



FCC TEST REPORT

FCC ID: 2AVRVDG3200RTV

Product	:	32inch Rollable Smart Touchscreen TV
Model Name	:	OR3200RTV,DG3200RTV,CR3200RTV
Brand	:	ORCATV, DURAGO, CORE INNOVATIONS
Report No.	:	PTC26072026401E-FC04
Prepared for		
DP Audio Video LLC		
1001 Gayley Avenue P.O. Box 24857, Los Angeles, California 90024, United states		
Prepared by		
Precise Testing & Certification Co., Ltd		
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China		



1 TEST RESULT CERTIFICATION

Applicant's name : DP Audio Video LLC

Address : 1001 Gayley Avenue P.O. Box 24857, Los Angeles, California 90024,
United states

Manufacture's name : BUILDWELL INDUSTRY LIMITED

Address : NO.2-309 2/FCHUNGKINGEXPRESS NOS.36 NATHAN
ROADTSIMSHATSUI HONGKONG

Factory: Shenzhen Jinzheng Electrical Appliance Co., Ltd.

Address: Room201,NO.6,Tongfu Industry Zone, Houdikeng, Shijia
Community,Matian street, Guangming District, Shenzhen.

Product name : 32inch Rollable Smart Touchscreen TV

Model name : OR3200RTV,DG3200RTV,CR3200RTV

Standards : FCC CFR47 Part 15 Section 15.407

Test procedure : ANSI C63.10-2020

Test Date : Jul. 24, 2026 to Aug. 26, 2026

Date of Issue : Aug. 26, 2026

Test Result : Pass



Report No.: PTC26072026401E-FC04

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink, appearing to read 'Jack Zhou'.

Jack zhou / Engineer

Technical Manager:

A handwritten signature in black ink, appearing to read 'Simon Pu'.

Simon Pu / Manager



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2 Test Summary

Test Items	Test Requirement	Result
Conduct Emission	15.207	PASS
Radiated Spurious Emissions	15.205(a) 15.209 15.407(b)	PASS
Emission and Occupied Bandwidth	15.407(a)(e)	PASS
Maximum Conducted Output Power	15.407(a)	PASS
Power Spectral Density	15.407(a)	PASS
Frequency stability	15.407 (g)	PASS
Antenna Requirement	15.203	PASS



3 General Information

3.1 General Description of E.U.T.

Product Name	: 32inch Rollable Smart Touchscreen TV
Model Name	: OR3200RTV,DG3200RTV,CR3200RTV
Specification	: 802.11a/n HT20/HT40/ac20/ac40/ac80
Operation Frequency	: 5G Wi-Fi:5180-5240 MHz 5.8G Wi-Fi:5745MHz~5825MHz
Number of Channel	: 4 channels for 802.11a/n20/ac20 5180-5240 MHz 5 channels for 802.11a/n20/ac20 5745MHz~5825MHz 2 channels for 802.11n40/ac40 5190-5230 MHz 2 channels for 802.11n40/ac40 5755MHz~5795MHz 1 channels for 802.11 ac80
Type of Modulation	: OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11n/a/ac
Antenna installation	: Rob Antenna
Antenna Gain	: 5.2G: 3.32dBi 5.8G: 2.8dBi
Power supply	: Input: 12.0V~5.0A Battery: 14.8V5A Adapter: J652-1205000UX Input: 100-240V~ 50/60Hz 1.7A Output:12.0V~5.0A 60.0W
Hardware Version	: N/A
Software Version	: N/A
Test sample No.	: PTC26072026401E-1/2, PTC26072026401E-2/2



3.2 Channel List

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Those data rates (802.11a: 6 Mbps; 802.11n20: MCS0; 802.11n40: MCS0; 802.11ac20: MCS0; 802.11ac40: MCS0; 802.11ac80: MCS0;) were used for all test.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Frequency and Channel list for 802.11 a/N20/N40/AC20/AC40

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	46	5230	153	5765
38	5190	48	5240	157	5785
40	5200	149	5745	159	5795
44	5220	151	5755	161	5805
				165	5825

Frequency and Channel list for 802.11 ac80

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	155	5775	/	/

The maximum duty cycle as following table:

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	1.39	1.44	96.53
11A	Ant1	5200	1.39	1.43	97.20
11A	Ant1	5240	1.40	1.44	97.22
11A	Ant1	5745	1.39	1.44	96.53
11A	Ant1	5785	1.39	1.44	96.53
11A	Ant1	5825	1.39	1.44	96.53
11N20SISO	Ant1	5180	1.30	1.35	96.30
11N20SISO	Ant1	5200	1.30	1.35	96.30
11N20SISO	Ant1	5240	1.30	1.34	97.01
11N20SISO	Ant1	5745	1.30	1.34	97.01
11N20SISO	Ant1	5785	1.30	1.35	96.30
11N20SISO	Ant1	5825	1.30	1.35	96.30
11N40SISO	Ant1	5190	0.65	0.69	94.20
11N40SISO	Ant1	5230	0.65	0.69	94.20
11N40SISO	Ant1	5755	0.64	0.69	92.75
11N40SISO	Ant1	5795	0.65	0.69	94.20
11AC20SISO	Ant1	5180	1.31	1.35	97.04
11AC20SISO	Ant1	5200	1.31	1.35	97.04
11AC20SISO	Ant1	5240	1.31	1.36	96.32
11AC20SISO	Ant1	5745	1.31	1.36	96.32
11AC20SISO	Ant1	5785	1.32	1.36	97.06
11AC20SISO	Ant1	5825	1.31	1.36	96.32
11AC40SISO	Ant1	5190	0.66	0.70	94.29
11AC40SISO	Ant1	5230	0.65	0.70	92.86
11AC40SISO	Ant1	5755	0.66	0.70	94.29



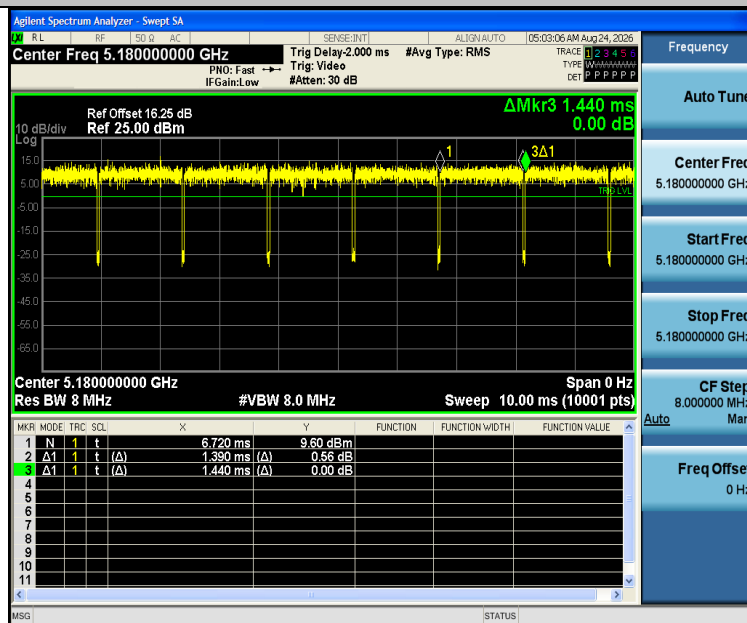
Report No.: PTC26072026401E-FC04

11AC40SISO	Ant1	5795	0.65	0.70	92.86
11AC80SISO	Ant1	5210	0.32	0.37	86.49
11AC80SISO	Ant1	5775	0.33	0.37	89.19

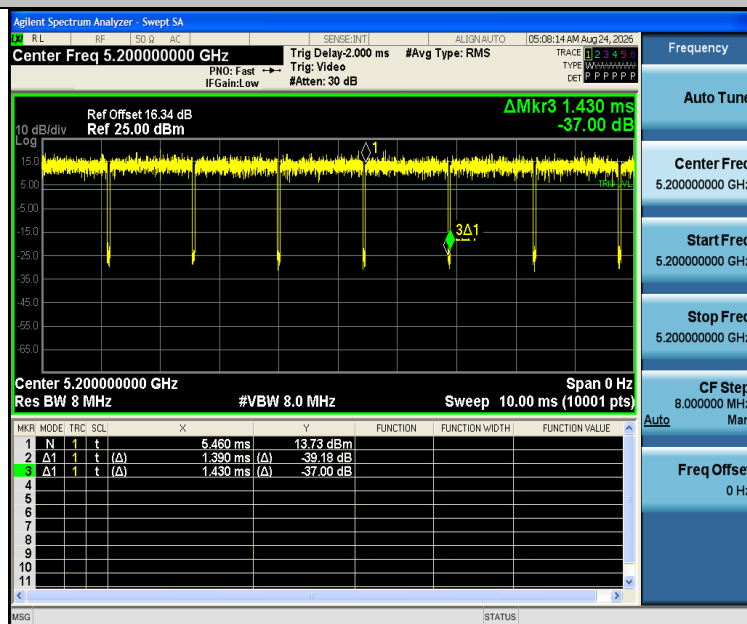


Test Graphs:

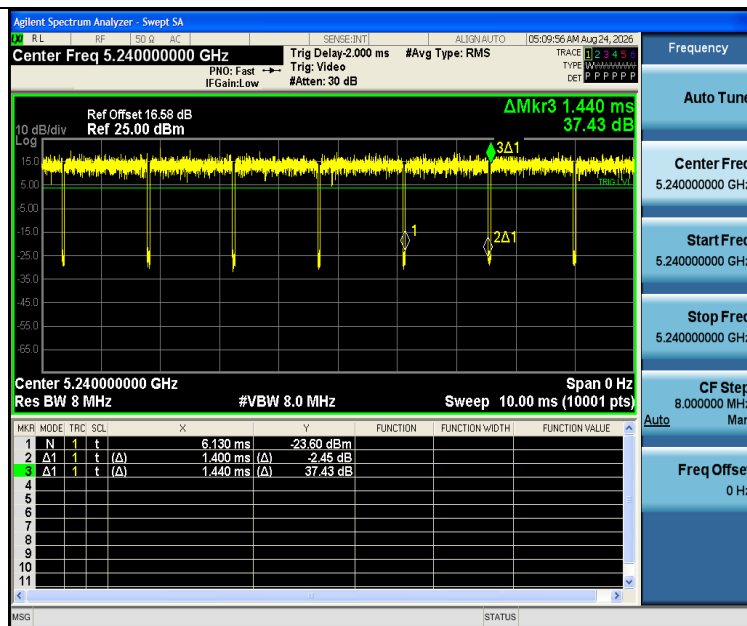
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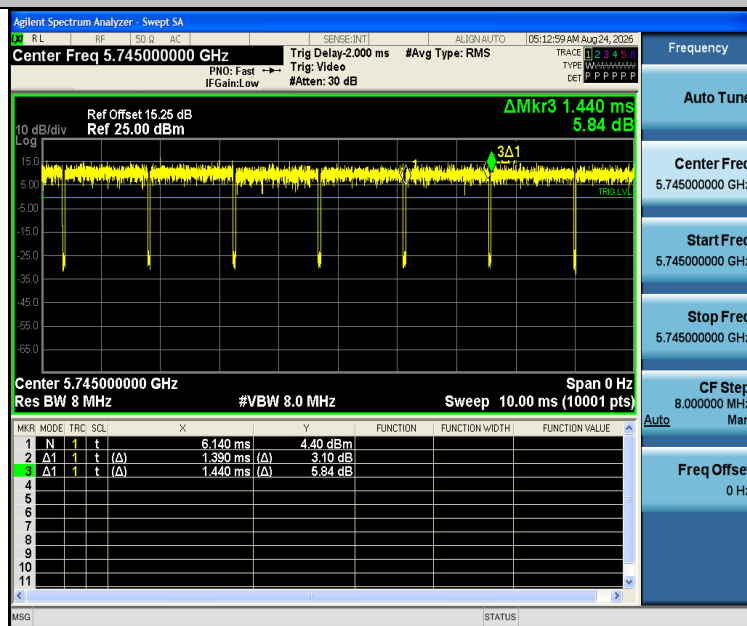
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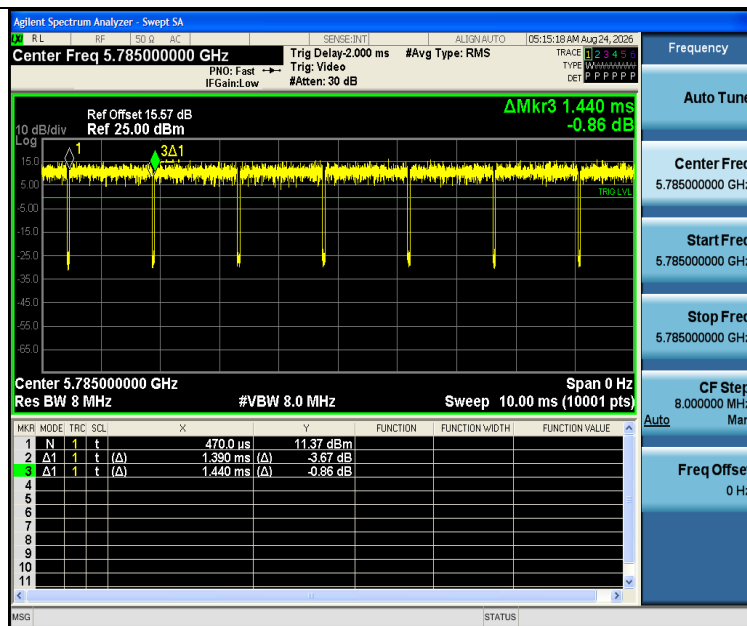
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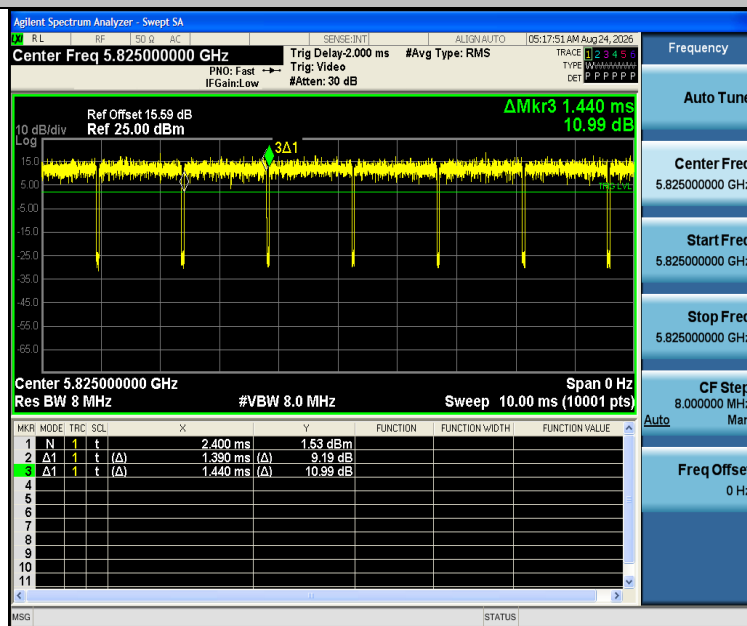
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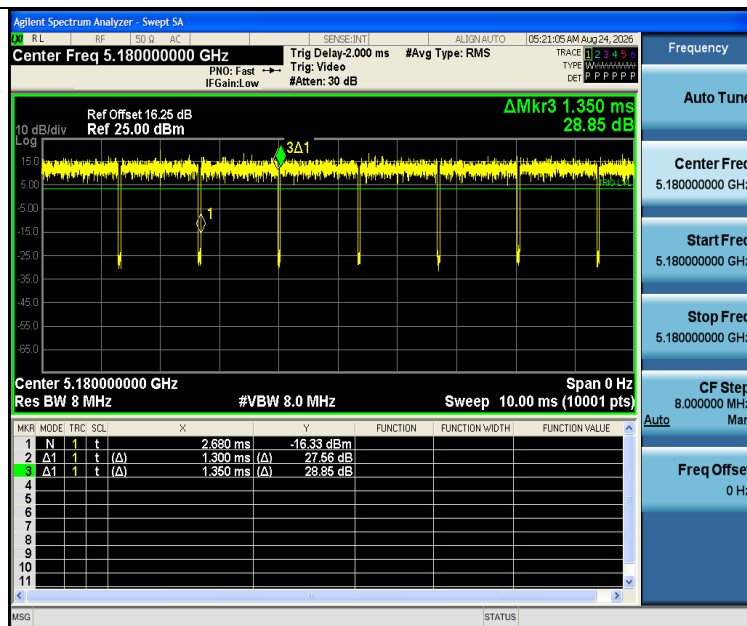
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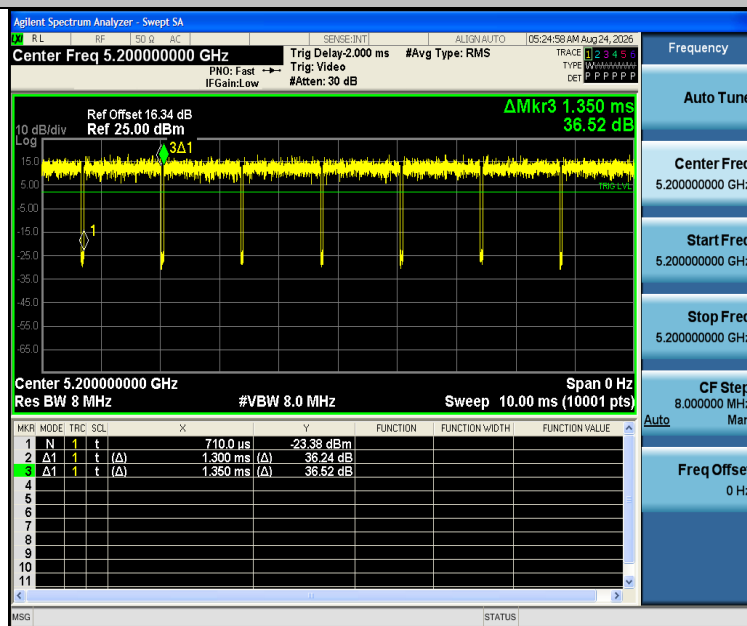
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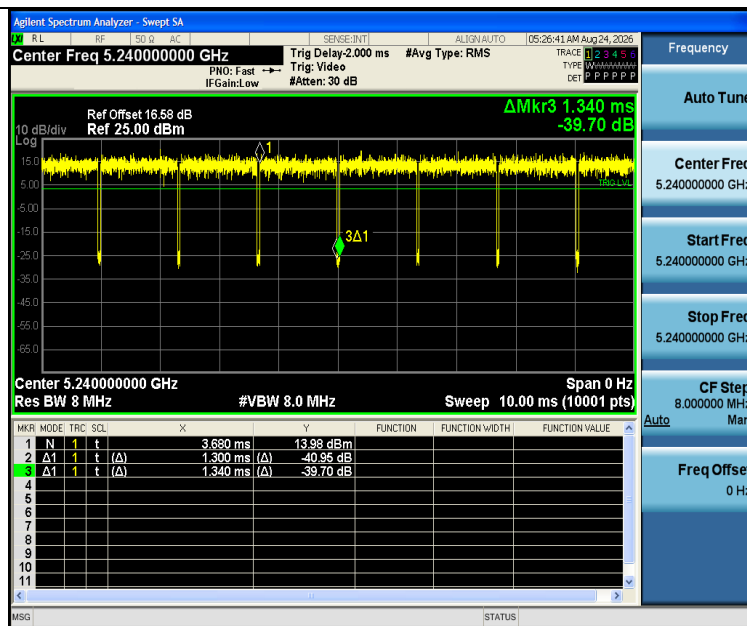
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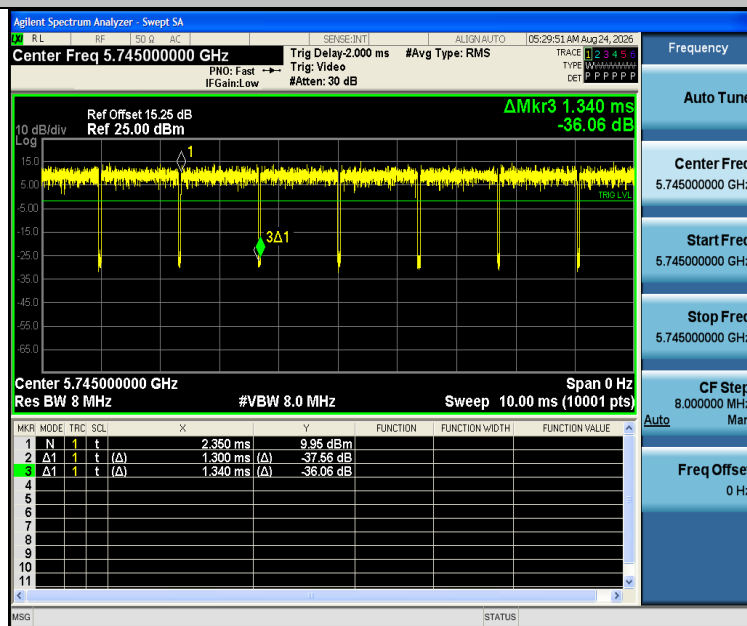
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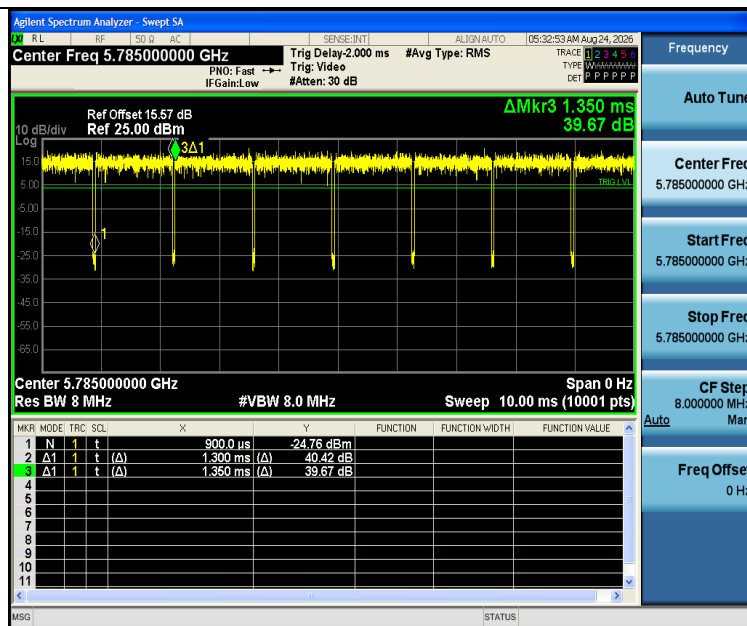
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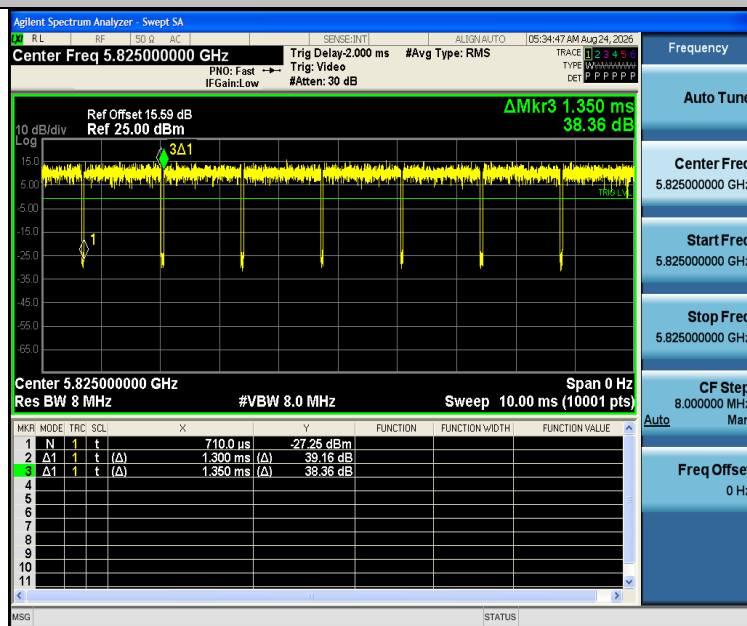
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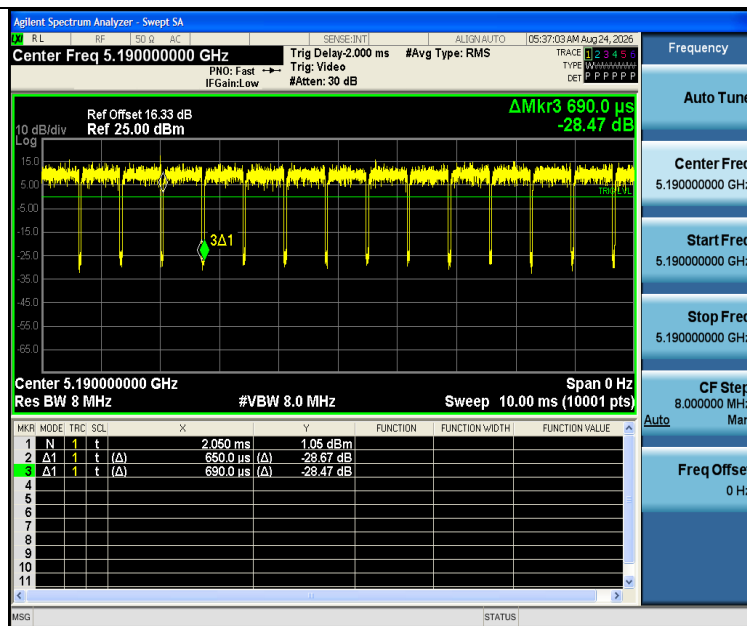
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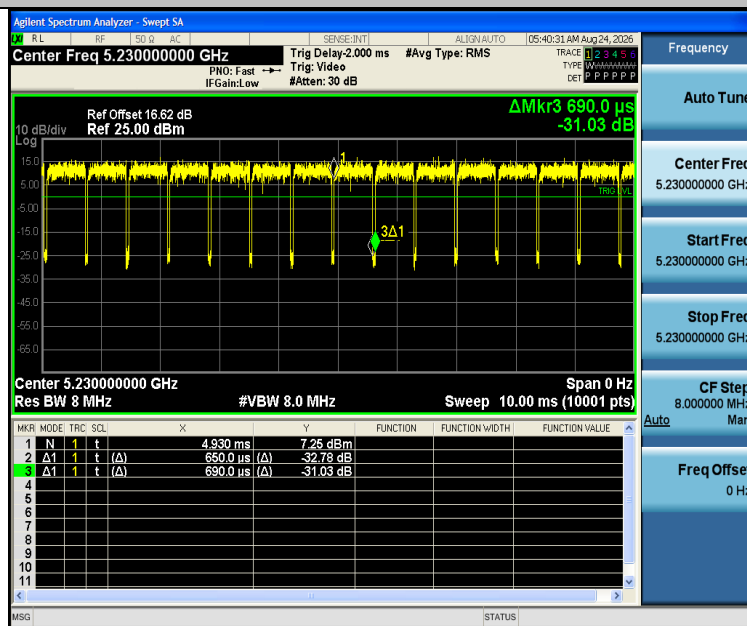
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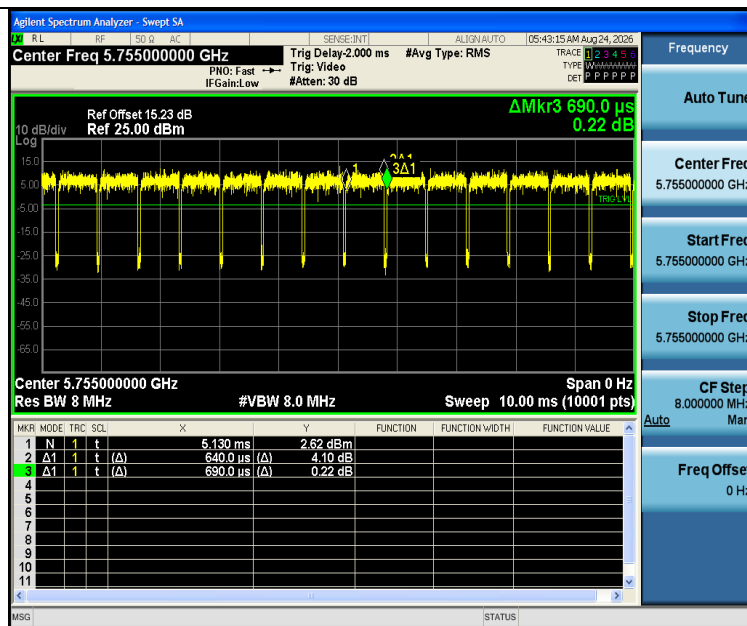
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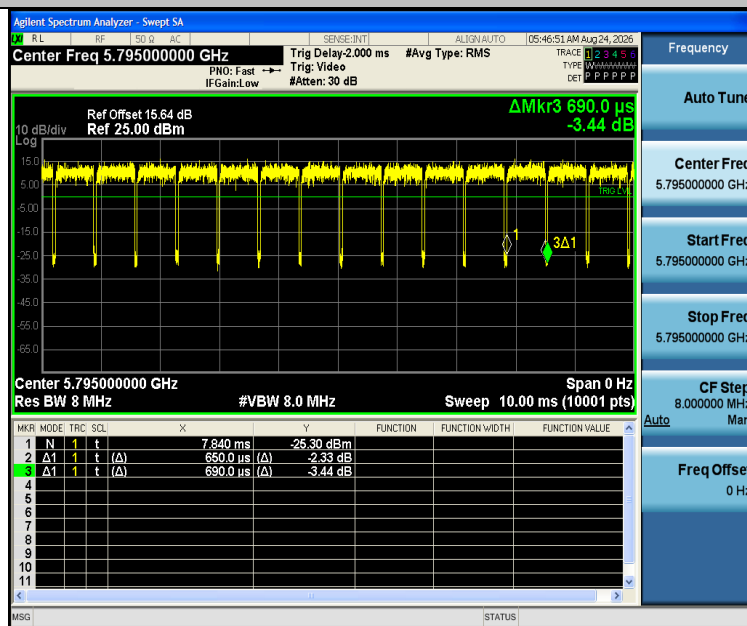
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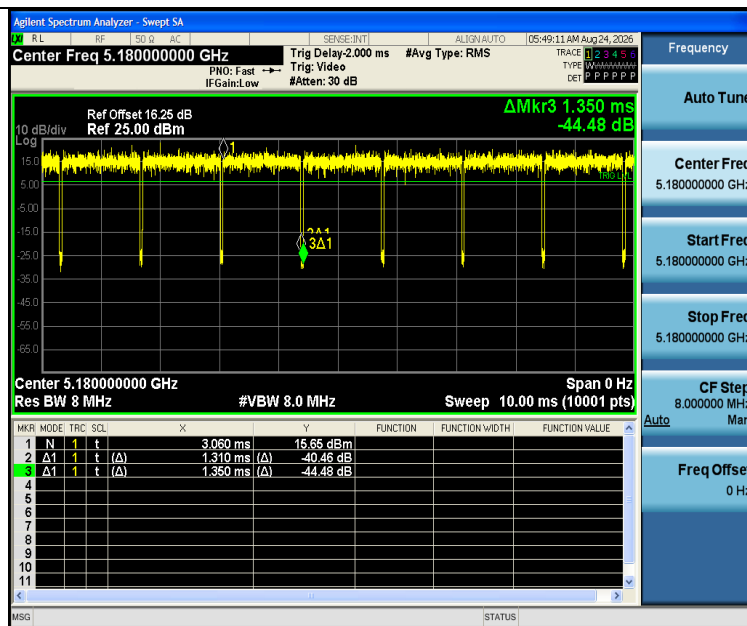
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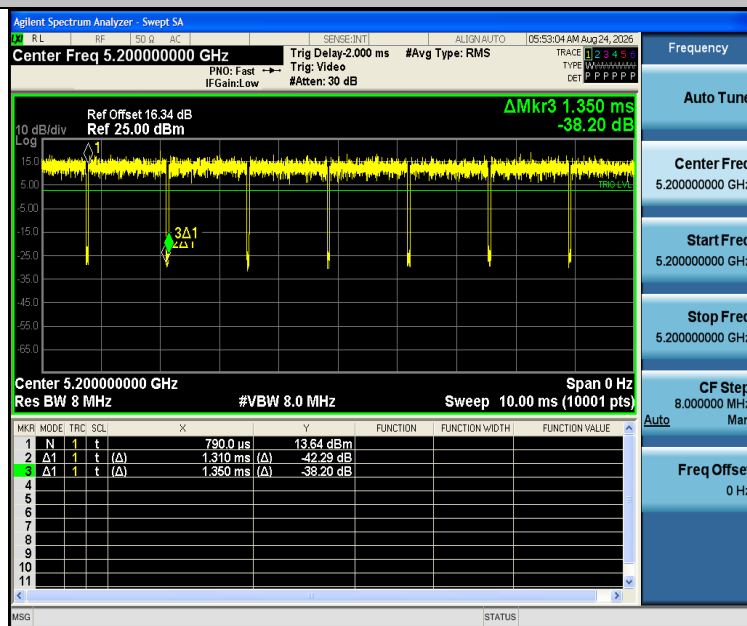
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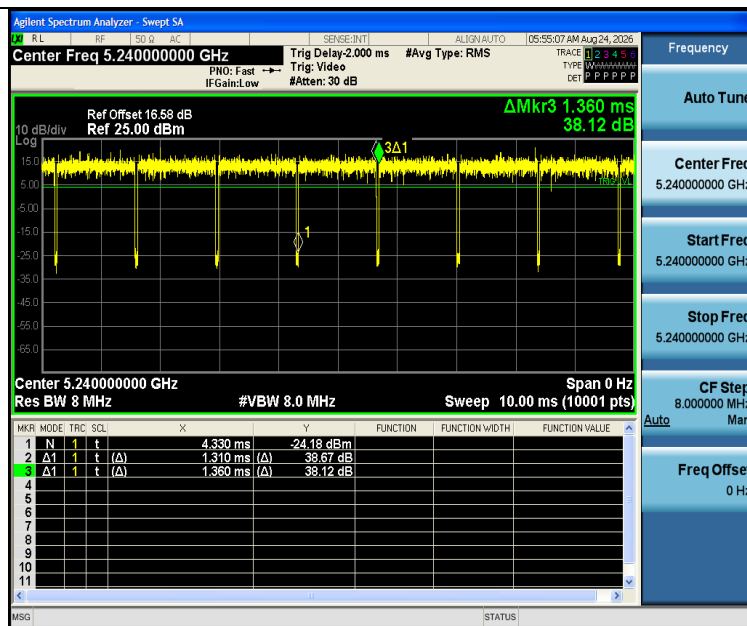
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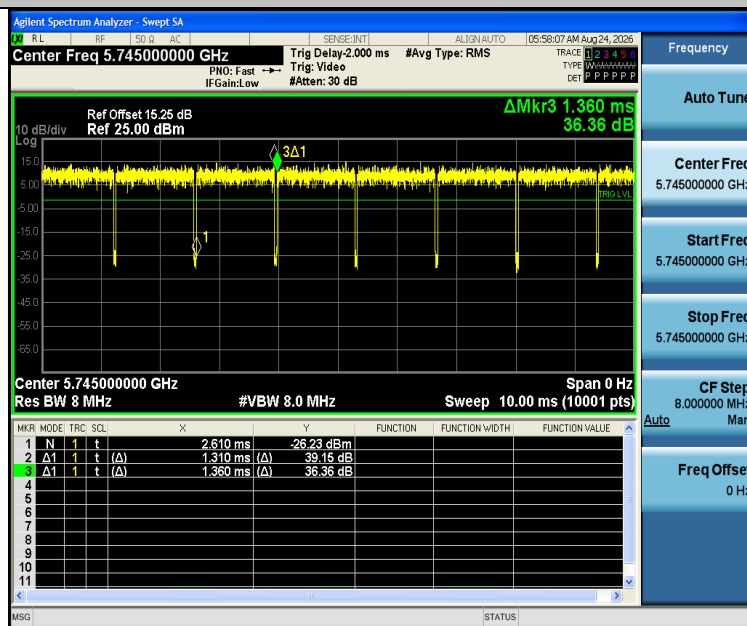
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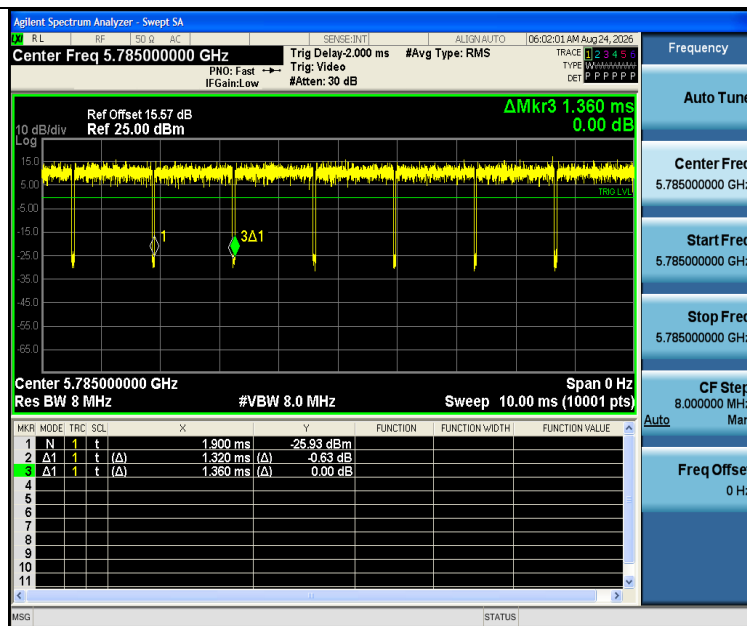
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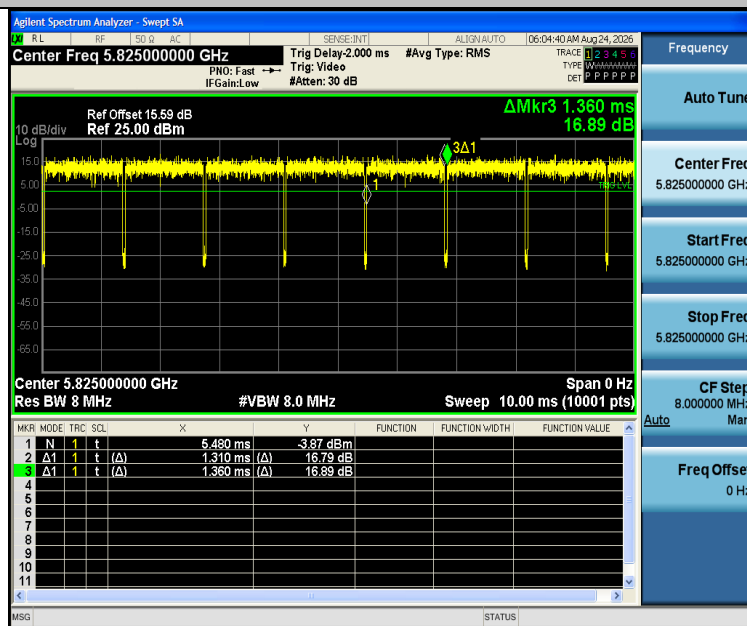
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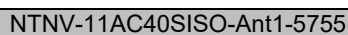
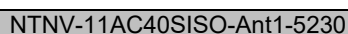
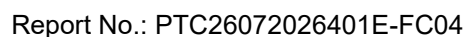
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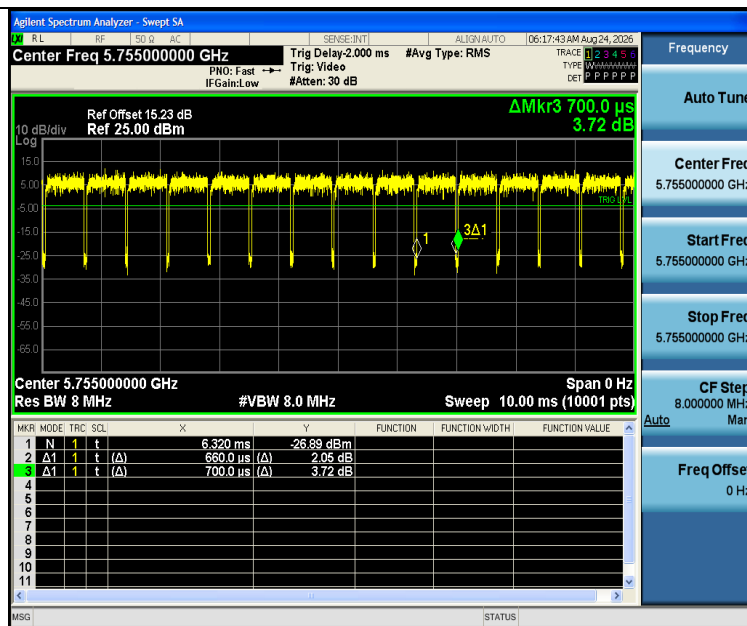


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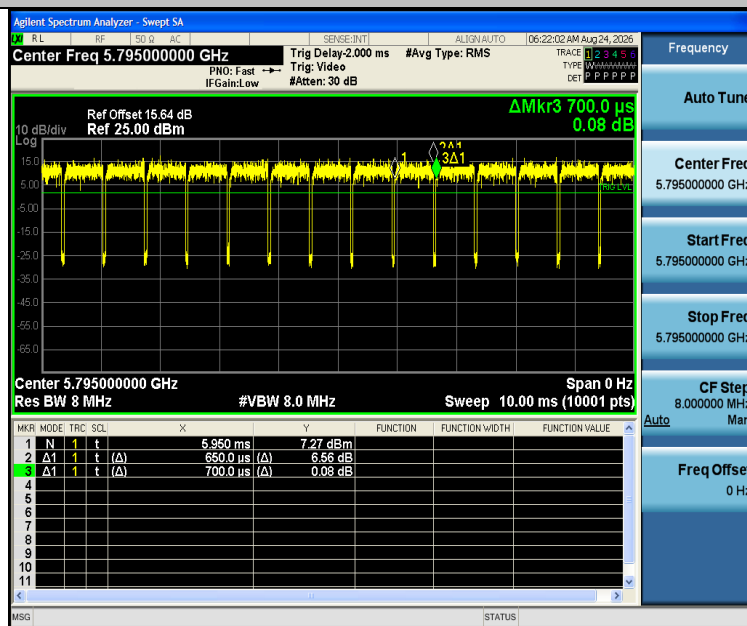


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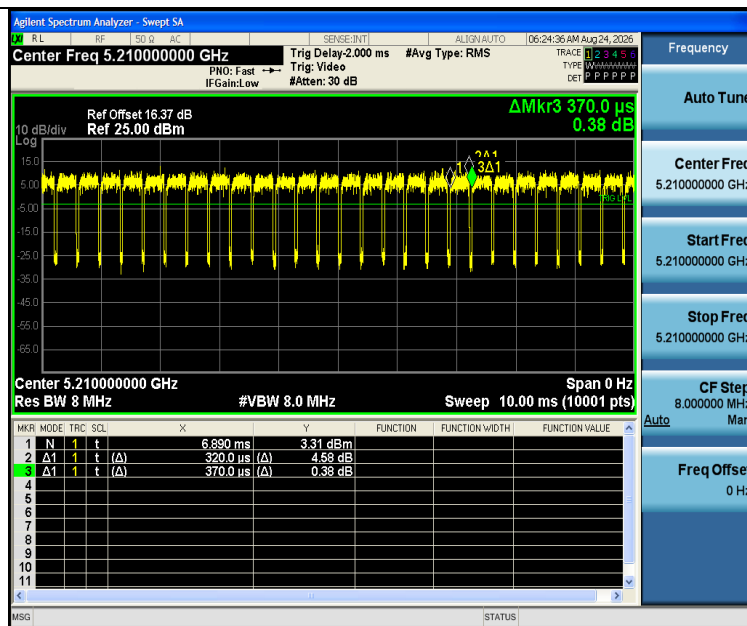




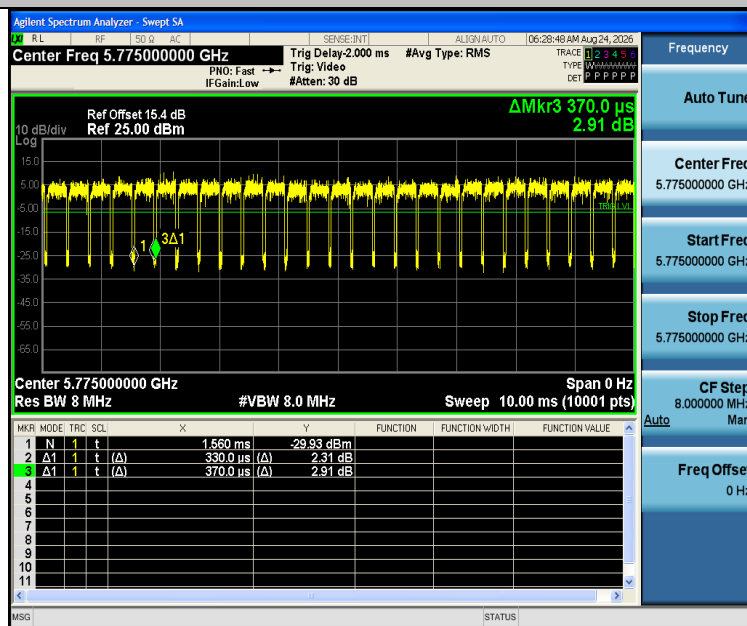
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NTNV-11AC80SISO-Ant1-5210



NTNV-11AC80SISO-Ant1-5775



3.3 Test Site

Precise Testing & Certification Co., Ltd



Report No.: PTC26072026401E-FC04

Address: Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China

FCC Registration Number: 790290

A2LA Certificate No.: 4408.01

IC Registration Number: 12191A

FCC Designation Number: CN1219



4 Equipment During Test

4.1 Equipments List

RF Conducted Test

Name of Equipment	Manufacturer	Model	Serial No.	Characteristics	Last Calibration	Calibration Interval
MXG Signal Analyzer	Agilent	N9020A	SER MY5111038	10Hz-26.5GHz	Aug. 10, 2026	1 Year
Coaxial Cable	CDS	79254	46107086	10Hz-30GHz	Aug. 10, 2026	1 Year
Power Meter	Anritsu	ML2495A	0949003	300MHz-40GHz	Aug. 10, 2026	1 Year
Power Sensor	Anritsu	MA2411B	0917017	300MHz-40GHz	Aug. 10, 2026	1 Year
DC power Supply	Agilent	E3642A	MY52420017	0-8V,5A/0-20 ,2.5A	Aug. 10, 2026	1 Year
Humidity Chamber	AISRY	ASR-HW2-1000	20230926003	-40°C-150°C	Feb. 22,2026	1Year
Test S/W	Tonscend	JS1120-3	/	/	/	/

Remark: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

Name of Equipment	Manufacturer	Model	Serial No.	Characteristics	Last Calibration	Calibration Interval
EMI Test Receiver	Rohde&Schwarz	ESPI7	101671	9KHz-7GHz	Aug. 10, 2026	1 Year
Loop Antenna	Schwarzbeck	FMZB 1519	192	9 KHz -30MHz	Aug. 10, 2026	1 Year
Bilog Antenna	SCHWARZBECK	VULB9160	9160-3355	25MHz-2GHz	Sep.10, 2025	1 Year
Preamplifier (low frequency)	SCHWARZBECK	BBV 9475	9745-0013	1MHz-1GHz	Aug. 10, 2026	1 Year
Cable	IMRO	AK-9515E(9m)	Cable-L	9KHz-3GHz	Aug. 10, 2026	1 Year
Spectrum Analyzer	Rohde&Schwarz	FSV40	6625-01-588-5515	9KHz-40GHz	Aug. 10, 2026	1 Year



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Horn Antenna	SCHWARZBECK	9120D	9120D-1246	1GHz-18GHz	Aug. 10, 2026	1 Year
Power Amplifier	ZHINAN	ZN3380C	15002	1GHz-26.5GHz	Aug. 10, 2026	1 Year
Horn Antenna	SCHWARZBECK	BBHA 9170	9170-1066	15GHz-40GHz	Jun. 06, 2026	1 Year
Amplifier	SCHWARZBECK	BBV 9721	9721-205	18GHz-40GHz	Jun. 04, 2026	1 Year
Cable	H+S	CBL-26	N/A	1GHz-26.5GHz	Aug. 10, 2026	1 Year
RF Cable	R&S	R204	R21X	1GHz-40GHz	Aug. 10, 2026	1 Year
Test S/W	Tonscend	TS+	/	/	/	/

Conducted Emissions

Name of Equipment	Manufacturer	Model	Serial No.	Characteristics	Calibration Date	Calibration Interval
EMI Test Receiver	Rohde&Schwarz	ESCI	101417	9KHz-3GHz	Aug. 10, 2026	1 Year
Artificial Mains Network	Rohde&Schwarz	ENV216	102453	9KHz-300MHz	Aug. 10, 2026	1 Year
Artificial Mains Network	Rohde&Schwarz	ENV216	101342	9KHz-300MHz	Aug. 10, 2026	1 Year
Limiter	R&S	ESH3-Z2	0357.8810.54-102808-NB	0Hz-30MHz	Aug. 10, 2026	1 Year
RF Switch	DIAMOND ANTENNA	CX-210	/	0.09MHz-6GHz	Mar. 21,2026	1 Year
Test S/W	Tonscend	JS32-CE	/	/	/	/



4.2 Measurement Uncertainty

Parameter	Uncertainty
RF output power, conducted	$\pm 1.0\text{dB}$
Power Spectral Density, conducted	$\pm 2.2\text{dB}$
Radio Frequency	$\pm 1 \times 10^{-6}$
Bandwidth	$\pm 1.5 \times 10^{-6}$
Time	$\pm 2\%$
Duty Cycle	$\pm 2\%$
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$
DC and low frequency voltages	$\pm 3\%$
Conducted Emissions (150kHz~30MHz)	$\pm 3.64\text{dB}$
Radiated Emission(9kHz~30MHz)	$\pm 3.15\text{dB}$
Radiated Emission(30MHz~1GHz)	$\pm 5.03\text{dB}$
Radiated Emission(1GHz~18GHz)	$\pm 4.74\text{dB}$
Radiated Emission(18GHz~40GHz)	$\pm 3.20\text{dB}$



Report No.: PTC26072026401E-FC04

4.3 Description of Support Units

Equipment	Model No.	Series No.	Parameters
N/A	N/A	N/A	N/A

5 Conducted Emission

Test Requirement:	: FCC CFR 47 Part 15 Section 15.207
Test Method	: ANSI C63.10-2020
Test Result	: PASS
Frequency Range	: 150kHz to 30MHz
Class/Severity	: Class B

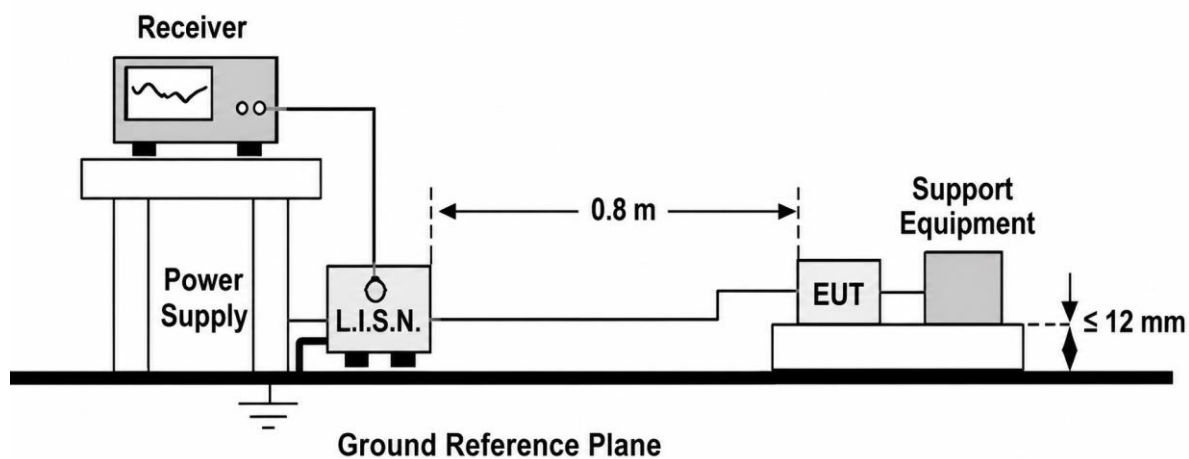
5.1 E.U.T. Operation

Operating Environment :

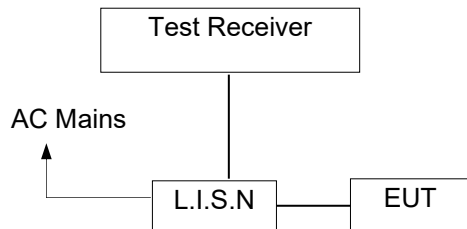
Temperature	: 23.9 °C
Humidity	: 51.4 % RH
Atmospheric Pressure	: 101.21kPa

5.2 EUT Setup

The conducted emission tests were performed using the setup accordance with the ANSI C63.10-2020.



5.3 Test SET-UP (Block Diagram of Configuration)



5.4 Measurement Procedure

1. The EUT was placed on a table, which is $\leq 12\text{mm}$ above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured was complete.

5.5 Conducted Emission Limit

Conducted Emission

Frequency(MHz)	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.

5.6 Measurement Description

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

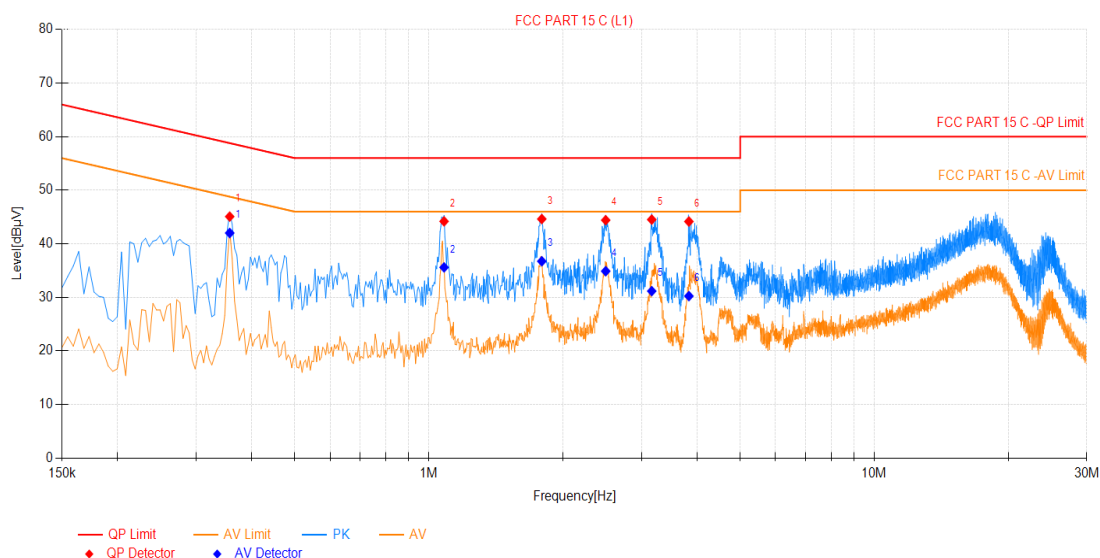
5.7 Conducted Emission Test Result

Pass.

All the modulation modes were tested the data of the worst mode (AC 120V/60Hz, TX 5180MHz) are recorded in the following pages and the others modulation methods do not exceed the limits.



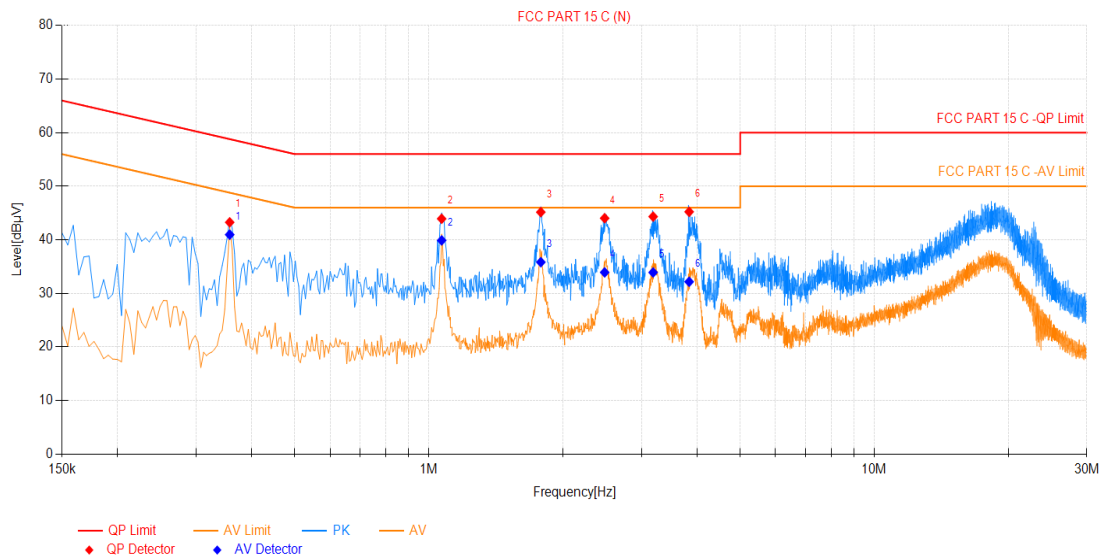
Line-AC 120V/60Hz



Final Data List											
NO.	Freq. [MHz]	QP Reading	Factor [dB]	QP Value	QP Limit	QP Margin	AV Reading	AV Value	AV Limit	AV Margin	Verdict
1	0.357	25.67	19.41	45.08	58.80	13.72	22.61	42.02	48.80	6.78	PASS
2	1.082	24.72	19.48	44.20	56.00	11.80	16.12	35.60	46.00	10.40	PASS
3	1.793	25.14	19.49	44.63	56.00	11.37	17.26	36.75	46.00	9.25	PASS
4	2.495	25.02	19.39	44.41	56.00	11.59	15.50	34.89	46.00	11.11	PASS
5	3.165	25.02	19.50	44.52	56.00	11.48	11.67	31.17	46.00	14.83	PASS
6	3.836	24.70	19.47	44.17	56.00	11.83	10.78	30.25	46.00	15.75	PASS



Neutral-AC 120V/60Hz



Final Data List											
NO.	Freq. [MHz]	QP Reading	Factor [dB]	QP Value	QP Limit	QP Margin	AV Reading	AV Value	AV Limit	AV Margin	Verdict
1	0.357	23.87	19.40	43.27	58.80	15.53	21.56	40.96	48.80	7.84	PASS
2	1.068	24.51	19.42	43.93	56.00	12.07	20.47	39.89	46.00	6.11	PASS
3	1.784	25.74	19.43	45.17	56.00	10.83	16.40	35.83	46.00	10.17	PASS
4	2.481	24.59	19.44	44.03	56.00	11.97	14.48	33.92	46.00	12.08	PASS
5	3.188	24.88	19.45	44.33	56.00	11.67	14.46	33.91	46.00	12.09	PASS
6	3.840	25.76	19.47	45.23	56.00	10.77	12.70	32.17	46.00	13.83	PASS

Note: QP Margin[dB]= QP Limit[dBμV]- QP Value[dBμV], AV Margin[dB]= AV Limit[dBμV]- AV Value[dBμV].



6 Radiated Spurious Emissions

Test Requirement	:	FCC CFR47 Part 15 Section 15.209 & 15.407(b)
Test Method	:	ANSI C63.10-2020
Test Result	:	PASS
Measurement Distance	:	3m

Limit

(1) 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.

(2) 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.

(3) 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.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) 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.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

(5) 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.

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

Further.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits. As per FCC §15.35(d): Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1MHz



As per FCC §15.209(a): Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Dist	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log^{(24000/F(\text{kHz}))} + 40$
1.705 ~ 30	30	30	$100 * 30$	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

6.1 EUT Operation

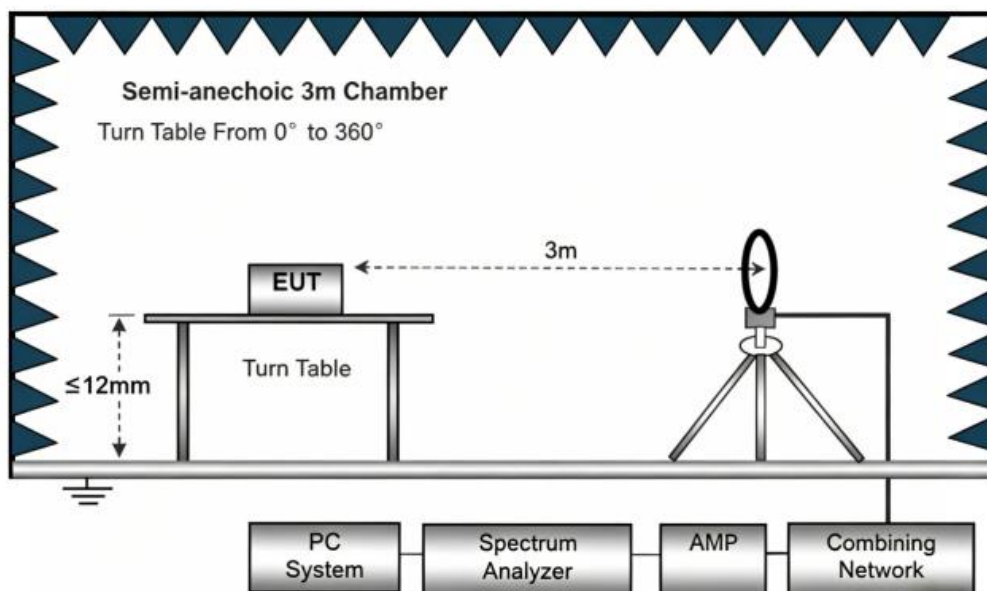
Operating Environment :

Temperature:	:	24.5 °C
Humidity:	:	52 % RH
Atmospheric Pressure:	:	101.3kPa
Test Voltage	:	AC 120V 60Hz

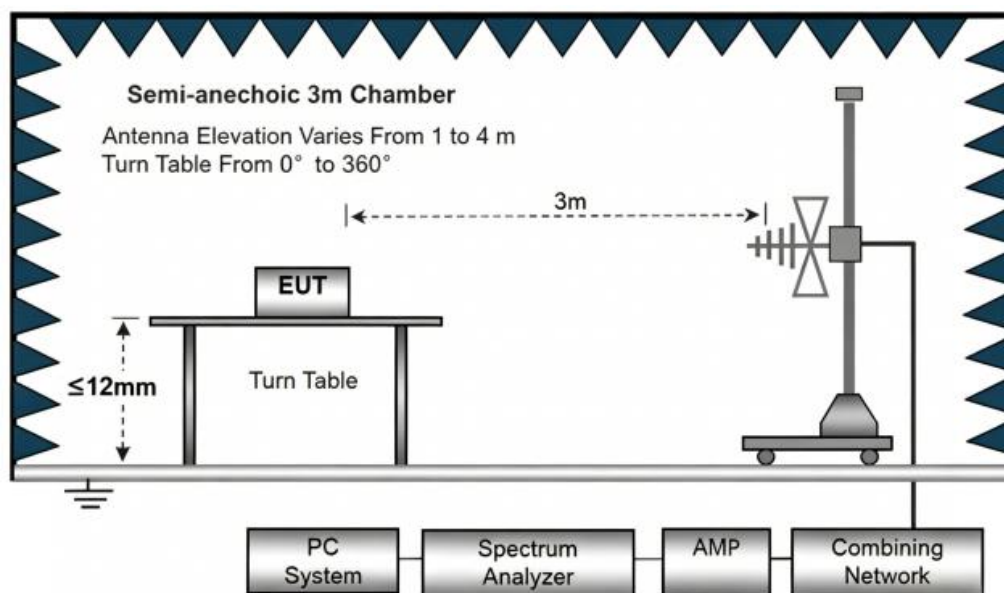
6.2 Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site

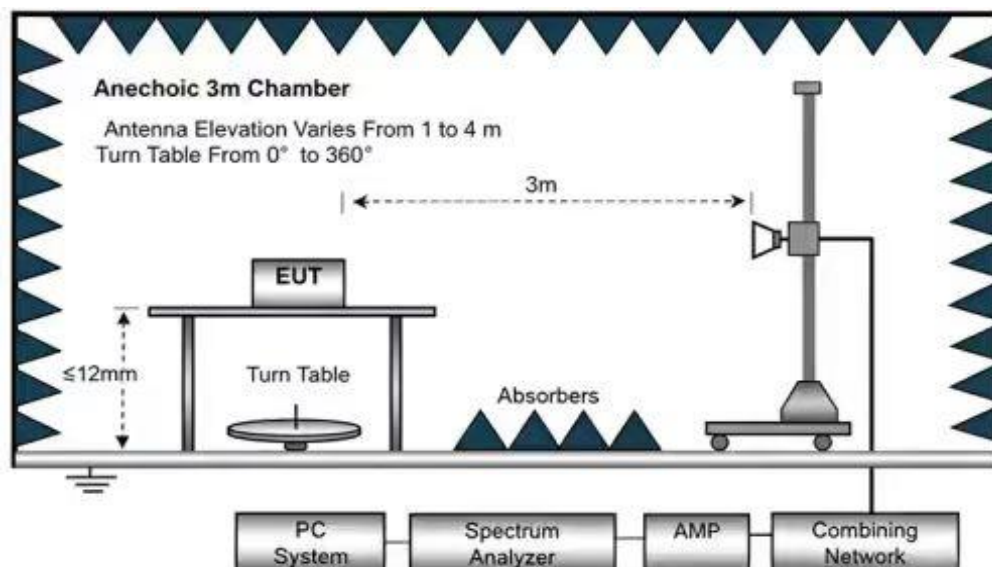
The test setup for emission measurement below 30MHz



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz



6.3 Spectrum Analyzer Setup

	Frequency	Detector	RBW	VBW	Remark
Receiver Setup	Below 30MHz	--	10kHz	10kHz	--
	30MHz ~ 1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		RMS	1MHz	3MHz	Average Value



6.4 Test Procedure

1. Below 1000MHz, The EUT was placed on a turn table which is $\leq 12\text{mm}$ above ground plane, And above 1000MHz, The EUT was placed on a styrofoam table which is $\leq 12\text{mm}$ above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions. The spectrum was investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The radiation measurements are tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position. So the data shown was the X position only.
8. The test above 1GHz must be use the fully anechoic room, and the test below 1GHz use the half anechoic room



6.5 Summary of Test Results

Test Frequency: 9KHz-30MHz

Note:

The amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

Distance extrapolation factor = $40\log(\text{Specific distance} / \text{test distance})$ (dB);

Limit line = Specific limits (dBuV) + distance extrapolation factor.

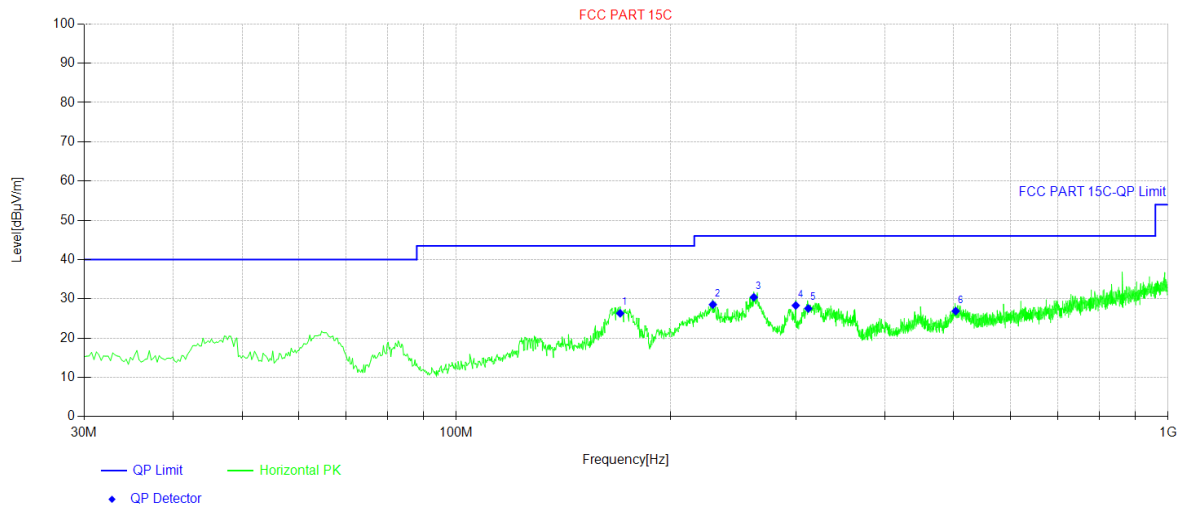
Test Frequency: 30MHz ~ 1GHz

All the modulation modes were tested the data of the worst mode (TX 802.11a Channel 36) are recorded in the following pages and the others modulation methods do not exceed the limits.

Please refer to the following test plots:



Antenna Polarization: Horizontal(CH36)



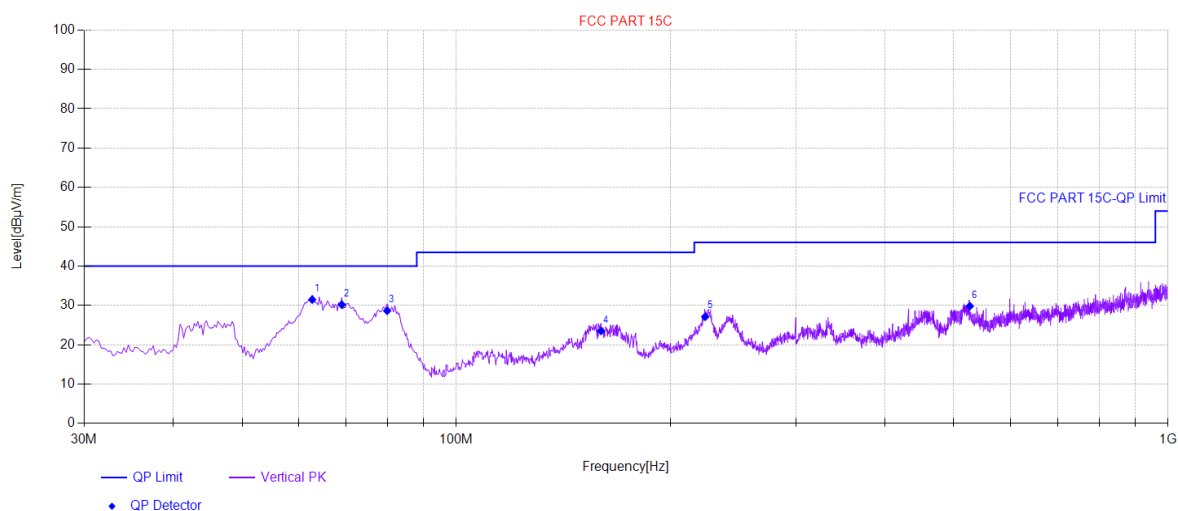
Final Data List[QP]

NO.	Freq. [MHz]	QP Reading [dBμV/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Polarity	Verdict
1	169.92	34.51	-8.19	26.32	43.50	17.18	Horizontal	PASS
2	229.34	37.49	-8.95	28.54	46.00	17.46	Horizontal	PASS
3	261.83	38.24	-7.83	30.41	46.00	15.59	Horizontal	PASS
4	299.90	34.7	-6.38	28.32	46.00	17.68	Horizontal	PASS
5	312.27	33.63	-6.08	27.55	46.00	18.45	Horizontal	PASS
6	503.12	27.95	-1.06	26.89	46.00	19.11	Horizontal	PASS

Remark:Emission Level=Reading+Cable Loss+ANT Factor-AMP Factor



Antenna Polarization: Vertical (CH36)



Final Data List[QP]

NO.	Freq. [MHz]	QP Reading [dBμV/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Polarity	Verdict
1	62.74	42.85	-11.39	31.46	40.00	8.54	Vertical	PASS
2	69.04	42.74	-12.53	30.21	40.00	9.79	Vertical	PASS
3	79.96	43.78	-15.15	28.63	40.00	11.37	Vertical	PASS
4	159.74	31.37	-7.85	23.52	43.50	19.98	Vertical	PASS
5	223.76	36.46	-9.33	27.13	46.00	18.87	Vertical	PASS
6	526.64	30.67	-0.84	29.83	46.00	16.17	Vertical	PASS

Remark: Emission Level = Reading + Cable Loss + ANT Factor - AMP Factor
 Note: only the worst case recorded in the report.



Test Frequency: From 1GHz to 40GHz

Pre-scan all test modes

Only the worst case Main test data.

802.11a

Test Mode: 5180					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10360	47.51	38.98	5.36	31.25	60.60	68.23	-7.63	V
15540	41.91	39.58	7.85	30.63	58.71	68.23	-9.52	V
20720	43.04	37.92	8.56	34.95	54.57	68.23	-13.66	V
10360	48.45	38.98	5.36	31.25	61.54	68.23	-6.69	H
15540	42.70	39.58	7.85	30.63	59.50	68.23	-8.73	H
20720	42.75	37.92	8.56	34.95	54.28	68.23	-13.95	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10360	32.88	38.98	5.36	31.25	45.97	54	-8.03	V
15540	30.57	39.58	7.85	30.63	47.37	54	-6.63	V
20720	27.80	37.92	8.56	34.95	39.33	54	-14.67	V
10360	32.34	38.98	5.36	31.25	45.43	54	-8.57	H
15540	24.41	39.58	7.85	30.63	41.21	54	-12.79	H
20720	27.08	37.92	8.56	34.95	38.61	54	-15.39	H



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Test Mode:5200					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10400	47.76	39.10	5.36	31.25	60.97	68.23	-7.26	V
15600	43.59	39.70	7.85	30.63	60.51	68.23	-7.72	V
20800	44.49	37.84	8.56	34.95	55.94	68.23	-12.29	V
10400	47.08	39.10	5.36	31.25	60.29	68.23	-7.94	H
15600	42.22	39.70	7.85	30.63	59.14	68.23	-9.09	H
20800	43.64	37.84	8.56	34.95	55.09	68.23	-13.14	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10400	33.94	39.10	5.36	31.25	47.15	54	-6.85	V
15600	29.08	39.70	7.85	30.63	46.00	54	-8.00	V
20800	29.40	37.84	8.56	34.95	40.85	54	-13.15	V
10400	32.90	39.10	5.36	31.25	46.11	54	-7.89	H
15600	28.93	39.70	7.85	30.63	45.85	54	-8.15	H
20800	29.83	37.84	8.56	34.95	41.28	54	-12.72	H



802.11a

Test Mode:5240					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10480	45.44	39.34	5.36	31.25	58.89	68.23	-9.34	V
17520	43.08	39.72	7.85	30.63	60.02	68.23	-8.21	V
20960	44.42	37.65	8.56	34.95	55.68	68.23	-12.55	V
10480	46.82	39.34	5.36	31.25	60.27	68.23	-7.96	H
17520	45.35	39.72	7.85	30.63	62.29	68.23	-5.94	H
20960	46.12	37.65	8.56	34.95	57.38	68.23	-10.85	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10480	33.22	39.34	5.36	31.25	46.67	54	-7.33	V
17520	28.69	39.72	7.85	30.63	45.63	54	-8.37	V
20960	30.25	37.65	8.56	34.95	41.51	54	-12.49	V
10480	32.09	39.34	5.36	31.25	45.54	54	-8.46	H
17520	27.24	39.72	7.85	30.63	44.18	54	-9.82	H
20960	29.21	37.65	8.56	34.95	40.47	54	-13.53	H



802.11a

Test Mode: 5745					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11490	47.79	39.65	5.42	31.75	61.11	68.23	-7.12	V
17235	41.95	41.28	7.32	30.96	59.59	68.23	-8.64	V
22980	44.07	37.12	8.85	35.25	54.79	68.23	-13.44	V
11490	49.45	39.65	5.42	31.75	62.77	68.23	-5.46	H
17235	43.99	41.28	7.32	30.96	61.63	68.23	-6.60	H
22980	44.59	37.12	8.85	35.25	55.31	68.23	-12.92	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11490	32.09	39.65	5.42	31.75	45.41	54	-8.59	V
17235	30.05	41.28	7.32	30.96	47.69	54	-6.31	V
22980	29.32	37.12	8.85	35.25	40.04	54	-13.96	V
11490	31.24	39.65	5.42	31.75	44.56	54	-9.44	H
17235	29.11	41.28	7.32	30.96	46.75	54	-7.25	H
22980	29.14	37.12	8.85	35.25	39.86	54	-14.14	H



802.11a

Test Mode:5785					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11570	48.43	39.84	5.42	31.75	61.94	68.23	-6.29	V
17355	44.09	42.02	7.32	30.96	62.47	68.23	-5.76	V
23140	45.03	37.32	8.85	35.25	55.95	68.23	-12.28	V
11570	48.68	39.84	5.42	31.75	62.19	68.23	-6.04	H
17355	42.04	42.02	7.32	30.96	60.42	68.23	-7.81	H
23140	43.57	37.32	8.85	35.25	54.49	68.23	-13.74	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11570	33.42	39.84	5.42	31.75	46.93	54	-7.07	V
17355	29.61	42.02	7.32	30.96	47.99	54	-6.01	V
23140	28.48	37.32	8.85	35.25	39.40	54	-14.60	V
11570	34.44	39.84	5.42	31.75	47.95	54	-6.05	H
17355	29.48	42.02	7.32	30.96	47.86	54	-6.14	H
23140	29.08	37.32	8.85	35.25	40.00	54	-14.00	H



802.11a

Test Mode:5825					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11650	48.55	39.80	5.42	31.75	62.02	68.23	-6.21	V
17475	44.30	42.13	7.32	30.96	62.79	68.23	-5.44	V
23300	45.45	37.60	8.85	35.25	56.65	68.23	-11.58	V
11650	49.28	39.80	5.42	31.75	62.75	68.23	-5.48	H
17475	44.12	42.13	7.32	30.96	62.61	68.23	-5.62	H
23300	45.19	37.60	8.85	35.25	56.39	68.23	-11.84	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11650	34.31	39.80	5.42	31.75	47.78	54	-6.22	V
17475	28.73	42.13	7.32	30.96	47.22	54	-6.78	V
23300	29.74	37.60	8.85	35.25	40.94	54	-13.06	V
11650	33.63	39.80	5.42	31.75	47.10	54	-6.90	H
17475	28.74	42.13	7.32	30.96	47.23	54	-6.77	H
23300	28.22	37.60	8.85	35.25	39.42	54	-14.58	H



802.11n20

Test Mode: 5180					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10360	47.36	39.04	5.42	31.75	60.07	68.23	-8.16	V
15540	44.24	39.64	7.32	30.96	60.24	68.23	-7.99	V
20720	45.03	37.89	8.85	35.25	56.52	68.23	-11.71	V
10360	49.40	39.04	5.42	31.75	62.11	68.23	-6.12	H
15540	44.94	39.64	7.32	30.96	60.94	68.23	-7.29	H
20720	45.10	37.89	8.85	35.25	56.59	68.23	-11.64	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10360	35.48	39.04	5.42	31.75	48.19	54	-5.81	V
15540	28.88	39.64	7.32	30.96	44.88	54	-9.12	V
20720	28.02	37.89	8.85	35.25	39.51	54	-14.49	V
10360	32.86	39.04	5.42	31.75	45.57	54	-8.43	H
15540	28.65	39.64	7.32	30.96	44.65	54	-9.35	H
20720	28.93	37.89	8.85	35.25	40.42	54	-13.58	H



802.11n20

Test Mode:5200					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10400	47.47	39.28	5.42	31.75	60.42	68.23	-7.81	V
15600	44.40	39.79	7.32	30.96	60.55	68.23	-7.68	V
20800	45.36	37.70	8.85	35.25	56.66	68.23	-11.57	V
10400	49.19	39.28	5.42	31.75	62.14	68.23	-6.09	H
15600	44.67	39.79	7.32	30.96	60.82	68.23	-7.41	H
20800	45.03	37.70	8.85	35.25	56.33	68.23	-11.90	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10400	35.40	39.28	5.42	31.75	48.35	54	-5.65	V
15600	28.96	39.79	7.32	30.96	45.11	54	-8.89	V
20800	27.93	37.70	8.85	35.25	39.23	54	-14.77	V
10400	33.30	39.28	5.42	31.75	46.25	54	-7.75	H
15600	28.82	39.79	7.32	30.96	44.97	54	-9.03	H
20800	29.07	37.70	8.85	35.25	40.37	54	-13.63	H



802.11n20

Test Mode:5240					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10480	49.58	39.72	5.42	31.75	62.97	68.23	-5.26	V
17520	42.36	41.52	7.32	30.96	60.24	68.23	-7.99	V
20960	43.36	37.13	8.85	35.25	54.09	68.23	-14.14	V
10480	49.53	39.72	5.42	31.75	62.92	68.23	-5.31	H
17520	44.34	41.52	7.32	30.96	62.22	68.23	-6.01	H
20960	44.85	37.13	8.85	35.25	55.58	68.23	-12.65	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10480	33.40	39.72	5.42	31.75	46.79	54	-7.21	V
17520	30.13	41.52	7.32	30.96	48.01	54	-5.99	V
20960	29.85	37.13	8.85	35.25	40.58	54	-13.42	V
10480	33.01	39.72	5.42	31.75	46.40	54	-7.60	H
17520	28.30	41.52	7.32	30.96	46.18	54	-7.82	H
20960	29.27	37.13	8.85	35.25	40.00	54	-14.00	H



802.11n20

Test Mode: 5745					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11490	45.57	39.88	5.42	31.75	59.12	68.23	-9.11	V
17235	44.37	42.14	7.32	30.96	62.87	68.23	-5.36	V
22980	45.29	37.39	8.85	35.25	56.28	68.23	-11.95	V
11490	47.92	39.88	5.42	31.75	61.47	68.23	-6.76	H
17235	42.84	42.14	7.32	30.96	61.34	68.23	-6.89	H
22980	42.27	37.39	8.85	35.25	53.26	68.23	-14.97	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11490	33.75	39.88	5.42	31.75	47.30	54	-6.70	V
17235	30.39	42.14	7.32	30.96	48.89	54	-5.11	V
22980	29.21	37.39	8.85	35.25	40.20	54	-13.80	V
11490	33.63	39.88	5.42	31.75	47.18	54	-6.82	H
17235	29.69	42.14	7.32	30.96	48.19	54	-5.81	H
22980	29.46	37.39	8.85	35.25	40.45	54	-13.55	H



802.11n20

Test Mode:5785					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11570	48.34	39.16	5.36	31.25	61.61	68.23	-6.62	V
17355	44.02	39.73	7.85	30.63	60.97	68.23	-7.26	V
23140	45.14	37.79	8.56	34.95	56.54	68.23	-11.69	V
11570	47.89	39.16	5.36	31.25	61.16	68.23	-7.07	H
17355	43.34	39.73	7.85	30.63	60.29	68.23	-7.94	H
23140	43.98	37.79	8.56	34.95	55.38	68.23	-12.85	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11570	32.77	39.16	5.36	31.25	46.04	54	-7.96	V
17355	28.45	39.73	7.85	30.63	45.40	54	-8.60	V
23140	29.09	37.79	8.56	34.95	40.49	54	-13.51	V
11570	33.08	39.16	5.36	31.25	46.35	54	-7.65	H
17355	28.25	39.73	7.85	30.63	45.20	54	-8.80	H
23140	30.00	37.79	8.56	34.95	41.40	54	-12.60	H



802.11n20

Test Mode:5825					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11650	48.78	39.80	5.39	31.75	62.22	68.23	-6.01	V
17475	44.58	41.90	7.27	30.96	62.79	68.23	-5.44	V
23300	45.46	37.26	8.79	35.25	56.26	68.23	-11.97	V
11650	48.50	39.80	5.39	31.75	61.94	68.23	-6.29	H
17475	42.56	41.90	7.27	30.96	60.77	68.23	-7.46	H
23300	43.09	37.26	8.79	35.25	53.89	68.23	-14.34	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11650	33.27	39.80	5.39	31.75	46.71	54	-7.29	V
17475	29.43	41.90	7.27	30.96	47.64	54	-6.36	V
23300	28.48	37.26	8.79	35.25	39.28	54	-14.72	V
11650	34.85	39.80	5.39	31.75	48.29	54	-5.71	H
17475	29.47	41.90	7.27	30.96	47.68	54	-6.32	H
23300	29.42	37.26	8.79	35.25	40.22	54	-13.78	H



802.11n40

Test Mode:5190					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10380	48.34	39.16	5.36	31.25	61.61	68.23	-6.62	V
15570	44.02	39.73	7.85	30.63	60.97	68.23	-7.26	V
20760	45.14	37.79	8.56	34.95	56.54	68.23	-11.69	V
10380	47.89	39.16	5.36	31.25	61.16	68.23	-7.07	H
15570	43.34	39.73	7.85	30.63	60.29	68.23	-7.94	H
20760	43.98	37.79	8.56	34.95	55.38	68.23	-12.85	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10380	32.77	39.16	5.36	31.25	46.04	54	-7.96	V
15570	28.45	39.73	7.85	30.63	45.40	54	-8.60	V
20760	29.09	37.79	8.56	34.95	40.49	54	-13.51	V
10380	33.08	39.16	5.36	31.25	46.35	54	-7.65	H
15570	28.25	39.73	7.85	30.63	45.20	54	-8.80	H
20760	30.00	37.79	8.56	34.95	41.40	54	-12.60	H



802.11n40

Test Mode:5230					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10460	47.36	39.04	5.42	31.75	60.07	68.23	-8.16	V
15690	44.24	39.64	7.32	30.96	60.24	68.23	-7.99	V
20920	45.03	37.89	8.85	35.25	56.52	68.23	-11.71	V
10460	49.40	39.04	5.42	31.75	62.11	68.23	-6.12	H
15690	44.94	39.64	7.32	30.96	60.94	68.23	-7.29	H
20920	45.10	37.89	8.85	35.25	56.59	68.23	-11.64	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10460	35.48	39.04	5.42	31.75	48.19	54	-5.81	V
15690	28.88	39.64	7.32	30.96	44.88	54	-9.12	V
20920	28.02	37.89	8.85	35.25	39.51	54	-14.49	V
10460	32.86	39.04	5.42	31.75	45.57	54	-8.43	H
15690	28.65	39.64	7.32	30.96	44.65	54	-9.35	H
20920	28.93	37.89	8.85	35.25	40.42	54	-13.58	H



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Test Mode: 5755					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11510	47.36	39.04	5.42	31.75	60.07	68.23	-8.16	V
17265	44.24	39.64	7.32	30.96	60.24	68.23	-7.99	V
23020	45.03	37.89	8.85	35.25	56.52	68.23	-11.71	V
11510	49.40	39.04	5.42	31.75	62.11	68.23	-6.12	H
17265	44.94	39.64	7.32	30.96	60.94	68.23	-7.29	H
23020	45.10	37.89	8.85	35.25	56.59	68.23	-11.64	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11510	35.48	39.04	5.42	31.75	48.19	54	-5.81	V
17265	28.88	39.64	7.32	30.96	44.88	54	-9.12	V
23020	28.02	37.89	8.85	35.25	39.51	54	-14.49	V
11510	32.86	39.04	5.42	31.75	45.57	54	-8.43	H
17265	28.65	39.64	7.32	30.96	44.65	54	-9.35	H
23020	28.93	37.89	8.85	35.25	40.42	54	-13.58	H



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Test Mode: 5795					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11590	47.47	39.28	5.42	31.75	60.42	68.23	-7.81	V
17385	44.40	39.79	7.32	30.96	60.55	68.23	-7.68	V
23180	45.36	37.70	8.85	35.25	56.66	68.23	-11.57	V
11590	49.19	39.28	5.42	31.75	62.14	68.23	-6.09	H
17385	44.67	39.79	7.32	30.96	60.82	68.23	-7.41	H
23180	45.03	37.70	8.85	35.25	56.33	68.23	-11.90	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11590	35.40	39.28	5.42	31.75	48.35	54	-5.65	V
17385	28.96	39.79	7.32	30.96	45.11	54	-8.89	V
23180	27.93	37.70	8.85	35.25	39.23	54	-14.77	V
11590	33.30	39.28	5.42	31.75	46.25	54	-7.75	H
17385	28.82	39.79	7.32	30.96	44.97	54	-9.03	H
23180	29.07	37.70	8.85	35.25	40.37	54	-13.63	H



802.11ac20

Test Mode: 5180					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10360	49.58	39.72	5.42	31.75	62.97	68.23	-5.26	V
15540	42.36	41.52	7.32	30.96	60.24	68.23	-7.99	V
20720	43.36	37.13	8.85	35.25	54.09	68.23	-14.14	V
10360	49.53	39.72	5.42	31.75	62.92	68.23	-5.31	H
15540	44.34	41.52	7.32	30.96	62.22	68.23	-6.01	H
20720	44.85	37.13	8.85	35.25	55.58	68.23	-12.65	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10360	32.91	38.98	5.36	31.25	46.00	54	-8.00	V
15540	30.11	39.58	7.85	30.63	46.91	54	-7.09	V
20720	27.81	37.92	8.56	34.95	39.34	54	-14.66	V
10360	32.74	38.98	5.36	31.25	45.83	54	-8.17	H
15540	24.53	39.58	7.85	30.63	41.33	54	-12.67	H
20720	26.97	37.92	8.56	34.95	38.50	54	-15.50	H



802.11ac20

Test Mode:5200					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10400	47.65	39.10	5.36	31.25	60.86	68.23	-7.37	V
15600	43.24	39.70	7.85	30.63	60.16	68.23	-8.07	V
20800	44.43	37.84	8.56	34.95	55.88	68.23	-12.35	V
10400	47.05	39.10	5.36	31.25	60.26	68.23	-7.97	H
15600	42.15	39.70	7.85	30.63	59.07	68.23	-9.16	H
20800	43.37	37.84	8.56	34.95	54.82	68.23	-13.41	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10400	33.71	39.10	5.36	31.25	46.92	54	-7.08	V
15600	28.96	39.70	7.85	30.63	45.88	54	-8.12	V
20800	29.71	37.84	8.56	34.95	41.16	54	-12.84	V
10400	33.32	39.10	5.36	31.25	46.53	54	-7.47	H
15600	29.29	39.70	7.85	30.63	46.21	54	-7.79	H
20800	29.92	37.84	8.56	34.95	41.37	54	-12.63	H



802.11ac20

Test Mode:5240					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10480	45.83	39.34	5.36	31.25	59.28	68.23	-8.95	V
17520	43.58	39.72	7.85	30.63	60.52	68.23	-7.71	V
20960	43.89	37.65	8.56	34.95	55.15	68.23	-13.08	V
10480	47.13	39.34	5.36	31.25	60.58	68.23	-7.65	H
17520	45.11	39.72	7.85	30.63	62.05	68.23	-6.18	H
20960	46.20	37.65	8.56	34.95	57.46	68.23	-10.77	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10480	33.47	39.34	5.36	31.25	46.92	54	-7.08	V
17520	28.85	39.72	7.85	30.63	45.79	54	-8.21	V
20960	29.82	37.65	8.56	34.95	41.08	54	-12.92	V
10480	32.49	39.34	5.36	31.25	45.94	54	-8.06	H
17520	26.98	39.72	7.85	30.63	43.92	54	-10.08	H
20960	29.13	37.65	8.56	34.95	40.39	54	-13.61	H



802.11ac20

Test Mode: 5745					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11490	47.70	39.65	5.42	31.75	61.02	68.23	-7.21	V
17235	42.17	41.28	7.32	30.96	59.81	68.23	-8.42	V
22980	43.90	37.12	8.85	35.25	54.62	68.23	-13.61	V
11490	49.54	39.65	5.42	31.75	62.86	68.23	-5.37	H
17235	44.48	41.28	7.32	30.96	62.12	68.23	-6.11	H
22980	44.46	37.12	8.85	35.25	55.18	68.23	-13.05	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11490	32.35	39.65	5.42	31.75	45.67	54	-8.33	V
17235	30.23	41.28	7.32	30.96	47.87	54	-6.13	V
22980	29.36	37.12	8.85	35.25	40.08	54	-13.92	V
11490	31.78	39.65	5.42	31.75	45.10	54	-8.90	H
17235	28.69	41.28	7.32	30.96	46.33	54	-7.67	H
22980	29.19	37.12	8.85	35.25	39.91	54	-14.09	H



802.11ac20

Test Mode:5785					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11570	48.51	39.84	5.42	31.75	62.02	68.23	-6.21	V
17355	44.43	42.02	7.32	30.96	62.81	68.23	-5.42	V
23140	45.01	37.32	8.85	35.25	55.93	68.23	-12.30	V
11570	48.67	39.84	5.42	31.75	62.18	68.23	-6.05	H
17355	42.48	42.02	7.32	30.96	60.86	68.23	-7.37	H
23140	43.06	37.32	8.85	35.25	53.98	68.23	-14.25	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11570	33.24	39.84	5.42	31.75	46.75	54	-7.25	V
17355	29.35	42.02	7.32	30.96	47.73	54	-6.27	V
23140	28.26	37.32	8.85	35.25	39.18	54	-14.82	V
11570	34.49	39.84	5.42	31.75	48.00	54	-6.00	H
17355	29.27	42.02	7.32	30.96	47.65	54	-6.35	H
23140	29.38	37.32	8.85	35.25	40.30	54	-13.70	H



802.11ac20

Test Mode:5825					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11650	48.33	39.80	5.42	31.75	61.80	68.23	-6.43	V
17475	44.26	42.13	7.32	30.96	62.75	68.23	-5.48	V
23300	45.57	37.60	8.85	35.25	56.77	68.23	-11.46	V
11650	49.55	39.80	5.42	31.75	63.02	68.23	-5.21	H
17475	44.56	42.13	7.32	30.96	63.05	68.23	-5.18	H
23300	44.96	37.60	8.85	35.25	56.16	68.23	-12.07	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11650	34.58	35.26	5.42	31.75	43.51	54	-10.49	V
17475	28.81	36.88	7.32	30.96	42.05	54	-11.95	V
23300	29.92	39.14	8.85	35.25	42.66	54	-11.34	V
11650	33.58	34.21	5.42	31.75	41.46	54	-12.54	H
17475	28.65	37.52	7.32	30.96	42.53	54	-11.47	H
23300	28.36	37.60	8.85	35.25	39.56	54	-14.44	H



802.11ac40

Test Mode:5190					Test channel:LOW			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10380	49.58	39.72	5.42	31.75	62.97	68.23	-5.26	V
15570	42.36	41.52	7.32	30.96	60.24	68.23	-7.99	V
20760	43.36	37.13	8.85	35.25	54.09	68.23	-14.14	V
10380	49.53	39.72	5.42	31.75	62.92	68.23	-5.31	H
15570	44.34	41.52	7.32	30.96	62.22	68.23	-6.01	H
20760	44.85	37.13	8.85	35.25	55.58	68.23	-12.65	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10380	33.75	39.88	5.42	31.75	47.30	54	-6.70	V
15570	30.39	42.14	7.32	30.96	48.89	54	-5.11	V
20760	29.21	37.39	8.85	35.25	40.20	54	-13.80	V
10380	33.63	39.88	5.42	31.75	47.18	54	-6.82	H
15570	29.69	42.14	7.32	30.96	48.19	54	-5.81	H
20760	29.46	37.39	8.85	35.25	40.45	54	-13.55	H



802.11ac40

Test Mode:5230					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10460	47.43	39.28	5.42	31.75	60.38	68.23	-7.85	V
15690	44.69	39.79	7.32	30.96	60.84	68.23	-7.39	V
20920	44.89	37.70	8.85	35.25	56.19	68.23	-12.04	V
10460	49.44	39.28	5.42	31.75	62.39	68.23	-5.84	H
15690	44.45	39.79	7.32	30.96	60.60	68.23	-7.63	H
20920	45.45	37.70	8.85	35.25	56.75	68.23	-11.48	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10460	35.75	39.28	5.42	31.75	48.70	54	-5.30	V
15690	29.13	39.79	7.32	30.96	45.28	54	-8.72	V
20920	27.96	37.70	8.85	35.25	39.26	54	-14.74	V
10460	33.36	39.28	5.42	31.75	46.31	54	-7.69	H
15690	28.41	39.79	7.32	30.96	44.56	54	-9.44	H
20920	29.31	37.70	8.85	35.25	40.61	54	-13.39	H



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Test Mode: 5755					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11510	49.54	39.72	5.42	31.75	62.93	68.23	-5.30	V
17265	42.69	41.52	7.32	30.96	60.57	68.23	-7.66	V
23020	43.23	37.13	8.85	35.25	53.96	68.23	-14.27	V
11510	49.27	39.72	5.42	31.75	62.66	68.23	-5.57	H
17265	44.24	41.52	7.32	30.96	62.12	68.23	-6.11	H
23020	44.94	37.13	8.85	35.25	55.67	68.23	-12.56	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11510	33.52	39.72	5.42	31.75	46.91	54	-7.09	V
17265	30.08	41.52	7.32	30.96	47.96	54	-6.04	V
23020	29.89	37.13	8.85	35.25	40.62	54	-13.38	V
11510	33.13	39.72	5.42	31.75	46.52	54	-7.48	H
17265	28.45	41.52	7.32	30.96	46.33	54	-7.67	H
23020	29.38	37.13	8.85	35.25	40.11	54	-13.89	H



U-NII-3- 802.11 ac40

Test Mode: 5795					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11590	45.87	39.88	5.42	31.75	59.42	68.23	-8.81	V
17385	44.05	42.14	7.32	30.96	62.55	68.23	-5.68	V
23180	44.81	37.39	8.85	35.25	55.80	68.23	-12.43	V
11590	48.48	39.88	5.42	31.75	62.03	68.23	-6.20	H
17385	42.80	42.14	7.32	30.96	61.30	68.23	-6.93	H
23180	41.76	37.39	8.85	35.25	52.75	68.23	-15.48	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
11590	33.32	39.88	5.42	31.75	46.87	54	-7.13	V
17385	30.31	42.14	7.32	30.96	48.81	54	-5.19	V
23180	29.72	37.39	8.85	35.25	40.71	54	-13.29	V
11590	33.56	39.88	5.42	31.75	47.11	54	-6.89	H
17385	29.99	42.14	7.32	30.96	48.49	54	-5.51	H
23180	29.55	37.39	8.85	35.25	40.54	54	-13.46	H



Band 1 802.11ac HT80

Test Mode: 5210					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10420	48.30	39.16	5.36	31.25	61.57	68.23	-6.66	V
15630	44.12	39.73	7.85	30.63	61.07	68.23	-7.16	V
20840	45.37	37.79	8.56	34.95	56.77	68.23	-11.46	V
10420	47.86	39.16	5.36	31.25	61.13	68.23	-7.10	H
15630	43.29	39.73	7.85	30.63	60.24	68.23	-7.99	H
20840	43.99	37.79	8.56	34.95	55.39	68.23	-12.84	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10420	32.71	39.16	5.36	31.25	45.98	54	-8.02	V
15630	28.81	39.73	7.85	30.63	45.76	54	-8.24	V
20840	29.20	37.79	8.56	34.95	40.60	54	-13.40	V
10420	33.42	39.16	5.36	31.25	46.69	54	-7.31	H
15630	28.52	39.73	7.85	30.63	45.47	54	-8.53	H
20840	29.55	37.79	8.56	34.95	40.95	54	-13.05	H


U-NII-3-802.11ac HT80

Test Mode: 5755					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10420	48.81	39.80	5.39	31.75	62.25	68.23	-5.98	V
15630	44.44	41.90	7.27	30.96	62.65	68.23	-5.58	V
20840	45.58	37.26	8.79	35.25	56.38	68.23	-11.85	V
10420	48.43	39.80	5.39	31.75	61.87	68.23	-6.36	H
15630	42.46	41.90	7.27	30.96	60.67	68.23	-7.56	H
20840	43.22	37.26	8.79	35.25	54.02	68.23	-14.21	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
10420	33.07	39.80	5.39	31.75	46.51	54	-7.49	V
15630	29.27	41.90	7.27	30.96	47.48	54	-6.52	V
20840	28.78	37.26	8.79	35.25	39.58	54	-14.42	V
10420	34.86	39.80	5.39	31.75	48.30	54	-5.70	H
15630	29.43	41.90	7.27	30.96	47.64	54	-6.36	H
20840	29.29	37.26	8.79	35.25	40.09	54	-13.91	H

Note:

1. The testing has been conformed to 40GHz.
2. All other emissions more than 30dB below the limit.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Emission Level = Reading + Factor
Margin=Emission Level-Limit
4. X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.



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6.6 Restricted Band

Test Requirement : FCC Part15 E Section 15.407(b)

Test site : Measurement Distance: 3m

Test Limit :

Frequency	Limit (dBuV/m @3m)	Remark
Above 1GHz	74	Peak Value
	54	Average Value

Test Procedure:

1. The EUT was placed on a styrofoam table which is 1.5m above ground plane.
2. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions. The spectrum was investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The radiation measurements are tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position. So the data shown was the X position only.
8. The test above 1GHz must be use the fully anechoic room, and the test below 1GHz use the half anechoic room

Test Result:

Worst case mode:		802.11a(6Mbps)		Test channel:		36		
NO.	Freq. [MHz]	level [dBμV/m]	Factor [dB]	Emission level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector Type
1	5150	50.69	6.53	57.22	68.23	11.01	H	Peak
2	5150	39.95	6.53	46.48	54	7.52	H	Average
3	5150	49.92	6.53	56.45	68.23	11.78	V	Peak
4	5150	38.38	6.53	44.91	54	9.09	V	Average

Worst case mode:		802.11a(6Mbps)		Test channel:		48		
NO.	Freq. [MHz]	level [dBμV/m]	Factor [dB]	Emission level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector Type
1	5350	50.08	6.56	56.64	68.23	11.59	H	Peak
2	5350	40.12	6.56	46.68	54	7.32	H	Average
3	5350	49.39	6.56	55.95	68.23	12.28	V	Peak
4	5350	38.18	6.56	44.74	54	9.26	V	Average

Worst case mode:		802.11a(6Mbps)		Test channel:		CH149(5745MHz)		
NO.	Freq. [MHz]	level [dBμV/m]	Factor [dB]	Emission level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector Type
1	5640	38.06	6.58	44.64	68.23	23.59	H	Peak
2	5640	38.24	6.58	44.82	54	9.18	H	Average
3	5640	37.8	6.58	44.38	68.23	23.85	V	Peak
4	5640	37.69	6.58	44.27	54	9.73	V	Average

Worst case mode:		802.11a(6Mbps)		Test channel:		CH 165(5825MHz)		
NO.	Freq. [MHz]	level [dBμV/m]	Factor [dB]	Emission level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector Type
1	5850	49.89	6.64	56.53	68.23	11.7	H	Peak
2	5850	40.49	6.64	47.13	54	6.87	H	Average
3	5850	48.77	6.64	55.41	68.23	12.82	V	Peak
4	5850	37.92	6.64	44.56	54	9.44	V	Average

Note: Only recorded the worst case in the report.



7 Emission Bandwidth and Occupied Bandwidth

Test Requirement	: FCC CFR47 Part 15 Section 15.407(a)(e)
Test Method	: ANSI C63.10-2020 According to FCC §15.407(a), The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less.
Test Limit	: Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth. As per FCC §15.407(e): for equipment operating in the band 5725 – 5850 MHz, the minimum 6 dB bandwidth of U-NII devices shall be 500 kHz.

7.1 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01,
Emission Bandwidth (EBW)

a) Set RBW = approximately 1% of the emission bandwidth; b) Set the VBW > RBW; c) Detector = Peak; d) Trace mode = max hold; e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%; 99% Occupied Bandwidth
The 99% occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99% occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in II.G.3.d). Measurements of 99% occupied bandwidth may also optionally be used in lieu of the EBW to define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

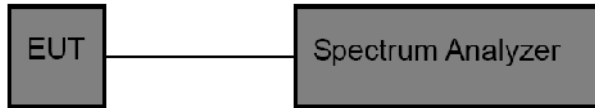
The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency.



The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

7.2 Test setup



7.3 Test Result

PASS

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations / data rates and antenna ports.
Following channel was selected for the final test as listed below.

26 dB emission bandwidth:

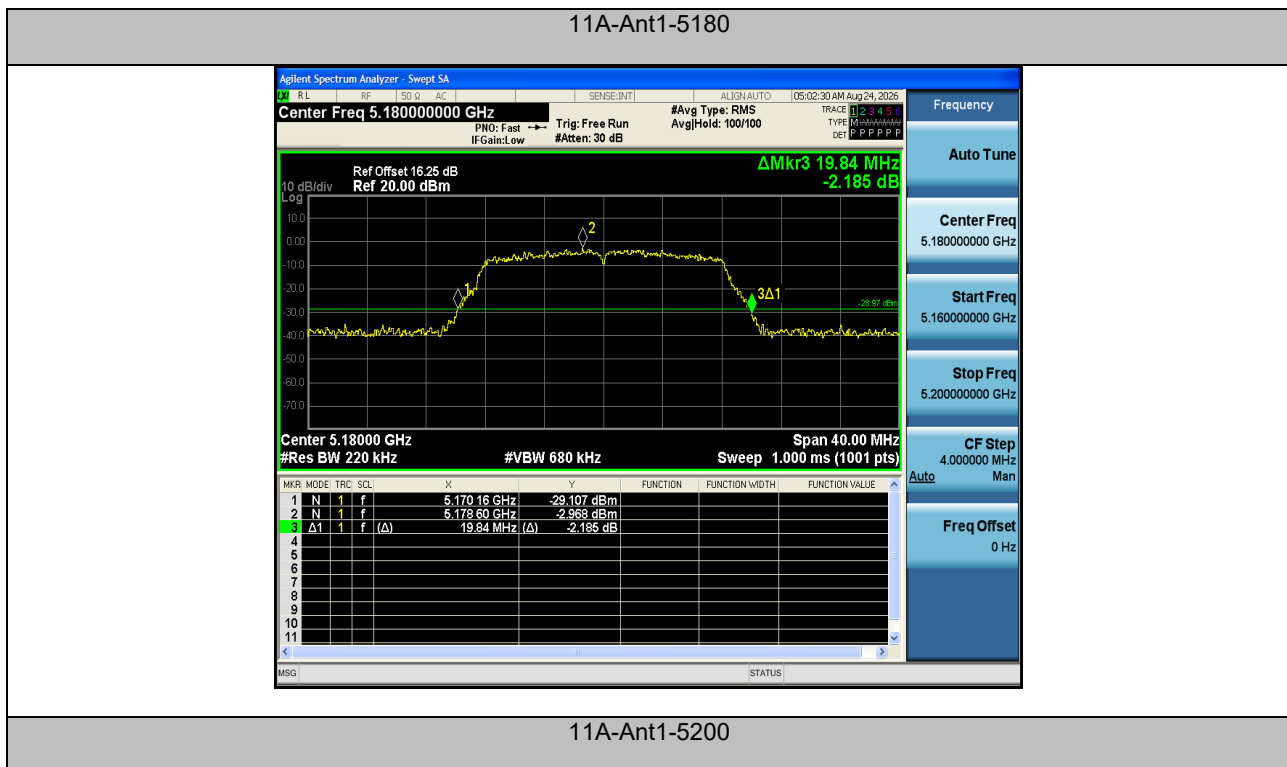
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.840	5170.160	5190.000	---	---
11A	Ant1	5200	19.640	5190.280	5209.920	---	---
11A	Ant1	5240	19.600	5230.160	5249.760	---	---
11A	Ant1	5745	19.960	5735.120	5755.080	---	---
11A	Ant1	5785	19.720	5775.160	5794.880	---	---
11A	Ant1	5825	20.000	5814.960	5834.960	---	---
11N20SISO	Ant1	5180	20.120	5169.920	5190.040	---	---
11N20SISO	Ant1	5200	20.200	5189.920	5210.120	---	---
11N20SISO	Ant1	5240	20.280	5229.840	5250.120	---	---
11N20SISO	Ant1	5745	20.480	5734.640	5755.120	---	---
11N20SISO	Ant1	5785	19.840	5774.960	5794.800	---	---
11N20SISO	Ant1	5825	20.280	5814.680	5834.960	---	---
11N40SISO	Ant1	5190	40.480	5170.080	5210.560	---	---
11N40SISO	Ant1	5230	40.560	5209.760	5250.320	---	---
11N40SISO	Ant1	5755	40.560	5735.000	5775.560	---	---
11N40SISO	Ant1	5795	40.080	5774.840	5814.920	---	---
11AC20SISO	Ant1	5180	20.240	5169.920	5190.160	---	---
11AC20SISO	Ant1	5200	20.080	5189.920	5210.000	---	---
11AC20SISO	Ant1	5240	20.120	5230.000	5250.120	---	---
11AC20SISO	Ant1	5745	20.120	5734.960	5755.080	---	---
11AC20SISO	Ant1	5785	20.160	5774.880	5795.040	---	---
11AC20SISO	Ant1	5825	20.080	5814.880	5834.960	---	---
11AC40SISO	Ant1	5190	40.400	5169.760	5210.160	---	---
11AC40SISO	Ant1	5230	40.160	5210.000	5250.160	---	---
11AC40SISO	Ant1	5755	40.480	5734.840	5775.320	---	---
11AC40SISO	Ant1	5795	40.000	5774.920	5814.920	---	---
11AC80SISO	Ant1	5210	81.600	5169.360	5250.960	---	---
11AC80SISO	Ant1	5775	80.960	5734.680	5815.640	---	---

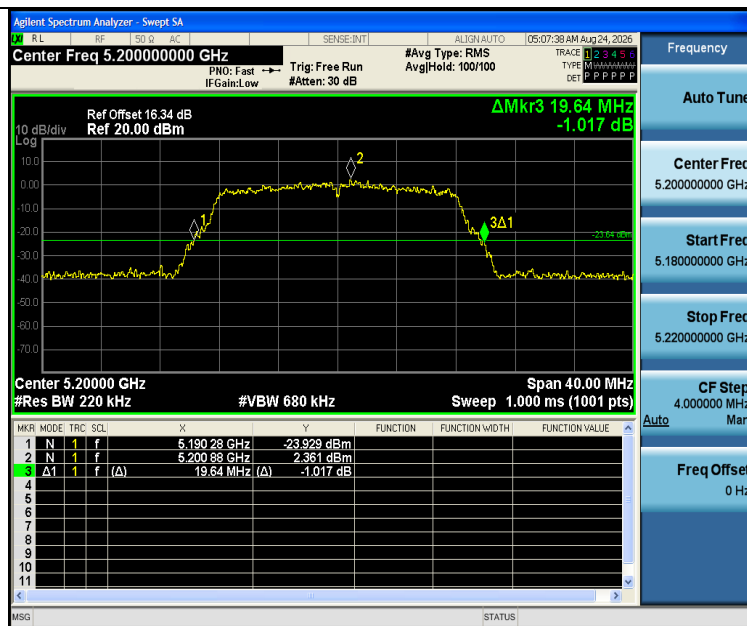


minimum 6 dB bandwidth:

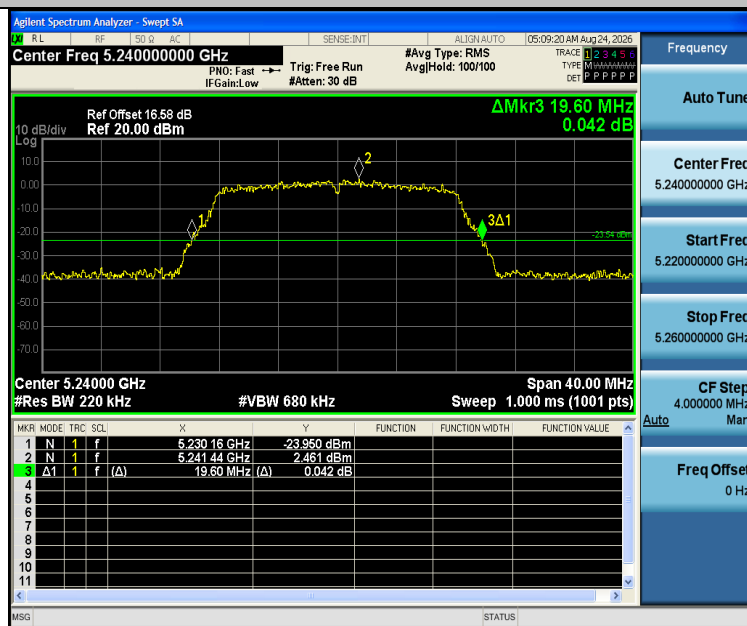
TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.480	5737.400	5752.880	0.5	PASS
11A	Ant1	5785	15.120	5777.400	5792.520	0.5	PASS
11A	Ant1	5825	14.680	5817.440	5832.120	0.5	PASS
11N20SISO	Ant1	5745	15.120	5737.440	5752.560	0.5	PASS
11N20SISO	Ant1	5785	15.120	5777.400	5792.520	0.5	PASS
11N20SISO	Ant1	5825	15.120	5817.400	5832.520	0.5	PASS
11N40SISO	Ant1	5755	33.840	5738.680	5772.520	0.5	PASS
11N40SISO	Ant1	5795	35.040	5777.400	5812.440	0.5	PASS
11AC20SISO	Ant1	5745	15.120	5737.400	5752.520	0.5	PASS
11AC20SISO	Ant1	5785	12.320	5778.640	5790.960	0.5	PASS
11AC20SISO	Ant1	5825	14.760	5816.840	5831.600	0.5	PASS
11AC40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
11AC40SISO	Ant1	5795	35.040	5777.400	5812.440	0.5	PASS
11AC80SISO	Ant1	5775	72.640	5737.400	5810.040	0.5	PASS

Test Graphs:

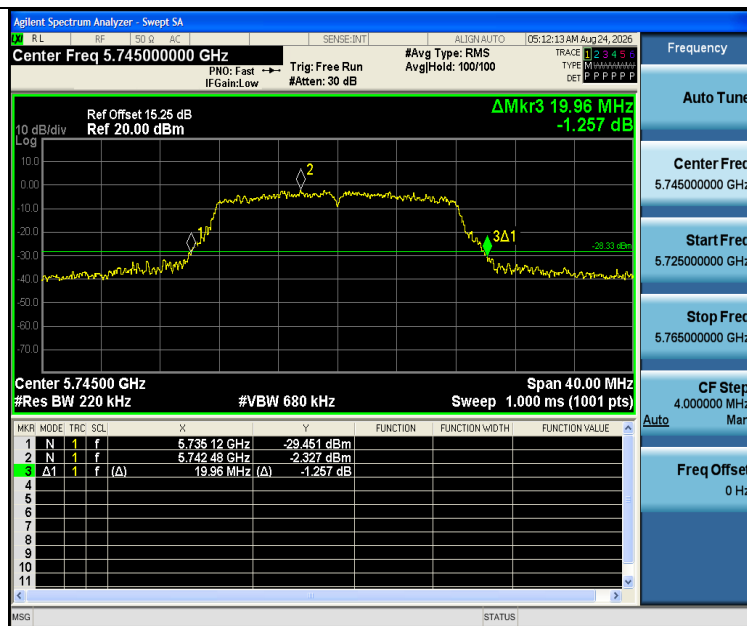




11A-Ant1-5240



11A-Ant1-5745



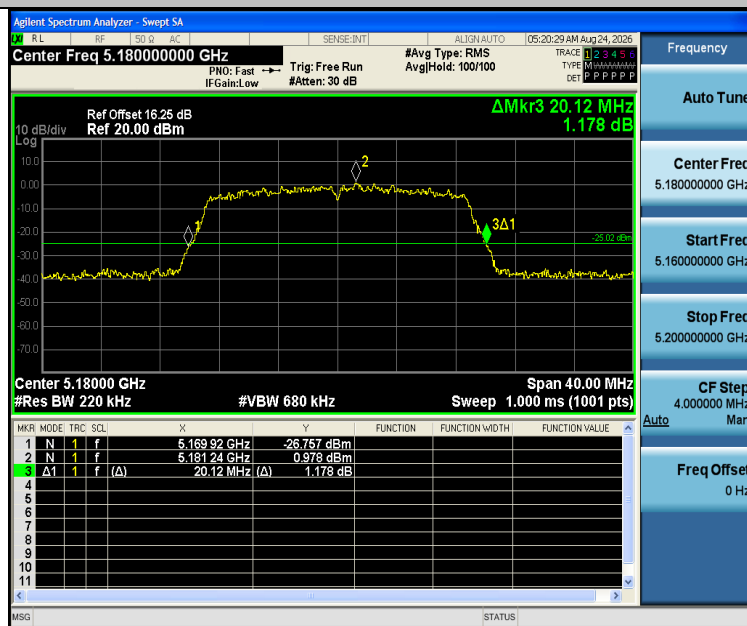
11A-Ant1-5785



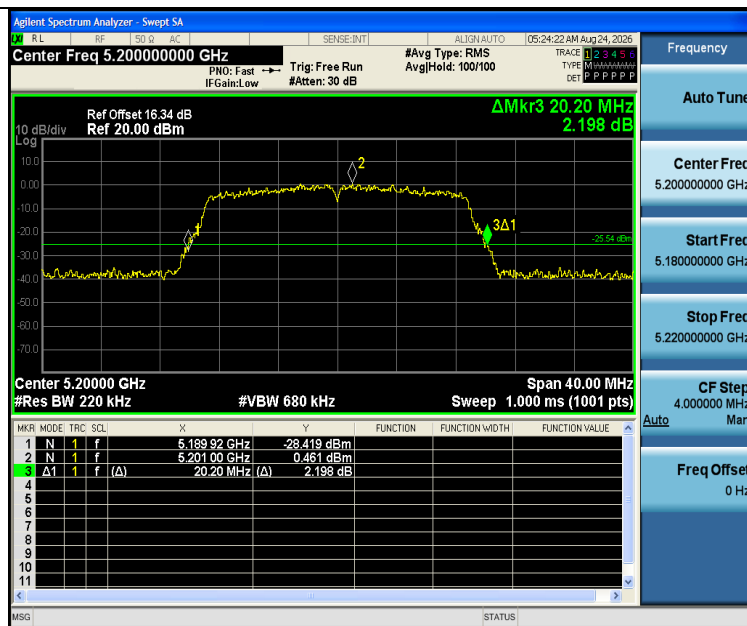
11A-Ant1-5825



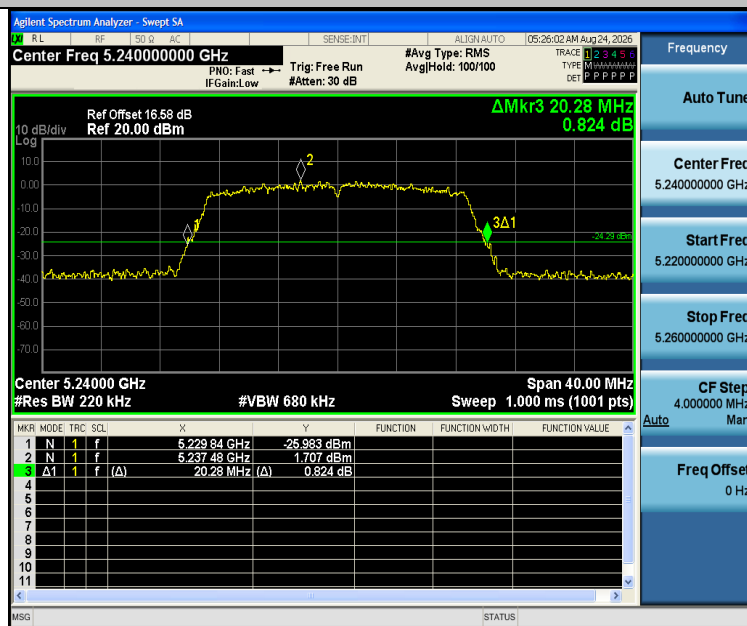
11N20SISO-Ant1-5180



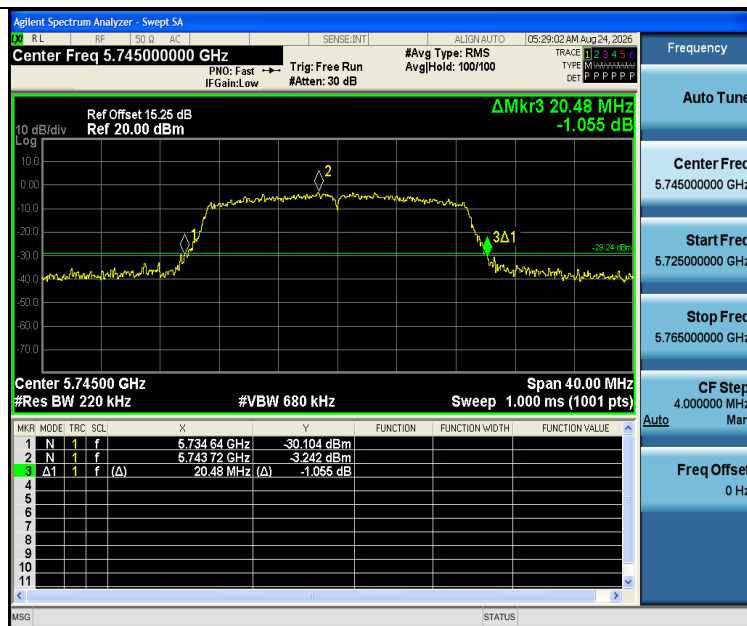
11N20SISO-Ant1-5200



11N20SISO-Ant1-5240



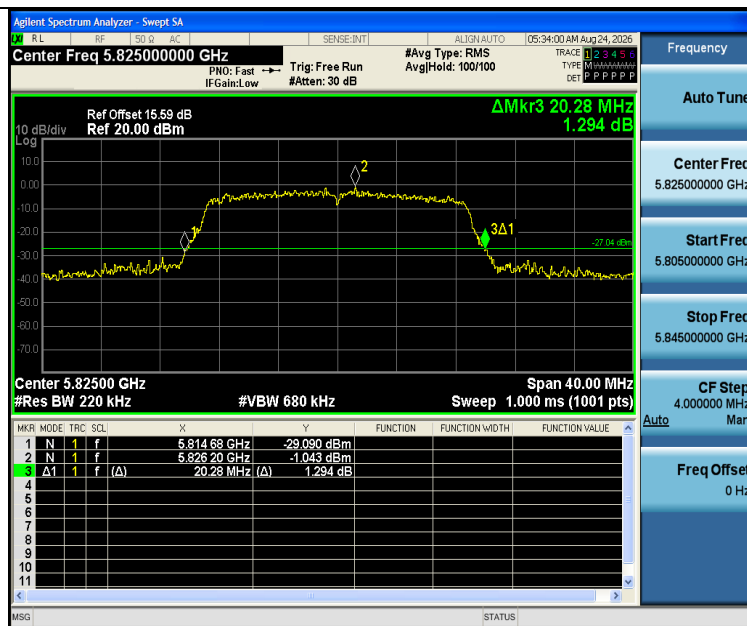
11N20SISO-Ant1-5745



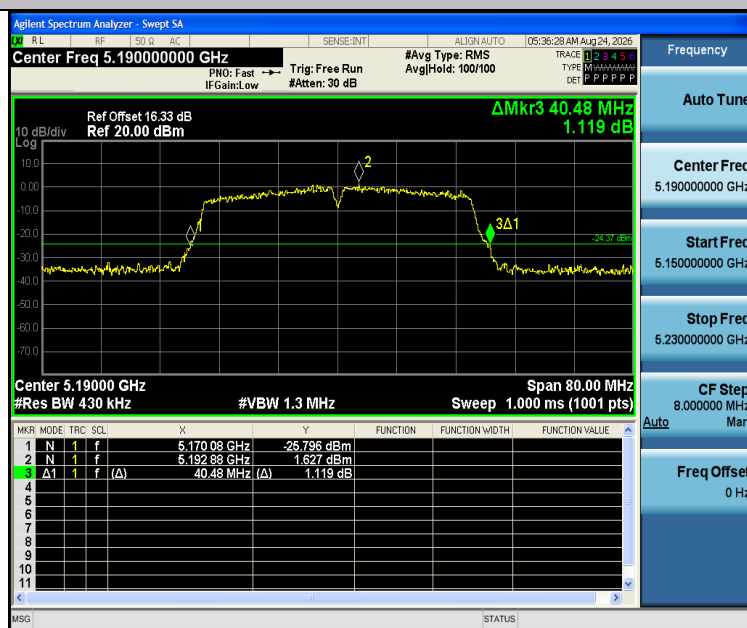
11N20SISO-Ant1-5785



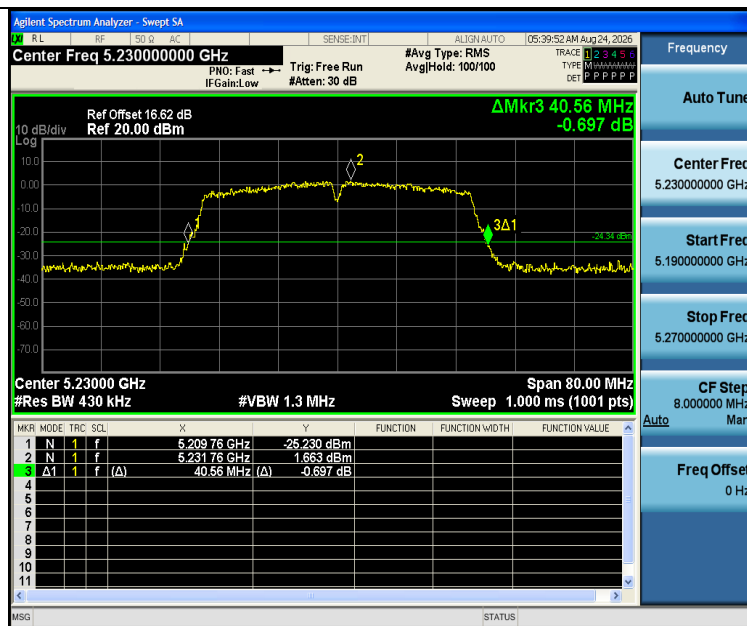
11N20SISO-Ant1-5825



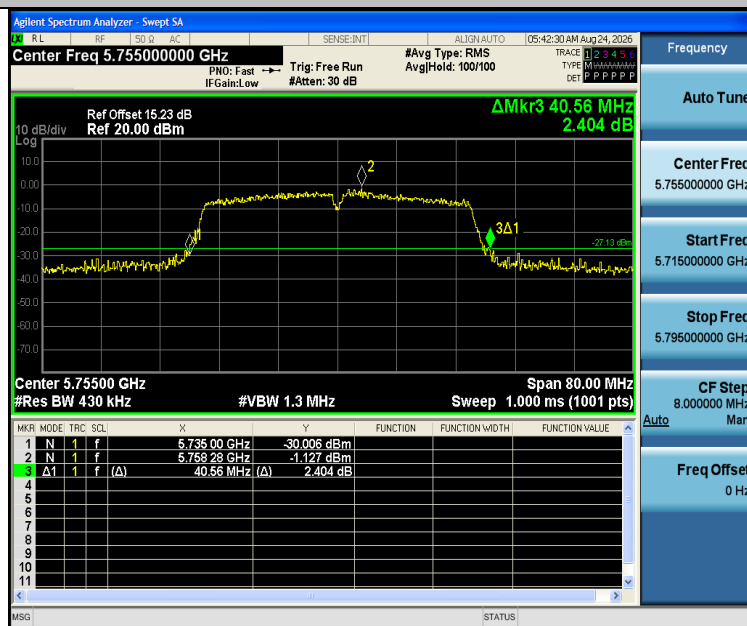
11N40SISO-Ant1-5190



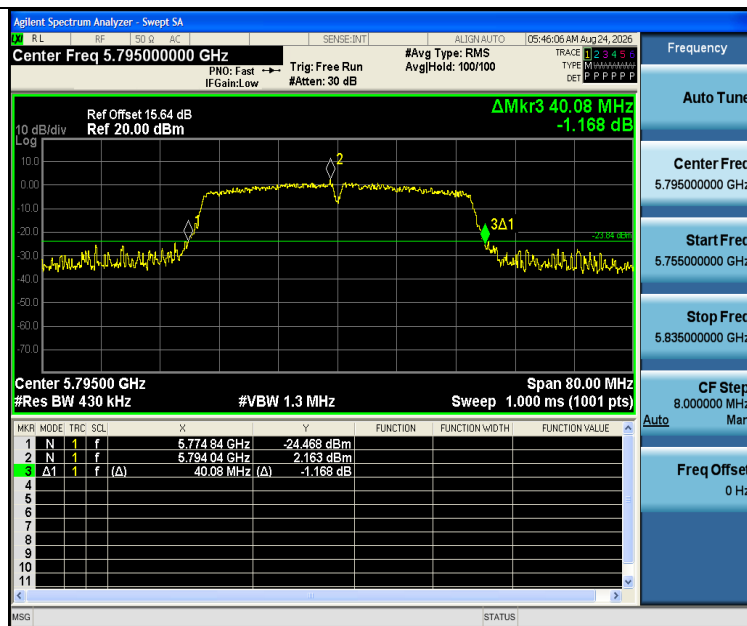
11N40SISO-Ant1-5230



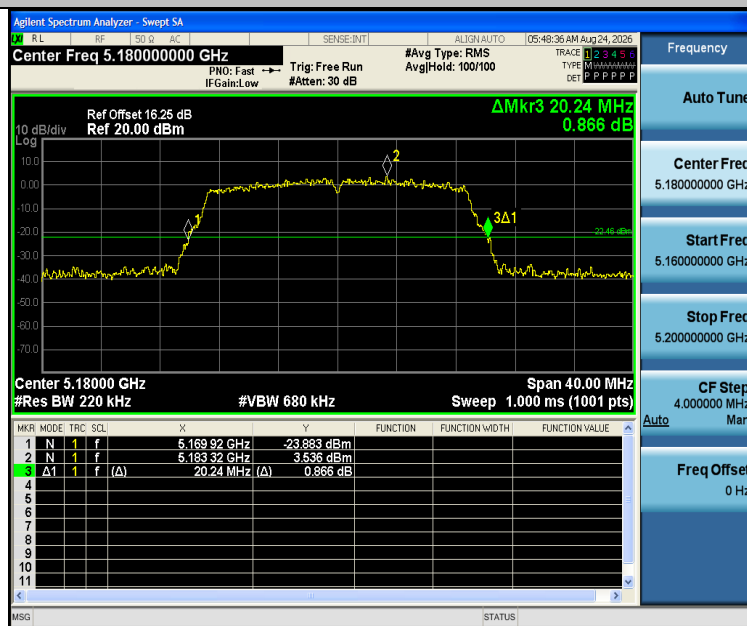
11N40SISO-Ant1-5755



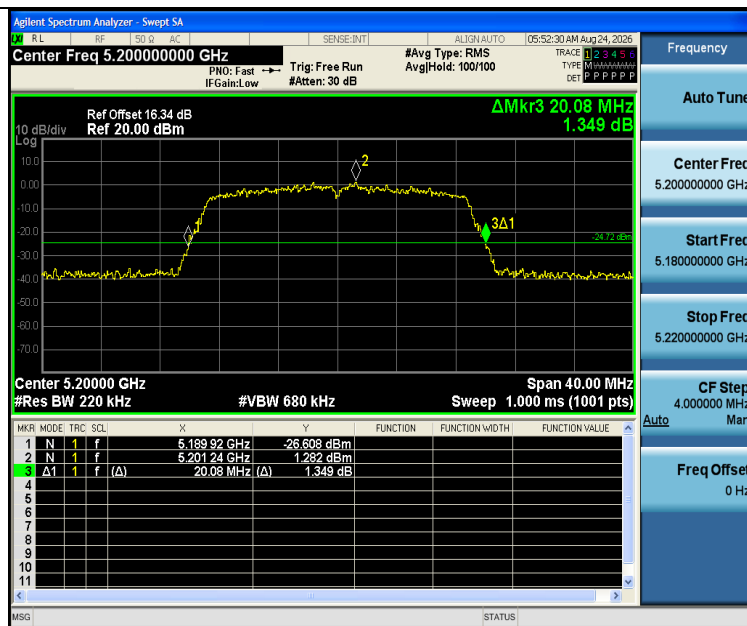
11N40SISO-Ant1-5795



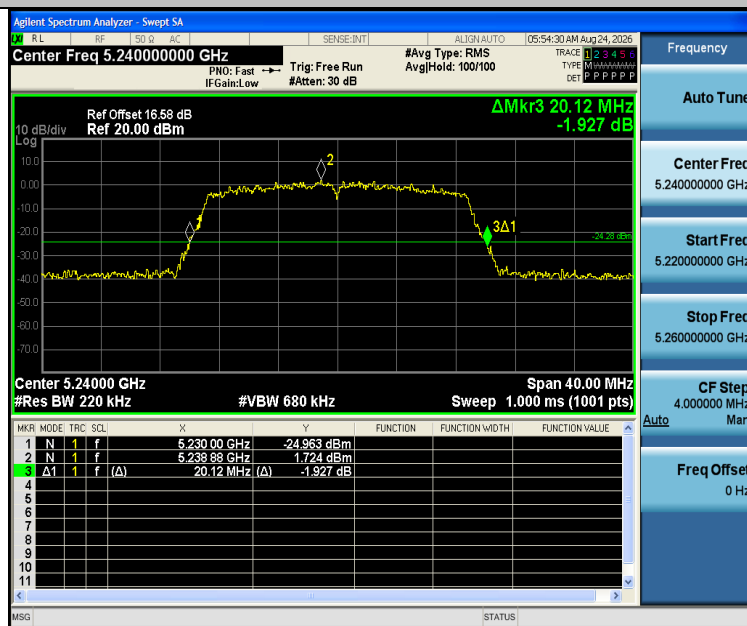
11AC20SISO-Ant1-5180



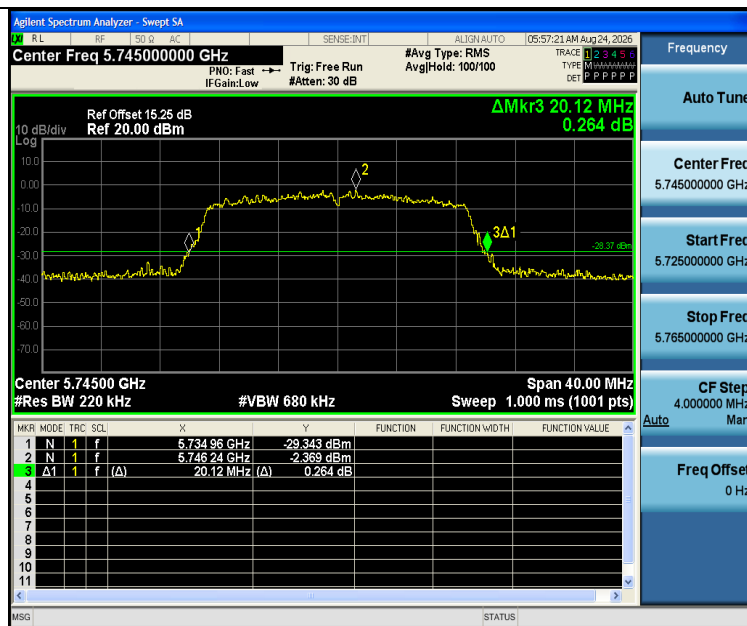
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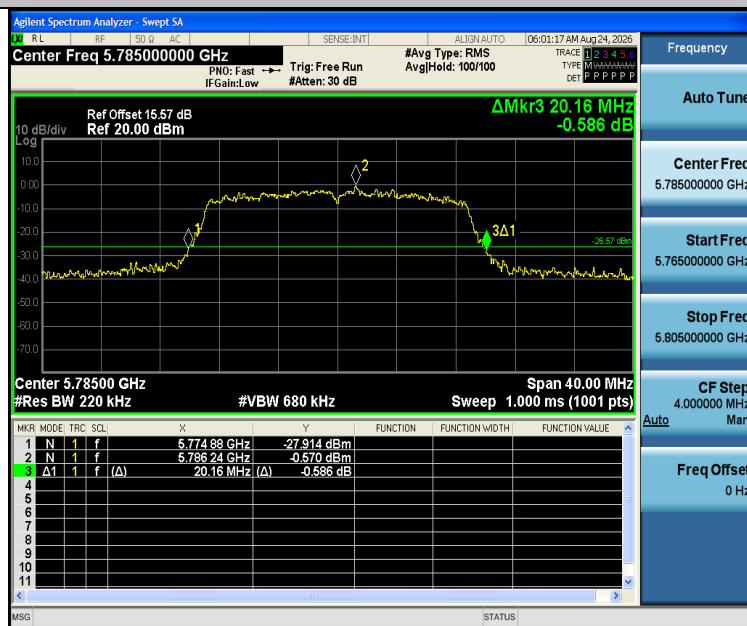
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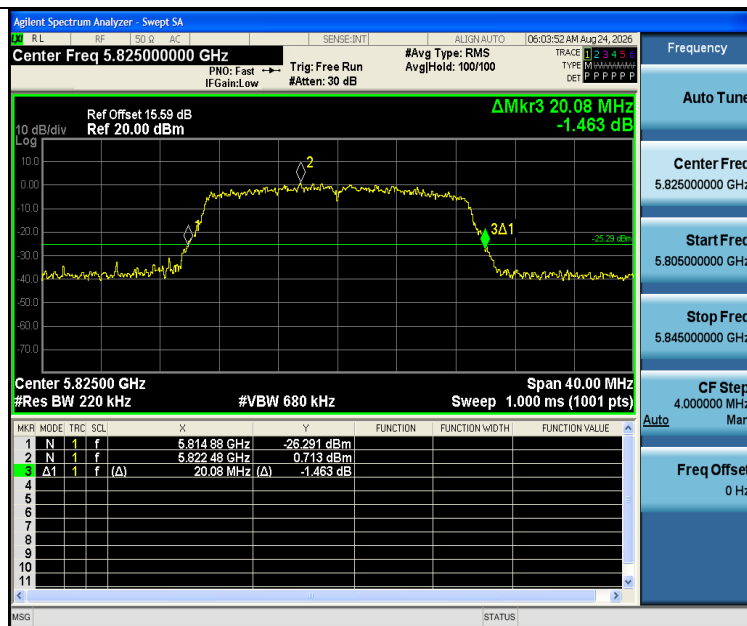
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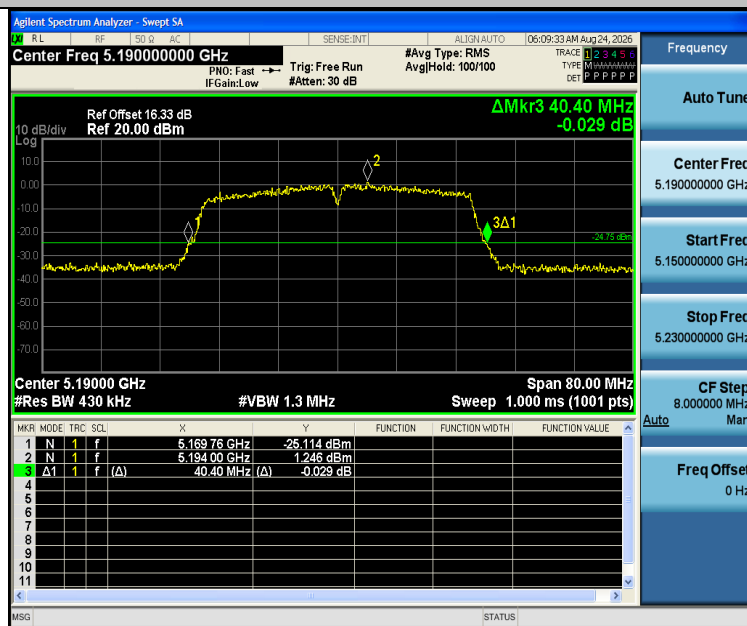
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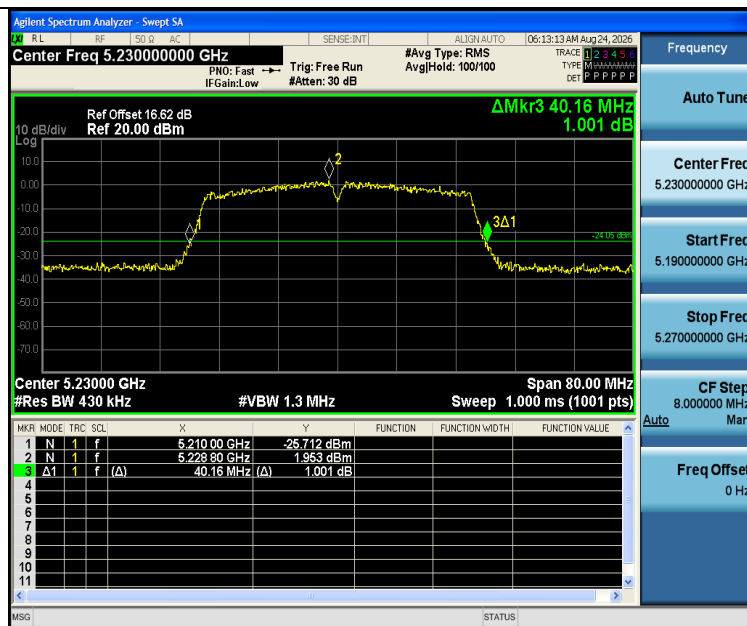
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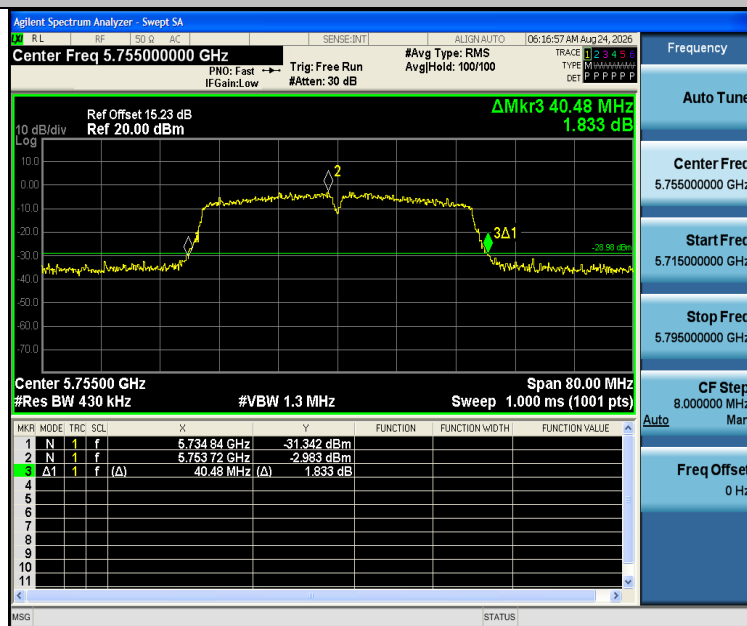
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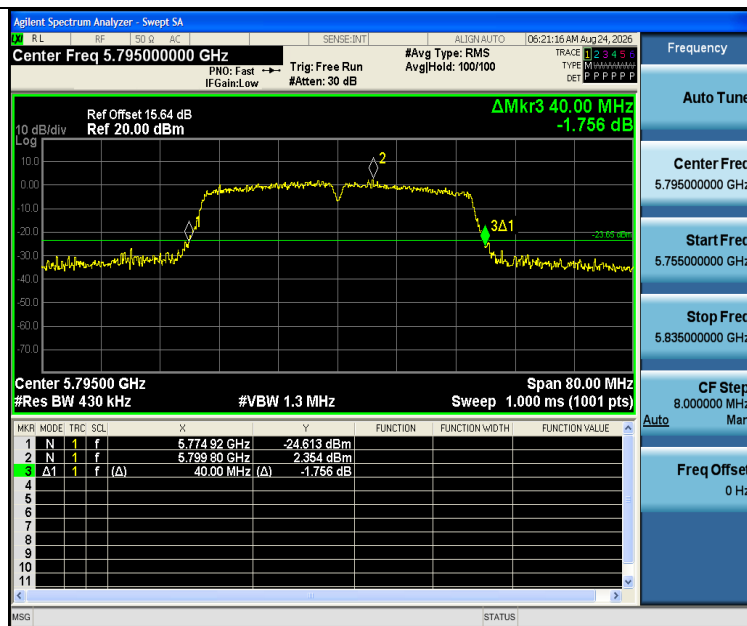
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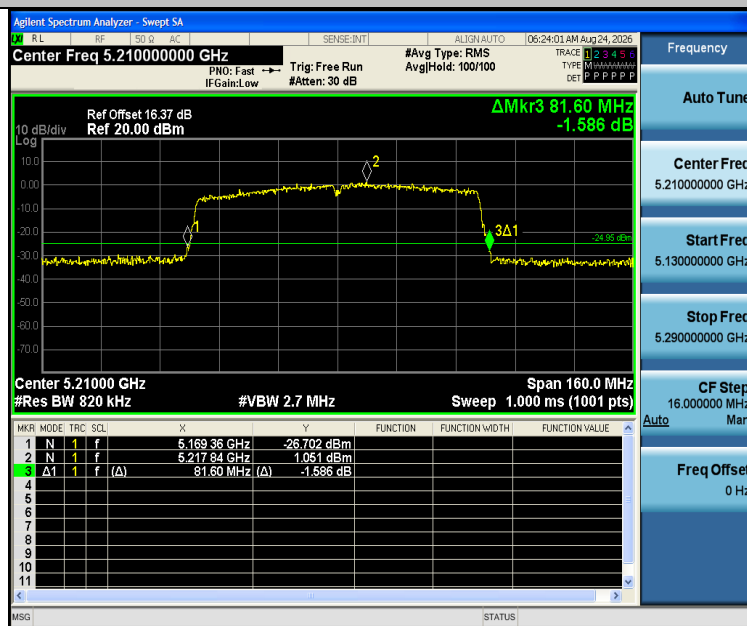
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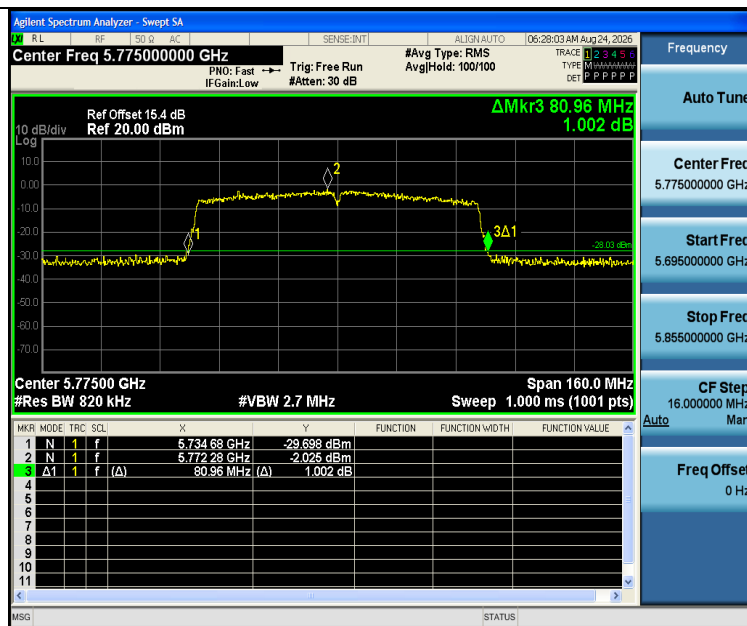
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11AC80SISO-Ant1-5210



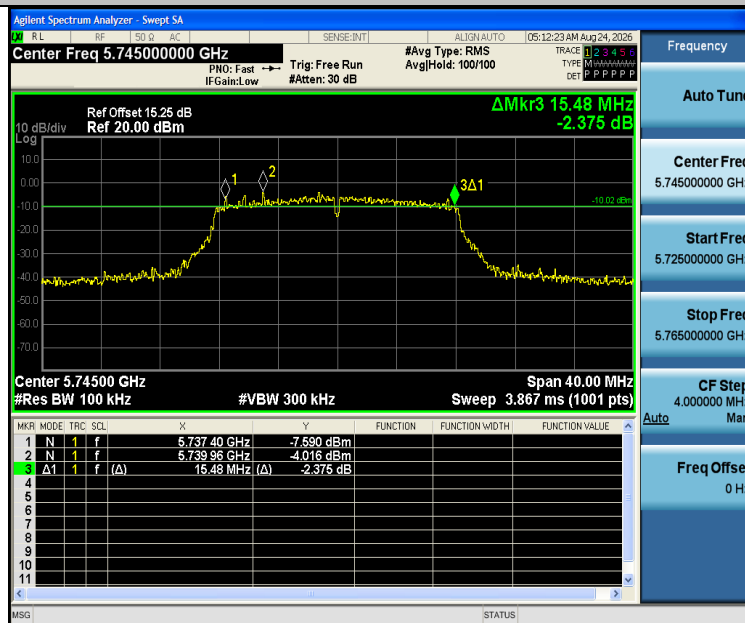
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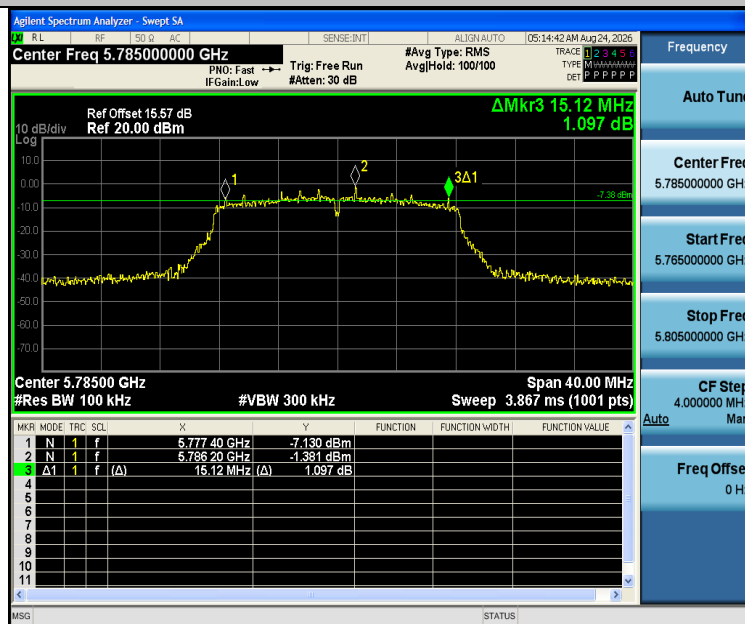


Min emission bandwidth Test Graphs:

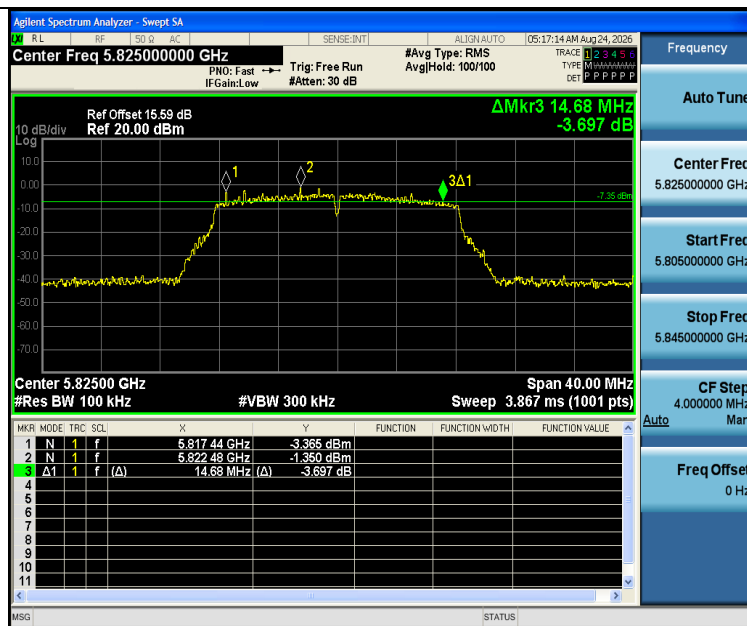
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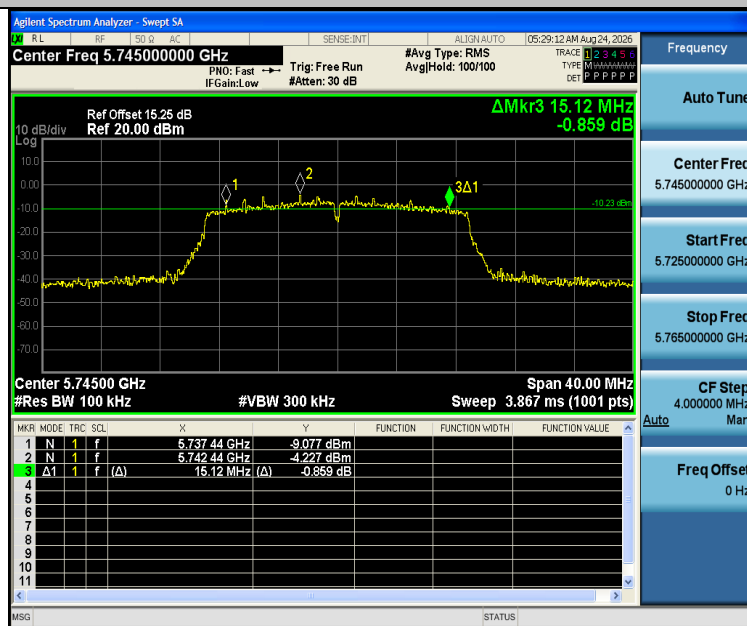
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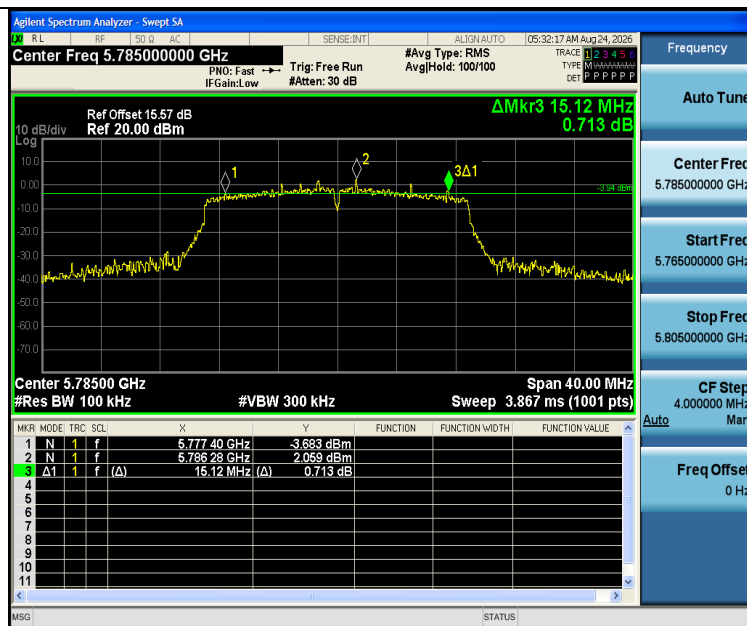
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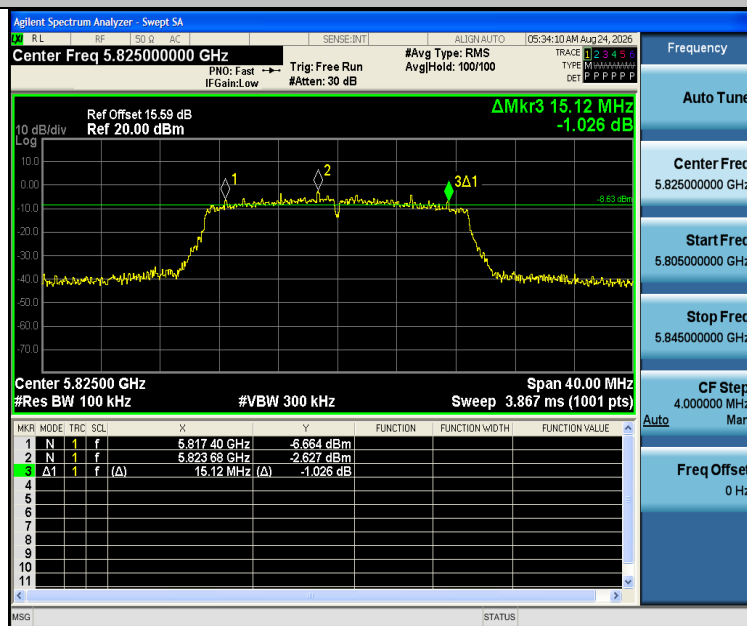
11N20SISO-Ant1-5745-PASS



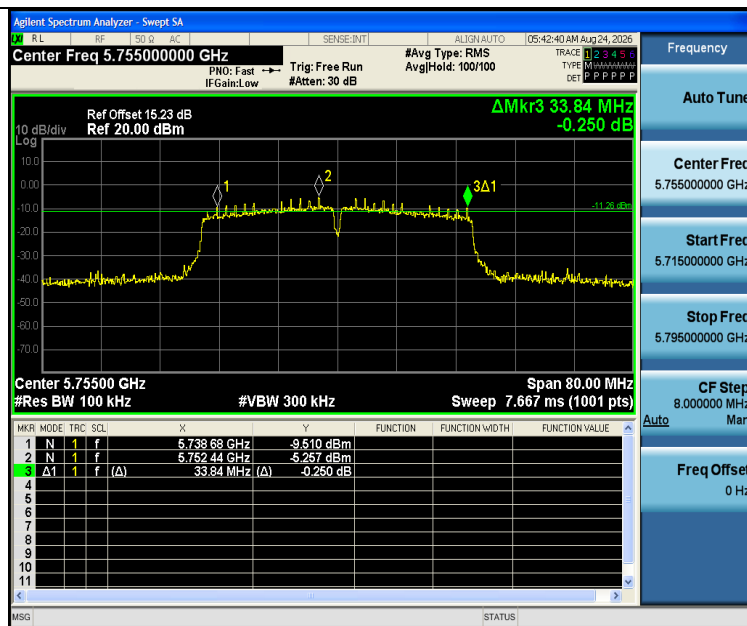
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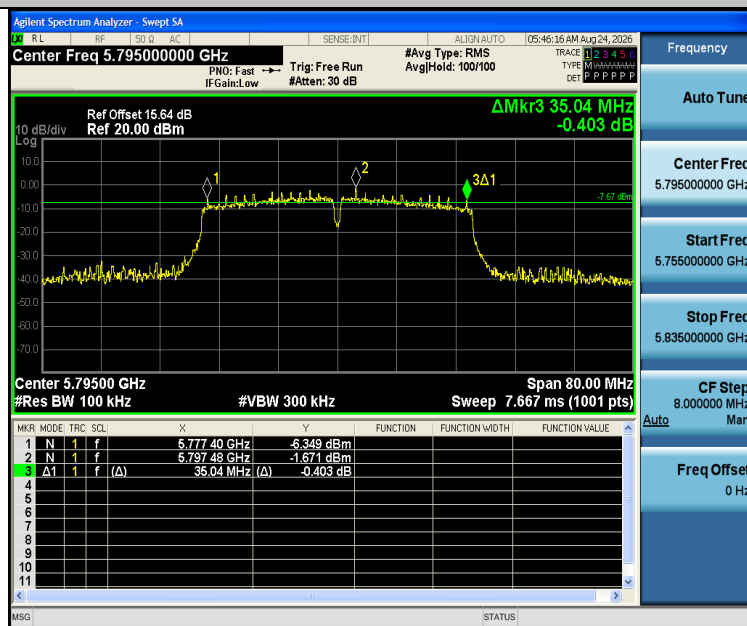
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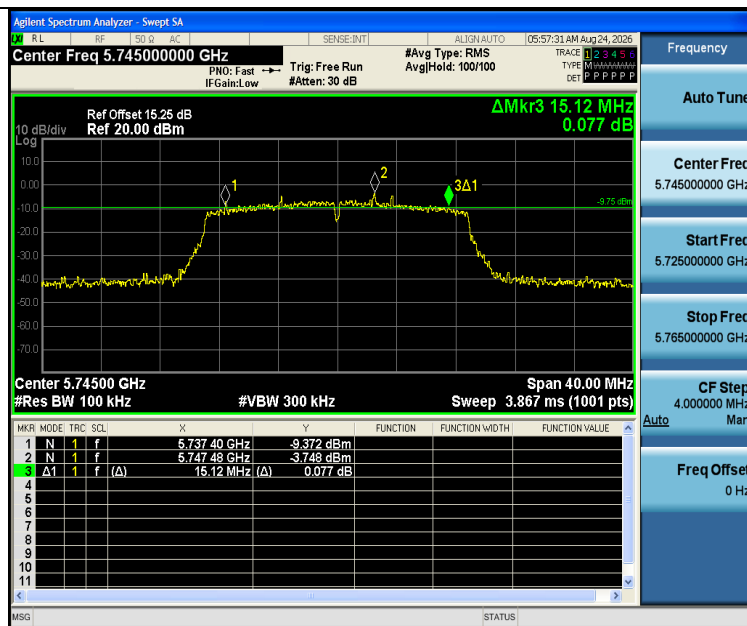
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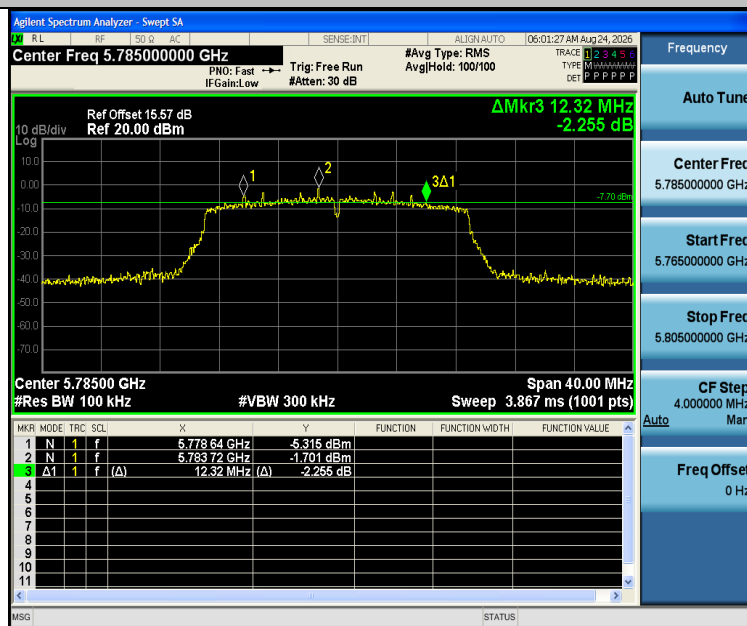
11N40SISO-Ant1-5795-PASS



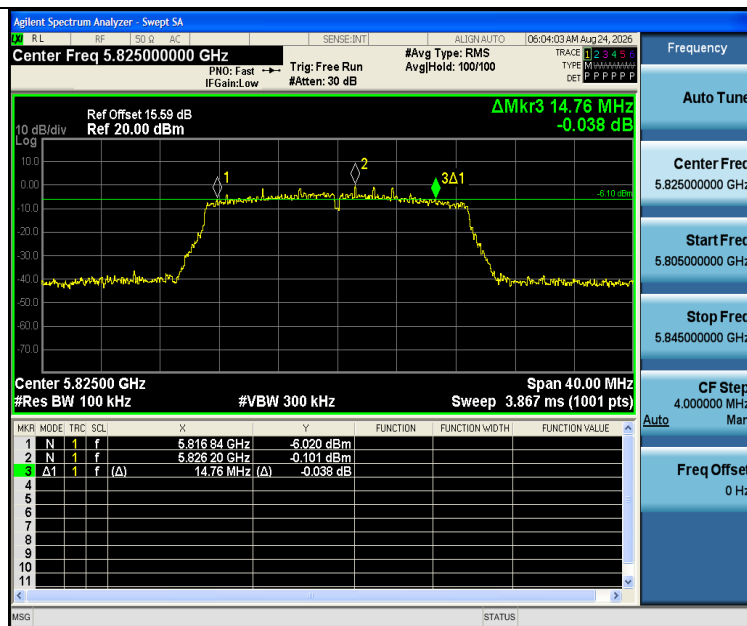
11AC20SISO-Ant1-5745-PASS



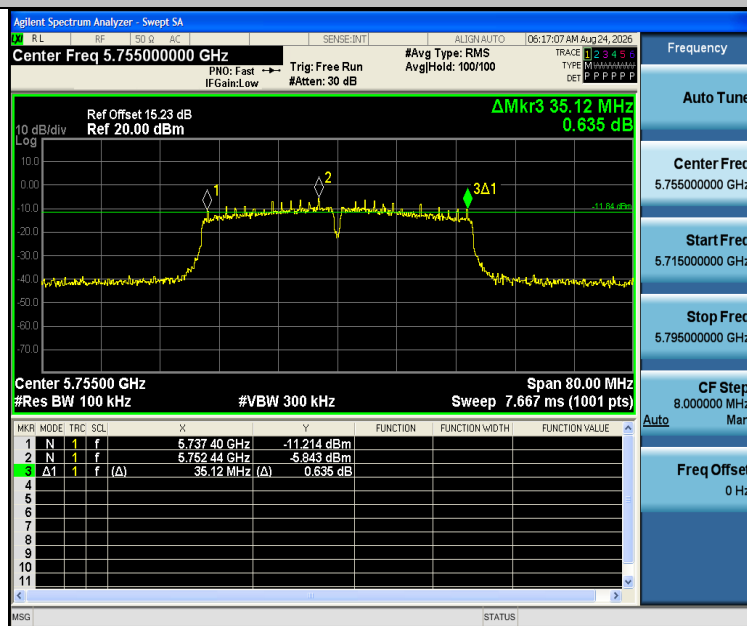
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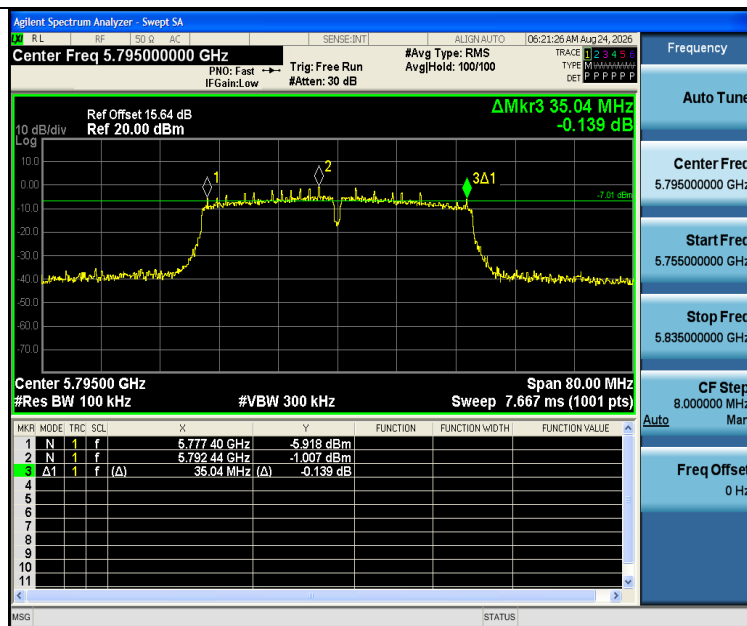
11AC20SISO-Ant1-5825-PASS



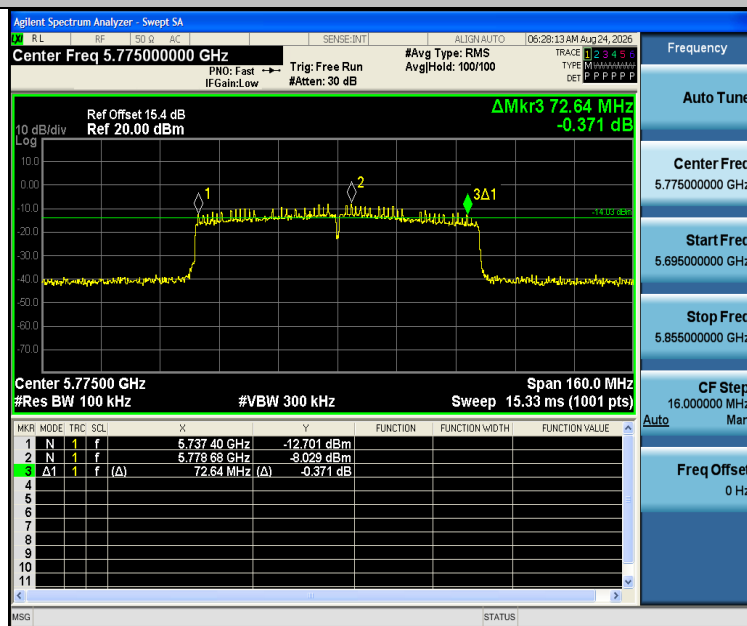
11AC40SISO-Ant1-5755-PASS



11AC40SISO-Ant1-5795-PASS



11AC80SISO-Ant1-5775-PASS



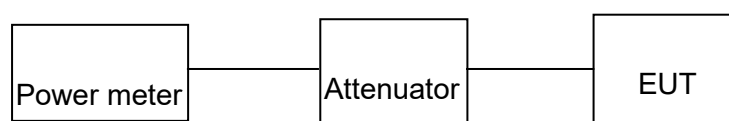


8 Maximum Conducted Output Power

Test Requirement	: FCC CFR47 Part 15 Section 15.407(a)
Test Method	: ANSI C63.10-2020
Test Limit	: For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

8.1 Test Setup



8.2 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, The use Power Meter 1. Place the EUT on a bench and set it in transmitting mode. 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to a Power meter.



8.3 Test Result

Test Mode	Antenna	Frequency[MHz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	11.02	96.53	0.15	11.17	≤23.98	PASS
11A	Ant1	5200	10.81	97.20	0.12	10.93	≤23.98	PASS
11A	Ant1	5240	11.23	97.22	0.12	11.35	≤23.98	PASS
11A	Ant1	5745	7.33	96.53	0.15	7.48	≤30.00	PASS
11A	Ant1	5785	10.27	96.53	0.15	10.42	≤30.00	PASS
11A	Ant1	5825	10.05	96.53	0.15	10.20	≤30.00	PASS
11N20SISO	Ant1	5180	9.92	96.30	0.16	10.08	≤23.98	PASS
11N20SISO	Ant1	5200	10.27	96.30	0.16	10.43	≤23.98	PASS
11N20SISO	Ant1	5240	11.24	97.01	0.13	11.37	≤23.98	PASS
11N20SISO	Ant1	5745	10.59	97.01	0.13	10.72	≤30.00	PASS
11N20SISO	Ant1	5785	12.11	96.30	0.16	12.27	≤30.00	PASS
11N20SISO	Ant1	5825	7.95	96.30	0.16	8.11	≤30.00	PASS
11N40SISO	Ant1	5190	9.80	94.20	0.26	10.06	≤23.98	PASS
11N40SISO	Ant1	5230	11.53	94.20	0.26	11.79	≤23.98	PASS
11N40SISO	Ant1	5755	9.94	92.75	0.33	10.27	≤30.00	PASS
11N40SISO	Ant1	5795	11.01	94.20	0.26	11.27	≤30.00	PASS
11AC20SISO	Ant1	5180	12.83	97.04	0.13	12.96	≤23.98	PASS
11AC20SISO	Ant1	5200	10.34	97.04	0.13	10.47	≤23.98	PASS
11AC20SISO	Ant1	5240	11.18	96.32	0.16	11.34	≤23.98	PASS
11AC20SISO	Ant1	5745	6.68	96.32	0.16	6.84	≤30.00	PASS
11AC20SISO	Ant1	5785	10.08	97.06	0.13	10.21	≤30.00	PASS
11AC20SISO	Ant1	5825	10.03	96.32	0.16	10.19	≤30.00	PASS
11AC40SISO	Ant1	5190	9.97	94.29	0.26	10.23	≤23.98	PASS
11AC40SISO	Ant1	5230	11.00	92.86	0.32	11.32	≤23.98	PASS
11AC40SISO	Ant1	5755	10.51	94.29	0.26	10.77	≤30.00	PASS
11AC40SISO	Ant1	5795	11.63	92.86	0.32	11.95	≤30.00	PASS
11AC80SISO	Ant1	5210	10.13	86.49	0.63	10.76	≤23.98	PASS
11AC80SISO	Ant1	5775	9.80	89.19	0.50	10.30	≤30.00	PASS



9 Power Spectral density

Test Requirement	: FCC CFR47 Part 15 Section 15.2407(a)
Test Method	: ANSI C63.10-2020
Test Limit	: For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.. For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHzband. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations

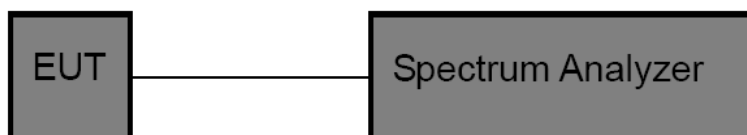


9.1 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 and ANSI 63.10: 2013 Sec 10.3.7. For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set the RBW to 1 MHz.
- b) Set the VBW to be at least 1 MHz (a VBW of 3 MHz is desirable).
- c) Set the frequency span to examine the spectrum across a convenient frequency segment (e.g., 600 MHz).
- d) Select the power averaging (rms) detector.
- e) Set the sweep time so that there is no more than a 1 ms integration period over each measurement bin.
- f) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

9.2 Test Setup





9.3 Test Result

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations / data rates and antenna ports.

Following channel was selected for the final test as listed below

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	0.92	≤11.00	PASS
11A	Ant1	5200	1.02	≤11.00	PASS
11A	Ant1	5240	1.35	≤11.00	PASS
11N20SISO	Ant1	5180	-0.28	≤11.00	PASS
11N20SISO	Ant1	5200	0.32	≤11.00	PASS
11N20SISO	Ant1	5240	0.99	≤11.00	PASS
11N40SISO	Ant1	5190	-2.86	≤11.00	PASS
11N40SISO	Ant1	5230	-1.13	≤11.00	PASS
11AC20SISO	Ant1	5180	2.6	≤11.00	PASS
11AC20SISO	Ant1	5200	0.09	≤11.00	PASS
11AC20SISO	Ant1	5240	1.06	≤11.00	PASS
11AC40SISO	Ant1	5190	-2.73	≤11.00	PASS
11AC40SISO	Ant1	5230	-1.73	≤11.00	PASS
11AC80SISO	Ant1	5210	-5.22	≤11.00	PASS

TestMode	Antenna	Frequency[MHz]	Result [dBm/300kHz]	Result [dBm/500kHz]	Limit[dBm/500kHz]	Verdict
11A	Ant1	5745	-5.01	-2.79	≤30.00	PASS
11A	Ant1	5785	-2.07	0.15	≤30.00	PASS
11A	Ant1	5825	-2.62	-0.40	≤30.00	PASS
11N20SISO	Ant1	5745	-2.32	-0.10	≤30.00	PASS
11N20SISO	Ant1	5785	-0.58	1.64	≤30.00	PASS
11N20SISO	Ant1	5825	-4.93	-2.71	≤30.00	PASS
11N40SISO	Ant1	5755	-6.42	-4.20	≤30.00	PASS
11N40SISO	Ant1	5795	-5.01	-2.79	≤30.00	PASS
11AC20SISO	Ant1	5745	-6.06	-3.84	≤30.00	PASS
11AC20SISO	Ant1	5785	-2.81	-0.59	≤30.00	PASS
11AC20SISO	Ant1	5825	-2.68	-0.46	≤30.00	PASS
11AC40SISO	Ant1	5755	-5.2	-2.98	≤30.00	PASS
11AC40SISO	Ant1	5795	-3.89	-1.67	≤30.00	PASS
11AC80SISO	Ant1	5775	-8.47	-6.25	≤30.00	PASS

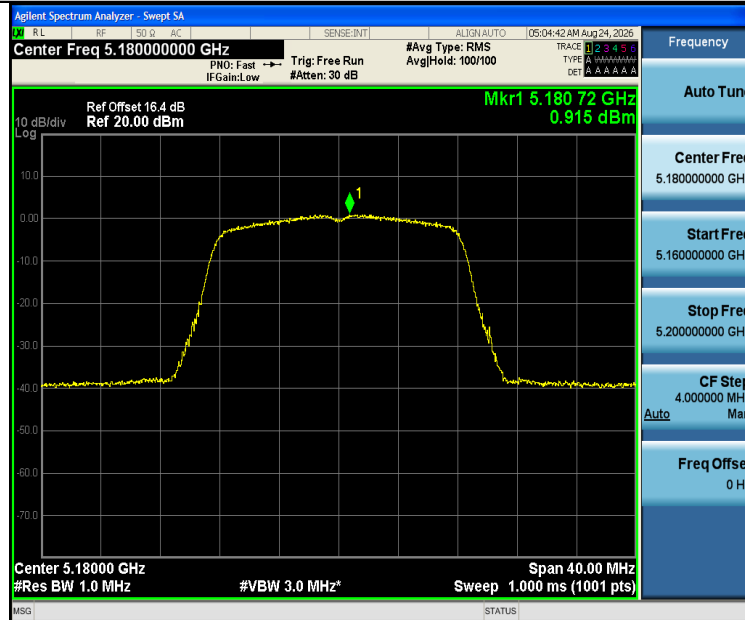
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2. in the band 5.725–5.85 GHz the test RBW select 300KHz,so the measured result corrected by Result+10 log (500 kHz/300kHz).

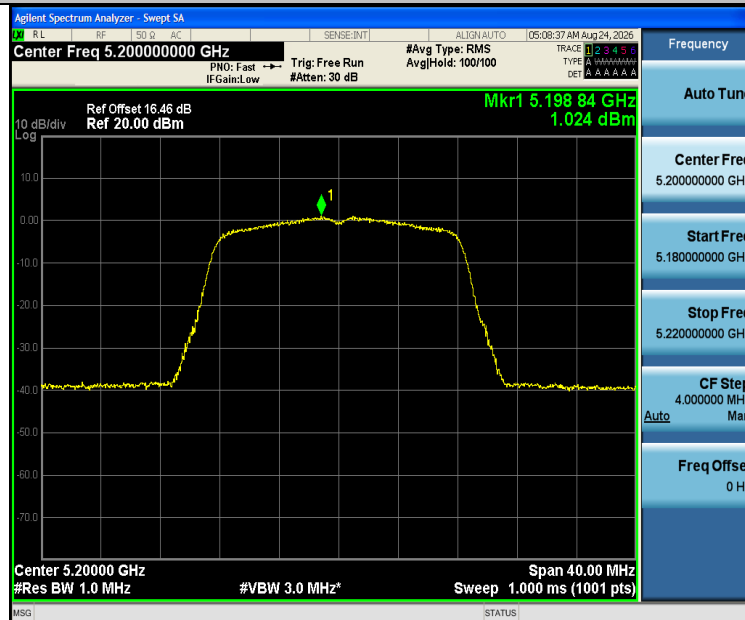


Test Graphs:

11A-Ant1-5180-PASS



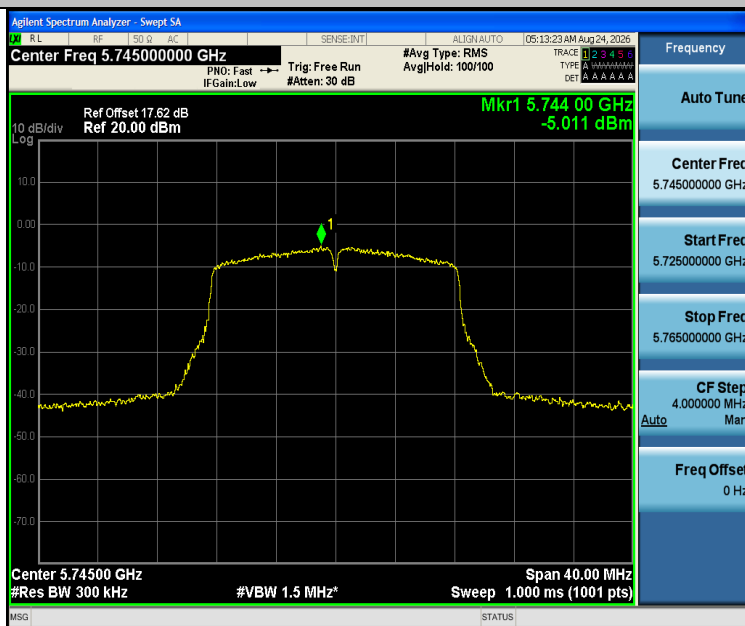
11A-Ant1-5200-PASS



11A-Ant1-5240-PASS



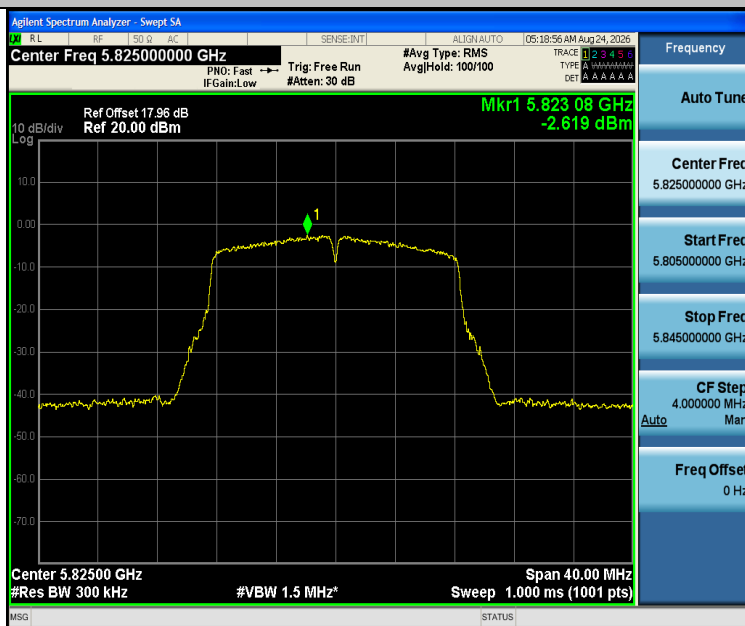
11A-Ant1-5745-PASS



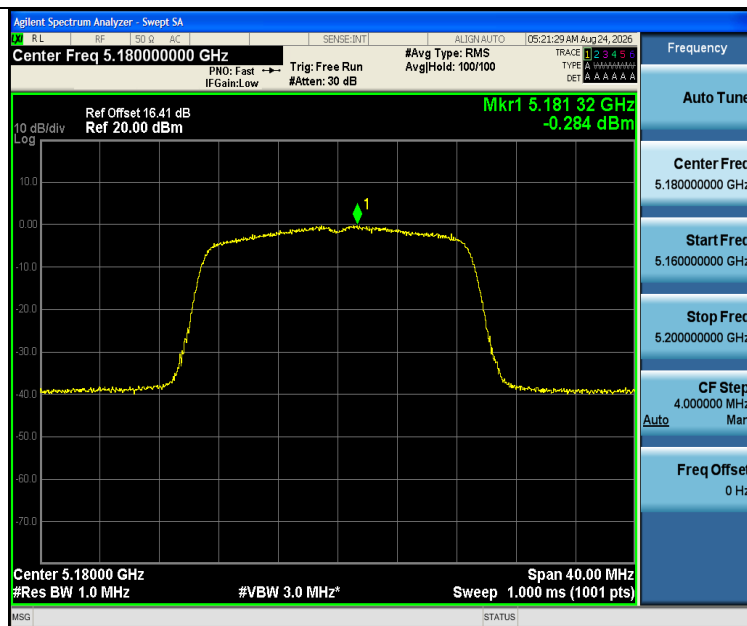
11A-Ant1-5785-PASS



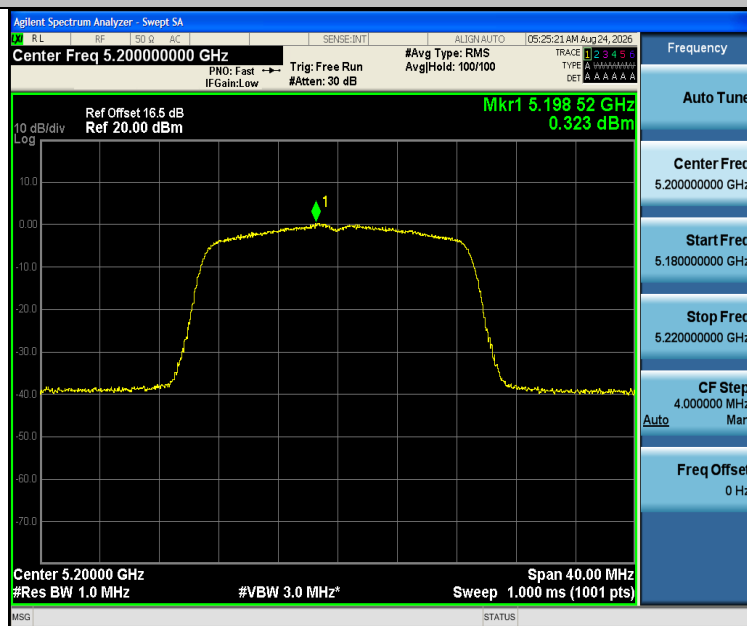
11A-Ant1-5825-PASS



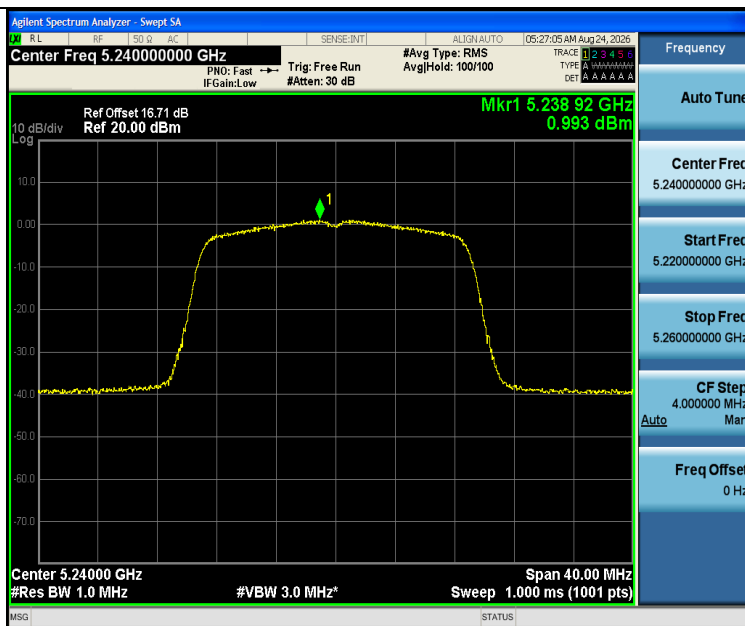
11N20SISO-Ant1-5180-PASS



11N20SISO-Ant1-5200-PASS



11N20SISO-Ant1-5240-PASS



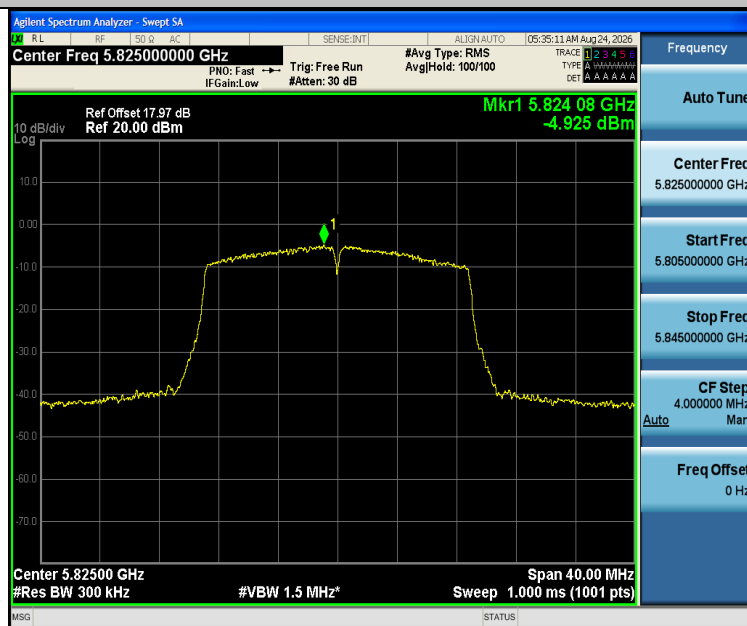
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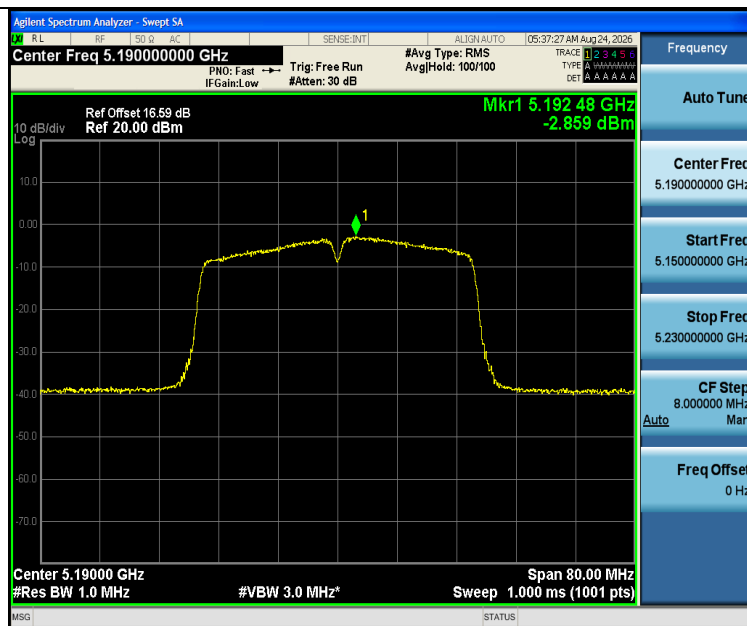
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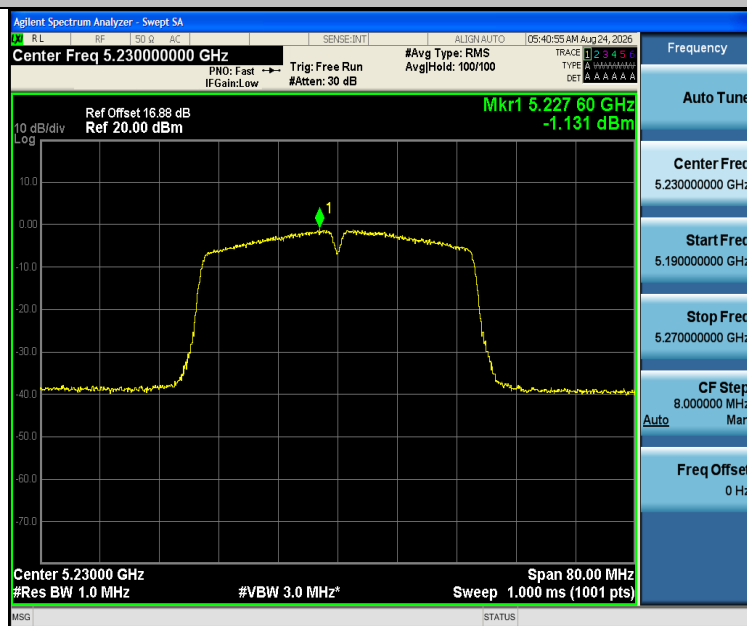
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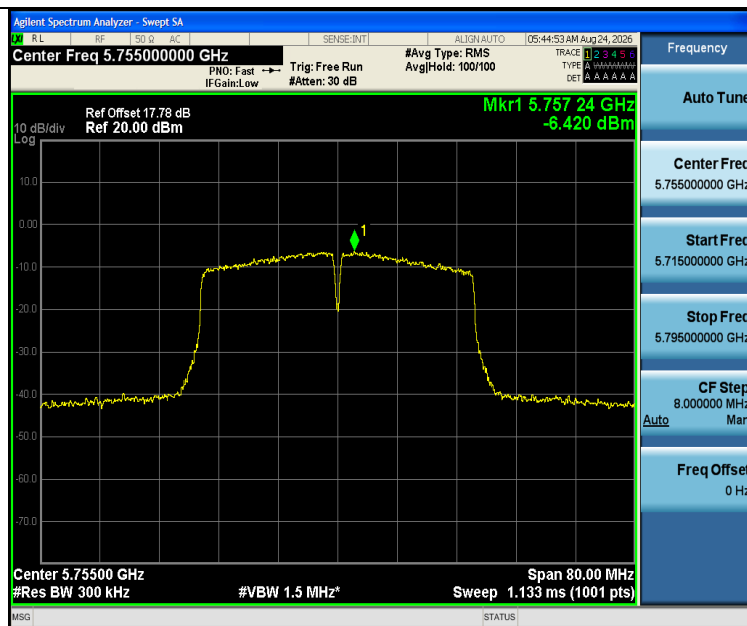
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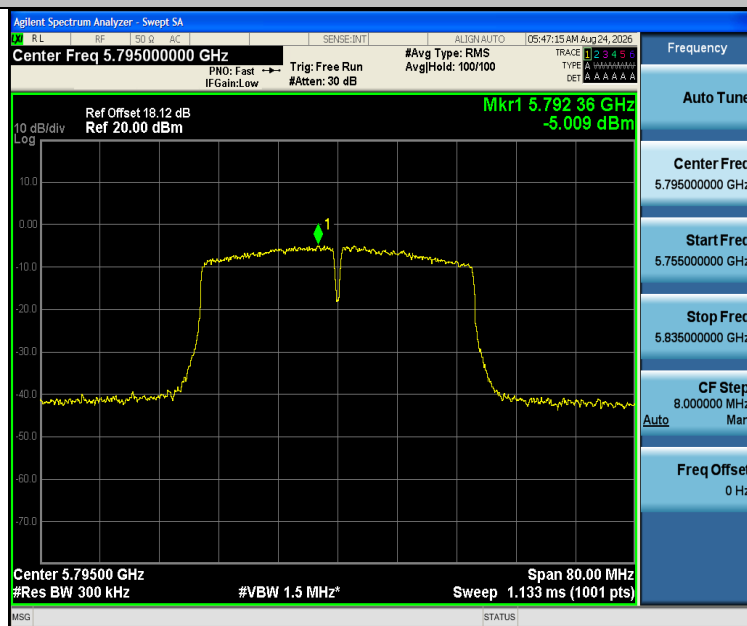
11N40SISO-Ant1-5230-PASS



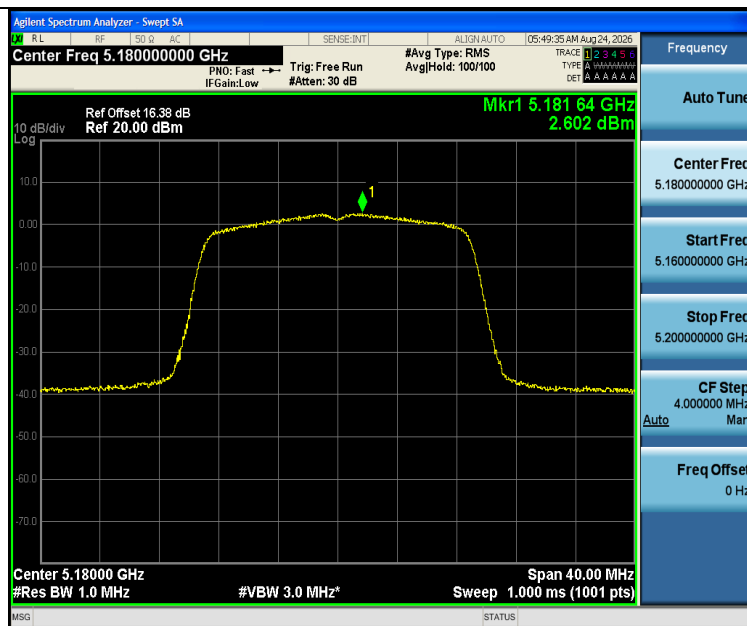
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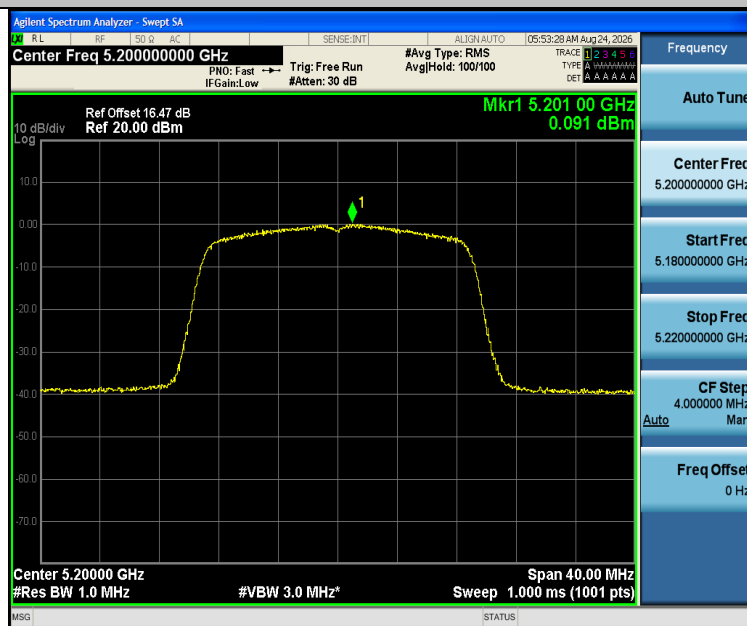
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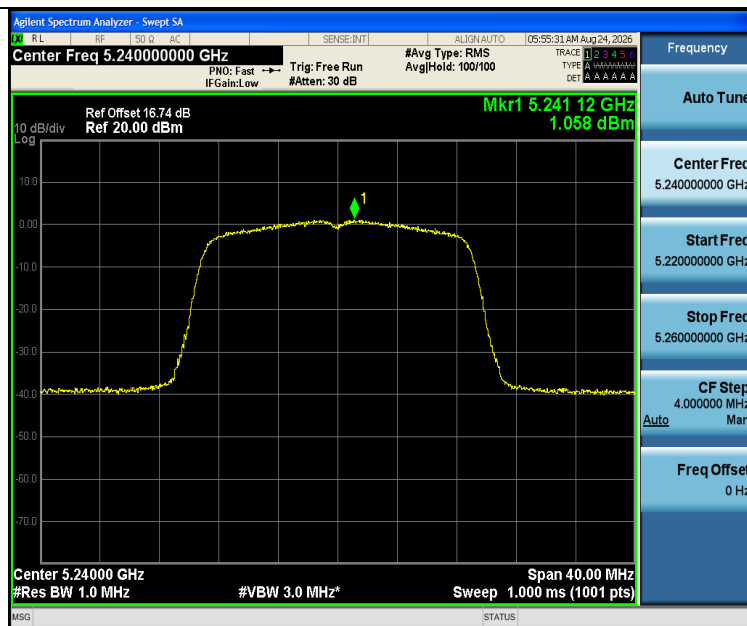
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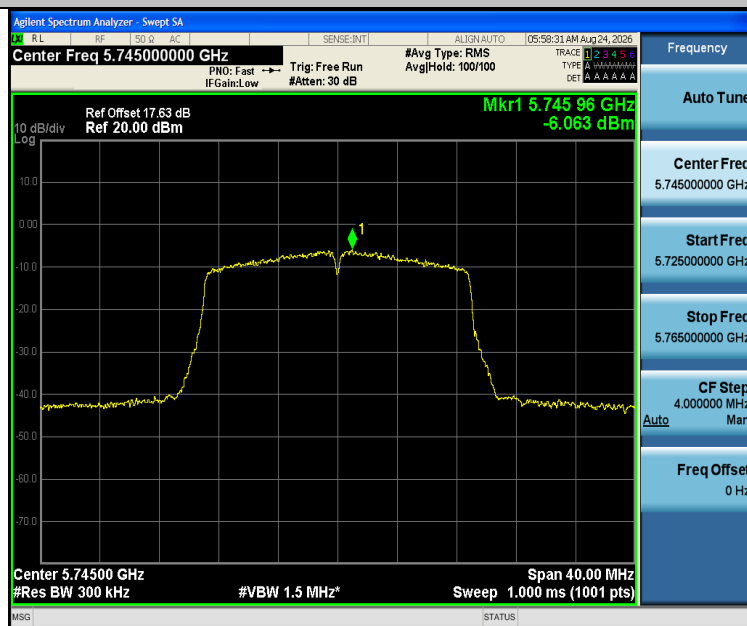
11AC20SISO-Ant1-5200-PASS



11AC20SISO-Ant1-5240-PASS



11AC20SISO-Ant1-5745-PASS



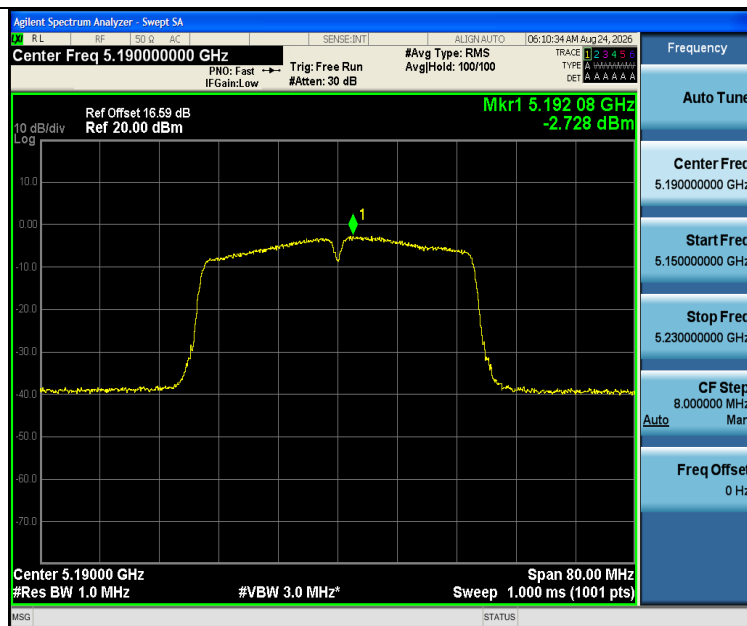
11AC20SISO-Ant1-5785-PASS



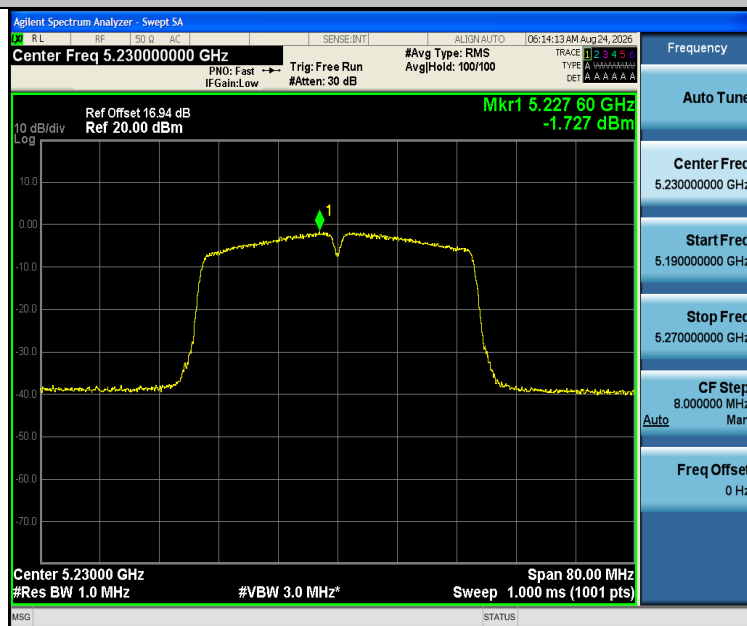
11AC20SISO-Ant1-5825-PASS



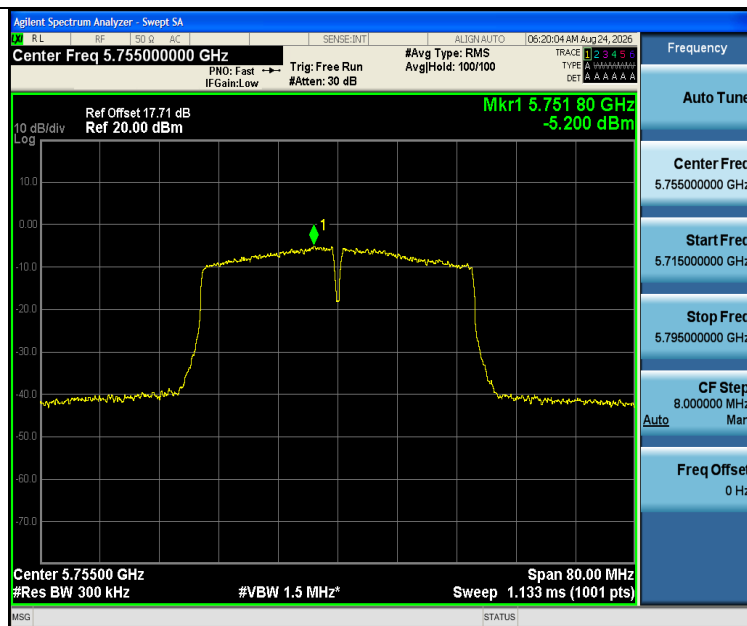
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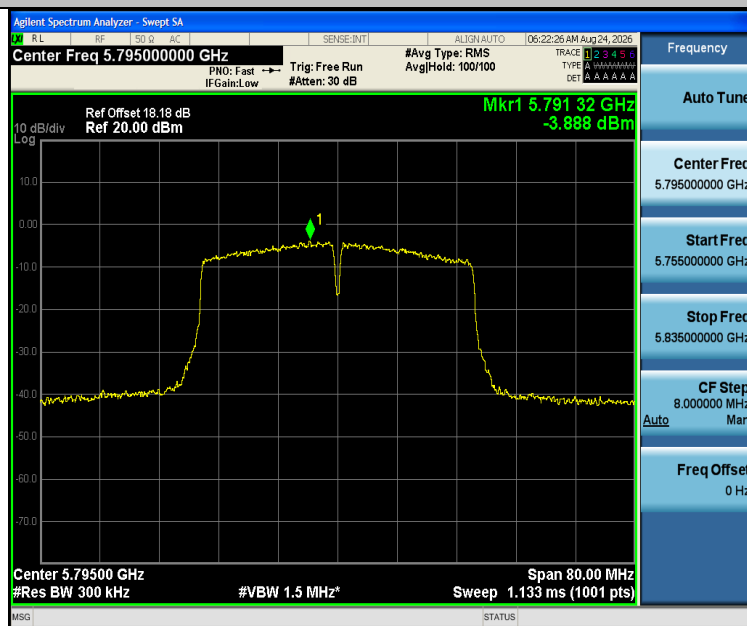
11AC40SISO-Ant1-5230-PASS



11AC40SISO-Ant1-5755-PASS



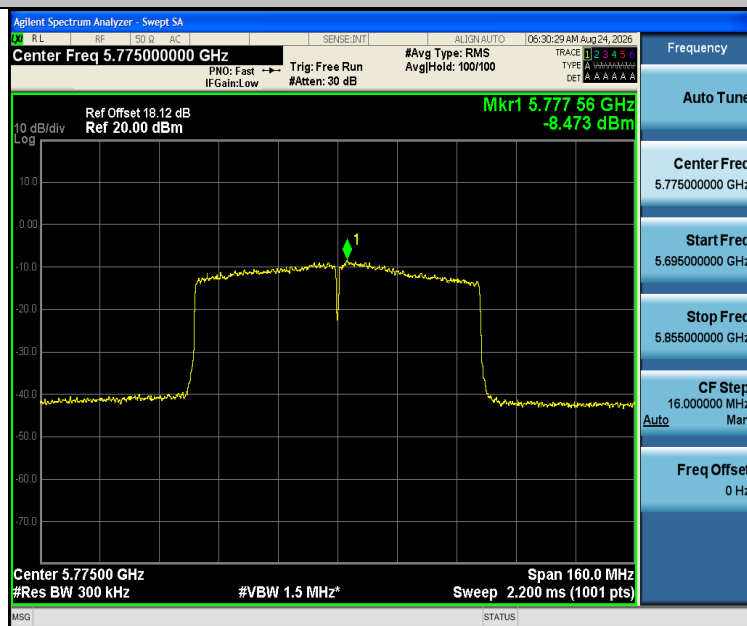
11AC40SISO-Ant1-5795-PASS



11AC80SISO-Ant1-5210-PASS



11AC80SISO-Ant1-5775-PASS



Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.



9.4 Antenna Requirement

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 15.247 (b), 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.

9.5 Result

The EUT'S antenna, permanent attached antenna, is Rob Antenna. The antenna's gain is 5.2G: 3.32dBi, 5.8G: 2.8dBi and meets the requirement.



10 Frequency Stability

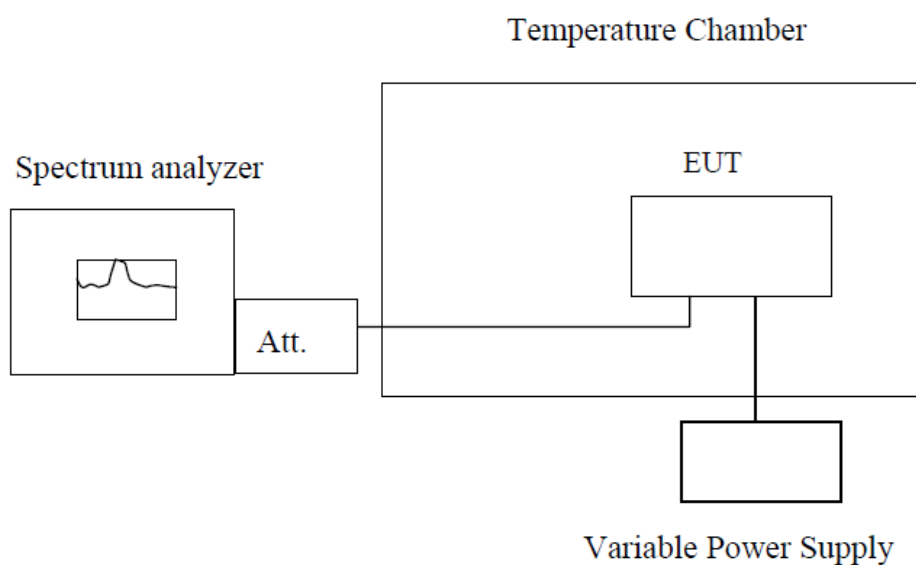
Test Requirement : FCC Part15 E Section 15.407 (g)

Test Limit Manufacturers 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 in the user's manual.

10.1 Test Procedure

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

10.2 Test Setup





10.3 Test Result

TestMode	Antenna	Frequenc y[MHz]	Voltage [Vdc]	Temperat ure (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-37000.00	-7.142857	20	PASS
11A	Ant1	5180	LV	NT	-37000.00	-7.142857	20	PASS
11A	Ant1	5180	HV	NT	-37000.00	-7.142857	20	PASS
11A	Ant1	5200	NV	NT	-37000.00	-7.115385	20	PASS
11A	Ant1	5200	LV	NT	-38000.00	-7.307692	20	PASS
11A	Ant1	5200	HV	NT	-38000.00	-7.307692	20	PASS
11A	Ant1	5240	NV	NT	-39000.00	-7.442748	20	PASS
11A	Ant1	5240	LV	NT	-39000.00	-7.442748	20	PASS
11A	Ant1	5240	HV	NT	-39000.00	-7.442748	20	PASS
11A	Ant1	5745	NV	NT	-42000.00	-7.310705	20	PASS
11A	Ant1	5745	LV	NT	-43000.00	-7.484769	20	PASS
11A	Ant1	5745	HV	NT	-43000.00	-7.484769	20	PASS
11A	Ant1	5785	NV	NT	-43000.00	-7.433016	20	PASS
11A	Ant1	5785	LV	NT	-43000.00	-7.433016	20	PASS
11A	Ant1	5785	HV	NT	-43000.00	-7.433016	20	PASS
11A	Ant1	5825	NV	NT	-43000.00	-7.381974	20	PASS
11A	Ant1	5825	LV	NT	-43000.00	-7.381974	20	PASS
11A	Ant1	5825	HV	NT	-43000.00	-7.381974	20	PASS
11N20SIS O	Ant1	5180	NV	NT	-38000.00	-7.335907	20	PASS
11N20SIS O	Ant1	5180	LV	NT	-38000.00	-7.335907	20	PASS
11N20SIS O	Ant1	5180	HV	NT	-39000.00	-7.528958	20	PASS
11N20SIS O	Ant1	5200	NV	NT	-39000.00	-7.500000	20	PASS
11N20SIS O	Ant1	5200	LV	NT	-39000.00	-7.500000	20	PASS
11N20SIS O	Ant1	5200	HV	NT	-39000.00	-7.500000	20	PASS
11N20SIS O	Ant1	5240	NV	NT	-39000.00	-7.442748	20	PASS
11N20SIS O	Ant1	5240	LV	NT	-39000.00	-7.442748	20	PASS
11N20SIS O	Ant1	5240	HV	NT	-39000.00	-7.442748	20	PASS
11N20SIS O	Ant1	5745	NV	NT	-43000.00	-7.484769	20	PASS
11N20SIS O	Ant1	5745	LV	NT	-43000.00	-7.484769	20	PASS
11N20SIS O	Ant1	5745	HV	NT	-43000.00	-7.484769	20	PASS
11N20SIS O	Ant1	5785	NV	NT	-43000.00	-7.433016	20	PASS
11N20SIS O	Ant1	5785	LV	NT	-43000.00	-7.433016	20	PASS
11N20SIS O	Ant1	5785	HV	NT	-43000.00	-7.433016	20	PASS
11N20SIS O	Ant1	5825	NV	NT	-44000.00	-7.553648	20	PASS
11N20SIS O	Ant1	5825	LV	NT	-44000.00	-7.553648	20	PASS



11N20SIS O	Ant1	5825	HV	NT	-44000.00	-7.553648	20	PASS
11N40SIS O	Ant1	5190	NV	NT	-39000.00	-7.514451	20	PASS
11N40SIS O	Ant1	5190	LV	NT	-39000.00	-7.514451	20	PASS
11N40SIS O	Ant1	5190	HV	NT	-39000.00	-7.514451	20	PASS
11N40SIS O	Ant1	5230	NV	NT	-39000.00	-7.456979	20	PASS
11N40SIS O	Ant1	5230	LV	NT	-39000.00	-7.456979	20	PASS
11N40SIS O	Ant1	5230	HV	NT	-39000.00	-7.456979	20	PASS
11N40SIS O	Ant1	5755	NV	NT	-43000.00	-7.471764	20	PASS
11N40SIS O	Ant1	5755	LV	NT	-43000.00	-7.471764	20	PASS
11N40SIS O	Ant1	5755	HV	NT	-43000.00	-7.471764	20	PASS
11N40SIS O	Ant1	5795	NV	NT	-43000.00	-7.420190	20	PASS
11N40SIS O	Ant1	5795	LV	NT	-44000.00	-7.592752	20	PASS
11N40SIS O	Ant1	5795	HV	NT	-43000.00	-7.420190	20	PASS
11AC20SIS O	Ant1	5180	NV	NT	-39000.00	-7.528958	20	PASS
11AC20SIS O	Ant1	5180	LV	NT	-39000.00	-7.528958	20	PASS
11AC20SIS O	Ant1	5180	HV	NT	-39000.00	-7.528958	20	PASS
11AC20SIS O	Ant1	5200	NV	NT	-39000.00	-7.500000	20	PASS
11AC20SIS O	Ant1	5200	LV	NT	-39000.00	-7.500000	20	PASS
11AC20SIS O	Ant1	5200	HV	NT	-39000.00	-7.500000	20	PASS
11AC20SIS O	Ant1	5240	NV	NT	-40000.00	-7.633588	20	PASS
11AC20SIS O	Ant1	5240	LV	NT	-40000.00	-7.633588	20	PASS
11AC20SIS O	Ant1	5240	HV	NT	-40000.00	-7.633588	20	PASS
11AC20SIS O	Ant1	5745	NV	NT	-43000.00	-7.484769	20	PASS
11AC20SIS O	Ant1	5745	LV	NT	-43000.00	-7.484769	20	PASS
11AC20SIS O	Ant1	5745	HV	NT	-43000.00	-7.484769	20	PASS
11AC20SIS O	Ant1	5785	NV	NT	-43000.00	-7.433016	20	PASS
11AC20SIS O	Ant1	5785	LV	NT	-44000.00	-7.605877	20	PASS
11AC20SIS O	Ant1	5785	HV	NT	-44000.00	-7.605877	20	PASS
11AC20SIS	Ant1	5825	NV	NT	-44000.00	-7.553648	20	PASS



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11AC20SIS O	Ant1	5825	LV	NT	-44000.00	-7.553648	20	PASS
11AC20SIS O	Ant1	5825	HV	NT	-44000.00	-7.553648	20	PASS
11AC40SIS O	Ant1	5190	NV	NT	-39000.00	-7.514451	20	PASS
11AC40SIS O	Ant1	5190	LV	NT	-39000.00	-7.514451	20	PASS
11AC40SIS O	Ant1	5190	HV	NT	-39000.00	-7.514451	20	PASS
11AC40SIS O	Ant1	5230	NV	NT	-39000.00	-7.456979	20	PASS
11AC40SIS O	Ant1	5230	LV	NT	-39000.00	-7.456979	20	PASS
11AC40SIS O	Ant1	5230	HV	NT	-39000.00	-7.456979	20	PASS
11AC40SIS O	Ant1	5755	NV	NT	-43000.00	-7.471764	20	PASS
11AC40SIS O	Ant1	5755	LV	NT	-43000.00	-7.471764	20	PASS
11AC40SIS O	Ant1	5755	HV	NT	-43000.00	-7.471764	20	PASS
11AC40SIS O	Ant1	5795	NV	NT	-43000.00	-7.420190	20	PASS
11AC40SIS O	Ant1	5795	LV	NT	-44000.00	-7.592752	20	PASS
11AC40SIS O	Ant1	5795	HV	NT	-44000.00	-7.592752	20	PASS
11AC80SIS O	Ant1	5210	NV	NT	-39000.00	-7.485605	20	PASS
11AC80SIS O	Ant1	5210	LV	NT	-39000.00	-7.485605	20	PASS
11AC80SIS O	Ant1	5210	HV	NT	-39000.00	-7.485605	20	PASS
11AC80SIS O	Ant1	5775	NV	NT	-44000.00	-7.619048	20	PASS
11AC80SIS O	Ant1	5775	LV	NT	-43000.00	-7.445887	20	PASS
11AC80SIS O	Ant1	5775	HV	NT	-43000.00	-7.445887	20	PASS