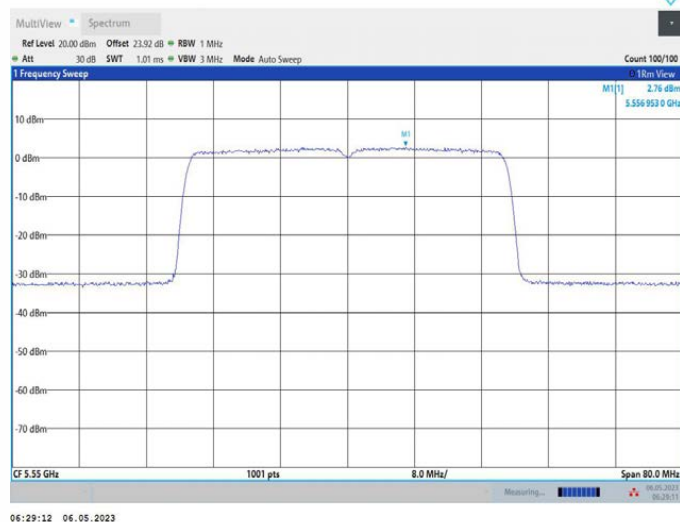
## 11AX40MIMO\_Ant1\_5510



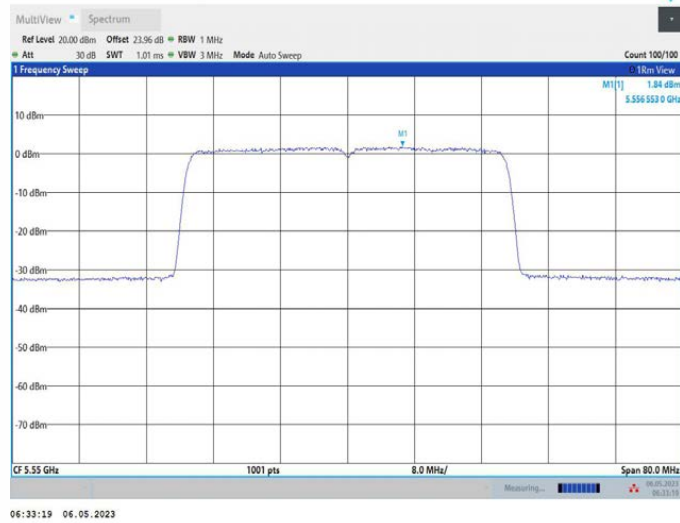
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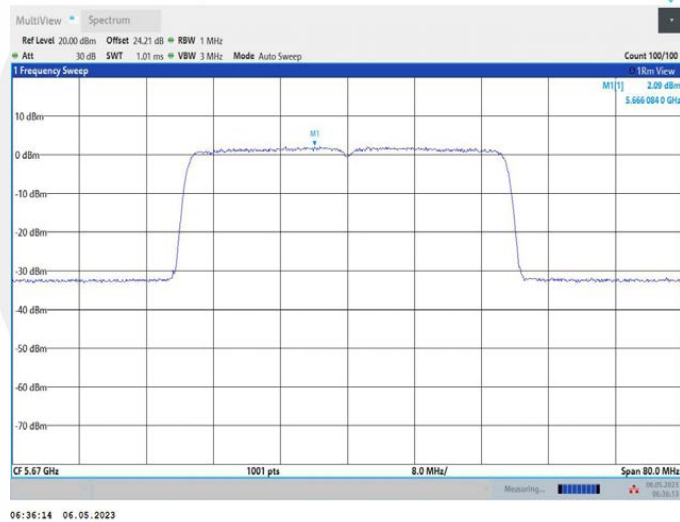
## 11AX40MIMO\_Ant1\_5550



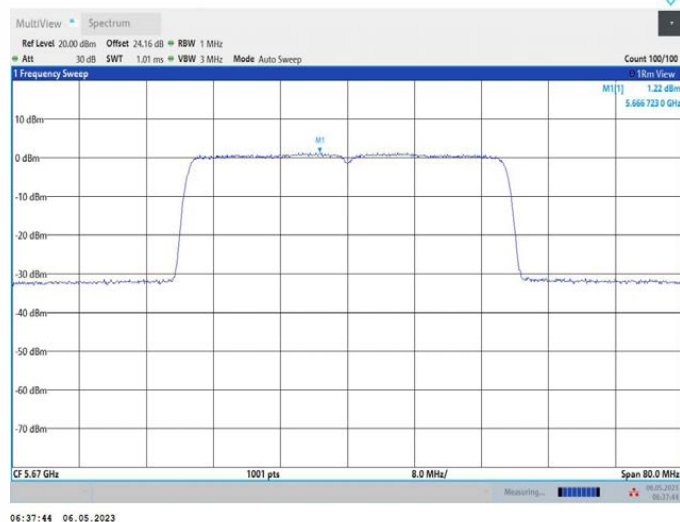
## 11AX40MIMO\_Ant2\_5550



## 11AX40MIMO\_Ant1\_5670

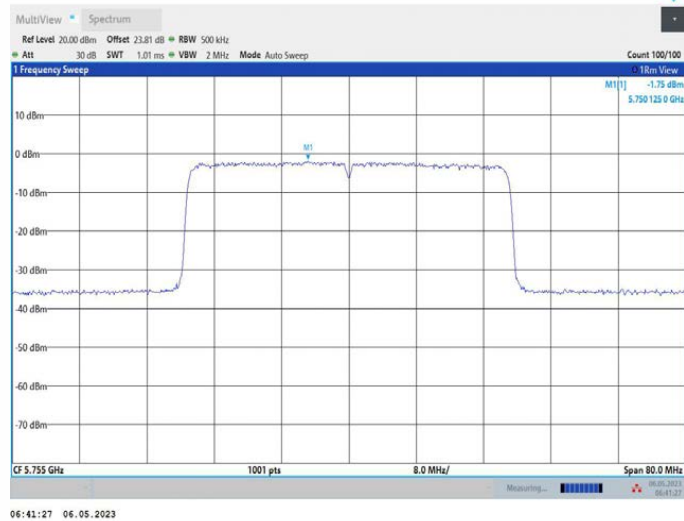


## 11AX40MIMO\_Ant2\_5670

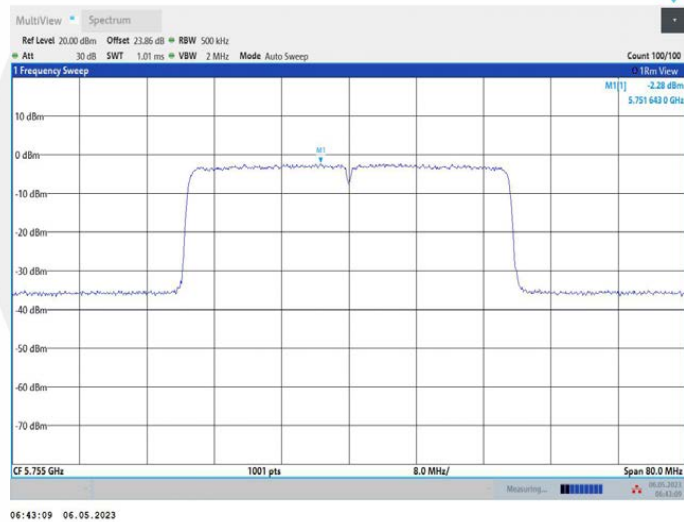




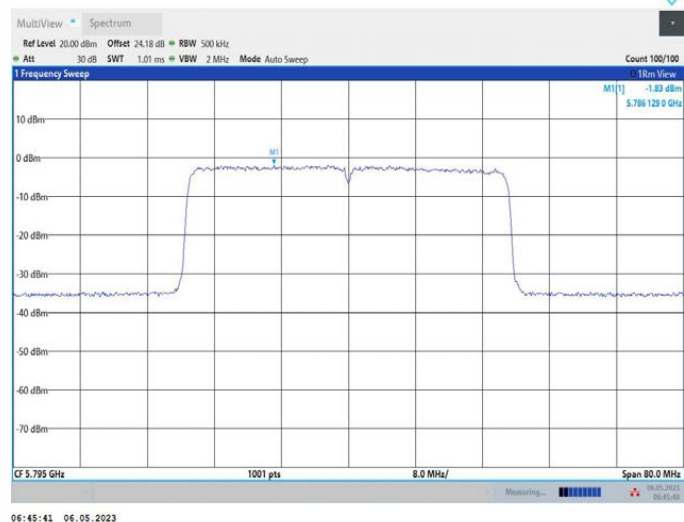
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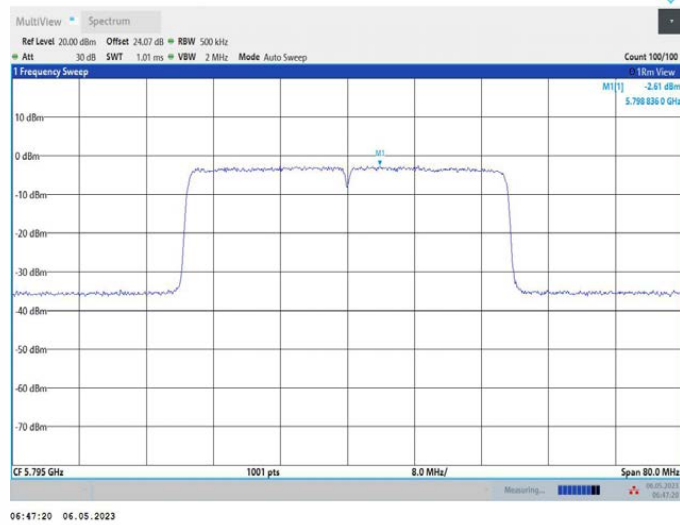
## 11AX40MIMO\_Ant2\_5755



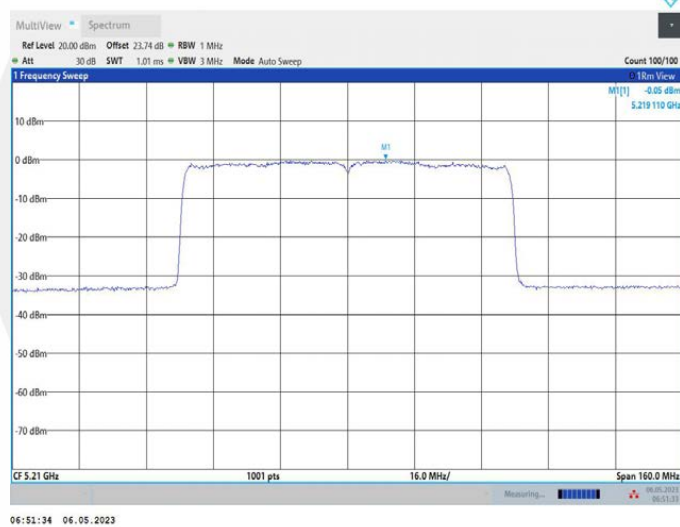
## 11AX40MIMO\_Ant1\_5795



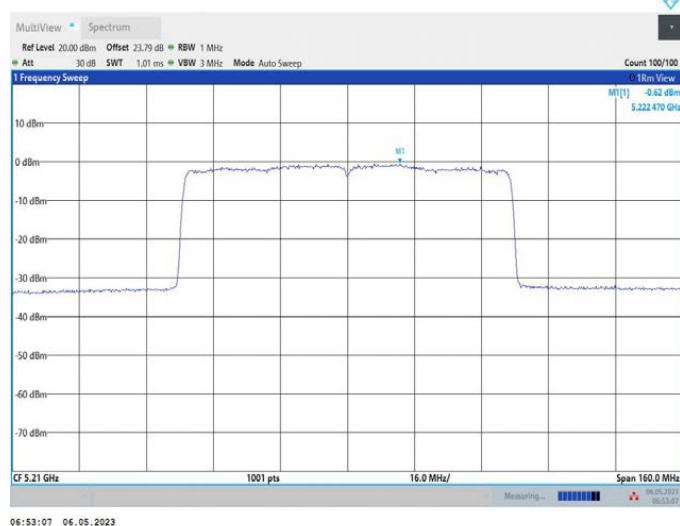
## 11AX40MIMO\_Ant2\_5795



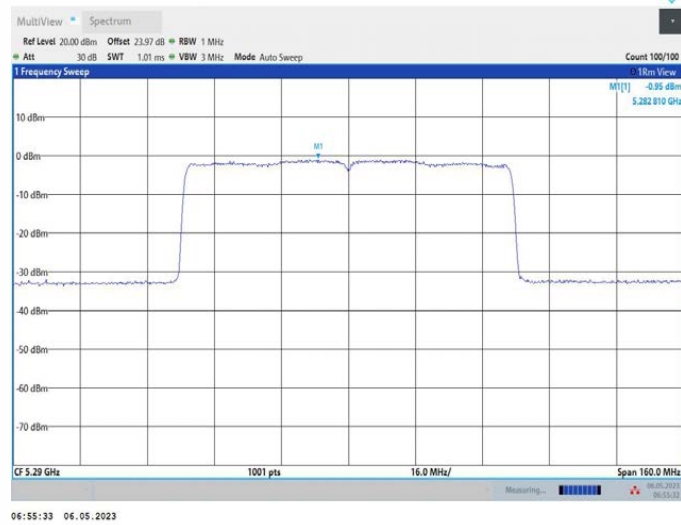
## 11AX80MIMO\_Ant1\_5210



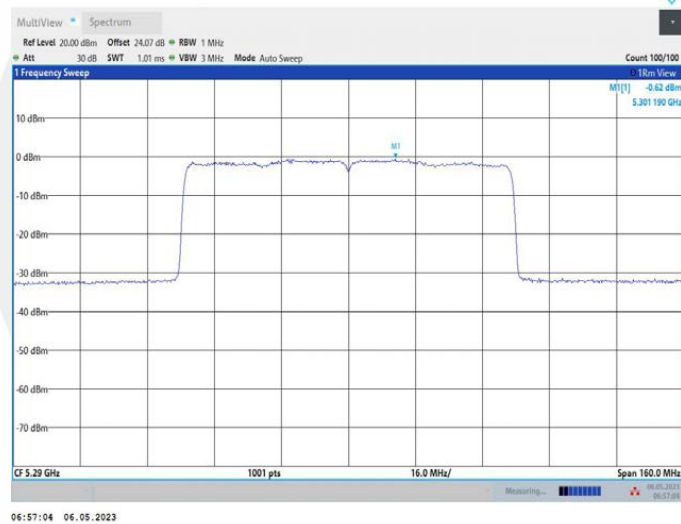
## 11AX80MIMO\_Ant2\_5210



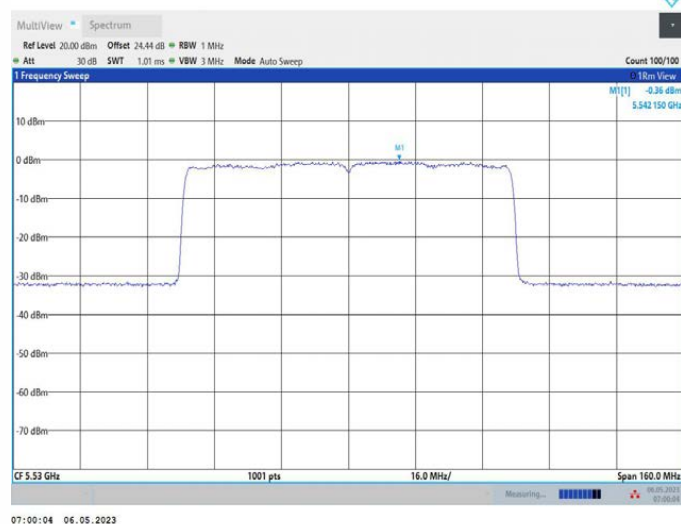
## 11AX80MIMO\_Ant1\_5290



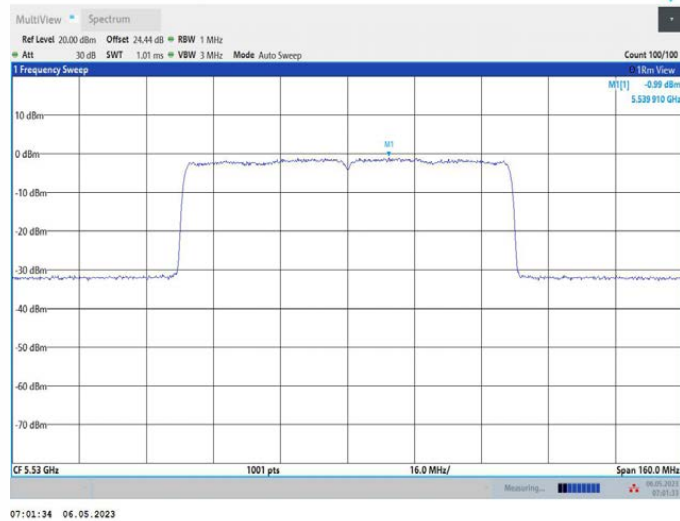
## 11AX80MIMO\_Ant2\_5290



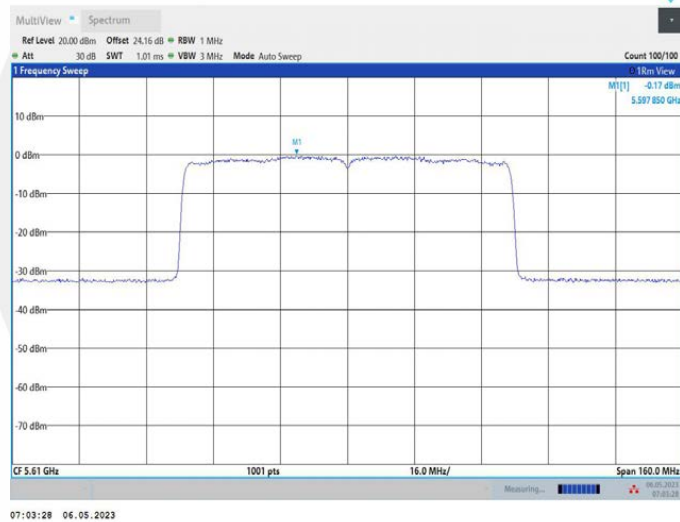
## 11AX80MIMO\_Ant1\_5530



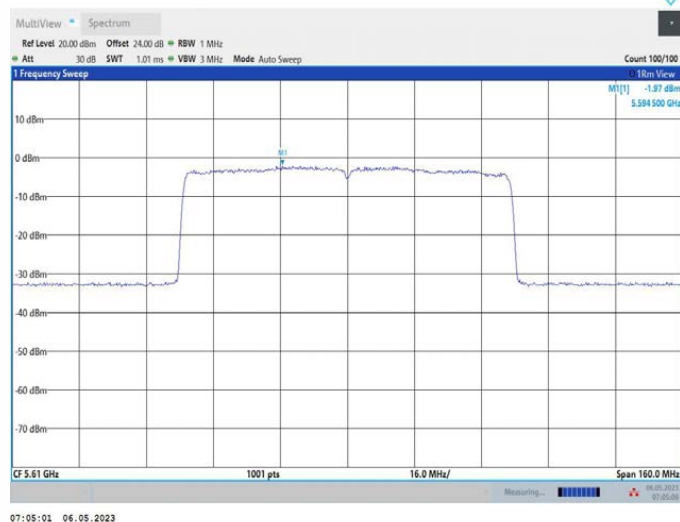
## 11AX80MIMO\_Ant2\_5530



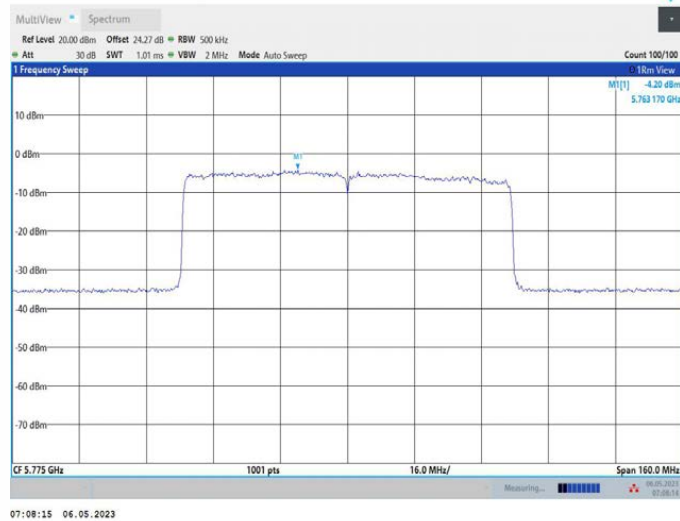
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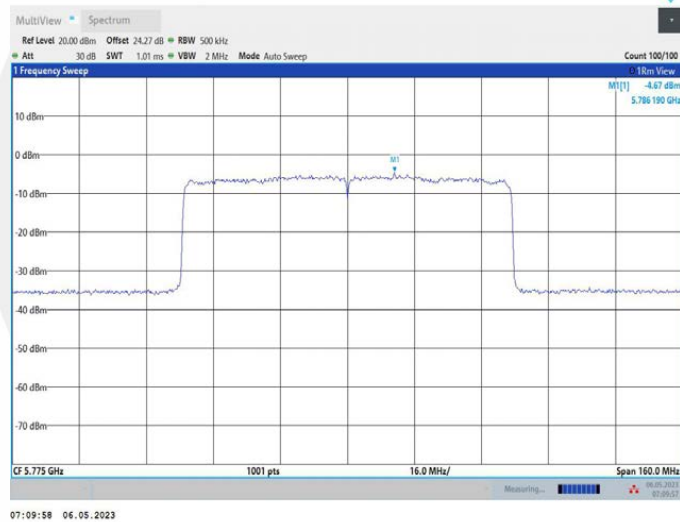
## 11AX80MIMO\_Ant2\_5610



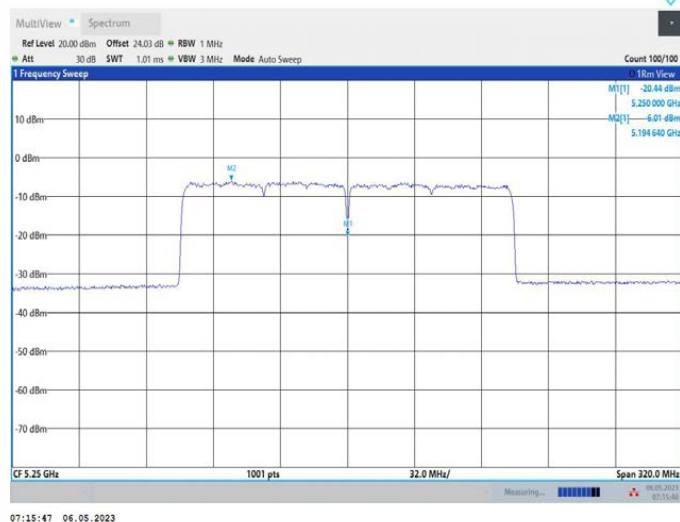
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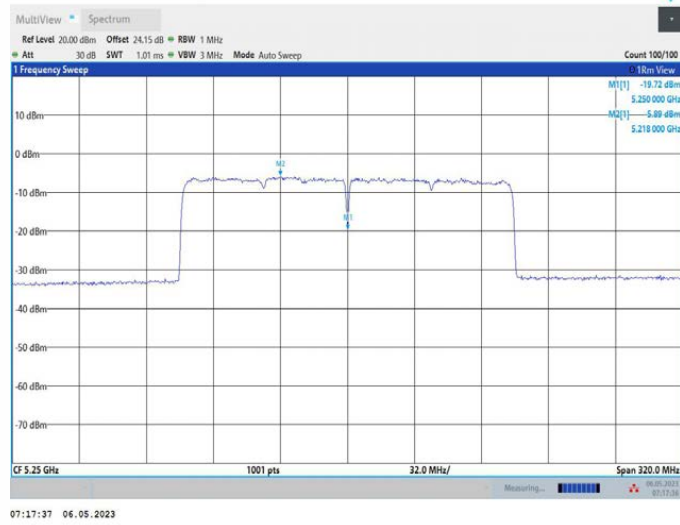
## 11AX80MIMO\_Ant2\_5775



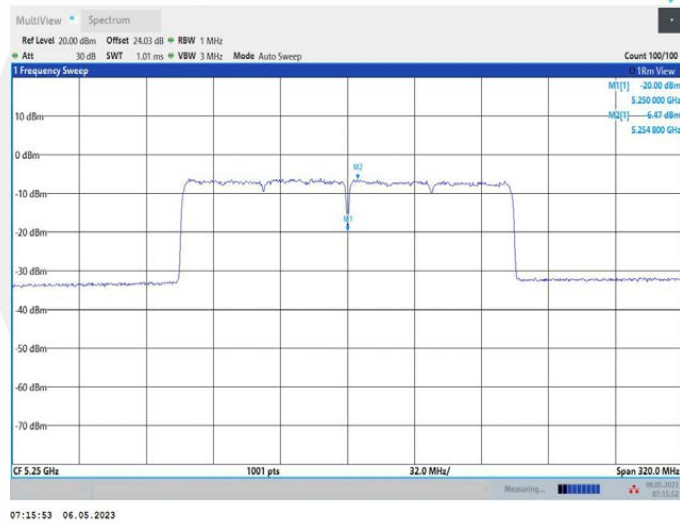
## 11AX160MIMO\_Ant1\_5250\_UNII-1



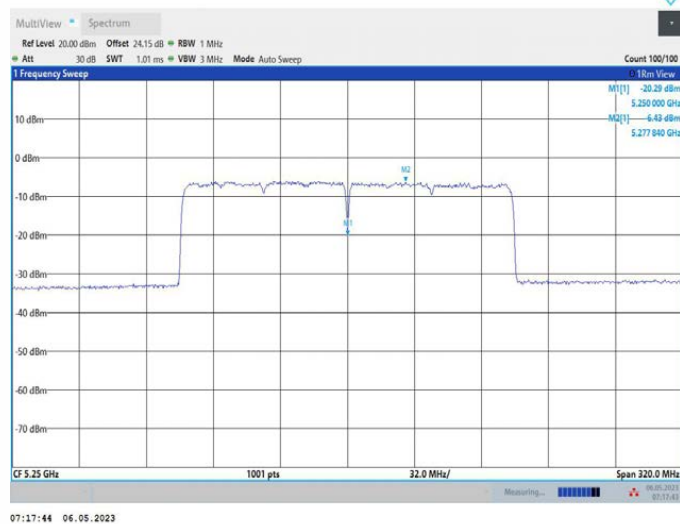
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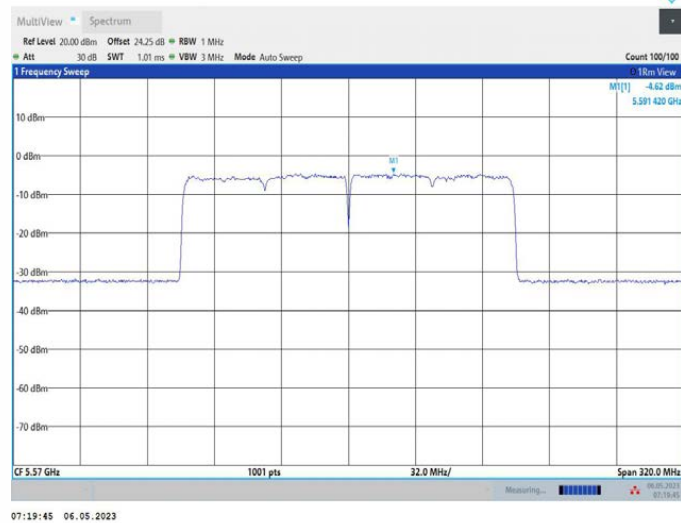
## 11AX160MIMO\_Ant1\_5250\_UNII-2A



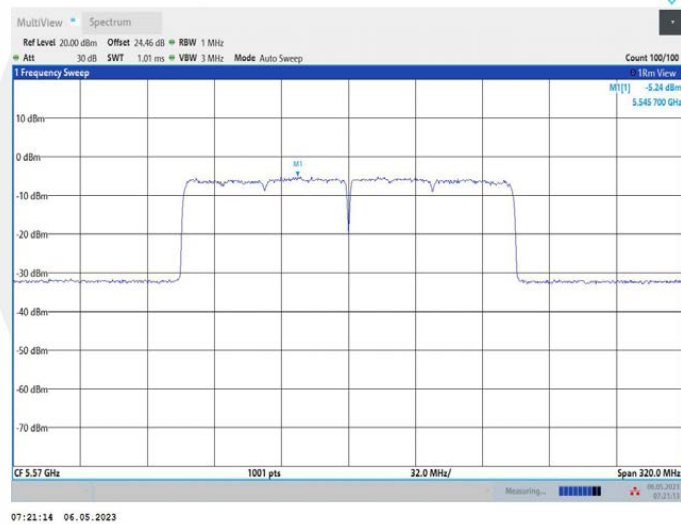
## 11AX160MIMO\_Ant2\_5250\_UNII-2A



## 11AX160MIMO\_Ant1\_5570



## 11AX160MIMO\_Ant2\_5570



## 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 ( $\mu\text{V}/\text{m}$ )	Field Strength ( $\text{dB}\mu\text{V}/\text{m}$ )	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  $\text{dBuV/m} = 20 \log(\mu\text{V/m})$
  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  $\xi$  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 C63.10-2013 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  $\text{VBW} \leq \text{RBW}/100$  (i.e., 10 kHz) but not less than 10 Hz.

• If the EUT duty cycle is  $<$  98 percent, set  $\text{VBW} \geq 1/T$ , 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

All models are tested, and the worst result are recorded as below.

- For Undesirable radiated Spurious Emission in U-NII – 1  
 All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
- Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)  
 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)
10703.3	V	59.26	-35.97	-27	8.97
15159.5	V	62.48	-32.75	-27	5.75
17498.2	V	66.89	-28.34	-27	1.34
11536.7	H	59.83	-35.4	-27	8.4
14538.7	H	63.37	-31.86	-27	4.86
17506.7	H	67.42	-27.81	-27	0.81

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)
10762.8	V	59.40	-35.83	-27	8.83
14793.8	V	62.99	-32.24	-27	5.24
17506.7	V	67.47	-27.76	-27	0.76
11494.2	H	60.32	-34.91	-27	7.91
14547.2	H	62.70	-32.53	-27	5.53
17498.2	H	67.03	-28.2	-27	1.2

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)
11349.6	V	59.16	-36.07	-27	9.07
14547.2	V	63.05	-32.18	-27	5.18
17506.7	V	67.19	-28.04	-27	1.04
11494.2	H	59.20	-36.03	-27	9.03
14564.2	H	62.84	-32.39	-27	5.39
17498.2	H	67.17	-28.06	-27	1.06

- 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[dBμV/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
10703.3	V	59.26	74.00	14.74	peak
15159.5	V	62.48	74.00	11.52	peak
17498.2	V	66.89	74.00	7.11	peak
10703.35	V	49.43	54.00	4.57	AVG
15159.57	V	47.22	54.00	6.78	AVG
17498.24	V	47.44	54.00	6.56	AVG
11536.7	H	59.83	74.00	14.17	peak
14538.7	H	63.37	74.00	10.63	peak
17506.7	H	67.42	74.00	6.58	peak
11536.76	H	48.88	54.00	5.12	AVG
14538.76	H	48.90	54.00	5.10	AVG
17506.75	H	46.92	54.00	7.08	AVG

Test mode:		802.11n(20)		Frequency(MHz): 5200	
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
10762.8	V	59.40	74.00	14.60	peak
14793.8	V	62.99	74.00	11.01	peak
17506.7	V	67.47	74.00	6.53	peak
10762.88	V	48.78	54.00	5.22	AVG
14793.89	V	47.86	54.00	6.14	AVG
17506.75	V	47.33	54.00	6.67	AVG
11494.2	H	60.32	74.00	13.68	peak
14547.2	H	62.70	74.00	11.30	peak
17498.2	H	67.03	74.00	6.97	peak
11494.24	H	48.80	54.00	5.20	AVG
14547.27	H	49.22	54.00	4.78	AVG
17498.24	H	47.05	54.00	6.95	AVG

Test mode:		802.11n(20)		Frequency(MHz): 5240	
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11349.6	V	59.16	74.00	14.84	peak
14547.2	V	63.05	74.00	10.95	peak
17506.7	V	67.19	74.00	6.81	peak
11349.67	V	48.71	54.00	5.29	AVG
14547.27	V	49.66	54.00	4.34	AVG
17506.75	V	47.32	54.00	6.68	AVG
11494.2	H	59.20	74.00	14.80	peak
14564.2	H	62.84	74.00	11.16	peak
17498.2	H	67.17	74.00	6.83	peak
11494.24	H	49.10	54.00	4.90	AVG
14564.28	H	49.46	54.00	4.54	AVG
17498.24	H	47.45	54.00	6.55	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.

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)
10701.91	V	59.13	-36.10	-27	9.10
17499.48	V	66.86	-28.37	-27	1.37
15157.32	V	46.96	-48.27	-27	21.27
11548.39	H	59.75	-35.48	-27	8.48
17518.39	H	67.26	-27.97	-27	0.97
14535.45	H	48.72	-46.51	-27	19.51

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)
10761.41	V	59.27	-35.96	-27	8.96
17507.98	V	67.44	-27.79	-27	0.79
14791.64	V	47.6	-47.63	-27	20.63
11505.89	H	60.24	-34.99	-27	7.99
17509.89	H	66.87	-28.36	-27	1.36
14543.96	H	49.04	-46.19	-27	19.19

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)
11348.21	V	59.03	-36.20	-27	9.20
17507.98	V	67.16	-28.07	-27	1.07
14545.02	V	49.4	-45.83	-27	18.83
11505.89	H	59.12	-36.11	-27	9.11
17509.89	H	67.01	-28.22	-27	1.22
14560.97	H	49.28	-45.95	-27	18.95

- 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[dBμV/m] + 20 log(d[meters]) - 104.77  
 d is the measurement distance in 3 meters

MIMO:

Test mode: 802.11n(20)		Frequency(MHz): 5180			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
10701.910	V	59.13	74.00	14.87	peak
15158.110	V	62.32	74.00	11.68	peak
17499.480	V	66.86	74.00	7.14	peak
10704.630	V	49.41	54.00	4.59	AVG
15157.320	V	46.96	54.00	7.04	AVG
17495.990	V	47.25	54.00	6.75	AVG
11548.390	H	59.75	74.00	14.25	peak
14550.390	H	63.16	74.00	10.84	peak
17518.390	H	67.26	74.00	6.74	peak
11548.450	H	48.74	54.00	5.26	AVG
14535.450	H	48.72	54.00	5.28	AVG
17503.440	H	46.79	54.00	7.21	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5200			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
10761.410	V	59.27	74.00	14.73	peak
14792.410	V	62.83	74.00	11.17	peak
17507.980	V	67.44	74.00	6.56	peak
10764.160	V	48.76	54.00	5.24	AVG
14791.640	V	47.6	54.00	6.4	AVG
17504.500	V	47.14	54.00	6.86	AVG
11505.890	H	60.24	74.00	13.76	peak
14558.890	H	62.49	74.00	11.51	peak
17509.890	H	66.87	74.00	7.13	peak
11505.930	H	48.66	54.00	5.34	AVG
14543.960	H	49.04	54.00	4.96	AVG
17494.930	H	46.92	54.00	7.08	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5240			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11348.210	V	59.03	74.00	14.97	peak
14545.810	V	62.89	74.00	11.11	peak
17507.980	V	67.16	74.00	6.84	peak
11350.950	V	48.69	54.00	5.31	AVG
14545.020	V	49.4	54.00	4.6	AVG
17504.500	V	47.13	54.00	6.87	AVG
11505.890	H	59.12	74.00	14.88	peak
14575.890	H	62.63	74.00	11.37	peak
17509.890	H	67.01	74.00	6.99	peak
11505.930	H	48.96	54.00	5.04	AVG
14560.970	H	49.28	54.00	4.72	AVG
17494.930	H	47.32	54.00	6.68	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
5043.88	H	53.52	-41.71	-27	Pass
5042.75	V	53.63	-41.6	-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
5381.28	H	52.67	-42.56	-27	Pass
5372.44	V	53.58	-41.65	-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[dBμV/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
5042.75	V	53.63	74.00	20.37	peak
5042.75	V	48.85	54.00	5.15	AVG
5043.88	H	53.52	74.00	20.48	peak
5043.88	H	48.09	54.00	5.91	AVG

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

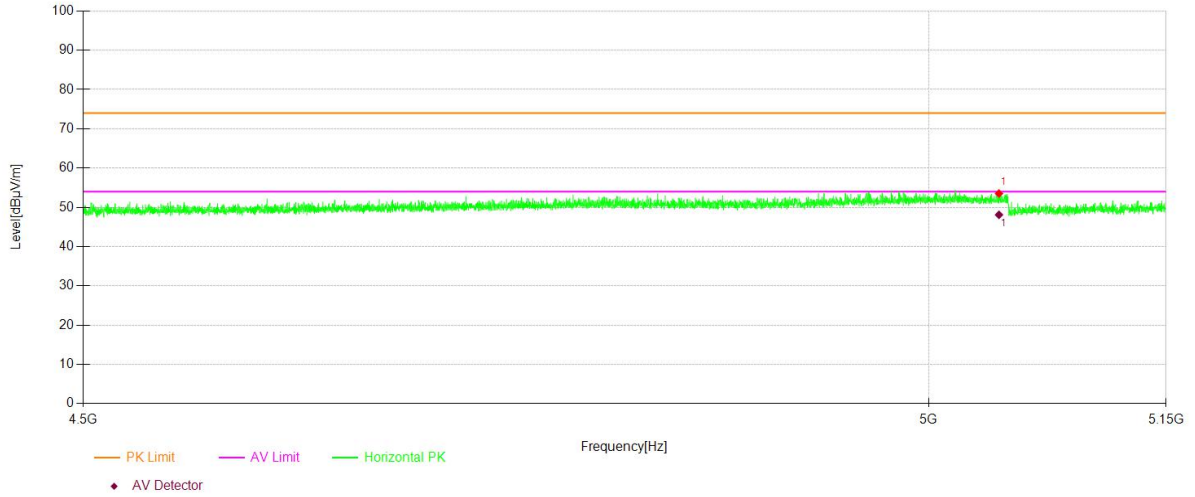
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5372.44	V	53.58	74.00	20.42	peak
5372.44	V	49.08	54.00	4.92	AVG
5381.28	H	52.67	74.00	21.33	peak
5381.28	H	50.24	54.00	3.76	AVG

- 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.

**U-NII - 1**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)

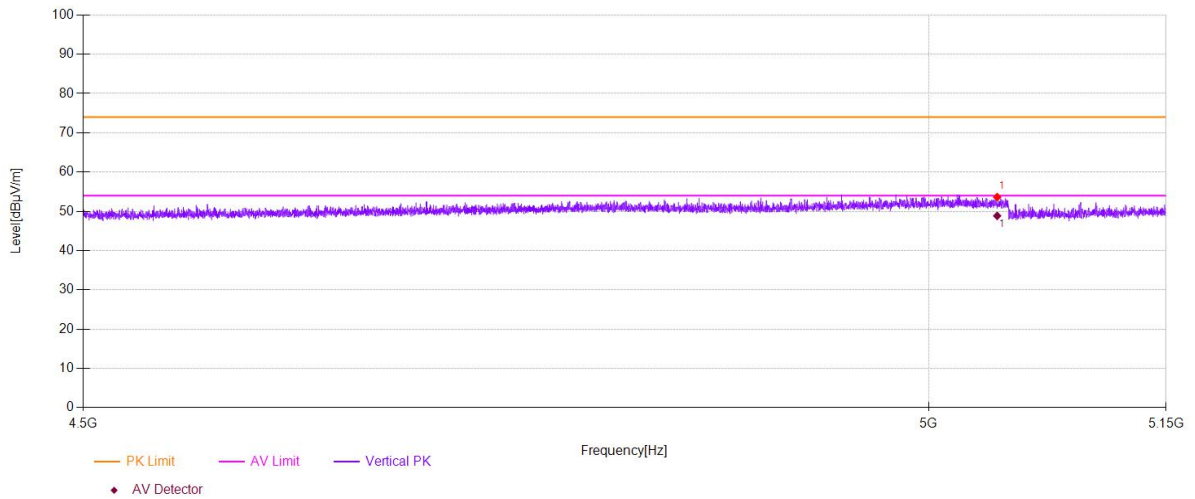
<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
<input checked="" type="checkbox"/> 5180	<input type="checkbox"/> 5200	<input type="checkbox"/> 5240
		Ant.Pol    H



**U-NII - 1**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)

<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
<input checked="" type="checkbox"/> 5180	<input type="checkbox"/> 5200	<input type="checkbox"/> 5240
		Ant.Pol    V

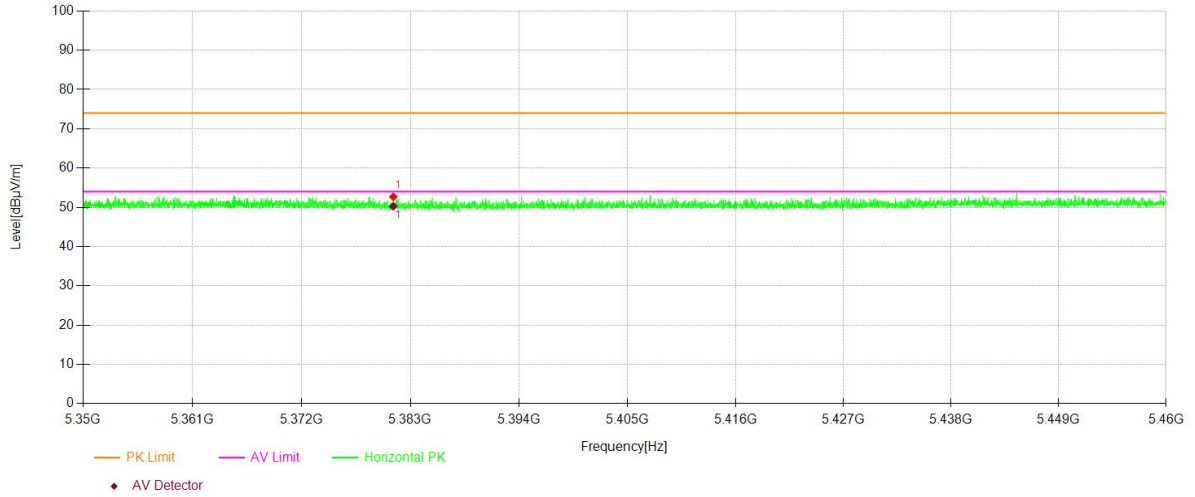




**U-NII - 1**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )

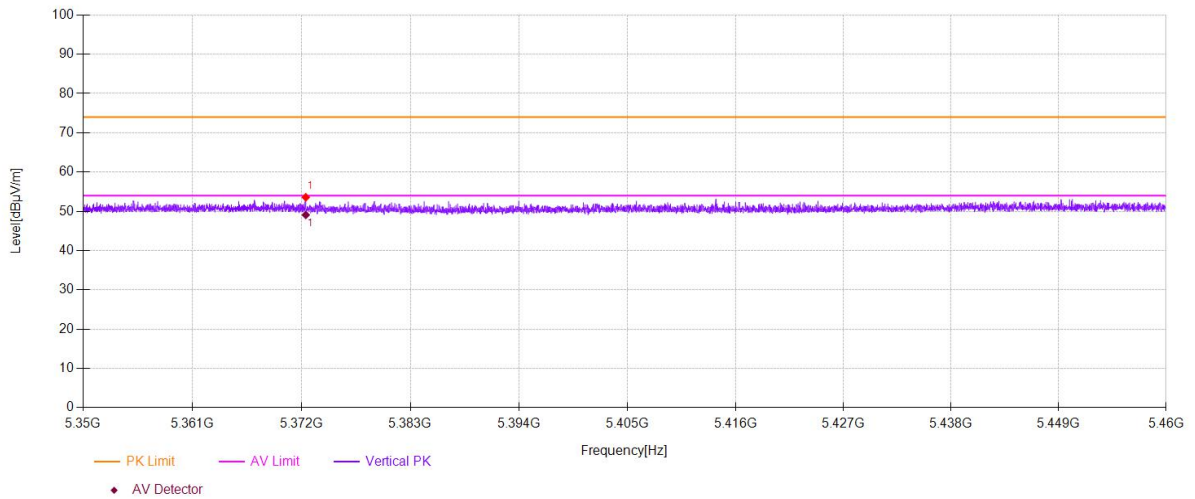
<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
<input type="checkbox"/> 5180	<input type="checkbox"/> 5200	<input checked="" type="checkbox"/> 5240
		<b>Ant.Pol</b> H



**U-NII - 1**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )

<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
<input type="checkbox"/> 5180	<input type="checkbox"/> 5200	<input checked="" type="checkbox"/> 5240
		<b>Ant.Pol</b> V



- For Undesirable radiated Spurious Emission in U-NII -2A  
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
- Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)  
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)
11519.7	V	60.12	-35.11	-27	8.11
14615.3	V	62.59	-32.64	-27	5.64
17489.7	V	66.41	-28.82	-27	1.82
11392.1	H	59.24	-35.99	-27	8.99
14581.2	H	62.81	-32.42	-27	5.42
17506.7	H	66.79	-28.44	-27	1.44

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)
11562.2	V	59.90	-35.33	-27	8.33
14606.8	V	62.53	-32.7	-27	5.7
17506.7	V	67.22	-28.01	-27	1.01
10669.3	H	59.40	-35.83	-27	8.83
14632.3	H	63.39	-31.84	-27	4.84
17498.2	H	67.25	-27.98	-27	0.98

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)
11621.8	V	59.26	-35.97	-27	8.97
14589.7	V	62.93	-32.3	-27	5.3
17498.2	V	67.08	-28.15	-27	1.15
11545.2	H	59.16	-36.07	-27	9.07
14547.2	H	63.03	-32.2	-27	5.2
17498.2	H	66.87	-28.36	-27	1.36

- 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[dBμV/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
11519.7	V	60.12	74.00	13.88	peak
14615.3	V	62.59	74.00	11.41	peak
17489.7	V	66.41	74.00	7.59	peak
11519.75	V	48.78	54.00	5.22	AVG
14615.30	V	49.77	54.00	4.23	AVG
17489.74	V	46.67	54.00	7.33	AVG
11392.1	H	59.24	74.00	14.76	peak
14581.2	H	62.81	74.00	11.19	peak
17506.7	H	66.79	74.00	7.21	peak
11392.19	H	48.03	54.00	5.97	AVG
14581.29	H	49.72	54.00	4.28	AVG
17506.75	H	47.33	54.00	6.67	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5280			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11562.2	V	59.90	74.00	14.10	peak
14606.8	V	62.53	74.00	11.47	peak
17506.7	V	67.22	74.00	6.78	peak
11562.28	V	48.66	54.00	5.34	AVG
14606.80	V	49.83	54.00	4.17	AVG
17506.75	V	47.52	54.00	6.48	AVG
10669.3	H	59.40	74.00	14.60	peak
14632.3	H	63.39	74.00	10.61	peak
17498.2	H	67.25	74.00	6.75	peak
10669.33	H	48.97	54.00	5.03	AVG
14632.31	H	49.29	54.00	4.71	AVG
17498.24	H	47.64	54.00	6.36	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5320			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11621.8	V	59.26	74.00	14.74	peak
14589.7	V	62.93	74.00	11.07	peak
17498.2	V	67.08	74.00	6.92	peak
11621.81	V	48.39	54.00	5.61	AVG
14589.79	V	49.83	54.00	4.17	AVG
17498.24	V	47.34	54.00	6.66	AVG
11545.2	H	59.16	74.00	14.84	peak
14547.2	H	63.03	74.00	10.97	peak
17498.2	H	66.87	74.00	7.13	peak
11545.27	H	48.74	54.00	5.26	AVG
14547.27	H	49.22	54.00	4.78	AVG
17498.24	H	47.01	54.00	6.99	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.

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)
11518.31	V	59.99	-35.24	-27	8.24
17490.98	V	66.38	-28.85	-27	1.85
14613.05	V	49.51	-45.72	-27	18.72
11403.79	H	59.16	-36.07	-27	9.07
17518.39	H	66.63	-28.60	-27	1.60
14577.98	H	49.54	-45.69	-27	18.69

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)
11560.81	V	59.77	-35.46	-27	8.46
17507.98	V	67.19	-28.04	-27	1.04
14604.55	V	49.57	-45.66	-27	18.66
10680.99	H	59.32	-35.91	-27	8.91
17509.89	H	67.09	-28.14	-27	1.14
14629.00	H	49.11	-46.12	-27	19.12

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)
11620.41	V	59.13	-36.10	-27	9.10
17499.48	V	67.05	-28.18	-27	1.18
14587.54	V	49.57	-45.66	-27	18.66
11556.89	H	59.08	-36.15	-27	9.15
17509.89	H	66.71	-28.52	-27	1.52
14543.96	H	49.04	-46.19	-27	19.19

- 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[dBμV/m] + 20 log(d[meters]) - 104.77  
 d is the measurement distance in 3 meters

MIMO:

Test mode: 802.11n(20)		Frequency(MHz): 5260			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11518.310	V	59.99	74.00	14.01	peak
14613.910	V	62.43	74.00	11.57	peak
17490.980	V	66.38	74.00	7.62	peak
11521.030	V	48.76	54.00	5.24	AVG
14613.050	V	49.51	54.00	4.49	AVG
17487.490	V	46.48	54.00	7.52	AVG
11403.790	H	59.16	74.00	14.84	peak
14592.890	H	62.6	74.00	11.4	peak
17518.390	H	66.63	74.00	7.37	peak
11403.880	H	47.89	54.00	6.11	AVG
14577.980	H	49.54	54.00	4.46	AVG
17503.440	H	47.2	54.00	6.8	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5280			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11560.810	V	59.77	74.00	14.23	peak
14605.410	V	62.37	74.00	11.63	peak
17507.980	V	67.19	74.00	6.81	peak
11563.560	V	48.64	54.00	5.36	AVG
14604.550	V	49.57	54.00	4.43	AVG
17504.500	V	47.33	54.00	6.67	AVG
10680.990	H	59.32	74.00	14.68	peak
14643.990	H	63.18	74.00	10.82	peak
17509.890	H	67.09	74.00	6.91	peak
10681.020	H	48.83	54.00	5.17	AVG
14629.000	H	49.11	54.00	4.89	AVG
17494.930	H	47.51	54.00	6.49	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5320			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11620.410	V	59.13	74.00	14.87	peak
14588.310	V	62.77	74.00	11.23	peak
17499.480	V	67.05	74.00	6.95	peak
11623.090	V	48.37	54.00	5.63	AVG
14587.540	V	49.57	54.00	4.43	AVG
17495.990	V	47.15	54.00	6.85	AVG
11556.890	H	59.08	74.00	14.92	peak
14558.890	H	62.82	74.00	11.18	peak
17509.890	H	66.71	74.00	7.29	peak
11556.960	H	48.6	54.00	5.4	AVG
14543.960	H	49.04	54.00	4.96	AVG
17494.930	H	46.88	54.00	7.12	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): 5260

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5049.25	H	54.61	-40.62	-27	Pass
5033.16	V	54.16	-41.07	-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
5411.39	H	53.03	-42.2	-27	Pass
5411.39	V	53.13	-42.1	-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
5033.16	V	54.16	74.00	19.84	peak
5033.16	V	49.10	54.00	4.90	AVG
5049.25	H	54.61	74.00	19.39	peak
5049.25	H	48.23	54.00	5.77	AVG

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

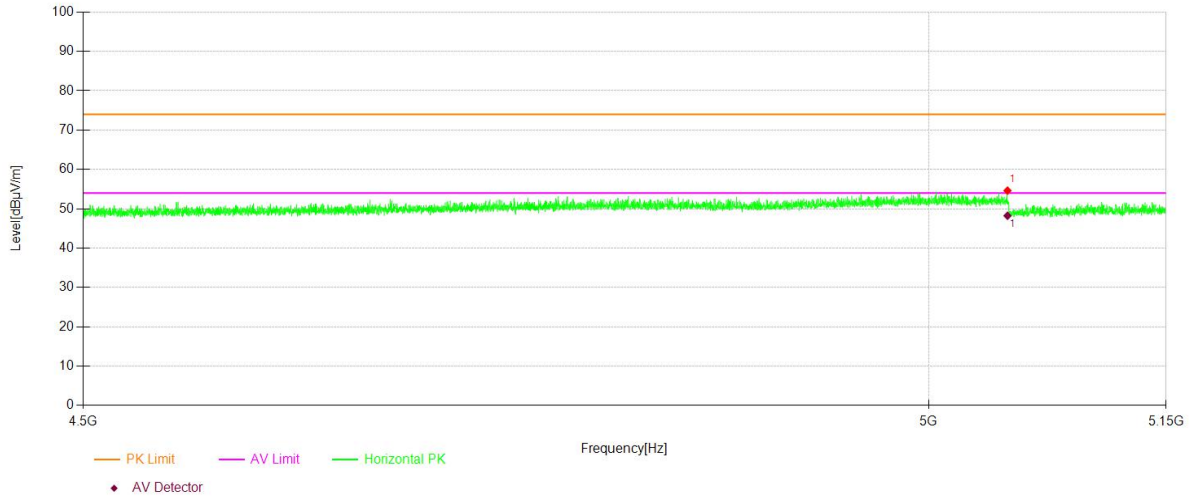
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5411.39	V	53.13	74.00	20.87	peak
5411.39	V	50.31	54.00	3.69	AVG
5406.49	H	53.03	74.00	20.97	peak
5406.49	H	49.23	54.00	4.77	AVG

- 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.

**U-NII -2A**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)

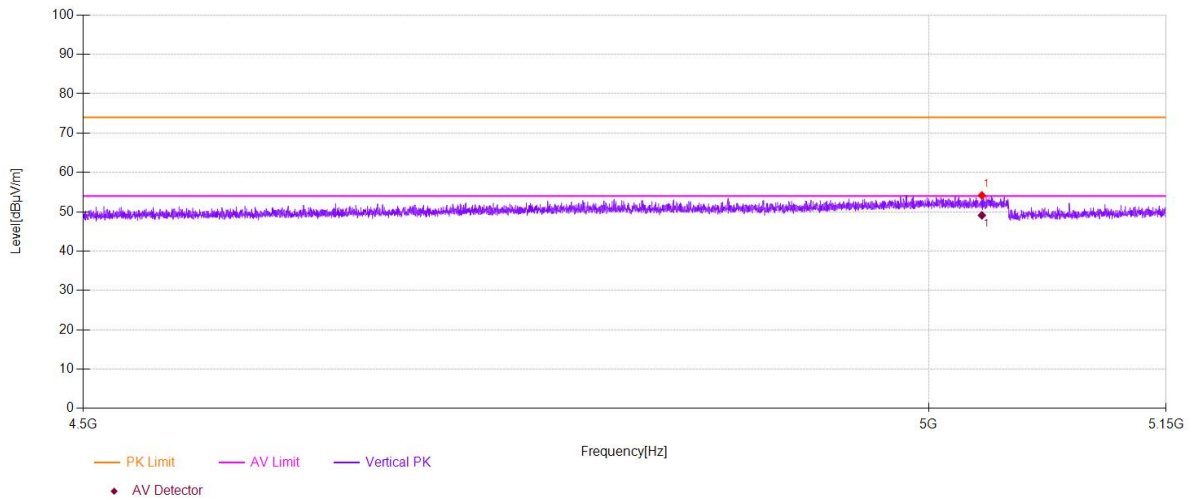
<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11 ac (VHT20)
<input checked="" type="checkbox"/> 5260	<input type="checkbox"/> 5300	<input type="checkbox"/> 5320
		<b>Ant.Pol</b> H



**U-NII -2A**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)

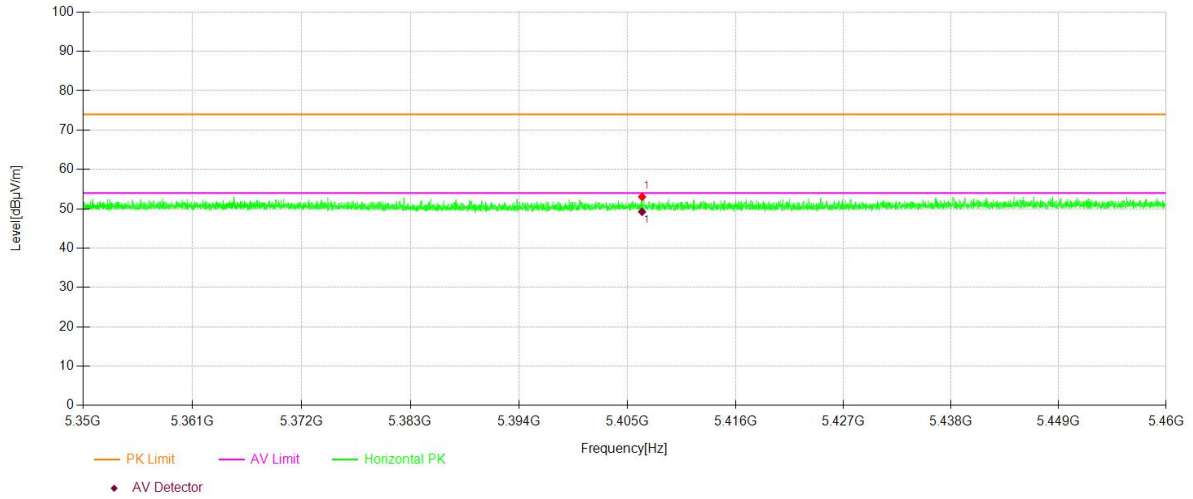
<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11 ac (VHT20)
<input checked="" type="checkbox"/> 5260	<input type="checkbox"/> 5300	<input type="checkbox"/> 5320
		<b>Ant.Pol</b> V



**U-NII -2A**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )

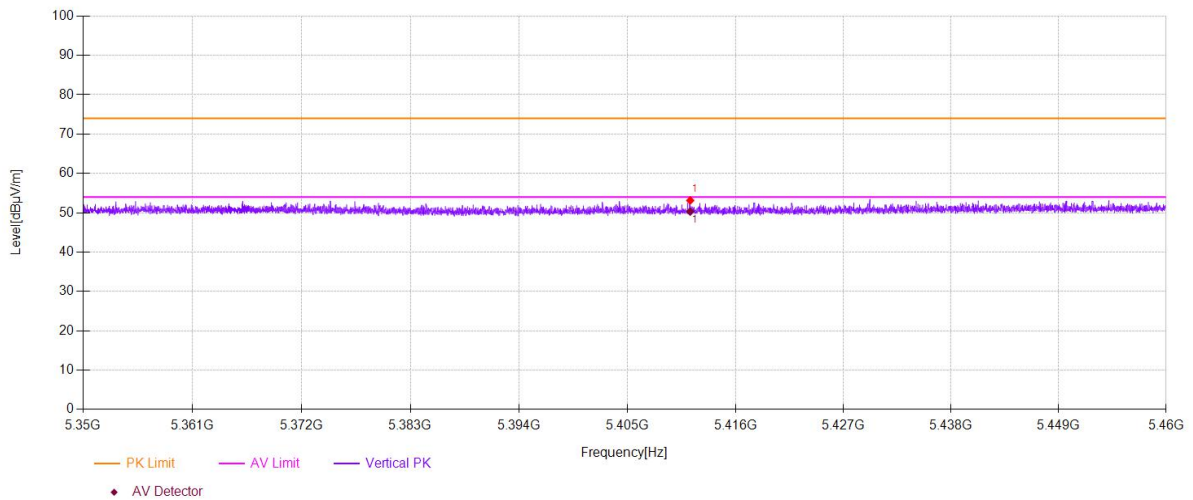
<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11 ac (VHT20)
<input type="checkbox"/> 5260	<input type="checkbox"/> 5300	<input checked="" type="checkbox"/> 5320
		Ant.Pol    H



**U-NII -2A**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )

<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11 ac (VHT20)
<input type="checkbox"/> 5260	<input type="checkbox"/> 5300	<input checked="" type="checkbox"/> 5320
		Ant.Pol    V





- For Undesirable radiated Spurious Emission in U-NII -2C  
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
- Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)  
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)
11536.7	V	59.33	-35.9	-27	8.9
14640.8	V	62.48	-32.75	-27	5.75
17498.2	V	67.47	-27.76	-27	0.76
11400.7	H	58.98	-36.25	-27	9.25
14555.7	H	62.69	-32.54	-27	5.54
17498.2	H	66.86	-28.37	-27	1.37

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)
11281.6	V	59.24	-35.99	-27	8.99
14793.8	V	62.70	-32.53	-27	5.53
17498.2	V	67.05	-28.18	-27	1.18
11536.7	H	59.69	-35.54	-27	8.54
14530.2	H	62.89	-32.34	-27	5.34
17498.2	H	67.61	-27.62	-27	0.62

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)
11562.2	V	59.47	-35.76	-27	8.76
14572.7	V	62.55	-32.68	-27	5.68
17489.7	V	67.19	-28.04	-27	1.04
11570.7	H	59.68	-35.55	-27	8.55
15151.0	H	63.46	-31.77	-27	4.77
17498.2	H	67.24	-27.99	-27	0.99

- 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[dBμV/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
11536.7	V	59.33	74.00	14.67	peak
14640.8	V	62.48	74.00	11.52	peak
17498.2	V	67.47	74.00	6.53	peak
11536.76	V	49.21	54.00	4.79	AVG
14640.82	V	49.46	54.00	4.54	AVG
17498.24	V	47.00	54.00	7.00	AVG
11400.7	H	58.98	74.00	15.02	peak
14555.7	H	62.69	74.00	11.31	peak
17498.2	H	66.86	74.00	7.14	peak
11400.70	H	48.09	54.00	5.91	AVG
14555.77	H	49.63	54.00	4.37	AVG
17498.24	H	47.05	54.00	6.95	AVG

Test mode:		802.11n(20)		Frequency(MHz): 5580	
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11281.6	V	59.24	74.00	14.76	peak
14793.8	V	62.70	74.00	11.30	peak
17498.2	V	67.05	74.00	6.95	peak
11281.64	V	48.54	54.00	5.46	AVG
14793.89	V	47.89	54.00	6.11	AVG
17498.24	V	47.64	54.00	6.36	AVG
11536.7	H	59.69	74.00	14.31	peak
14530.2	H	62.89	74.00	11.11	peak
17498.2	H	67.61	74.00	6.39	peak
11536.76	H	49.09	54.00	4.91	AVG
14530.26	H	49.03	54.00	4.97	AVG
17498.24	H	47.07	54.00	6.93	AVG

Test mode:		802.11n(20)		Frequency(MHz): 5700	
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11562.2	V	59.47	74.00	14.53	peak
14572.7	V	62.55	74.00	11.45	peak
17489.7	V	67.19	74.00	6.81	peak
11562.28	V	48.66	54.00	5.34	AVG
14572.78	V	49.59	54.00	4.41	AVG
17489.74	V	46.97	54.00	7.03	AVG
11570.7	H	59.68	74.00	14.32	peak
15151.0	H	63.46	74.00	10.54	peak
17498.2	H	67.24	74.00	6.76	peak
11570.78	H	48.61	54.00	5.39	AVG
15151.07	H	47.16	54.00	6.84	AVG
17498.24	H	47.64	54.00	6.36	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.

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)
11535.31	V	59.2	-36.03	-27	9.03
17499.48	V	67.44	-27.79	-27	0.79
14638.57	V	49.2	-46.03	-27	19.03
11412.39	H	58.9	-36.33	-27	9.33
17509.89	H	66.7	-28.53	-27	1.53
14552.46	H	49.45	-45.78	-27	18.78

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)
11280.21	V	59.11	-36.12	-27	9.12
17499.48	V	67.02	-28.21	-27	1.21
14791.64	V	47.63	-47.60	-27	20.60
11548.39	H	59.61	-35.62	-27	8.62
17509.89	H	67.45	-27.78	-27	0.78
14526.95	H	48.85	-46.38	-27	19.38

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)
11560.81	V	59.34	-35.89	-27	8.89
17490.98	V	67.16	-28.07	-27	1.07
14570.53	V	49.33	-45.90	-27	18.90
11582.39	H	59.6	-35.63	-27	8.63
17509.89	H	67.08	-28.15	-27	1.15
15147.76	H	46.98	-48.25	-27	21.25

- 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

MIMO:

Test mode: 802.11n(20)		Frequency(MHz): 5500			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11535.310	V	59.2	74.00	14.8	peak
14639.410	V	62.32	74.00	11.68	peak
17499.480	V	67.44	74.00	6.56	peak
11538.040	V	49.19	54.00	4.81	AVG
14638.570	V	49.2	54.00	4.8	AVG
17495.990	V	46.81	54.00	7.19	AVG
11412.390	H	58.9	74.00	15.1	peak
14567.390	H	62.48	74.00	11.52	peak
17509.890	H	66.7	74.00	7.3	peak
11412.390	H	47.95	54.00	6.05	AVG
14552.460	H	49.45	54.00	4.55	AVG
17494.930	H	46.92	54.00	7.08	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5580			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11280.210	V	59.11	74.00	14.89	peak
14792.410	V	62.54	74.00	11.46	peak
17499.480	V	67.02	74.00	6.98	peak
11282.920	V	48.52	54.00	5.48	AVG
14791.640	V	47.63	54.00	6.37	AVG
17495.990	V	47.45	54.00	6.55	AVG
11548.390	H	59.61	74.00	14.39	peak
14541.890	H	62.68	74.00	11.32	peak
17509.890	H	67.45	74.00	6.55	peak
11548.450	H	48.95	54.00	5.05	AVG
14526.950	H	48.85	54.00	5.15	AVG
17494.930	H	46.94	54.00	7.06	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5700			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11560.810	V	59.34	74.00	14.66	peak
14571.310	V	62.39	74.00	11.61	peak
17490.980	V	67.16	74.00	6.84	peak
11563.560	V	48.64	54.00	5.36	AVG
14570.530	V	49.33	54.00	4.67	AVG
17487.490	V	46.78	54.00	7.22	AVG
11582.390	H	59.6	74.00	14.4	peak
15162.690	H	63.25	74.00	10.75	peak
17509.890	H	67.08	74.00	6.92	peak
11582.470	H	48.47	54.00	5.53	AVG
15147.760	H	46.98	54.00	7.02	AVG
17494.930	H	47.51	54.00	6.49	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): 5500

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5442.65	H	52.96	-42.27	-27	Pass
5442.83	V	53.35	-41.88	-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
5747.86	H	53.32	-41.91	-27	Pass
5763.18	V	53.15	-42.08	-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[dBμV/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
5442.83	V	53.35	74.00	20.65	peak
5442.83	V	47.68	54.00	6.32	AVG
5442.65	H	52.96	74.00	21.04	peak
5442.65	H	48.74	54.00	5.26	AVG

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

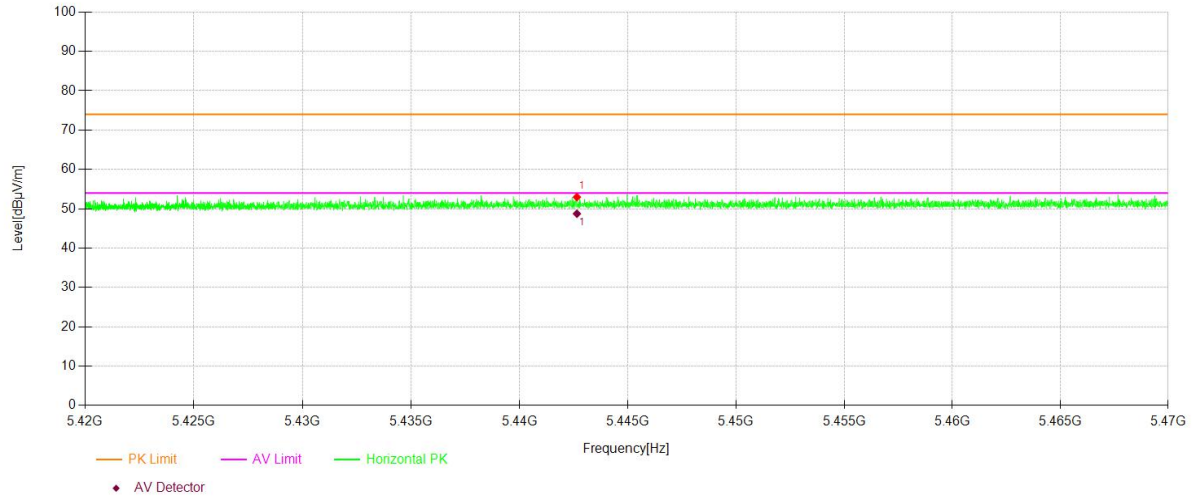
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
5763.18	V	53.15	74.00	19.50	peak
5763.18	V	49.91	54.00	4.09	AVG
5747.86	H	53.32	74.00	20.68	peak
5747.86	H	50.04	54.00	3.96	AVG

- 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.

**U-NII -2C**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)

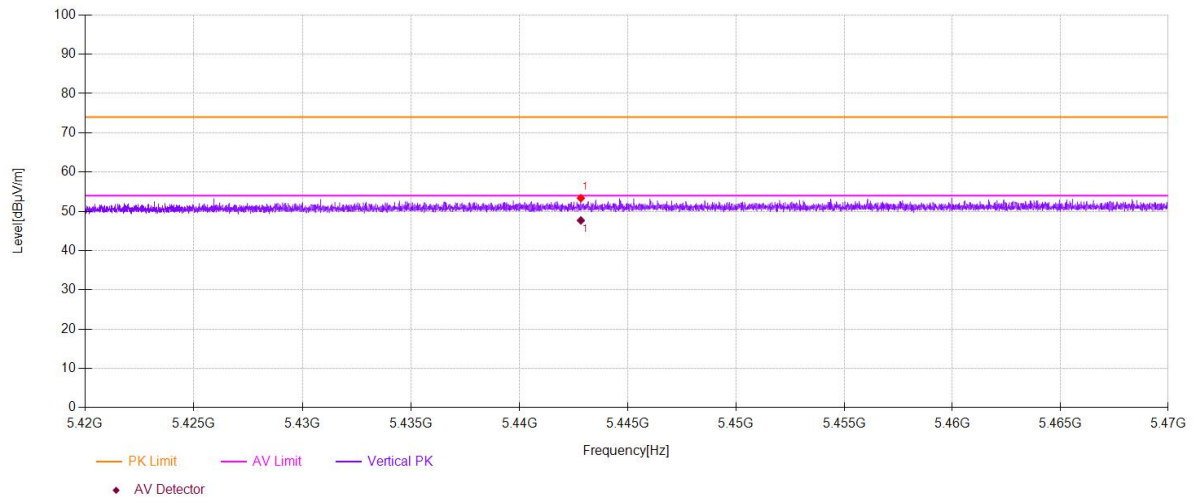
<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11 ac (VHT20)
<input checked="" type="checkbox"/> 5500	<input type="checkbox"/> 5580	<input type="checkbox"/> 5700
		<b>Ant.Pol</b> H



**U-NII -2C**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)

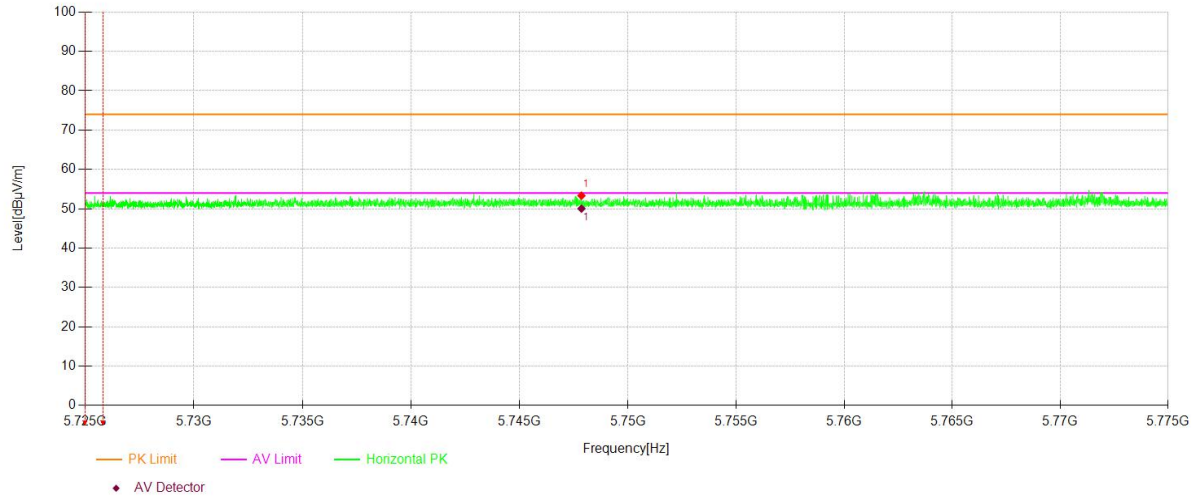
<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11 ac (VHT20)
<input checked="" type="checkbox"/> 5500	<input type="checkbox"/> 5580	<input type="checkbox"/> 5700
		<b>Ant.Pol</b> V



**U-NII -2C**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )

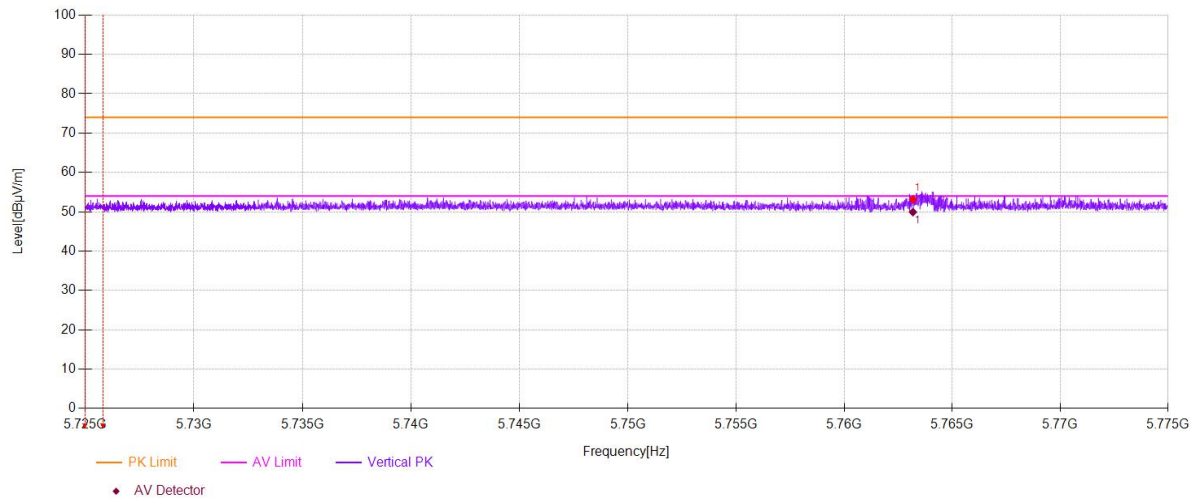
<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11 ac (VHT20)
<input type="checkbox"/> 5500	<input type="checkbox"/> 5580	<input checked="" type="checkbox"/> 5700
		Ant.Pol            H



**U-NII -2C**

**Test Model**    Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )

<input type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11 ac (VHT20)
<input type="checkbox"/> 5500	<input type="checkbox"/> 5580	<input checked="" type="checkbox"/> 5700
		Ant.Pol            V



- For Undesirable radiated Spurious Emission in U-NII -3  
 All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
  - Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)  
 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)
11477.2	V	59.58	-35.65	-27	8.65
14547.2	V	63.36	-31.87	-27	4.87
17498.2	V	66.78	-28.45	-27	1.45
11511.2	H	60.18	-35.05	-27	8.05
14589.7	H	63.01	-32.22	-27	5.22
17506.7	H	67.12	-28.11	-27	1.11

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)
11647.3	V	59.65	-35.58	-27	8.58
15142.5	V	63.31	-31.92	-27	4.92
17498.2	V	66.90	-28.33	-27	1.33
11536.7	H	60.02	-35.21	-27	8.21
14581.2	H	63.96	-31.27	-27	4.27
17498.2	H	67.38	-27.85	-27	0.85

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)
11375.1	V	60.05	-35.18	-27	8.18
14589.7	V	62.61	-32.62	-27	5.62
17498.2	V	67.44	-27.79	-27	0.79
11511.2	H	59.78	-35.45	-27	8.45
14581.2	H	62.73	-32.5	-27	5.5
17523.7	H	66.81	-28.42	-27	1.42

- 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[dBμV/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
11477.2	V	59.58	74.00	14.42	peak
14547.2	V	63.36	74.00	10.64	peak
17498.2	V	66.78	74.00	7.22	peak
11477.23	V	49.19	54.00	4.81	AVG
14547.27	V	49.26	54.00	4.74	AVG
17498.24	V	47.12	54.00	6.88	AVG
11511.2	H	60.18	74.00	13.82	peak
14589.7	H	63.01	74.00	10.99	peak
17506.7	H	67.12	74.00	6.88	peak
11511.25	H	48.70	54.00	5.30	AVG
14589.79	H	49.83	54.00	4.17	AVG
17506.75	H	47.33	54.00	6.67	AVG

Test mode:		802.11n(20)		Frequency(MHz): 5785	
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11647.3	V	59.65	74.00	14.35	peak
15142.5	V	63.31	74.00	10.69	peak
17498.2	V	66.90	74.00	7.10	peak
11647.32	V	48.32	54.00	5.68	AVG
15142.57	V	47.25	54.00	6.75	AVG
17498.241	V	47.44	54.00	6.56	AVG
11536.7	H	60.02	74.00	13.98	peak
14581.2	H	63.96	74.00	10.04	peak
17498.2	H	67.38	74.00	6.62	peak
11536.76	H	48.89	54.00	5.11	AVG
14581.29	H	50.11	54.00	3.89	AVG
17498.24	H	47.01	54.00	6.99	AVG

Test mode:		802.11n(20)		Frequency(MHz): 5825	
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11375.1	V	60.05	74.00	13.95	peak
14589.7	V	62.61	74.00	11.39	peak
17498.2	V	67.44	74.00	6.56	peak
11375.18	V	48.16	54.00	5.84	AVG
14589.79	V	50.23	54.00	3.77	AVG
17498.24	V	47.04	54.00	6.96	AVG
11511.2	H	59.78	74.00	14.22	peak
14581.2	H	62.73	74.00	11.27	peak
17523.7	H	66.81	74.00	7.19	peak
11511.25	H	48.85	54.00	5.15	AVG
14581.29	H	49.68	54.00	4.32	AVG
17523.76	H	46.82	54.00	7.18	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.

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)
11475.81	V	59.45	-35.78	-27	8.78
17499.48	V	66.75	-28.48	-27	1.48
14545.02	V	49	-46.23	-27	19.23
11522.89	H	60.1	-35.13	-27	8.13
17518.39	H	66.96	-28.27	-27	1.27
14586.48	H	49.65	-45.58	-27	18.58

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)
11645.91	V	59.52	-35.71	-27	8.71
17499.48	V	66.87	-28.36	-27	1.36
15140.32	V	46.99	-48.24	-27	21.24
11548.39	H	59.94	-35.29	-27	8.29
17509.89	H	67.22	-28.01	-27	1.01
14577.98	H	49.93	-45.30	-27	18.30

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)
11373.71	V	59.92	-35.31	-27	8.31
17499.48	V	67.41	-27.82	-27	0.82
14587.54	V	49.97	-45.26	-27	18.26
11522.89	H	59.7	-35.53	-27	8.53
17535.39	H	66.65	-28.58	-27	1.58
14577.98	H	49.5	-45.73	-27	18.73

- 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[dBμV/m] + 20 log(d[meters]) - 104.77  
 d is the measurement distance in 3 meters

MIMO:

Test mode: 802.11n(20)		Frequency(MHz): 5745			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11475.810	V	59.45	74.00	14.55	peak
14545.810	V	63.2	74.00	10.8	peak
17499.480	V	66.75	74.00	7.25	peak
11478.510	V	49.17	54.00	4.83	AVG
14545.020	V	49	54.00	5	AVG
17495.990	V	46.93	54.00	7.07	AVG
11522.890	H	60.1	74.00	13.9	peak
14601.390	H	62.8	74.00	11.2	peak
17518.390	H	66.96	74.00	7.04	peak
11522.940	H	48.56	54.00	5.44	AVG
14586.480	H	49.65	54.00	4.35	AVG
17503.440	H	47.2	54.00	6.8	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5785			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11645.910	V	59.52	74.00	14.48	peak
15141.110	V	63.15	74.00	10.85	peak
17499.480	V	66.87	74.00	7.13	peak
11648.600	V	48.3	54.00	5.7	AVG
15140.320	V	46.99	54.00	7.01	AVG
17495.991	V	47.25	54.00	6.75	AVG
11548.390	H	59.94	74.00	14.06	peak
14592.890	H	63.75	74.00	10.25	peak
17509.890	H	67.22	74.00	6.78	peak
11548.450	H	48.75	54.00	5.25	AVG
14577.980	H	49.93	54.00	4.07	AVG
17494.930	H	46.88	54.00	7.12	AVG

Test mode: 802.11n(20)		Frequency(MHz): 5825			
Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
11373.710	V	59.92	74.00	14.08	peak
14588.310	V	62.45	74.00	11.55	peak
17499.480	V	67.41	74.00	6.59	peak
11376.460	V	48.14	54.00	5.86	AVG
14587.540	V	49.97	54.00	4.03	AVG
17495.990	V	46.85	54.00	7.15	AVG
11522.890	H	59.7	74.00	14.3	peak
14592.890	H	62.52	74.00	11.48	peak
17535.390	H	66.65	74.00	7.35	peak
11522.940	H	48.71	54.00	5.29	AVG
14577.980	H	49.5	54.00	4.5	AVG
17520.450	H	46.69	54.00	7.31	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(20) Frequency: 5745

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5657.59	H	52.86	-42.37	-27	PASS
5664.28	V	52.95	-42.28	-27	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
5920.16	H	53.50	-41.73	-27	PASS
5914.46	V	54.20	-41.03	-27	PASS

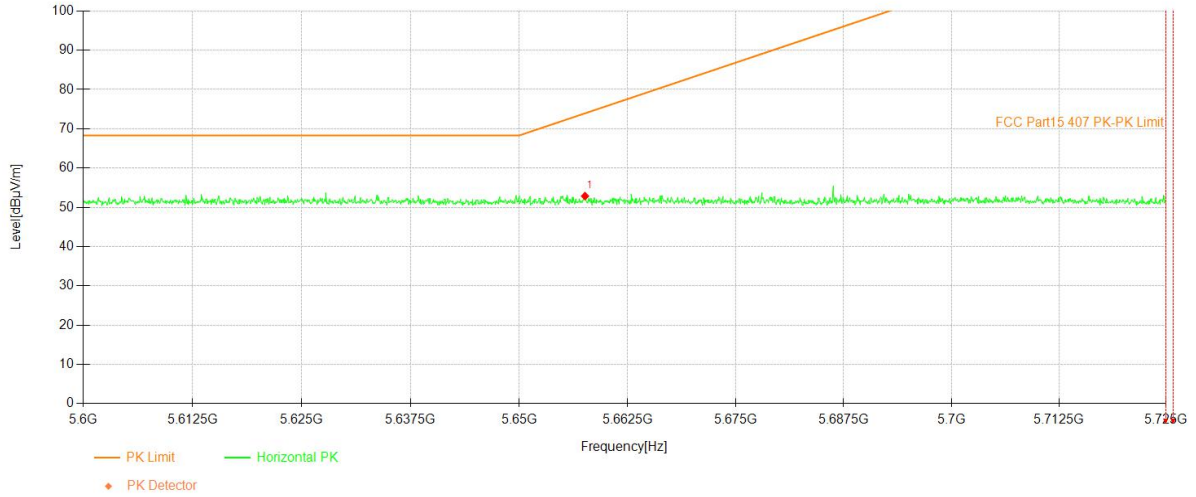
- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
 (2) Emission Level= Reading Level+Correct Factor +Cable Loss.  
 (3) Correct Factor= Ant\_F + Cab\_L - Preamp  
 (4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77  
 d is the measurement distance in 3 meters

**U-NII -3**

Test Model    Undesirable radiated    Undesirable radiated    Spurious Emission in Band Edge

802.11a    5745    802.11n(HT20)    802.11n(HT40)

Ant.Pol    H

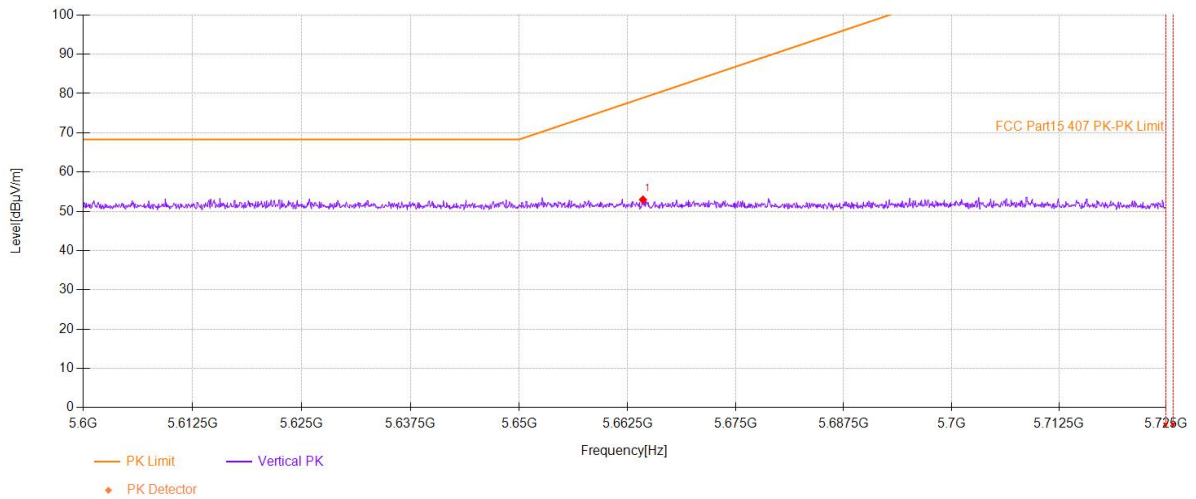


**U-NII -3**

Test Model    Undesirable radiated    Undesirable radiated    Spurious Emission in Band Edge

802.11a    5745    802.11n(HT20)    802.11n(HT40)

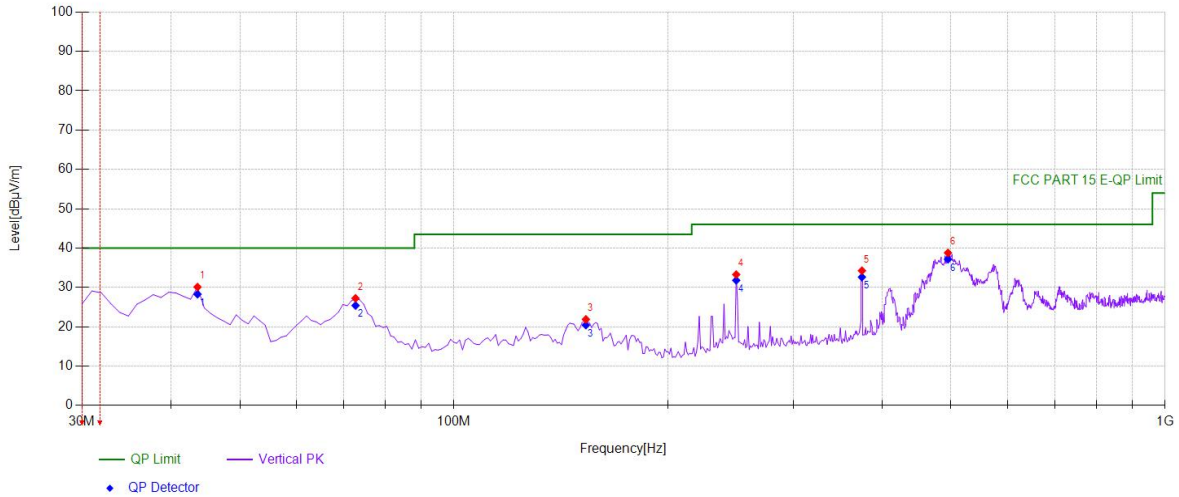
Ant.Pol    V



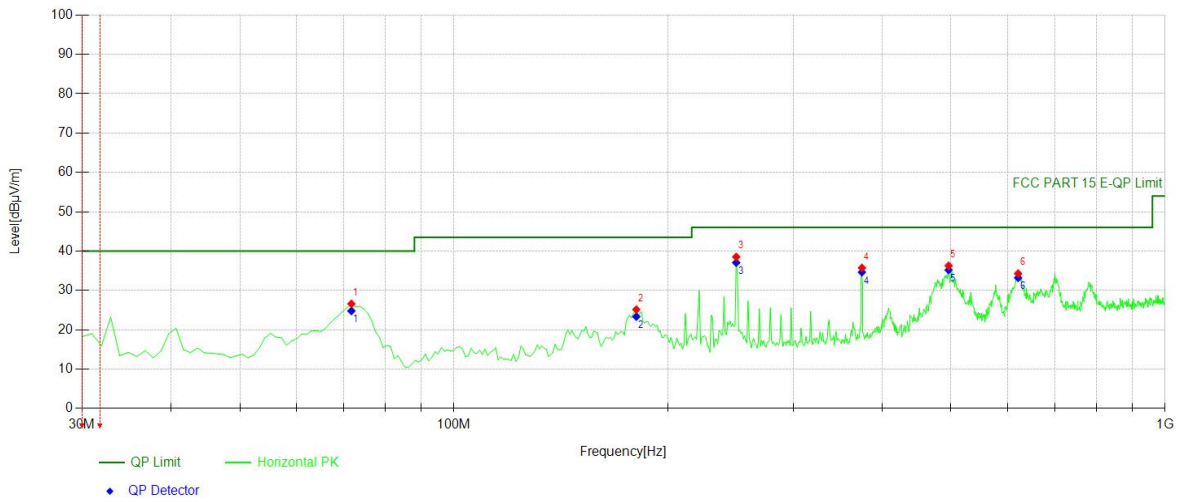


- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)  
All modes have been tested, and the worst result recorded was report as below:

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



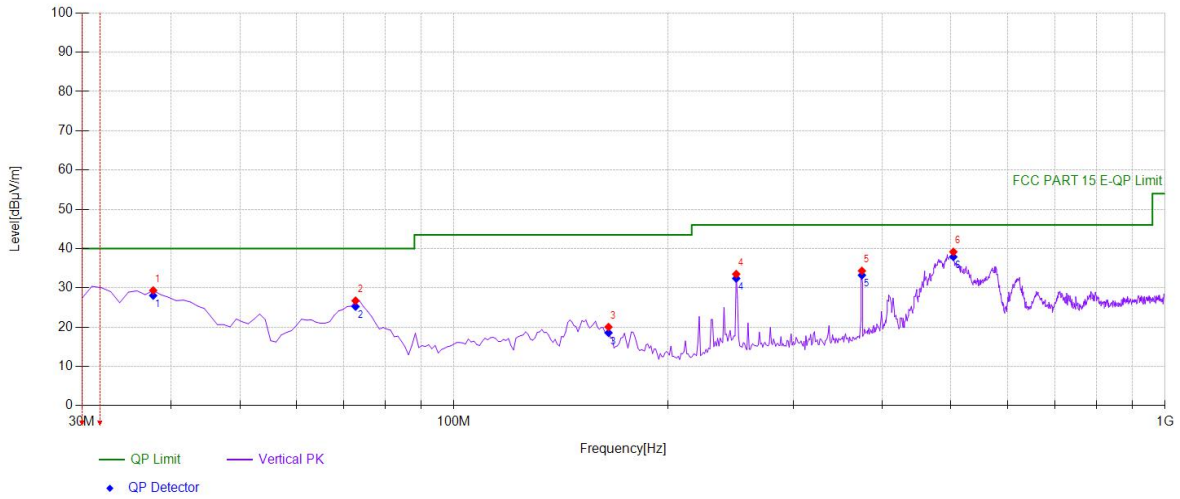
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBµV]	Factor [dB/m]	Level [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]	Polarity
1	43.5936	47.77	-17.66	30.11	PK	40.00	9.89	Vertical
2	72.7227	47.62	-20.38	27.24	PK	40.00	12.76	Vertical
3	153.313	41.61	-19.71	21.90	PK	43.50	21.60	Vertical
4	249.439	48.45	-15.17	33.28	PK	46.00	12.72	Vertical
5	374.694	46.52	-12.26	34.26	PK	46.00	11.74	Vertical
6	495.095	48.57	-9.78	38.79	PK	46.00	7.21	Vertical



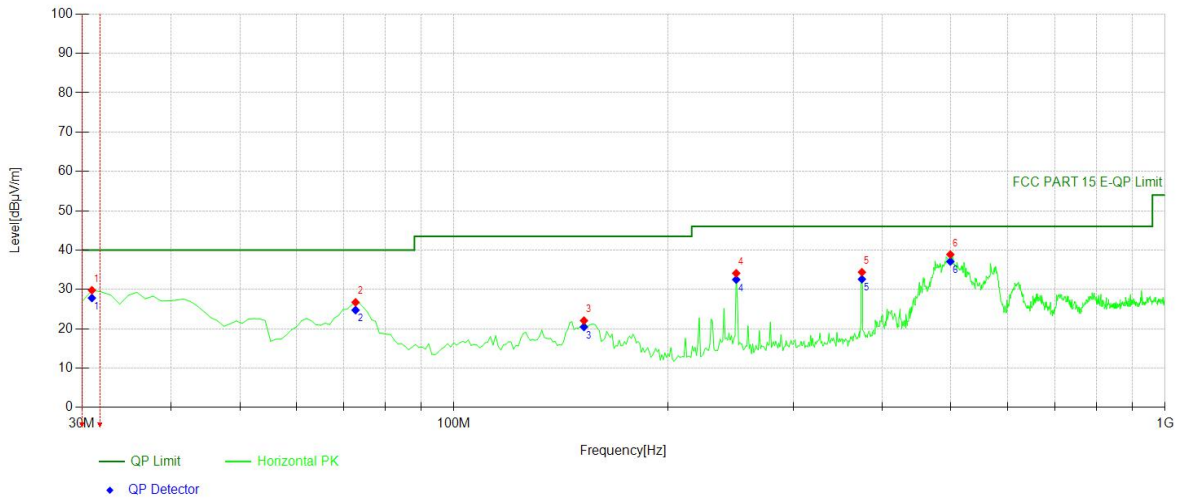
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBµV]	Factor [dB/m]	Level [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]	Polarity
1	71.7518	46.83	-20.23	26.60	PK	40.00	13.40	Horizontal
2	180.500	43.52	-18.36	25.16	PK	43.50	18.34	Horizontal
3	249.439	53.70	-15.17	38.53	PK	46.00	7.47	Horizontal
4	374.694	48.00	-12.26	35.74	PK	46.00	10.26	Horizontal
5	496.066	46.07	-9.78	36.29	PK	46.00	9.71	Horizontal
6	621.321	41.37	-7.07	34.30	PK	46.00	11.70	Horizontal



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

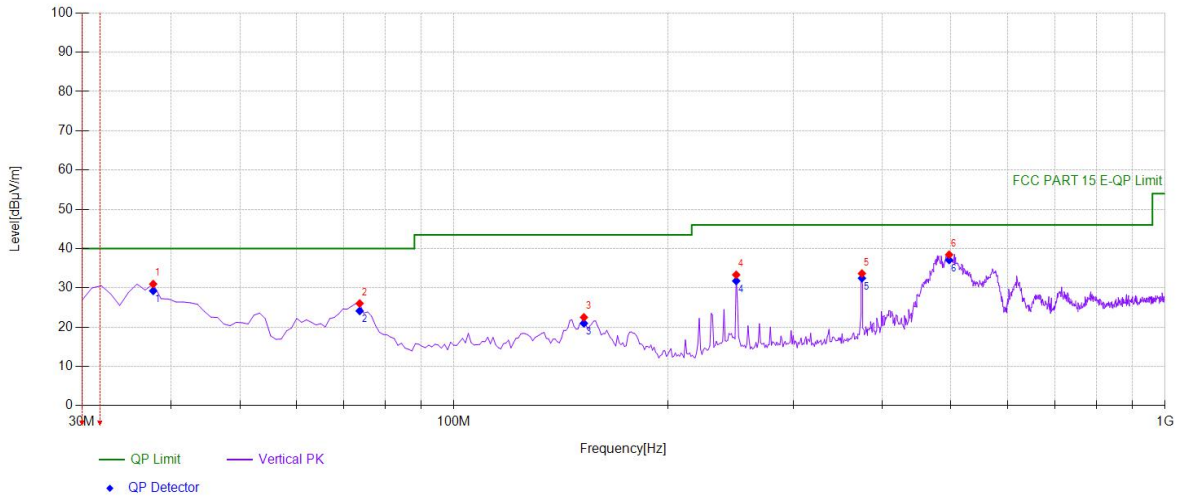


Suspected Data List								
NO.	Freq. [MHz]	Reading [dBµV]	Factor [dB/m]	Level [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]	Polarity
1	37.7678	47.39	-18.05	29.34	PK	40.00	10.66	Vertical
2	72.7227	47.10	-20.38	26.72	PK	40.00	13.28	Vertical
3	164.965	39.32	-19.29	20.03	PK	43.50	23.47	Vertical
4	249.439	48.68	-15.17	33.51	PK	46.00	12.49	Vertical
5	374.694	46.59	-12.26	34.33	PK	46.00	11.67	Vertical
6	503.833	48.94	-9.77	39.17	PK	46.00	6.83	Vertical

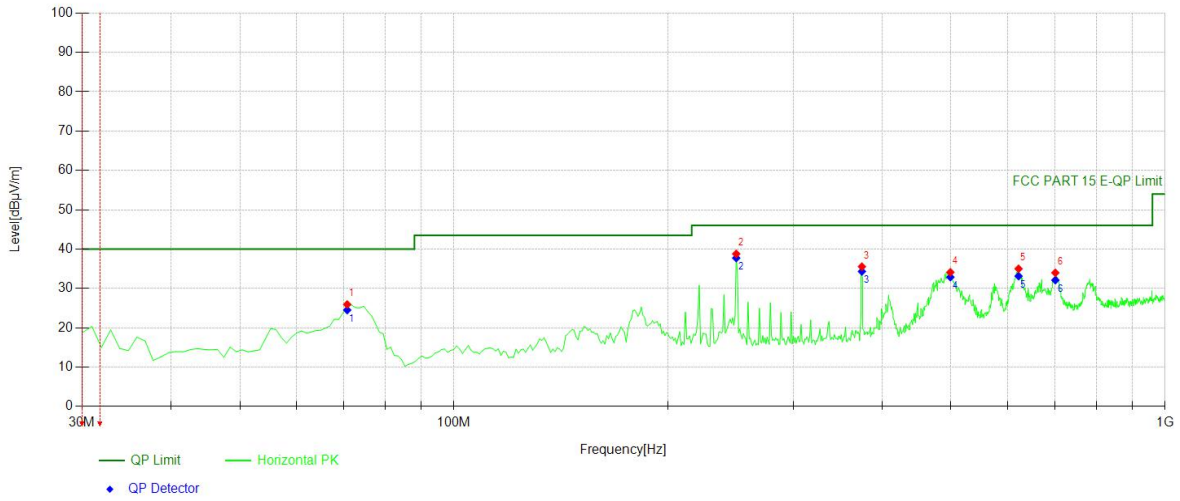


Suspected Data List								
NO.	Freq. [MHz]	Reading [dBµV]	Factor [dB/m]	Level [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]	Polarity
1	30.971	48.27	-18.47	29.80	PK	40.00	10.20	Horizontal
2	72.7227	47.10	-20.38	26.72	PK	40.00	13.28	Horizontal
3	152.342	41.80	-19.72	22.08	PK	43.50	21.42	Horizontal
4	249.439	49.29	-15.17	34.12	PK	46.00	11.88	Horizontal
5	374.694	46.65	-12.26	34.39	PK	46.00	11.61	Horizontal
6	498.979	48.64	-9.76	38.88	PK	46.00	7.12	Horizontal

Test mode: 802.11n(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	37.7678	49.03	-18.05	30.98	PK	40.00	9.02	Vertical
2	73.6937	46.56	-20.53	26.03	PK	40.00	13.97	Vertical
3	152.342	42.22	-19.72	22.50	PK	43.50	21.00	Vertical
4	249.439	48.49	-15.17	33.32	PK	46.00	12.68	Vertical
5	374.694	45.92	-12.26	33.66	PK	46.00	12.34	Vertical
6	497.037	48.22	-9.77	38.45	PK	46.00	7.55	Vertical



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBµV]	Factor [dB/m]	Level [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]	Polarity
1	70.7808	46.01	-20.08	25.93	PK	40.00	14.07	Horizontal
2	249.439	53.96	-15.17	38.79	PK	46.00	7.21	Horizontal
3	374.694	47.81	-12.26	35.55	PK	46.00	10.45	Horizontal
4	498.979	43.87	-9.76	34.11	PK	46.00	11.89	Horizontal
5	622.292	42.03	-7.03	35.00	PK	46.00	11.00	Horizontal
6	700.940	39.91	-5.93	33.98	PK	46.00	12.02	Horizontal

## 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

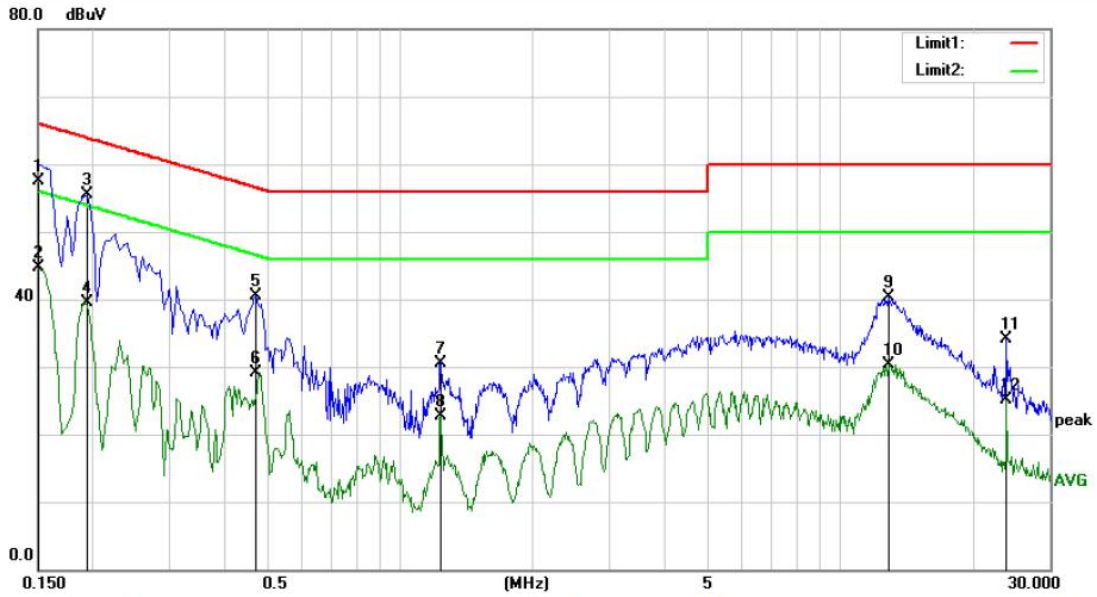
### 8.5.4 Test Procedure

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

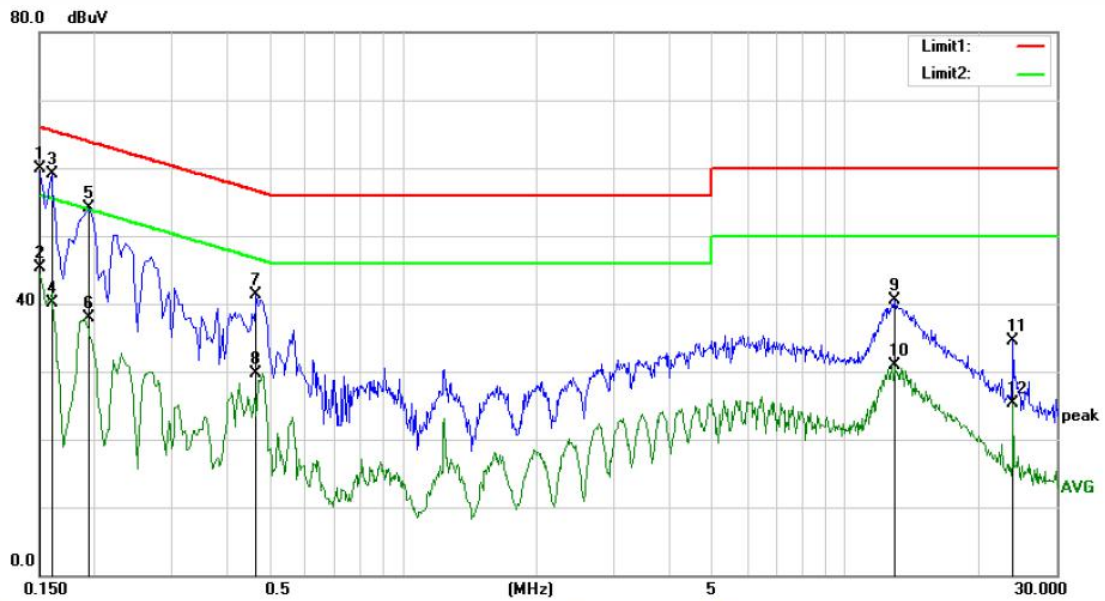
#### Pass

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



Site Conduction #1 Phase: **N** Temperature: 21.9

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1500	48.06	9.54	57.60	66.00	-8.40	QP	
2		0.1500	35.15	9.54	44.69	56.00	-11.31	AVG	
3	*	0.1950	45.93	9.54	55.47	63.82	-8.35	QP	
4		0.1950	30.05	9.54	39.59	53.82	-14.23	AVG	
5		0.4700	30.90	9.53	40.43	56.51	-16.08	QP	
6		0.4700	19.50	9.53	29.03	46.51	-17.48	AVG	
7		1.2400	21.02	9.55	30.57	56.00	-25.43	QP	
8		1.2400	13.22	9.55	22.77	46.00	-23.23	AVG	
9		12.8800	30.48	9.75	40.23	60.00	-19.77	QP	
10		12.8800	20.54	9.75	30.29	50.00	-19.71	AVG	
11		23.9300	23.99	10.04	34.03	60.00	-25.97	QP	
12		23.9300	15.14	10.04	25.18	50.00	-24.82	AVG	



Site Conduction #1 Phase: **L1** Temperature: 21.9

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1500	50.43	9.54	59.97	66.00	-6.03	QP	
2		0.1500	35.67	9.54	45.21	56.00	-10.79	AVG	
3		0.1600	49.57	9.54	59.11	65.46	-6.35	QP	
4		0.1600	30.53	9.54	40.07	55.46	-15.39	AVG	
5		0.1950	44.60	9.54	54.14	63.82	-9.68	QP	
6		0.1950	28.33	9.54	37.87	53.82	-15.95	AVG	
7		0.4650	31.77	9.53	41.30	56.60	-15.30	QP	
8		0.4650	20.10	9.53	29.63	46.60	-16.97	AVG	
9		12.9300	30.68	9.76	40.44	60.00	-19.56	QP	
10		12.9300	21.07	9.76	30.83	50.00	-19.17	AVG	
11		23.9300	24.48	10.04	34.52	60.00	-25.48	QP	
12		23.9300	15.19	10.04	25.23	50.00	-24.77	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

#### PASS

The EUT is integrated antenna, the antenna gain as below:

Ant1: 5.31dBi, Ant2: 5.31dBi

- 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 ---