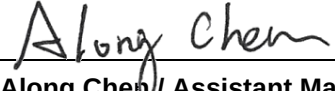


FCC C2PC Test Report

FCC ID : P27RP362M
Equipment : AC2100 Wi-Fi Mesh Extender ;
AC2100 Wi-Fi Mesh Router
Model No. : RP362M ; IP3421M
Multiple Listing : Refer to item 1.1.1 for more details
Brand Name : Sercomm
Applicant : Sercomm Corporation
Address : 8F, No. 3-1, YuanQu St., NanKang, Taipei 115,
Taiwan, R.O.C.
Standard : 47 CFR FCC Part 15.407
Received Date : Feb. 12, 2020
Tested Date : Mar. 04 ~ Apr. 08, 2020

We, International Certification Corp., 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 may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:


Along Chen / Assistant Manager

Approved by:

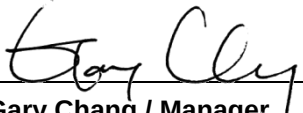

Gary Chang / Manager



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Local Support Equipment List	10
1.3	Test Setup Chart	11
1.4	The Equipment List	13
1.5	Testing Applied Standards	14
1.6	Deviation from Test Standard and Measurement Procedure.....	14
1.7	Measurement Uncertainty	15
2	TEST CONFIGURATION.....	16
2.1	Testing Condition	16
2.2	The Worst Test Modes and Channel Details	17
3	TRANSMITTER TEST RESULTS	19
3.1	Conducted Emissions.....	19
3.2	Emission Bandwidth	28
3.3	RF Output Power.....	51
3.4	Peak Power Spectral Density	63
3.5	Transmitter Radiated and Band Edge Emissions	88
3.6	Frequency Stability.....	181
4	TEST LABORATORY INFORMATION	183

Release Record

Report No.	Version	Description	Issued Date
FR021202-01	Rev. 01	Initial issue	Apr. 29, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.835MHz 28.62 (Margin -17.38dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5470.00MHz 67.14 (Margin -1.06dB) – PK 5350.00MHz 52.94 (Margin -1.06dB) - AV	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: Non-beamforming mode 5250~5350MHz: 23.60 5470~5725MHz: 23.56 Beamforming mode 5250~5350MHz: 21.43 5470~5725MHz: 21.44	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

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

This is a Class II Permissive Change report (C2PC).

This report is issued as a supplementary report to original ICC report no. FR021202AN. The modification is only concerned with adding 5250~5350MHz and 5470~5725 MHz band by software setting.

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
Sercomm	RP362MXXXXXXXXXX	AC2100 Wi-Fi Mesh Extender	FW: v1.00.01 supports 2 LANs. Indoor AP / Client
Sercomm	IP3421MXXXXXXXXXX	AC2100 Wi-Fi Mesh Router	FW: v1.00.00.001 supports 1 WAN & 1 LAN Indoor AP
- the 1st X should be "blank" or "-"; the rest X could be 0 to 9, A to Z, "blank", "- " or "/" , for marketing purpose. - The above models used the same hardware but with the different firmware. - The above models, model RP362M and IP3421M were selected as a representative one for the final test			

1.1.2 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
5250-5350 5470-5725	a	5260-5320 5500-5720	52-64 [4] 100-144 [12]	4	6-54 Mbps
5250-5350 5470-5725	n (HT20)	5260-5320 5500-5720	52-64 [4] 100-144 [12]	4	MCS 0-31
5250-5350 5470-5725	n (HT40)	5270-5310 5510-5710	54-62 [2] 102-142 [6]	4	MCS 0-31
5250-5350 5470-5725	ac (VHT20)	5260-5320 5500-5720	52-64 [4] 100-144 [12]	4	MCS 0-9
5250-5350 5470-5725	ac (VHT40)	5270-5310 5510-5710	54-62 [2] 102-142 [6]	4	MCS 0-9
5250-5350 5470-5725	ac (VHT80)	5290 5530-5690	58 [1] 106-138 [3]	4	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: 802.11n/ac supports beamforming mode.					

1.1.3 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)	
				5250~5350	5470~5725
1	Dual Ant 1	Dipole	i-pex	2.09	2.27
2	Dual ANT 2	Dipole	i-pex	2.21	2.12
3	Wi Fi 5G Ant 1	PIFA	N/A	2.32	2.1
4	Wi Fi 5G Ant 2	PIFA	N/A	2.35	2.96

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter
--------------------------	-----------------------

1.1.5 Accessories

Accessories		
No.	Equipment	Description
1	AC adapter	Brand: MOSO Model: MSS-H1000WR120-012B0-US I/P: 100-240Vac, 50/60Hz, 0.5A max O/P: 12.0Vdc, 1A Power Line: 1.5m non-shielded without core

Note: There are two designs for the adapter, with or without Y-capacitor.

1.1.6 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
52	5260	54	5270
56	5280	62	5310
60	5300	102	5510
64	5320	110	5550
100	5500	118	5590
104	5520	126	5630
108	5540	134	5670
112	5560	142	5710
116	5580	VHT80	
120	5600	58	5290
124	5620	106	5530
128	5640	122	5610
132	5660	138	5690
136	5680	---	---
140	5700	---	---
144	5720	---	---

1.1.7 Test Tool and Duty Cycle

Non-beamforming

Test Tool	MT7615 QA, V0.0.2.0		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11a	97.02%	0.13
	VHT20	96.85%	0.14
	VHT40	93.13%	0.31
	VHT80	92.14%	0.36

Beamforming

Test Tool	Putty, V0.60.0.0		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	VHT20	98.31%	0.07
	VHT40	94.41%	0.25
	VHT80	98.10%	0.08

1.1.8 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5260	11	---
11a	5300	11	---
11a	5320	11	---
11a	5500	0F	---
11a	5580	11	---
11a	5700	0E	---
VHT20	5260	15	23
VHT20	5300	15	23
VHT20	5320	15	23
VHT20	5500	12	19
VHT20	5580	15	22
VHT20	5700	12	17
VHT40	5270	1B	24
VHT40	5310	11	16
VHT40	5510	0F	16
VHT40	5590	1B	24
VHT40	5670	12	18
VHT80	5290	0F	14
VHT80	5530	0F	15
VHT80	5610	13	19

Channel that extends across the 5.725 GHz boundary

Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5720	12	---
VHT20	5720	16	24
VHT40	5710	1C	25
VHT80	5690	16	21

1.2 Local Support Equipment List

Non-beamforming mode

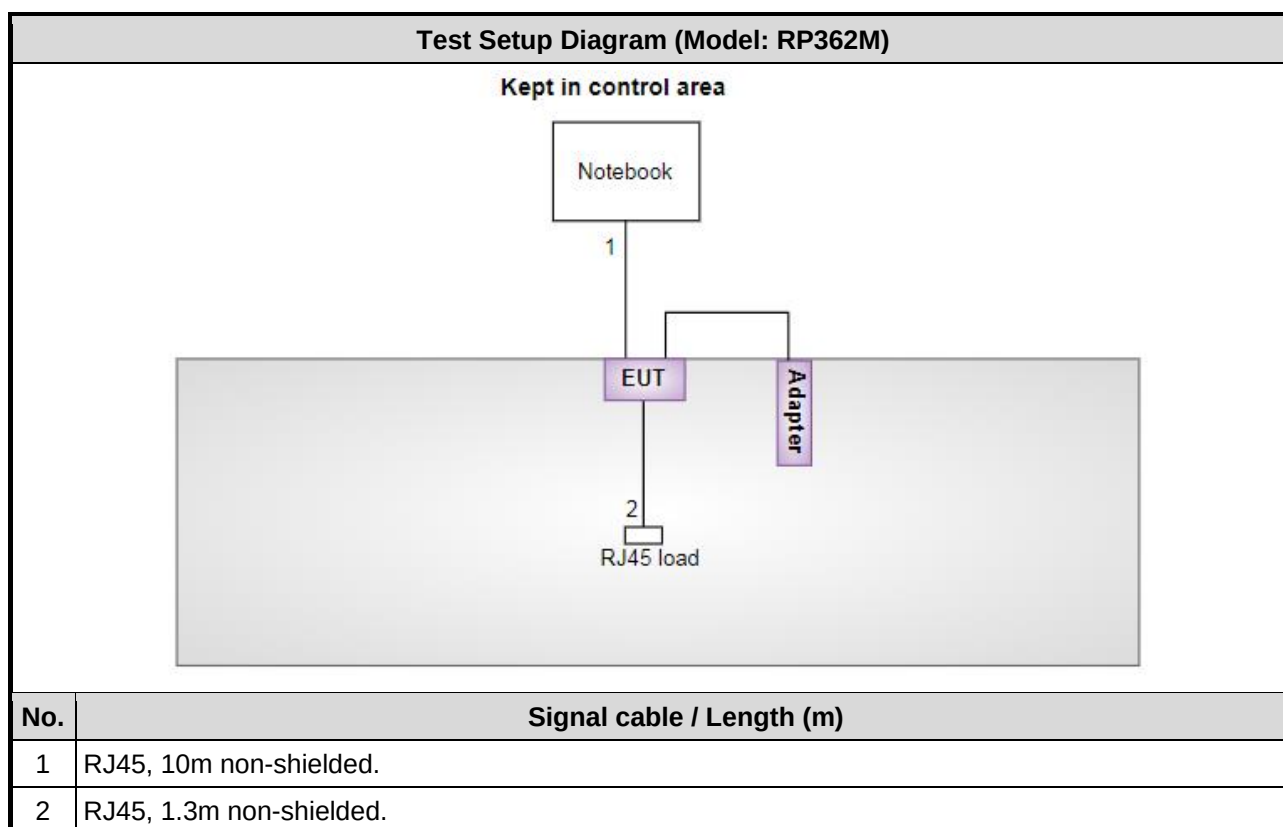
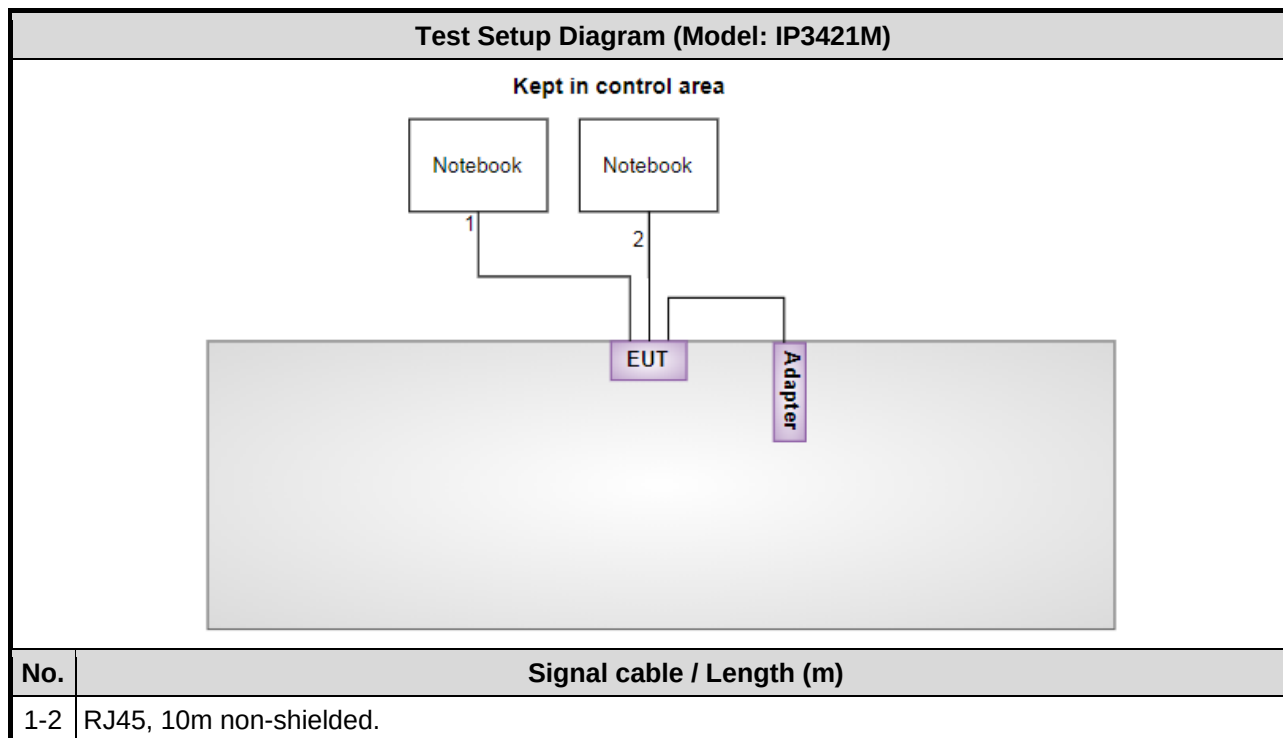
Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5470	DoC	---
2	Notebook	DELL	Latitude E6440	DoC	---
3	RJ45 Load	ICC	---	---	---

Beamforming mode

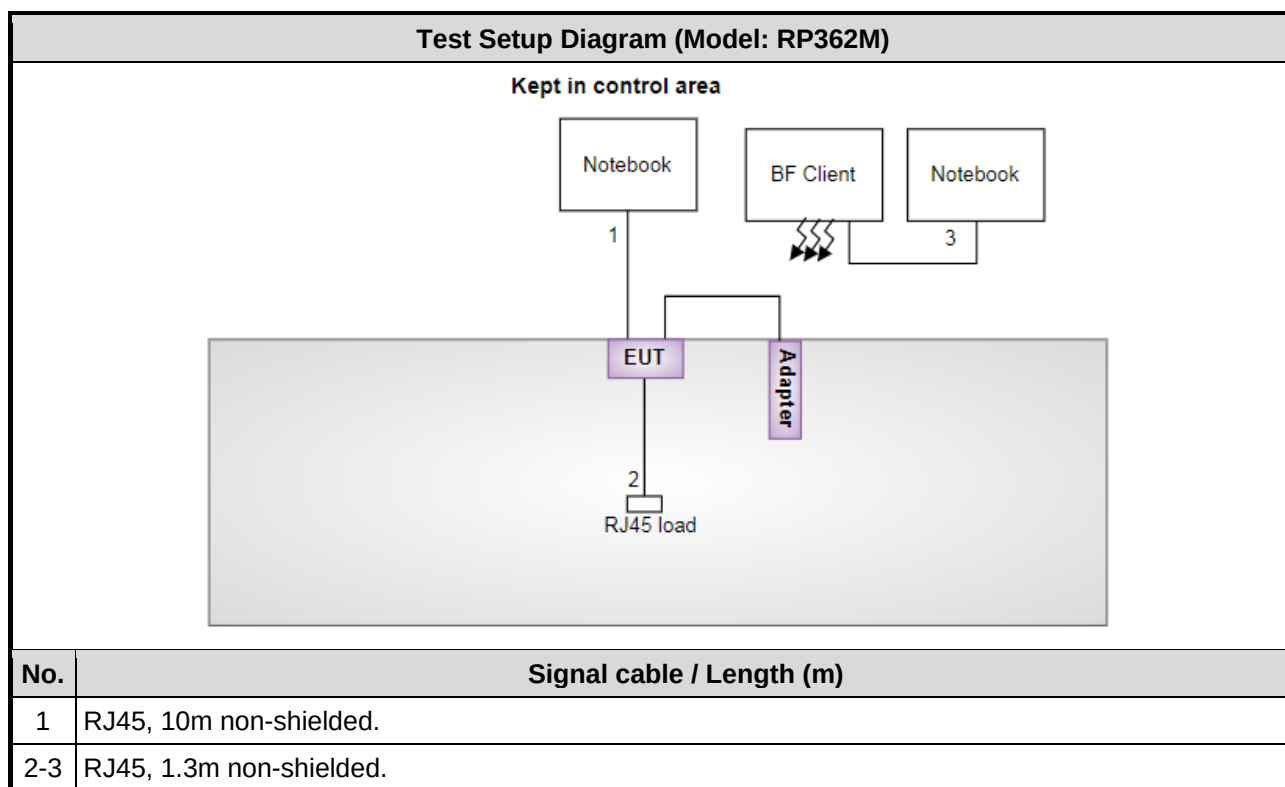
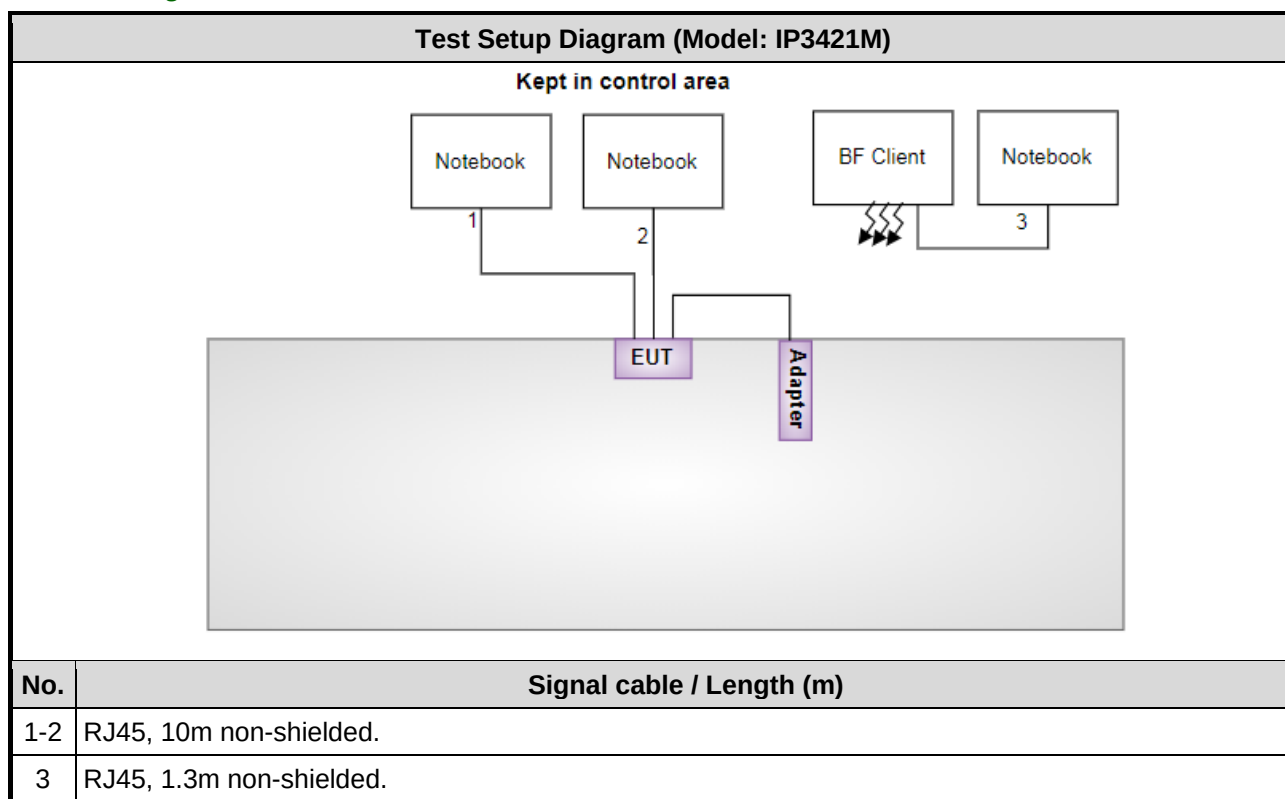
Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5470	DoC	---
2	Notebook	DELL	Latitude E6440	DoC	---
3	Notebook	DELL	Latitude E6430	DoC	---
4	RJ45 Load	ICC	---	---	---
5	BF Client (AC2100 Wi-Fi Mesh Extender)	Sercomm	IP3421M	---	Provided by applicant.
6	BF Client (AC2100 Wi-Fi Mesh Extender)	Sercomm	RP362M	---	Provided by applicant.

1.3 Test Setup Chart

Non-beamforming mode



Beamforming mode



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Apr. 02, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101658	Dec. 12, 2019	Dec. 11, 2020
LISN	R&S	ENV216	101579	Mar. 12, 2020	Mar. 11, 2021
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Tested Date	Mar. 04 ~ Mar. 26, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Jan. 09, 2020	Jan. 08, 2021
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 17, 2019	Apr. 16, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 27, 2019	Dec. 26, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2019	Nov. 14, 2020
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2019	Nov. 12, 2020
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 07, 2019	Oct. 06, 2020
Preamplifier	EMC	EMC02325	980187	Aug. 14, 2019	Aug. 13, 2020
Preamplifier	Agilent	83017A	MY53270014	Aug. 07, 2019	Aug. 06, 2020
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 27, 2019	Sep. 26, 2020
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 27, 2019	Sep. 26, 2020
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Sep. 27, 2019	Sep. 26, 2020
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 27, 2019	Sep. 26, 2020
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 27, 2019	Sep. 26, 2020
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 27, 2019	Sep. 26, 2020
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	Apr. 01 ~ Apr. 08, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Apr. 17, 2019	Apr. 16, 2020
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 12, 2019	Dec. 11, 2020
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 02, 2019	Dec. 01, 2020
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.407

ANSI C63.10-2013

FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

FCC KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 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
Conducted emission	± 2.715 dB
AC conducted emission	± 2.92 dB
Radiated emission ≤ 1 GHz	± 3.96 dB
Radiated emission > 1 GHz	± 4.51 dB
Time	$\pm 0.1\%$
Temperature	± 0.4 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	24°C / 68%	Alex Tsai
Radiated Emissions	03CH03-WS	20-21°C / 63-65%	Brad Wu Roger Lu
RF Conducted	TH01-WS	21°C / 64%	Aska Huang

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

2.2 The Worst Test Modes and Channel Details

Non-beamforming mode

For Frequency band 5250-5350 MHz, 5470-5725 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	VHT40	5270	MCS 0	1, 2
Radiated Emissions ≤1GHz	VHT40	5270	MCS 0	1, 2
RF Output Power	11a	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	6 Mbps	1
	HT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	HT40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5610 / 5690	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	6 Mbps	1
	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5610 / 5690	MCS 0	
Frequency Stability	Un-modulation	5500	---	1
NOTE: 1. The adapter have two configurations (with Y capacitor / without Y capacitor) had been covered during the pretest, and found that without Y was the worst case and was selected for final test. 2. Thee EUT had been tested by following test configurations. Configuration 1 , Model name: IP3421M Configuration 2 , Model name: RP362M				

Beamforming mode

For Frequency band 5250-5350 MHz, 5470-5725 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	VHT40	5270	MCS 0	1, 2
Radiated Emissions ≤1GHz	VHT40	5270	MCS 0	1, 2
RF Output Power	HT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	1
	HT40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5610 / 5690	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	1
	VHT40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5610 / 5690	MCS 0	
NOTE: 1. The adapter have two capacitors (with Y and without Y) had been covered during the pretest, and found that without Y was the worst case and was selected for final test. 2. Thee EUT had been tested by following test configurations. Configuration 1 , Model name: IP3421M Configuration 2 , Model name: RP362M				

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

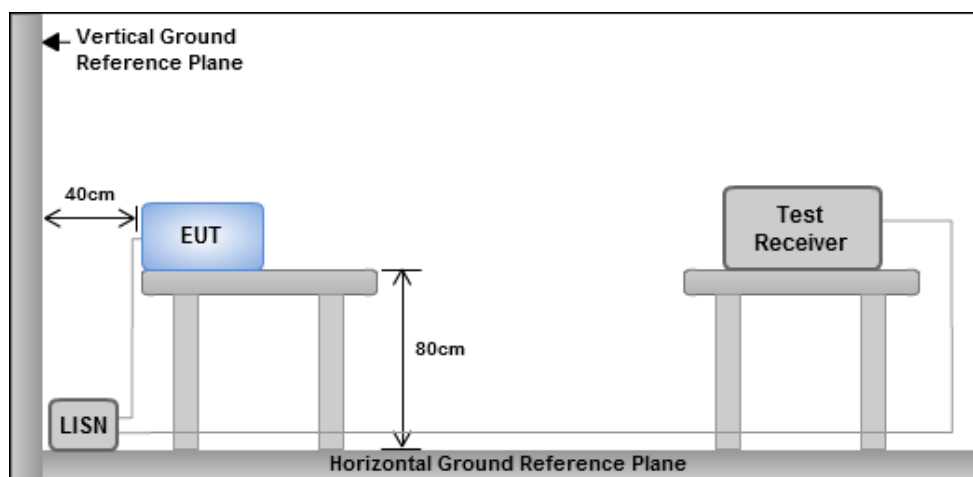
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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

3.1.2 Test Procedures

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

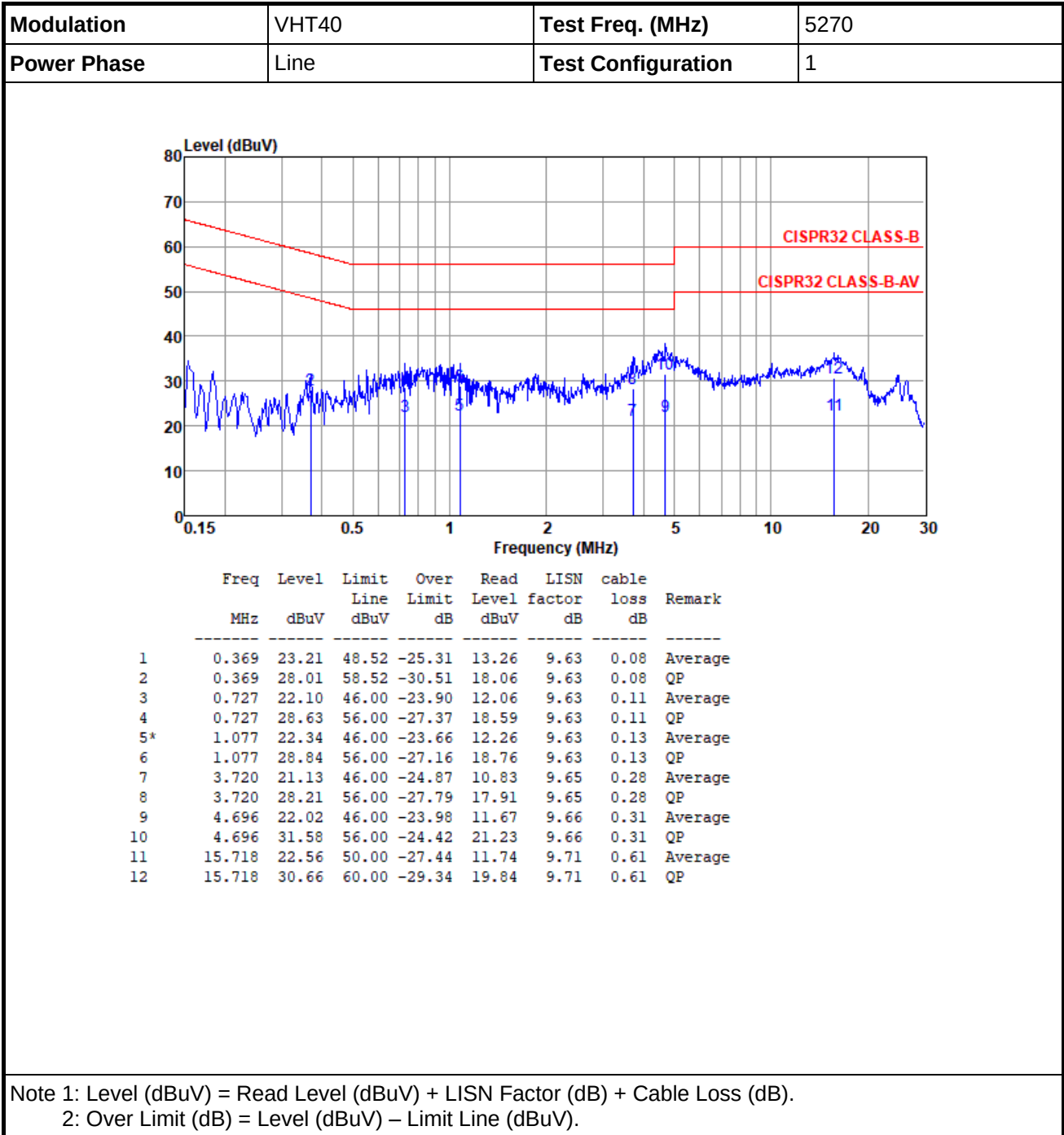
3.1.3 Test Setup



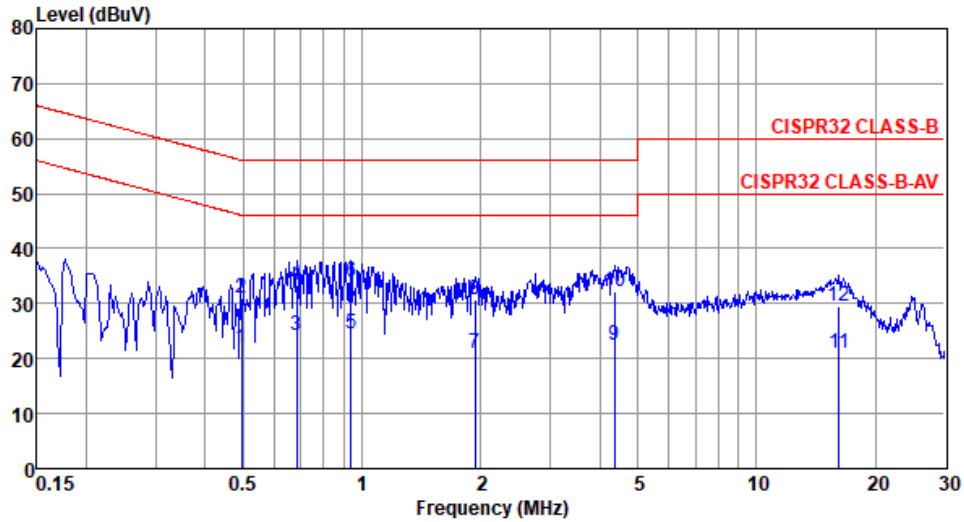
- Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

Non- beamforming mode



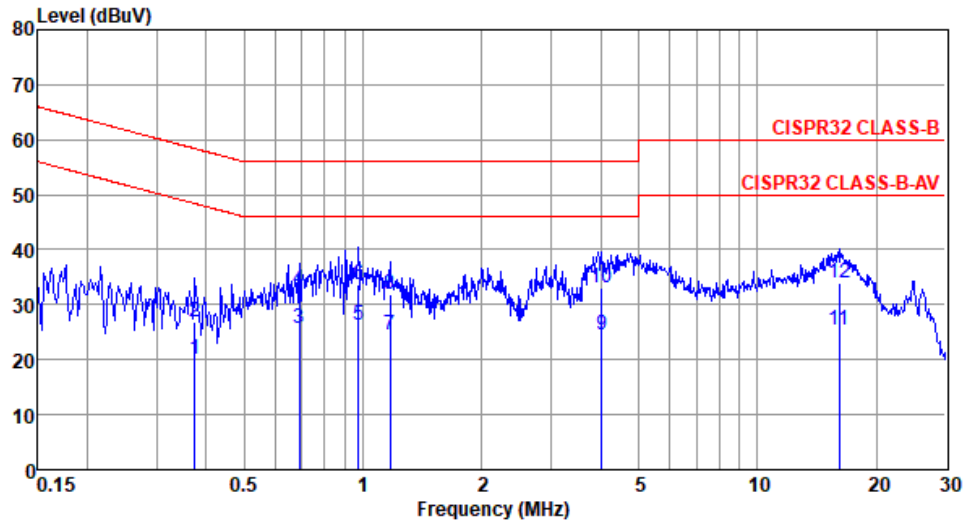
Modulation	VHT40	Test Freq. (MHz)	5270
Power Phase	Neutral	Test Configuration	1



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1	0.494	21.75	46.10	-24.35	11.83	9.65	0.09	Average
2	0.494	30.91	56.10	-25.19	20.99	9.65	0.09	QP
3	0.683	24.32	46.00	-21.68	14.38	9.65	0.10	Average
4	0.683	33.32	56.00	-22.68	23.38	9.65	0.10	QP
5*	0.938	24.55	46.00	-21.45	14.58	9.65	0.12	Average
6	0.938	33.98	56.00	-22.02	24.01	9.65	0.12	QP
7	1.939	20.99	46.00	-25.01	10.89	9.66	0.18	Average
8	1.939	30.71	56.00	-25.29	20.61	9.66	0.18	QP
9	4.361	22.46	46.00	-23.54	12.21	9.68	0.30	Average
10	4.361	32.09	56.00	-23.91	21.84	9.68	0.30	QP
11	16.226	20.84	50.00	-29.16	10.00	9.81	0.62	Average
12	16.226	29.56	60.00	-30.44	18.72	9.81	0.62	QP

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

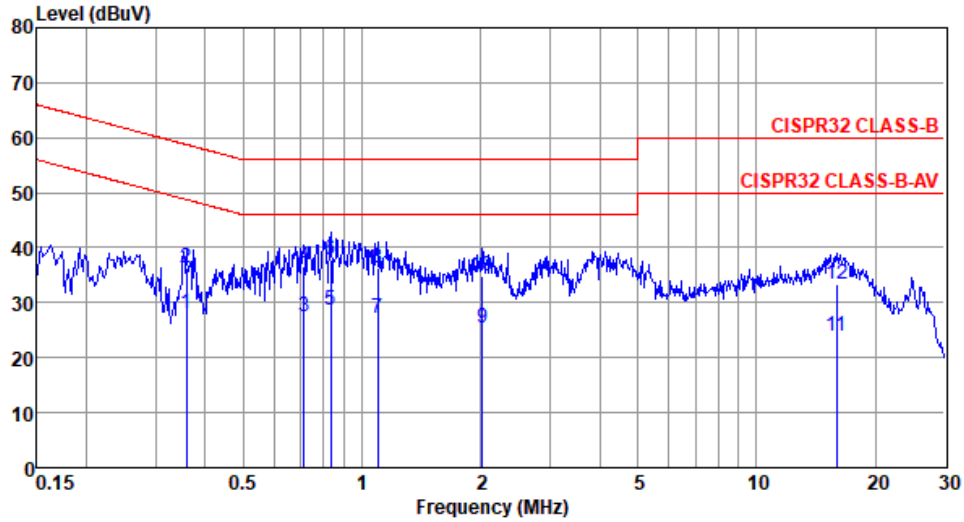
Modulation	VHT40	Test Freq. (MHz)	5270
Power Phase	Line	Test Configuration	2



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1	0.375	20.18	48.39	-28.21	10.23	9.63	0.08	Average
2	0.375	27.00	58.39	-31.39	17.05	9.63	0.08	QP
3	0.690	25.76	46.00	-20.24	15.74	9.63	0.10	Average
4	0.690	32.65	56.00	-23.35	22.63	9.63	0.10	QP
5*	0.974	26.29	46.00	-19.71	16.22	9.63	0.12	Average
6	0.974	33.71	56.00	-22.29	23.64	9.63	0.12	QP
7	1.172	24.65	46.00	-21.35	14.57	9.63	0.13	Average
8	1.172	32.02	56.00	-23.98	21.94	9.63	0.13	QP
9	4.027	24.47	46.00	-21.53	14.16	9.65	0.29	Average
10	4.027	32.92	56.00	-23.08	22.61	9.65	0.29	QP
11	16.140	25.27	50.00	-24.73	14.43	9.71	0.62	Average
12	16.140	33.91	60.00	-26.09	23.07	9.71	0.62	QP

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

Modulation	VHT40	Test Freq. (MHz)	5270
Power Phase	Neutral	Test Configuration	2

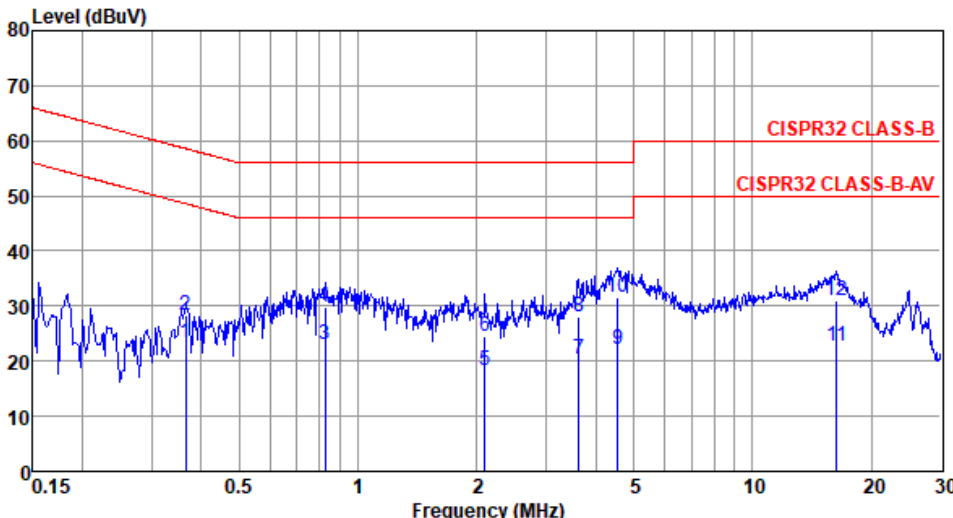


	Freq MHz	Level dBuV	Limit dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.360	28.09	48.74	-20.65	18.19	9.65	0.08	Average
2	0.360	36.40	58.74	-22.34	26.50	9.65	0.08	QP
3	0.712	27.34	46.00	-18.66	17.39	9.65	0.11	Average
4	0.712	36.74	56.00	-19.26	26.79	9.65	0.11	QP
5*	0.835	28.62	46.00	-17.38	18.67	9.65	0.11	Average
6	0.835	37.89	56.00	-18.11	27.94	9.65	0.11	QP
7	1.094	27.18	46.00	-18.82	17.19	9.65	0.13	Average
8	1.094	36.28	56.00	-19.72	26.29	9.65	0.13	QP
9	2.023	25.48	46.00	-20.52	15.38	9.66	0.18	Average
10	2.023	34.73	56.00	-21.27	24.63	9.66	0.18	QP
11	15.970	24.02	50.00	-25.98	13.21	9.80	0.61	Average
12	15.970	33.34	60.00	-26.66	22.53	9.80	0.61	QP

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

Beamforming mode

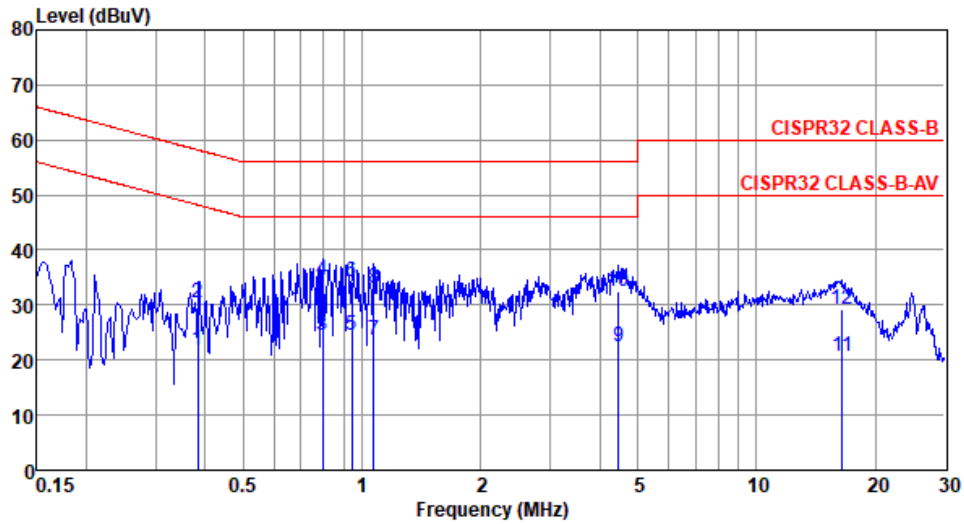
Modulation	VHT40	Test Freq. (MHz)	5270
Power Phase	Line	Test Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.365	23.47	48.61	-25.14	13.52	9.63	0.08	Average
2	0.365	28.28	58.61	-30.33	18.33	9.63	0.08	QP
3*	0.826	22.89	46.00	-23.11	12.84	9.63	0.11	Average
4	0.826	29.89	56.00	-26.11	19.84	9.63	0.11	QP
5	2.099	18.42	46.00	-27.58	8.25	9.64	0.19	Average
6	2.099	24.58	56.00	-31.42	14.41	9.64	0.19	QP
7	3.623	20.43	46.00	-25.57	10.14	9.65	0.27	Average
8	3.623	27.96	56.00	-28.04	17.67	9.65	0.27	QP
9	4.549	22.25	46.00	-23.75	11.92	9.66	0.30	Average
10	4.549	31.68	56.00	-24.32	21.35	9.66	0.30	QP
11	16.312	22.76	50.00	-27.24	11.91	9.71	0.62	Average
12	16.312	30.88	60.00	-29.12	20.03	9.71	0.62	QP

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

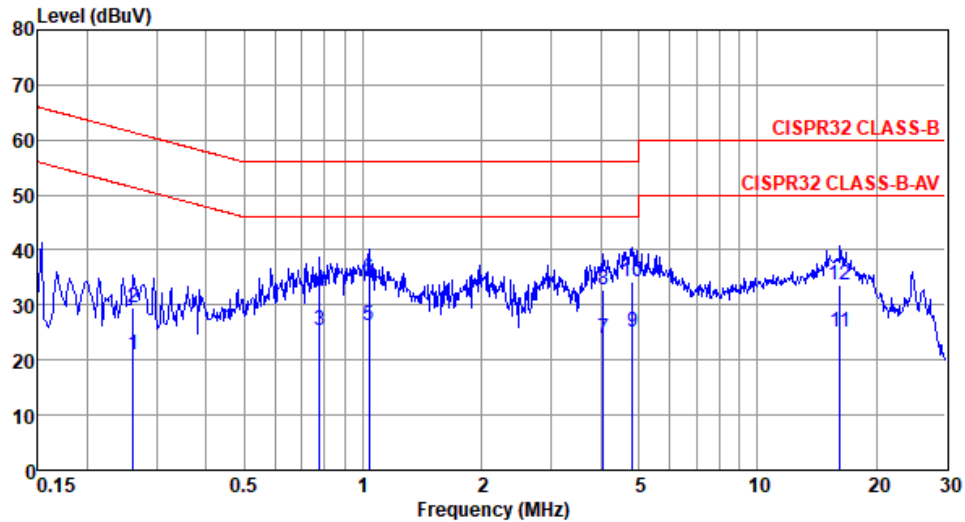
Modulation	VHT40	Test Freq. (MHz)	5270
Power Phase	Neutral	Test Configuration	1



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line dBuV	Limit dB	Level dBuV	factor dB	loss dB	
1	0.383	21.89	48.21	-26.32	11.99	9.65	0.08	Average
2	0.383	30.49	58.21	-27.72	20.59	9.65	0.08	QP
3	0.796	24.46	46.00	-21.54	14.51	9.65	0.11	Average
4*	0.796	34.53	56.00	-21.47	24.58	9.65	0.11	QP
5	0.943	24.42	46.00	-21.58	14.45	9.65	0.12	Average
6	0.943	34.29	56.00	-21.71	24.32	9.65	0.12	QP
7	1.071	23.66	46.00	-22.34	13.67	9.65	0.13	Average
8	1.071	33.16	56.00	-22.84	23.17	9.65	0.13	QP
9	4.478	22.38	46.00	-23.62	12.13	9.68	0.30	Average
10	4.478	32.48	56.00	-23.52	22.23	9.68	0.30	QP
11	16.486	20.81	50.00	-29.19	9.96	9.81	0.62	Average
12	16.486	29.26	60.00	-30.74	18.41	9.81	0.62	QP

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

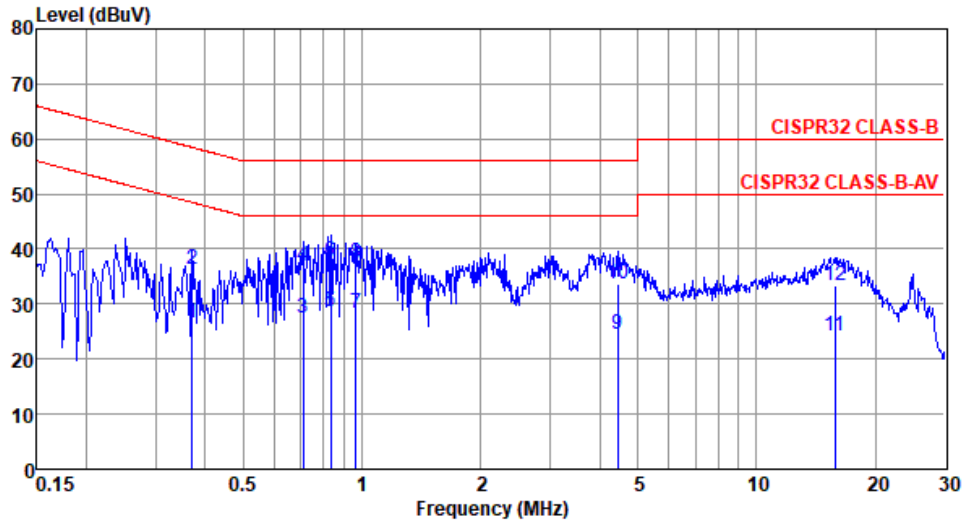
Modulation	VHT40	Test Freq. (MHz)	5270
Power Phase	Line	Test Configuration	2



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1	0.262	20.94	51.38	-30.44	11.03	9.63	0.07	Average
2	0.262	29.61	61.38	-31.77	19.70	9.63	0.07	QP
3	0.775	25.48	46.00	-20.52	15.44	9.63	0.11	Average
4	0.775	32.52	56.00	-23.48	22.48	9.63	0.11	QP
5*	1.037	26.33	46.00	-19.67	16.26	9.63	0.12	Average
6	1.037	34.85	56.00	-21.15	24.78	9.63	0.12	QP
7	4.070	23.99	46.00	-22.01	13.68	9.65	0.29	Average
8	4.070	32.64	56.00	-23.36	22.33	9.65	0.29	QP
9	4.822	25.15	46.00	-20.85	14.80	9.66	0.31	Average
10	4.822	34.20	56.00	-21.80	23.85	9.66	0.31	QP
11	16.226	24.95	50.00	-25.05	14.10	9.71	0.62	Average
12	16.226	33.76	60.00	-26.24	22.91	9.71	0.62	QP

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

Modulation	VHT40	Test Freq. (MHz)	5270
Power Phase	Neutral	Test Configuration	2



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1	0.371	26.69	48.47	-21.78	16.79	9.65	0.08	Average
2	0.371	36.30	58.47	-22.17	26.40	9.65	0.08	QP
3	0.708	27.50	46.00	-18.50	17.56	9.65	0.10	Average
4	0.708	36.77	56.00	-19.23	26.83	9.65	0.10	QP
5*	0.835	28.76	46.00	-17.24	18.81	9.65	0.11	Average
6	0.835	37.68	56.00	-18.32	27.73	9.65	0.11	QP
7	0.963	28.34	46.00	-17.66	18.37	9.65	0.12	Average
8	0.963	37.46	56.00	-18.54	27.49	9.65	0.12	QP
9	4.454	24.40	46.00	-21.60	14.15	9.68	0.30	Average
10	4.454	33.59	56.00	-22.41	23.34	9.68	0.30	QP
11	15.801	24.07	50.00	-25.93	13.26	9.80	0.61	Average
12	15.801	33.25	60.00	-26.75	22.44	9.80	0.61	QP

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

3.2 Emission Bandwidth

3.2.1 Test Procedures

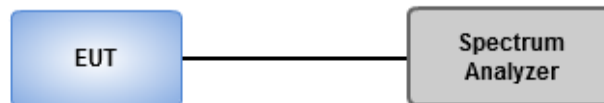
26dB Bandwidth

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

Occupied Bandwidth

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

3.2.2 Test Setup



3.2.3 Test Result of Emission Bandwidth

Non-beamforming mode

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.928M	16.498M	16M5D1D	19.493M	16.425M
802.11ac VHT20_Nss1,(MCS0)_4TX	20M	17.583M	17M6D1D	19.783M	17.511M
802.11ac VHT40_Nss1,(MCS0)_4TX	41.159M	36.324M	36M3D1D	39.71M	36.035M
802.11ac VHT80_Nss1,(MCS0)_4TX	80.87M	74.964M	75M0D1D	79.42M	74.964M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	20M	16.498M	16M5D1D	14.652M	13.198M
802.11ac VHT20_Nss1,(MCS0)_4TX	20.362M	17.583M	17M6D1D	14.913M	13.763M
802.11ac VHT40_Nss1,(MCS0)_4TX	42.609M	36.324M	36M3D1D	34.899M	32.822M
802.11ac VHT80_Nss1,(MCS0)_4TX	81.449M	75.253M	75M3D1D	74.565M	71.635M

Max-N dB = Maximum 26dB down bandwidth

Max-OBW = Maximum 99% occupied bandwidth

Min-N dB = Maximum 26dB down bandwidth

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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1 ,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	19.638M	16.498M	19.71M	16.425M	19.493M	16.498M	19.855M	16.425M
5300MHz	Pass	Inf	19.493M	16.498M	19.783M	16.498M	19.928M	16.498M	19.638M	16.425M
5320MHz	Pass	Inf	19.493M	16.498M	19.565M	16.498M	19.855M	16.425M	19.855M	16.425M
5500MHz	Pass	Inf	19.638M	16.425M	19.71M	16.425M	19.783M	16.425M	19.71M	16.425M
5580MHz	Pass	Inf	19.493M	16.498M	19.638M	16.425M	20M	16.425M	19.71M	16.498M
5700MHz	Pass	Inf	19.565M	16.353M	19.71M	16.425M	19.783M	16.498M	19.565M	16.425M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.696M	13.198M	14.826M	13.242M	14.826M	13.242M	14.652M	13.285M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.13M	3.647M	3.13M	3.705M	3.13M	3.763M	3.13M	3.936M
802.11ac VHT20 _Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	19.928M	17.511M	19.855M	17.511M	19.783M	17.511M	19.928M	17.511M
5300MHz	Pass	Inf	19.928M	17.511M	19.855M	17.511M	19.855M	17.511M	19.928M	17.511M
5320MHz	Pass	Inf	20M	17.511M	19.855M	17.511M	19.783M	17.511M	19.928M	17.583M
5500MHz	Pass	Inf	20.362M	17.511M	19.855M	17.511M	19.855M	17.583M	20M	17.511M
5580MHz	Pass	Inf	20.362M	17.583M	19.928M	17.511M	19.855M	17.511M	20.217M	17.511M
5700MHz	Pass	Inf	20M	17.511M	19.783M	17.511M	19.783M	17.511M	20M	17.583M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.087M	13.806M	14.957M	13.763M	14.913M	13.763M	14.913M	13.806M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.478M	4.052M	3.71M	3.994M	3.13M	3.994M	3.768M	4.11M

Port X-N dB = 26dB down bandwidth

Port X-OBW = Port X 99% occupied bandwidth

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT40 _Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	41.159M	36.035M	39.71M	36.179M	40.435M	36.035M	40.29M	36.324M
5310MHz	Pass	Inf	40.435M	36.035M	40.29M	36.179M	40.145M	36.035M	40.29M	36.035M
5510MHz	Pass	Inf	40.58M	36.035M	39.565M	36.179M	40.29M	36.035M	40.29M	36.035M
5590MHz	Pass	Inf	42.609M	36.324M	39.71M	36.179M	40M	36.035M	40.435M	36.324M
5670MHz	Pass	Inf	40.435M	36.035M	39.855M	36.035M	40.29M	36.035M	40.435M	36.179M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.116M	32.923M	34.899M	32.822M	35.203M	32.822M	35.101M	32.923M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.13M	16.961M	3.13M	10.246M	3.13M	11.52M	3.13M	20.434M
802.11ac VHT80 _Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	80.87M	74.964M	79.42M	74.964M	79.71M	74.964M	79.71M	74.964M
5530MHz	Pass	Inf	81.449M	75.253M	79.71M	74.964M	80M	74.964M	80M	75.253M
5610MHz	Pass	Inf	81.159M	75.253M	79.71M	74.964M	80.29M	75.253M	80M	75.253M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.217M	72.069M	74.565M	72.069M	75M	71.635M	74.565M	72.069M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.13M	24.834M	3.13M	18.35M	3.13M	18.871M	3.13M	30.449M

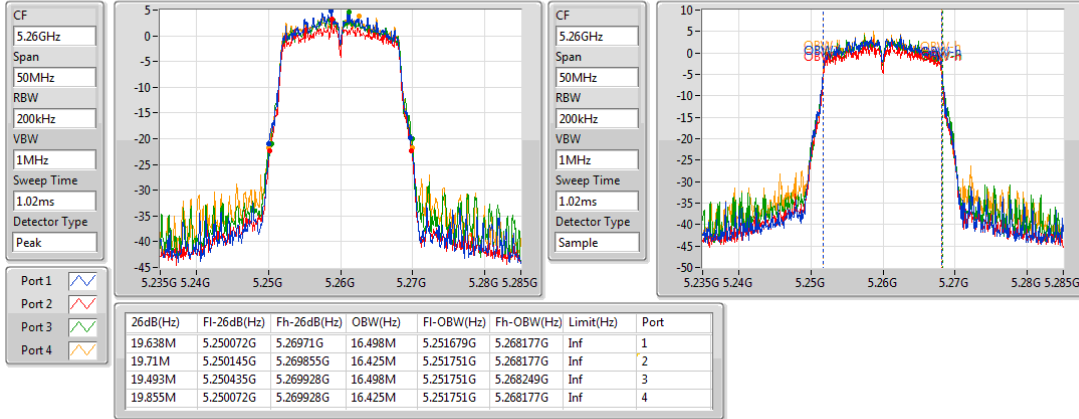
Port X-N dB = 26dB down bandwidth

Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_4TX

EBW

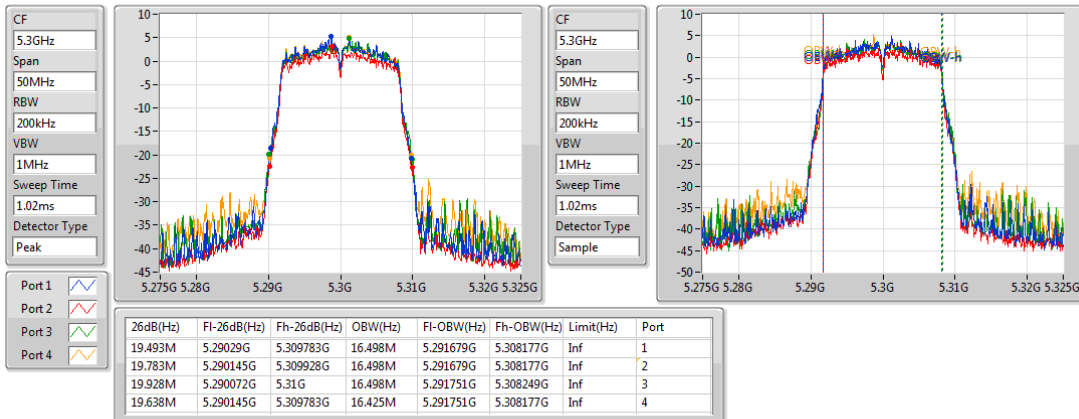
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802.11a_Nss1,(6Mbps)_4TX

EBW

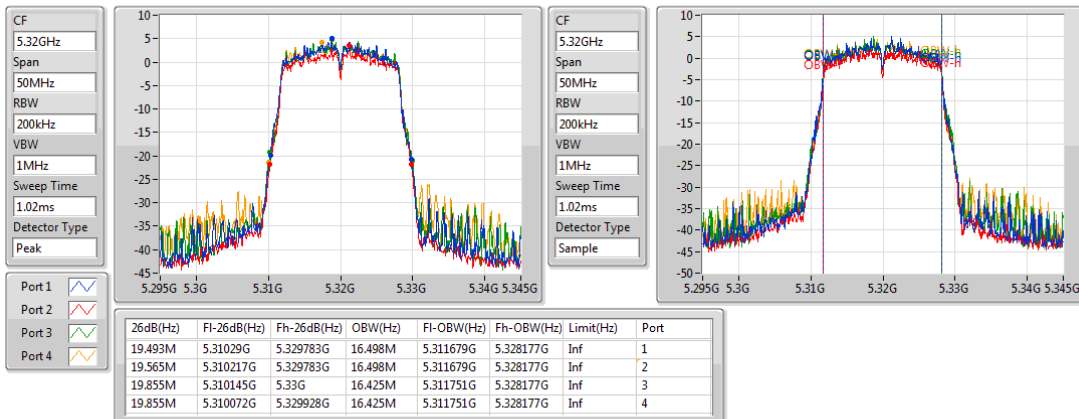
5300MHz



802.11a_Nss1,(6Mbps)_4TX

EBW

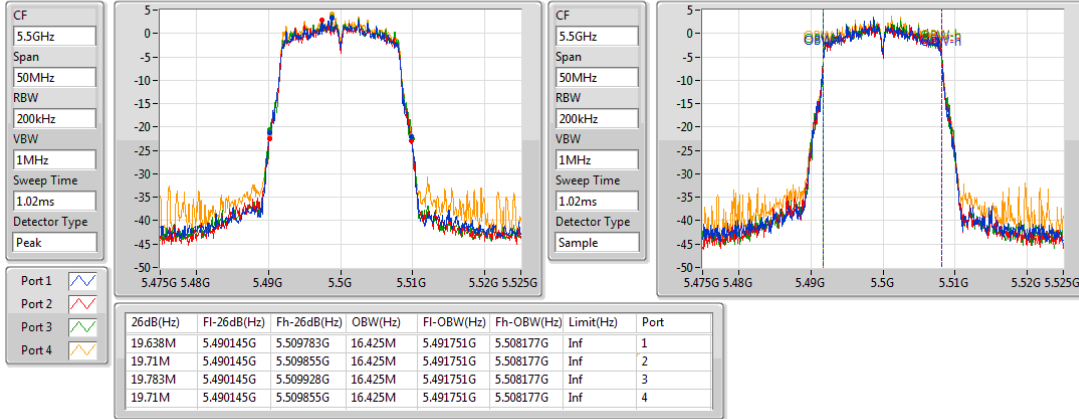
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802.11a_Nss1,(6Mbps)_4TX

EBW

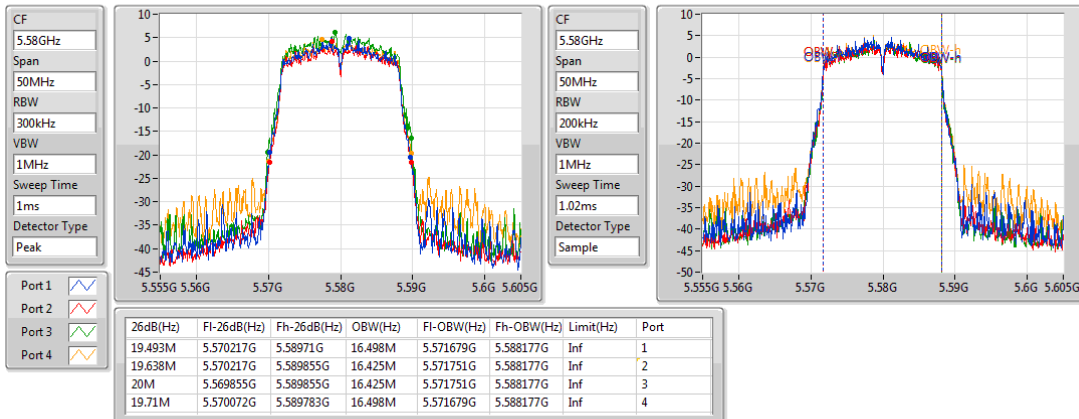
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802.11a_Nss1,(6Mbps)_4TX

EBW

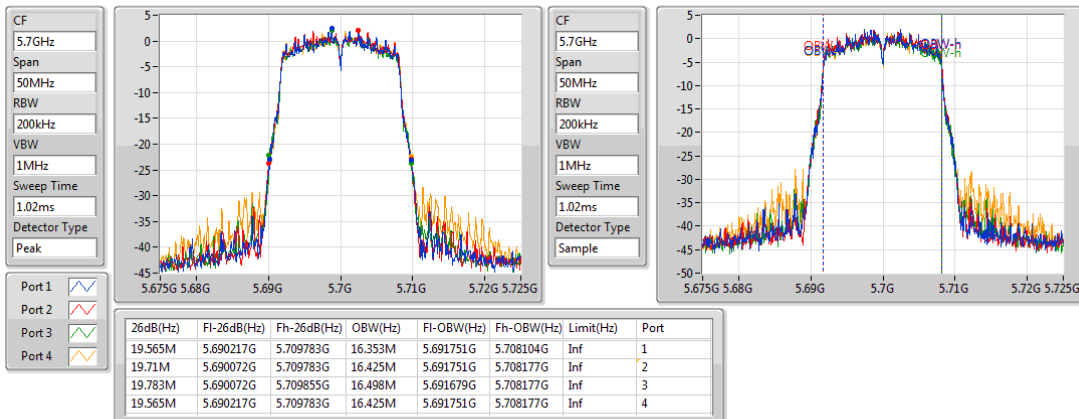
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802.11a_Nss1,(6Mbps)_4TX

EBW

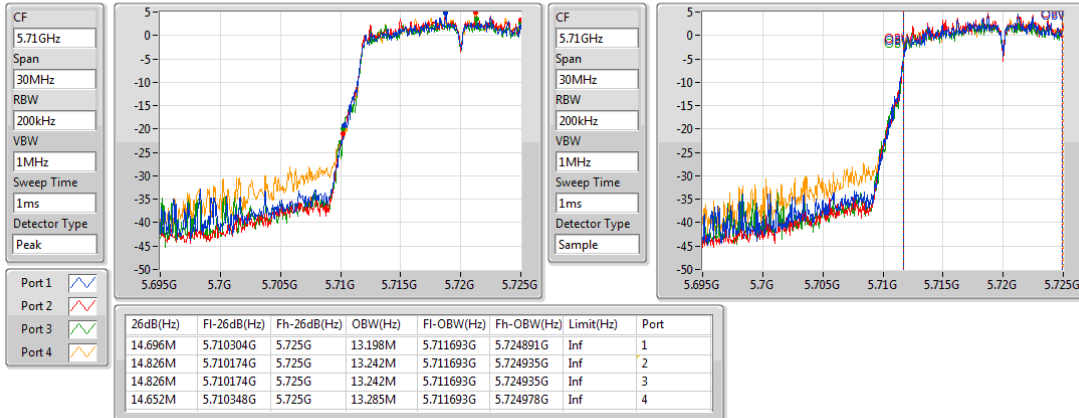
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802.11a_Nss1,(6Mbps)_4TX

EBW

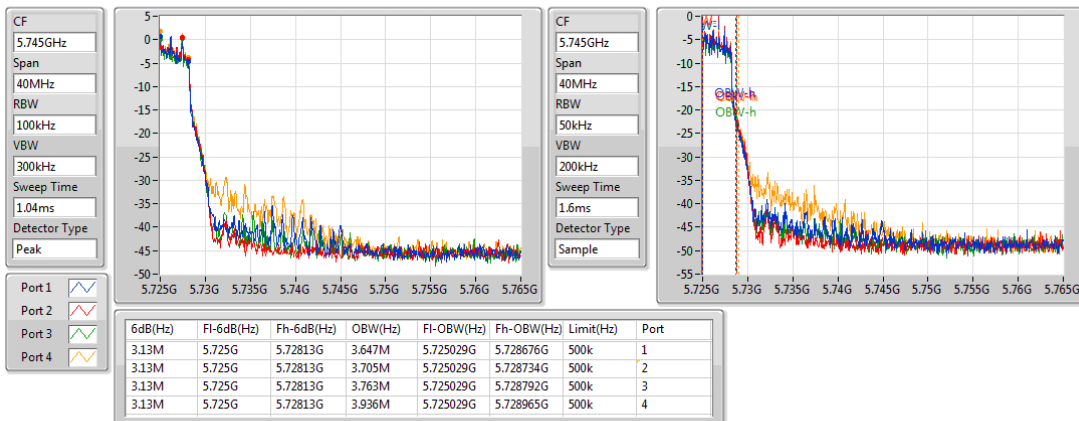
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802.11a_Nss1,(6Mbps)_4TX

EBW

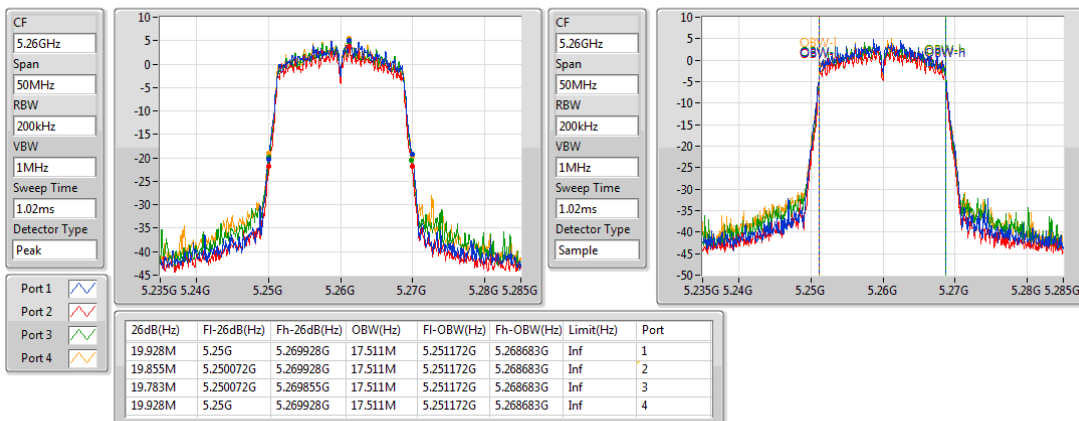
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802.11ac VHT20_Nss1,(MCS0)_4TX

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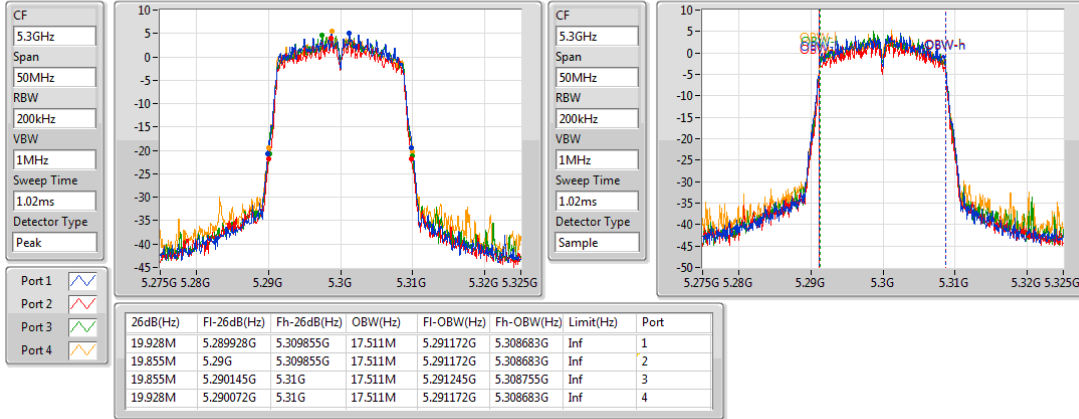
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802.11ac VHT20_Nss1,(MCS0)_4TX

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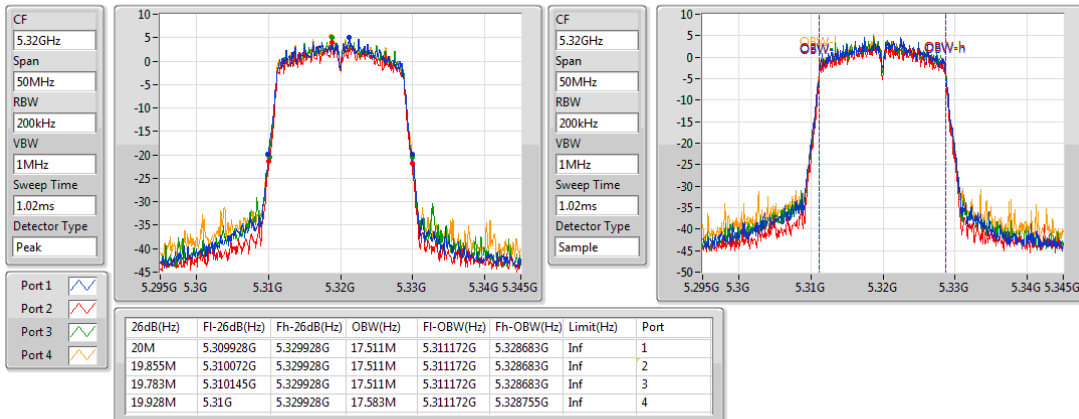
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802.11ac VHT20_Nss1,(MCS0)_4TX

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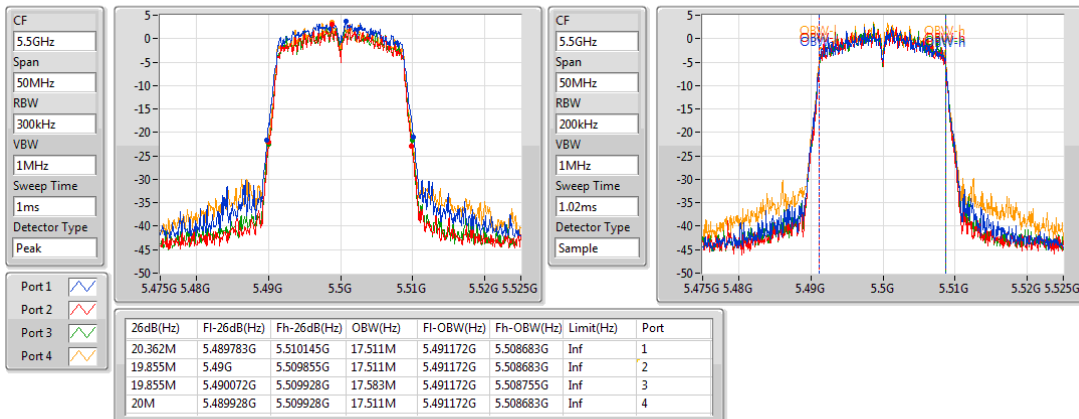
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802.11ac VHT20_Nss1,(MCS0)_4TX

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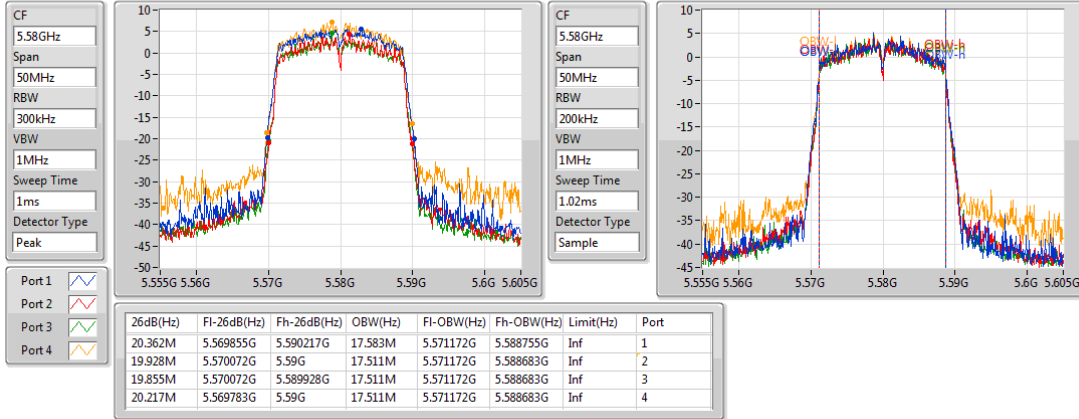
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802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

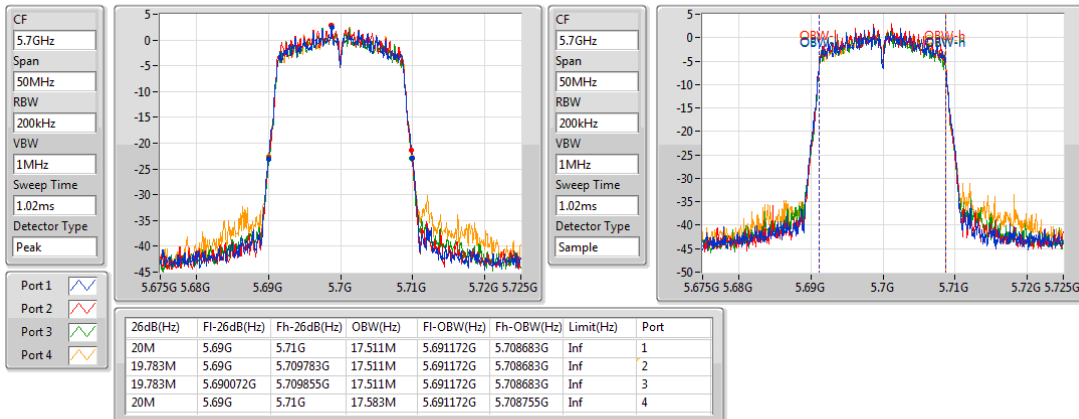
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802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

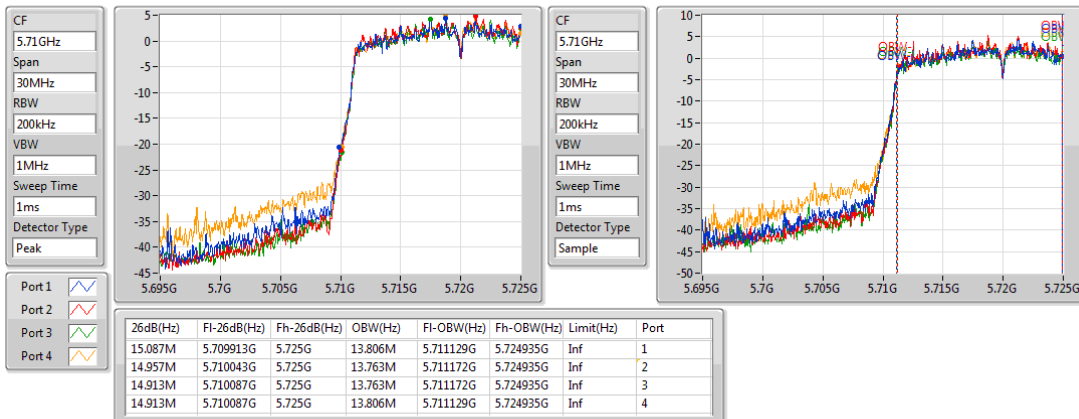
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802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

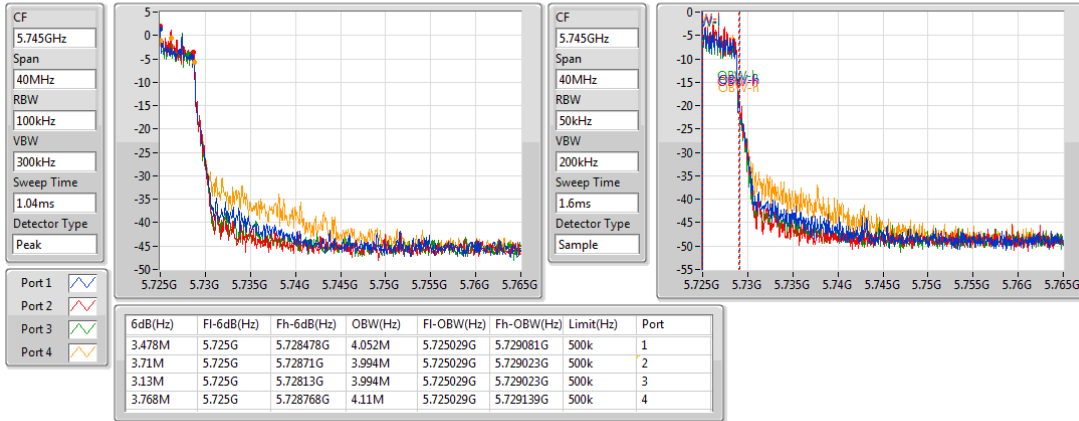
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802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

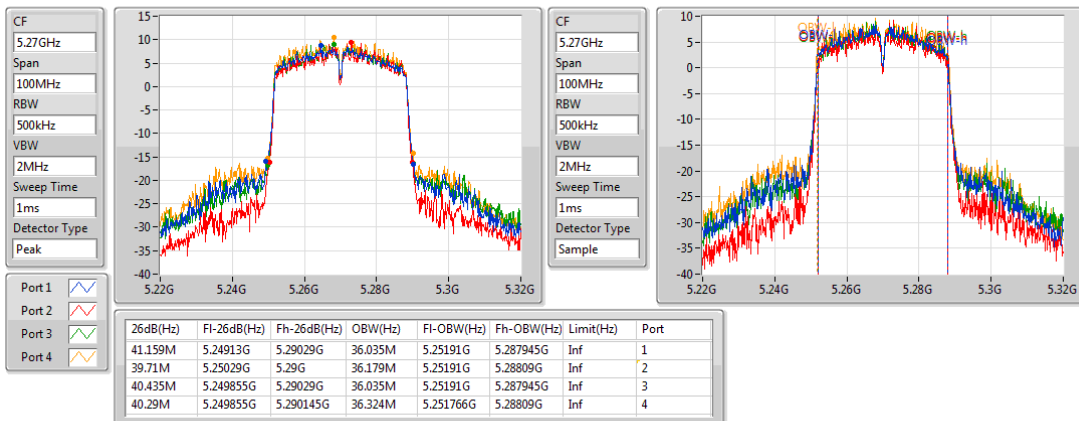
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

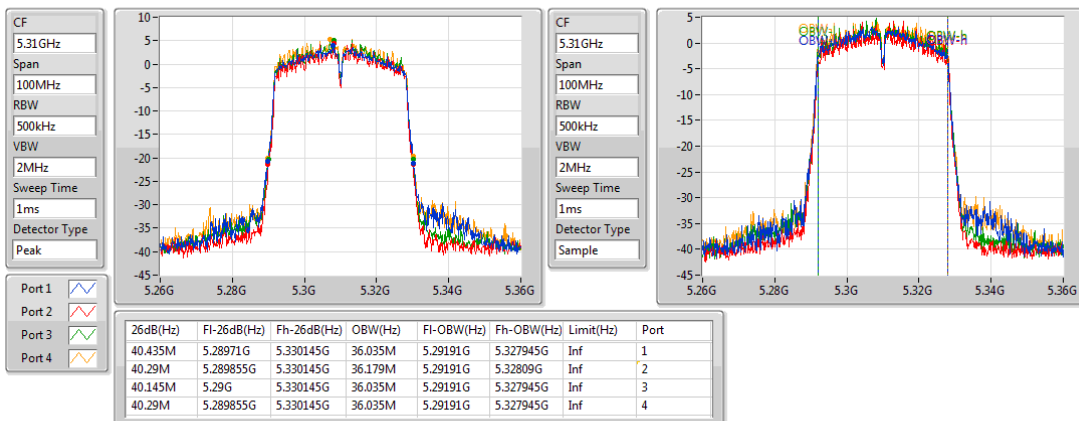
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802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

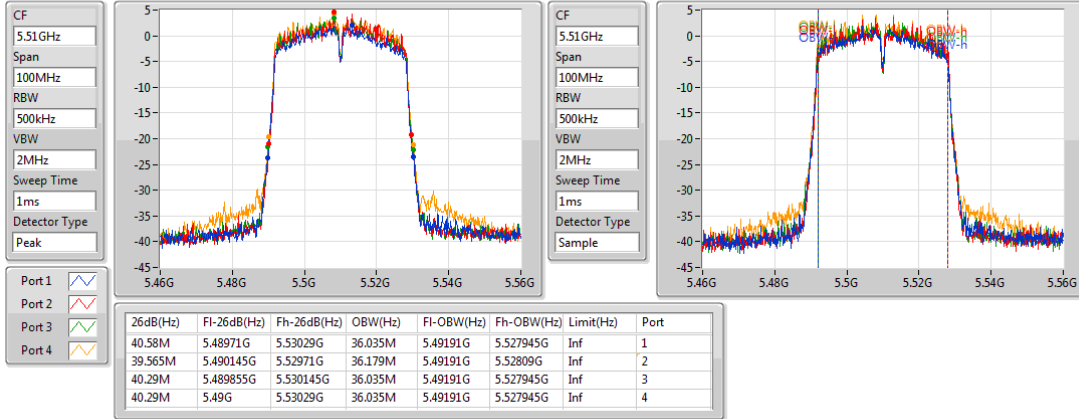
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802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

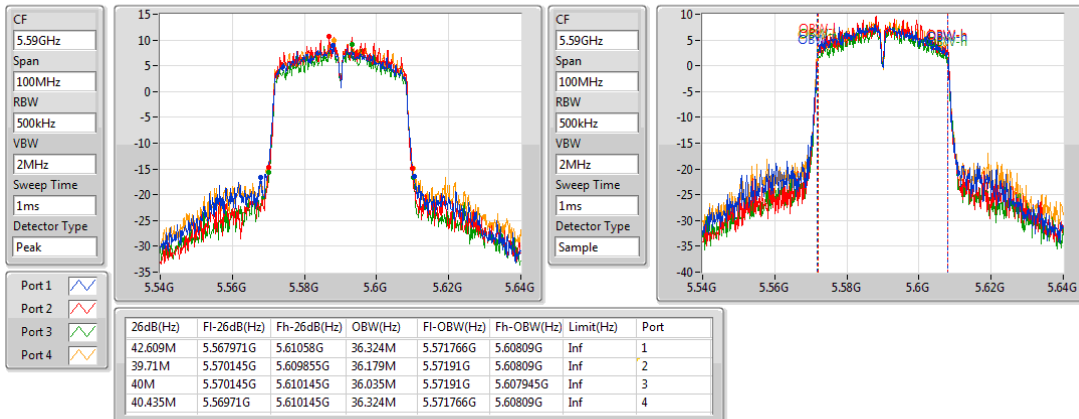
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802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

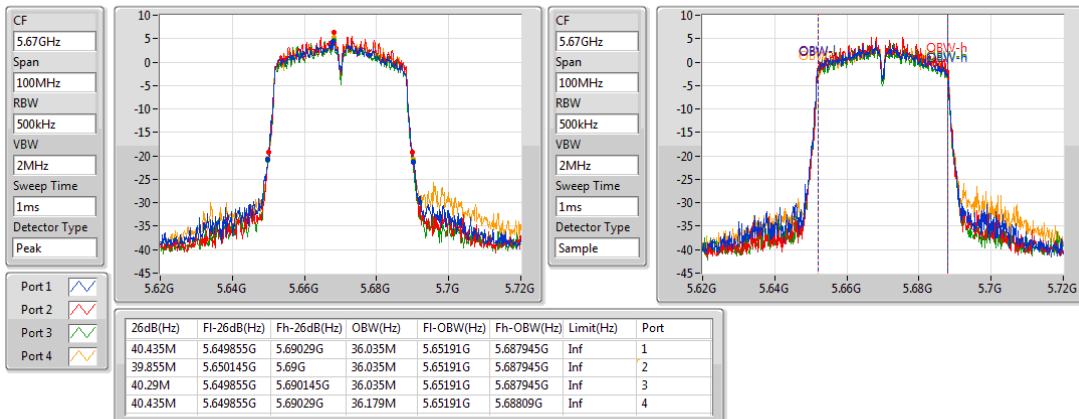
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802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

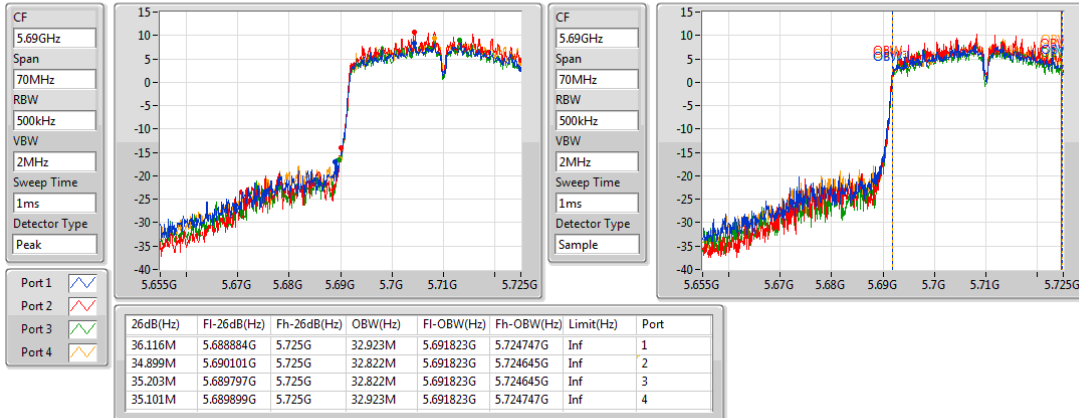
5670MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

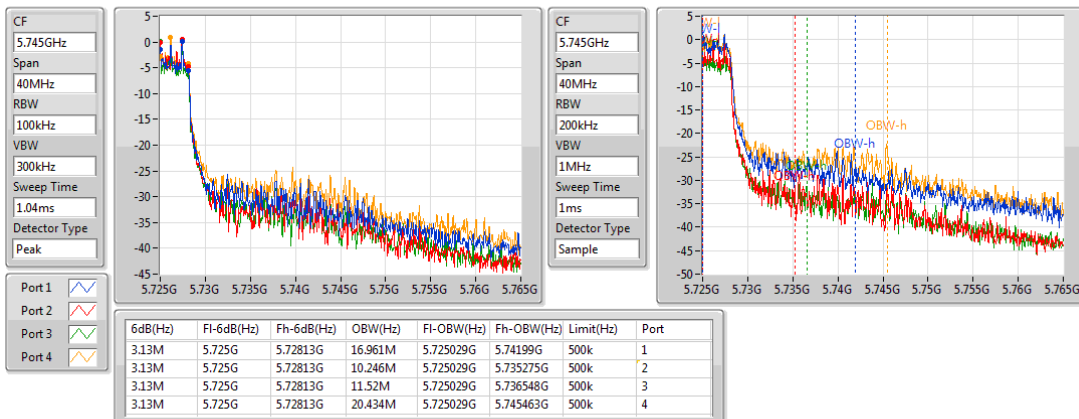
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802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

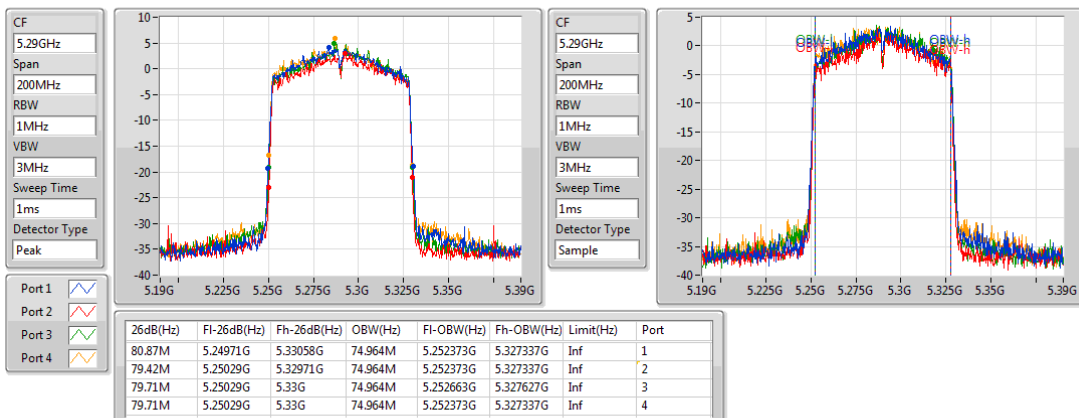
5710MHz Straddle 5.725-5.85GHz



802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

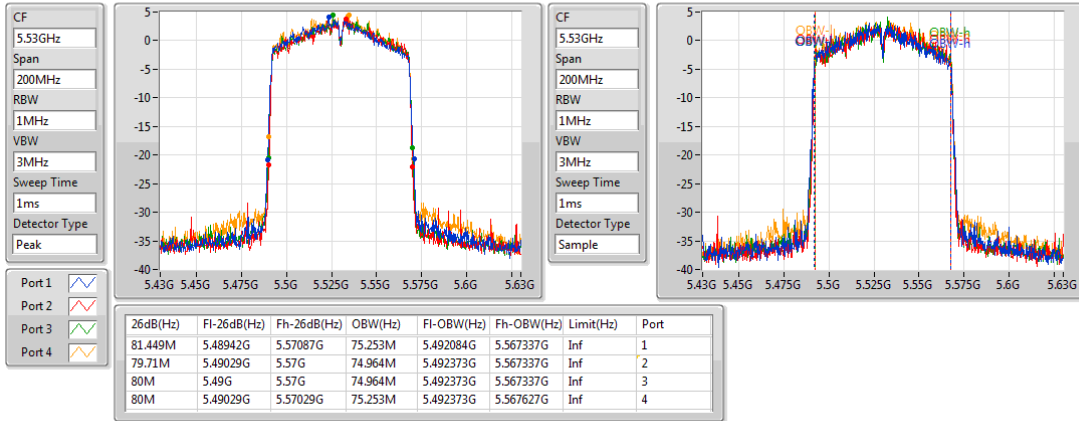
5290MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

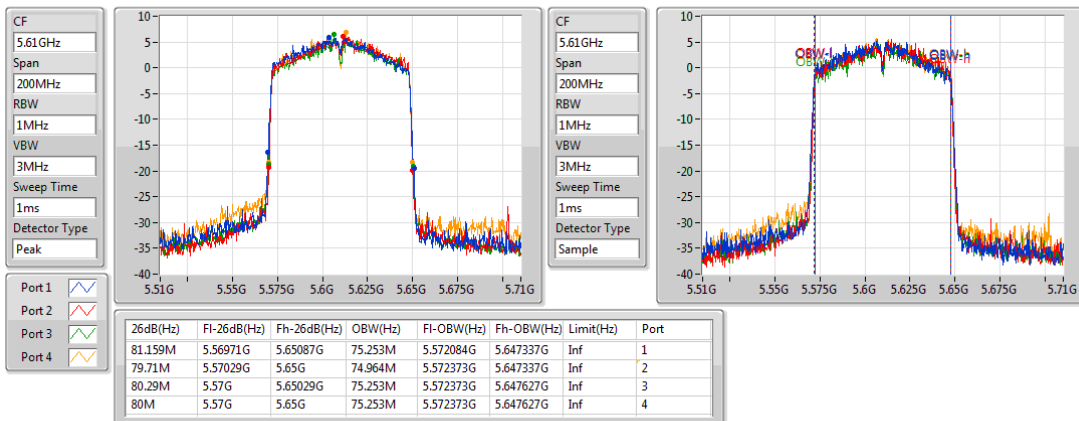
5530MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

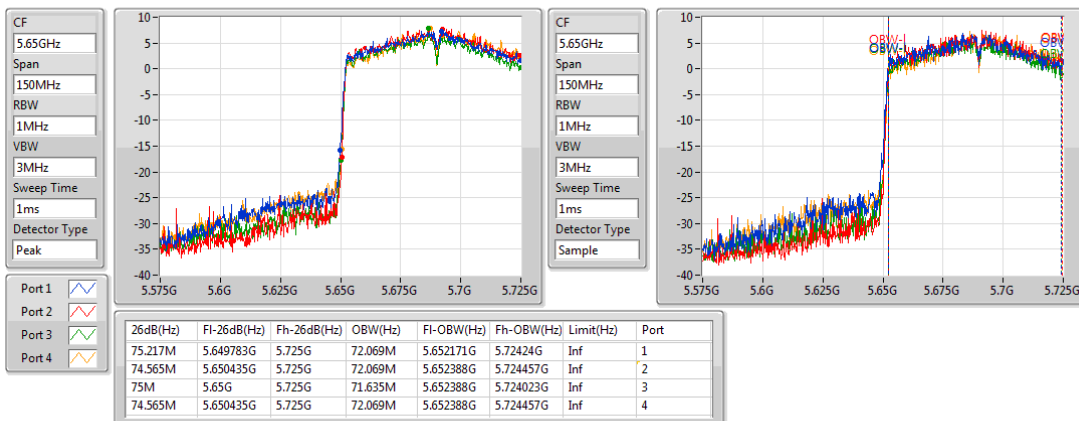
5610MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

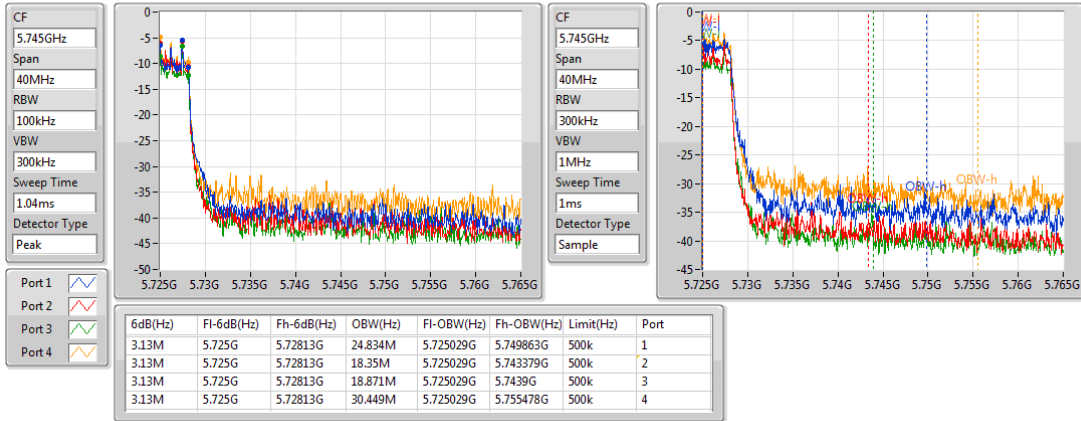
5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

5690MHz Straddle 5.725-5.85GHz



Beamforming mode

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	20.725M	17.728M	17M7D1D	20.435M	17.656M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	41.304M	36.469M	36M5D1D	40.435M	36.179M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	82.029M	75.832M	75M8D1D	81.159M	75.543M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	20.652M	17.728M	17M7D1D	15.13M	13.849M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	41.449M	36.469M	36M5D1D	35.304M	32.923M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	82.319M	76.122M	76M1D1D	75.652M	72.504M

Max-N dB = Maximum 26dB down bandwidth

Max-OBW = Maximum 99% occupied bandwidth

Min-N dB = Maximum 26dB down bandwidth

Min-OBW = Minimum 99% occupied bandwidth

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OB W (Hz)	Port 2-N dB (Hz)	Port 2-OB W (Hz)	Port 3-N dB (Hz)	Port 3-OB W (Hz)	Port 4-N dB (Hz)	Port 4-OB W (Hz)
802.11ac VHT20-BF _Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	20.725M	17.728M	20.435M	17.728M	20.58M	17.728M	20.507M	17.656M
5300MHz	Pass	Inf	20.58M	17.656M	20.58M	17.728M	20.507M	17.656M	20.507M	17.728M
5320MHz	Pass	Inf	20.507M	17.728M	20.435M	17.656M	20.507M	17.656M	20.435M	17.728M
5500MHz	Pass	Inf	20.58M	17.583M	20.507M	17.656M	20.58M	17.656M	20.652M	17.728M
5580MHz	Pass	Inf	20M	17.583M	20.58M	17.656M	20.652M	17.728M	20.507M	17.728M
5700MHz	Pass	Inf	20M	17.728M	20.362M	17.728M	20.435M	17.728M	20.58M	17.728M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.174M	13.893M	15.13M	13.936M	15.13M	13.936M	15.13M	13.849M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.768M	4.11M	3.826M	4.052M	3.768M	4.11M	3.768M	4.226M
802.11ac VHT40-BF _Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	41.159M	36.179M	40.435M	36.179M	41.304M	36.324M	41.014M	36.469M
5310MHz	Pass	Inf	40.725M	36.324M	40.725M	36.179M	40.58M	36.179M	41.014M	36.324M
5510MHz	Pass	Inf	41.014M	36.324M	40.435M	36.035M	40.725M	36.179M	40.87M	36.324M
5590MHz	Pass	Inf	41.159M	36.179M	40.58M	36.179M	40.725M	36.324M	41.449M	36.469M
5670MHz	Pass	Inf	40.725M	36.324M	40.725M	36.179M	40.435M	36.324M	41.159M	36.324M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.406M	33.025M	35.304M	32.923M	35.609M	33.025M	35.304M	33.025M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.188M	4.805M	3.246M	3.936M	3.13M	3.994M	3.246M	4.573M
802.11ac VHT80-BF _Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	82.029M	75.832M	81.449M	75.832M	81.159M	75.543M	82.029M	75.832M
5530MHz	Pass	Inf	81.159M	75.832M	81.159M	76.122M	80.87M	75.832M	81.159M	76.122M
5610MHz	Pass	Inf	81.449M	75.543M	81.159M	75.832M	82.319M	75.832M	82.029M	75.832M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.87M	72.504M	75.652M	72.504M	75.87M	72.504M	75.87M	72.504M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.246M	12.967M	3.246M	6.831M	3.246M	14.877M	3.246M	19.682M

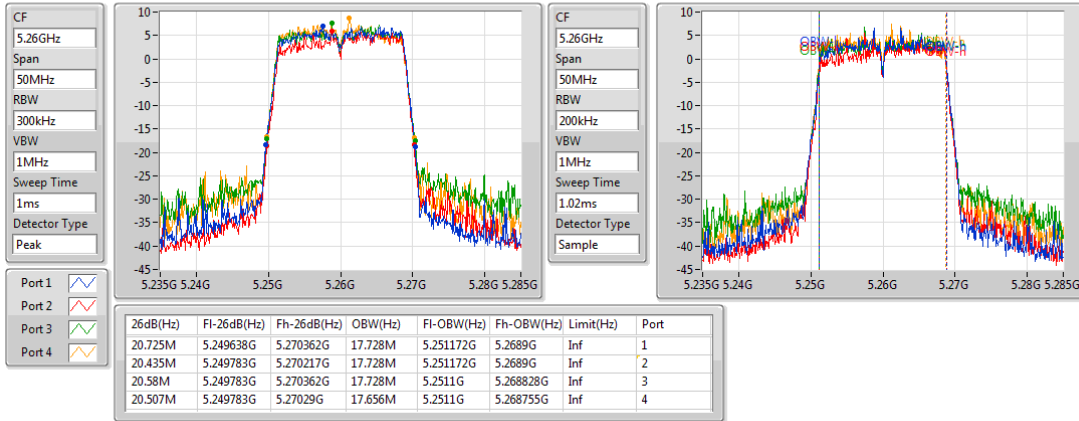
Port X-N dB = 26dB down bandwidth

Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

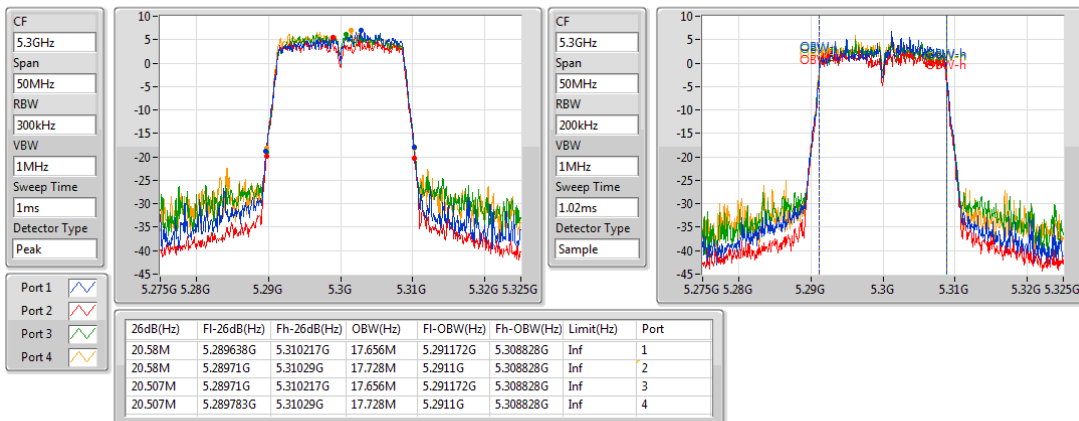
5260MHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

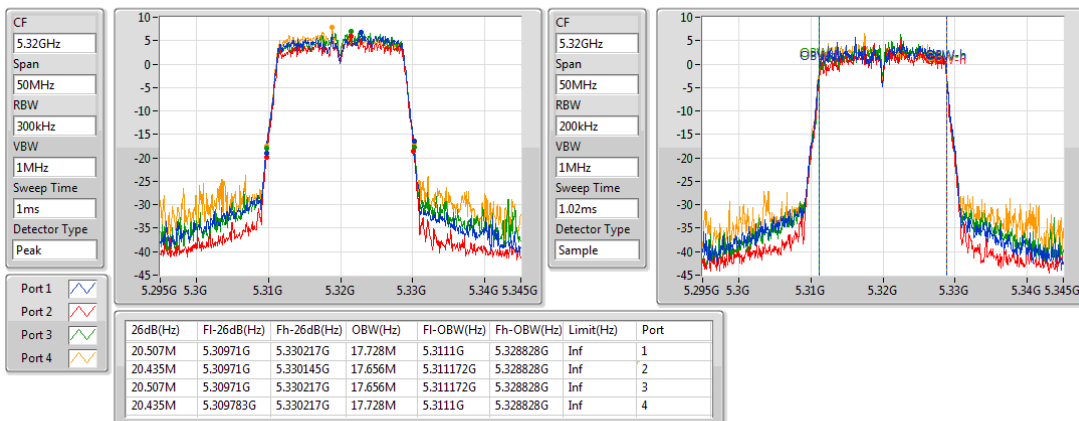
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802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

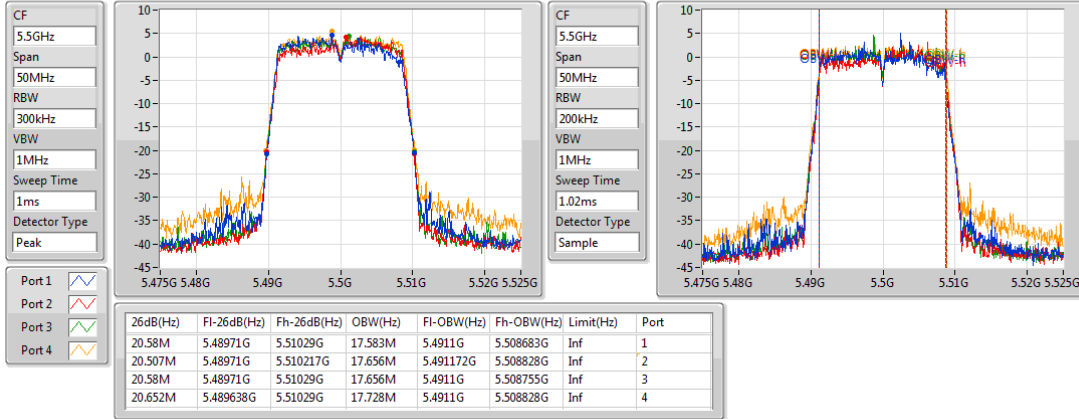
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802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

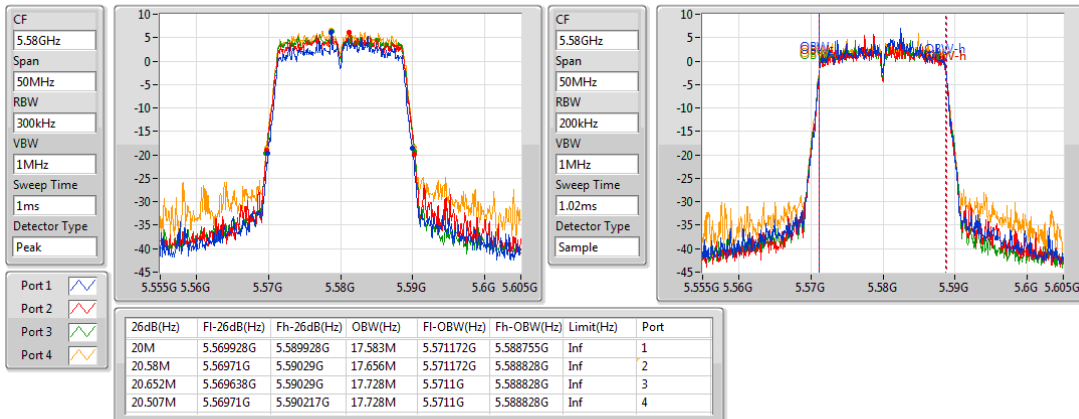
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802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

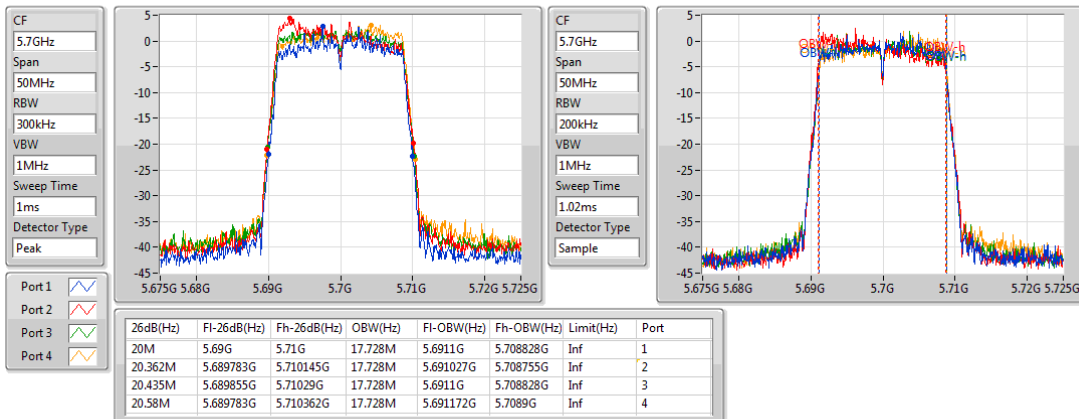
5580MHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

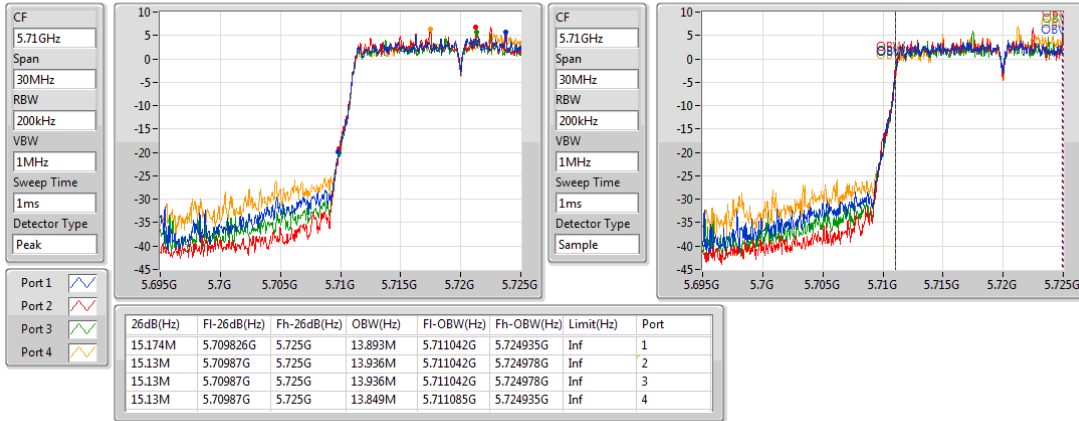
5700MHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

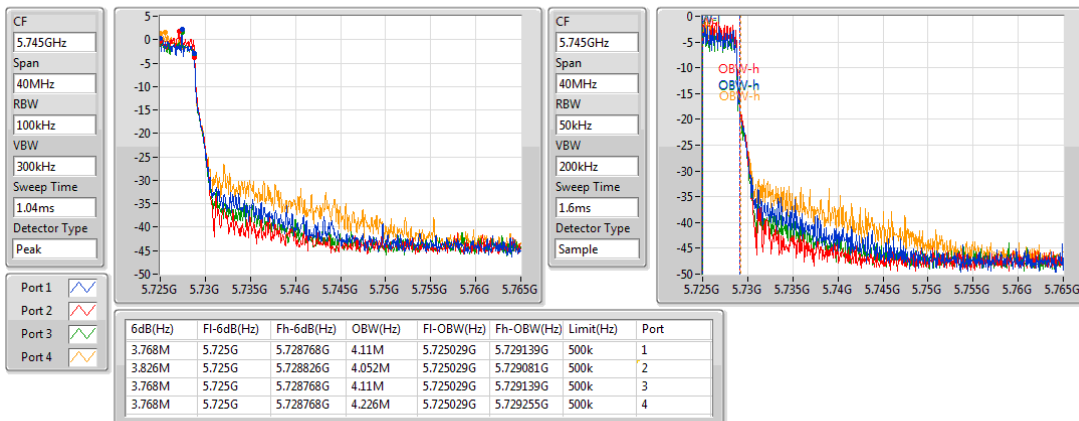
5720MHz Straddle 5.47-5.725GHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

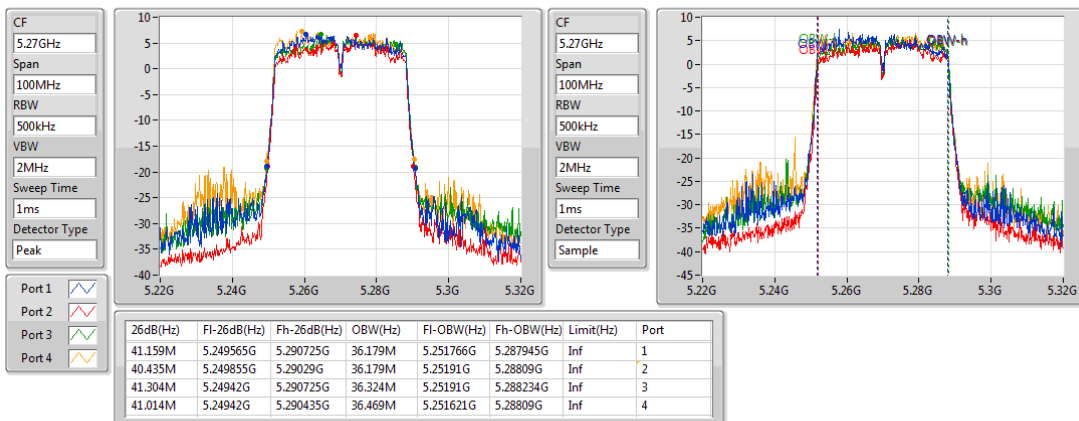
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

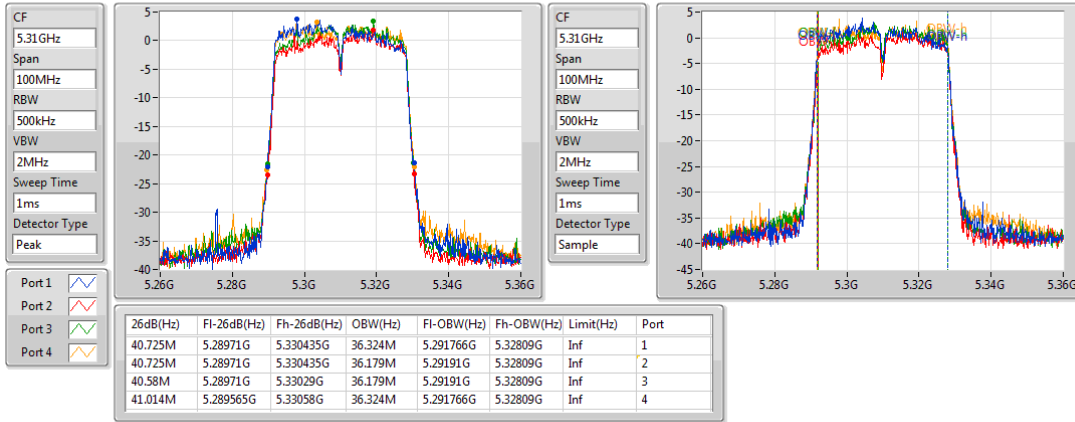
5270MHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

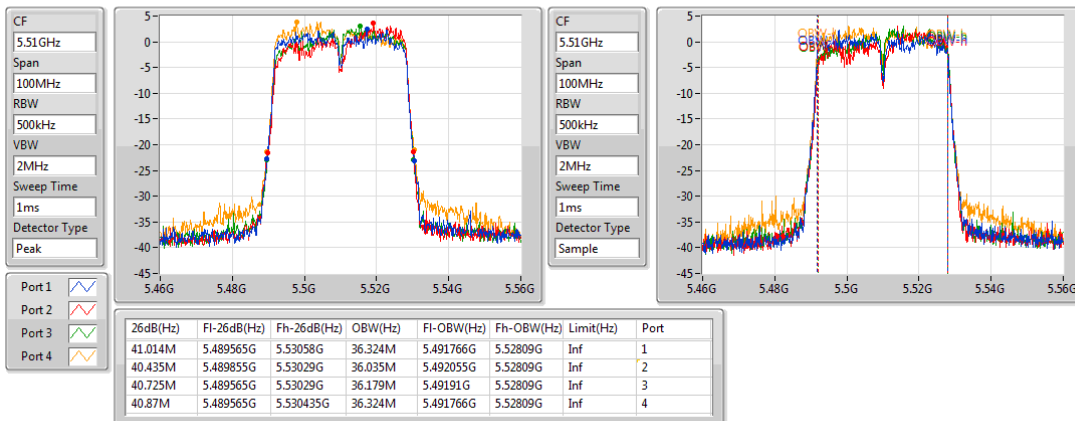
5310MHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

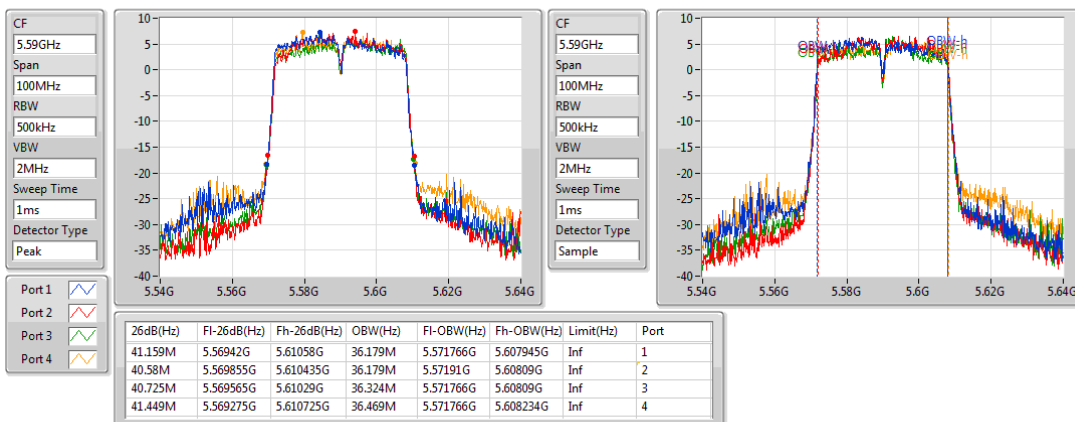
5510MHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

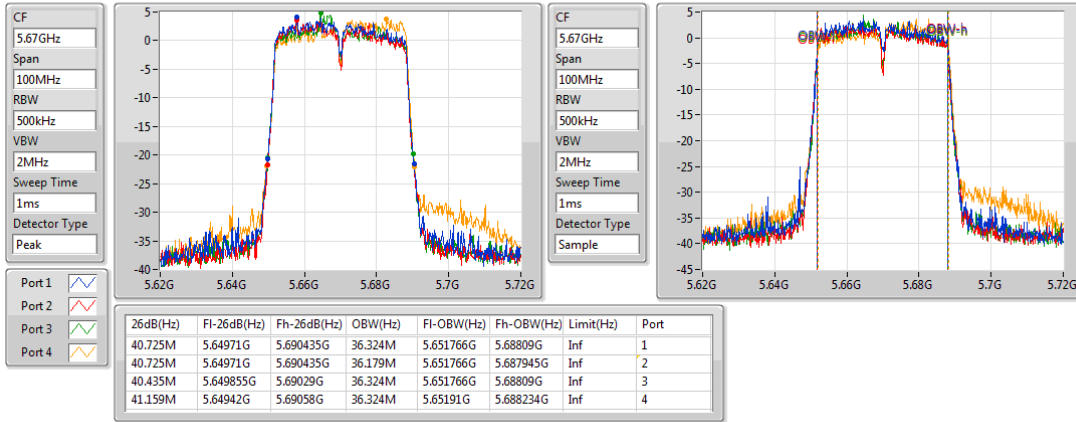
5590MHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

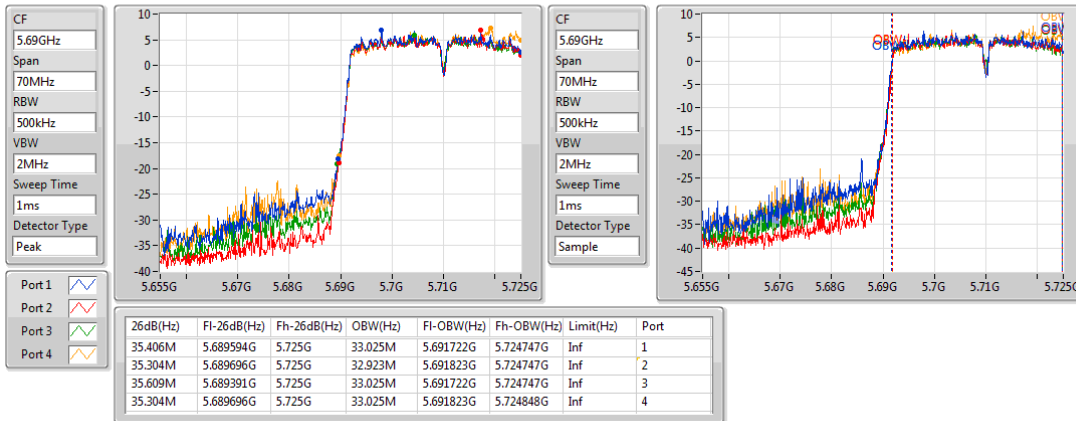
5670MHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

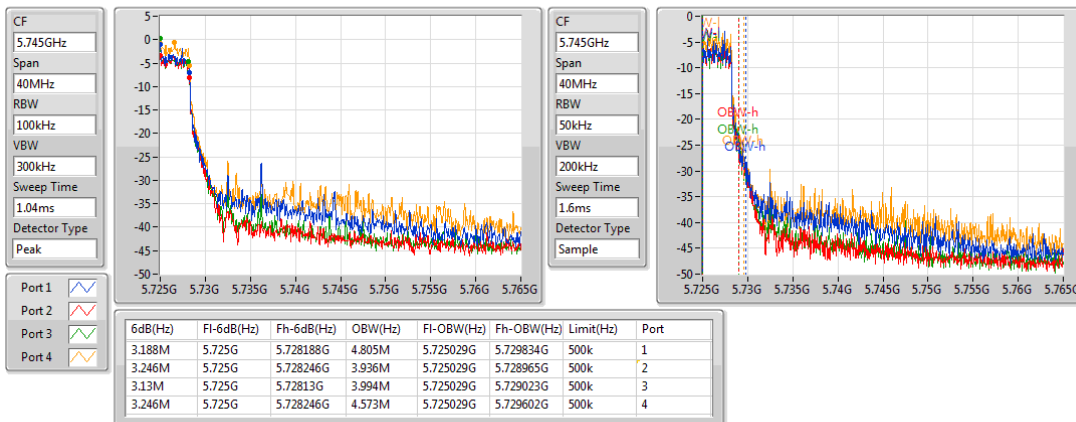
5710MHz Straddle 5.47-5.725GHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

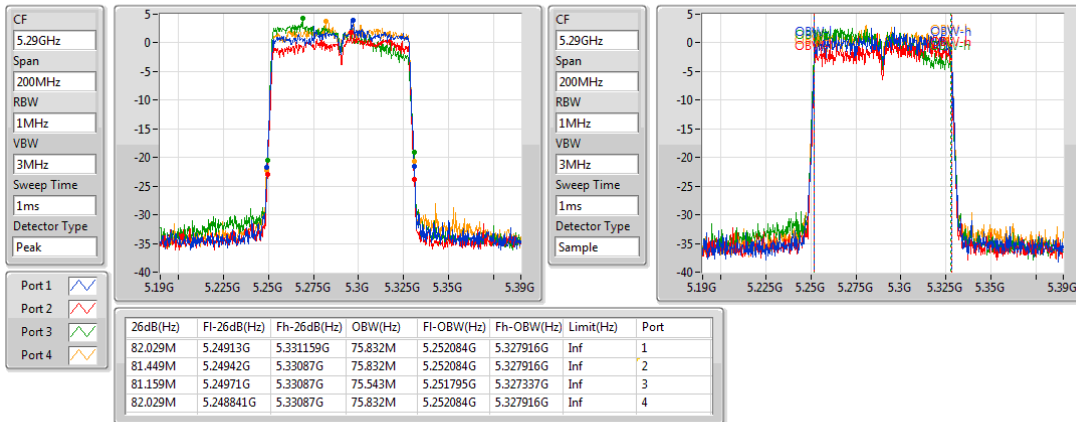
5710MHz Straddle 5.725-5.85GHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

EBW

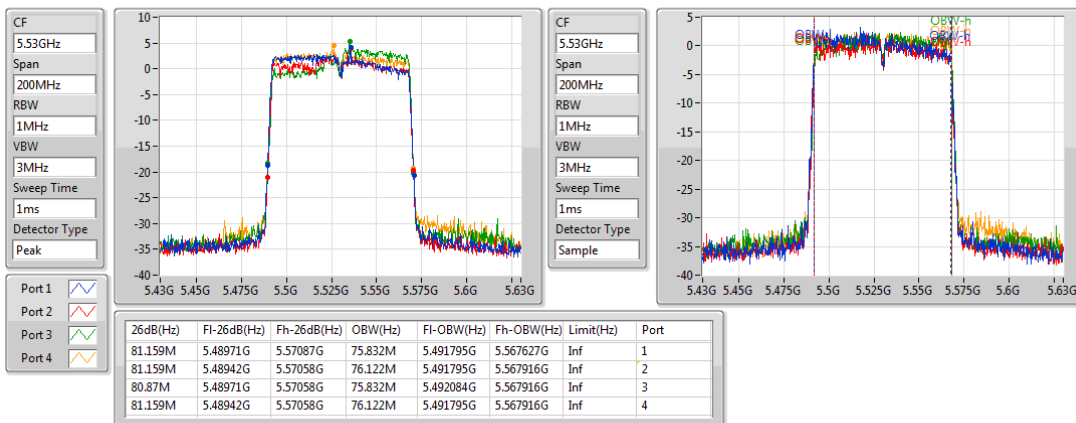
5290MHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

EBW

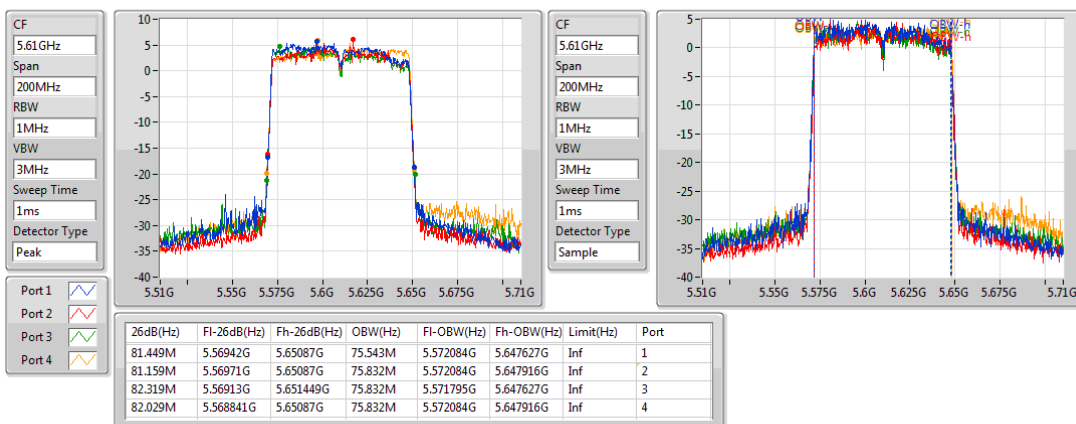
5530MHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

EBW

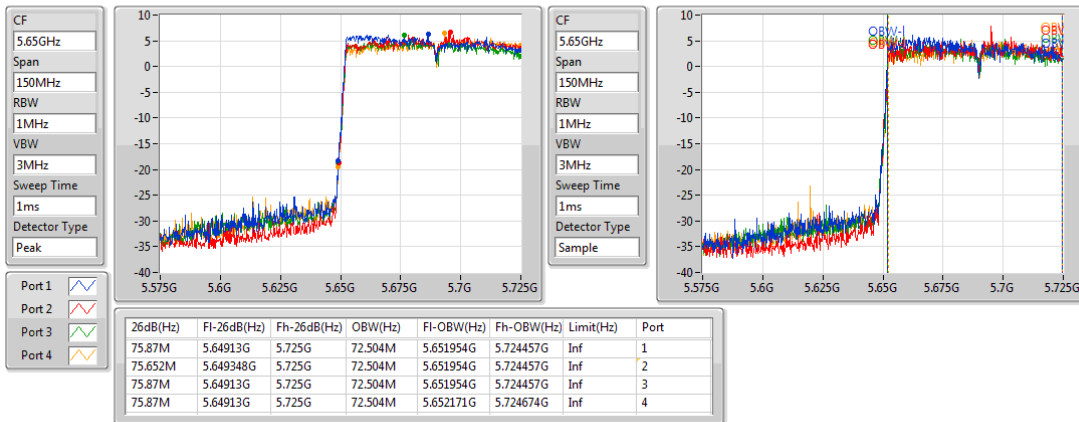
5610MHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

EBW

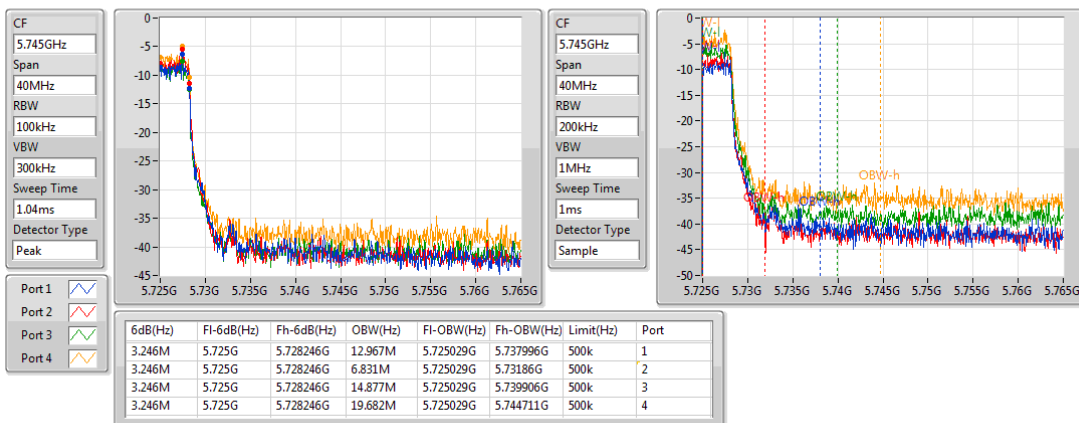
5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

EBW

5690MHz Straddle 5.725-5.85GHz



3.3 RF Output Power

3.3.1 Limit of RF Output Power

Frequency Band (MHz)		Limit
☒	5250 ~ 5350	Conducted Power: 250mW or 11dBm+10 log B
☒	5470 ~ 5725	Conducted Power: 250mW or 11dBm+10 log B
Note: "B" is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

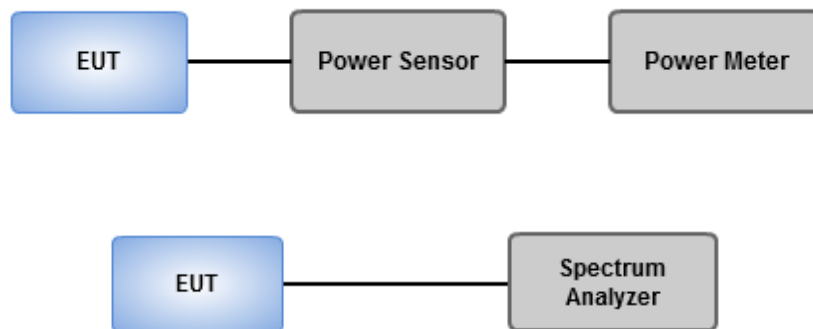
Method PM-G (Measurement using a gated RF average power meter)

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.

Spectrum analyzer (For channel that extends across the 5.725 GHz boundary)

1. Set RBW = 1MHz, VBW = 3MHz, Sweep time = Auto, Detector = RMS.
2. Trace average at least 100 traces in power averaging mode.
3. Compute power by integrating the spectrum across the 26 dB EBW.
4. Add $10 \log(1/X, X:\text{duty cycle})$ if duty cycle is <98%).

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	20.69	0.11722	23.04	0.20137
802.11ac VHT20_Nss1,(MCS0)_4TX	20.72	0.11803	23.07	0.20277
802.11ac VHT40_Nss1,(MCS0)_4TX	23.60	0.22909	25.95	0.39355
802.11ac VHT80_Nss1,(MCS0)_4TX	17.62	0.05781	19.97	0.09931
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	20.57	0.11402	23.53	0.22542
802.11ac VHT20_Nss1,(MCS0)_4TX	20.65	0.11614	23.61	0.22961
802.11ac VHT40_Nss1,(MCS0)_4TX	23.56	0.22699	26.52	0.44875
802.11ac VHT80_Nss1,(MCS0)_4TX	20.77	0.11940	23.73	0.23605

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_ Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	2.35	14.75	13.43	14.43	15.15	20.51	23.90	22.86	29.90
5300MHz	Pass	2.35	15.11	13.56	14.62	15.21	20.69	23.90	23.04	29.90
5320MHz	Pass	2.35	14.99	13.74	14.66	15.12	20.68	23.90	23.03	29.90
5500MHz	Pass	2.96	12.87	12.94	13.46	13.54	19.23	23.93	22.19	29.93
5580MHz	Pass	2.96	14.89	13.93	14.14	15.12	20.57	23.90	23.53	29.90
5700MHz	Pass	2.96	12.25	12.42	12.08	11.92	18.19	23.91	21.15	29.91
5720MHz Straddle 5.47-5.725GHz	Pass	2.96	12.77	13.78	13.30	13.48	19.37	24.00	22.33	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	2.66	5.16	6.37	5.49	6.43	11.92	30.00	14.58	36.00
802.11ac VHT20_ Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	2.35	14.67	13.45	14.52	15.34	20.57	23.96	22.92	29.96
5300MHz	Pass	2.35	14.83	13.58	14.67	15.15	20.62	23.98	22.97	29.98
5320MHz	Pass	2.35	14.87	13.74	14.93	15.11	20.72	23.96	23.07	29.96
5500MHz	Pass	2.96	12.48	12.63	13.01	13.15	18.85	23.98	21.81	29.98
5580MHz	Pass	2.96	14.79	14.01	14.42	15.22	20.65	23.98	23.61	29.98
5700MHz	Pass	2.96	12.08	12.56	12.14	11.85	18.19	23.96	21.15	29.96
5720MHz Straddle 5.47-5.725GHz	Pass	2.96	12.71	13.85	13.22	13.54	19.37	24.00	22.33	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	2.66	5.38	6.63	5.84	6.38	12.10	30.00	14.76	36.00
802.11ac VHT40_ Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	2.35	18.01	16.58	17.34	18.19	23.60	24.00	25.95	30.00
5310MHz	Pass	2.35	13.25	11.79	12.88	12.83	18.74	24.00	21.09	30.00
5510MHz	Pass	2.96	11.36	11.28	11.78	11.95	17.62	24.00	20.58	30.00
5590MHz	Pass	2.96	18.01	17.31	17.01	17.75	23.56	24.00	26.52	30.00
5670MHz	Pass	2.96	13.35	13.08	12.89	12.55	19.00	24.00	21.96	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	2.96	16.28	17.39	16.64	16.91	22.84	24.00	25.80	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	2.66	3.89	5.00	3.88	5.10	10.53	30.00	13.19	36.00
802.11ac VHT80_ Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-

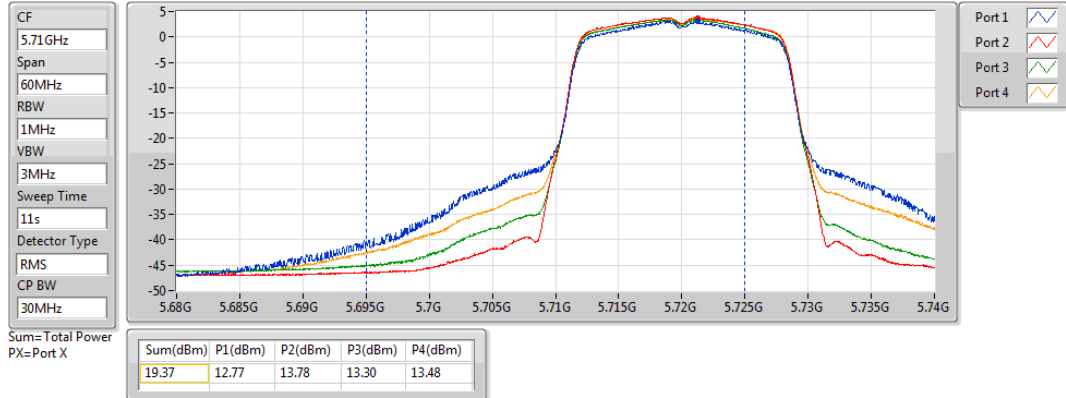
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5290MHz	Pass	2.35	11.85	10.58	11.89	11.93	17.62	24.00	19.97	30.00
5530MHz	Pass	2.96	11.69	11.55	11.41	11.98	17.68	24.00	20.64	30.00
5610MHz	Pass	2.96	13.52	13.21	13.06	12.99	19.22	24.00	22.18	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	2.96	14.55	15.29	14.32	14.79	20.77	24.00	23.73	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	2.66	-2.23	-1.43	-2.77	-0.75	4.29	30.00	6.95	36.00

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

802.11a_Nss1,(6Mbps)_4TX

AV Power

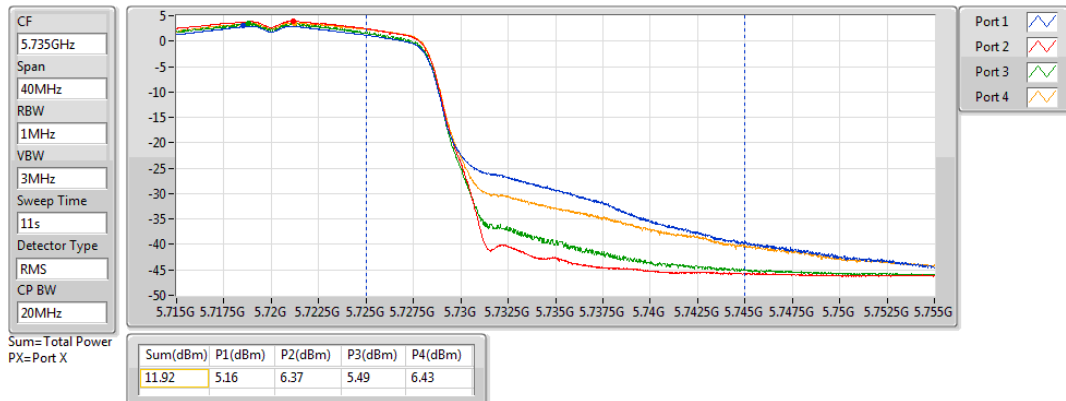
5720MHz Straddle 5.47-5.725GHz



802.11a_Nss1,(6Mbps)_4TX

AV Power

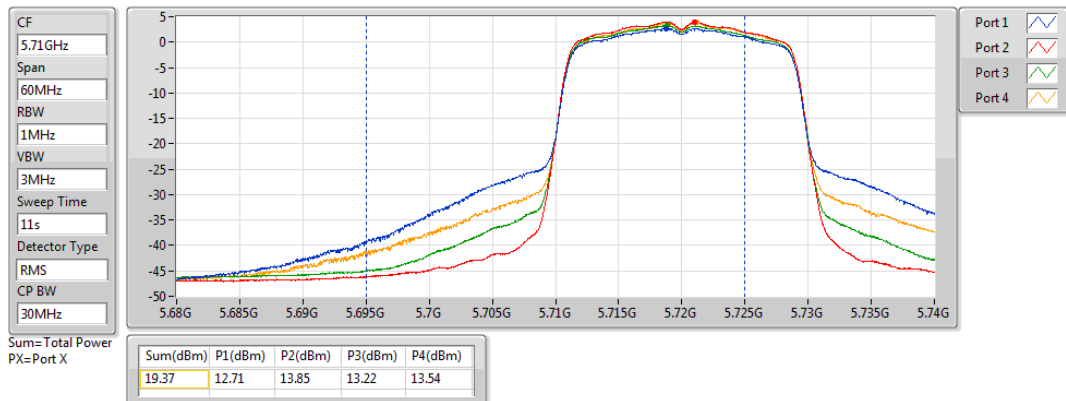
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT20_Nss1,(MCS0)_4TX

AV Power

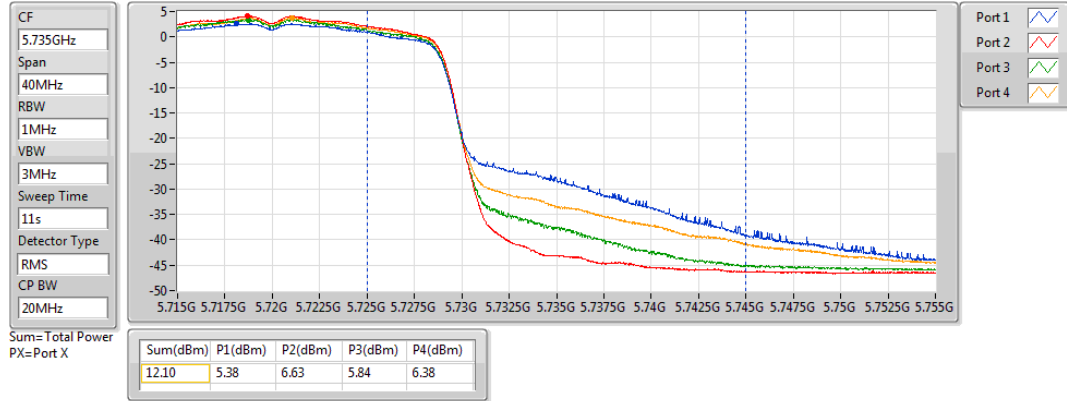
5720MHz Straddle 5.47-5.725GHz



802.11ac VHT20_Nss1,(MCS0)_4TX

AV Power

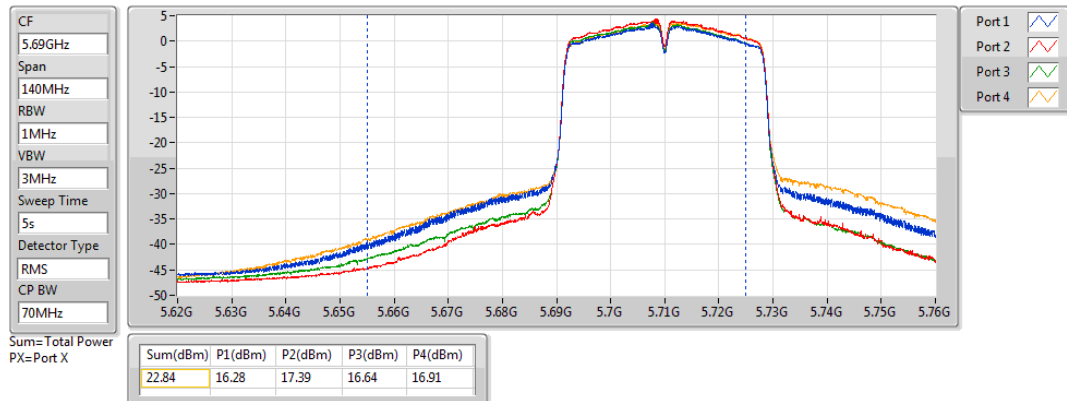
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT40_Nss1,(MCS0)_4TX

AV Power

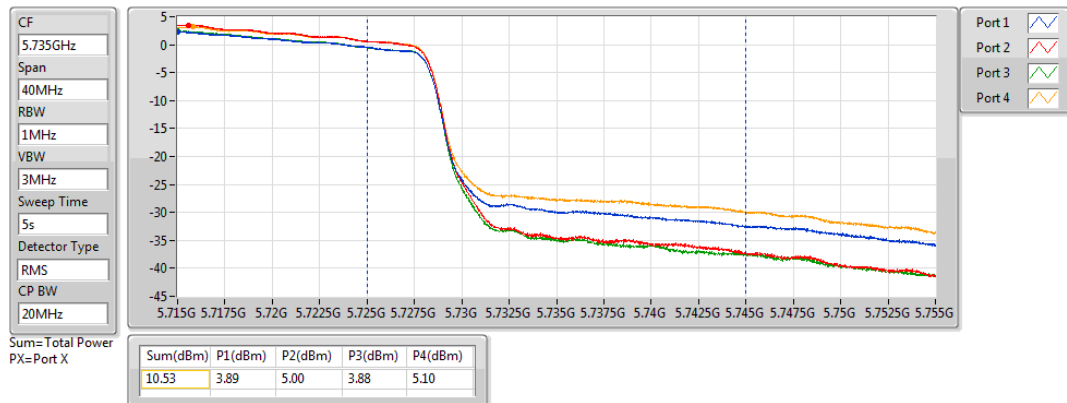
5710MHz Straddle 5.47-5.725GHz



802.11ac VHT40_Nss1,(MCS0)_4TX

AV Power

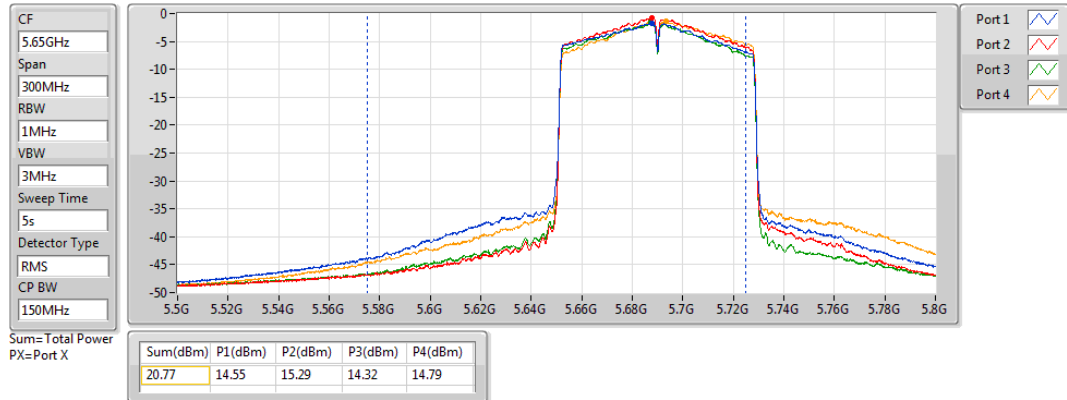
5710MHz Straddle 5.725-5.85GHz



802.11ac VHT80_Nss1,(MCS0)_4TX

AV Power

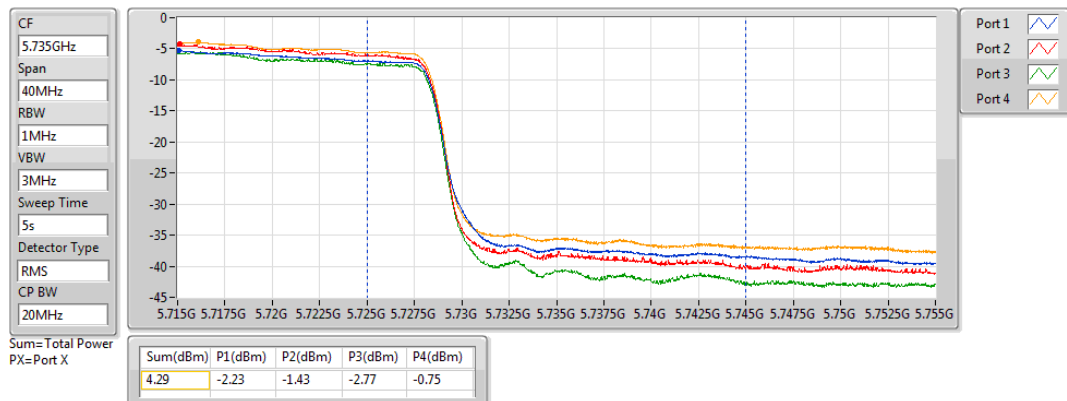
5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz



Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.25-5.35GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	20.62	0.11535	28.88	0.77268
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	21.43	0.13900	29.69	0.93111
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	16.66	0.04634	24.92	0.31046
5.47-5.725GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	20.19	0.10447	28.58	0.72111
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	21.44	0.13932	29.83	0.96161
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	19.83	0.09616	28.22	0.66374

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	8.26	14.52	13.41	14.26	15.16	20.40	21.74	28.66	30.00
5300MHz	Pass	8.26	14.78	13.48	14.68	14.76	20.48	21.74	28.74	30.00
5320MHz	Pass	8.26	14.85	13.84	14.81	14.83	20.62	21.74	28.88	30.00
5500MHz	Pass	8.39	12.25	12.26	12.24	12.84	18.43	21.61	26.82	30.00
5580MHz	Pass	8.39	14.55	13.85	13.99	14.25	20.19	21.61	28.58	30.00
5700MHz	Pass	8.39	10.96	11.31	10.85	10.64	16.97	21.61	25.36	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	8.39	13.42	13.41	13.14	13.46	19.38	21.61	27.77	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	8.57	7.52	8.34	7.07	7.37	13.62	27.43	22.19	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	8.26	15.76	14.45	15.41	15.89	21.43	21.74	29.69	30.00
5310MHz	Pass	8.26	12.06	10.89	11.52	11.86	17.63	21.74	25.89	30.00
5510MHz	Pass	8.39	11.28	11.25	11.41	11.52	17.39	21.61	25.78	30.00
5590MHz	Pass	8.39	16.12	15.34	15.02	15.09	21.44	21.61	29.83	30.00
5670MHz	Pass	8.39	13.02	12.25	12.16	11.86	18.36	21.61	26.75	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	8.39	15.04	15.70	14.52	14.89	21.08	21.61	29.47	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	8.57	4.59	5.42	3.41	4.44	10.54	27.43	19.11	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	8.26	11.02	9.35	10.96	11.02	16.66	21.74	24.92	30.00
5530MHz	Pass	8.39	11.12	10.84	10.91	11.22	17.05	21.61	25.44	30.00
5610MHz	Pass	8.39	13.39	13.21	12.68	12.52	18.99	21.61	27.38	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	8.39	14.15	14.32	13.32	13.35	19.83	21.61	28.22	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	8.57	-0.42	-0.88	-2.96	0.52	5.26	27.43	13.83	36.00

Port X = Port X output power

For 5250 ~ 5350 MHz

DG = Directional Gain = $10 \times \log((10^{2.09/20} + 10^{2.21/20} + 10^{2.32/20} + 10^{2.35/20})^4/4) = 8.26 \text{ dBi} > 6 \text{ dBi}$

Limit shall be reduced to 24 dBm – (8.26 dBi – 6 dBi) = 21.74 dBm

For 5470 ~ 5725MHz

DG = Directional Gain = $10 \times \log((10^{2.27/20} + 10^{2.12/20} + 10^{2.1/20} + 10^{2.96/20})^4/4) = 8.39 \text{ dBi} > 6 \text{ dBi}$

Limit shall be reduced to 24 dBm – (8.39 dBi – 6 dBi) = 21.61 dBm

For 5725 ~ 5850MHz

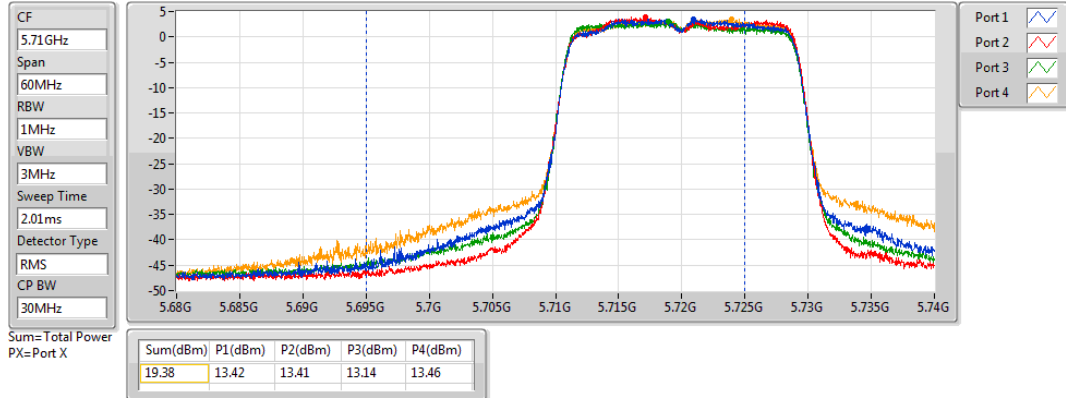
DG = Directional Gain = $10 \times \log((10^{2.45/20} + 10^{2.59/20} + 10^{2.5/20} + 10^{2.66/20})^4 / 4) = 8.57 \text{ dBi} > 6 \text{ dBi}$

Limit shall be reduced to $30 \text{ dBm} - (8.57 \text{ dBi} - 6 \text{ dBi}) = 27.43 \text{ dBm}$

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

AV Power

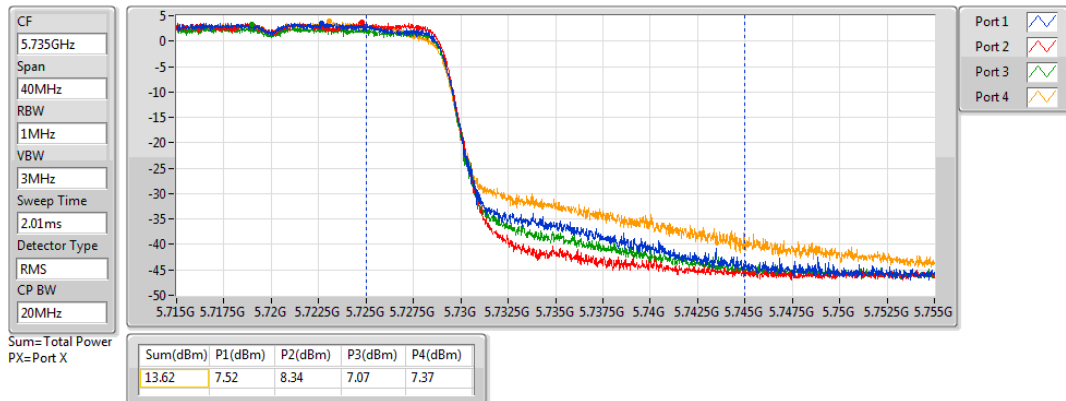
5720MHz Straddle 5.47-5.725GHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

AV Power

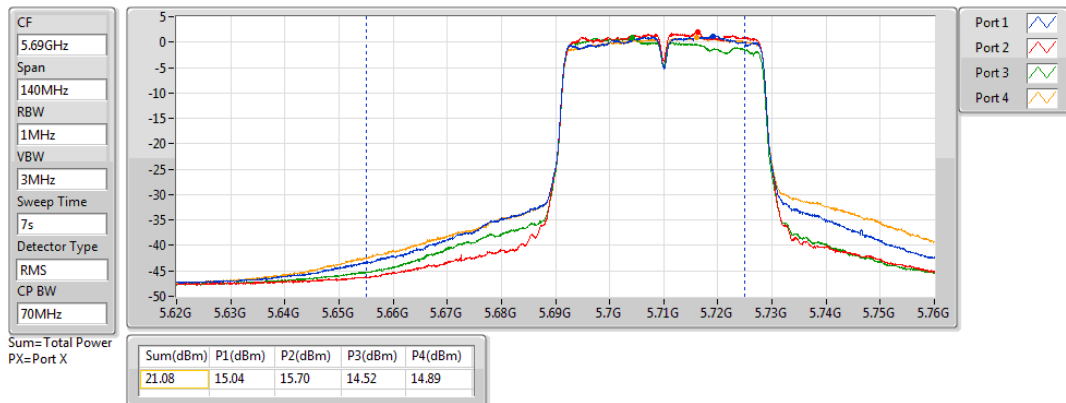
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

AV Power

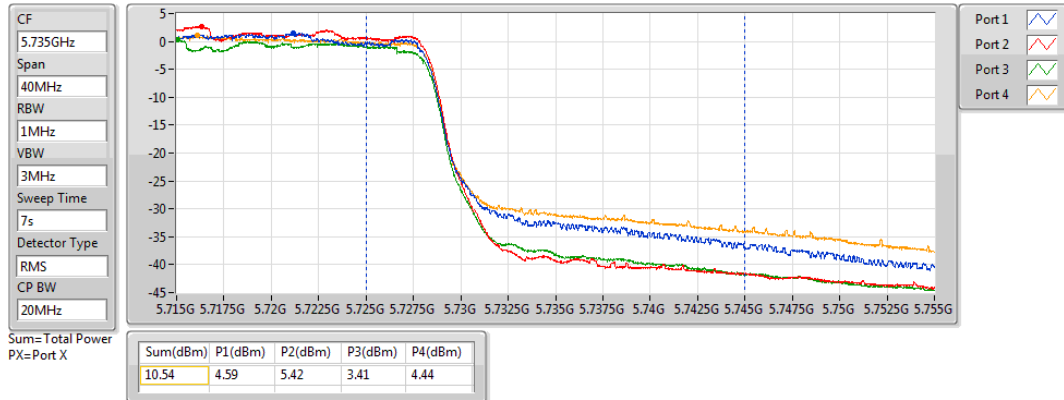
5710MHz Straddle 5.47-5.725GHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

AV Power

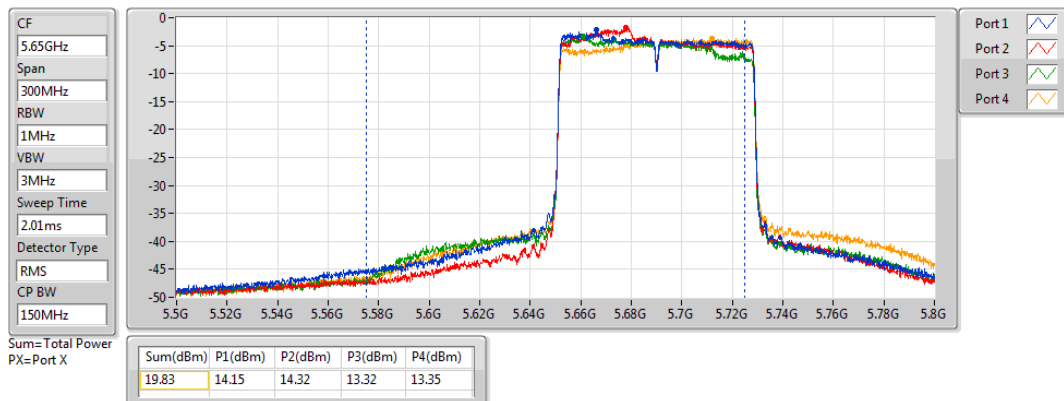
5710MHz Straddle 5.725-5.85GHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

AV Power

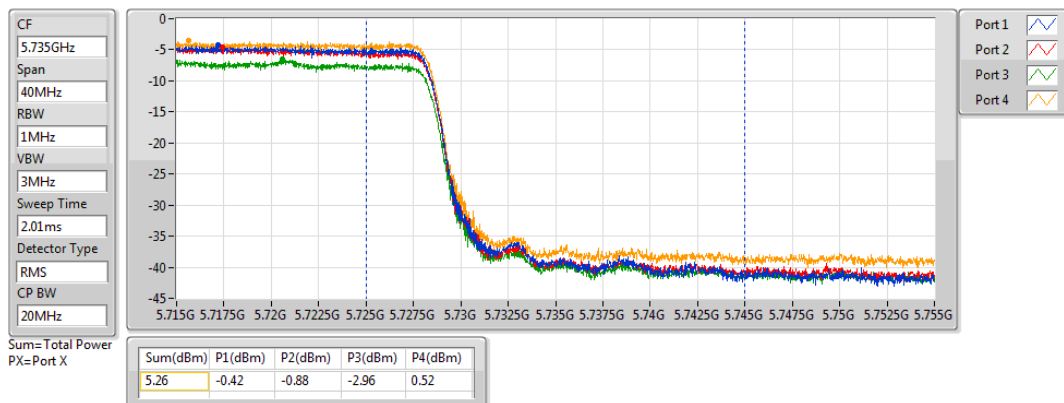
5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz



3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

Frequency Band (MHz)		Limit
☒	5250 ~ 5350	11 dBm / MHz
☒	5470 ~ 5725	11 dBm / MHz

3.4.2 Test Procedures

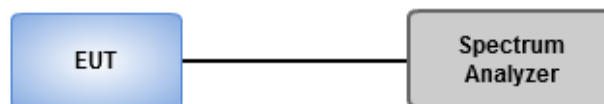
Duty cycle $\geq 98\%$

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

Duty cycle $< 98\%$

1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
2. Set sweep time $\geq 10 \times (\text{number of points in sweep}) \times (\text{total on/off period of the transmitted signal})$.
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.

3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Non-beamforming mode

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	8.35	16.61
802.11ac VHT20_Nss1,(MCS0)_4TX	8.41	16.67
802.11ac VHT40_Nss1,(MCS0)_4TX	8.34	16.60
802.11ac VHT80_Nss1,(MCS0)_4TX	-0.06	8.20
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	8.21	16.60
802.11ac VHT20_Nss1,(MCS0)_4TX	8.30	16.69
802.11ac VHT40_Nss1,(MCS0)_4TX	8.47	16.86
802.11ac VHT80_Nss1,(MCS0)_4TX	3.34	11.73

RBW = 1MHz

Result

Mode	Result	DG (dBi)	Port 1 (dBm/ RBW)	Port 2 (dBm/ RBW)	Port 3 (dBm/ RBW)	Port 4 (dBm/ RBW)	PD (dBm/ RBW)	PD Limit (dBm/ RBW)	EIRP PD (dBm/ RBW)	EIRP PD Limit (dBm/ RBW)
802.11a_ Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	8.26	2.49	0.90	2.12	2.77	8.05	8.74	16.31	17.00
5300MHz	Pass	8.26	2.80	1.17	2.27	2.80	8.26	8.74	16.52	17.00
5320MHz	Pass	8.26	2.95	1.20	2.38	2.81	8.35	8.74	16.61	17.00
5500MHz	Pass	8.39	0.90	0.71	1.16	1.81	7.16	8.61	15.55	17.00
5580MHz	Pass	8.39	2.58	1.46	1.86	2.76	8.21	8.61	16.60	17.00
5700MHz	Pass	8.39	0.01	0.30	-0.21	0.09	6.01	8.61	14.40	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	8.39	1.98	2.22	1.71	2.38	8.08	8.61	16.47	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	8.57	-1.24	-0.81	-1.64	-0.77	4.92	27.43	13.49	36.00
802.11ac VHT20_ Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	8.26	2.36	1.19	2.00	2.93	8.15	8.74	16.41	17.00
5300MHz	Pass	8.26	2.50	1.46	2.27	3.00	8.34	8.74	16.60	17.00
5320MHz	Pass	8.26	2.62	1.61	2.42	2.98	8.41	8.74	16.67	17.00
5500MHz	Pass	8.39	0.02	0.35	0.55	1.39	6.60	8.61	14.99	17.00
5580MHz	Pass	8.39	2.44	1.72	1.95	2.98	8.30	8.61	16.69	17.00
5700MHz	Pass	8.39	-0.25	0.54	-0.26	0.28	6.09	8.61	14.48	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	8.39	1.79	2.59	1.58	2.68	8.17	8.61	16.56	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	8.57	-1.54	-1.16	-1.79	-1.17	4.60	27.43	13.17	36.00
802.11ac VHT40_ Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	8.26	2.86	1.41	2.15	2.94	8.34	8.74	16.60	17.00
5310MHz	Pass	8.26	-1.86	-3.46	-2.12	-2.04	3.65	8.74	11.91	17.00
5510MHz	Pass	8.39	-3.77	-3.92	-3.52	-2.77	2.49	8.61	10.88	17.00
5590MHz	Pass	8.39	3.10	2.19	1.96	2.73	8.47	8.61	16.86	17.00
5670MHz	Pass	8.39	-2.10	-2.33	-2.82	-2.63	3.54	8.61	11.93	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	8.39	2.38	2.51	1.84	2.49	8.29	8.61	16.68	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	8.57	-2.57	-2.52	-3.52	-2.49	3.27	27.43	11.84	36.00
802.11ac VHT80_	-	-	-	-	-	-	-	-	-	-

Mode	Result	DG (dBi)	Port 1 (dBm/ RBW)	Port 2 (dBm/ RBW)	Port 3 (dBm/ RBW)	Port 4 (dBm/ RBW)	PD (dBm/ RBW)	PD Limit (dBm/ RBW)	EIRP PD (dBm/ RBW)	EIRP PD Limit (dBm/ RBW)
Nss1,(MCS0)_4TX										
5290MHz	Pass	8.26	-5.77	-7.17	-5.72	-5.54	-0.06	8.74	8.20	17.00
5530MHz	Pass	8.39	-5.75	-6.40	-5.98	-5.46	0.00	8.61	8.39	17.00
5610MHz	Pass	8.39	-3.57	-4.12	-4.44	-3.97	1.90	8.61	10.29	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	8.39	-2.28	-2.26	-3.18	-2.69	3.34	8.61	11.73	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	8.57	-9.05	-9.12	-10.51	-8.27	-3.21	27.43	5.36	36.00

RBW = 1MHz

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

For 5250 ~ 5350 MHz

DG = Directional Gain = $10 \times \log((10^{2.09/20} + 10^{2.21/20} + 10^{2.32/20} + 10^{2.35/20})^4/4) = 8.26 \text{ dBi} > 6 \text{ dBi}$

Limit shall be reduced to 11 dBm – (8.26 dBi – 6 dBi) = 8.74 dBm

For 5470 ~ 5725MHz

DG = Directional Gain = $10 \times \log((10^{2.27/20} + 10^{2.12/20} + 10^{2.1/20} + 10^{2.96/20})^4/4) = 8.39 \text{ dBi} > 6 \text{ dBi}$

Limit shall be reduced to 11 dBm – (8.39 dBi – 6 dBi) = 8.61 dBm

For 5725 ~ 5850MHz

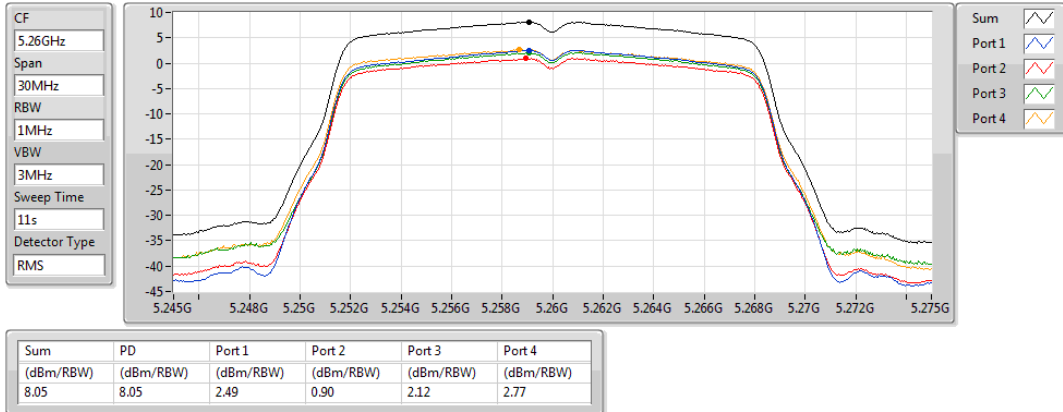
DG = Directional Gain = $10 \times \log((10^{2.45/20} + 10^{2.59/20} + 10^{2.5/20} + 10^{2.66/20})^4/4) = 8.57 \text{ dBi} > 6 \text{ dBi}$

Limit shall be reduced to 30 dBm – (8.57 dBi – 6 dBi) = 27.43 dBm

802.11a_Nss1,(6Mbps)_4TX

PSD

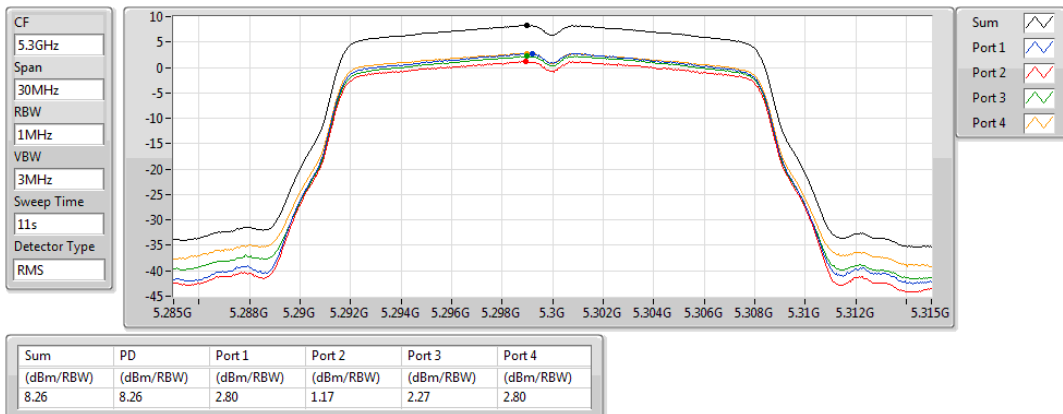
5260MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

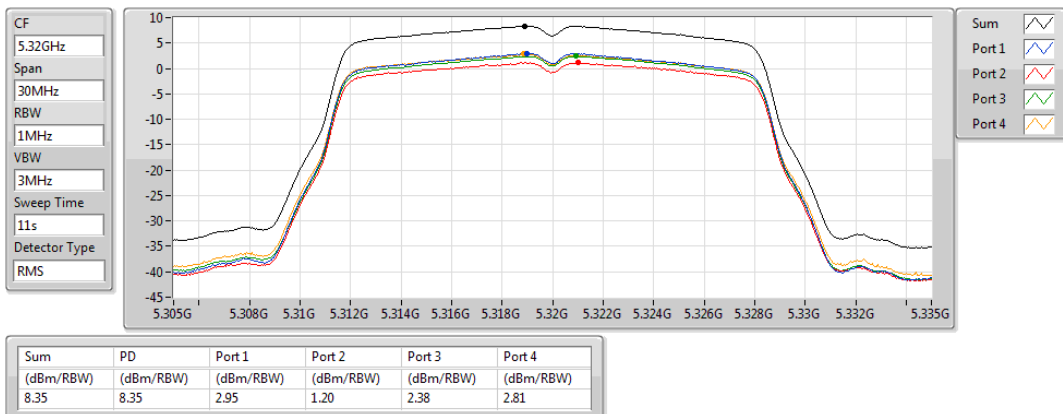
5300MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

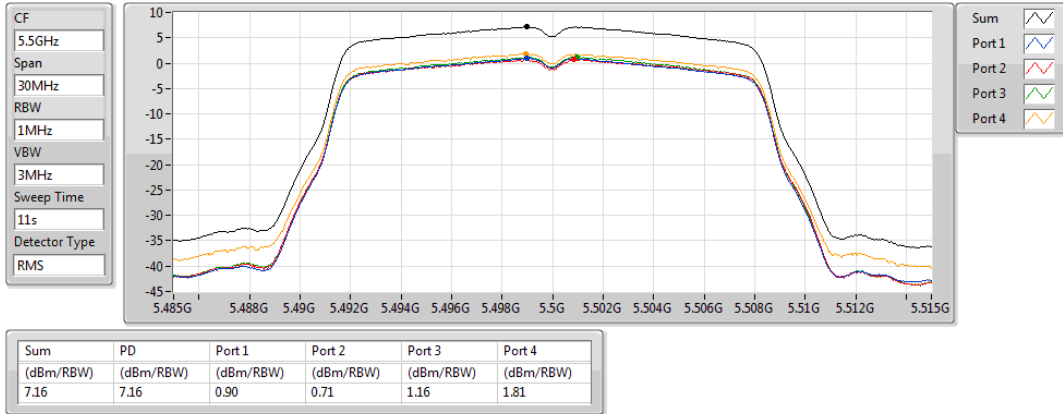
5320MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

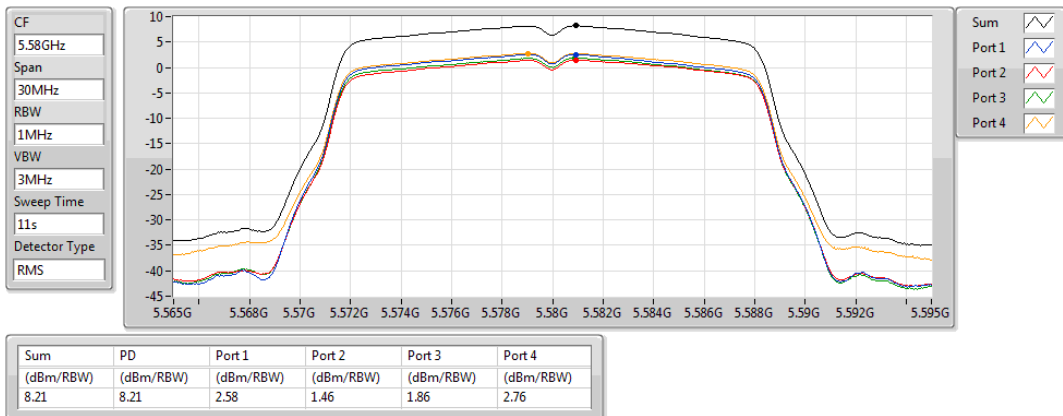
5500MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

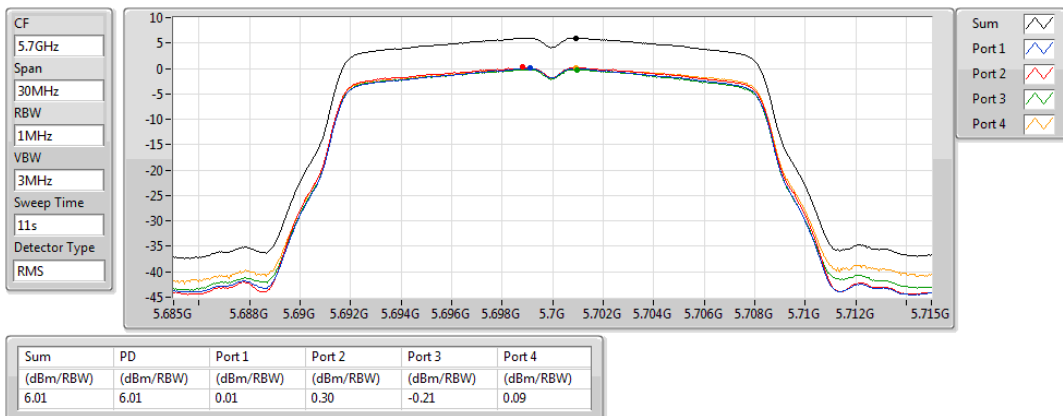
5580MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

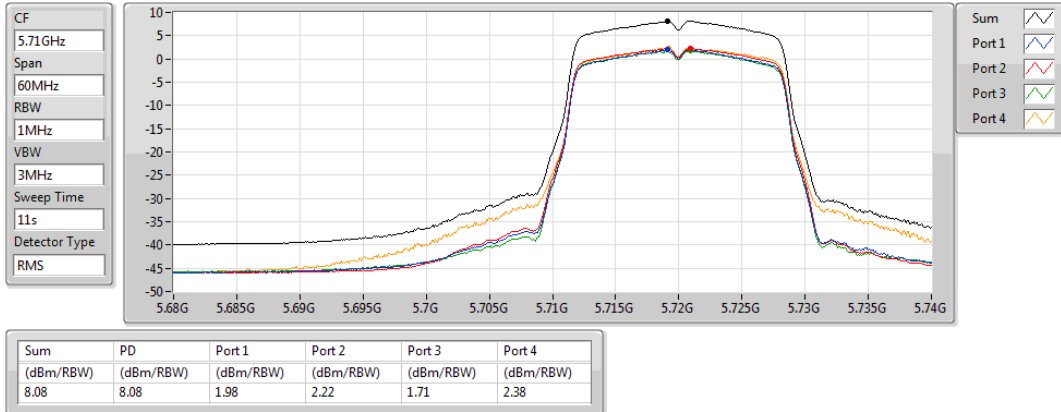
5700MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

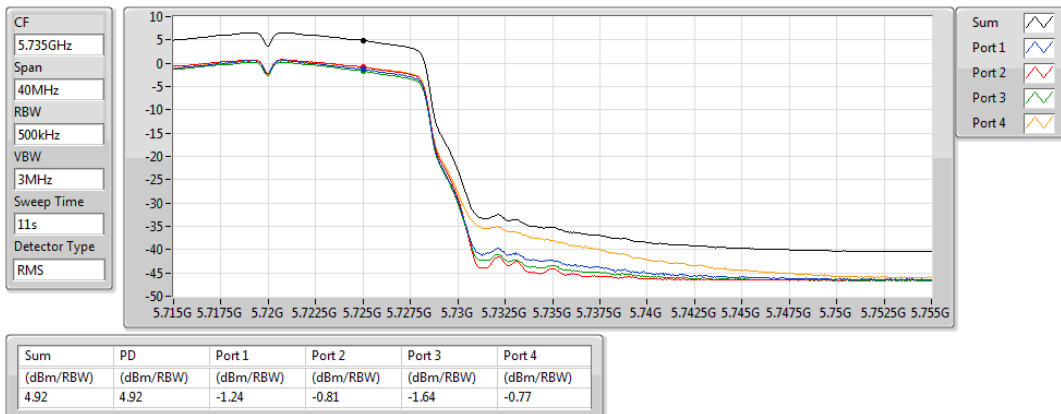
5720MHz Straddle 5.47-5.725GHz



802.11a_Nss1,(6Mbps)_4TX

PSD

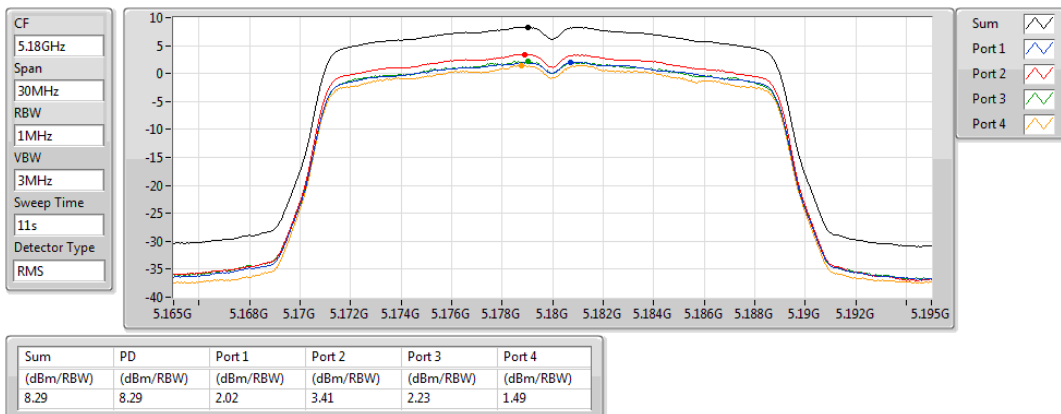
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

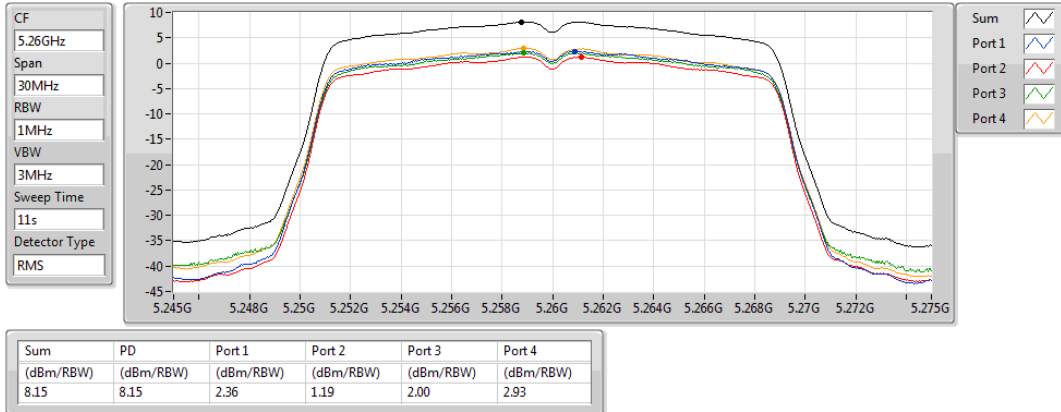
5180MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

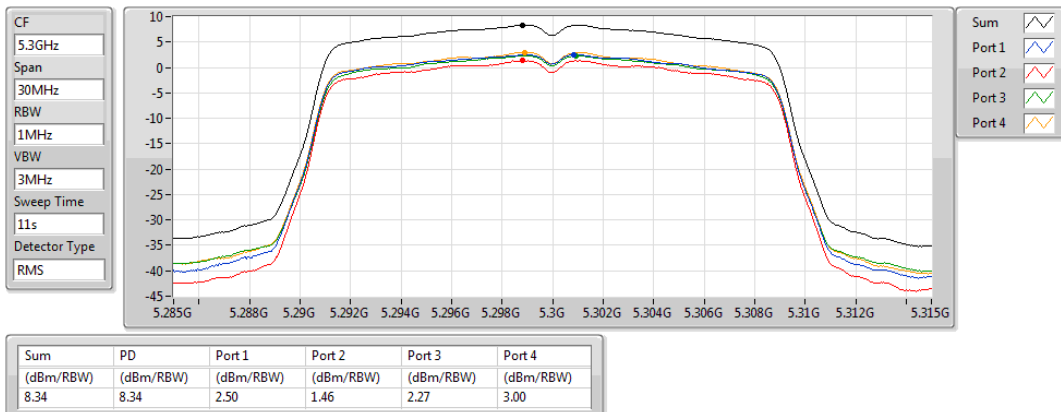
5260MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

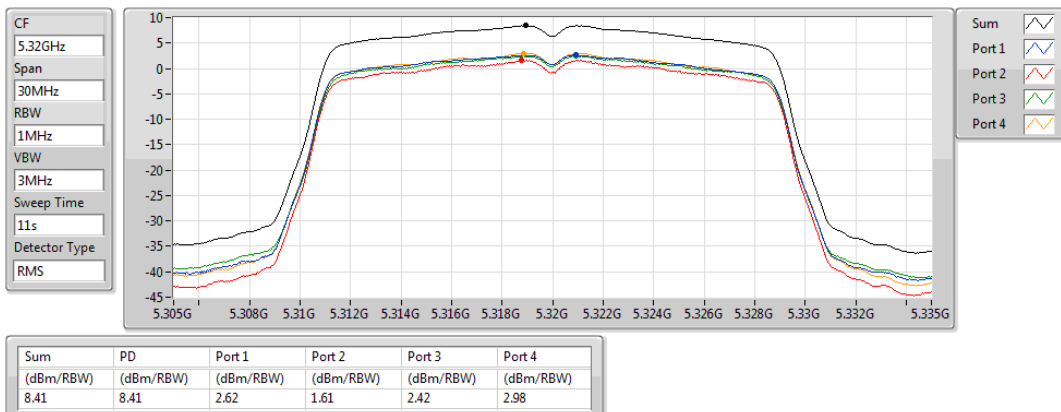
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802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

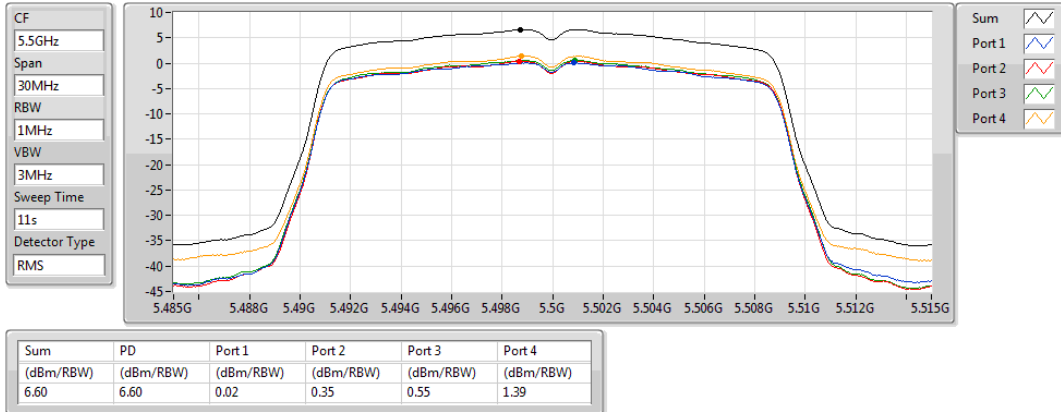
5320MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

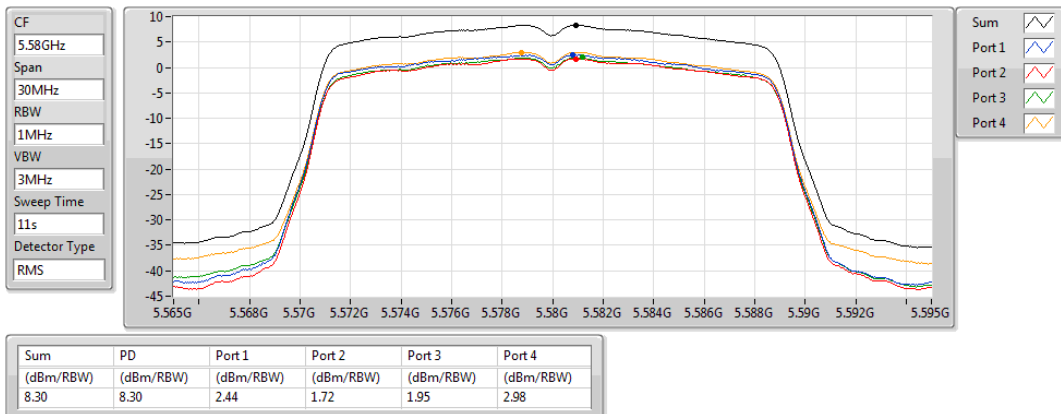
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802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

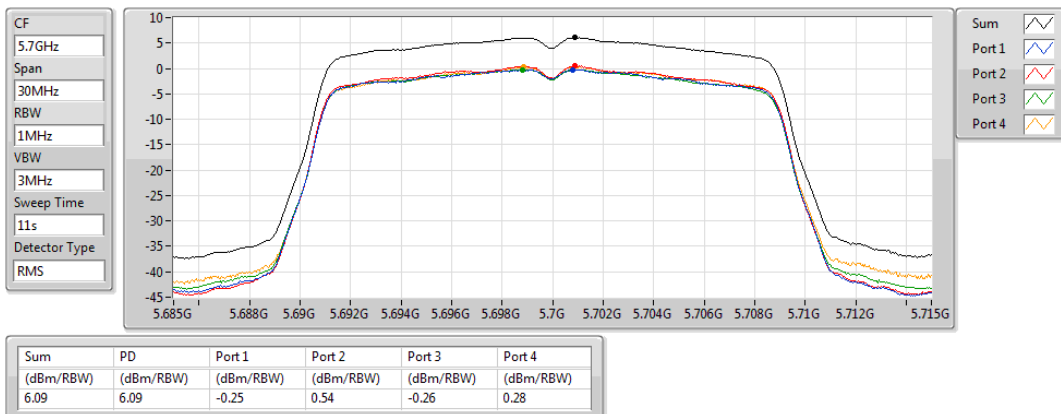
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802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

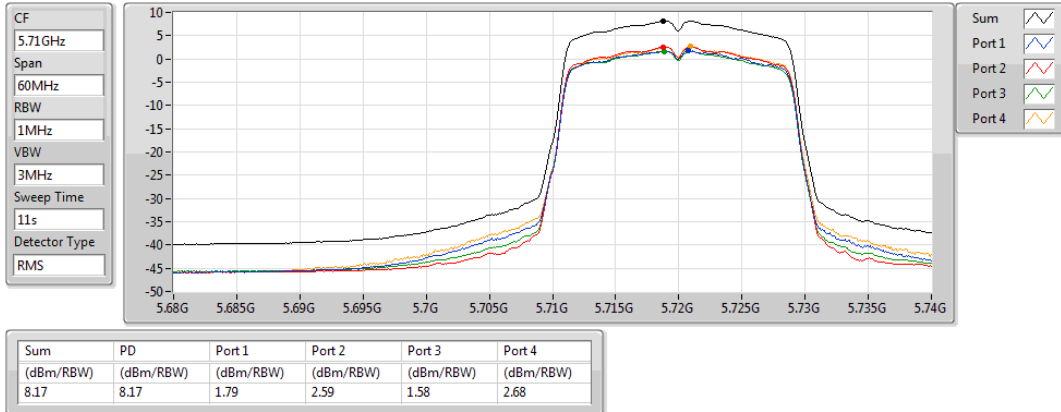
5700MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

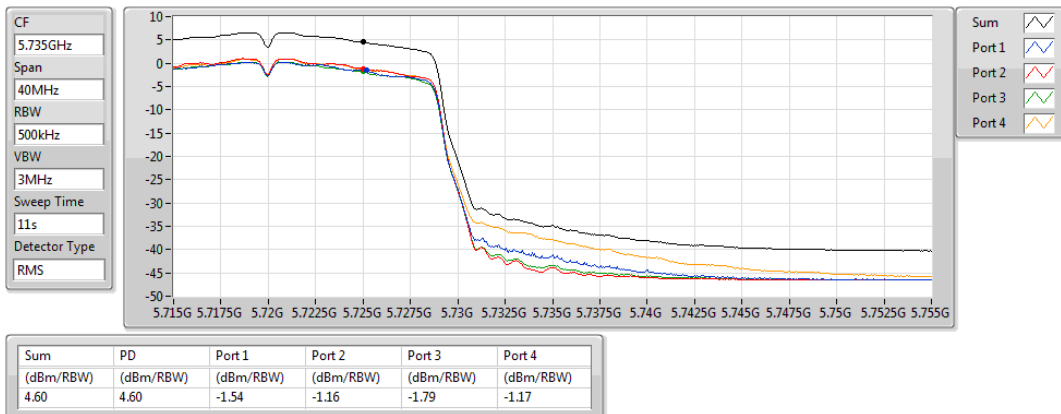
5720MHz Straddle 5.47-5.725GHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

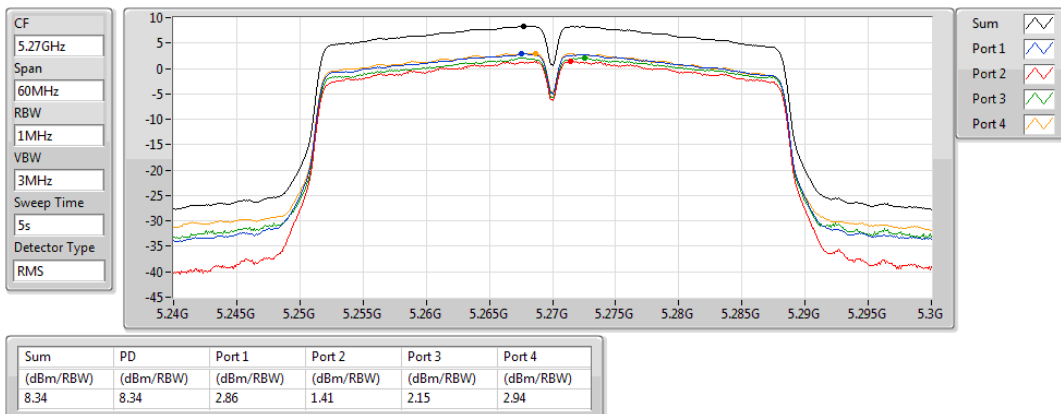
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

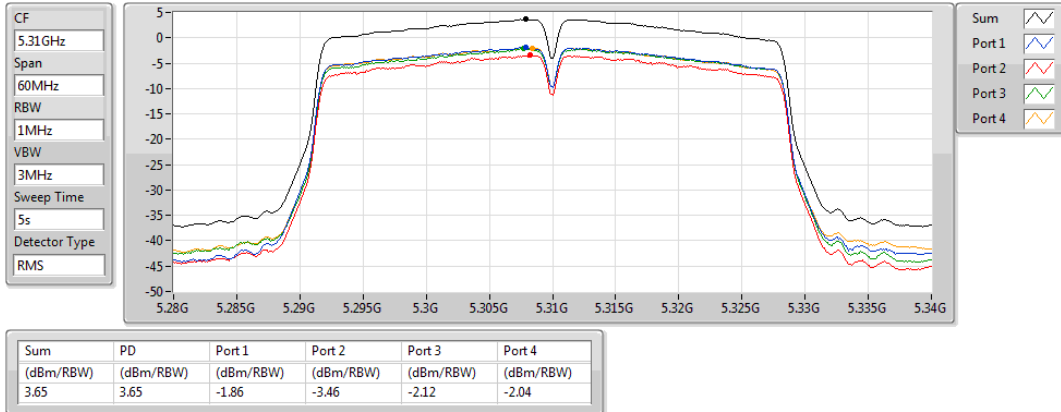
5270MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

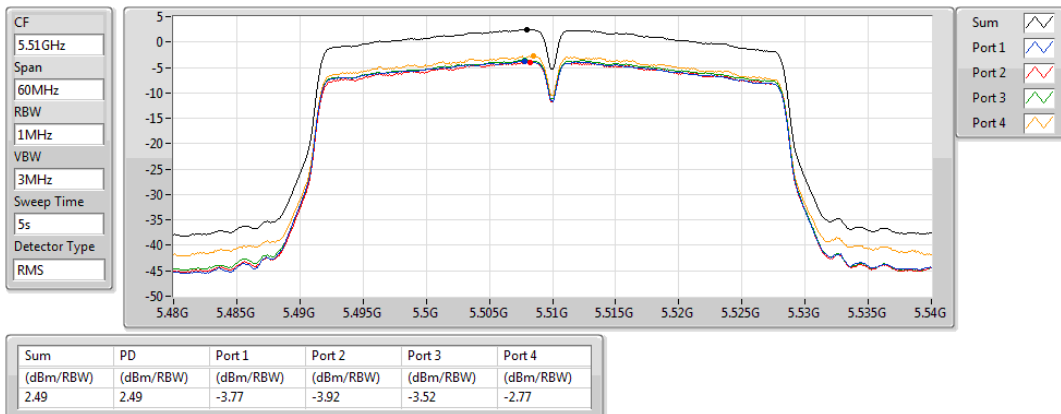
5310MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

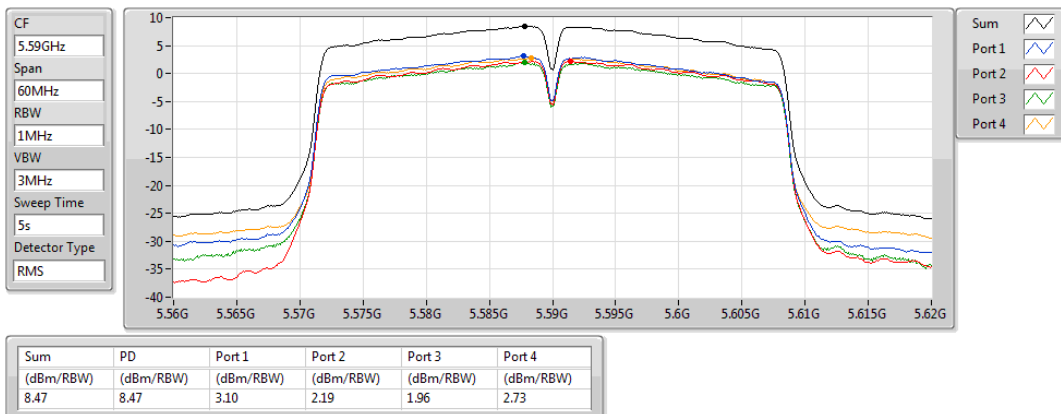
5510MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

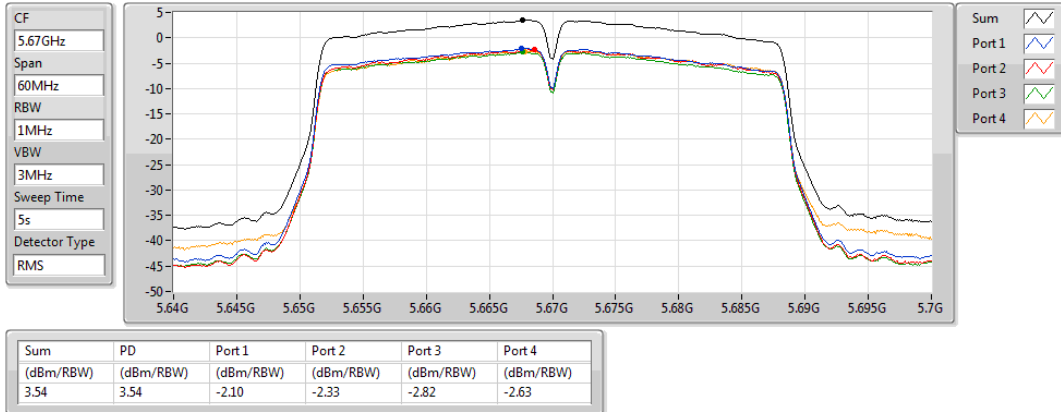
5590MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

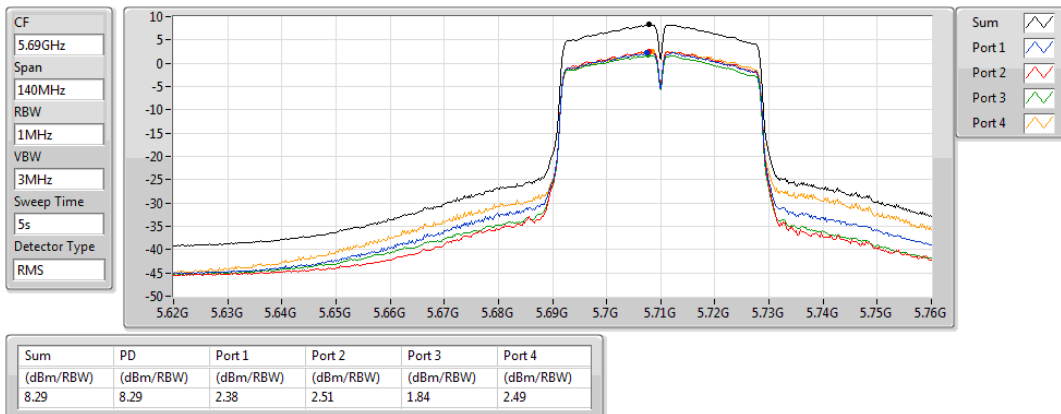
5670MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

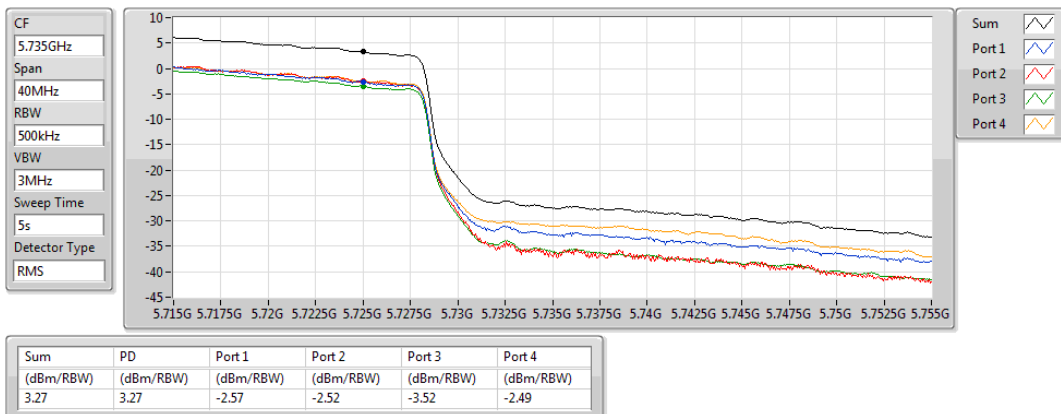
5710MHz Straddle 5.47-5.725GHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

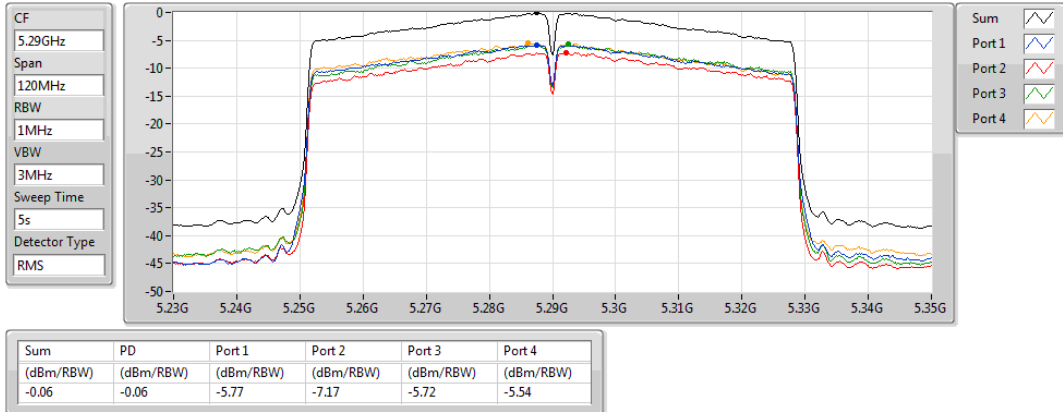
5710MHz Straddle 5.725-5.85GHz



802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

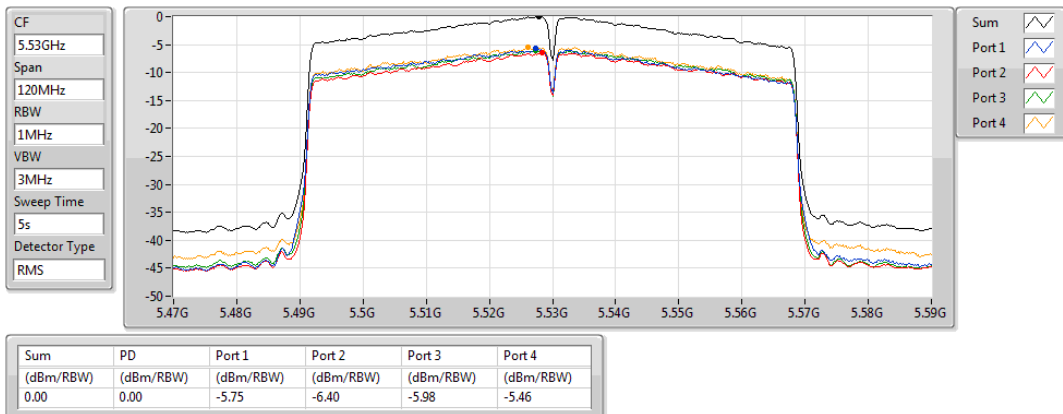
5290MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

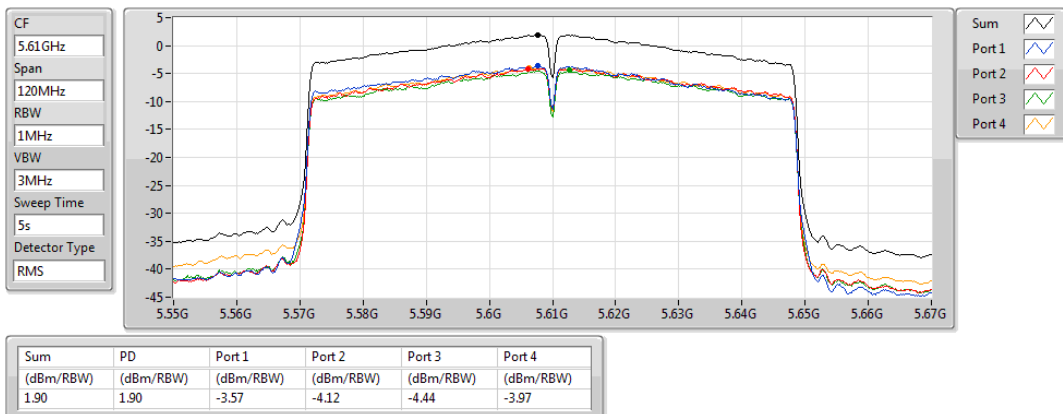
5530MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

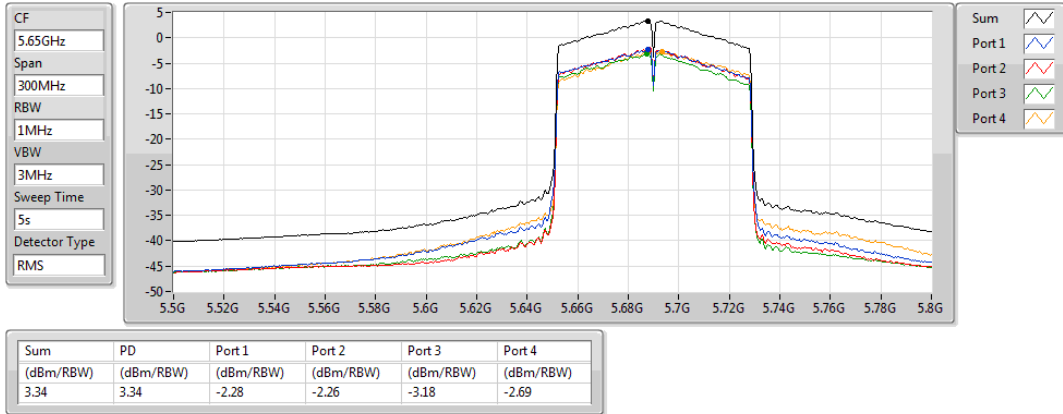
5610MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

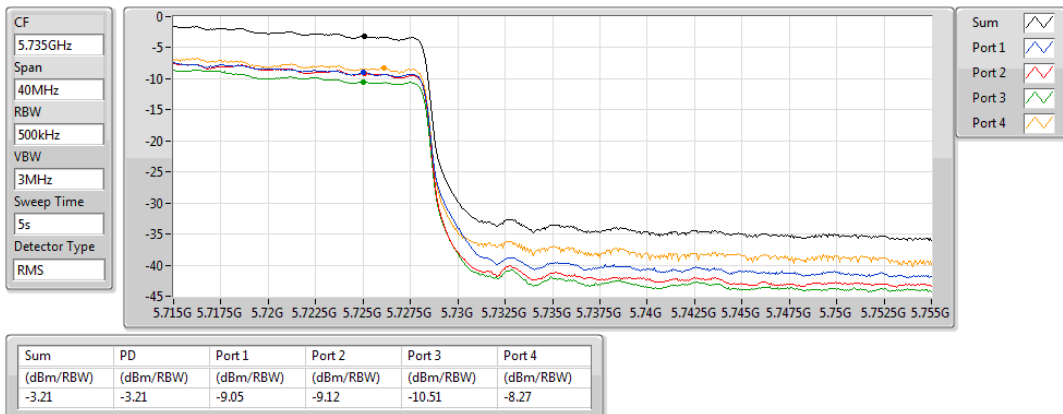
5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz



Beamforming mode

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.25-5.35GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	8.46	16.72
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	6.42	14.68
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-1.84	6.42
5.47-5.725GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	8.44	16.83
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	6.63	15.02
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	1.36	9.75

RBW = 1MHz

Result

Mode	Result	DG (dBi)	Port 1 (dBm/ RBW)	Port 2 (dBm/ RBW)	Port 3 (dBm/ RBW)	Port 4 (dBm/ RBW)	PD (dBm/ RBW)	PD Limit (dBm/ RBW)	EIRP PD (dBm/ RBW)	EIRP PD Limit (dBm/ RBW)
802.11ac VHT20-BF_Nss1,(MC S0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	8.26	3.04	1.25	2.30	3.64	8.44	8.74	16.70	17.00
5300MHz	Pass	8.26	3.35	1.82	2.67	3.37	8.38	8.74	16.64	17.00
5320MHz	Pass	8.26	2.74	2.34	3.26	3.35	8.46	8.74	16.72	17.00
5500MHz	Pass	8.39	0.96	0.42	1.03	1.22	6.53	8.61	14.92	17.00
5580MHz	Pass	8.39	2.79	3.05	2.44	3.20	8.44	8.61	16.83	17.00
5700MHz	Pass	8.39	-0.13	0.07	-0.88	0.00	4.90	8.61	13.29	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	8.39	2.91	2.92	2.49	3.80	8.43	8.61	16.82	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	8.57	0.49	1.52	0.12	2.30	6.71	27.43	15.28	36.00
802.11ac VHT40-BF _Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	8.26	1.39	-0.22	0.57	1.37	6.42	8.74	14.68	17.00
5310MHz	Pass	8.26	-1.99	-3.79	-2.91	-3.01	2.78	8.74	11.04	17.00
5510MHz	Pass	8.39	-3.84	-2.29	-2.56	-2.30	2.69	8.61	11.08	17.00
5590MHz	Pass	8.39	1.47	1.18	1.22	0.36	6.63	8.61	15.02	17.00
5670MHz	Pass	8.39	-1.65	-2.63	-2.02	-1.80	3.34	8.61	11.73	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	8.39	0.17	0.67	1.25	1.19	6.39	8.61	14.78	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	8.57	-2.48	-3.06	-3.34	-0.62	3.73	27.43	12.30	36.00
802.11ac VHT80-BF _Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	8.26	-7.03	-8.48	-6.09	-7.00	-1.84	8.74	6.42	17.00
5530MHz	Pass	8.39	-6.20	-7.58	-7.06	-6.31	-1.57	8.61	6.82	17.00
5610MHz	Pass	8.39	-3.81	-4.79	-4.82	-5.22	0.94	8.61	9.33	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	8.39	-2.89	-4.35	-4.57	-4.34	1.36	8.61	9.75	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	8.57	-7.42	-6.87	-8.20	-5.48	-1.40	27.43	7.17	36.00

RBW = 1MHz

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

For 5250 ~ 5350 MHz

DG = Directional Gain = $10 \times \log((10^{2.09/20} + 10^{2.21/20} + 10^{2.32/20} + 10^{2.35/20})^4/4) = 8.26 \text{ dBi} > 6 \text{ dBi}$

Limit shall be reduced to 11 dBm – (8.26 dBi – 6 dBi) = 8.74 dBm

For 5470 ~ 5725 MHz

DG = Directional Gain = $10 \times \log((10^{2.27/20} + 10^{2.12/20} + 10^{2.1/20} + 10^{2.96/20})^4/4) = 8.39 \text{ dBi} > 6 \text{ dBi}$

Limit shall be reduced to 11 dBm – (8.39 dBi – 6 dBi) = 8.61 dBm

For 5725 ~ 5850 MHz

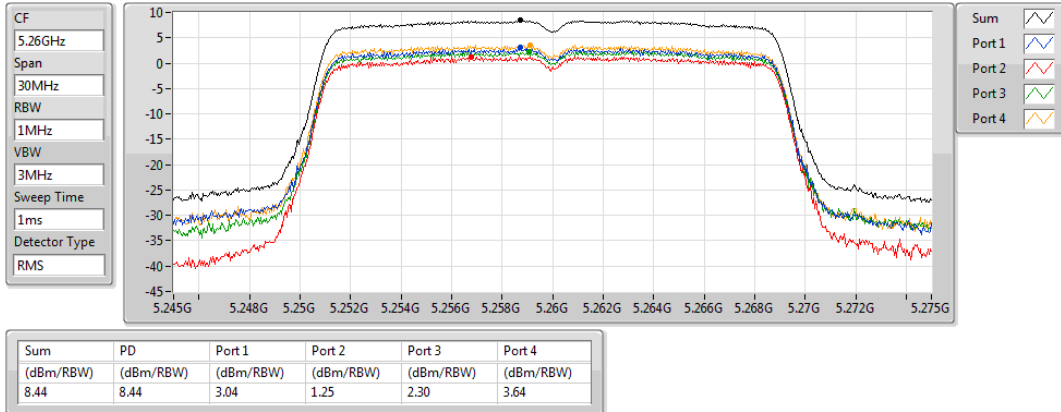
DG = Directional Gain = $10 \times \log((10^{2.45/20} + 10^{2.59/20} + 10^{2.5/20} + 10^{2.66/20})^4/4) = 8.57 \text{ dBi} > 6 \text{ dBi}$

Limit shall be reduced to 30 dBm – (8.57 dBi – 6 dBi) = 27.43 dBm

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

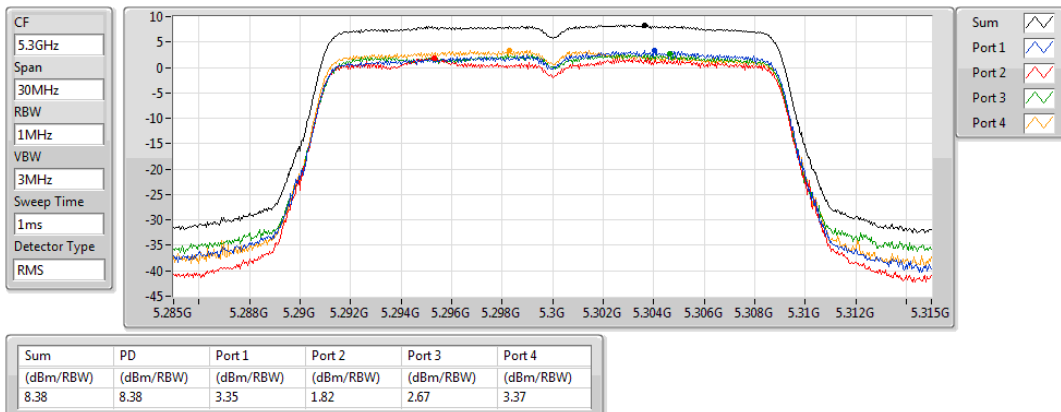
5260MHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

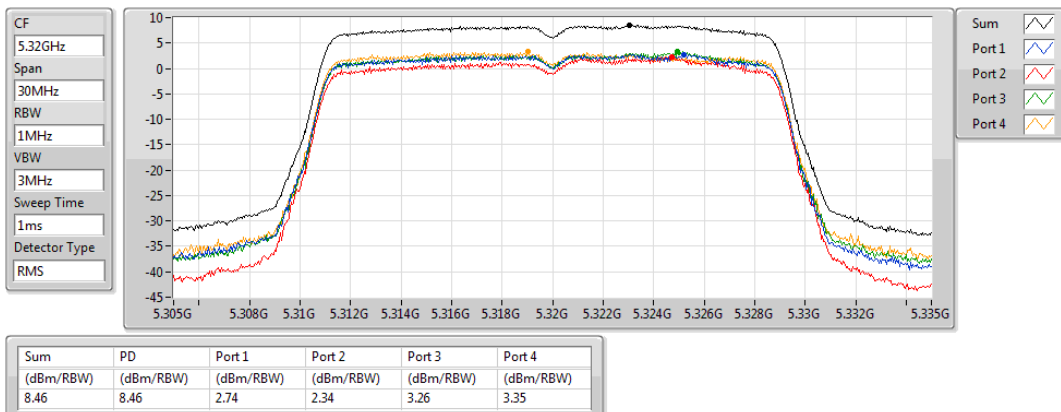
5300MHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

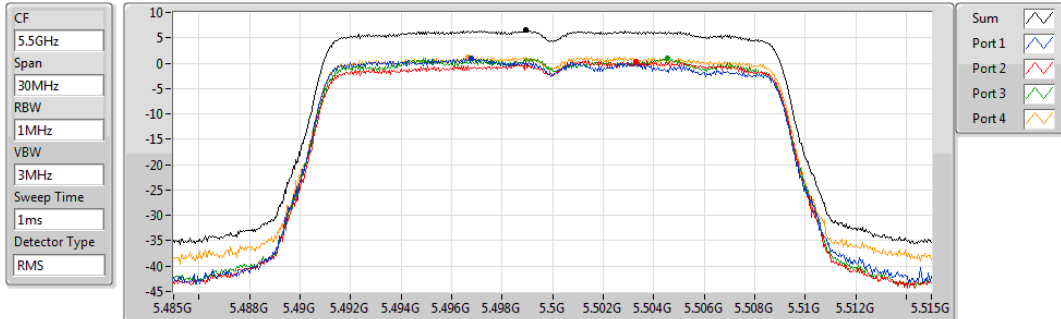
5320MHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5500MHz

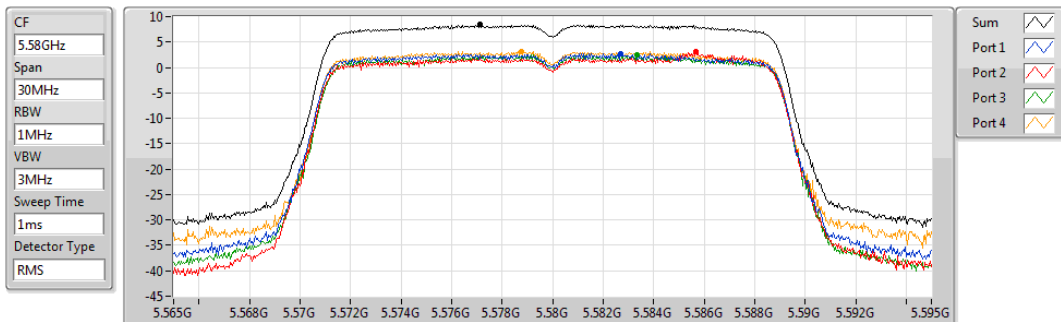


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
6.53	6.53	0.96	0.42	1.03	1.22

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5580MHz

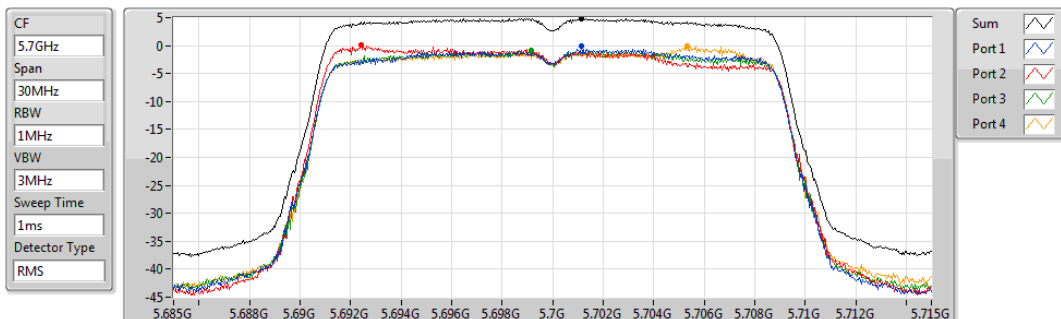


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
8.44	8.44	2.79	3.05	2.44	3.20

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5700MHz

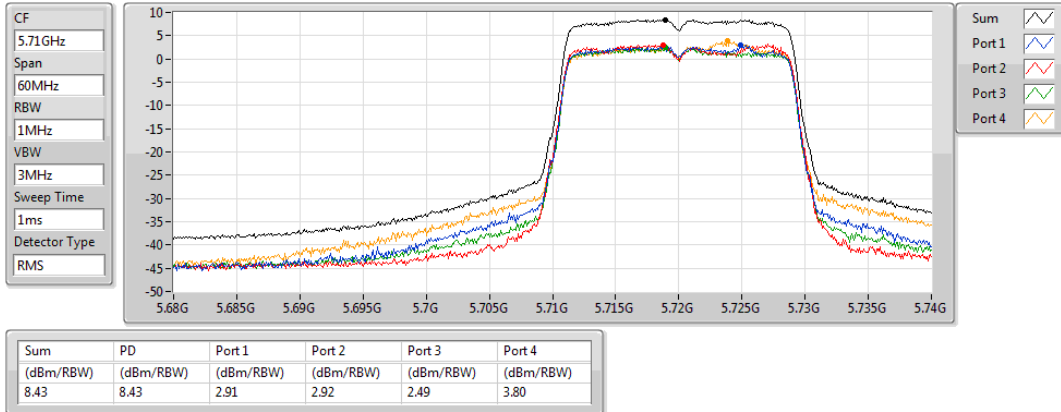


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
4.90	4.90	-0.13	0.07	-0.88	0.00

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

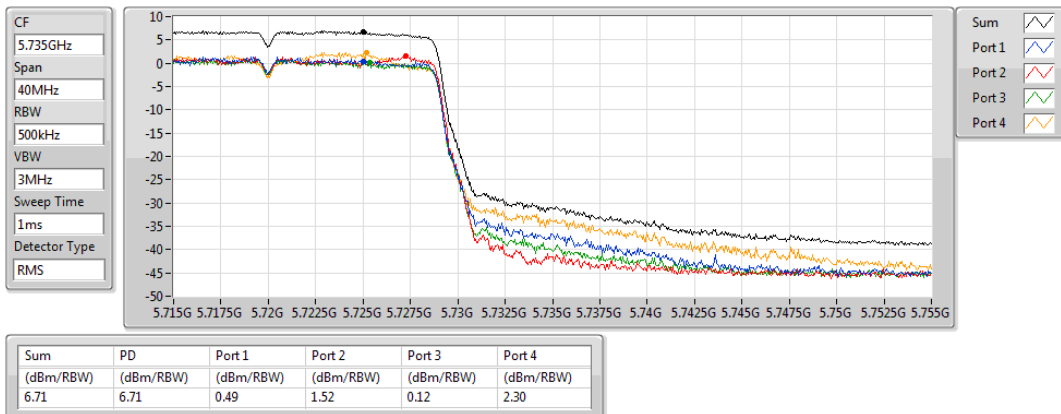
5720MHz Straddle 5.47-5.725GHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

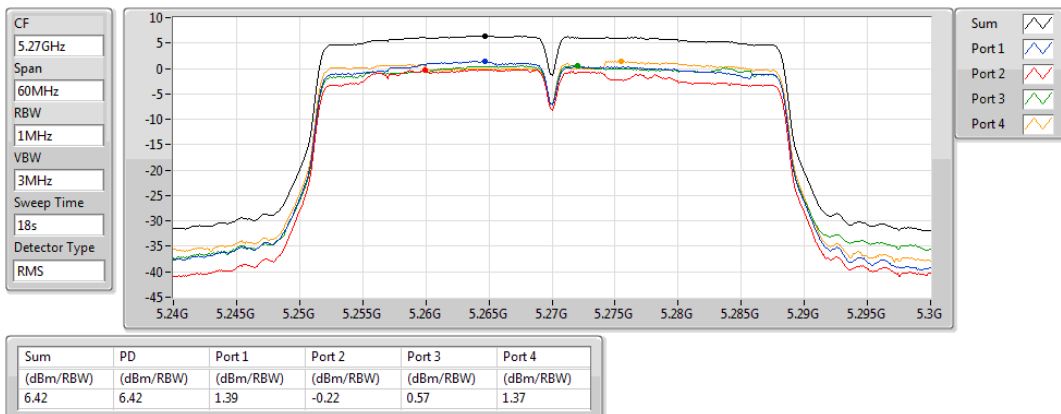
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

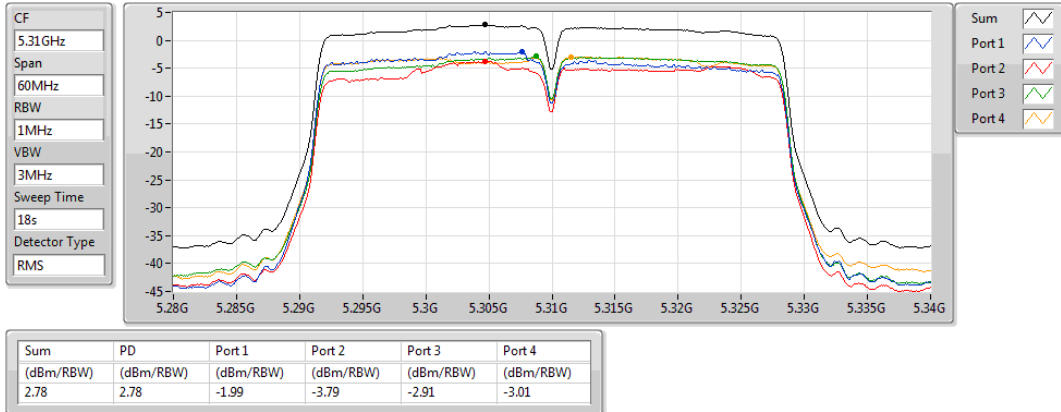
5270MHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

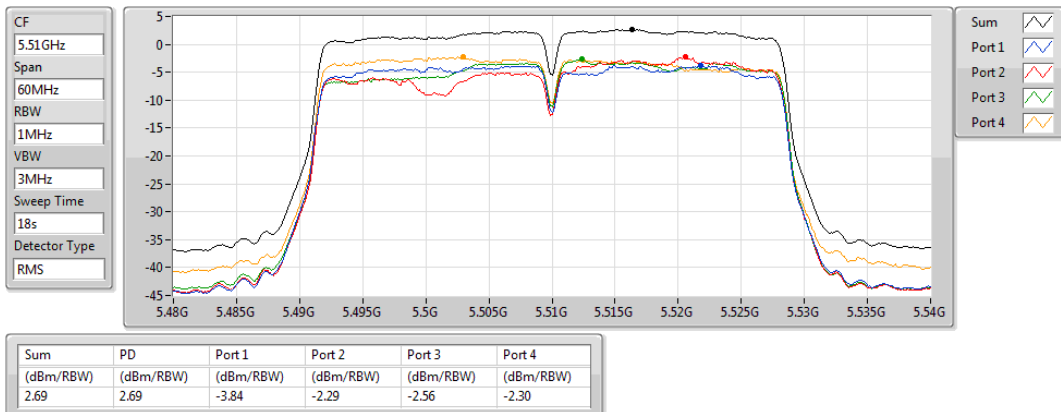
5310MHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

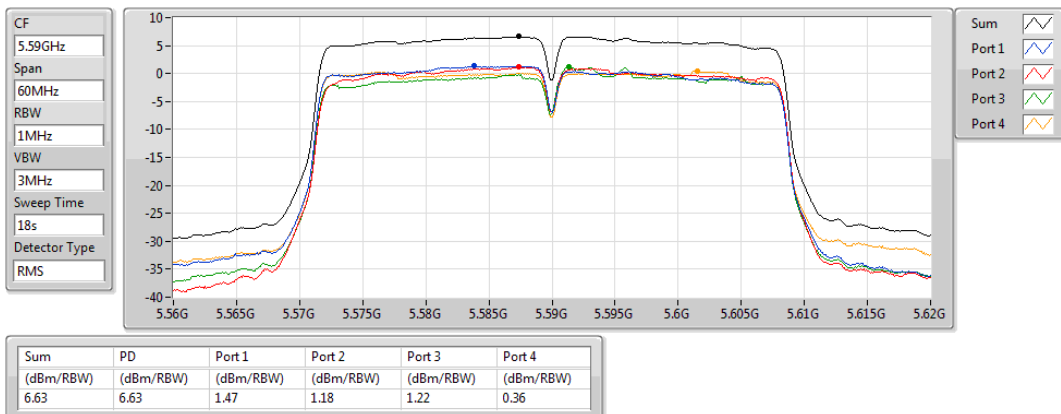
5510MHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

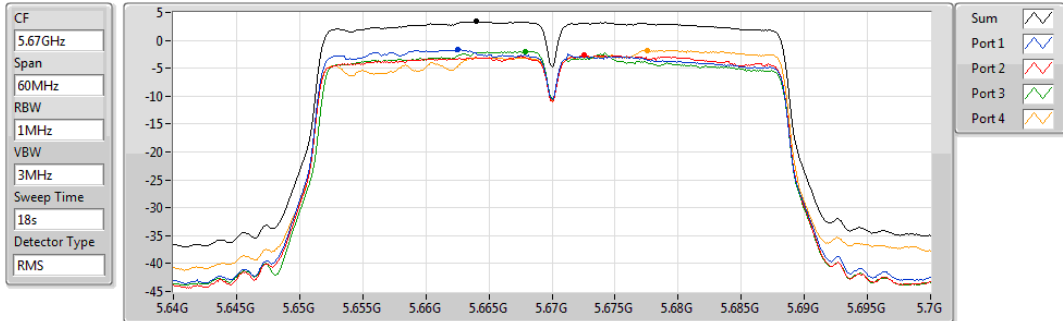
5590MHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5670MHz

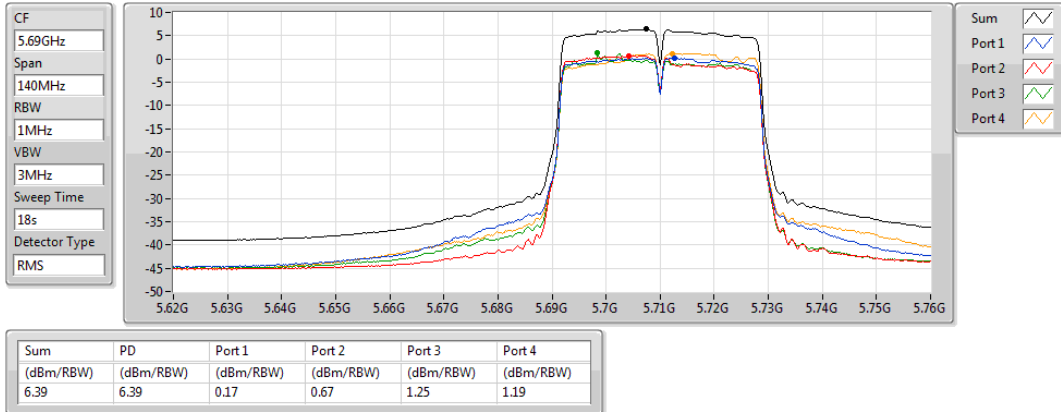


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.34	3.34	-1.65	-2.63	-2.02	-1.80

802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

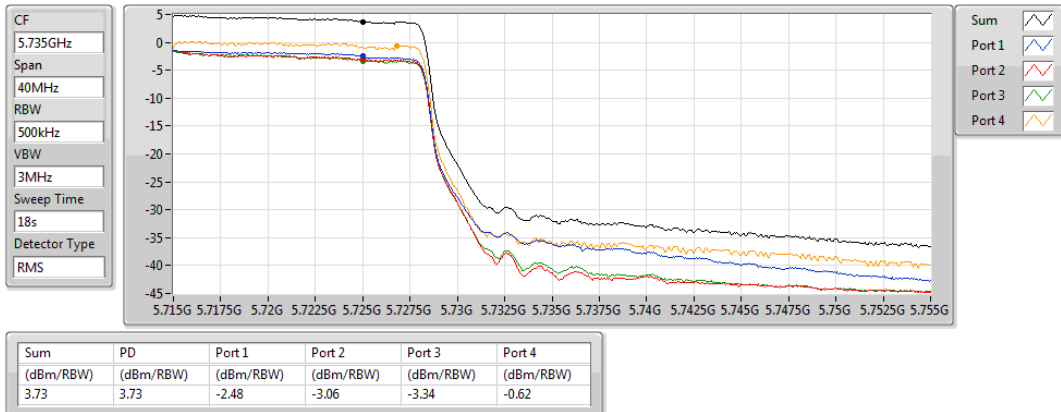
5710MHz Straddle 5.47-5.725GHz



802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

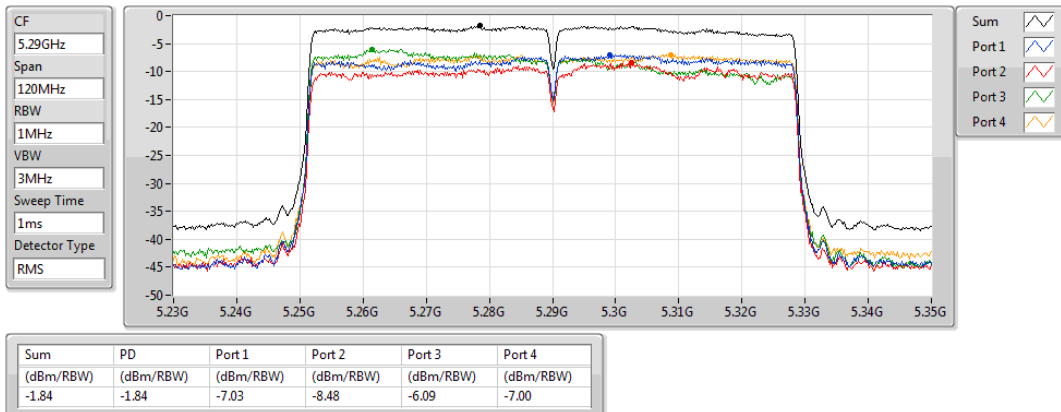
5710MHz Straddle 5.725-5.85GHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

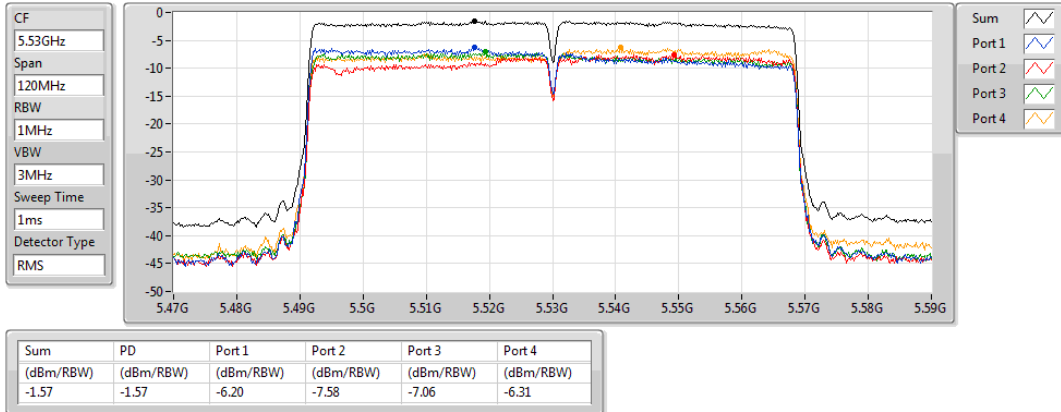
5290MHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

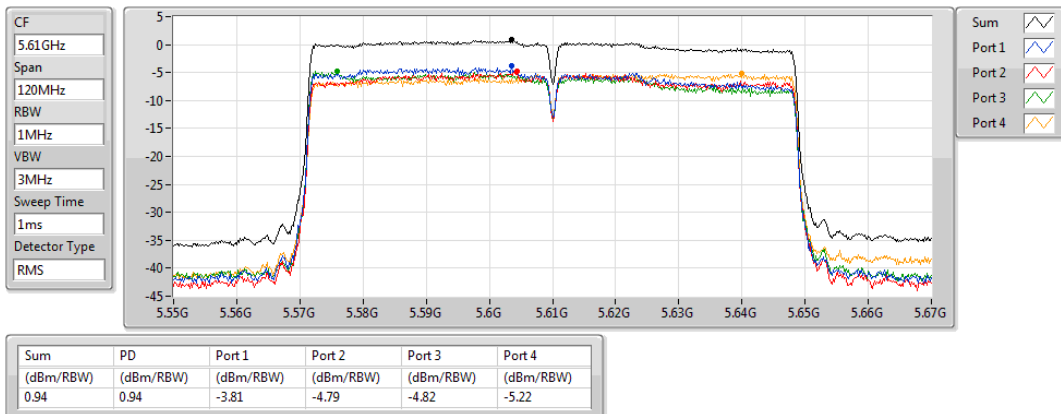
5530MHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

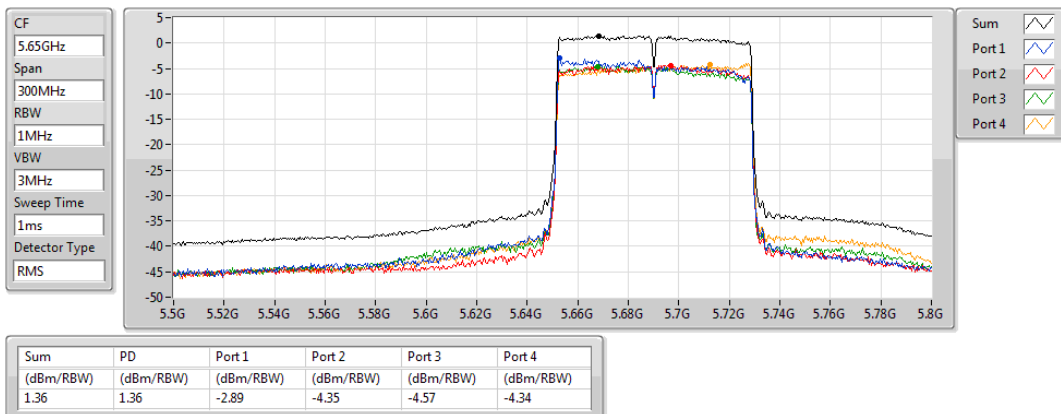
5610MHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

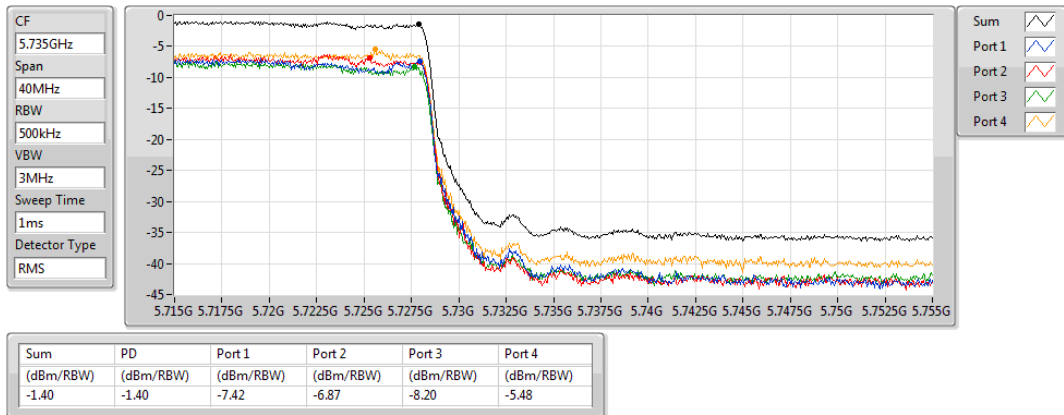
5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz



3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 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
5.25 - 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]

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).

3.5.2 Test Procedures

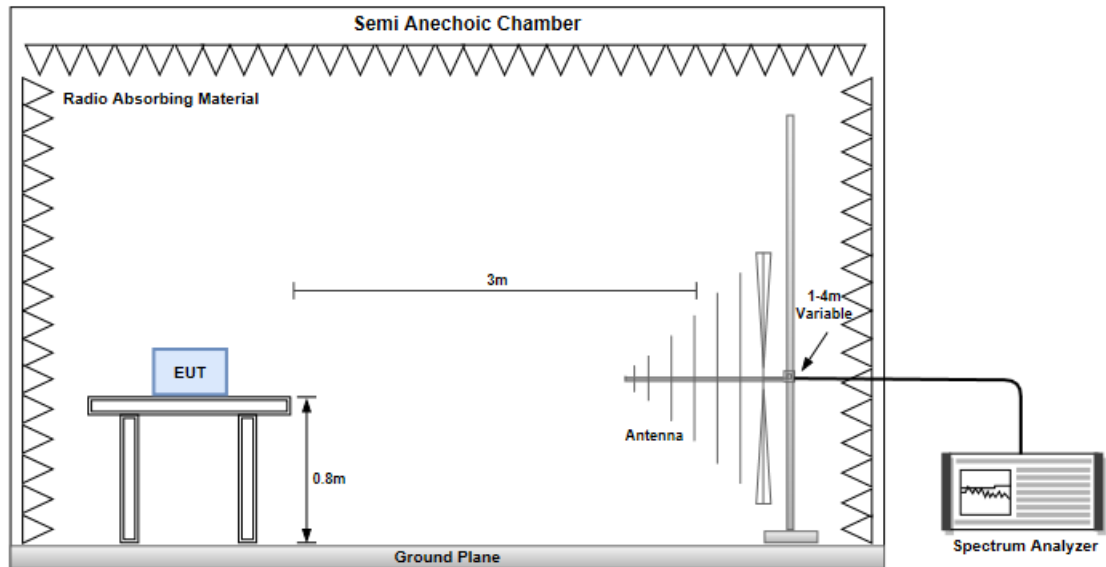
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

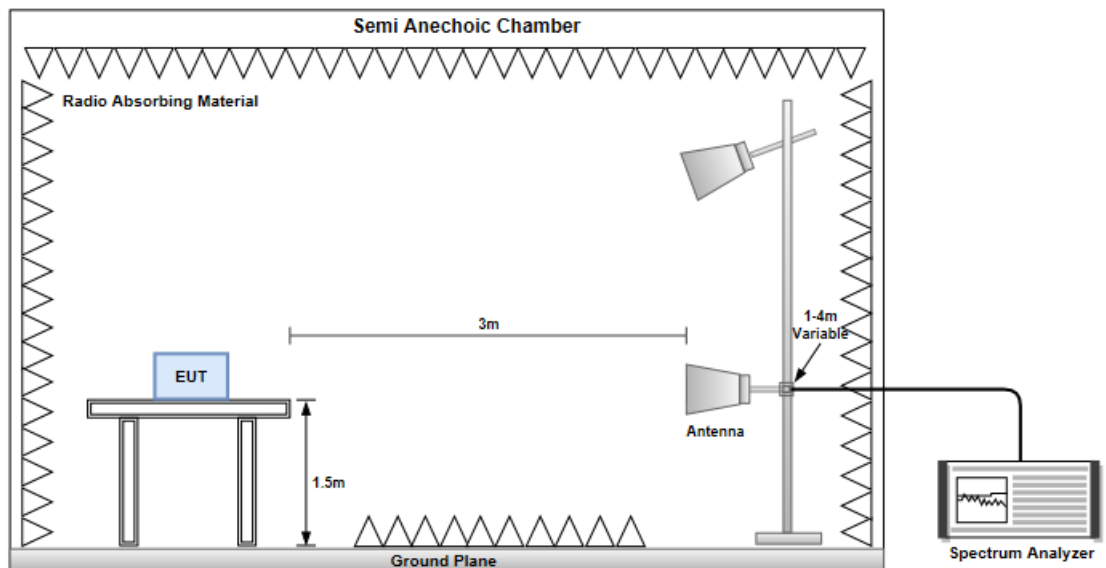
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



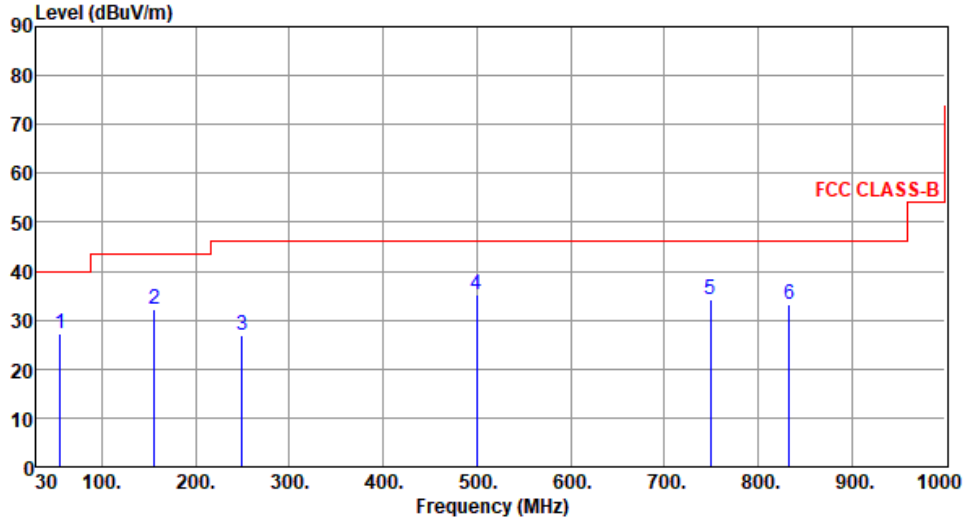
Radiated Emissions above 1 GHz



Non- beamforming mode

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal	Test Configuration	1

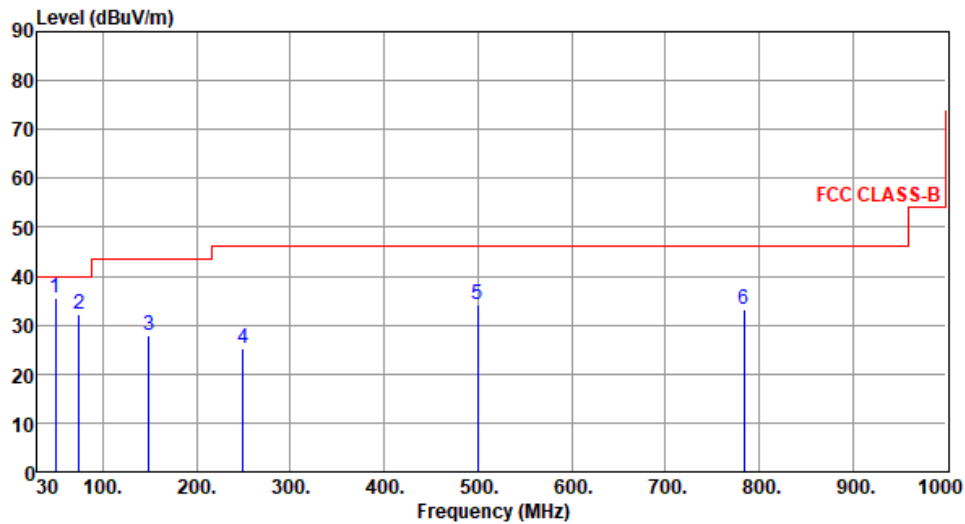


The graph displays the Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (30 to 1000). A red line represents the FCC CLASS-B limit, which is 40 dBuV/m from 30 to 100 MHz, 45 dBuV/m from 100 to 200 MHz, and 50 dBuV/m from 200 to 1000 MHz. Six blue vertical lines represent measured peaks, labeled 1 through 6, with their corresponding data in the table below.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	55.20	27.16	40.00	-12.84	36.07	-8.91	Peak	---	---
2	156.29	32.25	43.50	-11.25	40.81	-8.56	Peak	---	---
3	249.33	26.87	46.00	-19.13	36.83	-9.96	Peak	---	---
4	499.48	35.26	46.00	-10.74	38.31	-3.05	Peak	---	---
5	749.68	34.19	46.00	-11.81	31.73	2.46	Peak	---	---
6	833.18	33.25	46.00	-12.75	29.94	3.31	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	49.38	35.54	40.00	-4.46	44.12	-8.58	Peak	---	---
2	74.59	32.28	40.00	-7.72	44.16	-11.88	Peak	---	---
3	149.24	27.85	43.50	-15.65	36.60	-8.75	Peak	---	---
4	249.31	25.18	46.00	-20.82	35.14	-9.96	Peak	---	---
5	499.48	34.18	46.00	-11.82	37.23	-3.05	Peak	---	---
6	783.84	33.27	46.00	-12.73	30.55	2.72	Peak	---	---

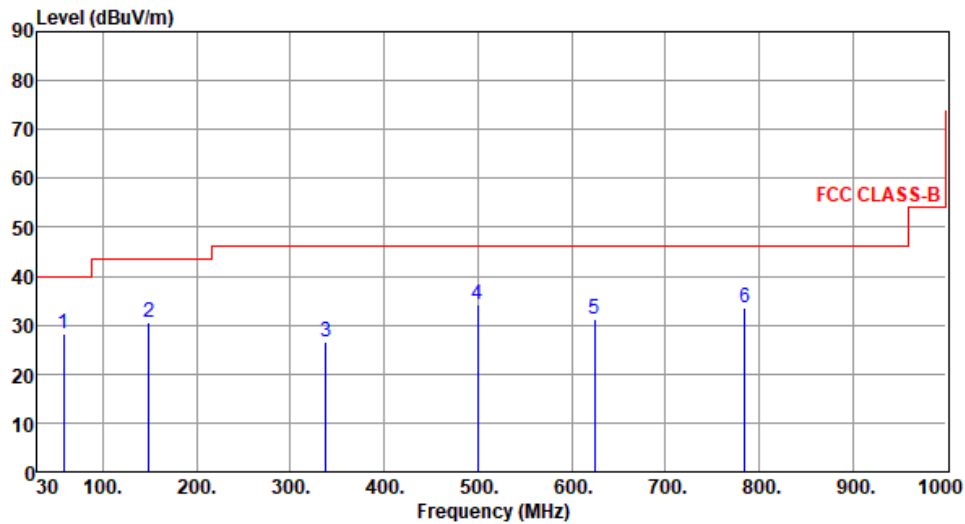
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	58.22	28.31	40.00	-11.69	37.45	-9.14	Peak	---	---
2	149.22	30.65	43.50	-12.85	39.40	-8.75	Peak	---	---
3	337.51	26.45	46.00	-19.55	33.57	-7.12	Peak	---	---
4	499.55	34.27	46.00	-11.73	37.32	-3.05	Peak	---	---
5	624.61	31.29	46.00	-14.71	31.43	-0.14	Peak	---	---
6	784.59	33.57	46.00	-12.43	30.86	2.71	Peak	---	---

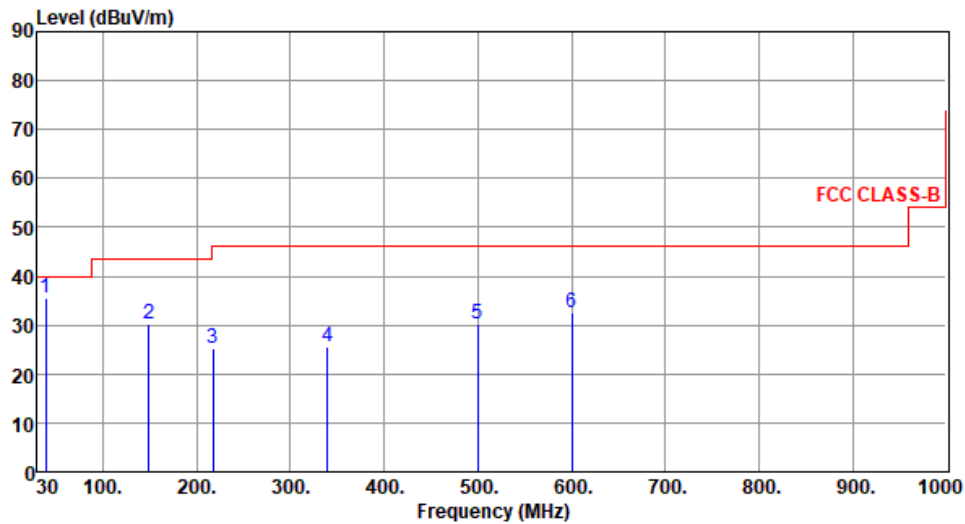
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	38.65	35.48	40.00	-4.52	44.81	-9.33	Peak	---	---
2	149.26	30.15	43.50	-13.35	38.90	-8.75	Peak	---	---
3	217.19	25.26	46.00	-20.74	37.40	-12.14	Peak	---	---
4	339.34	25.64	46.00	-20.36	32.74	-7.10	Peak	---	---
5	499.48	30.16	46.00	-15.84	33.21	-3.05	Peak	---	---
6	600.48	32.65	46.00	-13.35	33.23	-0.58	Peak	---	---

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

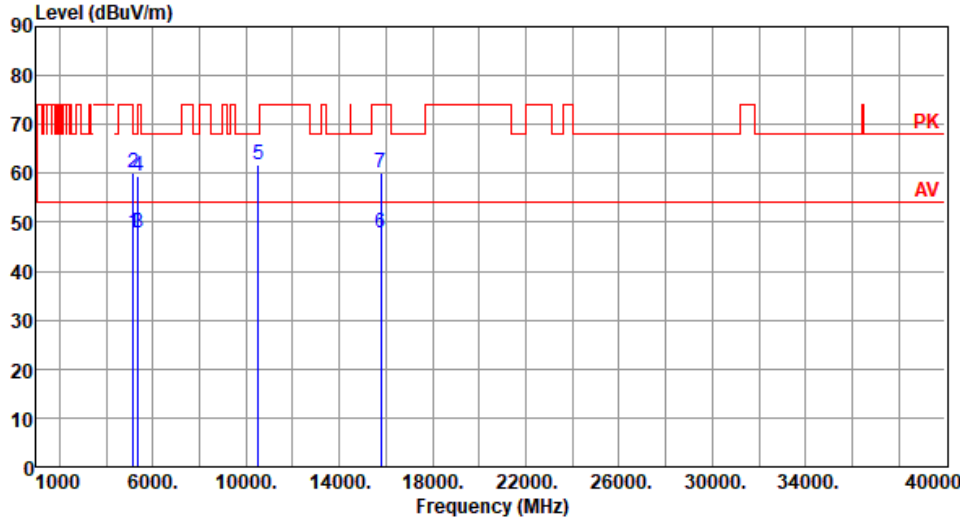
*Factor includes antenna factor , cable loss and amplifier gain

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.

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

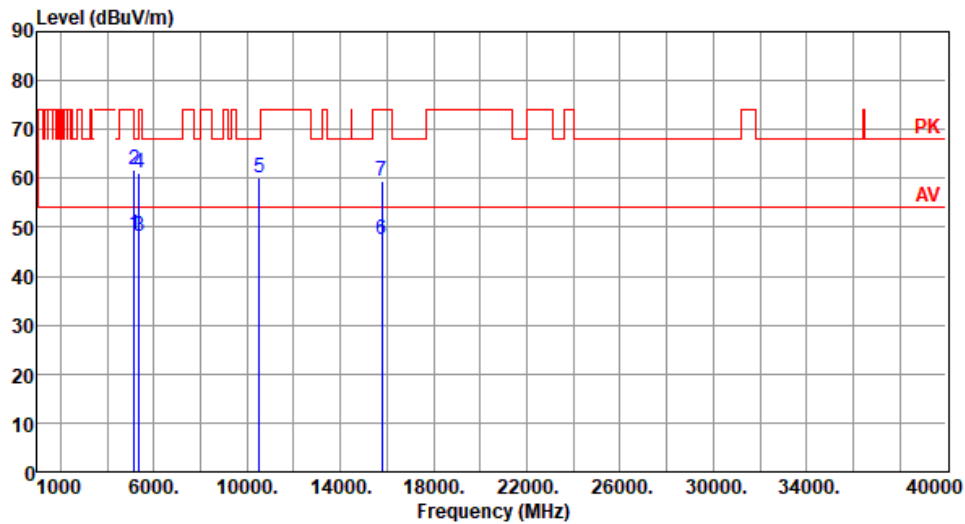
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.90	54.00	-6.10	40.58	7.32	Average	207	52
2	5150.00	60.00	74.00	-14.00	52.68	7.32	Peak	207	52
3	5350.00	47.73	54.00	-6.27	40.88	6.85	Average	207	52
4	5350.00	59.55	74.00	-14.45	52.70	6.85	Peak	207	52
5	10520.00	61.92	68.20	-6.28	45.50	16.42	Peak	231	135
6	15780.00	47.95	54.00	-6.05	31.39	16.56	Average	100	74
7	15780.00	60.12	74.00	-13.88	43.56	16.56	Peak	100	74

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



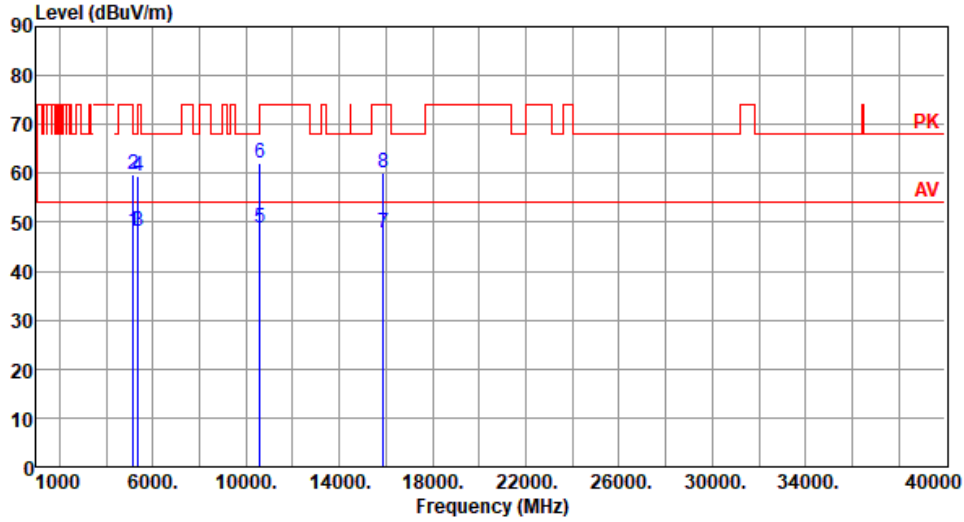
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.36	54.00	-5.64	41.04	7.32	Average	209	110
2	5150.00	61.73	74.00	-12.27	54.41	7.32	Peak	209	110
3	5350.00	48.11	54.00	-5.89	41.26	6.85	Average	209	110
4	5350.00	61.24	74.00	-12.76	54.39	6.85	Peak	209	110
5	10520.00	60.00	68.20	-8.20	43.58	16.42	Peak	100	32
6	15780.00	47.58	54.00	-6.42	31.02	16.56	Average	100	35
7	15780.00	59.45	74.00	-14.55	42.89	16.56	Peak	100	35

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

*Factor includes antenna factor , cable loss and amplifier gain

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

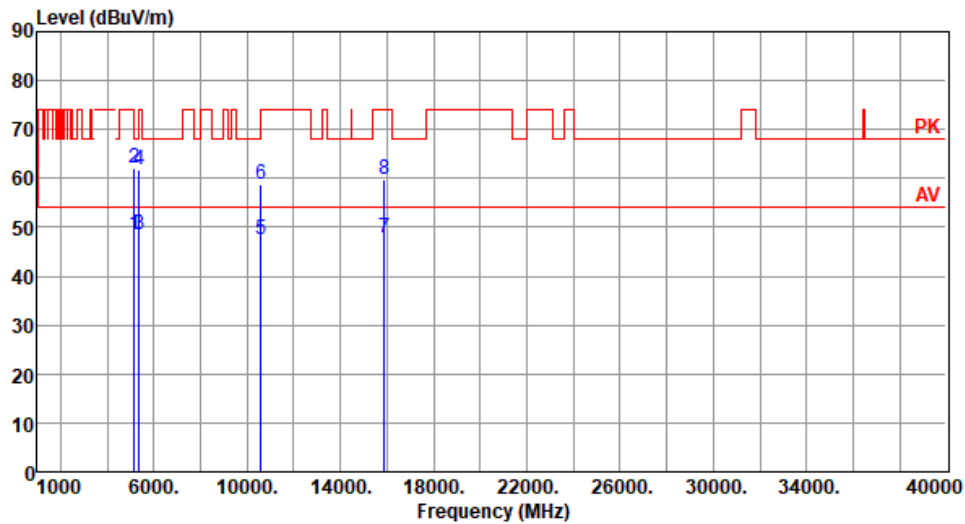
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.18	54.00	-5.82	40.86	7.32	Average	207	50
2	5150.00	59.90	74.00	-14.10	52.58	7.32	Peak	207	50
3	5350.00	47.99	54.00	-6.01	41.14	6.85	Average	207	50
4	5350.00	59.59	74.00	-14.41	52.74	6.85	Peak	207	50
5	10600.00	48.85	54.00	-5.15	32.49	16.36	Average	232	136
6	10600.00	61.95	74.00	-12.05	45.59	16.36	Peak	232	136
7	15900.00	47.91	54.00	-6.09	31.22	16.69	Average	100	70
8	15900.00	60.04	74.00	-13.96	43.35	16.69	Peak	100	70

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



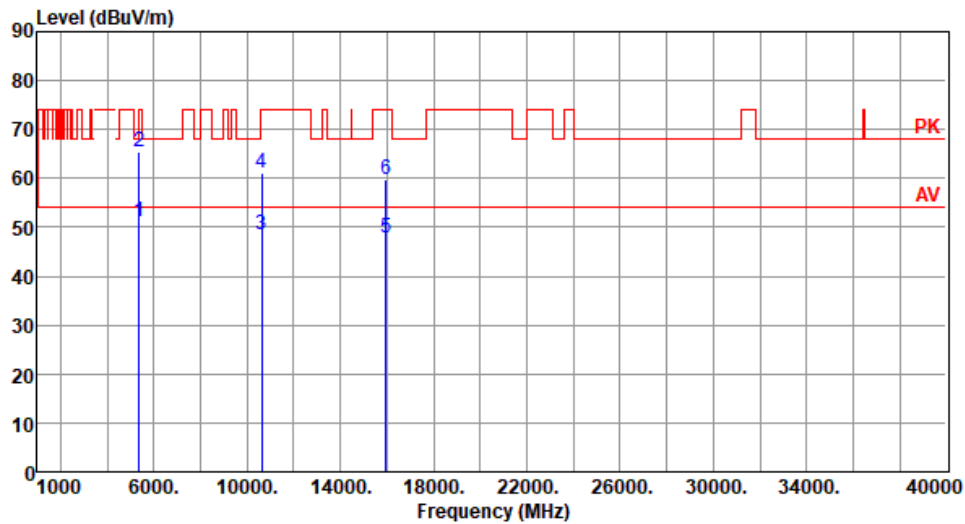
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.56	54.00	-5.44	41.24	7.32	Average	205	101
2	5150.00	62.16	74.00	-11.84	54.84	7.32	Peak	205	101
3	5350.00	48.41	54.00	-5.59	41.56	6.85	Average	205	101
4	5350.00	61.84	74.00	-12.16	54.99	6.85	Peak	205	101
5	10600.00	47.59	54.00	-6.41	31.23	16.36	Average	100	40
6	10600.00	58.71	74.00	-15.29	42.35	16.36	Peak	100	40
7	15900.00	47.86	54.00	-6.14	31.17	16.69	Average	100	25
8	15900.00	59.81	74.00	-14.19	43.12	16.69	Peak	100	25

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

*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 Configuration	1



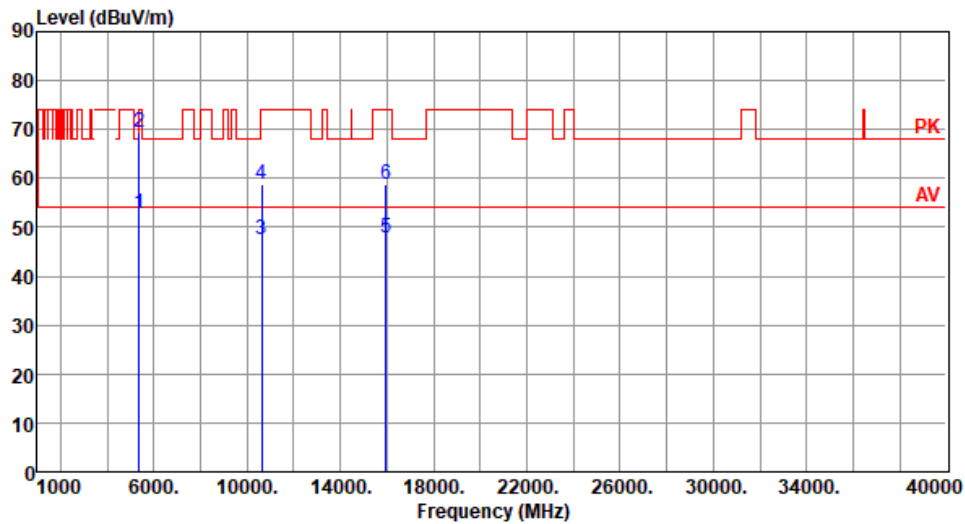
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	51.10	54.00	-2.90	44.25	6.85	Average	209	51
2	5350.00	65.36	74.00	-8.64	58.51	6.85	Peak	209	51
3	10640.00	48.62	54.00	-5.38	32.25	16.37	Average	233	134
4	10640.00	61.26	74.00	-12.74	44.89	16.37	Peak	233	134
5	15960.00	47.79	54.00	-6.21	31.26	16.53	Average	100	133
6	15960.00	59.78	74.00	-14.22	43.25	16.53	Peak	100	133

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

*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 Configuration	1



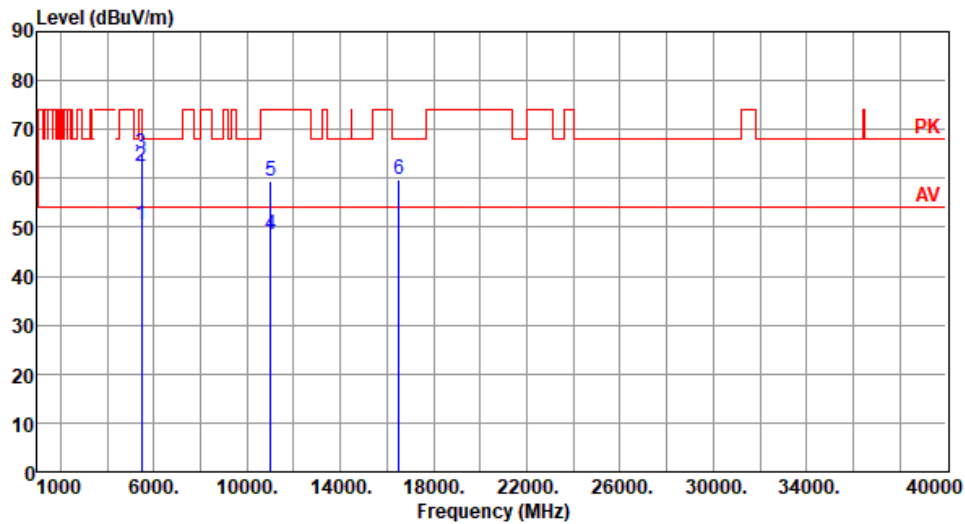
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.94	54.00	-1.06	46.09	6.85	Average	192	106
2	5350.00	69.26	74.00	-4.74	62.41	6.85	Peak	192	106
3	10640.00	47.48	54.00	-6.52	31.11	16.37	Average	100	42
4	10640.00	58.62	74.00	-15.38	42.25	16.37	Peak	100	42
5	15960.00	47.75	54.00	-6.25	31.22	16.53	Average	100	44
6	15960.00	58.78	74.00	-15.22	42.25	16.53	Peak	100	44

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

*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 Configuration	1



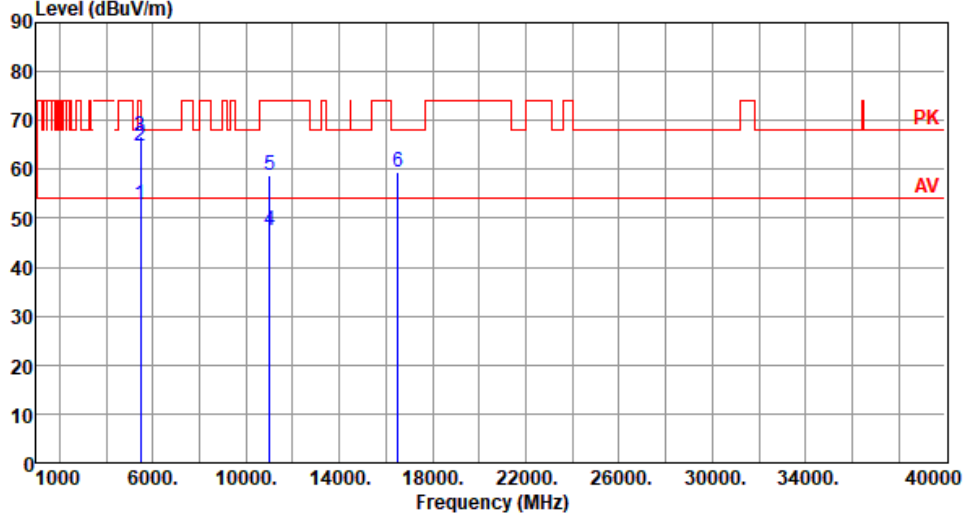
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.46	54.00	-3.54	43.21	7.25	Average	266	29
2	5460.00	62.51	74.00	-11.49	55.26	7.25	Peak	266	29
3	5470.00	64.97	68.20	-3.23	57.69	7.28	Peak	266	29
4	11000.00	48.42	54.00	-5.58	31.58	16.84	Average	100	136
5	11000.00	59.42	74.00	-14.58	42.58	16.84	Peak	100	136
6	16500.00	59.90	68.20	-8.30	42.26	17.64	Peak	100	137

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

*Factor includes antenna factor , cable loss and amplifier gain

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

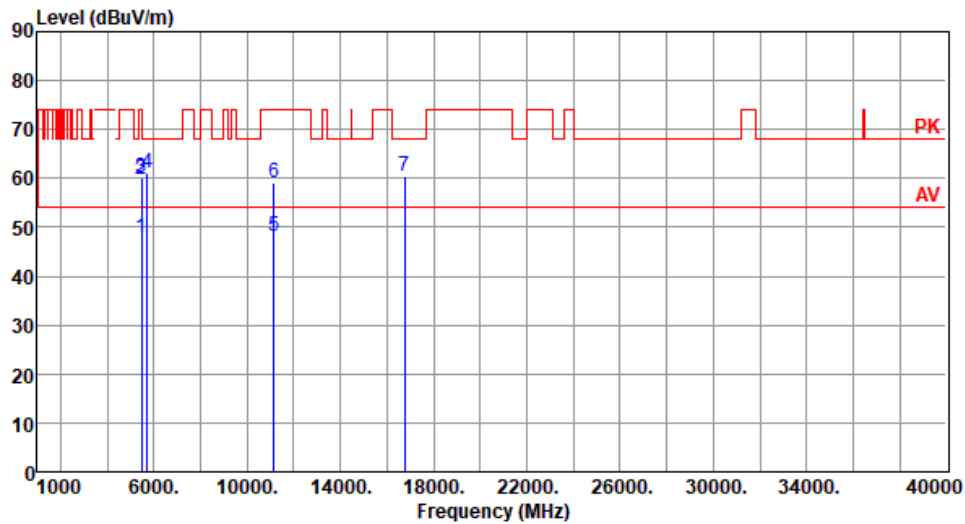
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	52.76	54.00	-1.24	45.51	7.25	Average	188	97
2	5460.00	64.85	74.00	-9.15	57.60	7.25	Peak	188	97
3	5470.00	66.85	68.20	-1.35	59.57	7.28	Peak	188	97
4	11000.00	47.34	54.00	-6.66	30.50	16.84	Average	100	26
5	11000.00	58.70	74.00	-15.30	41.86	16.84	Peak	100	26
6	16500.00	59.38	68.20	-8.82	41.74	17.64	Peak	100	29

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



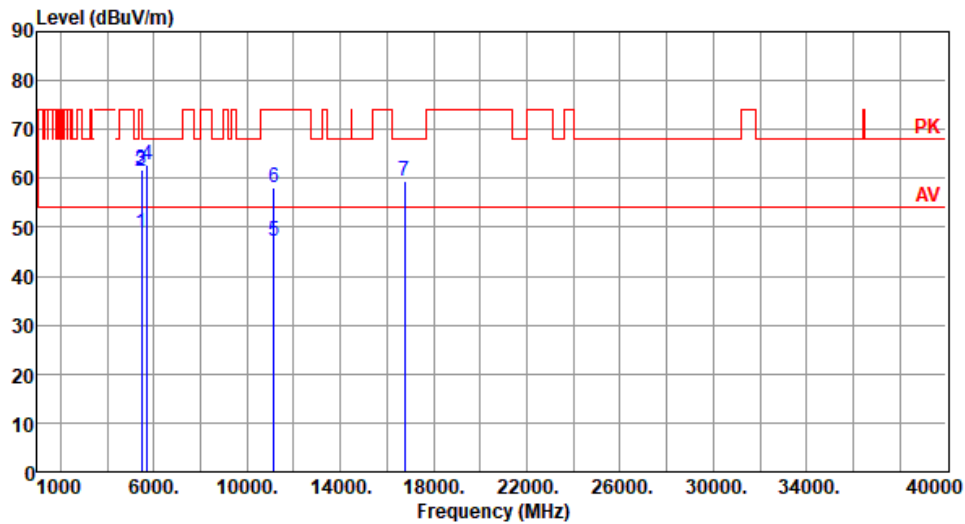
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.77	54.00	-6.23	40.52	7.25	Average	233	32
2	5460.00	59.83	74.00	-14.17	52.58	7.25	Peak	233	32
3	5470.00	60.24	68.20	-7.96	52.96	7.28	Peak	233	32
4	5725.00	61.23	68.20	-6.97	53.57	7.66	Peak	233	32
5	11160.00	48.15	54.00	-5.85	31.56	16.59	Average	100	50
6	11160.00	59.15	74.00	-14.85	42.56	16.59	Peak	100	50
7	16740.00	60.47	68.20	-7.73	42.24	18.23	Peak	100	70

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

*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 Configuration	1



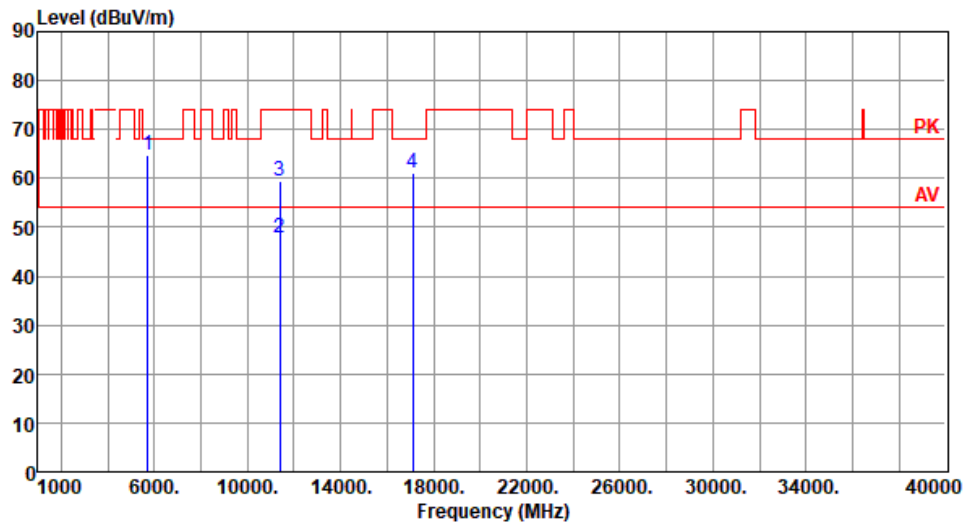
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.77	54.00	-5.23	41.52	7.25	Average	247	103
2	5460.00	61.58	74.00	-12.42	54.33	7.25	Peak	247	103
3	5470.00	61.86	68.20	-6.34	54.58	7.28	Peak	247	103
4	5725.00	62.87	68.20	-5.33	55.21	7.66	Peak	247	103
5	11160.00	47.00	54.00	-7.00	30.41	16.59	Average	100	100
6	11160.00	58.06	74.00	-15.94	41.47	16.59	Peak	100	100
7	16740.00	59.34	68.20	-8.86	41.11	18.23	Peak	100	50

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

*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 Configuration	1



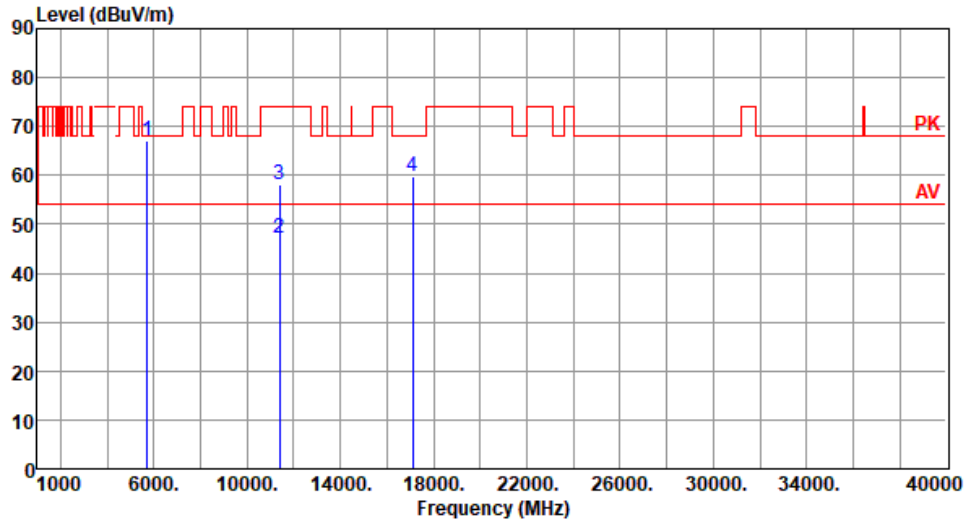
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.90	68.20	-3.30	57.24	7.66	Peak	269	24
2	11400.00	47.97	54.00	-6.03	31.24	16.73	Average	100	138
3	11400.00	59.57	74.00	-14.43	42.84	16.73	Peak	100	138
4	17100.00	61.08	68.20	-7.12	42.84	18.24	Peak	100	132

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

*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 Configuration	1



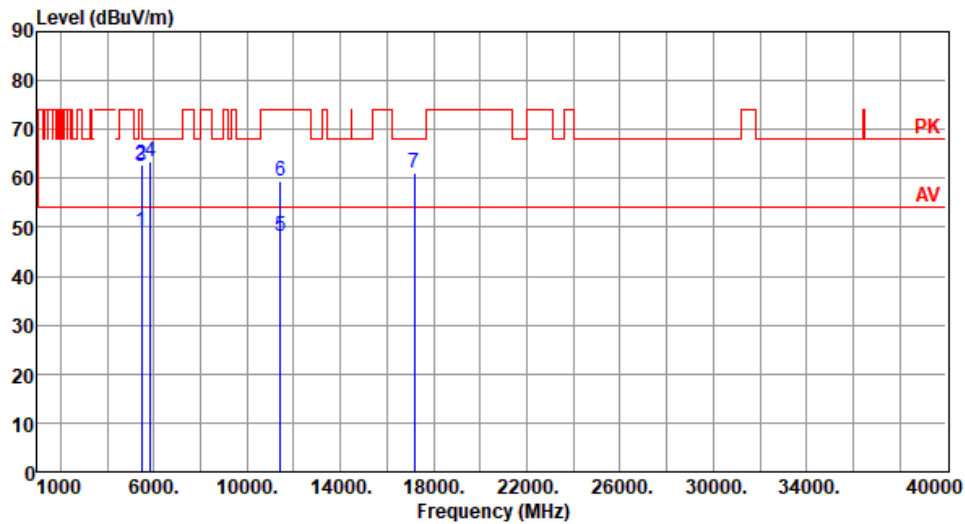
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	67.10	68.20	-1.10	59.44	7.66	Peak	188	311
2	11400.00	47.24	54.00	-6.76	30.51	16.73	Average	100	27
3	11400.00	58.18	74.00	-15.82	41.45	16.73	Peak	100	27
4	17100.00	59.87	68.20	-8.33	41.63	18.24	Peak	100	24

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

*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)	5720
Polarization	Horizontal	Test Configuration	1



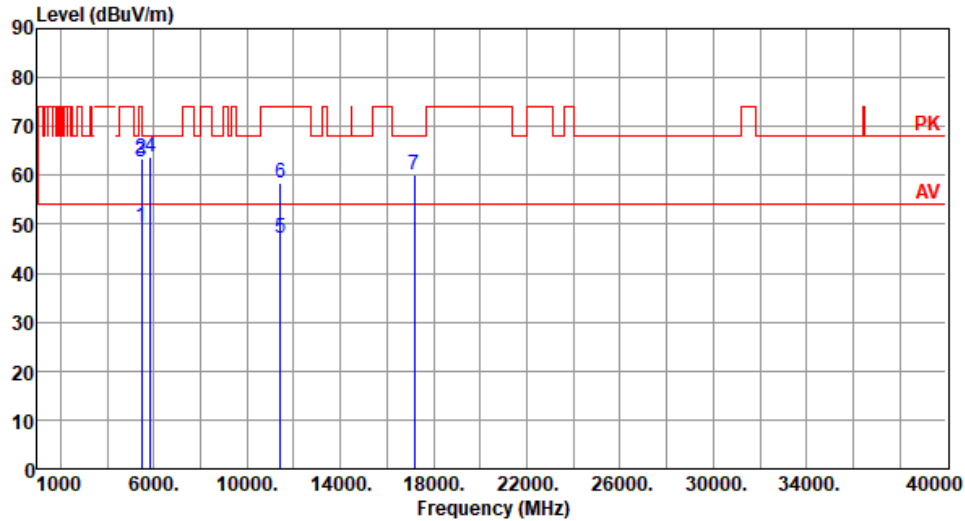
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.13	54.00	-4.87	41.88	7.25	Average	274	25
2	5460.00	62.80	74.00	-11.20	55.55	7.25	Peak	274	25
3	5470.00	62.43	68.20	-5.77	55.15	7.28	Peak	274	25
4	5850.00	63.35	68.20	-4.85	55.33	8.02	Peak	274	25
5	11440.00	48.31	54.00	-5.69	31.57	16.74	Average	100	137
6	11440.00	59.59	74.00	-14.41	42.85	16.74	Peak	100	137
7	17160.00	61.16	68.20	-7.04	42.78	18.38	Peak	100	132

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

*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)	5720
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.63	54.00	-4.37	42.38	7.25	Average	194	118
2	5460.00	63.43	74.00	-10.57	56.18	7.25	Peak	194	118
3	5470.00	62.67	68.20	-5.53	55.39	7.28	Peak	194	118
4	5850.00	63.67	68.20	-4.53	55.65	8.02	Peak	194	118
5	11440.00	47.00	54.00	-7.00	30.26	16.74	Average	100	24
6	11440.00	58.49	74.00	-15.51	41.75	16.74	Peak	100	24
7	17160.00	60.00	68.20	-8.20	41.62	18.38	Peak	100	26

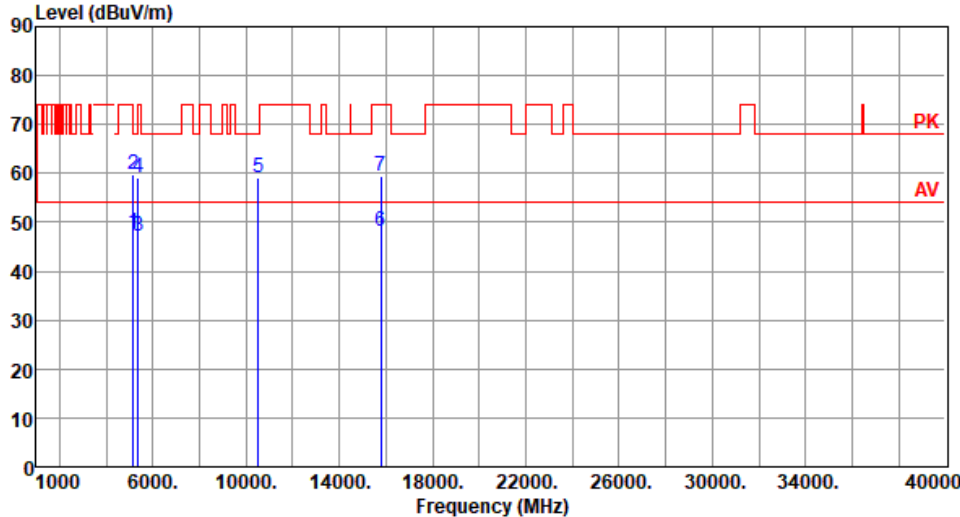
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

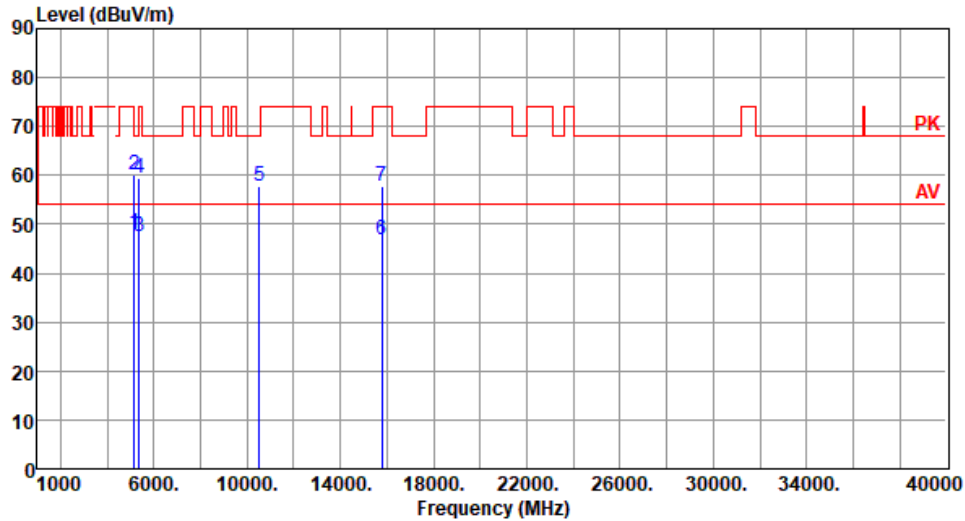
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.75	54.00	-6.25	40.43	7.32	Average	292	24
2	5150.00	59.70	74.00	-14.30	52.38	7.32	Peak	292	24
3	5350.00	47.27	54.00	-6.73	40.42	6.85	Average	292	24
4	5350.00	59.25	74.00	-14.75	52.40	6.85	Peak	292	24
5	10520.00	59.27	68.20	-8.93	42.85	16.42	Peak	100	133
6	15780.00	48.22	54.00	-5.78	31.66	16.56	Average	100	130
7	15780.00	59.33	74.00	-14.67	42.77	16.56	Peak	100	130

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



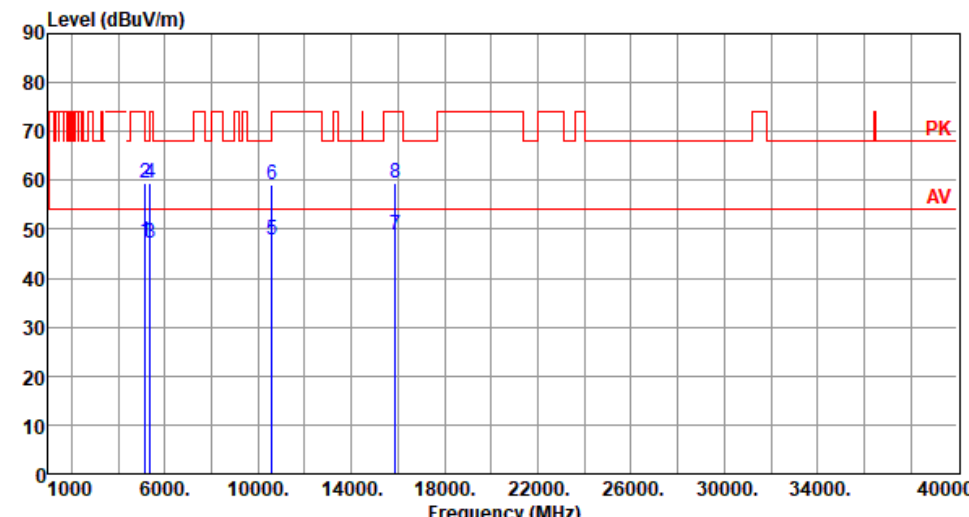
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.09	54.00	-5.91	40.77	7.32	Average	197	137
2	5150.00	60.00	74.00	-14.00	52.68	7.32	Peak	197	137
3	5350.00	47.51	54.00	-6.49	40.66	6.85	Average	197	137
4	5350.00	59.55	74.00	-14.45	52.70	6.85	Peak	197	137
5	10520.00	57.94	68.20	-10.26	41.52	16.42	Peak	100	28
6	15780.00	46.81	54.00	-7.19	30.25	16.56	Average	100	32
7	15780.00	57.89	74.00	-16.11	41.33	16.56	Peak	100	32

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

*Factor includes antenna factor , cable loss and amplifier gain

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

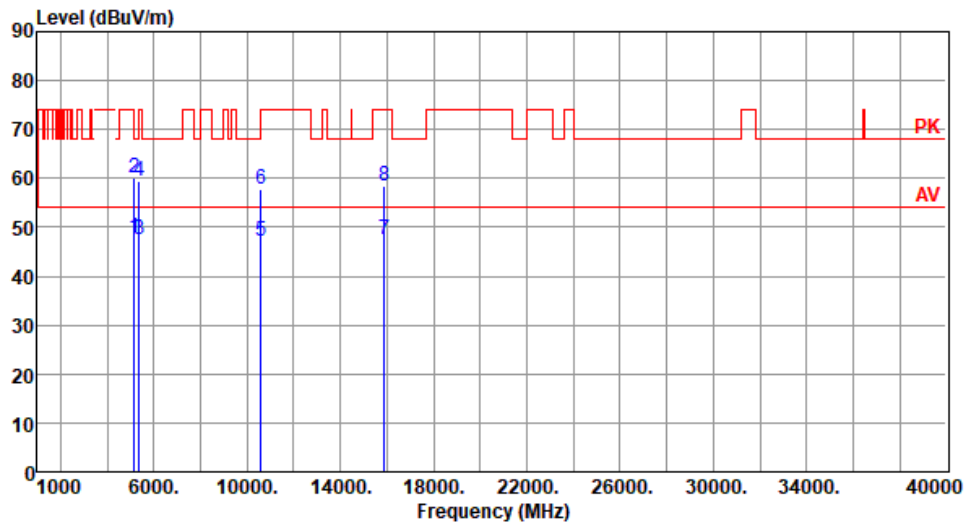
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.56	54.00	-6.44	40.24	7.32	Average	289	26
2	5150.00	59.58	74.00	-14.42	52.26	7.32	Peak	289	26
3	5350.00	47.24	54.00	-6.76	40.39	6.85	Average	289	26
4	5350.00	59.29	74.00	-14.71	52.44	6.85	Peak	289	26
5	10600.00	47.94	54.00	-6.06	31.58	16.36	Average	100	133
6	10600.00	59.21	74.00	-14.79	42.85	16.36	Peak	100	133
7	15900.00	48.68	54.00	-5.32	31.99	16.69	Average	100	139
8	15900.00	59.57	74.00	-14.43	42.88	16.69	Peak	100	139

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



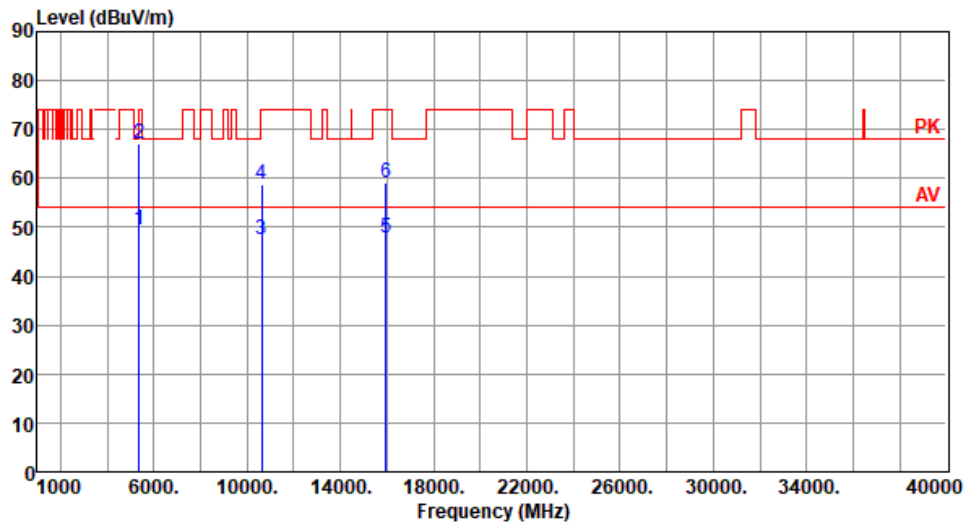
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.86	54.00	-6.14	40.54	7.32	Average	195	133
2	5150.00	60.19	74.00	-13.81	52.87	7.32	Peak	195	133
3	5350.00	47.48	54.00	-6.52	40.63	6.85	Average	195	133
4	5350.00	59.59	74.00	-14.41	52.74	6.85	Peak	195	133
5	10600.00	47.02	54.00	-6.98	30.66	16.36	Average	100	23
6	10600.00	57.94	74.00	-16.06	41.58	16.36	Peak	100	23
7	15900.00	47.35	54.00	-6.65	30.66	16.69	Average	100	29
8	15900.00	58.46	74.00	-15.54	41.77	16.69	Peak	100	29

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

*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 Configuration	1



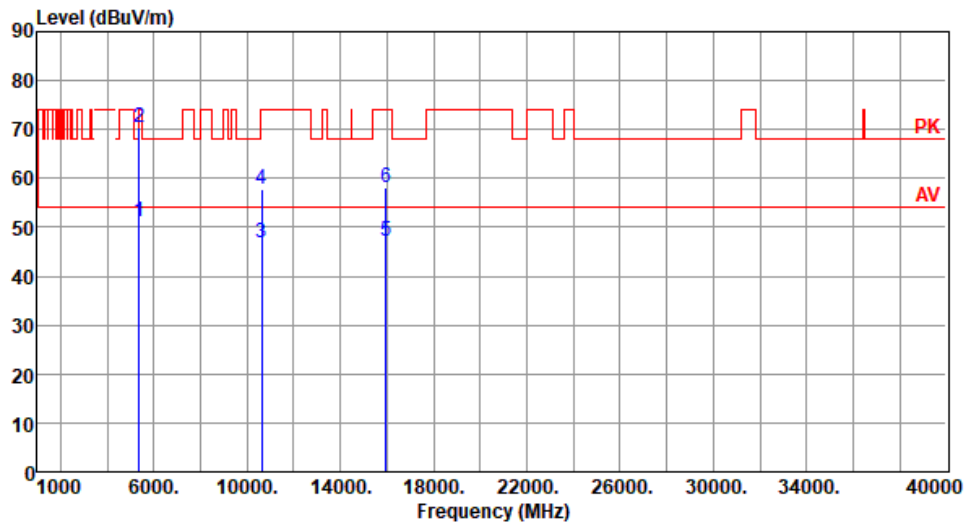
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	49.40	54.00	-4.60	42.55	6.85	Average	288	27
2	5350.00	67.07	74.00	-6.93	60.22	6.85	Peak	288	27
3	10640.00	47.62	54.00	-6.38	31.25	16.37	Average	100	139
4	10640.00	58.92	74.00	-15.08	42.55	16.37	Peak	100	139
5	15960.00	47.78	54.00	-6.22	31.25	16.53	Average	100	140
6	15960.00	58.97	74.00	-15.03	42.44	16.53	Peak	100	140

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

*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 Configuration	1



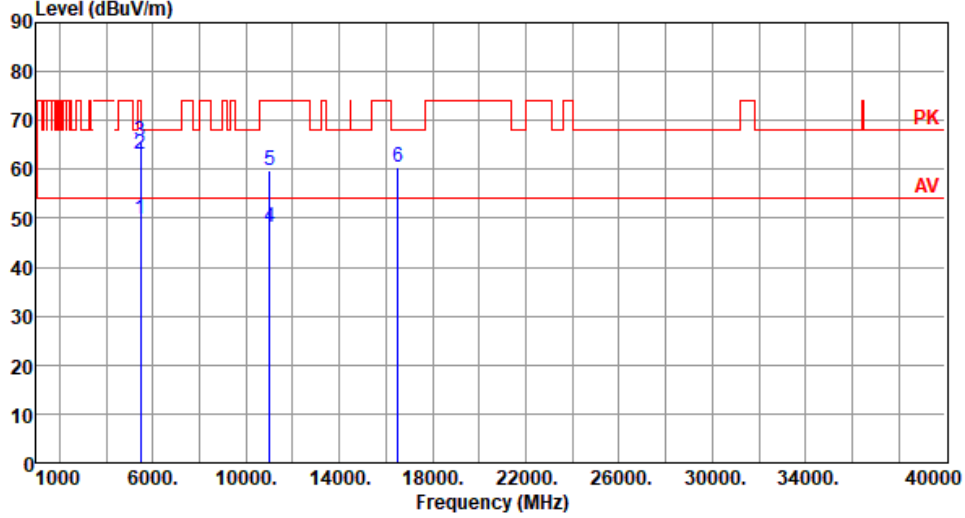
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	51.06	54.00	-2.94	44.21	6.85	Average	188	102
2	5350.00	70.50	74.00	-3.50	63.65	6.85	Peak	188	102
3	10640.00	46.73	54.00	-7.27	30.36	16.37	Average	100	39
4	10640.00	57.70	74.00	-16.30	41.33	16.37	Peak	100	39
5	15960.00	47.00	54.00	-7.00	30.47	16.53	Average	100	42
6	15960.00	58.22	74.00	-15.78	41.69	16.53	Peak	100	42

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

*Factor includes antenna factor , cable loss and amplifier gain

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

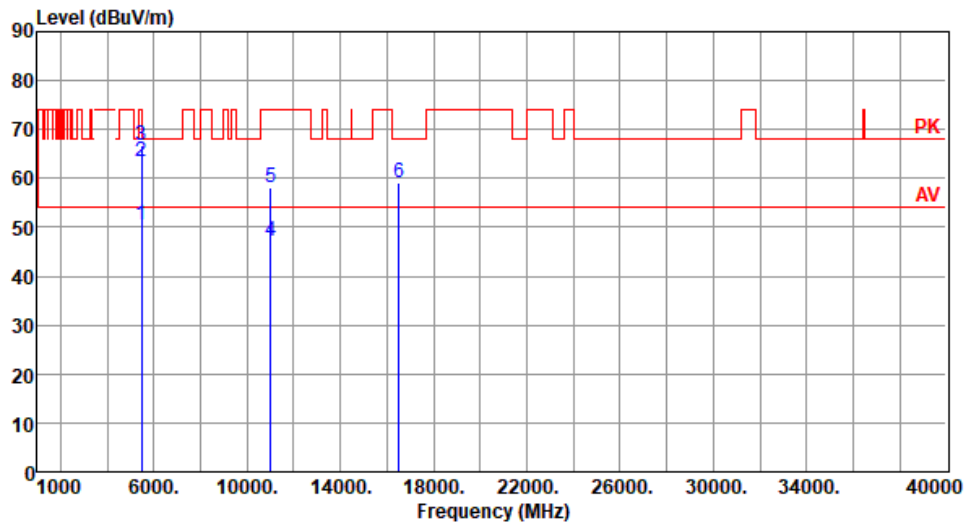
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.80	54.00	-4.20	42.55	7.25	Average	269	26
2	5460.00	63.13	74.00	-10.87	55.88	7.25	Peak	269	26
3	5470.00	65.72	68.20	-2.48	58.44	7.28	Peak	269	26
4	11000.00	48.25	54.00	-5.75	31.41	16.84	Average	100	135
5	11000.00	59.80	74.00	-14.20	42.96	16.84	Peak	100	135
6	16500.00	60.38	68.20	-7.82	42.74	17.64	Peak	100	132

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



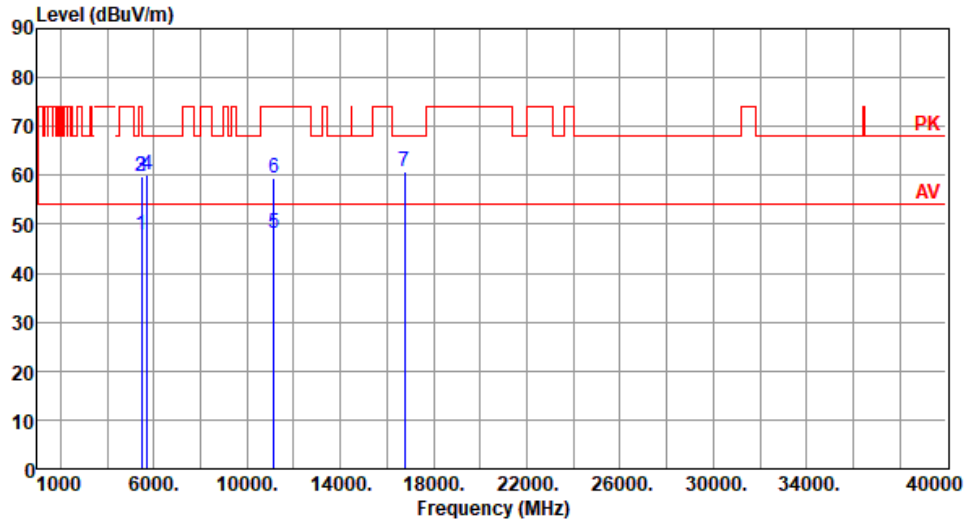
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.47	54.00	-3.53	43.22	7.25	Average	185	323
2	5460.00	63.59	74.00	-10.41	56.34	7.25	Peak	185	323
3	5470.00	66.61	68.20	-1.59	59.33	7.28	Peak	185	323
4	11000.00	47.09	54.00	-6.91	30.25	16.84	Average	100	25
5	11000.00	58.24	74.00	-15.76	41.40	16.84	Peak	100	25
6	16500.00	59.17	68.20	-9.03	41.53	17.64	Peak	100	26

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

*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 Configuration	1



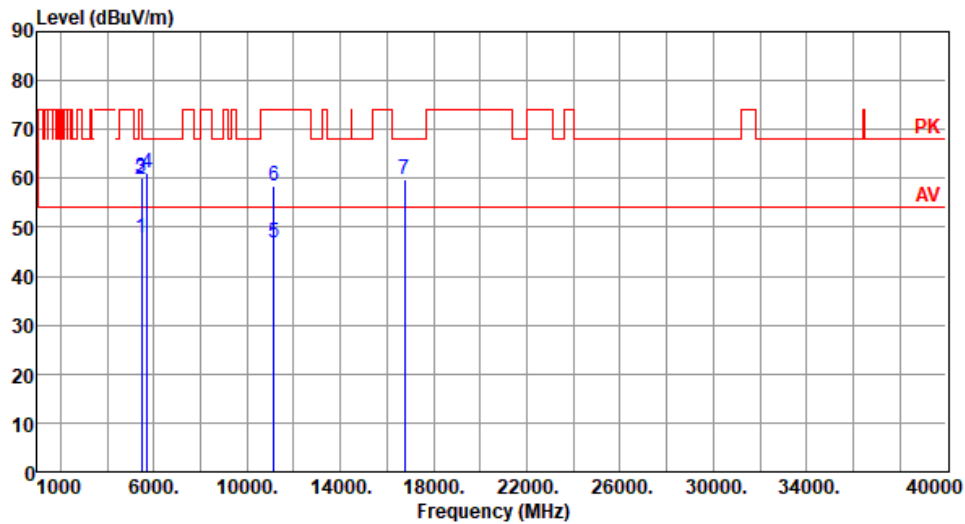
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.80	54.00	-6.20	40.55	7.25	Average	270	29
2	5460.00	59.72	74.00	-14.28	52.47	7.25	Peak	270	29
3	5470.00	59.76	68.20	-8.44	52.48	7.28	Peak	270	29
4	5725.00	60.15	68.20	-8.05	52.49	7.66	Peak	270	29
5	11160.00	48.11	54.00	-5.89	31.52	16.59	Average	100	138
6	11160.00	59.44	74.00	-14.56	42.85	16.59	Peak	100	138
7	16740.00	60.63	68.20	-7.57	42.40	18.23	Peak	100	140

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

*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 Configuration	1



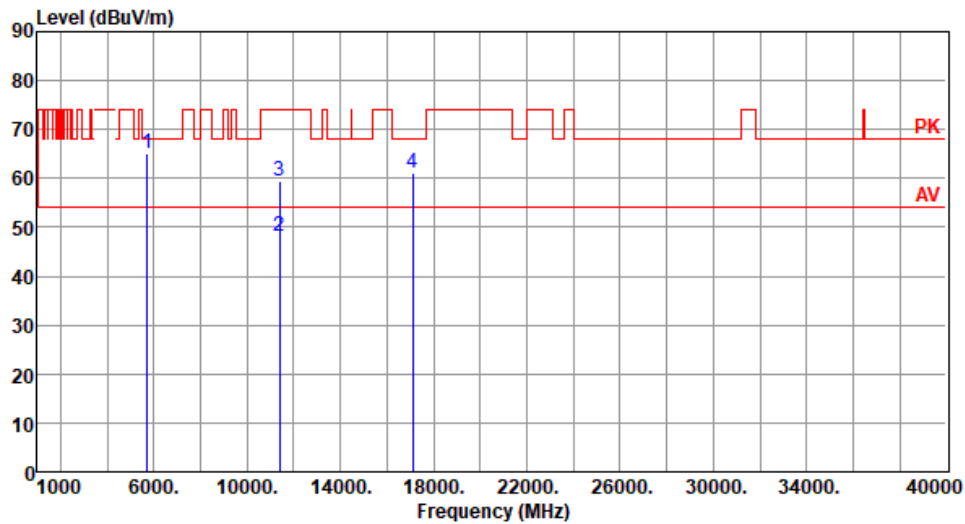
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.80	54.00	-6.20	40.55	7.25	Average	189	139
2	5460.00	59.91	74.00	-14.09	52.66	7.25	Peak	189	139
3	5470.00	60.08	68.20	-8.12	52.80	7.28	Peak	189	139
4	5725.00	61.25	68.20	-6.95	53.59	7.66	Peak	189	139
5	11160.00	46.87	54.00	-7.13	30.28	16.59	Average	100	26
6	11160.00	58.29	74.00	-15.71	41.70	16.59	Peak	100	26
7	16740.00	59.80	68.20	-8.40	41.57	18.23	Peak	100	32

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

*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 Configuration	1



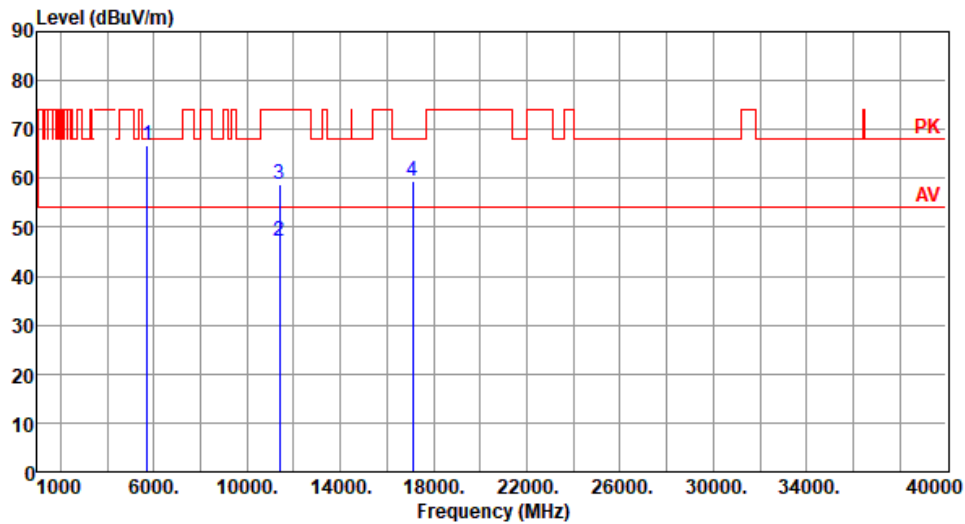
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	65.23	68.20	-2.97	57.57	7.66	Peak	267	24
2	11400.00	48.24	54.00	-5.76	31.51	16.73	Average	100	134
3	11400.00	59.57	74.00	-14.43	42.84	16.73	Peak	100	134
4	17100.00	60.95	68.20	-7.25	42.71	18.24	Peak	100	139

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

*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 Configuration	1



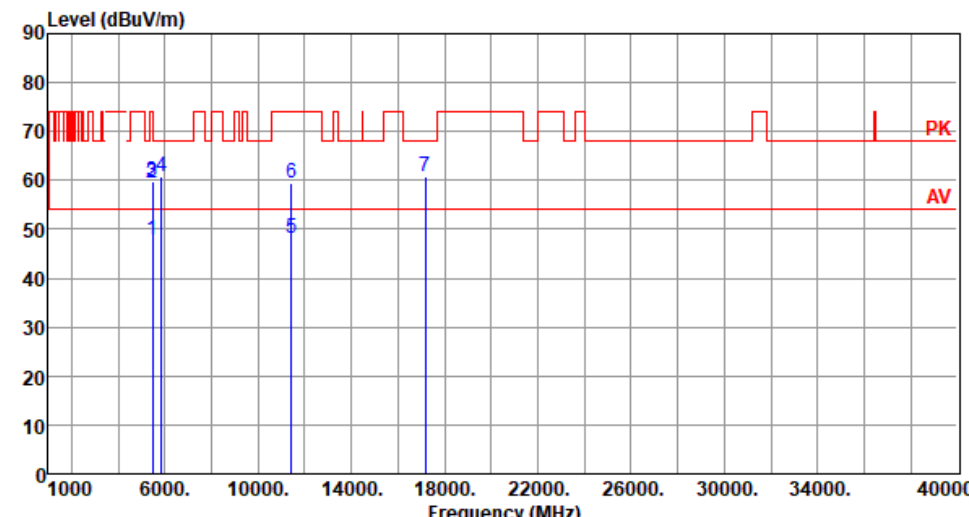
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	66.86	68.20	-1.34	59.20	7.66	Peak	194	118
2	11400.00	47.30	54.00	-6.70	30.57	16.73	Average	100	23
3	11400.00	58.72	74.00	-15.28	41.99	16.73	Peak	100	23
4	17100.00	59.44	68.20	-8.76	41.20	18.24	Peak	100	25

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

*Factor includes antenna factor , cable loss and amplifier gain

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

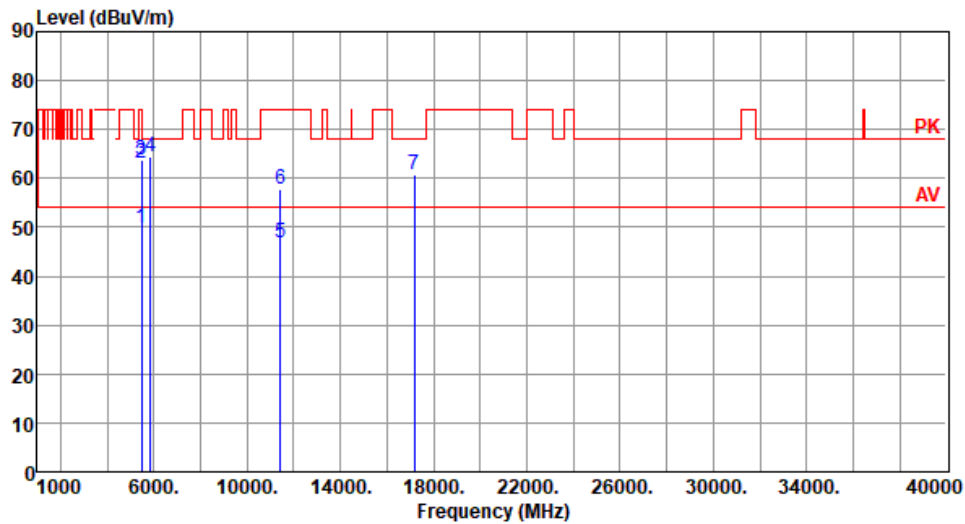
Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.78	54.00	-6.22	40.53	7.25	Average	233	27
2	5460.00	59.58	74.00	-14.42	52.33	7.25	Peak	233	27
3	5470.00	59.68	68.20	-8.52	52.40	7.28	Peak	233	27
4	5850.00	60.62	68.20	-7.58	52.60	8.02	Peak	233	27
5	11440.00	48.31	54.00	-5.69	31.57	16.74	Average	100	139
6	11440.00	59.48	74.00	-14.52	42.74	16.74	Peak	100	139
7	17160.00	60.89	68.20	-7.31	42.51	18.38	Peak	100	140

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*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)	5720
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.76	54.00	-4.24	42.51	7.25	Average	192	98
2	5460.00	63.19	74.00	-10.81	55.94	7.25	Peak	192	98
3	5470.00	63.78	68.20	-4.42	56.50	7.28	Peak	192	98
4	5850.00	64.27	68.20	-3.93	56.25	8.02	Peak	192	98
5	11440.00	46.99	54.00	-7.01	30.25	16.74	Average	100	21
6	11440.00	57.94	74.00	-16.06	41.20	16.74	Peak	100	21
7	17160.00	60.73	68.20	-7.47	42.35	18.38	Peak	100	23

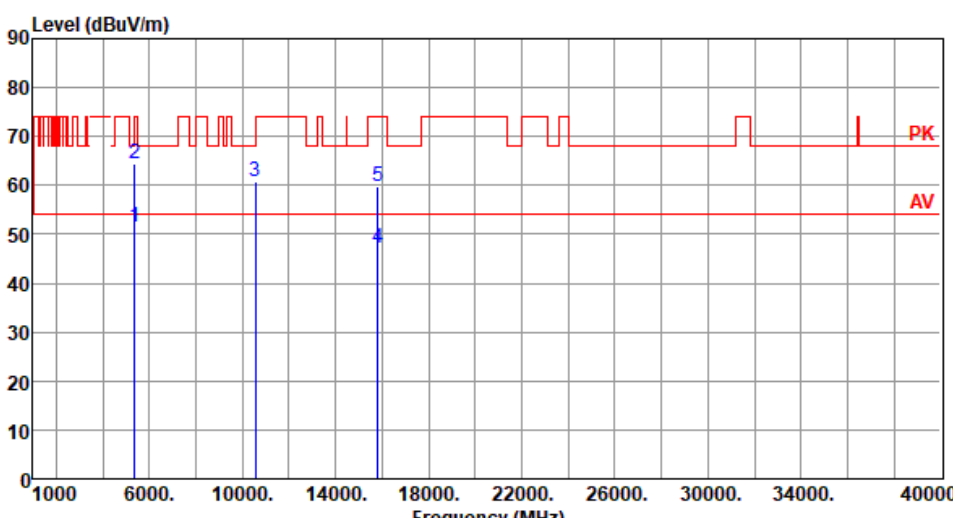
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

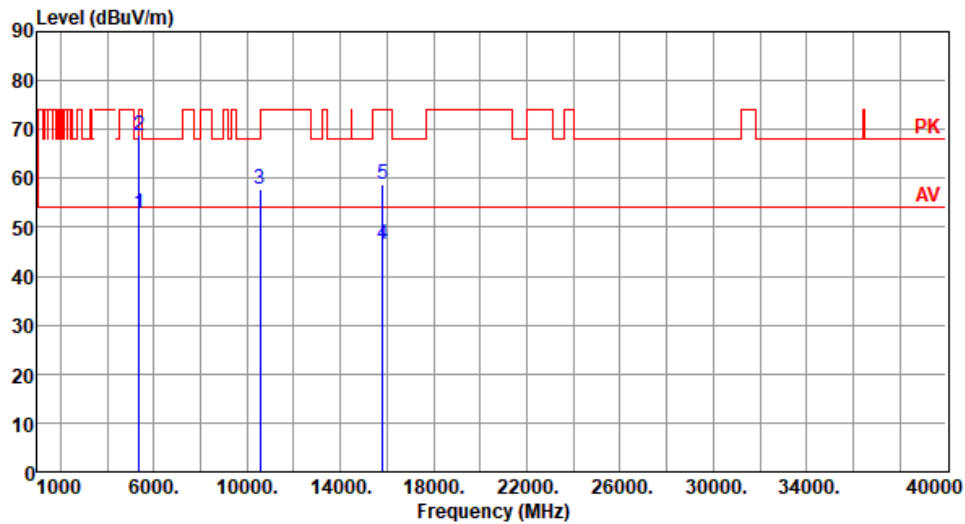
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	51.43	54.00	-2.57	44.58	6.85	Average	203	56
2	5350.00	64.43	74.00	-9.57	57.58	6.85	Peak	203	56
3	10540.00	60.63	68.20	-7.57	44.22	16.41	Peak	233	137
4	15810.00	47.14	54.00	-6.86	30.58	16.56	Average	100	131
5	15810.00	59.81	74.00	-14.19	43.25	16.56	Peak	100	131

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



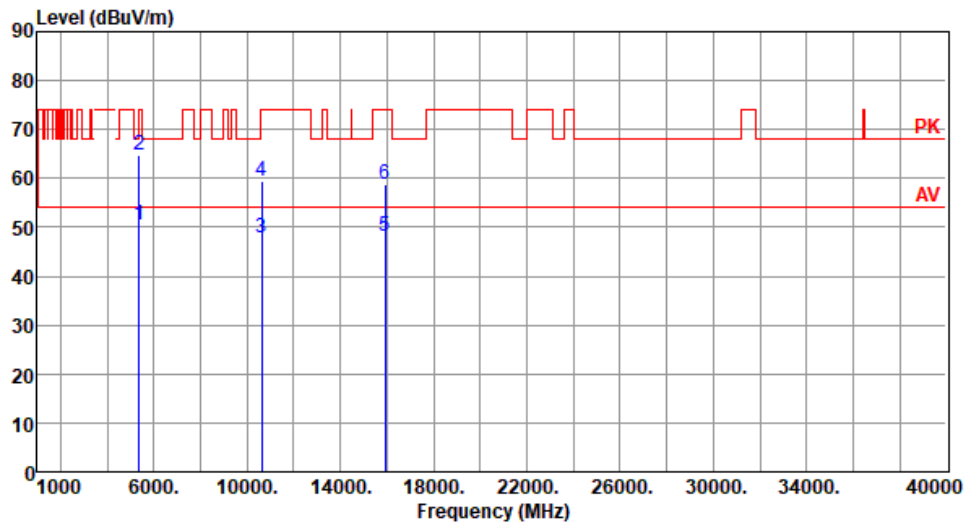
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.80	54.00	-1.20	45.95	6.85	Average	246	109
2	5350.00	68.84	74.00	-5.16	61.99	6.85	Peak	246	109
3	10540.00	57.63	68.20	-10.57	41.22	16.41	Peak	100	36
4	15810.00	46.58	54.00	-7.42	30.02	16.56	Average	100	33
5	15810.00	58.81	74.00	-15.19	42.25	16.56	Peak	100	33

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

*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 Configuration	1



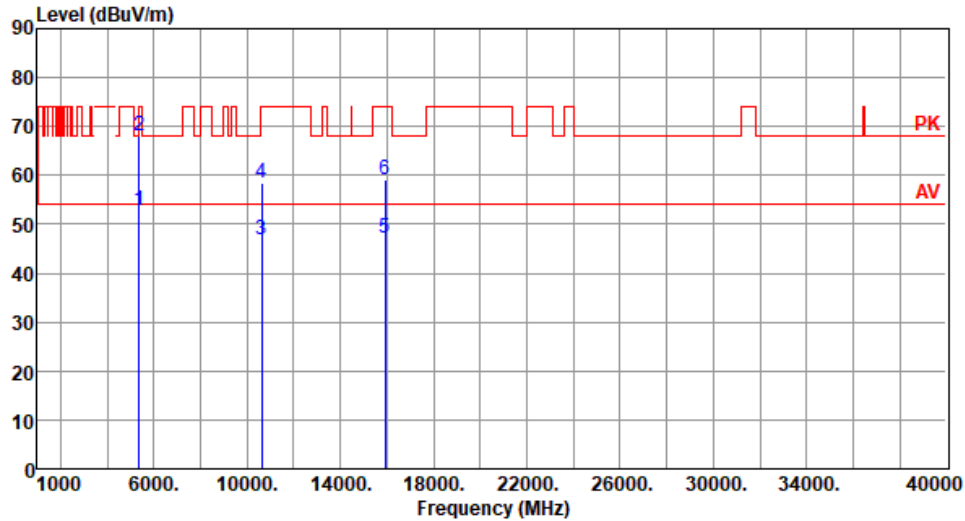
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	50.43	54.00	-3.57	43.58	6.85	Average	201	55
2	5350.00	64.70	74.00	-9.30	57.85	6.85	Peak	201	55
3	10620.00	47.91	54.00	-6.09	31.54	16.37	Average	100	133
4	10620.00	59.32	74.00	-14.68	42.95	16.37	Peak	100	133
5	15930.00	48.15	54.00	-5.85	31.54	16.61	Average	100	135
6	15930.00	58.86	74.00	-15.14	42.25	16.61	Peak	100	135

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

*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 Configuration	1



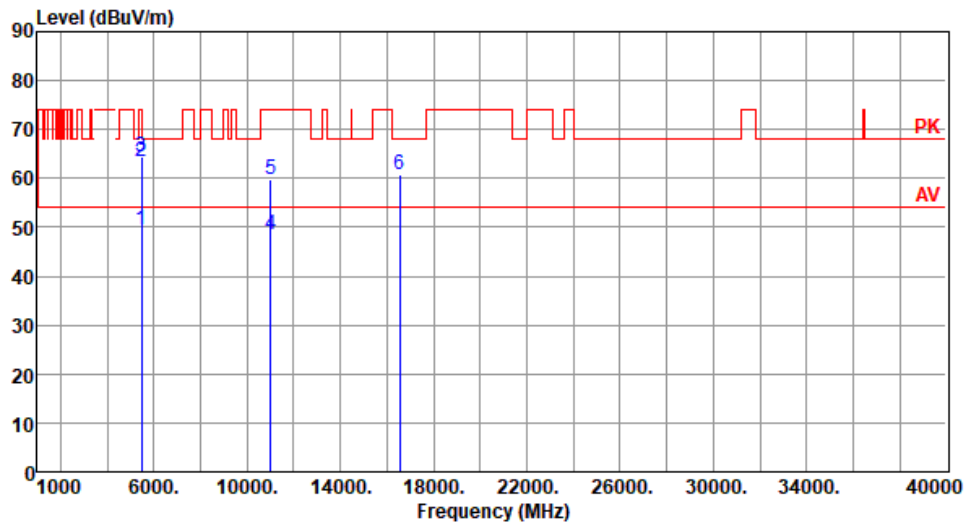
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.85	54.00	-1.15	46.00	6.85	Average	172	328
2	5350.00	67.97	74.00	-6.03	61.12	6.85	Peak	172	328
3	10620.00	46.66	54.00	-7.34	30.29	16.37	Average	100	23
4	10620.00	58.60	74.00	-15.40	42.23	16.37	Peak	100	23
5	15930.00	47.02	54.00	-6.98	30.41	16.61	Average	100	29
6	15930.00	58.97	74.00	-15.03	42.36	16.61	Peak	100	29

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

*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 Configuration	1



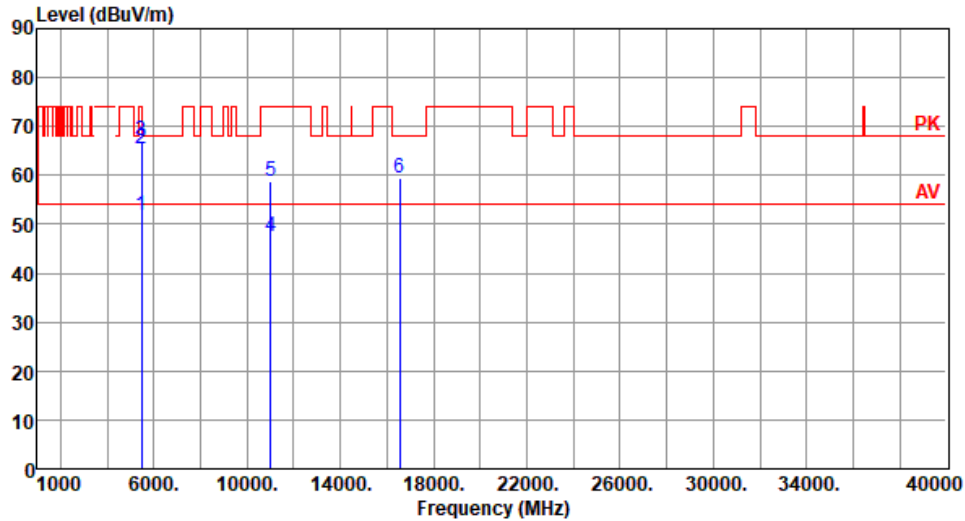
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.55	54.00	-4.45	42.30	7.25	Average	286	33
2	5460.00	63.50	74.00	-10.50	56.25	7.25	Peak	286	33
3	5470.00	64.53	68.20	-3.67	57.25	7.28	Peak	286	33
4	11020.00	48.33	54.00	-5.67	31.52	16.81	Average	100	138
5	11020.00	59.68	74.00	-14.32	42.87	16.81	Peak	100	138
6	16530.00	60.68	68.20	-7.52	42.85	17.83	Peak	100	140

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

*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 Configuration	1



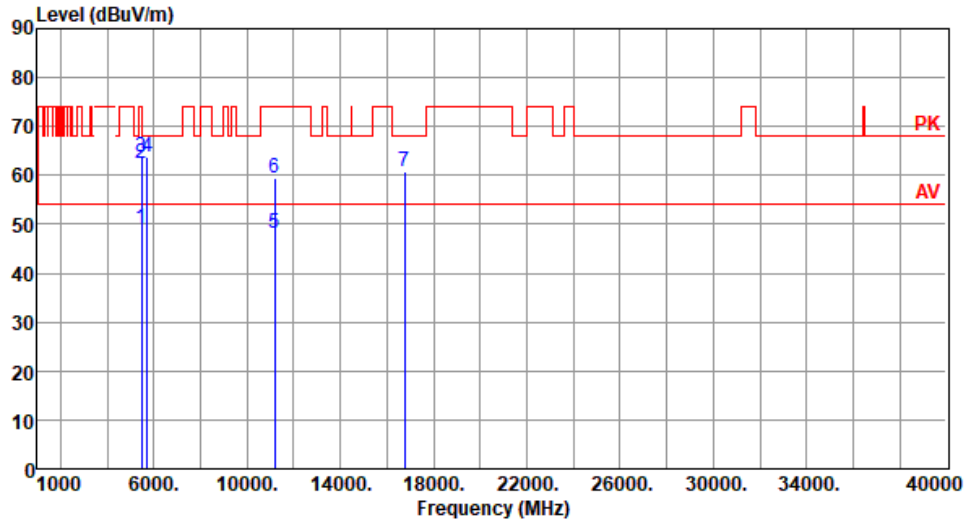
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	51.88	54.00	-2.12	44.63	7.25	Average	188	318
2	5460.00	65.29	74.00	-8.71	58.04	7.25	Peak	188	318
3	5470.00	67.14	68.20	-1.06	59.86	7.28	Peak	188	318
4	11020.00	47.33	54.00	-6.67	30.52	16.81	Average	100	132
5	11020.00	58.69	74.00	-15.31	41.88	16.81	Peak	100	132
6	16530.00	59.57	68.20	-8.63	41.74	17.83	Peak	100	139

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

*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)	5590
Polarization	Horizontal	Test Configuration	1



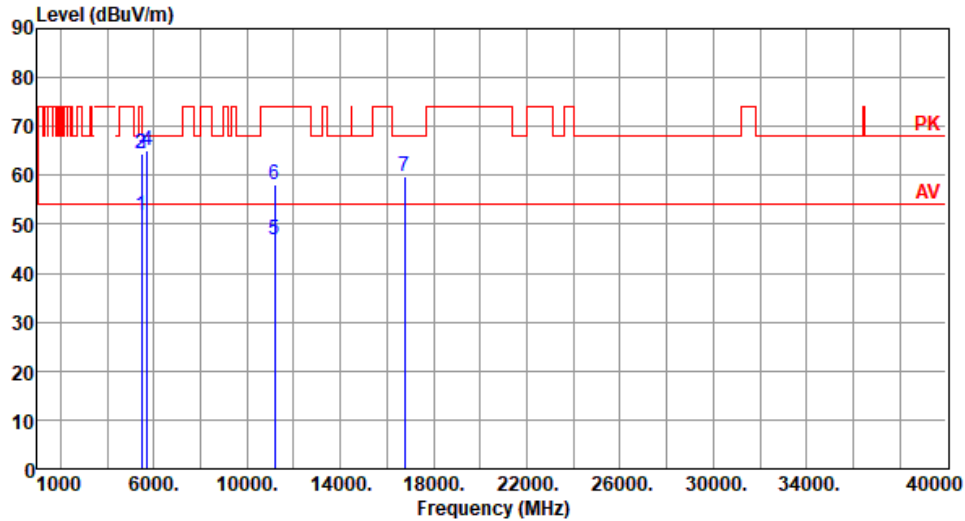
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.11	54.00	-4.89	41.86	7.25	Average	287	29
2	5460.00	62.40	74.00	-11.60	55.15	7.25	Peak	287	29
3	5470.00	63.64	68.20	-4.56	56.36	7.28	Peak	287	29
4	5725.00	63.64	68.20	-4.56	55.98	7.66	Peak	287	29
5	11180.00	48.08	54.00	-5.92	31.52	16.56	Average	100	135
6	11180.00	59.41	74.00	-14.59	42.85	16.56	Peak	100	135
7	16770.00	60.71	68.20	-7.49	42.48	18.23	Peak	100	133

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

*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)	5590
Polarization	Vertical	Test Configuration	1



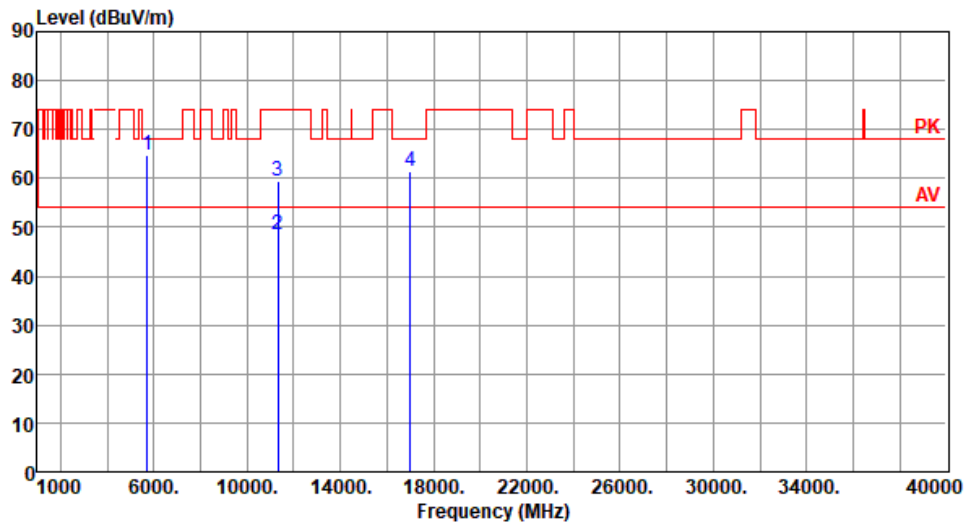
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	51.65	54.00	-2.35	44.40	7.25	Average	188	104
2	5460.00	64.51	74.00	-9.49	57.26	7.25	Peak	188	104
3	5470.00	64.57	68.20	-3.63	57.29	7.28	Peak	188	104
4	5725.00	65.21	68.20	-2.99	57.55	7.66	Peak	188	129
5	11180.00	46.82	54.00	-7.18	30.26	16.56	Average	100	24
6	11180.00	58.03	74.00	-15.97	41.47	16.56	Peak	100	24
7	16770.00	59.73	68.20	-8.47	41.50	18.23	Peak	100	26

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

*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 Configuration	1



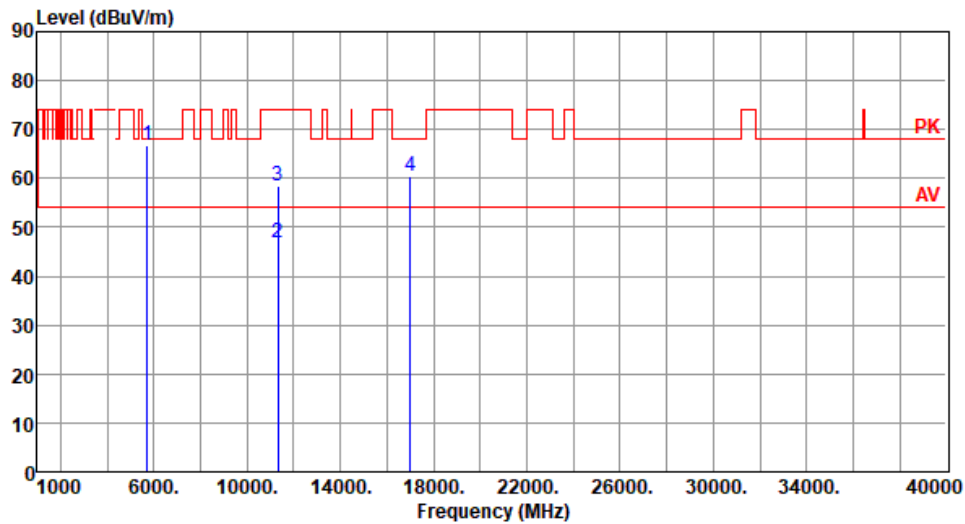
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.88	68.20	-3.32	57.22	7.66	Peak	287	25
2	11340.00	48.36	54.00	-5.64	31.78	16.58	Average	100	139
3	11340.00	59.40	74.00	-14.60	42.82	16.58	Peak	100	139
4	17010.00	61.36	68.20	-6.84	42.70	18.66	Peak	100	143

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

*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 Configuration	1



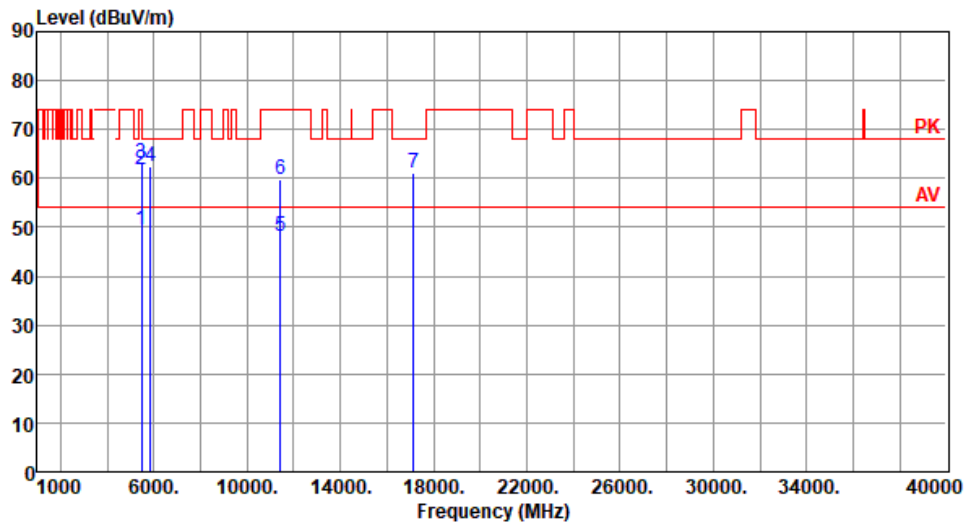
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	66.91	68.20	-1.29	59.25	7.66	Peak	188	280
2	11340.00	46.97	54.00	-7.03	30.39	16.58	Average	100	21
3	11340.00	58.29	74.00	-15.71	41.71	16.58	Peak	100	21
4	17010.00	60.54	68.20	-7.66	41.88	18.66	Peak	100	26

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

*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)	5710
Polarization	Horizontal	Test Configuration	1



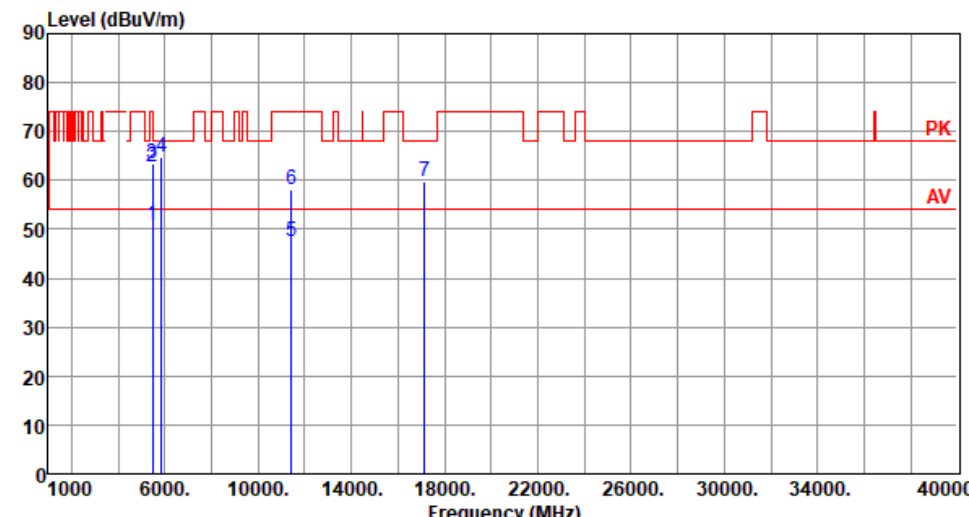
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.47	54.00	-4.53	42.22	7.25	Average	290	26
2	5460.00	61.83	74.00	-12.17	54.58	7.25	Peak	290	26
3	5470.00	63.15	68.20	-5.05	55.87	7.28	Peak	290	26
4	5850.00	62.55	68.20	-5.65	54.53	8.02	Peak	290	26
5	11420.00	48.20	54.00	-5.80	31.47	16.73	Average	100	132
6	11420.00	59.62	74.00	-14.38	42.89	16.73	Peak	100	132
7	17130.00	61.02	68.20	-7.18	42.72	18.30	Peak	100	139

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

*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)	5710
Polarization	Vertical	Test Configuration	1

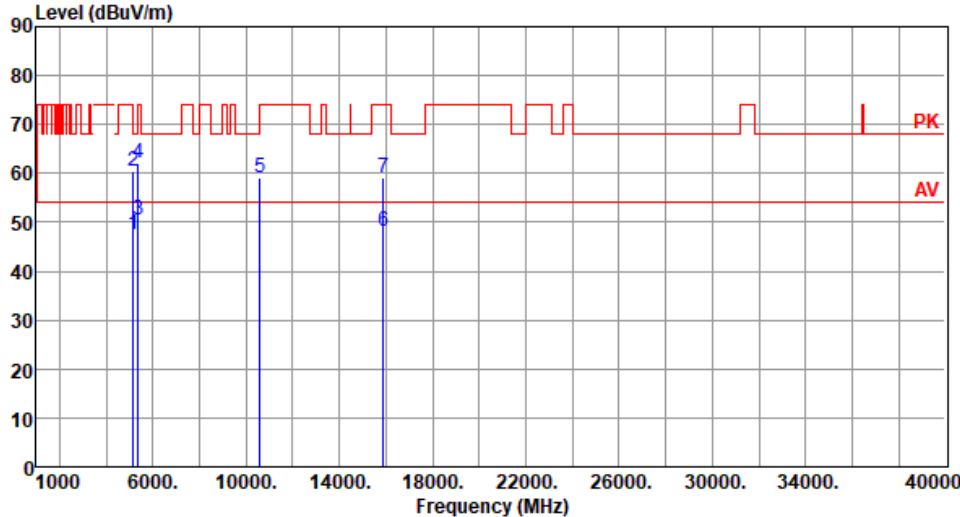


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.65	54.00	-3.35	43.40	7.25	Average	185	97
2	5460.00	62.87	74.00	-11.13	55.62	7.25	Peak	185	97
3	5470.00	63.56	68.20	-4.64	56.28	7.28	Peak	185	97
4	5850.00	64.65	68.20	-3.55	56.63	8.02	Peak	185	97
5	11420.00	47.60	54.00	-6.40	30.87	16.73	Average	100	26
6	11420.00	58.13	74.00	-15.87	41.40	16.73	Peak	100	26
7	17130.00	59.93	68.20	-8.27	41.63	18.30	Peak	100	29

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

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

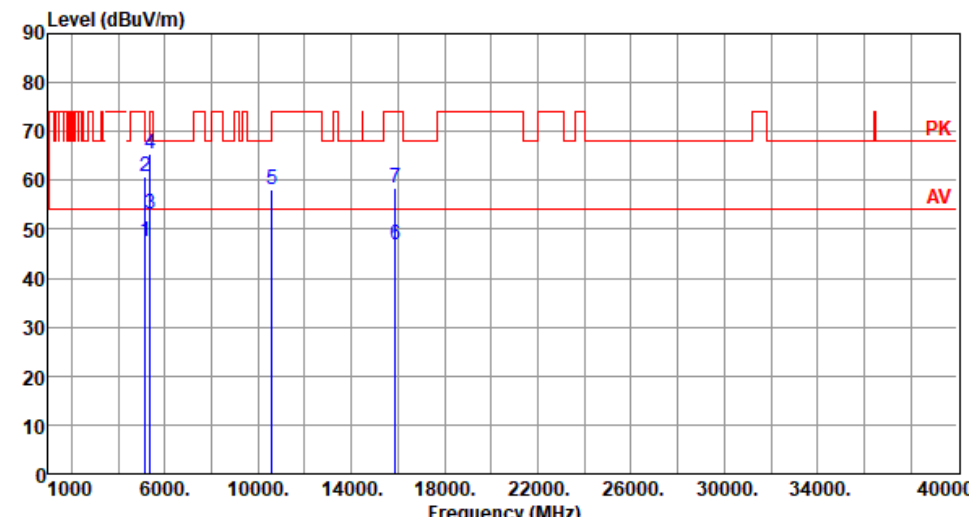
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.44	54.00	-6.56	40.12	7.32	Average	197	52
2	5150.00	60.45	74.00	-13.55	53.13	7.32	Peak	197	52
3	5350.00	50.58	54.00	-3.42	43.73	6.85	Average	197	52
4	5350.00	62.17	74.00	-11.83	55.32	6.85	Peak	197	52
5	10580.00	59.01	68.20	-9.19	42.64	16.37	Peak	100	137
6	15870.00	48.28	54.00	-5.72	31.64	16.64	Average	100	132
7	15870.00	59.23	74.00	-14.77	42.59	16.64	Peak	100	132

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

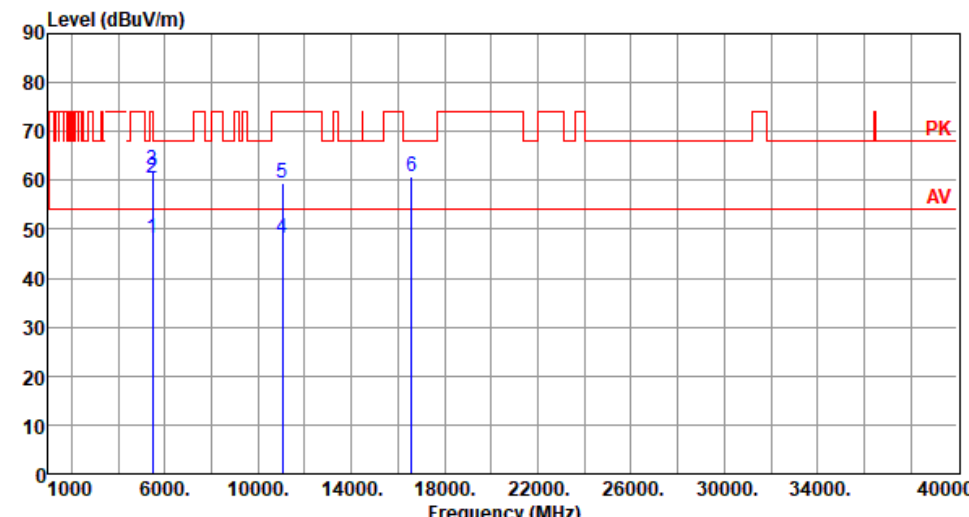
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.59	54.00	-6.41	40.27	7.32	Average	209	175
2	5150.00	60.76	74.00	-13.24	53.44	7.32	Peak	209	175
3	5350.00	53.00	54.00	-1.00	46.15	6.85	Average	209	175
4	5350.00	65.34	74.00	-8.66	58.49	6.85	Peak	209	175
5	10580.00	58.18	68.20	-10.02	41.81	16.37	Peak	100	24
6	15870.00	46.85	54.00	-7.15	30.21	16.64	Average	100	26
7	15870.00	58.55	74.00	-15.45	41.91	16.64	Peak	100	26

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

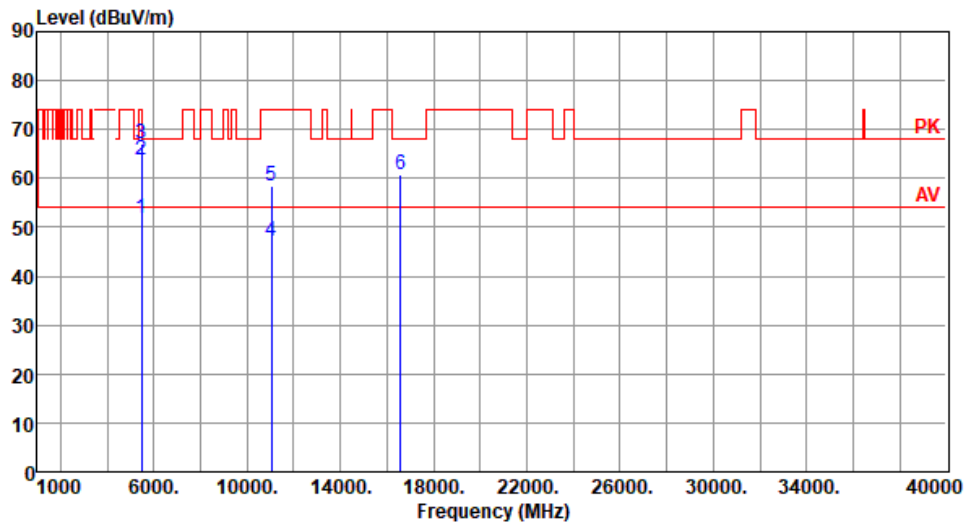
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.28	54.00	-5.72	41.03	7.25	Average	280	49
2	5460.00	60.52	74.00	-13.48	53.27	7.25	Peak	280	49
3	5470.00	62.26	68.20	-5.94	54.98	7.28	Peak	280	49
4	11060.00	48.32	54.00	-5.68	31.57	16.75	Average	100	139
5	11060.00	59.56	74.00	-14.44	42.81	16.75	Peak	100	139
6	16590.00	60.92	68.20	-7.28	42.71	18.21	Peak	100	143

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



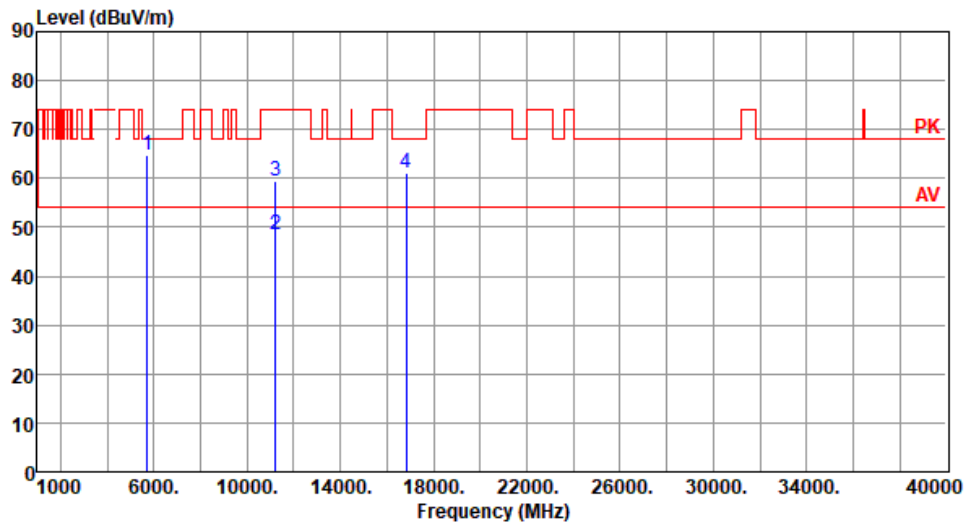
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	51.80	54.00	-2.20	44.55	7.25	Average	197	327
2	5460.00	63.72	74.00	-10.28	56.47	7.25	Peak	197	327
3	5470.00	66.96	68.20	-1.24	59.68	7.28	Peak	197	327
4	11060.00	47.32	54.00	-6.68	30.57	16.75	Average	100	32
5	11060.00	58.59	74.00	-15.41	41.84	16.75	Peak	100	32
6	16590.00	60.79	68.20	-7.41	42.58	18.21	Peak	100	33

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

*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)	5610
Polarization	Horizontal	Test Configuration	1



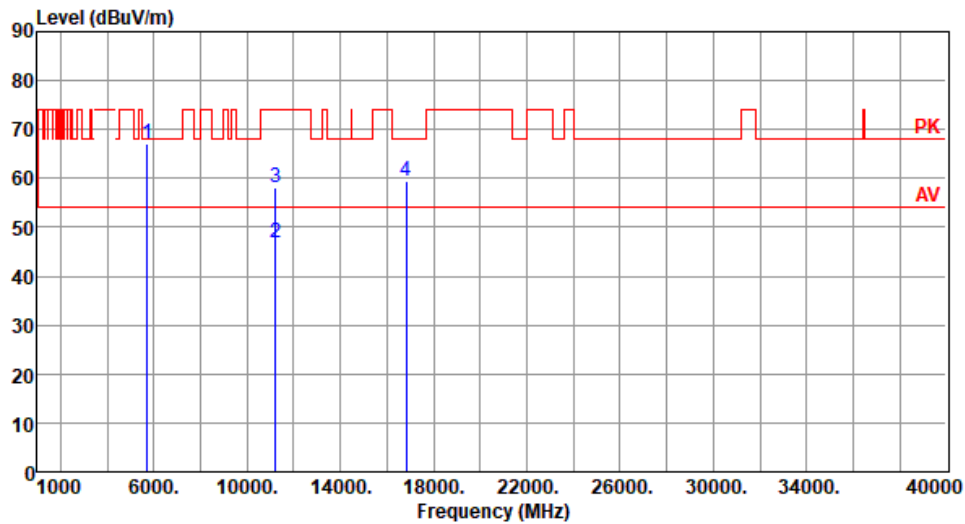
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.90	68.20	-3.30	57.24	7.66	Peak	277	21
2	11220.00	48.45	54.00	-5.55	31.93	16.52	Average	100	132
3	11220.00	59.48	74.00	-14.52	42.96	16.52	Peak	100	132
4	16830.00	61.09	68.20	-7.11	42.75	18.34	Peak	100	131

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

*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)	5610
Polarization	Vertical	Test Configuration	1



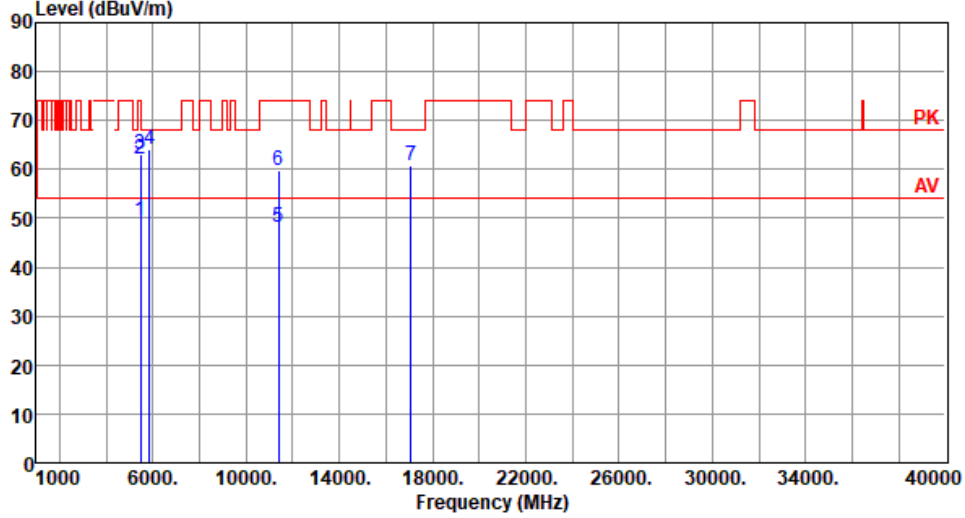
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	66.93	68.20	-1.27	59.27	7.66	Peak	175	322
2	11220.00	46.77	54.00	-7.23	30.25	16.52	Average	100	21
3	11220.00	57.96	74.00	-16.04	41.44	16.52	Peak	100	21
4	16830.00	59.57	68.20	-8.63	41.23	18.34	Peak	100	29

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

*Factor includes antenna factor , cable loss and amplifier gain

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

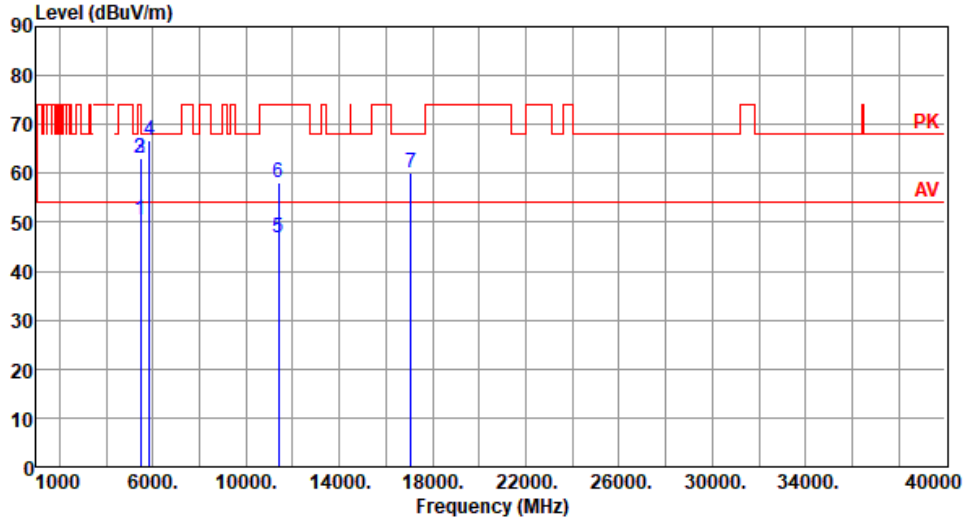
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.36	54.00	-4.64	42.11	7.25	Average	287	23
2	5460.00	62.24	74.00	-11.76	54.99	7.25	Peak	287	23
3	5470.00	63.12	68.20	-5.08	55.84	7.28	Peak	287	23
4	5850.00	64.25	68.20	-3.95	56.23	8.02	Peak	287	23
5	11380.00	48.19	54.00	-5.81	31.51	16.68	Average	100	132
6	11380.00	59.63	74.00	-14.37	42.95	16.68	Peak	100	132
7	17070.00	60.79	68.20	-7.41	42.41	18.38	Peak	100	139

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*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)	5690
Polarization	Vertical	Test Configuration	1



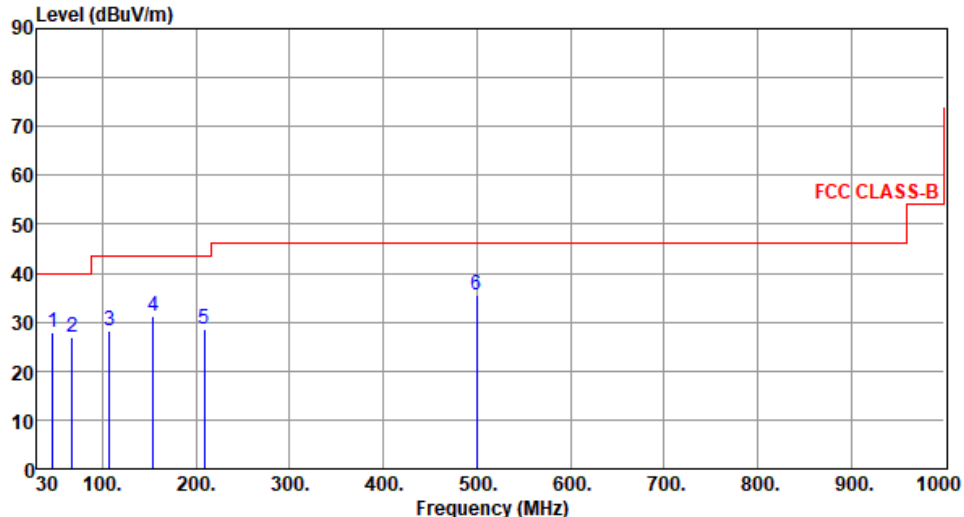
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.33	54.00	-3.67	43.08	7.25	Average	184	96
2	5460.00	63.07	74.00	-10.93	55.82	7.25	Peak	184	96
3	5470.00	63.22	68.20	-4.98	55.94	7.28	Peak	184	96
4	5850.00	66.91	68.20	-1.29	58.89	8.02	Peak	184	96
5	11380.00	46.92	54.00	-7.08	30.24	16.68	Average	100	23
6	11380.00	58.06	74.00	-15.94	41.38	16.68	Peak	100	23
7	17070.00	59.96	68.20	-8.24	41.58	18.38	Peak	100	28

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

Beamforming mode

3.5.9 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal	Test Configuration	1

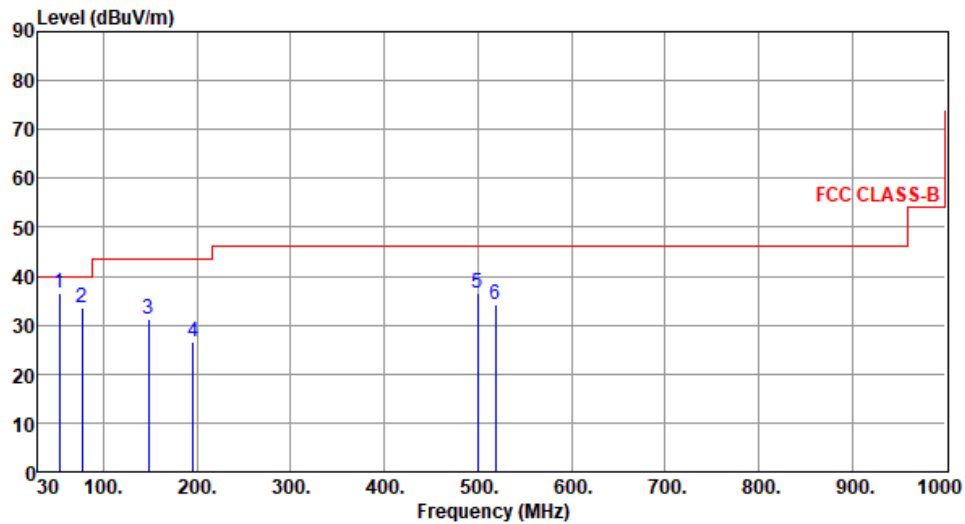


The graph displays the emission level in dBuV/m on the y-axis (0 to 90) against frequency in MHz on the x-axis (30 to 1000). A red line represents the FCC CLASS-B limit, which is 40 dBuV/m from 30 to 100 MHz, 45 dBuV/m from 100 to 200 MHz, and 50 dBuV/m from 200 to 1000 MHz. Six blue vertical lines indicate measured peaks at frequencies 1, 2, 3, 4, 5, and 6 MHz. The peak at 6 MHz is the highest, reaching approximately 38.51 dBuV/m.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	46.51	27.84	40.00	-12.16	36.44	-8.60	Peak	---	---
2	67.79	26.78	40.00	-13.22	37.07	-10.29	Peak	---	---
3	107.56	28.26	43.50	-15.24	40.64	-12.38	Peak	---	---
4	154.21	31.28	43.50	-12.22	39.89	-8.61	Peak	---	---
5	208.51	28.54	43.50	-14.96	40.59	-12.05	Peak	---	---
6	499.59	35.46	46.00	-10.54	38.51	-3.05	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
 *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	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	52.42	36.38	40.00	-3.62	45.07	-8.69	Peak	---	---
2	77.49	33.45	40.00	-6.55	46.31	-12.86	Peak	---	---
3	148.34	31.36	43.50	-12.14	40.11	-8.75	Peak	---	---
4	195.79	26.54	43.50	-16.96	38.33	-11.79	Peak	---	---
5	499.44	36.56	46.00	-9.44	39.61	-3.05	Peak	---	---
6	518.65	34.28	46.00	-11.72	36.88	-2.60	Peak	---	---

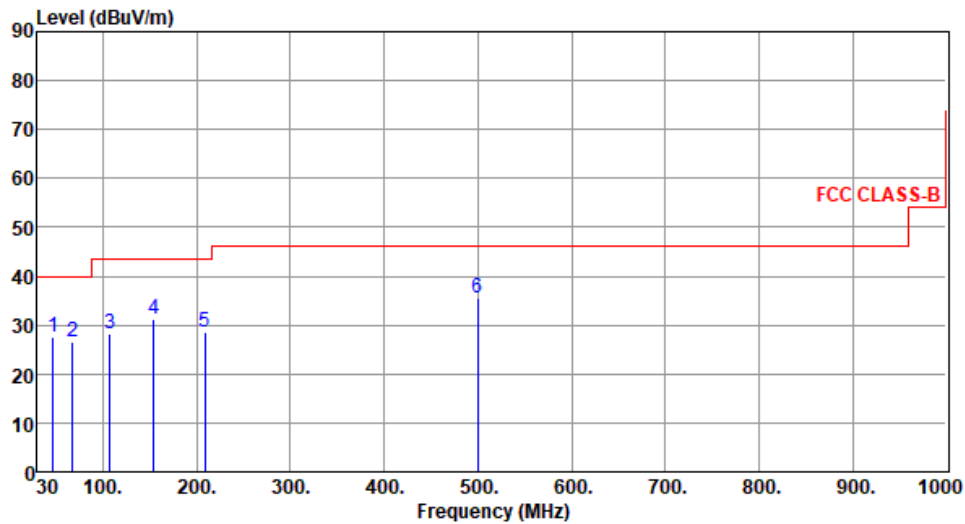
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	46.48	27.69	40.00	-12.31	36.29	-8.60	Peak	---	---
2	67.68	26.68	40.00	-13.32	36.97	-10.29	Peak	---	---
3	107.45	28.27	43.50	-15.23	40.66	-12.39	Peak	---	---
4	154.31	31.38	43.50	-12.12	39.98	-8.60	Peak	---	---
5	208.49	28.61	43.50	-14.89	40.66	-12.05	Peak	---	---
6	499.48	35.54	46.00	-10.46	38.59	-3.05	Peak	---	---

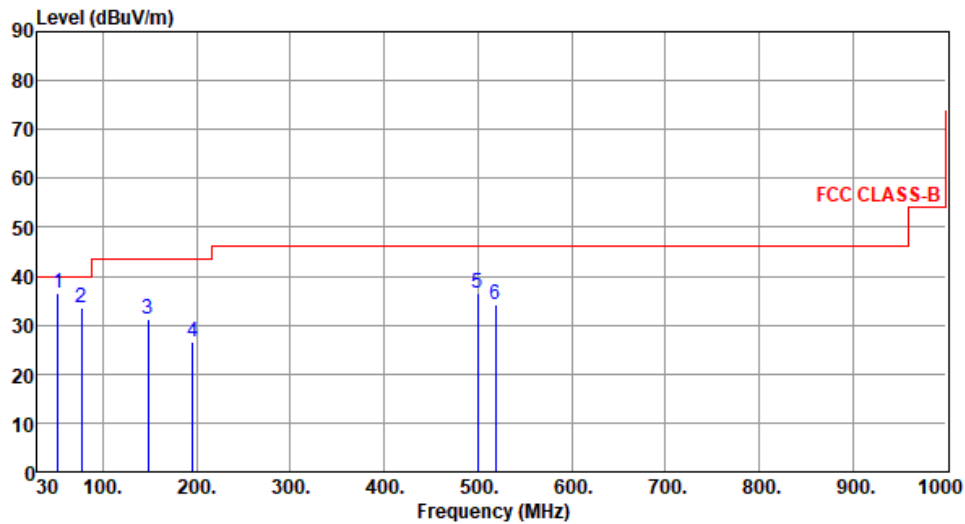
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	52.31	36.48	40.00	-3.52	45.18	-8.70	Peak	---	---
2	77.51	33.53	40.00	-6.47	46.38	-12.85	Peak	---	---
3	148.51	31.17	43.50	-12.33	39.92	-8.75	Peak	---	---
4	195.85	26.48	43.50	-17.02	38.27	-11.79	Peak	---	---
5	499.51	36.54	46.00	-9.46	39.59	-3.05	Peak	---	---
6	518.63	34.35	46.00	-11.65	36.95	-2.60	Peak	---	---

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

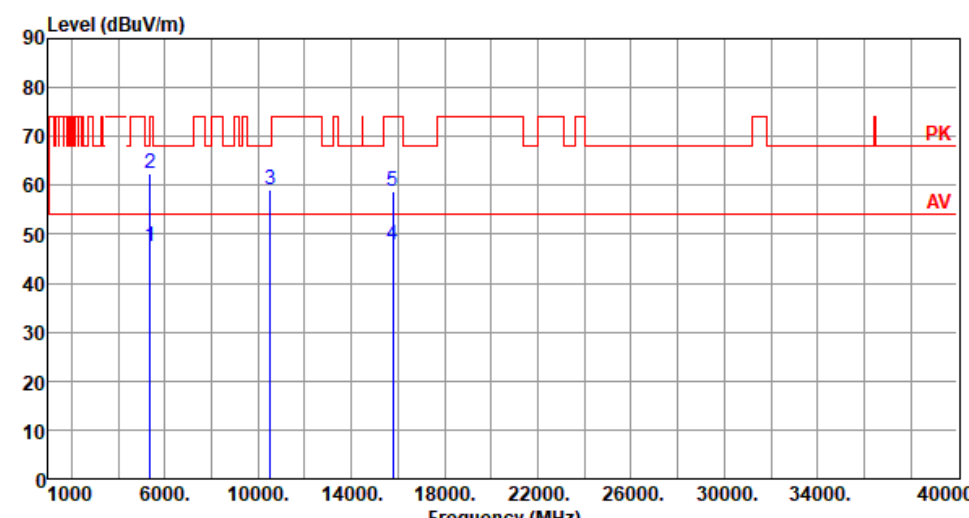
*Factor includes antenna factor , cable loss and amplifier gain

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.

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

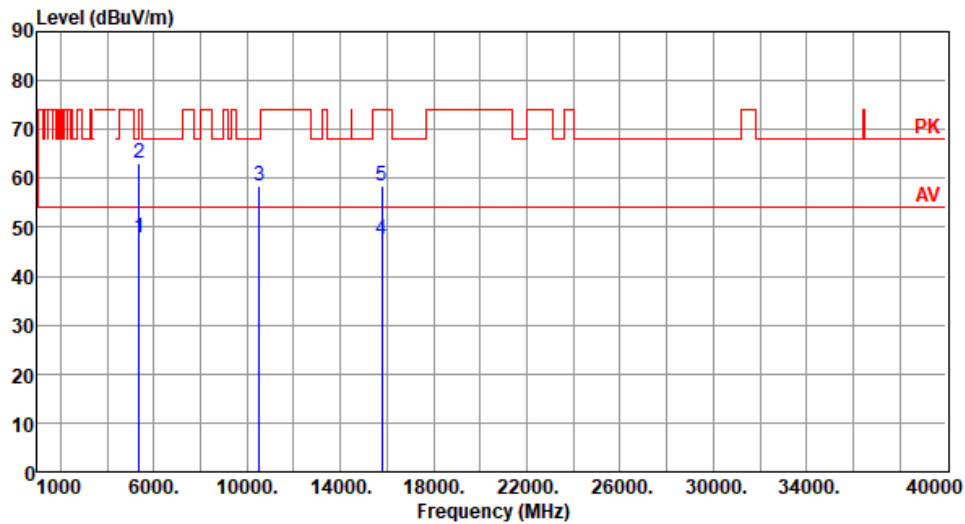
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.51	54.00	-6.49	40.66	6.85	Average	255	25
2	5350.00	62.43	74.00	-11.57	55.58	6.85	Peak	255	25
3	10520.00	59.27	68.20	-8.93	42.85	16.42	Peak	100	103
4	15780.00	47.89	54.00	-6.11	31.33	16.56	Average	100	105
5	15780.00	58.92	74.00	-15.08	42.36	16.56	Peak	100	105

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



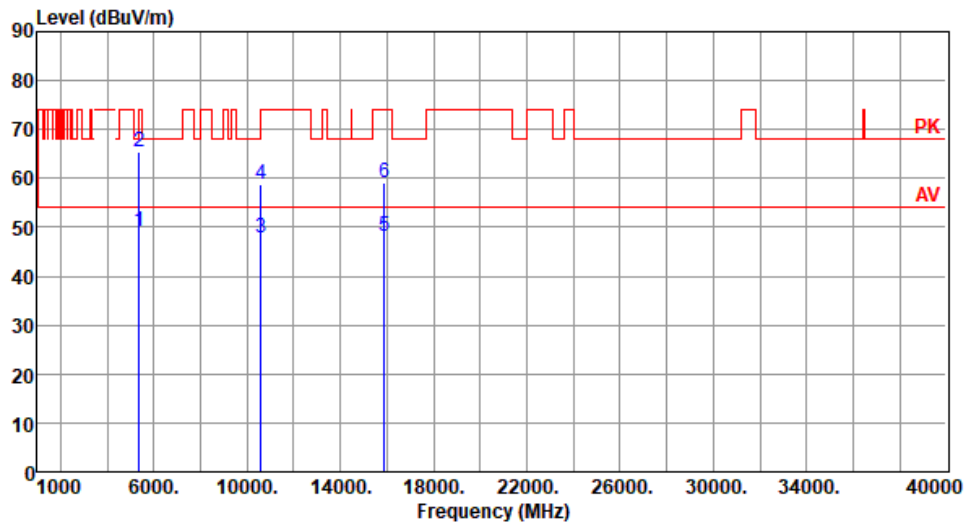
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.98	54.00	-6.02	41.13	6.85	Average	195	104
2	5350.00	63.03	74.00	-10.97	56.18	6.85	Peak	195	104
3	10520.00	58.30	68.20	-9.90	41.88	16.42	Peak	100	50
4	15780.00	47.54	54.00	-6.46	30.98	16.56	Average	100	56
5	15780.00	58.29	74.00	-15.71	41.73	16.56	Peak	100	56

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

*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 Configuration	1



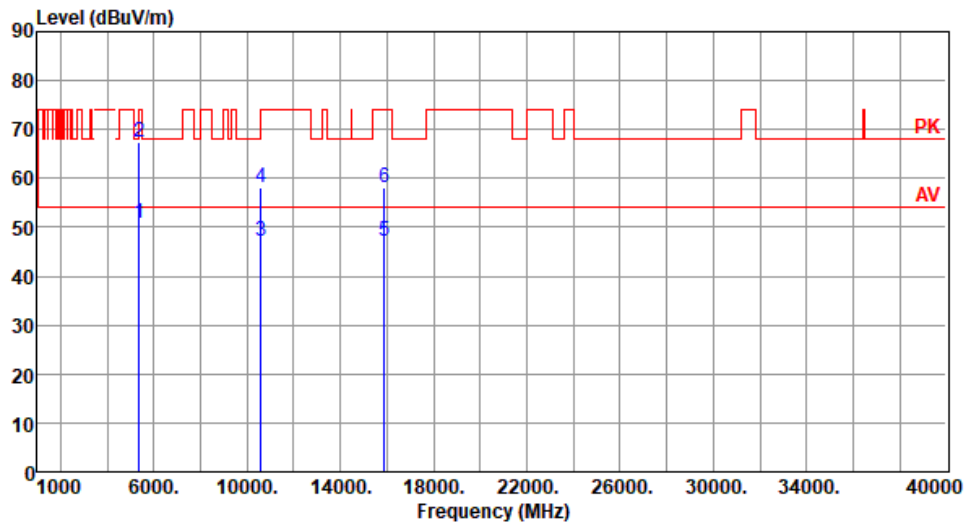
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	49.10	54.00	-4.90	42.25	6.85	Average	288	24
2	5350.00	65.43	74.00	-8.57	58.58	6.85	Peak	288	24
3	10600.00	47.94	54.00	-6.06	31.58	16.36	Average	100	108
4	10600.00	58.73	74.00	-15.27	42.37	16.36	Peak	100	108
5	15900.00	48.08	54.00	-5.92	31.39	16.69	Average	100	101
6	15900.00	59.13	74.00	-14.87	42.44	16.69	Peak	100	101

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

*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 Configuration	1



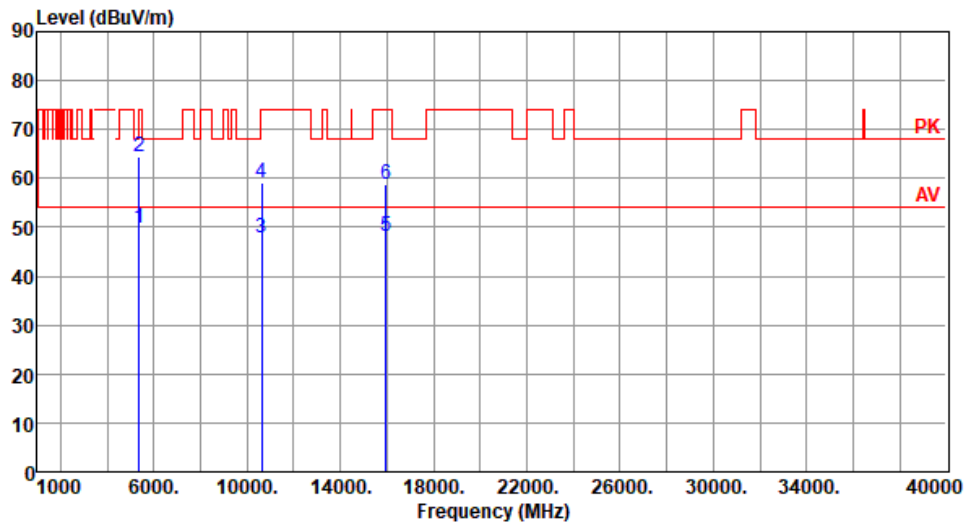
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	50.77	54.00	-3.23	43.92	6.85	Average	187	99
2	5350.00	67.46	74.00	-6.54	60.61	6.85	Peak	187	99
3	10600.00	47.02	54.00	-6.98	30.66	16.36	Average	100	58
4	10600.00	58.23	74.00	-15.77	41.87	16.36	Peak	100	58
5	15900.00	47.02	54.00	-6.98	30.33	16.69	Average	100	51
6	15900.00	58.27	74.00	-15.73	41.58	16.69	Peak	100	51

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

*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 Configuration	1



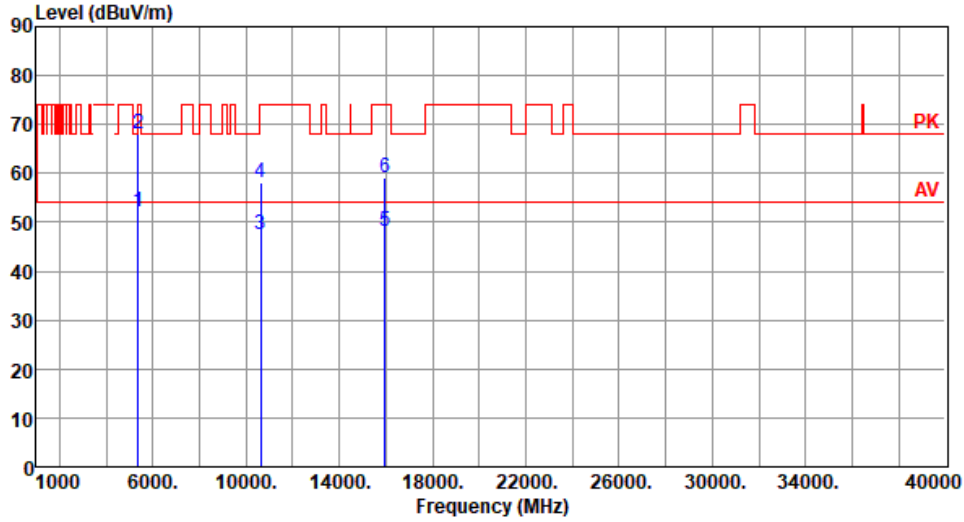
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	49.70	54.00	-4.30	42.85	6.85	Average	207	27
2	5350.00	64.43	74.00	-9.57	57.58	6.85	Peak	207	27
3	10640.00	47.94	54.00	-6.06	31.57	16.37	Average	100	100
4	10640.00	59.22	74.00	-14.78	42.85	16.37	Peak	100	100
5	15960.00	48.08	54.00	-5.92	31.55	16.53	Average	100	105
6	15960.00	58.89	74.00	-15.11	42.36	16.53	Peak	100	105

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

*Factor includes antenna factor , cable loss and amplifier gain

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

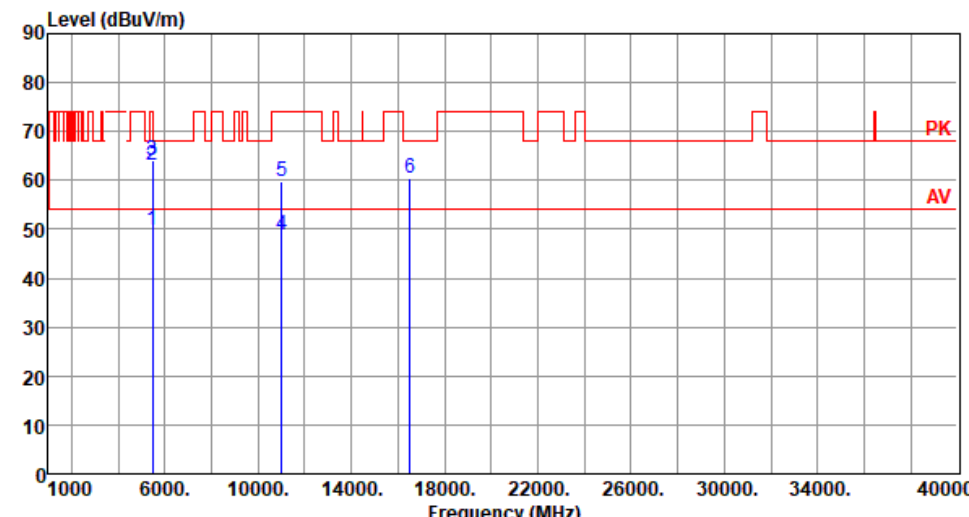
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.11	54.00	-1.89	45.26	6.85	Average	209	122
2	5350.00	68.13	74.00	-5.87	61.28	6.85	Peak	209	122
3	10640.00	47.60	54.00	-6.40	31.23	16.37	Average	100	30
4	10640.00	57.96	74.00	-16.04	41.59	16.37	Peak	100	30
5	15960.00	48.11	54.00	-5.89	31.58	16.53	Average	100	50
6	15960.00	59.12	74.00	-14.88	42.59	16.53	Peak	100	50

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

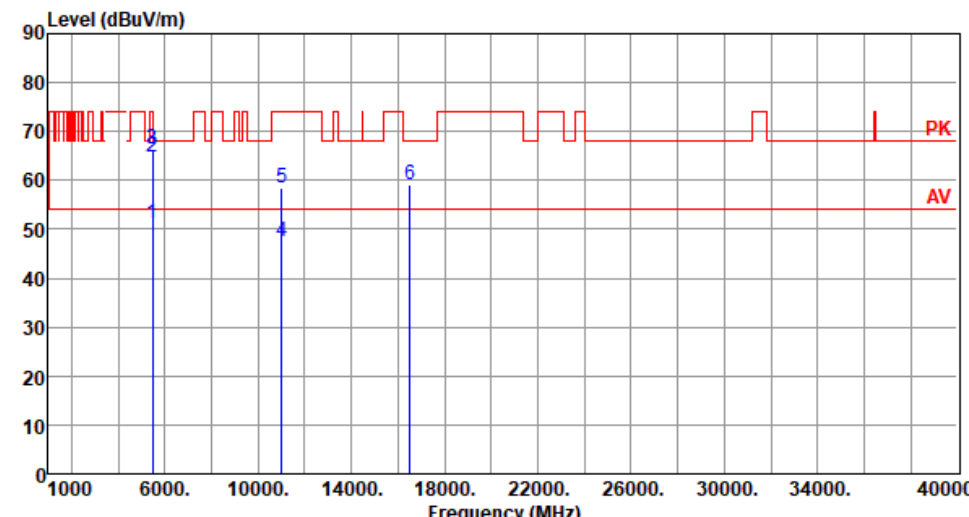
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.84	54.00	-4.16	42.59	7.25	Average	281	24
2	5460.00	63.10	74.00	-10.90	55.85	7.25	Peak	281	24
3	5470.00	64.16	68.20	-4.04	56.88	7.28	Peak	281	24
4	11000.00	48.83	54.00	-5.17	31.99	16.84	Average	100	103
5	11000.00	59.84	74.00	-14.16	43.00	16.84	Peak	100	103
6	16500.00	60.52	68.20	-7.68	42.88	17.64	Peak	100	102

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

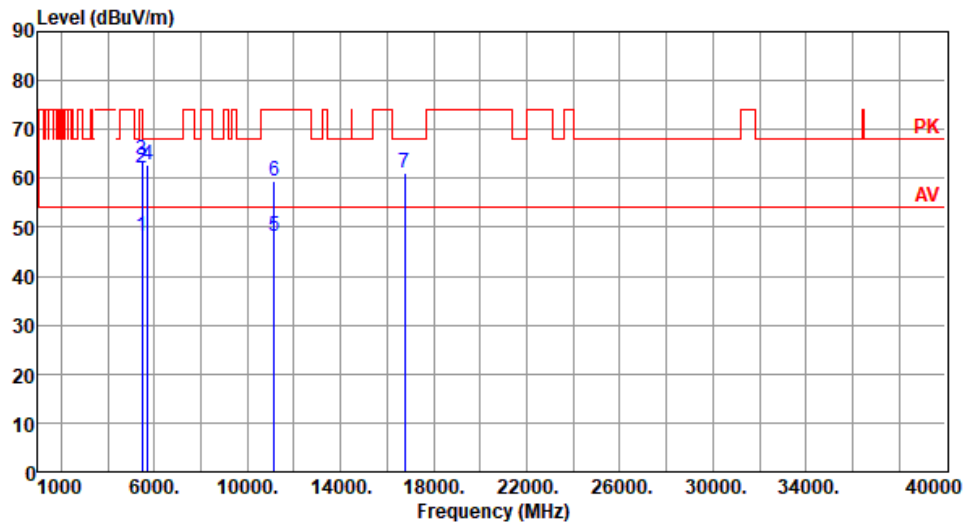
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	51.09	54.00	-2.91	43.84	7.25	Average	186	95
2	5460.00	64.73	74.00	-9.27	57.48	7.25	Peak	186	95
3	5470.00	66.56	68.20	-1.64	59.28	7.28	Peak	186	95
4	11000.00	47.47	54.00	-6.53	30.63	16.84	Average	100	52
5	11000.00	58.34	74.00	-15.66	41.50	16.84	Peak	100	52
6	16500.00	58.97	68.20	-9.23	41.33	17.64	Peak	100	53

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



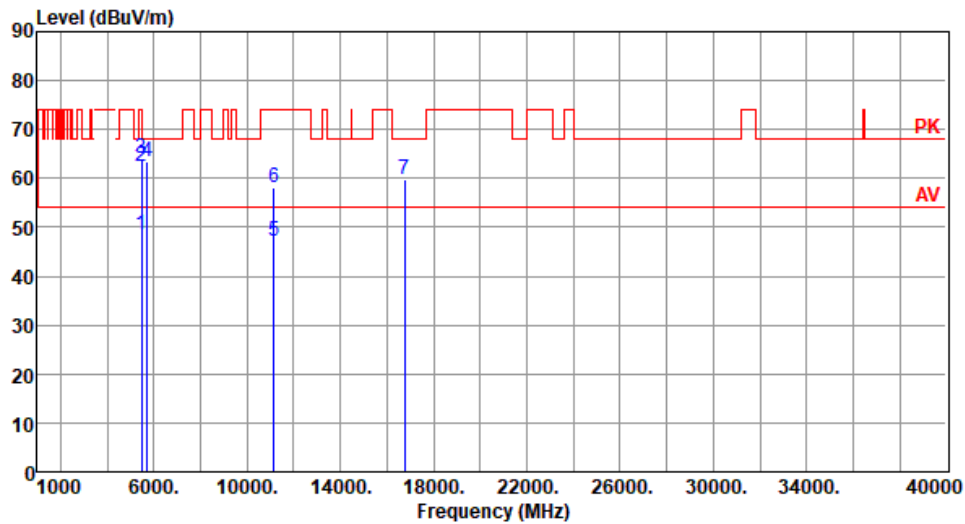
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.30	54.00	-5.70	41.05	7.25	Average	263	23
2	5460.00	62.25	74.00	-11.75	55.00	7.25	Peak	263	23
3	5470.00	63.86	68.20	-4.34	56.58	7.28	Peak	263	23
4	5725.00	62.90	68.20	-5.30	55.24	7.66	Peak	263	23
5	11160.00	48.17	54.00	-5.83	31.58	16.59	Average	100	107
6	11160.00	59.49	74.00	-14.51	42.90	16.59	Peak	100	107
7	16740.00	61.08	68.20	-7.12	42.85	18.23	Peak	100	105

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

*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 Configuration	1



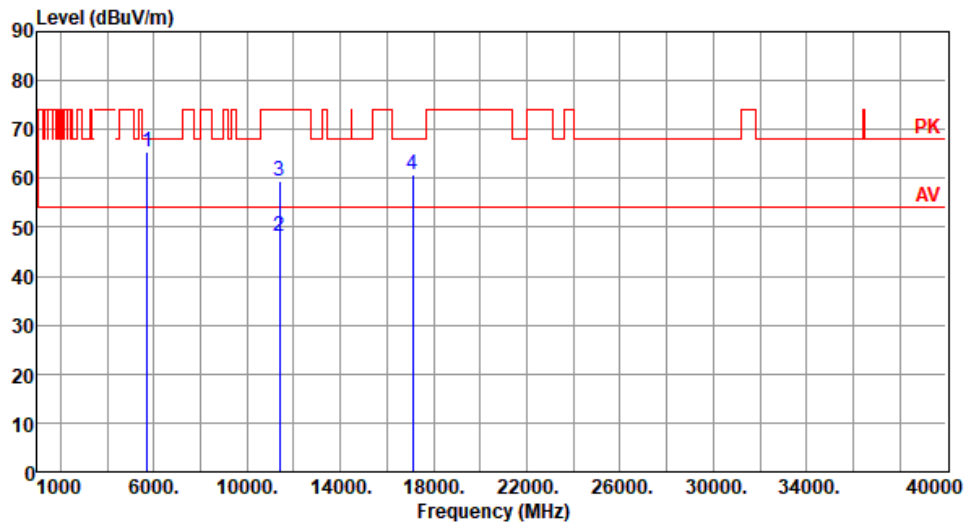
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.50	54.00	-5.50	41.25	7.25	Average	177	95
2	5460.00	62.40	74.00	-11.60	55.15	7.25	Peak	177	95
3	5470.00	64.13	68.20	-4.07	56.85	7.28	Peak	177	95
4	5725.00	63.31	68.20	-4.89	55.65	7.66	Peak	177	95
5	11160.00	47.12	54.00	-6.88	30.53	16.59	Average	100	70
6	11160.00	58.15	74.00	-15.85	41.56	16.59	Peak	100	70
7	16740.00	59.76	68.20	-8.44	41.53	18.23	Peak	100	50

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

*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 Configuration	1



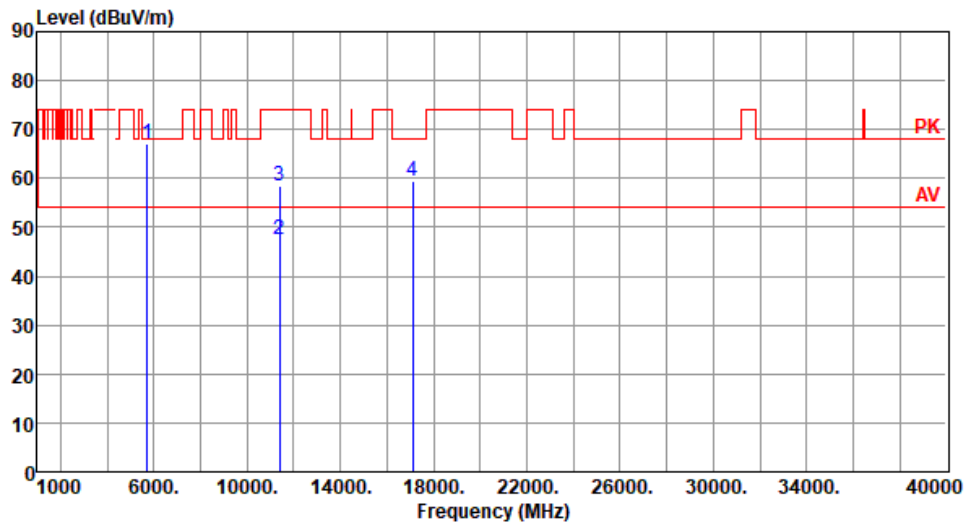
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	65.50	68.20	-2.70	57.84	7.66	Peak	241	23
2	11400.00	48.29	54.00	-5.71	31.56	16.73	Average	100	107
3	11400.00	59.60	74.00	-14.40	42.87	16.73	Peak	100	107
4	17100.00	60.87	68.20	-7.33	42.63	18.24	Peak	100	104

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

*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 Configuration	1



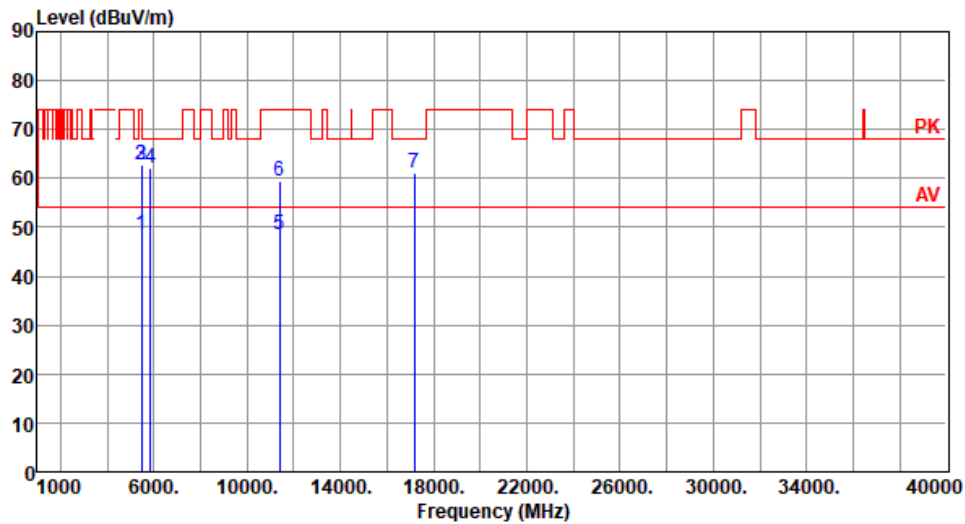
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	66.99	68.20	-1.21	59.33	7.66	Peak	185	256
2	11400.00	47.35	54.00	-6.65	30.62	16.73	Average	100	52
3	11400.00	58.60	74.00	-15.40	41.87	16.73	Peak	100	52
4	17100.00	59.60	68.20	-8.60	41.36	18.24	Peak	100	53

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

*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)	5720
Polarization	Horizontal	Test Configuration	1



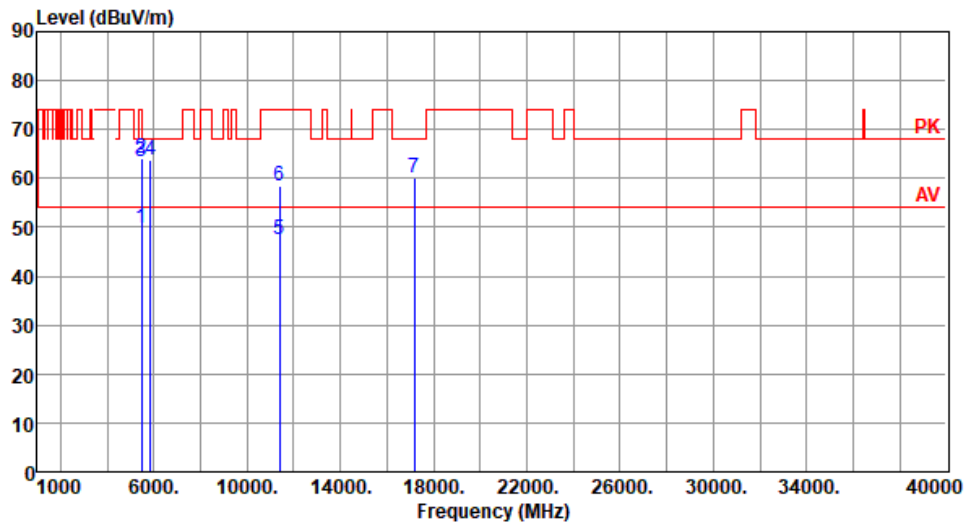
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.50	54.00	-5.50	41.25	7.25	Average	282	22
2	5460.00	62.81	74.00	-11.19	55.56	7.25	Peak	282	22
3	5470.00	62.65	68.20	-5.55	55.37	7.28	Peak	282	22
4	5850.00	62.23	68.20	-5.97	54.21	8.02	Peak	282	22
5	11400.00	48.60	54.00	-5.40	31.87	16.73	Average	100	108
6	11400.00	59.58	74.00	-14.42	42.85	16.73	Peak	100	108
7	17160.00	60.95	68.20	-7.25	42.57	18.38	Peak	100	104

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

*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)	5720
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.91	54.00	-4.09	42.66	7.25	Average	192	103
2	5460.00	63.94	74.00	-10.06	56.69	7.25	Peak	192	103
3	5470.00	63.32	68.20	-4.88	56.04	7.28	Peak	192	103
4	5850.00	63.90	68.20	-4.30	55.88	8.02	Peak	192	103
5	11400.00	47.41	54.00	-6.59	30.68	16.73	Average	100	57
6	11400.00	58.60	74.00	-15.40	41.87	16.73	Peak	100	57
7	17160.00	60.00	68.20	-8.20	41.62	18.38	Peak	100	52

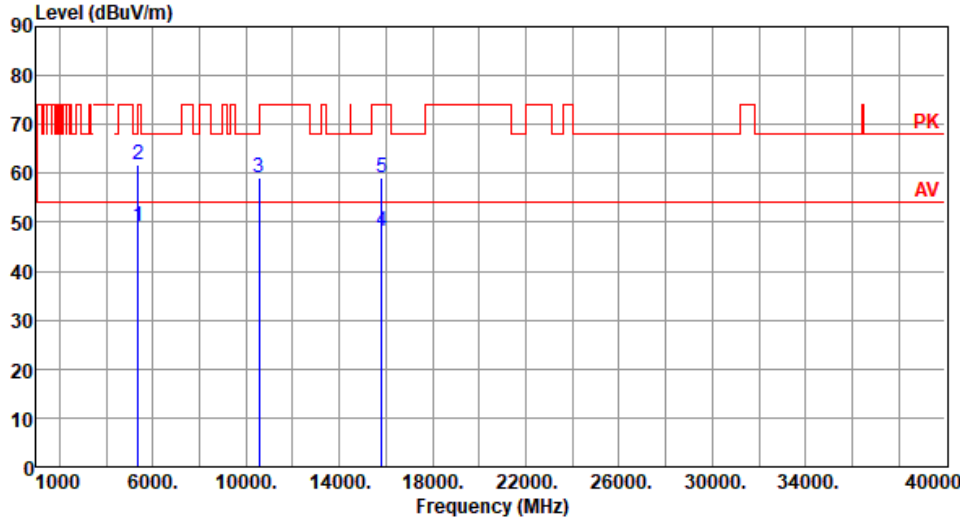
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

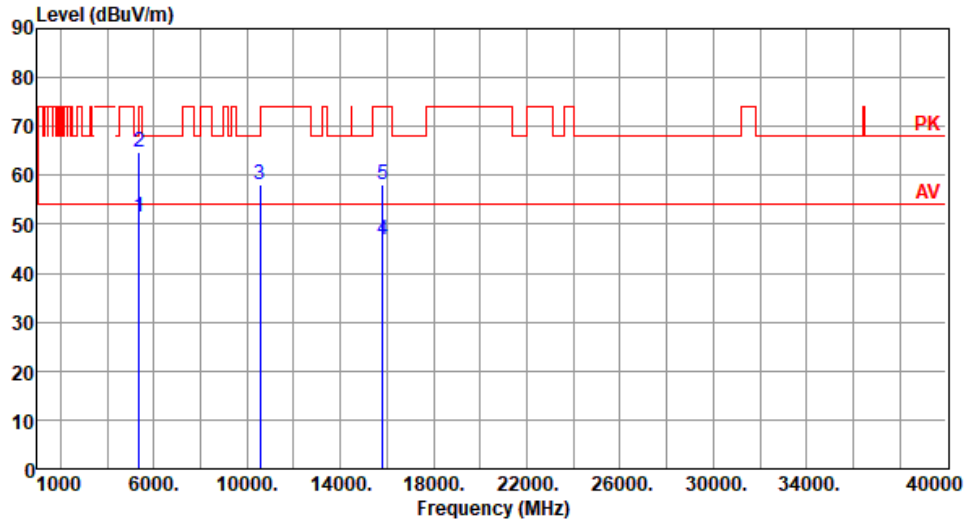
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	49.11	54.00	-4.89	42.26	6.85	Average	239	21
2	5350.00	61.73	74.00	-12.27	54.88	6.85	Peak	239	21
3	10540.00	58.99	68.20	-9.21	42.58	16.41	Peak	100	105
4	15810.00	48.14	54.00	-5.86	31.58	16.56	Average	100	106
5	15810.00	59.22	74.00	-14.78	42.66	16.56	Peak	100	106

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



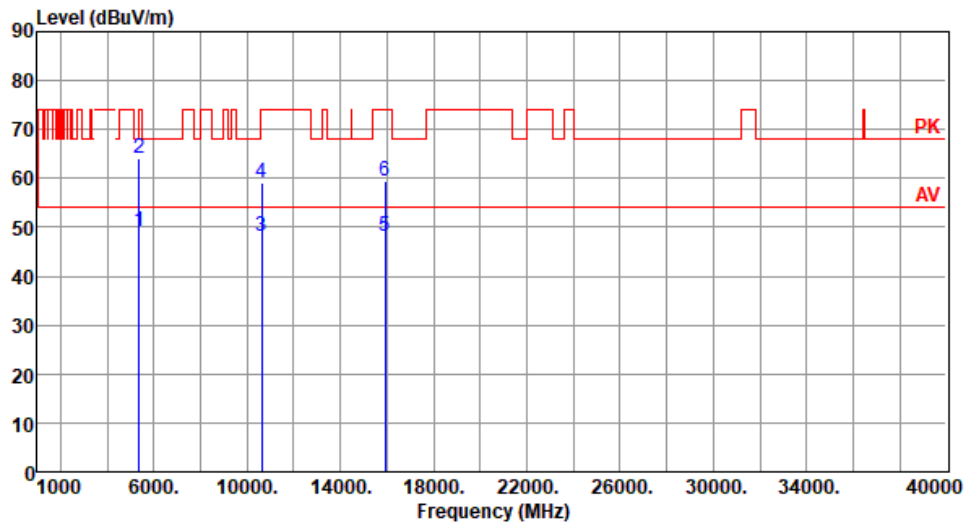
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	51.34	54.00	-2.66	44.49	6.85	Average	218	96
2	5350.00	64.70	74.00	-9.30	57.85	6.85	Peak	218	96
3	10540.00	58.26	68.20	-9.94	41.85	16.41	Peak	100	55
4	15810.00	46.89	54.00	-7.11	30.33	16.56	Average	100	56
5	15810.00	58.22	74.00	-15.78	41.66	16.56	Peak	100	56

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

*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 Configuration	1



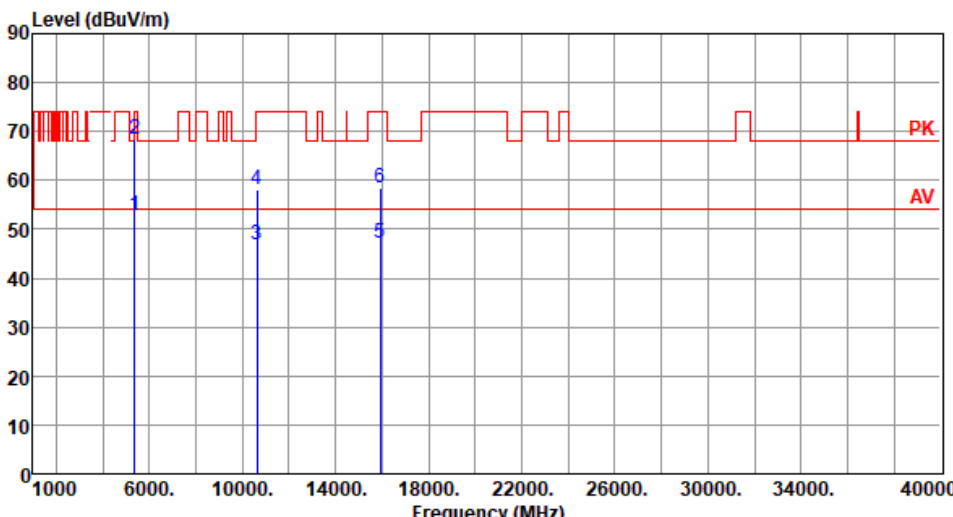
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	49.10	54.00	-4.90	42.25	6.85	Average	284	21
2	5350.00	64.10	74.00	-9.90	57.25	6.85	Peak	284	21
3	10620.00	48.02	54.00	-5.98	31.65	16.37	Average	100	108
4	10620.00	59.21	74.00	-14.79	42.84	16.37	Peak	100	108
5	15930.00	48.18	54.00	-5.82	31.57	16.61	Average	100	110
6	15930.00	59.38	74.00	-14.62	42.77	16.61	Peak	100	110

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

*Factor includes antenna factor , cable loss and amplifier gain

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

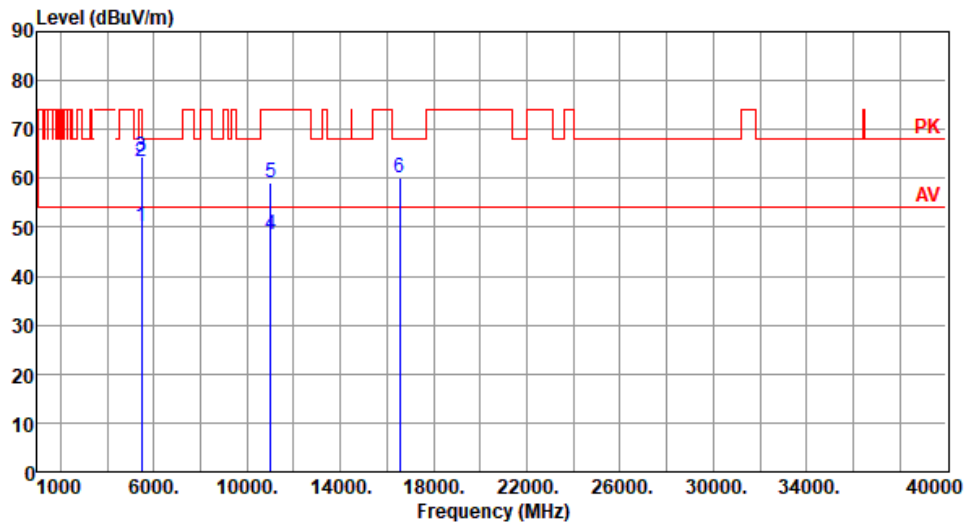
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.68	54.00	-1.32	45.83	6.85	Average	193	10
2	5350.00	68.30	74.00	-5.70	61.45	6.85	Peak	193	10
3	10620.00	46.94	54.00	-7.06	30.57	16.37	Average	100	57
4	10620.00	58.13	74.00	-15.87	41.76	16.37	Peak	100	57
5	15930.00	47.00	54.00	-7.00	30.39	16.61	Average	100	55
6	15930.00	58.44	74.00	-15.56	41.83	16.61	Peak	100	55

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



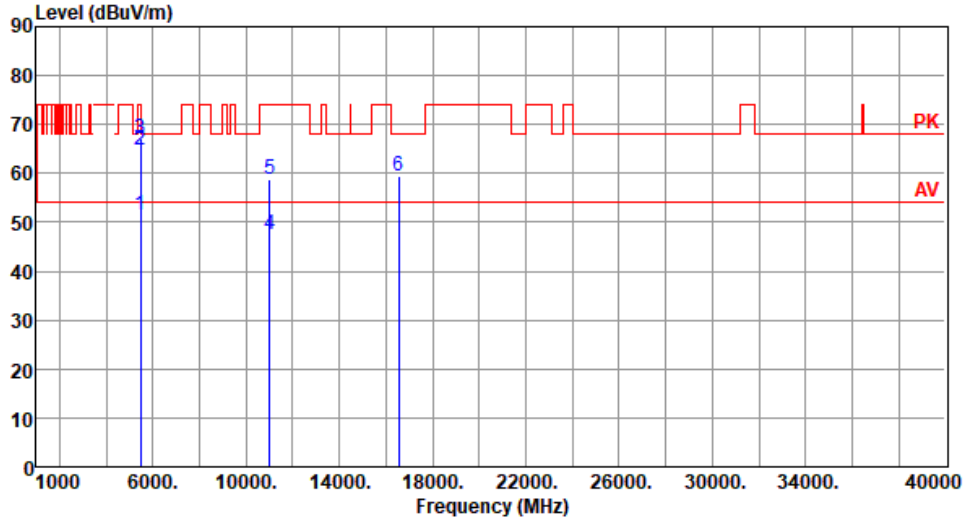
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.11	54.00	-3.89	42.86	7.25	Average	207	23
2	5460.00	63.57	74.00	-10.43	56.32	7.25	Peak	207	23
3	5470.00	64.51	68.20	-3.69	57.23	7.28	Peak	207	23
4	11020.00	48.44	54.00	-5.56	31.63	16.81	Average	100	107
5	11020.00	59.17	74.00	-14.83	42.36	16.81	Peak	100	107
6	16530.00	60.08	68.20	-8.12	42.25	17.83	Peak	100	105

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

*Factor includes antenna factor , cable loss and amplifier gain

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

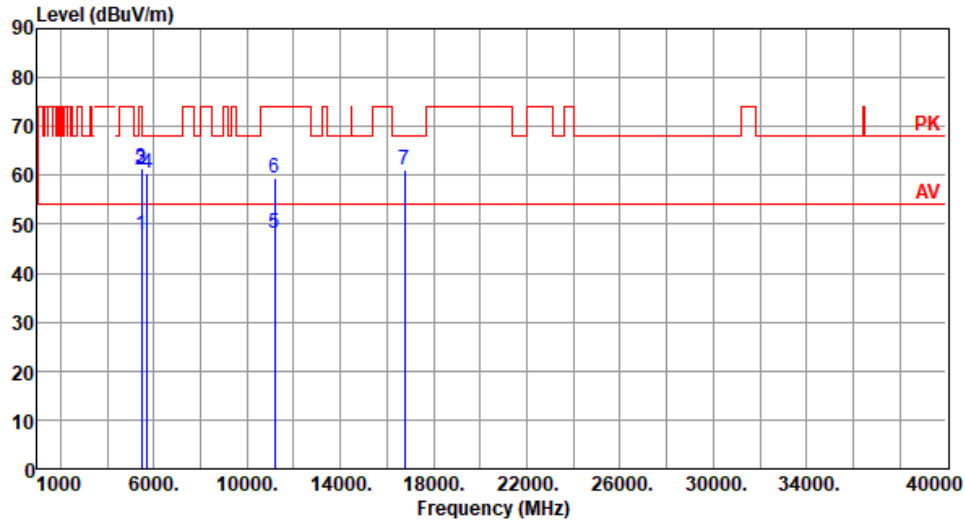
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	51.37	54.00	-2.63	44.12	7.25	Average	202	327
2	5460.00	64.84	74.00	-9.16	57.59	7.25	Peak	202	327
3	5470.00	66.99	68.20	-1.21	59.71	7.28	Peak	202	327
4	11020.00	47.50	54.00	-6.50	30.69	16.81	Average	100	51
5	11020.00	58.66	74.00	-15.34	41.85	16.81	Peak	100	51
6	16530.00	59.60	68.20	-8.60	41.77	17.83	Peak	100	52

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*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)	5590
Polarization	Horizontal	Test Configuration	1



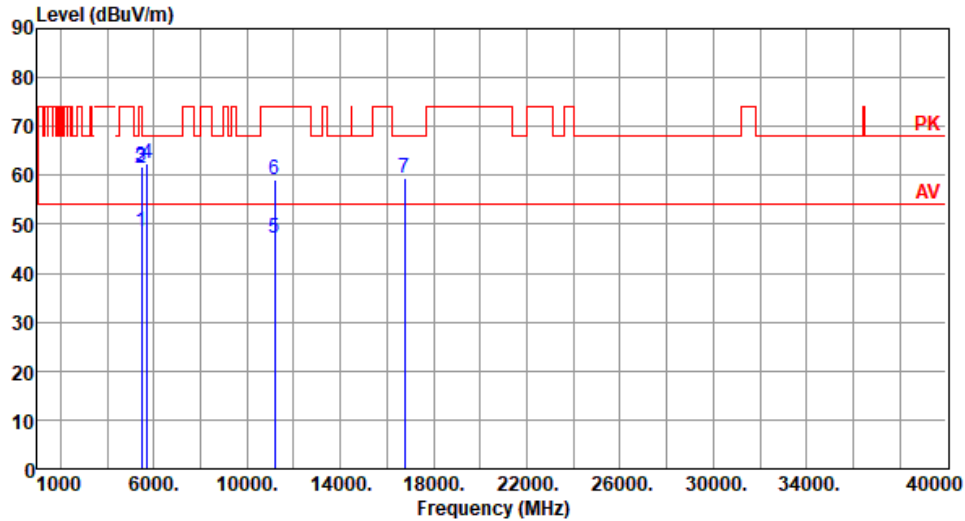
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.85	54.00	-6.15	40.60	7.25	Average	208	30
2	5460.00	61.25	74.00	-12.75	54.00	7.25	Peak	208	30
3	5470.00	61.48	68.20	-6.72	54.20	7.28	Peak	208	30
4	5725.00	60.55	68.20	-7.65	52.89	7.66	Peak	208	30
5	11180.00	48.14	54.00	-5.86	31.58	16.56	Average	100	107
6	11180.00	59.53	74.00	-14.47	42.97	16.56	Peak	100	107
7	16770.00	61.06	68.20	-7.14	42.83	18.23	Peak	100	102

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

*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)	5590
Polarization	Vertical	Test Configuration	1



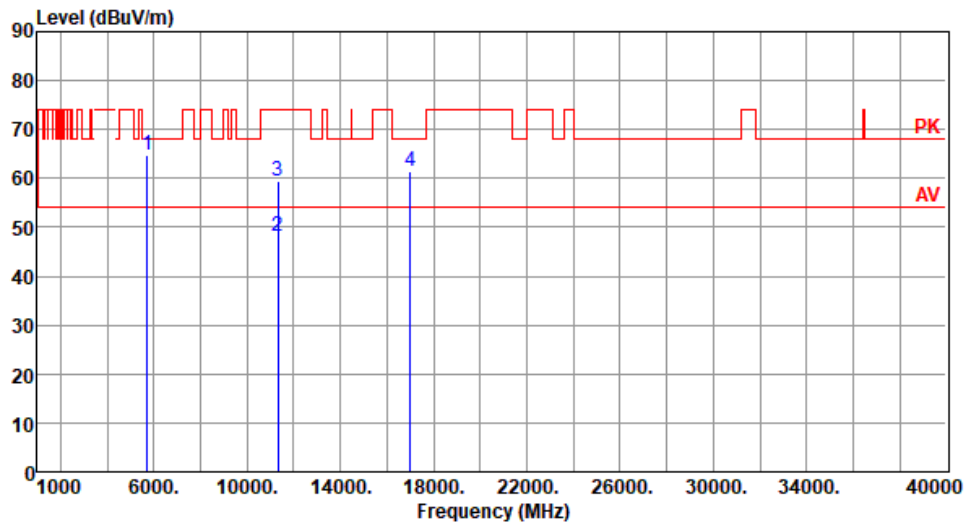
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.51	54.00	-5.49	41.26	7.25	Average	184	110
2	5460.00	61.51	74.00	-12.49	54.26	7.25	Peak	184	110
3	5470.00	61.87	68.20	-6.33	54.59	7.28	Peak	184	110
4	5725.00	62.50	68.20	-5.70	54.84	7.66	Peak	184	110
5	11180.00	47.25	54.00	-6.75	30.69	16.56	Average	100	51
6	11180.00	59.19	74.00	-14.81	42.63	16.56	Peak	100	51
7	16770.00	59.56	68.20	-8.64	41.33	18.23	Peak	100	52

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

*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 Configuration	1



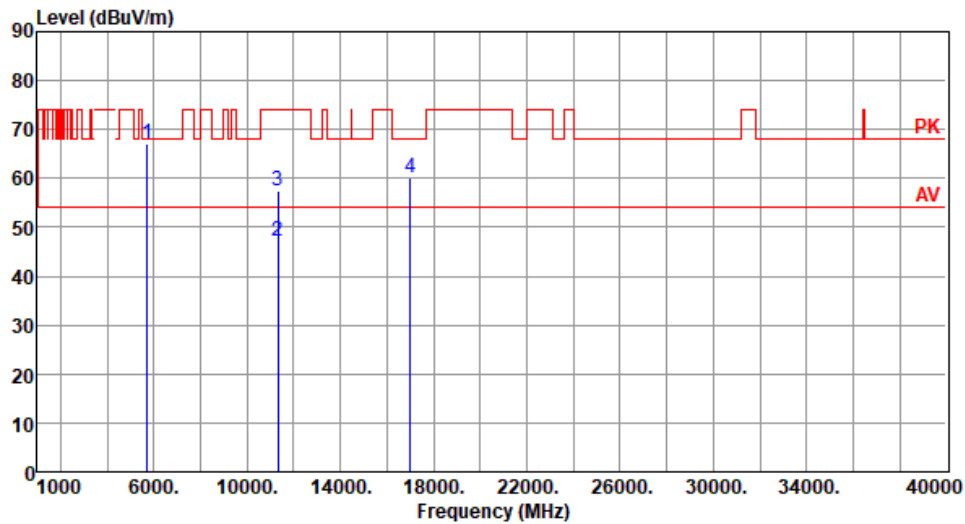
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.90	68.20	-3.30	57.24	7.66	Peak	209	29
2	11340.00	48.16	54.00	-5.84	31.58	16.58	Average	100	108
3	11340.00	59.46	74.00	-14.54	42.88	16.58	Peak	100	108
4	17010.00	61.40	68.20	-6.80	42.74	18.66	Peak	100	105

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

*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 Configuration	1



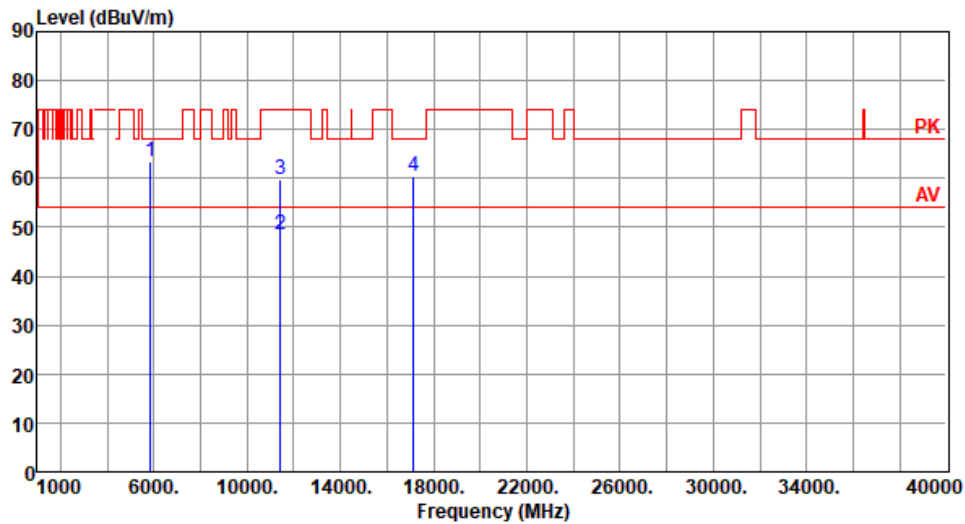
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	67.10	68.20	-1.10	59.44	7.66	Peak	184	250
2	11340.00	47.10	54.00	-6.90	30.52	16.58	Average	100	52
3	11340.00	57.58	74.00	-16.42	41.00	16.58	Peak	100	52
4	17010.00	60.21	68.20	-7.99	41.55	18.66	Peak	100	51

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

*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)	5710
Polarization	Horizontal	Test Configuration	1



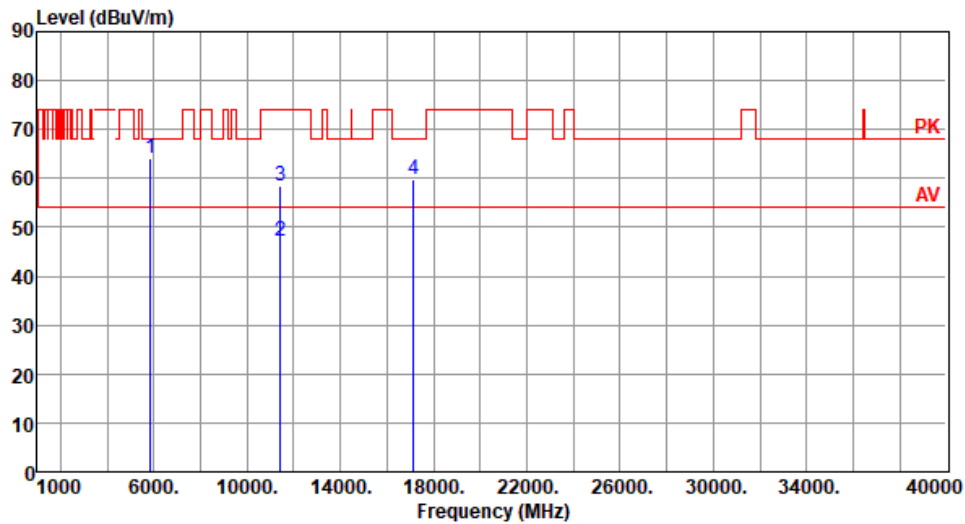
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	63.27	68.20	-4.93	55.25	8.02	Peak	207	20
2	11420.00	48.61	54.00	-5.39	31.88	16.73	Average	100	104
3	11420.00	59.61	74.00	-14.39	42.88	16.73	Peak	100	104
4	17130.00	60.56	68.20	-7.64	42.26	18.30	Peak	100	109

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

*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)	5710
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	63.98	68.20	-4.22	55.96	8.02	Peak	188	95
2	11420.00	47.28	54.00	-6.72	30.55	16.73	Average	100	51
3	11420.00	58.61	74.00	-15.39	41.88	16.73	Peak	100	51
4	17130.00	59.86	68.20	-8.34	41.56	18.30	Peak	100	53

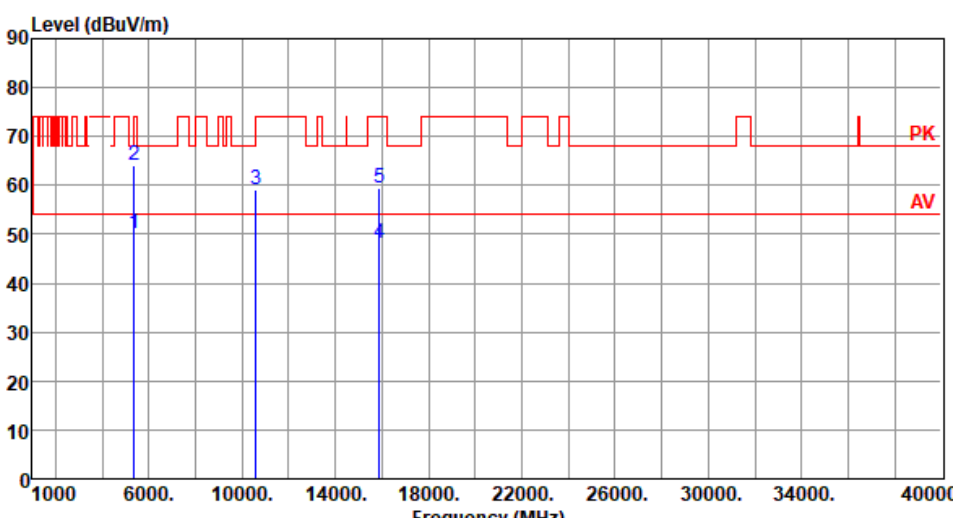
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

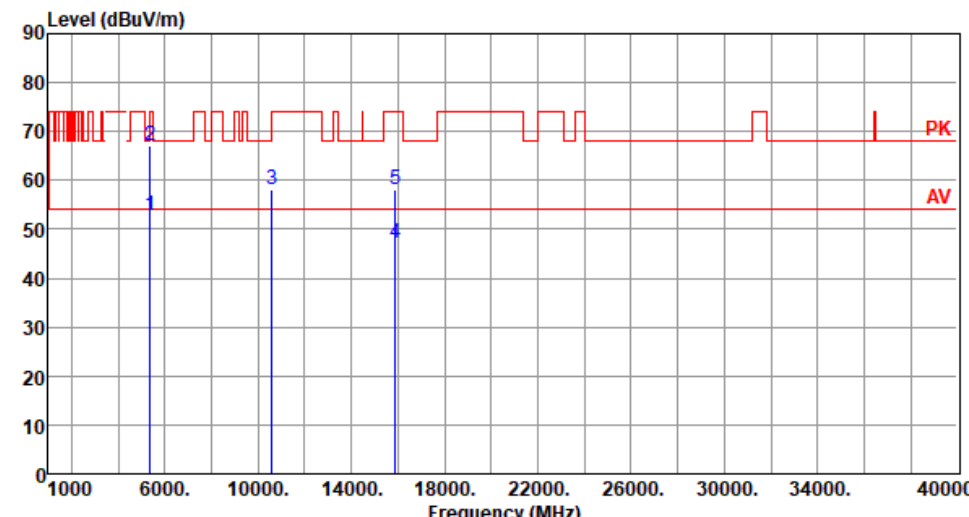
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	50.11	54.00	-3.89	43.26	6.85	Average	209	23
2	5350.00	64.10	74.00	-9.90	57.25	6.85	Peak	209	23
3	10580.00	59.07	68.20	-9.13	42.70	16.37	Peak	100	109
4	15870.00	48.04	54.00	-5.96	31.40	16.64	Average	100	105
5	15870.00	59.52	74.00	-14.48	42.88	16.64	Peak	100	105

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

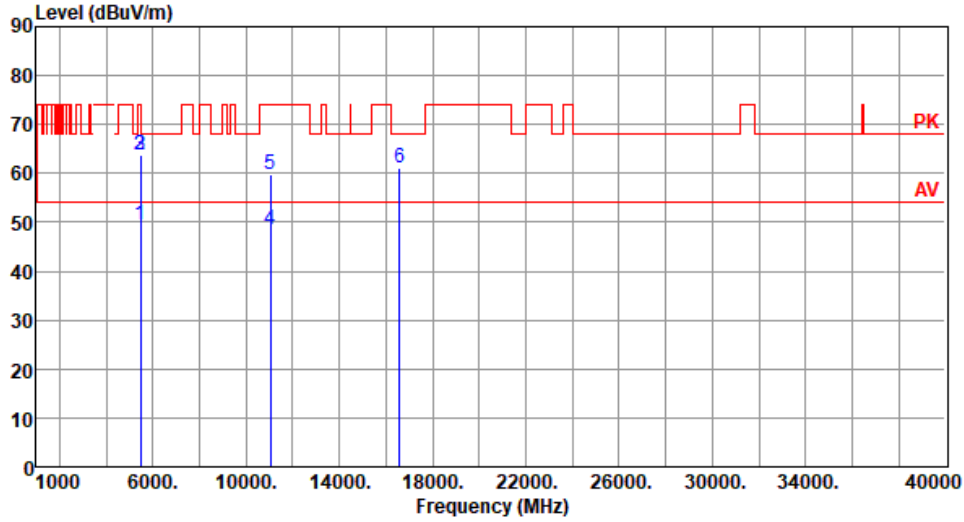
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.85	54.00	-1.15	46.00	6.85	Average	195	102
2	5350.00	67.11	74.00	-6.89	60.26	6.85	Peak	195	102
3	10580.00	57.96	68.20	-10.24	41.59	16.37	Peak	100	56
4	15870.00	47.23	54.00	-6.77	30.59	16.64	Average	100	56
5	15870.00	57.98	74.00	-16.02	41.34	16.64	Peak	100	55

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

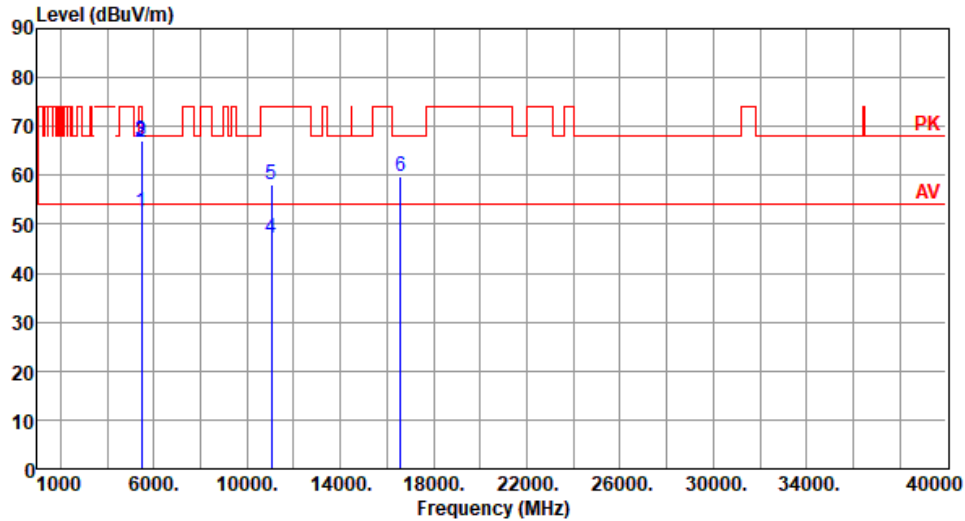
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.50	54.00	-4.50	42.25	7.25	Average	225	25
2	5460.00	63.61	74.00	-10.39	56.36	7.25	Peak	225	25
3	5470.00	63.65	68.20	-4.55	56.37	7.28	Peak	225	25
4	11060.00	48.38	54.00	-5.62	31.63	16.75	Average	100	107
5	11060.00	59.67	74.00	-14.33	42.92	16.75	Peak	100	107
6	16590.00	61.02	68.20	-7.18	42.81	18.21	Peak	100	102

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



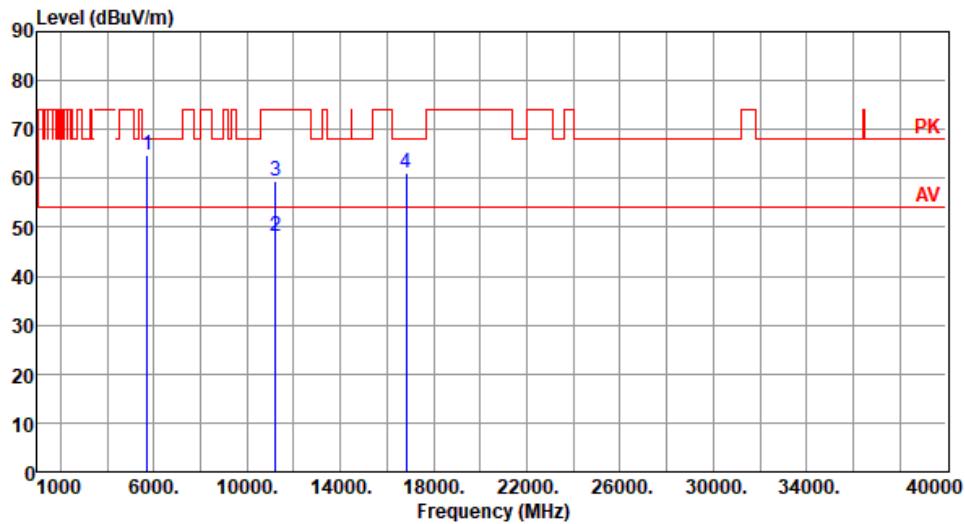
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	52.55	54.00	-1.45	45.30	7.25	Average	189	98
2	5460.00	66.90	74.00	-7.10	59.65	7.25	Peak	189	98
3	5470.00	67.06	68.20	-1.14	59.78	7.28	Peak	189	98
4	11060.00	47.00	54.00	-7.00	30.25	16.75	Average	100	52
5	11060.00	58.03	74.00	-15.97	41.28	16.75	Peak	100	52
6	16590.00	59.84	68.20	-8.36	41.63	18.21	Peak	100	53

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

*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)	5610
Polarization	Horizontal	Test Configuration	1



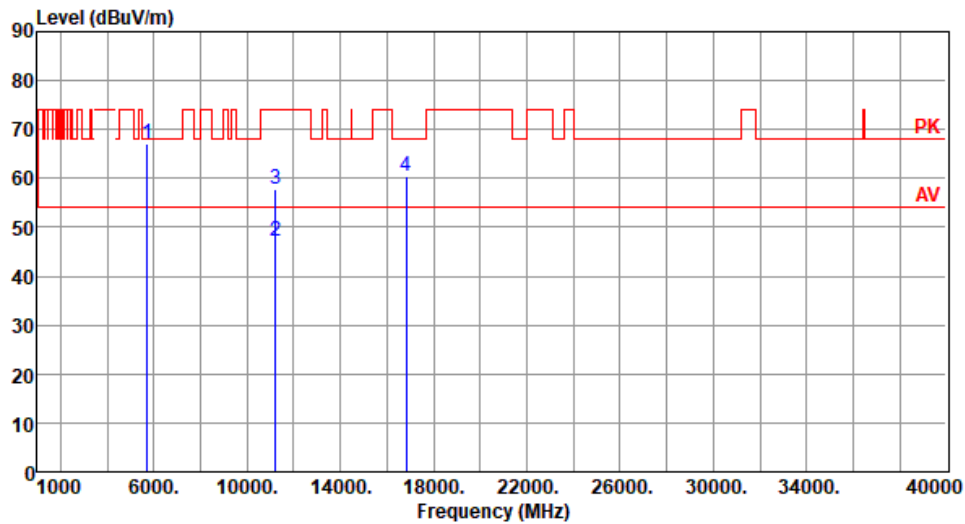
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.90	68.20	-3.30	57.24	7.66	Peak	221	21
2	11220.00	48.08	54.00	-5.92	31.56	16.52	Average	100	109
3	11220.00	59.52	74.00	-14.48	43.00	16.52	Peak	100	109
4	16830.00	61.22	68.20	-6.98	42.88	18.34	Peak	100	105

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

*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)	5610
Polarization	Vertical	Test Configuration	1



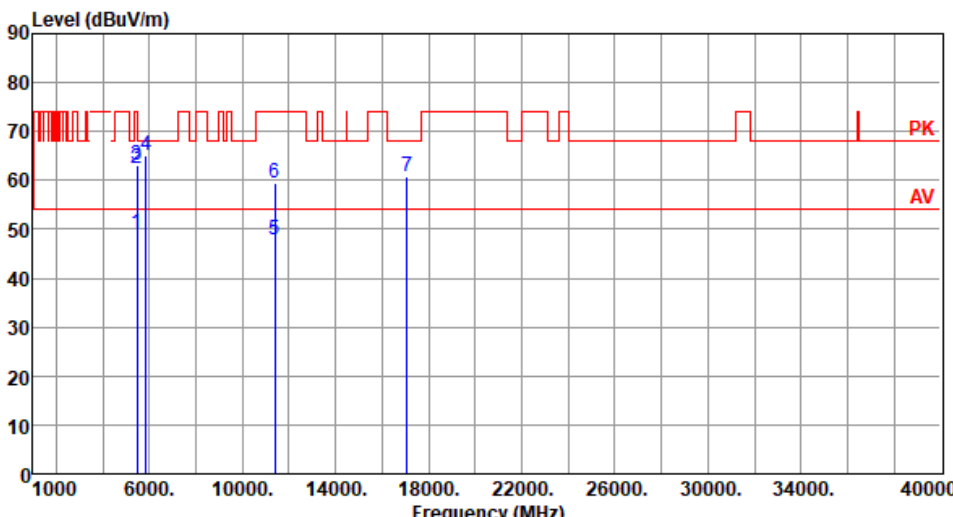
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	66.94	68.20	-1.26	59.28	7.66	Peak	200	118
2	11220.00	47.18	54.00	-6.82	30.66	16.52	Average	100	53
3	11220.00	57.85	74.00	-16.15	41.33	16.52	Peak	100	53
4	16830.00	60.34	68.20	-7.86	42.00	18.34	Peak	100	54

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

*Factor includes antenna factor , cable loss and amplifier gain

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

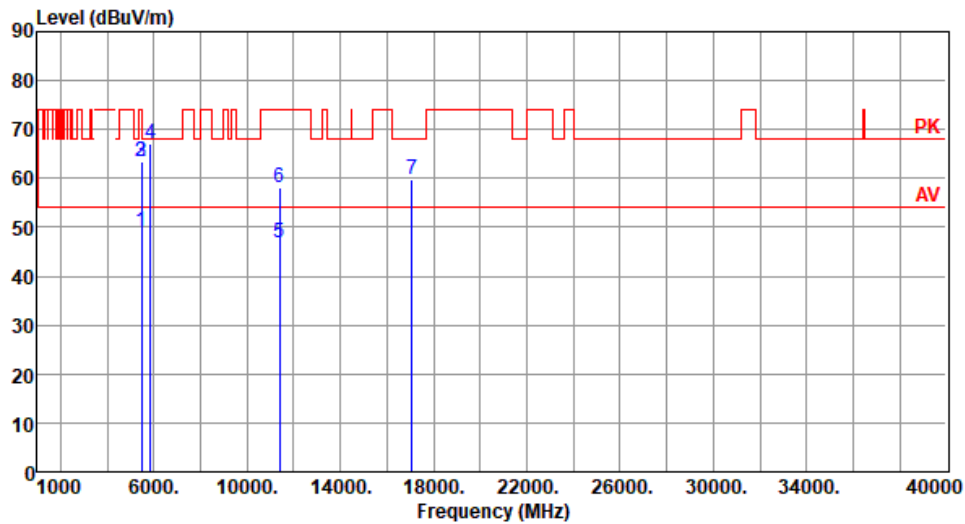
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.13	54.00	-4.87	41.88	7.25	Average	202	26
2	5460.00	62.27	74.00	-11.73	55.02	7.25	Peak	202	26
3	5470.00	62.94	68.20	-5.26	55.66	7.28	Peak	202	26
4	5850.00	65.25	68.20	-2.95	57.23	8.02	Peak	206	26
5	11380.00	47.93	54.00	-6.07	31.25	16.68	Average	100	105
6	11380.00	59.30	74.00	-14.70	42.62	16.68	Peak	100	105
7	17070.00	60.93	68.20	-7.27	42.55	18.38	Peak	100	102

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*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)	5690
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.26	54.00	-4.74	42.01	7.25	Average	200	106
2	5460.00	63.29	74.00	-10.71	56.04	7.25	Peak	200	106
3	5470.00	63.49	68.20	-4.71	56.21	7.28	Peak	200	106
4	5850.00	67.06	68.20	-1.14	59.04	8.02	Peak	200	96
5	11380.00	46.92	54.00	-7.08	30.24	16.68	Average	100	52
6	11380.00	57.97	74.00	-16.03	41.29	16.68	Peak	100	52
7	17070.00	59.68	68.20	-8.52	41.30	18.38	Peak	100	55

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

*Factor includes antenna factor , cable loss and amplifier gain

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

3.6 Frequency Stability

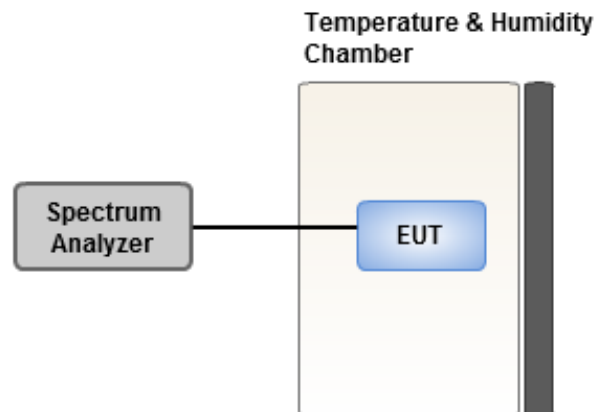
3.6.1 Limit of Frequency Stability

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.

3.6.2 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.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5500 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-1.62	-1.08	-1.45	-1.29
T20°CVmin	-1.78	-1.77	-1.07	-1.23
T50°CVnom	-15.66	-15.88	-15.38	-15.47
T40°CVnom	-11.91	-11.97	-11.53	-12.13
T30°CVnom	-6.53	-7.03	-6.22	-5.99
T20°CVnom	-2.47	-2.61	-2.18	-2.57
T10°CVnom	1.34	1.70	1.57	1.90
T0°CVnom	2.57	3.22	2.61	2.75
T-10°CVnom	3.32	3.84	3.14	3.46
T-20°CVnom	4.80	4.88	5.25	5.05
T-30°CVnom	6.27	6.52	6.09	6.16
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		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 Corp (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

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Taiwan, R.O.C.

Kwei Shan

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Kwei Shan Site II

Tel: 886-3-271-8640

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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: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==