



# FCC RADIO TEST REPORT

**FCC ID** : 2AGMRTRM9995G  
**Equipment** : 802.11ac WiFi Radio Module  
**Brand Name** : EVEREST™ Network Solutions  
**Model Name** : TRM9995G  
**Applicant** : Tembo Systems, Inc.  
2933 Bunker Hill lane, Suite 100, Santa Clara, CA  
95054 U.S.A  
**Manufacturer** : Tembo Systems, Inc.  
2933 Bunker Hill lane, Suite 100, Santa Clara, CA  
95054 U.S.A  
**Standard** : 47 CFR FCC Part 15.407

The product was received on Apr. 25, 2018, and testing was started from May 16, 2018 and completed on Jun. 12, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**  
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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**Appendix A. Test Results of AC Power-line Conducted Emissions****Appendix B. Test Results of Emission Bandwidth****Appendix C. Test Results of Maximum Conducted Output Power****Appendix D. Test Results of Peak Power Spectral Density****Appendix E. Test Results of Unwanted Emissions****Appendix F. Test Photos****Photographs of EUT v01**



## History of this test report



## Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

Reviewed by: Sam Chen

Report Producer: Vicky Huang



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2TX, 4TX
5.15-5.25GHz	802.11n HT20	20	2TX, 4TX
5.15-5.25GHz	802.11n HT20-BF	20	2TX, 4TX
5.15-5.25GHz	802.11ac VHT20	20	2TX, 4TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.15-5.25GHz	802.11n HT40	40	2TX, 4TX
5.15-5.25GHz	802.11n HT40-BF	40	2TX, 4TX
5.15-5.25GHz	802.11ac VHT40	40	2TX, 4TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.15-5.25GHz	802.11ac VHT80	80	2TX, 4TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.25-5.35GHz	802.11a	20	2TX, 4TX
5.25-5.35GHz	802.11n HT20	20	2TX, 4TX
5.25-5.35GHz	802.11n HT20-BF	20	2TX, 4TX
5.25-5.35GHz	802.11ac VHT20	20	2TX, 4TX
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.25-5.35GHz	802.11n HT40	40	2TX, 4TX
5.25-5.35GHz	802.11n HT40-BF	40	2TX, 4TX

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Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11ac VHT40	40	2TX, 4TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.47-5.725GHz	802.11a	20	4TX
5.47-5.725GHz	802.11n HT20	20	4TX
5.47-5.725GHz	802.11n HT20-BF	20	4TX
5.47-5.725GHz	802.11ac VHT20	20	4TX
5.47-5.725GHz	802.11ac VHT20-BF	20	4TX
5.47-5.725GHz	802.11n HT40	40	4TX
5.47-5.725GHz	802.11n HT40-BF	40	4TX
5.47-5.725GHz	802.11ac VHT40	40	4TX
5.47-5.725GHz	802.11ac VHT40-BF	40	4TX
5.725-5.85GHz	802.11a	20	2TX, 4TX
5.725-5.85GHz	802.11n HT20	20	2TX, 4TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11ac VHT20	20	2TX, 4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11n HT40	40	2TX, 4TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ac VHT40	40	2TX, 4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ac VHT80	80	2TX, 4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX, 4TX

**Note:**

- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 and VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.



### 1.1.2 Antenna Information

Ant. Set	Brand Holder	Band	Model Name	Antenna Type	Connector	Gain (dBi)	TX Function	Host System Model
1	Tembo Systems Inc.	Band 1, 2 and Band 4	PCA-000007-XXX-X/ PCA-000005-XXX-X	OMNI Antenna	I-PEX	Note1	4TX/4RX	AP1004WRe series
		Band 3	PCA-000006-000-X/ PCB-000015-XXX-X					
2	Tembo Systems Inc.	Band 1 and Band 2	PCA-000009-XXX-X	Directional Antenna	I-PEX	Note1	4TX/4RX	AP1004NRe series
		Band 3	PCB-000011-XXX-X					
		Band 4	PCA-000010-XXX-X					
3	Tembo Systems Inc.	Band 1 and Band 2	PCA-000033-000-X	Directional Antenna	I-PEX	Note1	2TX/2RX	AP1004UNe series
		Band 3	PCA-000046-000-X				4TX/4RX	
		Band 4	PCA-000034-000-X				2TX/2RX	

Note1:

Ant. Set	Band	Gain (dBi)	Cable loss	True Gain (dBi)	Array Gain (dBi)
1	Band 1	5.06	9.90	-4.84	4
	Band 2	4.55	9.90	-5.35	4
	Band 3	4.82	1.35	3.47	4
	Band 4	5.03	10.9	-5.87	4

Ant. Set	Band	Tested Antenna Gain (dBi)	Cable loss (dB)	Tested net antenna gain (dBi)	Certified Net Antenna Gain (dBi)	Array Gain (dBi)
2	Band 1	13.6	1.6	12	13	1
	Band 2	13.6	1.6	12	13	1
	Band 3	15.3	1.6	13.7	14	1
	Band 4	13.6	1.6	12	13	1

Ant. Set	Band	Tested Antenna Gain (dBi)	Cable loss (dB)	Tested net antenna gain (dBi)	Certified Net Antenna Gain (dBi)	Array Gain (dBi)
3	Band 1	19.25	1.6	17.65	18	0
	Band 2	19.25	1.6	17.65	18	0
	Band 3	15.30	1.6	13.70	14	1
	Band 4	19.25	1.6	17.65	18	0

Note2: For Ant. Set 1:

The EUT is a limited module which only limited to the host (model: AP1004WRe series).

The EUT was installed to the host (model: AP1004WRe series) to perform all the tests.

**For Ant. Set 2:**

The EUT is a limited module which only limited to the host (model: AP1004NRe series).

The EUT was installed to the host (model: AP1004NRe series) to perform all the tests.

**For Ant. Set 3:**

The EUT is a limited module which only limited to the host (model: AP1004UNe series).

The EUT was installed to the host (model: AP1004UNe series) to perform all the tests.



Note 3: The EUT has three sets of antennas.

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

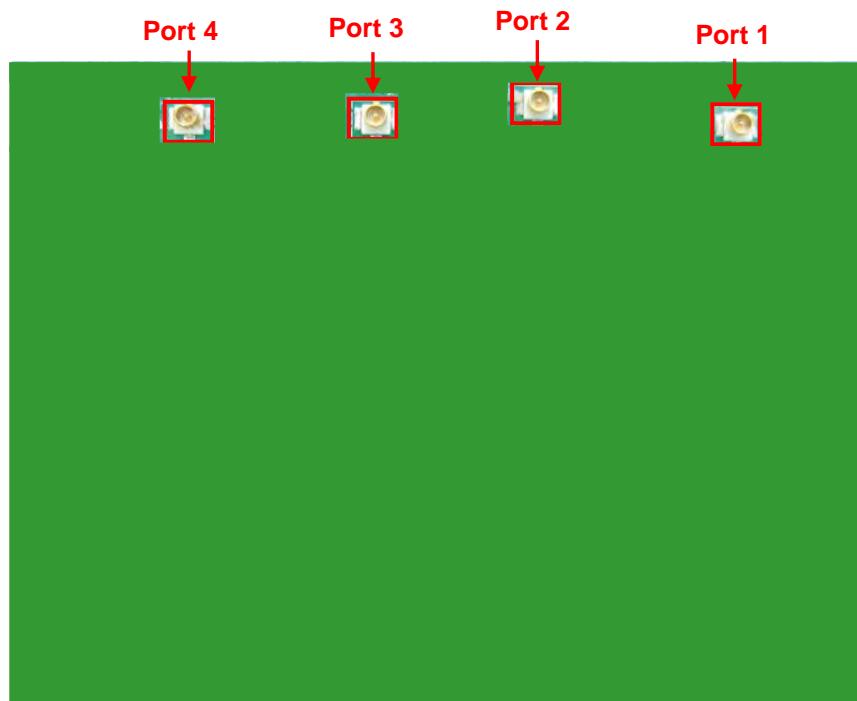
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

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

**For IEEE 802.11a/n/ac mode (2TX/2RX):**

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.





### 1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.967	0.146	2.03m	1k
802.11ac VHT20	0.987	0.057	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT20-BF	0.926	0.334	1.755m	1k
802.11ac VHT40	0.974	0.114	2.418m	1k
802.11ac VHT40-BF	0.915	0.386	1.69m	1k
802.11ac VHT80	0.948	0.232	1.138m	1k
802.11ac VHT80-BF	0.858	0.665	1.943m	1k

### 1.1.4 EUT Operational Condition

EUT Power Type	From host system		
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming for 802.11n/ac	<input type="checkbox"/> Without beamforming
Weather Band	<input checked="" type="checkbox"/>	With 5600~5650MHz	<input type="checkbox"/> Without 5600~5650MHz
Function	<input checked="" type="checkbox"/>	Outdoor P2M	<input checked="" type="checkbox"/> Indoor P2M
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/> Client
TPC Function	<input checked="" type="checkbox"/>	With TPC	<input type="checkbox"/> Without TPC
Test Software Version	For non-beamforming mode: QCARCT		
	For beamforming mode: Telnet Ver3.0.210.0		

### 1.1.5 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR650411 and FR650411-01  
Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
<ol style="list-style-type: none"> <li>Add the third set antenna with the same type (Directional Antenna).(Antenna type: Directional Ant. / Brand holder: Tembo Systems Inc. /Part Number: PCA-000033-000-X, PCA-000046-000-X, PCA-000034-000-X).</li> <li>For Band 1, Band 2 and Band 4, the gain is higher than the original's gain. The third set antenna support 2TX/2RX but the original directional antenna support 4TX/4RX.</li> <li>For Band 3, the gain is same as the original's gain. The third set antenna and the original directional antenna support 4TX/4RX.</li> </ol> <p>Note: According the modification above, only available for the host system Model Name: AP1004UNe series.</p>	<ol style="list-style-type: none"> <li>For Band 1, Band 2 and Band 4: All test items.</li> <li>For Band 3: After evaluating, it's no need to re-test.</li> </ol>
4. Adding brand name "EVEREST™ Network Solutions".	It does not affect the test.



## 1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013
- ◆ FCC KDB 789033 D02 v02r01
- ◆ FCC KDB 662911 D01 v02r01

## 1.3 Testing Location Information

Testing Location				
<input type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973		
<input checked="" type="checkbox"/>	JHUBEI	ADD : 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 Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Owen Hsu	25°C / 55%	May 16, 2018~Jun. 07, 2018
Radiated	03CH01-CB	Eddie Weng & Ekko Hsieh	25°C / 45%	May 16, 2018~Jun. 07, 2018
AC Conduction	CO01-CB	Max Lin	24°C / 57%	Jun. 12, 2018

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086D with Industry Canada.

## 1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 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%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74 x10 <sup>-8</sup>	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	14
5200MHz	14
5240MHz	14.5
5260MHz	8
5300MHz	7.5
5320MHz	7.5
5745MHz	14
5785MHz	14
5825MHz	15
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	14
5200MHz	14
5240MHz	14
5260MHz	8
5300MHz	8
5320MHz	8
5745MHz	15
5785MHz	15
5825MHz	15
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	13
5230MHz	13
5270MHz	7
5310MHz	7
5755MHz	13.5
5795MHz	13.5
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	12
5775MHz	13.5



802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	12
5300MHz	12
5320MHz	12.5
5745MHz	18
5785MHz	17
5825MHz	17
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	16
5230MHz	16.5
5270MHz	11
5310MHz	11
5755MHz	16
5795MHz	16
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	17
5775MHz	16

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

Note 2: The EUT supports AP mode and Repeater mode, but the Repeater mode doesn't supports DFS band.

Note 3: There are two modes of EUT, one is beamforming mode, and the other is non-beamforming mode for 802.11n/ac. All test results were recorded in this report.



## 2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	AC power-line conducted emissions
<b>Condition</b>	AC power-line conducted measurement for line and neutral
<b>Operating Mode</b>	Normal Link
1	AP Mode with Ant.3
2	Repeater Mode with Ant.3

For operating mode 1 is the worst case and it was record in this test report.

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
<b>Test Condition</b>	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Unwanted Emissions
<b>Test Condition</b>	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
<b>Operating Mode &lt; 1GHz</b>	Normal Link
1	EUT X axis - AP Mode with Ant.3
2	EUT Y axis - AP Mode with Ant.3
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT X axis - Repeater Mode with Ant. Set 3
For operating mode 3 is the worst case and it was record in this test report.	
<b>Operating Mode &gt; 1GHz</b>	CTX
1	EUT X axis with Ant.3
2	EUT Y axis with Ant.3
Mode 1 has been evaluated to be the worst case after evaluating. Consequently, measurement will follow this same test mode.	



The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
<b>Operating Mode</b>	
1	WLAN 2.4GHz + 5GHz Band 1, 2 + 5GHz Band 3 + 5GHz Band 4

Refer to Sporton Test Report No.: FA650411-08 for Co-location RF Exposure Evaluation.

Note: The host (AP1004UNe series) insert four radios. Radio 1 is 2.4GHz, Radio 2 is 5GHz band 1, band 2, Radio 3 is 5GHz band 3, Radio 4 is 5GHz band 4.  
Radio 1 FCC ID: 2AGMRTRM9992G.  
Radio 2~Radio 4 FCC ID: 2AGMRTRM9995G.

## 2.3 EUT Operation during Test

For CTX Mode:

For non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

For beamforming mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by Wireless AP and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

## 2.4 Accessories

N/A



## 2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*3	DELL	E6430	N/A
2	PC*2	DELL	T3400	N/A
3	Switch*2	NETGEAR	XS724EM	N/A
4	PoE*2	YAMAHA	YPS-PoE-AT	N/A
5	Host system	EVEREST™ Network Solutions	AP1004UNe series	N/A

For Test Site No: 03CH01-CB (below 1GHz)

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*4	Apple	Mac Book	N/A
2	PC*2	DELL	T3400	N/A
3	Switch*2	NETGEAR	XS512EM	N/A
4	PoE*4	ZyXEL	PoE12-HP	N/A
5	Host system	EVEREST™ Network Solutions	AP1004UNe series	N/A

For Test Site No: 03CH01-CB (above 1GHz) and TH01-CB

For non-beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	N/A
2	PoE*2	ZyXEL	PoE12-HP	N/A
3	Host system	EVEREST™ Network Solutions	AP1004UNe series	N/A

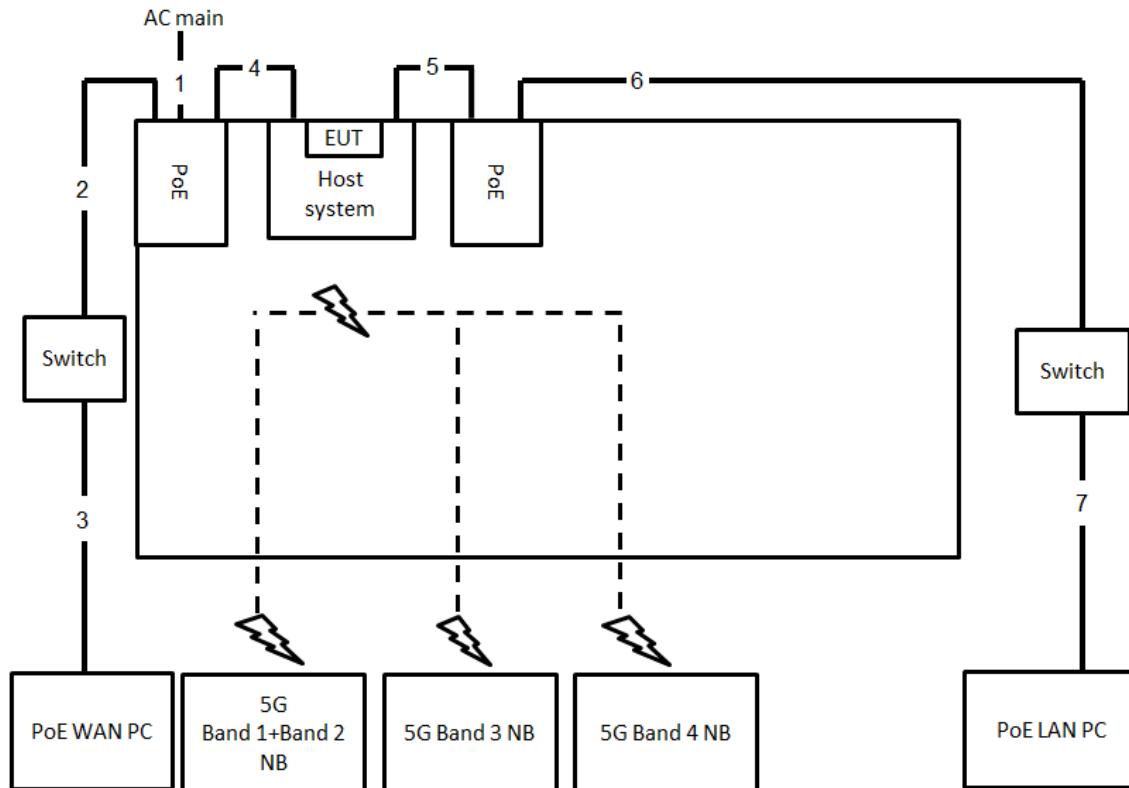
For beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*2	DELL	E4300	N/A
2	PoE*2	ZyXEL	PoE12-HP	N/A
3	WLAN AP (RX Device)	NETGEAR	R7800	N/A
4	Host system	EVEREST™ Network Solutions	AP1004UNe series	N/A



## 2.6 Test Setup Diagram

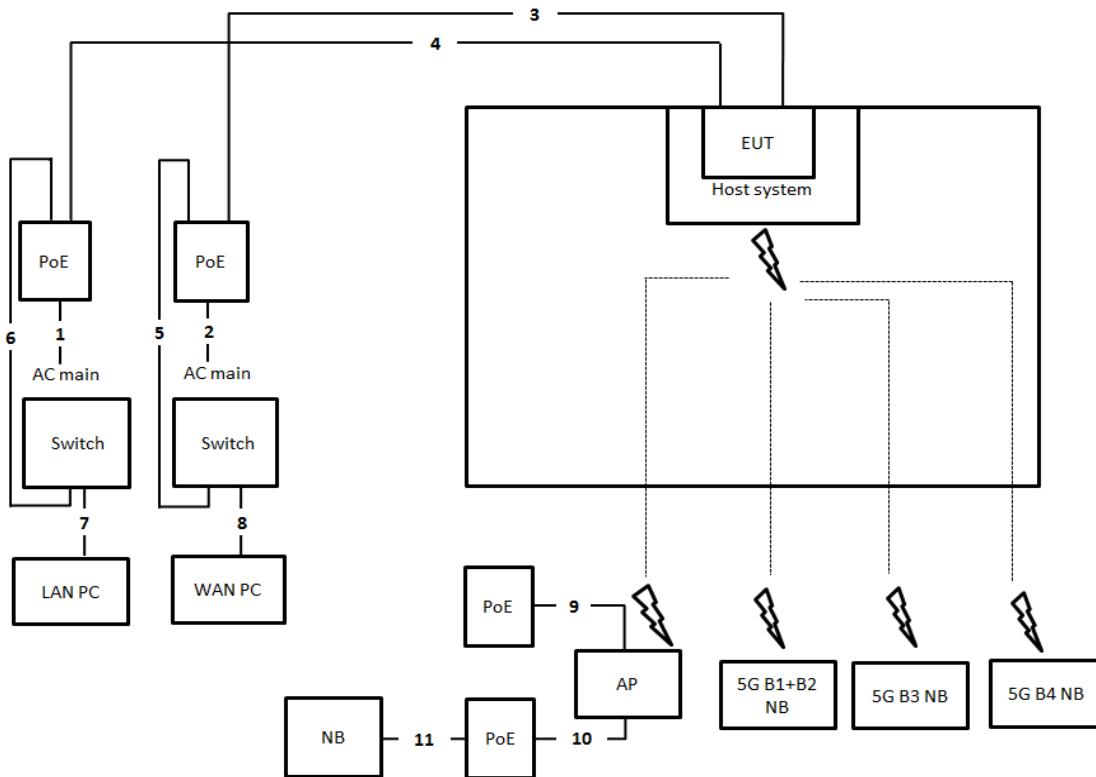
Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	3m
4	RJ-45 cable	No	1.5m
5	RJ-45 cable	No	1.5m
6	RJ-45 cable	No	10m
7	RJ-45 cable	No	3m



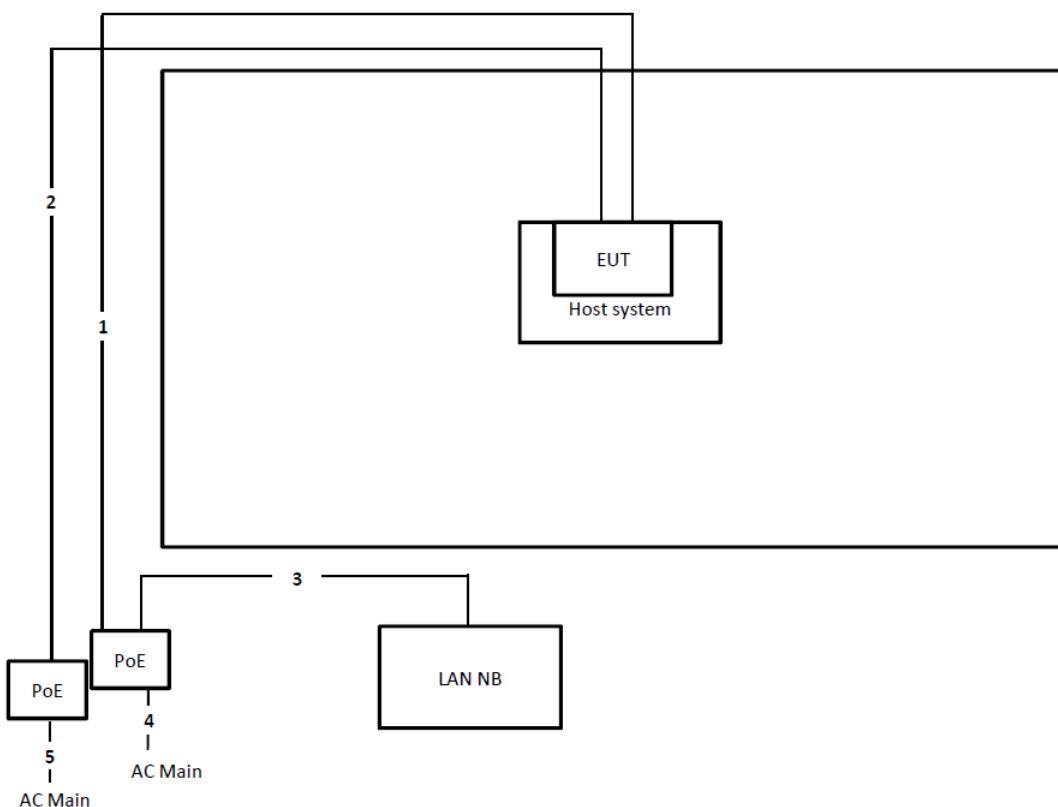
## Test Setup Diagram - Radiated Test &lt; 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	Power cable	No	1.5m
3	RJ-45 cable	No	10m
4	RJ-45 cable	No	10m
5	RJ-45 cable	No	1.5m
6	RJ-45 cable	No	1.5m
7	RJ-45 cable	No	1.5m
8	RJ-45 cable	No	1.5m
9	RJ-45 cable	No	10m
10	RJ-45 cable	No	10m
11	RJ-45 cable	No	1.5m

**Test Setup Diagram - Radiated Test > 1GHz**

For non-beamforming mode:

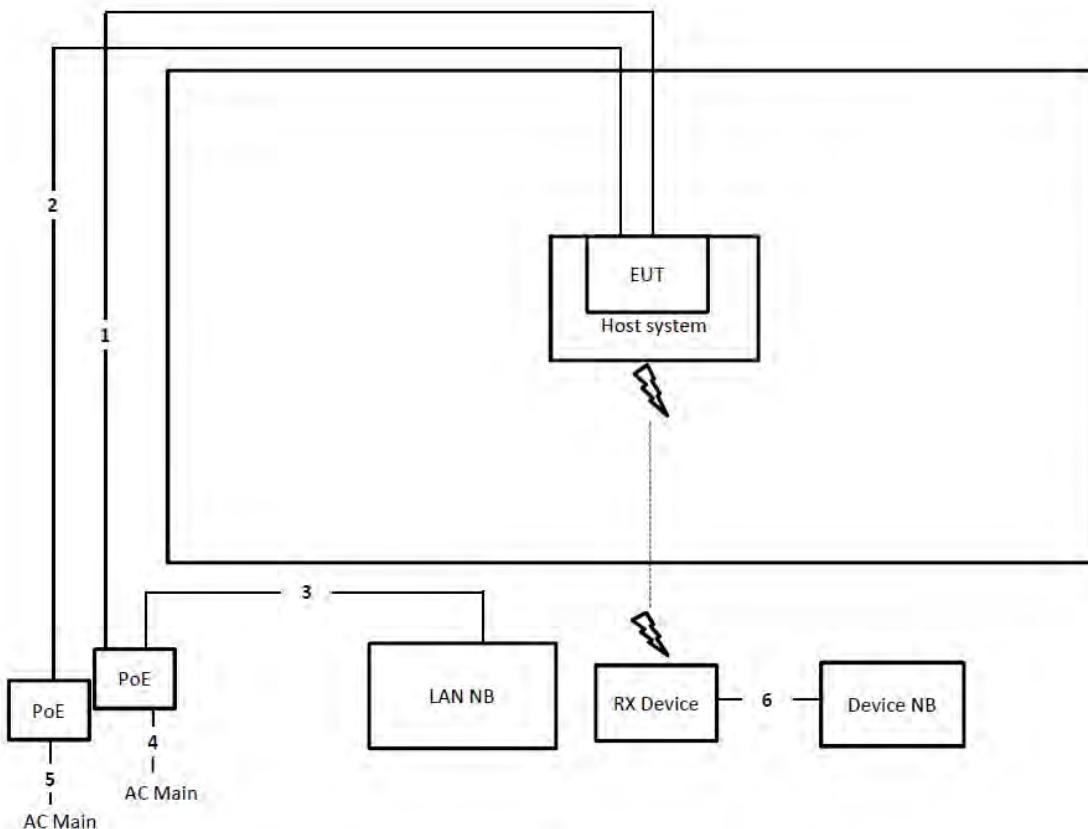


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m
4	Power cable	No	1.8m
5	Power cable	No	1.8m



## Test Setup Diagram - Radiated Test &gt; 1GHz

For beamforming mode:



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m
4	Power cable	No	1.8m
5	Power cable	No	1.8m
6	RJ-45 cable	No	1.5m



### 3 Transmitter Test Result

#### 3.1 AC Power-line Conducted Emissions

##### 3.1.1 AC Power-line Conducted Emissions Limit

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

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

##### 3.1.2 Measuring Instruments

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

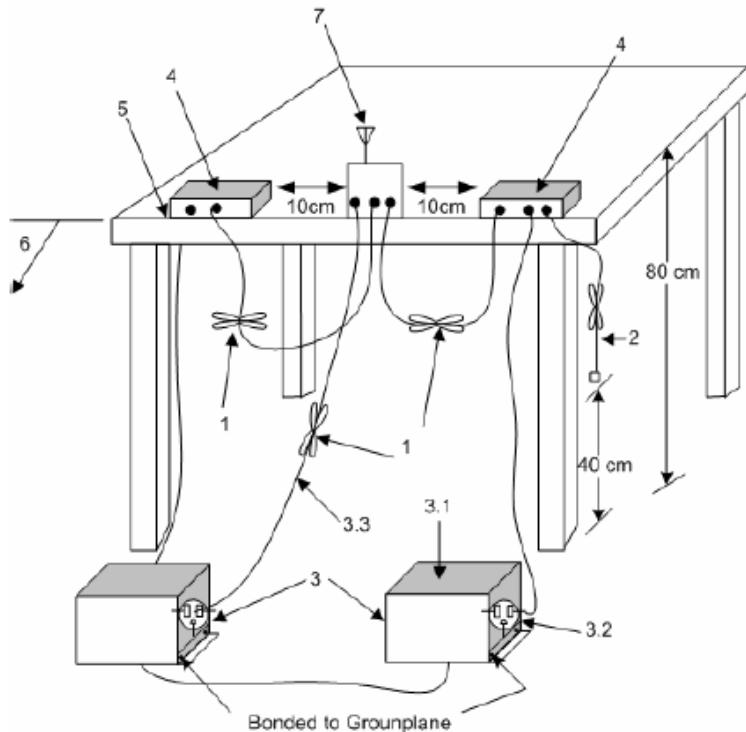
##### 3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.



### 3.1.4 Test Setup

#### AC Power-line Conducted Emissions



- 1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
- 2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- 3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in  $50 \Omega$  loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
- 3.1—All other equipment powered from additional LISN(s).
- 3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
- 3.3—LISN at least 80 cm from nearest part of EUT chassis.
- 4—Non-EUT components of EUT system being tested.
- 5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
- 6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
- 7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

### 3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A



## 3.2 Emission Bandwidth

### 3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
<b>UNII Devices</b>	
<input checked="" type="checkbox"/>	For the 5.15-5.25 GHz band, N/A
<input checked="" type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in MHz.
<input checked="" type="checkbox"/>	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in MHz.
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq 500\text{kHz}$ .
<b>LE-LAN Devices</b>	
<input type="checkbox"/>	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq 500\text{kHz}$ .

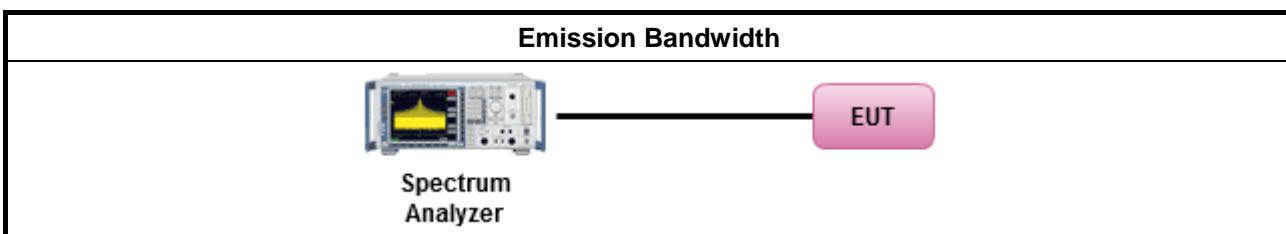
### 3.2.2 Measuring Instruments

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

### 3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

### 3.2.4 Test Setup



### 3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



### 3.3 Maximum Conducted Output Power

#### 3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
<b>UNII Devices</b>	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	<ul style="list-style-type: none"><li>▪ Outdoor AP: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 6)</math>. e.i.r.p. at any elevation angle above 30 degrees <math>\leq 125\text{mW}</math> [21dBm]</li><li>▪ Indoor AP: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 6)</math></li><li>▪ Point-to-point AP: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 23 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 23)</math>.</li><li>▪ Mobile or Portable Client: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 250 mW. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 24 - (G_{TX} - 6)</math>.</li></ul>
<input checked="" type="checkbox"/> For the 5.25-5.35 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6 \text{ dBi}$ , then $P_{Out} = 24 - (G_{TX} - 6)$ .	
<input checked="" type="checkbox"/> For the 5.47-5.725 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6 \text{ dBi}$ , then $P_{Out} = 24 - (G_{TX} - 6)$ .	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	<ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point systems (P2P): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W.</li></ul>
<b>LE-LAN Devices</b>	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	<ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point systems (P2P): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W.</li></ul>
$P_{Out}$ = maximum conducted output power in dBm, $G_{TX}$ = the maximum transmitting antenna directional gain in dBi.	



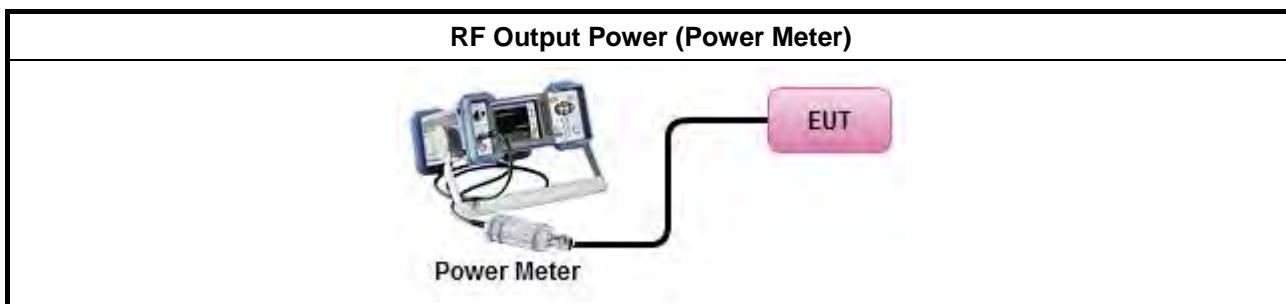
### 3.3.2 Measuring Instruments

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

### 3.3.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	
	Average over on/off periods with duty factor
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
▪ For conducted measurement.	
	<ul style="list-style-type: none"><li>▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.</li><li>▪ If multiple transmit chains, EIRP calculation could be following as methods: <math>P_{total} = P_1 + P_2 + \dots + P_n</math> (calculated in linear unit [mW] and transfer to log unit [dBm]) <math>EIRP_{total} = P_{total} + DG</math></li></ul>

### 3.3.4 Test Setup



### 3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



## 3.4 Peak Power Spectral Density

### 3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
<b>UNII Devices</b>	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	<ul style="list-style-type: none"><li>▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 17 - (G_{TX} - 6)</math>.</li><li>▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 17 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If <math>G_{TX} &gt; 23</math> dBi, then <math>P_{Out} = 17 - (G_{TX} - 23)</math>.</li><li>▪ Mobile or Portable Client: the peak power spectral density (PPSD) <math>\leq 11</math> dBm/MHz. If <math>G_{TX} &gt; 6</math> dBi, then PPSD= <math>11 - (G_{TX} - 6)</math>.</li></ul>
<input checked="" type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= $11 - (G_{TX} - 6)$ .	
<input checked="" type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= $11 - (G_{TX} - 6)$ .	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	<ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz. If <math>G_{TX} &gt; 6</math> dBi, then PPSD= <math>30 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz.</li></ul>
<b>LE-LAN Devices</b>	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the peak power spectral density (PPSD) $\leq 4$ dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) $\leq 10$ dBm/MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) $\leq 17$ dBm/MHz.	
<input type="checkbox"/> e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where $\theta$ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$ ; -13 - 0.716 ( $\theta$ -8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 ( $\theta$ -40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$ ; -42 dBW/MHz for $\theta > 45^\circ$	
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) $\leq 17$ dBm/MHz.	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	<ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz. If <math>G_{TX} &gt; 6</math> dBi, then PPSD= <math>30 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz.</li></ul>
<b>PPSD</b> = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz <b>G<sub>TX</sub></b> = the maximum transmitting antenna directional gain in dBi.	



### 3.4.2 Measuring Instruments

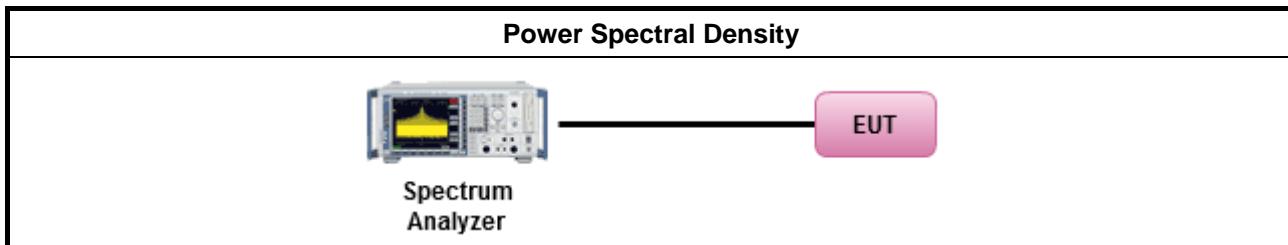
Refer a test equipment and calibration data table in this test report.

### 3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"><li>▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:</li></ul>	
<input type="checkbox"/> Refer as FCC KDB 789033, F5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth	[duty cycle $\geq$ 98% or external video / power trigger]
<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).	
<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)	duty cycle < 98% and average over on/off periods with duty factor
<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).	
<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
<ul style="list-style-type: none"><li>▪ For conducted measurement.</li></ul>	
<ul style="list-style-type: none"><li>▪ If the EUT supports multiple transmit chains using options given below:</li></ul>	<input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
	<input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
	<input type="checkbox"/> Option 3: Measure and add $10 \log(N)$ dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with $10 \log(N)$ . Or each transmit chains shall be add $10 \log(N)$ to compared with the limit.
	<ul style="list-style-type: none"><li>▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: <math display="block">\text{PPSD}_{\text{total}} = \text{PPSD}_1 + \text{PPSD}_2 + \dots + \text{PPSD}_n</math>(calculated in linear unit [mW] and transfer to log unit [dBm]) <math display="block">\text{EIRP}_{\text{total}} = \text{PPSD}_{\text{total}} + \text{DG}</math></li></ul>



### 3.4.4 Test Setup



### 3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D



## 3.5 Unwanted Emissions

### 3.5.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
<input checked="" type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 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).



### 3.5.2 Measuring Instruments

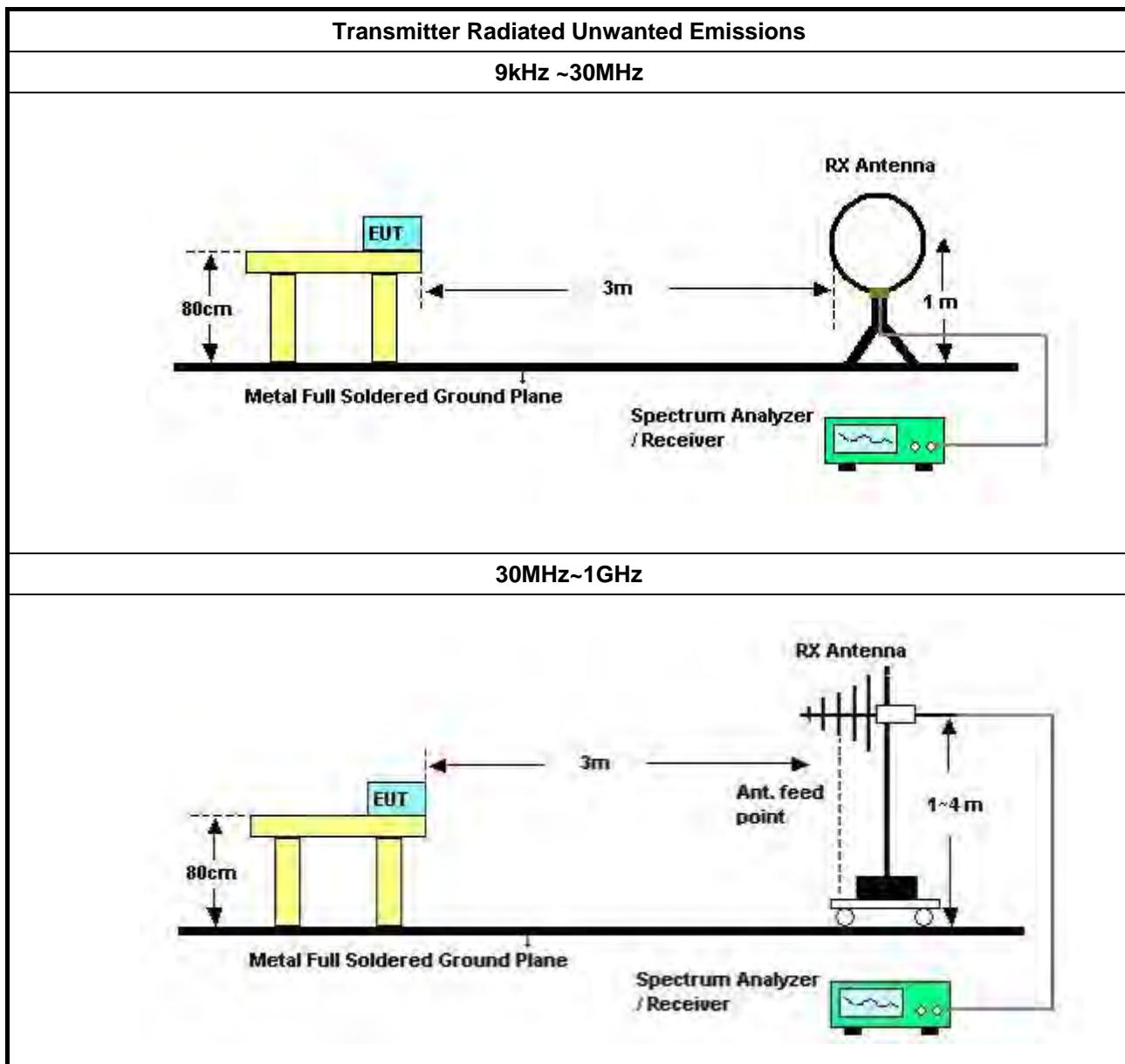
Refer a test equipment and calibration data table in this test report.

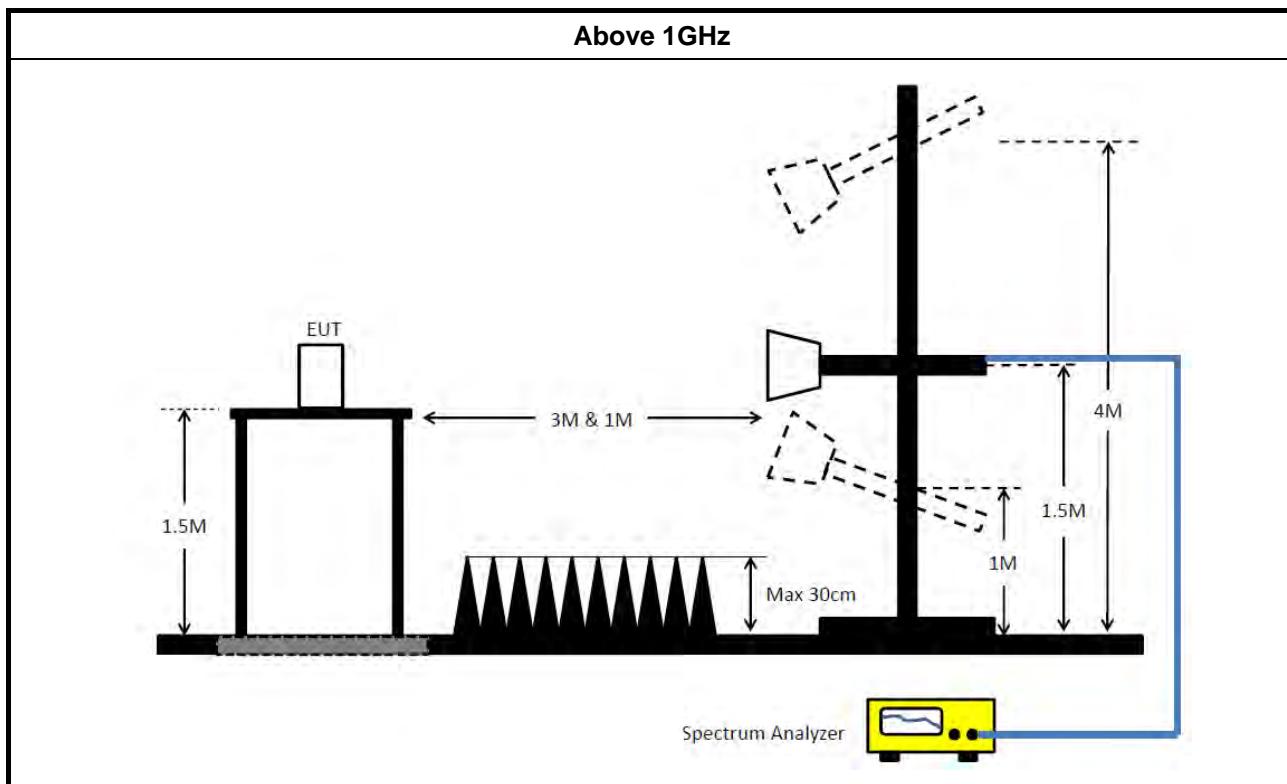
### 3.5.3 Test Procedures

Test Method	
<ul style="list-style-type: none"><li>▪ 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).</li></ul>	
<ul style="list-style-type: none"><li>▪ The average emission levels shall be measured in [duty cycle <math>\geq</math> 98 or duty factor].</li></ul>	
<ul style="list-style-type: none"><li>▪ For the transmitter unwanted emissions shall be measured using following options below:</li></ul>	
<ul style="list-style-type: none"><li>▪ Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.</li></ul>	
<ul style="list-style-type: none"><li>▪ Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.</li></ul>	
	<input type="checkbox"/> Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
<ul style="list-style-type: none"><li>▪ For radiated measurement.</li></ul>	
	<input type="checkbox"/> Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
<ul style="list-style-type: none"><li>▪ The any unwanted emissions level shall not exceed the fundamental emission level.</li></ul>	
<ul style="list-style-type: none"><li>▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.</li></ul>	



### 3.5.4 Test Setup





### 3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

### 3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



## 4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 24, 2017	Nov. 23, 2018	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 13, 2017	Nov. 12, 2018	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 17, 2018	Jan. 16, 2019	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Nov. 10, 2017	Nov. 09, 2018	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2017	Aug. 29, 2018	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 20, 2017	Nov. 19, 2018	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2018	May 01, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 09, 2018	Jan. 08, 2019	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Jul. 09, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 23, 2017	Nov. 22, 2018	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100354	9kHz ~ 2.75GHz	Dec. 08, 2017	Dec. 07, 2018	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 11, 2017	Oct. 10, 2018	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)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2018	Mar. 15, 2019	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 21, 2017	Dec. 20, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)

**FCC RADIO TEST REPORT****Report No. : FR650411-08**

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 20, 2017	Nov. 19, 2018	Conducted (TH01-CB)

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

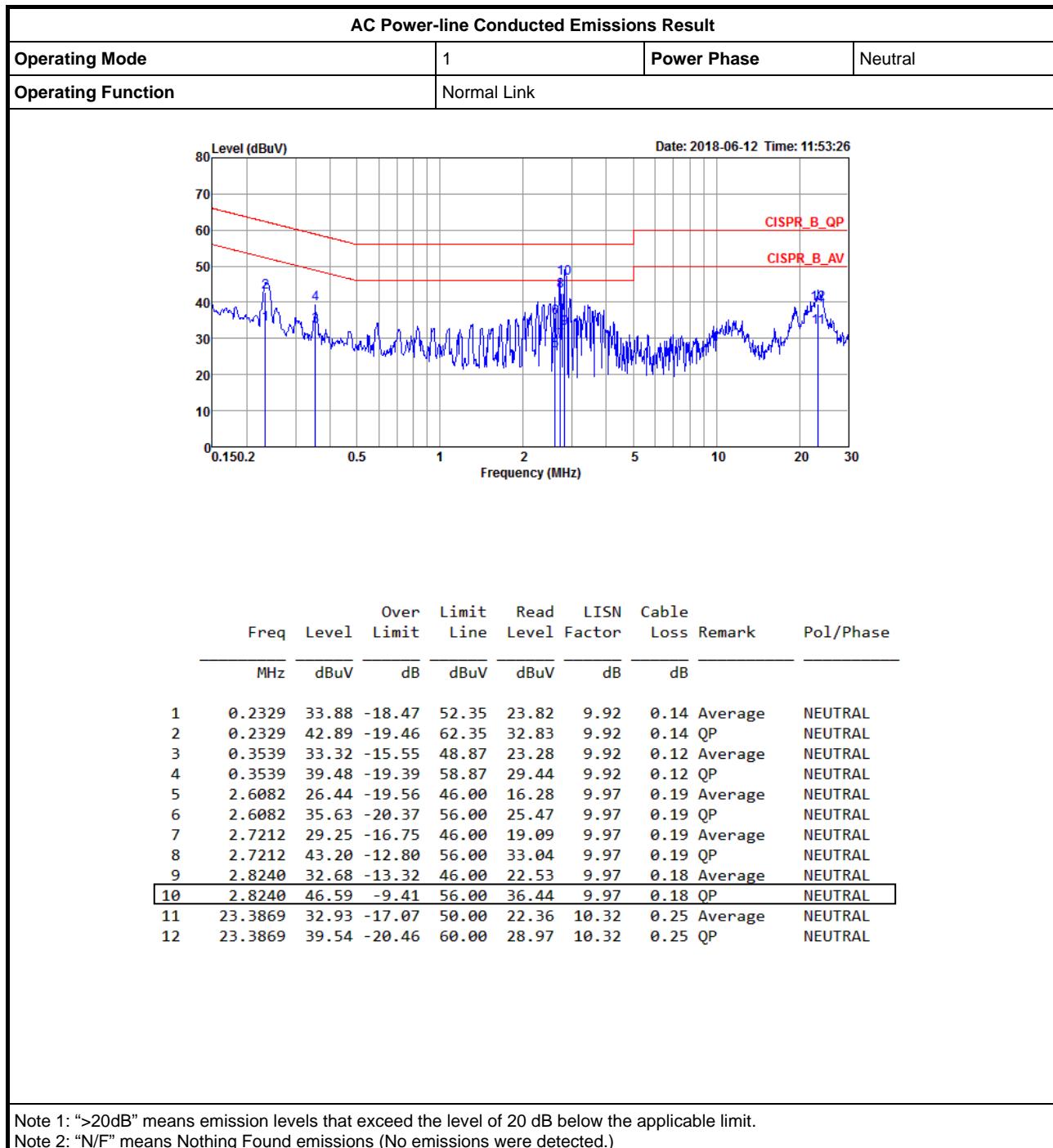
\*\* Calibration Interval of instruments listed above is two years.

NCR means Non-Calibration required.



## AC Power-line Conducted Emissions Result

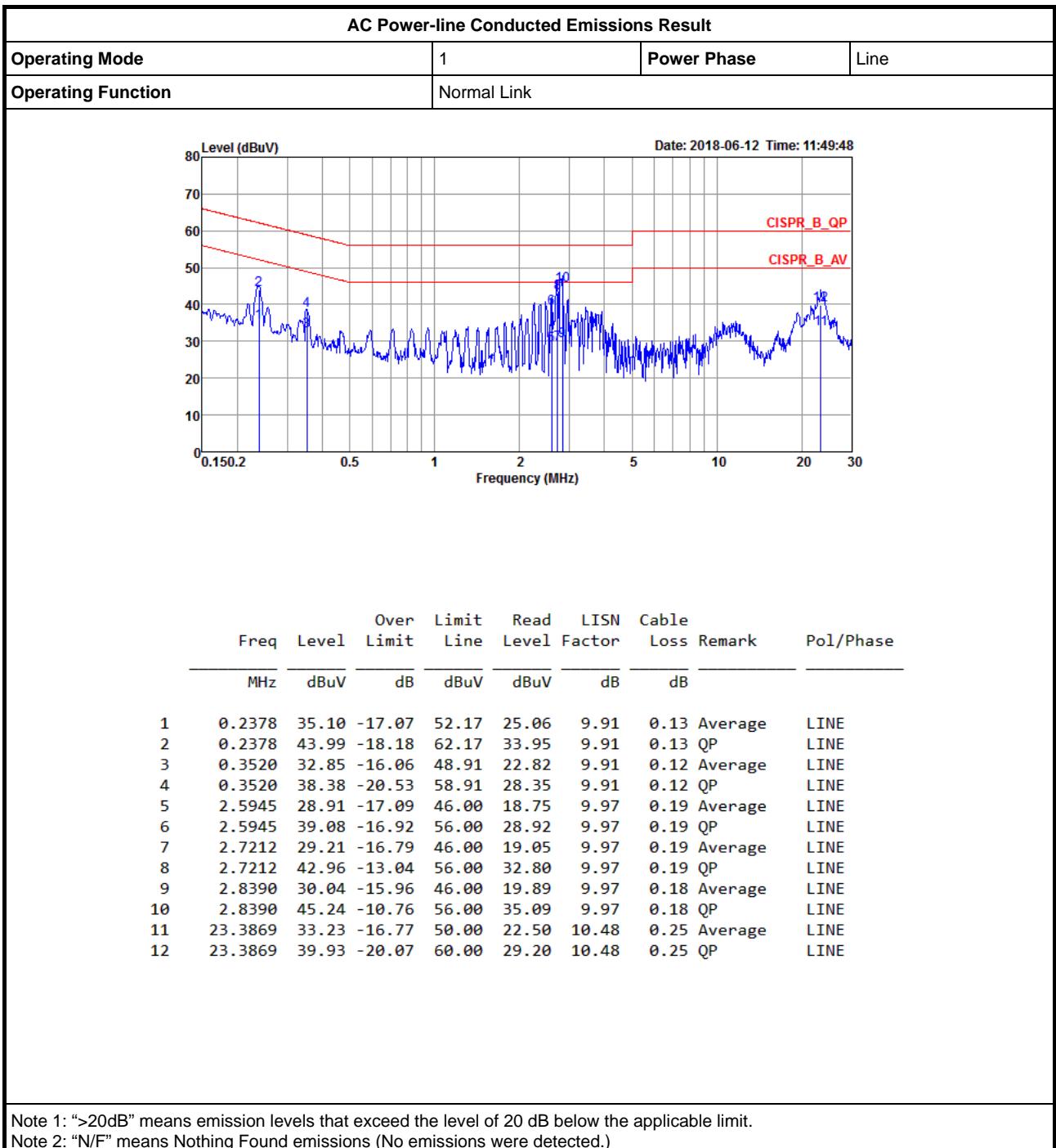
Appendix A





## AC Power-line Conducted Emissions Result

Appendix A





## EBW Result

## Appendix B

**For Indoor/outdoor use:**

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.55M	16.442M	16M4D1D	19.15M	16.367M
802.11ac VHT20_Nss1,(MCS0)_2TX	21.075M	17.641M	17M6D1D	20.3M	17.591M
802.11ac VHT40_Nss1,(MCS0)_2TX	40M	35.982M	36M0D1D	39.65M	35.932M
802.11ac VHT80_Nss1,(MCS0)_2TX	83.2M	75.862M	75M9D1D	83.2M	75.662M
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.925M	17.641M	17M6D1D	20.45M	17.616M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	39.55M	36.132M	36M1D1D	39M	35.832M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	82.2M	75.662M	75M7D1D	82.1M	75.562M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.575M	16.417M	16M4D1D	19.2M	16.392M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.975M	17.616M	17M6D1D	20.525M	17.591M
802.11ac VHT40_Nss1,(MCS0)_2TX	39.9M	35.982M	36M0D1D	39.6M	35.882M
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.8M	17.691M	17M7D1D	19.775M	17.541M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	39.7M	36.132M	36M1D1D	39.05M	35.782M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.3M	16.442M	16M4D1D	16.275M	16.367M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.55M	17.666M	17M7D1D	16.875M	17.591M
802.11ac VHT40_Nss1,(MCS0)_2TX	35M	35.932M	35M9D1D	29.75M	35.882M
802.11ac VHT80_Nss1,(MCS0)_2TX	74.5M	75.862M	75M9D1D	69.9M	75.662M
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.525M	17.691M	17M7D1D	16.4M	17.566M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	35.45M	35.982M	36M0D1D	33.75M	35.882M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	72.4M	75.862M	75M9D1D	69.4M	75.762M

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

**Max-OBW** = Maximum 99% occupied bandwidth;

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

**Min-OBW** = Minimum 99% occupied bandwidth;



## EBW Result

## Appendix B

### Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.55M	16.392M	19.45M	16.442M
5200MHz	Pass	Inf	19.325M	16.392M	19.425M	16.417M
5240MHz	Pass	Inf	19.15M	16.392M	19.45M	16.367M
5260MHz	Pass	Inf	19.3M	16.417M	19.45M	16.392M
5300MHz	Pass	Inf	19.2M	16.417M	19.45M	16.417M
5320MHz	Pass	Inf	19.575M	16.417M	19.375M	16.417M
5745MHz	Pass	500k	16.275M	16.392M	16.275M	16.392M
5785MHz	Pass	500k	16.3M	16.417M	16.275M	16.417M
5825MHz	Pass	500k	16.3M	16.367M	16.275M	16.442M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.075M	17.616M	20.4M	17.591M
5200MHz	Pass	Inf	20.65M	17.641M	20.3M	17.641M
5240MHz	Pass	Inf	20.85M	17.616M	20.45M	17.616M
5260MHz	Pass	Inf	20.975M	17.591M	20.625M	17.616M
5300MHz	Pass	Inf	20.75M	17.591M	20.75M	17.616M
5320MHz	Pass	Inf	20.975M	17.591M	20.525M	17.616M
5745MHz	Pass	500k	17.55M	17.641M	17.55M	17.641M
5785MHz	Pass	500k	17.15M	17.641M	17.525M	17.641M
5825MHz	Pass	500k	16.875M	17.591M	17.55M	17.666M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.7M	35.982M	39.65M	35.982M
5230MHz	Pass	Inf	40M	35.932M	39.85M	35.932M
5270MHz	Pass	Inf	39.6M	35.932M	39.75M	35.932M
5310MHz	Pass	Inf	39.9M	35.982M	39.7M	35.882M
5755MHz	Pass	500k	33.8M	35.932M	33.2M	35.932M
5795MHz	Pass	500k	29.75M	35.932M	35M	35.882M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	83.2M	75.862M	83.2M	75.662M
5775MHz	Pass	500k	74.5M	75.862M	69.9M	75.662M
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.775M	17.616M	20.45M	17.616M
5200MHz	Pass	Inf	20.85M	17.641M	20.925M	17.616M
5240MHz	Pass	Inf	20.6M	17.616M	20.775M	17.616M
5260MHz	Pass	Inf	19.775M	17.566M	19.85M	17.591M
5300MHz	Pass	Inf	20.8M	17.691M	20.275M	17.541M
5320MHz	Pass	Inf	20.675M	17.616M	20.35M	17.616M
5745MHz	Pass	500k	17.525M	17.691M	17.375M	17.691M
5785MHz	Pass	500k	16.425M	17.616M	16.4M	17.591M
5825MHz	Pass	500k	16.65M	17.616M	17.225M	17.566M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.3M	35.982M	39.55M	35.932M
5230MHz	Pass	Inf	39.05M	35.832M	39M	36.132M



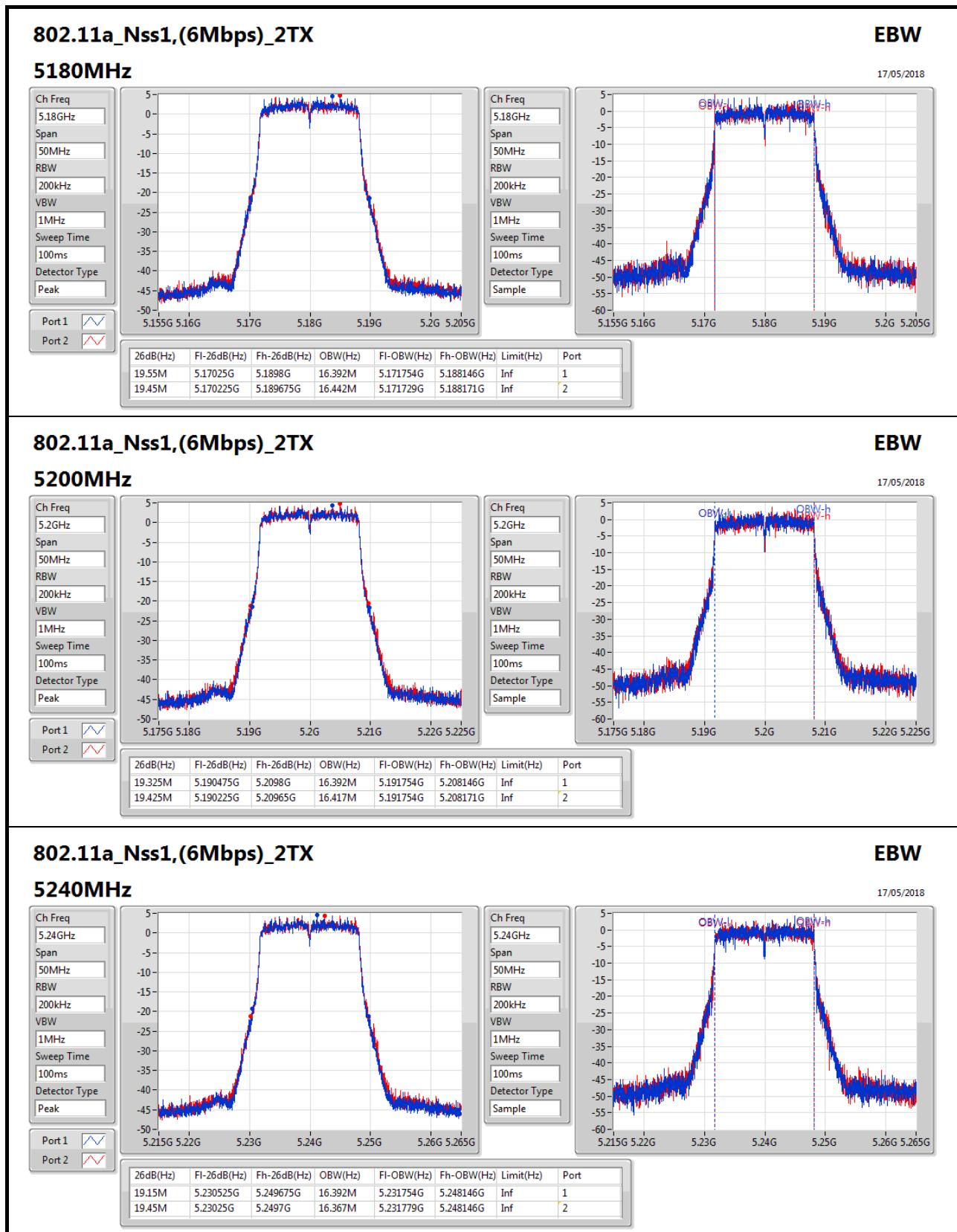
## EBW Result

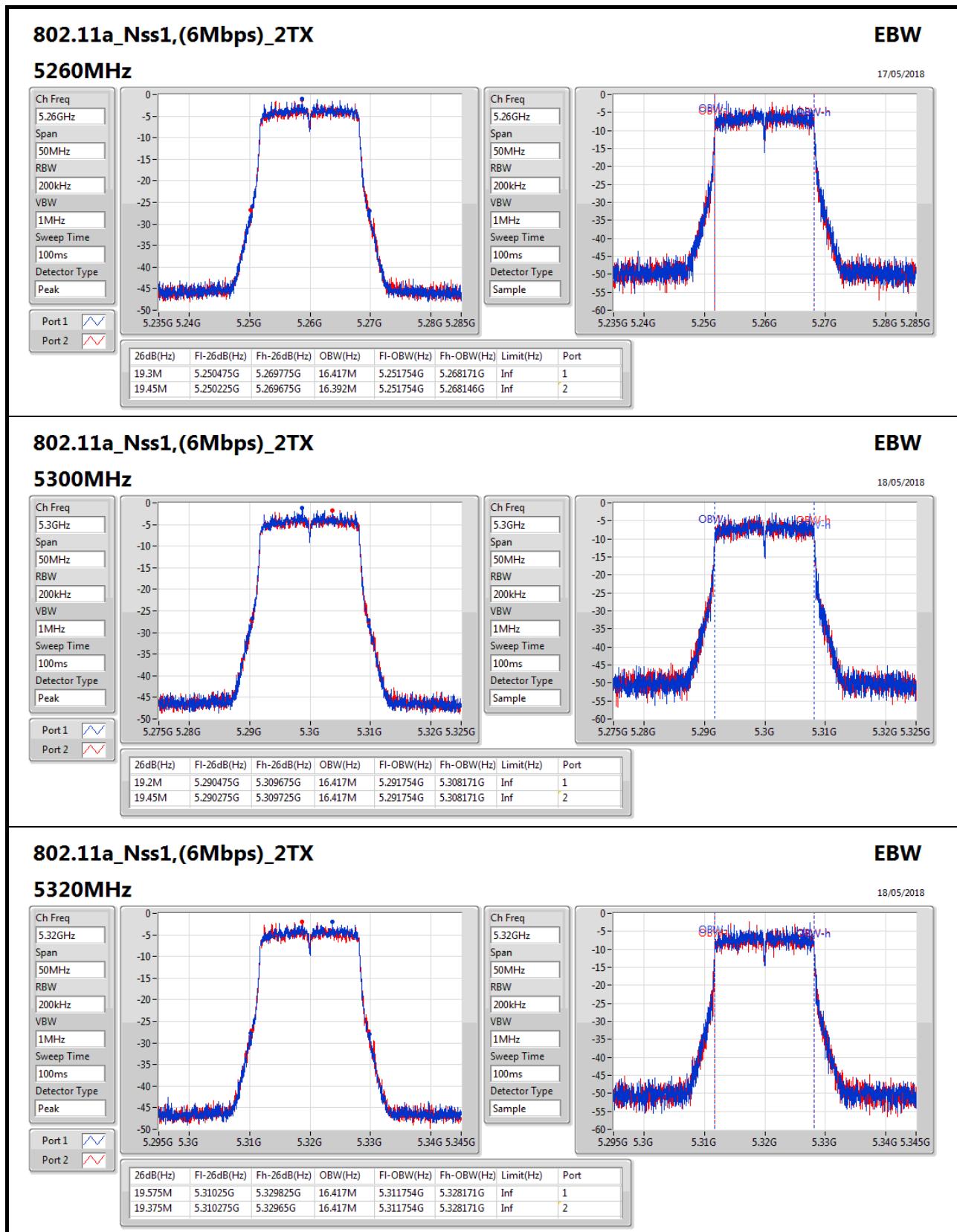
## Appendix B

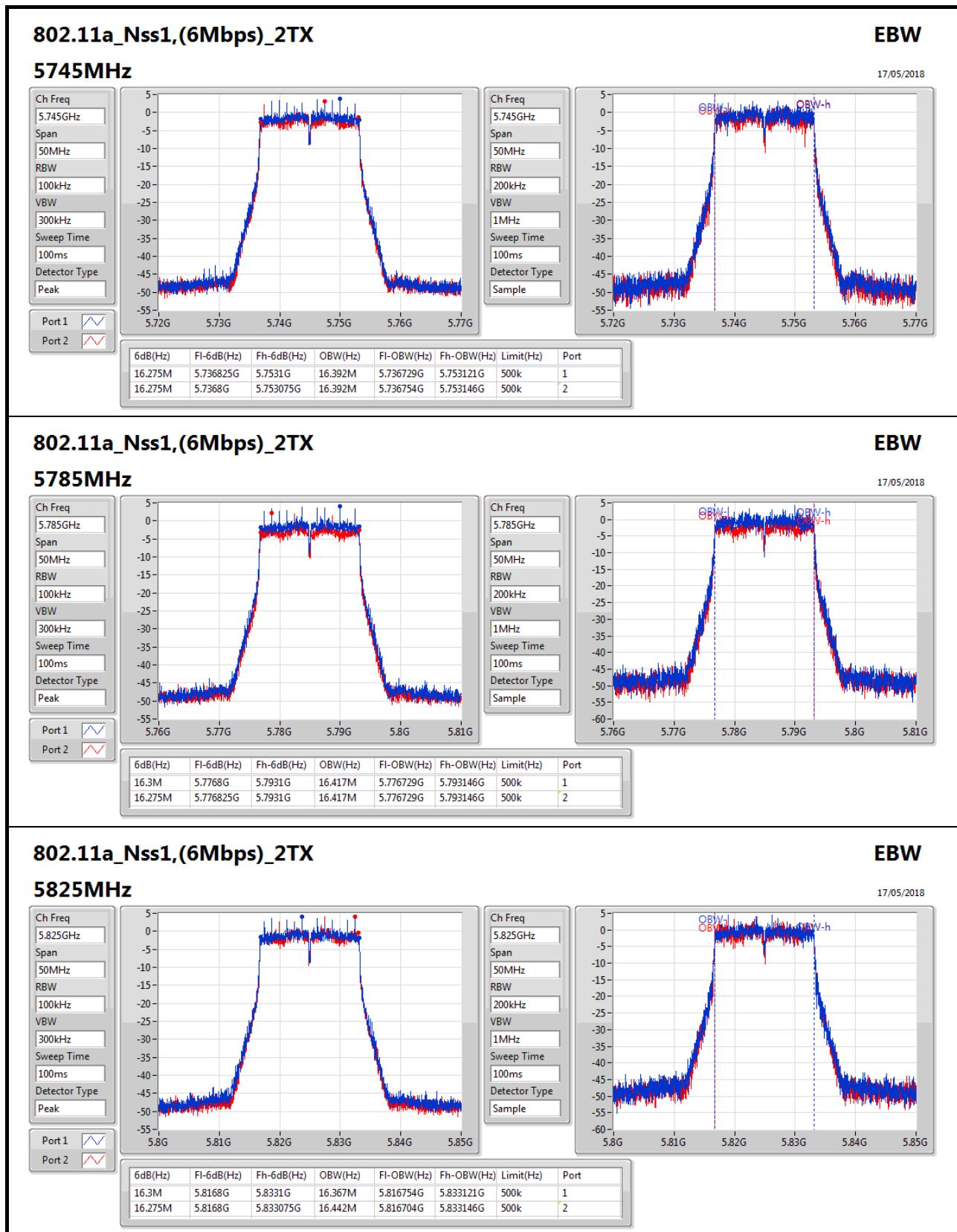
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5270MHz	Pass	Inf	39.6M	36.132M	39.7M	35.782M
5310MHz	Pass	Inf	39.05M	35.982M	39.45M	35.932M
5755MHz	Pass	500k	34.05M	35.982M	33.8M	35.932M
5795MHz	Pass	500k	33.75M	35.932M	35.45M	35.882M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.2M	75.662M	82.1M	75.562M
5775MHz	Pass	500k	69.4M	75.862M	72.4M	75.762M

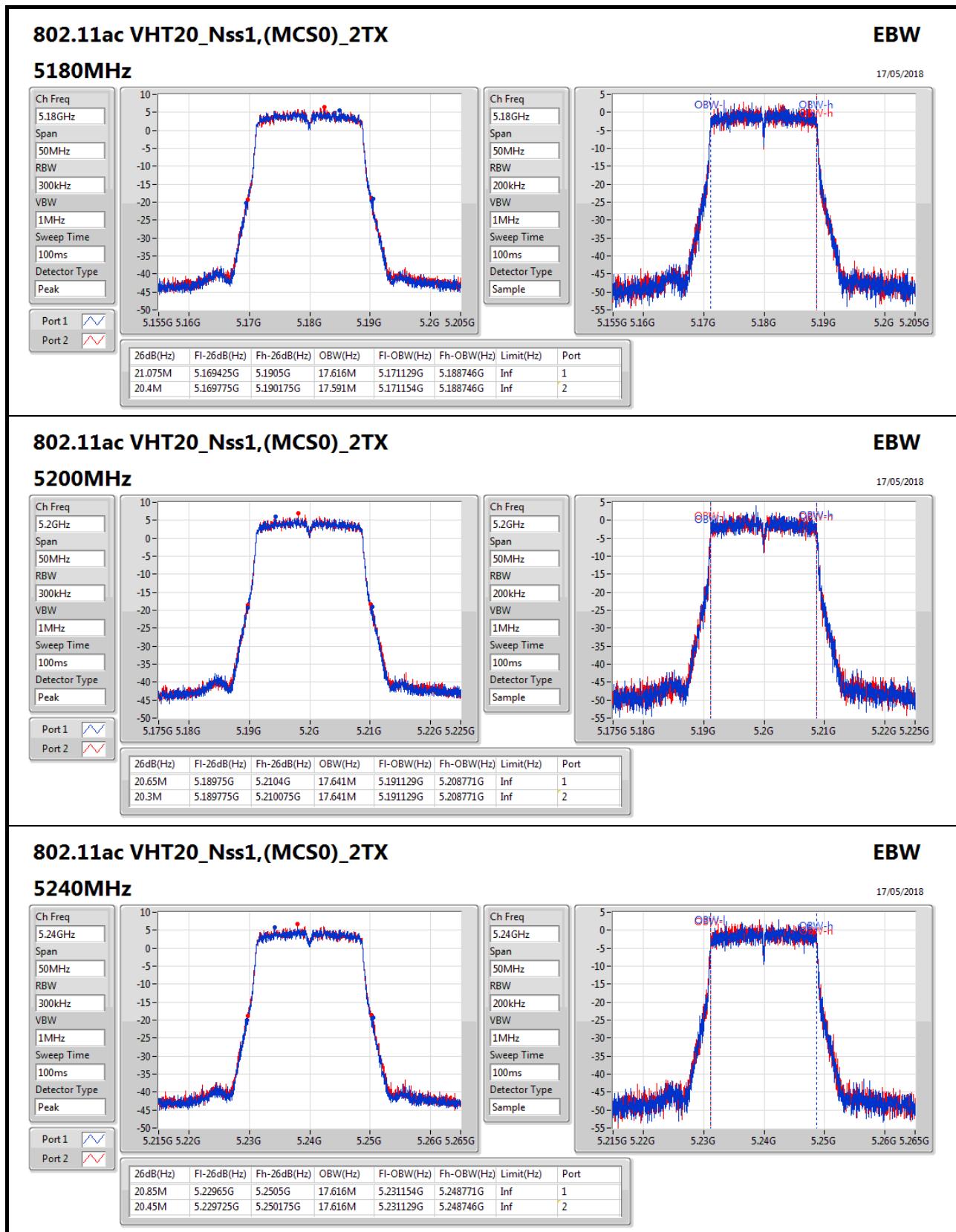
**Port X-N dB** = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

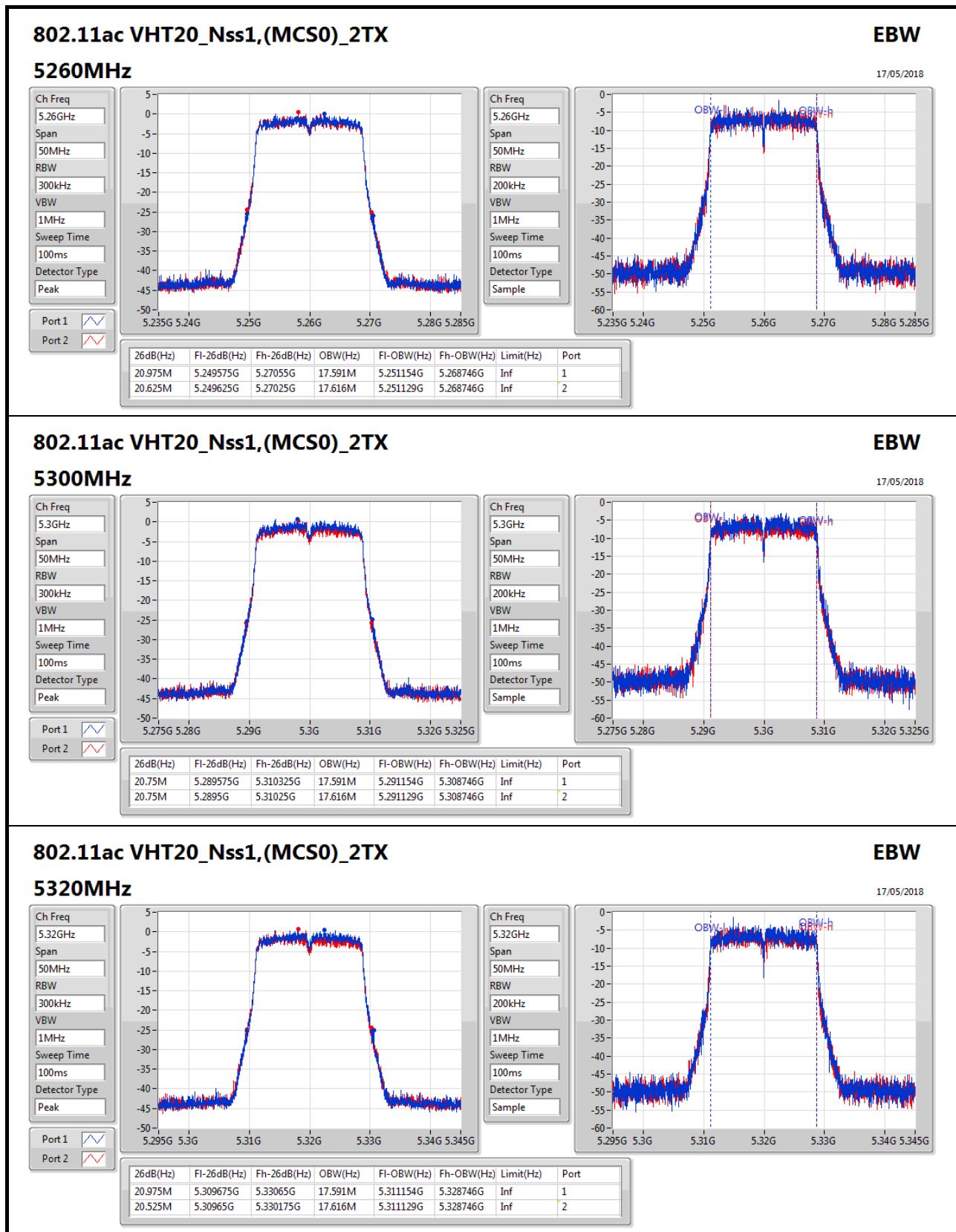
**Port X-OBW** = Port X 99% occupied bandwidth;

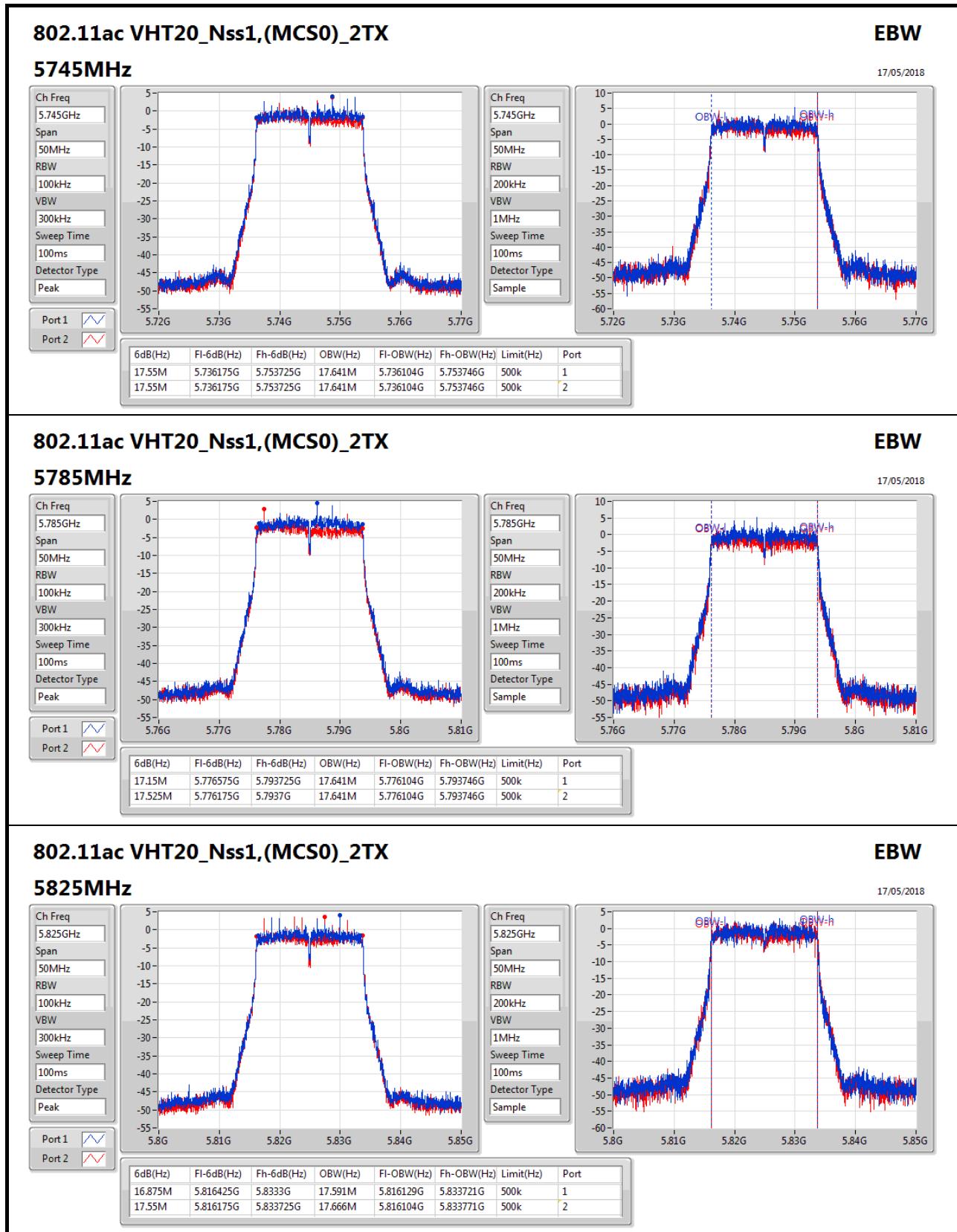


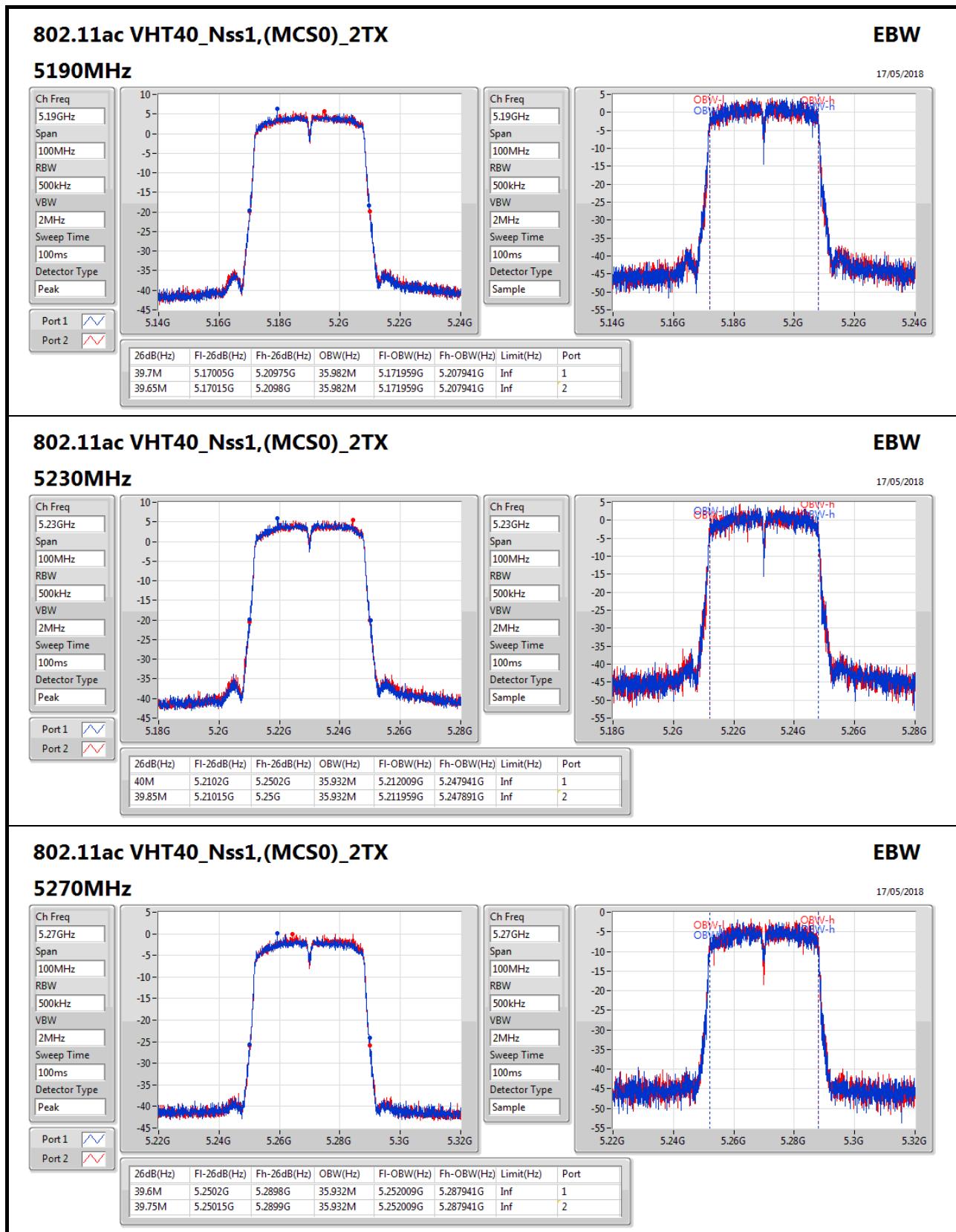








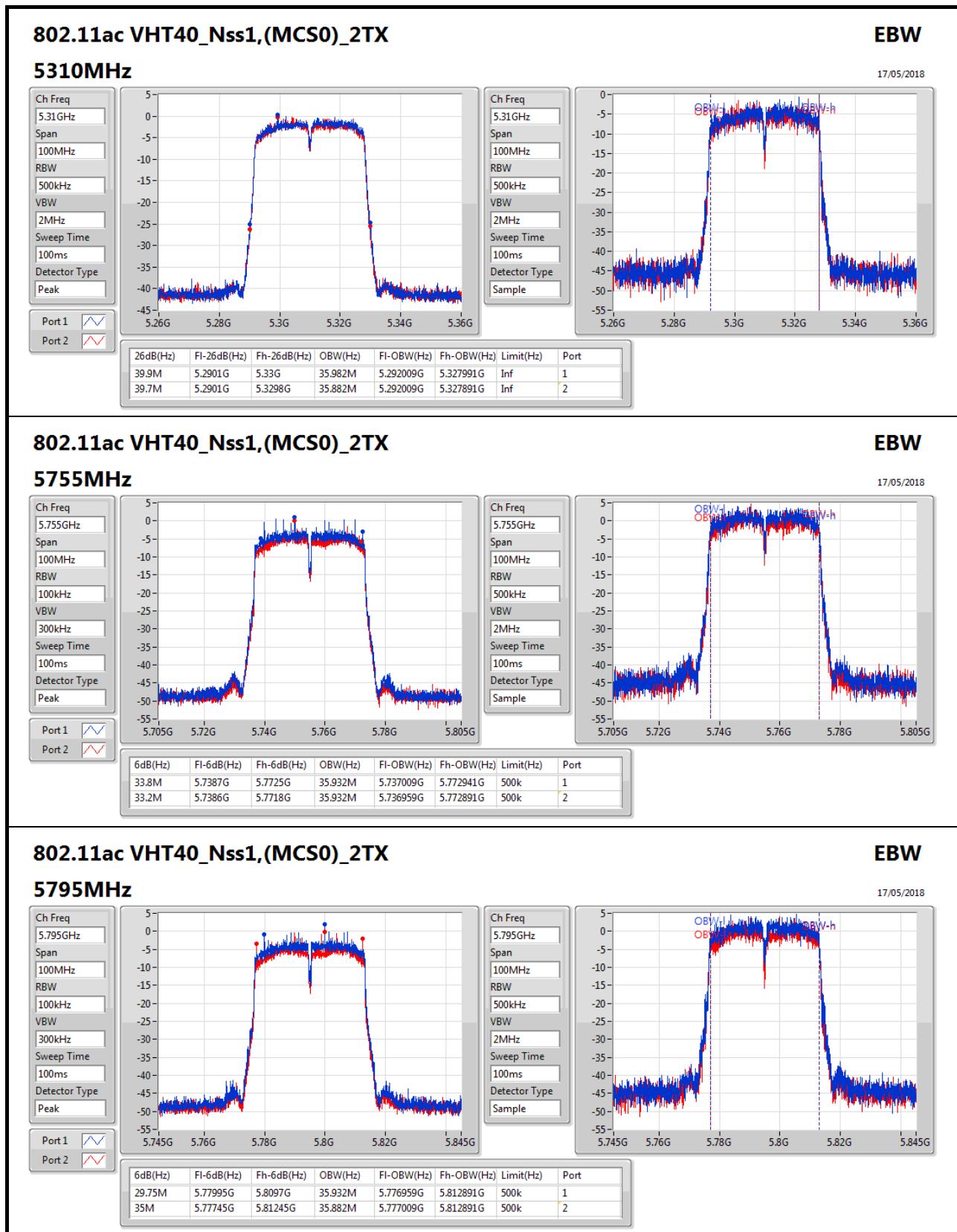


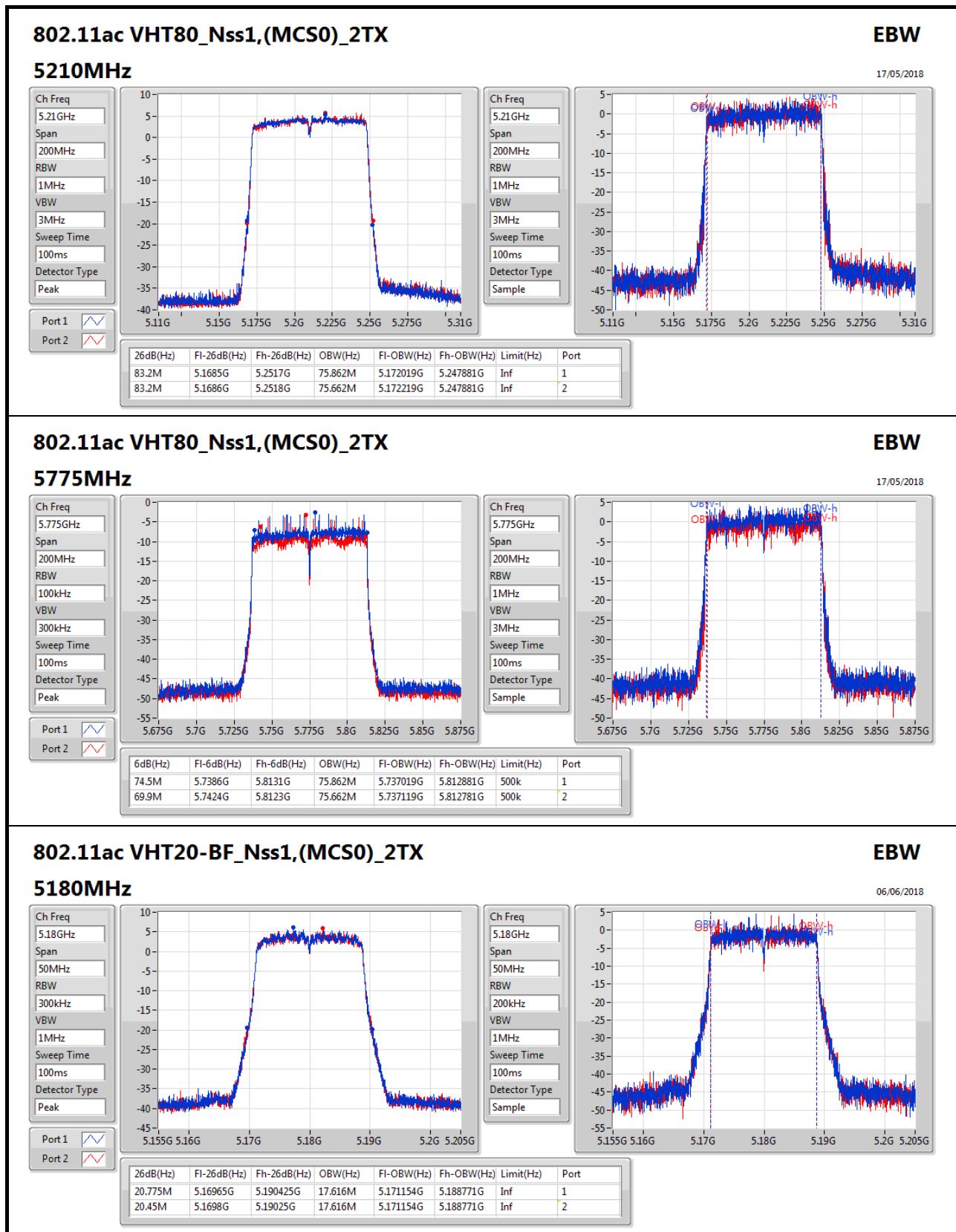


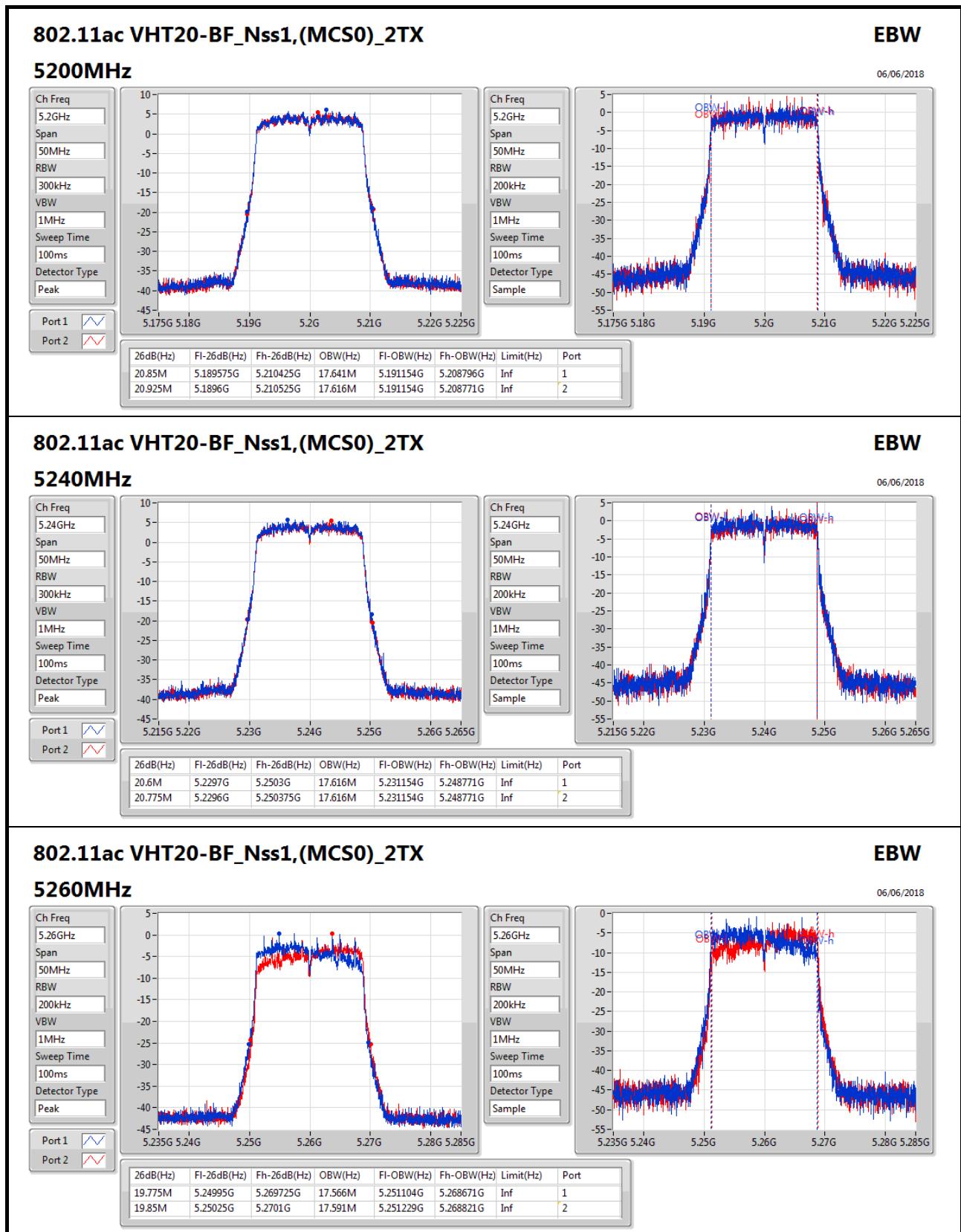


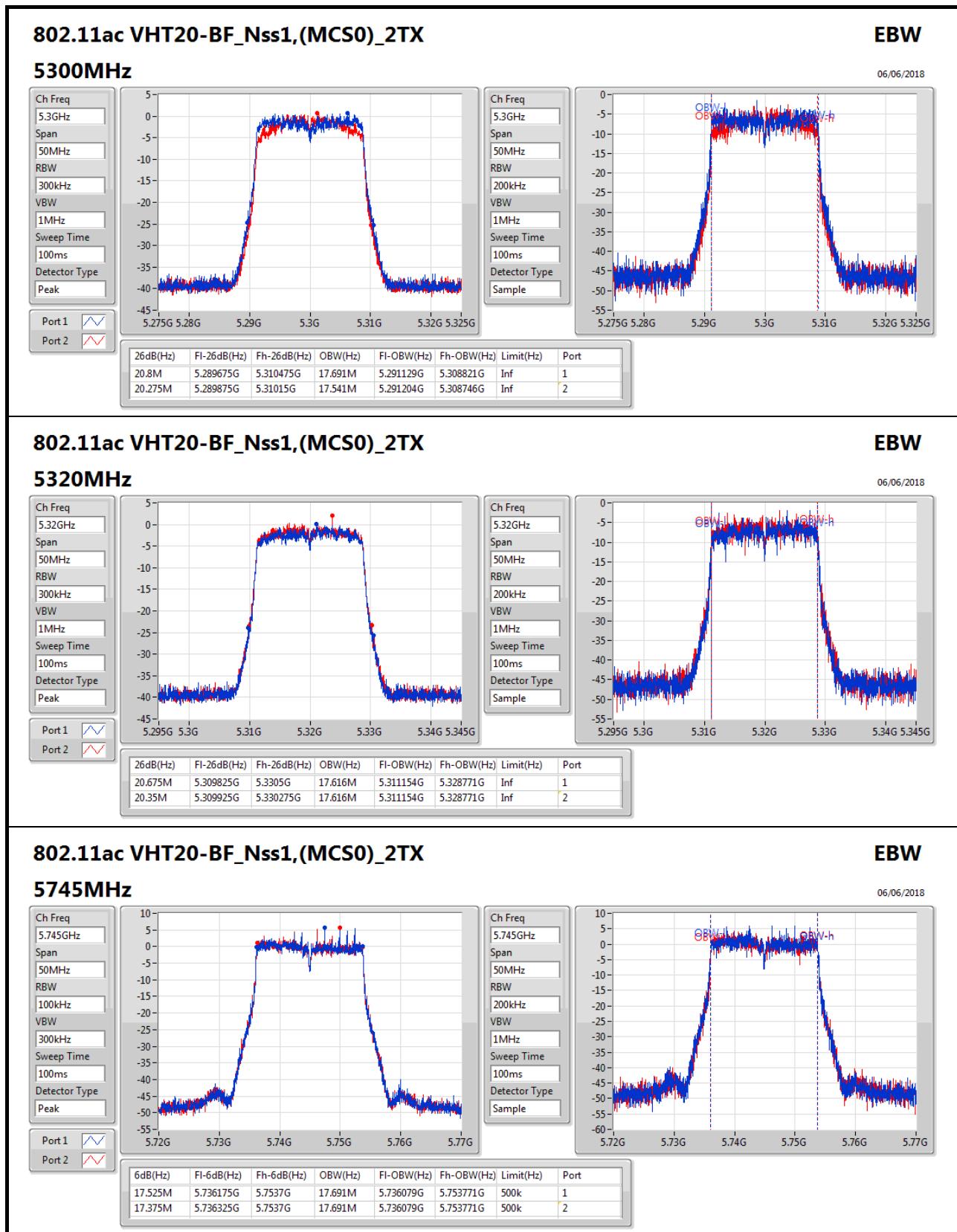
## EBW Result

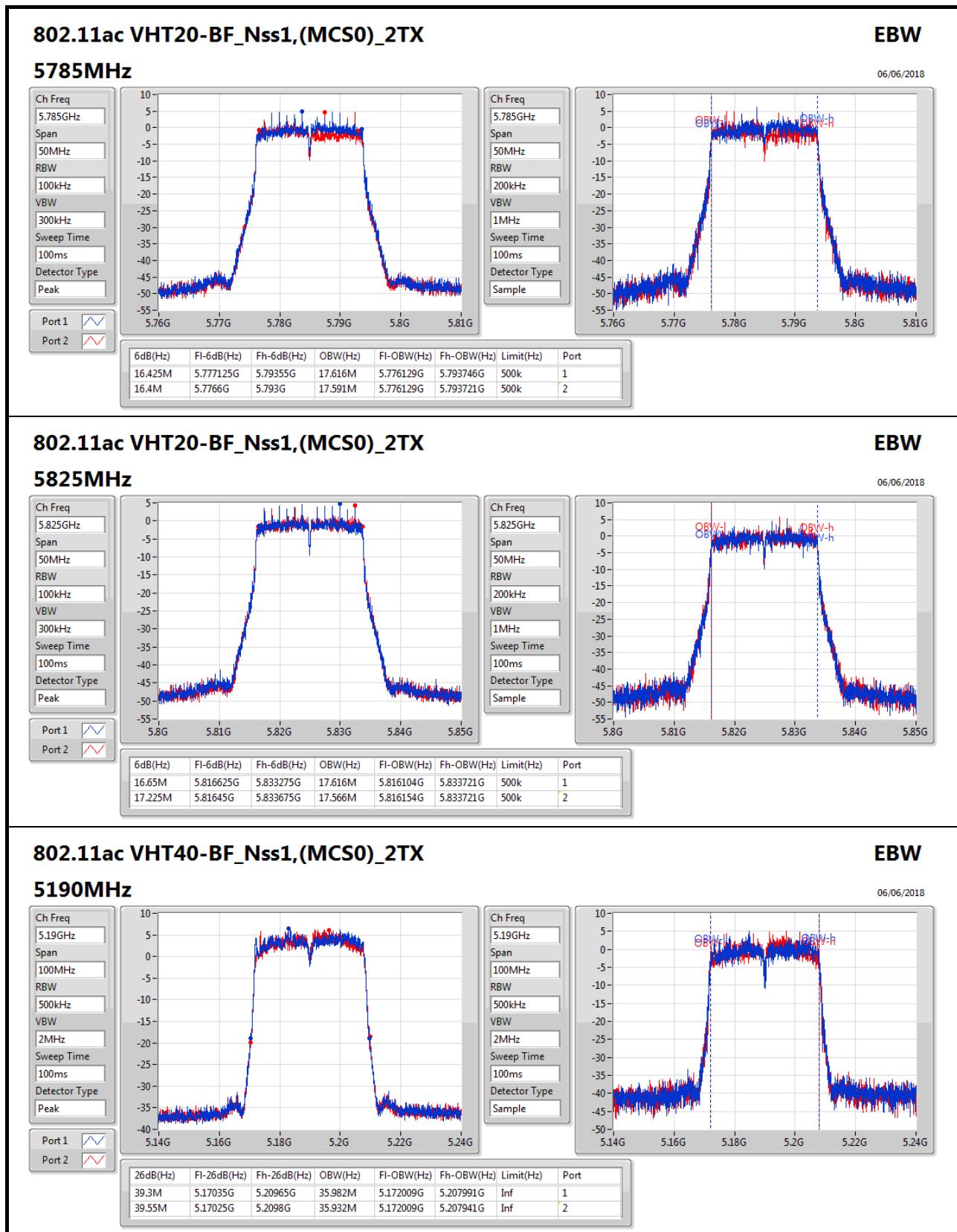
## Appendix B

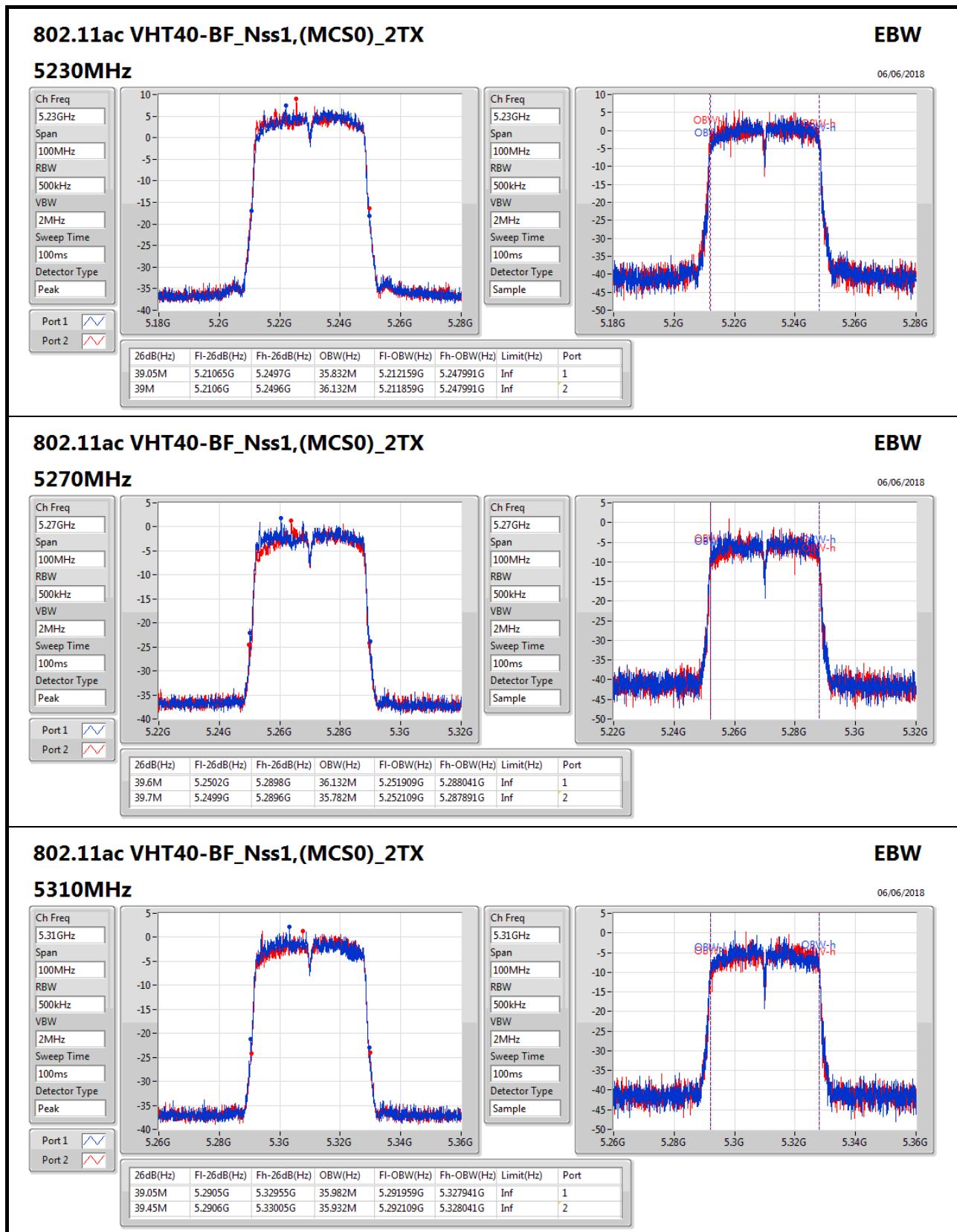


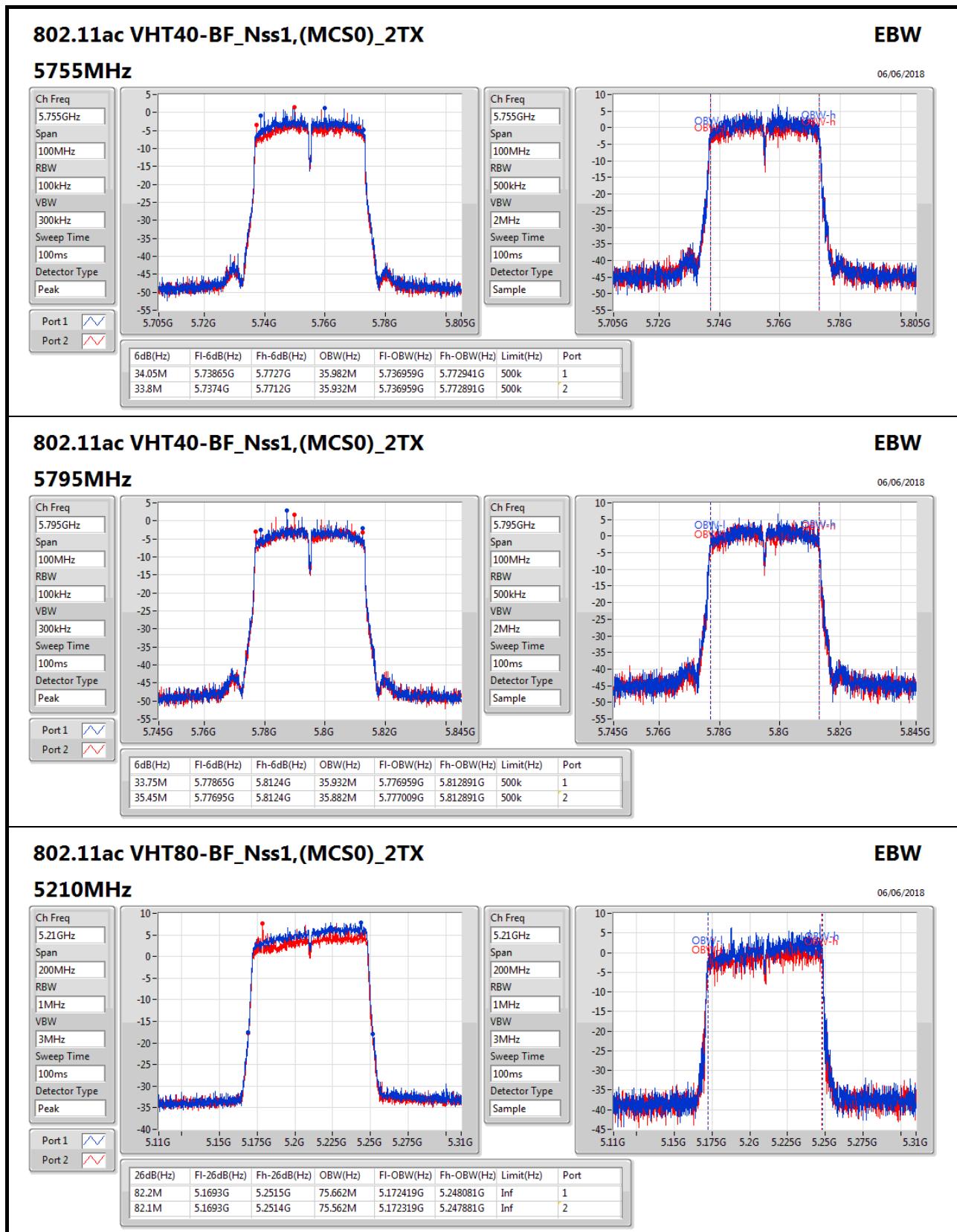








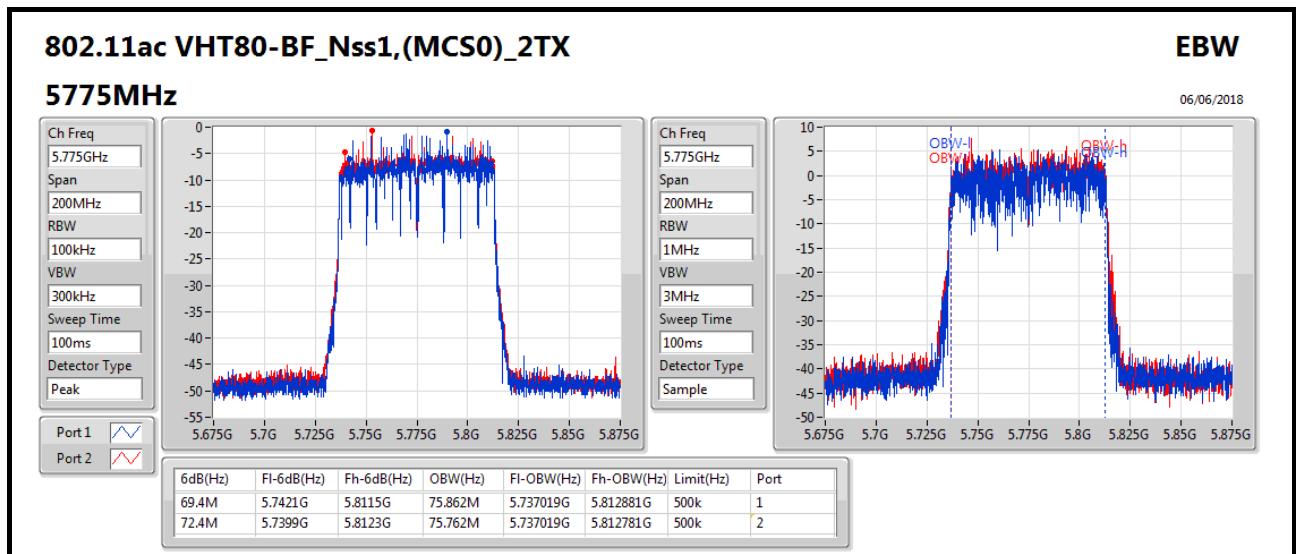






## EBW Result

Appendix B





## Power Result

## Appendix C.1

For Indoor use:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	17.99	0.06295
802.11ac VHT20_Nss1,(MCS0)_2TX	17.61	0.05768
802.11ac VHT40_Nss1,(MCS0)_2TX	17.62	0.05781
802.11ac VHT80_Nss1,(MCS0)_2TX	17.63	0.05794
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.61	0.05768
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	17.66	0.05834
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	17.85	0.06095
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	11.66	0.01466
802.11ac VHT20_Nss1,(MCS0)_2TX	11.75	0.01496
802.11ac VHT40_Nss1,(MCS0)_2TX	11.92	0.01556
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	11.87	0.01538
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	11.86	0.01535
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	17.85	0.06095
802.11ac VHT20_Nss1,(MCS0)_2TX	17.90	0.06166
802.11ac VHT40_Nss1,(MCS0)_2TX	17.53	0.05662
802.11ac VHT80_Nss1,(MCS0)_2TX	17.54	0.05675
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.89	0.06152
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	17.74	0.05943
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	17.30	0.05370



## Power Result

Appendix C.1

### Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	18.00	14.61	14.73	17.68	18.00
5200MHz	Pass	18.00	14.68	14.73	17.72	18.00
5240MHz	Pass	18.00	15.04	14.91	17.99	18.00
5260MHz	Pass	18.00	8.69	8.60	11.66	11.86
5300MHz	Pass	18.00	8.67	8.46	11.58	11.83
5320MHz	Pass	18.00	8.51	8.26	11.40	11.87
5745MHz	Pass	18.00	14.93	14.12	17.55	18.00
5785MHz	Pass	18.00	14.99	14.21	17.63	18.00
5825MHz	Pass	18.00	15.07	14.60	17.85	18.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	18.00	14.58	14.61	17.61	18.00
5200MHz	Pass	18.00	14.46	14.56	17.52	18.00
5240MHz	Pass	18.00	14.51	14.67	17.60	18.00
5260MHz	Pass	18.00	8.61	8.48	11.56	11.98
5300MHz	Pass	18.00	9.02	8.18	11.63	11.98
5320MHz	Pass	18.00	8.94	8.53	11.75	11.98
5745MHz	Pass	18.00	15.21	14.45	17.86	18.00
5785MHz	Pass	18.00	15.32	14.41	17.90	18.00
5825MHz	Pass	18.00	14.83	14.22	17.55	18.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	18.00	14.74	14.47	17.62	18.00
5230MHz	Pass	18.00	14.64	14.51	17.59	18.00
5270MHz	Pass	18.00	8.69	8.91	11.81	11.98
5310MHz	Pass	18.00	9.05	8.76	11.92	11.98
5755MHz	Pass	18.00	15.00	13.97	17.53	18.00
5795MHz	Pass	18.00	15.06	13.91	17.53	18.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	18.00	14.68	14.56	17.63	18.00
5775MHz	Pass	18.00	14.93	14.08	17.54	18.00
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	18.00	14.70	14.48	17.60	18.00
5200MHz	Pass	18.00	14.72	14.48	17.61	18.00
5240MHz	Pass	18.00	14.56	14.48	17.53	18.00
5260MHz	Pass	18.00	8.89	8.83	11.87	11.96
5300MHz	Pass	18.00	8.51	8.65	11.59	11.98
5320MHz	Pass	18.00	8.66	8.83	11.76	11.98
5745MHz	Pass	18.00	15.08	14.68	17.89	18.00
5785MHz	Pass	18.00	14.73	13.88	17.34	18.00
5825MHz	Pass	18.00	14.29	14.41	17.36	18.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	18.00	14.58	14.67	17.64	18.00
5230MHz	Pass	18.00	14.60	14.70	17.66	18.00



## Power Result

Appendix C.1

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
5270MHz	Pass	18.00	8.84	8.86	11.86	11.98
5310MHz	Pass	18.00	8.58	8.56	11.58	11.98
5755MHz	Pass	18.00	14.67	14.29	17.49	18.00
5795MHz	Pass	18.00	14.98	14.46	17.74	18.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	18.00	14.84	14.83	17.85	18.00
5775MHz	Pass	18.00	14.35	14.22	17.30	18.00

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



## Power Result

## Appendix C.2

### For Outdoor use:

#### Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP / EIRP Elevation 30° (dBm)	EIRP / EIRP Elevation 30° (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	17.99	0.06295	35.99/20.89	3.97192
802.11ac VHT20_Nss1,(MCS0)_2TX	17.61	0.05768	35.61/20.51	3.63915
802.11ac VHT40_Nss1,(MCS0)_2TX	17.62	0.05781	35.62/20.52	3.64754
802.11ac VHT80_Nss1,(MCS0)_2TX	17.63	0.05794	35.63/20.53	3.65595
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.61	0.05768	35.61/20.51	3.63915
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	17.66	0.05834	35.66/20.56	3.68129
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	17.85	0.06095	35.85/20.75	3.84592
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	11.66	0.01466	29.66	0.92470
802.11ac VHT20_Nss1,(MCS0)_2TX	11.75	0.01496	29.75	0.94406
802.11ac VHT40_Nss1,(MCS0)_2TX	11.92	0.01556	29.92	0.98175
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	11.87	0.01538	29.87	0.97051
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	11.86	0.01535	29.86	0.96828
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	17.85	0.06095	35.85	3.84592
802.11ac VHT20_Nss1,(MCS0)_2TX	17.90	0.06166	35.90	3.89045
802.11ac VHT40_Nss1,(MCS0)_2TX	17.53	0.05662	35.53	3.57273
802.11ac VHT80_Nss1,(MCS0)_2TX	17.54	0.05675	35.54	3.58096
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.89	0.06152	35.89	3.88150
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	17.74	0.05943	35.74	3.74973
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	17.30	0.05370	35.30	3.38844



## Power Result

## Appendix C.2

### Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP / EIRP- Elevation 30° (dBm)	EIRP Limit / EIRP Limit- Elevation 30° (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	18.00	14.61	14.73	17.68	18.00	35.68/20.58	36.00/21.00
5200MHz	Pass	18.00	14.68	14.73	17.72	18.00	35.72/20.62	36.00/21.00
5240MHz	Pass	18.00	15.04	14.91	17.99	18.00	35.99/20.89	36.00/21.00
5260MHz	Pass	18.00	8.69	8.60	11.66	11.86	29.66	29.86
5300MHz	Pass	18.00	8.67	8.46	11.58	11.83	29.58	29.83
5320MHz	Pass	18.00	8.51	8.26	11.40	11.87	29.40	29.87
5745MHz	Pass	18.00	14.93	14.12	17.55	18.00	35.55	36.00
5785MHz	Pass	18.00	14.99	14.21	17.63	18.00	35.63	36.00
5825MHz	Pass	18.00	15.07	14.60	17.85	18.00	35.85	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	18.00	14.58	14.61	17.61	18.00	35.61/20.51	36.00/21.00
5200MHz	Pass	18.00	14.46	14.56	17.52	18.00	35.52/20.42	36.00/21.00
5240MHz	Pass	18.00	14.51	14.67	17.60	18.00	35.60/20.50	36.00/21.00
5260MHz	Pass	18.00	8.61	8.48	11.56	11.98	29.56	30.00
5300MHz	Pass	18.00	9.02	8.18	11.63	11.98	29.63	30.00
5320MHz	Pass	18.00	8.94	8.53	11.75	11.98	29.75	30.00
5745MHz	Pass	18.00	15.21	14.45	17.86	18.00	35.86	36.00
5785MHz	Pass	18.00	15.32	14.41	17.90	18.00	35.90	36.00
5825MHz	Pass	18.00	14.83	14.22	17.55	18.00	35.55	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	18.00	14.74	14.47	17.62	18.00	35.62/20.52	36.00/21.00
5230MHz	Pass	18.00	14.64	14.51	17.59	18.00	35.59/20.49	36.00/21.00
5270MHz	Pass	18.00	8.69	8.91	11.81	11.98	29.81	30.00
5310MHz	Pass	18.00	9.05	8.76	11.92	11.98	29.92	30.00
5755MHz	Pass	18.00	15.00	13.97	17.53	18.00	35.53	36.00
5795MHz	Pass	18.00	15.06	13.91	17.53	18.00	35.53	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	18.00	14.68	14.56	17.63	18.00	35.63/20.53	36.00/21.00
5775MHz	Pass	18.00	14.93	14.08	17.54	18.00	35.54	36.00
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	18.00	14.70	14.48	17.60	18.00	35.60/20.50	36.00/21.00
5200MHz	Pass	18.00	14.72	14.48	17.61	18.00	35.61/20.51	36.00/21.00
5240MHz	Pass	18.00	14.56	14.48	17.53	18.00	35.53/20.43	36.00/21.00
5260MHz	Pass	18.00	8.89	8.83	11.87	11.96	29.87	29.96
5300MHz	Pass	18.00	8.51	8.65	11.59	11.98	29.59	30.00
5320MHz	Pass	18.00	8.66	8.83	11.76	11.98	29.76	30.00
5745MHz	Pass	18.00	15.08	14.68	17.89	18.00	35.89	36.00
5785MHz	Pass	18.00	14.73	13.88	17.34	18.00	35.34	36.00
5825MHz	Pass	18.00	14.29	14.41	17.36	18.00	35.36	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	18.00	14.58	14.67	17.64	18.00	35.64/20.54	36.00/21.00

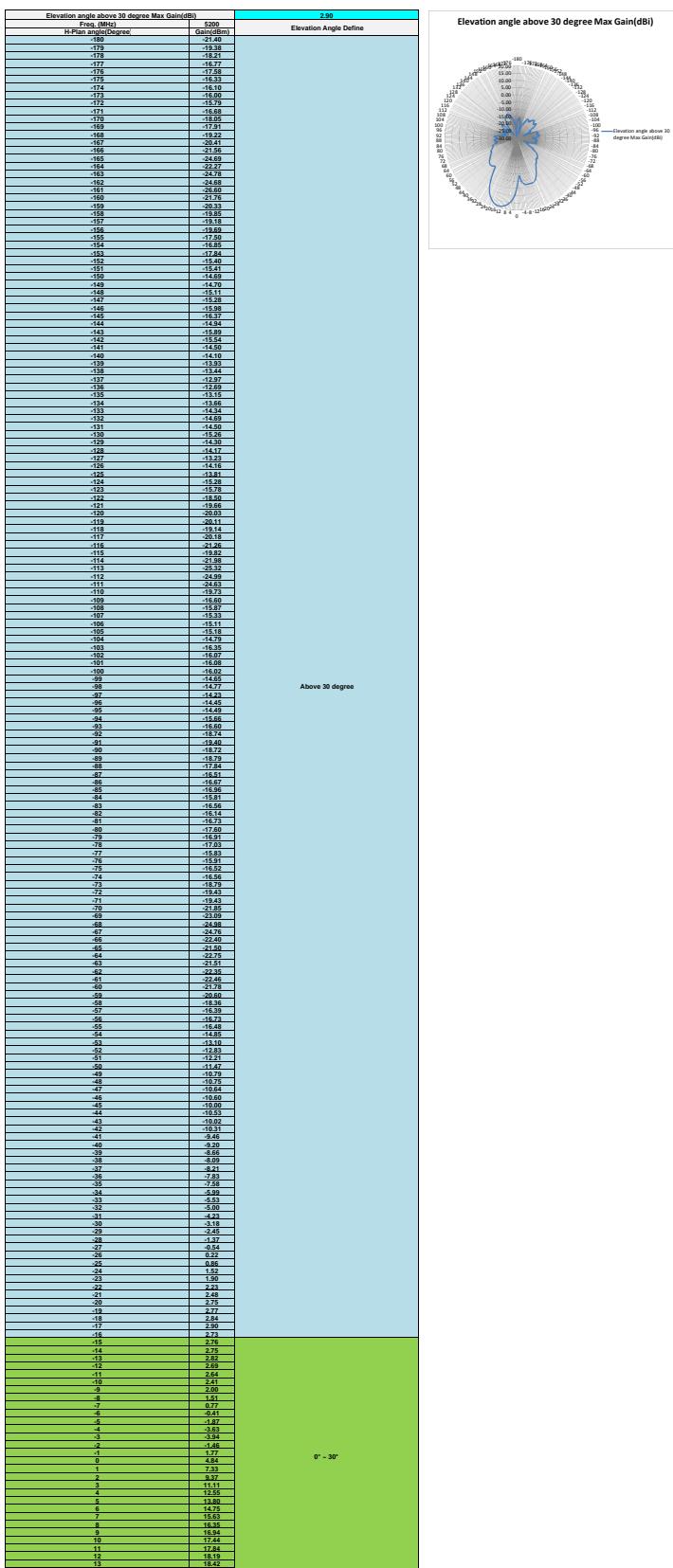


## Power Result

## Appendix C.2

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP / EIRP- Elevation 30° (dBm)	EIRP Limit / EIRP Limit- Elevation 30° (dBm)
5230MHz	Pass	18.00	14.60	14.70	17.66	18.00	35.66/20.56	36.00/21.00
5270MHz	Pass	18.00	8.84	8.86	11.86	11.98	29.86	30.00
5310MHz	Pass	18.00	8.58	8.56	11.58	11.98	29.58	30.00
5755MHz	Pass	18.00	14.67	14.29	17.49	18.00	35.49	36.00
5795MHz	Pass	18.00	14.98	14.46	17.74	18.00	35.74	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	18.00	14.84	14.83	17.85	18.00	35.85/20.75	36.00/21.00
5775MHz	Pass	18.00	14.35	14.22	17.30	18.00	35.30	36.00

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

**Elevation angle above 30 degree Max Gain**

**Elevation angle above 30 degree Max Gain**

	θ° reference angle
15	18.61
16	18.50
17	18.41
18	18.16
19	17.79
20	17.37
21	16.91
22	16.20
23	15.51
24	14.74
25	13.83
26	12.85
27	11.81
28	10.77
29	9.67
30	8.51
31	7.37
32	6.35
33	5.37
34	4.41
35	3.49
36	2.58
37	1.68
38	0.77
39	-0.17
40	-1.64
41	-2.53
42	-3.48
43	-4.41
44	-5.37
45	-6.35
46	-7.37
47	-8.51
48	-9.67
49	-10.77
50	-11.81
51	-12.85
52	-13.83
53	-14.74
54	-15.51
55	-16.20
56	-16.91
57	-17.37
58	-17.79
59	-18.16
60	-18.50
61	-18.61
62	-19.23
63	-19.53
64	-19.74
65	-19.90
66	-19.99
67	-19.95
68	-19.84
69	-19.64
70	-19.35
71	-19.24
72	-19.05
73	-18.85
74	-18.32
75	-17.74
76	-17.20
77	-16.62
78	-16.24
79	-15.86
80	-15.48
81	-15.09
82	-14.69
83	-14.29
84	-13.89
85	-13.49
86	-13.09
87	-12.69
88	-12.29
89	-11.89
90	-11.49
91	-11.09
92	-10.69
93	-10.29
94	-9.89
95	-9.49
96	-9.09
97	-8.69
98	-8.29
99	-7.89
100	-7.49
101	-7.09
102	-6.69
103	-6.29
104	-5.89
105	-5.49
106	-5.09
107	-4.69
108	-4.29
109	-3.89
110	-3.49
111	-3.09
112	-2.69
113	-19.96
114	-21.13
115	-21.29
116	-21.89
117	-21.93
118	-21.39
119	-19.49
120	-18.43
121	-17.37
122	-16.24
123	-15.09
124	-13.89
125	-12.69
126	-11.49
127	-10.29
128	-8.69
129	-7.49
130	-6.29
131	-5.09
132	-3.89
133	-16.63
134	-17.81
135	-21.81
136	-21.93
137	-21.53
138	-25.10
139	-26.30
140	-26.50
141	-24.43
142	-23.23
143	-20.07
144	-19.13
145	-18.40
146	-17.24
147	-15.93
148	-13.53
149	-11.13
150	-13.76
151	-17.64
152	-13.39
153	-13.02
154	-11.87
155	-12.44
156	-11.52
157	-11.79
158	-12.76
159	-13.39
160	-14.47
161	-15.55
162	-13.39
163	-13.39
164	-13.39
165	-14.47
166	-15.55
167	-16.63
168	-16.63
169	-16.63
170	-19.20
171	-19.20
172	-20.06
173	-23.98
174	-24.41
175	-24.41
176	-24.41
177	-28.39
178	-31.11
179	-32.55



## PSD Result

## Appendix D

For Indoor/outdoor use:

### Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	4.72
802.11ac VHT20_Nss1,(MCS0)_2TX	4.26
802.11ac VHT40_Nss1,(MCS0)_2TX	1.69
802.11ac VHT80_Nss1,(MCS0)_2TX	-2.09
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	4.10
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	0.92
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-0.97
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_2TX	-1.18
802.11ac VHT20_Nss1,(MCS0)_2TX	-1.57
802.11ac VHT40_Nss1,(MCS0)_2TX	-4.27
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-1.25
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-4.25
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	3.58
802.11ac VHT20_Nss1,(MCS0)_2TX	3.16
802.11ac VHT40_Nss1,(MCS0)_2TX	0.11
802.11ac VHT80_Nss1,(MCS0)_2TX	-3.44
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	4.07
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	0.43
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-4.09

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



## PSD Result

## Appendix D

### Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	18.00	1.67	1.78	4.71	5.00
5200MHz	Pass	18.00	1.82	1.93	4.72	5.00
5240MHz	Pass	18.00	1.70	1.86	4.66	5.00
5260MHz	Pass	18.00	-4.09	-4.08	-1.18	-1.00
5300MHz	Pass	18.00	-4.41	-4.31	-1.43	-1.00
5320MHz	Pass	18.00	-4.18	-4.31	-1.29	-1.00
5745MHz	Pass	18.00	0.40	-0.03	3.04	18.00
5785MHz	Pass	18.00	0.36	-0.64	2.82	18.00
5825MHz	Pass	18.00	0.59	0.69	3.58	18.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	18.00	1.15	1.37	4.26	5.00
5200MHz	Pass	18.00	1.08	1.26	4.16	5.00
5240MHz	Pass	18.00	0.96	1.12	4.04	5.00
5260MHz	Pass	18.00	-4.75	-4.82	-1.80	-1.00
5300MHz	Pass	18.00	-4.19	-4.87	-1.57	-1.00
5320MHz	Pass	18.00	-4.35	-4.91	-1.70	-1.00
5745MHz	Pass	18.00	0.49	-0.02	3.16	18.00
5785MHz	Pass	18.00	0.62	-0.71	2.88	18.00
5825MHz	Pass	18.00	-0.06	-0.70	2.48	18.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	18.00	-1.32	-1.14	1.69	5.00
5230MHz	Pass	18.00	-1.40	-1.62	1.45	5.00
5270MHz	Pass	18.00	-7.44	-7.10	-4.27	-1.00
5310MHz	Pass	18.00	-7.02	-7.33	-4.29	-1.00
5755MHz	Pass	18.00	-2.50	-3.07	0.11	18.00
5795MHz	Pass	18.00	-2.42	-3.49	-0.15	18.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	18.00	-4.94	-4.99	-2.09	5.00
5775MHz	Pass	18.00	-6.01	-6.87	-3.44	18.00
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	18.00	0.83	0.66	3.68	5.00
5200MHz	Pass	18.00	1.06	0.91	3.94	5.00
5240MHz	Pass	18.00	1.31	0.91	4.10	5.00
5260MHz	Pass	18.00	-4.02	-4.66	-1.43	-1.00
5300MHz	Pass	18.00	-3.63	-3.46	-1.25	-1.00
5320MHz	Pass	18.00	-4.28	-4.17	-1.37	-1.00
5745MHz	Pass	18.00	1.84	1.38	4.07	18.00
5785MHz	Pass	18.00	1.39	0.41	3.21	18.00
5825MHz	Pass	18.00	0.40	0.59	3.38	18.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	18.00	-2.59	-2.61	0.30	5.00
5230MHz	Pass	18.00	-2.01	-2.05	0.92	5.00



## PSD Result

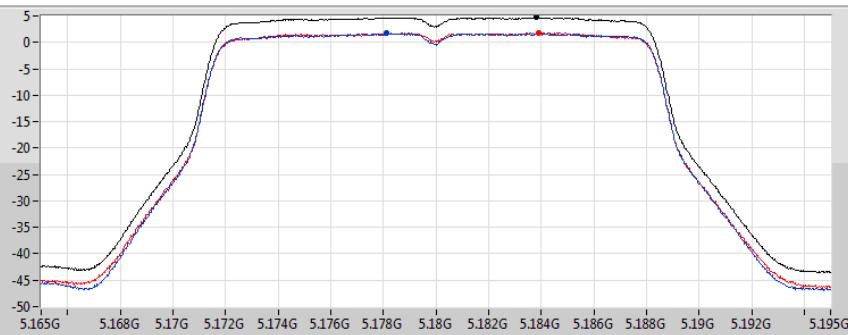
## Appendix D

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
5270MHz	Pass	18.00	-6.95	-7.45	-4.47	-1.00
5310MHz	Pass	18.00	-6.62	-6.87	-4.25	-1.00
5755MHz	Pass	18.00	-2.15	-2.86	0.23	18.00
5795MHz	Pass	18.00	-2.36	-2.45	0.43	18.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	18.00	-3.03	-5.05	-0.97	5.00
5775MHz	Pass	18.00	-7.57	-6.42	-4.09	18.00

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

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

**802.11a\_Nss1,(6Mbps)\_2TX**
**PSD**
**5180MHz**

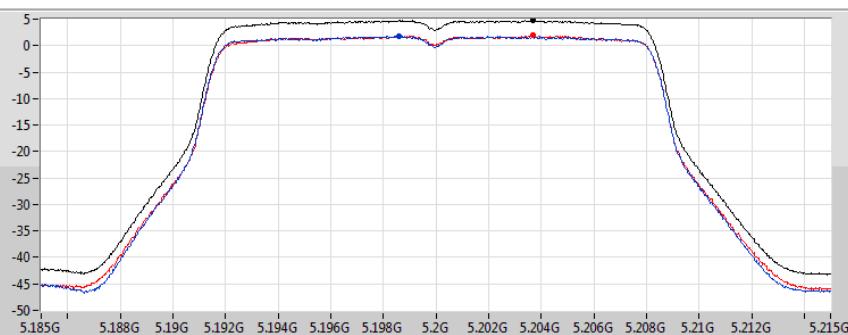
 Ch Freq  
 5.18GHz  
 Span  
 30MHz  
 RBW  
 1MHz  
 VBW  
 3MHz  
 Sweep Time  
 20ms  
 Detector Type  
 RMS


17/05/2018

 Sum  
 Port 1  
 Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.71	4.71	1.67	1.78

**802.11a\_Nss1,(6Mbps)\_2TX**
**PSD**
**5200MHz**

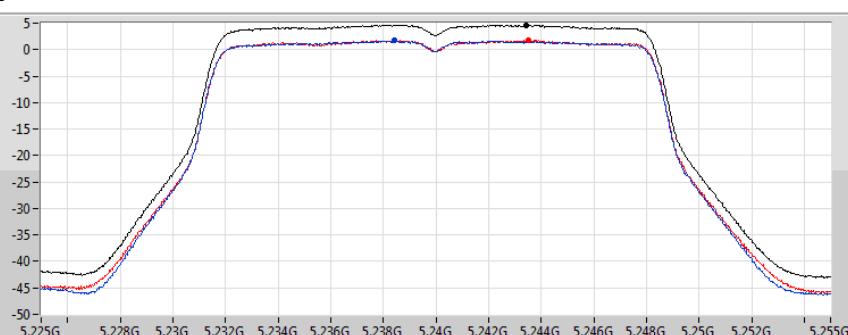
 Ch Freq  
 5.2GHz  
 Span  
 30MHz  
 RBW  
 1MHz  
 VBW  
 3MHz  
 Sweep Time  
 20ms  
 Detector Type  
 RMS


17/05/2018

 Sum  
 Port 1  
 Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.72	4.72	1.82	1.93

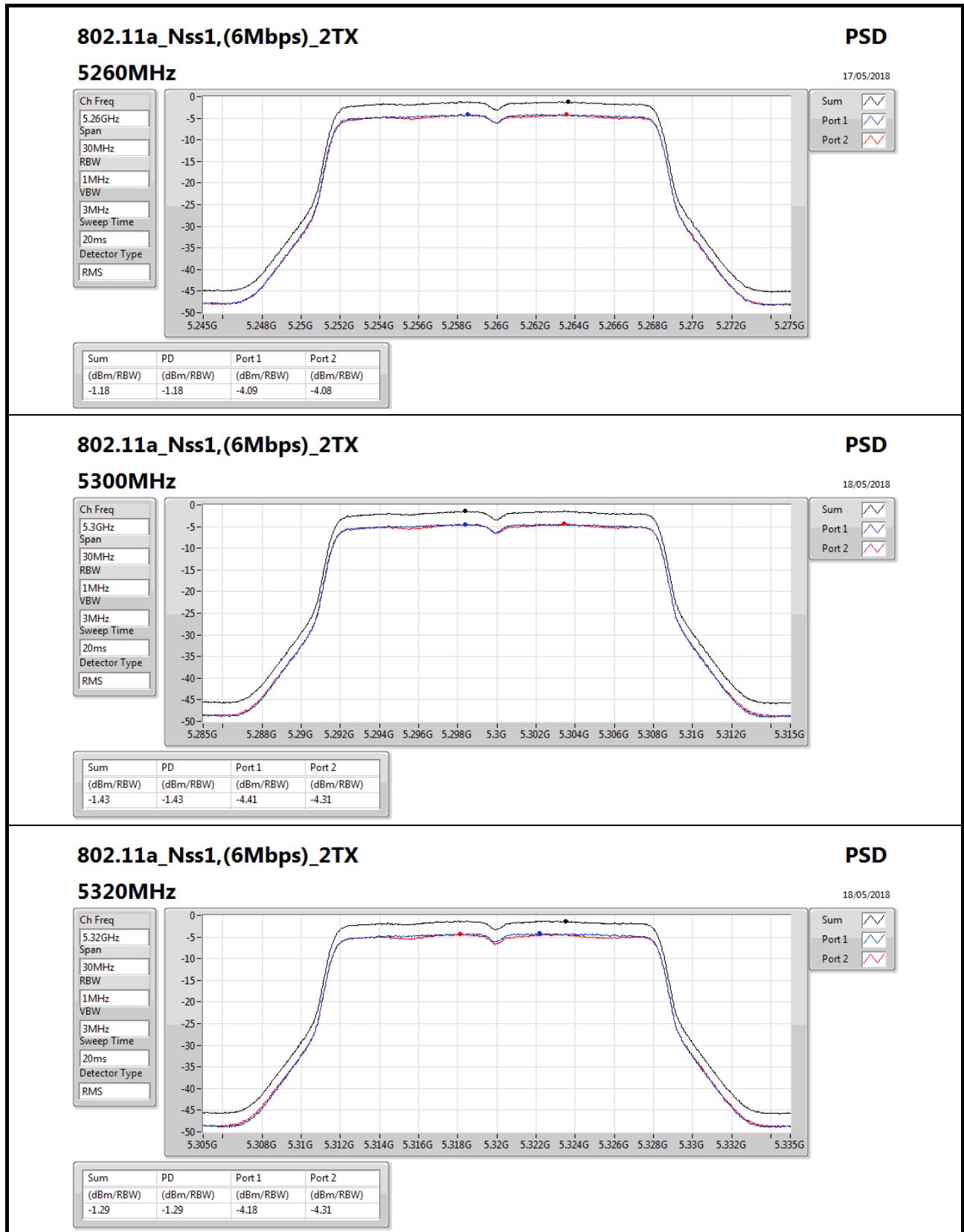
**802.11a\_Nss1,(6Mbps)\_2TX**
**PSD**
**5240MHz**

 Ch Freq  
 5.24GHz  
 Span  
 30MHz  
 RBW  
 1MHz  
 VBW  
 3MHz  
 Sweep Time  
 20ms  
 Detector Type  
 RMS


17/05/2018

 Sum  
 Port 1  
 Port 2

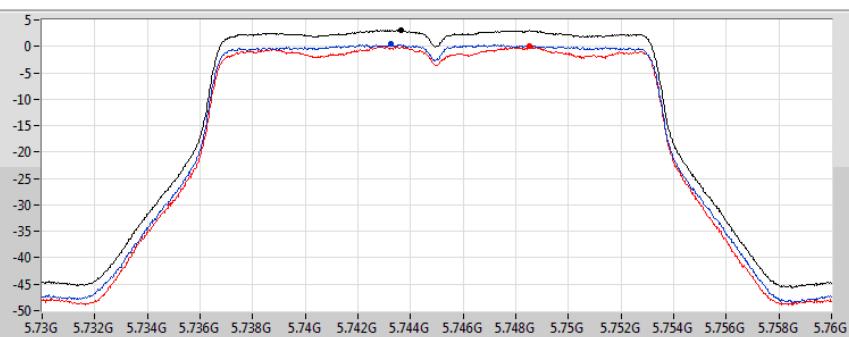
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.66	4.66	1.70	1.86



**802.11a\_Nss1,(6Mbps)\_2TX**
**PSD**

17/05/2018

**5745MHz**

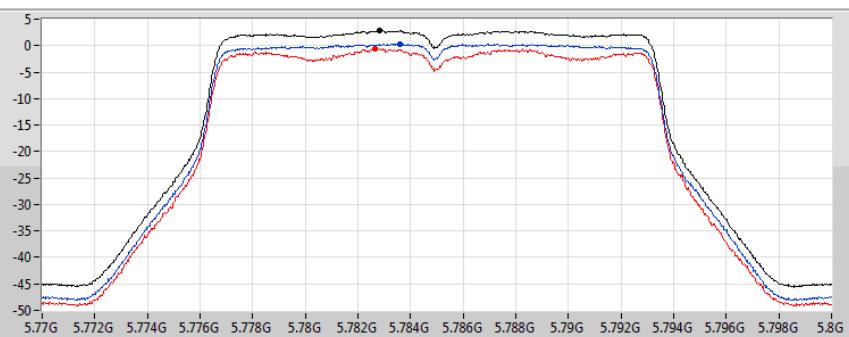
 Ch Freq  
5.745GHz  
Span  
30MHz  
RBW  
500kHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS

 Sum  
Port 1  
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.04	3.04	0.40	-0.03

**802.11a\_Nss1,(6Mbps)\_2TX**
**PSD**

17/05/2018

**5785MHz**

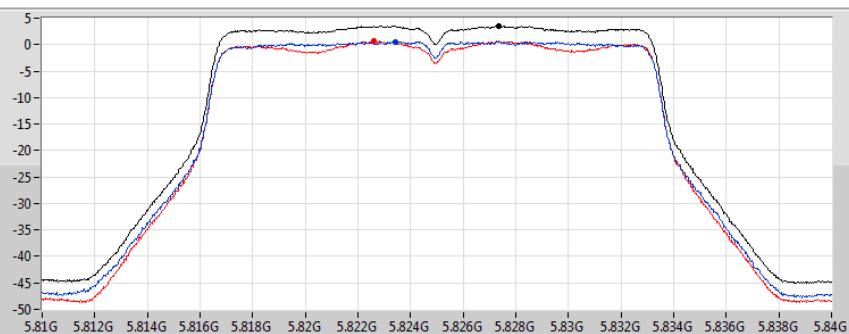
 Ch Freq  
5.785GHz  
Span  
30MHz  
RBW  
500kHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS

 Sum  
Port 1  
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.82	2.82	0.36	-0.64

**802.11a\_Nss1,(6Mbps)\_2TX**
**PSD**

17/05/2018

**5825MHz**

 Ch Freq  
5.825GHz  
Span  
30MHz  
RBW  
500kHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS

 Sum  
Port 1  
Port 2

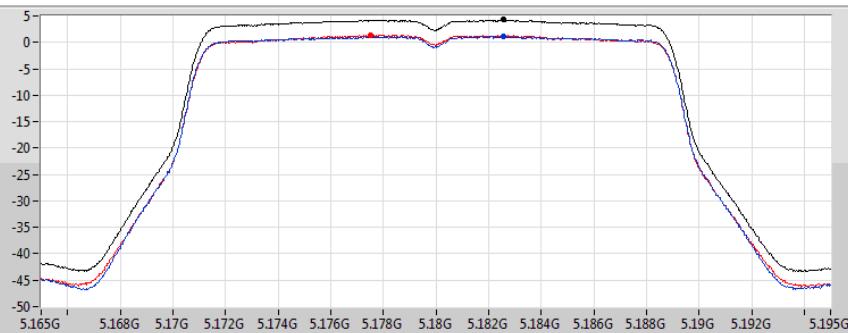
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.58	3.58	0.59	0.69

**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**PSD**

17/05/2018

**5180MHz**

Ch Freq
5.18GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



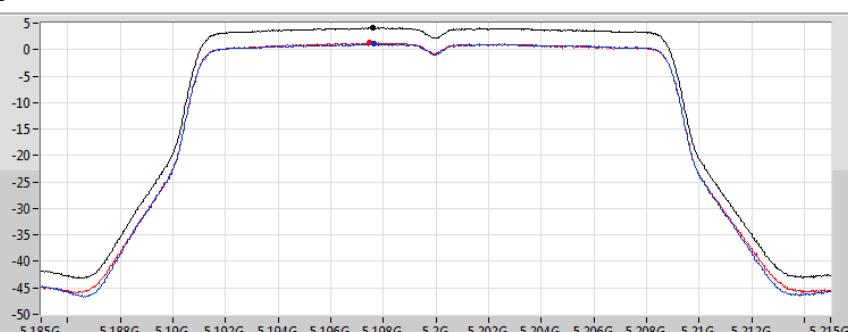
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Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**PSD**

17/05/2018

**5200MHz**

Ch Freq
5.2GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



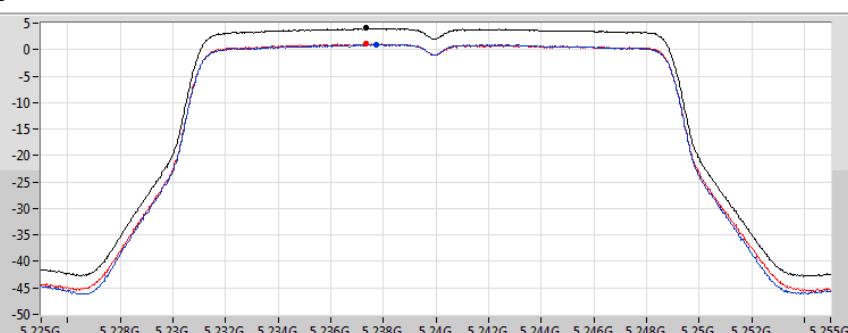
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Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**PSD**

17/05/2018

**5240MHz**

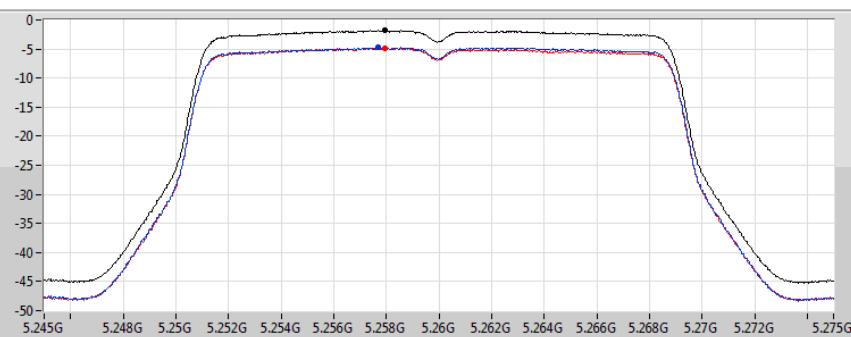
Ch Freq
5.24GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**PSD**
**5260MHz**

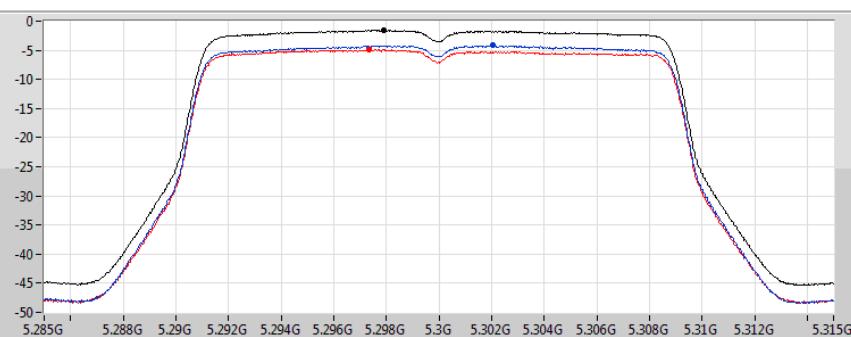
Ch Freq  
5.26GHz  
Span  
30MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS



17/05/2018

Sum   
Port 1   
Port 2 
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**PSD**
**5300MHz**

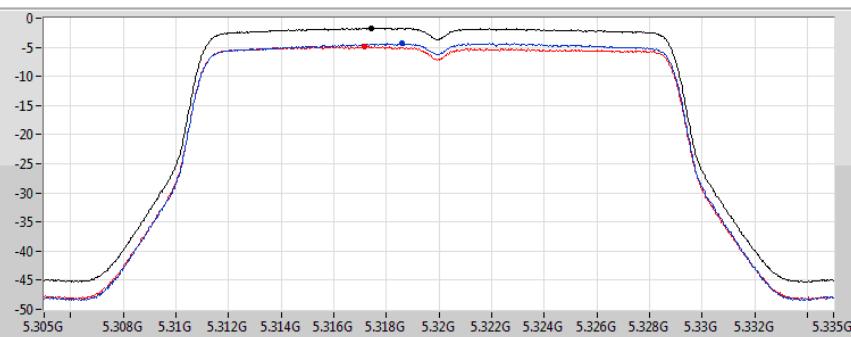
Ch Freq  
5.3GHz  
Span  
30MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS



17/05/2018

Sum   
Port 1   
Port 2 
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**PSD**
**5320MHz**

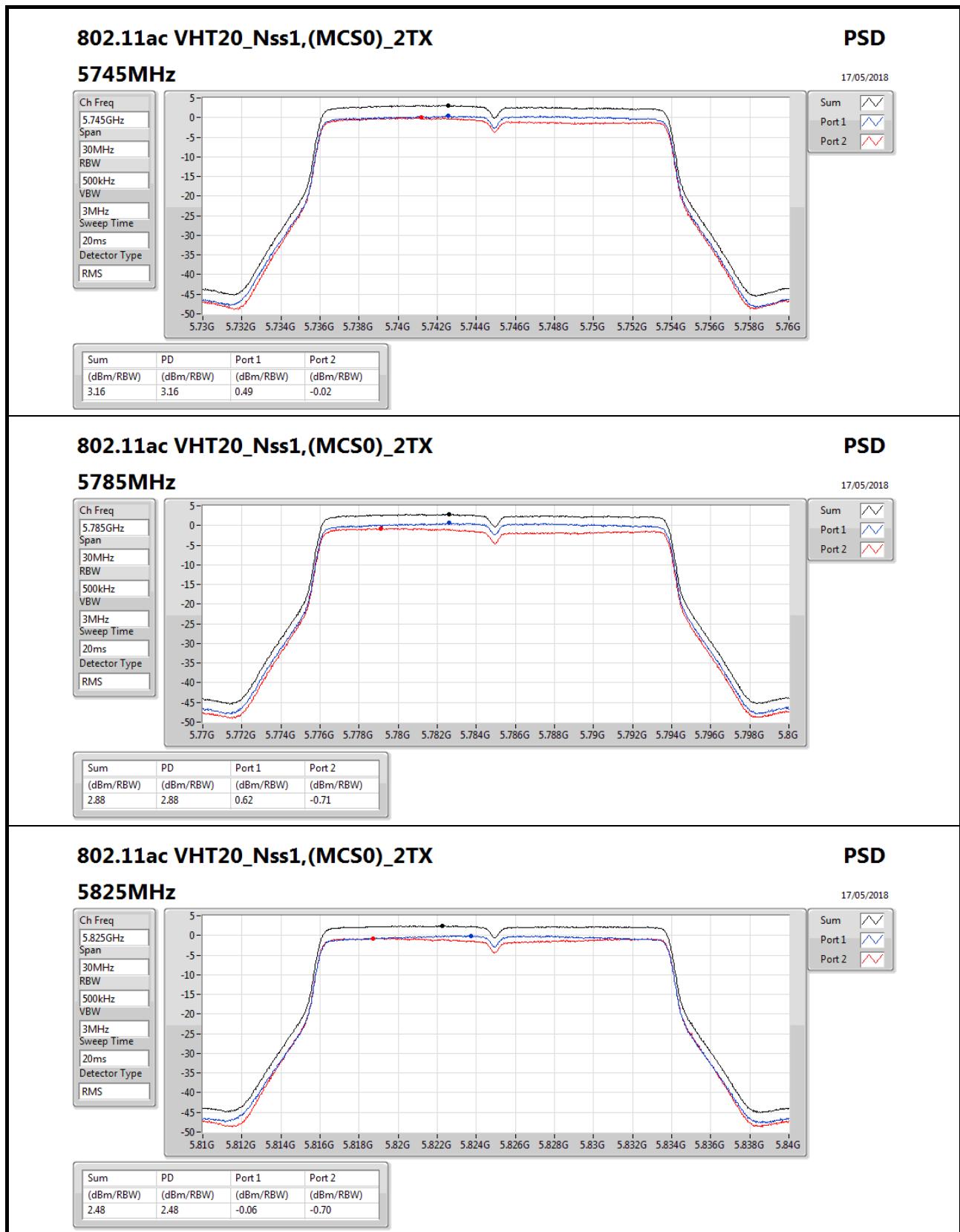
Ch Freq  
5.32GHz  
Span  
30MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS



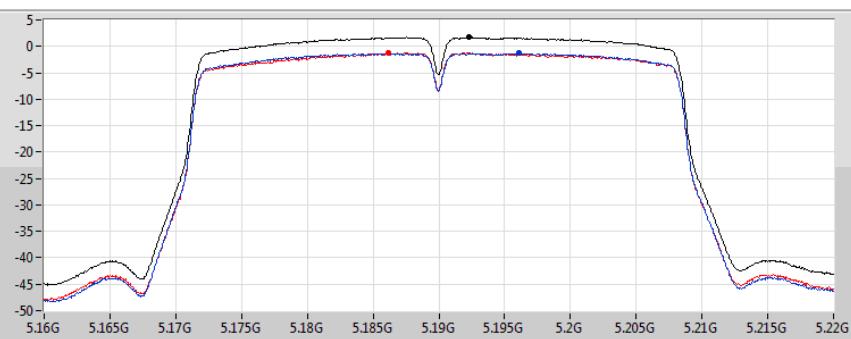
17/05/2018

Sum   
Port 1   
Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.80	-1.80	-4.75	-4.82



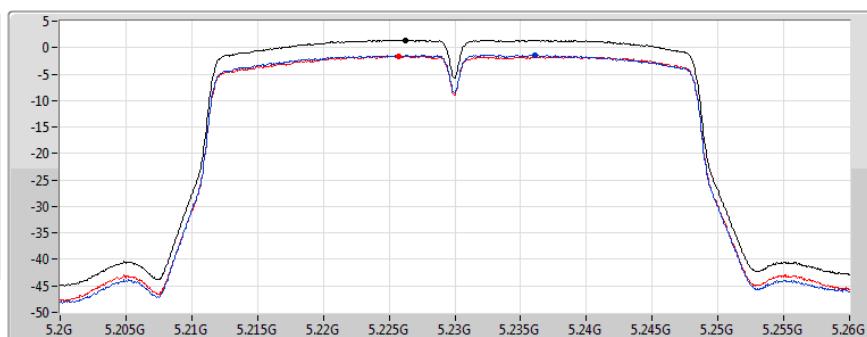
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**PSD**
**5190MHz**

 Ch Freq  
 5.19GHz  
 Span  
 60MHz  
 RBW  
 1MHz  
 VBW  
 3MHz  
 Sweep Time  
 20ms  
 Detector Type  
 RMS


17/05/2018

 Sum  
 Port 1  
 Port 2

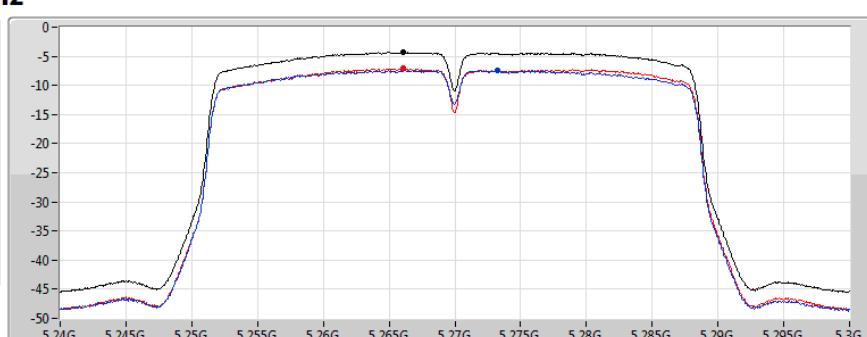
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**PSD**
**5230MHz**

 Ch Freq  
 5.23GHz  
 Span  
 60MHz  
 RBW  
 1MHz  
 VBW  
 3MHz  
 Sweep Time  
 20ms  
 Detector Type  
 RMS


17/05/2018

 Sum  
 Port 1  
 Port 2

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**PSD**
**5270MHz**

 Ch Freq  
 5.27GHz  
 Span  
 60MHz  
 RBW  
 1MHz  
 VBW  
 3MHz  
 Sweep Time  
 20ms  
 Detector Type  
 RMS


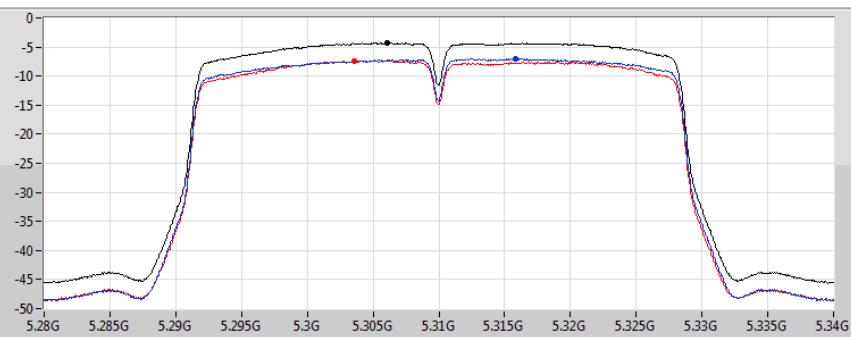
17/05/2018

 Sum  
 Port 1  
 Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.27	-4.27	-7.44	-7.10

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**PSD**
**5310MHz**

Ch Freq  
5.31GHz  
Span  
60MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS



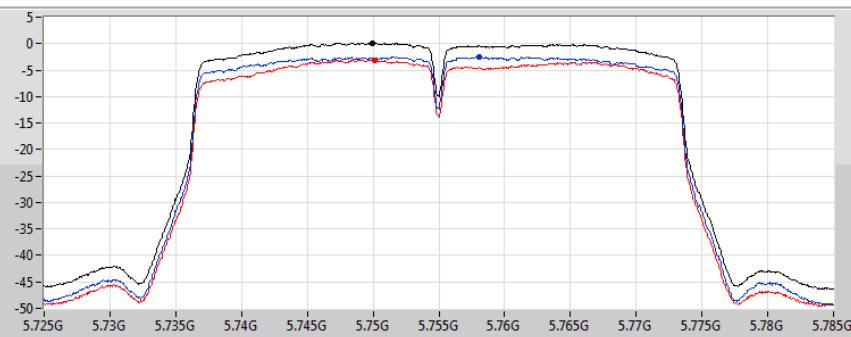
17/05/2018

Sum  
Port 1  
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.29	-4.29	-7.02	-7.33

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**PSD**
**5755MHz**

Ch Freq  
5.755GHz  
Span  
60MHz  
RBW  
500kHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS



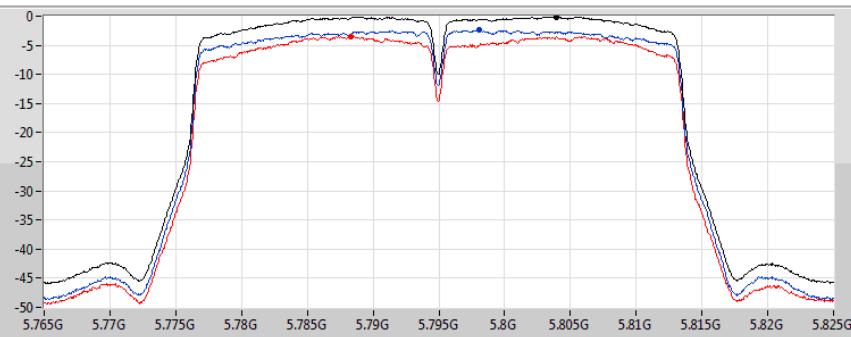
17/05/2018

Sum  
Port 1  
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.11	0.11	-2.50	-3.07

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**PSD**
**5795MHz**

Ch Freq  
5.795GHz  
Span  
60MHz  
RBW  
500kHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS



17/05/2018

Sum  
Port 1  
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.15	-0.15	-2.42	-3.49

**802.11ac VHT80\_Nss1,(MCS0)\_2TX**
**PSD**
**5210MHz**

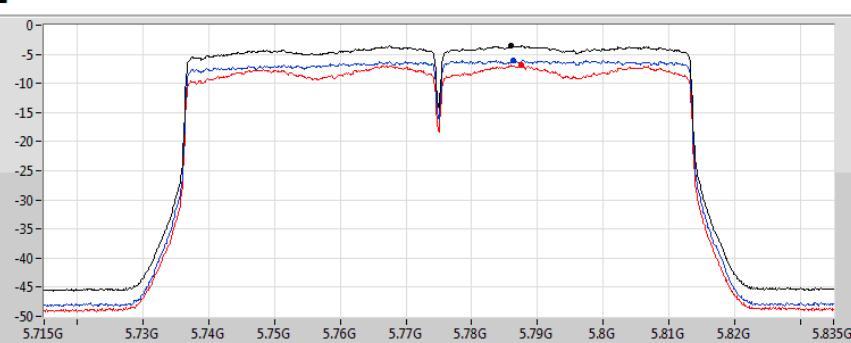
Ch Freq  
5.21GHz  
Span  
120MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS



17/05/2018

Sum   
Port 1   
Port 2 
**802.11ac VHT80\_Nss1,(MCS0)\_2TX**
**PSD**
**5775MHz**

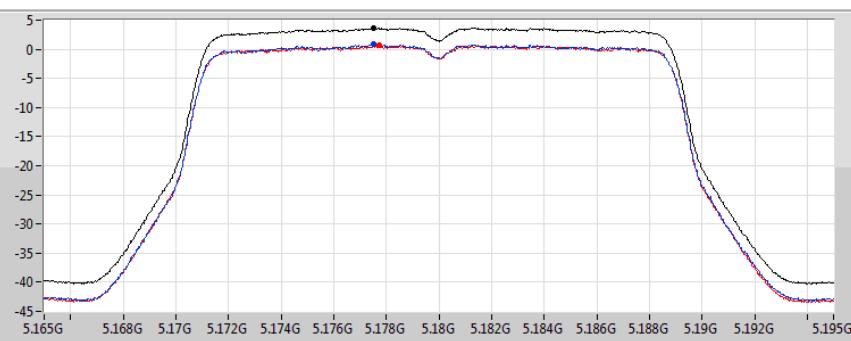
Ch Freq  
5.775GHz  
Span  
120MHz  
RBW  
500kHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS



17/05/2018

Sum   
Port 1   
Port 2 
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**
**5180MHz**

Ch Freq  
5.18GHz  
Span  
30MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS



06/06/2018

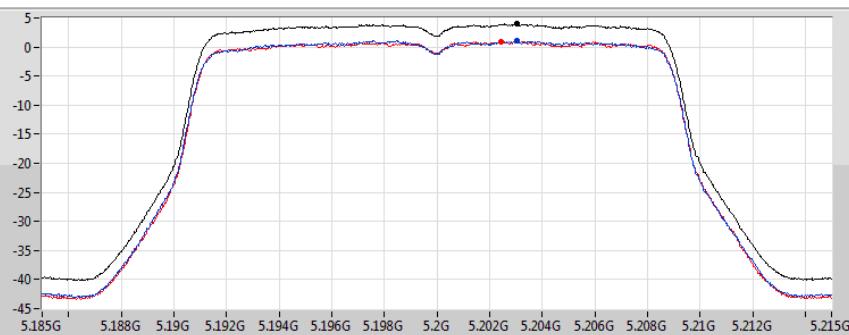
Sum   
Port 1   
Port 2

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5200MHz**

Ch Freq	5.2GHz
Span	30MHz
RBW	1MHz
VBW	3MHz
Sweep Time	20ms
Detector Type	RMS



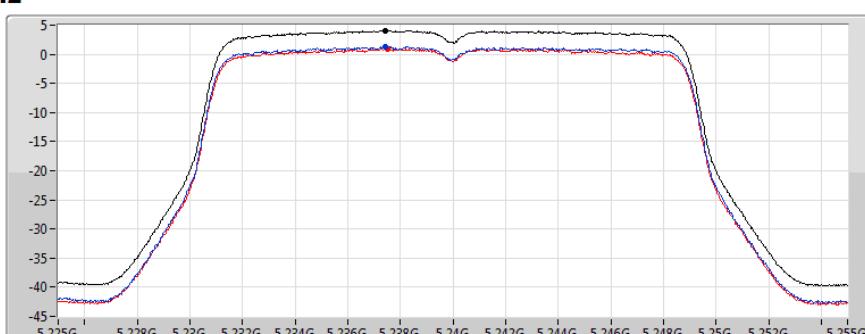
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5240MHz**

Ch Freq	5.24GHz
Span	30MHz
RBW	1MHz
VBW	3MHz
Sweep Time	20ms
Detector Type	RMS



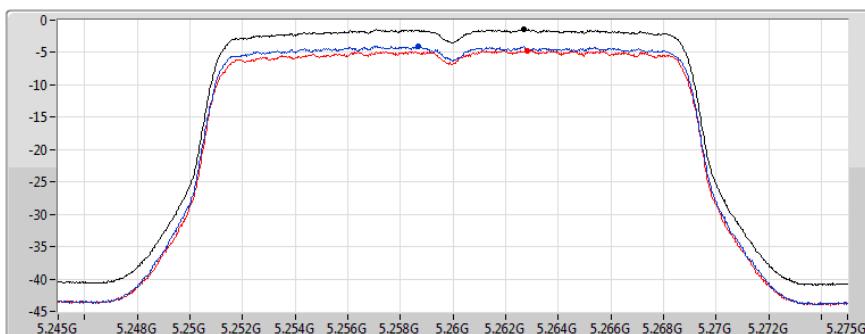
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5260MHz**

Ch Freq	5.26GHz
Span	30MHz
RBW	1MHz
VBW	3MHz
Sweep Time	20ms
Detector Type	RMS



Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

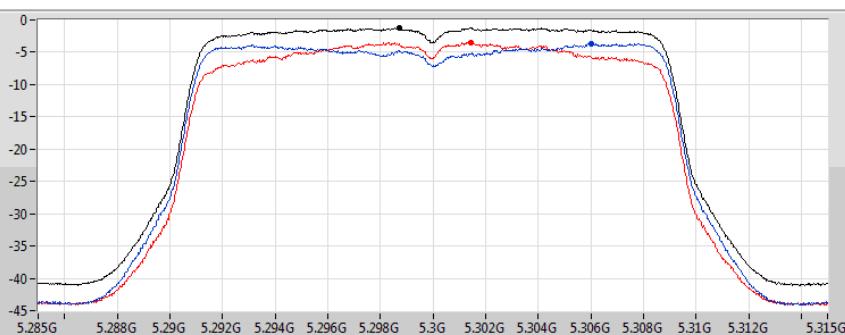
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.43	-1.43	-4.02	-4.66

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5300MHz**

Ch Freq
5.3GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



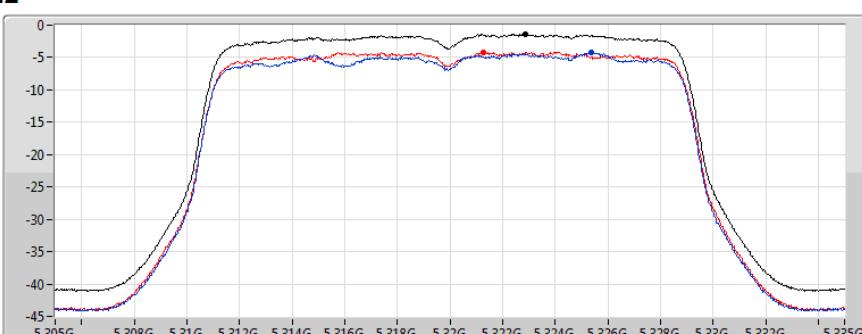
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5320MHz**

Ch Freq
5.32GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



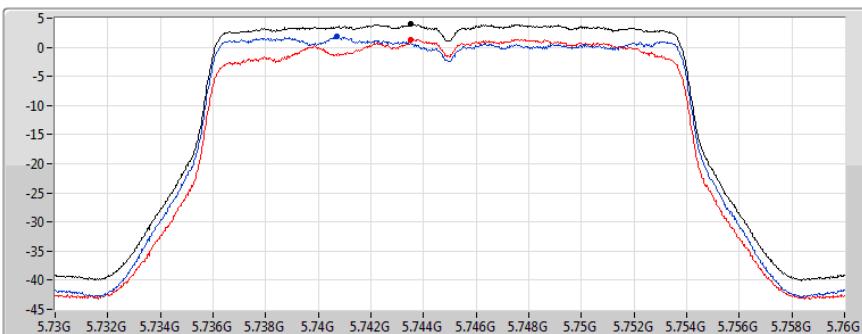
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5745MHz**

Ch Freq
5.745GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



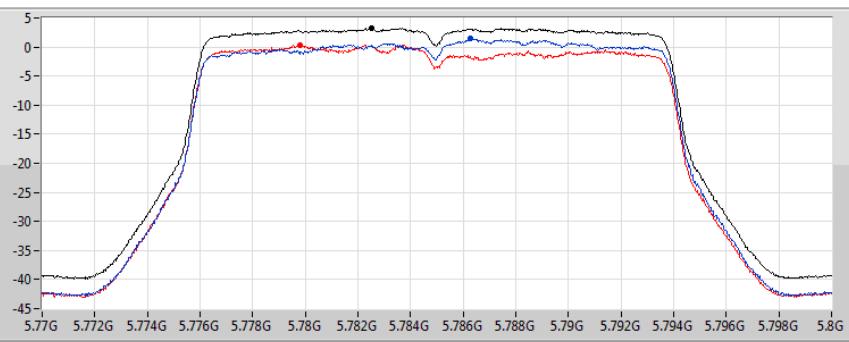
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5785MHz**

Ch Freq
5.785GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



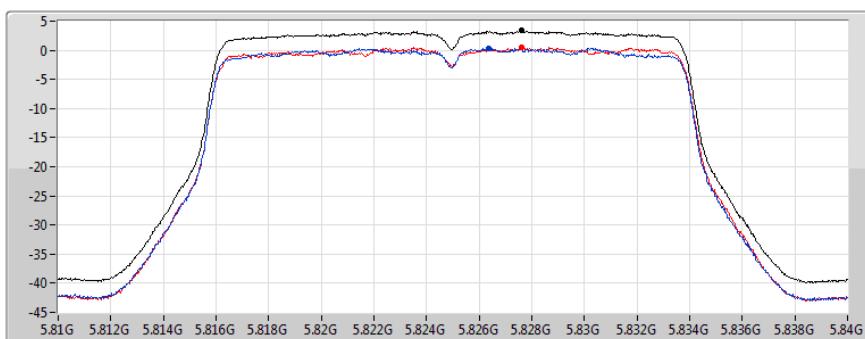
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5825MHz**

Ch Freq
5.825GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



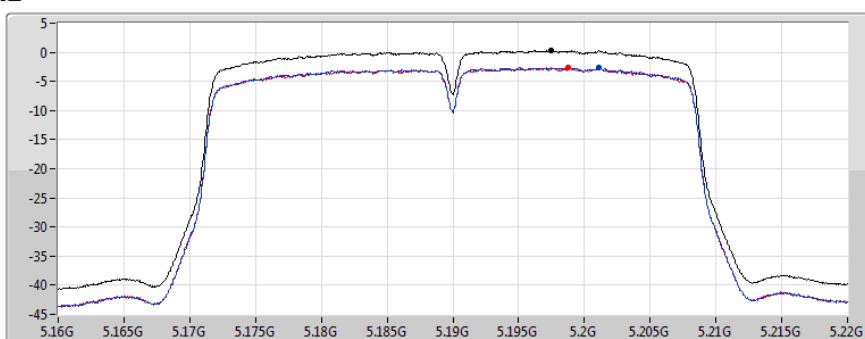
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

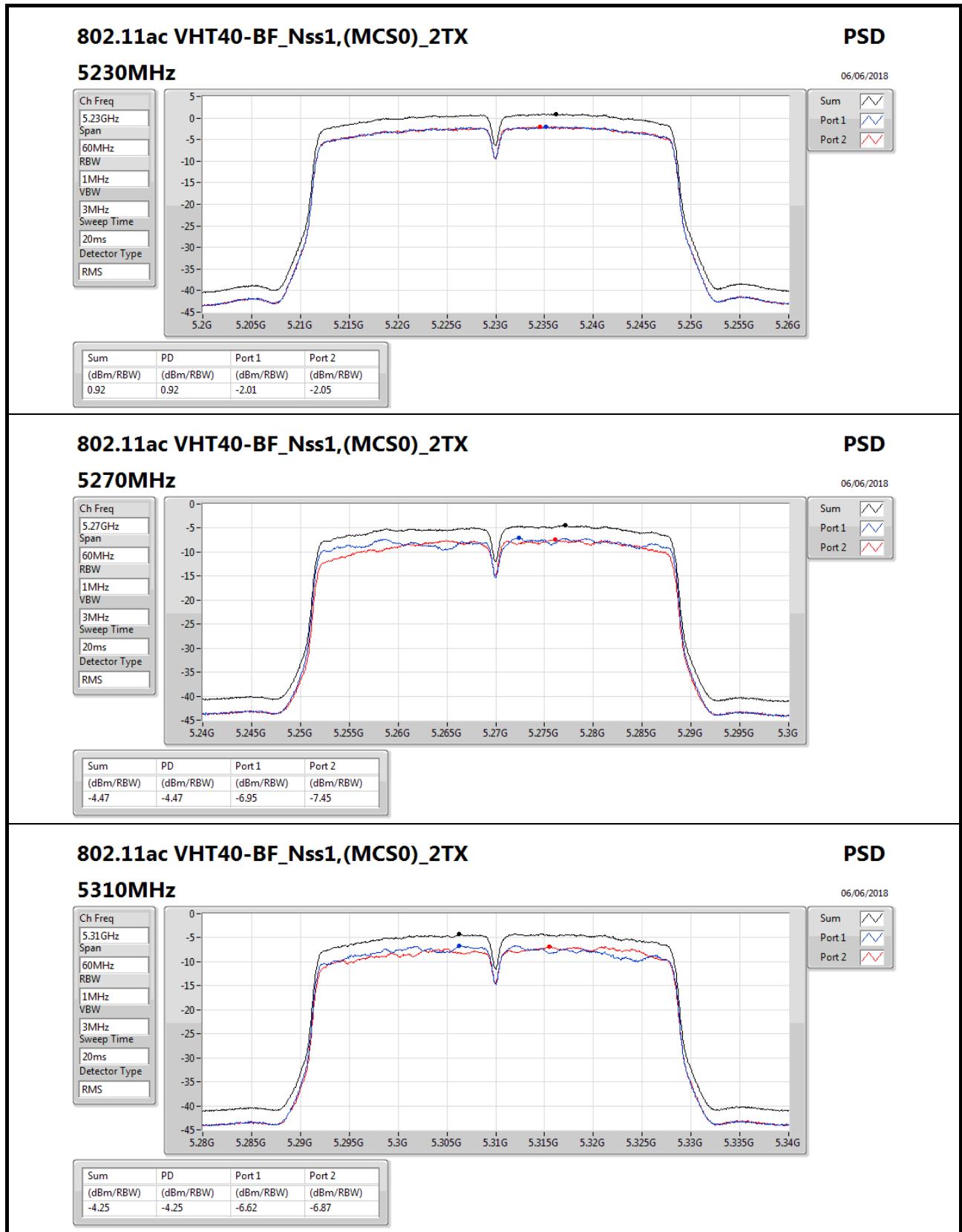
**5190MHz**

Ch Freq
5.19GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.21	3.21	1.39	0.41

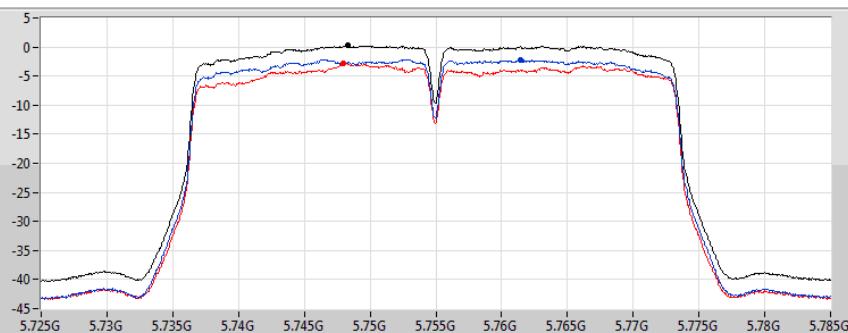


**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5755MHz**

Ch Freq
5.755GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



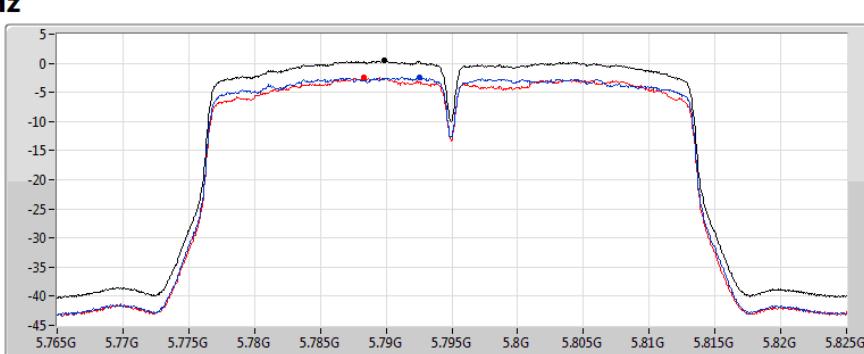
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5795MHz**

Ch Freq
5.795GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



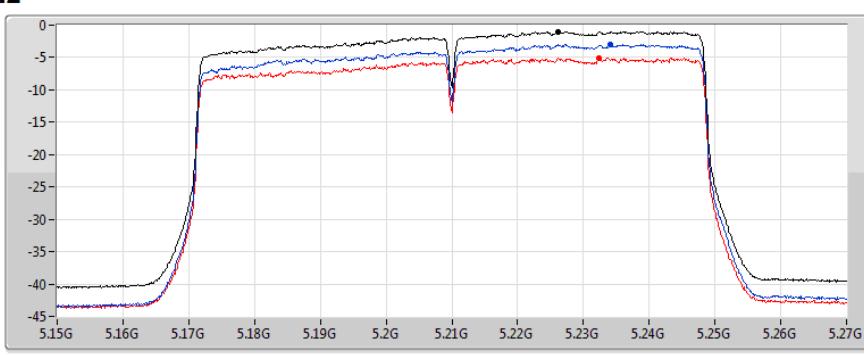
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**
**PSD**

06/06/2018

**5210MHz**

Ch Freq
5.21GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



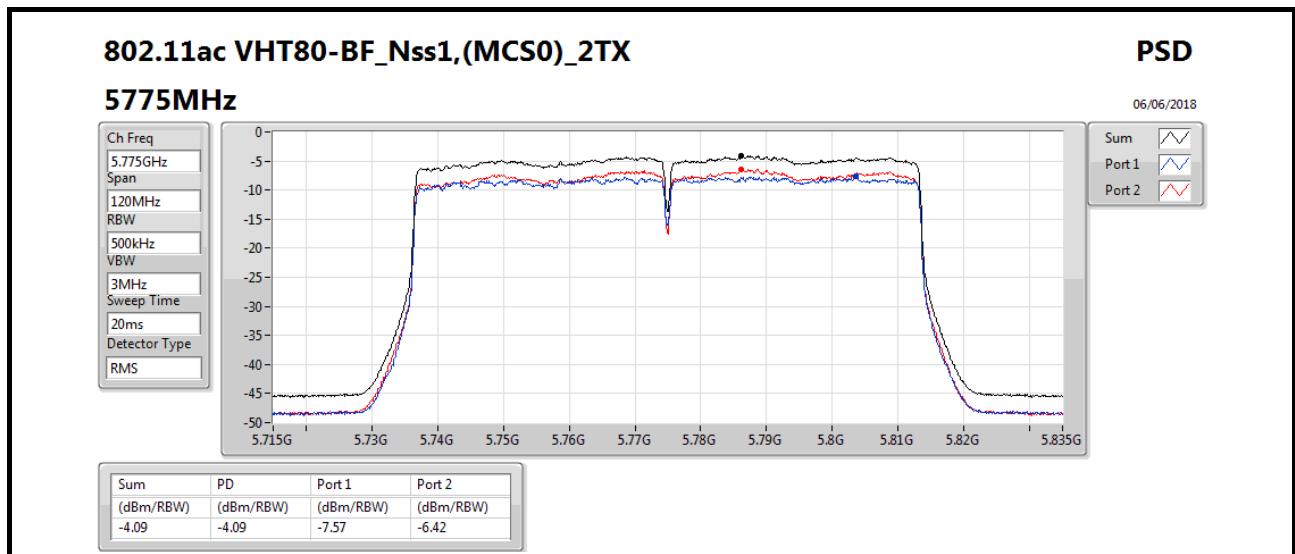
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.97	-0.97	-3.03	-5.05



## PSD Result

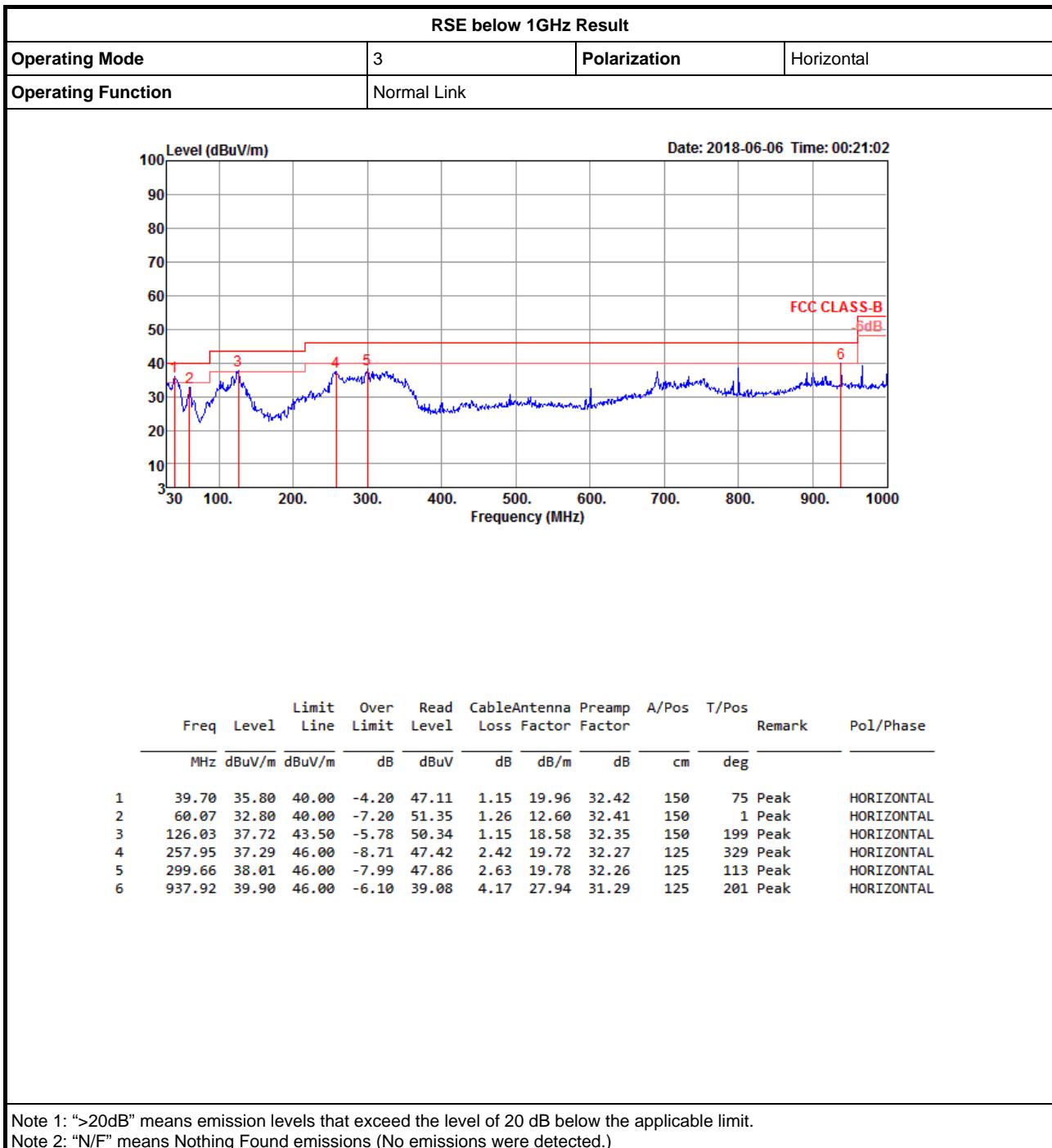
## Appendix D





## RSE below 1GHz Result

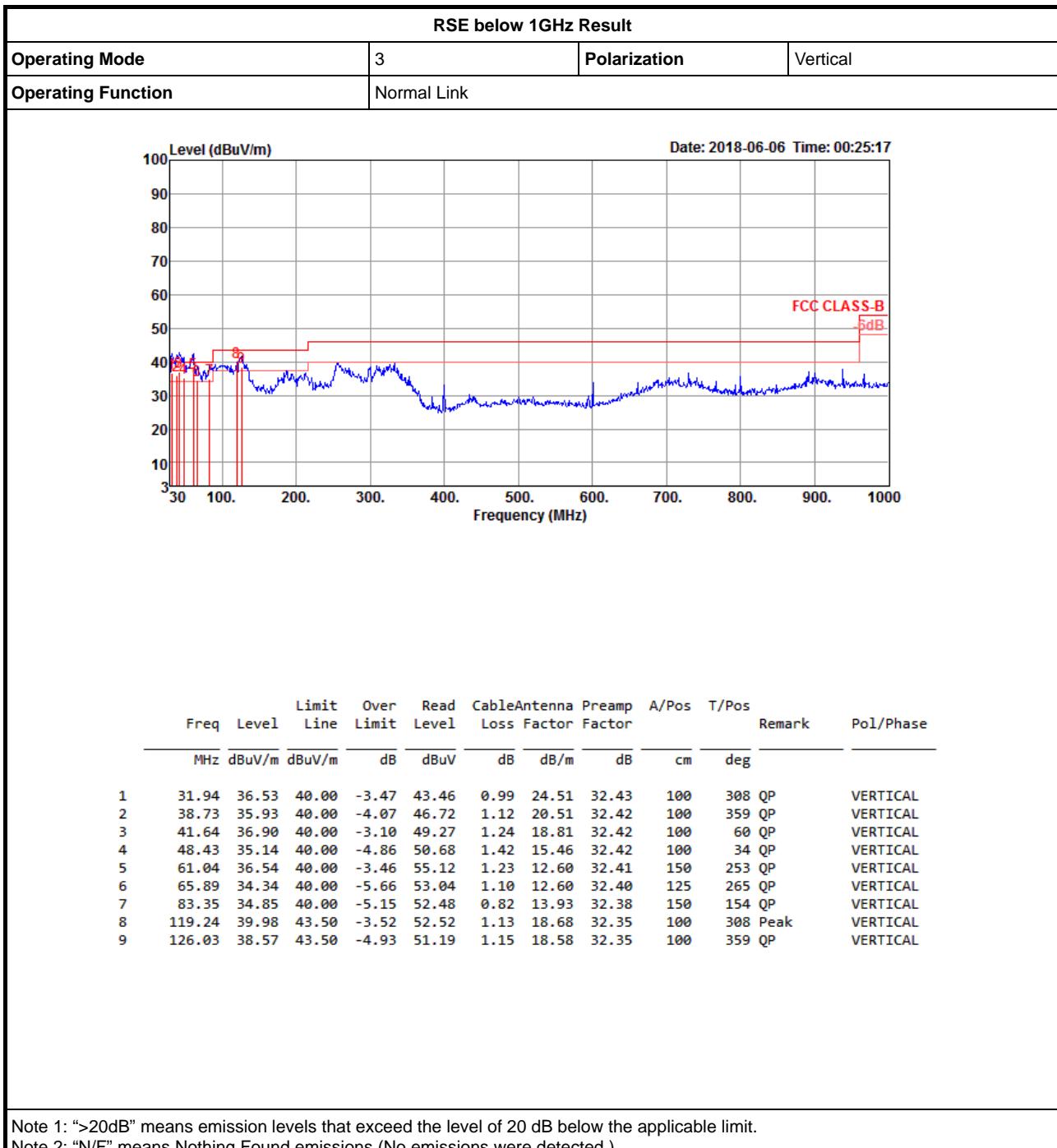
Appendix E.1





## RSE below 1GHz Result

Appendix E.1



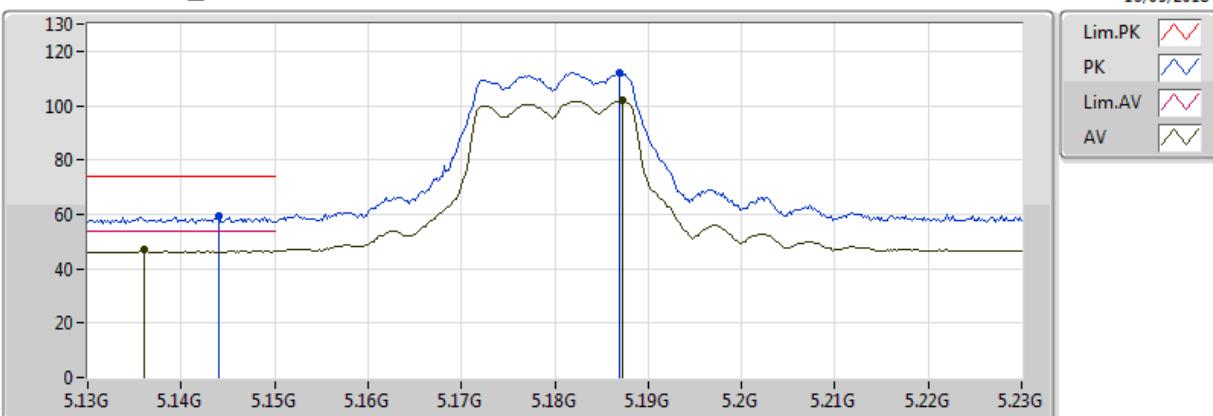


## RSE TX above 1GHz Result

Appendix E.2

### 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 VHT20_Nss1_(MCS0)_2TX	Pass	AV	5.149995G	53.98	54.00	-0.02	8.54	3	Vertical	14	1.94	-

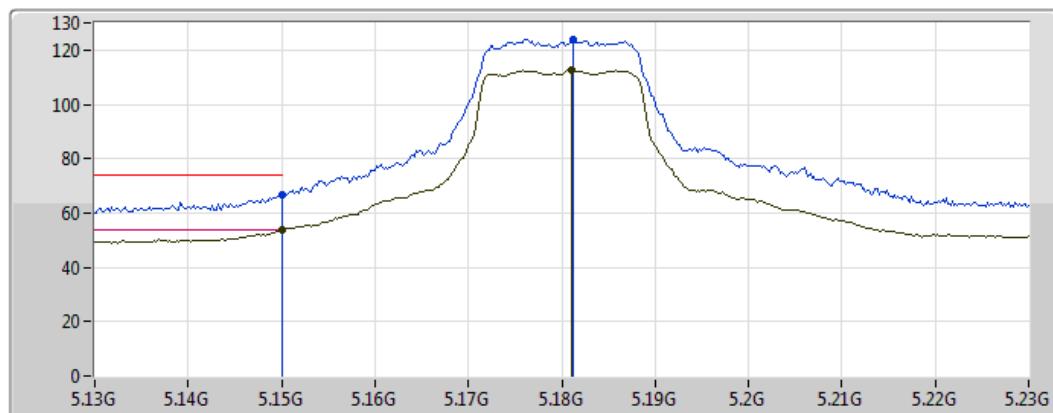
**802.11a\_Nss1,(6Mbps)\_2TX****5180MHz\_TX**

EUT X\_2TX  
Setting 19  
02-L-3-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.144G	59.24	74.00	-14.76	8.54	3	Vertical	360	1.80	-
AV	5.136G	47.00	54.00	-7.00	8.53	3	Vertical	360	1.80	-
PK	5.187G	112.32	Inf	-Inf	8.62	3	Vertical	360	1.80	-
AV	5.1872G	102.04	Inf	-Inf	8.62	3	Vertical	360	1.80	-

**802.11a\_Nss1,(6Mbps)\_2TX****5180MHz\_TX**

16/05/2018



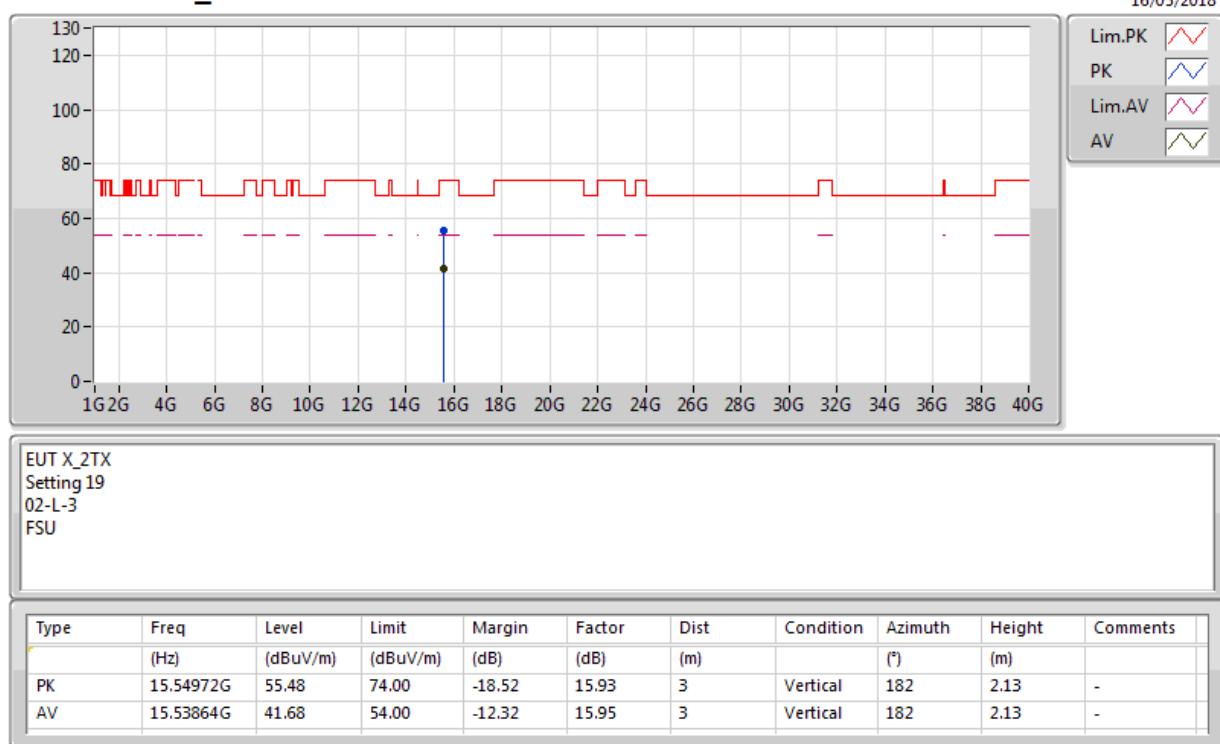
Lim.PK	
PK	
Lim.AV	
AV	

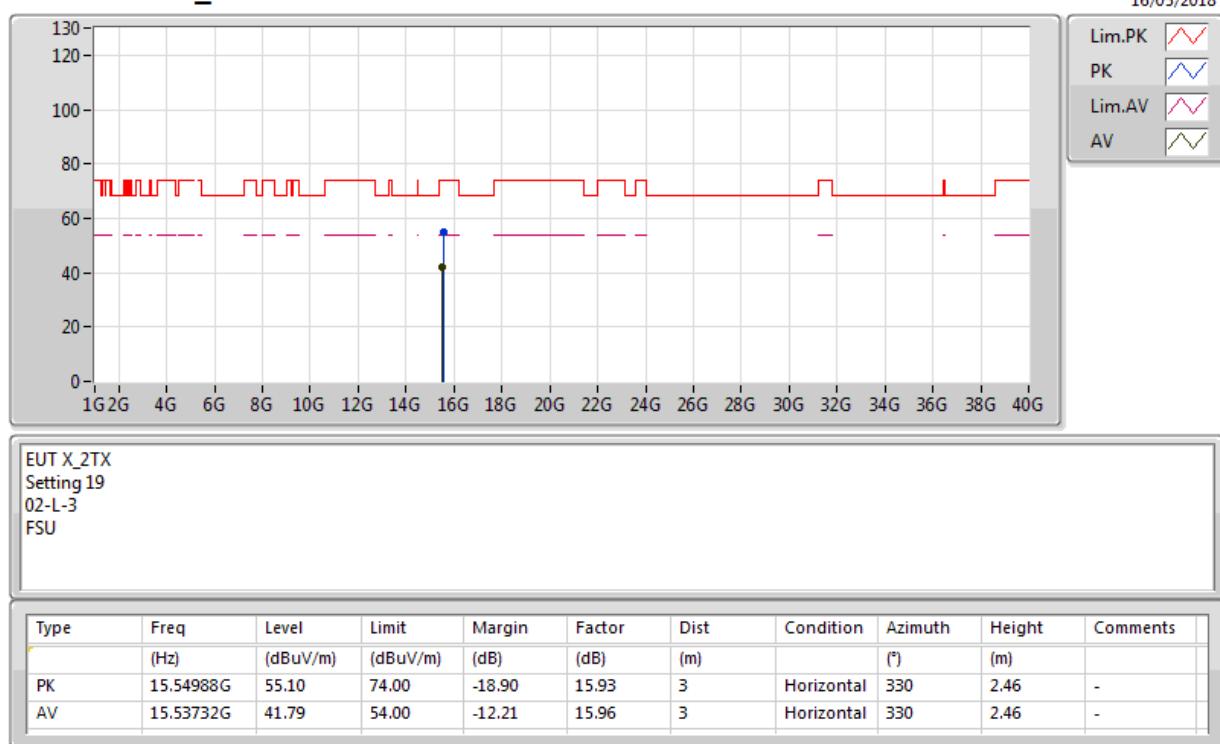
EUT X\_2TX  
Setting 19  
02-L-3-10  
FSU

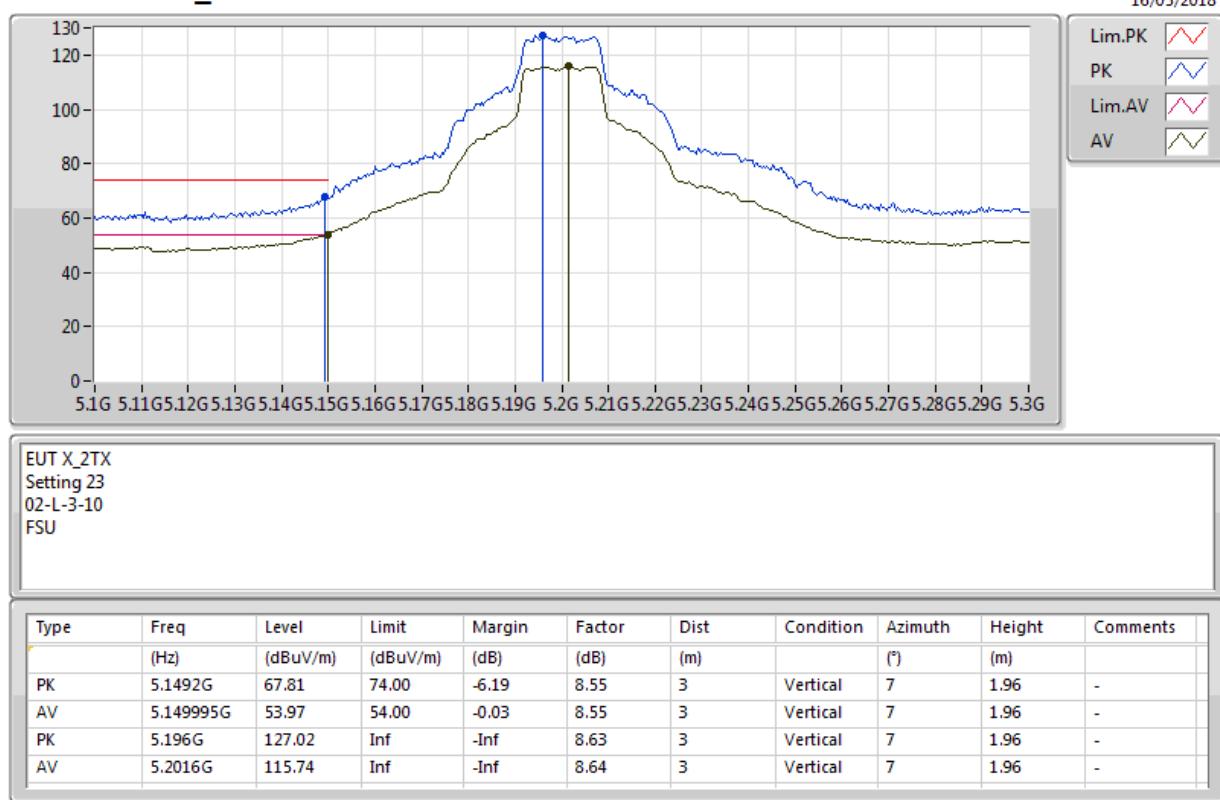
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.149995G	66.88	74.00	-7.12	8.54	3	Horizontal	10	1.77	-
AV	5.149995G	53.58	54.00	-0.42	8.54	3	Horizontal	10	1.77	-
PK	5.1812G	124.05	Inf	-Inf	8.61	3	Horizontal	10	1.77	-
AV	5.181G	112.57	Inf	-Inf	8.61	3	Horizontal	10	1.77	-

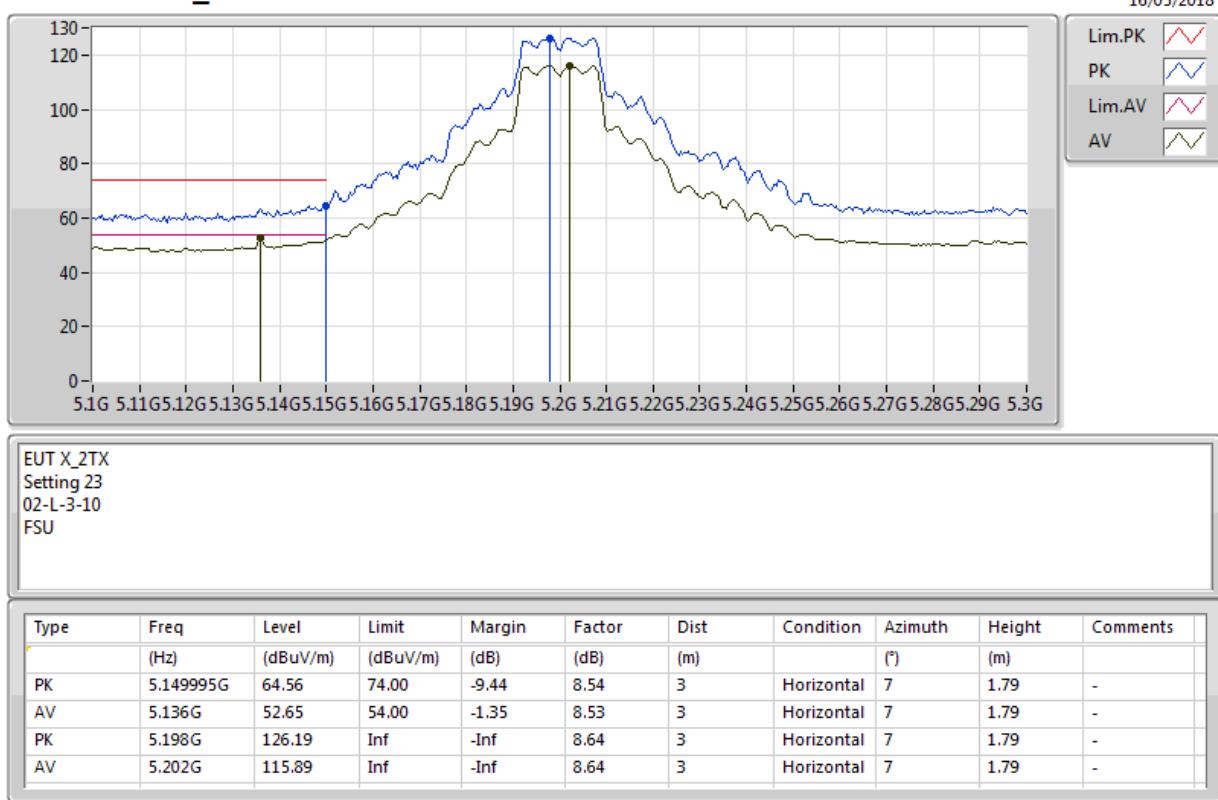
### **802.11a\_Nss1,(6Mbps)\_2TX**

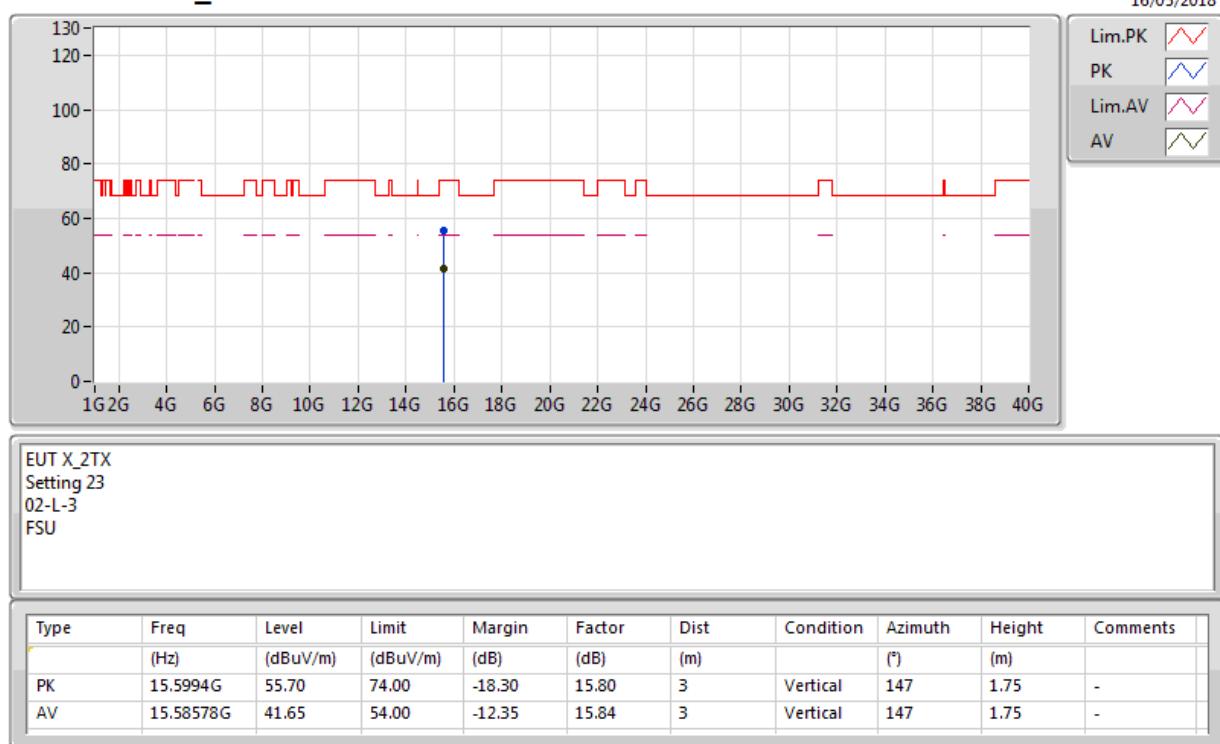
#### **5180MHz\_TX**

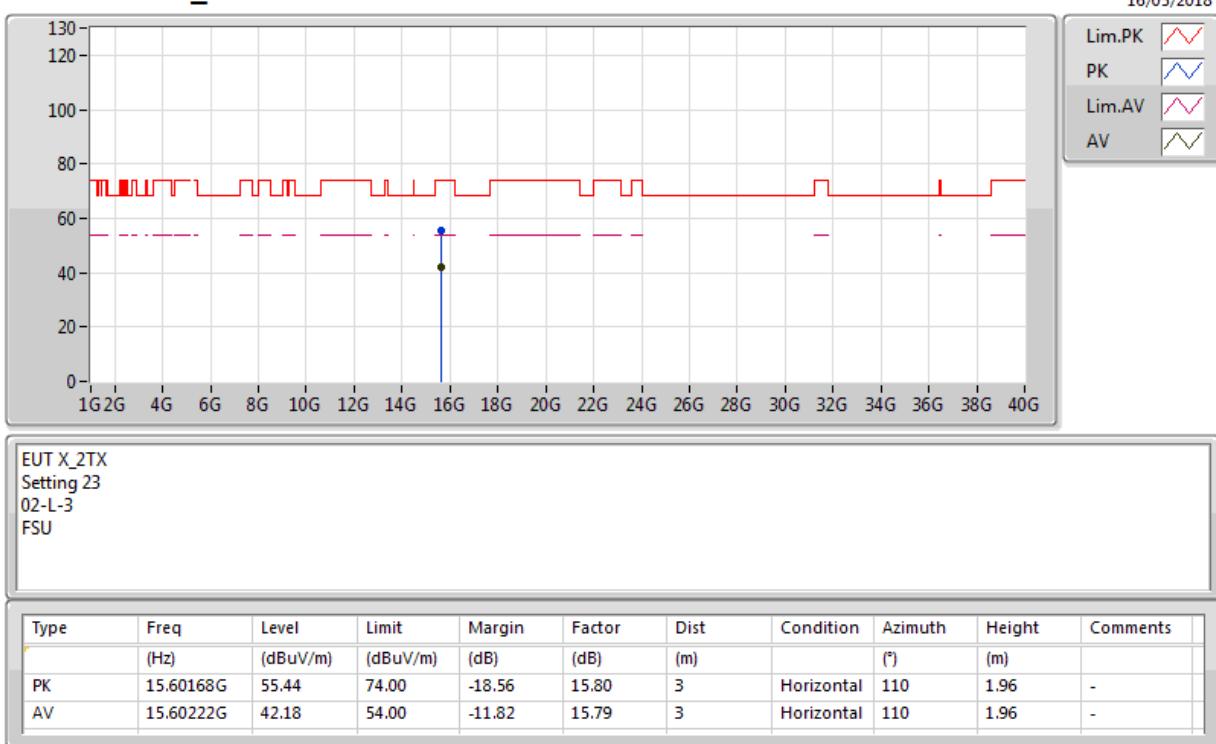


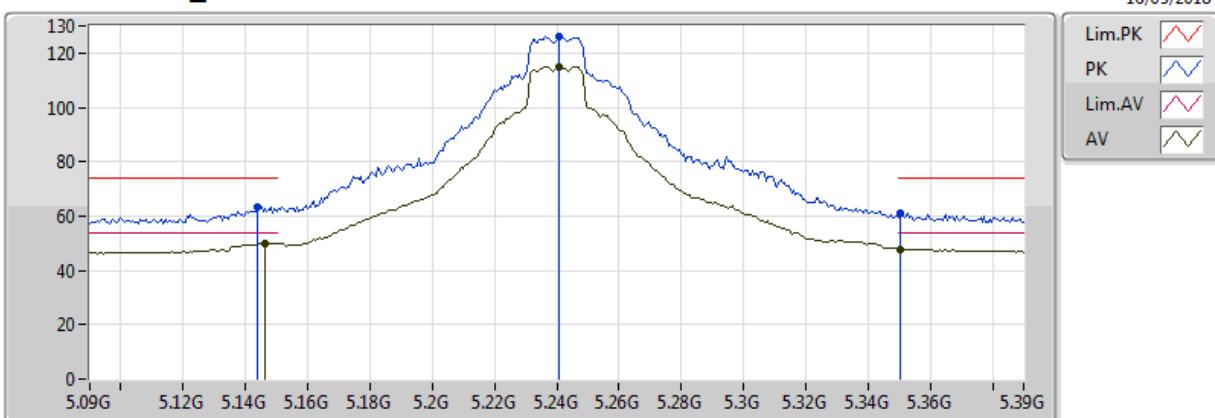
**802.11a\_Nss1,(6Mbps)\_2TX**
**5180MHz\_TX**


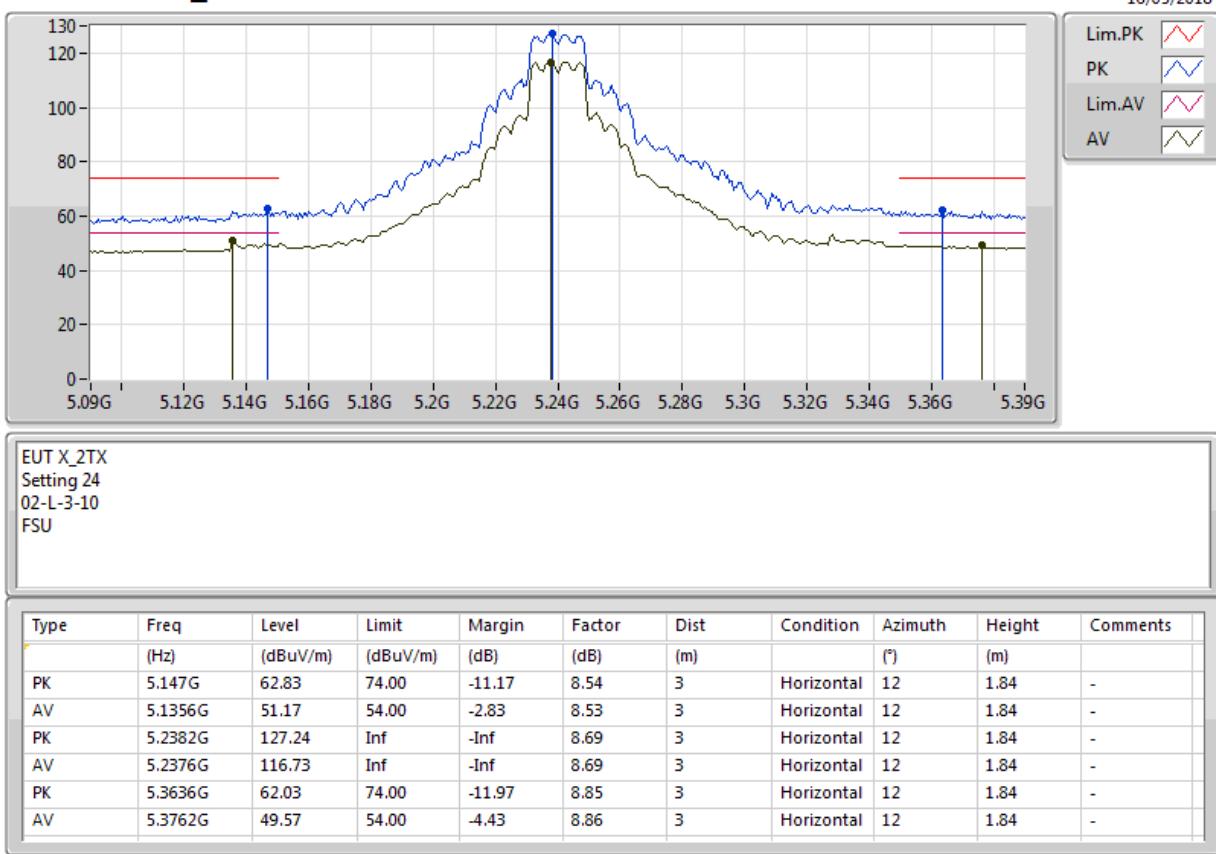
**802.11a\_Nss1,(6Mbps)\_2TX****5200MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5200MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5200MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5200MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5240MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5240MHz\_TX**

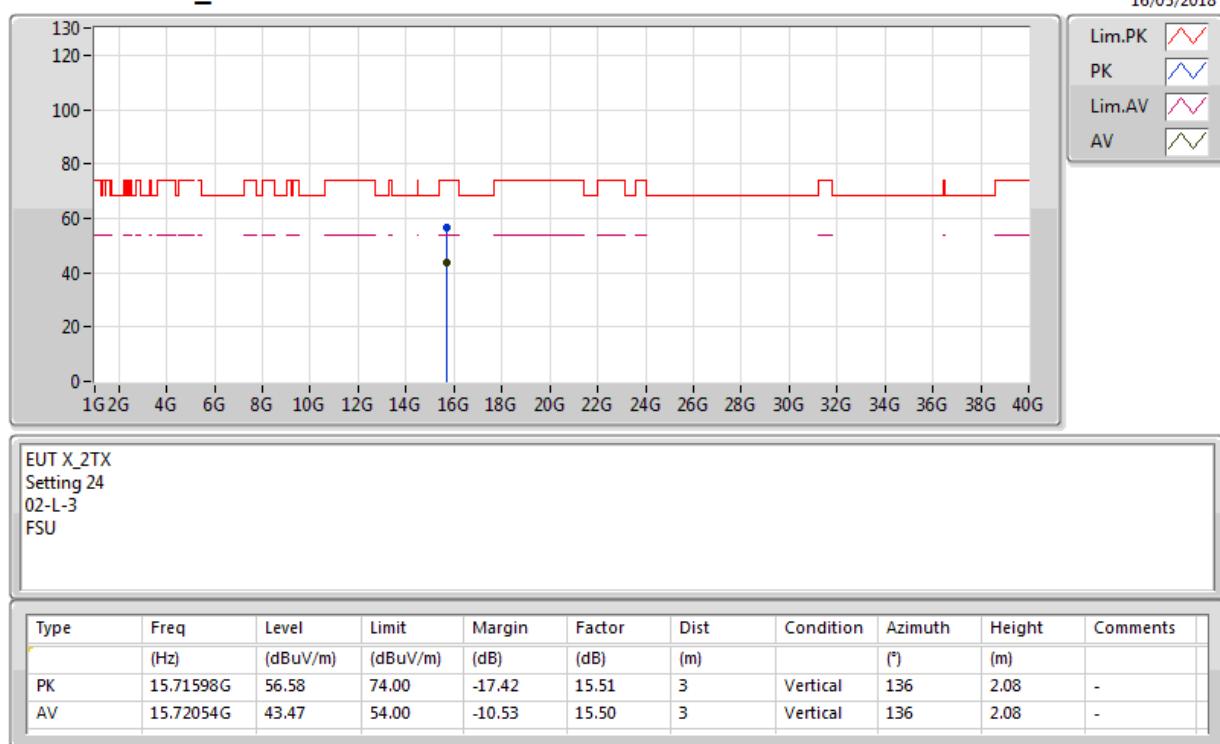


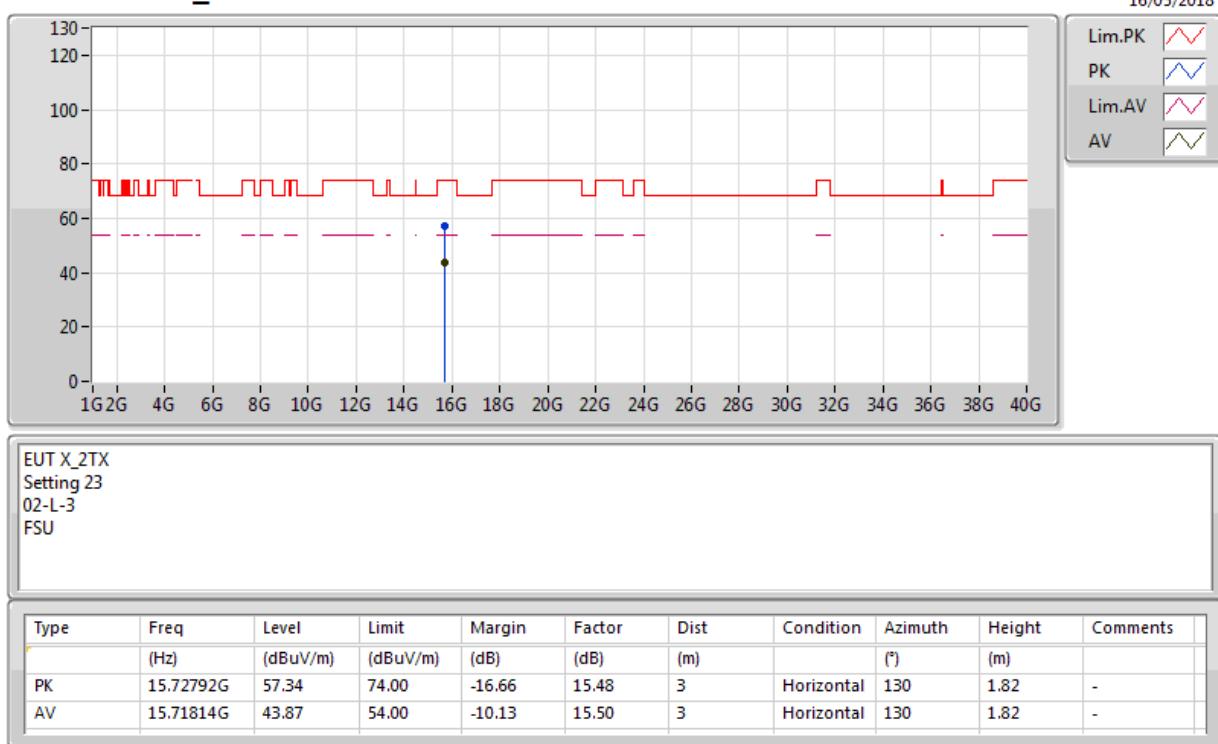
## RSE TX above 1GHz Result

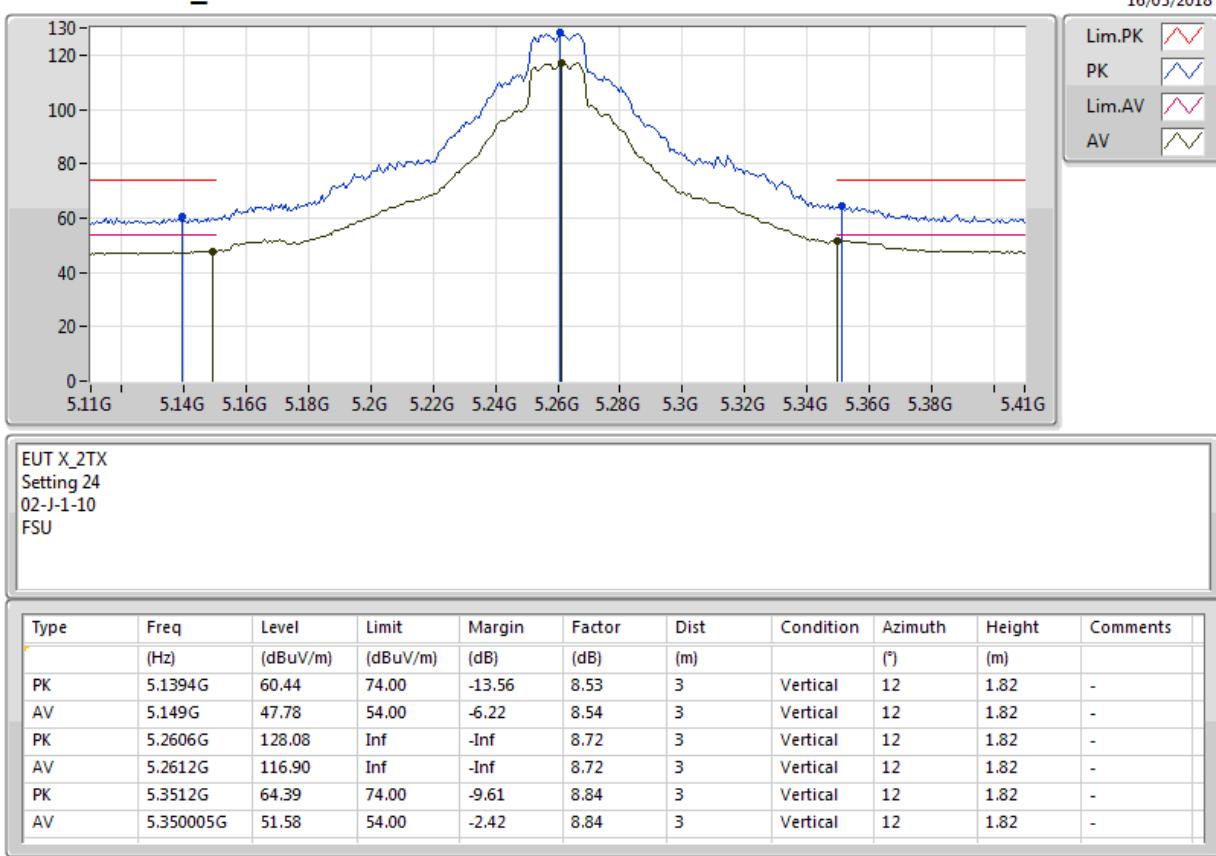
Appendix E.2

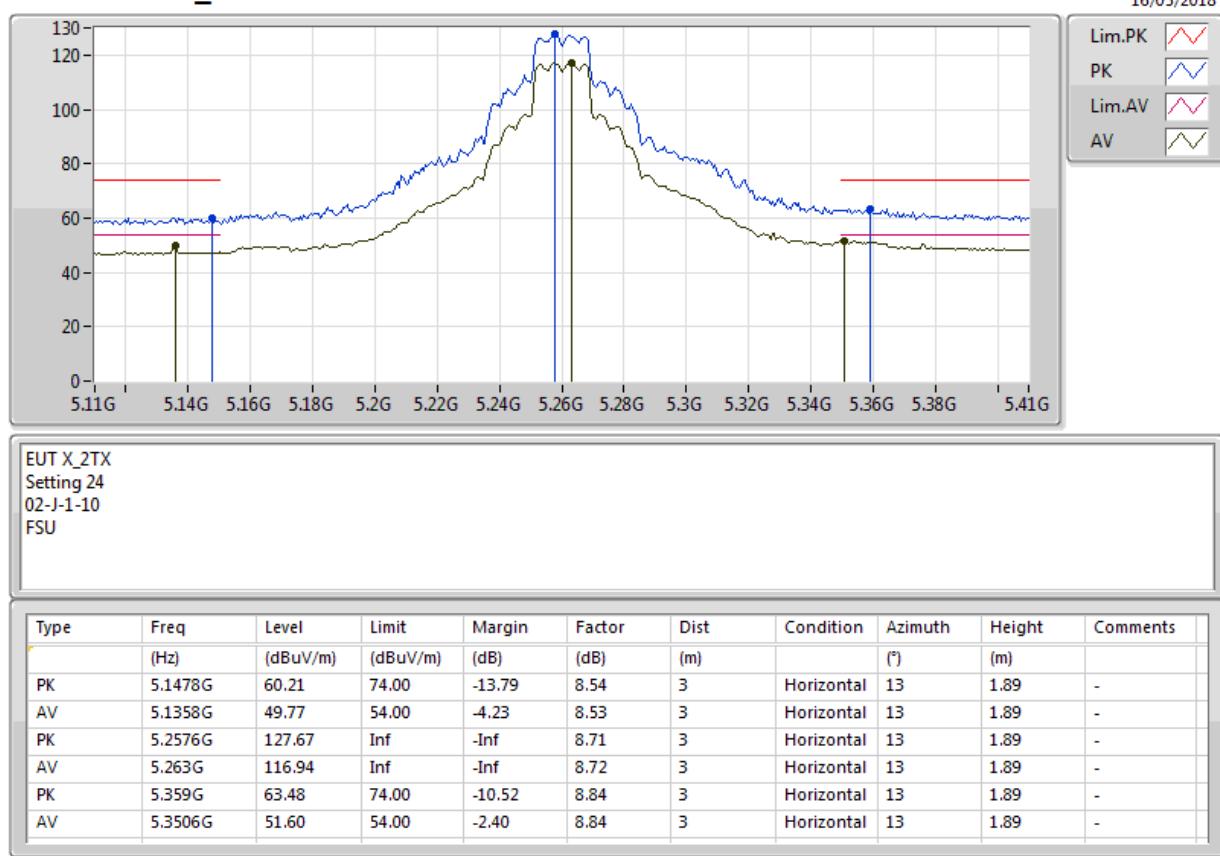
### 802.11a\_Nss1,(6Mbps)\_2TX

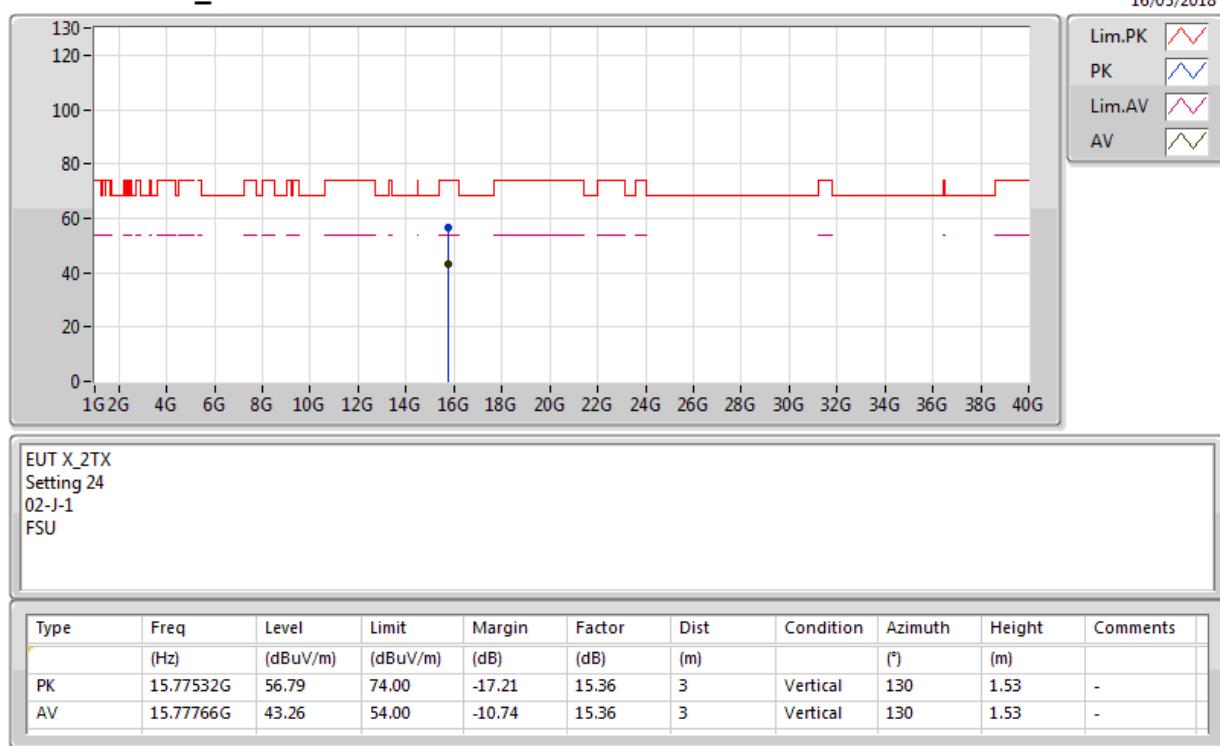
#### 5240MHz\_TX

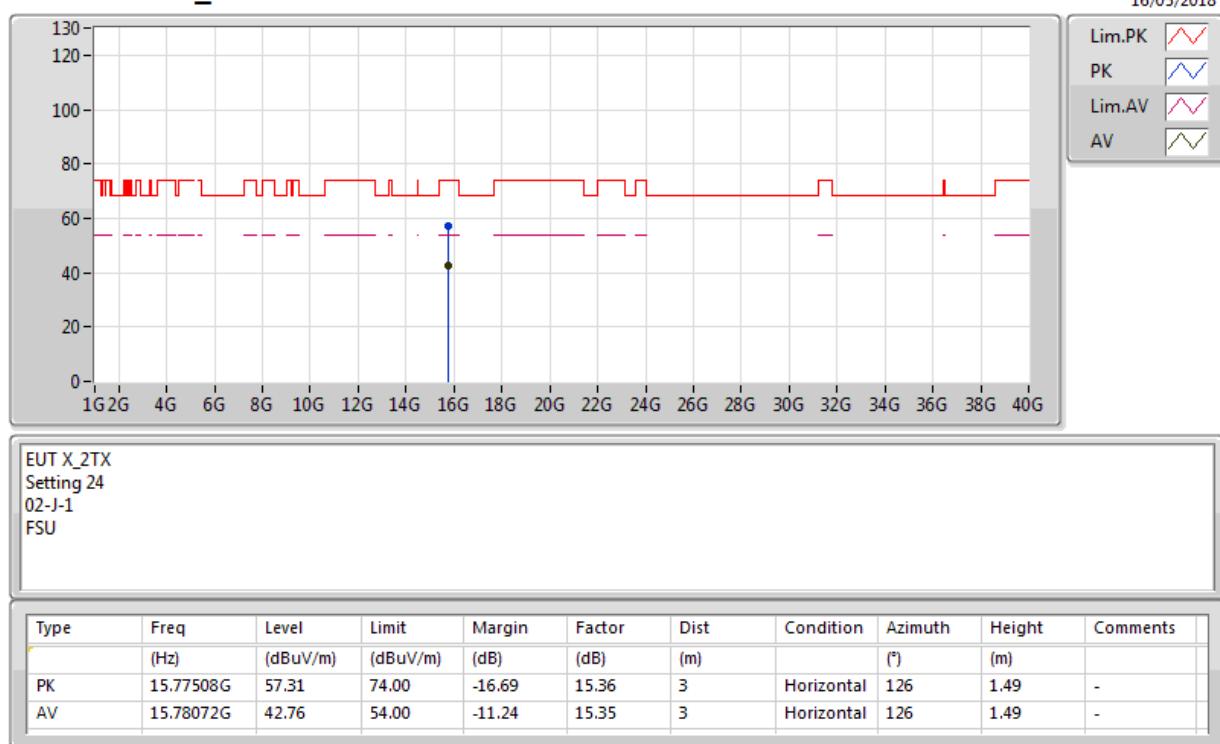


**802.11a\_Nss1,(6Mbps)\_2TX****5240MHz\_TX**

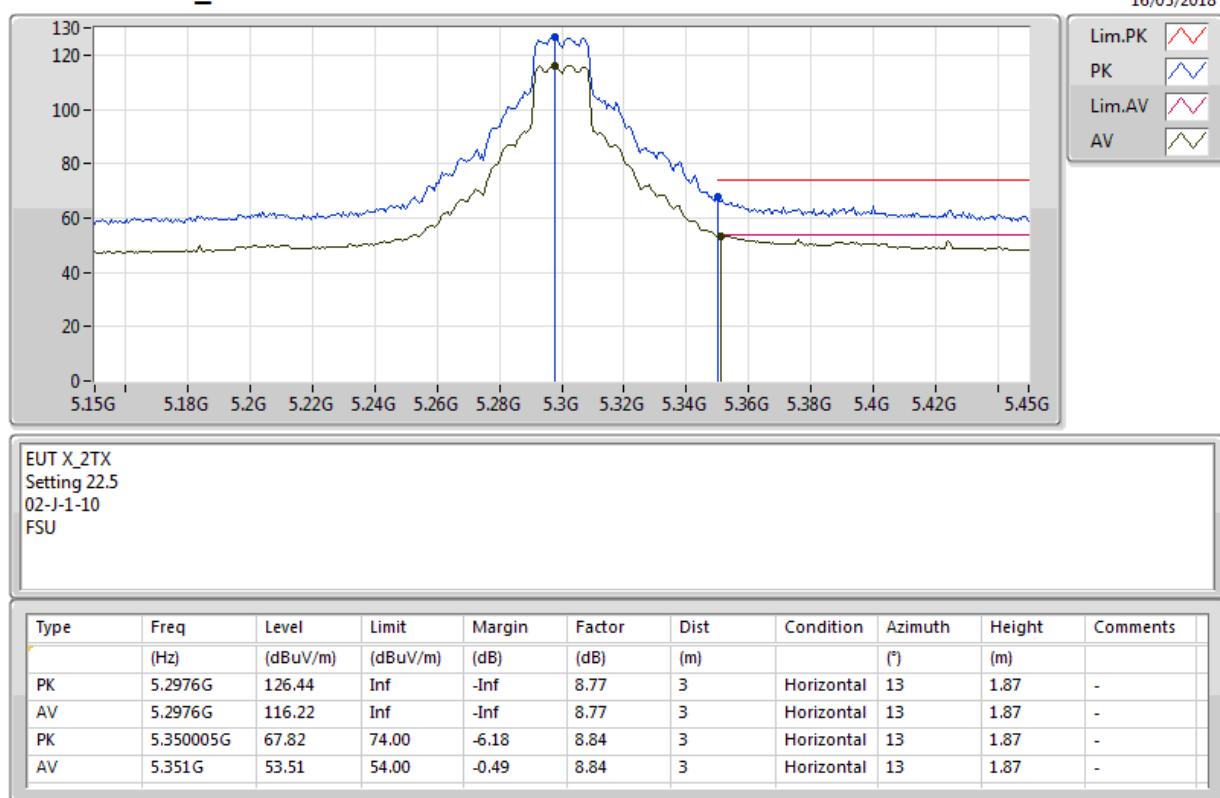
**802.11a\_Nss1,(6Mbps)\_2TX****5260MHz\_TX**

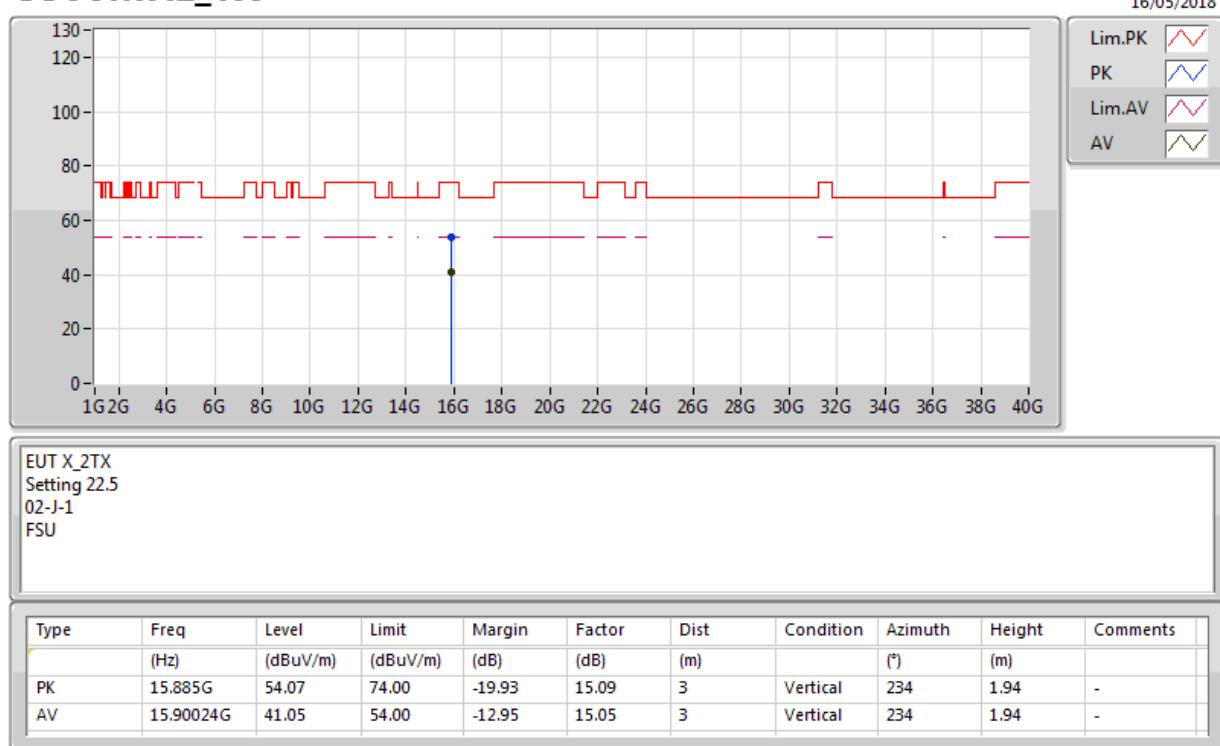
**802.11a\_Nss1,(6Mbps)\_2TX****5260MHz\_TX**

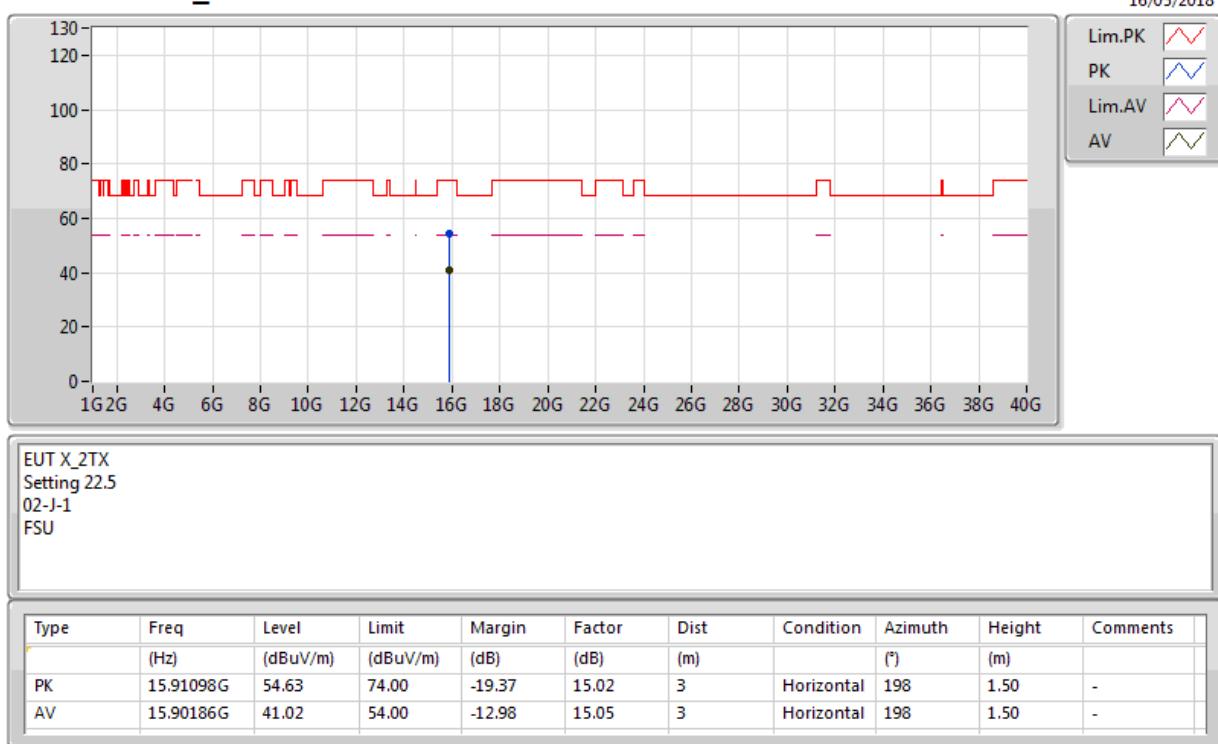
**802.11a\_Nss1,(6Mbps)\_2TX****5260MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5260MHz\_TX**

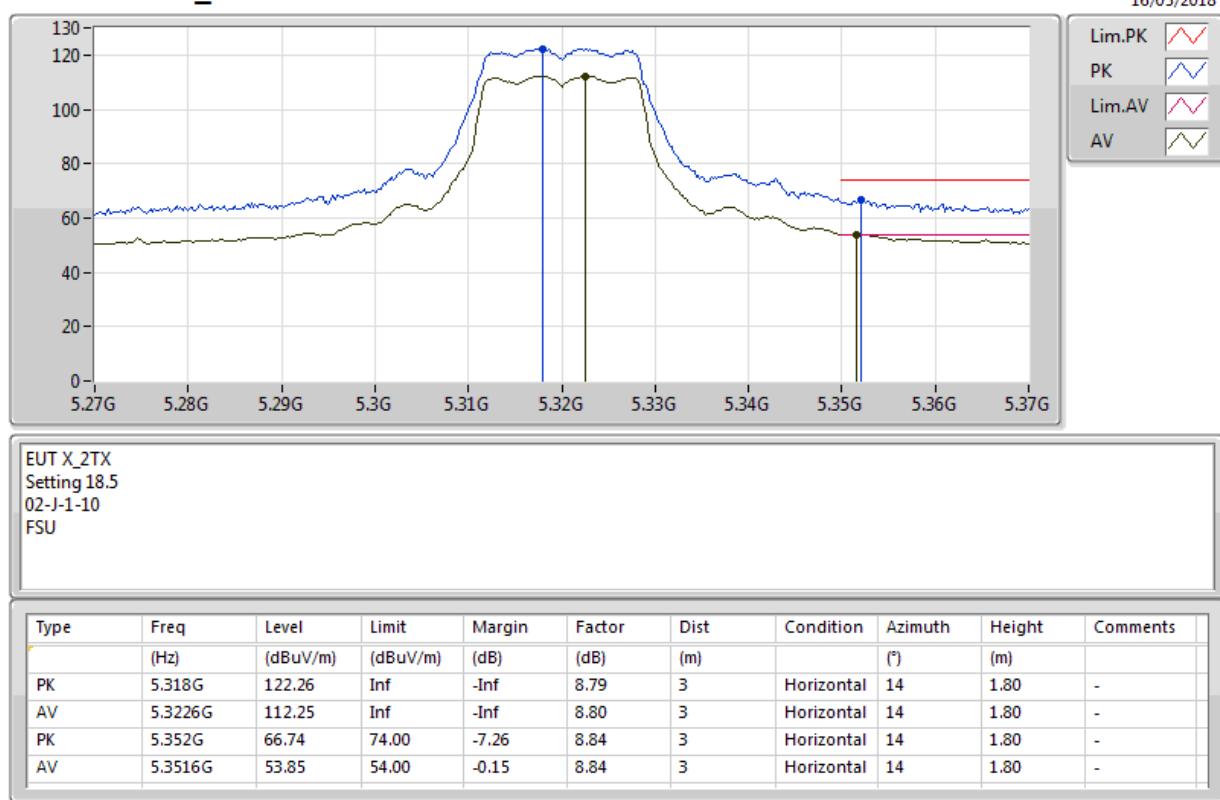
**802.11a\_Nss1,(6Mbps)\_2TX****5300MHz\_TX**

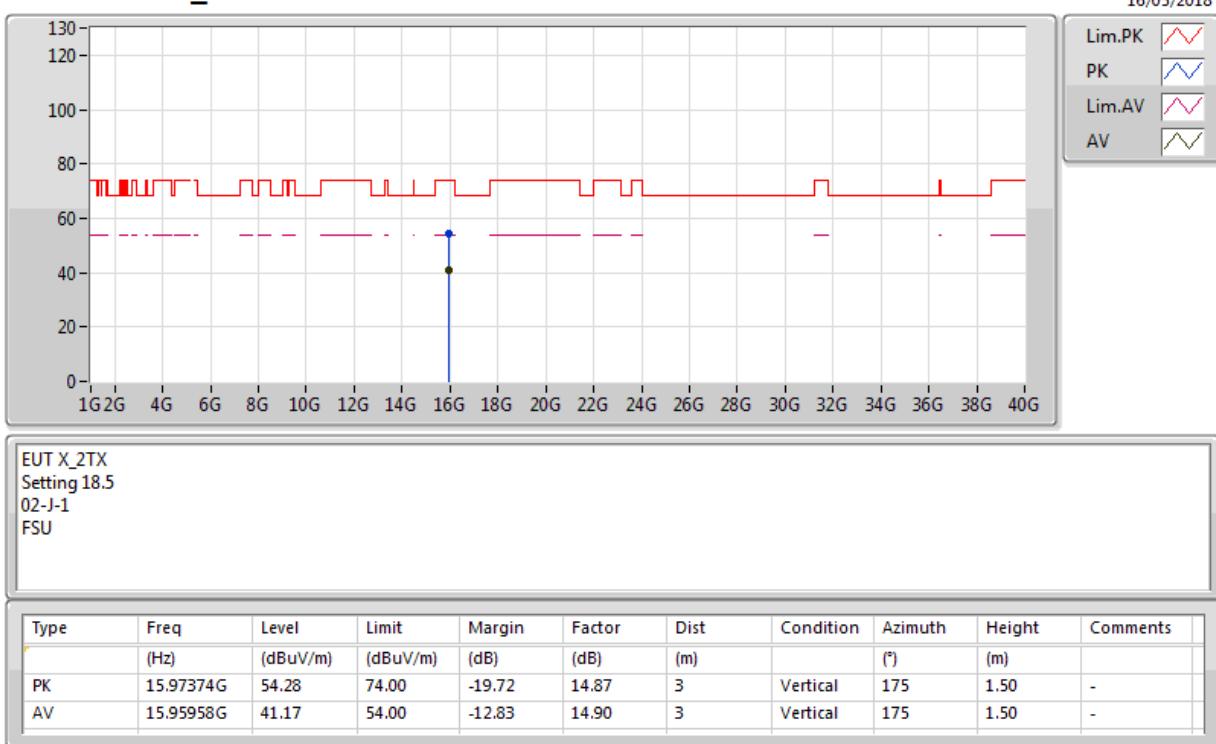
**802.11a\_Nss1,(6Mbps)\_2TX****5300MHz\_TX**

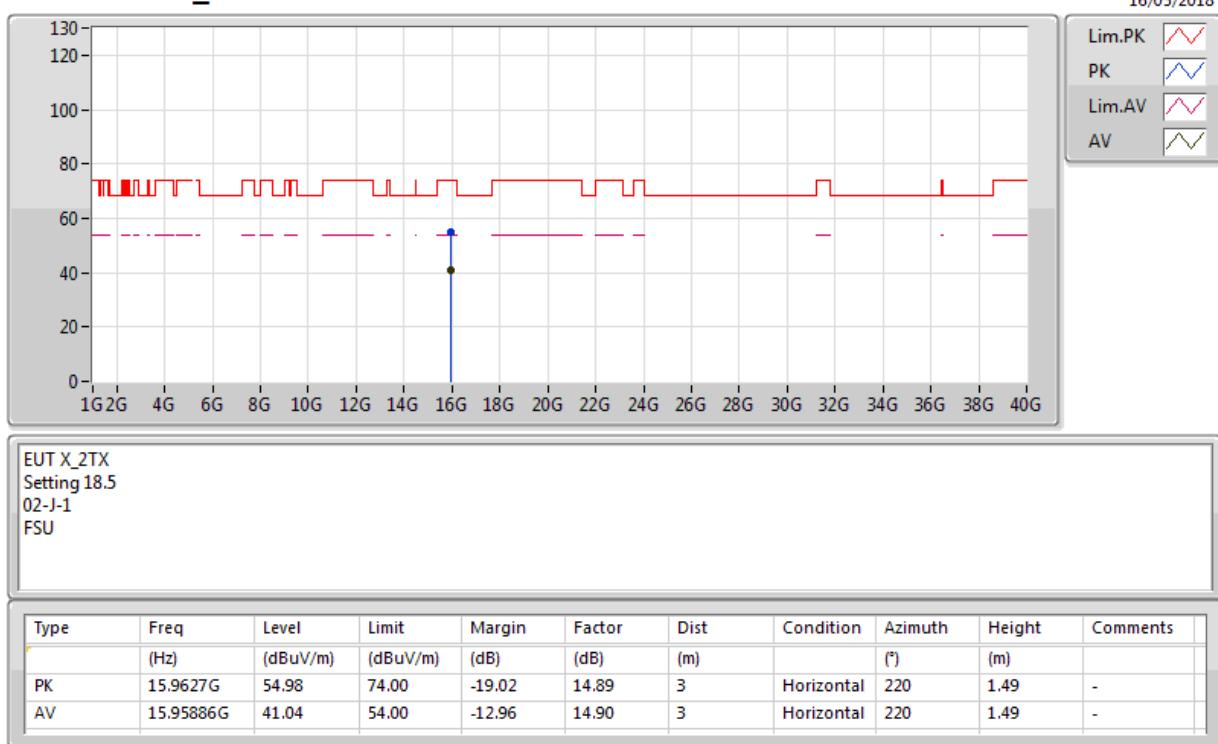
**802.11a\_Nss1,(6Mbps)\_2TX****5300MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5300MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5320MHz\_TX**

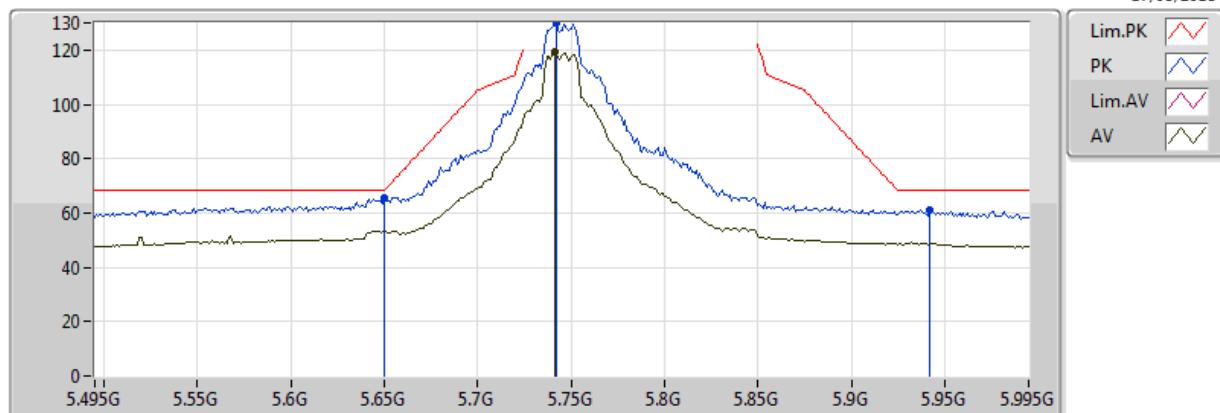
**802.11a\_Nss1,(6Mbps)\_2TX****5320MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5320MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5320MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5745MHz\_TX**

17/05/2018

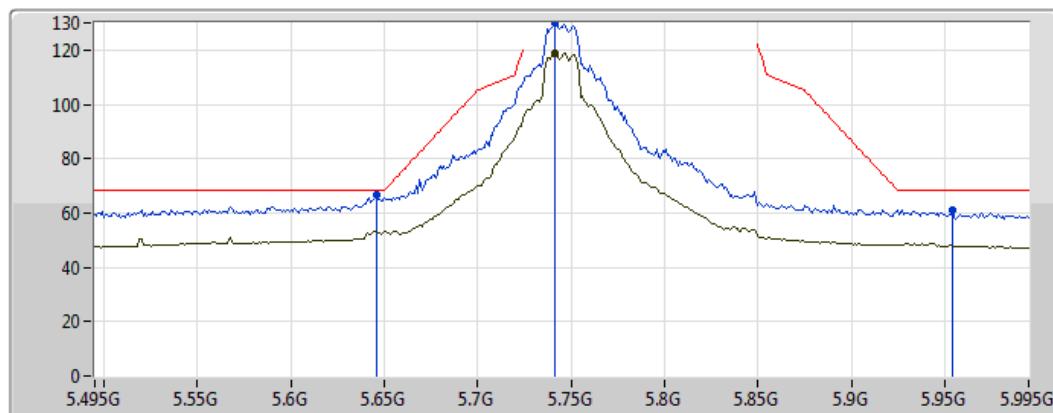


EUT X\_2TX  
Setting 23  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.65G	65.53	68.20	-2.67	9.20	3	Vertical	360	1.61	-
PK	5.742G	129.96	Inf	-Inf	9.22	3	Vertical	360	1.61	-
AV	5.741G	119.15	Inf	-Inf	9.22	3	Vertical	360	1.61	-
PK	5.942G	61.24	68.20	-6.96	9.35	3	Vertical	360	1.61	-

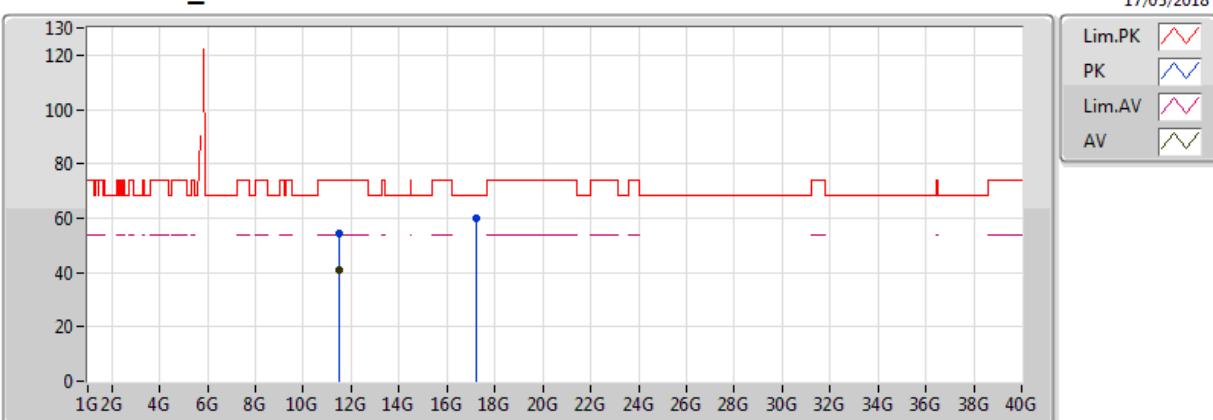
**802.11a\_Nss1,(6Mbps)\_2TX****5745MHz\_TX**

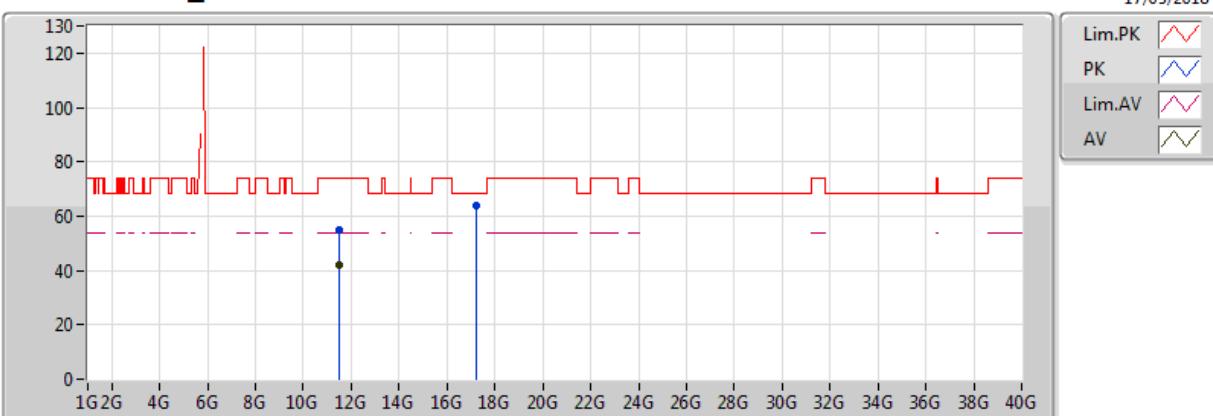
17/05/2018



EUT X\_2TX  
Setting 23  
02-J-1-10  
FSU

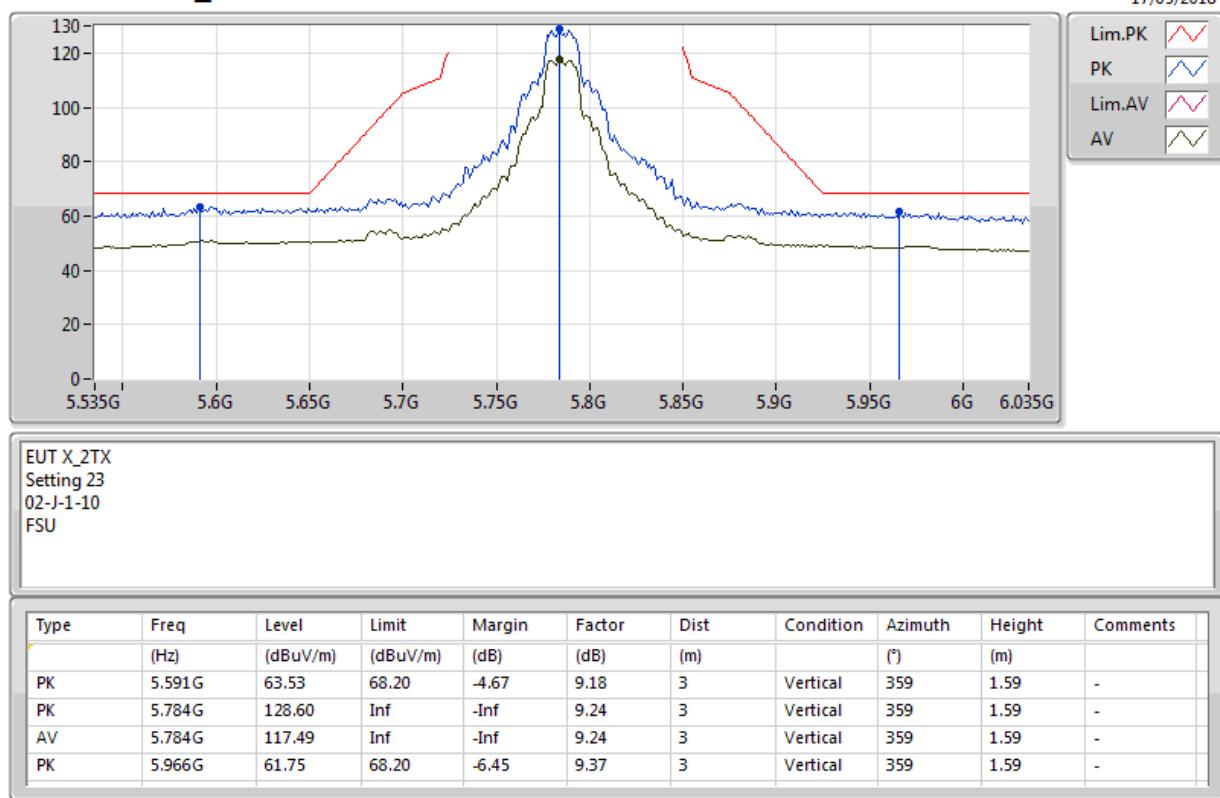
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.646G	66.77	68.20	-1.43	9.20	3	Horizontal	359	1.65	-
PK	5.741G	129.97	Inf	-Inf	9.22	3	Horizontal	359	1.65	-
AV	5.741G	118.99	Inf	-Inf	9.22	3	Horizontal	359	1.65	-
PK	5.954G	61.08	68.20	-7.12	9.36	3	Horizontal	359	1.65	-

**802.11a\_Nss1,(6Mbps)\_2TX****5745MHz\_TX**

**802.11a\_Nss1,(6Mbps)\_2TX****5745MHz\_TX**

EUT X\_2TX  
Setting 23  
02-J-1  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.48852G	55.17	74.00	-18.83	14.60	3	Horizontal	71	1.53	-
AV	11.48768G	42.22	54.00	-11.78	14.60	3	Horizontal	71	1.53	-
PK	17.22816G	64.01	68.20	-4.19	20.36	3	Horizontal	235	1.47	-

**802.11a\_Nss1,(6Mbps)\_2TX****5785MHz\_TX**

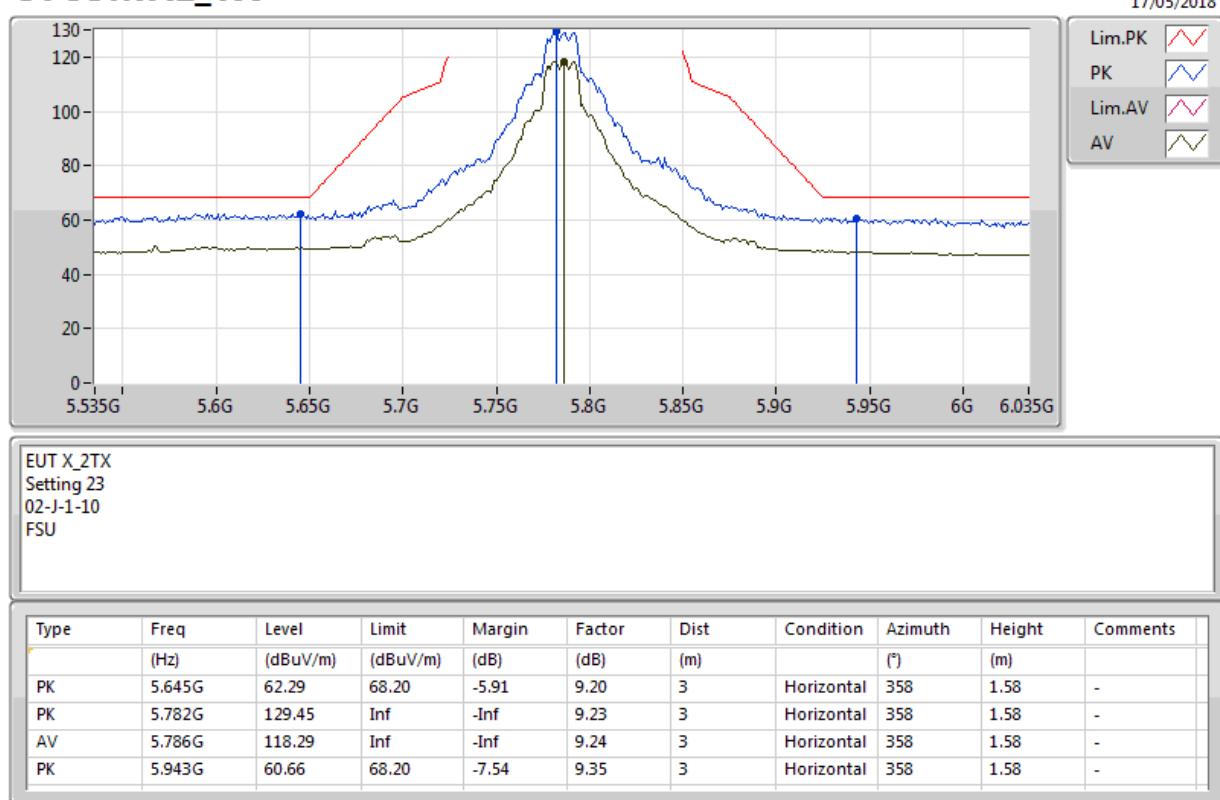


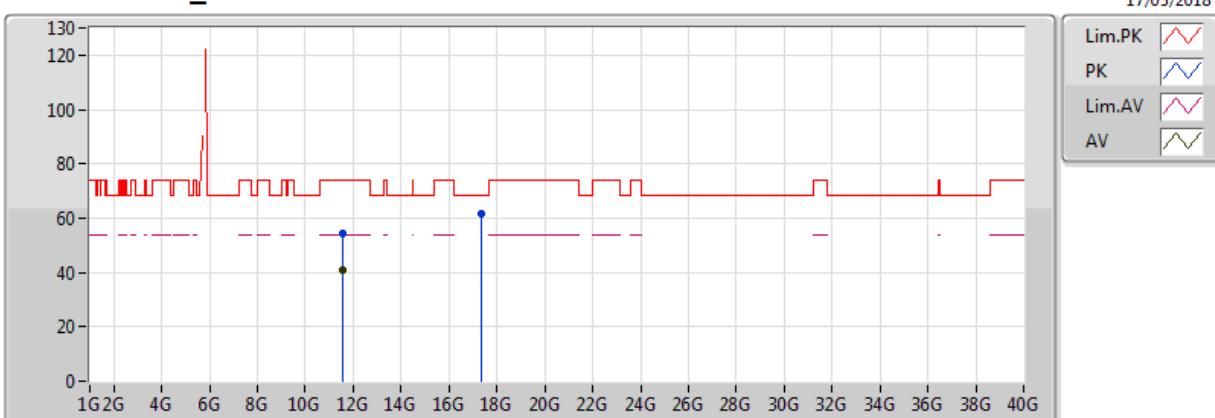
## RSE TX above 1GHz Result

Appendix E.2

### 802.11a\_Nss1,(6Mbps)\_2TX

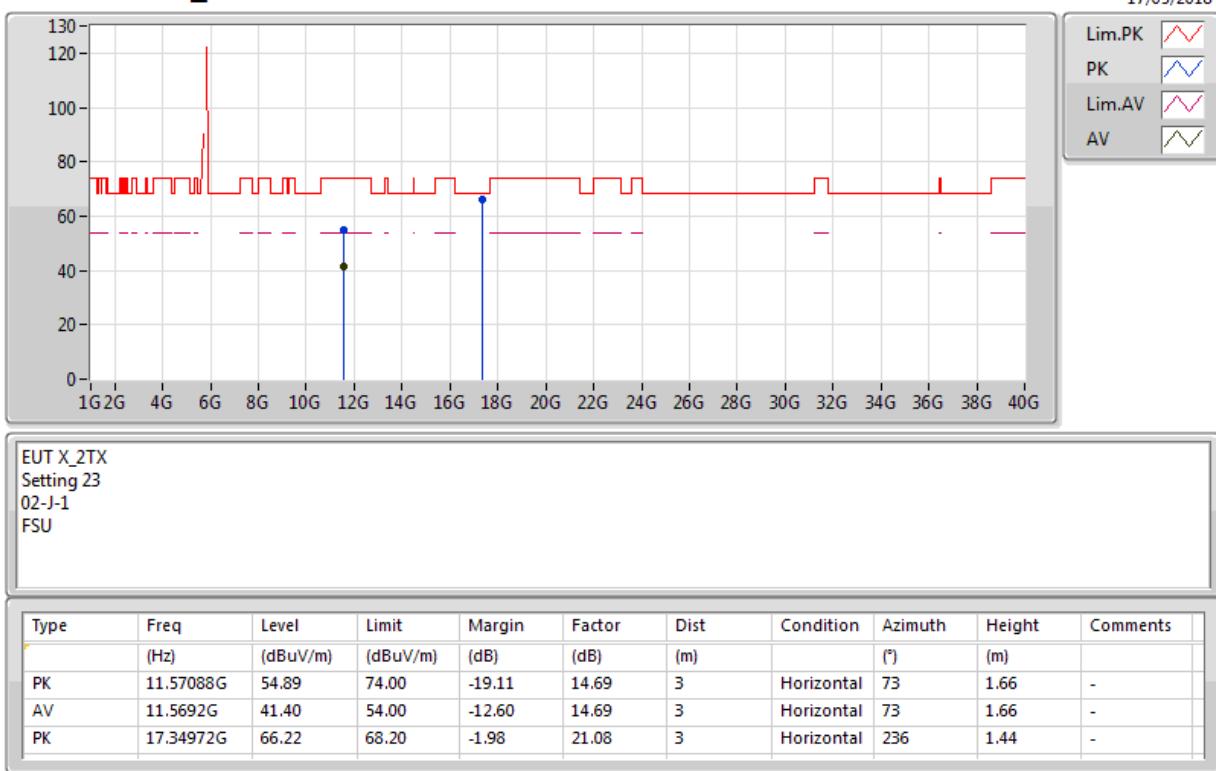
#### 5785MHz\_TX



**802.11a\_Nss1,(6Mbps)\_2TX****5785MHz\_TX**

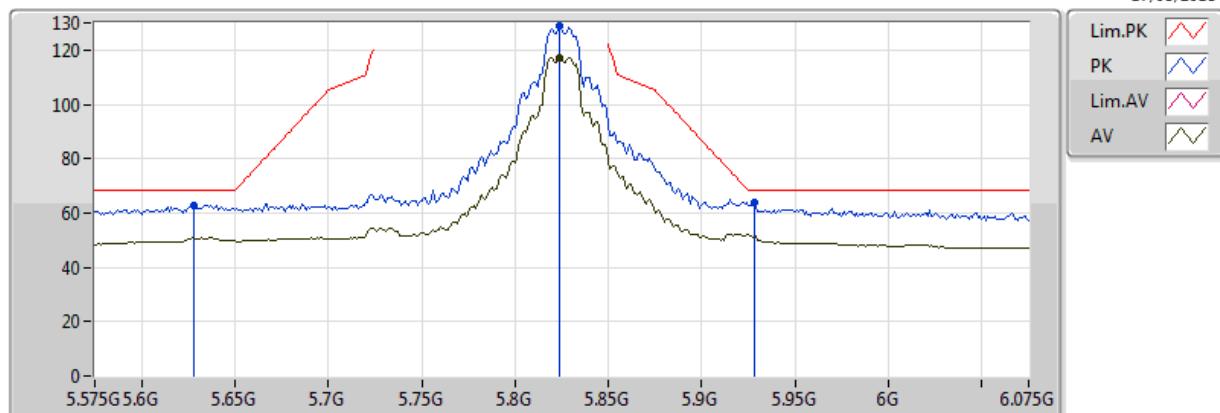
EUT X\_2TX  
Setting 23  
02-J-1  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.56952G	54.52	74.00	-19.48	14.69	3	Vertical	148	1.76	-
AV	11.572G	40.72	54.00	-13.28	14.69	3	Vertical	148	1.76	-
PK	17.3534G	61.57	68.20	-6.63	21.10	3	Vertical	234	1.49	-

**802.11a\_Nss1,(6Mbps)\_2TX**
**5785MHz\_TX**


**802.11a\_Nss1,(6Mbps)\_2TX****5825MHz\_TX**

17/05/2018

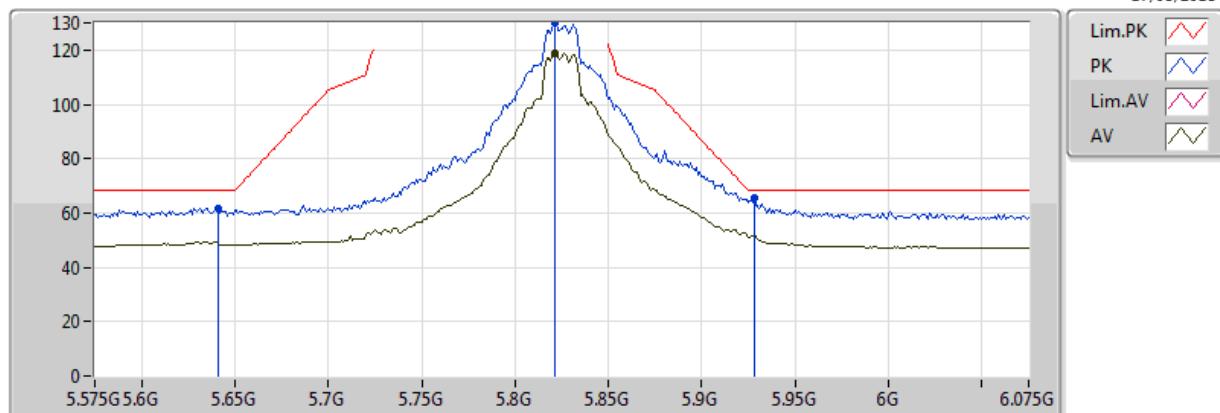


EUT X\_2TX  
Setting 23.5  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.628G	62.89	68.20	-5.31	9.20	3	Vertical	360	1.59	-
PK	5.824G	128.91	Inf	-Inf	9.26	3	Vertical	360	1.59	-
AV	5.824G	117.13	Inf	-Inf	9.26	3	Vertical	360	1.59	-
PK	5.928G	63.92	68.20	-4.28	9.35	3	Vertical	360	1.59	-

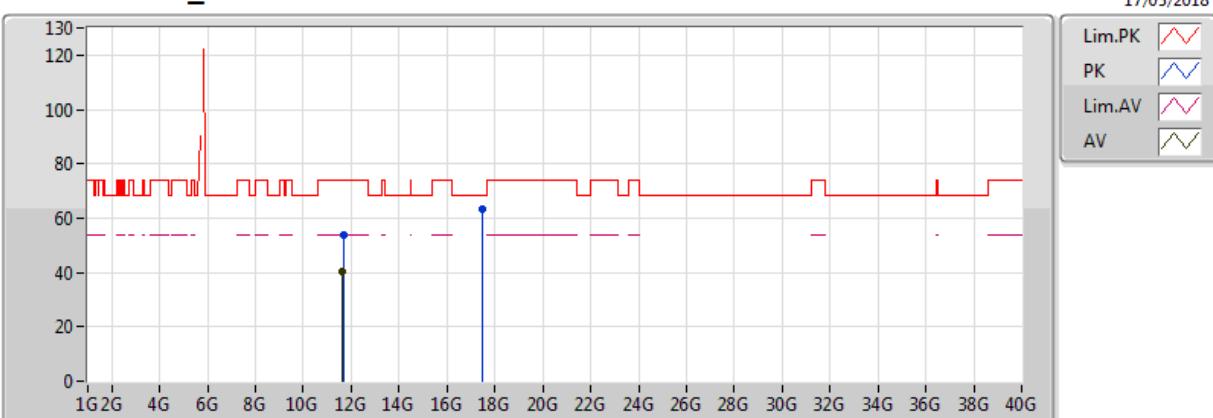
**802.11a\_Nss1,(6Mbps)\_2TX**
**5825MHz\_TX**

17/05/2018



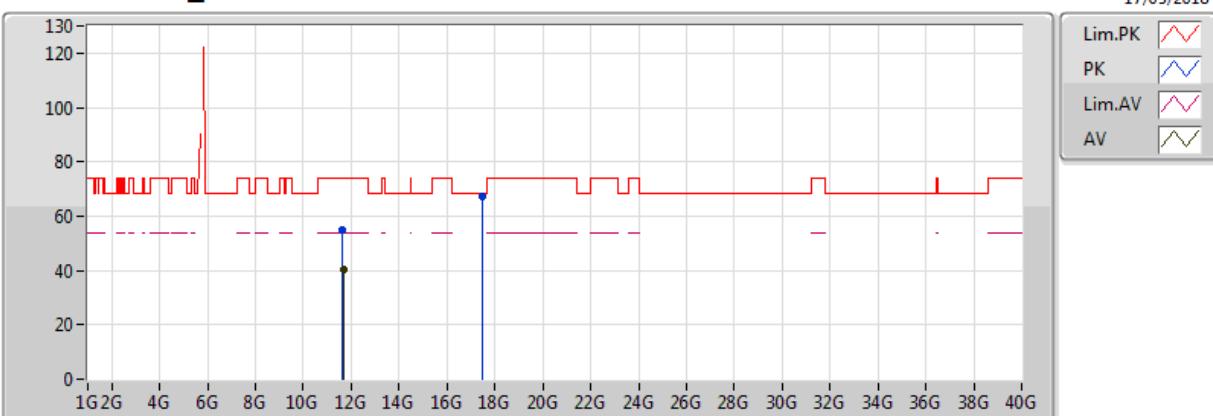
EUT X\_2TX  
 Setting 23.5  
 02-J-1-10  
 FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.641G	61.71	68.20	-6.49	9.20	3	Horizontal	356	1.59	-
PK	5.821G	130.05	Inf	-Inf	9.26	3	Horizontal	356	1.59	-
AV	5.821G	118.63	Inf	-Inf	9.26	3	Horizontal	356	1.59	-
PK	5.928G	65.80	68.20	-2.40	9.35	3	Horizontal	356	1.59	-

**802.11a\_Nss1,(6Mbps)\_2TX****5825MHz\_TX**

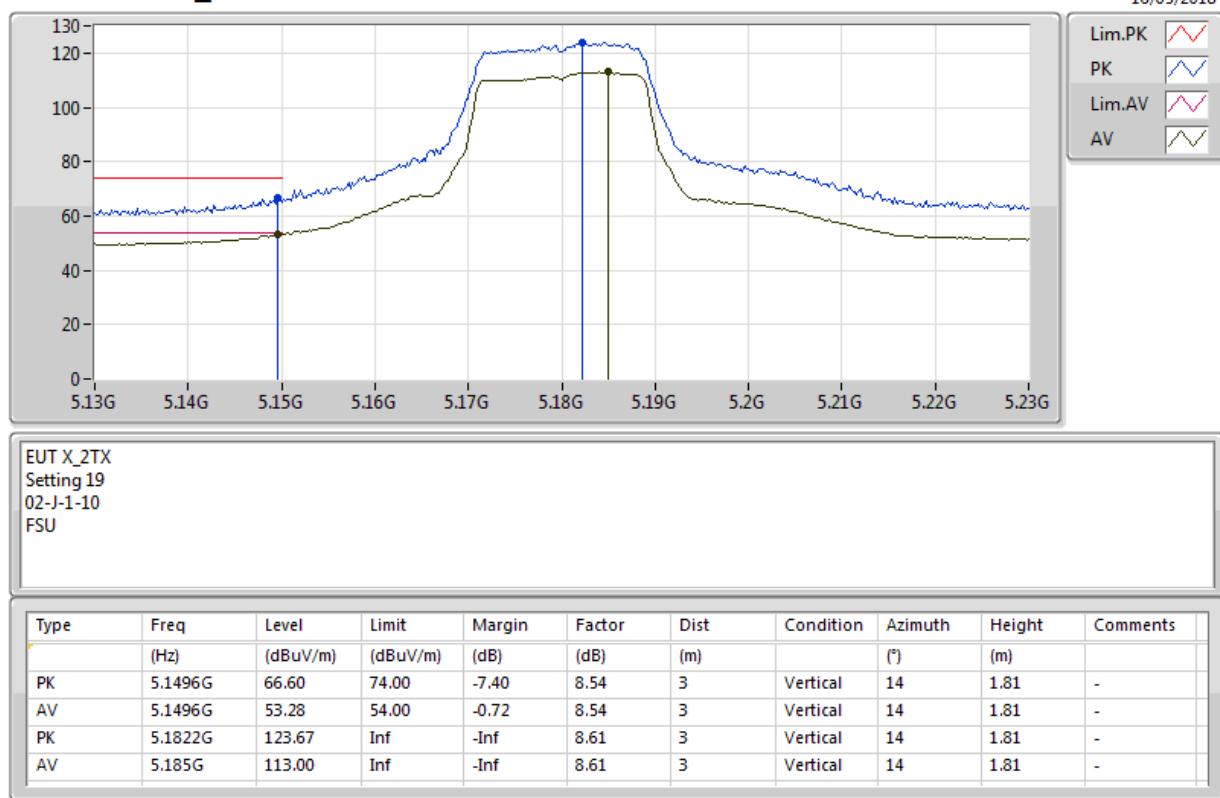
EUT X\_2TX  
Setting 23.5  
02-J-1  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.65804G	53.71	74.00	-20.29	14.80	3	Vertical	12	1.50	-
AV	11.6554G	40.48	54.00	-13.52	14.79	3	Vertical	12	1.50	-
PK	17.47684G	63.32	68.20	-4.88	21.82	3	Vertical	190	1.50	-

**802.11a\_Nss1,(6Mbps)\_2TX****5825MHz\_TX**

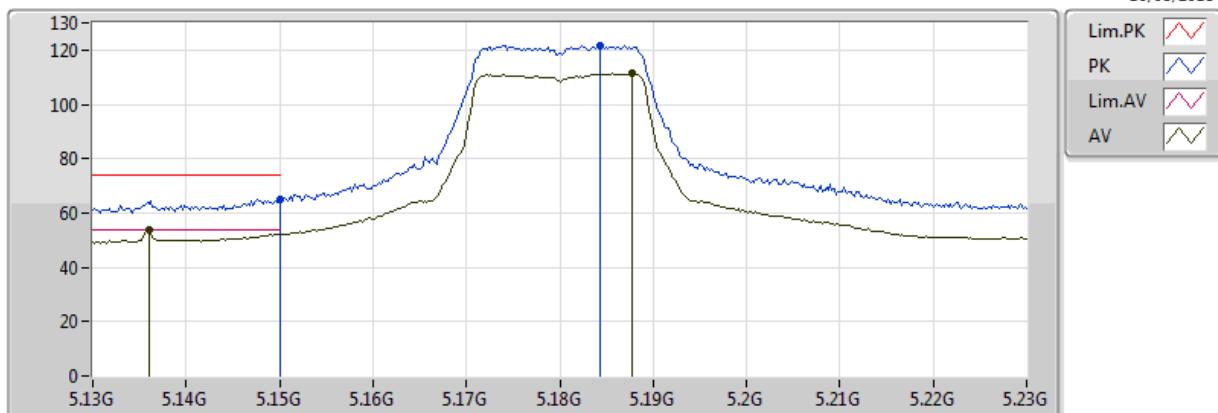
EUT X\_2TX  
Setting 23.5  
02-J-1  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.65464G	54.82	74.00	-19.18	14.79	3	Horizontal	61	1.67	-
AV	11.65676G	40.52	54.00	-13.48	14.79	3	Horizontal	61	1.67	-
PK	17.4696G	67.14	68.20	-1.06	21.78	3	Horizontal	238	1.48	-

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5180MHz\_TX**

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5180MHz\_TX**

16/05/2018

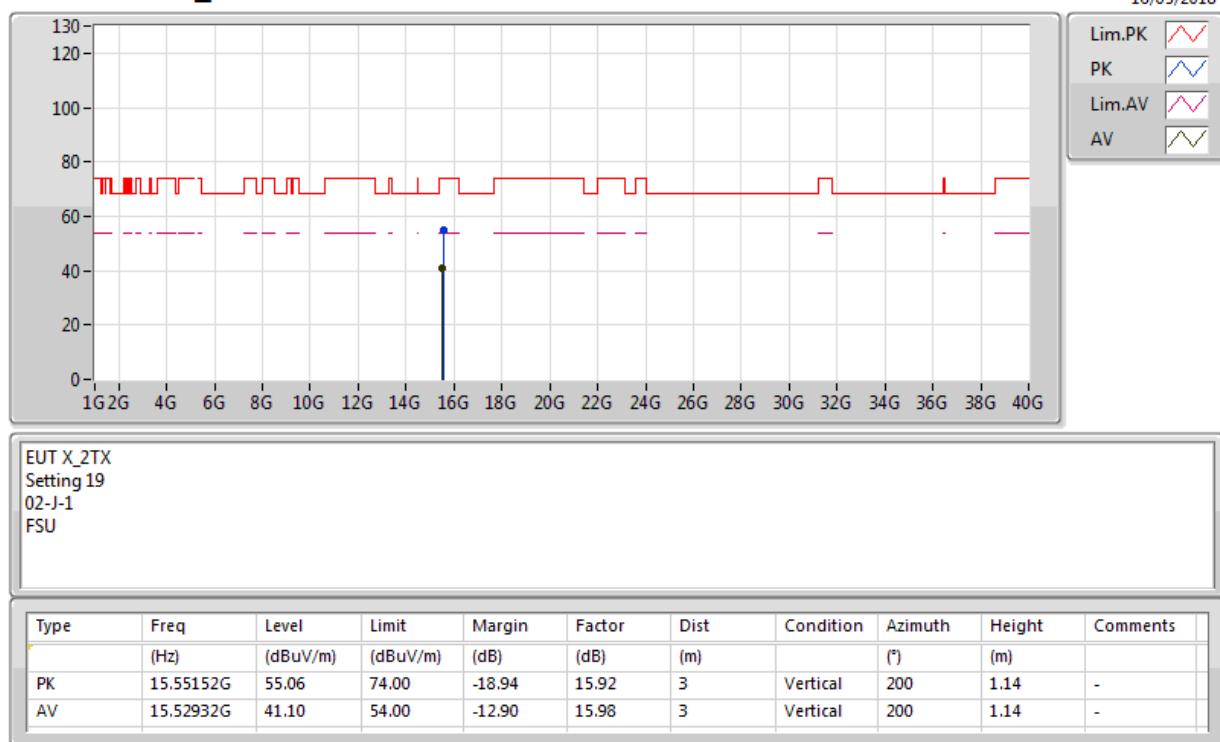


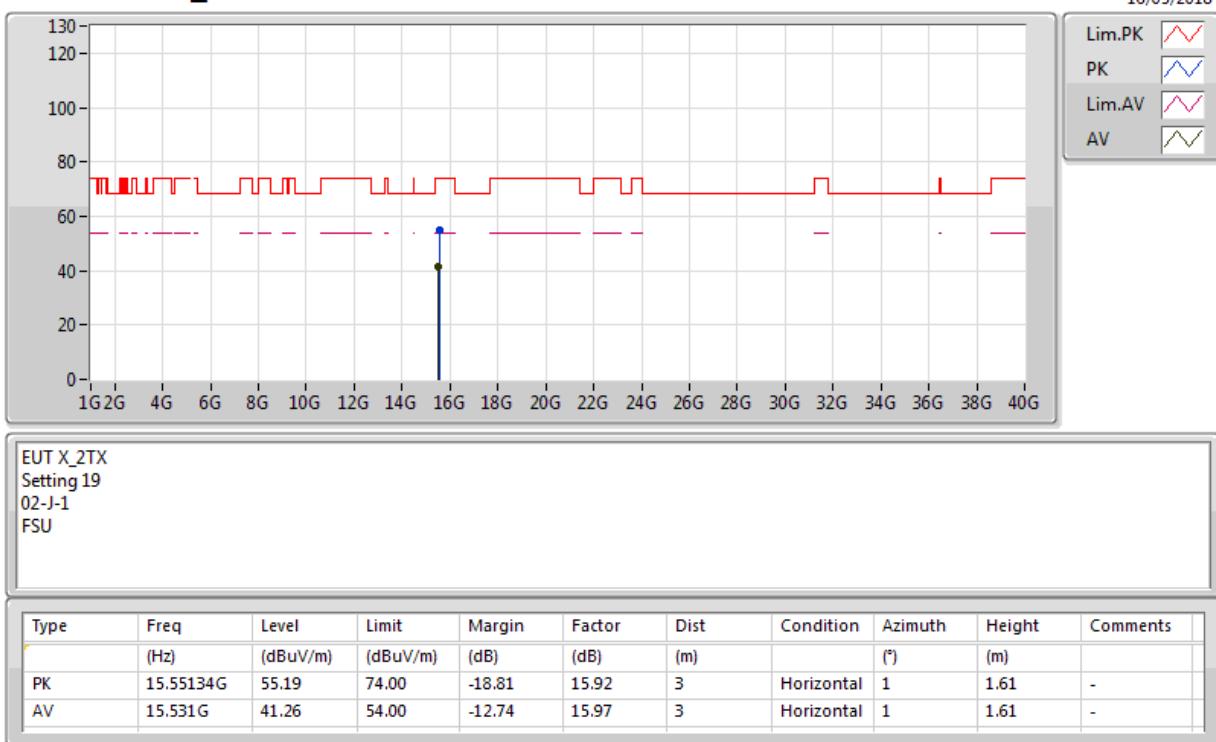
EUT X\_2TX  
Setting 19  
02-J-1-10  
FSU

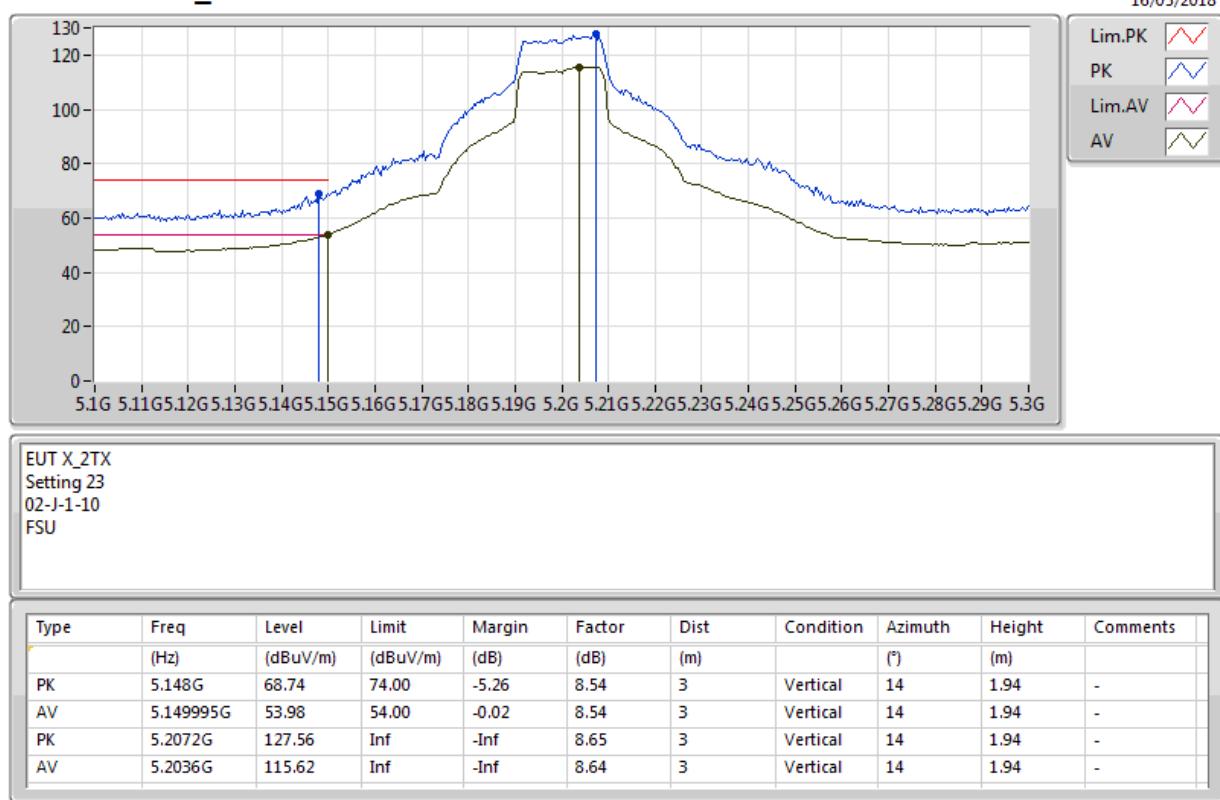
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.149995G	65.21	74.00	-8.79	8.54	3	Horizontal	11	1.77	-
AV	5.136G	53.67	54.00	-0.33	8.53	3	Horizontal	11	1.77	-
PK	5.1844G	121.62	Inf	-Inf	8.61	3	Horizontal	11	1.77	-
AV	5.1878G	111.31	Inf	-Inf	8.62	3	Horizontal	11	1.77	-

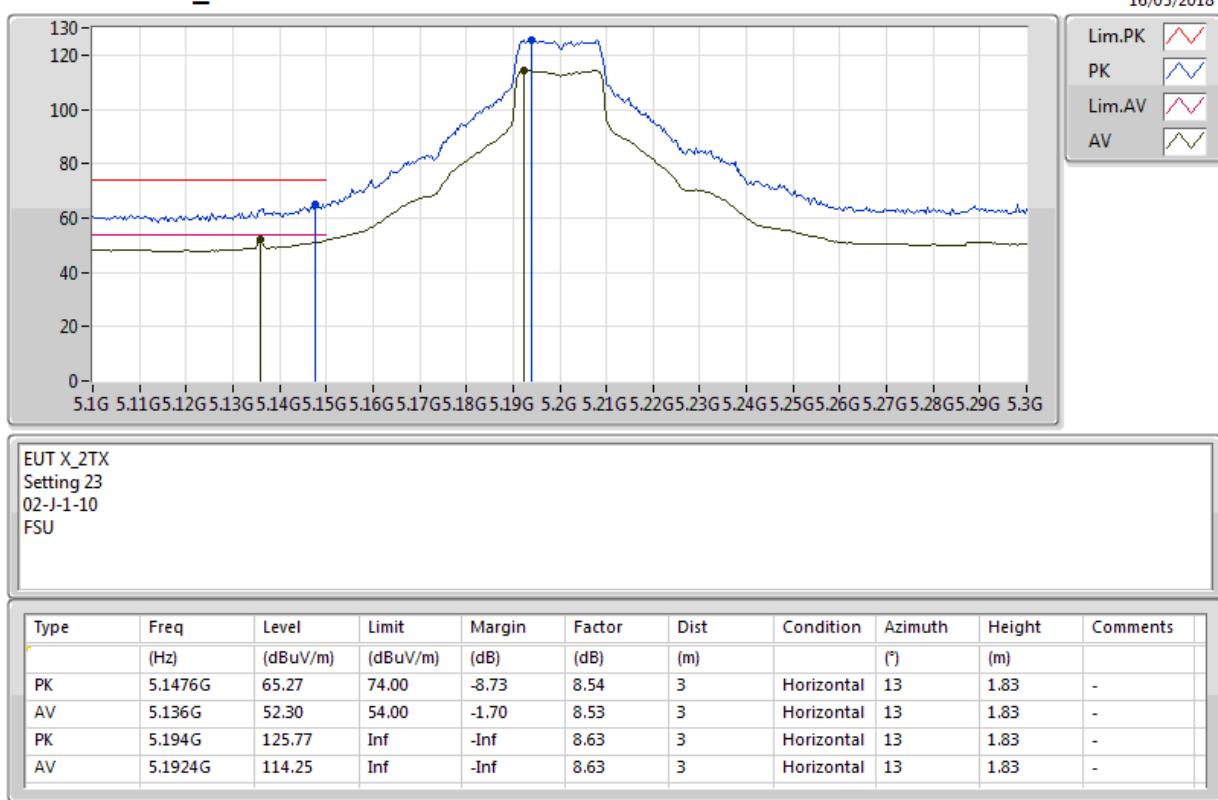
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

**5180MHz\_TX**



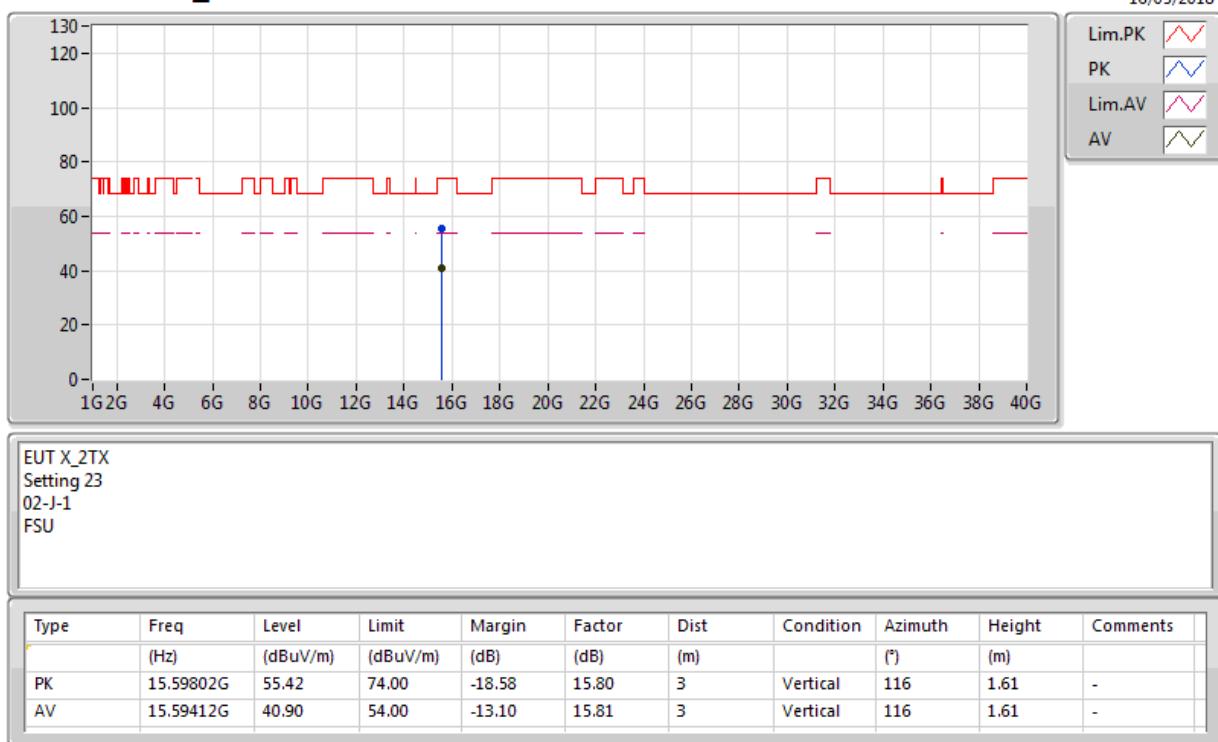
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5180MHz\_TX**

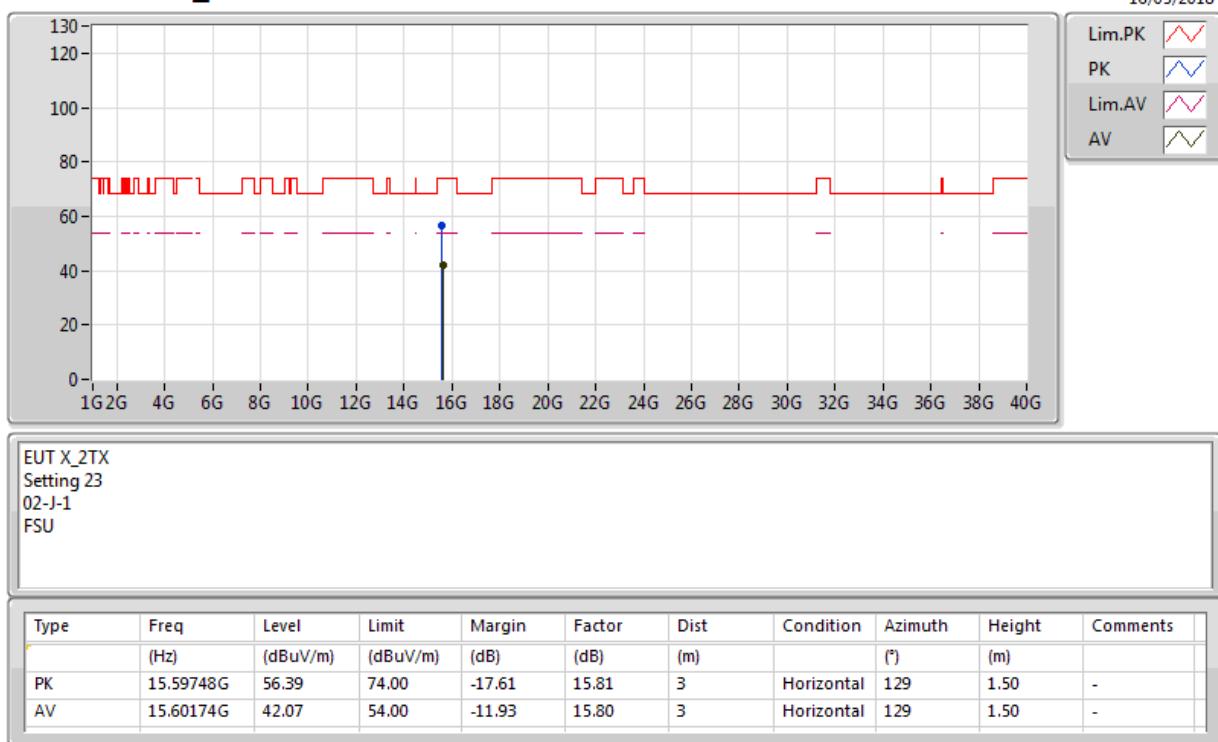
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5200MHz\_TX**

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5200MHz\_TX**

### **802.11ac VHT20\_Nss1,(MCS0)\_2TX**

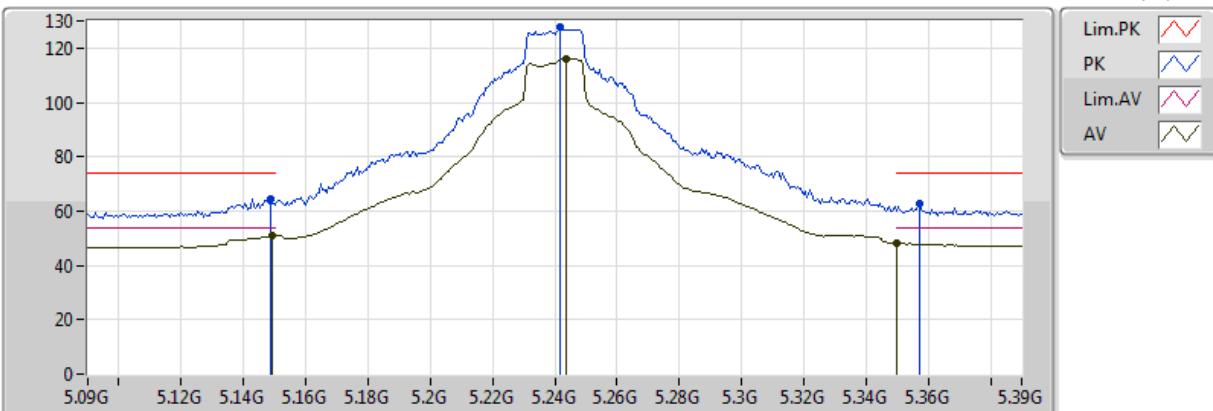
#### **5200MHz\_TX**



**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5200MHz\_TX**

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5240MHz\_TX**

16/05/2018

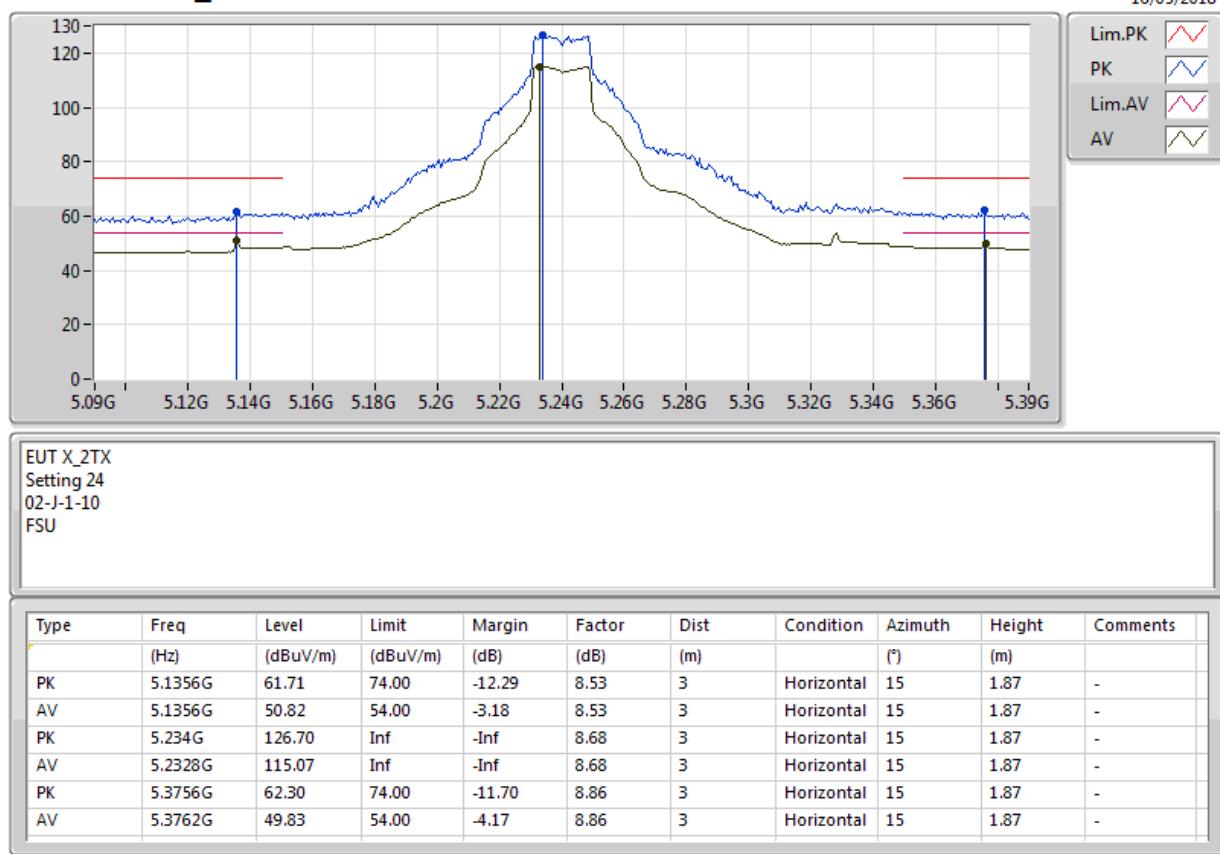


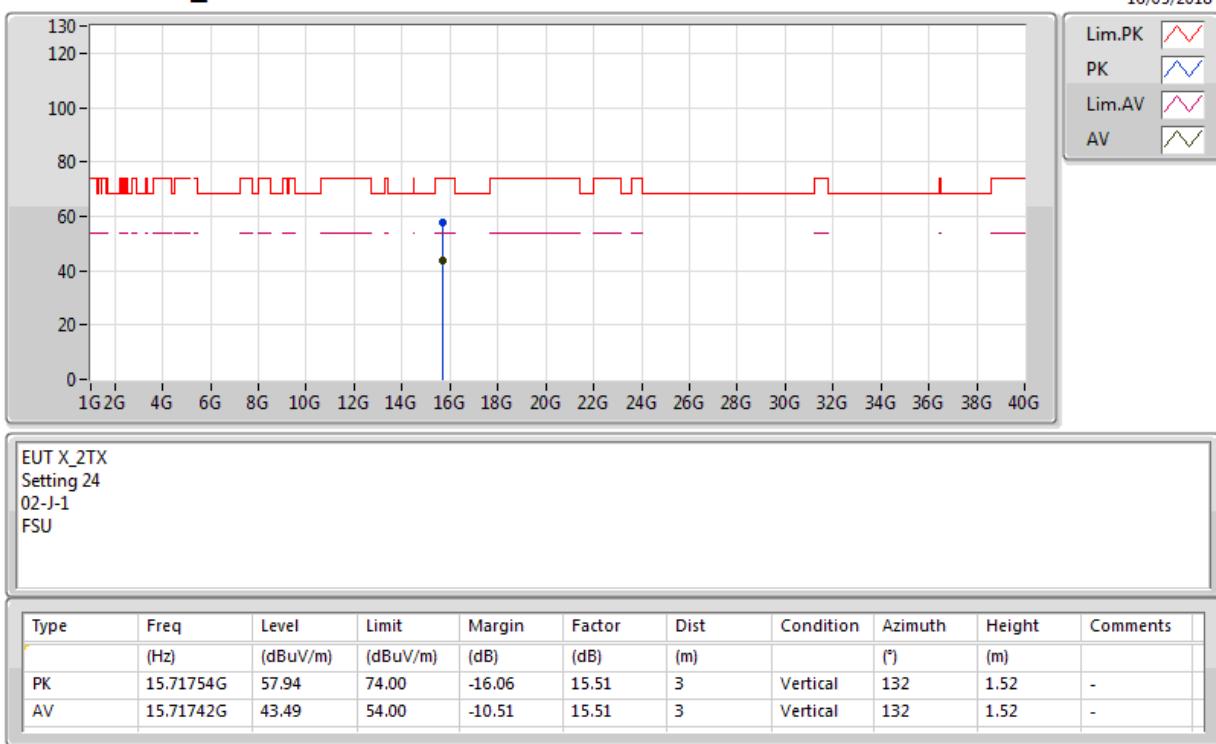
EUT X\_2TX  
Setting 24  
02-J-1-10  
FSU

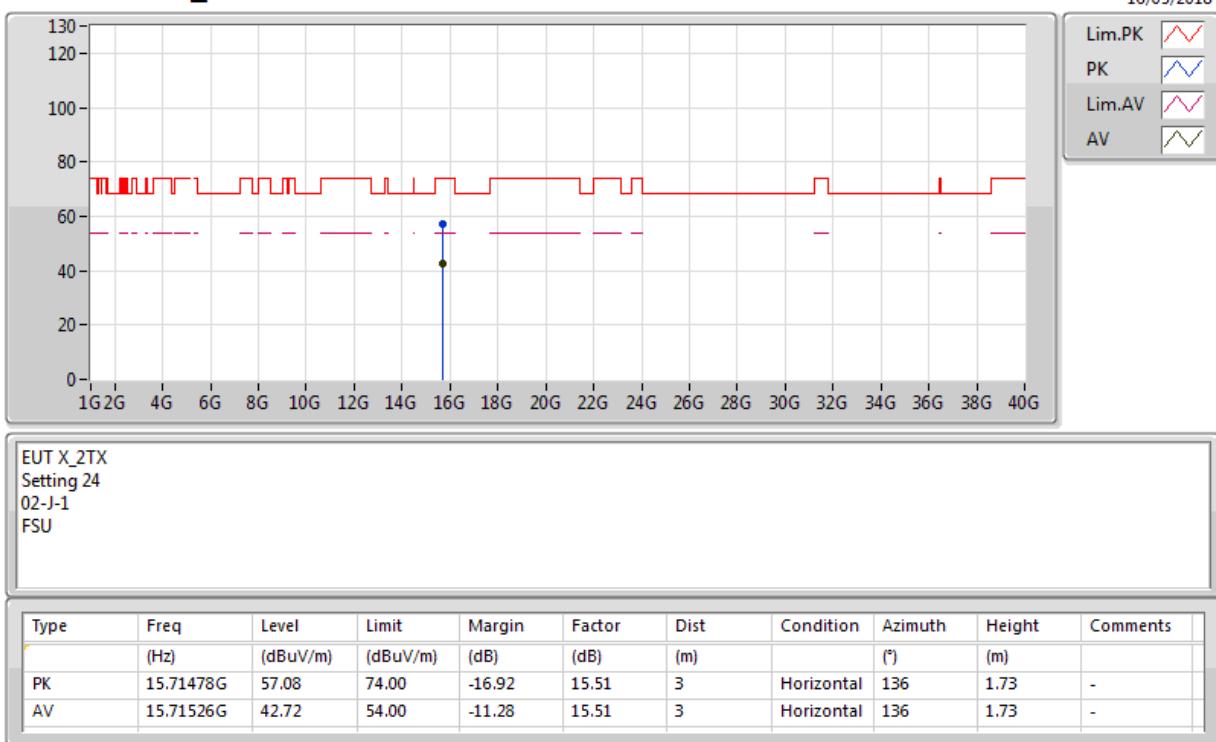
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.1488G	64.50	74.00	-9.50	8.54	3	Vertical	13	1.83	-
AV	5.1494G	50.77	54.00	-3.23	8.54	3	Vertical	13	1.83	-
PK	5.2418G	127.53	Inf	-Inf	8.69	3	Vertical	13	1.83	-
AV	5.2436G	116.18	Inf	-Inf	8.70	3	Vertical	13	1.83	-
PK	5.357G	62.49	74.00	-11.51	8.84	3	Vertical	13	1.83	-
AV	5.350005G	48.18	54.00	-5.82	8.84	3	Vertical	13	1.83	-

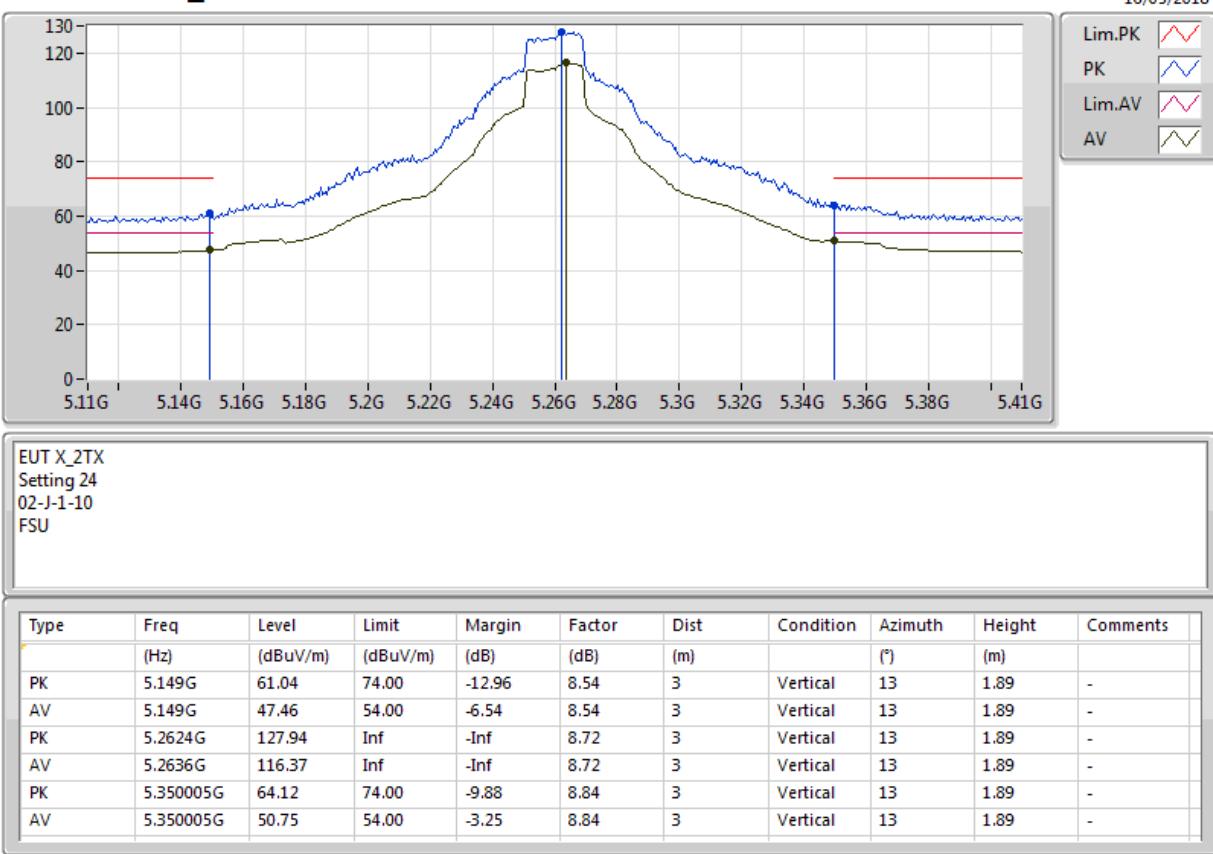
### **802.11ac VHT20\_Nss1,(MCS0)\_2TX**

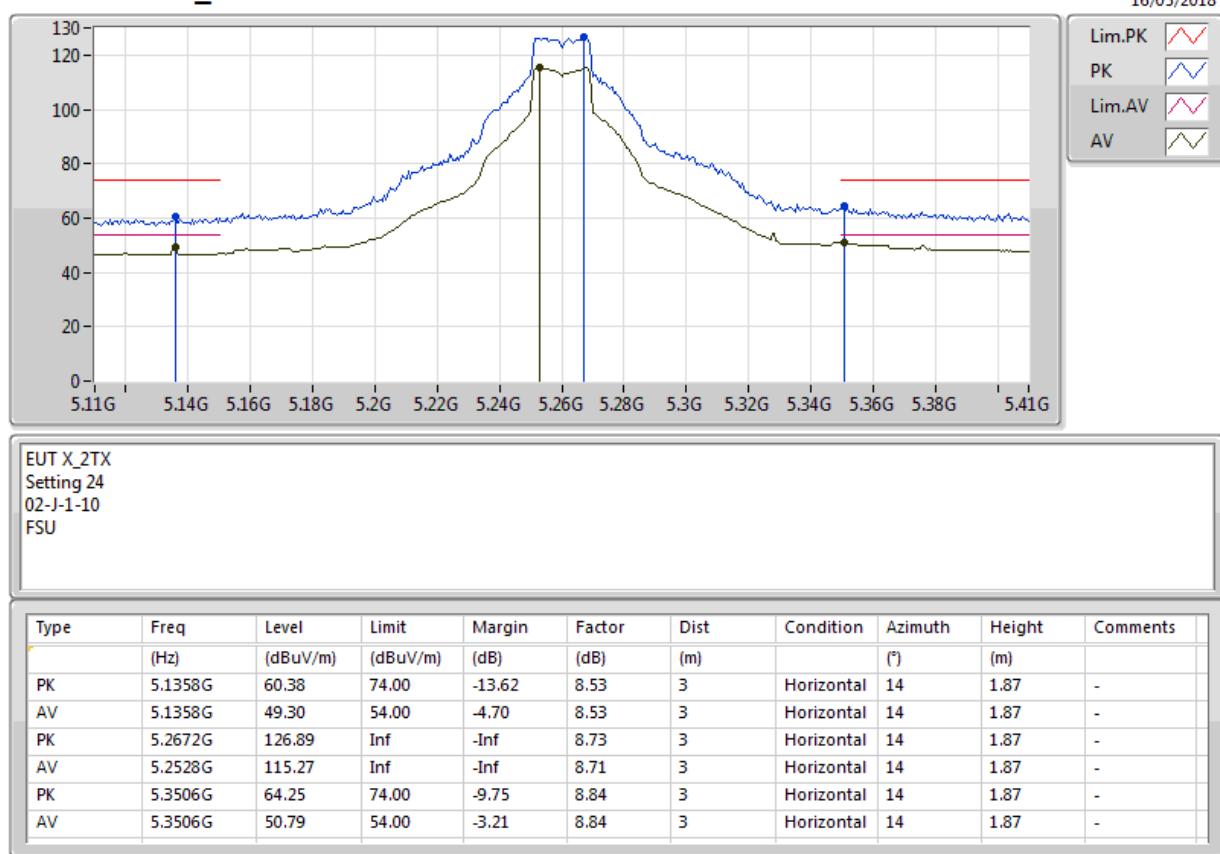
#### **5240MHz\_TX**

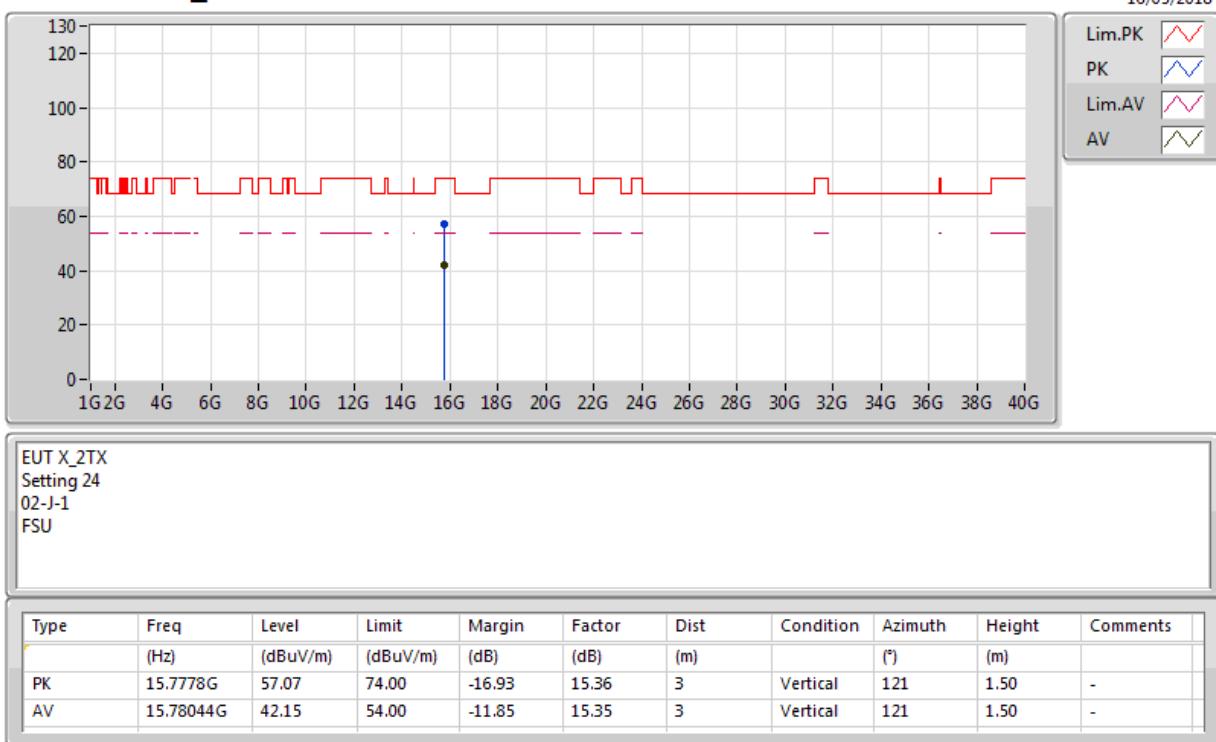


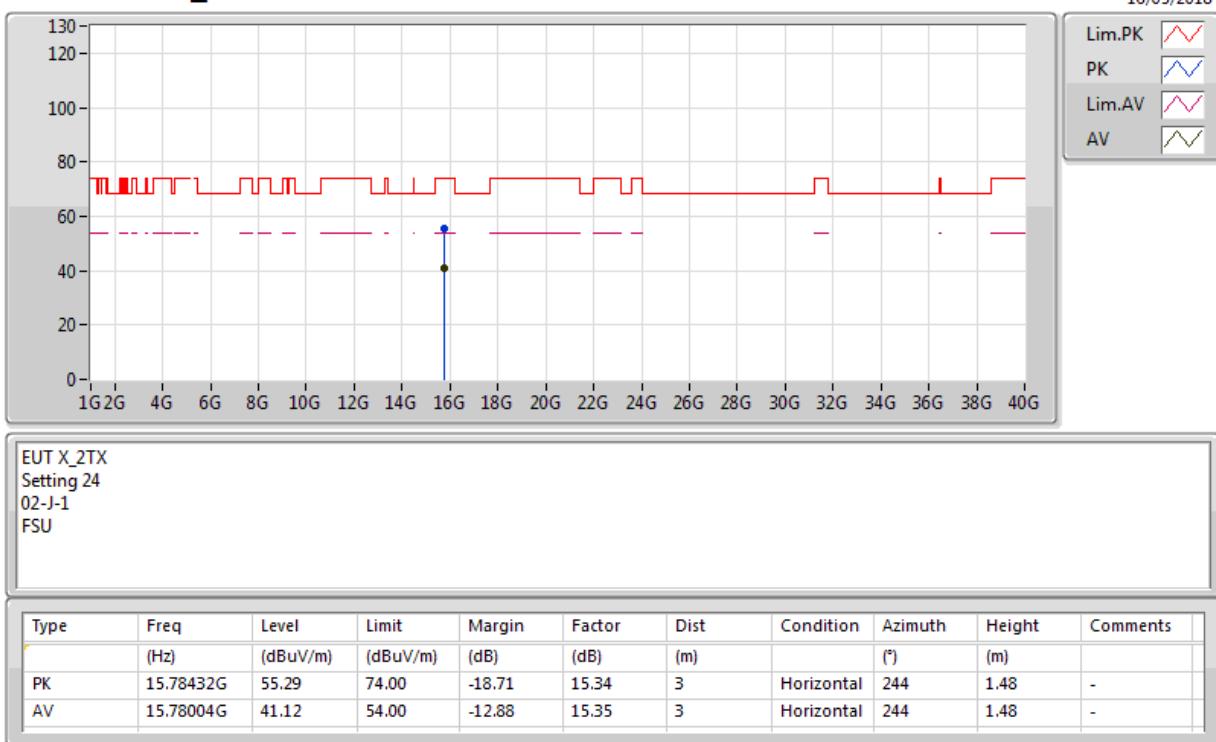
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5240MHz\_TX**

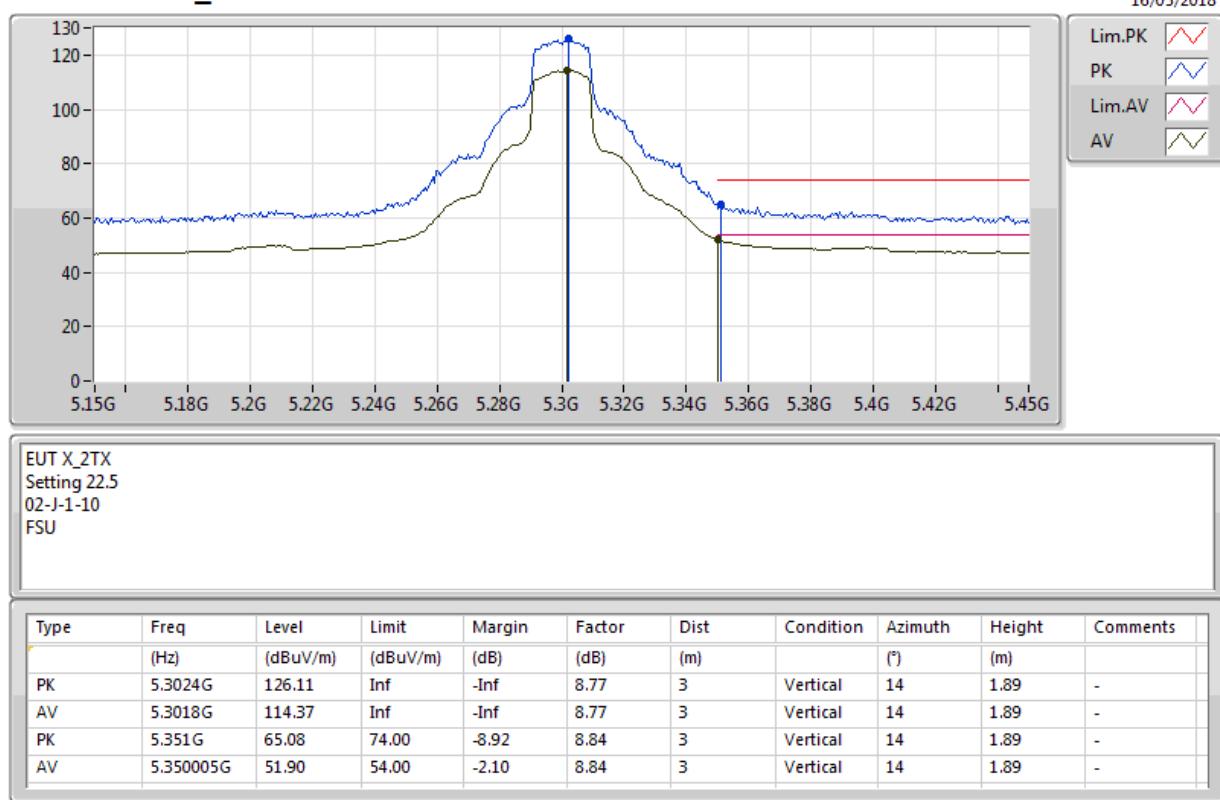
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5240MHz\_TX**

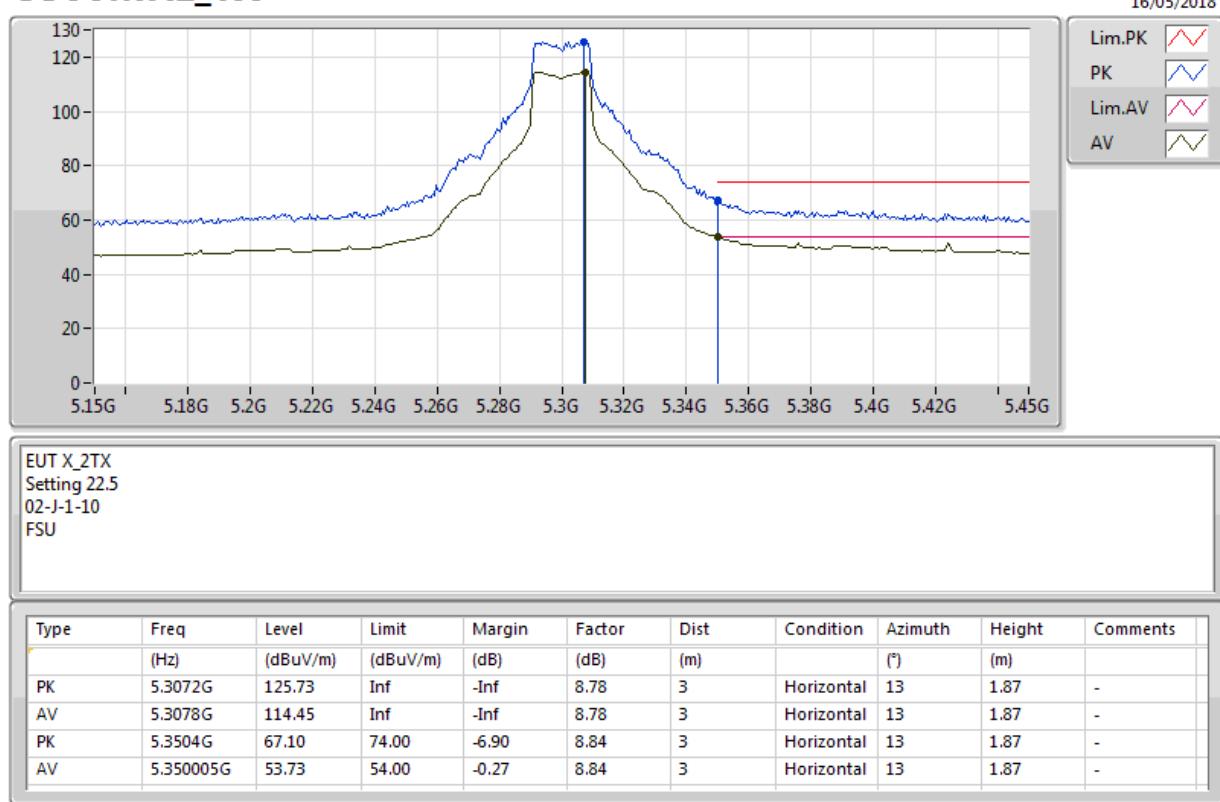
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5260MHz\_TX**

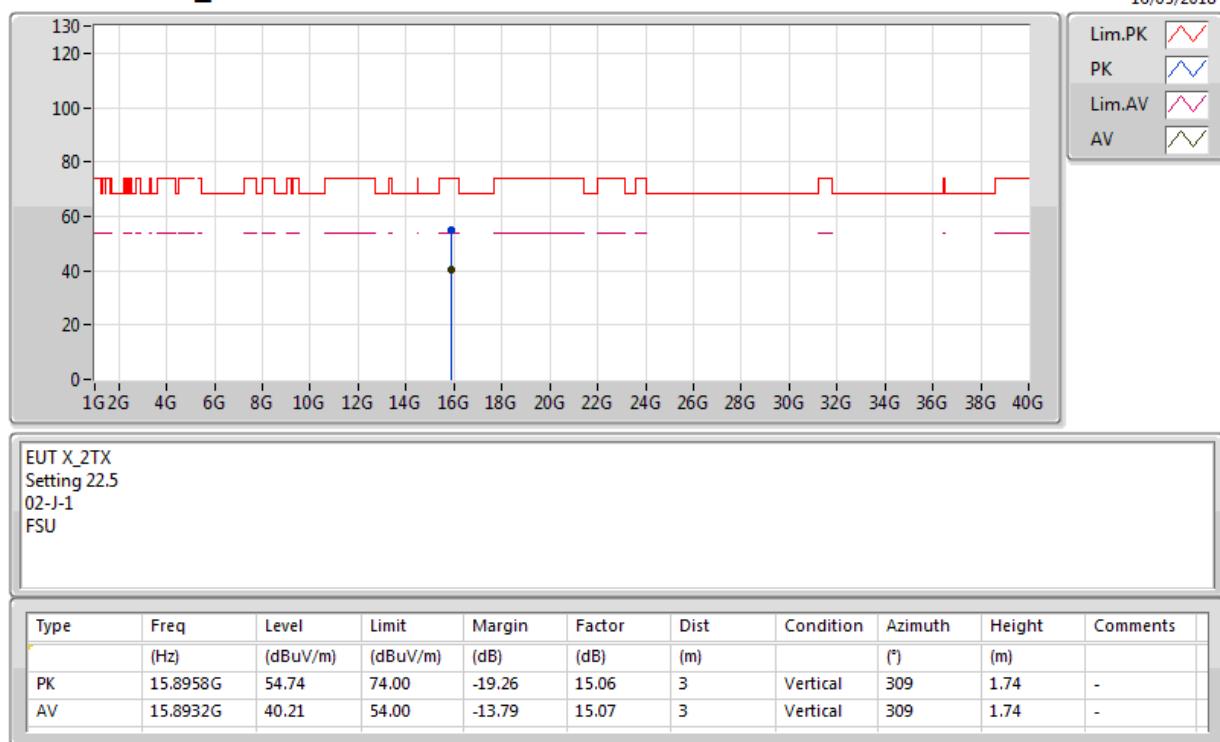
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**5260MHz\_TX**


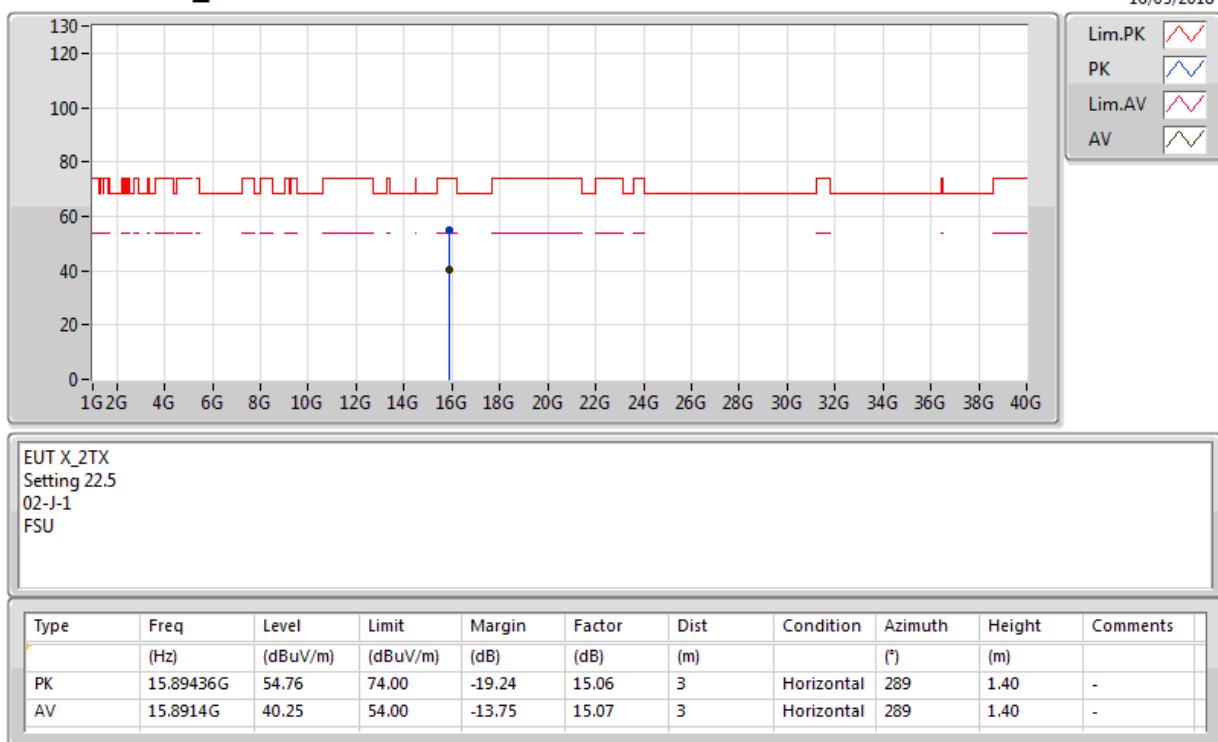
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5260MHz\_TX**

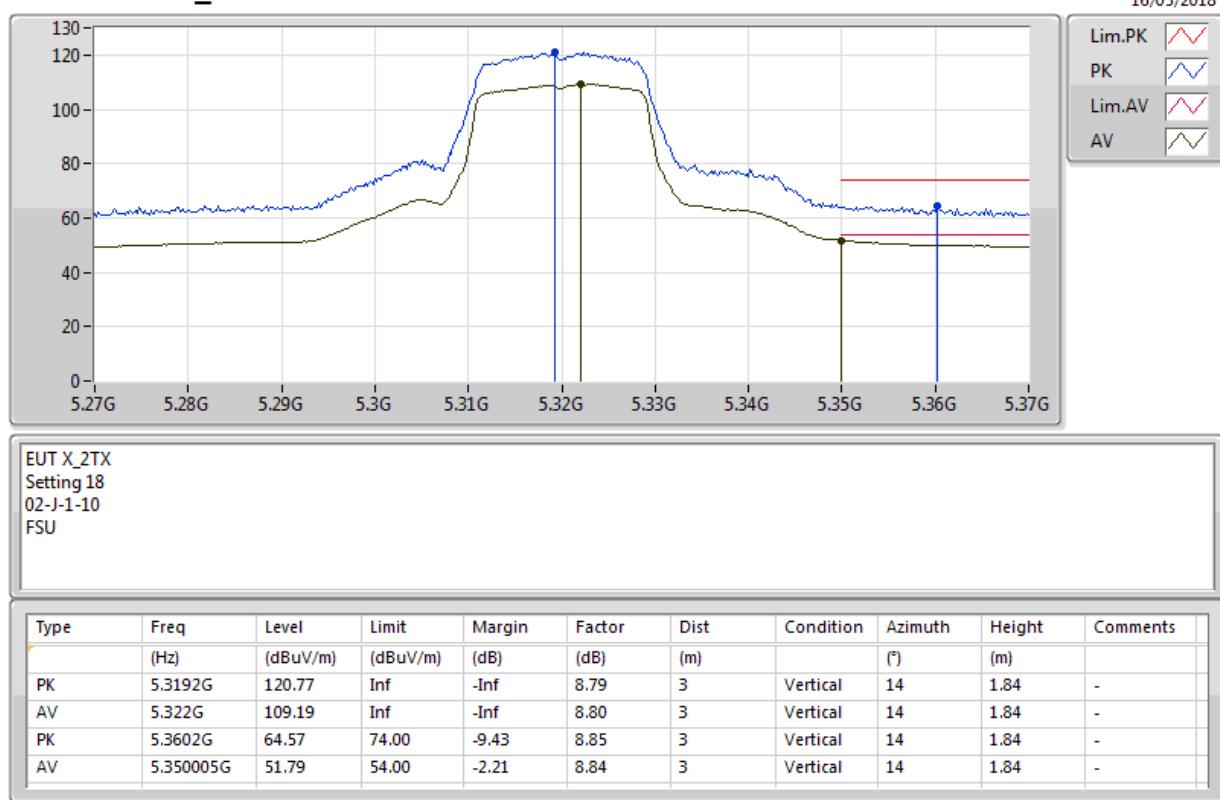
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5260MHz\_TX**

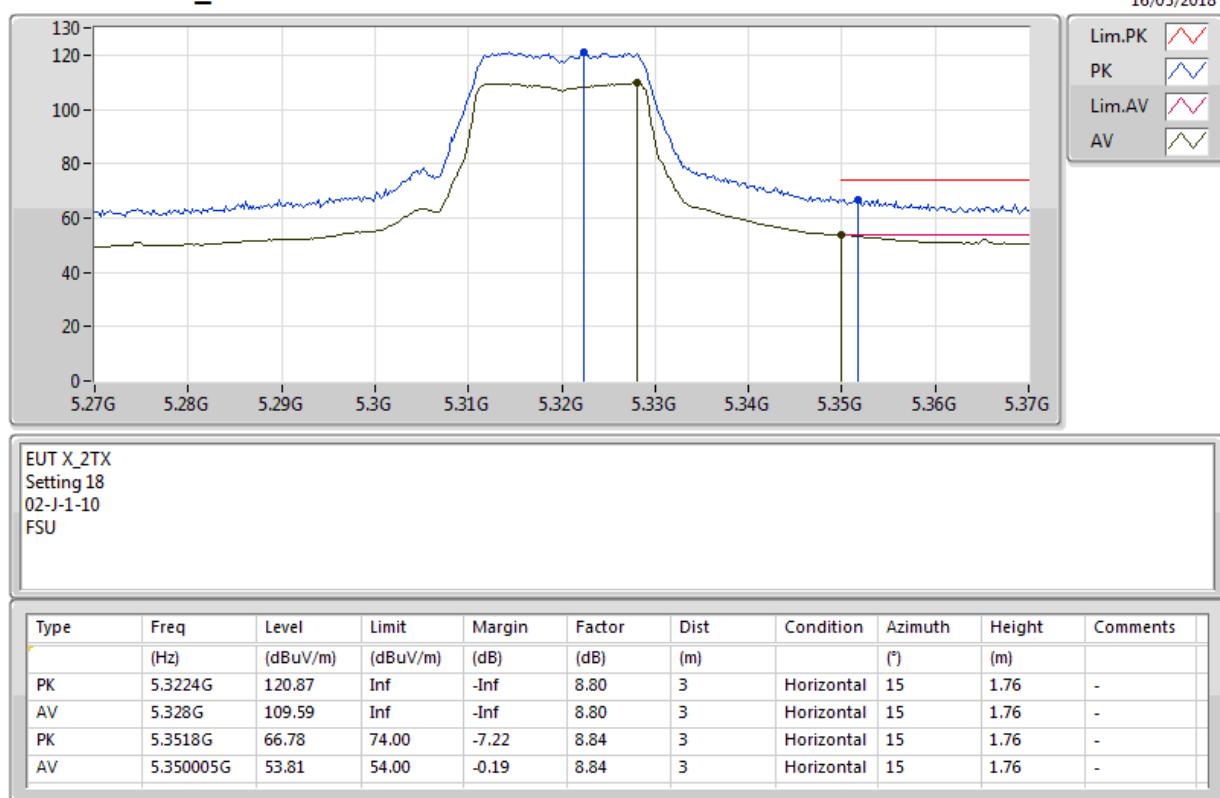
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5300MHz\_TX**

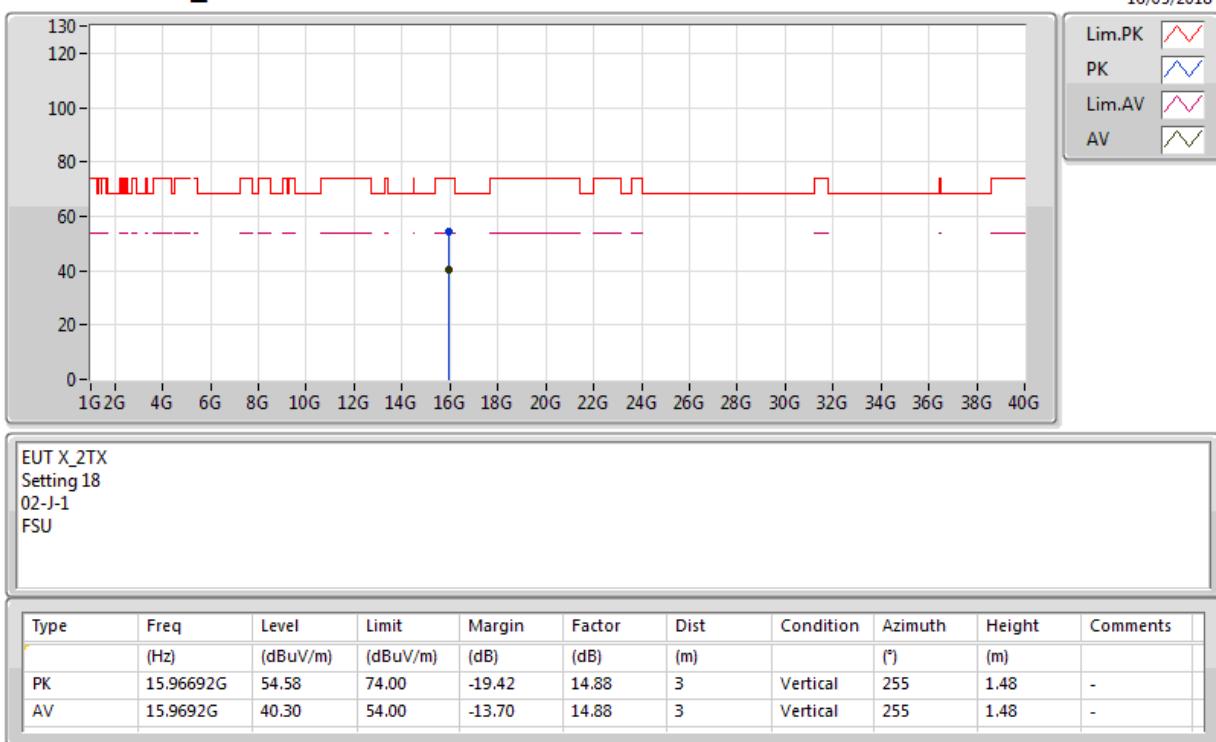
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5300MHz\_TX**

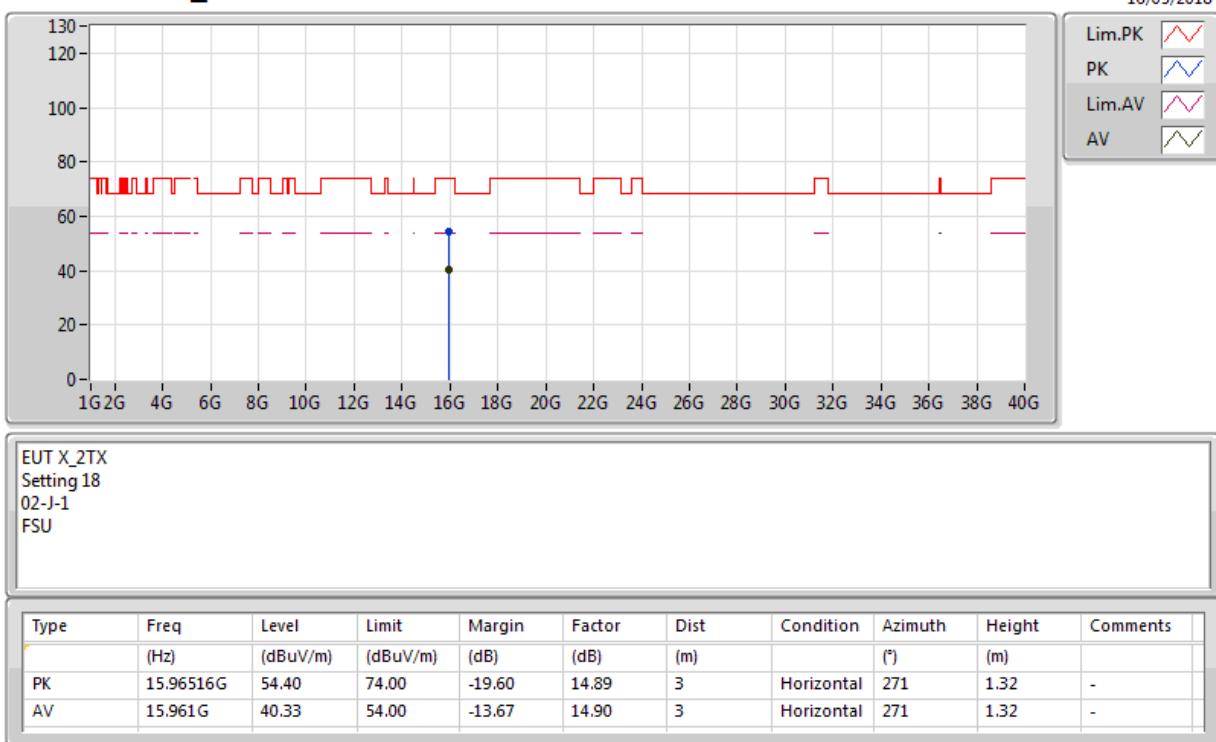
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**5300MHz\_TX**


**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5300MHz\_TX**

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5320MHz\_TX**

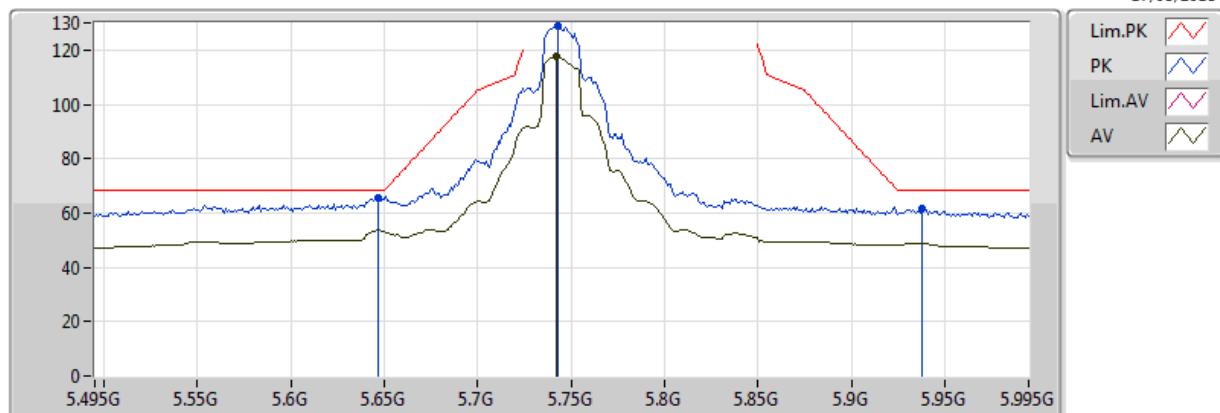
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5320MHz\_TX**

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5320MHz\_TX**

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5320MHz\_TX**

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5745MHz\_TX**

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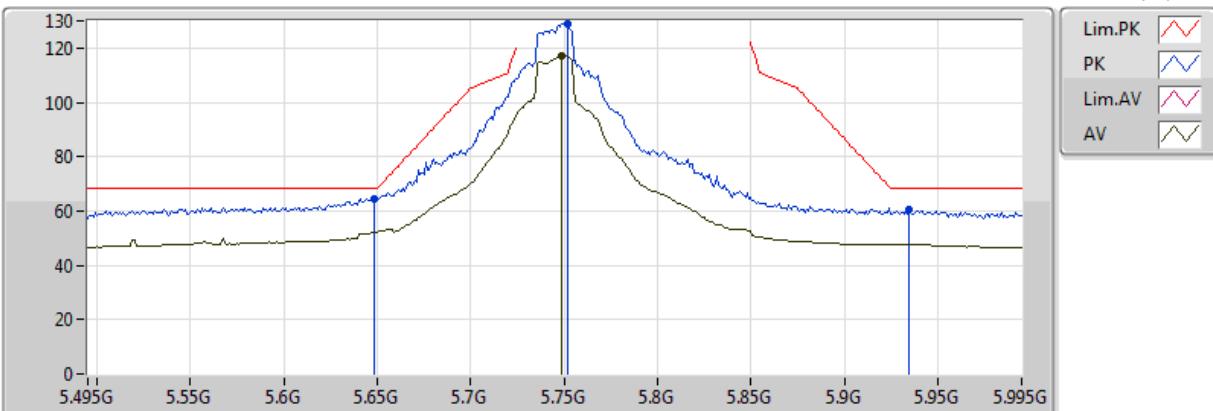


EUT X\_2TX  
Setting 23  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.647G	65.68	68.20	-2.52	9.20	3	Vertical	1	1.55	-
PK	5.743G	129.13	Inf	-Inf	9.22	3	Vertical	1	1.55	-
AV	5.742G	117.62	Inf	-Inf	9.22	3	Vertical	1	1.55	-
PK	5.938G	61.57	68.20	-6.63	9.35	3	Vertical	1	1.55	-

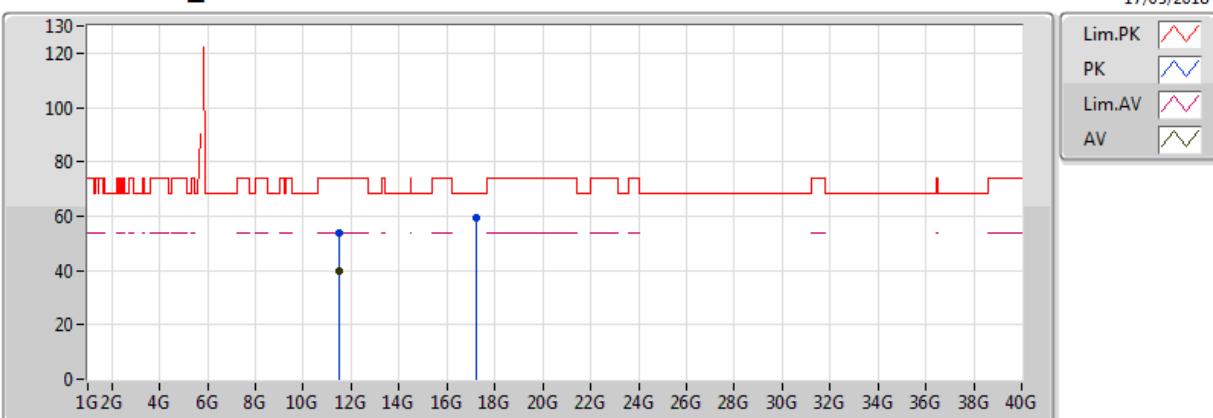
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5745MHz\_TX**

17/05/2018



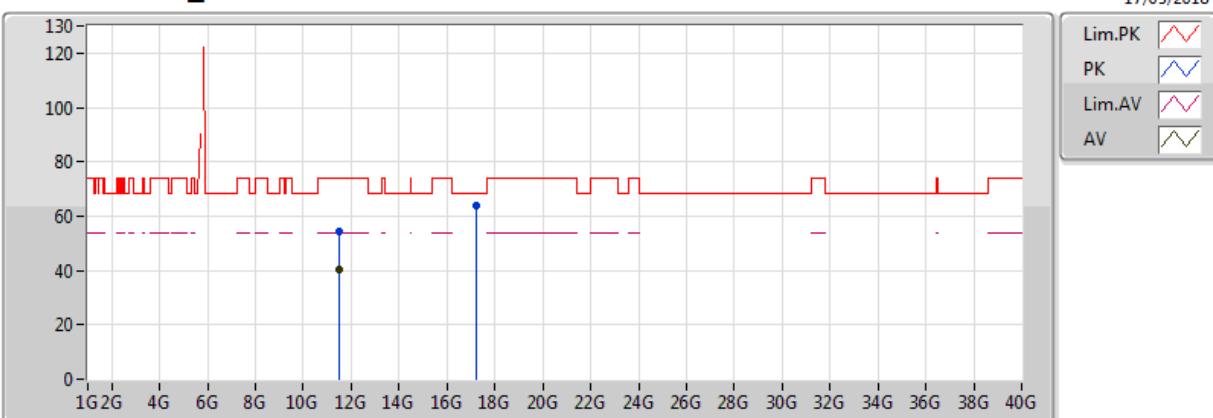
EUT X\_2TX  
Setting 23  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dB <sub>1uV/m</sub> )	Limit (dB <sub>1uV/m</sub> )	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.648G	64.60	68.20	-3.60	9.20	3	Horizontal	359	1.54	-
PK	5.752G	128.87	Inf	-Inf	9.23	3	Horizontal	359	1.54	-
AV	5.749G	117.33	Inf	-Inf	9.22	3	Horizontal	359	1.54	-
PK	5.935G	60.70	68.20	-7.50	9.36	3	Horizontal	359	1.54	-

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5745MHz\_TX**

EUT X\_2TX  
Setting 23  
02-J-1  
FSU

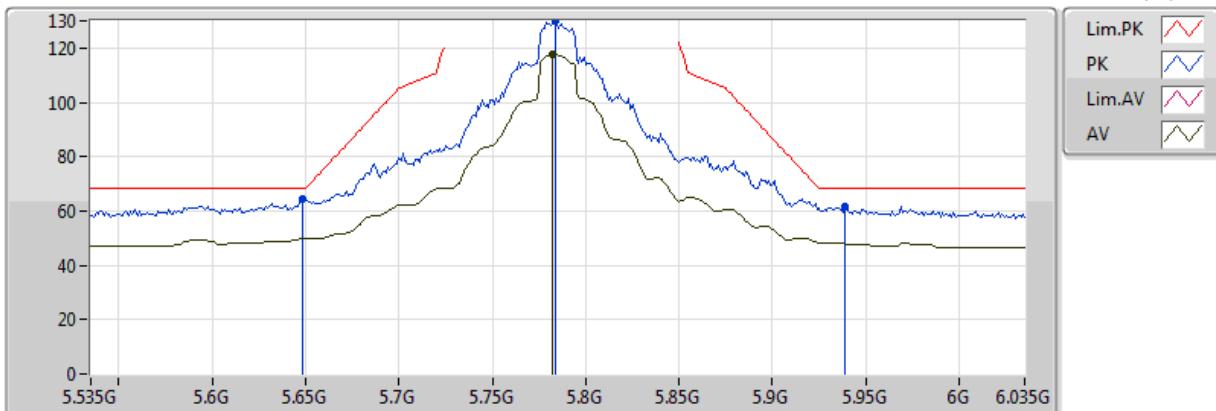
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.48872G	54.01	74.00	-19.99	14.60	3	Vertical	143	1.37	-
AV	11.49112G	39.99	54.00	-14.01	14.60	3	Vertical	143	1.37	-
PK	17.22572G	59.50	68.20	-8.70	20.35	3	Vertical	187	1.64	-

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5745MHz\_TX**

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.49484G	54.53	74.00	-19.47	14.60	3	Horizontal	61	1.64	-
AV	11.4812G	40.28	54.00	-13.72	14.59	3	Horizontal	61	1.64	-
PK	17.22788G	63.76	68.20	-4.44	20.36	3	Horizontal	231	1.49	-

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5785MHz\_TX**

17/05/2018

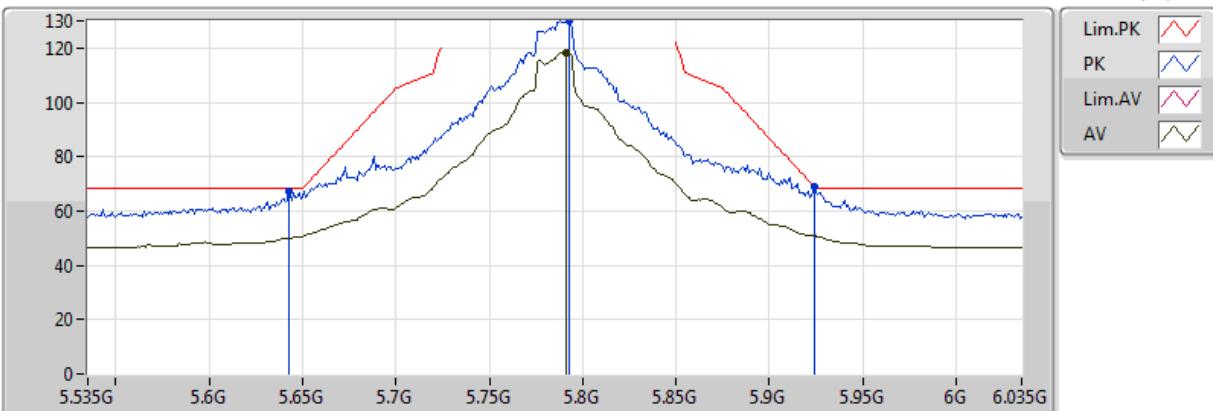


EUT X\_2TX  
Setting 25  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.648G	64.30	68.20	-3.90	9.20	3	Vertical	360	1.61	-
PK	5.784G	129.95	Inf	-Inf	9.24	3	Vertical	360	1.61	-
AV	5.782G	117.80	Inf	-Inf	9.23	3	Vertical	360	1.61	-
PK	5.939G	61.71	68.20	-6.49	9.35	3	Vertical	360	1.61	-

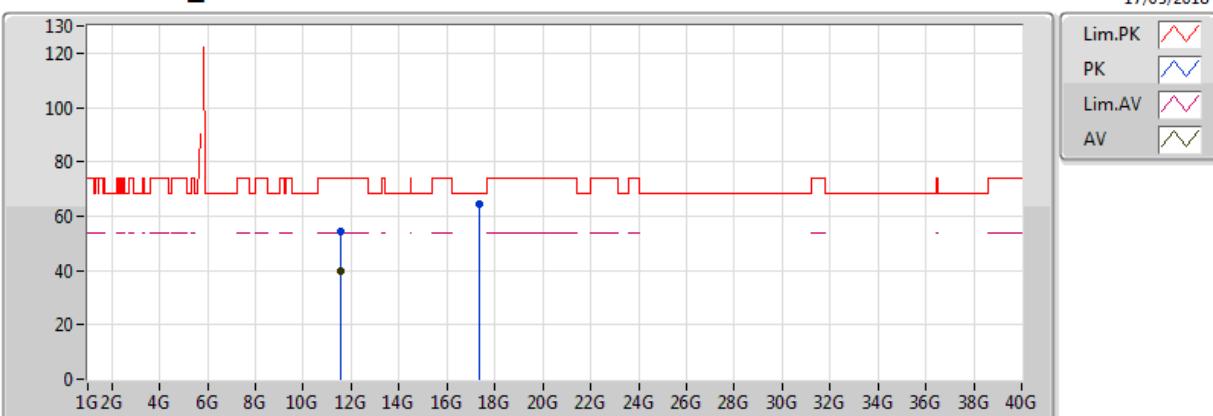
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5785MHz\_TX**

17/05/2018

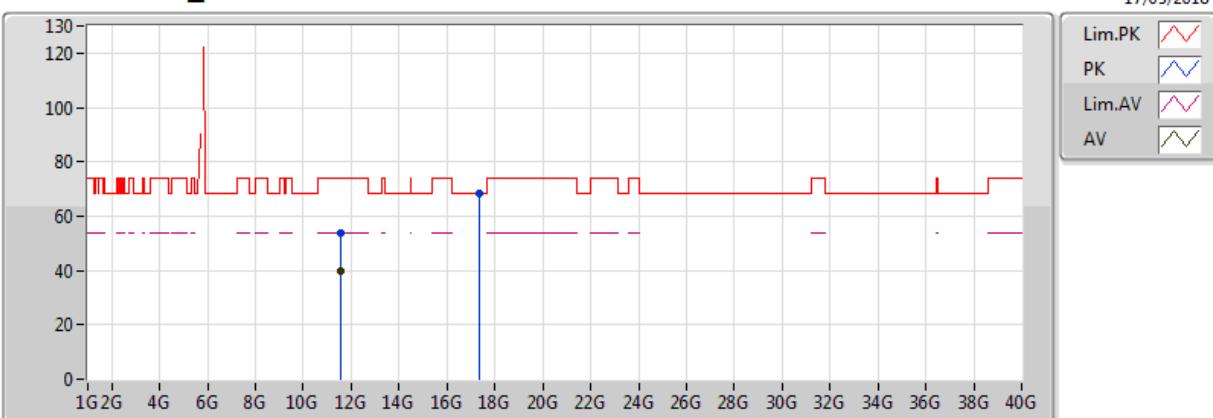


EUT X\_2TX  
Setting 25  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.643G	67.02	68.20	-1.18	9.20	3	Horizontal	359	1.58	-
PK	5.793G	130.19	Inf	-Inf	9.24	3	Horizontal	359	1.58	-
AV	5.791G	118.20	Inf	-Inf	9.24	3	Horizontal	359	1.58	-
PK	5.924G	68.69	68.94	-0.25	9.33	3	Horizontal	359	1.58	-

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5785MHz\_TX**

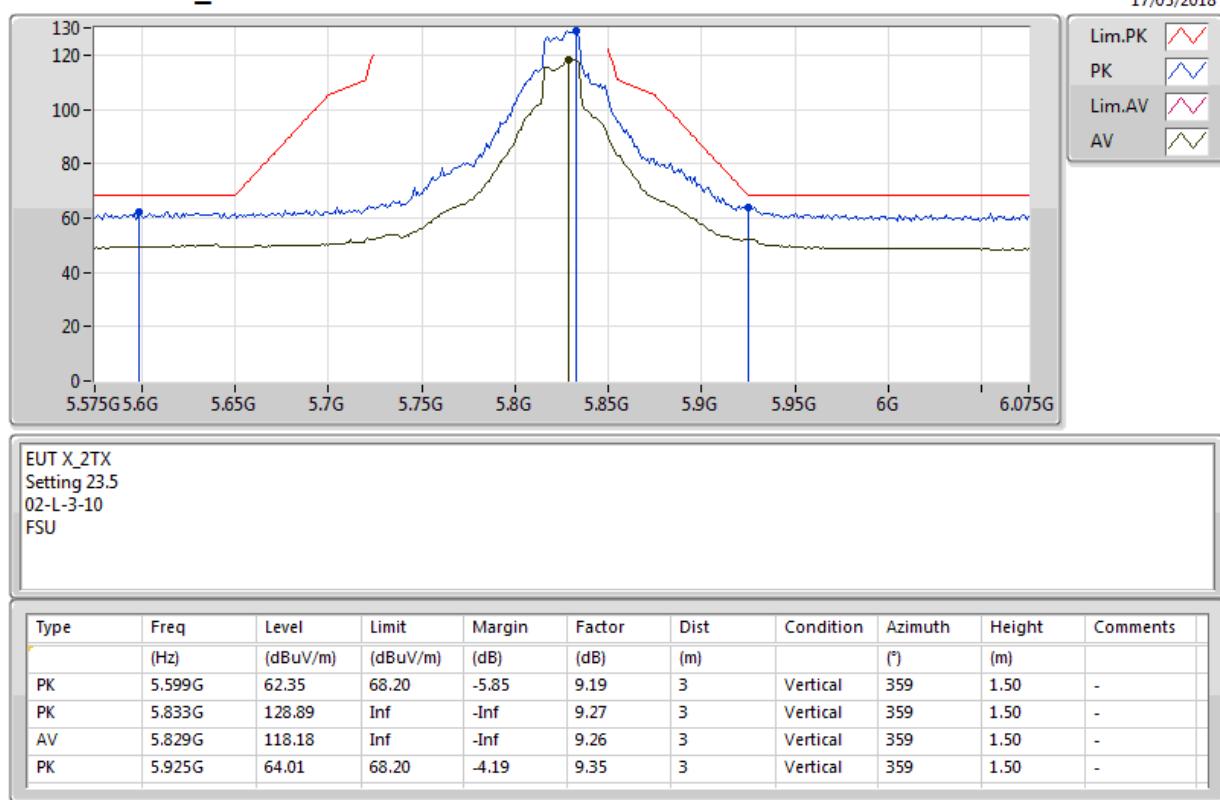
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.56904G	54.40	74.00	-19.60	14.69	3	Vertical	100	1.61	-
AV	11.56264G	39.88	54.00	-14.12	14.68	3	Vertical	100	1.61	-
PK	17.35228G	64.53	68.20	-3.67	21.09	3	Vertical	131	2.53	-

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5785MHz\_TX**

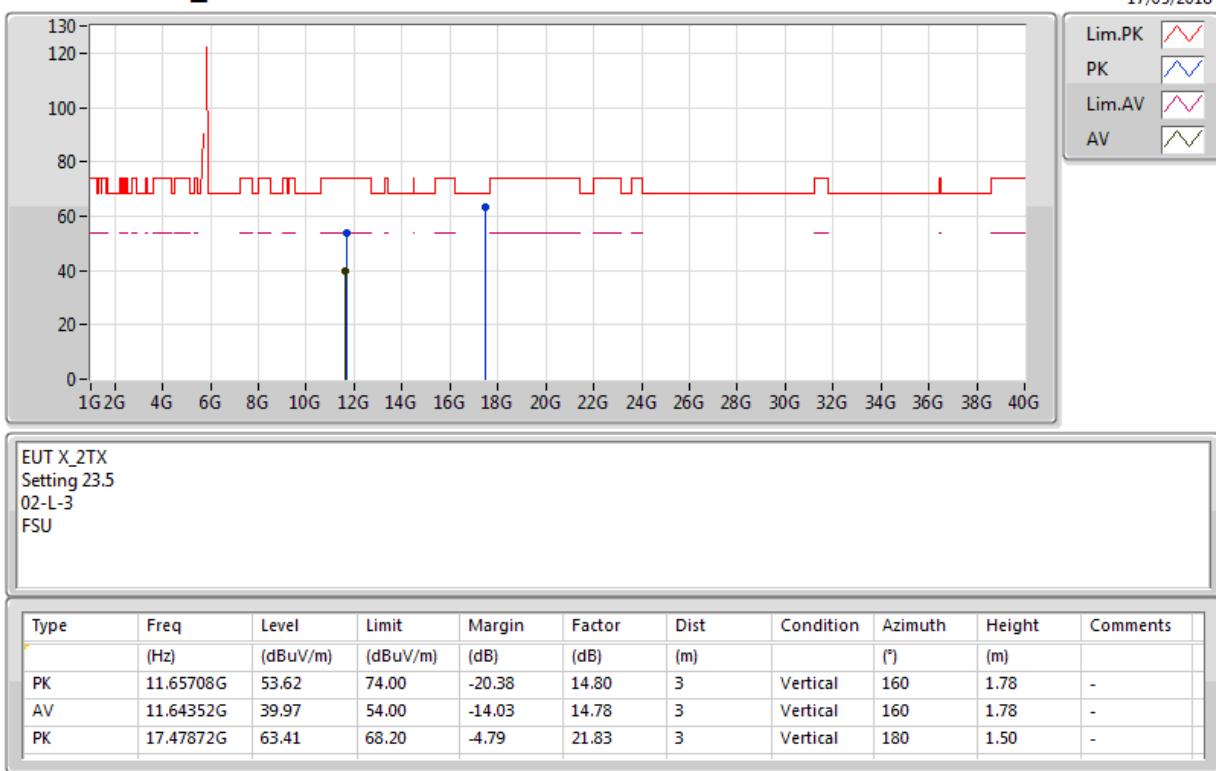
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.57004G	54.04	74.00	-19.96	14.69	3	Horizontal	74	2.00	-
AV	11.56164G	39.81	54.00	-14.19	14.68	3	Horizontal	74	2.00	-
PK	17.35252G	68.16	68.20	-0.04	21.09	3	Horizontal	233	1.44	-

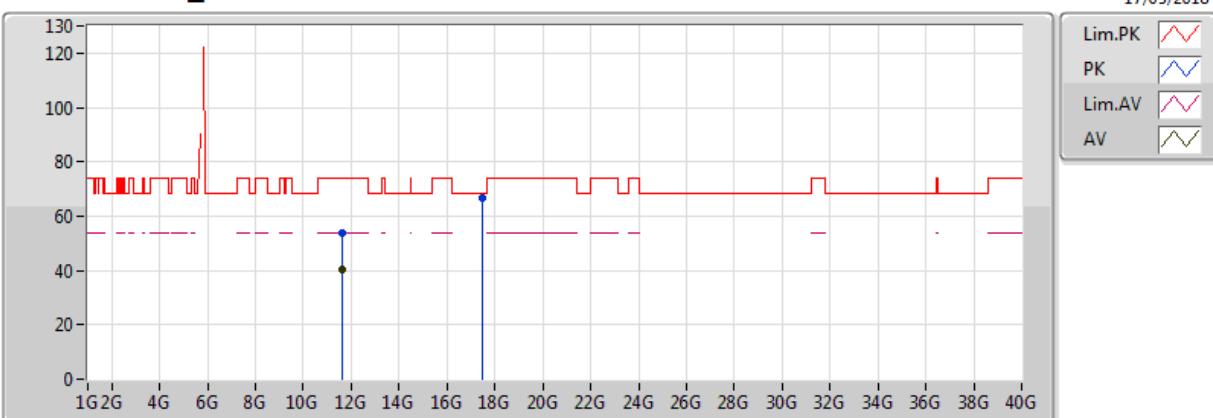
### **802.11ac VHT20\_Nss1,(MCS0)\_2TX**

#### **5825MHz\_TX**

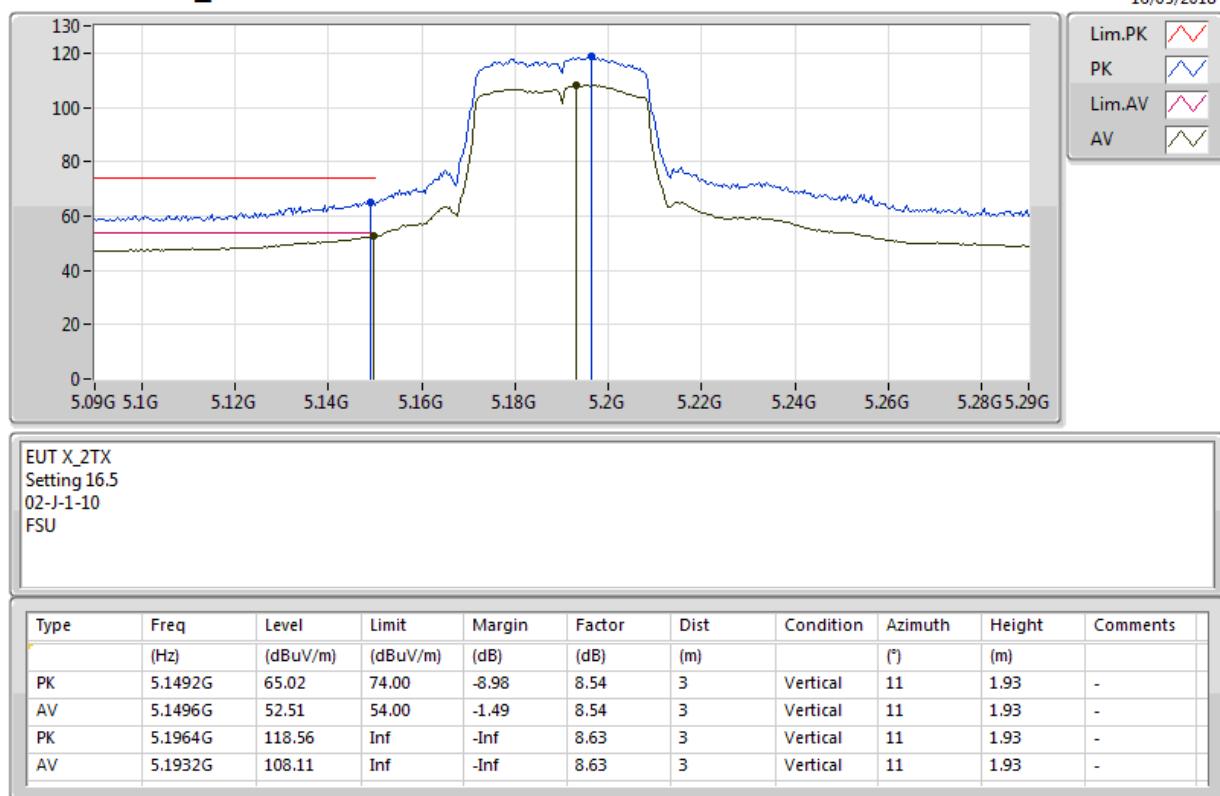


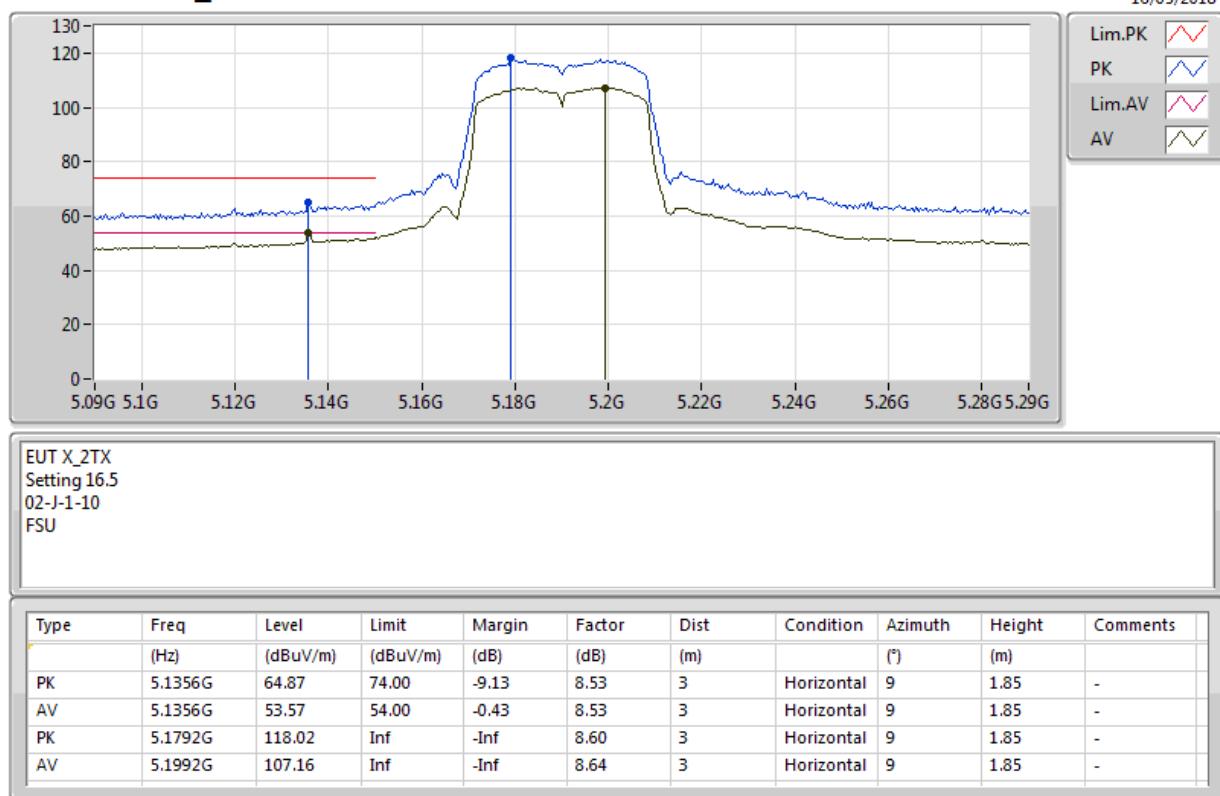
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**5825MHz\_TX**

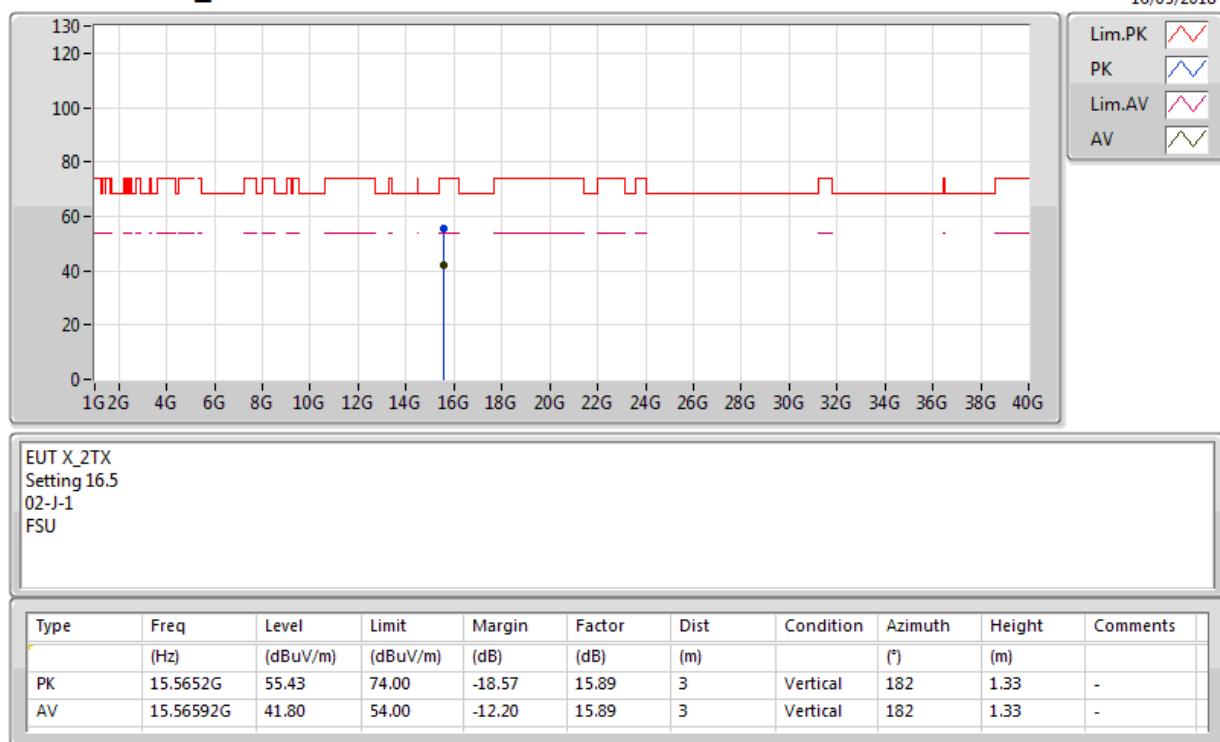

**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5825MHz\_TX**

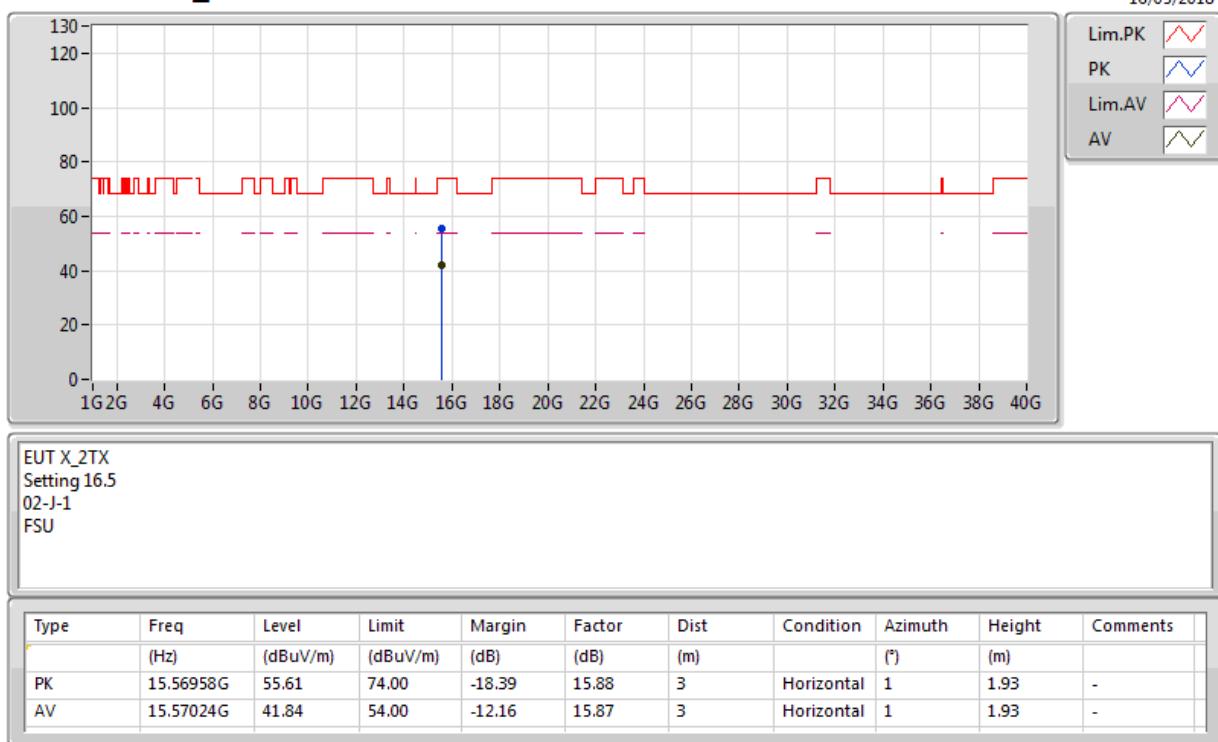
**802.11ac VHT20\_Nss1,(MCS0)\_2TX****5825MHz\_TX**

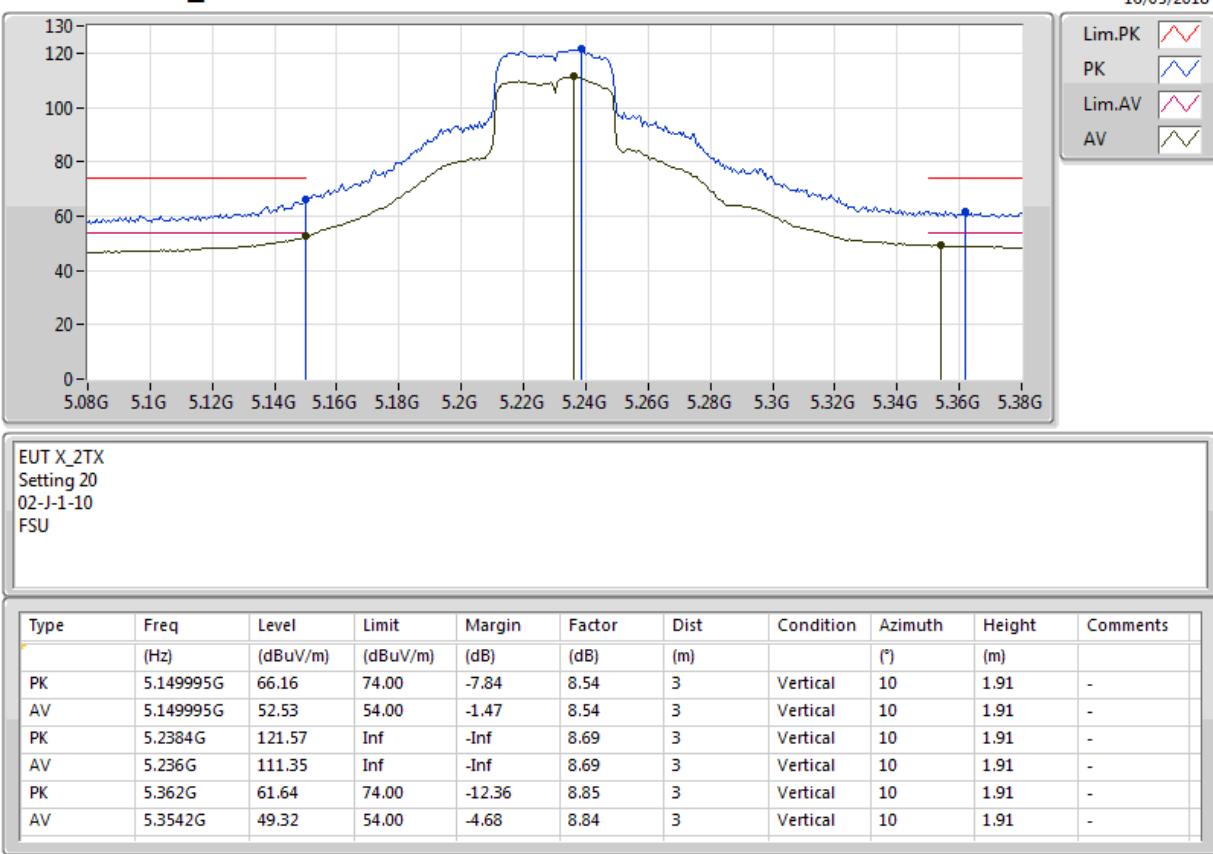
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.63704G	53.68	74.00	-20.32	14.77	3	Horizontal	65	1.61	-
AV	11.65336G	40.40	54.00	-13.60	14.79	3	Horizontal	65	1.61	-
PK	17.47242G	66.86	68.20	-1.34	21.80	3	Horizontal	234	1.97	-

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5190MHz\_TX**

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5190MHz\_TX**

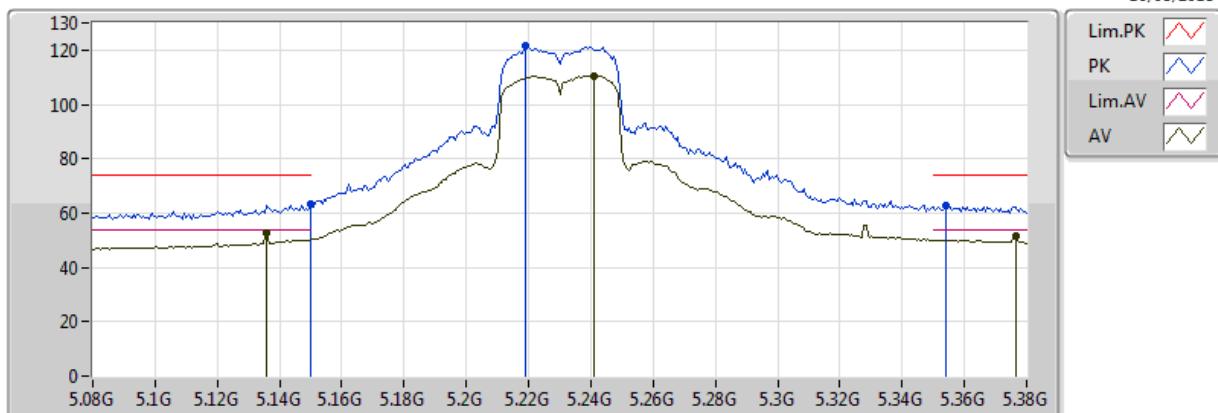
**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5190MHz\_TX**

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5190MHz\_TX**

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5230MHz\_TX**

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**5230MHz\_TX**

16/05/2018

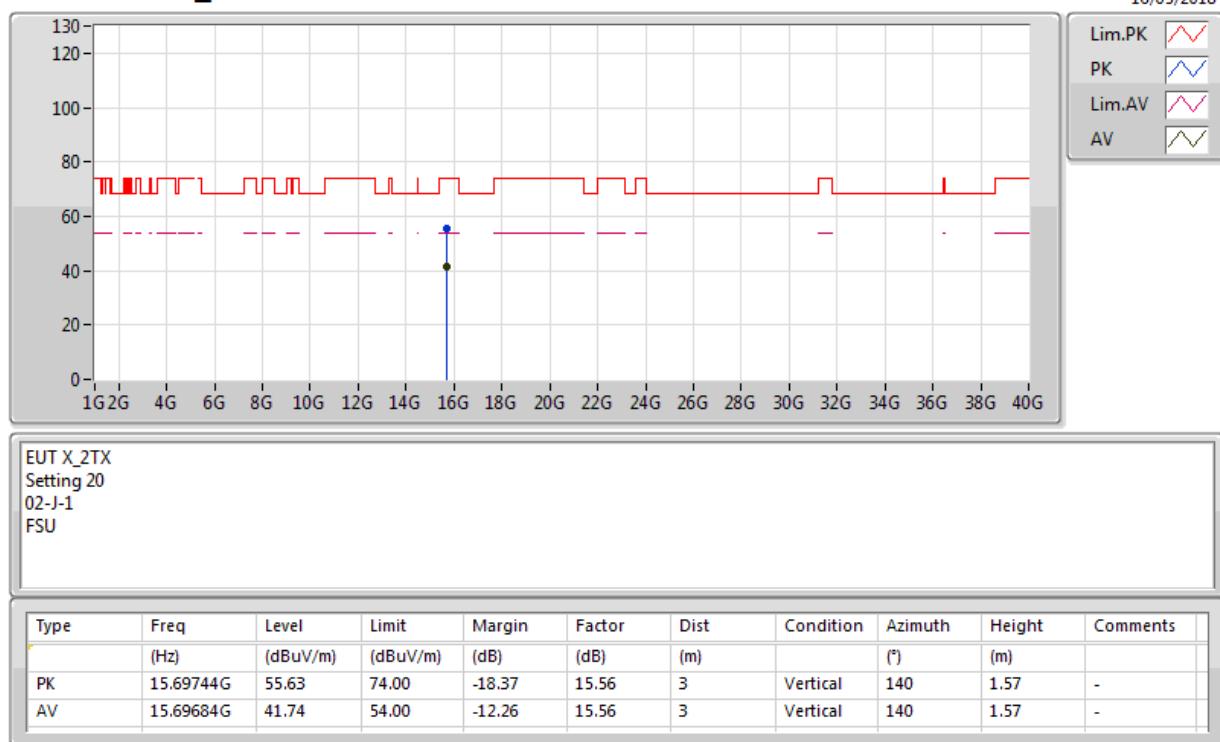


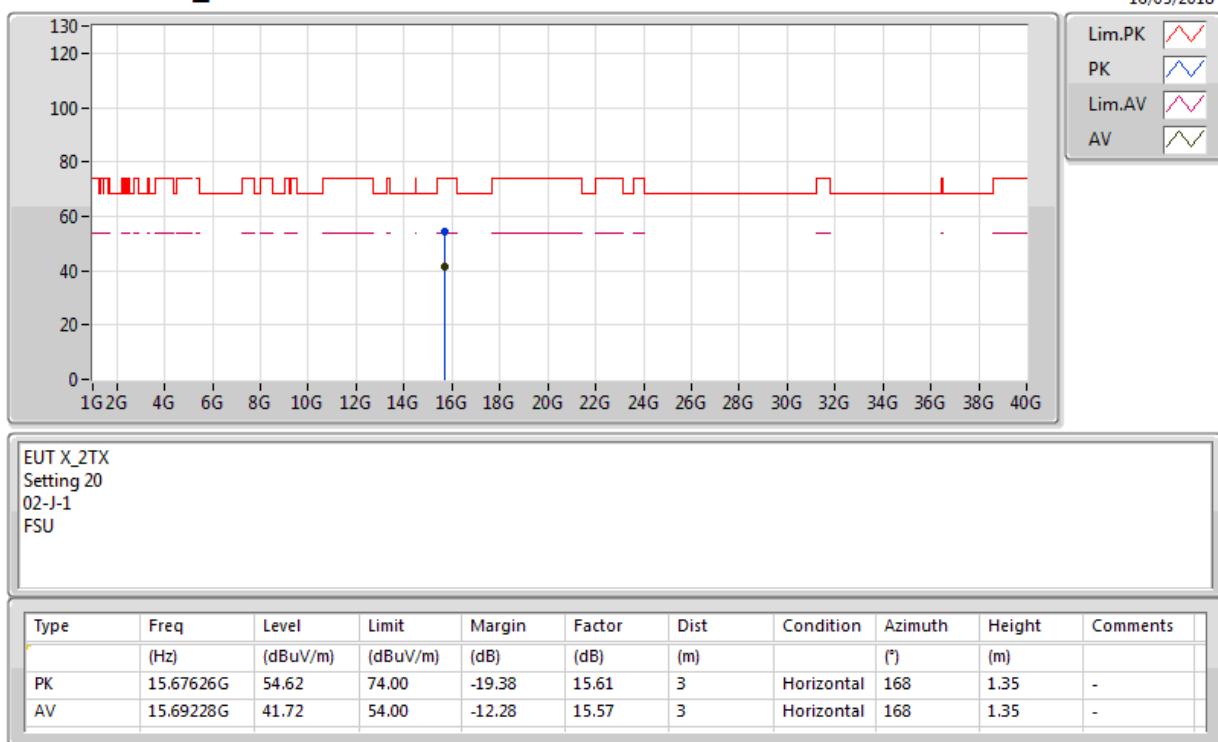
EUT X\_2TX  
Setting 20  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.149995G	63.55	74.00	-10.45	8.54	3	Horizontal	9	1.86	-
AV	5.1358G	52.48	54.00	-1.52	8.53	3	Horizontal	9	1.86	-
PK	5.2192G	121.44	Inf	-Inf	8.66	3	Horizontal	9	1.86	-
AV	5.2408G	110.66	Inf	-Inf	8.69	3	Horizontal	9	1.86	-
PK	5.3542G	62.82	74.00	-11.18	8.84	3	Horizontal	9	1.86	-
AV	5.3764G	51.53	54.00	-2.47	8.86	3	Horizontal	9	1.86	-

### **802.11ac VHT40\_Nss1,(MCS0)\_2TX**

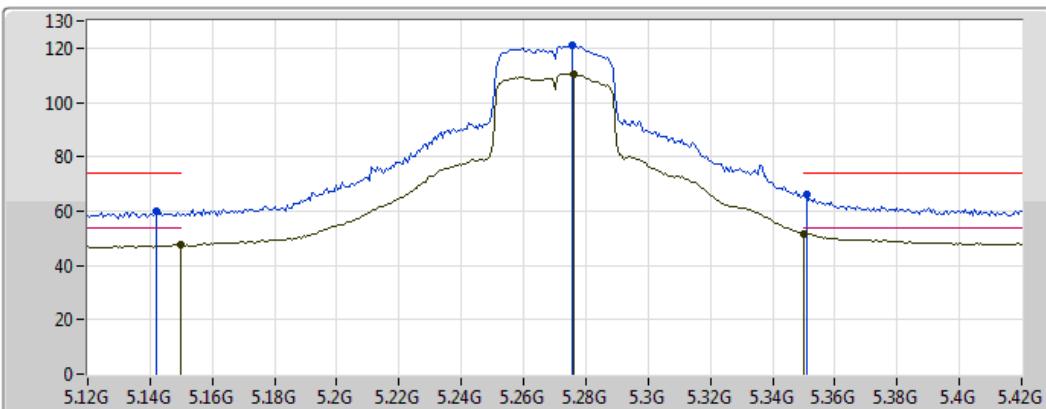
#### **5230MHz\_TX**



**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5230MHz\_TX**

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**5270MHz\_TX**

17/05/2018

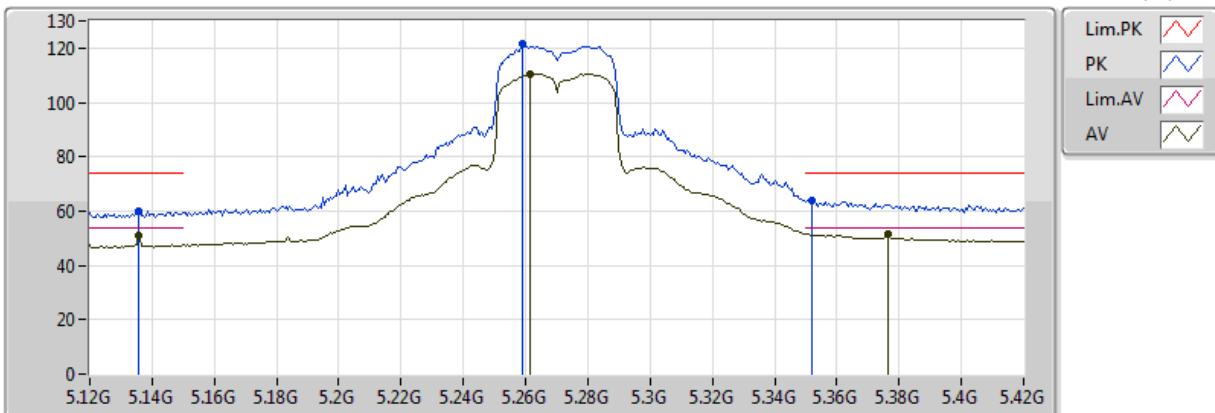


EUT X\_2TX  
 Setting 19.5  
 02-J-1-10  
 FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.1422G	59.68	74.00	-14.32	8.54	3	Vertical	13	1.85	-
AV	5.149995G	47.46	54.00	-6.54	8.54	3	Vertical	13	1.85	-
PK	5.2754G	120.79	Inf	-Inf	8.74	3	Vertical	13	1.85	-
AV	5.276G	110.62	Inf	-Inf	8.74	3	Vertical	13	1.85	-
PK	5.351G	66.24	74.00	-7.76	8.84	3	Vertical	13	1.85	-
AV	5.350005G	51.65	54.00	-2.35	8.84	3	Vertical	13	1.85	-

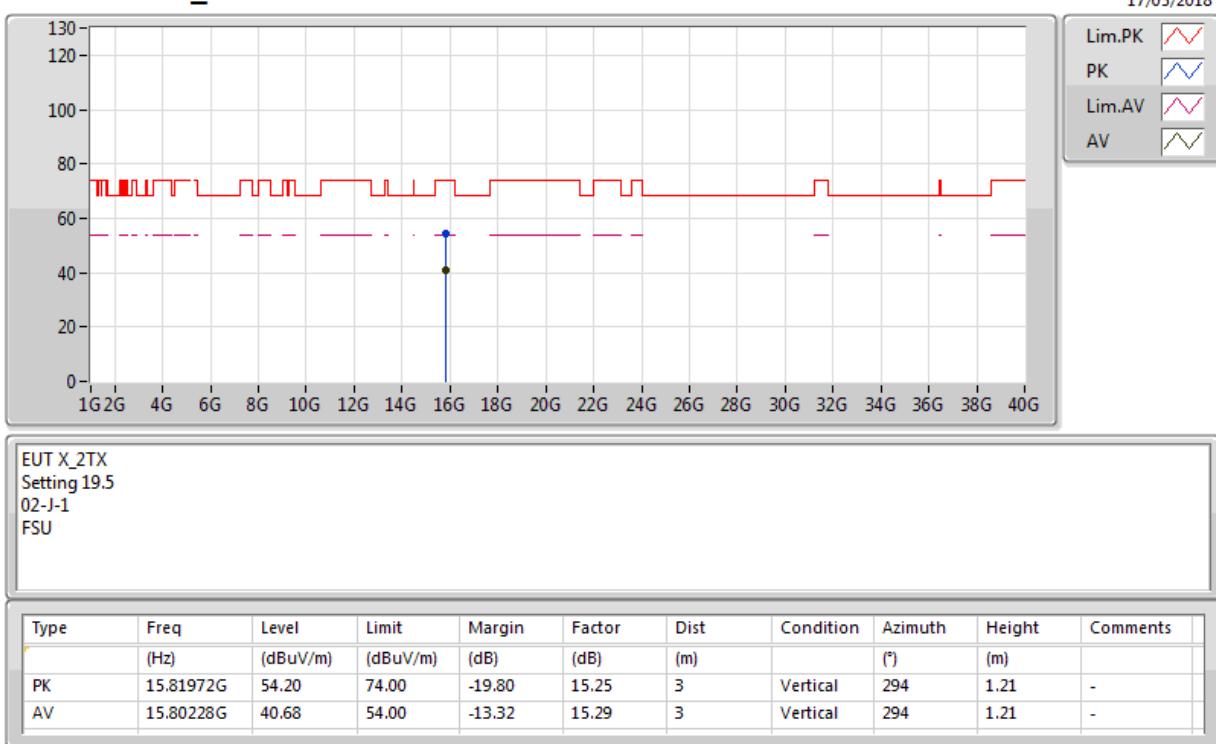
**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5270MHz\_TX**

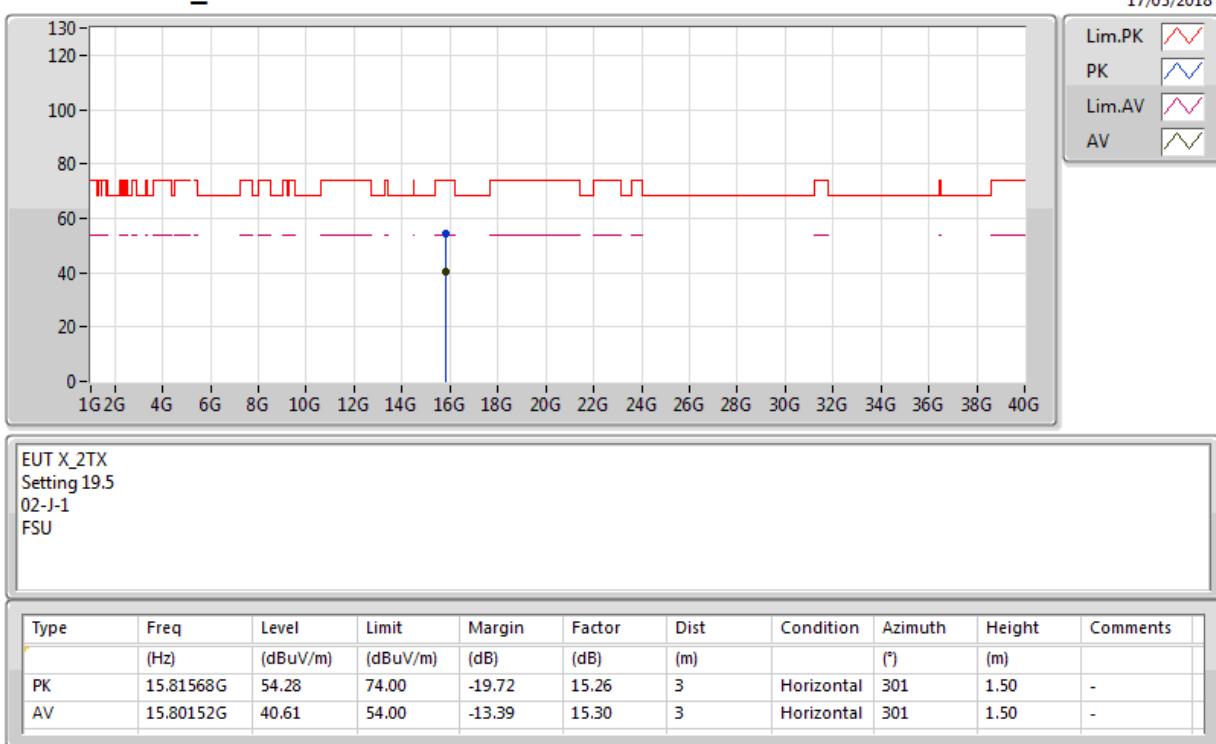
17/05/2018



EUT X\_2TX  
Setting 19.5  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.1356G	60.16	74.00	-13.84	8.53	3	Horizontal	13	1.92	-
AV	5.1356G	50.76	54.00	-3.24	8.53	3	Horizontal	13	1.92	-
PK	5.2592G	121.37	Inf	-Inf	8.72	3	Horizontal	13	1.92	-
AV	5.2616G	110.46	Inf	-Inf	8.72	3	Horizontal	13	1.92	-
PK	5.3522G	63.86	74.00	-10.14	8.84	3	Horizontal	13	1.92	-
AV	5.3762G	51.61	54.00	-2.39	8.86	3	Horizontal	13	1.92	-

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5270MHz\_TX**

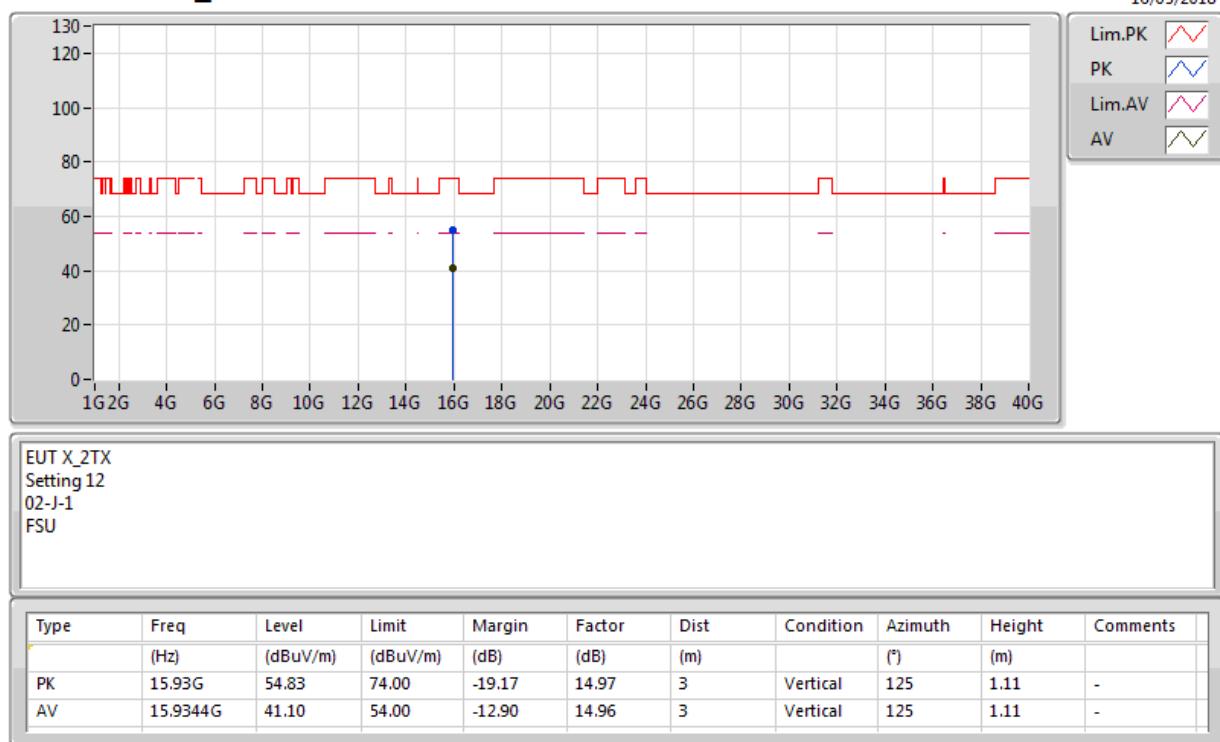
**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5270MHz\_TX**

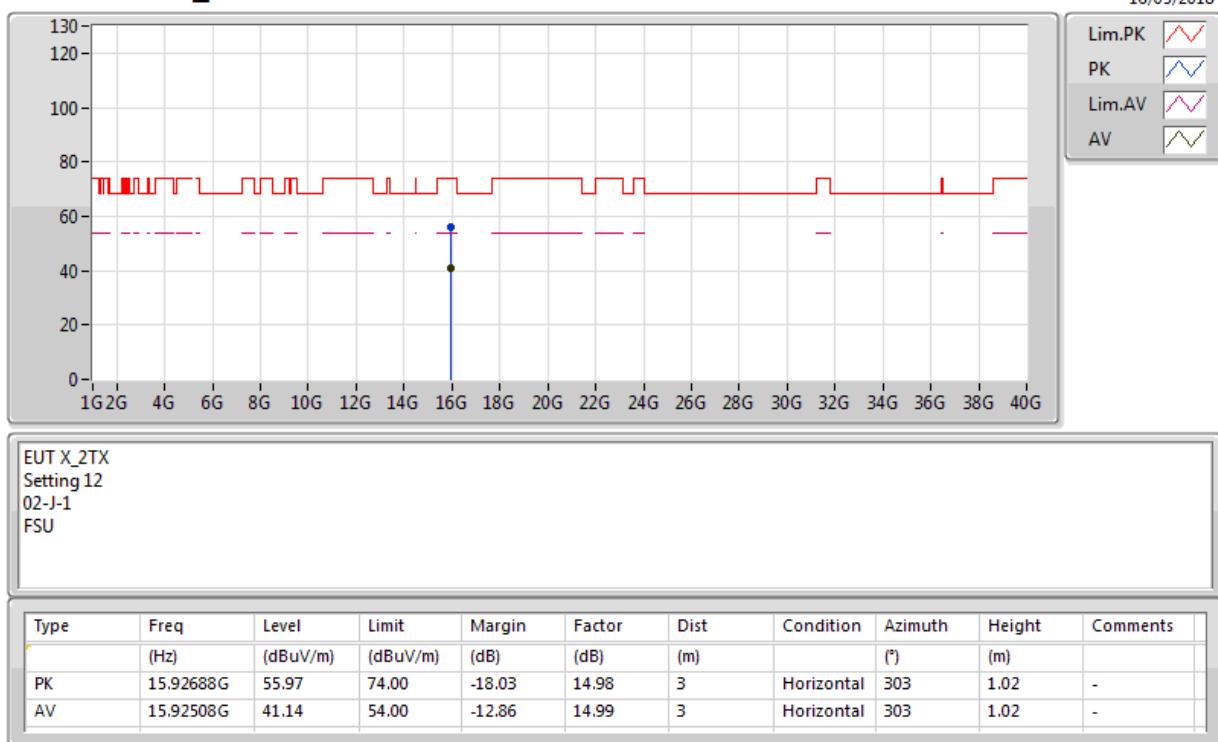
**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5310MHz\_TX**

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5310MHz\_TX**

### **802.11ac VHT40\_Nss1,(MCS0)\_2TX**

#### **5310MHz\_TX**

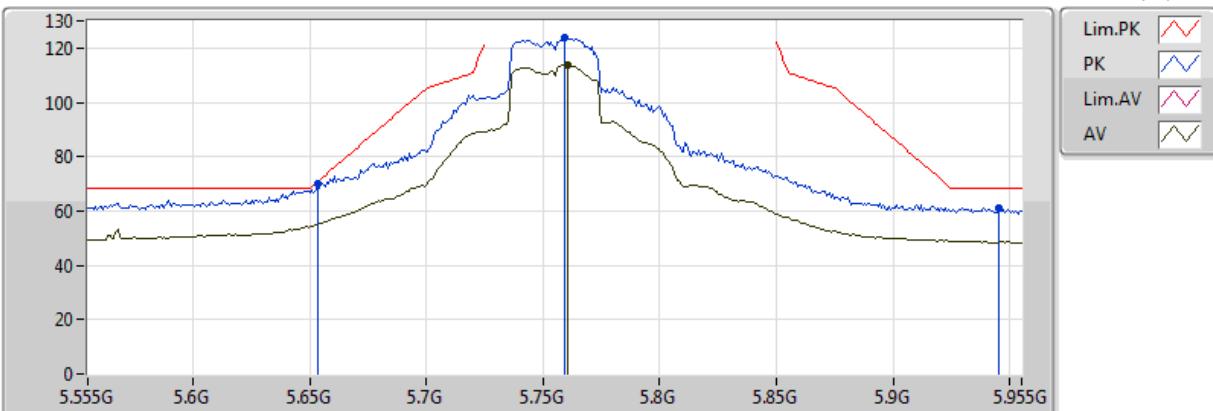


**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5310MHz\_TX**

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5755MHz\_TX**

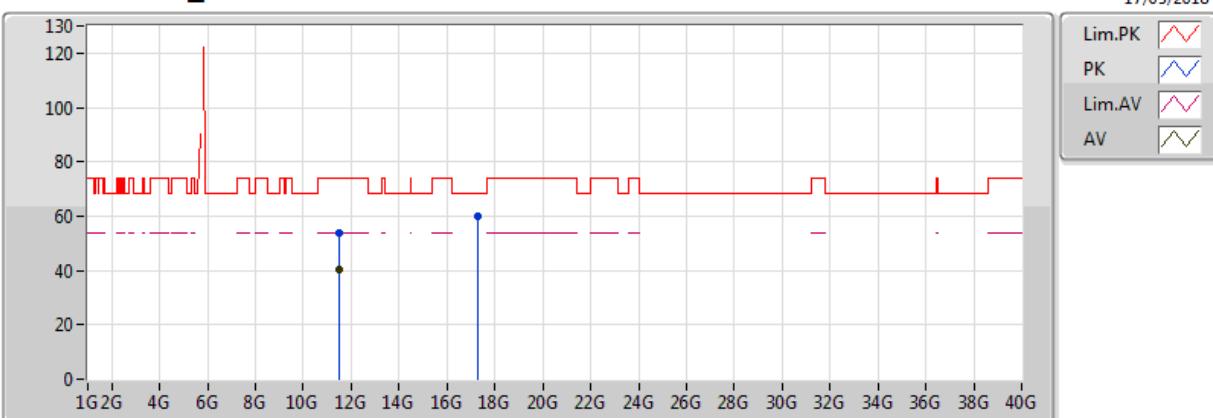
**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5755MHz\_TX**

17/05/2018



EUT X\_2TX  
Setting 20.5  
02-L-3-10  
FSU

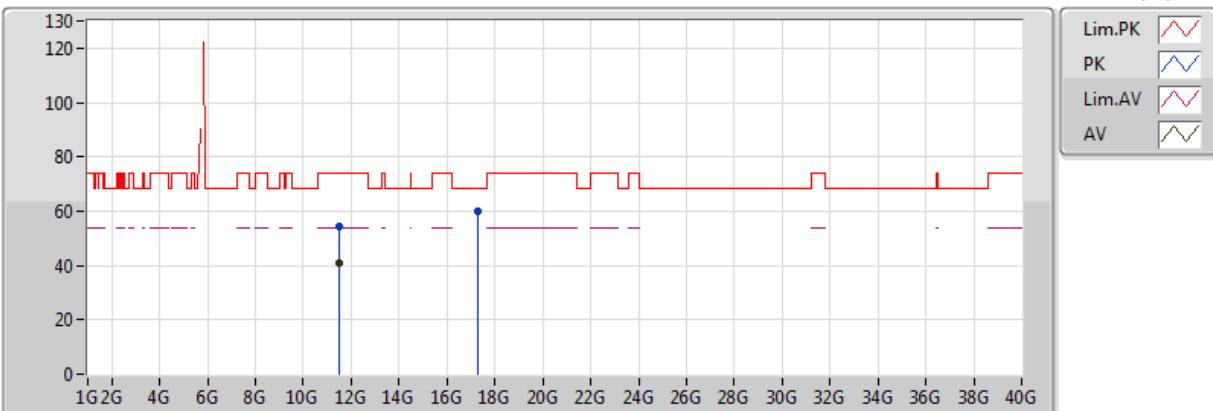
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.6534G	70.08	70.72	-0.64	9.20	3	Horizontal	360	1.54	-
PK	5.759G	123.65	Inf	-Inf	9.23	3	Horizontal	360	1.54	-
AV	5.7606G	113.72	Inf	-Inf	9.23	3	Horizontal	360	1.54	-
PK	5.9454G	61.28	68.20	-6.92	9.36	3	Horizontal	360	1.54	-

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5755MHz\_TX**

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.5124G	54.05	74.00	-19.95	14.62	3	Vertical	3	1.04	-
AV	11.52128G	40.56	54.00	-13.44	14.64	3	Vertical	3	1.04	-
PK	17.27982G	59.94	68.20	-8.26	20.67	3	Vertical	130	2.52	-

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5755MHz\_TX**

17/05/2018

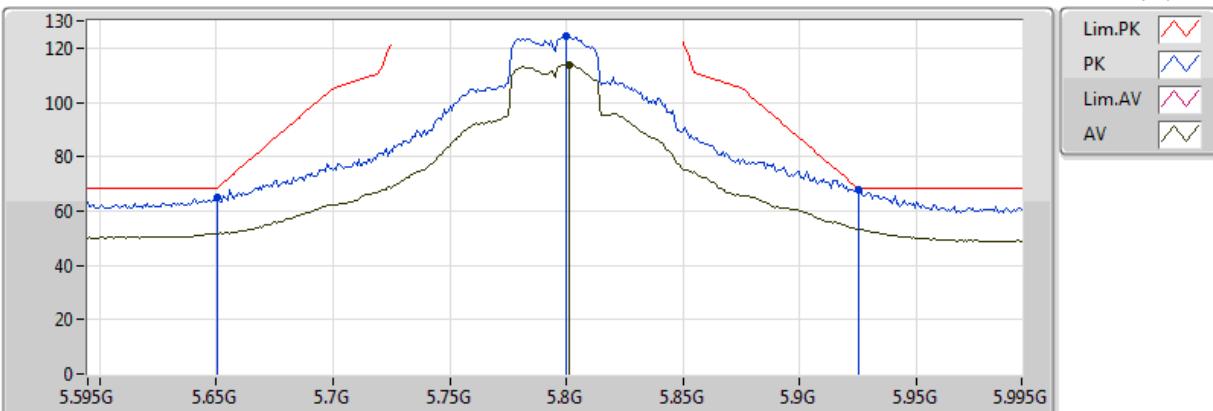


EUT X\_2TX  
Setting 20.5  
02-L-3  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.51978G	54.46	74.00	-19.54	14.63	3	Horizontal	68	1.52	-
AV	11.51816G	40.69	54.00	-13.31	14.63	3	Horizontal	68	1.52	-
PK	17.25696G	60.23	68.20	-7.97	20.53	3	Horizontal	236	1.47	-

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5795MHz\_TX**

17/05/2018

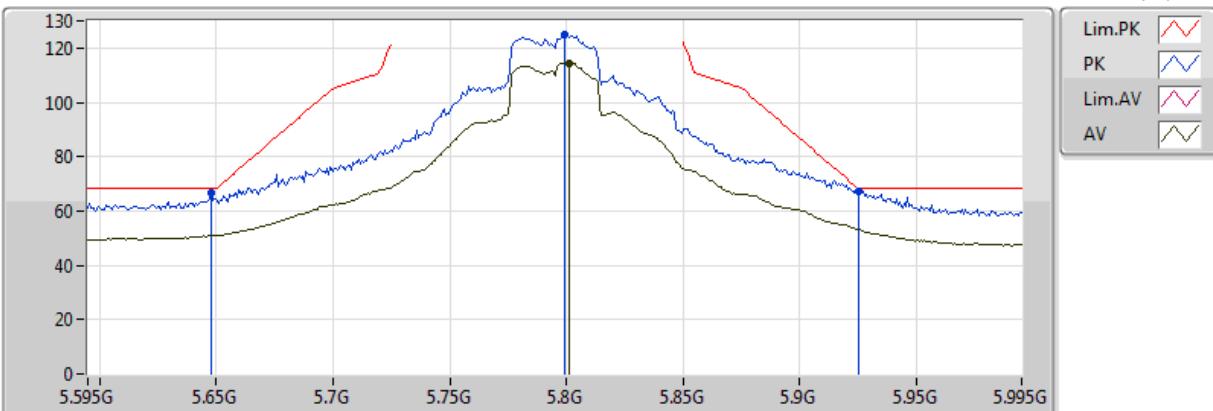


EUT X\_2TX  
Setting 21.5  
02-L-3-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.6502G	65.22	68.35	-3.13	9.20	3	Vertical	2	1.57	-
PK	5.7998G	124.39	Inf	-Inf	9.24	3	Vertical	2	1.57	-
AV	5.8014G	113.99	Inf	-Inf	9.24	3	Vertical	2	1.57	-
PK	5.9254G	67.55	68.20	-0.65	9.35	3	Vertical	2	1.57	-

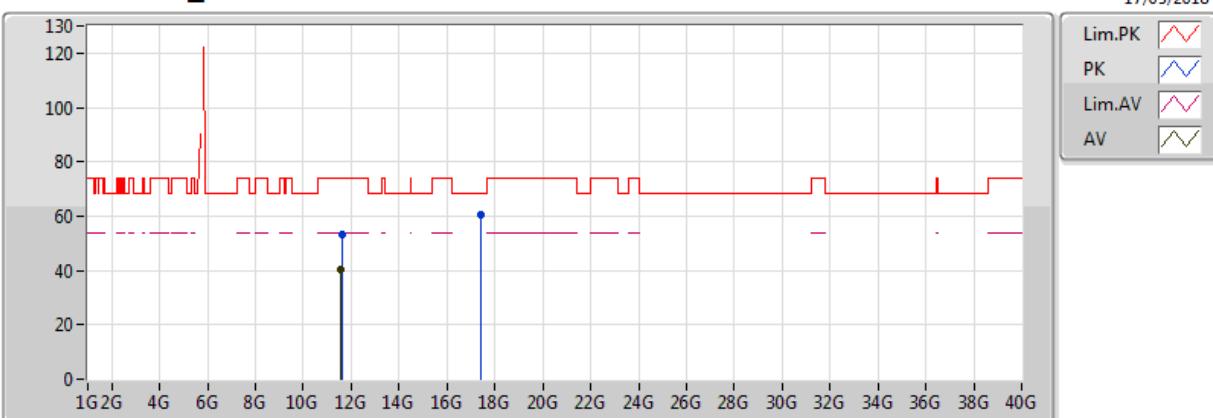
**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5795MHz\_TX**

17/05/2018



EUT X\_2TX  
Setting 21.5  
02-L-3-10  
FSU

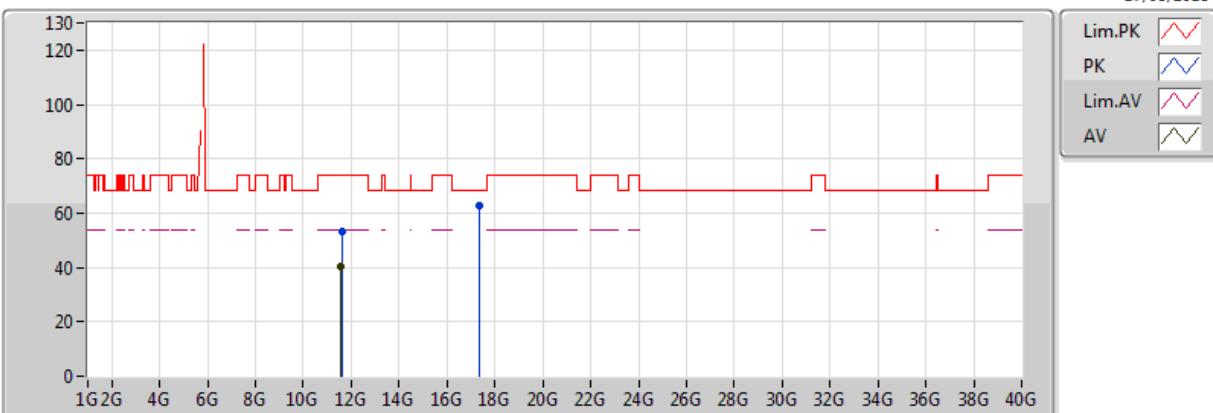
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.6478G	66.51	68.20	-1.69	9.20	3	Horizontal	1	1.50	-
PK	5.799G	124.84	Inf	-Inf	9.24	3	Horizontal	1	1.50	-
AV	5.8014G	114.58	Inf	-Inf	9.24	3	Horizontal	1	1.50	-
PK	5.925006G	67.51	68.20	-0.69	9.35	3	Horizontal	1	1.50	-

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5795MHz\_TX**

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.5996G	53.34	74.00	-20.66	14.73	3	Vertical	359	1.23	-
AV	11.58502G	40.25	54.00	-13.75	14.71	3	Vertical	359	1.23	-
PK	17.38554G	60.53	68.20	-7.67	21.29	3	Vertical	129	1.48	-

**802.11ac VHT40\_Nss1,(MCS0)\_2TX****5795MHz\_TX**

17/05/2018

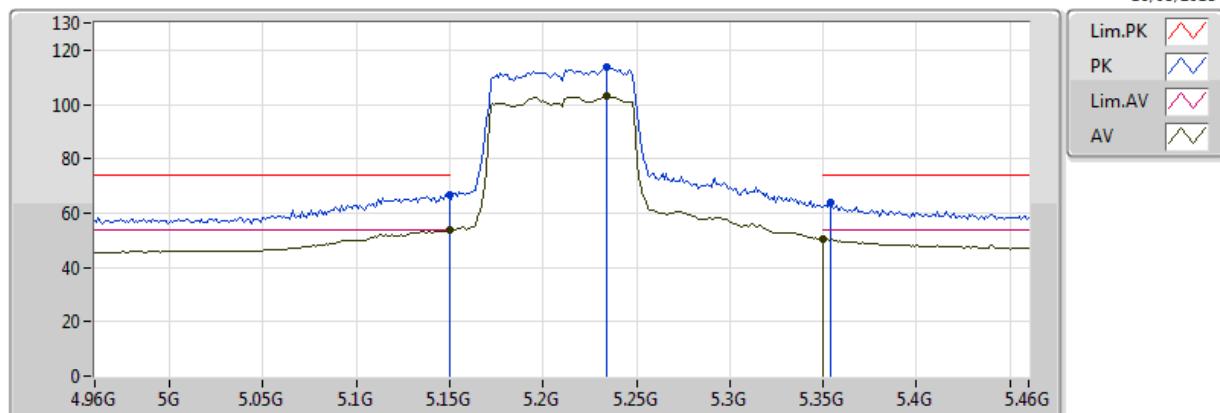


EUT X\_2TX  
Setting 21.5  
02-L-3  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.60362G	53.16	74.00	-20.84	14.73	3	Horizontal	99	1.51	-
AV	11.58028G	40.14	54.00	-13.86	14.70	3	Horizontal	99	1.51	-
PK	17.38248G	62.56	68.20	-5.64	21.27	3	Horizontal	233	1.50	-

**802.11ac VHT80\_Nss1,(MCS0)\_2TX****5210MHz\_TX**

16/05/2018

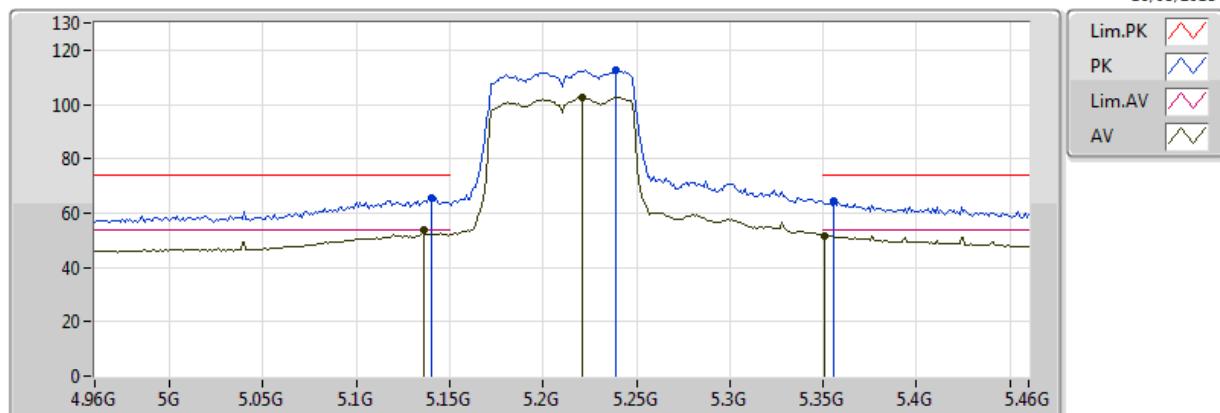


EUT X\_2TX  
Setting 15.5  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.149995G	66.88	74.00	-7.12	8.54	3	Vertical	13	1.88	-
AV	5.149995G	53.65	54.00	-0.35	8.54	3	Vertical	13	1.88	-
PK	5.234G	113.62	Inf	-Inf	8.68	3	Vertical	13	1.88	-
AV	5.234G	102.96	Inf	-Inf	8.68	3	Vertical	13	1.88	-
PK	5.354G	63.99	74.00	-10.01	8.84	3	Vertical	13	1.88	-
AV	5.350005G	50.45	54.00	-3.55	8.84	3	Vertical	13	1.88	-

**802.11ac VHT80\_Nss1,(MCS0)\_2TX****5210MHz\_TX**

16/05/2018

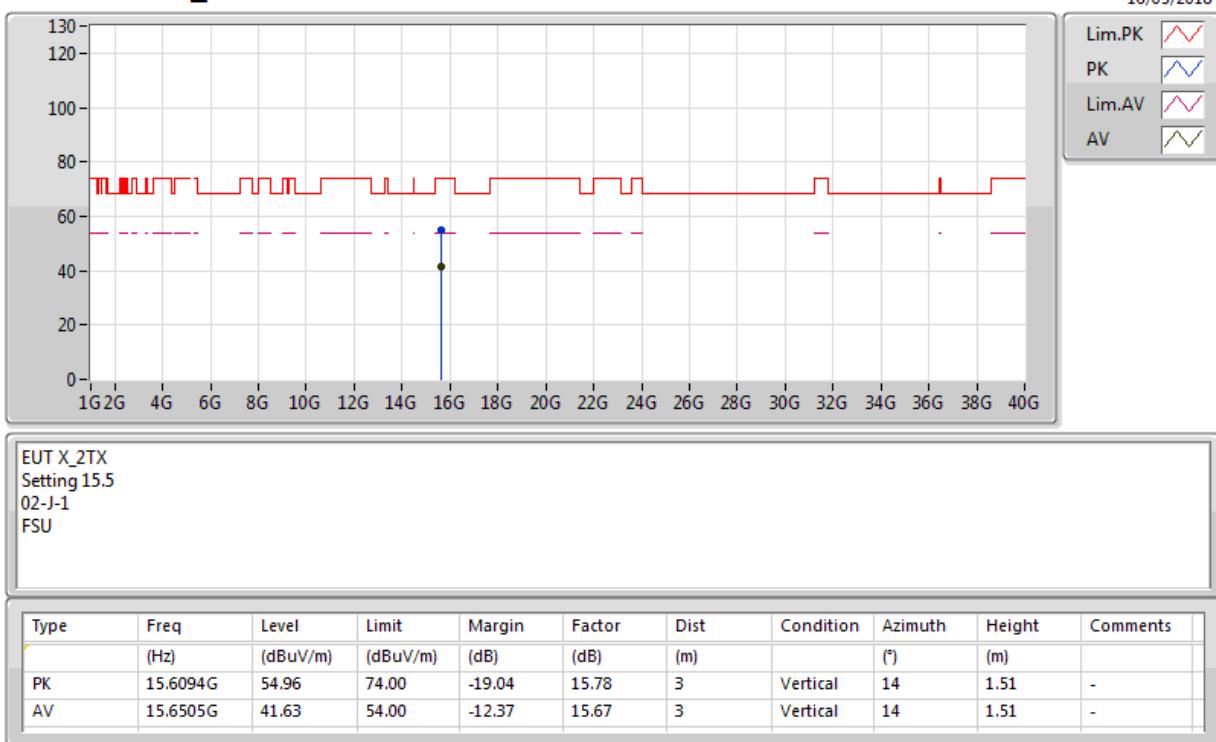


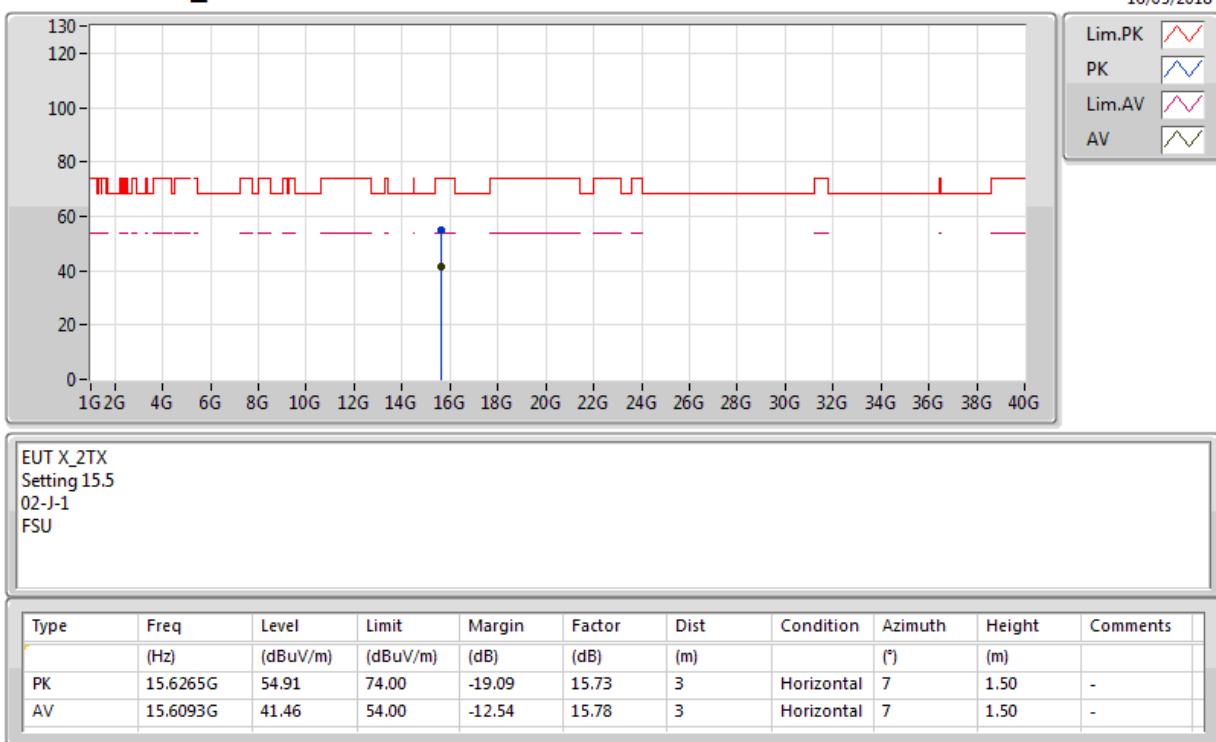
EUT X\_2TX  
Setting 15.5  
02-J-1-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.14G	65.52	74.00	-8.48	8.53	3	Horizontal	13	1.86	-
AV	5.136G	53.97	54.00	-0.03	8.53	3	Horizontal	13	1.86	-
PK	5.239G	112.78	Inf	-Inf	8.69	3	Horizontal	13	1.86	-
AV	5.221G	102.72	Inf	-Inf	8.67	3	Horizontal	13	1.86	-
PK	5.356G	64.34	74.00	-9.66	8.84	3	Horizontal	13	1.86	-
AV	5.351G	51.79	54.00	-2.21	8.84	3	Horizontal	13	1.86	-

### **802.11ac VHT80\_Nss1,(MCS0)\_2TX**

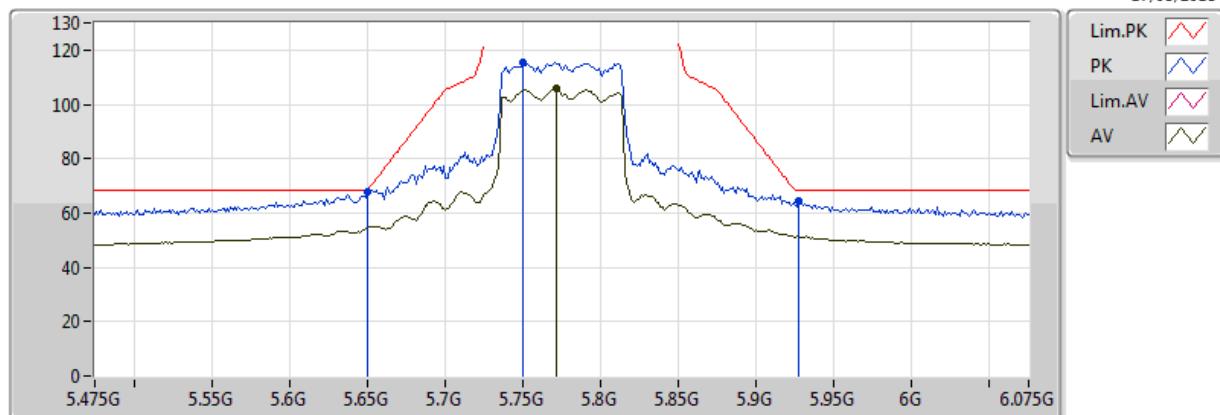
#### **5210MHz\_TX**



**802.11ac VHT80\_Nss1,(MCS0)\_2TX****5210MHz\_TX**

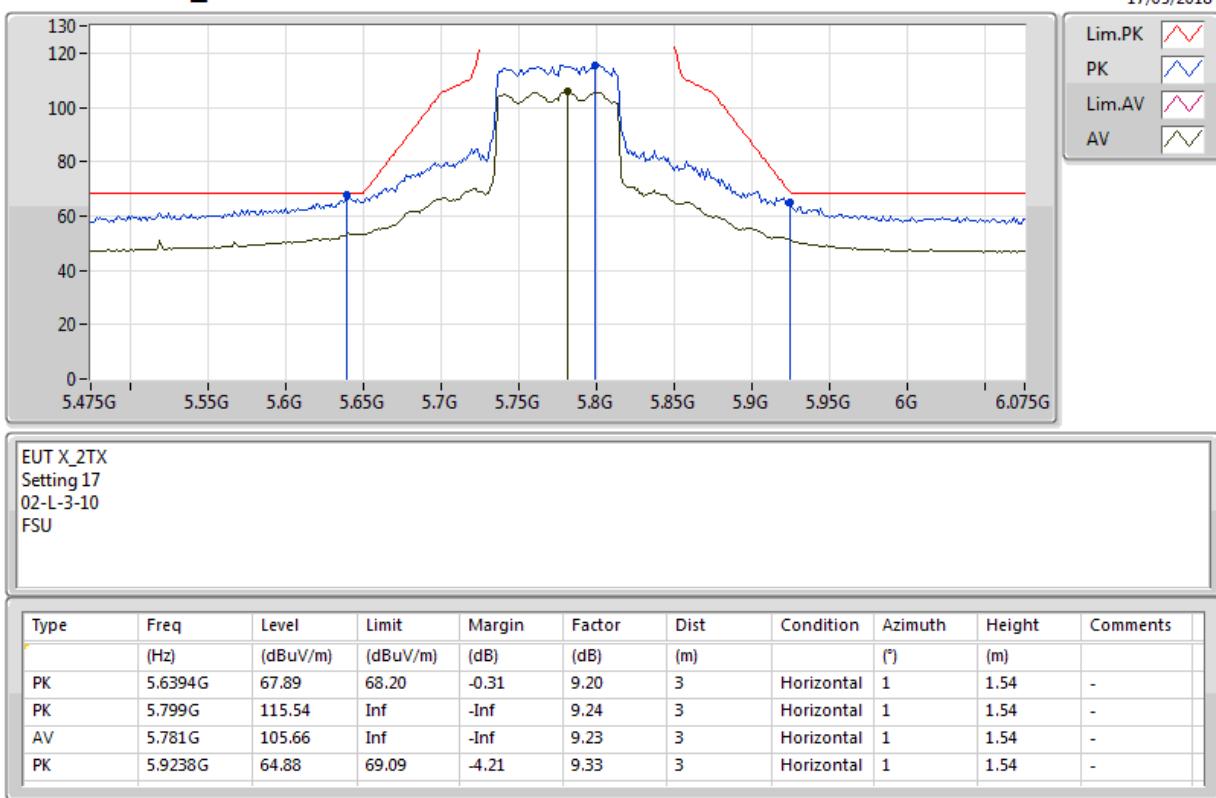
**802.11ac VHT80\_Nss1,(MCS0)\_2TX****5775MHz\_TX**

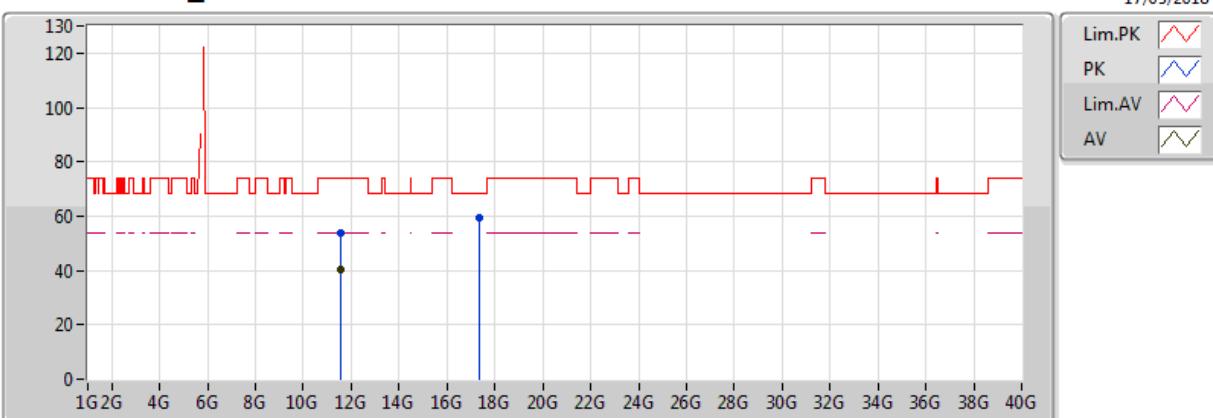
17/05/2018



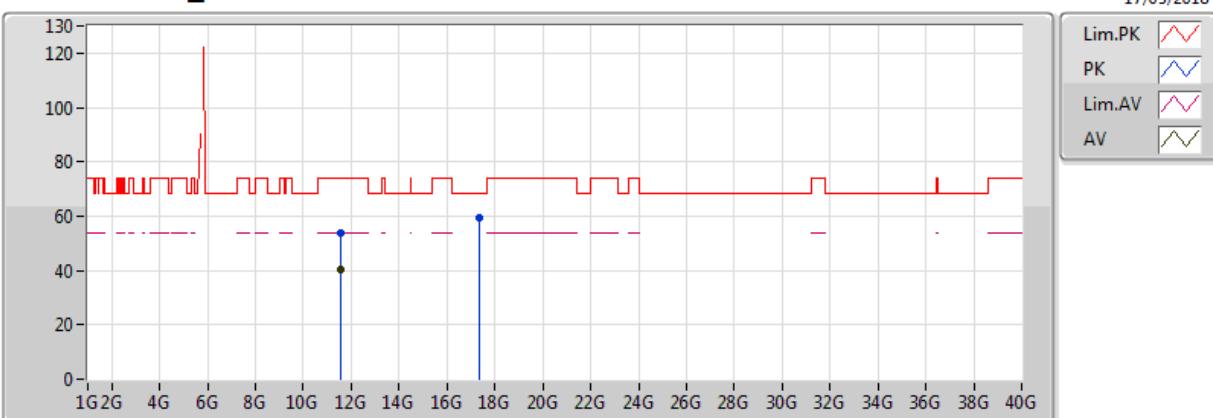
EUT X\_2TX  
Setting 17  
02-L-3-10  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.6502G	67.73	68.35	-0.62	9.20	3	Vertical	1	1.57	-
PK	5.7498G	115.67	Inf	-Inf	9.22	3	Vertical	1	1.57	-
AV	5.7714G	105.79	Inf	-Inf	9.23	3	Vertical	1	1.57	-
PK	5.9274G	64.34	68.20	-3.86	9.35	3	Vertical	1	1.57	-

**802.11ac VHT80\_Nss1,(MCS0)\_2TX****5775MHz\_TX**

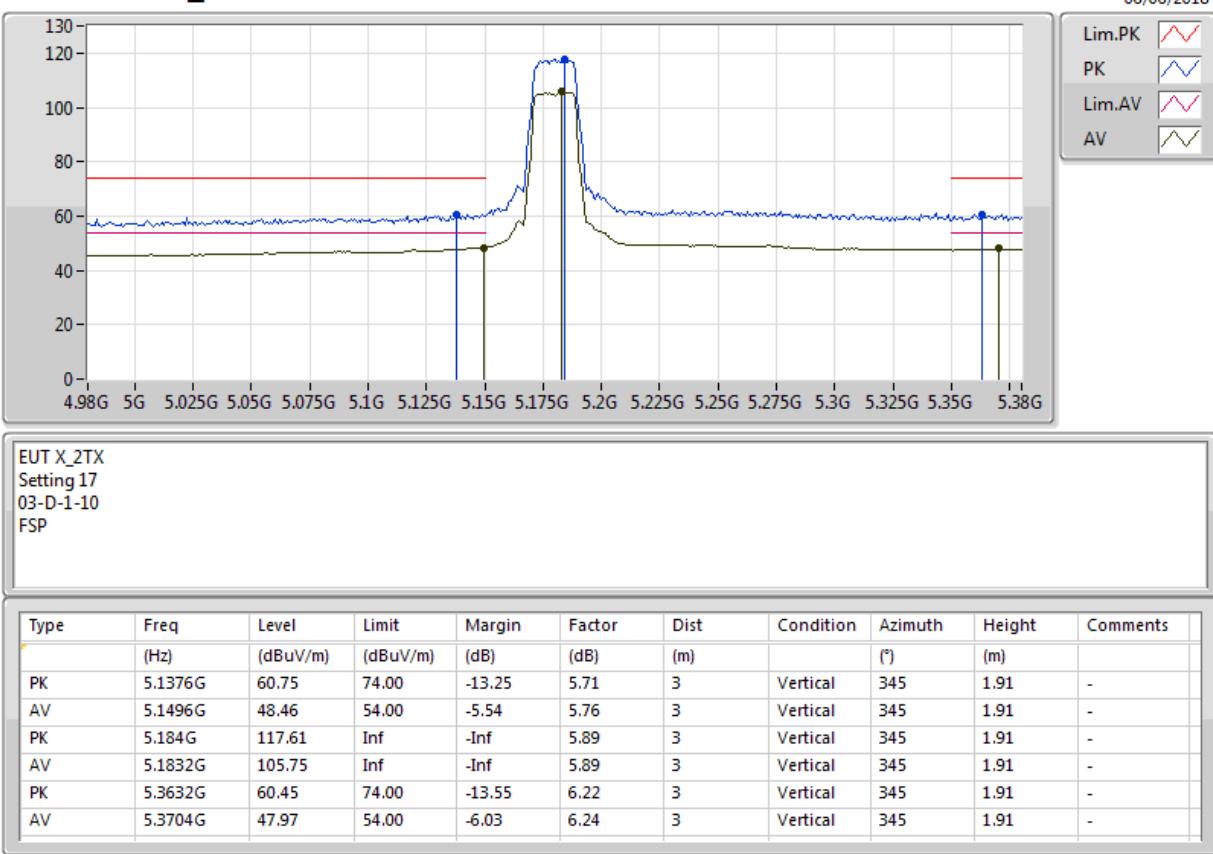
**802.11ac VHT80\_Nss1,(MCS0)\_2TX****5775MHz\_TX**

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.54994G	53.67	74.00	-20.33	14.67	3	Vertical	96	1.50	-
AV	11.53998G	40.44	54.00	-13.56	14.66	3	Vertical	96	1.50	-
PK	17.33178G	59.44	68.20	-8.76	20.97	3	Vertical	93	1.36	-

**802.11ac VHT80\_Nss1,(MCS0)\_2TX****5775MHz\_TX**

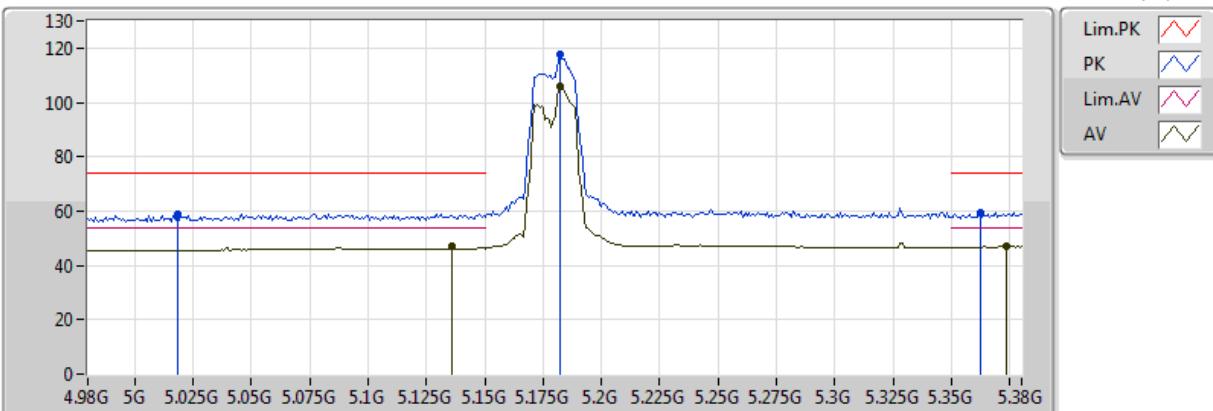
EUT X\_2TX  
Setting 17  
02-L-3  
FSU

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	11.5626G	53.79	74.00	-20.21	14.68	3	Horizontal	310	1.37	-
AV	11.5524G	40.57	54.00	-13.43	14.67	3	Horizontal	310	1.37	-
PK	17.33874G	59.34	68.20	-8.86	21.01	3	Horizontal	29	1.50	-

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5180MHz\_TX**

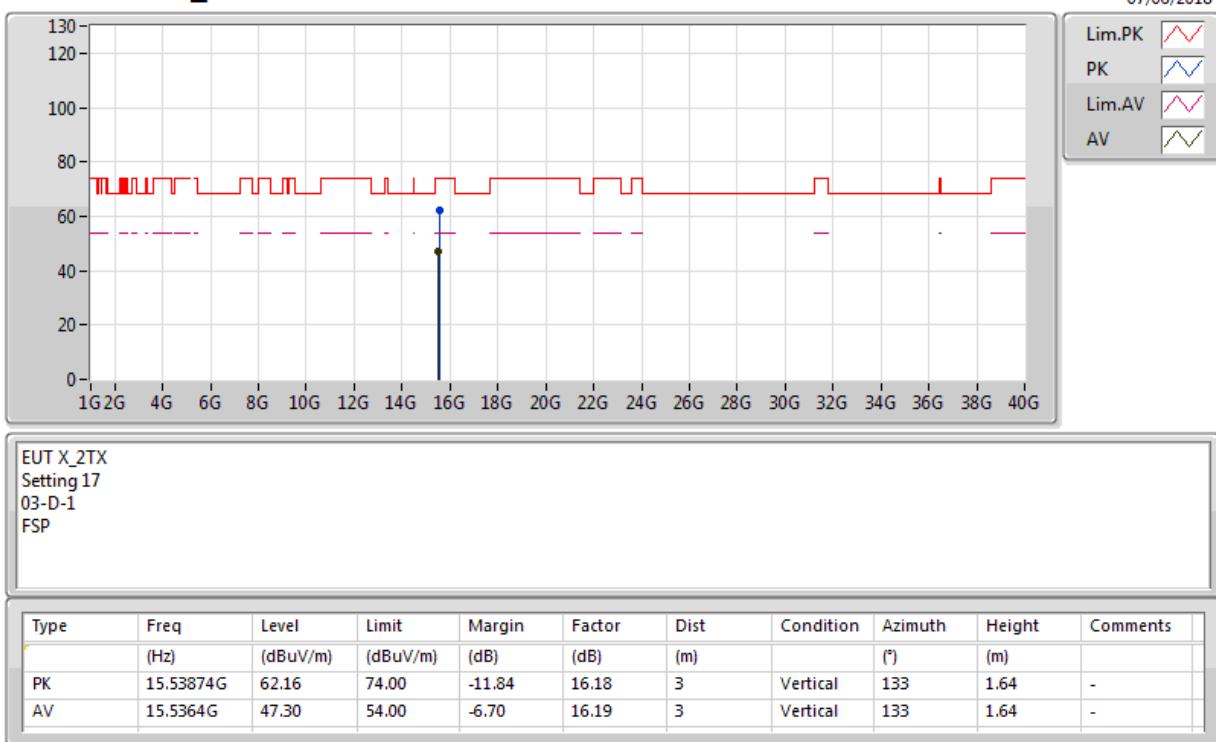
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5180MHz\_TX**

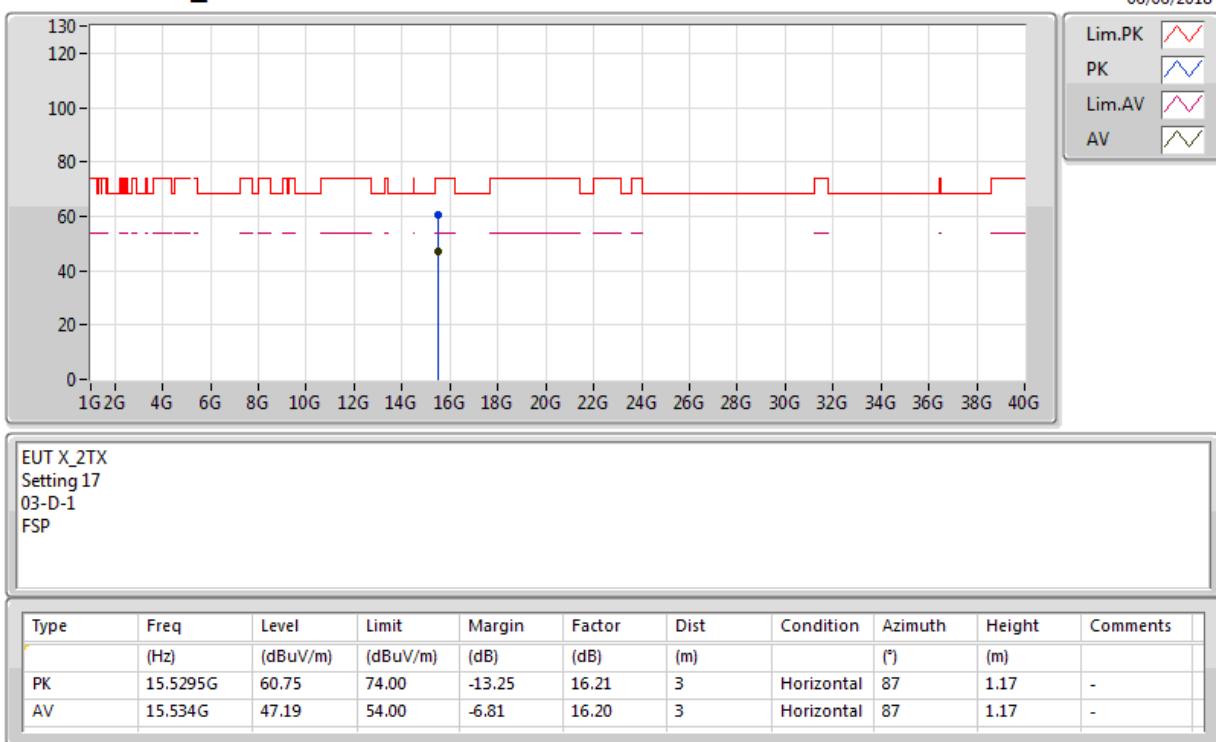
06/06/2018

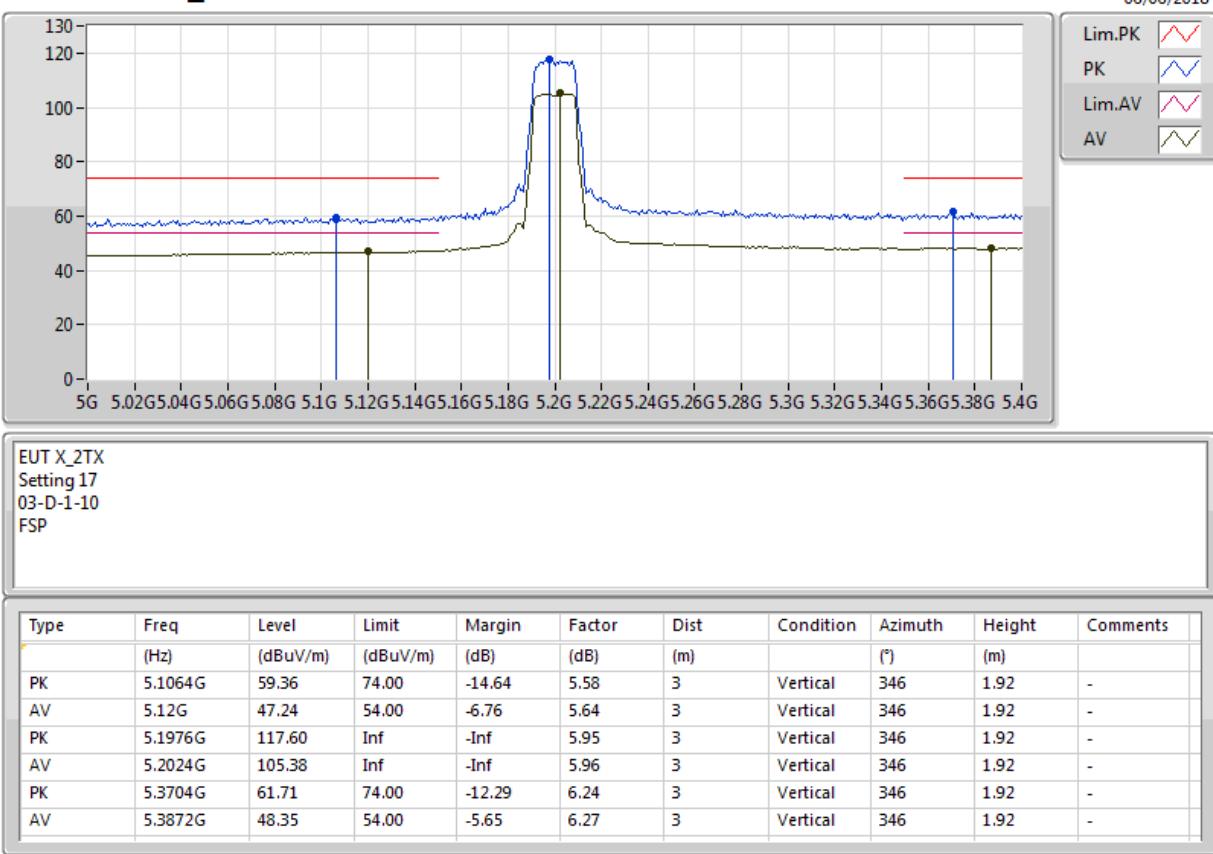


EUT X\_2TX  
Setting 17  
03-D-1-10  
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.0184G	58.85	74.00	-15.15	5.17	3	Horizontal	336	1.88	-
AV	5.136G	47.18	54.00	-6.82	5.70	3	Horizontal	336	1.88	-
PK	5.1824G	117.44	Inf	-Inf	5.89	3	Horizontal	336	1.88	-
AV	5.1824G	106.14	Inf	-Inf	5.89	3	Horizontal	336	1.88	-
PK	5.3624G	59.43	74.00	-14.57	6.22	3	Horizontal	336	1.88	-
AV	5.3736G	47.14	54.00	-6.86	6.24	3	Horizontal	336	1.88	-

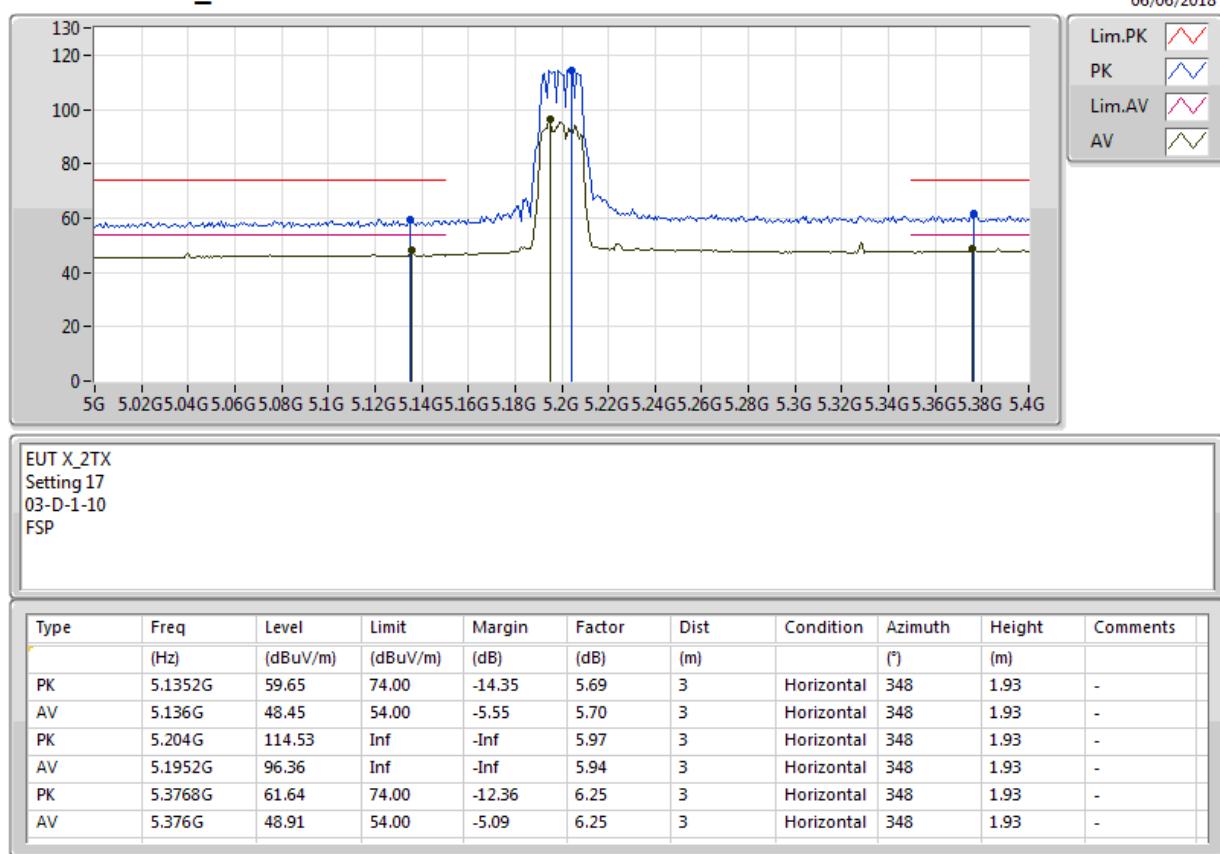
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5180MHz\_TX**

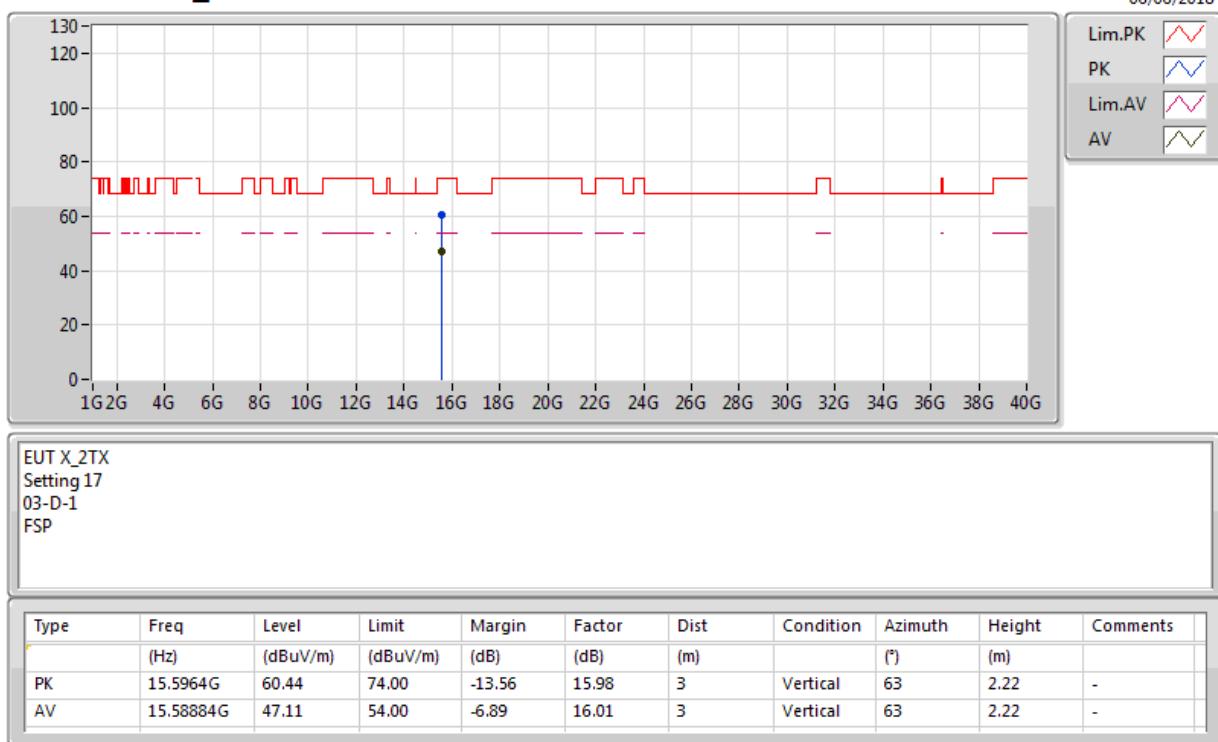
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5180MHz\_TX**

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5200MHz\_TX**

### **802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

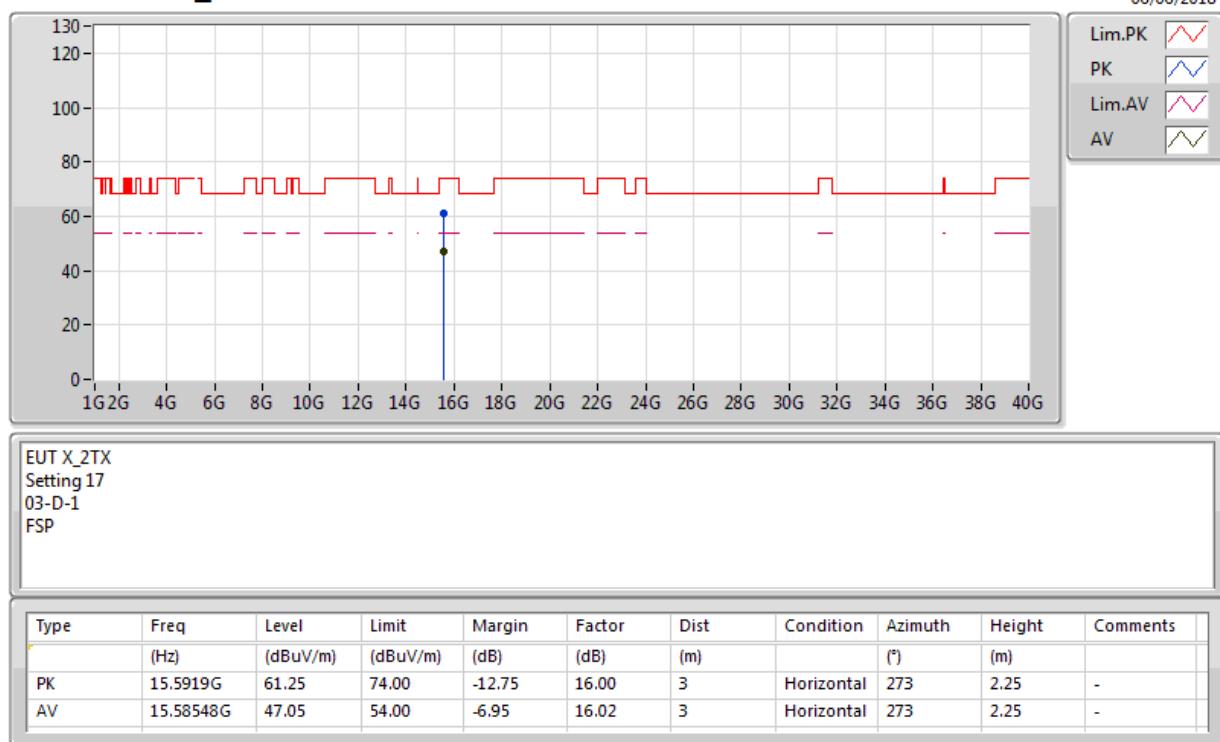
#### **5200MHz\_TX**

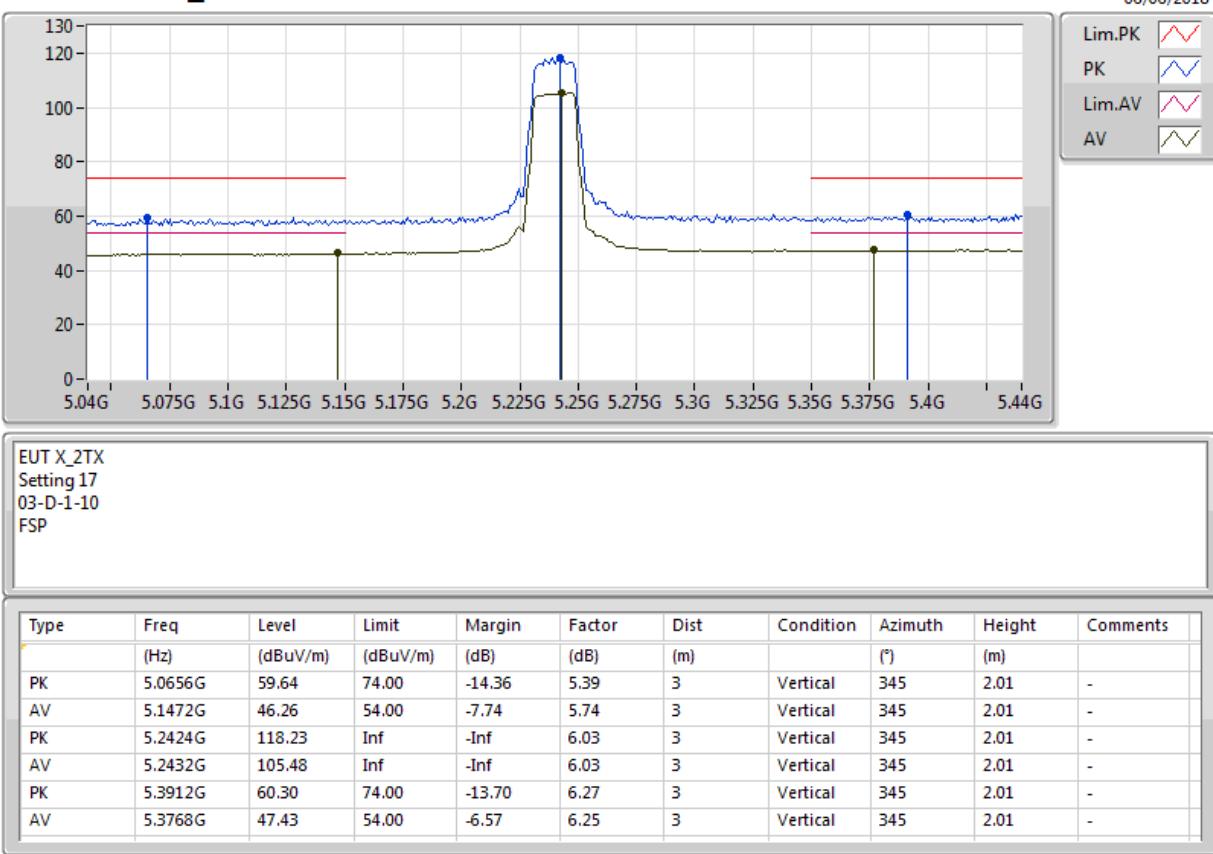


**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5200MHz\_TX**

### **802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

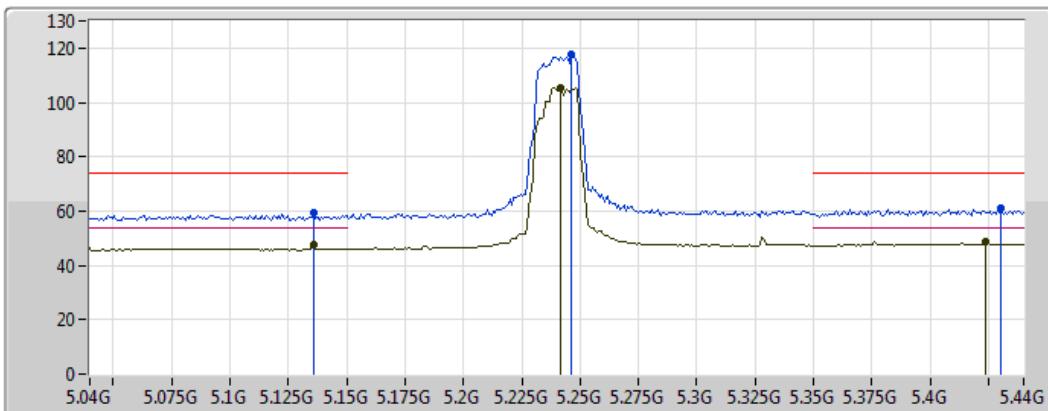
#### **5200MHz\_TX**



**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5240MHz\_TX**

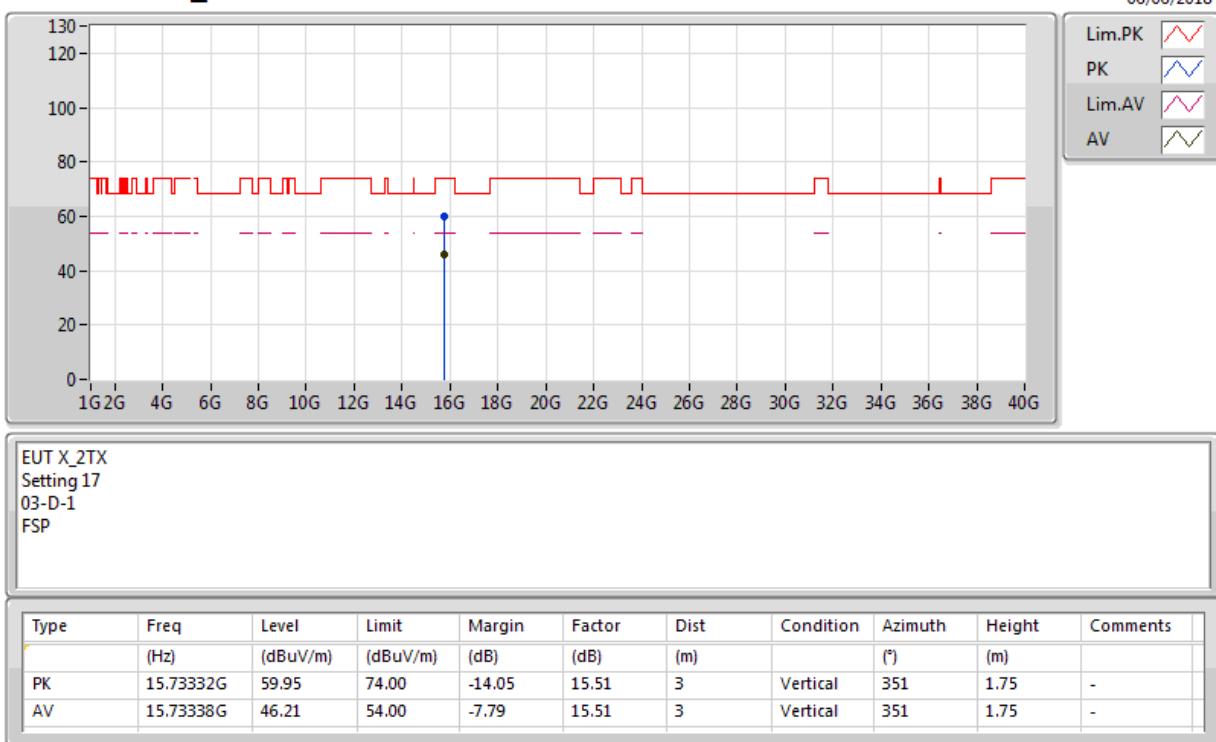
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5240MHz\_TX**

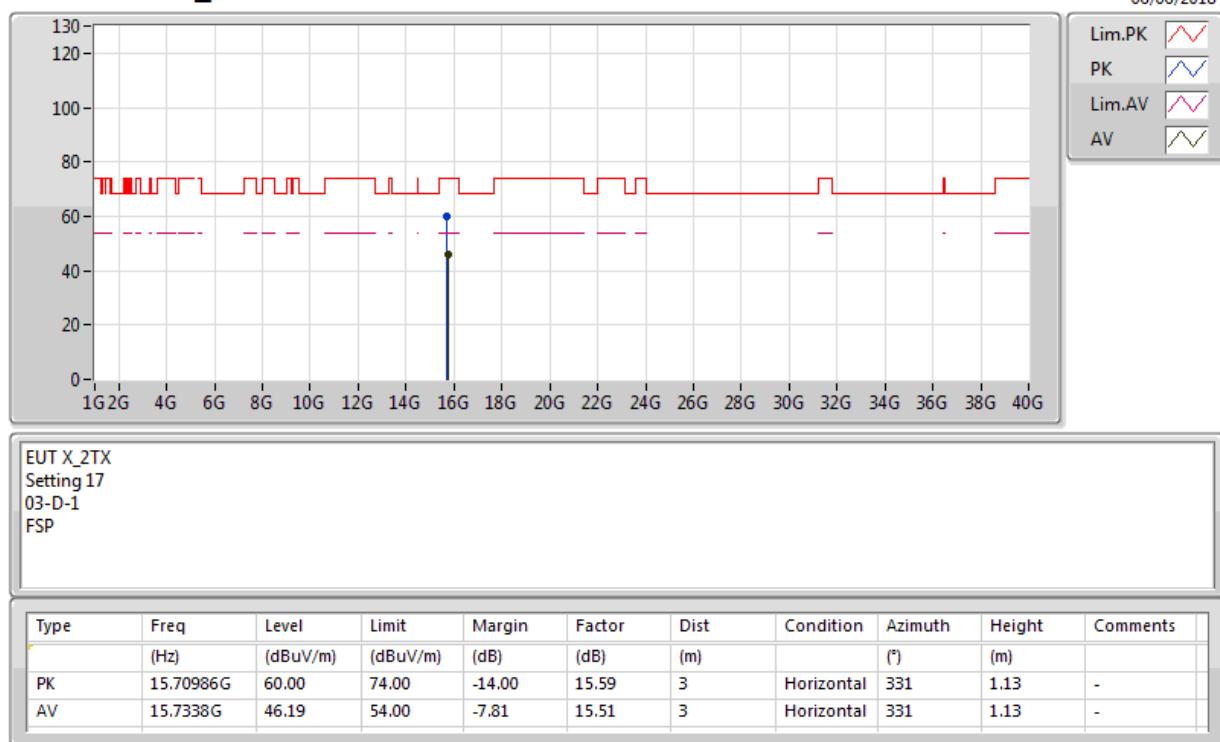
06/06/2018

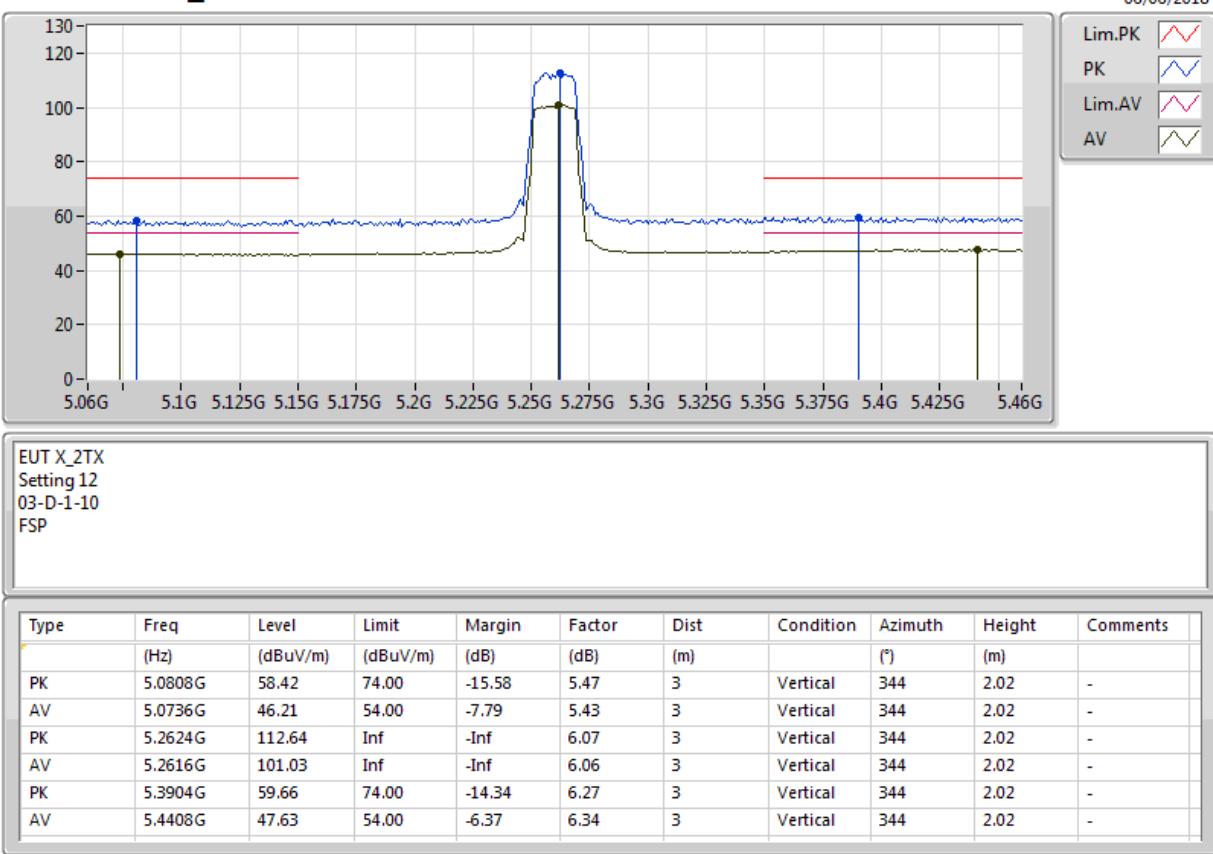


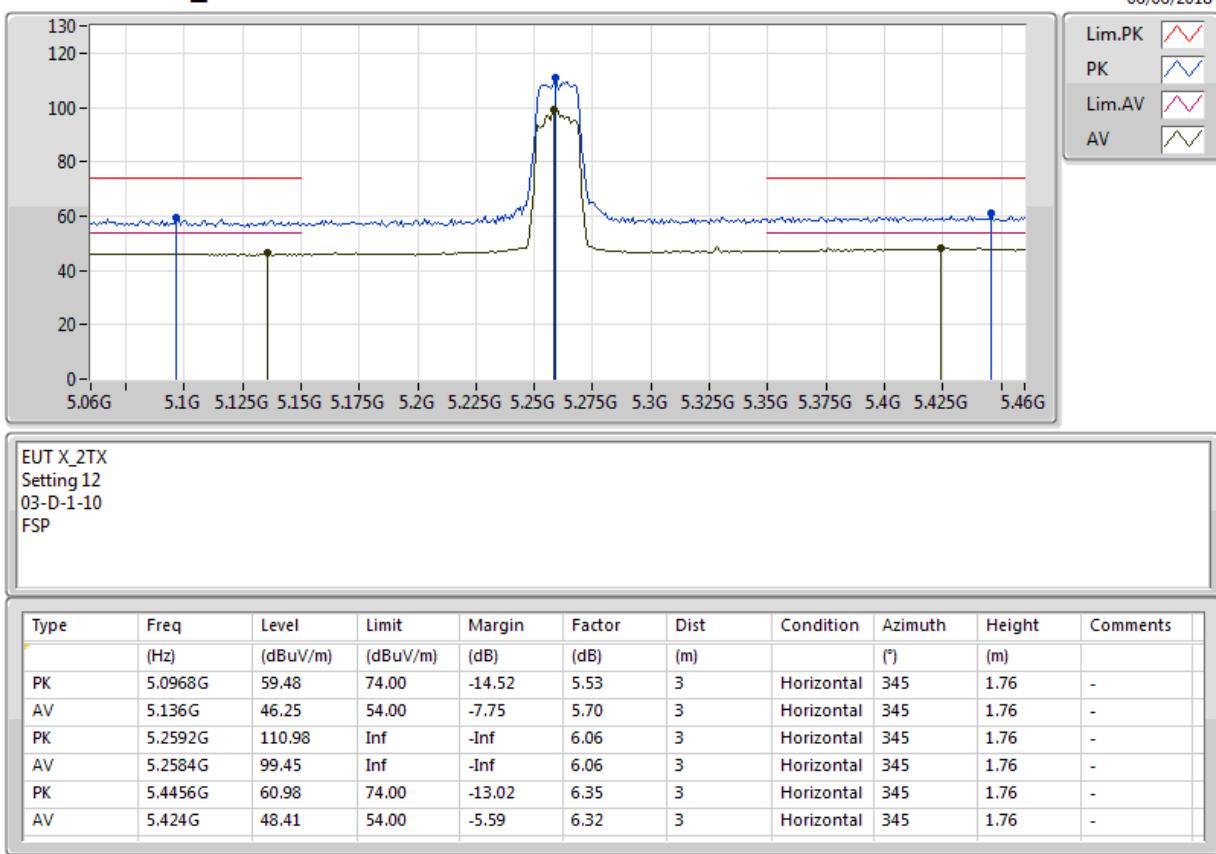
EUT X\_2TX  
Setting 17  
03-D-1-10  
FSP

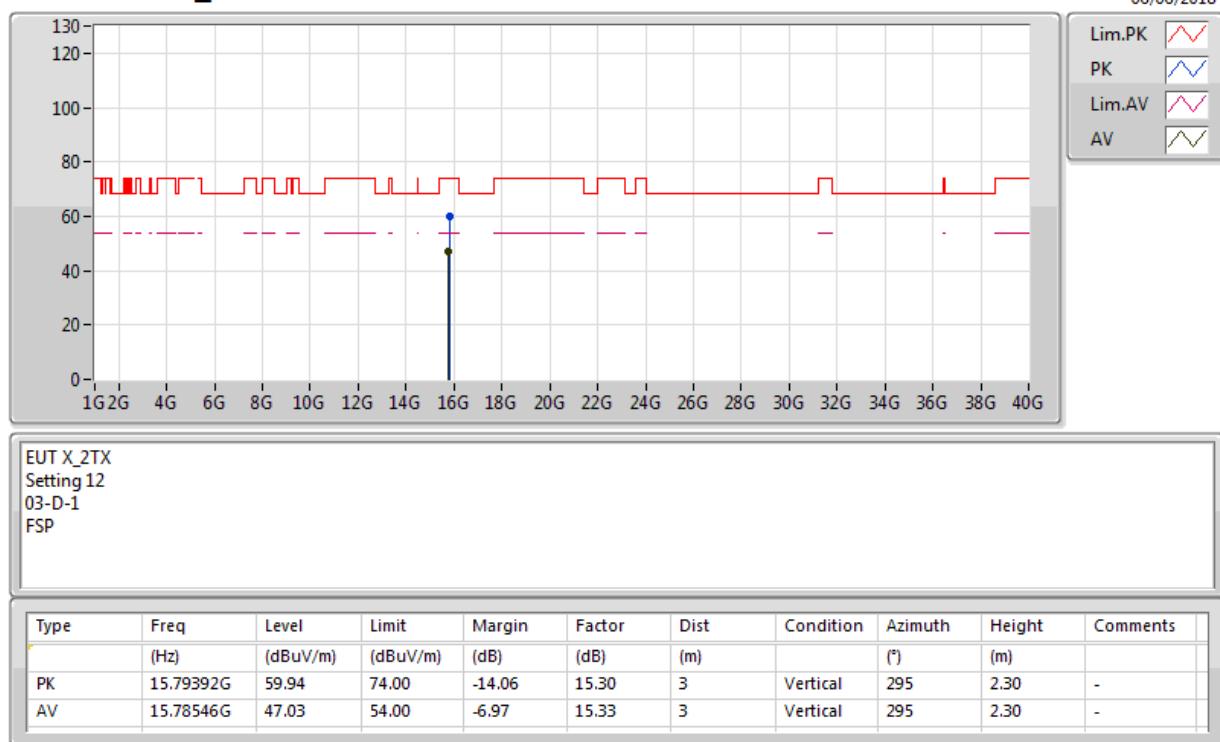
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.136G	59.35	74.00	-14.65	5.70	3	Horizontal	341	1.83	-
AV	5.136G	47.73	54.00	-6.27	5.70	3	Horizontal	341	1.83	-
PK	5.2464G	117.67	Inf	-Inf	6.04	3	Horizontal	341	1.83	-
AV	5.2416G	105.24	Inf	-Inf	6.03	3	Horizontal	341	1.83	-
PK	5.4304G	61.14	74.00	-12.86	6.33	3	Horizontal	341	1.83	-
AV	5.424G	48.70	54.00	-5.30	6.32	3	Horizontal	341	1.83	-

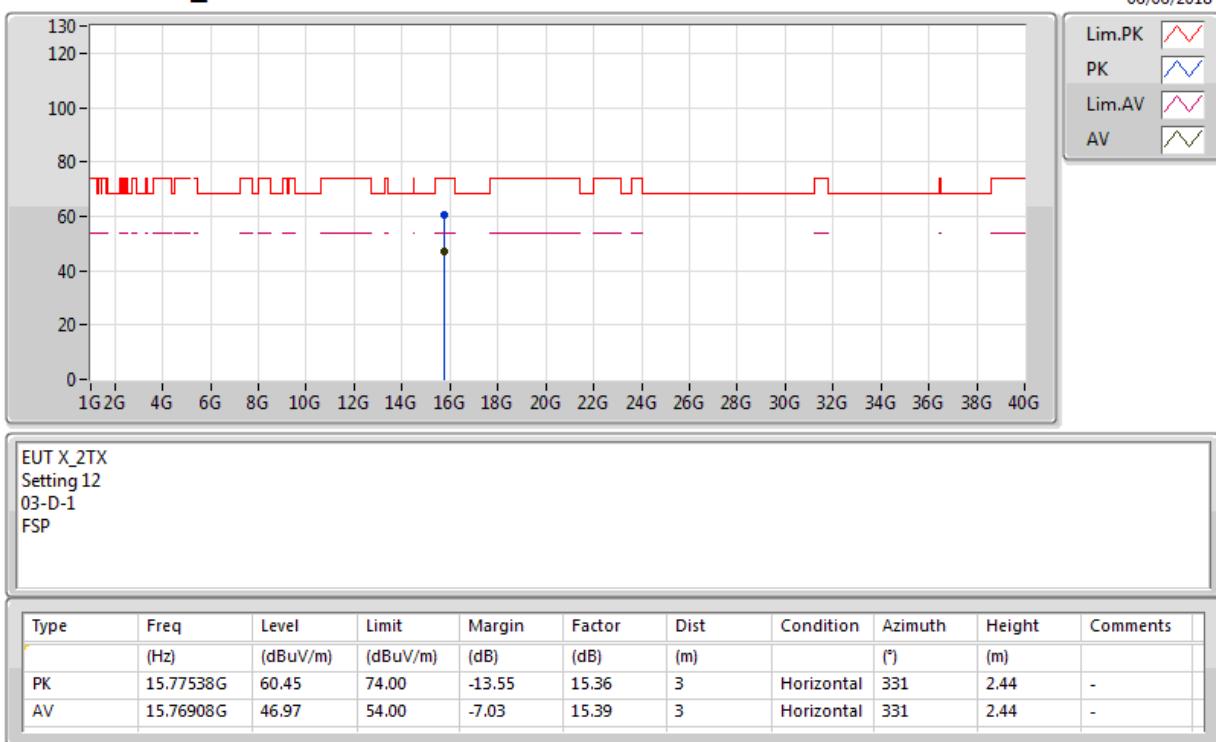
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5240MHz\_TX**

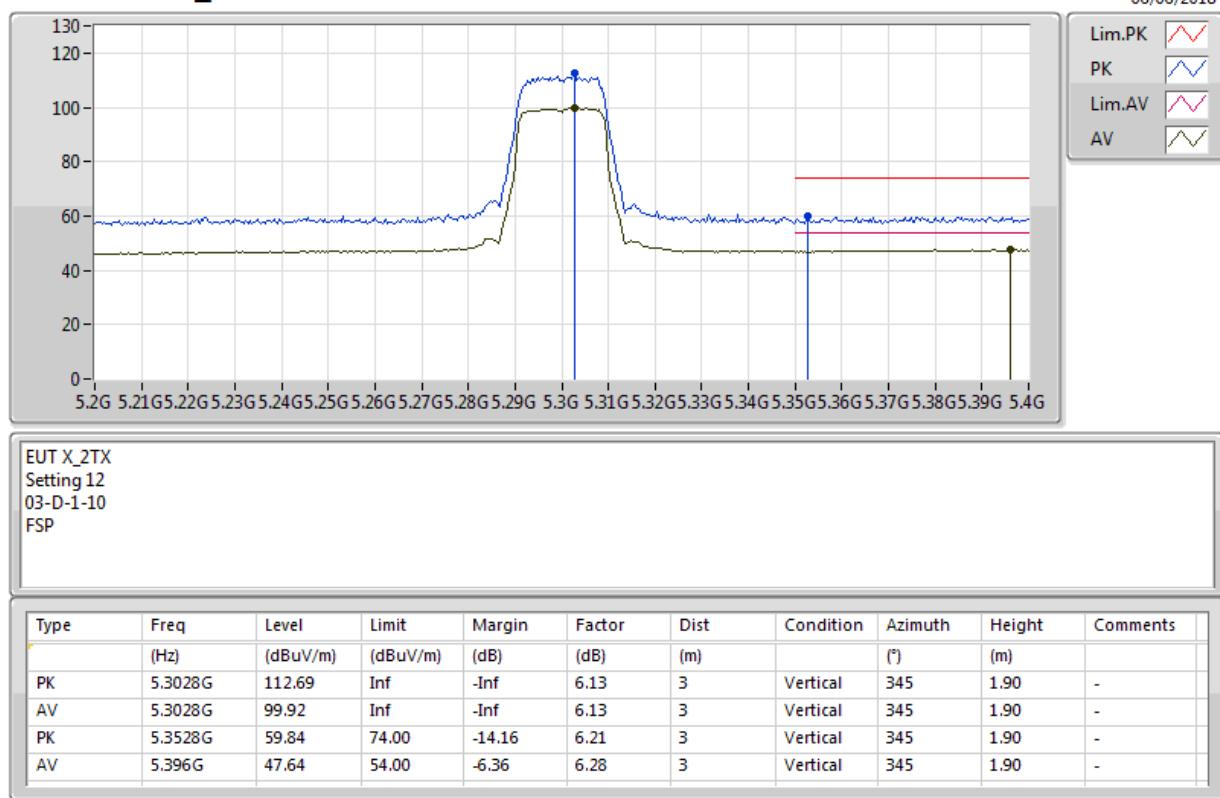
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5240MHz\_TX**

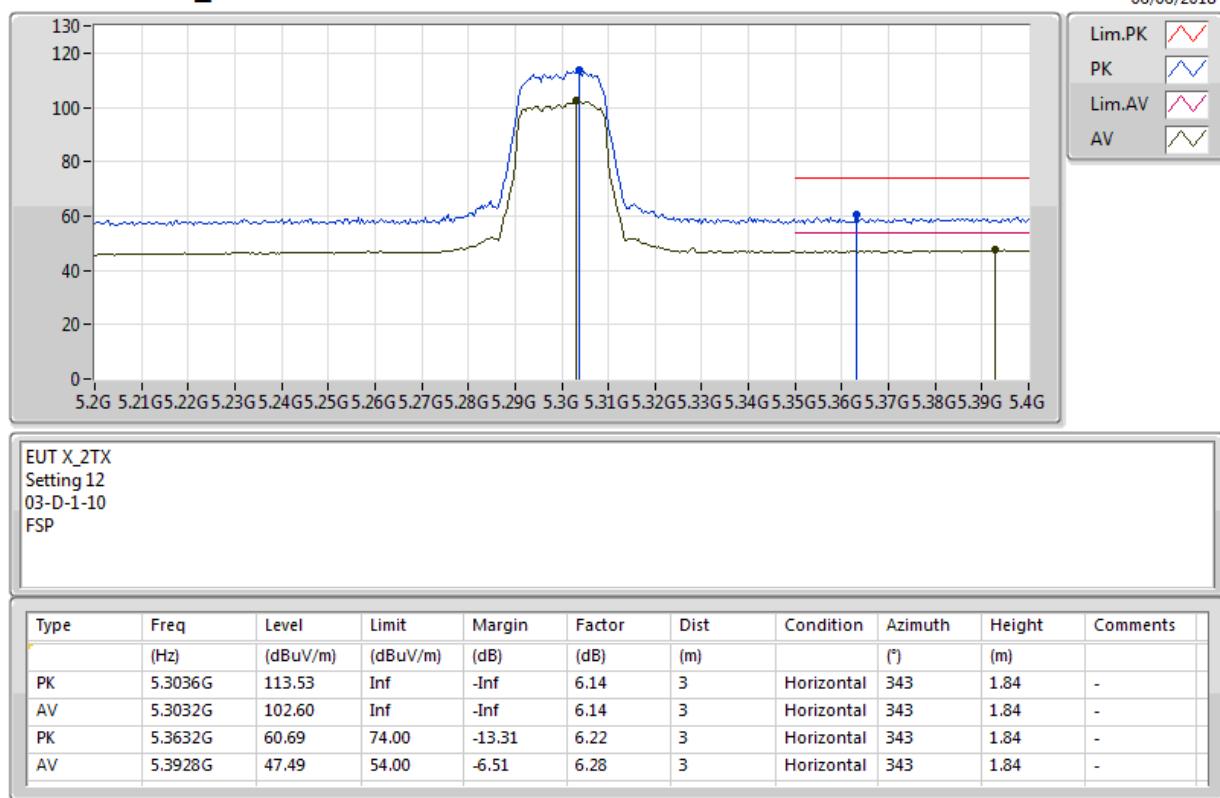
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5260MHz\_TX**

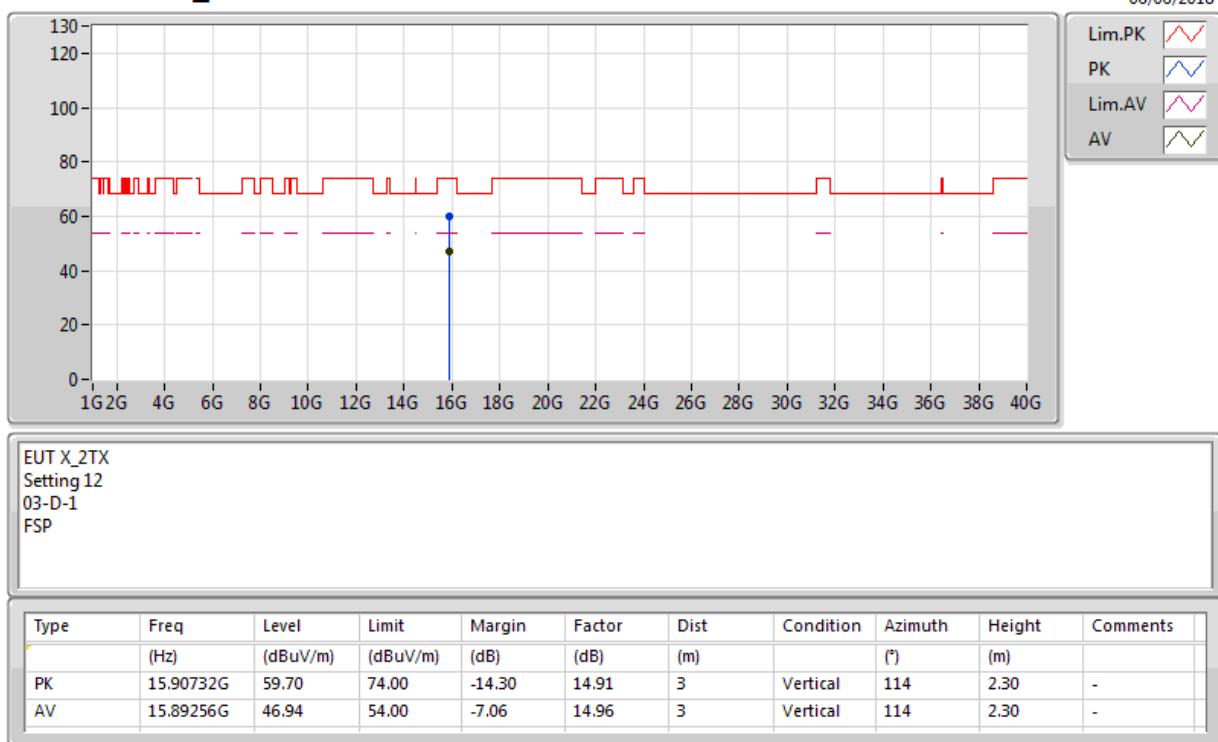
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5260MHz\_TX**

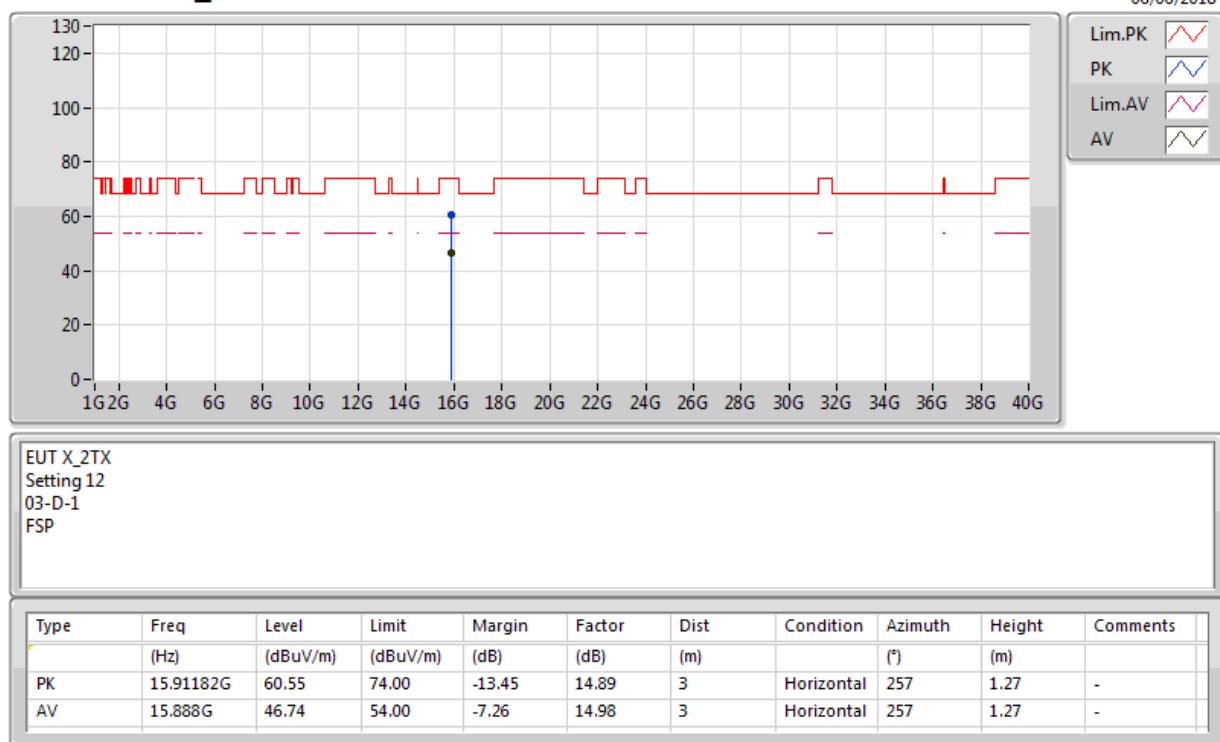
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5260MHz\_TX**

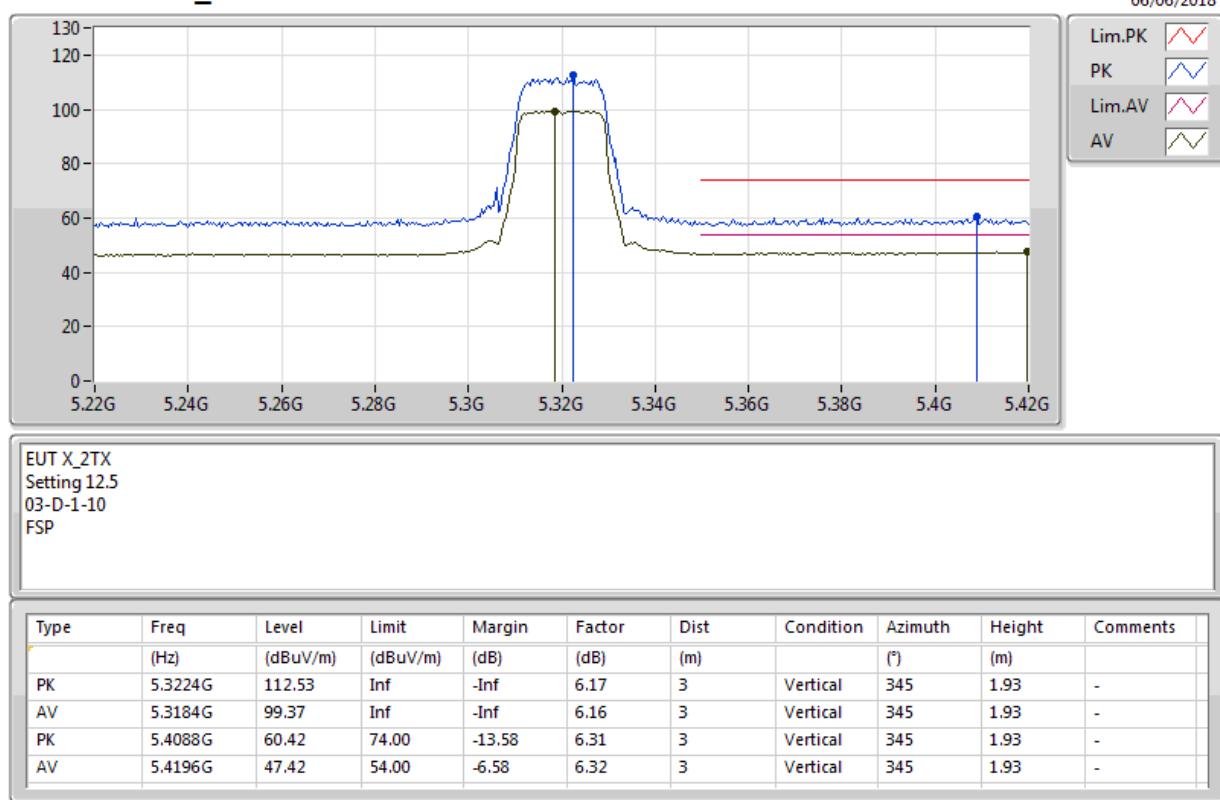
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5260MHz\_TX**

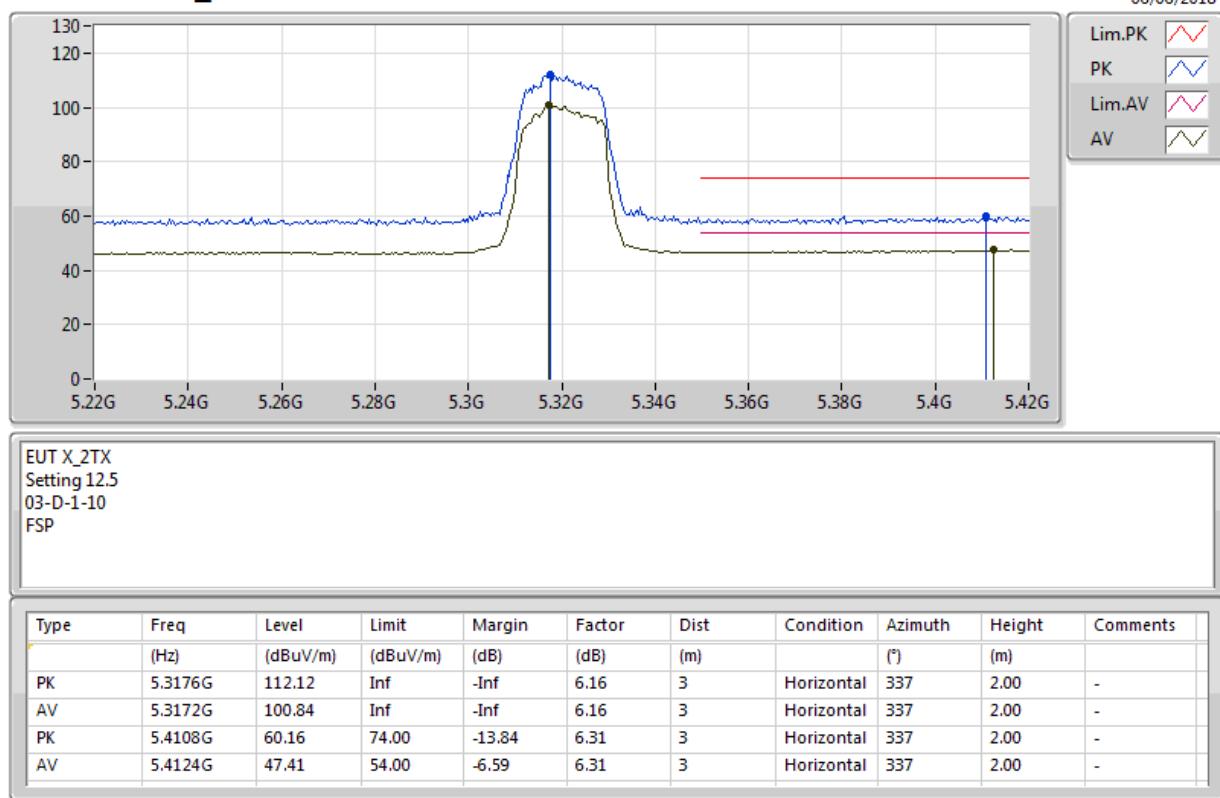
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5300MHz\_TX**

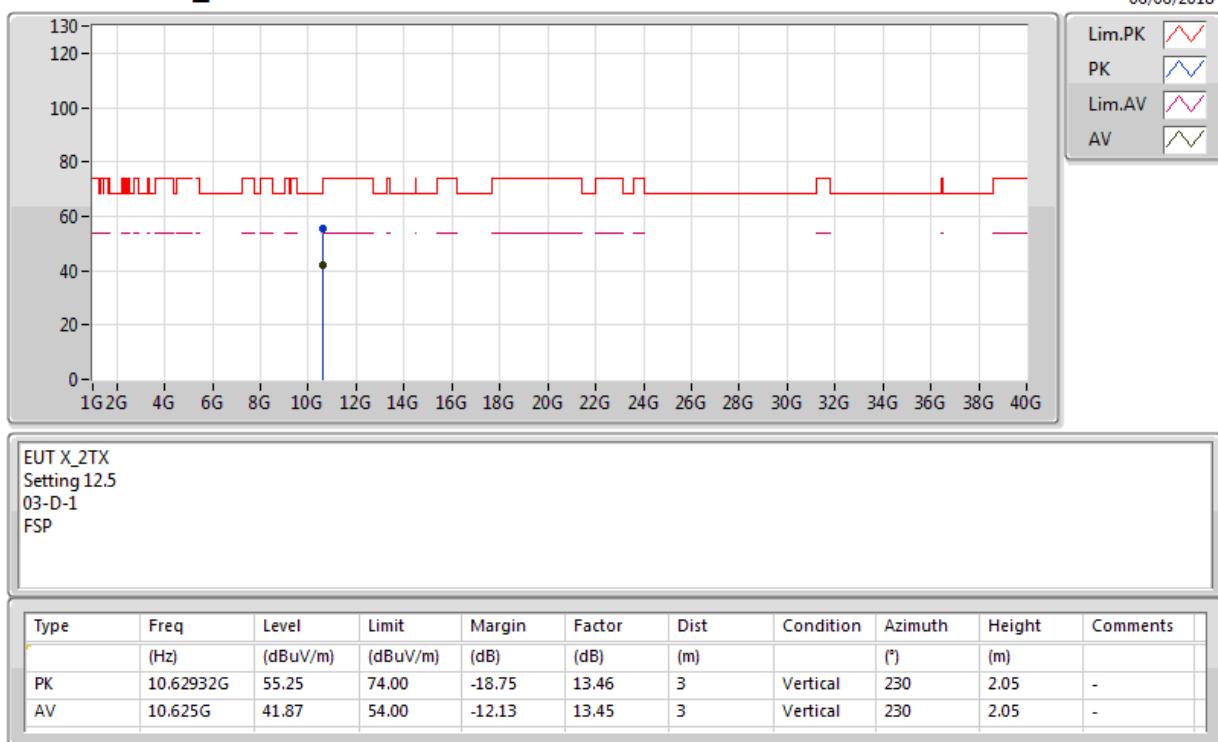
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5300MHz\_TX**

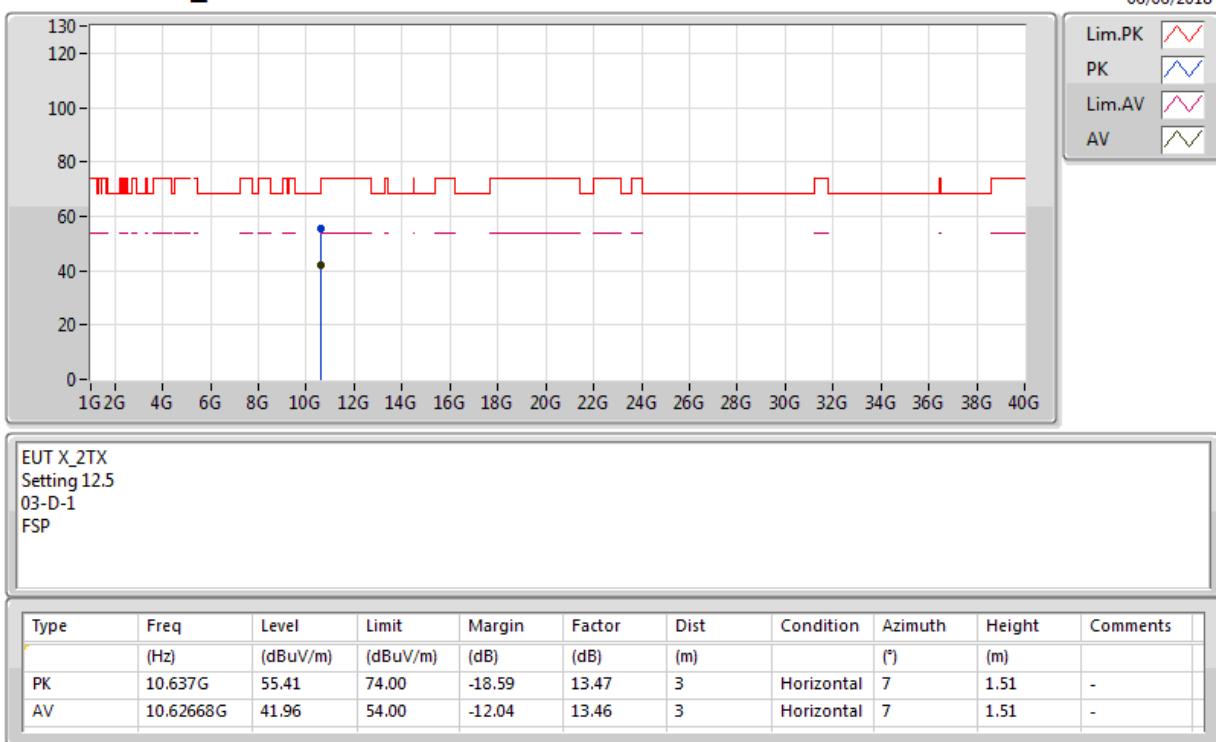
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5300MHz\_TX**

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5300MHz\_TX**

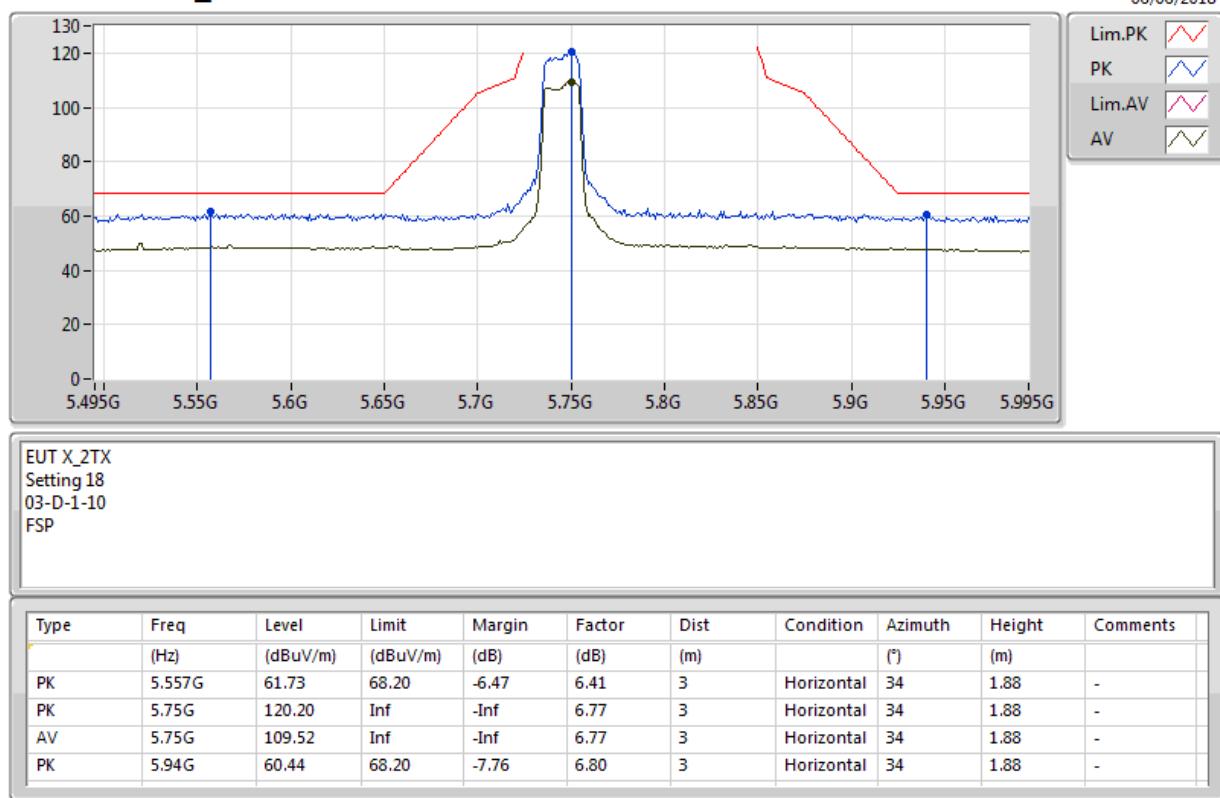
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5320MHz\_TX**

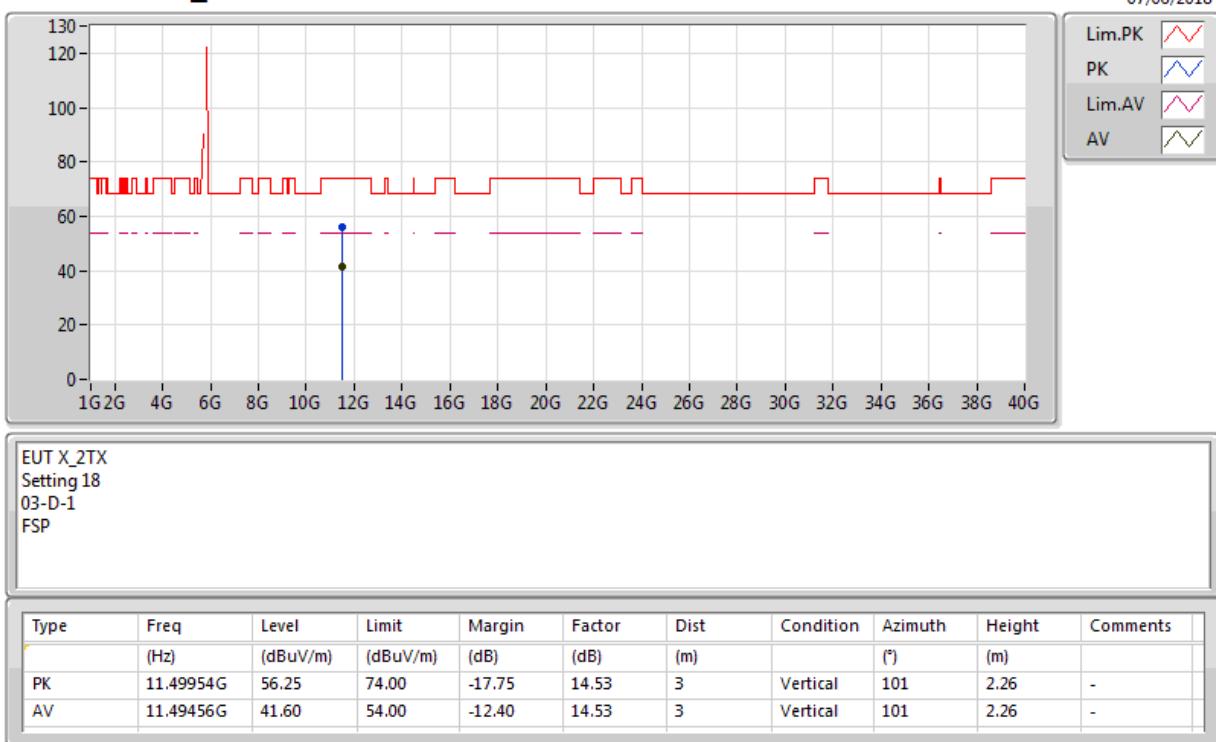
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5320MHz\_TX**

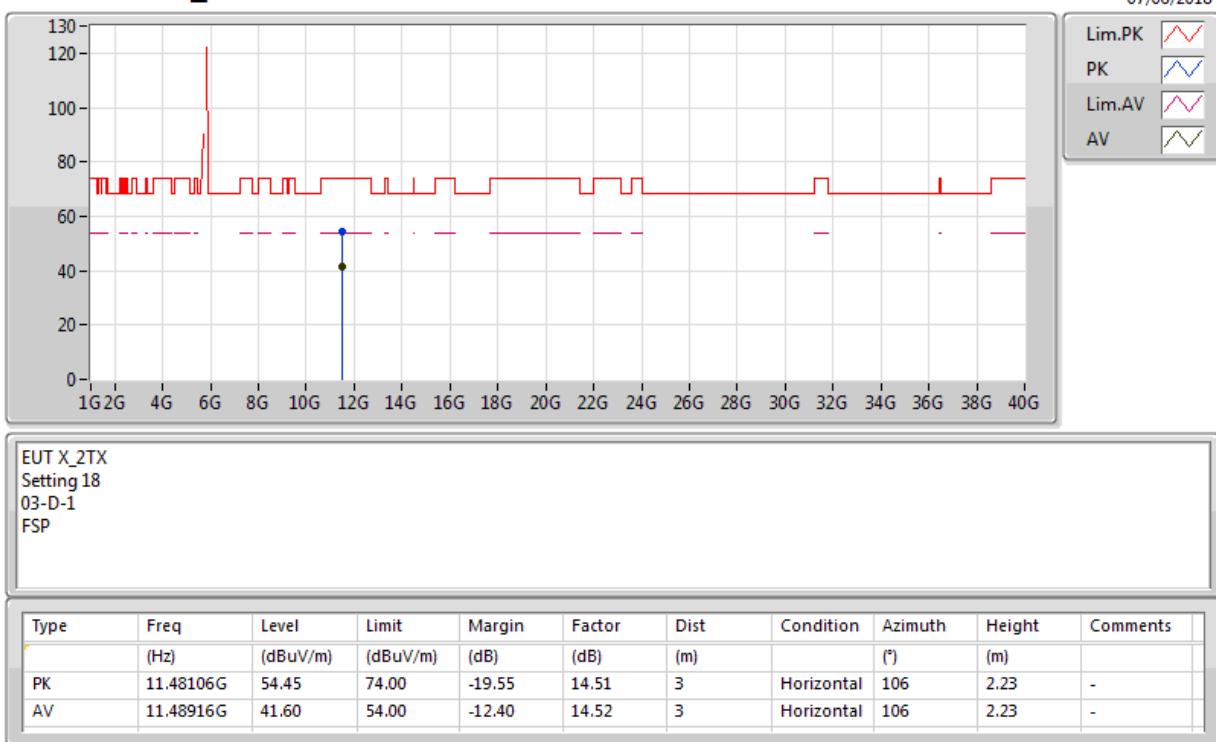
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5320MHz\_TX**

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5320MHz\_TX**

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5745MHz\_TX**

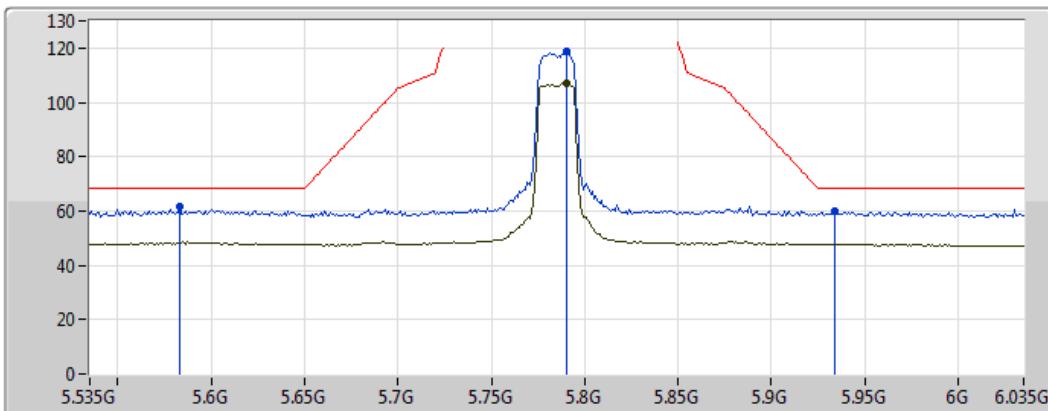
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5745MHz\_TX**

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5745MHz\_TX**

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5745MHz\_TX**

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5785MHz\_TX**

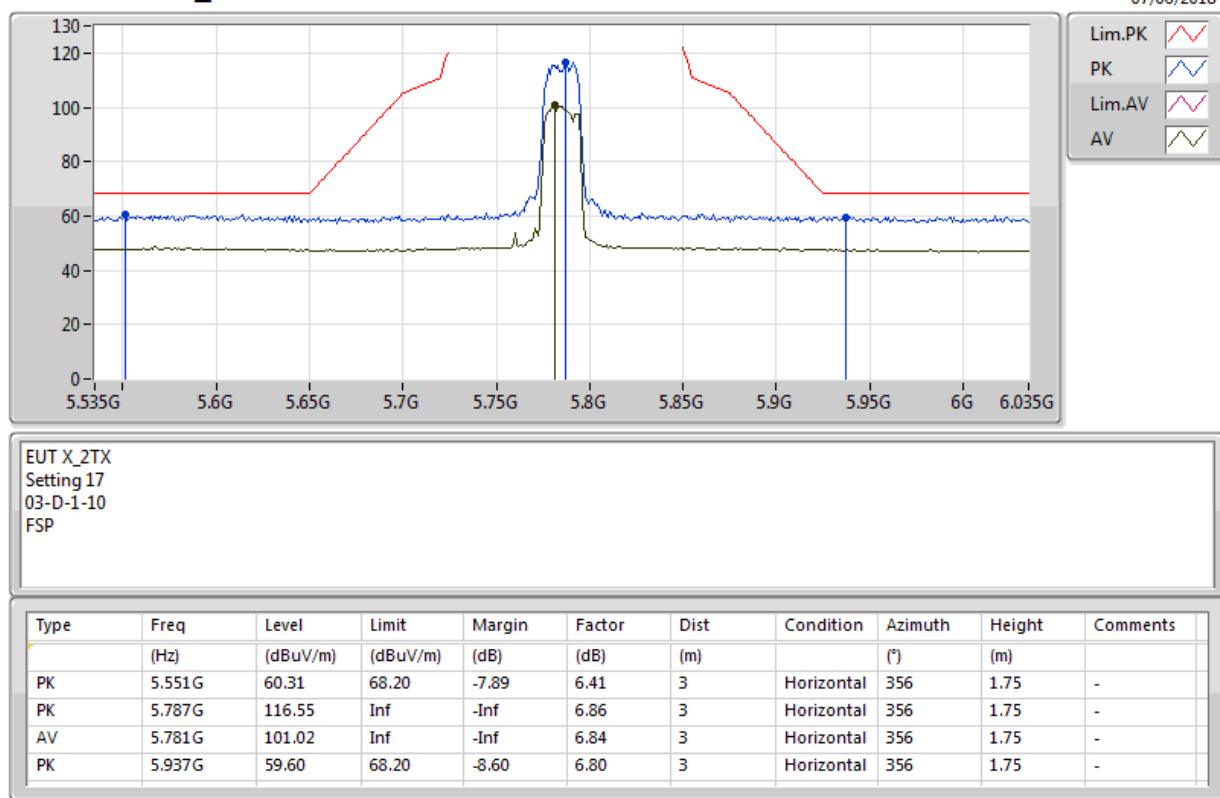
07/06/2018

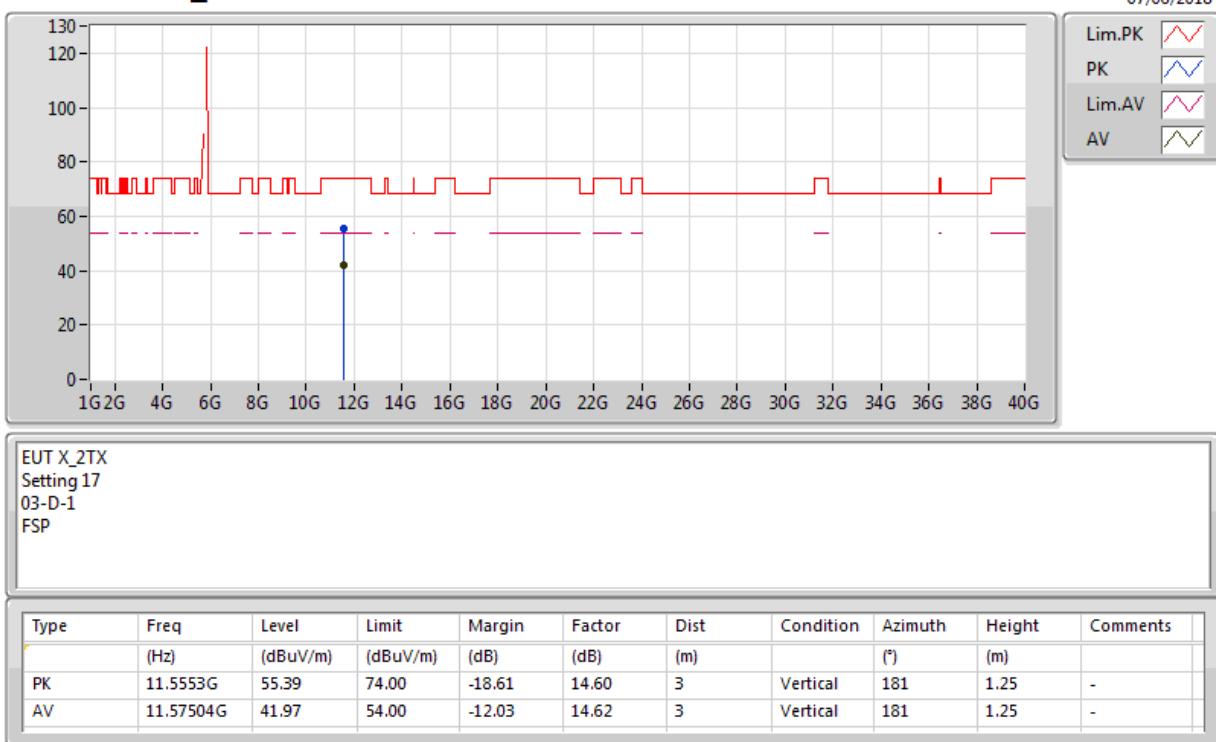


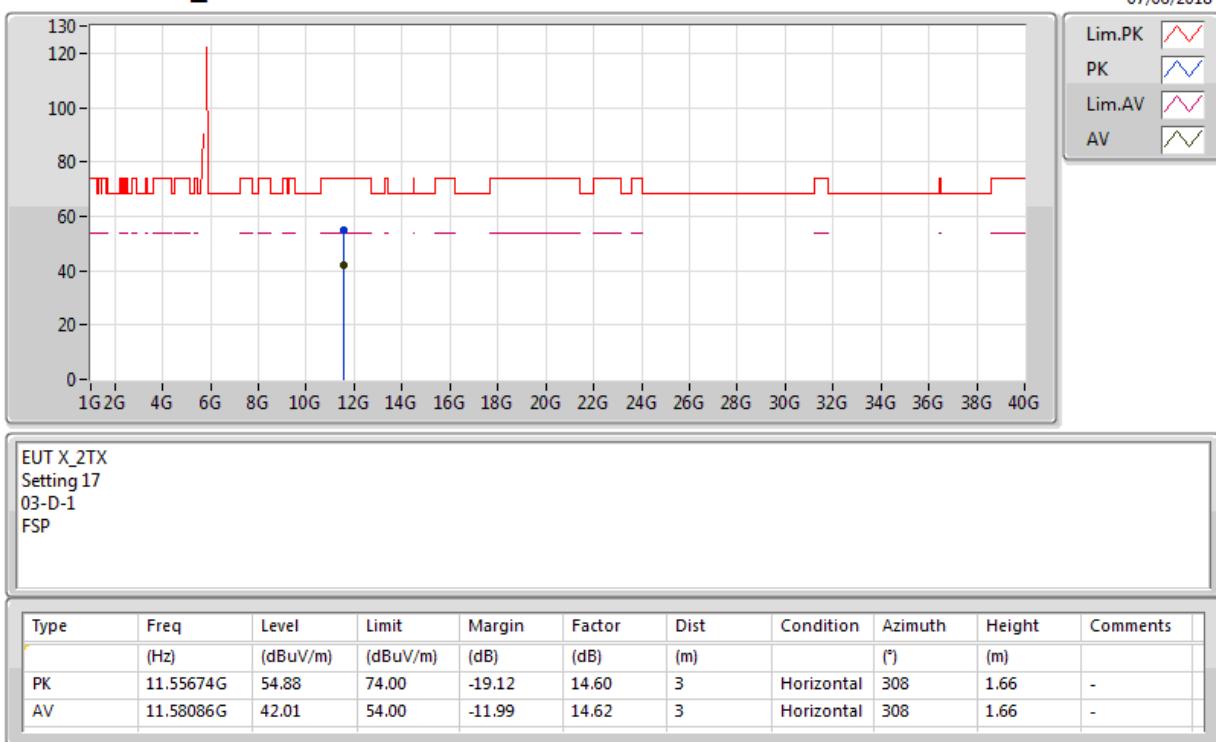
Lim.PK	/\
PK	/\
Lim.AV	/\
AV	/\

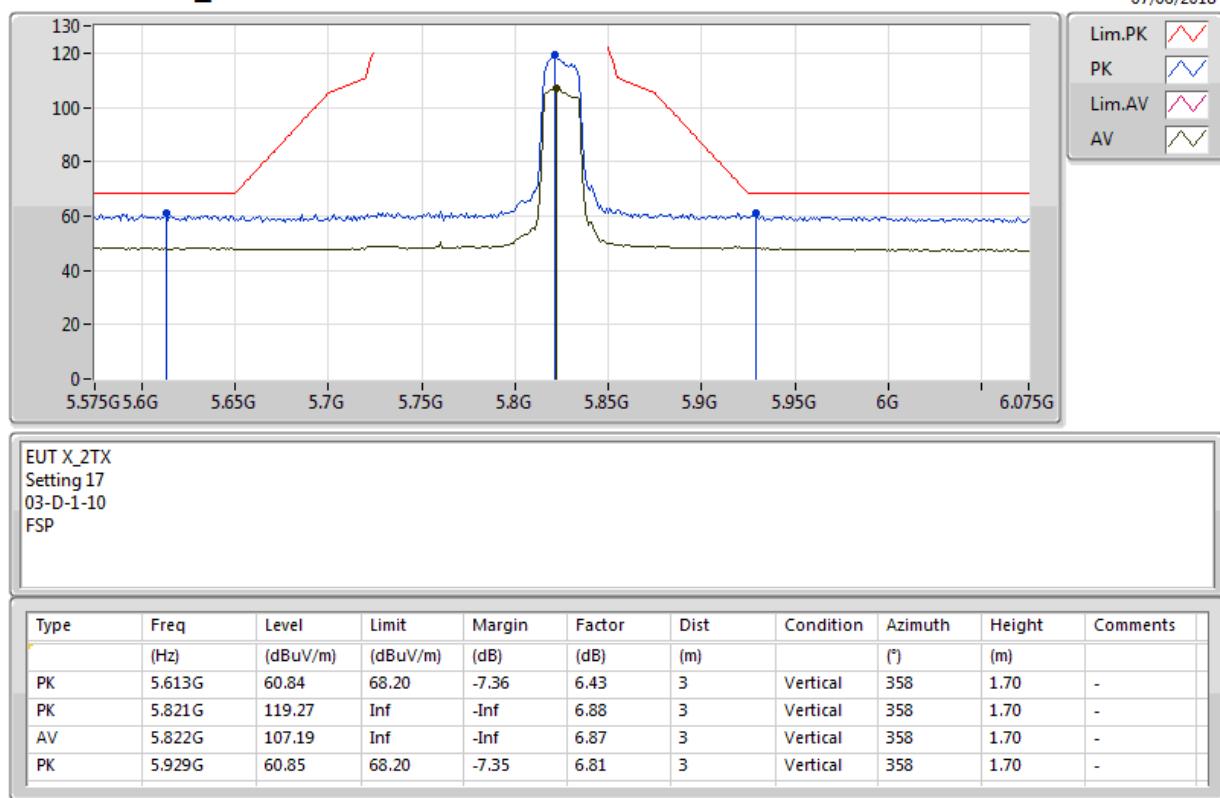
EUT X\_2TX  
Setting 17  
03-D-1-10  
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.583G	61.60	68.20	-6.60	6.41	3	Vertical	0	1.70	-
PK	5.79G	118.80	Inf	-Inf	6.87	3	Vertical	0	1.70	-
AV	5.79G	106.86	Inf	-Inf	6.87	3	Vertical	0	1.70	-
PK	5.934G	60.02	68.20	-8.18	6.80	3	Vertical	0	1.70	-

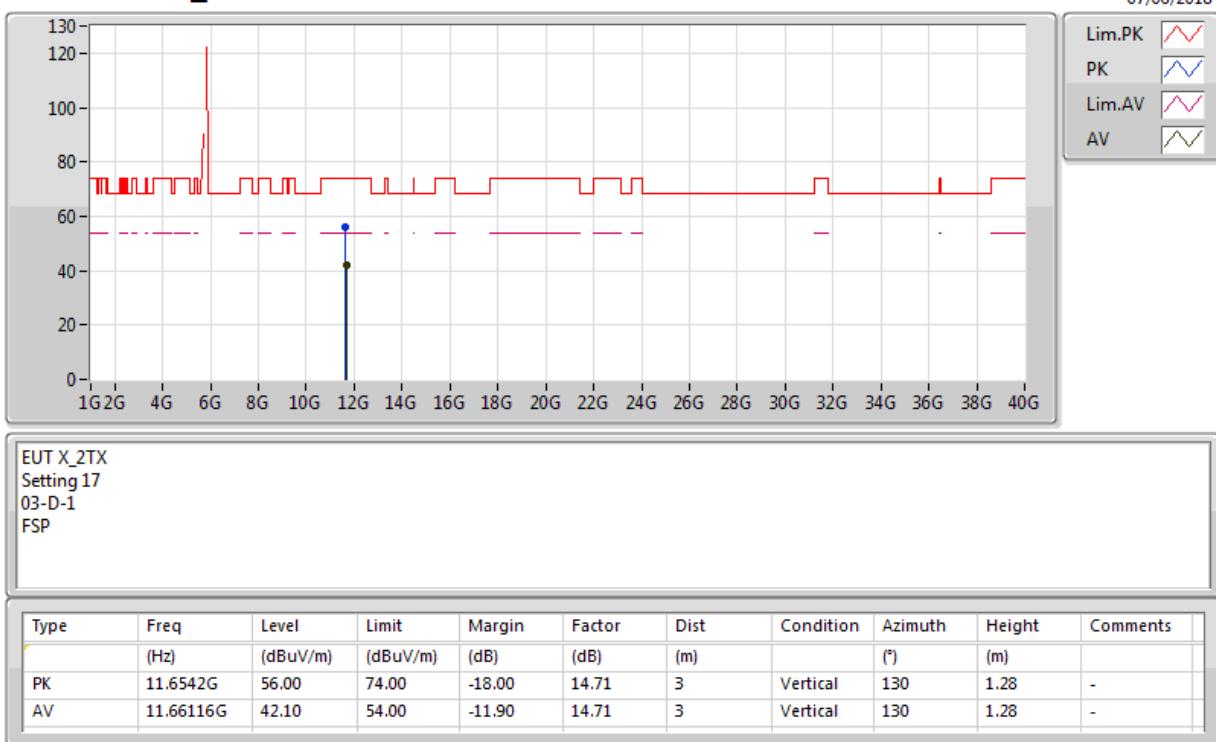
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5785MHz\_TX**

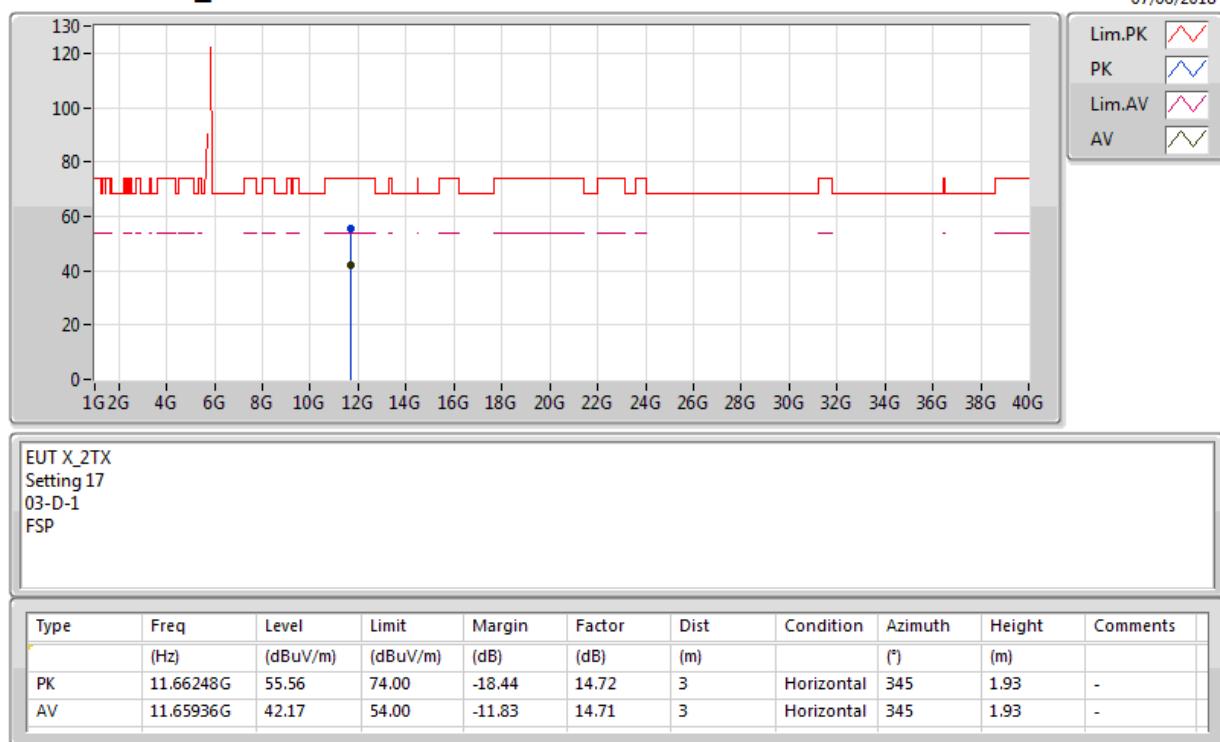
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5785MHz\_TX**

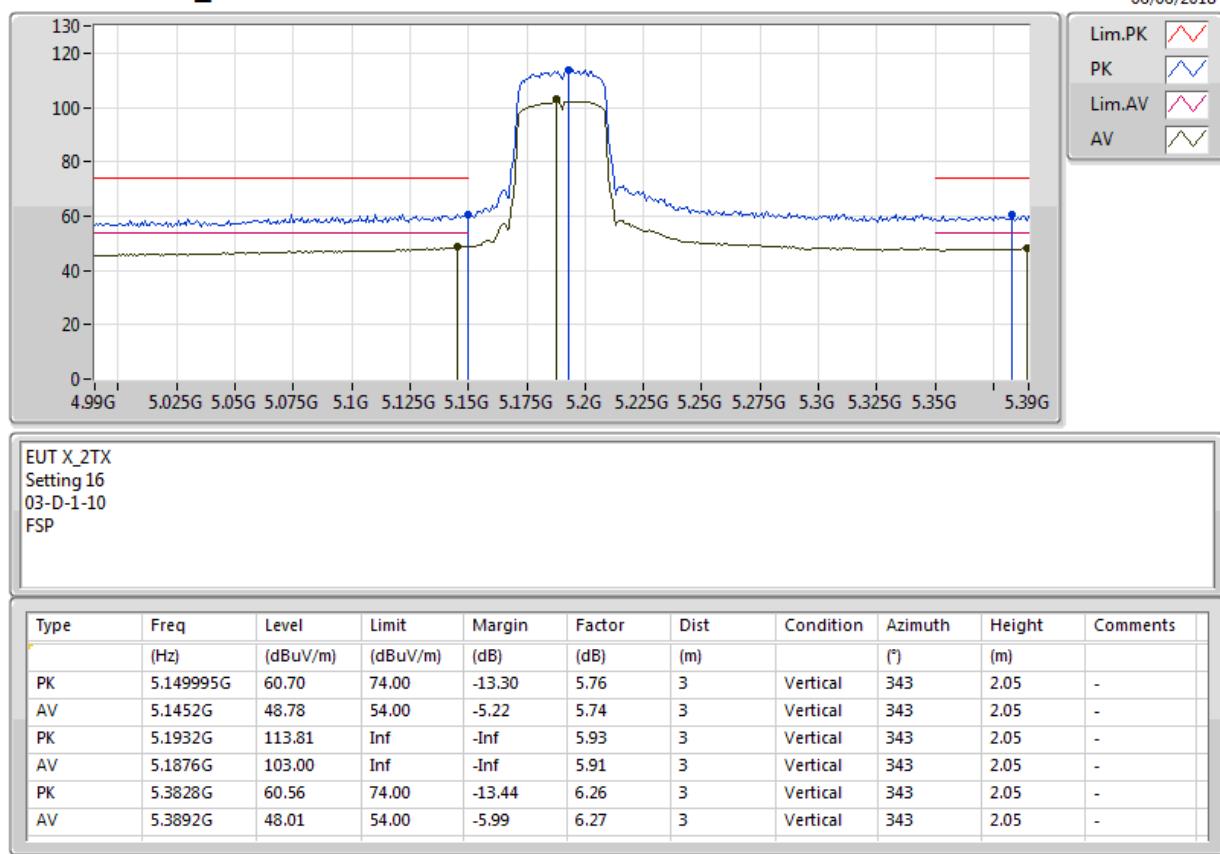
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5785MHz\_TX**

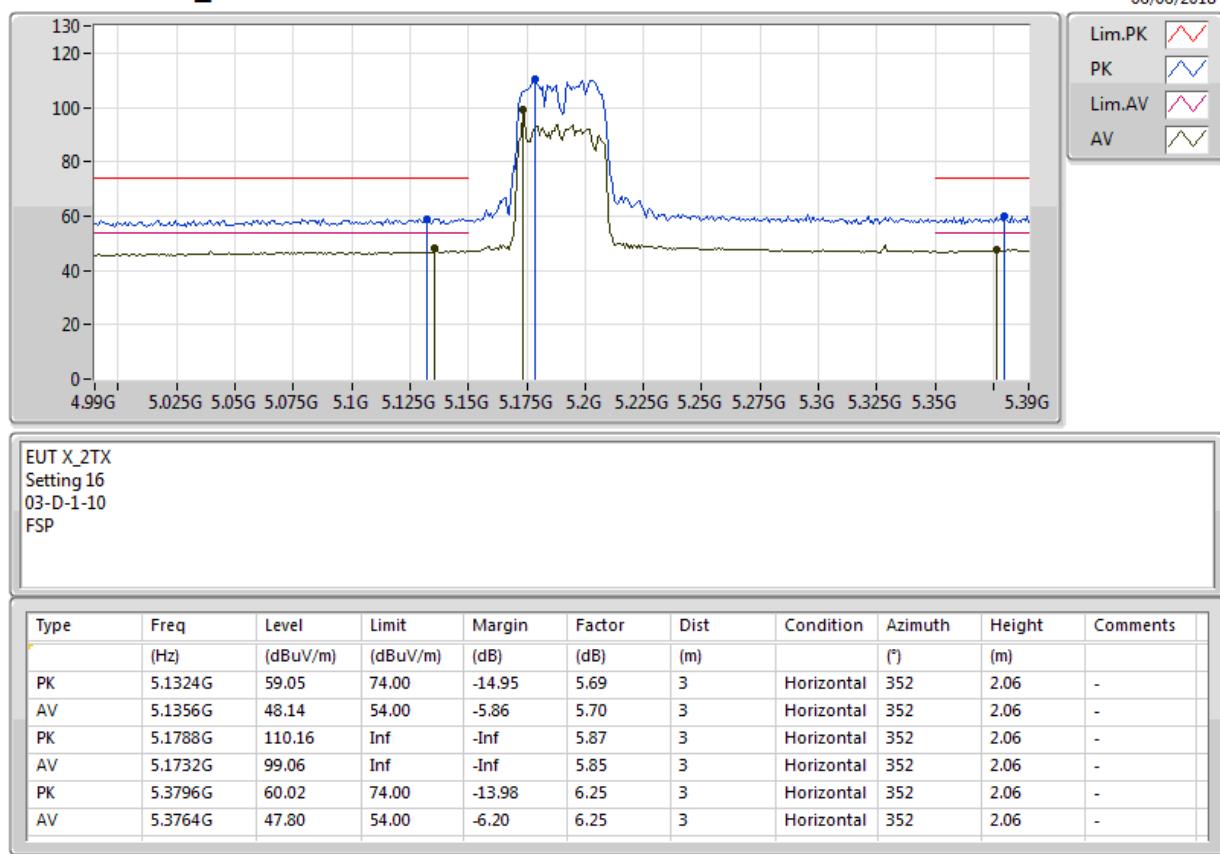
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**5825MHz\_TX**


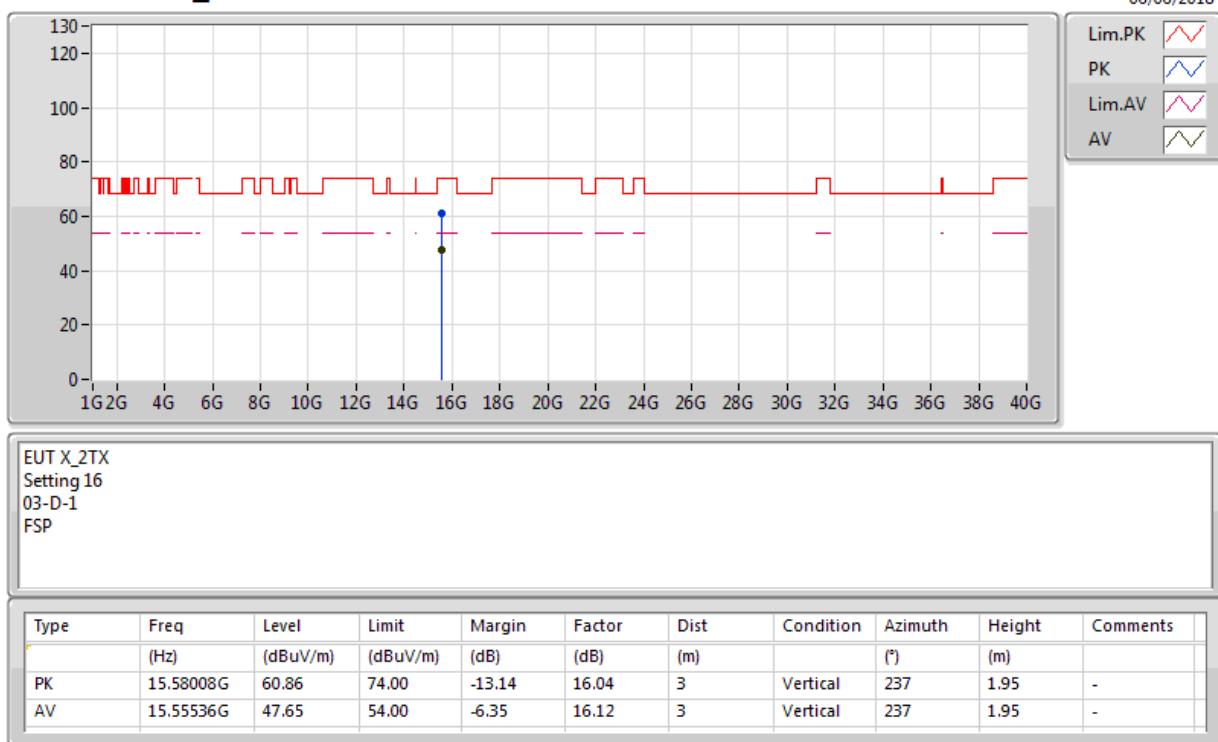
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5825MHz\_TX**

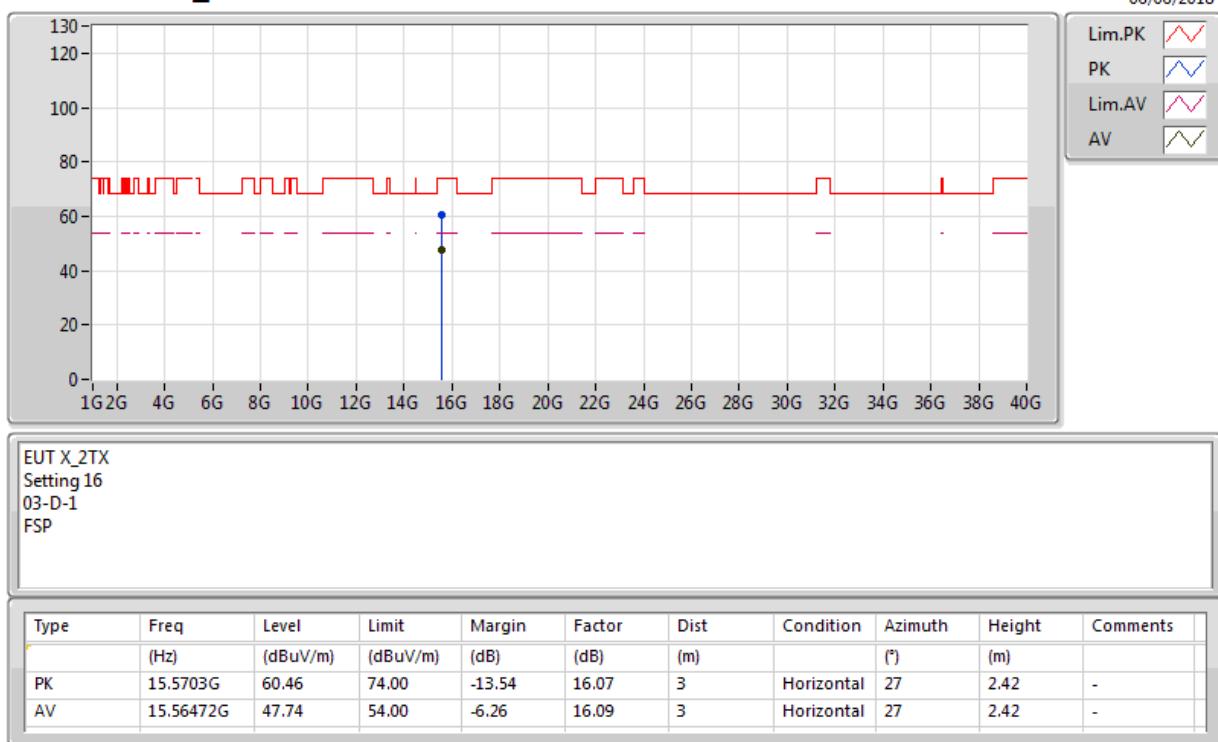
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5825MHz\_TX**

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX****5825MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5190MHz\_TX**

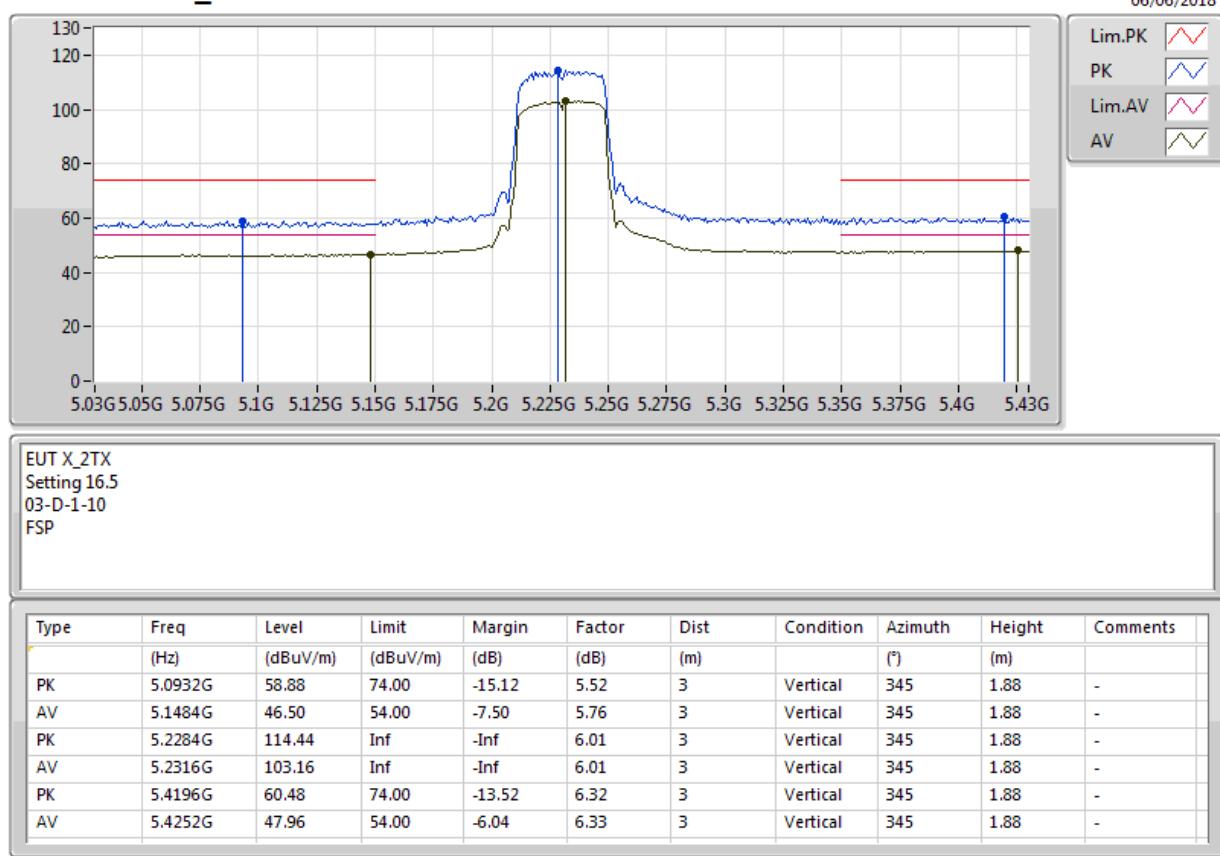
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5190MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5190MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5190MHz\_TX**

## **802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

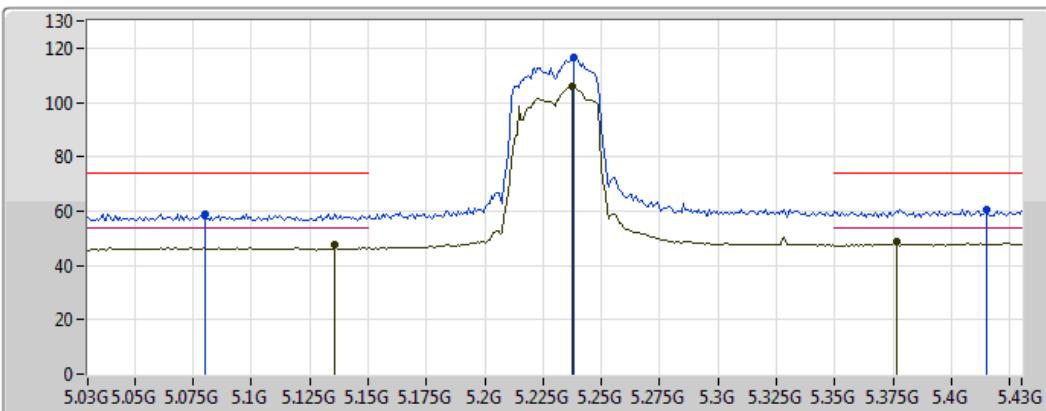
### **5230MHz\_TX**



**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5230MHz\_TX**

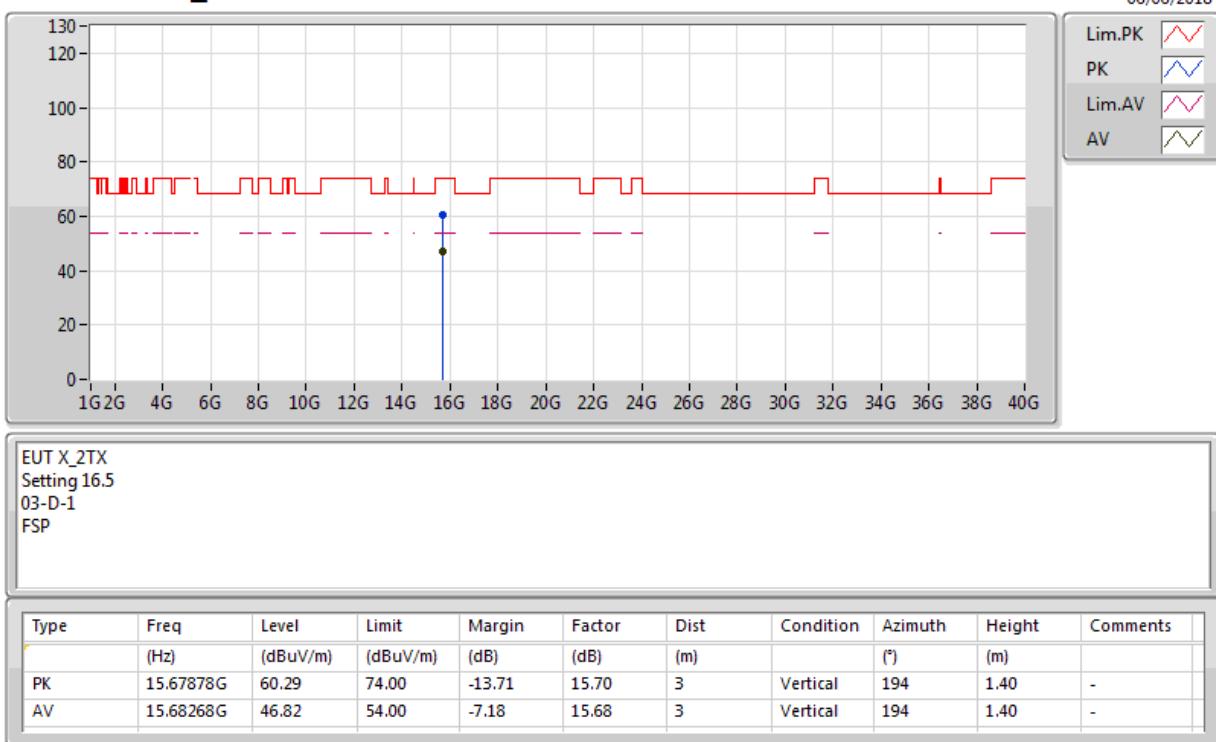
06/06/2018

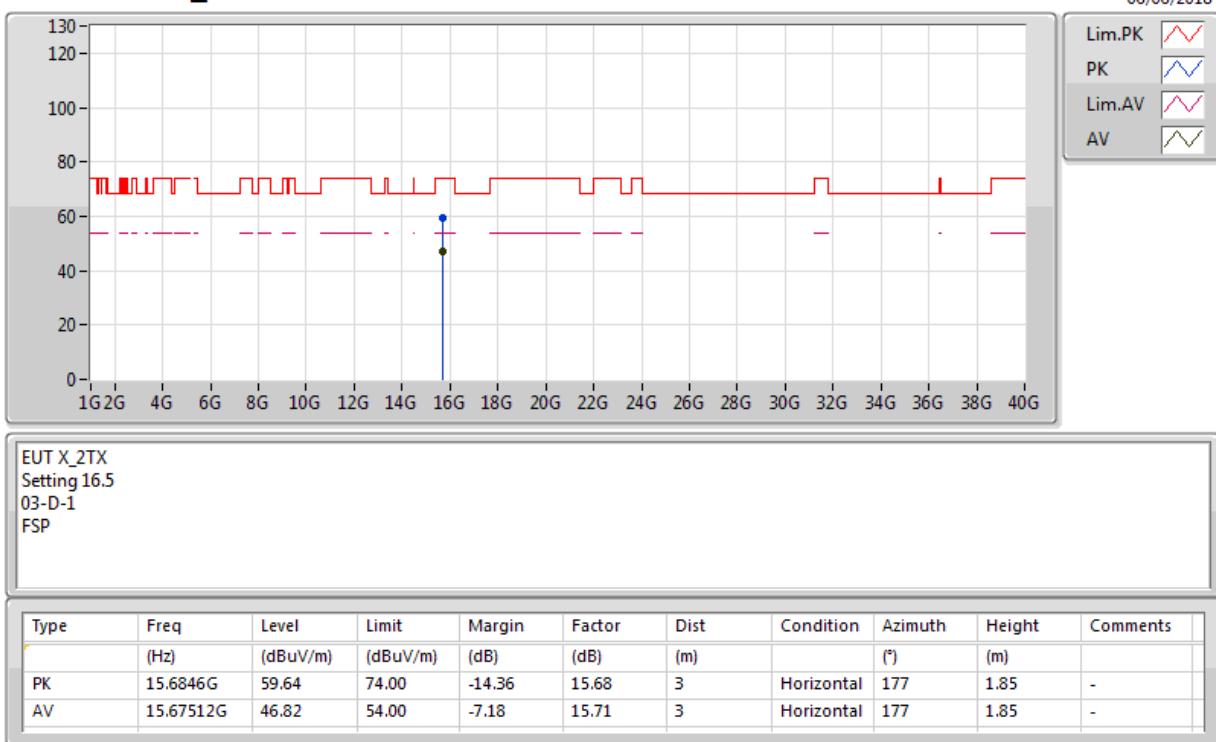
Lim.PK	
PK	
Lim.AV	
AV	

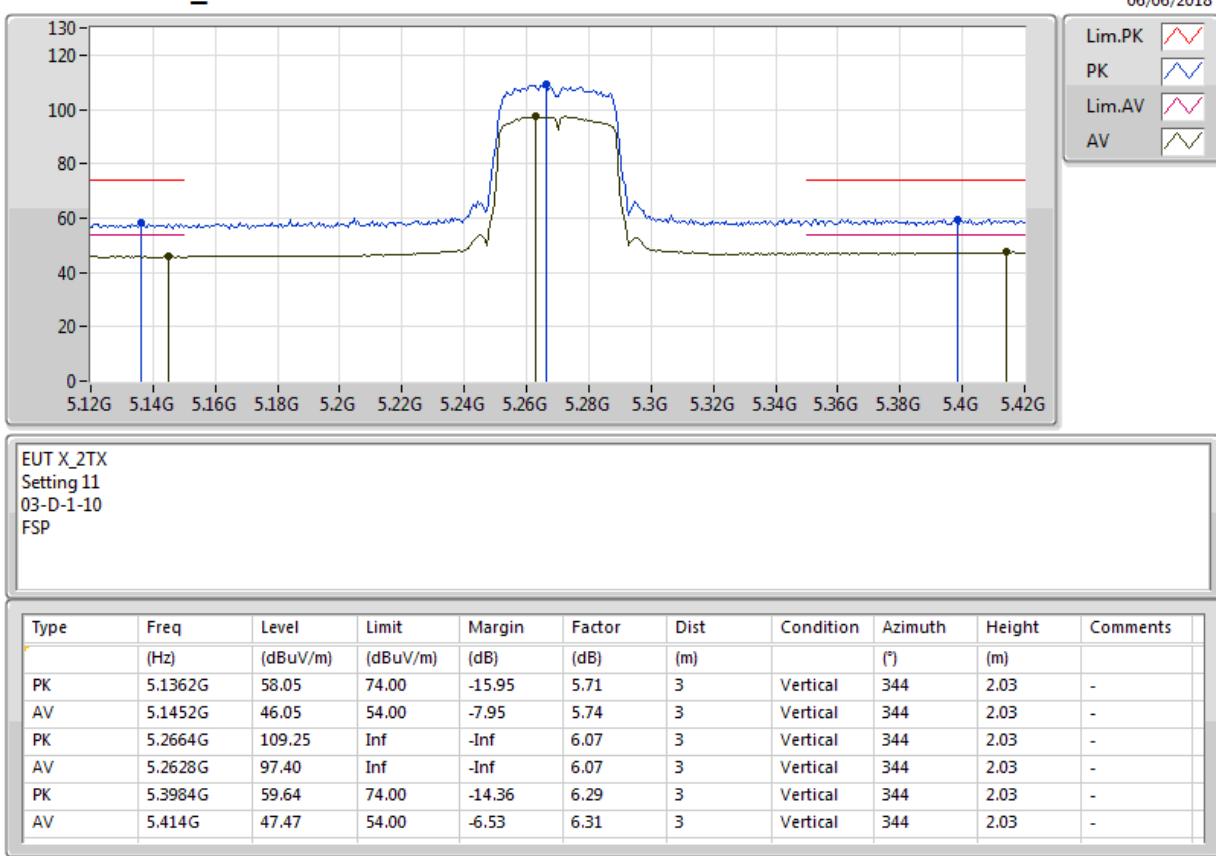


EUT X\_2TX  
Setting 16.5  
03-D-1-10  
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.0804G	58.94	74.00	-15.06	5.46	3	Horizontal	339	2.05	-
AV	5.1356G	47.43	54.00	-6.57	5.70	3	Horizontal	339	2.05	-
PK	5.238G	116.76	Inf	-Inf	6.02	3	Horizontal	339	2.05	-
AV	5.2372G	106.03	Inf	-Inf	6.02	3	Horizontal	339	2.05	-
PK	5.4148G	60.62	74.00	-13.38	6.31	3	Horizontal	339	2.05	-
AV	5.3764G	48.63	54.00	-5.37	6.25	3	Horizontal	339	2.05	-

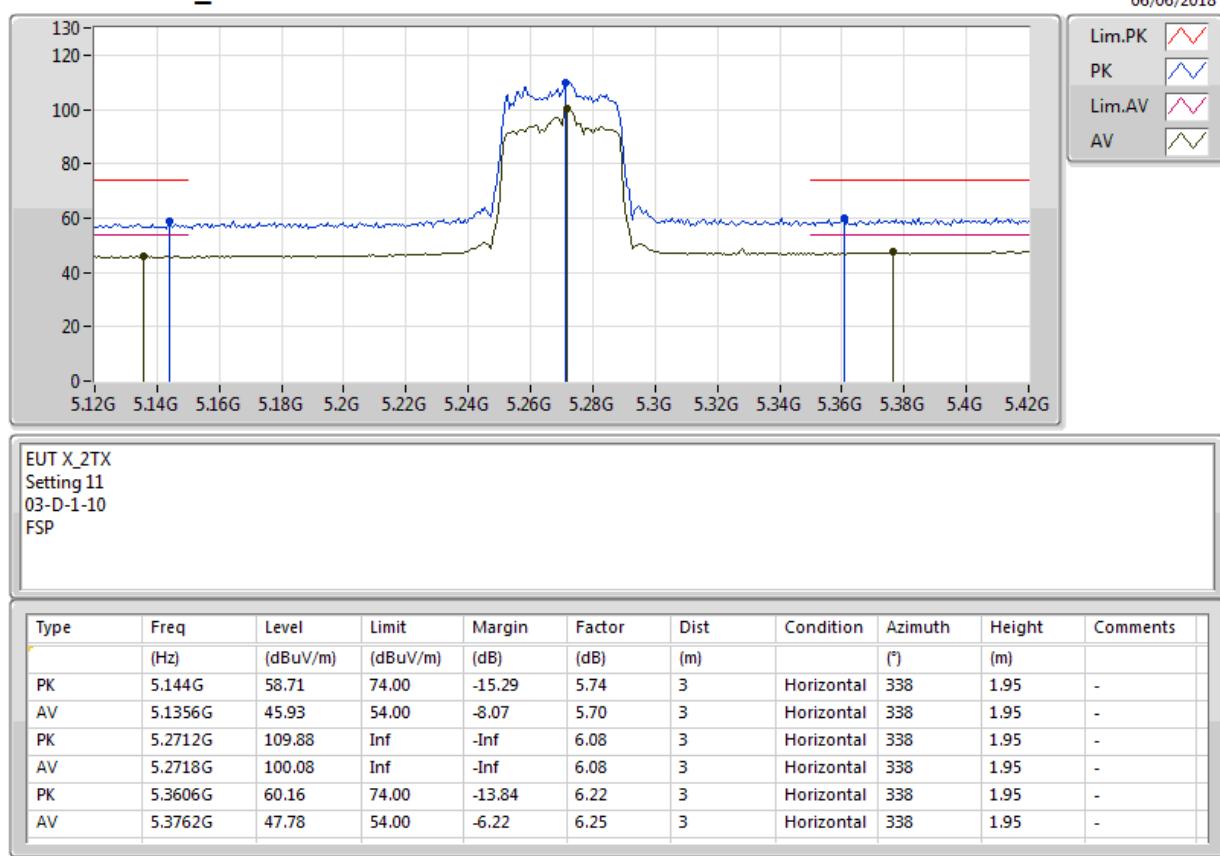
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5230MHz\_TX**

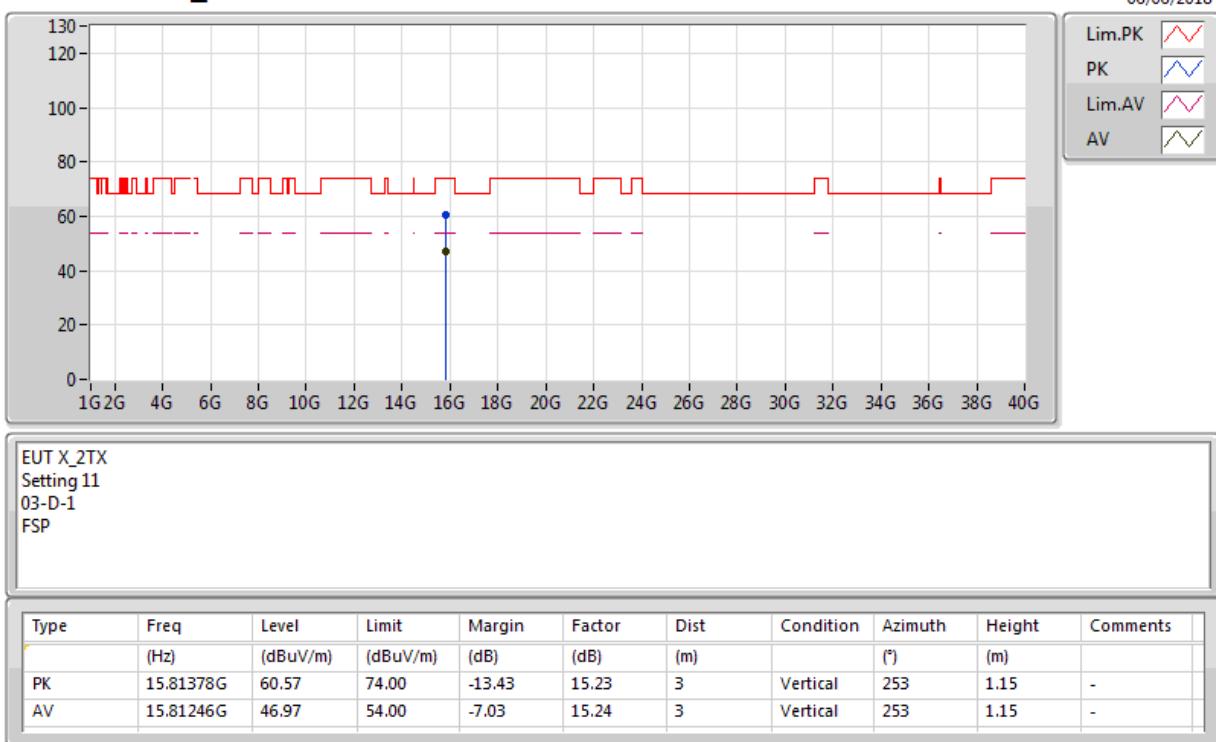
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5230MHz\_TX**

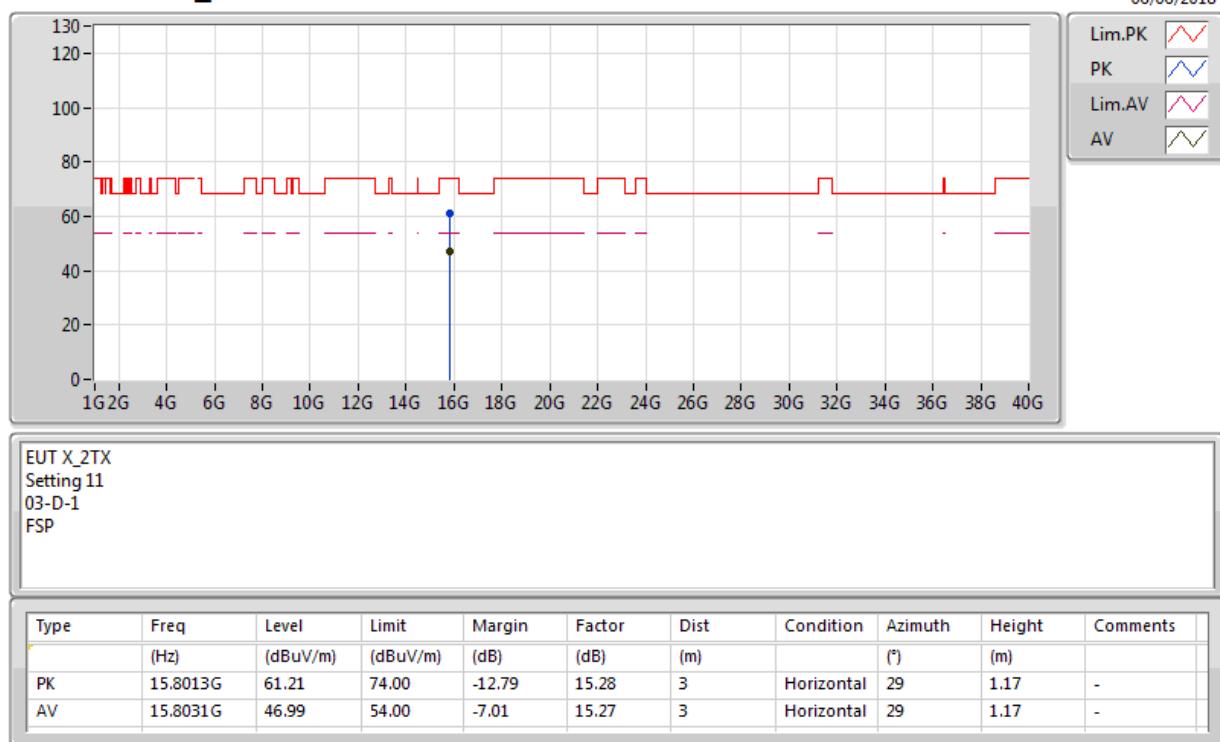
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5270MHz\_TX**

### **802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

#### **5270MHz\_TX**

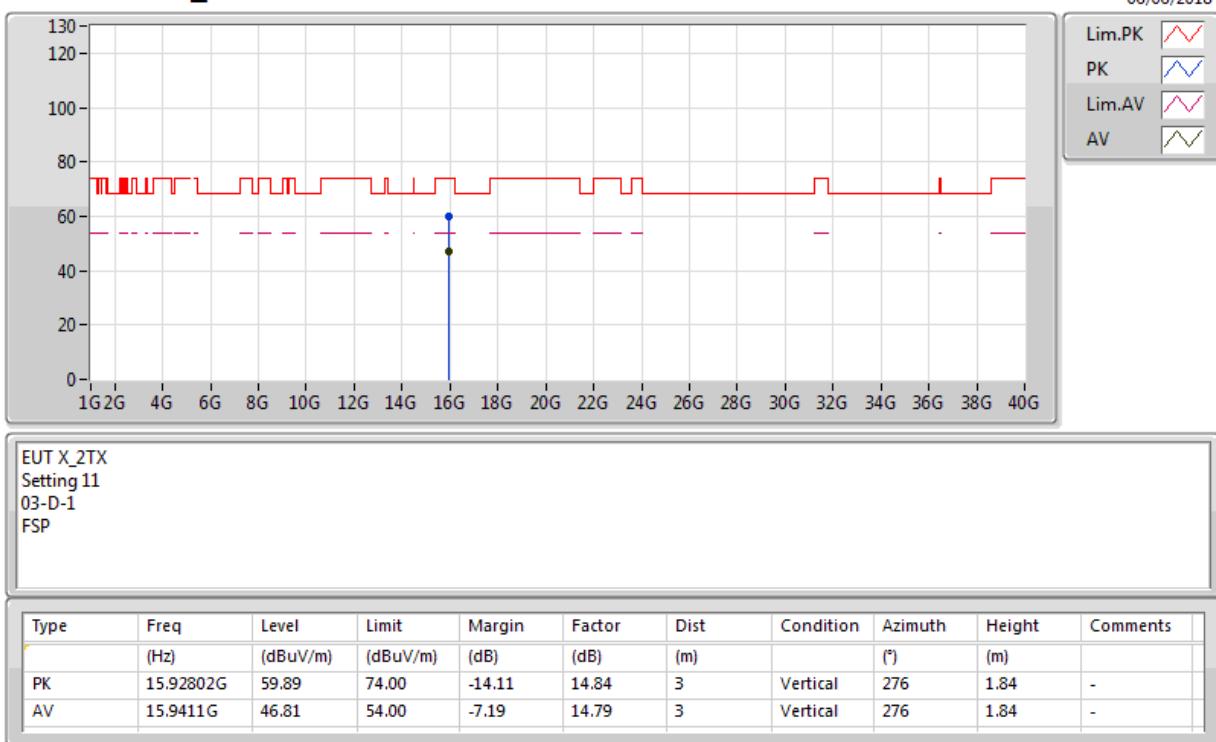


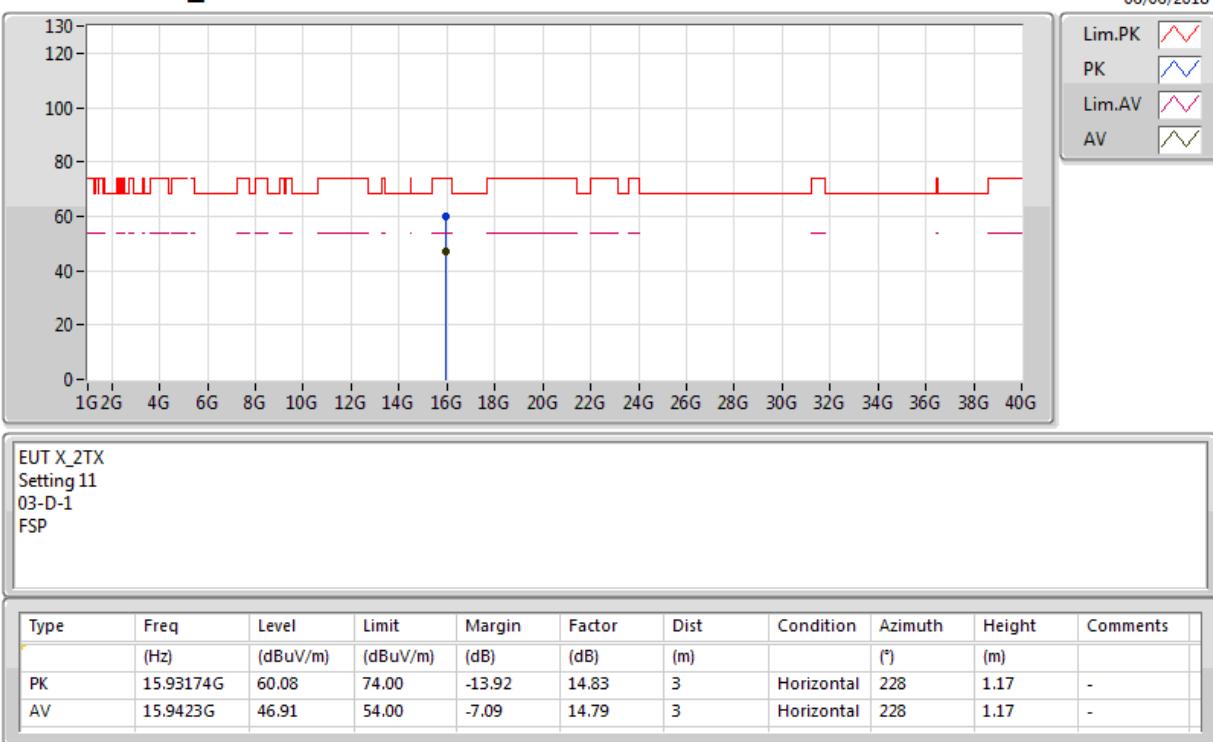
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5270MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5270MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5310MHz\_TX**

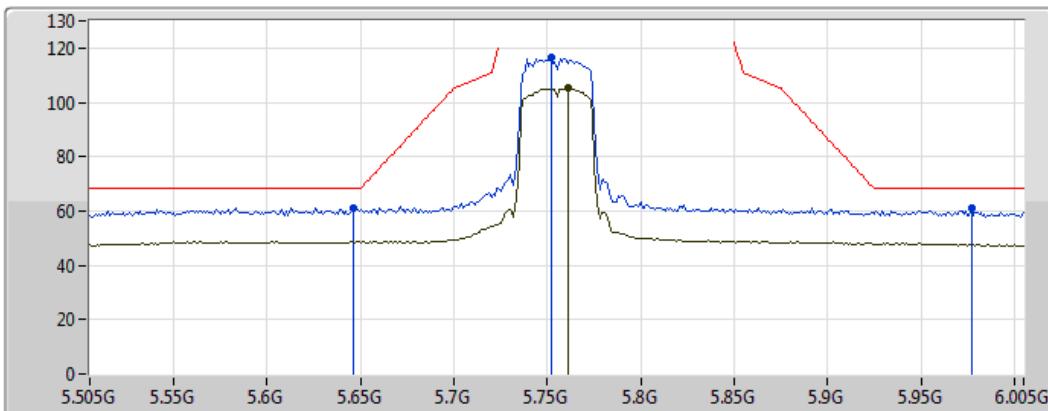
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5310MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5310MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5310MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5755MHz\_TX**

07/06/2018

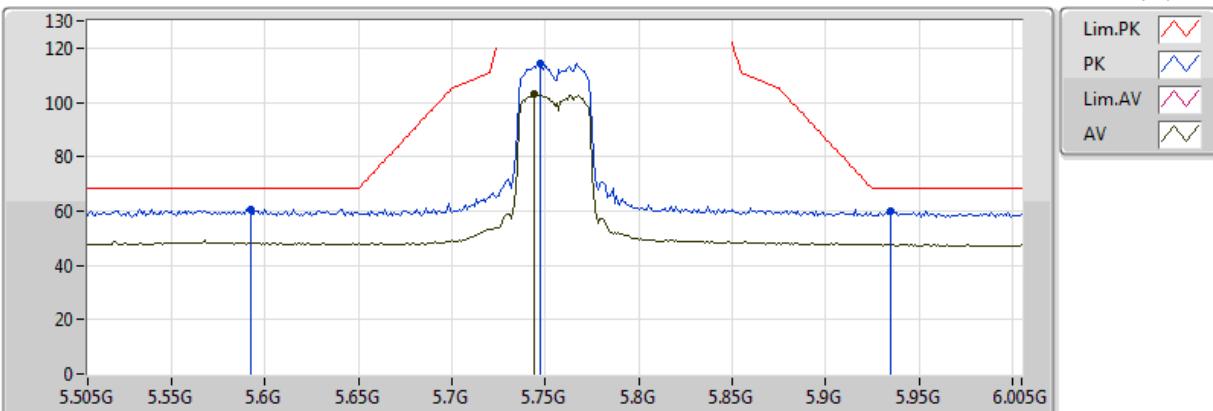


EUT X\_2TX  
Setting 16  
03-D-1-10  
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.646G	61.15	68.20	-7.05	6.52	3	Vertical	360	1.77	-
PK	5.752G	116.73	Inf	-Inf	6.77	3	Vertical	360	1.77	-
AV	5.761G	105.16	Inf	-Inf	6.80	3	Vertical	360	1.77	-
PK	5.977G	61.07	68.20	-7.13	6.77	3	Vertical	360	1.77	-

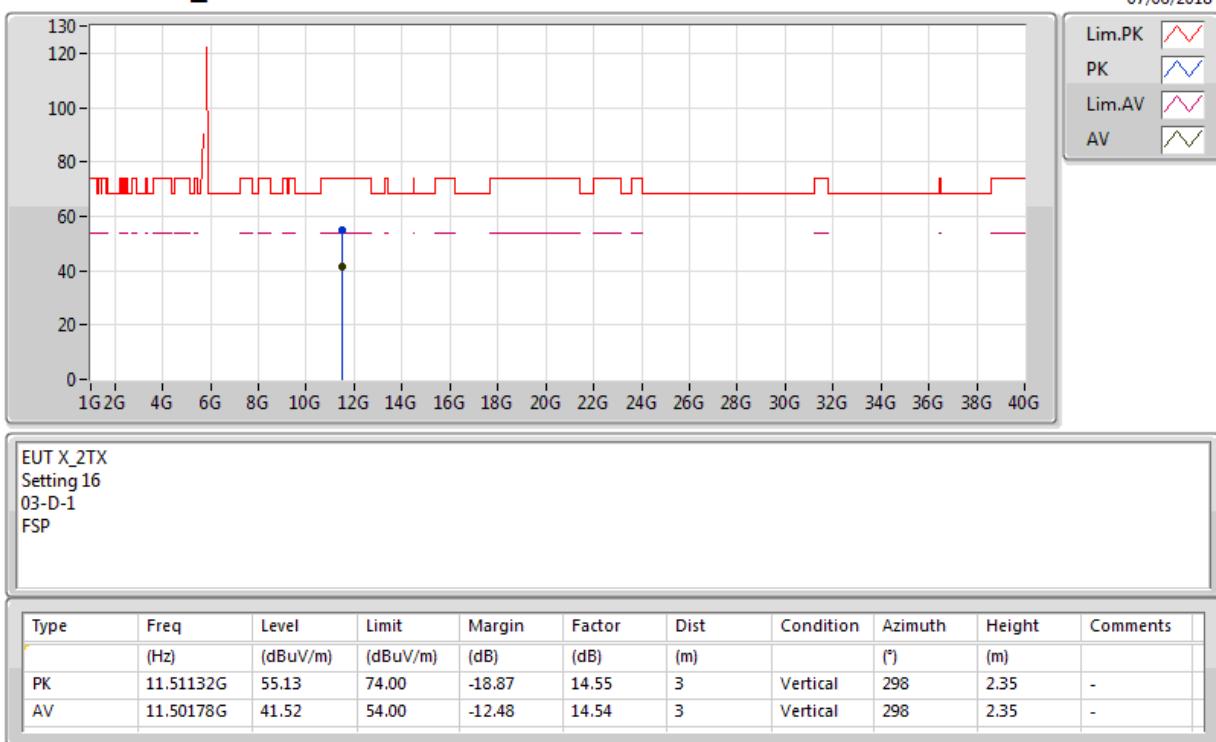
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5755MHz\_TX**

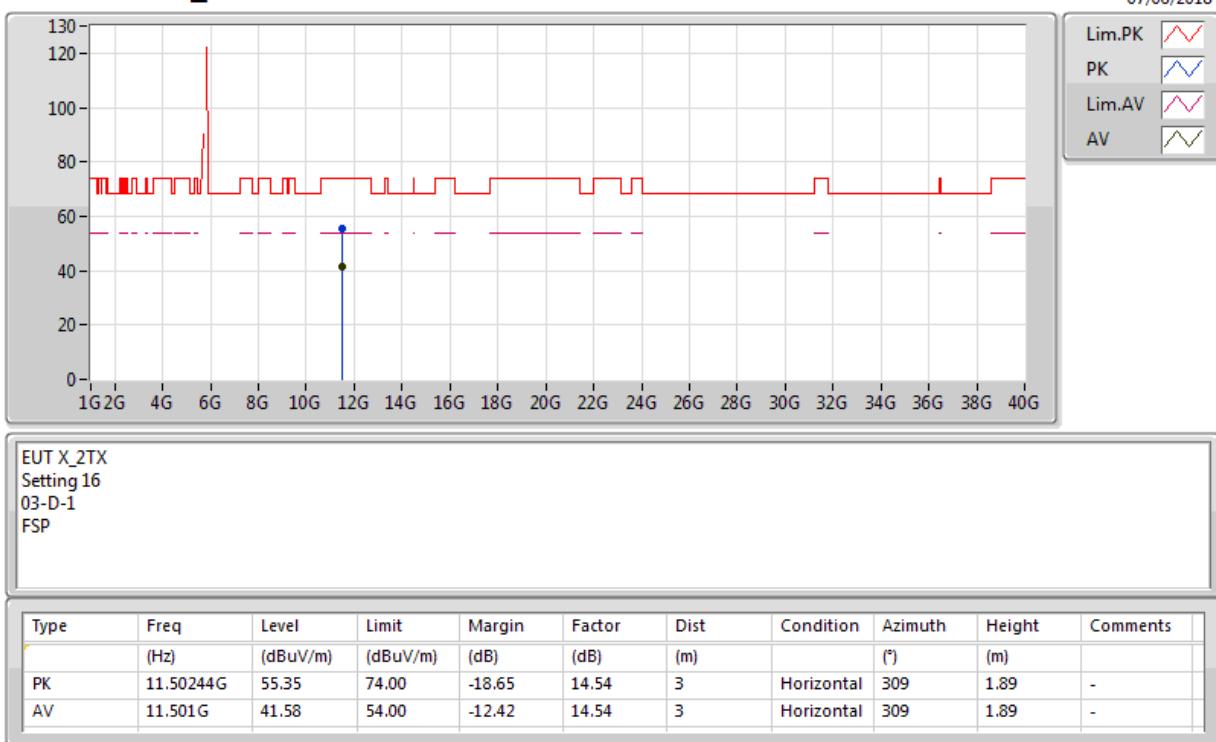
07/06/2018



EUT X\_2TX  
Setting 16  
03-D-1-10  
FSP

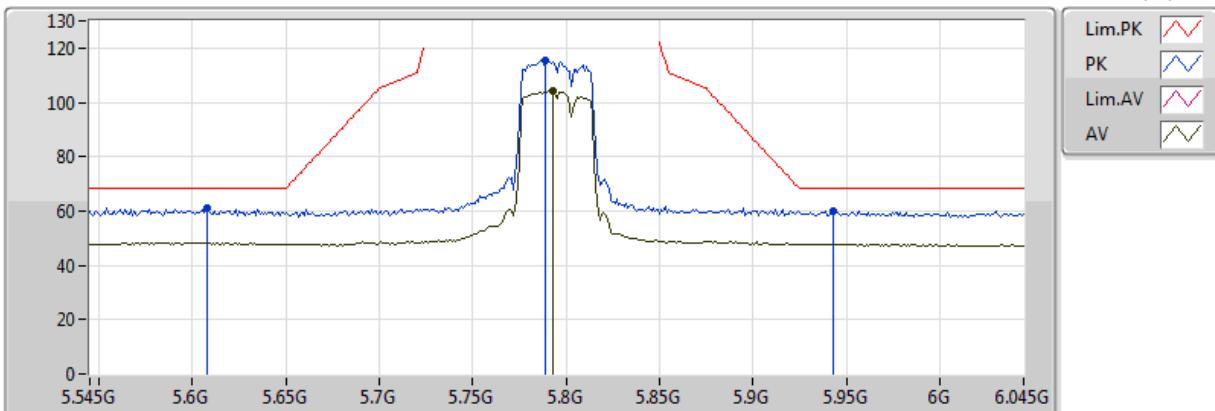
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.592G	60.76	68.20	-7.44	6.40	3	Horizontal	355	1.80	-
PK	5.747G	114.33	Inf	-Inf	6.76	3	Horizontal	355	1.80	-
AV	5.744G	103.36	Inf	-Inf	6.76	3	Horizontal	355	1.80	-
PK	5.935G	60.07	68.20	-8.13	6.80	3	Horizontal	355	1.80	-

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5755MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5755MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5795MHz\_TX**

07/06/2018

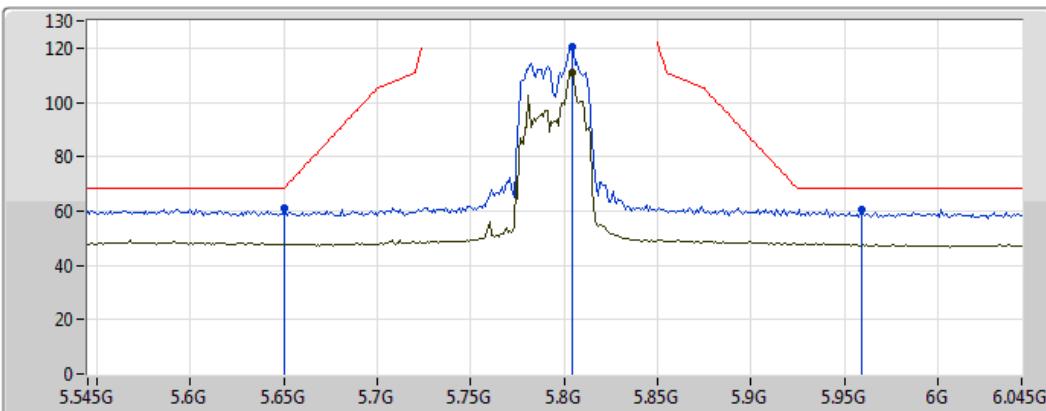


EUT X\_2TX  
Setting 16  
03-D-1-10  
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.608G	61.01	68.20	-7.19	6.42	3	Vertical	360	1.67	-
PK	5.789G	115.34	Inf	-Inf	6.86	3	Vertical	360	1.67	-
AV	5.793G	104.26	Inf	-Inf	6.87	3	Vertical	360	1.67	-
PK	5.943G	60.15	68.20	-8.05	6.80	3	Vertical	360	1.67	-

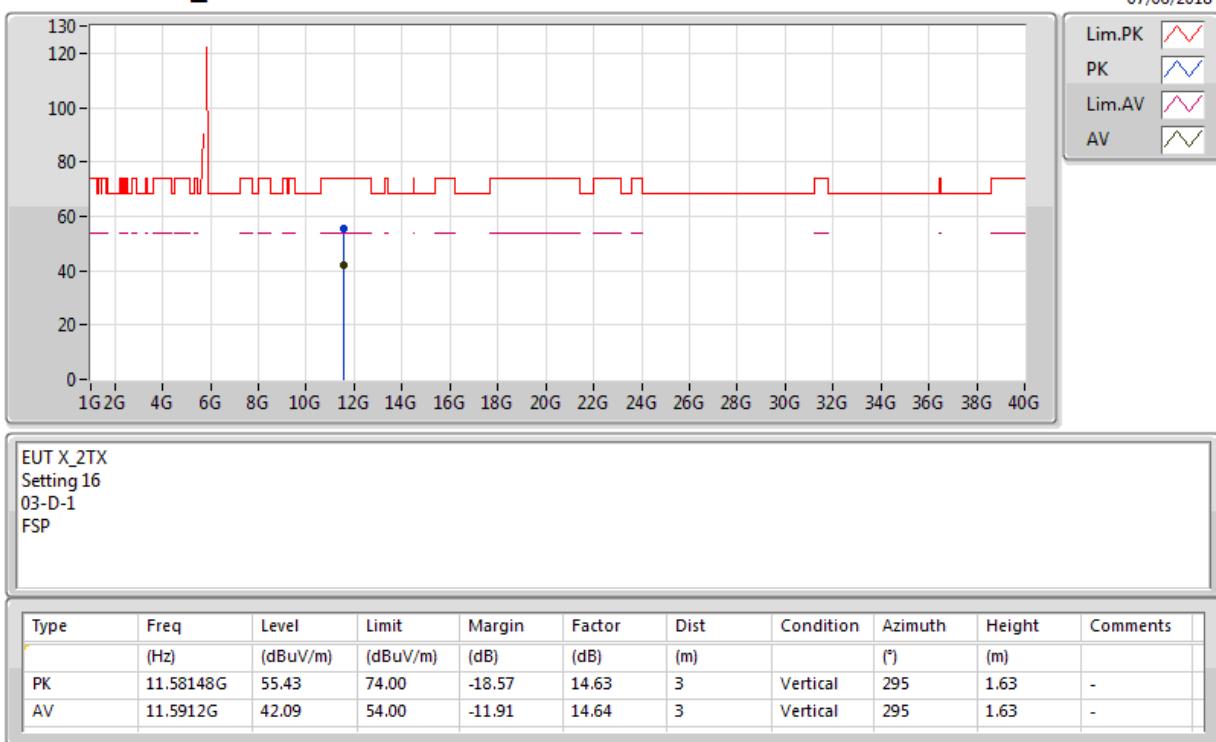
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5795MHz\_TX**

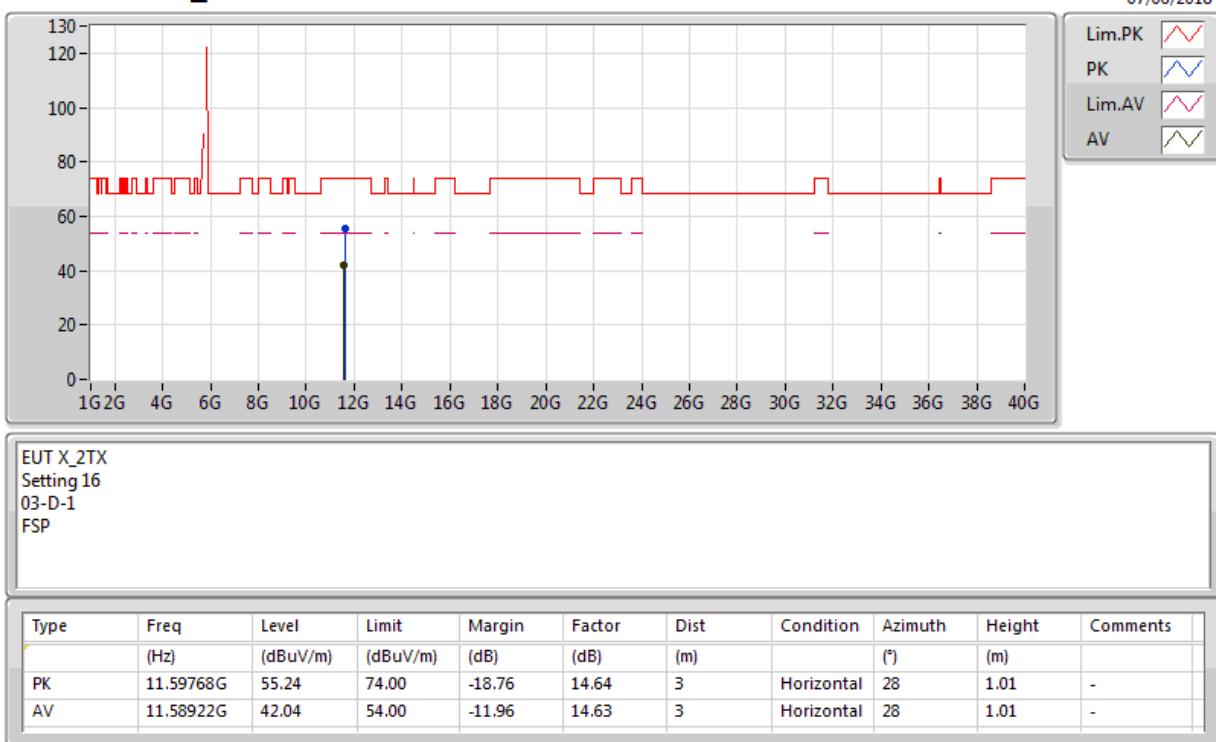
07/06/2018



EUT X\_2TX  
Setting 16  
03-D-1-10  
FSP

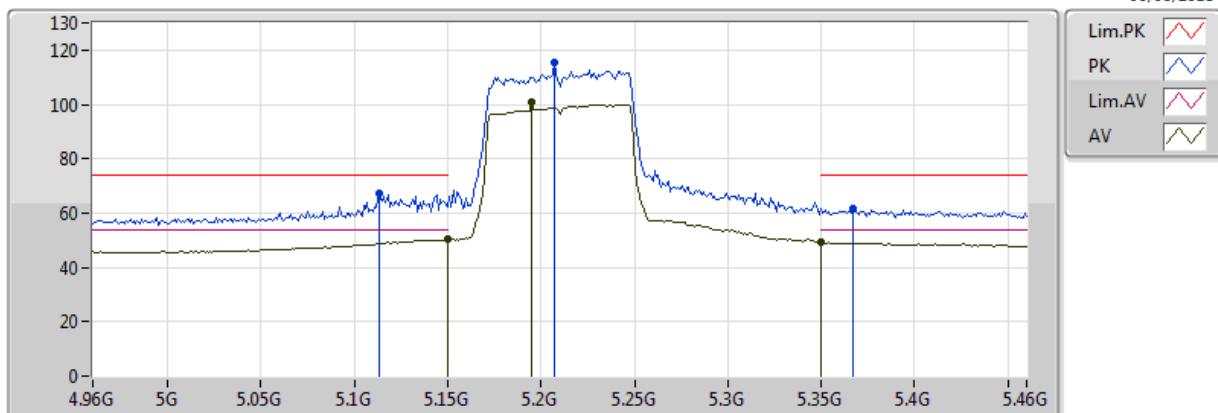
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.65G	61.06	68.20	-7.14	6.53	3	Horizontal	0	1.60	-
PK	5.804G	120.34	Inf	-Inf	6.89	3	Horizontal	0	1.60	-
AV	5.804G	110.73	Inf	-Inf	6.89	3	Horizontal	0	1.60	-
PK	5.959G	60.42	68.20	-7.78	6.77	3	Horizontal	0	1.60	-

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5795MHz\_TX**

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX****5795MHz\_TX**

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX****5210MHz\_TX**

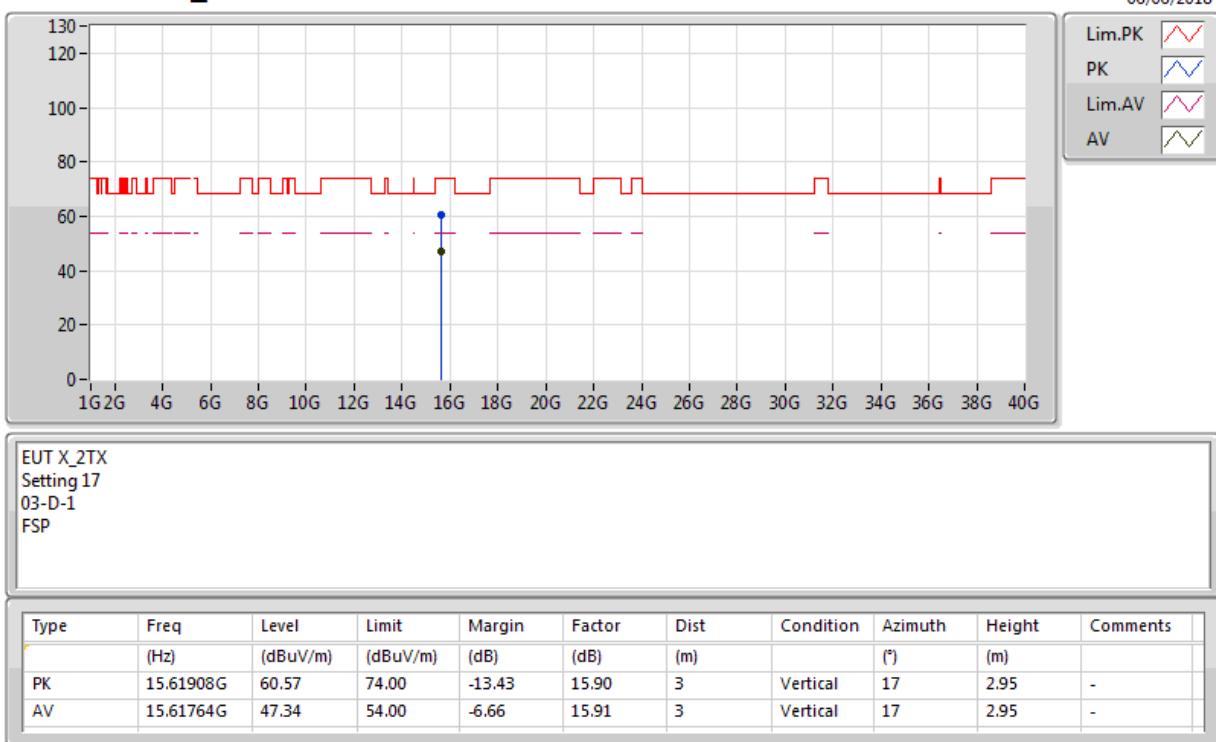
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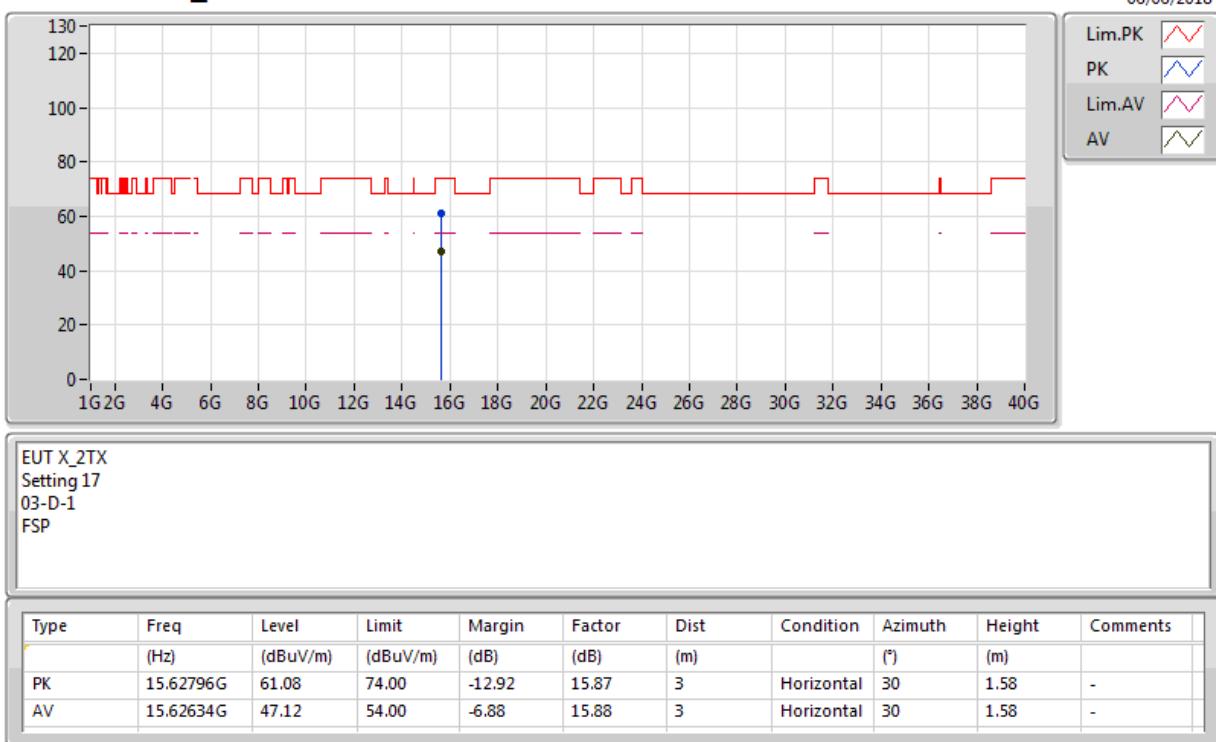


EUT X\_2TX  
Setting 17  
03-D-1-10  
FSP

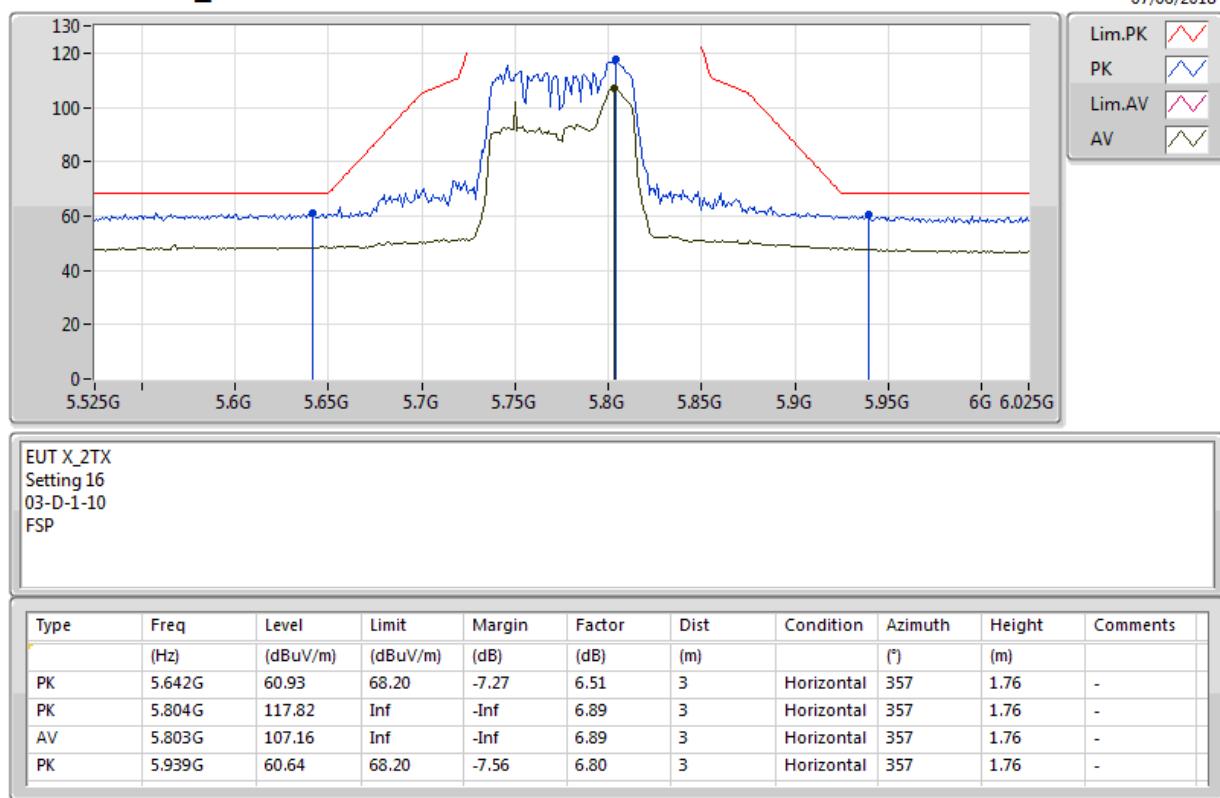
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	5.113G	66.97	74.00	-7.03	5.60	3	Vertical	343	2.06	-
AV	5.149995G	50.23	54.00	-3.77	5.76	3	Vertical	343	2.06	-
PK	5.207G	115.40	Inf	-Inf	5.97	3	Vertical	343	2.06	-
AV	5.195G	100.75	Inf	-Inf	5.94	3	Vertical	343	2.06	-
PK	5.367G	61.76	74.00	-12.24	6.23	3	Vertical	343	2.06	-
AV	5.350005G	49.08	54.00	-4.92	6.20	3	Vertical	343	2.06	-

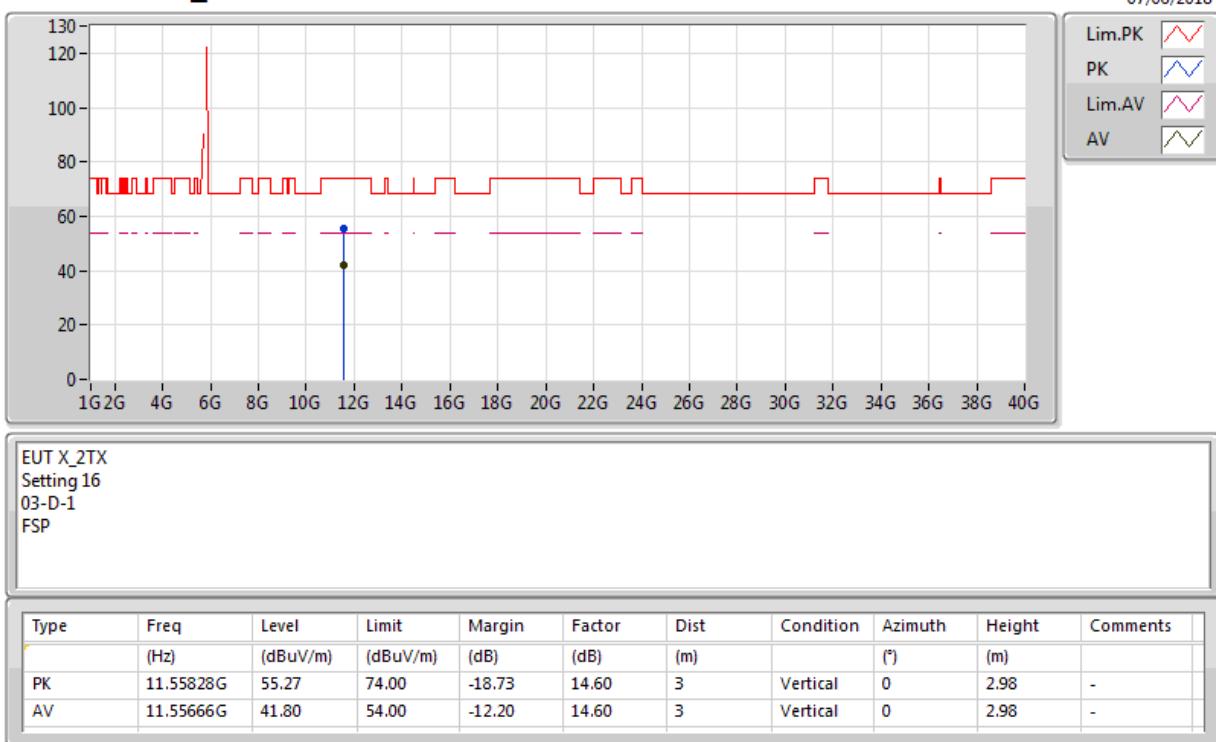
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX****5210MHz\_TX**

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX****5210MHz\_TX**

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX****5210MHz\_TX**

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX****5775MHz\_TX**

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX****5775MHz\_TX**

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX****5775MHz\_TX**

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX****5775MHz\_TX**