

FCC Test Report

FCC ID : 2AWC2-SRDT101
Equipment : NUWA Service Robot - Collibot
Model No. : SR-DT101
Brand Name : NUWA ROBOTICS
Applicant : NUWA ROBOTICS (HK) LIMITED TAIWAN
BRANCH
Address : 6F., No. 102, Dunhua N. Rd., Songshan Dist.,
Taipei City
Standard : 47 CFR FCC Part 15.407
Received Date : Nov. 17, 2023
Tested Date : Nov. 17 ~ Dec. 08, 2023

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

Approved by:



Along Chen / Assistant Manager



Gary Chang / Manager

Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Local Support Equipment List	8
1.3	Test Setup Chart	8
1.4	The Equipment List	9
1.5	Test Standards	10
1.6	Reference Guidance	10
1.7	Deviation from Test Standard and Measurement Procedure.....	10
1.8	Measurement Uncertainty	11
2	TEST CONFIGURATION.....	12
2.1	Testing Facility	12
2.2	The Worst Test Modes and Channel Details	12
3	TRANSMITTER TEST RESULTS	13
3.1	Emission Bandwidth	13
3.2	Conducted Output Power	14
3.3	Power Spectral Density	15
3.4	Unwanted Emissions.....	17
3.5	Frequency Stability.....	20
3.6	AC Power Line Conducted Emissions	21
4	TEST LABORATORY INFORMATION	22

Appendix A. Emission Bandwidth

Appendix B. Conducted Output Power

Appendix C. Power Spectral Density

Appendix D. Unwanted Emissions

Appendix E. Frequency Stability

Appendix F. AC Power Line Conducted Emissions

Release Record

Report No.	Version	Description	Issued Date
FR3O3001-02AN	Rev. 01	Initial issue	Sep. 23, 2024

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emissions	[dBuV]: 0.354MHz 35.50 (Margin -13.37dB) - AV	Pass
15.407(b) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 5150.00MHz 52.98 (Margin -1.02dB) - AV	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	Conducted Output Power	Max Power [dBm]: 5150~5250MHz: 19.30 5725~5850MHz: 18.38	Pass
15.407(a)	Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	Data Rate / MCS
5150-5250 5725-5850	a	5180-5240 5745-5825	36-48 [4] 149-165 [5]	2	6-54 Mbps
5150-5250 5725-5850	n (HT20)	5180-5240 5745-5825	36-48 [4] 149-165 [5]	2	MCS 0-15
5150-5250 5725-5850	n (HT40)	5190-5230 5755-5795	38-46 [2] 151-159 [2]	2	MCS 0-15
5150-5250 5725-5850	ac (VHT20)	5180-5240 5745-5825	36-48 [4] 149-165 [5]	2	MCS 0-9
5150-5250 5725-5850	ac (VHT40)	5190-5230 5755-5795	38-46 [2] 151-159 [2]	2	MCS 0-9
5150-5250 5725-5850	ac (VHT80)	5210 5775	42 [1] 155 [1]	2	MCS 0-9

Note 1: OFDM BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.

1.1.2 Antenna Details

Ant. No.	Brand/ Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)		
				2400~2483.5	5150~5250	5725~5850
1	INPAQ/WA-P-LB-03-162	PCB	No	2.47	3.08	4.31
2	INPAQ/WA-P-LB-03-163	PCB	No	2.43	3.16	4.41

1.1.3 Configuration of Equipment under Test (EUT)

Power Supply Type	28.0Vdc from adapter 25.6Vdc from battery
--------------------------	--

1.1.4 Accessories

Accessories		
No.	Equipment	Description
1	AC adapter	Brand: TC-TEK Model: FY28010000 I/P: 100-240V~50/60Hz 4A 350VA O/P: 28.0V=10.0A 280.0W Power Line: DC 1m non-shielded with one core AC 1.2m non-shielded without core
2	charging cradle	Brand: Matsutek Model: RVDS-NW01BK
3	Li-ion Battery	Brand: Moai Model: NW-8S5P Battery rated capacity: 30Ah/768Wh Battery nominal voltage: 25.6V

1.1.5 Channel List

802.11a / n HT20 / ac VHT20		802.11n HT40 / ac VHT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	151	5755
48	5240	159	5795
149	5745	802.11ac VHT80	
153	5765	42	5210
157	5785	155	5775
161	5805	-	-
165	5825	-	-

1.1.6 Test Tool and Duty Cycle

Test Tool	QRCT, v4.0		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11a	96.86%	0.14
	VHT20	96.65%	0.15
	VHT40	93.79%	0.28
	VHT80	86.84%	0.61

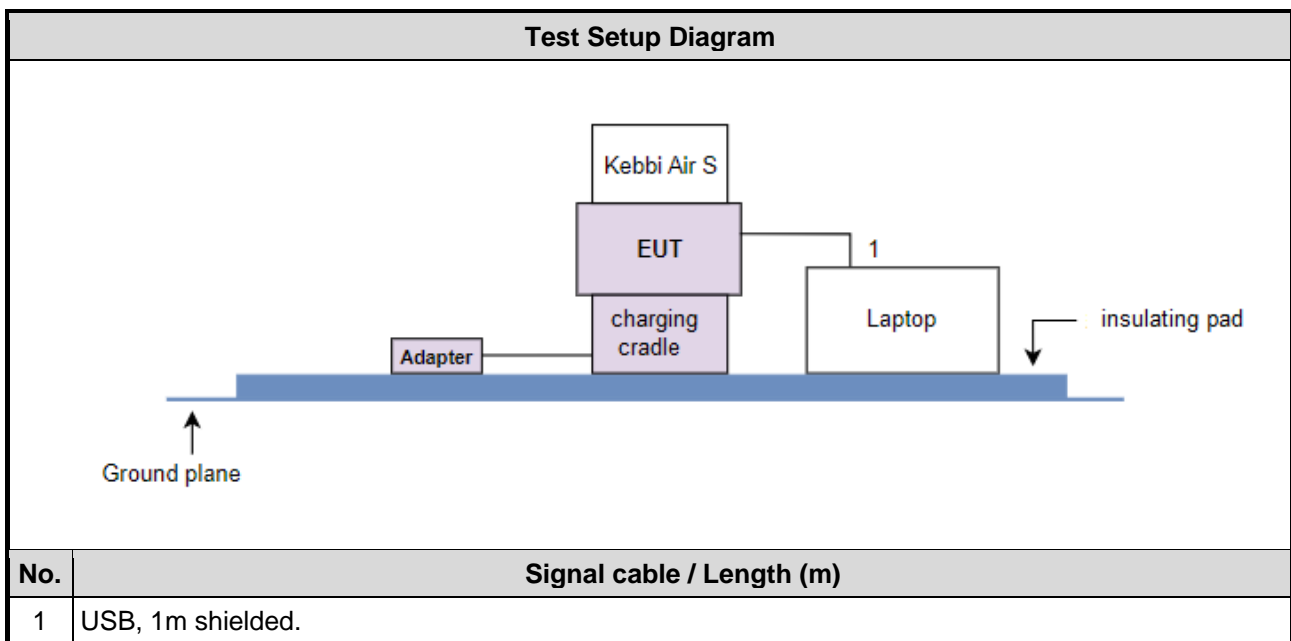
1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	16
11a	5200	16
11a	5240	16
11a	5745	14.5
11a	5785	14.5
11a	5825	15.5
VHT20	5180	15.5
VHT20	5200	16
VHT20	5240	16
VHT20	5745	14.5
VHT20	5785	14.5
VHT20	5825	15.5
VHT40	5190	10.5
VHT40	5230	13.5
VHT40	5755	14.5
VHT40	5795	14
VHT80	5210	8.5
VHT80	5775	14.5

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Kebbi Air S	NUWAROBOTICS	AIR-H203	---	Provided by applicant.
2	Laptop	DELL	Latitude E5470	DoC	---

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Dec. 08, 2023				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101658	Feb. 17, 2023	Feb. 16, 2024
LISN	R&S	ENV216	101579	May 09, 2023	May 08, 2024
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 11, 2023	Oct. 10, 2024
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan. 03, 2023	Jan. 02, 2024
50 ohm terminal (Support Unit)	NA	50	01	Jun. 14, 2023	Jun. 13, 2024
Measurement Software	Sporton	SENSE-EMI	V5.11.6	NA	NA

Note: Calibration Interval of instruments listed above is one year.

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Nov. 17 ~ Dec. 05, 2023				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Mar. 03, 2023	Mar. 02, 2024
Spectrum Analyzer	R&S	FSV40	101910	Apr. 14, 2023	Apr. 13, 2024
Loop Antenna	R&S	HFH2-Z2	100330	Oct. 31, 2023	Oct. 30, 2024
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 31, 2023	Jul. 30, 2024
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1095	Sep. 01, 2023	Aug. 31, 2024
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 30, 2023	Oct. 29, 2024
Preamplifier	EMC	EMC02325	980225	Jun. 28, 2023	Jun. 27, 2024
Preamplifier	EMC	EMC118A45SE	980898	Jul. 14, 2023	Jul. 13, 2024
Preamplifier	EMC	EMC184045SE	980903	Jul. 17, 2023	Jul. 16, 2024
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 03, 2023	Oct. 02, 2024
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 03, 2023	Oct. 02, 2024
LF cable 11M	EMC	EMCCFD400-NW-N W-11000	200801	Oct. 03, 2023	Oct. 02, 2024
LF cable 1M	EMC	EMCCFD400-NM-N M-1000	160502	Oct. 03, 2023	Oct. 02, 2024
RF Cable	EMC	EMC104-35M-35M-8000	210920	Oct. 03, 2023	Oct. 02, 2024
RF Cable	EMC	EMC104-35M-35M-3000	210922	Oct. 03, 2023	Oct. 02, 2024
Attenuator	Pasternack	PE7005-10	10-1	Oct. 05, 2023	Oct. 04, 2024
HIGHPASS FILTER	K&L	11SH10-7000/T1800 0-O/OP	21	Sep. 27, 2023	Sep. 26, 2024
Measurement Software	AUDIX	e3	6.120210g	NA	NA

Note: Calibration Interval of instruments listed above is one year.

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Dec. 06, 2023				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101910	Apr. 14, 2023	Apr. 13, 2024
Power Meter	Anritsu	ML2495A	1241001	Jan. 11, 2023	Jan. 10, 2024
Power Sensor	Anritsu	MA2411B	1911228	Jan. 11, 2023	Jan. 10, 2024
Attenuator	Pasternack	PE7005-10	10-2	Oct. 05, 2023	Oct. 04, 2024
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Jun. 21, 2023	Jun. 20, 2024
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 09, 2022	Dec. 08, 2023
Measurement Software	Sporton	SENSE-15407_NII	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 15.407
ANSI C63.10-2013

1.6 Reference Guidance

FCC KDB 412172 D01 Determining ERP and EIRP v01r01
FCC KDB 662911 D01 Multiple Transmitter Output v02r01
FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Frequency error	±1×10 ⁻⁹
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Unwanted Emission ≤ 1GHz	±3.41 dB
Unwanted Emission > 1GHz	±4.59 dB
Time	±0.1%
Temperature	±0.4 °C

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, 03CH01-WS, TH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

For Frequency band 5150-5250 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
AC Power Line Conducted Emission	11a	5240	6 Mbps	---
Unwanted Emissions ≤1GHz	11a	5240	6 Mbps	---
Unwanted Emissions >1GHz	11a	5180 / 5200 / 5240	6 Mbps	---
Conducted Output Power	VHT20	5180 / 5200 / 5240	MCS 0	
Emission Bandwidth	VHT40	5190 / 5230	MCS 0	
Power Spectral Density	VHT80	5210	MCS 0	
Frequency Stability	Un-modulation	5200	---	---
For Frequency band 5725-5850 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
AC Power Line Conducted Emission	11a	5825	6 Mbps	---
Unwanted Emissions ≤1GHz	11a	5825	6 Mbps	---
Unwanted Emissions >1GHz	11a	5745 / 5785 / 5825	6 Mbps	---
Conducted Output Power	VHT20	5745 / 5785 / 5825	MCS 0	
Emission Bandwidth	VHT40	5755 / 5795	MCS 0	
Power Spectral Density	VHT80	5775	MCS 0	
Frequency Stability	Un-modulation	5785	---	---

3 Transmitter Test Results

3.1 Emission Bandwidth

3.1.1 Limit of Emission Bandwidth

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.1.2 Test Procedures

26dB Bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW, Detector = Peak.
3. Trace mode = max hold.
4. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

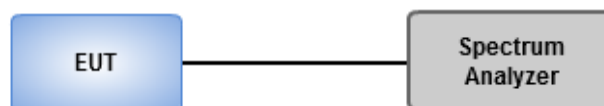
Occupied Bandwidth

1. Set RBW = 1 % to 5 % of the OBW.
2. Set VBW \geq 3 RBW.
3. Sample detection and single sweep mode shall be used.
4. Use the 99 % power bandwidth function of the instrument.

6dB Bandwidth

1. Set RBW = 100kHz, VBW = 300kHz.
2. Detector = Peak, Trace mode = max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.1.3 Test Setup



3.1.4 Test Results

Ambient Condition	22°C / 68%	Tested By	Roger Lu
--------------------------	------------	------------------	----------

Refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Limit of Conducted Output Power

Frequency band 5150-5250 MHz	
Operating Mode	Limit
<input type="checkbox"/> Outdoor access point	Conducted Power: 1 W The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm)
<input checked="" type="checkbox"/> Indoor access point	Conducted Power: 1 W
<input type="checkbox"/> Fixed point-to-point access points	Conducted Power: 1 W
<input type="checkbox"/> Client devices	Conducted Power: 250 mW

Frequency Band (MHz)	Limit
<input checked="" type="checkbox"/> 5725 ~ 5850	Conducted Power: 1 W

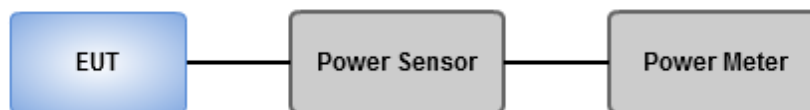
Note: "B" is the 26dB emission bandwidth in MHz.

3.2.2 Test Procedures

Method PM-G (Measurement using a gated RF average power meter)

Measurements is performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.2.3 Test Setup



3.2.4 Test Results

Ambient Condition	22°C / 68%	Tested By	Roger Lu
-------------------	------------	-----------	----------

Refer to Appendix B.

3.3 Power Spectral Density

3.3.1 Limit of Power Spectral Density

Frequency band 5150-5250 MHz		
Operating Mode		Limit
<input type="checkbox"/>	Outdoor access point	17 dBm / MHz
<input checked="" type="checkbox"/>	Indoor access point	17 dBm / MHz
<input type="checkbox"/>	Fixed point-to-point access points	17 dBm / MHz
<input type="checkbox"/>	Client devices	11 dBm / MHz

Frequency Band (MHz)	Limit
<input checked="" type="checkbox"/> 5725 ~ 5850	30 dBm /500 kHz

3.3.2 Test Procedures

For 5150 ~ 5250 MHz

Duty cycle \geq 98 %

1. Set RBW = 1 MHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
2. Trace average 100 traces.
3. Use the peak marker function to determine the maximum amplitude level.

Duty cycle $<$ 98 %

1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
2. Set sweep time \geq 10 * (number of points in sweep) * (total on/off period of the transmitted signal).
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add 10 log(1/x), where x is the duty cycle.

For 5725 ~ 5850 MHz

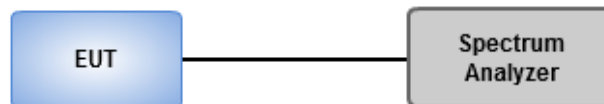
Duty cycle \geq 98 %

1. Set RBW = 500 kHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
2. Trace average 100 traces.
3. Use the peak marker function to determine the maximum amplitude level.

Duty cycle $<$ 98 %

1. Set RBW = 500 kHz, VBW = 3 MHz, Detector = RMS.
2. Set sweep time \geq 10 * (number of points in sweep) * (total on/off period of the transmitted signal).
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add 10 log(1/x), where x is the duty cycle.

3.3.3 Test Setup



3.3.4 Test Results

Ambient Condition	22°C / 68%	Tested By	Roger Lu
--------------------------	------------	------------------	----------

Refer to Appendix C.

3.4 Unwanted Emissions

3.4.1 Limit of Unwanted Emissions

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.850 GHz	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.

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.4.2 Test Procedures

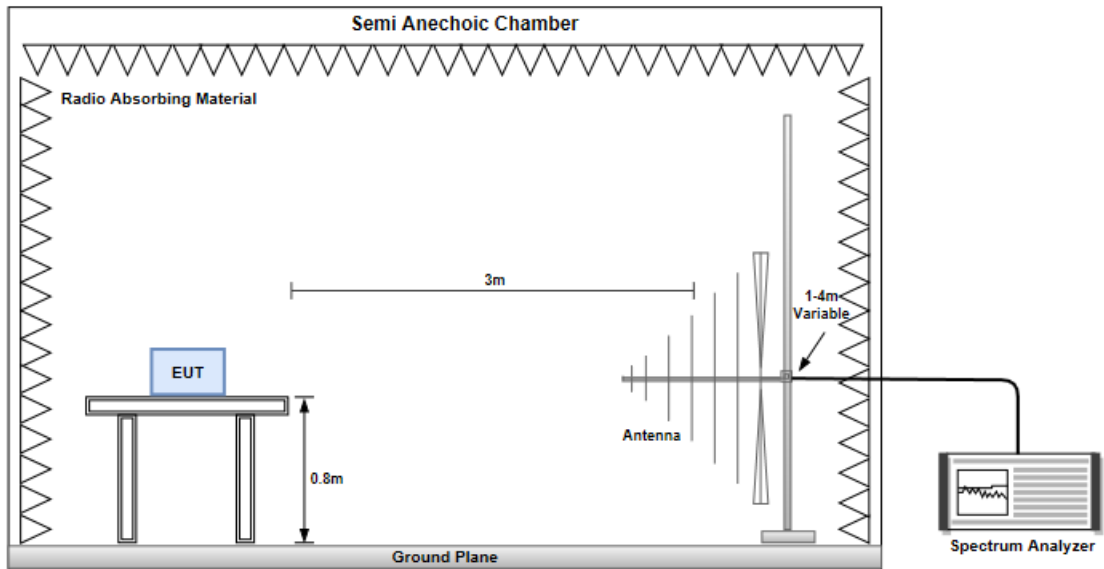
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

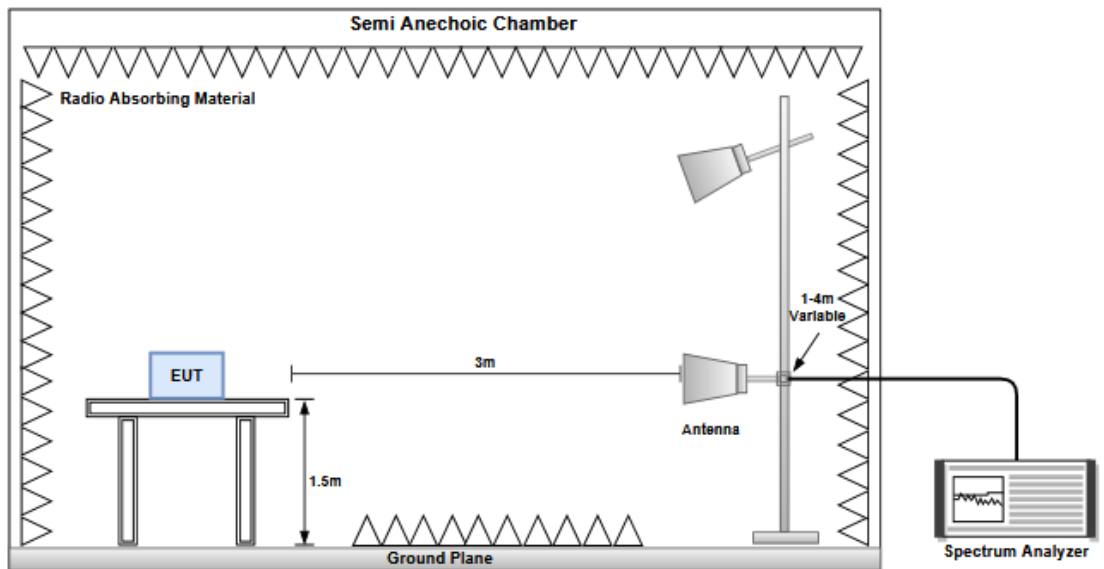
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.4.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.4.4 Test Results

Refer to Appendix D.

3.5 Frequency Stability

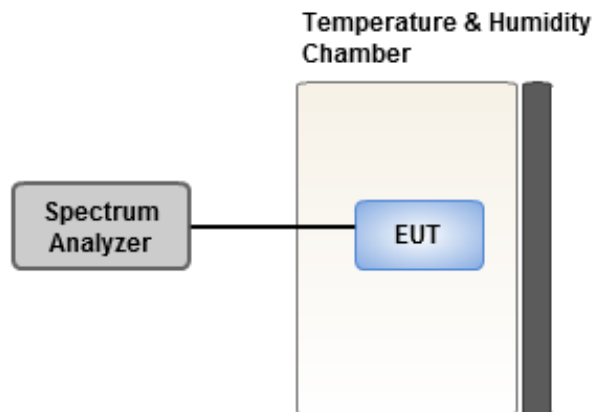
3.5.1 Limit of Frequency Stability

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.

3.5.2 Test Procedures

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 20 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 normal and extreme condition for temperature and voltage.

3.5.3 Test Setup



3.5.4 Test Results

Ambient Condition	22°C / 68%	Tested By	Roger Lu
--------------------------	------------	------------------	----------

Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

3.6.1 Limit of AC Power Line Conducted Emissions

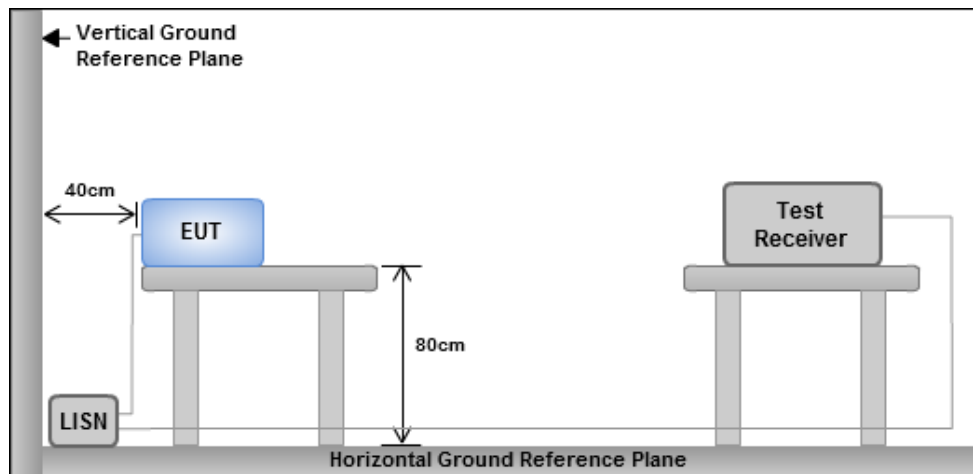
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.6.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V/60Hz

3.6.3 Test Setup



- Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.6.4 Test Results

Refer to Appendix F.

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou
District, New Taipei City, Taiwan
(R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)
No.2-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666

Fax: 886-3-318-0345

Email: ICC_Service@icertifi.com.tw

==END==



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	29.238M	17.715M	17M7D1D	28.776M	17.116M
802.11ac VHT20_Nss1,(MCS0)_2TX	30.954M	18.403M	18M4D1D	28.71M	18.06M
802.11ac VHT40_Nss1,(MCS0)_2TX	42.108M	36.392M	36M4D1D	41.184M	36.236M
802.11ac VHT80_Nss1,(MCS0)_2TX	83.16M	75.573M	75M6D1D	82.104M	75.503M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.302M	18.117M	18M1D1D	15.048M	16.579M
802.11ac VHT20_Nss1,(MCS0)_2TX	16.764M	18.846M	18M8D1D	14.652M	17.796M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.244M	36.599M	36M6D1D	34.98M	36.299M
802.11ac VHT80_Nss1,(MCS0)_2TX	74.976M	76.122M	76M1D1D	70.224M	75.668M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Minimum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	28.776M	17.116M	28.974M	17.715M
5200MHz	Pass	Inf	28.776M	17.147M	29.238M	17.648M
5240MHz	Pass	Inf	28.974M	17.172M	28.908M	17.649M
5745MHz	Pass	500k	15.51M	16.593M	16.302M	16.817M
5785MHz	Pass	500k	15.708M	16.579M	15.048M	17.157M
5825MHz	Pass	500k	15.84M	16.599M	15.246M	18.117M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	28.776M	18.06M	28.71M	18.069M
5200MHz	Pass	Inf	28.908M	18.135M	30.954M	18.365M
5240MHz	Pass	Inf	29.964M	18.193M	30.228M	18.403M
5745MHz	Pass	500k	16.764M	17.81M	15.444M	17.969M
5785MHz	Pass	500k	16.17M	17.823M	15.444M	18.077M
5825MHz	Pass	500k	14.652M	17.796M	15.642M	18.846M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	41.448M	36.276M	41.184M	36.236M
5230MHz	Pass	Inf	42.108M	36.392M	41.448M	36.325M
5755MHz	Pass	500k	34.98M	36.321M	35.244M	36.446M
5795MHz	Pass	500k	34.98M	36.299M	34.98M	36.599M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	83.16M	75.573M	82.104M	75.503M
5775MHz	Pass	500k	74.976M	75.668M	70.224M	76.122M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

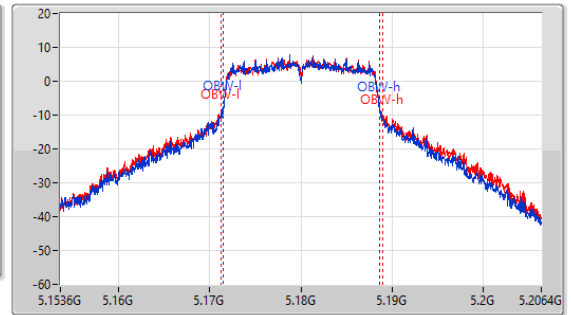
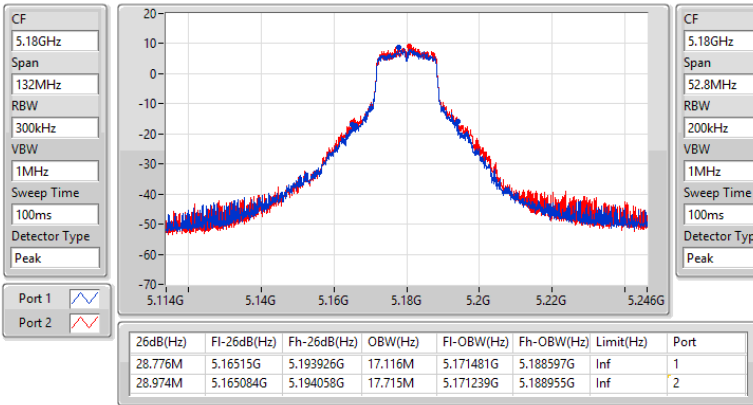
Port X-OBW = Port X 99% occupied bandwidth



5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

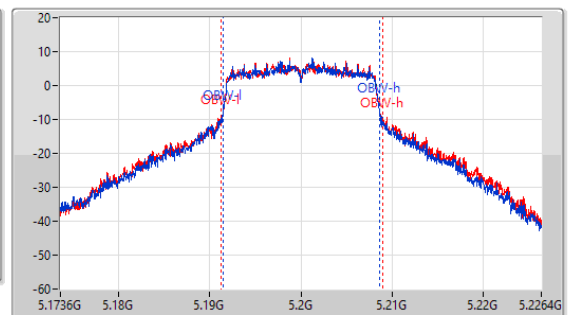
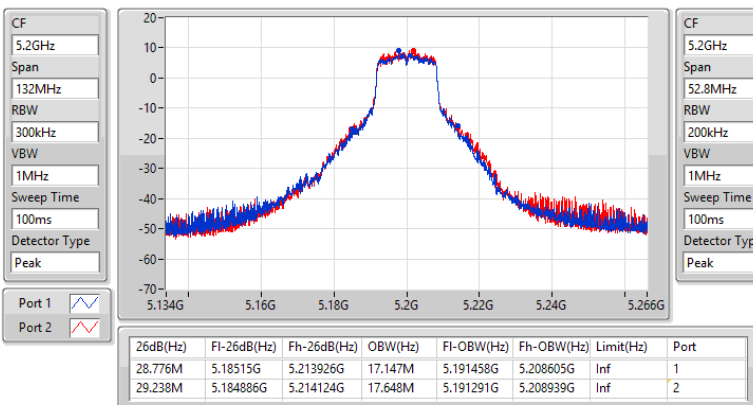
5180MHz



5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

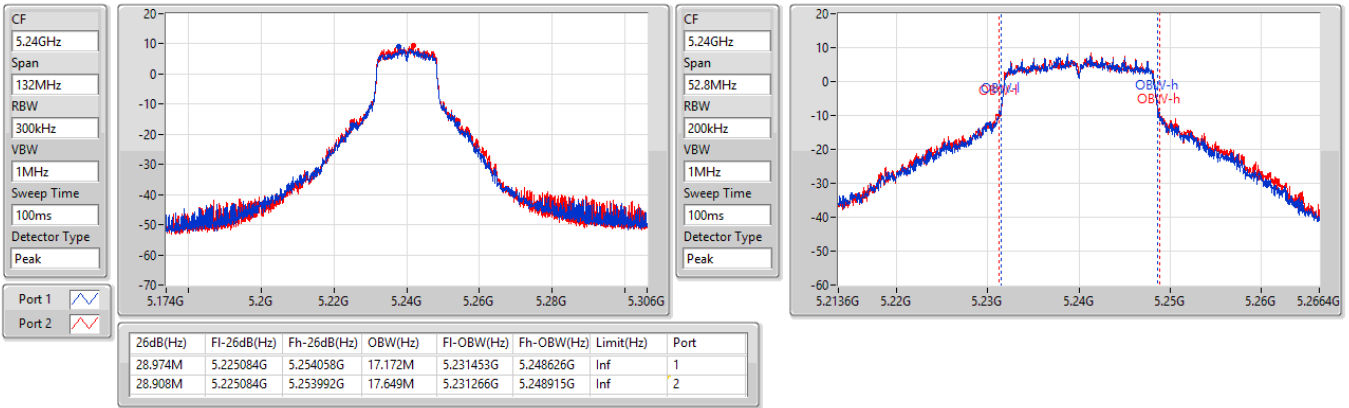
5200MHz



5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

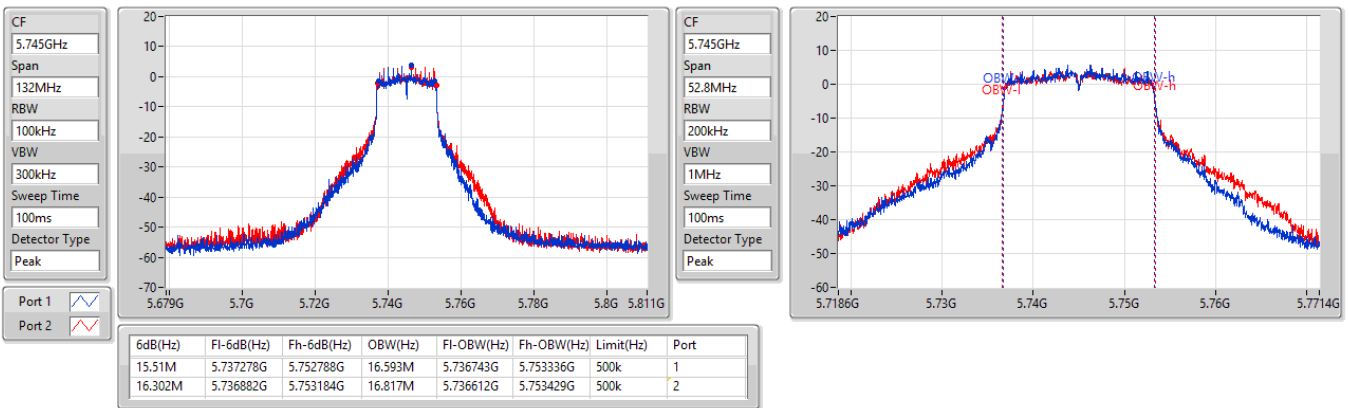
5240MHz

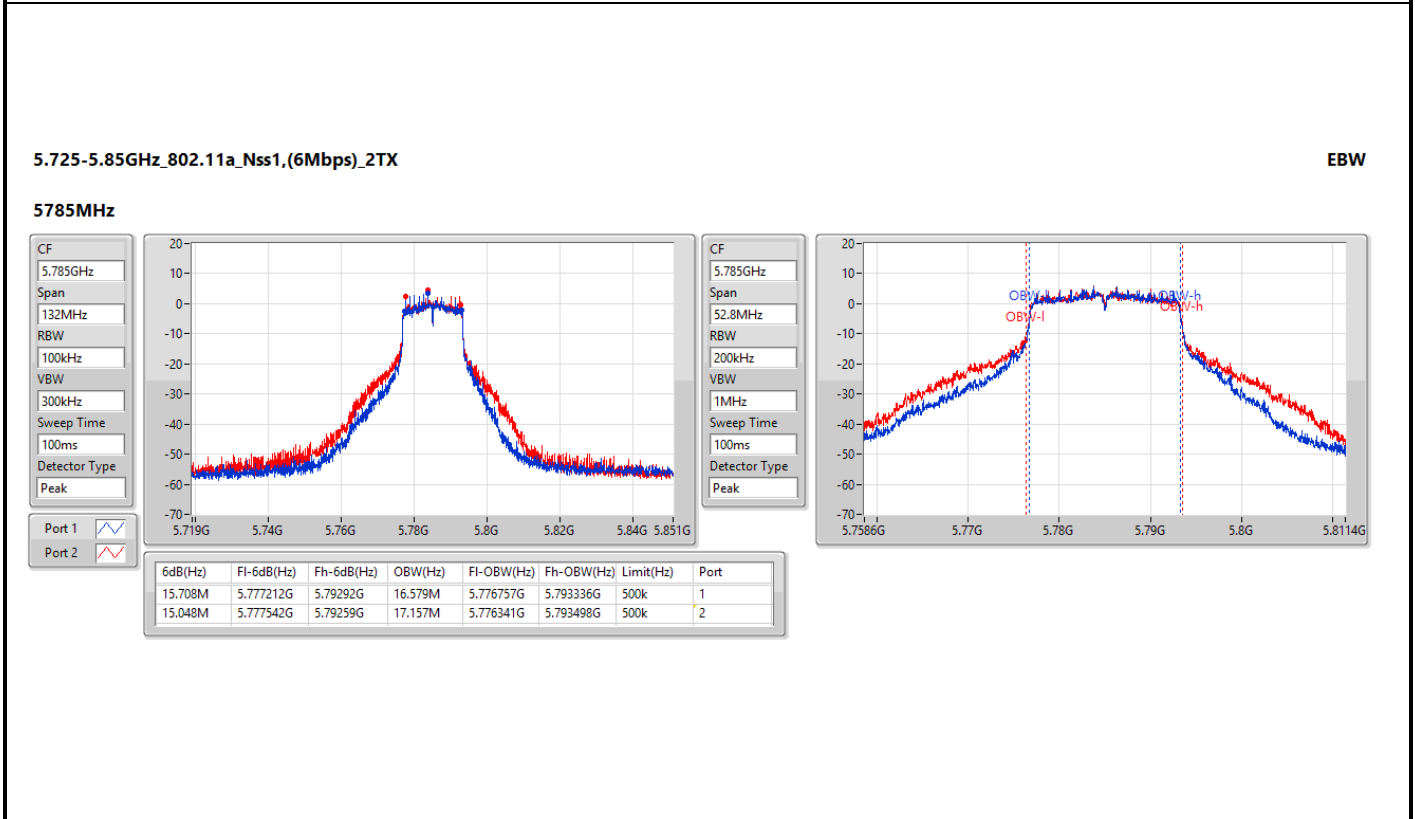
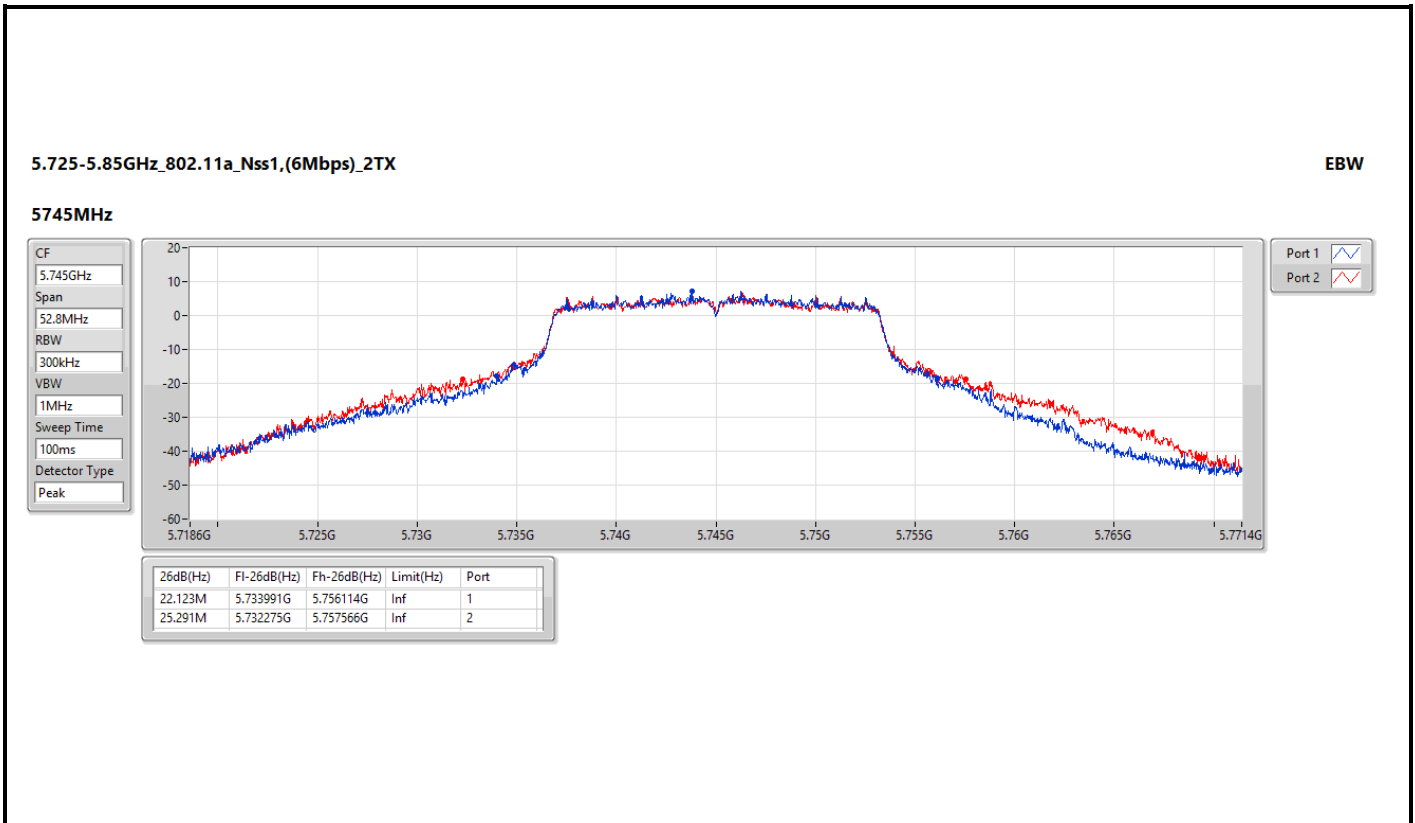


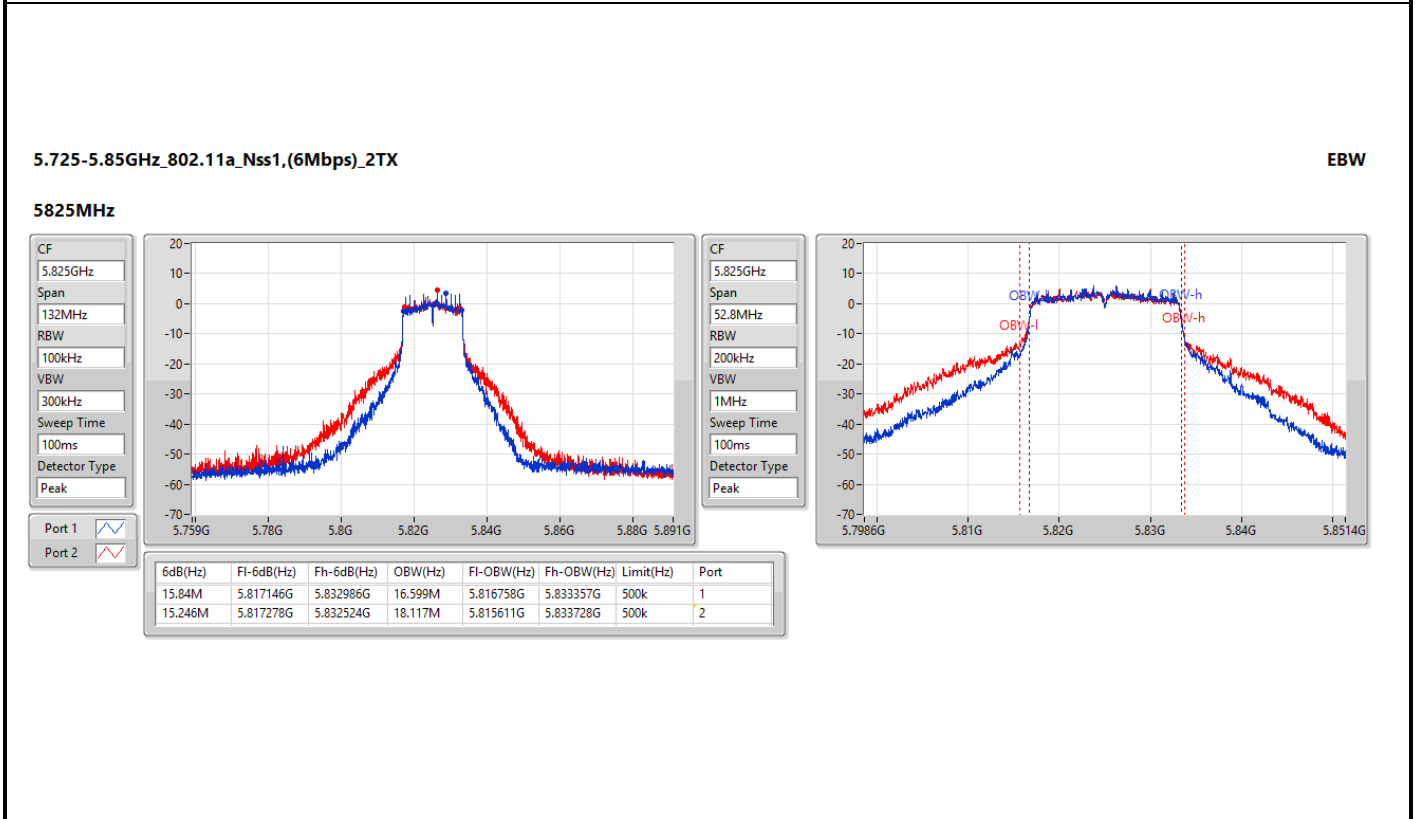
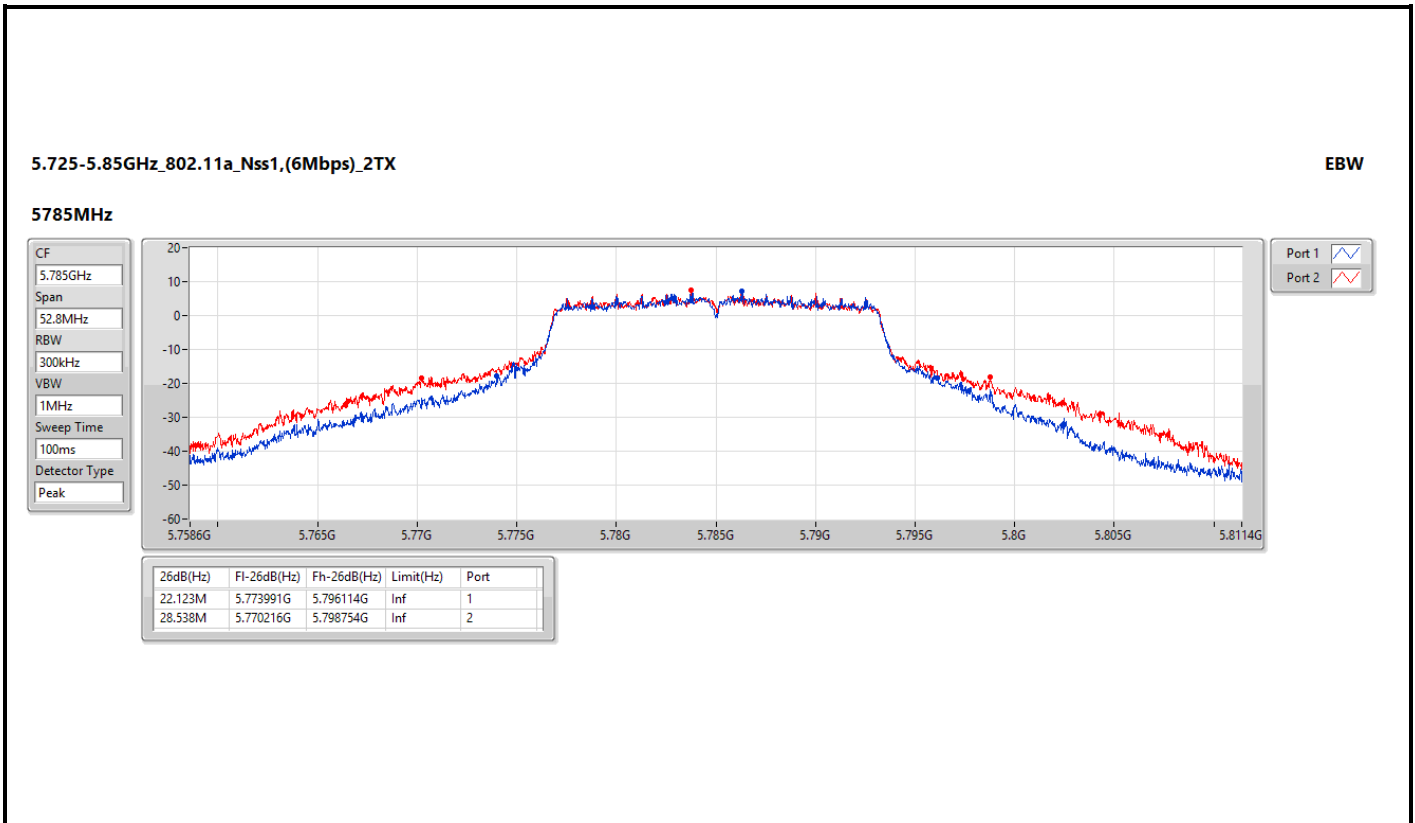
5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

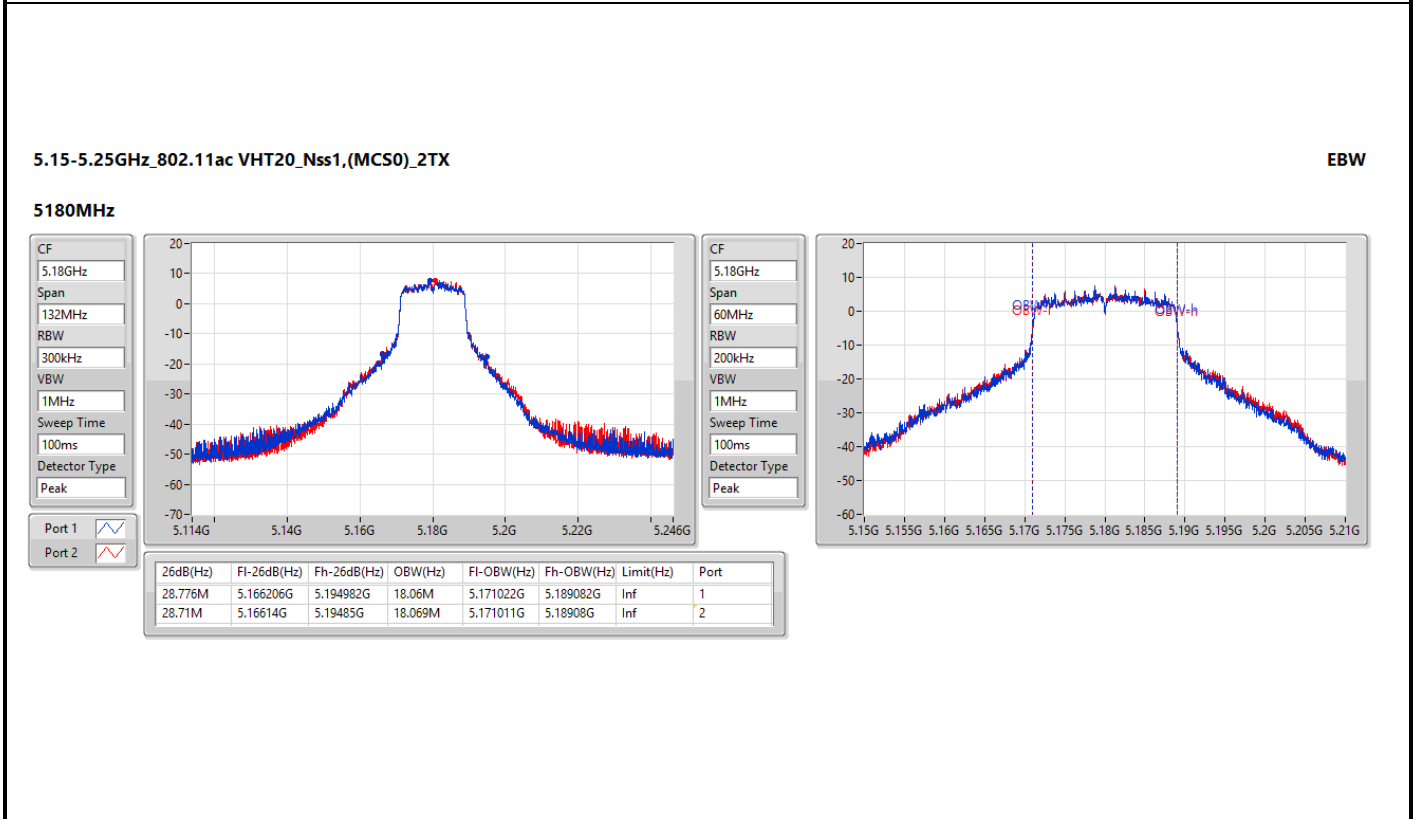
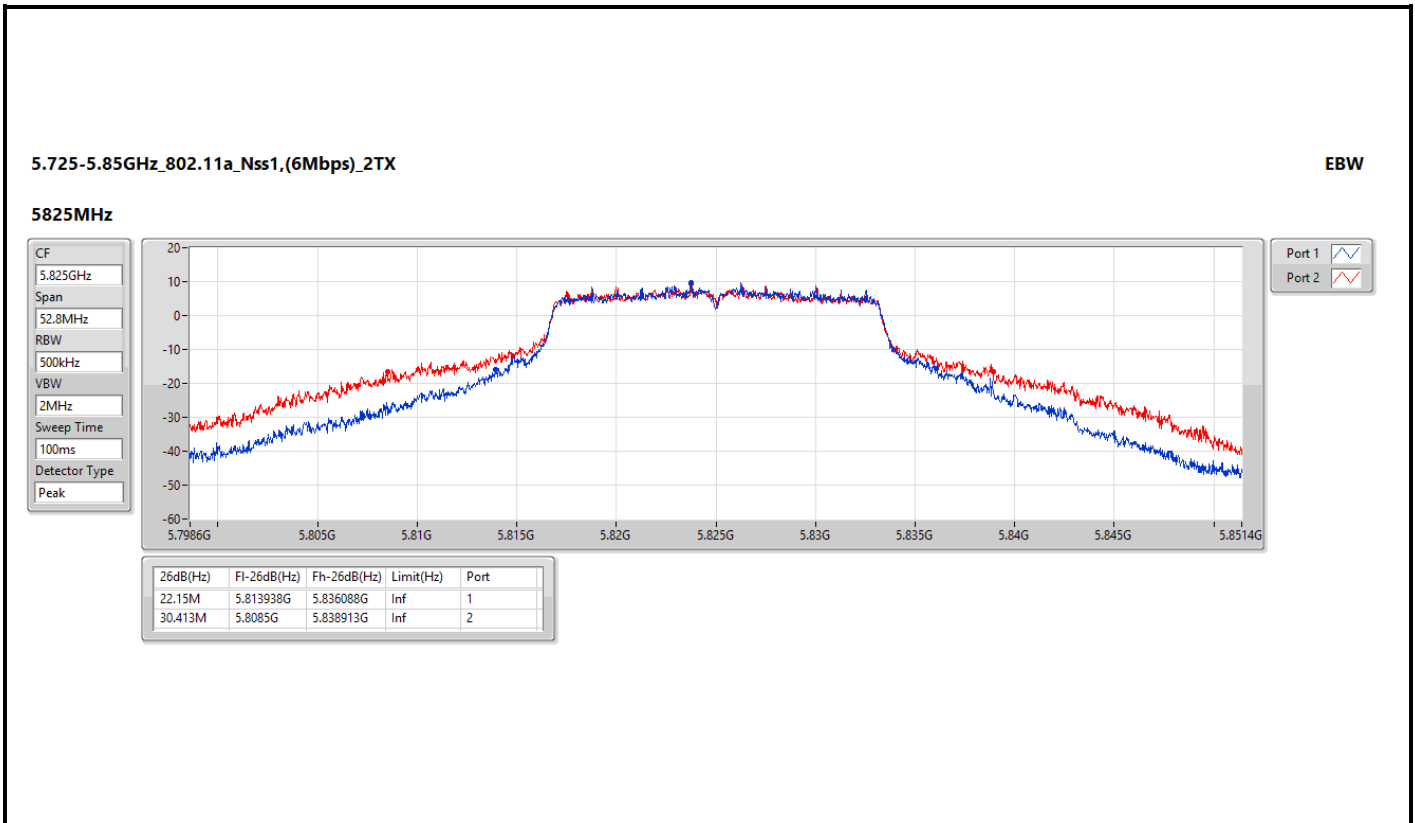
EBW

5745MHz









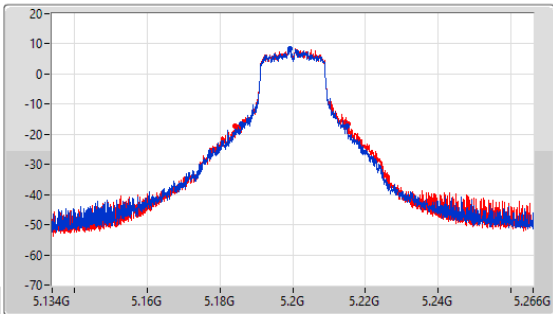


5.15-5.25GHz_802.11ac_VHT20_Nss1,(MCS0)_2TX

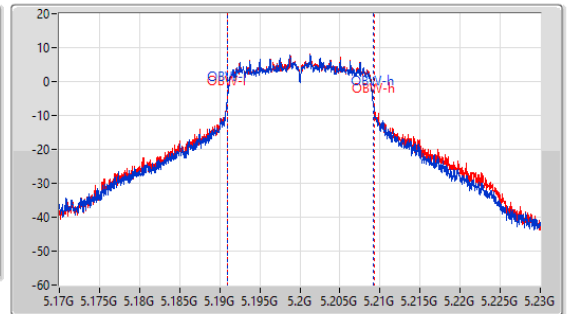
EBW

5200MHz

CF: 5.2GHz
 Span: 132MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.2GHz
 Span: 60MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



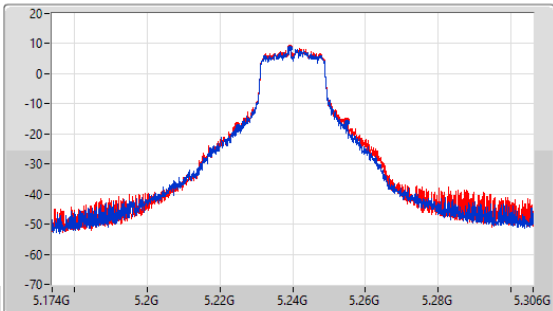
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
28.908M	5.186074G	5.214982G	18.135M	5.190969G	5.209104G	Inf	1
30.954M	5.184292G	5.215246G	18.365M	5.190905G	5.20927G	Inf	2

5.15-5.25GHz_802.11ac_VHT20_Nss1,(MCS0)_2TX

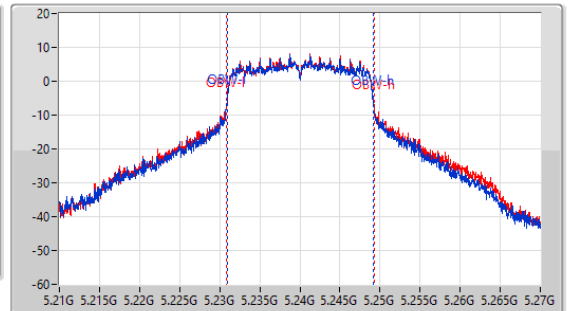
EBW

5240MHz

CF: 5.24GHz
 Span: 132MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.24GHz
 Span: 60MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
29.964M	5.224952G	5.254916G	18.193M	5.230934G	5.249127G	Inf	1
30.228M	5.22482G	5.255048G	18.403M	5.230872G	5.249275G	Inf	2

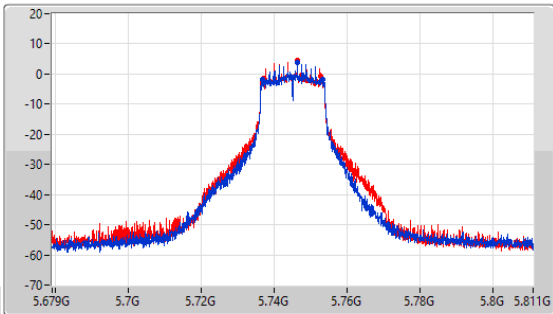


5.725-5.85GHz_802.11ac VHT20_Nss1,(MCS0)_2TX

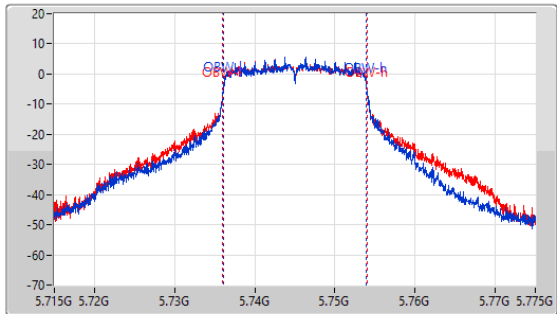
EBW

5745MHz

CF
5.745GHz
Span
132MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.745GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2

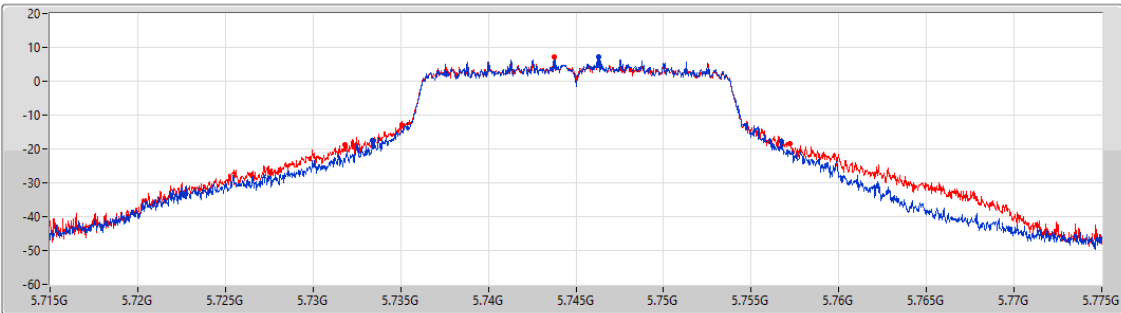
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.764M	5.736618G	5.753382G	17.81M	5.736138G	5.753948G	500k	1
15.444M	5.737146G	5.75259G	17.969M	5.736024G	5.753994G	500k	2

5.725-5.85GHz_802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5745MHz

CF
5.745GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
23.28M	5.73342G	5.7567G	Inf	1
25.41M	5.73183G	5.75724G	Inf	2

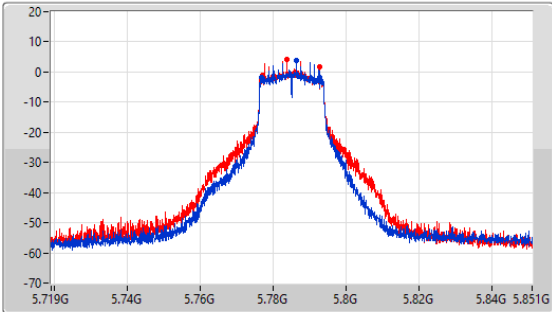


5.725-5.85GHz_802.11ac VHT20_Nss1,(MCS0)_2TX

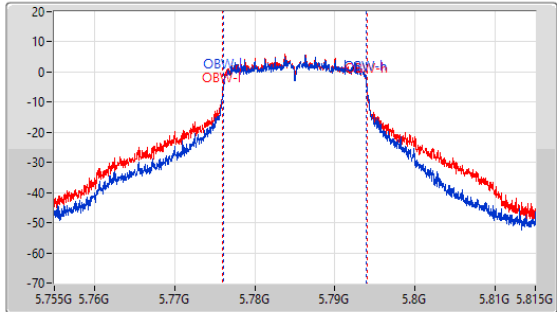
EBW

5785MHz

CF
5.785GHz
Span
132MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.785GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2

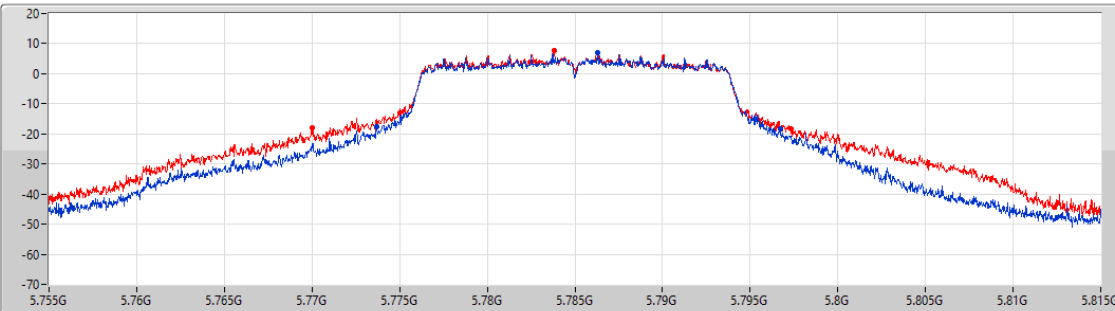
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.17M	5.776618G	5.792788G	17.823M	5.776132G	5.793955G	500k	1
15.444M	5.777146G	5.79259G	18.077M	5.775924G	5.794002G	500k	2

5.725-5.85GHz_802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5785MHz

CF
5.785GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
23.01M	5.77369G	5.7967G	Inf	1
27.33M	5.77003G	5.79736G	Inf	2

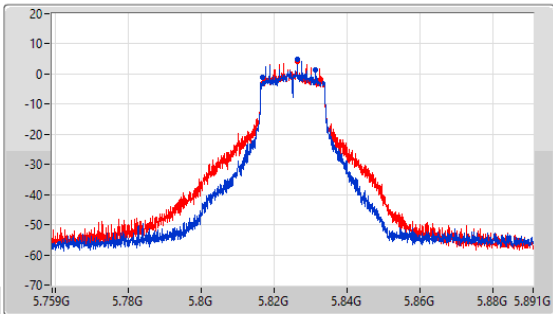


5.725-5.85GHz_802.11ac VHT20_Nss1,(MCS0)_2TX

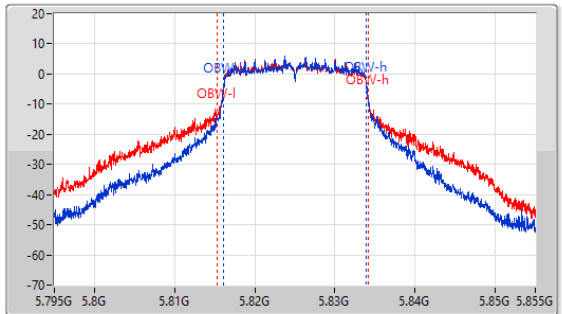
EBW

5825MHz

CF
5.825GHz
Span
132MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.825GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



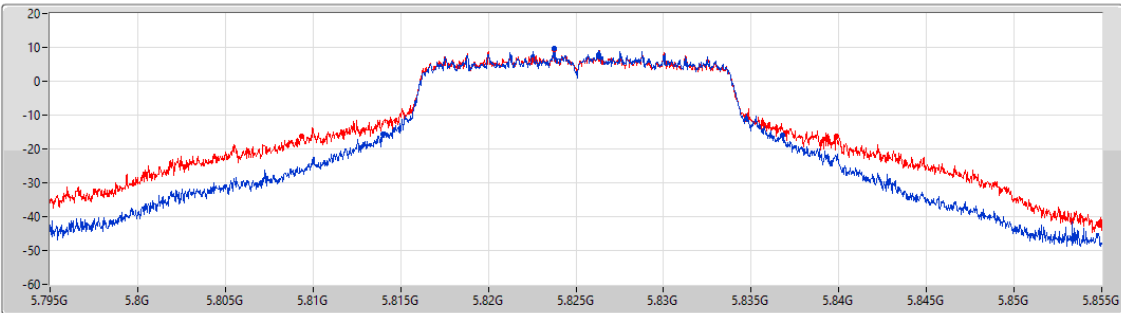
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.652M	5.816684G	5.831336G	17.796M	5.81615G	5.833946G	500k	1
15.642M	5.817146G	5.832788G	18.846M	5.815309G	5.834155G	500k	2

5.725-5.85GHz_802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5825MHz

CF
5.825GHz
Span
60MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
22.74M	5.81402G	5.83676G	Inf	1
30.54M	5.80934G	5.83988G	Inf	2

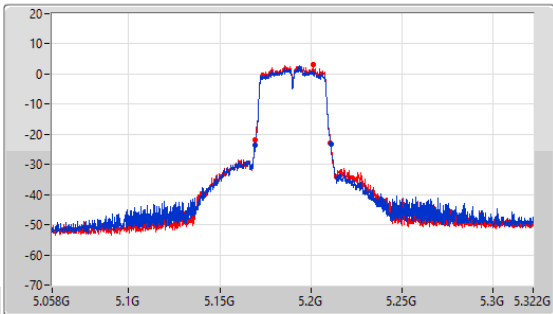


5.15-5.25GHz_802.11ac_VHT40_Nss1,(MCS0)_2TX

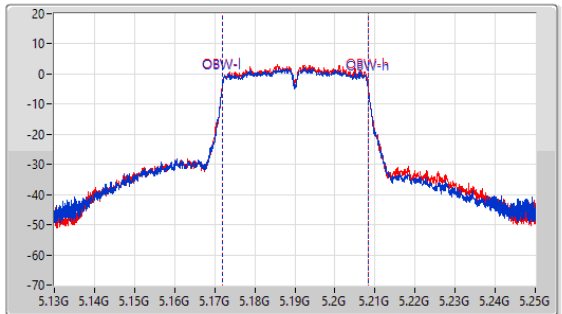
EBW

5190MHz

CF: 5.19GHz
 Span: 264MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.19GHz
 Span: 120MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



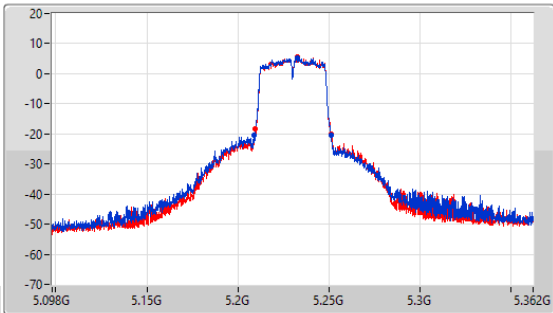
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.448M	5.16954G	5.210988G	36.276M	5.171933G	5.208209G	Inf	1
41.184M	5.169672G	5.210856G	36.236M	5.171966G	5.208201G	Inf	2

5.15-5.25GHz_802.11ac_VHT40_Nss1,(MCS0)_2TX

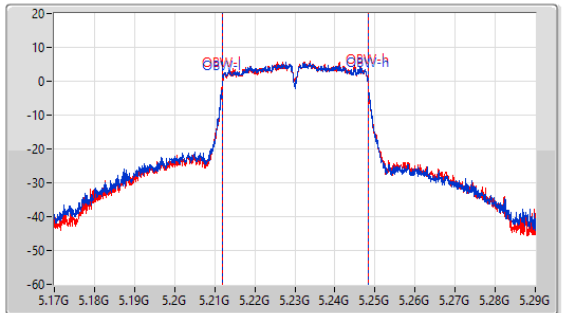
EBW

5230MHz

CF: 5.23GHz
 Span: 264MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.23GHz
 Span: 120MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.108M	5.209012G	5.25112G	36.392M	5.211867G	5.248238G	Inf	1
41.448M	5.209672G	5.25112G	36.325M	5.211925G	5.248249G	Inf	2

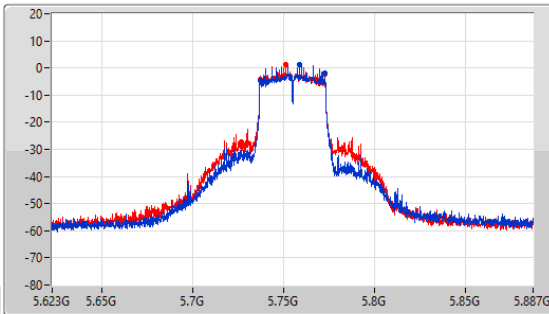


5.725-5.85GHz_802.11ac VHT40_Nss1,(MCS0)_2TX

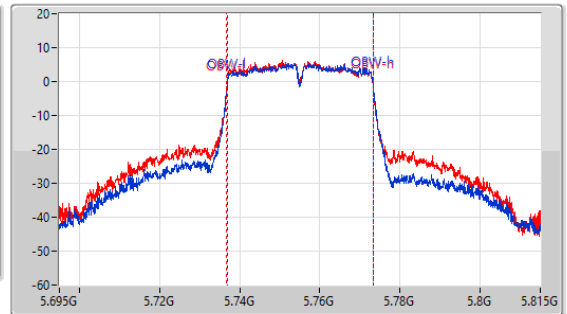
EBW

5755MHz

CF: 5.755GHz
 Span: 264MHz
 RBW: 100kHz
 VBW: 300kHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.755GHz
 Span: 120MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]

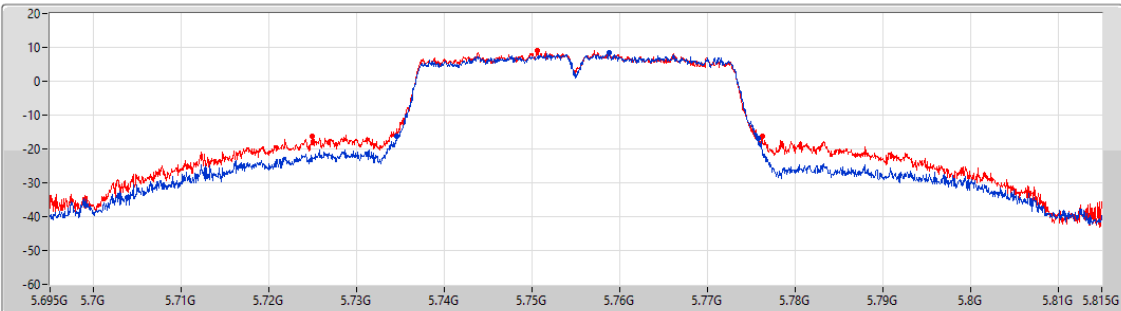
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.98M	5.737576G	5.772556G	36.321M	5.736906G	5.773227G	500k	1
35.244M	5.737312G	5.772556G	36.446M	5.73676G	5.773206G	500k	2

5.725-5.85GHz_802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5755MHz

CF: 5.755GHz
 Span: 120MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]

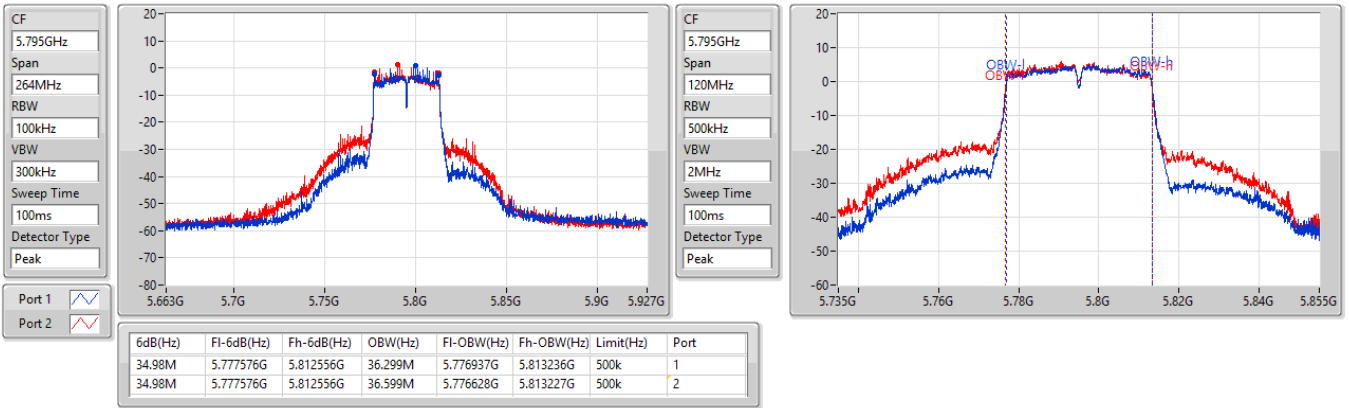
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
41.22M	5.73454G	5.77576G	Inf	1
51.36M	5.72488G	5.77624G	Inf	2



5.725-5.85GHz_802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

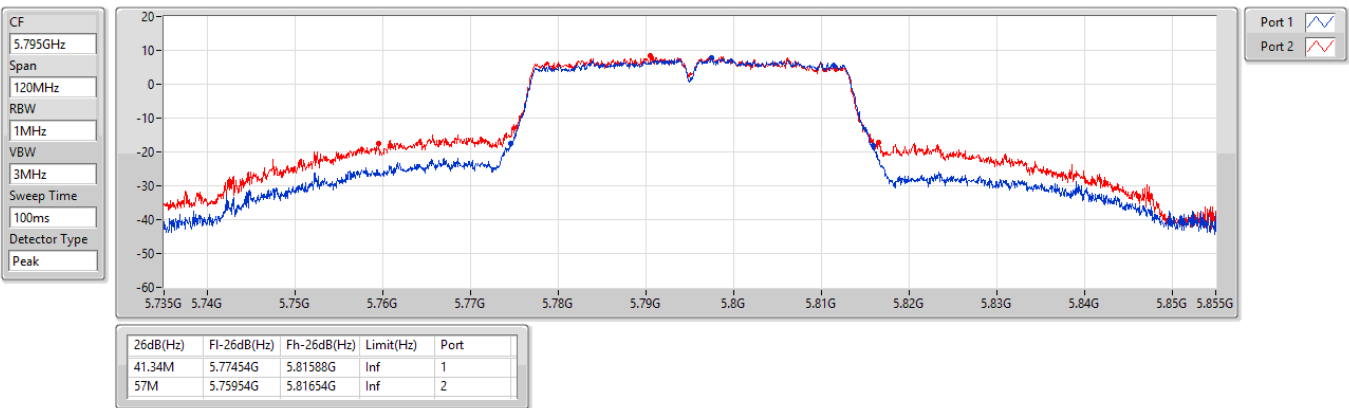
5795MHz



5.725-5.85GHz_802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5795MHz



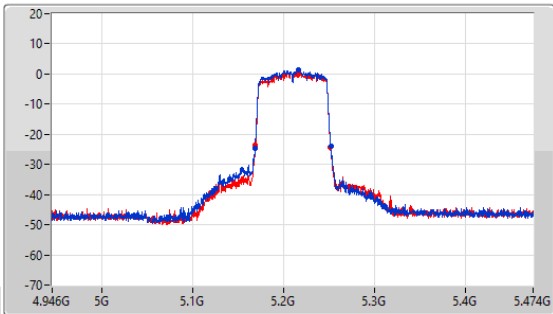


5.15-5.25GHz_802.11ac_VHT80_Nss1,(MCS0)_2TX

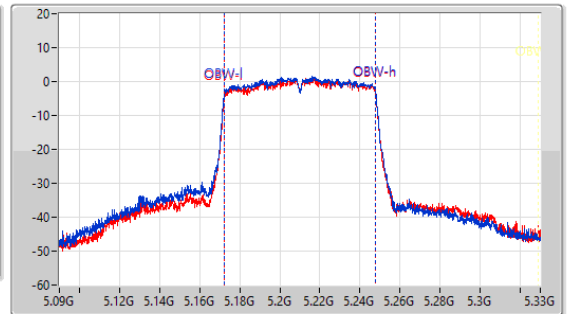
EBW

5210MHz

CF: 5.21GHz
 Span: 528MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak
 Port 1: [Waveform icon]
 Port 2: [Waveform icon]



CF: 5.21GHz
 Span: 240MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



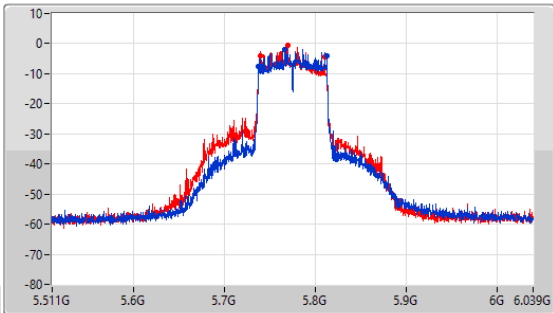
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.16M	5.168816G	5.251976G	75.573M	5.172332G	5.247905G	Inf	1
82.104M	5.169344G	5.251448G	75.503M	5.172424G	5.247928G	Inf	2

5.725-5.85GHz_802.11ac_VHT80_Nss1,(MCS0)_2TX

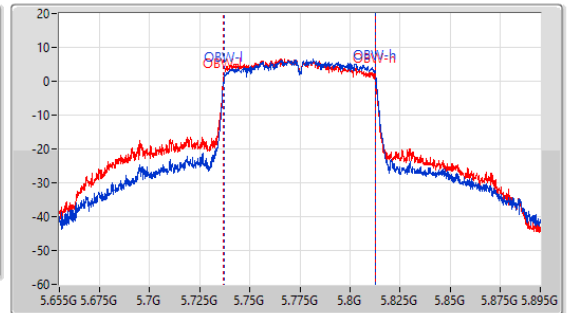
EBW

5775MHz

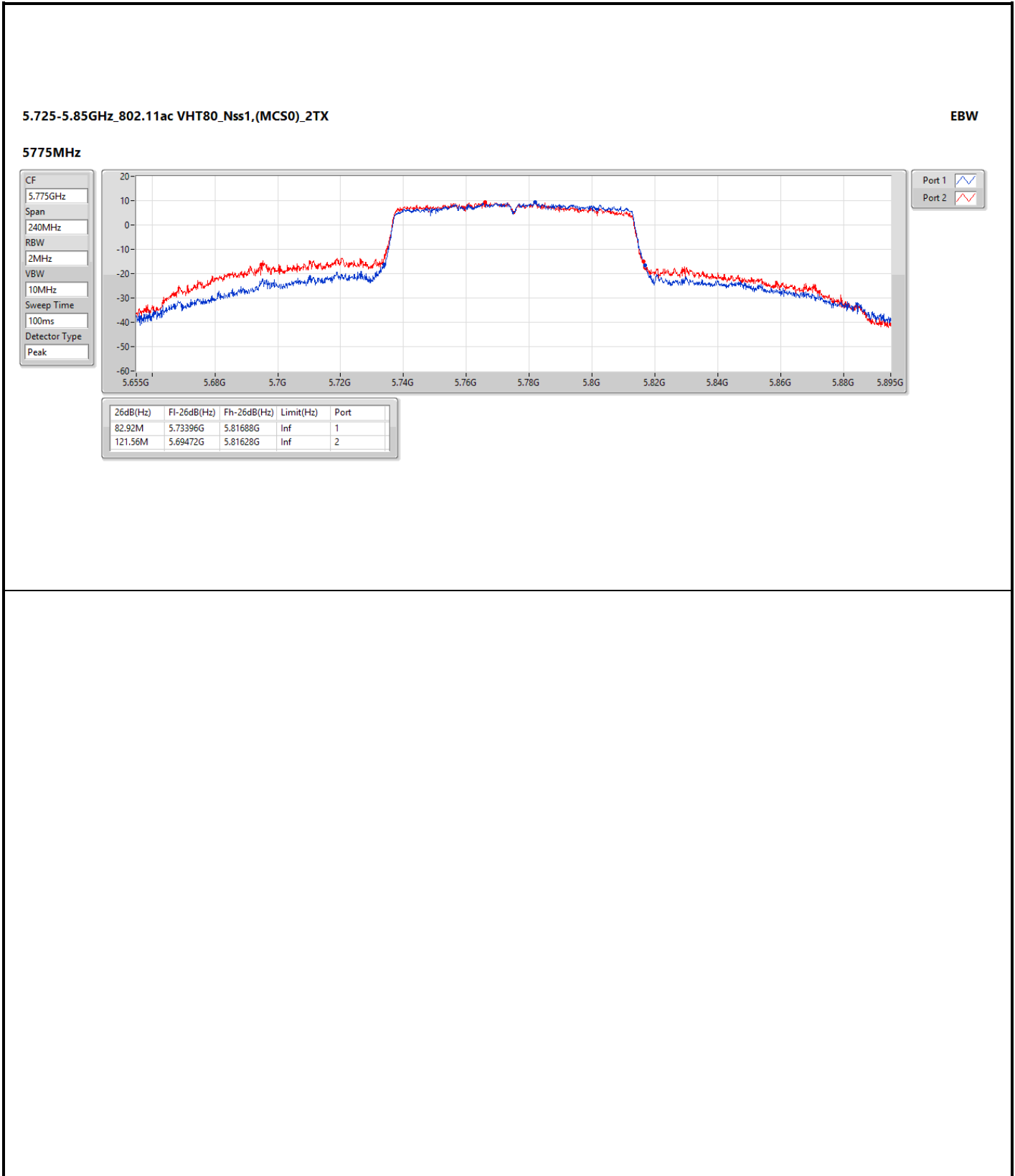
CF: 5.775GHz
 Span: 528MHz
 RBW: 100kHz
 VBW: 300kHz
 Sweep Time: 100ms
 Detector Type: Peak
 Port 1: [Waveform icon]
 Port 2: [Waveform icon]



CF: 5.775GHz
 Span: 240MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
74.976M	5.737512G	5.812488G	75.668M	5.737245G	5.812913G	500k	1
70.224M	5.739888G	5.810112G	76.122M	5.736647G	5.812769G	500k	2





Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.30	0.08511	22.46	0.17620
802.11ac VHT20_Nss1,(MCS0)_2TX	19.17	0.08260	22.33	0.17100
802.11ac VHT40_Nss1,(MCS0)_2TX	17.20	0.05248	20.36	0.10864
802.11ac VHT80_Nss1,(MCS0)_2TX	12.11	0.01626	15.27	0.03365
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	18.38	0.06887	22.79	0.19011
802.11ac VHT20_Nss1,(MCS0)_2TX	18.36	0.06855	22.77	0.18923
802.11ac VHT40_Nss1,(MCS0)_2TX	17.38	0.05470	21.79	0.15101
802.11ac VHT80_Nss1,(MCS0)_2TX	17.05	0.05070	21.46	0.13996

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.16	15.96	16.11	19.05	24.00	22.21	30.00
5200MHz	Pass	3.16	15.98	16.22	19.11	24.00	22.27	30.00
5240MHz	Pass	3.16	16.04	16.52	19.30	24.00	22.46	30.00
5745MHz	Pass	4.41	13.94	13.88	16.92	30.00	21.33	36.00
5785MHz	Pass	4.41	14.04	14.02	17.04	30.00	21.45	36.00
5825MHz	Pass	4.41	15.41	15.32	18.38	30.00	22.79	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.16	15.41	15.81	18.62	24.00	21.78	30.00
5200MHz	Pass	3.16	15.91	16.18	19.06	24.00	22.22	30.00
5240MHz	Pass	3.16	15.98	16.34	19.17	24.00	22.33	30.00
5745MHz	Pass	4.41	13.89	13.78	16.85	30.00	21.26	36.00
5785MHz	Pass	4.41	13.95	13.86	16.92	30.00	21.33	36.00
5825MHz	Pass	4.41	15.34	15.36	18.36	30.00	22.77	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.16	11.05	11.52	14.30	24.00	17.46	30.00
5230MHz	Pass	3.16	14.26	14.11	17.20	24.00	20.36	30.00
5755MHz	Pass	4.41	14.39	14.35	17.38	30.00	21.79	36.00
5795MHz	Pass	4.41	14.02	14.06	17.05	30.00	21.46	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.16	9.27	8.92	12.11	24.00	15.27	30.00
5775MHz	Pass	4.41	14.01	14.06	17.05	30.00	21.46	36.00

DG = Directional Gain; Port X = Port X output power



Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	7.48	13.61
802.11ac VHT20_Nss1,(MCS0)_2TX	7.14	13.27
802.11ac VHT40_Nss1,(MCS0)_2TX	1.97	8.10
802.11ac VHT80_Nss1,(MCS0)_2TX	-6.00	0.13
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	4.12	11.49
802.11ac VHT20_Nss1,(MCS0)_2TX	3.50	10.87
802.11ac VHT40_Nss1,(MCS0)_2TX	1.00	8.37
802.11ac VHT80_Nss1,(MCS0)_2TX	-2.38	4.99

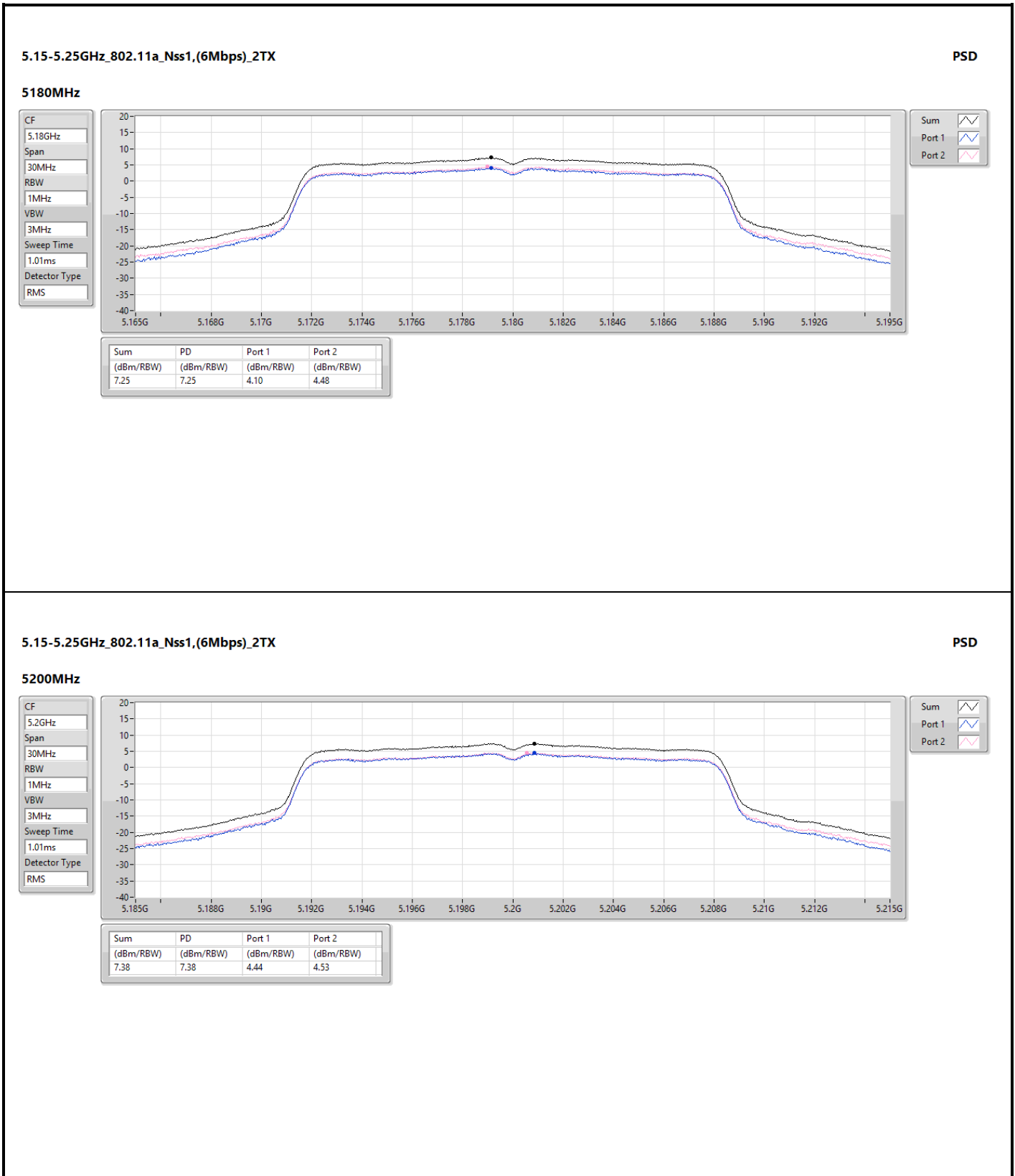
RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

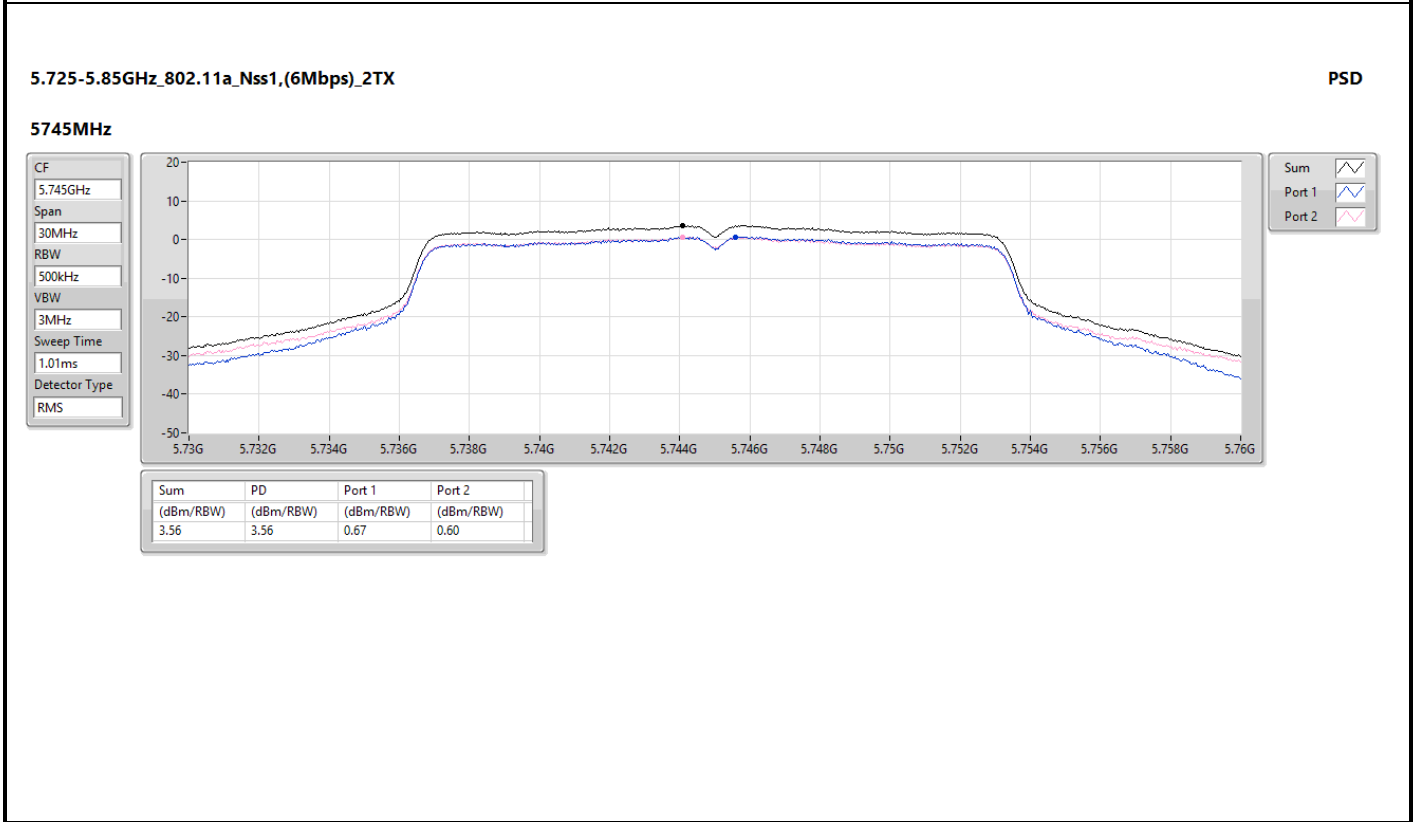
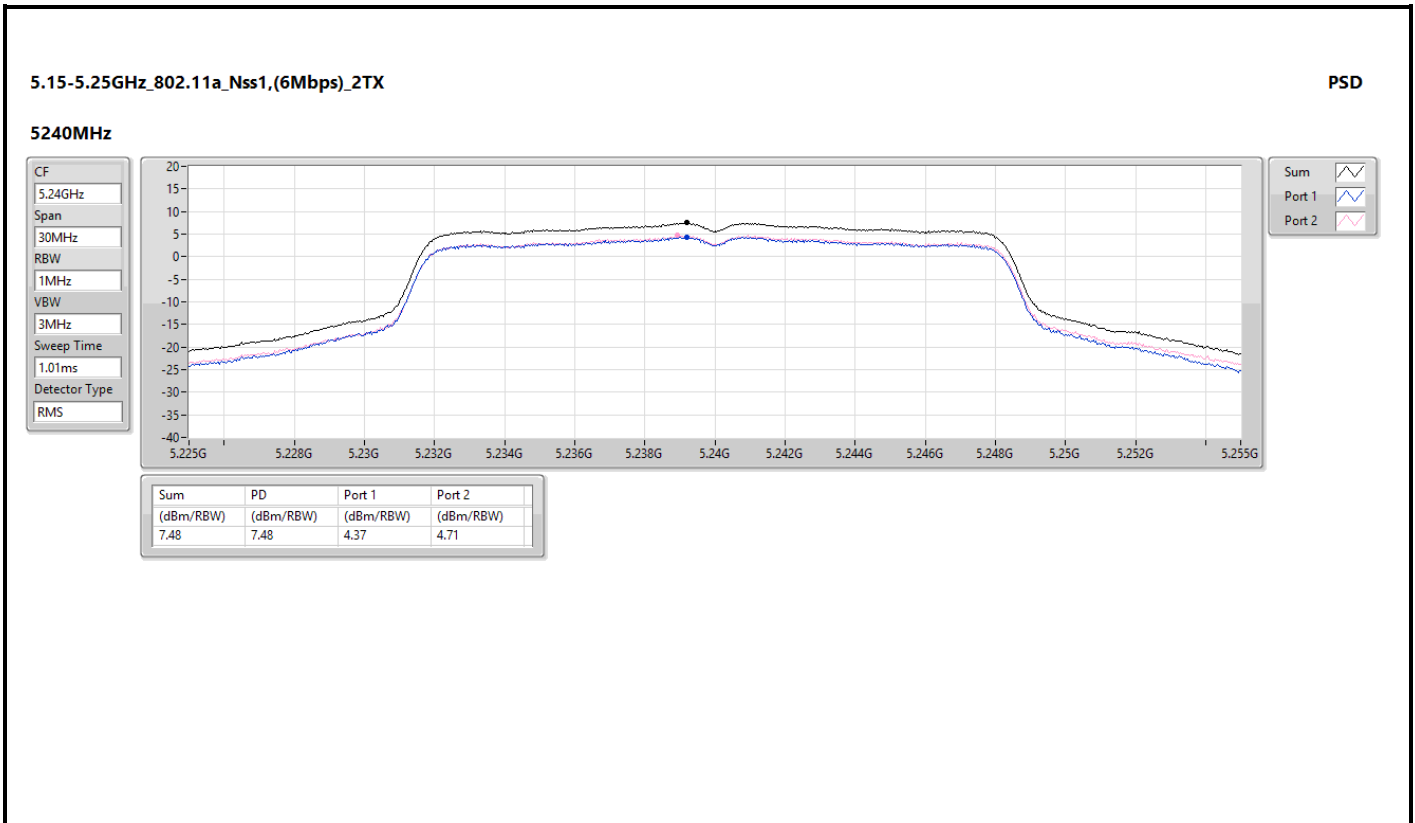
Result

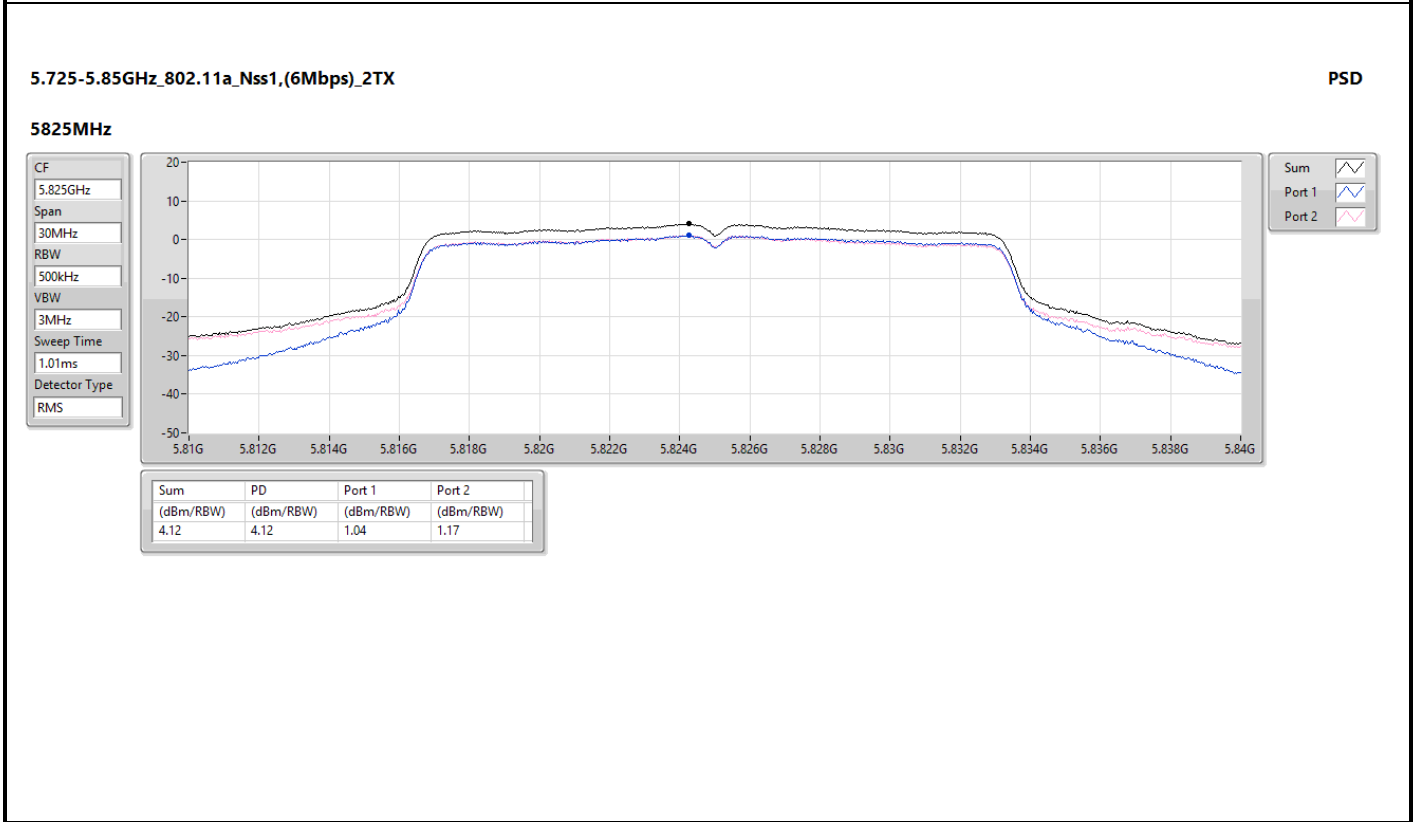
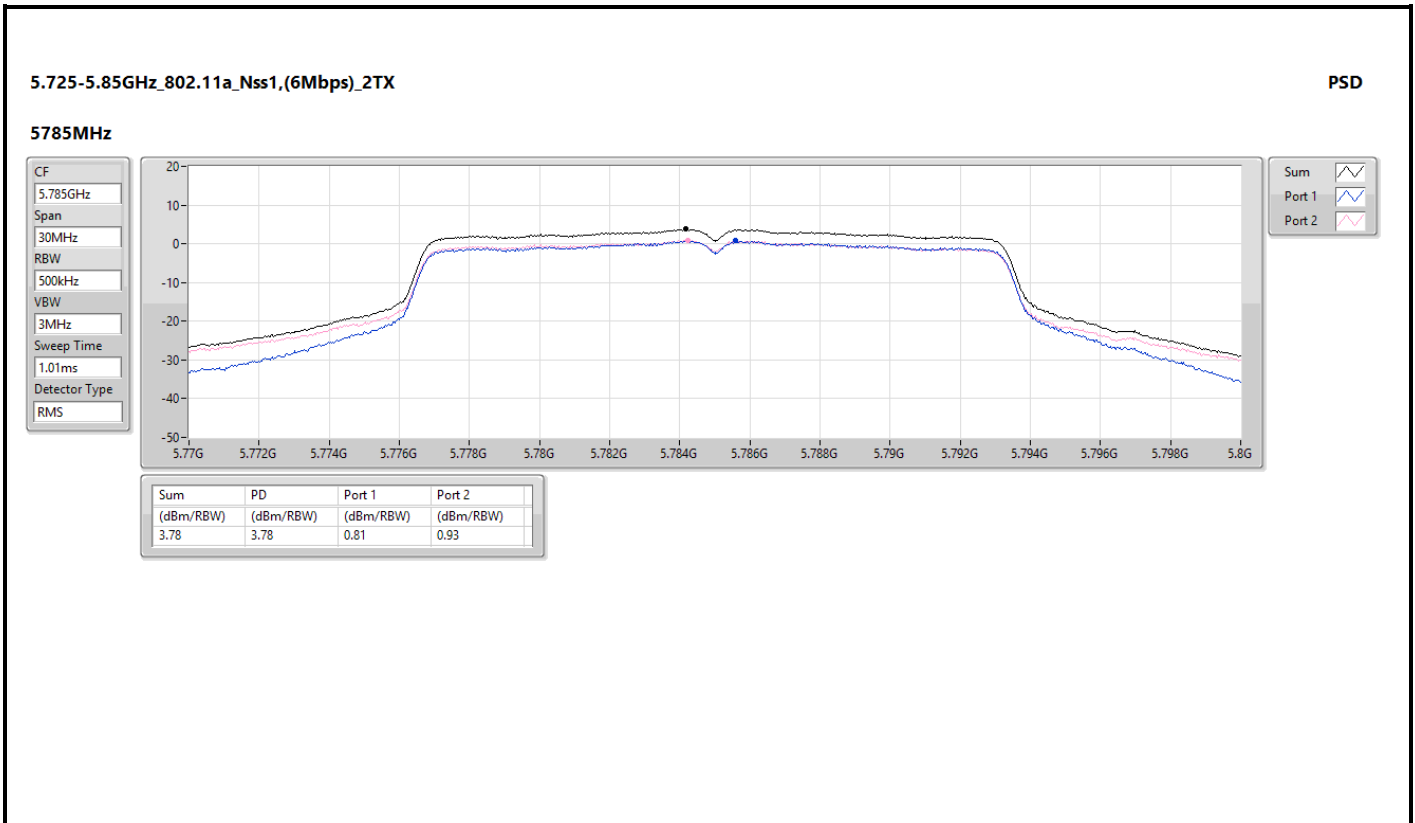
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.13	4.10	4.48	7.25	10.87	13.38	17.00
5200MHz	Pass	6.13	4.44	4.53	7.38	10.87	13.51	17.00
5240MHz	Pass	6.13	4.37	4.71	7.48	10.87	13.61	17.00
5745MHz	Pass	7.37	0.67	0.60	3.56	28.63	10.93	36.00
5785MHz	Pass	7.37	0.81	0.93	3.78	28.63	11.15	36.00
5825MHz	Pass	7.37	1.04	1.17	4.12	28.63	11.49	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.13	3.34	3.32	6.29	10.87	12.42	17.00
5200MHz	Pass	6.13	3.96	4.16	6.98	10.87	13.11	17.00
5240MHz	Pass	6.13	4.08	4.42	7.14	10.87	13.27	17.00
5745MHz	Pass	7.37	0.41	0.30	3.34	28.63	10.71	36.00
5785MHz	Pass	7.37	0.13	0.47	3.29	28.63	10.66	36.00
5825MHz	Pass	7.37	0.50	0.48	3.50	28.63	10.87	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.13	-4.28	-3.61	-1.00	10.87	5.13	17.00
5230MHz	Pass	6.13	-0.87	-1.05	1.97	10.87	8.10	17.00
5755MHz	Pass	7.37	-2.18	-1.85	1.00	28.63	8.37	36.00
5795MHz	Pass	7.37	-2.75	-2.48	0.28	28.63	7.65	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.13	-8.72	-9.33	-6.00	10.87	0.13	17.00
5775MHz	Pass	7.37	-5.26	-5.32	-2.38	28.63	4.99	36.00

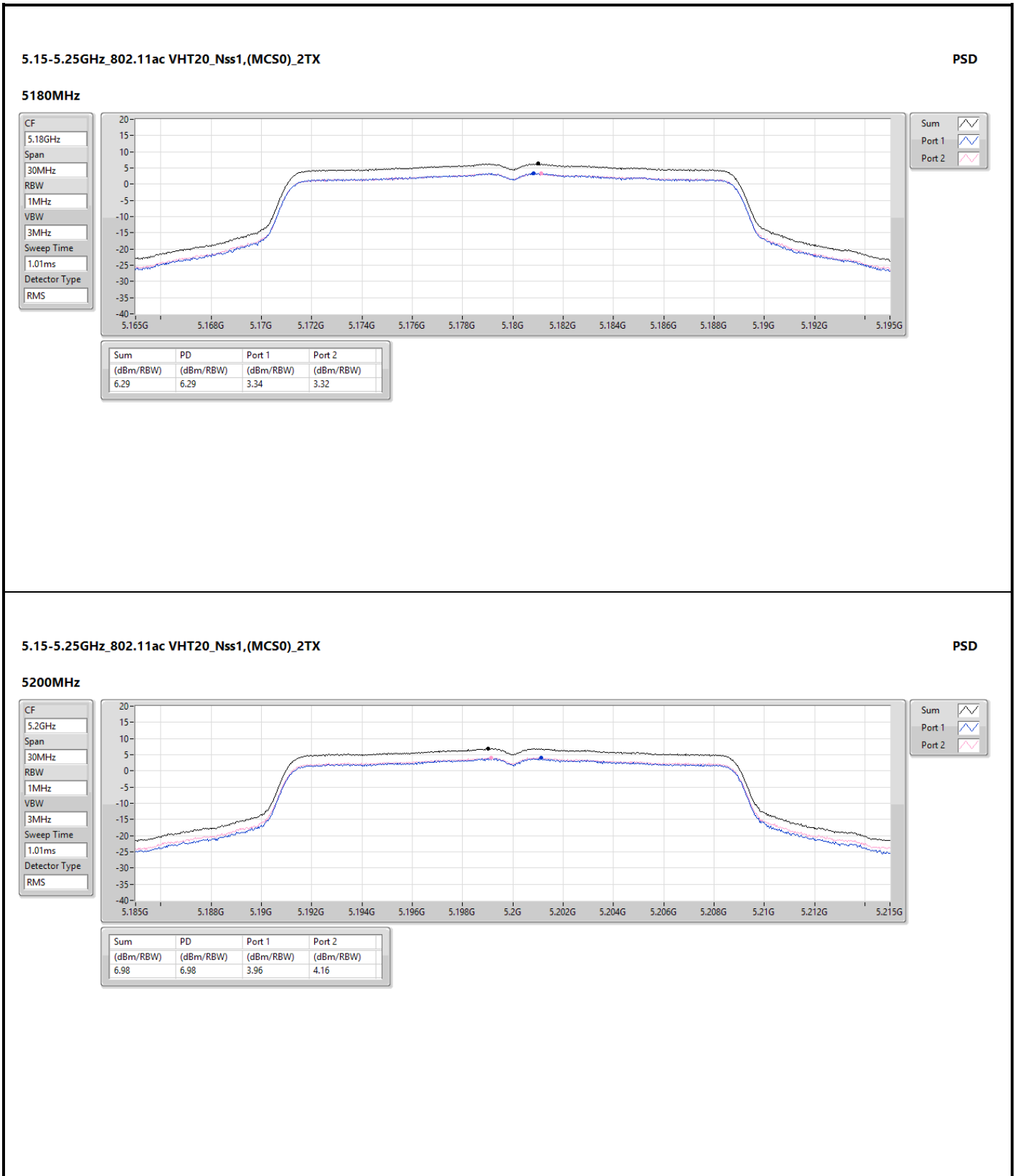
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

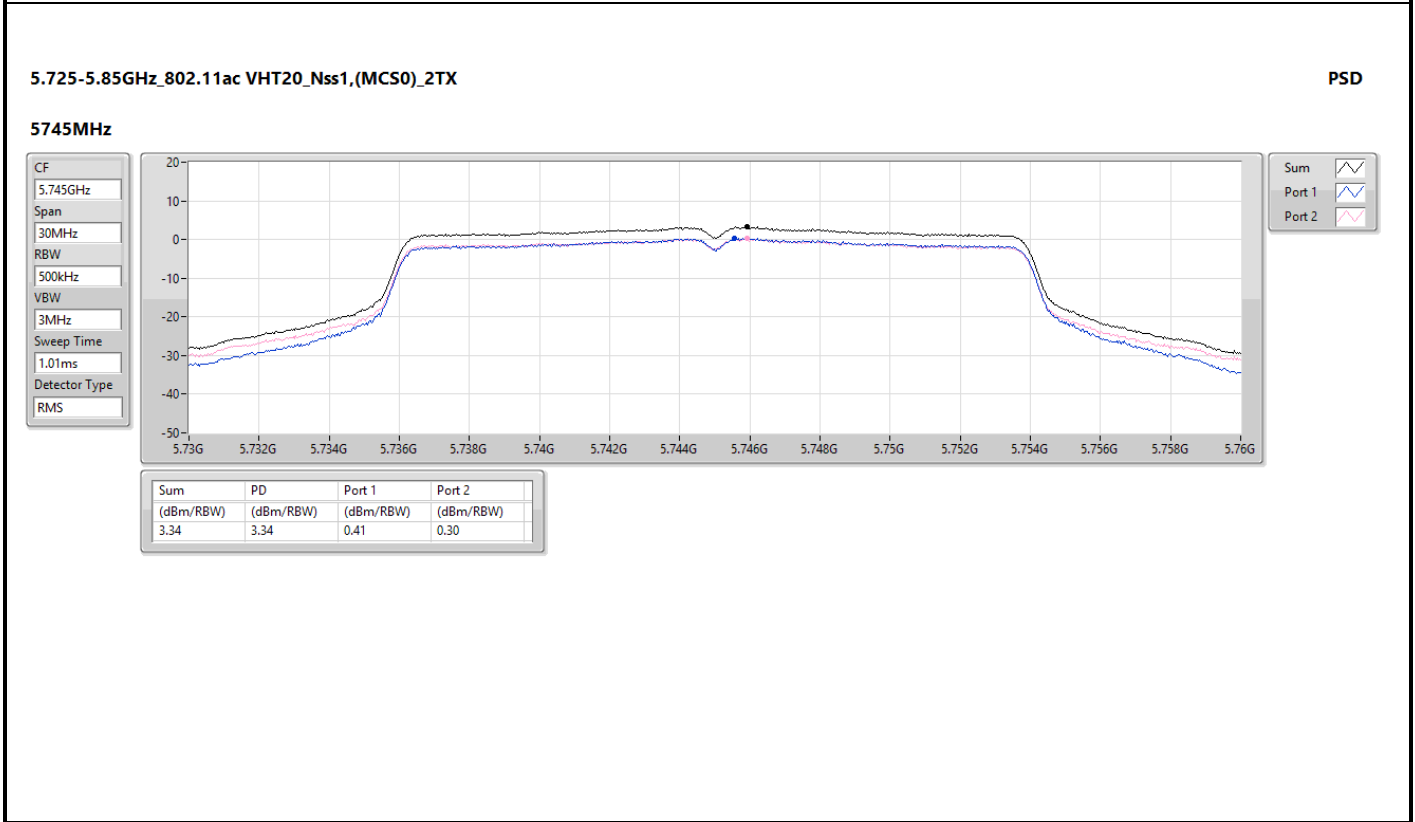
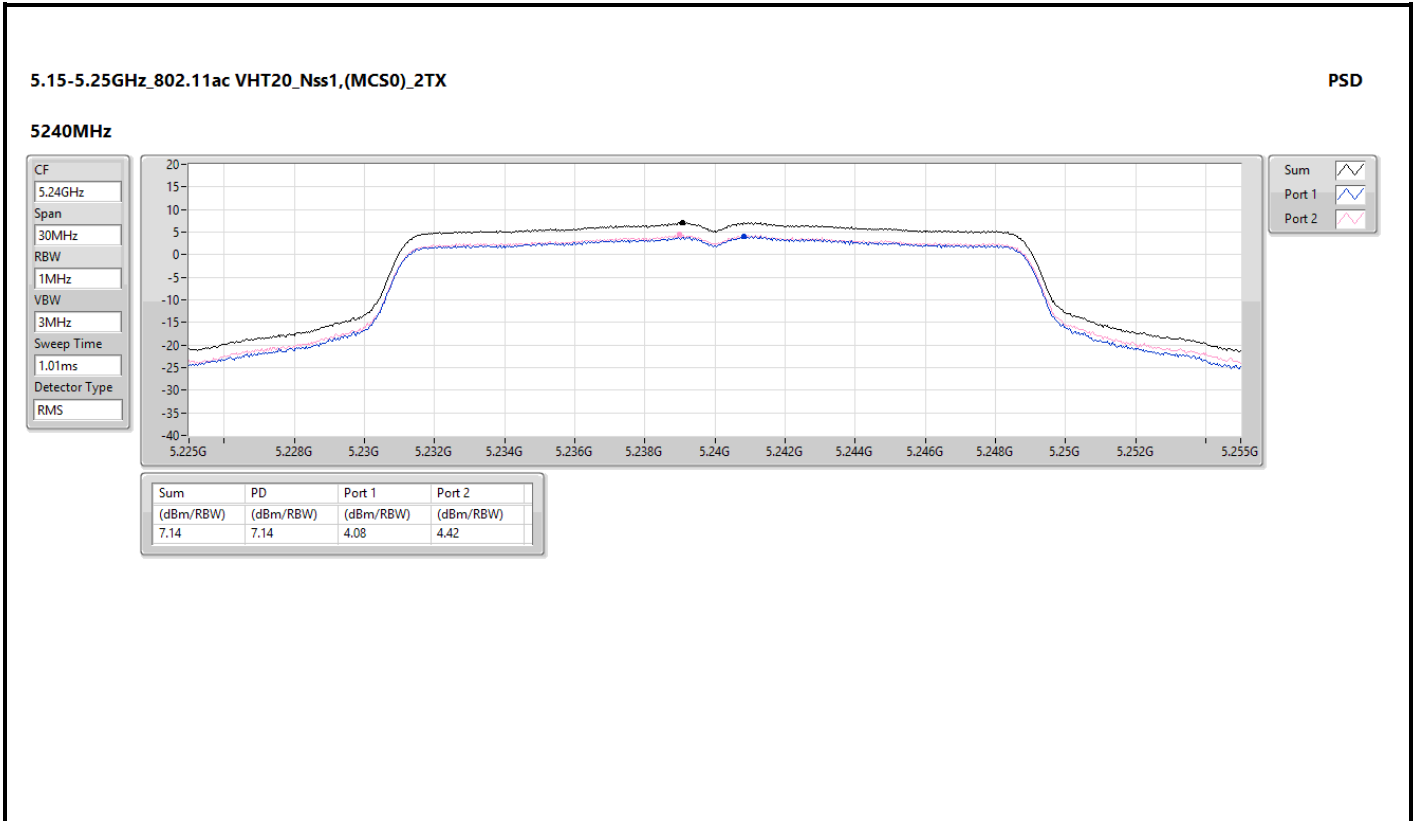
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

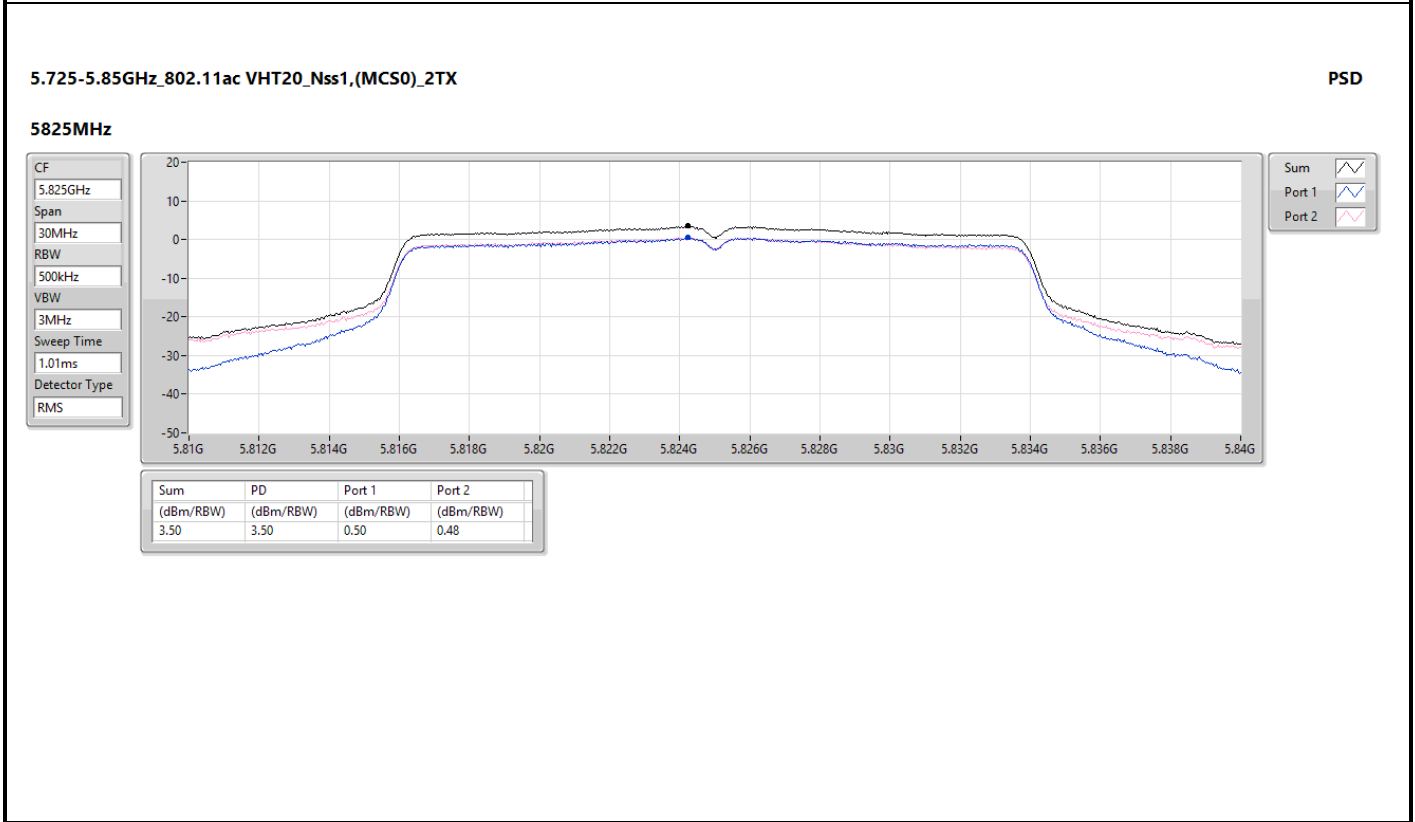
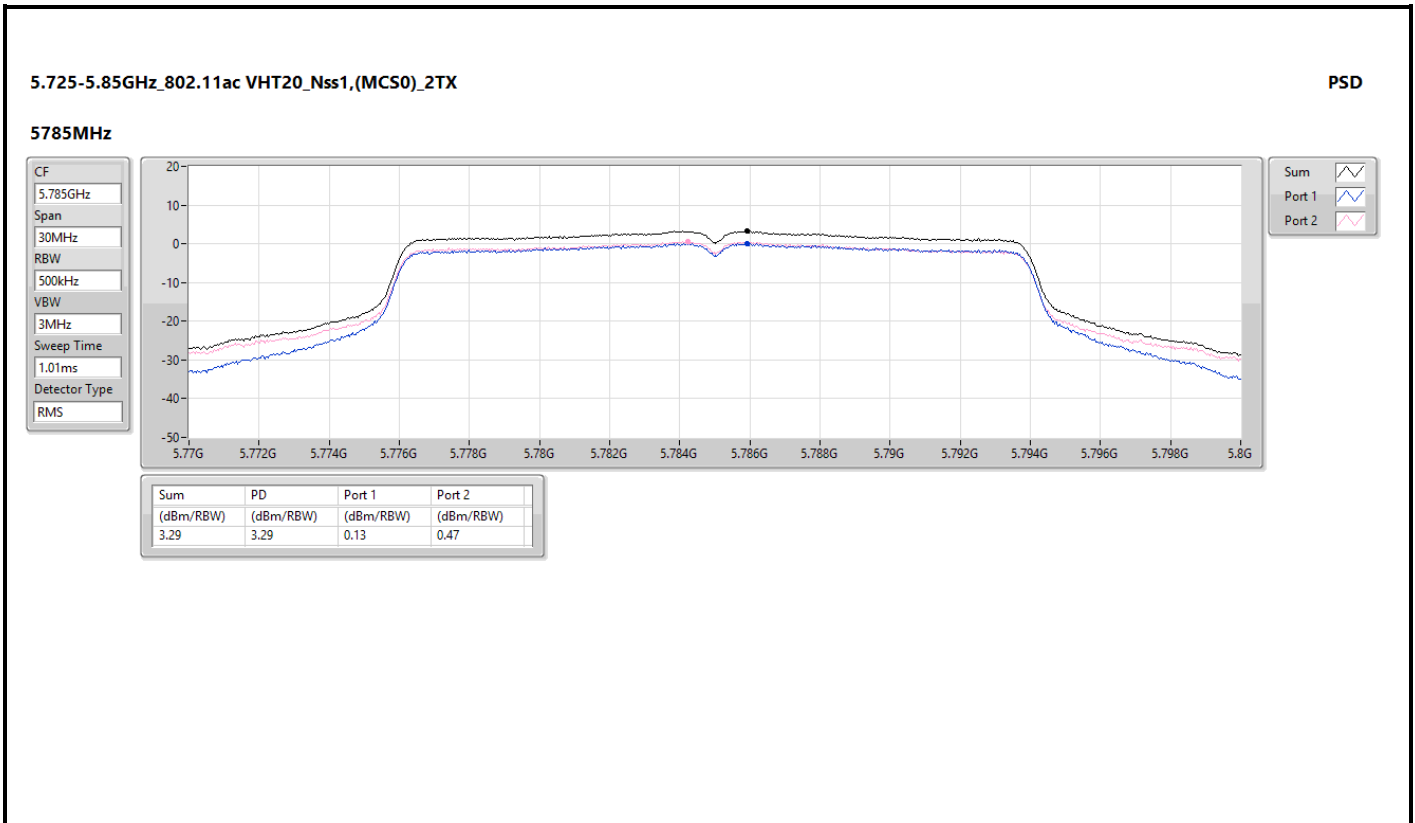


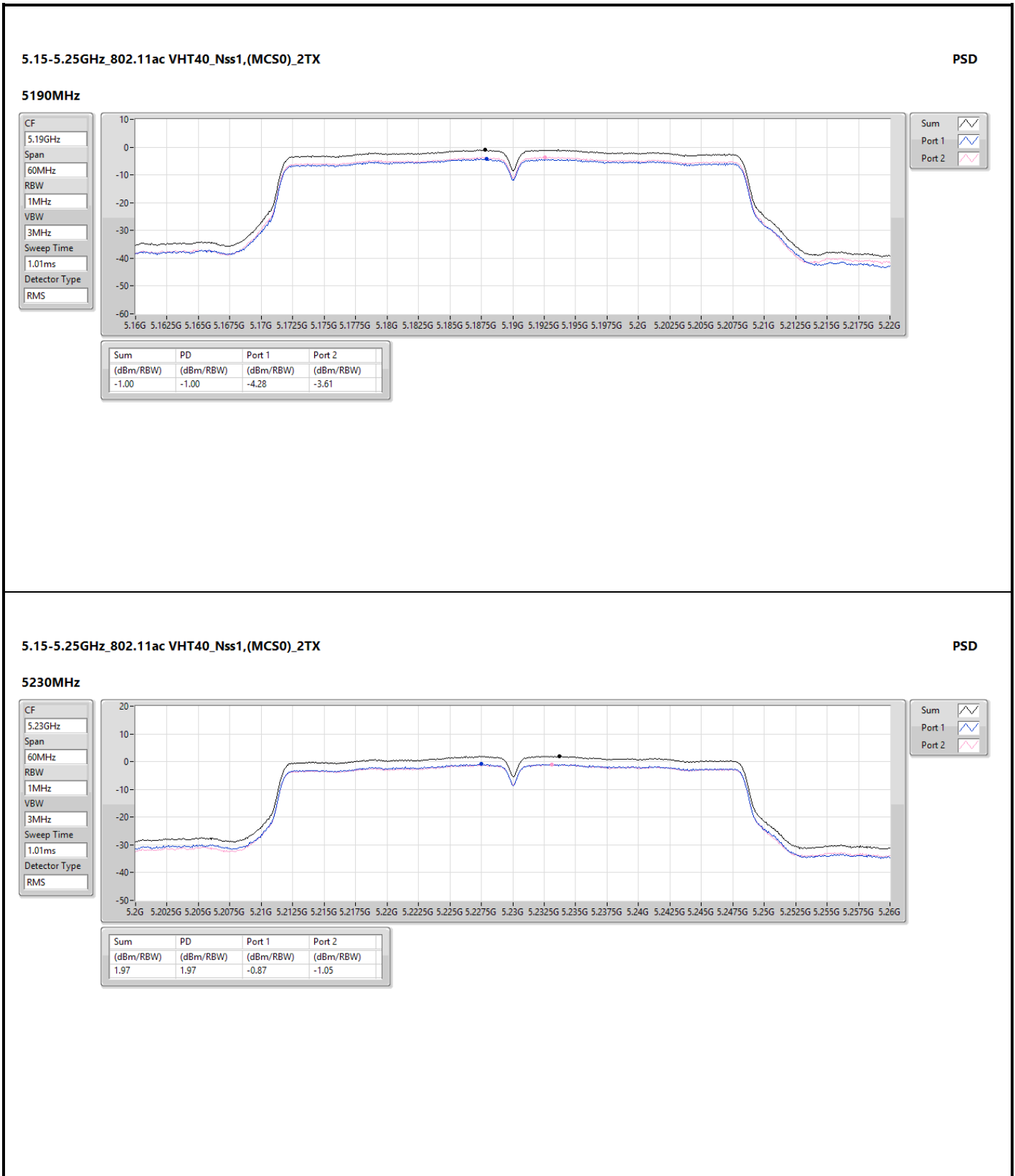


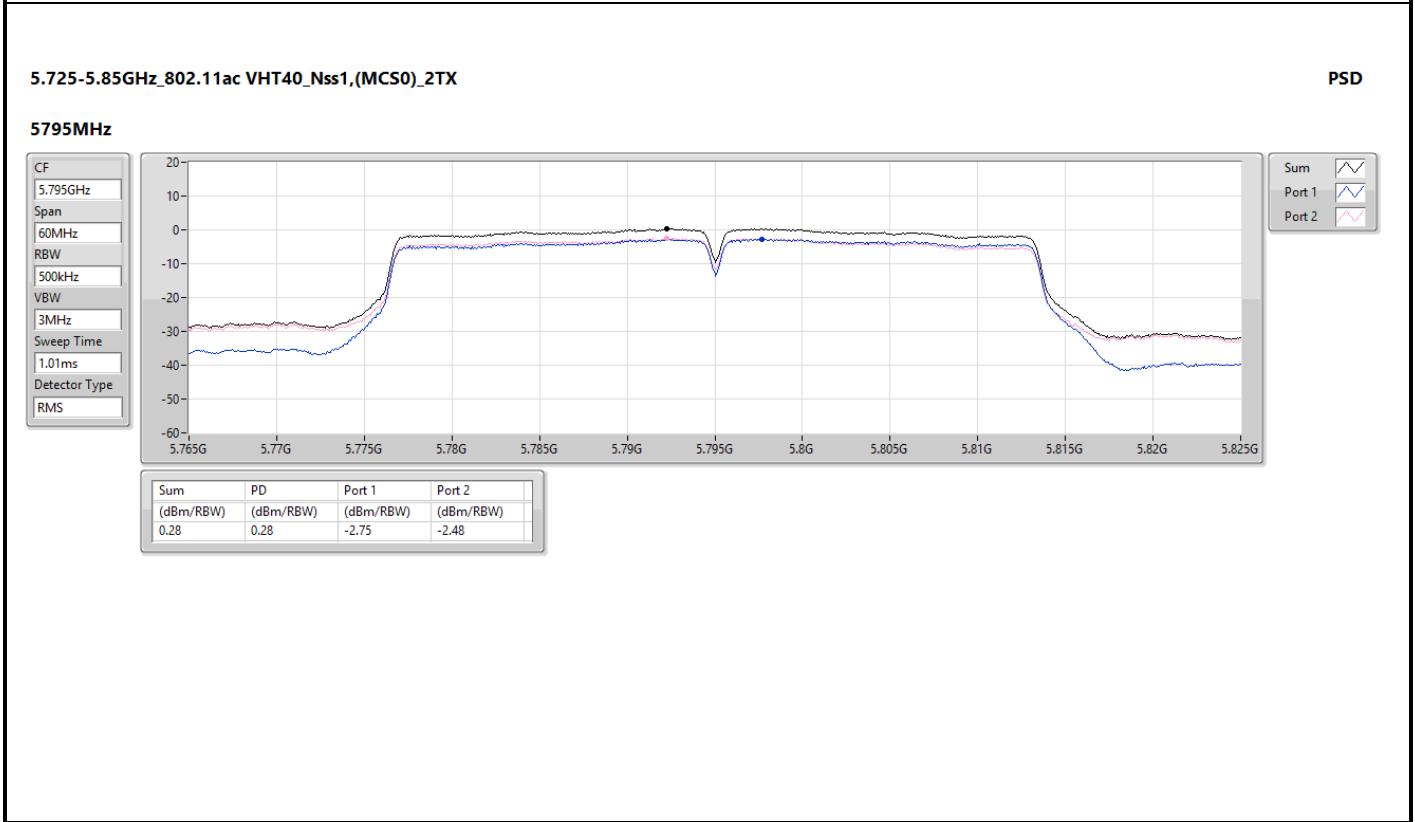
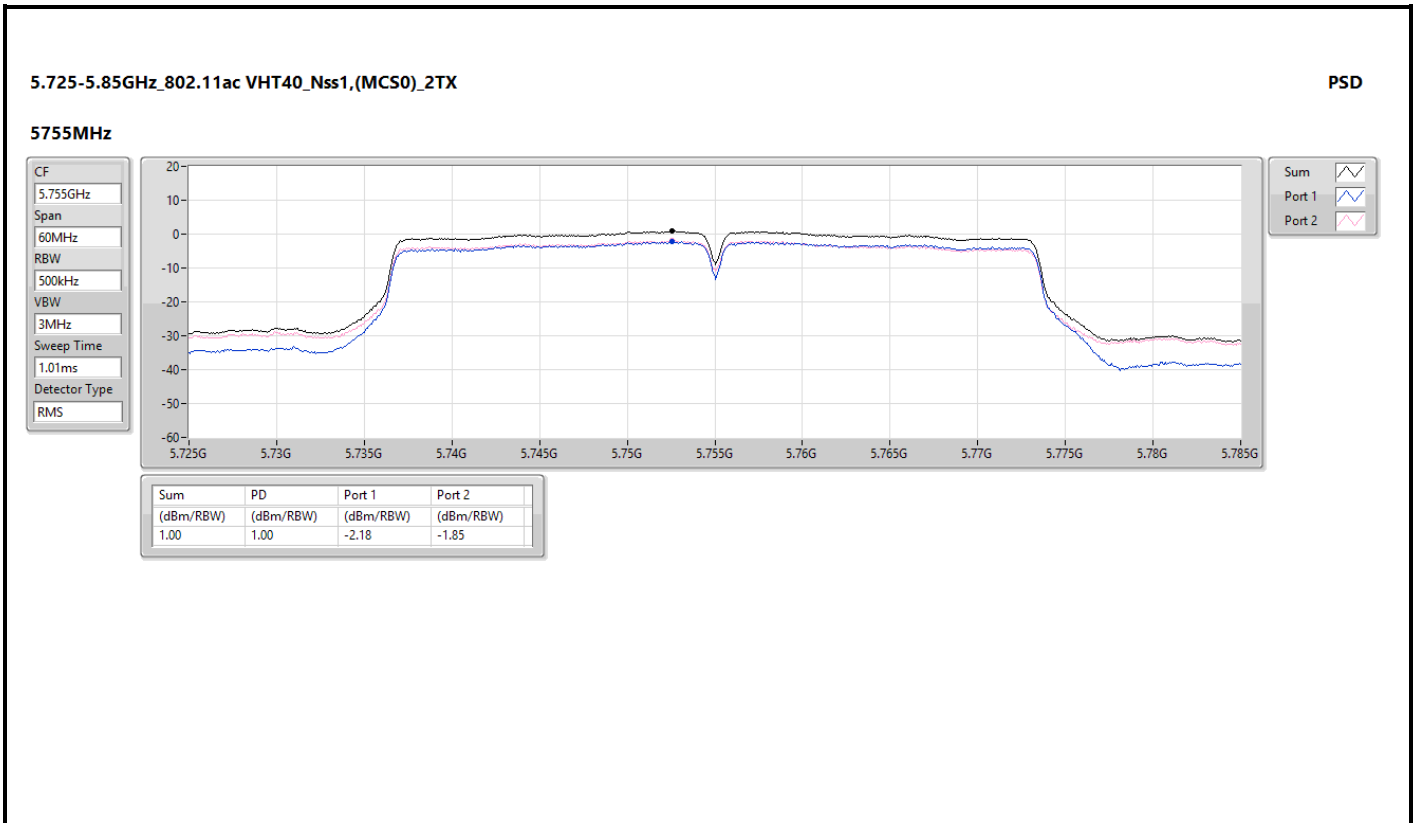












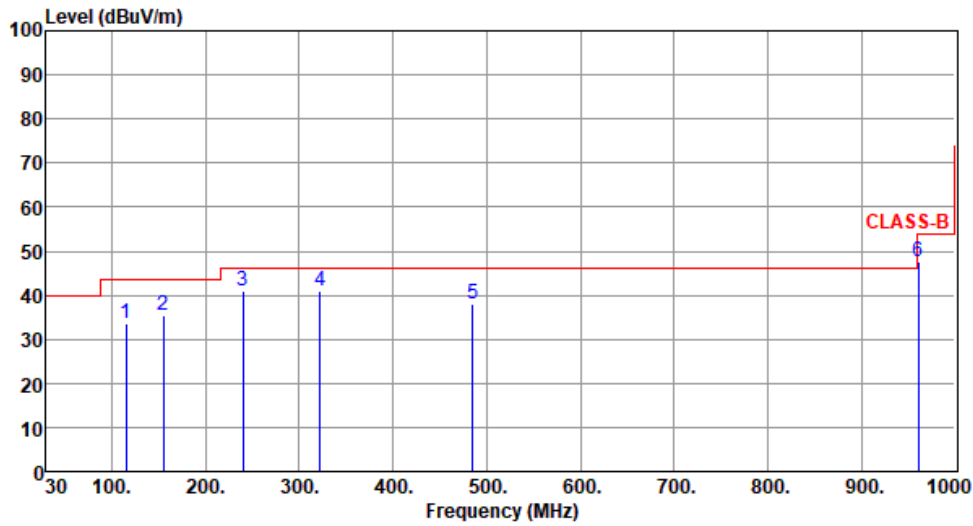




Unwanted Emissions (Below 1GHz)

Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):64



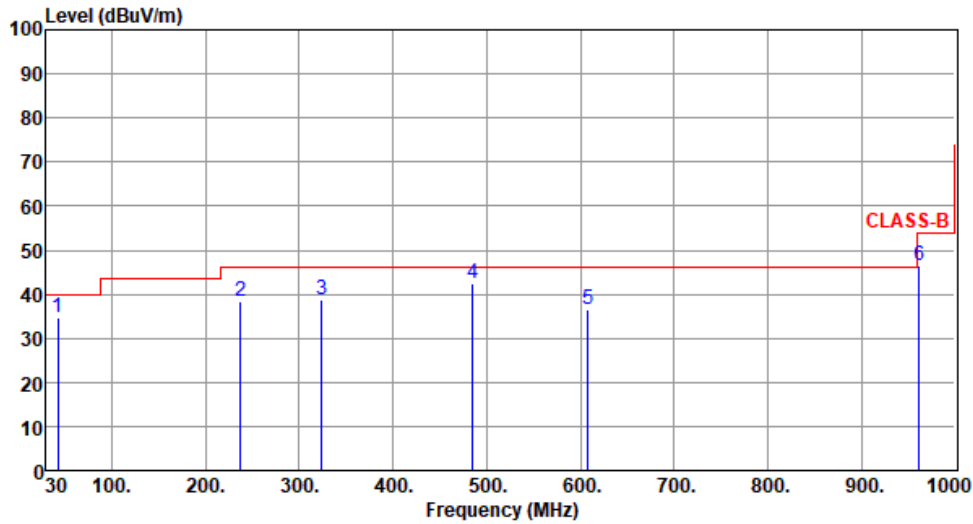
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	114.87	33.45	43.50	-10.05	44.84	-11.39	Peak	---	---
2	154.67	35.45	43.50	-8.05	44.03	-8.58	Peak	---	---
3	239.98	41.00	46.00	-5.00	51.28	-10.28	Peak	---	---
4	322.33	41.11	46.00	-4.89	48.46	-7.35	Peak	---	---
5	484.99	38.14	46.00	-7.86	41.47	-3.33	Peak	---	---
6	960.87	47.66	54.00	-6.34	42.35	5.31	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	42.54	34.63	40.00	-5.37	43.03	-8.40	QP	100	350
2	237.14	38.35	46.00	-7.65	48.93	-10.58	Peak	---	---
3	324.17	38.69	46.00	-7.31	46.01	-7.32	Peak	---	---
4	485.46	42.33	46.00	-3.67	45.65	-3.32	Peak	---	---
5	607.79	36.38	46.00	-9.62	36.76	-0.38	Peak	---	---
6	961.89	46.51	54.00	-7.49	41.20	5.31	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

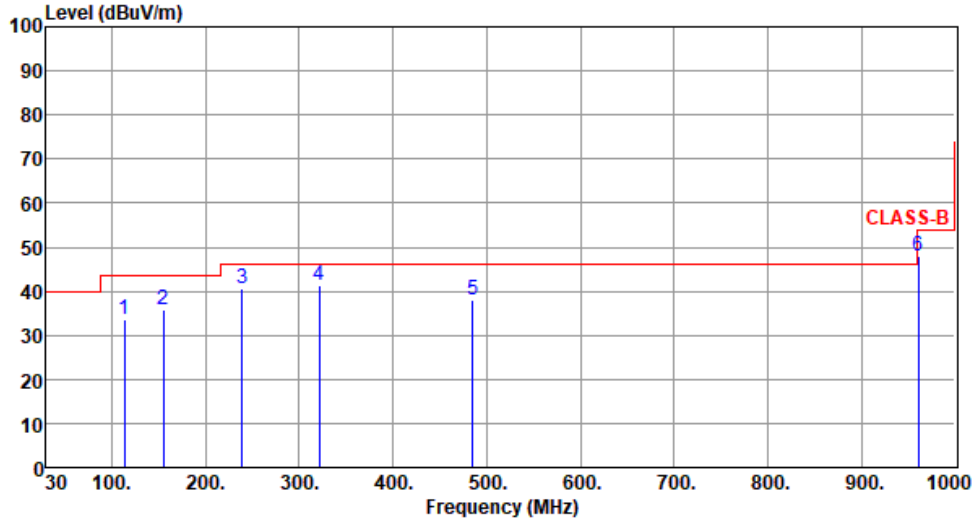
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	113.89	33.46	43.50	-10.04	44.95	-11.49	Peak	---	---
2	154.77	35.91	43.50	-7.59	44.48	-8.57	Peak	---	---
3	239.02	40.54	46.00	-5.46	50.92	-10.38	Peak	---	---
4	321.27	41.33	46.00	-4.67	48.70	-7.37	Peak	---	---
5	485.16	37.93	46.00	-8.07	41.26	-3.33	Peak	---	---
6	960.61	48.02	54.00	-5.98	42.71	5.31	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

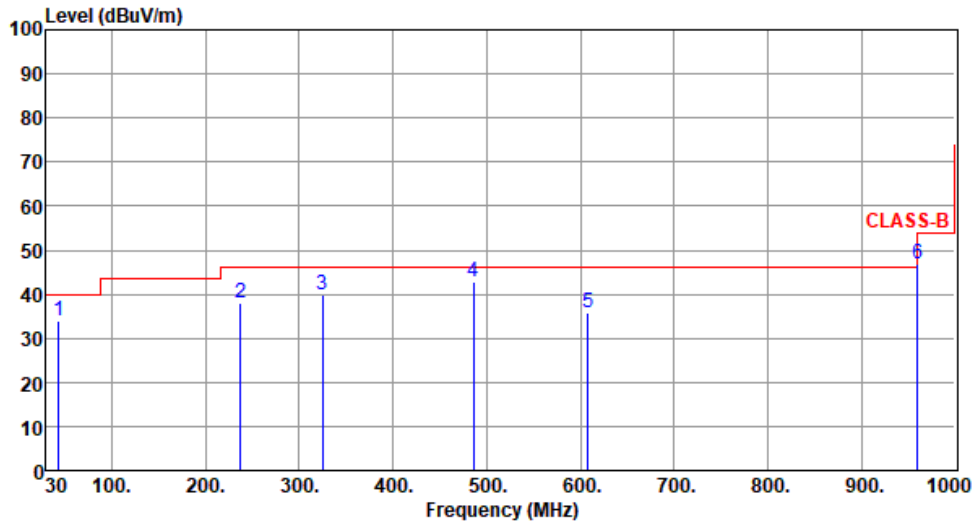
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	42.91	34.03	40.00	-5.97	42.39	-8.36	QP	100	343
2	237.09	38.09	46.00	-7.91	48.67	-10.58	Peak	---	---
3	325.12	39.88	46.00	-6.12	47.17	-7.29	Peak	---	---
4	485.61	42.93	46.00	-3.07	46.25	-3.32	Peak	---	---
5	607.85	35.76	46.00	-10.24	36.14	-0.38	Peak	---	---
6	960.12	46.77	54.00	-7.23	41.47	5.30	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

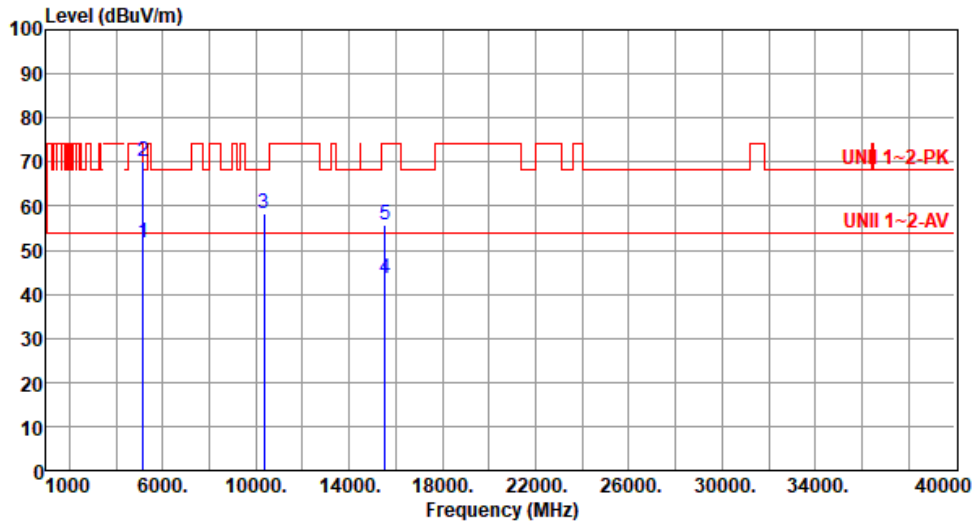
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Unwanted Emissions (Above 1GHz) for 11a

Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	51.72	54.00	-2.28	51.39	0.33	Average	113	349
2	5150.00	70.16	74.00	-3.84	69.83	0.33	Peak	113	349
3	10360.00	58.45	68.20	-9.75	50.97	7.48	Peak	100	209
4	15540.00	43.42	54.00	-10.58	39.50	3.92	Average	100	31
5	15540.00	55.61	74.00	-18.39	51.69	3.92	Peak	100	31

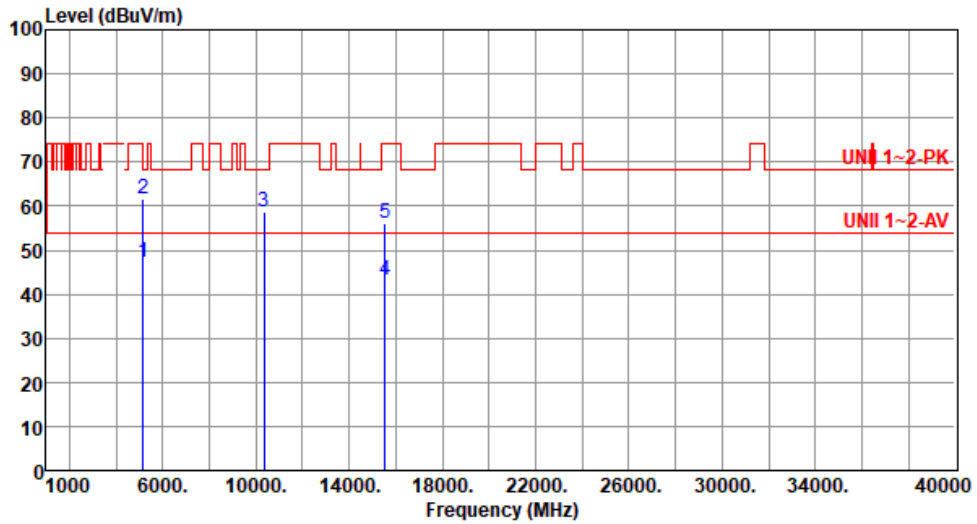
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5180
------------	-----	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.15	54.00	-6.85	46.82	0.33	Average	125	29
2	5150.00	61.55	74.00	-12.45	61.22	0.33	Peak	125	29
3	10360.00	58.82	68.20	-9.38	51.34	7.48	Peak	100	329
4	15540.00	43.21	54.00	-10.79	39.29	3.92	Average	100	42
5	15540.00	55.96	74.00	-18.04	52.04	3.92	Peak	100	42

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

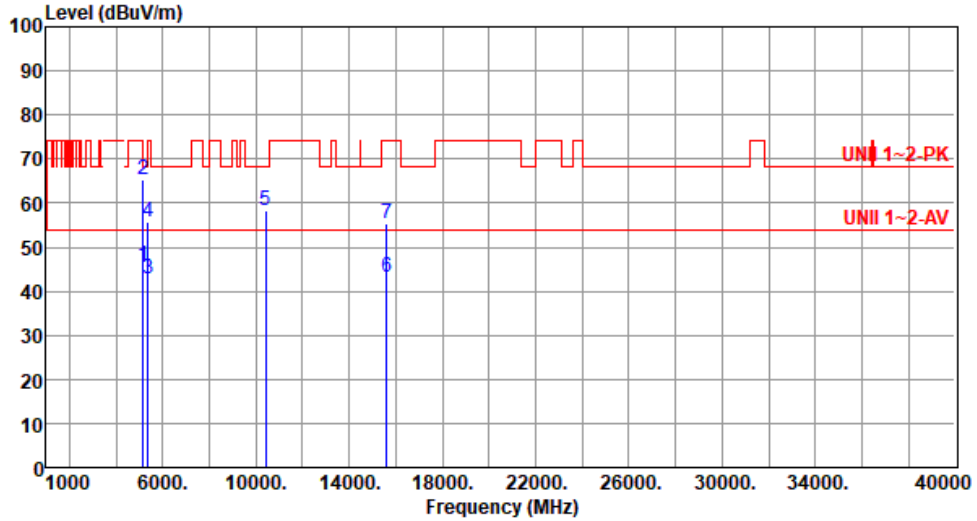
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5200
------------	-----	------------------	------

Polarization	Horizontal
--------------	------------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	45.79	54.00	-8.21	45.46	0.33	Average	117	349
2	5150.00	65.13	74.00	-8.87	64.80	0.33	Peak	117	349
3	5350.00	42.76	54.00	-11.24	43.01	-0.25	Average	117	349
4	5350.00	55.73	74.00	-18.27	55.98	-0.25	Peak	117	349
5	10400.00	58.38	68.20	-9.82	50.84	7.54	Peak	100	204
6	15600.00	43.34	54.00	-10.66	39.64	3.70	Average	100	25
7	15600.00	55.53	74.00	-18.47	51.83	3.70	Peak	100	25

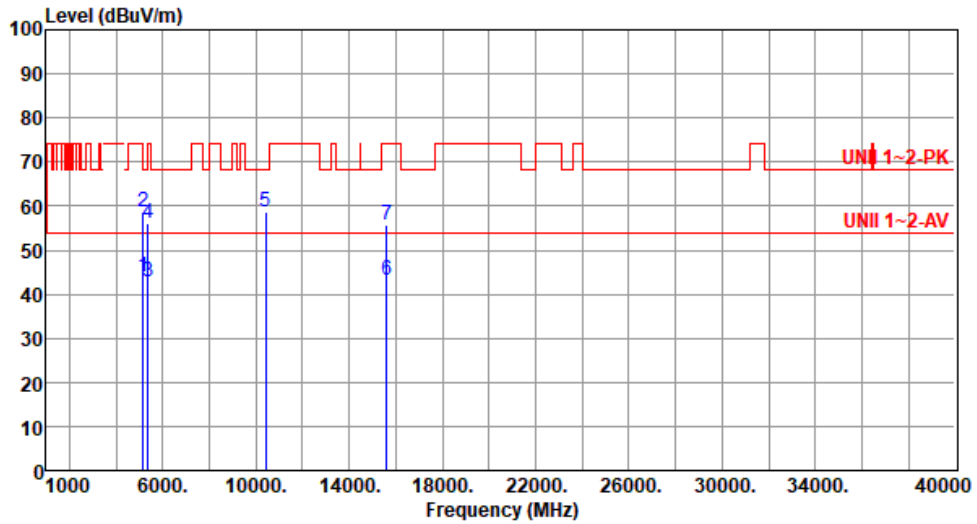
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5200
------------	-----	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	44.09	54.00	-9.91	43.76	0.33	Average	125	31
2	5150.00	58.74	74.00	-15.26	58.41	0.33	Peak	125	31
3	5350.00	42.68	54.00	-11.32	42.93	-0.25	Average	125	31
4	5350.00	55.97	74.00	-18.03	56.22	-0.25	Peak	125	31
5	10400.00	58.76	68.20	-9.44	51.22	7.54	Peak	100	321
6	15600.00	43.12	54.00	-10.88	39.42	3.70	Average	100	26
7	15600.00	55.84	74.00	-18.16	52.14	3.70	Peak	100	26

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

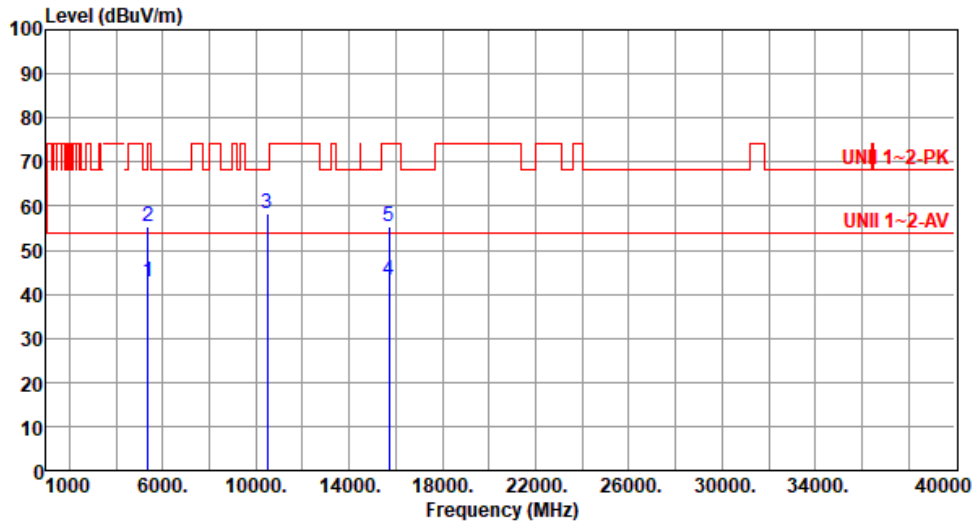
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5240
------------	-----	------------------	------

Polarization	Horizontal
--------------	------------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	42.85	54.00	-11.15	43.10	-0.25	Average	105	2
2	5350.00	55.48	74.00	-18.52	55.73	-0.25	Peak	105	2
3	10480.00	58.44	68.20	-9.76	50.94	7.50	Peak	100	209
4	15720.00	43.29	54.00	-10.71	39.44	3.85	Average	100	21
5	15720.00	55.46	74.00	-18.54	51.61	3.85	Peak	100	21

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

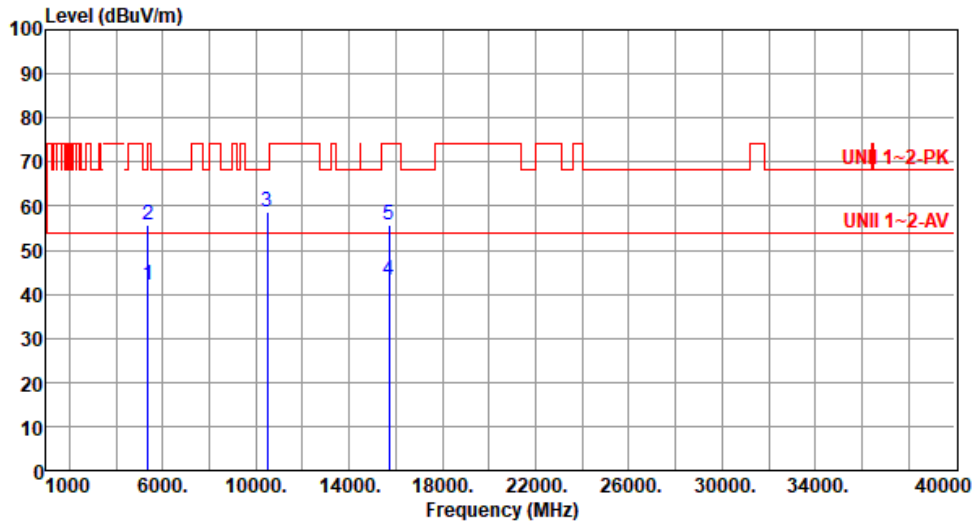
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



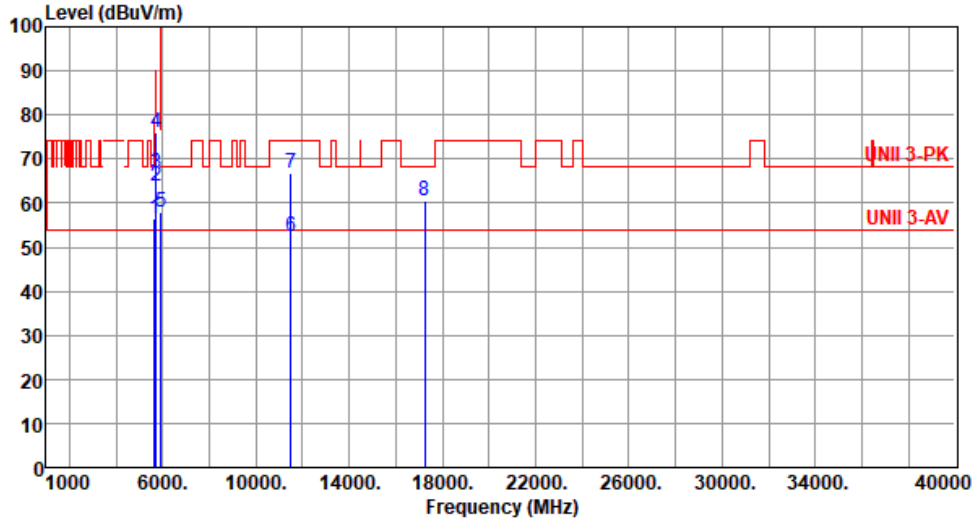
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	42.13	54.00	-11.87	42.38	-0.25	Average	128	32
2	5350.00	55.64	74.00	-18.36	55.89	-0.25	Peak	128	32
3	10480.00	58.84	68.20	-9.36	51.34	7.50	Peak	100	326
4	15720.00	43.08	54.00	-10.92	39.23	3.85	Average	100	34
5	15720.00	55.79	74.00	-18.21	51.94	3.85	Peak	100	34

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.54	68.20	-11.66	56.43	0.11	Peak	138	8
2	5700.00	63.82	105.20	-41.38	63.49	0.33	Peak	138	8
3	5720.00	66.61	110.80	-44.19	66.24	0.37	Peak	138	8
4	5725.00	76.02	122.20	-46.18	75.64	0.38	Peak	138	8
5	5925.00	57.89	68.20	-10.31	56.86	1.03	Peak	138	8
6	11490.00	52.30	54.00	-1.70	44.96	7.34	Average	100	93
7	11490.00	66.79	74.00	-7.21	59.45	7.34	Peak	100	93
8	17235.00	60.36	68.20	-7.84	53.51	6.85	Peak	100	29

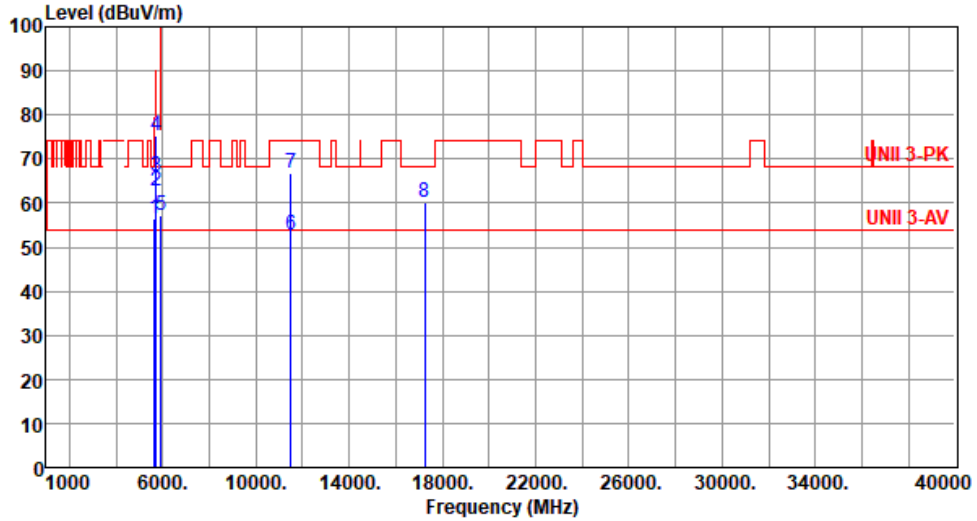
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5745
------------	-----	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.53	68.20	-11.67	56.42	0.11	Peak	105	326
2	5700.00	62.68	105.20	-42.52	62.35	0.33	Peak	105	326
3	5720.00	66.23	110.80	-44.57	65.86	0.37	Peak	105	326
4	5725.00	75.19	122.20	-47.01	74.81	0.38	Peak	105	326
5	5925.00	57.22	68.20	-10.98	56.19	1.03	Peak	105	326
6	11490.00	52.67	54.00	-1.33	45.33	7.34	Average	100	42
7	11490.00	66.62	74.00	-7.38	59.28	7.34	Peak	100	42
8	17235.00	60.28	68.20	-7.92	53.43	6.85	Peak	100	22

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

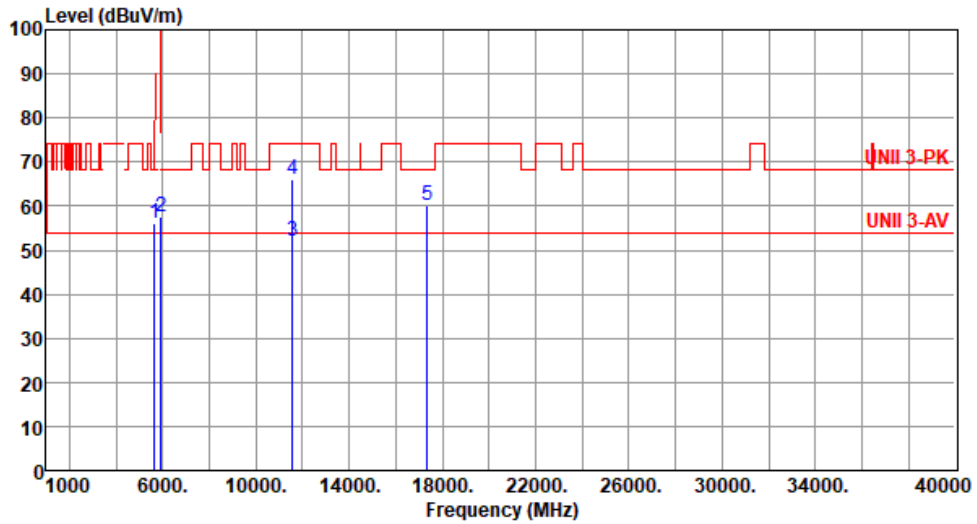
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5785
------------	-----	------------------	------

Polarization	Horizontal
--------------	------------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.01	68.20	-12.19	55.90	0.11	Peak	136	10
2	5925.00	57.49	68.20	-10.71	56.46	1.03	Peak	136	10
3	11570.00	51.92	54.00	-2.08	44.79	7.13	Average	100	96
4	11570.00	66.11	74.00	-7.89	58.98	7.13	Peak	100	96
5	17355.00	60.28	68.20	-7.92	52.99	7.29	Peak	100	24

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

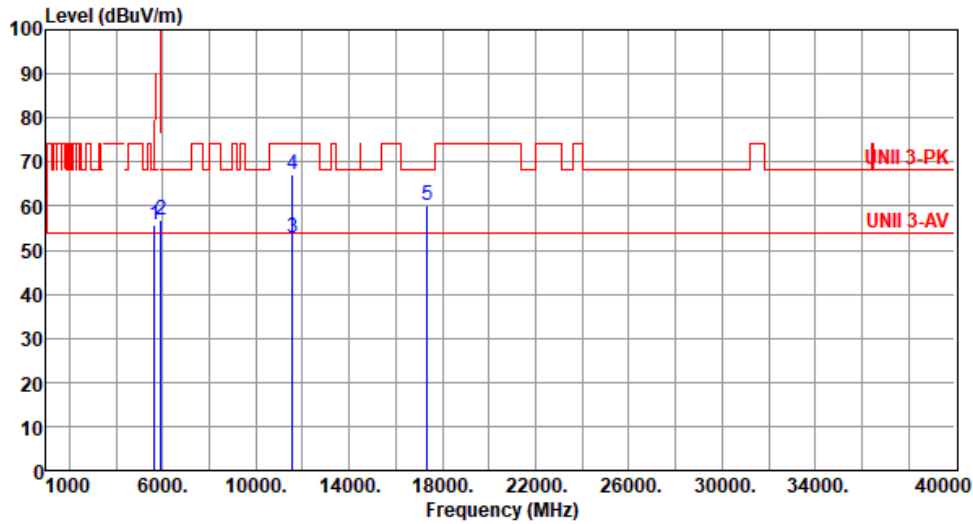
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5785
------------	-----	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	55.86	68.20	-12.34	55.75	0.11	Peak	100	324
2	5925.00	56.99	68.20	-11.21	55.96	1.03	Peak	100	324
3	11570.00	52.92	54.00	-1.08	45.79	7.13	Average	100	44
4	11570.00	67.15	74.00	-6.85	60.02	7.13	Peak	100	44
5	17355.00	60.20	68.20	-8.00	52.91	7.29	Peak	100	19

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

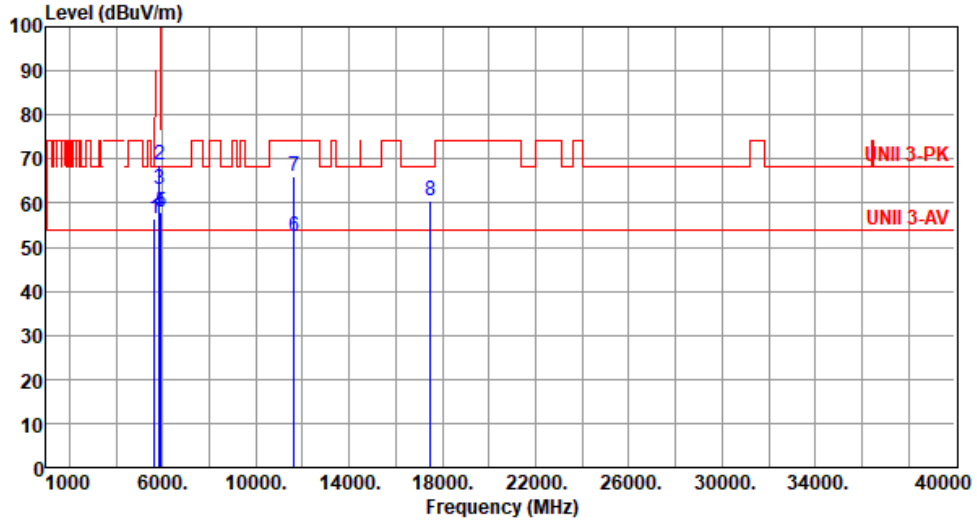
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.57	68.20	-11.63	56.46	0.11	Peak	128	9
2	5850.00	68.57	122.20	-53.63	67.81	0.76	Peak	128	9
3	5855.00	63.28	110.80	-47.52	62.49	0.79	Peak	128	9
4	5875.00	57.79	105.20	-47.41	56.92	0.87	Peak	128	9
5	5925.00	57.91	68.20	-10.29	56.88	1.03	Peak	128	9
6	11650.00	52.54	54.00	-1.46	45.76	6.78	Average	100	94
7	11650.00	65.88	74.00	-8.12	59.10	6.78	Peak	100	94
8	17475.00	60.34	68.20	-7.86	52.52	7.82	Peak	100	39

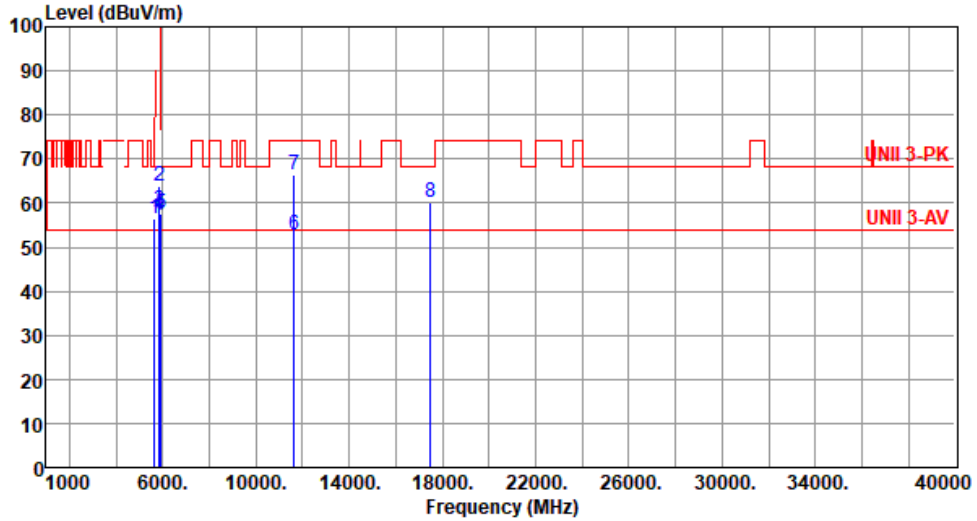
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11a	Test Freq. (MHz)	5825
------------	-----	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.36	68.20	-11.84	56.25	0.11	Peak	100	321
2	5850.00	64.00	122.20	-58.20	63.24	0.76	Peak	100	321
3	5855.00	58.24	110.80	-52.56	57.45	0.79	Peak	100	321
4	5875.00	57.08	105.20	-48.12	56.21	0.87	Peak	100	321
5	5925.00	57.51	68.20	-10.69	56.48	1.03	Peak	100	321
6	11650.00	52.86	54.00	-1.14	46.08	6.78	Average	100	44
7	11650.00	66.29	74.00	-7.71	59.51	6.78	Peak	100	44
8	17475.00	60.14	68.20	-8.06	52.32	7.82	Peak	100	31

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

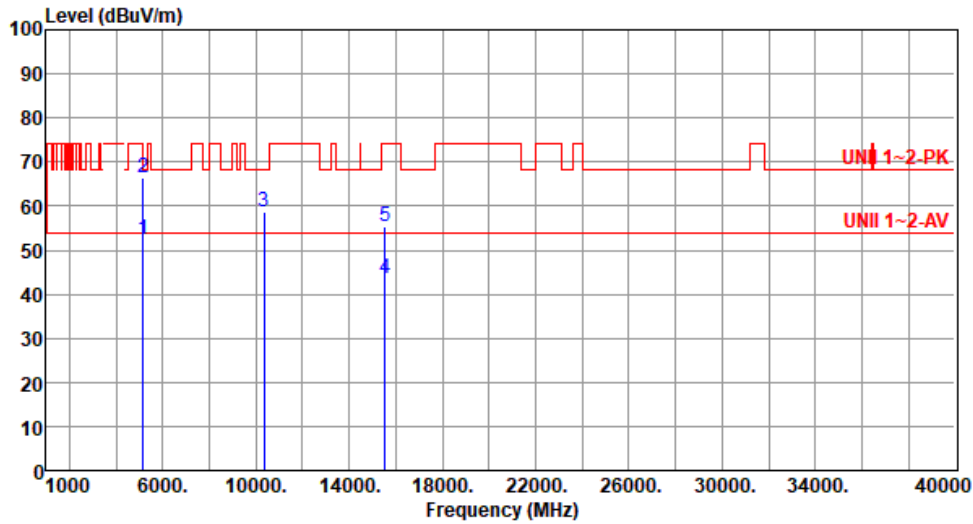
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Unwanted Emissions (Above 1GHz) for ac VHT20

Modulation	ac VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



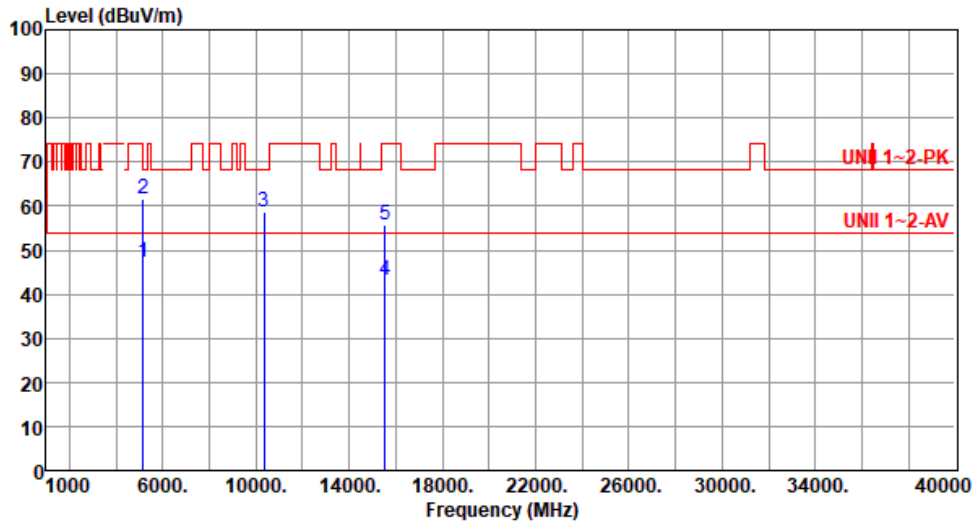
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	52.54	54.00	-1.46	52.21	0.33	Average	114	353
2	5150.00	66.25	74.00	-7.75	65.92	0.33	Peak	114	353
3	10360.00	58.56	68.20	-9.64	51.08	7.48	Peak	100	203
4	15540.00	43.38	54.00	-10.62	39.46	3.92	Average	100	45
5	15540.00	55.52	74.00	-18.48	51.60	3.92	Peak	100	45

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.28	54.00	-6.72	46.95	0.33	Average	129	31
2	5150.00	61.64	74.00	-12.36	61.31	0.33	Peak	129	31
3	10360.00	58.74	68.20	-9.46	51.26	7.48	Peak	100	314
4	15540.00	43.16	54.00	-10.84	39.24	3.92	Average	100	45
5	15540.00	55.87	74.00	-18.13	51.95	3.92	Peak	100	45

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

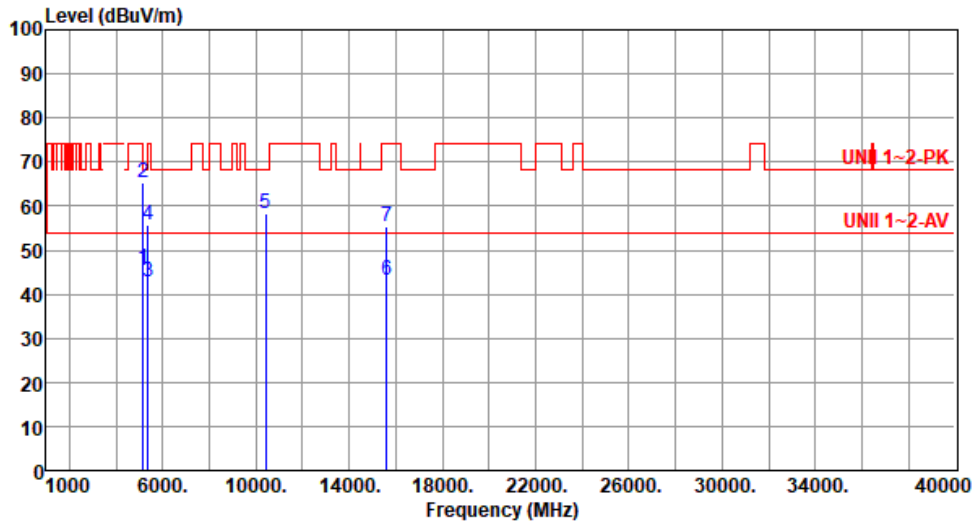
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	45.81	54.00	-8.19	45.48	0.33	Average	116	345
2	5150.00	65.24	74.00	-8.76	64.91	0.33	Peak	116	345
3	5350.00	42.71	54.00	-11.29	42.96	-0.25	Average	116	345
4	5350.00	55.79	74.00	-18.21	56.04	-0.25	Peak	116	345
5	10400.00	58.42	68.20	-9.78	50.88	7.54	Peak	100	209
6	15600.00	43.29	54.00	-10.71	39.59	3.70	Average	100	31
7	15600.00	55.48	74.00	-18.52	51.78	3.70	Peak	100	31

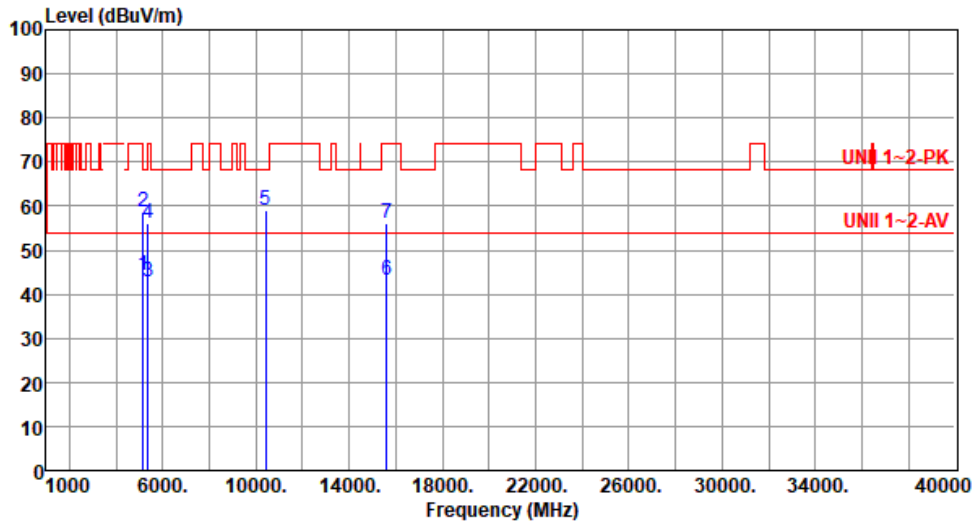
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5200
------------	----------	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	44.11	54.00	-9.89	43.78	0.33	Average	124	35
2	5150.00	58.79	74.00	-15.21	58.46	0.33	Peak	124	35
3	5350.00	42.71	54.00	-11.29	42.96	-0.25	Average	124	35
4	5350.00	56.15	74.00	-17.85	56.40	-0.25	Peak	124	35
5	10400.00	58.86	68.20	-9.34	51.32	7.54	Peak	100	325
6	15600.00	43.19	54.00	-10.81	39.49	3.70	Average	100	34
7	15600.00	55.92	74.00	-18.08	52.22	3.70	Peak	100	34

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

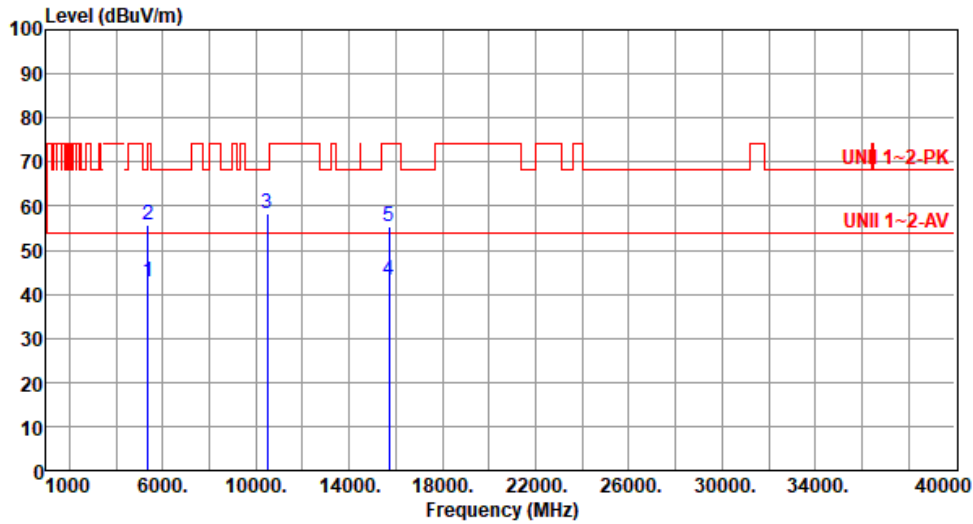
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	42.94	54.00	-11.06	43.19	-0.25	Average	115	329
2	5350.00	55.56	74.00	-18.44	55.81	-0.25	Peak	115	329
3	10480.00	58.36	68.20	-9.84	50.86	7.50	Peak	100	214
4	15720.00	43.26	54.00	-10.74	39.41	3.85	Average	100	35
5	15720.00	55.41	74.00	-18.59	51.56	3.85	Peak	100	35

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

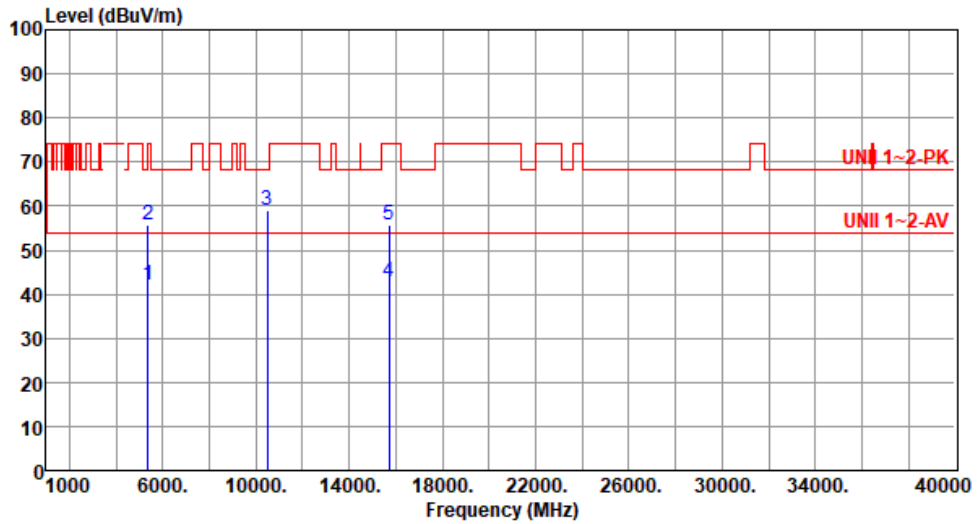
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



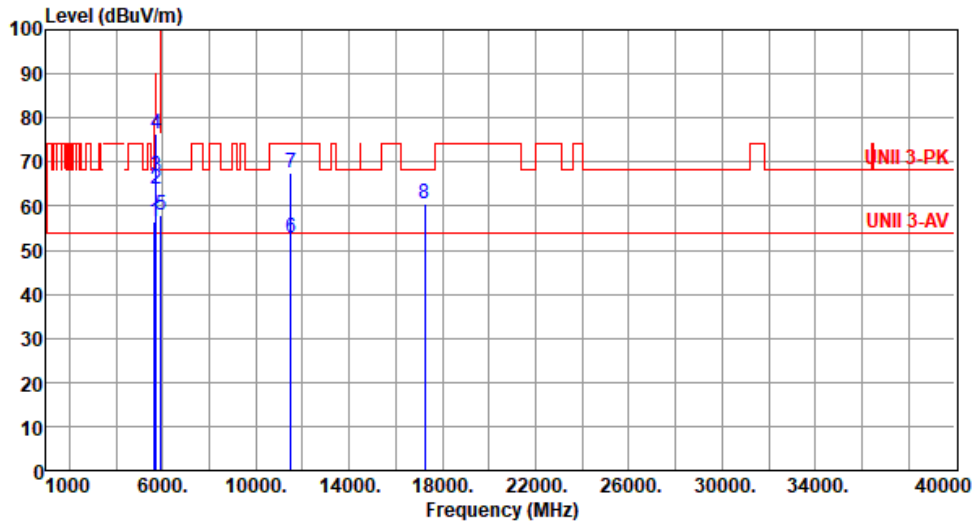
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	42.15	54.00	-11.85	42.40	-0.25	Average	124	36
2	5350.00	55.68	74.00	-18.32	55.93	-0.25	Peak	124	36
3	10480.00	58.92	68.20	-9.28	51.42	7.50	Peak	100	341
4	15720.00	42.94	54.00	-11.06	39.09	3.85	Average	100	48
5	15720.00	55.65	74.00	-18.35	51.80	3.85	Peak	100	48

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.62	68.20	-11.58	56.51	0.11	Peak	136	6
2	5700.00	63.95	105.20	-41.25	63.62	0.33	Peak	136	6
3	5720.00	66.89	110.80	-43.91	66.52	0.37	Peak	136	6
4	5725.00	76.48	122.20	-45.72	76.10	0.38	Peak	136	6
5	5925.00	57.84	68.20	-10.36	56.81	1.03	Peak	136	6
6	11490.00	52.86	54.00	-1.14	45.52	7.34	Average	100	93
7	11490.00	67.41	74.00	-6.59	60.07	7.34	Peak	100	93
8	17235.00	60.44	68.20	-7.76	53.59	6.85	Peak	100	21

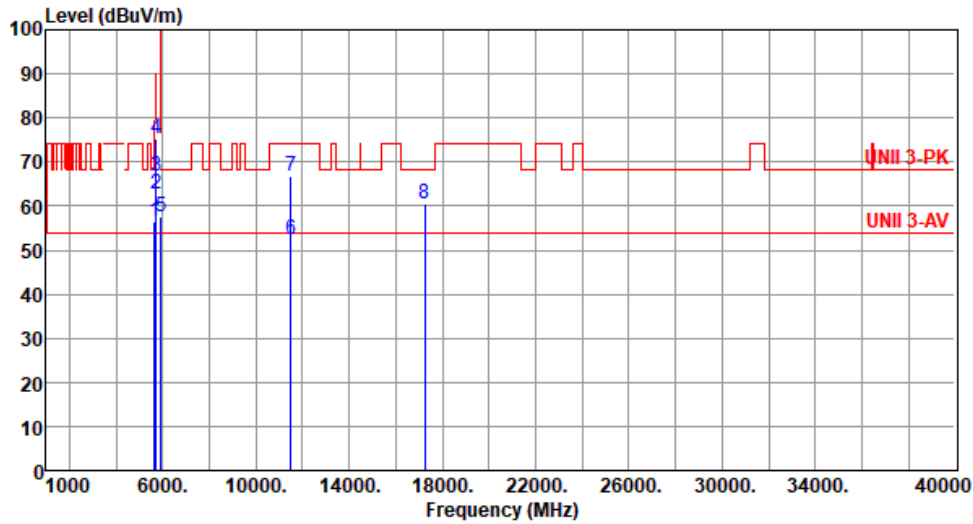
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5745
------------	----------	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.62	68.20	-11.58	56.51	0.11	Peak	103	329
2	5700.00	62.75	105.20	-42.45	62.42	0.33	Peak	103	329
3	5720.00	66.83	110.80	-43.97	66.46	0.37	Peak	103	329
4	5725.00	75.46	122.20	-46.74	75.08	0.38	Peak	103	329
5	5925.00	57.41	68.20	-10.79	56.38	1.03	Peak	103	329
6	11490.00	52.39	54.00	-1.61	45.05	7.34	Average	100	43
7	11490.00	66.63	74.00	-7.37	59.29	7.34	Peak	100	43
8	17235.00	60.34	68.20	-7.86	53.49	6.85	Peak	100	31

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

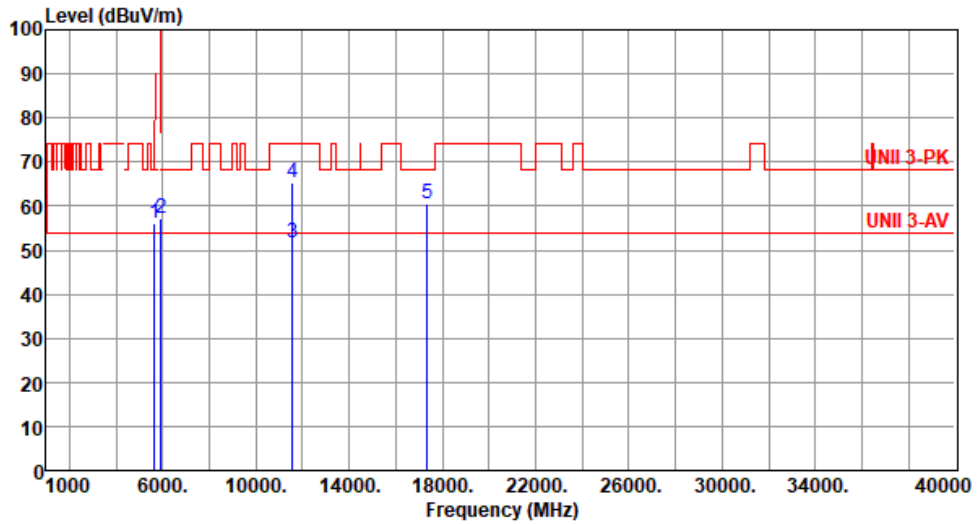
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.22	68.20	-11.98	56.11	0.11	Peak	136	11
2	5925.00	57.28	68.20	-10.92	56.25	1.03	Peak	136	11
3	11570.00	51.81	54.00	-2.19	44.68	7.13	Average	100	94
4	11570.00	65.39	74.00	-8.61	58.26	7.13	Peak	100	94
5	17355.00	60.34	68.20	-7.86	53.05	7.29	Peak	100	29

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

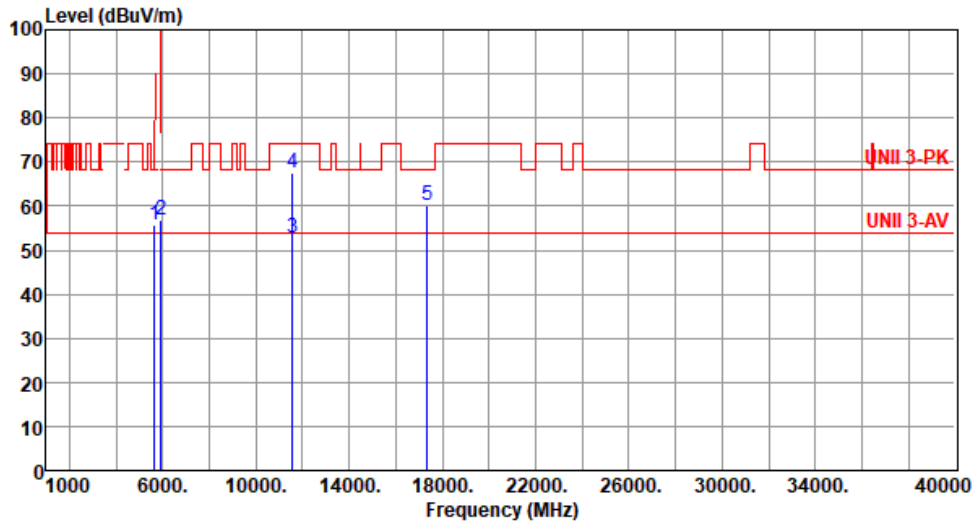
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	55.82	68.20	-12.38	55.71	0.11	Peak	100	329
2	5925.00	56.84	68.20	-11.36	55.81	1.03	Peak	100	329
3	11570.00	52.89	54.00	-1.11	45.76	7.13	Average	100	42
4	11570.00	67.55	74.00	-6.45	60.42	7.13	Peak	100	42
5	17355.00	60.28	68.20	-7.92	52.99	7.29	Peak	100	26

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

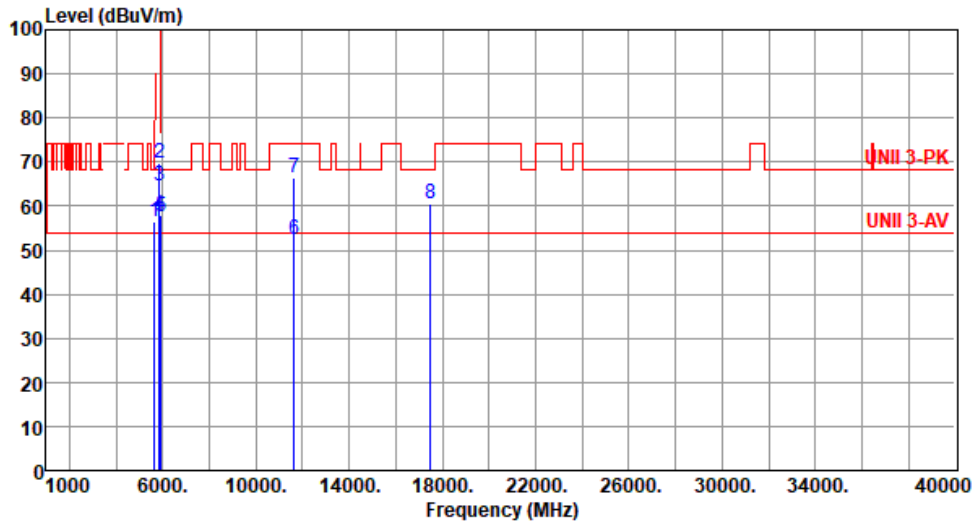
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5825
------------	----------	------------------	------

Polarization	Horizontal
--------------	------------

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.48	68.20	-11.72	56.37	0.11	Peak	129	10
2	5850.00	69.82	122.20	-52.38	69.06	0.76	Peak	129	10
3	5855.00	64.47	110.80	-46.33	63.68	0.79	Peak	129	10
4	5875.00	57.89	105.20	-47.31	57.02	0.87	Peak	129	10
5	5925.00	57.64	68.20	-10.56	56.61	1.03	Peak	129	10
6	11650.00	52.53	54.00	-1.47	45.75	6.78	Average	100	96
7	11650.00	66.37	74.00	-7.63	59.59	6.78	Peak	100	96
8	17475.00	60.42	68.20	-7.78	52.60	7.82	Peak	100	56

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV) + Factor* (dB/m)

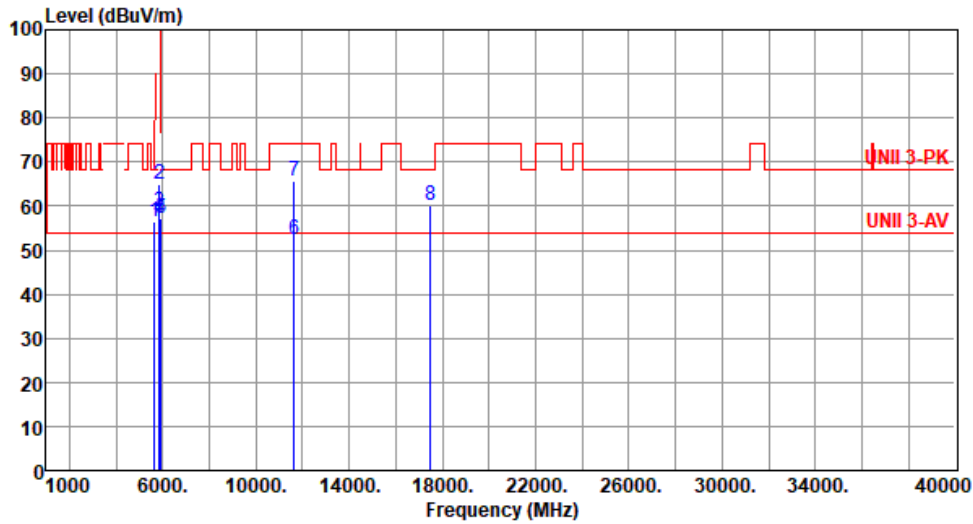
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).



Modulation	ac VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):24 Humidity(%):61



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.42	68.20	-11.78	56.31	0.11	Peak	100	325
2	5850.00	64.81	122.20	-57.39	64.05	0.76	Peak	100	325
3	5855.00	58.69	110.80	-52.11	57.90	0.79	Peak	100	325
4	5875.00	57.26	105.20	-47.94	56.39	0.87	Peak	100	325
5	5925.00	57.11	68.20	-11.09	56.08	1.03	Peak	100	325
6	11650.00	52.46	54.00	-1.54	45.68	6.78	Average	100	46
7	11650.00	65.70	74.00	-8.30	58.92	6.78	Peak	100	46
8	17475.00	60.08	68.20	-8.12	52.26	7.82	Peak	100	52

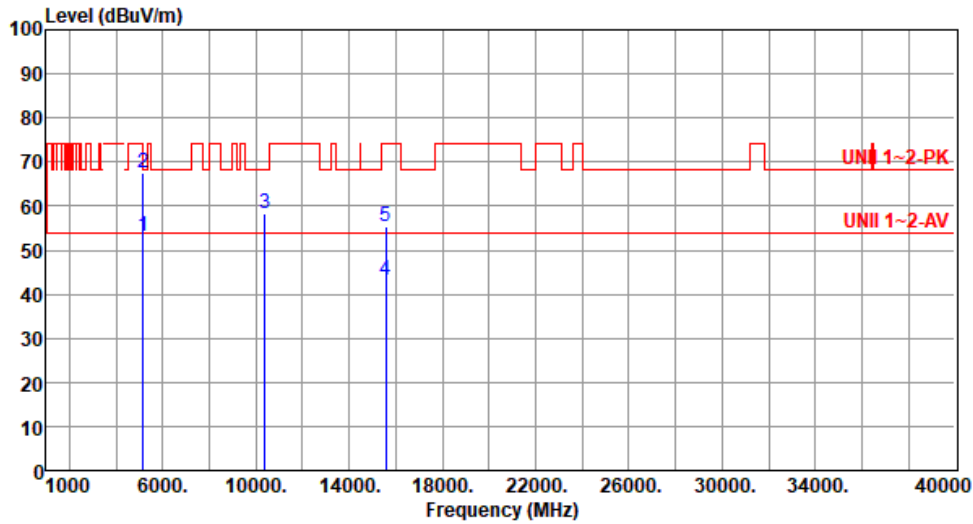
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Unwanted Emissions (Above 1GHz) for ac VHT40

Modulation	ac VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



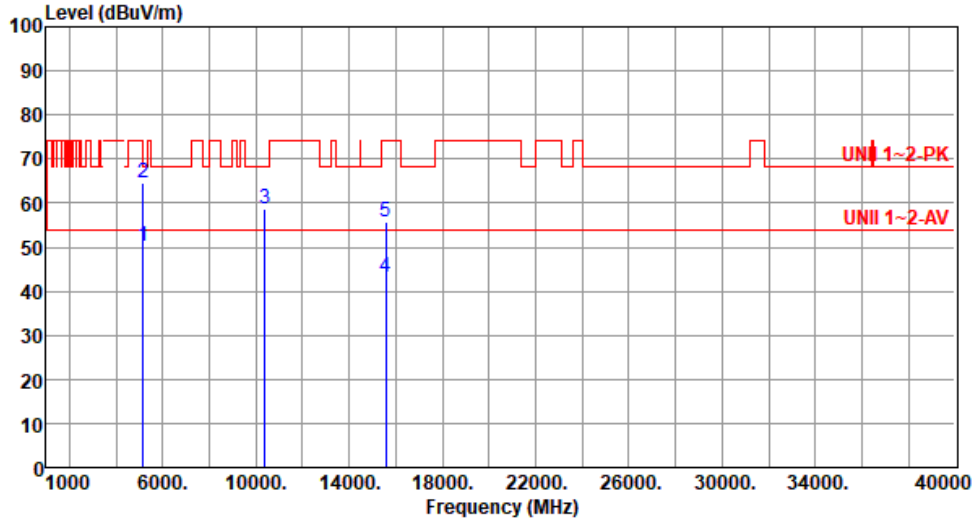
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	52.98	54.00	-1.02	52.65	0.33	Average	113	356
2	5150.00	67.68	74.00	-6.32	67.35	0.33	Peak	113	356
3	10380.00	58.45	68.20	-9.75	50.94	7.51	Peak	100	201
4	15570.00	43.34	54.00	-10.66	39.54	3.80	Average	100	34
5	15570.00	55.46	74.00	-18.54	51.66	3.80	Peak	100	34

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



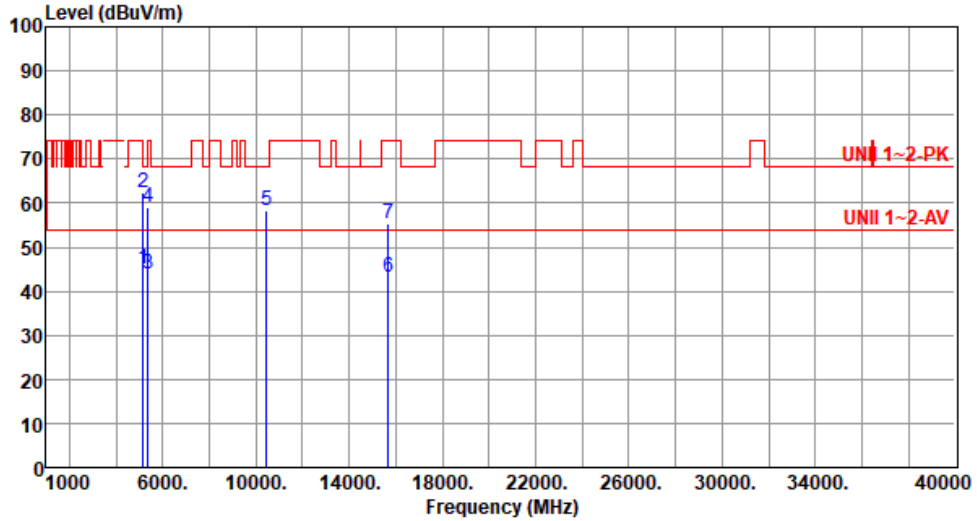
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	50.24	54.00	-3.76	49.91	0.33	Average	125	19
2	5150.00	64.55	74.00	-9.45	64.22	0.33	Peak	125	19
3	10380.00	58.62	68.20	-9.58	51.11	7.51	Peak	100	316
4	15570.00	43.12	54.00	-10.88	39.32	3.80	Average	100	39
5	15570.00	55.81	74.00	-18.19	52.01	3.80	Peak	100	39

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



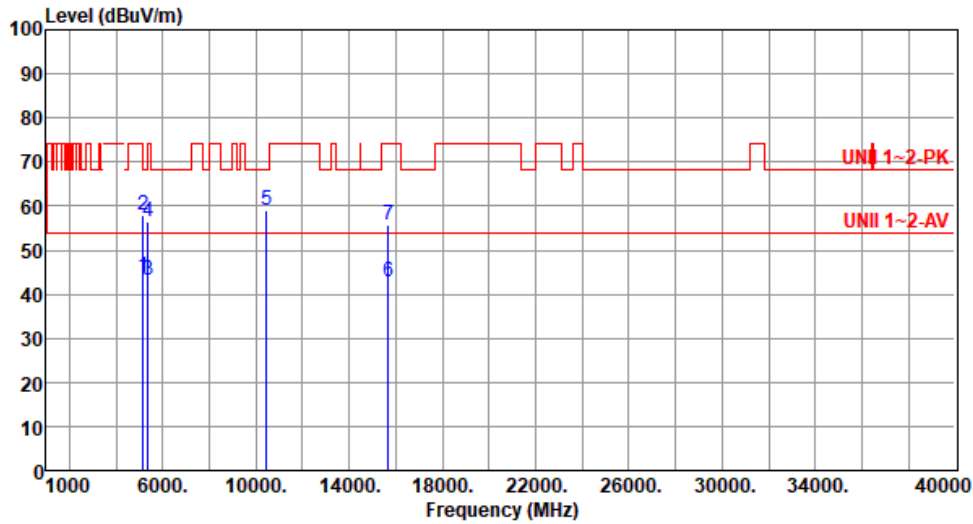
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	45.09	54.00	-8.91	44.76	0.33	Average	108	351
2	5150.00	62.39	74.00	-11.61	62.06	0.33	Peak	108	351
3	5350.00	43.96	54.00	-10.04	44.21	-0.25	Average	108	351
4	5350.00	58.87	74.00	-15.13	59.12	-0.25	Peak	108	351
5	10460.00	58.29	68.20	-9.91	50.78	7.51	Peak	100	211
6	15690.00	43.16	54.00	-10.84	39.33	3.83	Average	100	28
7	15690.00	55.34	74.00	-18.66	51.51	3.83	Peak	100	28

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	43.75	54.00	-10.25	43.42	0.33	Average	129	19
2	5150.00	58.01	74.00	-15.99	57.68	0.33	Peak	129	19
3	5350.00	43.18	54.00	-10.82	43.43	-0.25	Average	129	19
4	5350.00	56.63	74.00	-17.37	56.88	-0.25	Peak	129	19
5	10460.00	58.87	68.20	-9.33	51.36	7.51	Peak	100	349
6	15690.00	42.86	54.00	-11.14	39.03	3.83	Average	100	33
7	15690.00	55.61	74.00	-18.39	51.78	3.83	Peak	100	33

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

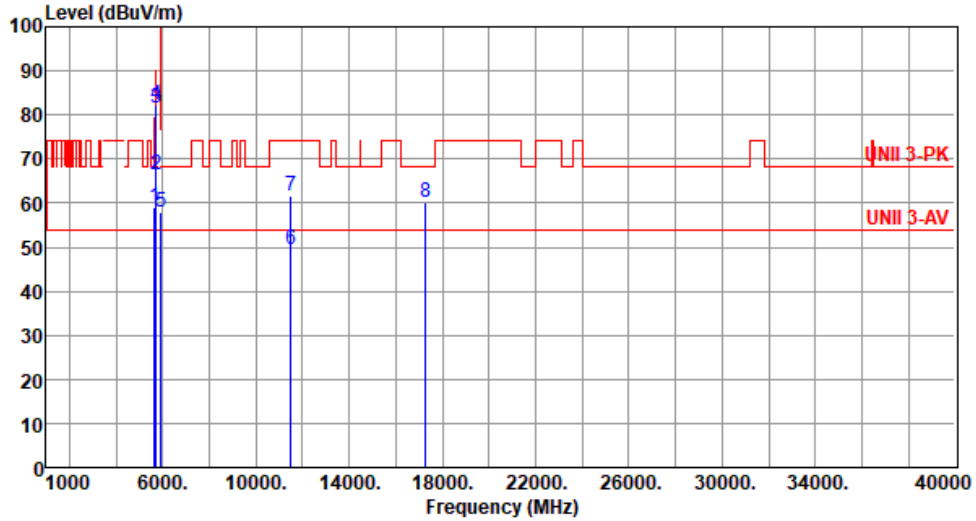
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT40	Test Freq. (MHz)	5755
------------	----------	------------------	------

Polarization	Horizontal
--------------	------------

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.16	68.20	-9.04	59.05	0.11	Peak	125	3
2	5700.00	66.38	105.20	-38.82	66.05	0.33	Peak	125	3
3	5720.00	81.73	110.80	-29.07	81.36	0.37	Peak	125	3
4	5725.00	82.43	122.20	-39.77	82.05	0.38	Peak	125	3
5	5925.00	57.89	68.20	-10.31	56.86	1.03	Peak	125	3
6	11510.00	49.61	54.00	-4.39	42.29	7.32	Average	100	96
7	11510.00	61.56	74.00	-12.44	54.24	7.32	Peak	100	96
8	17265.00	60.29	68.20	-7.91	53.41	6.88	Peak	100	38

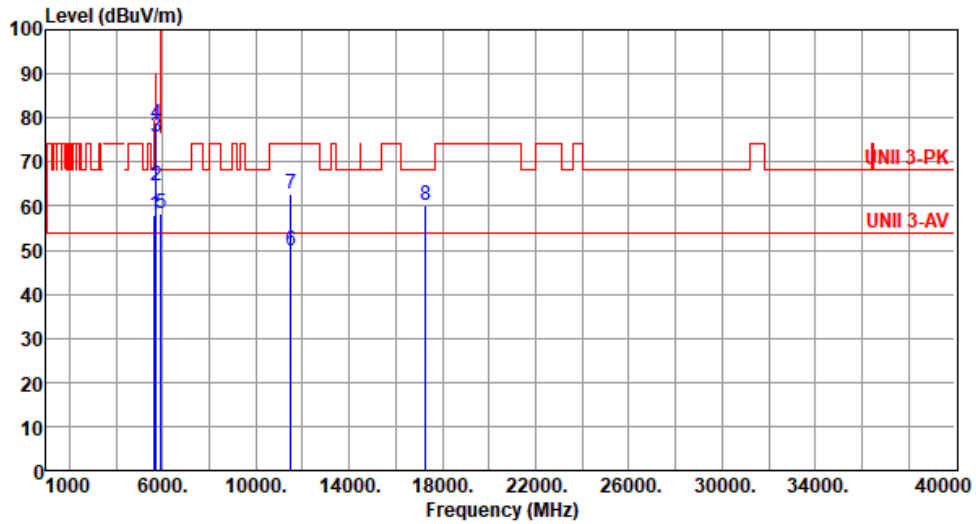
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT40	Test Freq. (MHz)	5755
------------	----------	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	57.84	68.20	-10.36	57.73	0.11	Peak	103	326
2	5700.00	64.44	105.20	-40.76	64.11	0.33	Peak	103	326
3	5720.00	75.69	110.80	-35.11	75.32	0.37	Peak	103	326
4	5725.00	78.52	122.20	-43.68	78.14	0.38	Peak	103	326
5	5925.00	58.28	68.20	-9.92	57.25	1.03	Peak	103	326
6	11510.00	49.77	54.00	-4.23	42.45	7.32	Average	100	31
7	11510.00	62.70	74.00	-11.30	55.38	7.32	Peak	100	31
8	17265.00	60.28	68.20	-7.92	53.40	6.88	Peak	100	56

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

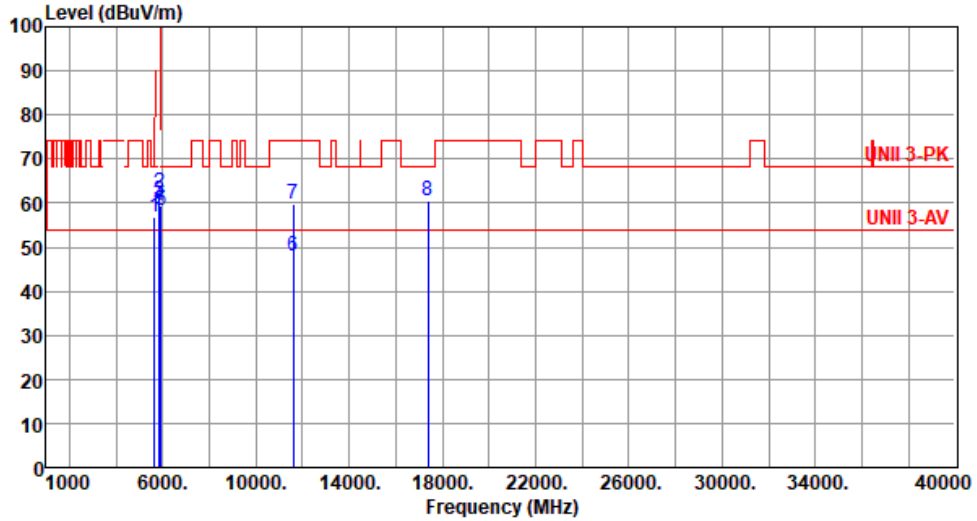
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.86	68.20	-11.34	56.75	0.11	Peak	132	12
2	5850.00	62.53	122.20	-59.67	61.77	0.76	Peak	132	12
3	5855.00	60.59	110.80	-50.21	59.80	0.79	Peak	132	12
4	5875.00	59.33	105.20	-45.87	58.46	0.87	Peak	132	12
5	5925.00	58.22	68.20	-9.98	57.19	1.03	Peak	132	12
6	11590.00	47.98	54.00	-6.02	40.91	7.07	Average	100	93
7	11590.00	59.94	74.00	-14.06	52.87	7.07	Peak	100	93
8	17385.00	60.34	68.20	-7.86	52.85	7.49	Peak	100	48

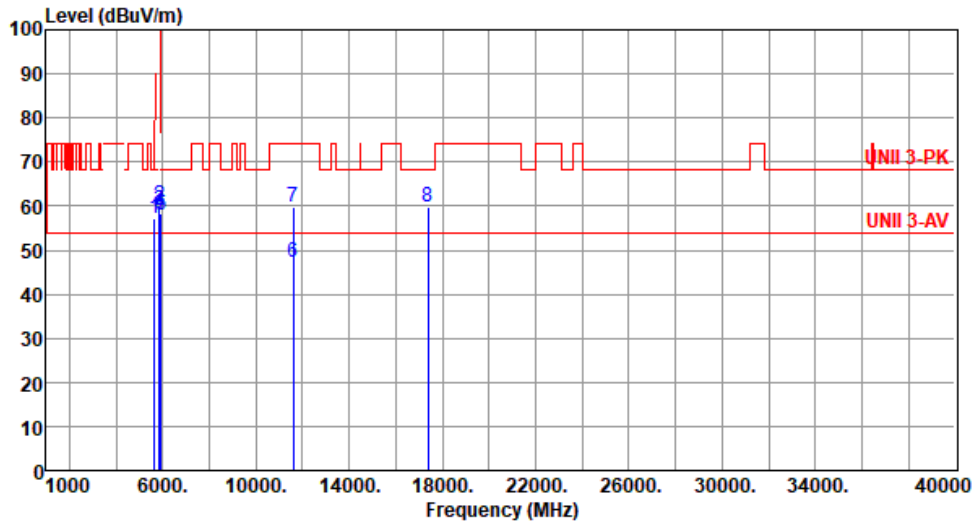
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT40	Test Freq. (MHz)	5795
------------	----------	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	57.30	68.20	-10.90	57.19	0.11	Peak	104	326
2	5850.00	60.17	122.20	-62.03	59.41	0.76	Peak	104	326
3	5855.00	59.16	110.80	-51.64	58.37	0.79	Peak	104	326
4	5875.00	58.43	105.20	-46.77	57.56	0.87	Peak	104	326
5	5925.00	58.02	68.20	-10.18	56.99	1.03	Peak	104	326
6	11590.00	47.22	54.00	-6.78	40.15	7.07	Average	100	31
7	11590.00	59.92	74.00	-14.08	52.85	7.07	Peak	100	31
8	17385.00	59.89	68.20	-8.31	52.40	7.49	Peak	100	46

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

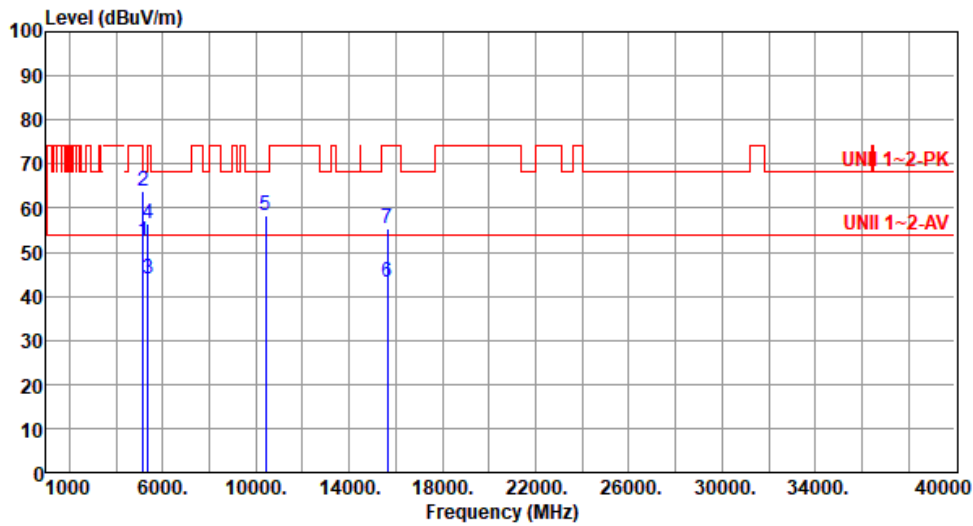
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Unwanted Emissions (Above 1GHz) for ac VHT80

Modulation	ac VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



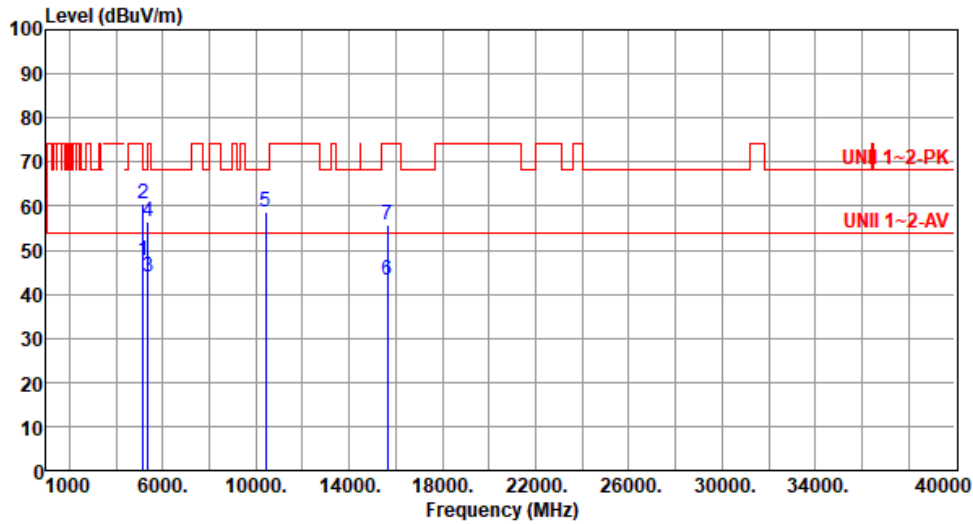
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	52.48	54.00	-1.52	52.15	0.33	Average	112	355
2	5150.00	63.77	74.00	-10.23	63.44	0.33	Peak	112	355
3	5350.00	44.05	54.00	-9.95	44.30	-0.25	Average	112	355
4	5350.00	56.28	74.00	-17.72	56.53	-0.25	Peak	112	355
5	10420.00	58.31	68.20	-9.89	50.78	7.53	Peak	100	212
6	15630.00	43.24	54.00	-10.76	39.50	3.74	Average	100	36
7	15630.00	55.42	74.00	-18.58	51.68	3.74	Peak	100	36

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).



Modulation	ac VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.44	54.00	-6.56	47.11	0.33	Average	125	23
2	5150.00	60.61	74.00	-13.39	60.28	0.33	Peak	125	23
3	5350.00	43.86	54.00	-10.14	44.11	-0.25	Average	125	23
4	5350.00	56.40	74.00	-17.60	56.65	-0.25	Peak	125	23
5	10420.00	58.75	68.20	-9.45	51.22	7.53	Peak	100	314
6	15630.00	43.06	54.00	-10.94	39.32	3.74	Average	100	39
7	15630.00	55.85	74.00	-18.15	52.11	3.74	Peak	100	39

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

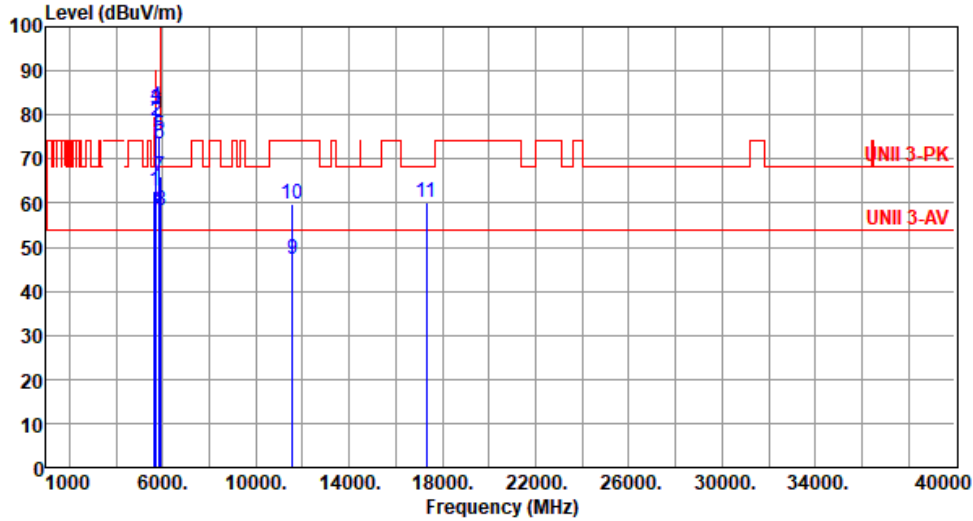
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	62.78	68.20	-5.42	62.67	0.11	Peak	135	13
2	5700.00	78.48	105.20	-26.72	78.15	0.33	Peak	135	13
3	5720.00	81.08	110.80	-29.72	80.71	0.37	Peak	135	13
4	5725.00	81.86	122.20	-40.34	81.48	0.38	Peak	135	13
5	5850.00	75.17	122.20	-47.03	74.41	0.76	Peak	135	13
6	5855.00	73.59	110.80	-37.21	72.80	0.79	Peak	135	13
7	5875.00	66.08	105.20	-39.12	65.21	0.87	Peak	135	13
8	5925.00	58.25	68.20	-9.95	57.22	1.03	Peak	135	13
9	11550.00	47.31	54.00	-6.69	40.12	7.19	Average	100	98
10	11550.00	59.65	74.00	-14.35	52.46	7.19	Peak	100	98
11	17325.00	60.05	68.20	-8.15	52.97	7.08	Peak	100	22

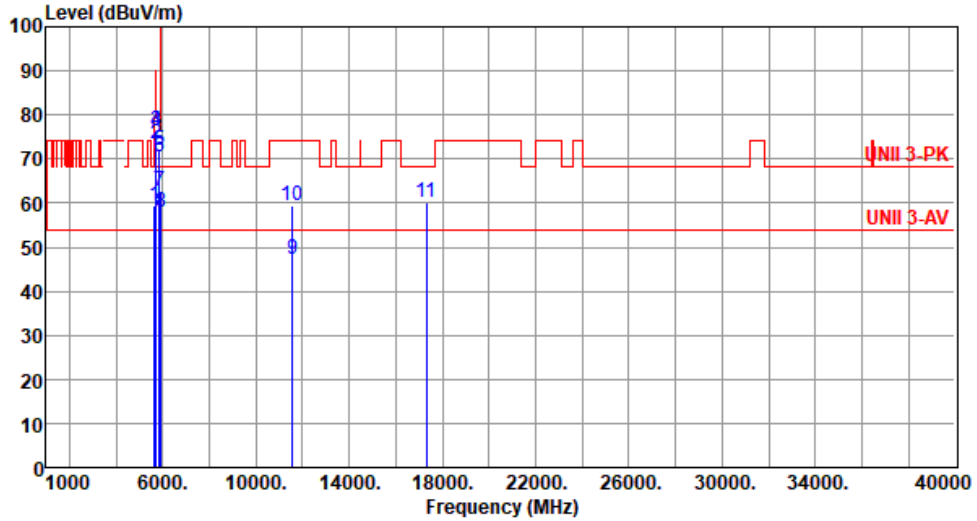
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ac VHT80	Test Freq. (MHz)	5775
------------	----------	------------------	------

Polarization	Vertical
--------------	----------

Test By :Brad Wu Temperature(°C):23 Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.42	68.20	-8.78	59.31	0.11	Peak	100	324
2	5700.00	73.53	105.20	-31.67	73.20	0.33	Peak	100	324
3	5720.00	76.23	110.80	-34.57	75.86	0.37	Peak	100	324
4	5725.00	76.40	122.20	-45.80	76.02	0.38	Peak	100	324
5	5850.00	72.12	122.20	-50.08	71.36	0.76	Peak	100	324
6	5855.00	70.31	110.80	-40.49	69.52	0.79	Peak	100	324
7	5875.00	62.79	105.20	-42.41	61.92	0.87	Peak	100	324
8	5925.00	58.11	68.20	-10.09	57.08	1.03	Peak	100	324
9	11550.00	47.06	54.00	-6.94	39.87	7.19	Average	100	32
10	11550.00	59.40	74.00	-14.60	52.21	7.19	Peak	100	32
11	17325.00	60.12	68.20	-8.08	53.04	7.08	Peak	100	29

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



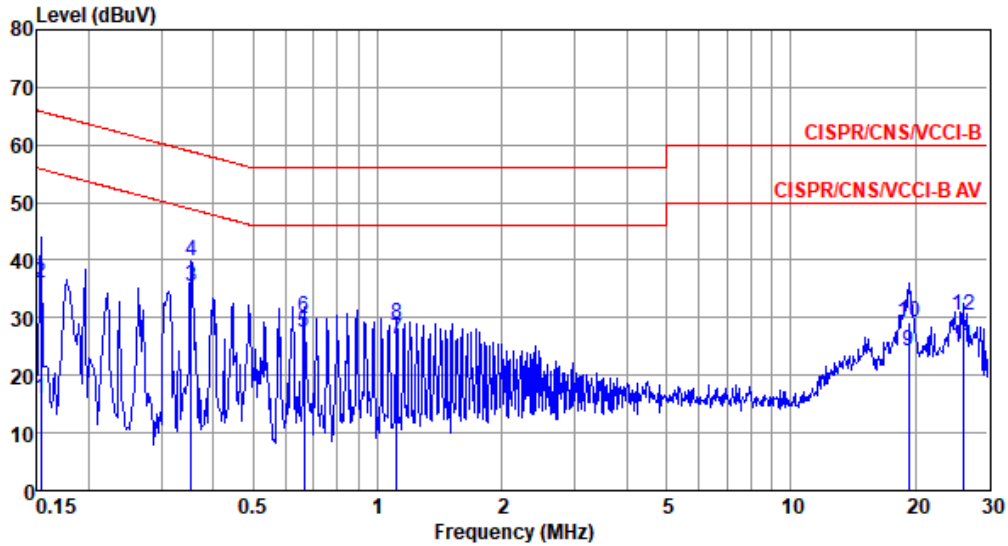
Frequency: 5200 MHz	Frequency Drift (ppm)			
	0 minute	2 minutes	5 minutes	10 minutes
Temperature (°C)				
T20°CVmax	8.37	9.02	8.55	8.34
T20°CVmin	8.67	9.07	8.99	8.43
T40°CVnom	6.12	6.41	6.37	6.43
T30°CVnom	7.79	8.28	7.89	7.77
T20°CVnom	8.63	8.55	9.38	8.67
T10°CVnom	11.44	11.88	11.15	11.25
T0°CVnom	14.75	15.18	15.40	14.61
Vnom [V]: 25.6	Vmax [V]: 28		Vmin [V]: 20	
Tnom [°C]: 20	Tmax [°C]: 40		Tmin [°C]: 0	

Frequency: 5785 MHz	Frequency Drift (ppm)			
	0 minute	2 minutes	5 minutes	10 minutes
Temperature (°C)				
T20°CVmax	7.52	7.52	7.52	7.52
T20°CVmin	7.80	7.80	7.80	7.80
T40°CVnom	5.50	5.50	5.50	5.50
T30°CVnom	7.00	7.00	7.00	7.00
T20°CVnom	7.76	7.76	7.76	7.76
T10°CVnom	10.29	10.29	10.29	10.29
T0°CVnom	13.26	13.26	13.26	13.26
Vnom [V]: 25.6	Vmax [V]: 28		Vmin [V]: 20	
Tnom [°C]: 20	Tmax [°C]: 40		Tmin [°C]: 0	



Modulation Mode	11a	Test Freq. (MHz)	5240
Power Phase	Line		

Test by : Joe Liao Temperature: 20°C Humidity: 61%



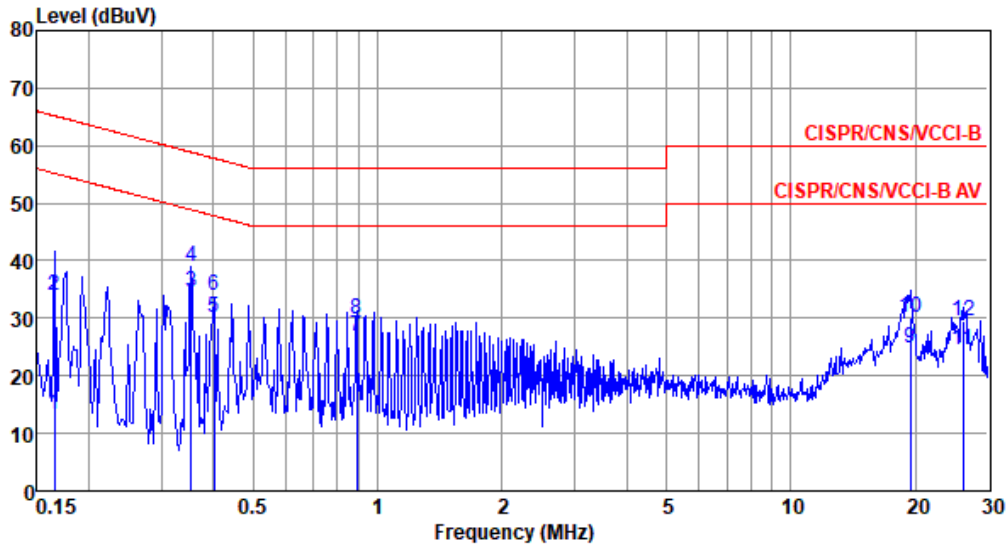
	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.153	15.89	55.82	-39.93	6.18	9.63	0.08	0.00	Average
2	0.153	35.92	65.82	-29.90	26.21	9.63	0.08	0.00	QP
3*	0.354	35.40	48.87	-13.47	25.70	9.62	0.08	0.00	Average
4	0.354	39.86	58.87	-19.01	30.16	9.62	0.08	0.00	QP
5	0.665	27.32	46.00	-18.68	17.60	9.63	0.09	0.00	Average
6	0.665	30.10	56.00	-25.90	20.38	9.63	0.09	0.00	QP
7	1.111	26.18	46.00	-19.82	16.46	9.63	0.09	0.00	Average
8	1.111	29.03	56.00	-26.97	19.31	9.63	0.09	0.00	QP
9	19.326	24.16	50.00	-25.84	13.98	9.68	0.50	0.00	Average
10	19.326	29.20	60.00	-30.80	19.02	9.68	0.50	0.00	QP
11	26.139	25.01	50.00	-24.99	14.82	9.64	0.55	0.00	Average
12	26.139	30.27	60.00	-29.73	20.08	9.64	0.55	0.00	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
 Note 2: Over Limit (dB) = Level (dBUV) - Limit Line (dBUV).



Modulation Mod	11a	Test Freq. (MHz)	5240
Power Phase	Neutral		

Test by : Joe Liao Temperature: 20°C Humidity: 61%



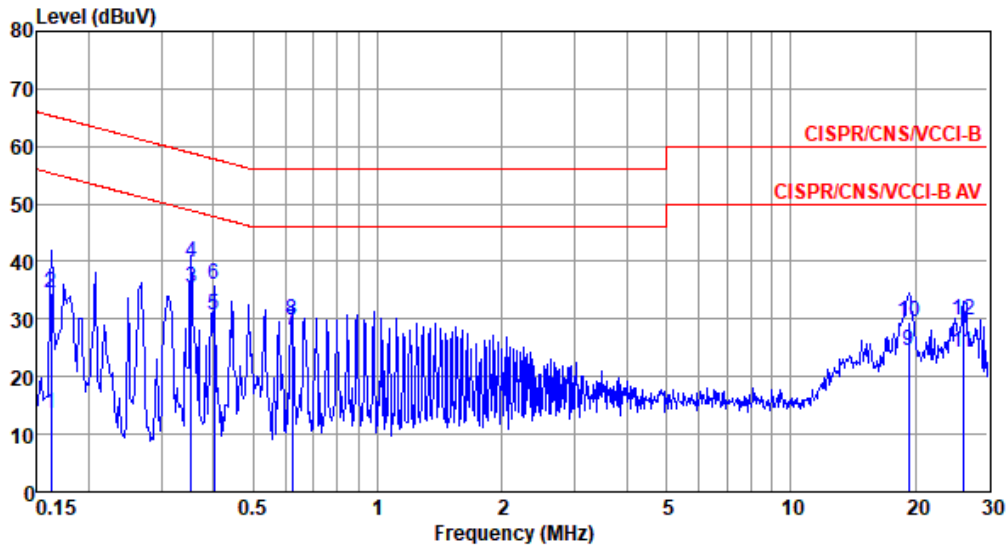
	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.165	13.26	55.21	-41.95	3.56	9.63	0.07	0.00	Average
2	0.165	33.99	65.21	-31.22	24.29	9.63	0.07	0.00	QP
3*	0.354	34.60	48.87	-14.27	24.90	9.62	0.08	0.00	Average
4	0.354	38.84	58.87	-20.03	29.14	9.62	0.08	0.00	QP
5	0.402	30.10	47.81	-17.71	20.40	9.62	0.08	0.00	Average
6	0.402	34.05	57.81	-23.76	24.35	9.62	0.08	0.00	QP
7	0.890	26.95	46.00	-19.05	17.23	9.63	0.09	0.00	Average
8	0.890	29.72	56.00	-26.28	20.00	9.63	0.09	0.00	QP
9	19.428	24.91	50.00	-25.09	14.61	9.80	0.50	0.00	Average
10	19.428	30.09	60.00	-29.91	19.79	9.80	0.50	0.00	QP
11	26.139	24.58	50.00	-25.42	14.24	9.79	0.55	0.00	Average
12	26.139	29.52	60.00	-30.48	19.18	9.79	0.55	0.00	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).



Modulation Mod	11a	Test Freq. (MHz)	5825
Power Phase	Line		

Test by : Joe Liao Temperature: 20°C Humidity: 61%



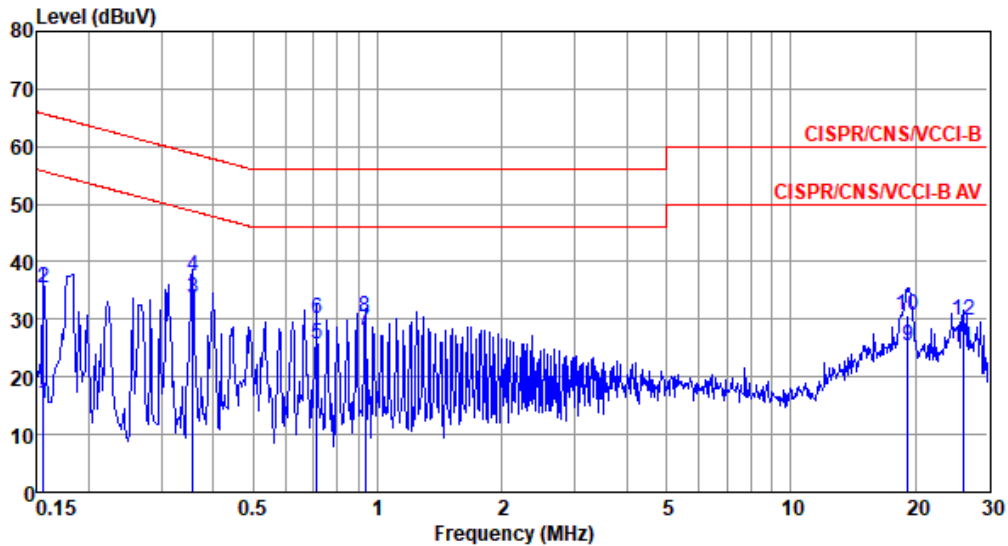
	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.162	13.59	55.34	-41.75	3.89	9.63	0.07	0.00	Average
2	0.162	34.58	65.34	-30.76	24.88	9.63	0.07	0.00	QP
3*	0.354	35.50	48.87	-13.37	25.80	9.62	0.08	0.00	Average
4	0.354	39.85	58.87	-19.02	30.15	9.62	0.08	0.00	QP
5	0.402	30.57	47.81	-17.24	20.87	9.62	0.08	0.00	Average
6	0.402	35.97	57.81	-21.84	26.27	9.62	0.08	0.00	QP
7	0.621	28.04	46.00	-17.96	18.34	9.62	0.08	0.00	Average
8	0.621	29.90	56.00	-26.10	20.20	9.62	0.08	0.00	QP
9	19.326	24.61	50.00	-25.39	14.43	9.68	0.50	0.00	Average
10	19.326	29.46	60.00	-30.54	19.28	9.68	0.50	0.00	QP
11	26.139	24.29	50.00	-25.71	14.10	9.64	0.55	0.00	Average
12	26.139	29.78	60.00	-30.22	19.59	9.64	0.55	0.00	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
 Note 2: Over Limit (dB) = Level (dBuV) - Limit Line (dBuV).



Modulation Mod	11a	Test Freq. (MHz)	5825
Power Phase	Neutral		

Test by : Joe Liao Temperature: 20°C Humidity: 61%



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.156	15.37	55.69	-40.32	5.66	9.63	0.08	0.00	Average
2	0.156	35.45	65.69	-30.24	25.74	9.63	0.08	0.00	QP
3*	0.358	33.76	48.78	-15.02	24.06	9.62	0.08	0.00	Average
4	0.358	37.46	58.78	-21.32	27.76	9.62	0.08	0.00	QP
5	0.712	25.79	46.00	-20.21	16.07	9.63	0.09	0.00	Average
6	0.712	30.12	56.00	-25.88	20.40	9.63	0.09	0.00	QP
7	0.933	28.05	46.00	-17.95	18.33	9.63	0.09	0.00	Average
8	0.933	30.29	56.00	-25.71	20.57	9.63	0.09	0.00	QP
9	19.224	25.32	50.00	-24.68	15.03	9.79	0.50	0.00	Average
10	19.224	30.71	60.00	-29.29	20.42	9.79	0.50	0.00	QP
11	26.139	25.13	50.00	-24.87	14.79	9.79	0.55	0.00	Average
12	26.139	29.92	60.00	-30.08	19.58	9.79	0.55	0.00	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).