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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-M445GL**
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.	4x4-5GL
Test Rule Part(s)	47 CFR FCC Part 15 Subpart E § 15.407
Test Freq. Range	5150 ~ 5350MHz
Received Date	Sep. 12, 2017
Final Test Date	Oct. 20, 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
FR661623-15	Rev. 01	Initial issue of report	Oct. 27 , 2017

1. VERIFICATION OF COMPLIANCE

Product Name	:	WiFi 5G Module
Brand Name	:	UBIQUITI
Model No.	:	4x4-5GL
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 Sep. 12, 2017 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(a)	Maximum Conducted Output Power	Complies
4.3	15.407(a)	Power Spectral Density	Complies
4.4	15.407(b)	Unwanted Emissions	Complies
4.5	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	5150 ~ 5350MHz
Channel Number	8 for 20MHz bandwidth ; 4 for 40MHz bandwidth 2 for 80MHz bandwidth
Channel Bandwidth (99%)	**For indoor use master B1 and indoor, outdoor use B2** U-NII-1: IEEE 802.11a: 16.15 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 17.37 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.89 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 75.83 MHz U-NII-2A: IEEE 802.11a: 16.24 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 17.28 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.32 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.41 MHz **For indoor use slave without radar detection B1** U-NII-1: IEEE 802.11a: 16.06 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 17.11 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.12 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.12 MHz **For outdoor use master B1** U-NII-1: IEEE 802.11a: 16.06 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 17.19 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.12 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 75.83 MHz **For indoor use master** U-NII-1: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 155.86 MHz U-NII-2A: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 155.86 MHz

	For indoor use slave without radar detection U-NII-1: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 155.86 MHz U-NII-2A: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 155.86 MHz **For outdoor use master** U-NII-1: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 154.56 MHz U-NII-2A: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 154.56 MHz
Maximum Conducted Output Power	**For indoor use master B1 and indoor, outdoor use B2** U-NII-1: IEEE 802.11a: 21.75 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 21.83 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 24.53 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 20.57 dBm U-NII-2A: IEEE 802.11a: 15.84 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 15.75 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 18.96 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 20.69 dBm **For indoor use slave without radar detection B1** U-NII-1: IEEE 802.11a: 15.96 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 15.86 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 18.80 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 17.79 dBm **For outdoor use master B1** U-NII-1: IEEE 802.11a: 12.84 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 12.69 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 12.84 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 12.91 dBm **For indoor use master** U-NII-1: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 16.90 dBm U-NII-2A: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 16.88 dBm **For indoor use slave without radar detection** U-NII-1: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 16.90 dBm U-NII-2A: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 16.88 dBm

	For outdoor use master U-NII-1: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 12.61 dBm U-NII-2A: IEEE 802.11ac MCS0/Nss2 (VHT80+80): 12.58 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
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 36, 40, 44, 48, 52, 56, 60, 64.

For 40MHz bandwidth systems, use Channel 38, 46, 54, 62.

For 80MHz bandwidth systems, use Channel 42, 58.

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz U-NII-1	36	5180 MHz	44	5220 MHz
	38	5190 MHz	46	5230 MHz
	40	5200 MHz	48	5240 MHz
	42	5210 MHz	-	-
5250~5350 MHz U-NII-2A	52	5260 MHz	60	5300 MHz
	54	5270 MHz	62	5310 MHz
	56	5280 MHz	64	5320 MHz
	58	5290 MHz	-	-

3.5. Table for 80+80 MHz Mode

Type	Channel No.	Frequency
1	42+58	5210+5290 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	**For B1 indoor use master and B2 indoor, outdoor use**				
	11a/BPSK	U-NII-1 U-NII-2A	6Mbps	36/40/48/52/60/64	1+2+3+4
	11ac VHT20	U-NII-1 U-NII-2A	MCS0/Nss1	36/40/48/52/60/64	1+2+3+4
	11ac VHT40	U-NII-1 U-NII-2A	MCS0/Nss1	38/46/54/62	1+2+3+4
	11ac VHT80	U-NII-1 U-NII-2A	MCS0/Nss1	42/58	1+2+3+4
	For B1 indoor use slave without radar detection, B1 outdoor use master				
	11a/BPSK	U-NII-1	6Mbps	36/40/48	1+2+3+4
	11ac VHT20	U-NII-1	MCS0/Nss1	36/40/48	1+2+3+4
	11ac VHT40	U-NII-1	MCS0/Nss1	38/46	1+2+3+4
	11ac VHT80	U-NII-1	MCS0/Nss1	42	1+2+3+4
Power Spectral Density	**For B1 indoor use master and B2 indoor, outdoor use**				
	11a/BPSK	U-NII-1 U-NII-2A	6Mbps	36/40/48/52/60/64	1+2+3+4
	11ac VHT20	U-NII-1 U-NII-2A	MCS0/Nss1	36/40/48/52/60/64	1+2+3+4
	11ac VHT40	U-NII-1 U-NII-2A	MCS0/Nss1	38/46/54/62	1+2+3+4
	11ac VHT80	U-NII-1 U-NII-2A	MCS0/Nss1	42/58	1+2+3+4
	For B1 indoor use slave without radar detection, B1 outdoor use master				
	11a/BPSK	U-NII-1	6Mbps	36/40/48	1+2+3+4
	11ac VHT20	U-NII-1	MCS0/Nss1	36/40/48	1+2+3+4
	11ac VHT40	U-NII-1	MCS0/Nss1	38/46	1+2+3+4
	11ac VHT80	U-NII-1	MCS0/Nss1	42	1+2+3+4

26dB Spectrum Bandwidth & 99% Occupied Bandwidth Measurement	**For B1 indoor use master and B2 indoor, outdoor use**				
	11a/BPSK	U-NII-1 U-NII-2A	6Mbps	36/40/48/52/60/64	1+2+3+4
	11ac VHT20	U-NII-1 U-NII-2A	MCS0/Nss1	36/40/48/52/60/64	1+2+3+4
	11ac VHT40	U-NII-1 U-NII-2A	MCS0/Nss1	38/46/54/62	1+2+3+4
	11ac VHT80	U-NII-1 U-NII-2A	MCS0/Nss1	42/58	1+2+3+4
	For B1 indoor use slave without radar detection, B1 outdoor use master				
	11a/BPSK	U-NII-1	6Mbps	36/40/48	1+2+3+4
	11ac VHT20	U-NII-1	MCS0/Nss1	36/40/48	1+2+3+4
	11ac VHT40	U-NII-1	MCS0/Nss1	38/46	1+2+3+4
	11ac VHT80	U-NII-1	MCS0/Nss1	42	1+2+3+4
Unwanted Emissions Above 1GHz	11a/BPSK	U-NII-1 U-NII-2A	6Mbps	36/40/48/52/60/64	1+2+3+4
	11ac VHT20	U-NII-1 U-NII-2A	MCS0/Nss1	36/40/48/52/60/64	1+2+3+4
	11ac VHT40	U-NII-1 U-NII-2A	MCS0/Nss1	38/46/54/62	1+2+3+4
	11ac VHT80	U-NII-1 U-NII-2A	MCS0/Nss1	42/58	1+2+3+4

Note: 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 Above 1GHz	11ac VHT80+80	U-NII-1 U-NII-2A	MCS0/Nss2	**For indoor use master**		
				1	42	1+2
					58	3+4
				For indoor use slave without radar detection, outdoor use master B1		
				1	42	1+2
					58	3+4

Note: The test mode as above, the rest type of slave without radar detection and outdoor master has been covered by indoor master.

For Unwanted Emissions Above 1GHz test:

The EUT can be placed in Y-axis and Z-axis. After evaluating, The worst case was found at Z-axis, so it's recorded in this report.

Mode 1. EUT in Z-axis

3.7. Table for Testing Locations

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Brian Sun	22°C / 54%	Sep. 12, 2017~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: FR661623-12

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. Unwanted Emissions Above 1GHz.

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.

For indoor use master B1 and indoor, outdoor use B2

Test Software Version	QCA					
Mode	Test Frequency (MHz)					
	NCB: 20MHz					
	5180 MHz	5200 MHz	5240 MHz	5260 MHz	5300 MHz	5320 MHz
802.11a	14.0	14.0	14.5	8.5	8.0	8.5
802.11ac MCS0/Nss1 VHT20	14.5	14.5	15.0	8.5	8.0	8.5
Mode	NCB: 40MHz					
802.11ac MCS0/Nss1 VHT40	5190 MHz		5230 MHz		5270 MHz	5310 MHz
	15.5		17.5		11.5	11.5
Mode	NCB: 80MHz					
802.11ac MCS0/Nss1 VHT80	5210 MHz				5290 MHz	
	13.5				13.5	

For indoor use slave without radar detection B1

Test Software Version	QCA		
Mode	Test Frequency (MHz)		
	NCB: 20MHz		
	5180 MHz	5200 MHz	5240 MHz
802.11a	8.5	8.5	8.5
802.11ac MCS0/Nss1 VHT20	8.5	8.5	9.0
Mode	NCB: 40MHz		
802.11ac MCS0/Nss1 VHT40	5190 MHz		5230 MHz
	11.5		11.5
Mode	NCB: 80MHz		
802.11ac MCS0/Nss1 VHT80	5210 MHz		
	10.0		

For outdoor use master B1

Test Software Version	QCA		
Mode	Test Frequency (MHz)		
	NCB: 20MHz		
	5180 MHz	5200 MHz	5240 MHz
802.11a	5.0	5.0	5.5
802.11ac MCS0/Nss1 VHT20	5.0	5.0	5.5
Mode	NCB: 40MHz		
802.11ac MCS0/Nss1 VHT40	5190 MHz	5230 MHz	
	5.0	5.5	
Mode	NCB: 80MHz		
802.11ac MCS0/Nss1 VHT80	5210 MHz		
	5.5		

802.11ac MCS0/Nss2 VHT80+80

For indoor use master

Test Software Version	QCA
Mode	NCB: 80MHz+80MHz
802.11ac MCS0/Nss2 VHT80+80	Type 1
	5210+5290 MHz
	12.5

For indoor use slave without radar detection

Test Software Version	QCA
Mode	NCB: 80MHz+80MHz
802.11ac MCS0/Nss2 VHT80+80	Type 1
	5210+5290 MHz
	12.5

For outdoor use master B1

Test Software Version	QCA
Mode	NCB: 80MHz+80MHz
802.11ac MCS0/Nss2 VHT80+80	Type 1
	5210+5290 MHz
	12.5

3.11. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

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:

This test setup layout is the same as that shown in section 4.4.4.

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

For indoor use master B1 and indoor, outdoor use B2

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5180 MHz	18.17	16.15
	5200 MHz	18.09	16.15
	5240 MHz	17.83	15.98
	5260 MHz	17.65	15.80
	5300 MHz	17.91	15.98
	5320 MHz	18.17	16.24
802.11ac MCS0/Nss1 VHT20	5180 MHz	19.04	17.28
	5200 MHz	19.13	17.37
	5240 MHz	18.96	17.19
	5260 MHz	18.87	16.93
	5300 MHz	18.87	16.85
	5320 MHz	18.96	17.28
802.11ac MCS0/Nss1 VHT40	5190 MHz	39.42	35.75
	5230 MHz	39.86	35.89
	5270 MHz	39.71	36.32
	5310 MHz	39.13	35.17
802.11ac MCS0/Nss1 VHT80	5210 MHz	82.90	75.83
	5290 MHz	82.32	76.41

For indoor use slave without radar detection B1

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5180 MHz	17.74	15.80
	5200 MHz	17.57	15.72
	5240 MHz	17.91	16.06
802.11ac MCS0/Nss1 VHT20	5180 MHz	18.87	17.11
	5200 MHz	18.70	16.67
	5240 MHz	18.96	16.85
802.11ac MCS0/Nss1 VHT40	5190 MHz	39.30	35.95
	5230 MHz	39.65	36.12
802.11ac MCS0/Nss1 VHT80	5210 MHz	82.90	76.12

For outdoor use master B1

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5180 MHz	17.91	15.98
	5200 MHz	17.91	16.06
	5240 MHz	17.57	15.80
802.11ac MCS0/Nss1 VHT20	5180 MHz	18.87	17.11
	5200 MHz	19.04	17.19
	5240 MHz	18.70	16.85
802.11ac MCS0/Nss1 VHT40	5190 MHz	39.30	35.95
	5230 MHz	39.48	36.12
802.11ac MCS0/Nss1 VHT80	5210 MHz	83.77	75.83

802.11ac MCS0/Nss2 VHT80+80

For indoor use master and slave without radar detection

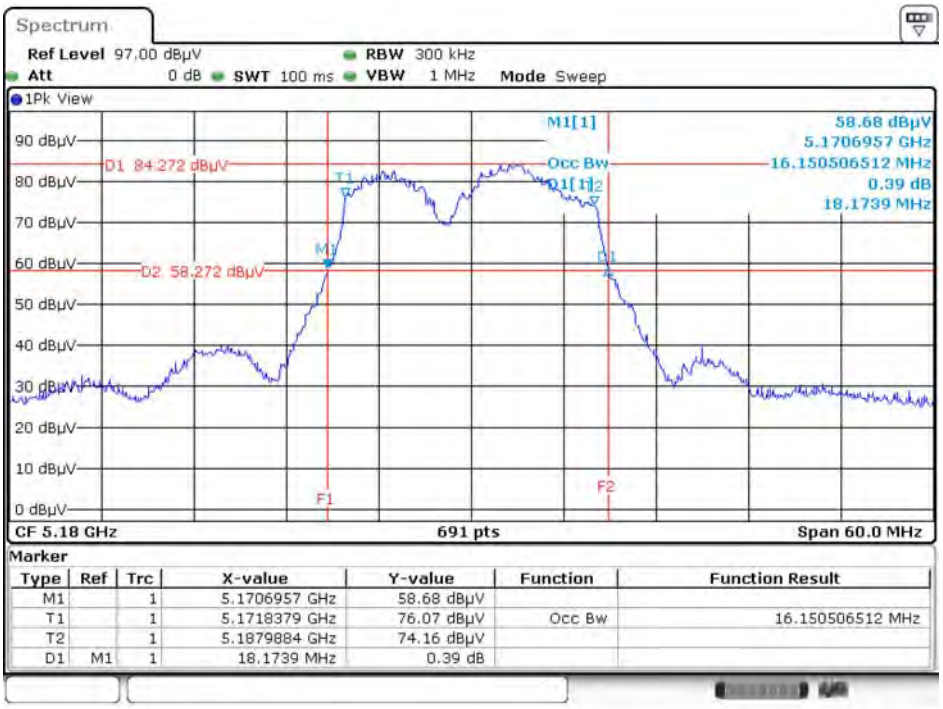
Type	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 1 or UNII 2C 26dB BW (MHz)	UNII 2A or UNII 3 26dB BW (MHz)	UNII 1 or UNII 2C 99% BW (MHz)	UNII 2A or UNII 3 99% BW (MHz)	26dB Total BW (MHz)
1	5210 MHz	164.35	155.86	-						-
	5290 MHz									

For outdoor use master B1

Type	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 1 or UNII 2C 26dB BW (MHz)	UNII 2A or UNII 3 26dB BW (MHz)	UNII 1 or UNII 2C 99% BW (MHz)	UNII 2A or UNII 3 99% BW (MHz)	26dB Total BW (MHz)
1	5210 MHz	163.04	154.56	-						-
	5290 MHz									

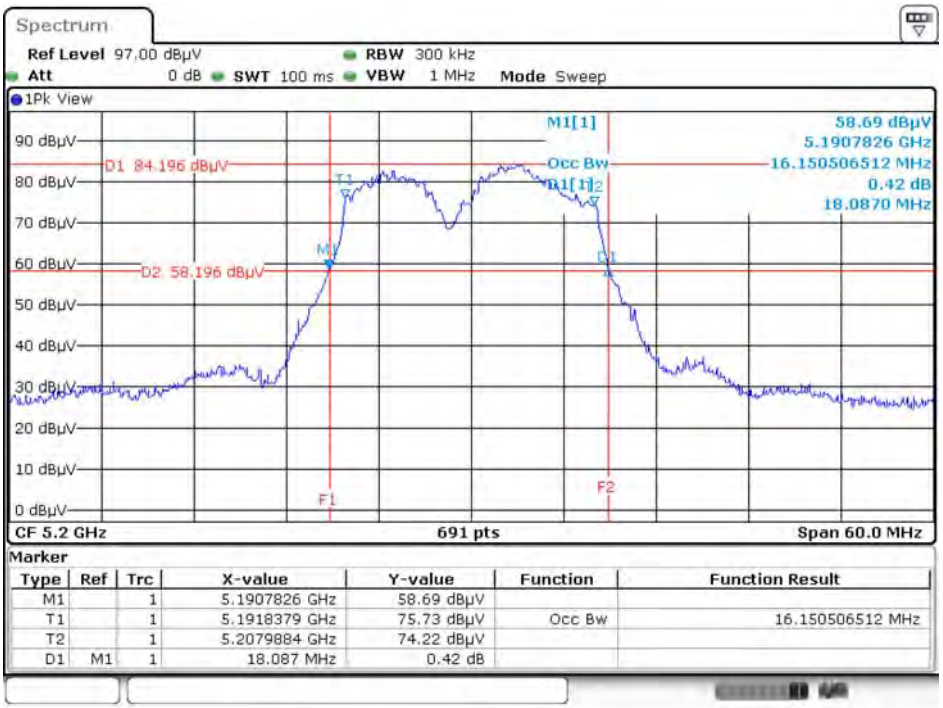
For indoor use master B1 and indoor, outdoor use B2

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5180 MHz



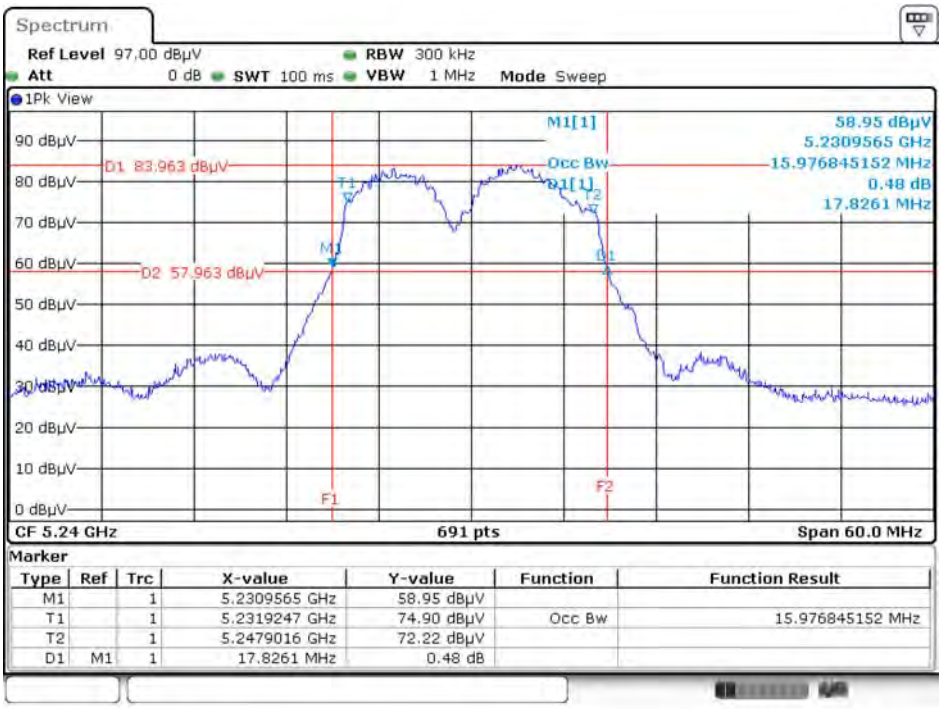
Date: 13.SEP.2017 02:37:48

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5200 MHz



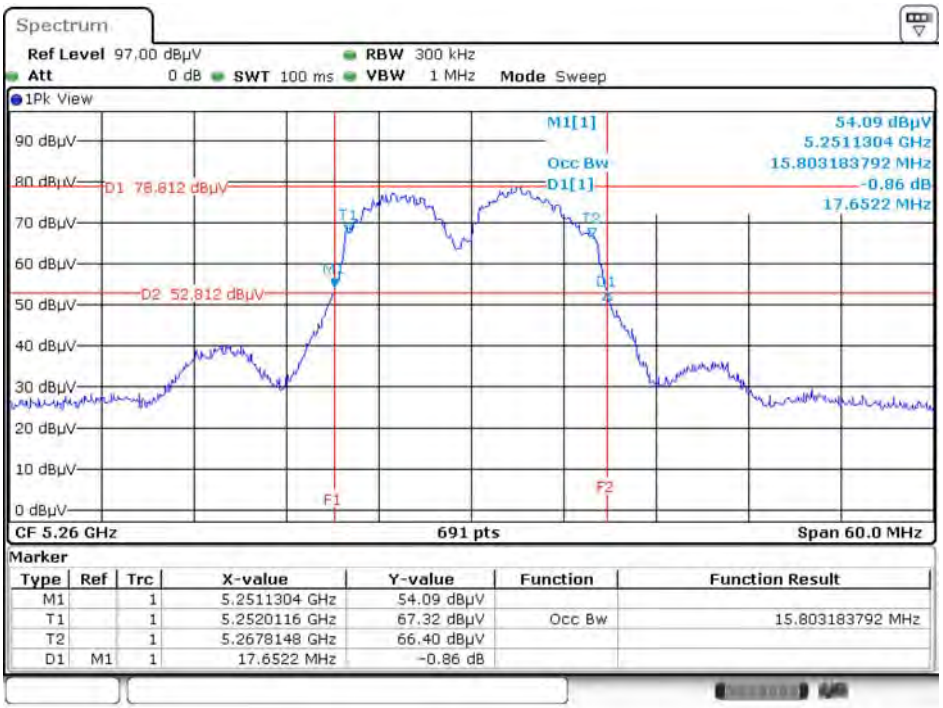
Date: 13.SEP.2017 02:40:32

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz



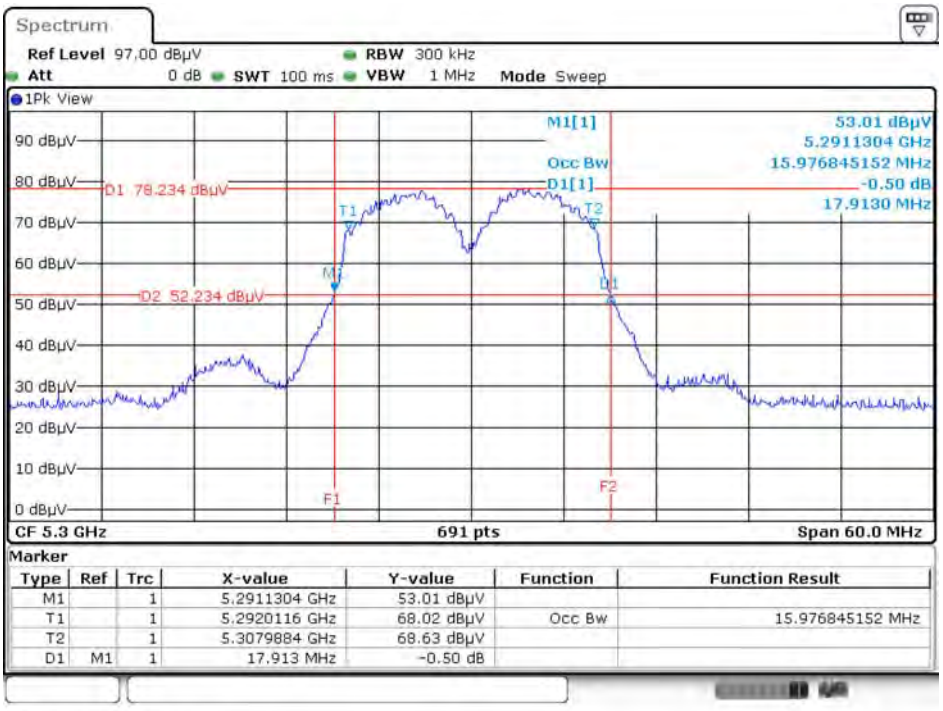
Date: 13.SEP.2017 02:41:39

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5260 MHz



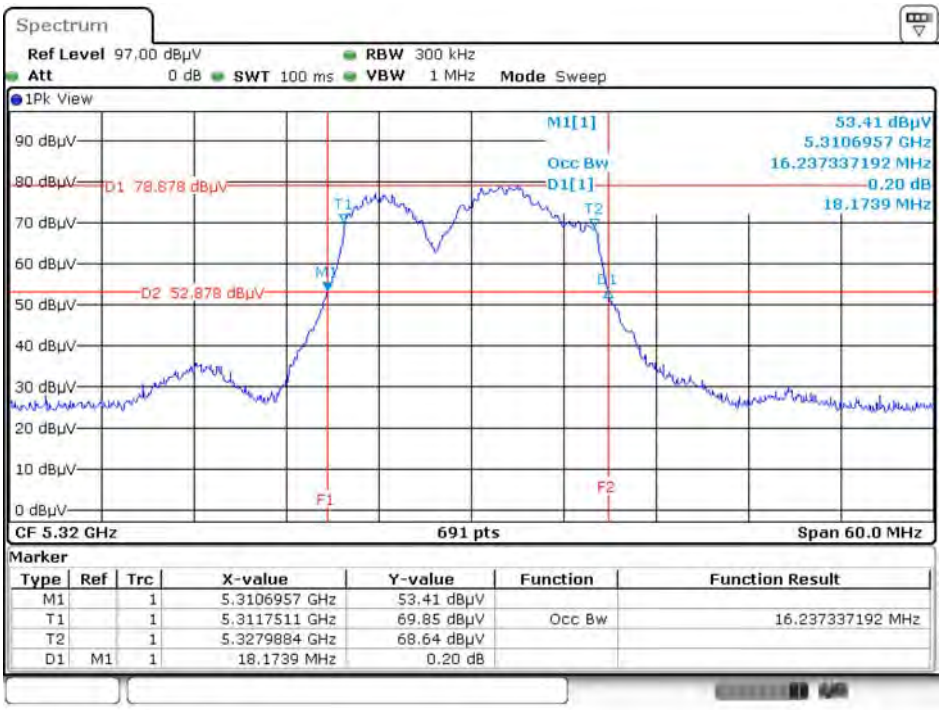
Date: 13.SEP.2017 02:42:24

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5300 MHz



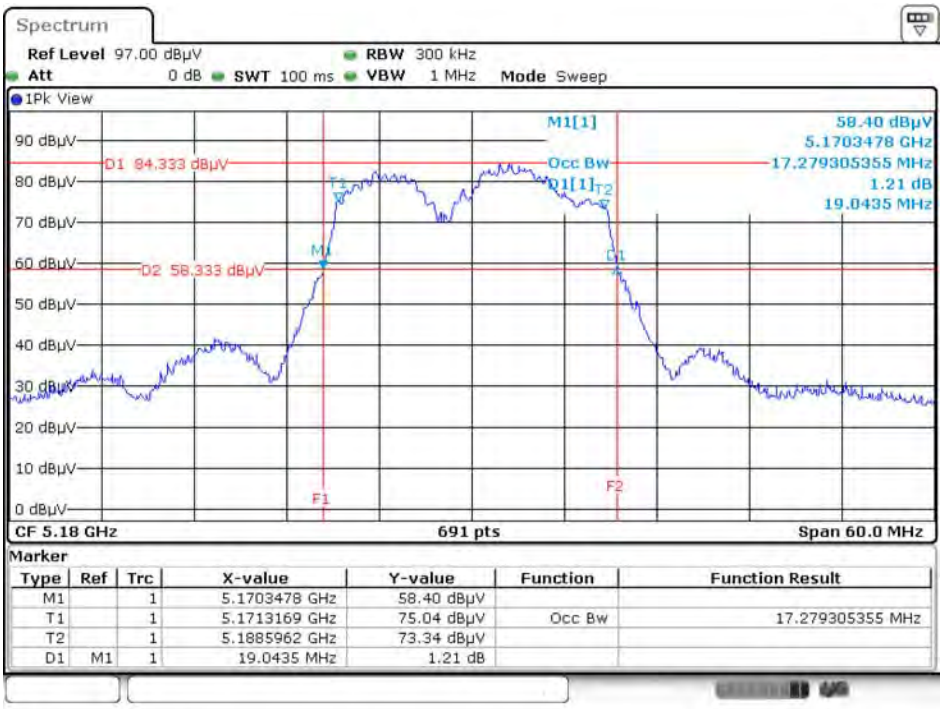
Date: 13.SEP.2017 02:43:35

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5320 MHz



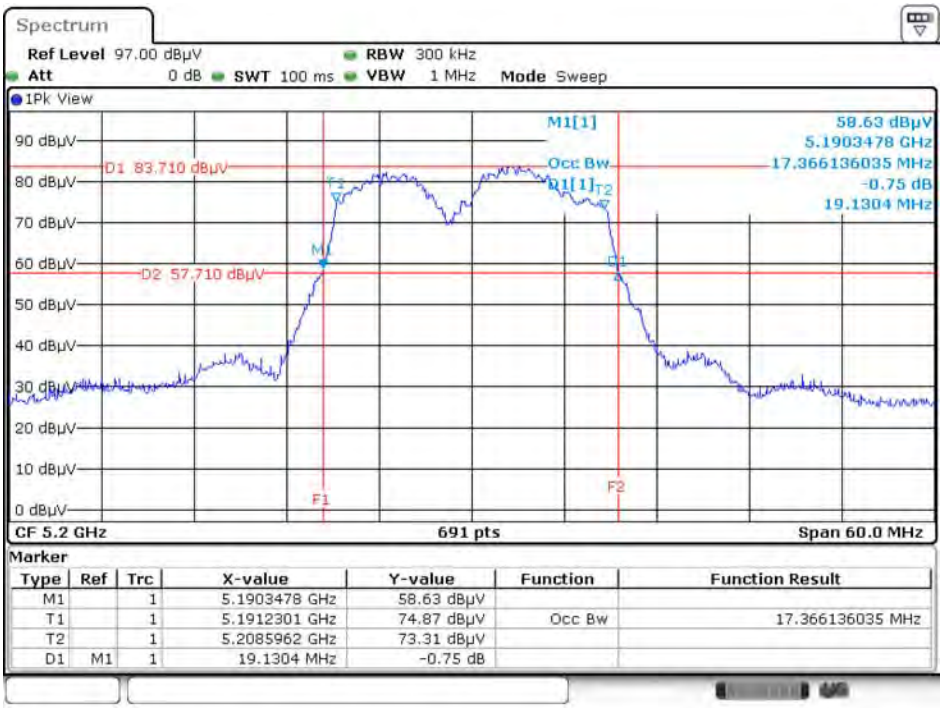
Date: 13.SEP.2017 02:44:23

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5180 MHz



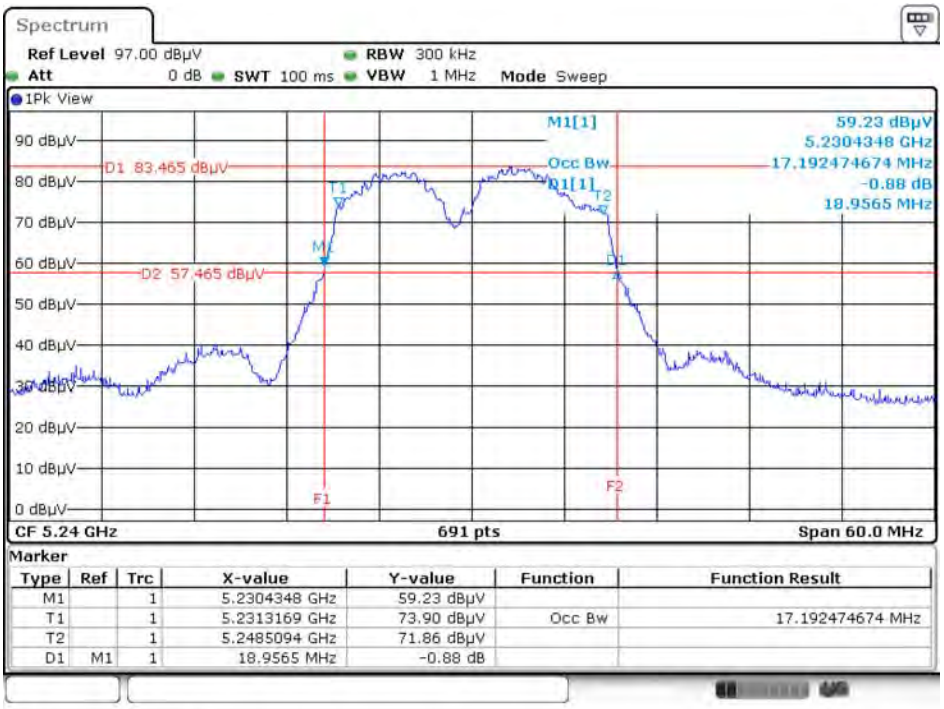
Date: 13.SEP.2017 02:49:05

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5200 MHz



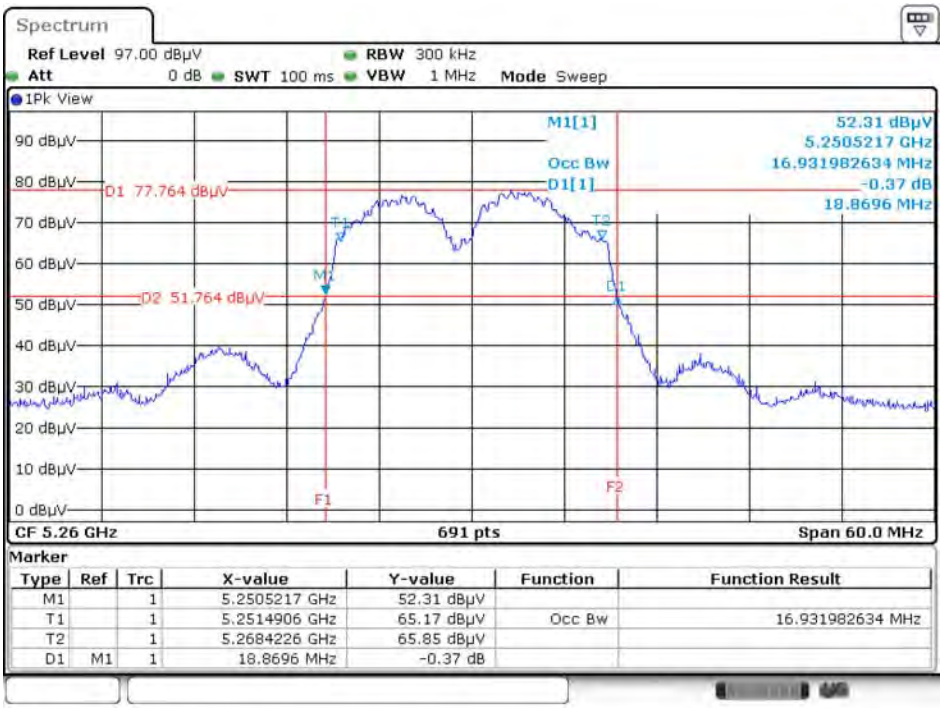
Date: 13.SEP.2017 02:48:30

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz



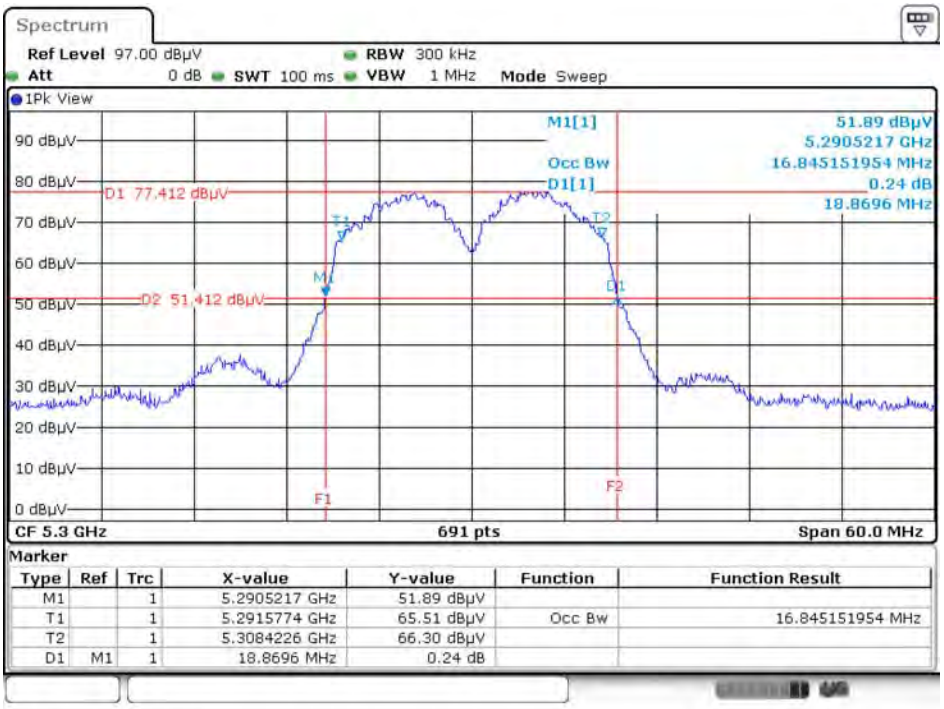
Date: 13.SEP.2017 02:47:47

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5260 MHz



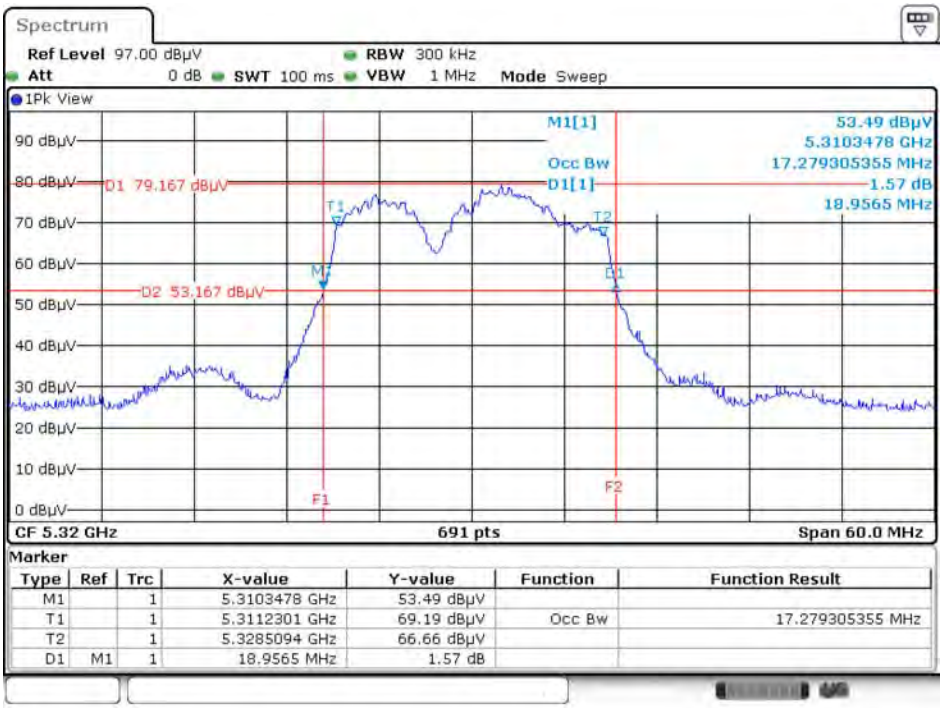
Date: 13.SEP.2017 02:47:05

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5300 MHz



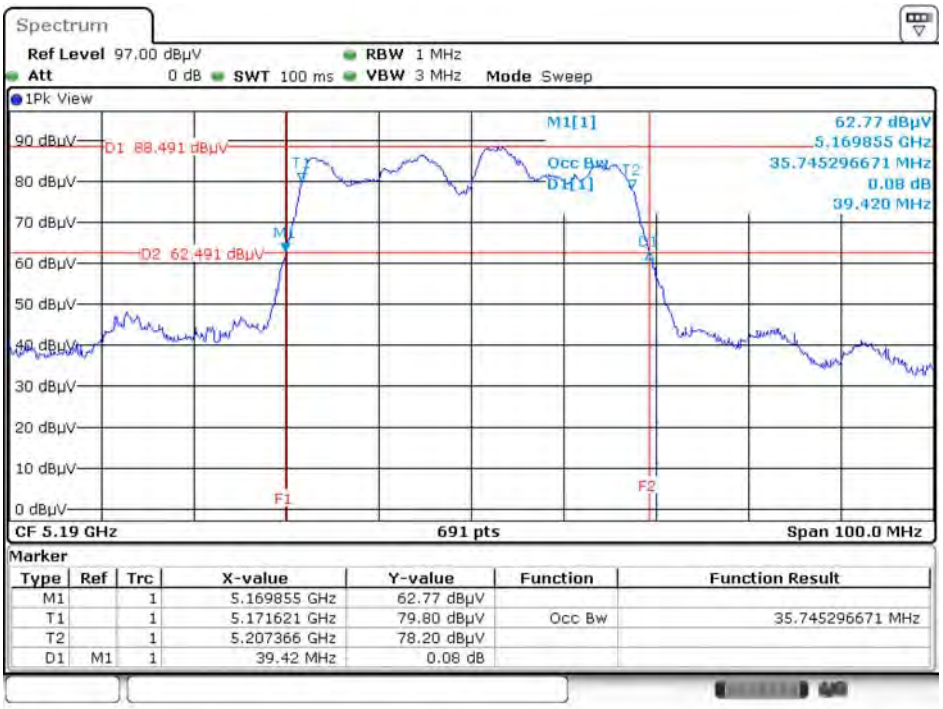
Date: 13.SEP.2017 02:46:22

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5320 MHz



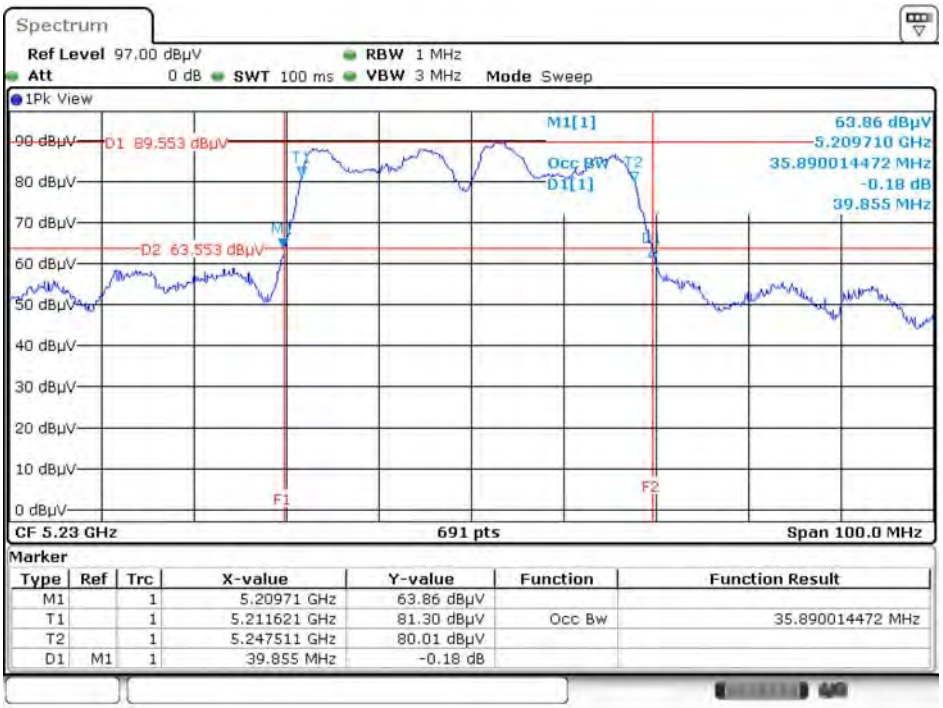
Date: 13.SEP.2017 02:45:30

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5190 MHz



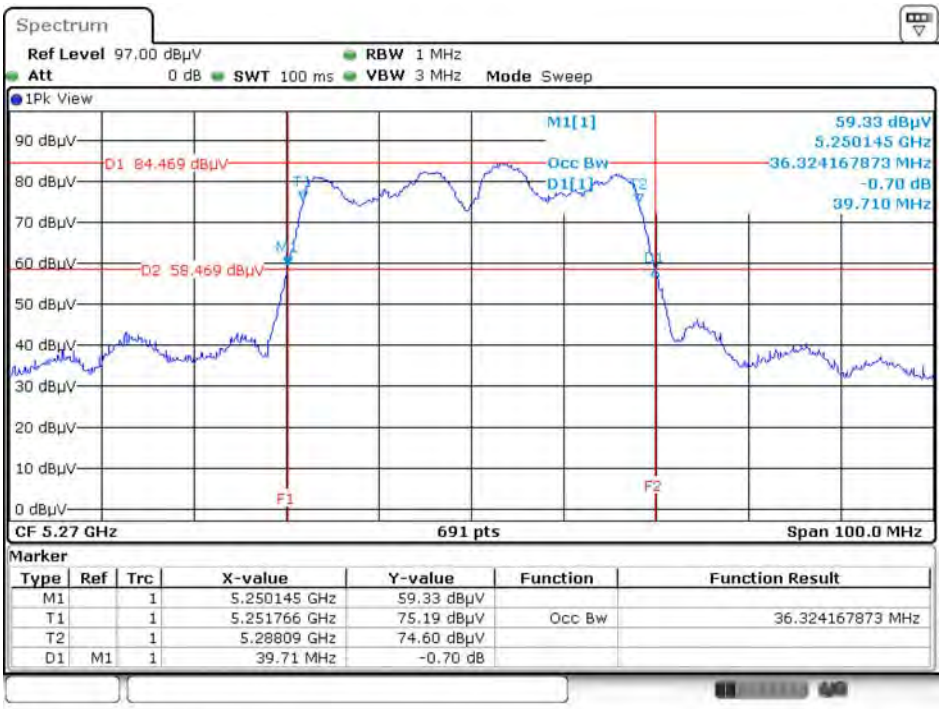
Date: 13.SEP.2017 02:50:21

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5230 MHz



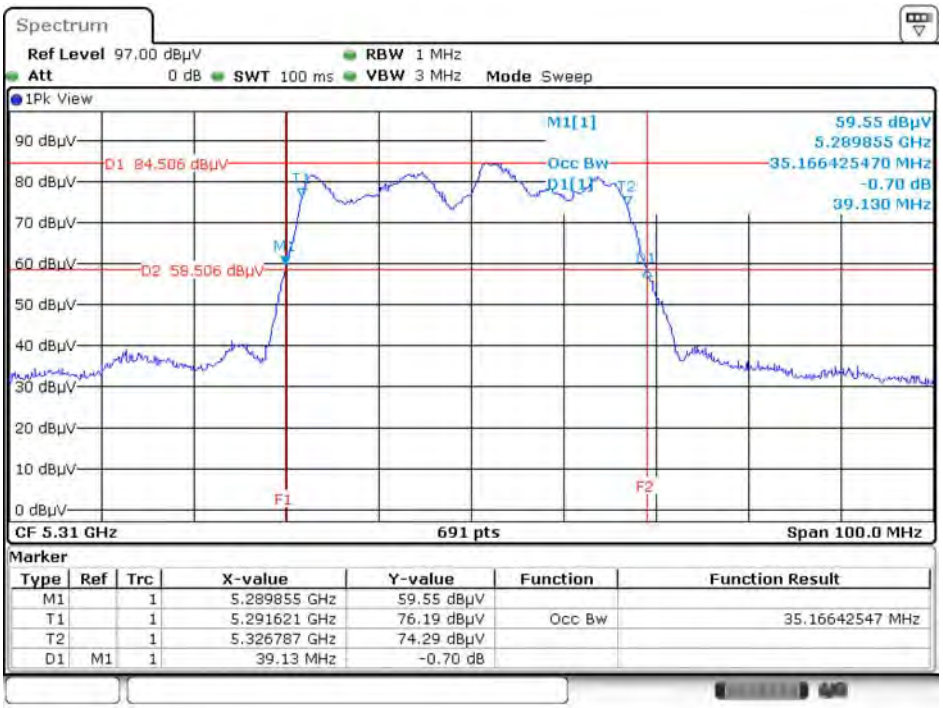
Date: 13.SEP.2017 02:51:56

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5270 MHz



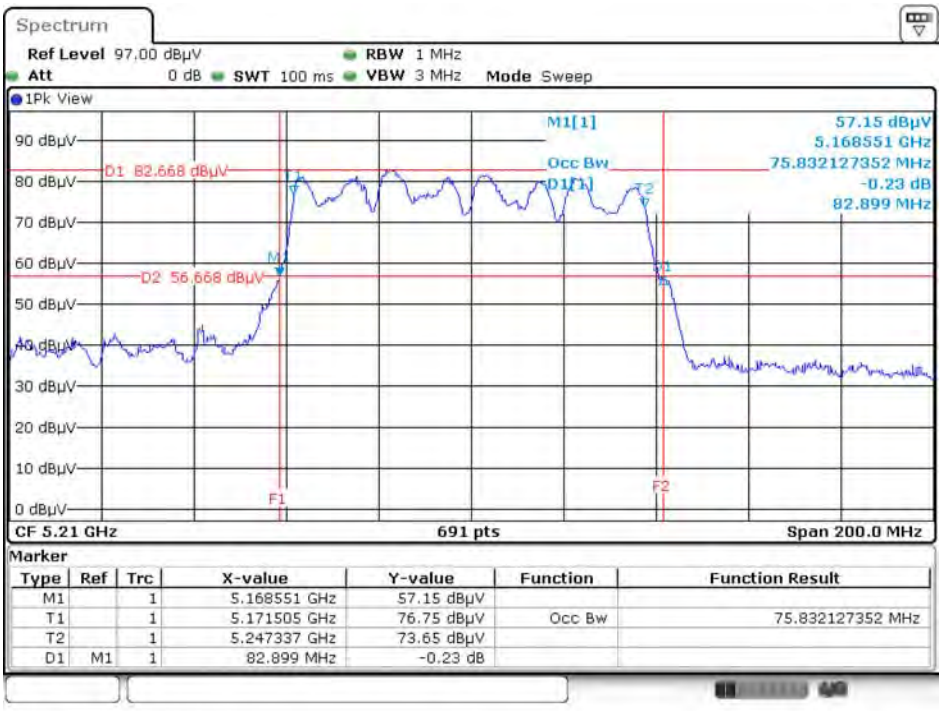
Date: 13.SEP.2017 02:52:40

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5310 MHz



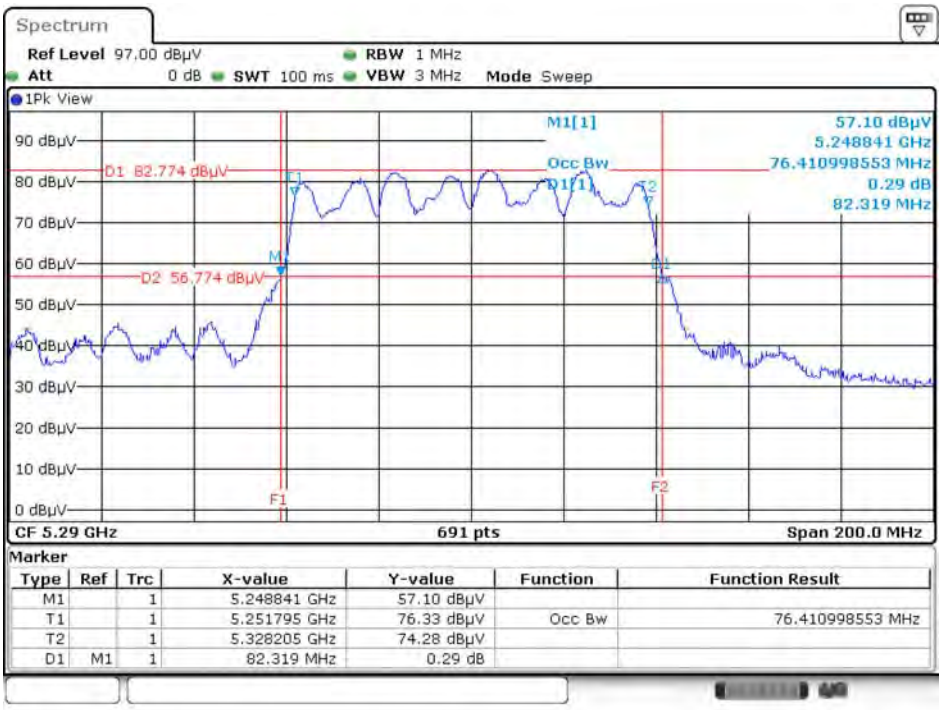
Date: 13.SEP.2017 02:53:21

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5210 MHz



Date: 13.SEP.2017 02:55:18

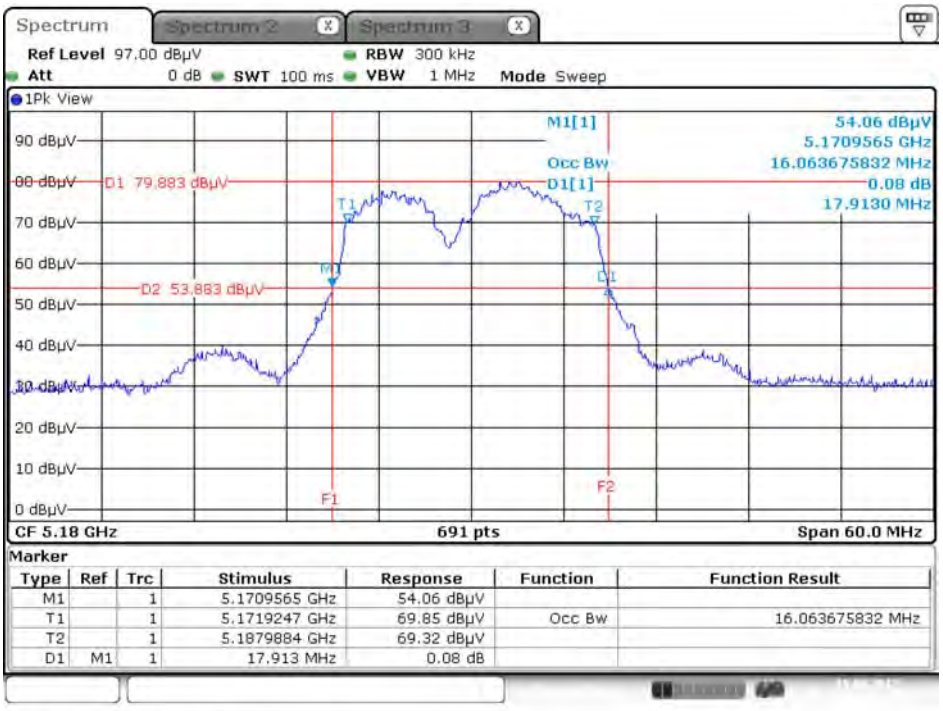
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5290 MHz



Date: 13.SEP.2017 02:55:59

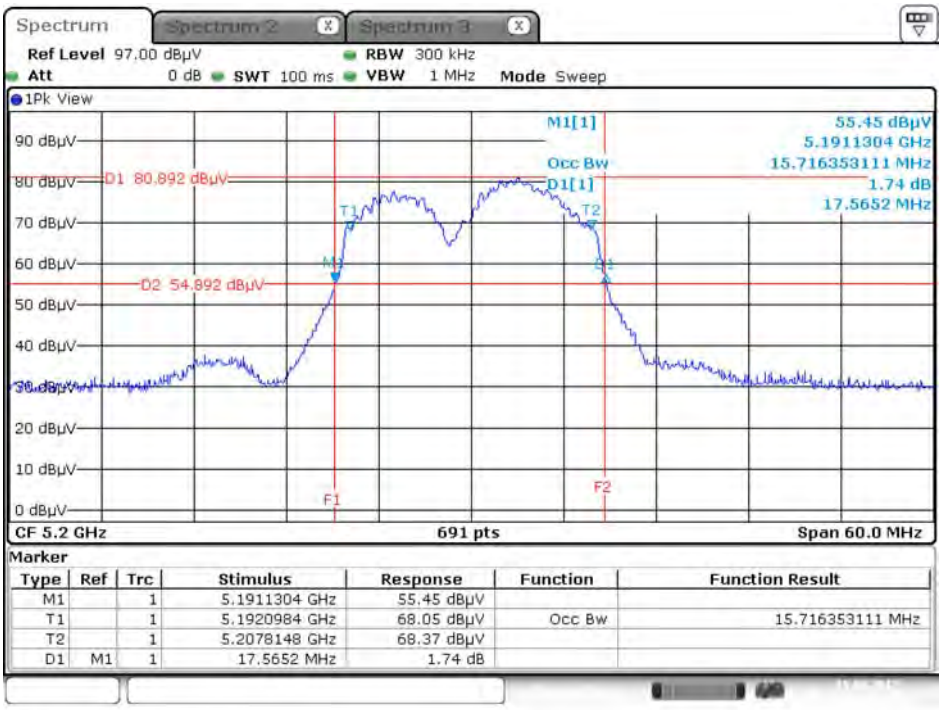
For indoor use slave without radar detection B1

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5180 MHz



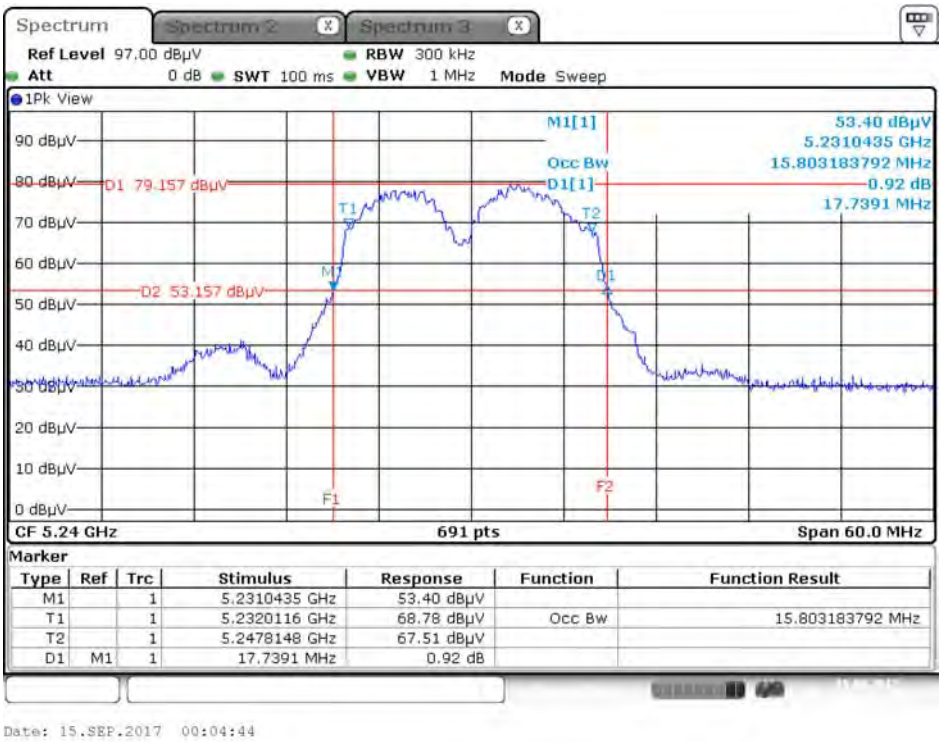
Date: 15.SEP.2017 00:05:46

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5200 MHz

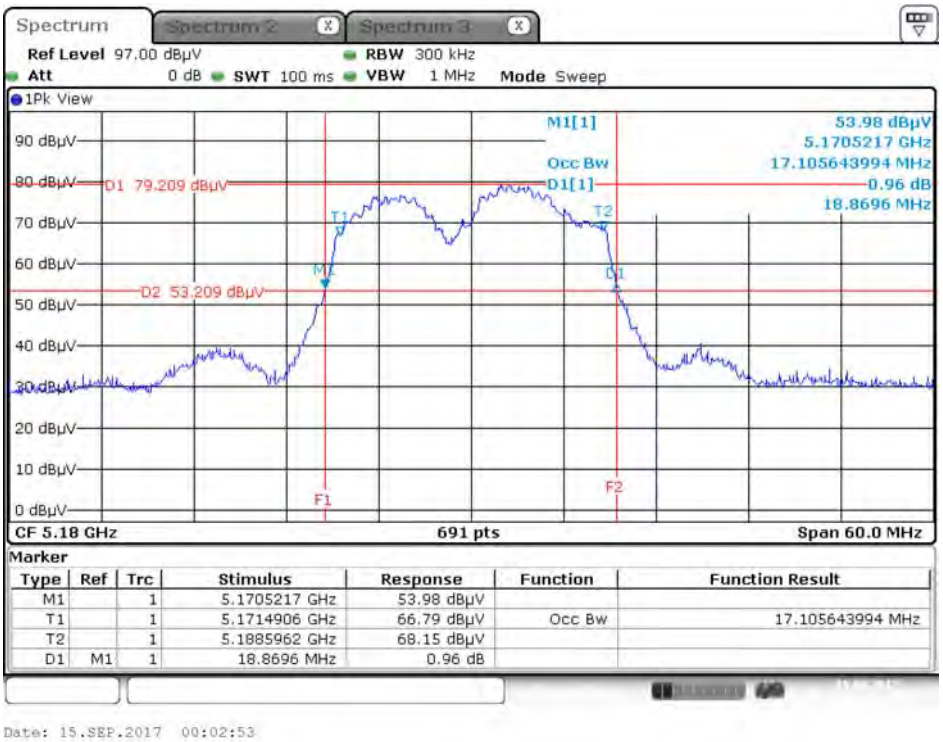


Date: 15.SEP.2017 00:05:16

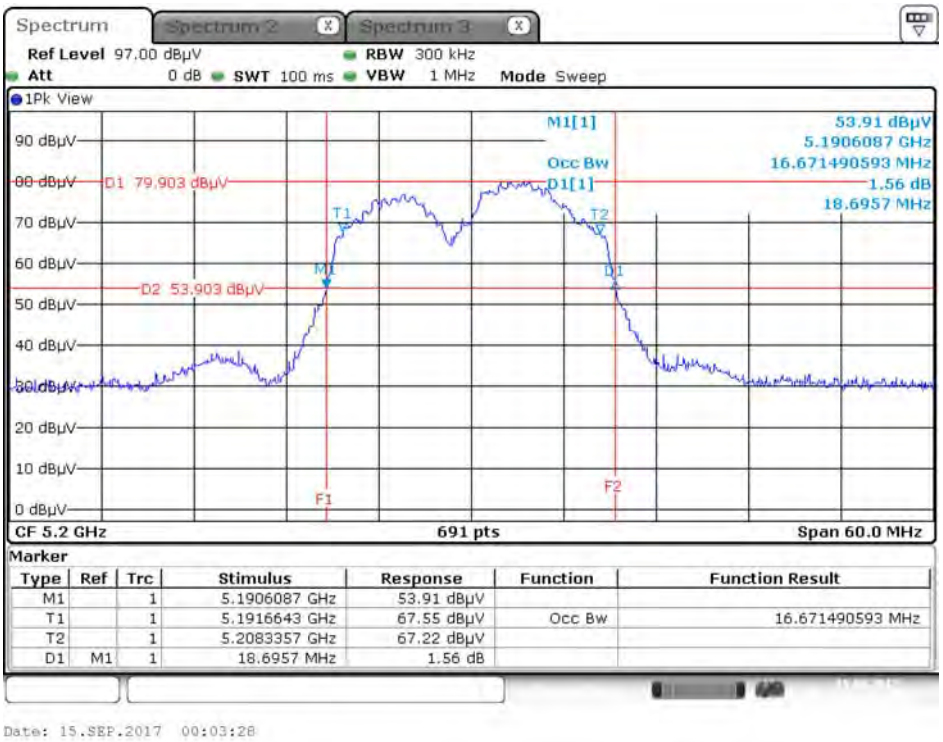
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz



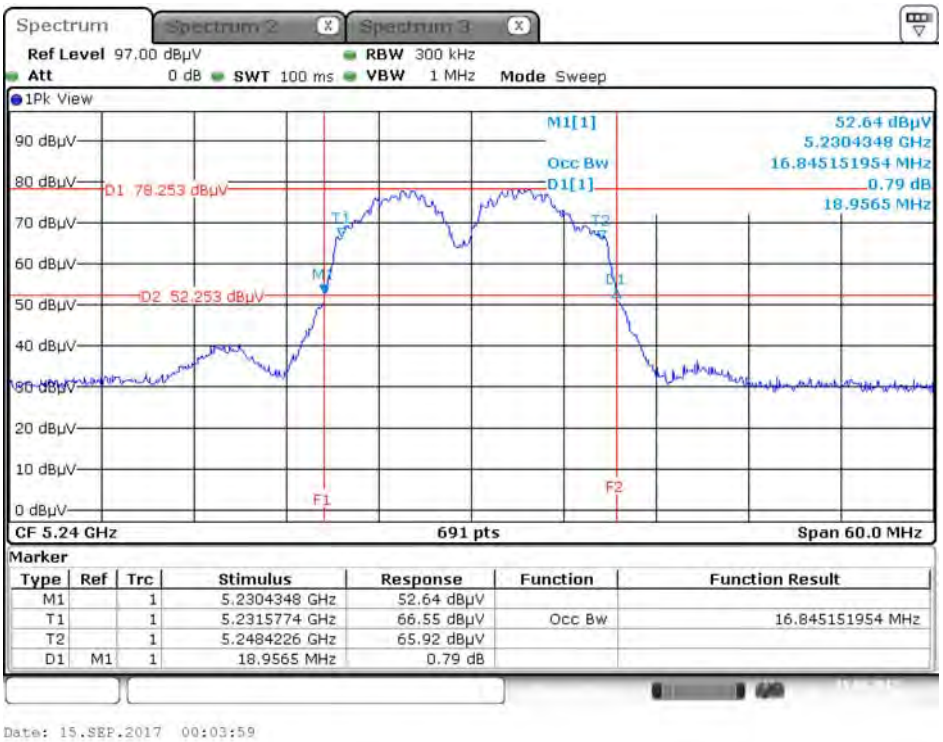
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5180 MHz



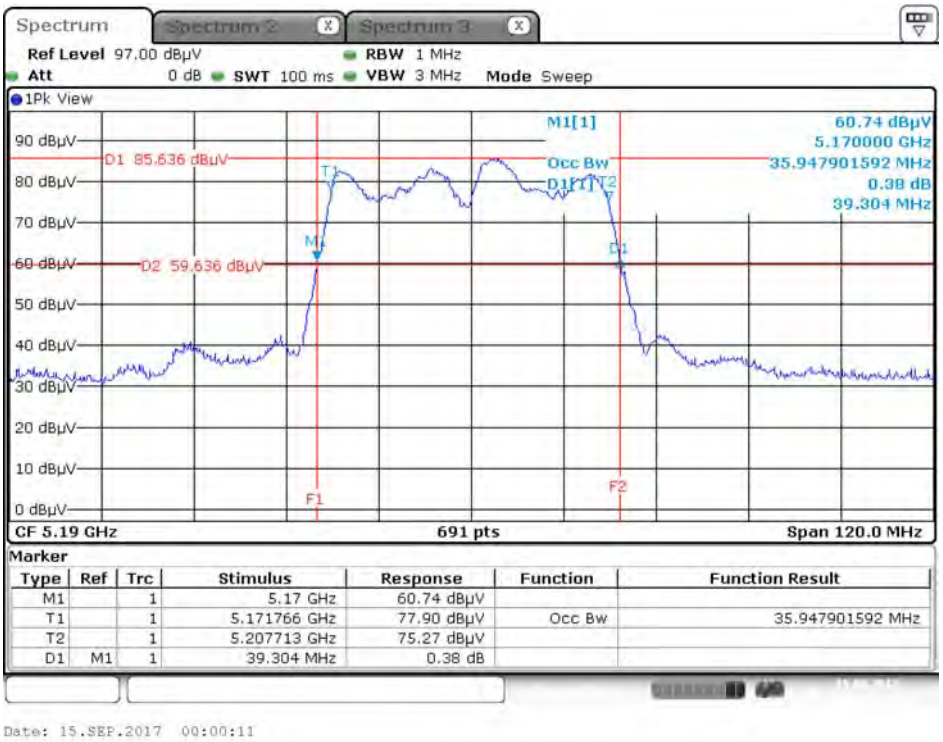
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5200 MHz



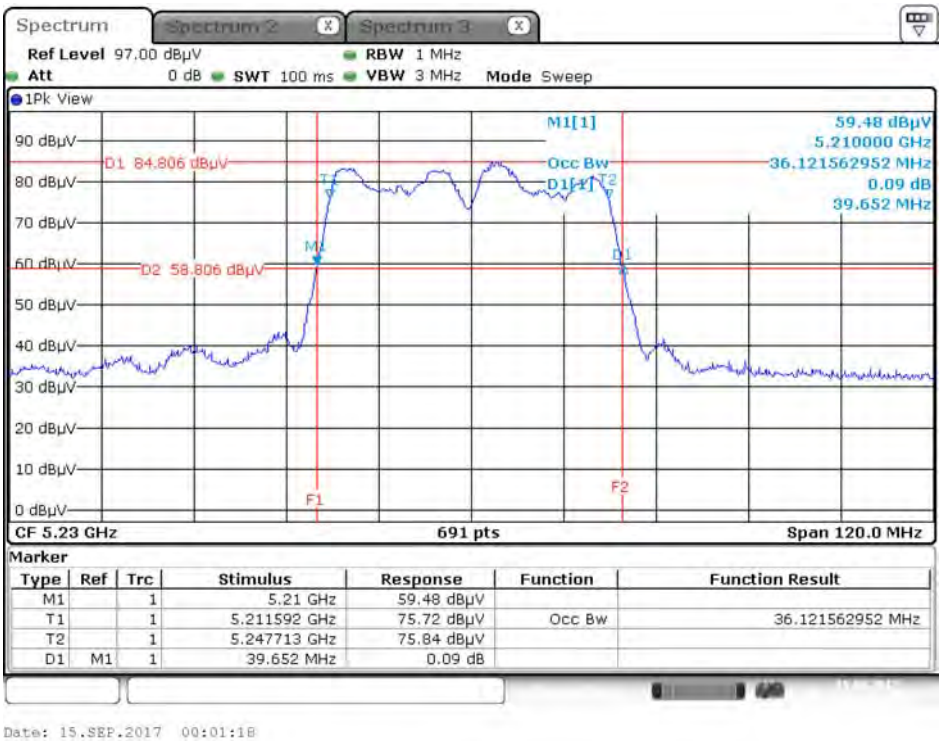
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz



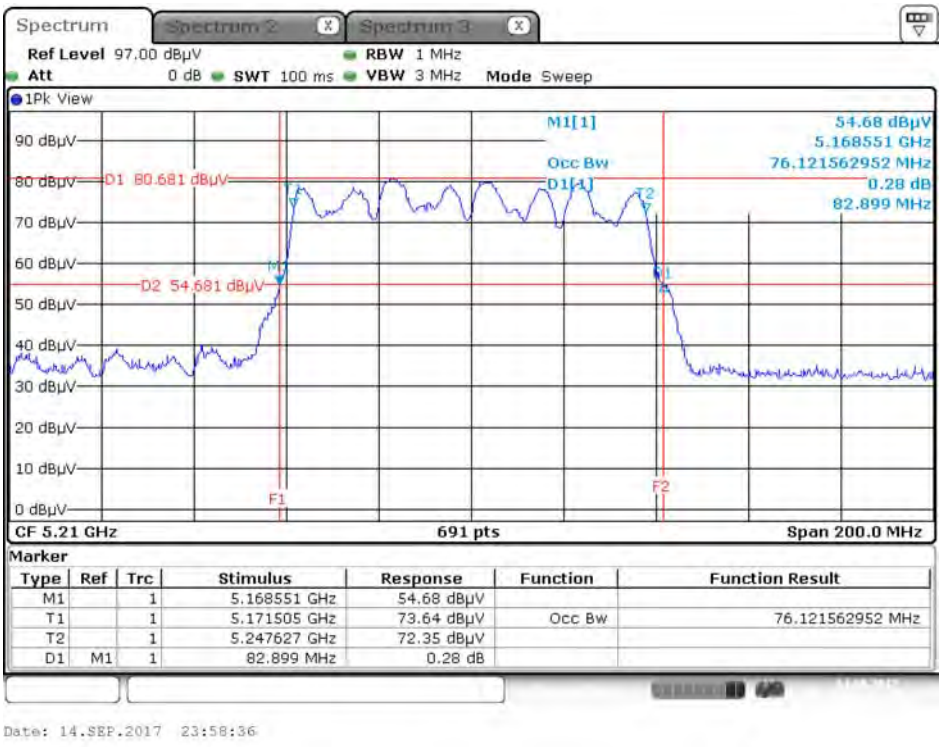
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5190 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5230 MHz

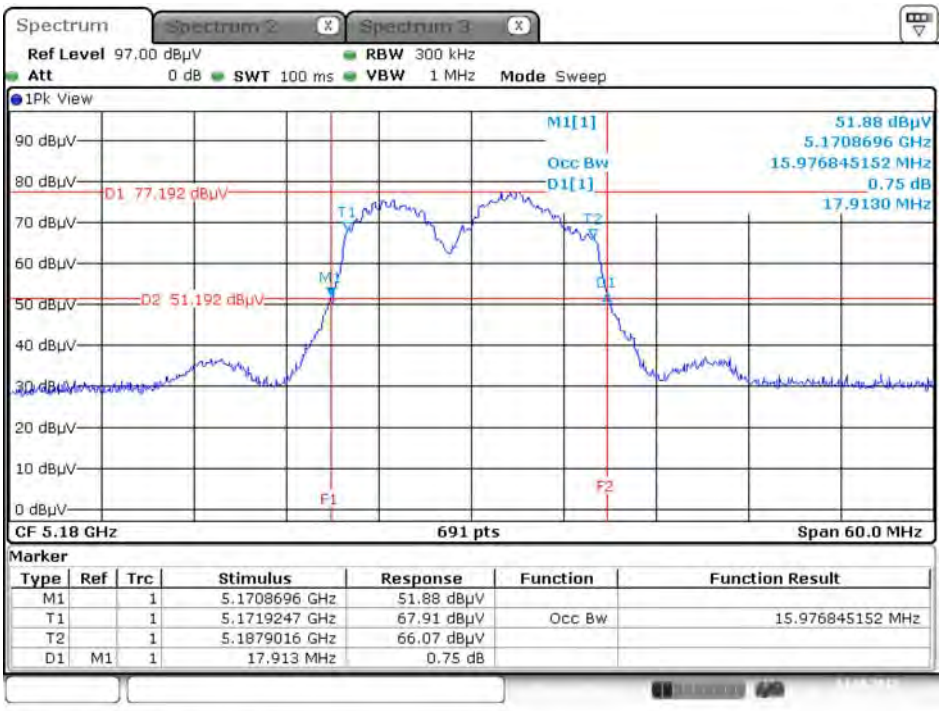


26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5210 MHz

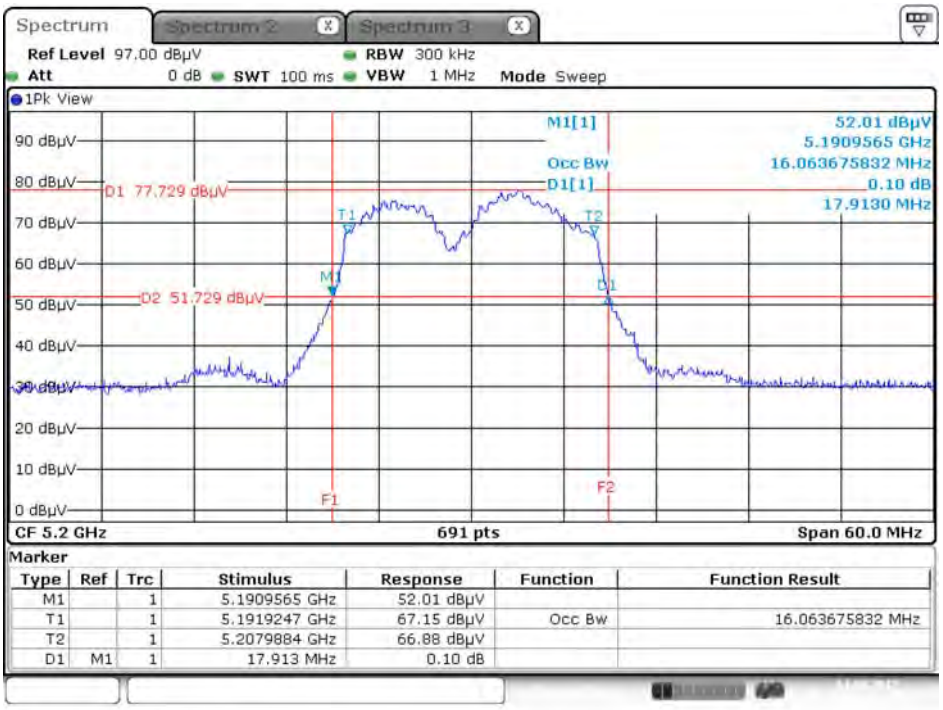


For outdoor use master B1

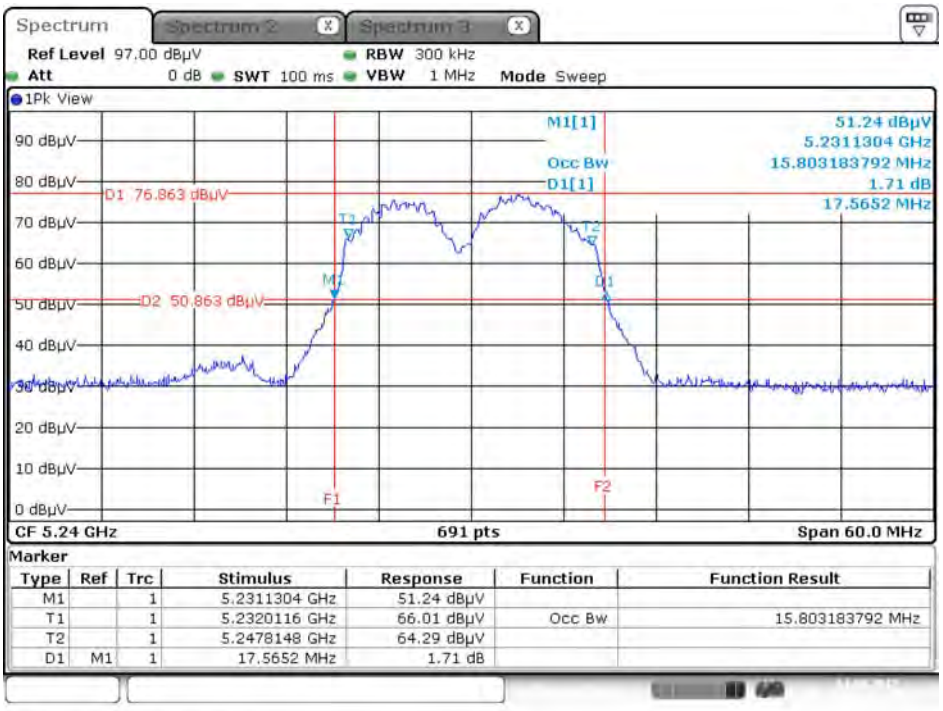
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5180 MHz



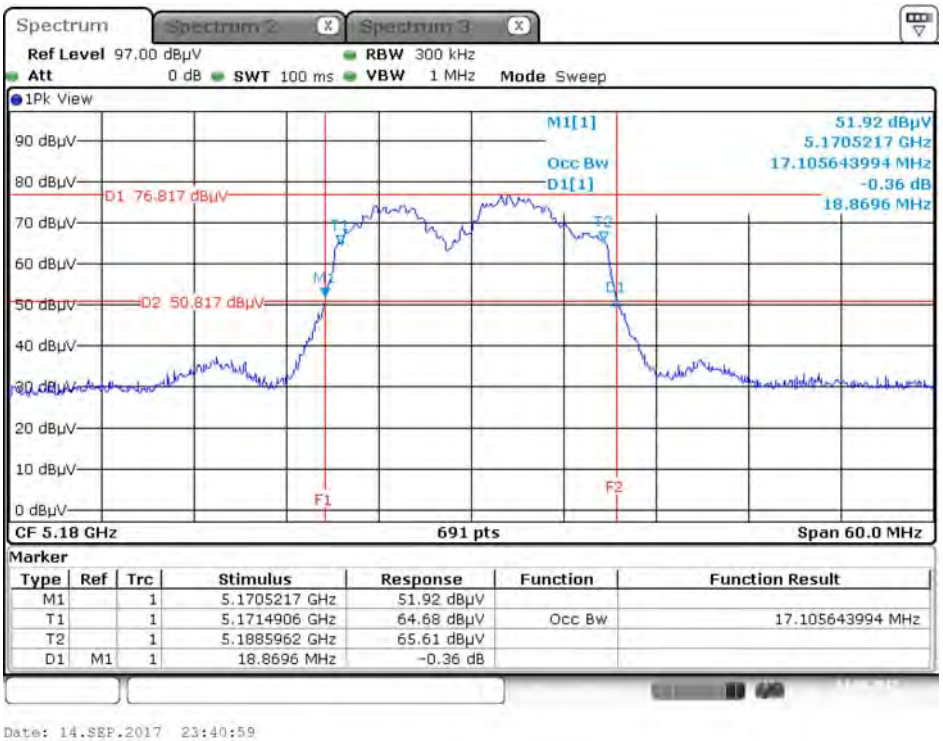
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5200 MHz



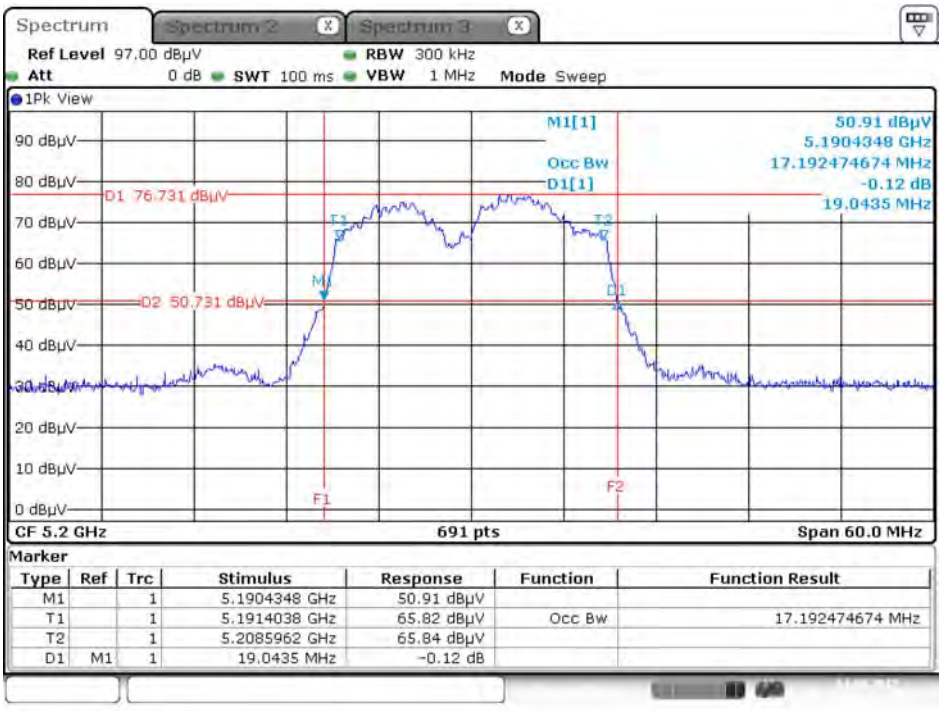
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz



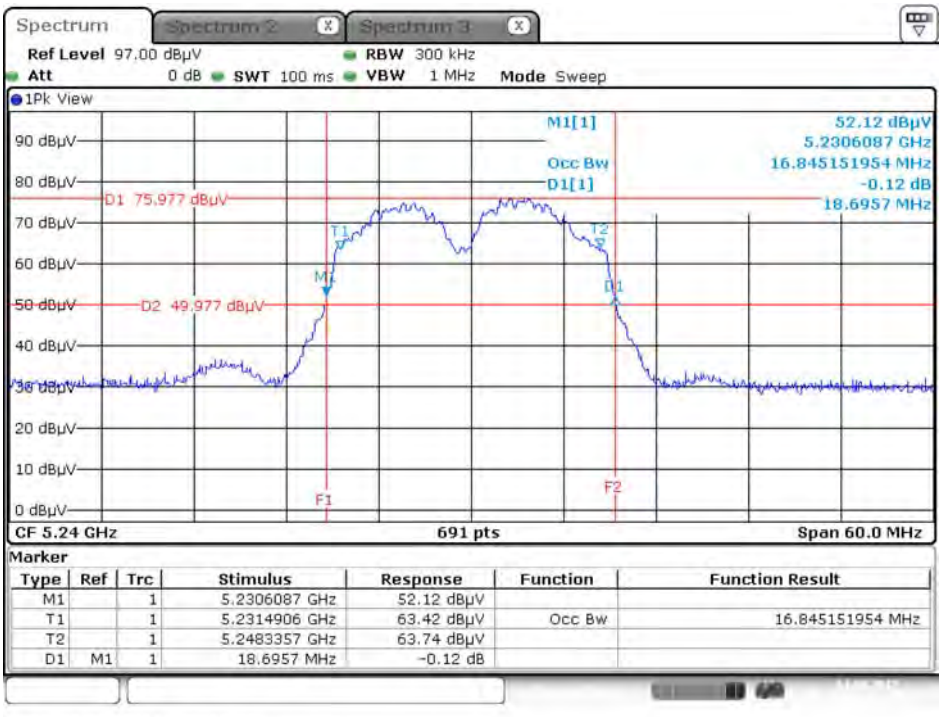
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5180 MHz



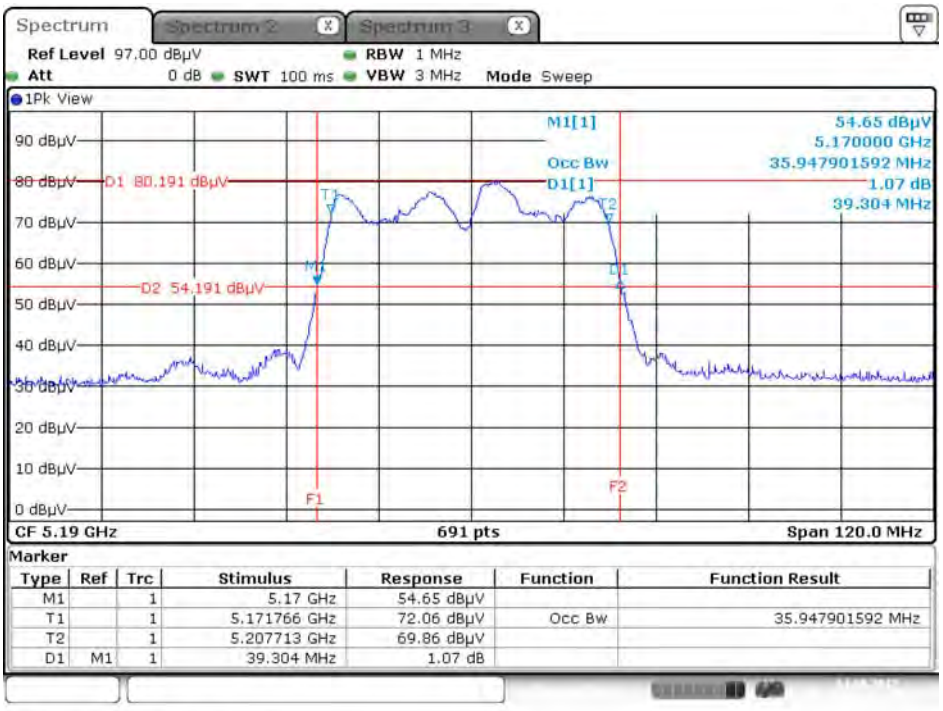
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5200 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz

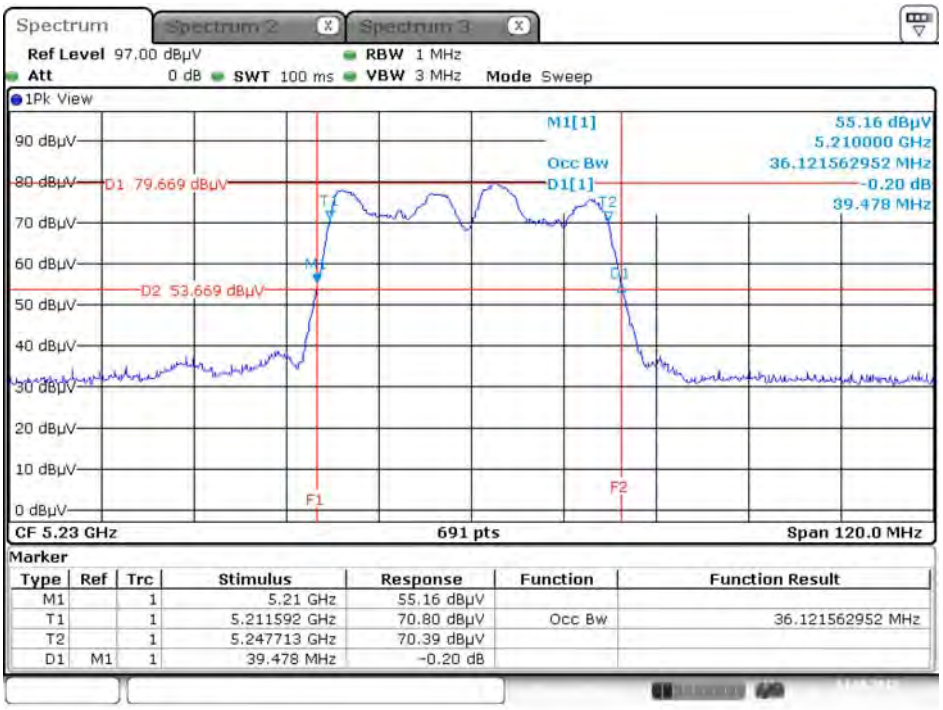


26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5190 MHz



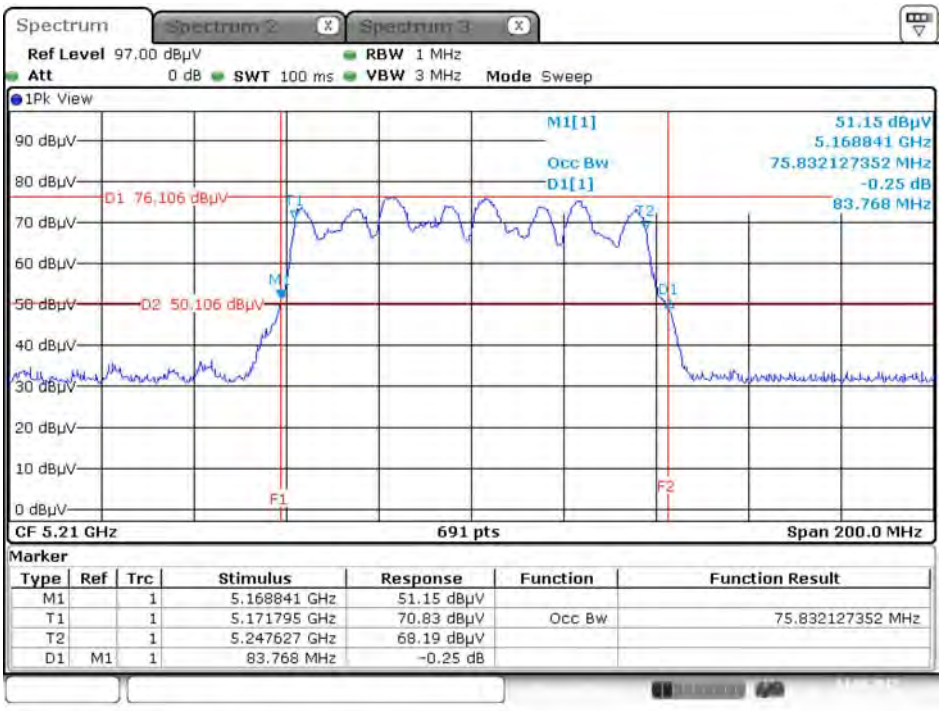
Date: 14.SEP.2017 23:42:44

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5230 MHz



Date: 14.SEP.2017 23:43:12

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5210 MHz

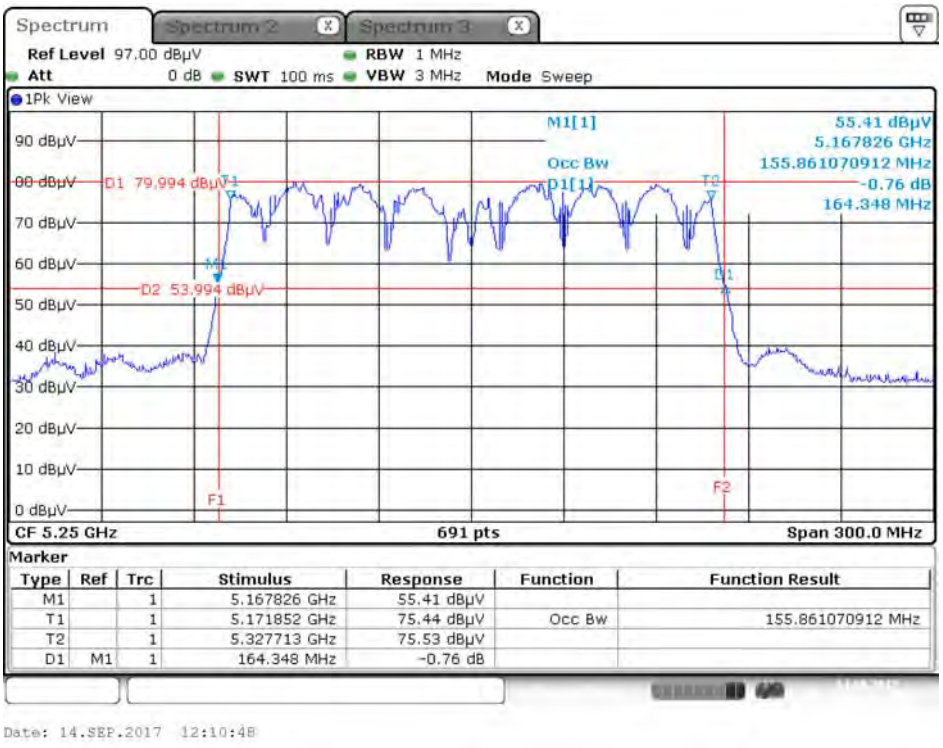


802.11ac MCS0/Nss2 VHT80+80

For indoor use master and slave without radar detection

Type 1

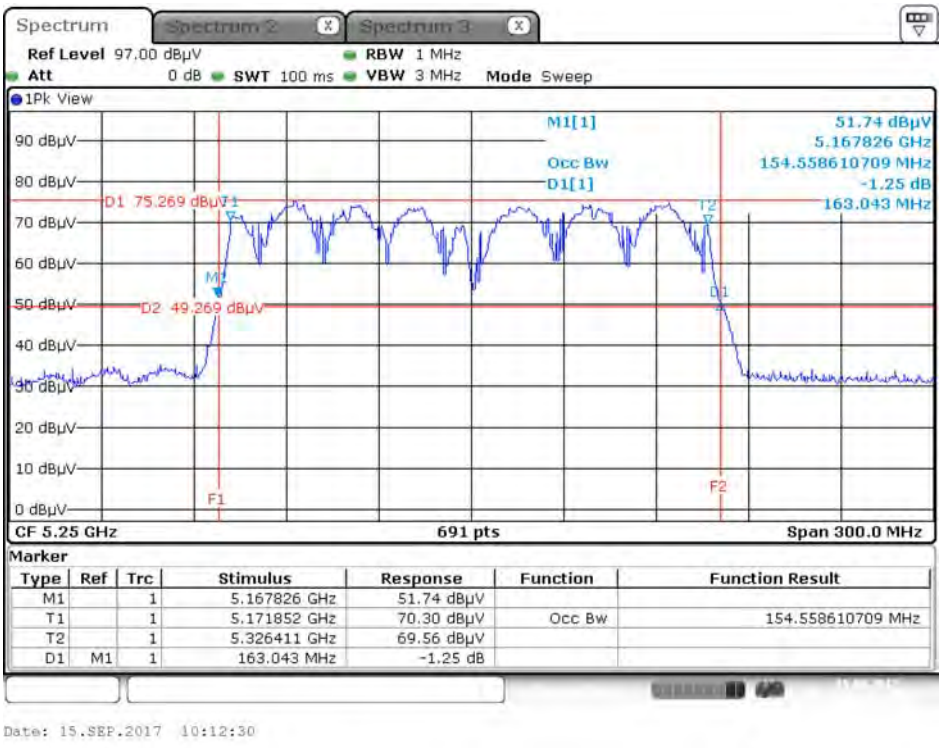
26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5210 MHz+5290 MHz



For outdoor use master B1

Type 1

26dB Bandwidth and 99% Occupied Bandwidth Plot on Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5210 MHz+5290 MHz



4.2. Maximum Conducted Output Power Measurement

4.2.1. Limit

Frequency Band			Limit
☒	5.15~5.25 GHz		
	Operating Mode		
	☒	Outdoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. 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. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
	☒	Indoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. 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.
	☐	Fixed point-to-point access points	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.
	☒	Client devices	The maximum conducted output power over the frequency band of operation shall not exceed 250 mW (24dBm) provided the maximum antenna gain does not exceed 6 dBi. 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.

☒	5.25-5.35 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.
☐	5.470-5.725 GHz	
☐	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.

4.2.2. Measuring Instruments and Setting

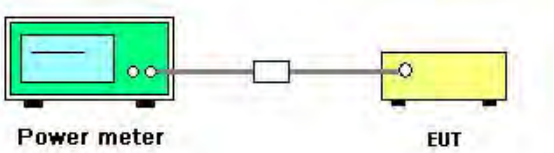
Please refer to section 5 of equipments list in this report. The following table is the setting of the power meter.

Power Meter Parameter	Setting
Detector	AVERAGE

4.2.3. Test Procedures

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.

4.2.4. Test Setup Layout



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 Maximum Conducted Output Power

For indoor use master B1 and indoor, outdoor use B2

Mode	Frequency	Conducted Power (dBm)					Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
802.11a	5180 MHz	14.93	15.93	15.89	15.87	21.70	28.00	Complies
	5200 MHz	14.95	15.86	15.83	15.84	21.66	28.00	Complies
	5240 MHz	15.36	15.78	15.62	16.11	21.75	28.00	Complies
	5260 MHz	9.66	9.11	9.89	10.45	15.82	21.47	Complies
	5300 MHz	9.27	9.23	10.02	10.17	15.71	21.53	Complies
	5320 MHz	10.21	9.92	9.68	9.45	15.84	21.59	Complies
802.11ac MCS0/Nss1 VHT20	5180 MHz	15.06	16.12	16.03	15.95	21.83	28.00	Complies
	5200 MHz	15.19	15.98	15.89	15.76	21.74	28.00	Complies
	5240 MHz	15.32	15.72	15.89	16.14	21.80	28.00	Complies
	5260 MHz	9.28	9.22	9.92	10.15	15.68	21.76	Complies
	5300 MHz	9.17	9.14	9.99	10.12	15.65	21.76	Complies
	5320 MHz	9.93	9.87	9.67	9.44	15.75	21.78	Complies

Note:

For 802.11a:

5180 MHz Antenna gain=8dBi >6dBi, so power limit= 30 – (8 – 6) = 28.00dBm.
5200 MHz Antenna gain=8dBi >6dBi, so power limit= 30 – (8 – 6) = 28.00dBm.
5240 MHz Antenna gain=8dBi >6dBi, so power limit= 30 – (8 – 6) = 28.00dBm.
5260 MHz Power limit=23.98dBm or 11+10log(B), Antenna gain=8dBi >6dBi; so power limit=11+10log(17.65)-(8-6)=21.47dBm<23.98dBm, so limit=21.47dBm.
5300 MHz Power limit=23.98dBm or 11+10log(B), Antenna gain=8dBi >6dBi; so power limit=11+10log(17.91)-(8-6)=21.53dBm<23.98dBm, so limit=21.53dBm.
5320 MHz Power limit=23.98dBm or 11+10log(B), Antenna gain=8dBi >6dBi; so power limit=11+10log(18.17)-(8-6)=21.59dBm<23.98dBm, so limit=21.59dBm.

For 802.11ac VHT20:

5180 MHz Antenna gain=8dBi >6dBi, so power limit= 30 – (8 – 6) = 28.00dBm.
5200 MHz Antenna gain=8dBi >6dBi, so power limit= 30 – (8 – 6) = 28.00dBm.
5240 MHz Antenna gain=8dBi >6dBi, so power limit= 30 – (8 – 6) = 28.00dBm.
5260 MHz Power limit=23.98dBm or 11+10log(B), Antenna gain=8dBi >6dBi; so power limit=11+10log(18.87)-(8-6)=21.76dBm<23.98dBm, so limit=21.76dBm.
5300 MHz Power limit=23.98dBm or 11+10log(B), Antenna gain=8dBi >6dBi; so power limit=11+10log(18.87)-(8-6)=21.76dBm<23.98dBm, so limit=21.76dBm.
5320 MHz Power limit=23.98dBm or 11+10log(B), Antenna gain=8dBi >6dBi; so power limit=11+10log(18.96)-(8-6)=21.78dBm<23.98dBm, so limit=21.78dBm.

Mode	Frequency	Conducted Power (dBm)					Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
802.11ac MCS0/Nss1 VHT40	5190 MHz	16.93	17.16	17.07	17.04	23.07	28.00	Complies
	5230 MHz	18.12	18.44	18.78	18.67	24.53	28.00	Complies
	5270 MHz	11.81	12.37	13.54	13.73	18.96	21.98	Complies
	5310 MHz	12.16	12.76	12.97	12.84	18.71	21.98	Complies
802.11ac MCS0/Nss1 VHT80	5210 MHz	14.26	14.81	14.46	14.63	20.57	28.00	Complies
	5290 MHz	14.61	14.74	14.59	14.72	20.69	21.98	Complies

Note:

For 802.11ac MCS0/Nss1 VHT40:

5190 MHz Antenna gain=8dBi >6dBi, so power limit= 30 – (8 – 6) = 28.00dBm.
5230 MHz Antenna gain=8dBi >6dBi, so power limit= 30 – (8 – 6) = 28.00dBm.
5270 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5310 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.

For 802.11ac MCS0/Nss1 VHT80:

5210 MHz Antenna gain=8dBi >6dBi, so power limit= 30 – (8 – 6) = 28.00dBm.
5290 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.

For indoor use slave without radar detection B1

Mode	Frequency	Conducted Power (dBm)					Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
802.11a	5180 MHz	9.91	9.92	9.75	9.92	15.90	21.98	Complies
	5200 MHz	9.92	9.94	9.93	9.98	15.96	21.98	Complies
	5240 MHz	9.85	9.46	9.80	9.94	15.79	21.98	Complies
802.11ac MCS0/Nss1 VHT20	5180 MHz	9.75	9.71	9.69	9.69	15.73	21.98	Complies
	5200 MHz	9.72	9.86	9.72	9.78	15.79	21.98	Complies
	5240 MHz	9.64	9.62	9.98	10.11	15.86	21.98	Complies
802.11ac MCS0/Nss1 VHT40	5190 MHz	12.23	13.09	12.78	12.97	18.80	21.98	Complies
	5230 MHz	12.28	12.73	12.72	12.65	18.62	21.98	Complies
802.11ac MCS0/Nss1 VHT80	5210 MHz	11.76	11.83	11.87	11.62	17.79	21.98	Complies

Note:

For 802.11a:

5180 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5200 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5240 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.

For 802.11ac VHT20:

5180 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5200 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5240 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.

For 802.11ac MCS0/Nss1 VHT40:

5190 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5230 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5270 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5310 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.

For 802.11ac MCS0/Nss1 VHT80:

5210 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5290 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.

For outdoor use master B1

Mode	Frequency	Conducted Power (dBm)					Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
802.11a	5180 MHz	6.33	6.49	6.82	7.02	12.69	28.00	Complies
	5200 MHz	6.44	6.55	7.04	7.13	12.82	28.00	Complies
	5240 MHz	6.55	6.29	6.92	7.42	12.84	28.00	Complies
802.11ac MCS0/Nss1 VHT20	5180 MHz	6.16	6.36	6.89	6.95	12.62	28.00	Complies
	5200 MHz	6.15	6.42	6.81	6.96	12.62	28.00	Complies
	5240 MHz	6.45	6.04	6.72	7.35	12.69	28.00	Complies
802.11ac MCS0/Nss1 VHT40	5190 MHz	6.06	6.71	6.85	6.73	12.62	28.00	Complies
	5230 MHz	6.68	6.53	6.84	7.19	12.84	28.00	Complies
802.11ac MCS0/Nss1 VHT80	5210 MHz	6.81	6.73	6.61	7.35	12.91	28.00	Complies

Note:

For 802.11a:

5180 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5200 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5240 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.

For 802.11ac VHT20:

5180 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5200 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5240 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.

For 802.11ac MCS0/Nss1 VHT40:

5190 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5230 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5270 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5310 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.

For 802.11ac MCS0/Nss1 VHT80:

5210 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5290 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.

802.11ac MCS0/Nss2 VHT80+80

For indoor use master

Type	Frequency	Conducted Power (dBm)						Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total	Band Total		
1	5210 MHz	13.64	14.13	-	-	16.90	-	28.00	Complies
	5290 MHz	-	-	13.98	13.76	16.88	-	21.98	Complies

Note:

5210 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5290 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.

For indoor use slave without radar detection B1

Type	Frequency	Conducted Power (dBm)						Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total	Band Total		
1	5210 MHz	13.64	14.13	-	-	16.90	-	21.98	Complies
	5290 MHz	-	-	13.98	13.76	16.88	-	21.98	Complies

Note:

5210 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.
5290 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.

For outdoor use master B1

Type	Frequency	Conducted Power (dBm)					Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
1	5210 MHz	9.63	9.57	-	-	12.61	28.00	Complies
	5290 MHz	-	-	9.44	9.69	12.58	21.98	Complies

Note:

5210 MHz Antenna gain=8dBi >6dBi, so power limit= 30.00 – (8 – 6) = 28.00dBm.
5290 MHz Antenna gain=8dBi >6dBi, so power limit= 23.98 – (8 – 6) = 21.98dBm.

4.3. Power Spectral Density Measurement

4.3.1. Limit

The following table is power spectral density limits and decrease power density limit rule refer to section 4.2.1.

Frequency Band			Limit
☒	5.15~5.25 GHz		
	Operating Mode		
	☒	Outdoor access point	17 dBm/MHz
	☒	Indoor access point	17 dBm/MHz
	☐	Fixed point-to-point access points	17 dBm/MHz
	☒	Mobile and portable client devices	11 dBm/MHz
☒	5.25-5.35 GHz		11 dBm/MHz
☐	5.470-5.725 GHz		11 dBm/MHz
☐	5.725~5.85 GHz		30 dBm/500kHz

4.3.2. Measuring Instruments and Setting

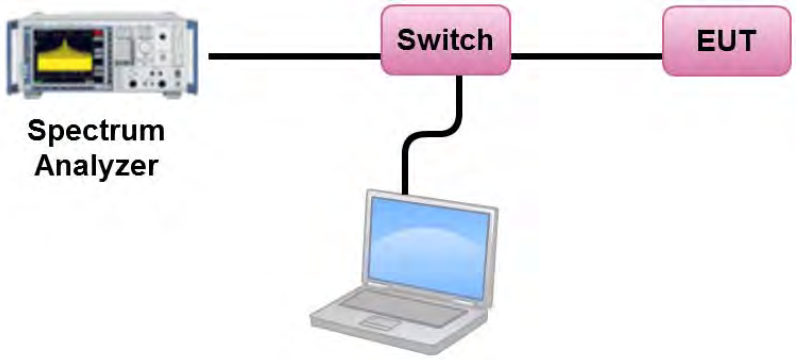
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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.	

4.3.3. 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.

4.3.4. Test Setup Layout



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 Power Spectral Density

For indoor use master B1 and indoor, outdoor use B2

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

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	8.68	8.98	Complies
40	5200 MHz	8.61	8.98	Complies
48	5240 MHz	8.64	8.98	Complies
52	5260 MHz	2.77	2.98	Complies
60	5300 MHz	2.65	2.98	Complies
64	5320 MHz	2.78	2.98	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so band 1 limit =17-(14.02-6)=8.98dBm/MHz.

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

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
36	5180 MHz	8.77	8.98	Complies
40	5200 MHz	8.73	8.98	Complies
48	5240 MHz	8.79	8.98	Complies
52	5260 MHz	2.66	2.98	Complies
60	5300 MHz	2.64	2.98	Complies
64	5320 MHz	2.71	2.98	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so band 1 limit =17-(14.02-6)=8.98dBm/MHz.

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

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
38	5190 MHz	6.99	8.98	Complies
46	5230 MHz	8.53	8.98	Complies
54	5270 MHz	2.89	2.98	Complies
62	5310 MHz	2.59	2.98	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so band 1 limit =17-(14.02-6)=8.98dBm/MHz.

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

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
42	5210 MHz	1.47	8.98	Complies
58	5290 MHz	1.61	2.98	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so band 1 limit =17-(14.02-6)=8.98dBm/MHz.

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

For indoor use slave without radar detection B1

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

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.92	2.98	Complies
40	5200 MHz	2.93	2.98	Complies
48	5240 MHz	2.78	2.98	Complies

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

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
36	5180 MHz	2.74	2.98	Complies
40	5200 MHz	2.80	2.98	Complies
48	5240 MHz	2.82	2.98	Complies

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

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
38	5190 MHz	2.83	2.98	Complies
46	5230 MHz	2.66	2.98	Complies

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

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
42	5210 MHz	-1.28	2.98	Complies

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

For outdoor use master B1

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

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-0.32	8.98	Complies
40	5200 MHz	-0.26	8.98	Complies
48	5240 MHz	-0.14	8.98	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so limit =17-(14.02-6)=8.98dBm/MHz.

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
36	5180 MHz	-0.38	8.98	Complies
40	5200 MHz	-0.32	8.98	Complies
48	5240 MHz	-0.30	8.98	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so limit =17-(14.02-6)=8.98dBm/MHz.

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
38	5190 MHz	-3.25	8.98	Complies
46	5230 MHz	-3.11	8.98	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so limit =17-(14.02-6)=8.98dBm/MHz.

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
42	5210 MHz	-5.98	8.98	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =14.02dBi, so limit =17-(14.02-6)=8.98dBm/MHz.

802.11ac MCS0/Nss2 VHT80+80

For indoor use master

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	5210 MHz	-2.12	-			11.99	Complies
	5290 MHz	-2.25				5.99	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.01dBi, so band 1 limit=17-(11.01-6)=11.99dBm/MHz.

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.01dBi, so band 2 limit=11-(11.01-6)=5.99dBm/MHz.

For indoor use slave without radar detection B1

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	5210 MHz	-2.12	-			5.99	Complies
	5290 MHz	-2.25				5.99	Complies

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

For outdoor use master B1

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	5210 MHz	-6.53	-			11.99	Complies
	5290 MHz	-6.58				5.99	Complies

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.01dBi, so band 1 limit=17-(11.01-6)=11.99dBm/MHz.

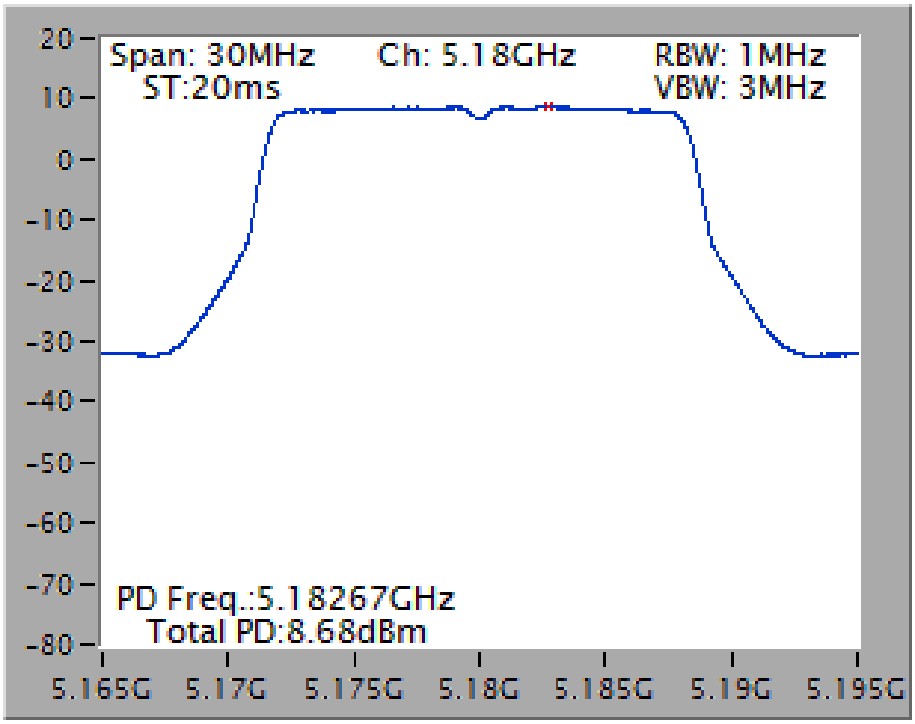
Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.01dBi, so band 2 limit=11-(11.01-6)=5.99dBm/MHz.

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

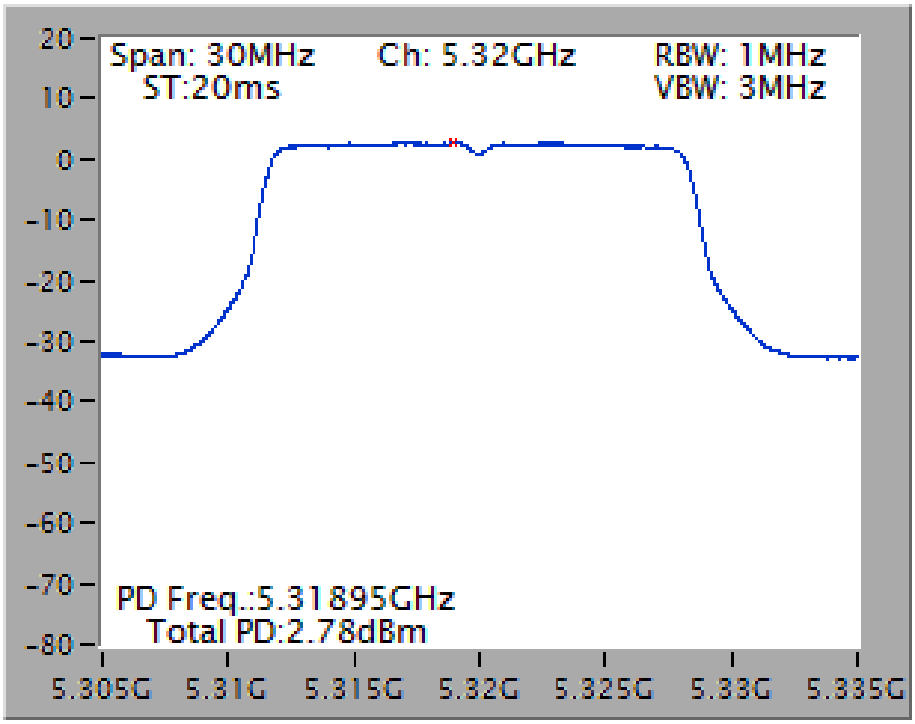
For plots, only the channel with worse result was shown.

For indoor use master B1 and indoor, outdoor use B2

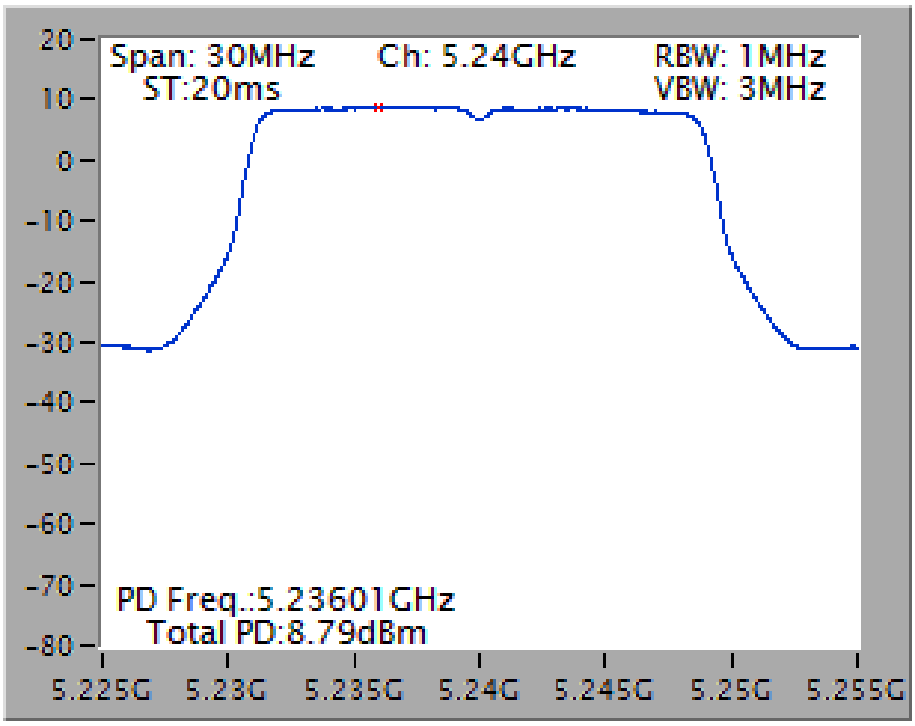
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5180 MHz



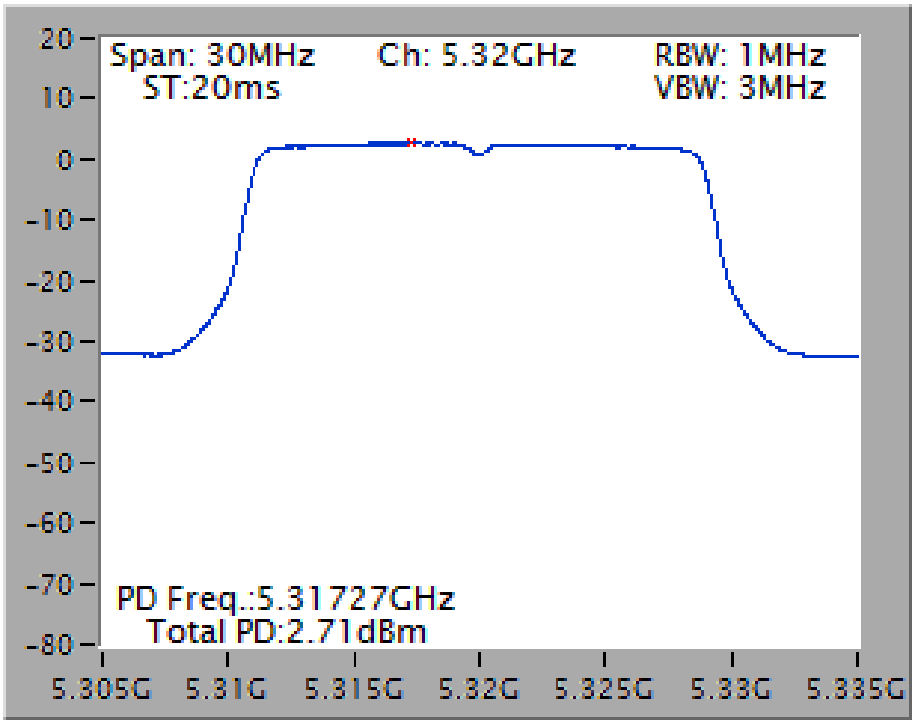
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5320 MHz



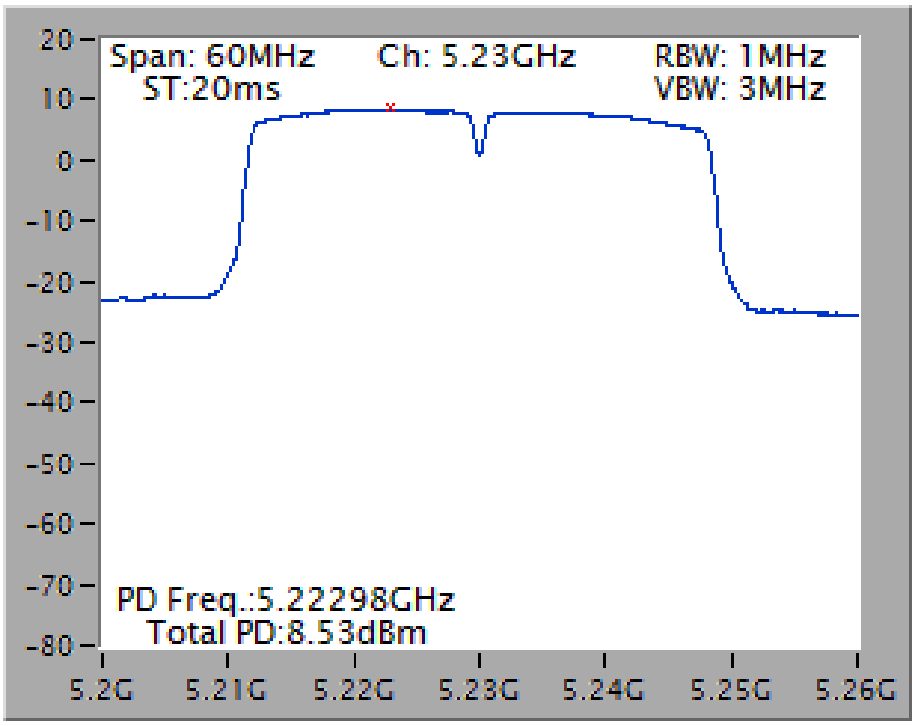
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz



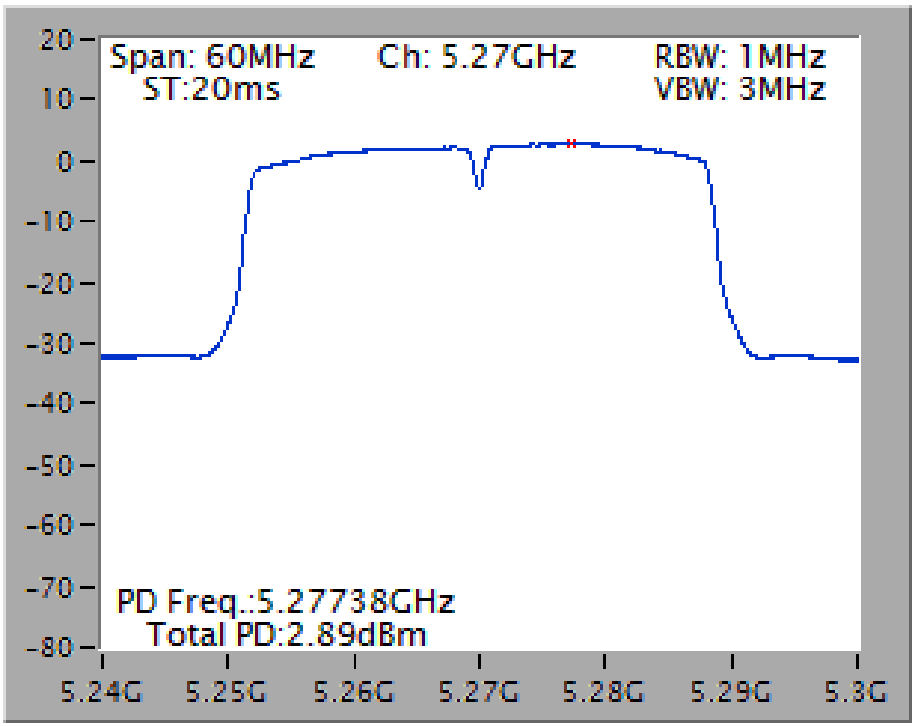
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5320 MHz



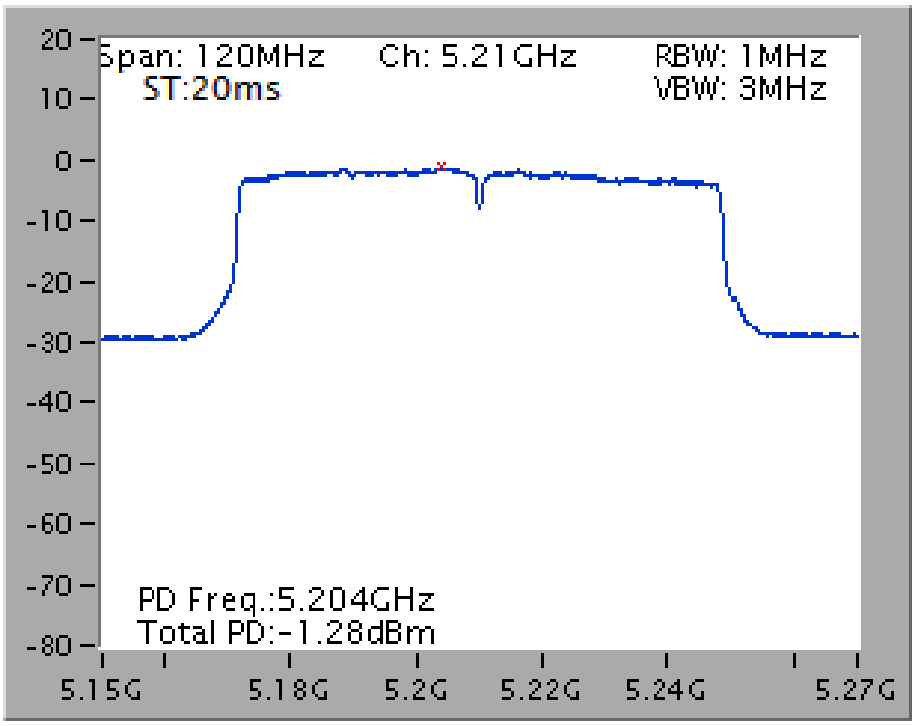
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5230 MHz



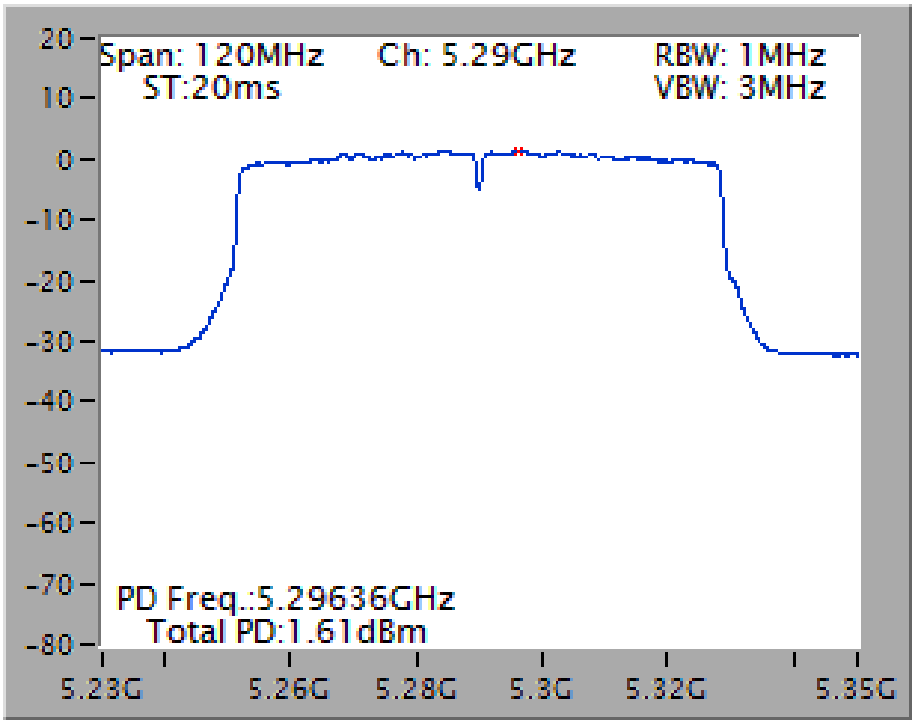
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5270 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5210 MHz

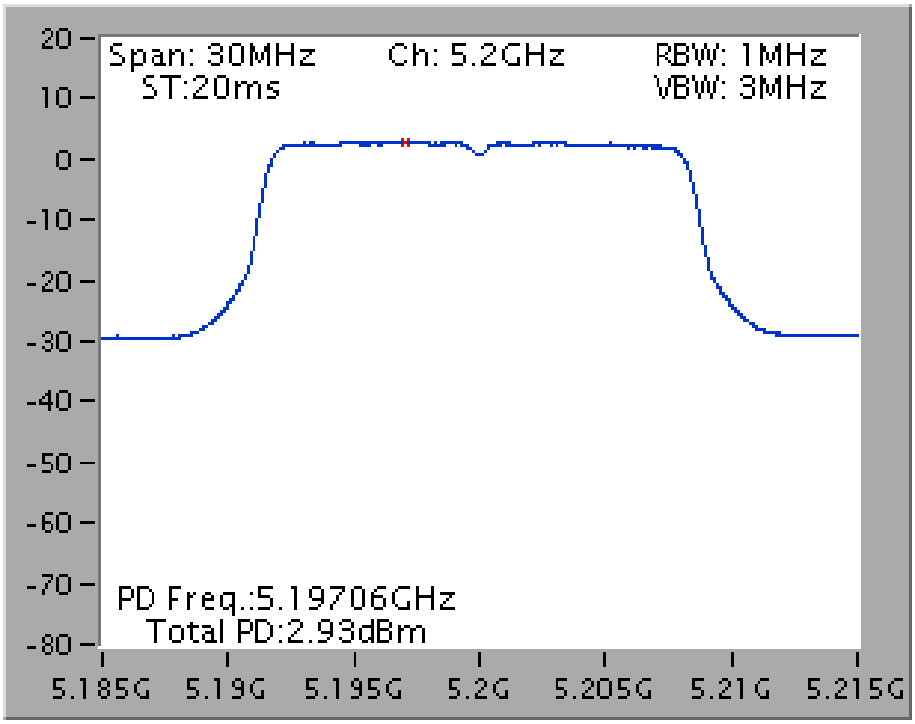


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5290 MHz

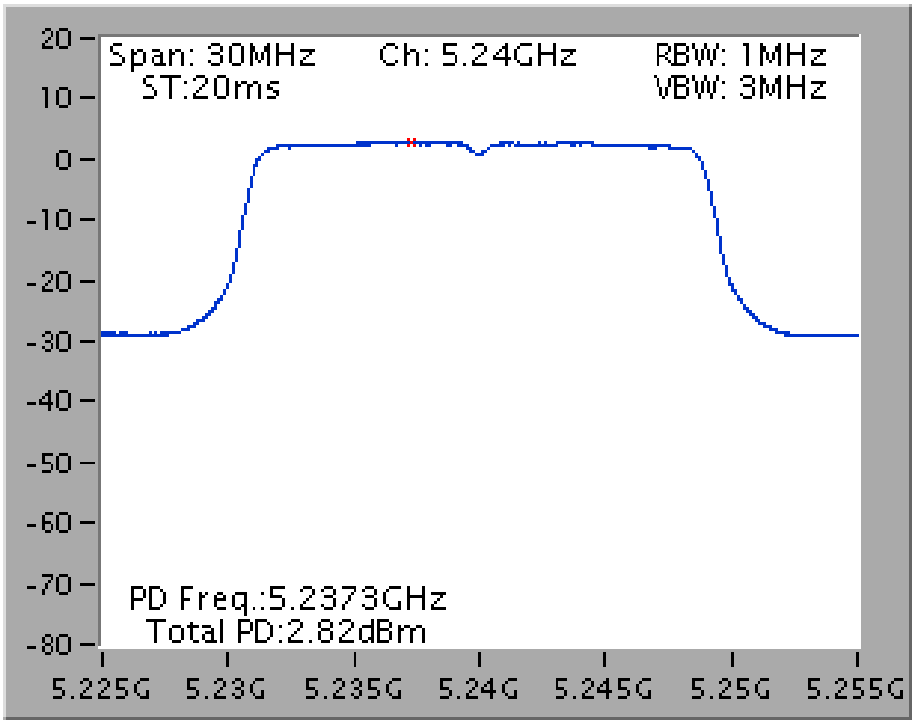


For indoor use slave without radar detection B1

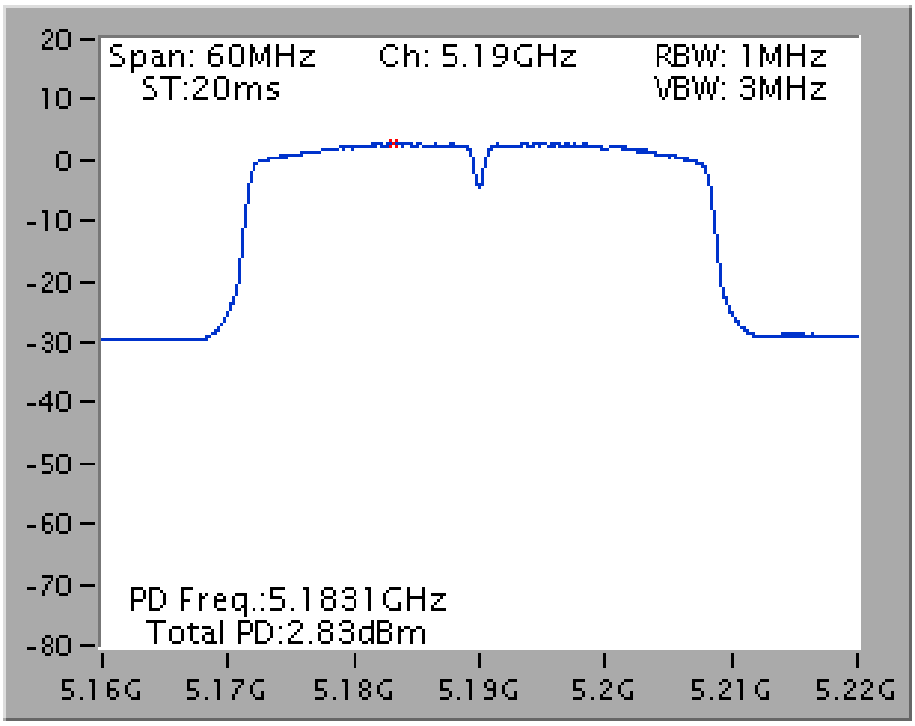
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5200 MHz



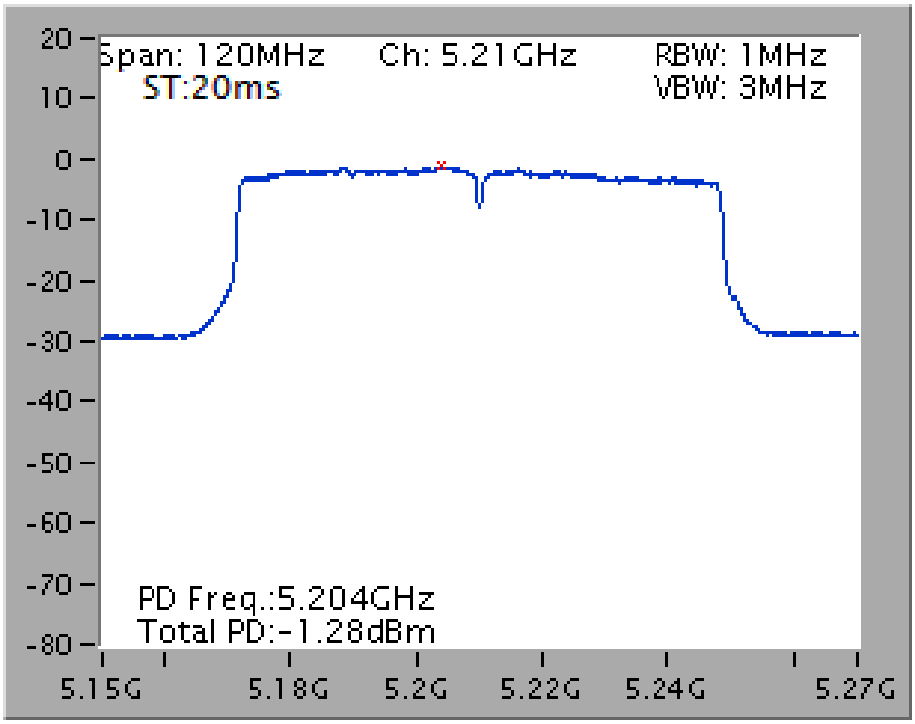
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5190 MHz

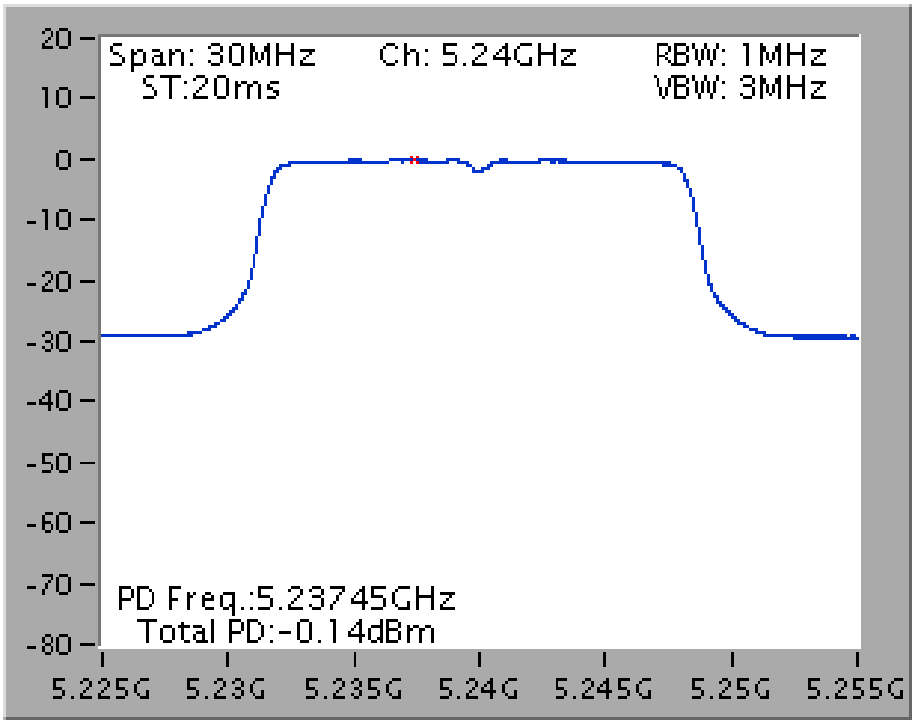


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5210 MHz

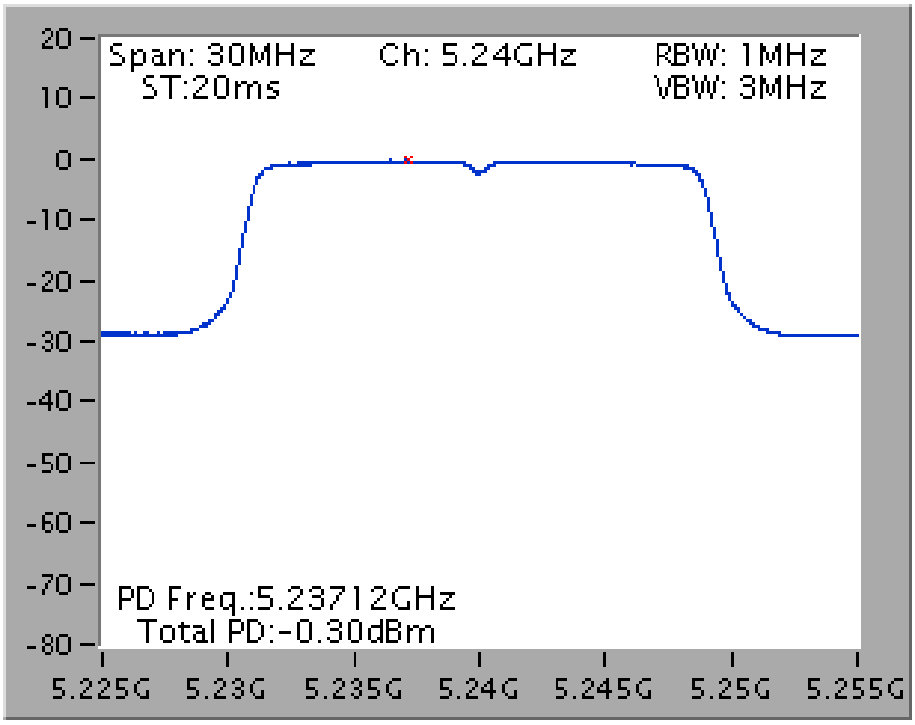


For outdoor use master B1

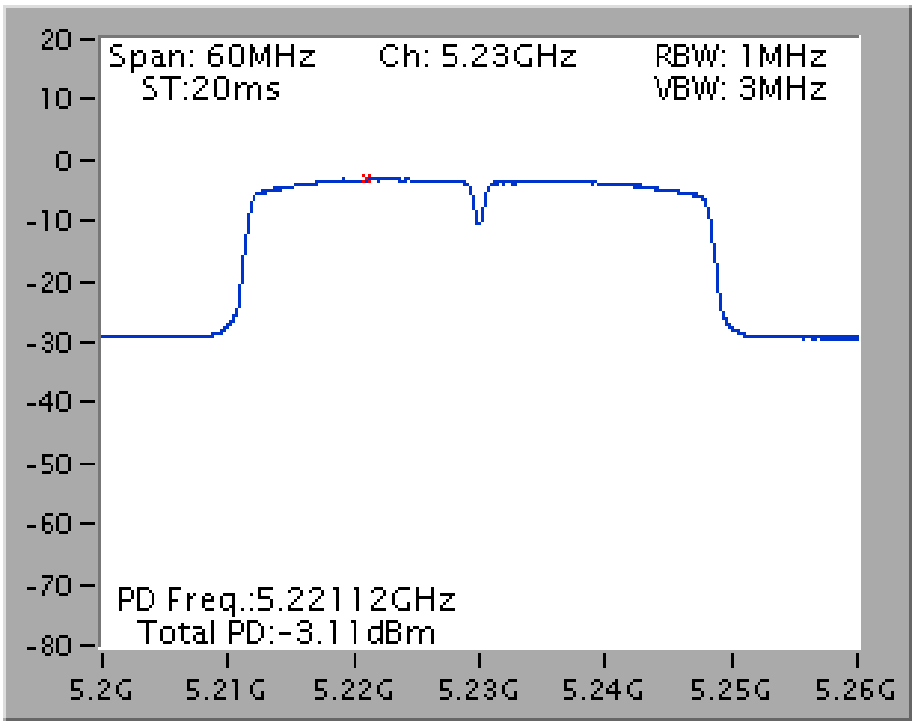
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz



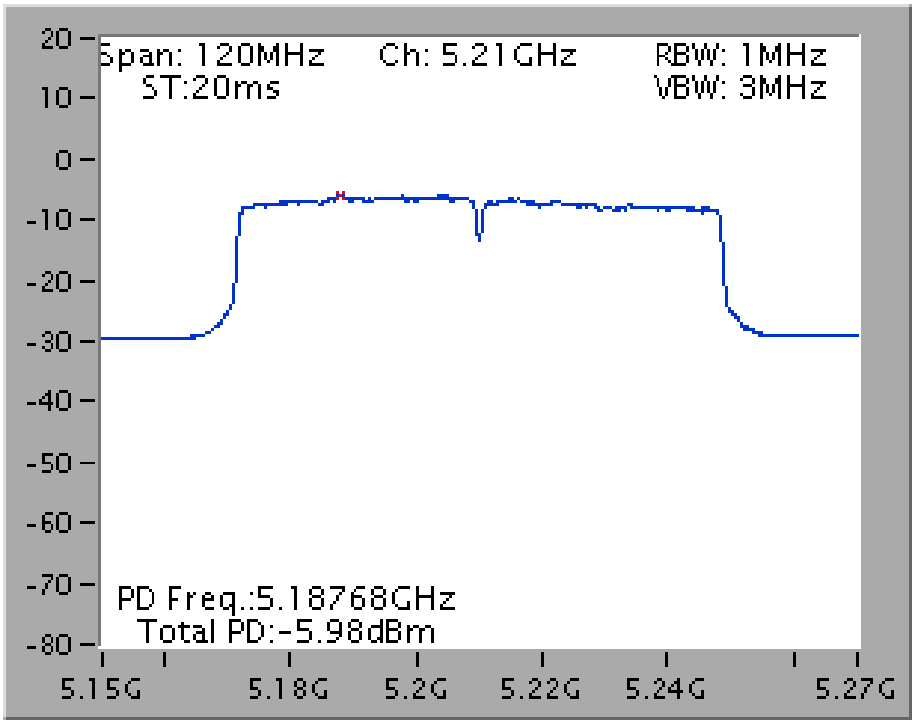
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5230 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5210 MHz

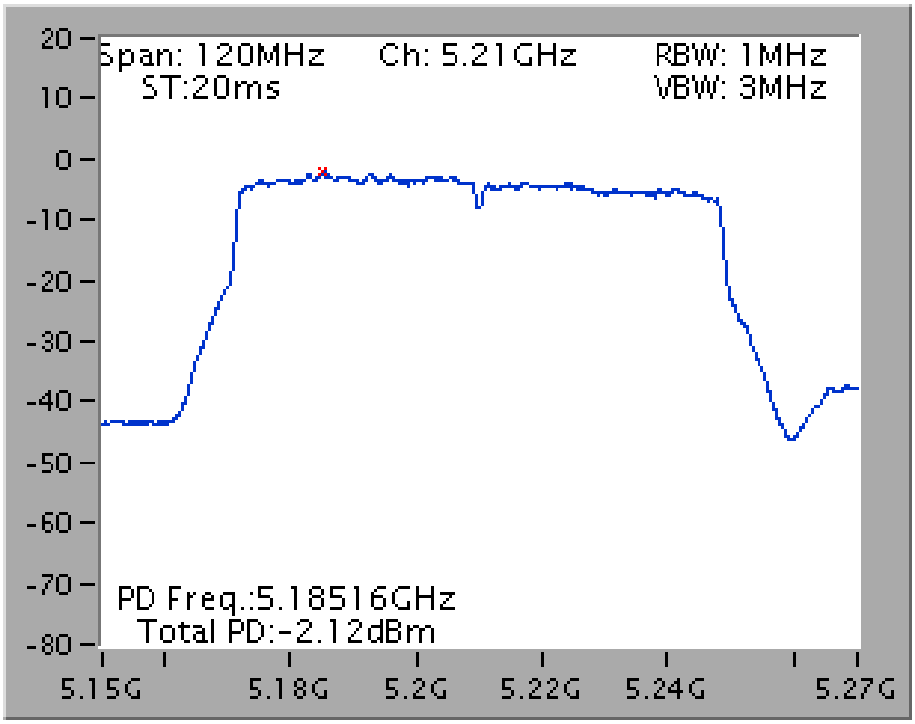


802.11ac MCS0/Nss2 VHT80+80

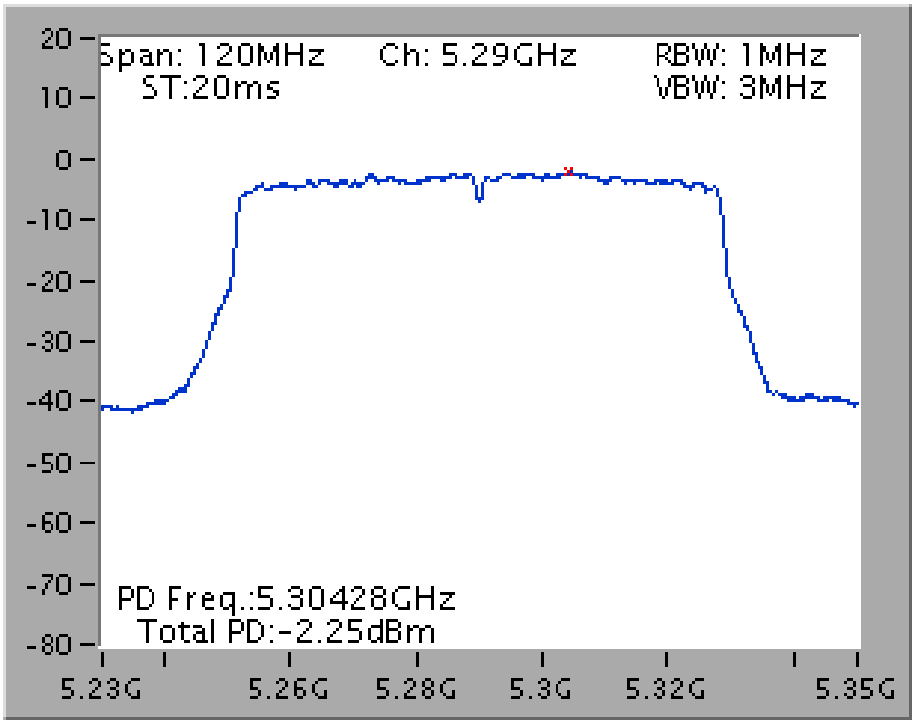
For indoor use master

Type 11

Power Density Plot on Chain 1 + Chain 2 / 5210 MHz



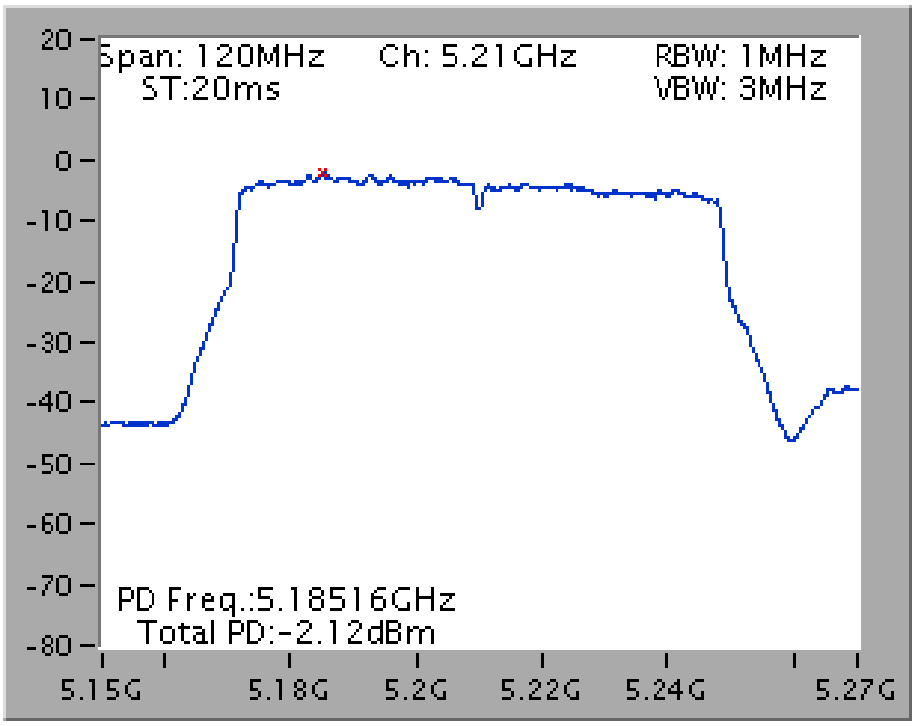
Power Density Plot on Chain 3 + Chain 4 / 5290 MHz



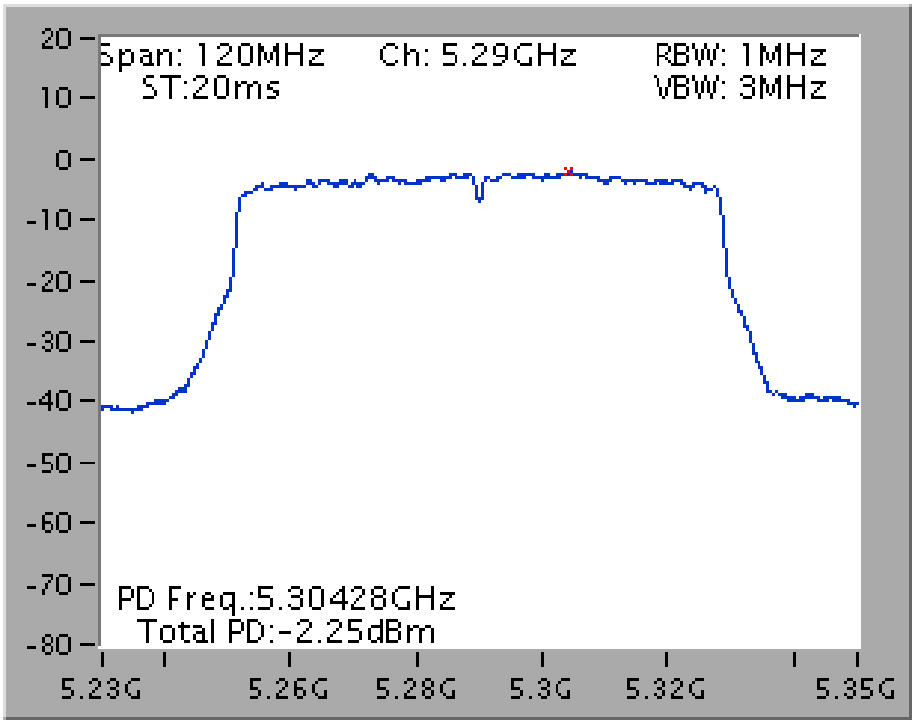
For indoor use slave without radar detection B1

Type 11

Power Density Plot on Chain 1 + Chain 2 / 5210 MHz



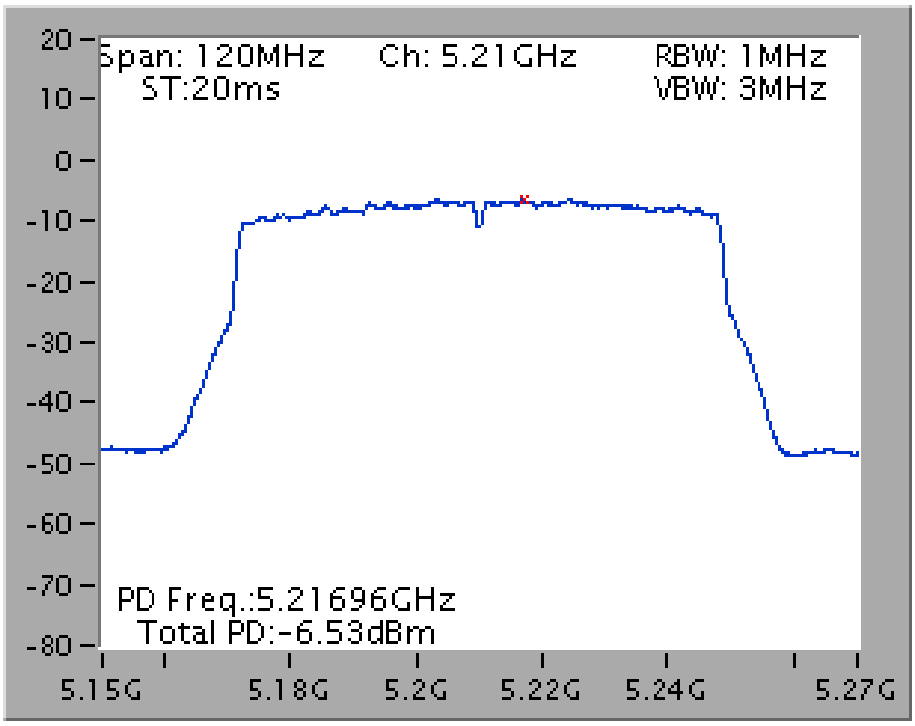
Power Density Plot on Chain 3 + Chain 4 / 5290 MHz



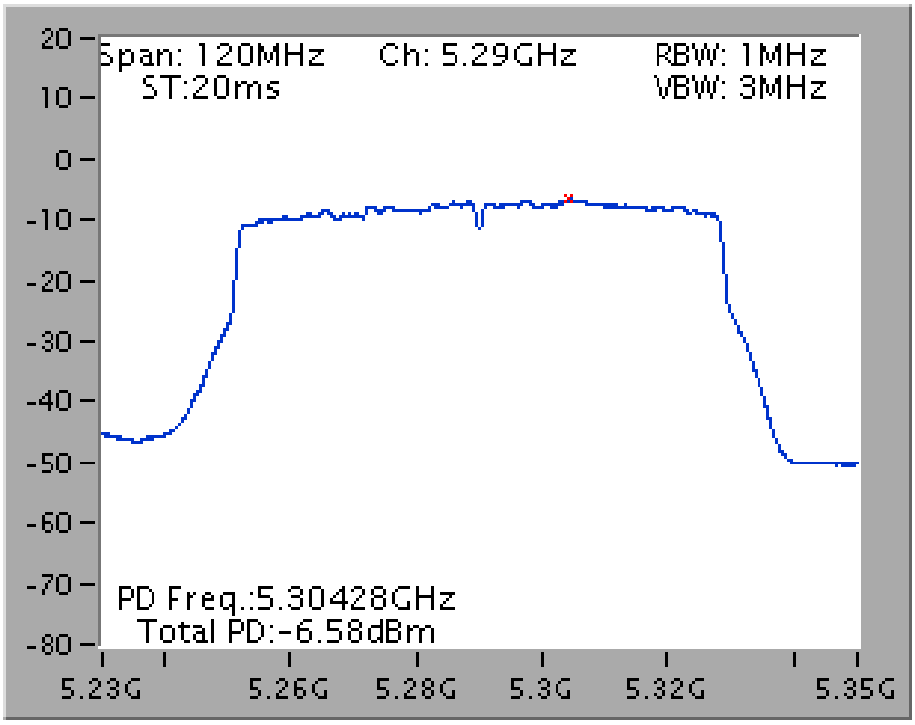
For outdoor use master B1

Type 1

Power Density Plot on Chain 1 + Chain 2 / 5210 MHz



Power Density Plot on Chain 3 + Chain 4 / 5290 MHz



4.4. Unwanted Emissions

4.4.1. 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).	

4.4.2. Measuring Instruments

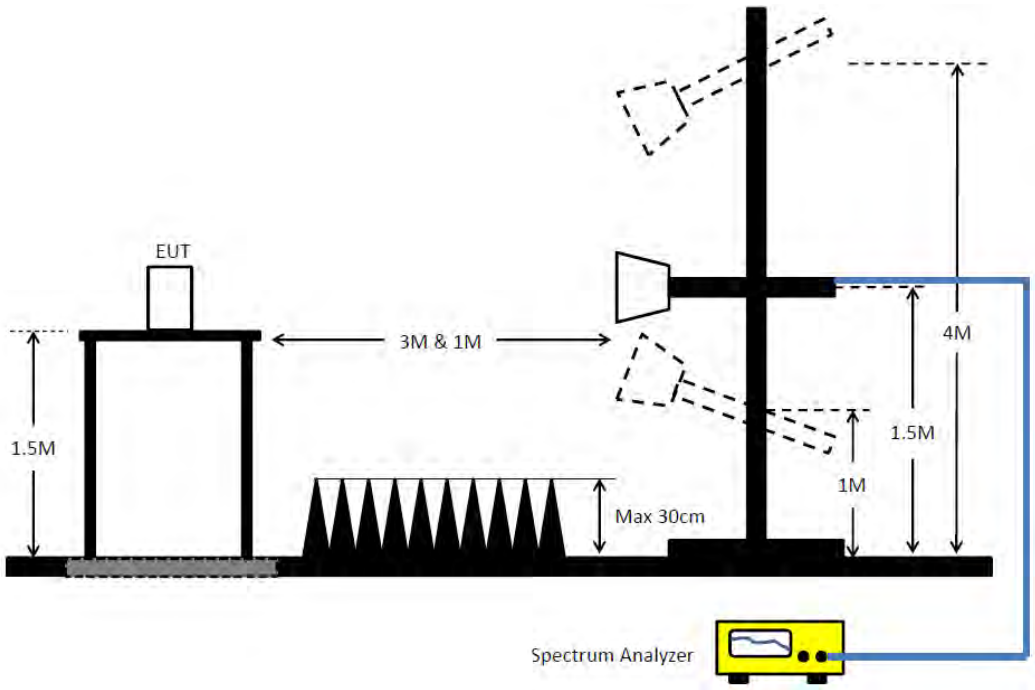
Refer a test equipment and calibration data table in this test report.

4.4.3. 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.		

4.4.4. Test Setup

Above 1GHz



4.4.5. Transmitter Unwanted Emissions

Refer as Appendix A

4.5. Antenna Requirements

4.5.1. 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.

4.5.2. 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

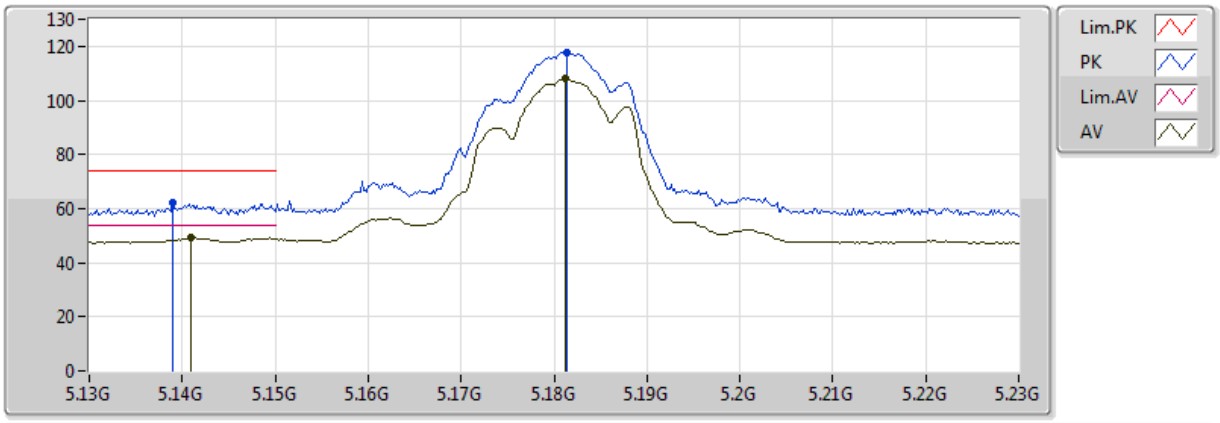
Test Items	Uncertainty	Remark
Conducted Emission	1.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%

802.11a, 802.11ac VHT20, 802.11ac VHT40, 802.11ac VHT80
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_4TX	Pass	AV	5.1404G	53.88	54.00	-0.12	9.74	3	Vertical	71	2.29	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX



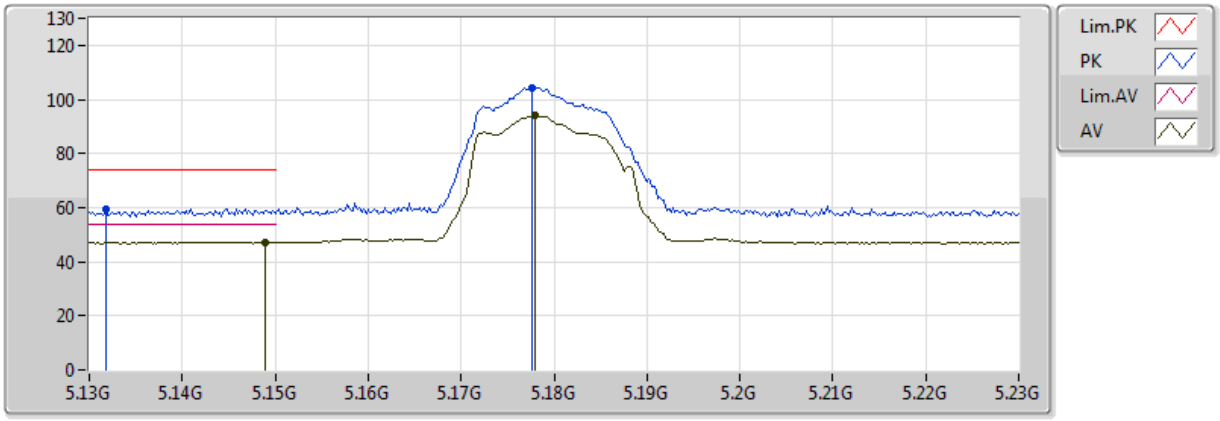
20171018
EUT Z_4TX
Setting 14
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.141G	49.22	54.00	-4.78	9.74	3	Vertical	198	2.30
AV	5.1812G	108.03	Inf	-Inf	9.84	3	Vertical	198	2.30
PK	5.139G	62.29	74.00	-11.71	9.74	3	Vertical	198	2.30
PK	5.1814G	117.50	Inf	-Inf	9.84	3	Vertical	198	2.30

Mode

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

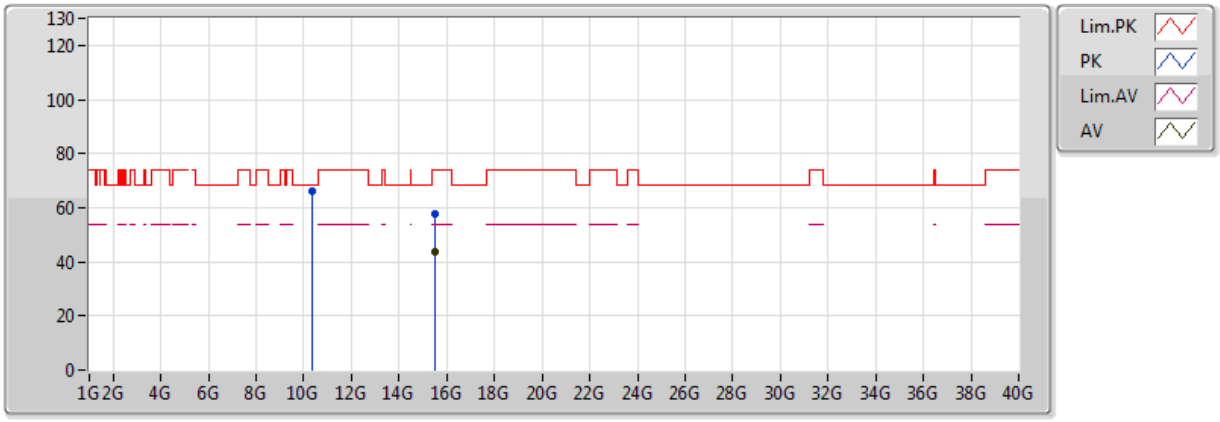


20171018
EUT Z_4TX
Setting 14
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.149G	47.32	54.00	-6.68	9.76	3	Horizontal	214	2.53
AV	5.178G	94.04	Inf	-Inf	9.83	3	Horizontal	214	2.53
PK	5.1318G	59.37	74.00	-14.63	9.72	3	Horizontal	214	2.53
PK	5.1776G	104.28	Inf	-Inf	9.83	3	Horizontal	214	2.53

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

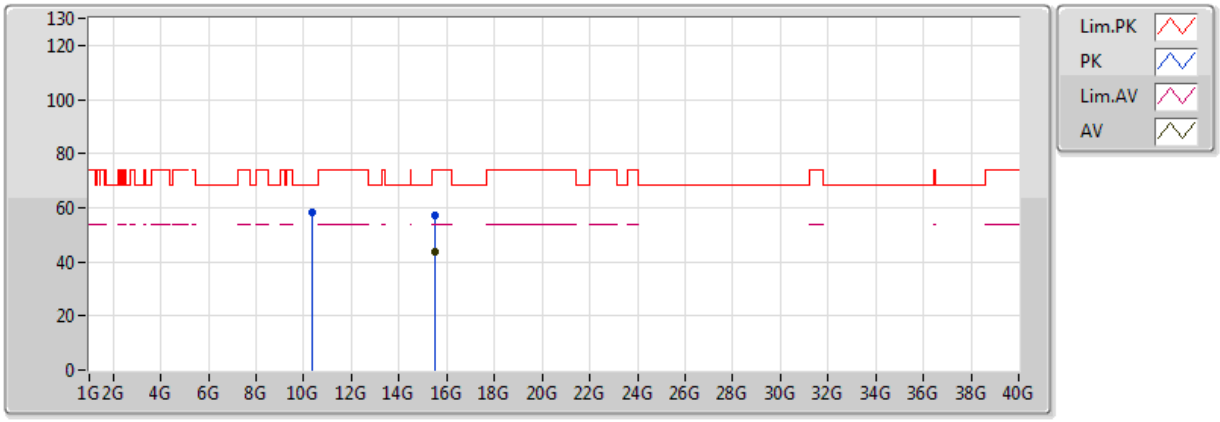


20171018
EUT Z_4TX
Setting 14
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5363G	43.88	54.00	-10.12	18.71	3	Vertical	331	1.48
PK	10.3544G	66.25	68.20	-1.95	15.99	3	Vertical	288	1.01
PK	15.5362G	57.48	74.00	-16.52	18.71	3	Vertical	331	1.48

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

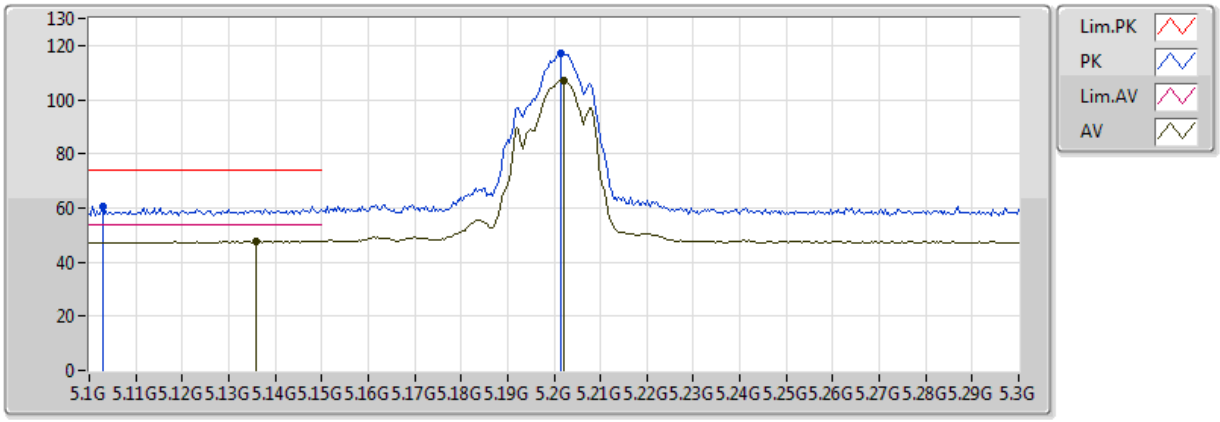


20171018
EUT Z_4TX
Setting 14
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5253G	43.66	54.00	-10.34	18.73	3	Horizontal	288	1.82
PK	10.3562G	58.12	68.20	-10.08	15.99	3	Horizontal	244	2.42
PK	15.5364G	57.22	74.00	-16.78	18.71	3	Horizontal	288	1.82

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

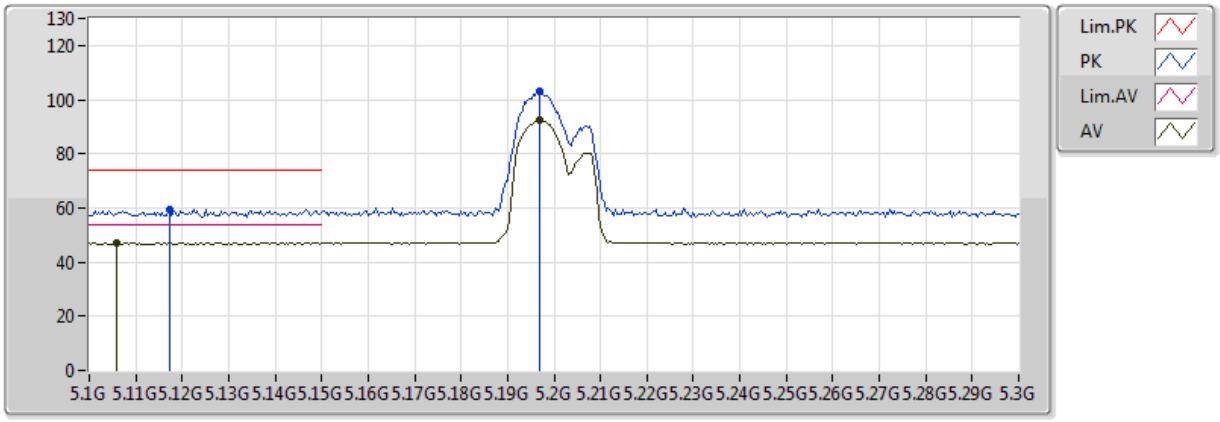


20171018
EUT Z_4TX
Setting 14
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.136G	47.80	54.00	-6.20	9.73	3	Vertical	184	2.33
AV	5.202G	107.05	Inf	-Inf	9.88	3	Vertical	184	2.33
PK	5.1028G	60.37	74.00	-13.63	9.66	3	Vertical	184	2.33
PK	5.2016G	116.98	Inf	-Inf	9.88	3	Vertical	184	2.33

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

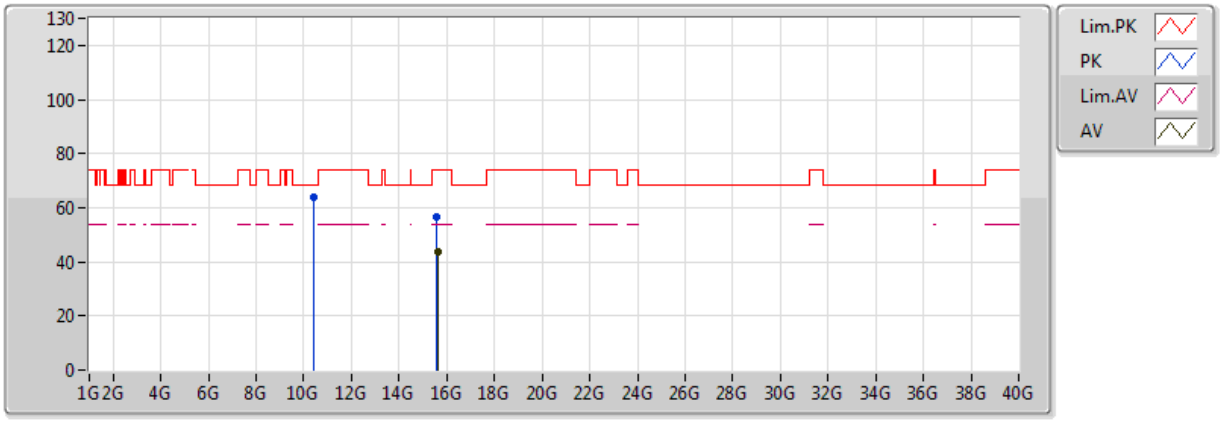


20171018
EUT Z_4TX
Setting 14
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.106G	47.12	54.00	-6.88	9.66	3	Horizontal	151	2.20
AV	5.1968G	92.27	Inf	-Inf	9.87	3	Horizontal	151	2.20
PK	5.1172G	59.35	74.00	-14.65	9.69	3	Horizontal	151	2.20
PK	5.1968G	102.96	Inf	-Inf	9.87	3	Horizontal	151	2.20

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

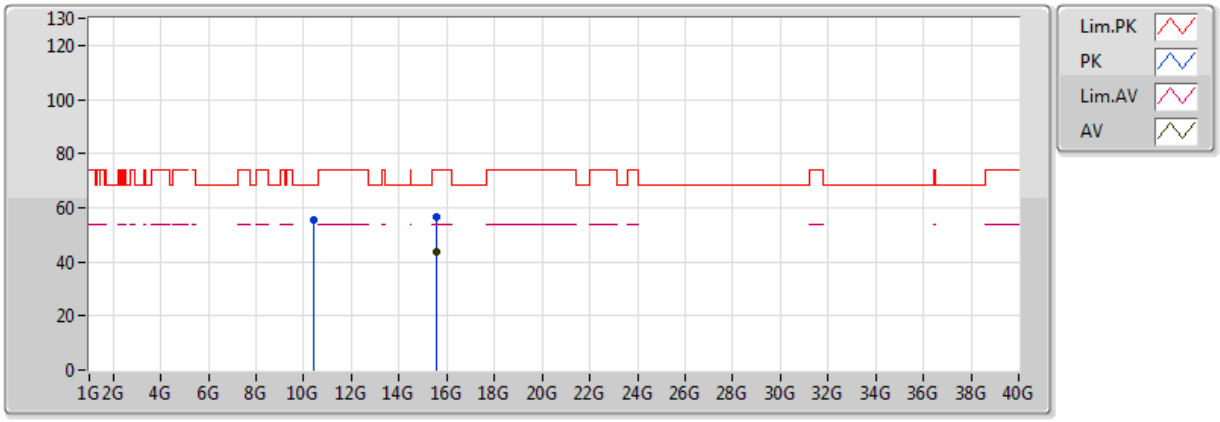


20171018
EUT Z_4TX
Setting 14
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.606G	43.65	54.00	-10.35	18.56	3	Vertical	291	1.85
PK	10.4005G	63.99	68.20	-4.21	15.99	3	Vertical	284	2.28
PK	15.595G	56.74	74.00	-17.26	18.58	3	Vertical	291	1.85

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

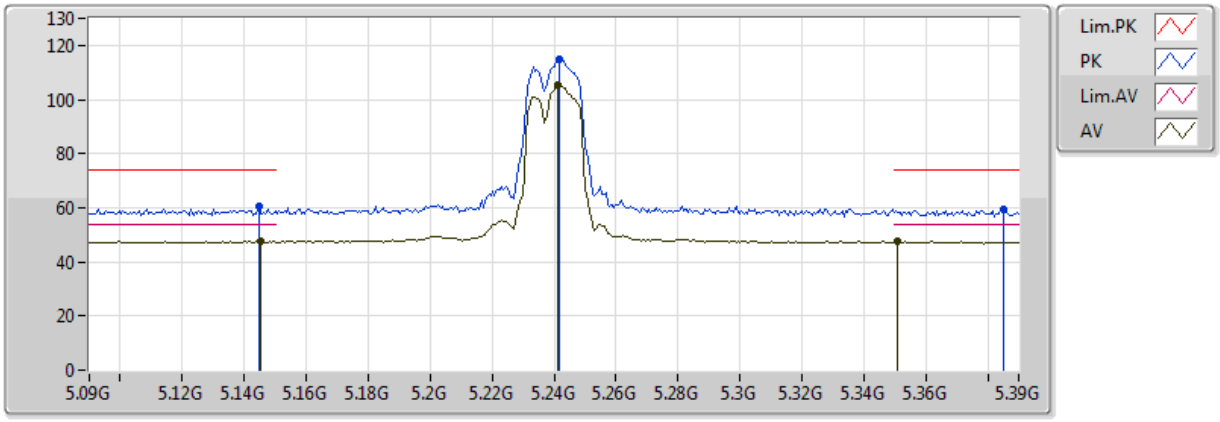


20171018
EUT Z_4TX
Setting 14
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5935G	43.73	54.00	-10.27	18.58	3	Horizontal	105	1.81
PK	10.3991G	55.54	68.20	-12.66	15.99	3	Horizontal	170	1.01
PK	15.5854G	56.85	74.00	-17.15	18.60	3	Horizontal	105	1.81

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

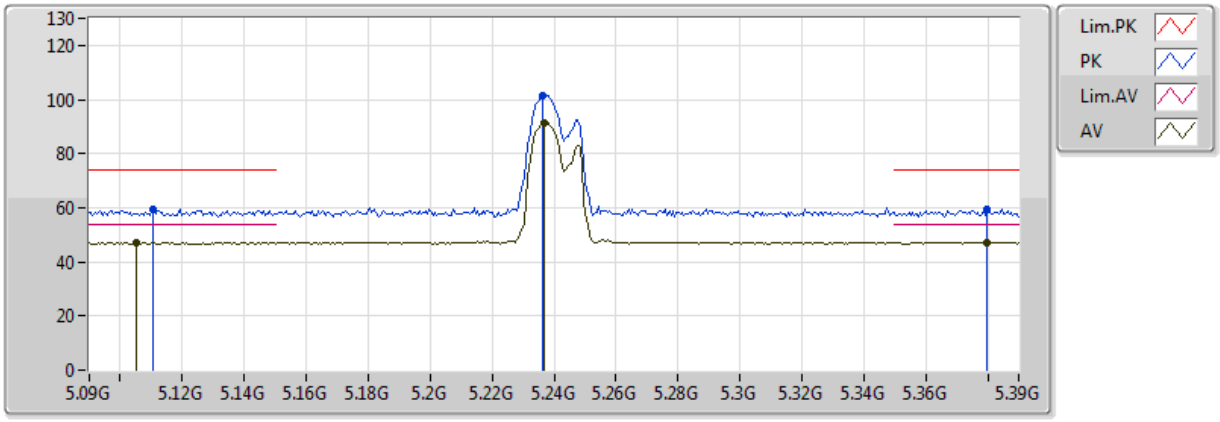


20171018
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1452G	47.56	54.00	-6.44	9.75	3	Vertical	192	2.15
AV	5.2412G	105.11	Inf	-Inf	9.94	3	Vertical	192	2.15
AV	5.351G	47.41	54.00	-6.59	10.09	3	Vertical	192	2.15
PK	5.1446G	60.52	74.00	-13.48	9.75	3	Vertical	192	2.15
PK	5.2418G	115.00	Inf	-Inf	9.94	3	Vertical	192	2.15
PK	5.3852G	59.39	74.00	-14.61	10.13	3	Vertical	192	2.15

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

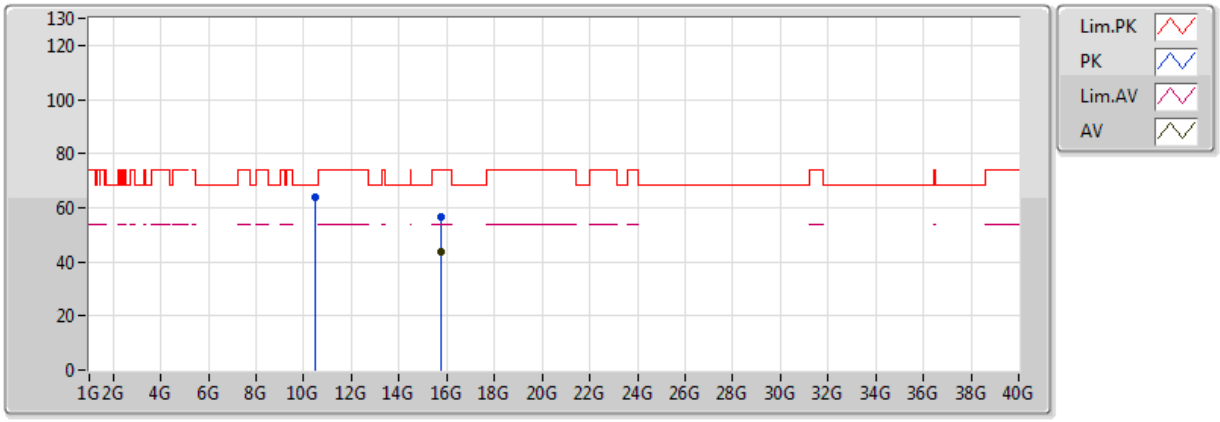


20171018
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.105G	47.08	54.00	-6.92	9.66	3	Horizontal	151	2.21
AV	5.237G	91.57	Inf	-Inf	9.93	3	Horizontal	151	2.21
AV	5.3798G	47.28	54.00	-6.72	10.12	3	Horizontal	151	2.21
PK	5.1104G	59.22	74.00	-14.78	9.67	3	Horizontal	151	2.21
PK	5.2364G	101.67	Inf	-Inf	9.93	3	Horizontal	151	2.21
PK	5.3798G	59.48	74.00	-14.52	10.12	3	Horizontal	151	2.21

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

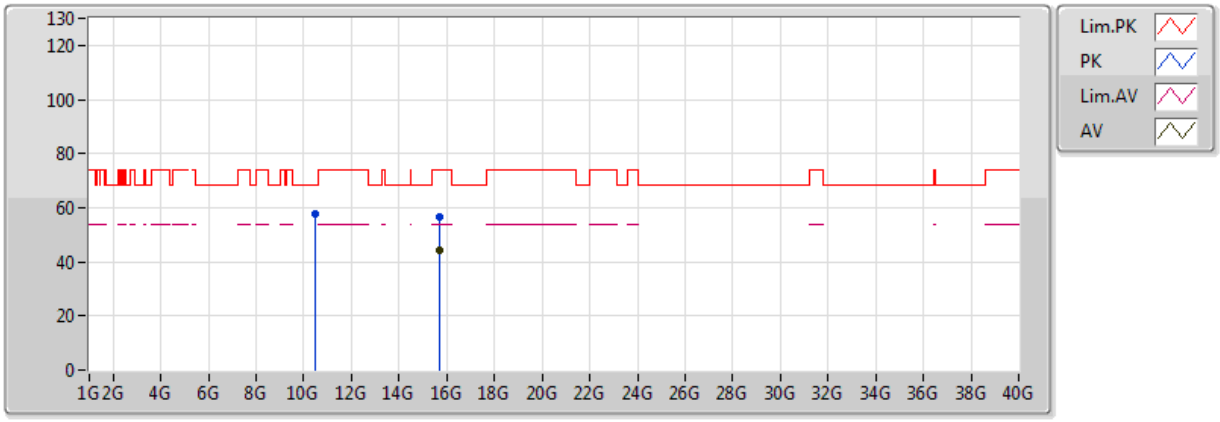


20171018
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7431G	43.69	54.00	-10.31	18.26	3	Vertical	174	1.53
PK	10.4808G	63.94	68.20	-4.26	15.99	3	Vertical	282	2.31
PK	15.7402G	56.87	74.00	-17.13	18.27	3	Vertical	174	1.53

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

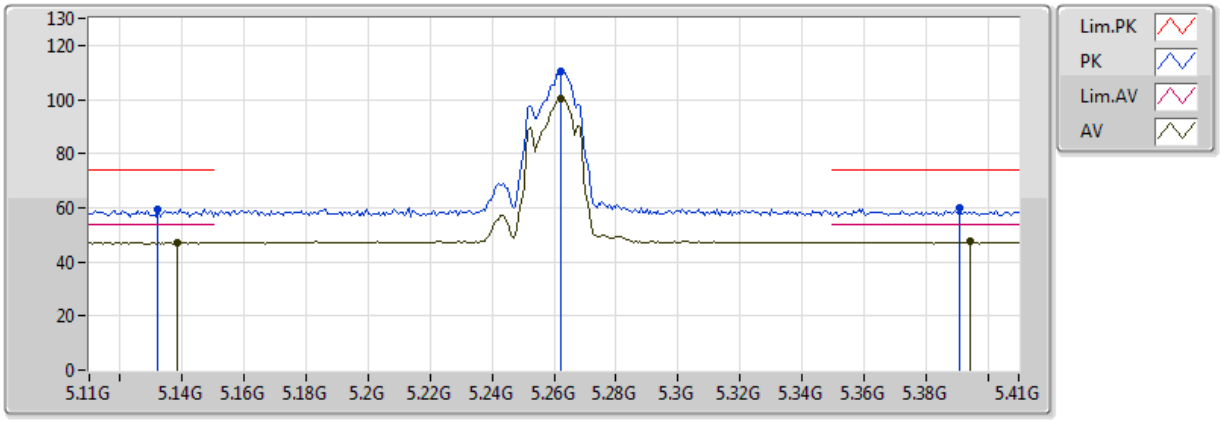


20171018
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7246G	44.02	54.00	-9.98	18.30	3	Horizontal	114	2.32
PK	10.4807G	57.68	68.20	-10.52	15.99	3	Horizontal	249	2.38
PK	15.7204G	56.63	74.00	-17.37	18.31	3	Horizontal	114	2.32

802.11a_Nss1,(6Mbps)_4TX

5260MHz_TX

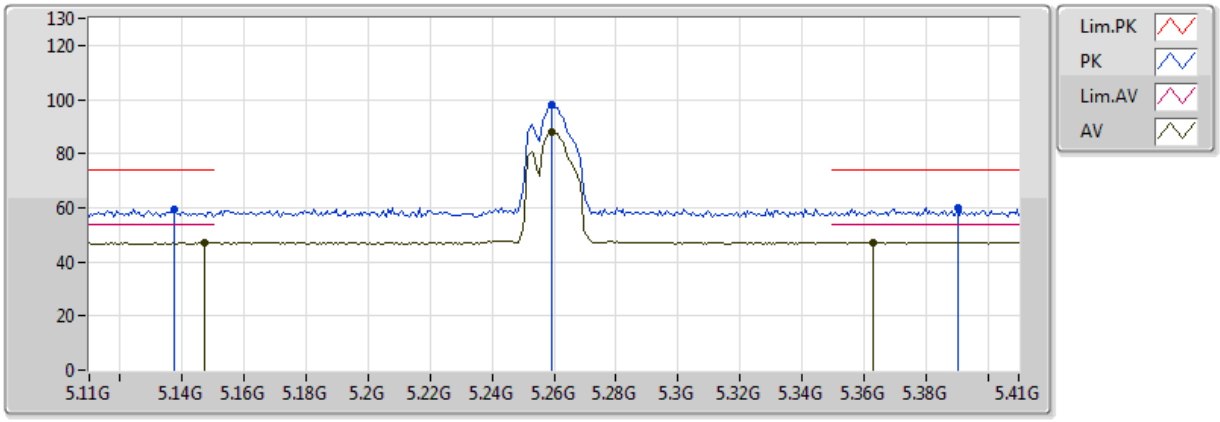


20171018
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1382G	47.17	54.00	-6.83	9.74	3	Vertical	181	2.40
AV	5.2624G	100.34	Inf	-Inf	9.97	3	Vertical	181	2.40
AV	5.3944G	47.41	54.00	-6.59	10.14	3	Vertical	181	2.40
PK	5.1322G	59.54	74.00	-14.46	9.72	3	Vertical	181	2.40
PK	5.2624G	110.55	Inf	-Inf	9.97	3	Vertical	181	2.40
PK	5.3908G	60.10	74.00	-13.90	10.14	3	Vertical	181	2.40

802.11a_Nss1,(6Mbps)_4TX

5260MHz_TX

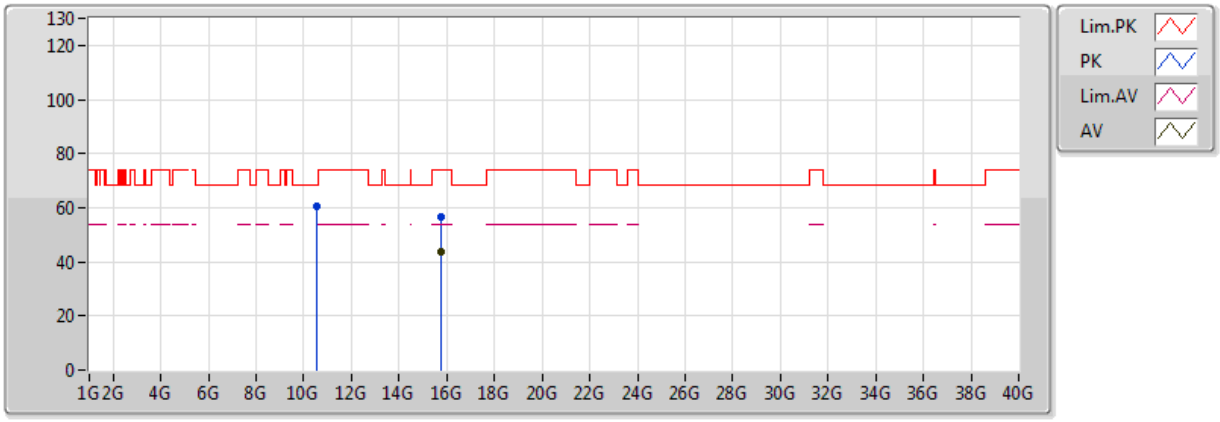


20171018
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1472G	47.14	54.00	-6.86	9.76	3	Horizontal	71	2.10
AV	5.2594G	88.17	Inf	-Inf	9.96	3	Horizontal	71	2.10
AV	5.3632G	47.31	54.00	-6.69	10.10	3	Horizontal	71	2.10
PK	5.1376G	59.23	74.00	-14.77	9.74	3	Horizontal	71	2.10
PK	5.2594G	98.04	Inf	-Inf	9.96	3	Horizontal	71	2.10
PK	5.3902G	59.85	74.00	-14.15	10.14	3	Horizontal	71	2.10

802.11a_Nss1,(6Mbps)_4TX

5260MHz_TX

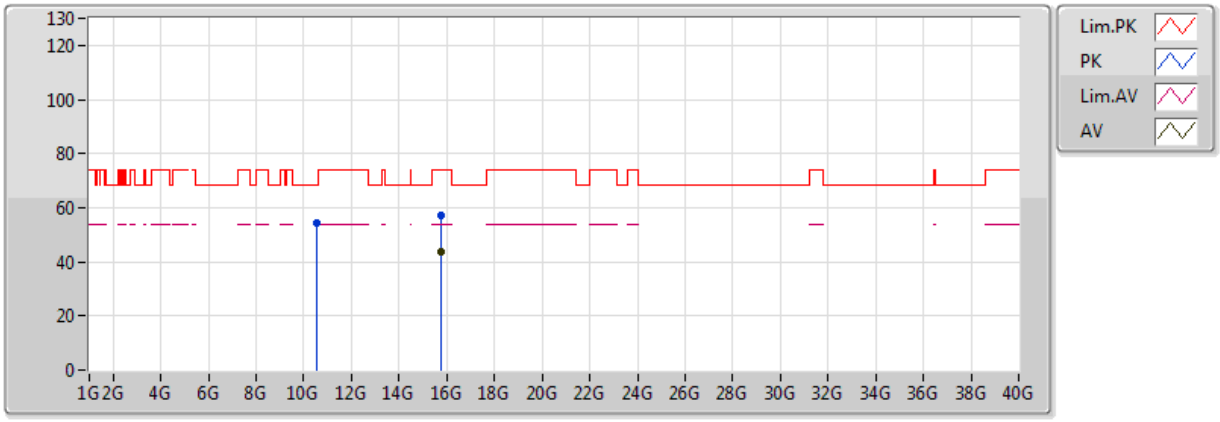


20171018
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7573G	43.63	54.00	-10.37	18.23	3	Vertical	75	1.79
PK	10.5193G	60.43	68.20	-7.77	15.99	3	Vertical	283	1.01
PK	15.763G	56.81	74.00	-17.19	18.22	3	Vertical	75	1.79

802.11a_Nss1,(6Mbps)_4TX

5260MHz_TX

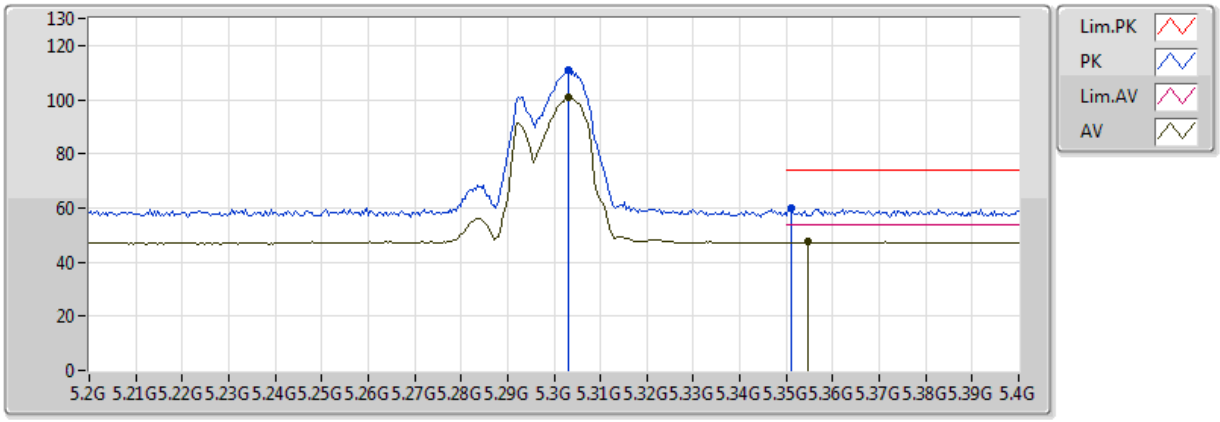


20171018
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7602G	43.60	54.00	-10.40	18.23	3	Horizontal	246	1.10
PK	10.5184G	54.60	68.20	-13.60	15.99	3	Horizontal	173	2.24
PK	15.7687G	57.05	74.00	-16.95	18.21	3	Horizontal	246	1.10

802.11a_Nss1,(6Mbps)_4TX

5300MHz_TX

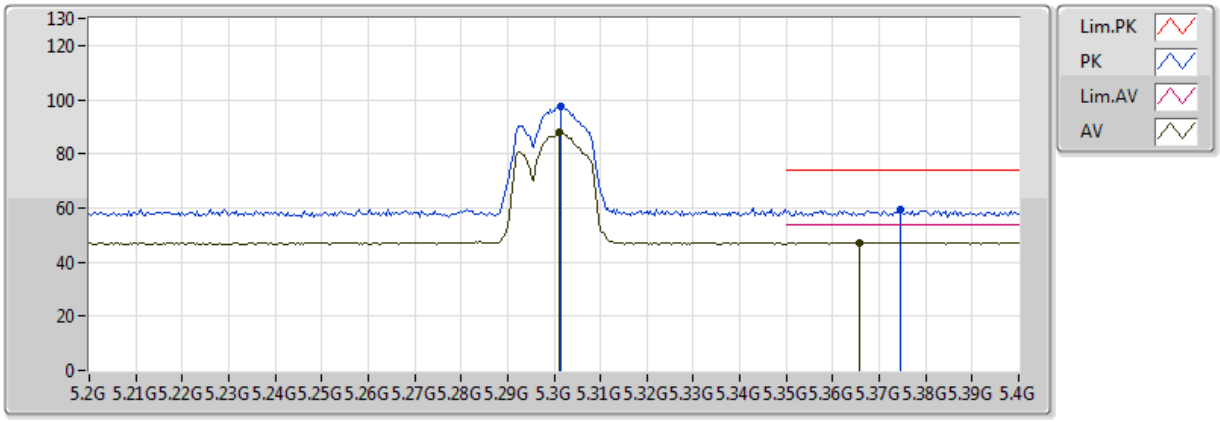


20171018
EUT Z_4TX
Setting 8
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.3032G	100.65	Inf	-Inf	10.02	3	Vertical	181	2.31
AV	5.3548G	47.52	54.00	-6.48	10.09	3	Vertical	181	2.31
PK	5.3032G	110.97	Inf	-Inf	10.02	3	Vertical	181	2.31
PK	5.3512G	59.73	74.00	-14.27	10.09	3	Vertical	181	2.31

802.11a_Nss1,(6Mbps)_4TX

5300MHz_TX

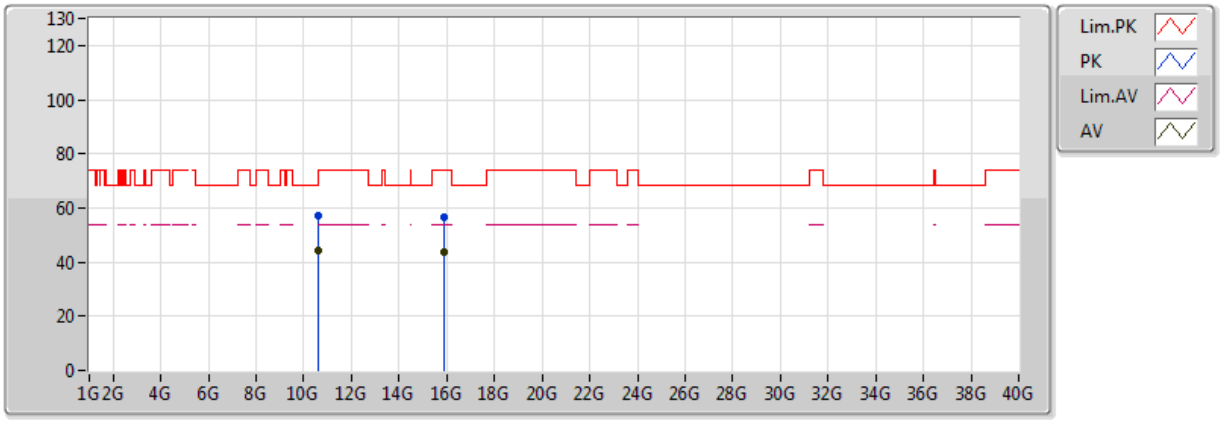


20171018
EUT Z_4TX
Setting 8
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.3012G	87.74	Inf	-Inf	10.02	3	Horizontal	70	2.52
AV	5.3656G	47.30	54.00	-6.70	10.11	3	Horizontal	70	2.52
PK	5.3016G	97.44	Inf	-Inf	10.02	3	Horizontal	70	2.52
PK	5.3744G	59.34	74.00	-14.66	10.12	3	Horizontal	70	2.52

802.11a_Nss1,(6Mbps)_4TX

5300MHz_TX

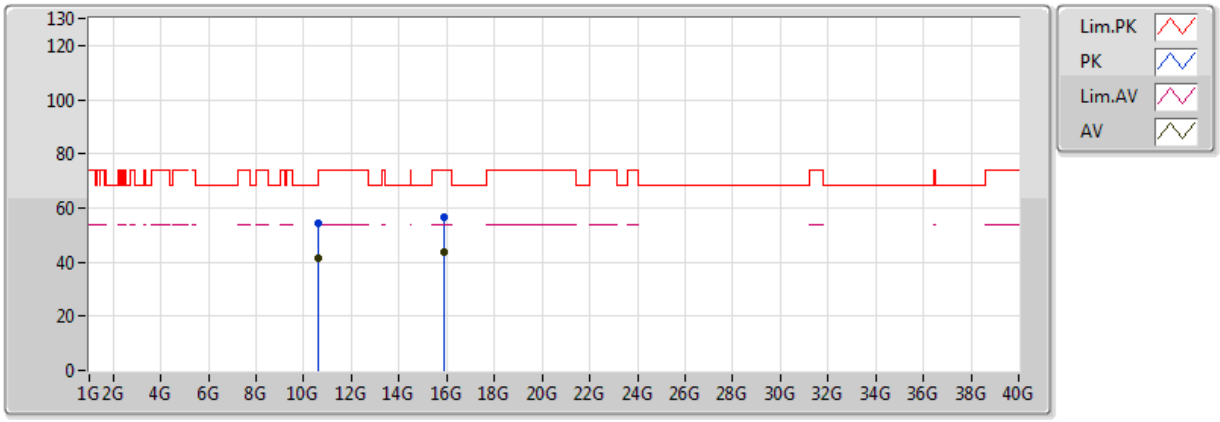


20171018
EUT Z_4TX
Setting 8
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	10.6002G	44.08	54.00	-9.92	15.99	3	Vertical	269	2.03
AV	15.9159G	43.78	54.00	-10.22	17.89	3	Vertical	235	1.06
PK	10.6015G	57.25	74.00	-16.75	15.99	3	Vertical	269	2.03
PK	15.902G	56.63	74.00	-17.37	17.92	3	Vertical	235	1.06

802.11a_Nss1,(6Mbps)_4TX

5300MHz_TX

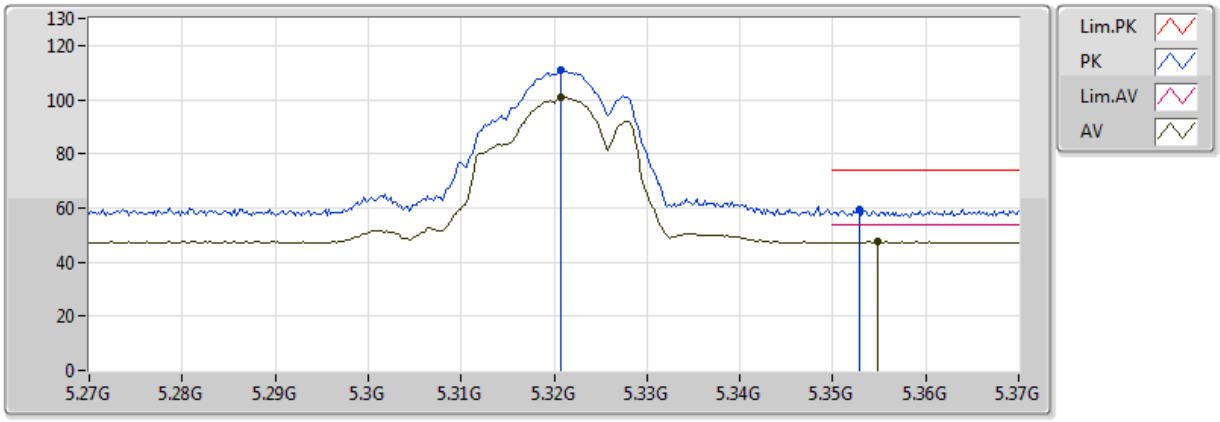


20171018
EUT Z_4TX
Setting 8
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	10.6184G	41.40	54.00	-12.60	15.99	3	Horizontal	173	1.68
AV	15.9064G	43.60	54.00	-10.40	17.91	3	Horizontal	45	1.30
PK	10.6052G	54.56	74.00	-19.44	15.99	3	Horizontal	173	1.68
PK	15.9132G	56.51	74.00	-17.49	17.90	3	Horizontal	45	1.30

802.11a_Nss1,(6Mbps)_4TX

5320MHz_TX

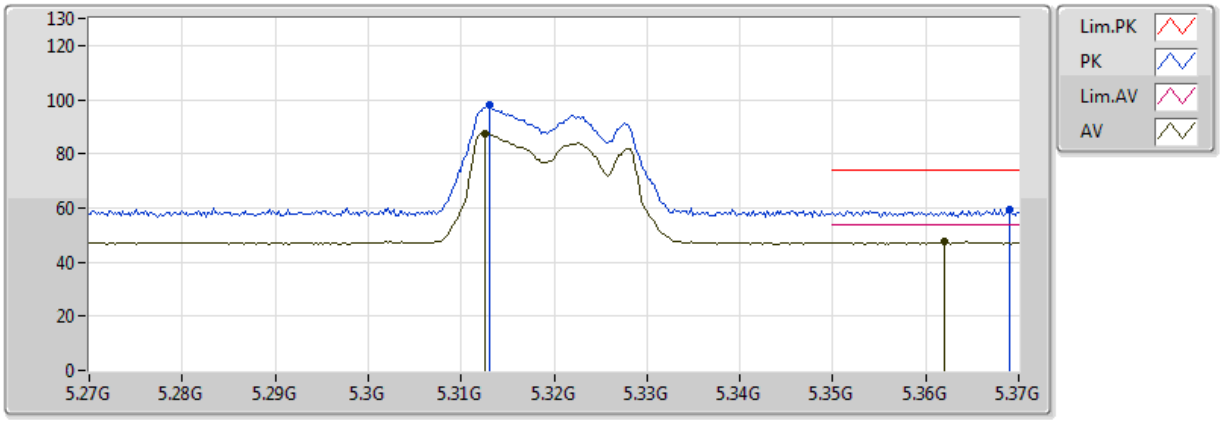


20171018
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.3208G	101.00	Inf	-Inf	10.05	3	Vertical	178	2.23
AV	5.3548G	47.68	54.00	-6.32	10.09	3	Vertical	178	2.23
PK	5.3208G	110.79	Inf	-Inf	10.05	3	Vertical	178	2.23
PK	5.3528G	59.48	74.00	-14.52	10.09	3	Vertical	178	2.23

802.11a_Nss1,(6Mbps)_4TX

5320MHz_TX

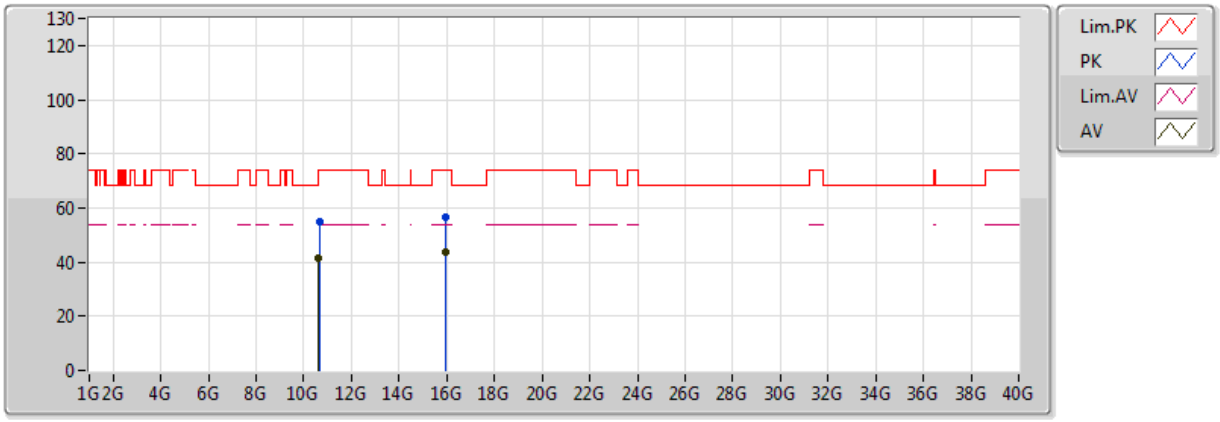


20171018
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.3126G	87.57	Inf	-Inf	10.04	3	Horizontal	90	2.79
AV	5.362G	47.39	54.00	-6.61	10.10	3	Horizontal	90	2.79
PK	5.313G	98.05	Inf	-Inf	10.04	3	Horizontal	90	2.79
PK	5.369G	59.54	74.00	-14.46	10.11	3	Horizontal	90	2.79

802.11a_Nss1,(6Mbps)_4TX

5320MHz_TX

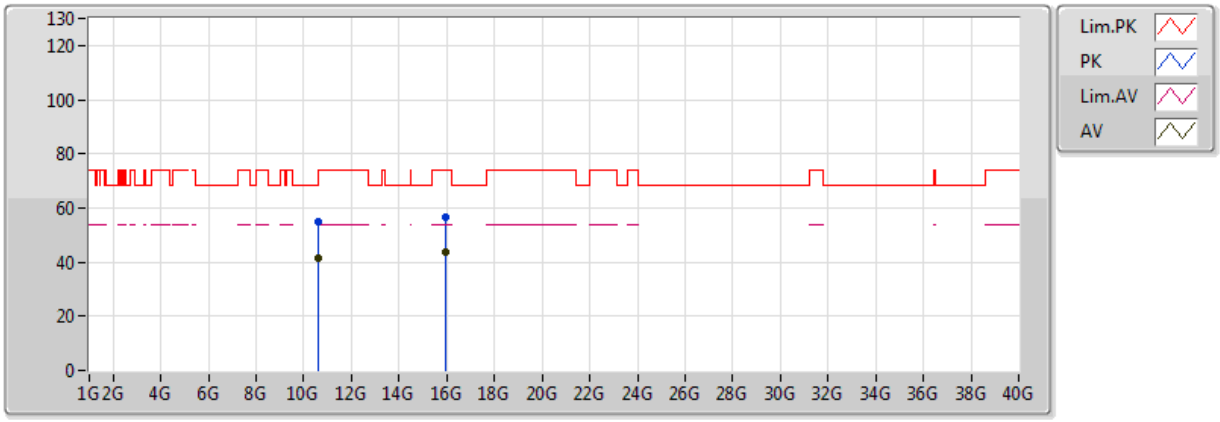


20171018
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	10.631G	41.49	54.00	-12.51	15.99	3	Vertical	239	2.21
AV	15.9524G	43.62	54.00	-10.38	17.81	3	Vertical	360	1.19
PK	10.6429G	54.65	74.00	-19.35	15.99	3	Vertical	239	2.21
PK	15.968G	56.84	74.00	-17.16	17.78	3	Vertical	360	1.19

802.11a_Nss1,(6Mbps)_4TX

5320MHz_TX

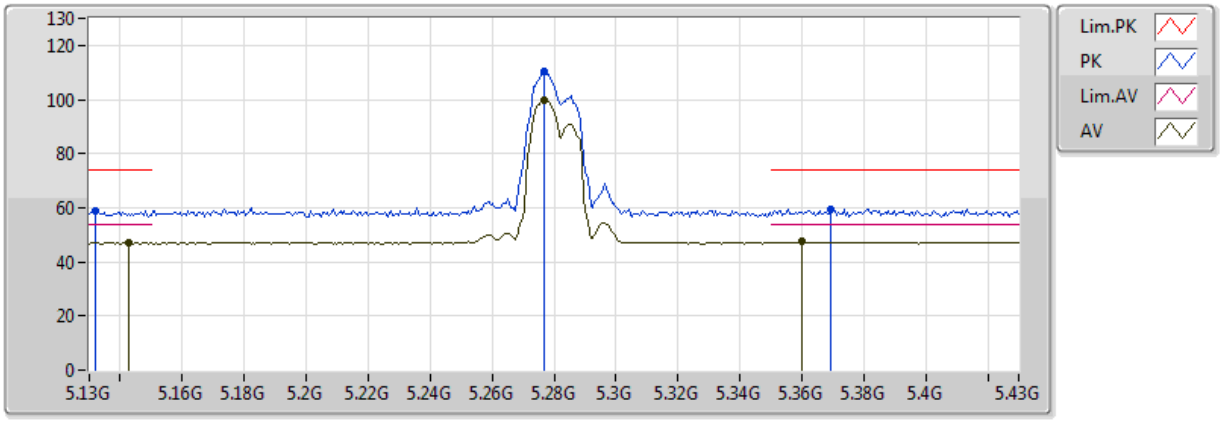


20171018
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	10.6302G	41.42	54.00	-12.58	15.99	3	Horizontal	314	1.08
AV	15.9476G	43.57	54.00	-10.43	17.82	3	Horizontal	17	1.71
PK	10.6355G	54.72	74.00	-19.28	15.99	3	Horizontal	314	1.08
PK	15.9591G	56.66	74.00	-17.34	17.80	3	Horizontal	17	1.71

802.11a_Nss1,(6Mbps)_4TX

5280MHz_TX

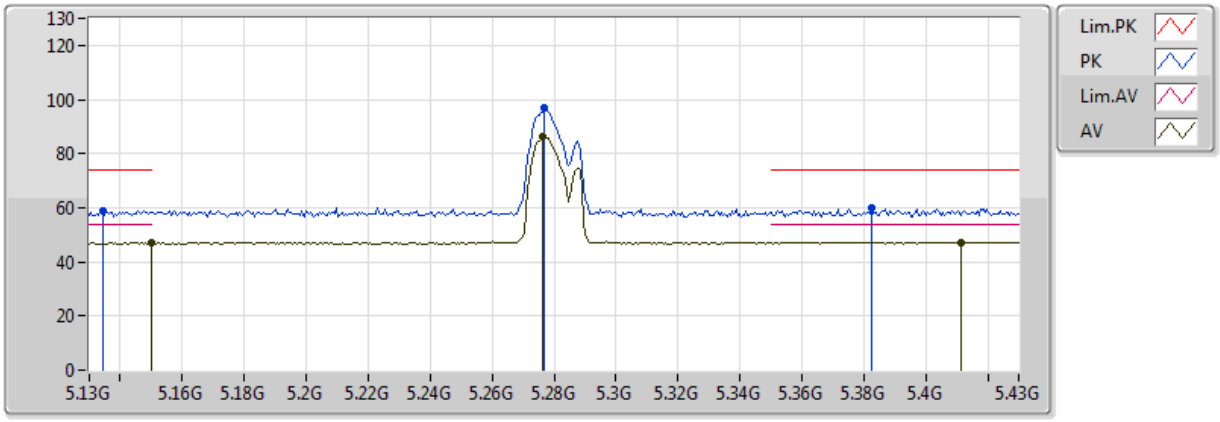


20171018
EUT Z_4TX
Setting 7
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1426G	47.02	54.00	-6.98	9.75	3	Vertical	283	2.36
AV	5.277G	99.94	Inf	-Inf	9.99	3	Vertical	283	2.36
AV	5.3598G	47.38	54.00	-6.62	10.10	3	Vertical	283	2.36
PK	5.1318G	59.07	74.00	-14.93	9.72	3	Vertical	283	2.36
PK	5.277G	110.44	Inf	-Inf	9.99	3	Vertical	283	2.36
PK	5.3694G	59.39	74.00	-14.61	10.11	3	Vertical	283	2.36

802.11a_Nss1,(6Mbps)_4TX

5280MHz_TX

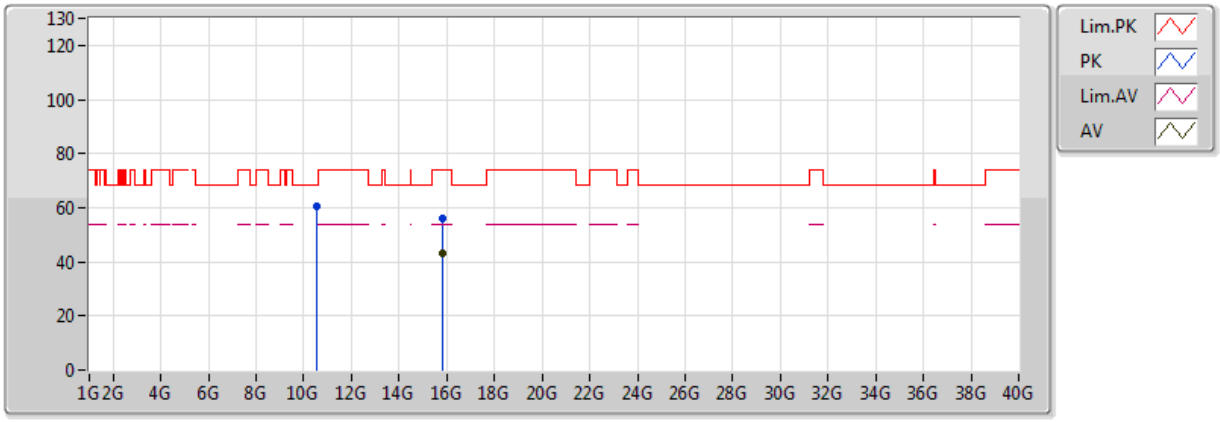


20171018
EUT Z_4TX
Setting 7
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.149995G	47.00	54.00	-7.00	9.76	3	Horizontal	155	1.40
AV	5.2764G	86.10	Inf	-Inf	9.99	3	Horizontal	155	1.40
AV	5.4114G	47.31	54.00	-6.69	10.19	3	Horizontal	155	1.40
PK	5.1342G	58.83	74.00	-15.17	9.73	3	Horizontal	155	1.40
PK	5.277G	97.04	Inf	-Inf	9.99	3	Horizontal	155	1.40
PK	5.3826G	59.73	74.00	-14.27	10.13	3	Horizontal	155	1.40

802.11a_Nss1,(6Mbps)_4TX

5280MHz_TX

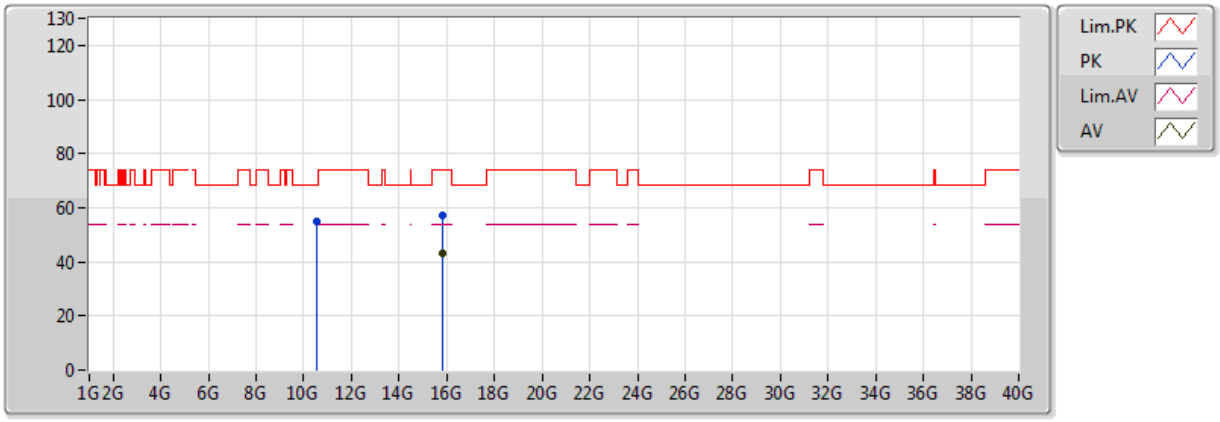


20171018
EUT Z_4TX
Setting 7
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.833G	43.23	54.00	-10.77	18.07	3	Vertical	85	1.02
PK	10.5563G	60.29	68.20	-7.91	15.99	3	Vertical	281	1.01
PK	15.8542G	56.24	74.00	-17.76	18.02	3	Vertical	85	1.02

802.11a_Nss1,(6Mbps)_4TX

5280MHz_TX

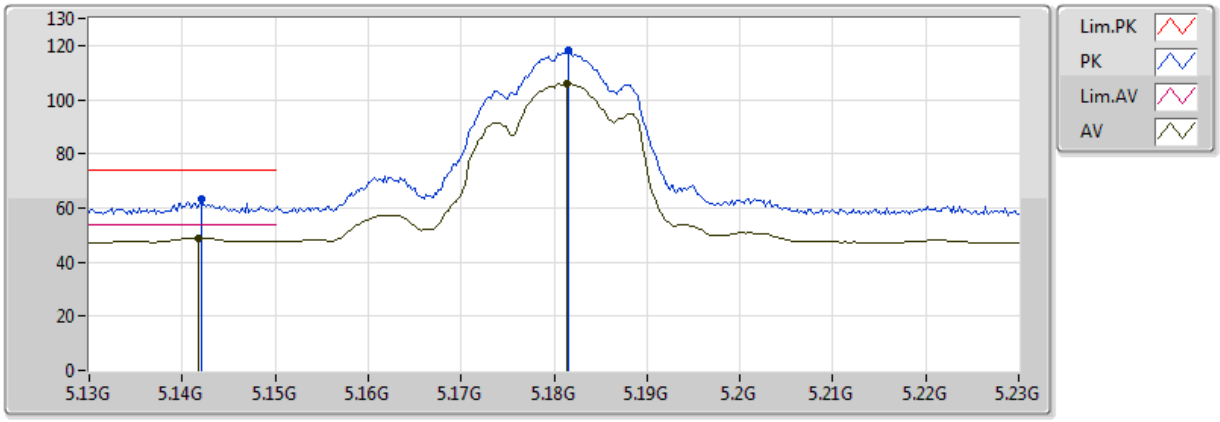


20171018
EUT Z_4TX
Setting 7
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.844G	43.05	54.00	-10.95	18.05	3	Horizontal	236	2.01
PK	10.5377G	54.64	68.20	-13.56	15.99	3	Horizontal	289	1.97
PK	15.8404G	57.20	74.00	-16.80	18.05	3	Horizontal	236	2.01

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

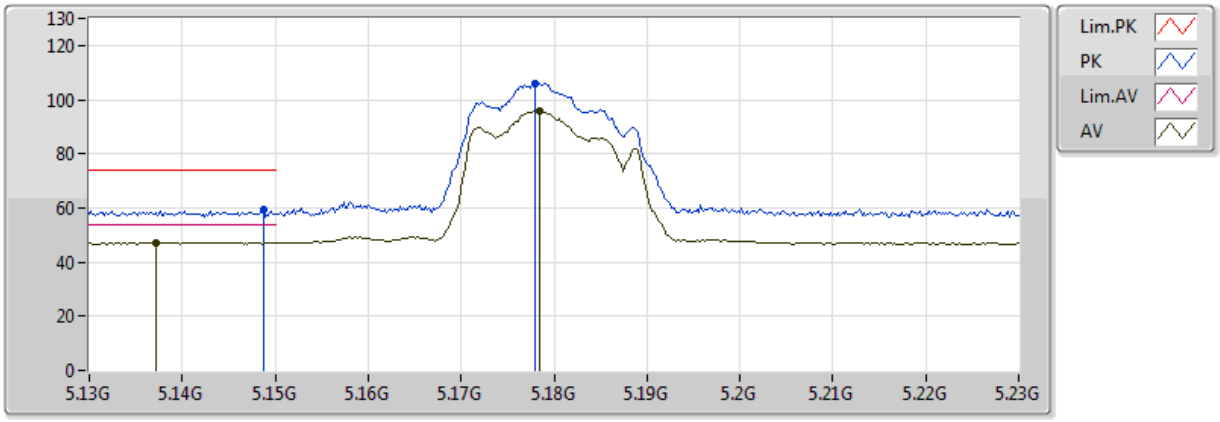


20171018
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1418G	48.95	54.00	-5.05	9.75	3	Vertical	174	2.25
AV	5.1814G	105.92	Inf	-Inf	9.84	3	Vertical	174	2.25
PK	5.142G	63.20	74.00	-10.80	9.75	3	Vertical	174	2.25
PK	5.1816G	118.39	Inf	-Inf	9.84	3	Vertical	174	2.25

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

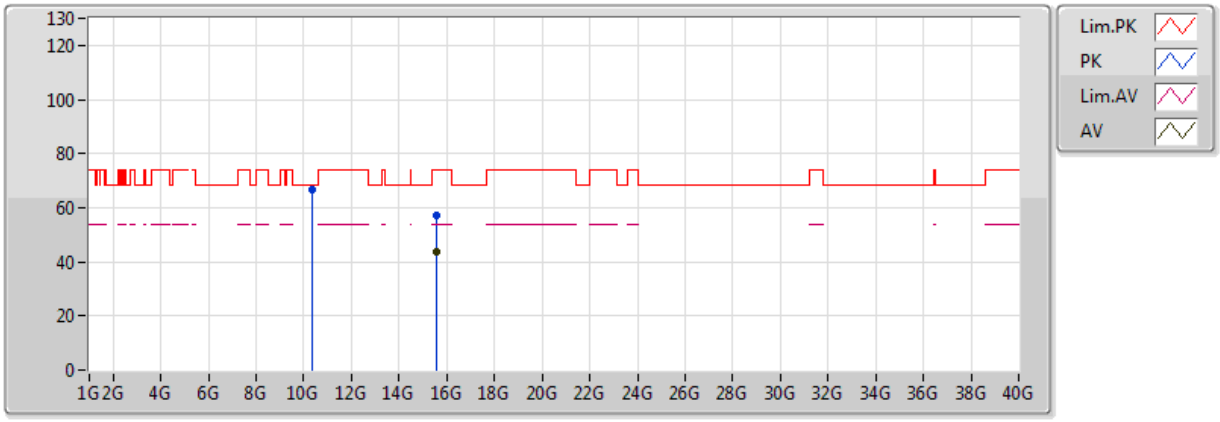


20171018
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1372G	47.18	54.00	-6.82	9.74	3	Horizontal	191	2.74
AV	5.1784G	95.85	Inf	-Inf	9.83	3	Horizontal	191	2.74
PK	5.1488G	59.32	74.00	-14.68	9.76	3	Horizontal	191	2.74
PK	5.178G	105.96	Inf	-Inf	9.83	3	Horizontal	191	2.74

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

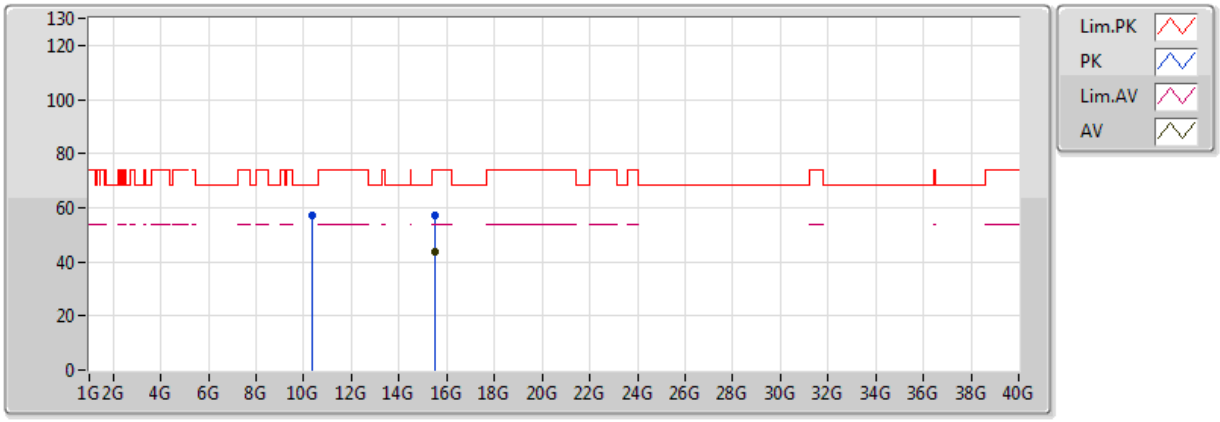


20171018
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5381G	43.89	54.00	-10.11	18.70	3	Vertical	155	1.25
PK	10.3579G	66.77	68.20	-1.43	15.99	3	Vertical	266	1.00
PK	15.5391G	57.14	74.00	-16.86	18.70	3	Vertical	155	1.25

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

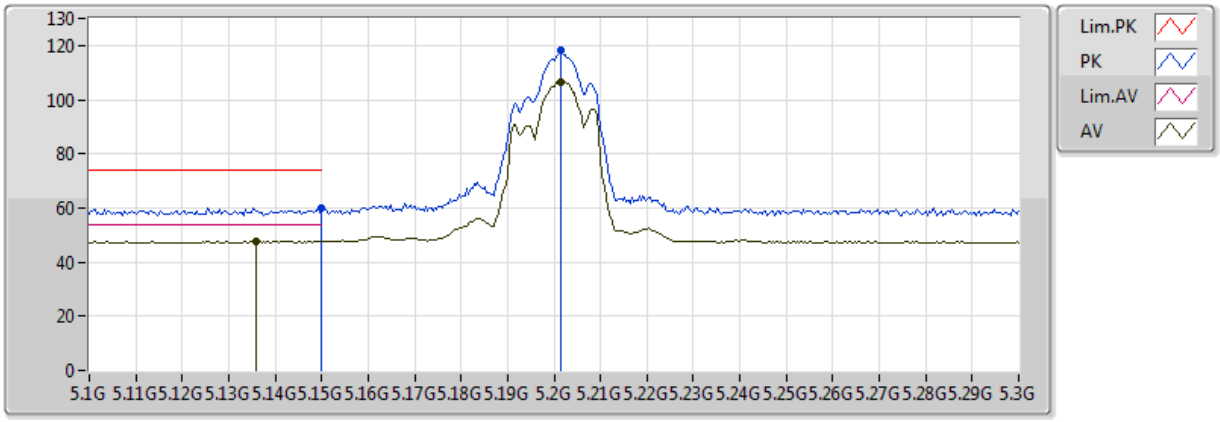


20171018
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.525G	43.63	54.00	-10.37	18.73	3	Horizontal	278	2.05
PK	10.3605G	57.00	68.20	-11.20	15.99	3	Horizontal	75	2.18
PK	15.525G	56.94	74.00	-17.06	18.73	3	Horizontal	278	2.05

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

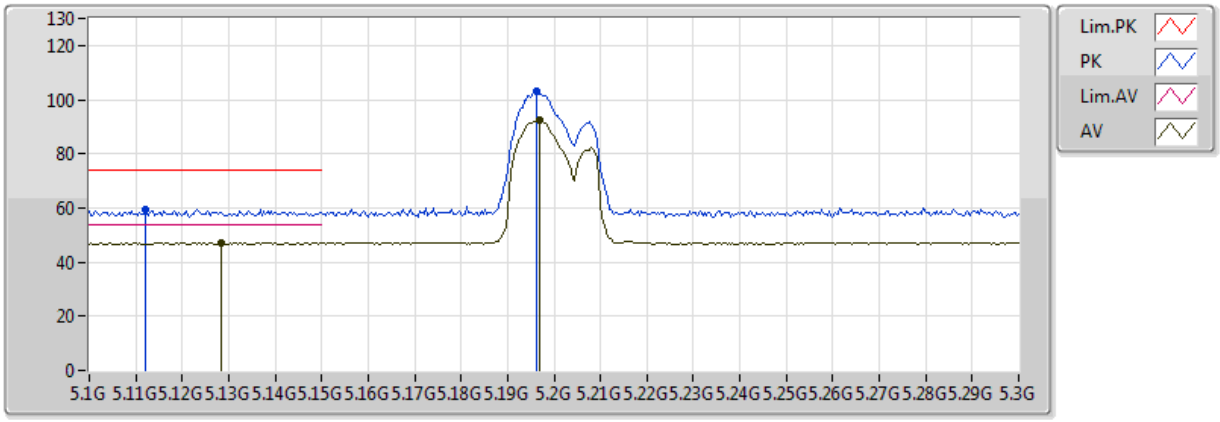


20171018
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.136G	47.69	54.00	-6.31	9.73	3	Vertical	194	2.29
AV	5.2016G	106.68	Inf	-Inf	9.88	3	Vertical	194	2.29
PK	5.149995G	60.07	74.00	-13.93	9.76	3	Vertical	194	2.29
PK	5.2016G	118.20	Inf	-Inf	9.88	3	Vertical	194	2.29

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

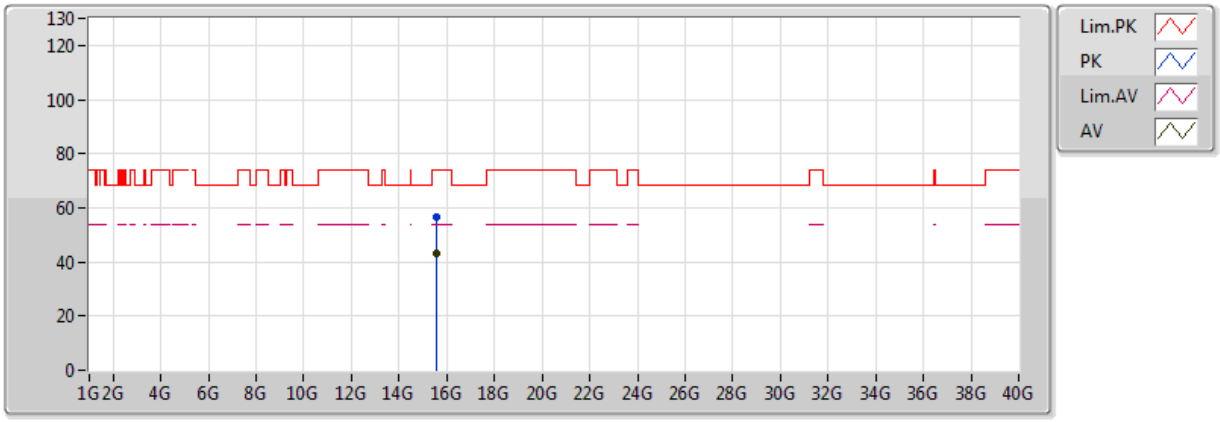


20171018
EUT Z_4TX
Setting 14.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1284G	47.19	54.00	-6.81	9.72	3	Horizontal	159	1.92
AV	5.1968G	92.51	Inf	-Inf	9.87	3	Horizontal	159	1.92
PK	5.112G	59.47	74.00	-14.53	9.68	3	Horizontal	159	1.92
PK	5.1964G	103.12	Inf	-Inf	9.87	3	Horizontal	159	1.92

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

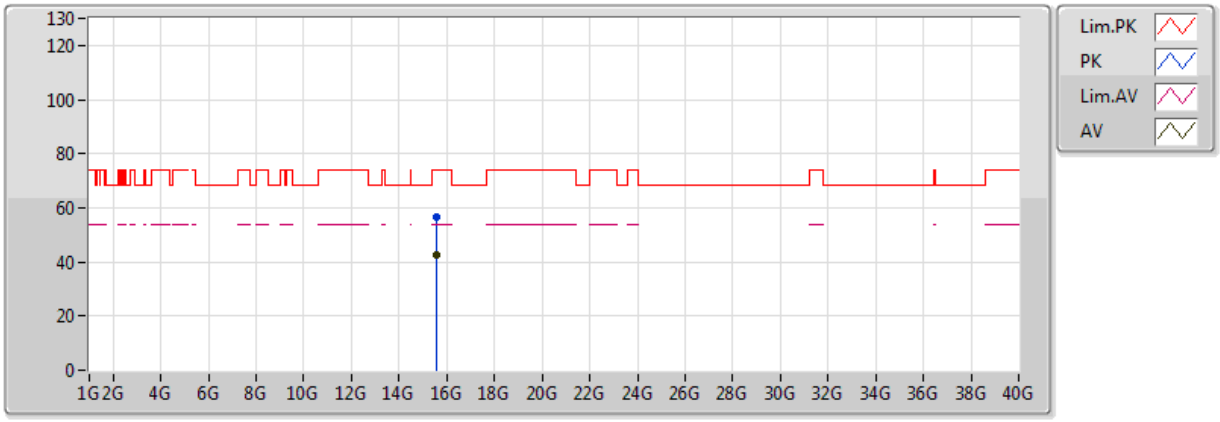


20171018
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5978G	43.05	54.00	-10.95	18.57	3	Vertical	233	2.31
PK	15.5977G	56.79	74.00	-17.21	18.57	3	Vertical	233	2.31

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

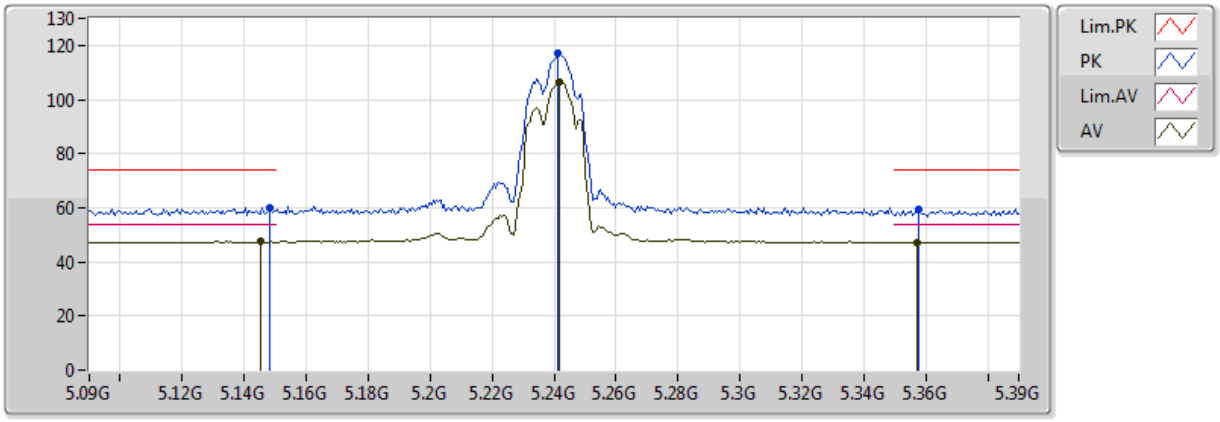


20171018
EUT Z_4TX
Setting 14.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5782G	42.76	54.00	-11.24	18.62	3	Horizontal	24	1.91
PK	15.59G	56.46	74.00	-17.54	18.59	3	Horizontal	24	1.91

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

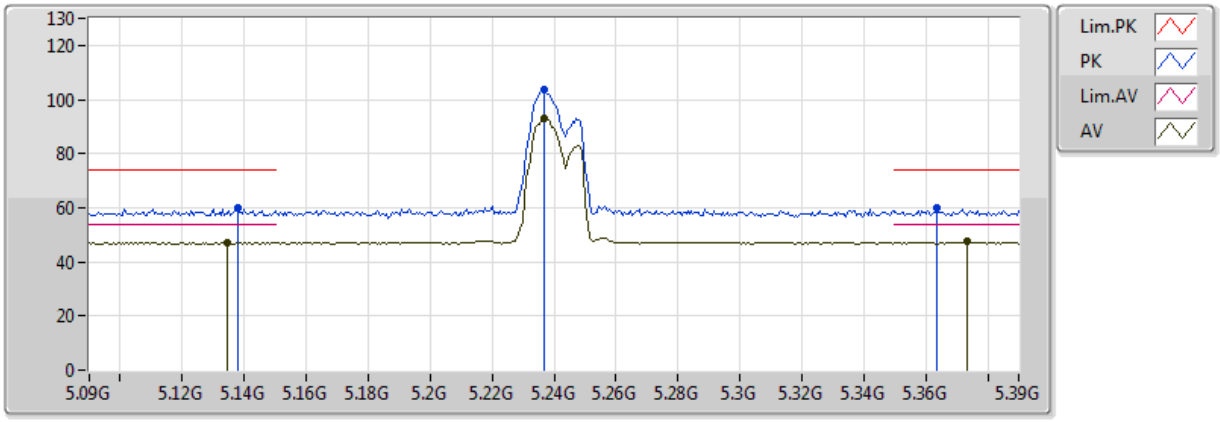


20171018
EUT Z_4TX
Setting 15
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1452G	47.63	54.00	-6.37	9.75	3	Vertical	193	2.18
AV	5.2418G	106.48	Inf	-Inf	9.94	3	Vertical	193	2.18
AV	5.357G	47.30	54.00	-6.70	10.09	3	Vertical	193	2.18
PK	5.1482G	60.19	74.00	-13.81	9.76	3	Vertical	193	2.18
PK	5.2412G	116.96	Inf	-Inf	9.94	3	Vertical	193	2.18
PK	5.3576G	59.51	74.00	-14.49	10.09	3	Vertical	193	2.18

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

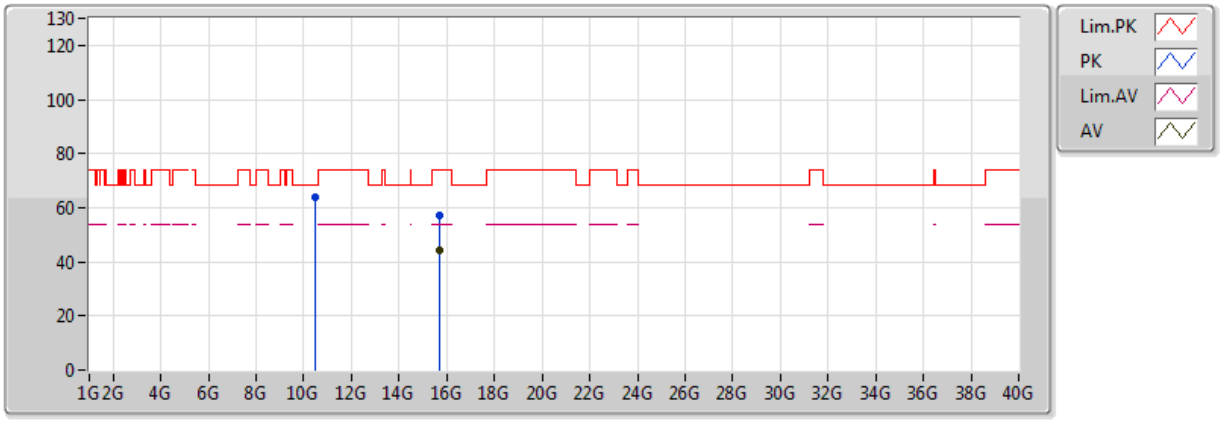


20171018
EUT Z_4TX
Setting 15
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1344G	47.17	54.00	-6.83	9.73	3	Horizontal	164	1.93
AV	5.237G	92.89	Inf	-Inf	9.93	3	Horizontal	164	1.93
AV	5.3732G	47.44	54.00	-6.56	10.12	3	Horizontal	164	1.93
PK	5.138G	59.73	74.00	-14.27	9.74	3	Horizontal	164	1.93
PK	5.237G	103.49	Inf	-Inf	9.93	3	Horizontal	164	1.93
PK	5.3636G	60.02	74.00	-13.98	10.10	3	Horizontal	164	1.93

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

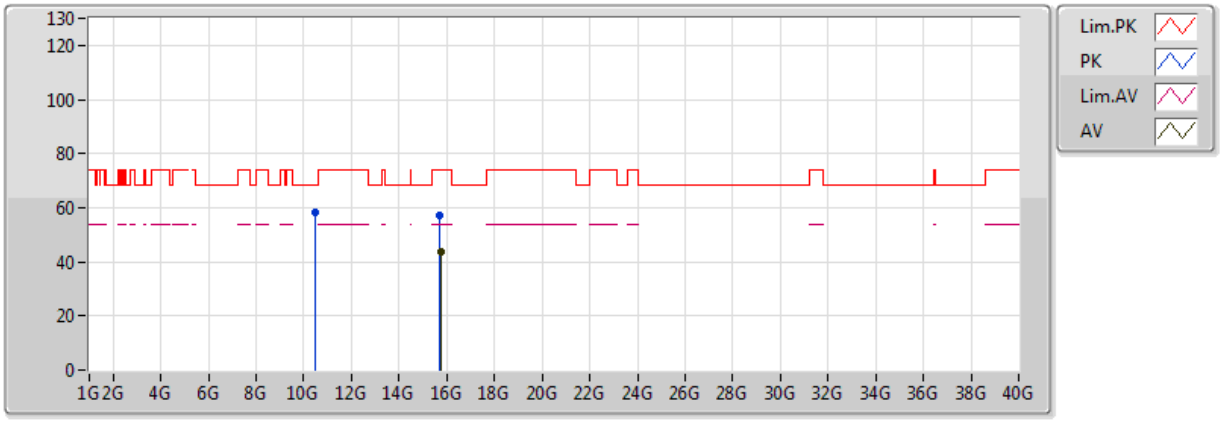


20171018
EUT Z_4TX
Setting 15
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.728G	44.02	54.00	-9.98	18.29	3	Vertical	215	2.48
PK	10.478G	63.99	68.20	-4.21	15.99	3	Vertical	283	1.00
PK	15.7253G	57.11	74.00	-16.89	18.30	3	Vertical	215	2.48

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

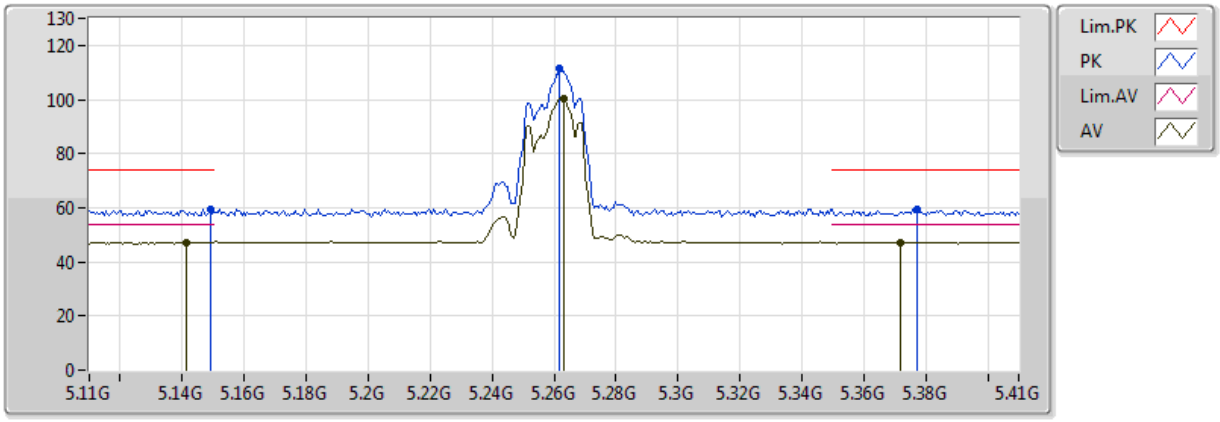


20171018
EUT Z_4TX
Setting 15
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7338G	43.75	54.00	-10.25	18.28	3	Horizontal	76	1.82
PK	10.4801G	58.29	68.20	-9.91	15.99	3	Horizontal	241	2.28
PK	15.7276G	57.11	74.00	-16.89	18.30	3	Horizontal	76	1.82

802.11ac VHT20_Nss1,(MCS0)_4TX

5260MHz_TX

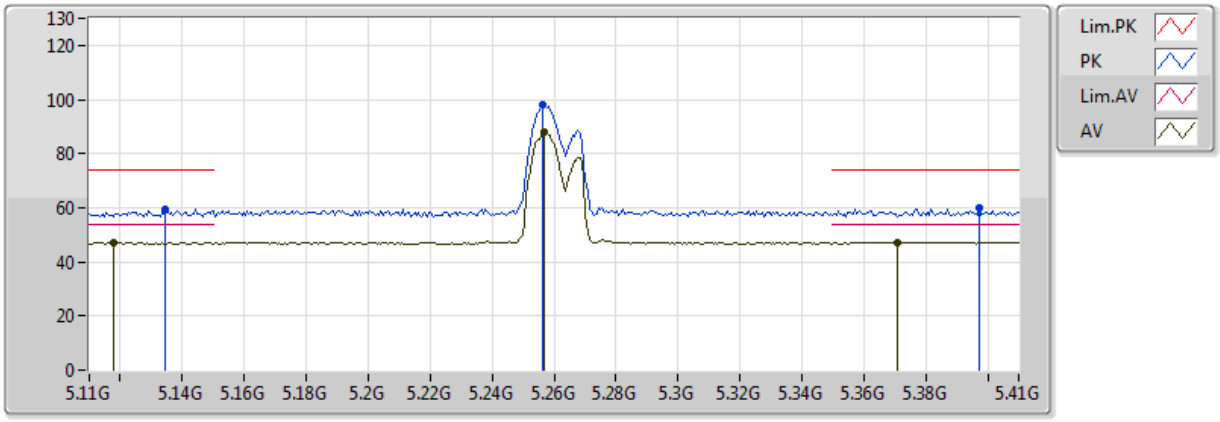


20171018
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1412G	47.28	54.00	-6.72	9.74	3	Vertical	189	2.39
AV	5.263G	100.16	Inf	-Inf	9.97	3	Vertical	189	2.39
AV	5.3716G	47.32	54.00	-6.68	10.11	3	Vertical	189	2.39
PK	5.149G	59.58	74.00	-14.42	9.76	3	Vertical	189	2.39
PK	5.2618G	111.50	Inf	-Inf	9.97	3	Vertical	189	2.39
PK	5.377G	59.24	74.00	-14.76	10.12	3	Vertical	189	2.39

802.11ac VHT20_Nss1,(MCS0)_4TX

5260MHz_TX

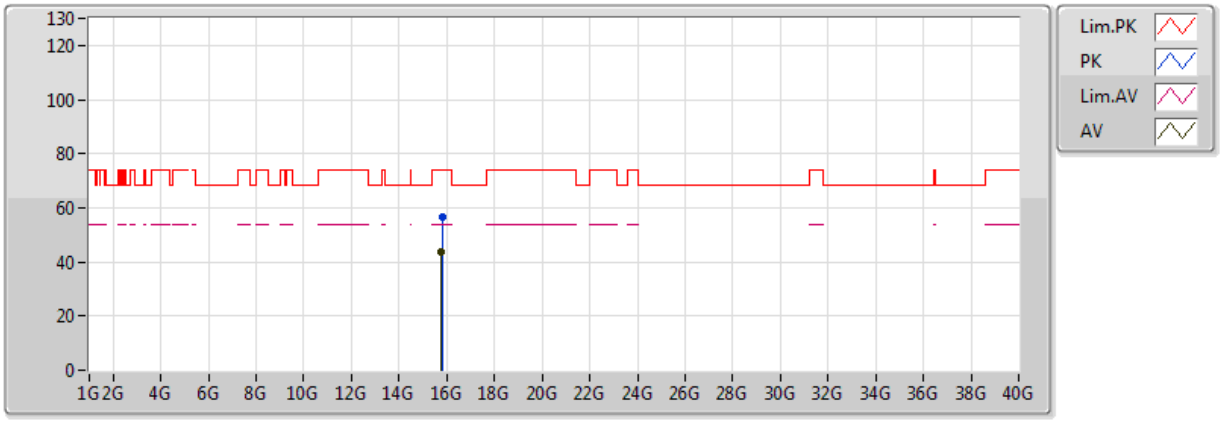


20171018
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1178G	47.03	54.00	-6.97	9.69	3	Horizontal	159	2.11
AV	5.257G	87.87	Inf	-Inf	9.96	3	Horizontal	159	2.11
AV	5.371G	47.22	54.00	-6.78	10.11	3	Horizontal	159	2.11
PK	5.1346G	59.34	74.00	-14.66	9.73	3	Horizontal	159	2.11
PK	5.2564G	98.03	Inf	-Inf	9.96	3	Horizontal	159	2.11
PK	5.3974G	59.84	74.00	-14.16	10.15	3	Horizontal	159	2.11

802.11ac VHT20_Nss1,(MCS0)_4TX

5260MHz_TX

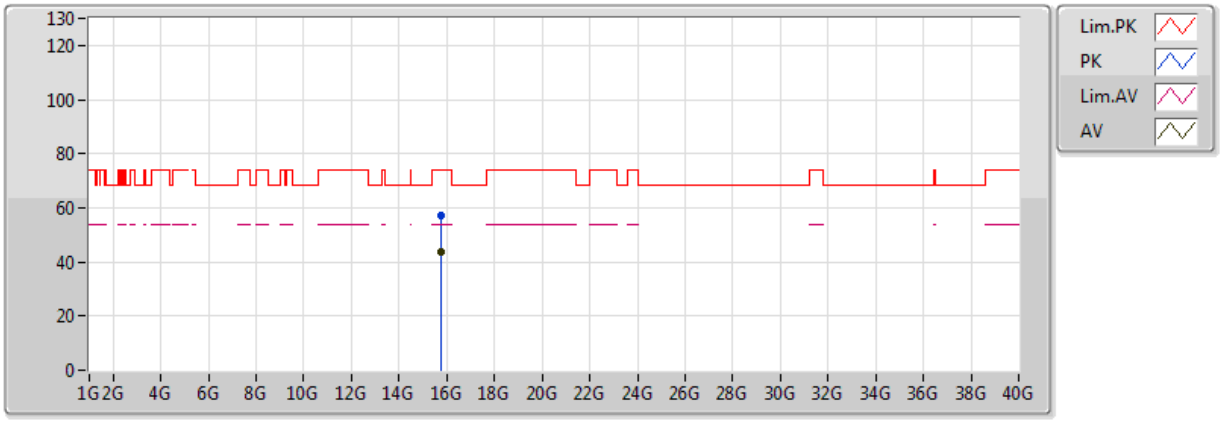


20171018
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7563G	43.66	54.00	-10.34	18.23	3	Vertical	15	1.32
PK	15.8044G	56.36	74.00	-17.64	18.13	3	Vertical	15	1.32

802.11ac VHT20_Nss1,(MCS0)_4TX

5260MHz_TX

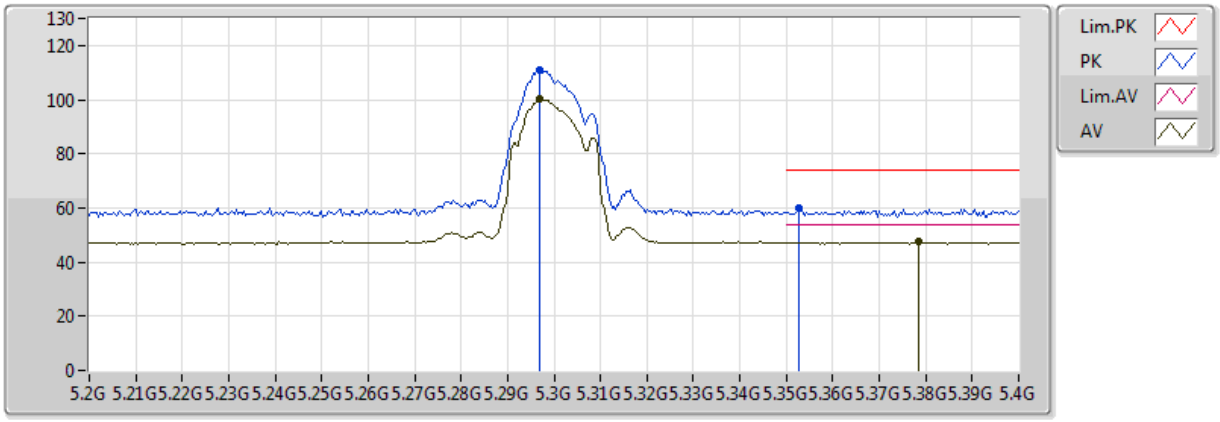


20171018
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7671G	43.64	54.00	-10.36	18.21	3	Horizontal	267	1.81
PK	15.7854G	56.98	74.00	-17.02	18.17	3	Horizontal	267	1.81

802.11ac VHT20_Nss1,(MCS0)_4TX

5300MHz_TX

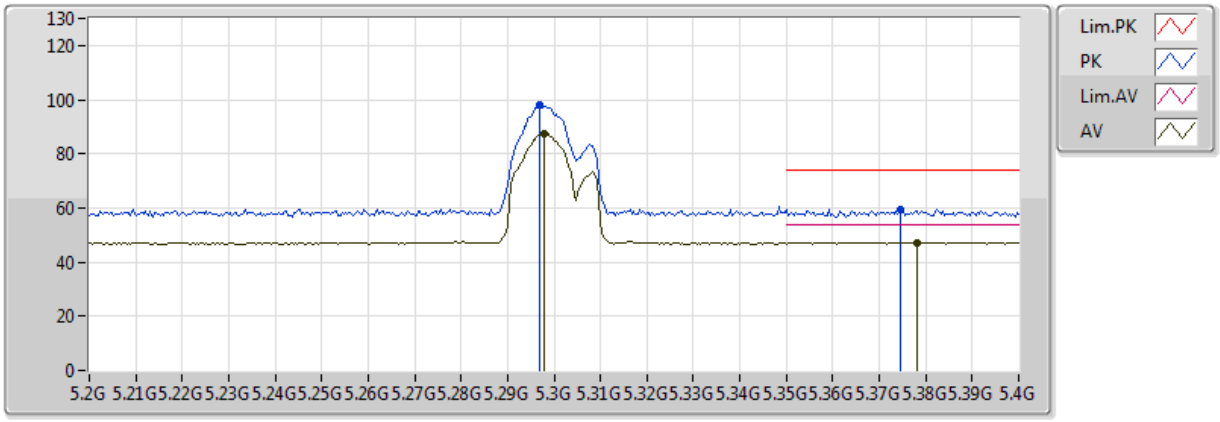


20171018
EUT Z_4TX
Setting 8
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.2968G	100.11	Inf	-Inf	10.02	3	Vertical	276	2.34
AV	5.3784G	47.48	54.00	-6.52	10.12	3	Vertical	276	2.34
PK	5.2968G	110.82	Inf	-Inf	10.02	3	Vertical	276	2.34
PK	5.3528G	59.78	74.00	-14.22	10.09	3	Vertical	276	2.34

802.11ac VHT20_Nss1,(MCS0)_4TX

5300MHz_TX

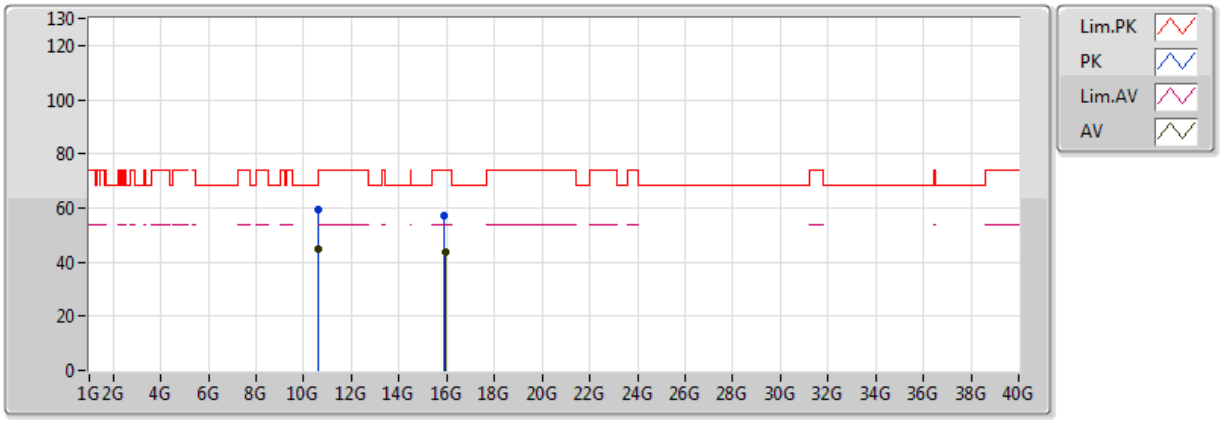


20171018
EUT Z_4TX
Setting 8
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.298G	87.49	Inf	-Inf	10.02	3	Horizontal	148	2.16
AV	5.378G	47.18	54.00	-6.82	10.12	3	Horizontal	148	2.16
PK	5.2968G	97.82	Inf	-Inf	10.02	3	Horizontal	148	2.16
PK	5.3744G	59.62	74.00	-14.38	10.12	3	Horizontal	148	2.16

802.11ac VHT20_Nss1,(MCS0)_4TX

5300MHz_TX

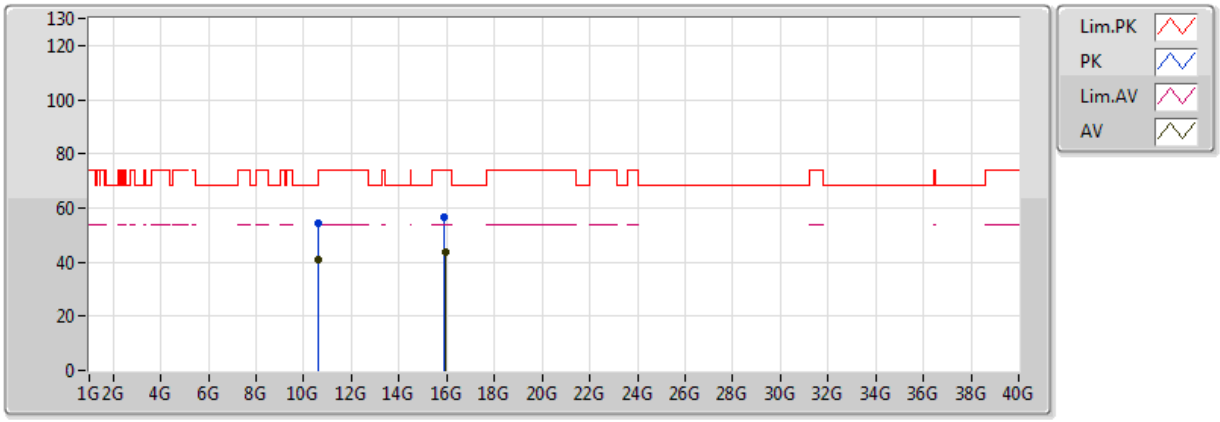


20171018
EUT Z_4TX
Setting 8
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	10.6002G	44.67	54.00	-9.33	15.99	3	Vertical	267	2.05
AV	15.9243G	43.63	54.00	-10.37	17.87	3	Vertical	358	1.83
PK	10.6007G	59.18	74.00	-14.82	15.99	3	Vertical	267	2.05
PK	15.8763G	57.11	74.00	-16.89	17.98	3	Vertical	358	1.83

802.11ac VHT20_Nss1,(MCS0)_4TX

5300MHz_TX

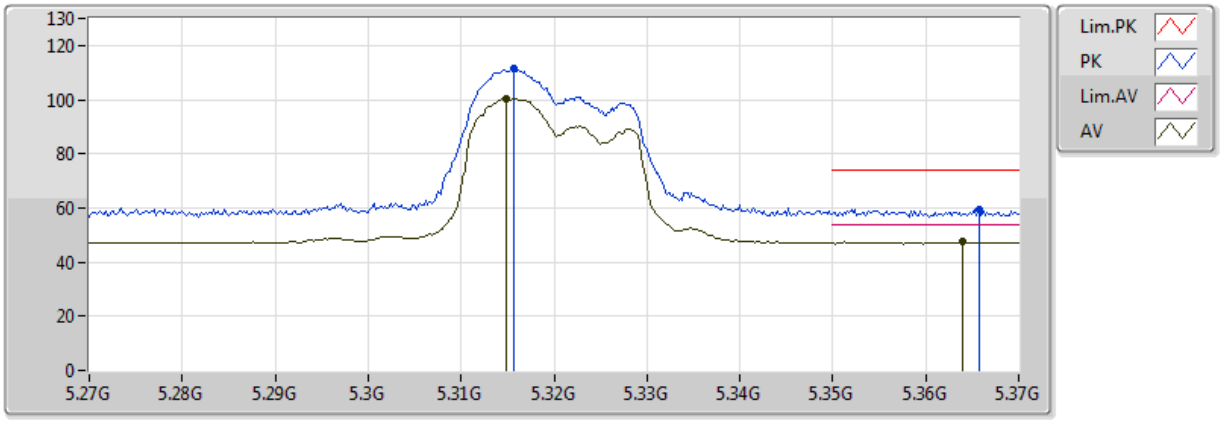


20171018
EUT Z_4TX
Setting 8
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	10.6184G	41.18	54.00	-12.82	15.99	3	Horizontal	271	1.84
AV	15.9242G	43.68	54.00	-10.32	17.87	3	Horizontal	53	1.55
PK	10.6082G	54.57	74.00	-19.43	15.99	3	Horizontal	271	1.84
PK	15.9099G	56.50	74.00	-17.50	17.90	3	Horizontal	53	1.55

802.11ac VHT20_Nss1,(MCS0)_4TX

5320MHz_TX

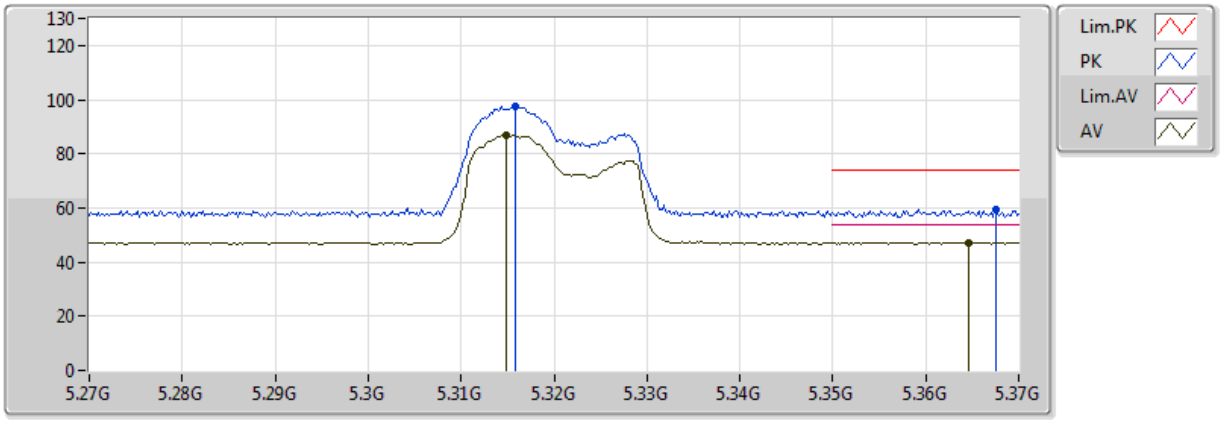


20171018
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.3148G	100.52	Inf	-Inf	10.04	3	Vertical	272	2.57
AV	5.364G	47.38	54.00	-6.62	10.10	3	Vertical	272	2.57
PK	5.3156G	111.28	Inf	-Inf	10.04	3	Vertical	272	2.57
PK	5.3658G	59.38	74.00	-14.62	10.11	3	Vertical	272	2.57

802.11ac VHT20_Nss1,(MCS0)_4TX

5320MHz_TX

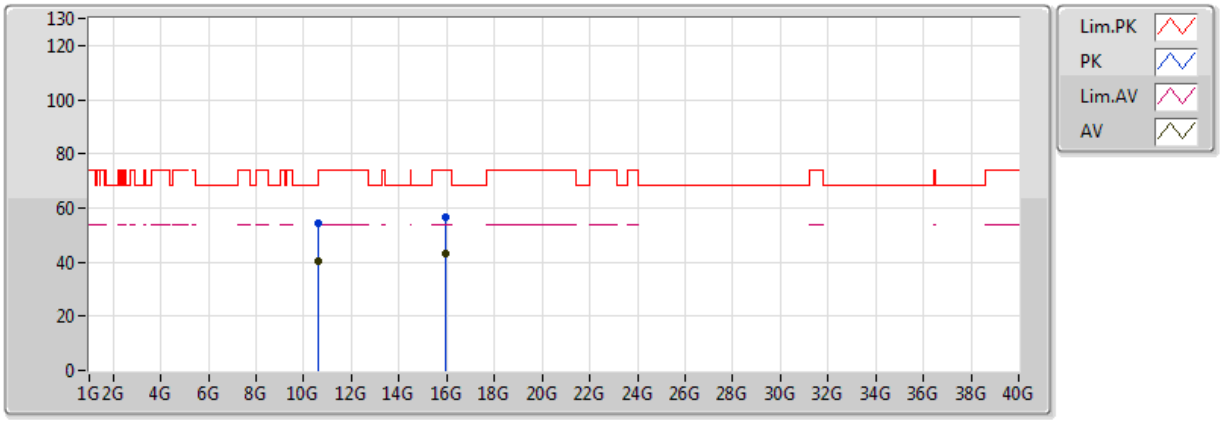


20171018
EUT Z_4TX
Setting 8.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.3148G	86.93	Inf	-Inf	10.04	3	Horizontal	139	1.87
AV	5.3646G	47.32	54.00	-6.68	10.10	3	Horizontal	139	1.87
PK	5.3158G	97.74	Inf	-Inf	10.04	3	Horizontal	139	1.87
PK	5.3676G	59.67	74.00	-14.33	10.11	3	Horizontal	139	1.87

802.11ac VHT20_Nss1,(MCS0)_4TX

5320MHz_TX

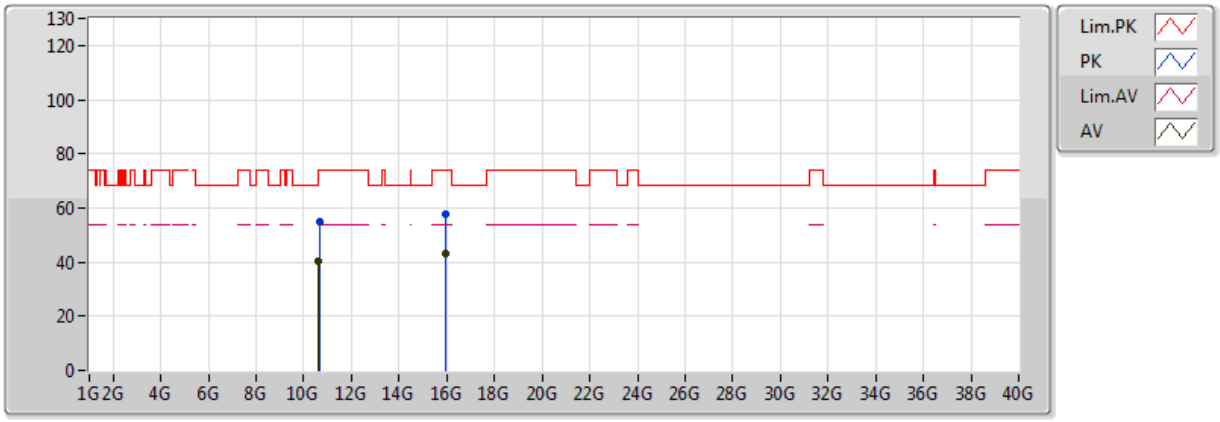


20171018
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	10.6344G	40.52	54.00	-13.48	15.99	3	Vertical	138	2.00
AV	15.9395G	42.96	54.00	-11.04	17.84	3	Vertical	268	1.93
PK	10.6342G	54.60	74.00	-19.40	15.99	3	Vertical	138	2.00
PK	15.9661G	56.74	74.00	-17.26	17.78	3	Vertical	268	1.93

802.11ac VHT20_Nss1,(MCS0)_4TX

5320MHz_TX

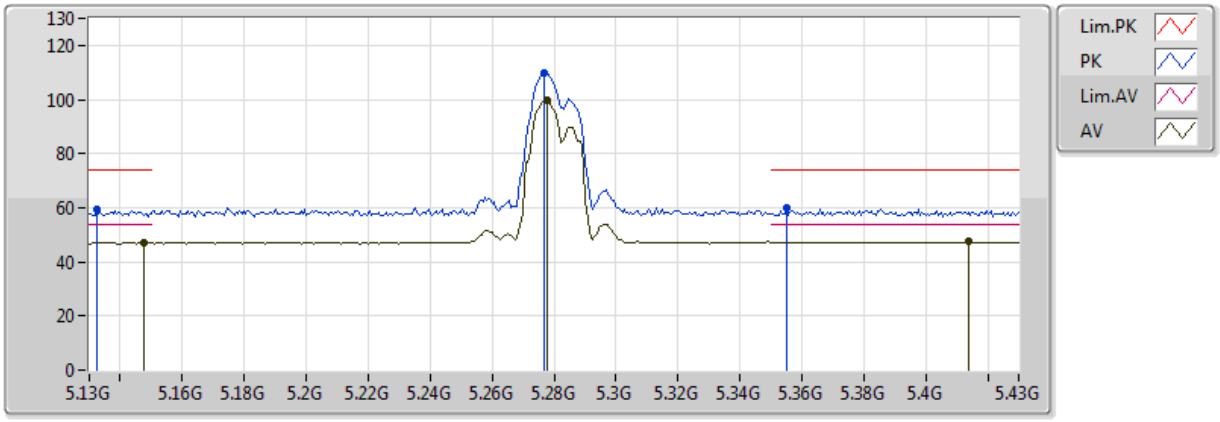


20171018
EUT Z_4TX
Setting 8.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	10.6309G	40.59	54.00	-13.41	15.99	3	Horizontal	282	2.29
AV	15.9395G	42.93	54.00	-11.07	17.84	3	Horizontal	19	1.25
PK	10.6566G	54.64	74.00	-19.36	15.99	3	Horizontal	282	2.29
PK	15.9701G	57.59	74.00	-16.41	17.77	3	Horizontal	19	1.25

802.11ac VHT20_Nss1,(MCS0)_4TX

5280MHz_TX

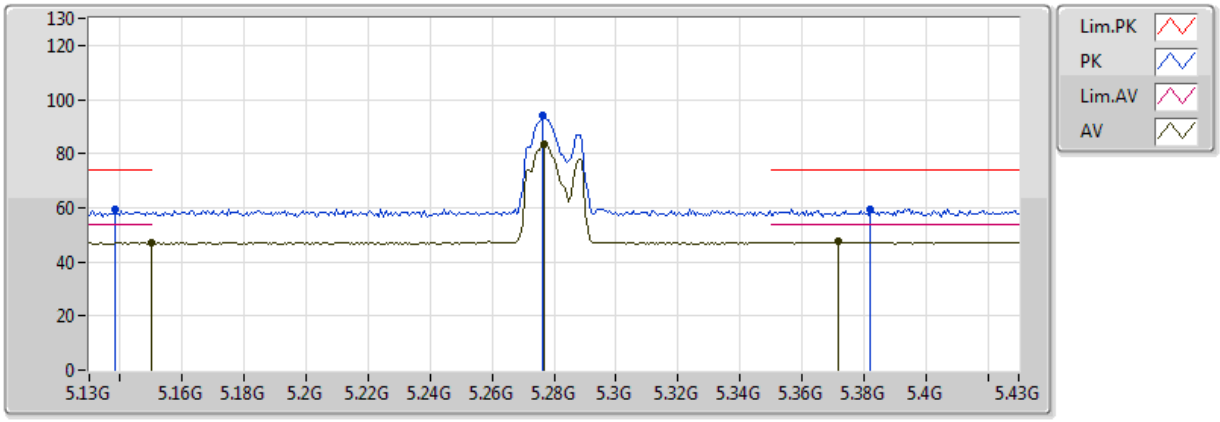


20171018
EUT Z_4TX
Setting 7
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1474G	47.10	54.00	-6.90	9.76	3	Vertical	288	2.36
AV	5.2776G	99.75	Inf	-Inf	9.99	3	Vertical	288	2.36
AV	5.4138G	47.42	54.00	-6.58	10.20	3	Vertical	288	2.36
PK	5.1324G	59.54	74.00	-14.46	9.72	3	Vertical	288	2.36
PK	5.277G	109.72	Inf	-Inf	9.99	3	Vertical	288	2.36
PK	5.355G	59.97	74.00	-14.03	10.09	3	Vertical	288	2.36

802.11ac VHT20_Nss1,(MCS0)_4TX

5280MHz_TX

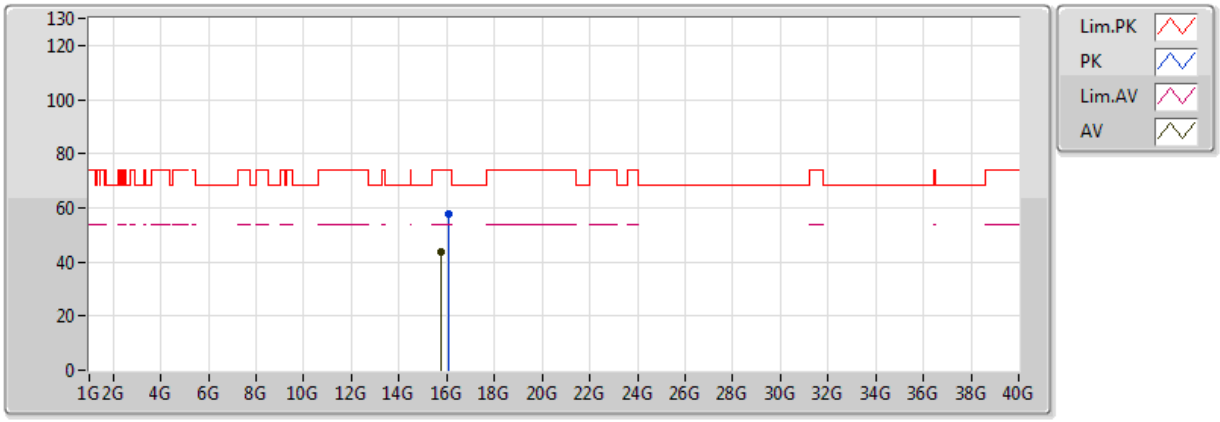


20171018
EUT Z_4TX
Setting 7
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.149995G	47.13	54.00	-6.87	9.76	3	Horizontal	164	1.96
AV	5.277G	83.28	Inf	-Inf	9.99	3	Horizontal	164	1.96
AV	5.3718G	47.40	54.00	-6.60	10.11	3	Horizontal	164	1.96
PK	5.1384G	59.16	74.00	-14.84	9.74	3	Horizontal	164	1.96
PK	5.2764G	94.01	Inf	-Inf	9.99	3	Horizontal	164	1.96
PK	5.382G	59.53	74.00	-14.47	10.13	3	Horizontal	164	1.96

802.11ac VHT20_Nss1,(MCS0)_4TX

5280MHz_TX

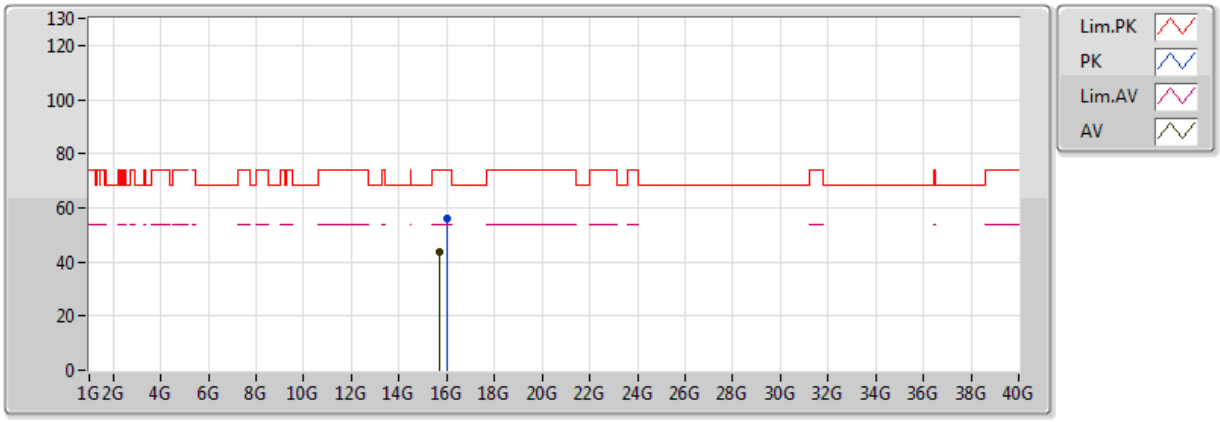


20171018
EUT Z_4TX
Setting 7
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.74G	43.73	54.00	-10.27	18.27	3	Vertical	0	1.24
PK	16.055G	57.49	74.00	-16.51	17.93	3	Vertical	0	1.24

802.11ac VHT20_Nss1,(MCS0)_4TX

5280MHz_TX

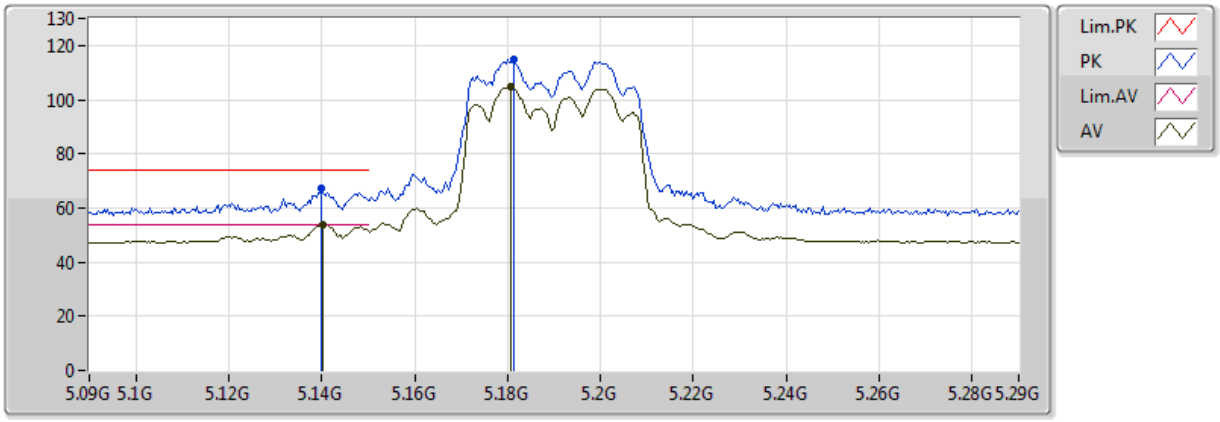


20171018
EUT Z_4TX
Setting 7
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.693G	43.76	54.00	-10.24	18.37	3	Horizontal	292	1.09
PK	16.03G	56.10	74.00	-17.90	17.83	3	Horizontal	292	1.09

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

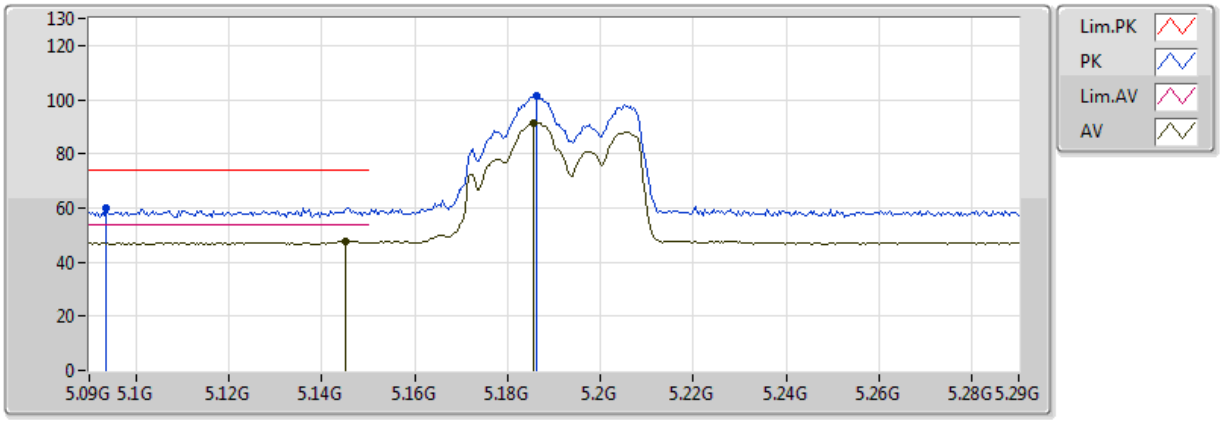


20171018
EUT Z_4TX
Setting 15.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1404G	53.88	54.00	-0.12	9.74	3	Vertical	71	2.29
AV	5.1808G	104.84	Inf	-Inf	9.84	3	Vertical	71	2.29
PK	5.14G	67.34	74.00	-6.66	9.74	3	Vertical	71	2.29
PK	5.1812G	114.78	Inf	-Inf	9.84	3	Vertical	71	2.29

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

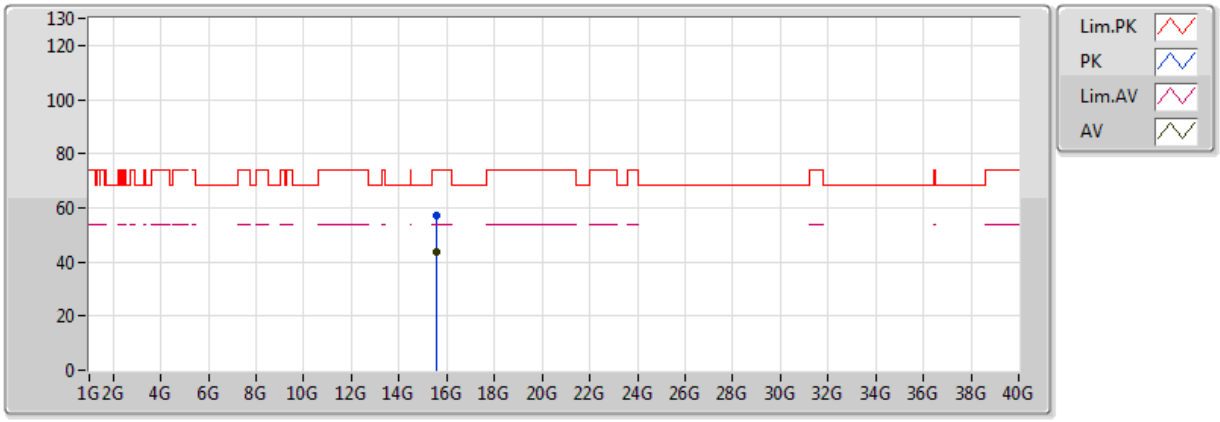


20171018
EUT Z_4TX
Setting 15.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1452G	47.74	54.00	-6.26	9.75	3	Horizontal	139	1.73
AV	5.1856G	91.29	Inf	-Inf	9.85	3	Horizontal	139	1.73
PK	5.0936G	60.08	74.00	-13.92	9.63	3	Horizontal	139	1.73
PK	5.1864G	101.15	Inf	-Inf	9.85	3	Horizontal	139	1.73

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

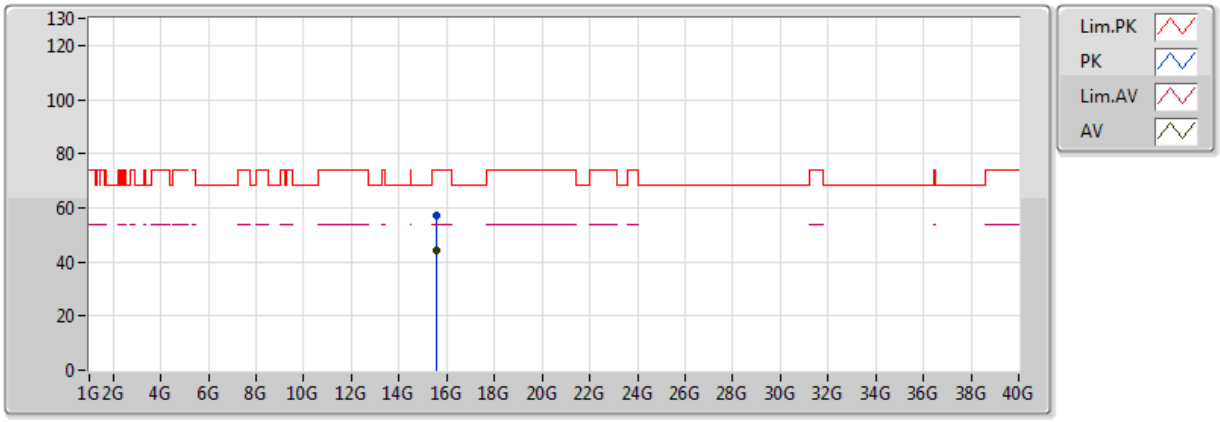


20171018
EUT Z_4TX
Setting 15.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5623G	43.89	54.00	-10.11	18.65	3	Vertical	291	2.21
PK	15.562G	56.92	74.00	-17.08	18.65	3	Vertical	291	2.21

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

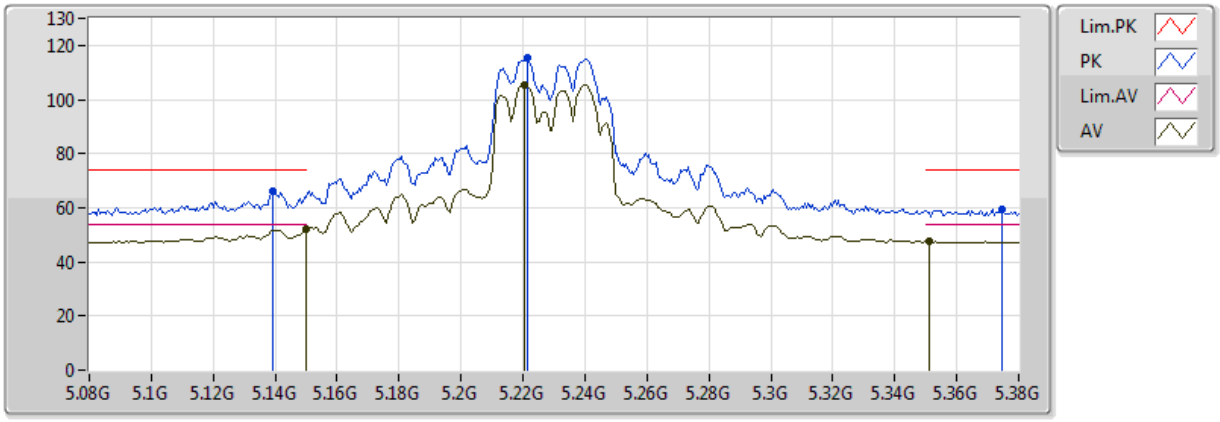


20171018
EUT Z_4TX
Setting 15.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5604G	44.18	54.00	-9.82	18.66	3	Horizontal	335	1.06
PK	15.5695G	57.30	74.00	-16.70	18.64	3	Horizontal	335	1.06

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

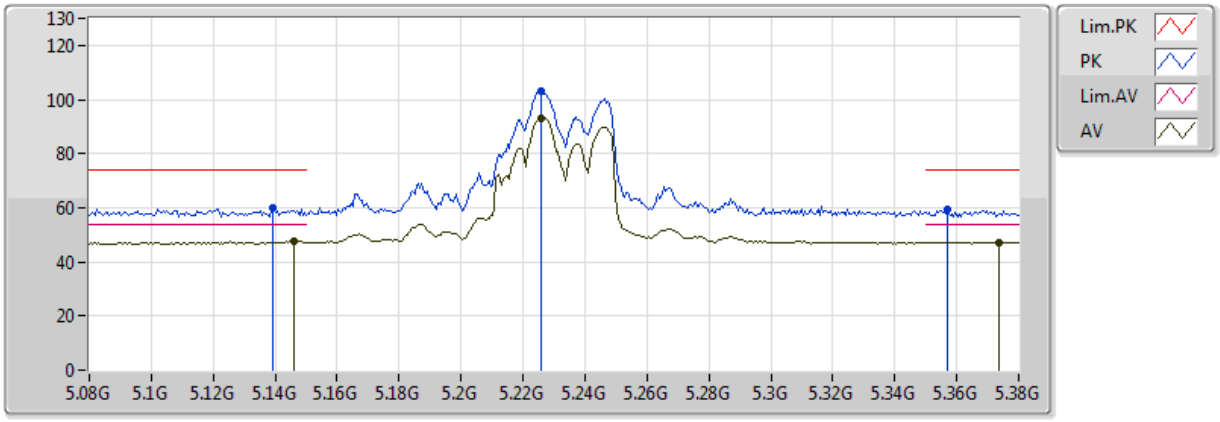


20171018
EUT Z_4TX
Setting 17.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.149995G	52.01	54.00	-1.99	9.76	3	Vertical	73	2.44
AV	5.2204G	105.53	Inf	-Inf	9.91	3	Vertical	73	2.44
AV	5.3512G	47.48	54.00	-6.52	10.09	3	Vertical	73	2.44
PK	5.1394G	66.08	74.00	-7.92	9.74	3	Vertical	73	2.44
PK	5.2216G	115.20	Inf	-Inf	9.91	3	Vertical	73	2.44
PK	5.3746G	59.20	74.00	-14.80	10.12	3	Vertical	73	2.44

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

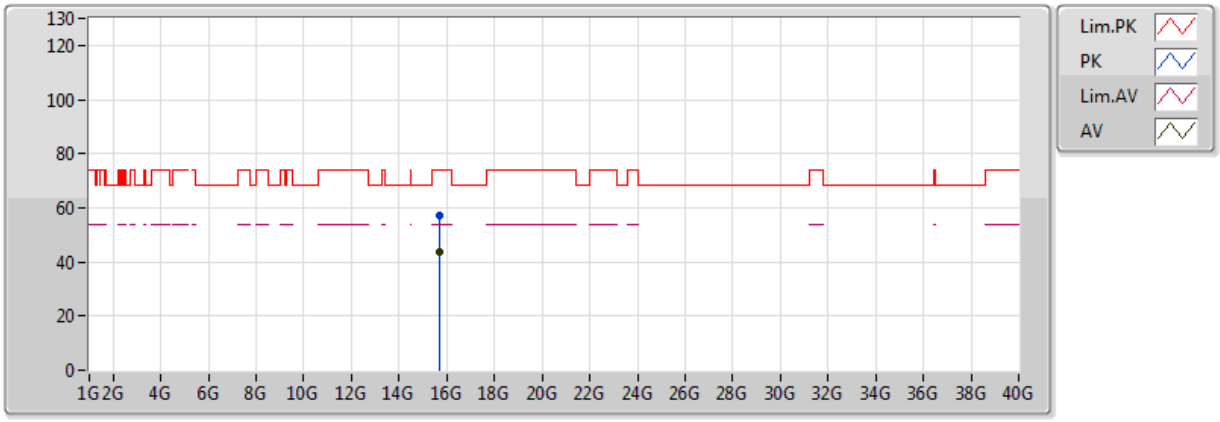


20171018
EUT Z_4TX
Setting 17.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.146G	47.79	54.00	-6.21	9.76	3	Horizontal	134	2.13
AV	5.2258G	93.20	Inf	-Inf	9.92	3	Horizontal	134	2.13
AV	5.3734G	47.19	54.00	-6.81	10.12	3	Horizontal	134	2.13
PK	5.1394G	59.82	74.00	-14.18	9.74	3	Horizontal	134	2.13
PK	5.2258G	102.85	Inf	-Inf	9.92	3	Horizontal	134	2.13
PK	5.3572G	59.35	74.00	-14.65	10.09	3	Horizontal	134	2.13

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

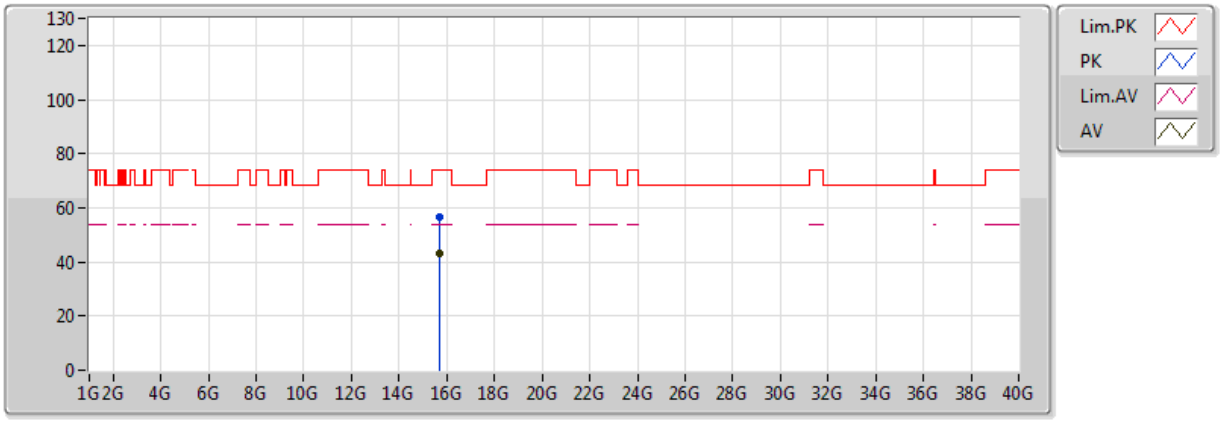


20171018
EUT Z_4TX
Setting 17.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.6967G	43.95	54.00	-10.05	18.36	3	Vertical	137	1.06
PK	15.6867G	57.04	74.00	-16.96	18.38	3	Vertical	137	1.06

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

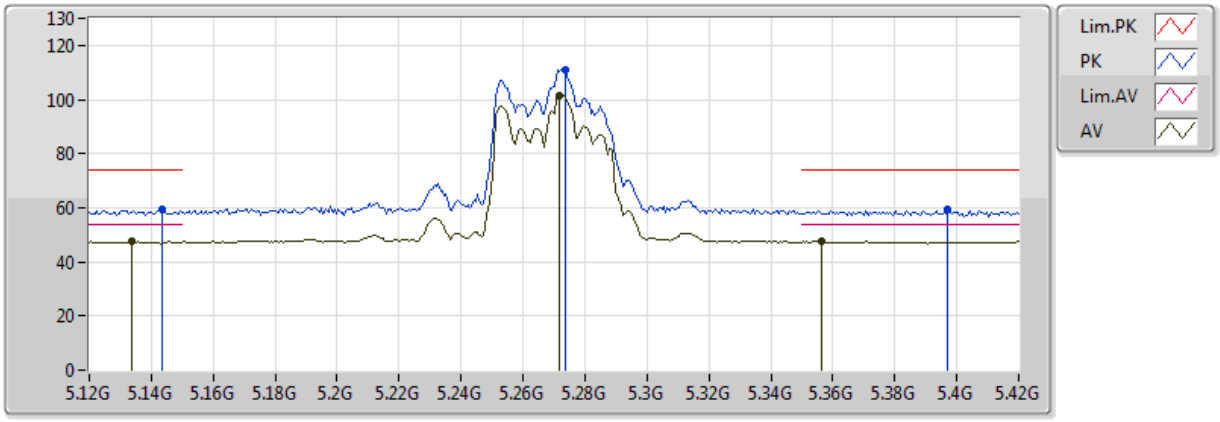


20171018
EUT Z_4TX
Setting 17.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.6976G	43.23	54.00	-10.77	18.36	3	Horizontal	278	1.67
PK	15.7148G	56.71	74.00	-17.29	18.32	3	Horizontal	278	1.67

802.11ac VHT40_Nss1,(MCS0)_4TX

5270MHz_TX

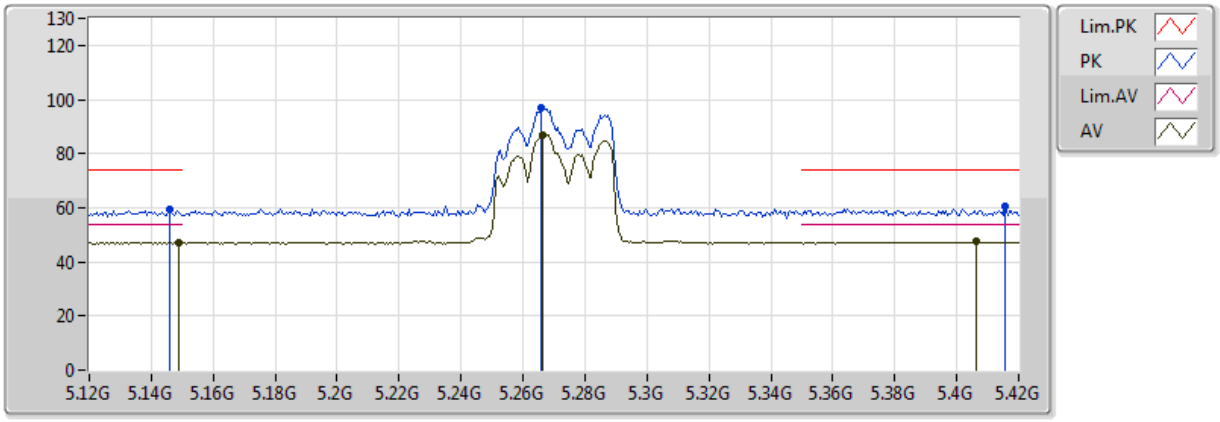


20171018
EUT Z_4TX
Setting 11.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1338G	47.45	54.00	-6.55	9.73	3	Vertical	196	2.26
AV	5.2718G	101.54	Inf	-Inf	9.98	3	Vertical	196	2.26
AV	5.3564G	47.56	54.00	-6.44	10.09	3	Vertical	196	2.26
PK	5.1434G	59.56	74.00	-14.44	9.75	3	Vertical	196	2.26
PK	5.2736G	110.84	Inf	-Inf	9.98	3	Vertical	196	2.26
PK	5.3972G	59.55	74.00	-14.45	10.15	3	Vertical	196	2.26

802.11ac VHT40_Nss1,(MCS0)_4TX

5270MHz_TX

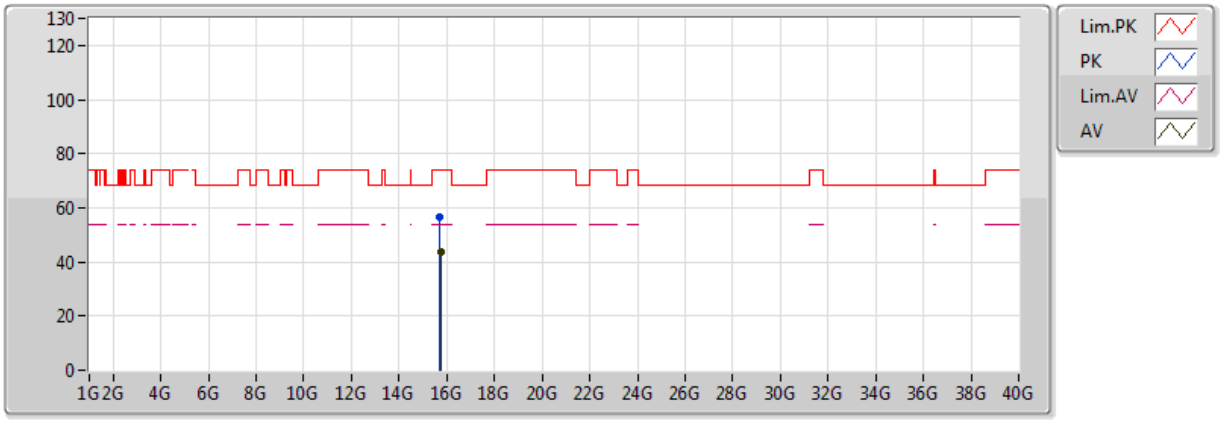


20171018
EUT Z_4TX
Setting 11.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1488G	47.09	54.00	-6.91	9.76	3	Horizontal	165	1.61
AV	5.2664G	86.97	Inf	-Inf	9.97	3	Horizontal	165	1.61
AV	5.4062G	47.35	54.00	-6.65	10.17	3	Horizontal	165	1.61
PK	5.1458G	59.25	74.00	-14.75	9.76	3	Horizontal	165	1.61
PK	5.2658G	96.78	Inf	-Inf	9.97	3	Horizontal	165	1.61
PK	5.4158G	60.26	74.00	-13.74	10.20	3	Horizontal	165	1.61

802.11ac VHT40_Nss1,(MCS0)_4TX

5270MHz_TX

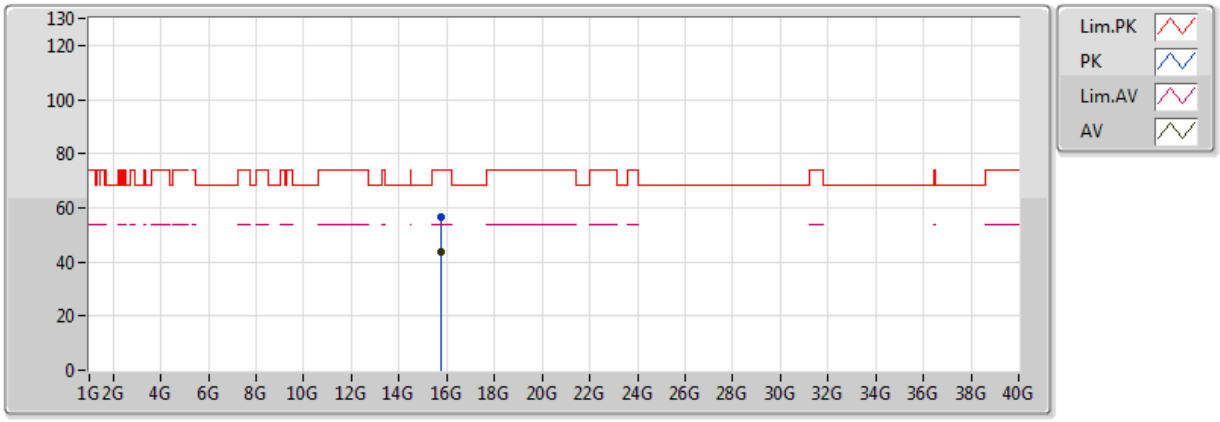


20171018
EUT Z_4TX
Setting 11.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7404G	43.80	54.00	-10.20	18.27	3	Vertical	138	2.09
PK	15.6924G	56.67	74.00	-17.33	18.37	3	Vertical	138	2.09

802.11ac VHT40_Nss1,(MCS0)_4TX

5270MHz_TX

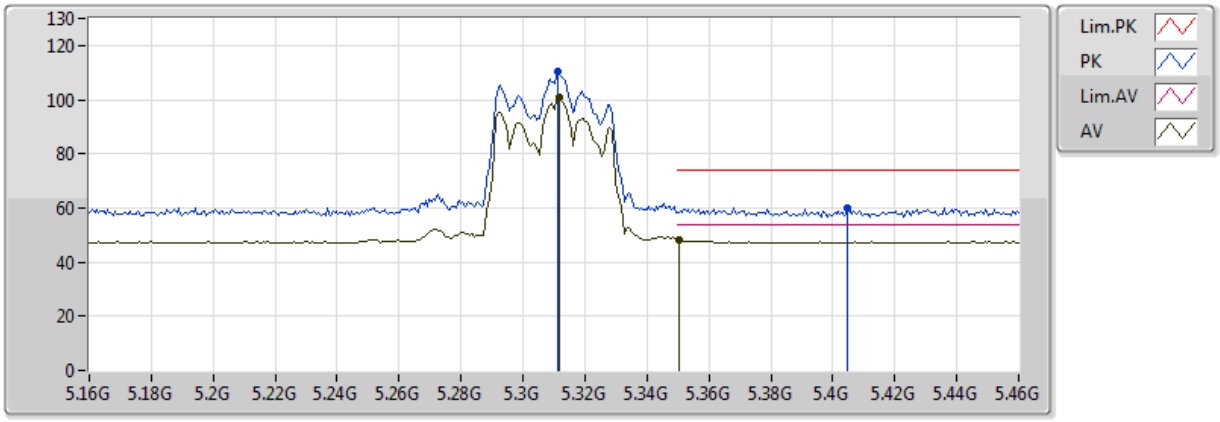


20171018
EUT Z_4TX
Setting 11.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7314G	43.87	54.00	-10.13	18.29	3	Horizontal	169	2.42
PK	15.7608G	56.41	74.00	-17.59	18.22	3	Horizontal	169	2.42

802.11ac VHT40_Nss1,(MCS0)_4TX

5310MHz_TX

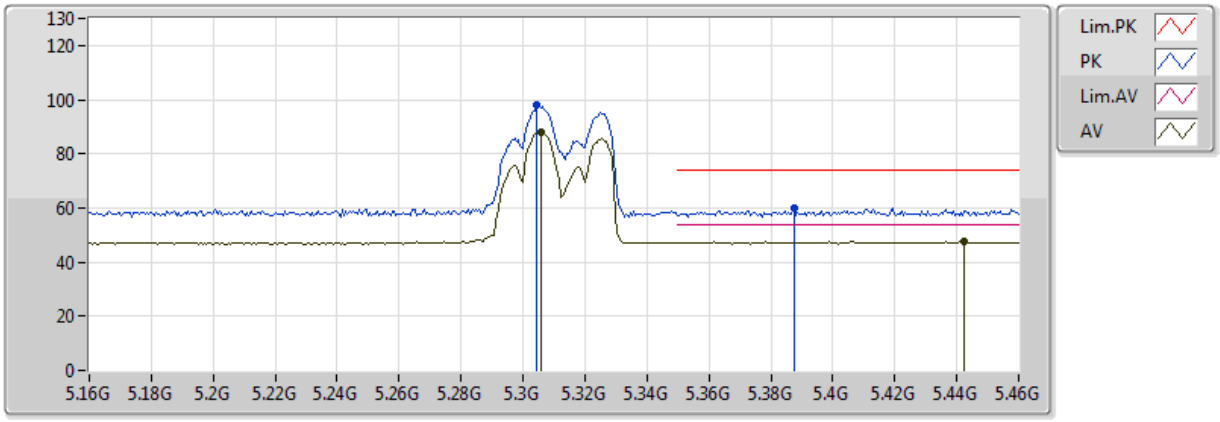


20171018
EUT Z_4TX
Setting 11.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.3118G	100.77	Inf	-Inf	10.04	3	Vertical	189	2.23
AV	5.3502G	48.22	54.00	-5.78	10.09	3	Vertical	189	2.23
PK	5.3112G	110.24	Inf	-Inf	10.03	3	Vertical	189	2.23
PK	5.4048G	59.94	74.00	-14.06	10.17	3	Vertical	189	2.23

802.11ac VHT40_Nss1,(MCS0)_4TX

5310MHz_TX

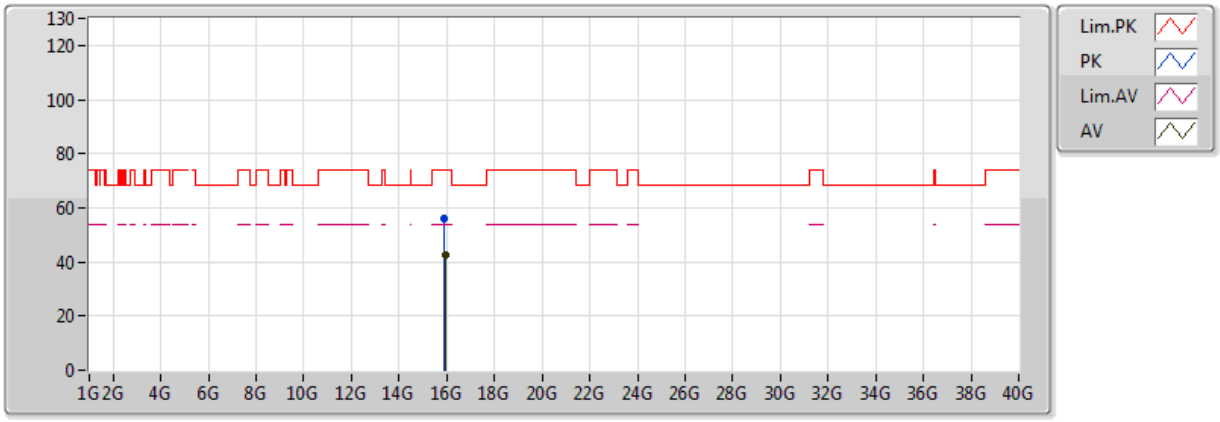


20171018
EUT Z_4TX
Setting 11.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.3058G	87.97	Inf	-Inf	10.03	3	Horizontal	163	1.85
AV	5.4426G	47.50	54.00	-6.50	10.29	3	Horizontal	163	1.85
PK	5.3046G	98.11	Inf	-Inf	10.03	3	Horizontal	163	1.85
PK	5.3874G	59.98	74.00	-14.02	10.13	3	Horizontal	163	1.85

802.11ac VHT40_Nss1,(MCS0)_4TX

5310MHz_TX

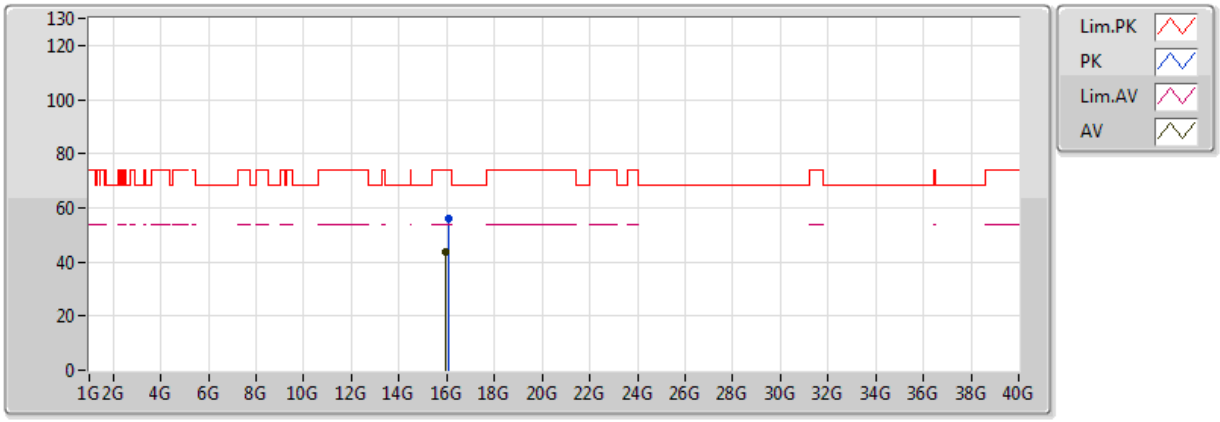


20171018
EUT Z_4TX
Setting 11.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.9294G	42.79	54.00	-11.21	17.86	3	Vertical	56	1.92
PK	15.9168G	56.16	74.00	-17.84	17.89	3	Vertical	56	1.92

802.11ac VHT40_Nss1,(MCS0)_4TX

5310MHz_TX

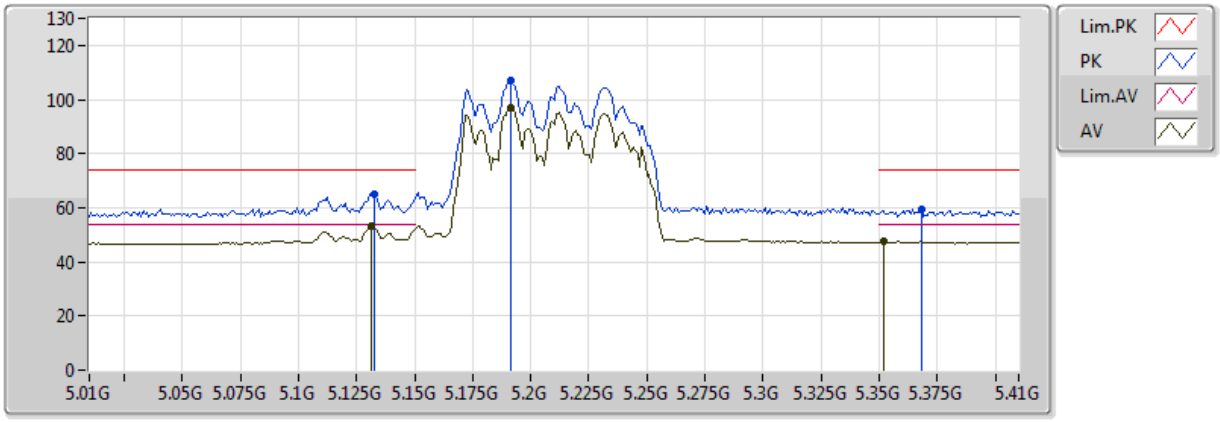


20171018
EUT Z_4TX
Setting 11.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.924G	43.69	54.00	-10.31	17.87	3	Horizontal	86	1.75
PK	16.0578G	56.21	74.00	-17.79	17.94	3	Horizontal	86	1.75

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

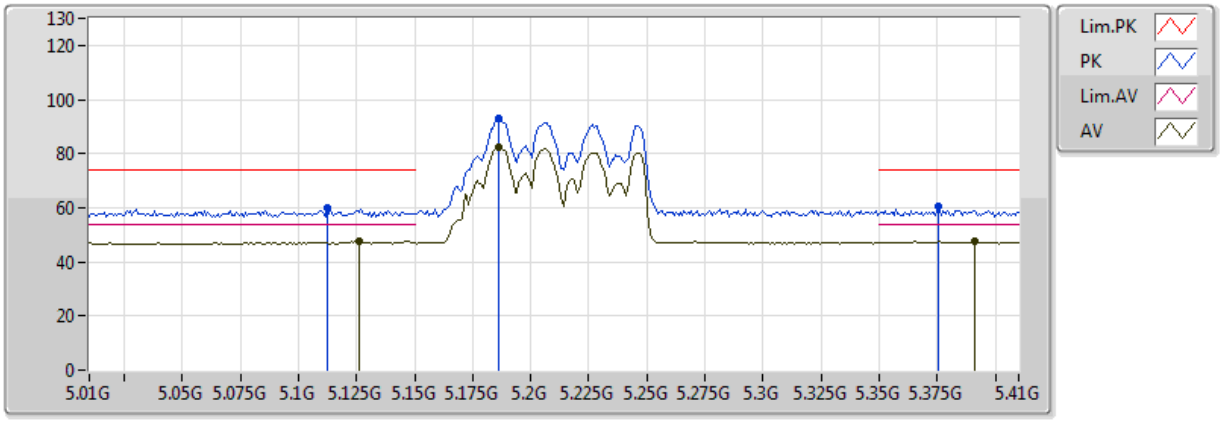


20171018
EUT Z_4TX
Setting 10
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1316G	53.12	54.00	-0.88	9.72	3	Vertical	188	2.35
AV	5.1916G	96.98	Inf	-Inf	9.86	3	Vertical	188	2.35
AV	5.3516G	47.45	54.00	-6.55	10.09	3	Vertical	188	2.35
PK	5.1324G	64.84	74.00	-9.16	9.72	3	Vertical	188	2.35
PK	5.1916G	107.19	Inf	-Inf	9.86	3	Vertical	188	2.35
PK	5.3684G	59.19	74.00	-14.81	10.11	3	Vertical	188	2.35

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

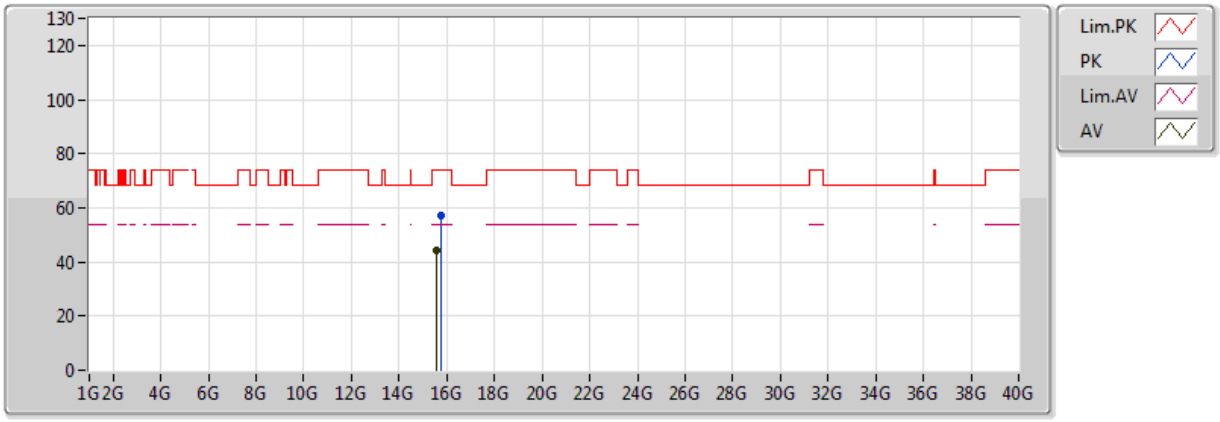


20171018
EUT Z_4TX
Setting 10
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.126G	47.55	54.00	-6.45	9.71	3	Horizontal	159	1.72
AV	5.186G	82.64	Inf	-Inf	9.85	3	Horizontal	159	1.72
AV	5.3908G	47.47	54.00	-6.53	10.14	3	Horizontal	159	1.72
PK	5.1124G	59.75	74.00	-14.25	9.68	3	Horizontal	159	1.72
PK	5.186G	93.00	Inf	-Inf	9.85	3	Horizontal	159	1.72
PK	5.3756G	60.64	74.00	-13.36	10.12	3	Horizontal	159	1.72

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

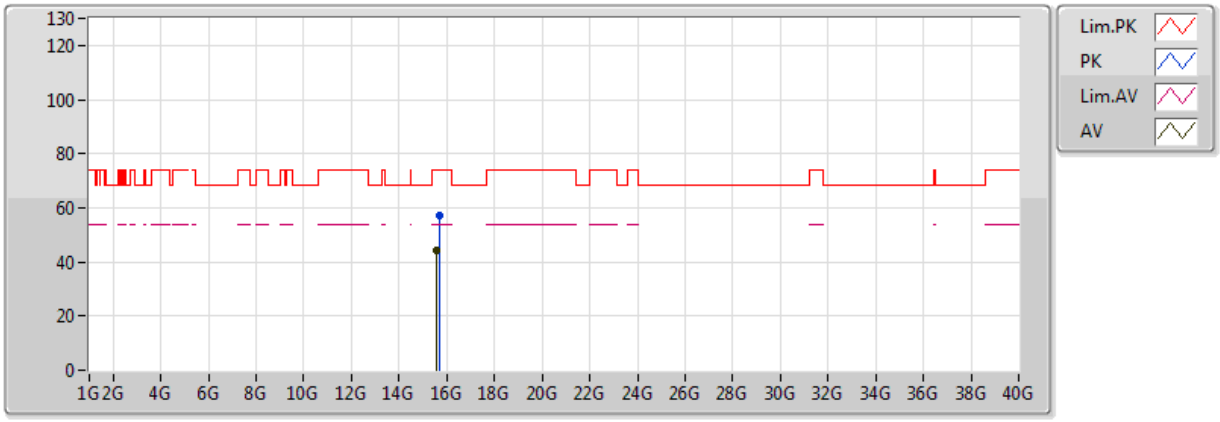


20171018
EUT Z_4TX
Setting 10
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5876G	44.14	54.00	-9.86	18.60	3	Vertical	305	1.88
PK	15.73G	57.02	74.00	-16.98	18.29	3	Vertical	305	1.88

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

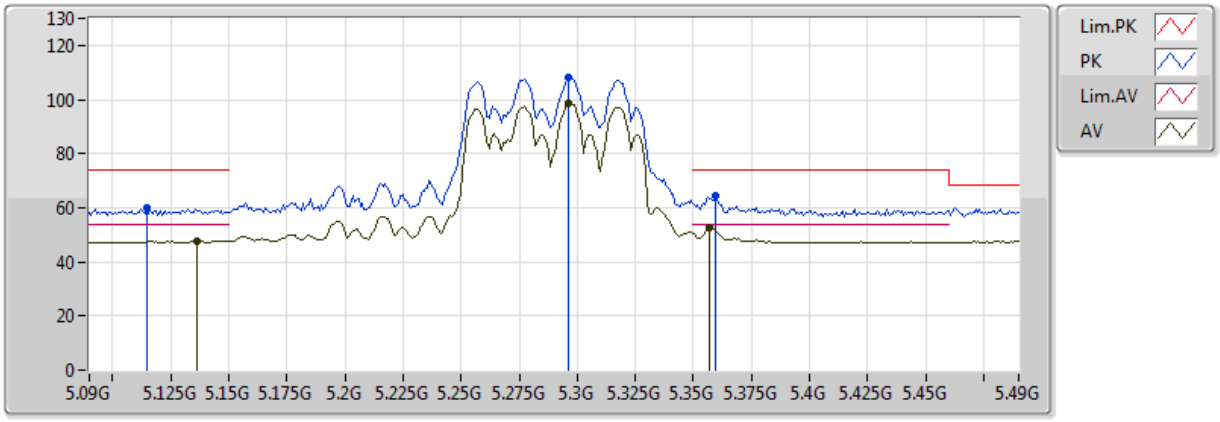


20171018
EUT Z_4TX
Setting 10
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.5716G	44.09	54.00	-9.91	18.63	3	Horizontal	116	1.24
PK	15.6836G	56.92	74.00	-17.08	18.39	3	Horizontal	116	1.24

802.11ac VHT80_Nss1,(MCS0)_4TX

5290MHz_TX

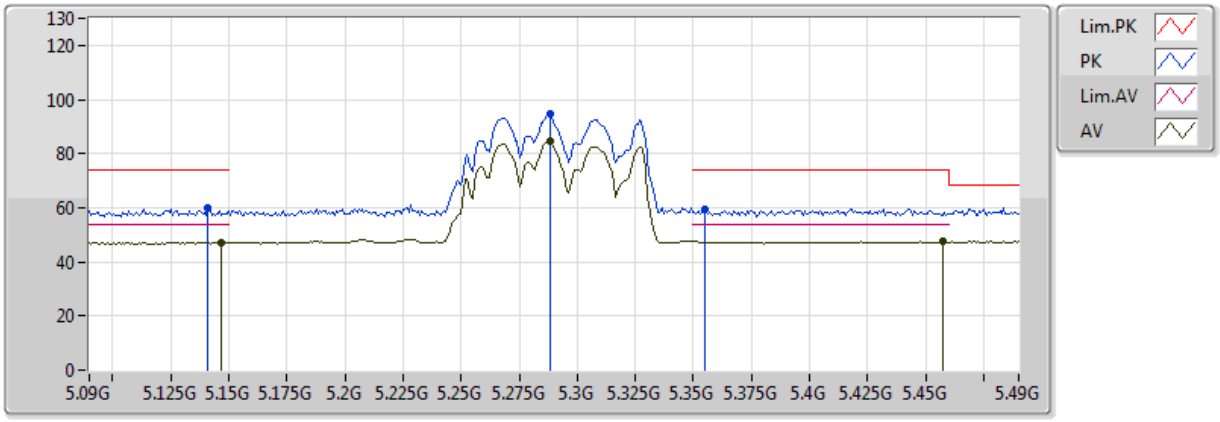


20171018
EUT Z_4TX
Setting 13.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1364G	47.89	54.00	-6.11	9.73	3	Vertical	153	2.20
AV	5.2964G	98.53	Inf	-Inf	10.01	3	Vertical	153	2.20
AV	5.3572G	52.45	54.00	-1.55	10.09	3	Vertical	153	2.20
PK	5.1148G	59.93	74.00	-14.07	9.68	3	Vertical	153	2.20
PK	5.2964G	108.28	Inf	-Inf	10.01	3	Vertical	153	2.20
PK	5.3596G	64.33	74.00	-9.67	10.10	3	Vertical	153	2.20

802.11ac VHT80_Nss1,(MCS0)_4TX

5290MHz_TX

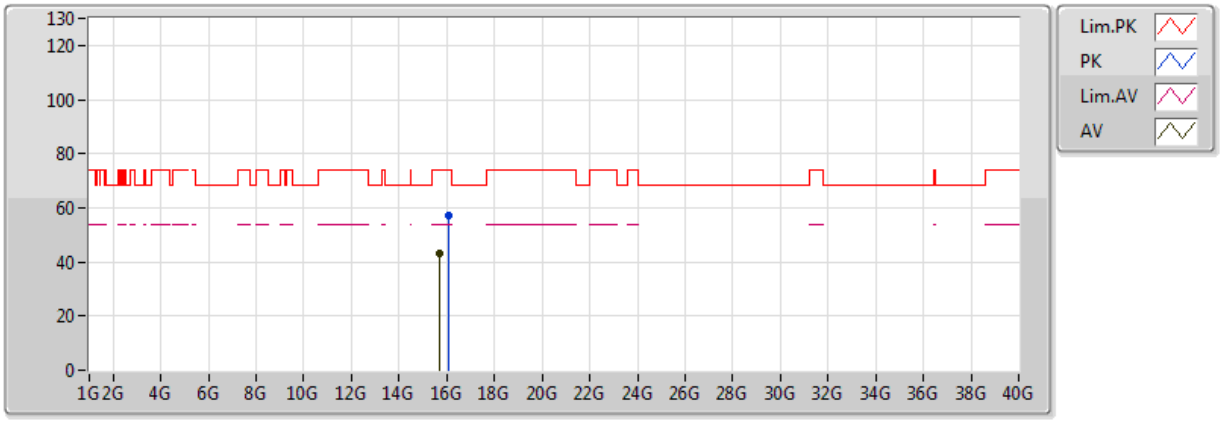


20171018
EUT Z_4TX
Setting 13.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.1468G	47.10	54.00	-6.90	9.76	3	Horizontal	154	1.50
AV	5.2884G	84.52	Inf	-Inf	10.00	3	Horizontal	154	1.50
AV	5.4572G	47.46	54.00	-6.54	10.34	3	Horizontal	154	1.50
PK	5.1412G	59.72	74.00	-14.28	9.74	3	Horizontal	154	1.50
PK	5.2884G	94.59	Inf	-Inf	10.00	3	Horizontal	154	1.50
PK	5.3548G	59.25	74.00	-14.75	10.09	3	Horizontal	154	1.50

802.11ac VHT80_Nss1,(MCS0)_4TX

5290MHz_TX

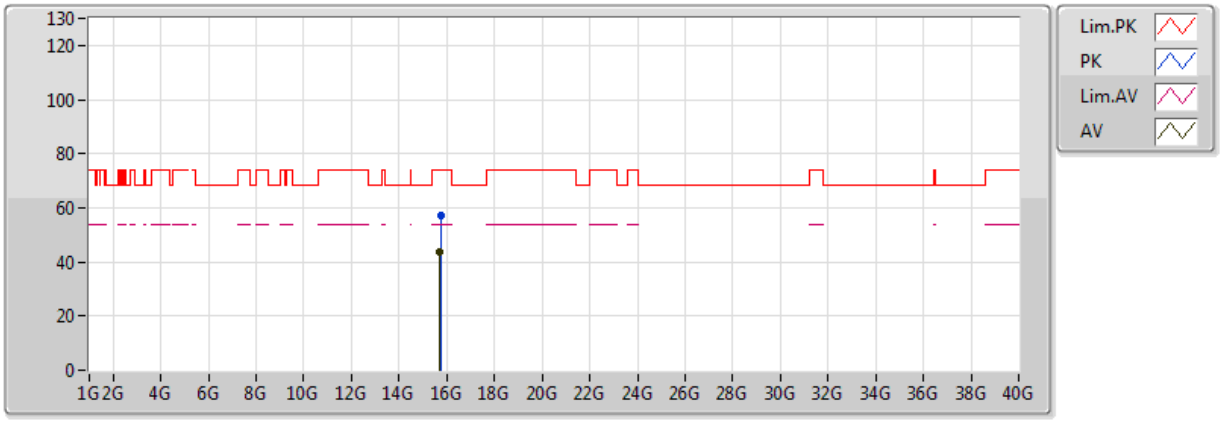


20171018
EUT Z_4TX
Setting 13.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7212G	43.16	54.00	-10.84	18.31	3	Vertical	328	2.14
PK	16.0524G	57.40	74.00	-16.60	17.92	3	Vertical	328	2.14

802.11ac VHT80_Nss1,(MCS0)_4TX

5290MHz_TX



20171018
EUT Z_4TX
Setting 13.5
02-C-5
FSU

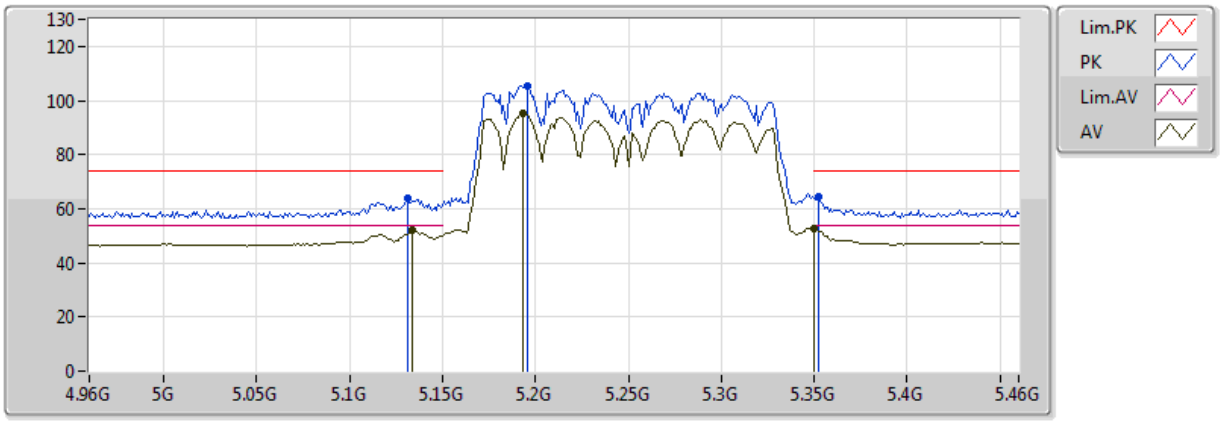
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.7068G	43.84	54.00	-10.16	18.34	3	Horizontal	33	2.10
PK	15.774G	57.15	74.00	-16.85	18.20	3	Horizontal	33	2.10

802.11ac VHT80+80
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80+80_Nss2,(MCS0)_2TX	Pass	AV	5.350005G	52.46	54.00	-1.54	10.09	3	Vertical	205	2.46	-

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5210MHz,5290MHz_TX



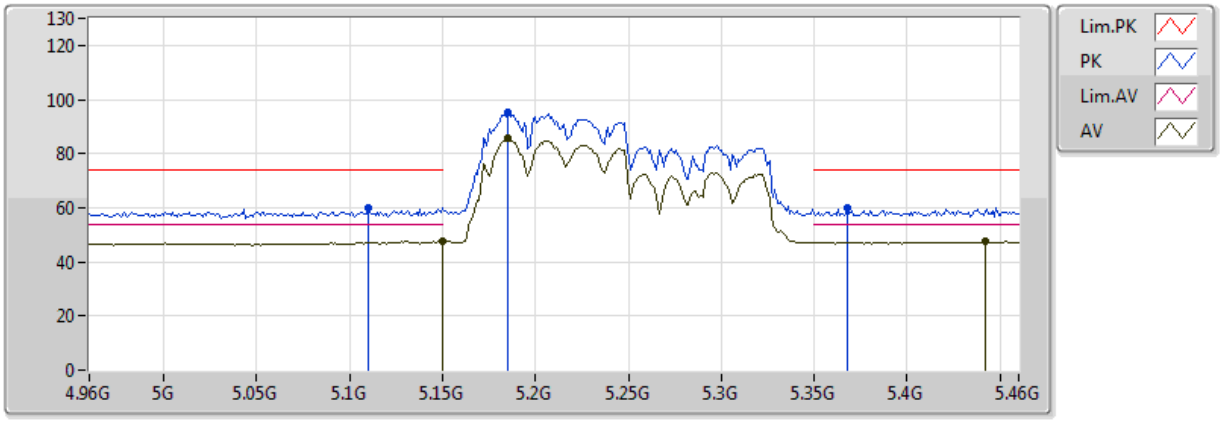
20171019
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.134G	52.03	54.00	-1.97	9.73	3	Vertical	205	2.46
AV	5.193G	95.32	Inf	-Inf	9.86	3	Vertical	205	2.46
AV	5.350005G	52.46	54.00	-1.54	10.09	3	Vertical	205	2.46
PK	5.131G	63.97	74.00	-10.03	9.72	3	Vertical	205	2.46
PK	5.196G	105.50	Inf	-Inf	9.87	3	Vertical	205	2.46
PK	5.352G	64.66	74.00	-9.34	10.09	3	Vertical	205	2.46

Mode

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5210MHz,5290MHz_TX

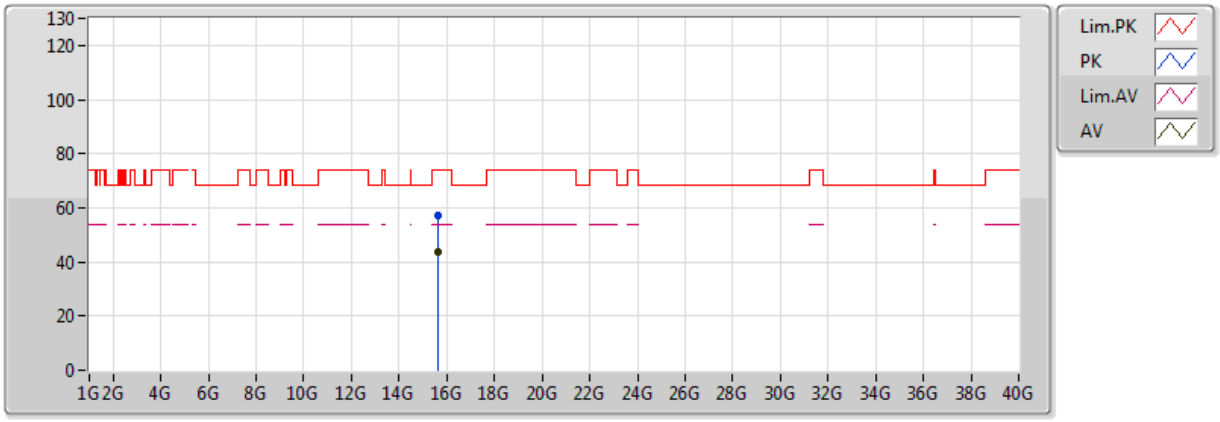


20171019
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.149995G	47.59	54.00	-6.41	9.76	3	Horizontal	201	2.75
AV	5.185G	85.68	Inf	-Inf	9.85	3	Horizontal	201	2.75
AV	5.442G	47.44	54.00	-6.56	10.29	3	Horizontal	201	2.75
PK	5.11G	59.90	74.00	-14.10	9.67	3	Horizontal	201	2.75
PK	5.185G	95.41	Inf	-Inf	9.85	3	Horizontal	201	2.75
PK	5.368G	60.16	74.00	-13.84	10.11	3	Horizontal	201	2.75

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5210MHz,5290MHz_TX

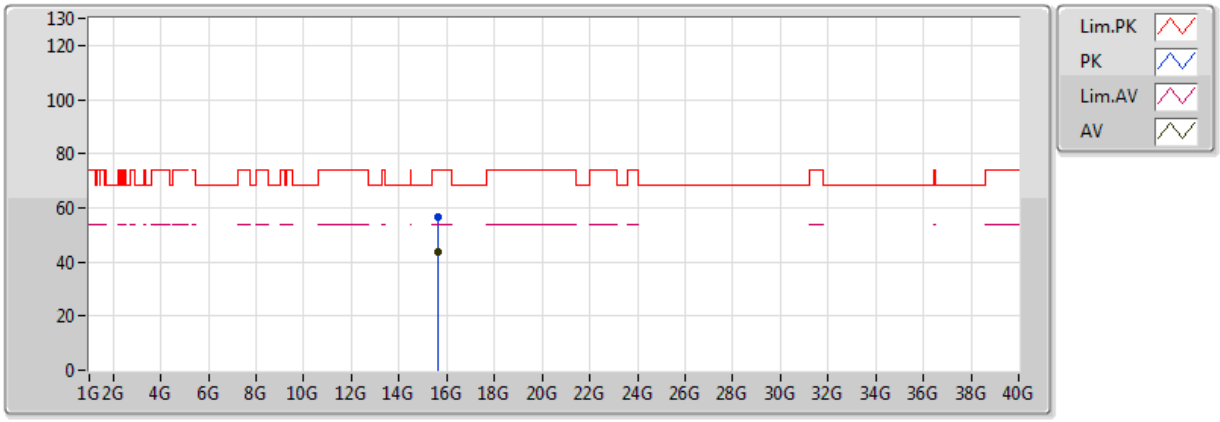


20171019
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.6157G	43.80	54.00	-10.20	18.54	3	Vertical	58	1.34
PK	15.6124G	57.03	74.00	-16.97	18.54	3	Vertical	58	1.34

802.11ac VHT80+80_Nss2,(MCS0)_2TX

#5210MHz,5290MHz_TX

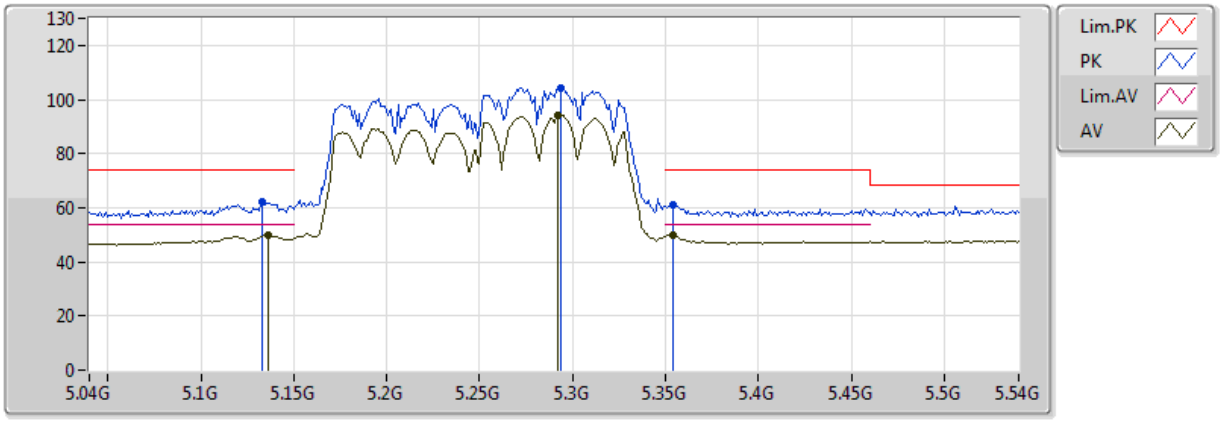


20171019
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.6319G	43.73	54.00	-10.27	18.50	3	Horizontal	349	1.46
PK	15.6179G	56.49	74.00	-17.51	18.53	3	Horizontal	349	1.46

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5210MHz,#5290MHz_TX

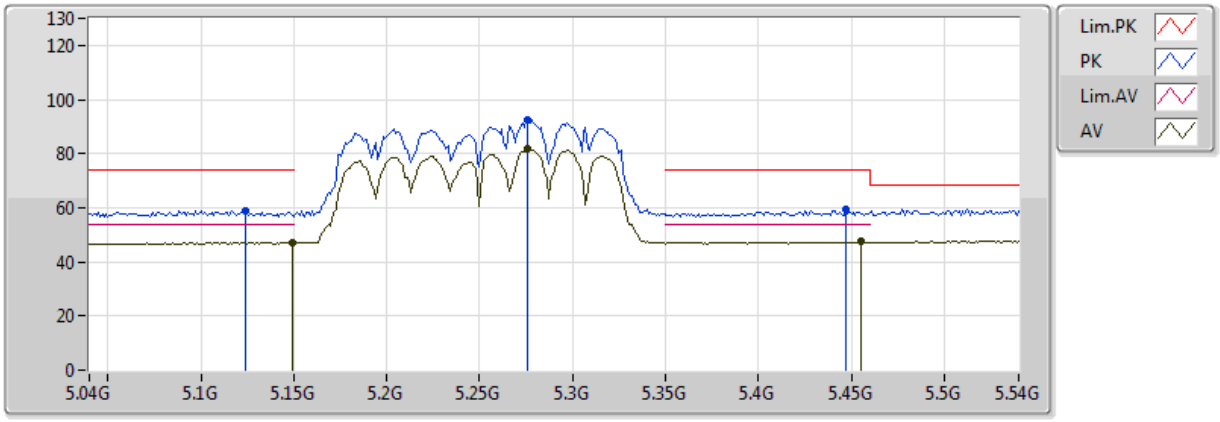


20171019
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.136G	50.12	54.00	-3.88	9.73	3	Vertical	254	2.32
AV	5.292G	94.38	Inf	-Inf	10.01	3	Vertical	254	2.32
AV	5.354G	49.80	54.00	-4.20	10.09	3	Vertical	254	2.32
PK	5.133G	61.95	74.00	-12.05	9.73	3	Vertical	254	2.32
PK	5.294G	104.08	Inf	-Inf	10.01	3	Vertical	254	2.32
PK	5.354G	60.90	74.00	-13.10	10.09	3	Vertical	254	2.32

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5210MHz,#5290MHz_TX

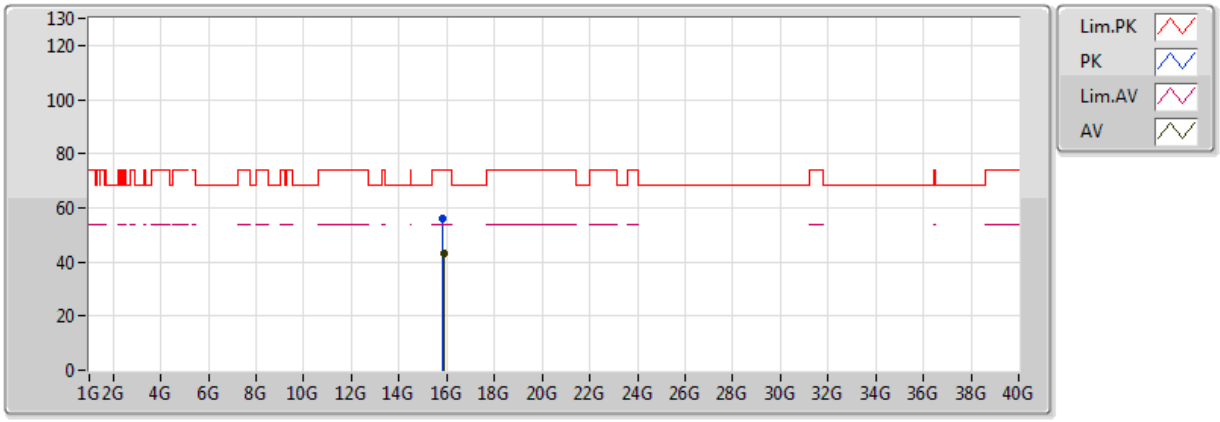


20171019
EUT Z_4TX
Setting 12.5
02-C-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	5.149G	47.14	54.00	-6.86	9.76	3	Horizontal	183	2.26
AV	5.276G	81.80	Inf	-Inf	9.99	3	Horizontal	183	2.26
AV	5.455G	47.35	54.00	-6.65	10.34	3	Horizontal	183	2.26
PK	5.124G	58.91	74.00	-15.09	9.71	3	Horizontal	183	2.26
PK	5.276G	92.40	Inf	-Inf	9.99	3	Horizontal	183	2.26
PK	5.447G	59.33	74.00	-14.67	10.31	3	Horizontal	183	2.26

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5210MHz,#5290MHz_TX

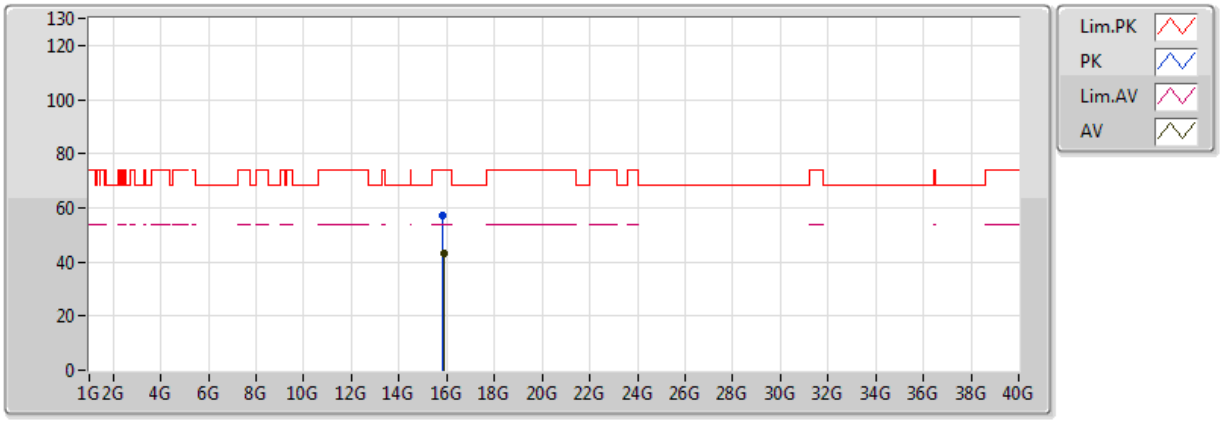


20171019
EUT Z_4TX
Setting 12.5
02-C-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
AV	15.8824G	43.29	54.00	-10.71	17.96	3	Vertical	263	2.11
PK	15.8511G	56.06	74.00	-17.94	18.03	3	Vertical	263	2.11

802.11ac VHT80+80_Nss2,(MCS0)_2TX

5210MHz,#5290MHz_TX



20171019
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	15.8859G	43.21	54.00	-10.79	17.96	3	Horizontal	17	2.37
PK	15.851G	57.02	74.00	-16.98	18.03	3	Horizontal	17	2.37

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain1 (dBm)	Chain2 (dBm	Chain3 (dBm	Chain4 (dBm	Total (dBm)	Elevation angle above 30° Max gain (dBi)	Elevation angle above 30° Max EIRP (dBm)	EIRP Power Limit (dBm)
Non BF	5180MHz	OFDM	Ch36	6Mbps	5	6.33	6.49	6.82	7.02	12.69	8.000	20.69	21.00
	5200MHz	OFDM	Ch40	6Mbps	5	6.44	6.55	7.04	7.13	12.82	8.000	20.82	21.00
	5240MHz	OFDM	Ch48	6Mbps	5.5	6.55	6.29	6.92	7.42	12.84	8.000	20.84	21.00
	5180MHz	VHT20	Ch36	MCS0-Nss1	5	6.16	6.36	6.89	6.95	12.62	8.000	20.62	21.00
	5200MHz	VHT20	Ch40	MCS0-Nss1	5	6.15	6.42	6.81	6.96	12.62	8.000	20.62	21.00
	5240MHz	VHT20	Ch48	MCS0-Nss1	5.5	6.45	6.04	6.72	7.35	12.69	8.000	20.69	21.00
	5190MHz	VHT40	Ch38	MCS0-Nss1	5	6.06	6.71	6.85	6.73	12.62	8.000	20.62	21.00
	5230MHz	VHT40	Ch46	MCS0-Nss1	5.5	6.68	6.53	6.84	7.19	12.84	8.000	20.84	21.00
	5210MHz	VHT80	Ch42	MCS0-Nss1	5.5	6.81	6.73	6.61	7.35	12.91	8.000	20.91	21.00