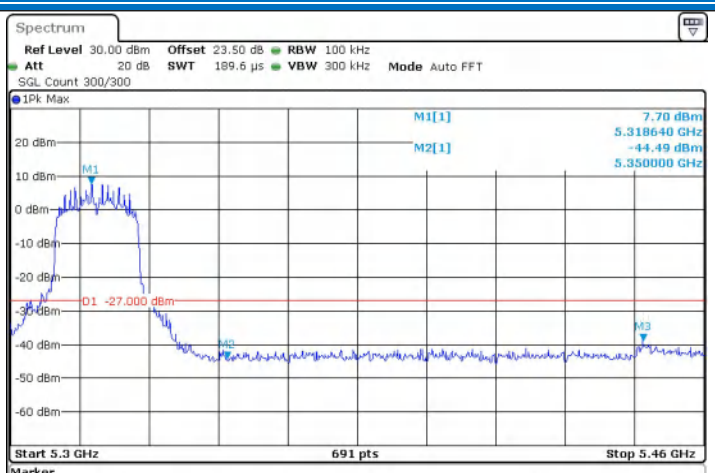
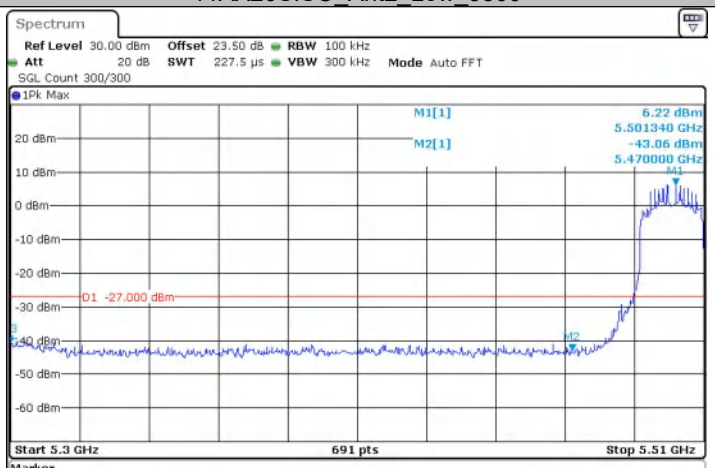


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.31864 GHz	7.70 dBm		
M2		1	5.35 GHz	-44.49 dBm		
M3		1	5.445855 GHz	-38.74 dBm		

Date: 10.APR.2025 10:45:13

11AX20SISO_Ant2_Low_5500

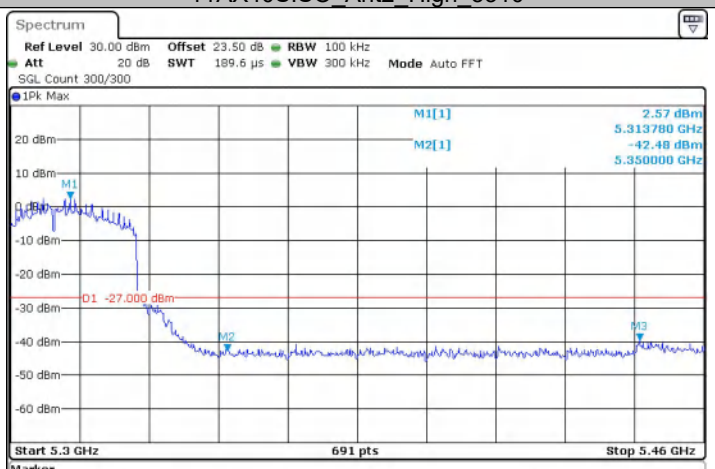


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.50134 GHz	6.22 dBm		
M2		1	5.47 GHz	-43.06 dBm		
M3		1	5.3 GHz	-39.29 dBm		

Date: 10.APR.2025 10:48:36

11AX40SISO_Ant2_High_5310

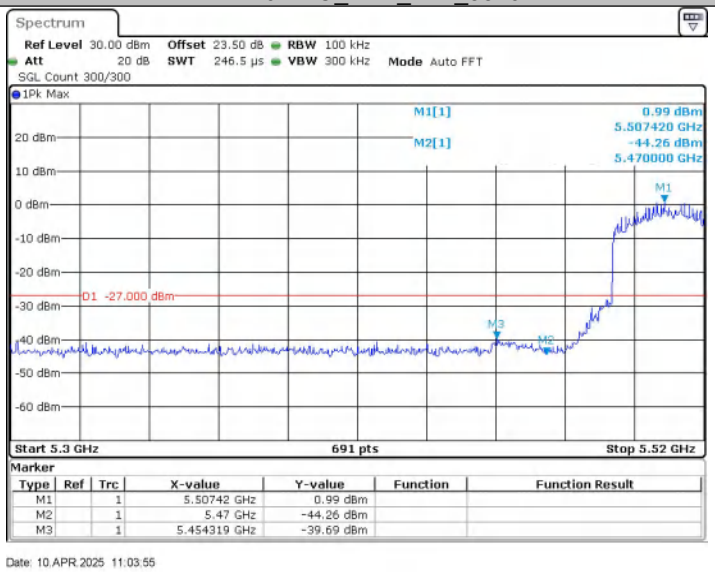


Marker

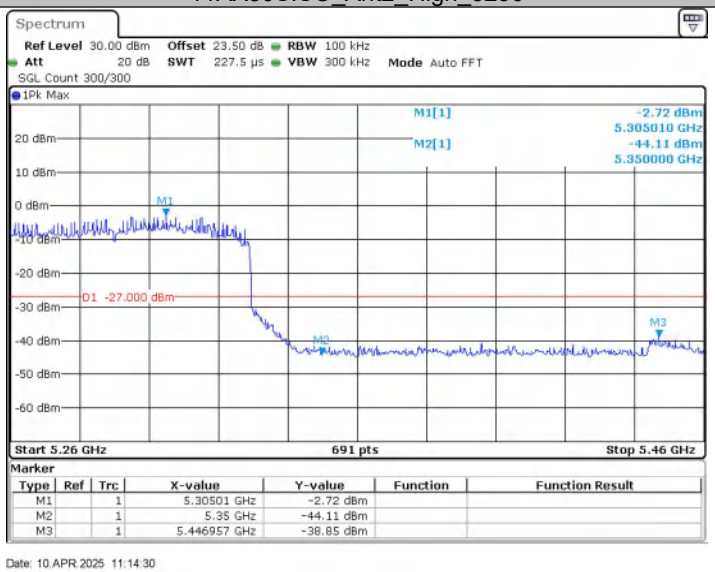
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.31378 GHz	2.57 dBm		
M2		1	5.35 GHz	-42.48 dBm		
M3		1	5.445159 GHz	-39.47 dBm		

Date: 10.APR.2025 11:01:47

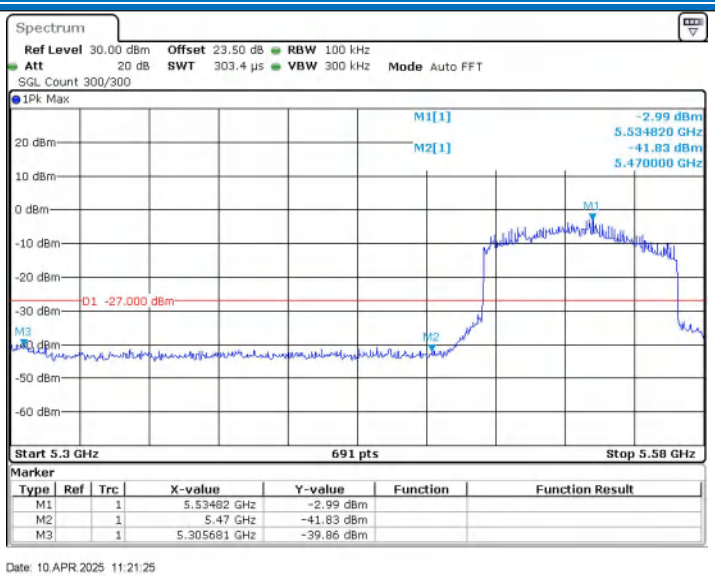
11AX40SISO_Ant2_Low_5510



11AX80SISO_Ant2_High_5290

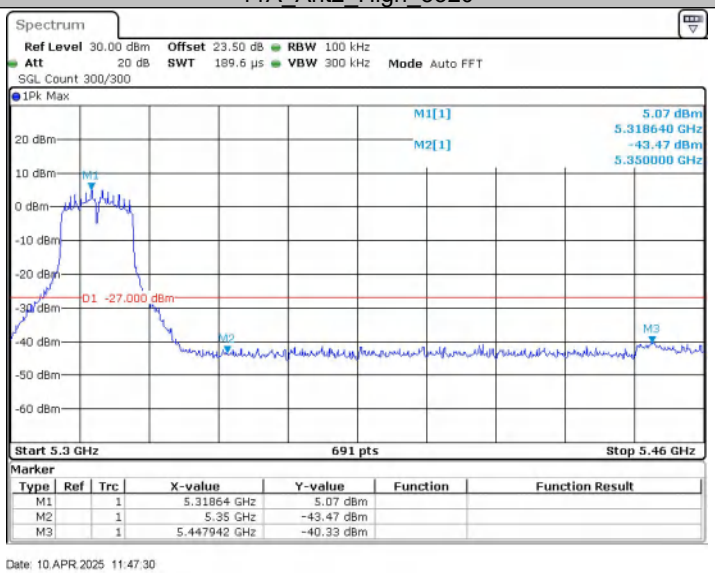


11AX80SISO_Ant2_Low_5530

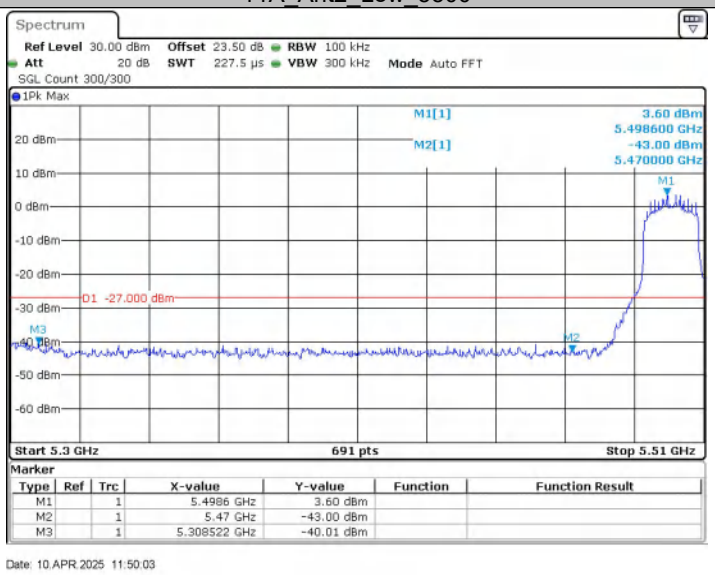

Spectrum
Ref Level 30.00 dBm Offset 23.50 dB RBW 100 kHz
Att 20 dB SWT 303.4 µs VBW 300 kHz Mode Auto FFT
SGL Count 300/300
1Pk Max
M1[1] -2.99 dBm 5.534820 GHz
M2[1] -41.83 dBm 5.470000 GHz
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -27.000 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
M1
M2
M3
Start 5.3 GHz 691 pts Stop 5.58 GHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 5.53482 GHz -2.99 dBm
M2 1 5.47 GHz -41.83 dBm
M3 1 5.305681 GHz -39.86 dBm
Date: 10.APR.2025 11:21:25

7.1.4 Test Graphs B2/3

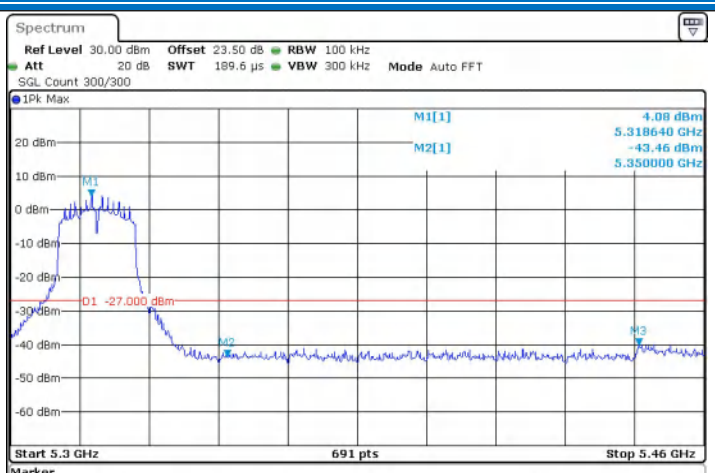
11A_Ant2_High_5320



11A_Ant2_Low_5500



11N20SISO_Ant2_High_5320

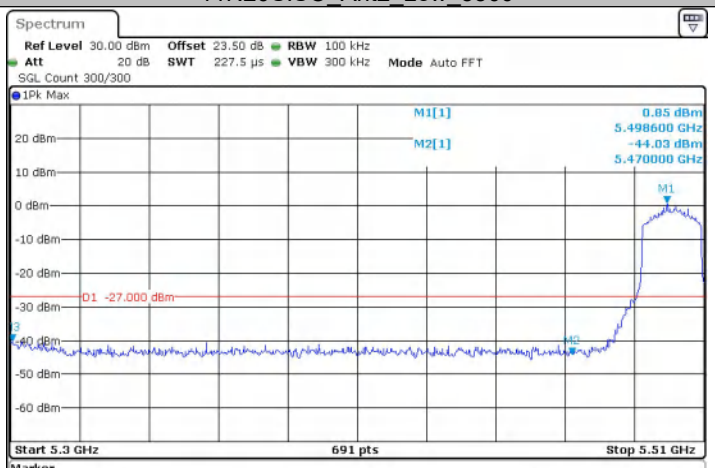


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.31864 GHz	4.08 dBm		
M2		1	5.35 GHz	-43.46 dBm		
M3		1	5.444928 GHz	-40.11 dBm		

Date: 10.APR.2025 12:08:46

11N20SISO_Ant2_Low_5500

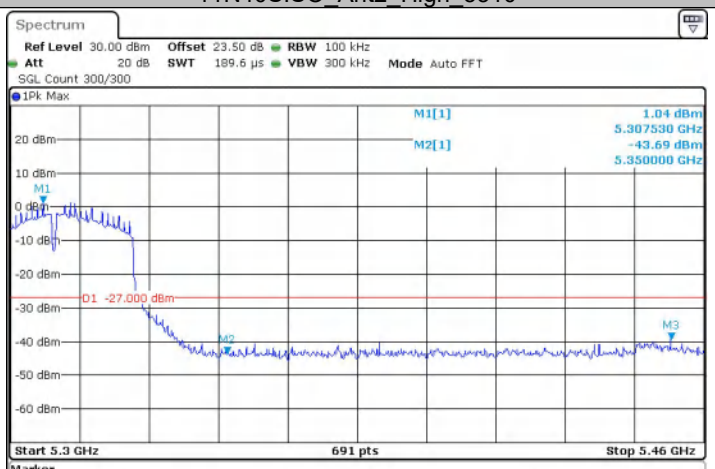


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.4986 GHz	0.85 dBm		
M2		1	5.47 GHz	-44.03 dBm		
M3		1	5.300609 GHz	-40.02 dBm		

Date: 10.APR.2025 12:11:02

11N40SISO_Ant2_High_5310

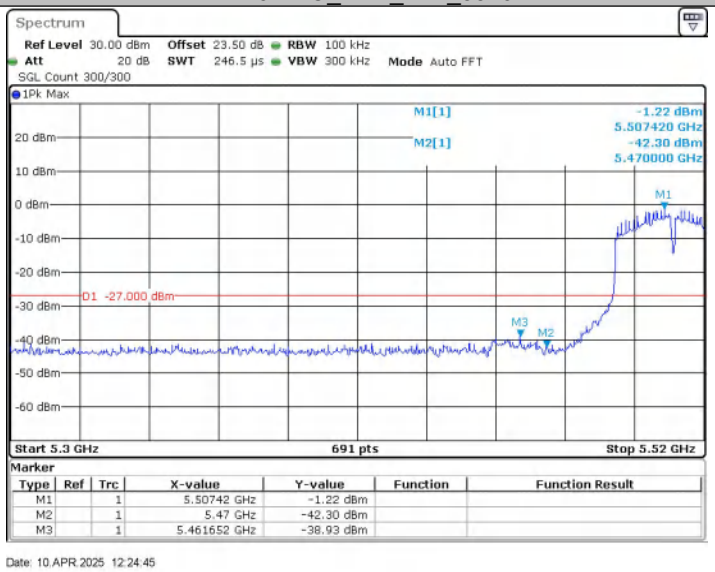


Marker

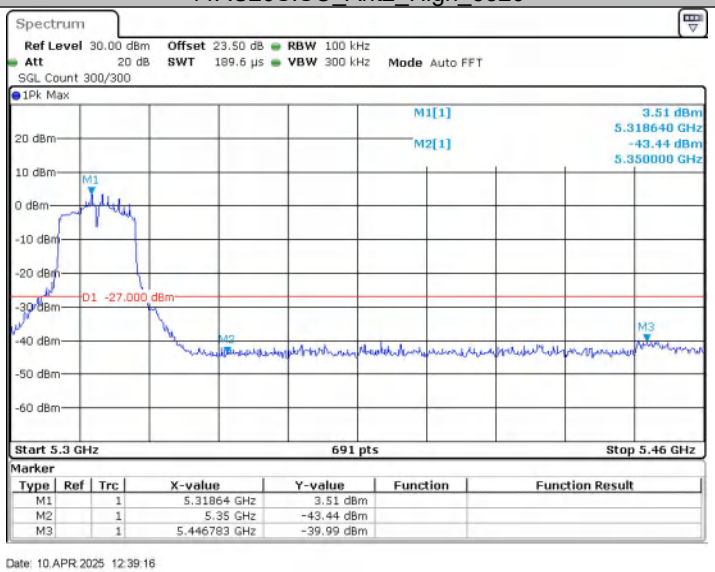
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.30753 GHz	1.04 dBm		
M2		1	5.35 GHz	-43.69 dBm		
M3		1	5.452348 GHz	-39.42 dBm		

Date: 10.APR.2025 12:22:29

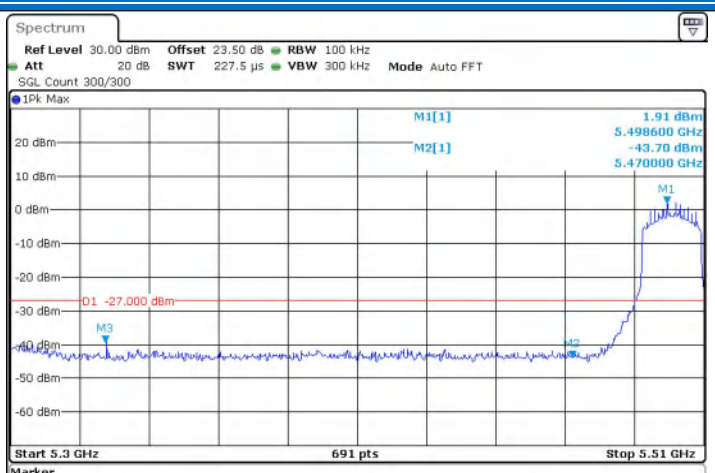
11N40SISO_Ant2_Low_5510



11AC20SISO_Ant2_High_5320



11AC20SISO_Ant2_Low_5500

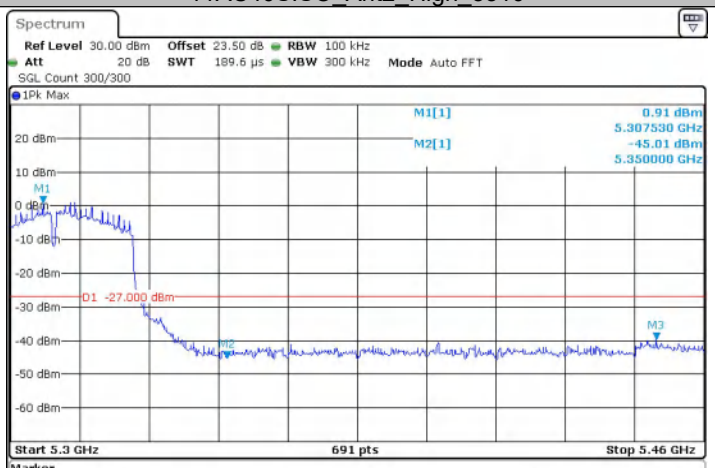


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.4986 GHz	1.91 dBm		
M2		1	5.47 GHz	-43.70 dBm		
M3		1	5.328913 GHz	-39.39 dBm		

Date: 10.APR.2025 12:41:47

11AC40SISO_Ant2_High_5310

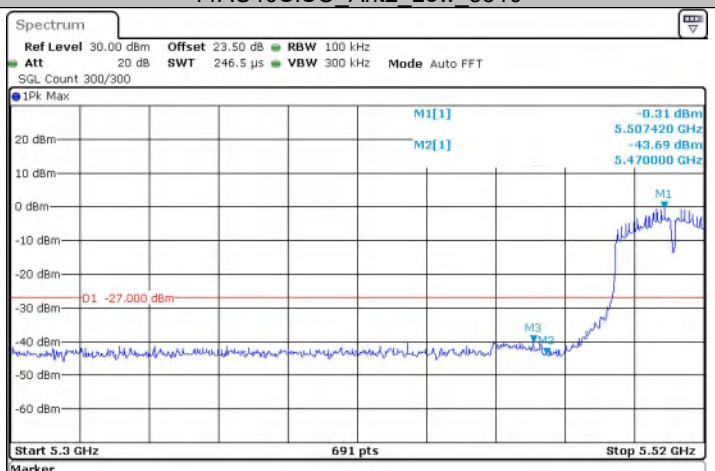


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.30753 GHz	0.91 dBm		
M2		1	5.35 GHz	-45.01 dBm		
M3		1	5.44887 GHz	-39.66 dBm		

Date: 10.APR.2025 12:56:50

11AC40SISO_Ant2_Low_5510

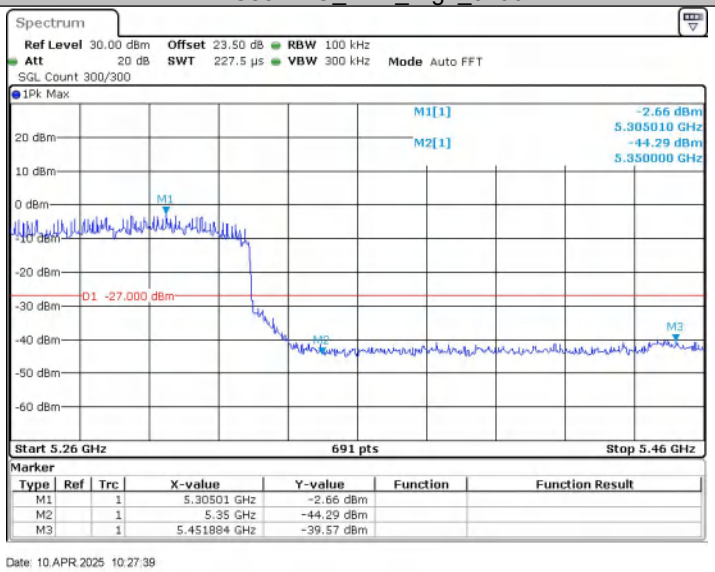


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.50742 GHz	-0.31 dBm		
M2		1	5.47 GHz	-43.69 dBm		
M3		1	5.465797 GHz	-40.03 dBm		

Date: 10.APR.2025 12:59:21

11AC80SISO_Ant2_High_5290

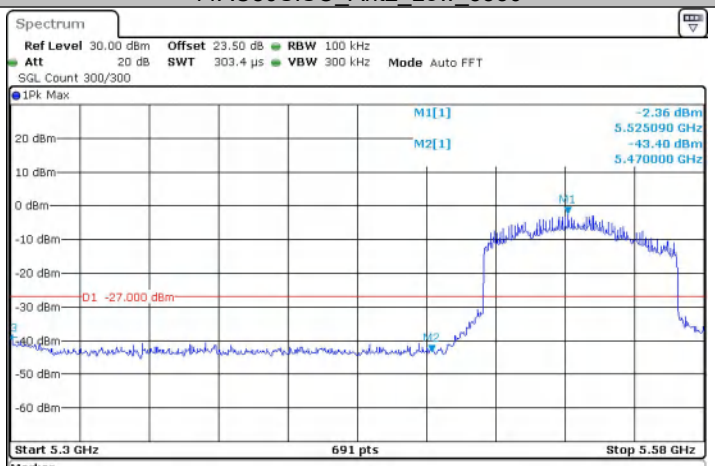


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.30501 GHz	-2.66 dBm		
M2		1	5.35 GHz	-44.29 dBm		
M3		1	5.451884 GHz	-39.57 dBm		

Date: 10.APR.2025 10:27:39

11AC80SISO_Ant2_Low_5530

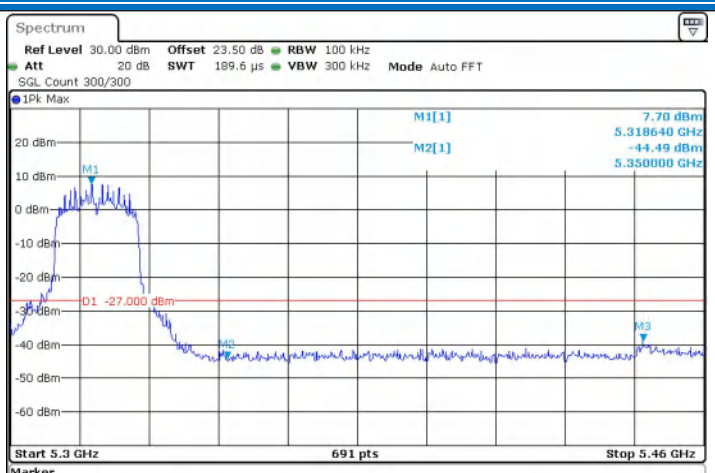


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.52509 GHz	-2.36 dBm		
M2		1	5.47 GHz	-43.40 dBm		
M3		1	5.3 GHz	-39.16 dBm		

Date: 10.APR.2025 10:30:36

11AX20SISO_Ant2_High_5320

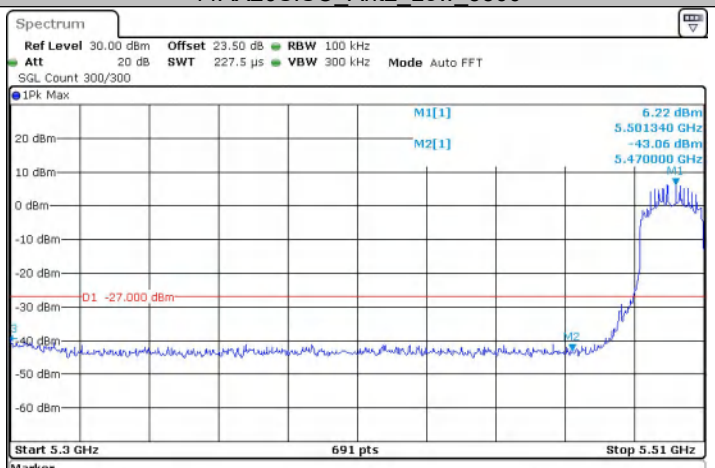


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.31864 GHz	7.70 dBm		
M2		1	5.35 GHz	-44.49 dBm		
M3		1	5.445855 GHz	-38.74 dBm		

Date: 10.APR.2025 10:45:13

11AX20SISO_Ant2_Low_5500

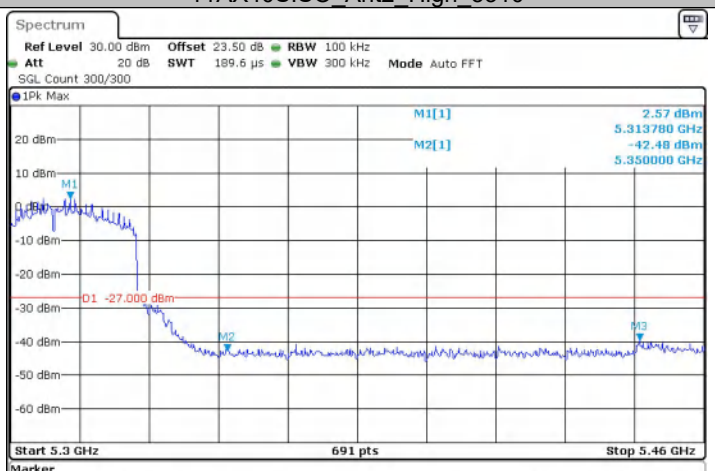


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.50134 GHz	6.22 dBm		
M2		1	5.47 GHz	-43.06 dBm		
M3		1	5.3 GHz	-39.29 dBm		

Date: 10.APR.2025 10:48:36

11AX40SISO_Ant2_High_5310

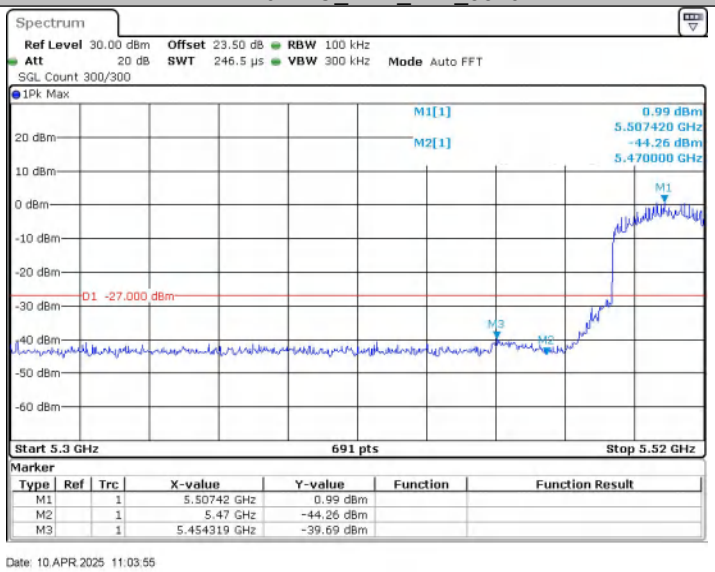


Marker

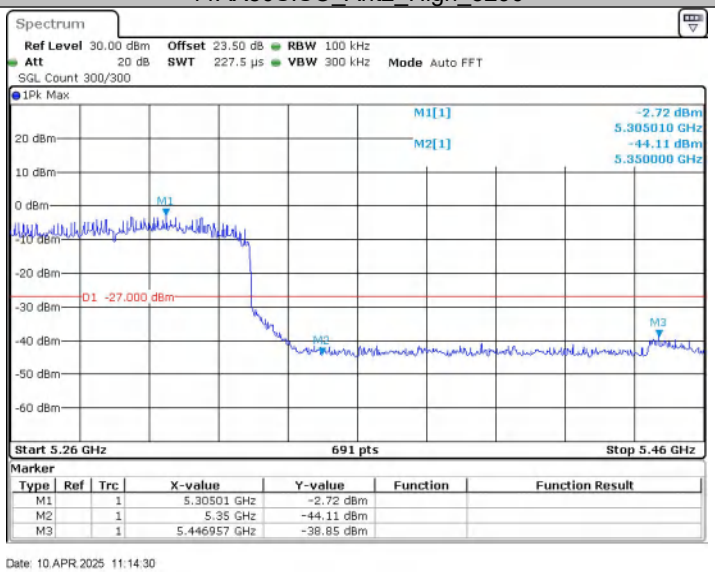
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.31378 GHz	2.57 dBm		
M2		1	5.35 GHz	-42.48 dBm		
M3		1	5.445159 GHz	-39.47 dBm		

Date: 10.APR.2025 11:01:47

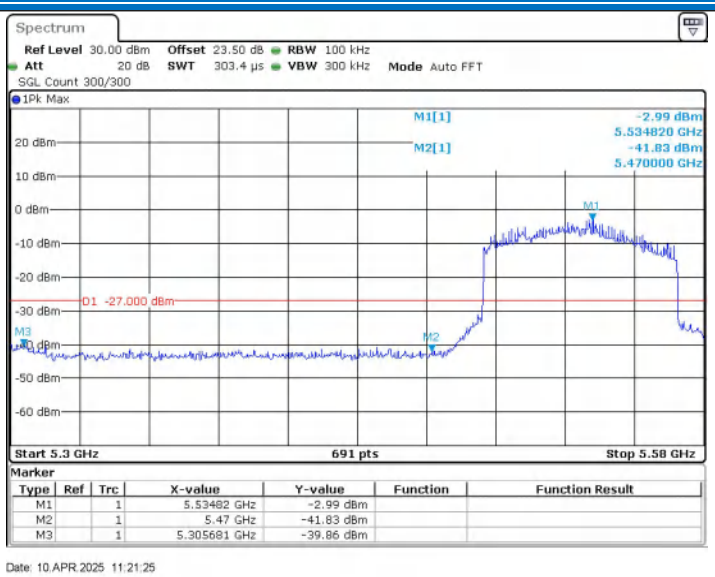
11AX40SISO_Ant2_Low_5510



11AX80SISO_Ant2_High_5290



11AX80SISO_Ant2_Low_5530


Spectrum
Ref Level 30.00 dBm Offset 23.50 dB RBW 100 kHz
Att 20 dB SWT 303.4 µs VBW 300 kHz Mode Auto FFT
SGL Count 300/300
1Pk Max
M1[1] -2.99 dBm 5.534820 GHz
M2[1] -41.83 dBm 5.470000 GHz
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
D1 -27.000 dBm
M1
M2
M3
Start 5.3 GHz 691 pts Stop 5.58 GHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 5.53482 GHz -2.99 dBm
M2 1 5.47 GHz -41.83 dBm
M3 1 5.305681 GHz -39.86 dBm
Date: 10.APR.2025 11:21:25

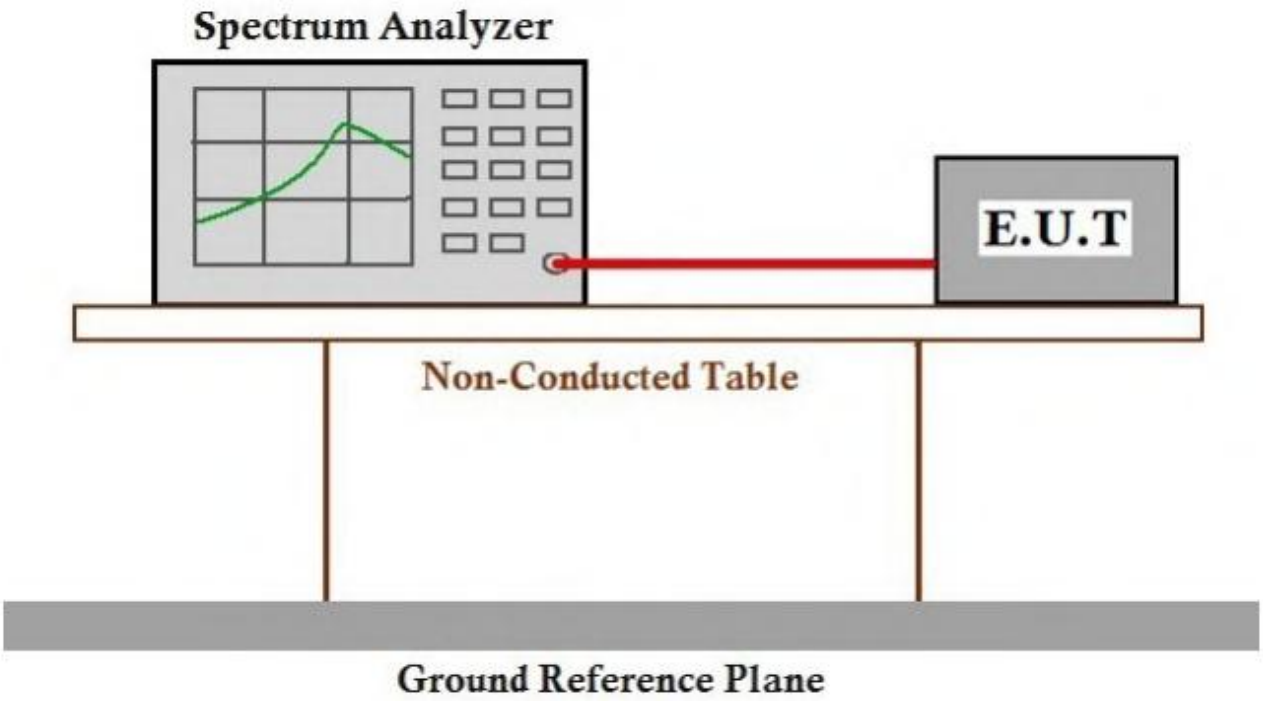
Appendix E): Frequency Stability

Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)

Test Method: ANSI C63.10 (2013) Section 6.8

Limit:The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

Test Setup Diagram



Measurement Data

Ant1

Frequency Stability Versus Temp.			
Operating Frequency: 5260 MHz			
Temp (℃)	Volta ge	Measured Frequency (MHz)	Frequency Drift (ppm)
50	VN	5260.03	5.703
40		5260.01	1.901
30		5260.02	3.802
20		5260.01	1.901
10		5260.03	5.703
0		5260.03	5.703
-10		5260.03	5.703
-20		5260.03	5.703

Frequency Stability Versus Temp.			
Operating Frequency: 5290 MHz			
Temp.	Volta ge	Measured Frequency (MHz)	Frequency Drift (ppm)
TN	VL	5290.00	0
	VN	5290.03	5.671
	VH	5290.02	3.781

Ant2

Frequency Stability Versus Temp.			
Operating Frequency: 5260 MHz			
Temp (℃)	Volta ge	Measured Frequency (MHz)	Frequency Drift (ppm)
50	VN	5260.03	5.703
40		5260.01	1.901
30		5260.02	3.802
20		5260.01	1.901
10		5260.03	5.703
0		5260.03	5.703
-10		5260.03	5.703
-20		5260.03	5.703

Frequency Stability Versus Temp.			
Operating Frequency: 5290 MHz			
Temp.	Volta ge	Measured Frequency (MHz)	Frequency Drift (ppm)
TN	VL	5290.00	0
	VN	5290.03	5.671
	VH	5290.02	3.781

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

Appendix F): Antenna Requirement

15.203 requirement:

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, 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.

15.407(a)(1) (2) requirement:

The conducted output power limit specified in paragraph (a) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (a) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power and the peak power spectral density shall be reduced by the by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is External antenna with ipex connector.The best case gain of the 5G WiFi antenna is Ant1:
6.7dBi@5GHz: Wi-Fi: U-NII-1
6.83dBi@5GHz: Wi-Fi: U-NII-2A
7.61dBi@5GHz: Wi-Fi: U-NII-2C
6.71dBi@5GHz: Wi-Fi: U-NII-3
Ant2:
6.7dBi@5GHz: Wi-Fi: U-NII-1
6.83dBi@5GHz: Wi-Fi: U-NII-2A
7.61dBi@5GHz: Wi-Fi: U-NII-2C
6.71dBi@5GHz: Wi-Fi: U-NII-3
Ant1+Ant2:
9.71dBi@5GHz: Wi-Fi: U-NII-1
9.84dBi@5GHz: Wi-Fi: U-NII-2A
10.62dBi@5GHz: Wi-Fi: U-NII-2C
9.72dBi@5GHz: Wi-Fi: U-NII-3

Appendix G): Operation in the absence of information to the transmit

15.407(c) requirement: The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signal ling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.
Operation in the absence of information to the transmit
While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission. (manufacturer declare)

Appendix H): AC Power Line Conducted Emission

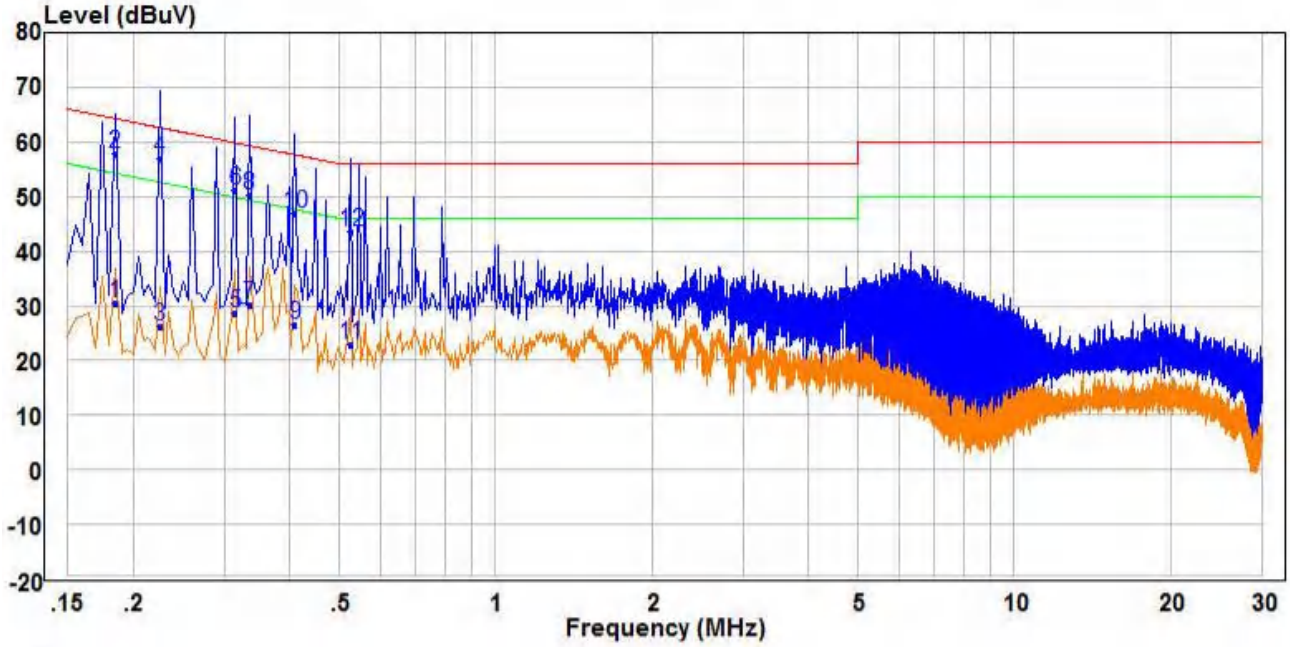
<table>
<tr><td>Test Procedure:</td><td>Test frequency range :150KHz-30MHz
1)The mains terminal disturbance voltage test was conducted in a shielded room.
2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
3)The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td rowspan="2">Frequency range (MHz)</td><td colspan="2">Limit (dBμV)</td></tr>
<tr><td>Quasi-peak</td><td>Average</td></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>5-30</td><td>60</td><td>50</td></tr>
</table>
* The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.
NOTE : The lower limit is applicable at the transition frequency</td></tr>
</table>

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

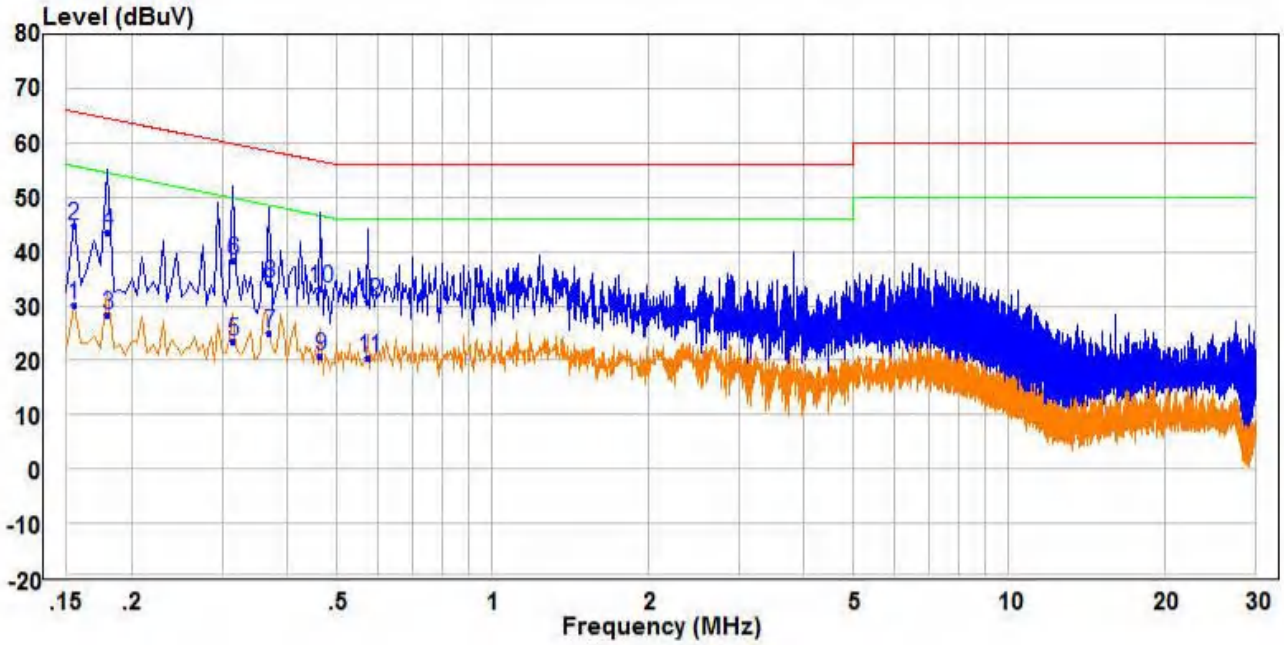
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live line:



		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.185	20.95	9.64	30.59	54.26	-23.67	Average	Line
2		0.185	48.26	9.64	57.90	64.26	-6.36	QP	Line
3		0.225	16.53	9.58	26.11	52.63	-26.52	Average	Line
4	PP	0.225	47.45	9.58	57.03	62.63	-5.60	QP	Line
5		0.315	19.12	9.51	28.63	49.84	-21.21	Average	Line
6		0.315	41.67	9.51	51.18	59.84	-8.66	QP	Line
7	AV	0.335	20.61	9.54	30.15	49.33	-19.18	Average	Line
8		0.335	40.63	9.54	50.17	59.33	-9.16	QP	Line
9		0.410	16.95	9.62	26.57	47.65	-21.08	Average	Line
10		0.410	37.38	9.62	47.00	57.65	-10.65	QP	Line
11		0.525	13.03	9.72	22.75	46.00	-23.25	Average	Line
12		0.525	33.90	9.72	43.62	56.00	-12.38	QP	Line

Neutral line:



		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.155	20.46	9.69	30.15	55.73	-25.58	Average	Neutral
2		0.155	34.94	9.69	44.63	65.73	-21.10	QP	Neutral
3		0.180	18.61	9.64	28.25	54.49	-26.24	Average	Neutral
4	PP	0.180	33.90	9.64	43.54	64.49	-20.95	QP	Neutral
5		0.315	13.96	9.50	23.46	49.84	-26.38	Average	Neutral
6		0.315	28.72	9.50	38.22	59.84	-21.62	QP	Neutral
7	AV	0.370	15.56	9.57	25.13	48.50	-23.37	Average	Neutral
8		0.370	24.51	9.57	34.08	58.50	-24.42	QP	Neutral
9		0.465	11.14	9.67	20.81	46.60	-25.79	Average	Neutral
10		0.465	23.61	9.67	33.28	56.60	-23.32	QP	Neutral
11		0.575	10.59	9.78	20.37	46.00	-25.63	Average	Neutral
12		0.575	20.88	9.78	30.66	56.00	-25.34	QP	Neutral

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. The 6Mbps of rate of 802.11A_5240 is the worst case, only the worst data recorded in the report.

Appendix I): Restricted bands around fundamental frequency (Radiated Emission)

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

Test Procedure:

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel

Above 1GHz test procedure as below:

g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
h. Test the EUT in the lowest channel , the Highest channel
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
j. Repeat above procedures until all frequencies measured was complete.

Limit:

Frequency	Limit (dBμV/m @3cm)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
	74.0	Peak Value

Test plot as follows:
Ant1:

Worse case mode:		802.11a		Test channel:		52			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.36	-3.63	54.73	74	-19.27	peak	H	1.5	281
5150.00	44.68	-3.63	41.05	54	-12.95	AVG	H	1.5	17
5150.00	60.17	-3.63	56.54	74	-17.46	peak	V	1.5	2
5150.00	46.43	-3.63	42.80	54	-11.20	AVG	V	1.5	18

Worse case mode:		802.11a		Test channel:		64			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	58.67	-3.59	55.08	74	-18.92	peak	H	1.5	32
5350.00	44.85	-3.59	41.26	54	-12.74	AVG	H	1.5	261
5350.00	59.65	-3.59	56.06	74	-17.94	peak	V	1.5	130
5350.00	46.92	-3.59	43.33	54	-10.67	AVG	V	1.5	175

Worse case mode:		802.11a		Test channel:		100			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	58.38	-3.44	54.94	74	-19.06	peak	H	1.5	205
5470.00	44.10	-3.44	40.66	54	-13.34	AVG	H	1.5	312
5470.00	57.83	-3.44	54.39	74	-19.61	peak	V	1.5	261
5470.00	46.15	-3.44	42.71	54	-11.29	AVG	V	1.5	274

Worse case mode:		802.11a		Test channel:		140			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	59.13	-3.42	55.71	74	-18.29	peak	H	1.5	255
5850.00	44.49	-3.42	41.07	54	-12.93	AVG	H	1.5	260
5850.00	60.08	-3.42	56.66	74	-17.34	peak	V	1.5	240
5850.00	46.24	-3.42	42.82	54	-11.18	AVG	V	1.5	125

Worse case mode:		802.11n(HT20)		Test channel:		52			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.47	-3.63	54.84	74	-19.16	peak	H	1.5	53
5150.00	44.07	-3.63	40.44	54	-13.56	AVG	H	1.5	210
5150.00	59.88	-3.63	56.25	74	-17.75	peak	V	1.5	201
5150.00	46.27	-3.63	42.64	54	-11.36	AVG	V	1.5	344

Worse case mode:		802.11n(HT20)		Test channel:		64			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	58.74	-3.59	55.15	74	-18.85	peak	H	1.5	71
5350.00	44.27	-3.59	40.68	54	-13.32	AVG	H	1.5	72
5350.00	59.82	-3.59	56.23	74	-17.77	peak	V	1.5	239
5350.00	46.81	-3.59	43.22	54	-10.78	AVG	V	1.5	166

Worse case mode:		802.11n(HT20)		Test channel:		100			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	58.35	-3.44	54.91	74	-19.09	peak	H	1.5	78
5470.00	44.25	-3.44	40.81	54	-13.19	AVG	H	1.5	55
5470.00	58.40	-3.44	54.96	74	-19.04	peak	V	1.5	338
5470.00	46.07	-3.44	42.63	54	-11.37	AVG	V	1.5	336

Worse case mode:		802.11n(HT20)		Test channel:		140			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	59.12	-3.42	55.70	74	-18.30	peak	H	1.5	313
5850.00	44.57	-3.42	41.15	54	-12.85	AVG	H	1.5	150
5850.00	59.81	-3.42	56.39	74	-17.61	peak	V	1.5	156
5850.00	46.73	-3.42	43.31	54	-10.69	AVG	V	1.5	143

Worse case mode:		802.11n(HT40)		Test channel:		54			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	59.01	-3.63	55.38	74	-18.62	peak	H	1.5	57
5150.00	44.83	-3.63	41.20	54	-12.80	AVG	H	1.5	110
5150.00	60.22	-3.63	56.59	74	-17.41	peak	V	1.5	226
5150.00	46.90	-3.63	43.27	54	-10.73	AVG	V	1.5	138

Worse case mode:		802.11n(HT40)		Test channel:		62			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	58.74	-3.59	55.15	74	-18.85	peak	H	1.5	235
5350.00	44.37	-3.59	40.78	54	-13.22	AVG	H	1.5	273
5350.00	59.27	-3.59	55.68	74	-18.32	peak	V	1.5	251
5350.00	46.44	-3.59	42.85	54	-11.15	AVG	V	1.5	244

Worse case mode:		802.11n(HT40)		Test channel:		102			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	57.99	-3.44	54.55	74	-19.45	peak	H	1.5	344
5470.00	44.35	-3.44	40.91	54	-13.09	AVG	H	1.5	54
5470.00	57.74	-3.44	54.30	74	-19.70	peak	V	1.5	198
5470.00	45.89	-3.44	42.45	54	-11.55	AVG	V	1.5	237

Worse case mode:		802.11n(HT40)		Test channel:		134			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	59.00	-3.42	55.58	74	-18.42	peak	H	1.5	289
5850.00	44.09	-3.42	40.67	54	-13.33	AVG	H	1.5	104
5850.00	59.79	-3.42	56.37	74	-17.63	peak	V	1.5	236
5850.00	46.64	-3.42	43.22	54	-10.78	AVG	V	1.5	320

Worse case mode:		802.11ac(VHT20)		Test channel:		52			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.84	-3.63	55.21	74	-18.79	peak	H	1.5	63
5150.00	44.52	-3.63	40.89	54	-13.11	AVG	H	1.5	324
5150.00	59.61	-3.63	55.98	74	-18.02	peak	V	1.5	62
5150.00	46.94	-3.63	43.31	54	-10.69	AVG	V	1.5	136

Worse case mode:		802.11ac(VHT20)		Test channel:		64			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	59.20	-3.59	55.61	74	-18.39	peak	H	1.5	333
5350.00	44.49	-3.59	40.90	54	-13.10	AVG	H	1.5	109
5350.00	59.91	-3.59	56.32	74	-17.68	peak	V	1.5	168
5350.00	46.59	-3.59	43.00	54	-11.00	AVG	V	1.5	122

Worse case mode:		802.11ac(VHT20)		Test channel:		100			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	57.45	-3.44	54.01	74	-19.99	peak	H	1.5	324
5470.00	43.96	-3.44	40.52	54	-13.48	AVG	H	1.5	341
5470.00	58.31	-3.44	54.87	74	-19.13	peak	V	1.5	111
5470.00	45.90	-3.44	42.46	54	-11.54	AVG	V	1.5	138

Worse case mode:		802.11ac(VHT20)		Test channel:		140			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	58.71	-3.42	55.29	74	-18.71	peak	H	1.5	119
5850.00	44.87	-3.42	41.45	54	-12.55	AVG	H	1.5	108
5850.00	59.90	-3.42	56.48	74	-17.52	peak	V	1.5	204
5850.00	46.18	-3.42	42.76	54	-11.24	AVG	V	1.5	157

Worse case mode:		802.11ac(VHT40)		Test channel:		54			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	59.10	-3.63	55.47	74	-18.53	peak	H	1.5	302
5150.00	44.48	-3.63	40.85	54	-13.15	AVG	H	1.5	145
5150.00	59.67	-3.63	56.04	74	-17.96	peak	V	1.5	342
5150.00	46.84	-3.63	43.21	54	-10.79	AVG	V	1.5	217

Worse case mode:		802.11ac(VHT40)		Test channel:		62			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	58.25	-3.59	54.66	74	-19.34	peak	H	1.5	304
5350.00	44.64	-3.59	41.05	54	-12.95	AVG	H	1.5	171
5350.00	60.17	-3.59	56.58	74	-17.42	peak	V	1.5	219
5350.00	46.30	-3.59	42.71	54	-11.29	AVG	V	1.5	168

Worse case mode:		802.11ac(VHT40)		Test channel:		102			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	57.65	-3.44	54.21	74	-19.79	peak	H	1.5	98
5470.00	43.59	-3.44	40.15	54	-13.85	AVG	H	1.5	69
5470.00	58.15	-3.44	54.71	74	-19.29	peak	V	1.5	238
5470.00	45.58	-3.44	42.14	54	-11.86	AVG	V	1.5	4

Worse case mode:		802.11ac(VHT40)		Test channel:		134			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)			(m)	(Degree)
5850.00	58.24	-3.42	54.82	74	-19.18	peak	H	1.5	185
5850.00	44.01	-3.42	40.59	54	-13.41	AVG	H	1.5	162
5850.00	60.00	-3.42	56.58	74	-17.42	peak	V	1.5	346
5850.00	46.11	-3.42	42.69	54	-11.31	AVG	V	1.5	4

Worse case mode:		802.11ac(VHT80)		Test channel:		58			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.47	-3.63	54.84	74	-19.16	peak	H	1.5	133
5150.00	44.66	-3.63	41.03	54	-12.97	AVG	H	1.5	331
5150.00	59.99	-3.63	56.36	74	-17.64	peak	V	1.5	115
5150.00	46.47	-3.63	42.84	54	-11.16	AVG	V	1.5	233

Worse case mode:		802.11ac(VHT80)		Test channel:		58			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	59.07	-3.59	55.48	74	-18.52	peak	H	1.5	264
5350.00	44.52	-3.59	40.93	54	-13.07	AVG	H	1.5	295
5350.00	59.60	-3.59	56.01	74	-17.99	peak	V	1.5	210
5350.00	46.07	-3.59	42.48	54	-11.52	AVG	V	1.5	5

Worse case mode:		802.11ac(VHT80)		Test channel:		106			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	58.16	-3.44	54.72	74	-19.28	peak	H	1.5	349
5470.00	43.97	-3.44	40.53	54	-13.47	AVG	H	1.5	297
5470.00	57.85	-3.44	54.41	74	-19.59	peak	V	1.5	261
5470.00	45.69	-3.44	42.25	54	-11.75	AVG	V	1.5	153

Worse case mode:		802.11ac(VHT80)		Test channel:		106			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	58.78	-3.42	55.36	74	-18.64	peak	H	1.5	317
5850.00	44.20	-3.42	40.78	54	-13.22	AVG	H	1.5	123
5850.00	59.49	-3.42	56.07	74	-17.93	peak	V	1.5	359
5850.00	46.87	-3.42	43.45	54	-10.55	AVG	V	1.5	321

Worse case mode:		802.11ax(HE20)		Test channel:		52			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.76	-3.63	55.13	74	-18.87	peak	H	1.5	219
5150.00	44.31	-3.63	40.68	54	-13.32	AVG	H	1.5	6
5150.00	59.61	-3.63	55.98	74	-18.02	peak	V	1.5	325
5150.00	46.05	-3.63	42.42	54	-11.58	AVG	V	1.5	273

Worse case mode:		802.11ax(HE20)		Test channel:		64			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	59.13	-3.59	55.54	74	-18.46	peak	H	1.5	21
5350.00	44.93	-3.59	41.34	54	-12.66	AVG	H	1.5	266
5350.00	60.17	-3.59	56.58	74	-17.42	peak	V	1.5	137
5350.00	46.49	-3.59	42.90	54	-11.10	AVG	V	1.5	185

Worse case mode:		802.11ax(HE20)		Test channel:		100			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	58.37	-3.44	54.93	74	-19.07	peak	H	1.5	134
5470.00	43.82	-3.44	40.38	54	-13.62	AVG	H	1.5	53
5470.00	57.79	-3.44	54.35	74	-19.65	peak	V	1.5	88
5470.00	45.89	-3.44	42.45	54	-11.55	AVG	V	1.5	37

Worse case mode:		802.11ax(HE20)		Test channel:		140			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	58.68	-3.42	55.26	74	-18.74	peak	H	1.5	68
5850.00	44.26	-3.42	40.84	54	-13.16	AVG	H	1.5	92
5850.00	59.42	-3.42	56.00	74	-18.00	peak	V	1.5	130
5850.00	46.82	-3.42	43.40	54	-10.60	AVG	V	1.5	304

Worse case mode:		802.11ax(HE40)		Test channel:		54			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.49	-3.63	54.86	74	-19.14	peak	H	1.5	0
5150.00	44.37	-3.63	40.74	54	-13.26	AVG	H	1.5	329
5150.00	59.60	-3.63	55.97	74	-18.03	peak	V	1.5	254
5150.00	46.17	-3.63	42.54	54	-11.46	AVG	V	1.5	152

Worse case mode:		802.11ax(HE40)		Test channel:		62			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	58.40	-3.59	54.81	74	-19.19	peak	H	1.5	97
5350.00	44.18	-3.59	40.59	54	-13.41	AVG	H	1.5	196
5350.00	59.29	-3.59	55.70	74	-18.30	peak	V	1.5	95
5350.00	46.01	-3.59	42.42	54	-11.58	AVG	V	1.5	129

Worse case mode:		802.11ax(HE40)		Test channel:		102			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	58.23	-3.44	54.79	74	-19.21	peak	H	1.5	239
5470.00	44.26	-3.44	40.82	54	-13.18	AVG	H	1.5	293
5470.00	57.45	-3.44	54.01	74	-19.99	peak	V	1.5	118
5470.00	46.24	-3.44	42.80	54	-11.20	AVG	V	1.5	210

Worse case mode:		802.11ax(HE40)		Test channel:		134			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	58.95	-3.42	55.53	74	-18.47	peak	H	1.5	108
5850.00	44.25	-3.42	40.83	54	-13.17	AVG	H	1.5	249
5850.00	59.24	-3.42	55.82	74	-18.18	peak	V	1.5	340
5850.00	46.84	-3.42	43.42	54	-10.58	AVG	V	1.5	178

Worse case mode:		802.11ax(HE80)		Test channel:		58			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.97	-3.63	55.34	74	-18.66	peak	H	1.5	227
5150.00	43.99	-3.63	40.36	54	-13.64	AVG	H	1.5	197
5150.00	59.91	-3.63	56.28	74	-17.72	peak	V	1.5	101
5150.00	46.45	-3.63	42.82	54	-11.18	AVG	V	1.5	145

Worse case mode:		802.11ax(HE80)		Test channel:		58			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	58.51	-3.59	54.92	74	-19.08	peak	H	1.5	345
5350.00	44.05	-3.59	40.46	54	-13.54	AVG	H	1.5	235
5350.00	60.21	-3.59	56.62	74	-17.38	peak	V	1.5	97
5350.00	46.09	-3.59	42.50	54	-11.50	AVG	V	1.5	185

Worse case mode:		802.11ax(HE80)		Test channel:		106			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	58.32	-3.44	54.88	74	-19.12	peak	H	1.5	232
5470.00	43.71	-3.44	40.27	54	-13.73	AVG	H	1.5	165
5470.00	57.43	-3.44	53.99	74	-20.01	peak	V	1.5	234
5470.00	45.53	-3.44	42.09	54	-11.91	AVG	V	1.5	44

Worse case mode:		802.11ax(HE80)		Test channel:		106			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	58.70	-3.42	55.28	74	-18.72	peak	H	1.5	284
5850.00	44.36	-3.42	40.94	54	-13.06	AVG	H	1.5	342
5850.00	59.95	-3.42	56.53	74	-17.47	peak	V	1.5	323
5850.00	46.72	-3.42	43.30	54	-10.70	AVG	V	1.5	38

Note:
1) Through Pre-scan transmitting mode with all kind of modulation and data rate, Only the worst case is recorded in the report.
2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level =Receiver Reading - Correct Factor
Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Appendix J): Radiated Spurious Emissions

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

Test Procedure:

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre)
h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
j. Repeat above procedures until all frequencies measured was complete.

Limit:

Frequency	Field strength (microvolt/meter)	Limit (dBμV/cm)	Remark	Measurement distance (cm)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

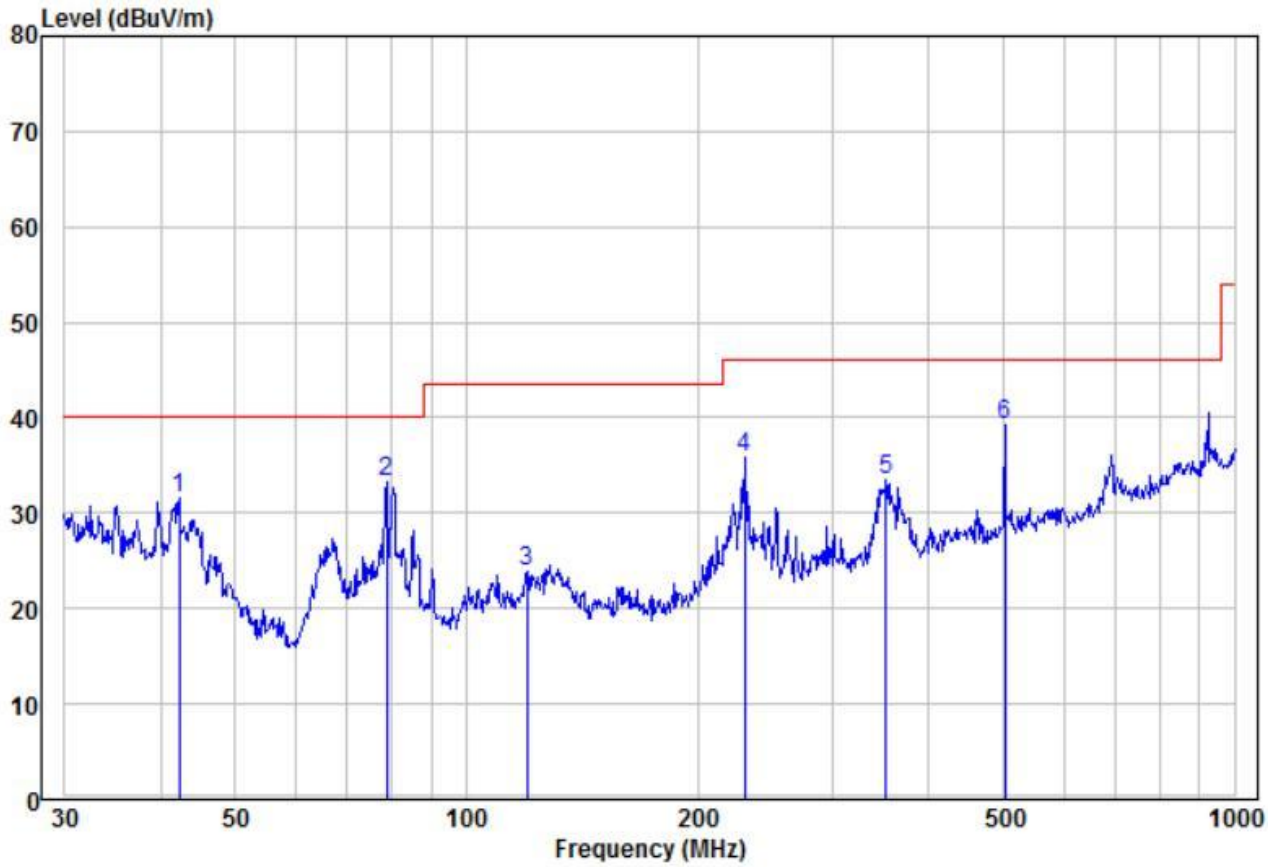
Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

Test result: PASS

Test Data:

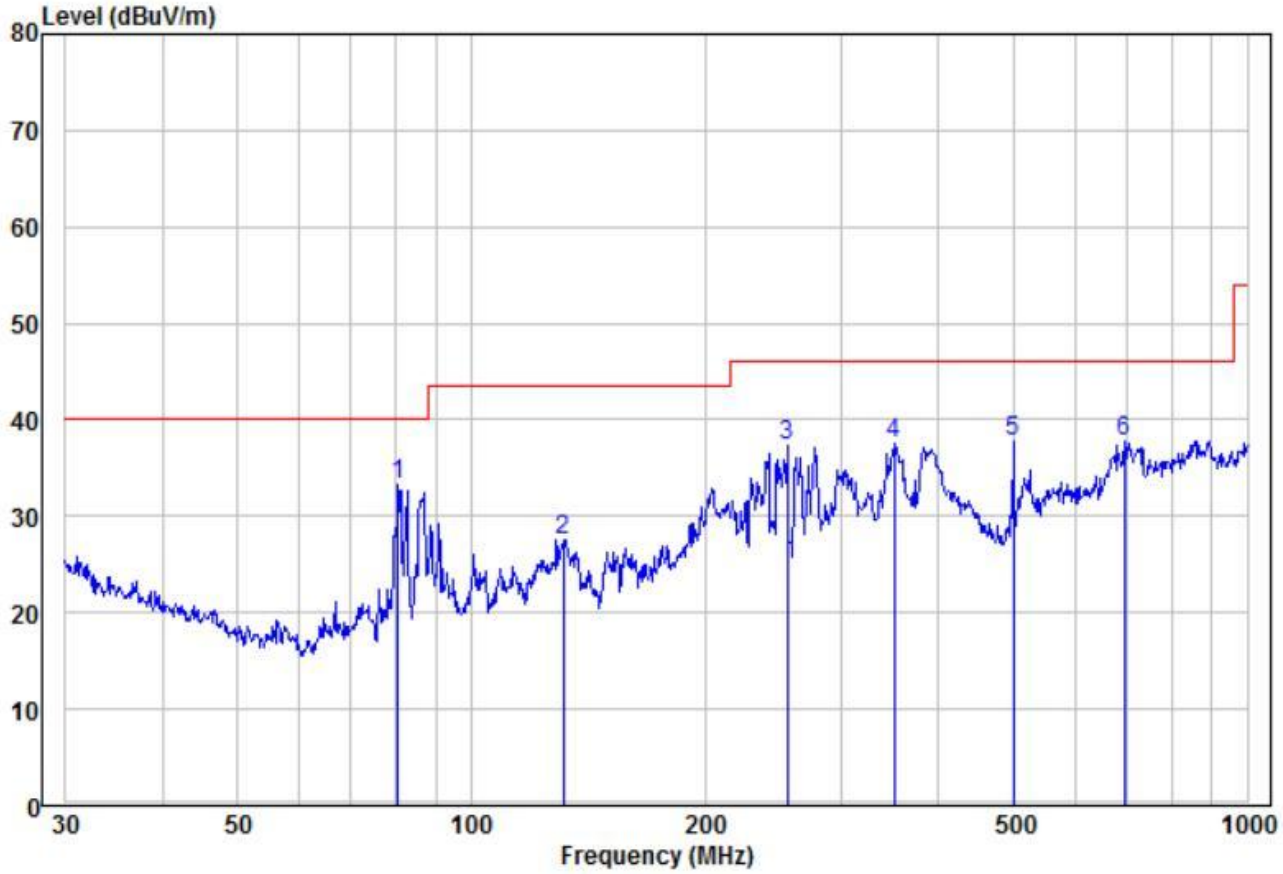
Radiated Emission below 1GHz

30MHz~1GHz		
Test mode:	Transmitting (802.11a 52CH)	Vertical



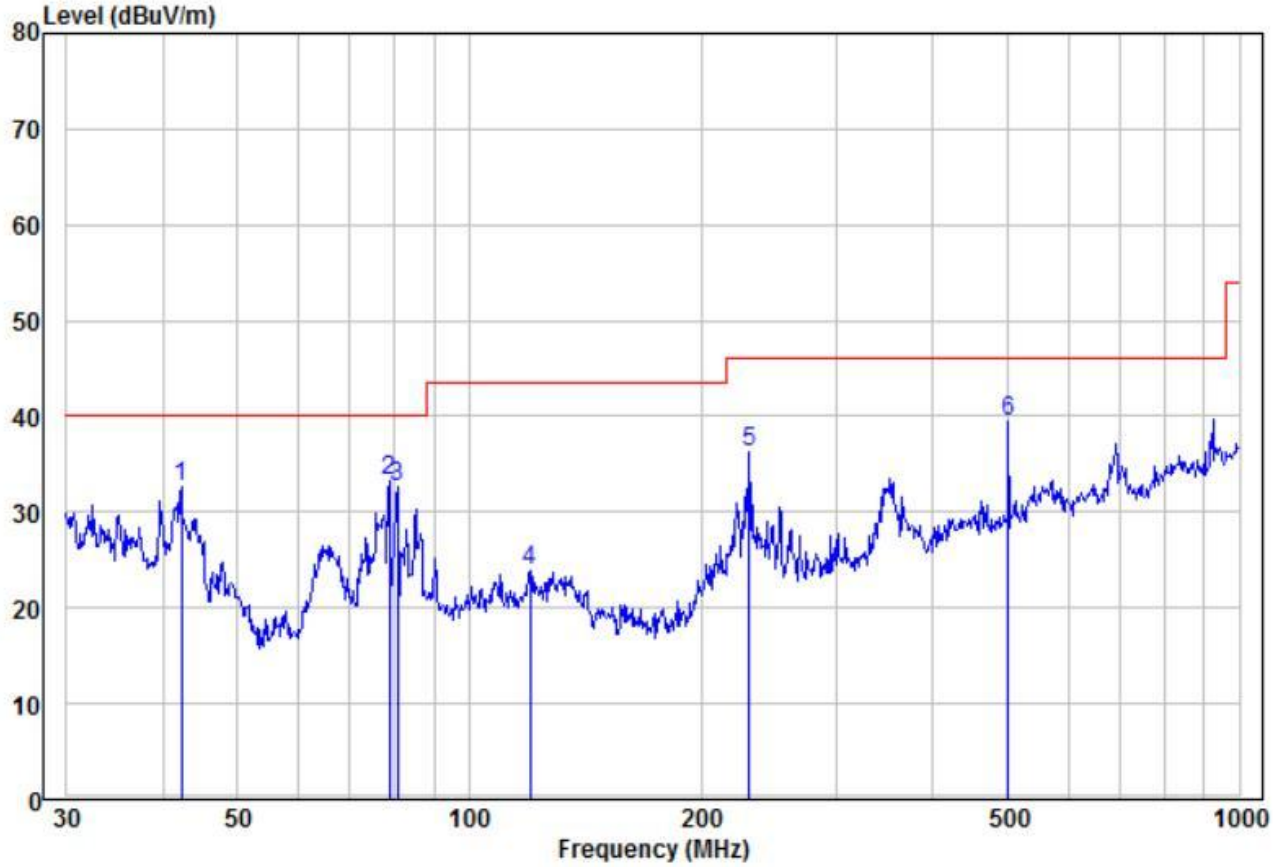
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	42.30	19.17	12.39	31.56	40.00	-8.44	Peak	VERTICAL
2	78.69	22.79	10.49	33.28	40.00	-6.72	Peak	VERTICAL
3	119.86	12.00	11.88	23.88	43.50	-19.62	Peak	VERTICAL
4	230.10	23.80	11.98	35.78	46.00	-10.22	Peak	VERTICAL
5	351.71	16.81	16.65	33.46	46.00	-12.54	Peak	VERTICAL
6 pp	502.94	18.94	20.34	39.28	46.00	-6.72	Peak	VERTICAL

Test mode:	Transmitting (802.11a 52CH)	Horizontal



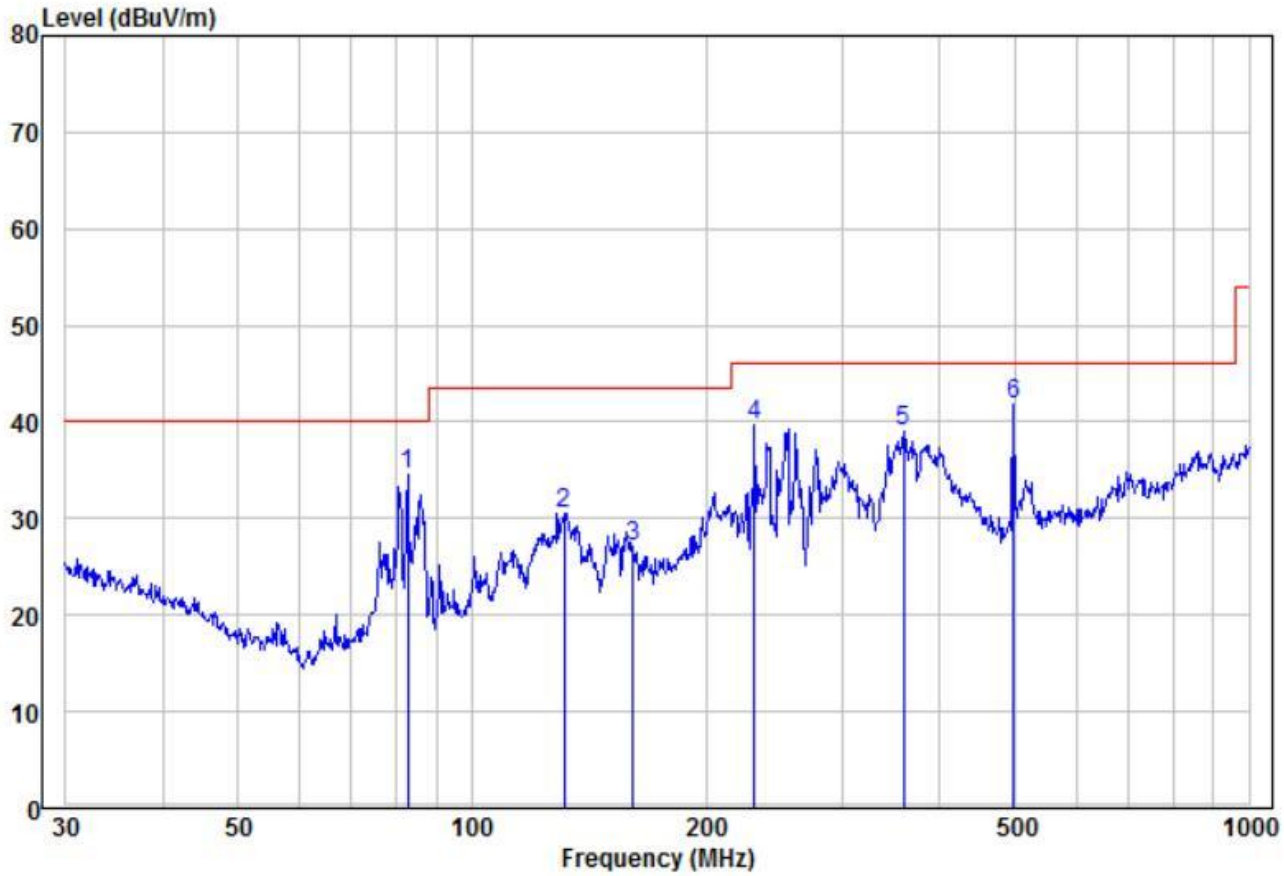
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1 pp	80.36	22.53	10.72	33.25	40.00	-6.75	Peak	HORIZONTAL
2	131.30	16.33	11.27	27.60	43.50	-15.90	Peak	HORIZONTAL
3	255.62	23.52	13.81	37.33	46.00	-8.67	Peak	HORIZONTAL
4	350.48	20.95	16.62	37.57	46.00	-8.43	Peak	HORIZONTAL
5	499.42	17.40	20.28	37.68	46.00	-8.32	Peak	HORIZONTAL
6	694.42	14.51	23.30	37.81	46.00	-8.19	Peak	HORIZONTAL

30MHz~1GHz		
Test mode:	Transmitting (802.11a 100CH)	Vertical



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	42.30	20.17	12.39	32.56	40.00	-7.44	Peak	VERTICAL
2	78.69	22.79	10.49	33.28	40.00	-6.72	Peak	VERTICAL
3	80.64	21.92	10.73	32.65	40.00	-7.35	Peak	VERTICAL
4	119.86	12.00	11.88	23.88	43.50	-19.62	Peak	VERTICAL
5	230.91	24.26	12.07	36.33	46.00	-9.67	Peak	VERTICAL
6 pp	501.18	19.08	20.31	39.39	46.00	-6.61	Peak	VERTICAL

Test mode:	Transmitting (802.11a 100CH)	Horizontal



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	82.65	23.83	10.78	34.61	40.00	-5.39	Peak	HORIZONTAL
2	131.30	19.33	11.27	30.60	43.50	-12.90	Peak	HORIZONTAL
3	161.47	17.94	9.13	27.07	43.50	-16.43	Peak	HORIZONTAL
4	230.91	27.68	12.07	39.75	46.00	-6.25	Peak	HORIZONTAL
5	359.19	22.10	16.84	38.94	46.00	-7.06	Peak	HORIZONTAL
6 pp	497.68	21.66	20.22	41.88	46.00	-4.12	Peak	HORIZONTAL

Transmitter Emission above 1GHz

Test mode:	802.11a(6Mbps)			Test channel:		52 CH			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detect or Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
10520	53.42	2.26	55.68	74	-18.32	peak	H	1.5	7
10520	37.41	2.26	39.67	54	-14.33	AVG	H	1.5	61
15780	51.82	3.75	55.57	74	-18.43	peak	H	1.5	242
15780	37.57	3.75	41.32	54	-12.68	AVG	H	1.5	242
10520	55.18	2.26	57.44	74	-16.56	peak	V	1.5	236
10520	38.17	2.26	40.43	54	-13.57	AVG	V	1.5	294
15780	50.51	3.75	54.26	74	-19.74	peak	V	1.5	149
15780	36.93	3.75	40.68	54	-13.32	AVG	V	1.5	177

Test mode:	802.11a(6Mbps)			Test channel:		64 CH			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detect or Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
10640	51.86	2.31	54.17	74	-19.83	peak	H	1.5	108
10640	37.47	2.31	39.78	54	-14.22	AVG	H	1.5	312
15960	48.57	3.79	52.36	74	-21.64	peak	H	1.5	119
15960	36.47	3.79	40.26	54	-13.74	AVG	H	1.5	102
10640	52.82	2.31	55.13	74	-18.87	peak	V	1.5	217
10640	37.10	2.31	39.41	54	-14.59	AVG	V	1.5	315
15960	49.33	3.79	53.12	74	-20.88	peak	V	1.5	89
15960	35.92	3.79	39.71	54	-14.29	AVG	V	1.5	95

Test mode:	802.11a(6Mbps)			Test channel:		100			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
11000	52.46	2.54	55.00	74	-19.00	peak	H	1.5	71
11000	38.21	2.54	40.75	54	-13.25	AVG	H	1.5	219
16500	50.95	3.94	54.89	74	-19.11	peak	H	1.5	148
16500	36.45	3.94	40.39	54	-13.61	AVG	H	1.5	233
11000	54.91	2.54	57.45	74	-16.55	peak	V	1.5	278
11000	37.69	2.54	40.23	54	-13.77	AVG	V	1.5	97
16500	50.34	3.94	54.28	74	-19.72	peak	V	1.5	335
16500	36.46	3.94	40.40	54	-13.60	AVG	V	1.5	240

Test mode:	802.11a(6Mbps)			Test channel:		140			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
11400	52.84	2.58	55.42	74	-18.58	peak	H	1.5	68
11400	38.26	2.58	40.84	54	-13.16	AVG	H	1.5	138
17100	49.51	4.02	53.53	74	-20.47	peak	H	1.5	281
17100	37.35	4.02	41.37	54	-12.63	AVG	H	1.5	224
11400	55.21	2.58	57.79	74	-16.21	peak	V	1.5	277
11400	37.23	2.58	39.81	54	-14.19	AVG	V	1.5	158
17100	50.10	4.02	54.12	74	-19.88	peak	V	1.5	72
17100	36.38	4.02	40.40	54	-13.60	AVG	V	1.5	224

Remark:

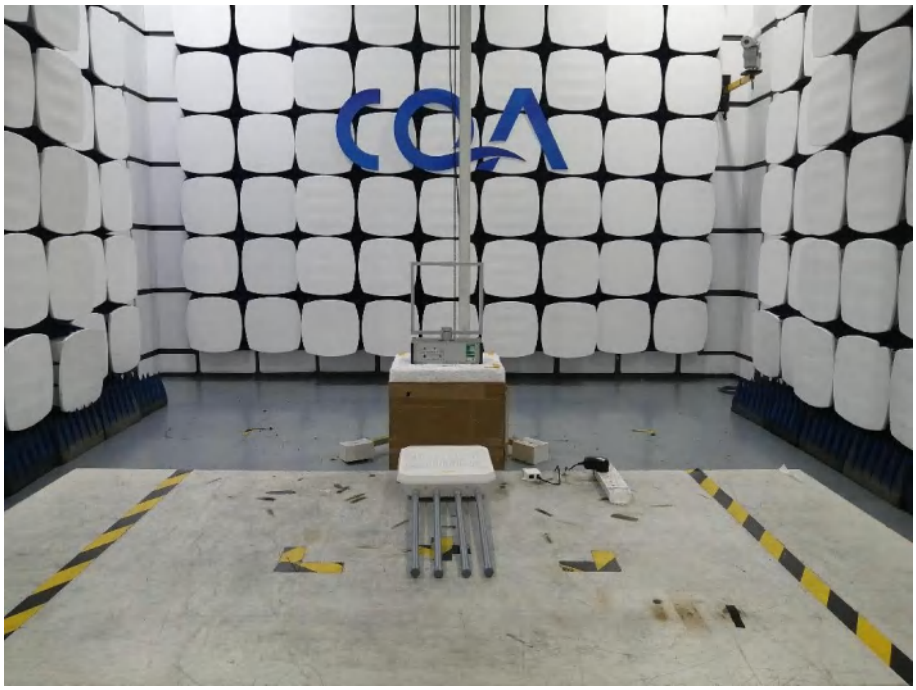
1) The 802.11a 6Mbps of rate is the worst case, only the worst data recorded in the report.
2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

   Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
3) Scan from 9kHz to 40GHz,The disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

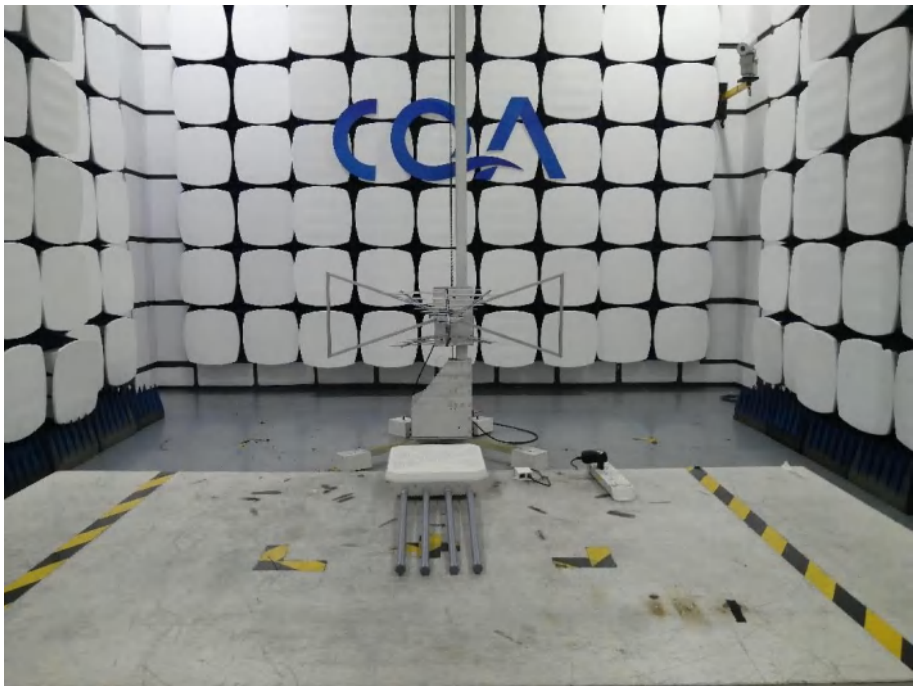
8 Photographs - EUT Test Setup

8.1 Radiated Spurious Emission

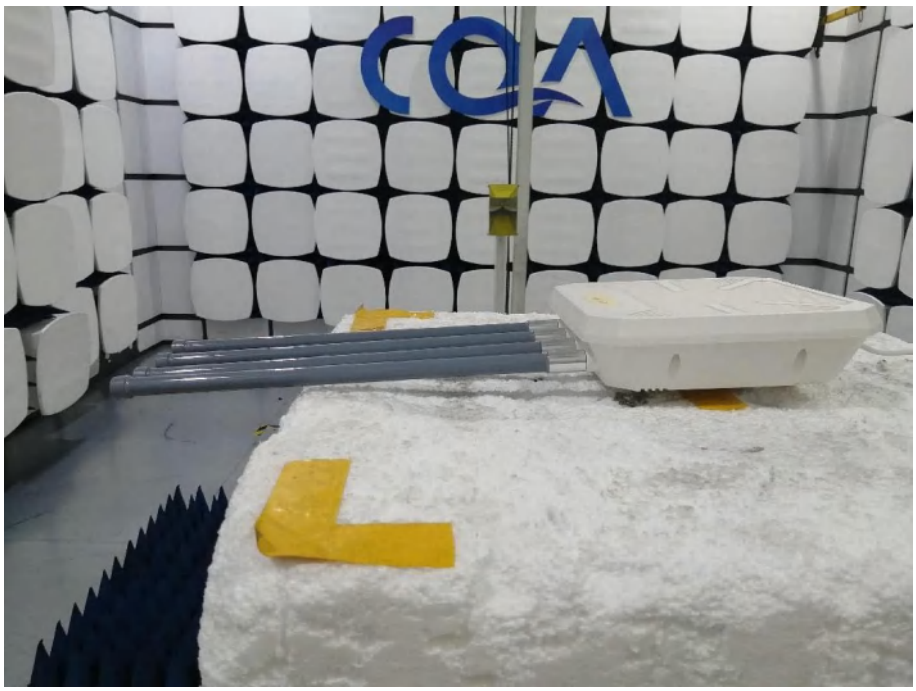
9kHz~30MHz:



30MHz~1GHz:

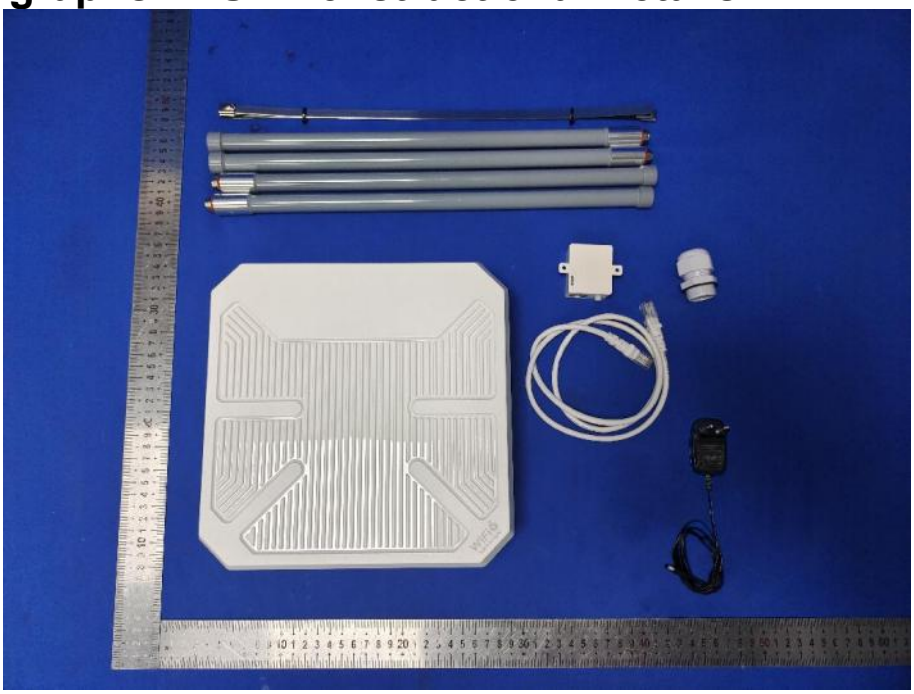


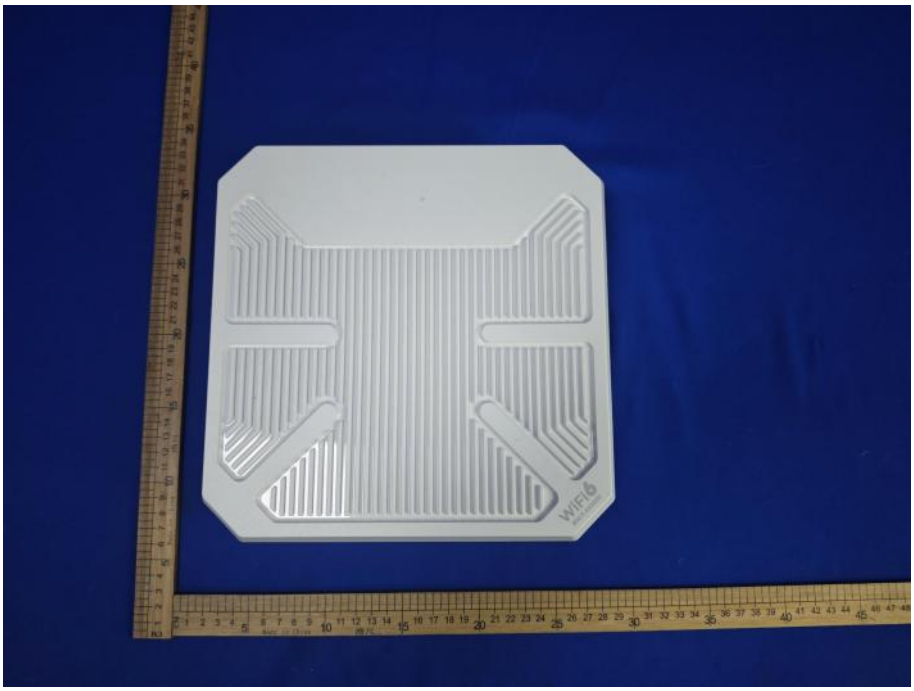
Above 1GHz:



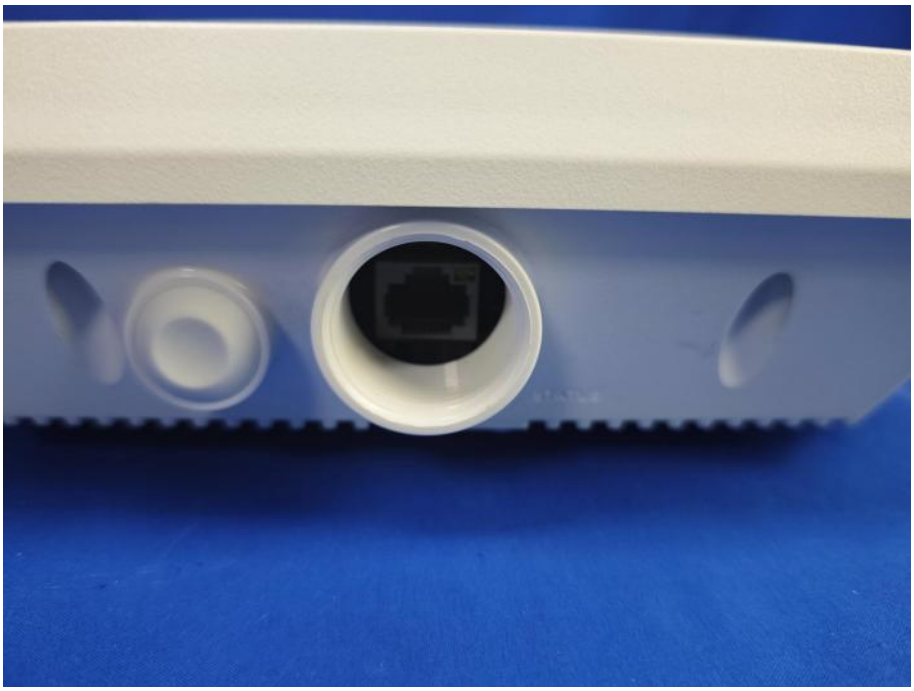
8.2 Conducted Emission

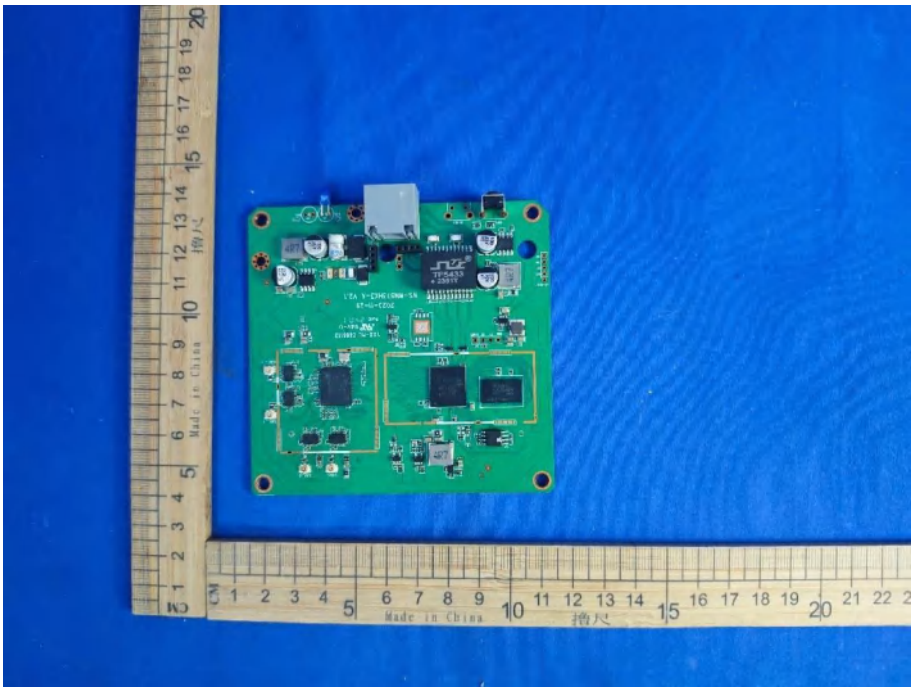
9 Photographs - EUT Constructional Details

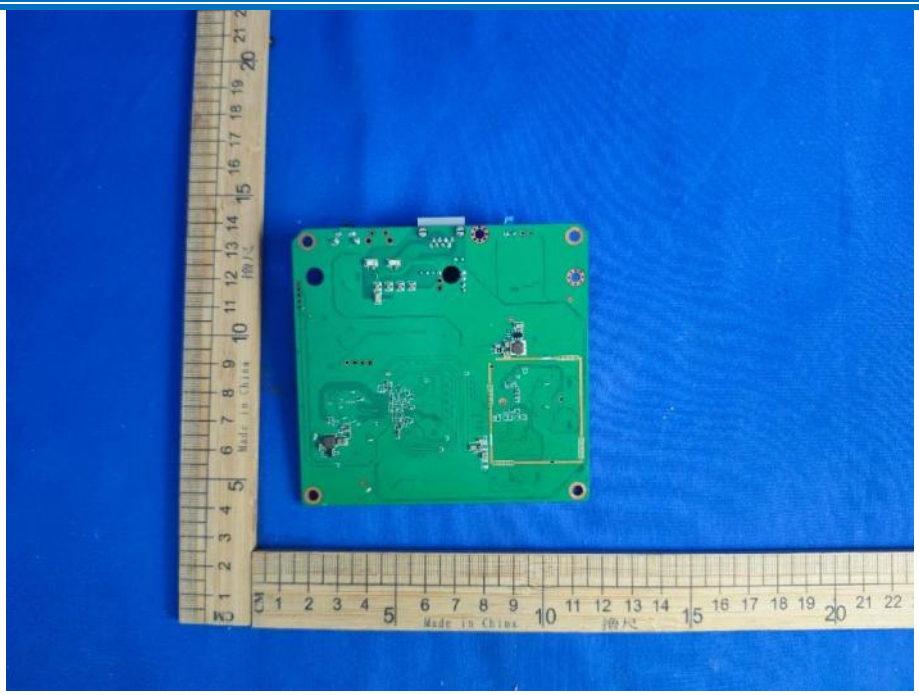


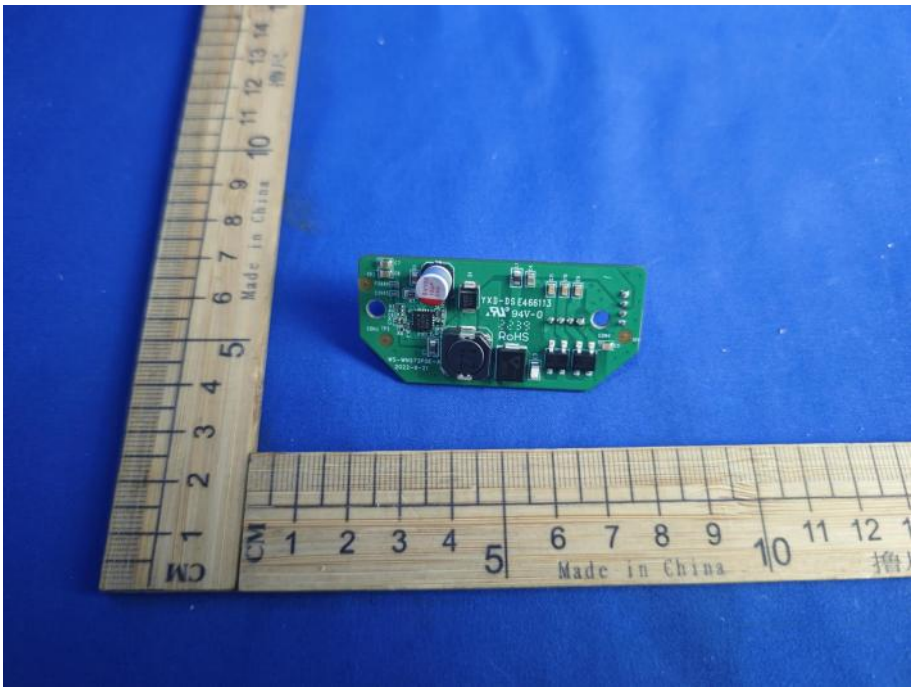

WiFi6

AX3000 WiFi 6 Outdoor Access Point








RoHS

*** END OF REPORT ***