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FCC RADIO TEST REPORT

Applicant's company	**Ubiquiti Networks, Inc.**
Applicant Address	685 Third Avenue, 27th Floor New York, New York 10017 USA
FCC ID	**SWX-M445GH**
Manufacturer's company	**Ubiquiti Networks, Inc.**
Manufacturer Address	685 Third Avenue, 27th Floor New York, New York 10017 USA

Product Name	WiFi 5G Module
Brand Name	UBIQUITI
Model No.	4x4-5GH
Test Rule Part(s)	47 CFR FCC Part 15 Subpart E § 15.407
Test Freq. Range	5470 ~ 5725MHz / 5725 ~ 5850 MHz
Received Date	Jun. 21, 2016
Final Test Date	Sep. 15, 2017
Submission Type	Class II Change

Statement

Test result included is for the IEEE 802.11n and IEEE 802.11a/ac of the product.

The test result in this report refers exclusively to the presented test model / sample.

Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.

The measurements and test results shown in this test report were made in accordance with the procedures and found in compliance with the limit given in **ANSI C63.10-2013**, **47 CFR FCC Part 15 Subpart E, KDB789033 D02 v01r04, KDB662911 D01 v02r01, KDB644545 D03 v01, ET Docket No. 13–49; FCC 16–24.**

The test equipment used to perform the test is calibrated and traceable to NML/ROC.

Testing Laboratory
1190

Table of Contents

History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR661623-16	Rev. 01	Initial issue of report	Oct. 26, 2017

1. VERIFICATION OF COMPLIANCE

Product Name	:	WiFi 5G Module
Brand Name	:	UBIQUITI
Model No.	:	4x4-5GH
Applicant	:	Ubiquiti Networks, inc.
Test Rule Part(s)	:	47 CFR FCC Part 15 Subpart E § 15.407

Sporton International as requested by the applicant to evaluate the EMC performance of the product sample received on Jun. 21, 2016 would like to declare that the tested sample has been evaluated and found to be in compliance with the tested rule parts. The data recorded as well as the test configuration specified is true and accurate for showing the sample's EMC nature.

Cliff Chang
SPORTON INTERNATIONAL INC.

2. SUMMARY OF THE TEST RESULT

Applied Standard: 47 CFR FCC Part 15 Subpart E			
Part	**Rule Section**	**Description of Test**	**Result**
4.1	15.407(a)	26dB Spectrum Bandwidth and 99% Occupied Bandwidth	Complies
4.2	15.407(e)	6dB Spectrum Bandwidth	Complies
4.3	15.407(a)	Maximum Conducted Output Power	Complies
4.4	15.407(a)	Power Spectral Density	Complies
4.5	15.407(b)	Unwanted Emissions	Complies
4.6	15.203	Antenna Requirements	Complies

3. GENERAL INFORMATION

3.1. Product Details

Items	Description
Product Type	WLAN (4TX, 4RX)
Radio Type	Intentional Transceiver
Power Type	From host system
Modulation	IEEE 802.11a: OFDM IEEE 802.11n/ac: see the below table
Data Modulation	IEEE 802.11a/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) IEEE 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)
Data Rate (Mbps)	IEEE 802.11a: OFDM (6/9/12/18/24/36/48/54) IEEE 802.11n/ac: see the below table
Frequency Range	5470 ~ 5725MHz / 5725 ~ 5850 MHz
Channel Number	17 for 20MHz bandwidth ; 8 for 40MHz bandwidth 4 for 80MHz bandwidth
Channel Bandwidth (99%)	U-NII-2C: IEEE 802.11a: 16.50 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 17.54 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 35.89 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 75.83 MHz IEEE 802.11ac MCS0/Nss2 (VHT80+80): 155.86 MHz U-NII-3: IEEE 802.11a: 16.06 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 17.28 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 35.89 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 75.83 MHz IEEE 802.11ac MCS0/Nss2 (VHT80+80): 76.70 MHz
Maximum Conducted Output Power	U-NII-2C: IEEE 802.11a: 16.04 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 16.24 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 19.11 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 21.72 dBm IEEE 802.11ac MCS0/Nss2 (VHT80+80): 21.62 dBm U-NII-3: IEEE 802.11a: 27.96 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 27.84 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 27.86 dBm

	IEEE 802.11ac MCS0/Nss1 (VHT80): 23.72 dBm IEEE 802.11ac MCS0/Nss2 (VHT80+80): 19.53 dBm
Carrier Frequencies	Please refer to section 3.4
Antenna	Please refer to section 3.3

Items	Description			
Communication Mode	☒	IP Based (Load Based)	☐	Frame Based
TPC Function	☒	With TPC	☐	Without TPC
Weather Band (5600~5650MHz)	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
Beamforming Function	☐	With beamforming	☒	Without beamforming

Antenna and Bandwidth

Antenna	Four (TX)		
Bandwidth Mode	20 MHz	40 MHz	80 MHz
IEEE 802.11a	V	X	X
IEEE 802.11n	V	V	X
IEEE 802.11ac	V	V	V

IEEE 11n/ac Spec.

Protocol	Number of Transmit Chains (NTX)	Data Rate / MCS
802.11n (HT20)	4	MCS 0-31
802.11n (HT40)	4	MCS 0-31
802.11ac (VHT20)	4	MCS 0-9/Nss1-4
802.11ac (VHT40)	4	MCS 0-9/Nss1-4
802.11ac (VHT80)	4	MCS 0-9/Nss1-4

Note 1: IEEE Std. 802.11n modulation consists of HT20 and HT40 (HT: High Throughput). Then EUT supports HT20 and HT40.

Note 2: IEEE Std. 802.11ac modulation consists of VHT20, VHT40, VHT80 and VHT160 (VHT: Very High Throughput). Then EUT supports VHT20, VHT40 and VHT80.

Note 3: Modulation modes consist of below configuration:
HT20/HT40: IEEE 802.11n, VHT20/VHT40/VHT80: IEEE 802.11ac

3.2. Accessories

N/A

3.3. Table for Filed Antenna

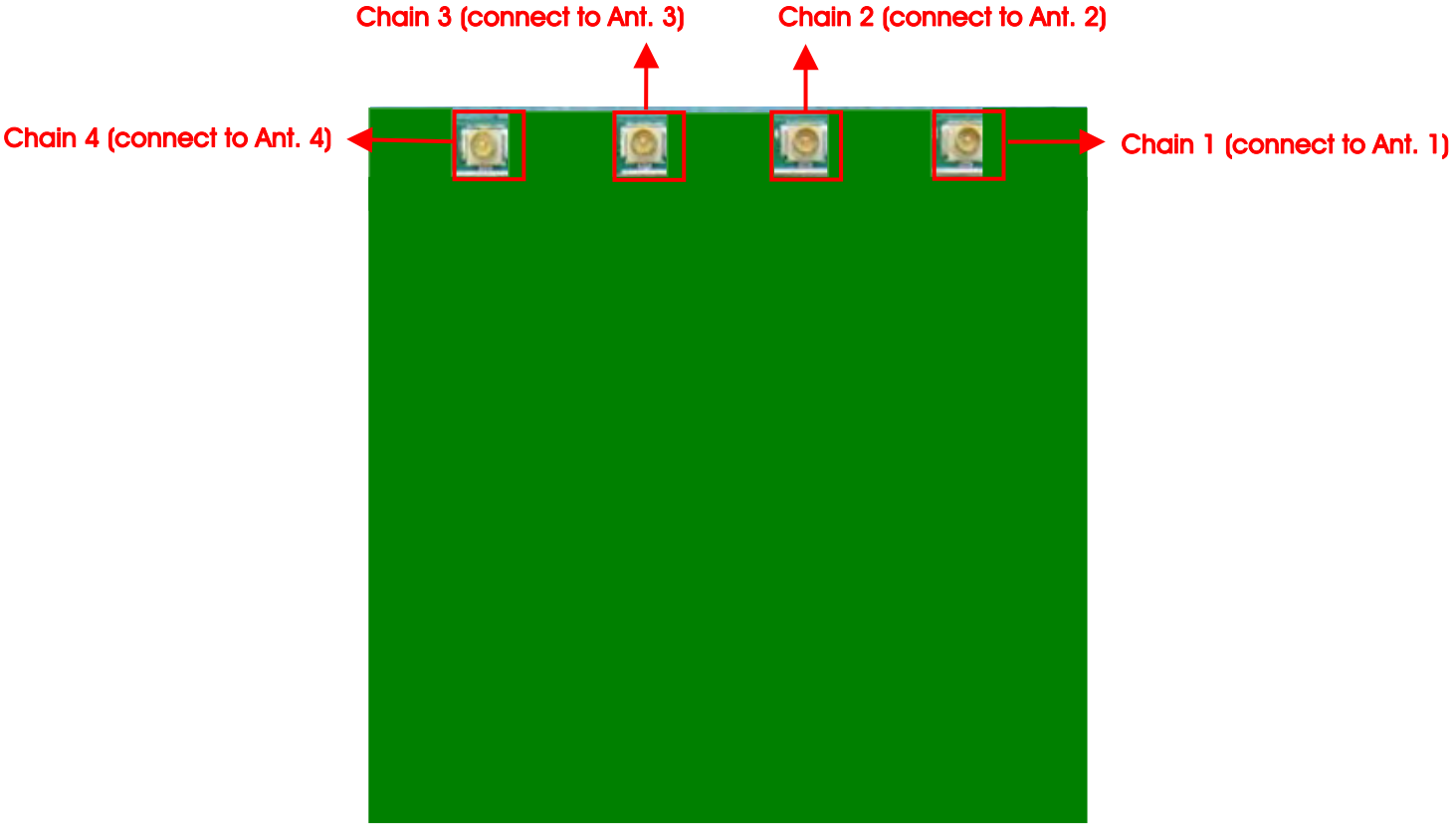
Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	-	-	PIFA Antenna	N/A	8
2	-	-	PIFA Antenna	N/A	8
3	-	-	PIFA Antenna	N/A	8
4	-	-	PIFA Antenna	N/A	8

Note: Ant. 1~Ant. 4 Connect to chain 1~chain 4.

For IEEE 802.11a/n/ac mode (4TX/4RX):

Chain 1, Chain 2, Chain 3 and Chain 4 can be used as transmitting/receiving antenna.

Chain 1, Chain 2, Chain 3 and Chain 4 could transmit/receive simultaneously.



3.4. Table for Carrier Frequencies

There are three bandwidth systems.

For 20MHz bandwidth systems, use Channel 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165.

For 40MHz bandwidth systems, use Channel 102, 110, 118, 126, 134, 142, 151, 159.

For 80MHz bandwidth systems, use Channel 106, 122, 138, 155.

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5470~5725 MHz U-NII-2C	100	5500 MHz	124	5620 MHz
	102	5510 MHz	126	5630 MHz
	104	5520 MHz	128	5640 MHz
	106	5530 MHz	132	5660 MHz
	108	5540 MHz	134	5670 MHz
	110	5550 MHz	136	5680 MHz
	112	5560 MHz	138	5690 MHz
	116	5580 MHz	140	5700 MHz
	118	5590 MHz	142	5710 MHz
	120	5600 MHz	144	5720 MHz
	122	5610 MHz	-	-
5725~5850 MHz U-NII-3	149	5745 MHz	157	5785 MHz
	151	5755 MHz	159	5795 MHz
	153	5765 MHz	161	5805 MHz
	155	5775 MHz	165	5825 MHz

3.5. Table for 80+80 MHz Mode

Type	Channel No.	Frequency
1	106+138	5530+5690 MHz
2	106+155	5530+5775 MHz
3	122+155	5610+5775 MHz
4	138+155	5690+5775 MHz
5	106+122	5530+5610 MHz
6	122+138	5610+5690 MHz

3.6. Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode		Data Rate	Channel	Chain
Max. Conducted Output Power	11a/BPSK	U-NII-2C U-NII-3	6Mbps	100/116/140/144 /149/157/165	1+2+3+4
	11ac VHT20	U-NII-2C U-NII-3	MCS0/Nss1	100/116/140/144 /149/157/165	1+2+3+4
	11ac VHT40	U-NII-2C U-NII-3	MCS0/Nss1	102/110/134/142 /151/159	1+2+3+4
	11ac VHT80	U-NII-2C U-NII-3	MCS0/Nss1	106/122/138/155	1+2+3+4
Power Spectral Density	11a/BPSK	U-NII-2C U-NII-3	6Mbps	100/116/140/144 /149/157/165	1+2+3+4
	11ac VHT20	U-NII-2C U-NII-3	MCS0/Nss1	100/116/140/144 /149/157/165	1+2+3+4
	11ac VHT40	U-NII-2C U-NII-3	MCS0/Nss1	102/110/134/142 /151/159	1+2+3+4
	11ac VHT80	U-NII-2C U-NII-3	MCS0/Nss1	106/122/138/155	1+2+3+4
26dB Spectrum Bandwidth & 99% Occupied Bandwidth Measurement	11a/BPSK	U-NII-2C U-NII-3	6Mbps	100/116/140/144 /149/157/165	1+2+3+4
	11ac VHT20	U-NII-2C U-NII-3	MCS0/Nss1	100/116/140/144 /149/157/165	1+2+3+4
	11ac VHT40	U-NII-2C U-NII-3	MCS0/Nss1	102/110/134/142 /151/159	1+2+3+4
	11ac VHT80	U-NII-2C U-NII-3	MCS0/Nss1	106/122/138/155	1+2+3+4
6dB Spectrum Bandwidth Measurement	11a/BPSK	U-NII-3	6Mbps	144/149/157/165	1+2+3+4
	11ac VHT20	U-NII-3	MCS0/Nss1	144/149/157/165	1+2+3+4
	11ac VHT40	U-NII-3	MCS0/Nss1	142/151/159	1+2+3+4
	11ac VHT80	U-NII-3	MCS0/Nss1	138/155	1+2+3+4

Unwanted Emissions	11a/BPSK	U-NII-2C U-NII-3	6Mbps	100/116/140/144 /149/157/165	1+2+3+4
	11ac VHT20	U-NII-2C U-NII-3	MCS0/Nss1	100/116/140/144 /149/157/165	1+2+3+4
	11ac VHT40	U-NII-2C U-NII-3	MCS0/Nss1	102/110/134/142 /151/159	1+2+3+4
	11ac VHT80	U-NII-2C U-NII-3	MCS0/Nss1	106/122/138/155	1+2+3+4

Note 1: VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

802.11ac MCS0/Nss2 VHT80+80

Test Items	Mode		Data Rate	Type	Channel	Chain
Max. Conducted Output Power Power Spectral Density 26dB Spectrum Bandwidth & 99% Occupied Bandwidth Measurement Unwanted Emissions	11ac VHT80+80	U-NII-2C U-NII-3	MCS0/Nss2	1	106	1+2
					138	3+4
				2	106	1+2
					155	3+4
				3	122	1+2
					155	3+4
				4	138	1+2
					155	3+4
				5	106	1+2
					122	3+4
				6	122	1+2
					138	3+4
6dB Spectrum Bandwidth Measurement	11ac VHT80+80	U-NII-3	MCS0/Nss2	1	106	-
					138	3+4
				2	106	-
					155	3+4
				3	122	-
					155	3+4
				4	138	1+2
					155	3+4
				6	122	1+2
					138	3+4

Note 2: PoE information as below, and the PoE was for measurement only, would not be marketed.

Power	Brand	Model
PoE	UBIQUITI	GP-D480-050G

3.7. Table for Testing Locations Information

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Brian Su	22°C / 54%	Sep. 15, 2017
Radiated	03CH01-CB	Zero Chen	22°C / 54%	Oct. 19, 2017 ~ Oct. 20, 2017

Test Site Location					
Address:	No.8, Lane 724, Bo-ai St., Jhubei City, Hsinchu County 302, Taiwan, R.O.C.				
TEL:	886-3-656-9065				
FAX:	886-3-656-9085				
Test Site No.	**Site Category**	**Location**	**FCC Designation No.**	**IC File No.**	**VCCI Reg. No**
TH01-CB	OVEN Room	Hsin Chu	-	-	-
03CH01-CB	SAC	Hsin Chu	TW0006	IC 4086D	-

Open Area Test Site (OATS); Semi Anechoic Chamber (SAC).

3.8. Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR661623-13

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Removing the beamforming function. 2. Increasing the antenna gain to "8dBi" from "6dBi".	1. 26dB Spectrum Bandwidth and 99% Occupied Bandwidth. 2. Maximum Conducted Output Power. 3. Power Spectral Density. 4. 6dB Spectrum Bandwidth. 5. Unwanted Emissions.

3.9. Table for Supporting Units

Support Unit	Brand	Model	FCC ID
Notebook	DELL	E4300	DoC
PoE	UBIQUITI	GP-D480-050G	DoC
Fixture	UBIQUITI	UAP-AC-HD_REV03	N/A

3.10. Table for Parameters of Test Software Setting

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Test Software Version	QRCT Version3.0.197.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5500 MHz	5580 MHz	5700 MHz	5720 MHz	5745 MHz	5785 MHz	5825 MHz
802.11a	9	9	9	7.5	20.5	20.5	20.5
802.11ac MCS0/Nss1 VHT20	9.5	9.5	9.5	8	20.5	20.5	20.5
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5510 MHz	5550 MHz	5670 MHz	5710 MHz	5755 MHz	5795 MHz	
	12	12	12	11	20	20.5	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5530 MHz	5610 MHz	5690 MHz	5775 MHz			
	8.5	15	14.5	16.5			

802.11ac MCS0/Nss2 VHT80+80

Test Software Version	QRCT Version3.0.197.0			
Mode	NCB: 80MHz+80MHz			
802.11ac MCS0/Nss2 VHT80+80	Type 1	Type 2	Type 3	Type 4
	5530+5690 MHz	5530+5775 MHz	5610+5775 MHz	5690+5775 MHz
	12.5	12.5	14	14.5
	Type 5	Type 6	-	-
	5530+5610 MHz	5610+5690 MHz	-	-
	13	15	-	-

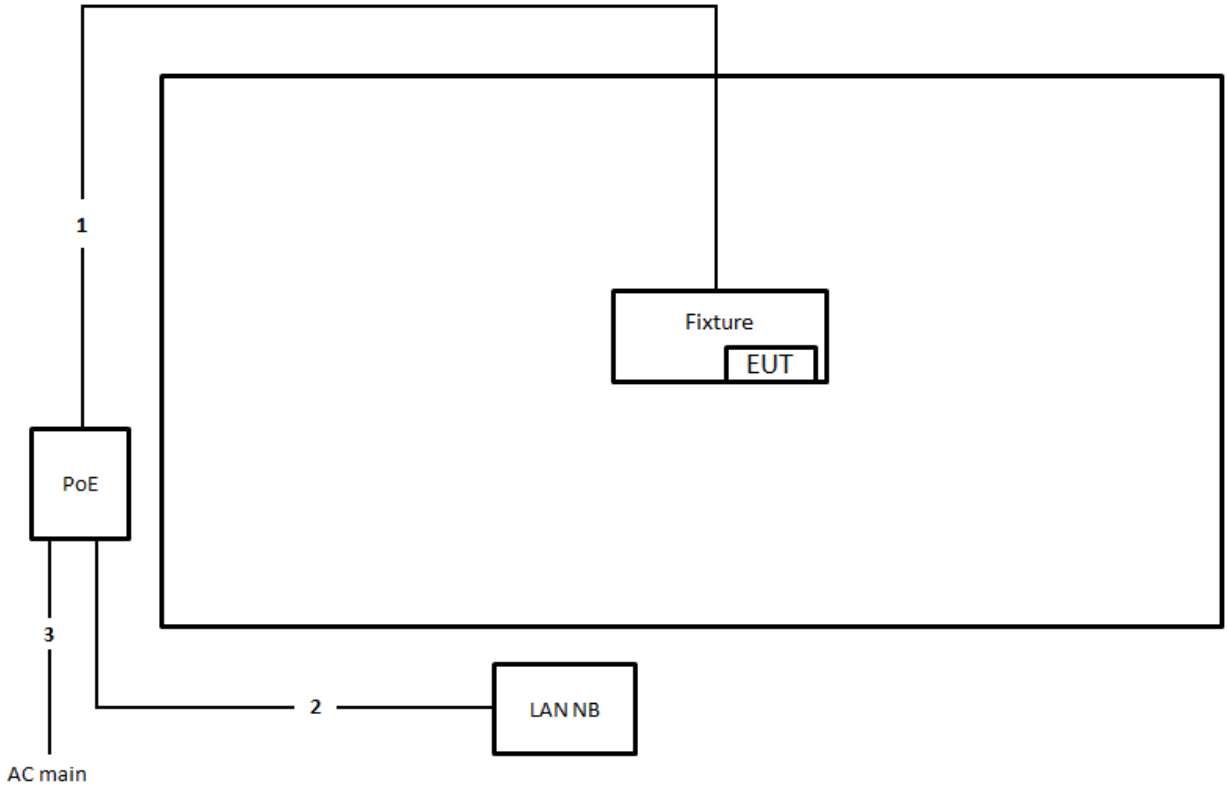
3.11. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.12. Duty Cycle

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Min. VBW (kHz)
802.11a	2.020	2.140	94.39	0.25	0.50
802.11ac MCS0/Nss1 VHT20	5.000	5.100	98.04	0.09	0.01
802.11ac MCS0/Nss1 VHT40	2.320	2.540	91.34	0.39	0.43
802.11ac MCS0/Nss1 VHT80	1.136	1.224	92.81	0.32	0.88
802.11ac MCS0/Nss2 VHT80+80	2.210	2.310	95.67	0.19	0.45

3.13. Test Setup Diagram



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	1.5m
3	Power cable	No	0.6m

4. TEST RESULT

4.1. 26dB Bandwidth and 99% Occupied Bandwidth Measurement

4.1.1. Limit

No restriction limits.

4.1.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

26dB Bandwidth	
Spectrum Parameters	**Setting**
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	Approximately 1% of the emission bandwidth
VBW	VBW > RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth	
Spectrum Parameters	**Setting**
Span	1.5 times to 5.0 times the OBW
RBW	1 % to 5 % of the OBW
VBW	≥ 3 x RBW
Detector	Peak
Trace	Max Hold

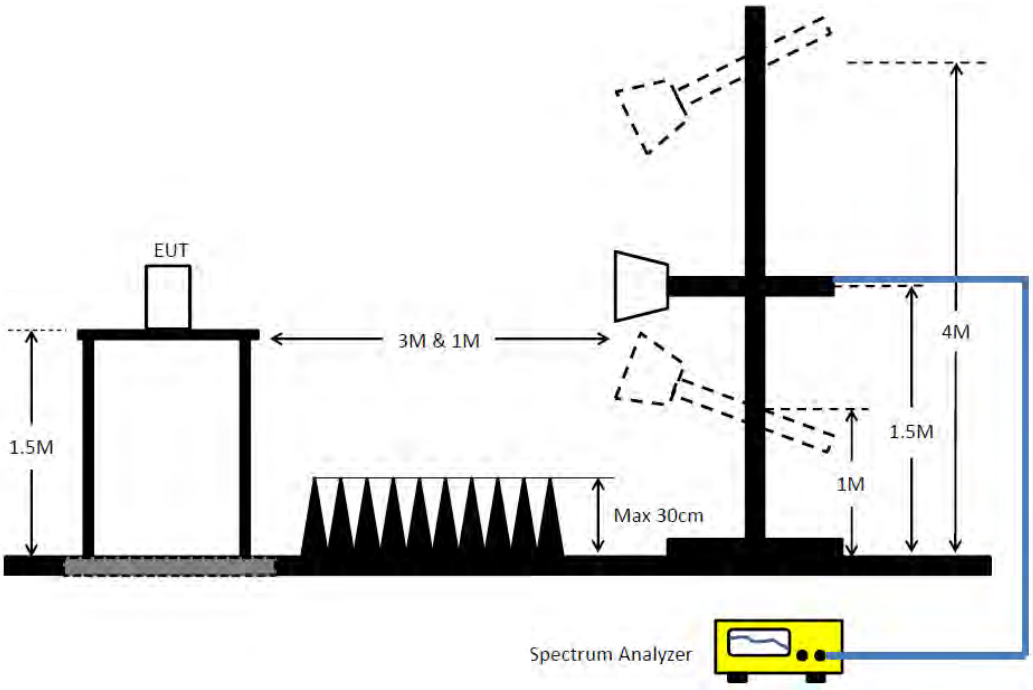
4.1.3. Test Procedures

For Radiated 26dB Bandwidth and 99% Occupied Bandwidth Measurement:

1. The transmitter was radiated to the spectrum analyzer in peak hold mode.
2. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.1.4. Test Setup Layout

For Radiated 26dB Bandwidth and 99% Occupied Bandwidth Measurement:



4.1.5. Test Deviation

There is no deviation with the original standard.

4.1.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.1.7. Test Result of 26dB Bandwidth and 99% Occupied Bandwidth

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5500 MHz	18.70	16.50
	5580 MHz	18.52	16.41
	5700 MHz	18.61	16.41
	5745 MHz	18.26	16.06
	5785 MHz	18.26	16.06
	5825 MHz	18.00	16.06
802.11ac MCS0/Nss1 VHT20	5500 MHz	19.48	17.54
	5580 MHz	19.57	17.54
	5700 MHz	19.48	17.45
	5745 MHz	19.30	17.28
	5785 MHz	19.13	17.11
	5825 MHz	18.96	17.11
802.11ac MCS0/Nss1 VHT40	5510 MHz	39.42	35.60
	5550 MHz	39.57	35.89
	5670 MHz	39.28	34.88
	5755 MHz	39.57	35.60
	5795 MHz	39.42	35.89
802.11ac MCS0/Nss1 VHT80	5530 MHz	83.77	75.83
	5610 MHz	82.61	74.67
	5775 MHz	82.61	75.83

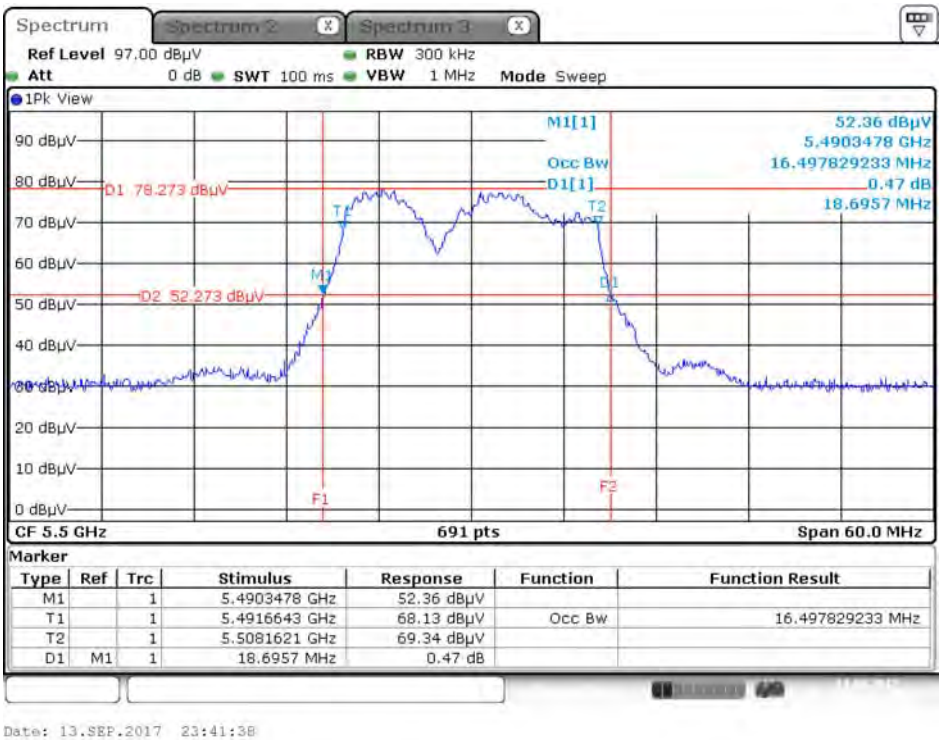
Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	18.61	16.41	5710.35	5711.66	14.65	3.96	13.34	3.08
802.11ac MCS0/Nss1 VHT20	5720 MHz	19.39	17.45	5710.00	5711.14	15.00	4.39	13.86	3.60
802.11ac MCS0/Nss1 VHT40	5710 MHz	39.57	35.02	5690.00	5691.77	35.00	4.57	33.23	1.79
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.61	74.39	5649.13	5652.08	75.87	6.74	72.92	1.47

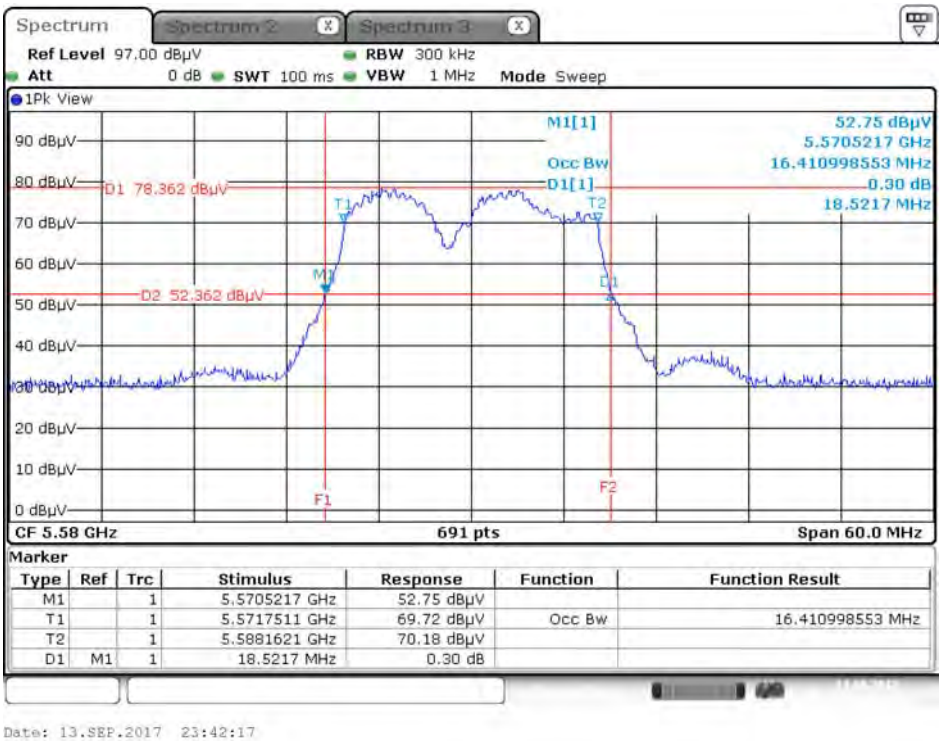
802.11ac MCS0/Nss2 VHT80+80

Type	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)	26dB Total BW (MHz)
1	5530 MHz	85.22	76.99	-						170.72
	5690 MHz	85.51	76.70	5647.10	5651.51	77.90	7.61	73.49	3.21	
2	5530 MHz	85.51	76.99	-						171.01
	5775 MHz	85.51	76.70							
3	5610 MHz	85.51	76.70	-						170.72
	5775 MHz	85.22	76.70							
4	5690 MHz	85.51	76.70	5647.10	5651.80	77.90	7.61	73.20	3.50	159.13
	5775 MHz	85.22	76.41	-						
5	5530 MHz	165.65	155.86	-						-
	5610 MHz									
6	5610 MHz	165.22	155.86	5567.39	5572.29	157.61	7.61	152.71	3.15	-
	5690 MHz									

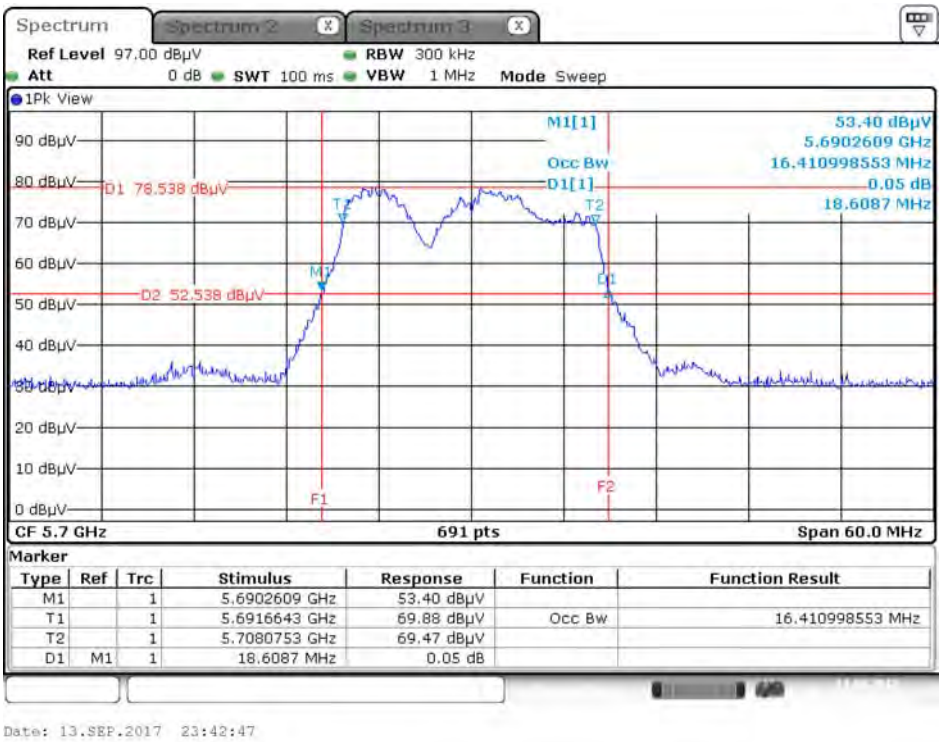
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5500 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5580 MHz

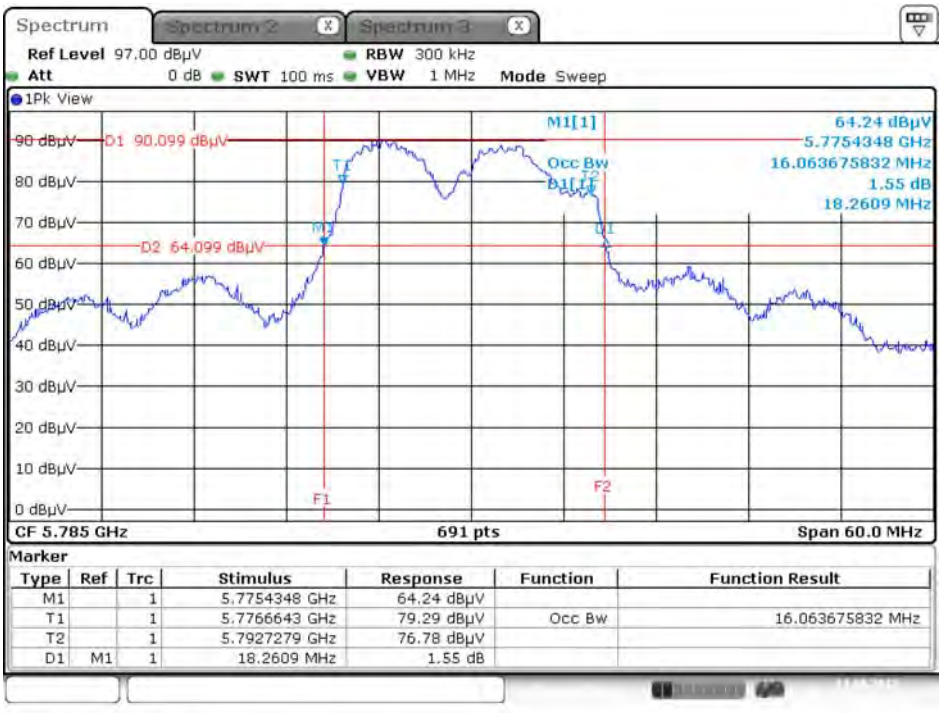


26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5700 MHz

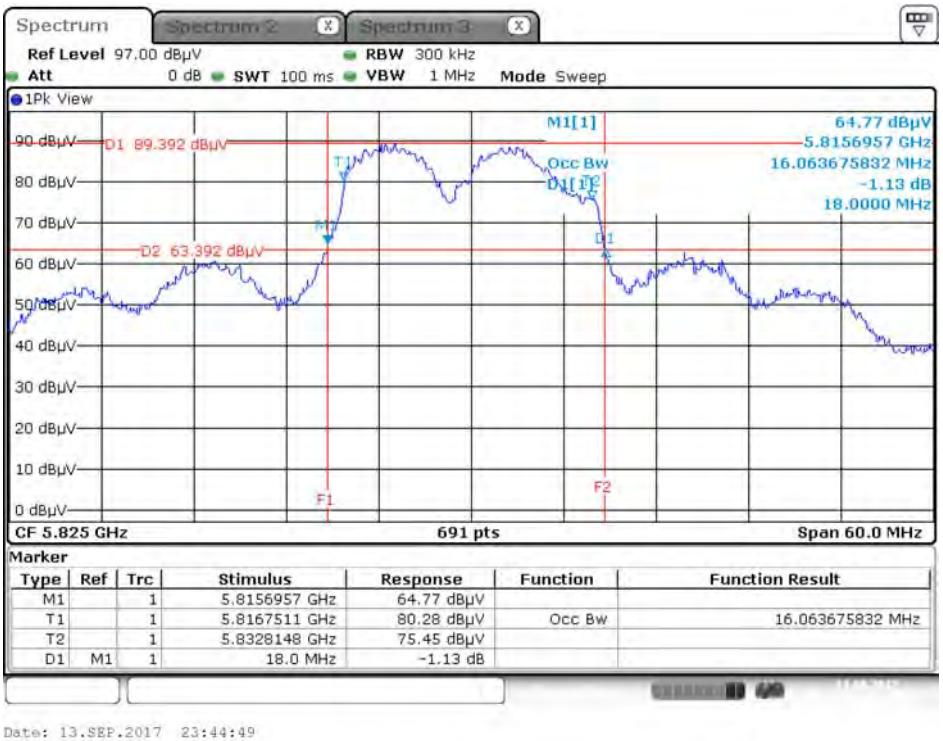


26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5745 MHz

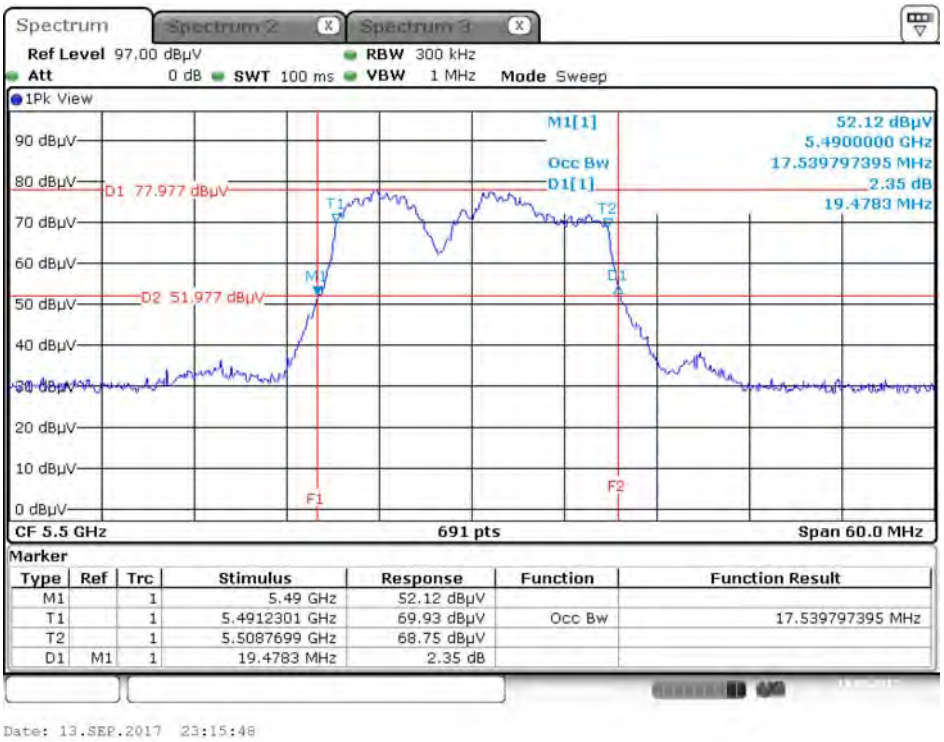
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5785 MHz



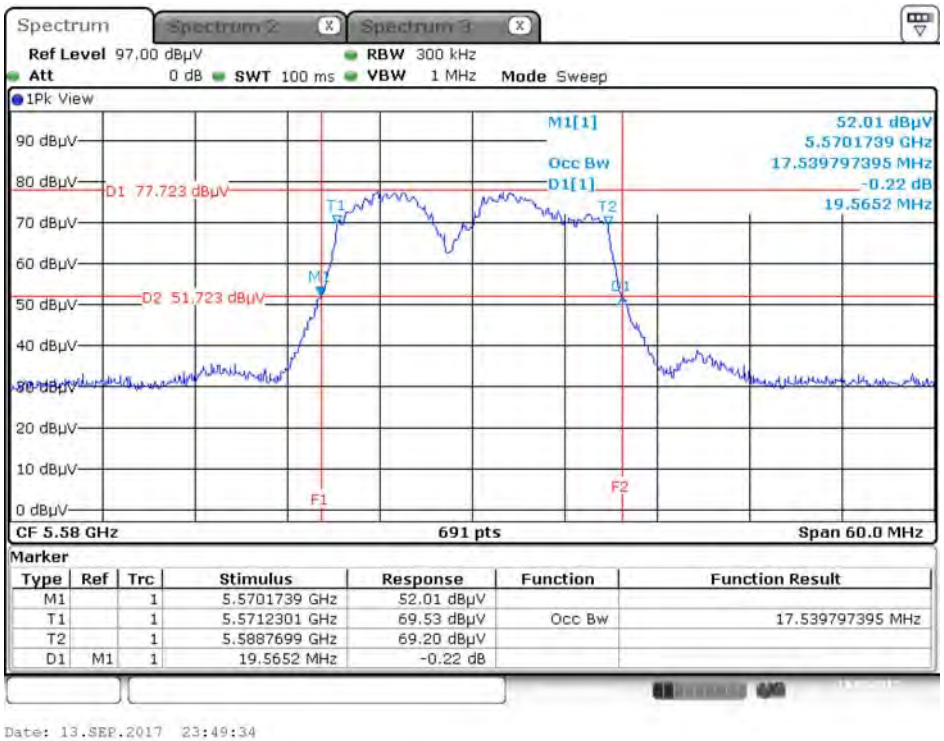
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5825 MHz



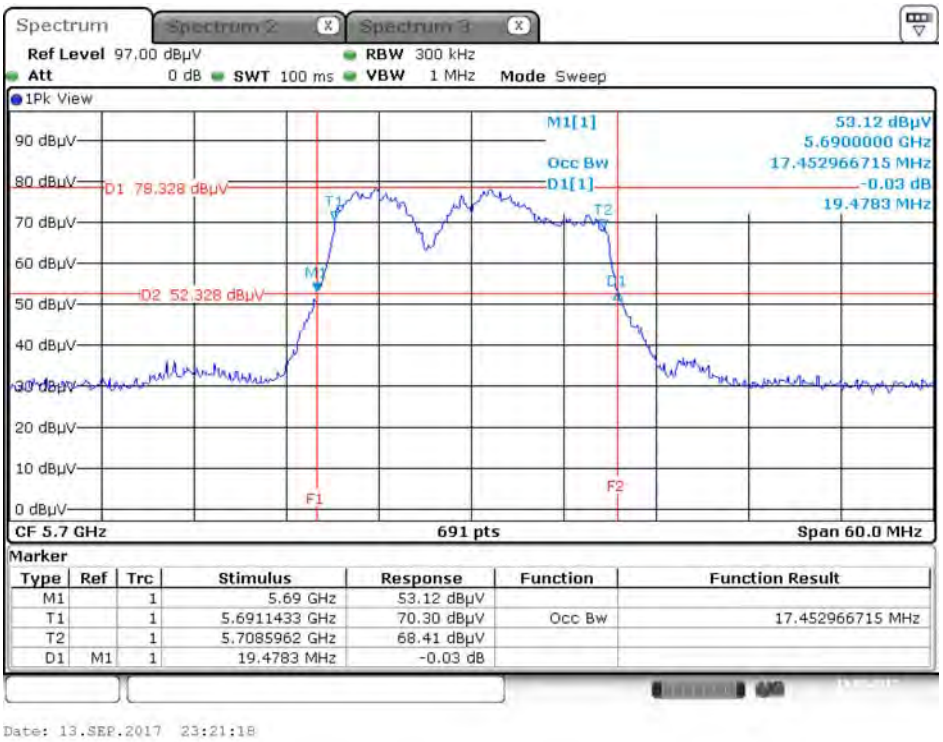
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5500 MHz



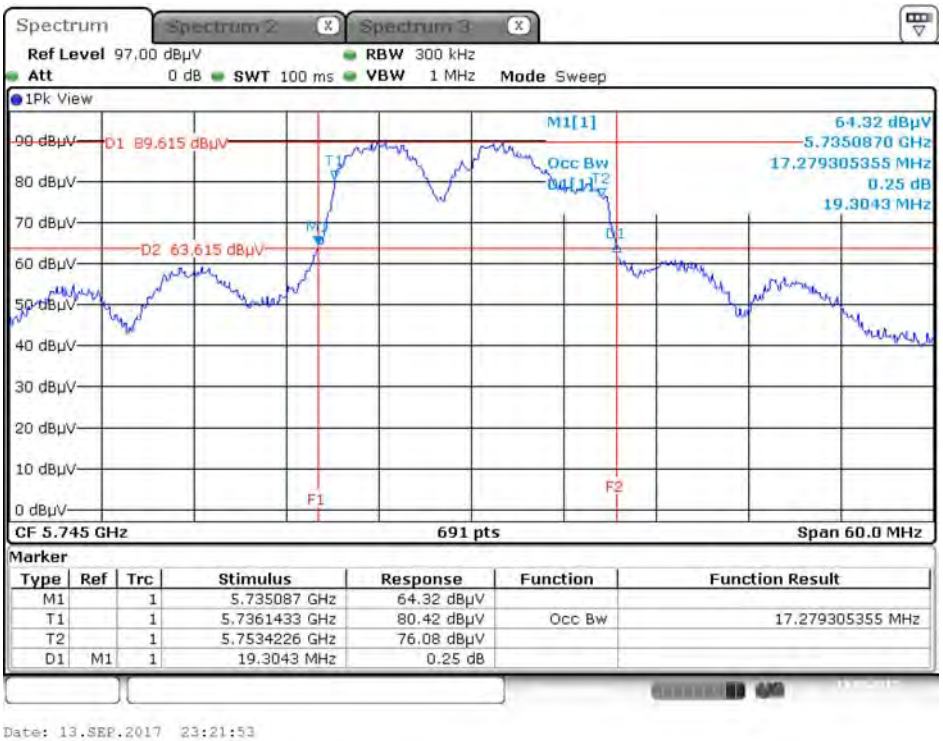
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5580 MHz



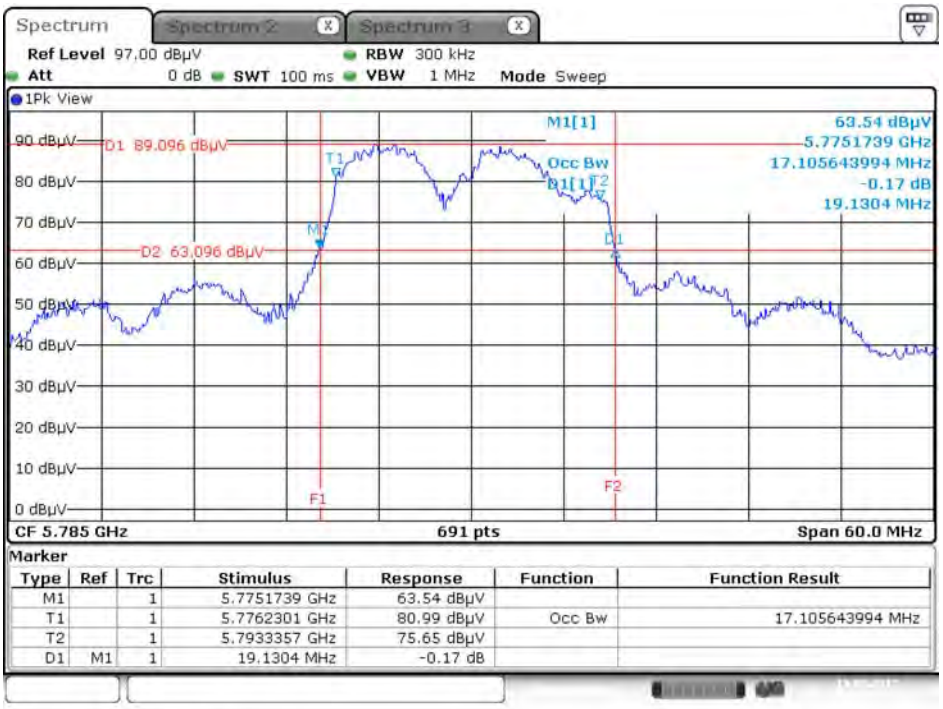
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5700 MHz



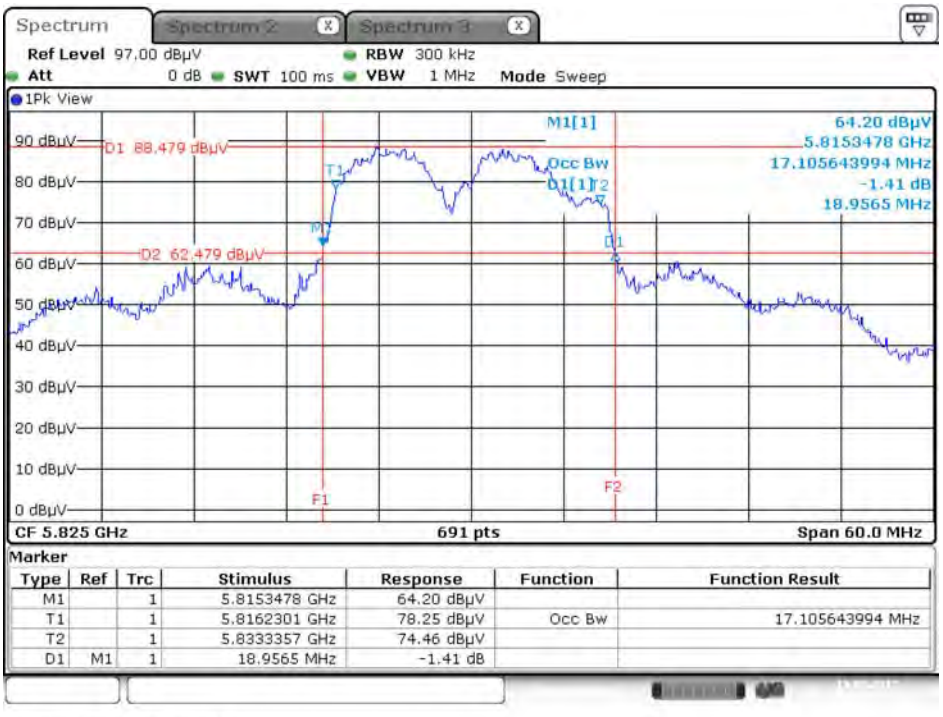
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5745 MHz



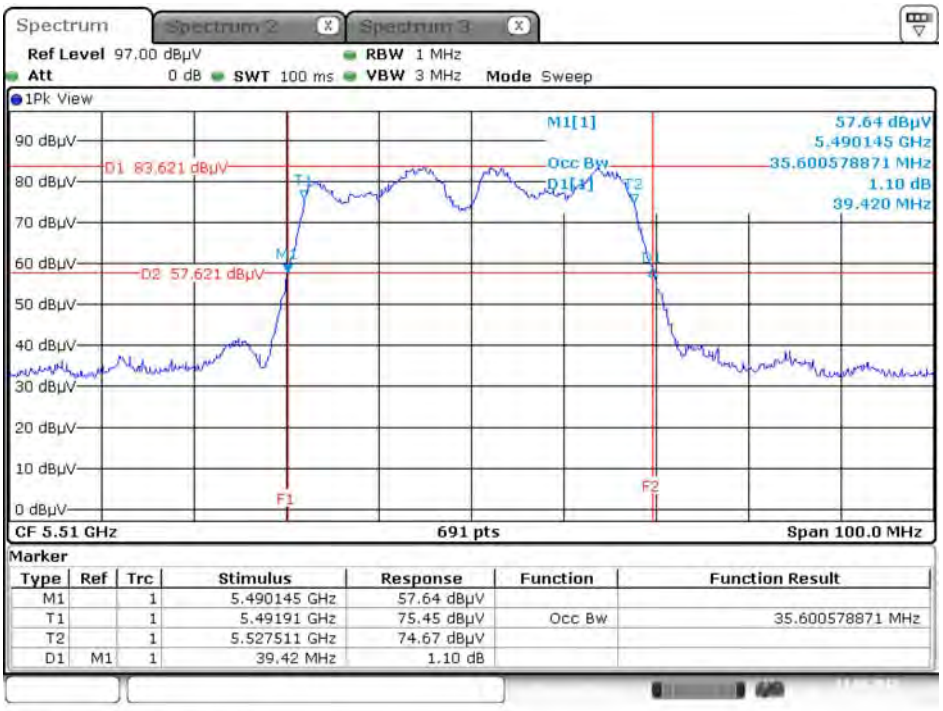
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5785 MHz



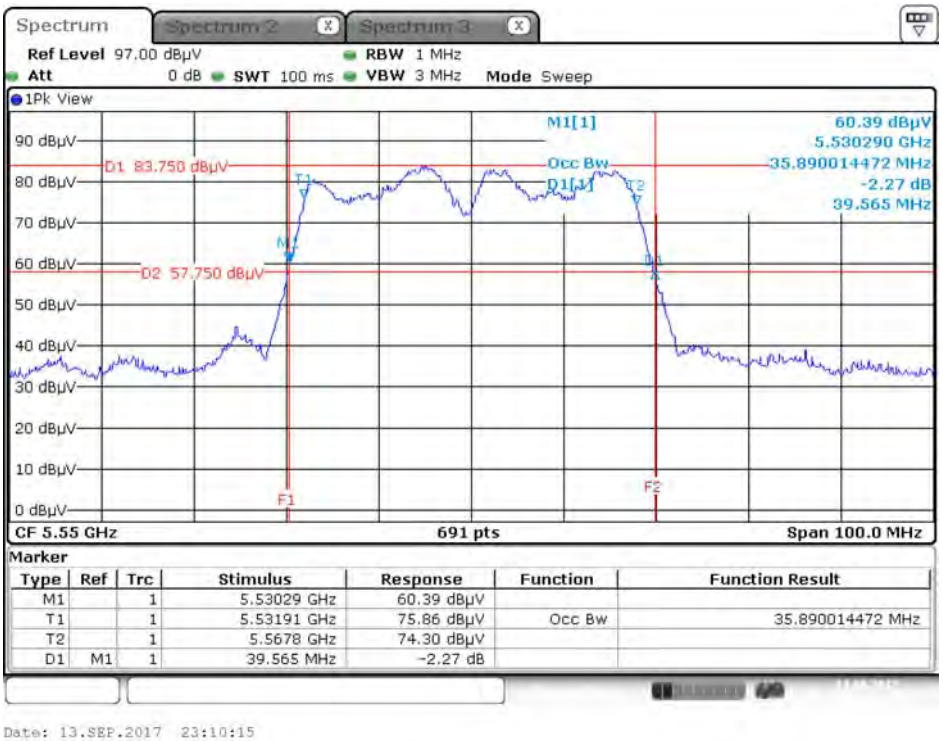
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5825 MHz



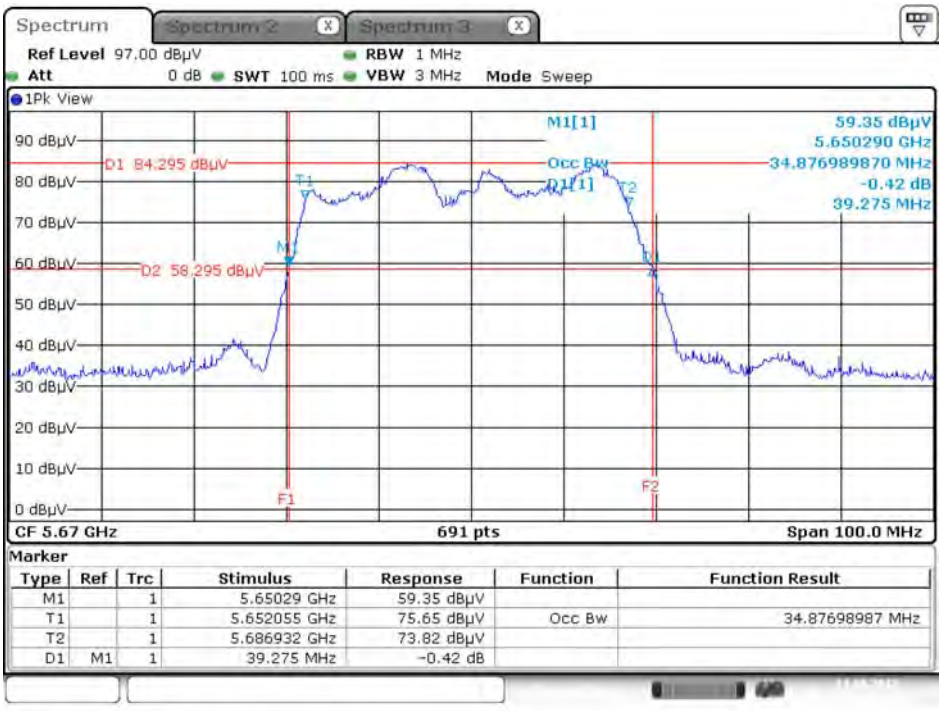
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5510 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5550 MHz

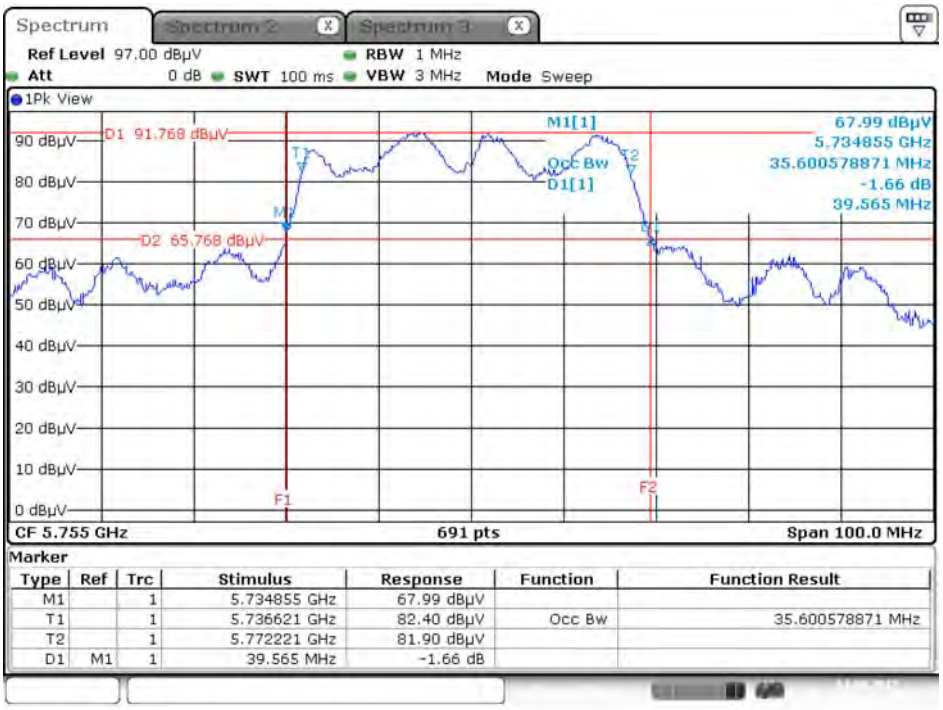


26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5670 MHz



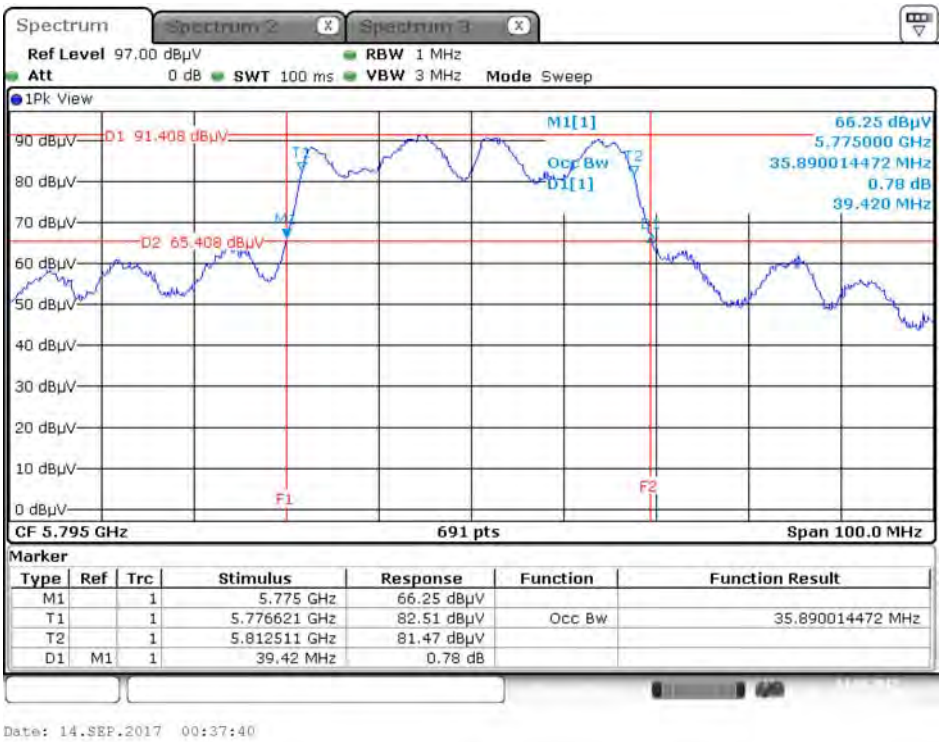
Date: 13.SEP.2017 23:10:47

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5755 MHz

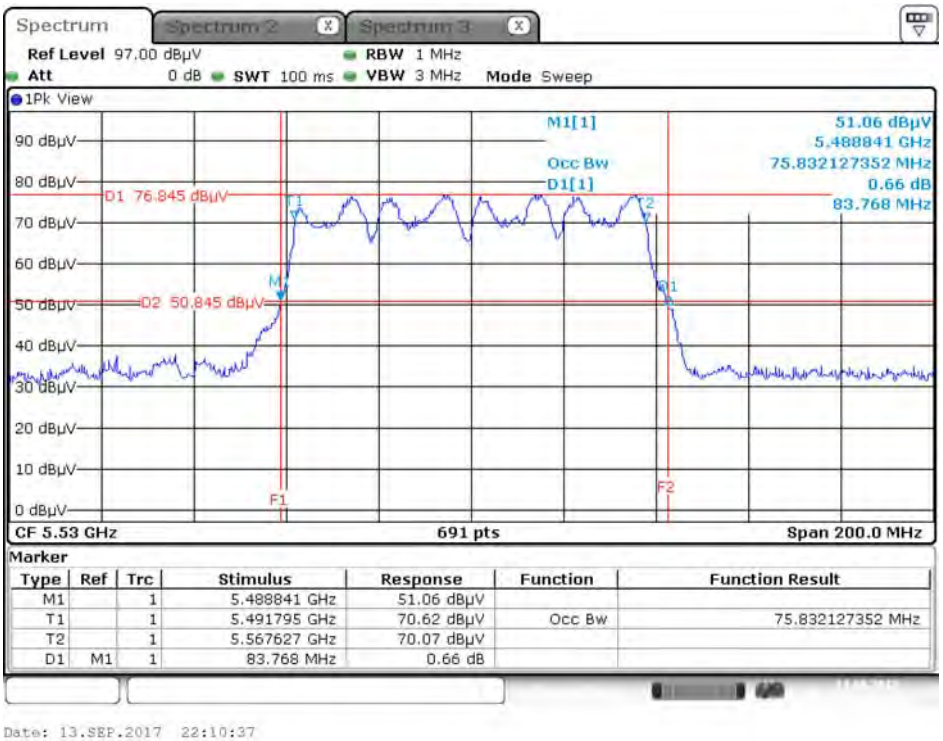


Date: 14.SEP.2017 00:36:18

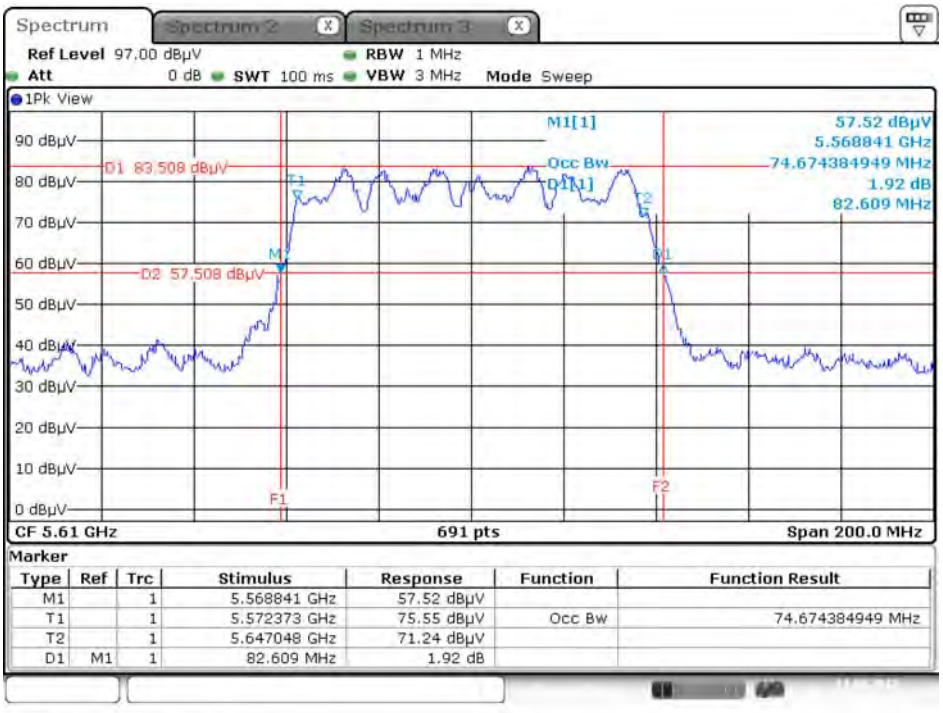
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5795 MHz



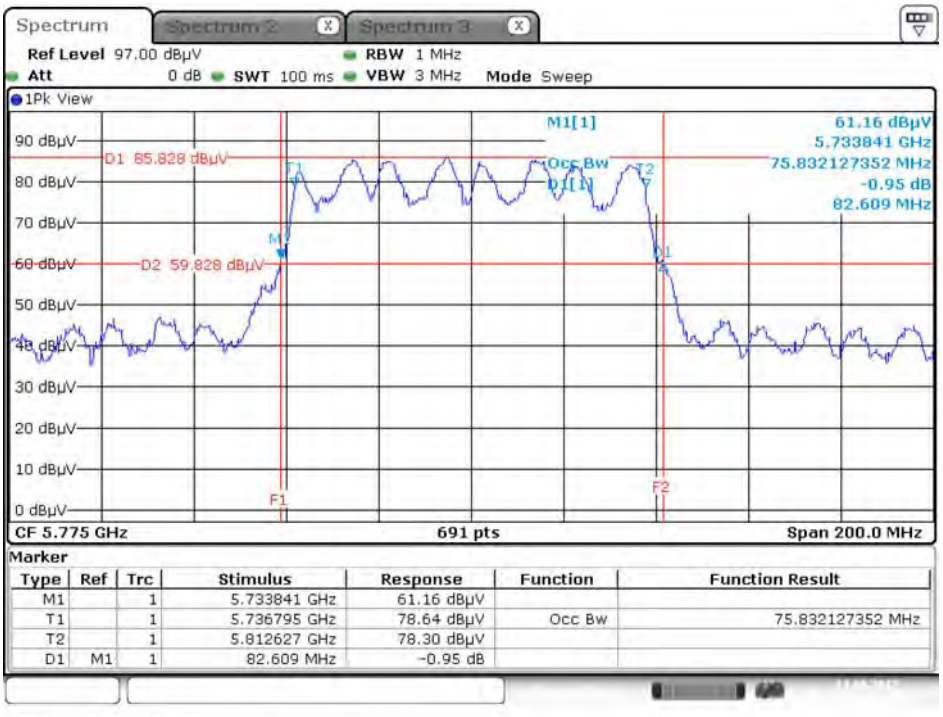
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5530 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5610 MHz

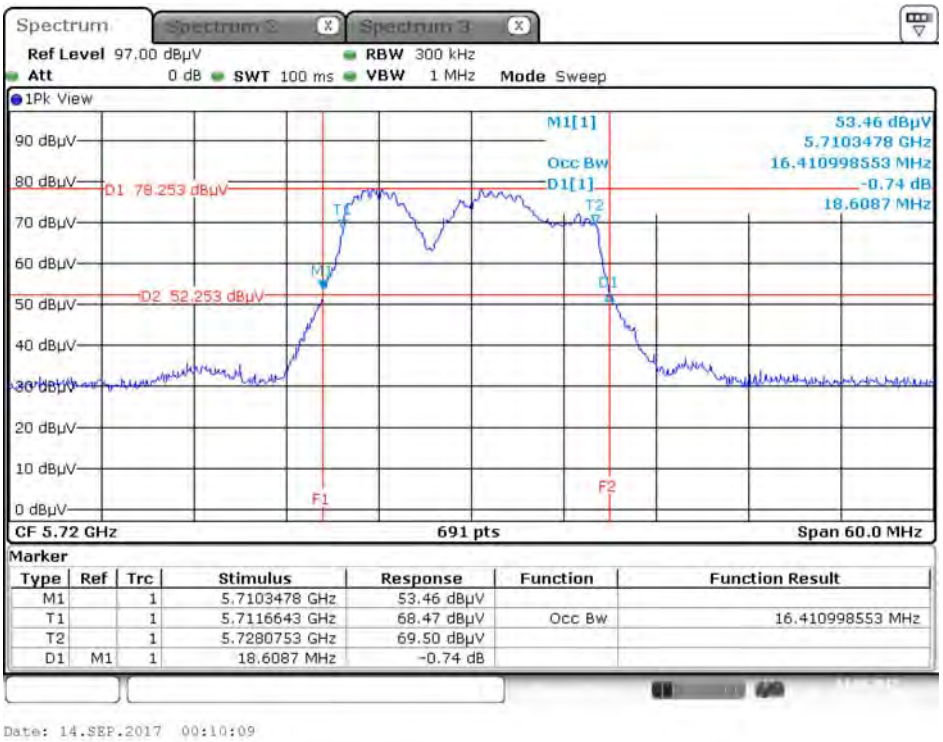


26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5775 MHz



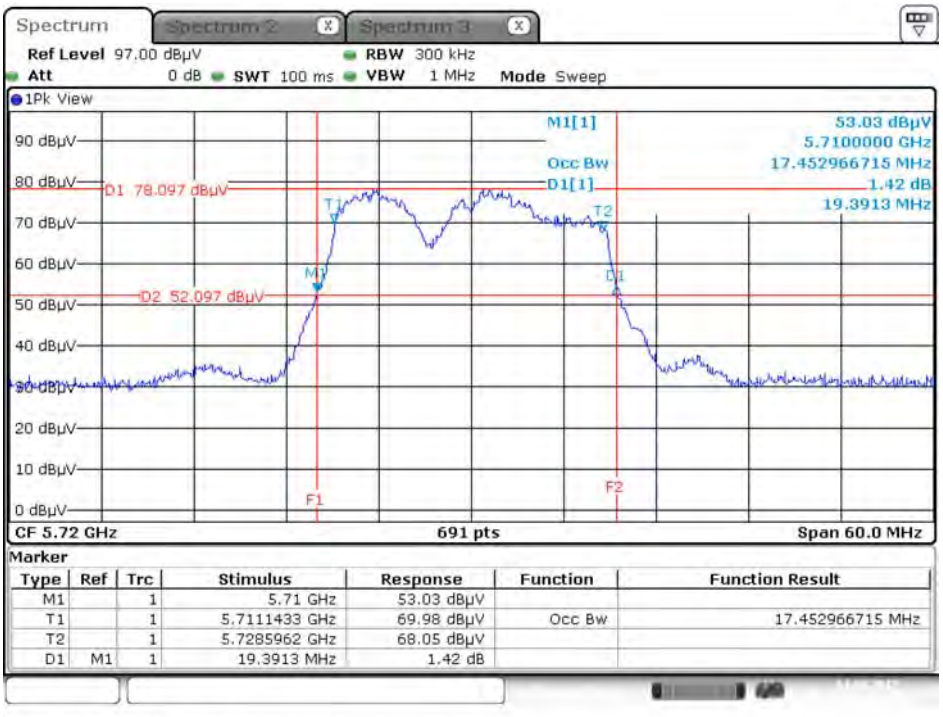
Straddle Channel

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz



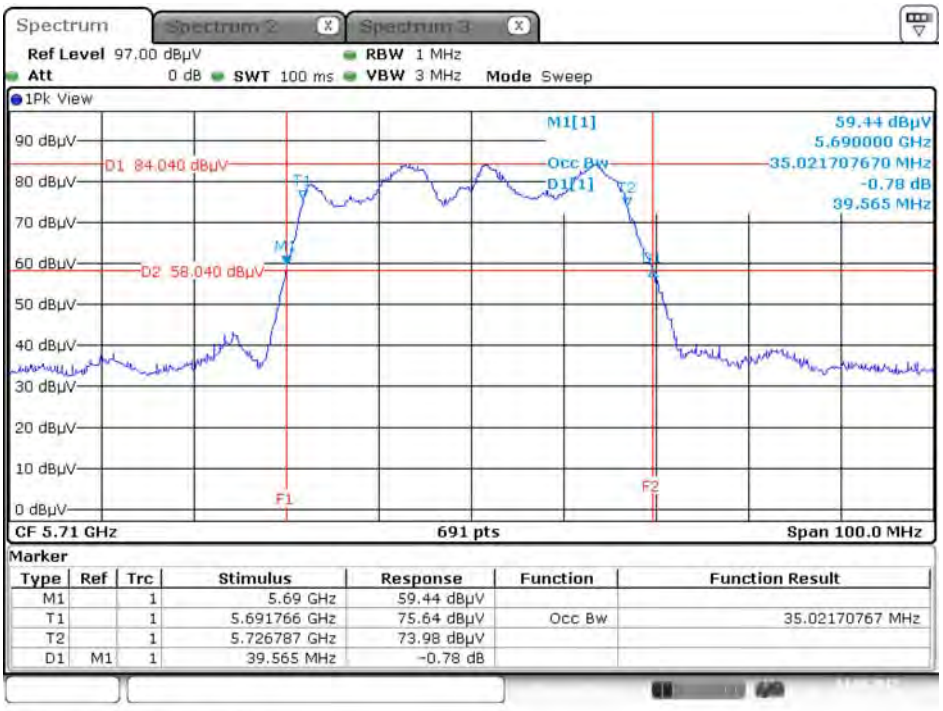
Date: 14.SEP.2017 00:10:09

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz

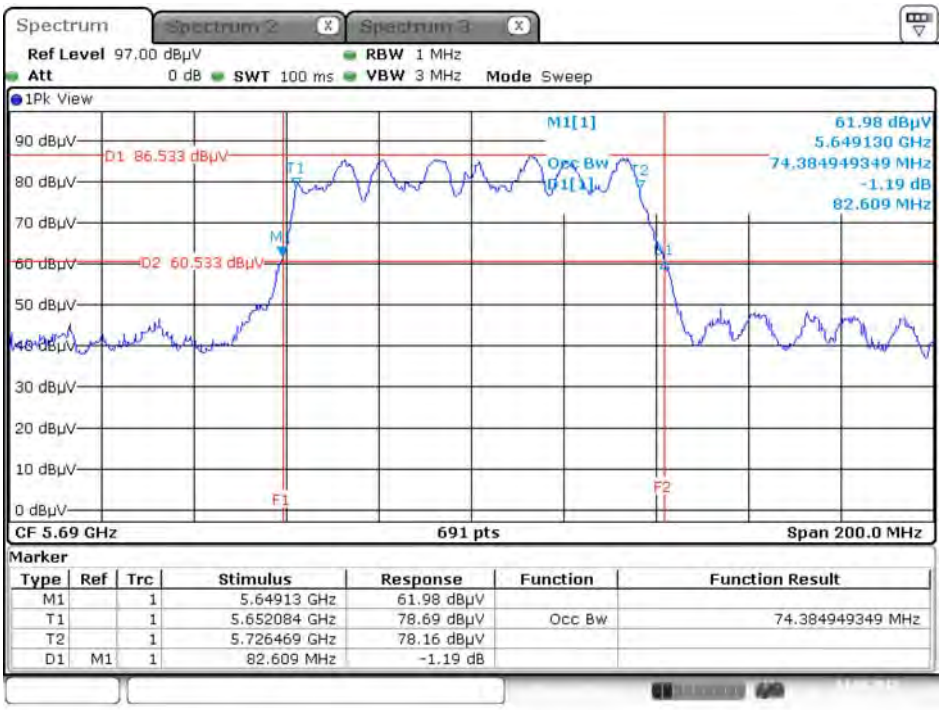


Date: 14.SEP.2017 00:16:36

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5710 MHz



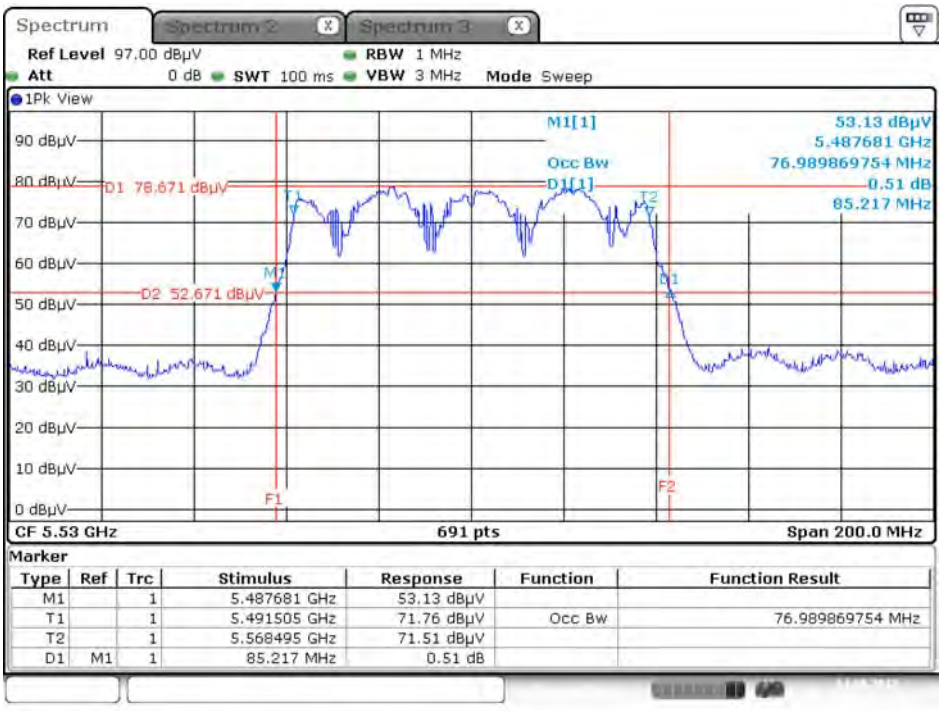
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5690 MHz



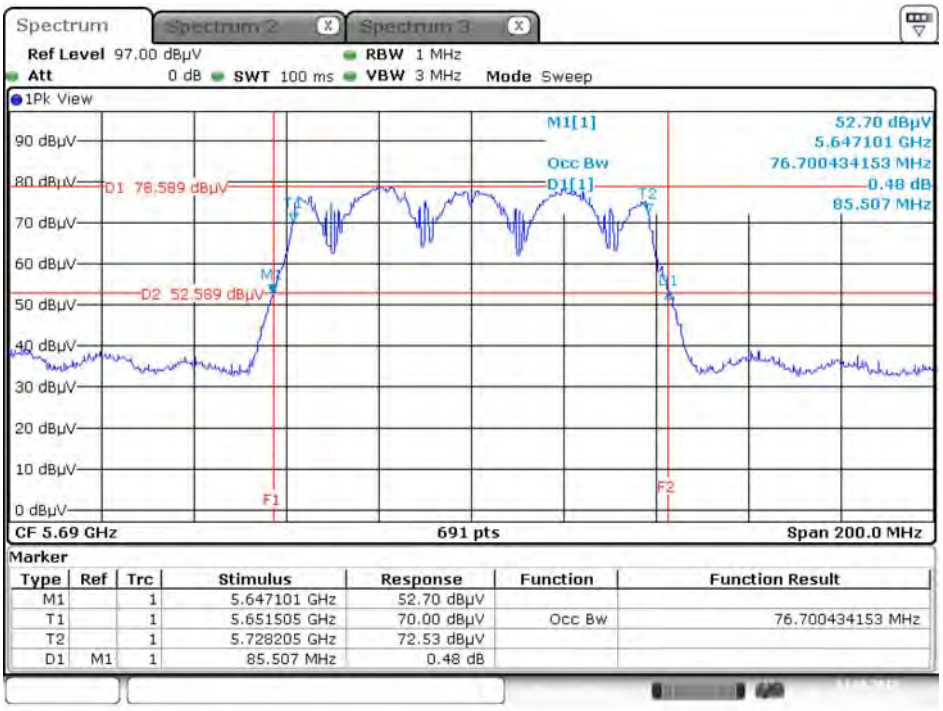
802.11ac MCS0/Nss2 VHT80+80

Type 1

26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 1 + Chain 2 / 5530 MHz

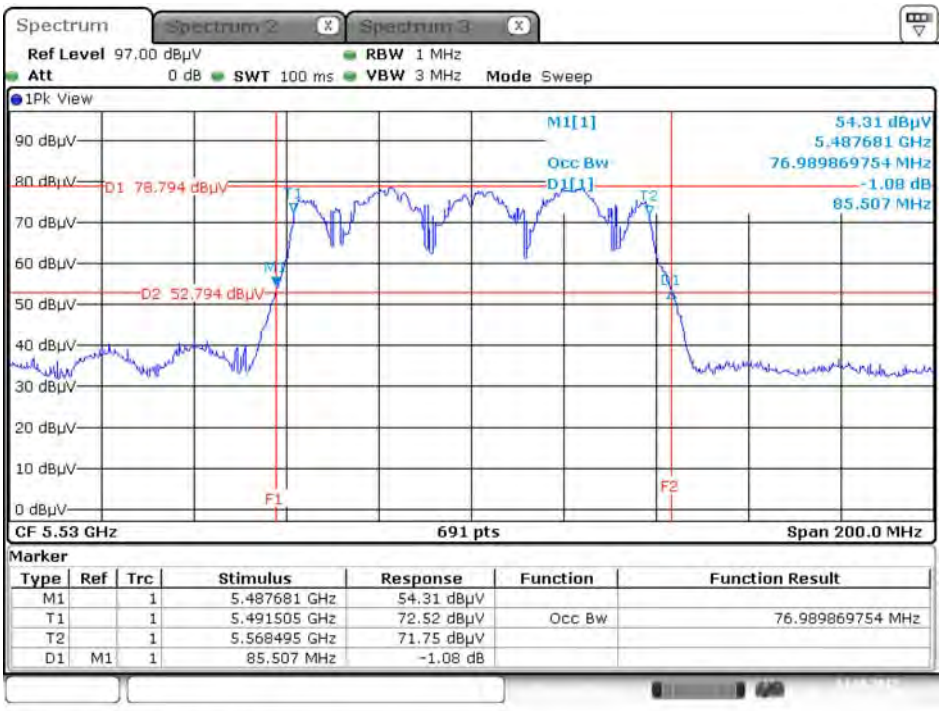


26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 3 + Chain 4 / 5690 MHz

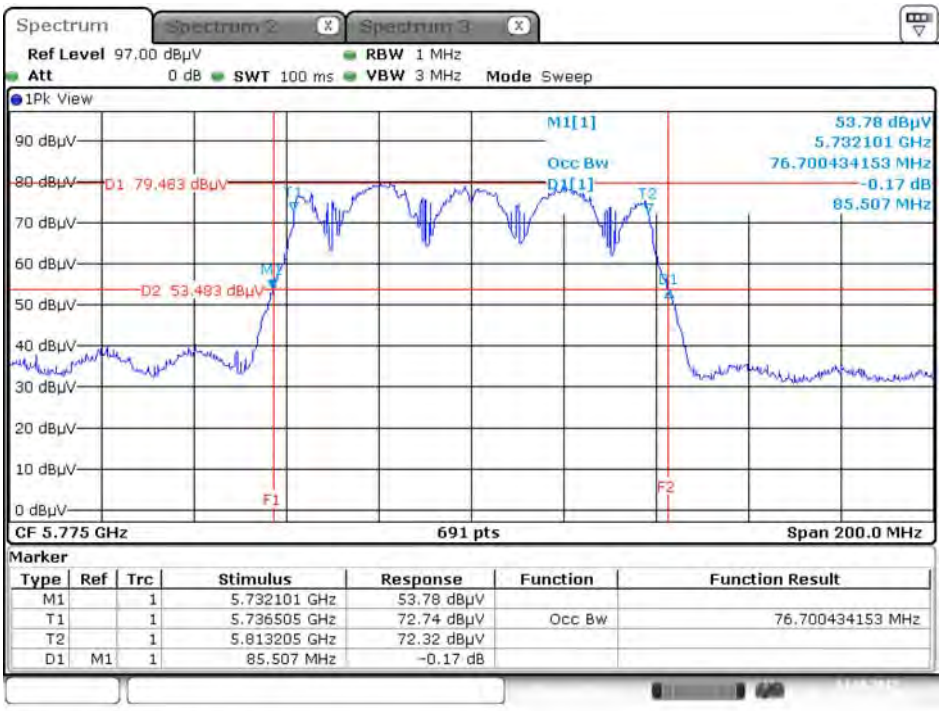


Type 2

26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 1 + Chain 2 / 5530 MHz

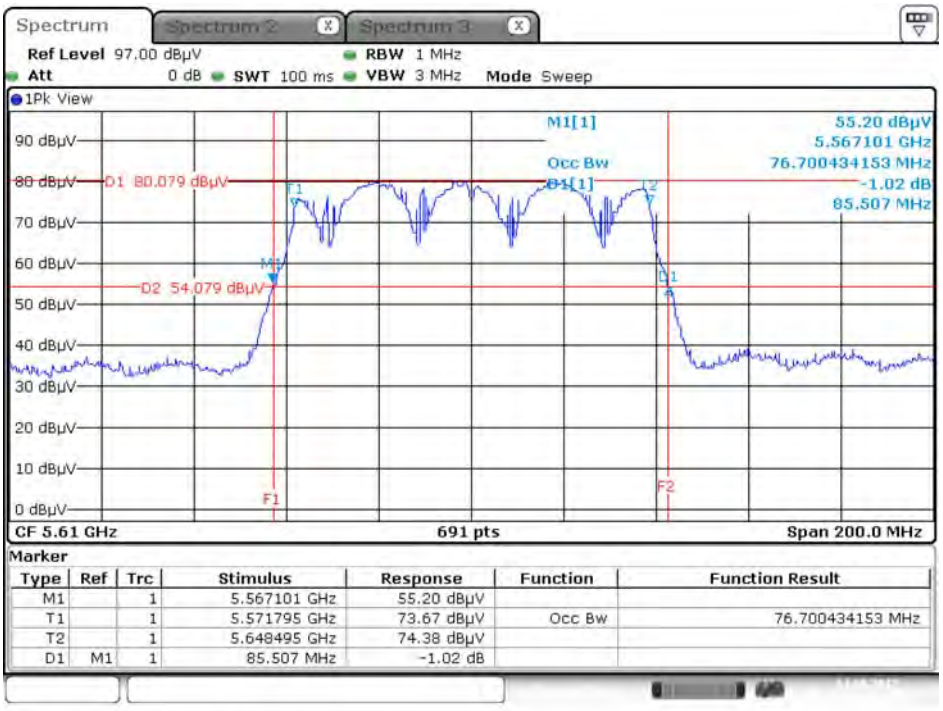


26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 3 + Chain 4 / 5775 MHz

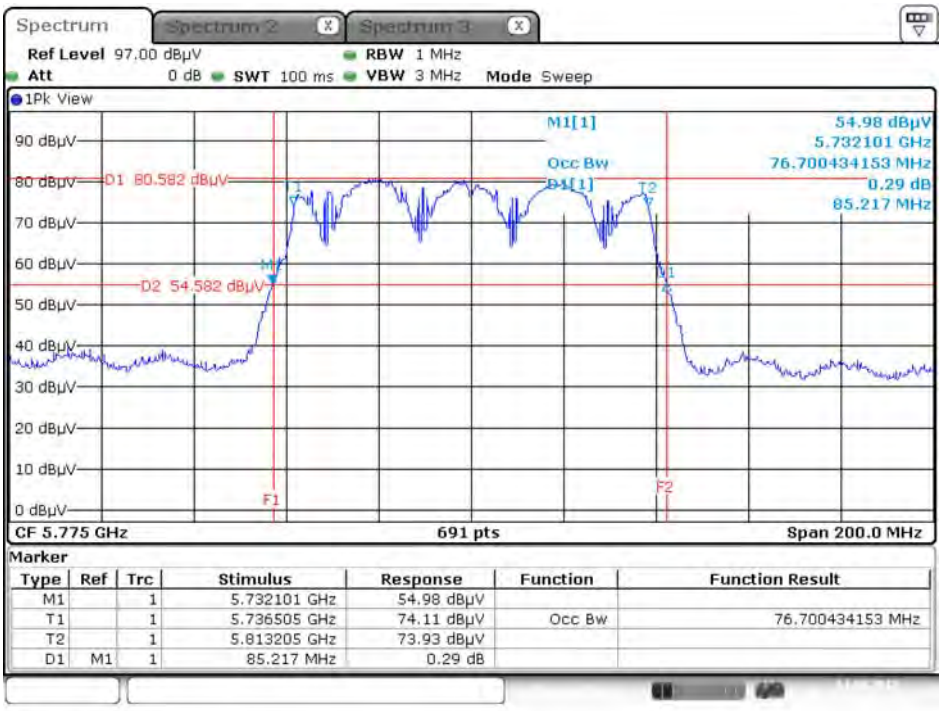


Type 3

26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 1 + Chain 2 / 5610 MHz

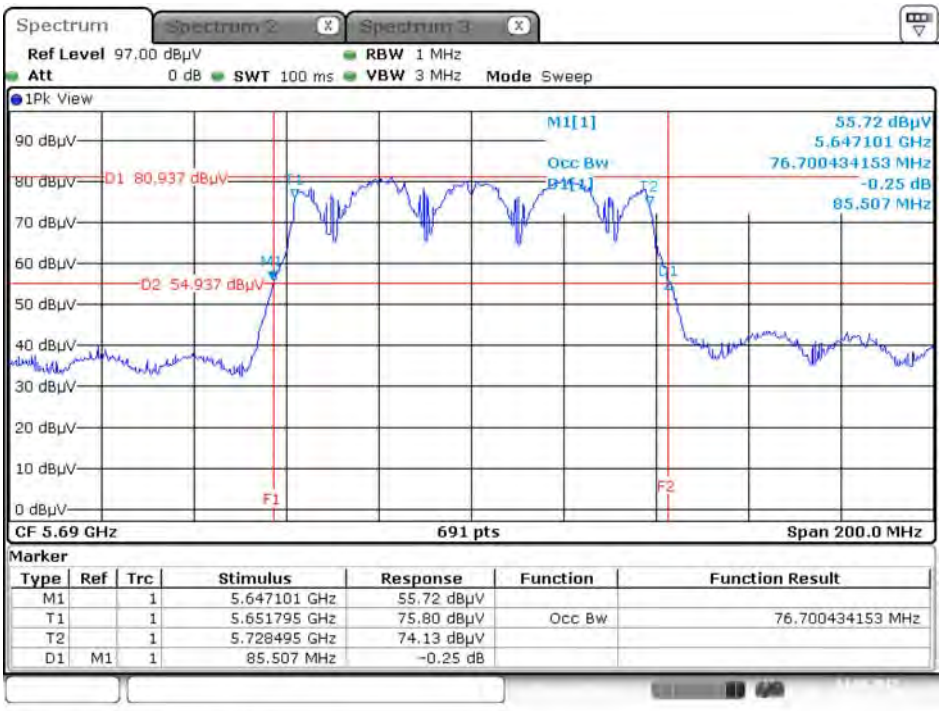


26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 3 + Chain 4 / 5775 MHz

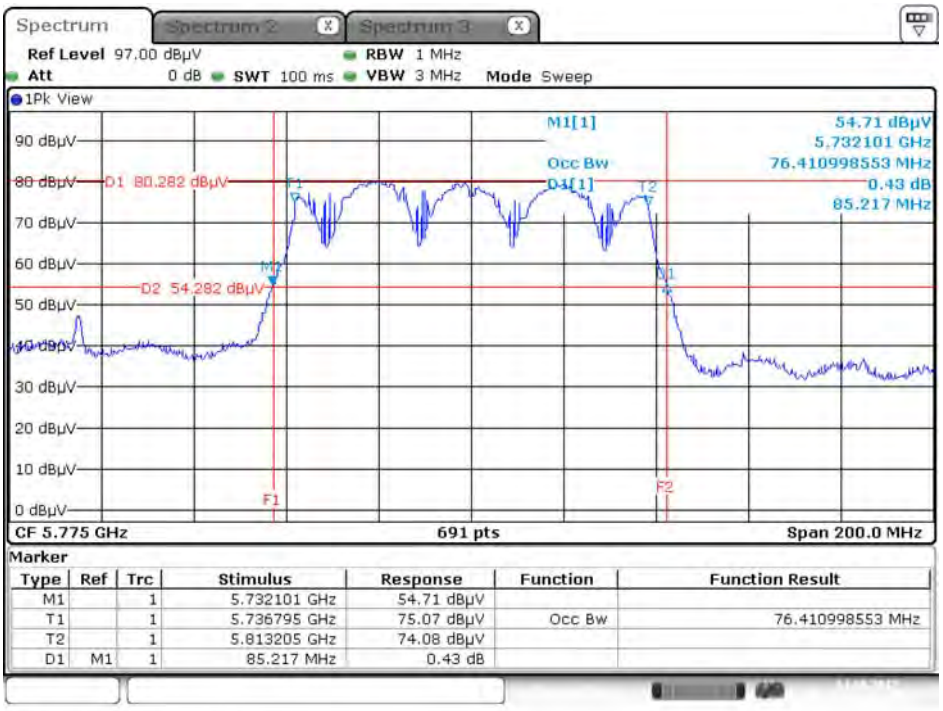


Type 4

26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 1 + Chain 2 / 5690 MHz

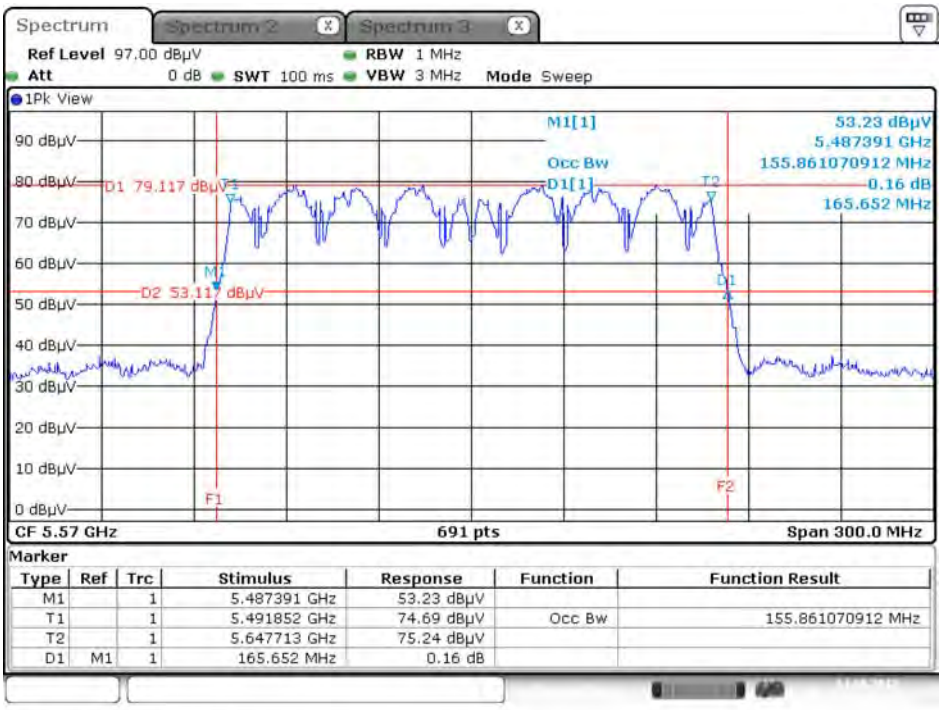


26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 3 + Chain 4 / 5775 MHz



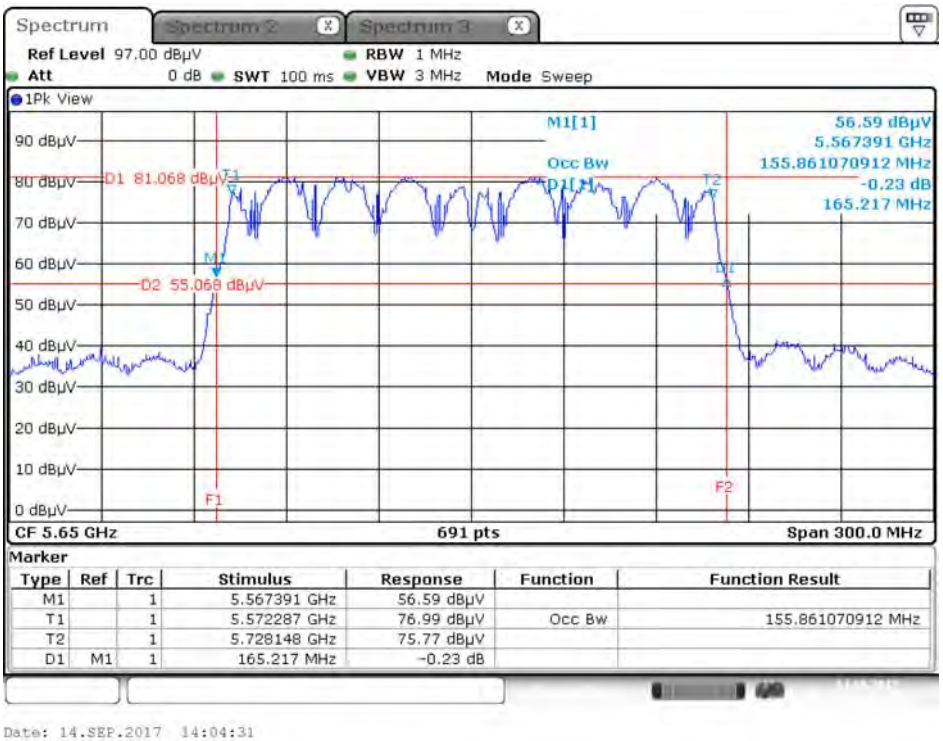
Type 5

26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5530 MHz+5610 MHz



Type 6

26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5610 MHz+5690 MHz



4.2. 6dB Spectrum Bandwidth Measurement

4.2.1. Limit

For digital modulation systems, the minimum 6dB bandwidth shall be at least 500 kHz.

4.2.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of spectrum analyzer.

6dB Spectrum Bandwidth	
Spectrum Parameters	**Setting**
Attenuation	Auto
Span Frequency	> 6dB Bandwidth
RBW	100kHz
VBW	≥ 3 x RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

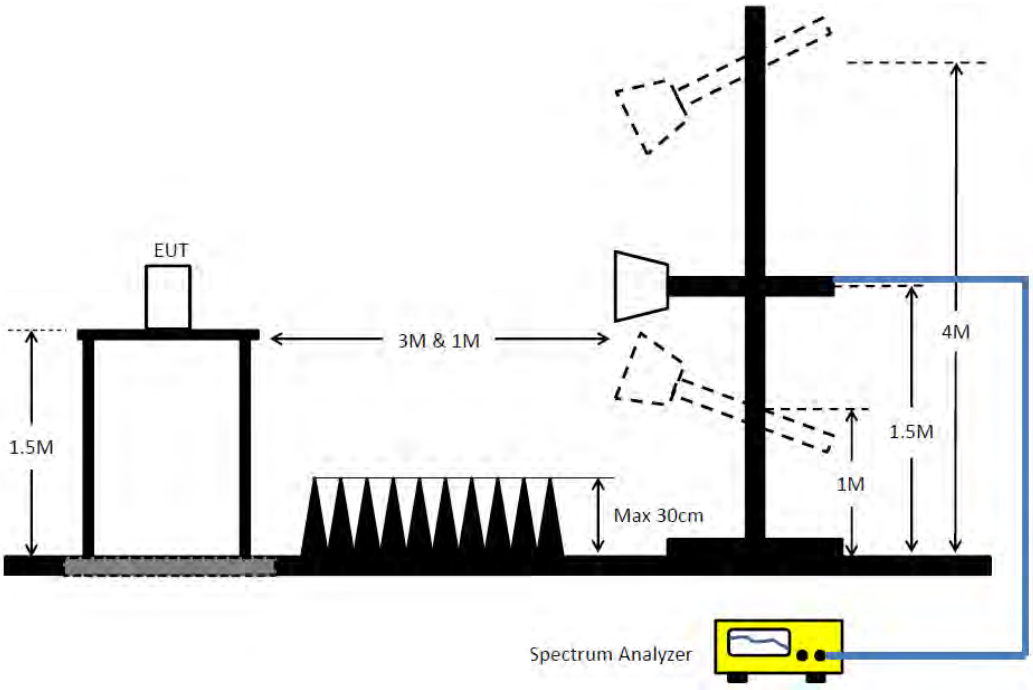
4.2.3. Test Procedures

For Radiated 6dB Bandwidth Measurement:

1. The transmitter was radiated to the spectrum analyzer in peak hold mode.
2. Test was performed in accordance with KDB789033 D02 v01r04 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (C) Emission Bandwidth.
3. Multiple antenna system was performed in accordance with KDB662911 D01 v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.
4. Measured the spectrum width with power higher than 6dB below carrier.

4.2.4. Test Setup Layout

For Radiated 6dB Bandwidth Measurement:



4.2.5. Test Deviation

There is no deviation with the original standard.

4.2.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.2.7. Test Result of 6dB Spectrum Bandwidth

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11a	5745 MHz	11.25	500	Complies
	5785 MHz	11.30	500	Complies
	5825 MHz	12.64	500	Complies
802.11ac MCS0/Nss1 VHT20	5745 MHz	11.30	500	Complies
	5785 MHz	12.29	500	Complies
	5825 MHz	12.64	500	Complies
802.11ac MCS0/Nss1 VHT40	5755 MHz	34.20	500	Complies
	5795 MHz	33.86	500	Complies
802.11ac MCS0/Nss1 VHT80	5775 MHz	73.91	500	Complies

Straddle Channel

Mode	Frequency	6dB BW (MHz)	6dB BW M1 (MHz)	UNII 3 BW (MHz)	Min. Limit (kHz)	Test Result
802.11a	5720 MHz	15.13	5712.41	2.54	500	Complies
802.11ac MCS0/Nss1 VHT20	5720 MHz	15.30	5712.23	2.54	500	Complies
802.11ac MCS0/Nss1 VHT40	5710 MHz	33.39	5692.26	0.65	500	Complies
802.11ac MCS0/Nss1 VHT80	5690 MHz	72.46	5653.77	1.23	500	Complies

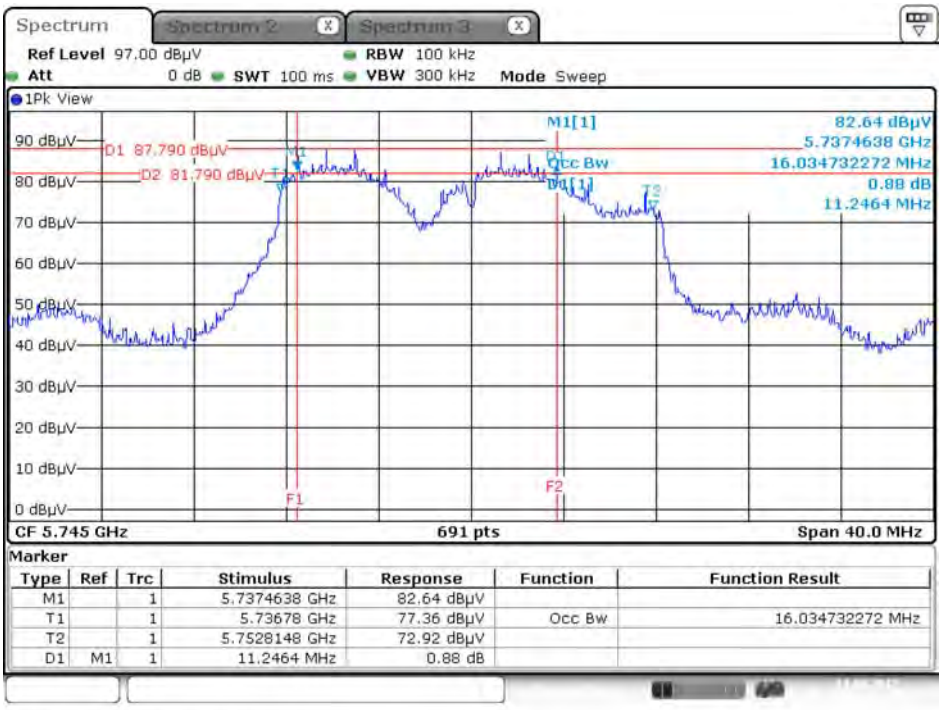
802.11ac MCS0/Nss2 VHT80+80

Type	Frequency	6dB BW (MHz)	6dB BW M1 (MHz)	UNII 3 BW (MHz)	Min. Limit (kHz)	Total 6dB BW (MHz)	Test Result
1	5530 MHz	-				-	-
	5690 MHz	76.52	5651.74	3.26	500	-	Complies
2	5530 MHz	-				-	-
	5775 MHz	76.23	-		500	-	Complies
3	5610 MHz	-				-	-
	5775 MHz	76.52	-		500	-	Complies
4	5690 MHz	76.52	5651.74	3.26	500	78.33	Complies
	5775 MHz	75.07	-		500		Complies
6	5610 MHz	156.52	5571.74	3.26	500	-	Complies
	5690 MHz						Complies

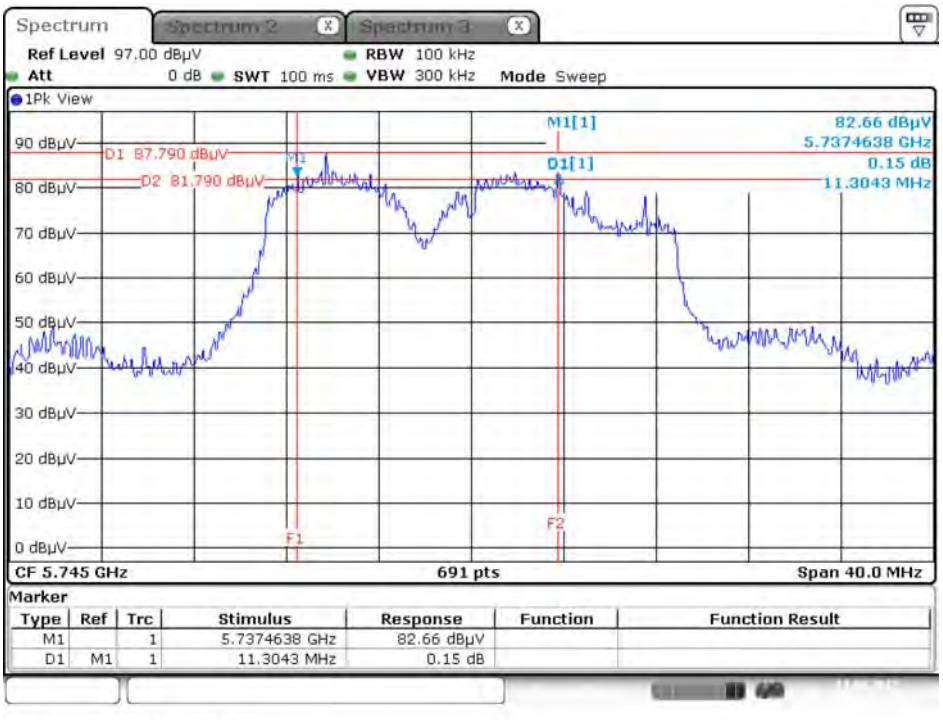
Note: All the test values were listed in the report.

For plots, only the channel with worse result was shown.

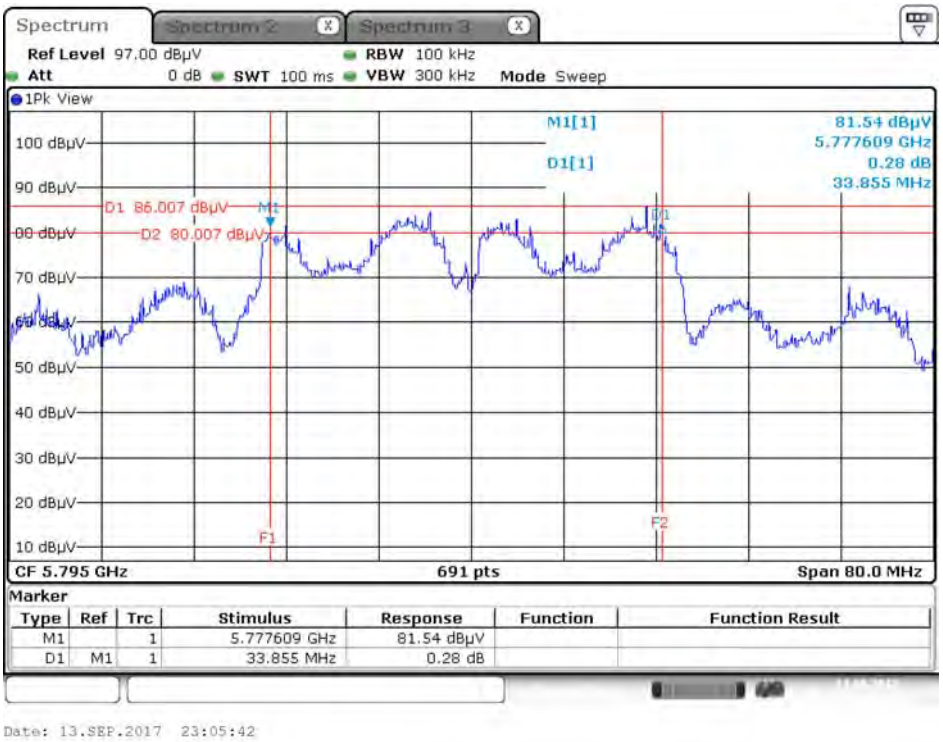
6 dB Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5745 MHz



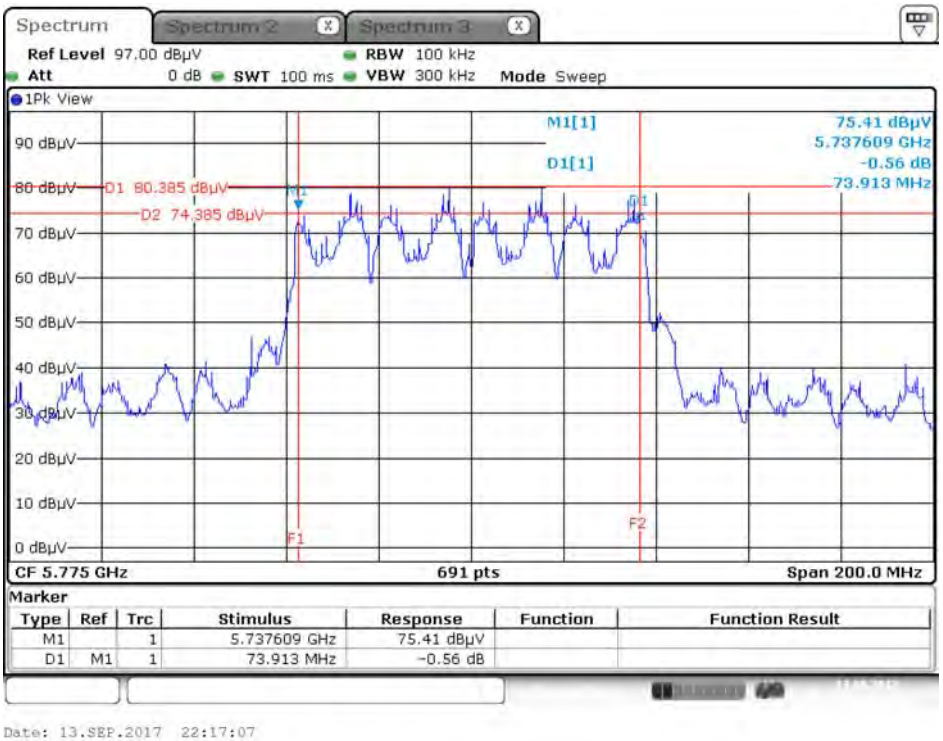
6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5745 MHz



6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5795 MHz

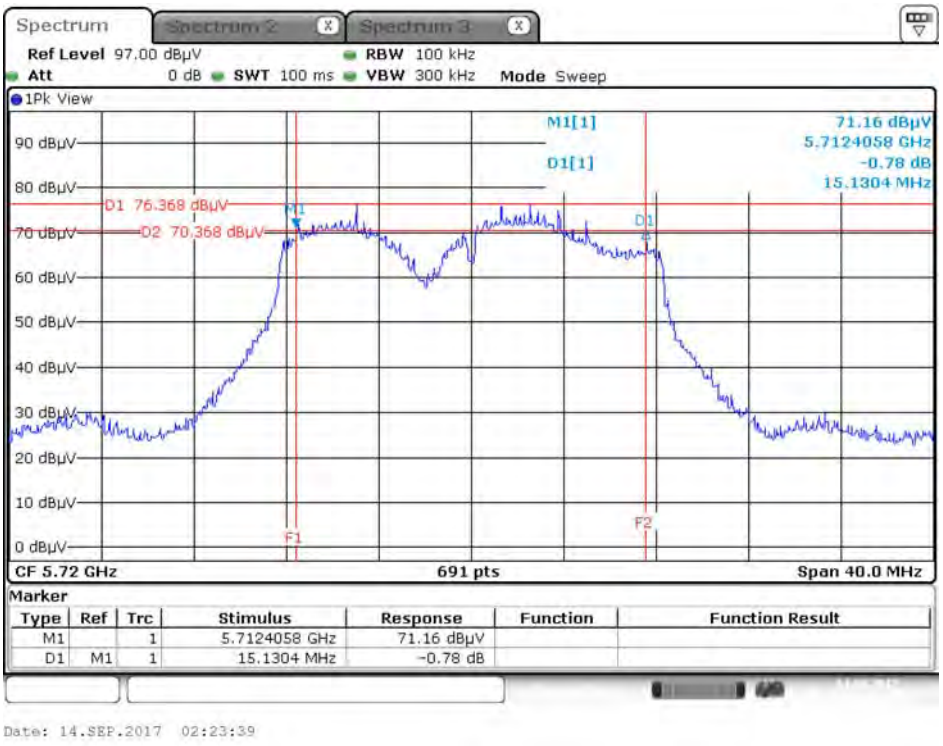


6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5775 MHz

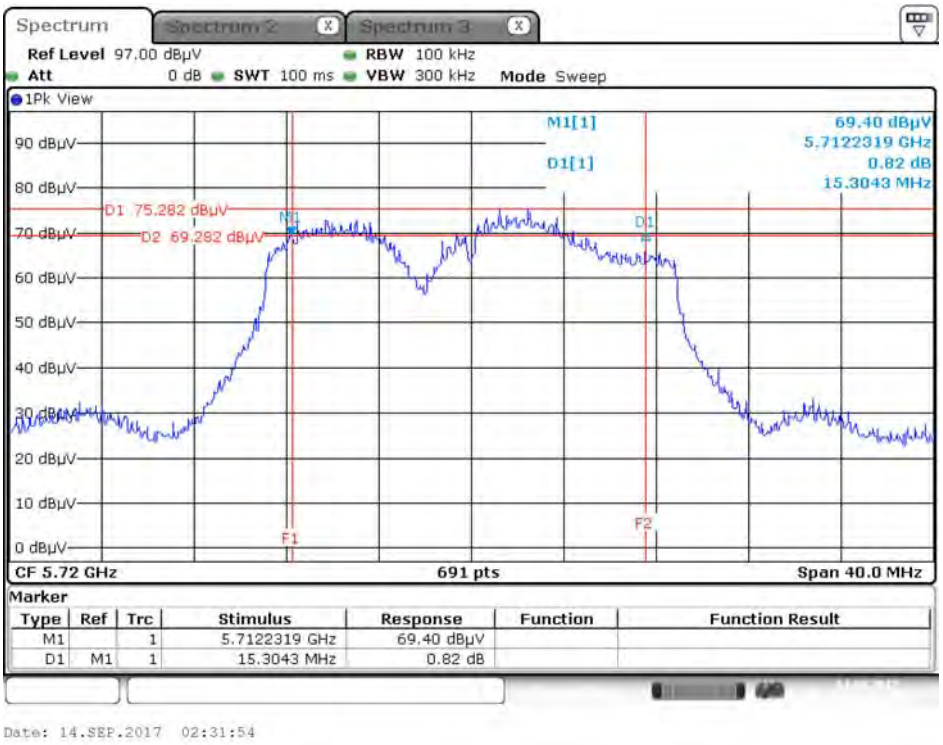


Straddle Channel

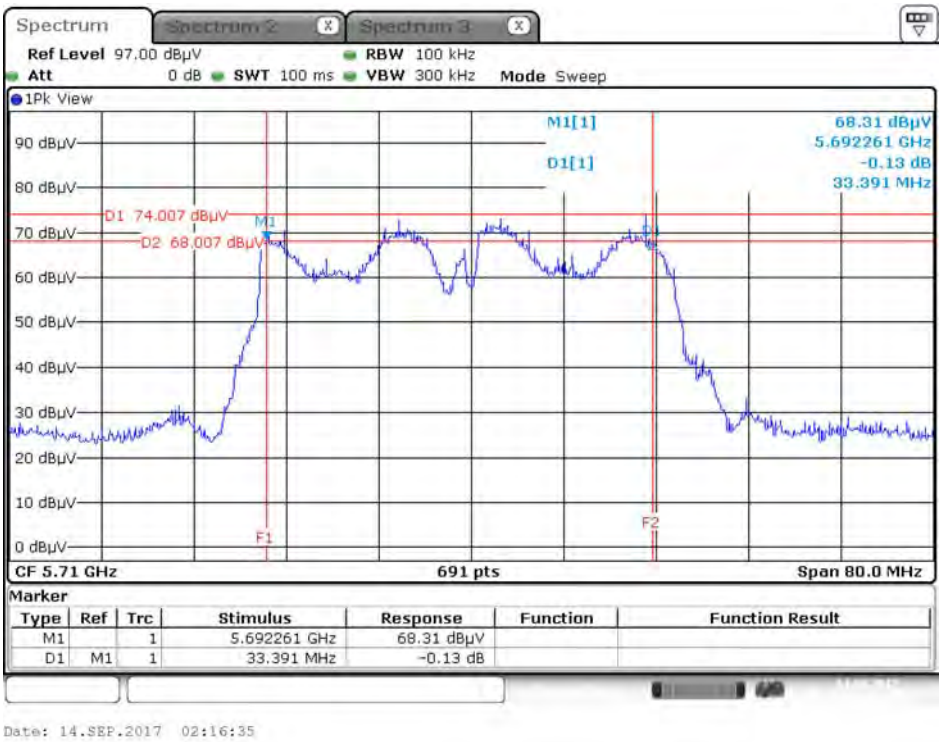
6 dB Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz



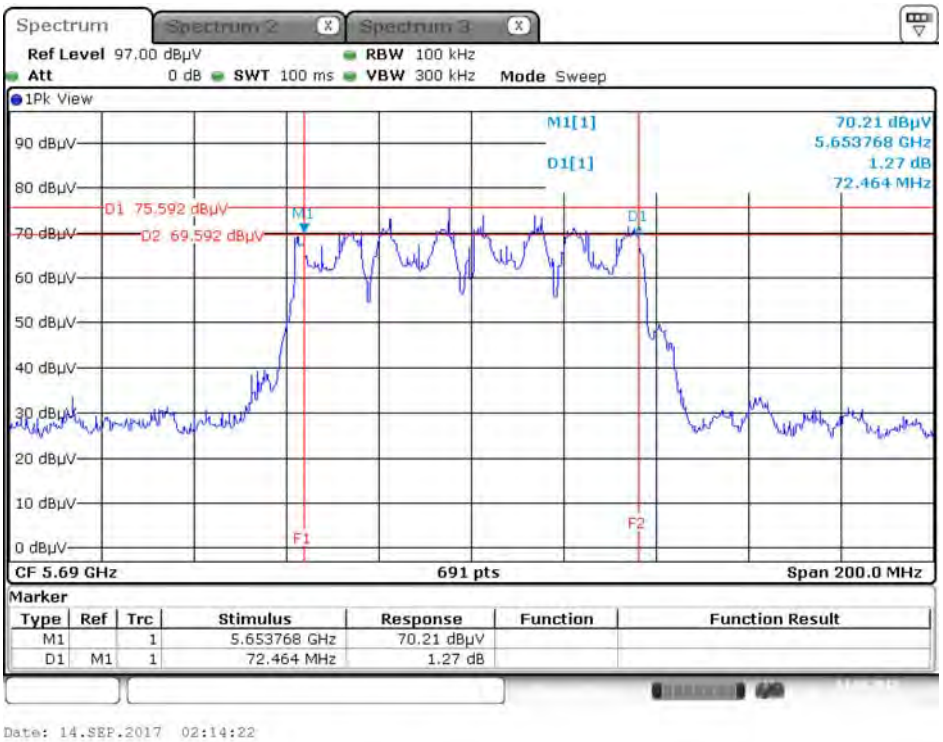
6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz



6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5710 MHz



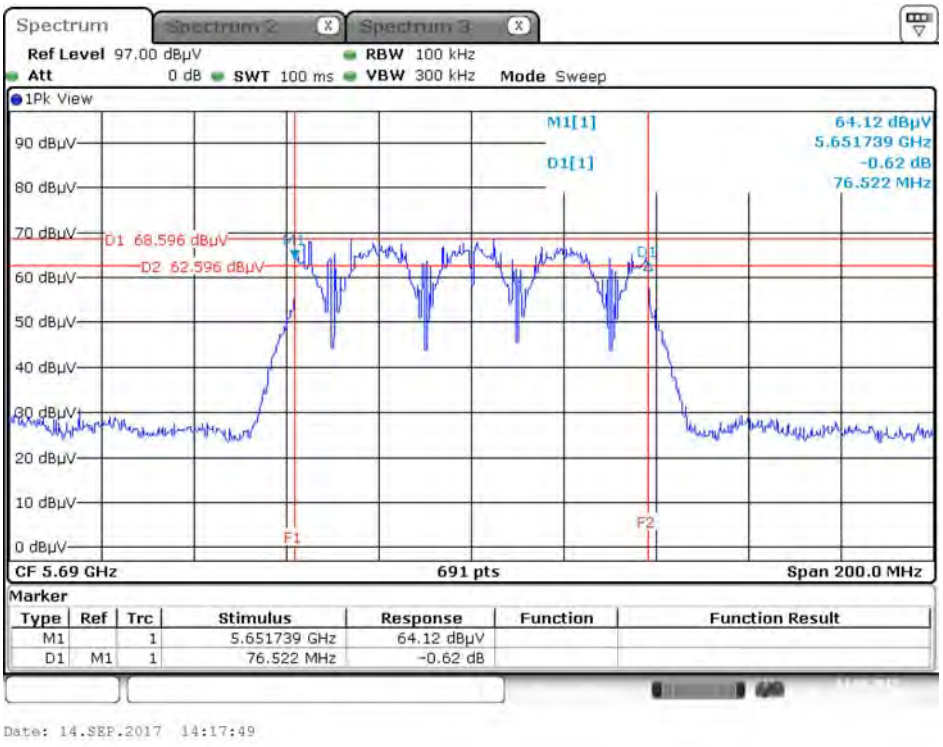
6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5690 MHz



802.11ac MCS0/Nss2 VHT80+80

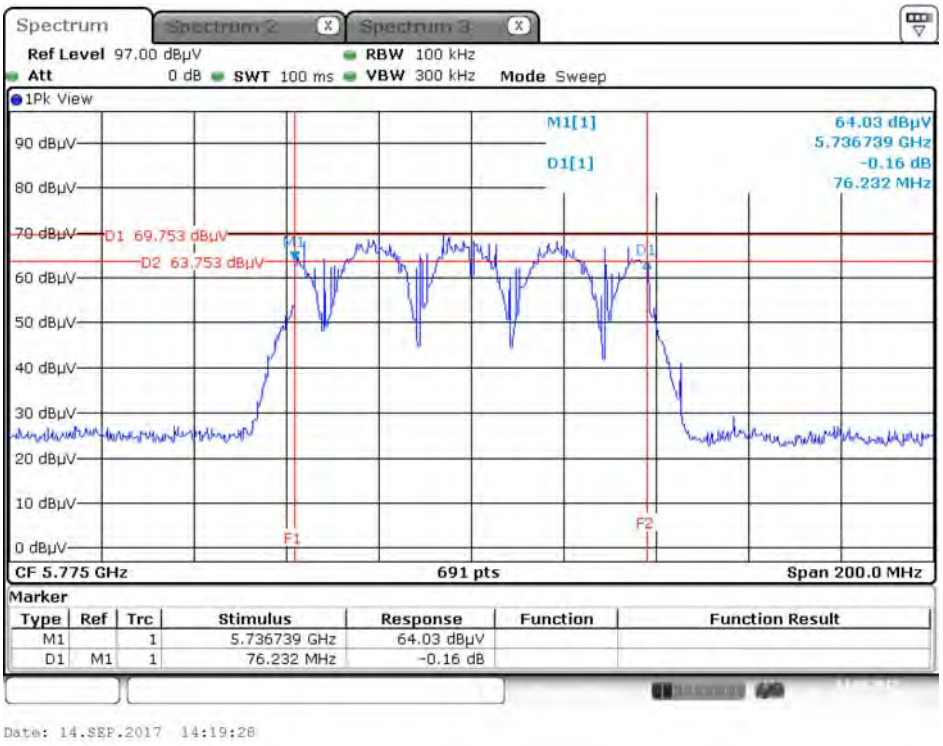
Type 1

6 dB Bandwidth Plot on Chain 3 + Chain 4 / 5690 MHz



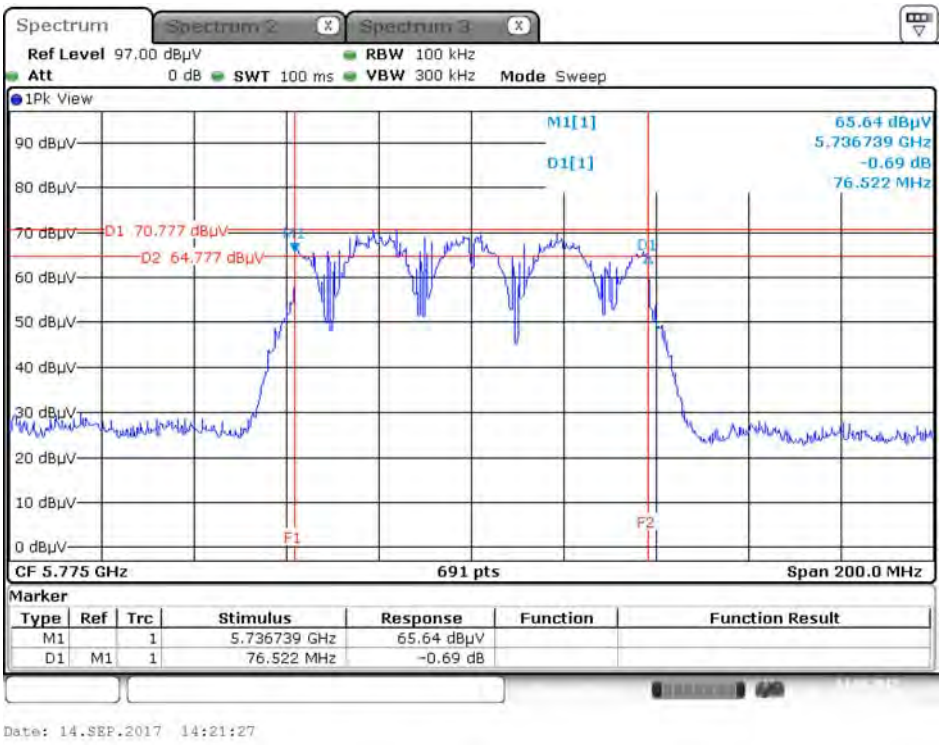
Type 2

6 dB Bandwidth Plot on Chain 3 + Chain 4 / 5775 MHz



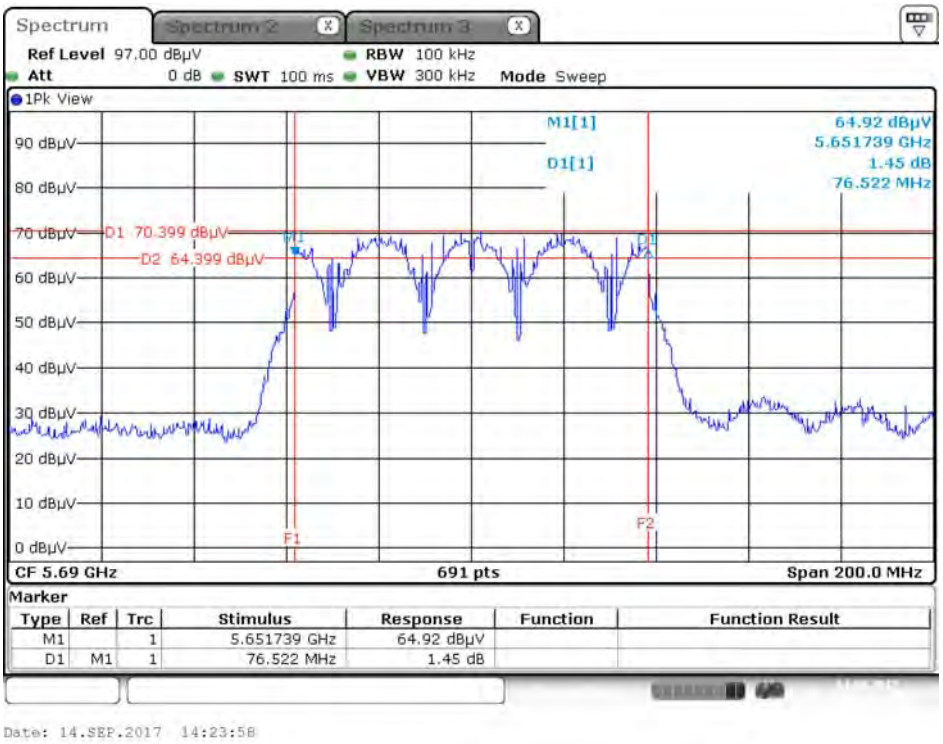
Type 3

6 dB Bandwidth Plot on Chain 3 + Chain 4 / 5775 MHz

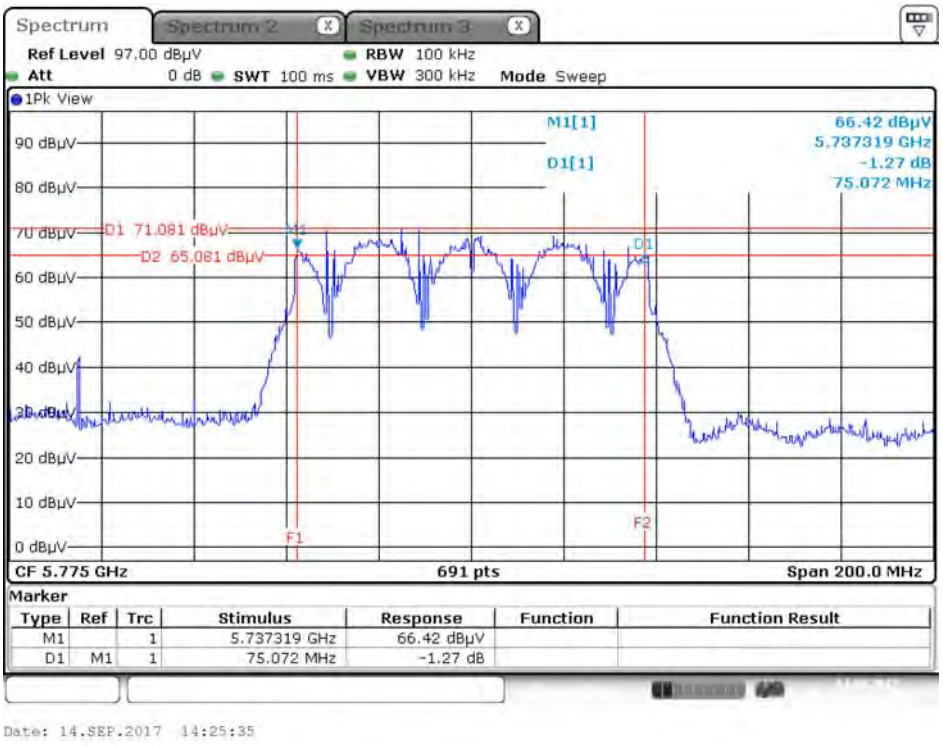


Type 4

6 dB Bandwidth Plot on Chain 1 + Chain 2 / 5690 MHz

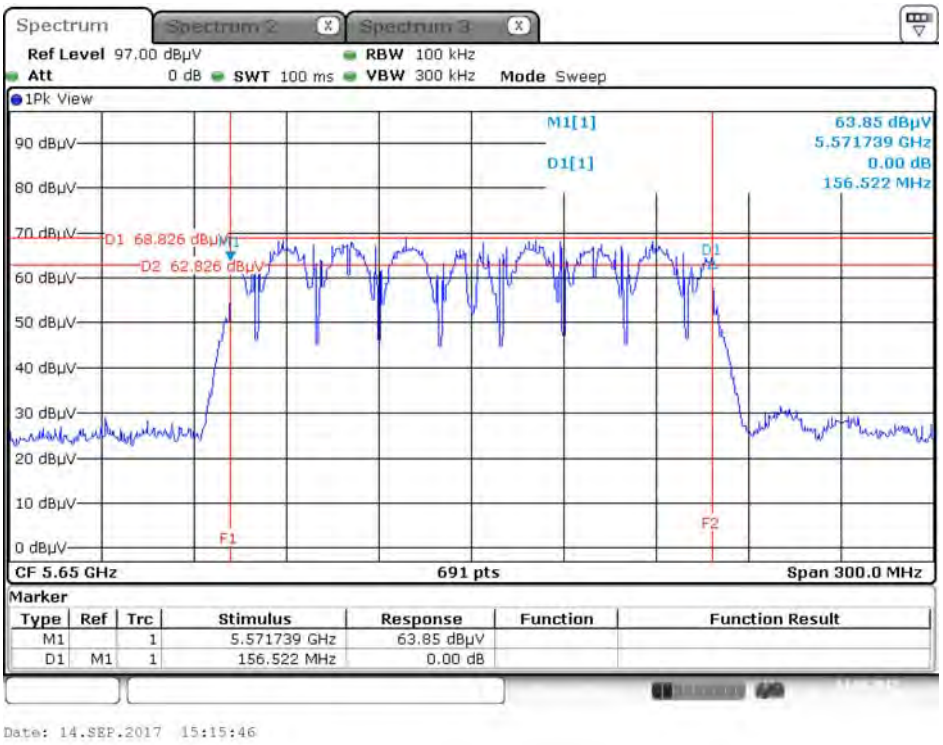


6 dB Bandwidth Plot on Chain 3 + Chain 4 / 5775 MHz



Type 6

6 dB Bandwidth Plot on Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5610 MHz+5690 MHz



4.3. Maximum Conducted Output Power Measurement

4.3.1. Limit

Frequency Band		Limit
☒	5.470-5.725 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
☒	5.725~5.85 GHz	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.

4.3.2. Measuring Instruments and Setting

For other channel

Please refer to section 5 of equipments list in this report. The following table is the setting of the power meter.

Power Meter Parameter	Setting
Detector	AVERAGE

For straddle channel

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1000 kHz
VBW	3000 kHz
Detector	RMS
Trace	Average Sweep count 100
Sweep Time	Auto

4.3.3. Test Procedures

For other channel

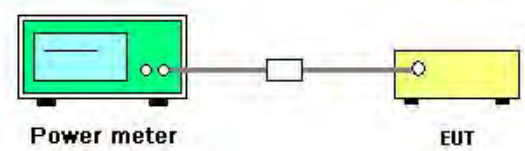
1. The transmitter output (antenna port) was connected to the power meter.
2. Test was performed in accordance with KDB789033 D02 v01r04 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (E) Maximum conducted output power =>3. Measurement using a Power Meter (PM) =>b) Method PM-G (Measurement using a gated RF average power meter).
3. Multiple antenna systems was performed in accordance with KDB662911 D01 v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.
4. When measuring maximum conducted output power with multiple antenna systems,add every result of the values by mathematic formula.

For straddle channel

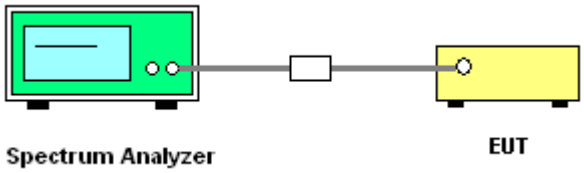
1. The transmitter output (antenna port) was connected to the spectrum analyzer.

4.3.4. Test Setup Layout

For other channel



For straddle channel



4.3.5. Test Deviation

There is no deviation with the original standard.

4.3.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.3.7. Test Result of Maximum Conducted Output Power

Mode	Frequency	Conducted Power (dBm)					Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
802.11a	5500 MHz	9.62	10.11	10.2	9.84	15.97	21.72	Complies
	5580 MHz	9.69	10.05	10.29	10.03	16.04	21.68	Complies
	5700 MHz	9.57	10.09	10.21	9.87	15.96	21.70	Complies
	5745 MHz	21.74	21.69	21.89	21.77	27.79	28.00	Complies
	5785 MHz	21.71	21.82	22.01	21.63	27.82	28.00	Complies
	5825 MHz	21.76	22.02	22.35	21.57	27.96	28.00	Complies
802.11ac MCS0/Nss1 VHT20	5500 MHz	9.93	10.21	10.39	10.13	16.19	21.90	Complies
	5580 MHz	9.94	10.14	10.44	10.35	16.24	21.91	Complies
	5700 MHz	9.40	10.26	10.36	10.11	16.07	21.90	Complies
	5745 MHz	21.49	21.62	21.68	21.55	27.61	28.00	Complies
	5785 MHz	21.61	21.42	21.94	21.54	27.65	28.00	Complies
	5825 MHz	21.59	21.98	22.08	21.61	27.84	28.00	Complies
802.11ac MCS0/Nss1 VHT40	5510 MHz	12.83	13.03	13.06	12.98	19.00	21.98	Complies
	5550 MHz	12.81	13.05	13.33	13.17	19.11	21.98	Complies
	5670 MHz	12.75	12.99	13.11	12.81	18.94	21.98	Complies
	5755 MHz	20.85	21.33	21.96	21.27	27.39	28.00	Complies
	5795 MHz	21.77	21.83	22.05	21.72	27.86	28.00	Complies
802.11ac MCS0/Nss1 VHT80	5530 MHz	13.25	14.26	14.28	13.58	19.89	21.98	Complies
	5610 MHz	15.56	15.63	15.75	15.27	21.58	21.98	Complies
	5775 MHz	17.17	17.74	18.18	17.65	23.72	28.00	Complies

Note:

For 802.11a:

5500 MHz Power limit=23.98dBm or 11+10log(B); 11+10log(18.7)=23.72dBm.
Antenna gain=8dBi>6dBi, so limit=23.72-(8-6)=21.72dBm.

5580 MHz Power limit=23.98dBm or 11+10log(B); 11+10log(18.52)=23.68dBm.
Antenna gain=8dBi>6dBi, so limit=23.68-(8-6)=21.68dBm.

5700 MHz Power limit=23.98dBm or 11+10log(B); 11+10log(18.61)=23.7dBm.
Antenna gain=8dBi>6dBi, so limit=23.7-(8-6)=21.70dBm.

For 802.11ac VHT20:

5500 MHz Power limit=23.98dBm or 11+10log(B); 11+10log(19.48)=23.90dBm.
Antenna gain=8dBi>6dBi, so limit=23.90-(8-6)=21.90dBm.

5580 MHz Power limit=23.98dBm or 11+10log(B); 11+10log(19.57)=23.92dBm.
Antenna gain=8dBi>6dBi, so limit=23.92-(8-6)=21.91dBm.

5700 MHz Power limit=23.98dBm or 11+10log(B); 11+10log(19.48)=23.90dBm.
Antenna gain=8dBi>6dBi, so limit=23.90-(8-6)=21.90dBm.

For 802.11ac VHT40 and 11ac80:

Band 3 Antenna gain=8dBi>6dBi, so limit=23.98-(8-6)=21.98dBm.

Band 4 Antenna gain=8dBi>6dBi, so limit=30-(8-6)=28.00dBm.

Straddle Channel

Mode	Frequency	Conducted Power (dBm)					Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
802.11a	5720 MHz (UNII 2C)	7.82	8.49	8.59	9.03	14.52	20.66	Complies
	5720 MHz (UNII 3)	1.71	1.98	2.54	2.76	8.29	28.00	Complies
802.11ac MCS0/Nss1 VHT20	5720 MHz (UNII 2C)	8.07	8.73	8.90	9.25	14.78	20.76	Complies
	5720 MHz (UNII 3)	2.45	2.68	3.31	3.46	9.02	28.00	Complies
802.11ac MCS0/Nss1 VHT40	5710 MHz (UNII 2C)	11.88	12.33	12.53	12.23	18.27	21.98	Complies
	5710 MHz (UNII 3)	1.01	1.39	1.38	1.25	7.28	28.00	Complies
802.11ac MCS0/Nss1 VHT80	5690 MHz (UNII 2C)	15.45	15.82	15.94	15.59	21.72	21.98	Complies
	5690 MHz (UNII 3)	2.38	2.65	2.63	1.83	8.41	28.00	Complies

For UNII 2C Power Limit as below:

802.11a and Power limit=23.98dBm or 11+10log(B); 11+10log(14.65)=22.66dBm.
Antenna gain=8dBi>6dBi, so limit=22.66-(8-6)=20.66dBm.

802.11ac MCS0/Nss1 VHT20 Power limit=23.98dBm or 11+10log(B); 11+10log(15)=22.76dBm.
Antenna gain=8dBi>6dBi, so limit=22.76-(8-6)=20.76dBm.

802.11ac MCS0/Nss1 VHT40 Antenna gain=8dBi>6dBi, so limit= 23.98-(8-6)=21.98 dBm.

802.11ac MCS0/Nss1 VHT80 Antenna gain=8dBi>6dBi, so limit= 23.98-(8-6)= 21.98 dBm.

For UNII3 Power Limit: Antenna gain=8dBi>6dBi, so limit= 30-(8-6)-28.00 dBm.

802.11ac MCS0/Nss2 VHT80+80

Type	Frequency	Conducted Power (dBm)						Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total	Band Total		
1	5530 MHz	13.62	13.88	-	-	16.76	19.77	21.98	Complies
	5690 MHz (UNII 2C)	-	-	13.37	14.08	16.75			
	5690 MHz (UNII 3)	-	-	-0.08	0.45	3.20	-	28.00	Complies
2	5530 MHz	13.74	13.86	-	-	16.81	-	21.98	Complies
	5775 MHz	-	-	14.13	14.42	17.29	-	28.00	Complies
3	5610 MHz	14.95	15.53	-	-	18.26	-	21.98	Complies
	5775 MHz	-	-	15.62	16.24	18.95	-	28.00	Complies
4	5690 MHz (UNII 2C)	15.08	15.11	-	-	18.11	-	21.98	Complies
	5690 MHz (UNII 3)	2.19	2.11	-	-	5.16	19.53	28.00	Complies
	5775 MHz	-	-	16.07	16.63	19.37			
5	5530 MHz	14.06	14.32	-	-	17.20	20.52	21.98	Complies
	5610 MHz	-	-	14.49	15.06	17.79			
6	5610 MHz	15.79	15.94	-	-	18.88	21.62	21.98	Complies
	5690 MHz (UNII 2C)	-	-	15.54	15.06	18.32			
	5690 MHz (UNII 3)	-	-	1.71	0.55	4.18	-	28.00	Complies

Note: Antenna gain=8dBi.

(UNII 2C) Antenna gain=8dBi>6dBi, so limit=23.98-(8-6)=21.98dBm.

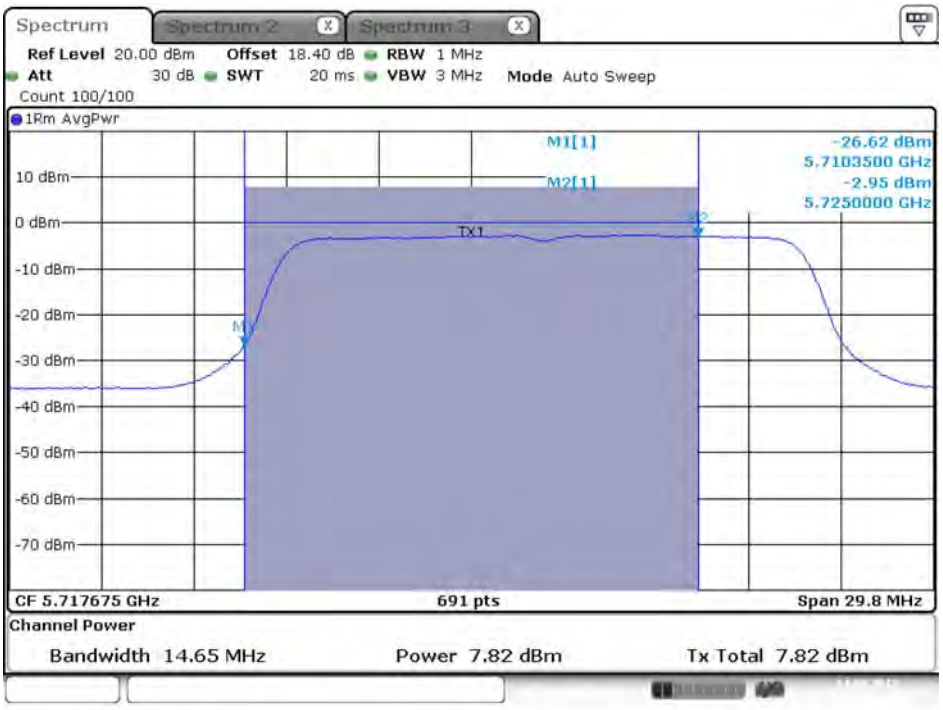
(UNII 3) Antenna gain=8dBi>6dBi, so limit=30-(8-6)=28.00dBm.

Note: All the test values were listed in the report.

For plots, only the channel with worse result was shown.

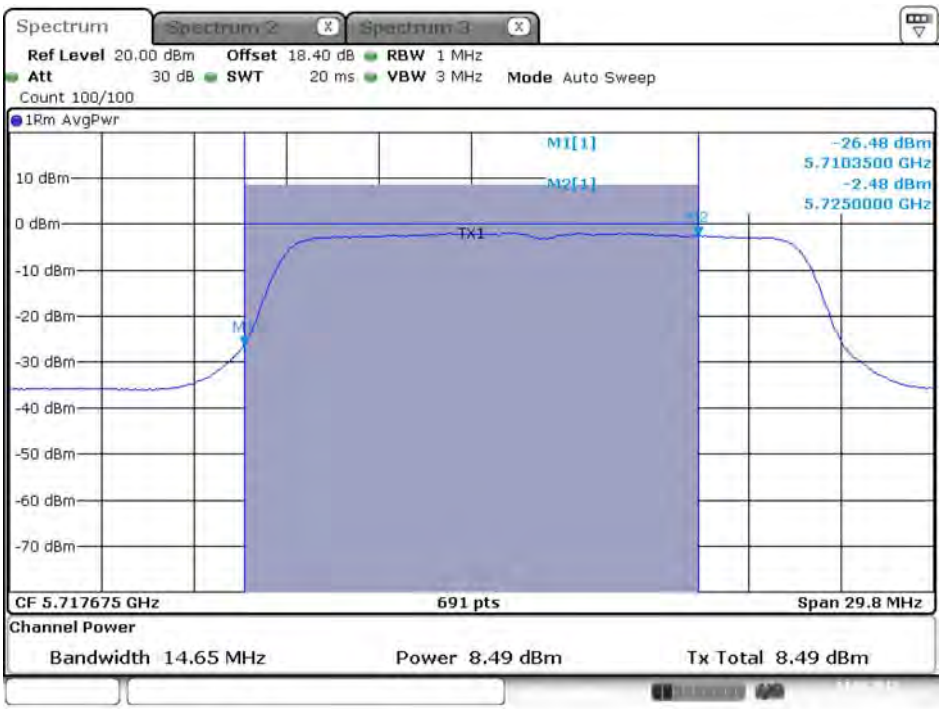
Straddle Channel

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 1 / 5720 MHz (UNII 2C)



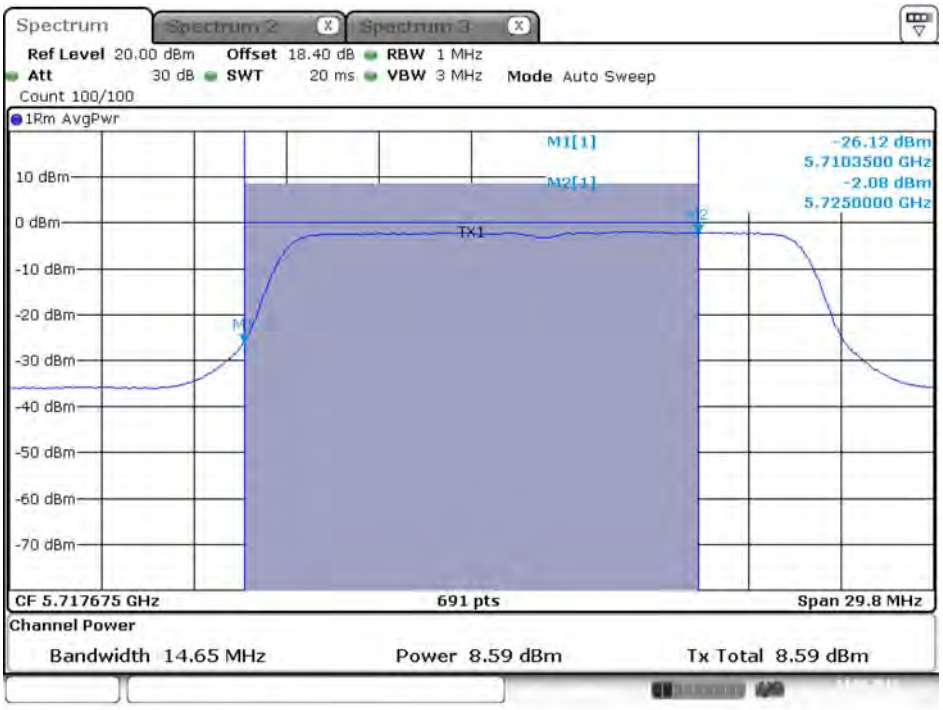
Date: 14.SEP.2017 01:32:34

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 2 / 5720 MHz (UNII 2C)



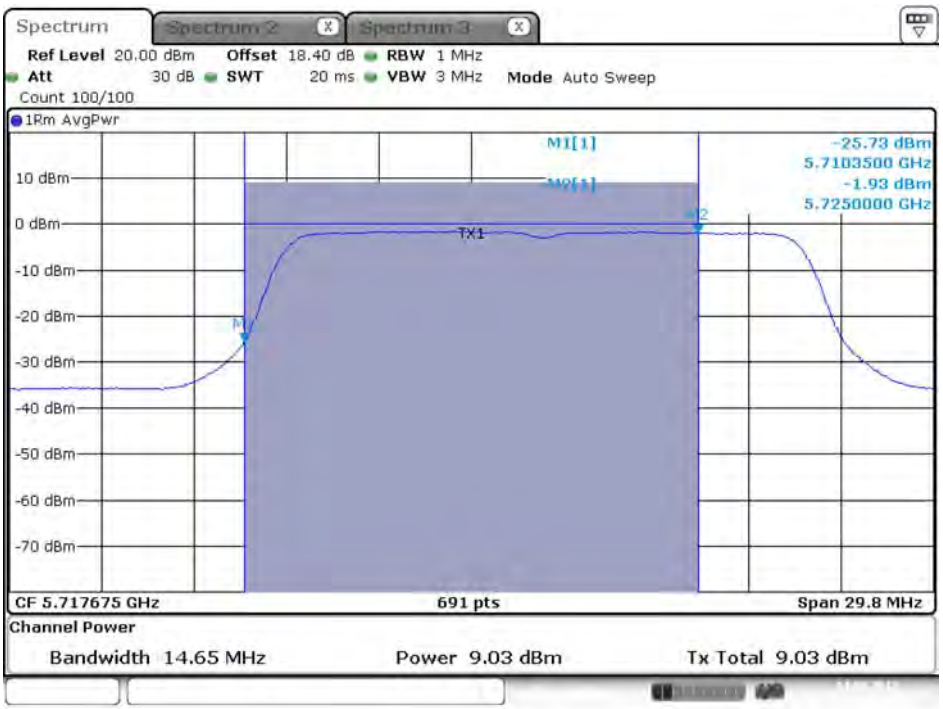
Date: 14.SEP.2017 01:32:42

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 3 / 5720 MHz (UNII 2C)



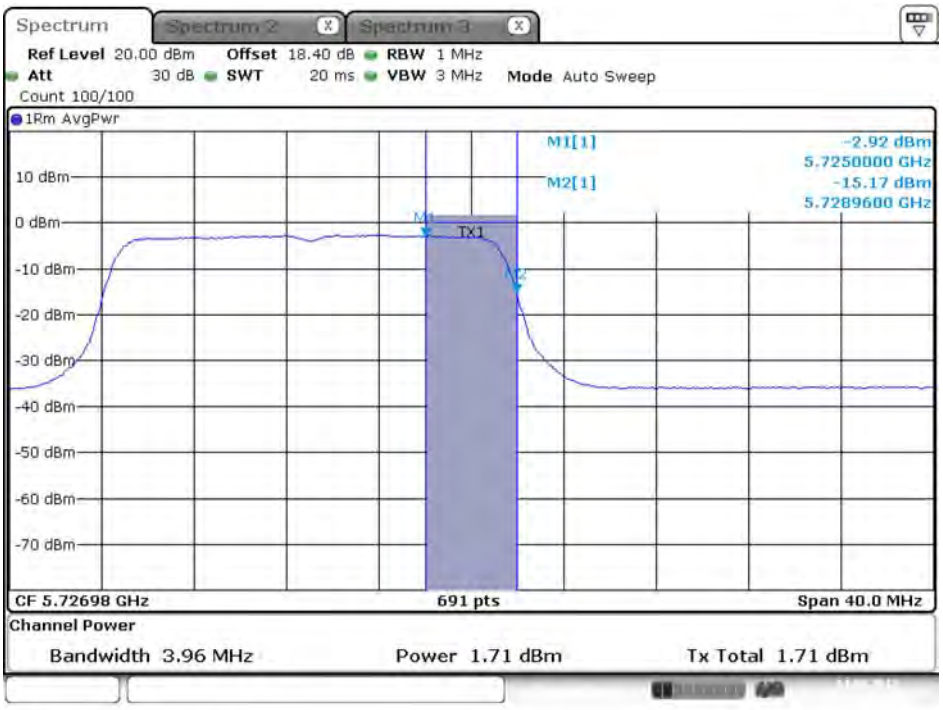
Date: 14.SEP.2017 01:32:49

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 4 / 5720 MHz (UNII 2C)

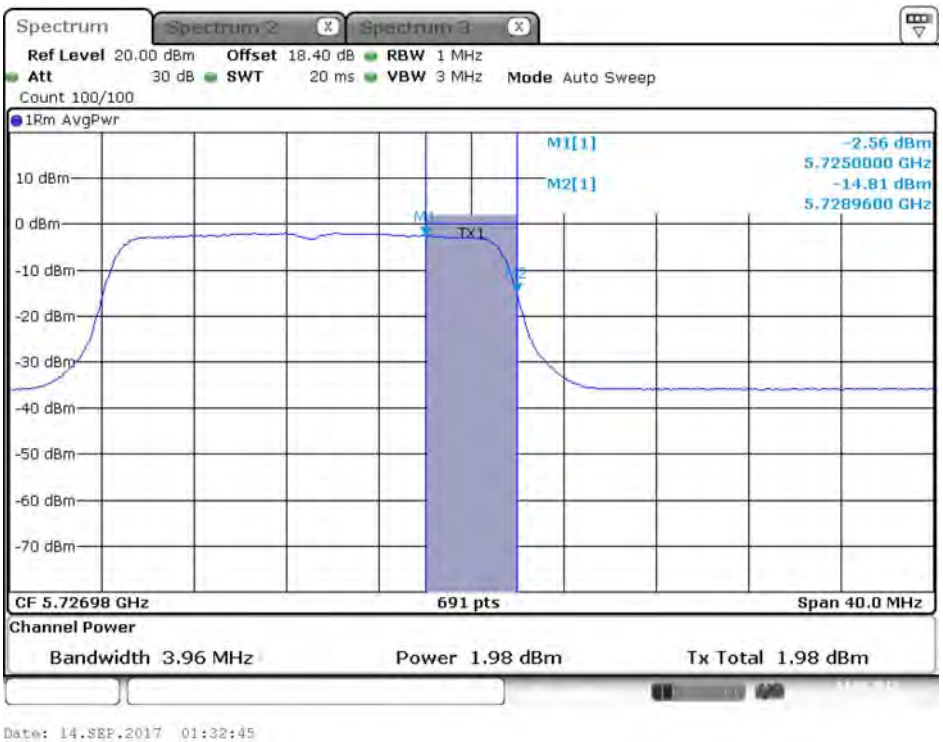


Date: 14.SEP.2017 01:32:56

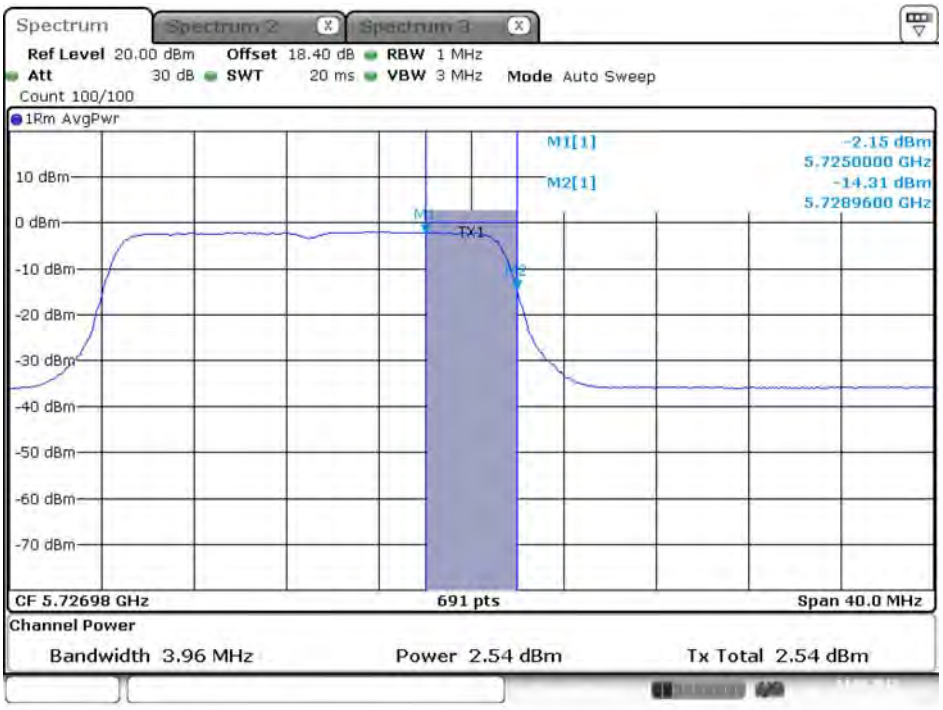
Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 1 / 5720 MHz (UNII 3)



Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 2 / 5720 MHz (UNII 3)

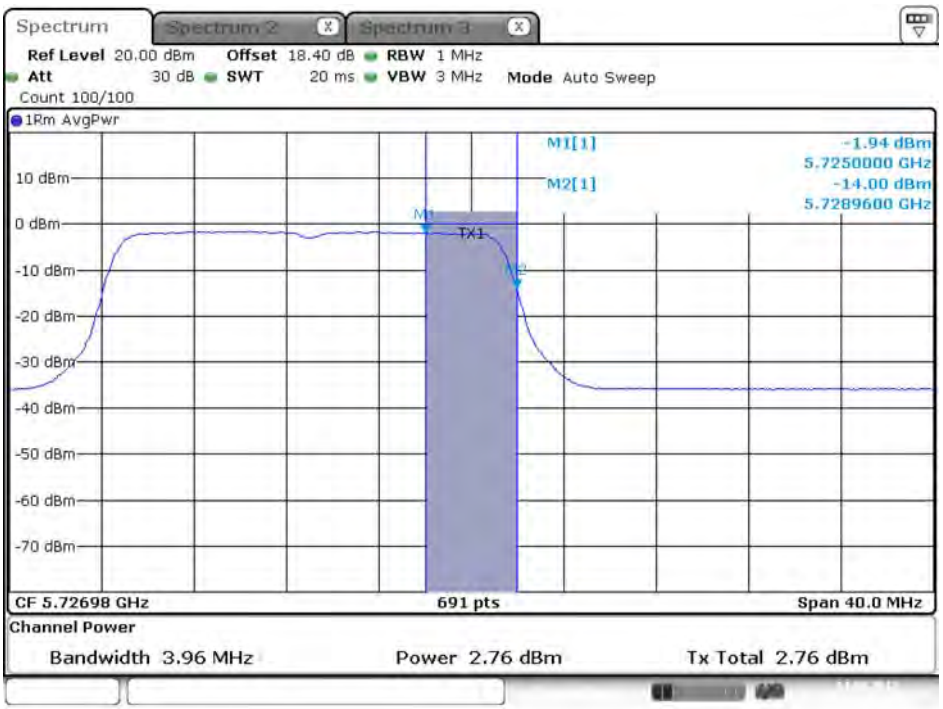


Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 3 / 5720 MHz (UNII 3)



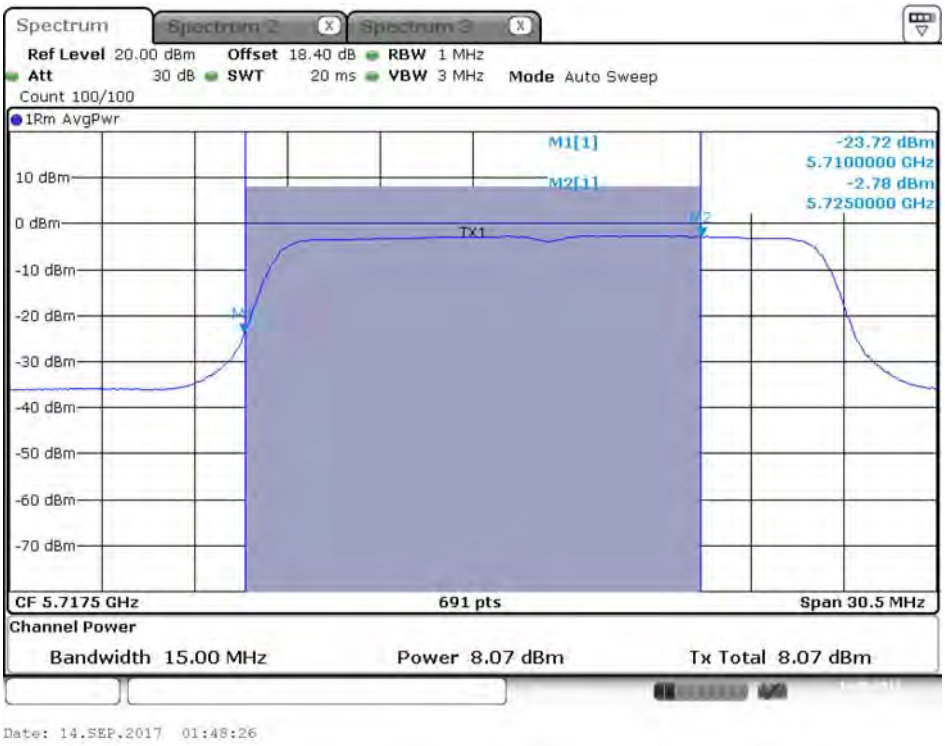
Date: 14.SEP.2017 01:32:52

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 4 / 5720 MHz (UNII 3)

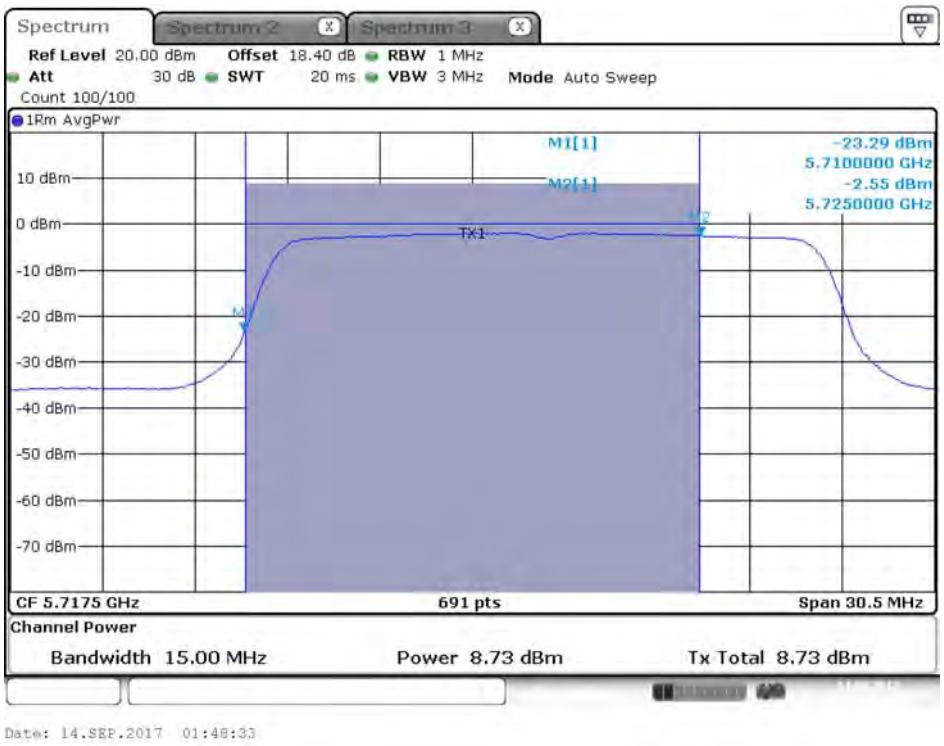


Date: 14.SEP.2017 01:33:00

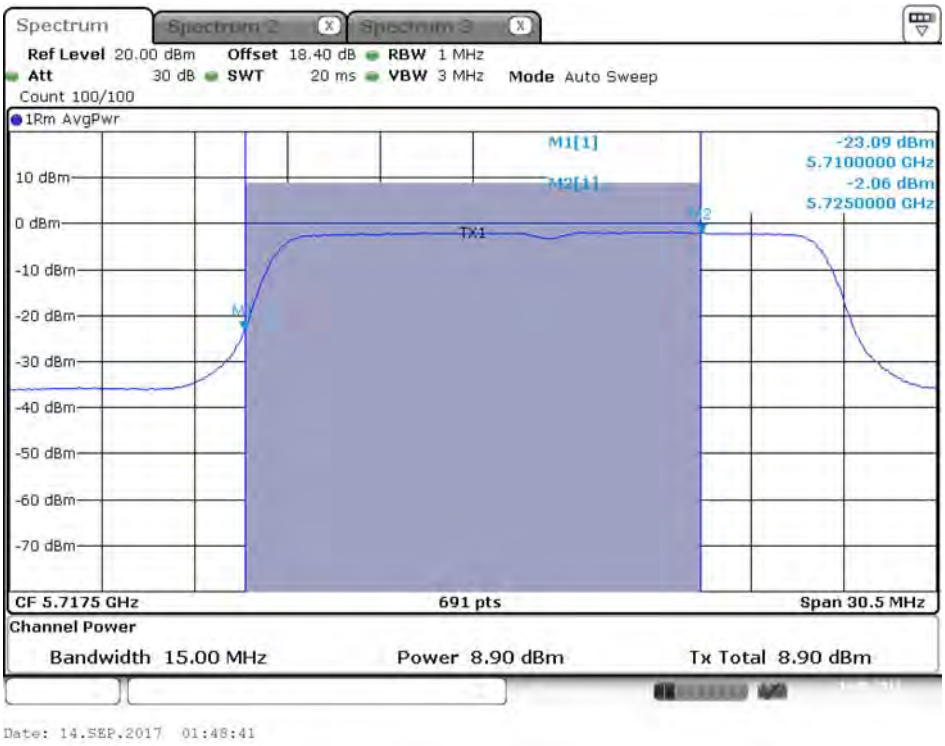
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 2C)



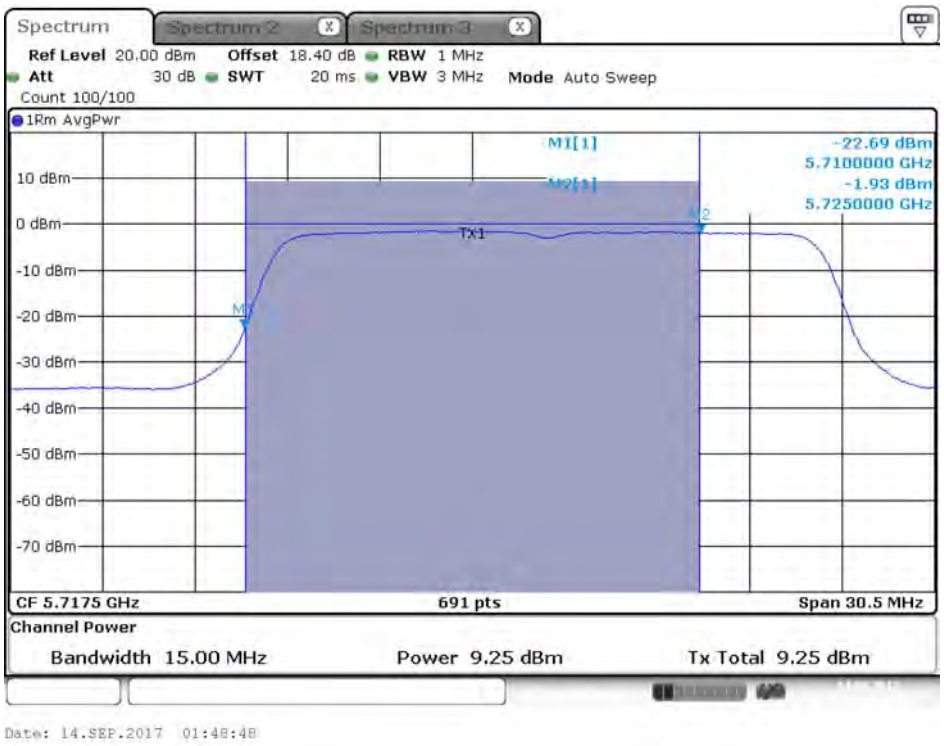
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 2 / 5720 MHz (UNII 2C)



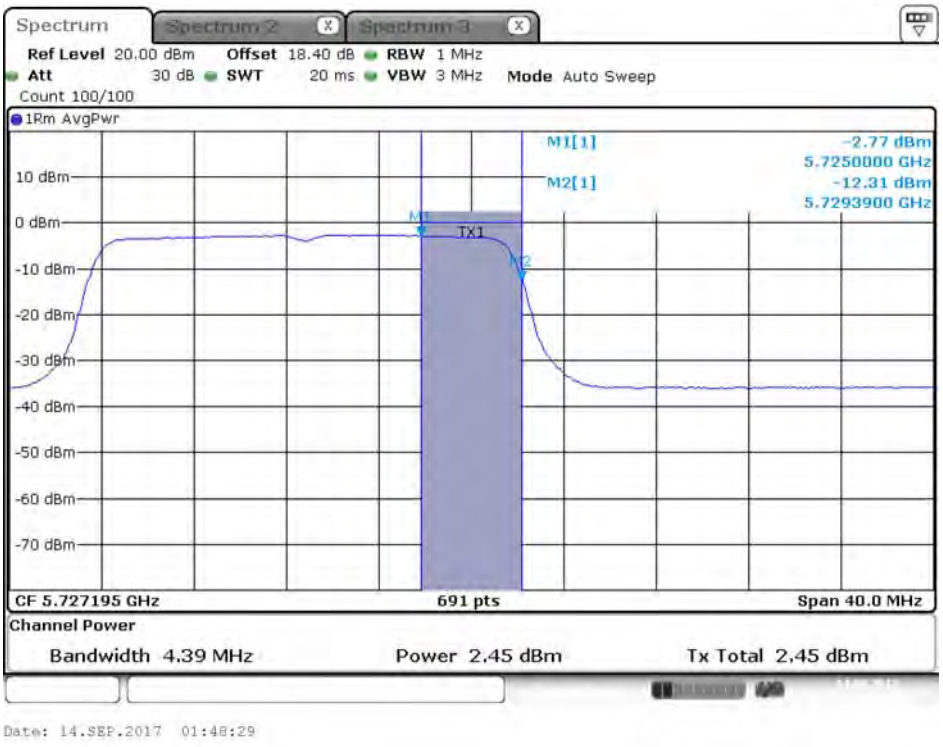
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 3 / 5720 MHz (UNII 2C)



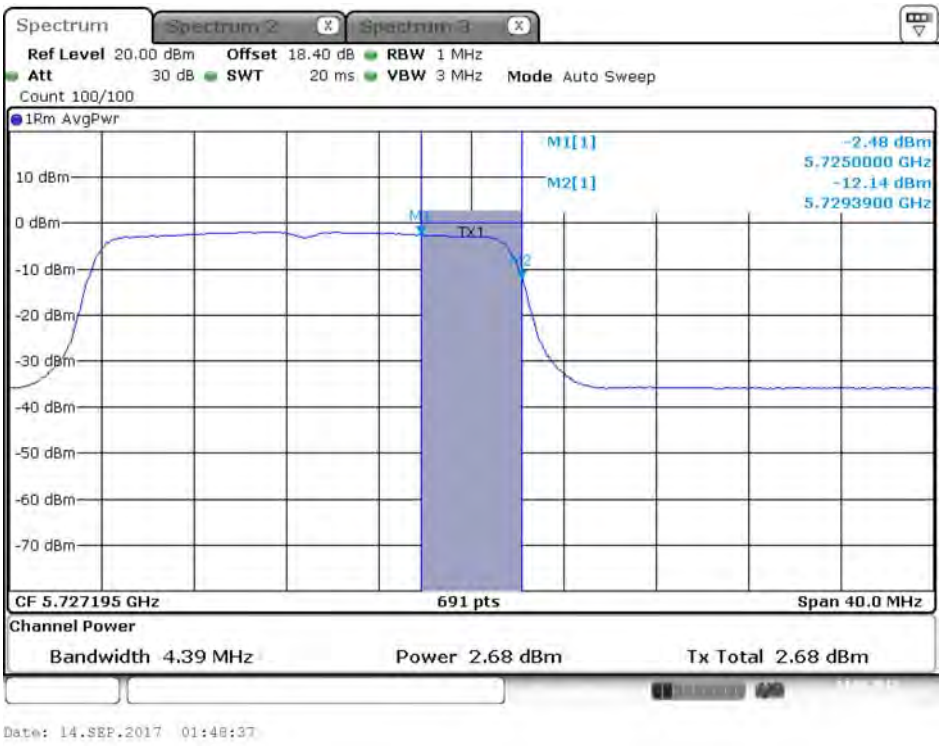
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 / 5720 MHz (UNII 2C)



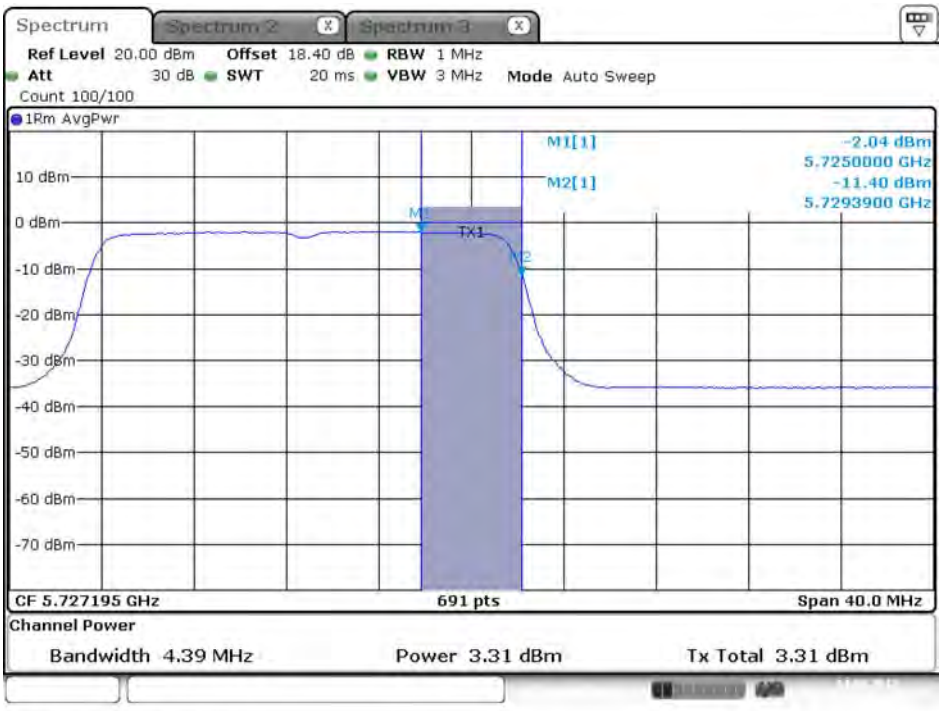
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 3)



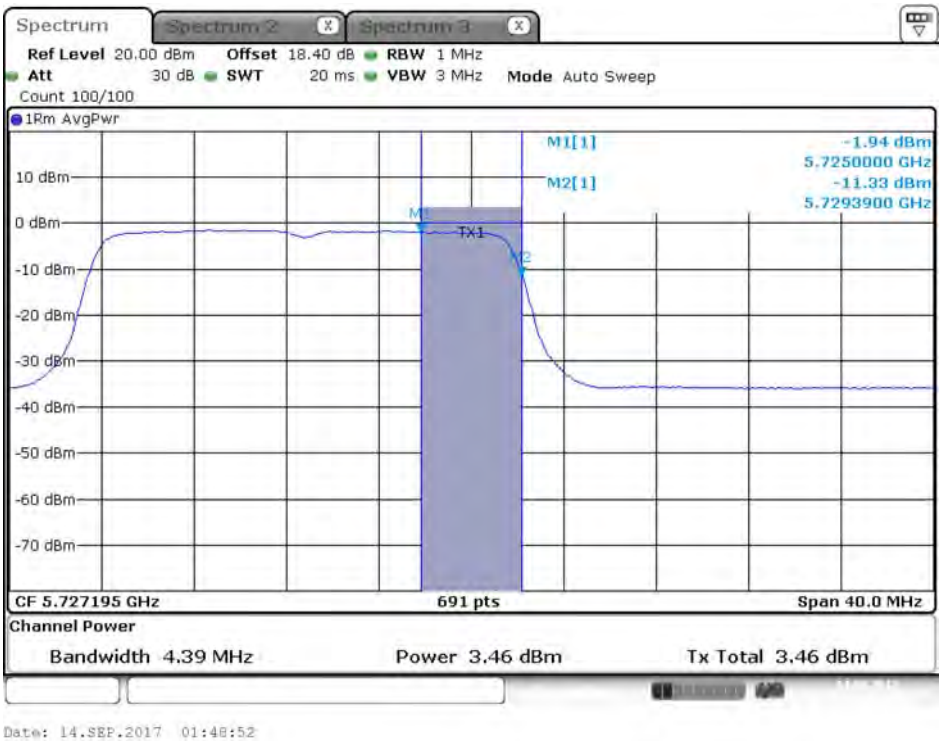
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 2 / 5720 MHz (UNII 3)



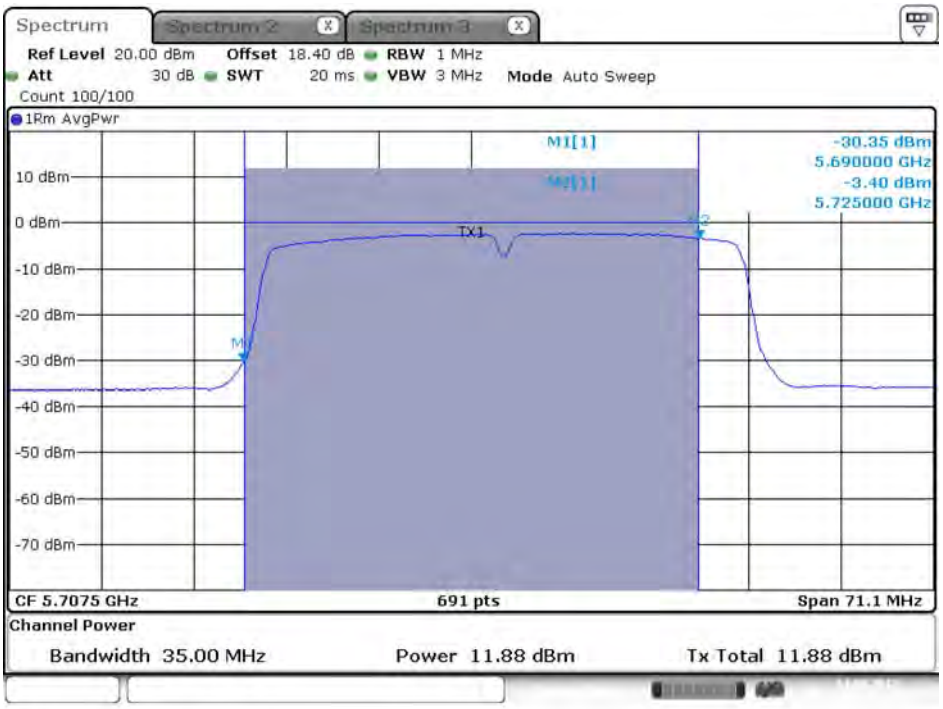
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 3 / 5720 MHz (UNII 3)



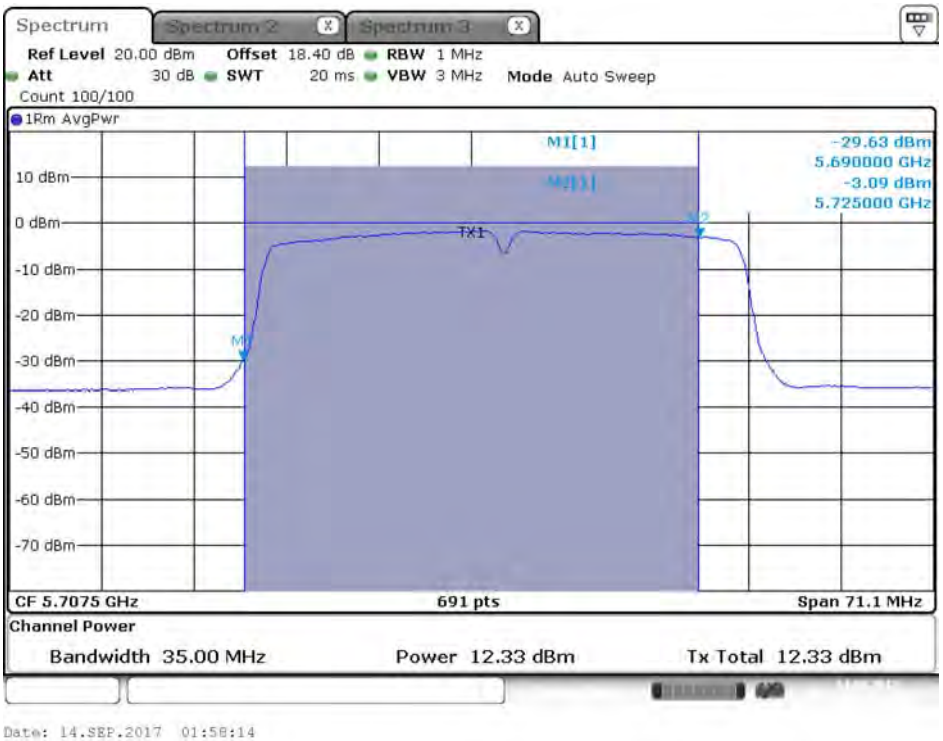
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 / 5720 MHz (UNII 3)



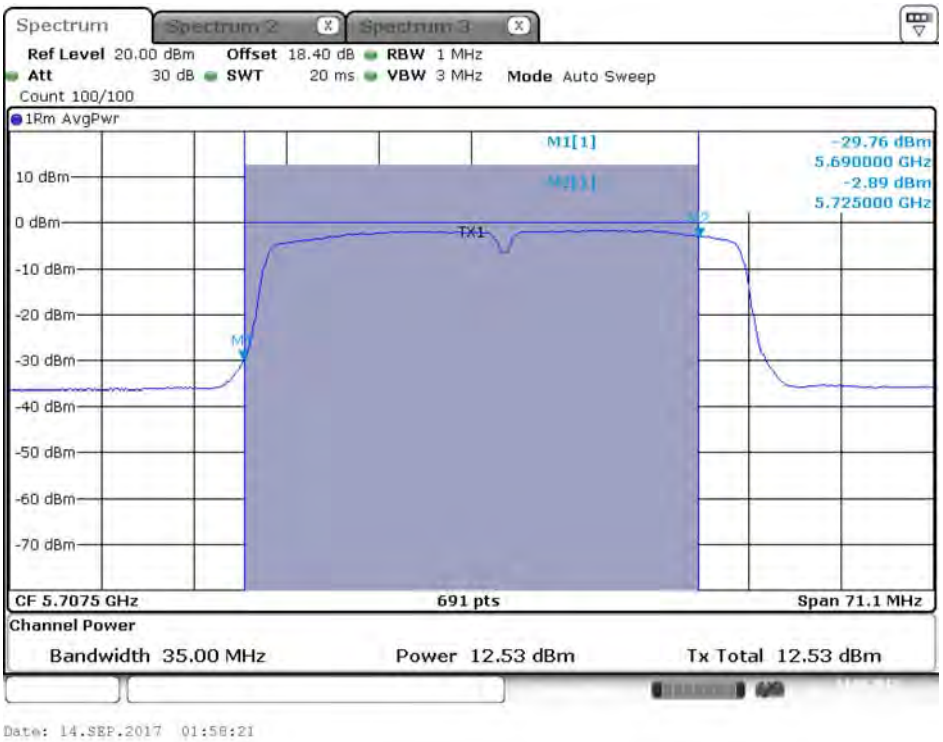
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 2C)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 2 / 5710 MHz (UNII 2C)

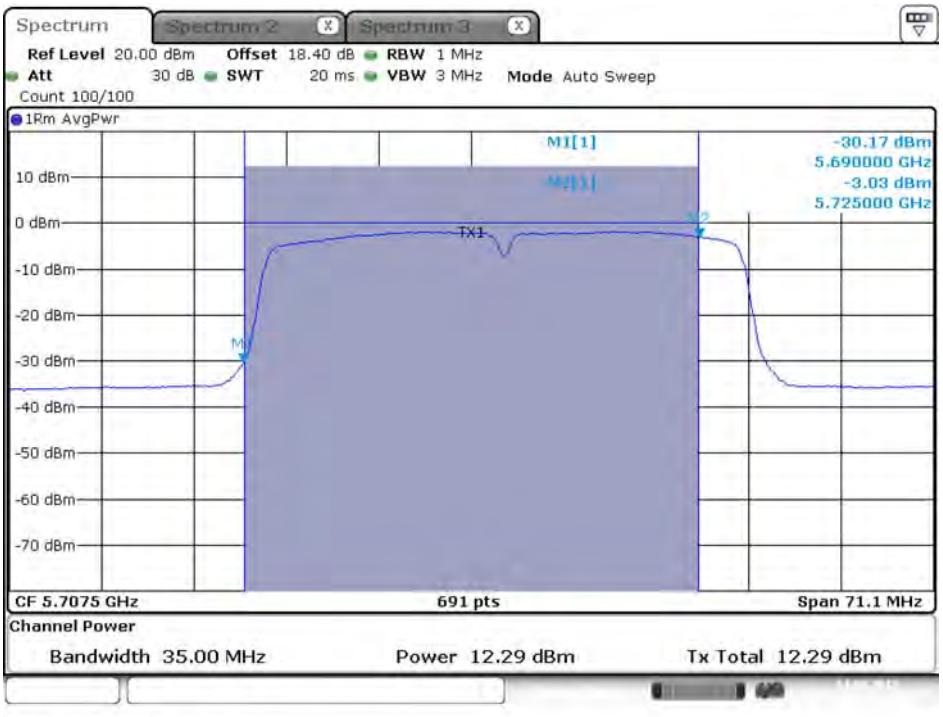


Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 3 / 5710 MHz (UNII 2C)



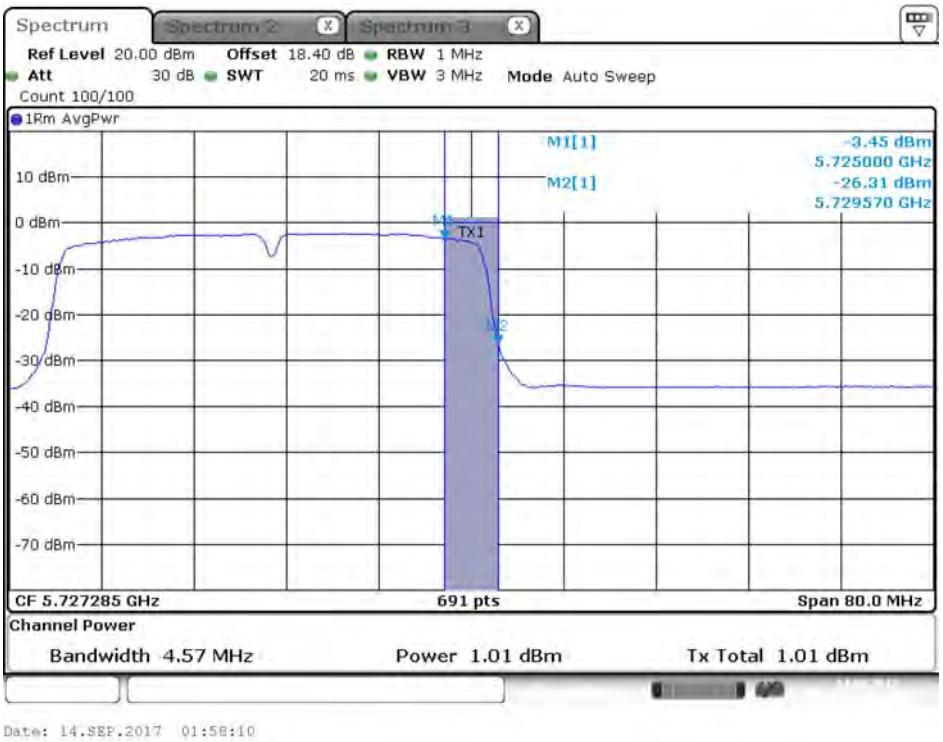
Date: 14.SEP.2017 01:58:21

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 / 5710 MHz (UNII 2C)



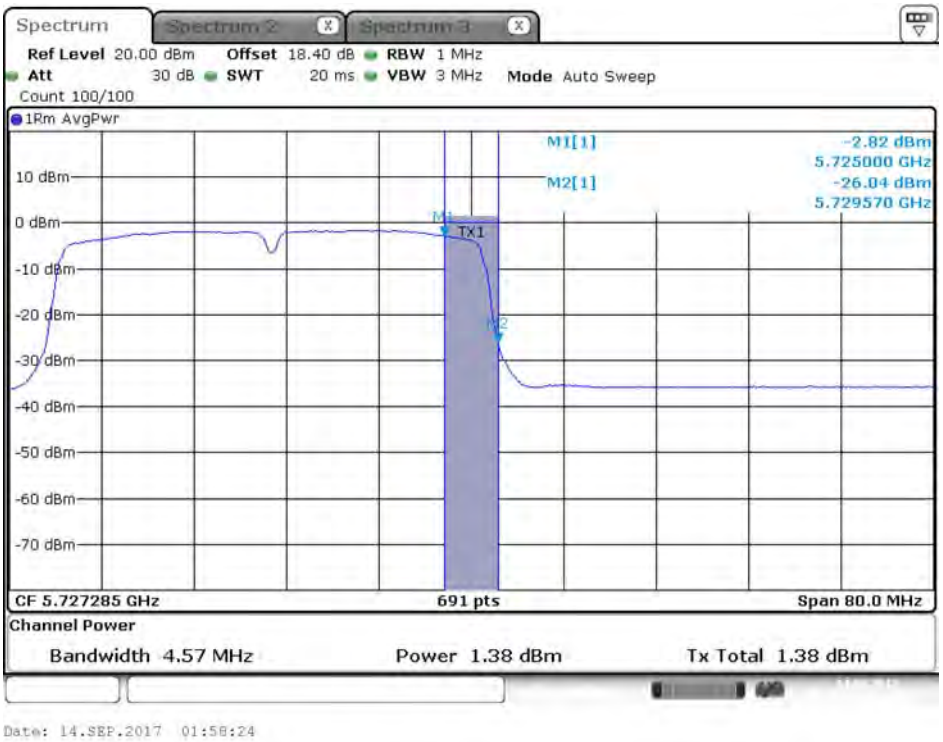
Date: 14.SEP.2017 01:58:28

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 3)



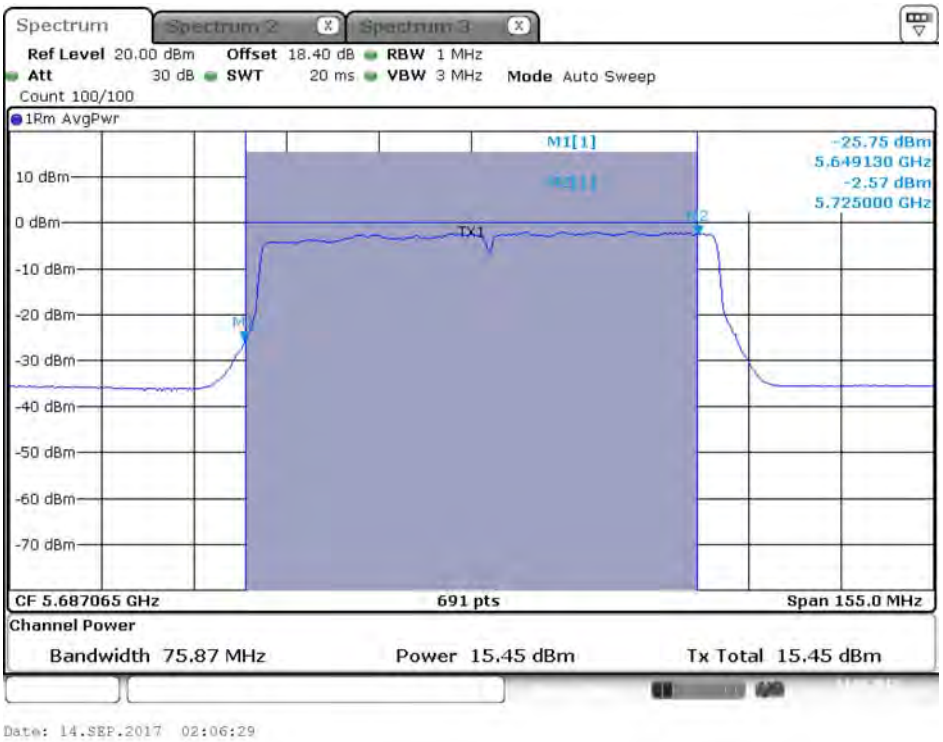
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 2 / 5710 MHz (UNII 3)

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 3 / 5710 MHz (UNII 3)

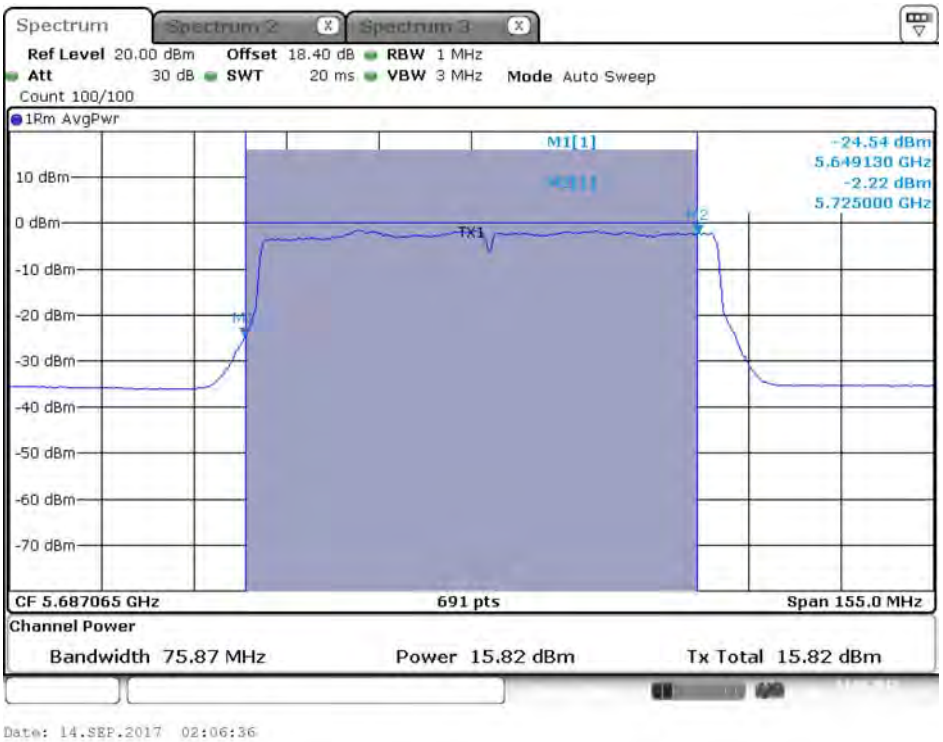


Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 / 5710 MHz (UNII 3)

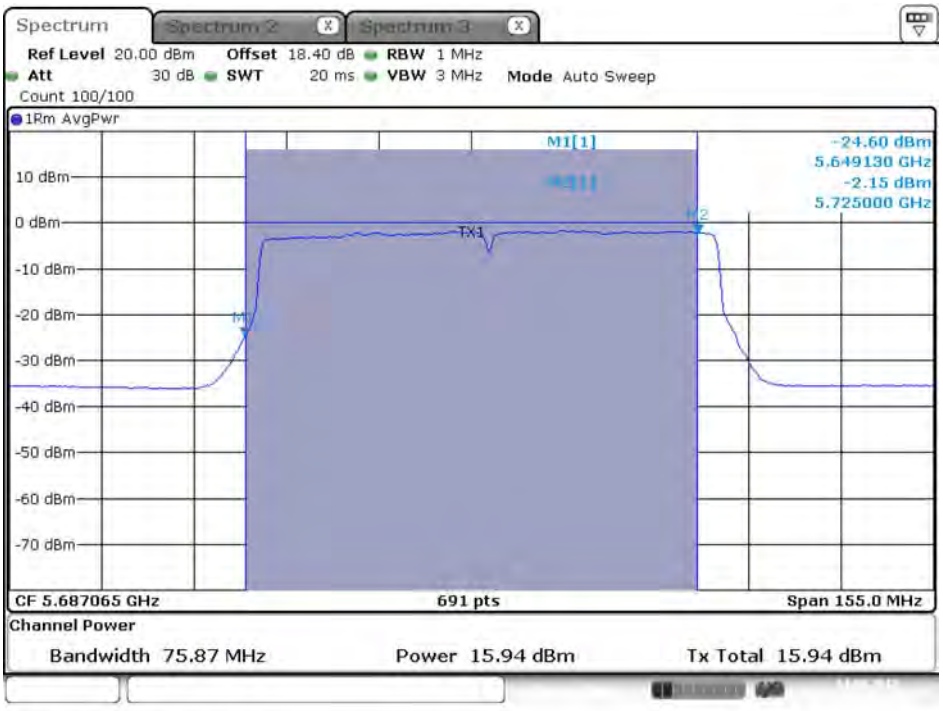
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 2C)



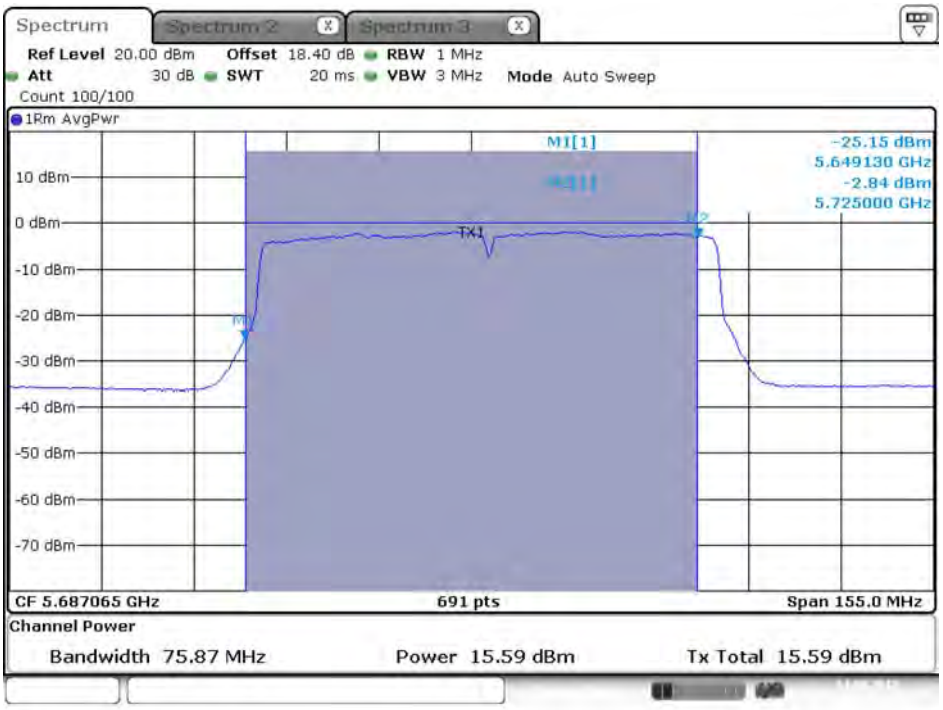
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 2 / 5690 MHz (UNII 2C)



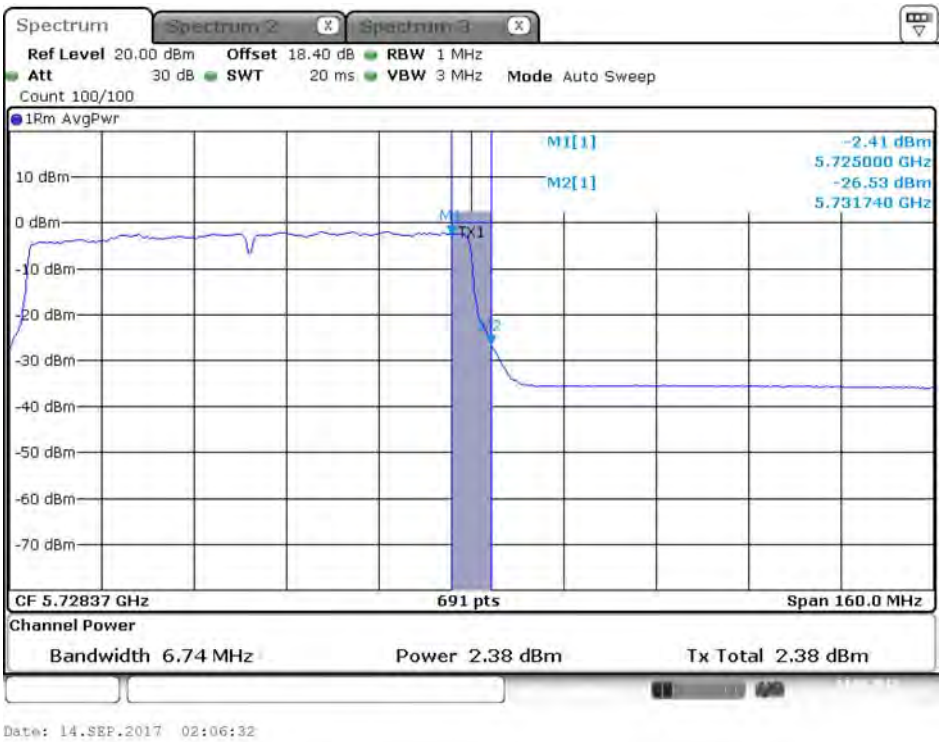
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 3 / 5690 MHz (UNII 2C)



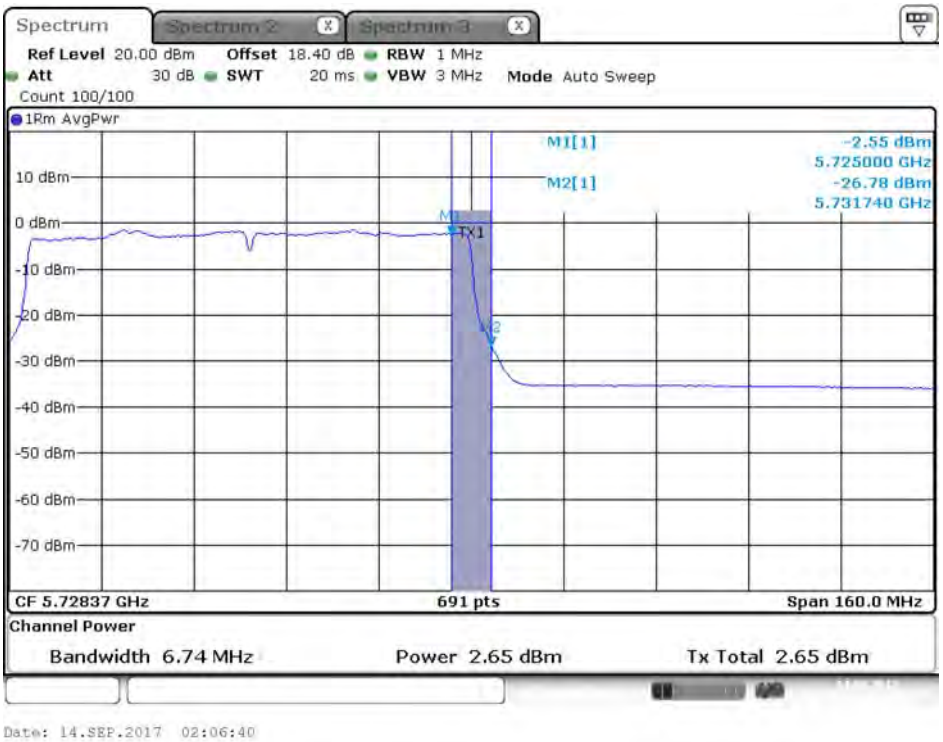
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 / 5690 MHz (UNII 2C)



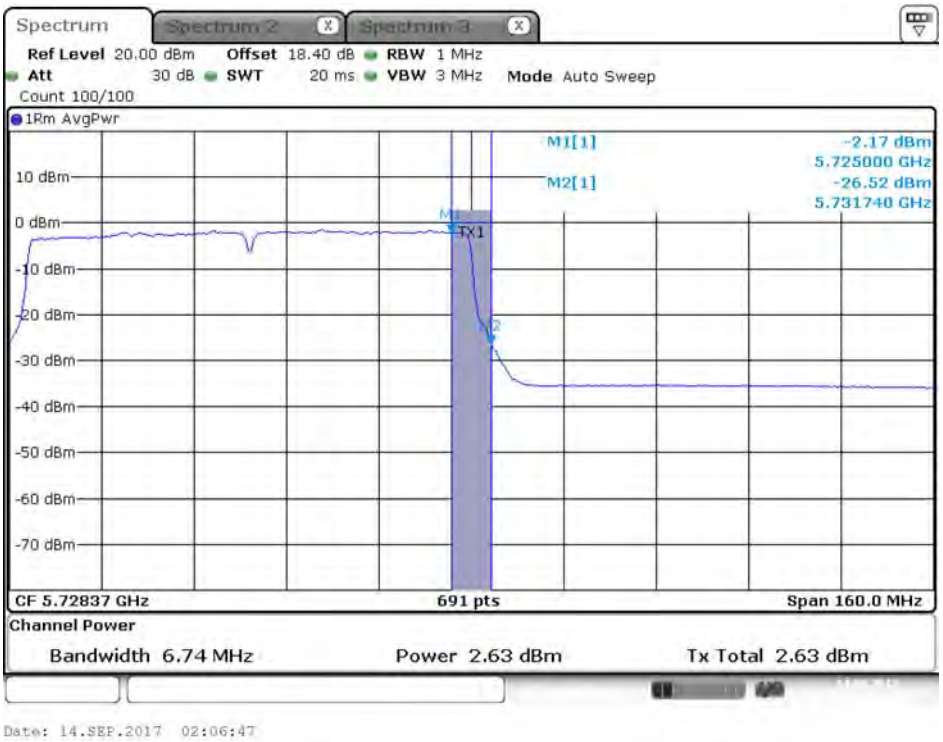
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 3)



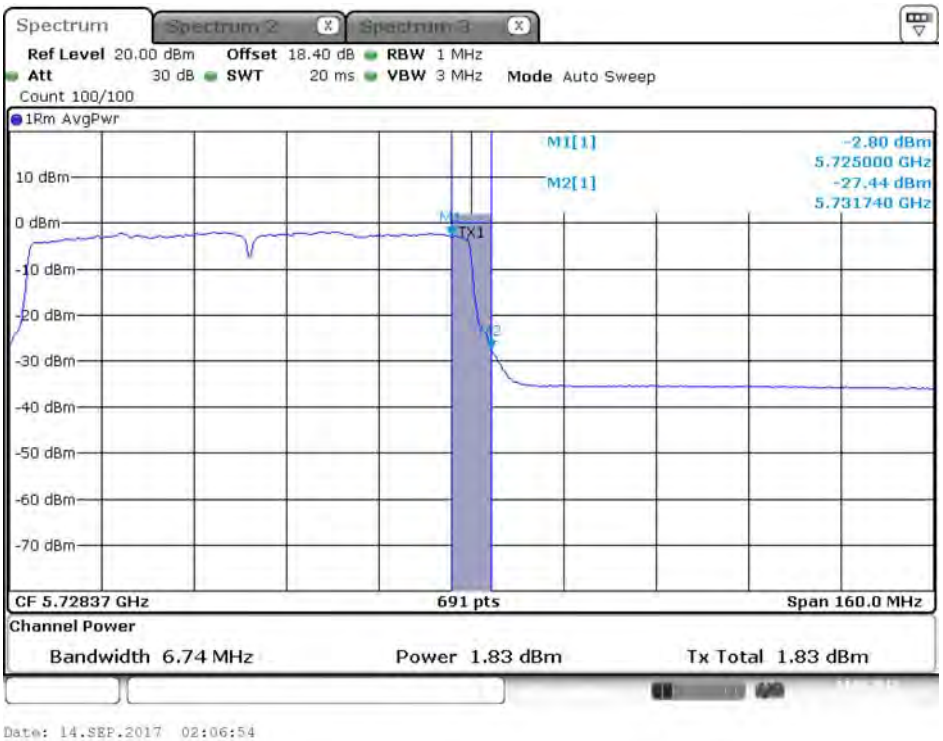
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 2 / 5690 MHz (UNII 3)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 3 / 5690 MHz (UNII 3)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 / 5690 MHz (UNII 3)

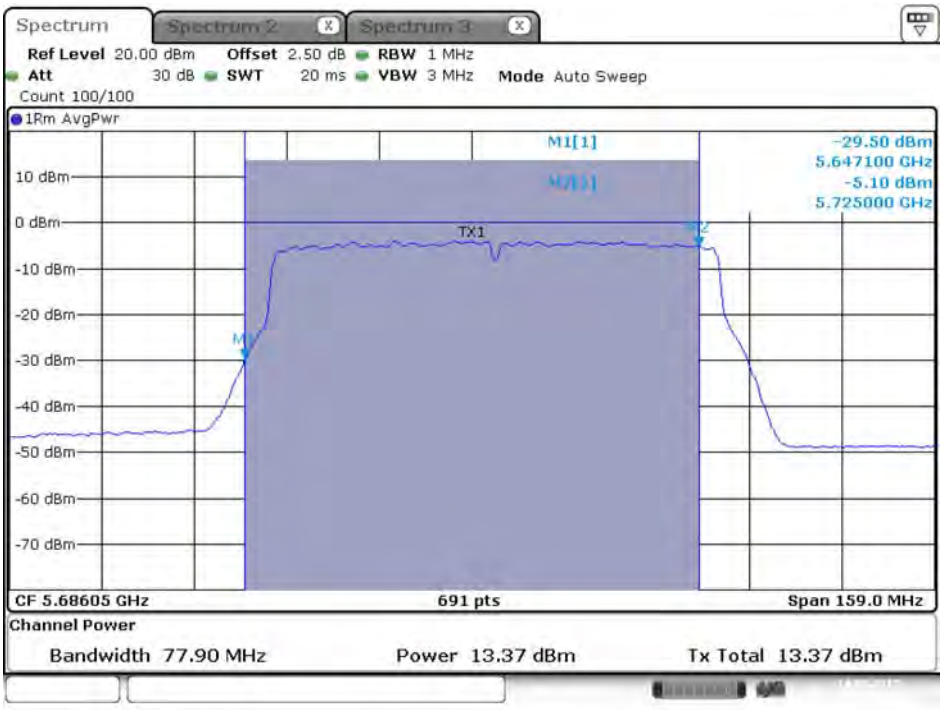


802.11ac MCS0/Nss2 VHT80+80

Straddle Channel

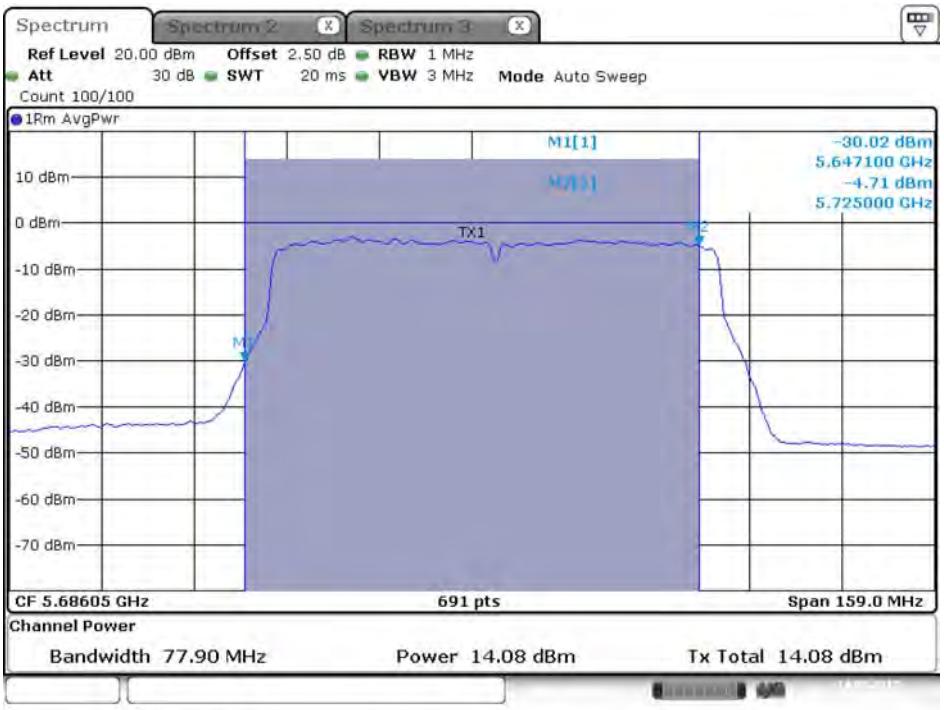
Type 1

Conducted Output Power Plot on Chain 3 / 5690 MHz (UNII 2C)



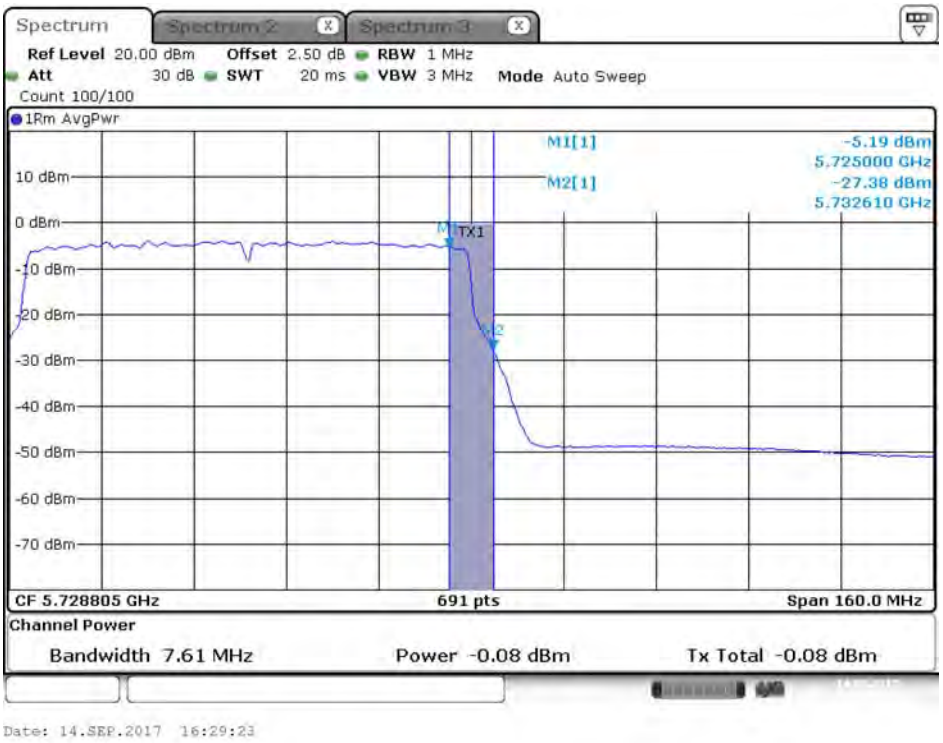
Date: 14.SEP.2017 16:29:19

Conducted Output Power Plot on Chain 4 / 5690 MHz (UNII 2C)

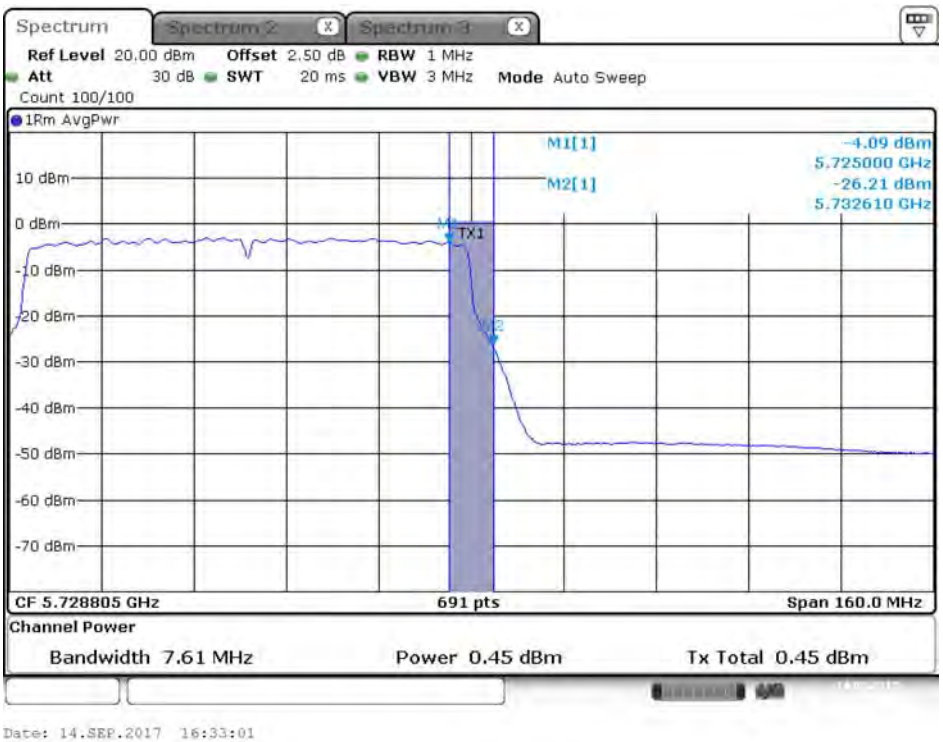


Date: 14.SEP.2017 16:33:05

Conducted Output Power Plot on Chain 3 / 5690 MHz (UNII 3)

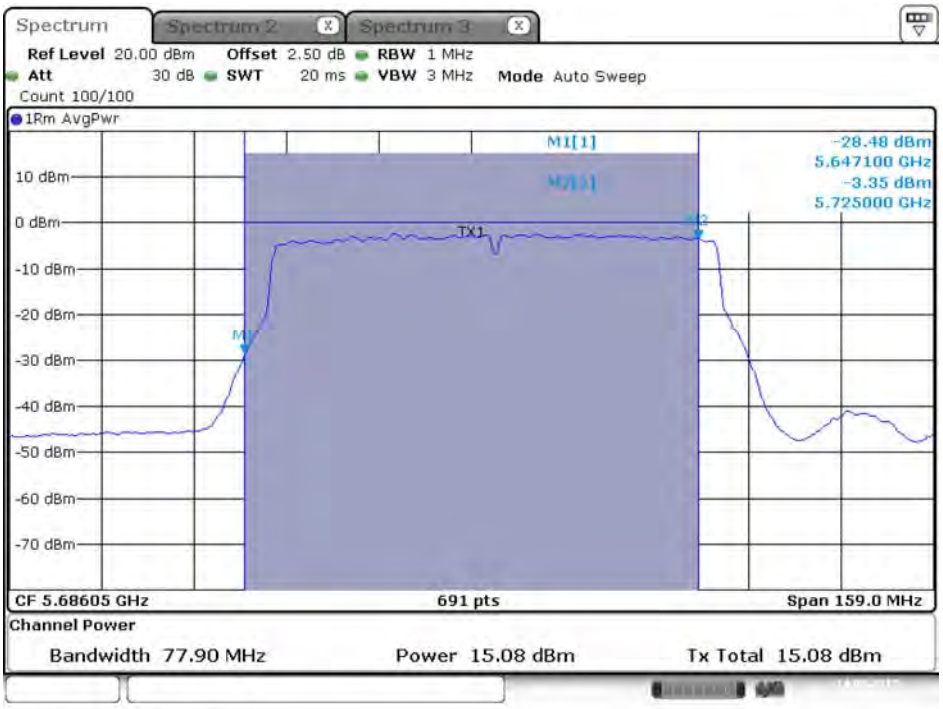


Conducted Output Power Plot on Chain 4 / 5690 MHz (UNII 3)



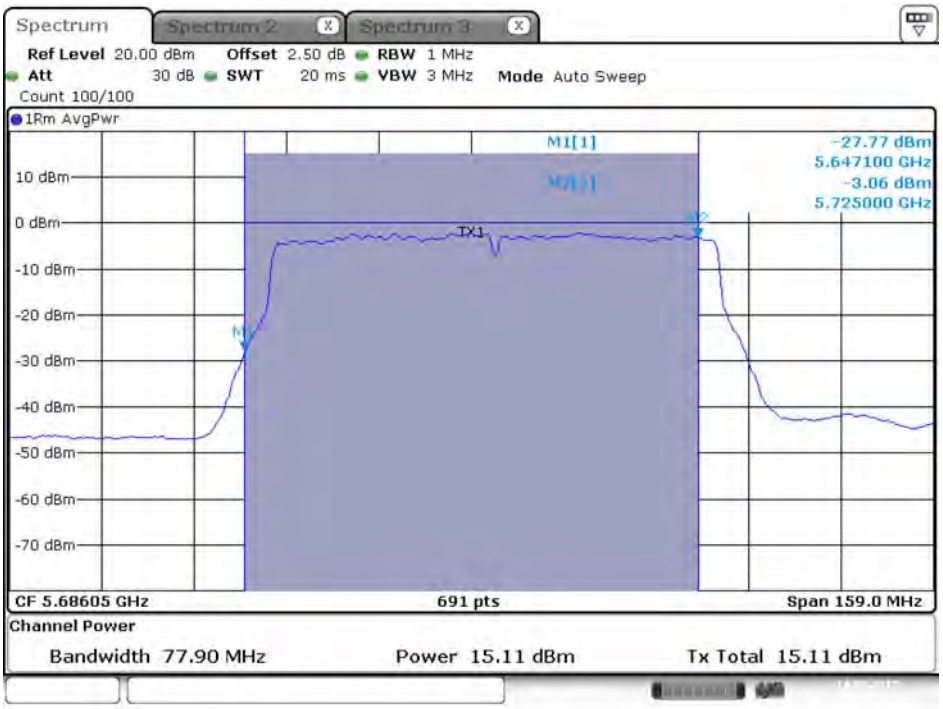
Type 4

Conducted Output Power Plot on Chain 1 / 5690 MHz (UNII 2C)



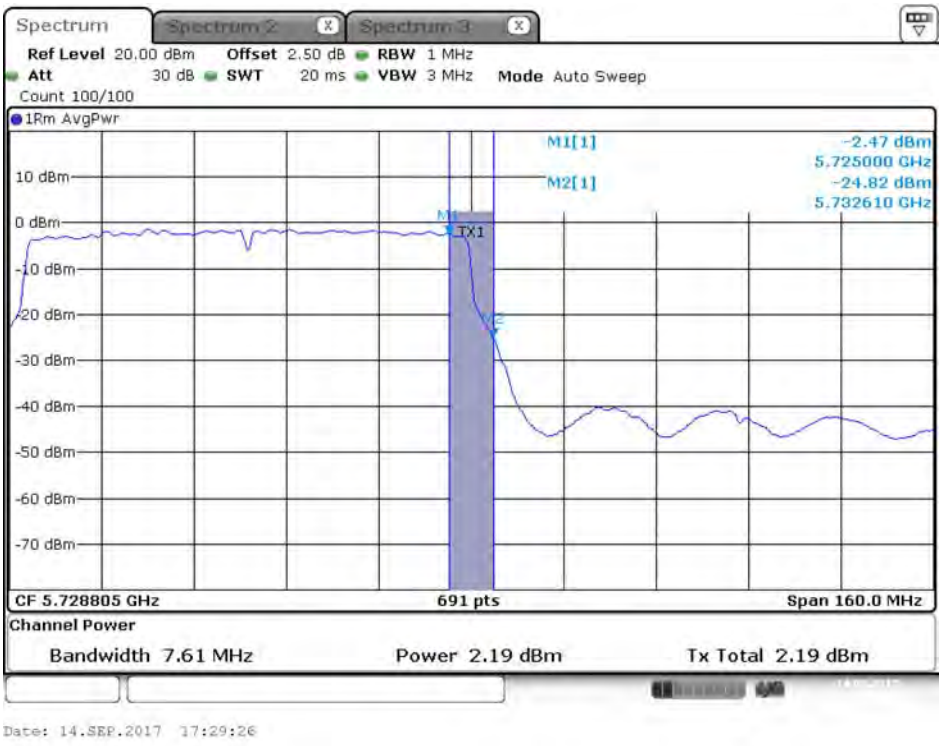
Date: 14.SEP.2017 17:30:11

Conducted Output Power Plot on Chain 2 / 5690 MHz (UNII 2C)

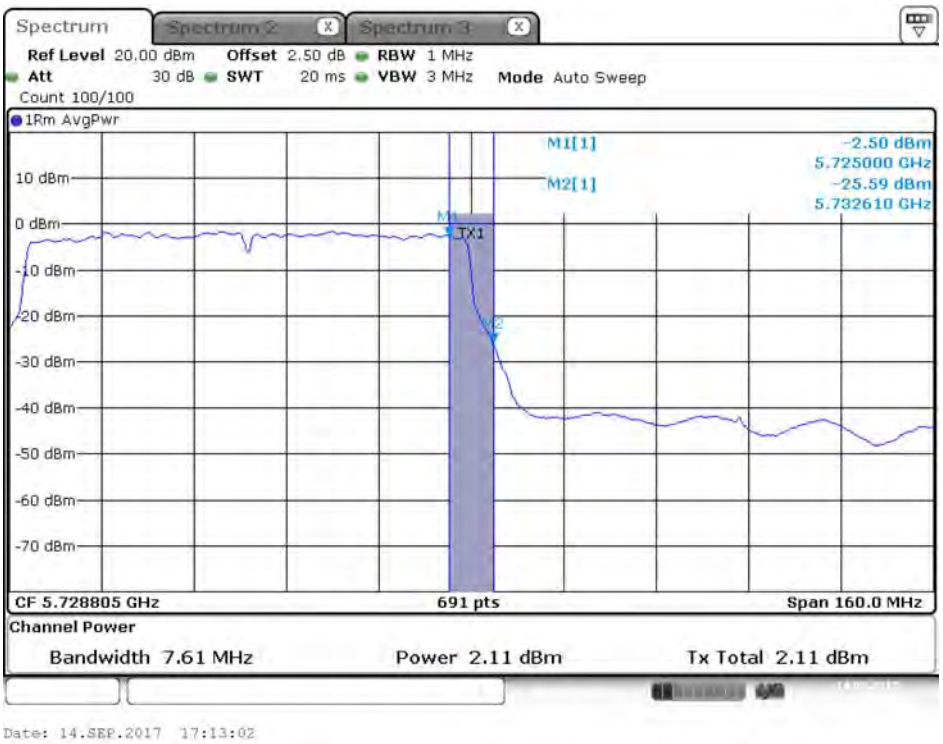


Date: 14.SEP.2017 17:24:21

Conducted Output Power Plot on Chain 1 / 5690 MHz (UNII 3)

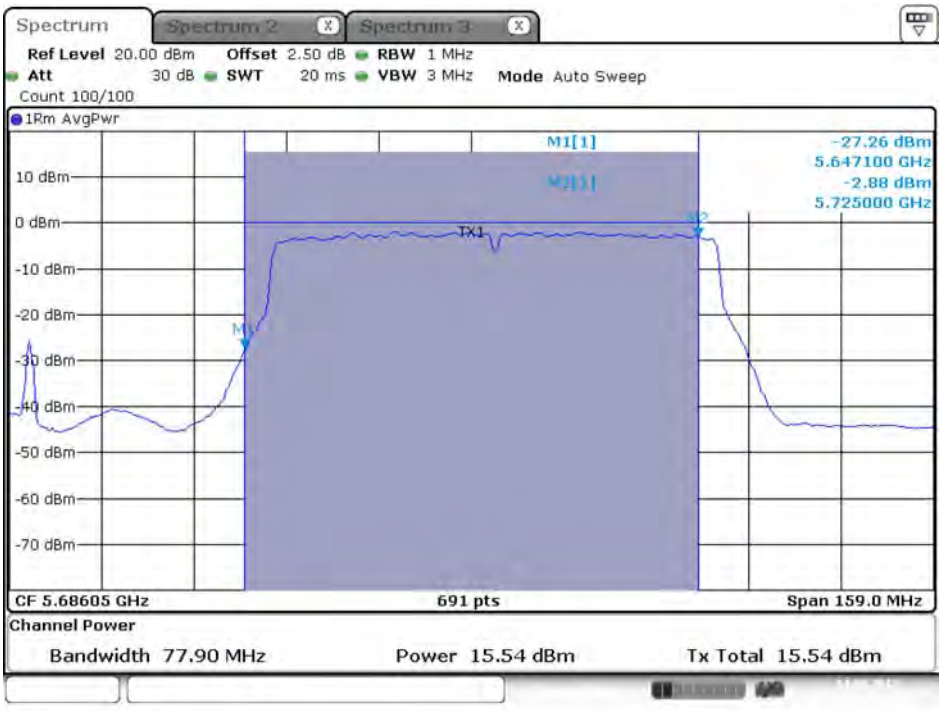


Conducted Output Power Plot on Chain 2 / 5690 MHz (UNII 3)

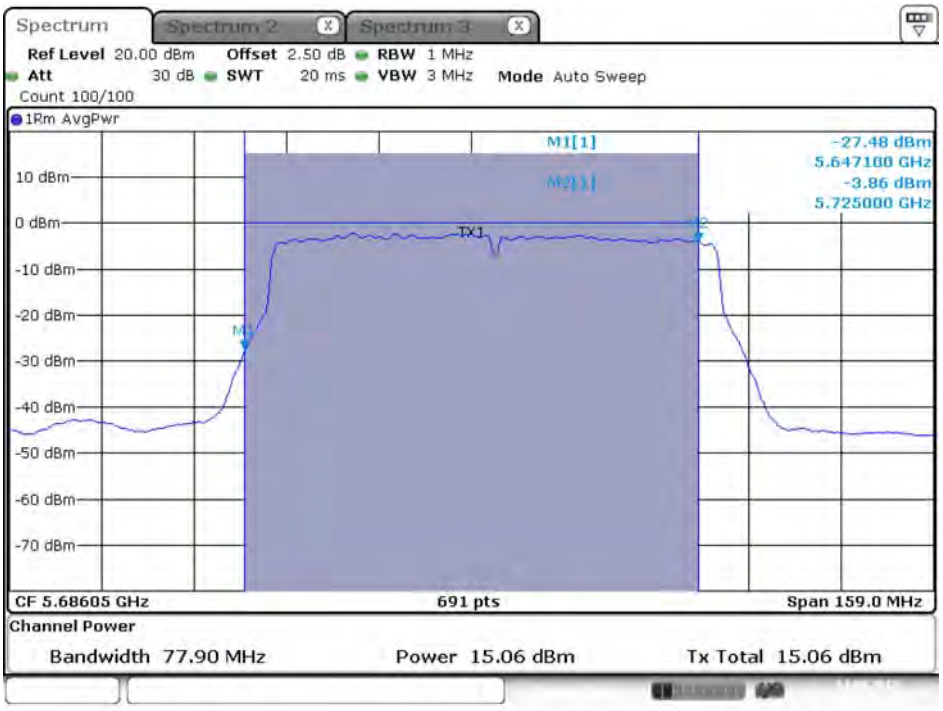


Type 6

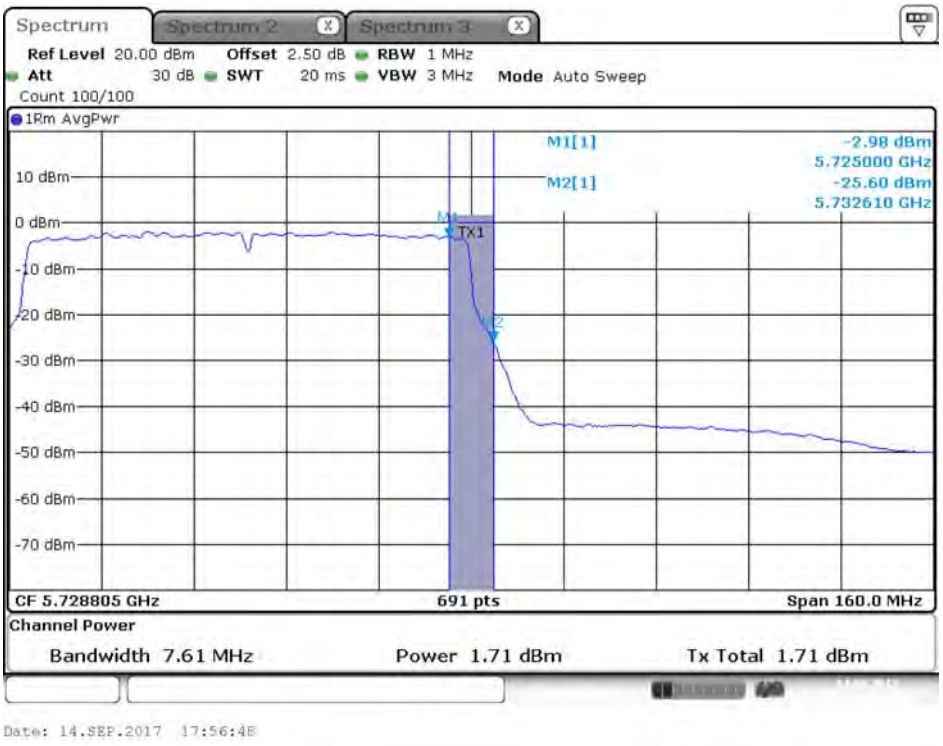
Conducted Output Power Plot on Chain 3 / 5690 MHz (UNII 2C)



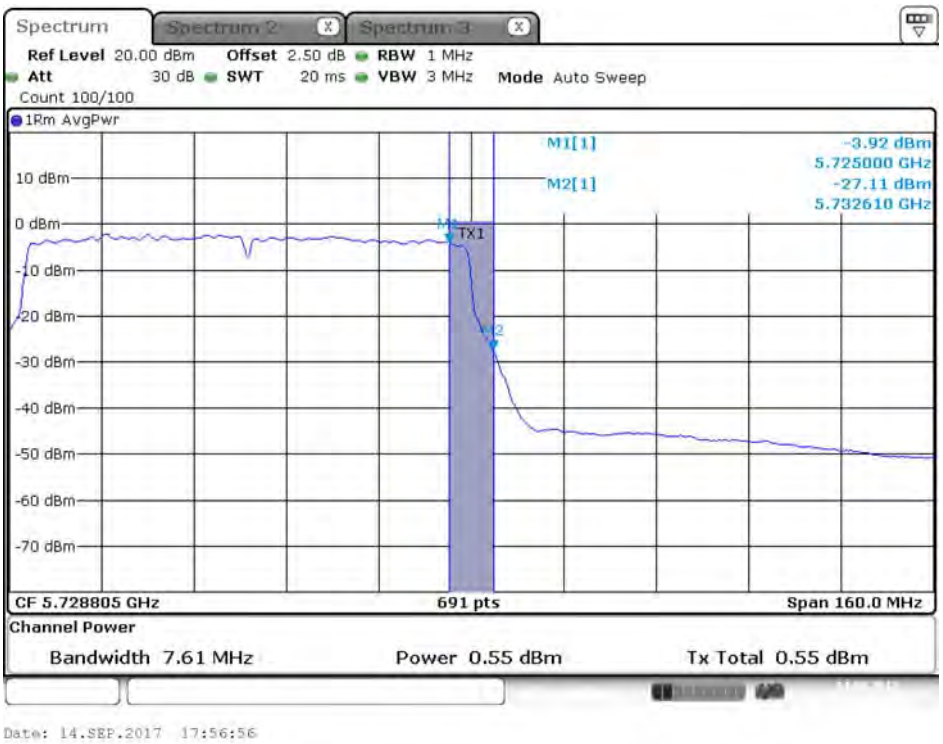
Conducted Output Power Plot on Chain 4 / 5690 MHz (UNII 2C)



Conducted Output Power Plot on Chain 3 / 5690 MHz (UNII 3)



Conducted Output Power Plot on Chain 4 / 5690 MHz (UNII 3)



4.4. Power Spectral Density Measurement

4.4.1. Limit

The following table is power spectral density limits and decrease power density limit rule refer to section 4.3.1.

Frequency Band		Limit
☒	5.470-5.725 GHz	11 dBm/MHz
☒	5.725~5.85 GHz	30 dBm/500kHz

4.4.2. Measuring Instruments and Setting

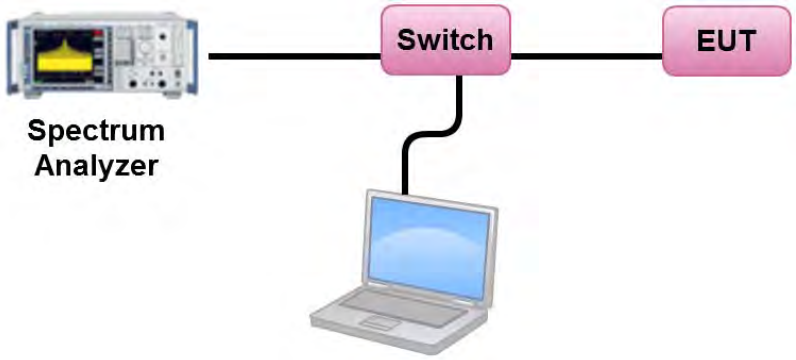
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1000 kHz
VBW	3000 kHz
Detector	RMS
Trace	AVERAGE
Sweep Time	Auto
Trace Average	100 times
Note: If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.	

4.4.3. Test Procedures

1. The transmitter output (antenna port) was connected RF switch to the spectrum analyzer.
2. Test was performed in accordance with KDB789033 D02 v01r04 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (F) Maximum Power Spectral Density (PSD).
3. Multiple antenna systems was performed in accordance KDB662911 D01 v02r01 in-Band Power Spectral Density (PSD) Measurements and sum the spectra across the outputs.
4. For 5.725~5.85 GHz, the measured result of PSD level must add 10log(500kHz/RBW) and the final result should ≤ 30 dBm.

4.4.4. Test Setup Layout



4.4.5. Test Deviation

There is no deviation with the original standard.

4.4.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.4.7. Test Result of Power Spectral Density

Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500 MHz	2.94	2.98	Complies
116	5580 MHz	2.94	2.98	Complies
140	5700 MHz	2.73	2.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B3 limit =11-(14.02-6)=2.98dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	14.77	-3.01	11.76	21.98	Complies
157	5785 MHz	14.60	-3.01	11.59	21.98	Complies
165	5825 MHz	14.66	-3.01	11.65	21.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B4 limit =30-(14.02-6)=21.98dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500 MHz	2.97	2.98	Complies
116	5580 MHz	2.91	2.98	Complies
140	5700 MHz	2.93	2.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B3 limit =11-(14.02-6)=2.98dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	14.61	-3.01	11.60	21.98	Complies
157	5785 MHz	14.57	-3.01	11.56	21.98	Complies
165	5825 MHz	14.77	-3.01	11.76	21.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B4 limit =30-(14.02-6)=21.98dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510 MHz	2.96	2.98	Complies
110	5550 MHz	2.95	2.98	Complies
134	5670 MHz	2.95	2.98	Complies

Note: $DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ =14.02dBi, so B3 limit =11-(14.02-6)=2.98dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	11.34	-3.01	8.33	21.98	Complies
159	5795 MHz	11.78	-3.01	8.77	21.98	Complies

Note: $DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ =14.02dBi, so B4 limit =30-(14.02-6)=21.98dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
106	5530 MHz	-2.91	2.98	Complies
122	5610 MHz	2.48	2.98	Complies

Note: $DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ =14.02dBi, so B3 limit =11-(14.02-6)=2.98dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	4.52	-3.01	1.51	21.98	Complies

Note: $DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$ =14.02dBi, so B4 limit =30-(14.02-6)=21.98dBm/500kHz.

Straddle Channel

Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	2.67	2.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B3 limit =11-(14.02-6)=2.98dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
144	5720 MHz (UNII 3)	2.32	-3.01	-0.69	21.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B4 limit =30-(14.02-6)=21.98dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	2.59	2.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B3 limit =11-(14.02-6)=2.98dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
144	5720 MHz (UNII 3)	2.31	-3.01	-0.70	21.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B4 limit =30-(14.02-6)=21.98dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
142	5710 MHz (UNII 2C)	2.63	2.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B3 limit =11-(14.02-6)=2.98dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
142	5710 MHz (UNII 3)	1.58	-3.01	-1.43	21.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B4 limit =30-(14.02-6)=21.98dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
138	5690 MHz (UNII 2C)	2.97	2.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B3 limit =11-(14.02-6)=2.98dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
138	5690 MHz (UNII 3)	2.31	-3.01	-0.70	21.98	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so B4 limit =30-(14.02-6)=21.98dBm/500kHz.

802.11ac MCS0/Nss2 VHT80+80

Type	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Max. Limit (dBm/MHz)	Result
1	5530 MHz	-2.34	-			5.99	Complies
	5690 MHz (UNII 2C)	-2.37				5.99	Complies
	5690 MHz (UNII 3)	-2.68	-3.01	-5.69	24.99	-	Complies
2	5530 MHz	-2.37	-			5.99	Complies
	5775 MHz	-1.94	-3.01	-4.95	24.99	-	Complies
3	5610 MHz	-1.02	-			5.99	Complies
	5775 MHz	-0.27	-3.01	-3.28	24.99	-	Complies
4	5690 MHz (UNII 2C)	-1.08	-			5.99	Complies
	5690 MHz (UNII 3)	-0.84	-3.01	-3.85	24.99	-	Complies
	5775 MHz	0.23	-3.01	-2.78	24.99	-	Complies
5	5530 MHz	-1.98	-			5.99	Complies
	5610 MHz	-1.50				5.99	Complies
6	5610 MHz	-0.18				5.99	Complies
	5690 MHz (UNII 2C)	-0.97				5.99	Complies
	5690 MHz (UNII 3)	-2.20	-3.01	-5.21	24.99	-	Complies

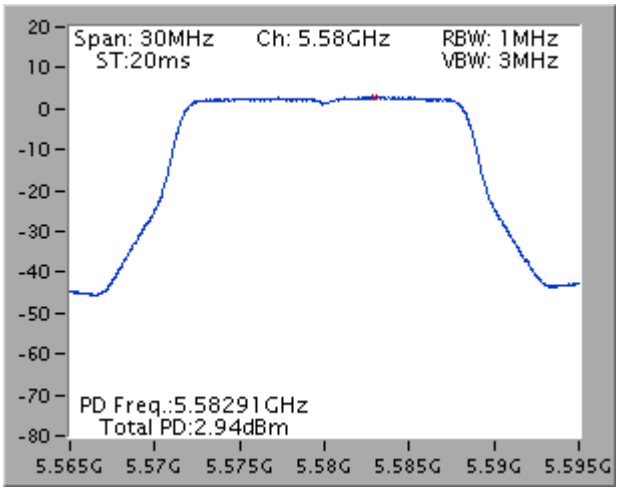
Note: Band 3 $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.01dBi, so limit=11-(11.01-6)=5.99dBm/MHz.

Note: Band 4 $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.01dBi, so limit=30-(11.01-6)=24. 99dBm/500kHz.

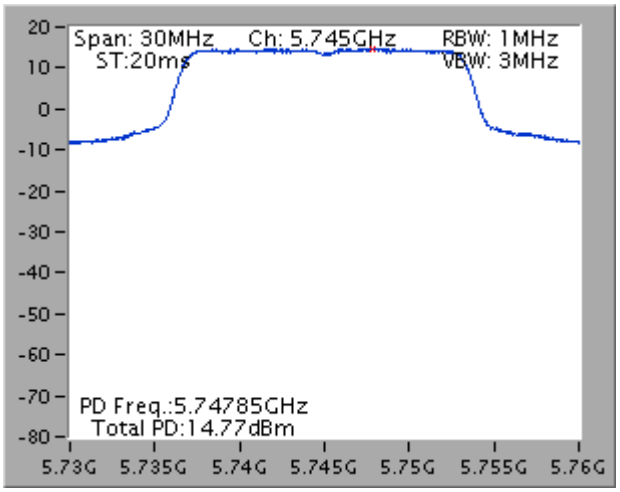
Note: All the test values were listed in the report.

For plots, only the channel with worse result was shown.

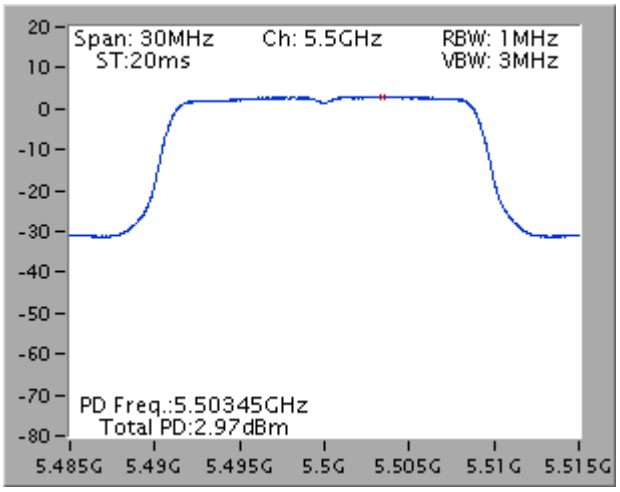
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5580 MHz



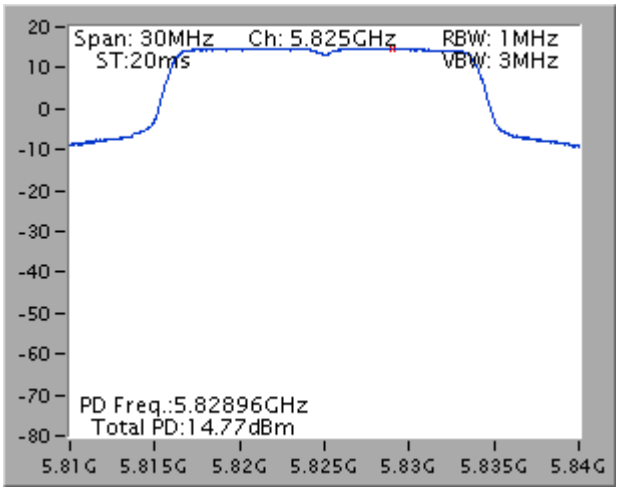
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5745 MHz



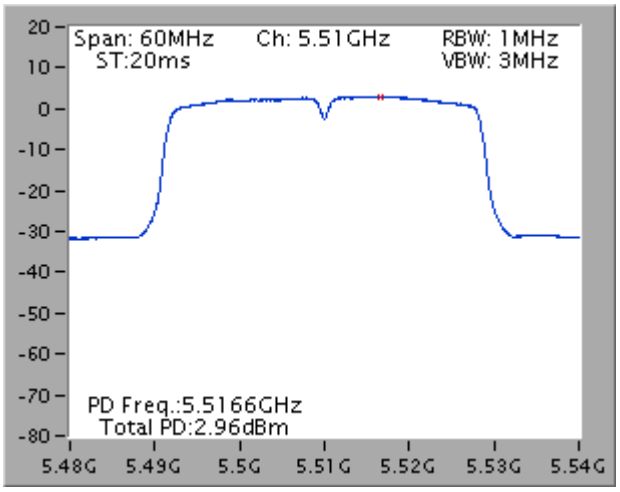
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5500 MHz



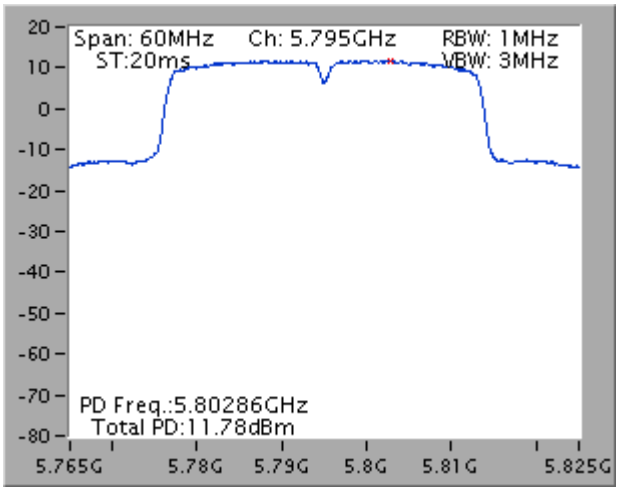
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5825 MHz



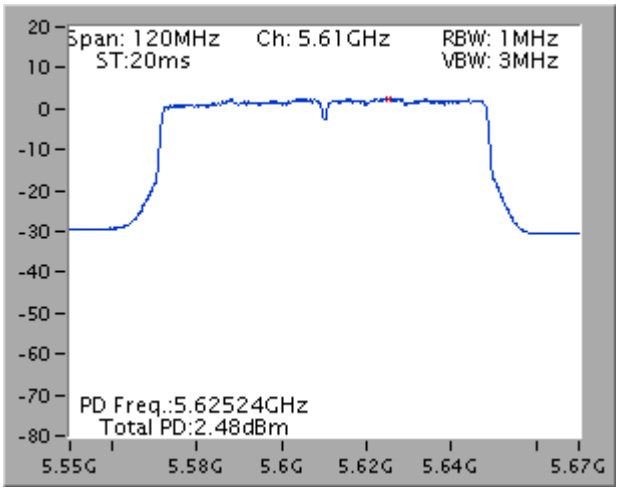
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5510 MHz



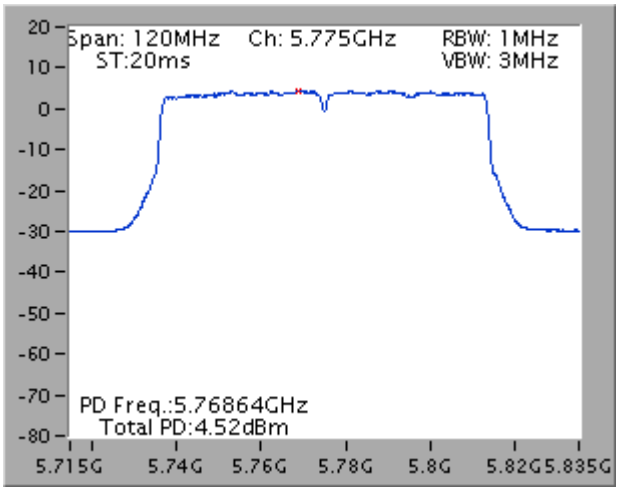
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5795 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5610 MHz

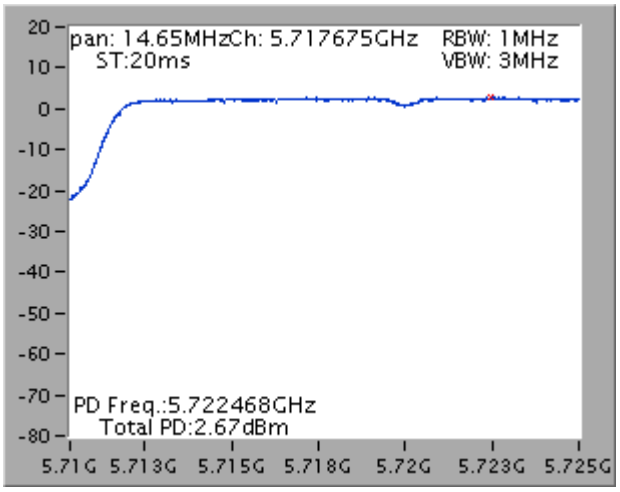


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5775 MHz

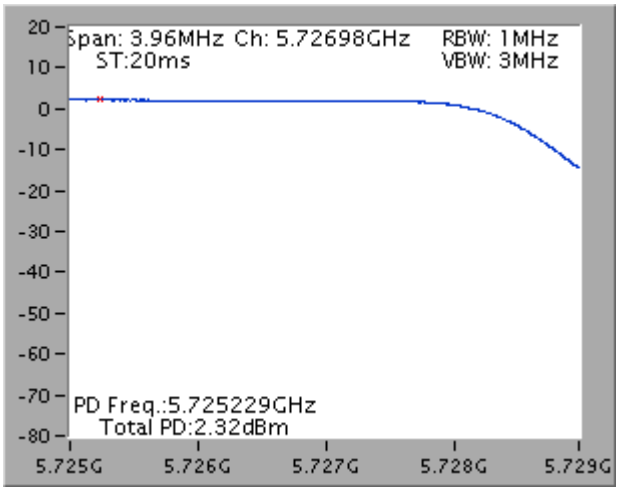


Straddle Channel

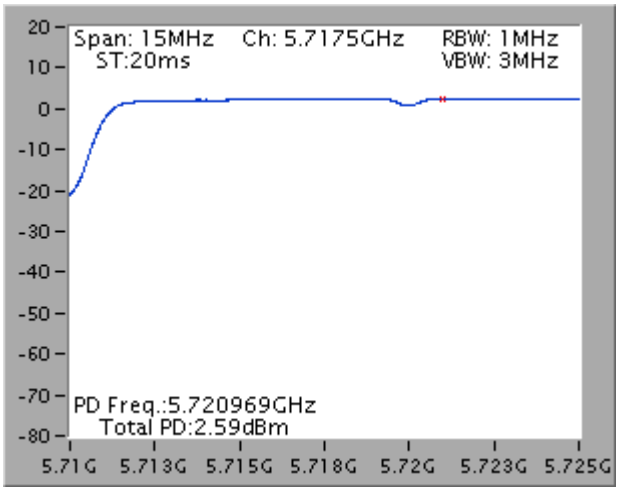
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz (UNII 2C)



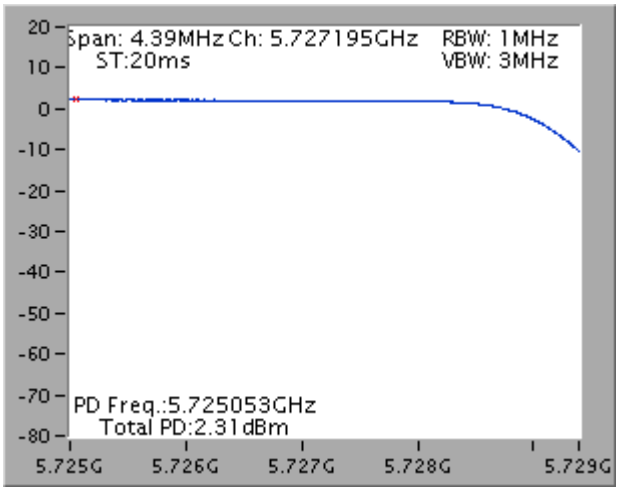
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz (UNII 3)



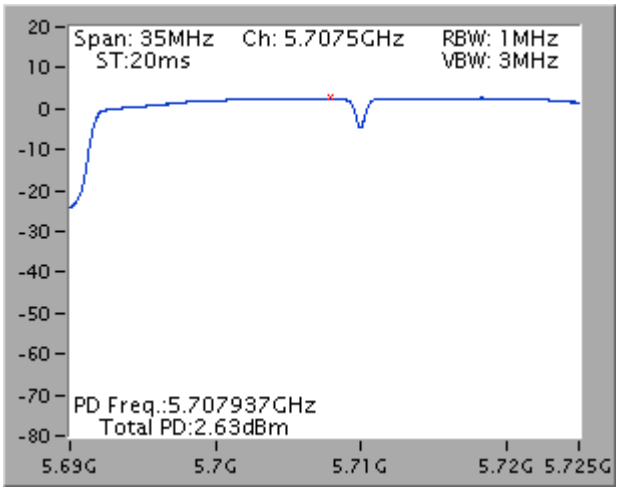
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz (UNII 2C)



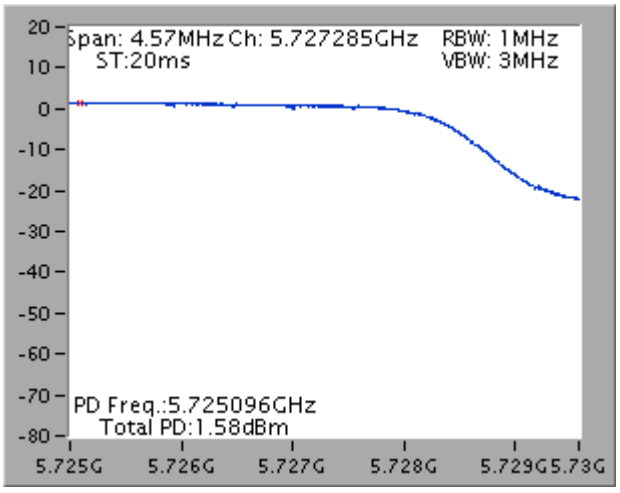
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz (UNII 3)



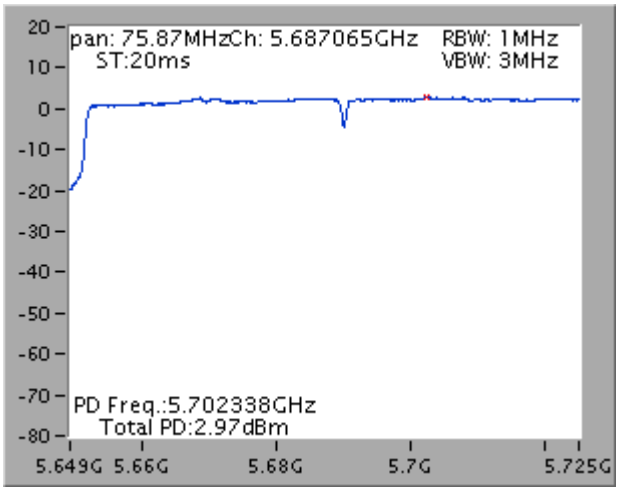
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5710 MHz (UNII 2C)



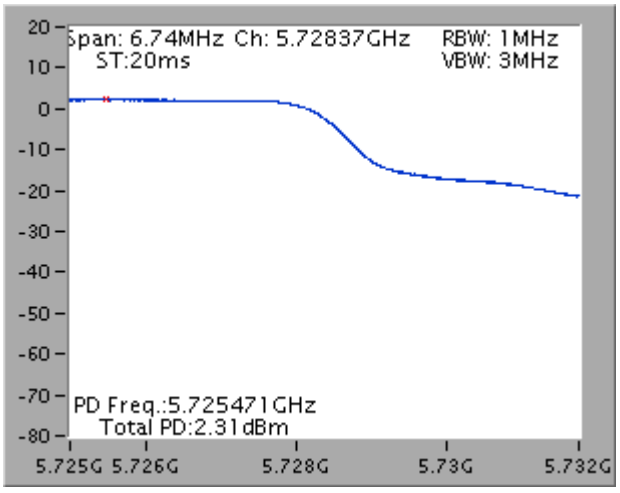
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5710 MHz (UNII 3)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5690 MHz (UNII 2C)



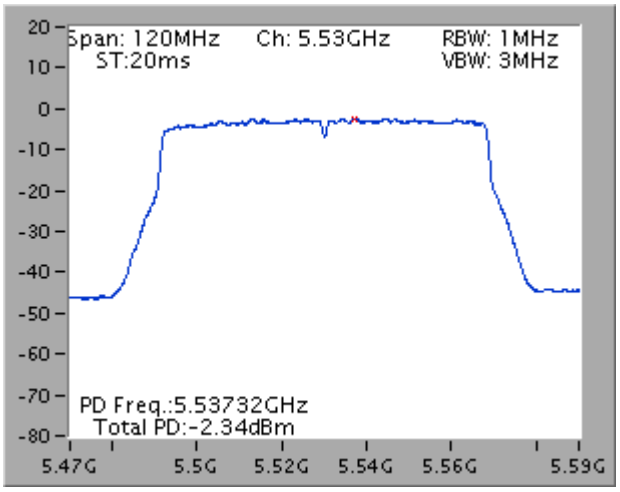
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5690 MHz (UNII 3)



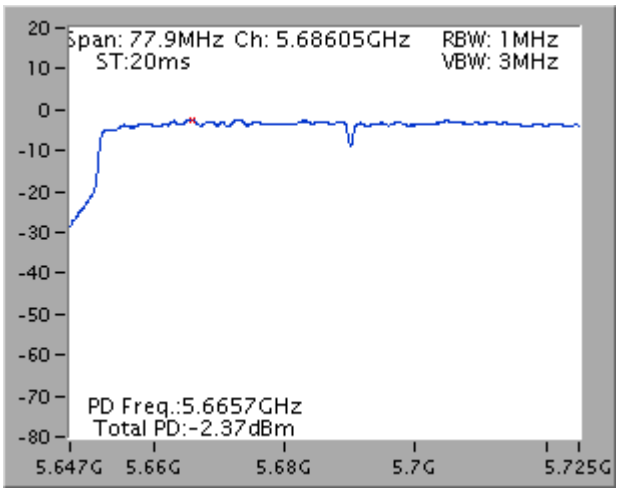
802.11ac MCS0/Nss2 VHT80+80

Type 1

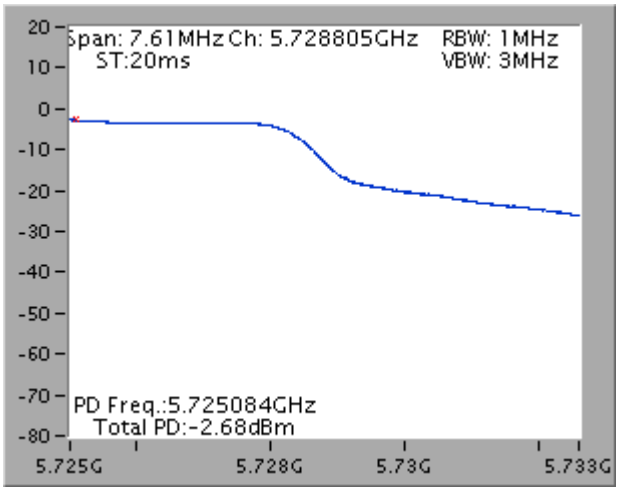
Power Density Plot on Chain 1 + Chain 2 / 5530 MHz



Power Density Plot on Chain 3 + Chain 4 / 5690 MHz (UNII 2C)

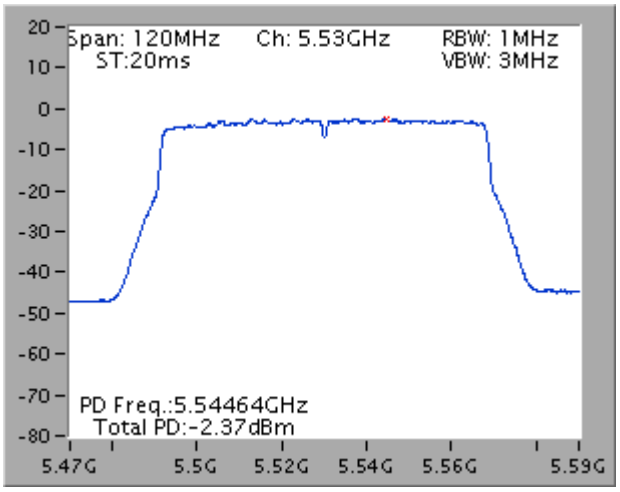


Power Density Plot on Chain 3 + Chain 4 / 5690 MHz (UNII 3)

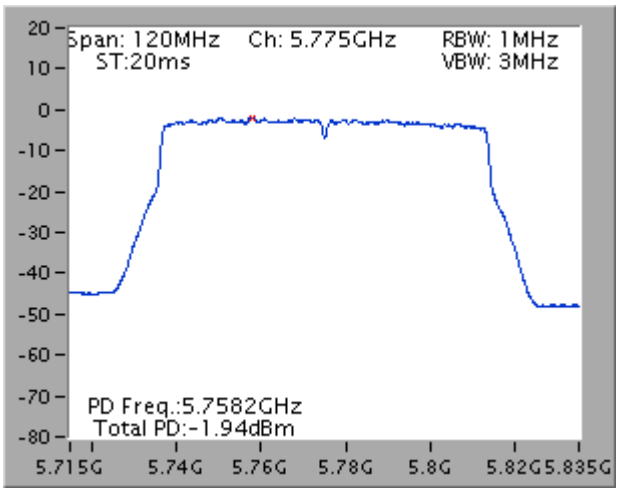


Type 2

Power Density Plot on Chain 1 + Chain 2 / 5530 MHz

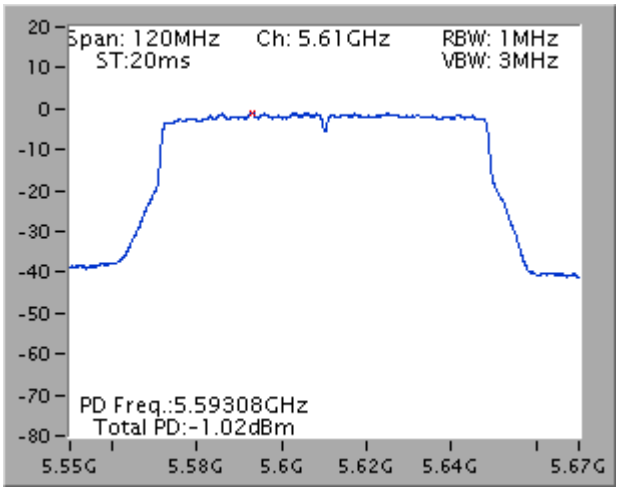


Power Density Plot on Chain 3 + Chain 4 / 5775 MHz

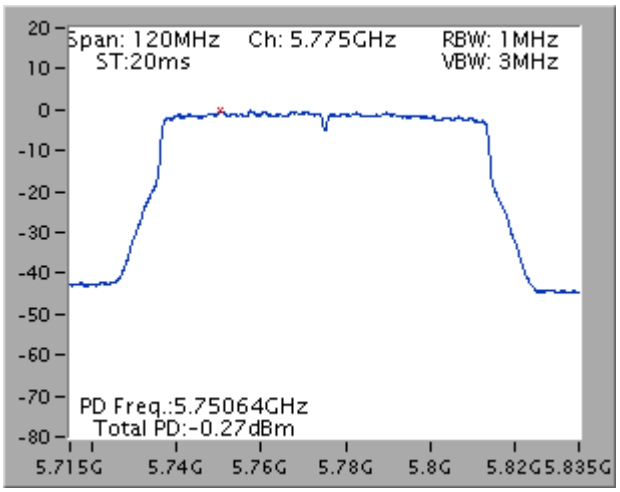


Type 3

Power Density Plot on Chain 1 + Chain 2 / 5610 MHz

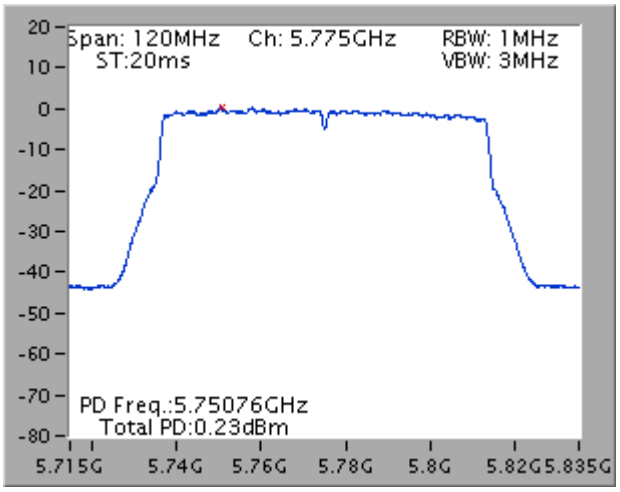


Power Density Plot on Chain 3 + Chain 4 / 5775 MHz

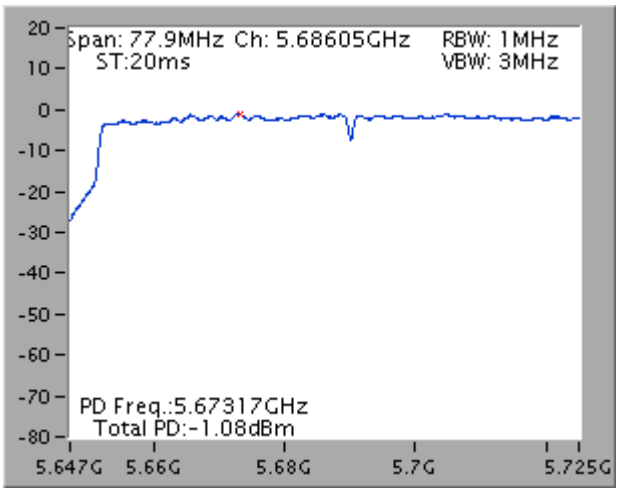


Type 4

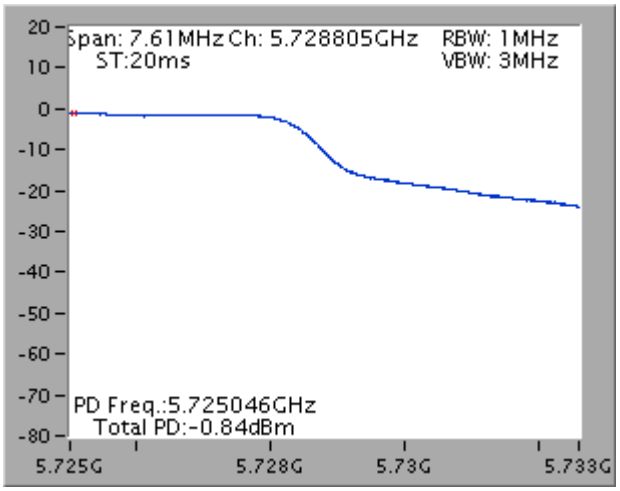
Power Density Plot on Chain 3 + Chain 4 / 5775 MHz



Power Density Plot on Chain 1 + Chain 2 / 5690 MHz (UNII 2C)

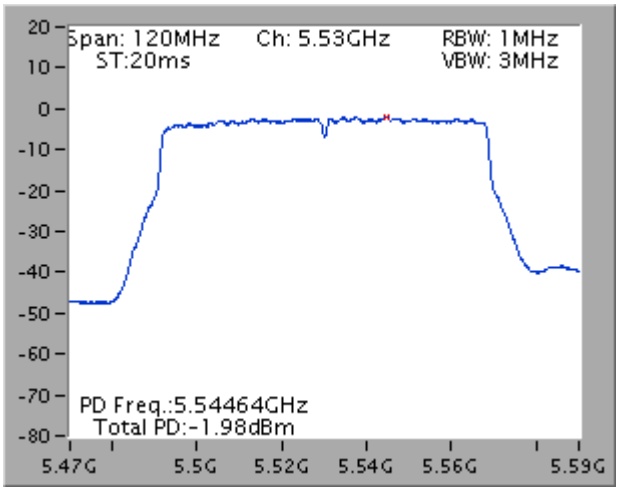


Power Density Plot on Chain 1 + Chain 2 / 5690 MHz (UNII 3)

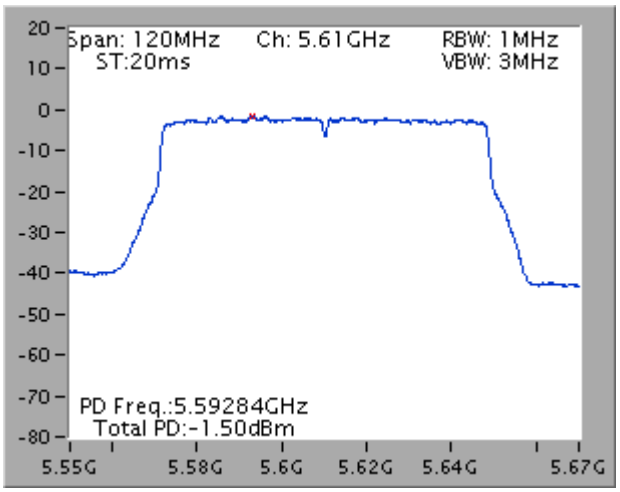


Type 5

Power Density Plot on Chain 1 + Chain 2 / 5530 MHz

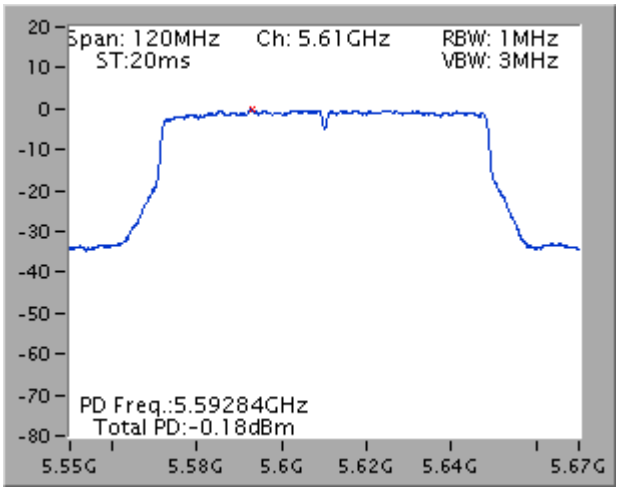


Power Density Plot on Chain 3 + Chain 4 / 5610 MHz

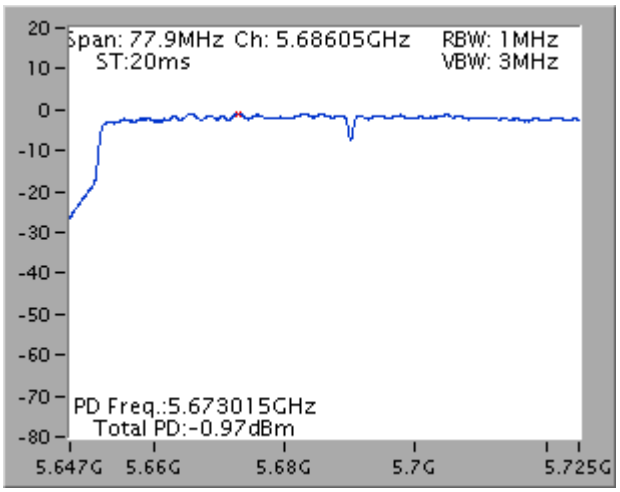


Type 6

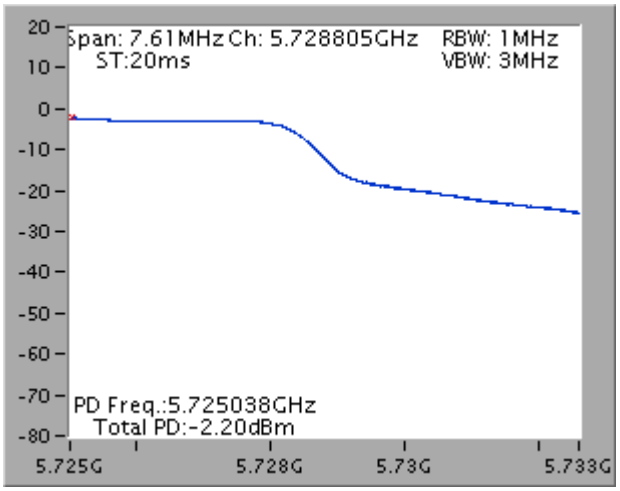
Power Density Plot on Chain 1 + Chain 2 / 5610 MHz



Power Density Plot on Chain 3 + Chain 4 / 5690 MHz (UNII 2C)



Power Density Plot on Chain 3 + Chain 4 / 5690 MHz (UNII 3)



4.5. Unwanted Emissions

4.5.1. Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz 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: Test distance for frequencies at or above 30 MHz, 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).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	

4.5.2. Measuring Instruments

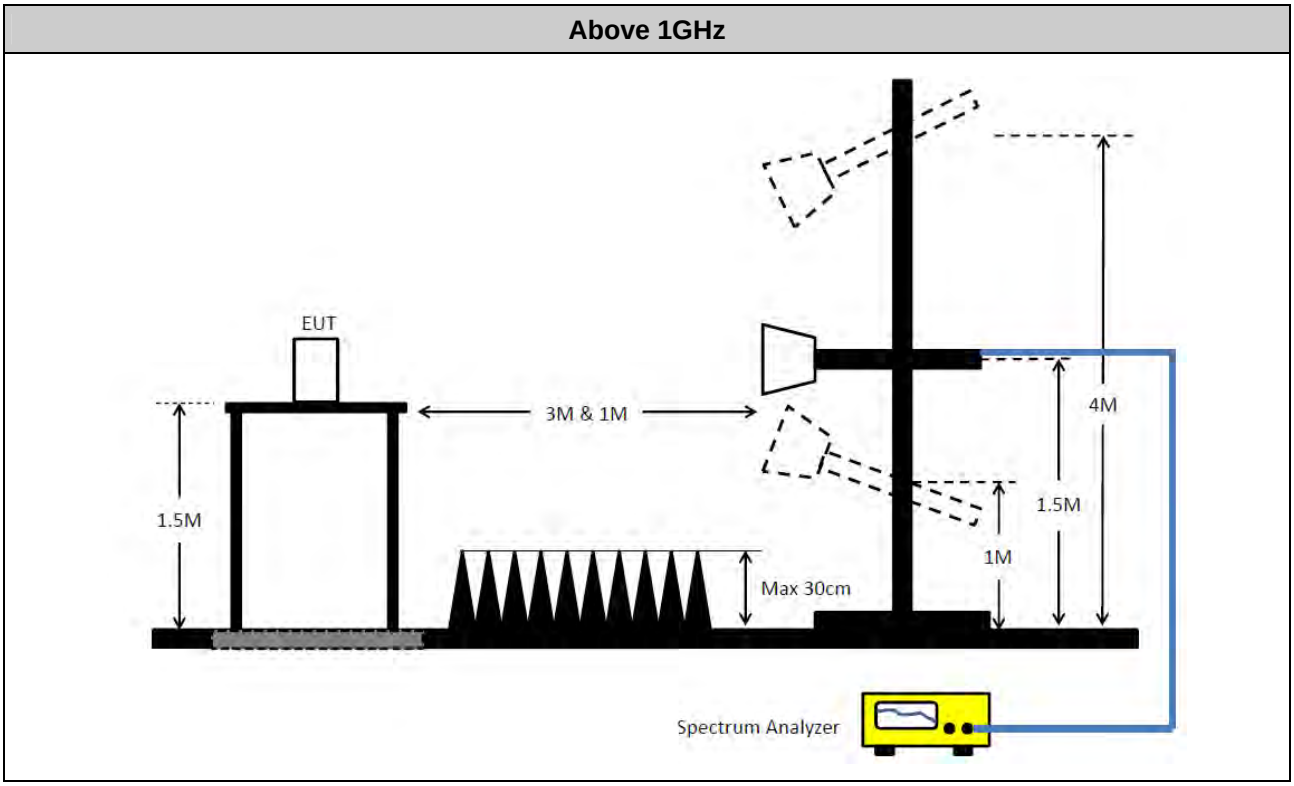
Refer a test equipment and calibration data table in this test report.

4.5.3. Test Procedures

Test Method			
▪	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. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. 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).		
▪	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
▪	For the transmitter unwanted emissions shall be measured using following options below:		
	▪	Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.	
	▪	Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.	
		☐	Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).
		☒	Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).
		☐	Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐	Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒	Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.
		☐	Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
▪	For radiated measurement.		
	▪	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.	
	▪	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.	
	▪	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
▪	The any unwanted emissions level shall not exceed the fundamental emission level.		
▪	All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.		

4.5.4. Test Setup

Above 1GHz



4.5.5. Transmitter Unwanted Emissions

Refer as Appendix A

4.6. Antenna Requirements

4.6.1. Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

4.6.2. Antenna Connector Construction

Please refer to section 3.3 in this test report; antenna connector complied with the requirements.

5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Dec. 25, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Nov. 21, 2017	Conducted (TH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Nov. 09, 2017	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Jan. 15, 2018	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Jul. 09, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Nov. 21, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)

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

6. MEASUREMENT UNCERTAINTY

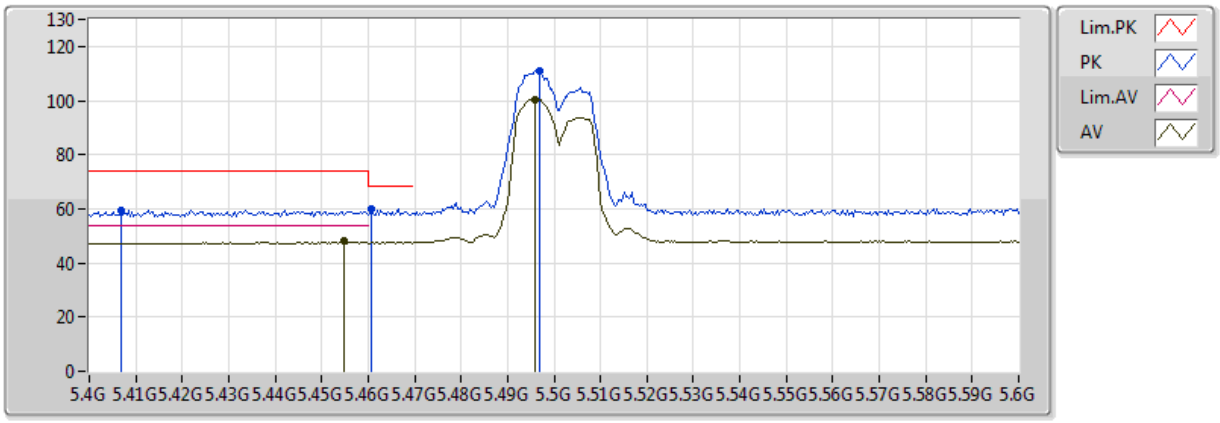
Test Items	Uncertainty	Remark
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%

For 802.11ac VHT 20, VHT40 and VHT 80 test mode:
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_4TX	Pass	AV	11.5913G	53.94	54.00	-0.06	16.73	3	Vertical	37	1.92	-

802.11a_Nss1,(6Mbps)_4TX

5500MHz_TX



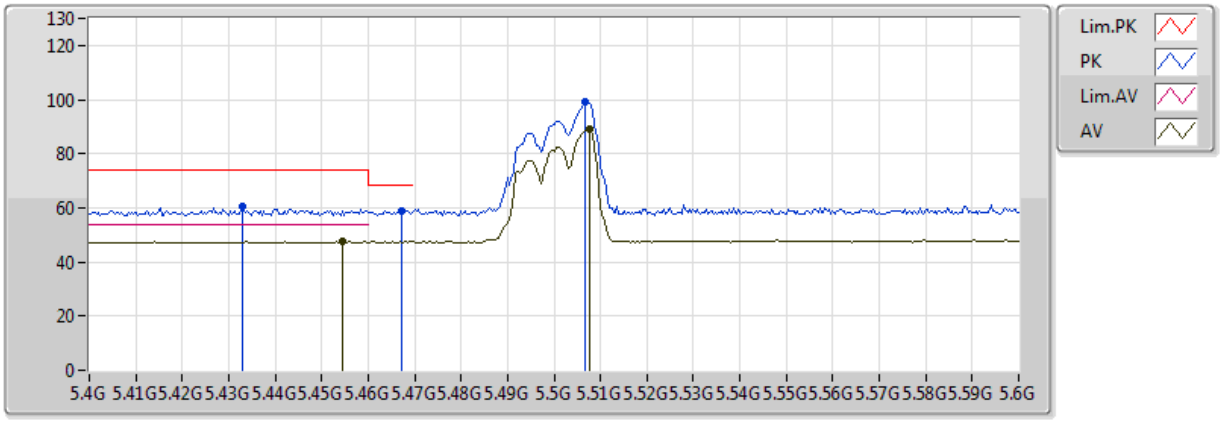
20171019
EUT Z_4TX
Setting 9
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4548G	47.96	54.00	-6.04	10.34	3	Vertical	254	1.98
AV	5.496G	100.28	Inf	-Inf	10.48	3	Vertical	254	1.98
PK	5.4068G	59.61	74.00	-14.39	10.17	3	Vertical	254	1.98
PK	5.4608G	60.00	68.20	-8.20	10.36	3	Vertical	254	1.98
PK	5.4968G	110.79	Inf	-Inf	10.48	3	Vertical	254	1.98

Mode

802.11a_Nss1,(6Mbps)_4TX

5500MHz_TX

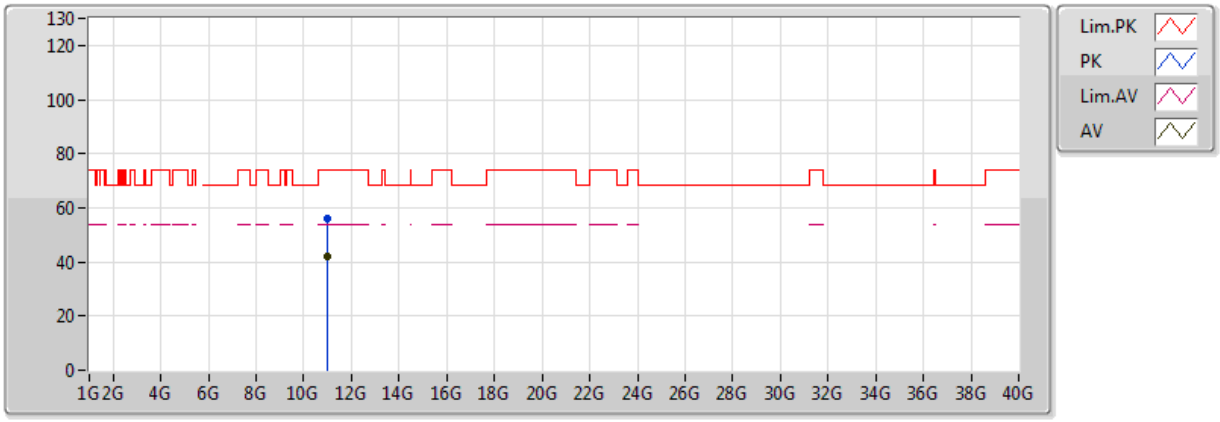


20171019
EUT Z_4TX
Setting 9
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4544G	47.55	54.00	-6.45	10.33	3	Horizontal	184	2.12
AV	5.5076G	88.90	Inf	-Inf	10.50	3	Horizontal	184	2.12
PK	5.4328G	60.29	74.00	-13.71	10.26	3	Horizontal	184	2.12
PK	5.4672G	58.96	68.20	-9.24	10.38	3	Horizontal	184	2.12
PK	5.5068G	98.94	Inf	-Inf	10.50	3	Horizontal	184	2.12

802.11a_Nss1,(6Mbps)_4TX

5500MHz_TX

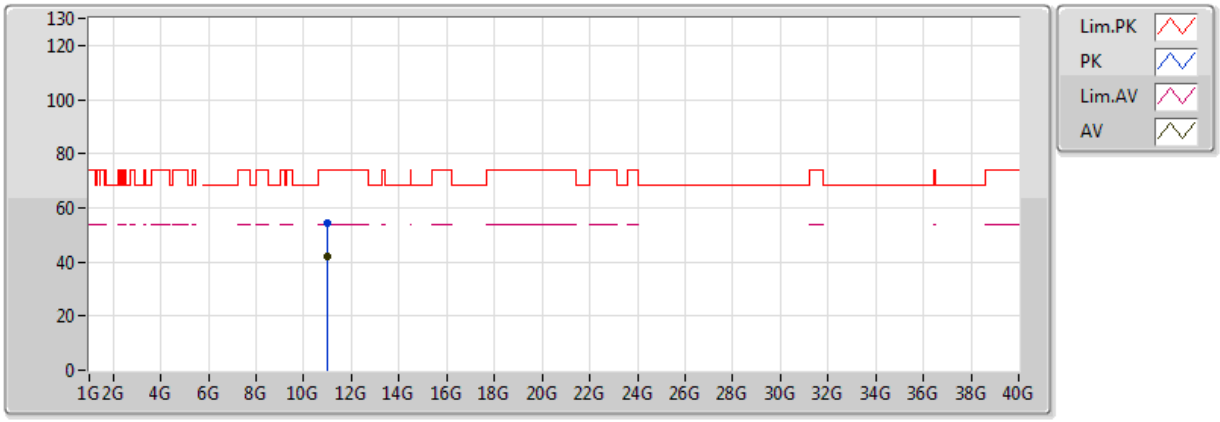


20171019
EUT Z_4TX
Setting 9
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	10.998G	42.14	54.00	-11.86	15.99	3	Vertical	85	2.03
PK	11.007G	55.92	74.00	-18.08	16.00	3	Vertical	85	2.03

802.11a_Nss1,(6Mbps)_4TX

5500MHz_TX

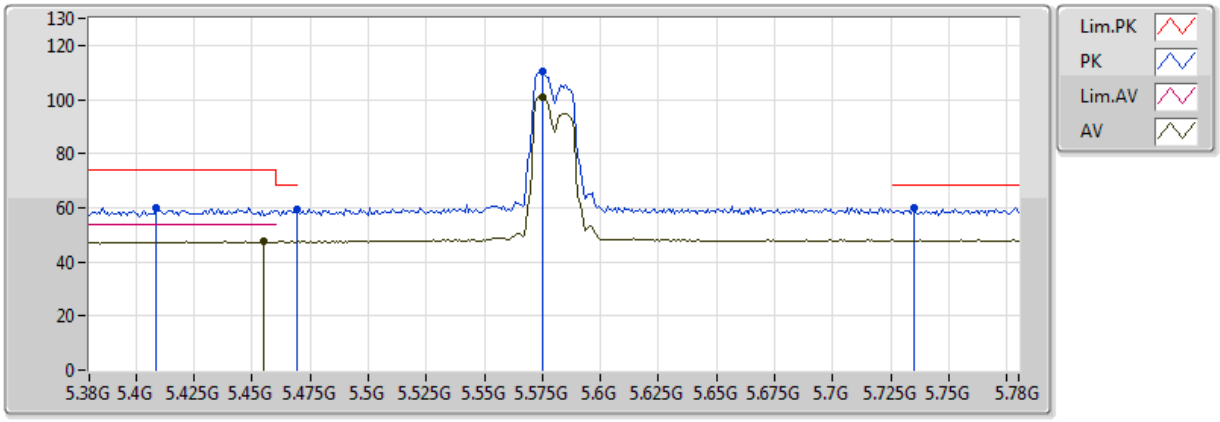


20171019
EUT Z_4TX
Setting 9
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0115G	41.95	54.00	-12.05	16.00	3	Horizontal	33	1.13
PK	10.9819G	54.51	74.00	-19.49	15.99	3	Horizontal	33	1.13

802.11a_Nss1,(6Mbps)_4TX

5580MHz_TX

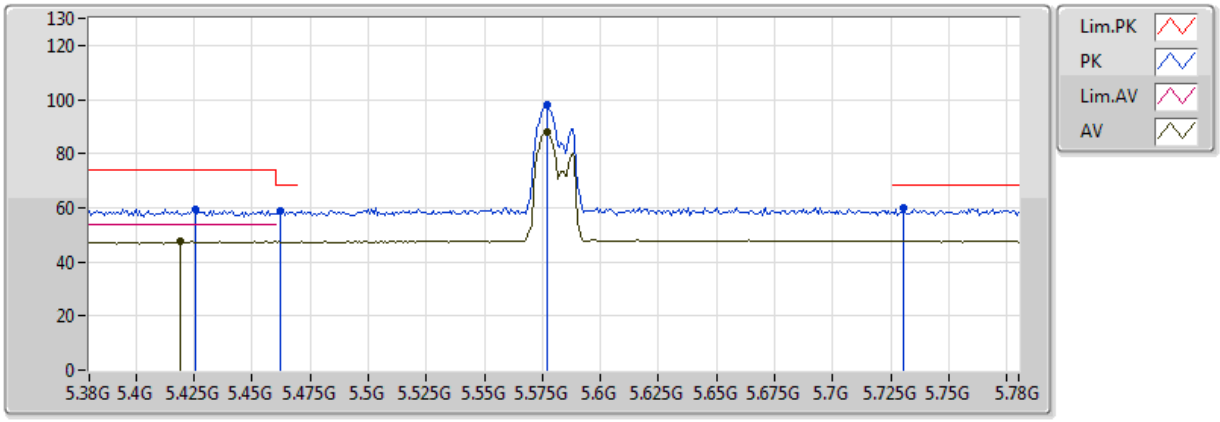


20171019
EUT Z_4TX
Setting 9
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4552G	47.50	54.00	-6.50	10.34	3	Vertical	248	2.05
AV	5.5752G	100.93	Inf	-Inf	10.61	3	Vertical	248	2.05
PK	5.4088G	59.90	74.00	-14.10	10.18	3	Vertical	248	2.05
PK	5.4696G	59.27	68.20	-8.93	10.39	3	Vertical	248	2.05
PK	5.5752G	110.59	Inf	-Inf	10.61	3	Vertical	248	2.05
PK	5.7352G	59.82	68.20	-8.38	10.65	3	Vertical	248	2.05

802.11a_Nss1,(6Mbps)_4TX

5580MHz_TX

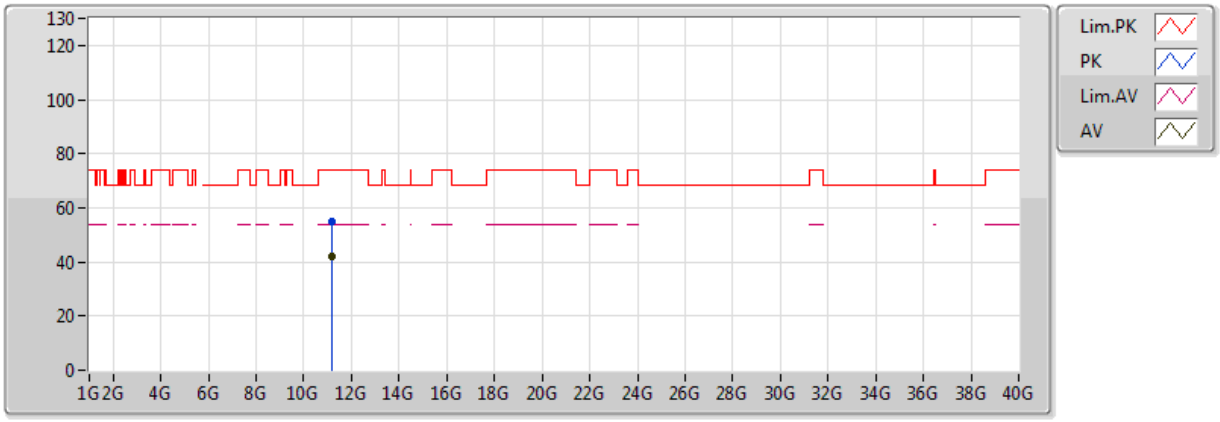


20171019
EUT Z_4TX
Setting 9
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4192G	47.41	54.00	-6.59	10.22	3	Horizontal	82	2.00
AV	5.5768G	87.75	Inf	-Inf	10.61	3	Horizontal	82	2.00
PK	5.4256G	59.67	74.00	-14.33	10.24	3	Horizontal	82	2.00
PK	5.4624G	58.73	68.20	-9.47	10.36	3	Horizontal	82	2.00
PK	5.5768G	97.94	Inf	-Inf	10.61	3	Horizontal	82	2.00
PK	5.7304G	59.88	68.20	-8.32	10.65	3	Horizontal	82	2.00

802.11a_Nss1,(6Mbps)_4TX

5580MHz_TX

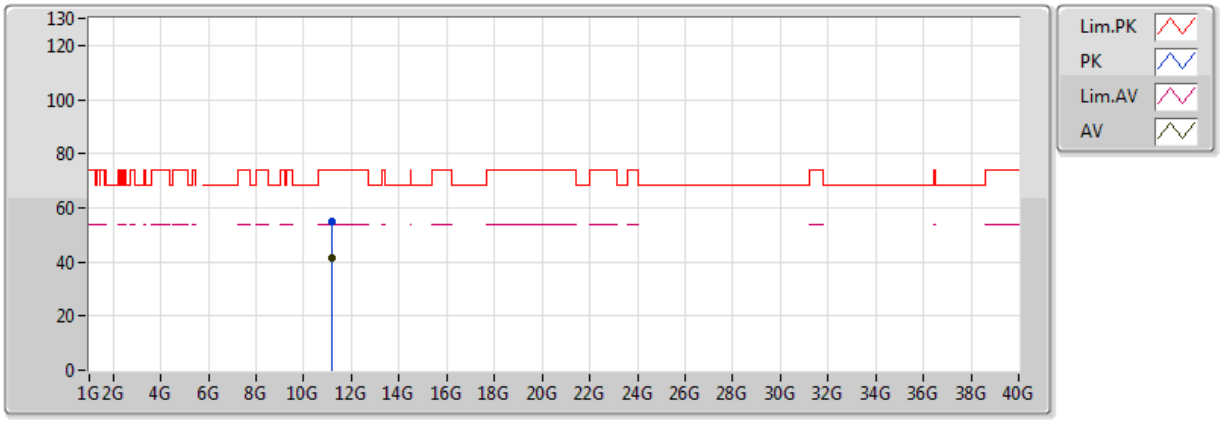


20171019
EUT Z_4TX
Setting 9
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.1635G	41.86	54.00	-12.14	16.19	3	Vertical	351	1.96
PK	11.1631G	55.01	74.00	-18.99	16.19	3	Vertical	351	1.96

802.11a_Nss1,(6Mbps)_4TX

5580MHz_TX

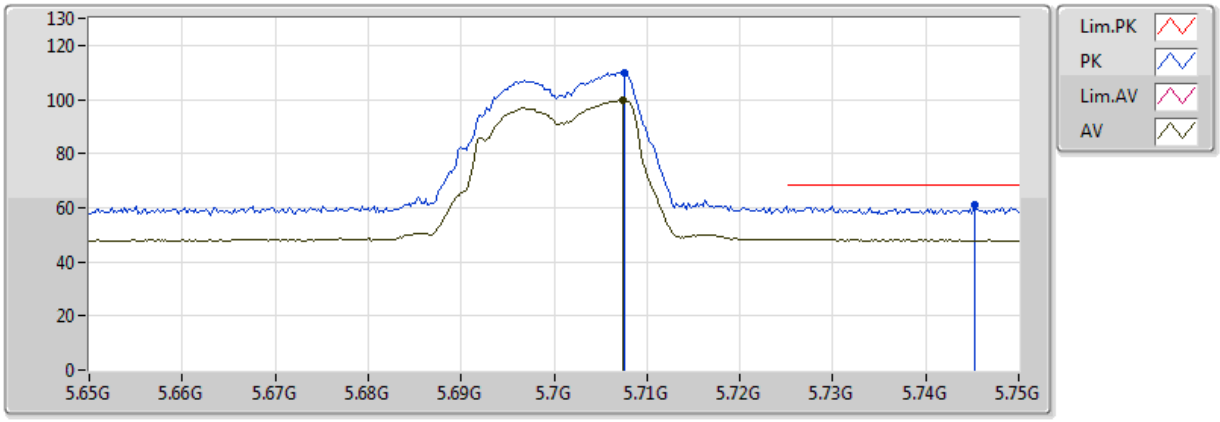


20171019
EUT Z_4TX
Setting 9
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.1622G	41.71	54.00	-12.29	16.19	3	Horizontal	286	2.36
PK	11.1549G	54.79	74.00	-19.21	16.18	3	Horizontal	286	2.36

802.11a_Nss1,(6Mbps)_4TX

5700MHz_TX

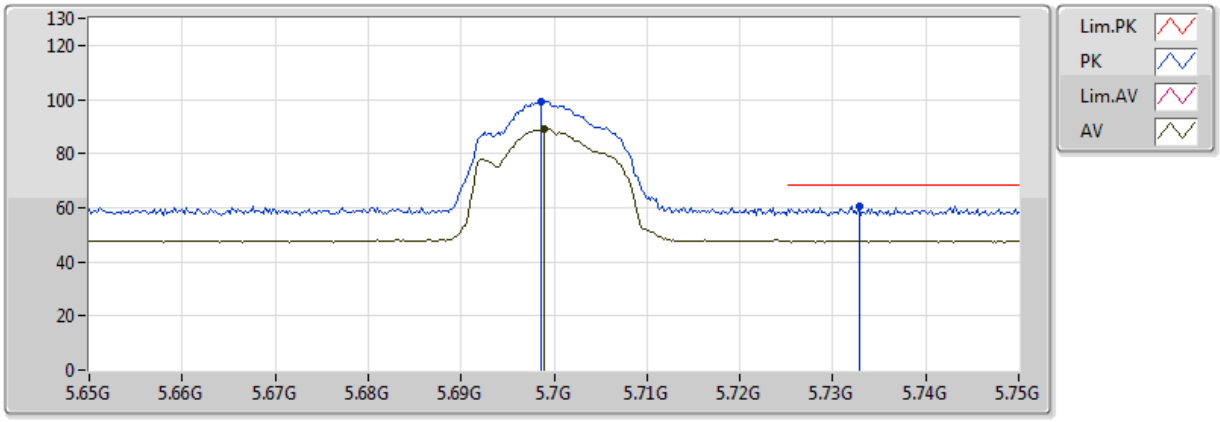


20171019
EUT Z_4TX
Setting 9
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.7074G	99.65	Inf	-Inf	10.65	3	Vertical	268	1.99
PK	5.7076G	109.76	Inf	-Inf	10.65	3	Vertical	268	1.99
PK	5.7452G	60.91	68.20	-7.29	10.65	3	Vertical	268	1.99

802.11a_Nss1,(6Mbps)_4TX

5700MHz_TX

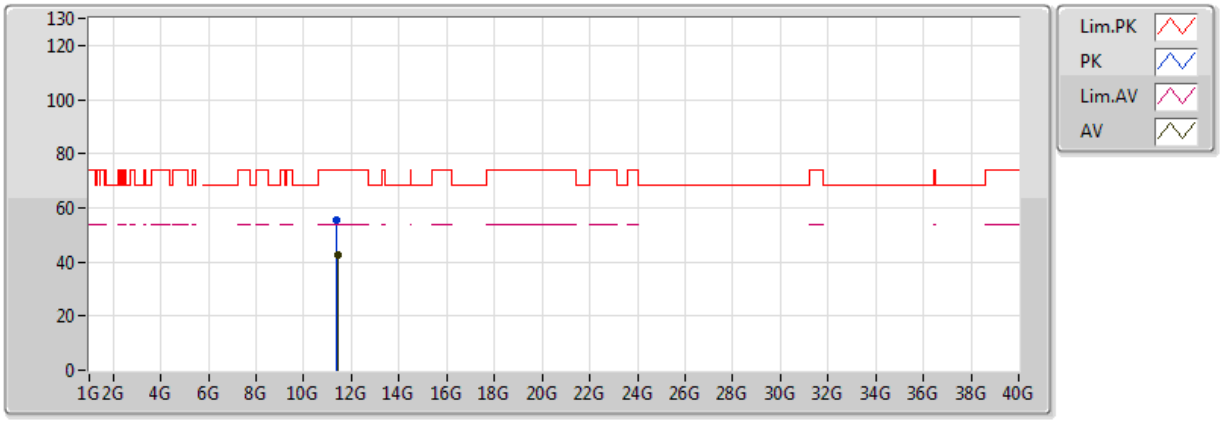


20171019
EUT Z_4TX
Setting 9
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.699G	89.32	Inf	-Inf	10.65	3	Horizontal	73	2.08
PK	5.6986G	99.29	Inf	-Inf	10.65	3	Horizontal	73	2.08
PK	5.7328G	60.46	68.20	-7.74	10.65	3	Horizontal	73	2.08

802.11a_Nss1,(6Mbps)_4TX

5700MHz_TX

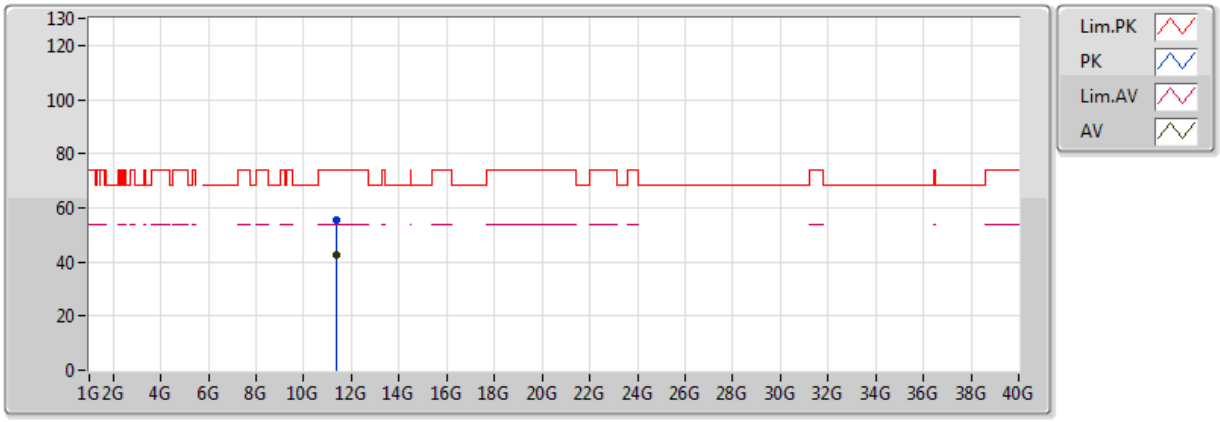


20171019
EUT Z_4TX
Setting 9
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4047G	42.80	54.00	-11.20	16.50	3	Vertical	255	2.39
PK	11.3998G	55.33	74.00	-18.67	16.49	3	Vertical	255	2.39

802.11a_Nss1,(6Mbps)_4TX

5700MHz_TX

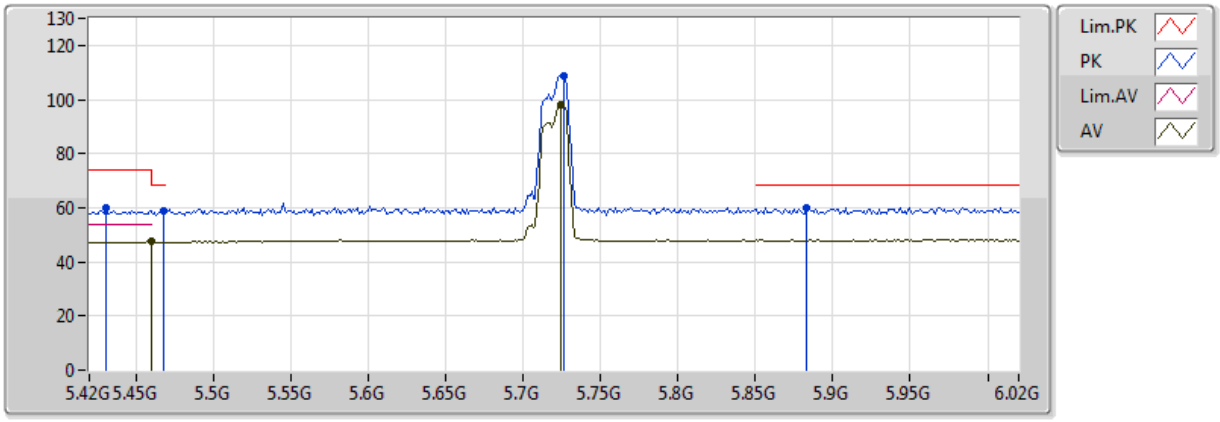


20171019
EUT Z_4TX
Setting 9
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.3877G	42.37	54.00	-11.63	16.47	3	Horizontal	350	1.17
PK	11.3988G	55.39	74.00	-18.61	16.49	3	Horizontal	350	1.17

802.11a_Nss1,(6Mbps)_4TX

5720MHz Straddle 5.47-5.725GHz_TX

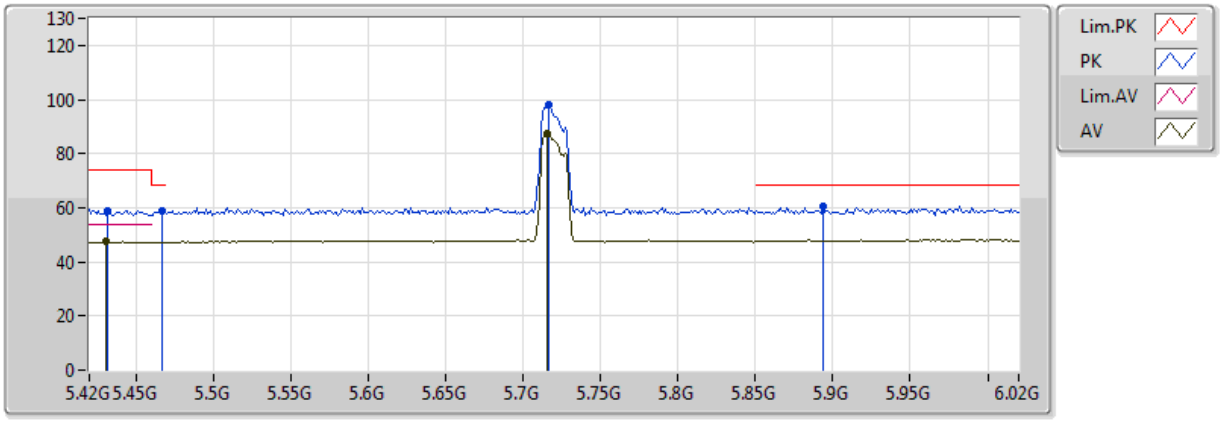


20171019
EUT Z_4TX
Setting 7.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.459995G	47.41	54.00	-6.59	10.35	3	Vertical	289	2.06
AV	5.7248G	98.28	Inf	-Inf	10.65	3	Vertical	289	2.06
PK	5.4308G	59.77	74.00	-14.23	10.25	3	Vertical	289	2.06
PK	5.468G	58.95	68.20	-9.25	10.38	3	Vertical	289	2.06
PK	5.726G	108.68	Inf	-Inf	10.65	3	Vertical	289	2.06
PK	5.8832G	60.23	68.20	-7.97	10.76	3	Vertical	289	2.06

802.11a_Nss1,(6Mbps)_4TX

5720MHz Straddle 5.47-5.725GHz_TX

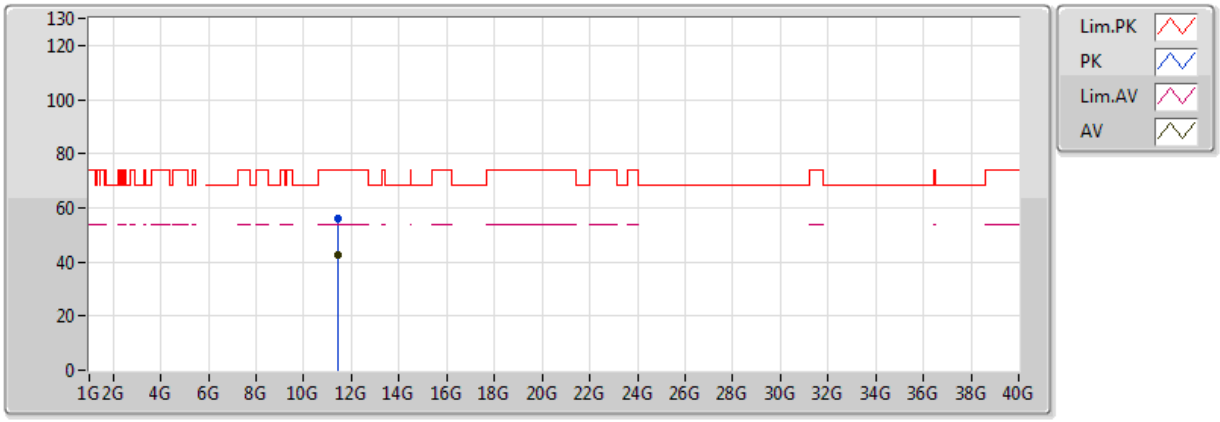


20171019
EUT Z_4TX
Setting 7.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4308G	47.40	54.00	-6.60	10.25	3	Horizontal	173	1.89
AV	5.7152G	87.67	Inf	-Inf	10.65	3	Horizontal	173	1.89
PK	5.432G	58.82	74.00	-15.18	10.26	3	Horizontal	173	1.89
PK	5.4668G	58.60	68.20	-9.60	10.38	3	Horizontal	173	1.89
PK	5.7164G	98.23	Inf	-Inf	10.65	3	Horizontal	173	1.89
PK	5.894G	60.62	68.20	-7.58	10.77	3	Horizontal	173	1.89

802.11a_Nss1,(6Mbps)_4TX

5720MHz Straddle 5.47-5.725GHz_TX

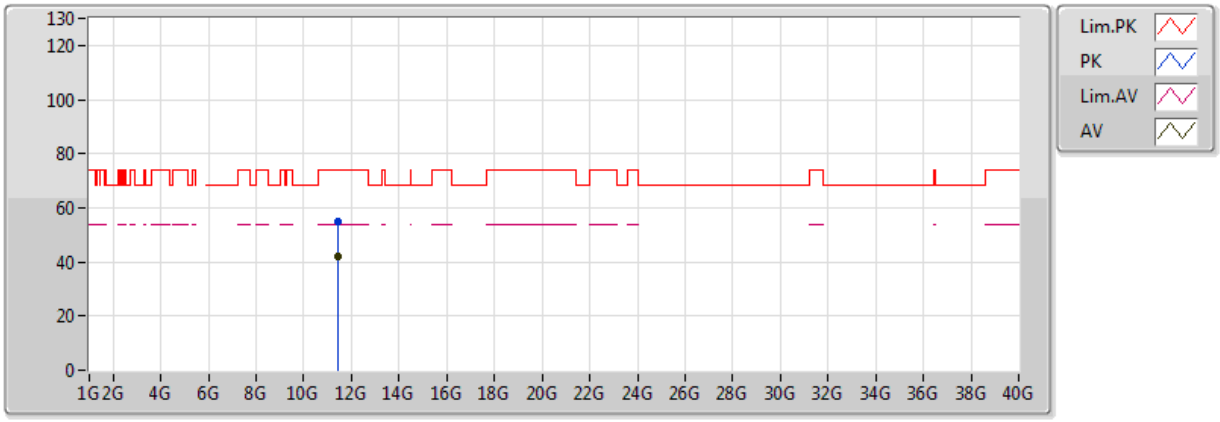


20171019
EUT Z_4TX
Setting 7.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4429G	42.52	54.00	-11.48	16.54	3	Vertical	183	1.62
PK	11.4191G	56.02	74.00	-17.98	16.51	3	Vertical	183	1.62

802.11a_Nss1,(6Mbps)_4TX

5720MHz Straddle 5.47-5.725GHz_TX

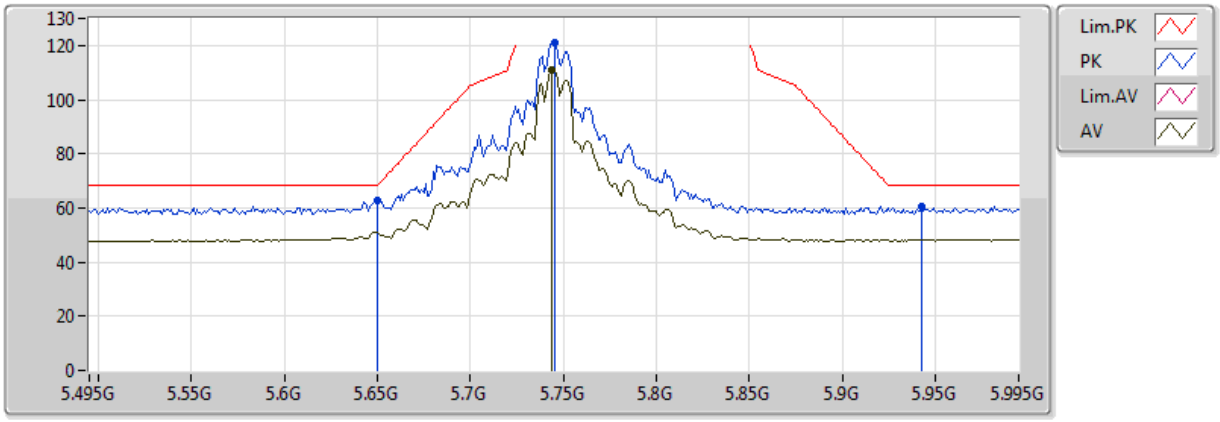


20171019
EUT Z_4TX
Setting 7.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4233G	42.30	54.00	-11.70	16.52	3	Horizontal	274	2.39
PK	11.4599G	55.05	74.00	-18.95	16.56	3	Horizontal	274	2.39

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

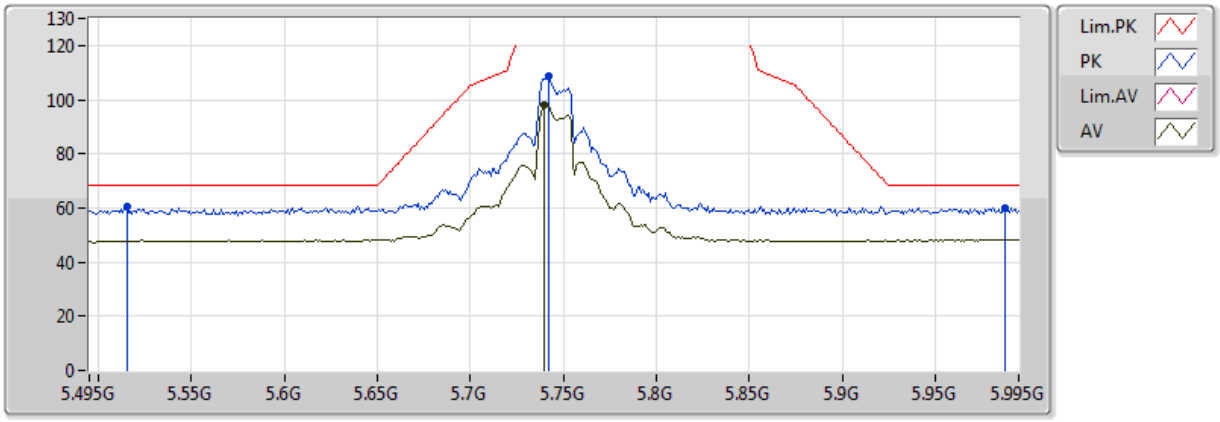


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.744G	111.19	Inf	-Inf	10.65	3	Vertical	71	2.75
PK	5.65G	62.49	68.20	-5.71	10.65	3	Vertical	71	2.75
PK	5.745G	121.31	Inf	-Inf	10.65	3	Vertical	71	2.75
PK	5.943G	60.39	68.20	-7.81	10.84	3	Vertical	71	2.75

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

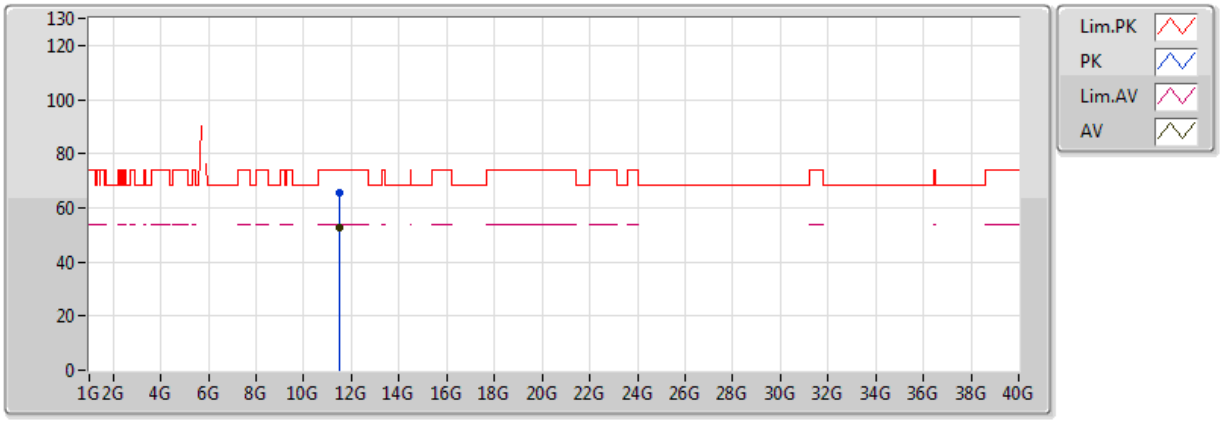


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.74G	98.30	Inf	-Inf	10.65	3	Horizontal	173	1.50
PK	5.515G	60.44	68.20	-7.76	10.51	3	Horizontal	173	1.50
PK	5.742G	108.71	Inf	-Inf	10.65	3	Horizontal	173	1.50
PK	5.988G	60.01	68.20	-8.19	10.89	3	Horizontal	173	1.50

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

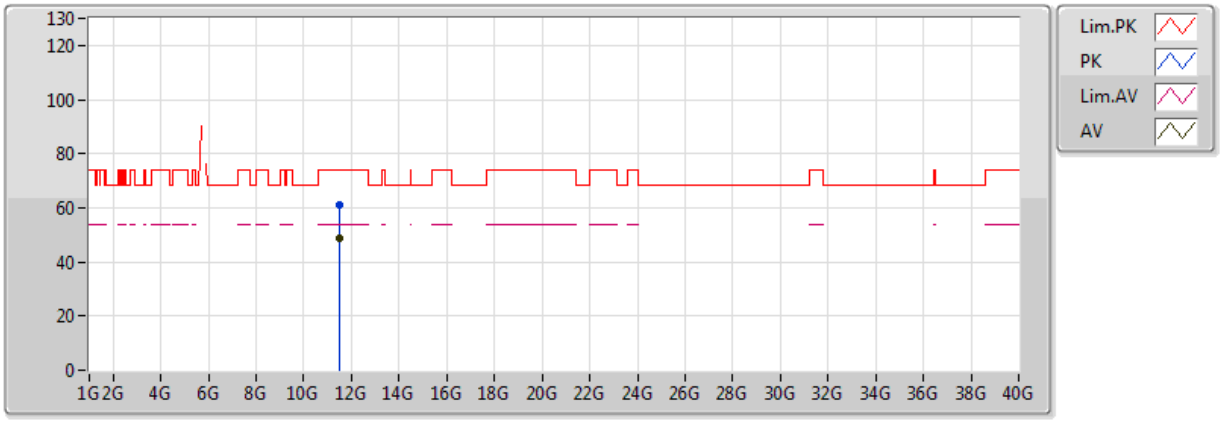


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4892G	52.59	54.00	-1.41	16.60	3	Vertical	281	1.01
PK	11.49G	65.38	74.00	-8.62	16.60	3	Vertical	281	1.01

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

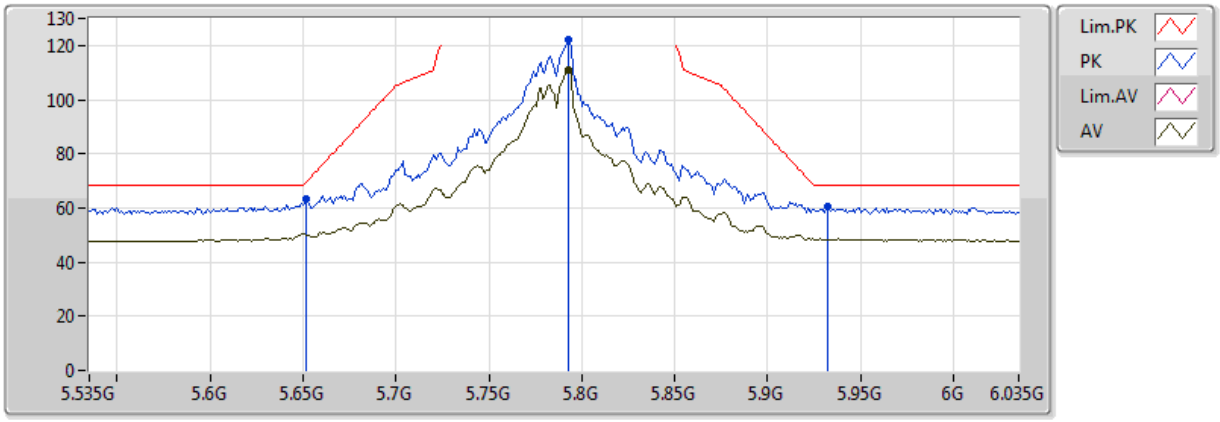


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4914G	48.75	54.00	-5.25	16.60	3	Horizontal	292	1.89
PK	11.4918G	60.88	74.00	-13.12	16.60	3	Horizontal	292	1.89

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

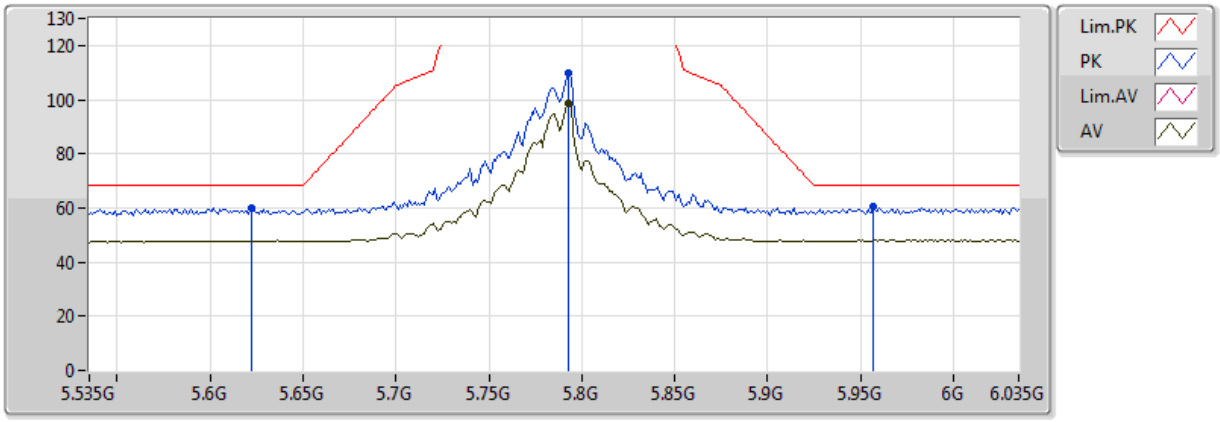


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.793G	111.00	Inf	-Inf	10.65	3	Vertical	262	2.04
PK	5.652G	63.19	69.68	-6.49	10.65	3	Vertical	262	2.04
PK	5.793G	122.21	Inf	-Inf	10.65	3	Vertical	262	2.04
PK	5.932G	60.27	68.20	-7.93	10.82	3	Vertical	262	2.04

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

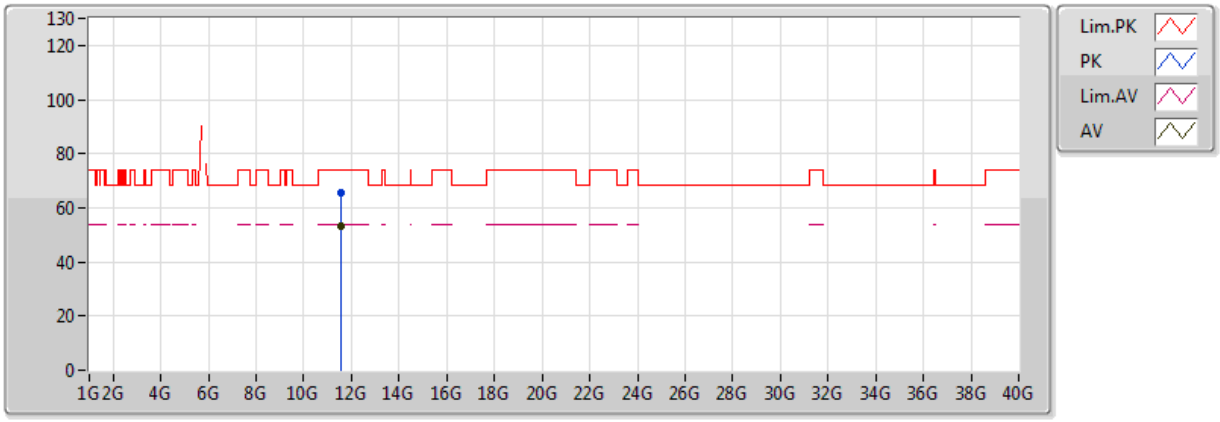


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.793G	98.78	Inf	-Inf	10.65	3	Horizontal	167	1.87
PK	5.622G	60.22	68.20	-7.98	10.65	3	Horizontal	167	1.87
PK	5.793G	109.80	Inf	-Inf	10.65	3	Horizontal	167	1.87
PK	5.957G	60.51	68.20	-7.69	10.85	3	Horizontal	167	1.87

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

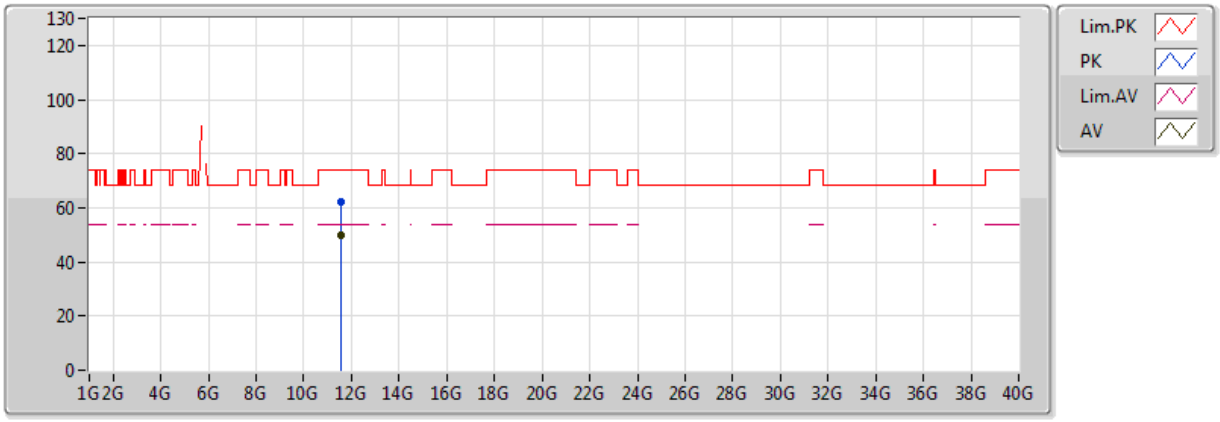


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5818G	53.18	54.00	-0.82	16.72	3	Vertical	5	1.87
PK	11.5808G	65.40	74.00	-8.60	16.72	3	Vertical	5	1.87

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

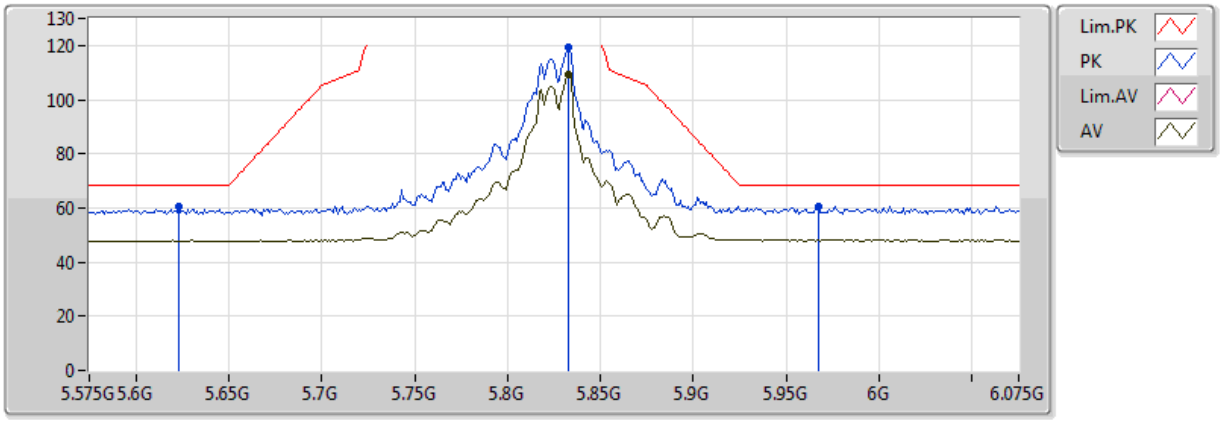


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5714G	50.08	54.00	-3.92	16.70	3	Horizontal	273	1.33
PK	11.5717G	62.31	74.00	-11.69	16.70	3	Horizontal	273	1.33

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

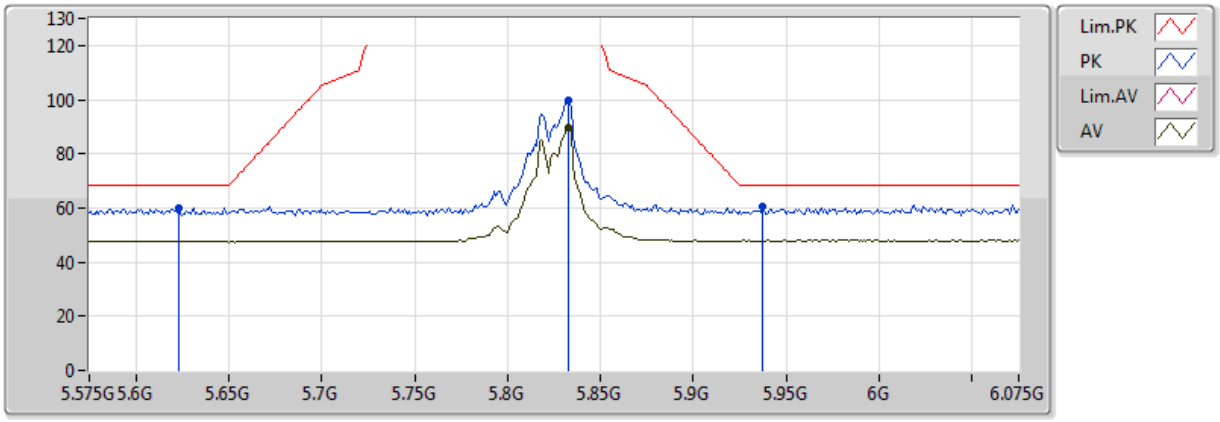


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.833G	109.49	Inf	-Inf	10.69	3	Vertical	280	2.11
PK	5.623G	60.34	68.20	-7.86	10.65	3	Vertical	280	2.11
PK	5.833G	119.51	Inf	-Inf	10.69	3	Vertical	280	2.11
PK	5.967G	60.43	68.20	-7.77	10.87	3	Vertical	280	2.11

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

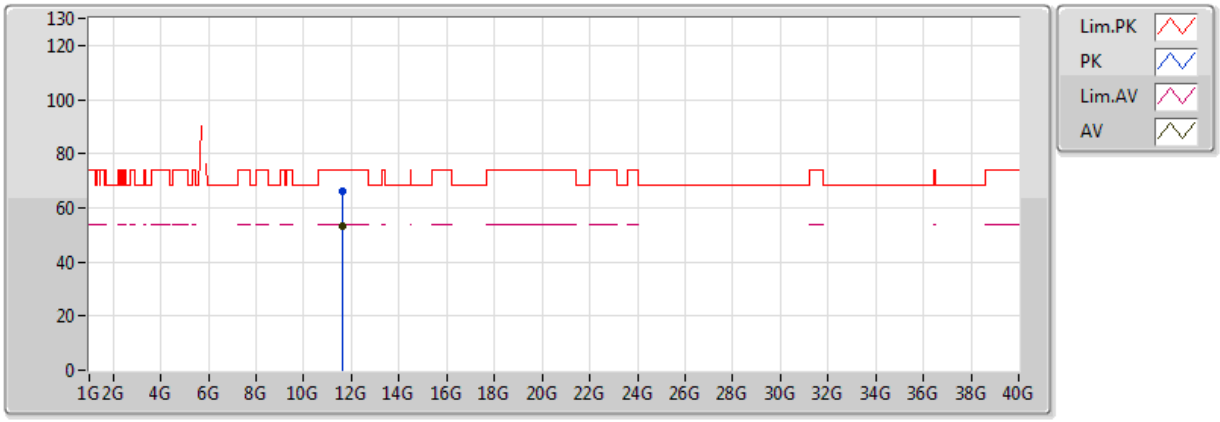


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.833G	89.43	Inf	-Inf	10.69	3	Horizontal	163	1.64
PK	5.623G	59.81	68.20	-8.39	10.65	3	Horizontal	163	1.64
PK	5.833G	99.91	Inf	-Inf	10.69	3	Horizontal	163	1.64
PK	5.937G	60.36	68.20	-7.84	10.83	3	Horizontal	163	1.64

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

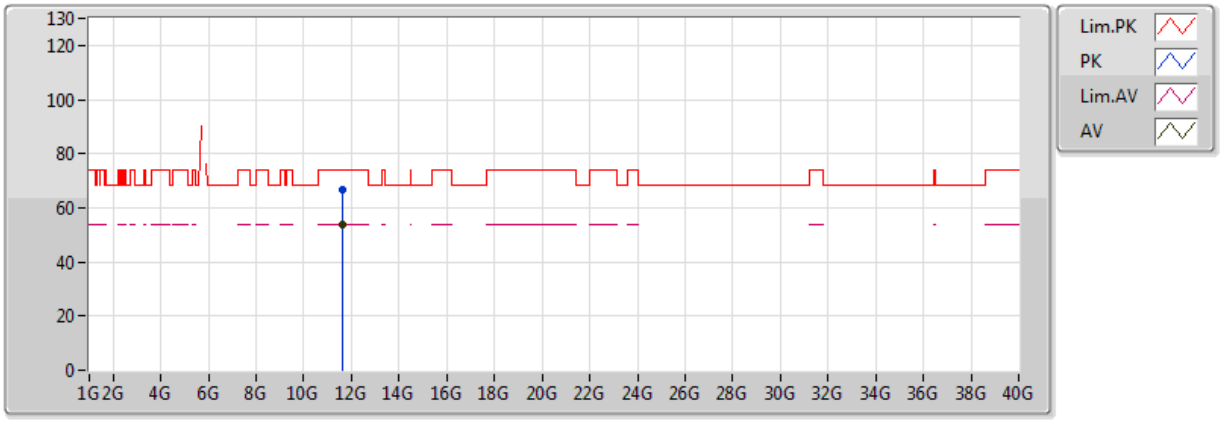


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.6535G	53.45	54.00	-0.55	16.81	3	Vertical	175	2.35
PK	11.6523G	66.27	74.00	-7.73	16.81	3	Vertical	175	2.35

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

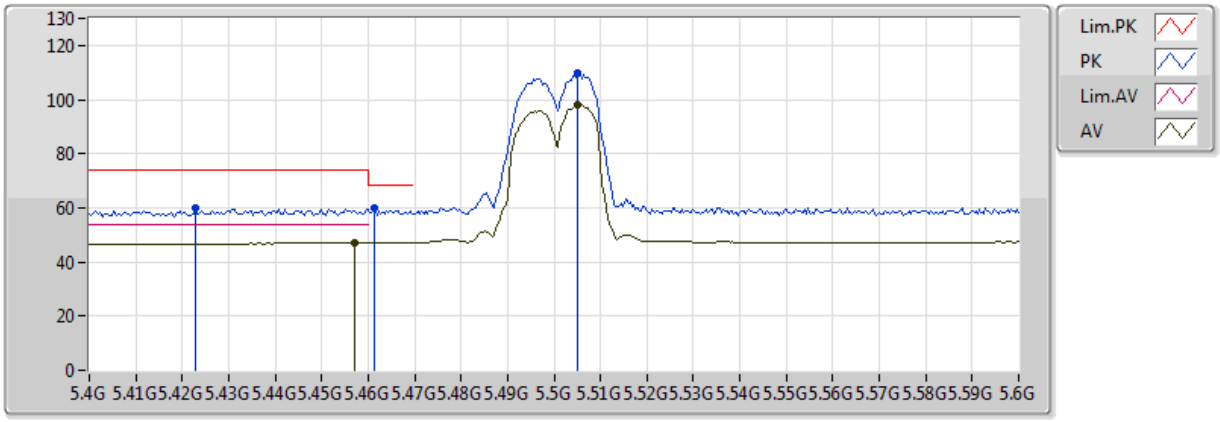


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.6533G	53.60	54.00	-0.40	16.81	3	Horizontal	3	1.76
PK	11.6538G	66.47	74.00	-7.53	16.81	3	Horizontal	3	1.76

802.11ac VHT20_Nss1,(MCS0)_4TX

5500MHz_TX

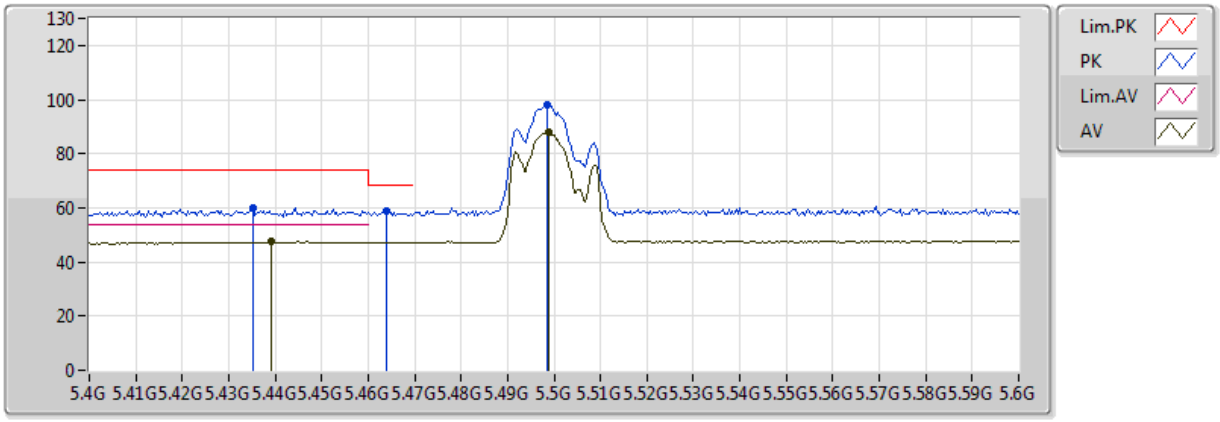


20171019
EUT Z_4TX
Setting 9.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4572G	47.00	54.00	-7.00	10.34	3	Vertical	255	2.76
AV	5.5052G	98.06	Inf	-Inf	10.50	3	Vertical	255	2.76
PK	5.4228G	59.89	74.00	-14.11	10.23	3	Vertical	255	2.76
PK	5.4612G	60.00	68.20	-8.20	10.36	3	Vertical	255	2.76
PK	5.5052G	109.81	Inf	-Inf	10.50	3	Vertical	255	2.76

802.11ac VHT20_Nss1,(MCS0)_4TX

5500MHz_TX

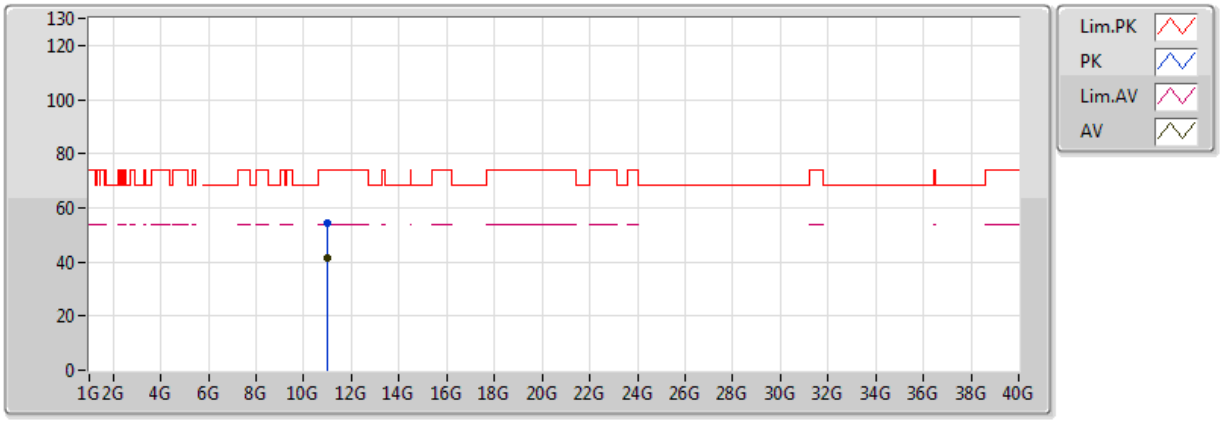


20171019
EUT Z_4TX
Setting 9.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4392G	47.44	54.00	-6.56	10.28	3	Horizontal	90	2.08
AV	5.4988G	87.90	Inf	-Inf	10.49	3	Horizontal	90	2.08
PK	5.4352G	59.88	74.00	-14.12	10.27	3	Horizontal	90	2.08
PK	5.464G	58.63	68.20	-9.57	10.37	3	Horizontal	90	2.08
PK	5.4984G	98.34	Inf	-Inf	10.48	3	Horizontal	90	2.08

802.11ac VHT20_Nss1,(MCS0)_4TX

5500MHz_TX

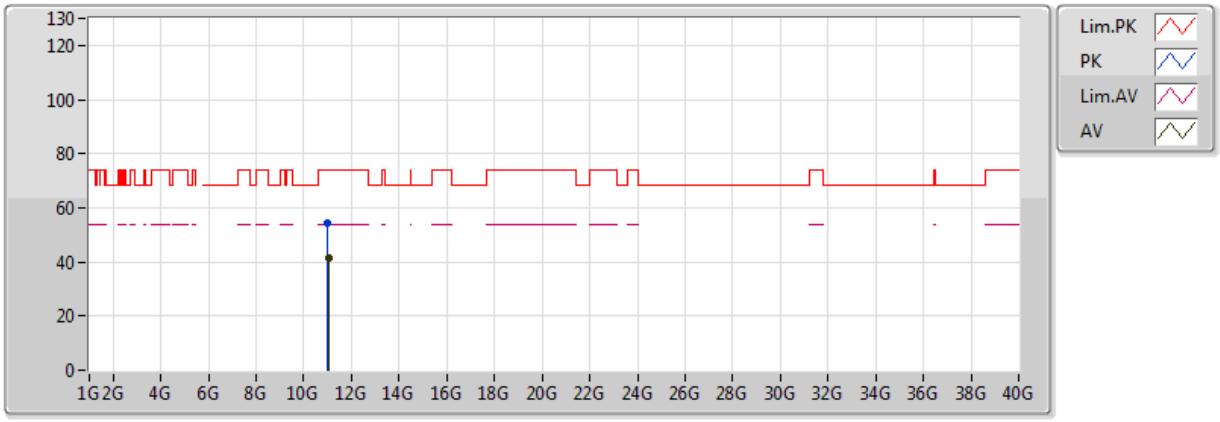


20171019
EUT Z_4TX
Setting 9.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0059G	41.64	54.00	-12.36	16.00	3	Vertical	281	1.52
PK	10.9891G	54.55	74.00	-19.45	15.99	3	Vertical	281	1.52

802.11ac VHT20_Nss1,(MCS0)_4TX

5500MHz_TX

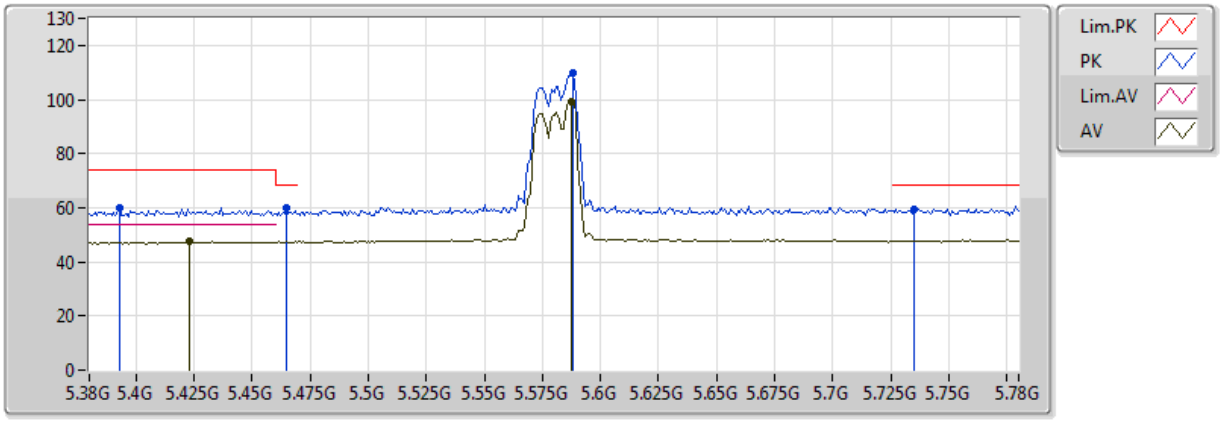


20171019
EUT Z_4TX
Setting 9.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0207G	41.69	54.00	-12.31	16.02	3	Horizontal	133	2.06
PK	11.0099G	54.59	74.00	-19.41	16.00	3	Horizontal	133	2.06

802.11ac VHT20_Nss1,(MCS0)_4TX

5580MHz_TX

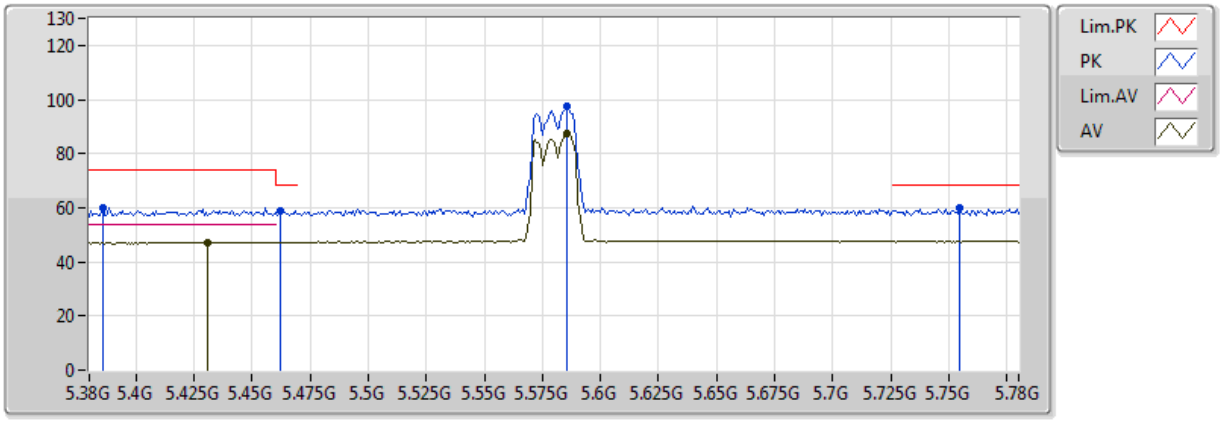


20171019
EUT Z_4TX
Setting 9.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4232G	47.40	54.00	-6.60	10.23	3	Vertical	110	2.23
AV	5.5872G	99.32	Inf	-Inf	10.63	3	Vertical	110	2.23
PK	5.3928G	60.19	74.00	-13.81	10.14	3	Vertical	110	2.23
PK	5.4648G	60.03	68.20	-8.17	10.37	3	Vertical	110	2.23
PK	5.588G	109.56	Inf	-Inf	10.63	3	Vertical	110	2.23
PK	5.7352G	59.57	68.20	-8.63	10.65	3	Vertical	110	2.23

802.11ac VHT20_Nss1,(MCS0)_4TX

5580MHz_TX

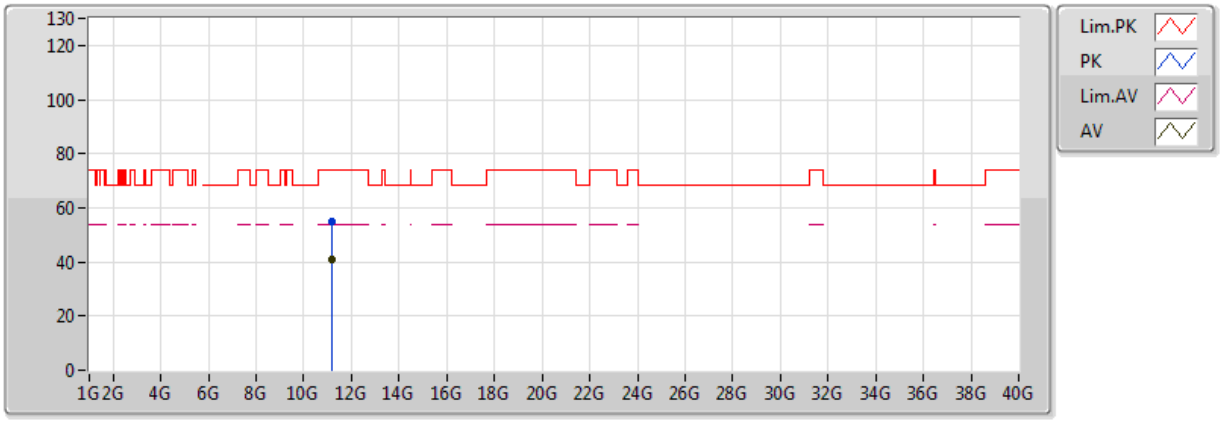


20171019
EUT Z_4TX
Setting 9.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4312G	47.31	54.00	-6.69	10.26	3	Horizontal	192	2.67
AV	5.5856G	87.59	Inf	-Inf	10.63	3	Horizontal	192	2.67
PK	5.3856G	59.87	74.00	-14.13	10.13	3	Horizontal	192	2.67
PK	5.4624G	59.05	68.20	-9.15	10.36	3	Horizontal	192	2.67
PK	5.5856G	97.45	Inf	-Inf	10.63	3	Horizontal	192	2.67
PK	5.7544G	60.01	68.20	-8.19	10.65	3	Horizontal	192	2.67

802.11ac VHT20_Nss1,(MCS0)_4TX

5580MHz_TX

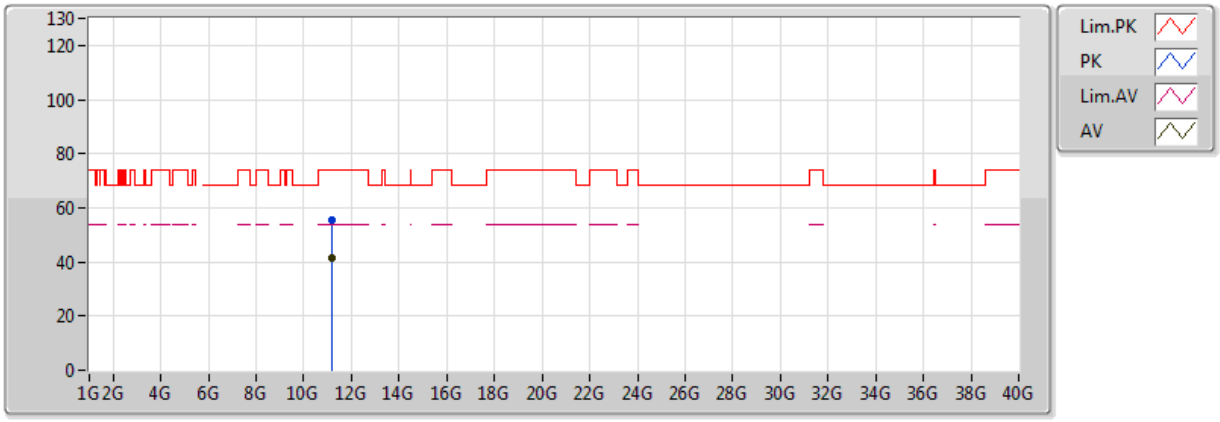


20171019
EUT Z_4TX
Setting 9.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.1627G	40.90	54.00	-13.10	16.19	3	Vertical	343	2.35
PK	11.1794G	54.75	74.00	-19.25	16.21	3	Vertical	343	2.35

802.11ac VHT20_Nss1,(MCS0)_4TX

5580MHz_TX

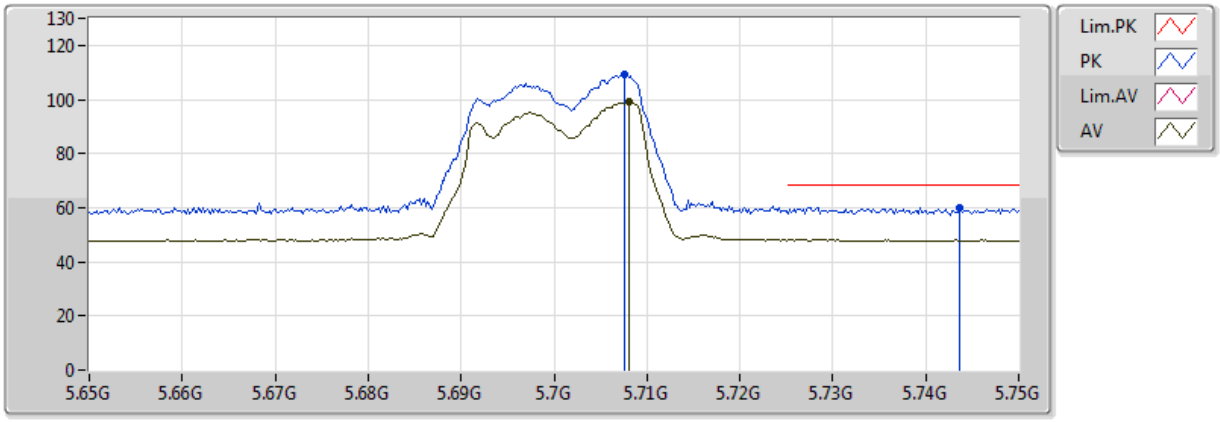


20171019
EUT Z_4TX
Setting 9.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.1623G	41.62	54.00	-12.38	16.19	3	Horizontal	120	1.95
PK	11.1567G	55.32	74.00	-18.68	16.19	3	Horizontal	120	1.95

802.11ac VHT20_Nss1,(MCS0)_4TX

5700MHz_TX

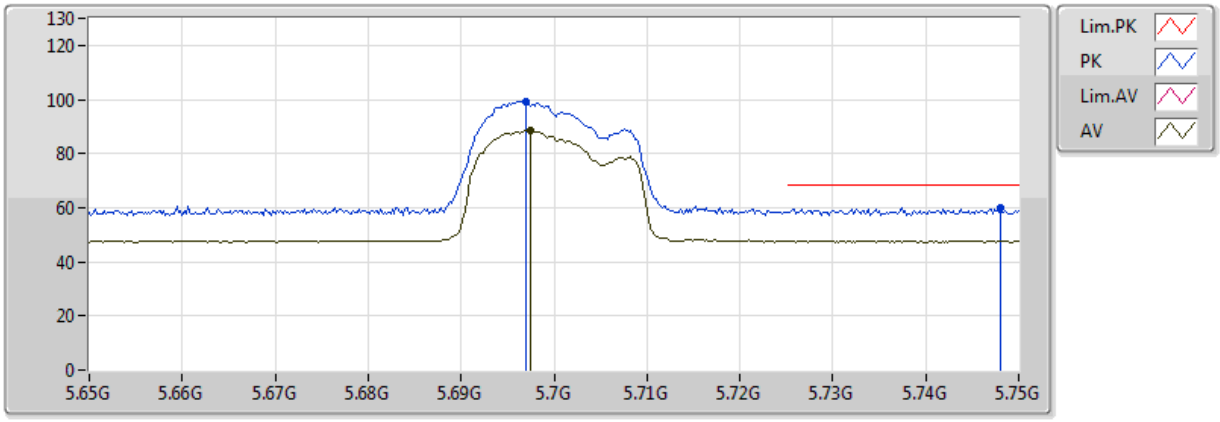


20171019
EUT Z_4TX
Setting 9.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.708G	99.11	Inf	-Inf	10.65	3	Vertical	273	1.88
PK	5.7076G	109.10	Inf	-Inf	10.65	3	Vertical	273	1.88
PK	5.7436G	60.06	68.20	-8.14	10.65	3	Vertical	273	1.88

802.11ac VHT20_Nss1,(MCS0)_4TX

5700MHz_TX

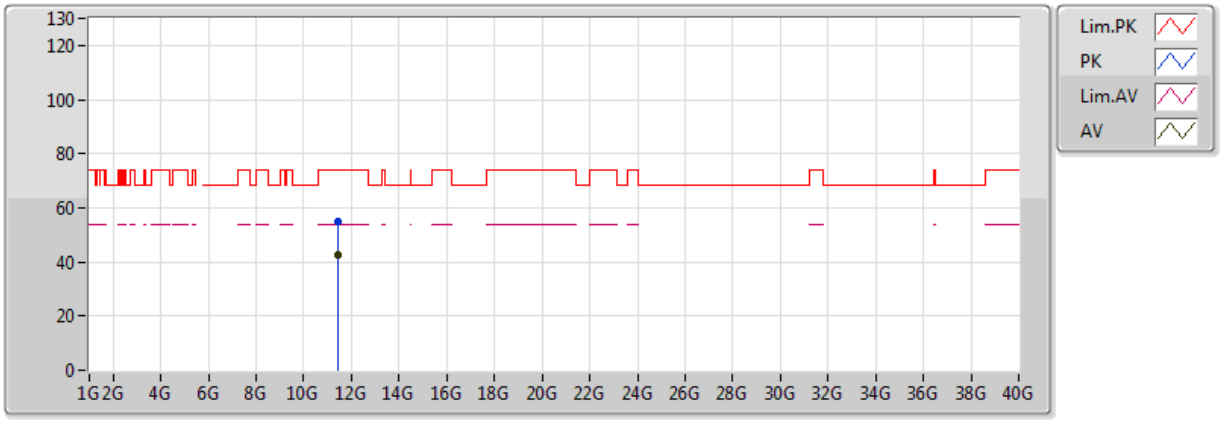


20171019
EUT Z_4TX
Setting 9.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.6974G	88.47	Inf	-Inf	10.65	3	Horizontal	168	2.09
PK	5.697G	99.39	Inf	-Inf	10.65	3	Horizontal	168	2.09
PK	5.748G	60.23	68.20	-7.97	10.65	3	Horizontal	168	2.09

802.11ac VHT20_Nss1,(MCS0)_4TX

5700MHz_TX

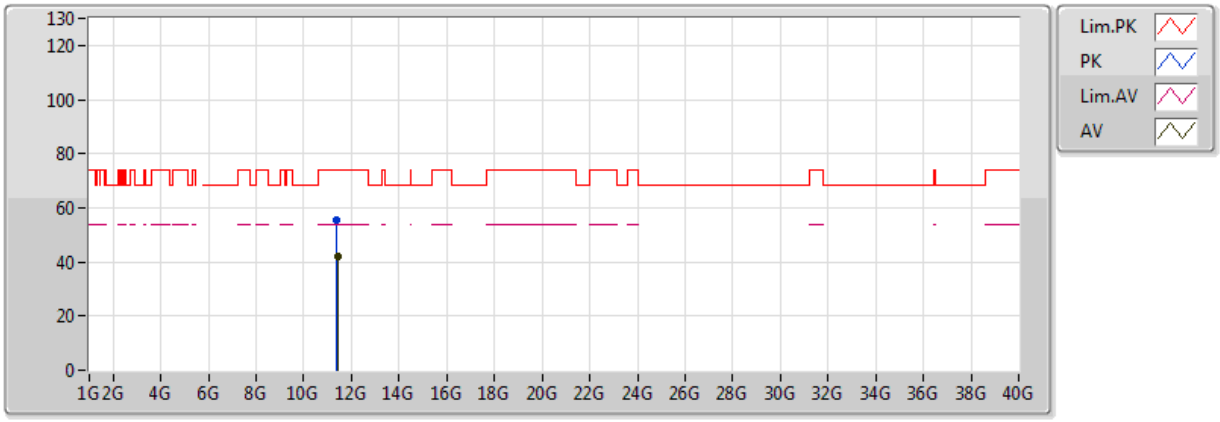


20171019
EUT Z_4TX
Setting 9.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4302G	42.50	54.00	-11.50	16.53	3	Vertical	221	1.82
PK	11.447G	54.92	74.00	-19.08	16.55	3	Vertical	221	1.82

802.11ac VHT20_Nss1,(MCS0)_4TX

5700MHz_TX

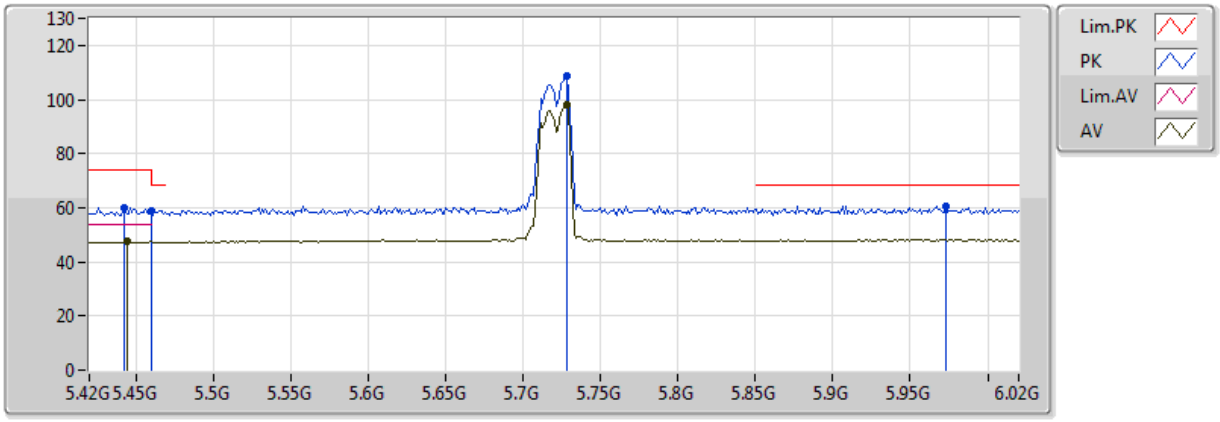


20171019
EUT Z_4TX
Setting 9.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4268G	42.27	54.00	-11.73	16.52	3	Horizontal	342	2.41
PK	11.3894G	55.32	74.00	-18.68	16.48	3	Horizontal	342	2.41

802.11ac VHT20_Nss1,(MCS0)_4TX

5720MHz Straddle 5.47-5.725GHz_TX

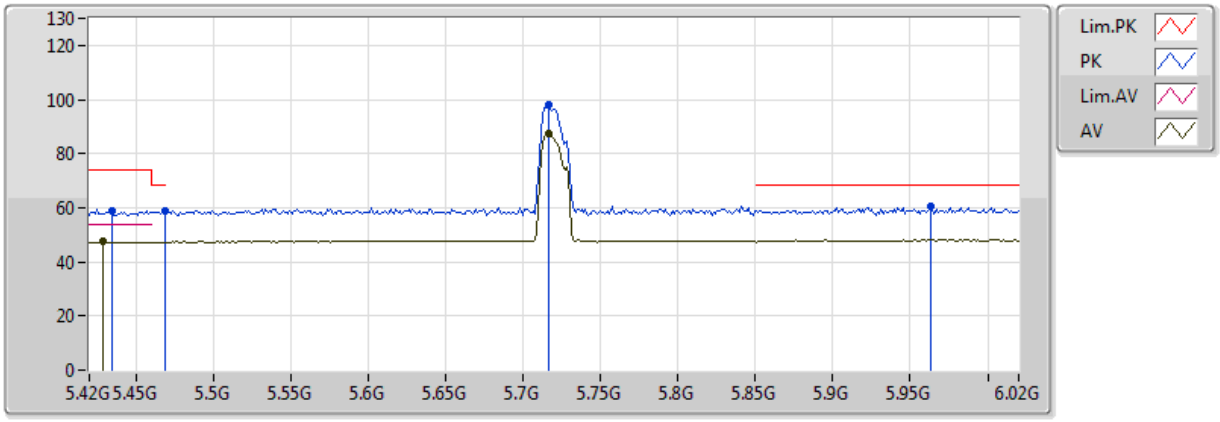


20171019
EUT Z_4TX
Setting 8
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.444G	47.50	54.00	-6.50	10.30	3	Vertical	272	2.07
AV	5.7284G	98.20	Inf	-Inf	10.65	3	Vertical	272	2.07
PK	5.4428G	60.00	74.00	-14.00	10.30	3	Vertical	272	2.07
PK	5.460005G	58.95	68.20	-9.25	10.35	3	Vertical	272	2.07
PK	5.7284G	108.47	Inf	-Inf	10.65	3	Vertical	272	2.07
PK	5.9732G	60.61	68.20	-7.59	10.88	3	Vertical	272	2.07

802.11ac VHT20_Nss1,(MCS0)_4TX

5720MHz Straddle 5.47-5.725GHz_TX

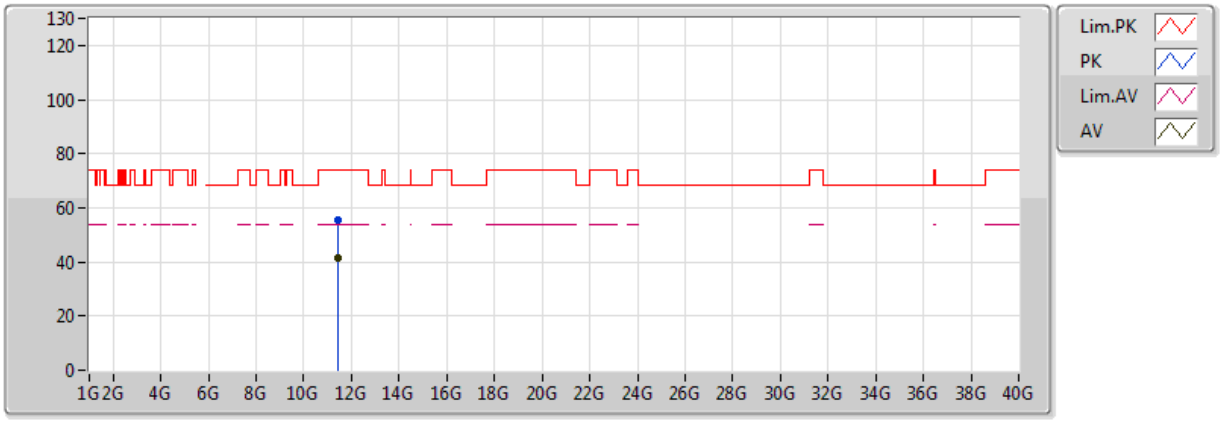


20171019
EUT Z_4TX
Setting 8
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4284G	47.37	54.00	-6.63	10.25	3	Horizontal	168	1.88
AV	5.7164G	87.27	Inf	-Inf	10.65	3	Horizontal	168	1.88
PK	5.4344G	58.89	74.00	-15.11	10.27	3	Horizontal	168	1.88
PK	5.4692G	58.69	68.20	-9.51	10.39	3	Horizontal	168	1.88
PK	5.7164G	98.00	Inf	-Inf	10.65	3	Horizontal	168	1.88
PK	5.9636G	60.44	68.20	-7.76	10.86	3	Horizontal	168	1.88

802.11ac VHT20_Nss1,(MCS0)_4TX

5720MHz Straddle 5.47-5.725GHz_TX

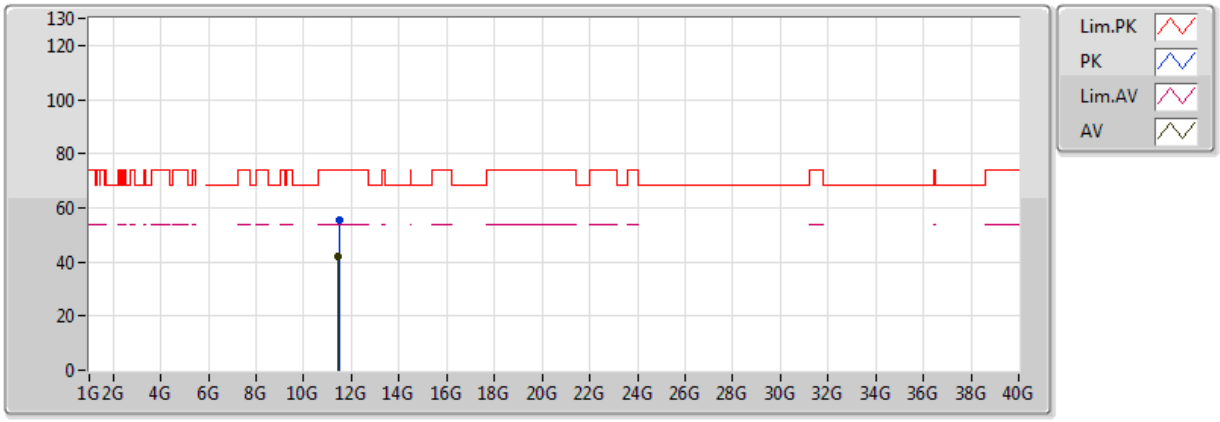


20171019
EUT Z_4TX
Setting 8
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4368G	41.60	54.00	-12.40	16.54	3	Vertical	127	1.40
PK	11.4336G	55.44	74.00	-18.56	16.53	3	Vertical	127	1.40

802.11ac VHT20_Nss1,(MCS0)_4TX

5720MHz Straddle 5.47-5.725GHz_TX

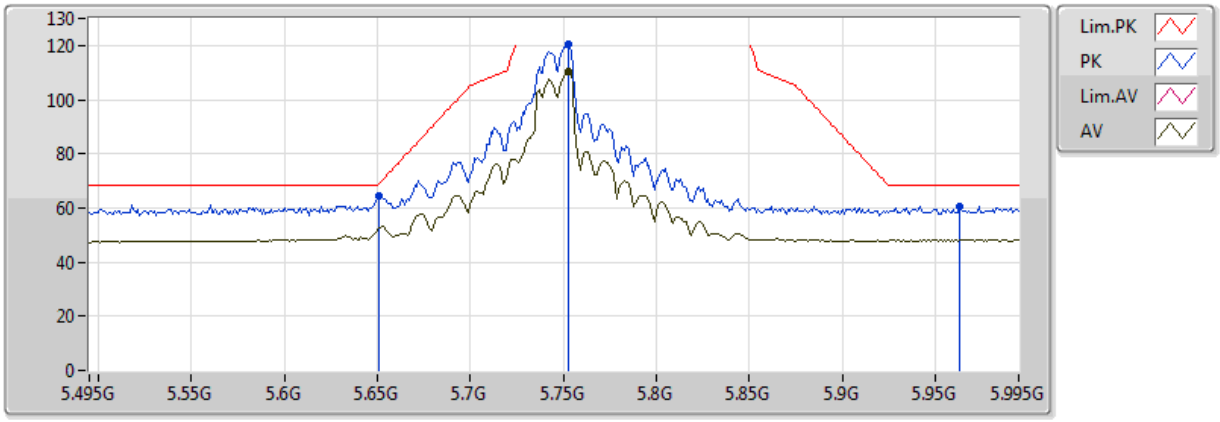


20171019
EUT Z_4TX
Setting 8
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4364G	42.29	54.00	-11.71	16.54	3	Horizontal	183	2.32
PK	11.4864G	55.60	74.00	-18.40	16.60	3	Horizontal	183	2.32

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

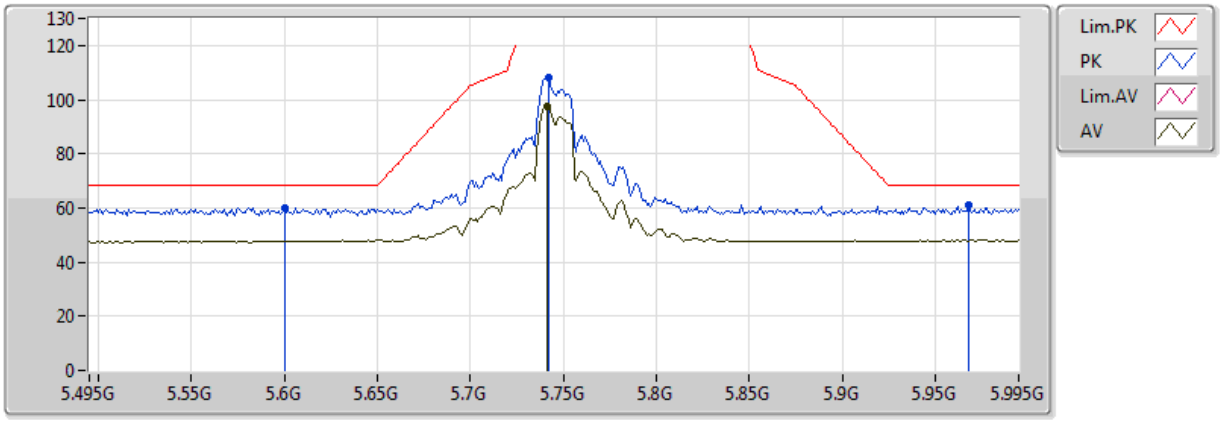


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.753G	110.57	Inf	-Inf	10.65	3	Vertical	272	2.24
PK	5.651G	64.56	68.94	-4.38	10.65	3	Vertical	272	2.24
PK	5.753G	120.60	Inf	-Inf	10.65	3	Vertical	272	2.24
PK	5.963G	60.77	68.20	-7.43	10.86	3	Vertical	272	2.24

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

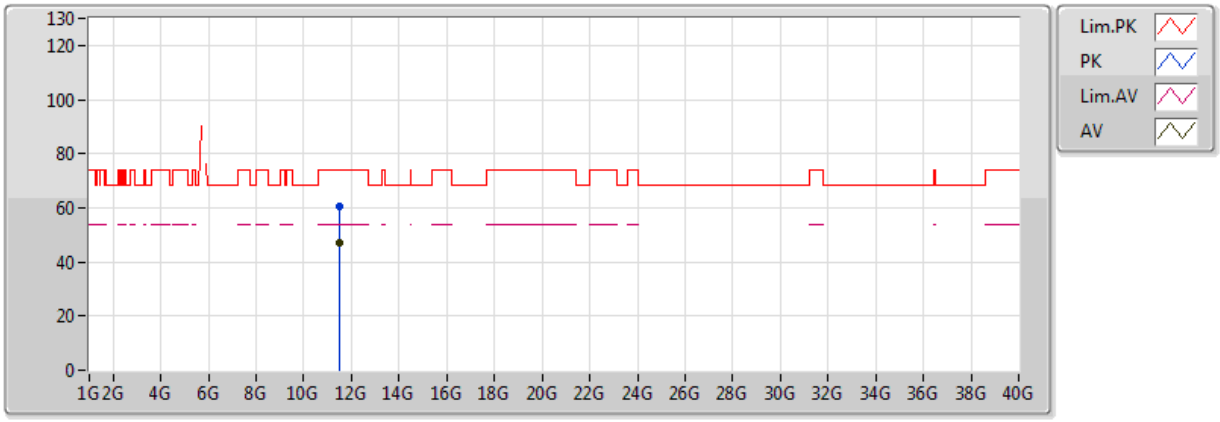


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.741G	97.50	Inf	-Inf	10.65	3	Horizontal	168	1.38
PK	5.6G	60.08	68.20	-8.12	10.65	3	Horizontal	168	1.38
PK	5.742G	108.05	Inf	-Inf	10.65	3	Horizontal	168	1.38
PK	5.968G	60.81	68.20	-7.39	10.87	3	Horizontal	168	1.38

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

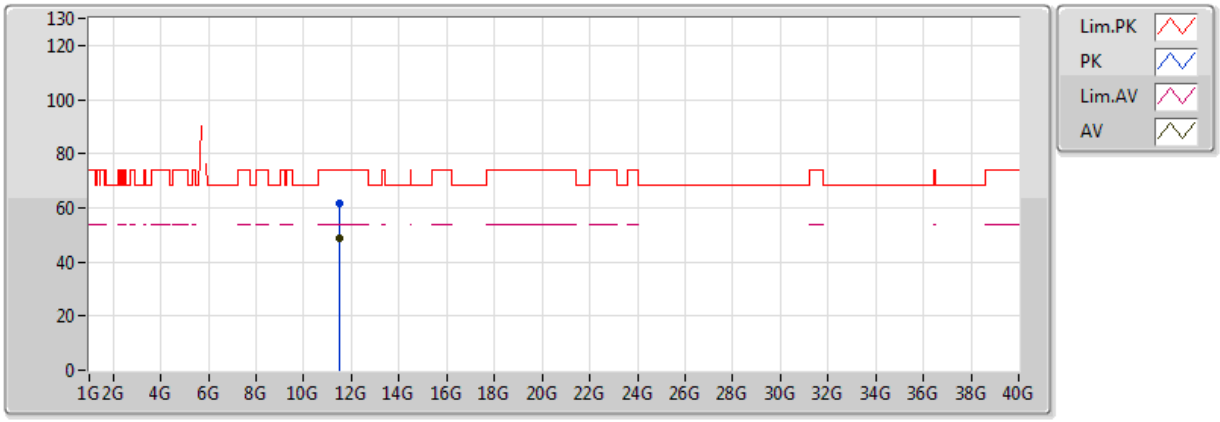


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4897G	46.93	54.00	-7.07	16.60	3	Vertical	97	1.38
PK	11.4886G	60.73	74.00	-13.27	16.60	3	Vertical	97	1.38

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

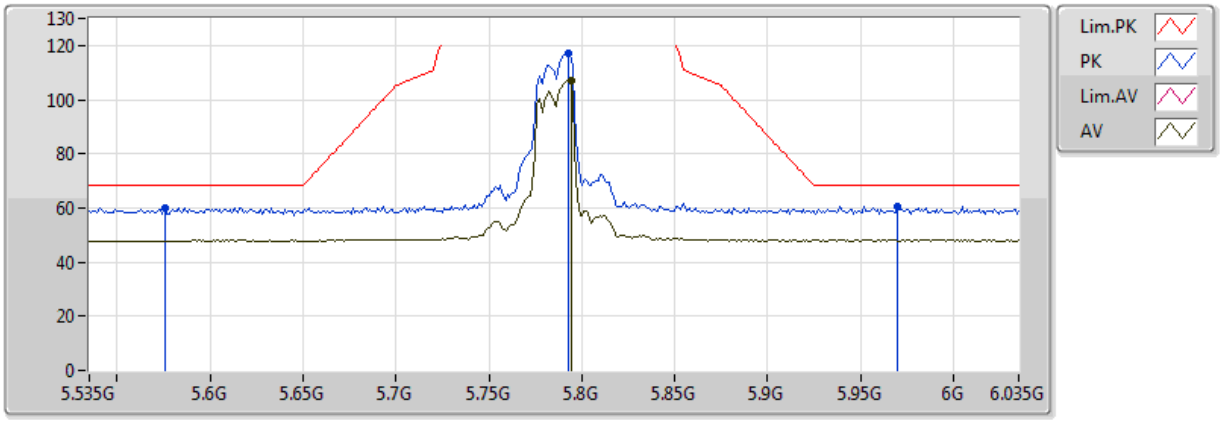


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4912G	48.49	54.00	-5.51	16.60	3	Horizontal	288	1.81
PK	11.489G	61.61	74.00	-12.39	16.60	3	Horizontal	288	1.81

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

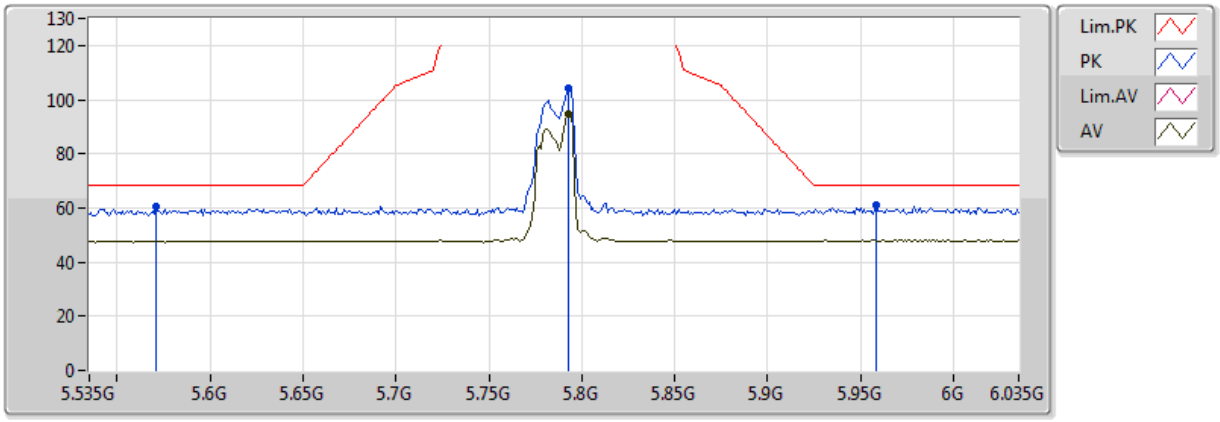


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.794G	107.00	Inf	-Inf	10.65	3	Vertical	267	2.04
PK	5.576G	60.20	68.20	-8.00	10.61	3	Vertical	267	2.04
PK	5.793G	117.22	Inf	-Inf	10.65	3	Vertical	267	2.04
PK	5.97G	60.62	68.20	-7.58	10.87	3	Vertical	267	2.04

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

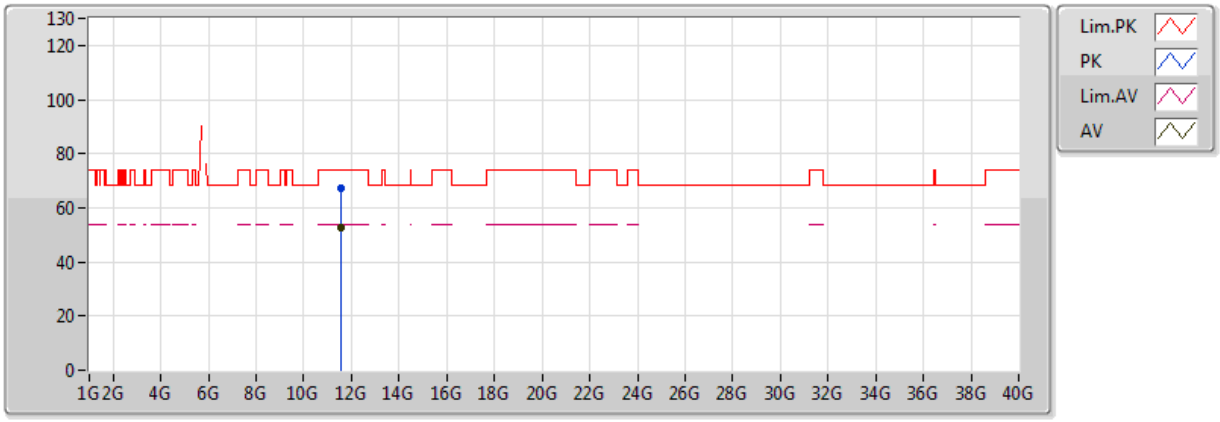


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.793G	94.60	Inf	-Inf	10.65	3	Horizontal	166	1.87
PK	5.571G	60.35	68.20	-7.85	10.60	3	Horizontal	166	1.87
PK	5.793G	104.46	Inf	-Inf	10.65	3	Horizontal	166	1.87
PK	5.958G	61.14	68.20	-7.06	10.86	3	Horizontal	166	1.87

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

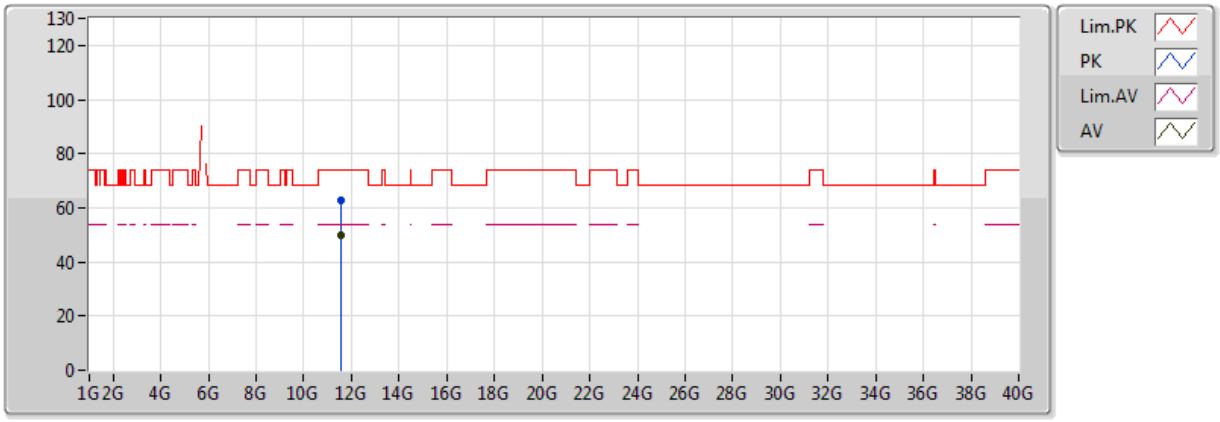


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5682G	52.90	54.00	-1.10	16.70	3	Vertical	189	1.85
PK	11.569G	67.27	74.00	-6.73	16.70	3	Vertical	189	1.85

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

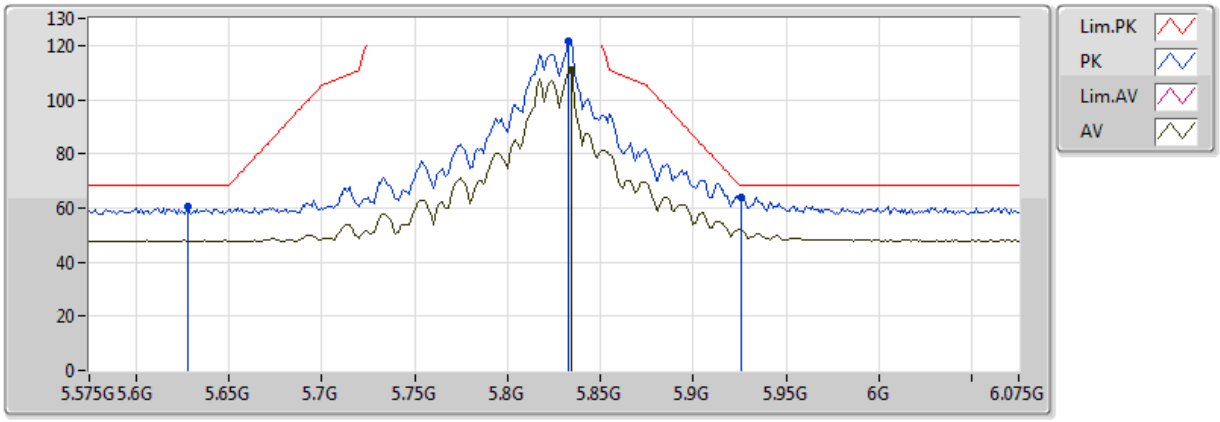


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5738G	49.81	54.00	-4.19	16.71	3	Horizontal	213	1.80
PK	11.5733G	62.84	74.00	-11.16	16.71	3	Horizontal	213	1.80

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

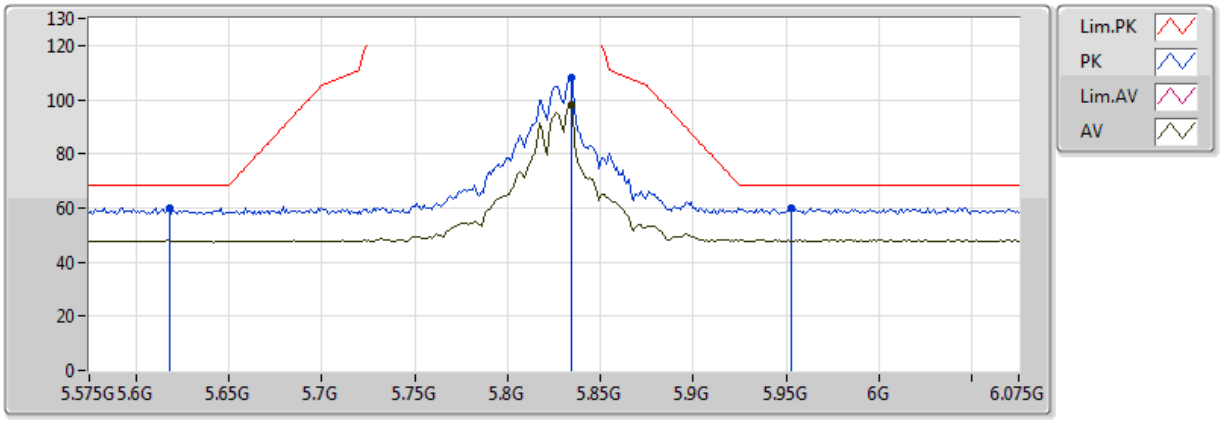


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.834G	110.89	Inf	-Inf	10.69	3	Vertical	259	2.12
PK	5.628G	60.38	68.20	-7.82	10.65	3	Vertical	259	2.12
PK	5.833G	121.84	Inf	-Inf	10.69	3	Vertical	259	2.12
PK	5.926G	64.10	68.20	-4.10	10.81	3	Vertical	259	2.12

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

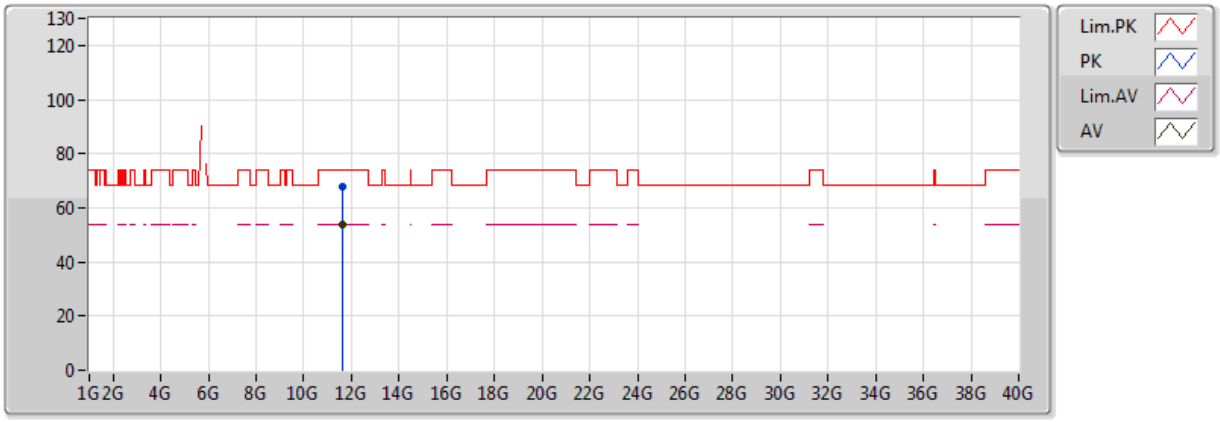


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.834G	98.12	Inf	-Inf	10.69	3	Horizontal	186	2.20
PK	5.618G	60.19	68.20	-8.01	10.65	3	Horizontal	186	2.20
PK	5.834G	108.02	Inf	-Inf	10.69	3	Horizontal	186	2.20
PK	5.953G	60.00	68.20	-8.20	10.85	3	Horizontal	186	2.20

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

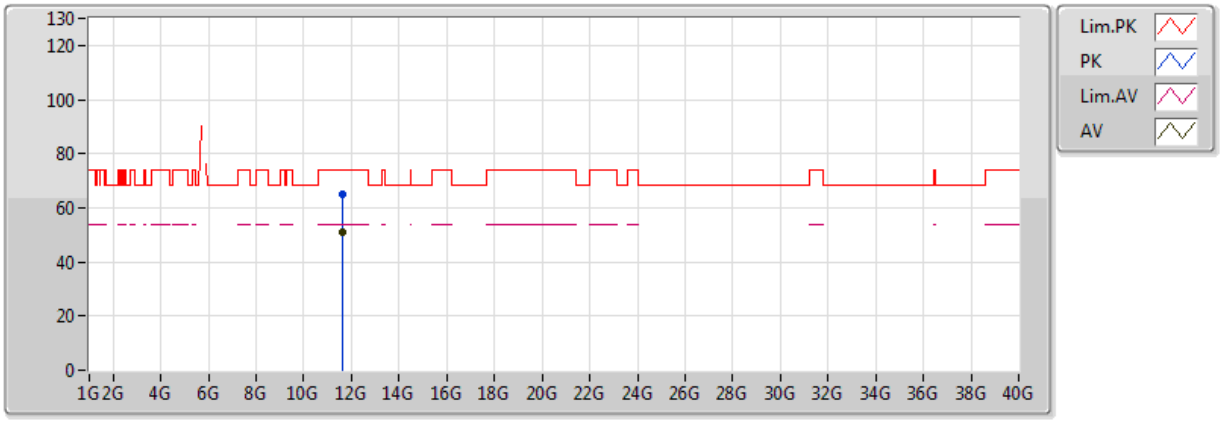


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.652G	53.71	54.00	-0.29	16.81	3	Vertical	294	1.97
PK	11.6532G	68.07	74.00	-5.93	16.81	3	Vertical	294	1.97

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

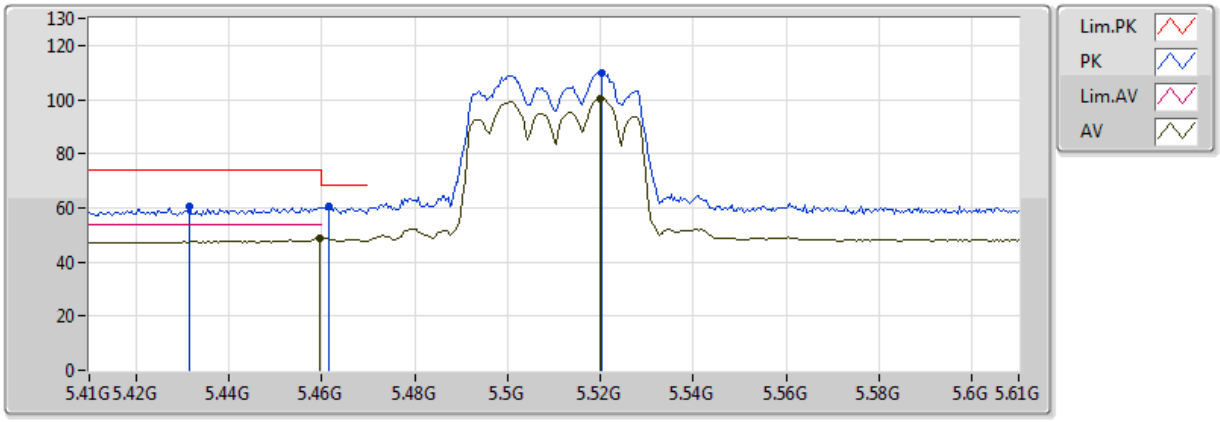


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.6468G	50.90	54.00	-3.10	16.80	3	Horizontal	217	1.71
PK	11.6487G	64.81	74.00	-9.19	16.80	3	Horizontal	217	1.71

802.11ac VHT40_Nss1,(MCS0)_4TX

5510MHz_TX

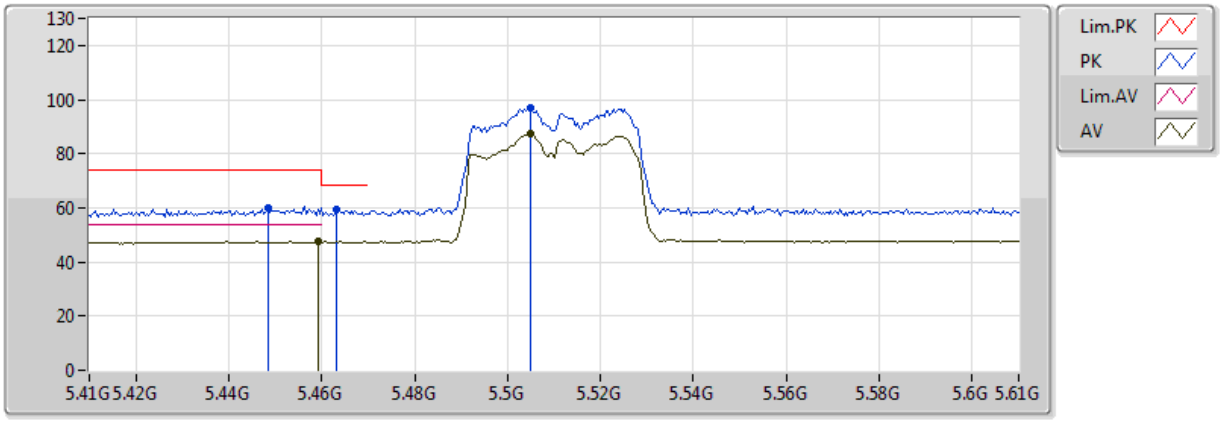


20171019
EUT Z_4TX
Setting 12
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4596G	48.62	54.00	-5.38	10.35	3	Vertical	94	2.34
AV	5.52G	100.14	Inf	-Inf	10.52	3	Vertical	94	2.34
PK	5.4316G	60.28	74.00	-13.72	10.26	3	Vertical	94	2.34
PK	5.4616G	60.27	68.20	-7.93	10.36	3	Vertical	94	2.34
PK	5.5204G	110.01	Inf	-Inf	10.52	3	Vertical	94	2.34

802.11ac VHT40_Nss1,(MCS0)_4TX

5510MHz_TX

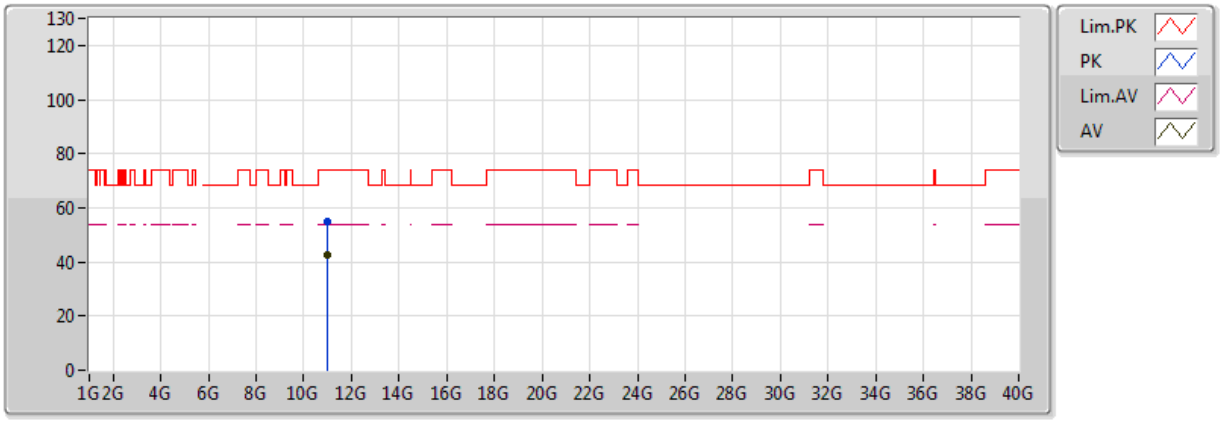


20171019
EUT Z_4TX
Setting 12
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4592G	47.47	54.00	-6.53	10.35	3	Horizontal	104	2.28
AV	5.5048G	87.21	Inf	-Inf	10.50	3	Horizontal	104	2.28
PK	5.4484G	60.17	74.00	-13.83	10.31	3	Horizontal	104	2.28
PK	5.4632G	59.42	68.20	-8.78	10.36	3	Horizontal	104	2.28
PK	5.5048G	97.12	Inf	-Inf	10.50	3	Horizontal	104	2.28

802.11ac VHT40_Nss1,(MCS0)_4TX

5510MHz_TX

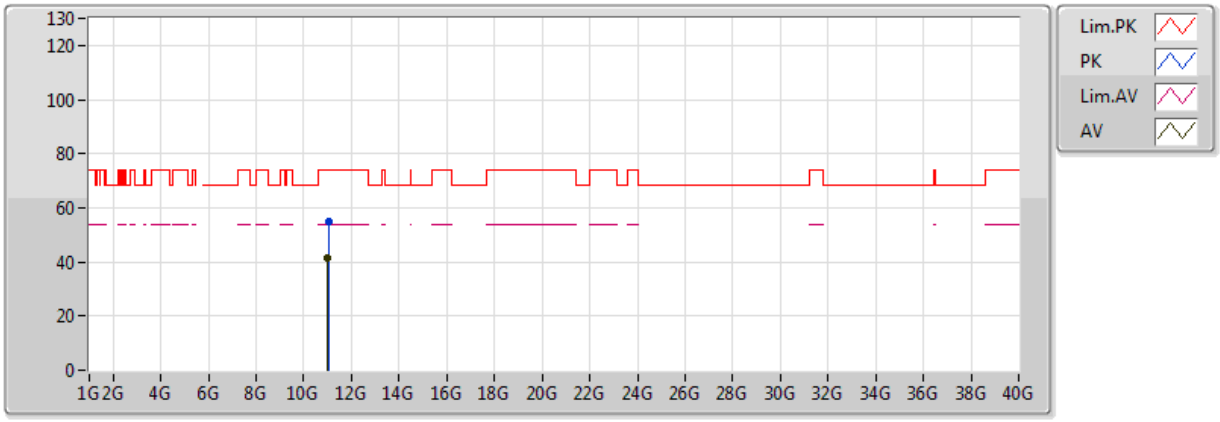


20171019
EUT Z_4TX
Setting 12
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0199G	42.32	54.00	-11.68	16.01	3	Vertical	192	1.01
PK	11.0034G	55.11	74.00	-18.89	15.99	3	Vertical	192	1.01

802.11ac VHT40_Nss1,(MCS0)_4TX

5510MHz_TX

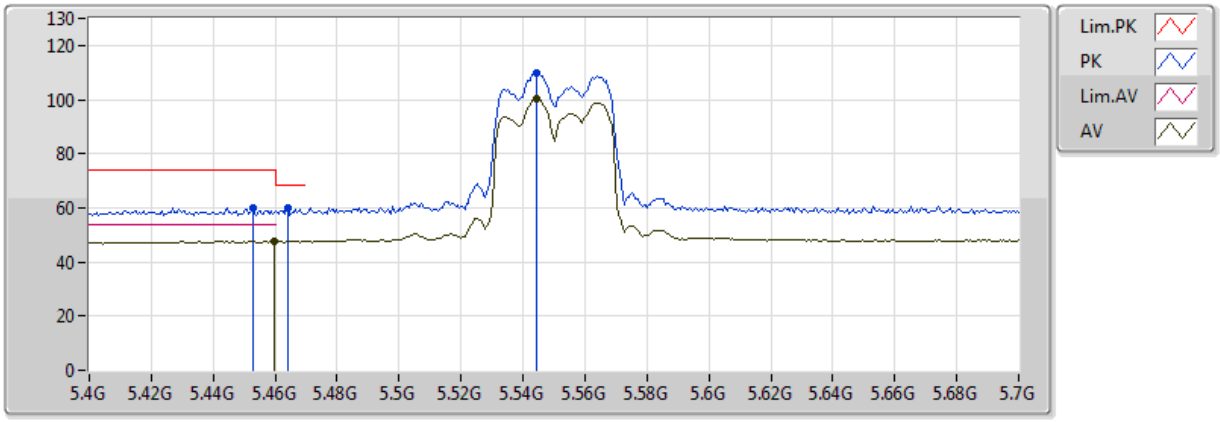


20171019
EUT Z_4TX
Setting 12
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0053G	41.69	54.00	-12.31	16.00	3	Horizontal	232	2.18
PK	11.0261G	55.13	74.00	-18.87	16.02	3	Horizontal	232	2.18

802.11ac VHT40_Nss1,(MCS0)_4TX

5550MHz_TX

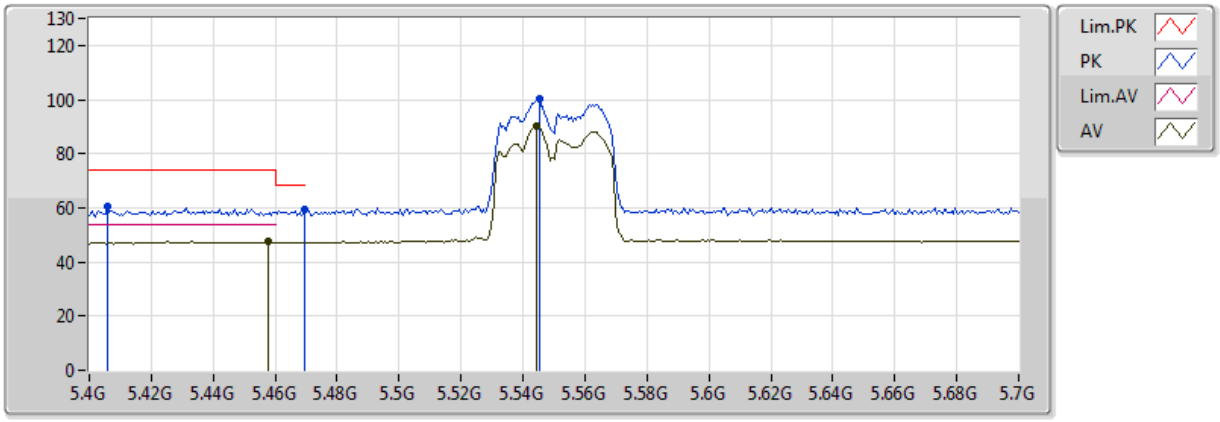


20171019
EUT Z_4TX
Setting 12
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4598G	47.55	54.00	-6.45	10.35	3	Vertical	243	2.06
AV	5.5446G	100.52	Inf	-Inf	10.56	3	Vertical	243	2.06
PK	5.4528G	60.16	74.00	-13.84	10.33	3	Vertical	243	2.06
PK	5.4642G	59.95	68.20	-8.25	10.37	3	Vertical	243	2.06
PK	5.5446G	109.84	Inf	-Inf	10.56	3	Vertical	243	2.06

802.11ac VHT40_Nss1,(MCS0)_4TX

5550MHz_TX

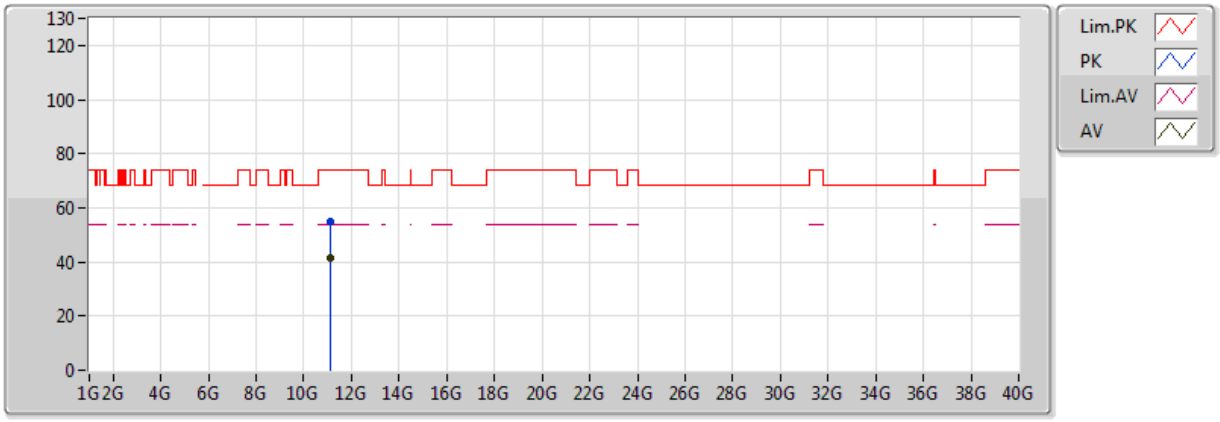


20171019
EUT Z_4TX
Setting 12
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4576G	47.39	54.00	-6.61	10.35	3	Horizontal	108	2.79
AV	5.5446G	90.45	Inf	-Inf	10.56	3	Horizontal	108	2.79
PK	5.406G	60.41	74.00	-13.59	10.17	3	Horizontal	108	2.79
PK	5.4696G	59.34	68.20	-8.86	10.39	3	Horizontal	108	2.79
PK	5.5452G	100.49	Inf	-Inf	10.56	3	Horizontal	108	2.79

802.11ac VHT40_Nss1,(MCS0)_4TX

5550MHz_TX

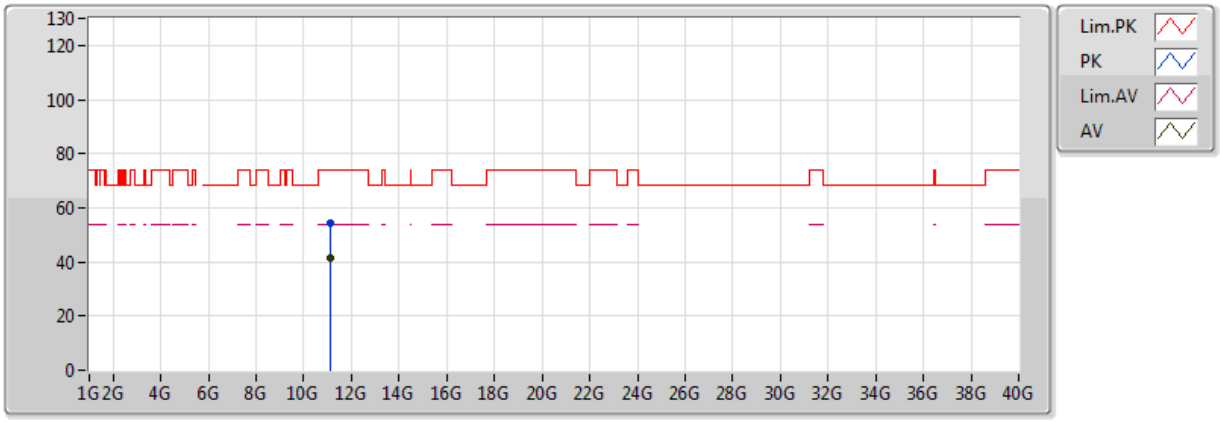


20171019
EUT Z_4TX
Setting 12
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.1051G	41.45	54.00	-12.55	16.12	3	Vertical	21	1.51
PK	11.0989G	54.97	74.00	-19.03	16.11	3	Vertical	21	1.51

802.11ac VHT40_Nss1,(MCS0)_4TX

5550MHz_TX

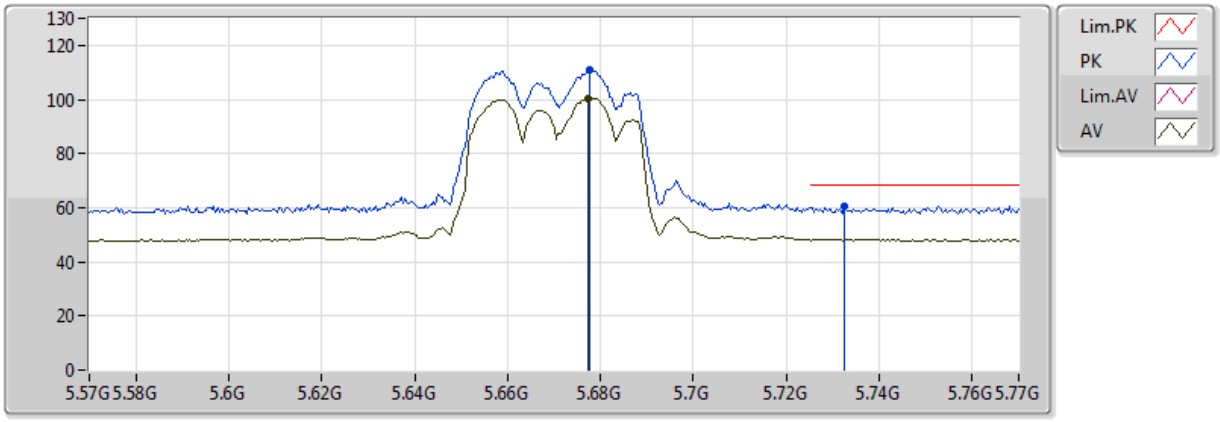


20171019
EUT Z_4TX
Setting 12
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0955G	41.60	54.00	-12.40	16.11	3	Horizontal	105	2.19
PK	11.1026G	54.18	74.00	-19.82	16.12	3	Horizontal	105	2.19

802.11ac VHT40_Nss1,(MCS0)_4TX

5670MHz_TX

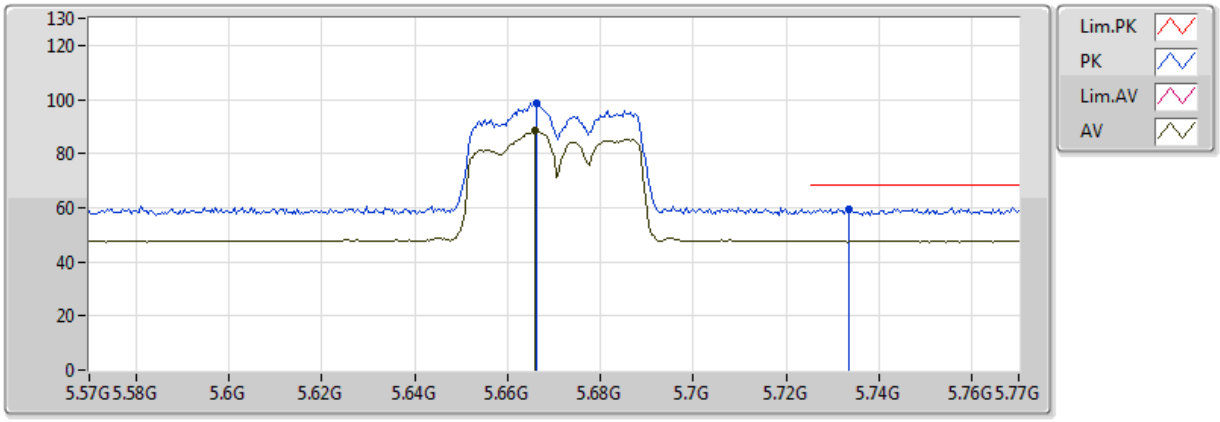


20171019
EUT Z_4TX
Setting 12
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.6772G	100.56	Inf	-Inf	10.65	3	Vertical	266	2.06
PK	5.6776G	111.04	Inf	-Inf	10.65	3	Vertical	266	2.06
PK	5.7324G	60.44	68.20	-7.76	10.65	3	Vertical	266	2.06

802.11ac VHT40_Nss1,(MCS0)_4TX

5670MHz_TX

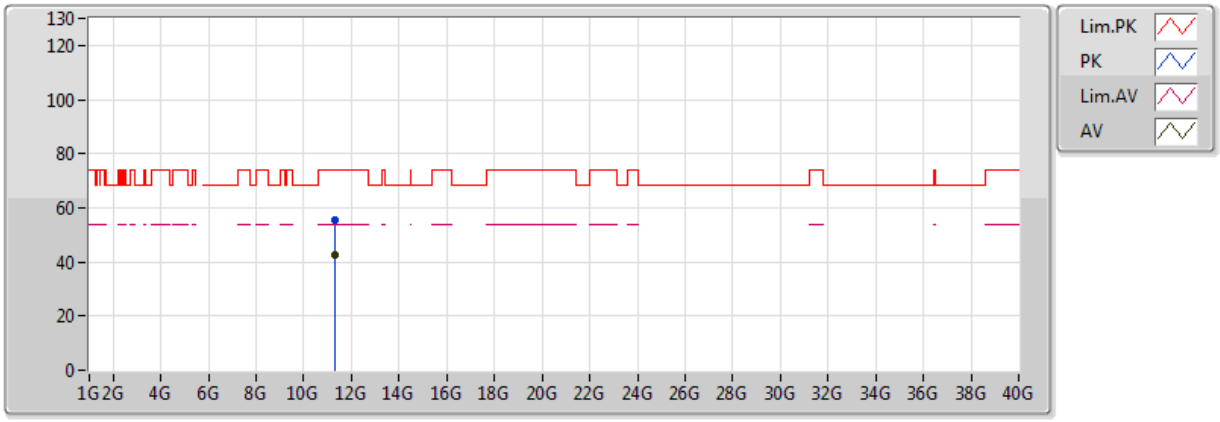


20171019
EUT Z_4TX
Setting 12
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.666G	88.48	Inf	-Inf	10.65	3	Horizontal	103	2.72
PK	5.6664G	98.77	Inf	-Inf	10.65	3	Horizontal	103	2.72
PK	5.7336G	59.53	68.20	-8.67	10.65	3	Horizontal	103	2.72

802.11ac VHT40_Nss1,(MCS0)_4TX

5670MHz_TX

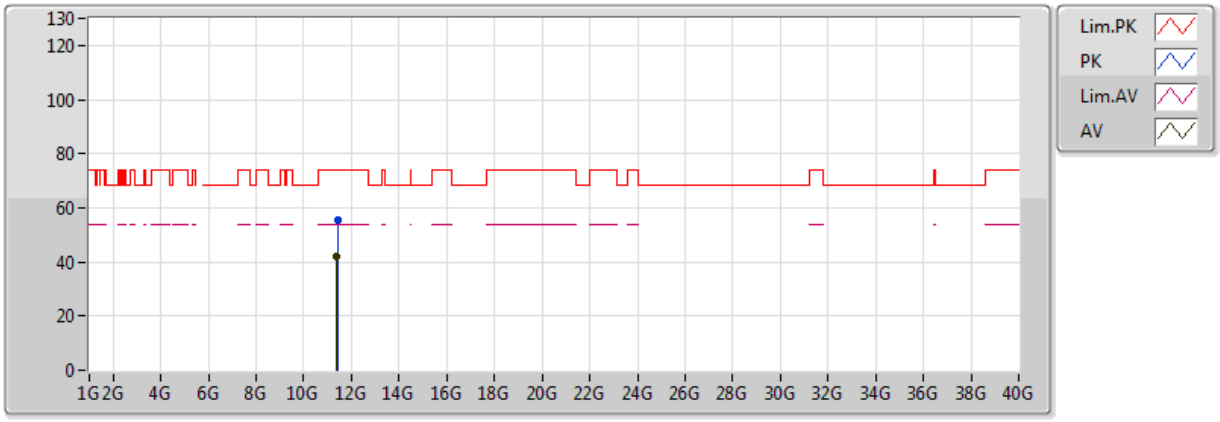


20171019
EUT Z_4TX
Setting 12
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.3344G	42.59	54.00	-11.41	16.41	3	Vertical	320	1.16
PK	11.3048G	55.69	74.00	-18.31	16.37	3	Vertical	320	1.16

802.11ac VHT40_Nss1,(MCS0)_4TX

5670MHz_TX

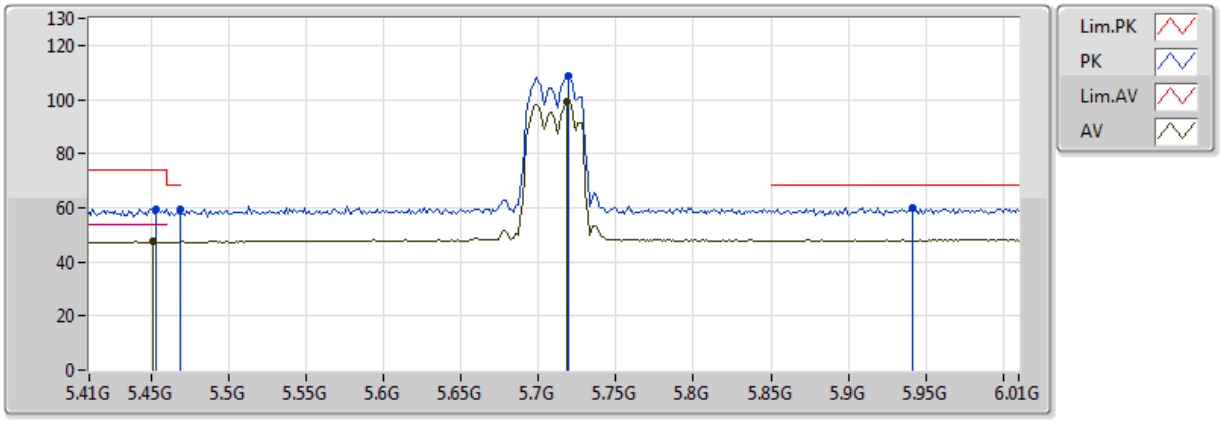


20171019
EUT Z_4TX
Setting 12
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.3608G	42.23	54.00	-11.77	16.44	3	Horizontal	302	2.35
PK	11.42G	55.48	74.00	-18.52	16.52	3	Horizontal	302	2.35

802.11ac VHT40_Nss1,(MCS0)_4TX

5710MHz Straddle 5.47-5.725GHz_TX

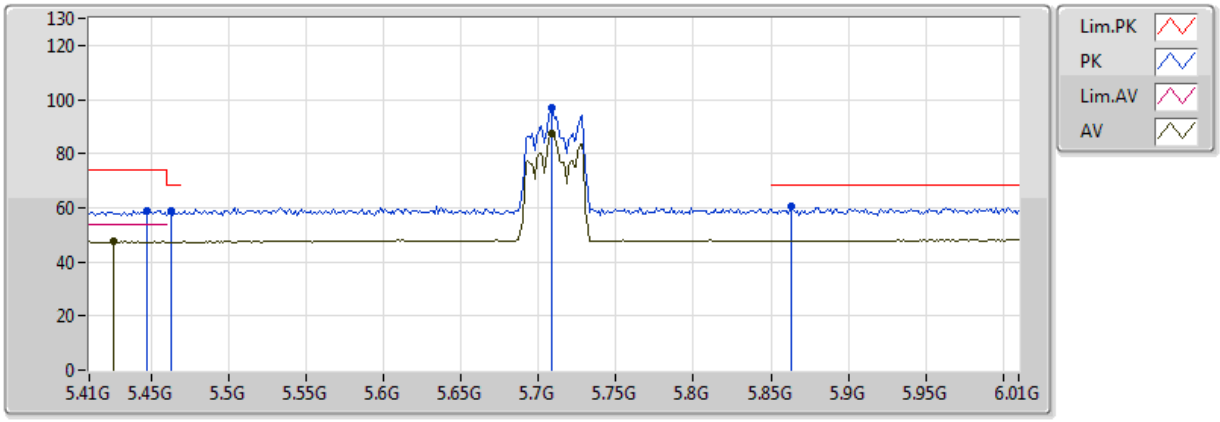


20171019
EUT Z_4TX
Setting 11
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4508G	47.44	54.00	-6.56	10.32	3	Vertical	259	2.06
AV	5.7184G	99.11	Inf	-Inf	10.65	3	Vertical	259	2.06
PK	5.4532G	59.53	74.00	-14.47	10.33	3	Vertical	259	2.06
PK	5.4688G	59.67	68.20	-8.53	10.38	3	Vertical	259	2.06
PK	5.7196G	108.66	Inf	-Inf	10.65	3	Vertical	259	2.06
PK	5.9416G	59.95	68.20	-8.25	10.83	3	Vertical	259	2.06

802.11ac VHT40_Nss1,(MCS0)_4TX

5710MHz Straddle 5.47-5.725GHz_TX

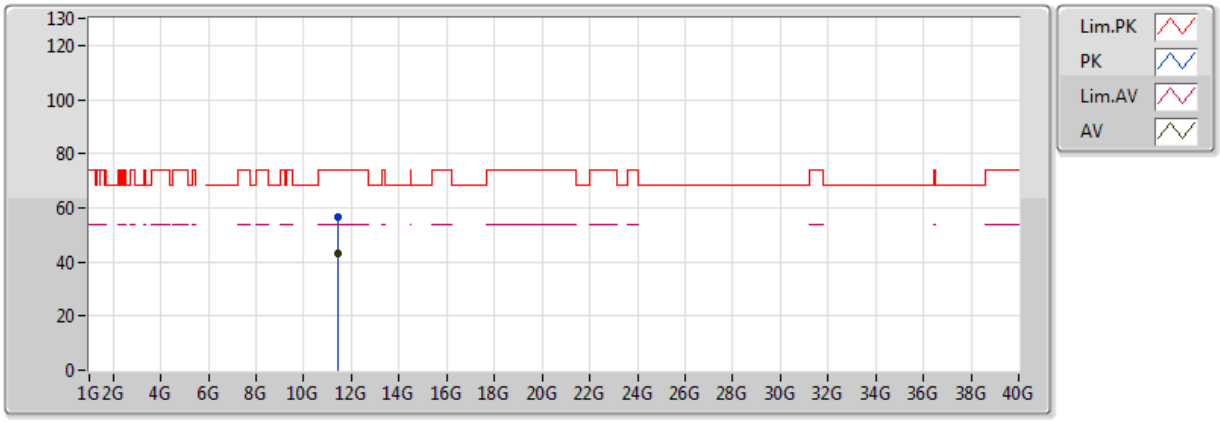


20171019
EUT Z_4TX
Setting 11
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4256G	47.47	54.00	-6.53	10.24	3	Horizontal	69	2.08
AV	5.7088G	87.24	Inf	-Inf	10.65	3	Horizontal	69	2.08
PK	5.4472G	59.09	74.00	-14.91	10.31	3	Horizontal	69	2.08
PK	5.4628G	58.57	68.20	-9.63	10.36	3	Horizontal	69	2.08
PK	5.7088G	96.86	Inf	-Inf	10.65	3	Horizontal	69	2.08
PK	5.8636G	60.25	68.20	-7.95	10.73	3	Horizontal	69	2.08

802.11ac VHT40_Nss1,(MCS0)_4TX

5710MHz Straddle 5.47-5.725GHz_TX

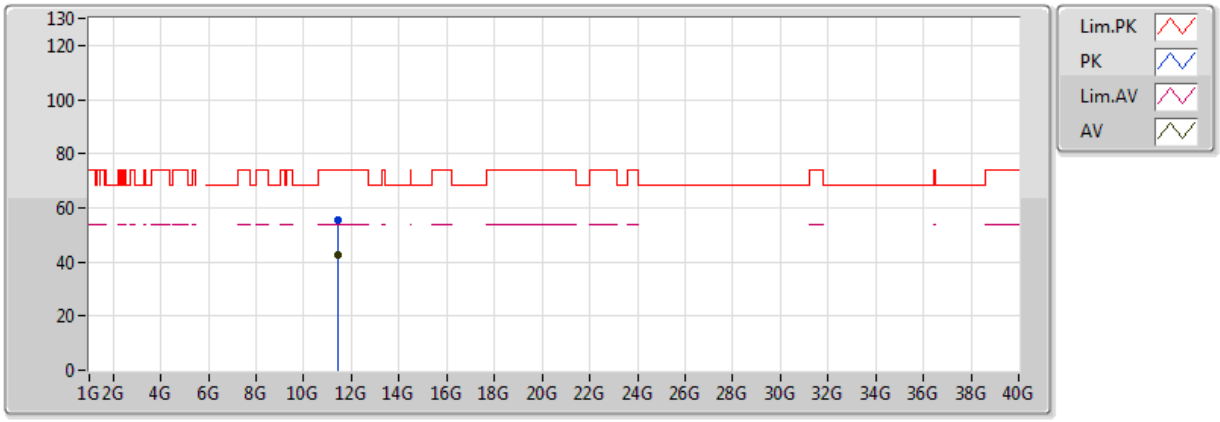


20171019
EUT Z_4TX
Setting 11
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4241G	43.25	54.00	-10.75	16.52	3	Vertical	347	1.86
PK	11.4272G	56.63	74.00	-17.37	16.52	3	Vertical	347	1.86

802.11ac VHT40_Nss1,(MCS0)_4TX

5710MHz Straddle 5.47-5.725GHz_TX

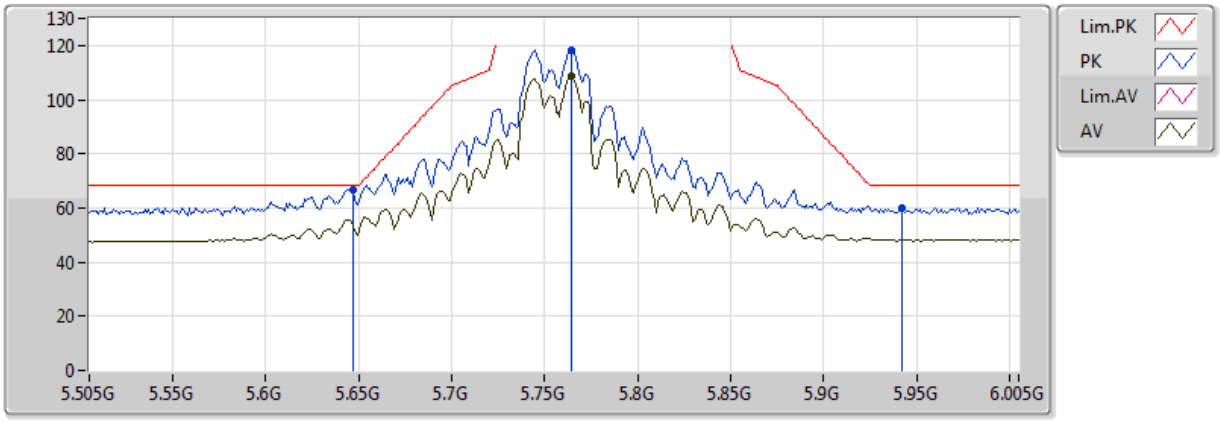


20171019
EUT Z_4TX
Setting 11
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4203G	42.63	54.00	-11.37	16.52	3	Horizontal	328	1.19
PK	11.4084G	55.45	74.00	-18.55	16.50	3	Horizontal	328	1.19

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

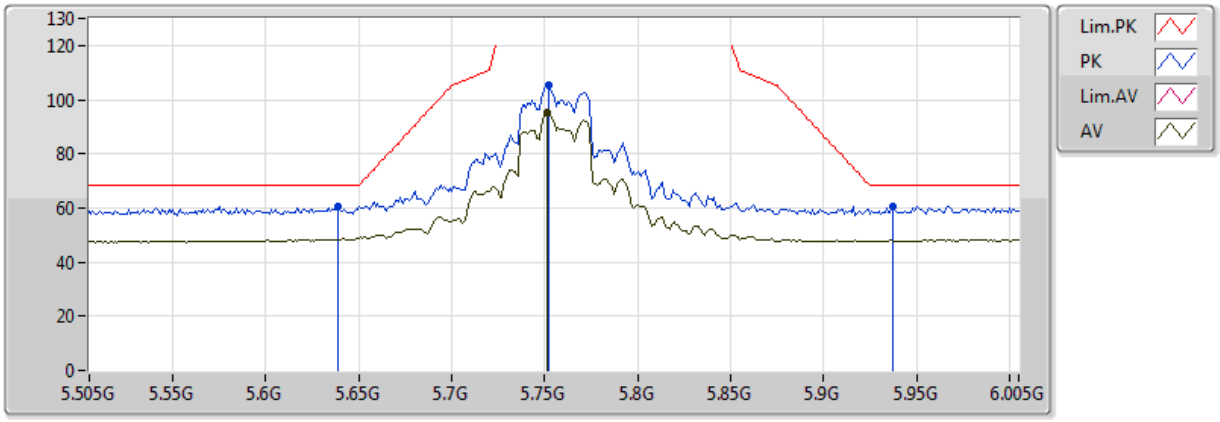


20171019
EUT Z_4TX
Setting 20
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.764G	108.44	Inf	-Inf	10.65	3	Vertical	253	2.03
PK	5.647G	66.91	68.20	-1.29	10.65	3	Vertical	253	2.03
PK	5.764G	118.49	Inf	-Inf	10.65	3	Vertical	253	2.03
PK	5.942G	60.15	68.20	-8.05	10.83	3	Vertical	253	2.03

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

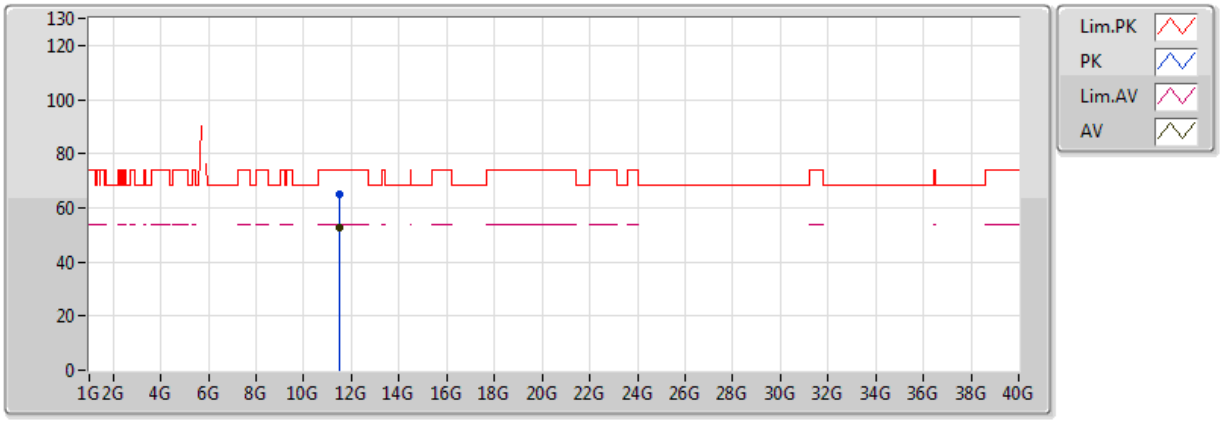


20171019
EUT Z_4TX
Setting 20
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.751G	95.17	Inf	-Inf	10.65	3	Horizontal	152	1.67
PK	5.639G	60.73	68.20	-7.47	10.65	3	Horizontal	152	1.67
PK	5.752G	105.17	Inf	-Inf	10.65	3	Horizontal	152	1.67
PK	5.937G	60.59	68.20	-7.61	10.83	3	Horizontal	152	1.67

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

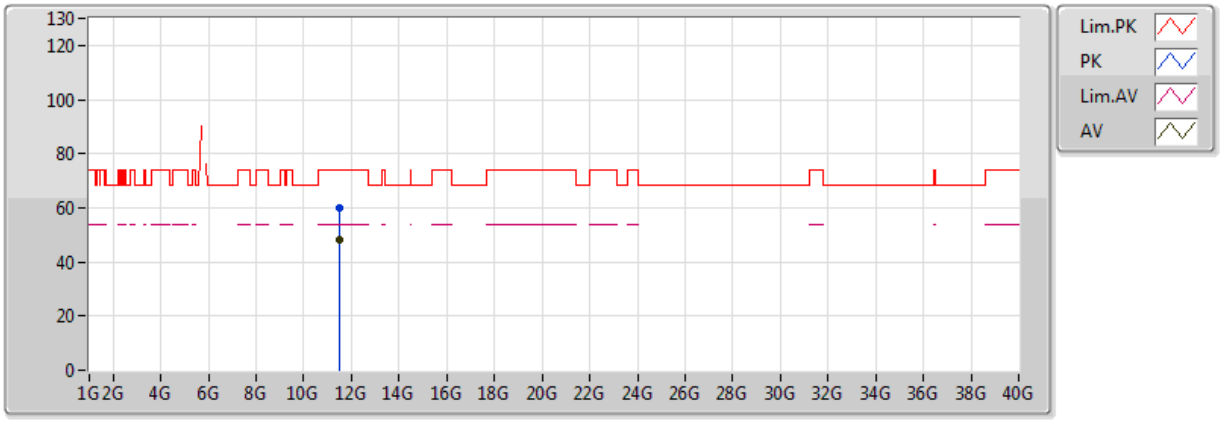


20171019
EUT Z_4TX
Setting 20
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5113G	52.52	54.00	-1.48	16.63	3	Vertical	73	1.96
PK	11.5125G	64.93	74.00	-9.07	16.63	3	Vertical	73	1.96

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

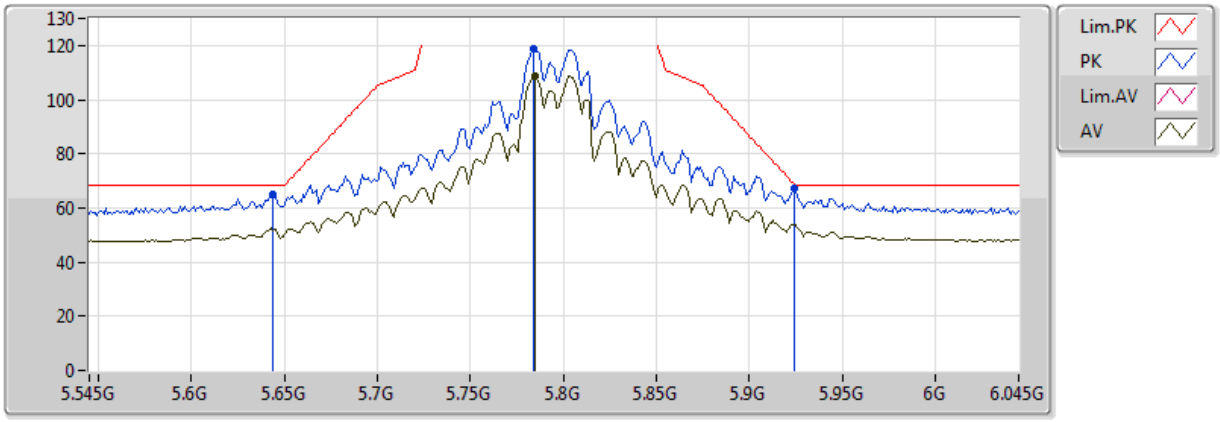


20171019
EUT Z_4TX
Setting 20
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5107G	48.19	54.00	-5.81	16.63	3	Horizontal	281	2.00
PK	11.5104G	59.93	74.00	-14.07	16.63	3	Horizontal	281	2.00

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

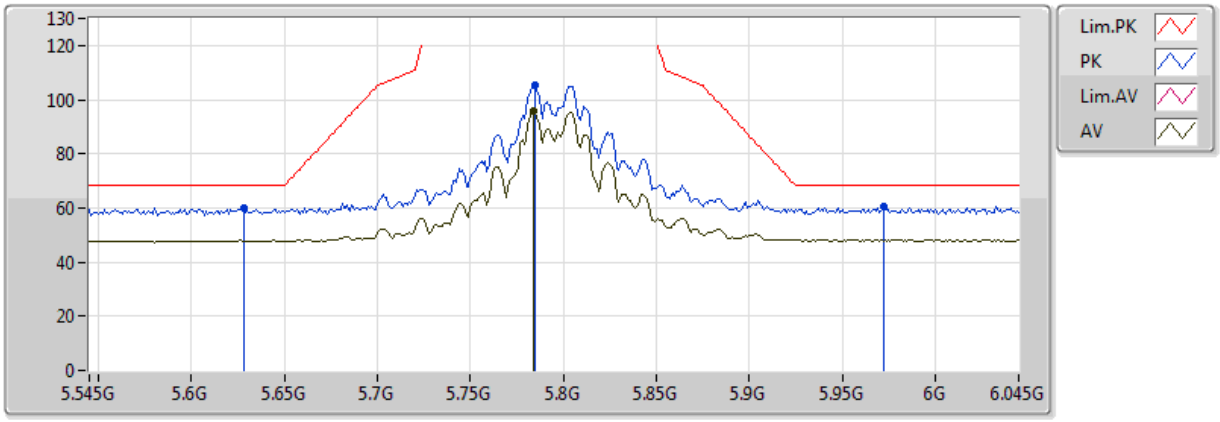


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.785G	108.60	Inf	-Inf	10.65	3	Vertical	278	2.19
PK	5.644G	64.87	68.20	-3.33	10.65	3	Vertical	278	2.19
PK	5.784G	118.67	Inf	-Inf	10.65	3	Vertical	278	2.19
PK	5.924G	67.34	68.94	-1.60	10.81	3	Vertical	278	2.19

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

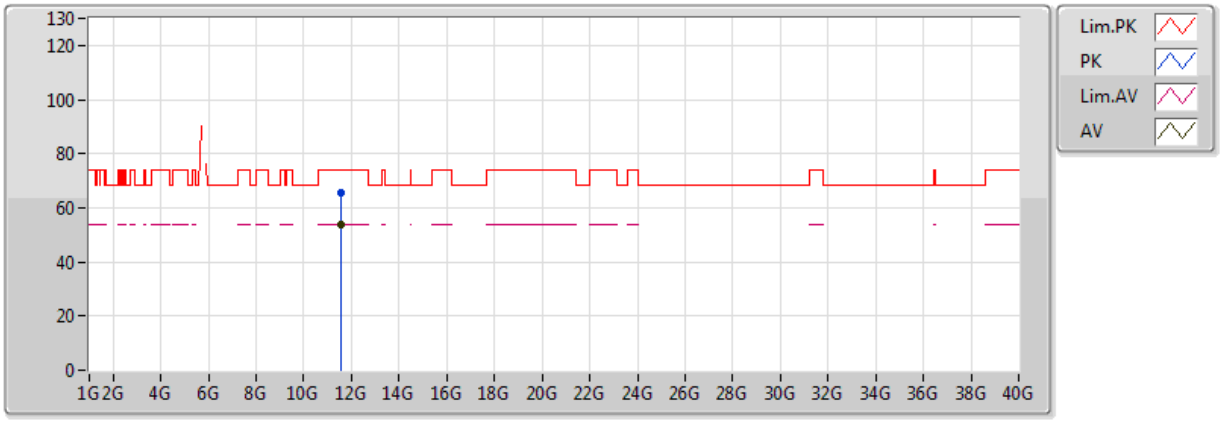


20171019
EUT Z_4TX
Setting 20.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.784G	95.69	Inf	-Inf	10.65	3	Horizontal	181	2.15
PK	5.628G	60.17	68.20	-8.03	10.65	3	Horizontal	181	2.15
PK	5.785G	105.34	Inf	-Inf	10.65	3	Horizontal	181	2.15
PK	5.972G	60.41	68.20	-7.79	10.87	3	Horizontal	181	2.15

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

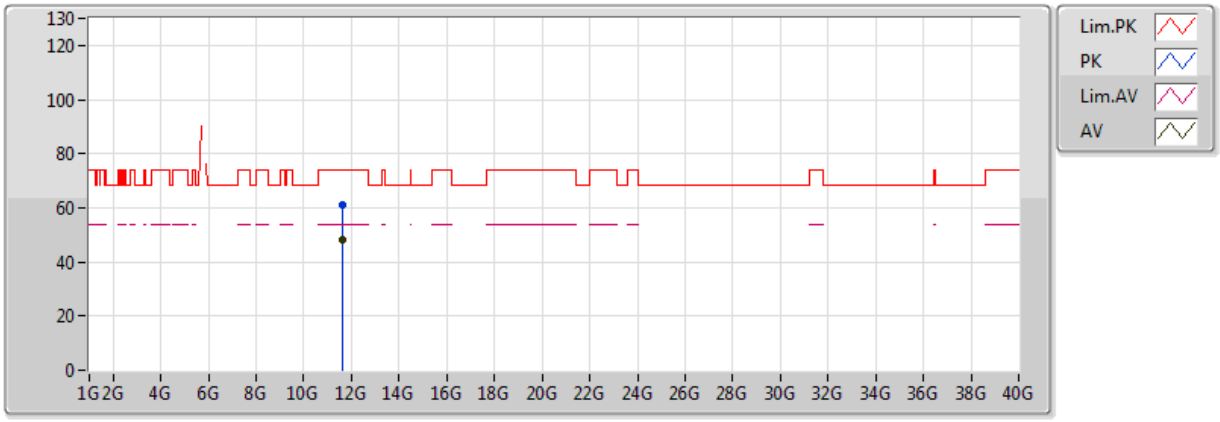


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5913G	53.94	54.00	-0.06	16.73	3	Vertical	37	1.92
PK	11.5903G	65.29	74.00	-8.71	16.73	3	Vertical	37	1.92

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

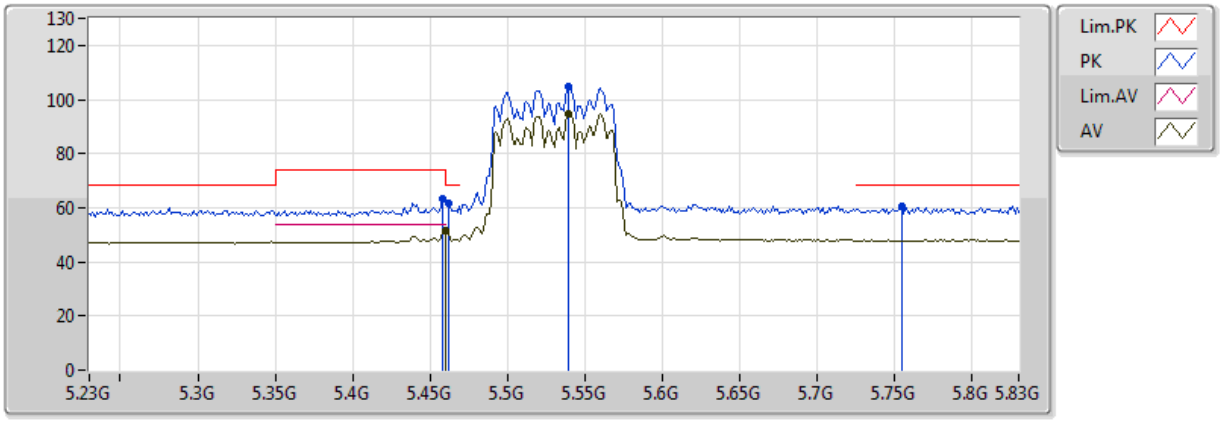


20171019
EUT Z_4TX
Setting 20.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5987G	48.33	54.00	-5.67	16.74	3	Horizontal	231	1.61
PK	11.5987G	60.97	74.00	-13.03	16.74	3	Horizontal	231	1.61

802.11ac VHT80_Nss1,(MCS0)_4TX

5530MHz_TX

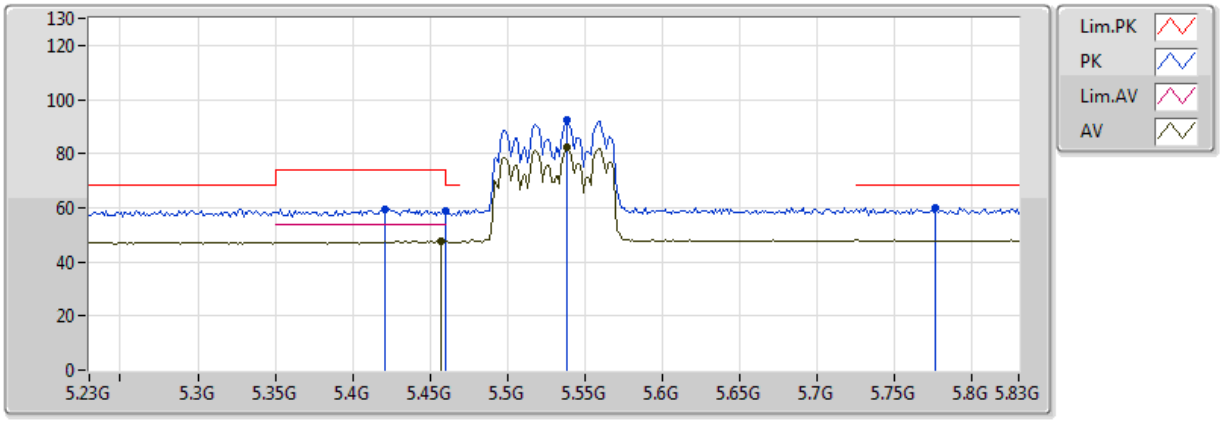


20171020
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.459995G	51.57	54.00	-2.43	10.35	3	Vertical	100	2.41
AV	5.5396G	94.72	Inf	-Inf	10.55	3	Vertical	100	2.41
PK	5.458G	63.23	74.00	-10.77	10.35	3	Vertical	100	2.41
PK	5.4616G	61.80	68.20	-6.40	10.36	3	Vertical	100	2.41
PK	5.5396G	104.62	Inf	-Inf	10.55	3	Vertical	100	2.41
PK	5.7544G	60.39	68.20	-7.81	10.65	3	Vertical	100	2.41

802.11ac VHT80_Nss1,(MCS0)_4TX

5530MHz_TX

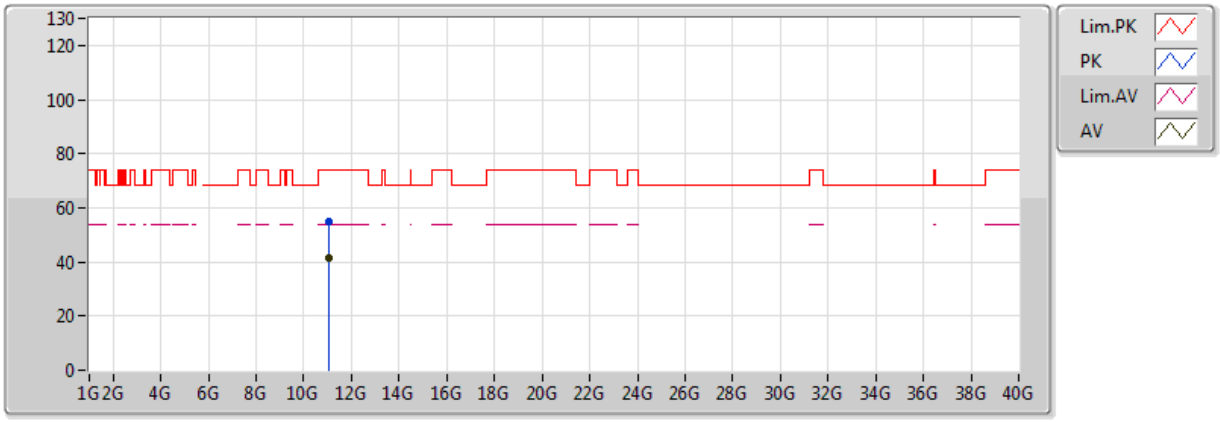


20171020
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4568G	47.63	54.00	-6.37	10.34	3	Horizontal	178	2.37
AV	5.5384G	82.16	Inf	-Inf	10.55	3	Horizontal	178	2.37
PK	5.4208G	59.34	74.00	-14.66	10.22	3	Horizontal	178	2.37
PK	5.4604G	59.03	68.20	-9.17	10.36	3	Horizontal	178	2.37
PK	5.5384G	92.31	Inf	-Inf	10.55	3	Horizontal	178	2.37
PK	5.776G	60.00	68.20	-8.20	10.65	3	Horizontal	178	2.37

802.11ac VHT80_Nss1,(MCS0)_4TX

5530MHz_TX

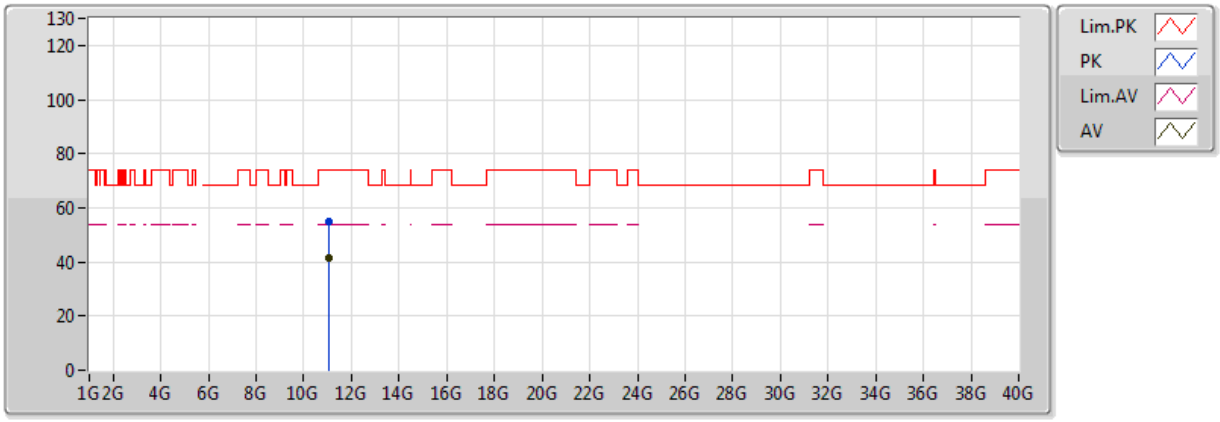


20171020
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0794G	41.43	54.00	-12.57	16.09	3	Vertical	88	1.73
PK	11.0491G	54.70	74.00	-19.30	16.05	3	Vertical	88	1.73

802.11ac VHT80_Nss1,(MCS0)_4TX

5530MHz_TX

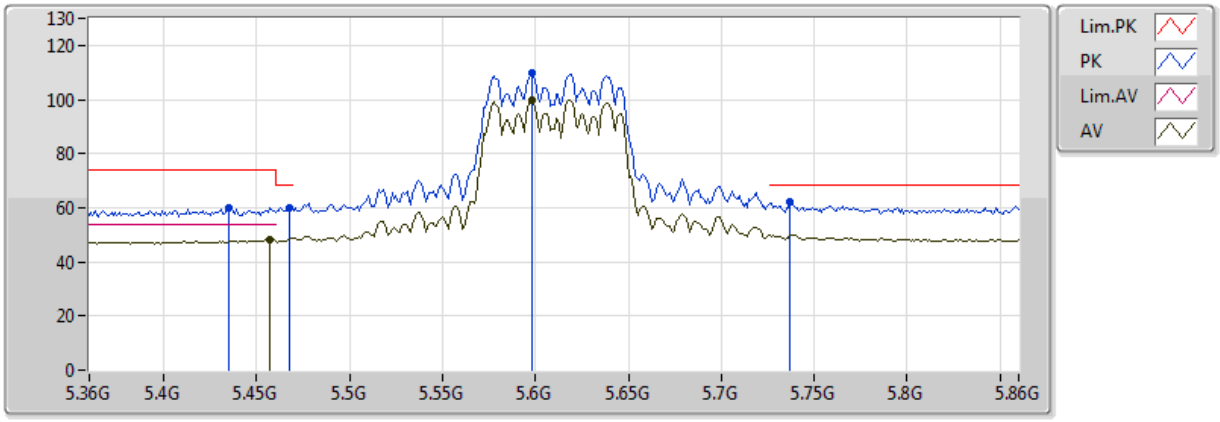


20171020
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0407G	41.40	54.00	-12.60	16.04	3	Horizontal	205	2.19
PK	11.0783G	54.75	74.00	-19.25	16.09	3	Horizontal	205	2.19

802.11ac VHT80_Nss1,(MCS0)_4TX

5610MHz_TX

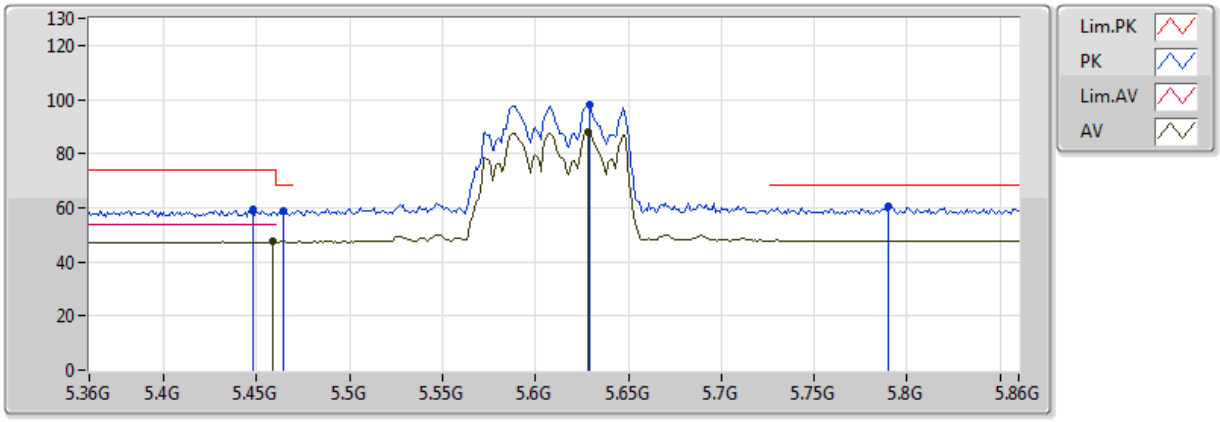


20171020
EUT Z_4TX
Setting 15
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.457G	48.30	54.00	-5.70	10.34	3	Vertical	97	2.33
AV	5.598G	99.69	Inf	-Inf	10.65	3	Vertical	97	2.33
PK	5.435G	60.11	74.00	-13.89	10.27	3	Vertical	97	2.33
PK	5.468G	60.06	68.20	-8.14	10.38	3	Vertical	97	2.33
PK	5.598G	109.83	Inf	-Inf	10.65	3	Vertical	97	2.33
PK	5.737G	62.03	68.20	-6.17	10.65	3	Vertical	97	2.33

802.11ac VHT80_Nss1,(MCS0)_4TX

5610MHz_TX

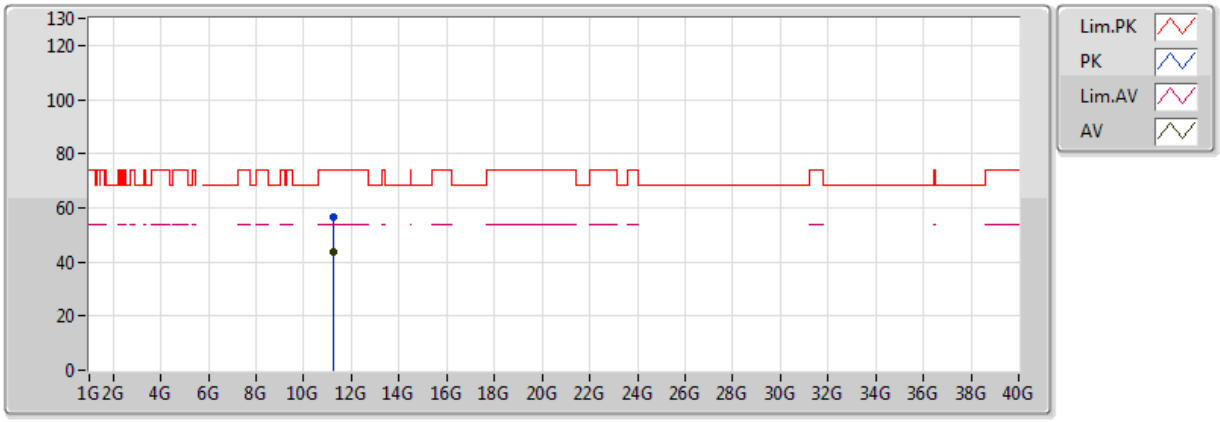


20171020
EUT Z_4TX
Setting 15
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.459G	47.46	54.00	-6.54	10.35	3	Horizontal	86	2.11
AV	5.628G	87.85	Inf	-Inf	10.65	3	Horizontal	86	2.11
PK	5.448G	59.12	74.00	-14.88	10.31	3	Horizontal	86	2.11
PK	5.464G	58.69	68.20	-9.51	10.37	3	Horizontal	86	2.11
PK	5.629G	97.93	Inf	-Inf	10.65	3	Horizontal	86	2.11
PK	5.79G	60.28	68.20	-7.92	10.65	3	Horizontal	86	2.11

802.11ac VHT80_Nss1,(MCS0)_4TX

5610MHz_TX

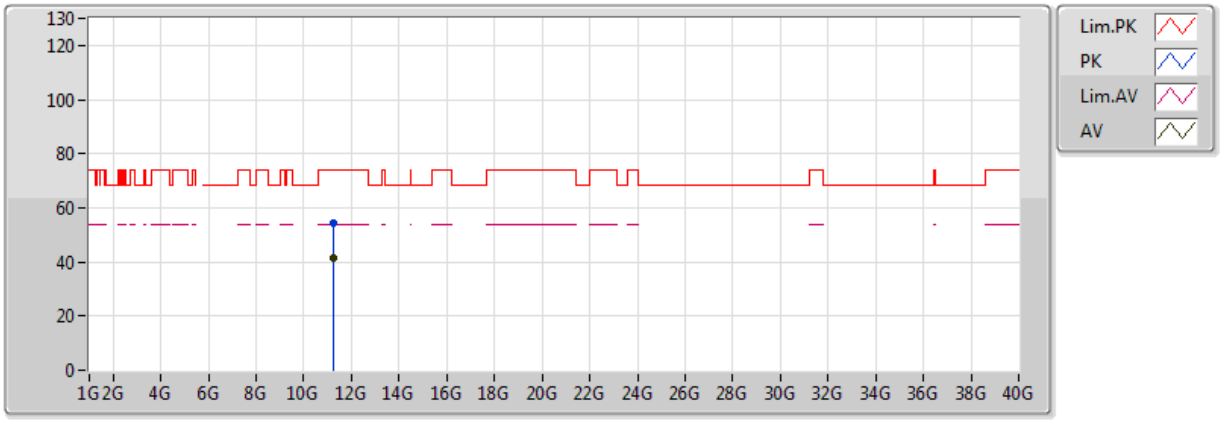


20171020
EUT Z_4TX
Setting 15
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.2147G	43.61	54.00	-10.39	16.26	3	Vertical	40	2.77
PK	11.2157G	56.55	74.00	-17.45	16.26	3	Vertical	40	2.77

802.11ac VHT80_Nss1,(MCS0)_4TX

5610MHz_TX

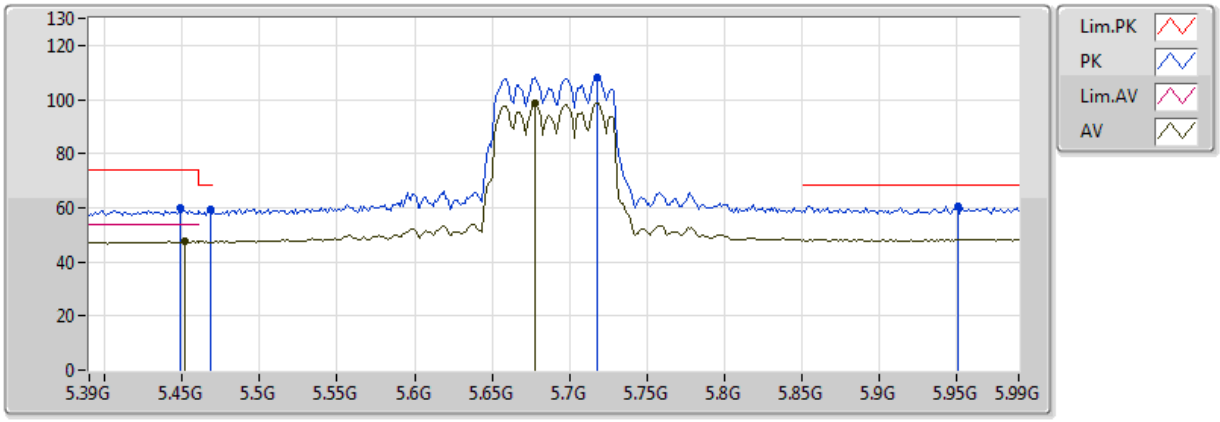


20171020
EUT Z_4TX
Setting 15
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.2404G	41.54	54.00	-12.46	16.29	3	Horizontal	325	2.37
PK	11.2395G	54.58	74.00	-19.42	16.29	3	Horizontal	325	2.37

802.11ac VHT80_Nss1,(MCS0)_4TX

5690MHz Straddle 5.47-5.725GHz_TX

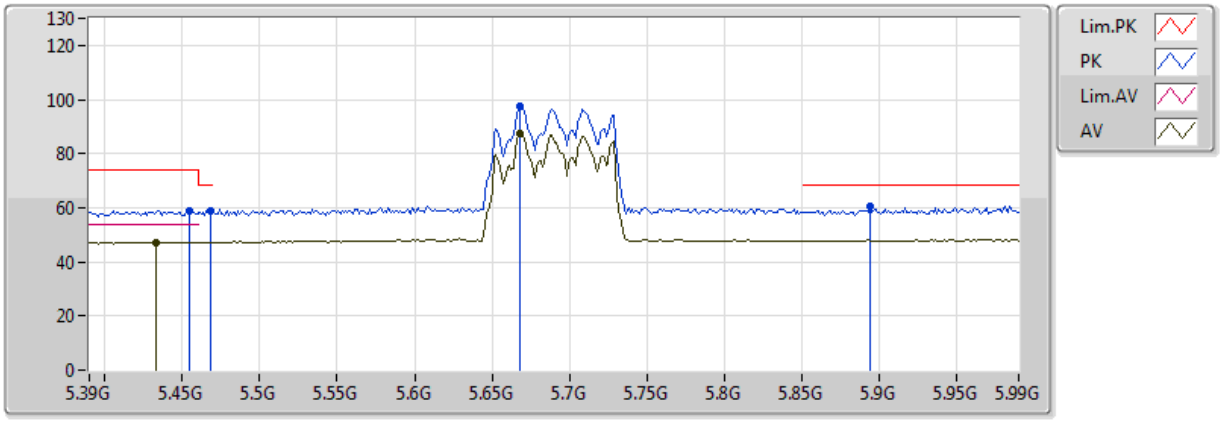


20171020
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4512G	47.48	54.00	-6.52	10.32	3	Vertical	277	2.08
AV	5.678G	98.57	Inf	-Inf	10.65	3	Vertical	277	2.08
PK	5.4488G	59.80	74.00	-14.20	10.32	3	Vertical	277	2.08
PK	5.468G	59.12	68.20	-9.08	10.38	3	Vertical	277	2.08
PK	5.7176G	108.41	Inf	-Inf	10.65	3	Vertical	277	2.08
PK	5.9504G	60.44	68.20	-7.76	10.85	3	Vertical	277	2.08

802.11ac VHT80_Nss1,(MCS0)_4TX

5690MHz Straddle 5.47-5.725GHz_TX

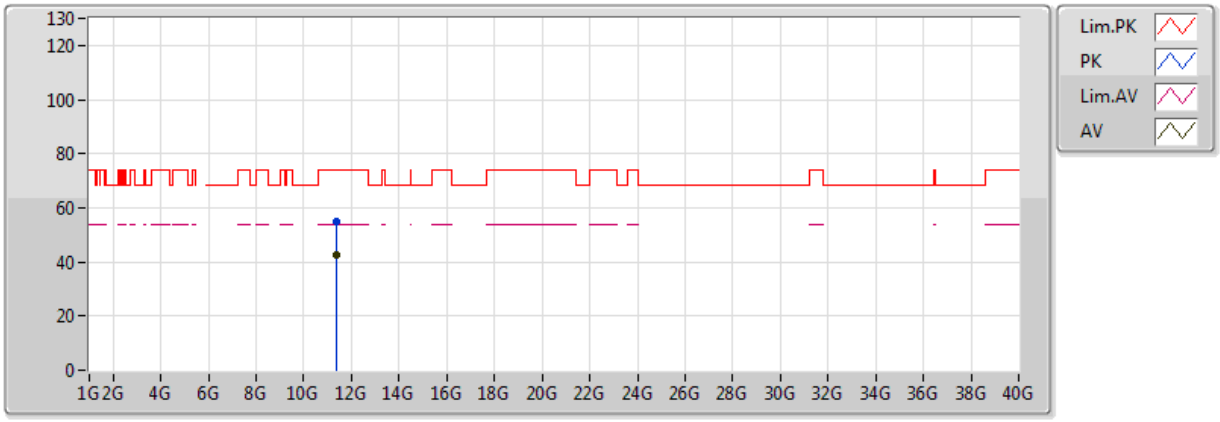


20171020
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4332G	47.32	54.00	-6.68	10.26	3	Horizontal	86	2.16
AV	5.6684G	87.53	Inf	-Inf	10.65	3	Horizontal	86	2.16
PK	5.4548G	58.99	74.00	-15.01	10.34	3	Horizontal	86	2.16
PK	5.468G	59.02	68.20	-9.18	10.38	3	Horizontal	86	2.16
PK	5.6684G	97.49	Inf	-Inf	10.65	3	Horizontal	86	2.16
PK	5.894G	60.59	68.20	-7.61	10.77	3	Horizontal	86	2.16

802.11ac VHT80_Nss1,(MCS0)_4TX

5690MHz Straddle 5.47-5.725GHz_TX

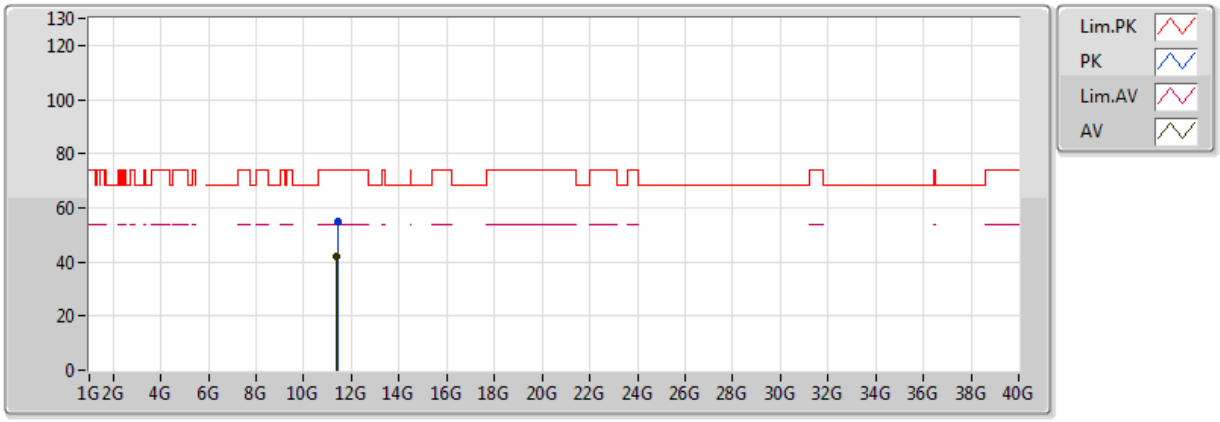


20171020
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.3562G	42.47	54.00	-11.53	16.44	3	Vertical	348	2.18
PK	11.3948G	54.90	74.00	-19.10	16.48	3	Vertical	348	2.18

802.11ac VHT80_Nss1,(MCS0)_4TX

5690MHz Straddle 5.47-5.725GHz_TX

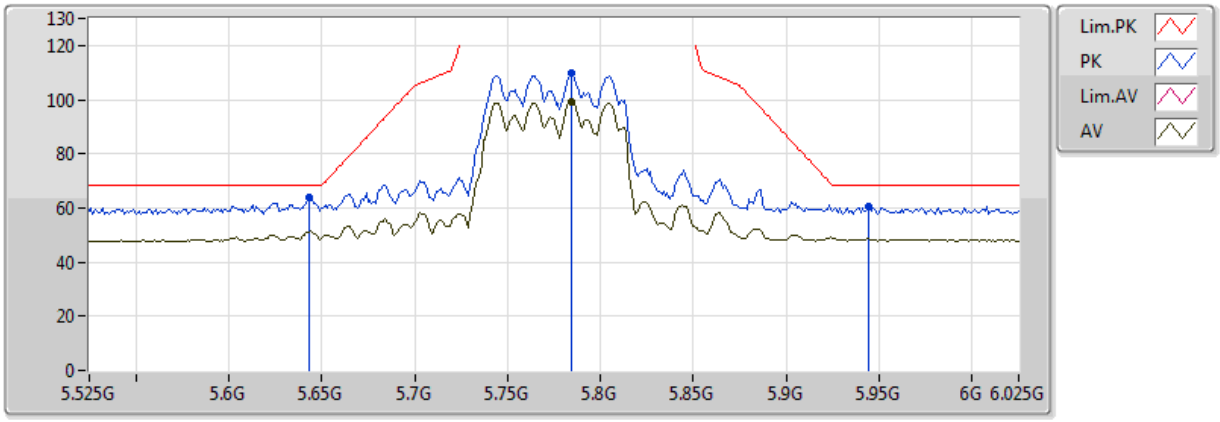


20171020
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.4021G	42.21	54.00	-11.79	16.49	3	Horizontal	104	1.91
PK	11.4046G	55.12	74.00	-18.88	16.50	3	Horizontal	104	1.91

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

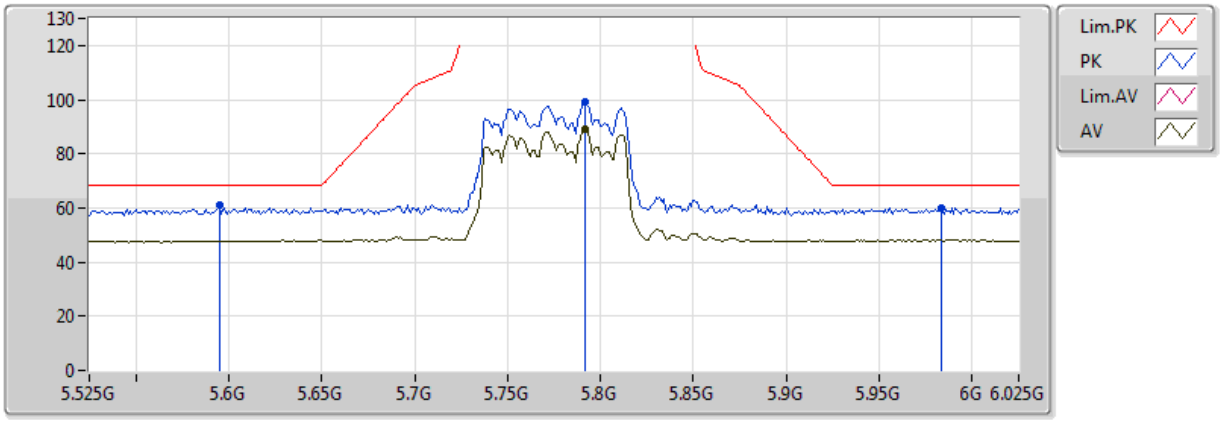


20171020
EUT Z_4TX
Setting 16.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.784G	99.34	Inf	-Inf	10.65	3	Vertical	265	2.13
PK	5.643G	63.64	68.20	-4.56	10.65	3	Vertical	265	2.13
PK	5.784G	109.67	Inf	-Inf	10.65	3	Vertical	265	2.13
PK	5.944G	60.65	68.20	-7.55	10.84	3	Vertical	265	2.13

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

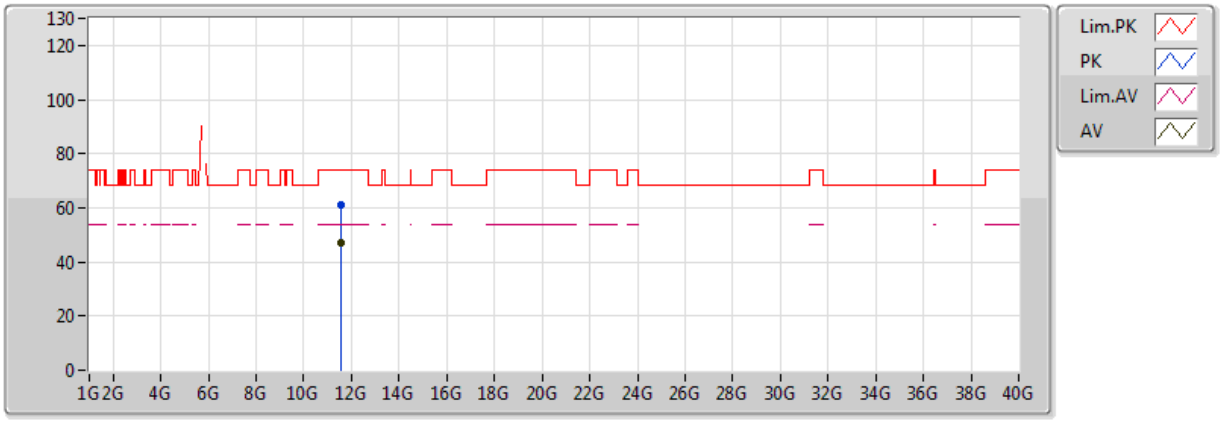


20171020
EUT Z_4TX
Setting 16.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.792G	88.92	Inf	-Inf	10.65	3	Horizontal	111	2.13
PK	5.595G	61.12	68.20	-7.08	10.64	3	Horizontal	111	2.13
PK	5.792G	98.97	Inf	-Inf	10.65	3	Horizontal	111	2.13
PK	5.983G	60.09	68.20	-8.11	10.89	3	Horizontal	111	2.13

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

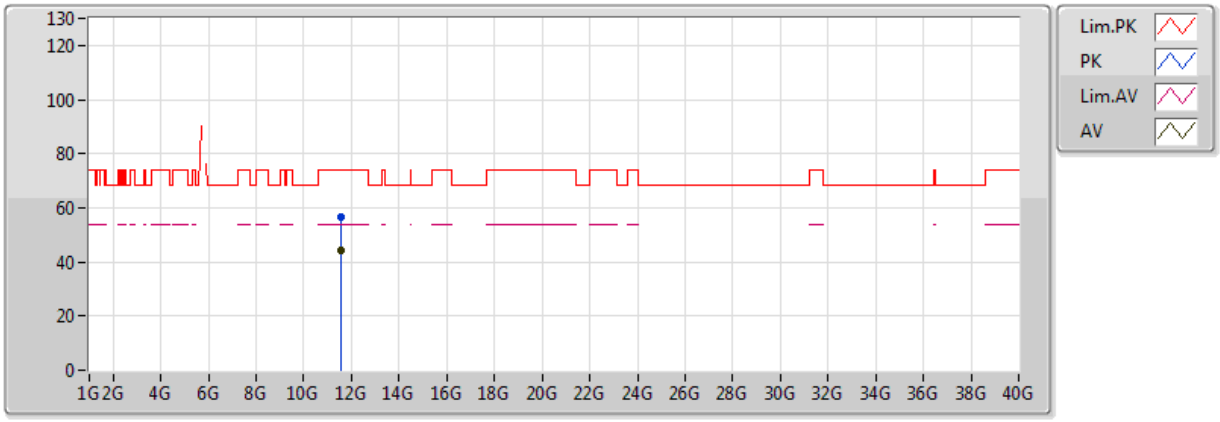


20171020
EUT Z_4TX
Setting 16.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5672G	47.01	54.00	-6.99	16.70	3	Vertical	99	1.95
PK	11.5669G	61.35	74.00	-12.65	16.70	3	Vertical	99	1.95

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX



20171020
EUT Z_4TX
Setting 16.5
02-C-5
FSU

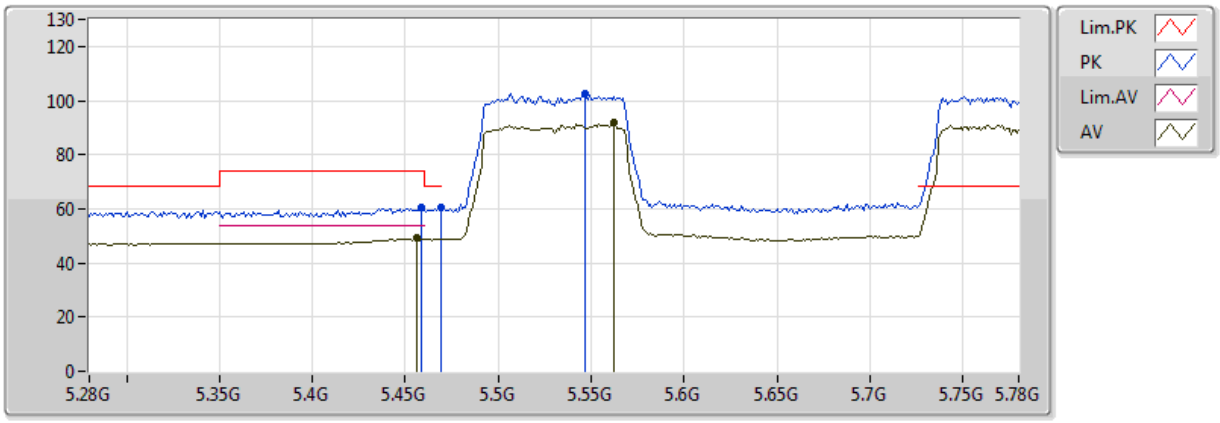
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5614G	44.14	54.00	-9.86	16.69	3	Horizontal	207	2.29
PK	11.5669G	56.54	74.00	-17.46	16.70	3	Horizontal	207	2.29

For 802.11ac VHT 80+80 test mode:
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80+80_Nss2,(MCS0)_2TX	Pass	PK	5.852G	64.11	68.20	-4.09	10.72	3	Vertical	273	2.25	-

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5775MHz_TX



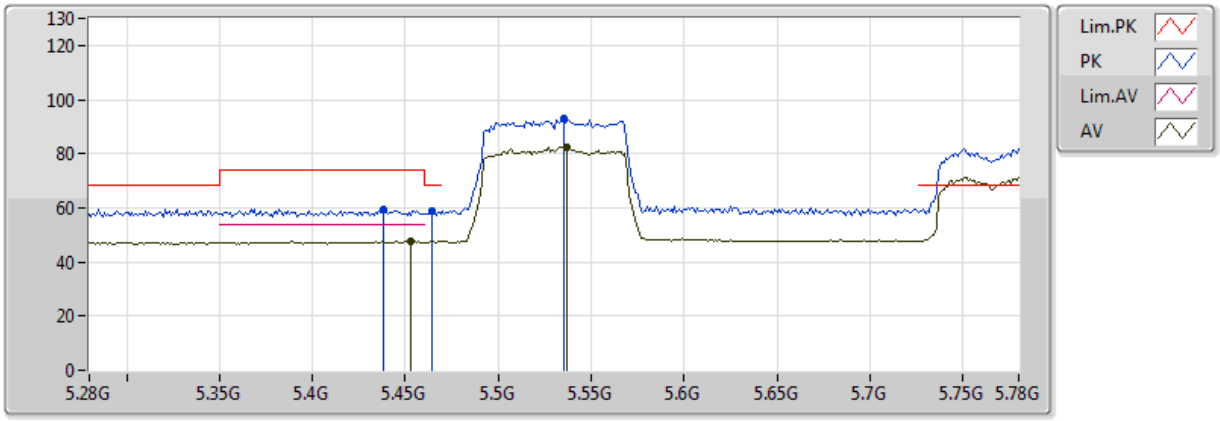
20171020
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.456G	49.05	54.00	-4.95	10.34	3	Vertical	333	2.12
AV	5.562G	91.77	Inf	-Inf	10.59	3	Vertical	333	2.12
PK	5.459G	60.51	74.00	-13.49	10.35	3	Vertical	333	2.12
PK	5.469G	60.38	68.20	-7.82	10.38	3	Vertical	333	2.12
PK	5.547G	102.64	Inf	-Inf	10.57	3	Vertical	333	2.12

Mode

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5775MHz_TX

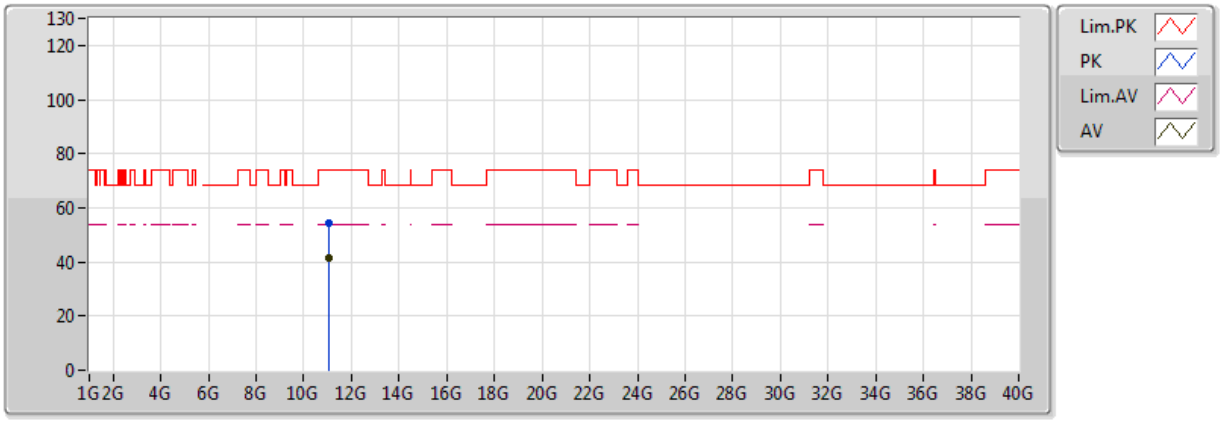


20171020
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.453G	47.52	54.00	-6.48	10.33	3	Horizontal	201	2.37
AV	5.537G	82.53	Inf	-Inf	10.55	3	Horizontal	201	2.37
PK	5.438G	59.31	74.00	-14.69	10.28	3	Horizontal	201	2.37
PK	5.464G	58.90	68.20	-9.30	10.37	3	Horizontal	201	2.37
PK	5.535G	93.15	Inf	-Inf	10.55	3	Horizontal	201	2.37

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5775MHz_TX

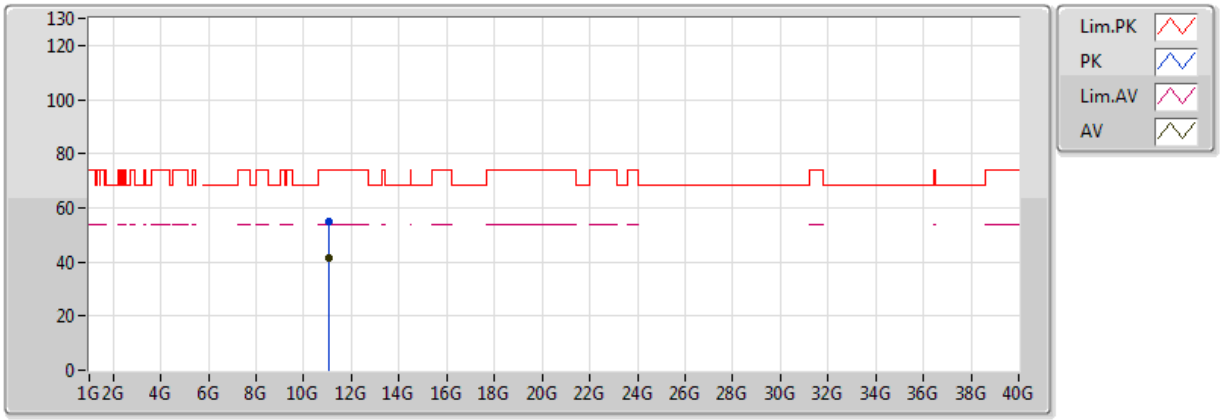


20171020
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0816G	41.45	54.00	-12.55	16.09	3	Vertical	274	1.56
PK	11.0534G	54.18	74.00	-19.82	16.06	3	Vertical	274	1.56

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5775MHz_TX

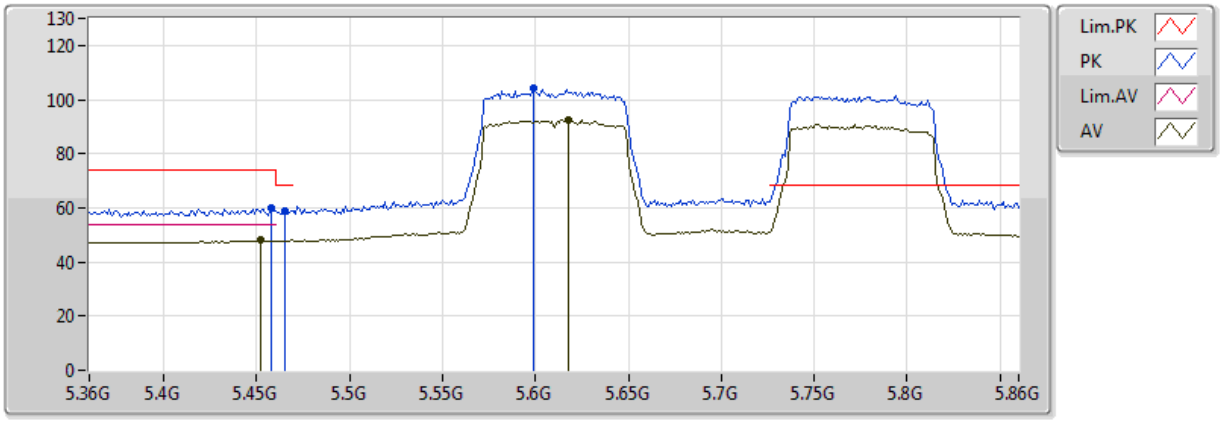


20171020
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0649G	41.40	54.00	-12.60	16.07	3	Horizontal	335	1.53
PK	11.0708G	54.76	74.00	-19.24	16.08	3	Horizontal	335	1.53

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5610MHz,5775MHz_TX

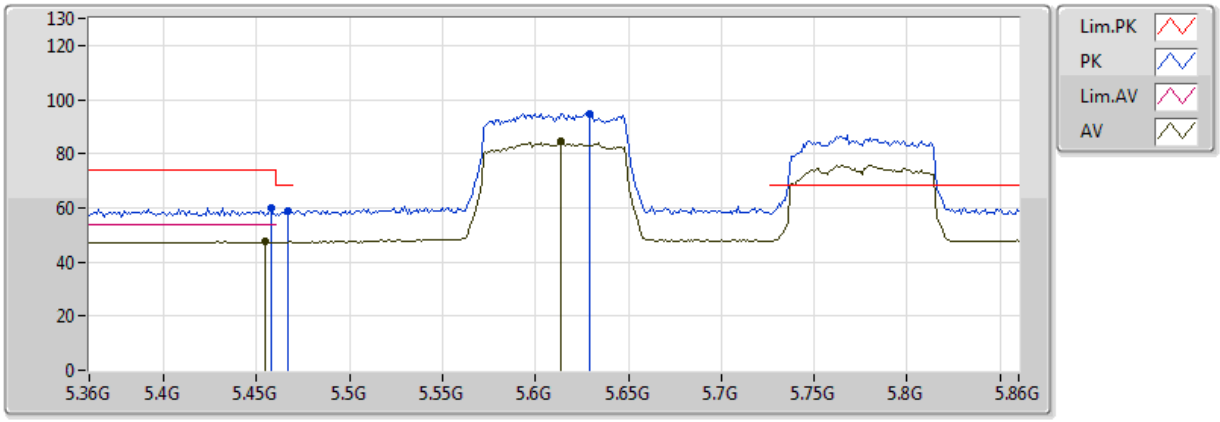


20171020
EUT Z_4TX
Setting 14
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.452G	47.99	54.00	-6.01	10.33	3	Vertical	166	2.47
AV	5.618G	92.57	Inf	-Inf	10.65	3	Vertical	166	2.47
PK	5.458G	59.72	74.00	-14.28	10.35	3	Vertical	166	2.47
PK	5.465G	58.99	68.20	-9.21	10.37	3	Vertical	166	2.47
PK	5.599G	104.18	Inf	-Inf	10.65	3	Vertical	166	2.47

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5610MHz,5775MHz_TX

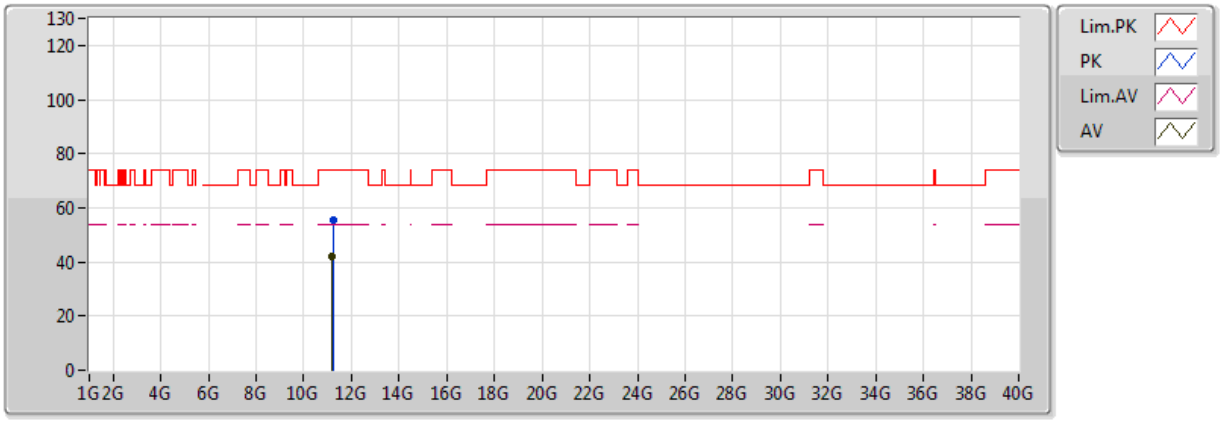


20171020
EUT Z_4TX
Setting 14
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.455G	47.45	54.00	-6.55	10.34	3	Horizontal	205	2.79
AV	5.614G	84.58	Inf	-Inf	10.65	3	Horizontal	205	2.79
PK	5.458G	59.70	74.00	-14.30	10.35	3	Horizontal	205	2.79
PK	5.467G	58.59	68.20	-9.61	10.38	3	Horizontal	205	2.79
PK	5.629G	94.94	Inf	-Inf	10.65	3	Horizontal	205	2.79

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5610MHz,5775MHz_TX

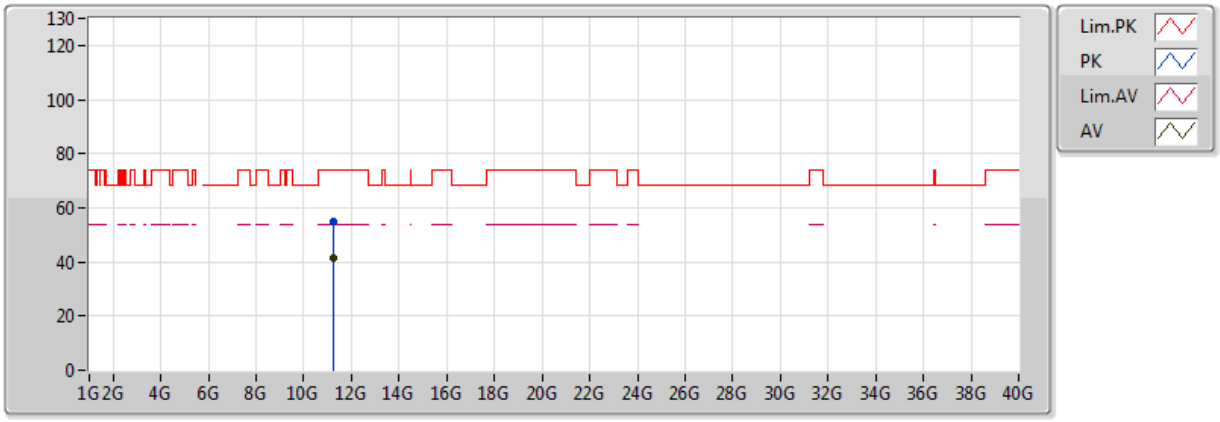


20171020
EUT Z_4TX
Setting 14
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.1956G	41.85	54.00	-12.15	16.23	3	Vertical	103	1.45
PK	11.2408G	55.38	74.00	-18.62	16.29	3	Vertical	103	1.45

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5610MHz,5775MHz_TX

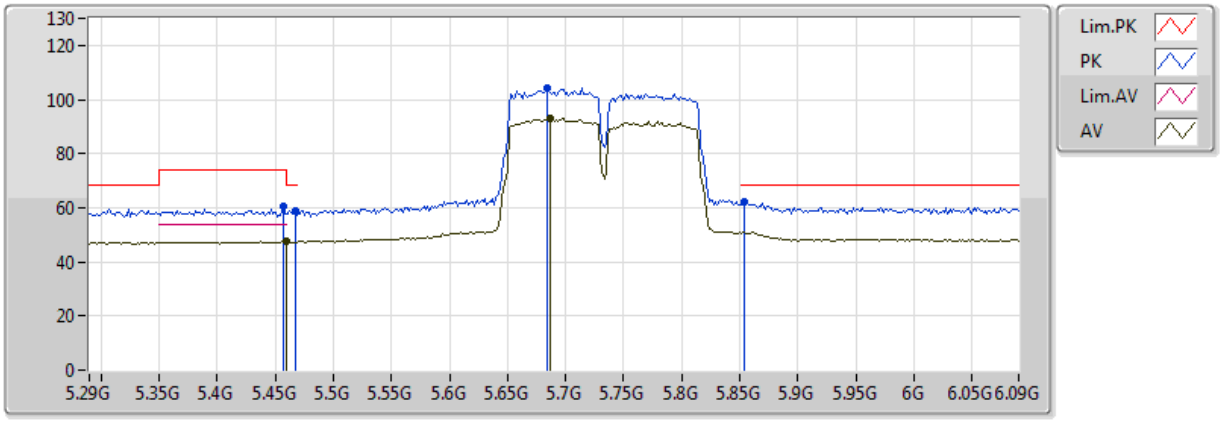


20171020
EUT Z_4TX
Setting 14
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.2311G	41.55	54.00	-12.45	16.28	3	Horizontal	176	1.04
PK	11.2188G	54.95	74.00	-19.05	16.26	3	Horizontal	176	1.04

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5690MHz,5775MHz Straddle 5.47-5.725GHz_TX

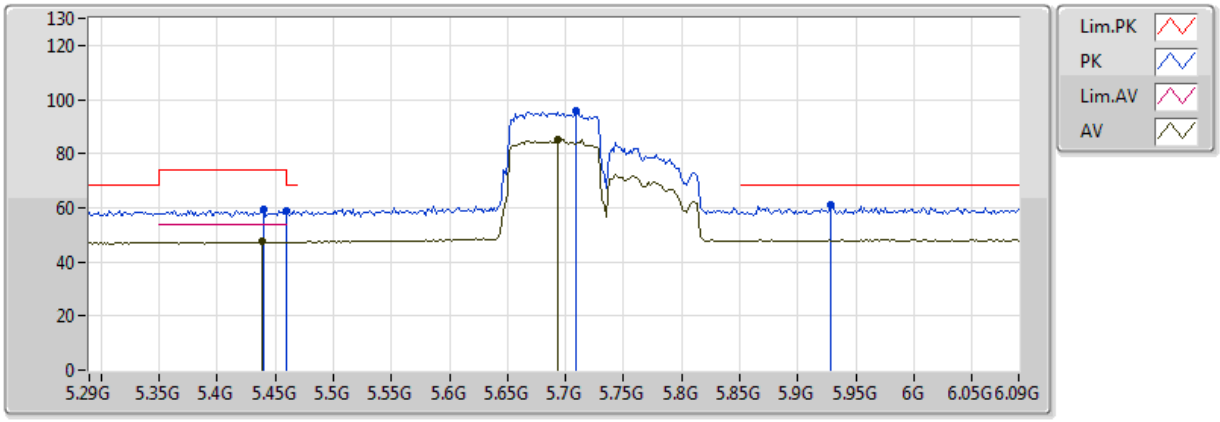


20171020
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.459995G	47.50	54.00	-6.50	10.35	3	Vertical	178	2.21
AV	5.6868G	93.02	Inf	-Inf	10.65	3	Vertical	178	2.21
PK	5.4564G	60.76	74.00	-13.24	10.34	3	Vertical	178	2.21
PK	5.4676G	58.83	68.20	-9.37	10.38	3	Vertical	178	2.21
PK	5.6836G	104.08	Inf	-Inf	10.65	3	Vertical	178	2.21
PK	5.8532G	62.04	68.20	-6.16	10.72	3	Vertical	178	2.21

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5690MHz,5775MHz Straddle 5.47-5.725GHz_TX

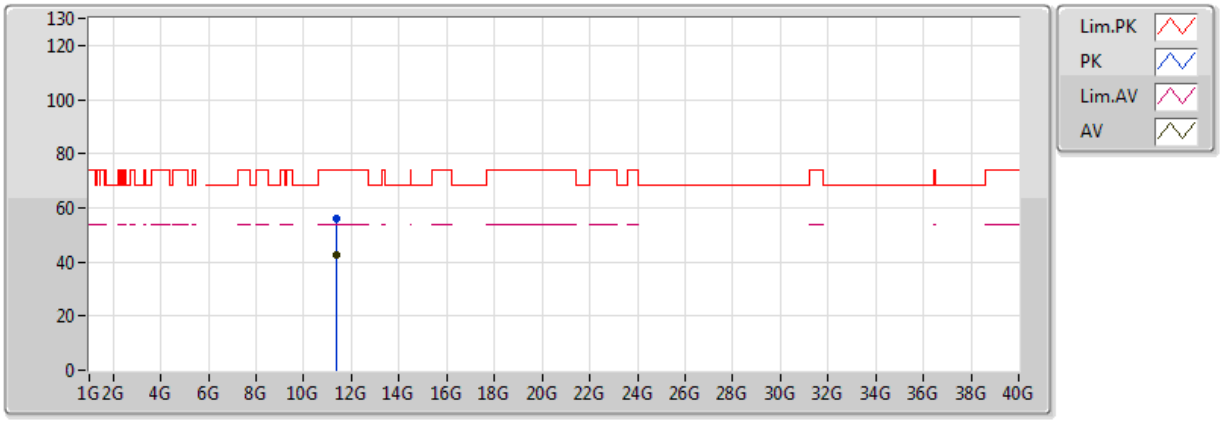


20171020
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4388G	47.45	54.00	-6.55	10.28	3	Horizontal	179	2.73
AV	5.6932G	85.45	Inf	-Inf	10.65	3	Horizontal	179	2.73
PK	5.4404G	59.21	74.00	-14.79	10.29	3	Horizontal	179	2.73
PK	5.460005G	58.97	68.20	-9.23	10.35	3	Horizontal	179	2.73
PK	5.7092G	95.66	Inf	-Inf	10.65	3	Horizontal	179	2.73
PK	5.9284G	60.96	68.20	-7.24	10.82	3	Horizontal	179	2.73

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5690MHz,5775MHz Straddle 5.47-5.725GHz_TX

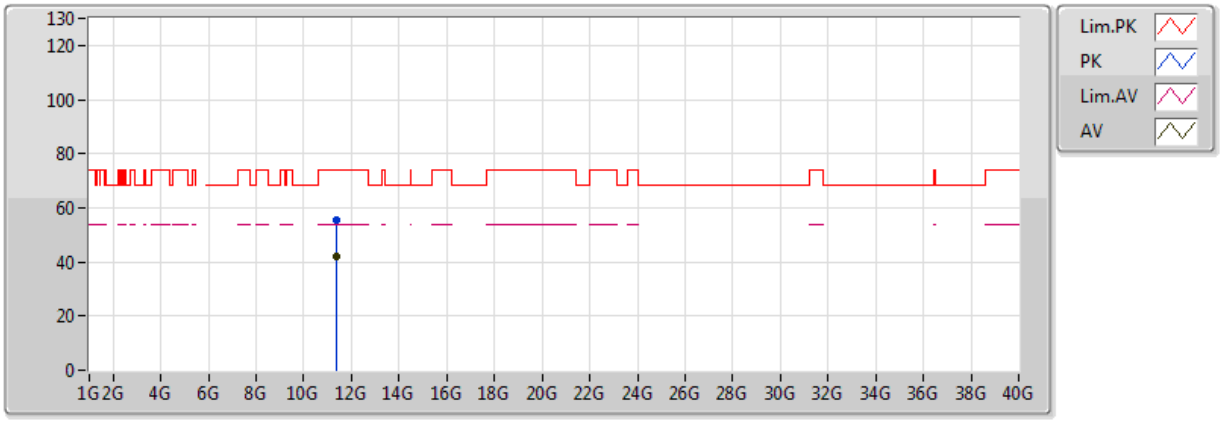


20171020
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.375G	42.44	54.00	-11.56	16.46	3	Vertical	144	1.88
PK	11.3958G	55.77	74.00	-18.23	16.48	3	Vertical	144	1.88

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5690MHz,5775MHz Straddle 5.47-5.725GHz_TX

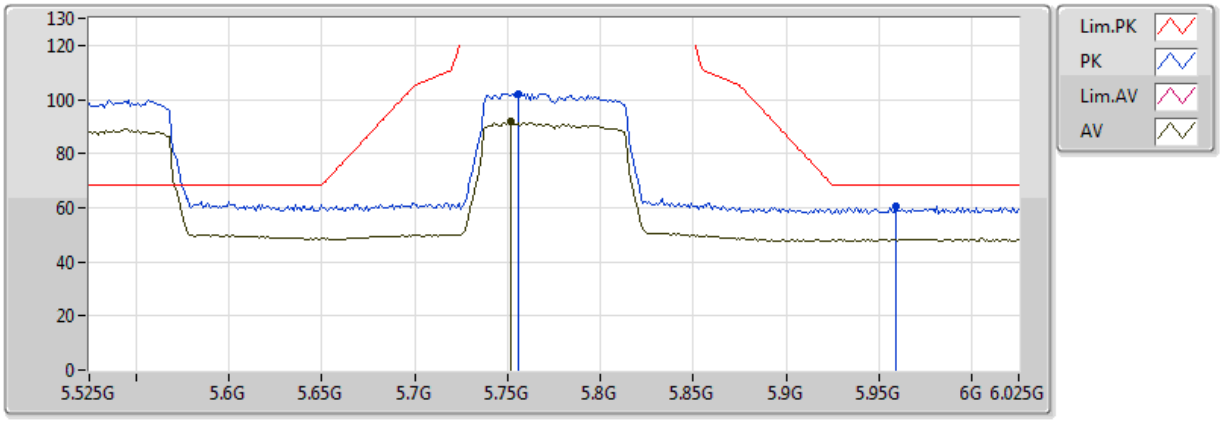


20171020
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.3912G	42.22	54.00	-11.78	16.48	3	Horizontal	175	1.55
PK	11.3923G	55.62	74.00	-18.38	16.48	3	Horizontal	175	1.55

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5775MHz_TX

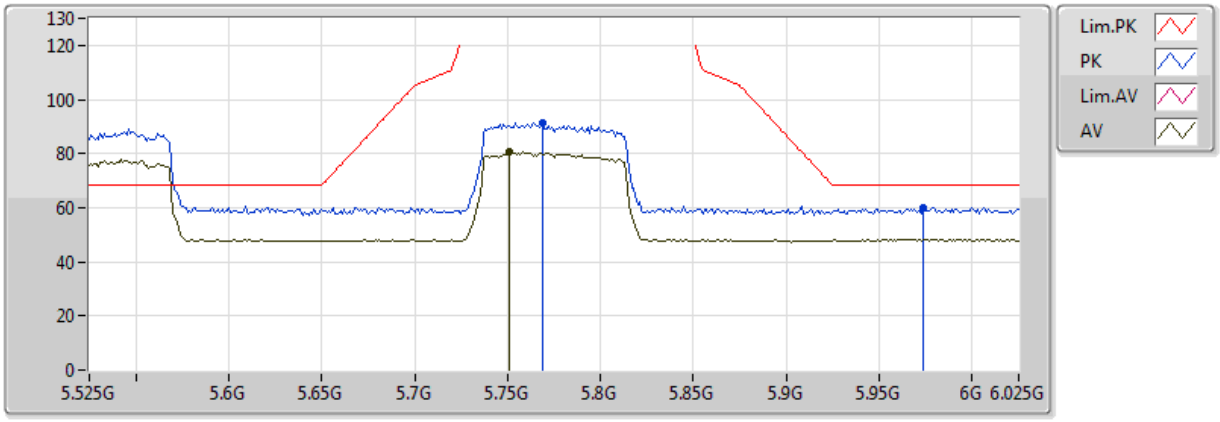


20171020
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.752G	91.98	Inf	-Inf	10.65	3	Vertical	261	2.25
PK	5.756G	102.11	Inf	-Inf	10.65	3	Vertical	261	2.25
PK	5.959G	60.31	68.20	-7.89	10.86	3	Vertical	261	2.25

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5775MHz_TX

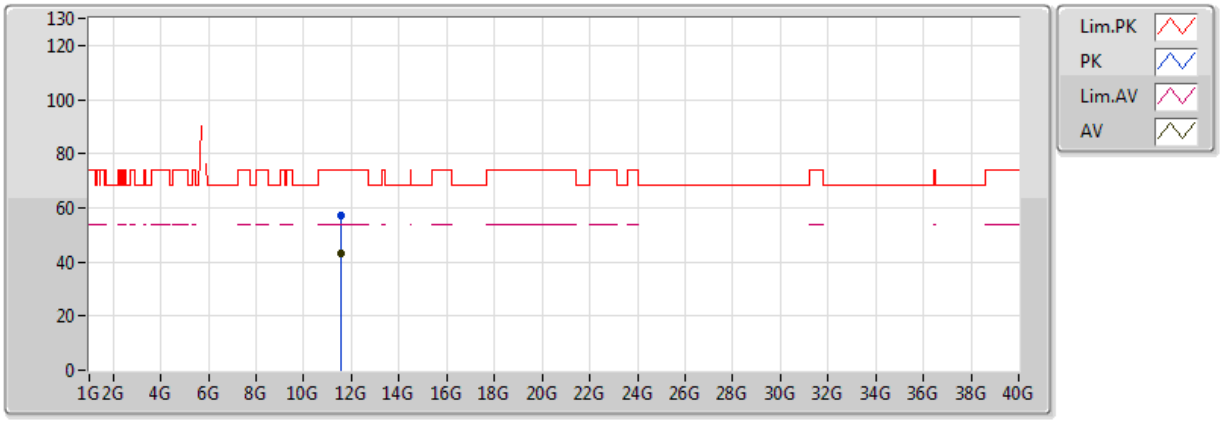


20171020
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.751G	80.52	Inf	-Inf	10.65	3	Horizontal	159	1.70
PK	5.769G	91.21	Inf	-Inf	10.65	3	Horizontal	159	1.70
PK	5.974G	59.86	68.20	-8.34	10.88	3	Horizontal	159	1.70

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5775MHz_TX

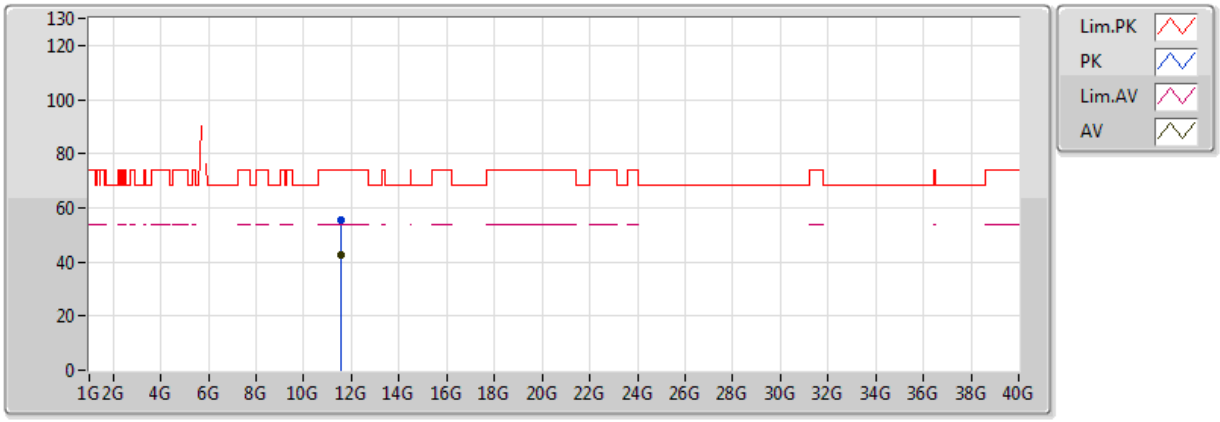


20171020
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5678G	43.10	54.00	-10.90	16.70	3	Vertical	139	1.31
PK	11.5706G	56.99	74.00	-17.01	16.70	3	Vertical	139	1.31

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5775MHz_TX

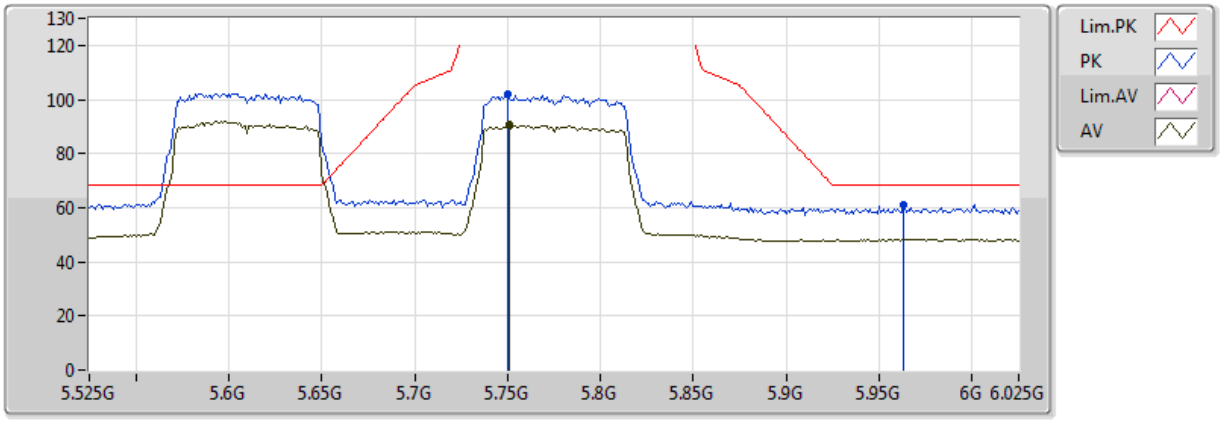


20171020
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5509G	42.36	54.00	-11.64	16.68	3	Horizontal	248	1.26
PK	11.531G	55.37	74.00	-18.63	16.65	3	Horizontal	248	1.26

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5610MHz,#5775MHz_TX

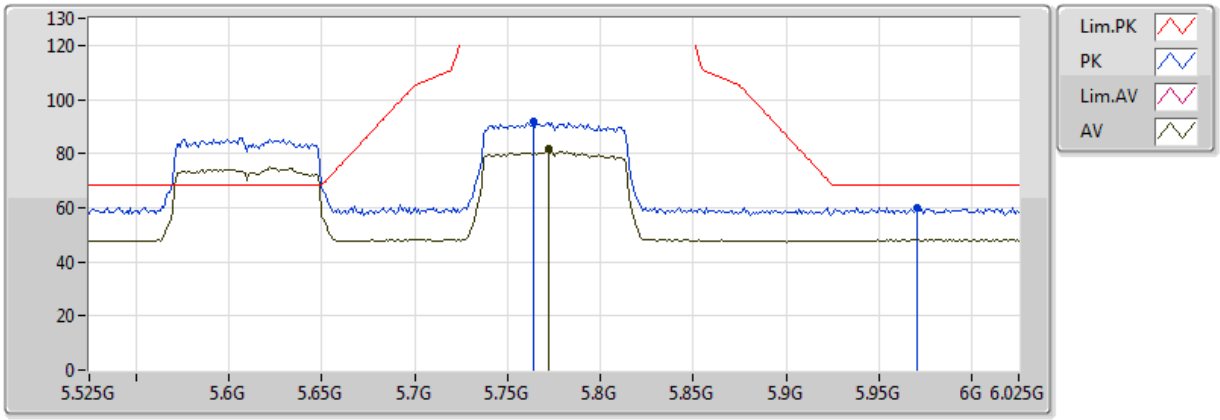


20171020
EUT Z_4TX
Setting 14
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.751G	90.51	Inf	-Inf	10.65	3	Vertical	248	2.25
PK	5.75G	102.02	Inf	-Inf	10.65	3	Vertical	248	2.25
PK	5.963G	61.25	68.20	-6.95	10.86	3	Vertical	248	2.25

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5610MHz,#5775MHz_TX

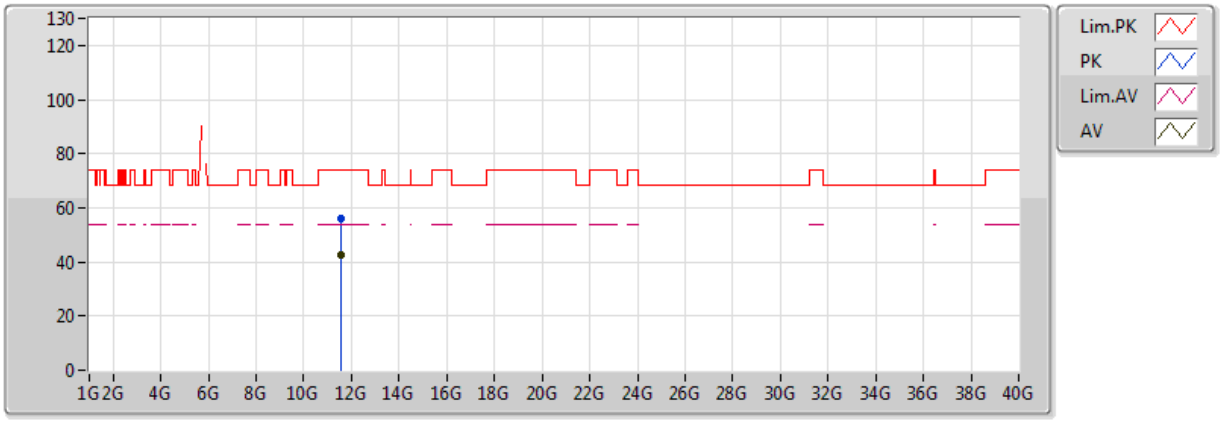


20171020
EUT Z_4TX
Setting 14
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.772G	81.54	Inf	-Inf	10.65	3	Horizontal	169	1.22
PK	5.764G	91.71	Inf	-Inf	10.65	3	Horizontal	169	1.22
PK	5.97G	59.88	68.20	-8.32	10.87	3	Horizontal	169	1.22

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5610MHz,#5775MHz_TX

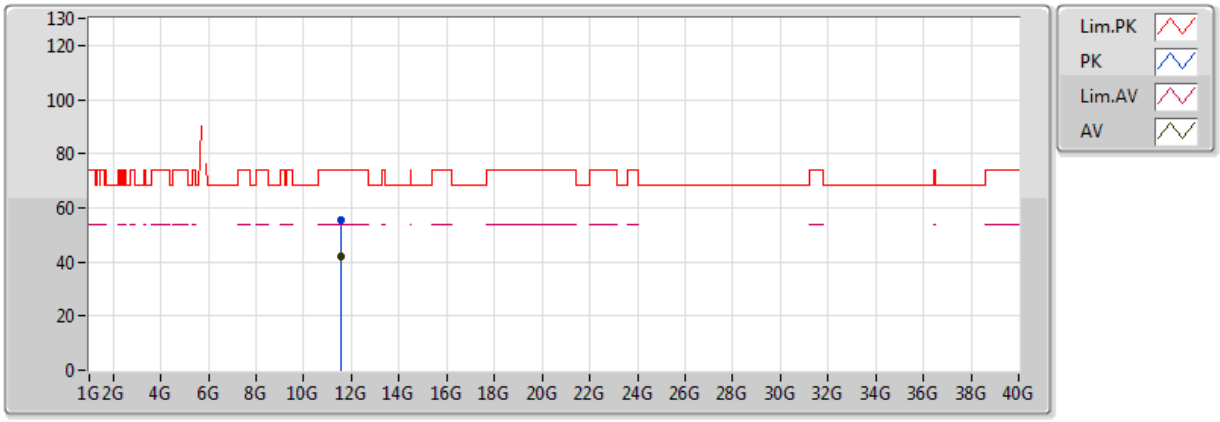


20171020
EUT Z_4TX
Setting 14
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5704G	42.67	54.00	-11.33	16.70	3	Vertical	250	1.81
PK	11.5675G	56.03	74.00	-17.97	16.70	3	Vertical	250	1.81

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5610MHz,#5775MHz_TX

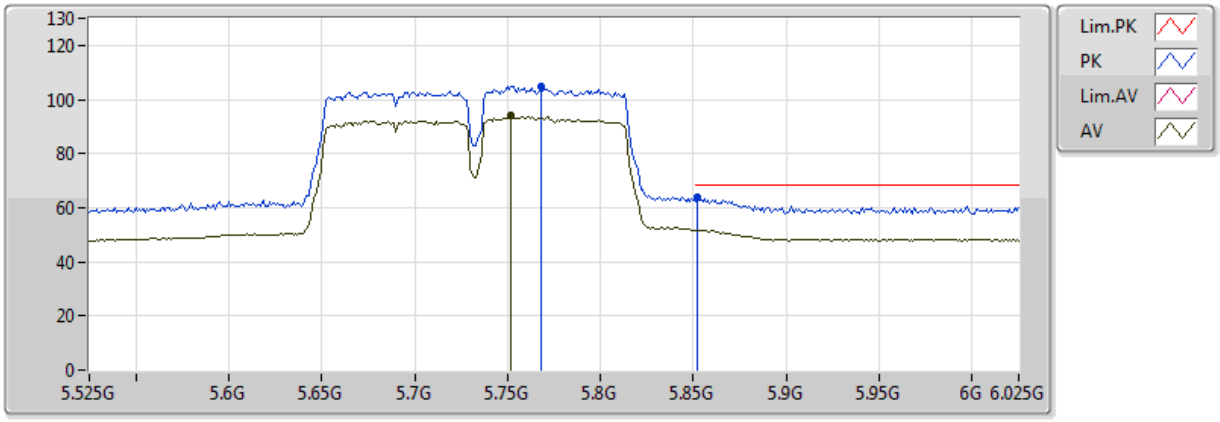


20171020
EUT Z_4TX
Setting 14
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5559G	42.23	54.00	-11.77	16.68	3	Horizontal	205	2.12
PK	11.5463G	55.73	74.00	-18.27	16.67	3	Horizontal	205	2.12

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5690MHz,#5775MHz Straddle 5.725-5.85GHz_TX

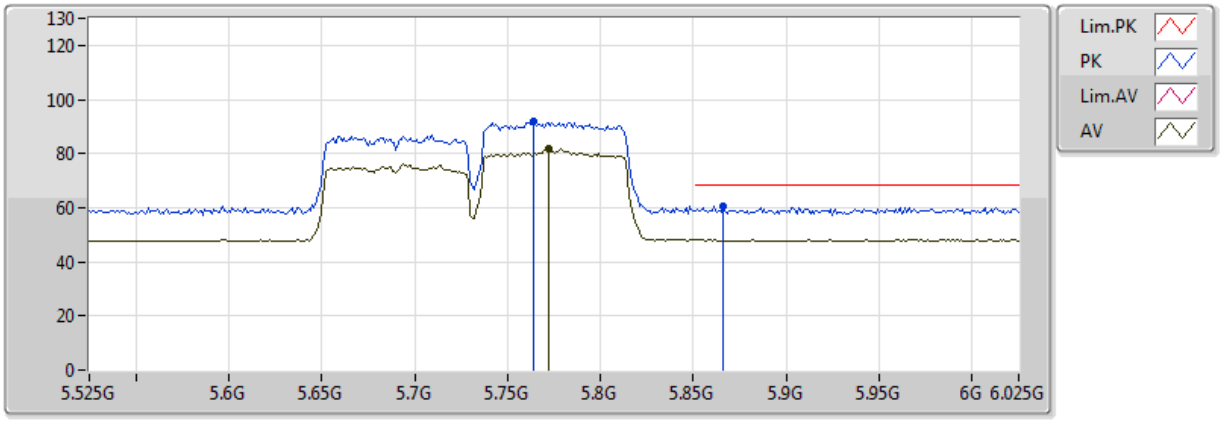


20171020
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.752G	94.26	Inf	-Inf	10.65	3	Vertical	273	2.25
PK	5.768G	104.89	Inf	-Inf	10.65	3	Vertical	273	2.25
PK	5.852G	64.11	68.20	-4.09	10.72	3	Vertical	273	2.25

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5690MHz,#5775MHz Straddle 5.725-5.85GHz_TX

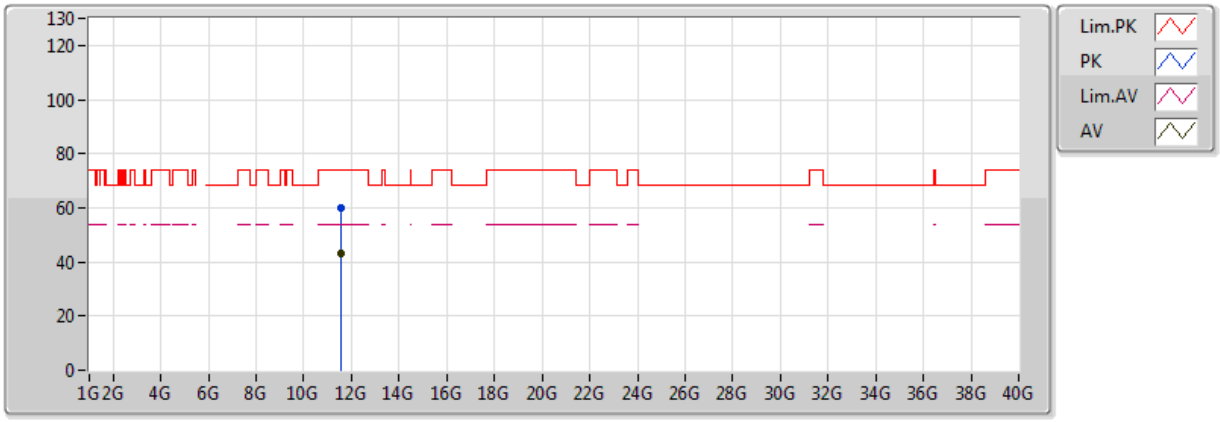


20171020
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.772G	81.87	Inf	-Inf	10.65	3	Horizontal	175	1.23
PK	5.764G	91.93	Inf	-Inf	10.65	3	Horizontal	175	1.23
PK	5.866G	60.79	68.20	-7.41	10.74	3	Horizontal	175	1.23

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5690MHz,#5775MHz Straddle 5.725-5.85GHz_TX

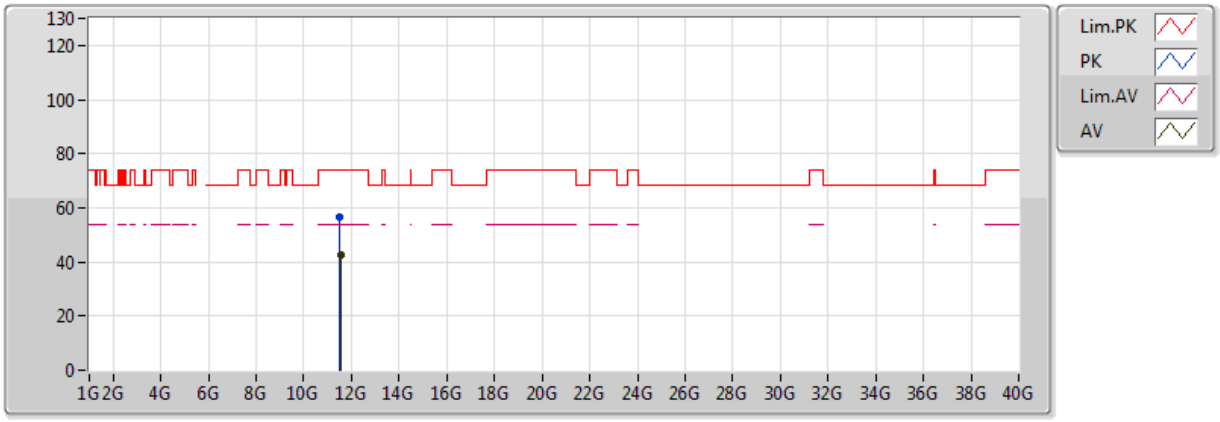


20171020
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5747G	43.32	54.00	-10.68	16.71	3	Vertical	206	2.31
PK	11.5704G	60.21	74.00	-13.79	16.70	3	Vertical	206	2.31

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5690MHz,#5775MHz Straddle 5.725-5.85GHz_TX

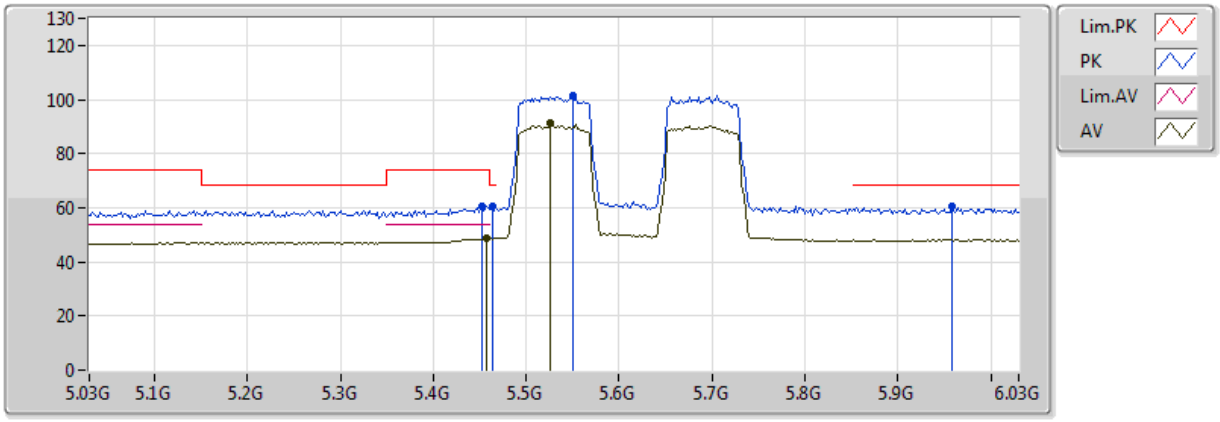


20171020
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.5628G	42.35	54.00	-11.65	16.69	3	Horizontal	3	2.42
PK	11.5293G	56.45	74.00	-17.55	16.65	3	Horizontal	3	2.42

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5690MHz Straddle 5.47-5.725GHz_TX

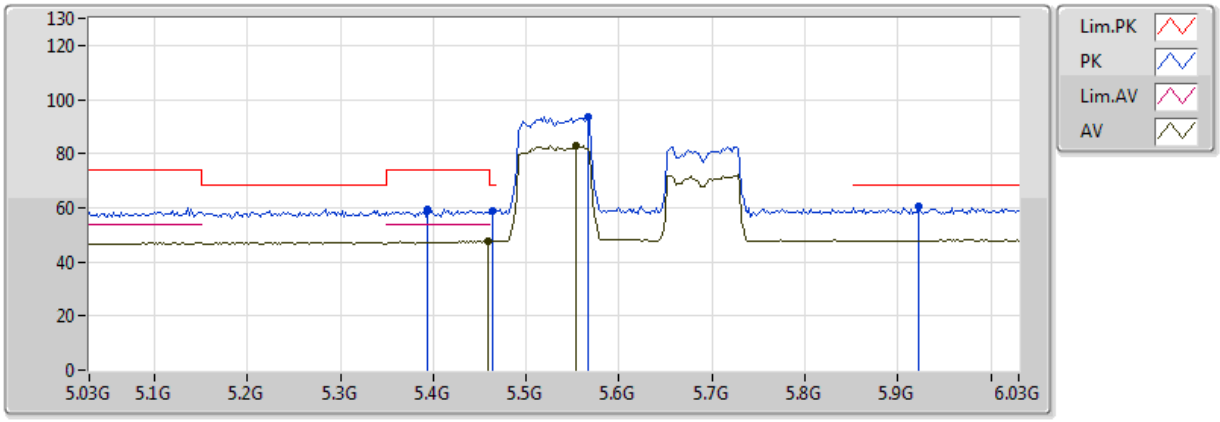


20171020
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.458G	48.51	54.00	-5.49	10.35	3	Vertical	70	2.77
AV	5.526G	91.07	Inf	-Inf	10.53	3	Vertical	70	2.77
PK	5.452G	60.28	74.00	-13.72	10.33	3	Vertical	70	2.77
PK	5.464G	60.36	68.20	-7.84	10.37	3	Vertical	70	2.77
PK	5.55G	101.55	Inf	-Inf	10.57	3	Vertical	70	2.77
PK	5.958G	60.55	68.20	-7.65	10.86	3	Vertical	70	2.77

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5690MHz Straddle 5.47-5.725GHz_TX

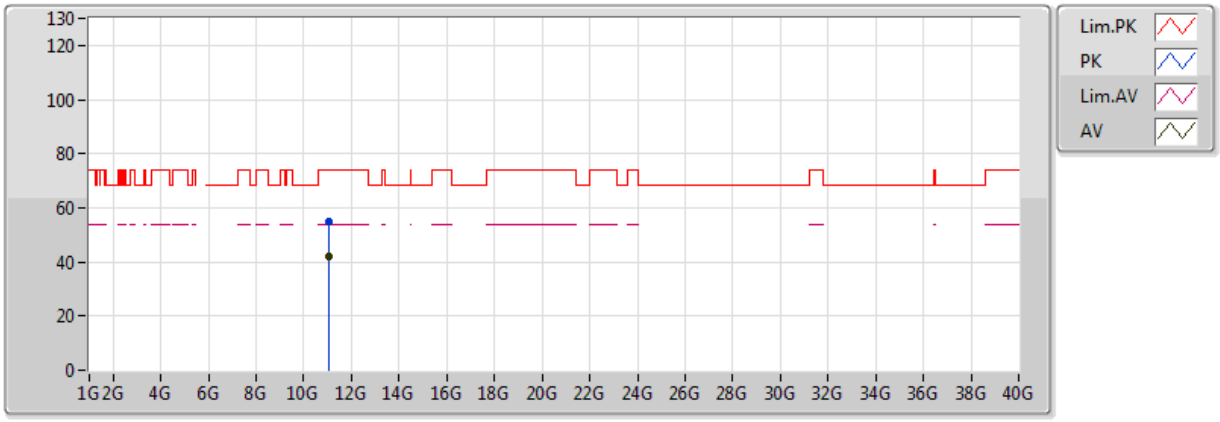


20171020
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4597G	47.52	54.00	-6.48	10.35	3	Horizontal	209	2.79
AV	5.554G	83.20	Inf	-Inf	10.58	3	Horizontal	209	2.79
PK	5.394G	59.53	74.00	-14.47	10.14	3	Horizontal	209	2.79
PK	5.464G	58.90	68.20	-9.30	10.37	3	Horizontal	209	2.79
PK	5.566G	93.41	Inf	-Inf	10.60	3	Horizontal	209	2.79
PK	5.922G	60.50	68.20	-7.70	10.81	3	Horizontal	209	2.79

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5690MHz Straddle 5.47-5.725GHz_TX

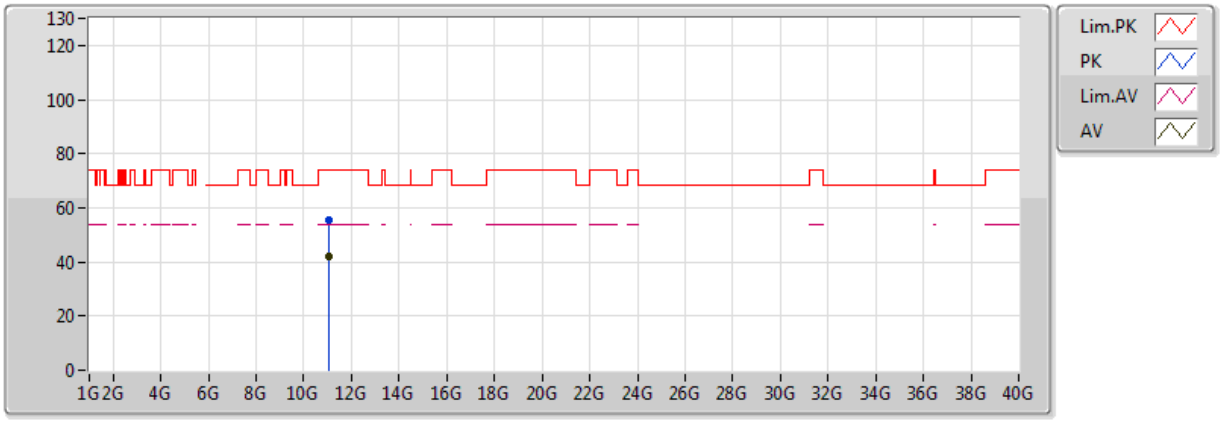


20171020
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0787G	42.13	54.00	-11.87	16.09	3	Vertical	320	1.37
PK	11.0563G	54.74	74.00	-19.26	16.06	3	Vertical	320	1.37

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5690MHz Straddle 5.47-5.725GHz_TX

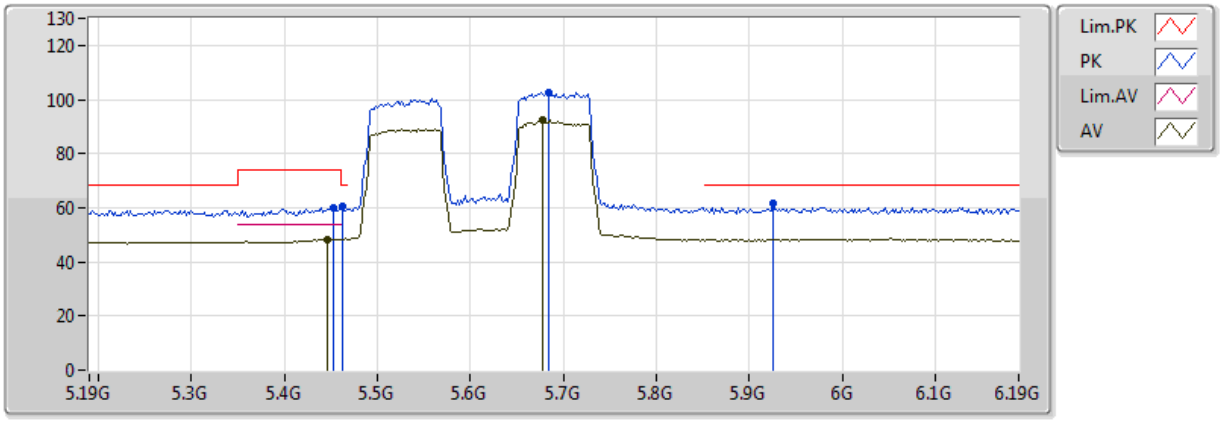


20171020
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.041G	42.07	54.00	-11.93	16.04	3	Horizontal	310	1.12
PK	11.0351G	55.66	74.00	-18.34	16.03	3	Horizontal	310	1.12

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5690MHz Straddle 5.47-5.725GHz_TX

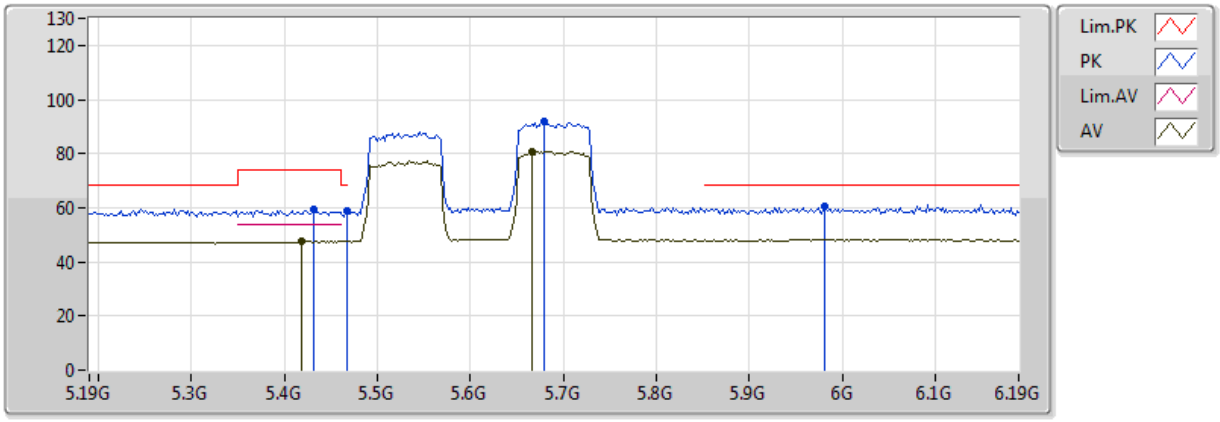


20171020
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.446G	48.40	54.00	-5.60	10.31	3	Vertical	275	2.20
AV	5.678G	92.22	Inf	-Inf	10.65	3	Vertical	275	2.20
PK	5.452G	60.19	74.00	-13.81	10.33	3	Vertical	275	2.20
PK	5.462G	60.43	68.20	-7.77	10.36	3	Vertical	275	2.20
PK	5.684G	102.81	Inf	-Inf	10.65	3	Vertical	275	2.20
PK	5.926G	61.47	68.20	-6.73	10.81	3	Vertical	275	2.20

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5690MHz Straddle 5.47-5.725GHz_TX

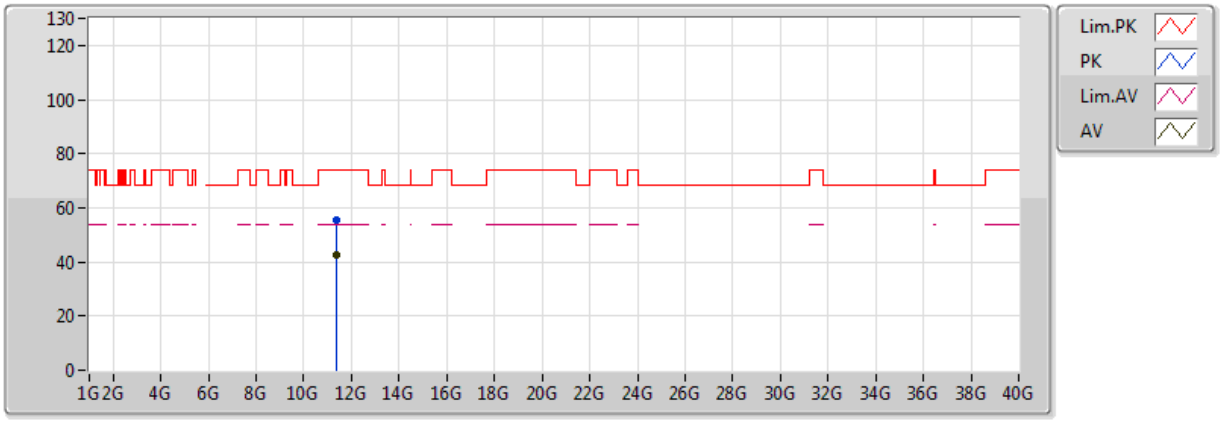


20171020
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.418G	47.64	54.00	-6.36	10.21	3	Horizontal	171	1.75
AV	5.666G	80.84	Inf	-Inf	10.65	3	Horizontal	171	1.75
PK	5.432G	59.32	74.00	-14.68	10.26	3	Horizontal	171	1.75
PK	5.468G	58.88	68.20	-9.32	10.38	3	Horizontal	171	1.75
PK	5.68G	91.75	Inf	-Inf	10.65	3	Horizontal	171	1.75
PK	5.982G	60.52	68.20	-7.68	10.89	3	Horizontal	171	1.75

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5690MHz Straddle 5.47-5.725GHz_TX

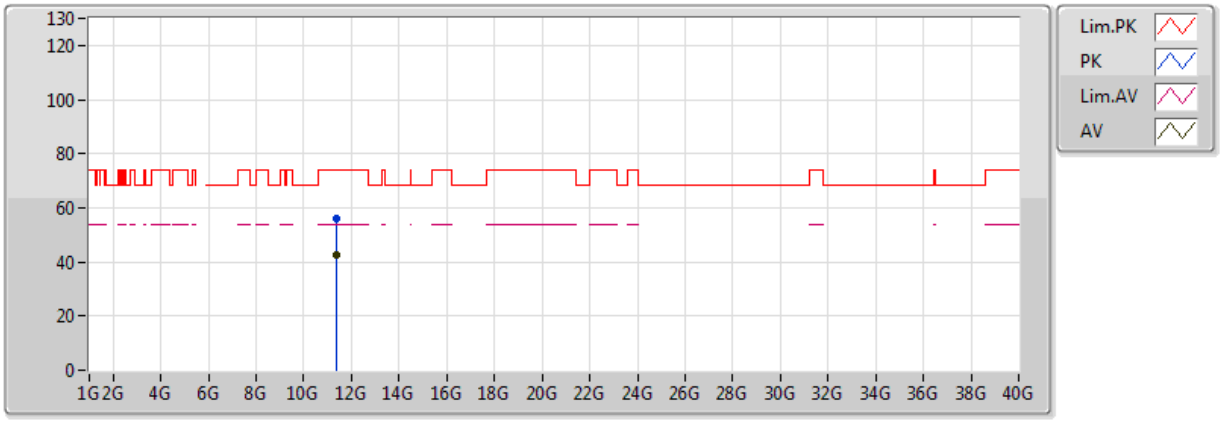


20171020
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.3882G	42.56	54.00	-11.44	16.48	3	Vertical	68	1.44
PK	11.3592G	55.61	74.00	-18.39	16.44	3	Vertical	68	1.44

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5690MHz Straddle 5.47-5.725GHz_TX

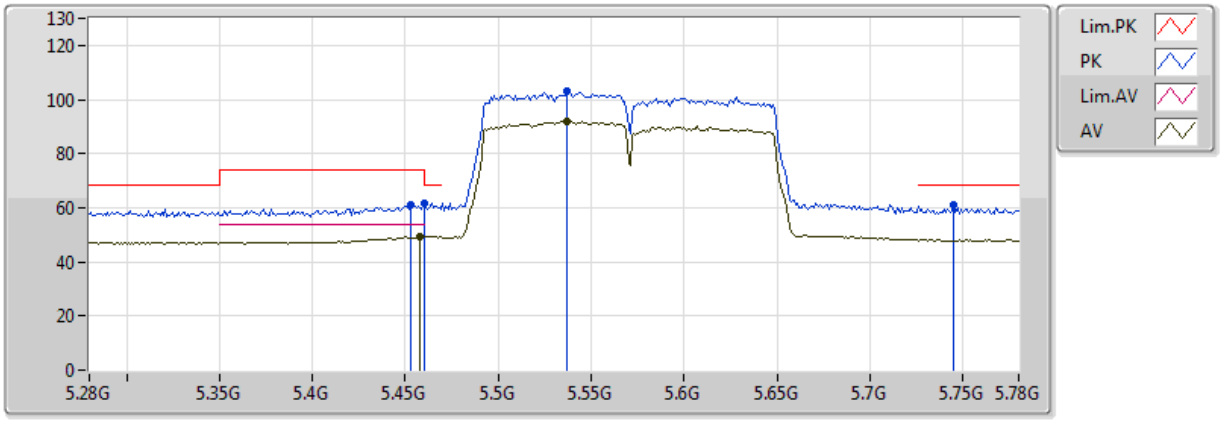


20171020
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.3877G	42.54	54.00	-11.46	16.47	3	Horizontal	350	1.76
PK	11.3726G	56.25	74.00	-17.75	16.46	3	Horizontal	350	1.76

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5610MHz_TX

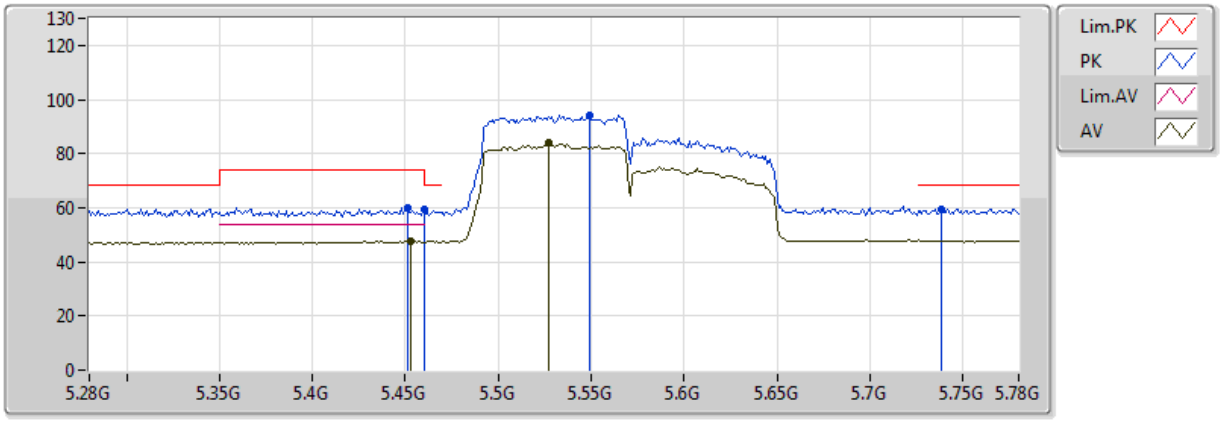


20171020
EUT Z_4TX
Setting 13
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.458G	49.39	54.00	-4.61	10.35	3	Vertical	175	2.32
AV	5.537G	92.02	Inf	-Inf	10.55	3	Vertical	175	2.32
PK	5.453G	60.88	74.00	-13.12	10.33	3	Vertical	175	2.32
PK	5.460005G	61.68	68.20	-6.52	10.35	3	Vertical	175	2.32
PK	5.537G	102.83	Inf	-Inf	10.55	3	Vertical	175	2.32
PK	5.745G	60.90	68.20	-7.30	10.65	3	Vertical	175	2.32

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5610MHz_TX

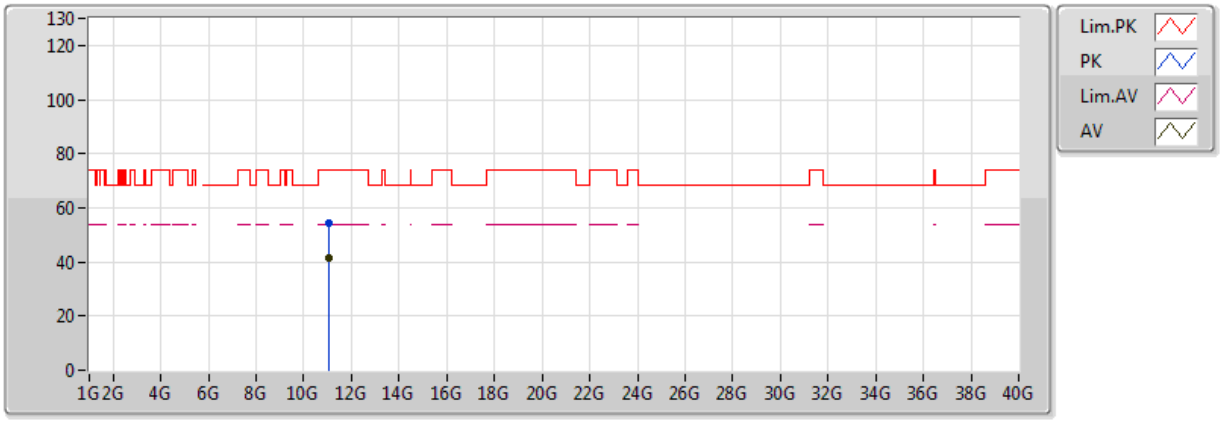


20171020
EUT Z_4TX
Setting 13
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.453G	47.64	54.00	-6.36	10.33	3	Horizontal	192	2.71
AV	5.527G	83.97	Inf	-Inf	10.53	3	Horizontal	192	2.71
PK	5.451G	59.84	74.00	-14.16	10.32	3	Horizontal	192	2.71
PK	5.460005G	59.43	68.20	-8.77	10.35	3	Horizontal	192	2.71
PK	5.549G	94.40	Inf	-Inf	10.57	3	Horizontal	192	2.71
PK	5.738G	59.36	68.20	-8.84	10.65	3	Horizontal	192	2.71

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5610MHz_TX

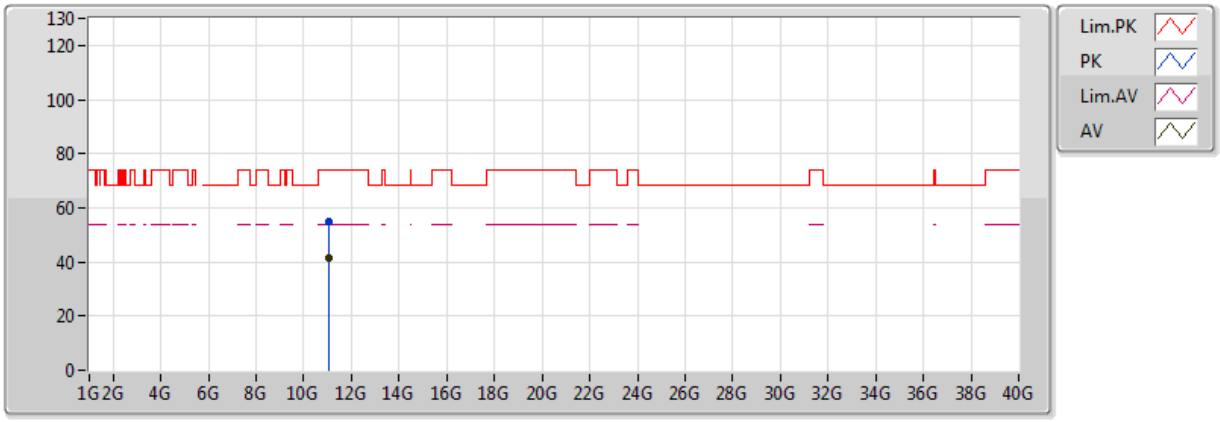


20171020
EUT Z_4TX
Setting 13
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0791G	41.63	54.00	-12.37	16.09	3	Vertical	31	1.65
PK	11.0469G	54.60	74.00	-19.40	16.05	3	Vertical	31	1.65

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5530MHz,5610MHz_TX

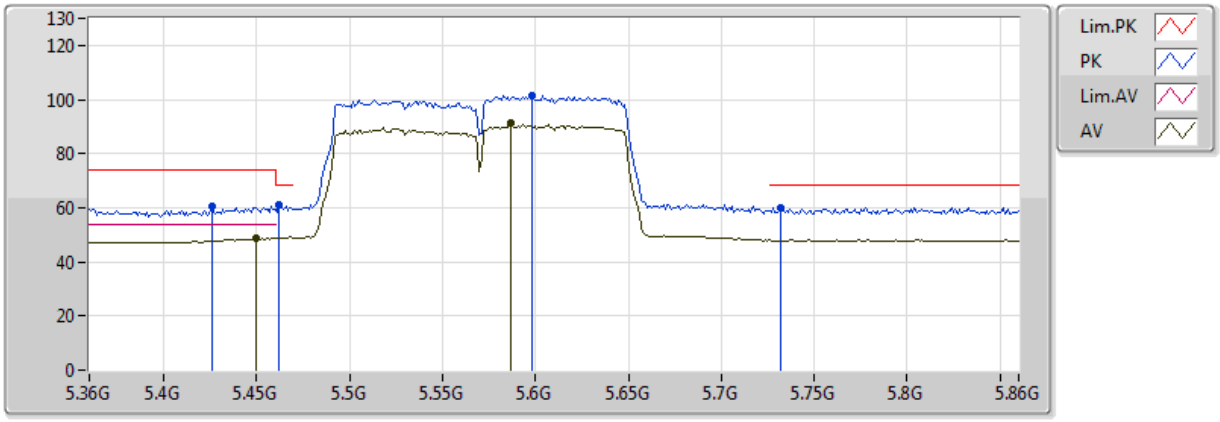


20171020
EUT Z_4TX
Setting 13
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.0437G	41.38	54.00	-12.62	16.04	3	Horizontal	285	1.51
PK	11.0815G	54.79	74.00	-19.21	16.09	3	Horizontal	285	1.51

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5610MHz_TX

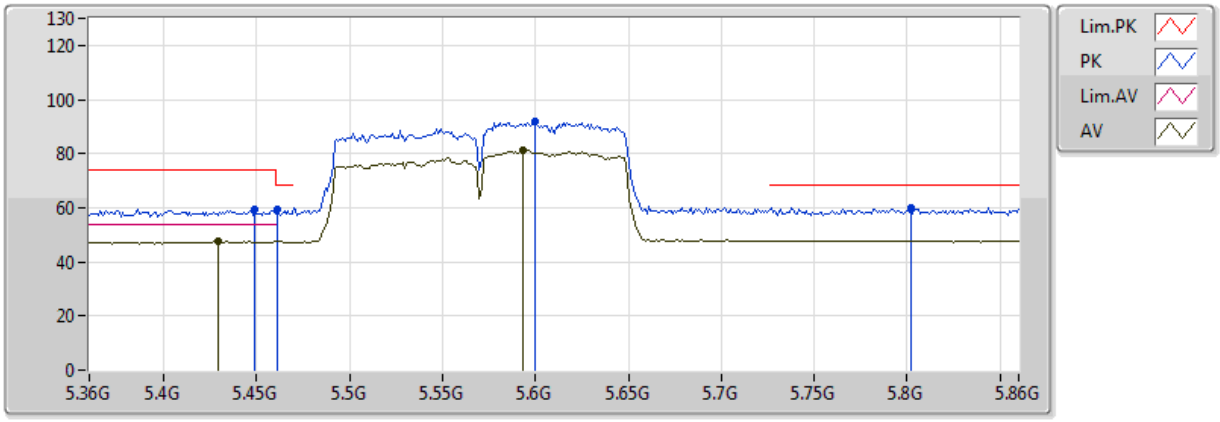


20171020
EUT Z_4TX
Setting 13
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.45G	48.64	54.00	-5.36	10.32	3	Vertical	271	2.14
AV	5.587G	91.31	Inf	-Inf	10.63	3	Vertical	271	2.14
PK	5.426G	60.48	74.00	-13.52	10.24	3	Vertical	271	2.14
PK	5.462G	60.84	68.20	-7.36	10.36	3	Vertical	271	2.14
PK	5.598G	101.54	Inf	-Inf	10.65	3	Vertical	271	2.14
PK	5.732G	60.16	68.20	-8.04	10.65	3	Vertical	271	2.14

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5610MHz_TX

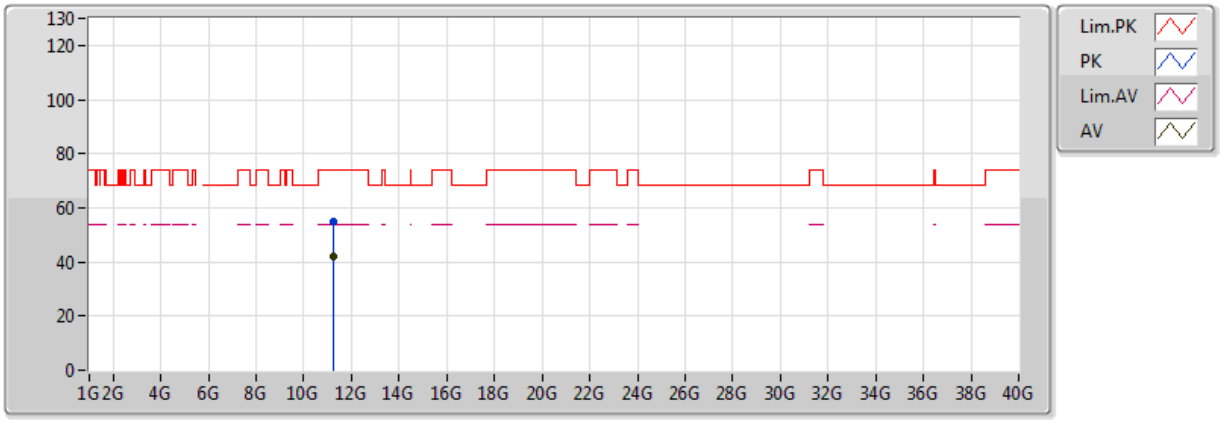


20171020
EUT Z_4TX
Setting 13
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.429G	47.39	54.00	-6.61	10.25	3	Horizontal	150	1.83
AV	5.593G	81.05	Inf	-Inf	10.64	3	Horizontal	150	1.83
PK	5.449G	59.48	74.00	-14.52	10.32	3	Horizontal	150	1.83
PK	5.461G	59.46	68.20	-8.74	10.36	3	Horizontal	150	1.83
PK	5.6G	91.99	Inf	-Inf	10.65	3	Horizontal	150	1.83
PK	5.802G	60.08	68.20	-8.12	10.65	3	Horizontal	150	1.83

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5610MHz_TX

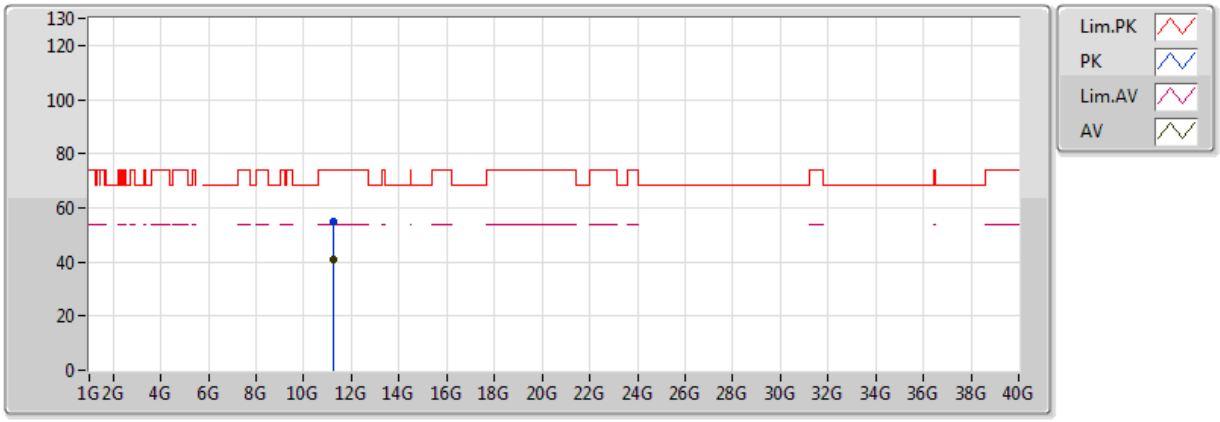


20171020
EUT Z_4TX
Setting 13
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.2285G	41.92	54.00	-12.08	16.28	3	Vertical	200	1.12
PK	11.2325G	54.80	74.00	-19.20	16.28	3	Vertical	200	1.12

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5530MHz,#5610MHz_TX

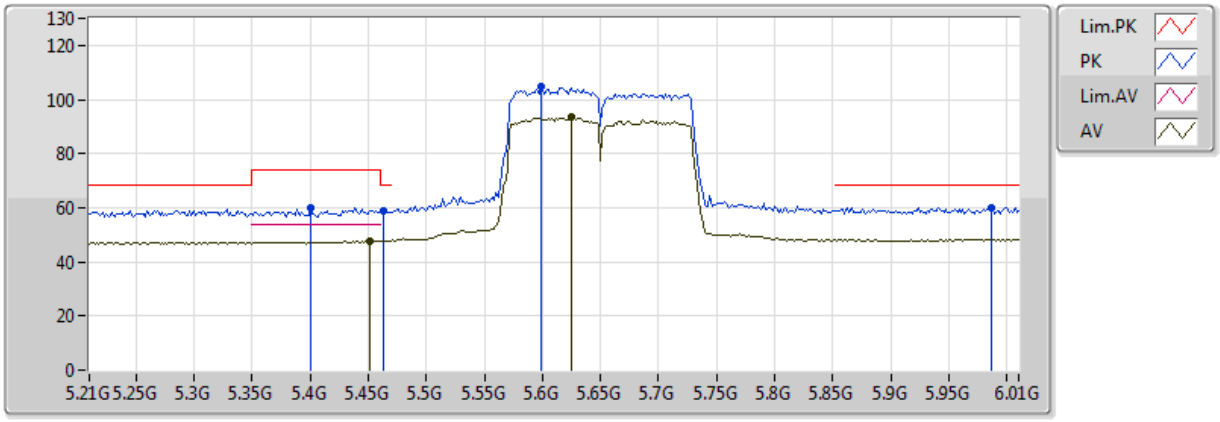


20171020
EUT Z_4TX
Setting 13
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.2448G	40.76	54.00	-13.24	16.30	3	Horizontal	151	1.55
PK	11.2313G	55.11	74.00	-18.89	16.28	3	Horizontal	151	1.55

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5610MHz,5690MHz Straddle 5.47-5.725GHz_TX

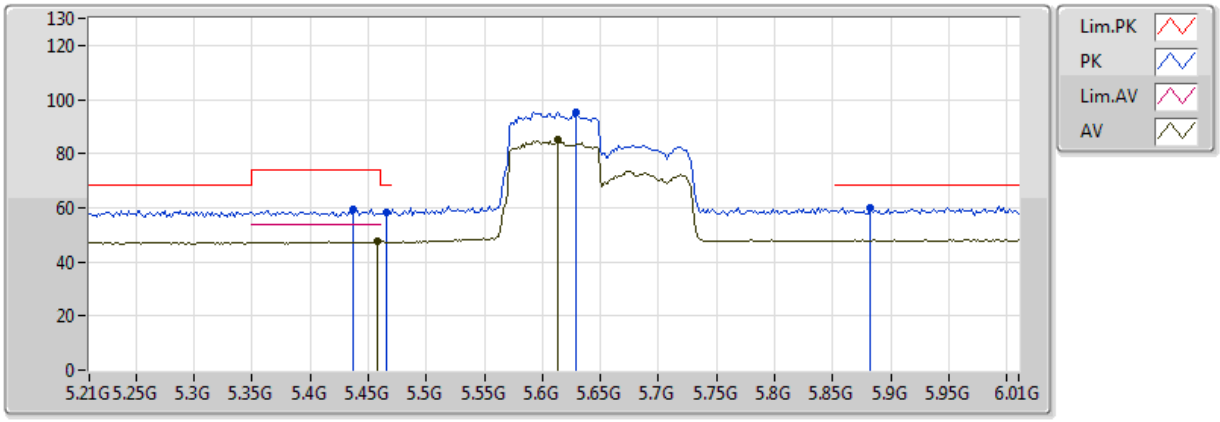


20171020
EUT Z_4TX
Setting 15
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4516G	47.62	54.00	-6.38	10.33	3	Vertical	191	2.71
AV	5.6244G	93.56	Inf	-Inf	10.65	3	Vertical	191	2.71
PK	5.4004G	59.85	74.00	-14.15	10.15	3	Vertical	191	2.71
PK	5.4628G	58.94	68.20	-9.26	10.36	3	Vertical	191	2.71
PK	5.5988G	104.92	Inf	-Inf	10.65	3	Vertical	191	2.71
PK	5.986G	60.09	68.20	-8.11	10.89	3	Vertical	191	2.71

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5610MHz,5690MHz Straddle 5.47-5.725GHz_TX

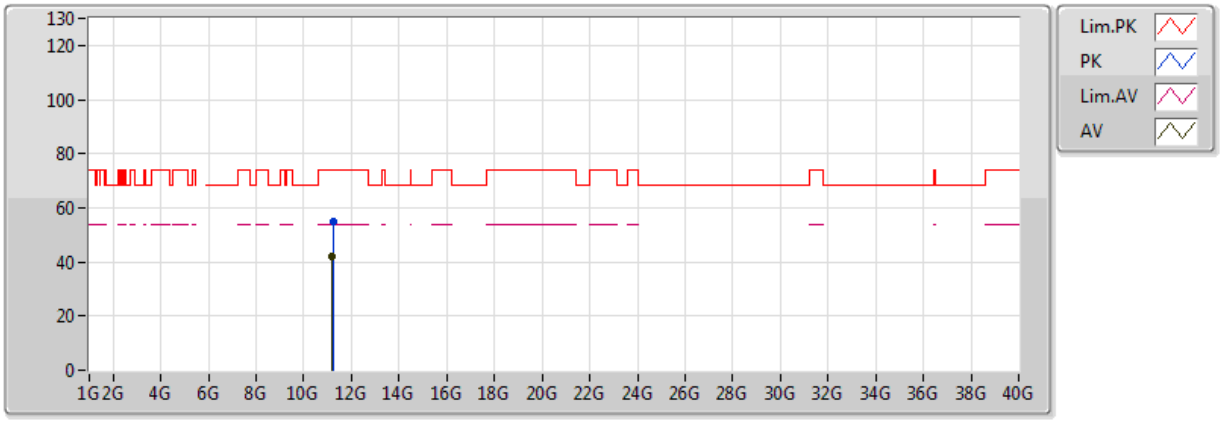


20171020
EUT Z_4TX
Setting 15
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.458G	47.59	54.00	-6.41	10.35	3	Horizontal	193	2.79
AV	5.6132G	84.97	Inf	-Inf	10.65	3	Horizontal	193	2.79
PK	5.4372G	59.56	74.00	-14.44	10.28	3	Horizontal	193	2.79
PK	5.466G	58.33	68.20	-9.87	10.37	3	Horizontal	193	2.79
PK	5.6292G	95.45	Inf	-Inf	10.65	3	Horizontal	193	2.79
PK	5.882G	60.07	68.20	-8.13	10.76	3	Horizontal	193	2.79

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5610MHz,5690MHz Straddle 5.47-5.725GHz_TX

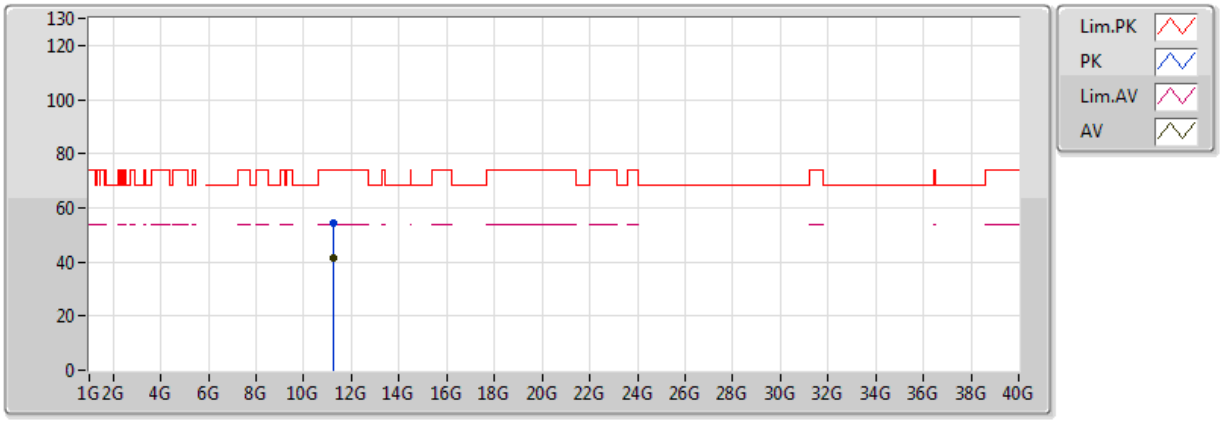


20171020
EUT Z_4TX
Setting 15
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.2039G	41.91	54.00	-12.09	16.24	3	Vertical	228	1.96
PK	11.2223G	55.14	74.00	-18.86	16.27	3	Vertical	228	1.96

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5610MHz,5690MHz Straddle 5.47-5.725GHz_TX

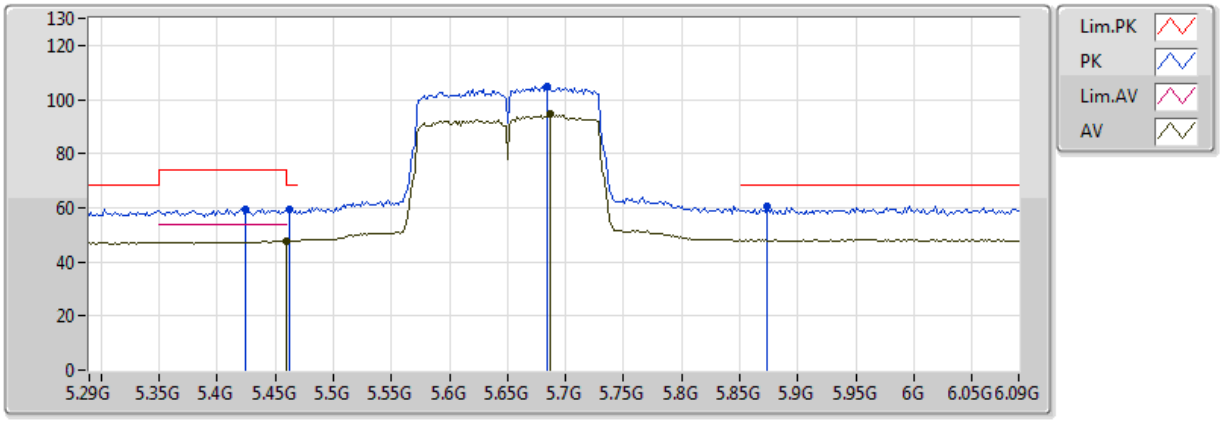


20171020
EUT Z_4TX
Setting 15
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.2316G	41.71	54.00	-12.29	16.28	3	Horizontal	85	1.84
PK	11.2167G	54.11	74.00	-19.89	16.26	3	Horizontal	85	1.84

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5610MHz,#5690MHz Straddle 5.47-5.725GHz_TX

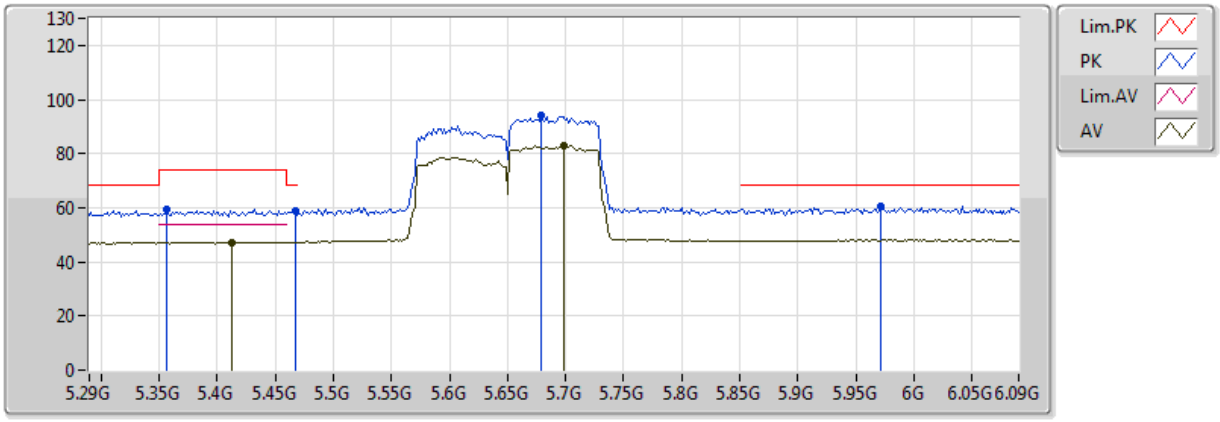


20171020
EUT Z_4TX
Setting 15
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.459995G	47.79	54.00	-6.21	10.35	3	Vertical	270	2.20
AV	5.6868G	94.63	Inf	-Inf	10.65	3	Vertical	270	2.20
PK	5.4244G	59.42	74.00	-14.58	10.23	3	Vertical	270	2.20
PK	5.4628G	59.13	68.20	-9.07	10.36	3	Vertical	270	2.20
PK	5.6836G	104.78	Inf	-Inf	10.65	3	Vertical	270	2.20
PK	5.874G	60.54	68.20	-7.66	10.75	3	Vertical	270	2.20

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5610MHz,#5690MHz Straddle 5.47-5.725GHz_TX

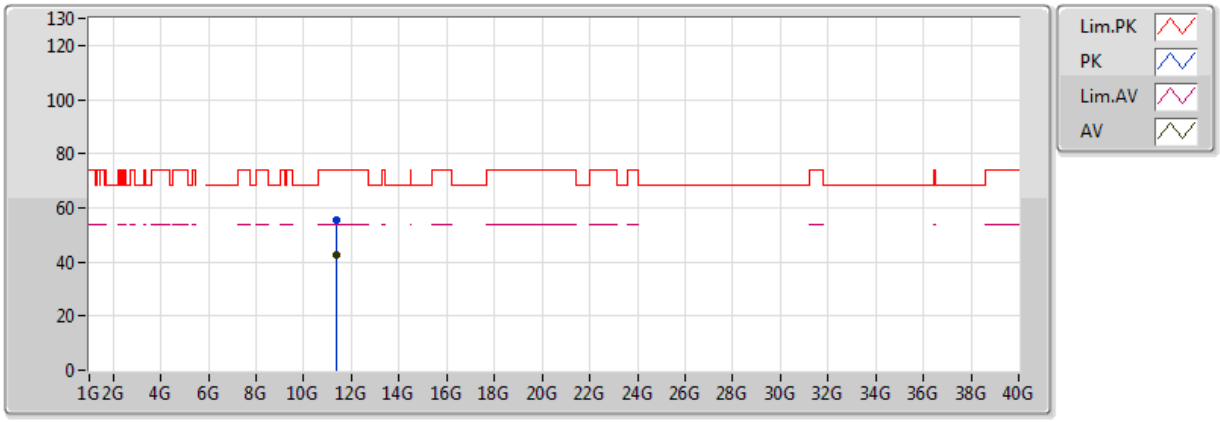


20171020
EUT Z_4TX
Setting 15
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.4132G	47.33	54.00	-6.67	10.19	3	Horizontal	166	1.79
AV	5.698G	82.99	Inf	-Inf	10.65	3	Horizontal	166	1.79
PK	5.3572G	59.65	74.00	-14.35	10.09	3	Horizontal	166	1.79
PK	5.4676G	58.96	68.20	-9.24	10.38	3	Horizontal	166	1.79
PK	5.6788G	94.11	Inf	-Inf	10.65	3	Horizontal	166	1.79
PK	5.9716G	60.53	68.20	-7.67	10.87	3	Horizontal	166	1.79

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5610MHz,#5690MHz Straddle 5.47-5.725GHz_TX

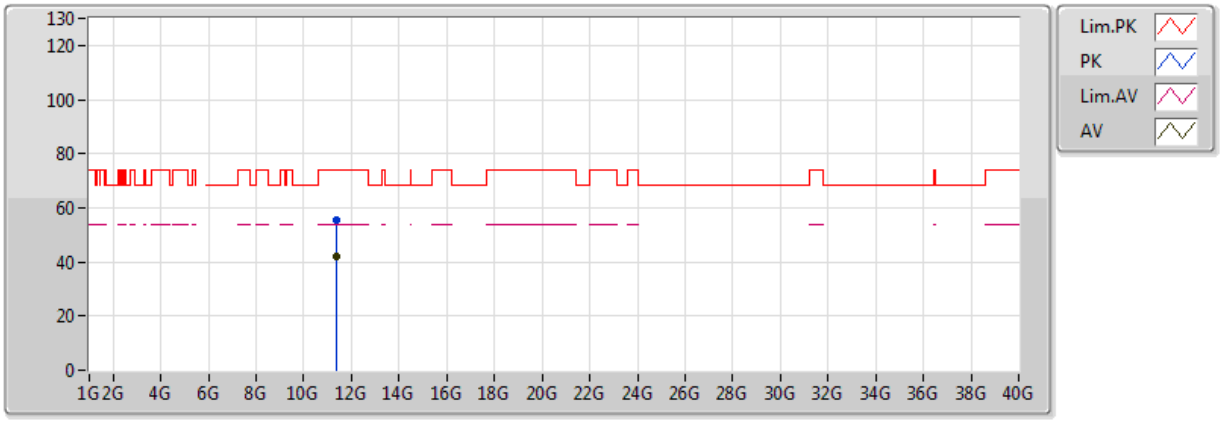


20171020
EUT Z_4TX
Setting 15
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.3964G	42.35	54.00	-11.65	16.49	3	Vertical	44	2.29
PK	11.3802G	55.33	74.00	-18.67	16.47	3	Vertical	44	2.29

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5610MHz,#5690MHz Straddle 5.47-5.725GHz_TX



20171020
EUT Z_4TX
Setting 15
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	11.3796G	42.18	54.00	-11.82	16.46	3	Horizontal	125	2.15
PK	11.3616G	55.36	74.00	-18.64	16.44	3	Horizontal	125	2.15