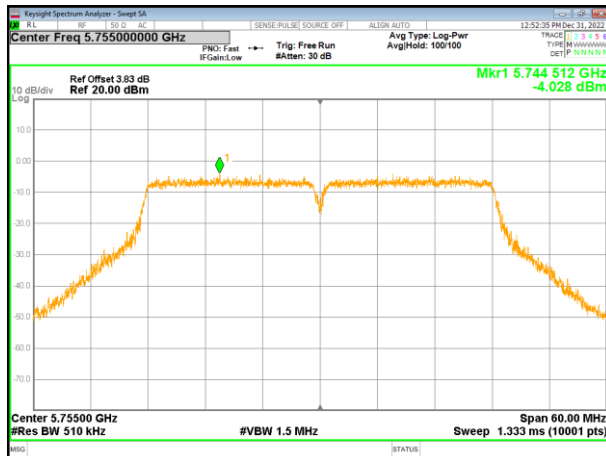
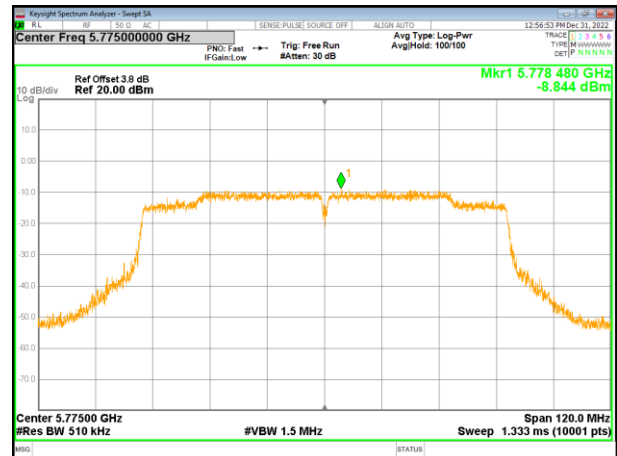


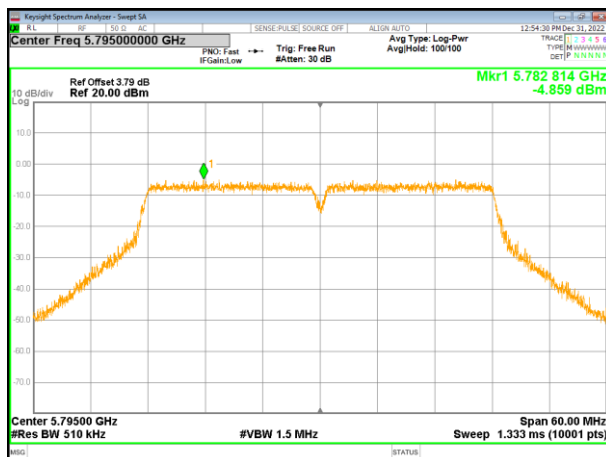
(802.11ac40) PSD plot on channel 151



(802.11ac80) PSD plot on channel 155

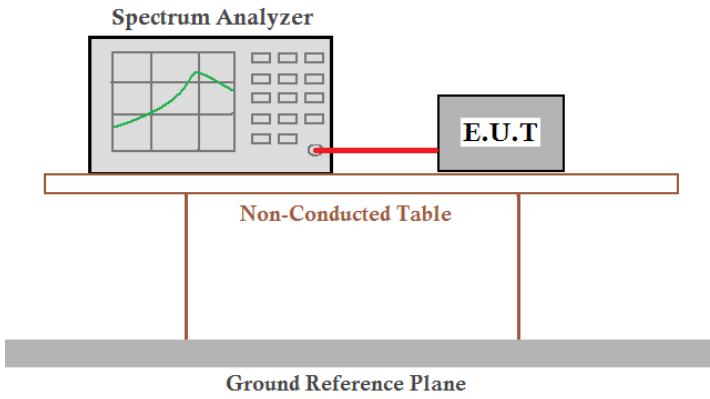


(802.11ac40) PSD plot on channel 159



4.6 Band edge

4.6.1 Conducted test Method

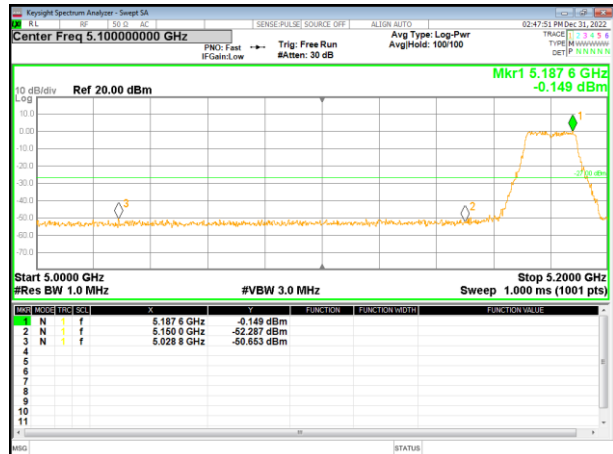
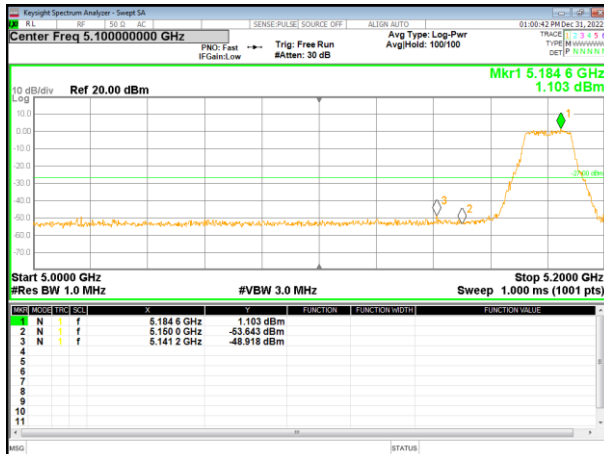
Test Requirement:	FCC Part15 C Section 15.209 and 15.205
Test Method:	ANSI C63.10: 2013
Limit:	All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below 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.
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table, which is supported by a Ground Reference Plane.
Test Procedure:	1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator. 2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range. 3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span. 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency. 5. Repeat above procedures until all measured frequencies were complete..
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Remarks:/

5.180~5.240 GHz

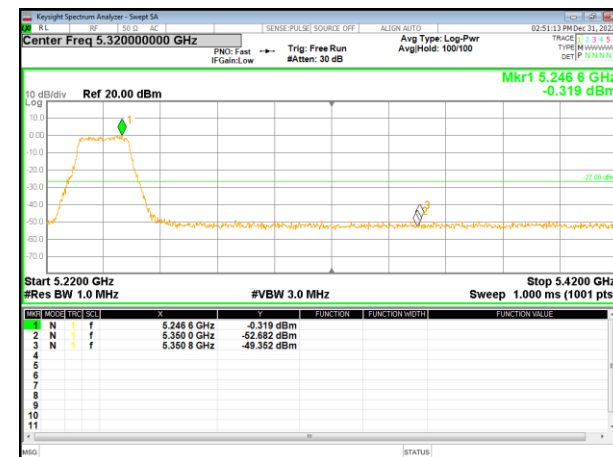
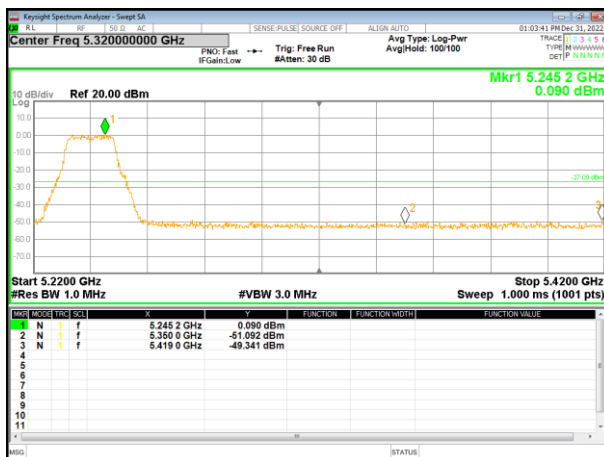
(802.11a) Band Edge, Left Side

(802.11n20) Band Edge, Left Side



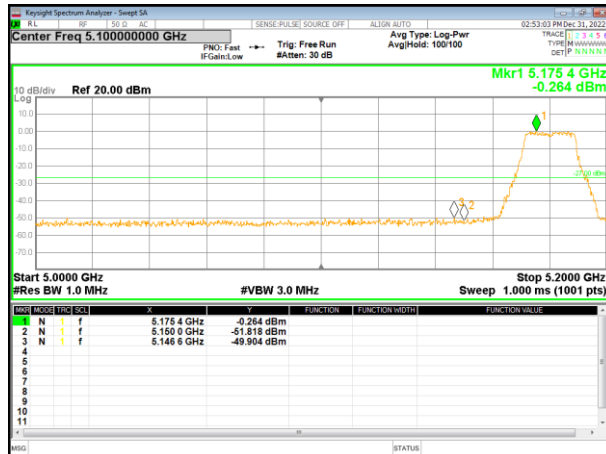
(802.11a) Band Edge, Right Side

(802.11n20) Band Edge, Right Side

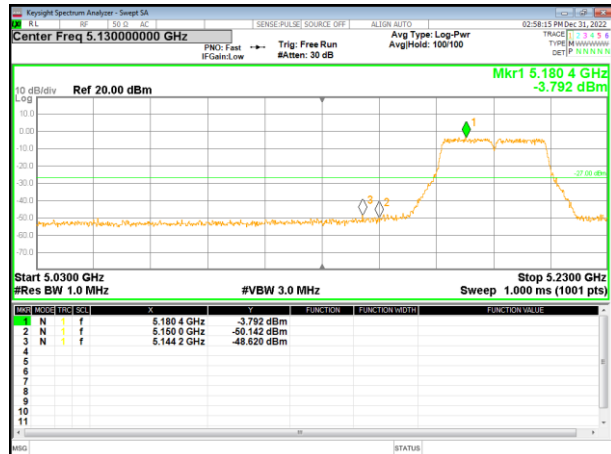


5.180~5.240 GHz

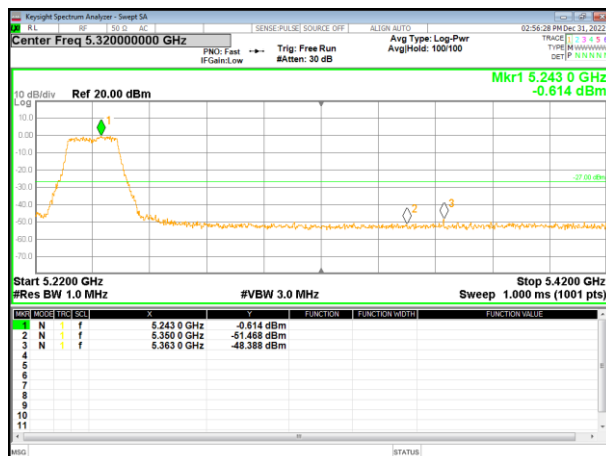
(802.11ac20) Band Edge, Left Side



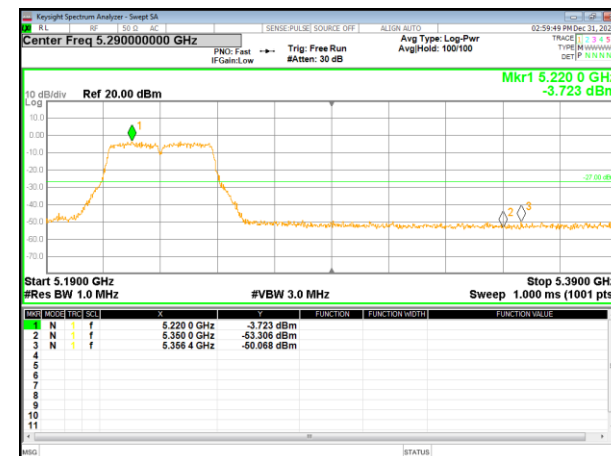
(802.11n40) Band Edge, Left Side



(802.11ac20) Band Edge, Right Side



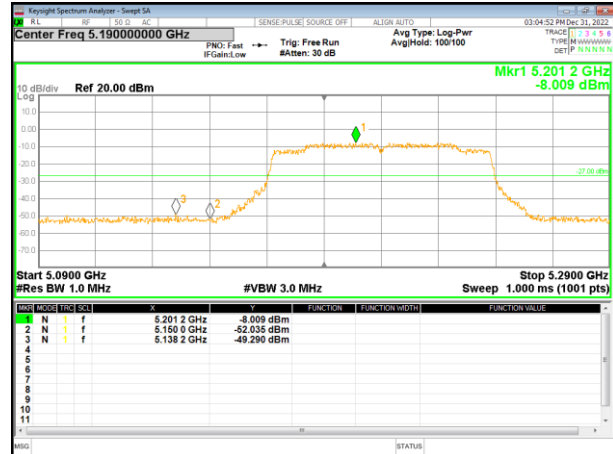
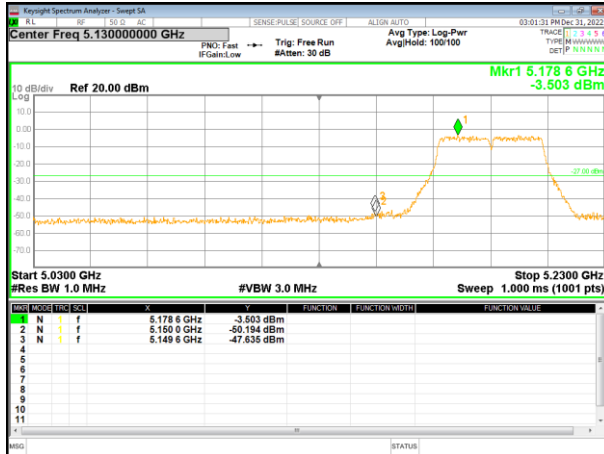
(802.11n40) Band Edge, Right Side



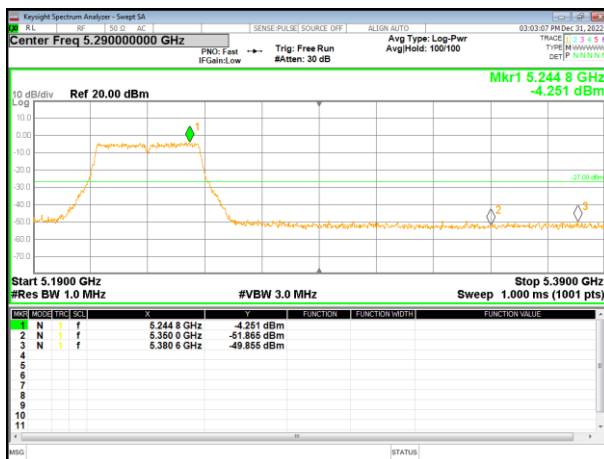
5.180~5.240 GHz

(802.11ac40) Band Edge, Left Side

(802.11ac80) Band Edge



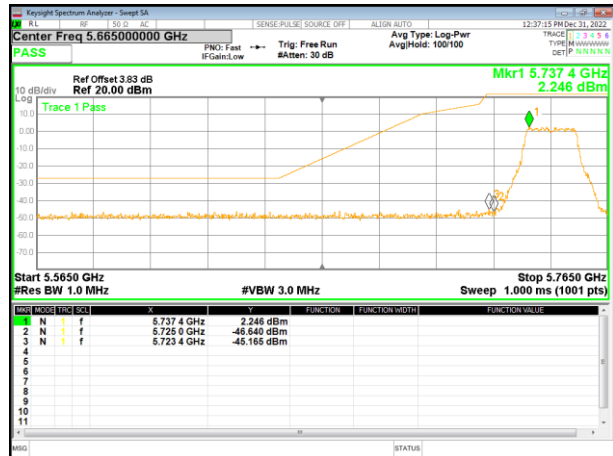
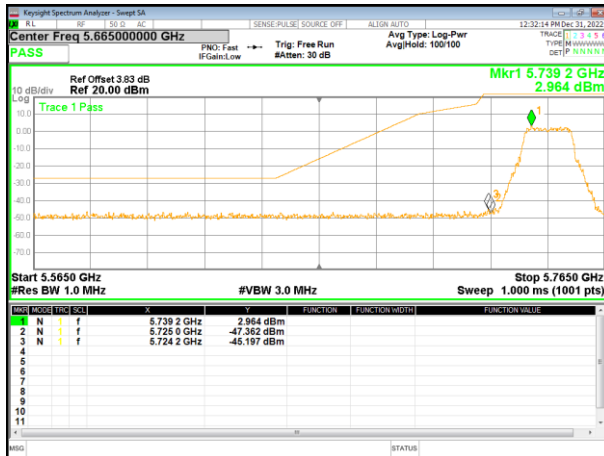
(802.11ac40) Band Edge, Right Side



5.745~5.825 GHz

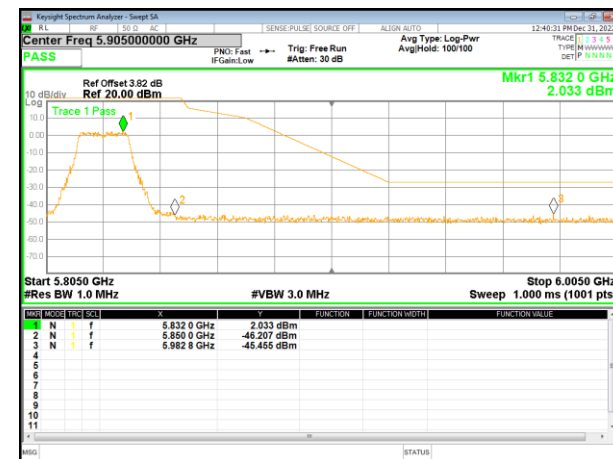
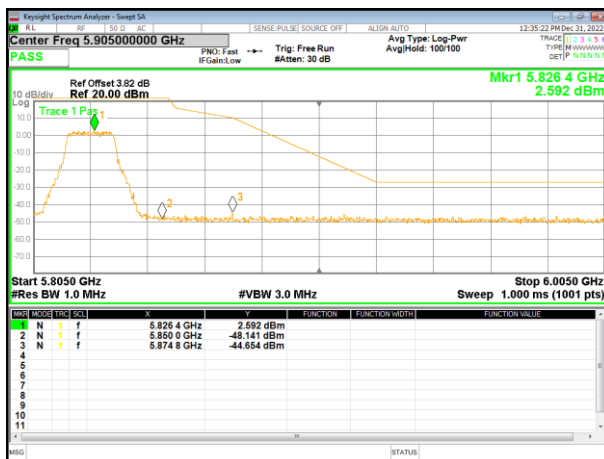
(802.11a) Band Edge, Left Side

(802.11n20) Band Edge, Left Side



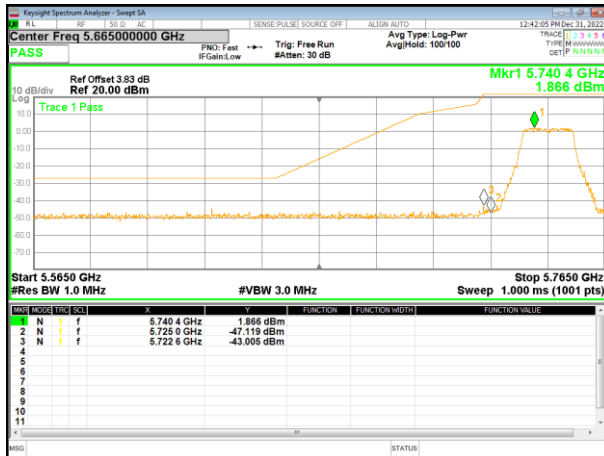
(802.11a) Band Edge, Right Side

(802.11n20) Band Edge, Right Side

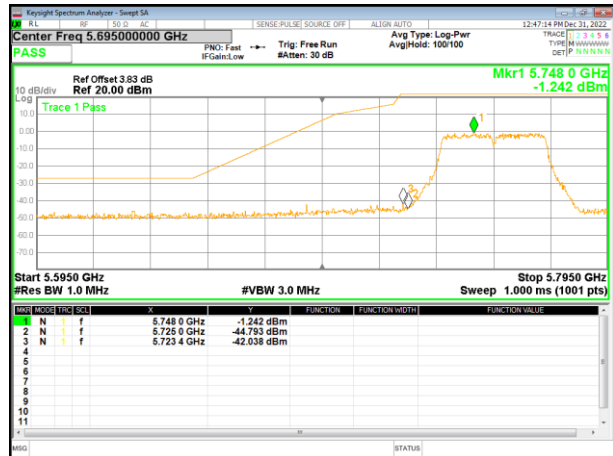


5.745~5.825 GHz

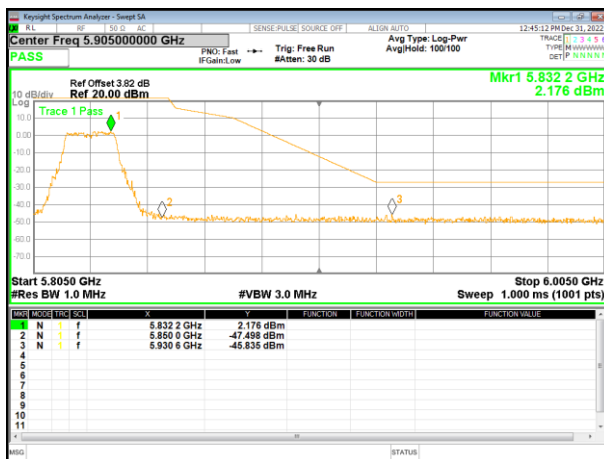
(802.11ac20) Band Edge, Left Side



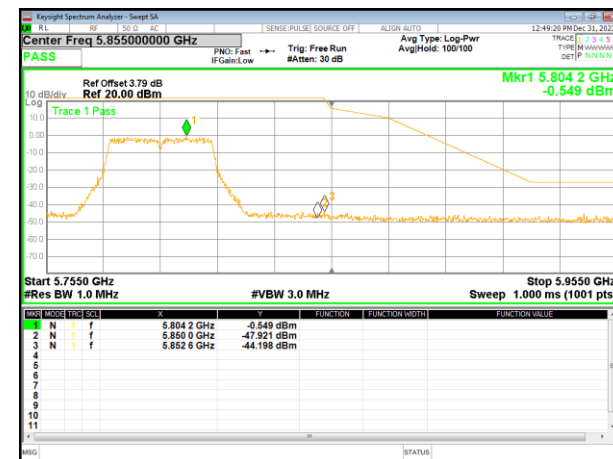
(802.11n40) Band Edge, Left Side



(802.11ac20) Band Edge, Right Side



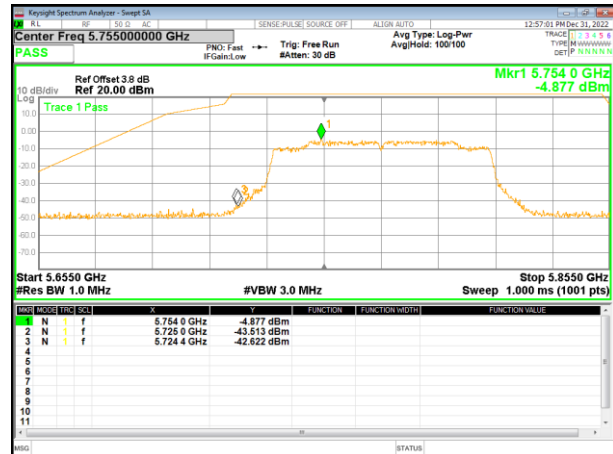
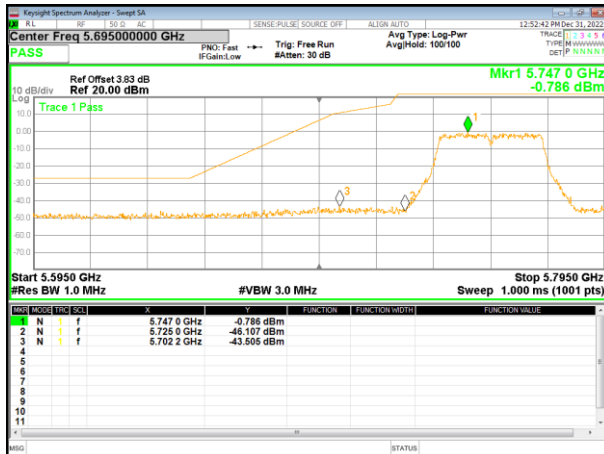
(802.11n40) Band Edge, Right Side



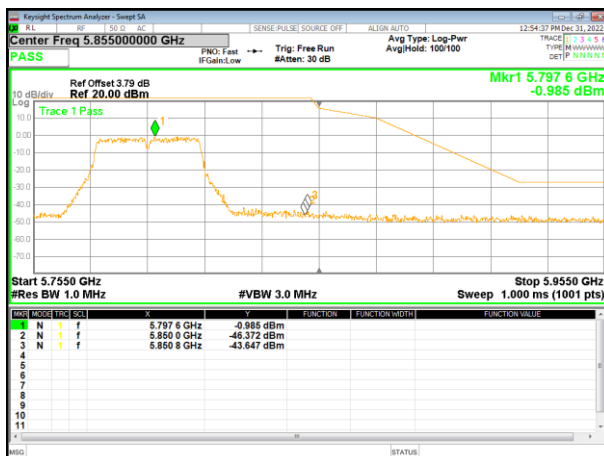
5.745~5.825 GHz

(802.11ac40) Band Edge, Left Side

(802.11ac80) Band Edge

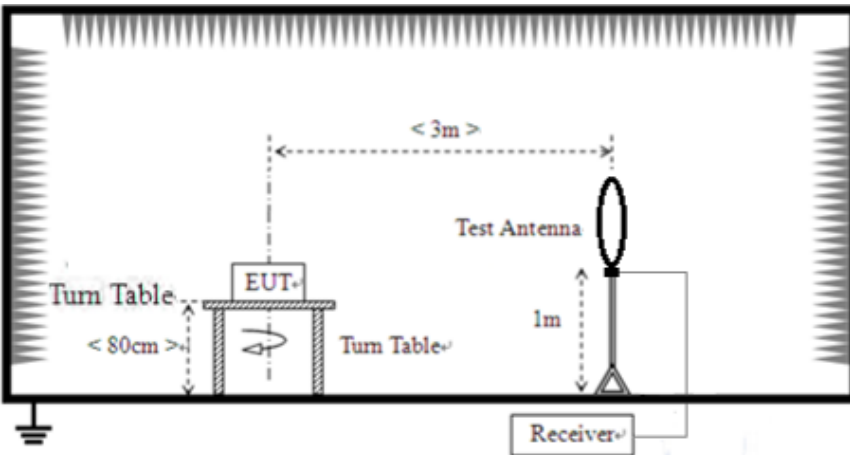


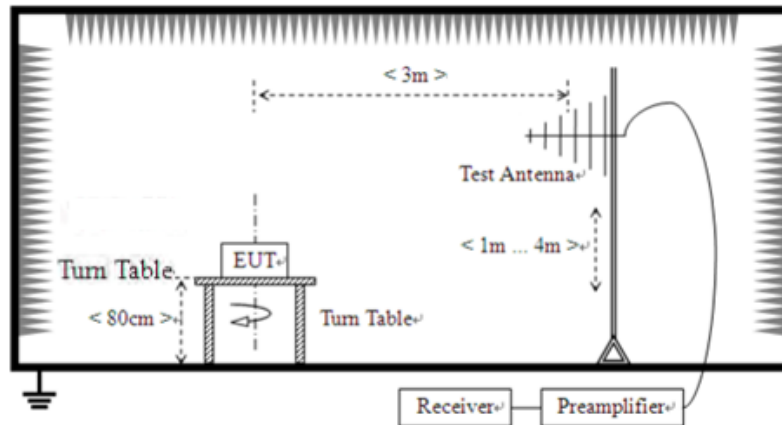
(802.11ac40) Band Edge, Right Side



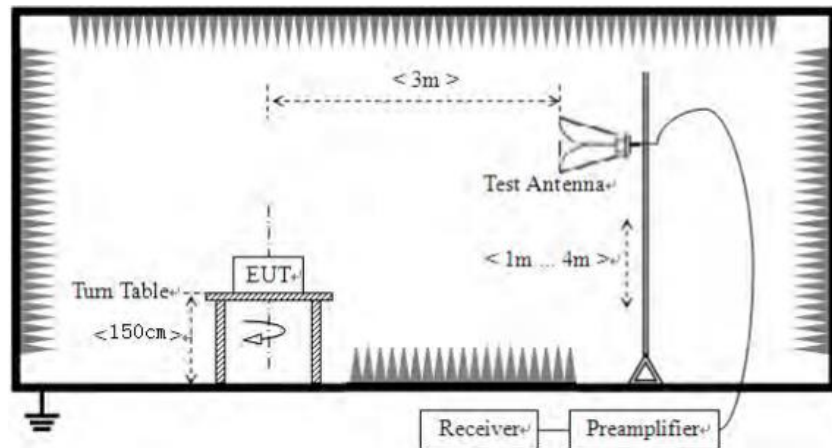
4.7 Spurious Emission

4.7.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209, Part 15E Section 15.407(b)(4)					
Test Method:	ANSI C63.10:2013					
Test Frequency Range:	9kHz to 40GHz					
Test site:	Measurement Distance: 3m					
Receiver setup:	Frequency	Detector	RBW	VBW	Value	
	9kHz-150KHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value	
	150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value	
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value	
	Above 1GHz	Peak	1MHz	3MHz	Peak Value	
		AV	1MHz	3MHz	Average Value	
Limit:	Frequency		Limit (uV/m)	Value	Measurement Distance	
	0.009MHz-0.490MHz		2400/F(KHz)	QP	300m	
	0.490MHz-1.705MHz		24000/F(KHz)	QP	300m	
	1.705MHz-30MHz		30	QP	30m	
	30MHz-88MHz		100	QP	3m	
	88MHz-216MHz		150	QP		
	216MHz-960MHz		200	QP		
	960MHz-1GHz		500	QP		
	Frequency		Limit (dBm/MHz)	Remark		
	Above 1GHz		-27.0	Peak Value		
	Test setup:	For radiated emissions from 9kHz to 30MHz				
						
		For radiated emissions from 30MHz to1GHz				



For radiated emissions above 1GHz



Test Procedure:

1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. 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.
4. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. 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.					
	7. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.					
Test Instruments:	Refer to section 3.0 for details					
Test mode:	Refer to section 2.2 for details					
Test environment:	Temp.:	25.6°C	Humid.:	55%	Press.:	1012mbar
Test voltage:	AC 120V					
Test results:	Pass					

Remarks:

1. All antennas was tested, only show the worst case 802.11n20 mode test data.
2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

Measurement Data:

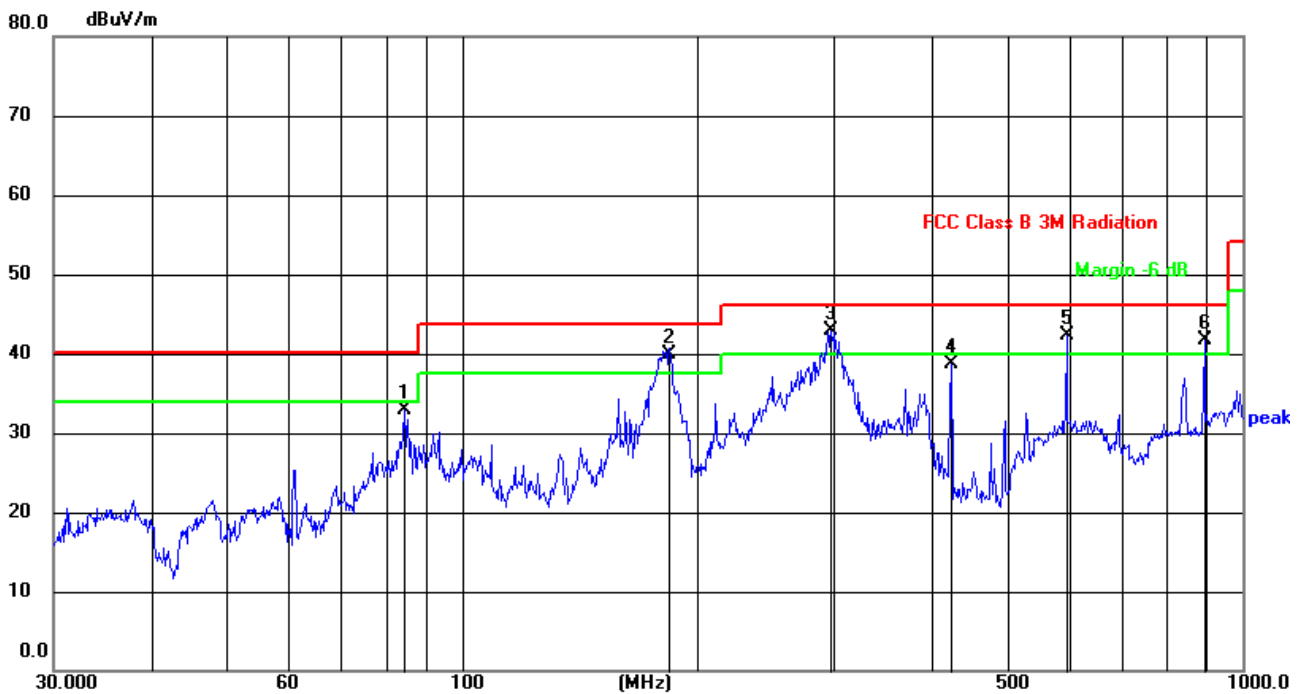
9 kHz ~ 30 MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

Below 1GHz

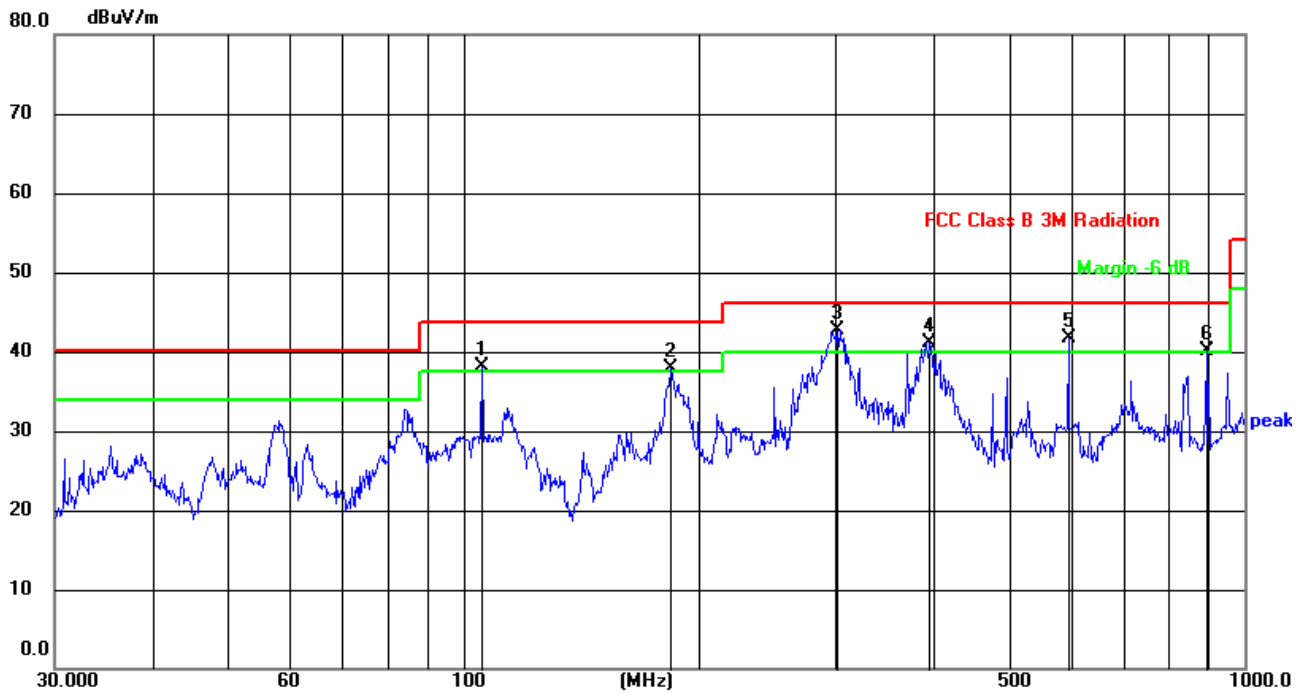
Temperature:	25.6℃	Relative Humidity:	55%
Pressure:	1010 hPa	Test Voltage :	AC120V
Test Mode :	5.2G TX- 802.11a		

Horizontal:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	84.4054	53.20	-20.38	32.82	40.00	-7.18	QP
2	184.4898	57.89	-18.01	39.88	43.50	-3.62	QP
3	297.2238	61.45	-18.50	42.95	46.00	-3.05	QP
4	423.5402	54.36	-15.62	38.74	46.00	-7.26	QP
5	595.1326	52.67	-10.41	42.26	46.00	-3.74	QP
6	893.8564	48.30	-6.64	41.66	46.00	-4.34	QP

Vertical:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	105.6414	57.99	-19.88	38.11	43.50	-5.39	QP
2	184.4898	56.23	-18.41	37.82	43.50	-5.68	QP
3	301.4223	60.77	-18.03	42.74	46.00	-3.26	QP
4	394.8543	57.65	-16.56	41.09	46.00	-4.91	QP
5	595.1326	53.01	-11.31	41.70	46.00	-4.30	QP
6	893.8564	46.05	-5.99	40.06	46.00	-5.94	QP

Remarks:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. The test data shows only the worst case 802.11a mode



Above 1GHz:

Temperature:	25.6℃	Relative Humidity:	55%
Pressure:	1010 hPa	Test Voltage :	AC120V
Test Mode :	5.2G TX- 802.11a		

802.11n20

Polar (H/V)	Frequency	Meter Read n g	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detect or Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel:5180MHz									
V	10360.00	50.98	46.20	8.27	38.50	51.55	68.20	-16.65	PK
V	10360.00	40.29	46.20	8.27	38.50	40.86	54.00	-13.14	AV
V	15540.00	47.89	46.30	10.35	38.70	50.64	74.00	-23.36	PK
V	15540.00	37.13	46.30	10.35	38.70	39.88	54.00	-14.12	AV
V	20720.00	57.64	57.40	11.93	37.80	49.97	68.20	-18.23	PK
V	20720.00	46.89	57.40	11.93	37.80	39.22	54.00	-14.78	AV
V	25900.00	55.11	56.50	13.45	39.70	51.76	68.20	-16.44	PK
V	25900.00	43.93	56.50	13.45	39.70	40.58	54.00	-13.42	AV
H	10360.00	50.90	46.20	8.27	38.50	51.47	68.20	-16.73	PK
H	10360.00	38.82	46.20	8.27	38.50	39.39	54.00	-14.61	AV
H	15540.00	46.83	46.30	10.35	38.70	49.58	74.00	-24.42	PK
H	15540.00	34.52	46.30	10.35	38.70	37.27	54.00	-16.73	AV
H	20720.00	60.02	57.40	11.93	37.80	52.35	68.20	-15.85	PK
H	20720.00	47.85	57.40	11.93	37.80	40.18	54.00	-13.82	AV
H	25900.00	56.20	56.50	13.45	39.70	52.85	68.20	-15.35	PK
H	25900.00	43.97	56.50	13.45	39.70	40.62	54.00	-13.38	AV

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detect or Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Middle Channel:5200MHz									
V	10400.00	48.66	46.20	8.27	38.50	49.23	68.20	-18.97	PK
V	10400.00	38.73	46.20	8.27	38.50	39.30	54.00	-14.70	AV
V	15600.00	46.93	46.30	10.35	38.40	49.38	74.00	-24.62	PK
V	15600.00	37.46	46.30	10.35	38.40	39.91	54.00	-14.09	AV
V	20800.00	57.63	57.40	11.93	37.80	49.96	68.20	-18.24	PK
V	20800.00	47.22	57.40	11.93	37.80	39.55	54.00	-14.45	AV
V	26000.00	52.41	56.50	13.45	39.80	49.16	68.20	-19.04	PK
V	26000.00	43.97	56.50	13.45	39.80	40.72	54.00	-13.28	AV
H	10400.00	49.32	46.20	8.27	38.50	49.89	68.20	-18.31	PK
H	10400.00	39.01	46.20	8.27	38.50	39.58	54.00	-14.42	AV
H	15600.00	46.91	46.30	10.35	38.40	49.36	74.00	-24.64	PK
H	15600.00	37.46	46.30	10.35	38.40	39.91	54.00	-14.09	AV
H	20800.00	56.50	57.40	11.93	37.80	48.83	68.20	-19.37	PK
H	20800.00	44.97	57.40	11.93	37.80	37.30	54.00	-16.70	AV
H	26000.00	52.10	56.50	13.45	39.80	48.85	68.20	-19.35	PK
H	26000.00	43.11	56.50	13.45	39.80	39.86	54.00	-14.14	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detect or Type
High Channel:5240MHz									
V	10480.00	49.97	46.20	8.27	38.60	50.64	68.20	-17.56	PK
V	10480.00	39.24	46.20	8.27	38.60	39.91	54.00	-14.09	AV
V	15720.00	47.36	46.30	10.35	38.40	49.81	74.00	-24.19	PK
V	15720.00	36.80	46.30	10.35	38.40	39.25	54.00	-14.75	AV
V	20960.00	58.21	57.40	11.93	37.50	50.24	68.20	-17.96	PK
V	20960.00	49.01	57.40	11.93	37.50	41.04	54.00	-12.96	AV
V	26200.00	53.90	56.50	13.45	40.10	50.95	68.20	-17.25	PK
V	26200.00	43.79	56.50	13.45	40.10	40.84	54.00	-13.16	AV
H	10480.00	50.23	46.20	8.27	38.60	50.90	68.20	-17.30	PK
H	10480.00	39.24	46.20	8.27	38.60	39.91	54.00	-14.09	AV
H	15720.00	47.72	46.30	10.35	38.40	50.17	74.00	-23.83	PK
H	15720.00	36.91	46.30	10.35	38.40	39.36	54.00	-14.64	AV
H	20960.00	58.41	57.40	11.93	37.50	50.44	68.20	-17.76	PK
H	20960.00	48.90	57.40	11.93	37.50	40.93	54.00	-13.07	AV
H	26200.00	53.58	56.50	13.45	40.10	50.63	68.20	-17.57	PK
H	26200.00	43.12	56.50	13.45	40.10	40.17	54.00	-13.83	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
4. The worst mode is 802.11a, only the worst data is recorded.



Temperature:	25.3℃	Relative Humidity:	57%
Pressure:	1010 hPa	Test Voltage :	AC120V
Test Mode :	5.8G TX- 802.11a		

802.11n20

Polar (H/V)	Frequency	Meter Readi g	Pre- amplifier	Cable Loss	Antenn Factor	Emission Level	Limits	Margin	Detect or Typ
	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel:5745MHz									
V	11490.00	46.58	46.10	8.77	39.10	48.35	74.00	-25.65	PK
V	11490.00	37.94	46.10	8.77	39.10	39.71	54.00	-14.29	AV
V	17235.00	44.01	47.60	11.10	38.70	46.21	68.20	-21.99	PK
V	17235.00	36.28	47.60	11.10	38.70	38.48	54.00	-15.52	AV
V	22980.00	53.25	56.90	12.73	37.70	46.78	74.00	-27.22	PK
V	22980.00	44.78	56.90	12.73	37.70	38.31	54.00	-15.69	AV
V	28725.00	49.87	55.60	14.25	40.30	48.82	68.20	-19.38	PK
V	28725.00	40.87	55.60	14.25	40.30	39.82	54.00	-14.18	AV
H	11490.00	47.08	46.10	8.77	39.10	48.85	74.00	-25.15	PK
H	11490.00	37.75	46.10	8.77	39.10	39.52	54.00	-14.48	AV
H	17235.00	45.09	47.60	11.10	38.70	47.29	68.20	-20.91	PK
H	17235.00	36.73	47.60	11.10	38.70	38.93	54.00	-15.07	AV
H	22980.00	55.59	56.90	12.73	37.70	49.12	74.00	-24.88	PK
H	22980.00	44.54	56.90	12.73	37.70	38.07	54.00	-15.93	AV
H	28725.00	51.96	55.60	14.25	40.30	50.91	68.20	-17.29	PK
H	28725.00	41.54	55.60	14.25	40.30	40.49	54.00	-13.51	AV

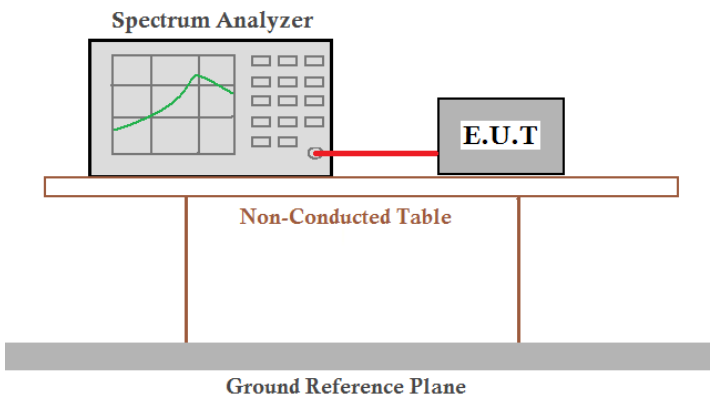
Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detect or Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Middle Channel:5785MHz									
V	11570.00	47.62	46.10	8.77	39.10	49.39	74.00	-24.61	PK
V	11570.00	38.14	46.10	8.77	39.10	39.91	54.00	-14.09	AV
V	17355.00	46.56	47.70	11.10	38.40	48.36	68.20	-19.84	PK
V	17355.00	38.05	47.70	11.10	38.40	39.85	54.00	-14.15	AV
V	23140.00	55.27	56.90	12.73	37.80	48.90	74.00	-25.10	PK
V	23140.00	45.95	56.90	12.73	37.80	39.58	54.00	-14.42	AV
V	28925.00	51.09	55.60	14.25	40.50	50.24	68.20	-17.96	PK
V	28925.00	42.57	55.60	14.25	40.50	41.72	54.00	-12.28	AV
H	11570.00	49.45	46.10	8.77	39.10	51.22	74.00	-22.78	PK
H	11570.00	39.38	46.10	8.77	39.10	41.15	54.00	-12.85	AV
H	17355.00	46.20	47.70	11.10	38.40	48.00	68.20	-20.20	PK
H	17355.00	37.49	47.70	11.10	38.40	39.29	54.00	-14.71	AV
H	23140.00	56.21	56.90	12.73	37.80	49.84	74.00	-24.16	PK
H	23140.00	47.31	56.90	12.73	37.80	40.94	54.00	-13.06	AV
H	28925.00	52.69	55.60	14.25	40.50	51.84	68.20	-16.36	PK
H	28925.00	43.42	55.60	14.25	40.50	42.57	54.00	-11.43	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detect or Type
High Channel:5825MHz									
V	11650.00	47.53	46.10	8.77	39.10	49.30	74.00	-24.70	PK
V	11650.00	37.93	46.10	8.77	39.10	39.70	54.00	-14.30	AV
V	17475.00	45.28	47.90	11.23	38.90	47.51	68.20	-20.69	PK
V	17475.00	37.17	47.90	11.23	38.90	39.40	54.00	-14.60	AV
V	23300.00	55.51	57.10	12.73	37.80	48.94	68.20	-19.26	PK
V	23300.00	45.57	57.10	12.73	37.80	39.00	54.00	-15.00	AV
V	29125.00	52.05	55.80	14.25	40.50	51.00	68.20	-17.20	PK
V	29125.00	42.66	55.80	14.25	40.50	41.61	54.00	-12.39	AV
H	11650.00	49.65	46.10	8.77	39.10	51.42	74.00	-22.58	PK
H	11650.00	40.46	46.10	8.77	39.10	42.23	54.00	-11.77	AV
H	17475.00	46.56	47.90	11.23	38.90	48.79	68.20	-19.41	PK
H	17475.00	38.52	47.90	11.23	38.90	40.75	54.00	-13.25	AV
H	23300.00	57.00	57.10	12.73	37.80	50.43	68.20	-17.77	PK
H	23300.00	47.10	57.10	12.73	37.80	40.53	54.00	-13.47	AV
H	29125.00	53.17	55.80	14.25	40.50	52.12	68.20	-16.08	PK
H	29125.00	43.44	55.80	14.25	40.50	42.39	54.00	-11.61	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
4. The worst mode is 802.11a, only the worst data is recorded.

4.7.2 Conducted Emission Method

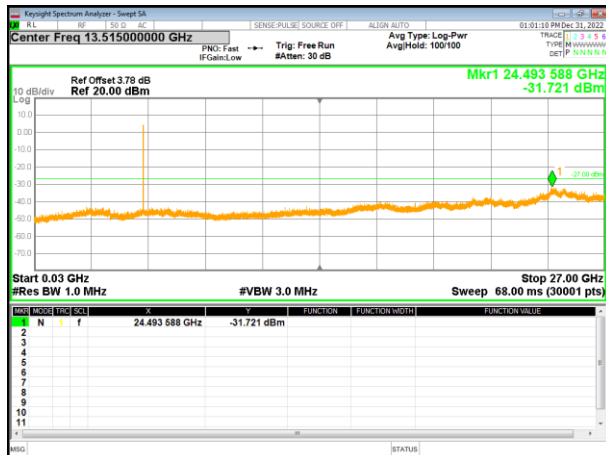
Test Requirement:	FCC Part15 C Section 15.209, Part 15E Section 15.407(b)(4)
Test Method:	ANSI C63.10:2013
Limit:	-27dBm/MHz
Test setup:	 The diagram illustrates the test setup for conducted emissions. A Spectrum Analyzer is connected to an Equipment Under Test (E.U.T.) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass



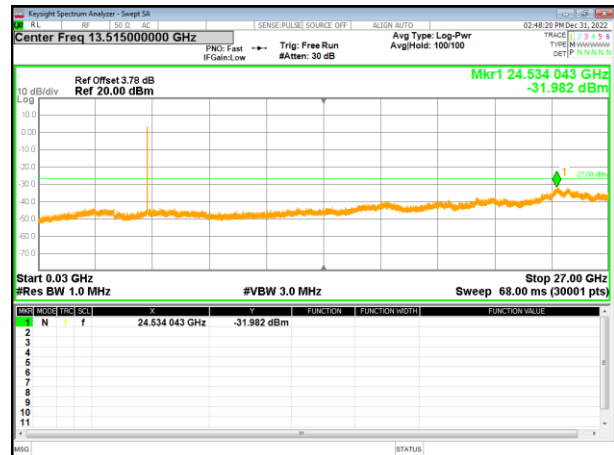
5180-5240MHz

Test Plot

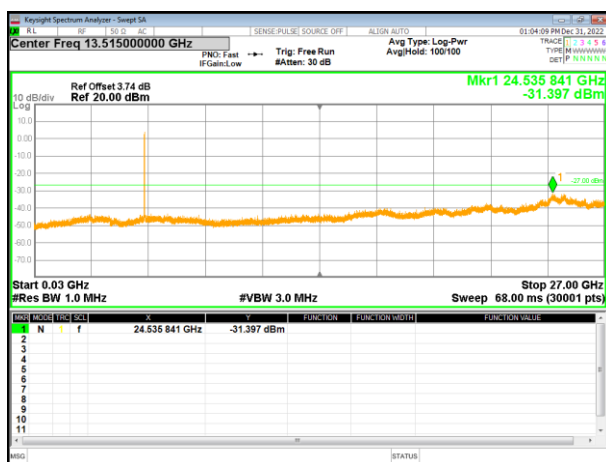
802.11a on channel 36



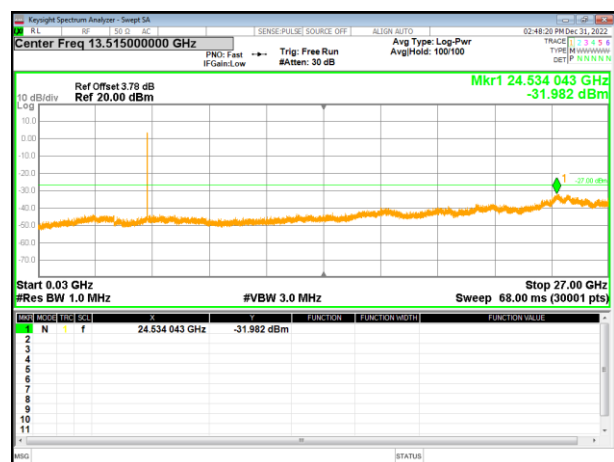
802.11a on channel 40



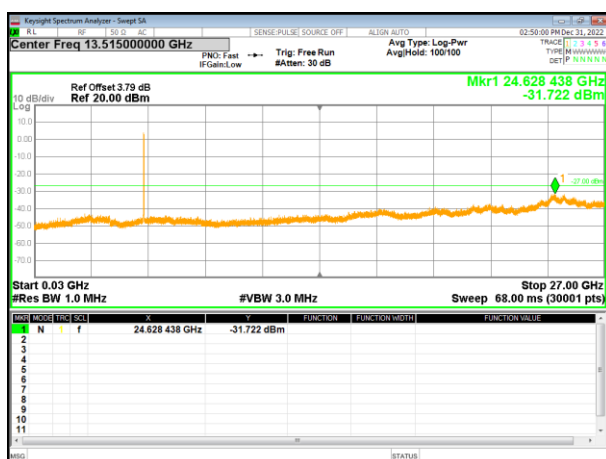
802.11a on channel 48



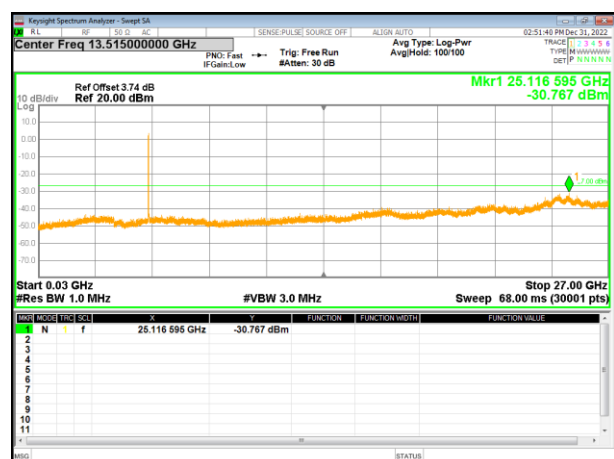
802.11n20 on channel 36



802.11n20 on channel 40

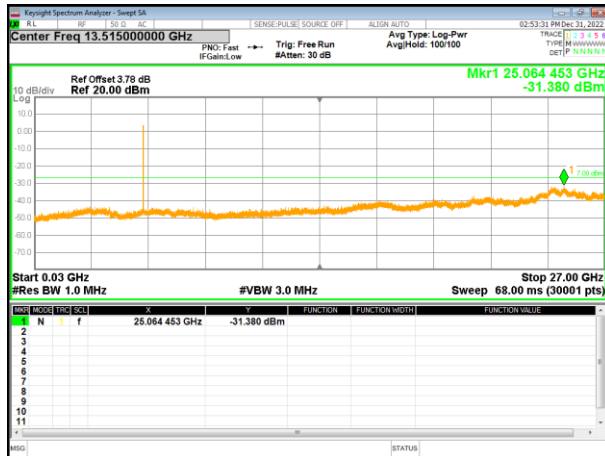


802.11n20 on channel 48

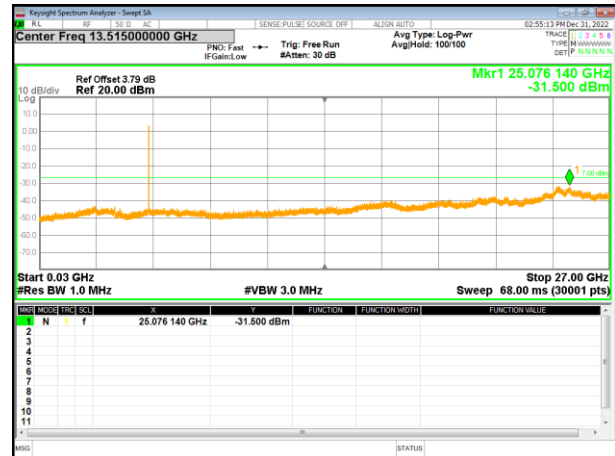


Test Plot

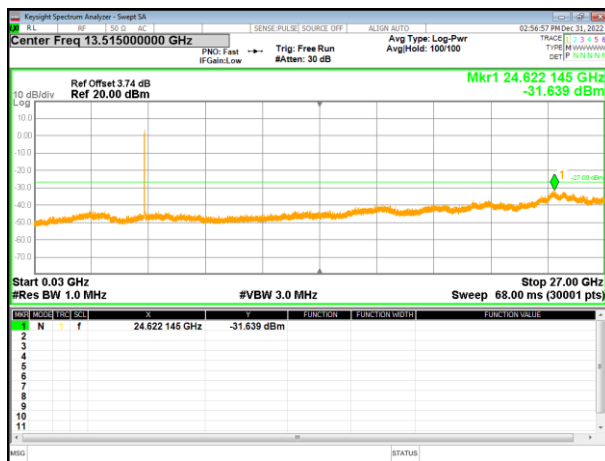
802.11ac20 on channel 36



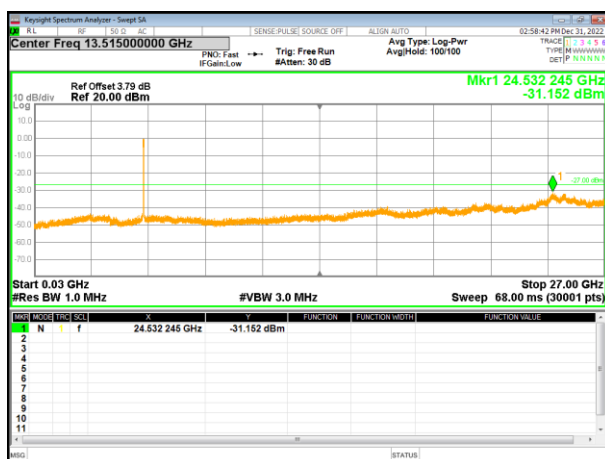
802.11ac20 on channel 40



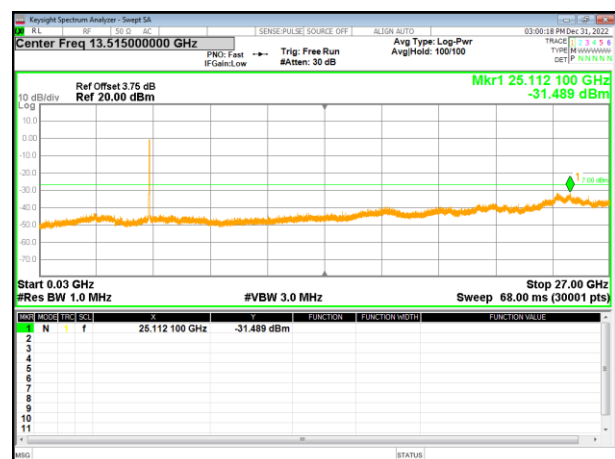
802.11ac20 on channel 48



802.11n40 on channel 38

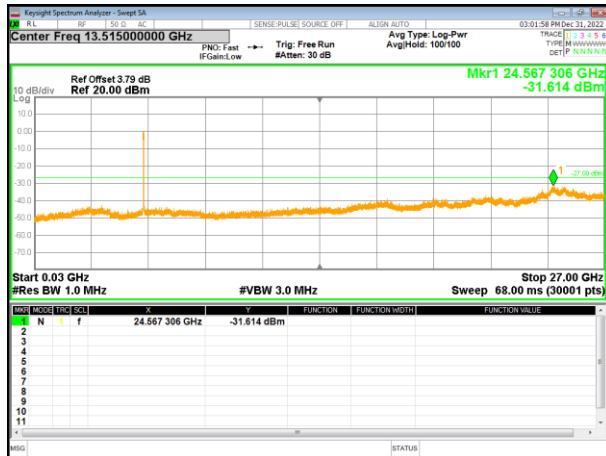


802.11n40 on channel 46

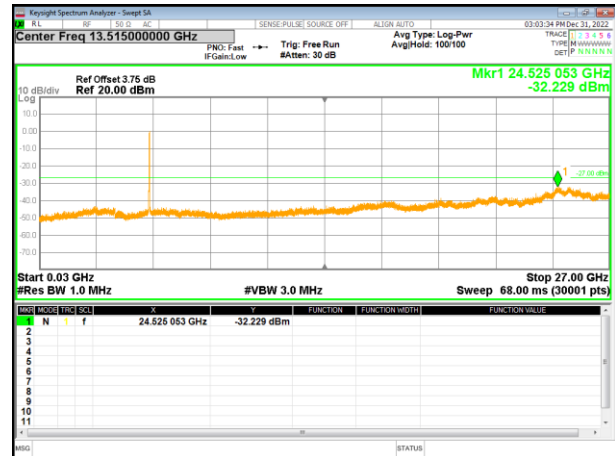


Test Plot

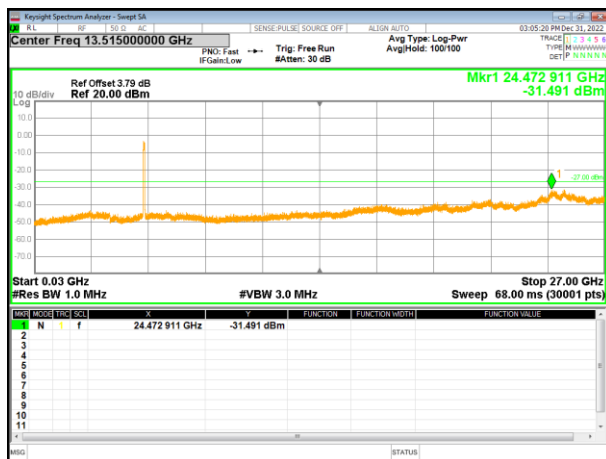
802.11ac40 on channel 38



802.11ac40 on channel 46



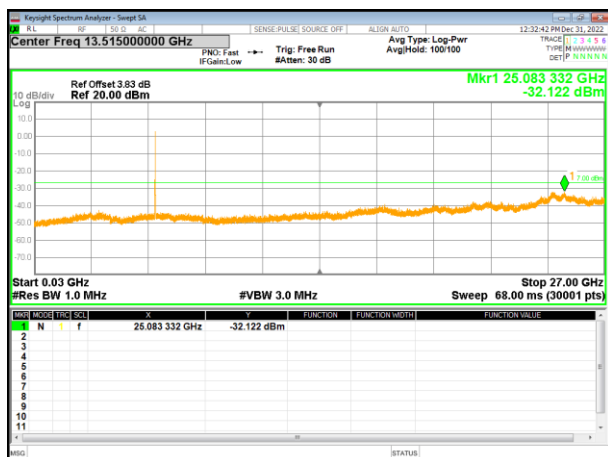
802.11ac80 on channel 42



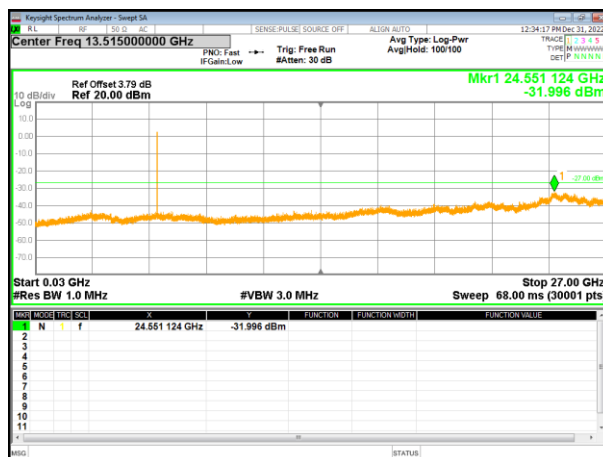
5745-5825MHz

Test Plot

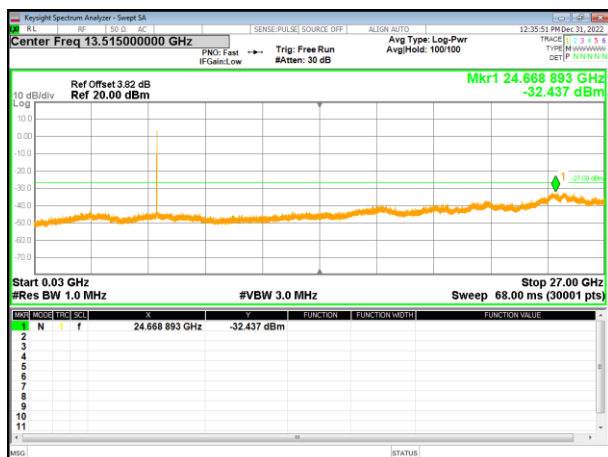
802.11a on channel 149



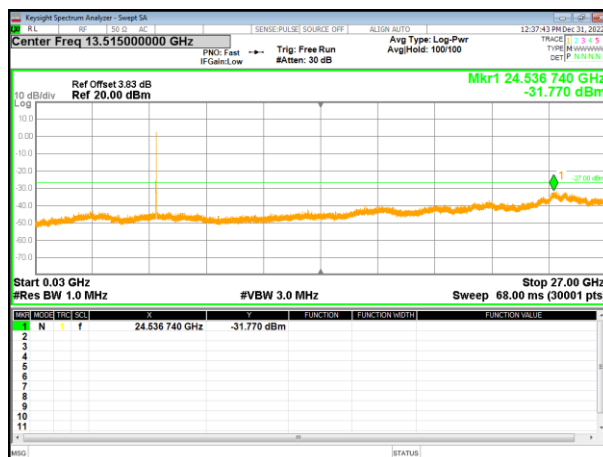
802.11a on channel 157



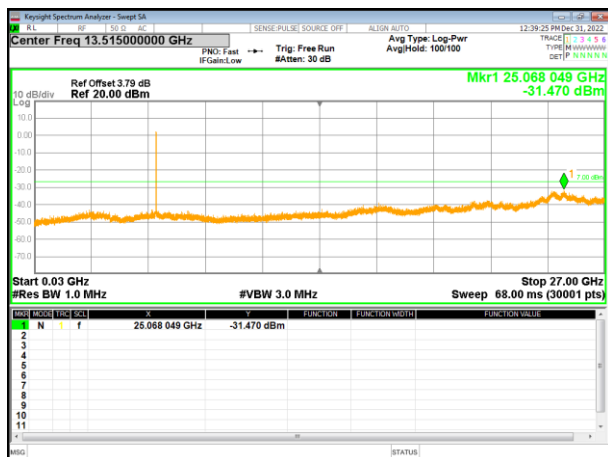
802.11a on channel 165



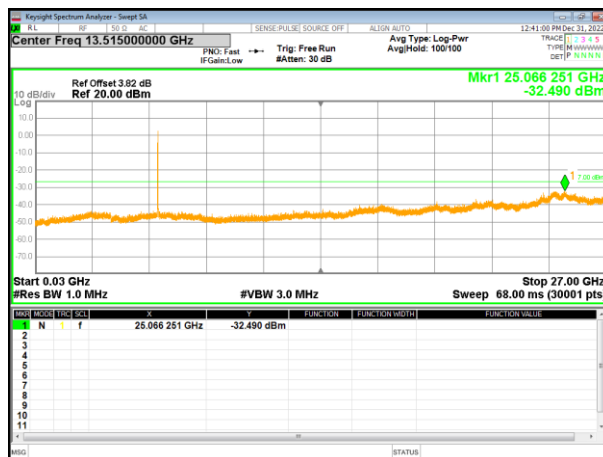
802.11n20 on channel 149



802.11n20 on channel 157

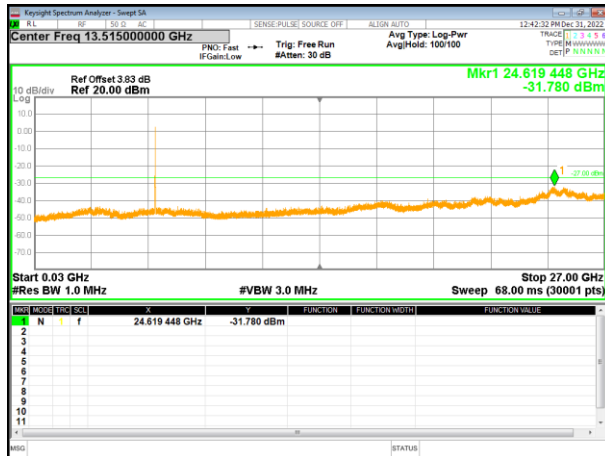


802.11n20 on channel 165

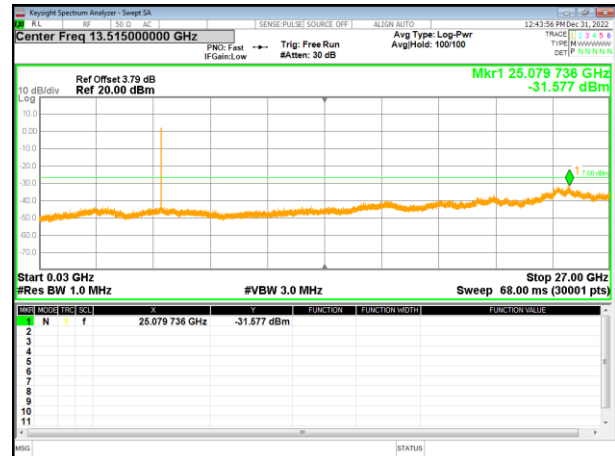


Test Plot

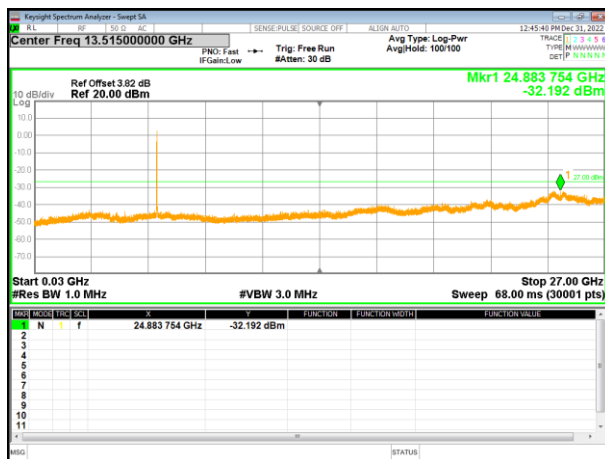
802.11ac20 on channel 149



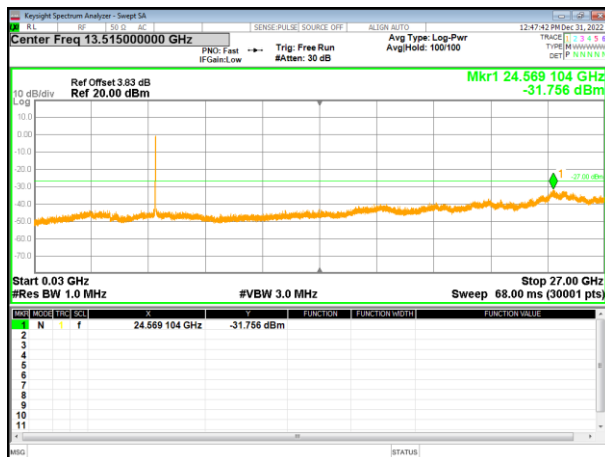
802.11ac20 on channel 157



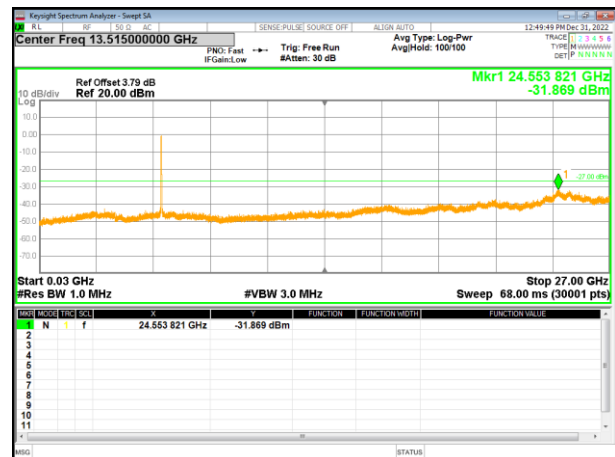
802.11ac20 on channel 165



802.11n40 on channel 151

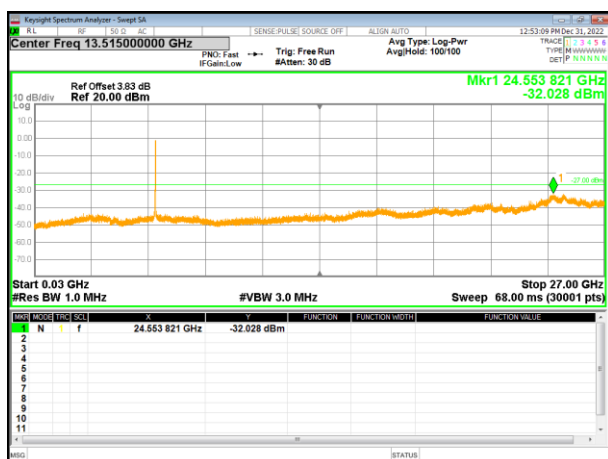


802.11n40 on channel 159

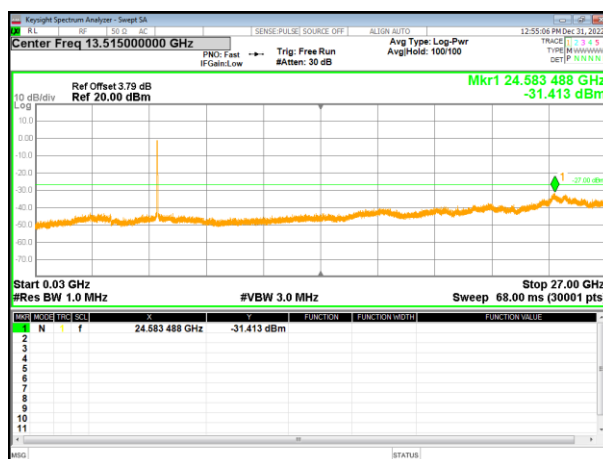


Test Plot

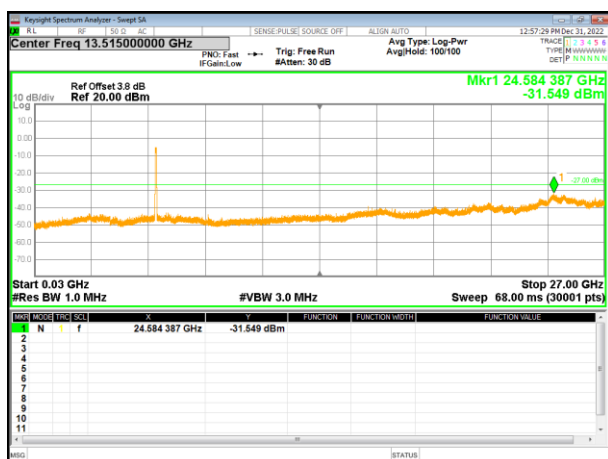
802.11ac40 on channel 151



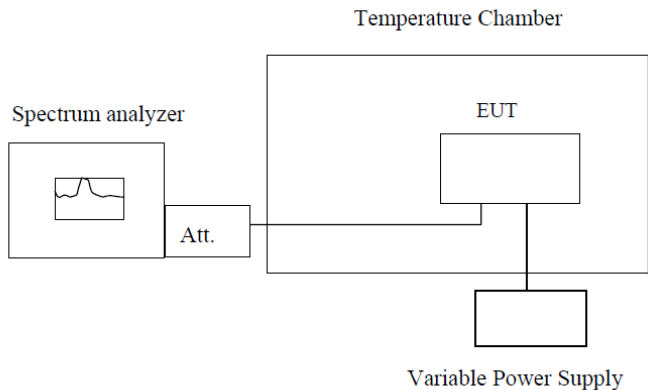
802.11ac40 on channel 159



802.11ac80 on channel 155



4.8 Frequency stability

Test Requirement:	FCC Part15 C Section 15.407(g)
Test Method:	ANSI C63.10:2013, FCC Part 2.1055
Limit:	Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified
Test Procedure:	a. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minute s. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test setup:	 Note : Measurement setup for testing on Antenna connector
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Remark: Set the EUT transmits at un-modulation mode to test frequency stability.

Measurement data:

Frequency stability versus Temp.					
Power Supply: AC 120V					
Temp. (°C)	Operating Frequency (MHz)	0 minute Measured Frequency (MHz)	2 minute Measured Frequency (MHz)	5 minute Measured Frequency (MHz)	10 minute Measured Frequency (MHz)
-30	5180	5179.979	5180.060	5180.067	5179.768
	5190	5189.975	5199.934	5199.942	5189.779
	5200	5199.970	5199.959	5199.967	5199.769
	5210	5209.976	5209.937	5209.945	5209.770
	5220	5219.971	5219.952	5219.960	5219.777
	5230	5229.969	5229.945	5229.953	5229.794
	5240	5239.942	5239.953	5239.961	5239.779
-20	5180	5179.970	5179.936	5179.952	5179.789
	5190	5189.961	5189.926	5189.951	5189.785
	5200	5199.969	5199.934	5199.945	5199.779
	5210	5209.961	5209.926	5209.935	5209.785
	5220	5219.982	5219.947	5219.945	5219.780
	5230	5229.960	5229.925	5229.943	5229.777
	5240	5239.978	5239.943	5239.947	5239.750
-10	5180	5179.979	5179.945	5179.931	5179.768
	5190	5189.975	5189.940	5189.942	5189.779
	5200	5199.970	5199.935	5199.933	5199.769
	5210	5209.976	5209.941	5209.934	5209.770
	5220	5219.971	5219.936	5219.941	5219.777
	5230	5229.969	5229.934	5229.959	5229.794
	5240	5239.942	5239.907	5239.931	5239.766
0	5180	5179.756	5179.924	5179.943	5179.779
	5190	5199.928	5189.934	5189.934	5189.780
	5200	5199.926	5199.925	5199.942	5199.770
	5210	5209.981	5209.926	5209.934	5209.775
	5220	5219.970	5219.933	5219.955	5219.770
	5230	5229.957	5229.951	5229.933	5229.790
	5240	5239.974	5239.923	5239.951	5239.768
10	5180	5179.958	5179.936	5179.952	5179.780
	5190	5189.969	5189.926	5189.948	5189.771
	5200	5199.960	5199.934	5199.943	5199.778
	5210	5209.961	5209.926	5209.949	5209.770
	5220	5219.968	5219.947	5219.944	5219.791
	5230	5229.986	5229.925	5229.942	5229.768
	5240	5239.971	5239.943	5239.915	5239.786

20	5180	5179.979	5179.935	5179.943	5179.741
	5190	5189.975	5189.935	5189.934	5189.771
	5200	5199.970	5199.926	5199.942	5199.795
	5210	5209.976	5299.934	5209.934	5209.779
	5220	5219.971	5219.926	5219.955	5219.770
	5230	5229.969	5229.947	5229.933	5229.797
	5240	5239.942	5239.925	5239.951	5239.785
30	5180	5179.958	5179.936	5179.943	5179.789
	5190	5189.969	5189.926	5189.934	5179.789
	5200	5199.960	5199.934	5199.942	5189.785
	5210	5209.961	5209.926	5209.934	5199.779
	5220	5219.968	5219.947	5219.955	5209.785
	5230	5229.986	5229.925	5229.933	5219.780
	5240	5239.958	5239.943	5239.951	5229.777
40	5180	5179.970	5179.935	5179.729	5179.768
	5190	5189.961	5189.935	5199.901	5189.779
	5200	5199.969	5199.926	5199.899	5199.769
	5210	5209.961	5299.934	5209.954	5209.770
	5220	5219.982	5219.926	5219.943	5219.777
	5230	5229.960	5229.947	5229.930	5229.794
	5240	5239.978	5239.925	5239.947	5239.766
50	5180	5179.970	5179.936	5179.943	5179.741
	5190	5189.961	5189.926	5189.934	5189.771
	5200	5199.969	5199.934	5199.942	5199.795
	5210	5209.961	5209.926	5209.934	5209.779
	5220	5219.982	5219.947	5219.955	5219.770
	5230	5229.960	5229.925	5229.933	5229.797
	5240	5239.978	5239.943	5239.951	5239.785

Frequency stability versus Voltage					
Temperature: 25°C					
Power Supply (VAC)	Operating Frequency (MHz)	0 minute Measured Frequency (MHz)	2 minute Measured Frequency (MHz)	5 minute Measured Frequency (MHz)	10 minute Measured Frequency (MHz)
102	5180	5179.979	5180.060	5179.943	5179.904
	5190	5189.975	5199.934	5189.934	5199.778
	5200	5199.970	5199.959	5199.942	5199.803
	5210	5209.976	5209.937	5209.934	5209.781
	5220	5219.971	5219.952	5219.955	5219.796
	5230	5229.969	5229.945	5229.933	5229.788
	5240	5239.942	5239.953	5239.951	5239.796
120	5180	5179.970	5179.954	5179.942	5179.789
	5190	5189.961	5180.060	5189.943	5189.788
	5200	5199.969	5199.934	5199.934	5199.781
	5210	5209.961	5209.959	5299.942	5209.771
	5220	5219.982	5219.937	5219.934	5219.781
	5230	5229.960	5229.952	5229.955	5299.776
	5240	5239.978	5239.945	5239.933	5239.782
138	5180	5179.979	5179.945	5179.931	5179.768
	5190	5189.975	5189.940	5189.942	5189.779
	5200	5199.970	5199.935	5199.933	5199.769
	5210	5209.976	5209.941	5209.934	5209.770
	5220	5219.971	5219.936	5219.941	5219.777
	5230	5229.969	5229.934	5229.959	5229.794
	5240	5239.942	5239.907	5239.931	5239.766

Frequency stability versus Temp.					
Power Supply: AC 120V					
Temp. (°C)	Operating Frequency (MHz)	0 minute Measured Frequency (MHz)	2 minute Measured Frequency (MHz)	5 minute Measured Frequency (MHz)	10 minute Measured Frequency (MHz)
-30	5745	5744.962	5744.922	5744.932	5744.750
	5755	5754.969	5754.929	5754.939	5754.738
	5775	5774.985	5774.921	5774.955	5774.749
	5785	5784.961	5784.913	5784.931	5784.755
	5795	5794.957	5794.920	5794.927	5794.773
	5825	5824.960	5824.848	5824.930	5824.764
-20	5745	5744.951	5744.933	5744.926	5744.761
	5755	5754.967	5754.935	5754.951	5754.774
	5775	5774.965	5774.938	5774.931	5774.759
	5785	5784.968	5784.930	5784.940	5784.745
	5795	5794.979	5794.921	5794.938	5794.739
	5825	5824.960	5824.929	5824.948	5824.772
-10	5745	5744.962	5744.923	5744.942	5744.381
	5755	5754.988	5754.930	5754.944	5754.763
	5775	5774.983	5774.947	5774.946	5774.764
	5785	5784.967	5784.923	5784.938	5784.766
	5795	5794.956	5794.919	5794.929	5794.749
	5825	5824.891	5824.921	5824.938	5824.744
0	5745	5744.956	5744.912	5744.942	5744.286
	5755	5754.981	5754.928	5754.944	5754.776
	5775	5774.961	5774.927	5774.946	5774.772
	5785	5784.970	5784.930	5784.938	5784.755
	5795	5794.968	5794.941	5794.929	5794.744
	5825	5824.978	5824.921	5824.938	5824.678
10	5745	5744.956	5744.922	5744.931	5744.751
	5755	5754.981	5754.939	5754.938	5754.757
	5775	5774.961	5774.940	5774.929	5774.774
	5785	5784.970	5784.922	5784.921	5784.749
	5795	5794.968	5794.939	5794.928	5794.745
	5825	5824.978	5824.936	5824.857	5824.747
20	5745	5744.972	5744.947	5744.942	5744.750
	5755	5754.986	5754.919	5754.956	5754.768
	5775	5774.970	5774.942	5774.940	5774.748
	5785	5784.957	5784.942	5784.927	5784.774
	5795	5794.951	5794.933	5794.921	5794.766
	5825	5824.985	5824.947	5824.955	5824.774
30	5745	5744.962	5744.933	5744.931	5744.775
	5755	5754.969	5754.935	5754.948	5754.746
	5775	5774.985	5774.938	5774.948	5774.769
	5785	5784.961	5784.930	5784.930	5784.768
	5795	5794.957	5794.921	5794.947	5794.759
	5825	5824.960	5824.929	5824.945	5824.773

40	5745	5744.972	5744.917	5744.942	57442.786
	5755	5754.986	5754.942	5754.944	5754.776
	5775	5774.970	5774.923	5774.946	5774.772
	5785	5784.957	5784.932	5784.938	5784.755
	5795	5794.951	5794.930	5794.929	5794.744
	5825	5824.985	5824.939	5824.938	5824.678
50	5745	5744.972	5744.947	5744.942	5744.750
	5755	5754.986	5754.919	5754.956	5754.768
	5775	5774.970	5774.942	5774.940	5774.748
	5785	5784.957	5784.942	5784.927	5784.774
	5795	5794.951	5794.933	5794.921	5794.766
	5825	5824.985	5824.947	5824.955	5824.774

Frequency stability versus Voltage					
Temperature: 25°C					
Power Supply (VAC)	Operating Frequency (MHz)	0 minute Measured Frequency (MHz)	2 minute Measured Frequency (MHz)	5 minute Measured Frequency (MHz)	10 minute Measured Frequency (MHz)
102	5745	5744.951	5744.922	5744.931	5744.745
	5755	5754.967	5754.929	5754.948	5754.769
	5775	5774.965	5774.921	5774.948	5774.750
	5785	5784.968	5784.913	5784.930	5784.758
	5795	5794.979	5794.920	5794.947	5794.756
	5825	5824.960	5824.848	5824.945	5824.765
120	5745	5744.951	5744.933	5744.926	5744.761
	5755	5754.967	5754.935	5754.951	5754.774
	5775	5774.965	5774.938	5774.931	5774.759
	5785	5784.968	5784.930	5784.940	5784.745
	5795	5794.979	5794.921	5794.938	5794.739
	5825	5824.960	5824.929	5824.948	5824.772
138	5745	5744.972	5744.947	5744.942	5744.750
	5755	5754.986	5754.919	5754.956	5754.768
	5775	5774.970	5774.942	5774.940	5774.748
	5785	5784.957	5784.942	5784.927	5784.774
	5795	5794.951	5794.933	5794.921	5794.766
	5825	5824.985	5824.947	5824.955	5824.774

5 Test Setup Photo

Reference to the **appendix I** for details.

6 EUT Constructional Details

Reference to the **appendix II** for details.

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