FCC Test Report

FCC ID	:	**YQMLLS090**
Equipment	:	**Focus Premium**
Model No.	:	**Focus Premium**
Brand Name	:	**FARO**
Applicant	:	**FARO Technologies, Inc.**
Address	:	**250 Technology Park, Lake Mary, Florida, United States, 32746**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Dec. 16, 2021**
Tested Date	:	**Dec. 29, 2021 ~ Feb. 22, 2022**

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

Release Record

Report No.	Version	Description	Issued Date
FR1D1602AN	Rev. 01	Initial issue	May 04, 2022
FR1D1602AN	Rev. 02	Corrected received date of test sample and company number of ISED	Jun. 14, 2022

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	Note[1]	N/A
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5350.00MHz 52.95 (Margin -1.05dB) - 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)	RF Output Power	Max Power [dBm]: 5150~5250MHz: 17.78 5250~5350MHz: 18.28 5470~5725MHz: 18.24 5725~5850MHz: 18.15	Pass
15.407(a)	Peak 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
N/A means Not Applicable. Note[1]: The EUT consumes DC power, so the test is not required.			

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 5250-5350 5470-5725 5725-5850	a	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [8] 149-165 [5]	2	6-54 Mbps
5150-5250 5250-5350 5470-5725 5725-5850	n (HT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [8] 149-165 [5]	2	MCS 0-15
5150-5250 5250-5350 5470-5725 5725-5850	n (HT40)	5190-5230 5270-5310 5510-5670 5755-5795	38-46 [2] 54-62 [2] 102-134 [3] 151-159 [2]	2	MCS 0-15
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [8] 149-165 [5]	2	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT40)	5190-5230 5270-5310 5510-5670 5755-5795	38-46 [2] 54-62 [2] 102-134 [3] 151-159 [2]	2	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT80)	5210 5290 5530 5775	42 [1] 58 [1] 106 [1] 155 [1]	2	MCS 0-9
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation. Note 3: The device has disabled the 5600-5650MHz band by S/W setting.					

1.1.2 Antenna Details

Ant. No.	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)			
			5150~5250	5250~5350	5470~5725	5725~5850
1	Dipole	IPEX	4.66	4.66	4.66	4.66

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	14.4Vdc from battery

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	Battery	Brand: Akku Power GmbH Model: ACCS-PWR-0014 Power Rating: Nom. Voltage: 14.4V Capacity: 6.8Ah Watt Hour: 97.92Wh Serial Number: 01562
2	3D_AC_LS_SD Card Reader	Brand: Transcend Model: G23758
3	SD Card	Brand: SanDisk Extreme PRO (170MB/s) Capacity: 64GB
4	Status Indicator	Model: 900-000038-001

1.1.5 Test Sample Information

Serial Number of Test Sample	Radiated Emission: LLS092125011 Antenna Port Conducted: LLS092125011

1.1.6 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	134	5670
64	5320	151	5755
100	5500	159	5795
104	5520	---	---
108	5540	**VHT80**	
112	5560	42	5210
116	5580	58	5290
132	5660	106	5530
136	5680	155	5775
140	5700	---	---
149	5745	---	---
153	5765	---	---
157	5785	---	---
161	5805	---	---
165	5825	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	QRCT_CONN, Version: v30161		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	96.31	0.16
	VHT20	96.21	0.17
	VHT40	92.71	0.33
	VHT80	85.34	0.69

1.1.8 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	16
11a	5200	16
11a	5240	16
11a	5260	16
11a	5300	16
11a	5320	16
11a	5500	13.5
11a	5580	13
11a	5700	12.5
11a	5745	11.5
11a	5785	11.5
11a	5825	11.5
VHT20	5180	16
VHT20	5200	16
VHT20	5240	16
VHT20	5260	16
VHT20	5300	16
VHT20	5320	16
VHT20	5500	12
VHT20	5580	12
VHT20	5700	12
VHT20	5745	12
VHT20	5785	12
VHT20	5825	12

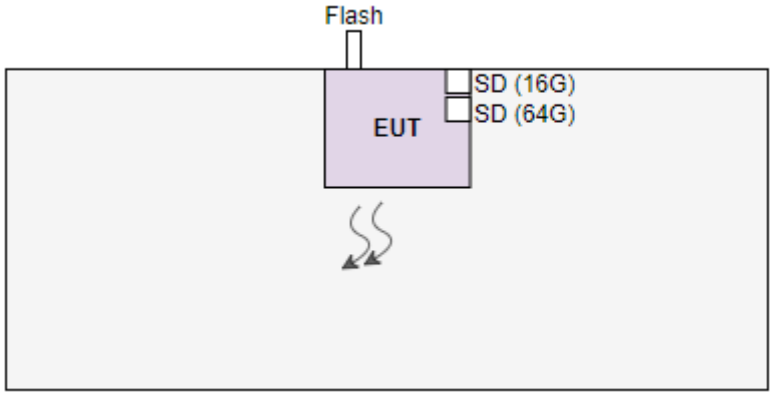
Modulation Mode	Test Frequency (MHz)	Power Index
VHT40	5190	16
VHT40	5230	16
VHT40	5270	16
VHT40	5310	16
VHT40	5510	12
VHT40	5550	12
VHT40	5670	12
VHT40	5755	12
VHT40	5795	12
VHT80	5210	16
VHT80	5290	16
VHT80	5530	12
VHT80	5775	12

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude 5400	DoC	---
2	USB to RJ45	---	---	---	Provided by applicant.
3	USB 3.1 Flash	pqi	Connect 313/16GB	---	---
4	SD Card	SanDisk	16GB	---	Provided by applicant.

1.3 Test Setup Chart

Test Setup Diagram



Note: The notebook & USB to RJ45 cable is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

1.4 The Equipment List

Test Item	Radiated Emission Below 1GHz				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Dec. 29, 2021				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 12, 2021	Mar. 11, 2022
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 08, 2021	Nov. 07, 2022
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	May 06, 2021	May 05, 2022
Preamplifier	EMC	EMC02325	980187	Jul. 26, 2021	Jul. 25, 2022
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 05, 2021	Oct. 04, 2022
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 24, 2021	Sep. 23, 2022
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 24, 2021	Sep. 23, 2022
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 24, 2021	Sep. 23, 2022
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission Above 1GHz				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Jan. 28, 2022				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101499	Mar. 02, 2021	Mar. 01, 2022
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 20, 2021	Dec. 19, 2022
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170508	Jan. 11, 2022	Jan. 10, 2023
Preamplifier	Agilent	83017A	MY39501309	Sep. 06, 2021	Sep. 05, 2022
Preamplifier	EMC	EMC184045B	980192	Jul. 14, 2021	Jul. 13, 2022
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 24, 2021	Sep. 23, 2022
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 24, 2021	Sep. 23, 2022
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	Feb. 22, 2022				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Nov. 29, 2021	Nov. 28, 2022
Power Meter	Anritsu	ML2495A	1241002	Nov. 07, 2021	Nov. 06, 2022
Power Sensor	Anritsu	MA2411B	1207366	Nov. 07, 2021	Nov. 06, 2022
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	May 25, 2021	May 24, 2022
DC POWER SOURCE	GW INSTEK	GPC-6030D	GES855395	Nov. 08, 2021	Nov. 07, 2022
Measurement Software	Sporton	SENSE-15407_NII	V5.10	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	$\pm 1 \times 10^{-9}$
Power density	±0.583 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.96 dB
Radiated emission > 1GHz	±4.51 dB
Time	±0.1%
Temperature	±0.4 °C

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	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.)
Test Site	03CH03-WS
Address of Test Site	No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 333, Taiwan (R.O.C.)

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- ISED#: 10807C
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Frequency band 5150~5250 MHz / 5250~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Radiated Emissions ≤1GHz	VHT20	5320	MCS 0	---
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	---
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
	HT40	5190 / 5230 / 5270 / 5310 / 5510 5550 / 5670	MCS 0	
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
	VHT40	5190 / 5230 / 5270 / 5310 / 5510 5550 / 5670	MCS 0	
	VHT80	5210 / 5290 / 5530	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	---
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
	VHT40	5190 / 5230 / 5270 / 5310 / 5510 5550 / 5670	MCS 0	
	VHT80	5210 / 5290 / 5530	MCS 0	
Frequency Stability	Un-modulation	5320	---	---

Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Radiated Emissions ≤1GHz	VHT20	5785	MCS 0	---
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	---
	HT20	5745 / 5785 / 5825	MCS 0	
	HT40	5755 / 5795	MCS 0	
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	---
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	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.

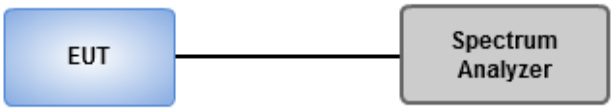
Occupied Bandwidth

1. Set RBW = 1 % to 5 % of the OBW.
2. Set VBW ≥ 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 Result of Emission Bandwidth

Ambient Condition	22°C / 68%	Tested By	Aska Huang

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	18.913M	16.281M	16M3D1D	18.623M	16.208M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.58M	17.366M	17M4D1D	19.348M	17.366M
802.11ac VHT40_Nss1,(MCS0)_2TX	40.725M	35.745M	35M7D1D	40.29M	35.745M
802.11ac VHT80_Nss1,(MCS0)_2TX	82.319M	74.964M	75M0D1D	82.029M	74.964M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	18.986M	16.281M	16M3D1D	18.768M	16.208M
802.11ac VHT20_Nss1,(MCS0)_2TX	19.928M	17.366M	17M4D1D	19.493M	17.366M
802.11ac VHT40_Nss1,(MCS0)_2TX	40.58M	35.745M	35M7D1D	40.29M	35.745M
802.11ac VHT80_Nss1,(MCS0)_2TX	82.899M	74.964M	75M0D1D	82.609M	74.964M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.493M	16.281M	16M3D1D	18.406M	16.208M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.145M	17.438M	17M4D1D	19.42M	17.366M
802.11ac VHT40_Nss1,(MCS0)_2TX	40.87M	35.745M	35M7D1D	40.58M	35.745M
802.11ac VHT80_Nss1,(MCS0)_2TX	82.319M	75.253M	75M3D1D	82.029M	74.674M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	15.362M	16.208M	16M2D1D	14.42M	16.208M
802.11ac VHT20_Nss1,(MCS0)_2TX	15.507M	17.366M	17M4D1D	13.913M	17.366M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.072M	35.745M	35M7D1D	32.754M	35.745M
802.11ac VHT80_Nss1,(MCS0)_2TX	75.362M	75.253M	75M3D1D	75.072M	74.964M

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 / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

Result

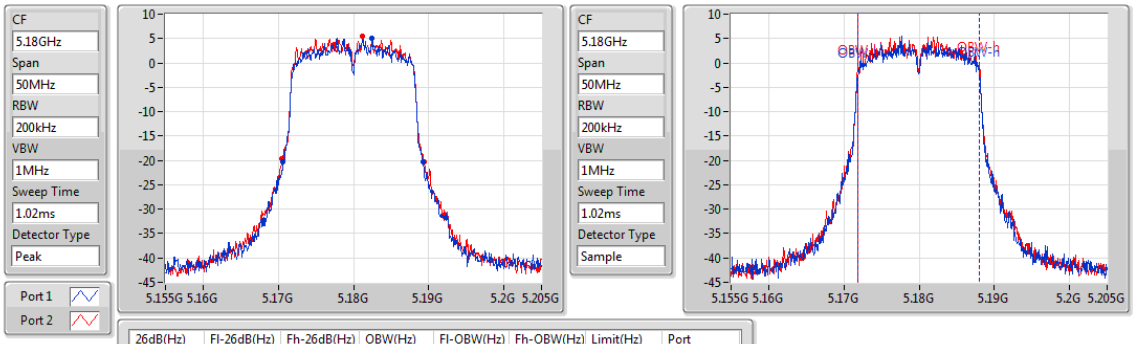
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	18.623M	16.208M	18.841M	16.208M
5200MHz	Pass	Inf	18.913M	16.208M	18.913M	16.281M
5240MHz	Pass	Inf	18.768M	16.208M	18.841M	16.208M
5260MHz	Pass	Inf	18.913M	16.208M	18.913M	16.281M
5300MHz	Pass	Inf	18.768M	16.208M	18.986M	16.281M
5320MHz	Pass	Inf	18.913M	16.208M	18.913M	16.208M
5500MHz	Pass	Inf	18.406M	16.208M	18.913M	16.281M
5580MHz	Pass	Inf	19.493M	16.208M	18.913M	16.208M
5700MHz	Pass	Inf	19.493M	16.208M	18.841M	16.208M
5745MHz	Pass	500k	15.362M	16.208M	14.42M	16.208M
5785MHz	Pass	500k	14.71M	16.208M	15M	16.208M
5825MHz	Pass	500k	15.145M	16.208M	15.072M	16.208M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.565M	17.366M	19.565M	17.366M
5200MHz	Pass	Inf	20.58M	17.366M	19.348M	17.366M
5240MHz	Pass	Inf	19.638M	17.366M	19.565M	17.366M
5260MHz	Pass	Inf	19.565M	17.366M	19.493M	17.366M
5300MHz	Pass	Inf	19.928M	17.366M	19.493M	17.366M
5320MHz	Pass	Inf	19.565M	17.366M	19.493M	17.366M
5500MHz	Pass	Inf	19.42M	17.366M	19.565M	17.366M
5580MHz	Pass	Inf	19.638M	17.366M	19.42M	17.366M
5700MHz	Pass	Inf	20.145M	17.438M	19.638M	17.366M
5745MHz	Pass	500k	13.913M	17.366M	14.638M	17.366M
5785MHz	Pass	500k	15.072M	17.366M	15.072M	17.366M
5825MHz	Pass	500k	15.435M	17.366M	15.507M	17.366M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.435M	35.745M	40.29M	35.745M
5230MHz	Pass	Inf	40.725M	35.745M	40.29M	35.745M
5270MHz	Pass	Inf	40.29M	35.745M	40.29M	35.745M
5310MHz	Pass	Inf	40.58M	35.745M	40.58M	35.745M
5510MHz	Pass	Inf	40.87M	35.745M	40.58M	35.745M
5550MHz	Pass	Inf	40.725M	35.745M	40.725M	35.745M
5670MHz	Pass	Inf	40.58M	35.745M	40.58M	35.745M

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5755MHz	Pass	500k	35.072M	35.745M	33.913M	35.745M
5795MHz	Pass	500k	35.072M	35.745M	32.754M	35.745M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.029M	74.964M	82.319M	74.964M
5290MHz	Pass	Inf	82.609M	74.964M	82.899M	74.964M
5530MHz	Pass	Inf	82.319M	75.253M	82.029M	74.964M
5775MHz	Pass	500k	75.072M	75.253M	75.362M	74.964M

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;

802.11a_Nss1,(6Mbps)_2TX **EBW**

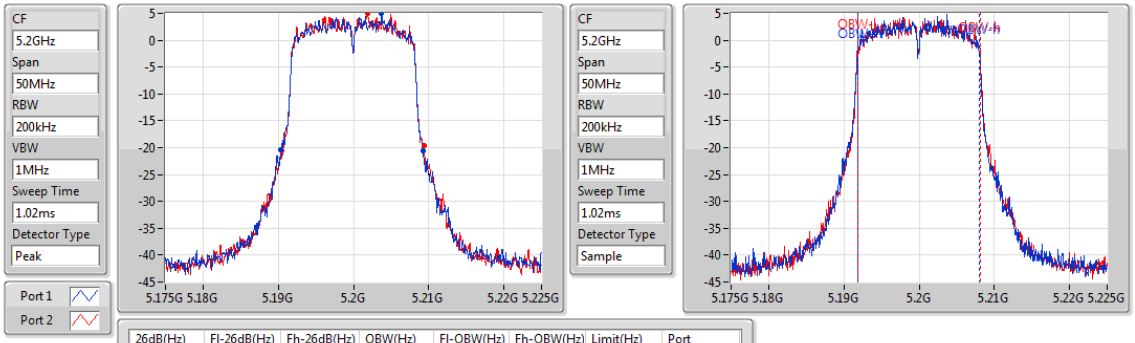
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.623M	5.170652G	5.189275G	16.208M	5.171823G	5.188032G	Inf	1
18.841M	5.170507G	5.189348G	16.208M	5.171823G	5.188032G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

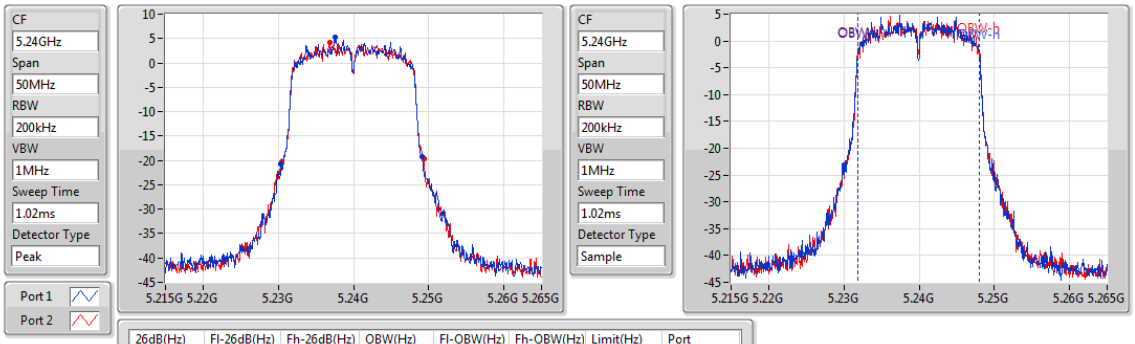
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.913M	5.19029G	5.209203G	16.208M	5.191823G	5.208032G	Inf	1
18.913M	5.190507G	5.20942G	16.281M	5.191823G	5.208104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

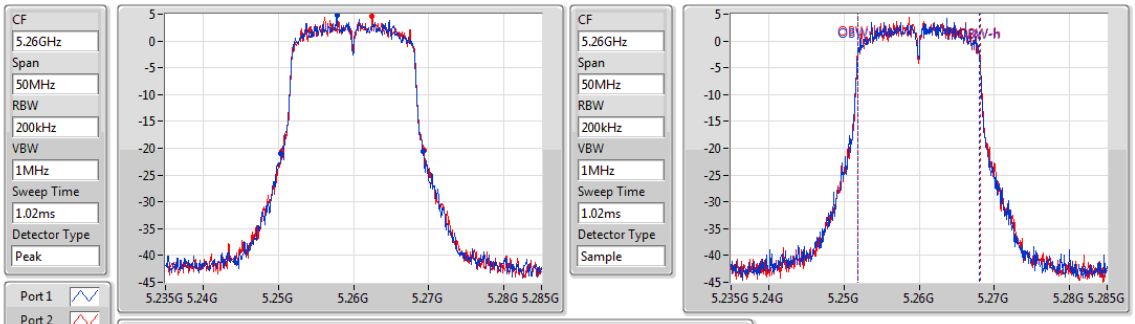
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.768M	5.230362G	5.24913G	16.208M	5.231823G	5.248032G	Inf	1
18.841M	5.230507G	5.249348G	16.208M	5.231823G	5.248032G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

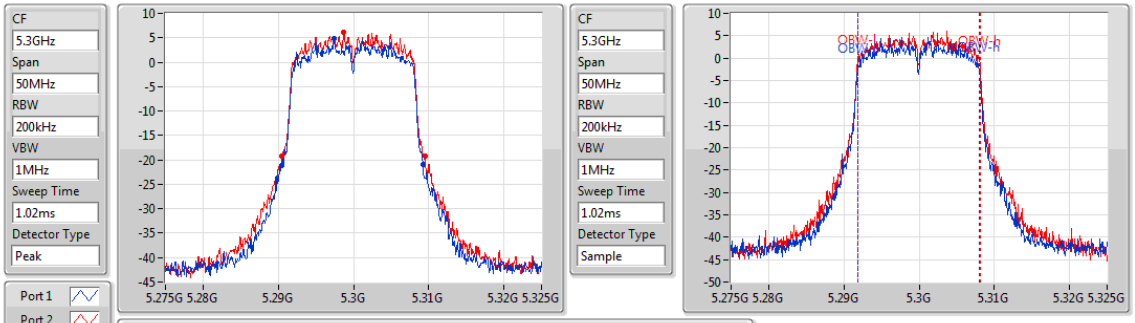
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.913M	5.250362G	5.269275G	16.208M	5.251823G	5.268032G	Inf	1
18.913M	5.250507G	5.26942G	16.281M	5.251823G	5.268104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

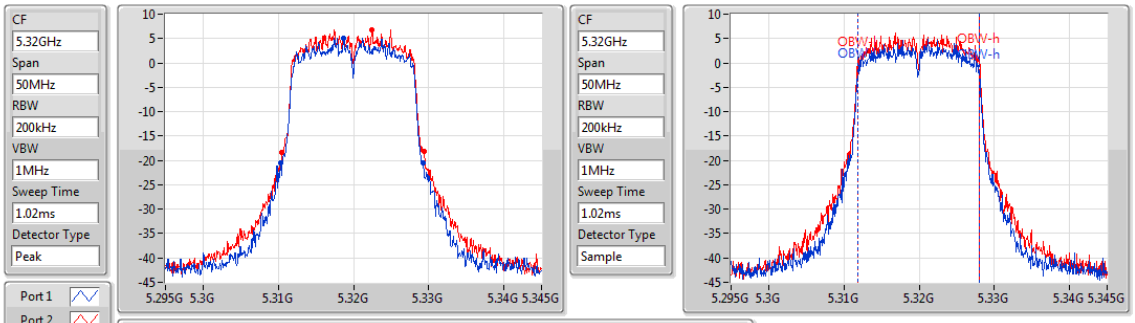
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.768M	5.290435G	5.309203G	16.208M	5.291823G	5.308032G	Inf	1
18.986M	5.290507G	5.309493G	16.281M	5.291823G	5.308104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

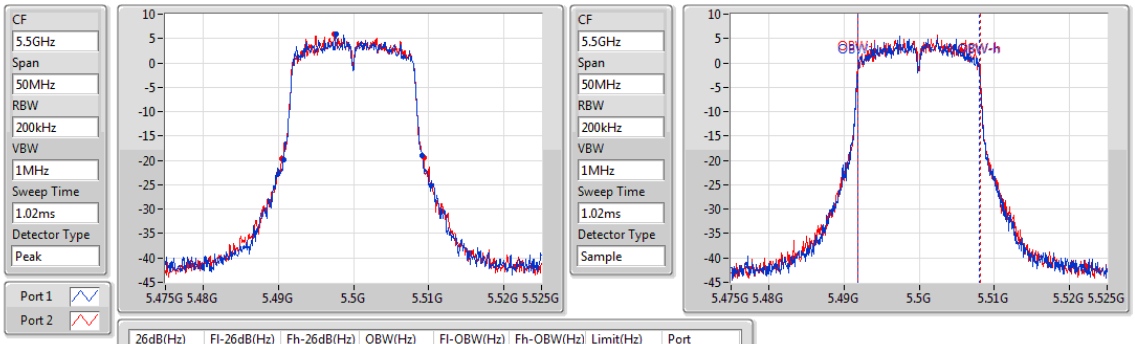
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.913M	5.31029G	5.329203G	16.208M	5.311823G	5.328032G	Inf	1
18.913M	5.310507G	5.32942G	16.208M	5.311823G	5.328032G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

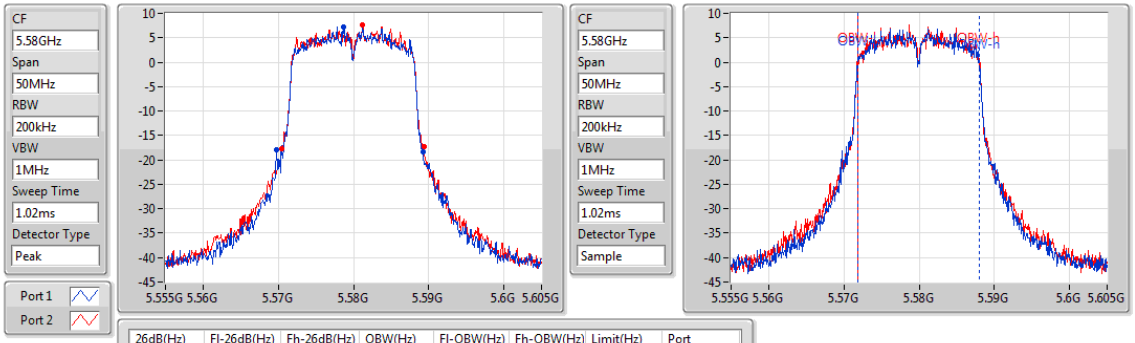
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.406M	5.490725G	5.50913G	16.208M	5.491823G	5.508032G	Inf	1
18.913M	5.490435G	5.509348G	16.281M	5.491823G	5.508104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

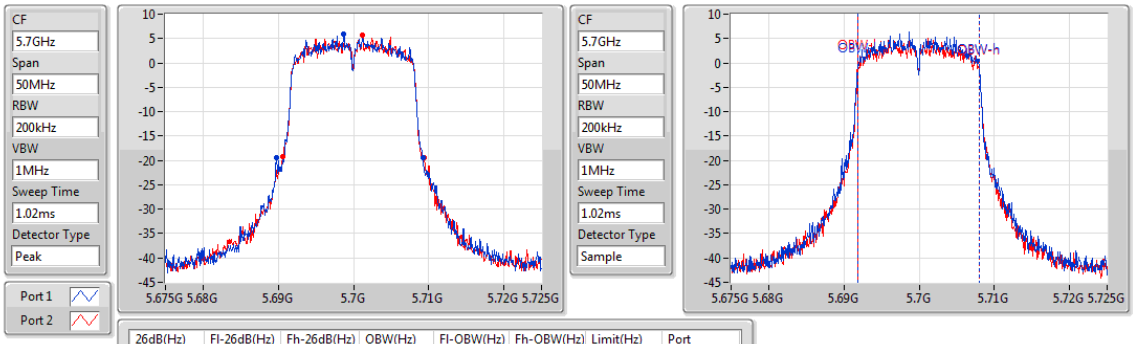
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.493M	5.56971G	5.589203G	16.208M	5.571823G	5.588032G	Inf	1
18.913M	5.570435G	5.589348G	16.208M	5.571823G	5.588032G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

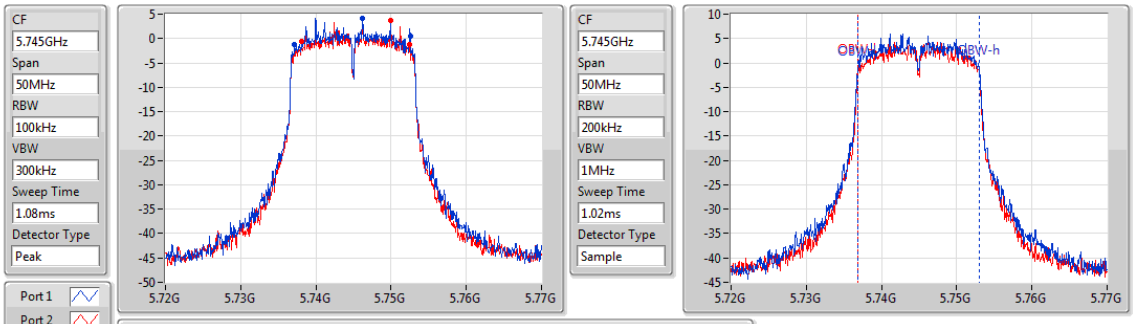
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.493M	5.68971G	5.709203G	16.208M	5.691823G	5.708032G	Inf	1
18.841M	5.69058G	5.70942G	16.208M	5.691823G	5.708032G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

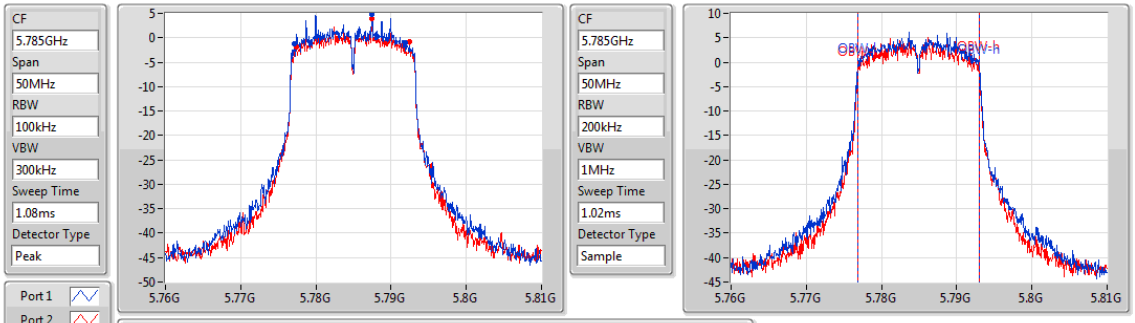
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.362M	5.737174G	5.752536G	16.208M	5.736823G	5.753032G	500k	1
14.42M	5.738043G	5.752464G	16.208M	5.736823G	5.753032G	500k	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

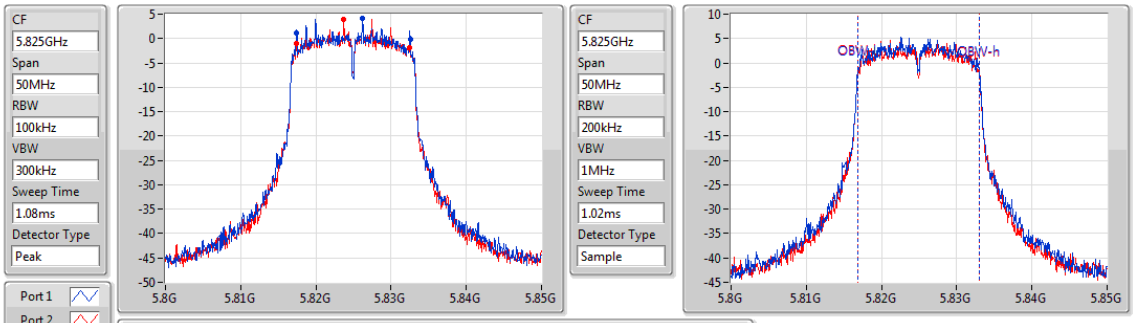
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.71M	5.777174G	5.791884G	16.208M	5.776823G	5.793032G	500k	1
15M	5.777464G	5.792464G	16.208M	5.776823G	5.793032G	500k	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

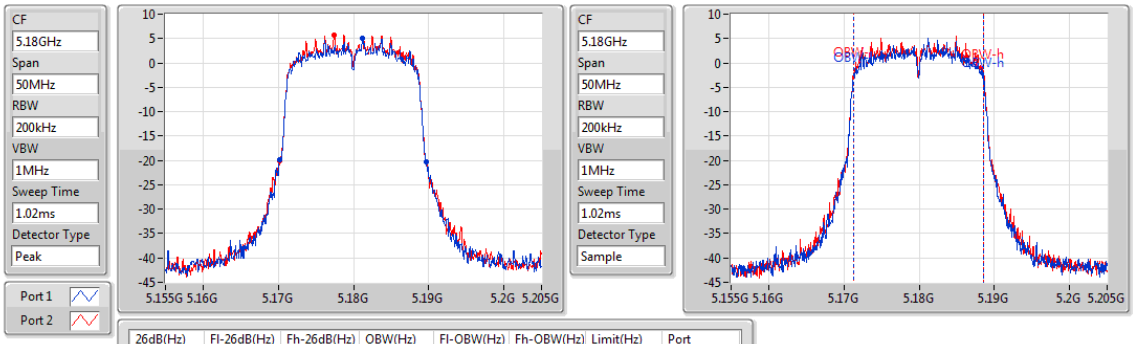
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.145M	5.817391G	5.832536G	16.208M	5.816823G	5.833032G	500k	1
15.072M	5.817391G	5.832464G	16.208M	5.816823G	5.833032G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

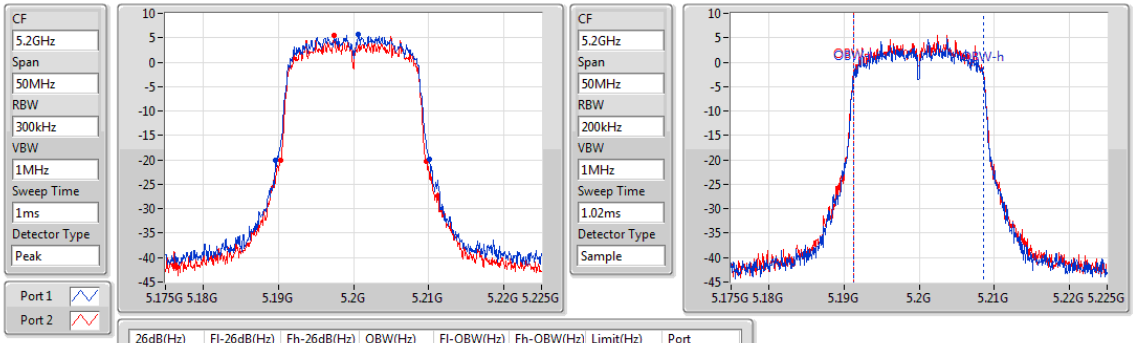
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.565M	5.170145G	5.18971G	17.366M	5.171245G	5.188611G	Inf	1
19.565M	5.170145G	5.18971G	17.366M	5.171245G	5.188611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

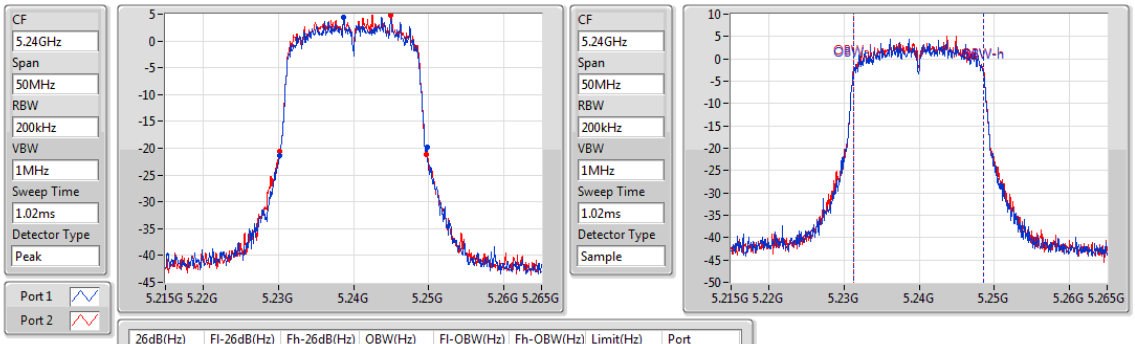
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.58M	5.189565G	5.210145G	17.366M	5.191245G	5.208611G	Inf	1
19.348M	5.19029G	5.209638G	17.366M	5.191245G	5.208611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

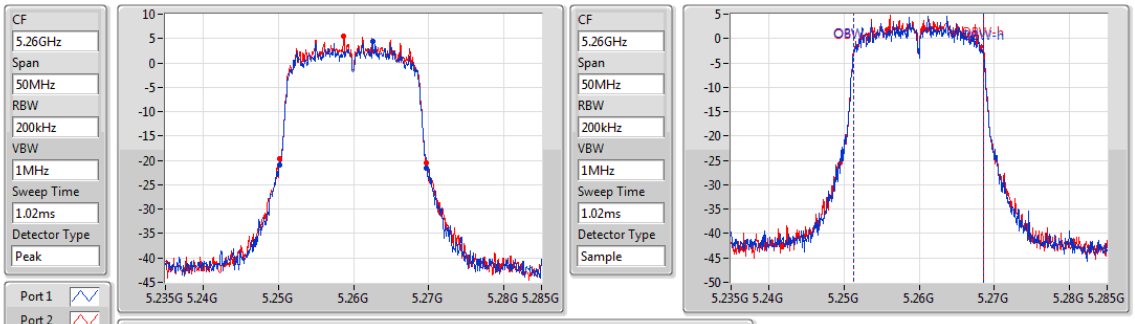
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.638M	5.230145G	5.249783G	17.366M	5.231245G	5.248611G	Inf	1
19.565M	5.230145G	5.24971G	17.366M	5.231245G	5.248611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

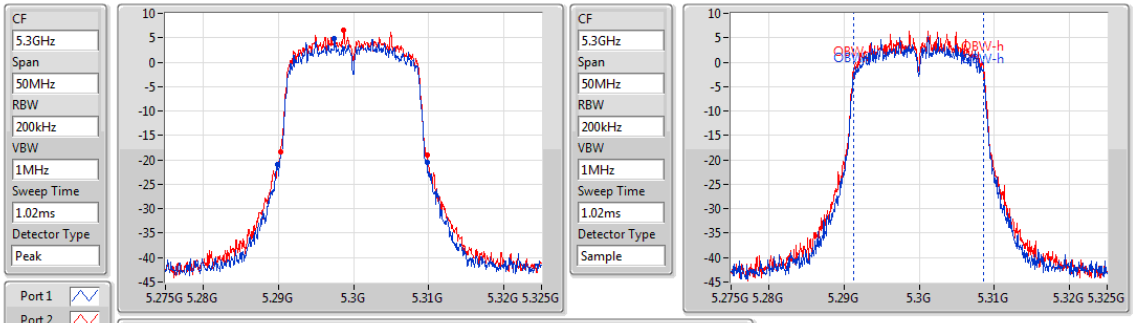
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.565M	5.250145G	5.26971G	17.366M	5.251245G	5.268611G	Inf	1
19.493M	5.250145G	5.269638G	17.366M	5.251245G	5.268611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

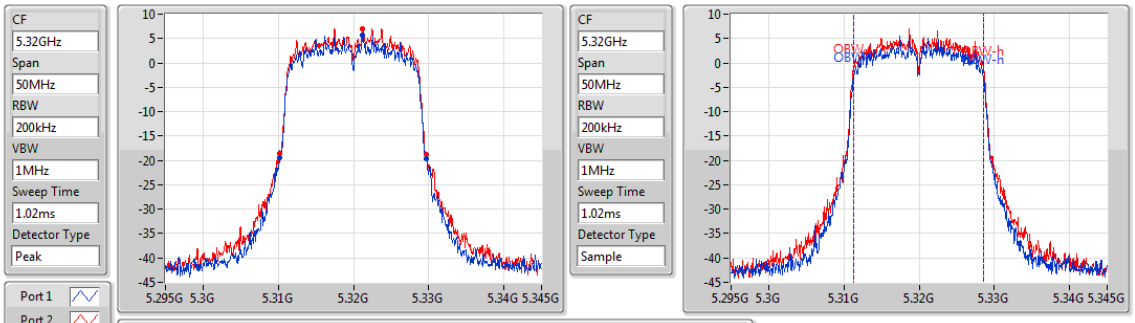
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.928M	5.289855G	5.309783G	17.366M	5.291245G	5.308611G	Inf	1
19.493M	5.29029G	5.309783G	17.366M	5.291245G	5.308611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

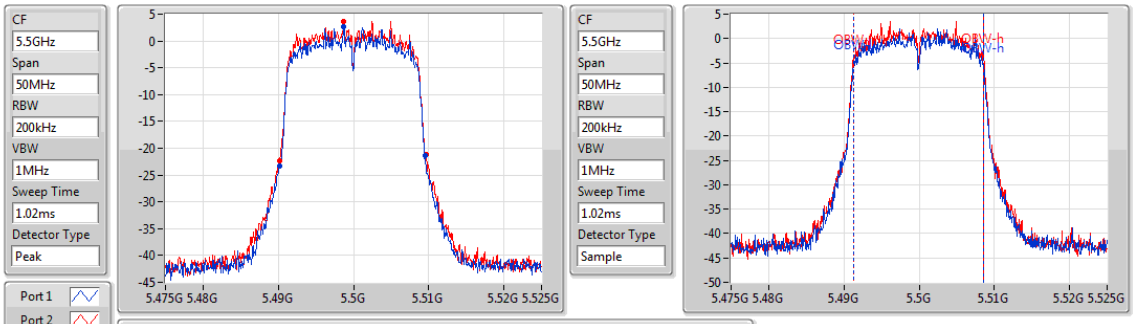
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.565M	5.310145G	5.32971G	17.366M	5.311245G	5.328611G	Inf	1
19.493M	5.310145G	5.329638G	17.366M	5.311245G	5.328611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

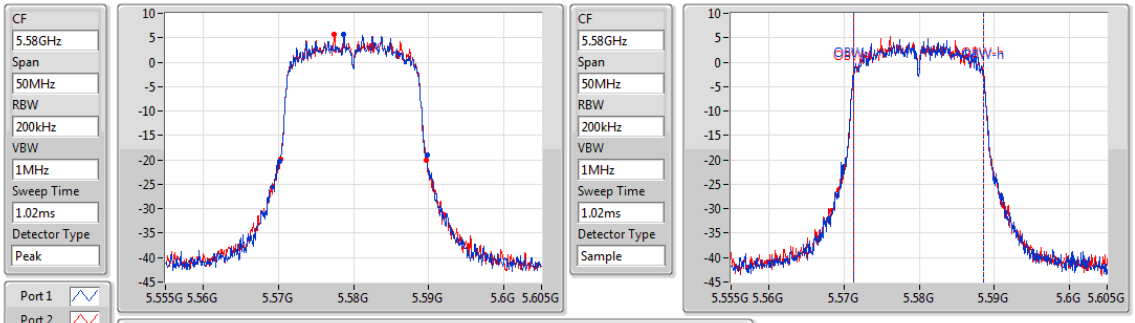
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.42M	5.490145G	5.509565G	17.366M	5.491245G	5.508611G	Inf	1
19.565M	5.490145G	5.50971G	17.366M	5.491245G	5.508611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

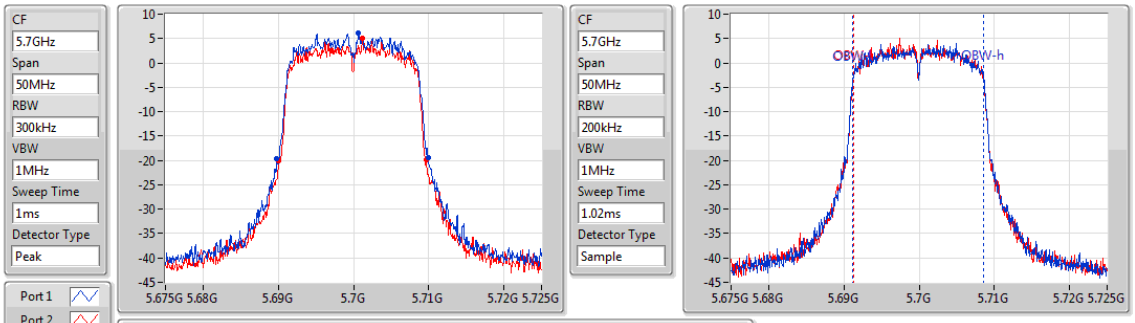
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.638M	5.570145G	5.589783G	17.366M	5.571245G	5.588611G	Inf	1
19.42M	5.57029G	5.58971G	17.366M	5.571245G	5.588611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

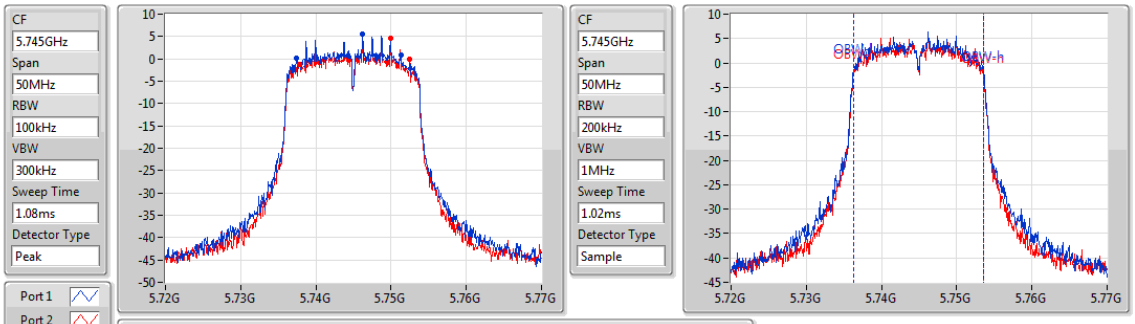
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.145M	5.689783G	5.709928G	17.438M	5.691172G	5.708611G	Inf	1
19.638M	5.690072G	5.70971G	17.366M	5.691245G	5.708611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

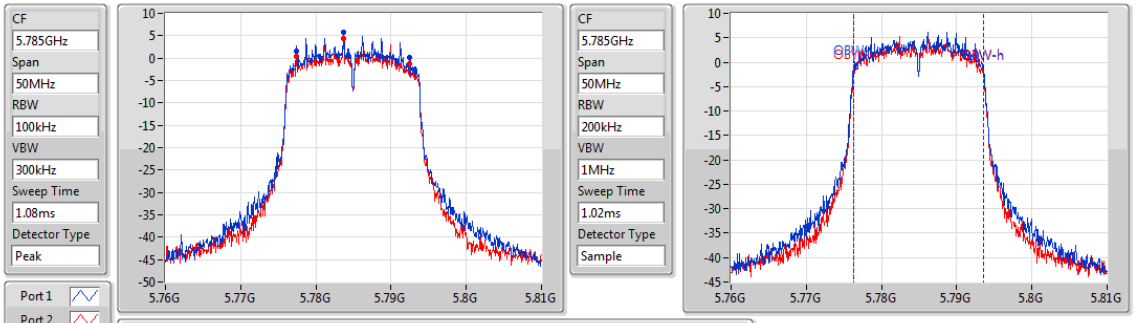
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
13.913M	5.737391G	5.751304G	17.366M	5.736245G	5.753611G	500k	1
14.638M	5.737826G	5.752464G	17.366M	5.736245G	5.753611G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

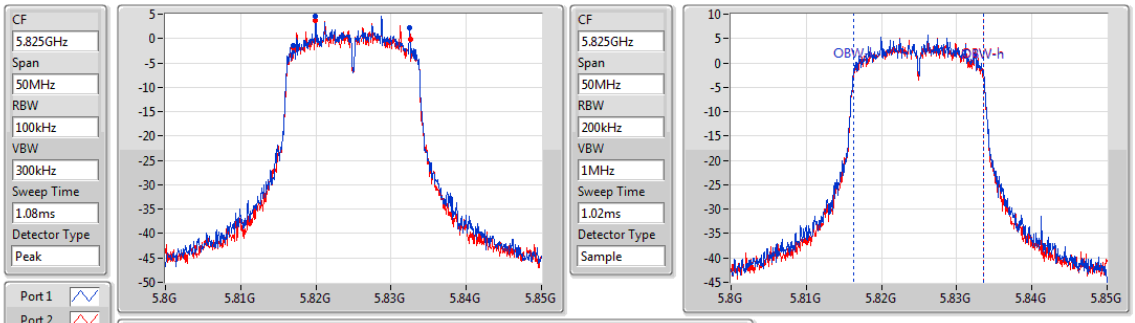
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.072M	5.777391G	5.792464G	17.366M	5.776245G	5.793611G	500k	1
15.072M	5.777391G	5.792464G	17.366M	5.776245G	5.793611G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

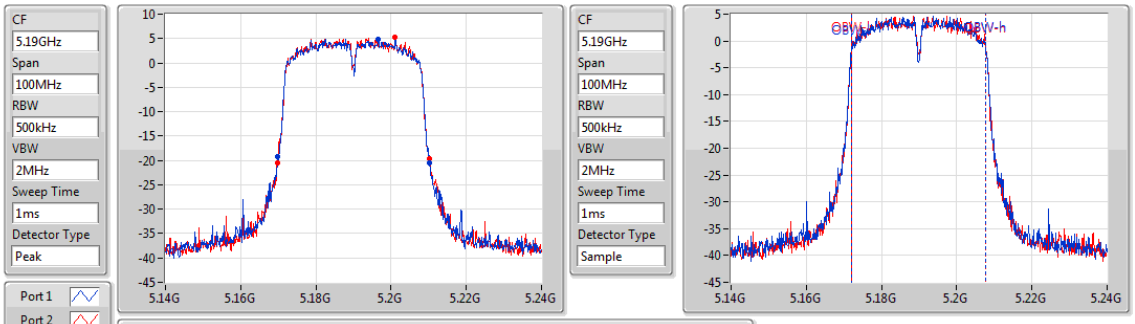
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.435M	5.817029G	5.832464G	17.366M	5.816245G	5.833611G	500k	1
15.507M	5.817029G	5.832536G	17.366M	5.816245G	5.833611G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

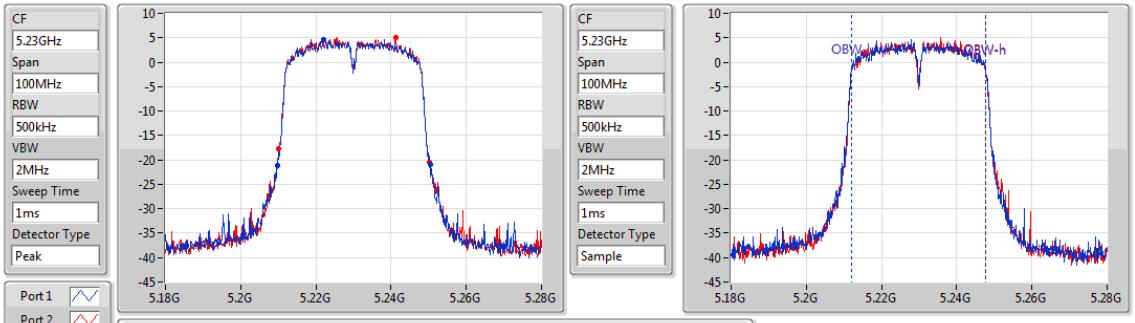
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.435M	5.169855G	5.21029G	35.745M	5.172055G	5.2078G	Inf	1
40.29M	5.169855G	5.210145G	35.745M	5.172055G	5.2078G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

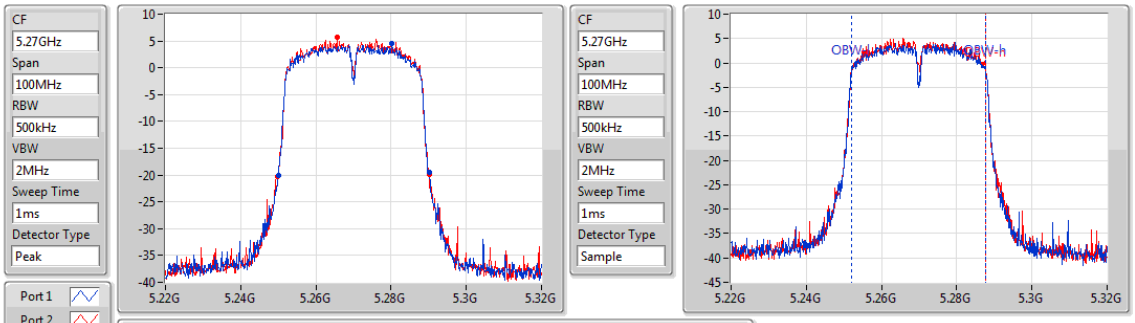
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.725M	5.20971G	5.250435G	35.745M	5.212055G	5.2478G	Inf	1
40.29M	5.21G	5.25029G	35.745M	5.212055G	5.2478G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

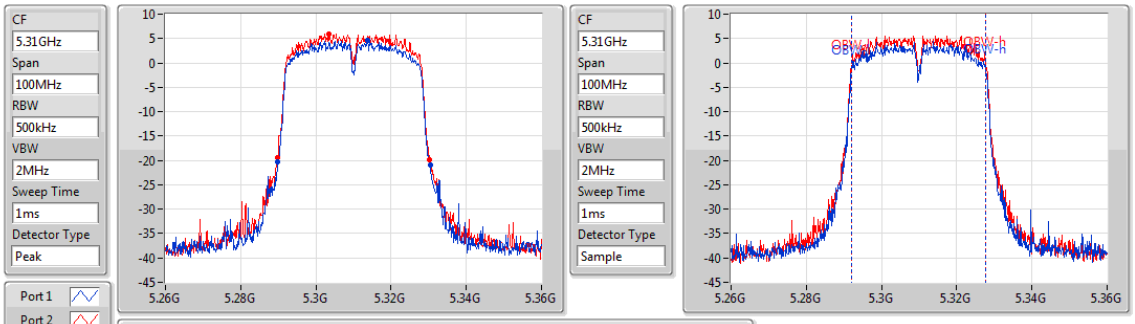
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.29M	5.25G	5.29029G	35.745M	5.252055G	5.2878G	Inf	1
40.29M	5.249855G	5.290145G	35.745M	5.252055G	5.2878G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

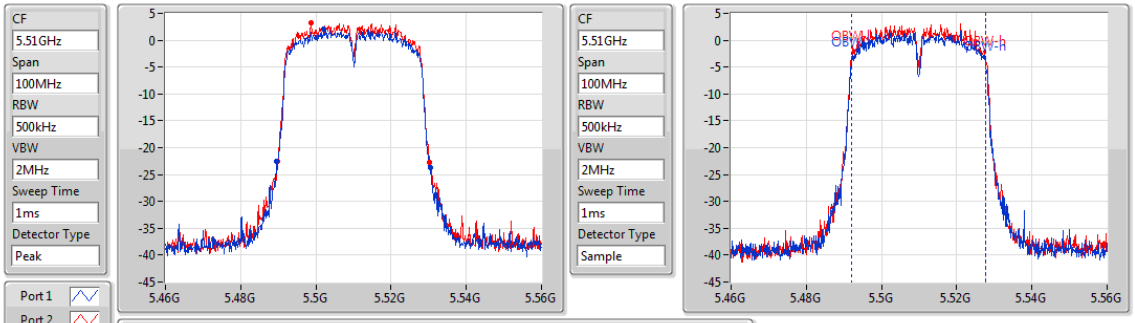
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.289855G	5.330435G	35.745M	5.292055G	5.3278G	Inf	1
40.58M	5.28971G	5.33029G	35.745M	5.292055G	5.3278G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

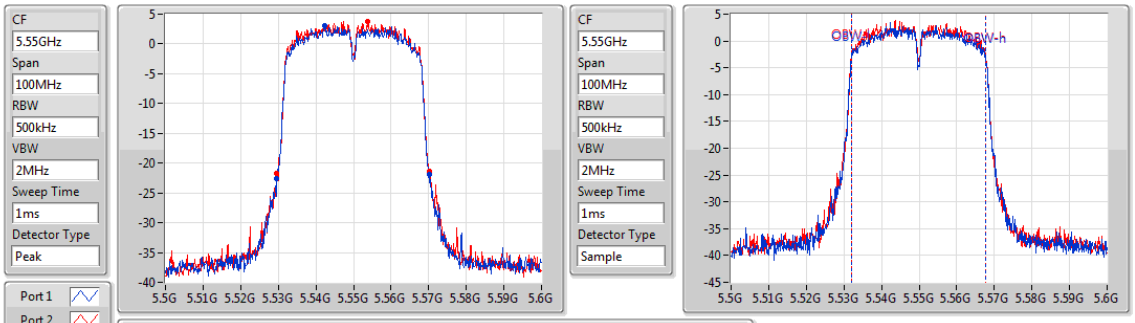
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.87M	5.489565G	5.530435G	35.745M	5.492055G	5.5278G	Inf	1
40.58M	5.48971G	5.53029G	35.745M	5.492055G	5.5278G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

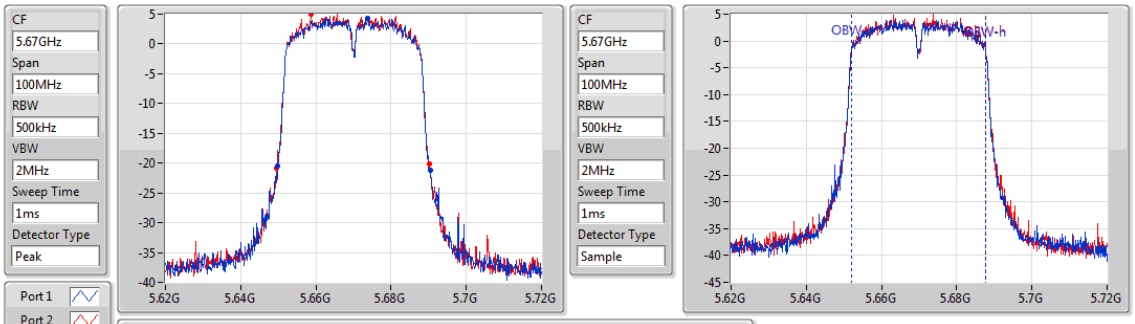
5550MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.725M	5.529565G	5.57029G	35.745M	5.532055G	5.5678G	Inf	1
40.725M	5.529565G	5.57029G	35.745M	5.532055G	5.5678G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX **EBW**

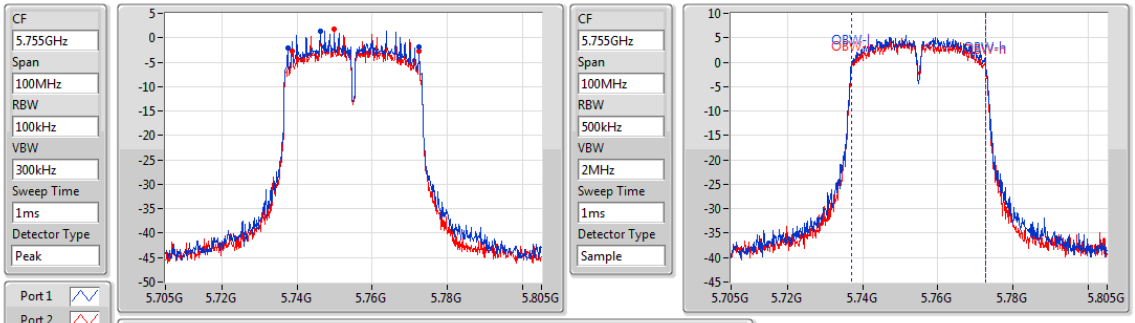
5670MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.649855G	5.690435G	35.745M	5.652055G	5.6878G	Inf	1
40.58M	5.649565G	5.690145G	35.745M	5.652055G	5.6878G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX **EBW**

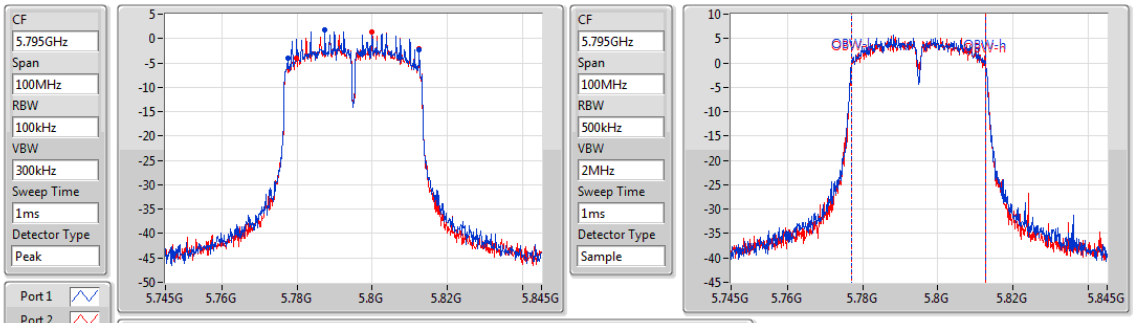
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.072M	5.737464G	5.772536G	35.745M	5.737055G	5.7728G	500k	1
33.913M	5.738623G	5.772536G	35.745M	5.737055G	5.7728G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX **EBW**

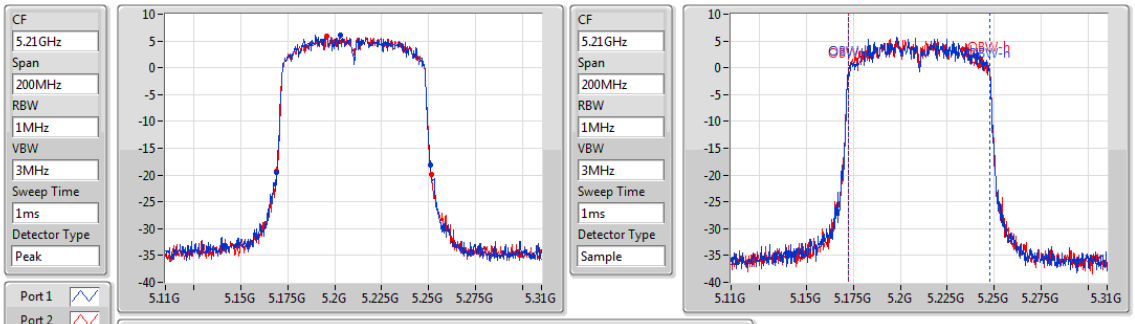
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.072M	5.777464G	5.812536G	35.745M	5.777055G	5.8128G	500k	1
32.754M	5.779783G	5.812536G	35.745M	5.777055G	5.8128G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

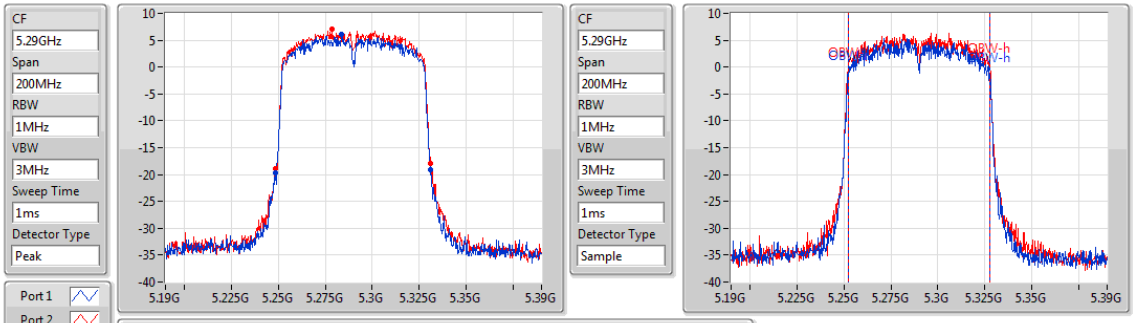
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.029M	5.16913G	5.251159G	74.964M	5.172373G	5.247337G	Inf	1
82.319M	5.16913G	5.251449G	74.964M	5.172373G	5.247337G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

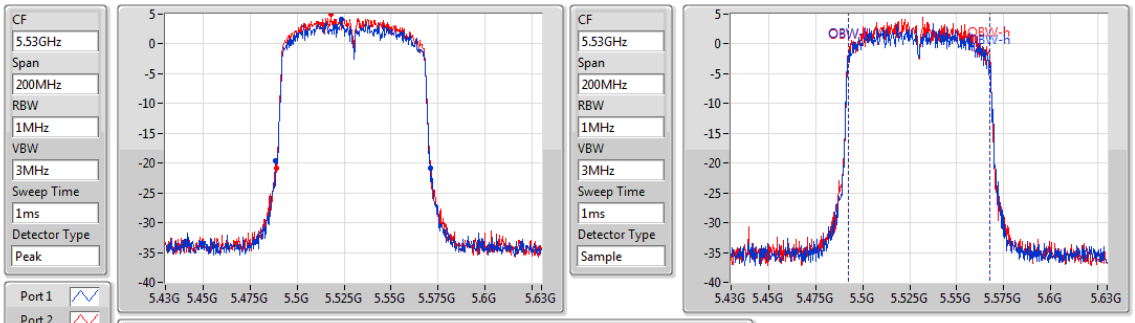
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.609M	5.248551G	5.331159G	74.964M	5.252373G	5.327337G	Inf	1
82.899M	5.248261G	5.331159G	74.964M	5.252373G	5.327337G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

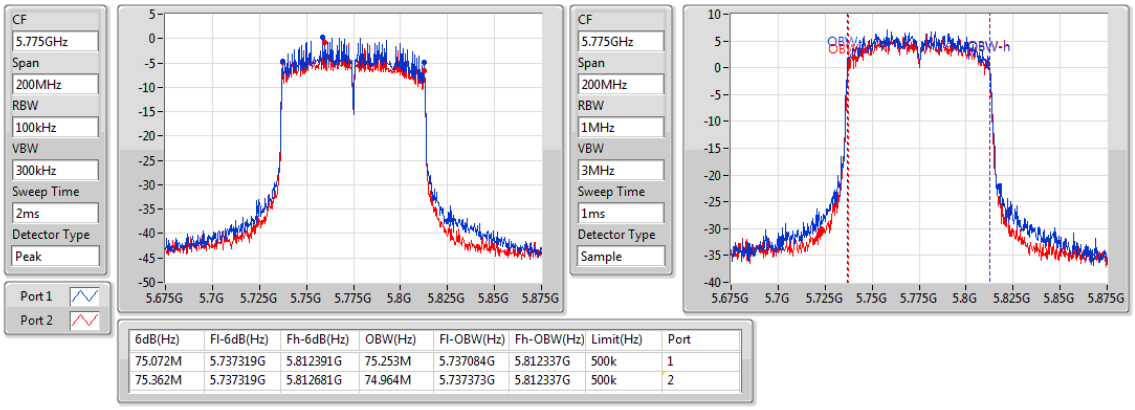
5530MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.319M	5.488551G	5.57087G	75.253M	5.492373G	5.567627G	Inf	1
82.029M	5.48913G	5.571159G	74.964M	5.492373G	5.567337G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX **EBW**

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.072M	5.737319G	5.812391G	75.253M	5.737084G	5.812337G	500k	1
75.362M	5.737319G	5.812681G	74.964M	5.737373G	5.812337G	500k	2

3.2 RF Output Power

3.2.1 Limit of RF Output Power

Frequency band 5150-5250 MHz		
Operating Mode		**Limit**
☐	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)
☐	Indoor access point	Conducted Power: 1 W
☐	Fixed point-to-point access points	Conducted Power: 1 W
☒	Client devices	Conducted Power: 250 mW

Frequency Band (MHz)		**Limit**
☒	5250 ~ 5350	Conducted Power: 250mW or 11dBm+10 log B
☒	5470 ~ 5725	Conducted Power: 250mW or 11dBm+10 log B
☒	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 Result of Maximum Conducted Output Power

Ambient Condition	22°C / 68%	Tested By	Aska Huang

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	17.78	0.05998	22.44	0.17539
802.11ac VHT20_Nss1,(MCS0)_2TX	17.77	0.05984	22.43	0.17498
802.11ac VHT40_Nss1,(MCS0)_2TX	17.20	0.05248	21.86	0.15346
802.11ac VHT80_Nss1,(MCS0)_2TX	17.66	0.05834	22.32	0.17061
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	18.07	0.06412	22.73	0.18750
802.11ac VHT20_Nss1,(MCS0)_2TX	18.28	0.06730	22.94	0.19679
802.11ac VHT40_Nss1,(MCS0)_2TX	17.92	0.06194	22.58	0.18113
802.11ac VHT80_Nss1,(MCS0)_2TX	17.63	0.05794	22.29	0.16943
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	18.24	0.06668	22.90	0.19498
802.11ac VHT20_Nss1,(MCS0)_2TX	17.86	0.06109	22.52	0.17865
802.11ac VHT40_Nss1,(MCS0)_2TX	17.29	0.05358	21.95	0.15668
802.11ac VHT80_Nss1,(MCS0)_2TX	16.04	0.04018	20.70	0.11749
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	18.14	0.06516	22.80	0.19055
802.11ac VHT20_Nss1,(MCS0)_2TX	18.15	0.06531	22.81	0.19099
802.11ac VHT40_Nss1,(MCS0)_2TX	18.03	0.06353	22.69	0.18578
802.11ac VHT80_Nss1,(MCS0)_2TX	18.13	0.06501	22.79	0.19011

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	4.66	14.61	14.92	17.78	24.00	22.44	30.00
5200MHz	Pass	4.66	14.52	14.96	17.76	24.00	22.42	30.00
5240MHz	Pass	4.66	14.64	14.85	17.76	24.00	22.42	30.00
5260MHz	Pass	4.66	14.42	14.91	17.68	23.77	22.34	29.77
5300MHz	Pass	4.66	14.16	15.55	17.92	23.73	22.58	29.73
5320MHz	Pass	4.66	14.16	15.8	18.07	23.77	22.73	29.77
5500MHz	Pass	4.66	15.01	14.95	17.99	23.65	22.65	29.65
5580MHz	Pass	4.66	15.28	15.17	18.24	23.77	22.90	29.77
5700MHz	Pass	4.66	15.11	15.01	18.07	23.75	22.73	29.75
5745MHz	Pass	4.66	14.82	14.61	17.73	30.00	22.39	36.00
5785MHz	Pass	4.66	15.49	14.73	18.14	30.00	22.80	36.00
5825MHz	Pass	4.66	15.01	14.45	17.75	30.00	22.41	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.66	14.12	14.96	17.57	24.00	22.23	30.00
5200MHz	Pass	4.66	14.29	15.18	17.77	24.00	22.43	30.00
5240MHz	Pass	4.66	14.35	14.84	17.61	24.00	22.27	30.00
5260MHz	Pass	4.66	14.28	14.75	17.53	23.90	22.19	29.90
5300MHz	Pass	4.66	13.98	15.52	17.83	23.90	22.49	29.90
5320MHz	Pass	4.66	14.44	15.96	18.28	23.90	22.94	29.90
5500MHz	Pass	4.66	12.21	13.04	15.66	23.88	20.32	29.88
5580MHz	Pass	4.66	14.53	14.62	17.59	23.88	22.25	29.88
5700MHz	Pass	4.66	14.78	14.91	17.86	23.93	22.52	29.93
5745MHz	Pass	4.66	15.41	14.86	18.15	30.00	22.81	36.00
5785MHz	Pass	4.66	15.45	14.68	18.09	30.00	22.75	36.00
5825MHz	Pass	4.66	14.69	15.15	17.94	30.00	22.60	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.66	13.95	14.41	17.20	24.00	21.86	30.00
5230MHz	Pass	4.66	13.87	14.45	17.18	24.00	21.84	30.00
5270MHz	Pass	4.66	13.75	14.49	17.15	24.00	21.81	30.00
5310MHz	Pass	4.66	14.21	15.51	17.92	24.00	22.58	30.00
5510MHz	Pass	4.66	12.32	12.92	15.64	24.00	20.30	30.00
5550MHz	Pass	4.66	13.55	13.62	16.60	24.00	21.26	30.00
5670MHz	Pass	4.66	14.01	14.54	17.29	24.00	21.95	30.00
5755MHz	Pass	4.66	15.36	14.65	18.03	30.00	22.69	36.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5795MHz	Pass	4.66	15.16	14.82	18.00	30.00	22.66	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.66	14.68	14.61	17.66	24.00	22.32	30.00
5290MHz	Pass	4.66	15.14	14.03	17.63	24.00	22.29	30.00
5530MHz	Pass	4.66	12.76	13.28	16.04	24.00	20.70	30.00
5775MHz	Pass	4.66	15.51	14.69	18.13	30.00	22.79	36.00

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

3.3 Peak Power Spectral Density

3.3.1 Limit of Peak Power Spectral Density

Frequency band 5150-5250 MHz		
Operating Mode		**Limit**
☐	Outdoor access point	17 dBm / MHz
☐	Indoor access point	17 dBm / MHz
☐	Fixed point-to-point access points	17 dBm / MHz
☒	Client devices	11 dBm / MHz

Frequency Band (MHz)		**Limit**
☒	5250 ~ 5350	11 dBm / MHz
☒	5470 ~ 5725	11 dBm / MHz
☒	5725 ~ 5850	30 dBm /500 kHz

3.3.2 Test Procedures

For 5150 ~ 5250 MHz / 5250 ~ 5350 MHz / 5470 ~ 5725 MHz

Duty cycle ≥ 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 ≥ 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

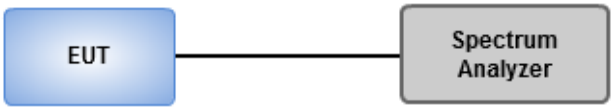
Duty cycle ≥ 98 %

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 ≥ 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 Result of Peak Power Spectral Density

Ambient Condition	22°C / 68%	Tested By	Aska Huang

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	5.51	13.18
802.11ac VHT20_Nss1,(MCS0)_2TX	5.63	13.30
802.11ac VHT40_Nss1,(MCS0)_2TX	1.83	9.50
802.11ac VHT80_Nss1,(MCS0)_2TX	-1.26	6.41
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	6.27	13.94
802.11ac VHT20_Nss1,(MCS0)_2TX	6.14	13.81
802.11ac VHT40_Nss1,(MCS0)_2TX	2.67	10.34
802.11ac VHT80_Nss1,(MCS0)_2TX	-1	6.67
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	6.22	13.89
802.11ac VHT20_Nss1,(MCS0)_2TX	5.49	13.16
802.11ac VHT40_Nss1,(MCS0)_2TX	1.55	9.22
802.11ac VHT80_Nss1,(MCS0)_2TX	-2.99	4.68
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	4.35	12.02
802.11ac VHT20_Nss1,(MCS0)_2TX	4.36	12.03
802.11ac VHT40_Nss1,(MCS0)_2TX	1.03	8.70
802.11ac VHT80_Nss1,(MCS0)_2TX	-1.53	6.14

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

Result

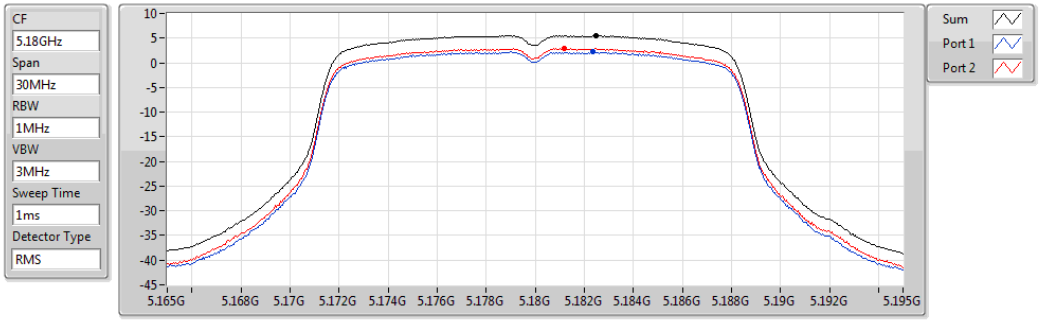
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.67	2.23	2.93	5.51	9.33	13.18	17.00
5200MHz	Pass	7.67	2.25	2.78	5.51	9.33	13.18	17.00
5240MHz	Pass	7.67	2.18	2.2	5.13	9.33	12.80	17.00
5260MHz	Pass	7.67	1.95	2.63	5.24	9.33	12.91	17.00
5300MHz	Pass	7.67	2.01	3.78	5.97	9.33	13.64	17.00
5320MHz	Pass	7.67	2.34	4.08	6.27	9.33	13.94	17.00
5500MHz	Pass	7.67	2.97	3.44	6.14	9.33	13.81	17.00
5580MHz	Pass	7.67	3.26	3.31	6.22	9.33	13.89	17.00
5700MHz	Pass	7.67	3.46	3.01	6.18	9.33	13.85	17.00
5745MHz	Pass	7.67	1.64	0.93	4.23	28.33	11.90	36.00
5785MHz	Pass	7.67	1.85	0.85	4.35	28.33	12.02	36.00
5825MHz	Pass	7.67	1.24	0.84	3.95	28.33	11.62	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.67	2.01	2.74	5.28	9.33	12.95	17.00
5200MHz	Pass	7.67	2.55	2.69	5.63	9.33	13.30	17.00
5240MHz	Pass	7.67	1.71	2.56	5.08	9.33	12.75	17.00
5260MHz	Pass	7.67	2.23	2.41	5.27	9.33	12.94	17.00
5300MHz	Pass	7.67	2.13	3.42	5.81	9.33	13.48	17.00
5320MHz	Pass	7.67	2.42	3.95	6.14	9.33	13.81	17.00
5500MHz	Pass	7.67	-0.1	0.66	3.31	9.33	10.98	17.00
5580MHz	Pass	7.67	2.53	2.55	5.49	9.33	13.16	17.00
5700MHz	Pass	7.67	2.52	2.32	5.30	9.33	12.97	17.00
5745MHz	Pass	7.67	1.76	1.09	4.35	28.33	12.02	36.00
5785MHz	Pass	7.67	1.85	0.95	4.36	28.33	12.03	36.00
5825MHz	Pass	7.67	1.33	0.99	4.02	28.33	11.69	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	7.67	-1.59	-0.74	1.83	9.33	9.50	17.00
5230MHz	Pass	7.67	-1.87	-0.87	1.61	9.33	9.28	17.00
5270MHz	Pass	7.67	-1.41	-0.95	1.80	9.33	9.47	17.00
5310MHz	Pass	7.67	-1.25	0.52	2.67	9.33	10.34	17.00
5510MHz	Pass	7.67	-3.78	-2.88	-0.38	9.33	7.29	17.00
5550MHz	Pass	7.67	-2.73	-2.24	0.41	9.33	8.08	17.00
5670MHz	Pass	7.67	-1.55	-1.24	1.55	9.33	9.22	17.00
5755MHz	Pass	7.67	-1.83	-2.29	0.83	28.33	8.50	36.00

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)
5795MHz	Pass	7.67	-1.43	-2.11	1.03	28.33	8.70	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	7.67	-4.21	-4.13	-1.26	9.33	6.41	17.00
5290MHz	Pass	7.67	-4.39	-3.53	-1.00	9.33	6.67	17.00
5530MHz	Pass	7.67	-6.41	-5.63	-2.99	9.33	4.68	17.00
5775MHz	Pass	7.67	-4	-5.15	-1.53	28.33	6.14	36.00

DG = Directional Gain;
For 5150 ~ 5850MHz
Directional Gain = 4.66 + 10*log(2/1) = 7.67 dBi > 6 dBi ,
For 5150 ~ 5725 MHz
Limit shall be reduced to 11 dBm – (7.67 dBi – 6 dBi) = 9.33 dBm
For 5725 ~ 5550 MHz
Limit shall be reduced to 30 dBm – (7.67 dBi – 6 dBi) = 28.33 dBm
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;

802.11a_Nss1,(6Mbps)_2TX **PSD**

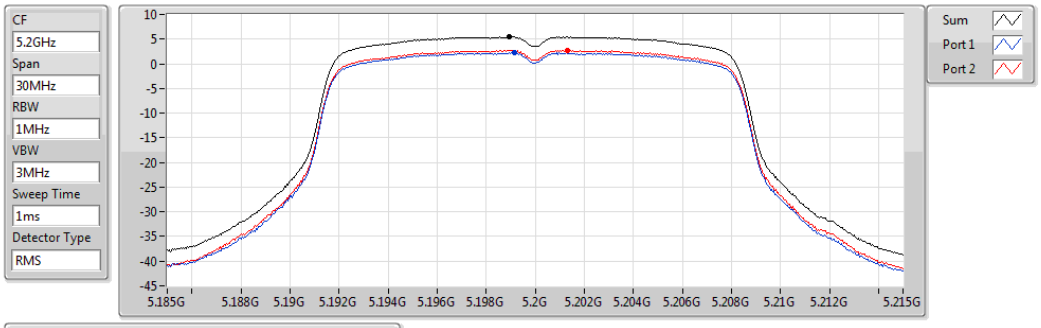
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.51	5.51	2.23	2.93

802.11a_Nss1,(6Mbps)_2TX **PSD**

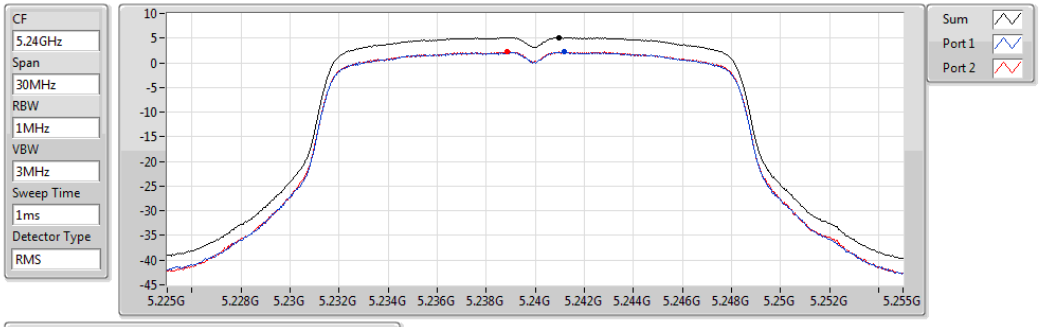
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.51	5.51	2.25	2.78

802.11a_Nss1,(6Mbps)_2TX **PSD**

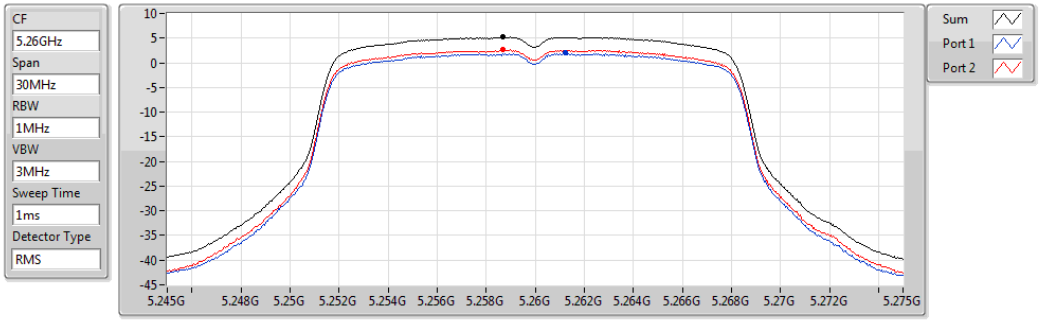
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.13	5.13	2.18	2.20

802.11a_Nss1,(6Mbps)_2TX **PSD**

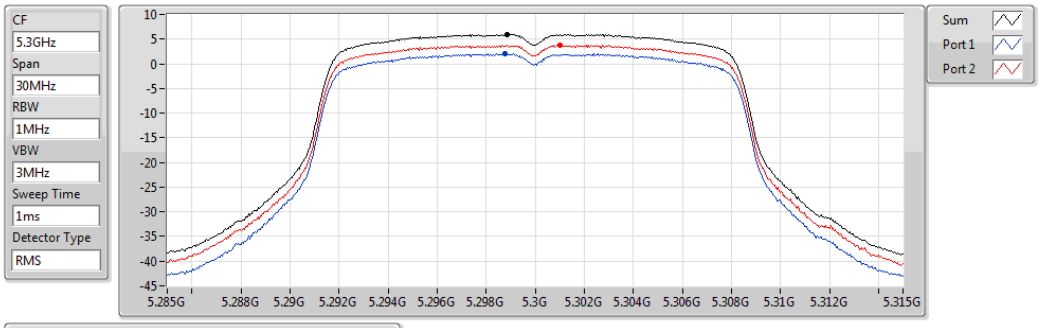
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.24	5.24	1.95	2.63

802.11a_Nss1,(6Mbps)_2TX **PSD**

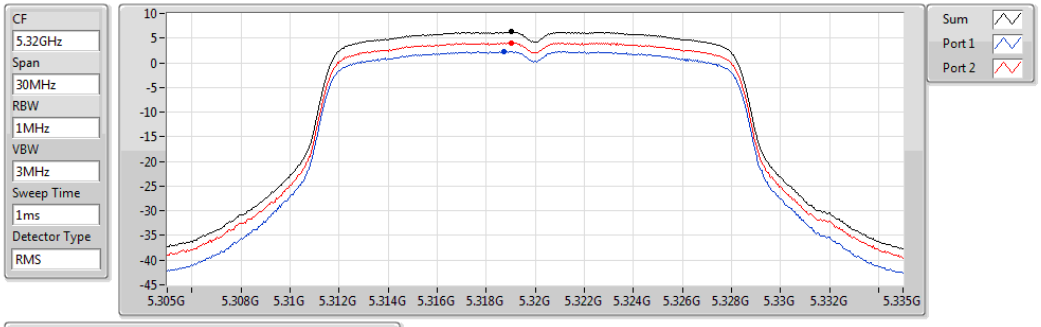
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.97	5.97	2.01	3.78

802.11a_Nss1,(6Mbps)_2TX **PSD**

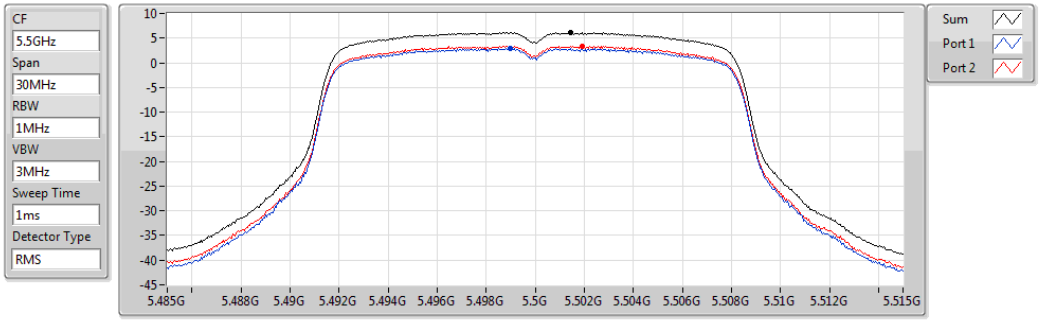
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.27	6.27	2.34	4.08

802.11a_Nss1,(6Mbps)_2TX **PSD**

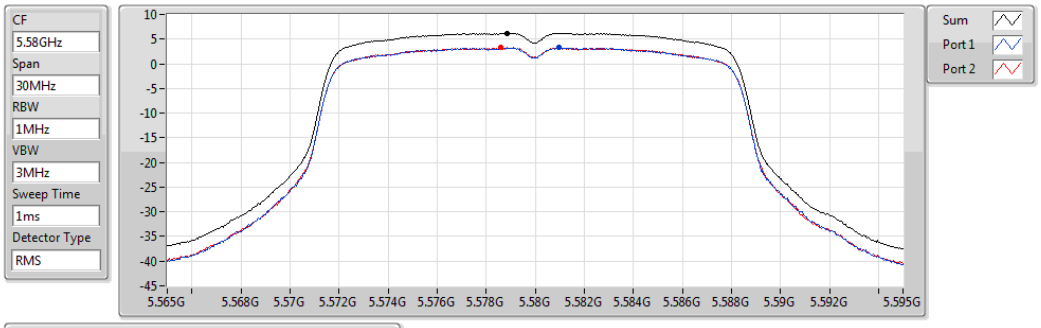
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.14	6.14	2.97	3.44

802.11a_Nss1,(6Mbps)_2TX **PSD**

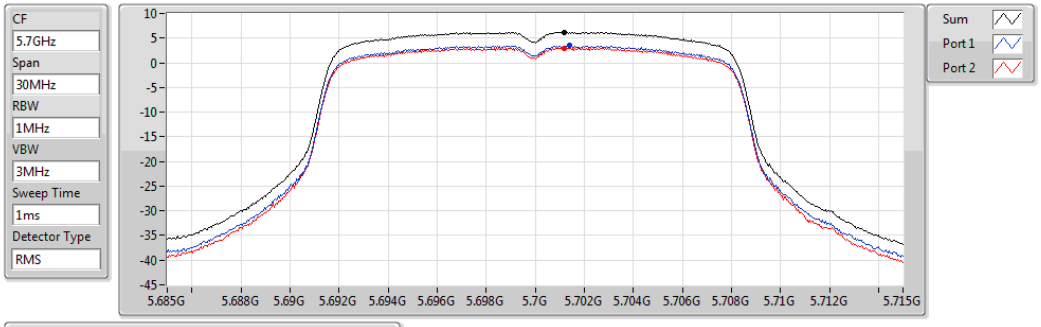
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.22	6.22	3.26	3.31

802.11a_Nss1,(6Mbps)_2TX **PSD**

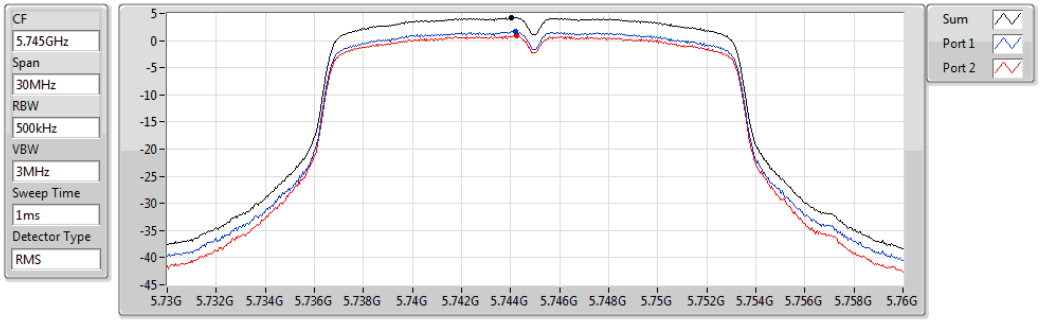
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.18	6.18	3.46	3.01

802.11a_Nss1,(6Mbps)_2TX **PSD**

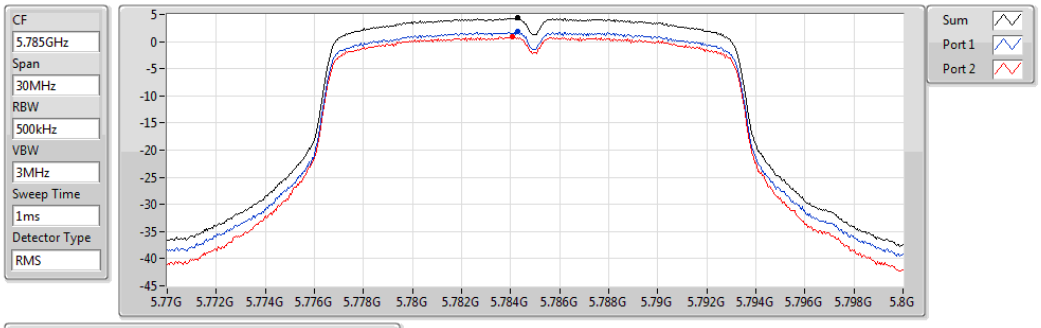
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.23	4.23	1.64	0.93

802.11a_Nss1,(6Mbps)_2TX **PSD**

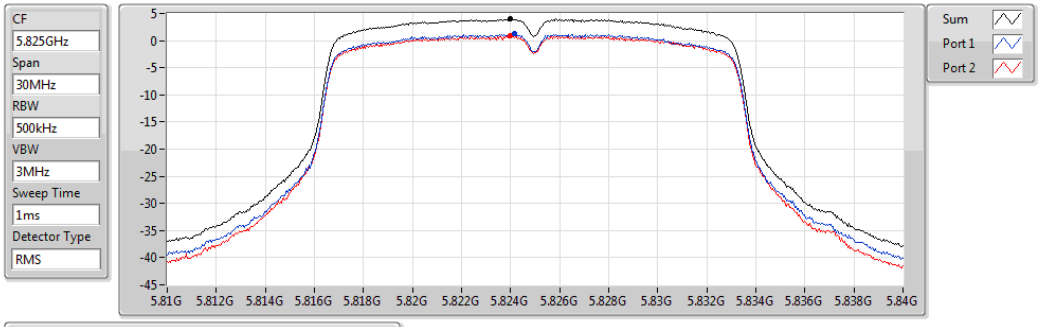
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.35	4.35	1.85	0.85

802.11a_Nss1,(6Mbps)_2TX **PSD**

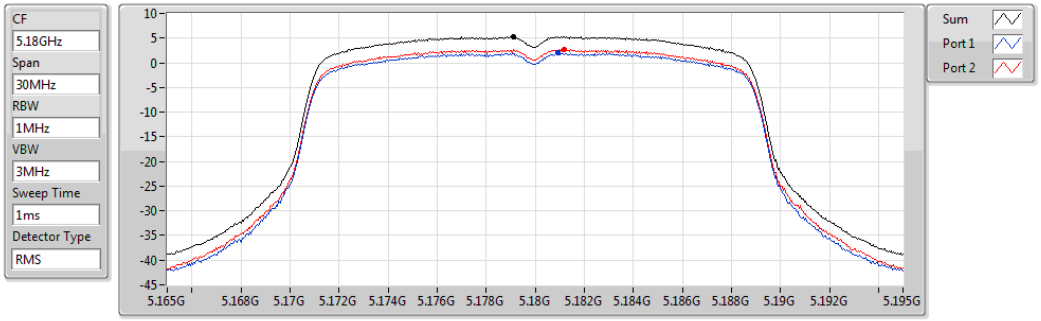
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.95	3.95	1.24	0.84

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

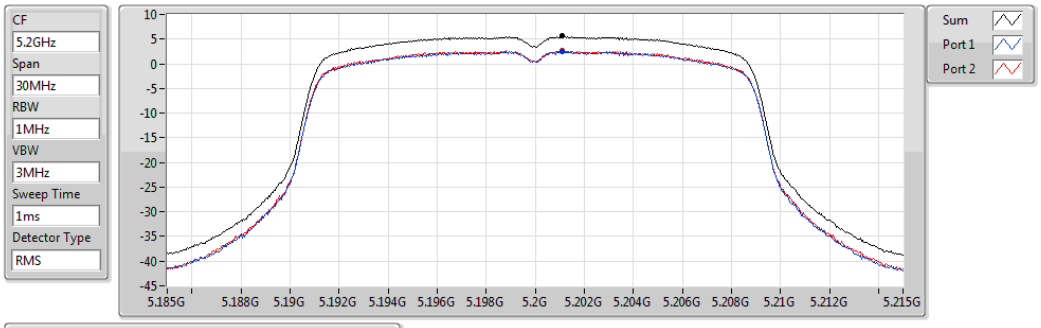
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.28	5.28	2.01	2.74

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

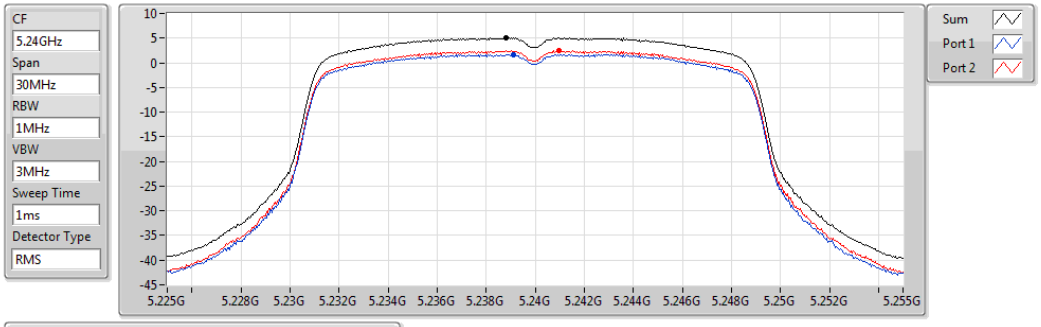
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.63	5.63	2.55	2.69

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

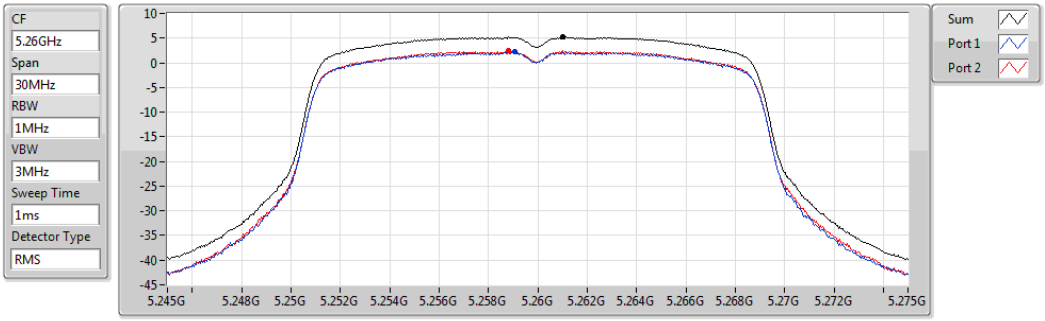
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.08	5.08	1.71	2.56

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

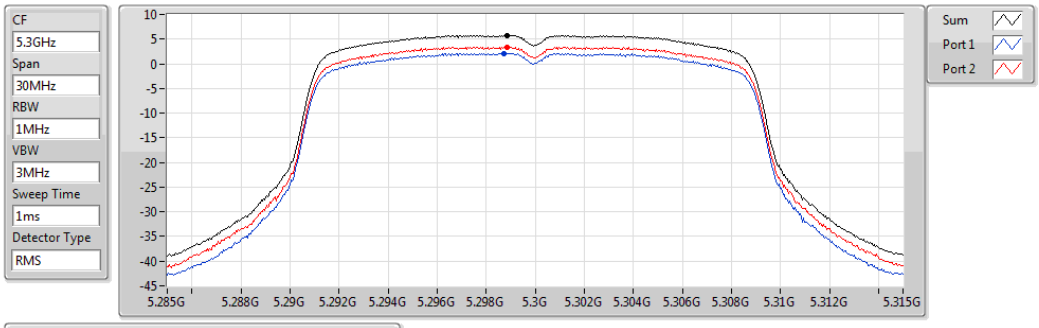
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.27	5.27	2.23	2.41

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

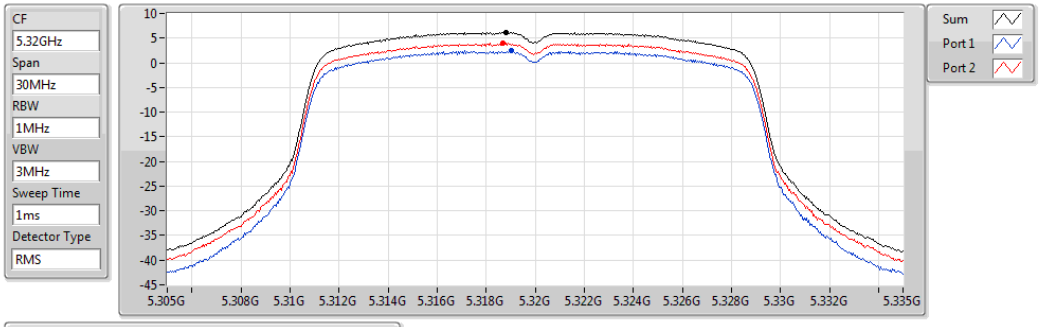
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.81	5.81	2.13	3.42

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

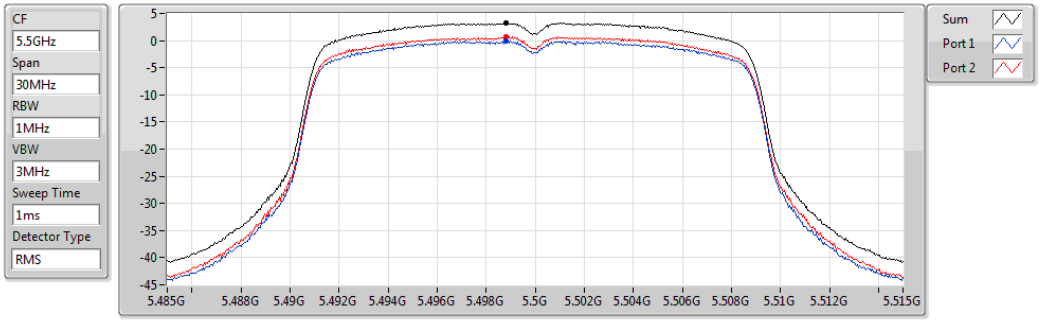
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.14	6.14	2.42	3.95

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

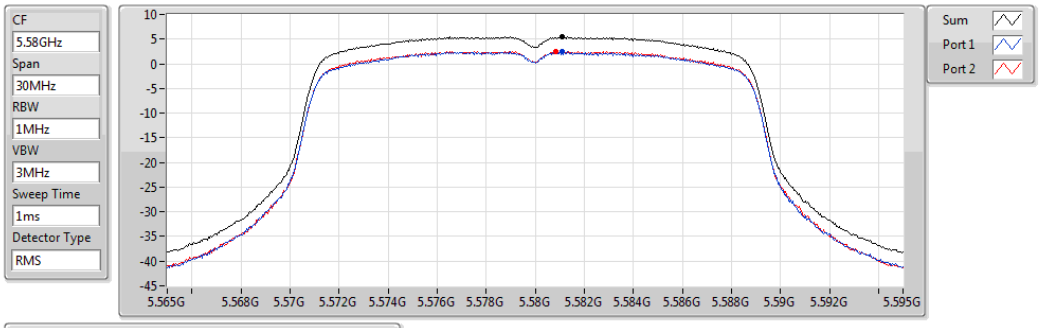
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.31	3.31	-0.10	0.66

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

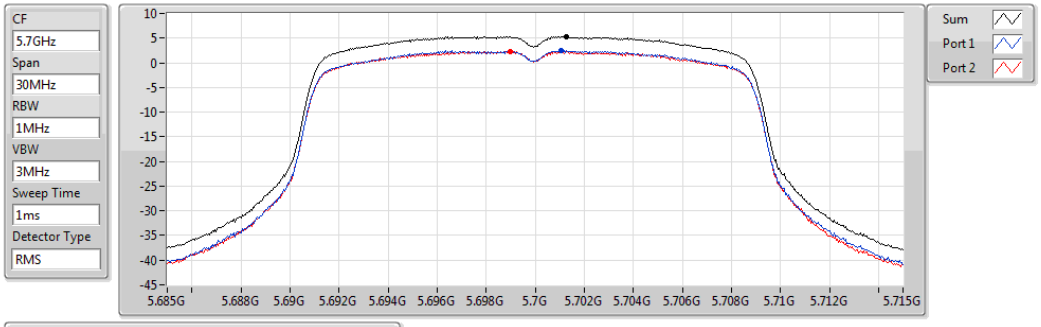
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.49	5.49	2.53	2.55

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

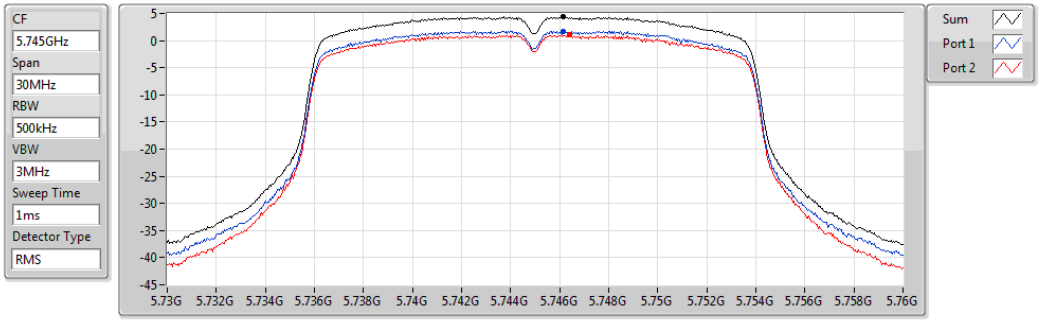
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.30	5.30	2.52	2.32

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

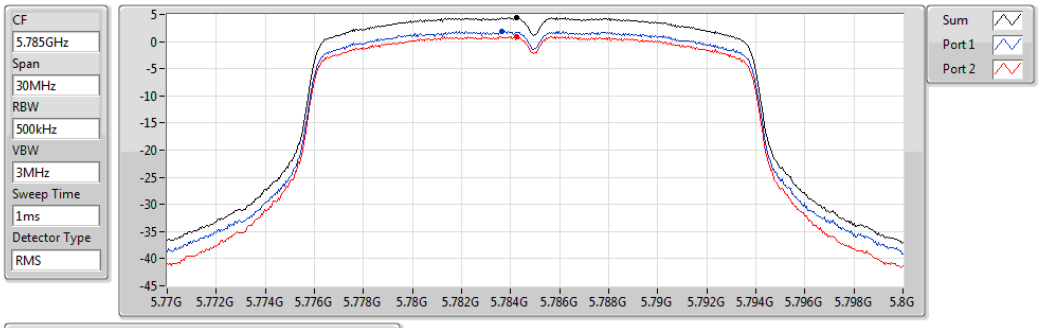
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.35	4.35	1.76	1.09

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

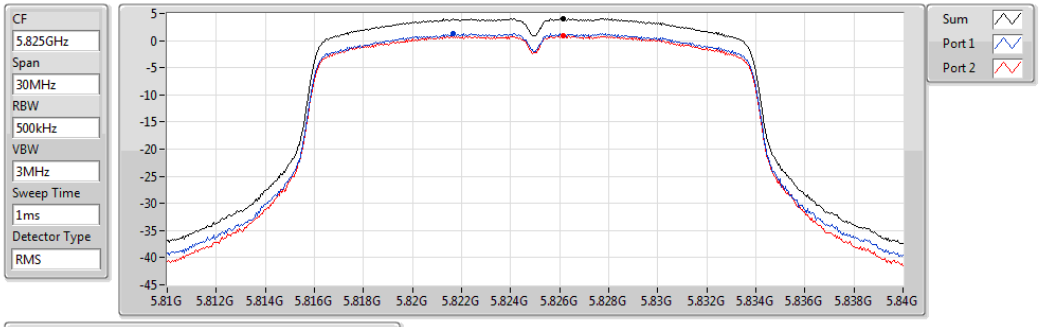
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.36	4.36	1.85	0.95

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

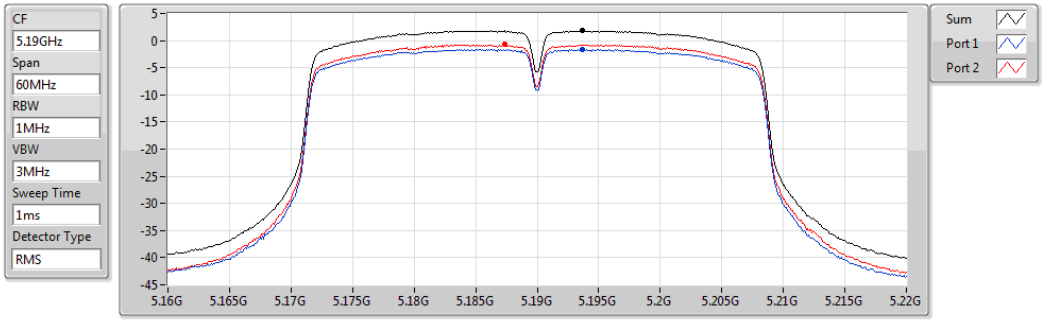
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.02	4.02	1.33	0.99

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

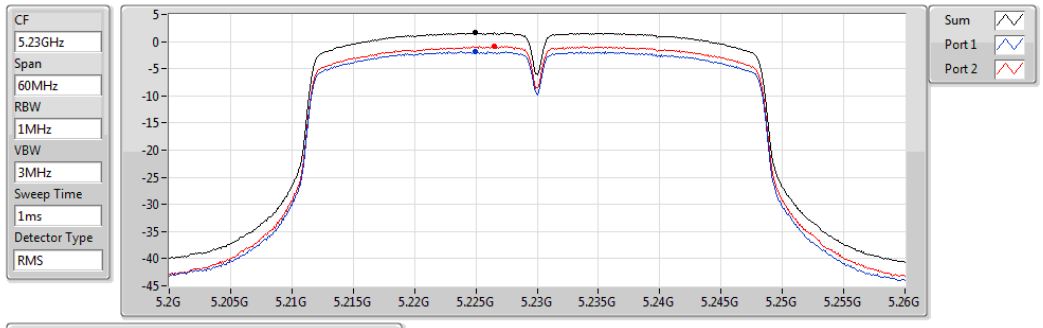
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.83	1.83	-1.59	-0.74

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

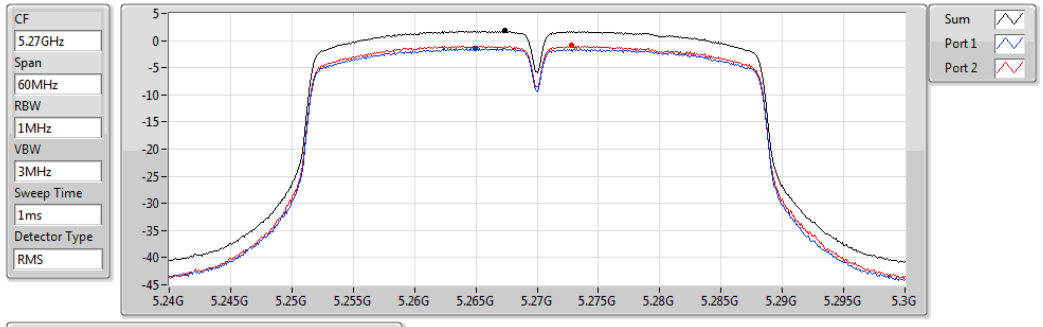
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.61	1.61	-1.87	-0.87

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

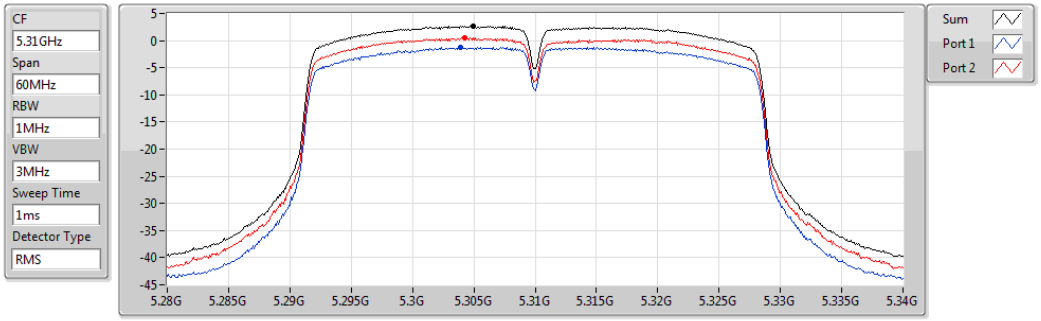
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.80	1.80	-1.41	-0.95

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

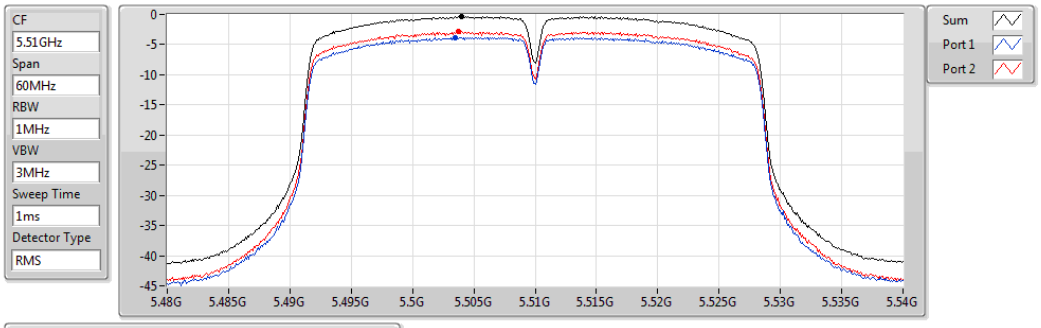
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.67	2.67	-1.25	0.52

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

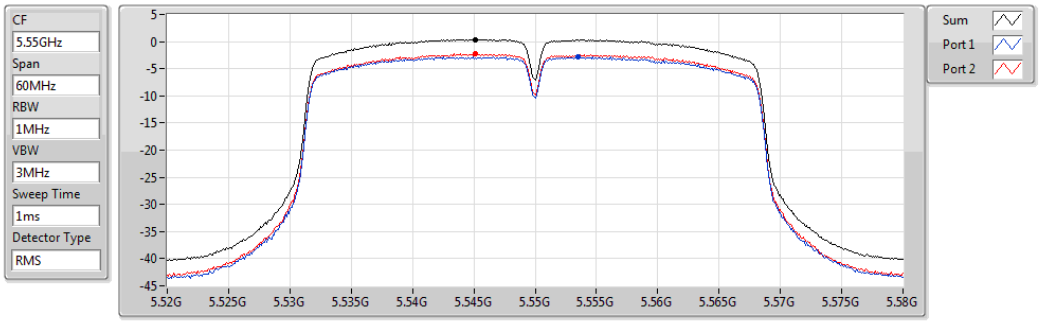
5510MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.38	-0.38	-3.78	-2.88

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

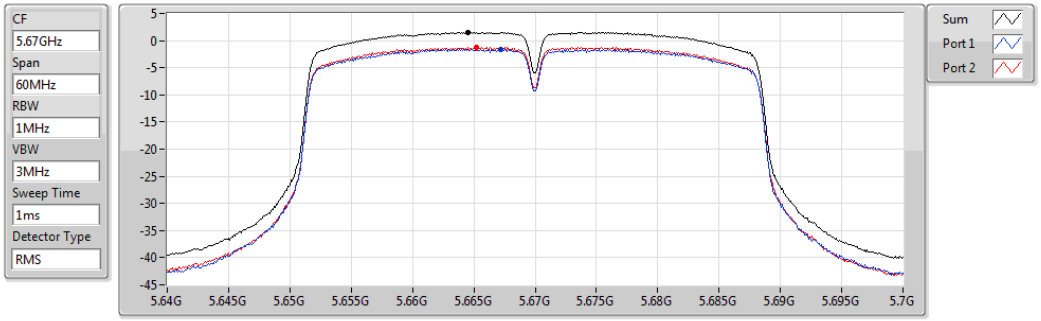
5550MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.41	0.41	-2.73	-2.24

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

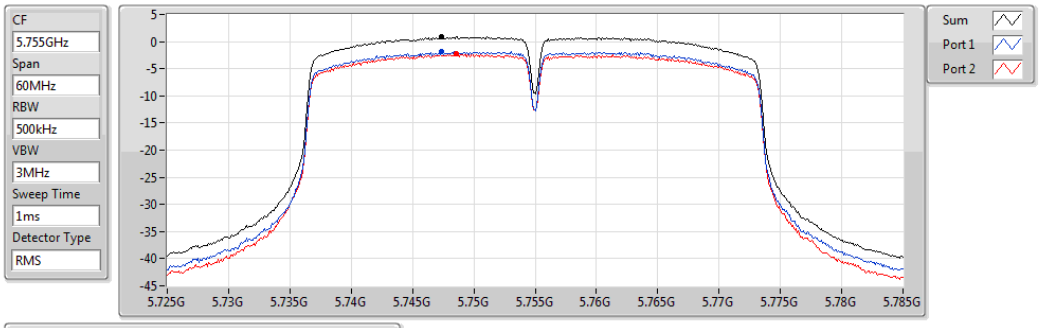
5670MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.55	1.55	-1.55	-1.24

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

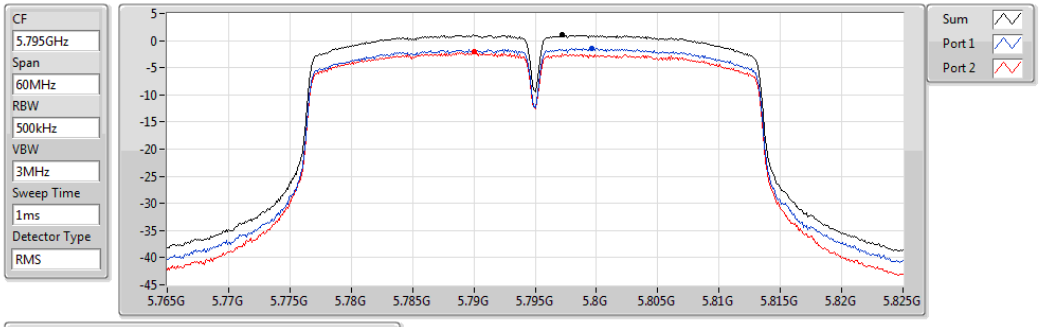
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.83	0.83	-1.83	-2.29

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

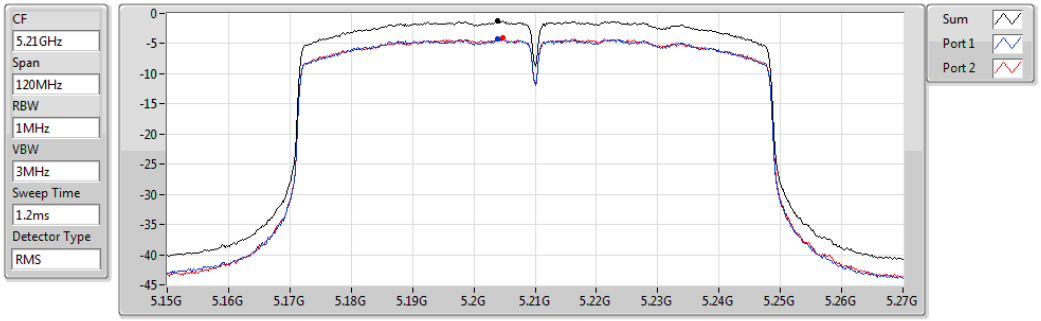
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.03	1.03	-1.43	-2.11

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

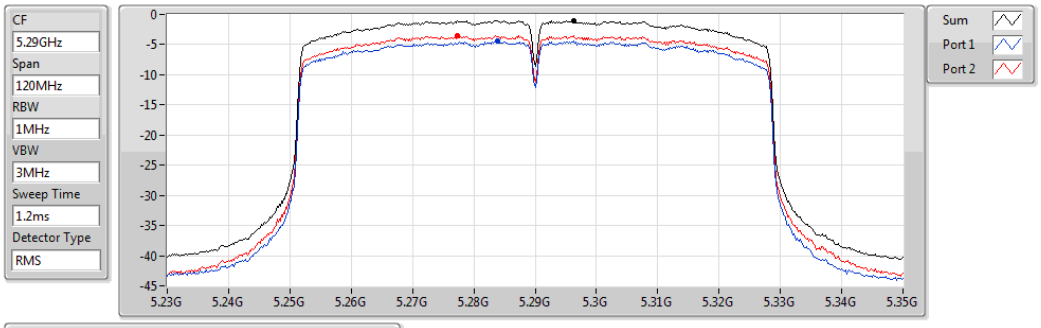
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.26	-1.26	-4.21	-4.13

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

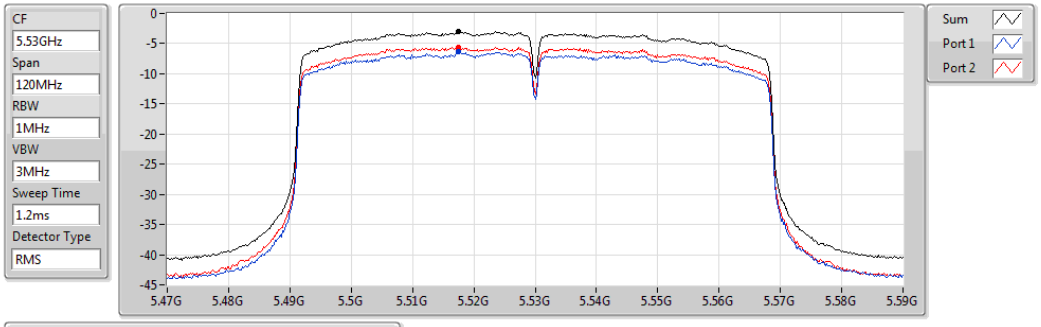
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.00	-1.00	-4.39	-3.53

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

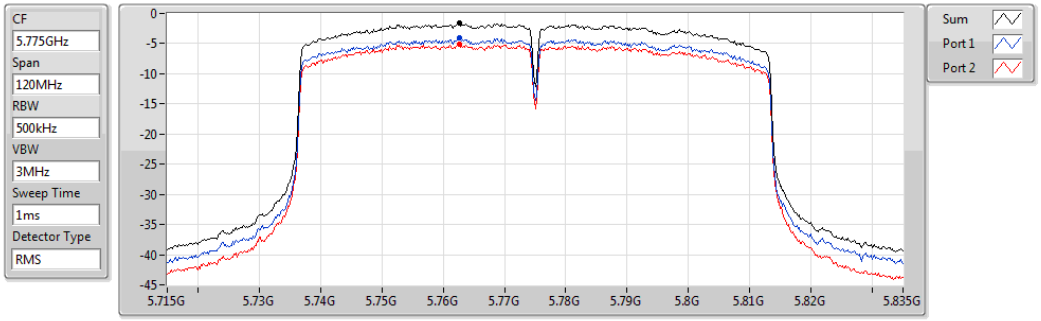
5530MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.99	-2.99	-6.41	-5.63

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.53	-1.53	-4.00	-5.15

3.4 Transmitter Radiated and Band Edge Emissions

3.4.1 Limit of Transmitter Radiated and Band Edge 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]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 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

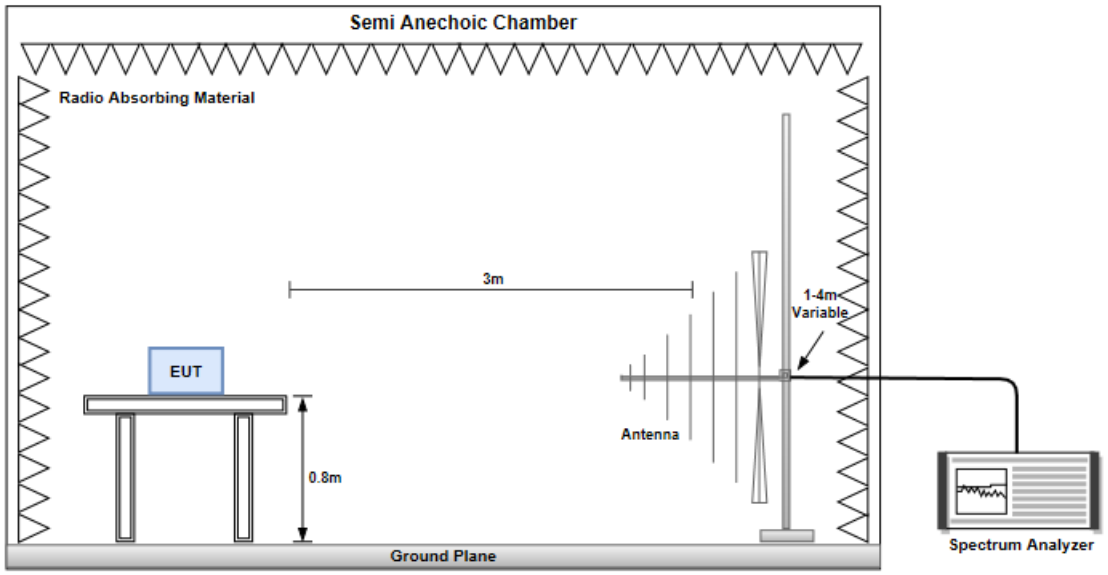
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission 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:

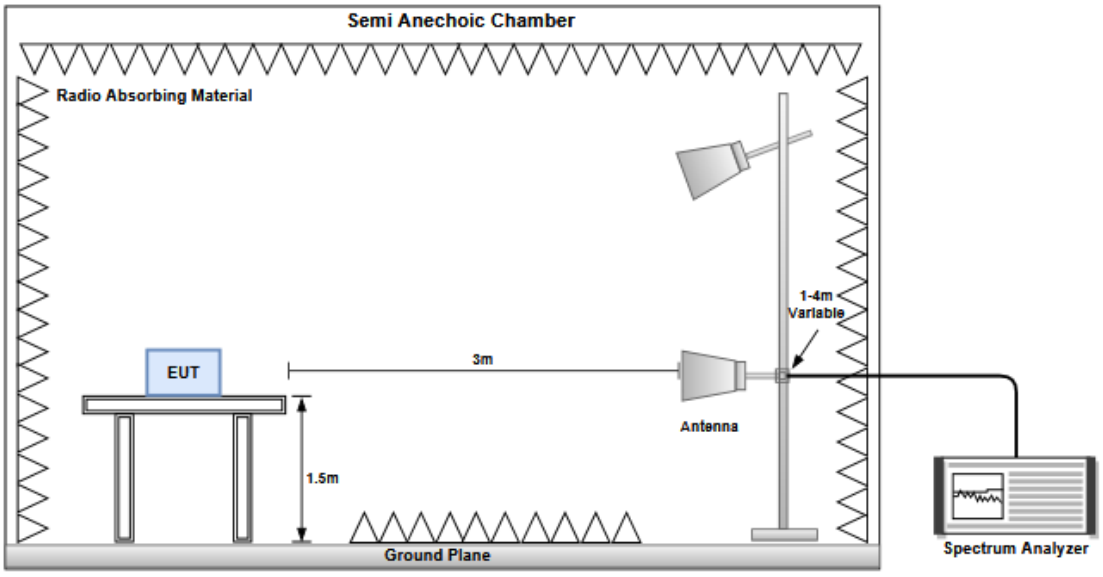
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.4.3 Test Setup

Radiated Emissions below 1 GHz



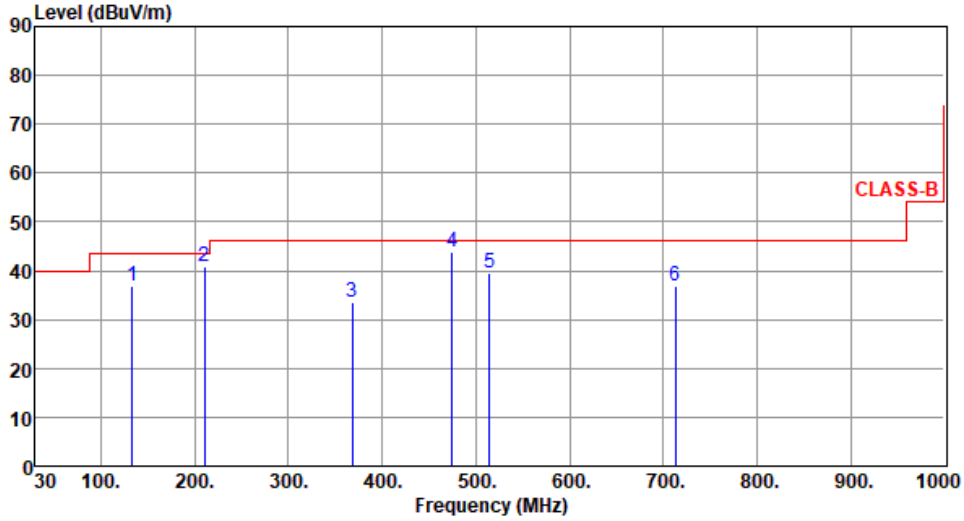
Radiated Emissions above 1 GHz



3.4.1 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):65

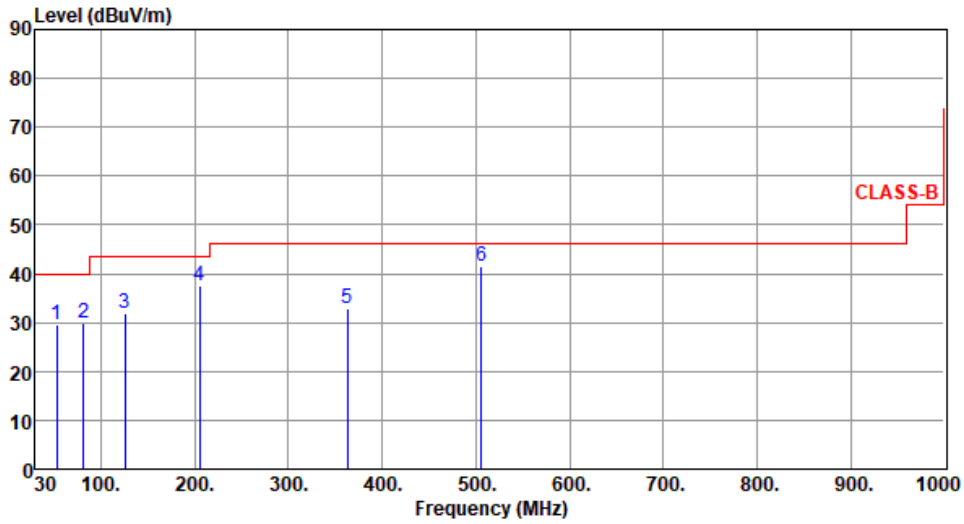


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	133.66	36.95	43.50	-6.55	46.44	-9.49	Peak	---	---
2	210.85	40.75	43.50	-2.75	52.45	-11.70	QP	103	257
3	367.95	33.66	46.00	-12.34	40.06	-6.40	Peak	---	---
4	474.95	43.72	46.00	-2.28	46.87	-3.15	QP	180	196
5	514.55	39.45	46.00	-6.55	41.75	-2.30	Peak	---	---
6	712.58	36.90	46.00	-9.10	35.25	1.65	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	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):65

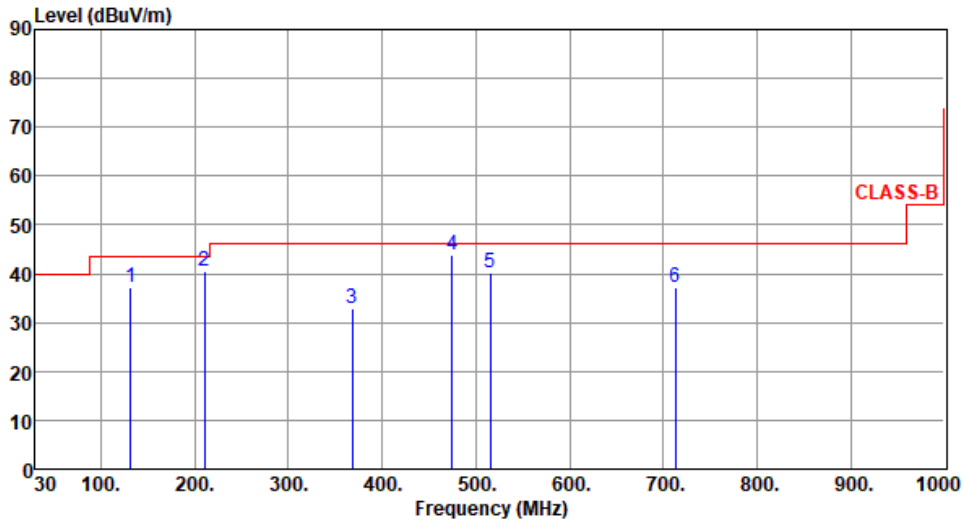


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	52.48	29.66	40.00	-10.34	38.87	-9.21	Peak	---	---
2	81.87	29.77	40.00	-10.23	43.50	-13.73	Peak	---	---
3	125.66	31.75	43.50	-11.75	42.05	-10.30	Peak	---	---
4	205.66	37.45	43.50	-6.05	49.15	-11.70	Peak	---	---
5	362.95	32.84	46.00	-13.16	39.43	-6.59	Peak	---	---
6	505.77	41.45	46.00	-4.55	43.95	-2.50	QP	101	323

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	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):65

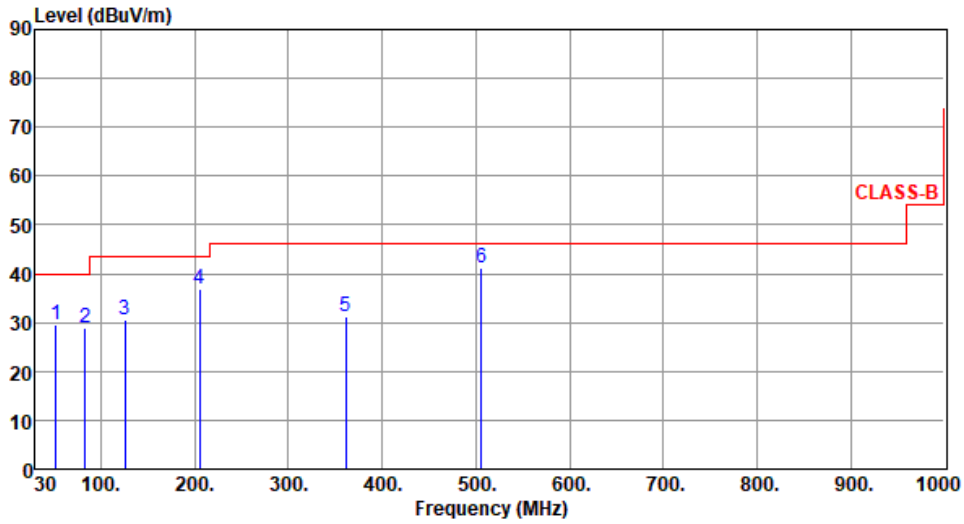


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	131.45	37.18	43.50	-6.32	46.85	-9.67	Peak	---	---
2	210.55	40.37	43.50	-3.13	52.06	-11.69	QP	100	255
3	367.77	32.85	46.00	-13.15	39.27	-6.42	Peak	---	---
4	474.55	43.72	46.00	-2.28	46.88	-3.16	QP	178	196
5	515.25	40.28	46.00	-5.72	42.56	-2.28	Peak	---	---
6	712.75	37.22	46.00	-8.78	35.57	1.65	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	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):65



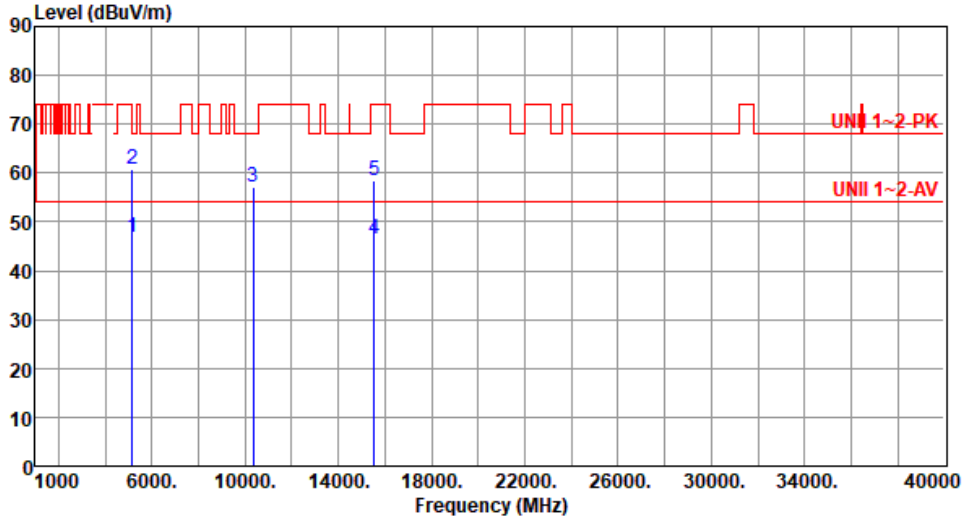
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	51.95	29.63	40.00	-10.37	38.70	-9.07	Peak	---	---
2	82.85	28.77	40.00	-11.23	42.69	-13.92	Peak	---	---
3	125.85	30.69	43.50	-12.81	40.95	-10.26	Peak	---	---
4	205.47	36.74	43.50	-6.76	48.44	-11.70	Peak	---	---
5	360.85	31.33	46.00	-14.67	37.96	-6.63	Peak	---	---
6	505.85	41.30	46.00	-4.70	43.80	-2.50	QP	101	323

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.

3.4.2 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11a

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

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

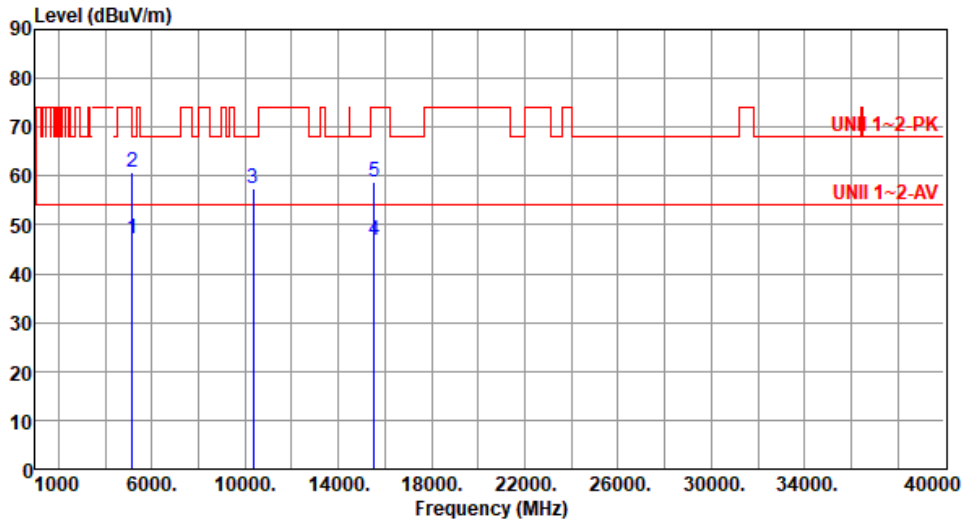


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.86	54.00	-7.14	40.55	6.31	Average	277	275
2	5150.00	60.61	74.00	-13.39	54.30	6.31	Peak	277	275
3	10360.00	57.29	68.20	-10.91	42.84	14.45	Peak	100	22
4	15540.00	46.63	54.00	-7.37	30.23	16.40	Average	100	25
5	15540.00	58.59	74.00	-15.41	42.19	16.40	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)	5180
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

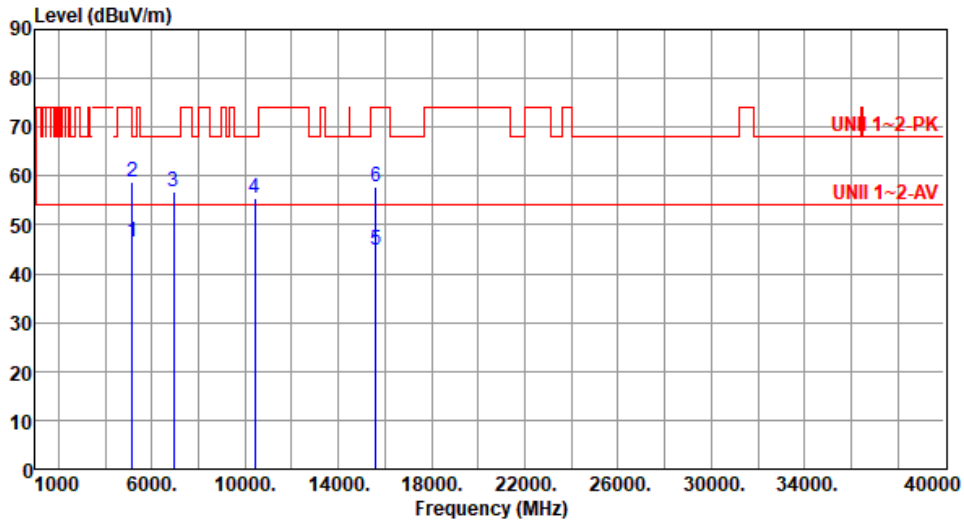


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.09	54.00	-6.91	40.78	6.31	Average	200	357
2	5150.00	60.86	74.00	-13.14	54.55	6.31	Peak	200	357
3	10360.00	57.58	68.20	-10.62	43.13	14.45	Peak	100	50
4	15540.00	46.93	54.00	-7.07	30.53	16.40	Average	100	59
5	15540.00	58.85	74.00	-15.15	42.45	16.40	Peak	100	59

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 :Roger Lu Temperature(℃):23 Humidity(%):66

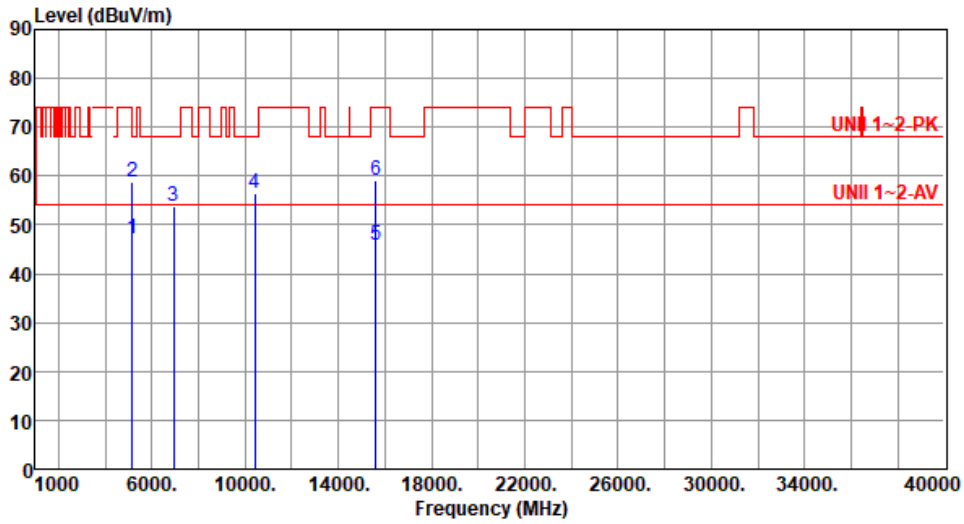


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.52	54.00	-7.48	40.21	6.31	Average	274	280
2	5150.00	58.64	74.00	-15.36	52.33	6.31	Peak	274	280
3	6933.33	56.76	68.20	-11.44	47.21	9.55	Peak	100	170
4	10400.00	55.32	68.20	-12.88	40.84	14.48	Peak	100	50
5	15600.00	44.99	54.00	-9.01	29.05	15.94	Average	100	30
6	15600.00	57.64	74.00	-16.36	41.70	15.94	Peak	100	30

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 :Roger Lu Temperature(℃):23 Humidity(%):66

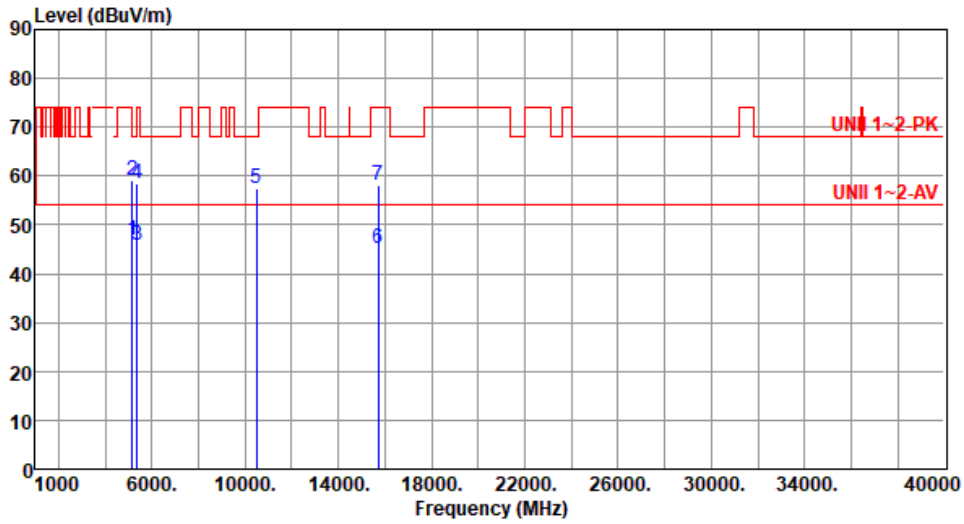


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.00	54.00	-7.00	40.69	6.31	Average	200	340
2	5150.00	58.81	74.00	-15.19	52.50	6.31	Peak	200	340
3	6933.33	53.83	68.20	-14.37	44.28	9.55	Peak	100	178
4	10400.00	56.54	68.20	-11.66	42.06	14.48	Peak	100	60
5	15600.00	45.89	54.00	-8.11	29.95	15.94	Average	100	20
6	15600.00	59.15	74.00	-14.85	43.21	15.94	Peak	100	20

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 :Akun Chung Temperature(℃):23 Humidity(%):66

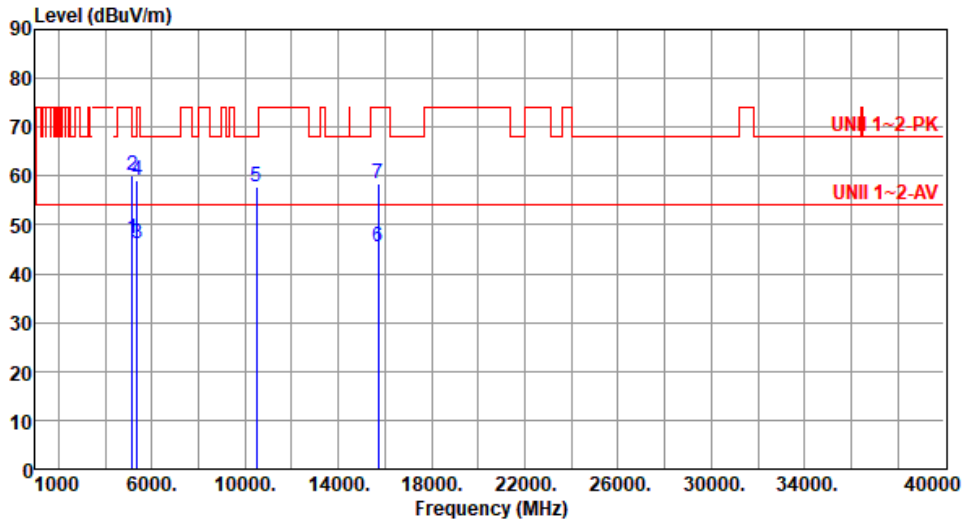


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.83	54.00	-7.17	40.52	6.31	Average	269	275
2	5150.00	59.16	74.00	-14.84	52.85	6.31	Peak	269	275
3	5350.00	45.98	54.00	-8.02	40.26	5.72	Average	269	275
4	5350.00	58.47	74.00	-15.53	52.75	5.72	Peak	269	275
5	10480.00	57.42	68.20	-10.78	42.79	14.63	Peak	100	21
6	15720.00	45.10	54.00	-8.90	29.15	15.95	Average	100	26
7	15720.00	58.15	74.00	-15.85	42.20	15.95	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	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

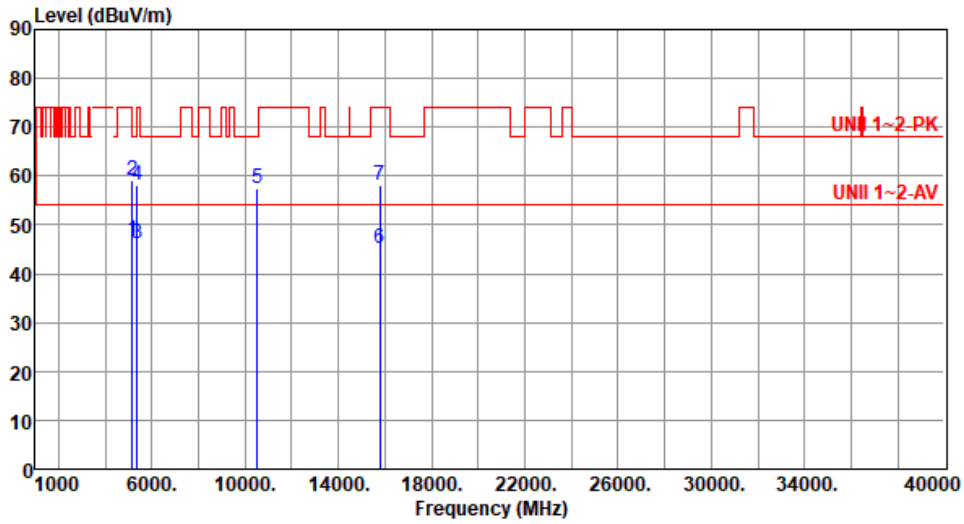


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.09	54.00	-6.91	40.78	6.31	Average	228	350
2	5150.00	60.18	74.00	-13.82	53.87	6.31	Peak	228	350
3	5350.00	46.20	54.00	-7.80	40.48	5.72	Average	228	350
4	5350.00	59.19	74.00	-14.81	53.47	5.72	Peak	228	350
5	10480.00	57.63	68.20	-10.57	43.00	14.63	Peak	100	59
6	15720.00	45.41	54.00	-8.59	29.46	15.95	Average	100	66
7	15720.00	58.43	74.00	-15.57	42.48	15.95	Peak	100	66

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)	5260
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

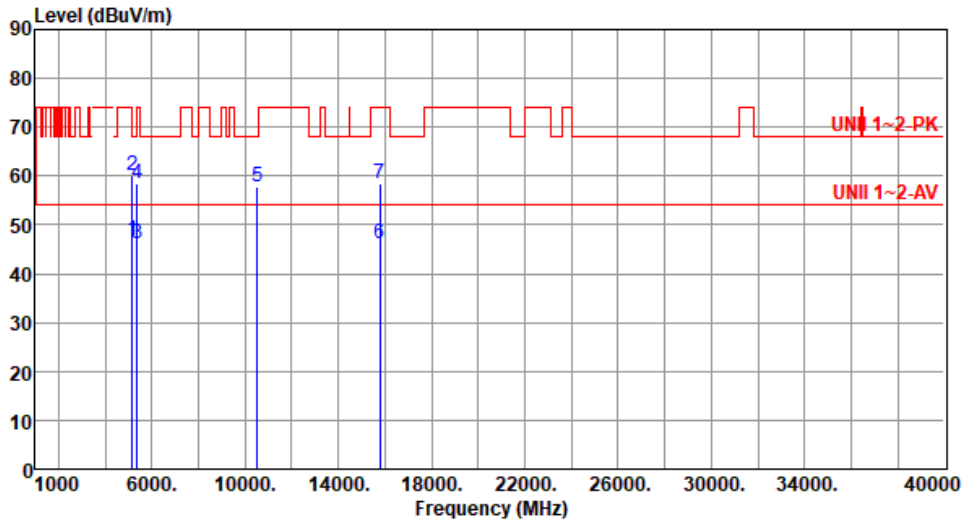


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.75	54.00	-7.25	40.44	6.31	Average	286	266
2	5150.00	59.18	74.00	-14.82	52.87	6.31	Peak	286	266
3	5350.00	46.16	54.00	-7.84	40.44	5.72	Average	227	286
4	5350.00	58.24	74.00	-15.76	52.52	5.72	Peak	286	266
5	10520.00	57.46	68.20	-10.74	42.79	14.67	Peak	100	28
6	15780.00	45.11	54.00	-8.89	29.25	15.86	Average	100	24
7	15780.00	58.05	74.00	-15.95	42.19	15.86	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)	5260
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

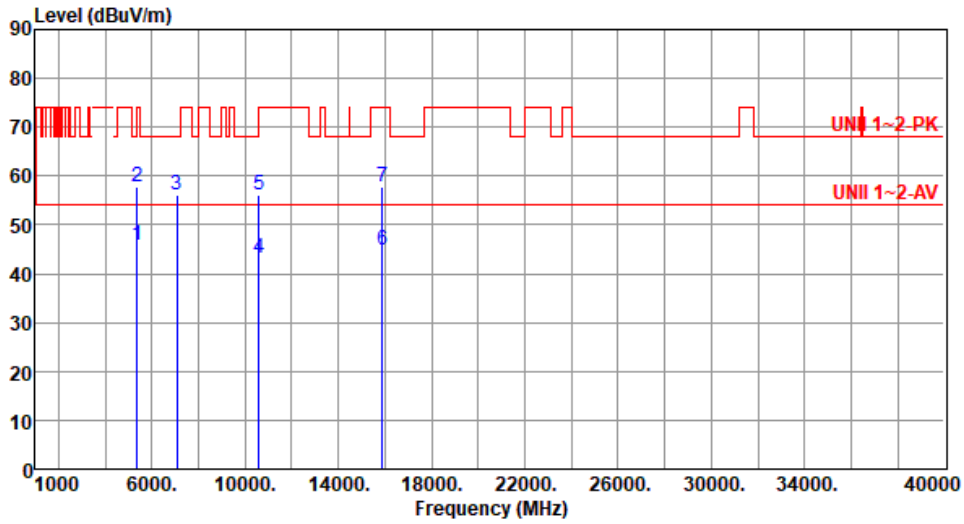


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.85	54.00	-7.15	40.54	6.31	Average	227	357
2	5150.00	59.99	74.00	-14.01	53.68	6.31	Peak	227	357
3	5350.00	46.24	54.00	-7.76	40.52	5.72	Average	227	357
4	5350.00	58.36	74.00	-15.64	52.64	5.72	Peak	227	357
5	10520.00	57.64	68.20	-10.56	42.97	14.67	Peak	100	54
6	15780.00	46.29	54.00	-7.71	30.43	15.86	Average	100	59
7	15780.00	58.34	74.00	-15.66	42.48	15.86	Peak	100	59

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)	5300
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):23 Humidity(%):66

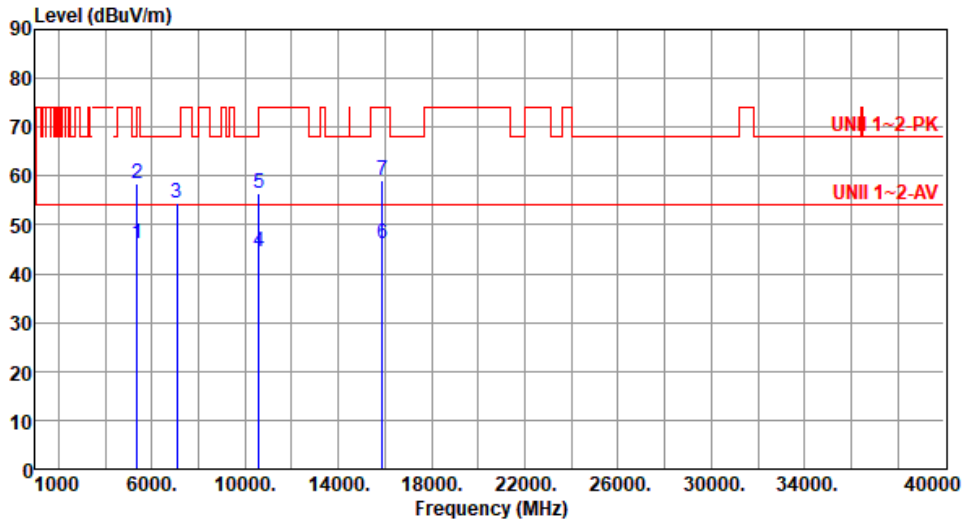


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	45.95	54.00	-8.05	40.23	5.72	Average	284	274
2	5350.00	57.87	74.00	-16.13	52.15	5.72	Peak	284	274
3	7066.66	56.26	68.20	-11.94	46.09	10.17	Peak	100	169
4	10600.00	43.28	54.00	-10.72	28.56	14.72	Average	100	40
5	10600.00	56.09	74.00	-17.91	41.37	14.72	Peak	100	40
6	15900.00	44.85	54.00	-9.15	29.28	15.57	Average	100	60
7	15900.00	57.92	74.00	-16.08	42.35	15.57	Peak	100	60

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)	5300
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):23 Humidity(%):66

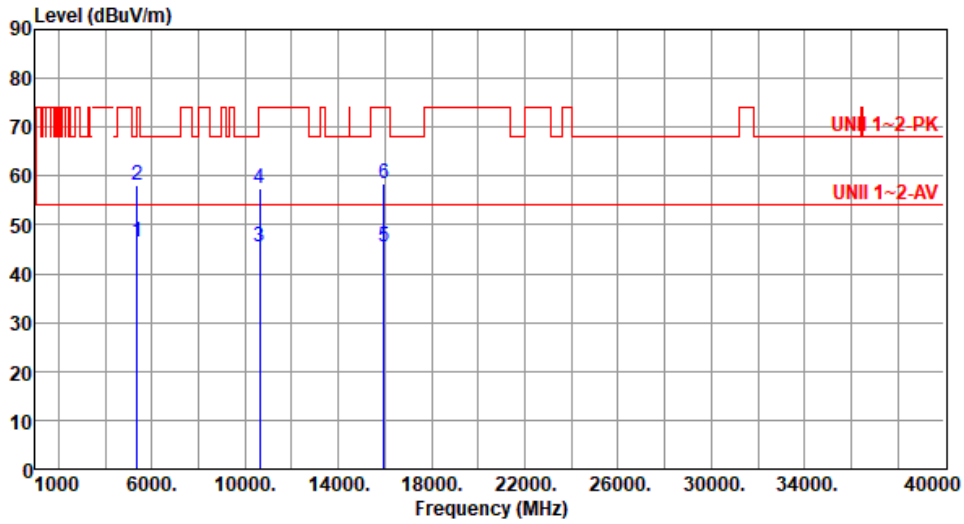


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	46.21	54.00	-7.79	40.59	5.62	Average	225	355
2	5350.00	58.32	74.00	-15.68	52.70	5.62	Peak	225	355
3	7066.66	54.59	68.20	-13.61	44.35	10.24	Peak	100	176
4	10600.00	44.41	54.00	-9.59	29.49	14.92	Average	100	30
5	10600.00	56.51	74.00	-17.49	41.59	14.92	Peak	100	30
6	15900.00	46.01	54.00	-7.99	30.64	15.37	Average	100	50
7	15900.00	59.04	74.00	-14.96	43.67	15.37	Peak	100	50

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)	5320
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

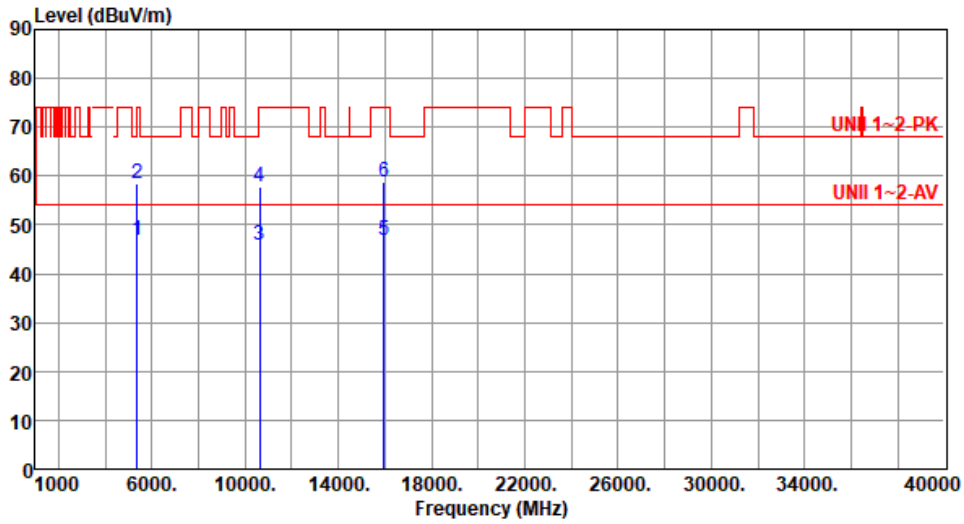


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	46.47	54.00	-7.53	40.75	5.72	Average	268	271
2	5350.00	58.25	74.00	-15.75	52.53	5.72	Peak	268	271
3	10640.00	45.61	54.00	-8.39	30.75	14.86	Average	100	27
4	10640.00	57.56	74.00	-16.44	42.70	14.86	Peak	100	27
5	15960.00	45.56	54.00	-8.44	29.91	15.65	Average	100	28
6	15960.00	58.55	74.00	-15.45	42.90	15.65	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	11a	Test Freq. (MHz)	5320
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

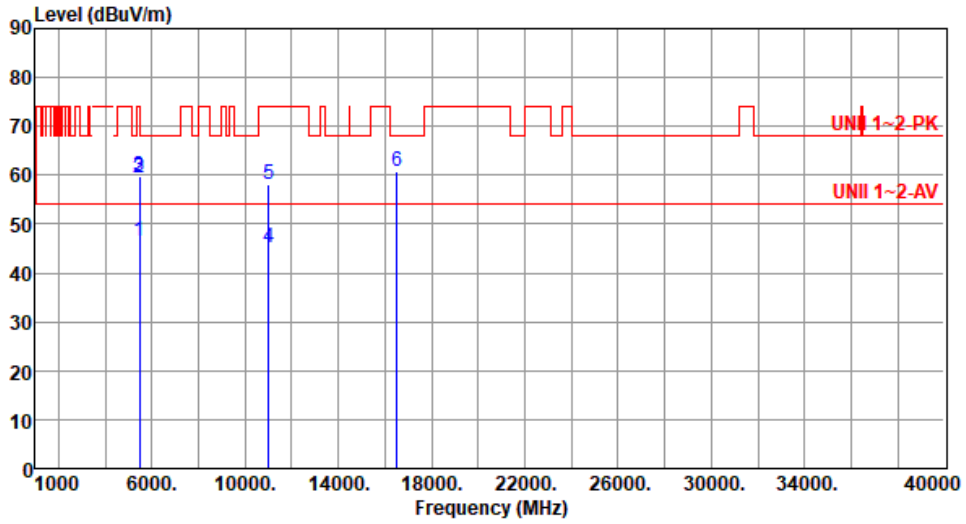


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	46.72	54.00	-7.28	41.00	5.72	Average	200	4
2	5350.00	58.49	74.00	-15.51	52.77	5.72	Peak	200	4
3	10640.00	45.81	54.00	-8.19	30.95	14.86	Average	100	57
4	10640.00	57.90	74.00	-16.10	43.04	14.86	Peak	100	57
5	15960.00	46.75	54.00	-7.25	31.10	15.65	Average	100	63
6	15960.00	58.76	74.00	-15.24	43.11	15.65	Peak	100	63

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)	5500
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

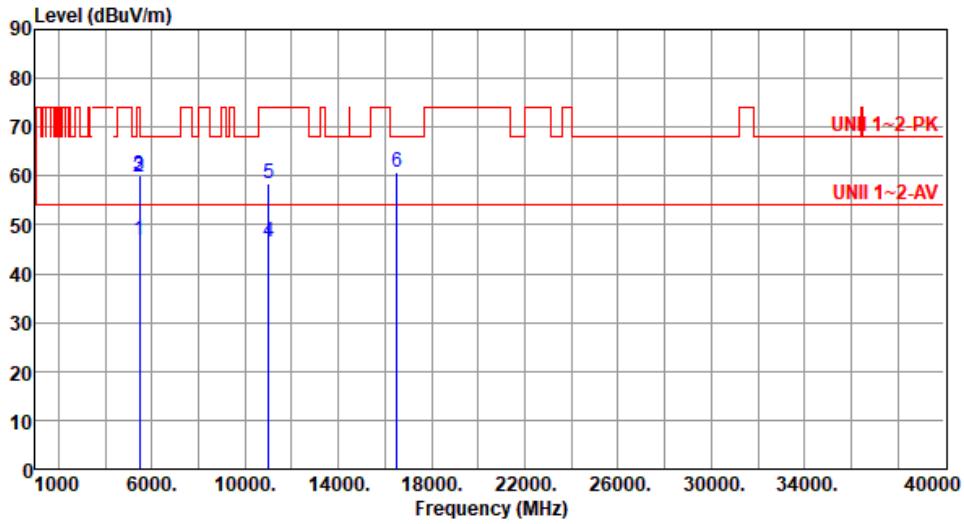


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.38	54.00	-7.62	40.08	6.30	Average	275	268
2	5460.00	59.38	74.00	-14.62	53.08	6.30	Peak	275	268
3	5470.00	59.75	68.20	-8.45	53.43	6.32	Peak	275	268
4	11000.00	45.23	54.00	-8.77	29.58	15.65	Average	100	19
5	11000.00	58.13	74.00	-15.87	42.48	15.65	Peak	100	19
6	16500.00	60.61	68.20	-7.59	43.15	17.46	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)	5500
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

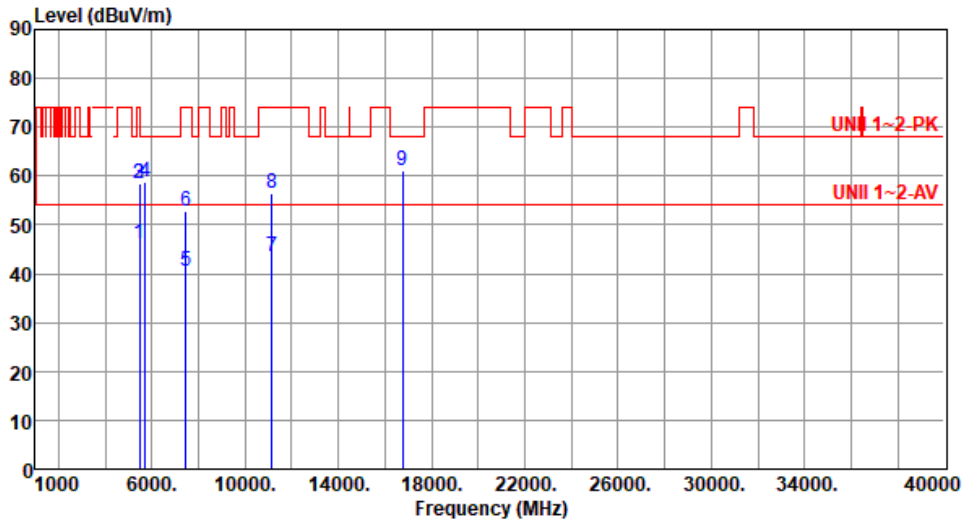


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.98	54.00	-7.02	40.68	6.30	Average	240	351
2	5460.00	59.91	74.00	-14.09	53.61	6.30	Peak	240	351
3	5470.00	60.05	68.20	-8.15	53.73	6.32	Peak	240	351
4	11000.00	46.43	54.00	-7.57	30.78	15.65	Average	100	57
5	11000.00	58.53	74.00	-15.47	42.88	15.65	Peak	100	57
6	16500.00	60.85	68.20	-7.35	43.39	17.46	Peak	100	57

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)	5580
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):23 Humidity(%):66

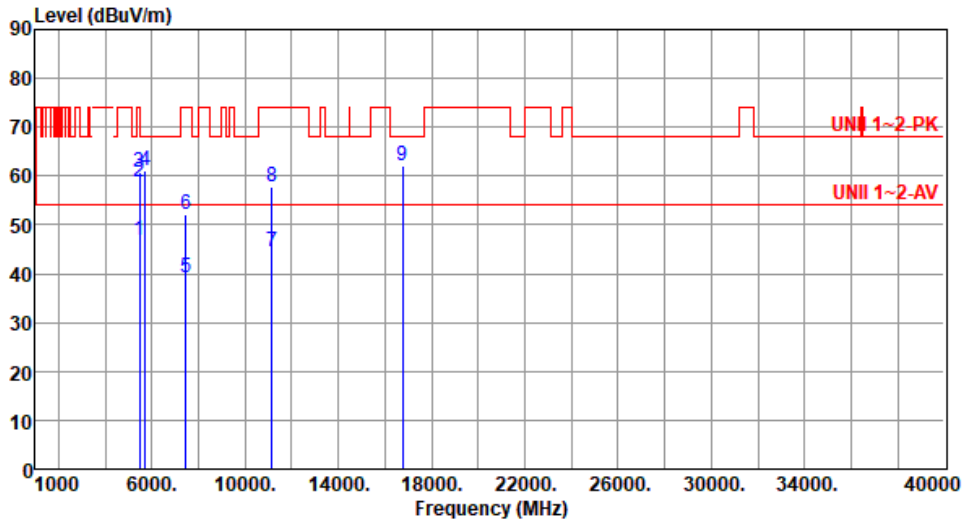


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.27	54.00	-7.73	39.97	6.30	Average	280	270
2	5460.00	58.43	74.00	-15.57	52.13	6.30	Peak	280	270
3	5470.00	58.56	68.20	-9.64	52.24	6.32	Peak	280	270
4	5725.00	58.75	68.20	-9.45	52.16	6.59	Peak	280	270
5	7440.00	40.59	54.00	-13.41	29.94	10.65	Average	100	192
6	7440.00	52.71	74.00	-21.29	42.06	10.65	Peak	100	192
7	11160.00	43.46	54.00	-10.54	28.31	15.15	Average	100	60
8	11160.00	56.45	74.00	-17.55	41.30	15.15	Peak	100	60
9	16740.00	61.07	68.20	-7.13	43.37	17.70	Peak	100	70

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)	5580
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):23 Humidity(%):66

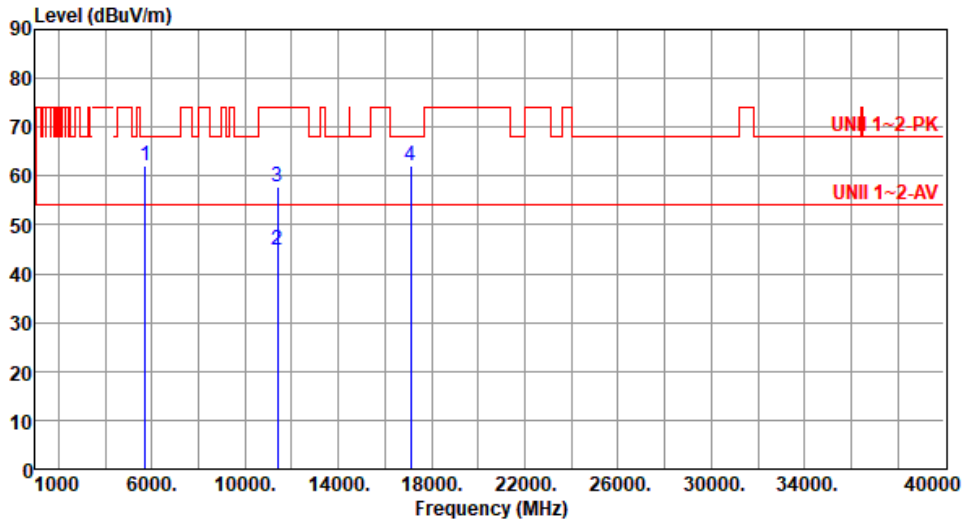


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.83	54.00	-7.17	40.53	6.30	Average	254	356
2	5460.00	58.76	74.00	-15.24	52.46	6.30	Peak	254	356
3	5470.00	60.86	68.20	-7.34	54.54	6.32	Peak	254	356
4	5725.00	61.01	68.20	-7.19	54.42	6.59	Peak	254	356
5	7440.00	39.27	54.00	-14.73	28.62	10.65	Average	100	80
6	7440.00	52.17	74.00	-21.83	41.52	10.65	Peak	100	80
7	11160.00	44.60	54.00	-9.40	29.45	15.15	Average	100	90
8	11160.00	57.90	74.00	-16.10	42.75	15.15	Peak	100	90
9	16740.00	62.04	68.20	-6.16	44.34	17.70	Peak	100	50

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)	5700
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

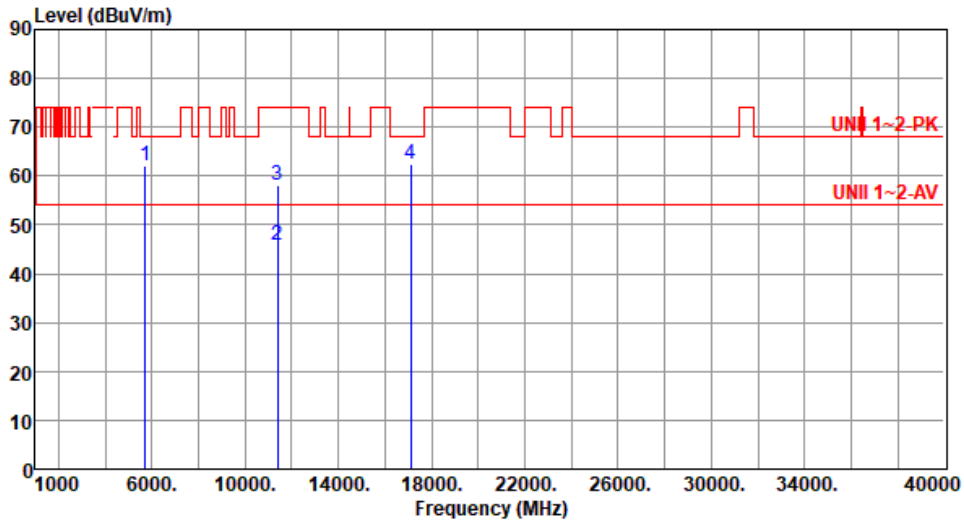


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	61.94	68.20	-6.26	55.35	6.59	Peak	276	268
2	11400.00	44.93	54.00	-9.07	29.78	15.15	Average	100	27
3	11400.00	57.90	74.00	-16.10	42.75	15.15	Peak	100	27
4	17100.00	62.01	68.20	-6.19	43.86	18.15	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)	5700
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

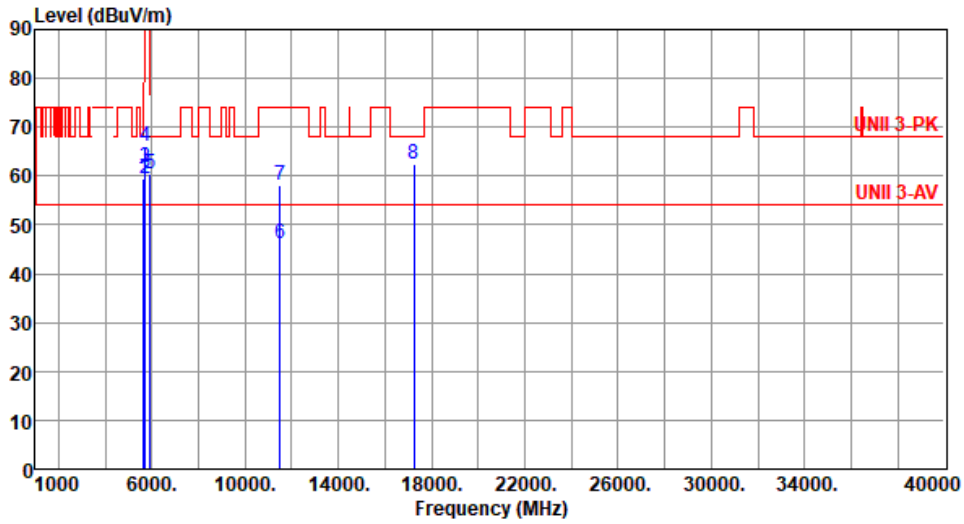


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	62.14	68.20	-6.06	55.55	6.59	Peak	224	356
2	11400.00	45.96	54.00	-8.04	30.81	15.15	Average	100	52
3	11400.00	58.18	74.00	-15.82	43.03	15.15	Peak	100	52
4	17100.00	62.30	68.20	-5.90	44.15	18.15	Peak	100	55

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 :Akun Chung Temperature(℃):23 Humidity(%):66

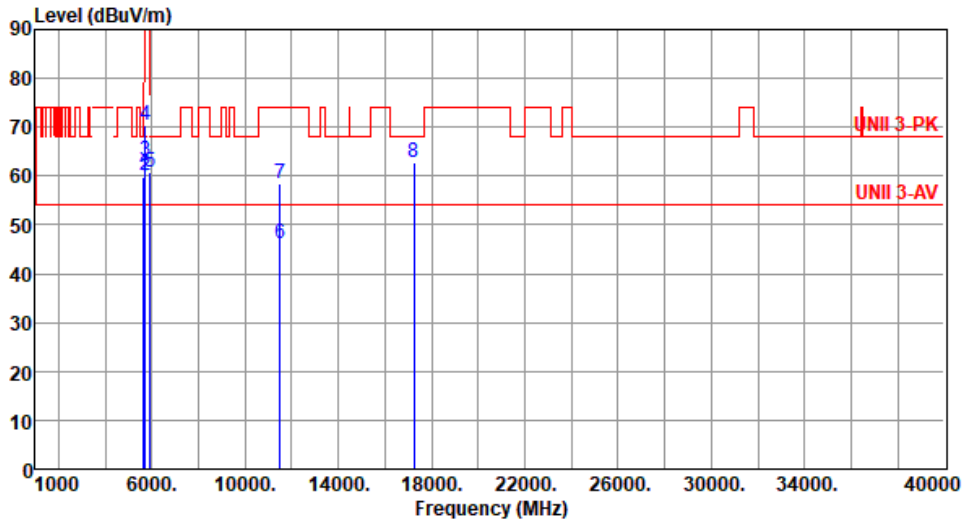


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.54	68.20	-8.66	53.22	6.32	Peak	280	266
2	5700.00	59.58	105.20	-45.62	53.05	6.53	Peak	280	266
3	5720.00	61.92	110.80	-48.88	55.34	6.58	Peak	280	266
4	5725.00	66.24	122.20	-55.96	59.65	6.59	Peak	280	266
5	5925.00	60.38	68.20	-7.82	53.35	7.03	Peak	280	266
6	11490.00	46.00	54.00	-8.00	30.62	15.38	Average	100	27
7	11490.00	58.06	74.00	-15.94	42.68	15.38	Peak	100	27
8	17235.00	62.56	68.20	-5.64	44.30	18.26	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)	5745
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

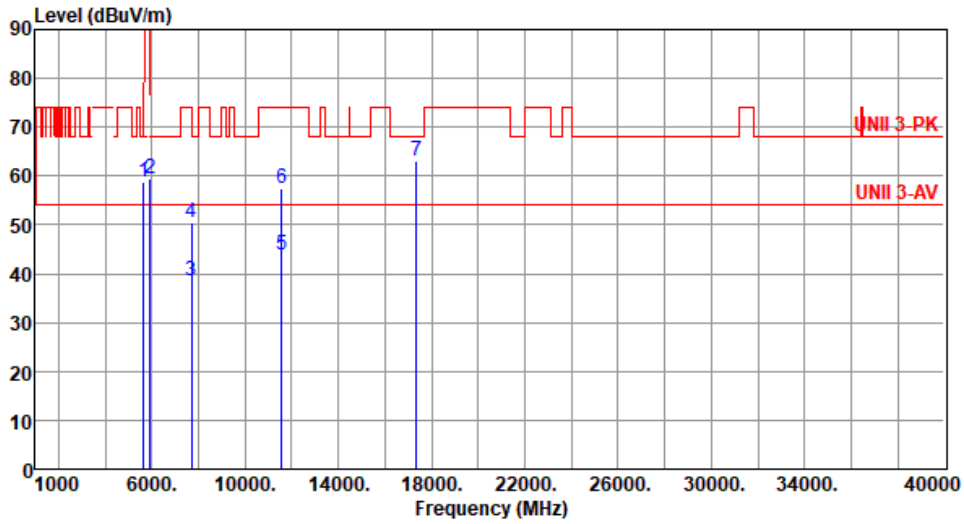


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.84	68.20	-8.36	53.52	6.32	Peak	243	343
2	5700.00	60.01	105.20	-45.19	53.48	6.53	Peak	243	343
3	5720.00	63.23	110.80	-47.57	56.65	6.58	Peak	243	343
4	5725.00	70.24	122.20	-51.96	63.65	6.59	Peak	243	343
5	5925.00	60.73	68.20	-7.47	53.70	7.03	Peak	243	343
6	11490.00	46.22	54.00	-7.78	30.84	15.38	Average	100	45
7	11490.00	58.34	74.00	-15.66	42.96	15.38	Peak	100	45
8	17235.00	62.82	68.20	-5.38	44.56	18.26	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	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):23 Humidity(%):66

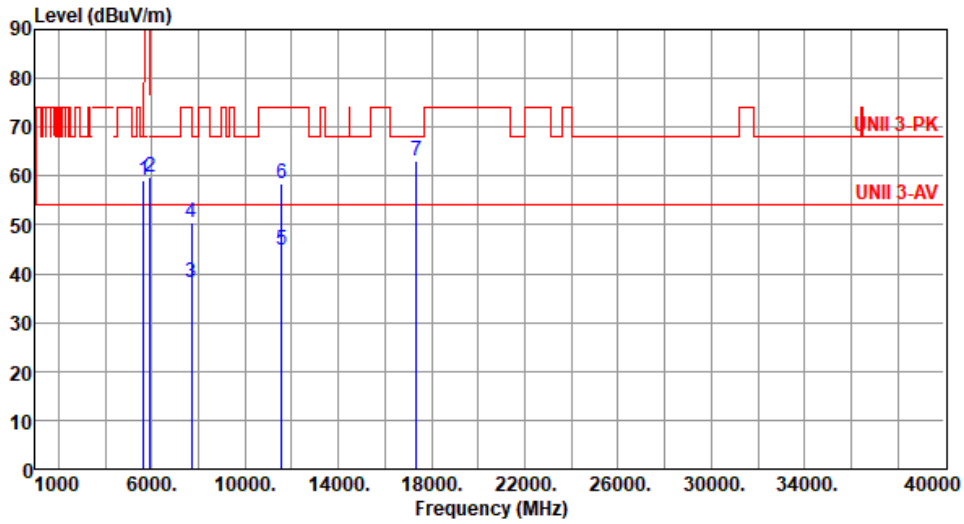


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	58.87	68.20	-9.33	52.55	6.32	Peak	280	266
2	5925.00	59.49	68.20	-8.71	52.46	7.03	Peak	280	266
3	7713.33	38.42	54.00	-15.58	28.30	10.12	Average	100	60
4	7713.33	50.52	74.00	-23.48	40.40	10.12	Peak	100	60
5	11570.00	43.87	54.00	-10.13	28.49	15.38	Average	100	80
6	11570.00	57.61	74.00	-16.39	42.23	15.38	Peak	100	80
7	17355.00	62.97	68.20	-5.23	43.99	18.98	Peak	100	55

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 :Roger Lu Temperature(℃):23 Humidity(%):66

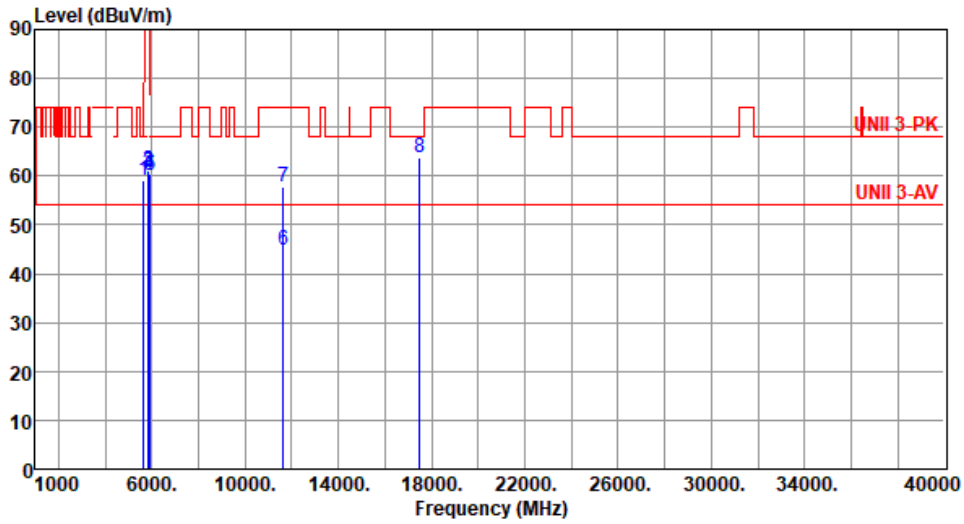


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.28	68.20	-8.92	52.96	6.32	Peak	209	350
2	5925.00	59.90	68.20	-8.30	52.87	7.03	Peak	209	350
3	7713.33	38.20	54.00	-15.80	28.08	10.12	Average	100	40
4	7713.33	50.41	74.00	-23.59	40.29	10.12	Peak	100	40
5	11570.00	44.79	54.00	-9.21	29.41	15.38	Average	100	100
6	11570.00	58.48	74.00	-15.52	43.10	15.38	Peak	100	100
7	17355.00	63.14	68.20	-5.06	44.16	18.98	Peak	100	90

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 :Akun Chung Temperature(℃):23 Humidity(%):66

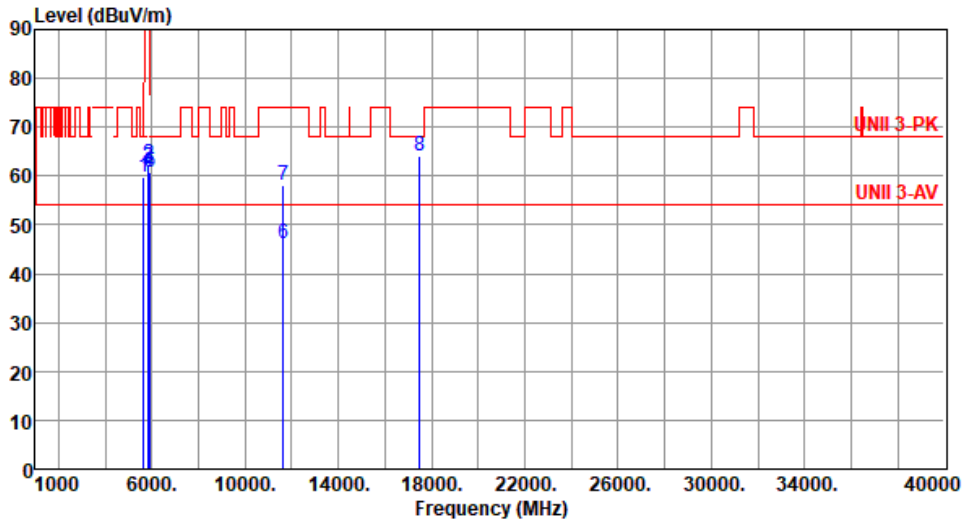


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.27	68.20	-8.93	52.95	6.32	Peak	274	283
2	5850.00	60.83	122.20	-61.37	54.06	6.77	Peak	274	283
3	5855.00	61.05	110.80	-49.75	54.25	6.80	Peak	274	283
4	5875.00	60.61	105.20	-44.59	53.73	6.88	Peak	274	283
5	5925.00	59.99	68.20	-8.21	52.96	7.03	Peak	274	283
6	11650.00	44.90	54.00	-9.10	29.73	15.17	Average	100	11
7	11650.00	57.81	74.00	-16.19	42.64	15.17	Peak	100	11
8	17475.00	63.90	68.20	-4.30	44.09	19.81	Peak	100	15

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 :Akun Chung Temperature(℃):23 Humidity(%):66



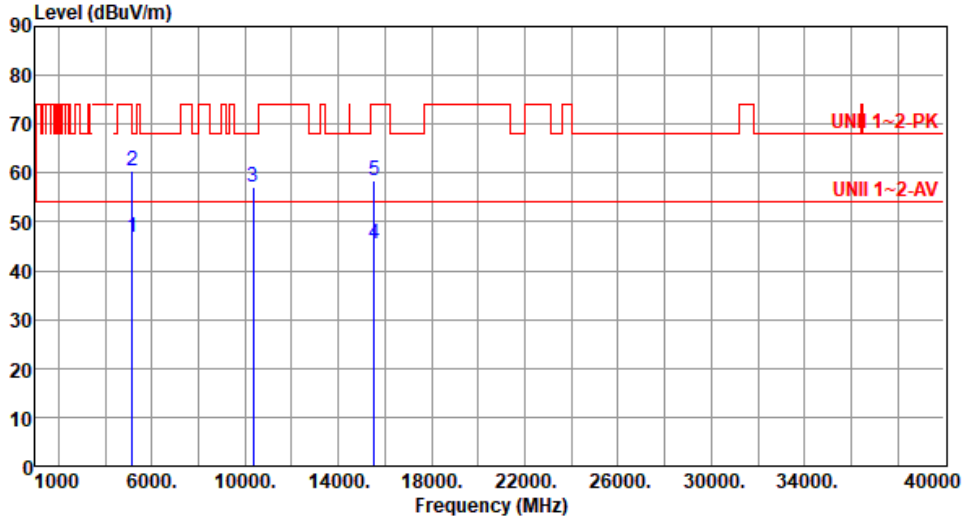
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.77	68.20	-8.43	53.45	6.32	Peak	198	342
2	5850.00	62.53	122.20	-59.67	55.76	6.77	Peak	198	342
3	5855.00	61.75	110.80	-49.05	54.95	6.80	Peak	198	342
4	5875.00	60.73	105.20	-44.47	53.85	6.88	Peak	198	342
5	5925.00	60.76	68.20	-7.44	53.73	7.03	Peak	198	342
6	11650.00	46.14	54.00	-7.86	30.97	15.17	Average	100	66
7	11650.00	58.20	74.00	-15.80	43.03	15.17	Peak	100	66
8	17475.00	64.12	68.20	-4.08	44.31	19.81	Peak	100	63

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).

3.4.3 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT20

Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

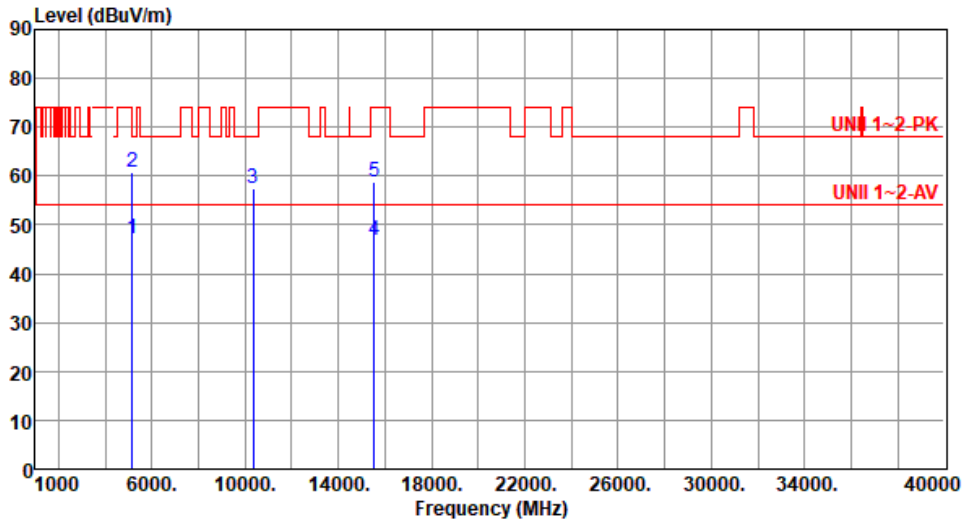


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.86	54.00	-7.14	40.55	6.31	Average	274	265
2	5150.00	60.56	74.00	-13.44	54.25	6.31	Peak	274	265
3	10360.00	57.18	68.20	-11.02	42.73	14.45	Peak	100	22
4	15540.00	45.54	54.00	-8.46	29.14	16.40	Average	100	19
5	15540.00	58.47	74.00	-15.53	42.07	16.40	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	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

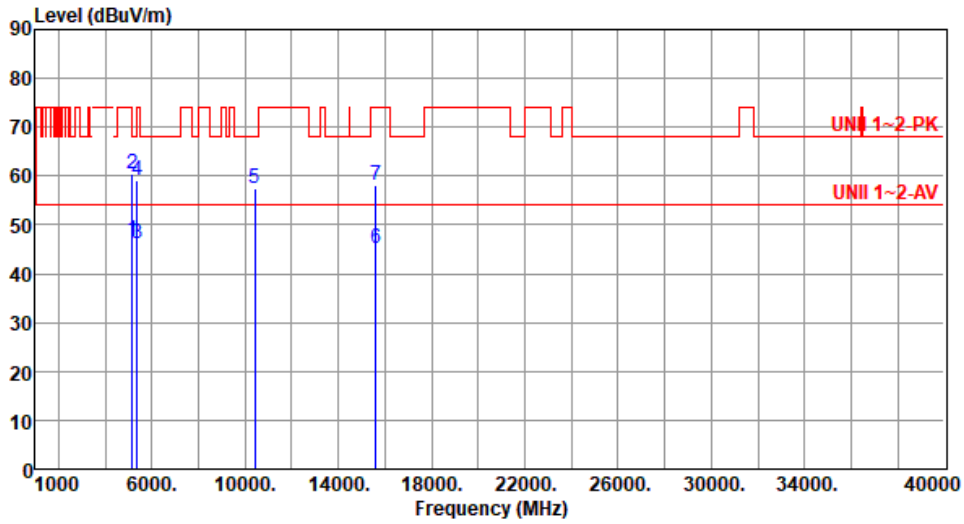


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.29	54.00	-6.71	40.98	6.31	Average	198	356
2	5150.00	60.87	74.00	-13.13	54.56	6.31	Peak	198	356
3	10360.00	57.48	68.20	-10.72	43.03	14.45	Peak	100	65
4	15540.00	46.76	54.00	-7.24	30.36	16.40	Average	100	69
5	15540.00	58.79	74.00	-15.21	42.39	16.40	Peak	100	69

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	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

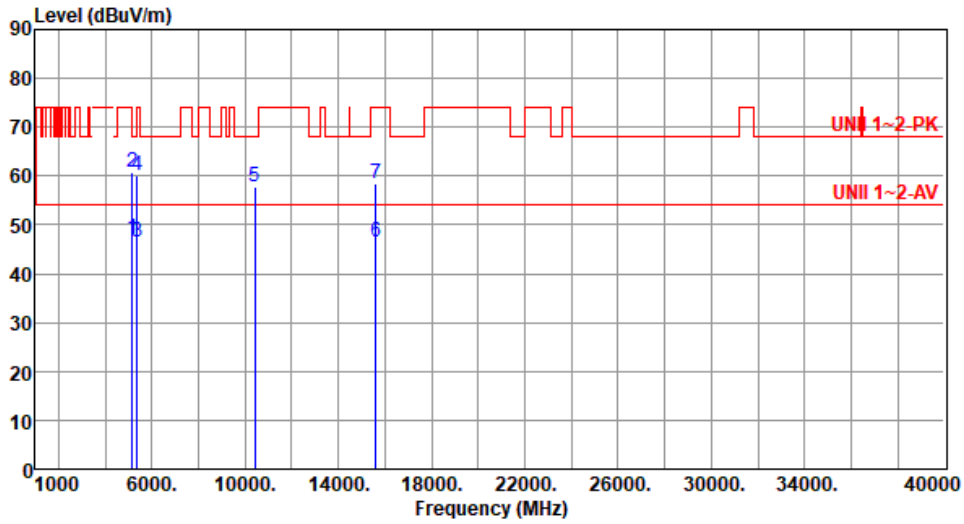


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.87	54.00	-7.13	40.56	6.31	Average	265	275
2	5150.00	60.56	74.00	-13.44	54.25	6.31	Peak	265	275
3	5350.00	46.14	54.00	-7.86	40.42	5.72	Average	265	275
4	5350.00	59.25	74.00	-14.75	53.53	5.72	Peak	265	275
5	10400.00	57.36	68.20	-10.84	42.88	14.48	Peak	100	28
6	15600.00	45.31	54.00	-8.69	29.37	15.94	Average	100	25
7	15600.00	58.26	74.00	-15.74	42.32	15.94	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	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

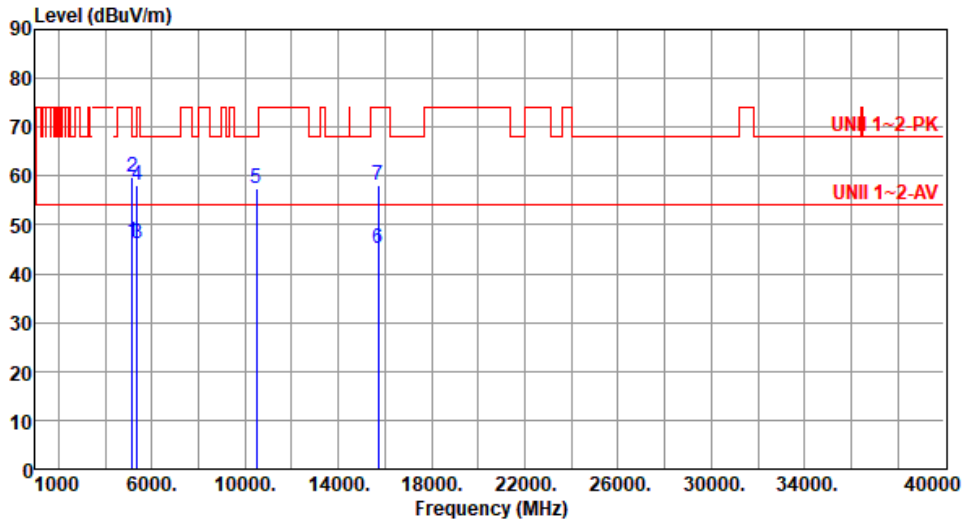


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.13	54.00	-6.87	40.82	6.31	Average	203	352
2	5150.00	60.86	74.00	-13.14	54.55	6.31	Peak	203	352
3	5350.00	46.36	54.00	-7.64	40.64	5.72	Average	203	352
4	5350.00	60.14	74.00	-13.86	54.42	5.72	Peak	203	352
5	10400.00	57.63	68.20	-10.57	43.15	14.48	Peak	100	55
6	15600.00	46.53	54.00	-7.47	30.59	15.94	Average	100	60
7	15600.00	58.58	74.00	-15.42	42.64	15.94	Peak	100	60

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	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

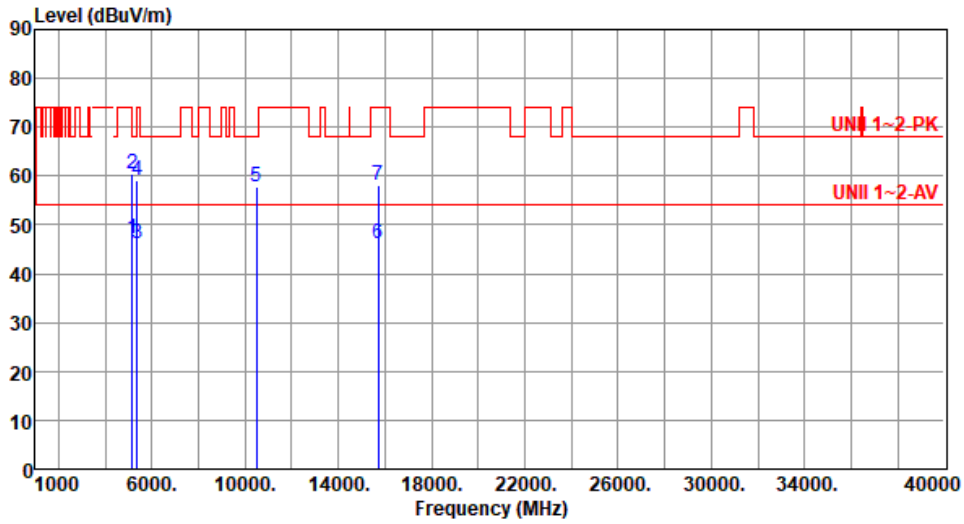


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.54	54.00	-7.46	40.23	6.31	Average	283	268
2	5150.00	59.86	74.00	-14.14	53.55	6.31	Peak	283	268
3	5350.00	46.16	54.00	-7.84	40.44	5.72	Average	283	268
4	5350.00	58.12	74.00	-15.88	52.40	5.72	Peak	283	268
5	10480.00	57.35	68.20	-10.85	42.72	14.63	Peak	100	29
6	15720.00	45.05	54.00	-8.95	29.10	15.95	Average	100	24
7	15720.00	57.99	74.00	-16.01	42.04	15.95	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	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

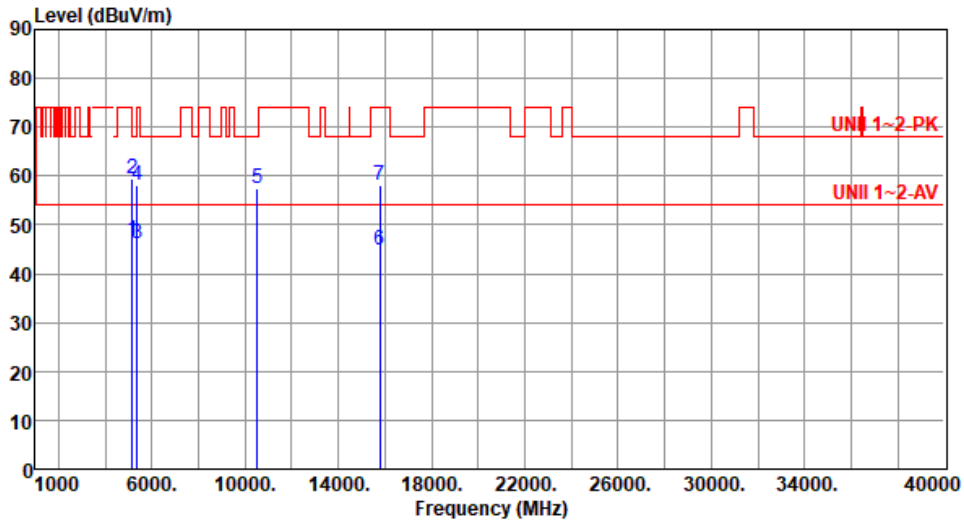


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.13	54.00	-6.87	40.82	6.31	Average	233	349
2	5150.00	60.31	74.00	-13.69	54.00	6.31	Peak	233	349
3	5350.00	46.28	54.00	-7.72	40.56	5.72	Average	233	349
4	5350.00	59.28	74.00	-14.72	53.56	5.72	Peak	233	349
5	10480.00	57.62	68.20	-10.58	42.99	14.63	Peak	100	57
6	15720.00	46.26	54.00	-7.74	30.31	15.95	Average	100	60
7	15720.00	58.28	74.00	-15.72	42.33	15.95	Peak	100	60

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	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

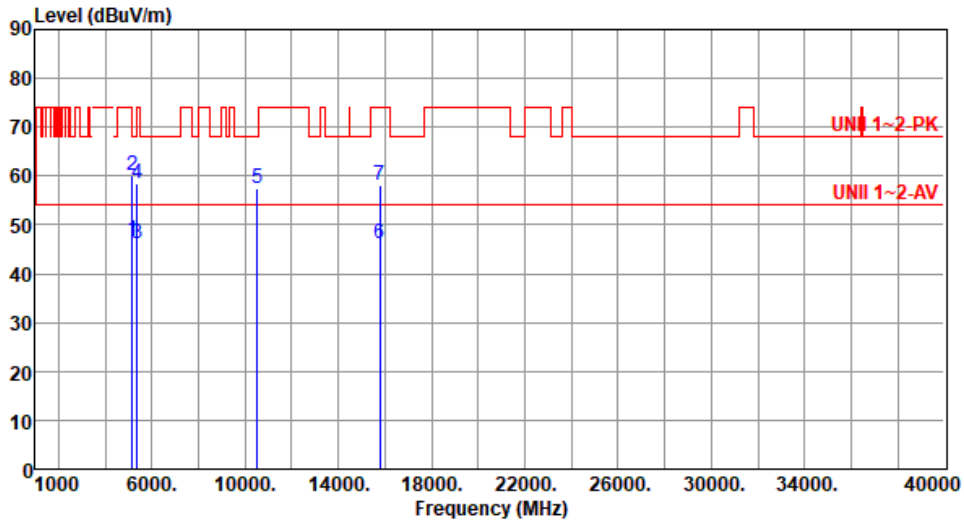


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.67	54.00	-7.33	40.36	6.31	Average	274	265
2	5150.00	59.56	74.00	-14.44	53.25	6.31	Peak	274	265
3	5350.00	46.07	54.00	-7.93	40.35	5.72	Average	274	265
4	5350.00	58.07	74.00	-15.93	52.35	5.72	Peak	274	265
5	10520.00	57.34	68.20	-10.86	42.67	14.67	Peak	100	17
6	15780.00	44.96	54.00	-9.04	29.10	15.86	Average	100	21
7	15780.00	57.98	74.00	-16.02	42.12	15.86	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	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

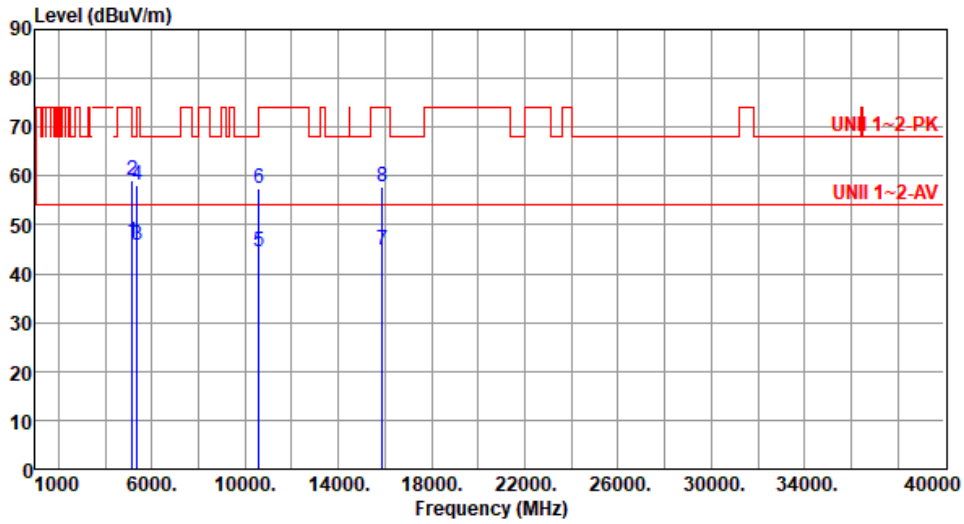


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.88	54.00	-7.12	40.57	6.31	Average	215	359
2	5150.00	60.06	74.00	-13.94	53.75	6.31	Peak	215	359
3	5350.00	46.31	54.00	-7.69	40.59	5.72	Average	215	359
4	5350.00	58.50	74.00	-15.50	52.78	5.72	Peak	215	359
5	10520.00	57.57	68.20	-10.63	42.90	14.67	Peak	100	54
6	15780.00	46.19	54.00	-7.81	30.33	15.86	Average	100	56
7	15780.00	58.13	74.00	-15.87	42.27	15.86	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	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

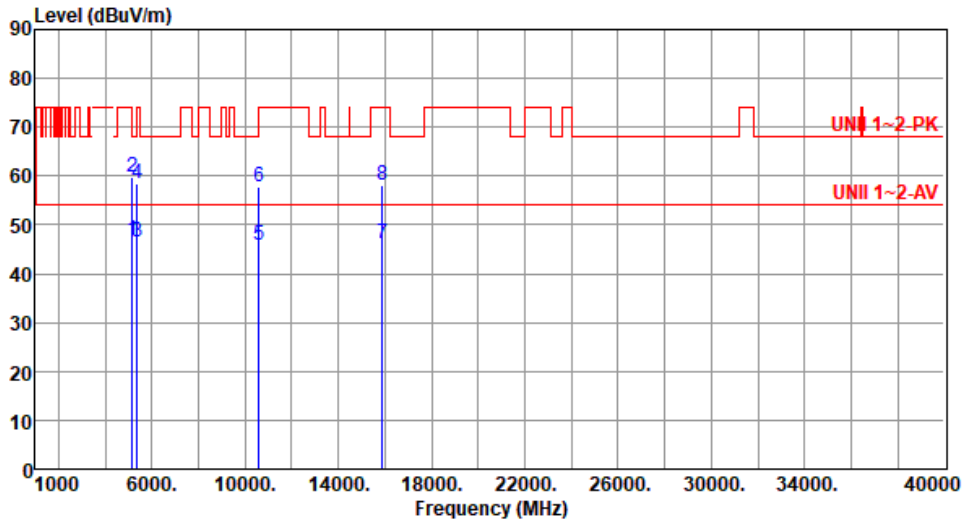


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.56	54.00	-7.44	40.25	6.31	Average	277	264
2	5150.00	59.16	74.00	-14.84	52.85	6.31	Peak	277	264
3	5350.00	45.88	54.00	-8.12	40.16	5.72	Average	277	264
4	5350.00	58.07	74.00	-15.93	52.35	5.72	Peak	274	264
5	10600.00	44.46	54.00	-9.54	29.74	14.72	Average	100	17
6	10600.00	57.41	74.00	-16.59	42.69	14.72	Peak	100	17
7	15900.00	44.95	54.00	-9.05	29.38	15.57	Average	100	25
8	15900.00	57.90	74.00	-16.10	42.33	15.57	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	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

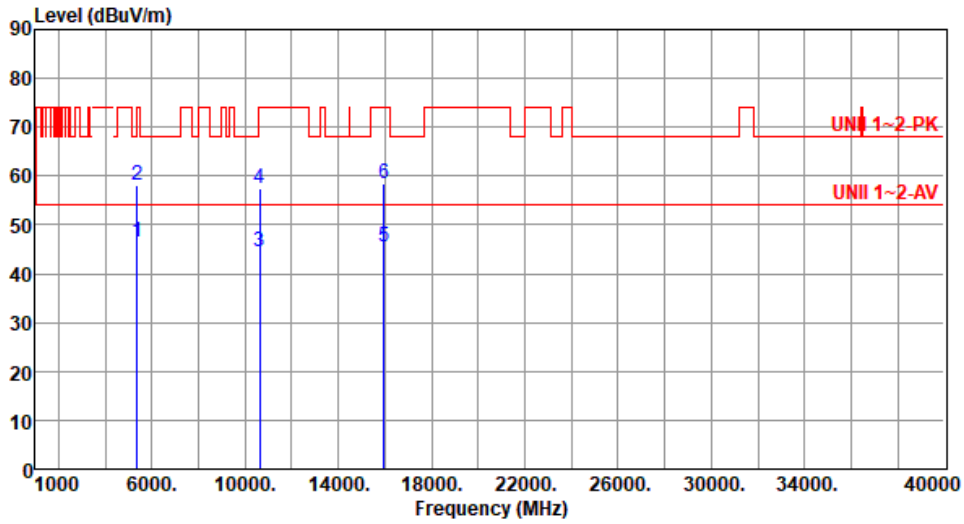


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.98	54.00	-7.02	40.67	6.31	Average	225	353
2	5150.00	59.89	74.00	-14.11	53.58	6.31	Peak	225	353
3	5350.00	46.39	54.00	-7.61	40.67	5.72	Average	225	353
4	5350.00	58.50	74.00	-15.50	52.78	5.72	Peak	225	353
5	10600.00	45.73	54.00	-8.27	31.01	14.72	Average	100	52
6	10600.00	57.70	74.00	-16.30	42.98	14.72	Peak	100	52
7	15900.00	46.20	54.00	-7.80	30.63	15.57	Average	100	55
8	15900.00	58.13	74.00	-15.87	42.56	15.57	Peak	100	55

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	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

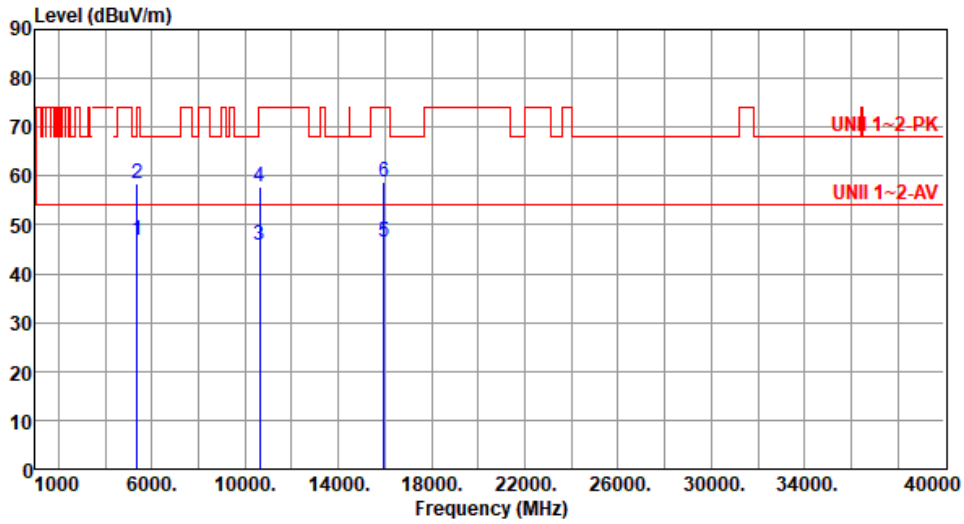


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	46.46	54.00	-7.54	40.74	5.72	Average	280	273
2	5350.00	58.07	74.00	-15.93	52.35	5.72	Peak	280	273
3	10640.00	44.48	54.00	-9.52	29.62	14.86	Average	100	11
4	10640.00	57.52	74.00	-16.48	42.66	14.86	Peak	100	11
5	15960.00	45.40	54.00	-8.60	29.75	15.65	Average	100	17
6	15960.00	58.44	74.00	-15.56	42.79	15.65	Peak	100	17

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	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

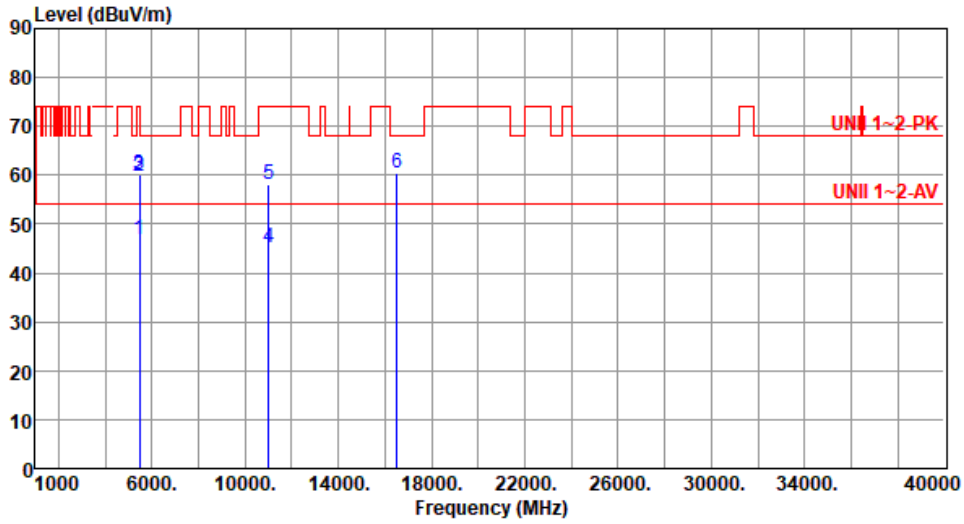


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	46.98	54.00	-7.02	41.26	5.72	Average	198	9
2	5350.00	58.57	74.00	-15.43	52.85	5.72	Peak	198	9
3	10640.00	45.69	54.00	-8.31	30.83	14.86	Average	100	54
4	10640.00	57.74	74.00	-16.26	42.88	14.86	Peak	100	54
5	15960.00	46.61	54.00	-7.39	30.96	15.65	Average	100	63
6	15960.00	58.62	74.00	-15.38	42.97	15.65	Peak	100	63

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	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

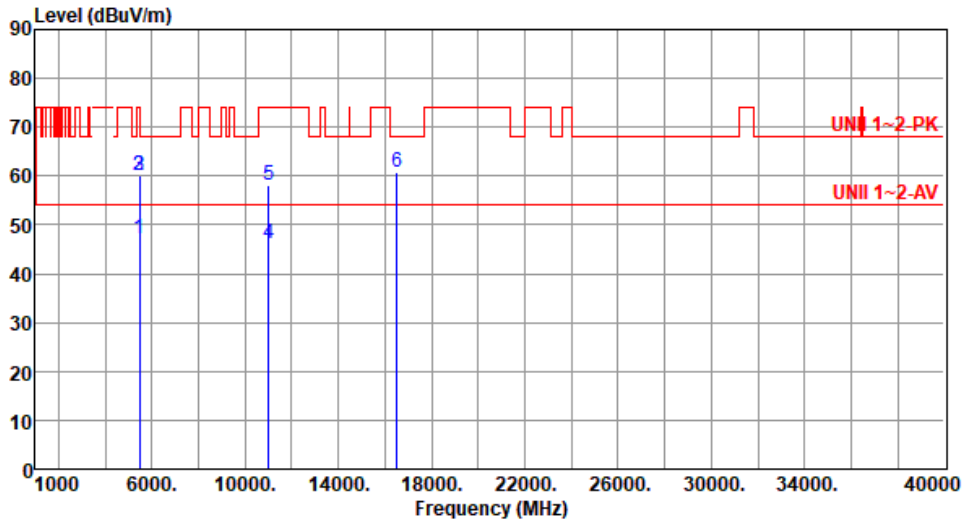


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.69	54.00	-7.31	40.39	6.30	Average	273	266
2	5460.00	59.65	74.00	-14.35	53.35	6.30	Peak	273	266
3	5470.00	59.95	68.20	-8.25	53.63	6.32	Peak	273	266
4	11000.00	45.13	54.00	-8.87	29.48	15.65	Average	100	24
5	11000.00	58.07	74.00	-15.93	42.42	15.65	Peak	100	24
6	16500.00	60.54	68.20	-7.66	43.08	17.46	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	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

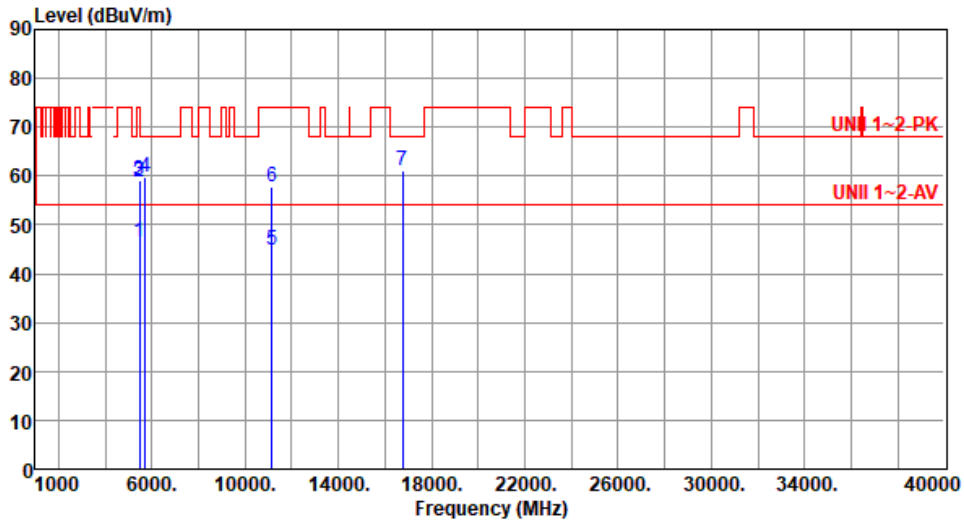


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	47.08	54.00	-6.92	40.78	6.30	Average	236	354
2	5460.00	60.00	74.00	-14.00	53.70	6.30	Peak	236	354
3	5470.00	60.18	68.20	-8.02	53.86	6.32	Peak	236	354
4	11000.00	46.29	54.00	-7.71	30.64	15.65	Average	100	51
5	11000.00	58.24	74.00	-15.76	42.59	15.65	Peak	100	51
6	16500.00	60.68	68.20	-7.52	43.22	17.46	Peak	100	55

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	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

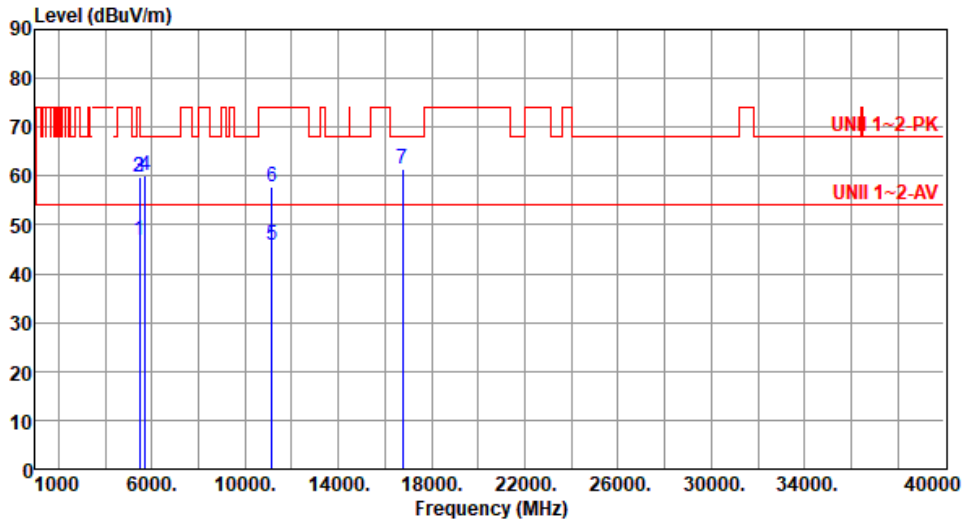


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.65	54.00	-7.35	40.35	6.30	Average	271	271
2	5460.00	58.93	74.00	-15.07	52.63	6.30	Peak	271	271
3	5470.00	59.15	68.20	-9.05	52.83	6.32	Peak	271	271
4	5725.00	59.64	68.20	-8.56	53.05	6.59	Peak	271	271
5	11160.00	44.68	54.00	-9.32	29.53	15.15	Average	100	21
6	11160.00	57.73	74.00	-16.27	42.58	15.15	Peak	100	21
7	16740.00	61.26	68.20	-6.94	43.56	17.70	Peak	100	23

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	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

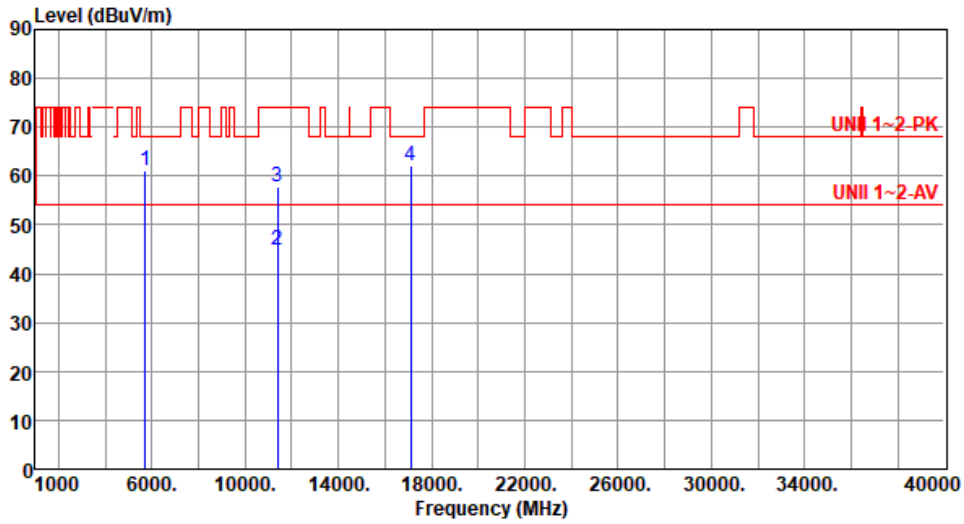


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.75	54.00	-7.25	40.45	6.30	Average	235	344
2	5460.00	59.65	74.00	-14.35	53.35	6.30	Peak	235	344
3	5470.00	59.89	68.20	-8.31	53.57	6.32	Peak	235	344
4	5725.00	60.14	68.20	-8.06	53.55	6.59	Peak	235	344
5	11160.00	45.89	54.00	-8.11	30.74	15.15	Average	100	63
6	11160.00	57.95	74.00	-16.05	42.80	15.15	Peak	100	63
7	16740.00	61.43	68.20	-6.77	43.73	17.70	Peak	100	63

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	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

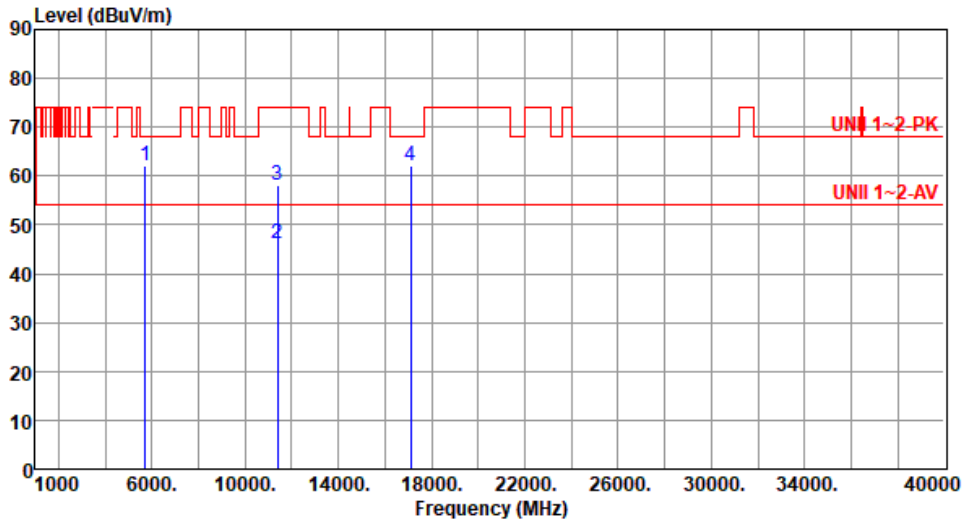


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	61.14	68.20	-7.06	54.55	6.59	Peak	269	282
2	11400.00	44.81	54.00	-9.19	29.66	15.15	Average	100	13
3	11400.00	57.82	74.00	-16.18	42.67	15.15	Peak	100	13
4	17100.00	62.00	68.20	-6.20	43.85	18.15	Peak	100	15

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	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

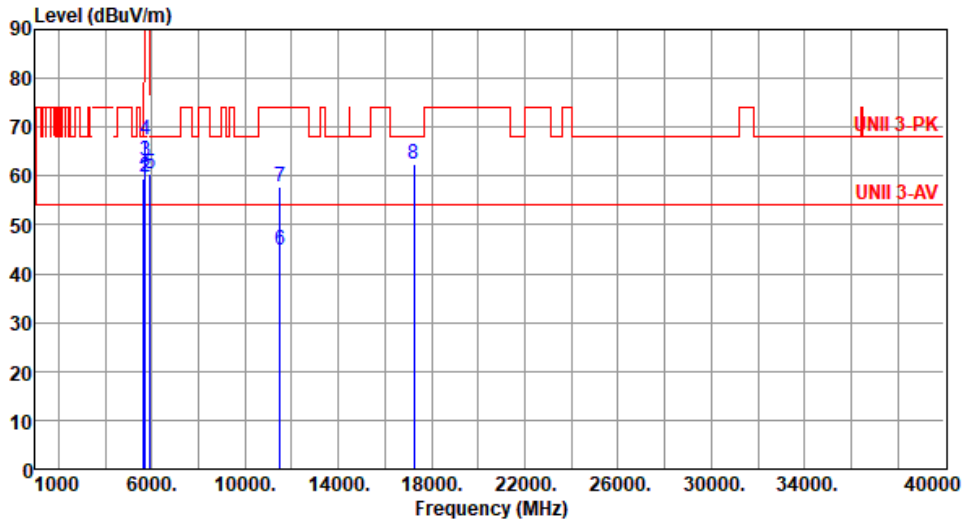


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	62.24	68.20	-5.96	55.65	6.59	Peak	228	352
2	11400.00	46.01	54.00	-7.99	30.86	15.15	Average	100	49
3	11400.00	58.02	74.00	-15.98	42.87	15.15	Peak	100	49
4	17100.00	62.25	68.20	-5.95	44.10	18.15	Peak	100	60

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	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

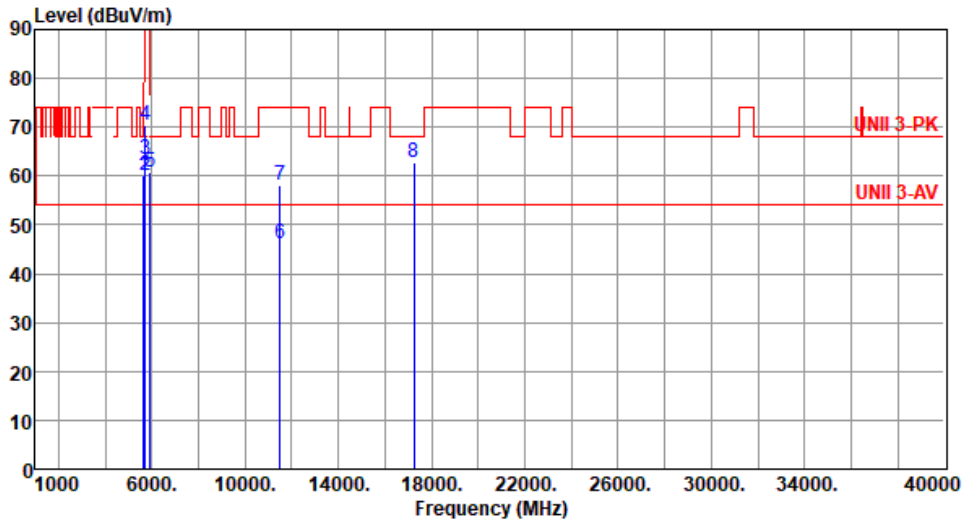


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.57	68.20	-8.63	53.25	6.32	Peak	255	268
2	5700.00	59.92	105.20	-45.28	53.39	6.53	Peak	255	268
3	5720.00	63.23	110.80	-47.57	56.65	6.58	Peak	255	268
4	5725.00	67.38	122.20	-54.82	60.79	6.59	Peak	255	268
5	5925.00	60.38	68.20	-7.82	53.35	7.03	Peak	255	268
6	11490.00	44.95	54.00	-9.05	29.57	15.38	Average	100	31
7	11490.00	57.94	74.00	-16.06	42.56	15.38	Peak	100	31
8	17235.00	62.47	68.20	-5.73	44.21	18.26	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	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

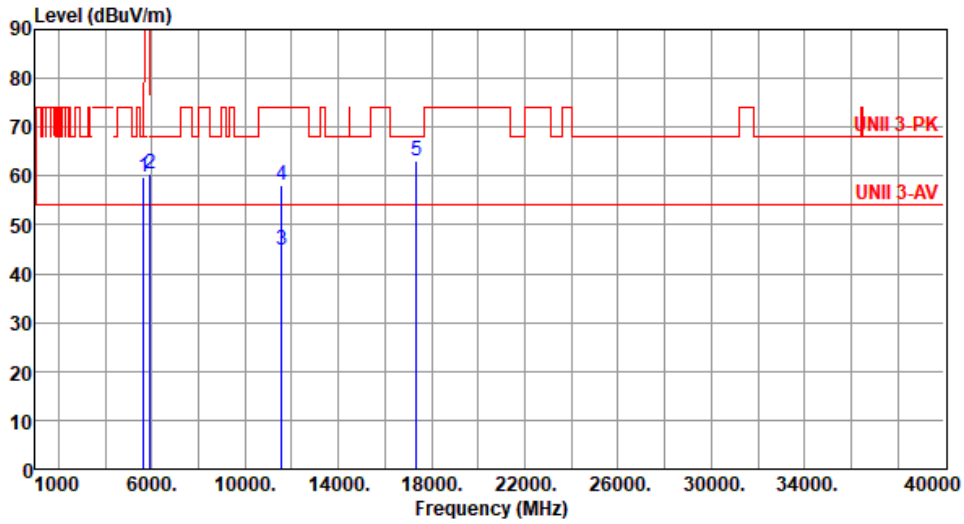


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	60.01	68.20	-8.19	53.69	6.32	Peak	238	345
2	5700.00	60.12	105.20	-45.08	53.59	6.53	Peak	238	345
3	5720.00	63.33	110.80	-47.47	56.75	6.58	Peak	238	345
4	5725.00	70.35	122.20	-51.85	63.76	6.59	Peak	238	345
5	5925.00	60.68	68.20	-7.52	53.65	7.03	Peak	238	345
6	11490.00	46.15	54.00	-7.85	30.77	15.38	Average	100	54
7	11490.00	58.13	74.00	-15.87	42.75	15.38	Peak	100	54
8	17235.00	62.62	68.20	-5.58	44.36	18.26	Peak	100	59

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	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

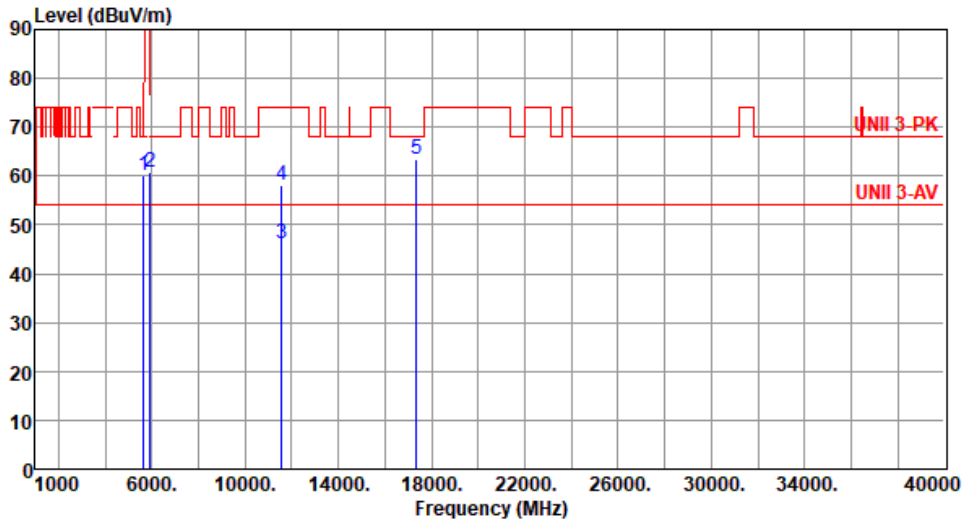


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.74	68.20	-8.46	53.42	6.32	Peak	273	270
2	5925.00	60.58	68.20	-7.62	53.55	7.03	Peak	273	270
3	11570.00	44.96	54.00	-9.04	29.58	15.38	Average	100	14
4	11570.00	57.99	74.00	-16.01	42.61	15.38	Peak	100	14
5	17355.00	63.18	68.20	-5.02	44.20	18.98	Peak	100	16

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	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

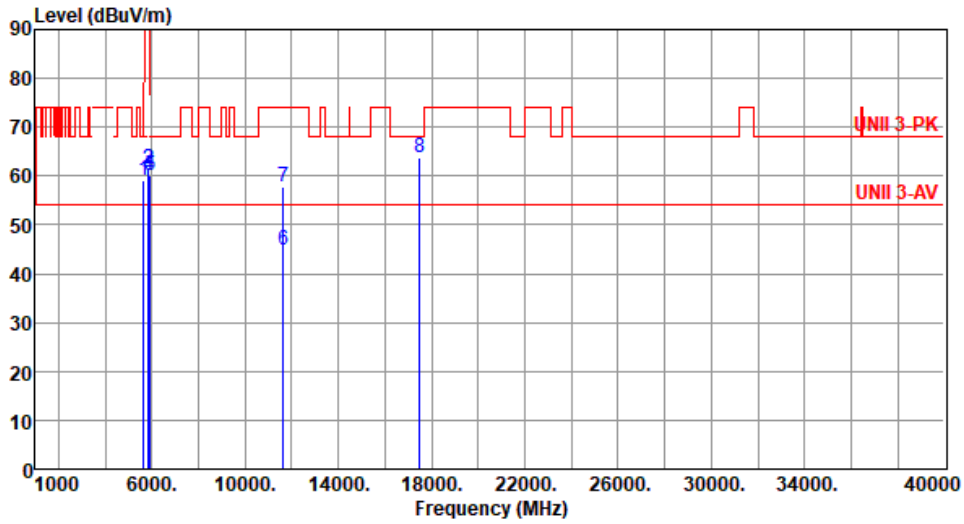


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.98	68.20	-8.22	53.66	6.32	Peak	183	341
2	5925.00	60.73	68.20	-7.47	53.70	7.03	Peak	183	341
3	11570.00	46.25	54.00	-7.75	30.87	15.38	Average	100	63
4	11570.00	58.23	74.00	-15.77	42.85	15.38	Peak	100	63
5	17355.00	63.38	68.20	-4.82	44.40	18.98	Peak	100	59

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	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66

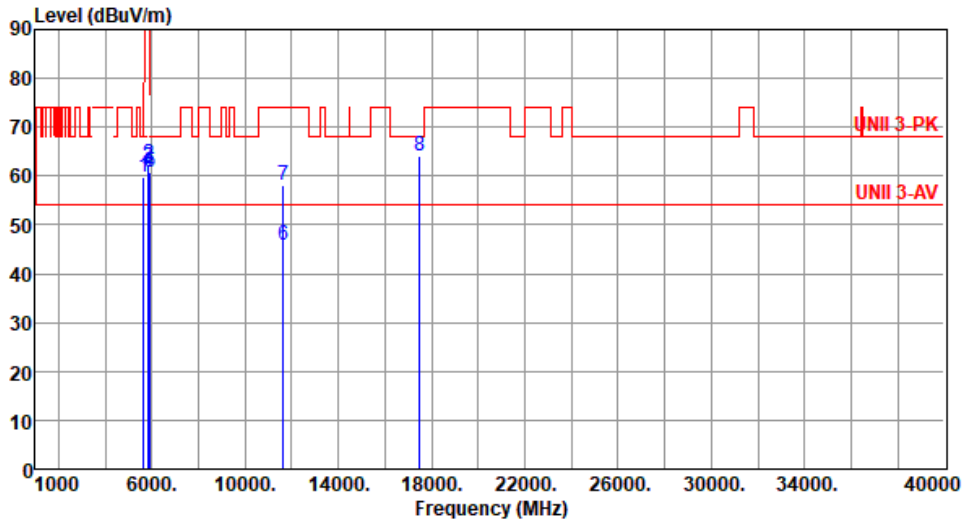


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.27	68.20	-8.93	52.95	6.32	Peak	278	272
2	5850.00	61.42	122.20	-60.78	54.65	6.77	Peak	278	272
3	5855.00	61.46	110.80	-49.34	54.66	6.80	Peak	278	272
4	5875.00	60.23	105.20	-44.97	53.35	6.88	Peak	278	272
5	5925.00	59.98	68.20	-8.22	52.95	7.03	Peak	278	272
6	11650.00	44.73	54.00	-9.27	29.56	15.17	Average	100	17
7	11650.00	57.75	74.00	-16.25	42.58	15.17	Peak	100	17
8	17475.00	63.79	68.20	-4.41	43.98	19.81	Peak	100	18

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	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):23 Humidity(%):66



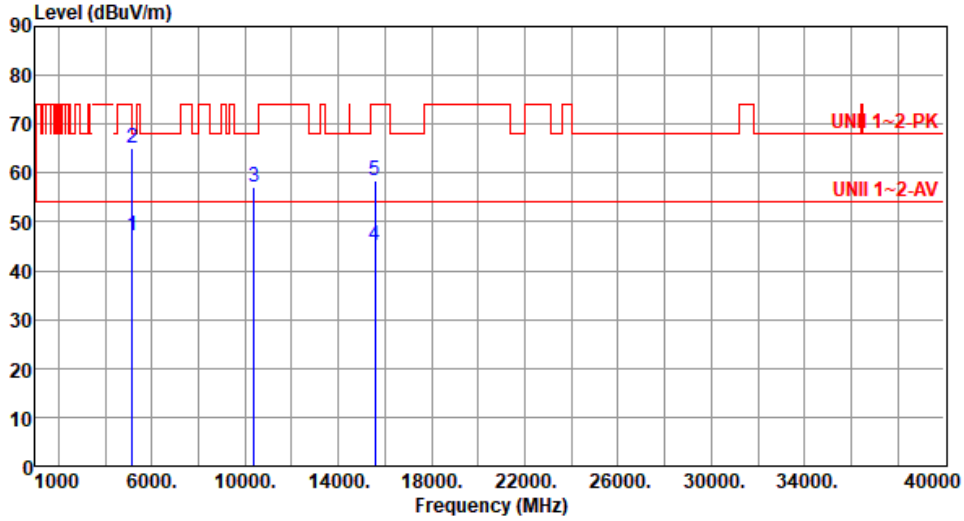
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.83	68.20	-8.37	53.51	6.32	Peak	176	346
2	5850.00	62.58	122.20	-59.62	55.81	6.77	Peak	176	346
3	5855.00	61.86	110.80	-48.94	55.06	6.80	Peak	176	346
4	5875.00	60.78	105.20	-44.42	53.90	6.88	Peak	176	346
5	5925.00	60.83	68.20	-7.37	53.80	7.03	Peak	176	346
6	11650.00	45.98	54.00	-8.02	30.81	15.17	Average	100	54
7	11650.00	58.00	74.00	-16.00	42.83	15.17	Peak	100	54
8	17475.00	64.00	68.20	-4.20	44.19	19.81	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).

3.4.4 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT40

Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

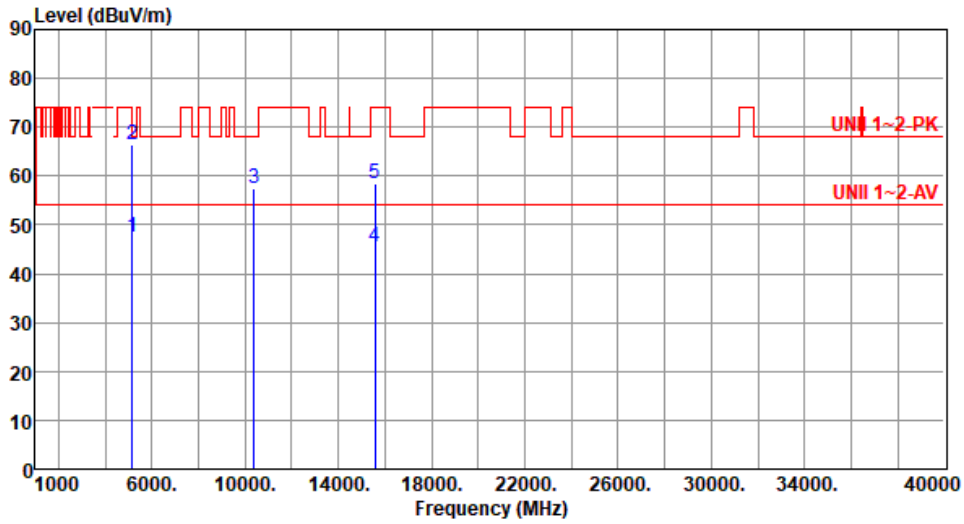


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.18	54.00	-6.82	40.87	6.31	Average	280	275
2	5150.00	65.16	74.00	-8.84	58.85	6.31	Peak	280	275
3	10380.00	57.11	68.20	-11.09	42.65	14.46	Peak	100	17
4	15570.00	45.26	54.00	-8.74	29.09	16.17	Average	100	22
5	15570.00	58.33	74.00	-15.67	42.16	16.17	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	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

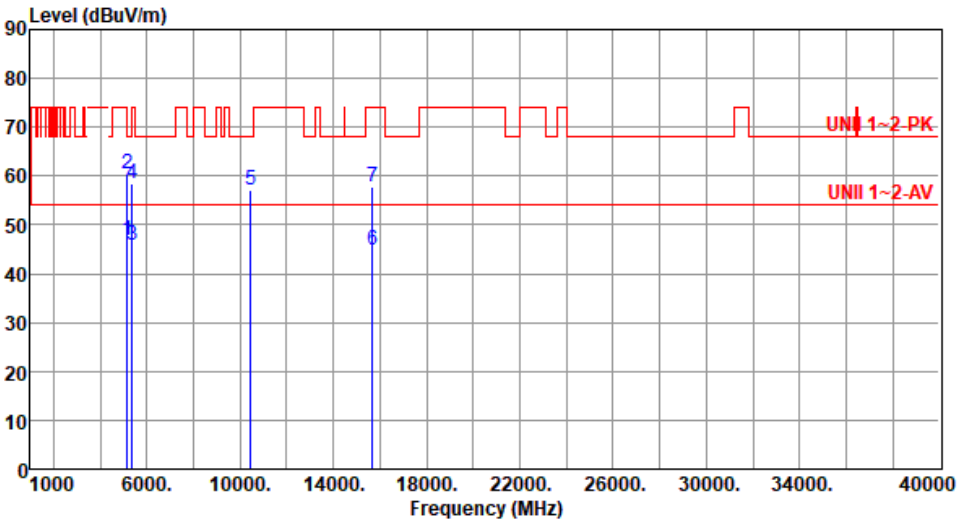


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	47.47	54.00	-6.53	41.16	6.31	Average	207	4
2	5150.00	66.52	74.00	-7.48	60.21	6.31	Peak	207	4
3	10380.00	57.36	68.20	-10.84	42.90	14.46	Peak	100	68
4	15570.00	45.53	54.00	-8.47	29.36	16.17	Average	100	59
5	15570.00	58.44	74.00	-15.56	42.27	16.17	Peak	100	59

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	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

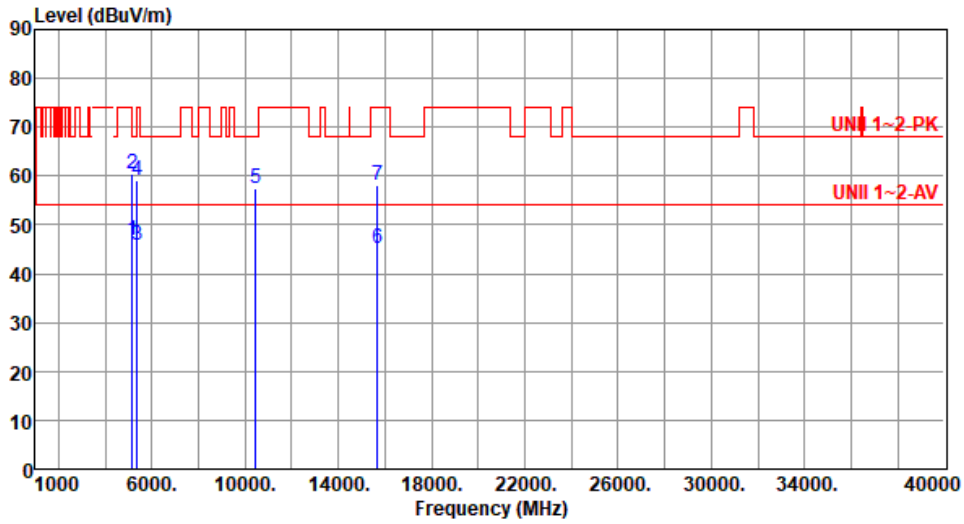


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.73	54.00	-7.27	40.42	6.31	Average	268	263
2	5150.00	60.42	74.00	-13.58	54.11	6.31	Peak	268	263
3	5350.00	45.79	54.00	-8.21	40.07	5.72	Average	268	263
4	5350.00	58.47	74.00	-15.53	52.75	5.72	Peak	268	263
5	10460.00	57.15	68.20	-11.05	42.56	14.59	Peak	100	14
6	15690.00	44.83	54.00	-9.17	28.85	15.98	Average	100	14
7	15690.00	57.85	74.00	-16.15	41.87	15.98	Peak	100	16

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	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

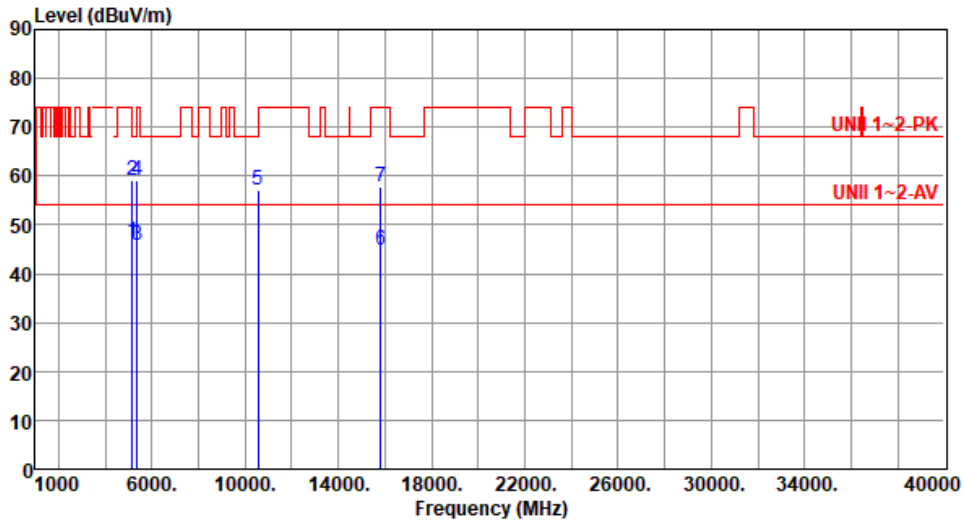


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.90	54.00	-7.10	40.59	6.31	Average	200	2
2	5150.00	60.57	74.00	-13.43	54.26	6.31	Peak	200	2
3	5350.00	45.87	54.00	-8.13	40.15	5.72	Average	200	2
4	5350.00	59.26	74.00	-14.74	53.54	5.72	Peak	200	2
5	10460.00	57.47	68.20	-10.73	42.88	14.59	Peak	100	61
6	15690.00	45.19	54.00	-8.81	29.21	15.98	Average	100	68
7	15690.00	58.15	74.00	-15.85	42.17	15.98	Peak	100	68

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	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

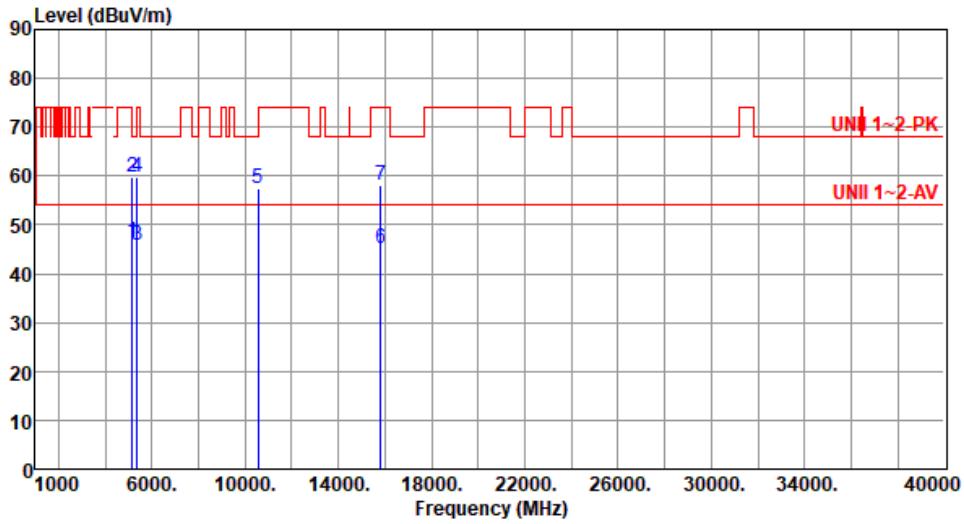


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.39	54.00	-7.61	40.08	6.31	Average	288	286
2	5150.00	59.16	74.00	-14.84	52.85	6.31	Peak	288	286
3	5350.00	45.85	54.00	-8.15	40.13	5.72	Average	288	286
4	5350.00	59.25	74.00	-14.75	53.53	5.72	Peak	288	286
5	10540.00	57.15	68.20	-11.05	42.47	14.68	Peak	100	11
6	15810.00	44.76	54.00	-9.24	28.96	15.80	Average	100	13
7	15810.00	57.78	74.00	-16.22	41.98	15.80	Peak	100	13

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	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

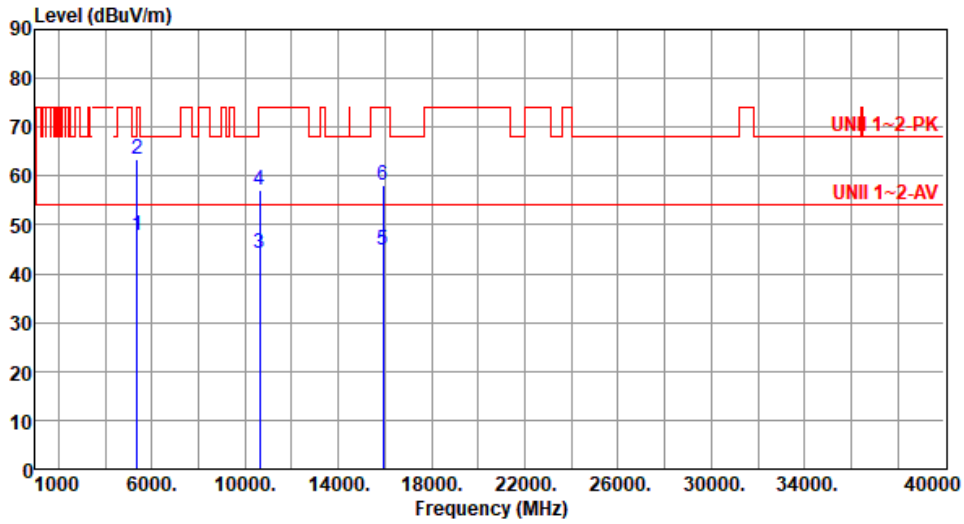


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.46	54.00	-7.54	40.15	6.31	Average	203	5
2	5150.00	59.86	74.00	-14.14	53.55	6.31	Peak	203	5
3	5350.00	45.97	54.00	-8.03	40.25	5.72	Average	203	5
4	5350.00	59.65	74.00	-14.35	53.93	5.72	Peak	203	5
5	10540.00	57.46	68.20	-10.74	42.78	14.68	Peak	100	66
6	15810.00	45.09	54.00	-8.91	29.29	15.80	Average	100	69
7	15810.00	58.06	74.00	-15.94	42.26	15.80	Peak	100	69

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	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

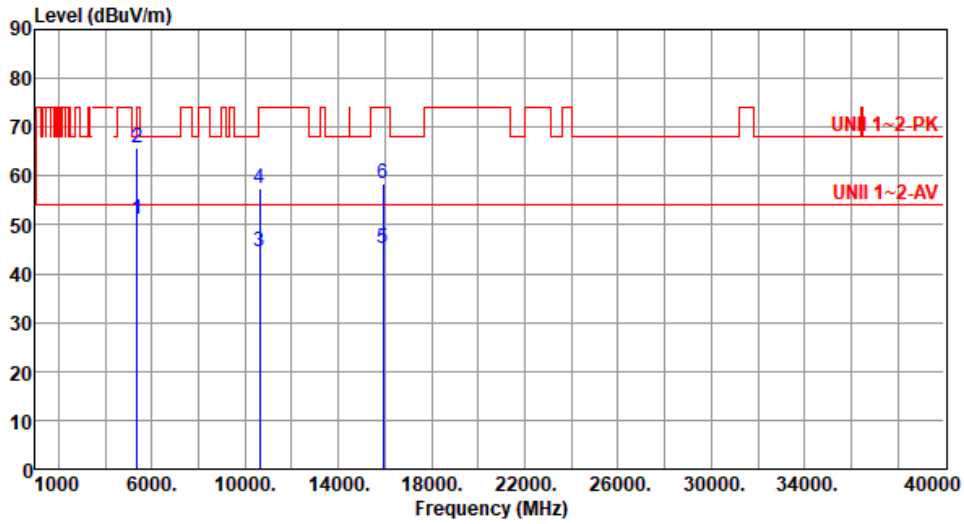


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	47.87	54.00	-6.13	42.15	5.72	Average	273	282
2	5350.00	63.50	74.00	-10.50	57.78	5.72	Peak	273	282
3	10620.00	44.24	54.00	-9.76	29.45	14.79	Average	100	15
4	10620.00	57.28	74.00	-16.72	42.49	14.79	Peak	100	15
5	15930.00	44.96	54.00	-9.04	29.34	15.62	Average	100	13
6	15930.00	57.99	74.00	-16.01	42.37	15.62	Peak	100	13

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	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

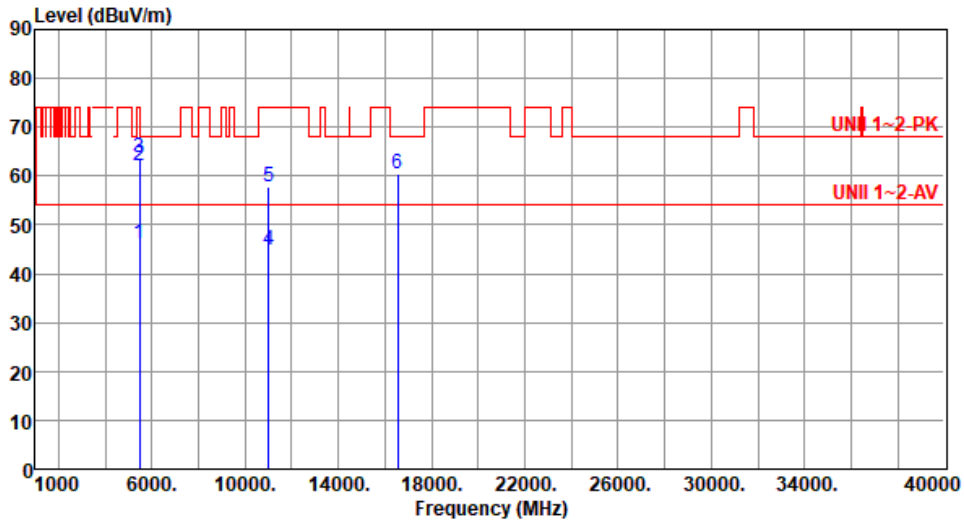


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	51.27	54.00	-2.73	45.55	5.72	Average	200	0
2	5350.00	65.92	74.00	-8.08	60.20	5.72	Peak	200	0
3	10620.00	44.54	54.00	-9.46	29.75	14.79	Average	100	65
4	10620.00	57.58	74.00	-16.42	42.79	14.79	Peak	100	65
5	15930.00	45.24	54.00	-8.76	29.62	15.62	Average	100	63
6	15930.00	58.29	74.00	-15.71	42.67	15.62	Peak	100	63

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	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

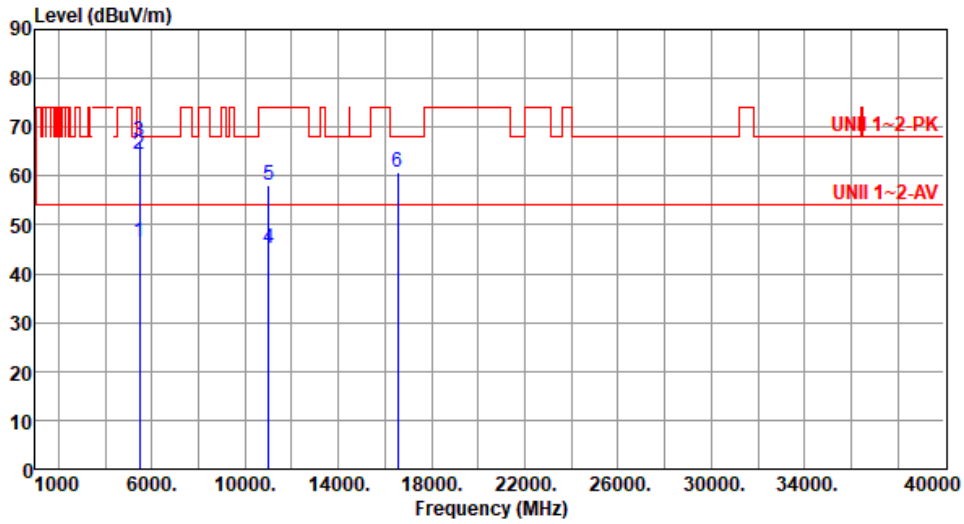


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.24	54.00	-7.76	39.94	6.30	Average	274	283
2	5460.00	62.12	74.00	-11.88	55.82	6.30	Peak	274	283
3	5470.00	63.92	68.20	-4.28	57.60	6.32	Peak	274	283
4	11020.00	44.85	54.00	-9.15	29.27	15.58	Average	100	16
5	11020.00	57.79	74.00	-16.21	42.21	15.58	Peak	100	16
6	16530.00	60.32	68.20	-7.88	43.02	17.30	Peak	100	18

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	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

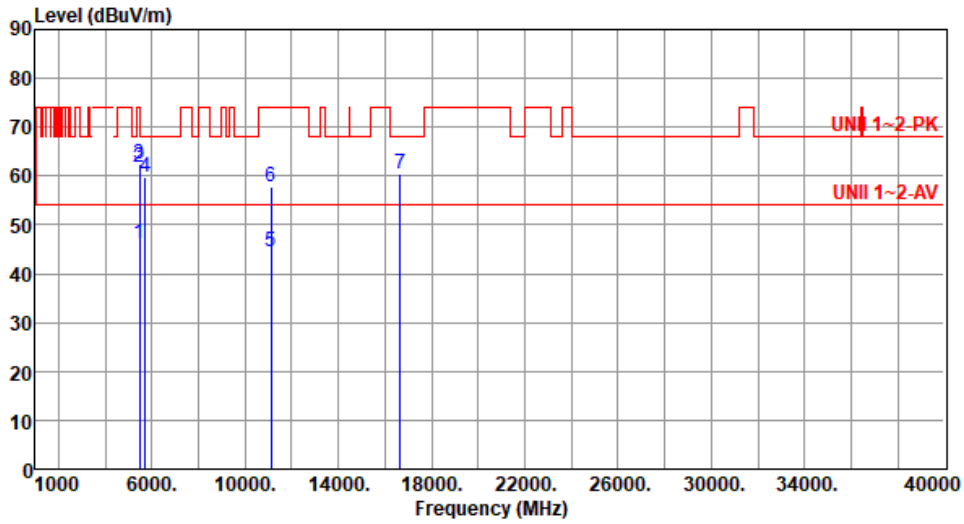


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.39	54.00	-7.61	40.09	6.30	Average	203	347
2	5460.00	64.38	74.00	-9.62	58.08	6.30	Peak	203	347
3	5470.00	67.07	68.20	-1.13	60.75	6.32	Peak	203	347
4	11020.00	45.17	54.00	-8.83	29.59	15.58	Average	100	65
5	11020.00	58.18	74.00	-15.82	42.60	15.58	Peak	100	65
6	16530.00	60.62	68.20	-7.58	43.32	17.30	Peak	100	69

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	VHT40	Test Freq. (MHz)	5550
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):65

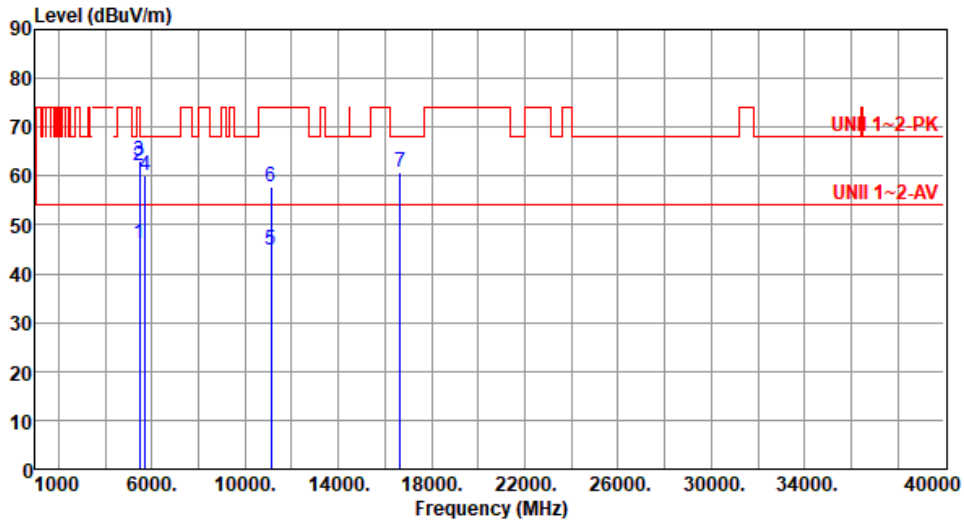


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.18	54.00	-7.82	39.88	6.30	Average	280	274
2	5460.00	61.68	74.00	-12.32	55.38	6.30	Peak	280	274
3	5470.00	62.45	68.20	-5.75	56.13	6.32	Peak	280	274
4	5725.00	59.93	68.20	-8.27	53.34	6.59	Peak	280	274
5	11100.00	44.64	54.00	-9.36	29.34	15.30	Average	100	14
6	11100.00	57.62	74.00	-16.38	42.32	15.30	Peak	100	14
7	16650.00	60.56	68.20	-7.64	43.37	17.19	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	VHT40	Test Freq. (MHz)	5550
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):65

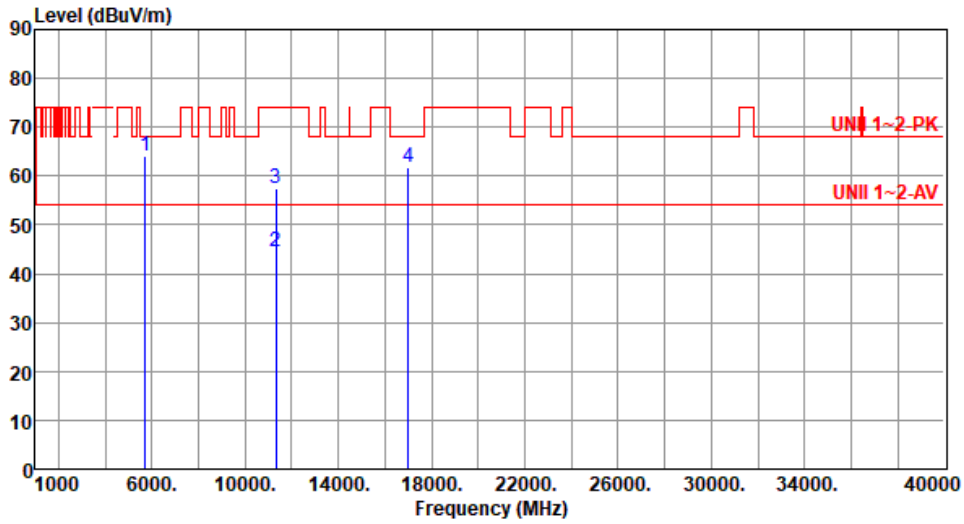


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	46.31	54.00	-7.69	40.01	6.30	Average	208	345
2	5460.00	61.98	74.00	-12.02	55.68	6.30	Peak	208	345
3	5470.00	63.05	68.20	-5.15	56.73	6.32	Peak	208	345
4	5725.00	60.25	68.20	-7.95	53.66	6.59	Peak	208	345
5	11100.00	44.92	54.00	-9.08	29.62	15.30	Average	100	62
6	11100.00	57.95	74.00	-16.05	42.65	15.30	Peak	100	62
7	16650.00	60.75	68.20	-7.45	43.56	17.19	Peak	100	68

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	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

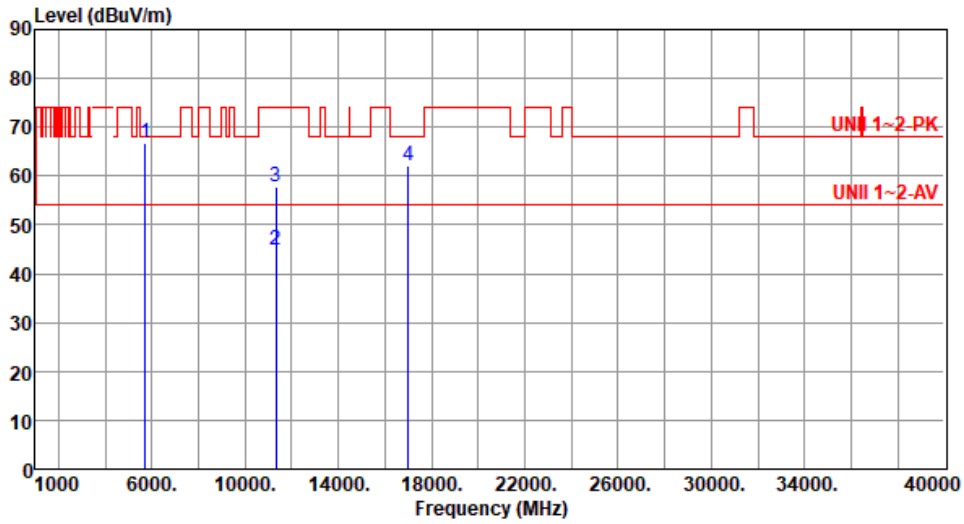


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	63.94	68.20	-4.26	57.35	6.59	Peak	277	262
2	11340.00	44.50	54.00	-9.50	29.38	15.12	Average	100	16
3	11340.00	57.54	74.00	-16.46	42.42	15.12	Peak	100	16
4	17010.00	61.88	68.20	-6.32	43.91	17.97	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	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

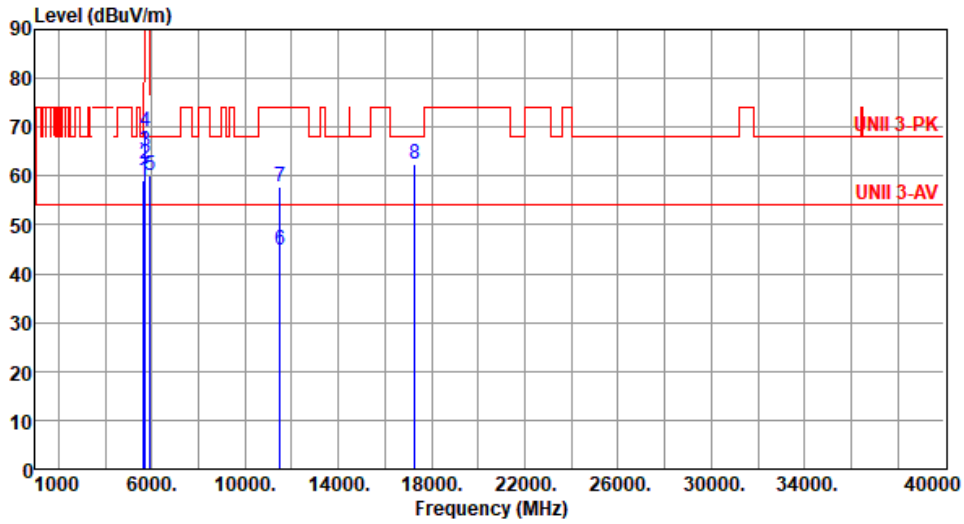


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	66.86	68.20	-1.34	60.27	6.59	Peak	205	348
2	11340.00	44.68	54.00	-9.32	29.56	15.12	Average	100	57
3	11340.00	57.83	74.00	-16.17	42.71	15.12	Peak	100	57
4	17010.00	62.22	68.20	-5.98	44.25	17.97	Peak	100	55

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	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

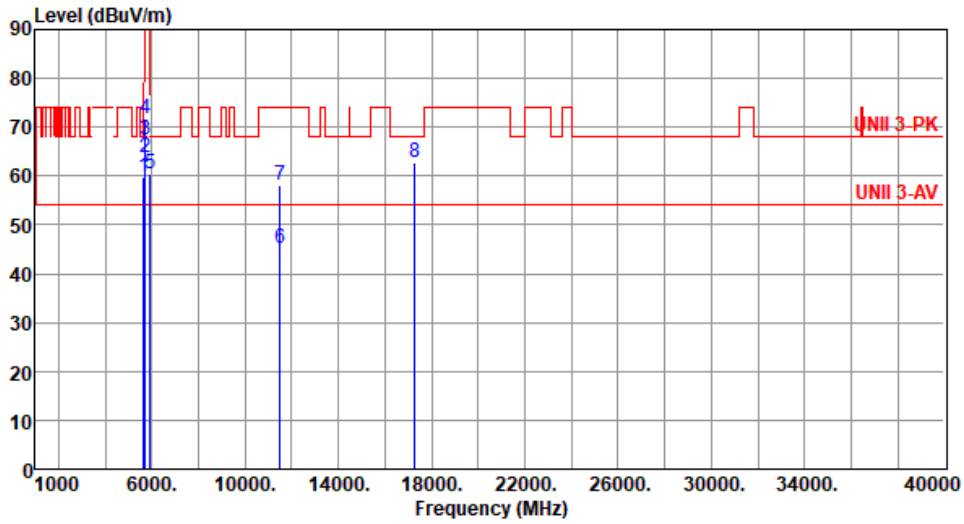


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.04	68.20	-9.16	52.72	6.32	Peak	279	281
2	5700.00	62.58	105.20	-42.62	56.05	6.53	Peak	279	281
3	5720.00	65.23	110.80	-45.57	58.65	6.58	Peak	279	281
4	5725.00	69.05	122.20	-53.15	62.46	6.59	Peak	279	281
5	5925.00	60.08	68.20	-8.12	53.05	7.03	Peak	279	281
6	11510.00	44.79	54.00	-9.21	29.39	15.40	Average	100	25
7	11510.00	57.73	74.00	-16.27	42.33	15.40	Peak	100	25
8	17265.00	62.46	68.20	-5.74	44.13	18.33	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	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

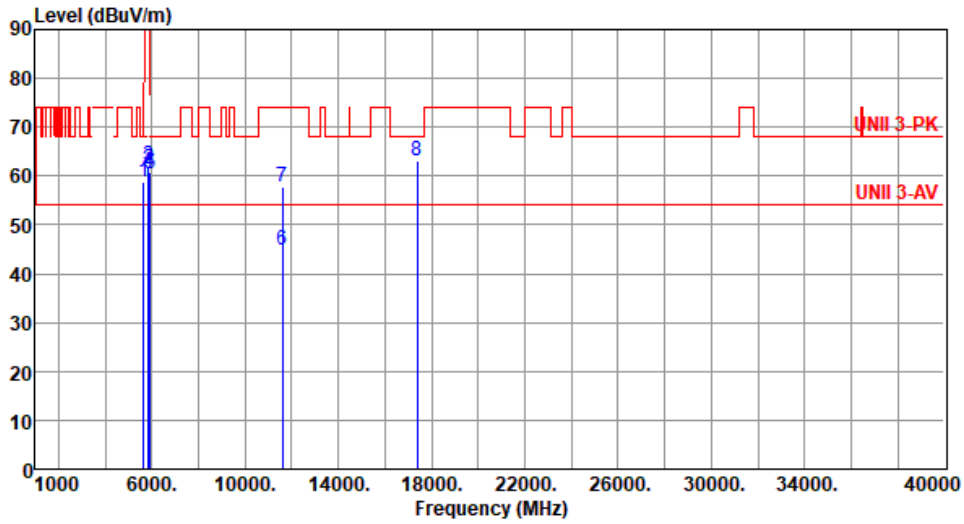


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.91	68.20	-8.29	53.59	6.32	Peak	232	348
2	5700.00	63.74	105.20	-41.46	57.21	6.53	Peak	232	348
3	5720.00	67.48	110.80	-43.32	60.90	6.58	Peak	232	348
4	5725.00	71.88	122.20	-50.32	65.29	6.59	Peak	232	348
5	5925.00	60.57	68.20	-7.63	53.54	7.03	Peak	232	348
6	11510.00	45.06	54.00	-8.94	29.66	15.40	Average	100	65
7	11510.00	58.09	74.00	-15.91	42.69	15.40	Peak	100	65
8	17265.00	62.69	68.20	-5.51	44.36	18.33	Peak	100	63

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	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

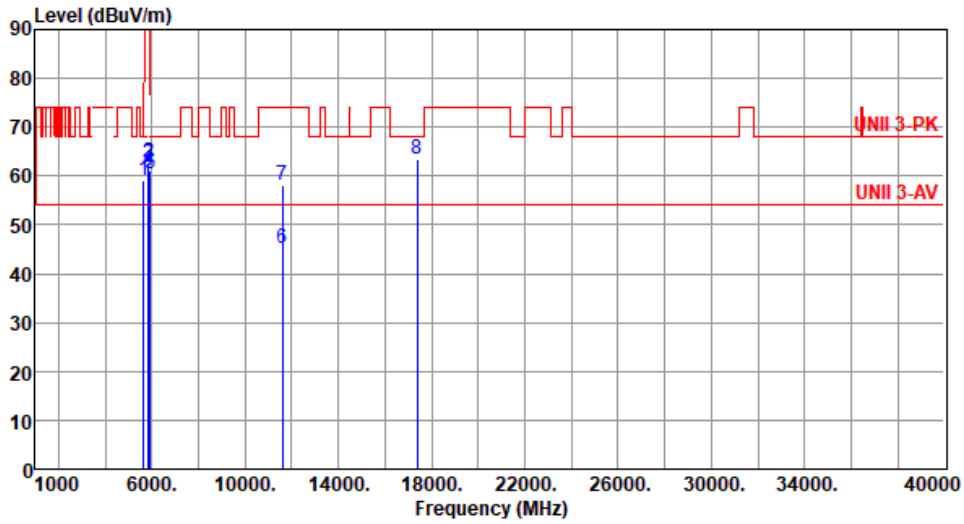


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	58.76	68.20	-9.44	52.44	6.32	Peak	270	265
2	5850.00	61.40	122.20	-60.80	54.63	6.77	Peak	270	265
3	5855.00	62.23	110.80	-48.57	55.43	6.80	Peak	270	265
4	5875.00	60.84	105.20	-44.36	53.96	6.88	Peak	270	265
5	5925.00	60.34	68.20	-7.86	53.31	7.03	Peak	270	265
6	11590.00	44.74	54.00	-9.26	29.36	15.38	Average	100	26
7	11590.00	57.75	74.00	-16.25	42.37	15.38	Peak	100	26
8	17385.00	63.20	68.20	-5.00	43.91	19.29	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	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65



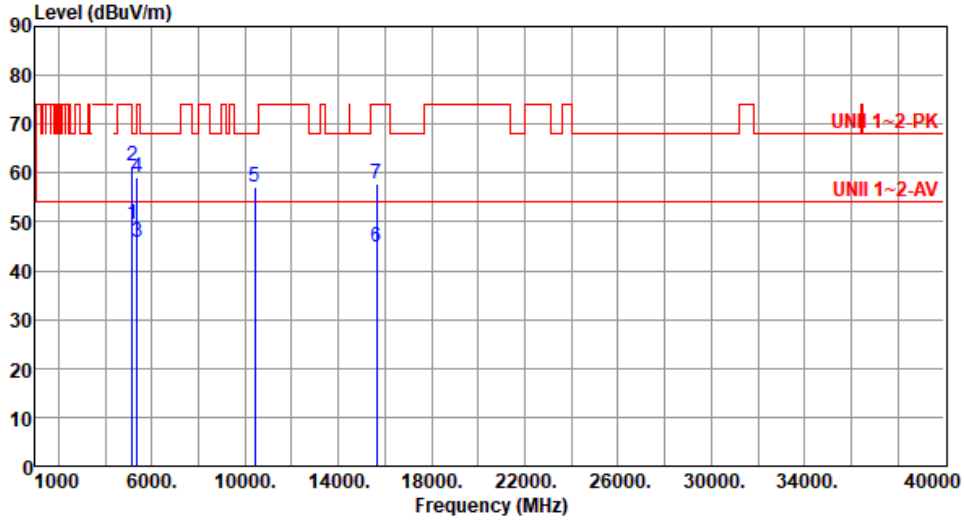
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.21	68.20	-8.99	52.89	6.32	Peak	231	356
2	5850.00	62.62	122.20	-59.58	55.85	6.77	Peak	231	356
3	5855.00	62.36	110.80	-48.44	55.56	6.80	Peak	231	356
4	5875.00	61.13	105.20	-44.07	54.25	6.88	Peak	231	356
5	5925.00	60.36	68.20	-7.84	53.33	7.03	Peak	231	356
6	11590.00	45.14	54.00	-8.86	29.76	15.38	Average	100	69
7	11590.00	58.12	74.00	-15.88	42.74	15.38	Peak	100	69
8	17385.00	63.50	68.20	-4.70	44.21	19.29	Peak	100	60

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).

3.4.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT80

Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

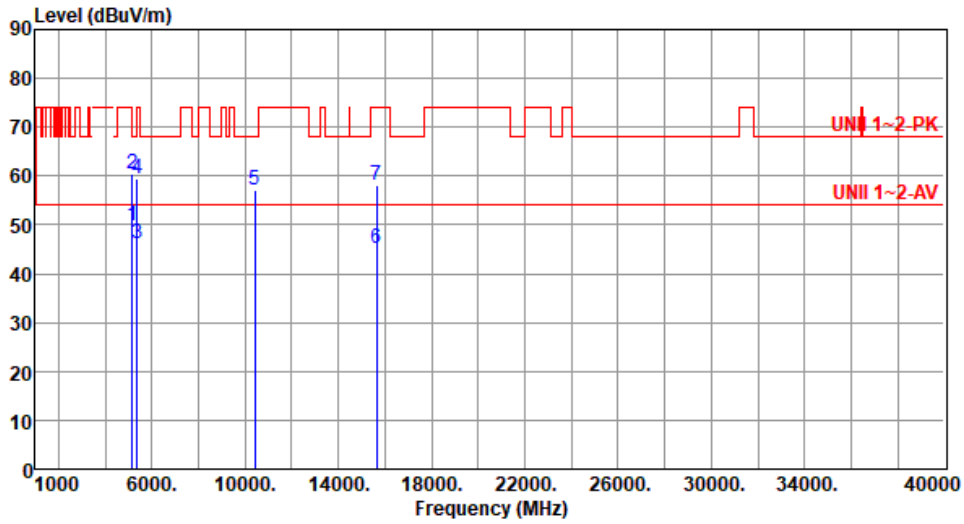


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	49.50	54.00	-4.50	43.19	6.31	Average	289	196
2	5150.00	61.56	74.00	-12.44	55.25	6.31	Peak	289	196
3	5350.00	45.72	54.00	-8.28	40.00	5.72	Average	289	196
4	5350.00	59.21	74.00	-14.79	53.49	5.72	Peak	289	196
5	10420.00	57.01	68.20	-11.19	42.50	14.51	Peak	100	24
6	15630.00	44.94	54.00	-9.06	28.99	15.95	Average	100	26
7	15630.00	57.84	74.00	-16.16	41.89	15.95	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	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

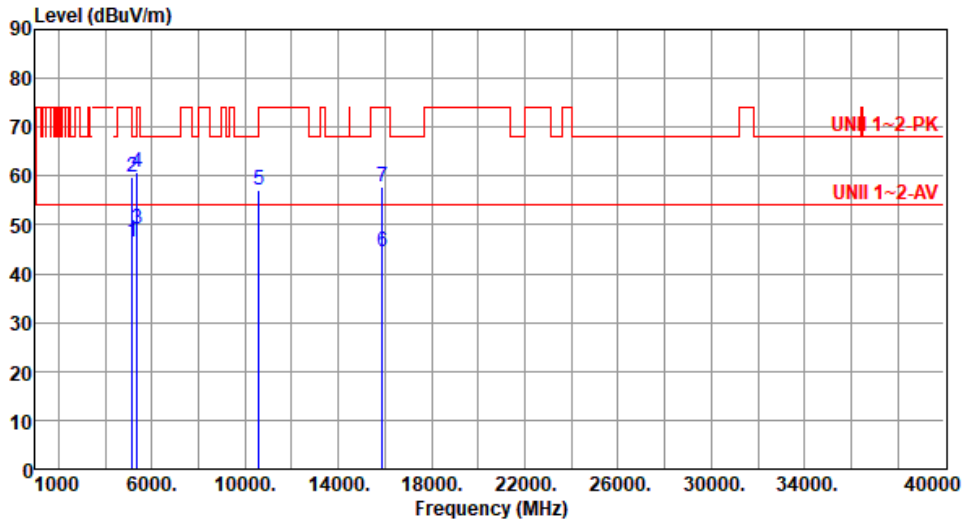


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	49.91	54.00	-4.09	43.60	6.31	Average	273	2
2	5150.00	60.39	74.00	-13.61	54.08	6.31	Peak	273	2
3	5350.00	46.18	54.00	-7.82	40.46	5.72	Average	273	2
4	5350.00	59.41	74.00	-14.59	53.69	5.72	Peak	273	2
5	10420.00	57.22	68.20	-10.98	42.71	14.51	Peak	100	60
6	15630.00	45.16	54.00	-8.84	29.21	15.95	Average	100	58
7	15630.00	58.08	74.00	-15.92	42.13	15.95	Peak	100	58

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	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

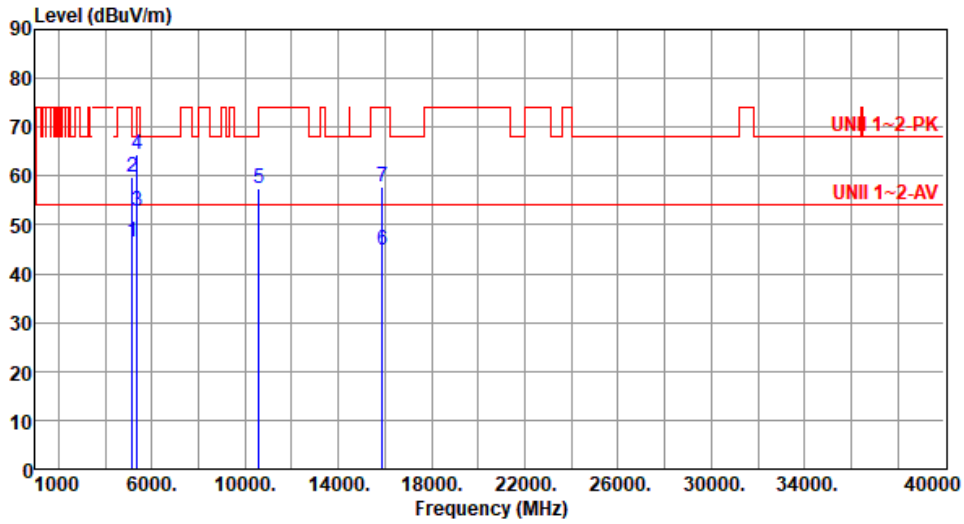


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.49	54.00	-7.51	40.18	6.31	Average	284	193
2	5150.00	59.75	74.00	-14.25	53.44	6.31	Peak	284	193
3	5350.00	49.18	54.00	-4.82	43.46	5.72	Average	284	193
4	5350.00	60.83	74.00	-13.17	55.11	5.72	Peak	284	193
5	10580.00	57.21	68.20	-10.99	42.50	14.71	Peak	100	19
6	15870.00	44.53	54.00	-9.47	28.88	15.65	Average	100	15
7	15870.00	57.64	74.00	-16.36	41.99	15.65	Peak	100	15

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	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

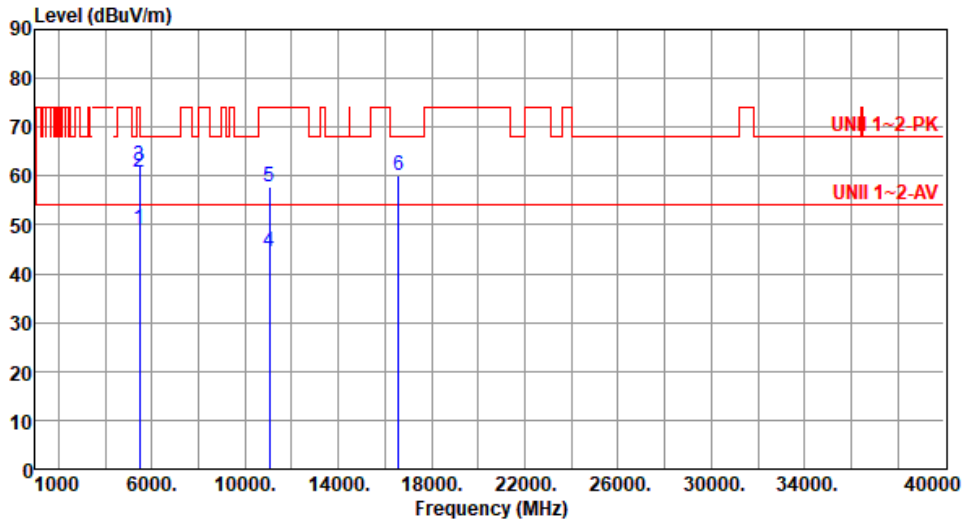


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.57	54.00	-7.43	40.26	6.31	Average	271	1
2	5150.00	59.89	74.00	-14.11	53.58	6.31	Peak	271	1
3	5350.00	52.95	54.00	-1.05	47.23	5.72	Average	271	1
4	5350.00	64.38	74.00	-9.62	58.66	5.72	Peak	271	1
5	10580.00	57.39	68.20	-10.81	42.68	14.71	Peak	100	56
6	15870.00	44.87	54.00	-9.13	29.22	15.65	Average	100	54
7	15870.00	57.92	74.00	-16.08	42.27	15.65	Peak	100	54

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	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

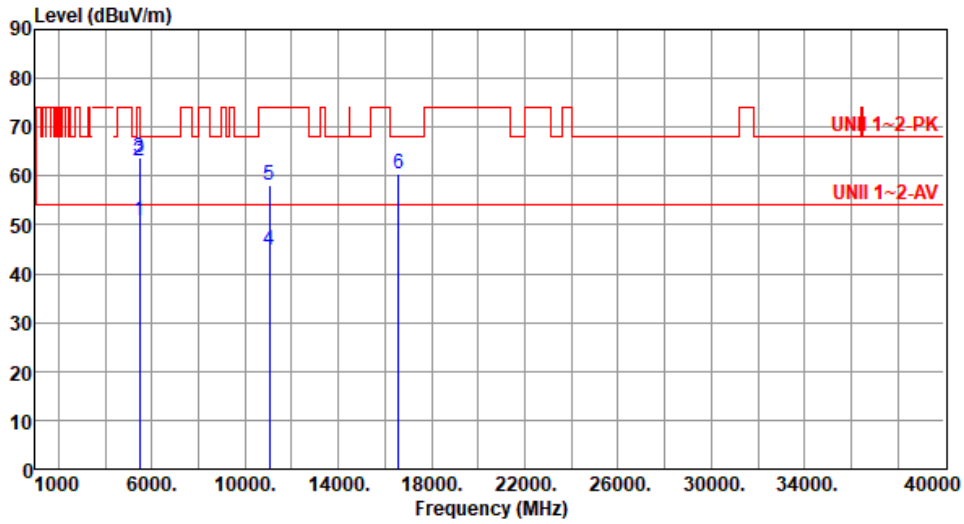


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	49.28	54.00	-4.72	42.98	6.30	Average	194	159
2	5460.00	60.90	74.00	-13.10	54.60	6.30	Peak	194	159
3	5470.00	62.09	68.20	-6.11	55.77	6.32	Peak	194	159
4	11060.00	44.55	54.00	-9.45	29.11	15.44	Average	100	29
5	11060.00	57.64	74.00	-16.36	42.20	15.44	Peak	100	29
6	16590.00	60.18	68.20	-8.02	43.20	16.98	Peak	100	30

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	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

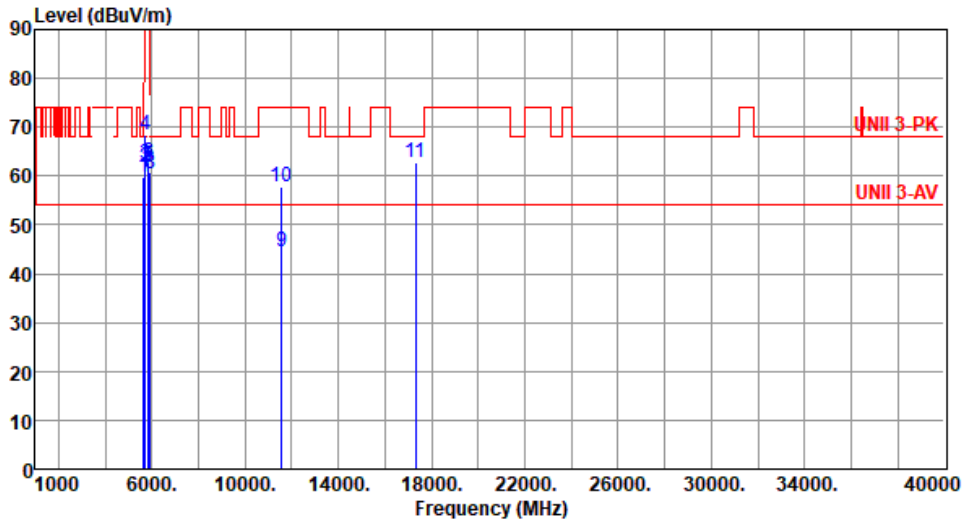


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	50.85	54.00	-3.15	44.55	6.30	Average	246	351
2	5460.00	62.98	74.00	-11.02	56.68	6.30	Peak	246	351
3	5470.00	63.62	68.20	-4.58	57.30	6.32	Peak	246	351
4	11060.00	44.88	54.00	-9.12	29.44	15.44	Average	100	62
5	11060.00	57.97	74.00	-16.03	42.53	15.44	Peak	100	62
6	16590.00	60.49	68.20	-7.71	43.51	16.98	Peak	100	65

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	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65

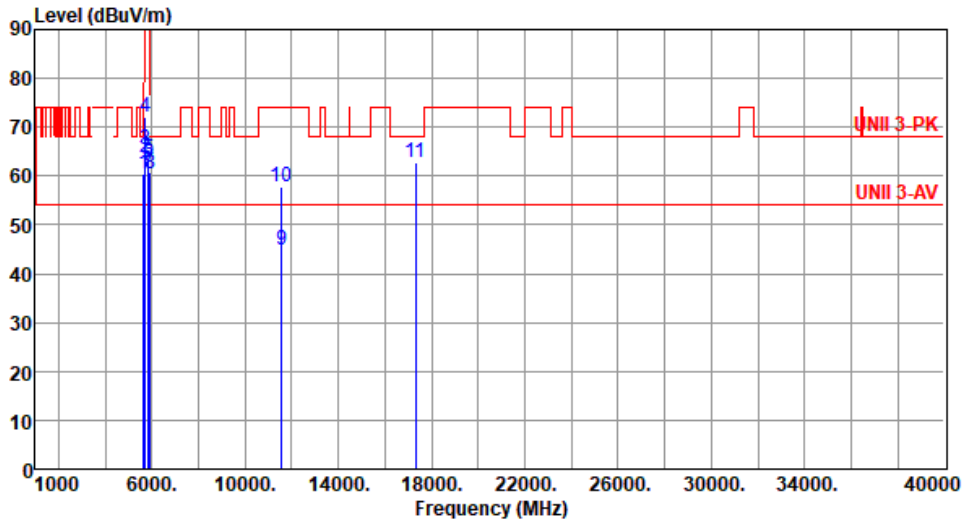


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	59.88	68.20	-8.32	53.56	6.32	Peak	195	131
2	5700.00	61.92	105.20	-43.28	55.39	6.53	Peak	195	131
3	5720.00	62.50	110.80	-48.30	55.92	6.58	Peak	195	131
4	5725.00	68.39	122.20	-53.81	61.80	6.59	Peak	195	131
5	5850.00	62.17	122.20	-60.03	55.40	6.77	Peak	195	131
6	5855.00	62.66	110.80	-48.14	55.86	6.80	Peak	195	131
7	5875.00	60.73	105.20	-44.47	53.85	6.88	Peak	195	131
8	5925.00	60.28	68.20	-7.92	53.25	7.03	Peak	195	131
9	11550.00	44.61	54.00	-9.39	29.22	15.39	Average	100	21
10	11550.00	57.69	74.00	-16.31	42.30	15.39	Peak	100	21
11	17325.00	62.68	68.20	-5.52	44.00	18.68	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	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):65



	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	60.51	68.20	-7.69	54.19	6.32	Peak	186	349
2	5700.00	63.76	105.20	-41.44	57.23	6.53	Peak	186	349
3	5720.00	65.34	110.80	-45.46	58.76	6.58	Peak	186	349
4	5725.00	71.90	122.20	-50.30	65.31	6.59	Peak	186	349
5	5850.00	63.47	122.20	-58.73	56.70	6.77	Peak	186	349
6	5855.00	62.88	110.80	-47.92	56.08	6.80	Peak	186	349
7	5875.00	60.92	105.20	-44.28	54.04	6.88	Peak	186	349
8	5925.00	60.43	68.20	-7.77	53.40	7.03	Peak	186	349
9	11550.00	44.98	54.00	-9.02	29.59	15.39	Average	100	69
10	11550.00	57.92	74.00	-16.08	42.53	15.39	Peak	100	69
11	17325.00	62.87	68.20	-5.33	44.19	18.68	Peak	100	63

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).

3.5 Frequency Stability

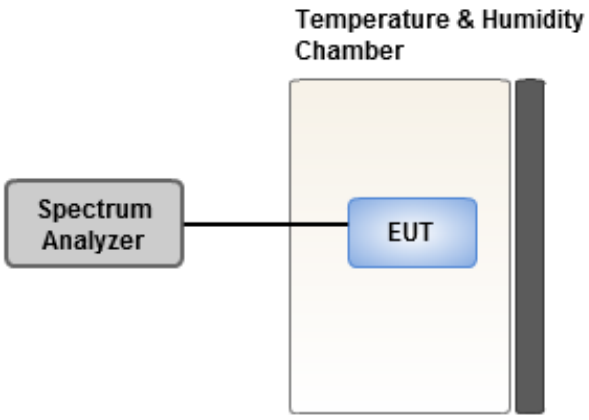
3.5.1 Limit of Frequency Stability

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 Result of Frequency Stability

Ambient Condition	22°C / 68%	Tested By	Aska Huang

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (ºC)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-13.70	-13.26	-13.12	-13.54
T20°CVmin	-14.69	-14.63	-14.51	-14.68
T55CVnom	-2.12	-1.94	-1.96	-1.76
T50CVnom	-3.56	-3.36	-2.96	-3.17
T40°CVnom	-5.14	-4.85	-5.41	-4.73
T30°CVnom	-9.54	-9.74	-8.88	-9.37
T20°CVnom	-14.43	-13.90	-14.25	-14.59
T10°CVnom	-9.99	-10.14	-10.29	-9.92
T0°CVnom	-8.86	-8.83	-8.52	-8.64
T-10°CVnom	-6.08	-6.20	-5.98	-6.20
T-20°CVnom	-3.88	-4.23	-3.65	-3.33
T-30°CVnom	-3.30	-2.82	-2.41	-3.33
Vnom [V]: 14.4		Vmax [V]: 16.8		Vmin [V]: 12.7
Tnom [°C]: 20		Tmax [°C]: 55		Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (ºC)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-11.80	-12.19	-12.04	-12.17
T20°CVmin	-12.96	-12.43	-12.78	-13.25
T55CVnom	-2.09	-2.14	-1.87	-1.41
T50CVnom	-3.12	-3.38	-3.40	-3.21
T40°CVnom	-4.15	-4.65	-4.26	-4.29
T30°CVnom	-9.15	-8.72	-8.85	-8.36
T20°CVnom	-12.40	-12.82	-12.86	-13.02
T10°CVnom	-8.43	-8.29	-8.35	-8.18
T0°CVnom	-7.93	-8.15	-7.69	-8.65
T-10°CVnom	-5.24	-5.78	-5.72	-5.36
T-20°CVnom	-3.14	-3.24	-3.67	-2.96
T-30°CVnom	-2.69	-2.82	-3.09	-3.18
Vnom [V]: 14.4		Vmax [V]: 16.8		Vmin [V]: 12.7
Tnom [°C]: 20		Tmax [°C]: 55		Tmin [°C]: -30

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 333, 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==