FCC TEST REPORT

FCC ID: 2BLQ7-GL02

Product	:	Gaming PC
Model Name	:	GL02, X1/M50/MTX240
Brand	:	AOACE
Report No.	:	PTC24090210203E-FC04

Prepared for

Shenzhen Zhuangji Master Electronic Commerce Co., Ltd.

3rd Floor, Building B, Innovation Silicon Valley Industrial Park, Jingtian Road, Laocun Community, Guanhu Street, Longhua District, Shenzhen

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	:	Shenzhen Zhuangji Master Electronic Commerce Co., Ltd.
Address	:	3rd Floor, Building B, Innovation Silicon Valley Industrial Park, Jingtian Road, Laocun Community, Guanhu Street, Longhua District, Shenzhen
Manufacture's name	:	Shenzhen Zhuangji Master Electronic Commerce Co., Ltd.
Address	:	3rd Floor, Building B, Innovation Silicon Valley Industrial Park, Jingtian Road, Laocun Community, Guanhu Street, Longhua District, Shenzhen
Product name	:	Gaming PC
Model name	:	GL02,X1/M50/MTX240
Standards	:	FCC CFR47 Part 15 Section 15.407
Test procedure	:	ANSI C63.10:2013
Test Date	:	Sep. 11, 2024 to Oct. 08, 2024
Date of Issue	:	Oct. 08, 2024
Test Result	:	Pass

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:

Jack zhou / Engineer

Technical Manager:

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	:	Gaming PC
Model Name	:	GL02
Additional model	:	X1/M50/MTX240
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 for 802.11g/n/a/ac
Antenna installation	:	External Antenna
Antenna Gain	:	Ant1:3.11dBi Ant2:3.11dBi
Smart System	:	☒ SISO:(802.11n/a/ac) ☐ MIMO:(802.11n/a/ac)
Power supply	:	Input voltage:100VAC~240V~ Input current:8-4A Frequency:60-50Hz Maximum output wattage: 550W
Hardware Version	:	N/A
Software Version	:	N/A
Test sample No.	:	PTC24090210203E-1/2, PTC24090210203E-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; 802.11n (HT20): MCS0; 802.11ac: 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:

Test Mode	Duty Cycle(%)
802.11a	100%
802.11n/ac20	100%
802.11n/ac40	100%
802.11ac80	100%

3.3 Test Site

Precise Testing & Certification Co., Ltd

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. 15,2024	1 Year
Coaxial Cable	CDS	79254	46107086	10Hz-30GHz	Aug. 15,2024	1 Year
Power Meter	Anritsu	ML2495A	0949003	300MHz-40GHz	Aug. 15,2024	1 Year
Power Sensor	Anritsu	MA2411B	0917017	300MHz-40GHz	Aug. 15,2024	1 Year
DC power Supply	Agilent	E3642A	MY52420017	0-8V,5A/0-20 ,2.5A	Aug. 15,2024	1 Year
Humidity Chamber	AISRY	ASR-HW2-1000	20230926003	-40℃-150℃	Feb.23 ,2024	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. 15,2024	1 Year
Loop Antenna	Schwarzbeck	FMZB 1519	192	9 KHz -30MHz	Aug. 15,2024	1 Year
Bilog Antenna	SCHWARZBECK	VULB9160	9160-3355	25MHz-2GHz	Aug. 15,2024	1 Year
Preamplifier (low frequency)	SCHWARZBECK	BBV 9475	9745-0013	1MHz-1GHz	Aug. 15,2024	1 Year
Cable	IMRO	AK-9515E(9m)	Cable-L	9KHz-3GHz	Aug. 15,2024	1 Year
Spectrum Analyzer	Rohde&Schwarz	FSV40	6625-01-588-5515	9KHz-40GHz	Aug. 15,2024	1 Year

Horn Antenna	SCHWARZBECK	9120D	9120D-1246	1GHz-18GHz	Aug. 15,2024	1 Year
Power Amplifier	ZHINAN	ZN3380C	15002	1GHz-26.5GHz	Aug. 15,2024	1 Year
Horn Antenna	SCHWARZBECK	BBHA 9170	9170-1066	15GHz-40GHz	Jul. 19, 2024	1 Year
Amplifier	SCHWARZBECK	BBV 9721	9721-205	18GHz-40GHz	Jul. 19, 2024	1 Year
Cable	H+S	CBL-26	N/A	1GHz-26.5GHz	Aug. 15,2024	1 Year
RF Cable	R&S	R204	R21X	1GHz-40GHz	Aug. 15,2024	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. 15,2024	1 Year
Artificial Mains Network	Rohde&Schwarz	ENV216	102453	9KHz-300MHz	Aug. 15,2024	1 Year
Artificial Mains Network	Rohde&Schwarz	ENV216	101342	9KHz-300MHz	Aug. 15,2024	1 Year
Limiter	R&S	ESH3-Z2	0357.8810.54-102808-NB	0Hz-30MHz	Aug. 15,2024	1 Year
RF Switch	DIAMOND ANTENNA	CX-210	/	0.09MHz-6GHz	Mar. 22,2024	1 Year
Test S/W	Tonscend	JS32-CE	/	/	/	/

4.2 Measurement Uncertainty

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

4.3 Description of Support Units

Equipment	Model No.	Series No.	Parameters
LCD	HU20270FB0	1S6S39BCS4L EGK1P3809	N/A
Mouse	OP-300	SA8177323	N/A
Keyboard	G2	SA8173709103	N/A

5 Conducted Emission

Test Requirement:	:	FCC CFR 47 Part 15 Section 15.207
Test Method	:	ANSI C63.10: 2013
Test Result	:	PASS
Frequency Range	:	150kHz to 30MHz
Class/Severity	:	Class B

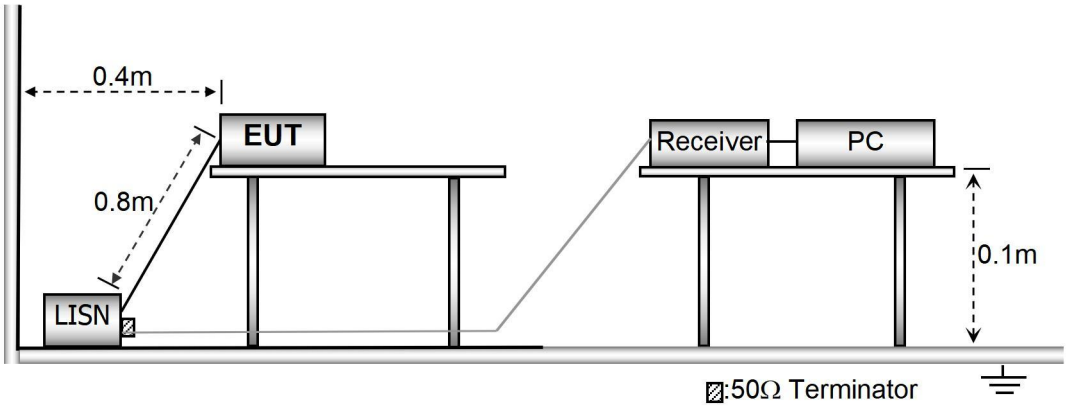
5.1 E.U.T. Operation

Operating Environment :

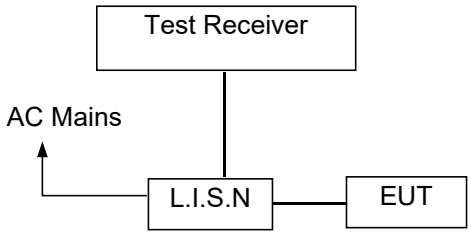
Temperature	:	23.9 °C
Humidity	:	51.4 % RH
Atmospheric Pressure	:	101.21kPa

5.2 EUT Setup

The conducted emission tests were performed using the setup accordance with the ANSI C63.10:2013.



5.3 Test SET-UP (Block Diagram of Configuration)



5.4 Measurement Procedure

1. The EUT was placed on a table, which is 0.1m 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

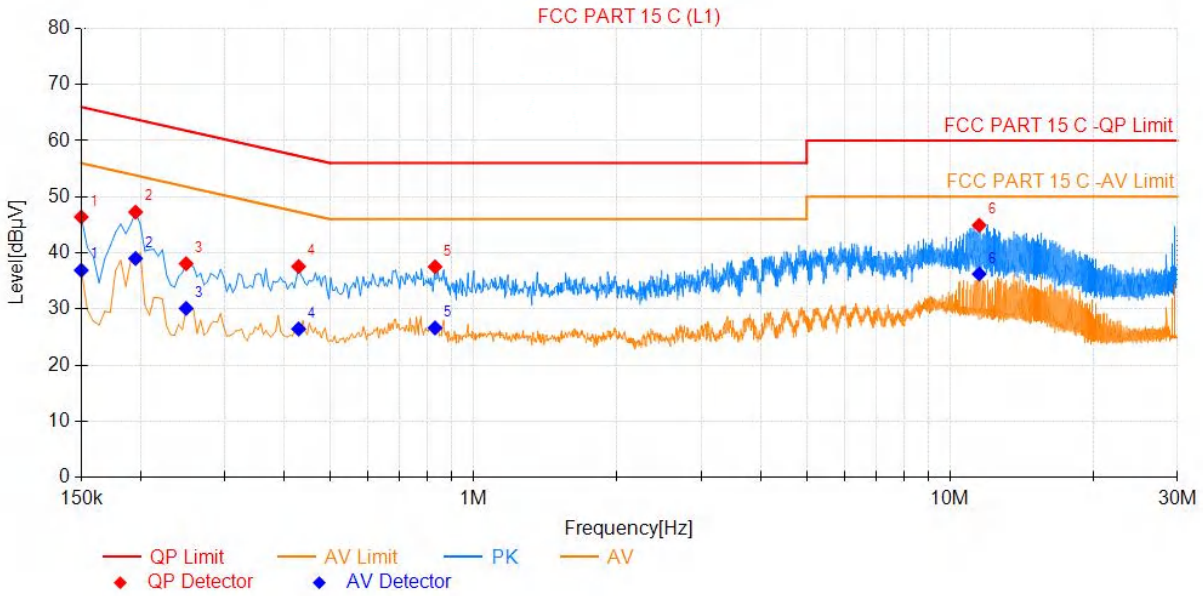
The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

5.7 Conducted Emission Test Result

Pass.

All the modulation modes were tested the data of the worst mode (AC 120V/60Hz, Ant1_TX 5180MHz) are recorded in the following pages and the others modulation methods do not exceed the limits.

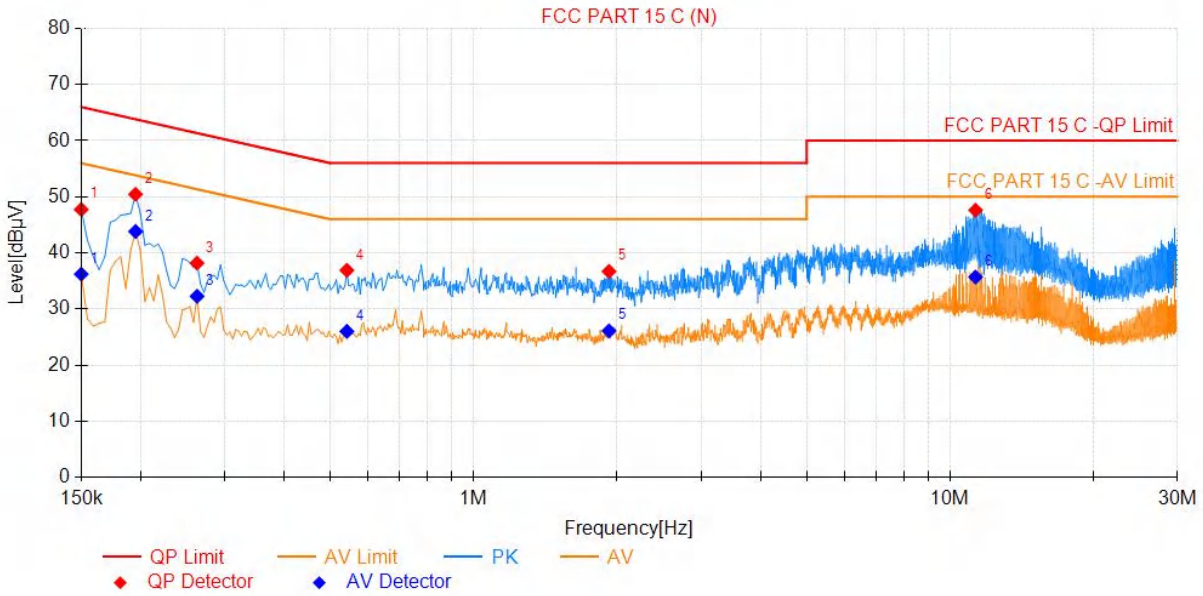
Line-AC 120V/60Hz



Final Data List

NO.	Freq. [MHz]	QP Reading [dBµV]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.150	27.20	19.19	46.39	66.00	19.61	17.71	36.90	56.00	19.10	PASS
2	0.195	28.13	19.14	47.27	63.82	16.55	19.86	39.00	53.82	14.82	PASS
3	0.249	18.98	19.09	38.07	61.79	23.72	11.02	30.11	51.79	21.68	PASS
4	0.429	18.30	19.27	37.57	57.27	19.70	7.17	26.44	47.27	20.83	PASS
5	0.830	18.30	19.22	37.52	56.00	18.48	7.39	26.61	46.00	19.39	PASS
6	11.513	25.17	19.75	44.92	60.00	15.08	16.49	36.24	50.00	13.76	PASS

Neutral-AC 120V/60Hz



Final Data List											
NO.	Freq. [MHz]	QP Reading [dBµV]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.150	28.77	18.96	47.73	66.00	18.27	17.24	36.20	56.00	19.80	PASS
2	0.195	31.38	19.06	50.44	63.82	13.38	24.75	43.81	53.82	10.01	PASS
3	0.263	19.13	19.04	38.17	61.35	23.18	13.22	32.26	51.35	19.09	PASS
4	0.542	17.74	19.15	36.89	56.00	19.11	6.86	26.01	46.00	19.99	PASS
5	1.923	17.53	19.17	36.70	56.00	19.30	6.92	26.09	46.00	19.91	PASS
6	11.310	27.97	19.64	47.61	60.00	12.39	16.05	35.69	50.00	14.31	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 C63.10:2013
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(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))} + 80$
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))} + 40$
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

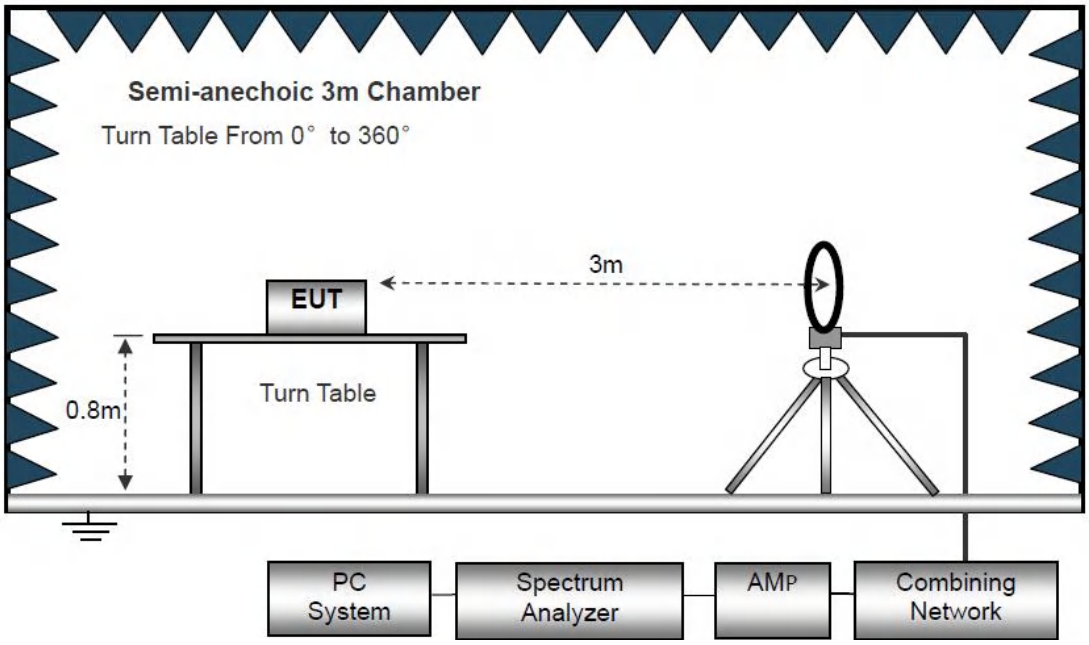
Atmospheric Pressure: : 101.3kPa

Test Voltage : AC 120V 60Hz

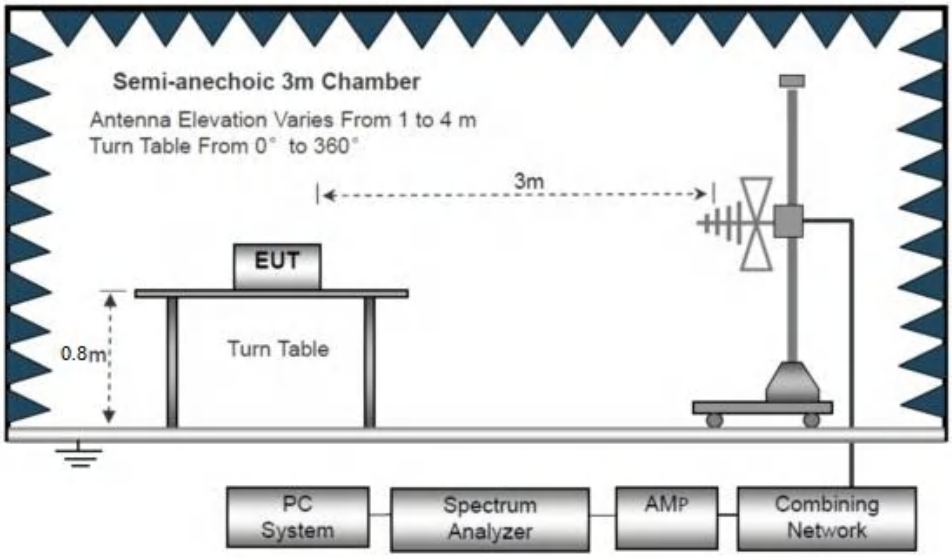
6.2 Test Setup

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

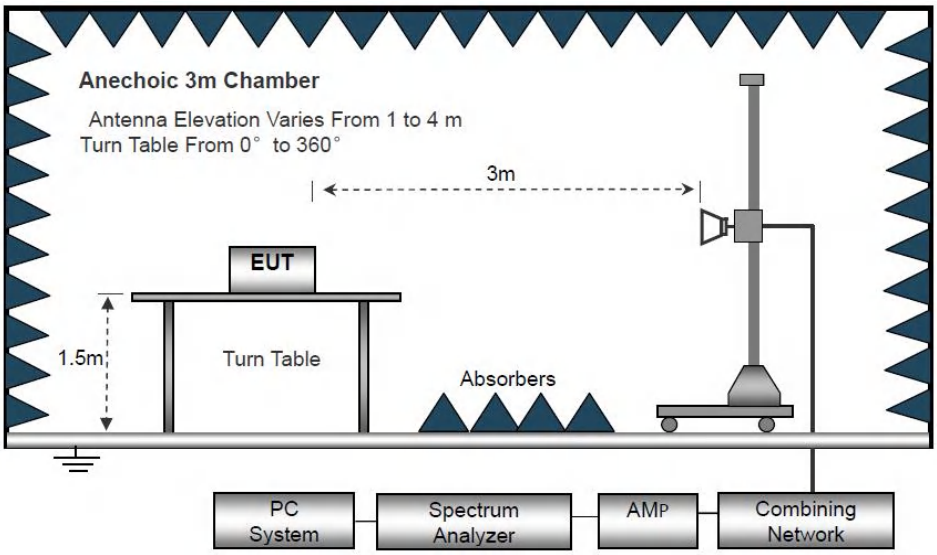
The test setup for emission measurement below 30MHz



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 0.8m above ground plane, And above 1000MHz, The EUT was placed on a styrofoam table which is 1.5m 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

Freq. (MHz)	Ant.Pol. H/V	Emission Level (dBuV/m)	Limit 3m (dBuV/m)	Over (dB)
--	--	--	--	>20

Note:

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

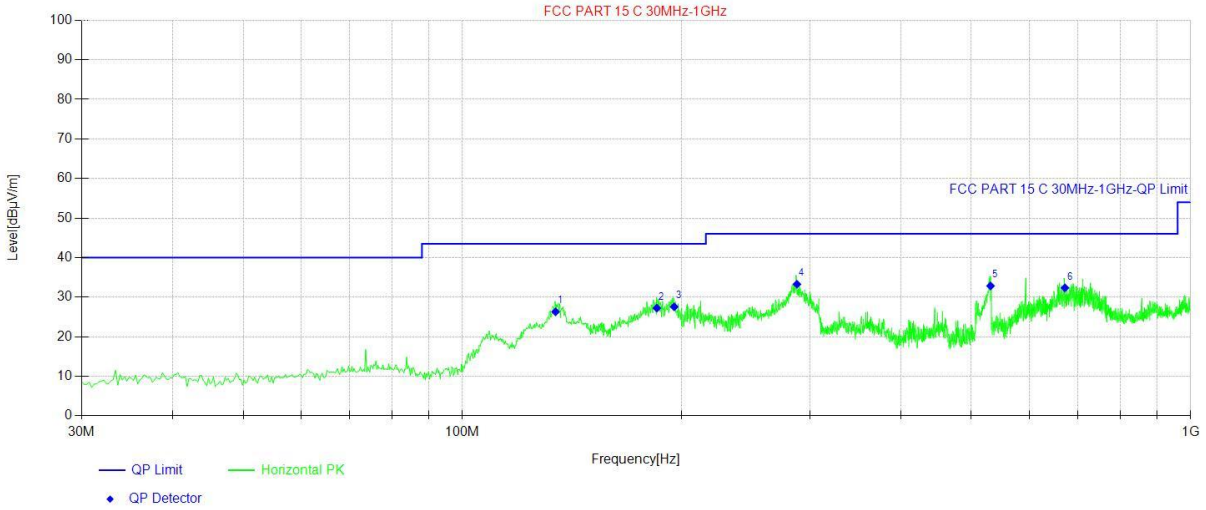
Distance extrapolation factor =40log(Specific distance/ test distance)(dB);
Limit line=Specific limits(dBuV) + distance extrapolation factor.

Test Frequency: 30MHz ~ 1GHz

All the modulation modes were tested the data of the worst mode (Ant1_TX 802.11a Channel 36，CH149) are recorded in the following pages and the others modulation methods do not exceed the limits.

Please refer to the following test plots:

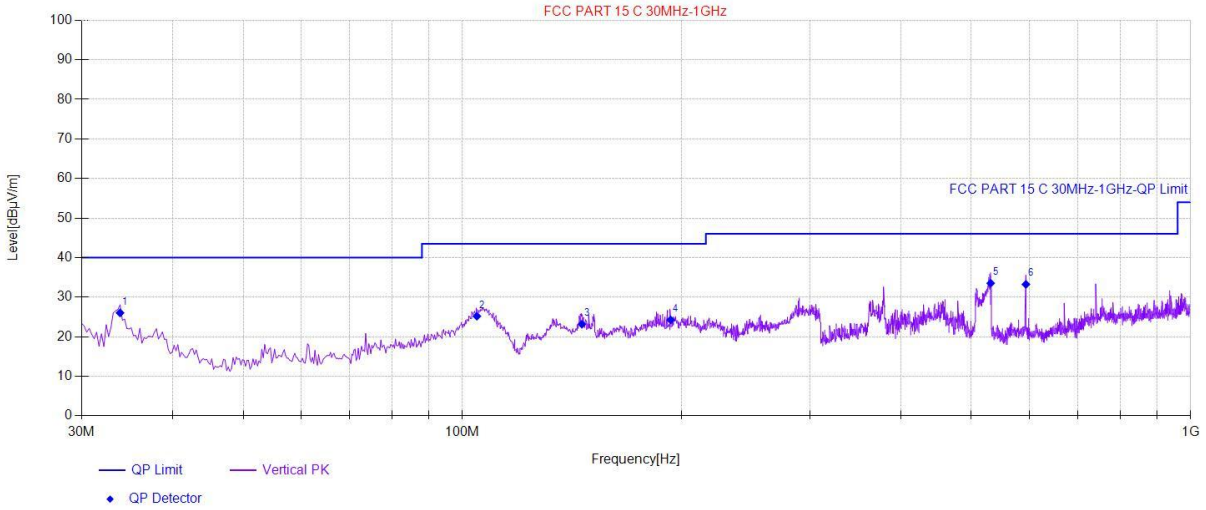
Antenna Polarization: Horizontal(CH36)



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	134.28	42.39	-16.08	26.31	43.50	17.19	Horizontal	PASS
2	184.96	44.32	-17.06	27.26	43.50	16.24	Horizontal	PASS
3	195.39	45.65	-18.08	27.57	43.50	15.93	Horizontal	PASS
4	288.02	48.24	-14.96	33.28	46.00	12.72	Horizontal	PASS
5	531.25	42.74	-9.89	32.85	46.00	13.15	Horizontal	PASS
6	672.14	38.65	-6.28	32.37	46.00	13.63	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	33.88	43.79	-17.75	26.04	40.00	13.96	Vertical	PASS
2	104.69	44.19	-19.00	25.19	43.50	18.31	Vertical	PASS
3	145.92	38.68	-15.50	23.18	43.50	20.32	Vertical	PASS
4	193.20	42.16	-17.91	24.25	43.50	19.25	Vertical	PASS
5	531.49	43.41	-9.88	33.53	46.00	12.47	Vertical	PASS
6	594.06	41.64	-8.40	33.24	46.00	12.76	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.

Ant1_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	47.48	35.22	5.36	31.25	56.81	68.23	-11.42	V
15540	42.38	35.96	7.85	30.63	55.56	68.23	-12.67	V
20720	43.53	39.12	8.56	34.95	56.26	68.23	-11.97	V
10360	48.45	34.12	5.36	31.25	56.68	68.23	-11.55	H
15540	42.25	36.52	7.85	30.63	55.99	68.23	-12.24	H
20720	42.92	40.01	8.56	34.95	56.54	68.23	-11.69	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	33.21	35.22	5.36	31.25	42.54	54	-11.46	V
15540	30.18	35.96	7.85	30.63	43.36	54	-10.64	V
20720	28.01	39.12	8.56	34.95	40.74	54	-13.26	V
10360	32.47	34.12	5.36	31.25	40.70	54	-13.30	H
15540	24.42	36.52	7.85	30.63	38.16	54	-15.84	H
20720	27.02	40.01	8.56	34.95	40.64	54	-13.36	H

Ant1_802.11a

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	47.92	35.63	5.36	31.25	57.66	68.23	-10.57	V
15600	43.60	35.91	7.85	30.63	56.73	68.23	-11.50	V
20800	44.52	39.67	8.56	34.95	57.80	68.23	-10.43	V
10400	46.80	34.25	5.36	31.25	55.16	68.23	-13.07	H
15600	42.05	37.02	7.85	30.63	56.29	68.23	-11.94	H
20800	43.51	38.88	8.56	34.95	56.00	68.23	-12.23	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	33.39	35.63	5.36	31.25	43.13	54	-10.87	V
15600	28.66	35.91	7.85	30.63	41.79	54	-12.21	V
20800	29.32	39.67	8.56	34.95	42.60	54	-11.40	V
10400	32.99	34.25	5.36	31.25	41.35	54	-12.65	H
15600	29.07	37.02	7.85	30.63	43.31	54	-10.69	H
20800	29.91	38.88	8.56	34.95	42.40	54	-11.60	H

Ant1_ 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	45.66	34.68	5.36	31.25	54.45	68.23	-13.78	V
17520	43.05	36.52	7.85	30.63	56.79	68.23	-11.44	V
20960	43.88	38.77	8.56	34.95	56.26	68.23	-11.97	V
10480	47.20	33.99	5.36	31.25	55.30	68.23	-12.93	H
17520	45.19	36.84	7.85	30.63	59.25	68.23	-8.98	H
20960	45.94	39.93	8.56	34.95	59.48	68.23	-8.75	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	33.32	34.68	5.36	31.25	42.11	54	-11.89	V
17520	29.23	36.52	7.85	30.63	42.97	54	-11.03	V
20960	30.02	38.77	8.56	34.95	42.40	54	-11.60	V
10480	32.40	33.99	5.36	31.25	40.50	54	-13.50	H
17520	26.85	36.84	7.85	30.63	40.91	54	-13.09	H
20960	29.28	39.93	8.56	34.95	42.82	54	-11.18	H

Ant1_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	47.34	35.26	5.42	31.75	56.27	68.23	-11.96	V
17235	42.26	36.88	7.32	30.96	55.50	68.23	-12.73	V
22980	43.76	39.14	8.85	35.25	56.50	68.23	-11.73	V
11490	49.71	34.21	5.42	31.75	57.59	68.23	-10.64	H
17235	44.34	37.52	7.32	30.96	58.22	68.23	-10.01	H
22980	44.13	39.88	8.85	35.25	57.61	68.23	-10.62	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	32.05	35.26	5.42	31.75	40.98	54	-13.02	V
17235	30.06	36.88	7.32	30.96	43.30	54	-10.70	V
22980	29.66	39.14	8.85	35.25	42.40	54	-11.60	V
11490	31.39	34.21	5.42	31.75	39.27	54	-14.73	H
17235	29.07	37.52	7.32	30.96	42.95	54	-11.05	H
22980	29.07	39.88	8.85	35.25	42.55	54	-11.45	H

Ant1_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	48.28	35.26	5.42	31.75	57.21	68.23	-11.02	V
17355	44.33	36.88	7.32	30.96	57.57	68.23	-10.66	V
23140	45.38	39.14	8.85	35.25	58.12	68.23	-10.11	V
11570	48.44	34.21	5.42	31.75	56.32	68.23	-11.91	H
17355	42.35	37.52	7.32	30.96	56.23	68.23	-12.00	H
23140	43.06	39.88	8.85	35.25	56.54	68.23	-11.69	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	33.17	35.26	5.42	31.75	42.10	54	-11.90	V
17355	29.44	36.88	7.32	30.96	42.68	54	-11.32	V
23140	28.37	39.14	8.85	35.25	41.11	54	-12.89	V
11570	34.69	34.21	5.42	31.75	42.57	54	-11.43	H
17355	29.44	37.52	7.32	30.96	43.32	54	-10.68	H
23140	29.33	39.88	8.85	35.25	42.81	54	-11.19	H

Ant1_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	48.44	35.26	5.42	31.75	57.37	68.23	-10.86	V
17475	44.53	36.88	7.32	30.96	57.77	68.23	-10.46	V
23300	45.89	39.14	8.85	35.25	58.63	68.23	-9.60	V
11650	49.07	34.21	5.42	31.75	56.95	68.23	-11.28	H
17475	44.15	37.52	7.32	30.96	58.03	68.23	-10.20	H
23300	44.93	39.88	8.85	35.25	58.41	68.23	-9.82	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	34.69	34.96	5.42	31.75	43.32	54	-10.68	V
17475	28.79	36.74	7.32	30.96	41.89	54	-12.11	V
23300	30.08	39.14	8.85	35.25	42.82	54	-11.18	V
11650	33.42	34.02	5.42	31.75	41.11	54	-12.89	H
17475	28.75	36.57	7.32	30.96	41.68	54	-12.32	H
23300	28.61	39.88	8.85	35.25	42.09	54	-11.91	H

Ant1_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	45.32	34.56	5.36	31.25	53.99	68.23	-14.24	V
15540	42.97	36.22	7.85	30.63	56.41	68.23	-11.82	V
20720	43.99	38.97	8.56	34.95	56.57	68.23	-11.66	V
10360	49.01	33.57	5.36	31.25	56.69	68.23	-11.54	H
15540	40.14	36.49	7.85	30.63	53.85	68.23	-14.38	H
20720	42.11	39.92	8.56	34.95	55.64	68.23	-12.59	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	32.29	34.56	5.36	31.25	40.96	54	-13.04	V
15540	29.39	36.22	7.85	30.63	42.83	54	-11.17	V
20720	27.94	38.97	8.56	34.95	40.52	54	-13.48	V
10360	32.05	33.57	5.36	31.25	39.73	54	-14.27	H
15540	27.23	36.49	7.85	30.63	40.94	54	-13.06	H
20720	28.10	39.92	8.56	34.95	41.63	54	-12.37	H

Ant1_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	48.69	34.63	5.36	31.25	57.43	68.23	-10.80	V
15600	44.07	36.42	7.85	30.63	57.71	68.23	-10.52	V
20800	45.04	38.81	8.56	34.95	57.46	68.23	-10.77	V
10400	47.85	33.93	5.36	31.25	55.89	68.23	-12.34	H
15600	43.43	36.55	7.85	30.63	57.20	68.23	-11.03	H
20800	43.82	39.94	8.56	34.95	57.37	68.23	-10.86	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	32.50	34.63	5.36	31.25	41.24	54	-12.76	V
15600	28.78	36.42	7.85	30.63	42.42	54	-11.58	V
20800	29.01	38.81	8.56	34.95	41.43	54	-12.57	V
10400	33.53	33.93	5.36	31.25	41.57	54	-12.43	H
15600	28.41	36.55	7.85	30.63	42.18	54	-11.82	H
20800	29.85	39.94	8.56	34.95	43.40	54	-10.60	H

Ant1_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	45.49	34.68	5.36	31.25	54.28	68.23	-13.95	V
17520	44.71	36.52	7.85	30.63	58.45	68.23	-9.78	V
20960	43.02	38.77	8.56	34.95	55.40	68.23	-12.83	V
10480	46.50	33.99	5.36	31.25	54.60	68.23	-13.63	H
17520	45.96	36.84	7.85	30.63	60.02	68.23	-8.21	H
20960	44.24	39.93	8.56	34.95	57.78	68.23	-10.45	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	31.83	34.68	5.36	31.25	40.62	54	-13.38	V
17520	27.58	36.52	7.85	30.63	41.32	54	-12.68	V
20960	28.11	38.77	8.56	34.95	40.49	54	-13.51	V
10480	30.53	33.99	5.36	31.25	38.63	54	-15.37	H
17520	27.59	36.84	7.85	30.63	41.65	54	-12.35	H
20960	29.48	39.93	8.56	34.95	43.02	54	-10.98	H

Ant1_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	49.61	35.26	5.42	31.75	58.54	68.23	-9.69	V
17235	42.44	36.88	7.32	30.96	55.68	68.23	-12.55	V
22980	43.03	39.14	8.85	35.25	55.77	68.23	-12.46	V
11490	49.52	34.21	5.42	31.75	57.40	68.23	-10.83	H
17235	43.98	37.52	7.32	30.96	57.86	68.23	-10.37	H
22980	44.98	39.88	8.85	35.25	58.46	68.23	-9.77	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.
11490	33.75	35.26	5.42	31.75	42.68	54	-11.32	V
17235	30.11	36.88	7.32	30.96	43.35	54	-10.65	V
22980	29.75	39.14	8.85	35.25	42.49	54	-11.51	V
11490	33.16	34.21	5.42	31.75	41.04	54	-12.96	H
17235	28.17	37.52	7.32	30.96	42.05	54	-11.95	H
22980	29.05	39.88	8.85	35.25	42.53	54	-11.47	H

Ant1_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	45.72	35.26	5.42	31.75	54.65	68.23	-13.58	V
17355	44.00	36.88	7.32	30.96	57.24	68.23	-10.99	V
23140	45.33	39.14	8.85	35.25	58.07	68.23	-10.16	V
11570	48.31	34.21	5.42	31.75	56.19	68.23	-12.04	H
17355	42.67	37.52	7.32	30.96	56.55	68.23	-11.68	H
23140	42.29	39.88	8.85	35.25	55.77	68.23	-12.46	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	33.58	35.26	5.42	31.75	42.51	54	-11.49	V
17355	30.01	36.88	7.32	30.96	43.25	54	-10.75	V
23140	29.64	39.14	8.85	35.25	42.38	54	-11.62	V
11570	33.60	34.21	5.42	31.75	41.48	54	-12.52	H
17355	29.89	37.52	7.32	30.96	43.77	54	-10.23	H
23140	29.32	39.88	8.85	35.25	42.80	54	-11.20	H

Ant1_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	47.74	35.26	5.42	31.75	56.67	68.23	-11.56	V
17475	44.71	36.88	7.32	30.96	57.95	68.23	-10.28	V
23300	45.33	39.14	8.85	35.25	58.07	68.23	-10.16	V
11650	49.05	34.21	5.42	31.75	56.93	68.23	-11.30	H
17475	44.36	37.52	7.32	30.96	58.24	68.23	-9.99	H
23300	45.62	39.88	8.85	35.25	59.10	68.23	-9.13	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	35.81	35.26	5.42	31.75	44.74	54	-9.26	V
17475	29.04	36.88	7.32	30.96	42.28	54	-11.72	V
23300	28.05	39.14	8.85	35.25	40.79	54	-13.21	V
11650	33.05	34.21	5.42	31.75	40.93	54	-13.07	H
17475	28.82	37.52	7.32	30.96	42.70	54	-11.30	H
23300	29.29	39.88	8.85	35.25	42.77	54	-11.23	H

Ant1_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	47.10	35.22	5.36	31.25	56.43	68.23	-11.80	V
15540	42.37	35.96	7.85	30.63	55.55	68.23	-12.68	V
20720	43.27	39.12	8.56	34.95	56.00	68.23	-12.23	V
10360	48.41	34.12	5.36	31.25	56.64	68.23	-11.59	H
15540	42.20	36.52	7.85	30.63	55.94	68.23	-12.29	H
20720	42.91	40.01	8.56	34.95	56.53	68.23	-11.70	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	32.90	35.22	5.36	31.25	42.23	54	-11.77	V
15540	30.15	35.96	7.85	30.63	43.33	54	-10.67	V
20720	28.13	39.12	8.56	34.95	40.86	54	-13.14	V
10360	32.91	34.12	5.36	31.25	41.14	54	-12.86	H
15540	24.80	36.52	7.85	30.63	38.54	54	-15.46	H
20720	27.00	40.01	8.56	34.95	40.62	54	-13.38	H

Ant1_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	47.69	35.63	5.36	31.25	57.43	68.23	-10.80	V
15600	43.14	35.91	7.85	30.63	56.27	68.23	-11.96	V
20800	44.08	39.67	8.56	34.95	57.36	68.23	-10.87	V
10400	46.74	34.25	5.36	31.25	55.10	68.23	-13.13	H
15600	42.23	37.02	7.85	30.63	56.47	68.23	-11.76	H
20800	43.54	38.88	8.56	34.95	56.03	68.23	-12.20	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	33.73	35.63	5.36	31.25	43.47	54	-10.53	V
15600	29.12	35.91	7.85	30.63	42.25	54	-11.75	V
20800	29.55	39.67	8.56	34.95	42.83	54	-11.17	V
10400	33.26	34.25	5.36	31.25	41.62	54	-12.38	H
15600	29.13	37.02	7.85	30.63	43.37	54	-10.63	H
20800	30.01	38.88	8.56	34.95	42.50	54	-11.50	H

Ant1_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	45.59	34.68	5.36	31.25	54.38	68.23	-13.85	V
17520	43.46	36.52	7.85	30.63	57.20	68.23	-11.03	V
20960	44.42	38.77	8.56	34.95	56.80	68.23	-11.43	V
10480	47.06	33.99	5.36	31.25	55.16	68.23	-13.07	H
17520	45.11	36.84	7.85	30.63	59.17	68.23	-9.06	H
20960	46.28	39.93	8.56	34.95	59.82	68.23	-8.41	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.
10480	33.19	34.68	5.36	31.25	41.98	54	-12.02	V
17520	28.78	36.52	7.85	30.63	42.52	54	-11.48	V
20960	30.20	38.77	8.56	34.95	42.58	54	-11.42	V
10480	32.34	33.99	5.36	31.25	40.44	54	-13.56	H
17520	27.31	36.84	7.85	30.63	41.37	54	-12.63	H
20960	29.03	39.93	8.56	34.95	42.57	54	-11.43	H

Ant1_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	47.60	35.26	5.42	31.75	56.53	68.23	-11.70	V
17235	42.10	36.88	7.32	30.96	55.34	68.23	-12.89	V
22980	44.01	39.14	8.85	35.25	56.75	68.23	-11.48	V
11490	49.48	34.21	5.42	31.75	57.36	68.23	-10.87	H
17235	44.46	37.52	7.32	30.96	58.34	68.23	-9.89	H
22980	44.08	39.88	8.85	35.25	57.56	68.23	-10.67	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	32.51	35.26	5.42	31.75	41.44	54	-12.56	V
17235	29.72	36.88	7.32	30.96	42.96	54	-11.04	V
22980	29.67	39.14	8.85	35.25	42.41	54	-11.59	V
11490	31.30	34.21	5.42	31.75	39.18	54	-14.82	H
17235	28.74	37.52	7.32	30.96	42.62	54	-11.38	H
22980	28.84	39.88	8.85	35.25	42.32	54	-11.68	H

Ant1_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	48.81	35.26	5.42	31.75	57.74	68.23	-10.49	V
17355	44.42	36.88	7.32	30.96	57.66	68.23	-10.57	V
23140	45.22	39.14	8.85	35.25	57.96	68.23	-10.27	V
11570	48.43	34.21	5.42	31.75	56.31	68.23	-11.92	H
17355	42.31	37.52	7.32	30.96	56.19	68.23	-12.04	H
23140	43.12	39.88	8.85	35.25	56.60	68.23	-11.63	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	33.32	35.26	5.42	31.75	42.25	54	-11.75	V
17355	29.24	36.88	7.32	30.96	42.48	54	-11.52	V
23140	28.49	39.14	8.85	35.25	41.23	54	-12.77	V
11570	34.89	34.21	5.42	31.75	42.77	54	-11.23	H
17355	29.45	37.52	7.32	30.96	43.33	54	-10.67	H
23140	29.24	39.88	8.85	35.25	42.72	54	-11.28	H

Ant1_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	48.80	35.26	5.42	31.75	57.73	68.23	-10.50	V
17475	44.58	36.88	7.32	30.96	57.82	68.23	-10.41	V
23300	45.75	39.14	8.85	35.25	58.49	68.23	-9.74	V
11650	49.34	34.21	5.42	31.75	57.22	68.23	-11.01	H
17475	44.69	37.52	7.32	30.96	58.57	68.23	-9.66	H
23300	45.20	39.88	8.85	35.25	58.68	68.23	-9.55	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	34.28	35.26	5.42	31.75	43.21	54	-10.79	V
17475	28.29	36.88	7.32	30.96	41.53	54	-12.47	V
23300	29.95	39.14	8.85	35.25	42.69	54	-11.31	V
11650	33.66	34.21	5.42	31.75	41.54	54	-12.46	H
17475	28.53	37.52	7.32	30.96	42.41	54	-11.59	H
23300	28.69	39.88	8.85	35.25	42.17	54	-11.83	H

Ant1_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	47.74	35.26	5.42	31.75	56.67	68.23	-11.56	V
15570	44.31	36.88	7.32	30.96	57.55	68.23	-10.68	V
20760	45.08	39.14	8.85	35.25	57.82	68.23	-10.41	V
10380	49.22	34.21	5.42	31.75	57.10	68.23	-11.13	H
15570	44.81	37.52	7.32	30.96	58.69	68.23	-9.54	H
20760	45.37	39.88	8.85	35.25	58.85	68.23	-9.38	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	35.51	35.26	5.42	31.75	44.44	54	-9.56	V
15570	29.26	36.88	7.32	30.96	42.50	54	-11.50	V
20760	28.13	39.14	8.85	35.25	40.87	54	-13.13	V
10380	32.92	34.21	5.42	31.75	40.80	54	-13.20	H
15570	28.45	37.52	7.32	30.96	42.33	54	-11.67	H
20760	29.18	39.88	8.85	35.25	42.66	54	-11.34	H

Ant1_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	47.88	35.26	5.42	31.75	56.81	68.23	-11.42	V
15690	44.64	36.88	7.32	30.96	57.88	68.23	-10.35	V
20920	44.91	39.14	8.85	35.25	57.65	68.23	-10.58	V
10460	49.49	34.21	5.42	31.75	57.37	68.23	-10.86	H
15690	44.51	37.52	7.32	30.96	58.39	68.23	-9.84	H
20920	45.06	39.88	8.85	35.25	58.54	68.23	-9.69	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	35.40	35.26	5.42	31.75	44.33	54	-9.67	V
15690	28.94	36.88	7.32	30.96	42.18	54	-11.82	V
20920	28.01	39.14	8.85	35.25	40.75	54	-13.25	V
10460	33.28	34.21	5.42	31.75	41.16	54	-12.84	H
15690	28.85	37.52	7.32	30.96	42.73	54	-11.27	H
20920	28.83	39.88	8.85	35.25	42.31	54	-11.69	H

Ant1_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	47.36	35.26	5.42	31.75	56.29	68.23	-11.94	V
15570	44.43	36.88	7.32	30.96	57.67	68.23	-10.56	V
20760	45.34	39.14	8.85	35.25	58.08	68.23	-10.15	V
10380	49.13	34.21	5.42	31.75	57.01	68.23	-11.22	H
15570	44.76	37.52	7.32	30.96	58.64	68.23	-9.59	H
20760	45.49	39.88	8.85	35.25	58.97	68.23	-9.26	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	35.70	35.26	5.42	31.75	44.63	54	-9.37	V
15570	28.95	36.88	7.32	30.96	42.19	54	-11.81	V
20760	27.95	39.14	8.85	35.25	40.69	54	-13.31	V
10380	33.17	34.21	5.42	31.75	41.05	54	-12.95	H
15570	28.66	37.52	7.32	30.96	42.54	54	-11.46	H
20760	28.84	39.88	8.85	35.25	42.32	54	-11.68	H

Ant1_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	47.46	35.26	5.42	31.75	56.39	68.23	-11.84	V
15690	44.27	36.88	7.32	30.96	57.51	68.23	-10.72	V
20920	45.04	39.14	8.85	35.25	57.78	68.23	-10.45	V
10460	49.33	34.21	5.42	31.75	57.21	68.23	-11.02	H
15690	44.73	37.52	7.32	30.96	58.61	68.23	-9.62	H
20920	45.63	39.88	8.85	35.25	59.11	68.23	-9.12	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	35.38	35.26	5.42	31.75	44.31	54	-9.69	V
15690	28.93	36.88	7.32	30.96	42.17	54	-11.83	V
20920	27.88	39.14	8.85	35.25	40.62	54	-13.38	V
10460	32.97	34.21	5.42	31.75	40.85	54	-13.15	H
15690	28.55	37.52	7.32	30.96	42.43	54	-11.57	H
20920	29.05	39.88	8.85	35.25	42.53	54	-11.47	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.

Undesirable emission

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	1744.23	-35.93	≤-27	PASS
11A	Ant1	5180	5360~27000	26267.85	-33.2	≤-27	PASS
11A	Ant1	5200	30~5140	3056.48	-40.27	≤-27	PASS
11A	Ant1	5200	5360~27000	25718.91	-32.42	≤-27	PASS
11A	Ant1	5240	30~5140	2475.48	-39.53	≤-27	PASS
11A	Ant1	5240	5360~27000	25752.81	-31.97	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	3068.24	-38.63	≤-27	PASS
11N20SISO	Ant1	5180	5360~27000	26238.27	-32.58	≤-27	PASS
11N20SISO	Ant1	5200	30~5140	3327.65	-39.37	≤-27	PASS
11N20SISO	Ant1	5200	5360~27000	25749.21	-33.06	≤-27	PASS
11N20SISO	Ant1	5240	30~5140	3159.88	-39.26	≤-27	PASS
11N20SISO	Ant1	5240	5360~27000	25736.22	-32.56	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	3294.78	-39.06	≤-27	PASS
11N40SISO	Ant1	5190	5360~27000	25761.47	-33.08	≤-27	PASS
11N40SISO	Ant1	5230	30~5140	3171.63	-38.39	≤-27	PASS
11N40SISO	Ant1	5230	5360~27000	25740.55	-32.05	≤-27	PASS
11AC20SISO	Ant1	5180	30~5140	3394.25	-39.65	≤-27	PASS
11AC20SISO	Ant1	5180	5360~27000	25740.55	-32.37	≤-27	PASS
11AC20SISO	Ant1	5200	30~5140	3266.84	-39.39	≤-27	PASS
11AC20SISO	Ant1	5200	5360~27000	25652.55	-33.27	≤-27	PASS
11AC20SISO	Ant1	5240	30~5140	3032.3	-37.76	≤-27	PASS
11AC20SISO	Ant1	5240	5360~27000	25760.03	-32.92	≤-27	PASS
11AC40SISO	Ant1	5190	30~5140	3157.49	-38.51	≤-27	PASS
11AC40SISO	Ant1	5190	5360~27000	25781.67	-33.53	≤-27	PASS
11AC40SISO	Ant1	5230	30~5140	2798.6	-38.72	≤-27	PASS
11AC40SISO	Ant1	5230	5360~27000	25179.35	-32.9	≤-27	PASS
11AC80SISO	Ant1	5210	30~5140	3066.02	-39.73	≤-27	PASS
11AC80SISO	Ant1	5210	5360~27000	26255.58	-33.17	≤-27	PASS
11A	Ant1	5745	30~5650	3192.19	-40.32	≤-27	PASS
11A	Ant1	5745	5925~27000	25145.4	-30.56	≤-27	PASS
11A	Ant1	5785	30~5650	3178.14	-40.58	≤-27	PASS
11A	Ant1	5785	5925~27000	25209.33	-30.28	≤-27	PASS
11A	Ant1	5825	30~5650	3159.59	-39.86	≤-27	PASS
11A	Ant1	5825	5925~27000	25663.14	-30.12	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	3078.29	-40.63	≤-27	PASS
11N20SISO	Ant1	5745	5925~27000	25611.86	-30.68	≤-27	PASS
11N20SISO	Ant1	5785	30~5650	2585.98	-40.62	≤-27	PASS
11N20SISO	Ant1	5785	5925~27000	25765.01	-29.6	≤-27	PASS
11N20SISO	Ant1	5825	30~5650	3030.14	-40.58	≤-27	PASS
11N20SISO	Ant1	5825	5925~27000	26266.59	-29.63	≤-27	PASS
11N40SISO	Ant1	5795	30~5650	3298.4	-39.91	≤-27	PASS
11N40SISO	Ant1	5795	5925~27000	25167.18	-28.95	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	3343.36	-41.01	≤-27	PASS
11AC20SISO	Ant1	5745	5925~27000	25696.86	-29.45	≤-27	PASS
11AC20SISO	Ant1	5785	30~5650	3015.34	-40.37	≤-27	PASS
11AC20SISO	Ant1	5785	5925~27000	25741.82	-30	≤-27	PASS
11AC20SISO	Ant1	5825	30~5650	2561.62	-40.58	≤-27	PASS
11AC20SISO	Ant1	5825	5925~27000	25686.33	-28.38	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	3201.55	-40.58	≤-27	PASS
11AC40SISO	Ant1	5755	5925~27000	25086.39	-30.44	≤-27	PASS
11AC40SISO	Ant1	5795	30~5650	1761.9	-39.62	≤-27	PASS
11AC40SISO	Ant1	5795	5925~27000	25729.18	-29.68	≤-27	PASS
11AC80SISO	Ant1	5775	30~5650	1744.85	-38.31	≤-27	PASS

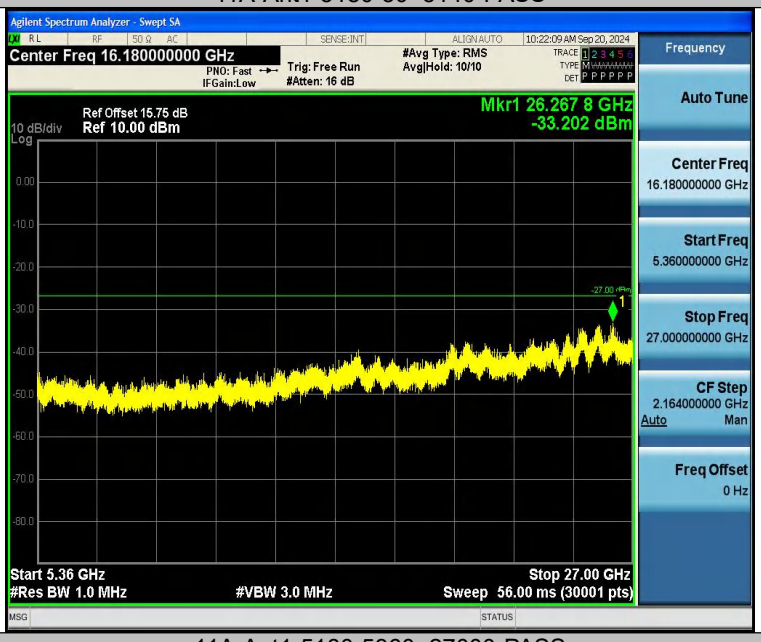
11AC80SISO	Ant1	5775	5925~27000	25659.63	-29.73	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	3208.67	-40.57	≤-27	PASS
11N40SISO	Ant1	5755	5925~27000	25226.89	-30.23	≤-27	PASS
11A	Ant2	5785	30~5650	3033.89	-39.48	≤-27	PASS
11A	Ant2	5785	5925~27000	25151.72	-29.94	≤-27	PASS
11A	Ant2	5825	30~5650	2621.94	-39.57	≤-27	PASS
11A	Ant2	5825	5925~27000	25104.66	-29.6	≤-27	PASS
11N20SISO	Ant2	5745	30~5650	3190.31	-39.45	≤-27	PASS
11N20SISO	Ant2	5745	5925~27000	25208.63	-30.45	≤-27	PASS
11N20SISO	Ant2	5785	30~5650	3168.58	-40.14	≤-27	PASS
11N20SISO	Ant2	5785	5925~27000	25115.9	-29.91	≤-27	PASS
11A	Ant2	5745	30~5650	3185.63	-40.43	≤-27	PASS
11A	Ant2	5745	5925~27000	25688.43	-29.34	≤-27	PASS
11N20SISO	Ant2	5825	30~5650	3204.74	-41.24	≤-27	PASS
11N20SISO	Ant2	5825	5925~27000	25101.85	-29.08	≤-27	PASS
11N40SISO	Ant2	5755	30~5650	3410.99	-41.45	≤-27	PASS
11N40SISO	Ant2	5755	5925~27000	25717.24	-28.74	≤-27	PASS
11N40SISO	Ant2	5795	30~5650	2716.55	-39.95	≤-27	PASS
11N40SISO	Ant2	5795	5925~27000	25132.05	-29.83	≤-27	PASS
11AC20SISO	Ant2	5745	30~5650	3061.24	-41.19	≤-27	PASS
11AC20SISO	Ant2	5745	5925~27000	25728.48	-30.11	≤-27	PASS
11AC20SISO	Ant2	5785	30~5650	3075.1	-39.54	≤-27	PASS
11AC20SISO	Ant2	5785	5925~27000	25656.82	-30.11	≤-27	PASS
11AC20SISO	Ant2	5825	30~5650	2673.09	-40.12	≤-27	PASS
11AC20SISO	Ant2	5825	5925~27000	25693.35	-28.89	≤-27	PASS
11AC40SISO	Ant2	5755	30~5650	3156.03	-40.39	≤-27	PASS
11AC40SISO	Ant2	5755	5925~27000	25668.06	-29.61	≤-27	PASS
11AC40SISO	Ant2	5795	30~5650	3253.07	-40.54	≤-27	PASS
11AC40SISO	Ant2	5795	5925~27000	25771.33	-29.86	≤-27	PASS
11AC80SISO	Ant2	5775	30~5650	2678.14	-39.73	≤-27	PASS
11AC80SISO	Ant2	5775	5925~27000	25191.06	-29.66	≤-27	PASS
11A	Ant2	5180	30~5140	3027.02	-39.05	≤-27	PASS
11A	Ant2	5180	5360~27000	25661.21	-33.73	≤-27	PASS
11A	Ant2	5200	30~5140	3104.69	-38.91	≤-27	PASS
11A	Ant2	5200	5360~27000	26324.83	-32.89	≤-27	PASS
11A	Ant2	5240	30~5140	3183.04	-39.21	≤-27	PASS
11A	Ant2	5240	5360~27000	26224.57	-32.67	≤-27	PASS
11N20SISO	Ant2	5180	30~5140	3075.56	-39.3	≤-27	PASS
11N20SISO	Ant2	5180	5360~27000	25661.21	-32.69	≤-27	PASS
11N20SISO	Ant2	5200	30~5140	3066.7	-39.49	≤-27	PASS
11N20SISO	Ant2	5200	5360~27000	25156.27	-32.87	≤-27	PASS
11N20SISO	Ant2	5240	30~5140	2289.81	-39.06	≤-27	PASS
11N20SISO	Ant2	5240	5360~27000	25735.5	-32.5	≤-27	PASS
11N40SISO	Ant2	5190	30~5140	3069.26	-39.66	≤-27	PASS
11N40SISO	Ant2	5190	5360~27000	25819.9	-33.49	≤-27	PASS
11N40SISO	Ant2	5230	30~5140	3042.69	-38.9	≤-27	PASS
11N40SISO	Ant2	5230	5360~27000	25754.98	-33.33	≤-27	PASS
11N40SISO	Ant2	5310	30~5140	3351.33	-38.86	≤-27	PASS
11N40SISO	Ant2	5310	5360~27000	25791.05	-33.19	≤-27	PASS
11AC20SISO	Ant2	5180	30~5140	3036.55	-38.78	≤-27	PASS
11AC20SISO	Ant2	5180	5360~27000	25775.9	-31.76	≤-27	PASS
11AC20SISO	Ant2	5200	30~5140	3064.83	-38.92	≤-27	PASS
11AC20SISO	Ant2	5200	5360~27000	25752.81	-33.53	≤-27	PASS
11AC20SISO	Ant2	5240	30~5140	2636.61	-38.49	≤-27	PASS
11AC20SISO	Ant2	5240	5360~27000	26295.26	-33.12	≤-27	PASS
11AC40SISO	Ant2	5190	30~5140	3287.97	-38.75	≤-27	PASS

11AC40SISO	Ant2	5190	5360~27000	25719.63	-32.8	≤-27	PASS
11AC40SISO	Ant2	5230	30~5140	3183.21	-38.78	≤-27	PASS
11AC40SISO	Ant2	5230	5360~27000	25693.67	-33.15	≤-27	PASS
11AC80SISO	Ant2	5210	30~5140	3298.36	-39.41	≤-27	PASS
11AC80SISO	Ant2	5210	5360~27000	25773.01	-33.35	≤-27	PASS

Note: 27~40GHz at least have 20dB margin. No recording in the test report.

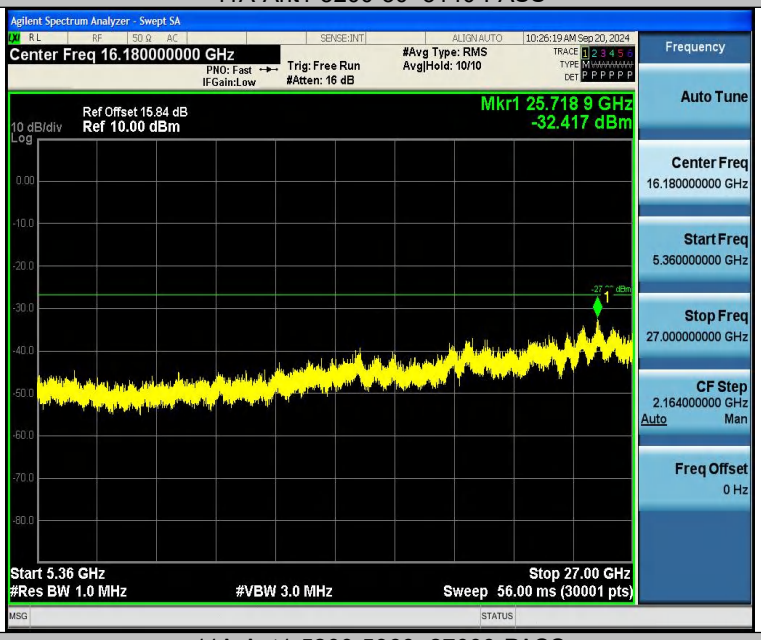
Test Graphs:

11A-Ant1-5180-30~5140-PASS



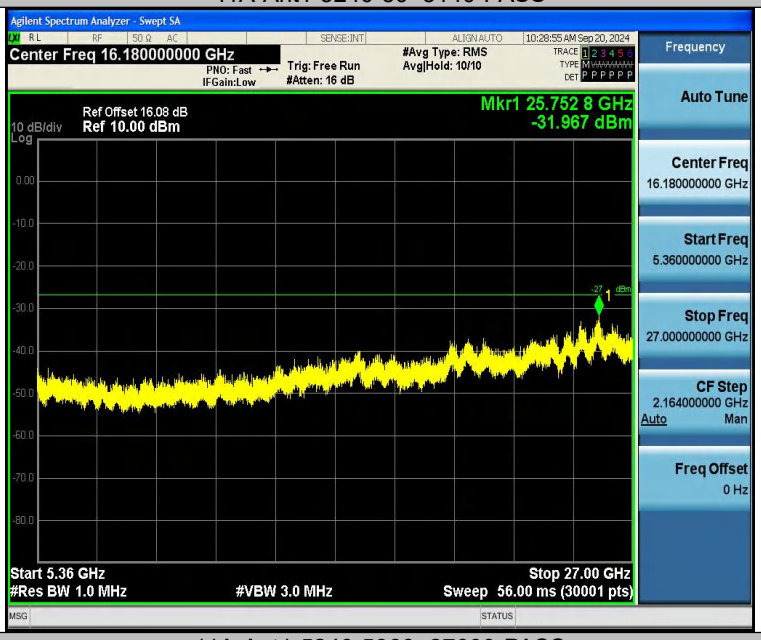
11A-Ant1-5180-5360~27000-PASS

11A-Ant1-5200-30~5140-PASS



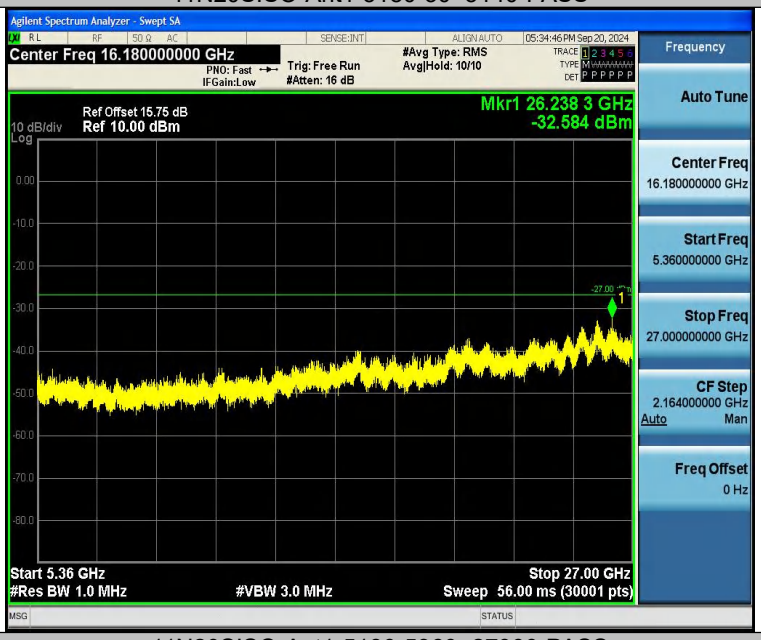
11A-Ant1-5200-5360~27000-PASS

11A-Ant1-5240-30~5140-PASS



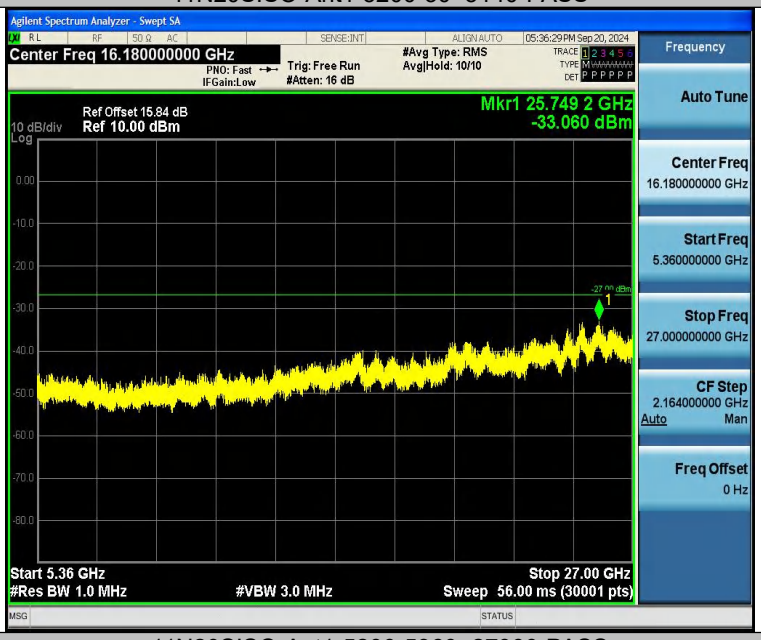
11A-Ant1-5240-5360~27000-PASS

11N20SISO-Ant1-5180-30~5140-PASS



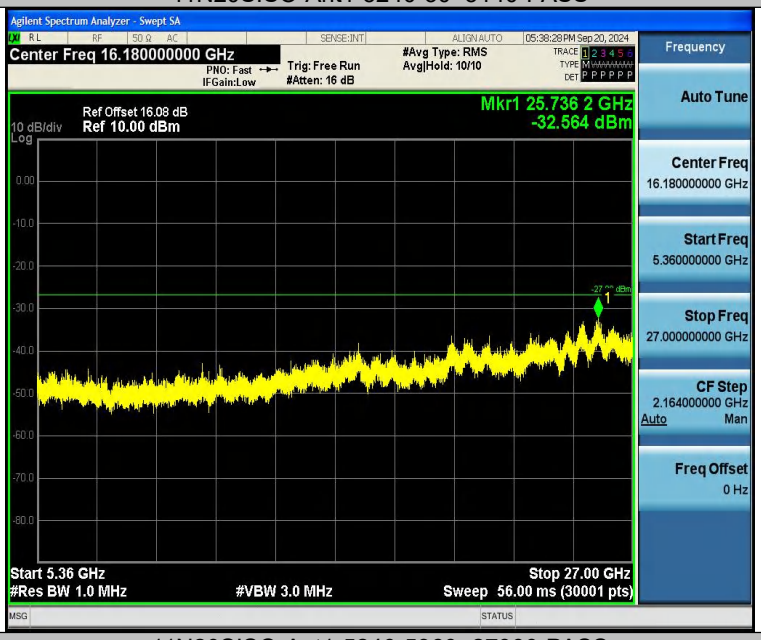
11N20SISO-Ant1-5180-5360~27000-PASS

11N20SISO-Ant1-5200-30~5140-PASS



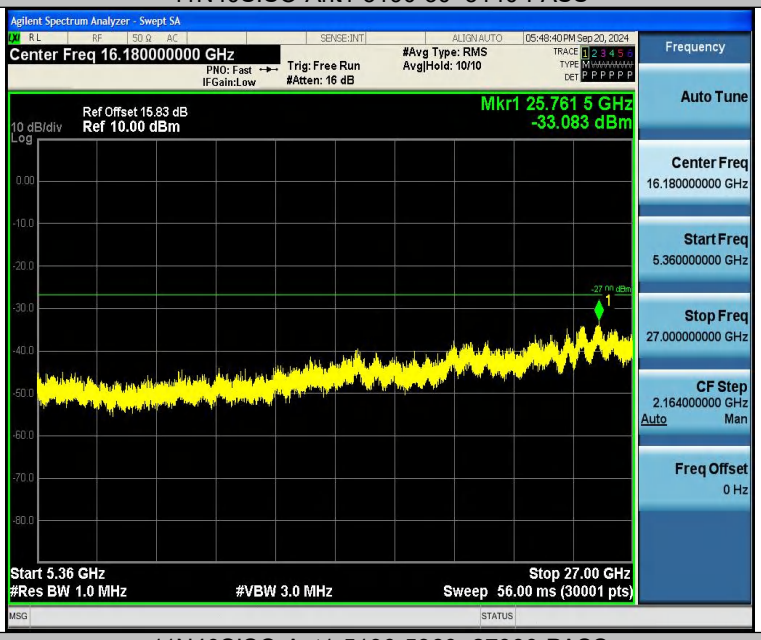
11N20SISO-Ant1-5200-5360~27000-PASS

11N20SISO-Ant1-5240-30~5140-PASS



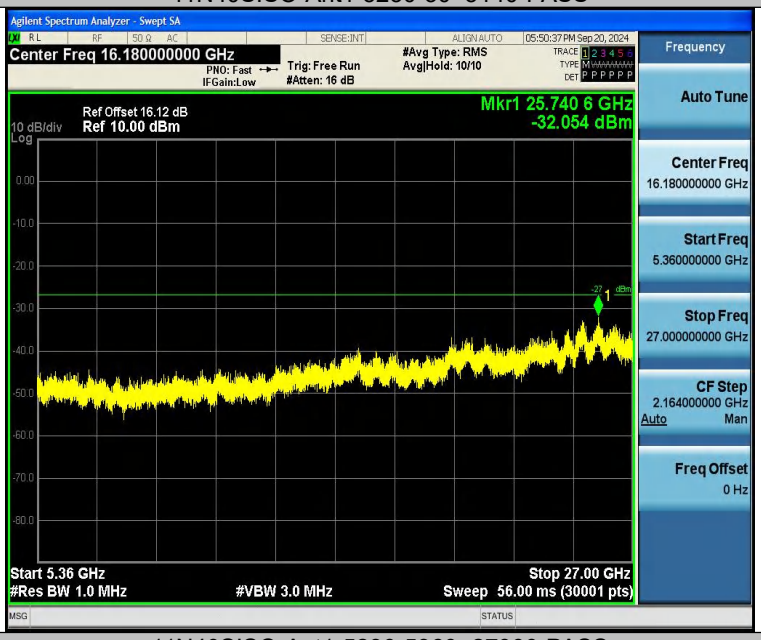
11N20SISO-Ant1-5240-5360~27000-PASS

11N40SISO-Ant1-5190-30~5140-PASS



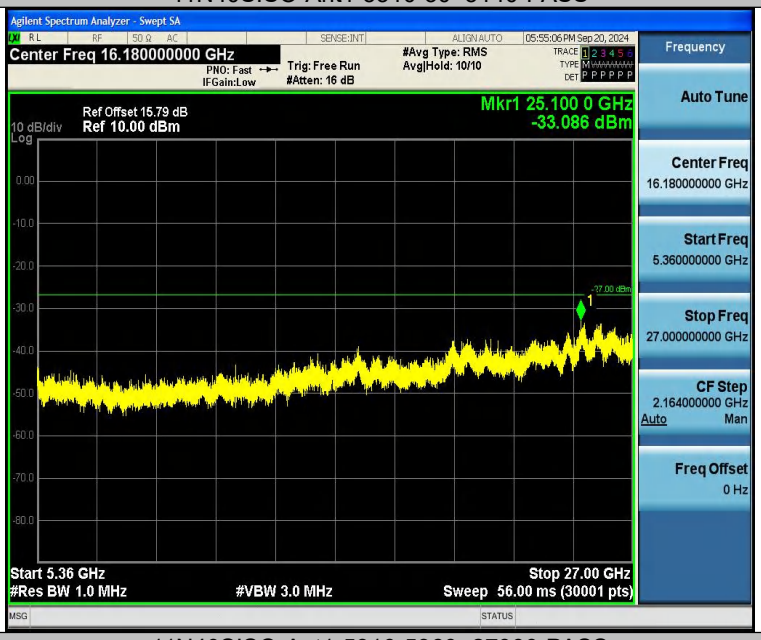
11N40SISO-Ant1-5190-5360~27000-PASS

11N40SISO-Ant1-5230-30~5140-PASS



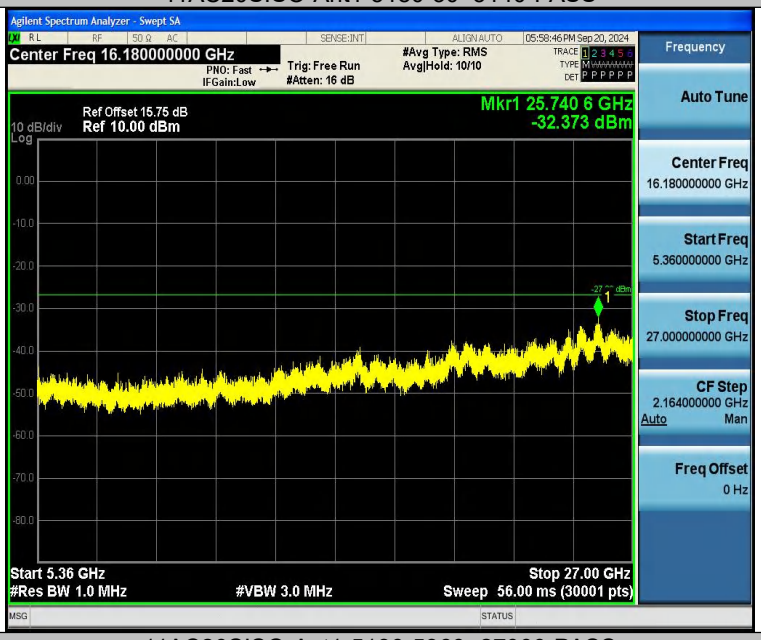
11N40SISO-Ant1-5230-5360~27000-PASS

11N40SISO-Ant1-5310-30~5140-PASS



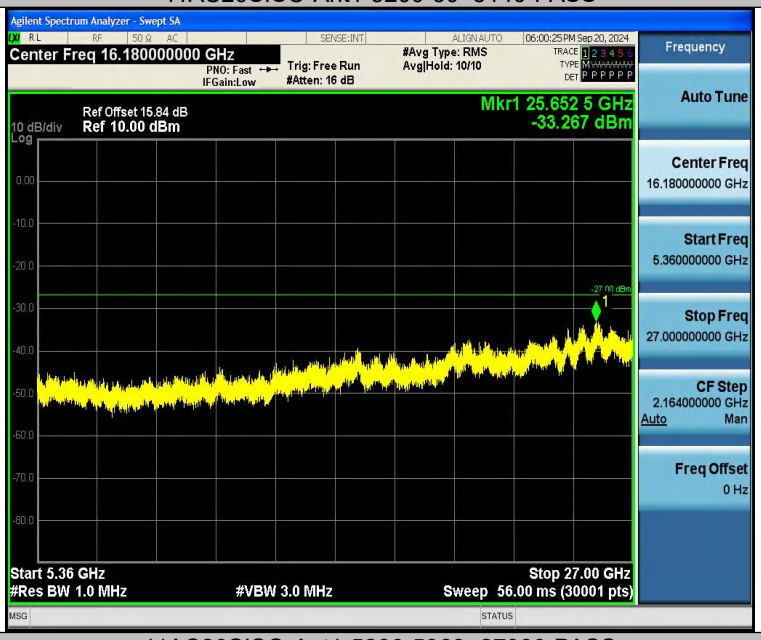
11N40SISO-Ant1-5310-5360~27000-PASS

11AC20SISO-Ant1-5180-30~5140-PASS



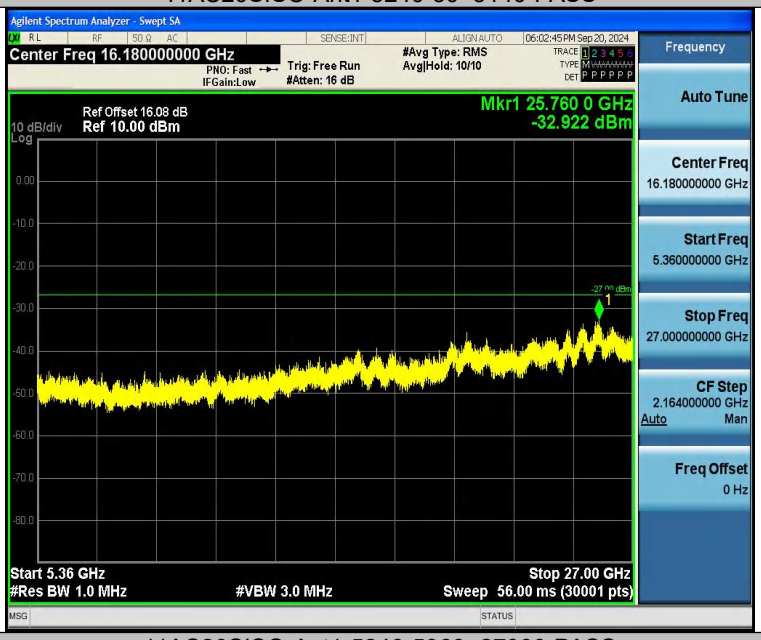
11AC20SISO-Ant1-5180-5360~27000-PASS

11AC20SISO-Ant1-5200-30~5140-PASS



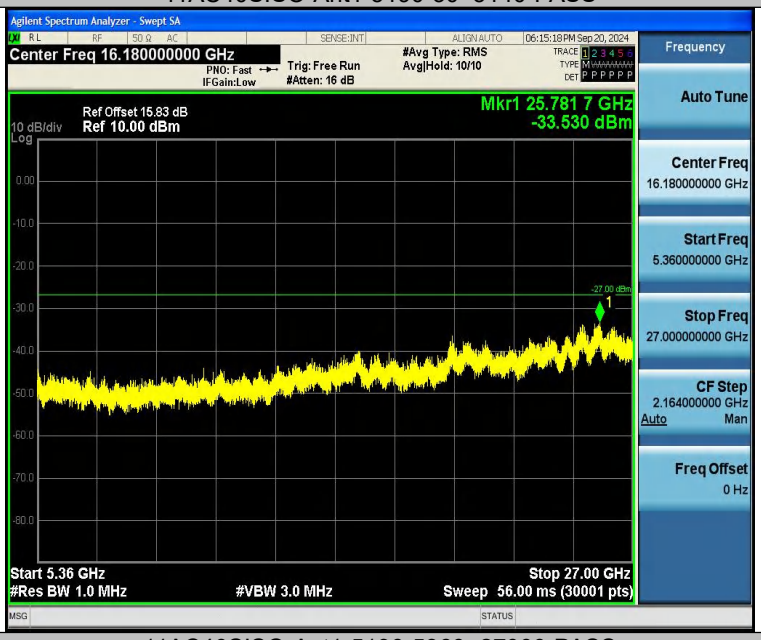
11AC20SISO-Ant1-5200-5360~27000-PASS

11AC20SISO-Ant1-5240-30~5140-PASS



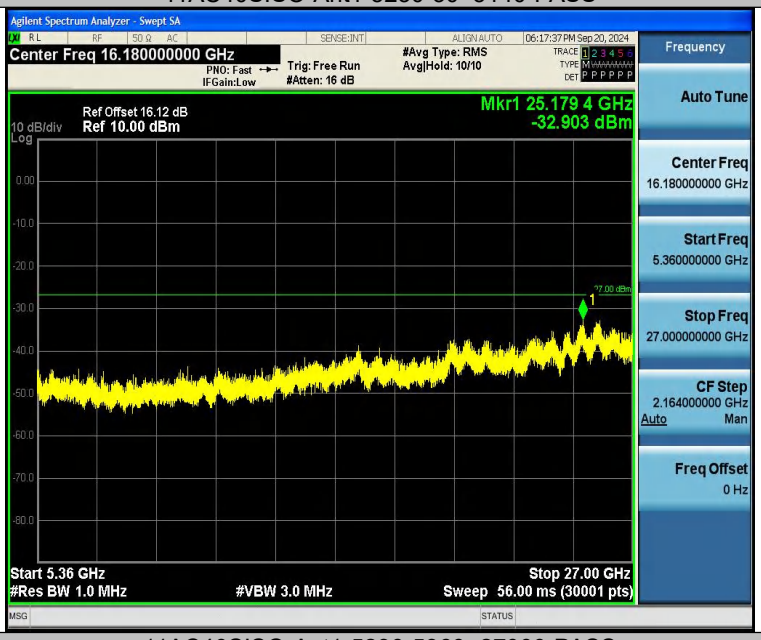
11AC20SISO-Ant1-5240-5360~27000-PASS

11AC40SISO-Ant1-5190-30~5140-PASS



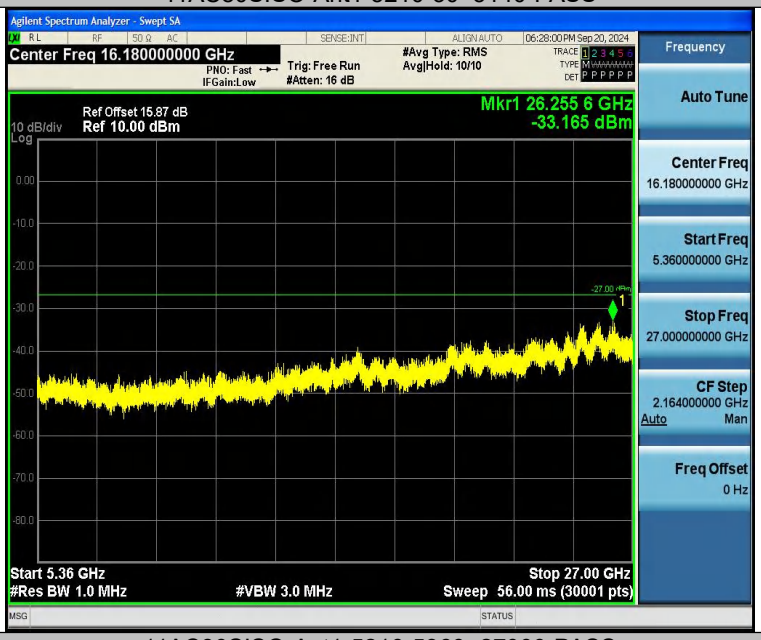
11AC40SISO-Ant1-5190-5360~27000-PASS

11AC40SISO-Ant1-5230-30~5140-PASS

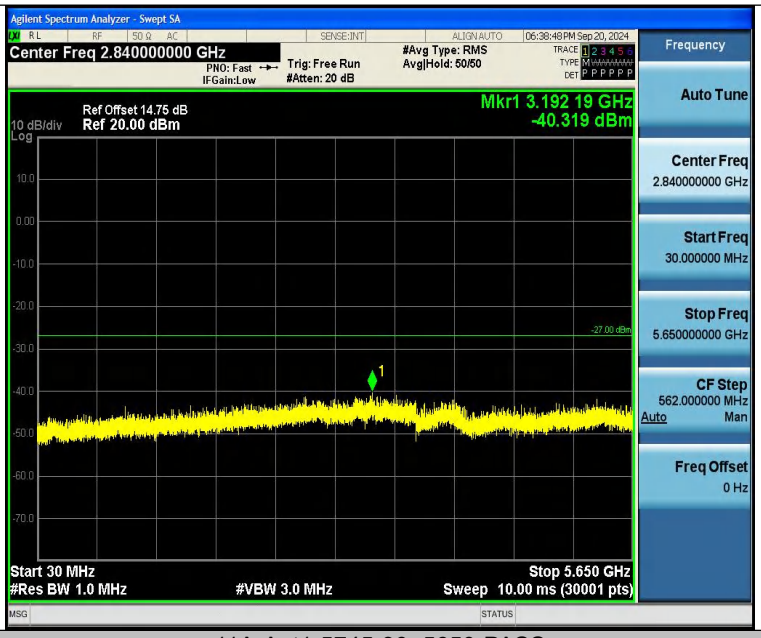


11AC40SISO-Ant1-5230-5360~27000-PASS

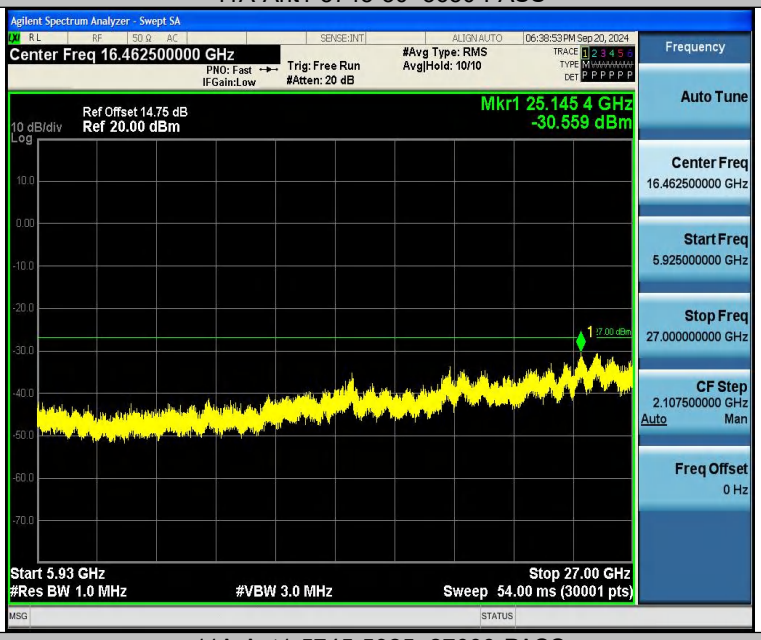
11AC80SISO-Ant1-5210-30~5140-PASS



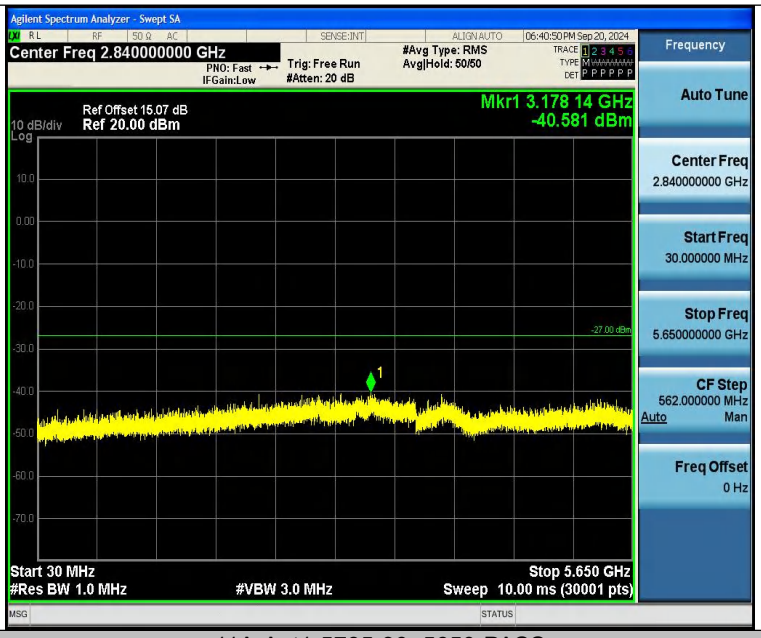
11AC80SISO-Ant1-5210-5360~27000-PASS



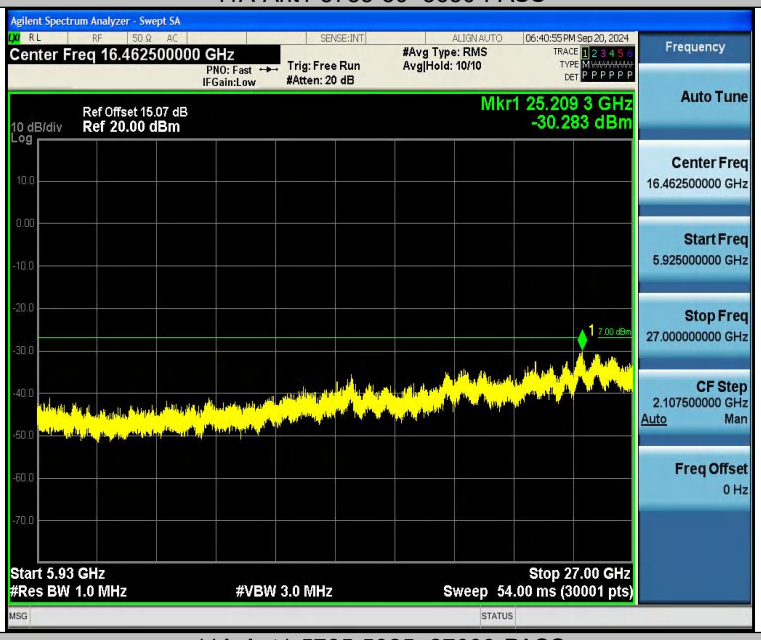
11A-Ant1-5745-30~5650-PASS



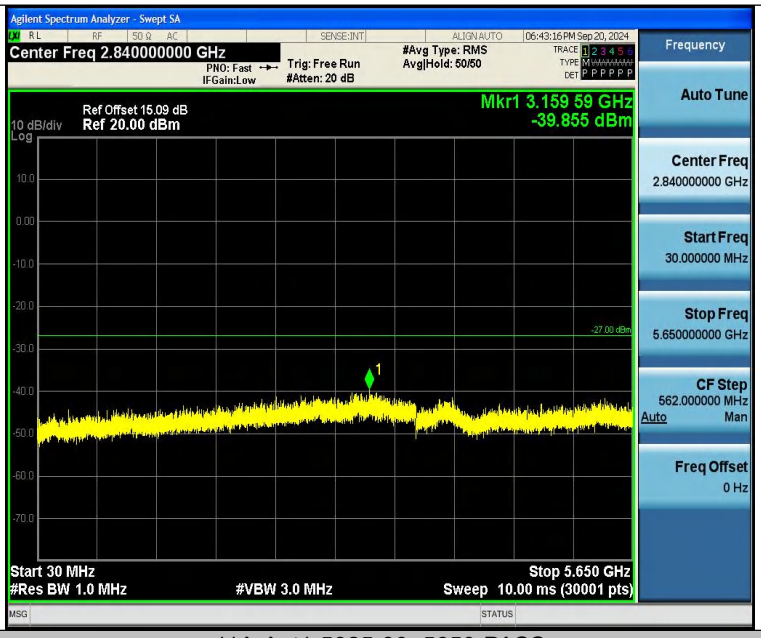
11A-Ant1-5745-5925~27000-PASS



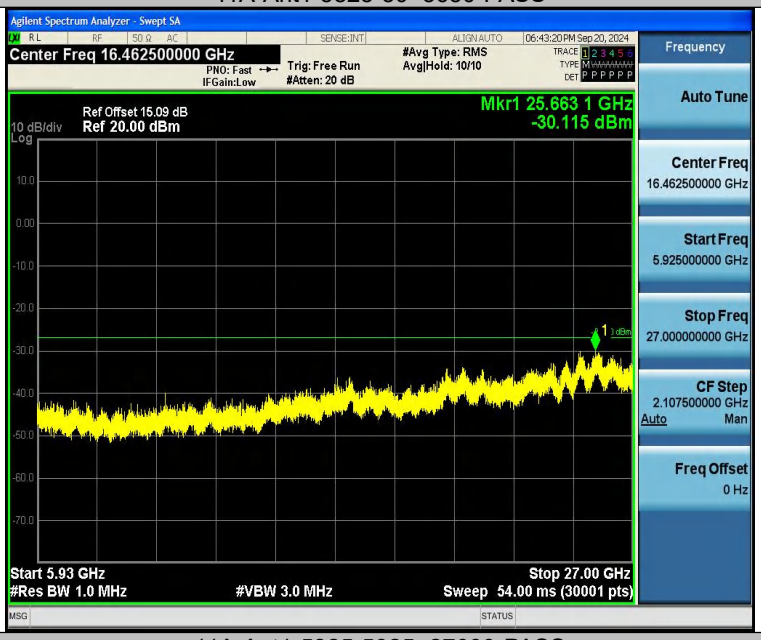
11A-Ant1-5785-30~5650-PASS



11A-Ant1-5785-5925~27000-PASS



11A-Ant1-5825-30~5650-PASS



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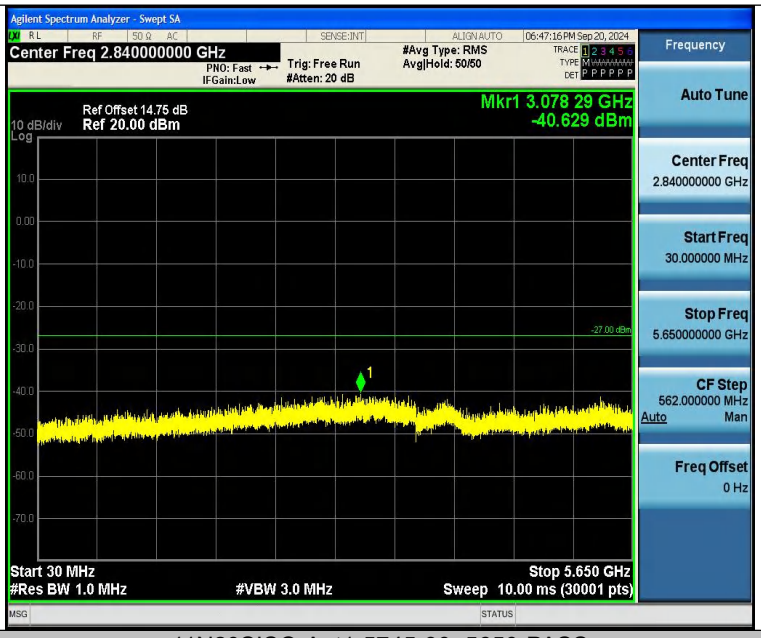
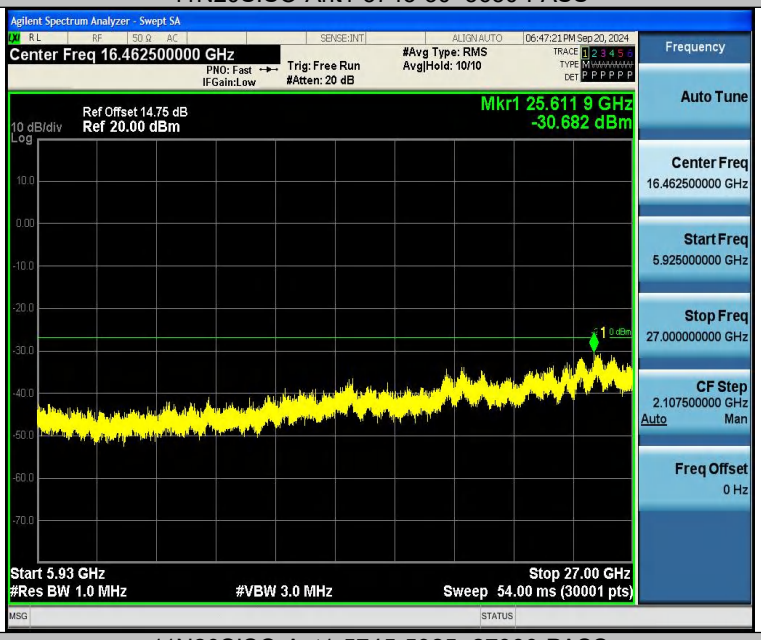
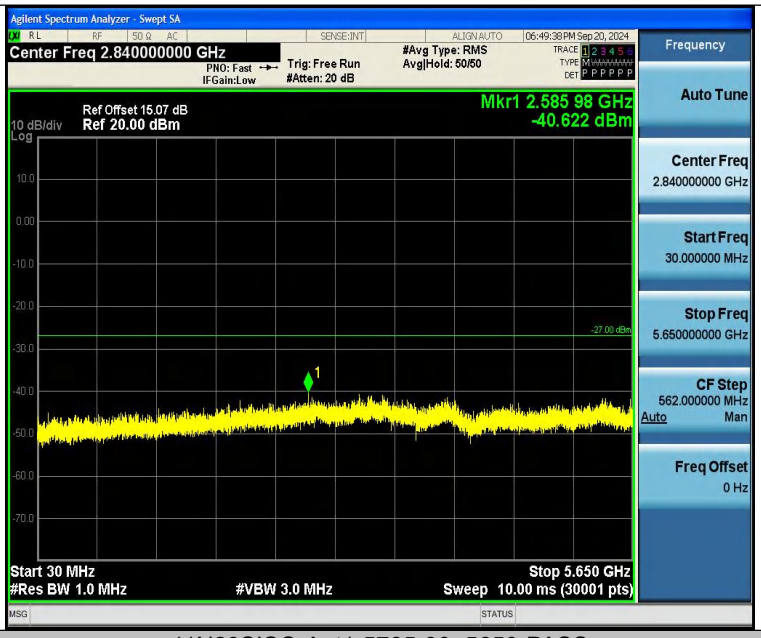


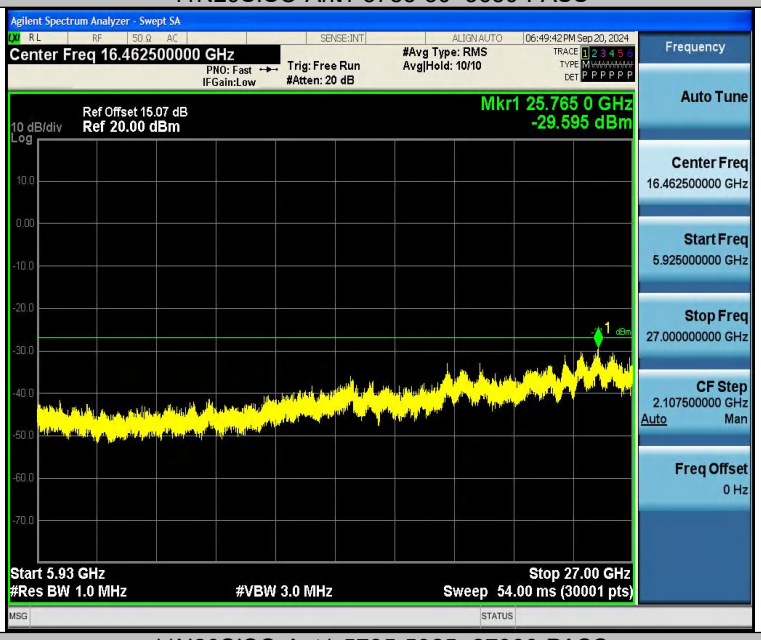
11N20SISO-Ant1-5745-30~5650-PASS



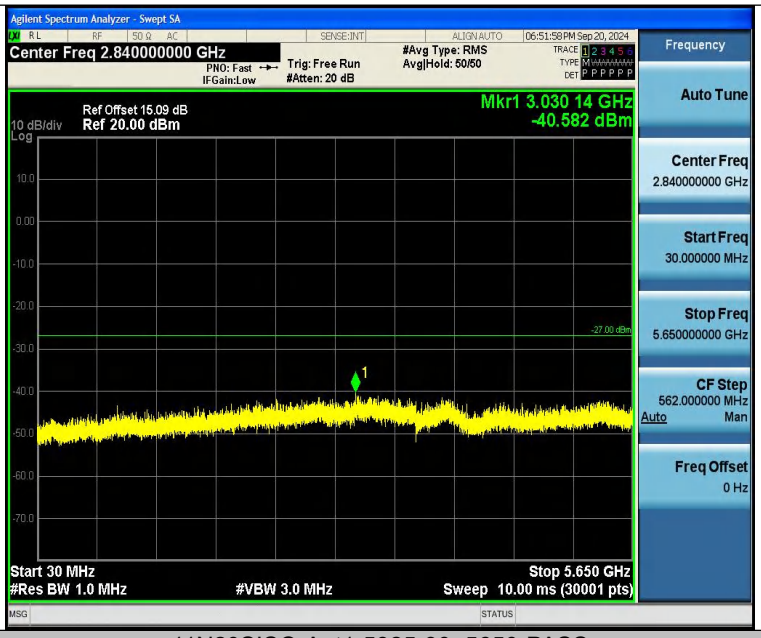
11N20SISO-Ant1-5745-5925~27000-PASS



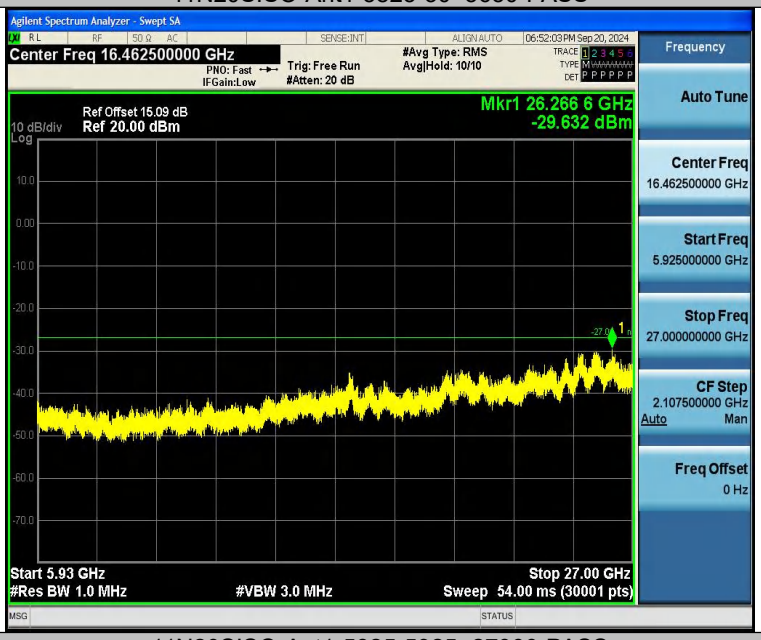
11N20SISO-Ant1-5785-30~5650-PASS



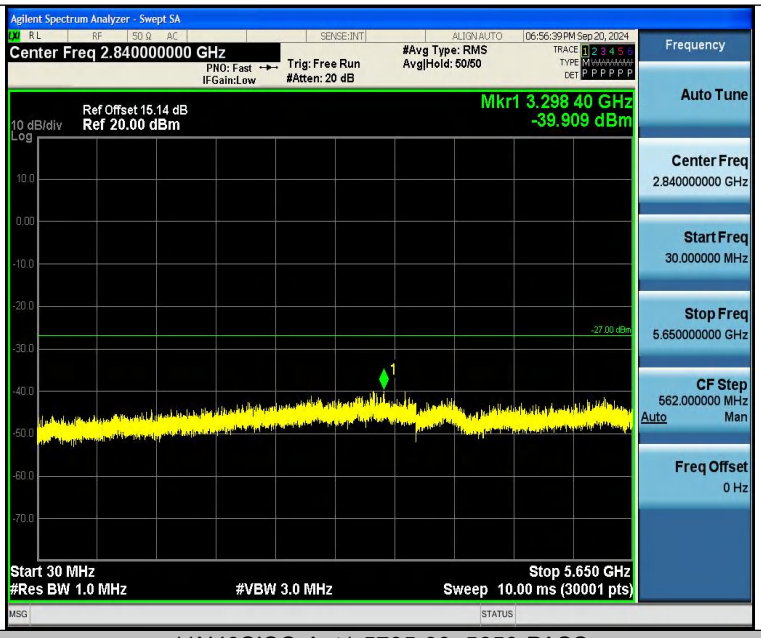
11N20SISO-Ant1-5785-5925~27000-PASS



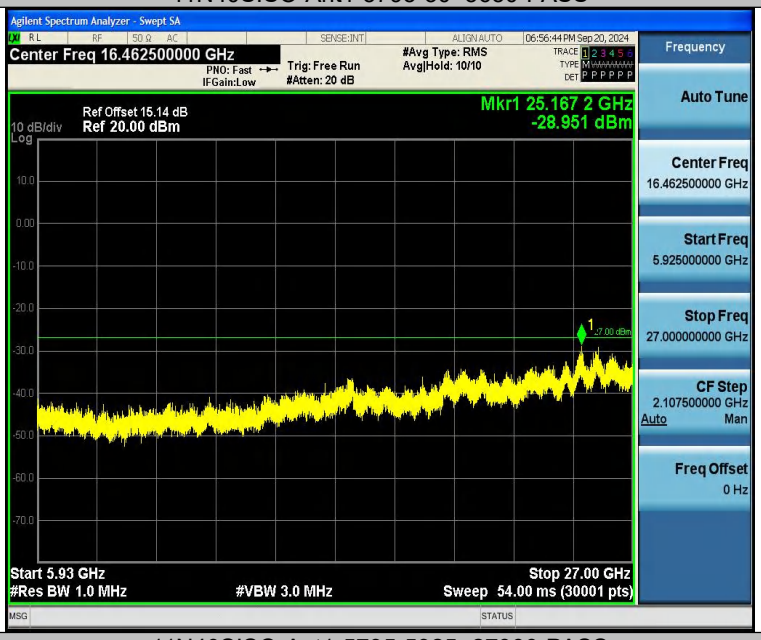
11N20SISO-Ant1-5825-30~5650-PASS



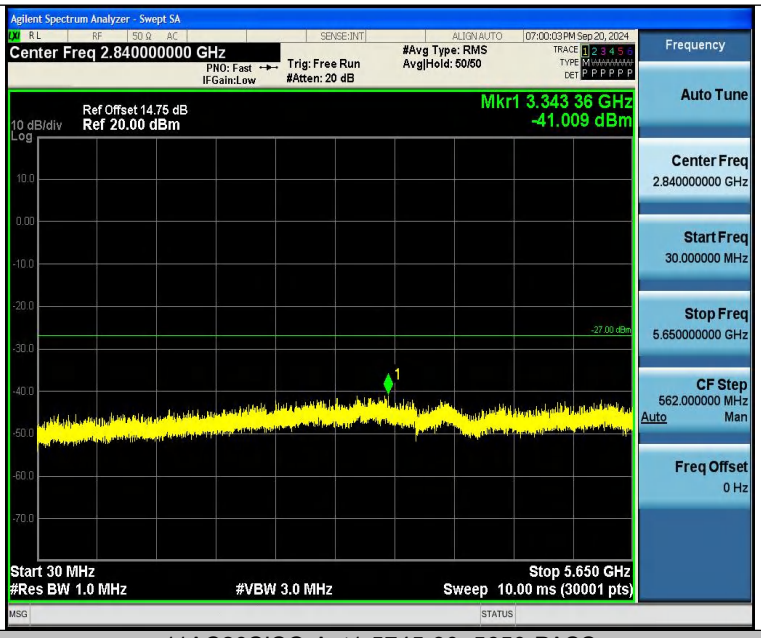
11N20SISO-Ant1-5825-5925~27000-PASS



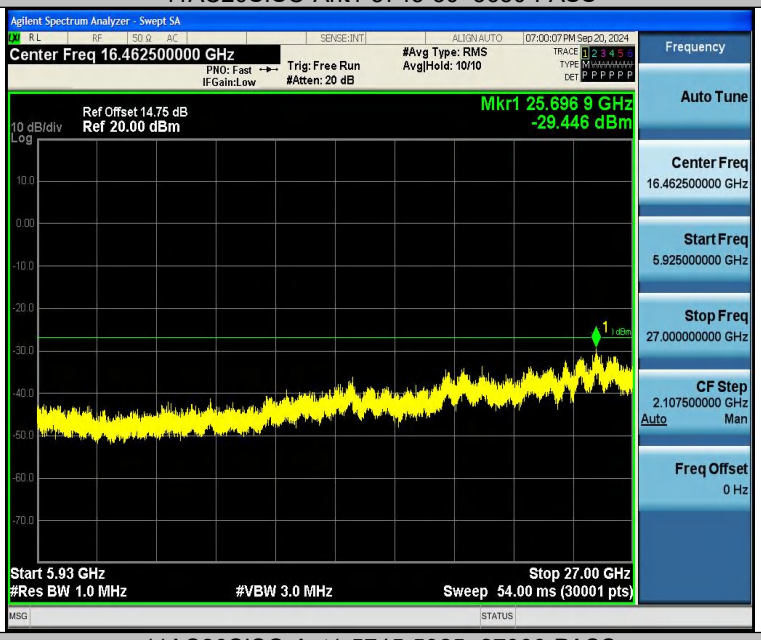
11N40SISO-Ant1-5795-30~5650-PASS



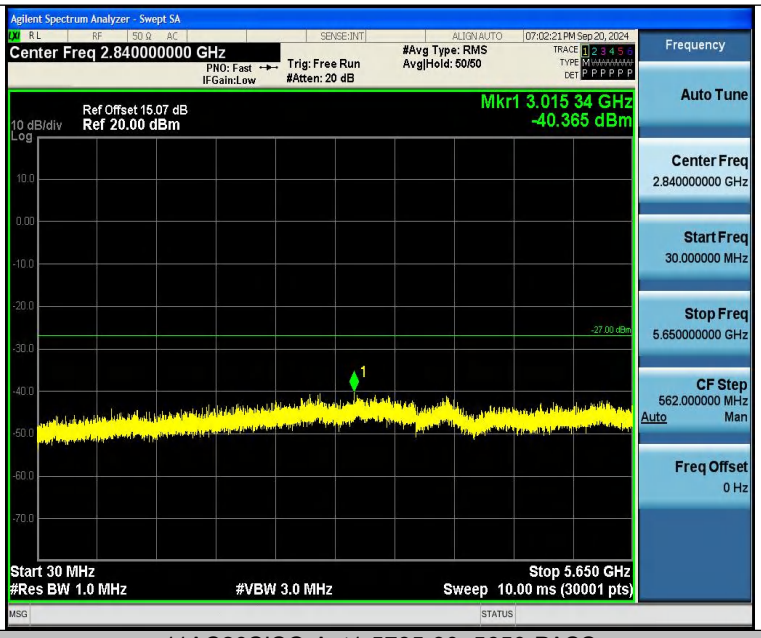
11N40SISO-Ant1-5795-5925~27000-PASS



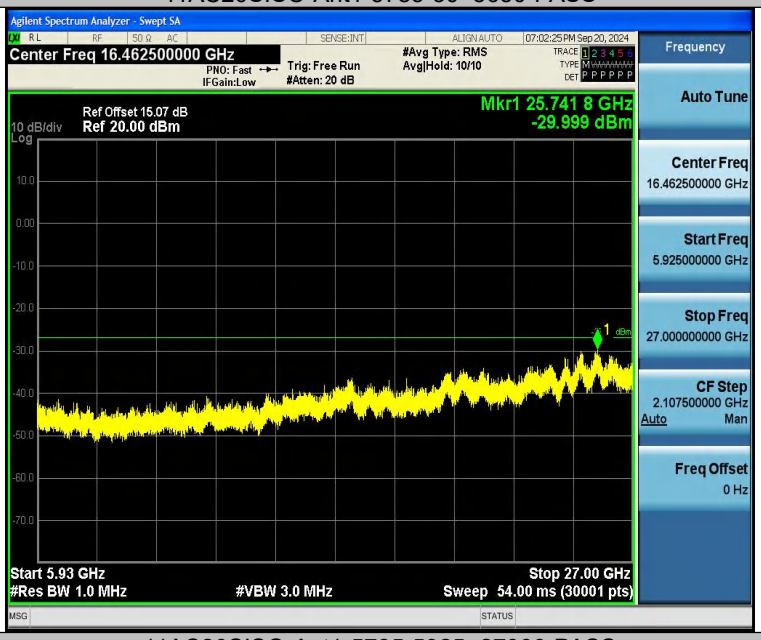
11AC20SISO-Ant1-5745-30~5650-PASS



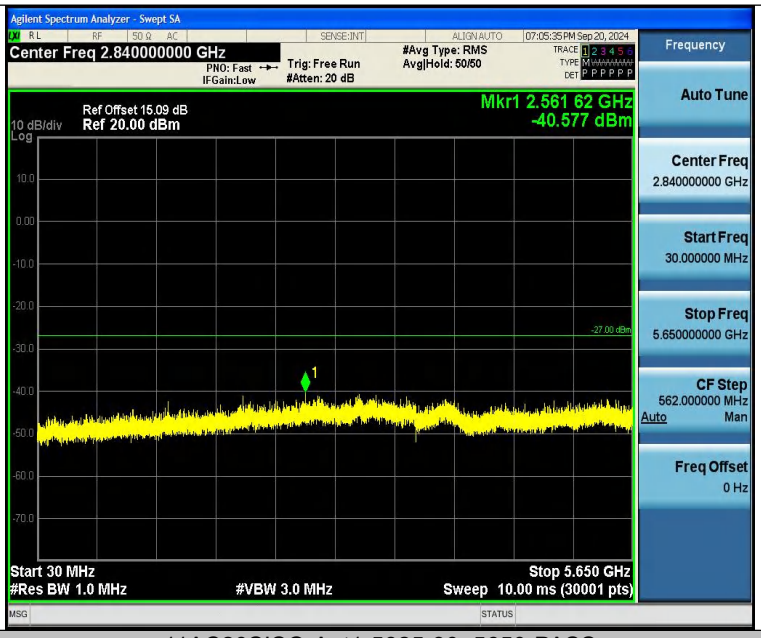
11AC20SISO-Ant1-5745-5925~27000-PASS



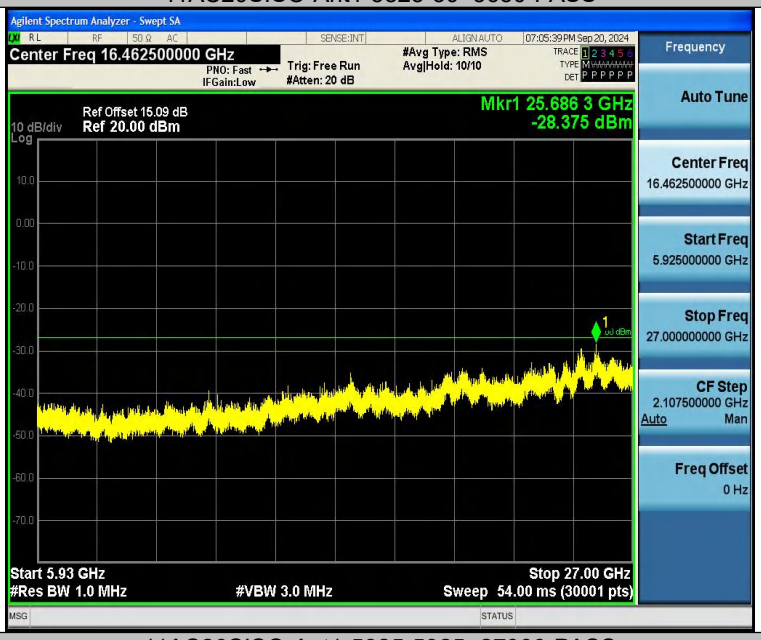
11AC20SISO-Ant1-5785-30~5650-PASS



11AC20SISO-Ant1-5785-5925~27000-PASS



11AC20SISO-Ant1-5825-30~5650-PASS



11AC20SISO-Ant1-5825-5925~27000-PASS