



# FCC RADIO TEST REPORT

**FCC ID** : 2AHKM-HIVE2200  
**Equipment** : 2x2 DBCC WiFi Extender  
**Brand Name** : hitron  
**Model Name** : HIXE12AWR  
**Applicant** : Hitron Technologies Inc.  
No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park,  
Hsinchu 30078, Taiwan  
**Manufacturer** : Hitron Technologies Inc.  
No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park,  
Hsinchu 30078, Taiwan  
**Standard** : 47 CFR FCC Part 15.407

The product was received on Jan. 04, 2019, and testing was started from Jan. 08, 2019 and completed on Jan. 23, 2019. 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: Cliff Chang

**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	-

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

**Reviewed by:** Cliff Chang**Report Producer:** Wendy Pan



# 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 [8]
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 [3]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530	106 [1]
5725-5850		5775	155 [1]

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

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

## Note:

- ◆ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ◆ VHT20, VHT40, 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.	Port	Brand	Model Name	P/N	Antenna Type	Connector	Gain (dBi)
1	1	Ethertronics	XE1v2	-	PCB Antenna	I-PEX	Note
2	2	Ethertronics	XE1v2	-	PCB Antenna	I-PEX	
3	1	PSA	-	RFECA3216060A1T	CERAMIC Antenna	N/A	

Note 1:

Ant.	Port	Gain (dBi)					
		WLAN 2.4G	WLAN 5G Band 1	WLAN 5G Band 2	WLAN 5G Band 3	WLAN 5G Band 4	BT
1	1	4.4	4.8	4.8	5.4	5.5	-
2	2	3.1	3.8	4.0	4.9	3.8	-
3	1	-		-	-		2.09

Note 2: The EUT has three antennas.

Note 3: The above information was declared by manufacturer.

#### <For 2.4GHz Band>

##### For IEEE 802.11b/g/n mode (2TX/2RX)

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

Port 1 and Port 2 could transmit/receive simultaneously.

#### <For 5GHz Band>

##### 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.

#### <For Bluetooth>

##### For BT function (1TX/1RX)

Only Port 1 can be used as transmitting/receiving antenna.



### 1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.971	0.128	2.068m	1k
802.11ac VHT20	0.988	0.052	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT20-BF	0.912	0.4	1.82m	1k
802.11ac VHT40	0.976	0.106	2.44m	1k
802.11ac VHT40-BF	0.901	0.453	1.683m	1k
802.11ac VHT80	0.95	0.223	1.153m	1k
802.11ac VHT80-BF	0.924	0.343	1.943m	1k

Note:

- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

### 1.1.4 EUT Operational Condition

EUT Power Type	Internal power supply				
Beamforming Function	<input checked="" type="checkbox"/> With beamforming	<input type="checkbox"/> Without beamforming	For 802.11n/ac in 5GHz.		
Weather Band	<input type="checkbox"/> With 5600~5650MHz	<input checked="" type="checkbox"/> Without 5600~5650MHz			
Function	<input type="checkbox"/> Outdoor P2M	<input checked="" type="checkbox"/> Indoor P2M			
TPC Function	<input type="checkbox"/> Fixed P2P	<input type="checkbox"/> Client			
Test Software Version	For non-beamforming test: QRCT(Version3.0.187.0) For beamforming test: Ttermpro				

Note: The above information was declared by manufacturer.



### 1.1.5 Table for EUT support type

Function	support type
AP Router	Master
Extender	Master + Slave
Mesh	Master + Slave

Note: The EUT supports AP Router、Extender and Mesh mode, only AP Router mode was tested and recorded in this test report for customer's request.

### 1.1.6 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR862827AB

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

Modifications	Performance Checking
1. Updating the hardware version to "SR3" from "SR2".  The detail differences as below.  a) Updating the design for antenna. b) Change LED to DIP lamp from SMD chip c) Removing the absorber of the device. d) Adding U4 and U4 related components on the mother board. e) Change the opening size for pin header on the main frame.	1. AC Power-line Conducted Emissions 2. Unwanted Emissions  For items 2 after evaluating, the worst case is found at 802.11a CH1 (5180MHz), CH165 (5825MHz), 11ac VHT40 CH46 (5230MHz), CH151 (5755MHz), 11ac VHT80 CH42 (5210MHz), CH155 (5755MHz) and retest these channels only and for above 1GHz will be based on original output power to retest.
2. Adding beamforming for Band 1 ~ Band 4. 3. Adding 5GHz band 2 and band 3 (5250~5350 MHz, 5470~5725 MHz) for this device.	1. Emission Bandwidth 2. Maximum Conducted Output Power 3. Peak Power Spectral Density 4. Unwanted Emissions



## 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
- ◆ FCC KDB 412172 D01 v01r01

## 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 / 65%	Jan. 08, 2019 ~ Jan. 23, 2019
Radiated	03CH01-CB	RJ Huang	22°C / 54%	Jan. 08, 2019 ~ Jan. 23, 2019
AC Conduction	CO02-CB	Wei Li	25°C / 65%	Jan. 14, 2019

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)	2.0 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	$9.74 \times 10^{-8}$	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	24
5825MHz	24
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5230MHz	23
5755MHz	24
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	22
5775MHz	24
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	24
5300MHz	24
5320MHz	24
5500MHz	24
5580MHz	24
5700MHz	24
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5260MHz	24
5300MHz	24
5320MHz	24
5500MHz	24
5580MHz	24
5700MHz	24
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5270MHz	24
5310MHz	24
5510MHz	24
5550MHz	24
5670MHz	24
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5290MHz	24
5530MHz	24
5610MHz	24



Mode	PowerSetting
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	21.5
5200MHz	22
5240MHz	22
5260MHz	21.5
5300MHz	22
5320MHz	22
5500MHz	22
5580MHz	21.5
5700MHz	20.5
5745MHz	21.5
5785MHz	22
5825MHz	22
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	19.5
5230MHz	22
5270MHz	20.5
5310MHz	18
5510MHz	17
5550MHz	20.5
5670MHz	19
5755MHz	22
5795MHz	22
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	18
5290MHz	18
5530MHz	16
5775MHz	22

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.

2.There are two modes of EUT for 802.11ac in 5GHz. One is beamforming mode, and the other is non-beamforming mode. Both modes have been tested and recorded in this test 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 Router mode

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	AP Router mode - EUT in Z axis
2	AP Router mode - EUT in Y axis
For operating mode 1 is the worst case and it was record in this test report.	
<b>Operating Mode &gt; 1GHz</b>	CTX The EUT was performed at Y axis and Z axis position for Unwanted Emissions test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis

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 + WLAN 5GHz

Refer to Sporton Test Report No.: FA862827-02 for Co-location RF Exposure Evaluation.

Note: For normal link mode, the bluetooth function doesn't work.



## 2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

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 Ttermpro.
3. Executed "Ttermpro" 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: CO02-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E6430	N/A
B	NB	DELL	E6430	N/A
C	NB	DELL	E6430	N/A

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

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	NB	DELL	E4300	N/A

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

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A

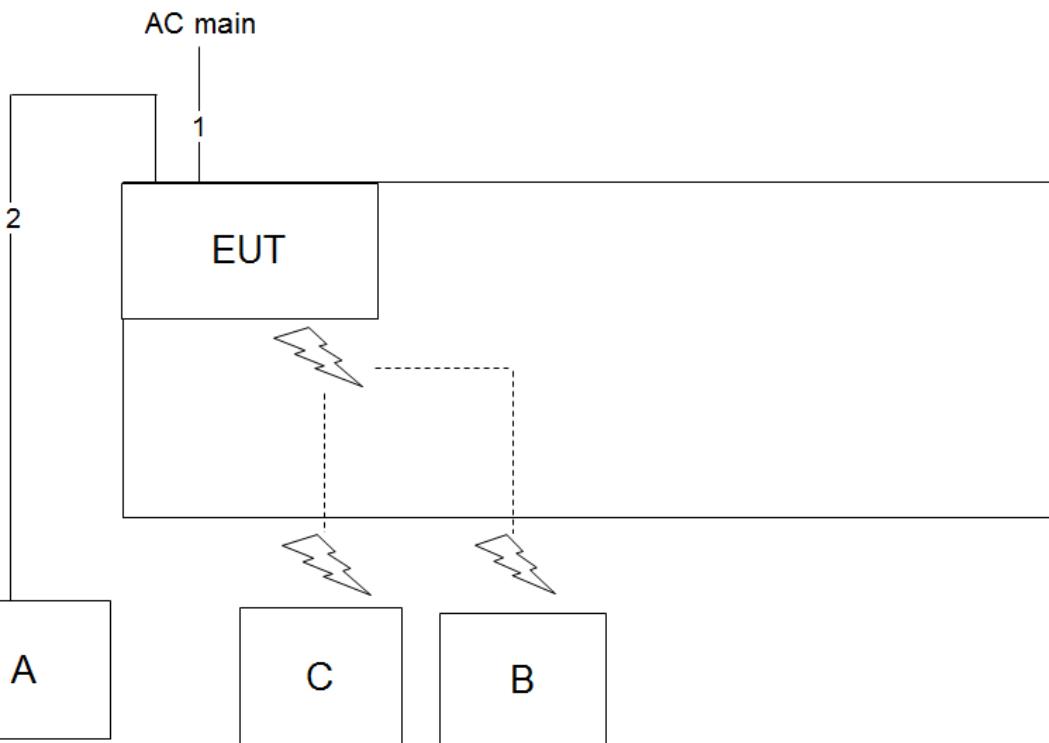
For Test Site No: TH01-CB and 03CH01-CB (above 1GHz, Beamforming Mode)

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	WLAN AP	Qualcomm	N/A	N/A
C	NB	DELL	E4300	N/A

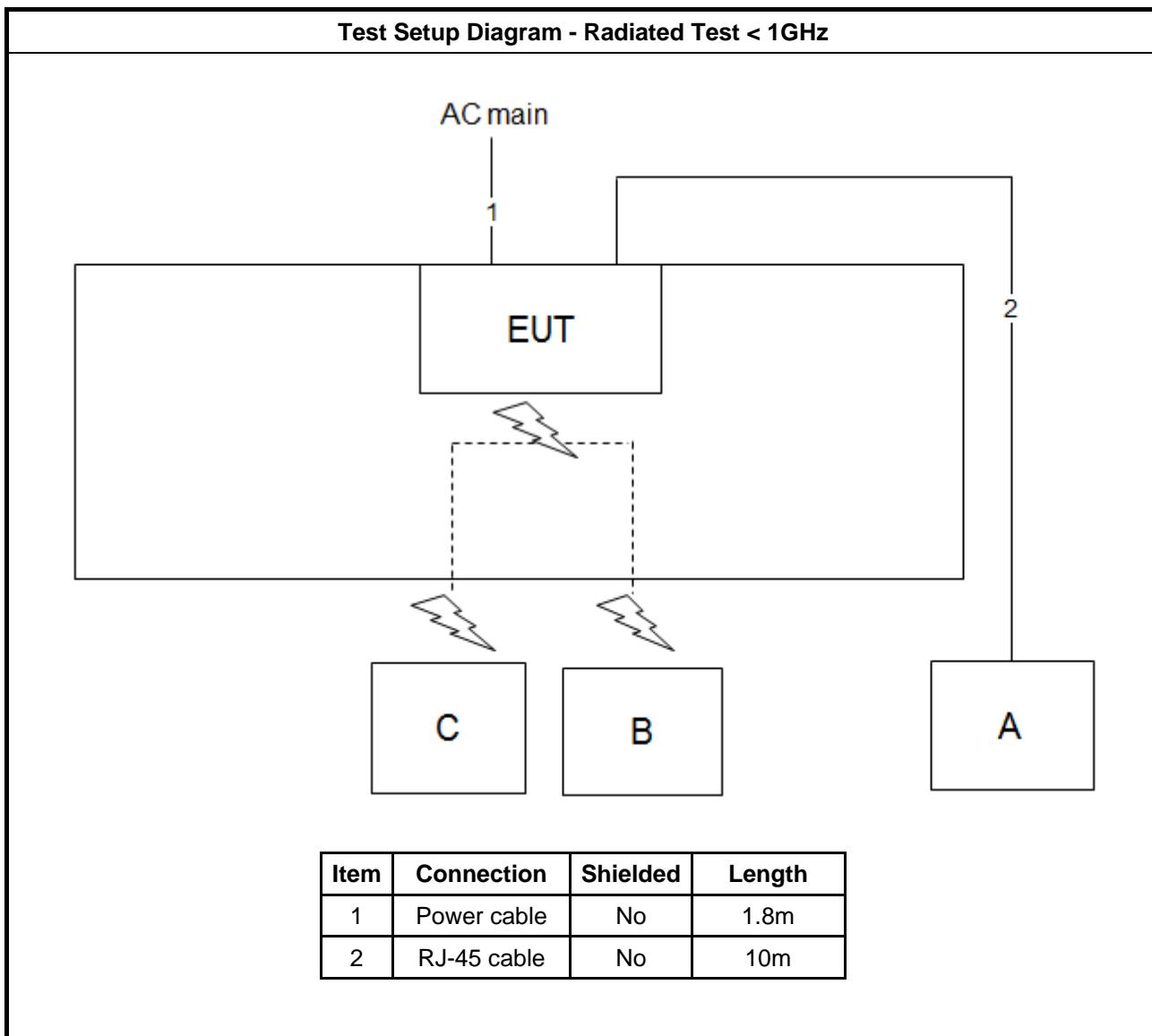


## 2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test

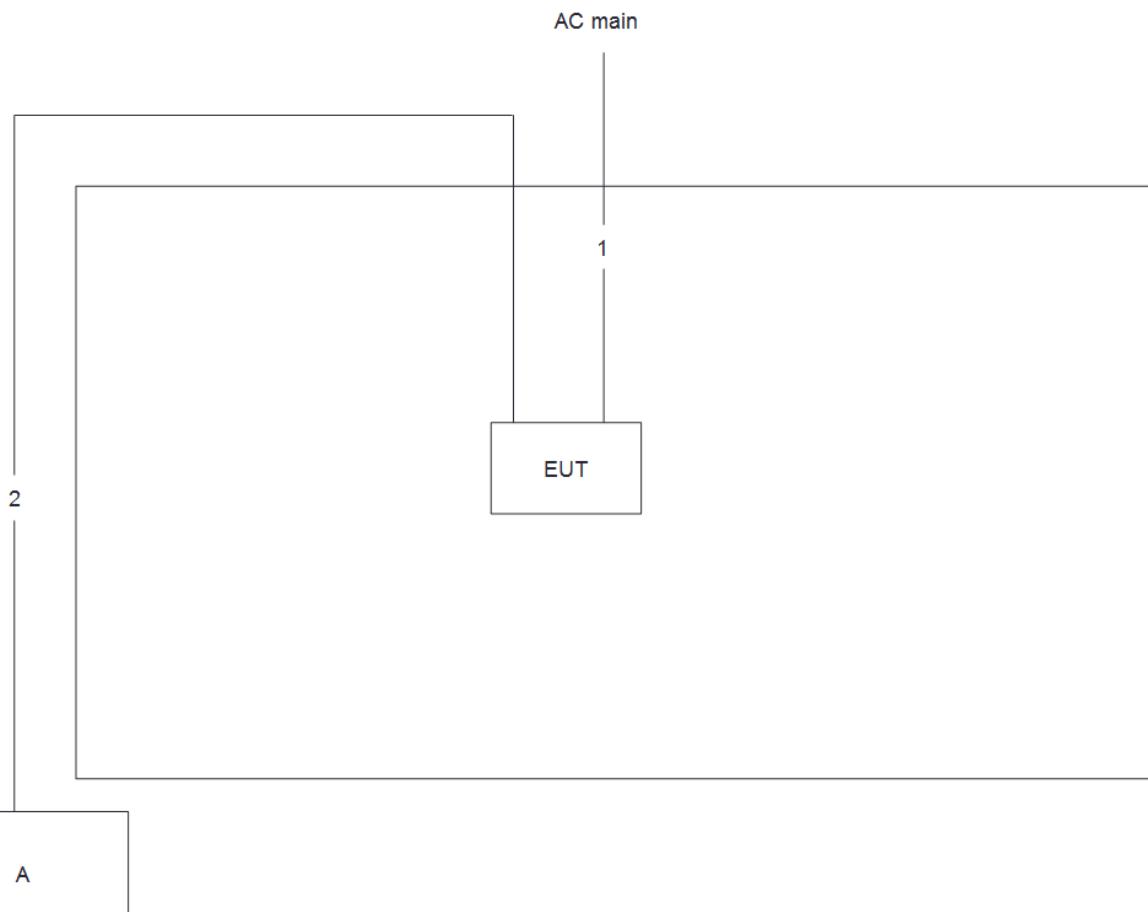


Item	Connection	Shielded	Length
1	Power cable	No	0.8m
2	RJ-45 cable	No	10m





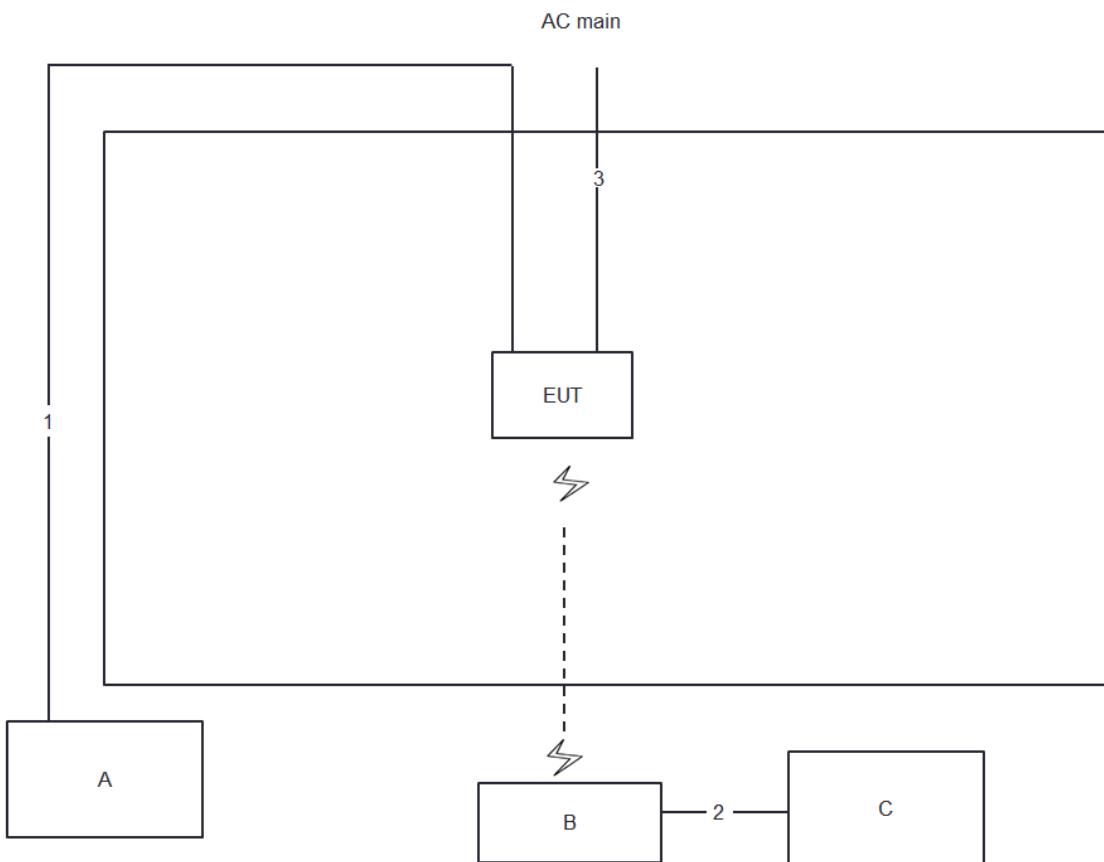
## Test Setup Diagram - Radiated Test &gt; 1GHz, Non-Beamforming Mode



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m



## Test Setup Diagram - Radiated Test &gt; 1GHz, Beamforming Mode



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



### 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.

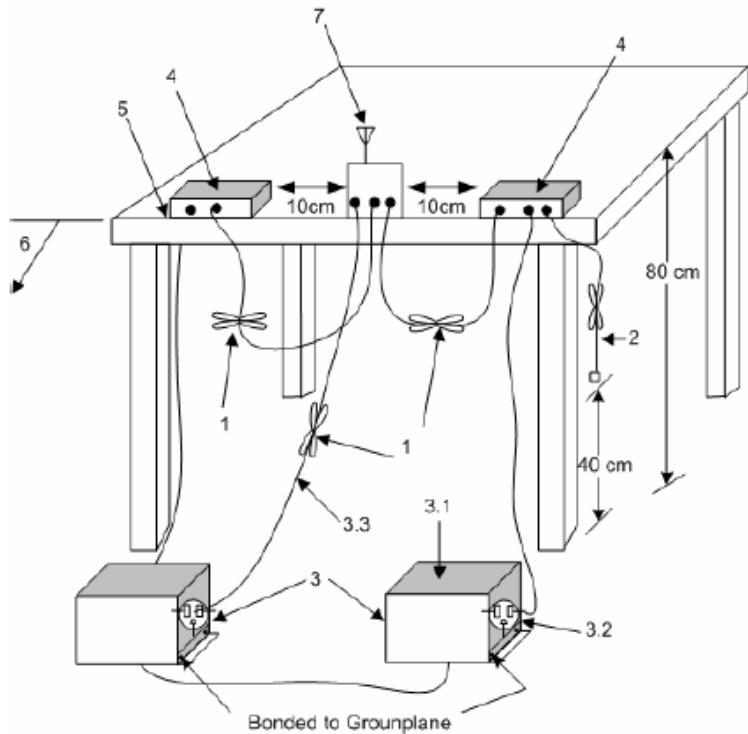
##### 3.1.3 Test Procedures

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 $\geq 500\text{kHz}$ .

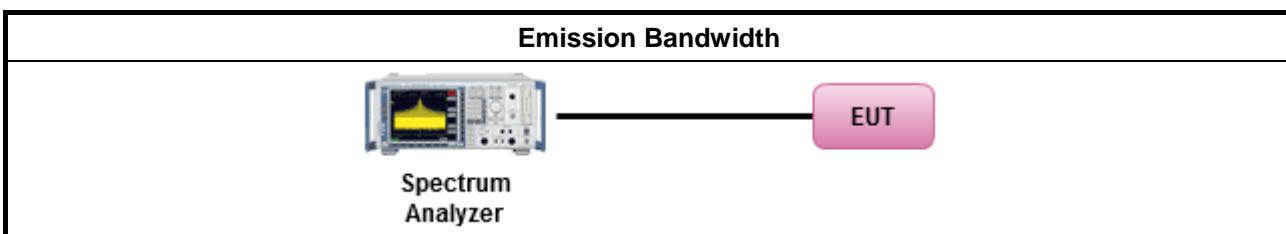
### 3.2.2 Measuring Instruments

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</math> dBi, then <math>P_{out} = 30 - (G_{TX} - 6)</math>. e.i.r.p. at any elevation angle above 30 degrees <math>\leq 125</math>mW [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</math> dBi, 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</math> dBi, 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</math> dBi, 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 $11$ dBm + $10 \log B$ , where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ 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 $11$ dBm + $10 \log B$ , where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ 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</math> dBi, 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</math> dBi, 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.	



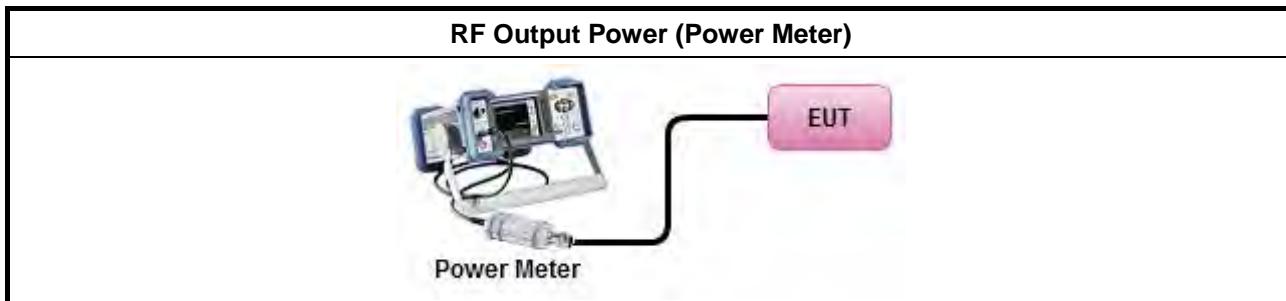
### 3.3.2 Measuring Instruments

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 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 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.	
<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.	<ul style="list-style-type: none"><li>▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where <math>\theta</math> is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for <math>0^\circ \leq \theta &lt; 8^\circ</math> ; -13 – 0.716 (<math>\theta</math>-8) dBW/MHz for <math>8^\circ \leq \theta &lt; 40^\circ</math> -35.9 – 1.22 (<math>\theta</math>-40) dBW/MHz for <math>40^\circ \leq \theta \leq 45^\circ</math> ; -42 dBW/MHz for <math>\theta &gt; 45^\circ</math></li></ul>
<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.

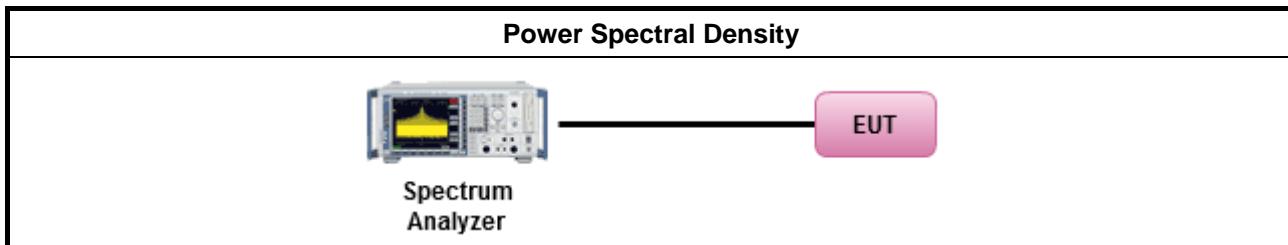


### 3.4.3 Test Procedures

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>	
<ul style="list-style-type: none"><li><input type="checkbox"/> Refer as FCC KDB 789033, F5) power spectral density can be measured using resolution bandwidths &lt; 1 MHz provided that the results are integrated over 1 MHz bandwidth [duty cycle <math>\geq</math> 98% or external video / power trigger]</li><li><input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).</li><li><input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed) duty cycle &lt; 98% and average over on/off periods with duty factor</li><li><input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).</li><li><input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)</li></ul>	
<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>	
<ul style="list-style-type: none"><li><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.</li><li><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,</li><li><input type="checkbox"/> Option 3: Measure and add <math>10 \log(N)</math> 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 <math>10 \log(N)</math>. Or each transmit chains shall be add <math>10 \log(N)</math> to compared with the limit.</li></ul>	
<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 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

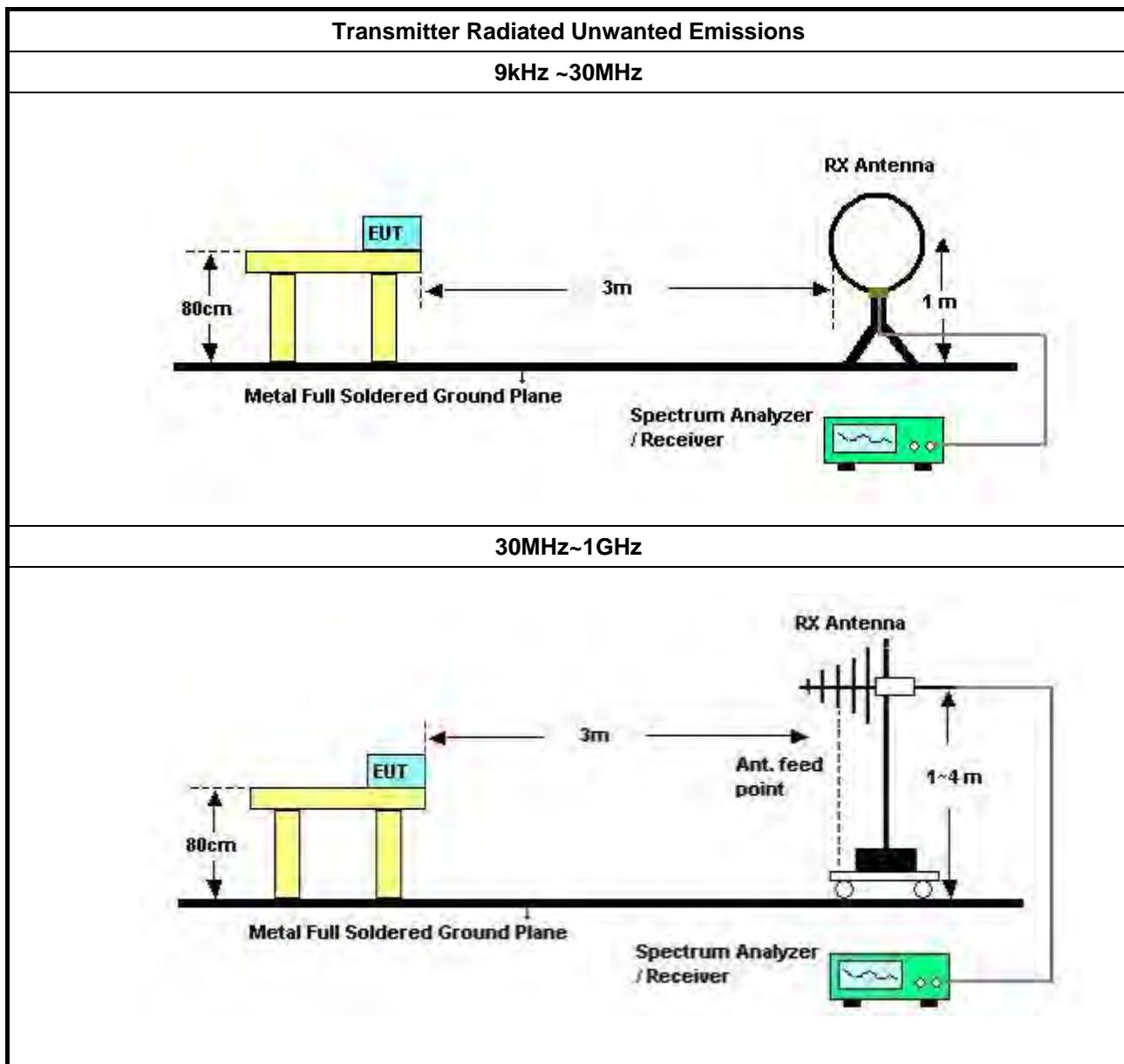
Test Method	
<ul style="list-style-type: none"><li>▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance 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><li>▪ The average emission levels shall be measured in [duty cycle <math>\geq</math> 98 or duty factor].</li><li>▪ For the transmitter unwanted emissions shall be measured using following options below:</li></ul>	
	<ul style="list-style-type: none"><li><input type="checkbox"/> Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.</li><li><input type="checkbox"/> Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.</li></ul>
	<ul style="list-style-type: none"><li><input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).</li><li><input checked="" type="checkbox"/> Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).</li><li><input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). <math>VBW \geq 1/T</math>, where T is pulse time.</li><li><input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.</li><li><input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.</li><li><input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.</li></ul>

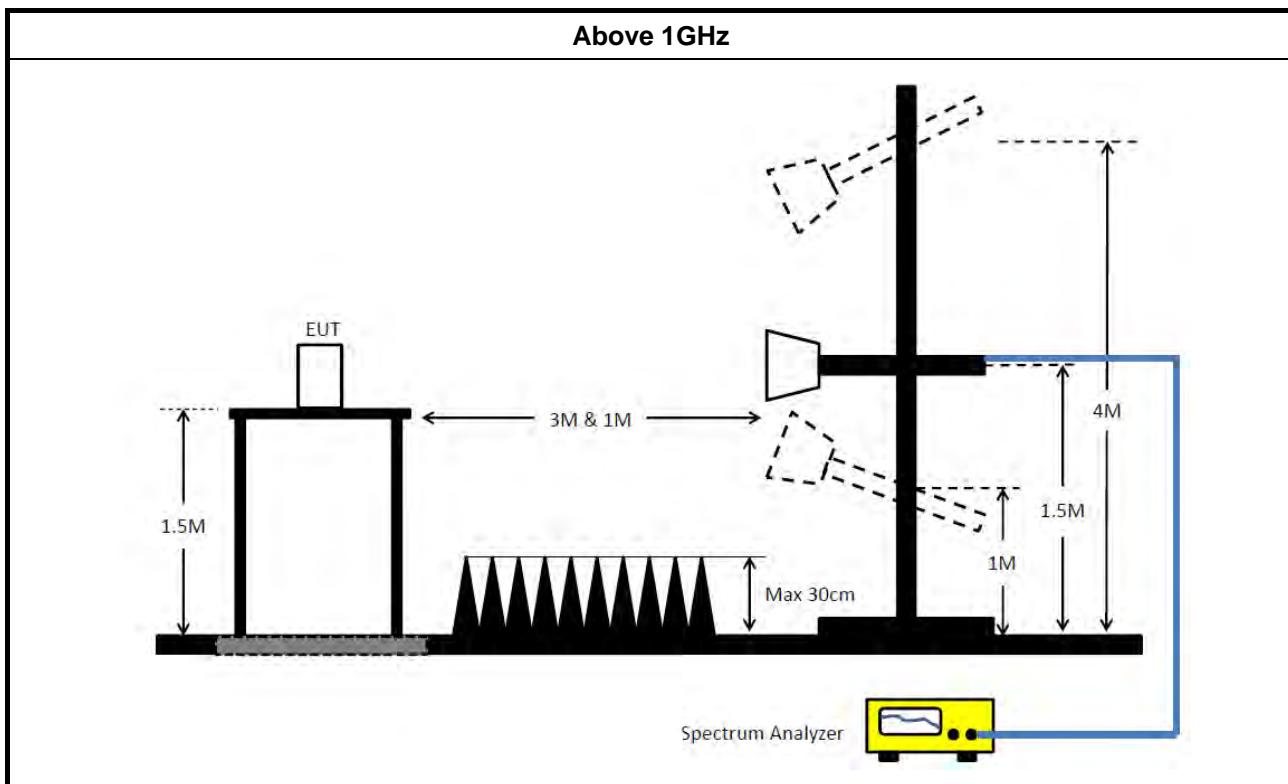


<b>Test Method</b>	
▪ For radiated measurement.	
▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
	▪ The any unwanted emissions level shall not exceed the fundamental emission level.
	▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.



### 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. 21, 2018	Nov. 20, 2019	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 05, 2018	Nov. 04, 2019	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. 06, 2018	Nov. 05, 2019	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. 27, 2018	Aug. 26, 2019	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2018	Mar. 15, 2019	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 13, 2018	Nov. 12, 2019	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 28, 2018	Jun. 27, 2019	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	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2019	Jan. 07, 2020	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 03, 2018	Oct. 02, 2019	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	100359	9kHz ~ 2.75GHz	Jul. 03, 2018	Jul. 02, 2019	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)

**FCC RADIO TEST REPORT**

Report No. : FR862827-02AB

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jun. 22, 2018	Jun. 21, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 05, 2018	Nov. 04, 2019	Conducted (TH01-CB)

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

N.C.R. means Non-Calibration required.

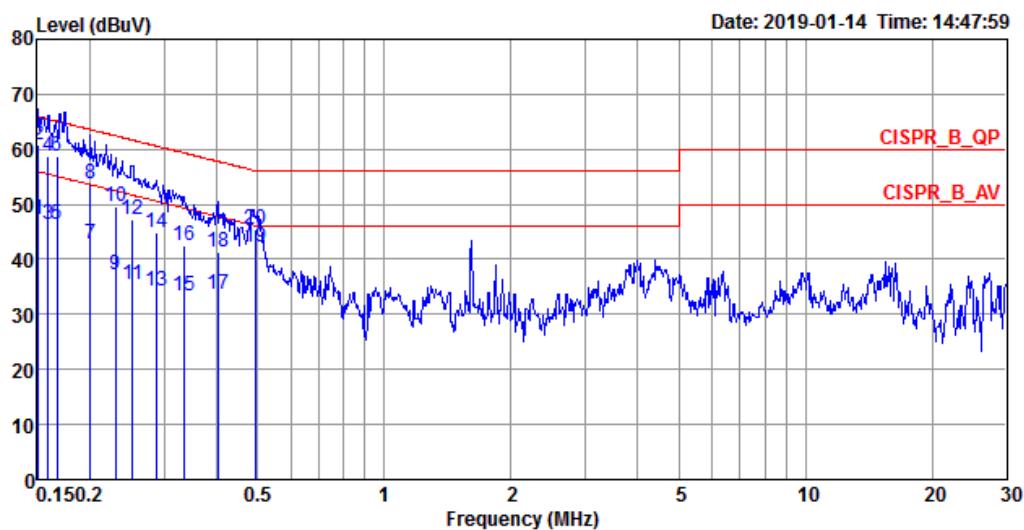


## AC Power Port Conducted Emission Result

Appendix A

Test Mode	Mode 1	Frequency Range	0.15 MHz to 30 MHz
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### Line



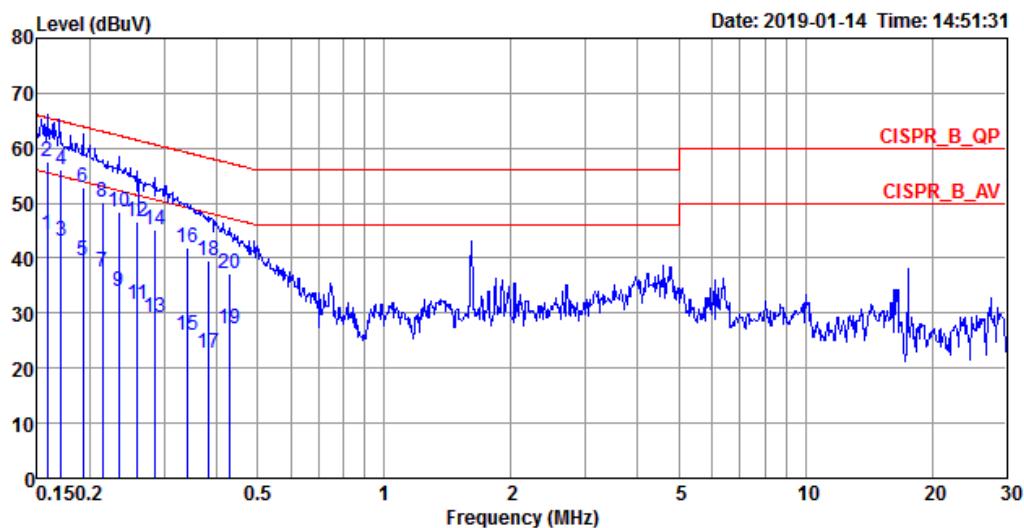
Freq	Level	Over	Limit	Read	LISN	Cable	Remark	Pol/Phase
		Limit	Line	Level	Factor	Loss		
MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1508	47.27	-8.69	55.96	37.10	10.15	0.02 Average	LINE
2	0.1508	60.69	-5.27	65.96	50.52	10.15	0.02 QP	LINE
3	0.1590	46.28	-9.24	55.52	36.11	10.15	0.02 Average	LINE
4	0.1590	58.70	-6.82	65.52	48.53	10.15	0.02 QP	LINE
5	0.1668	46.35	-8.77	55.12	36.18	10.15	0.02 Average	LINE
6	0.1668	58.62	-6.50	65.12	48.45	10.15	0.02 QP	LINE
7	0.2007	42.72	-10.86	53.58	32.55	10.15	0.02 Average	LINE
8	0.2007	53.66	-9.92	63.58	43.49	10.15	0.02 QP	LINE
9	0.2297	37.27	-15.19	52.46	27.10	10.15	0.02 Average	LINE
10	0.2297	49.65	-12.81	62.46	39.48	10.15	0.02 QP	LINE
11	0.2521	35.28	-16.41	51.69	25.11	10.15	0.02 Average	LINE
12	0.2521	47.35	-14.34	61.69	37.18	10.15	0.02 QP	LINE
13	0.2878	34.24	-16.35	50.59	24.06	10.16	0.02 Average	LINE
14	0.2878	44.90	-15.69	60.59	34.72	10.16	0.02 QP	LINE
15	0.3338	33.31	-16.04	49.35	23.13	10.16	0.02 Average	LINE
16	0.3338	42.65	-16.70	59.35	32.47	10.16	0.02 QP	LINE
17	0.4019	33.77	-14.04	47.81	23.59	10.16	0.02 Average	LINE
18	0.4019	41.31	-16.50	57.81	31.13	10.16	0.02 QP	LINE
19	0.4954	42.20	-3.88	46.08	32.02	10.16	0.02 Average	LINE
20	0.4954	45.37	-10.71	56.08	35.19	10.16	0.02 QP	LINE



## AC Power Port Conducted Emission Result

Appendix A

### Neutral



Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase	
								MHz	dBuV
1	0.1582	44.26	-11.30	55.56	34.11	10.13	0.02	Average	NEUTRAL
2	0.1582	57.46	-8.10	65.56	47.31	10.13	0.02	QP	NEUTRAL
3	0.1707	43.18	-11.75	54.93	33.03	10.13	0.02	Average	NEUTRAL
4	0.1707	56.10	-8.83	64.93	45.95	10.13	0.02	QP	NEUTRAL
5	0.1924	39.57	-14.36	53.93	29.42	10.13	0.02	Average	NEUTRAL
6	0.1924	52.84	-11.09	63.93	42.69	10.13	0.02	QP	NEUTRAL
7	0.2139	37.41	-15.64	53.05	27.26	10.13	0.02	Average	NEUTRAL
8	0.2139	50.08	-12.97	63.05	39.93	10.13	0.02	QP	NEUTRAL
9	0.2341	33.90	-18.40	52.30	23.75	10.13	0.02	Average	NEUTRAL
10	0.2341	48.46	-13.84	62.30	38.31	10.13	0.02	QP	NEUTRAL
11	0.2589	31.52	-19.95	51.47	21.37	10.13	0.02	Average	NEUTRAL
12	0.2589	46.77	-14.70	61.47	36.62	10.13	0.02	QP	NEUTRAL
13	0.2848	29.11	-21.57	50.68	18.95	10.14	0.02	Average	NEUTRAL
14	0.2848	45.13	-15.55	60.68	34.97	10.14	0.02	QP	NEUTRAL
15	0.3392	25.85	-23.37	49.22	15.69	10.14	0.02	Average	NEUTRAL
16	0.3392	41.93	-17.29	59.22	31.77	10.14	0.02	QP	NEUTRAL
17	0.3832	22.85	-25.36	48.21	12.69	10.14	0.02	Average	NEUTRAL
18	0.3832	39.52	-18.69	58.21	29.36	10.14	0.02	QP	NEUTRAL
19	0.4282	27.15	-20.14	47.29	16.99	10.14	0.02	Average	NEUTRAL
20	0.4282	37.30	-19.99	57.29	27.14	10.14	0.02	QP	NEUTRAL

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.375M	16.417M	16M4D1D	18.775M	16.392M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.55M	17.641M	17M6D1D	19.775M	17.591M
802.11ac VHT40_Nss1,(MCS0)_2TX	40M	35.982M	36M0D1D	39.85M	35.882M
802.11ac VHT80_Nss1,(MCS0)_2TX	83.6M	75.762M	75M8D1D	83.4M	75.762M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	28.925M	16.567M	16M6D1D	18.775M	16.367M
802.11ac VHT20_Nss1,(MCS0)_2TX	22.95M	17.691M	17M7D1D	19.825M	17.516M
802.11ac VHT40_Nss1,(MCS0)_2TX	66.2M	36.232M	36M2D1D	39.85M	35.932M
802.11ac VHT80_Nss1,(MCS0)_2TX	83.5M	76.062M	76M1D1D	83.3M	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;

**Result**

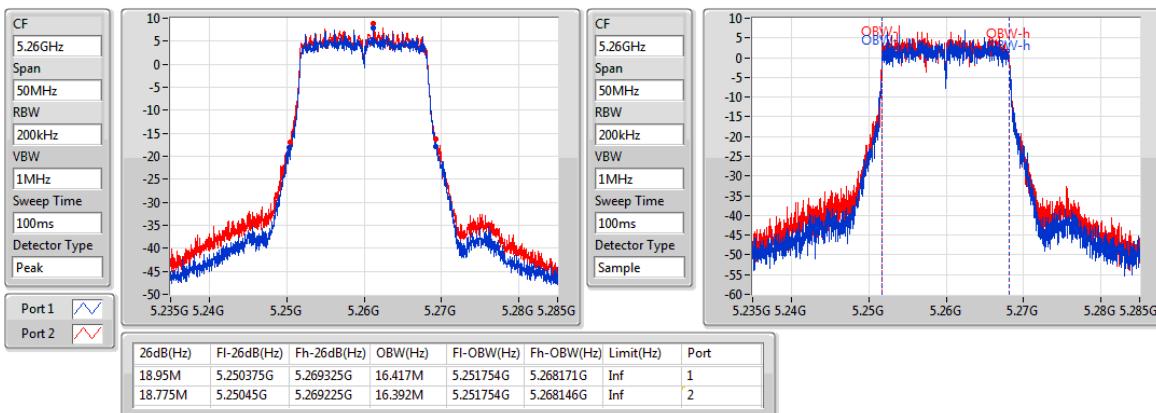
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	18.95M	16.417M	18.775M	16.392M
5300MHz	Pass	Inf	19.375M	16.392M	18.85M	16.417M
5320MHz	Pass	Inf	19.1M	16.417M	19M	16.417M
5500MHz	Pass	Inf	19.65M	16.417M	18.925M	16.417M
5580MHz	Pass	Inf	28.925M	16.567M	19.7M	16.367M
5700MHz	Pass	Inf	22.925M	16.517M	18.775M	16.467M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	19.775M	17.616M	20.55M	17.616M
5300MHz	Pass	Inf	19.85M	17.591M	19.9M	17.616M
5320MHz	Pass	Inf	20.5M	17.616M	20.475M	17.641M
5500MHz	Pass	Inf	20.55M	17.616M	20.5M	17.666M
5580MHz	Pass	Inf	22.95M	17.691M	21.025M	17.666M
5700MHz	Pass	Inf	22.175M	17.691M	19.825M	17.516M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	40M	35.882M	39.85M	35.932M
5310MHz	Pass	Inf	39.85M	35.982M	39.85M	35.882M
5510MHz	Pass	Inf	40.45M	35.982M	40.1M	36.132M
5550MHz	Pass	Inf	39.85M	35.932M	39.95M	36.082M
5670MHz	Pass	Inf	66.2M	36.232M	40M	36.132M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	83.4M	75.762M	83.6M	75.762M
5530MHz	Pass	Inf	83.5M	75.762M	83.3M	76.062M

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

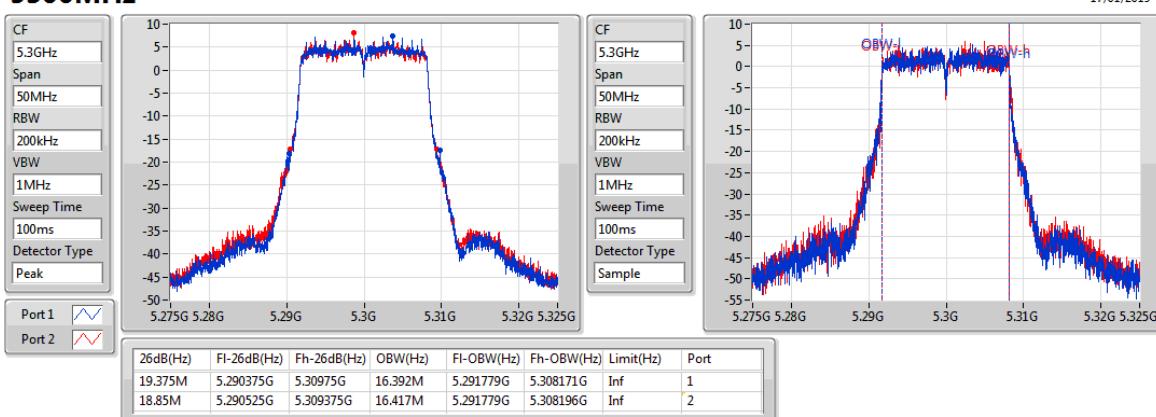
Port X-OBW = Port X 99% occupied bandwidth;

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

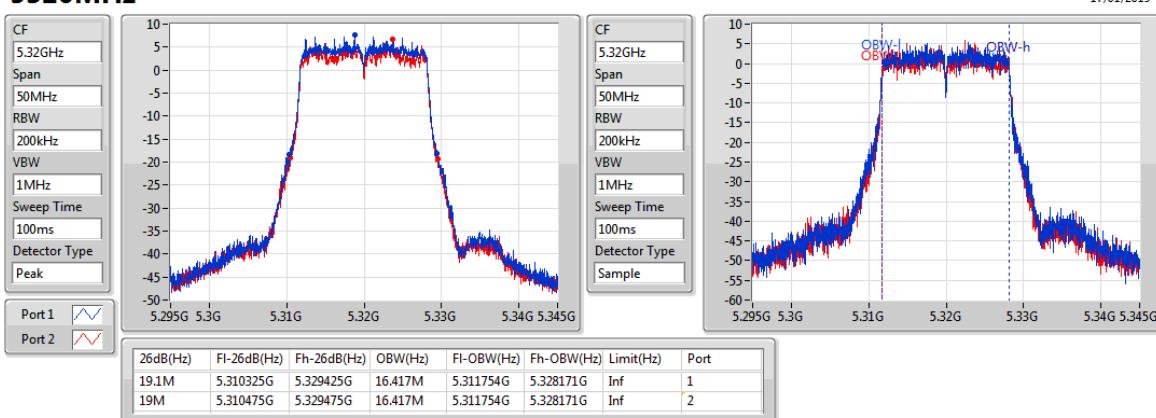
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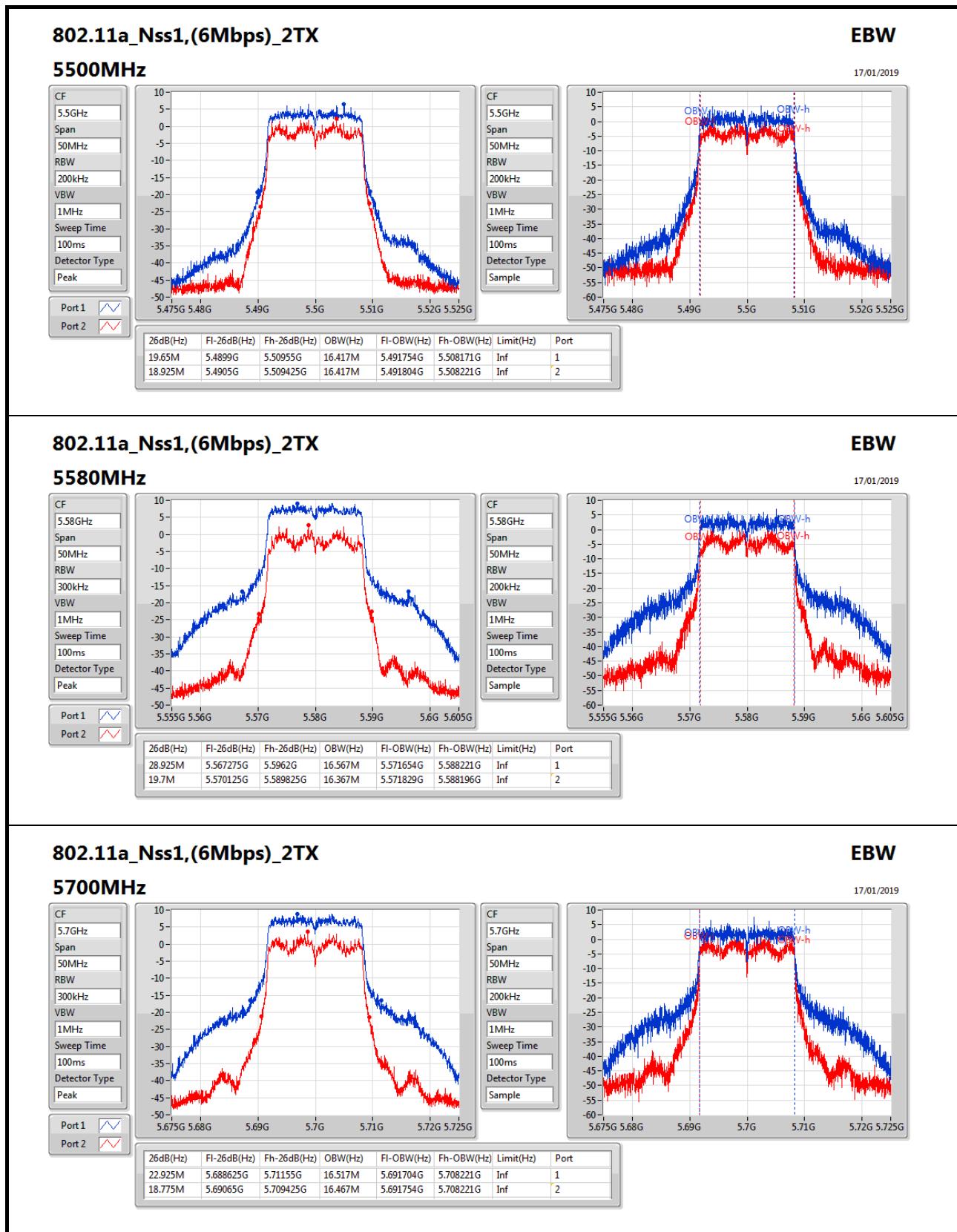

**802.11a\_Nss1,(6Mbps)\_2TX**
**EBW**
**5300MHz**

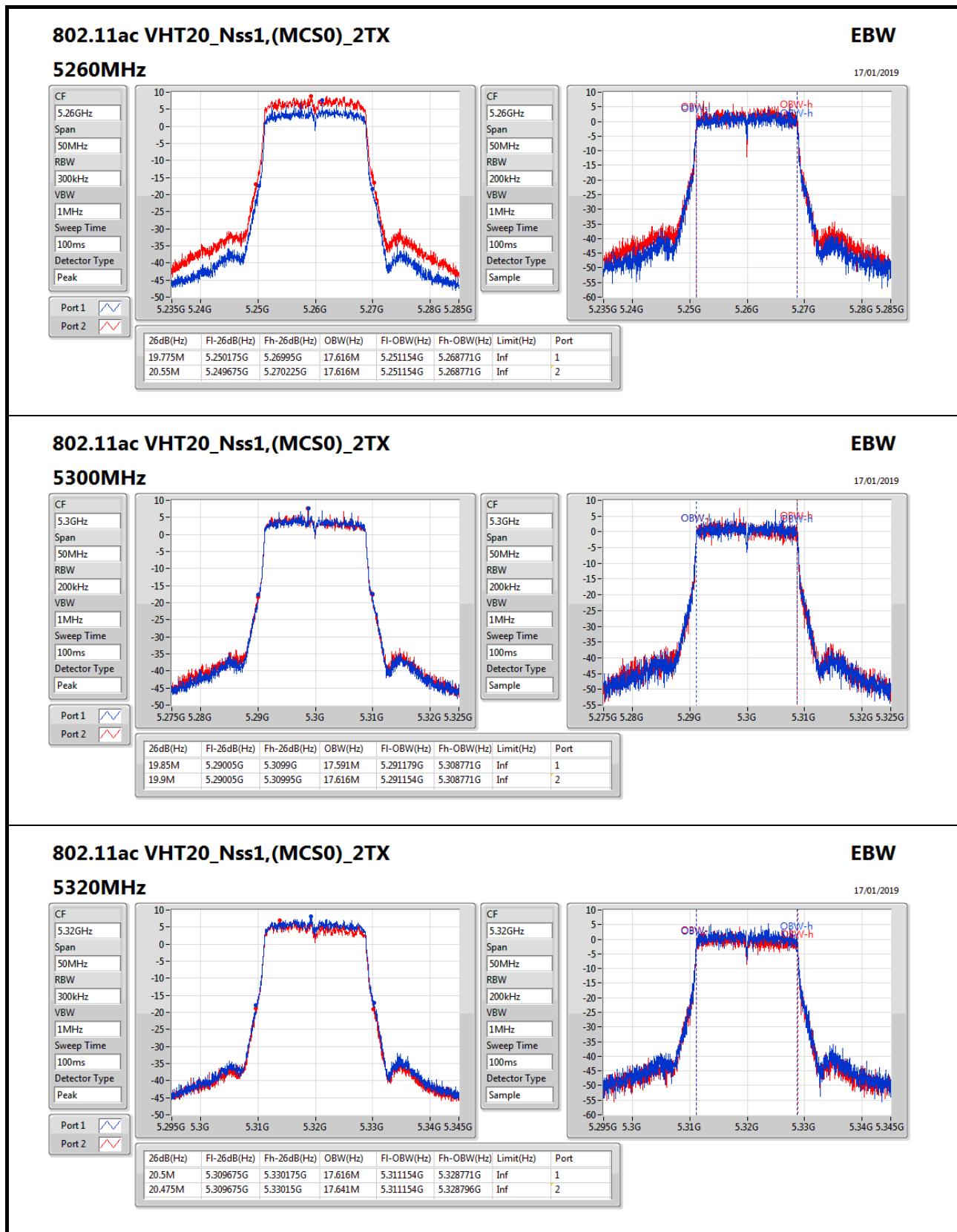
17/01/2019


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

17/01/2019

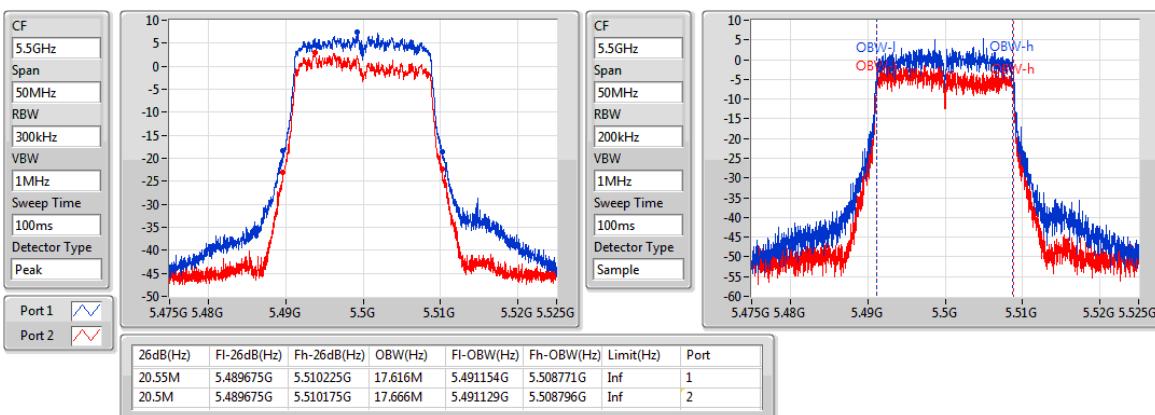




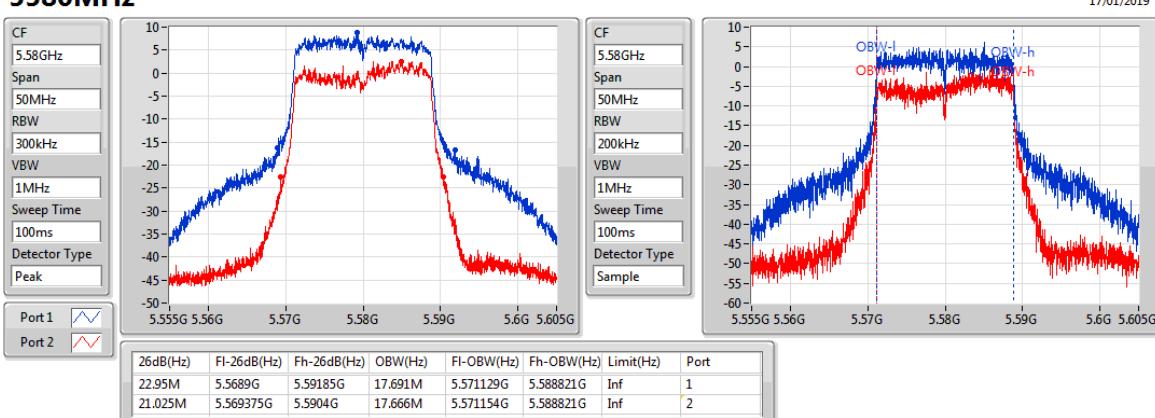


**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**EBW**
**5500MHz**

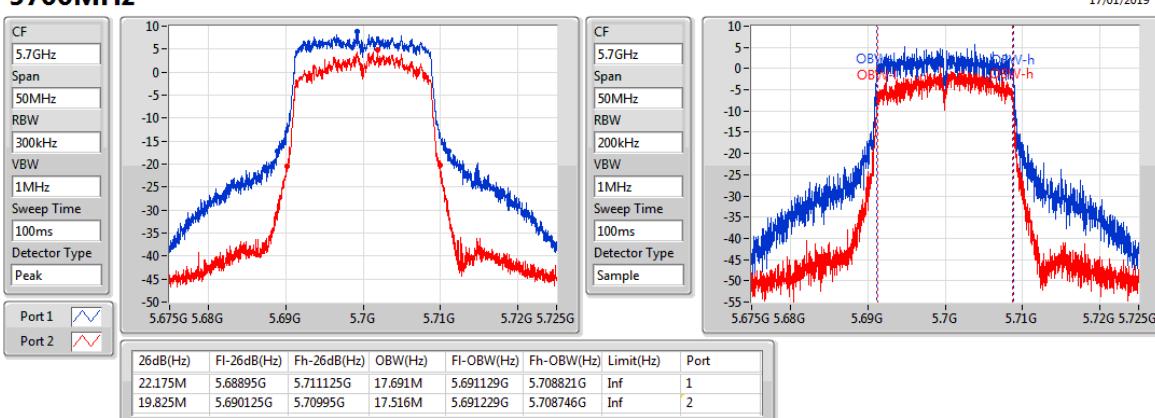
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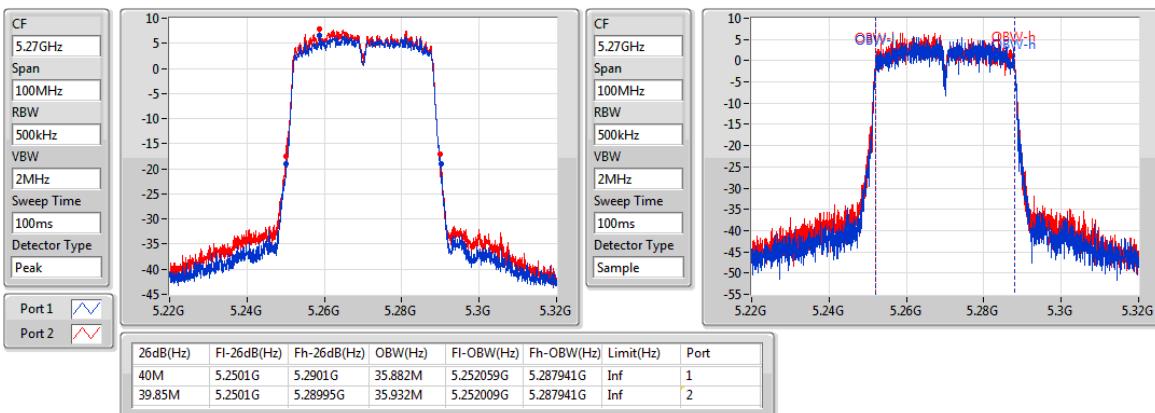
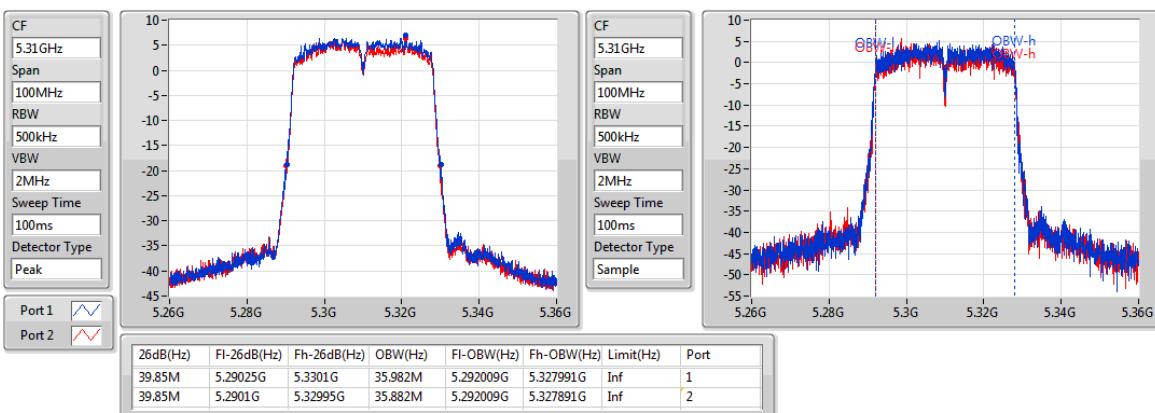
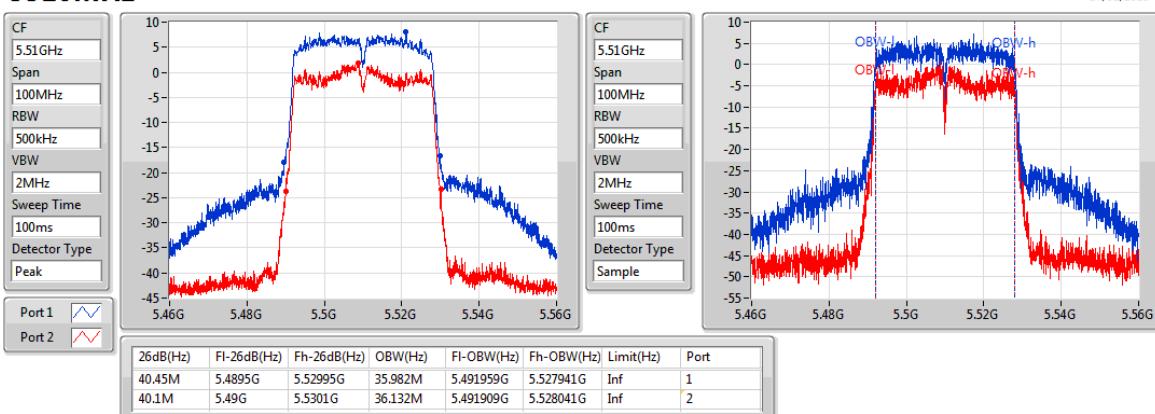

**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**EBW**
**5580MHz**

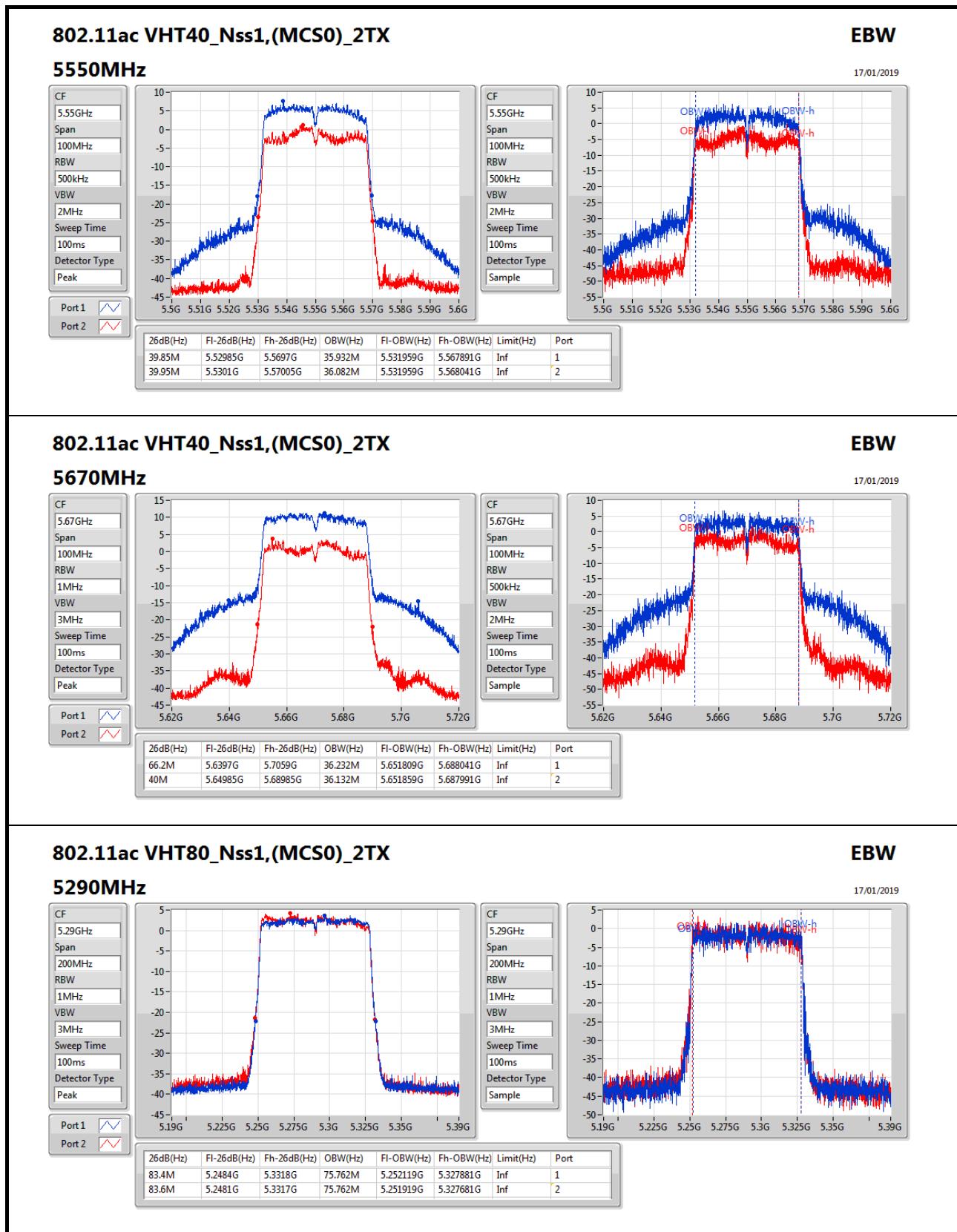
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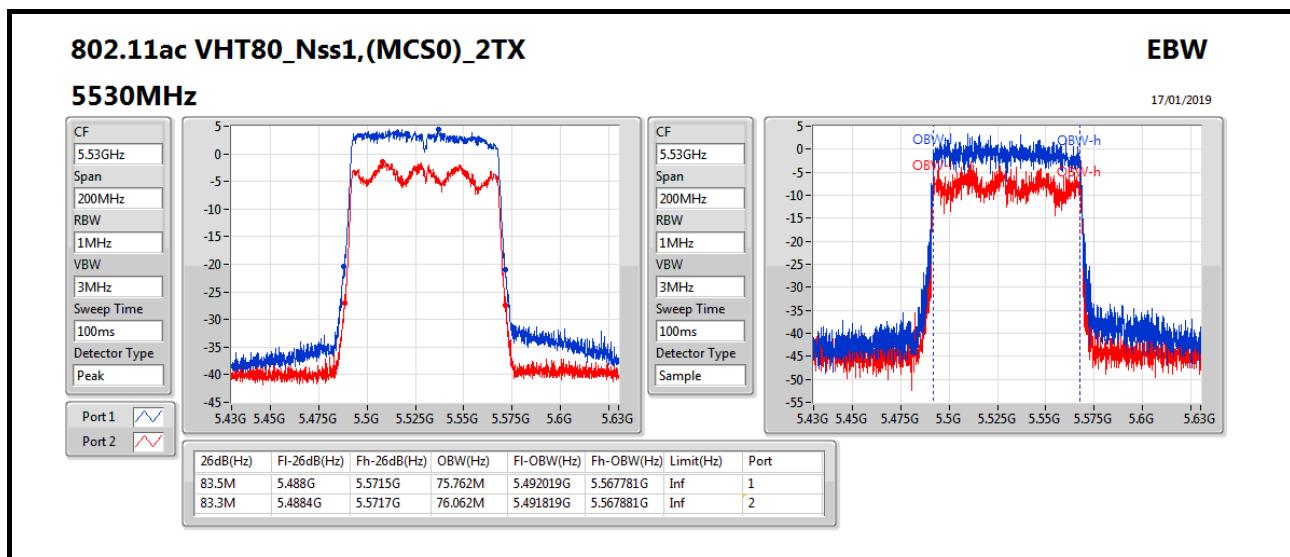

**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**EBW**
**5700MHz**

17/01/2019



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

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

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**EBW**
**5510MHz**






**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	21.475M	17.691M	17M7D1D	20.725M	17.616M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	51.6M	36.482M	36M5D1D	39.15M	35.932M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	82.1M	75.762M	75M8D1D	80.8M	75.762M
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	22.225M	17.641M	17M6D1D	19.85M	17.566M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	39.6M	36.082M	36M1D1D	39.2M	35.932M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	82.8M	75.862M	75M9D1D	80.9M	75.662M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	30.2M	17.816M	17M8D1D	20.6M	17.541M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	47.9M	36.282M	36M3D1D	39M	35.932M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	82.8M	75.762M	75M8D1D	82M	75.762M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.5M	18.091M	18M1D1D	15.675M	17.616M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	35.65M	36.132M	36M1D1D	33.8M	35.982M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	71.3M	75.862M	75M9D1D	60.1M	75.662M

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

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

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

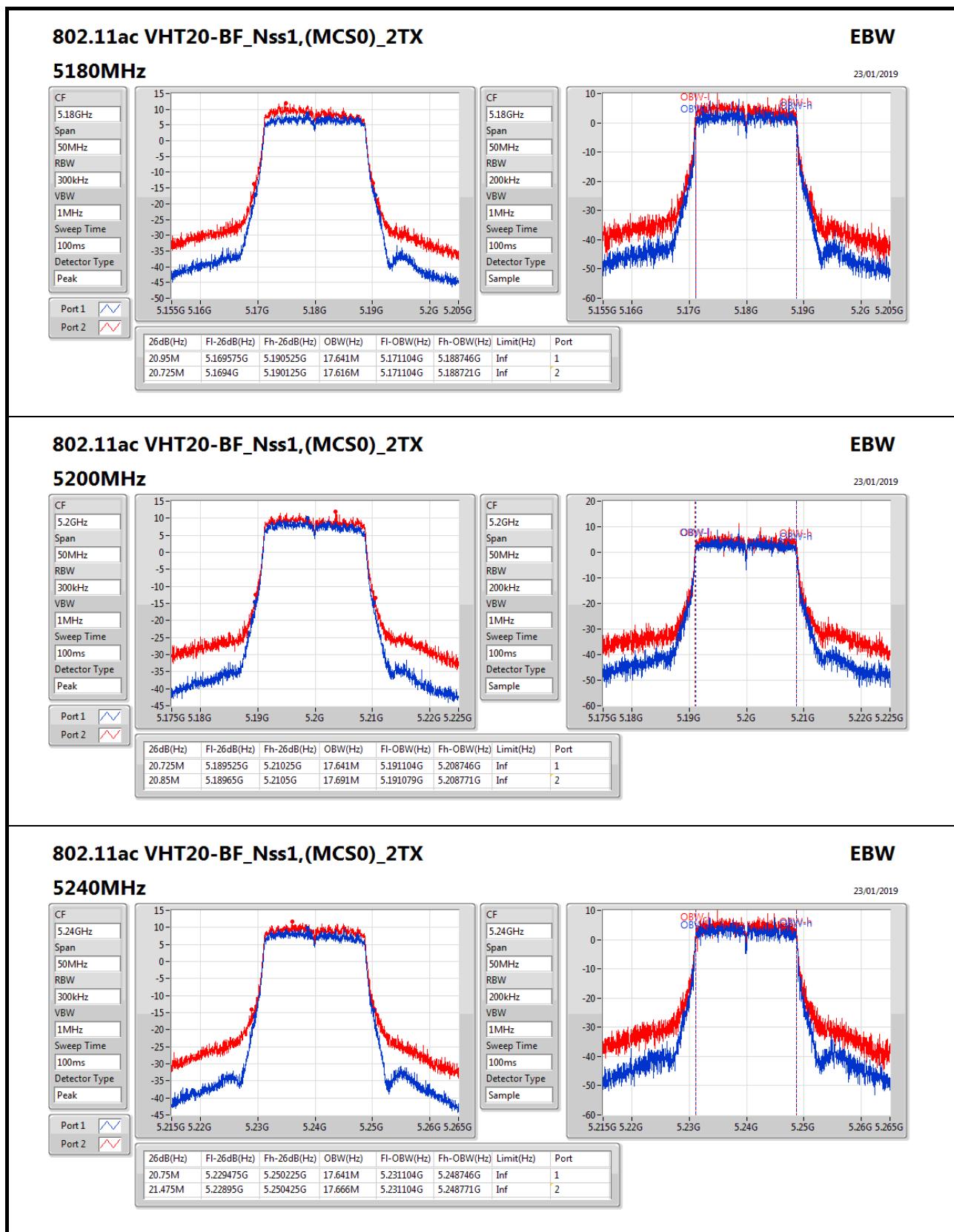
**Min-OBW** = Minimum 99% occupied bandwidth;

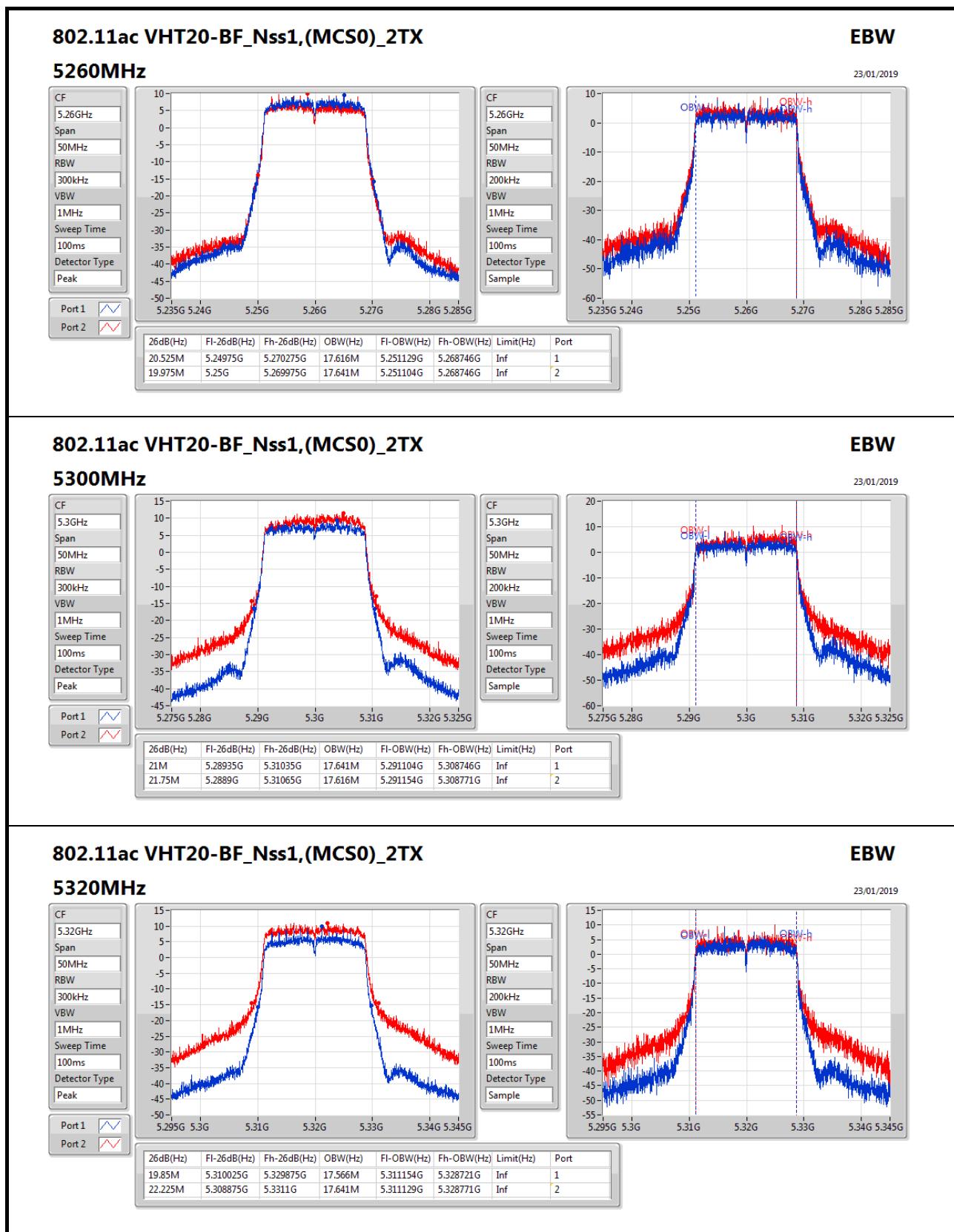
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.95M	17.641M	20.725M	17.616M
5200MHz	Pass	Inf	20.725M	17.641M	20.85M	17.691M
5240MHz	Pass	Inf	20.75M	17.641M	21.475M	17.666M
5260MHz	Pass	Inf	20.525M	17.616M	19.975M	17.641M
5300MHz	Pass	Inf	21M	17.641M	21.75M	17.616M
5320MHz	Pass	Inf	19.85M	17.566M	22.225M	17.641M
5500MHz	Pass	Inf	20.925M	17.641M	23.425M	17.691M
5580MHz	Pass	Inf	27.325M	17.741M	30.2M	17.816M
5700MHz	Pass	Inf	20.6M	17.541M	23.175M	17.791M
5745MHz	Pass	500k	16.85M	17.766M	16.275M	17.616M
5785MHz	Pass	500k	17.5M	17.641M	15.675M	17.691M
5825MHz	Pass	500k	16.4M	18.091M	16.175M	17.716M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.35M	35.932M	39.15M	36.082M
5230MHz	Pass	Inf	39.9M	35.982M	51.6M	36.482M
5270MHz	Pass	Inf	39.6M	36.032M	39.45M	35.932M
5310MHz	Pass	Inf	39.4M	35.932M	39.2M	36.082M
5510MHz	Pass	Inf	39M	35.932M	39.6M	36.132M
5550MHz	Pass	Inf	47.9M	36.082M	43.85M	36.282M
5670MHz	Pass	Inf	41.4M	36.132M	40.1M	36.182M
5755MHz	Pass	500k	35.65M	36.032M	35M	35.982M
5795MHz	Pass	500k	33.8M	36.132M	34.65M	36.032M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.1M	75.762M	80.8M	75.762M
5290MHz	Pass	Inf	82.8M	75.662M	80.9M	75.862M
5530MHz	Pass	Inf	82.8M	75.762M	82M	75.762M
5775MHz	Pass	500k	60.1M	75.662M	71.3M	75.862M

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

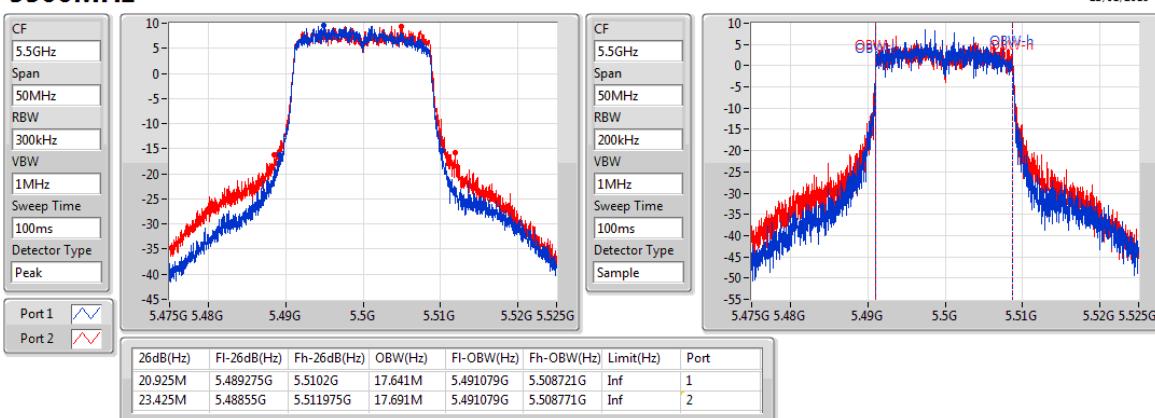
**Port X-OBW** = Port X 99% occupied bandwidth;



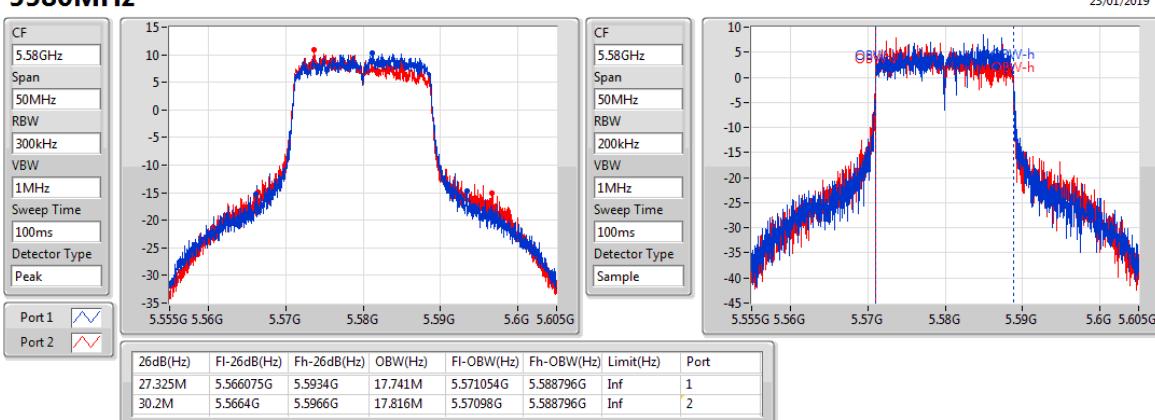


**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5500MHz**

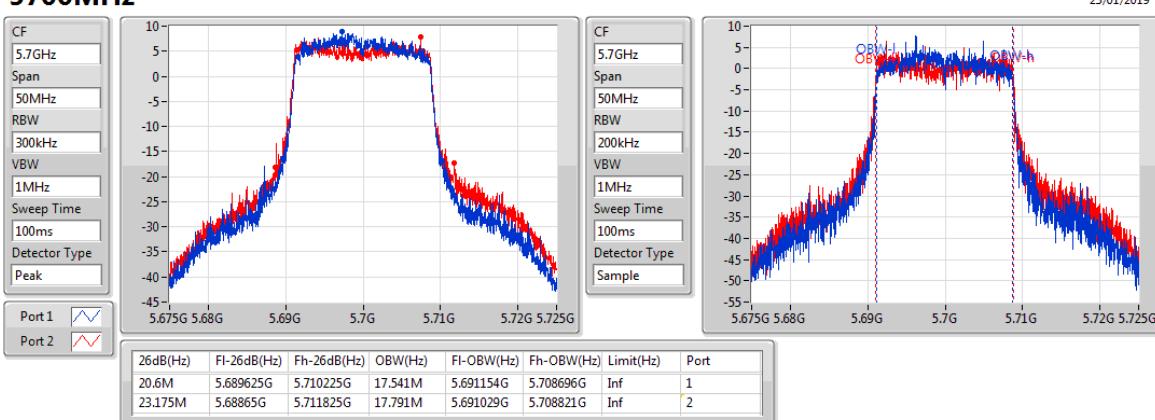
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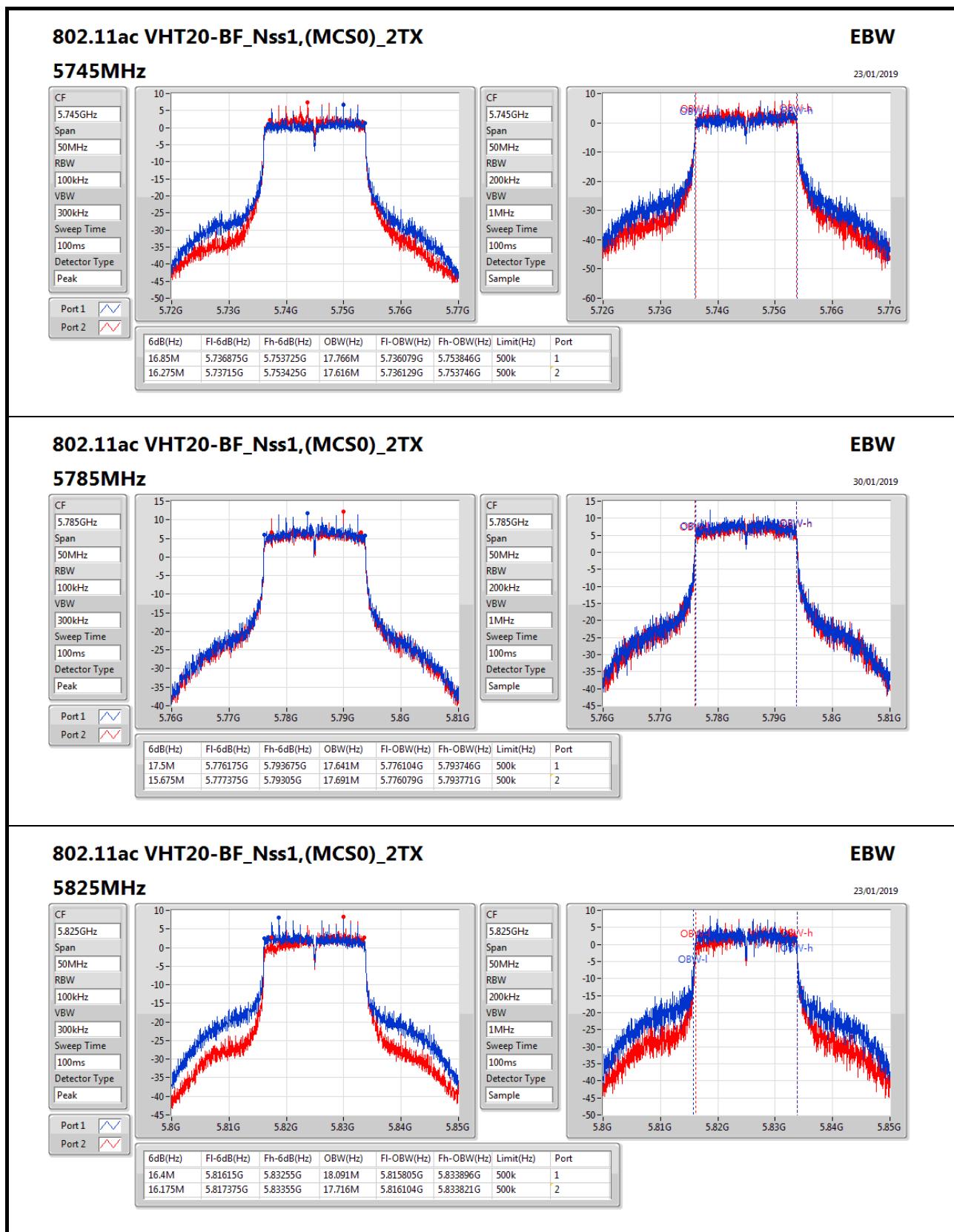

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5580MHz**

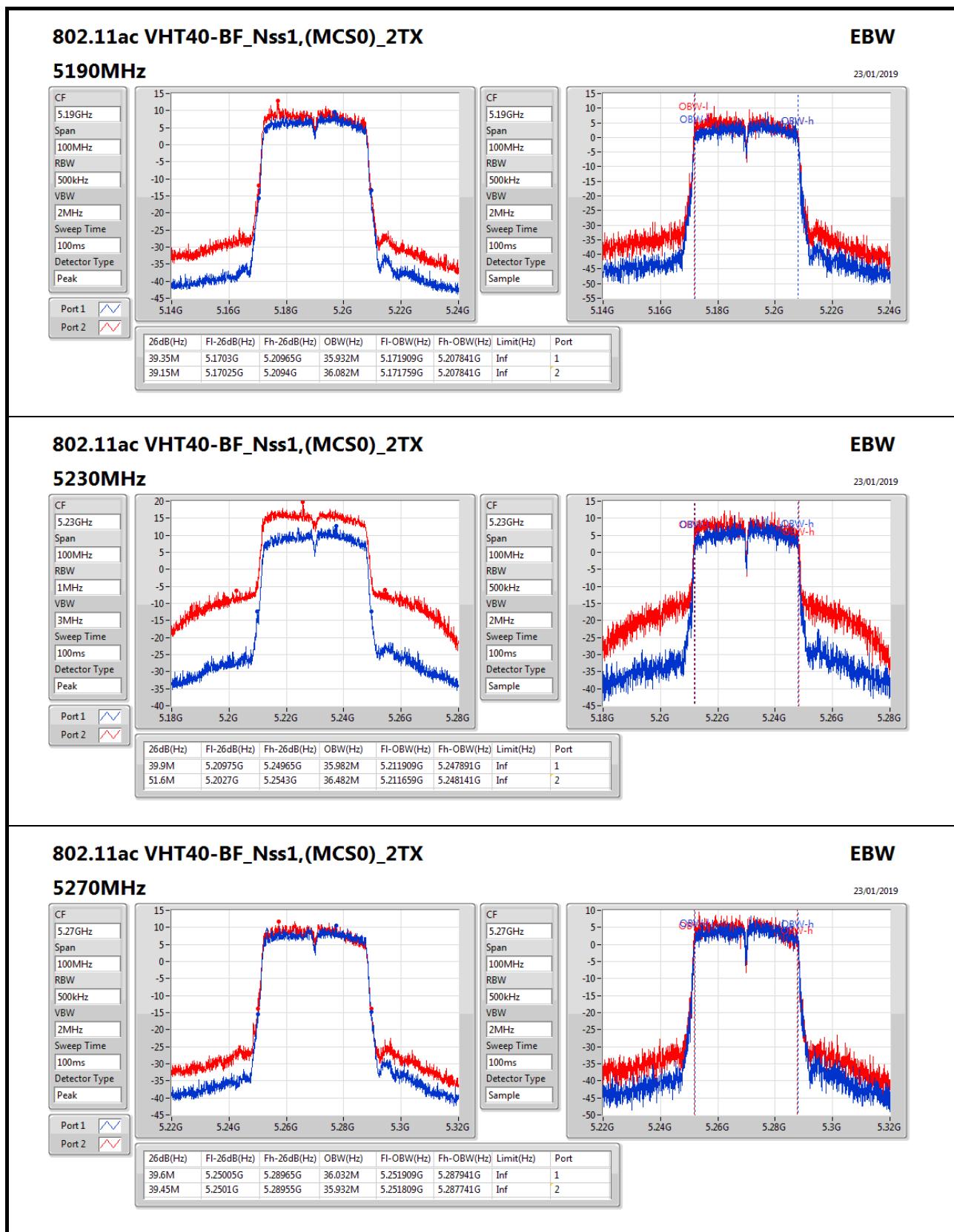
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**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5700MHz**

23/01/2019

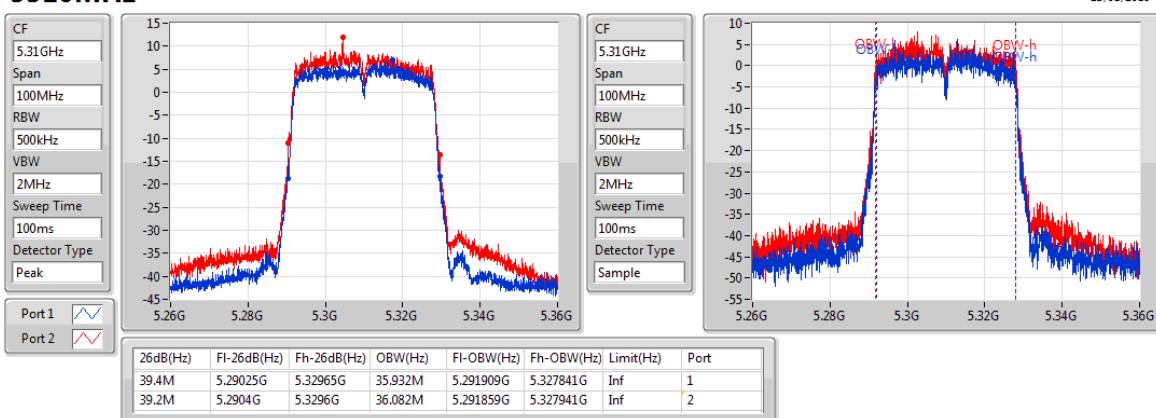




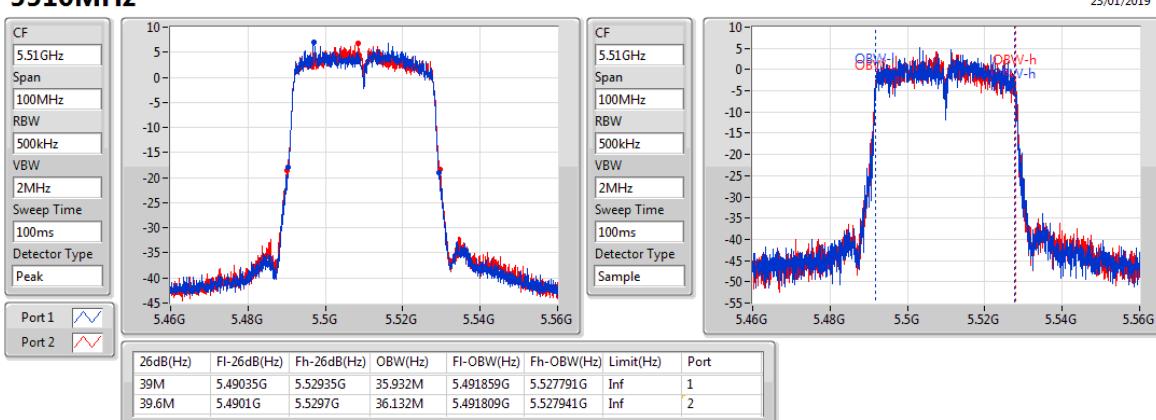


**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5310MHz**

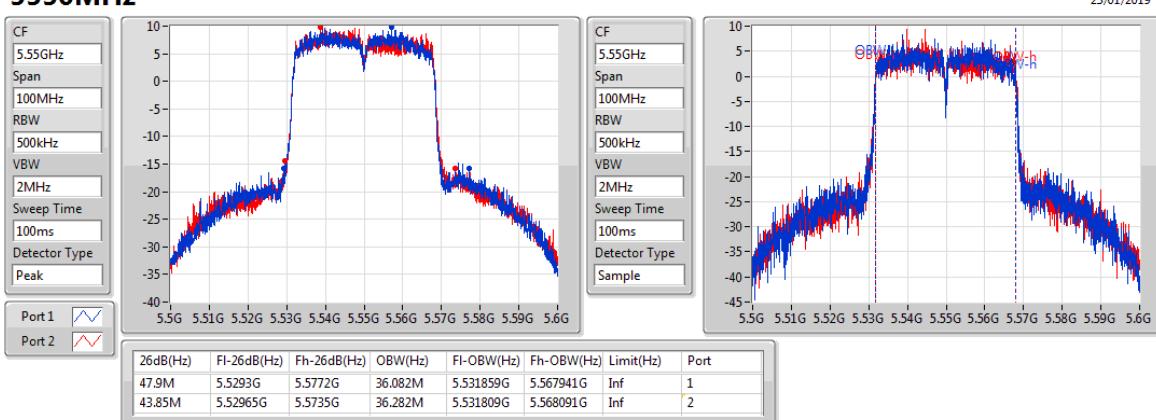
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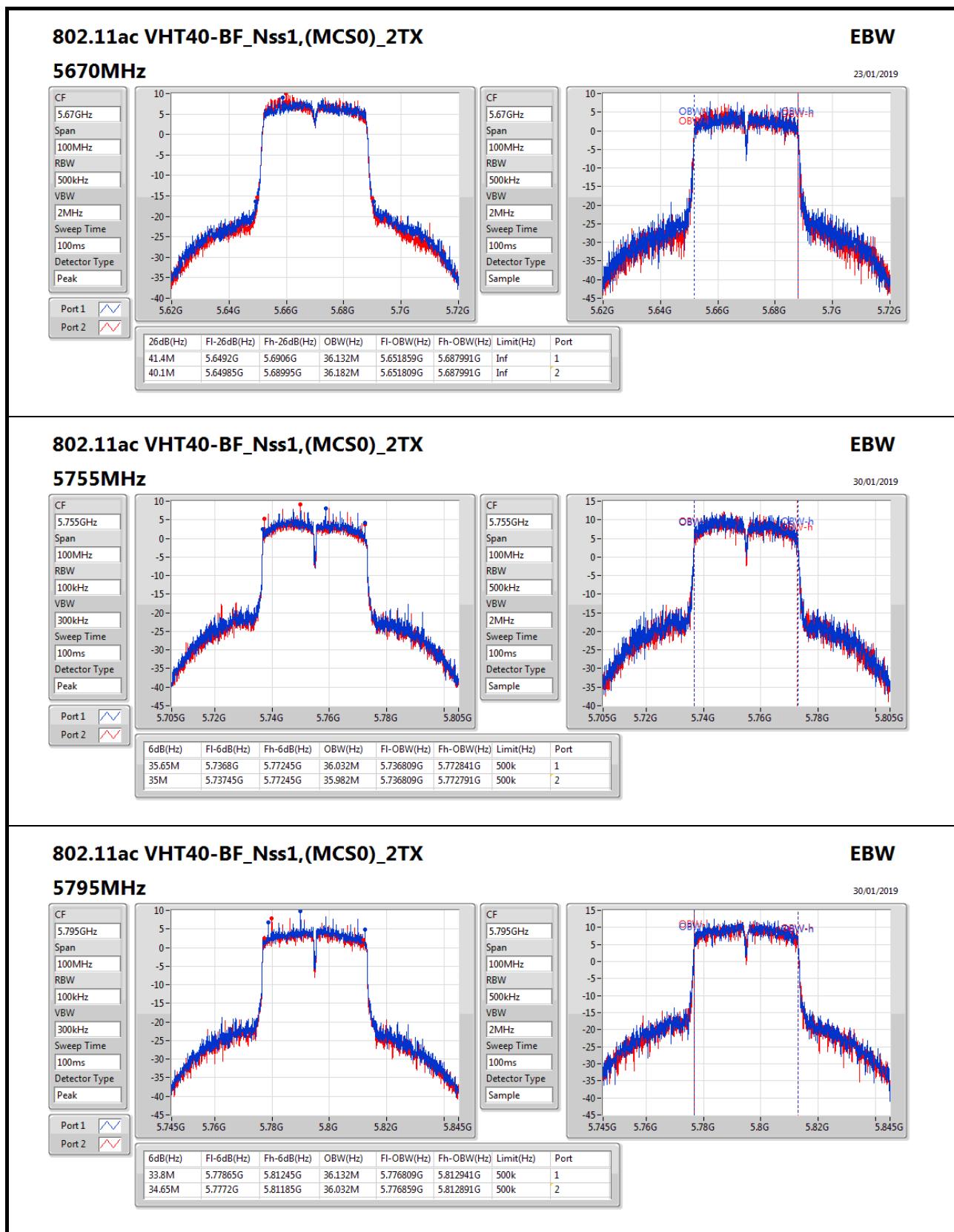

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5510MHz**

23/01/2019


**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5550MHz**

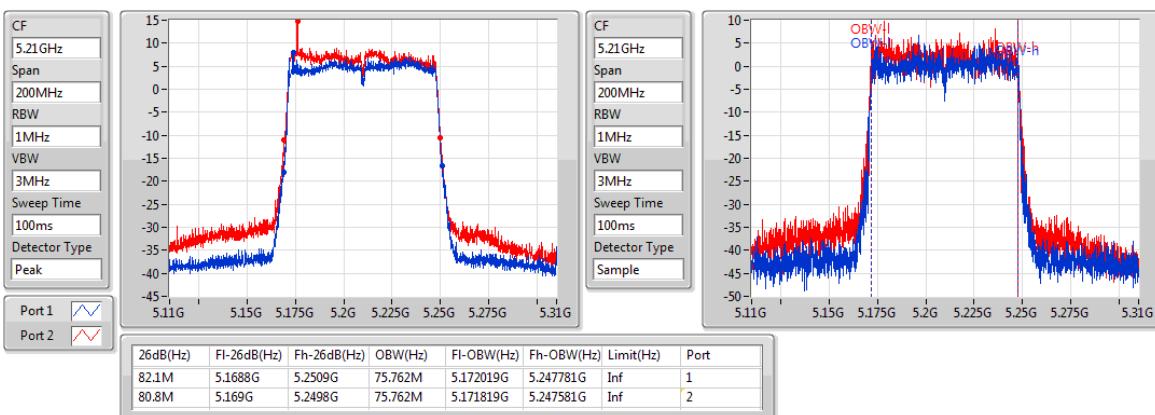
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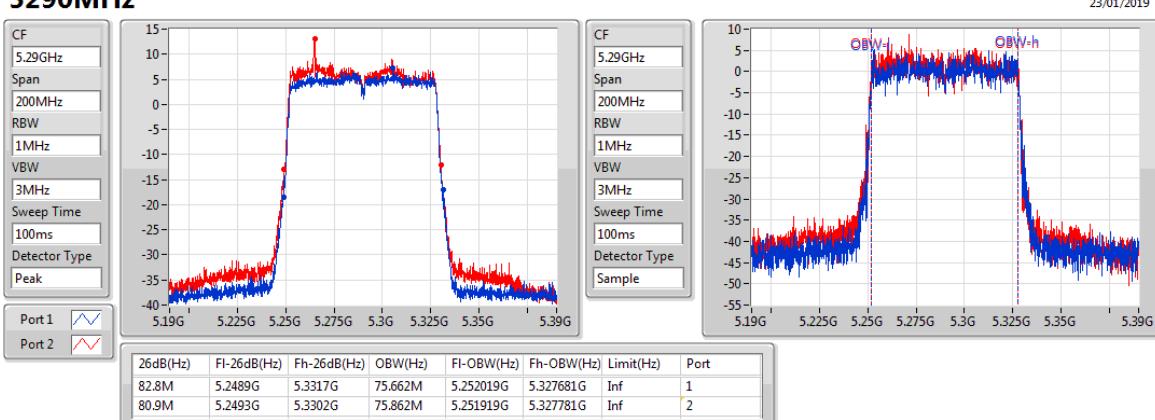


**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5210MHz**

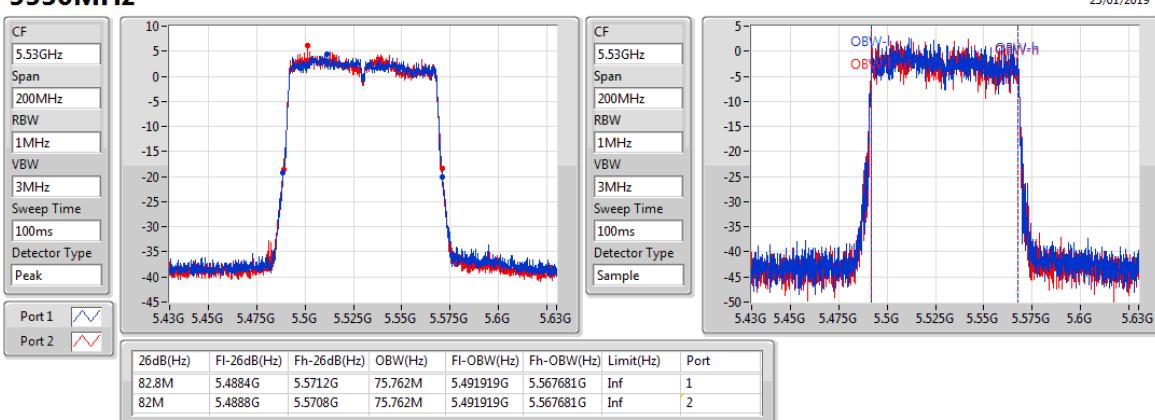
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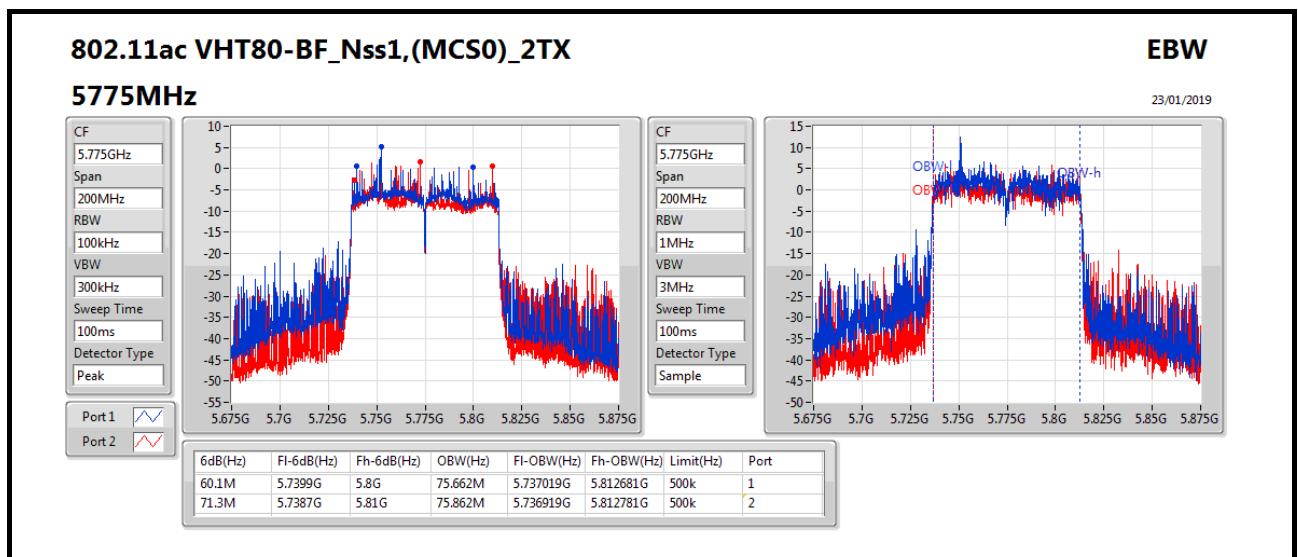

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5290MHz**

23/01/2019


**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5530MHz**

23/01/2019





**Summary**

Mode	Total Power (dBm)	Total Power (W)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	20.34	0.10814
802.11ac VHT20_Nss1,(MCS0)_2TX	19.81	0.09572
802.11ac VHT40_Nss1,(MCS0)_2TX	19.31	0.08531
802.11ac VHT80_Nss1,(MCS0)_2TX	15.55	0.03589
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	18.41	0.06934
802.11ac VHT20_Nss1,(MCS0)_2TX	17.82	0.06053
802.11ac VHT40_Nss1,(MCS0)_2TX	17.94	0.06223
802.11ac VHT80_Nss1,(MCS0)_2TX	14.19	0.02624

**Result**

Mode	Result	DG (dB) <sup>i</sup>	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	4.80	16.76	17.84	20.34	23.74
5300MHz	Pass	4.80	16.73	16.98	19.87	23.75
5320MHz	Pass	4.80	16.79	15.84	19.35	23.79
5500MHz	Pass	5.40	15.81	11.29	17.12	23.77
5580MHz	Pass	5.40	17.40	10.98	18.29	23.94
5700MHz	Pass	5.40	17.11	12.54	18.41	23.74
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	4.80	16.24	17.30	19.81	23.96
5300MHz	Pass	4.80	16.34	16.39	19.38	23.98
5320MHz	Pass	4.80	16.05	15.19	18.65	23.98
5500MHz	Pass	5.40	15.13	10.76	16.48	23.98
5580MHz	Pass	5.40	16.93	10.48	17.82	23.98
5700MHz	Pass	5.40	16.64	11.59	17.82	23.97
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	4.80	15.93	16.64	19.31	23.98
5310MHz	Pass	4.80	15.89	15.05	18.50	23.98
5510MHz	Pass	5.40	17.00	10.43	17.86	23.98
5550MHz	Pass	5.40	16.33	9.57	17.16	23.98
5670MHz	Pass	5.40	16.72	11.81	17.94	23.98
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	4.80	12.37	12.70	15.55	23.98
5530MHz	Pass	5.40	13.34	6.69	14.19	23.98

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	22.88	0.19409	30.20	1.04713
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	23.29	0.21330	30.61	1.15080
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	19.89	0.09750	27.21	0.52602
5.25-5.35GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	22.53	0.17906	29.95	0.98855
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	22.33	0.17100	29.75	0.94406
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	18.76	0.07516	26.18	0.41495
5.47-5.725GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	21.49	0.14093	29.65	0.92257
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	21.25	0.13335	29.41	0.87297
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	15.59	0.03622	23.75	0.23714
5.725-5.85GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	21.38	0.13740	29.08	0.80910
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	21.66	0.14655	29.36	0.86298
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	18.89	0.07745	26.59	0.45604

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.32	18.06	20.24	22.30	28.68
5200MHz	Pass	7.32	19.08	20.47	22.84	28.68
5240MHz	Pass	7.32	18.99	20.6	22.88	28.68
5260MHz	Pass	7.42	18.12	19.29	21.75	22.58
5300MHz	Pass	7.42	18.52	20.34	22.53	22.56
5320MHz	Pass	7.42	18.74	20.01	22.43	22.56
5500MHz	Pass	8.16	18.35	18.4	21.39	21.82
5580MHz	Pass	8.16	18.57	18.39	21.49	21.82
5700MHz	Pass	8.16	17.29	16.63	19.98	21.82
5745MHz	Pass	7.70	17.17	17.96	20.59	28.30
5785MHz	Pass	7.70	19.02	17.61	21.38	28.30
5825MHz	Pass	7.70	18.46	17.99	21.24	28.30
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	7.32	17.76	19.54	21.75	28.68
5230MHz	Pass	7.32	20.06	20.49	23.29	28.68
5270MHz	Pass	7.42	18.81	19.78	22.33	22.56
5310MHz	Pass	7.42	16.35	17.42	19.93	22.56
5510MHz	Pass	8.16	14.5	14.64	17.58	21.82
5550MHz	Pass	8.16	18.24	18.23	21.25	21.82
5670MHz	Pass	8.16	17.76	17.93	20.86	21.82
5755MHz	Pass	7.70	18.69	18.61	21.66	28.30
5795MHz	Pass	7.70	19.02	18.16	21.62	28.30
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	7.32	15.77	17.77	19.89	28.68
5290MHz	Pass	7.42	15.5	15.99	18.76	22.56
5530MHz	Pass	8.16	12.4	12.76	15.59	21.82
5775MHz	Pass	7.70	16.36	15.35	18.89	28.30

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

**Summary**

Mode	PD (dBm/RBW)
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_2TX	7.59
802.11ac VHT20_Nss1,(MCS0)_2TX	6.76
802.11ac VHT40_Nss1,(MCS0)_2TX	3.65
802.11ac VHT80_Nss1,(MCS0)_2TX	-3.64
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_2TX	5.87
802.11ac VHT20_Nss1,(MCS0)_2TX	5.04
802.11ac VHT40_Nss1,(MCS0)_2TX	2.13
802.11ac VHT80_Nss1,(MCS0)_2TX	-5.09

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

**Result**

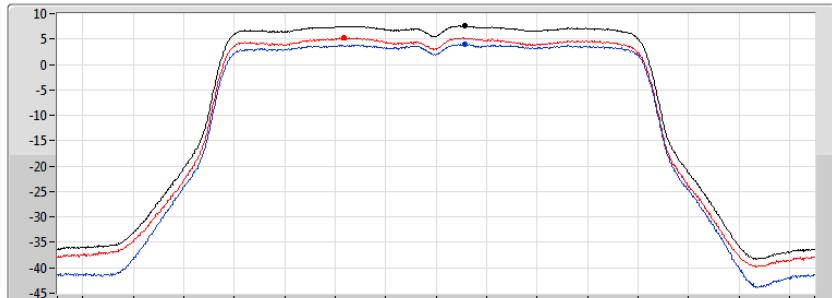
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	7.42	3.96	5.21	7.59	9.58
5300MHz	Pass	7.42	4.20	4.46	7.26	9.58
5320MHz	Pass	7.42	4.07	3.39	6.68	9.58
5500MHz	Pass	8.16	2.96	-0.86	4.40	8.84
5580MHz	Pass	8.16	4.54	-0.62	5.46	8.84
5700MHz	Pass	8.16	4.43	0.67	5.87	8.84
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	7.42	3.15	4.32	6.76	9.58
5300MHz	Pass	7.42	3.10	3.45	6.23	9.58
5320MHz	Pass	7.42	2.98	2.39	5.66	9.58
5500MHz	Pass	8.16	2.16	-1.76	3.52	8.84
5580MHz	Pass	8.16	3.78	-1.74	4.56	8.84
5700MHz	Pass	8.16	3.52	-0.13	5.04	8.84
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	7.42	0.17	1.14	3.65	9.58
5310MHz	Pass	7.42	-0.03	-0.31	2.84	9.58
5510MHz	Pass	8.16	1.20	-4.30	1.99	8.84
5550MHz	Pass	8.16	0.42	-4.96	1.35	8.84
5670MHz	Pass	8.16	0.87	-3.13	2.13	8.84
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	7.42	-6.76	-6.31	-3.64	9.58
5530MHz	Pass	8.16	-5.77	-11.70	-5.09	8.84

**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**
**5260MHz**

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


**PSD**

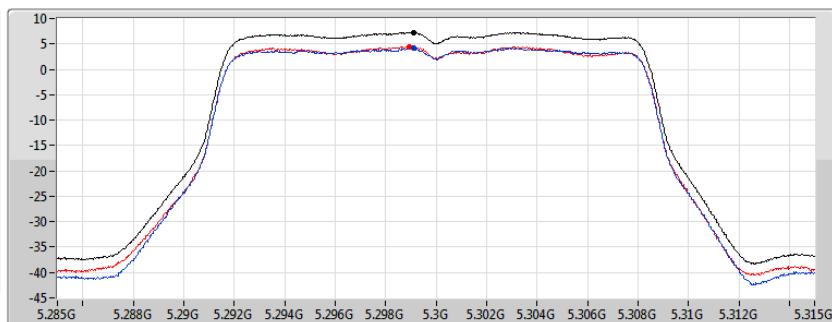
17/01/2019

Sum   
Port 1   
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.59	7.59	3.96	5.21

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

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


**PSD**

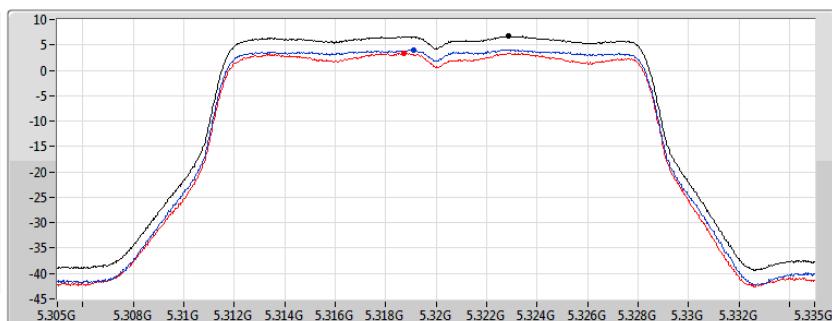
17/01/2019

Sum   
Port 1   
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.26	7.26	4.20	4.46

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

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


**PSD**

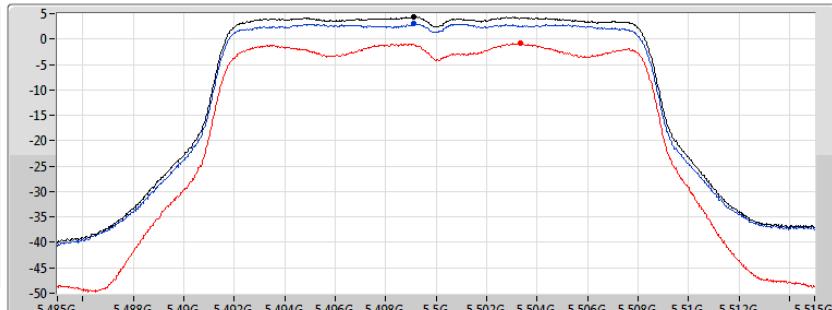
17/01/2019

Sum   
Port 1   
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.68	6.68	4.07	3.39

**802.11a\_Nss1,(6Mbps)\_2TX**
**5500MHz**

CF  
5.5GHz  
Span  
30MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS

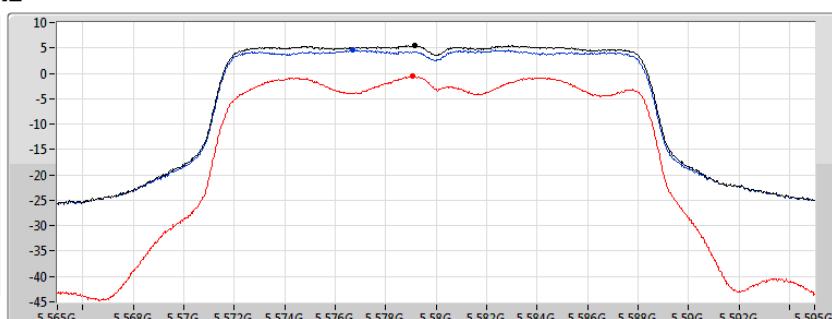

**PSD**

17/01/2019

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

**802.11a\_Nss1,(6Mbps)\_2TX**
**5580MHz**

CF  
5.58GHz  
Span  
30MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS

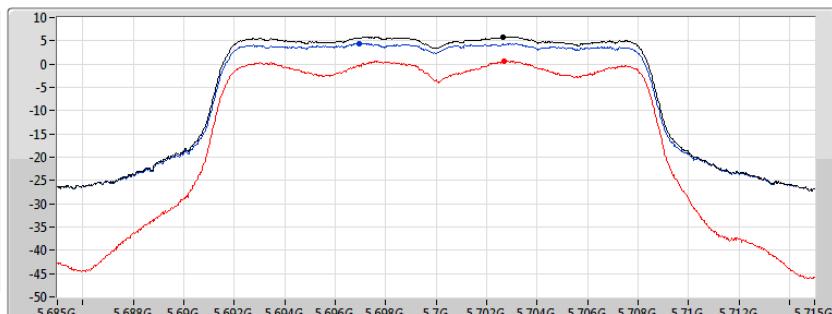

**PSD**

17/01/2019

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

**802.11a\_Nss1,(6Mbps)\_2TX**
**5700MHz**

CF  
5.7GHz  
Span  
30MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS

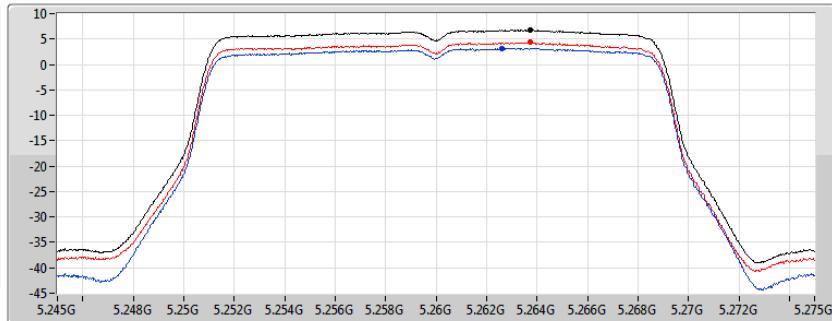

**PSD**

17/01/2019

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

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

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

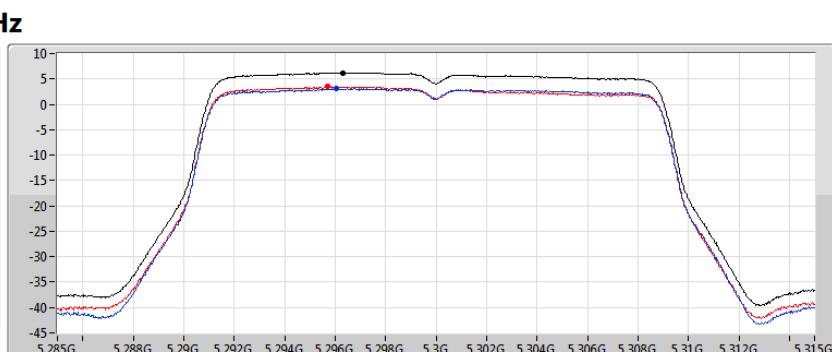

**PSD**

17/01/2019

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

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

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

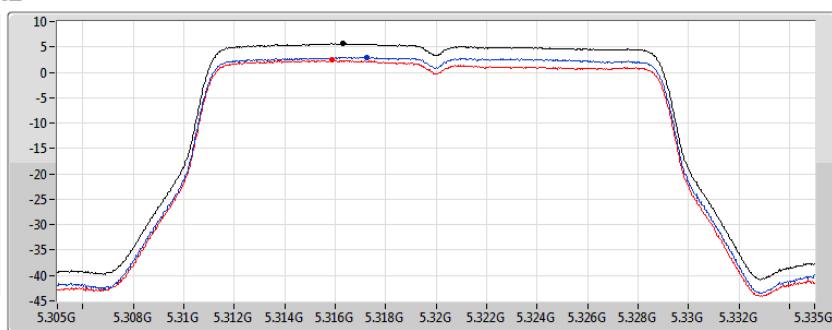

**PSD**

17/01/2019

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

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

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


**PSD**

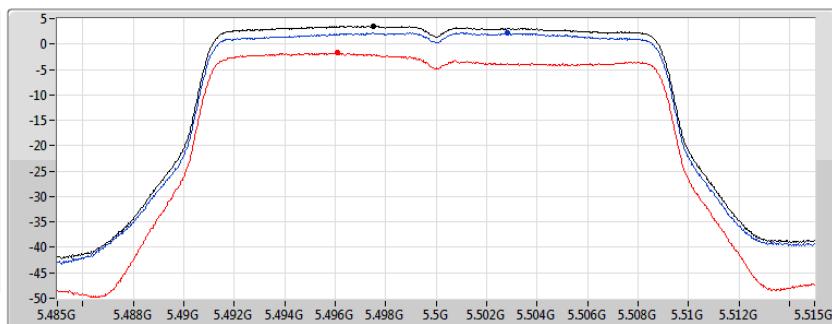
17/01/2019

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

**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**PSD**
**5500MHz**

17/01/2019

CF
5.5GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS

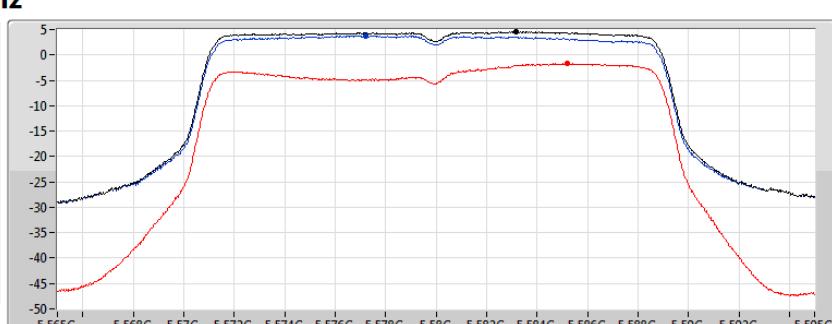


Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**PSD**
**5580MHz**

17/01/2019

CF
5.58GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS

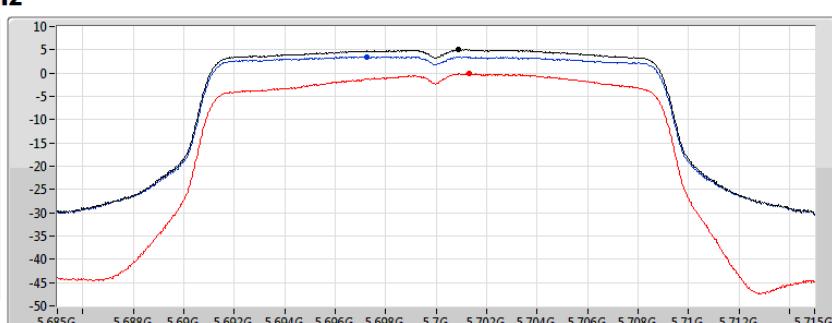


Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

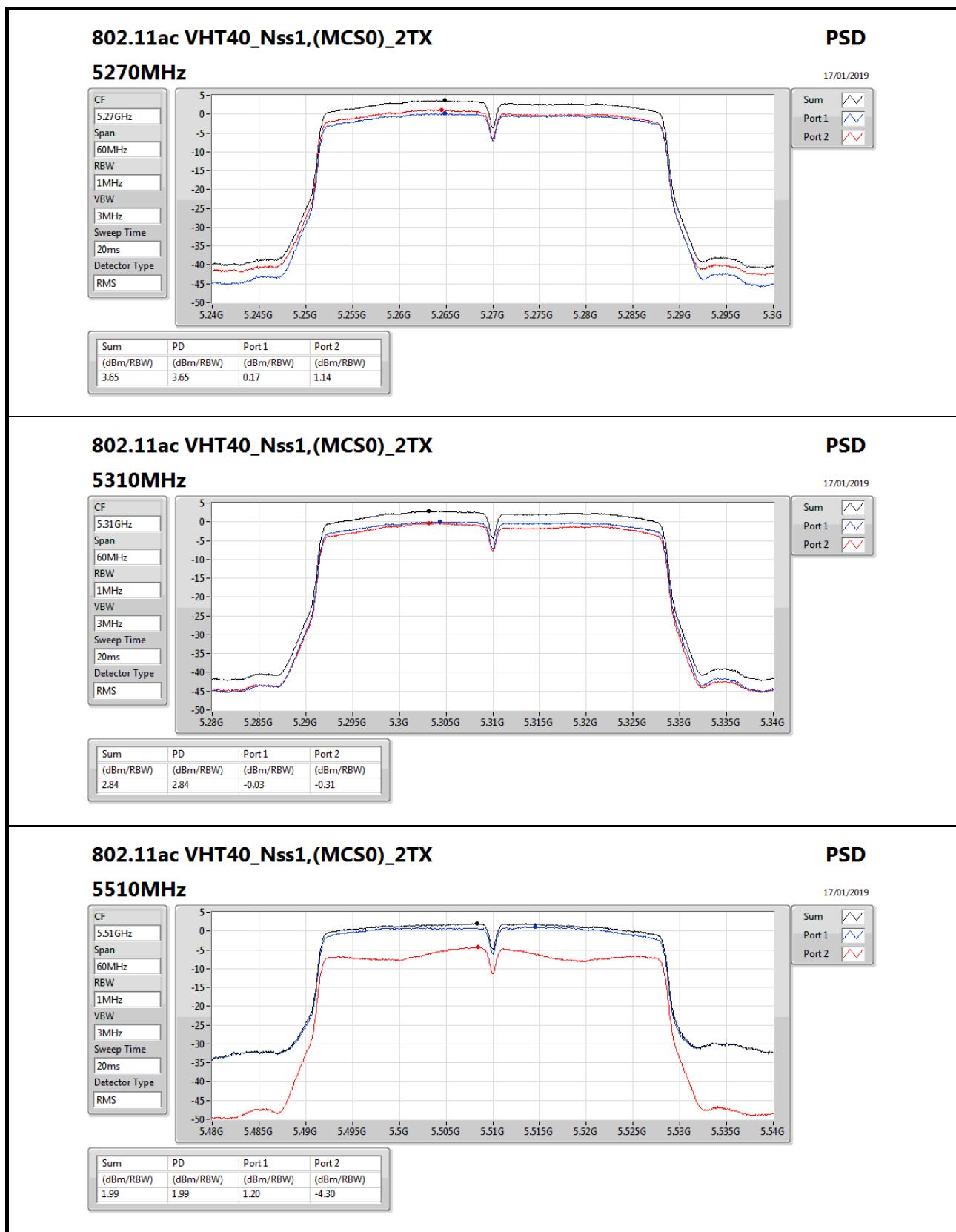
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**
**PSD**
**5700MHz**

17/01/2019

CF
5.7GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS

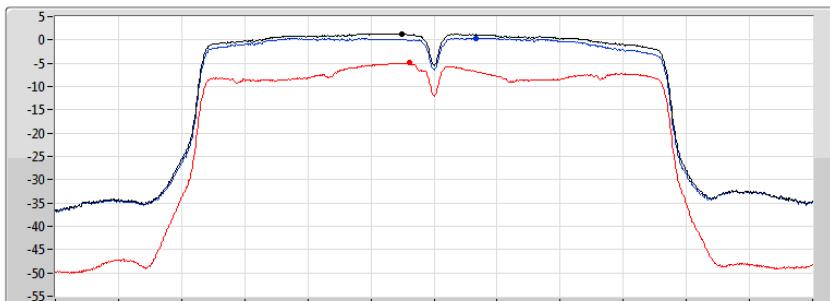


Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>



**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**5550MHz**

CF  
5.55GHz  
Span  
60MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS


**PSD**

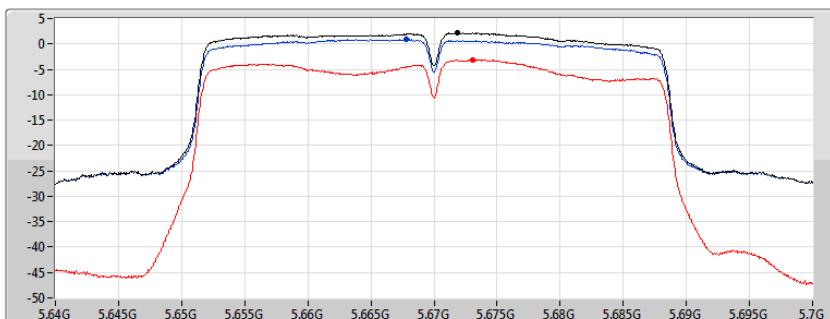
17/01/2019

Sum   
Port 1   
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.35	1.35	0.42	-4.96

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**
**5670MHz**

CF  
5.67GHz  
Span  
60MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS


**PSD**

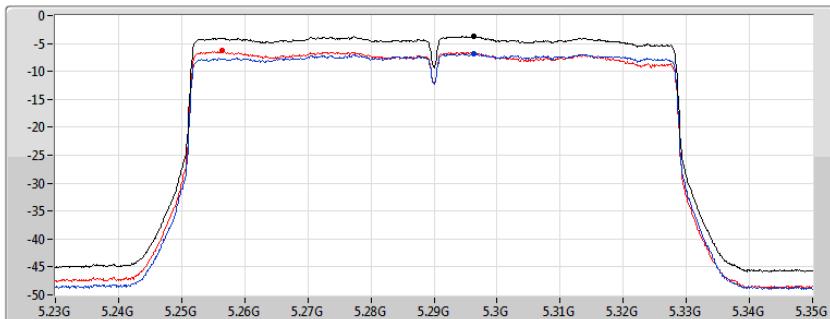
17/01/2019

Sum   
Port 1   
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.13	2.13	0.87	-3.13

**802.11ac VHT80\_Nss1,(MCS0)\_2TX**
**5290MHz**

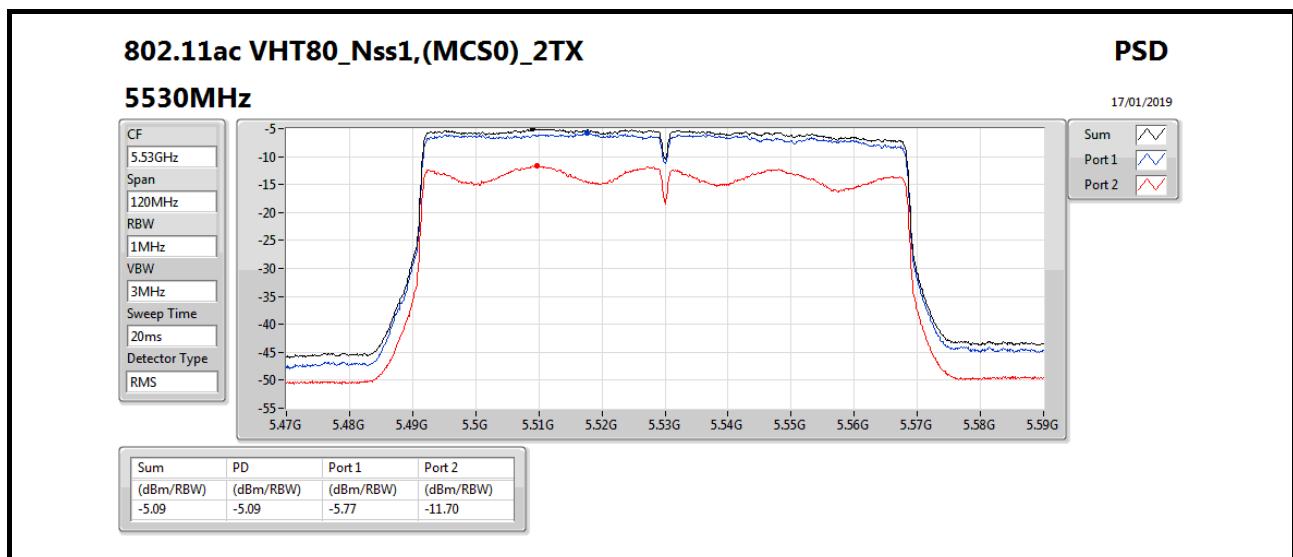
CF  
5.29GHz  
Span  
120MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
20ms  
Detector Type  
RMS


**PSD**

17/01/2019

Sum   
Port 1   
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.64	-3.64	-6.76	-6.31



**Summary**

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	9.42
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	8.29
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-0.3
5.25-5.35GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	9.19
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	6.18
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-0.72
5.47-5.725GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	8
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	5.03
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-3.61
5.725-5.85GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	6.32
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	4.34
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-1.86

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

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.32	4.32	7.11	8.94	15.68
5200MHz	Pass	7.32	5.68	7.08	9.42	15.68
5240MHz	Pass	7.32	5.65	7.12	9.41	15.68
5260MHz	Pass	7.42	4.68	6.01	8.30	9.58
5300MHz	Pass	7.42	4.98	7.27	9.19	9.58
5320MHz	Pass	7.42	5.71	6.55	9.08	9.58
5500MHz	Pass	8.16	5.31	4.82	8.00	8.84
5580MHz	Pass	8.16	5.06	5.19	7.79	8.84
5700MHz	Pass	8.16	4.79	3.65	6.57	8.84
5745MHz	Pass	7.70	2.59	3.15	5.36	28.30
5785MHz	Pass	7.70	3.65	3.00	6.32	28.30
5825MHz	Pass	7.70	3.57	3.51	6.31	28.30
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	7.32	1.81	3.44	5.38	15.68
5230MHz	Pass	7.32	4.55	6.23	8.29	15.68
5270MHz	Pass	7.42	2.58	3.9	6.18	9.58
5310MHz	Pass	7.42	-0.83	1.27	3.33	9.58
5510MHz	Pass	8.16	-1.37	-0.64	1.63	8.84
5550MHz	Pass	8.16	1.92	2.35	5.03	8.84
5670MHz	Pass	8.16	1.62	2.04	4.44	8.84
5755MHz	Pass	7.70	1.57	0.82	4.12	28.30
5795MHz	Pass	7.70	1.56	1.18	4.34	28.30
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	7.32	-4.02	-1.93	-0.30	15.68
5290MHz	Pass	7.42	-4.39	-2.61	-0.72	9.58
5530MHz	Pass	8.16	-6.47	-6.51	-3.61	8.84
5775MHz	Pass	7.70	-4.41	-4.64	-1.86	28.30

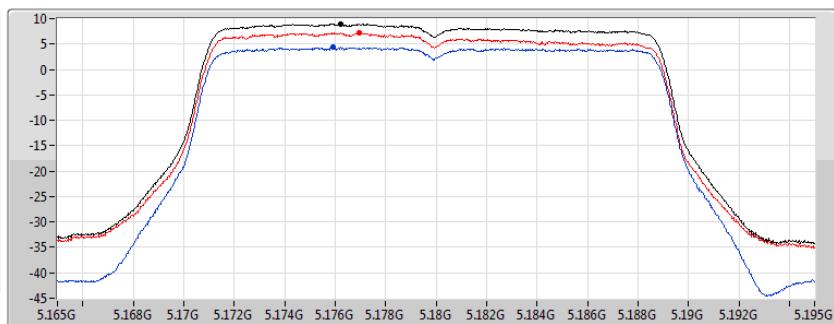
**DG** = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

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

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

23/01/2019

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



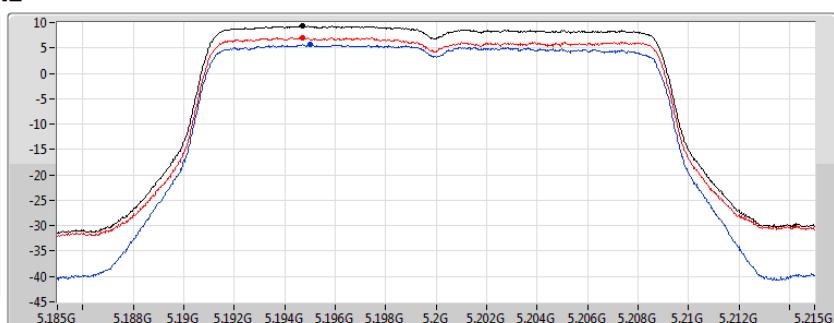
Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.94	8.94	4.32	7.11

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

23/01/2019

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



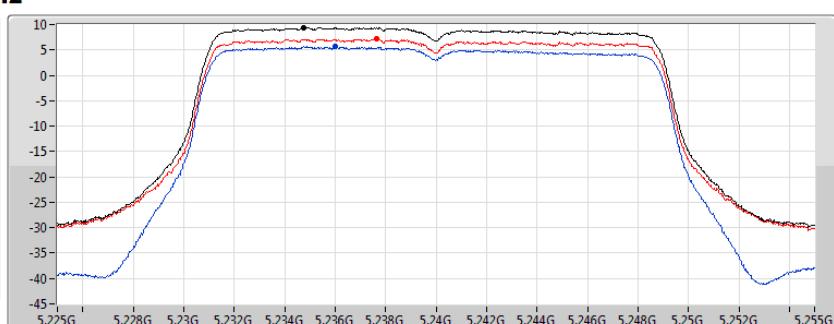
Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.42	9.42	5.68	7.08

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

23/01/2019

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



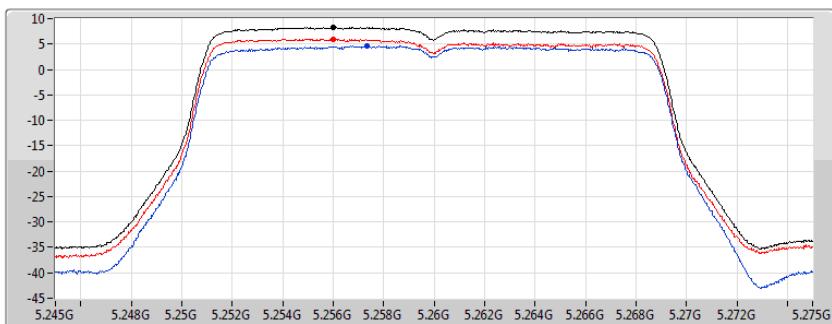
Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.41	9.41	5.65	7.12

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

23/01/2019

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



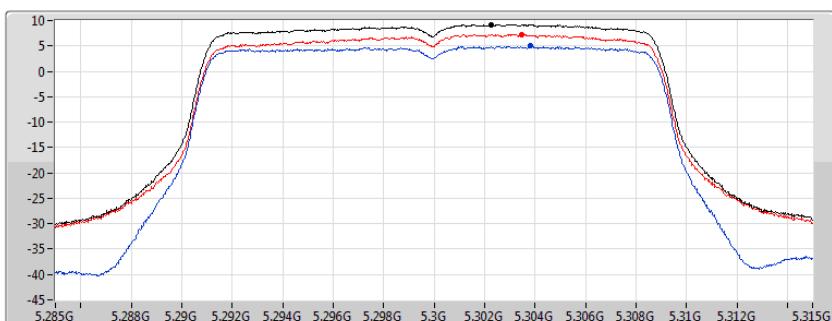
Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.30	8.30	4.68	6.01

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

23/01/2019

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



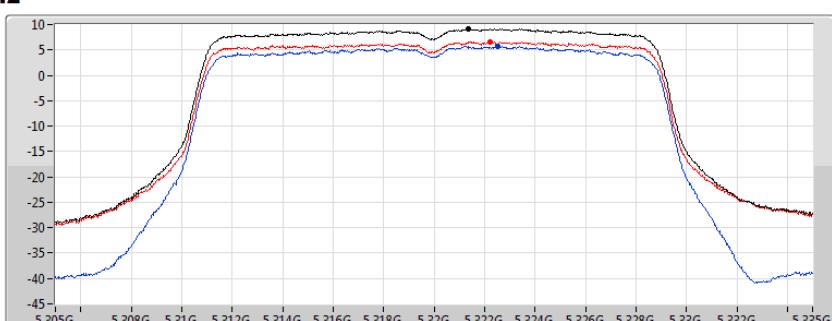
Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.19	9.19	4.98	7.27

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

23/01/2019

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



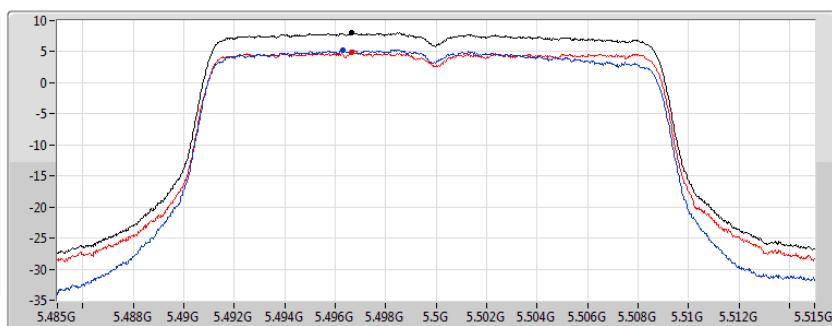
Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.08	9.08	5.71	6.55

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**
**5500MHz**

23/01/2019

CF
5.5GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



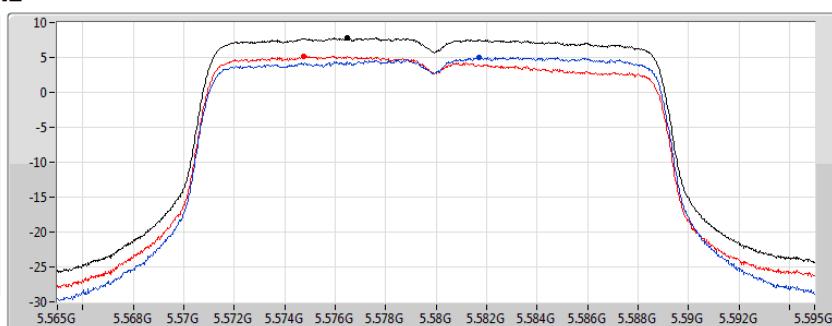
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.00	8.00	5.31	4.82

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**
**5580MHz**

23/01/2019

CF
5.58GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



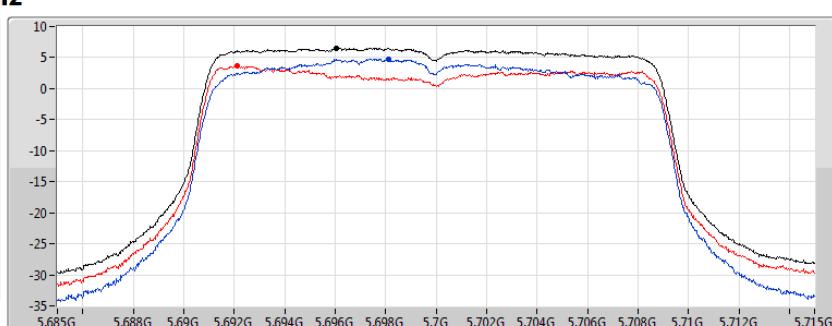
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.79	7.79	5.06	5.19

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**
**PSD**
**5700MHz**

23/01/2019

CF
5.7GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



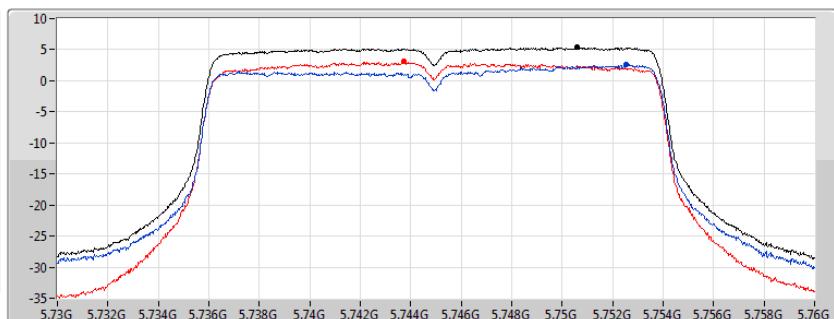
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.57	6.57	4.79	3.65

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

23/01/2019

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



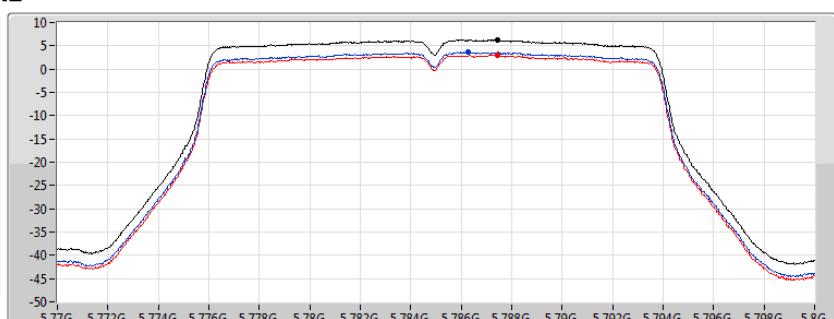
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.36	5.36	2.59	3.15

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

30/01/2019

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



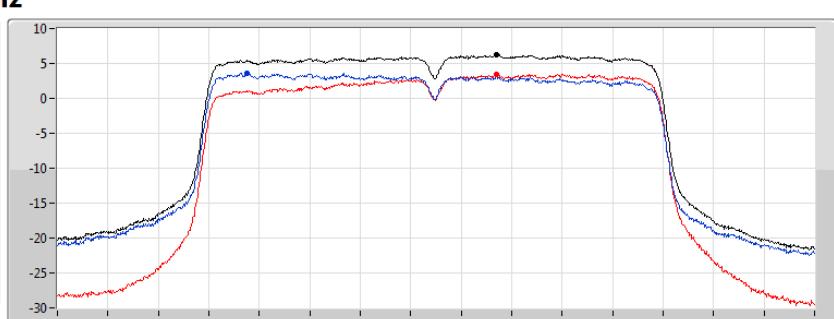
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.32	6.32	3.65	3.00

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

23/01/2019

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

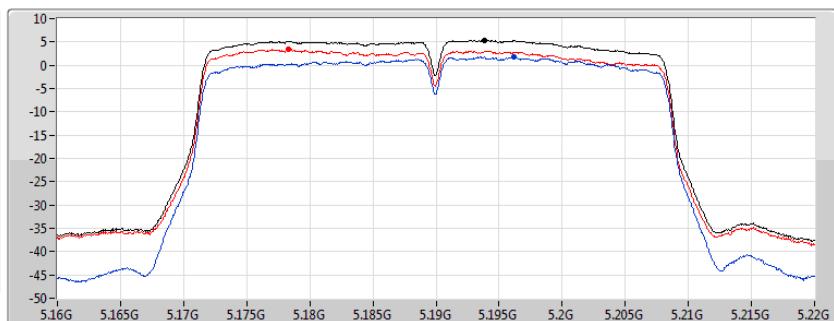


Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.31	6.31	3.57	3.51

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

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

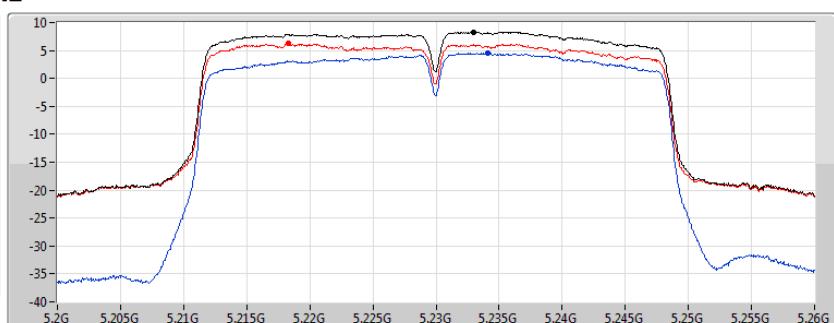


23/01/2019

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

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

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

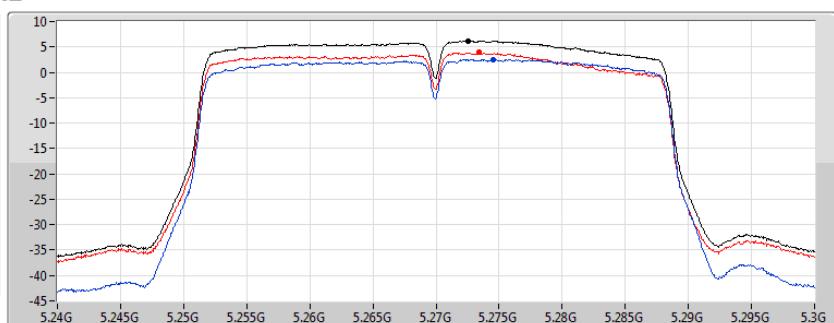


23/01/2019

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

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

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



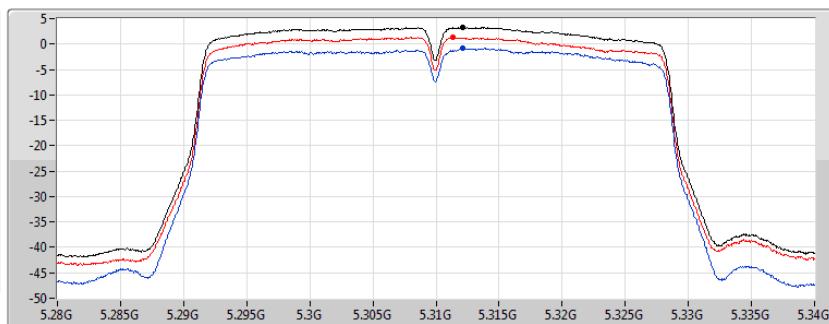
23/01/2019

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

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

23/01/2019

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



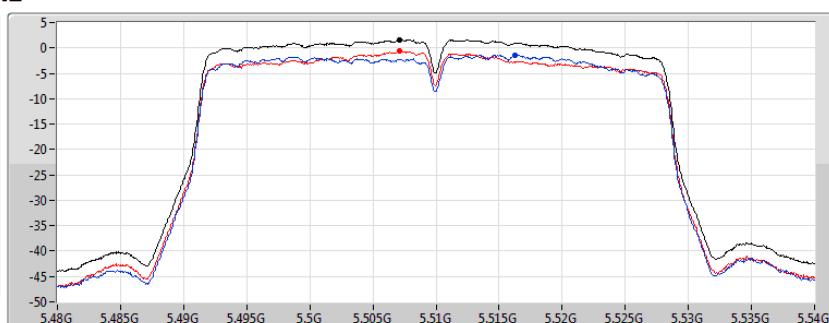
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.33	3.33	-0.83	1.27

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**
**PSD**
**5510MHz**

23/01/2019

CF
5.51GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



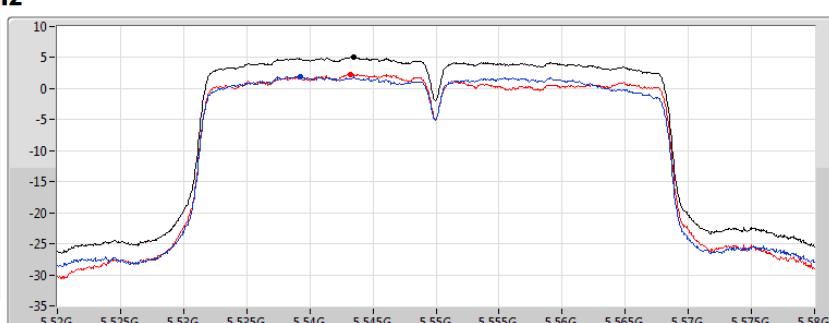
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.63	1.63	-1.37	-0.64

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**
**PSD**
**5550MHz**

23/01/2019

CF
5.55GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



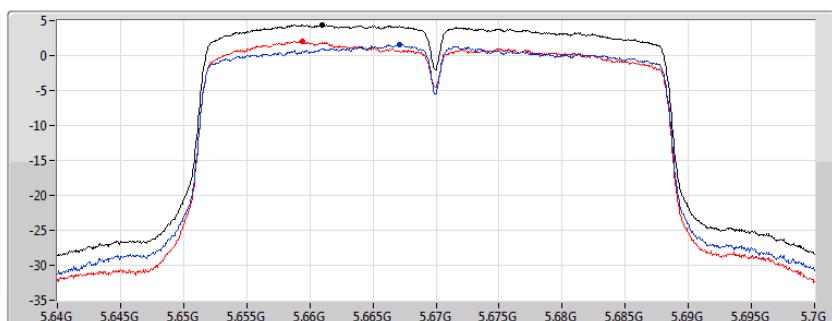
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.03	5.03	1.92	2.35

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**
**PSD**
**5670MHz**

23/01/2019

CF
5.67GHz
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)
4.44	4.44	1.62	2.04

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

30/01/2019

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



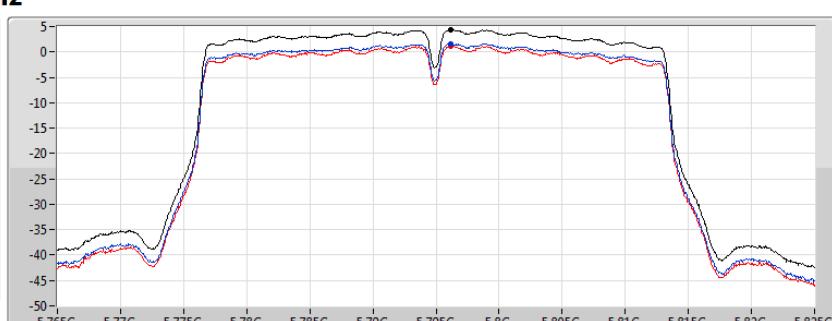
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.12	4.12	1.57	0.82

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

30/01/2019

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



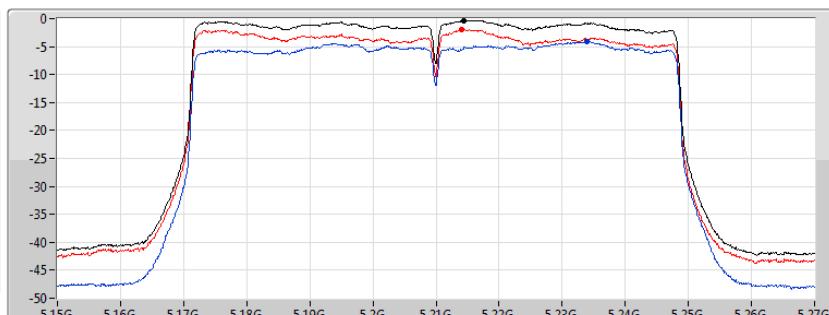
Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.34	4.34	1.56	1.18

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

23/01/2019

CF
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"/>

**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**
**PSD**
**5290MHz**

23/01/2019

CF
5.29GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS

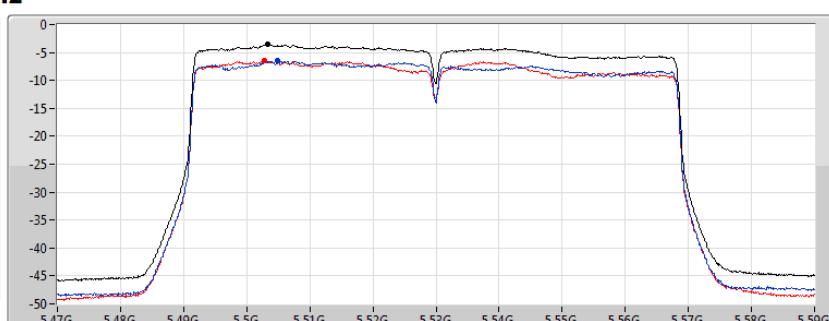


Sum	<input checked="" type="checkbox"/>
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>

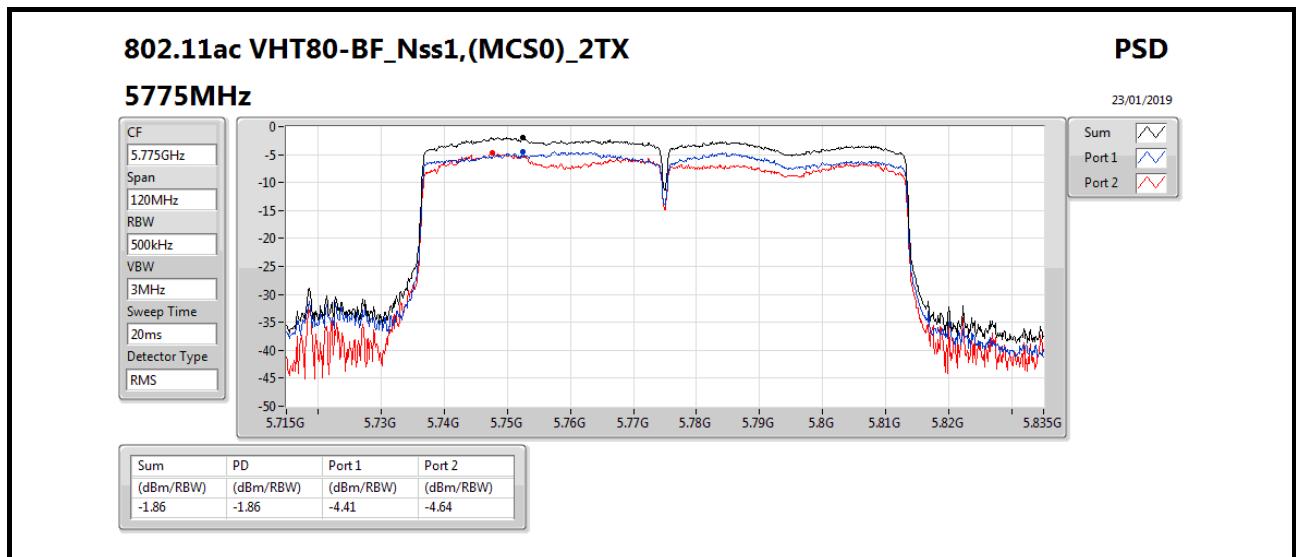
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**
**PSD**
**5530MHz**

23/01/2019

CF
5.53GHz
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"/>



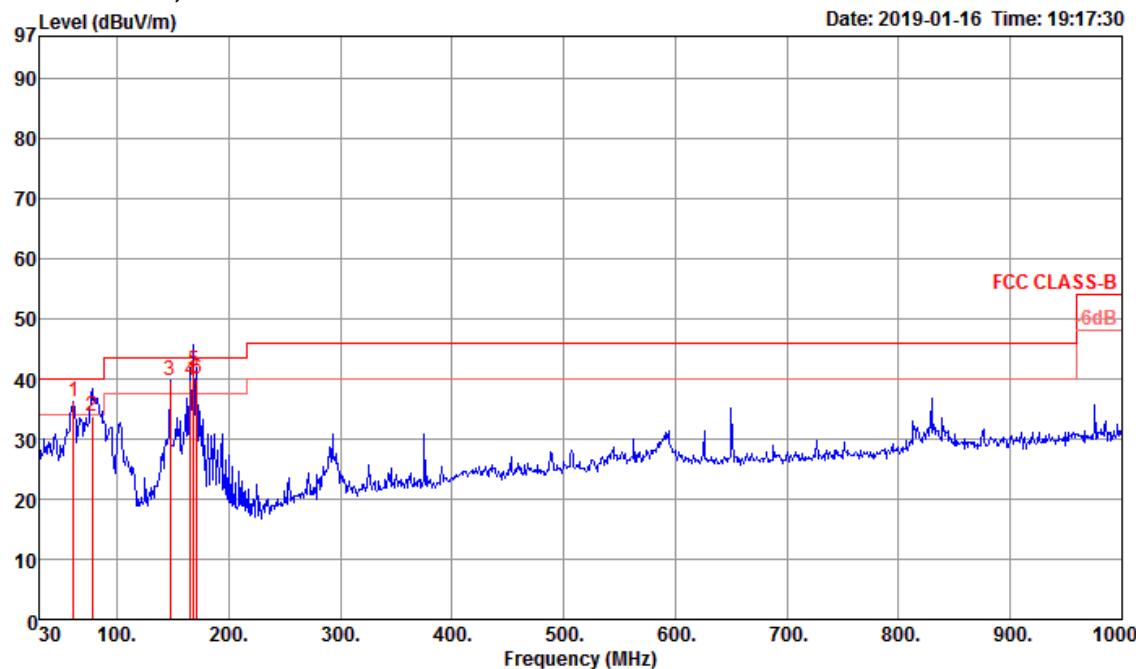


## Radiated Emission below 1GHz Result

Appendix E.1

Test Mode	Mode 1	Frequency Range	30 MHz to 1,000 MHz
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### Vertical 30 MHz to 1,000 MHz



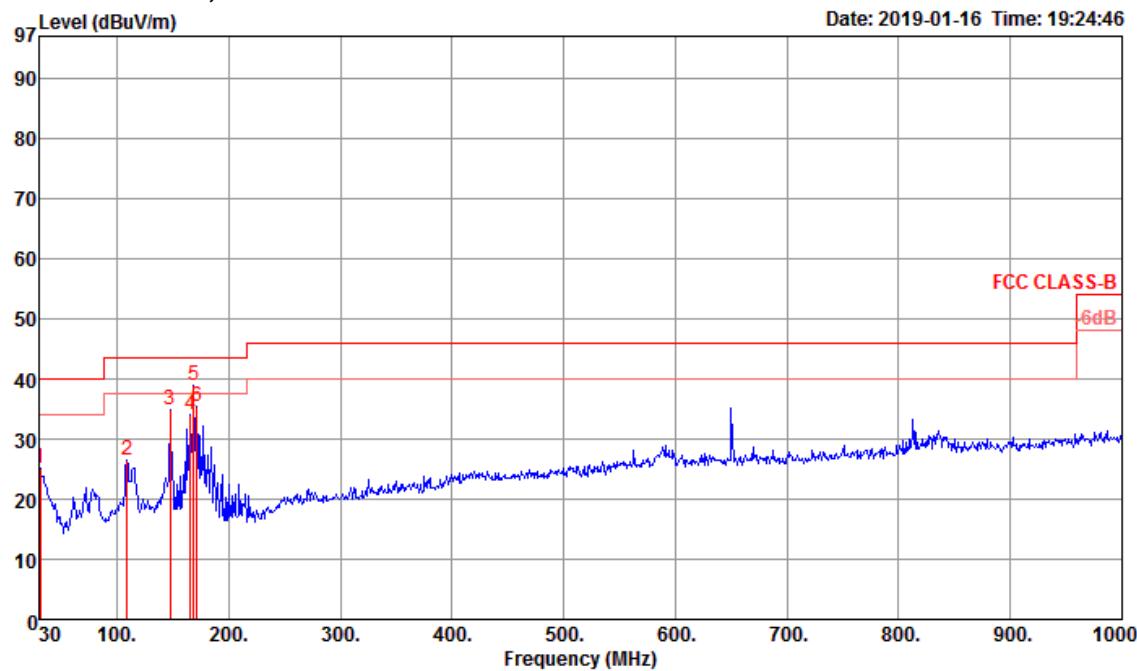
Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV			dB	dB/m		
1	61.04	36.14	40.00	-3.86	54.31	0.99	12.50	31.66	300	0	Peak		VERTICAL
2	77.53	33.68	40.00	-6.32	50.79	1.12	13.47	31.70	100	131	QP		VERTICAL
3	147.37	39.83	43.50	-3.67	52.99	1.50	17.10	31.76	300	0	Peak		VERTICAL
4	165.80	39.77	43.50	-3.73	53.70	1.62	16.20	31.75	100	300	QP		VERTICAL
5	168.71	41.45	43.50	-2.05	55.46	1.64	16.10	31.75	100	308	QP		VERTICAL
6	171.62	40.09	43.50	-3.41	54.20	1.64	16.00	31.75	100	301	QP		VERTICAL



## Radiated Emission below 1GHz Result

Appendix E.1

### Horizontal 30 MHz to 1,000 MHz



Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	deg
1	30.97	25.02	40.00	-14.98	30.18	0.76	25.40	31.32	100	360	Peak	HORIZONTAL
2	108.57	26.51	43.50	-16.99	38.61	1.29	18.33	31.72	100	360	Peak	HORIZONTAL
3	147.37	34.83	43.50	-8.67	47.99	1.50	17.10	31.76	100	360	Peak	HORIZONTAL
4	165.80	34.06	43.50	-9.44	47.99	1.62	16.20	31.75	100	360	Peak	HORIZONTAL
5	168.71	38.92	43.50	-4.58	52.93	1.64	16.10	31.75	100	360	Peak	HORIZONTAL
6	171.62	35.32	43.50	-8.18	49.43	1.64	16.00	31.75	100	360	Peak	HORIZONTAL



### Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	Pass	AV	5.15G	53.14	54.00	-0.86	7.85	3	Horizontal	25	2.24	-



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

08/01/2019

**5180MHz\_TX**

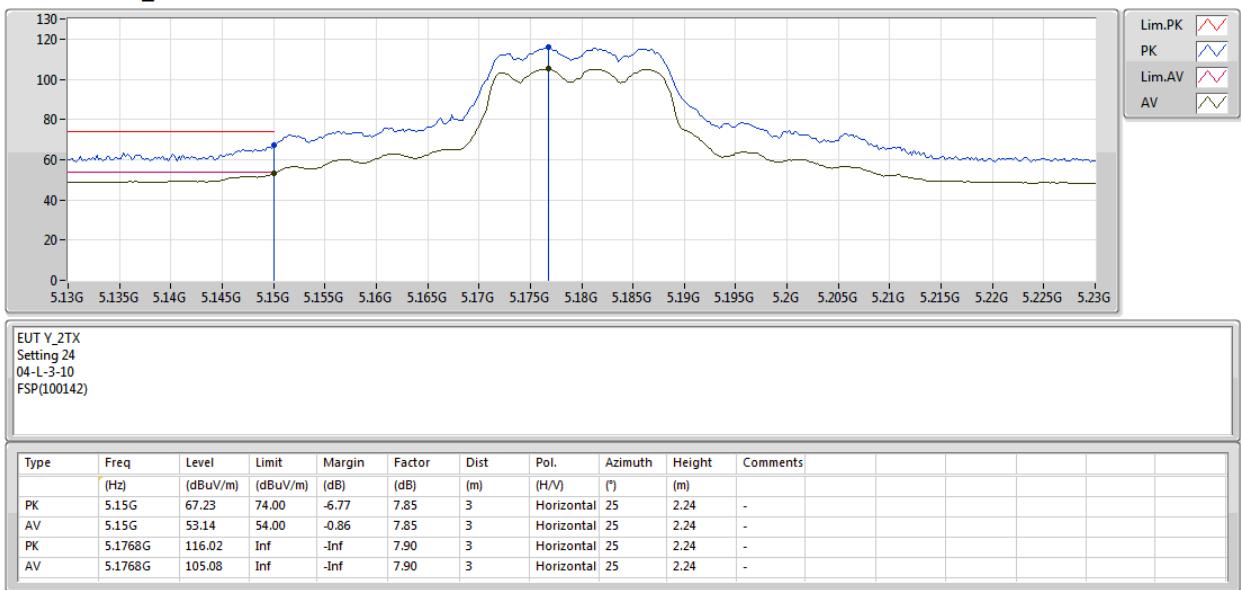




**802.11a\_Nss1,(6Mbps)\_2TX**

08/01/2019

**5180MHz\_TX**





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

08/01/2019

**5180MHz\_TX**





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

08/01/2019

**5180MHz\_TX**

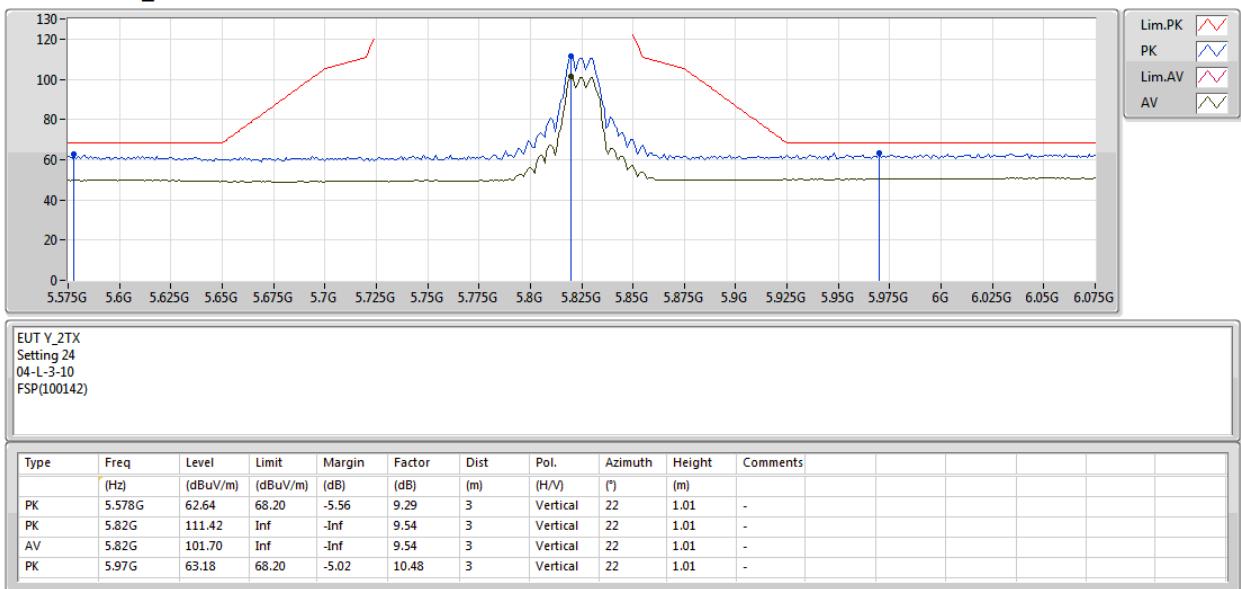




## 802.11a\_Nss1,(6Mbps)\_2TX

08/01/2019

## 5825MHz\_TX

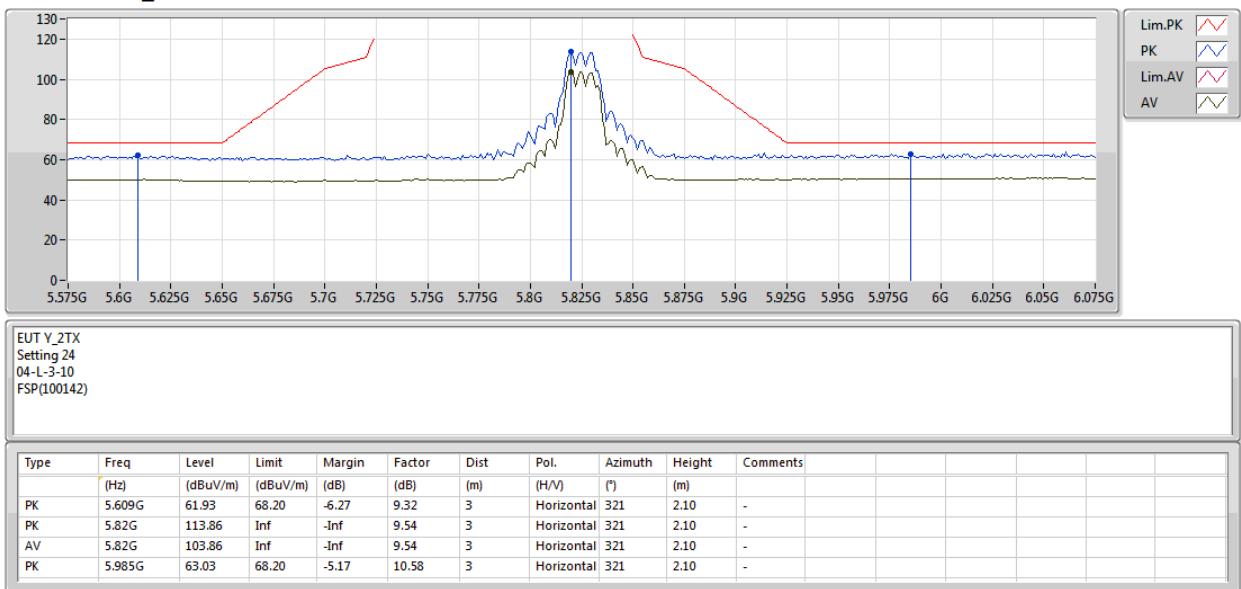




## 802.11a\_Nss1,(6Mbps)\_2TX

08/01/2019

## 5825MHz\_TX

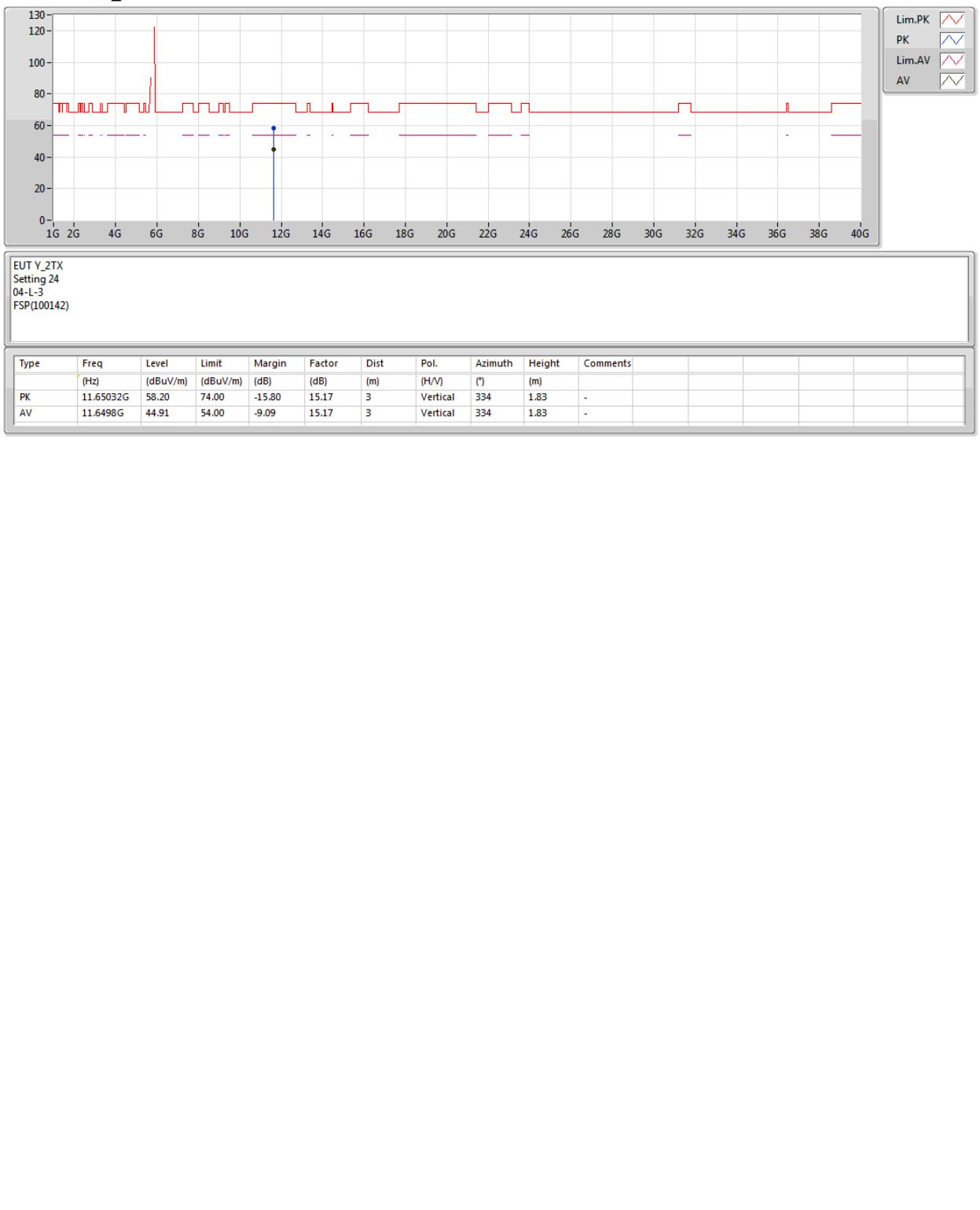




**802.11a\_Nss1,(6Mbps)\_2TX**

08/01/2019

**5825MHz\_TX**

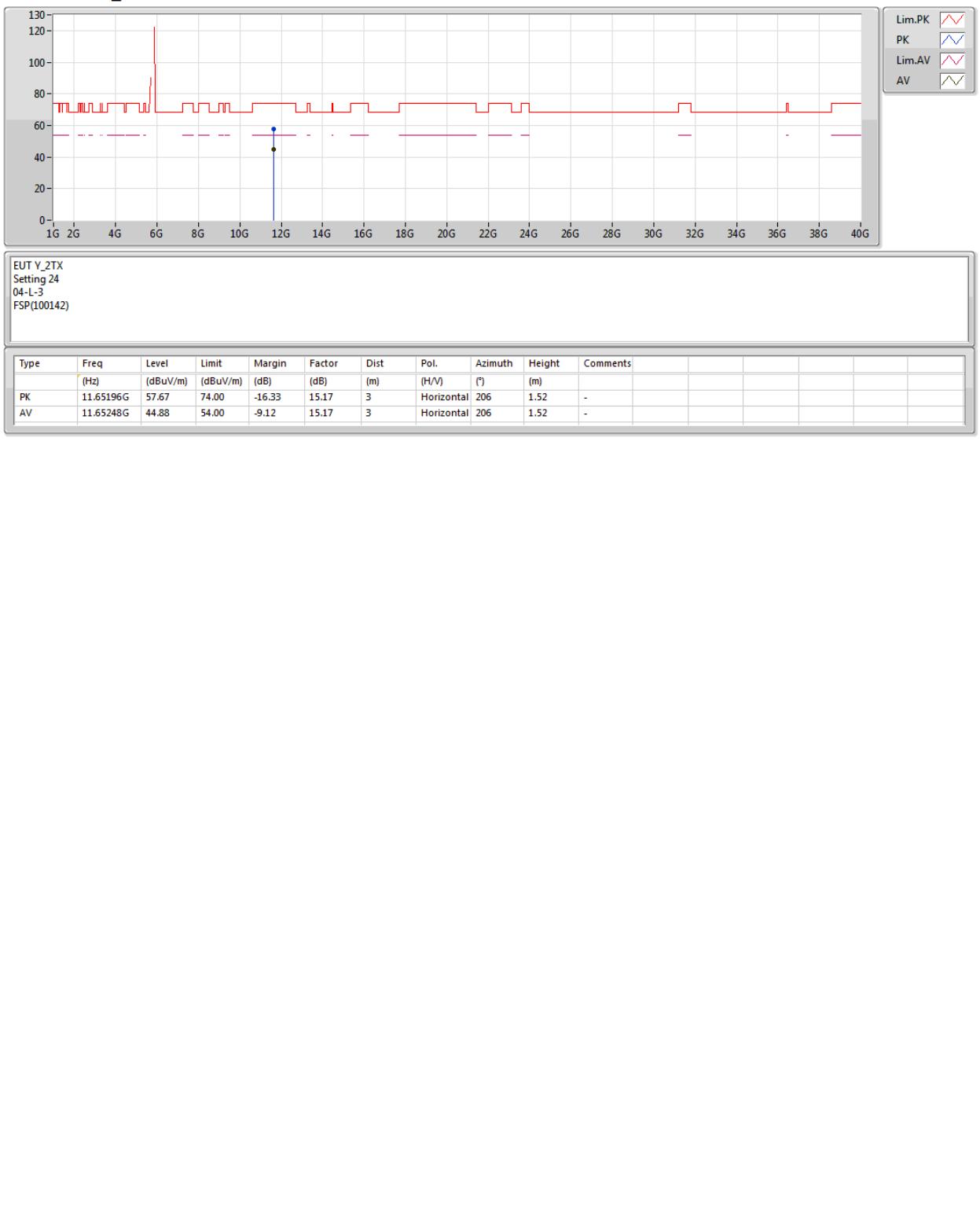




## 802.11a\_Nss1,(6Mbps)\_2TX

08/01/2019

## 5825MHz\_TX



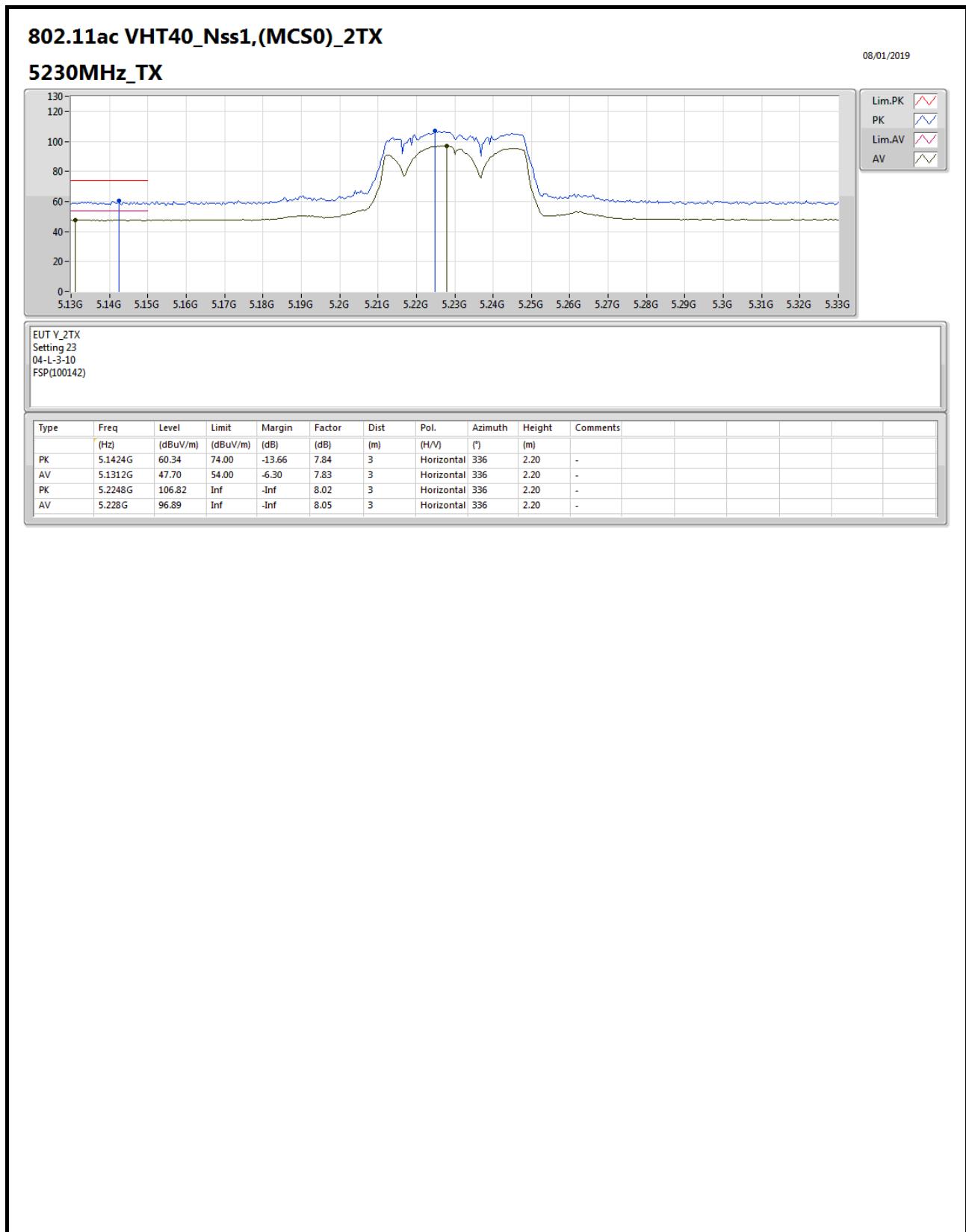


## 802.11ac VHT40\_Nss1,(MCS0)\_2TX

08/01/2019

## 5230MHz\_TX







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

08/01/2019

**5230MHz\_TX**

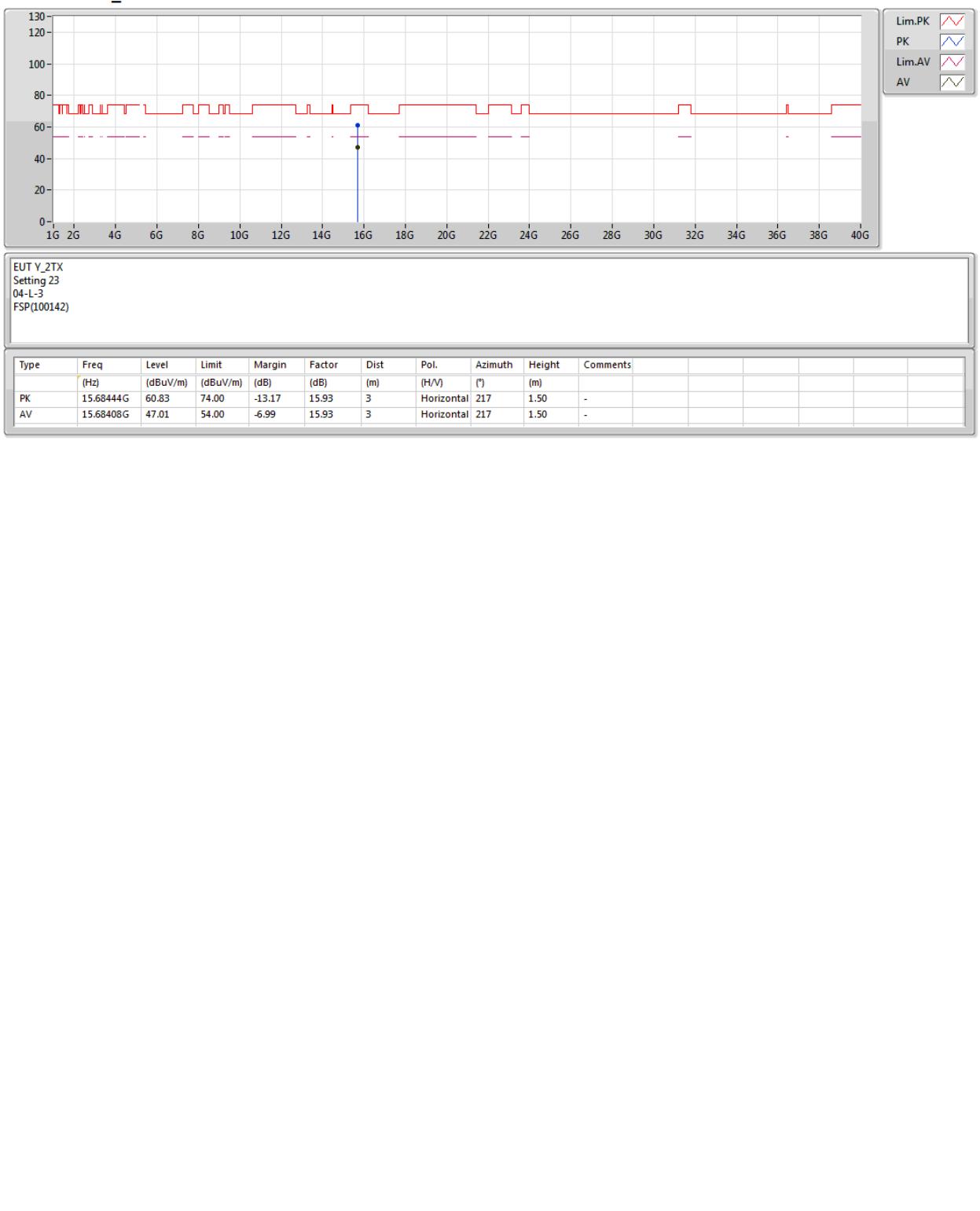




**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

08/01/2019

**5230MHz\_TX**

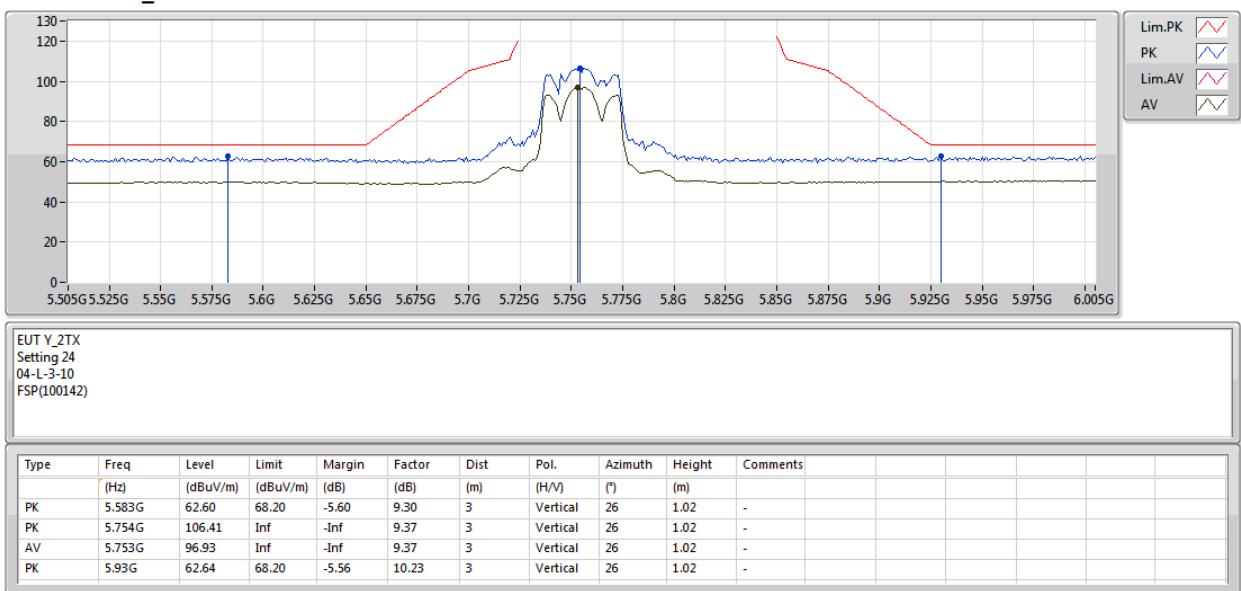




## 802.11ac VHT40\_Nss1,(MCS0)\_2TX

08/01/2019

## 5755MHz\_TX

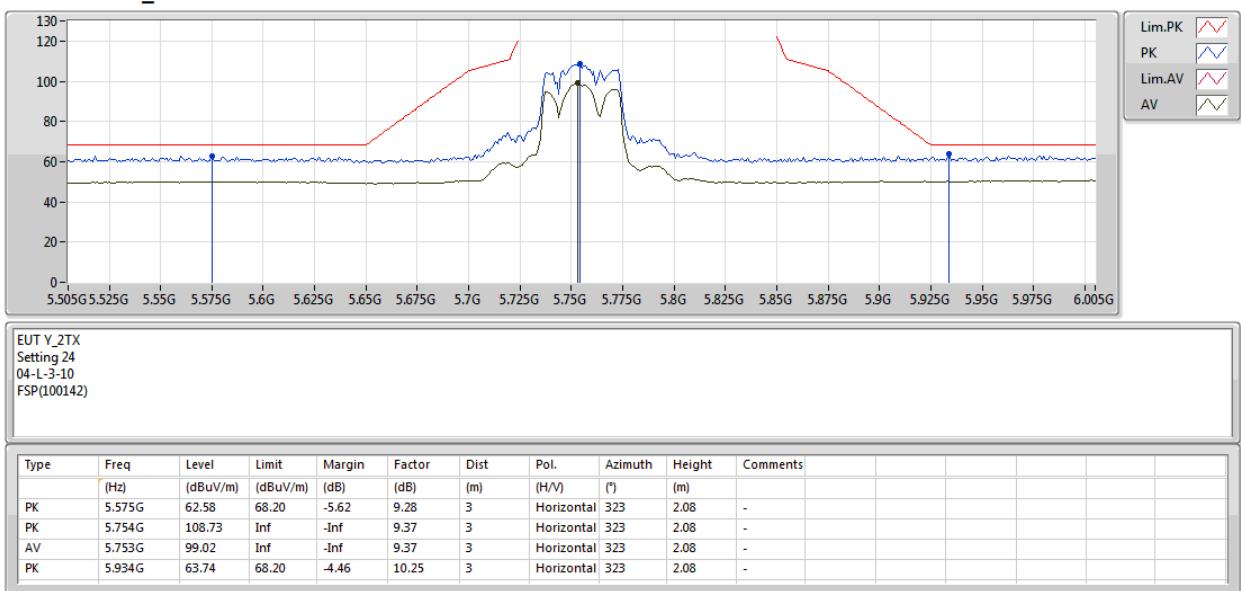




## 802.11ac VHT40\_Nss1,(MCS0)\_2TX

08/01/2019

## 5755MHz\_TX

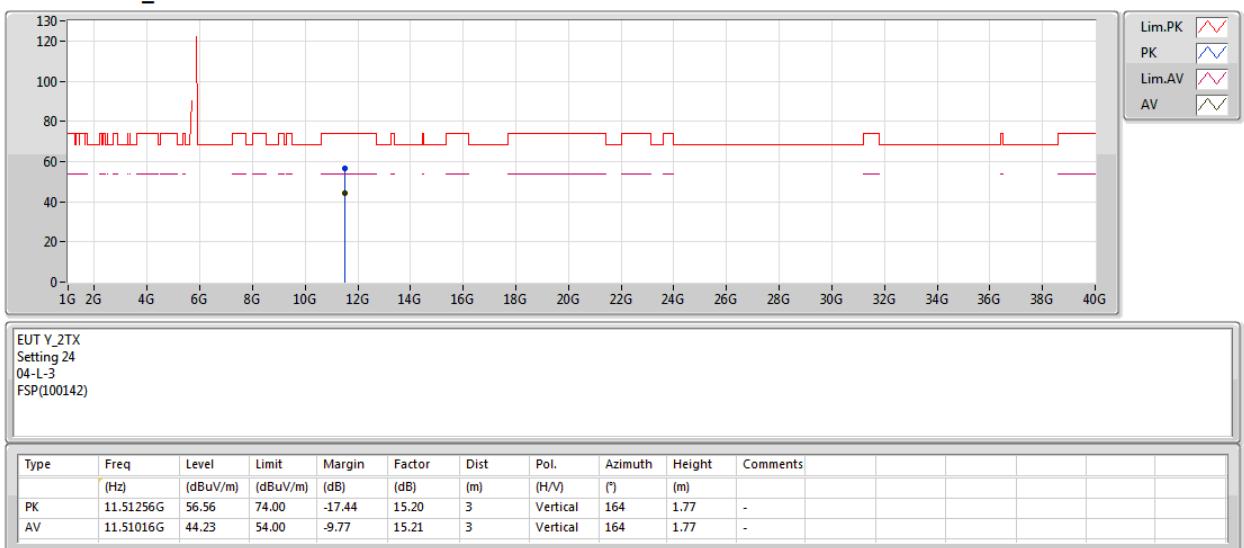




**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

08/01/2019

**5755MHz\_TX**

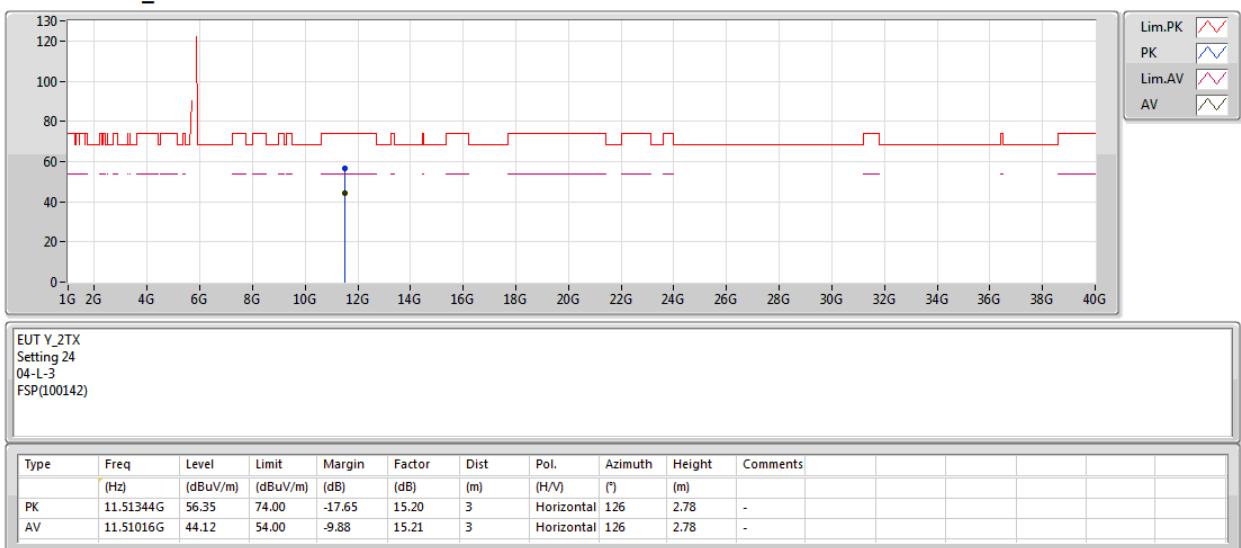




**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

08/01/2019

**5755MHz\_TX**

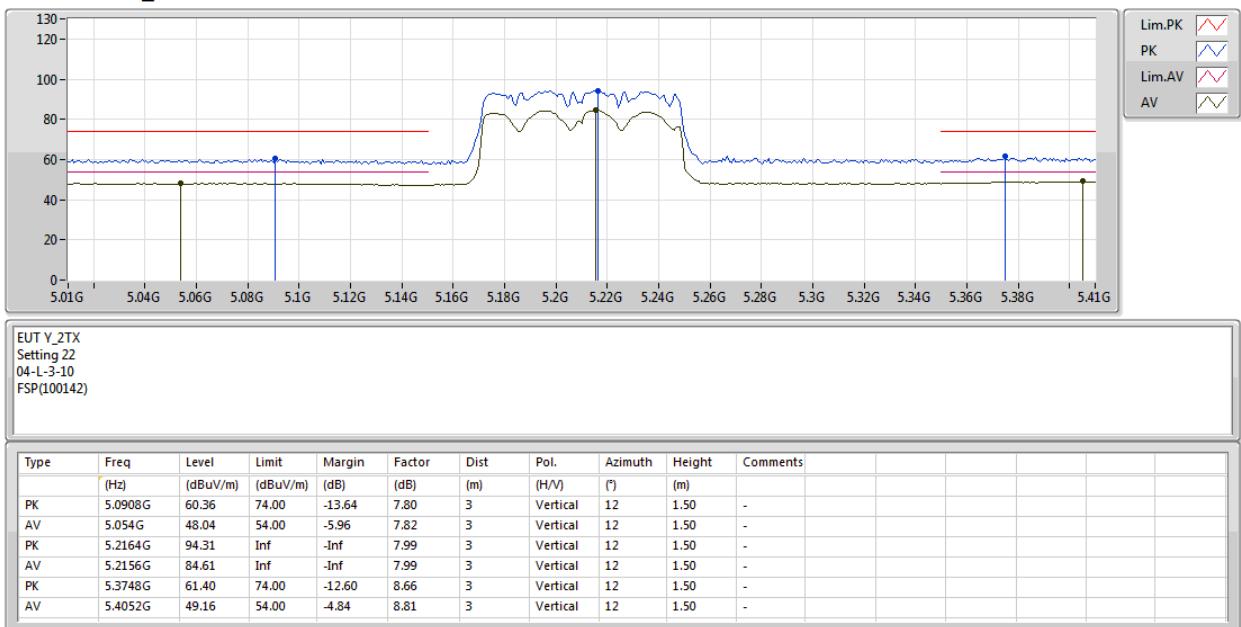


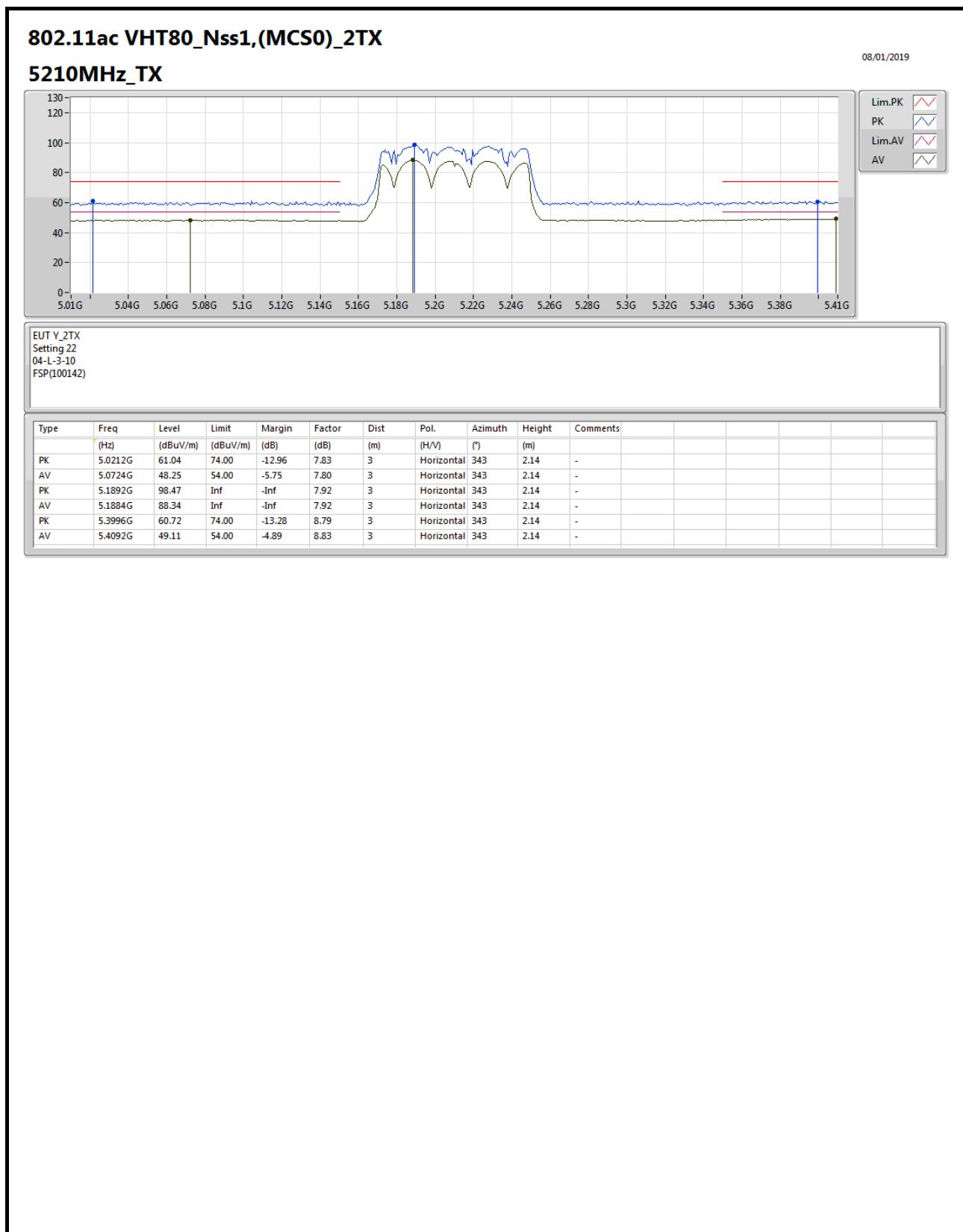


**802.11ac VHT80\_Nss1,(MCS0)\_2TX**

08/01/2019

**5210MHz\_TX**







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

08/01/2019

**5210MHz\_TX**





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

08/01/2019

**5210MHz\_TX**

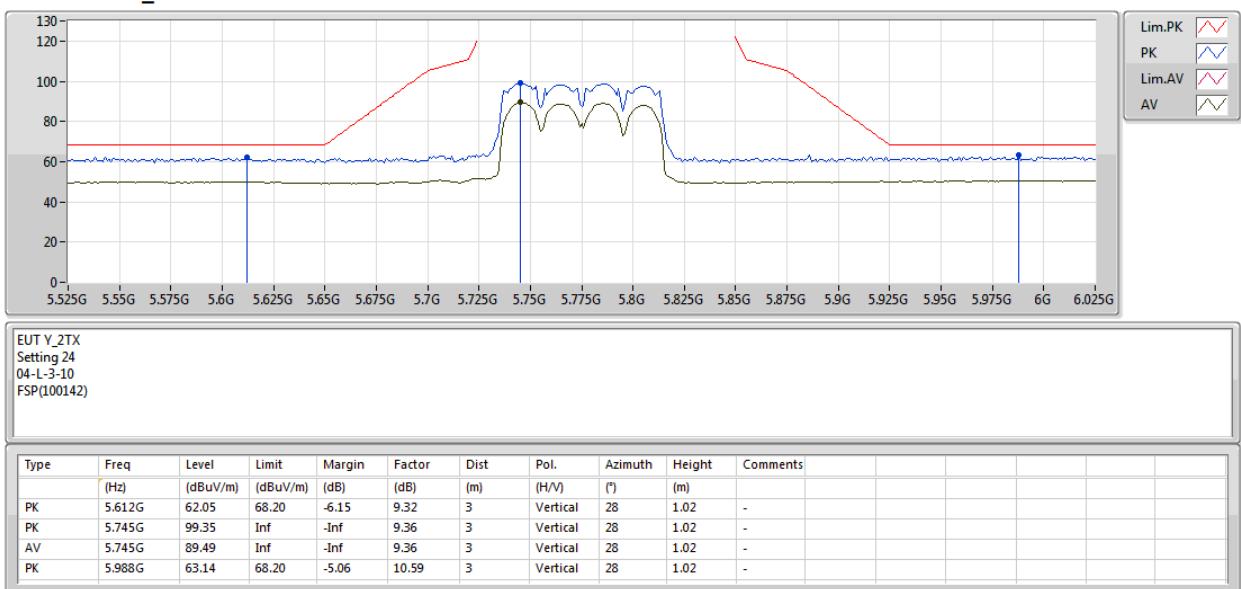




**802.11ac VHT80\_Nss1,(MCS0)\_2TX**

08/01/2019

**5775MHz\_TX**

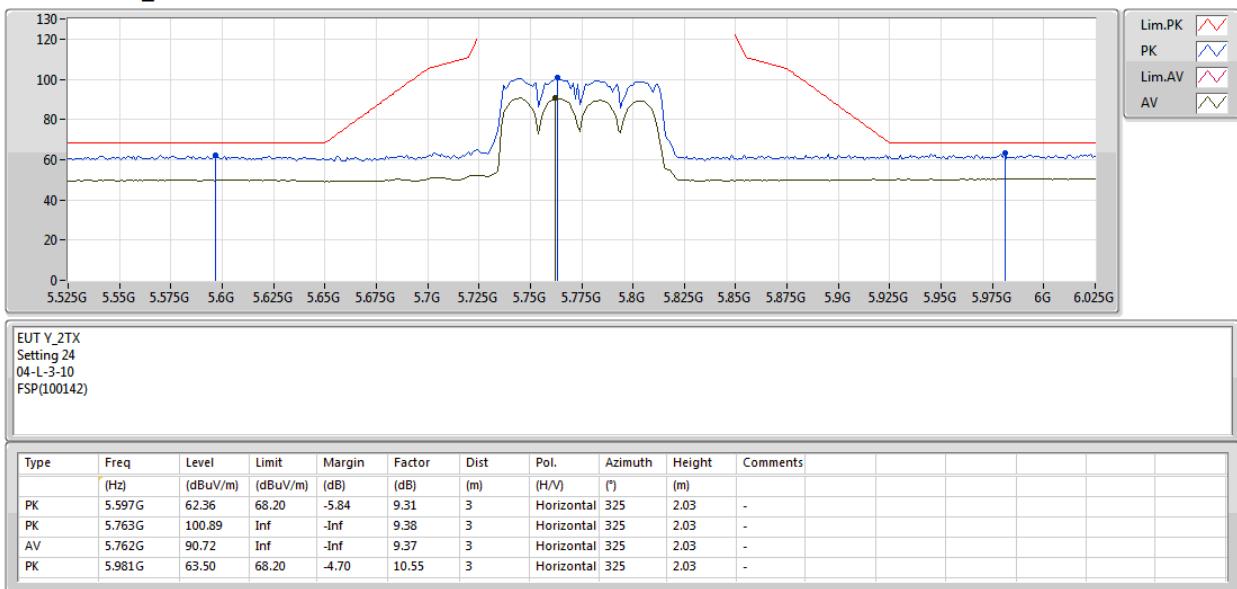




## 802.11ac VHT80\_Nss1,(MCS0)\_2TX

08/01/2019

## 5775MHz\_TX





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

08/01/2019

## 5775MHz\_TX

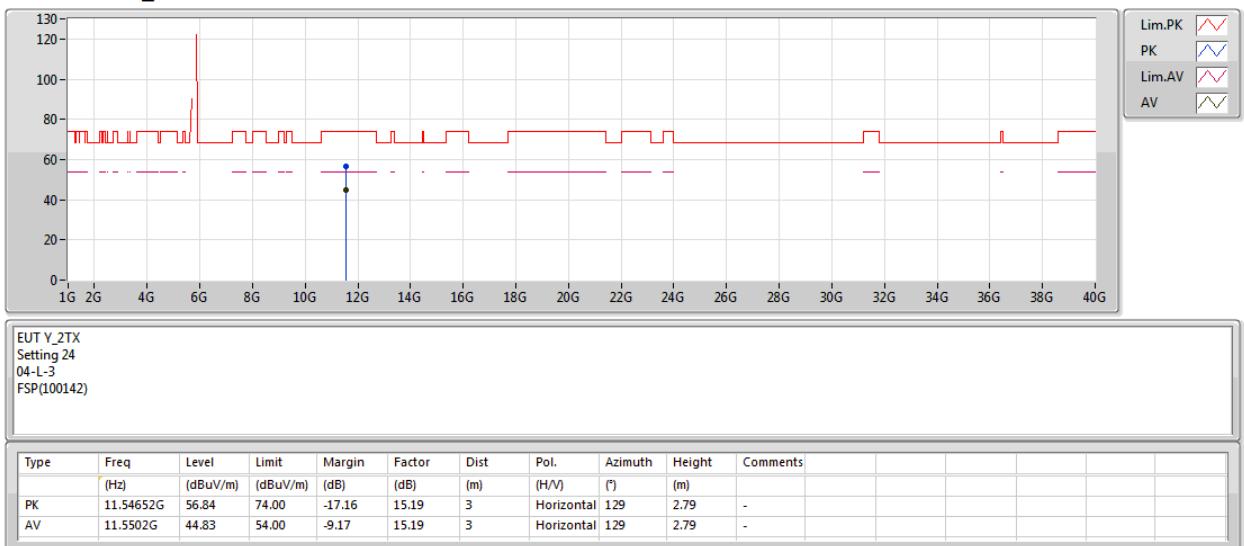




**802.11ac VHT80\_Nss1,(MCS0)\_2TX**

08/01/2019

**5775MHz\_TX**

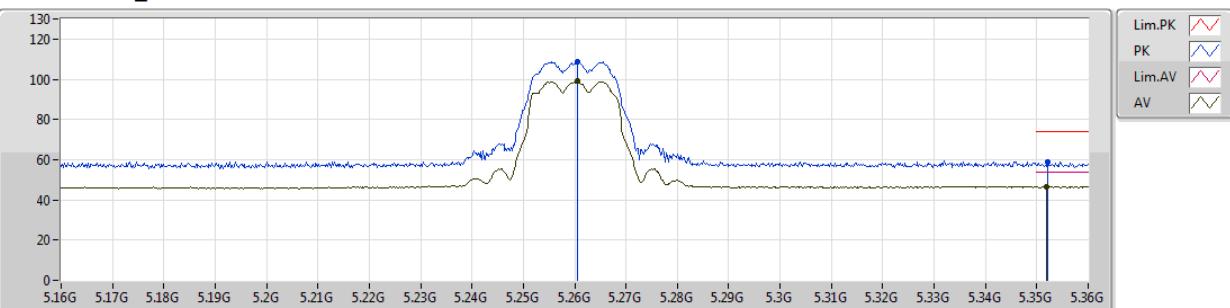


**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.47-5.725GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	PK	5.47G	66.87	68.20	-1.33	6.58	3	Vertical	0	1.03	-

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

16/01/2019

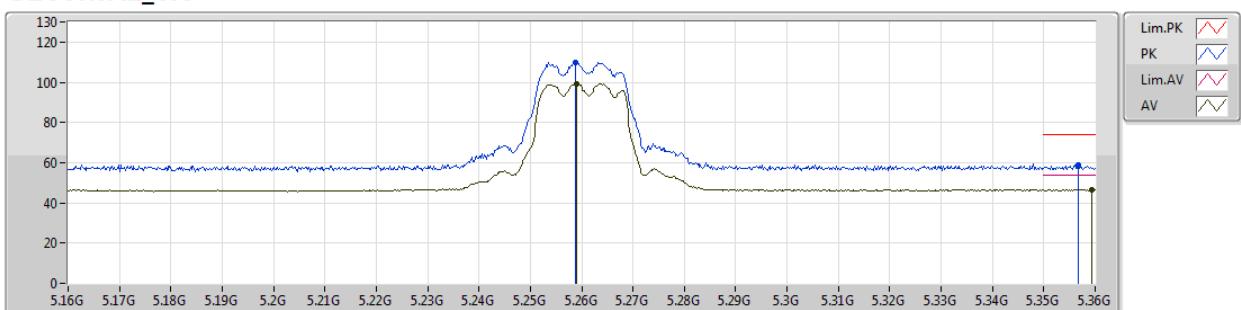


EUT Y\_2TX  
 Setting 24  
 03-L-2-10  
 FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments				
PK	5.2606G	108.75	Inf	-Inf	6.38	3	Vertical	30	2.03	-				
AV	5.2606G	98.93	Inf	-Inf	6.38	3	Vertical	30	2.03	-				
PK	5.3522G	58.78	74.00	-15.22	6.50	3	Vertical	30	2.03	-				
AV	5.352G	46.64	54.00	-7.36	6.50	3	Vertical	30	2.03	-				

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

16/01/2019

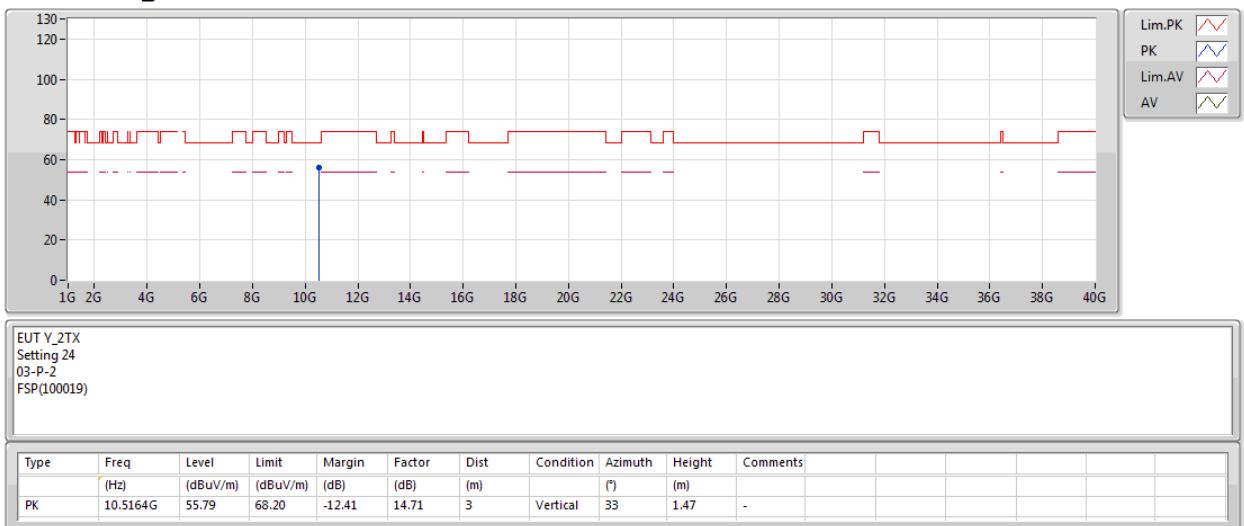


EUT Y\_2TX  
Setting 24  
03-L-2-10  
FSP(100019)

Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments					
PK	5.2588G	109.87	Inf	-Inf	6.37	3	Horizontal	20	2.33	-					
AV	5.259G	99.36	Inf	-Inf	6.37	3	Horizontal	20	2.33	-					
PK	5.3568G	58.87	74.00	-15.13	6.50	3	Horizontal	20	2.33	-					
AV	5.3594G	46.73	54.00	-7.27	6.50	3	Horizontal	20	2.33	-					

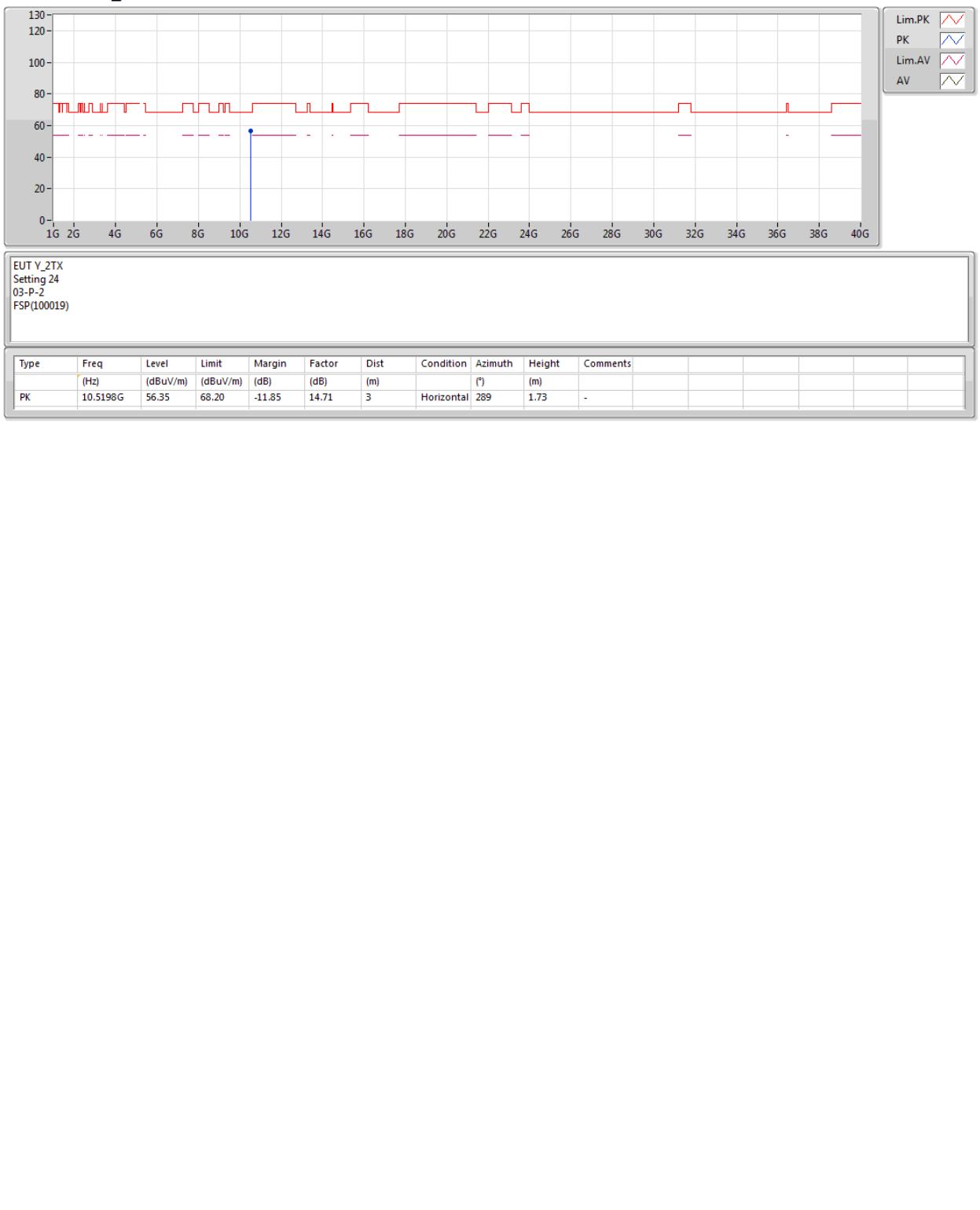
**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5260MHz\_TX**


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

17/01/2019

**5260MHz\_TX**


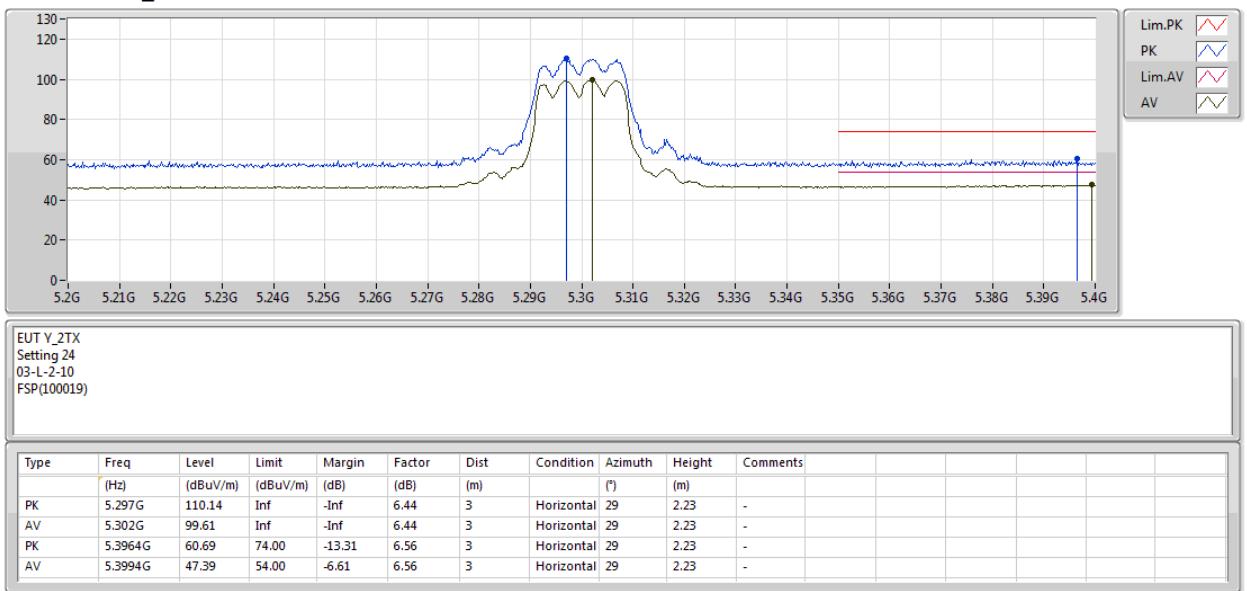
**802.11a\_Nss1,(6Mbps)\_2TX**

16/01/2019

**5300MHz\_TX**

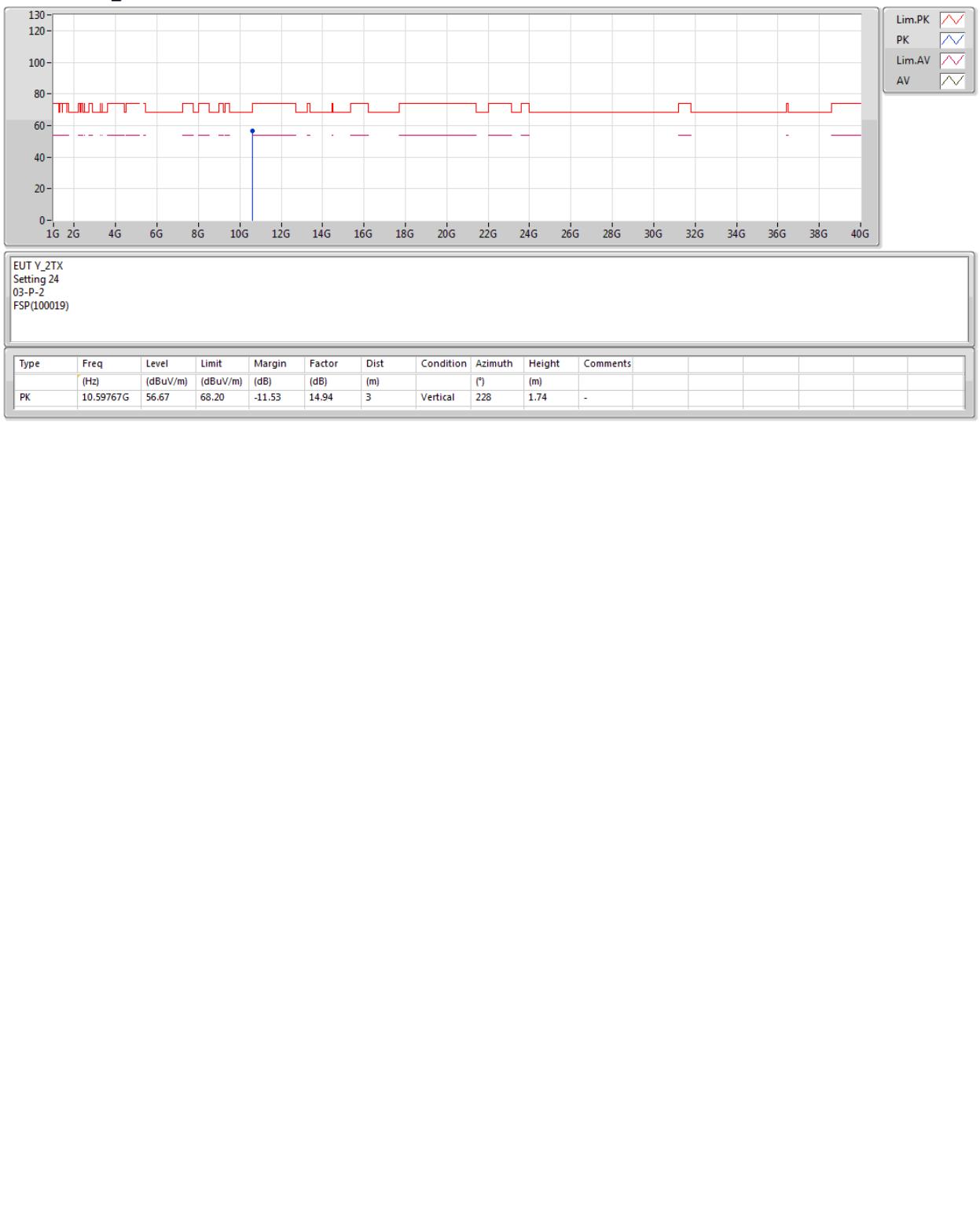

**802.11a\_Nss1,(6Mbps)\_2TX**

16/01/2019

**5300MHz\_TX**


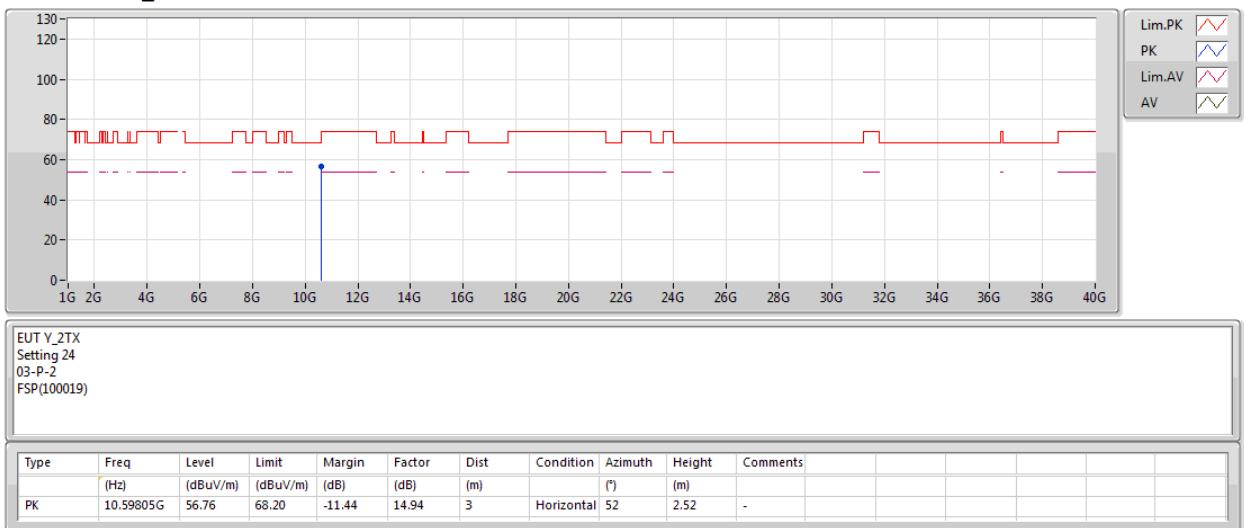
**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5300MHz\_TX**


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

17/01/2019

**5300MHz\_TX**


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

16/01/2019

**5320MHz\_TX**

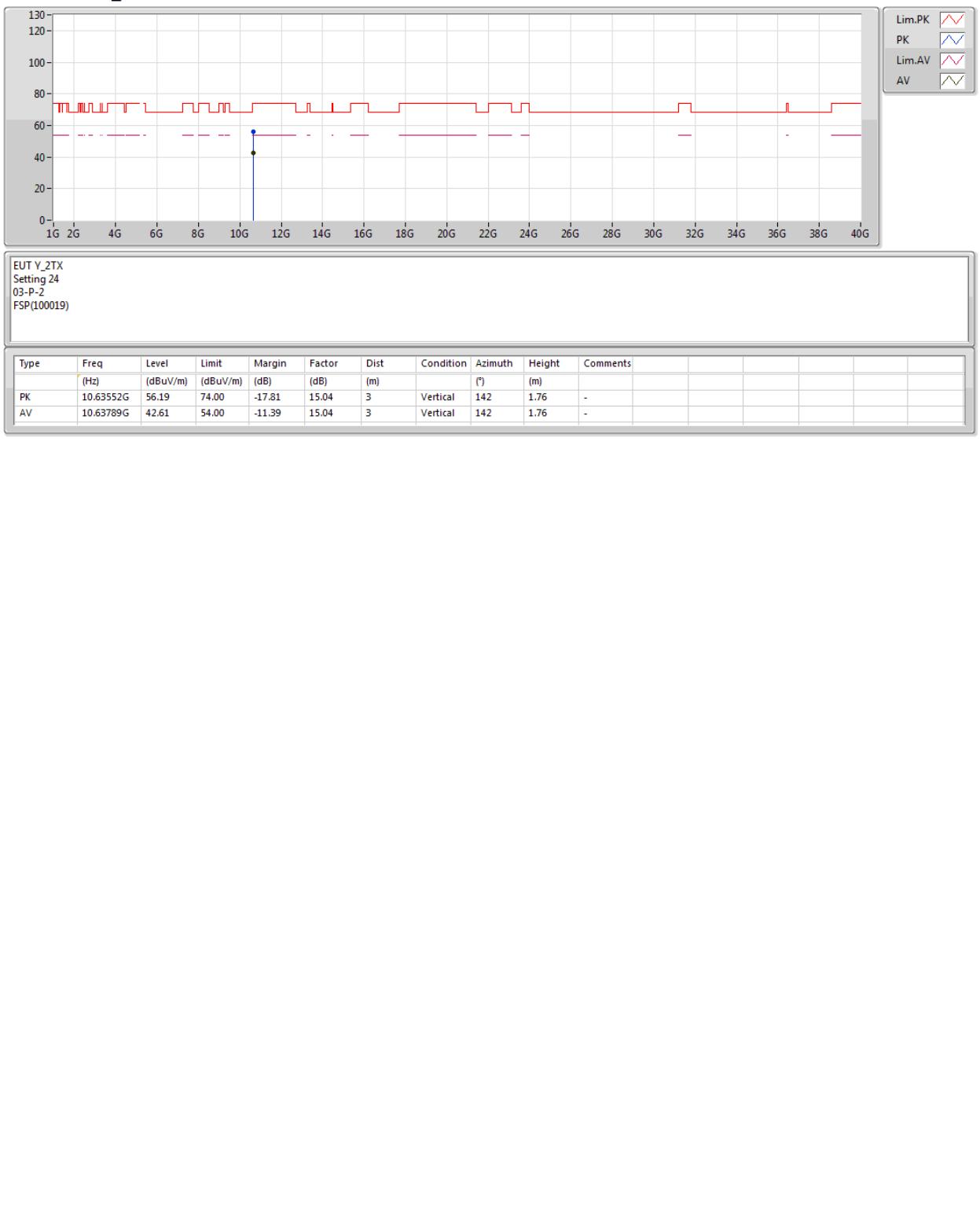

**802.11a\_Nss1,(6Mbps)\_2TX**

16/01/2019

**5320MHz\_TX**

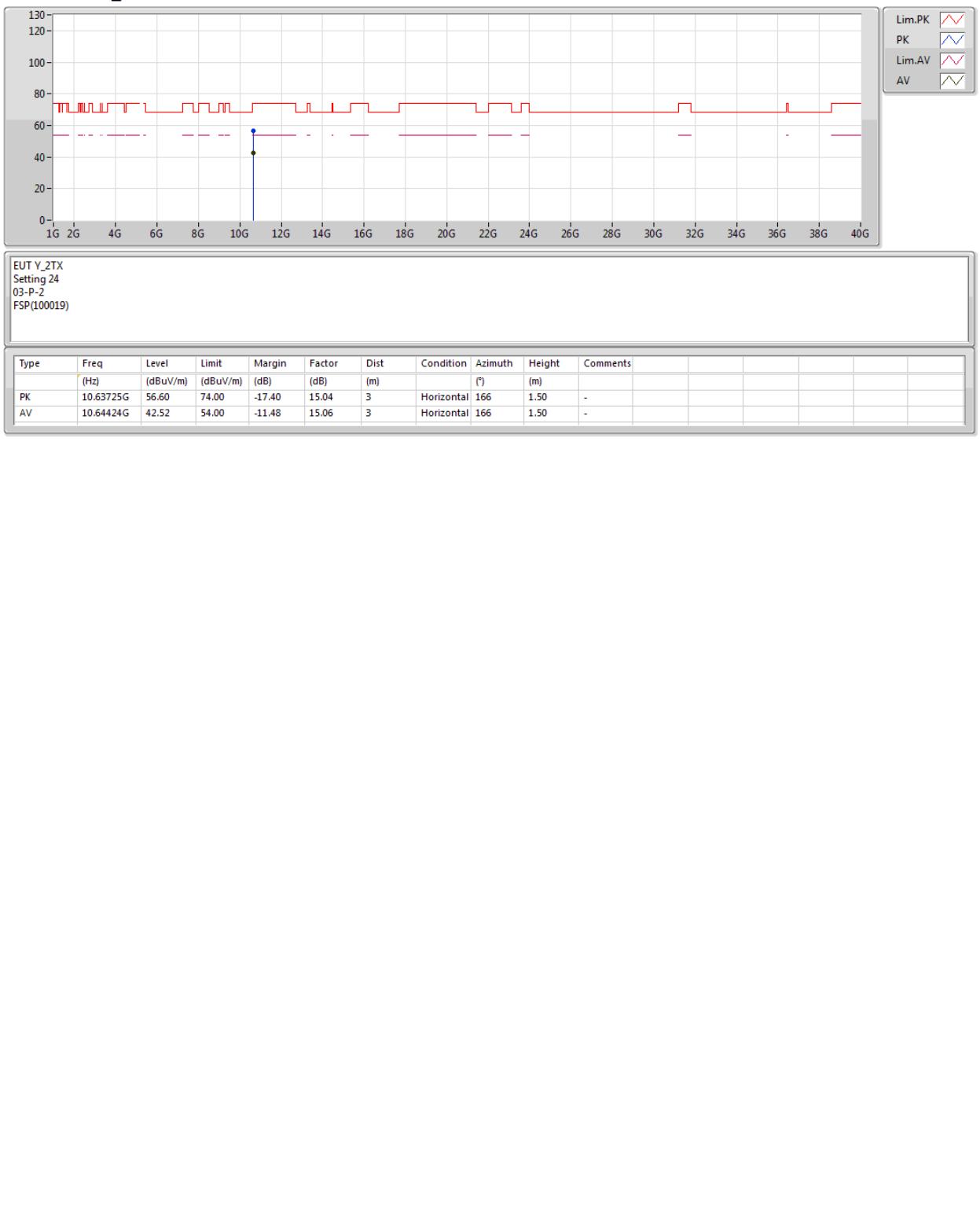

**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5320MHz\_TX**


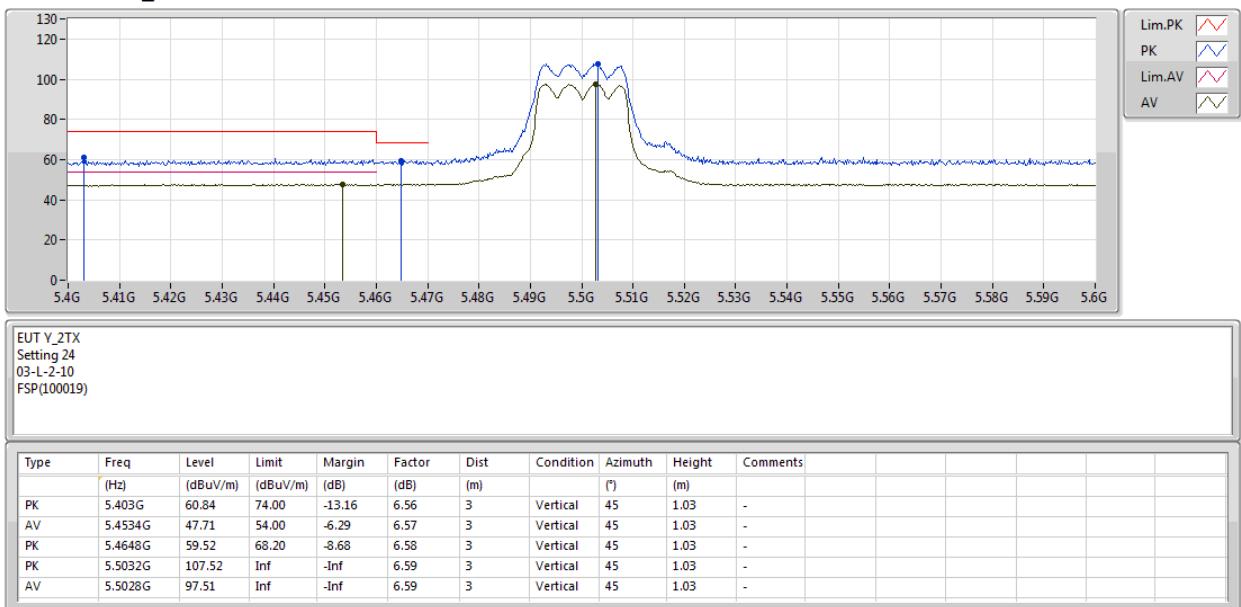
**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5320MHz\_TX**


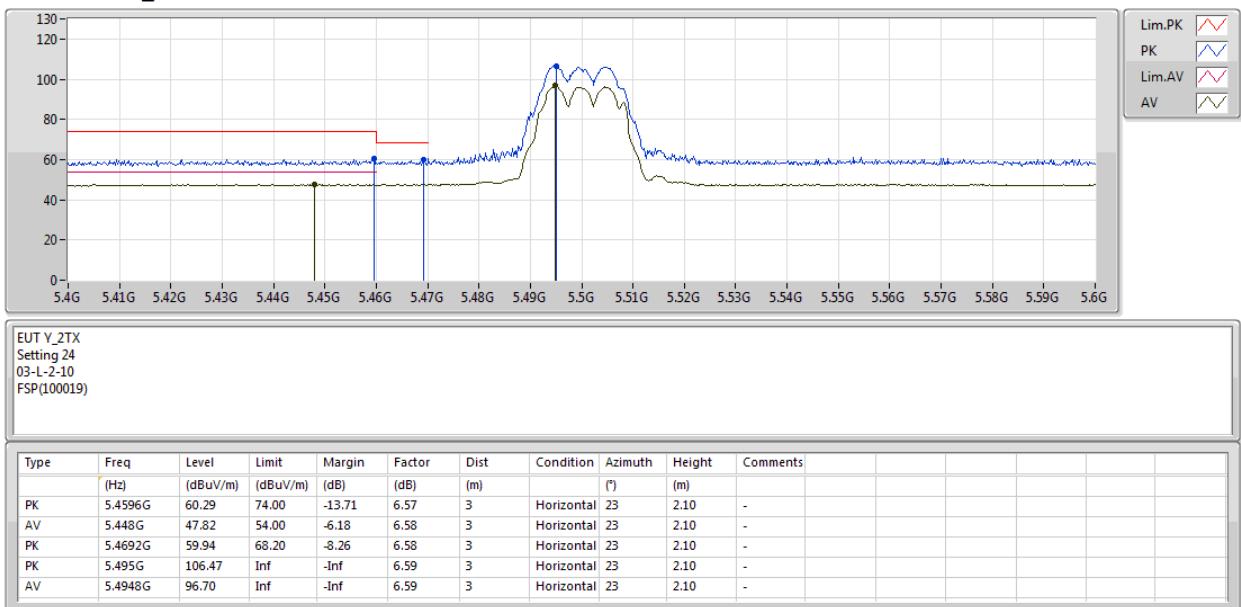
**802.11a\_Nss1,(6Mbps)\_2TX**

16/01/2019

**5500MHz\_TX**


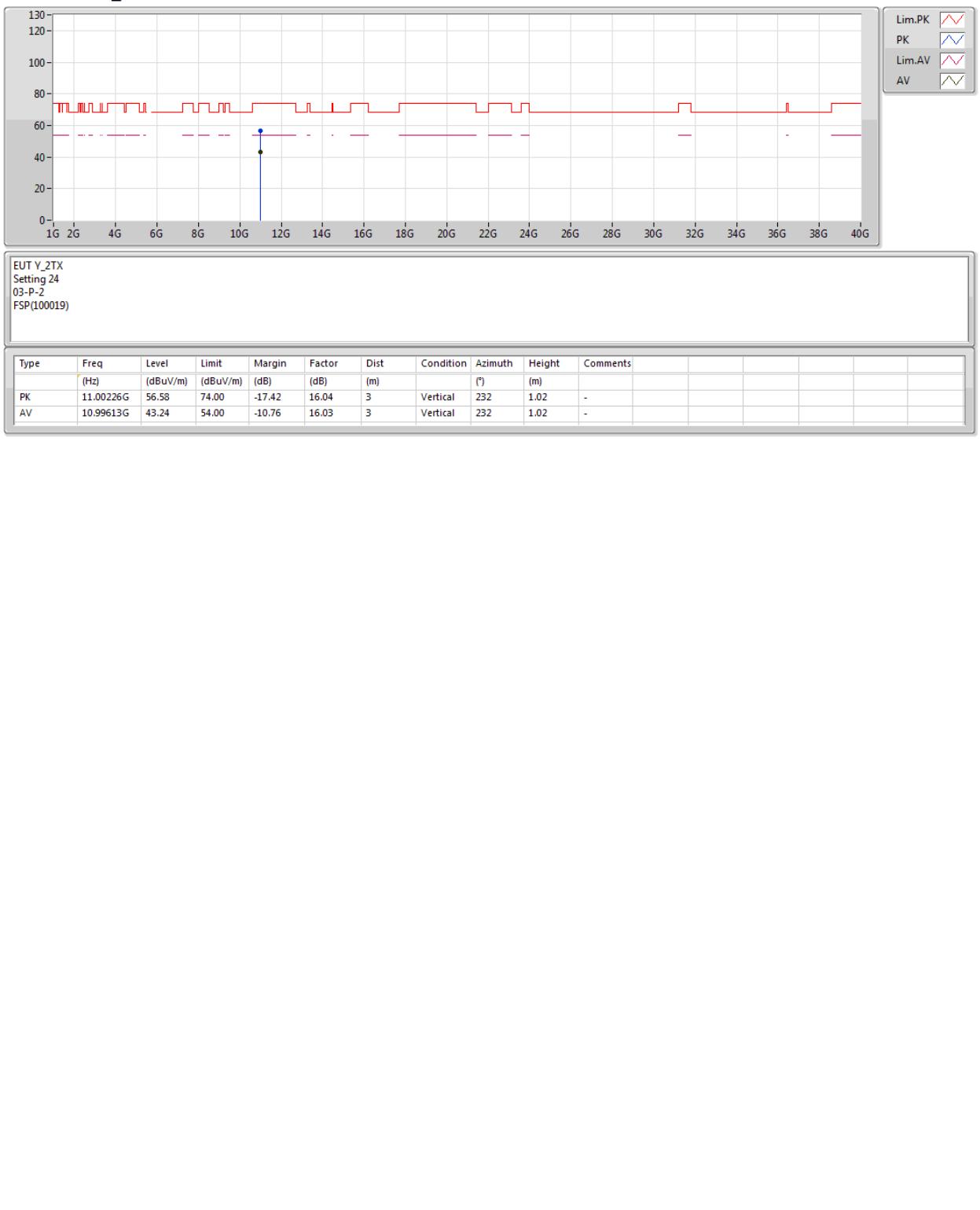
**802.11a\_Nss1,(6Mbps)\_2TX**

16/01/2019

**5500MHz\_TX**


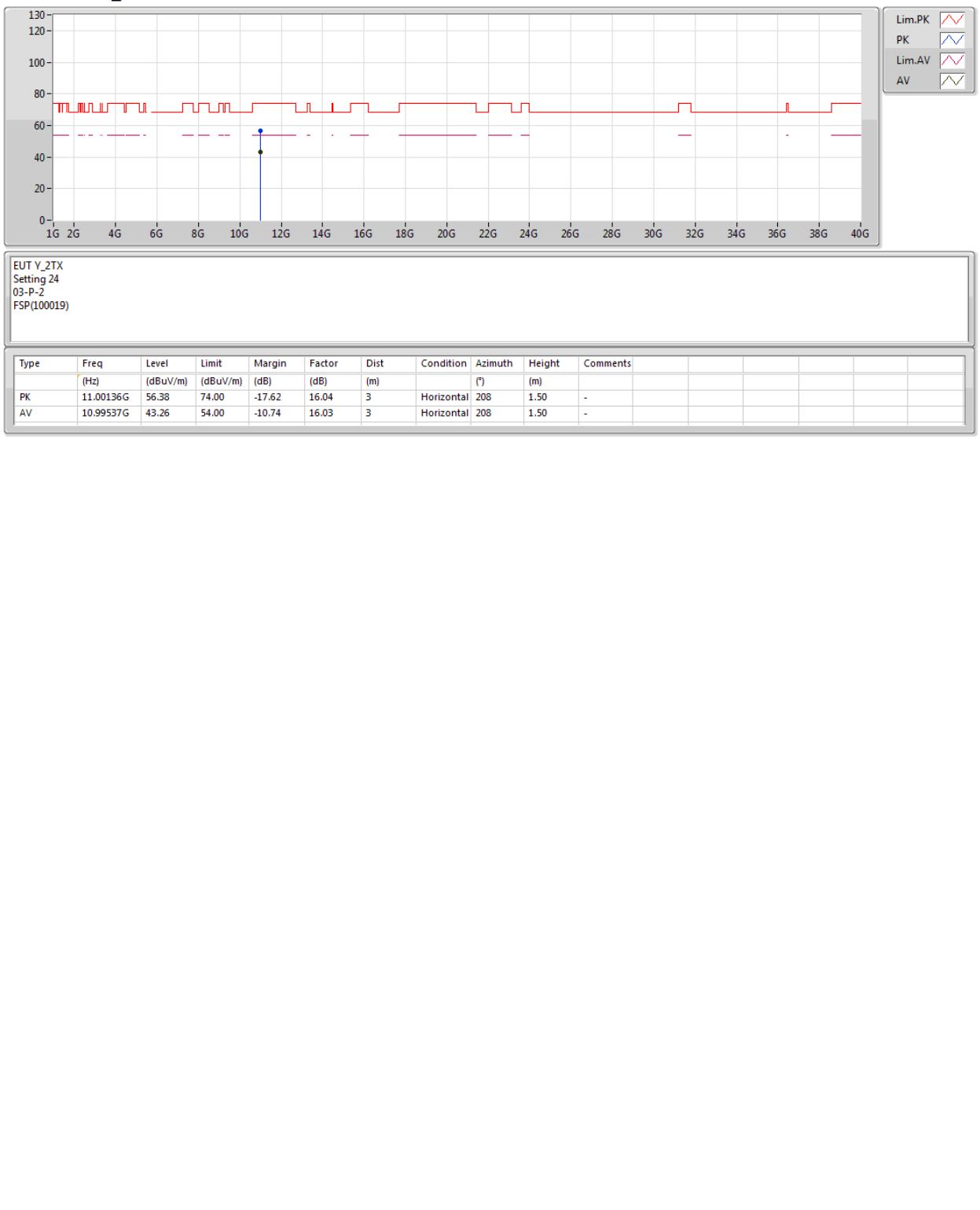
**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5500MHz\_TX**


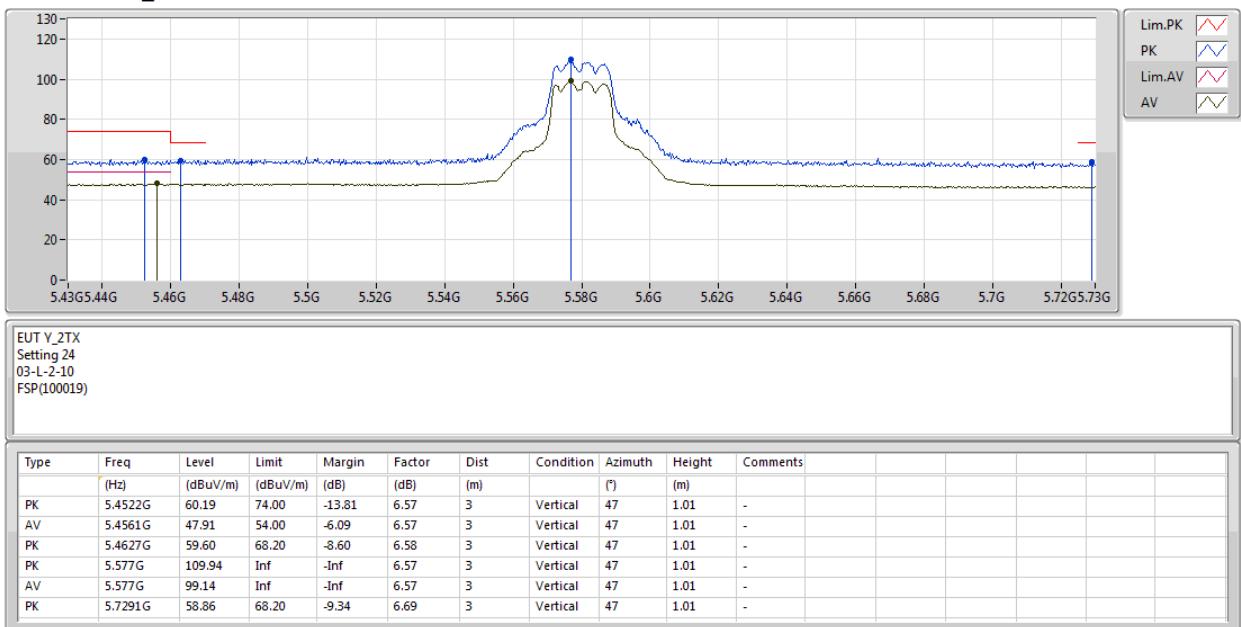
**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5500MHz\_TX**


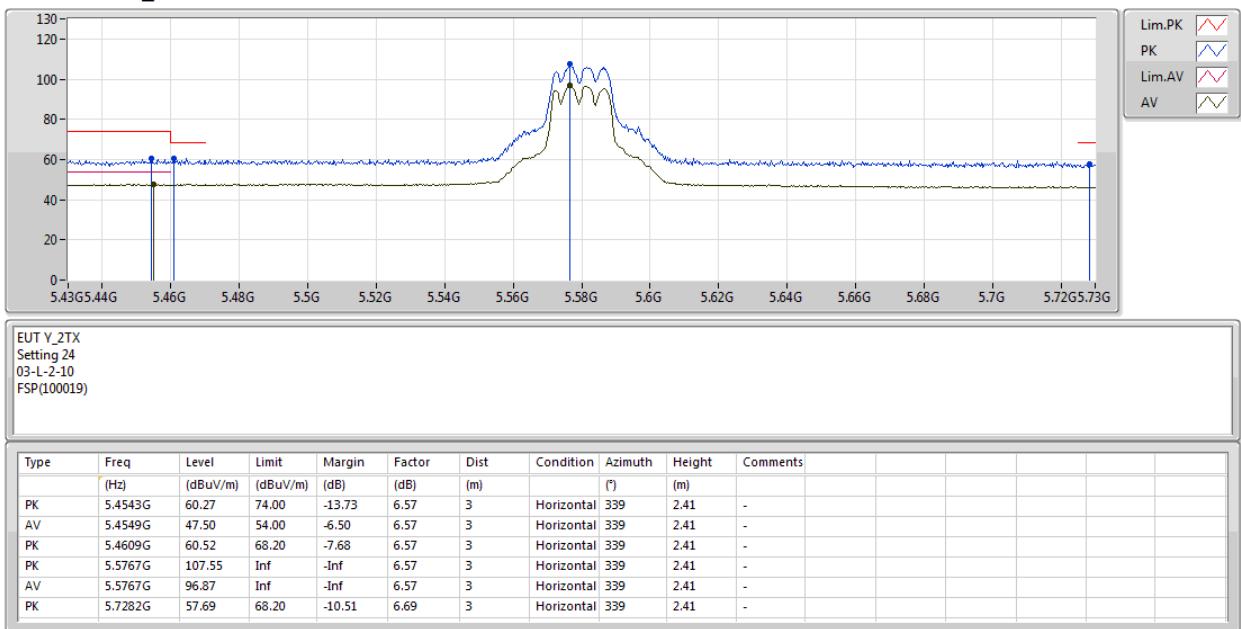
**802.11a\_Nss1,(6Mbps)\_2TX**

16/01/2019

**5580MHz\_TX**


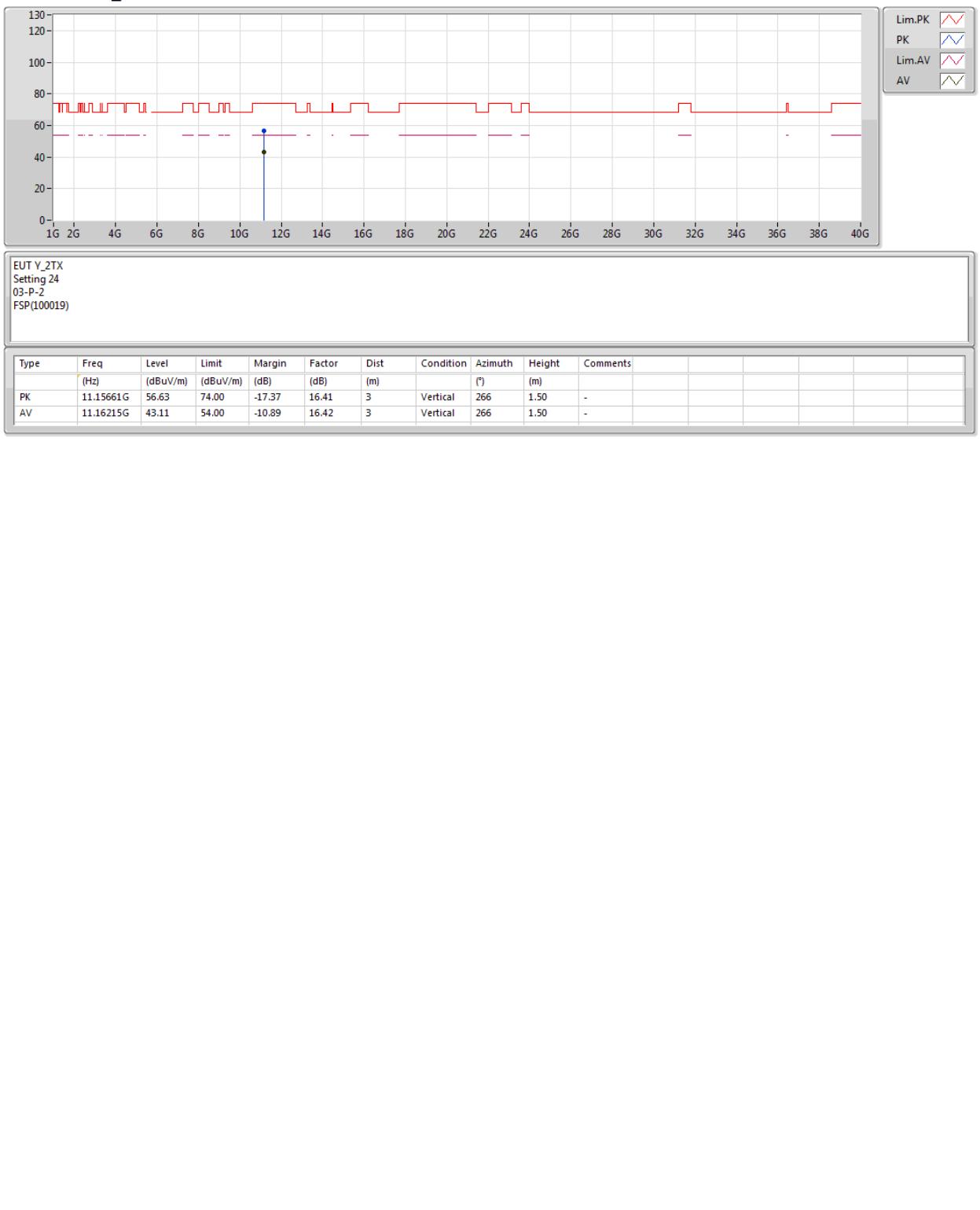
**802.11a\_Nss1,(6Mbps)\_2TX**

16/01/2019

**5580MHz\_TX**


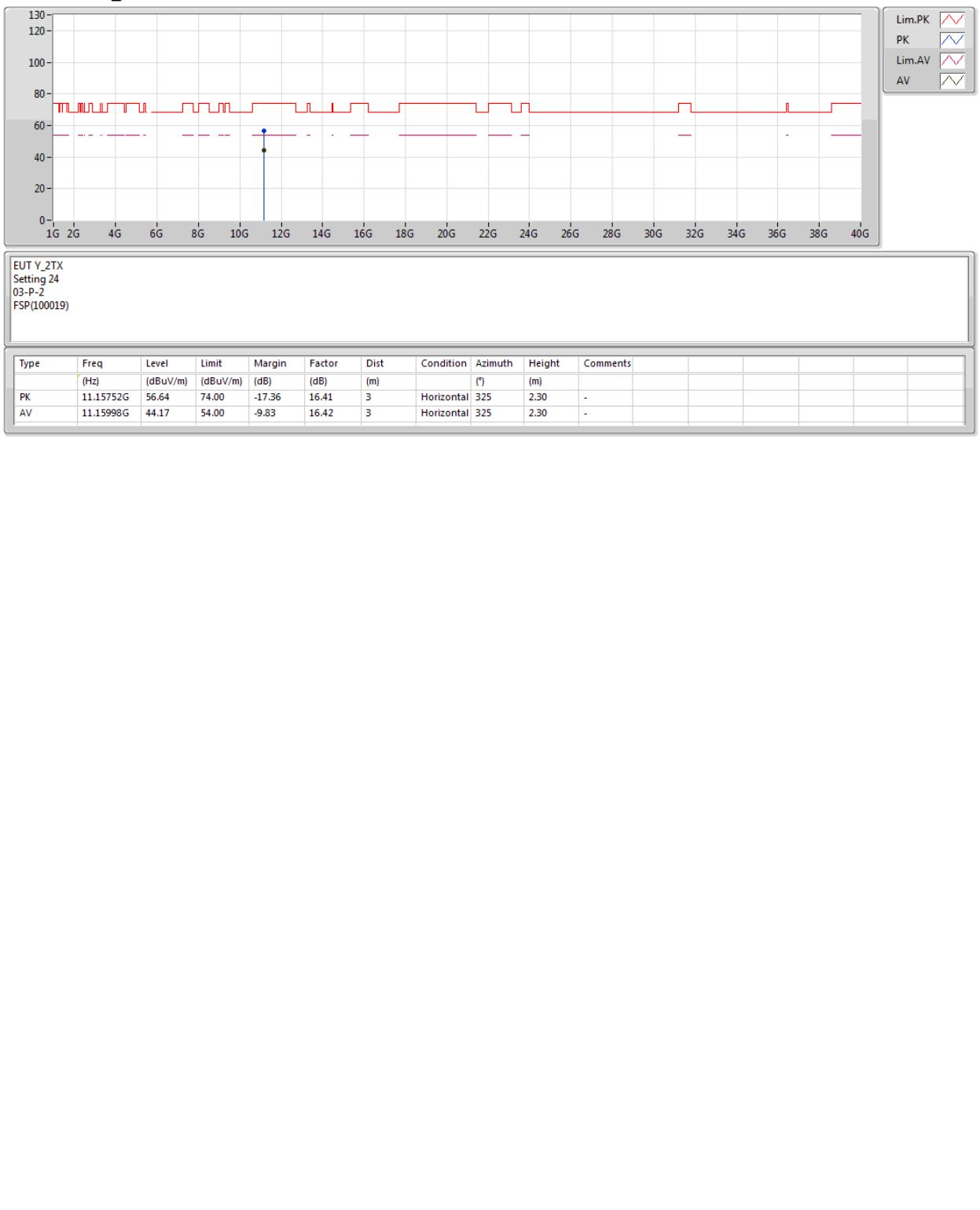
**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5580MHz\_TX**


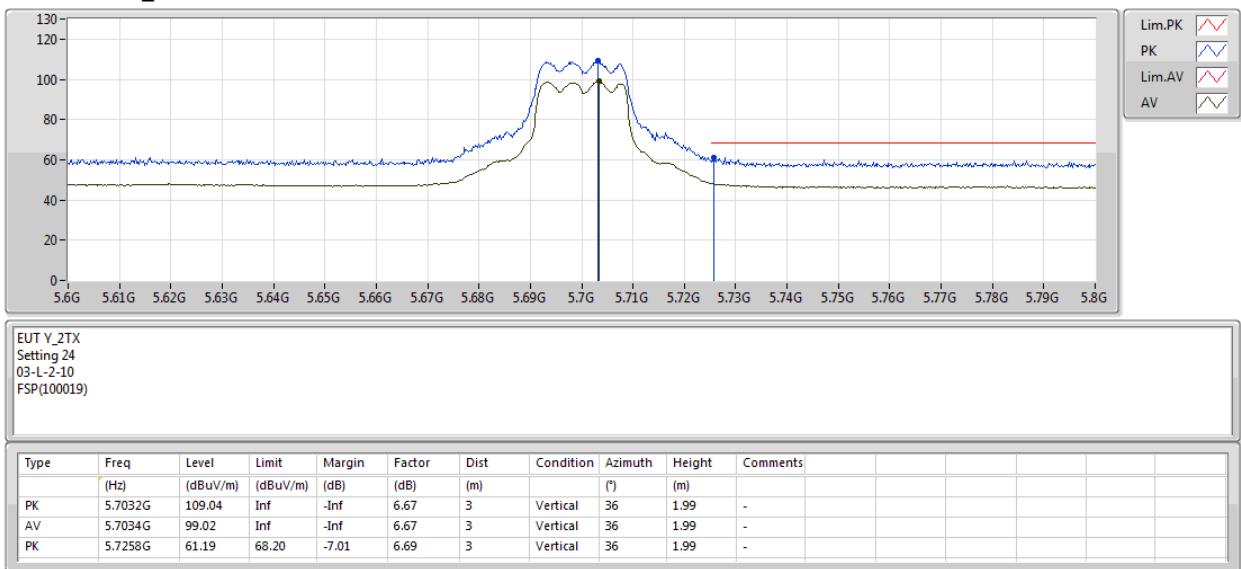
**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5580MHz\_TX**


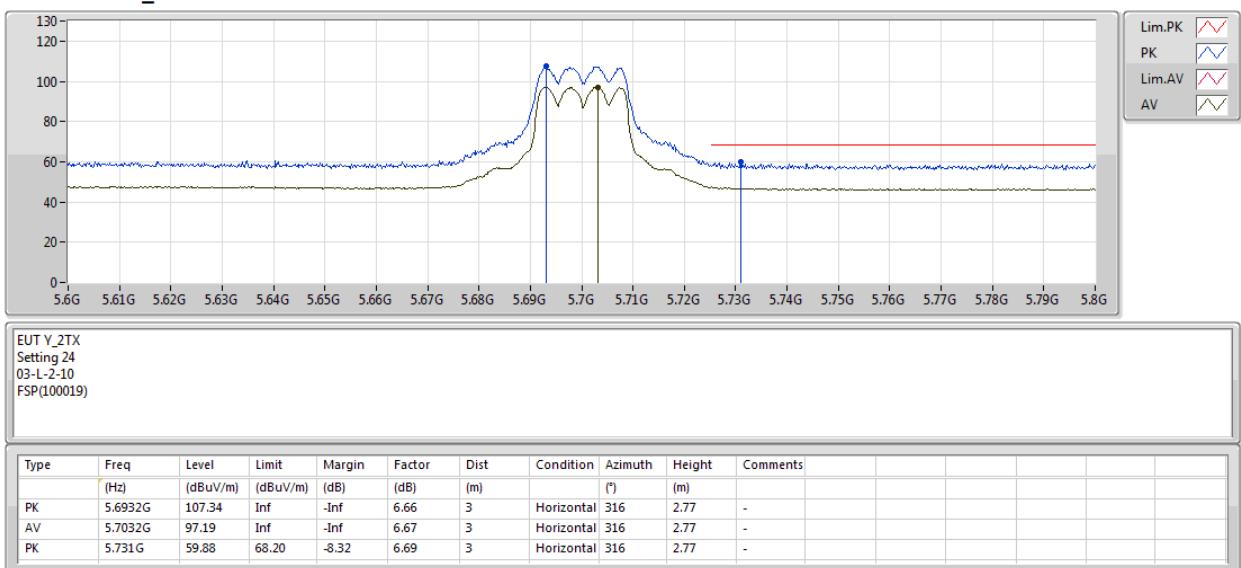
**802.11a\_Nss1,(6Mbps)\_2TX**

16/01/2019

**5700MHz\_TX**


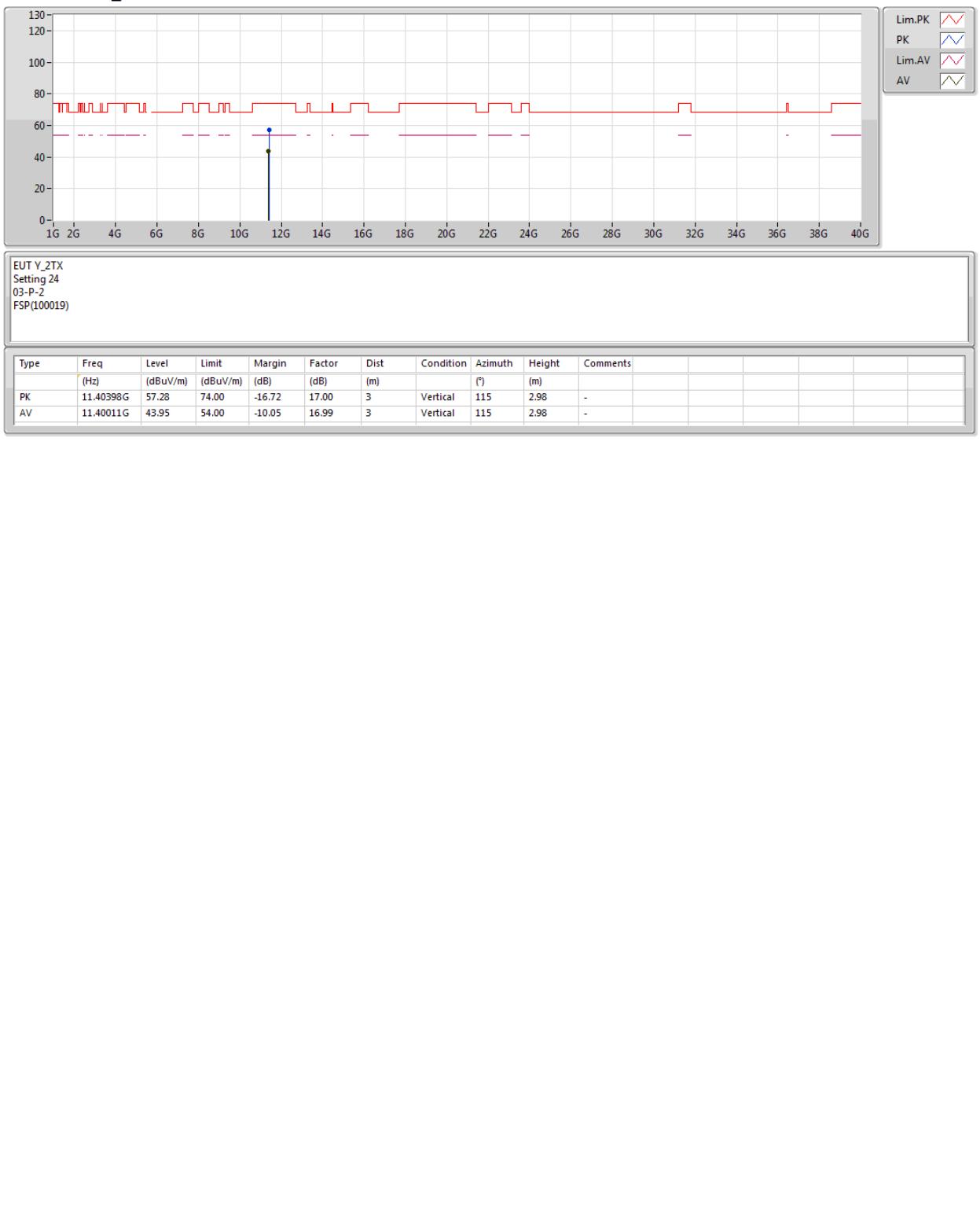
**802.11a\_Nss1,(6Mbps)\_2TX**

16/01/2019

**5700MHz\_TX**


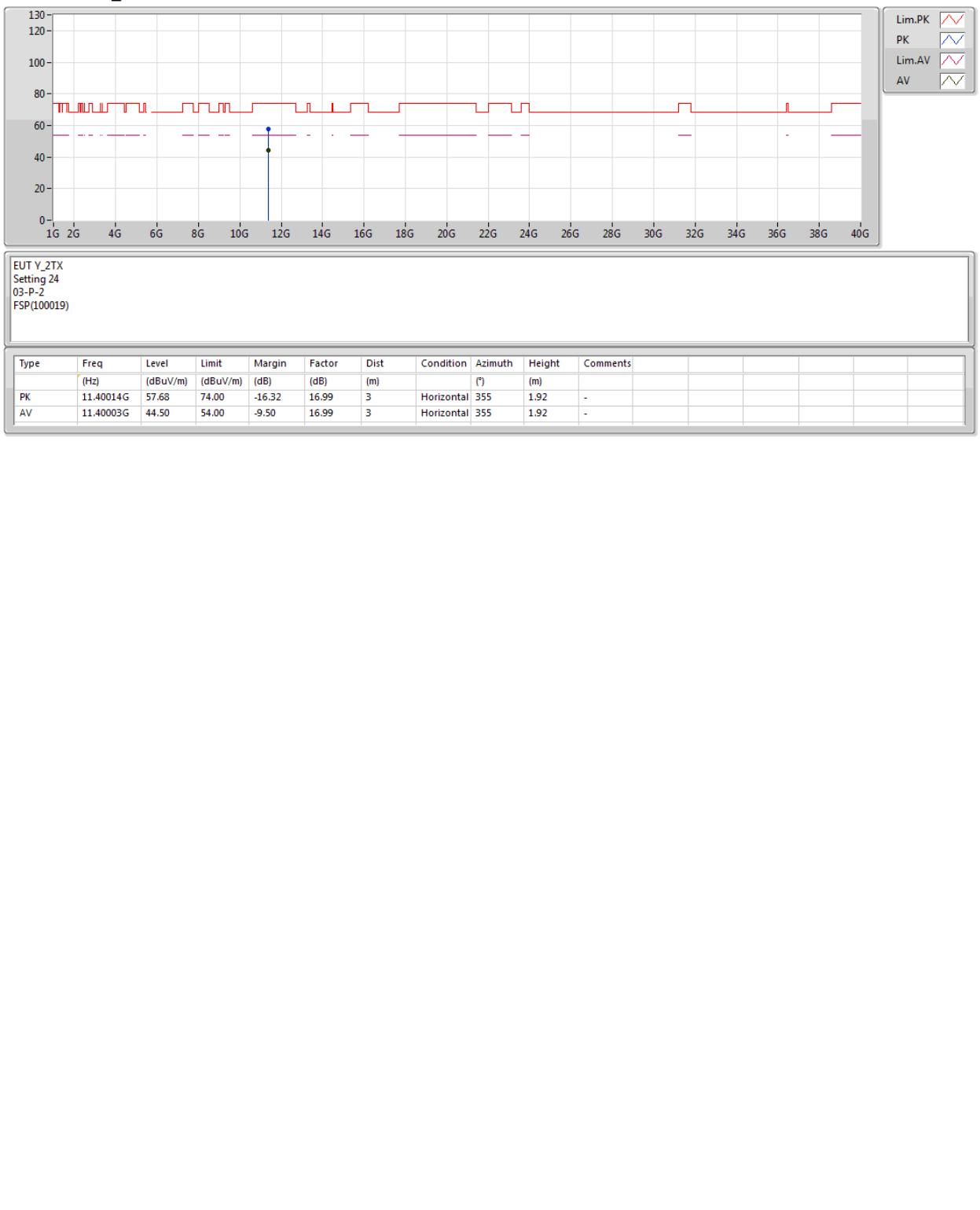
**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5700MHz\_TX**


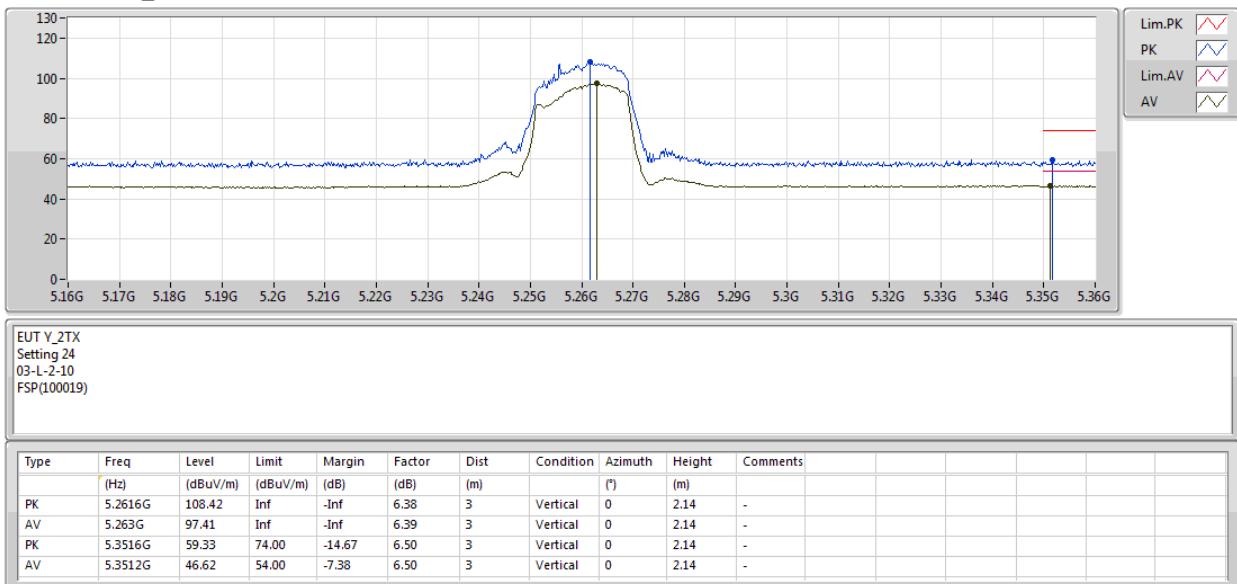
**802.11a\_Nss1,(6Mbps)\_2TX**

17/01/2019

**5700MHz\_TX**


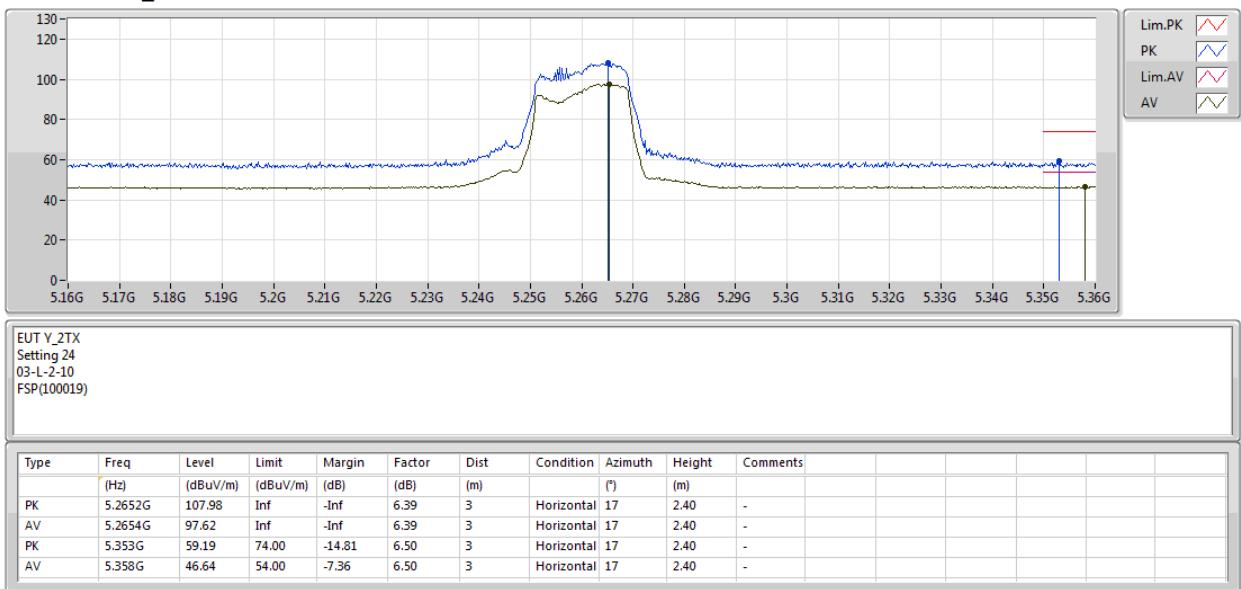
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5260MHz\_TX**


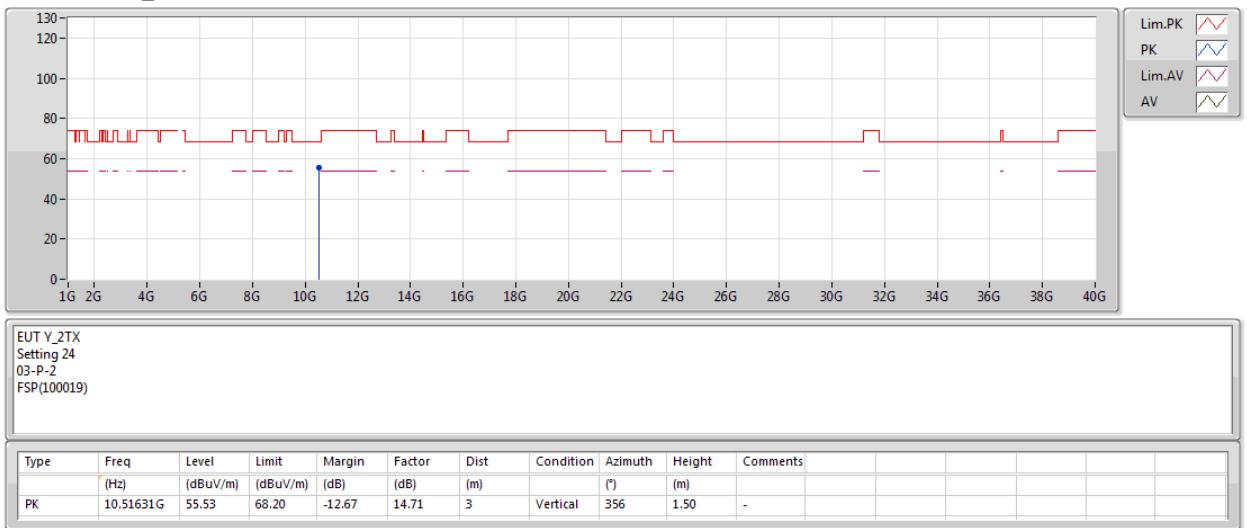
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5260MHz\_TX**


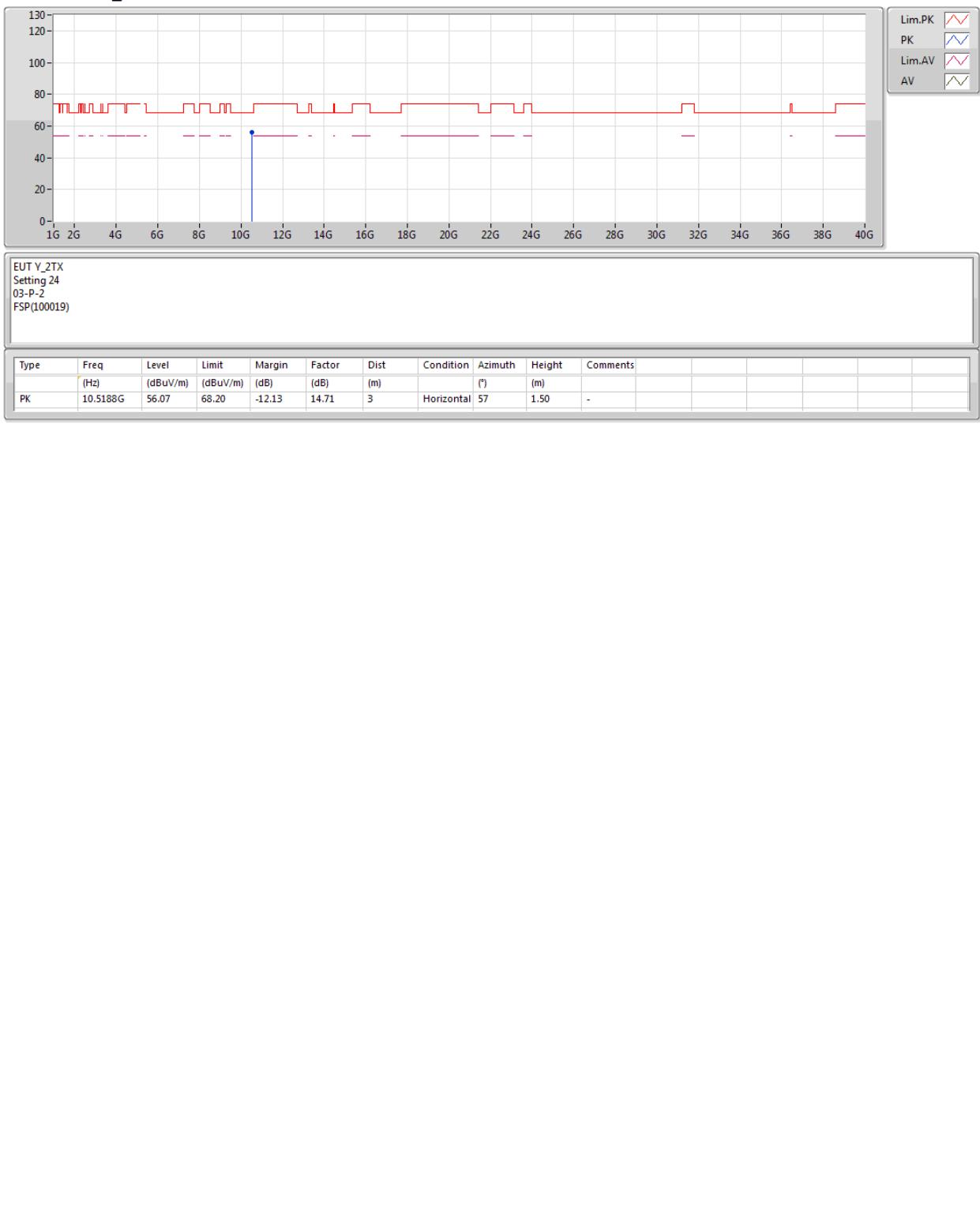
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

17/01/2019

**5260MHz\_TX**

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

17/01/2019

**5260MHz\_TX**


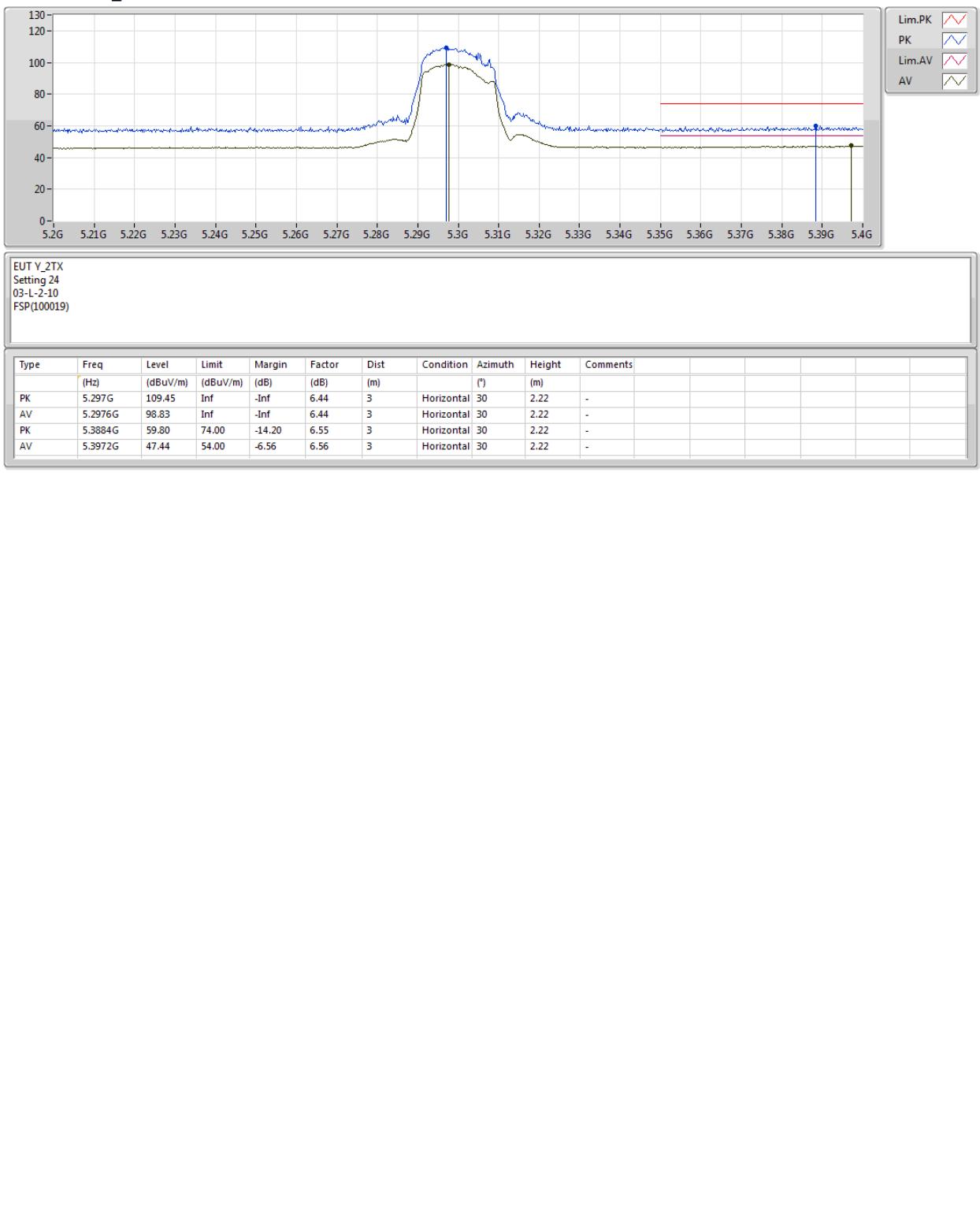
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5300MHz\_TX**

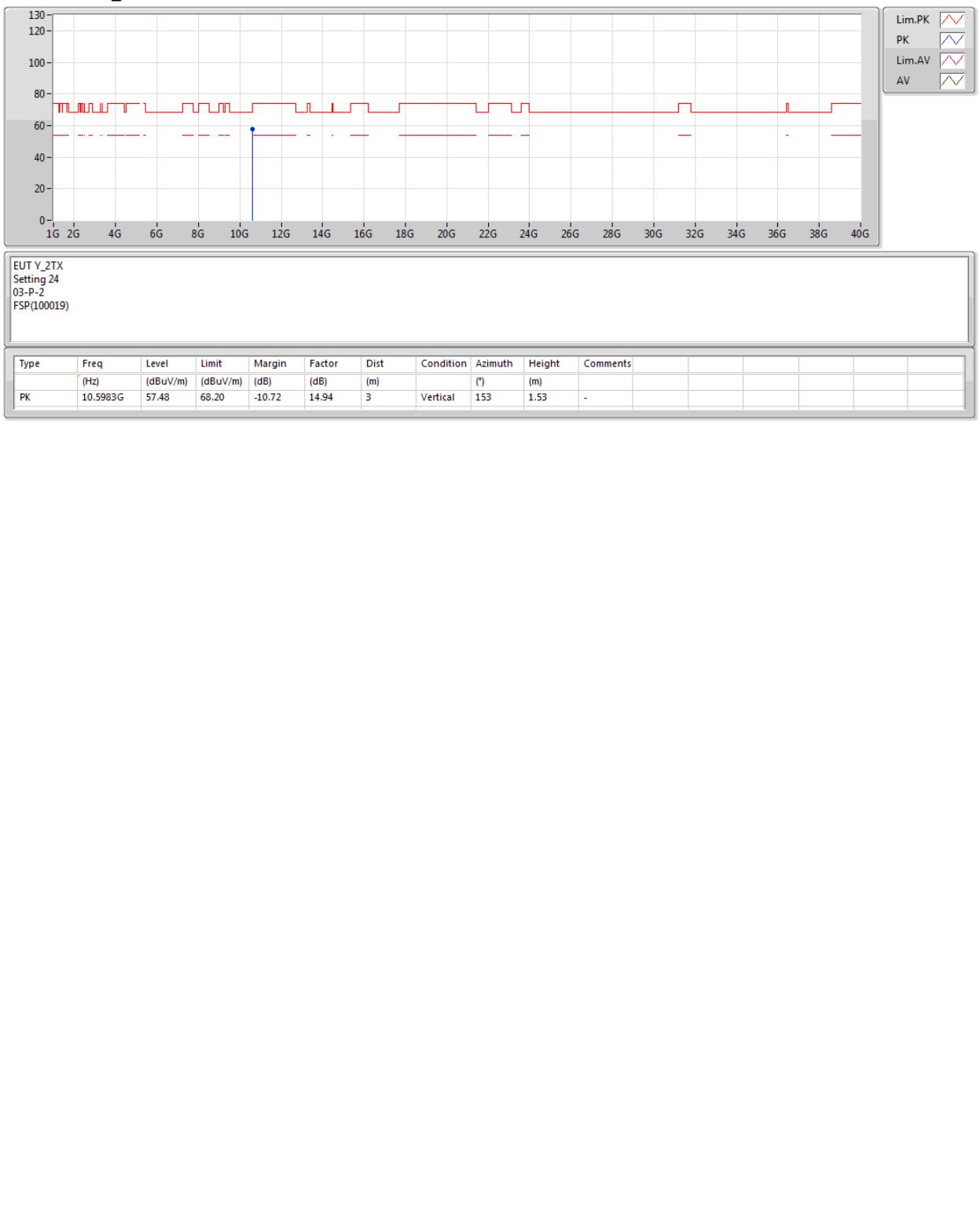

**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5300MHz\_TX**


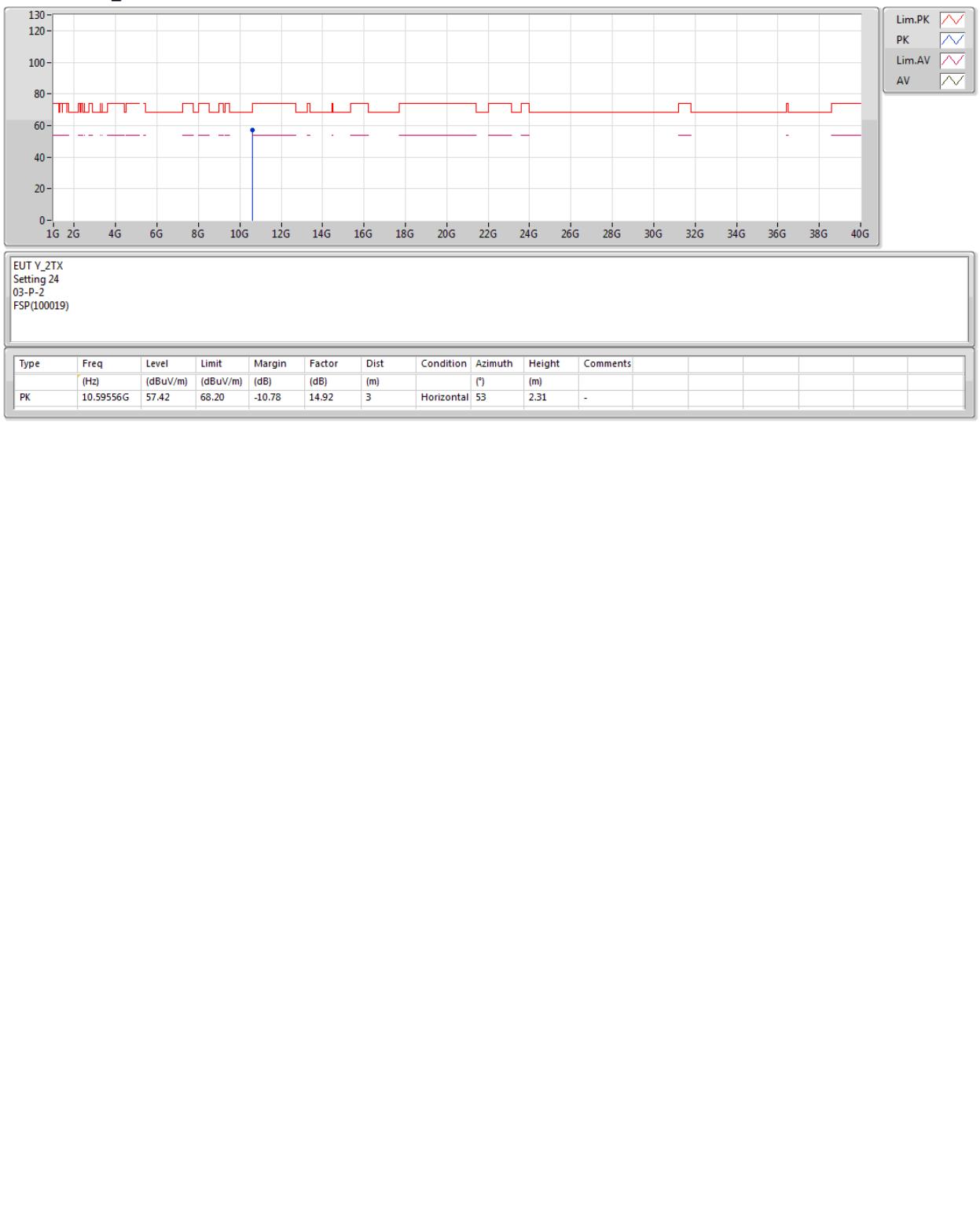
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

17/01/2019

**5300MHz\_TX**


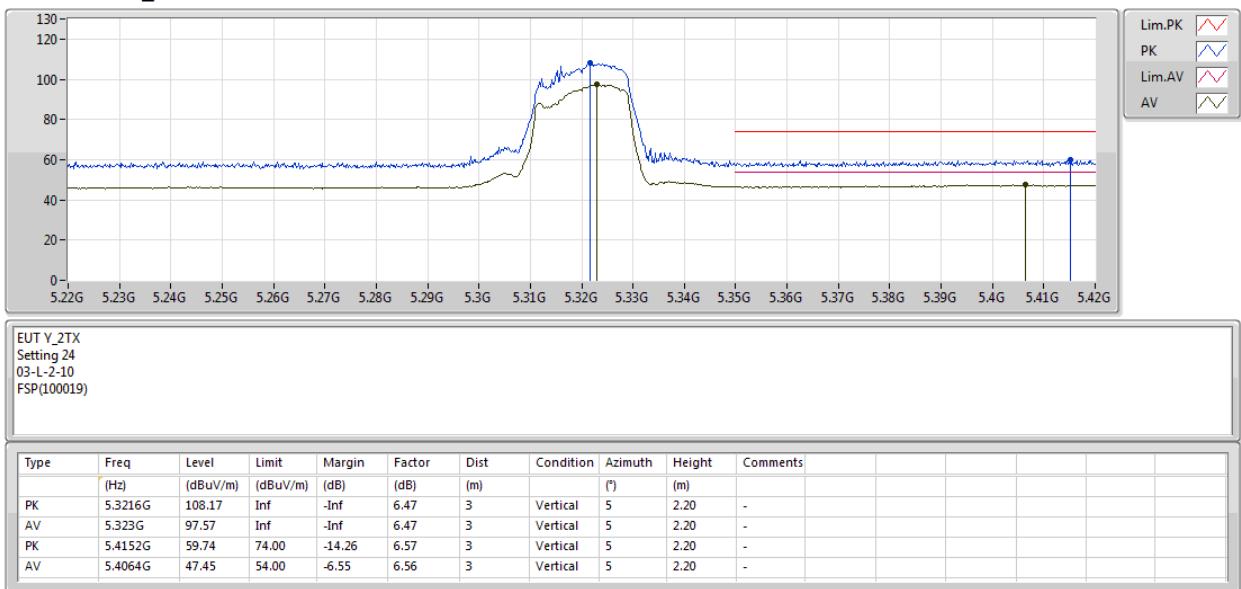
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

17/01/2019

**5300MHz\_TX**


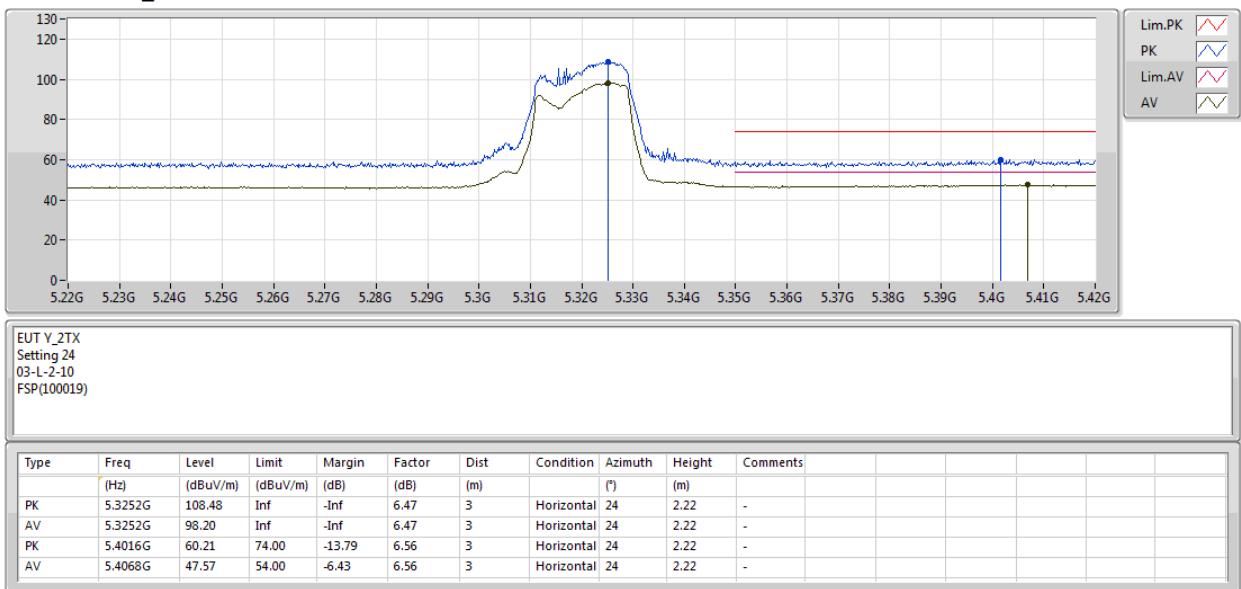
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5320MHz\_TX**


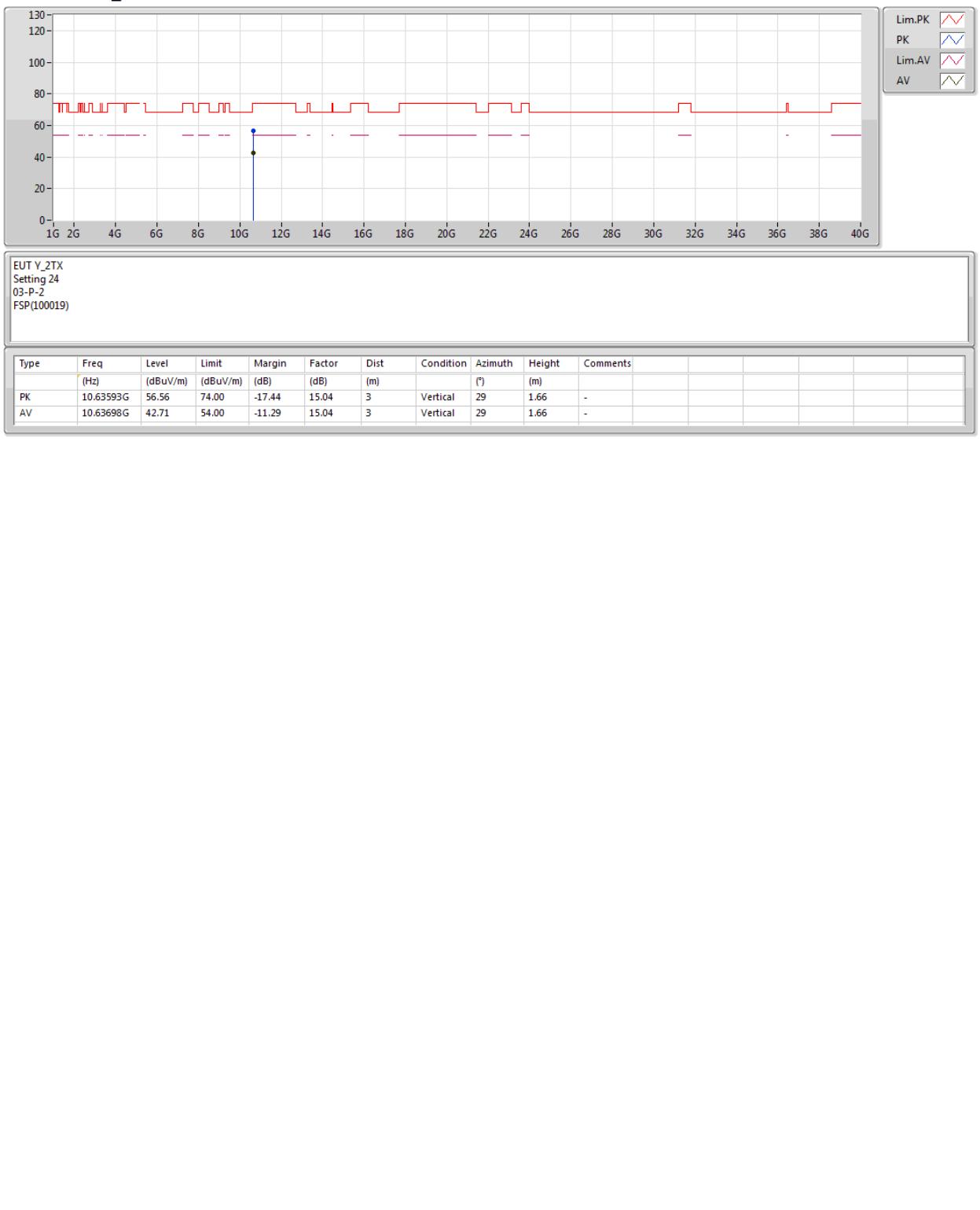
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5320MHz\_TX**


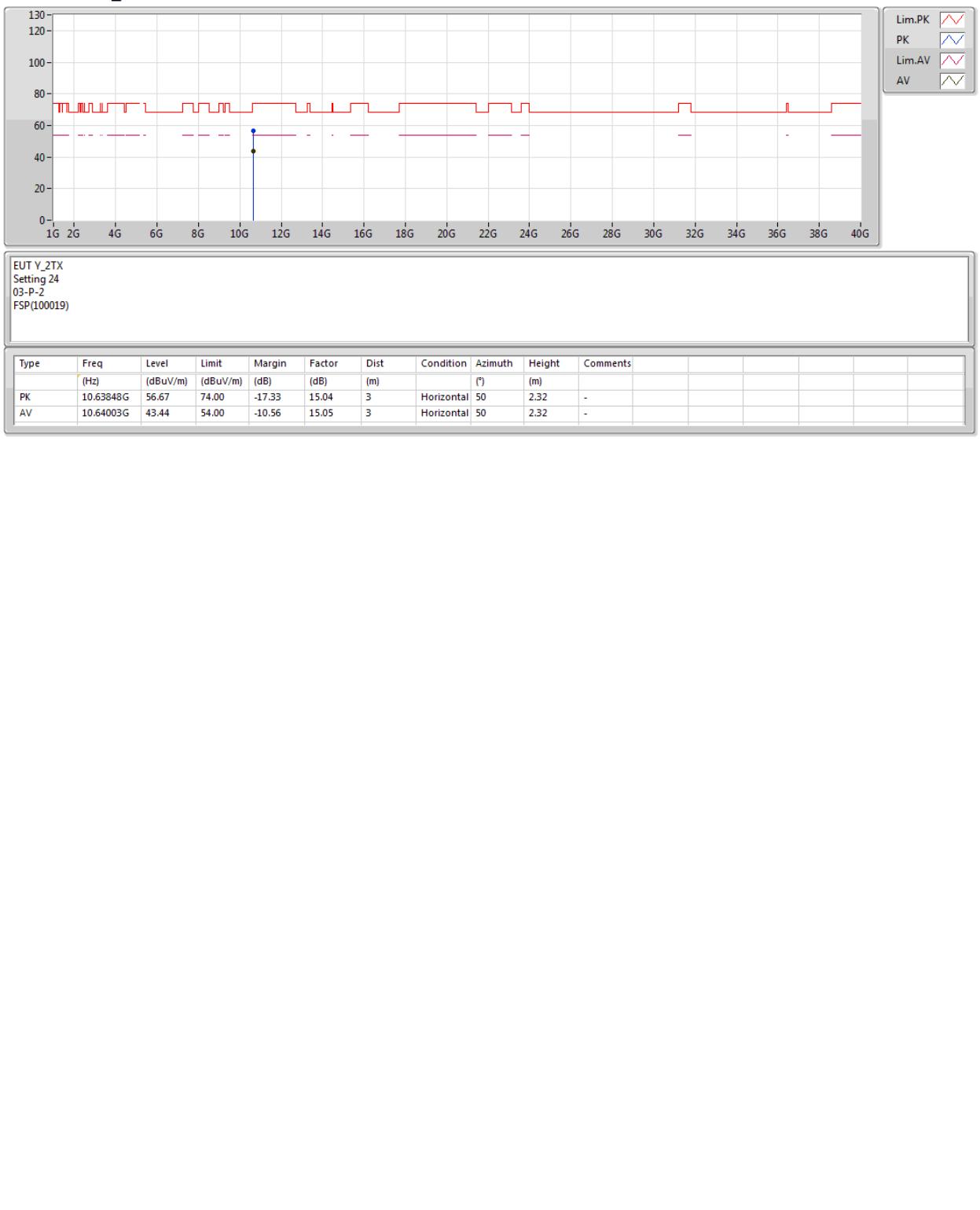
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

17/01/2019

**5320MHz\_TX**


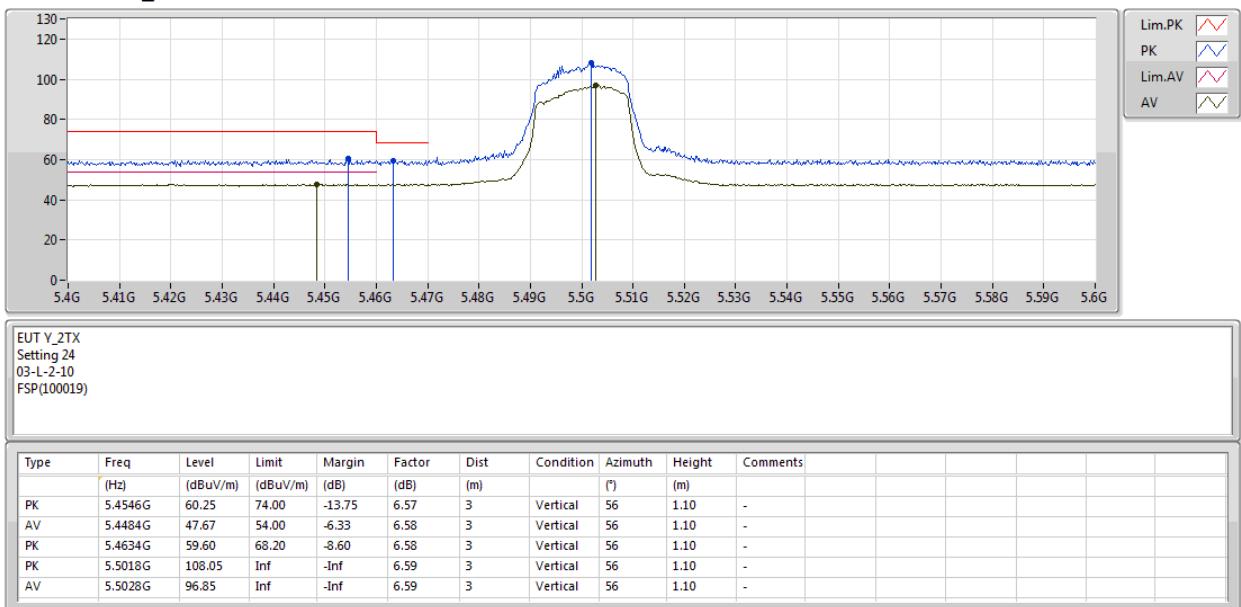
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

17/01/2019

**5320MHz\_TX**


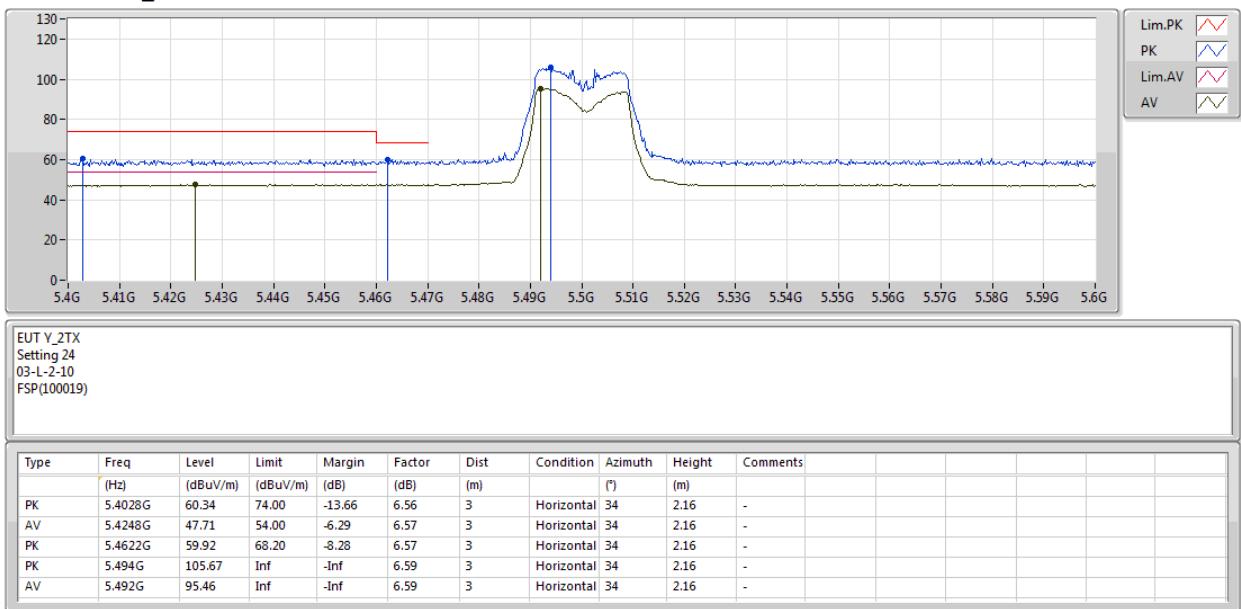
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5500MHz\_TX**


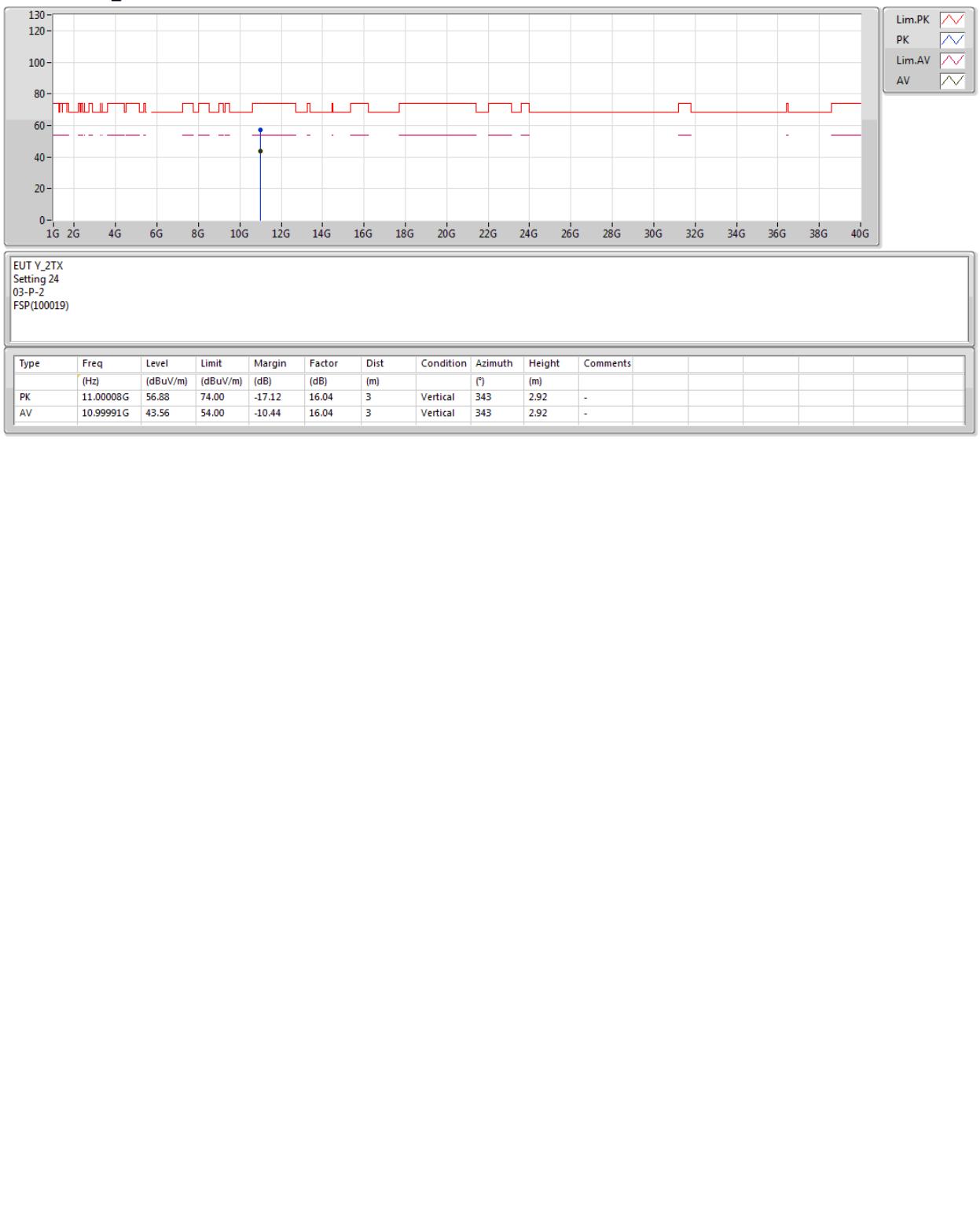
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5500MHz\_TX**


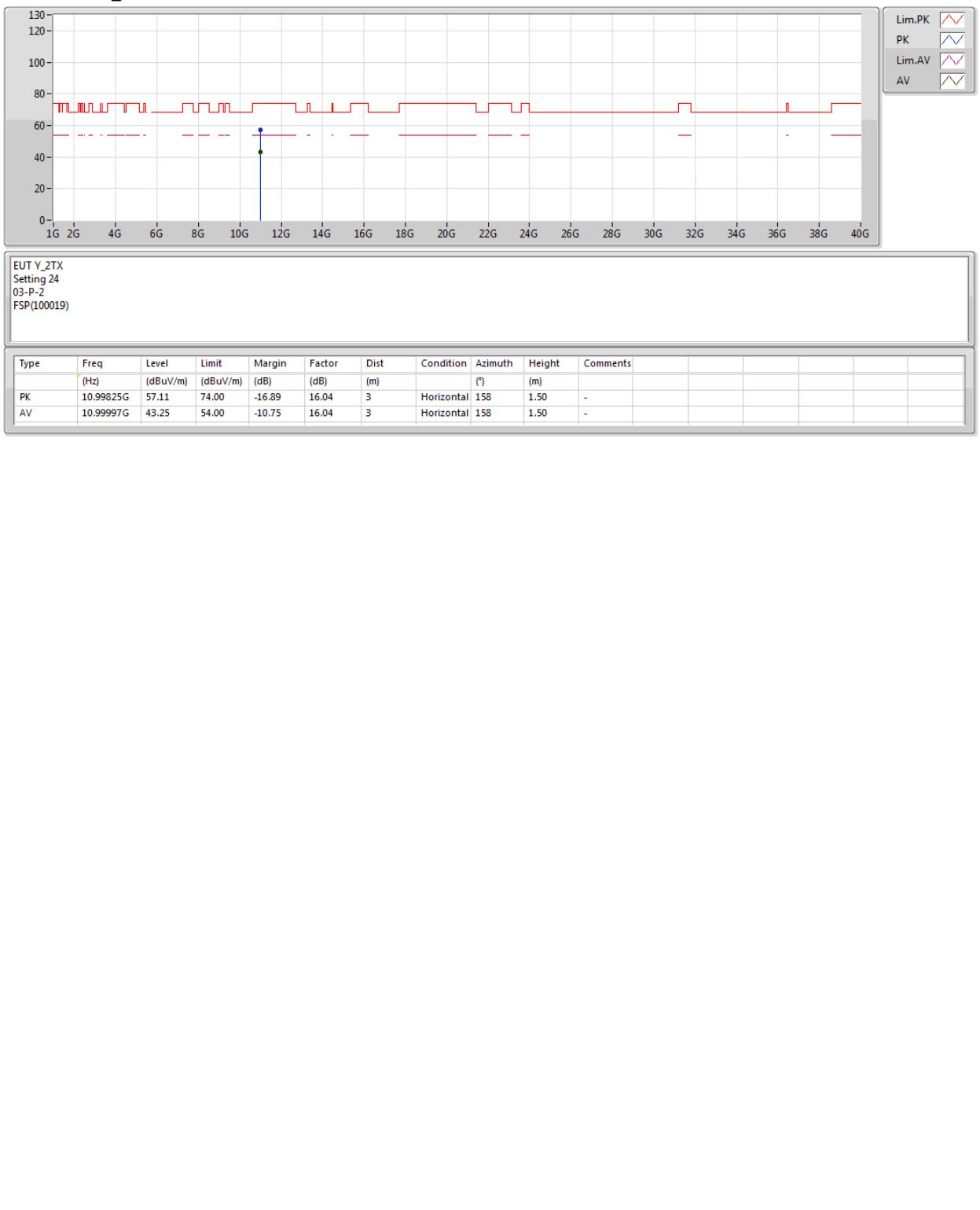
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

17/01/2019

**5500MHz\_TX**


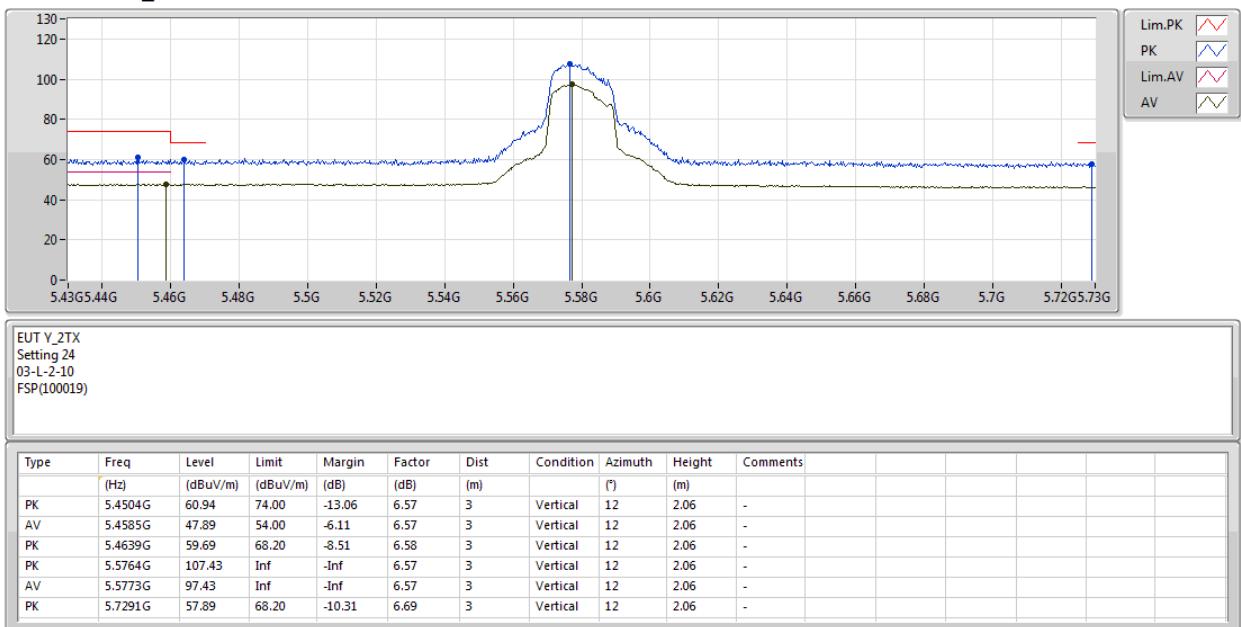
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

17/01/2019

**5500MHz\_TX**


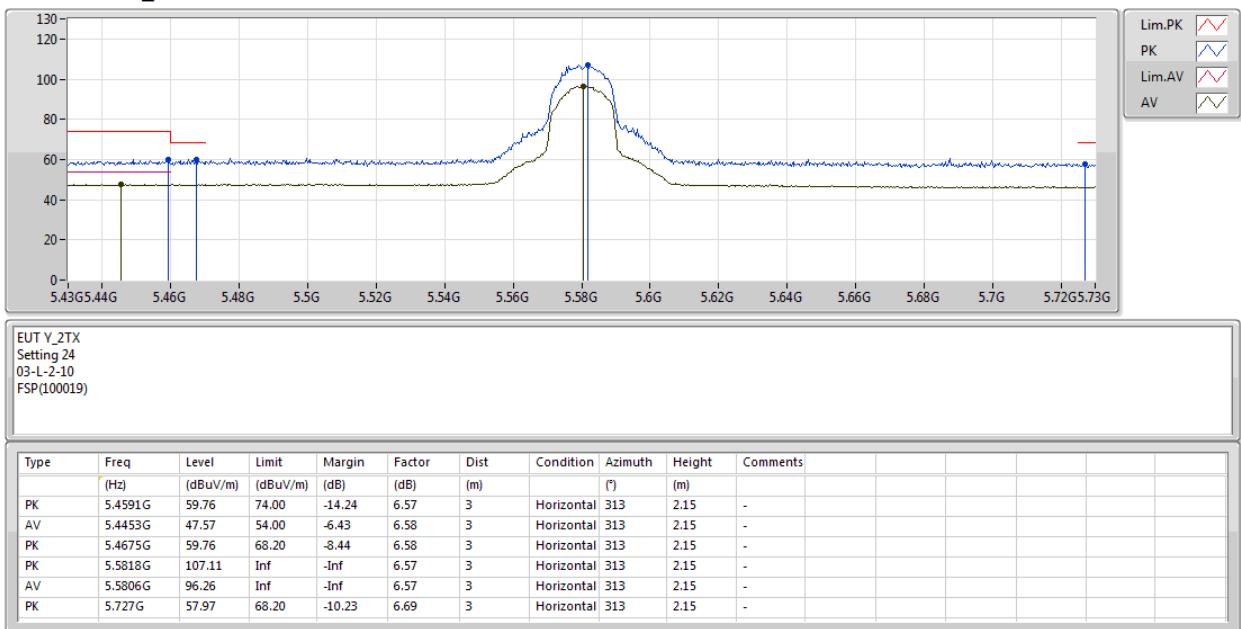
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5580MHz\_TX**


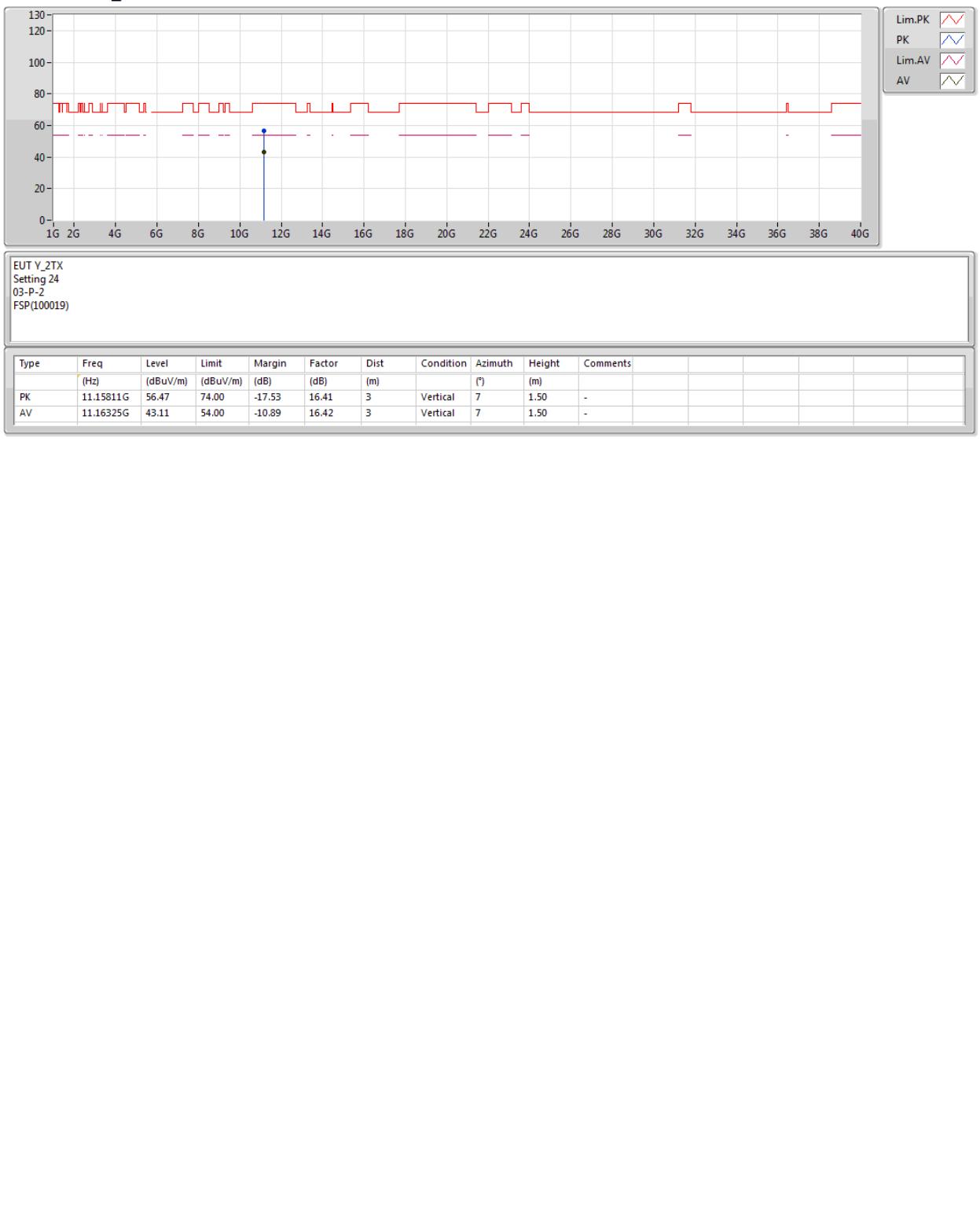
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5580MHz\_TX**


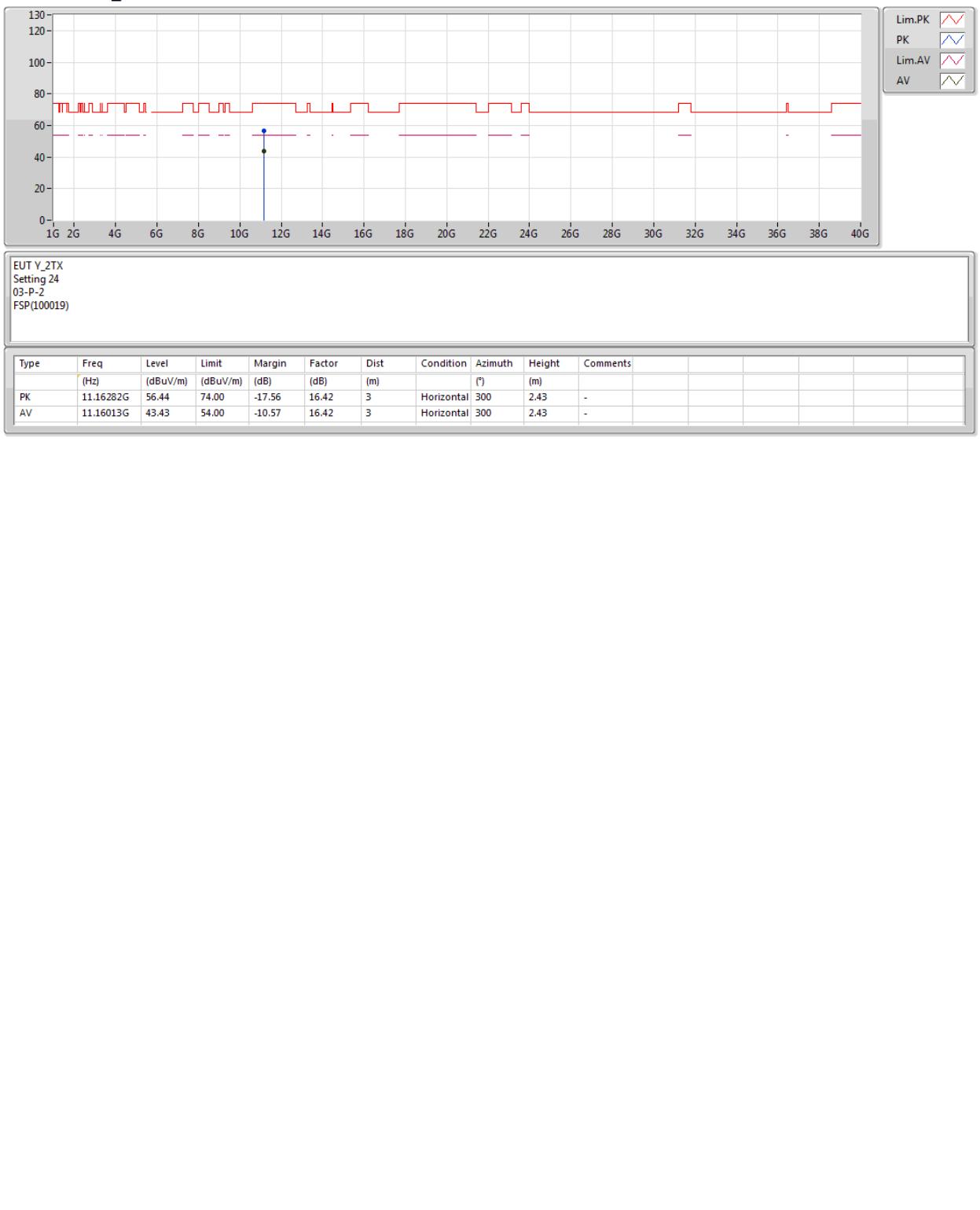
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

17/01/2019

**5580MHz\_TX**


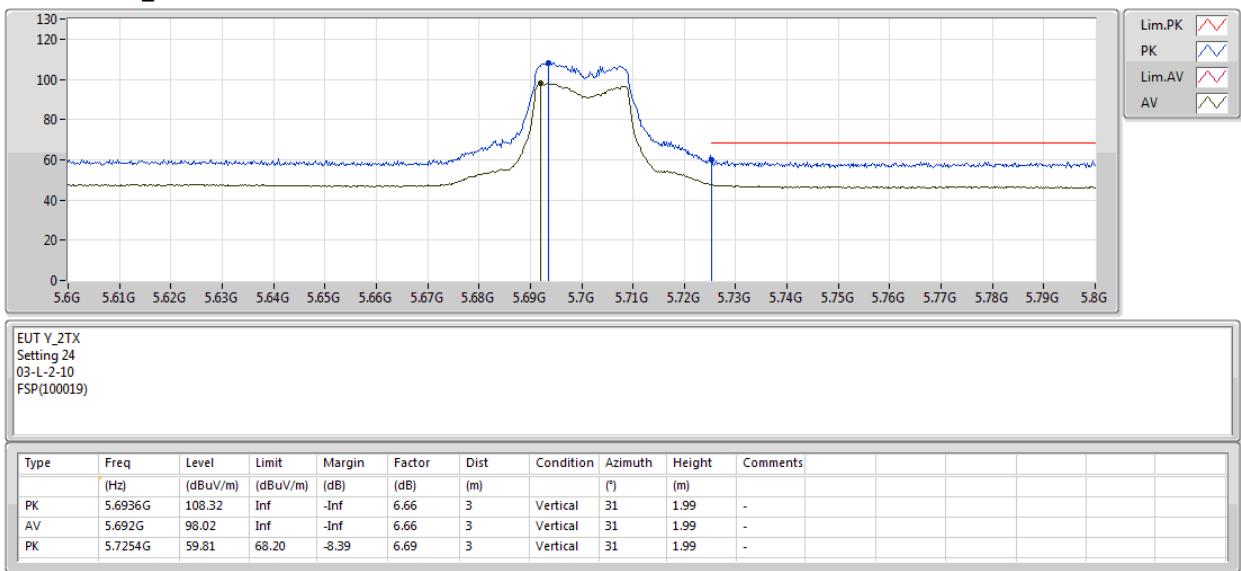
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

17/01/2019

**5580MHz\_TX**


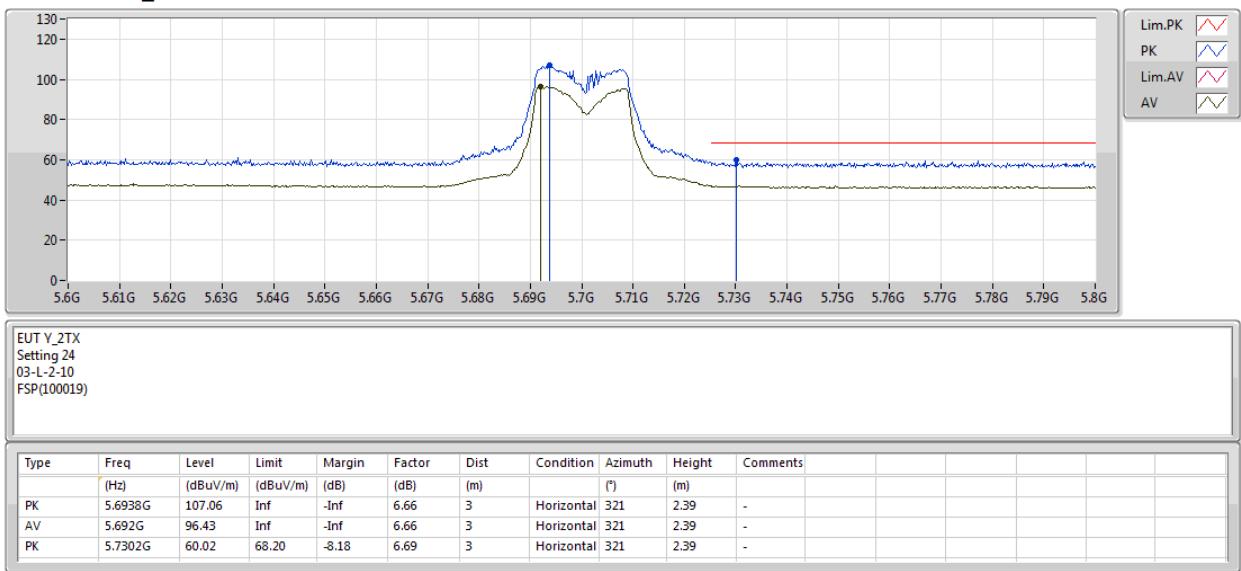
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5700MHz\_TX**


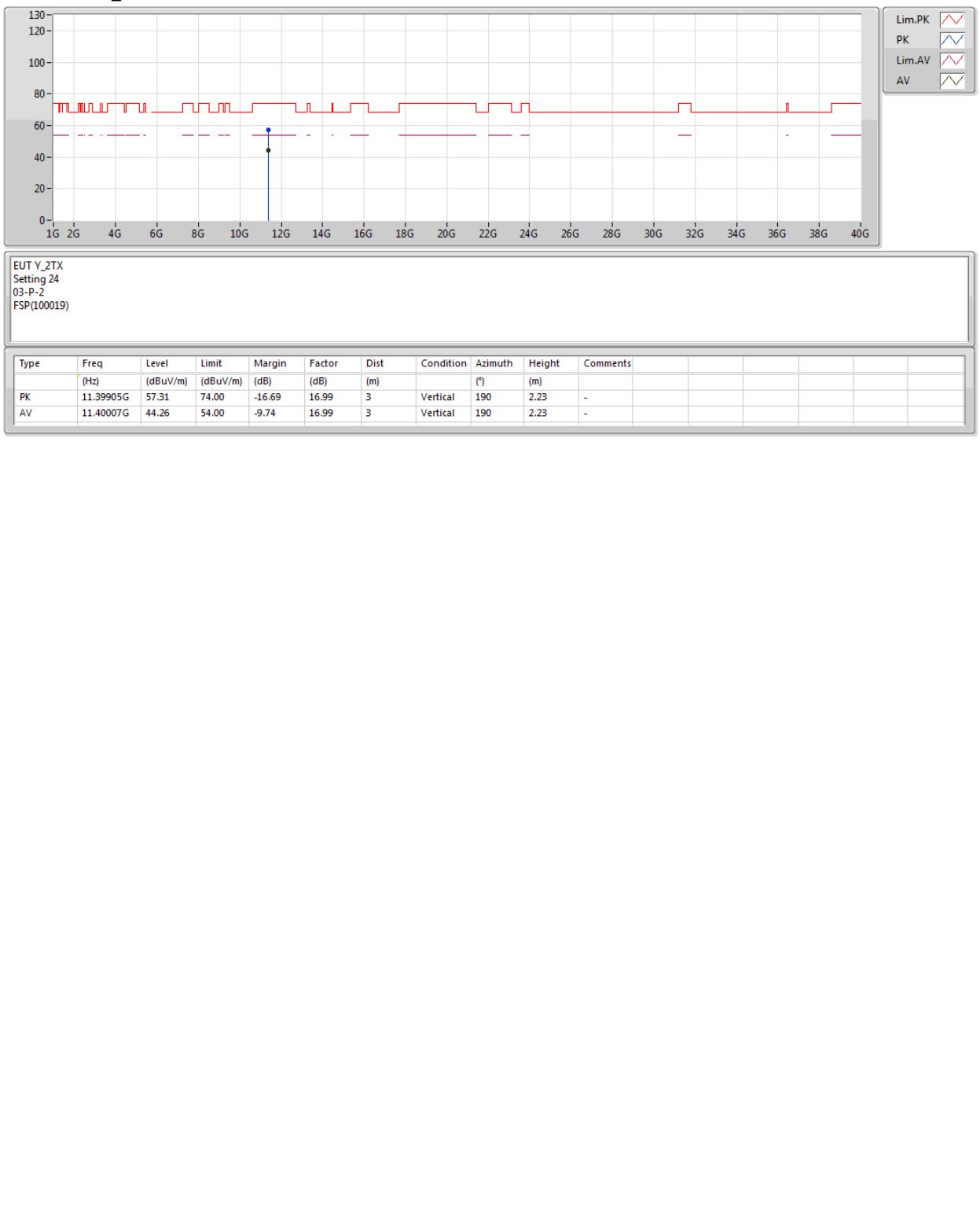
**802.11ac VHT20\_Nss1,(MCS0)\_2TX**

16/01/2019

**5700MHz\_TX**


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

17/01/2019

**5700MHz\_TX**


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

17/01/2019

**5700MHz\_TX**

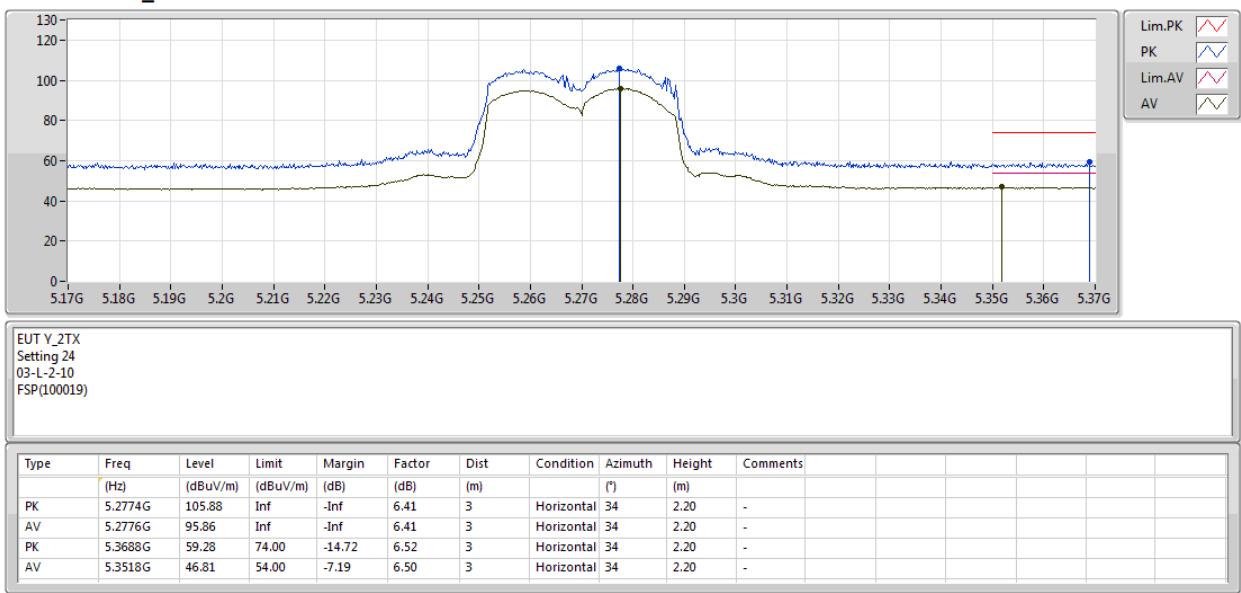

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5270MHz\_TX**

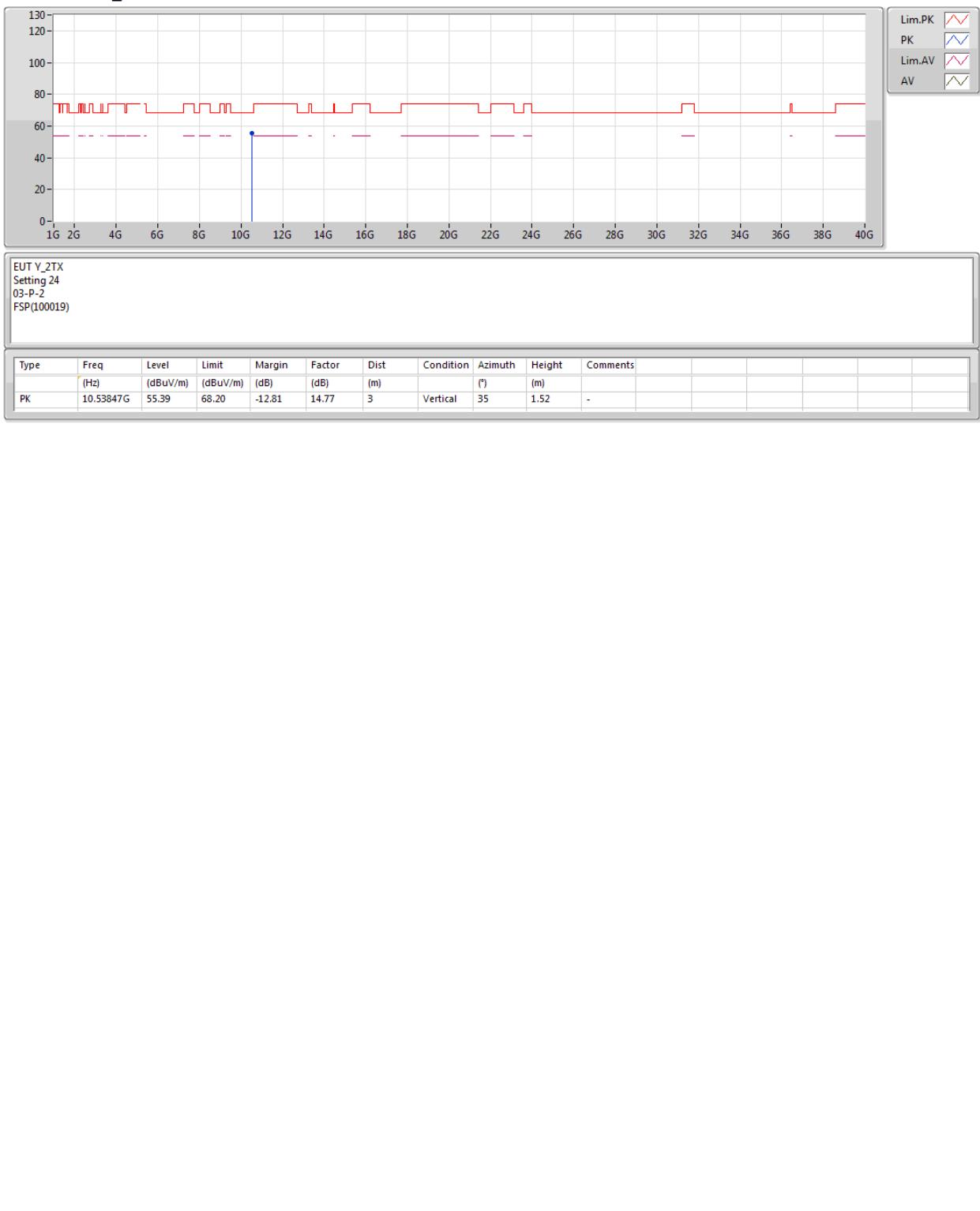

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5270MHz\_TX**


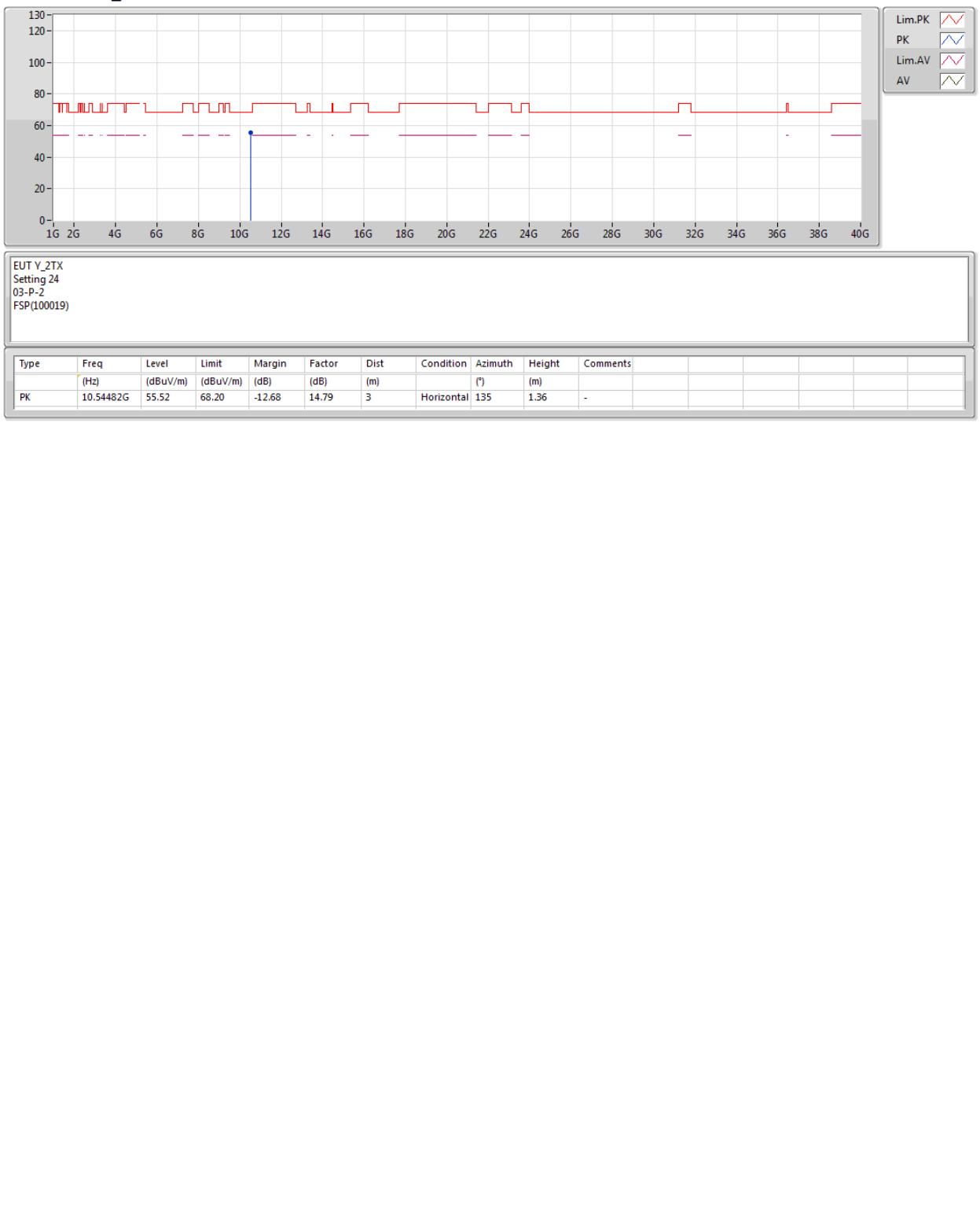
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

17/01/2019

**5270MHz\_TX**


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

17/01/2019

**5270MHz\_TX**


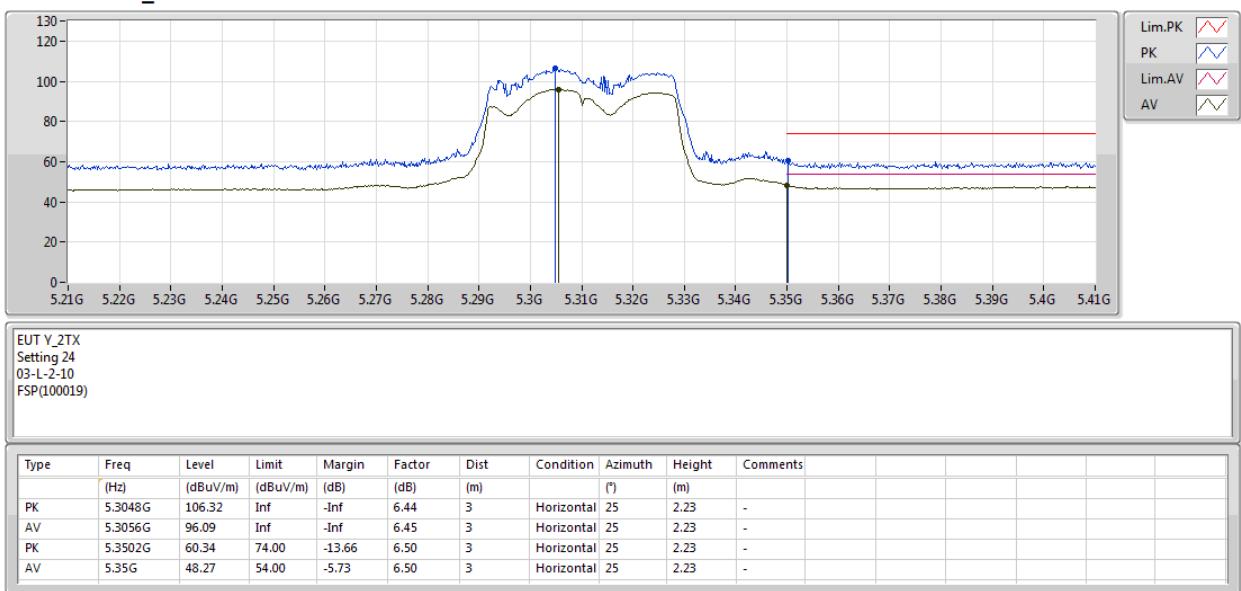
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5310MHz\_TX**

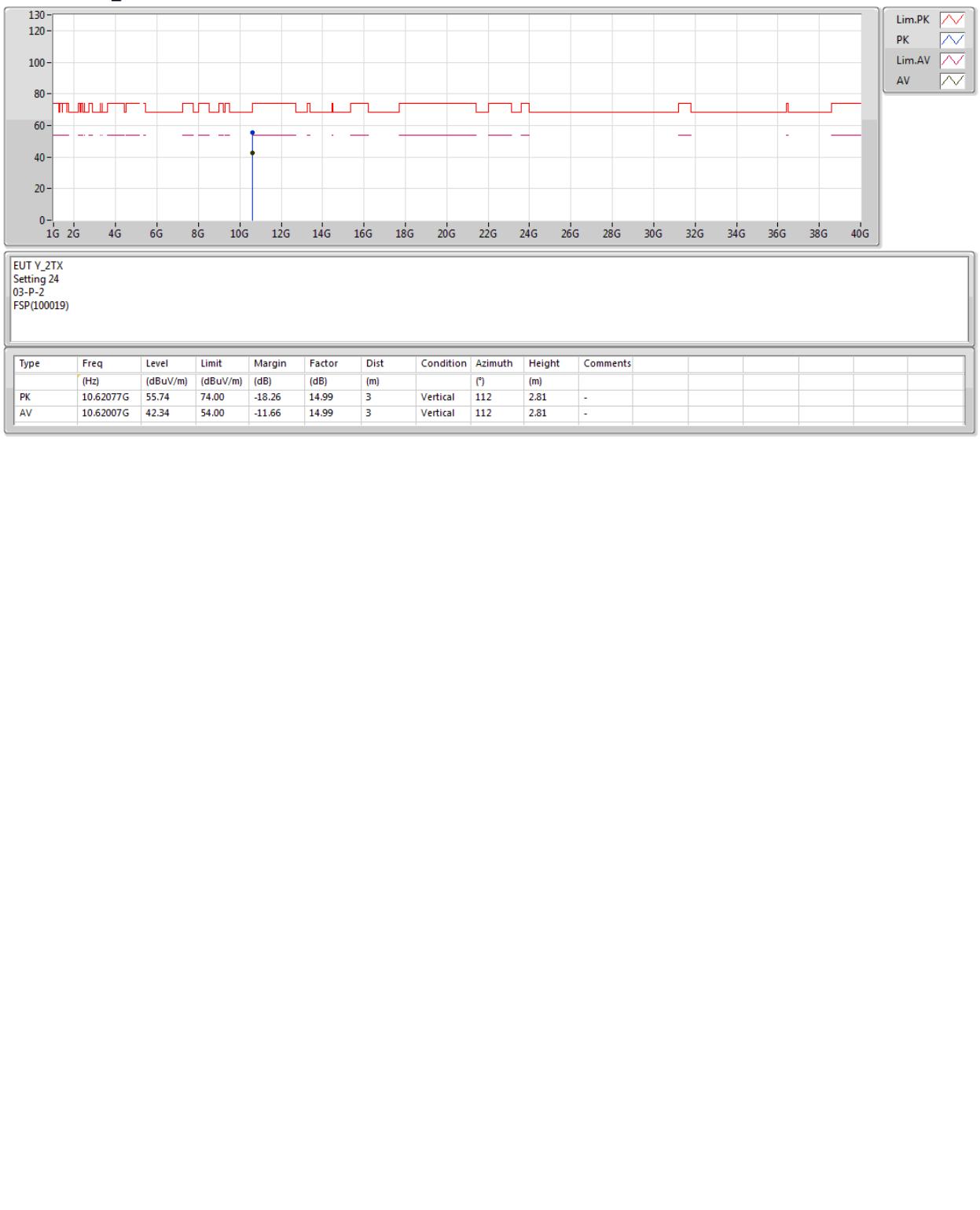

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5310MHz\_TX**


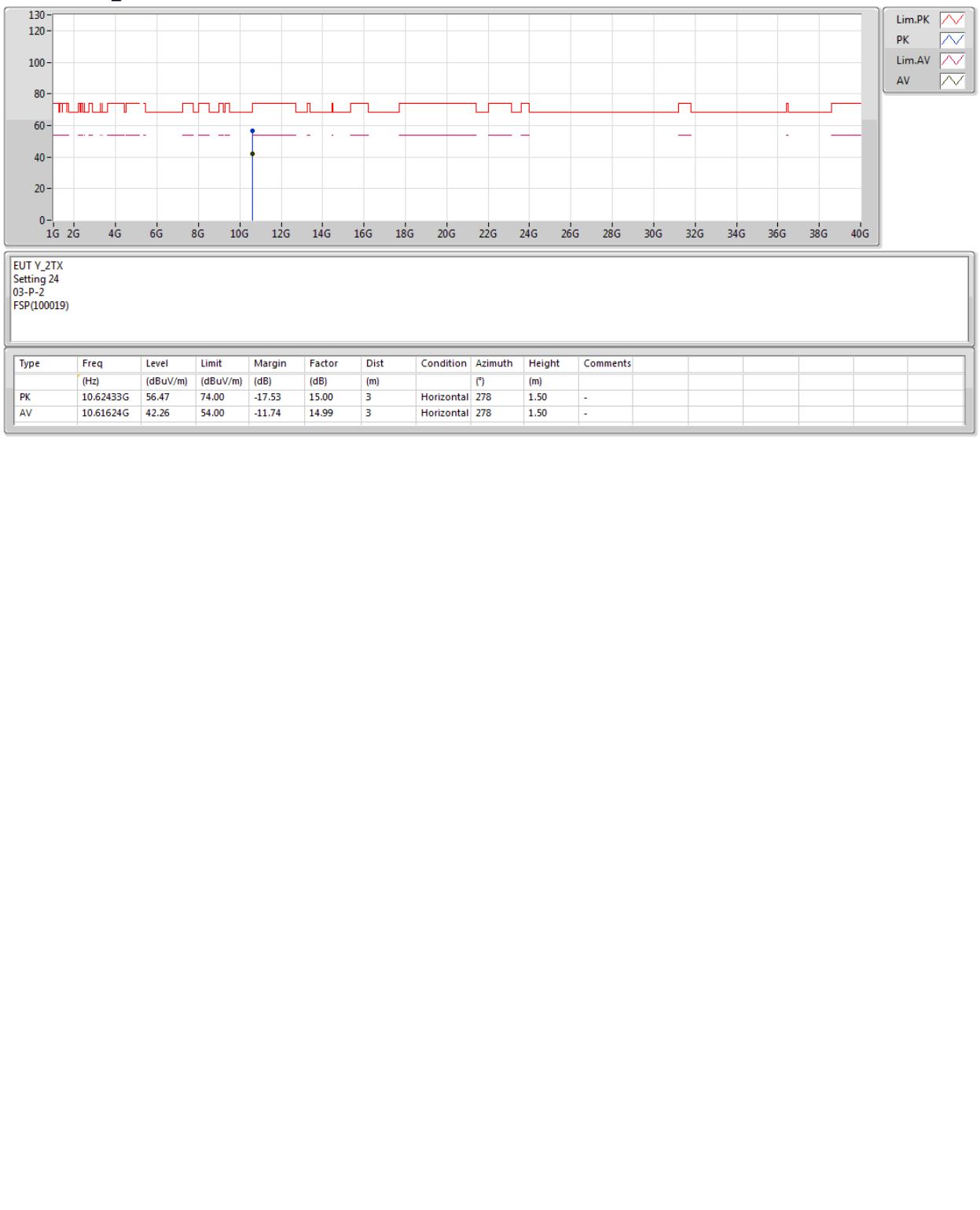
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

17/01/2019

**5310MHz\_TX**


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

17/01/2019

**5310MHz\_TX**


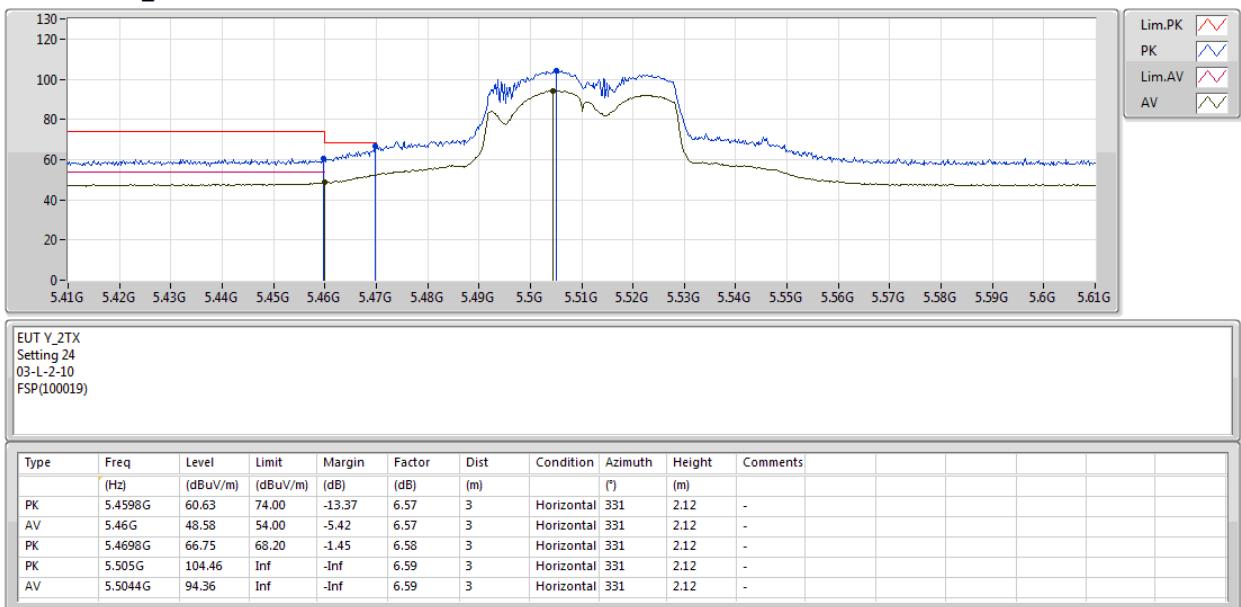
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5510MHz\_TX**

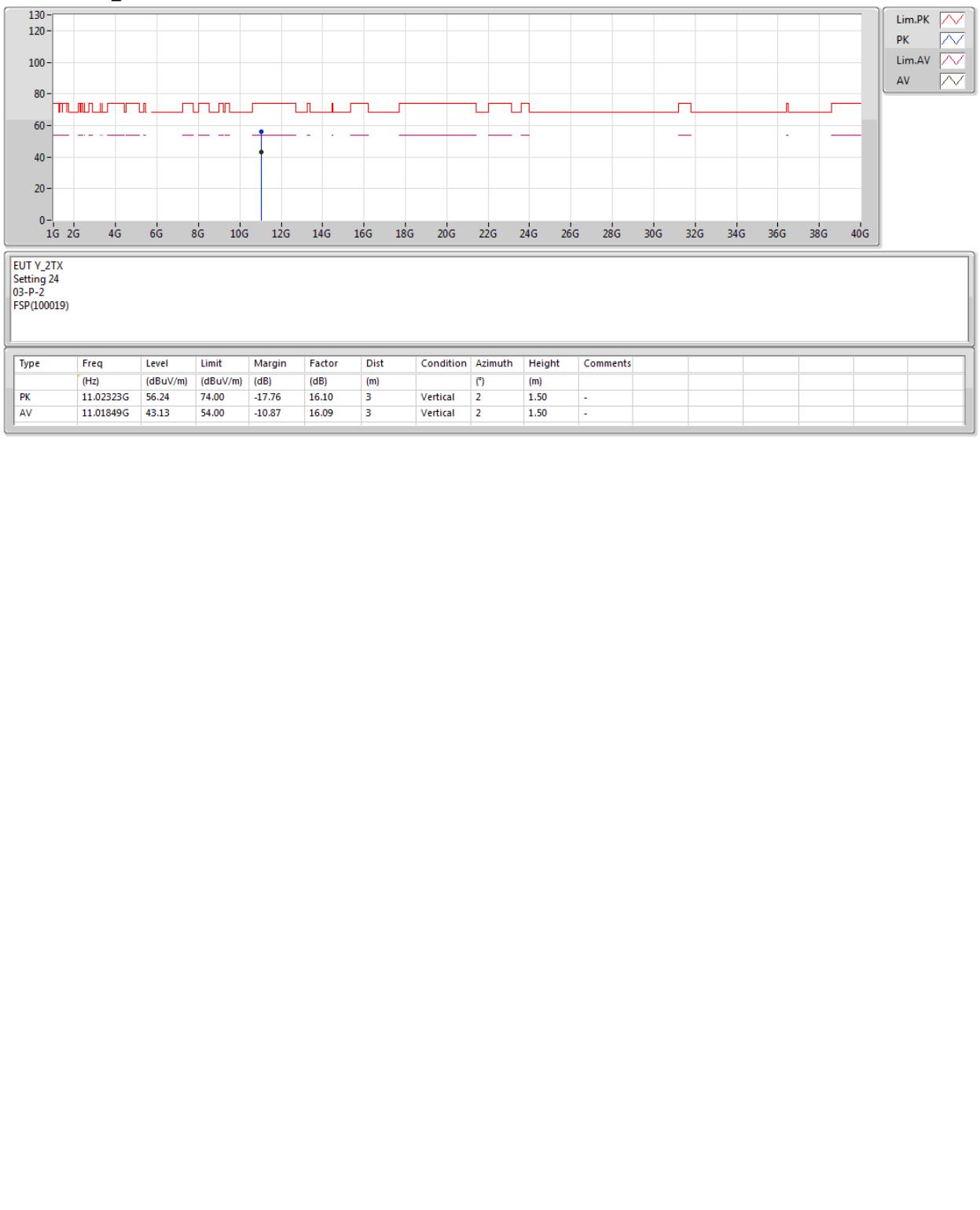

**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5510MHz\_TX**


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

17/01/2019

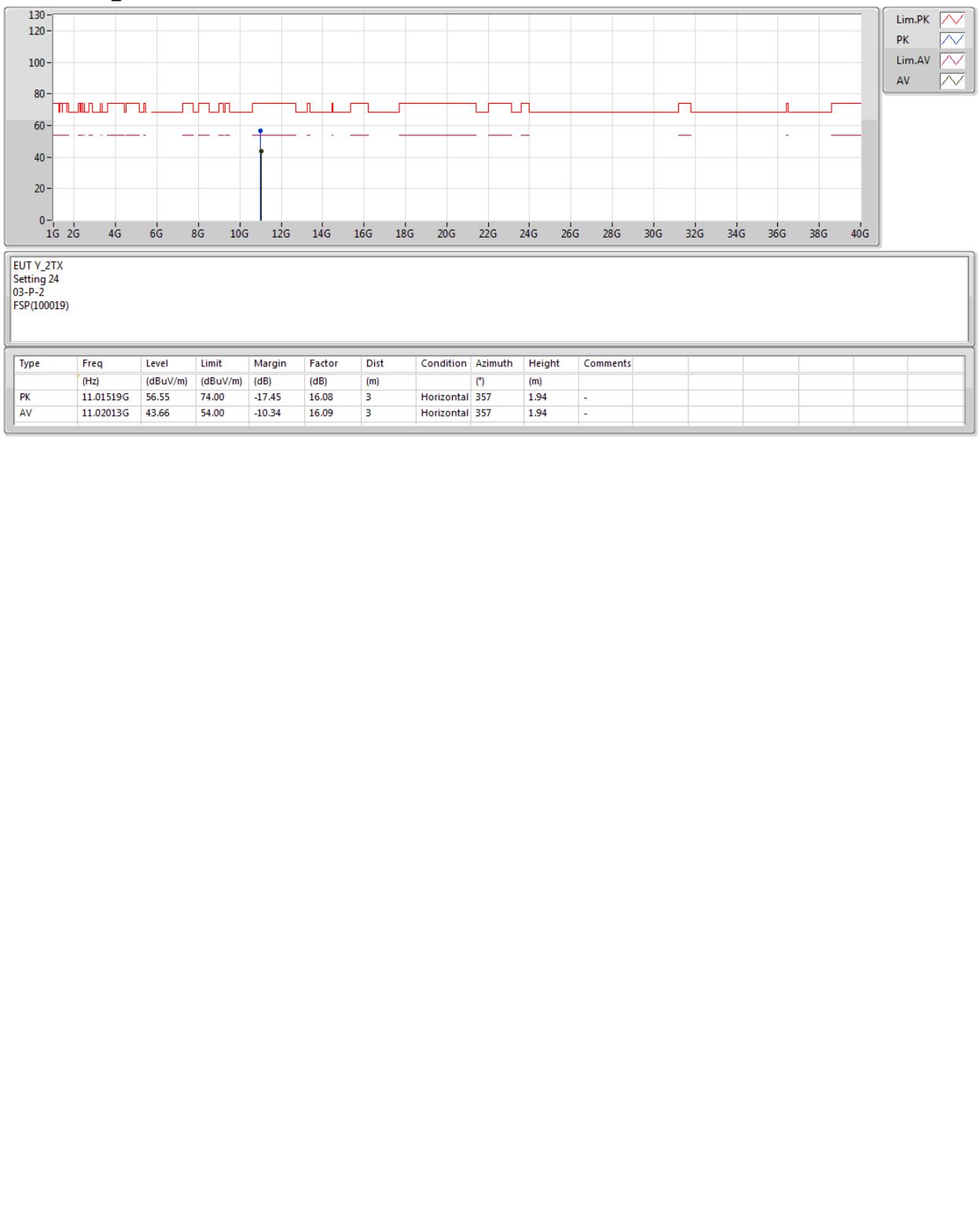
**5510MHz\_TX**




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

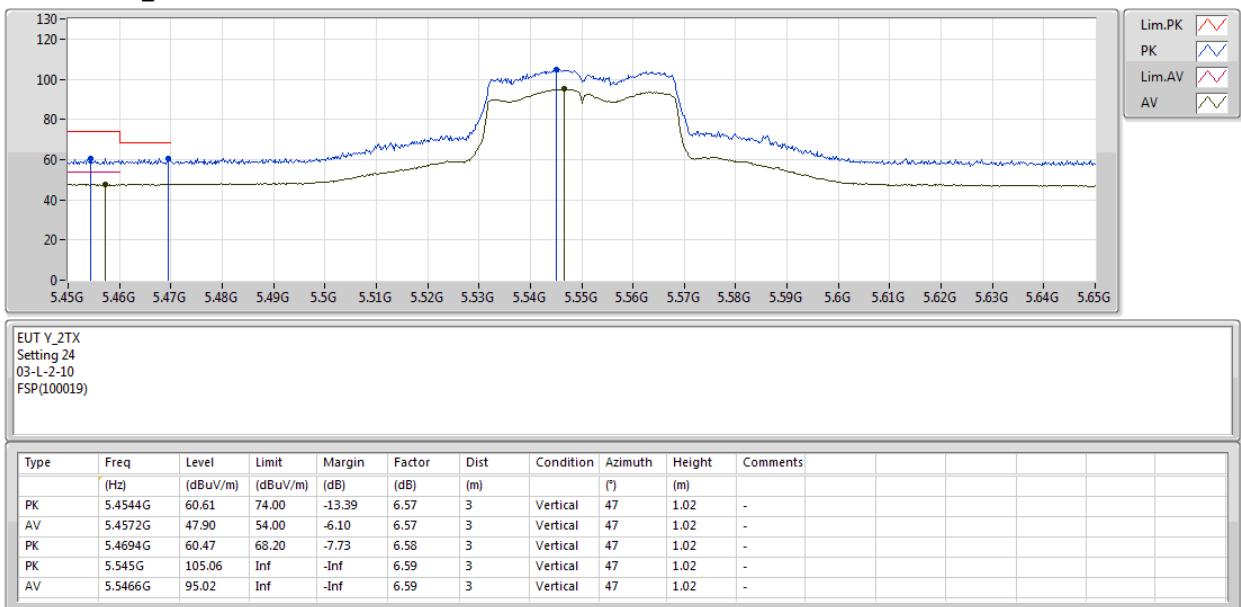
17/01/2019

## 5510MHz\_TX



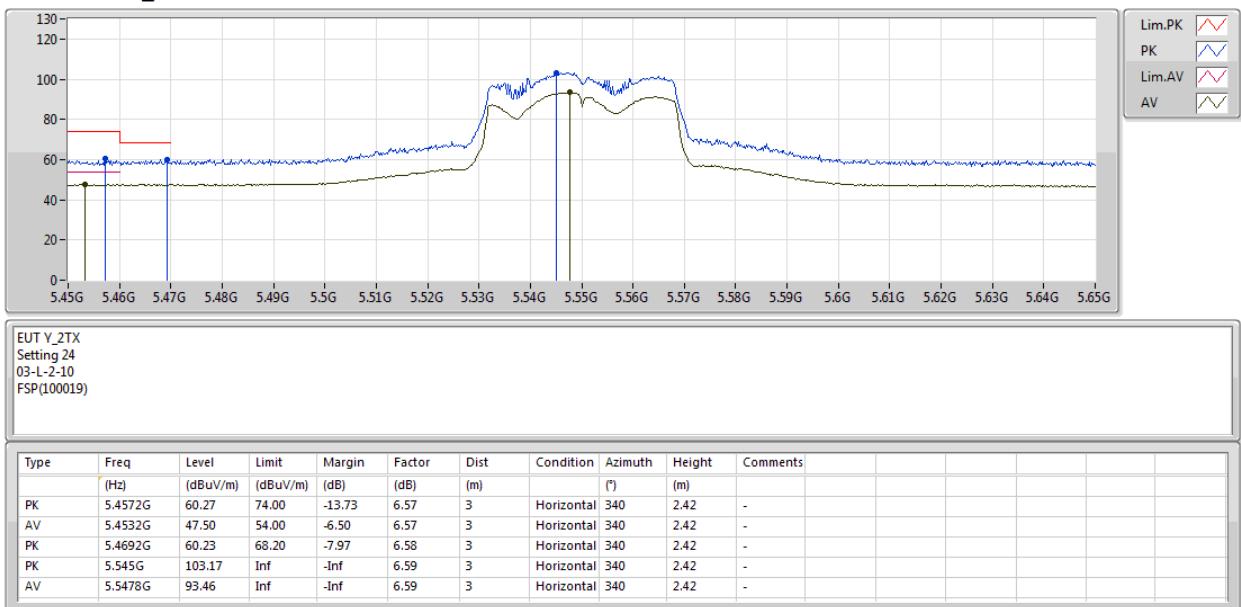
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5550MHz\_TX**


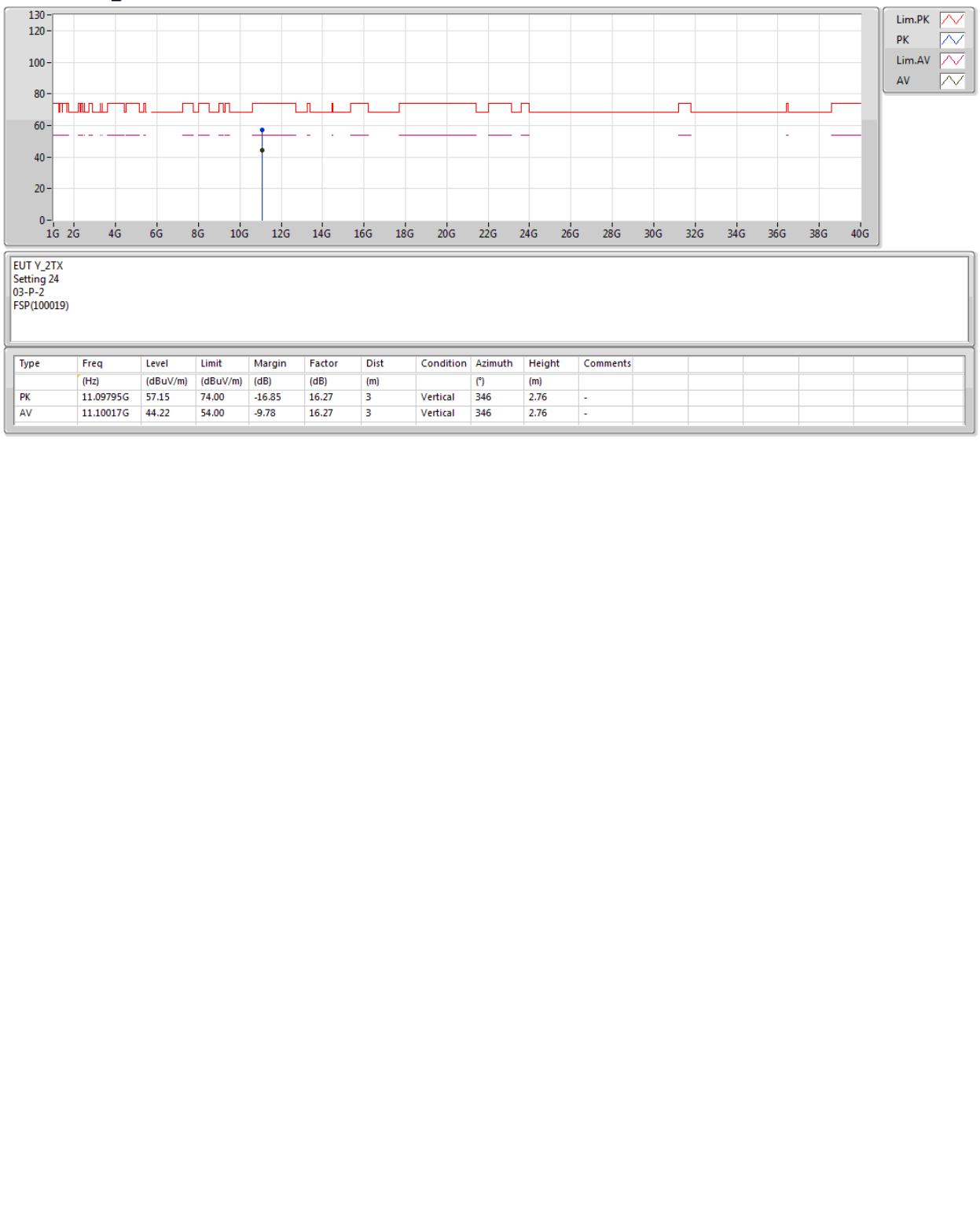
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5550MHz\_TX**


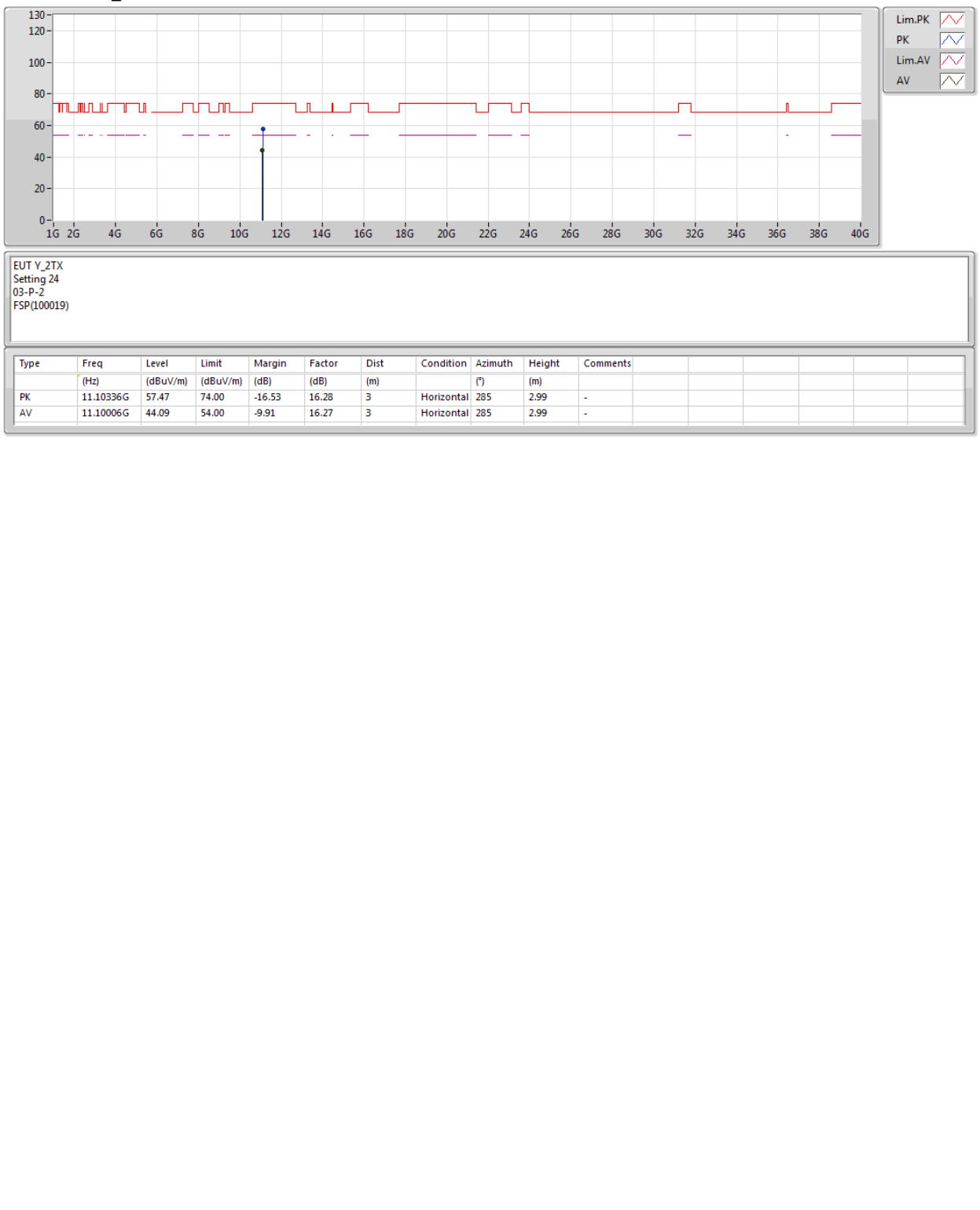
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

17/01/2019

**5550MHz\_TX**


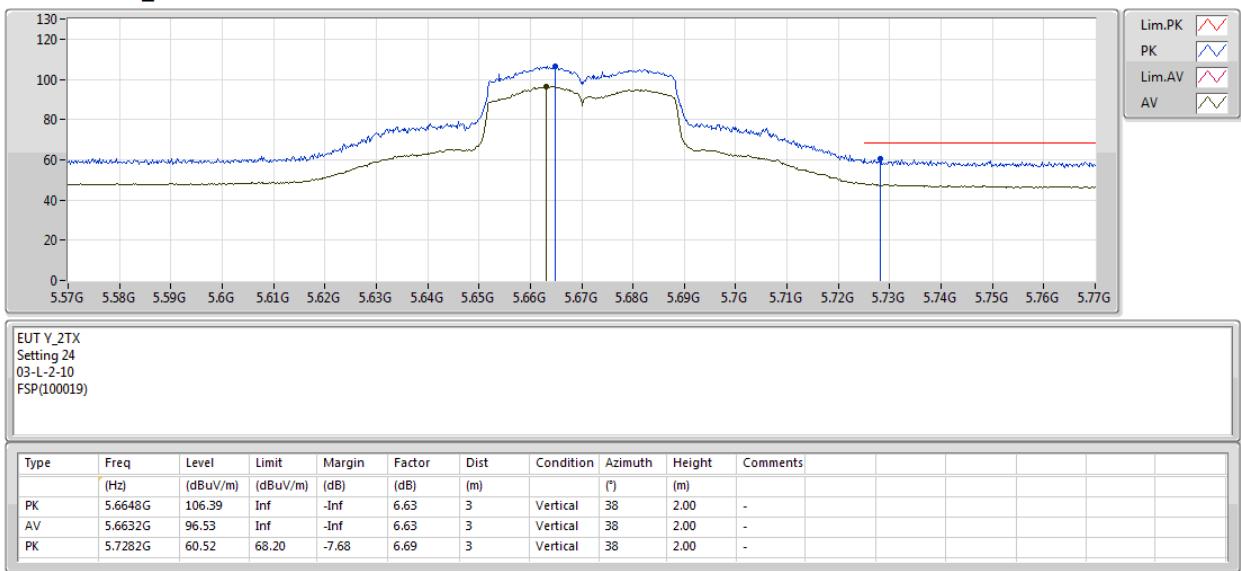
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

17/01/2019

**5550MHz\_TX**


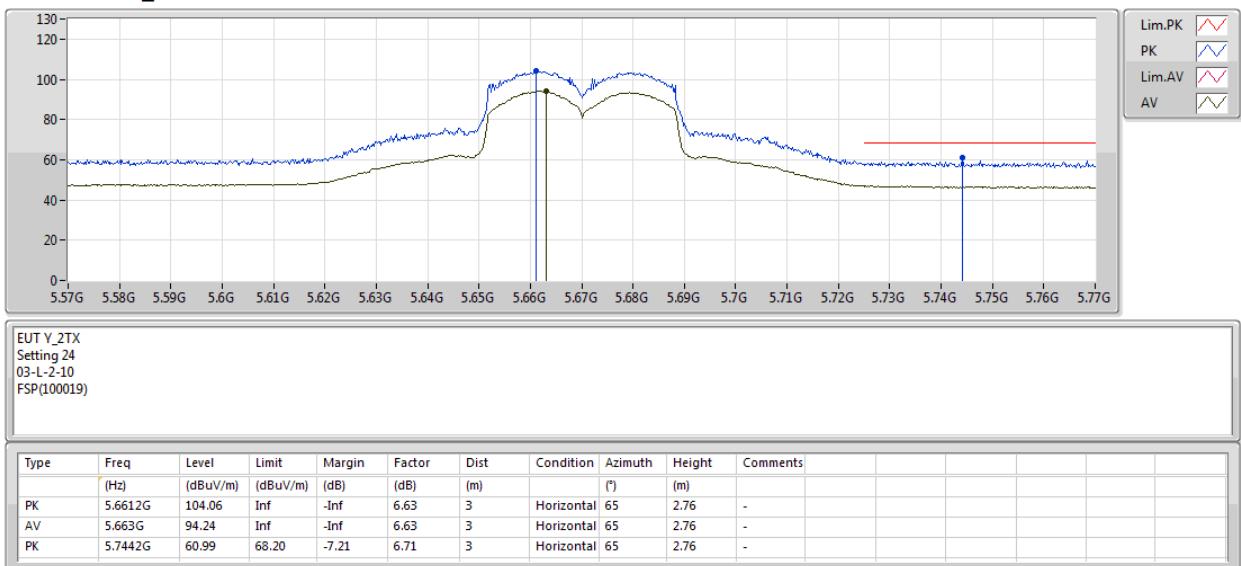
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5670MHz\_TX**


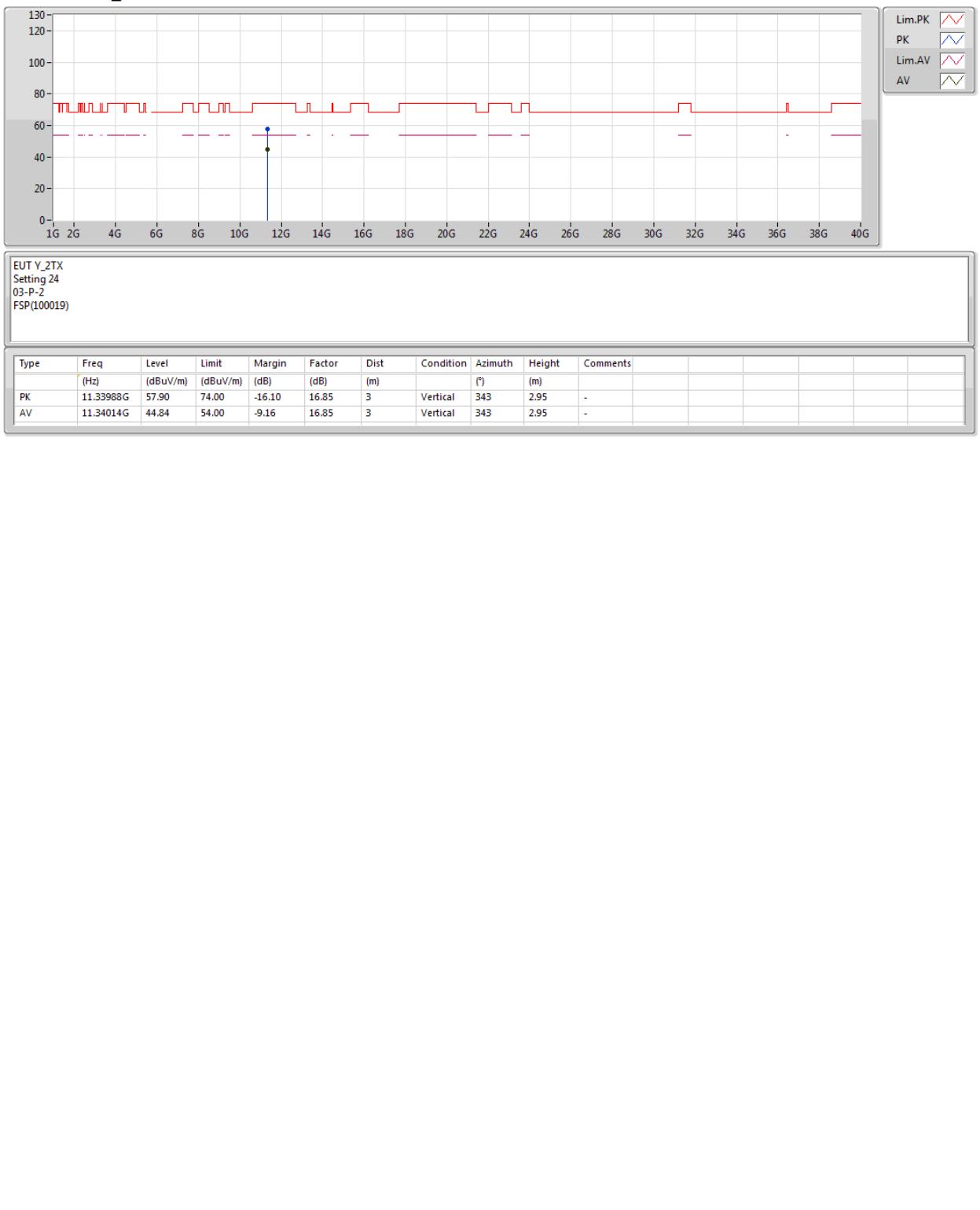
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

16/01/2019

**5670MHz\_TX**


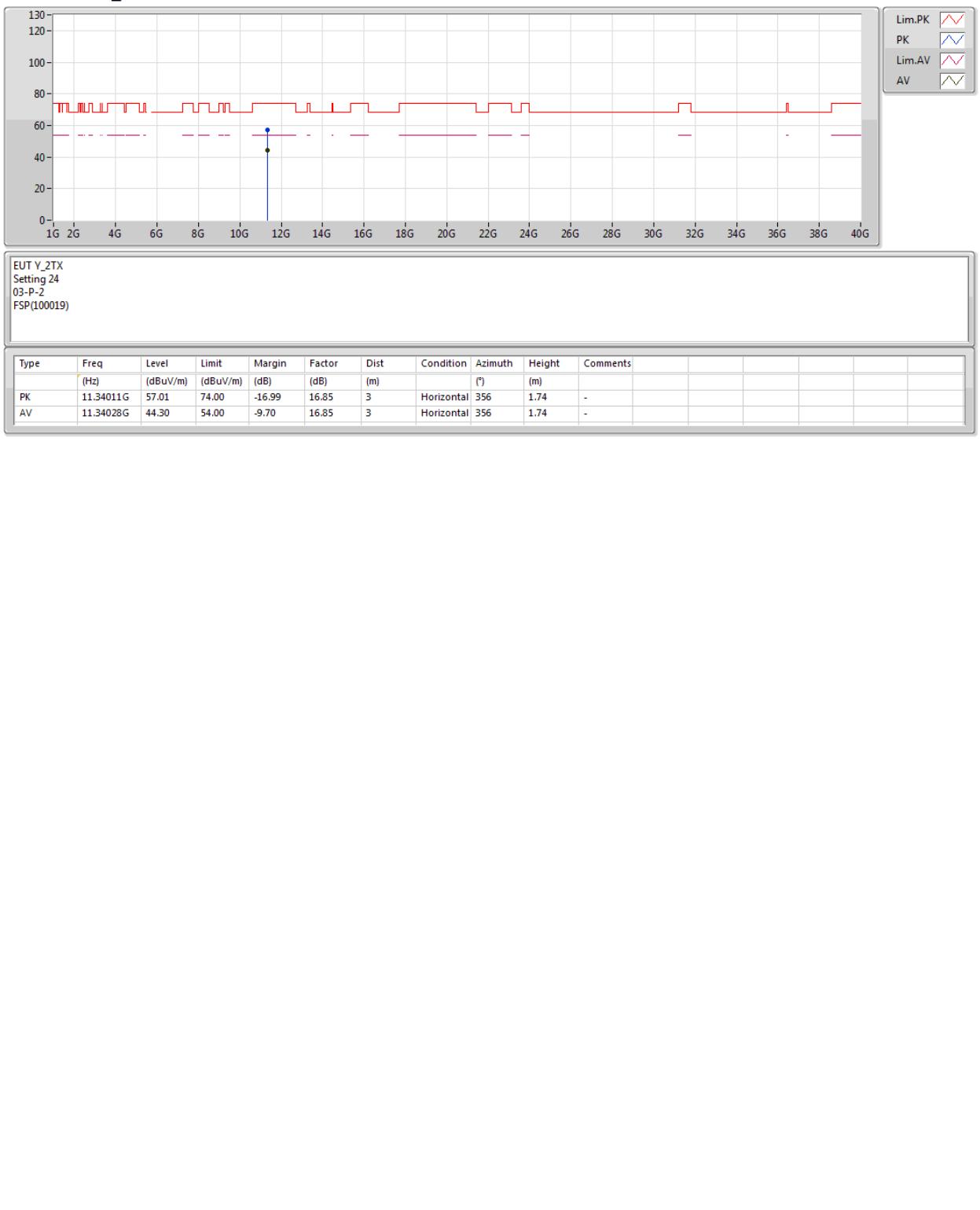
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

17/01/2019

**5670MHz\_TX**


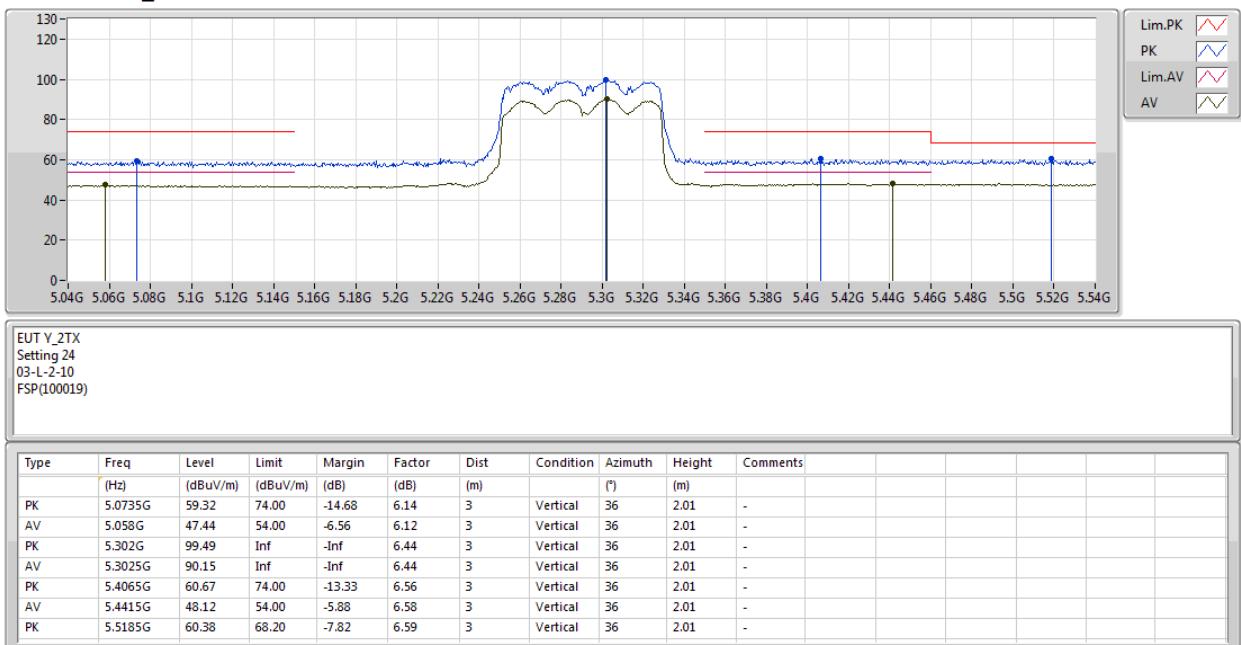
**802.11ac VHT40\_Nss1,(MCS0)\_2TX**

17/01/2019

**5670MHz\_TX**


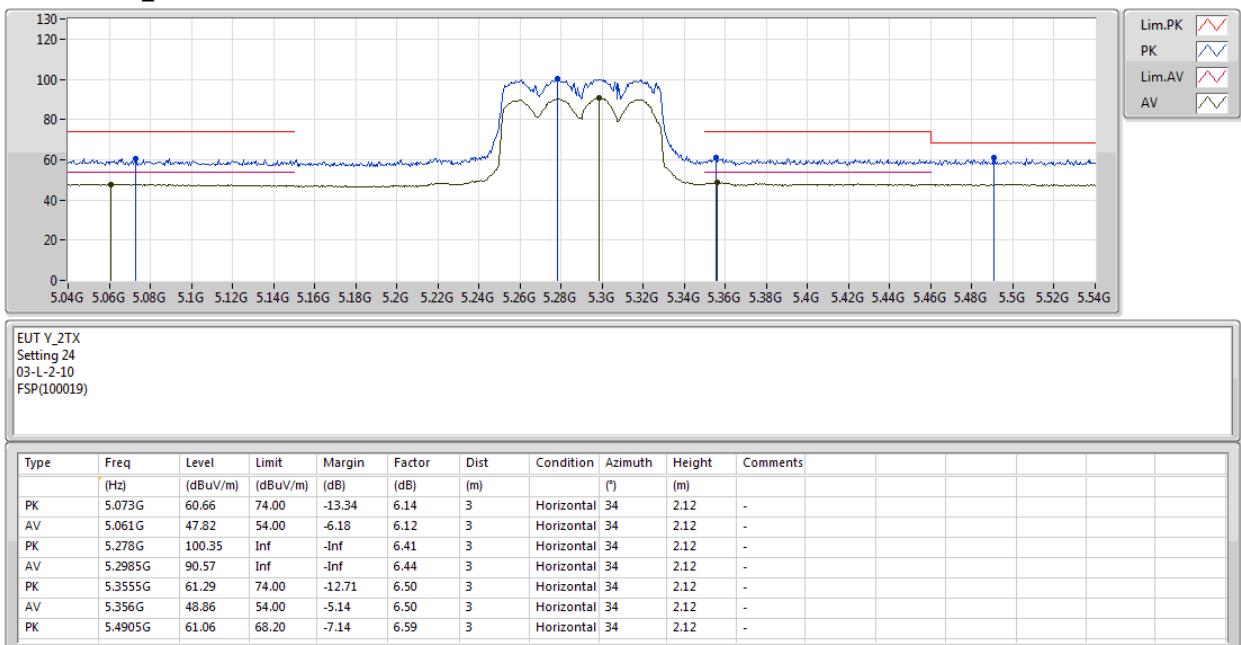
**802.11ac VHT80\_Nss1,(MCS0)\_2TX**

17/01/2019

**5290MHz\_TX**


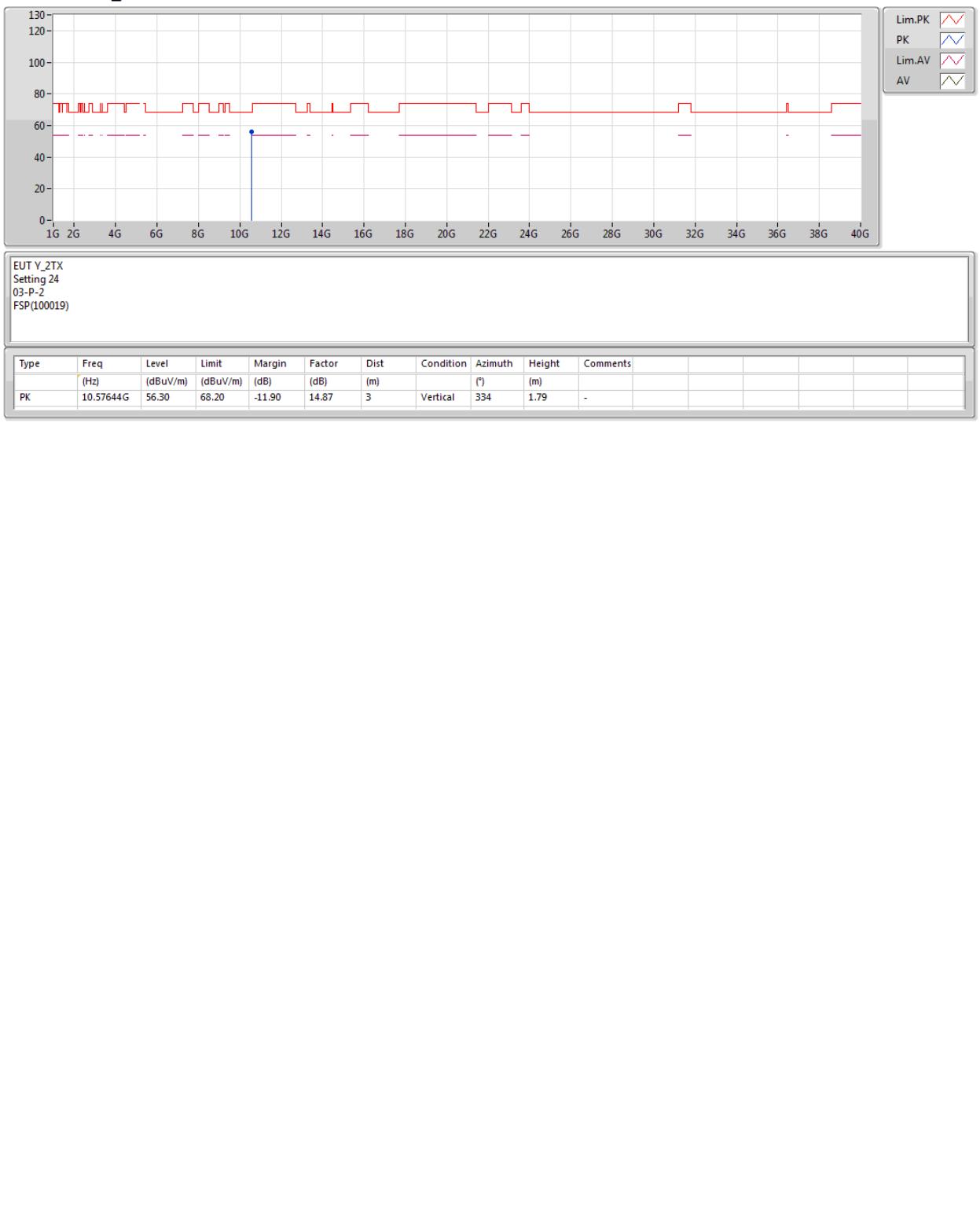
**802.11ac VHT80\_Nss1,(MCS0)\_2TX**

17/01/2019

**5290MHz\_TX**


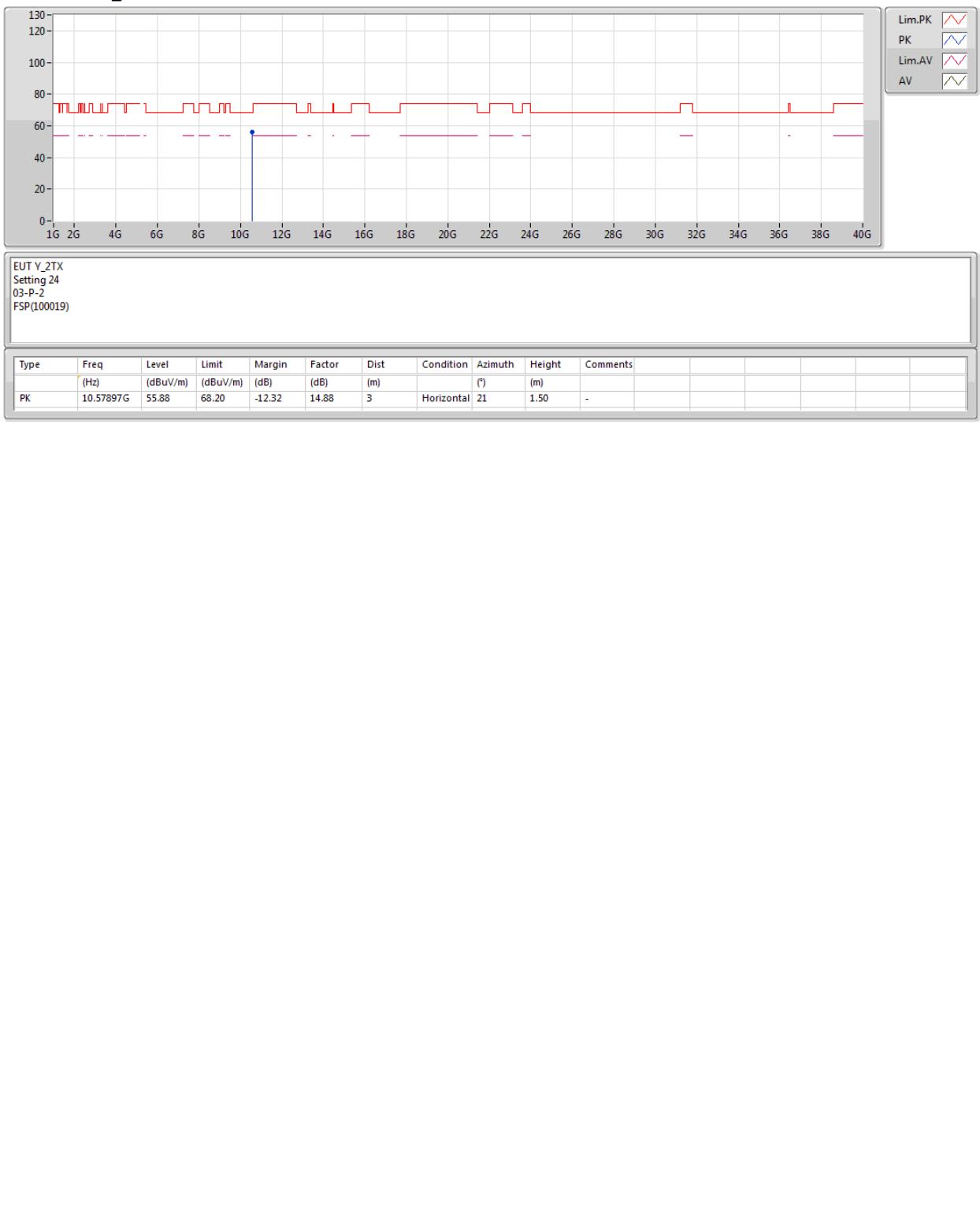
**802.11ac VHT80\_Nss1,(MCS0)\_2TX**

17/01/2019

**5290MHz\_TX**


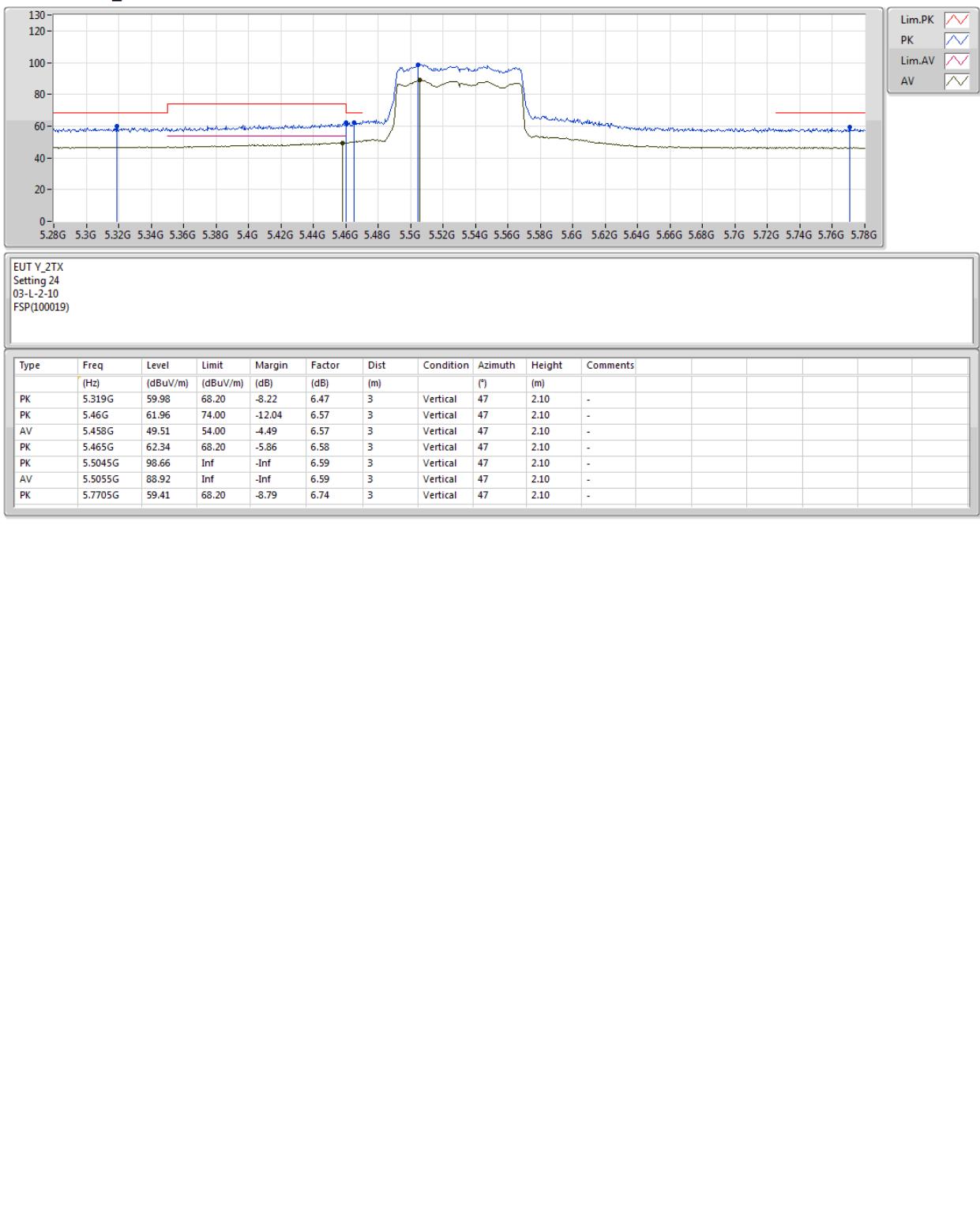
**802.11ac VHT80\_Nss1,(MCS0)\_2TX**

17/01/2019

**5290MHz\_TX**


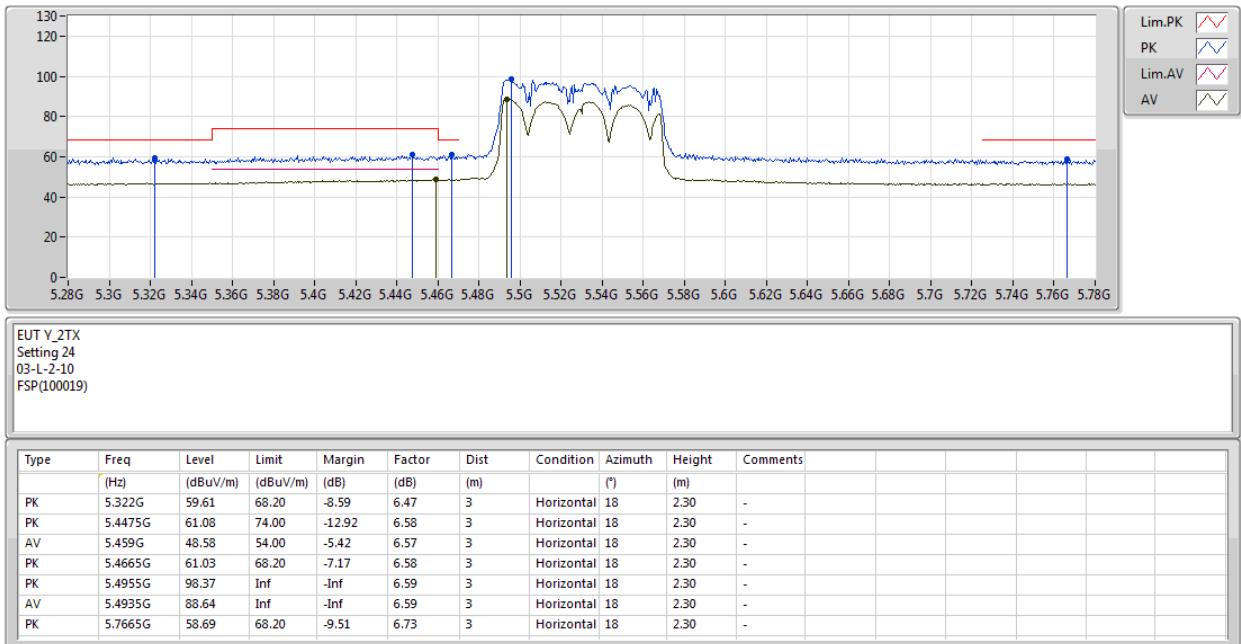
**802.11ac VHT80\_Nss1,(MCS0)\_2TX**

17/01/2019

**5530MHz\_TX**


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

17/01/2019

**5530MHz\_TX**


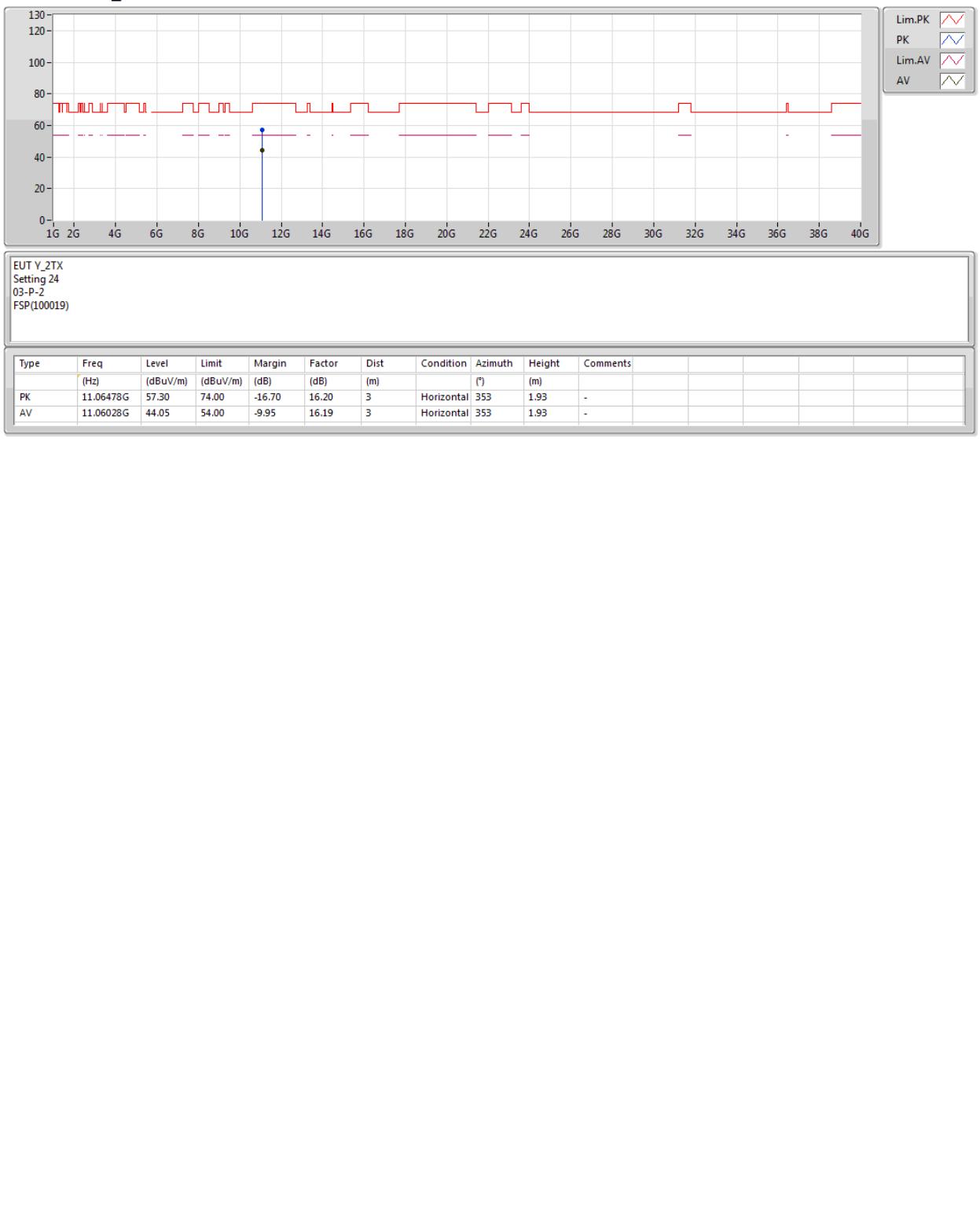
**802.11ac VHT80\_Nss1,(MCS0)\_2TX**

17/01/2019

**5530MHz\_TX**

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

17/01/2019

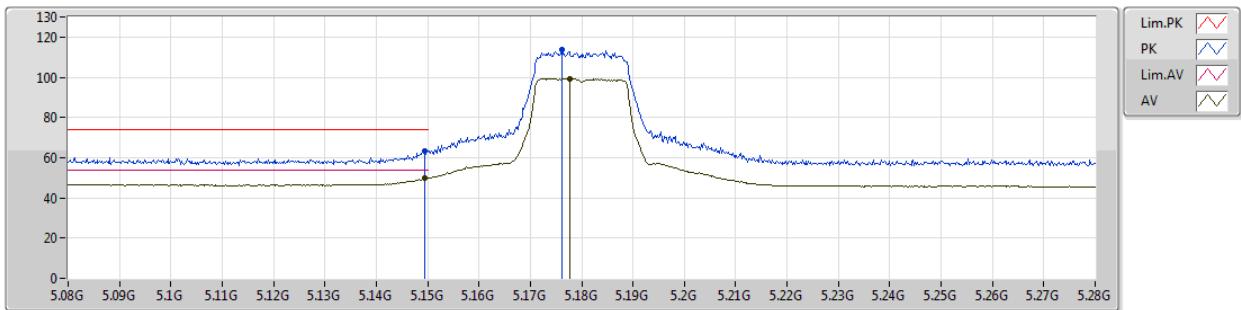
**5530MHz\_TX**

**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.47-5.725GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	Pass	PK	5.4684G	68.15	68.20	-0.05	6.58	3	Horizontal	198	2.96	-

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

22/01/2019

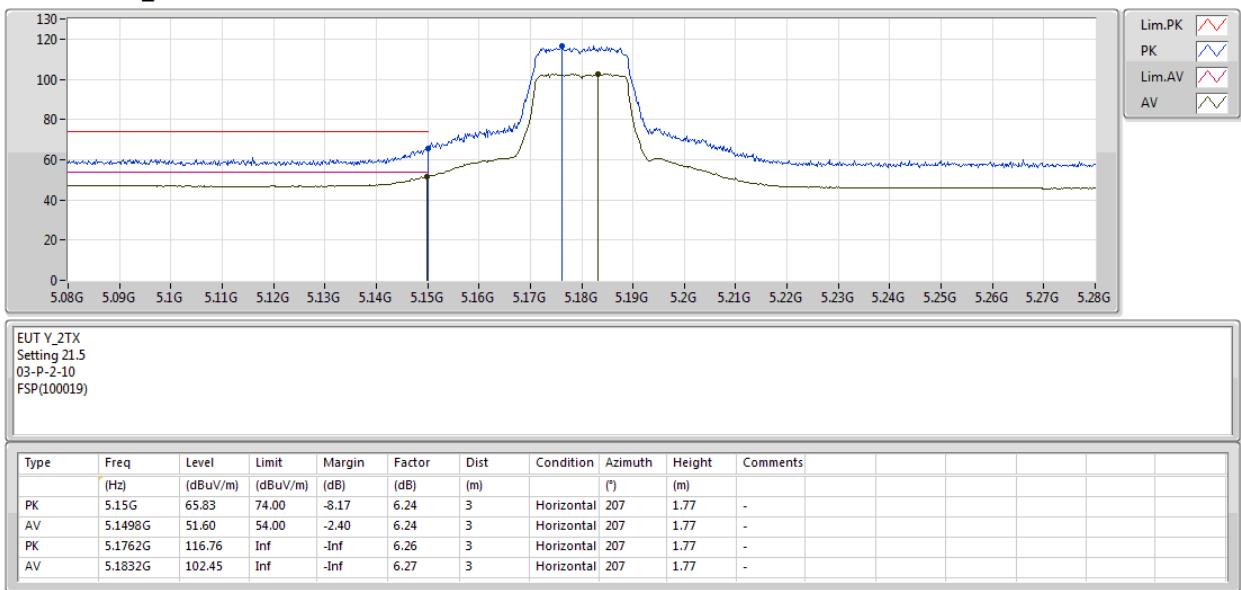
**5180MHz\_TX**


EUT Y\_2TX  
Setting 21.5  
03-P-2-10  
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments			
PK	5.1494G	63.48	74.00	-10.52	6.24	3	Vertical	177	1.91	-			
AV	5.1494G	49.76	54.00	-4.24	6.24	3	Vertical	177	1.91	-			
PK	5.1762G	113.71	Inf	-Inf	6.26	3	Vertical	177	1.91	-			
AV	5.1778G	99.45	Inf	-Inf	6.26	3	Vertical	177	1.91	-			

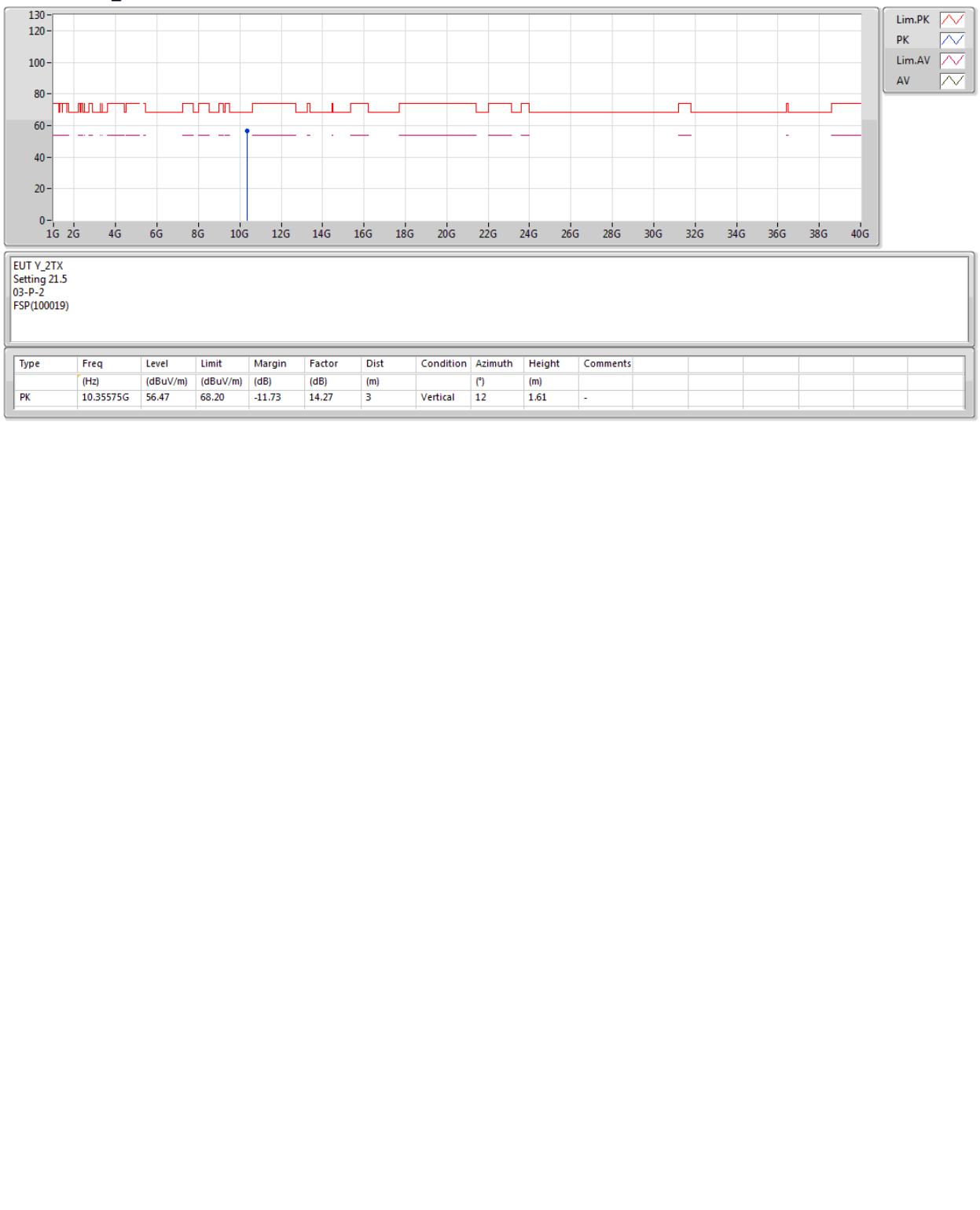
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5180MHz\_TX**


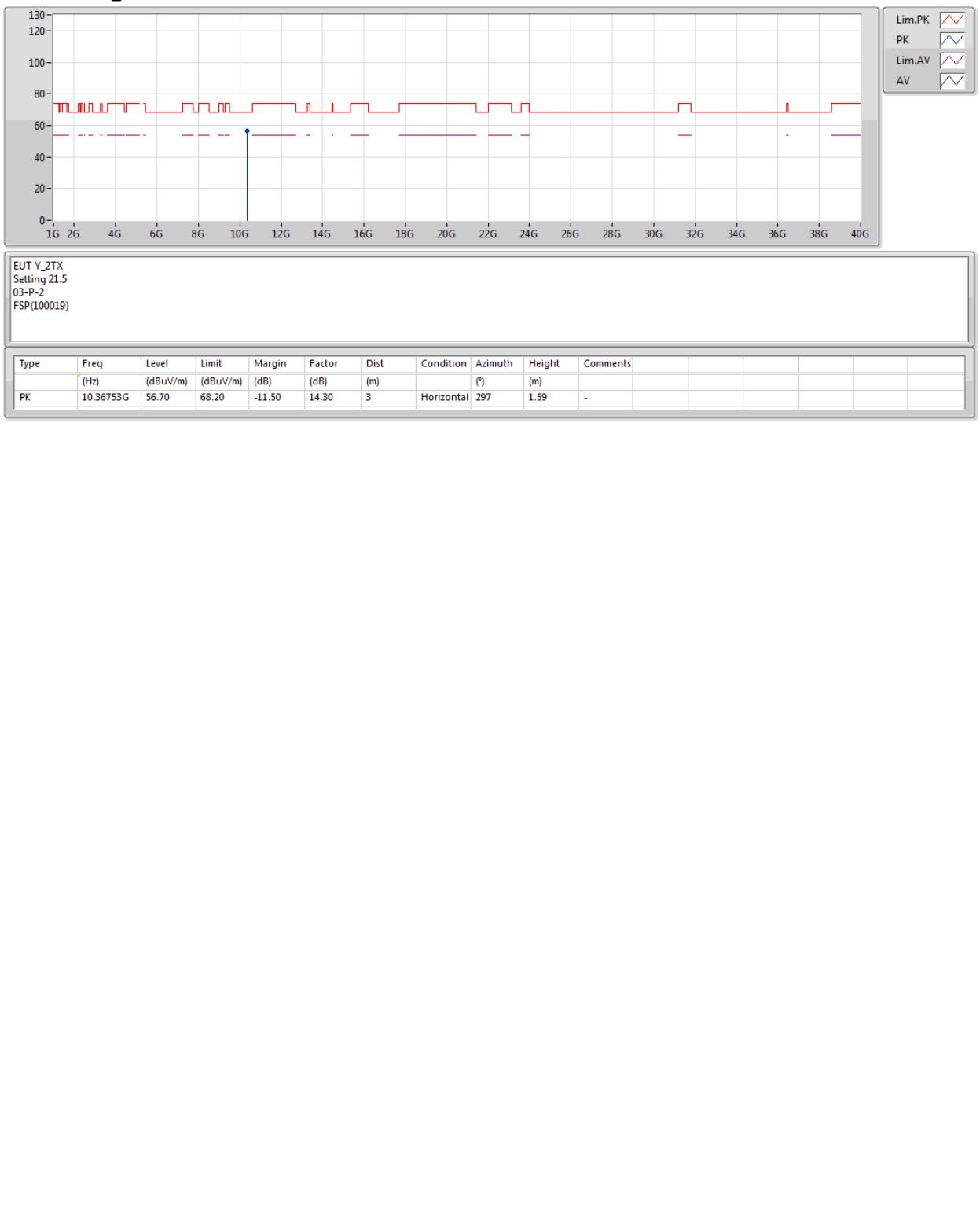
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5180MHz\_TX**


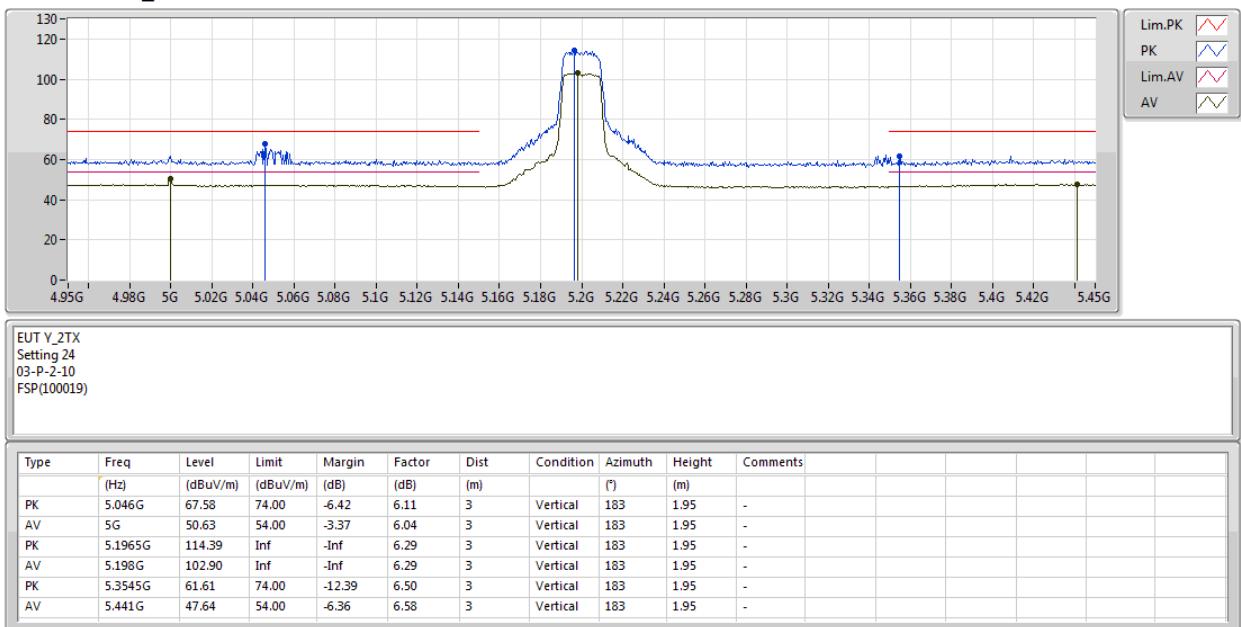
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5180MHz\_TX**


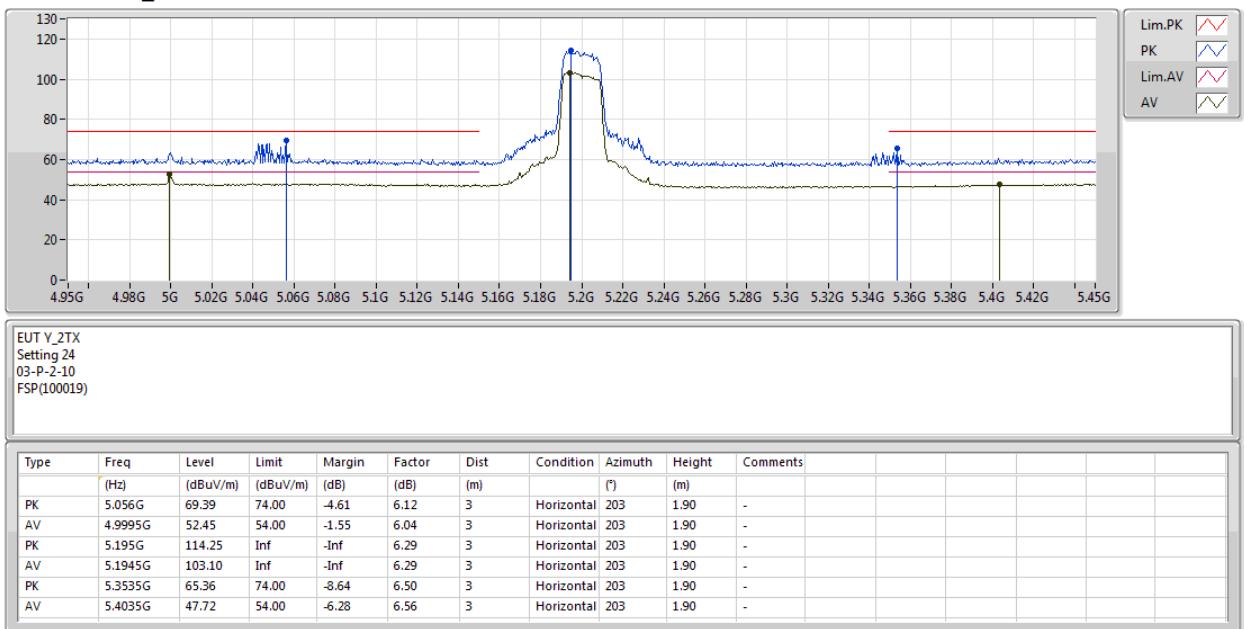
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5200MHz\_TX**


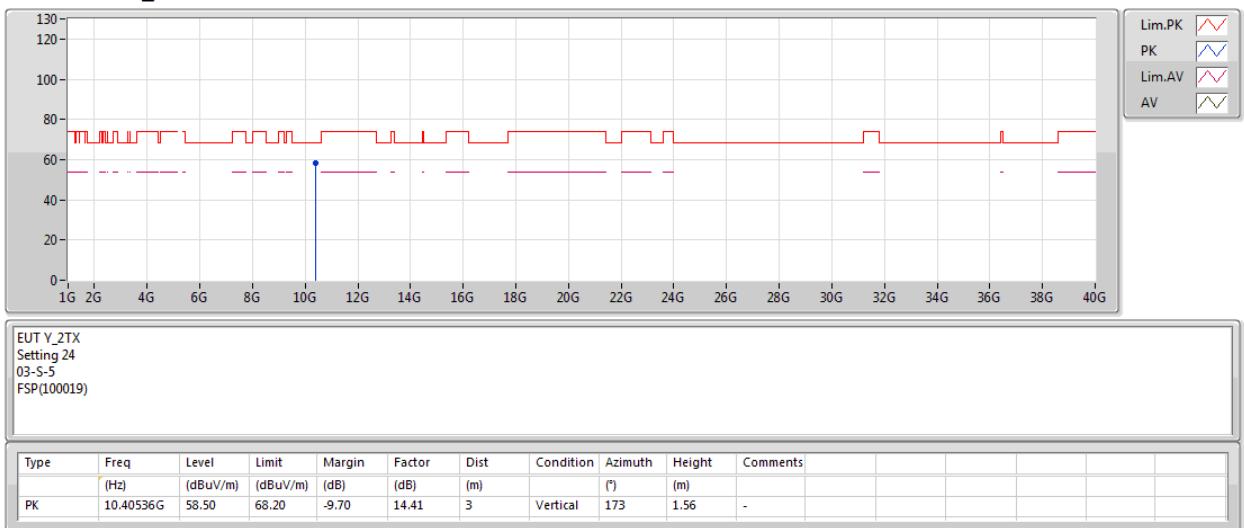
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5200MHz\_TX**


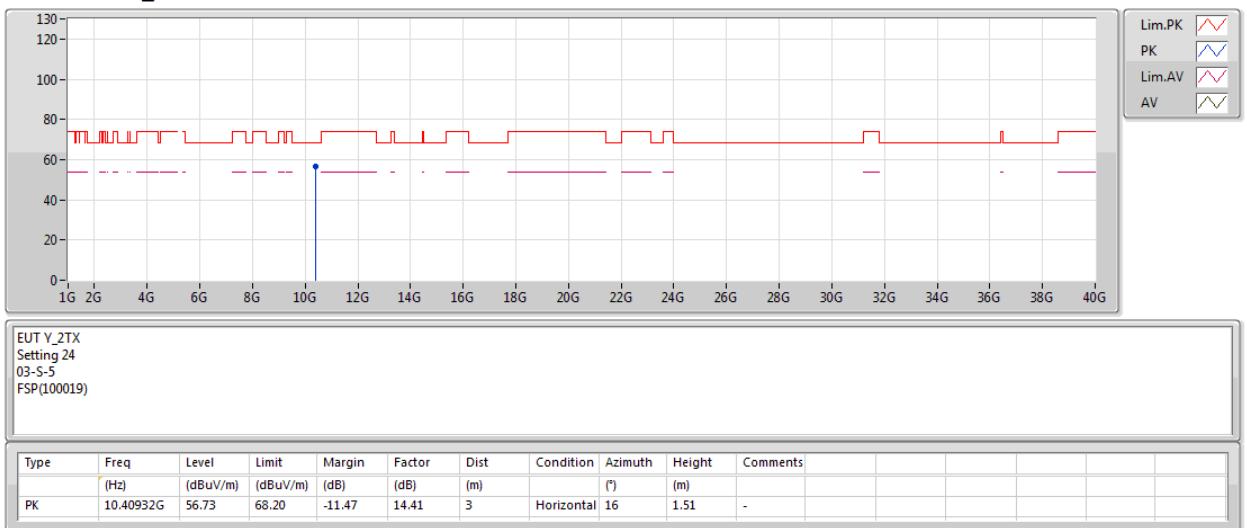
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5200MHz\_TX**


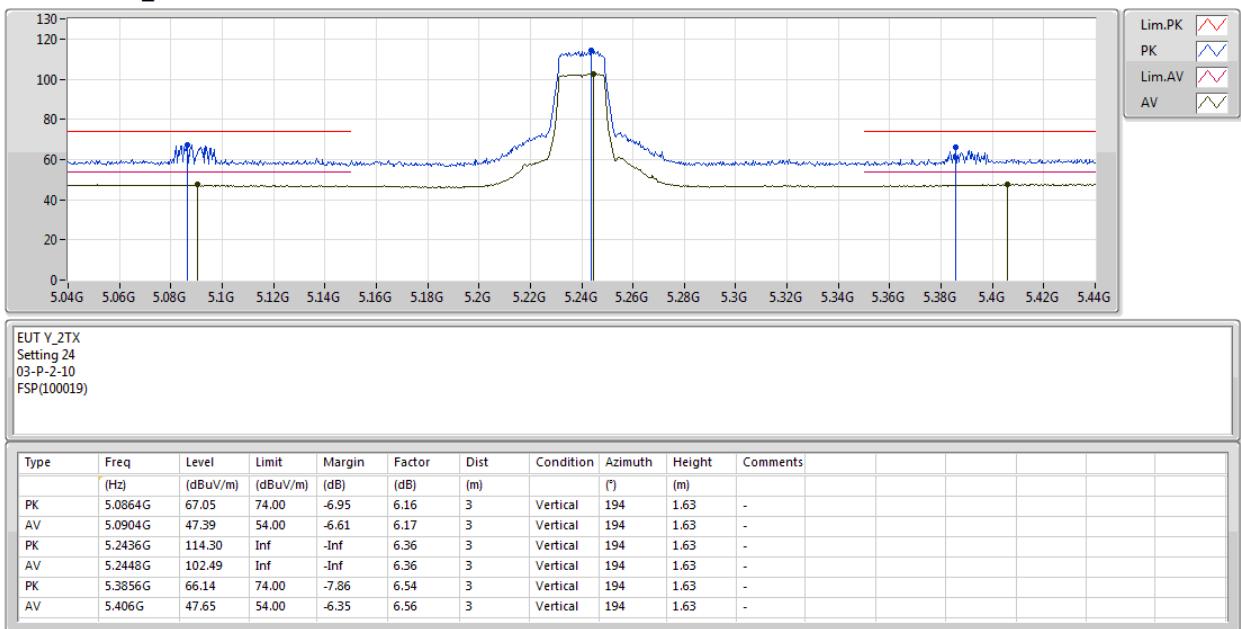
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5200MHz\_TX**


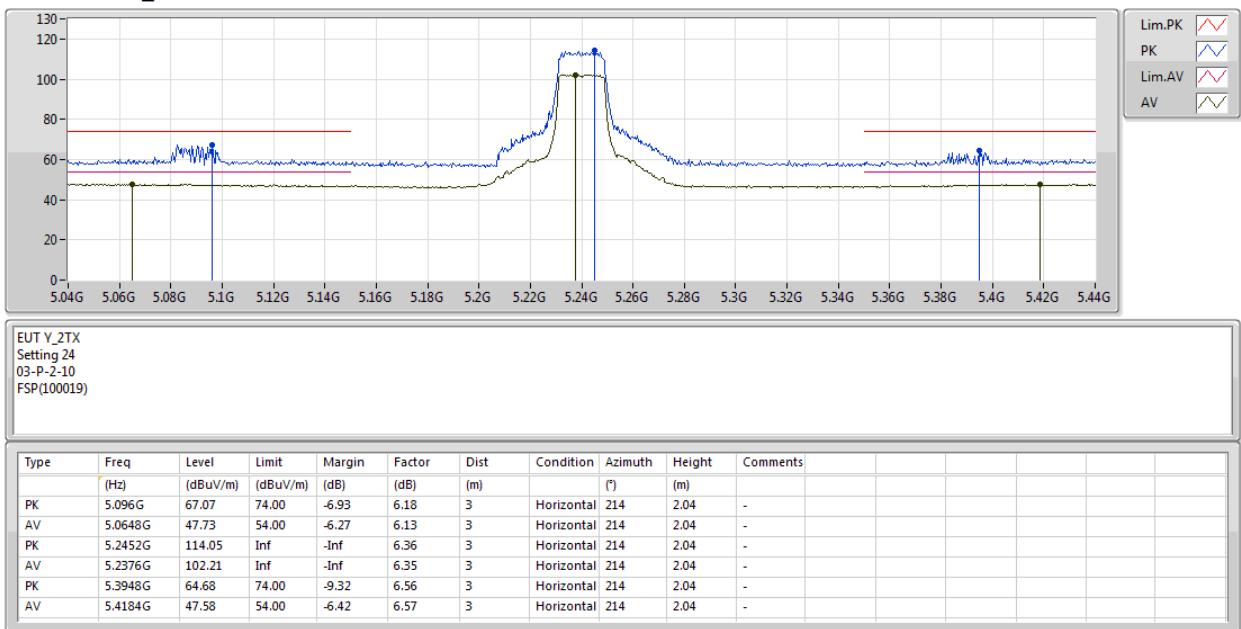
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5240MHz\_TX**


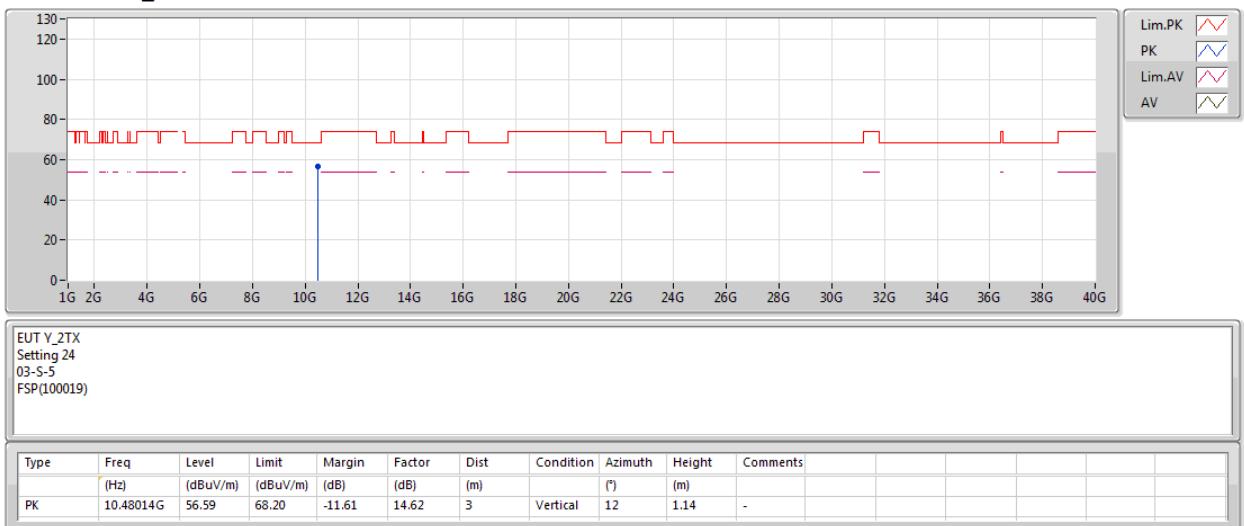
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5240MHz\_TX**


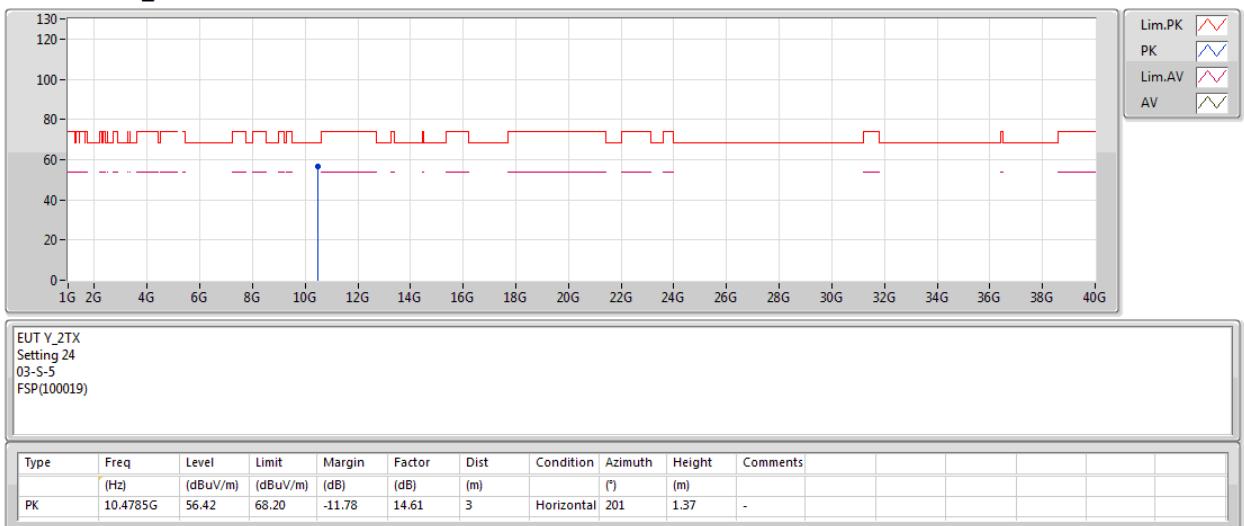
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5240MHz\_TX**


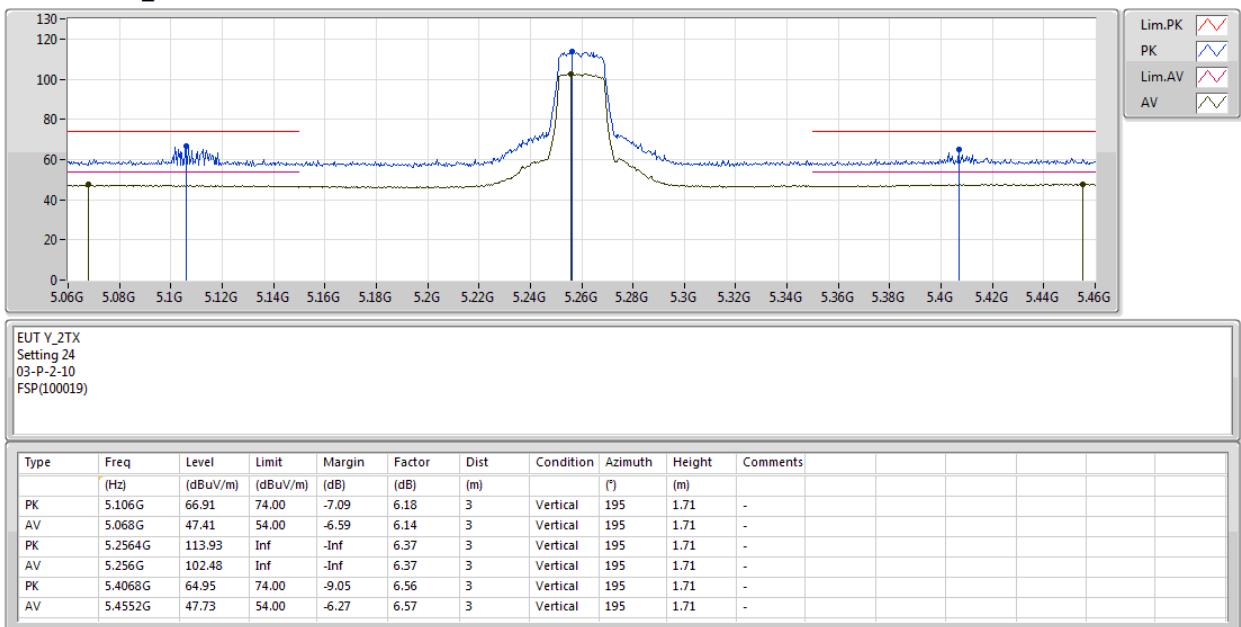
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5240MHz\_TX**


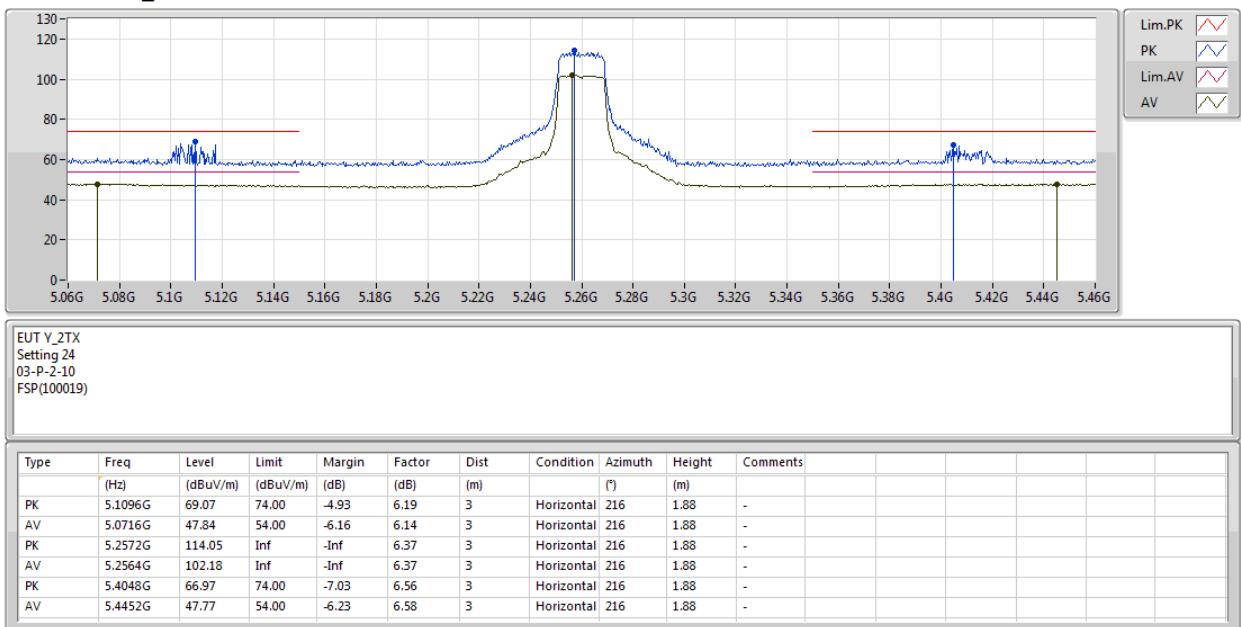
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5260MHz\_TX**


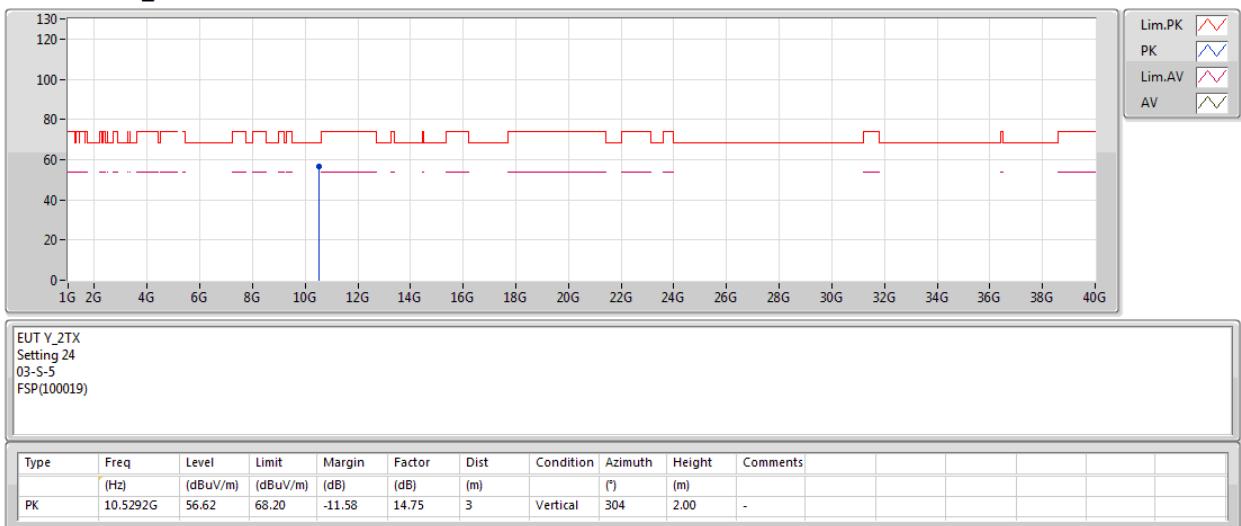
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5260MHz\_TX**


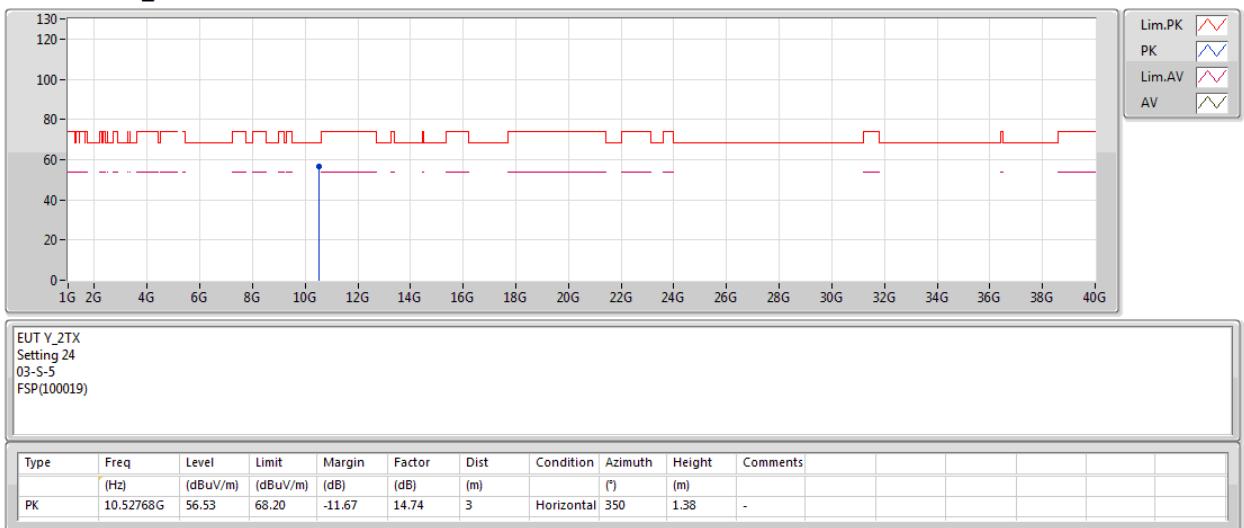
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5260MHz\_TX**


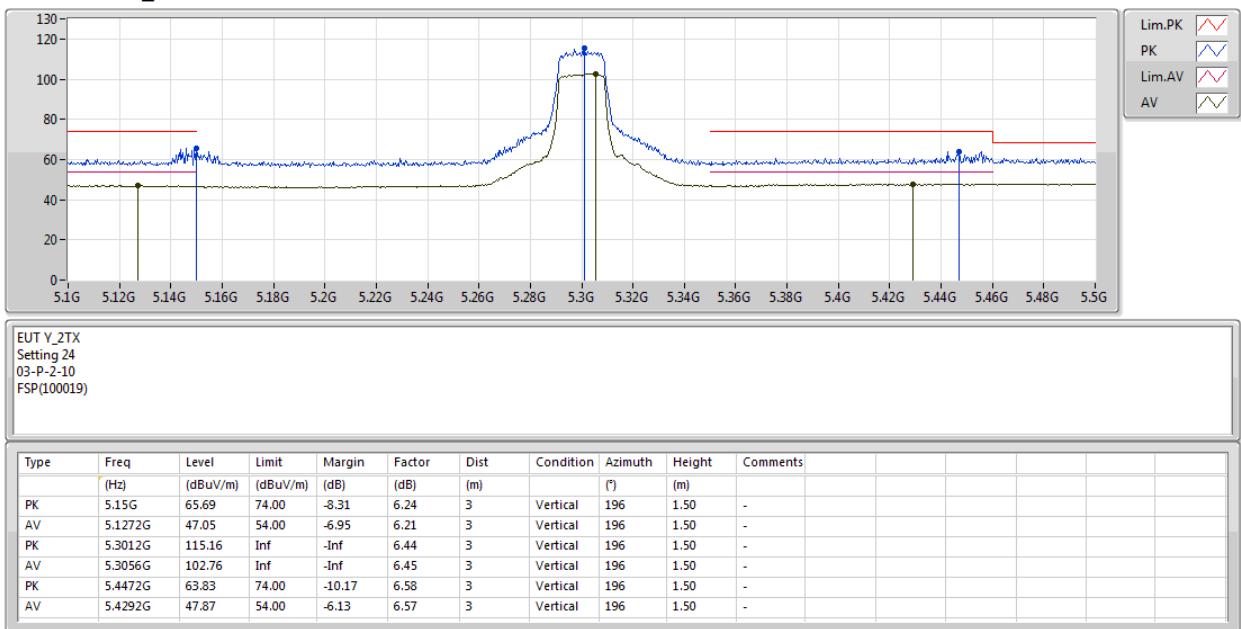
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5260MHz\_TX**


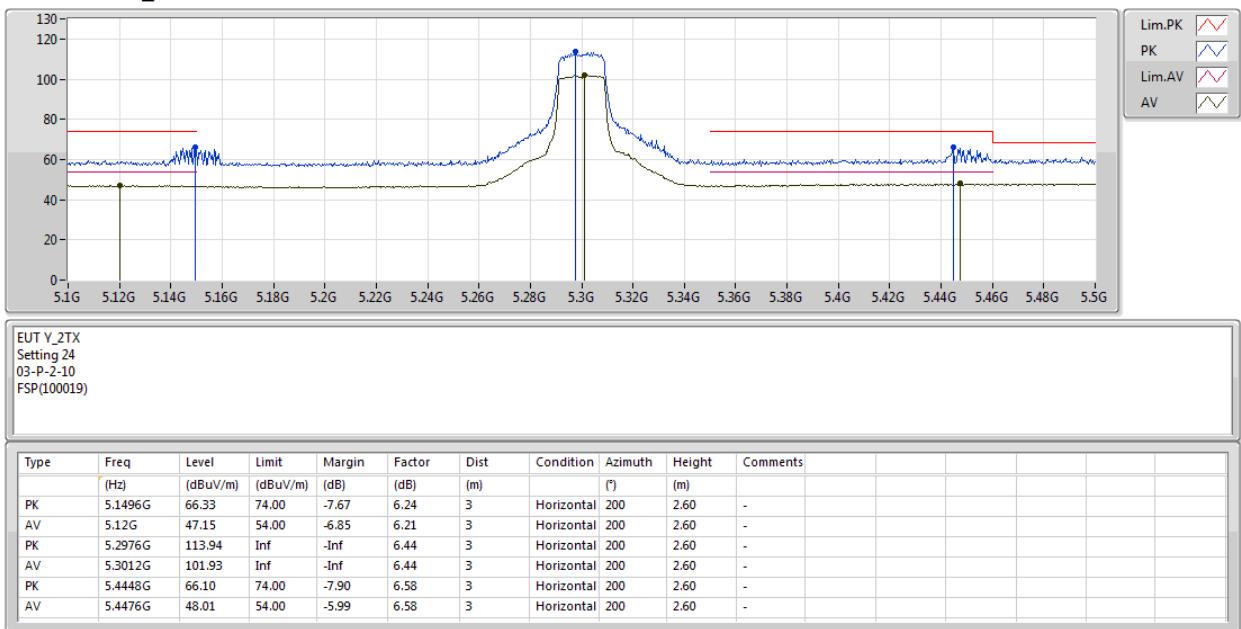
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5300MHz\_TX**


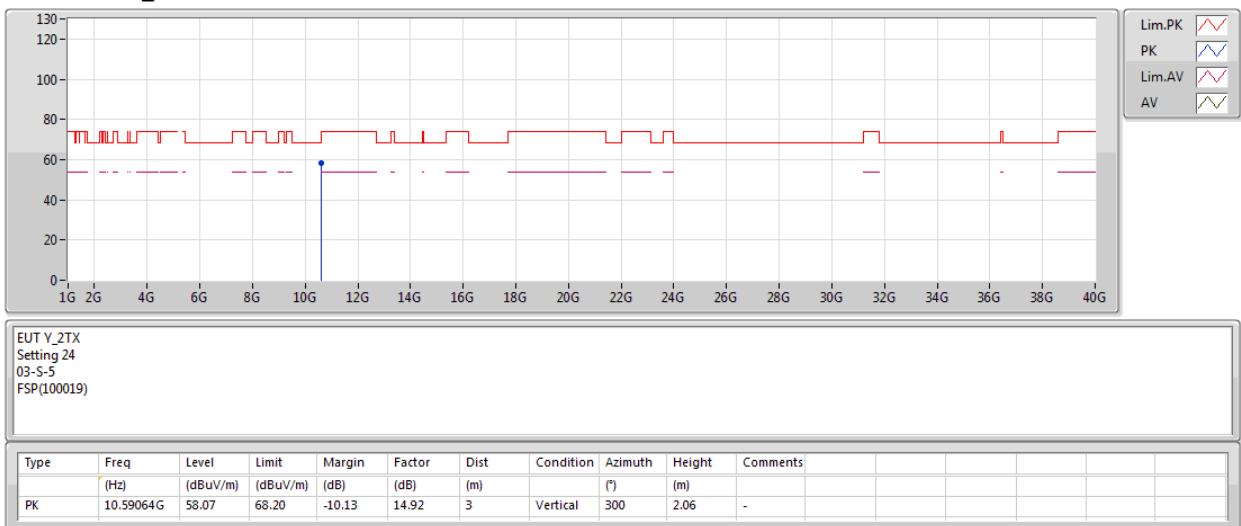
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5300MHz\_TX**


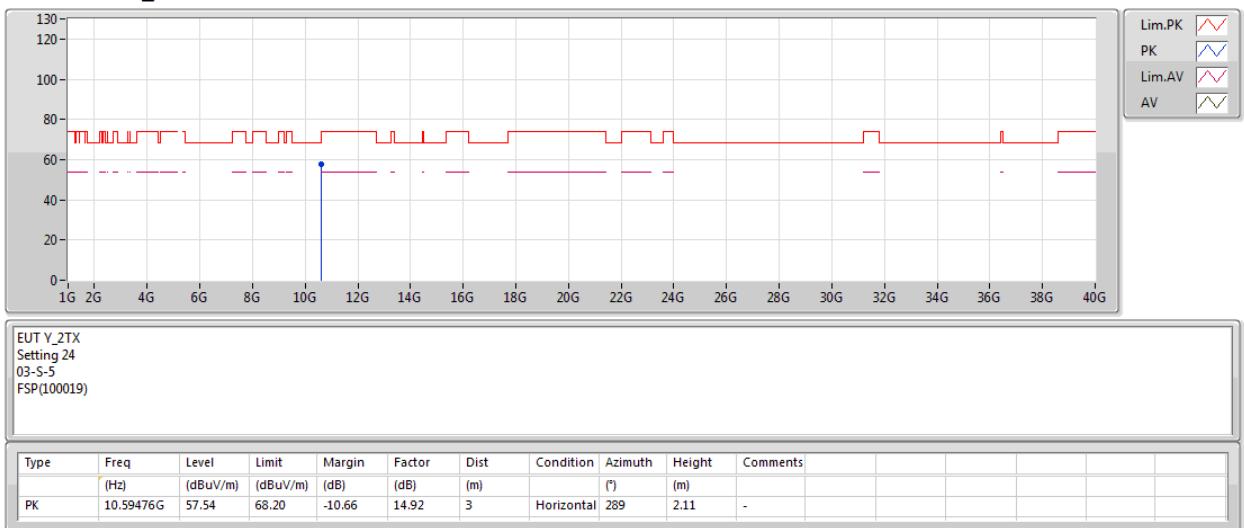
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5300MHz\_TX**


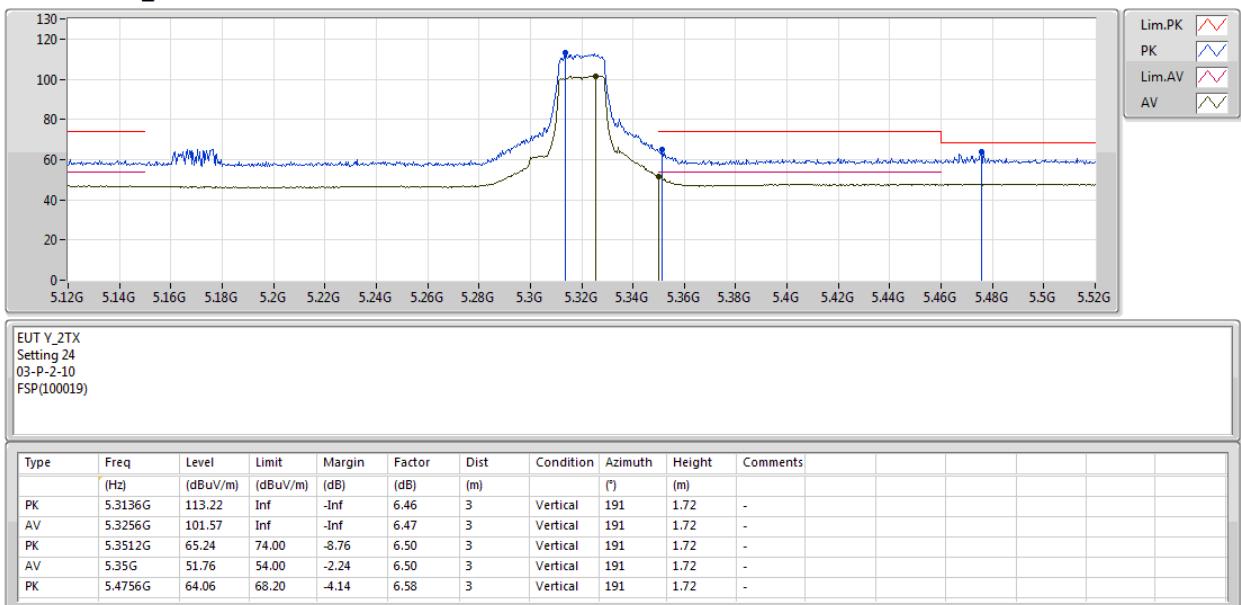
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5300MHz\_TX**


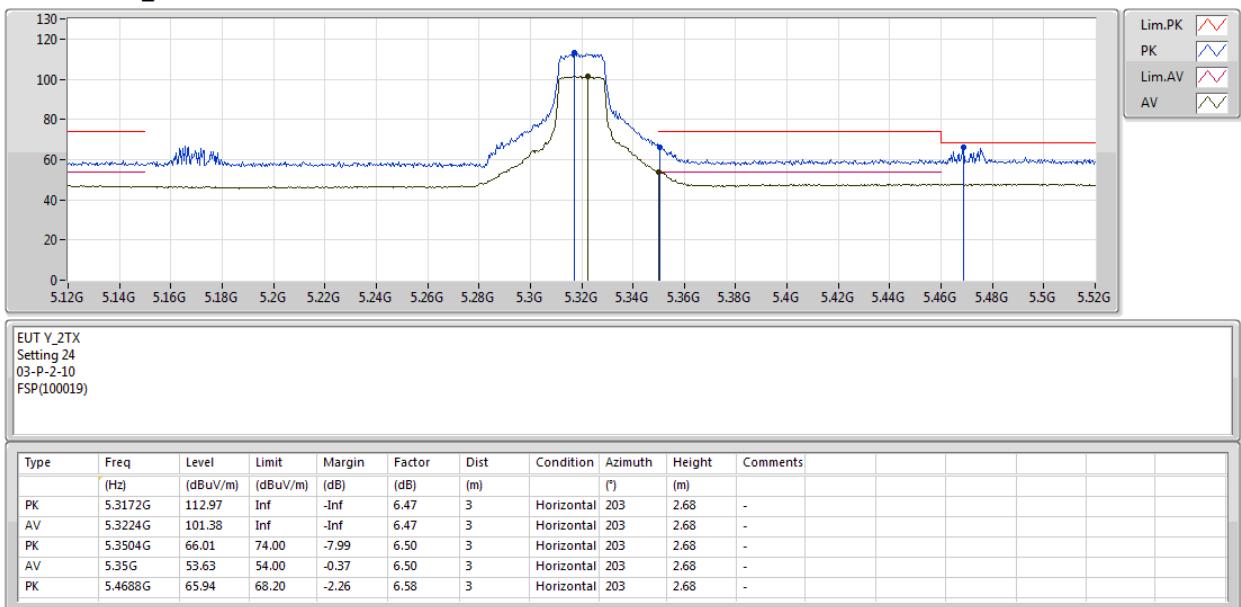
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5320MHz\_TX**


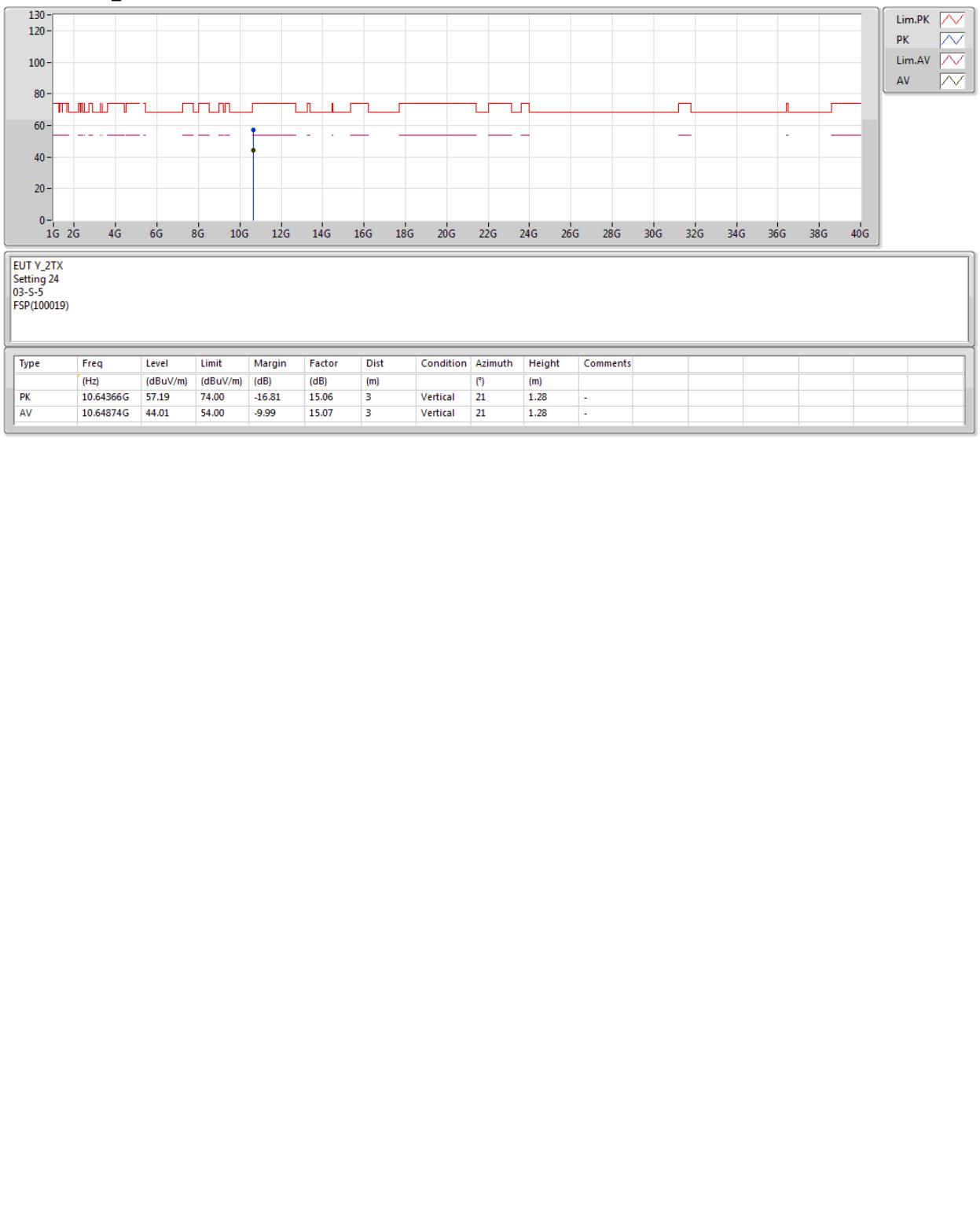
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5320MHz\_TX**


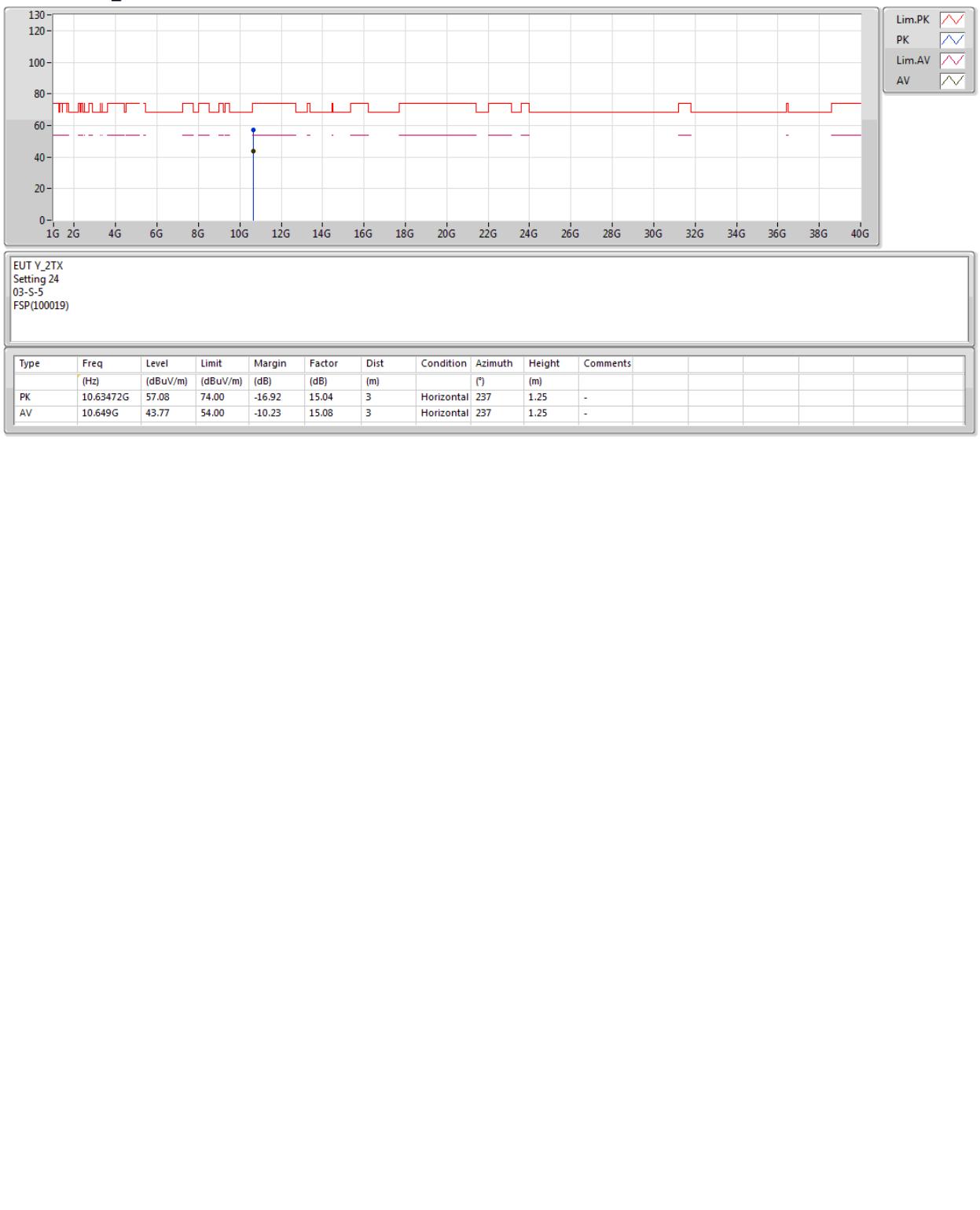
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5320MHz\_TX**


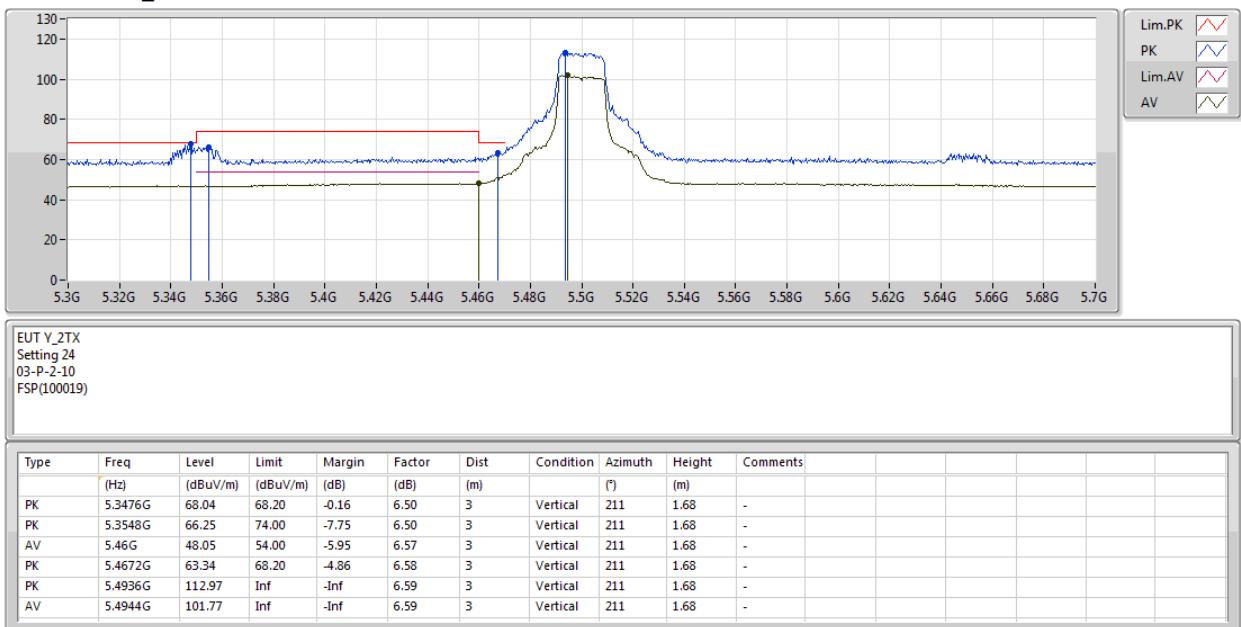
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5320MHz\_TX**


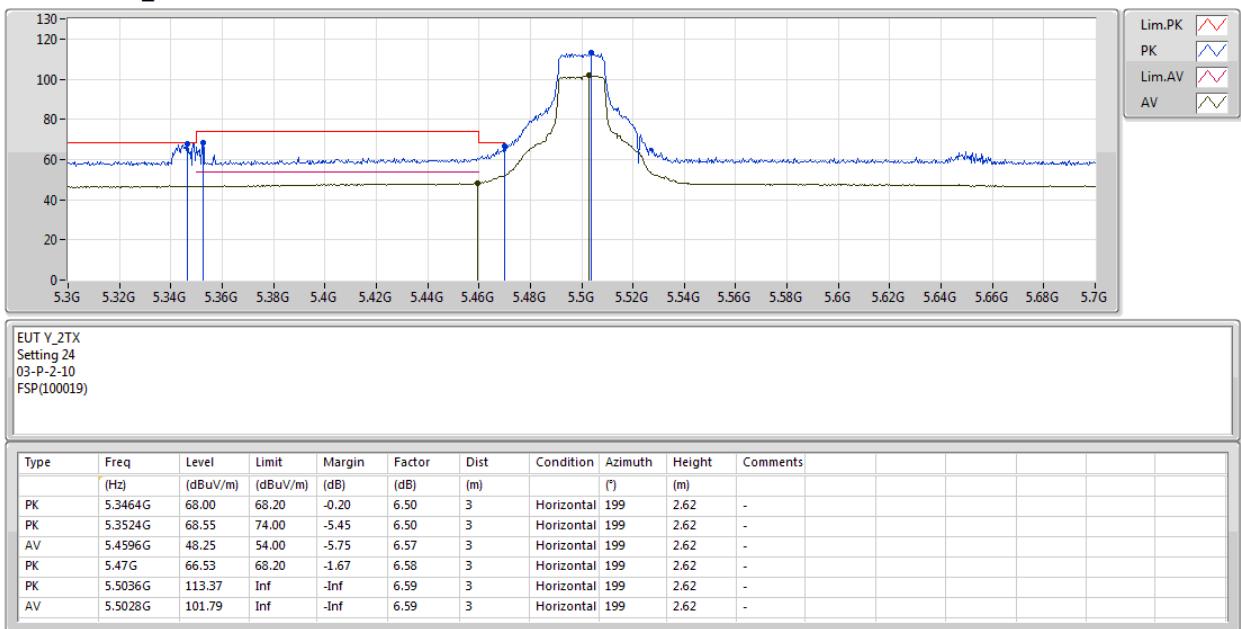
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5500MHz\_TX**


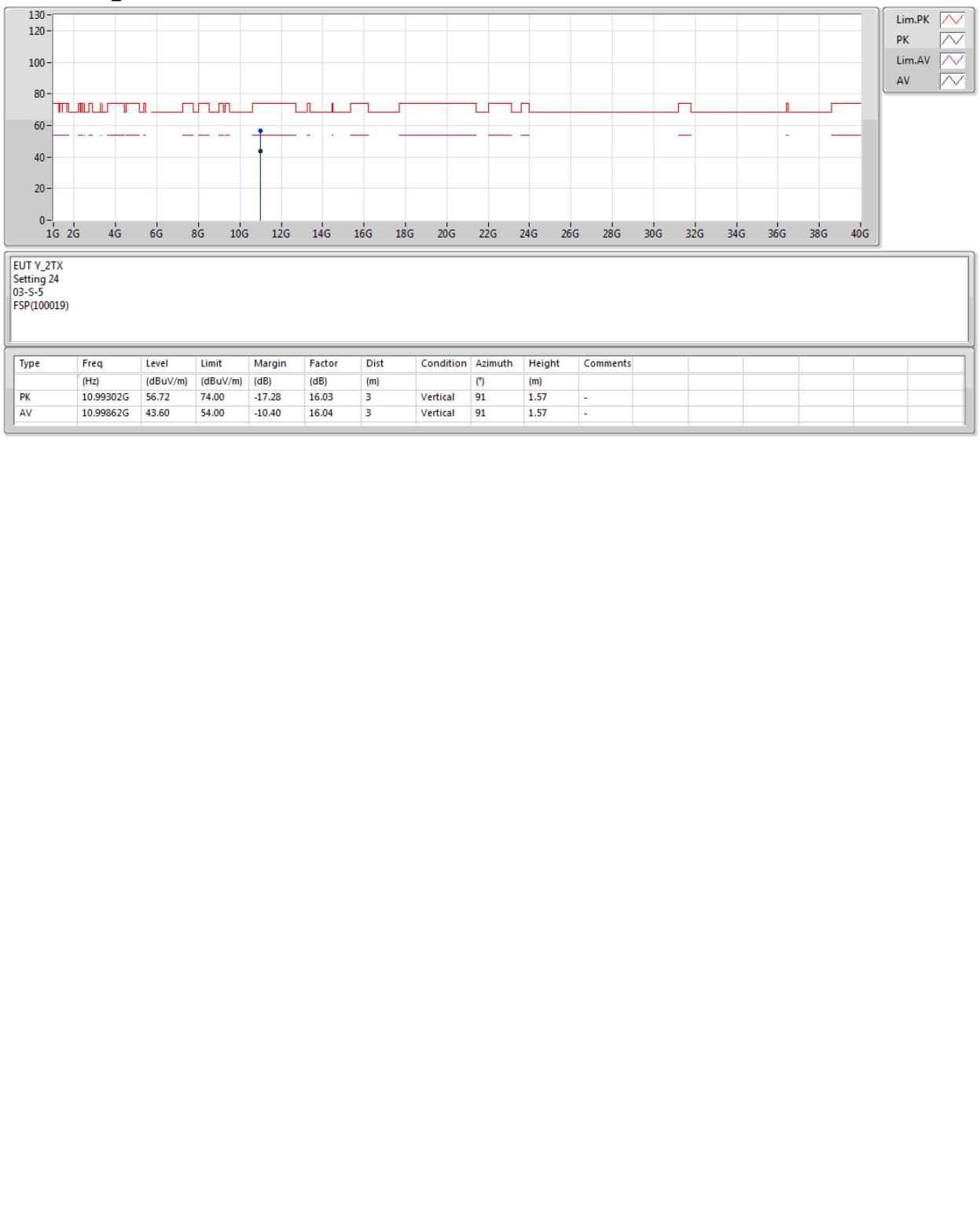
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5500MHz\_TX**


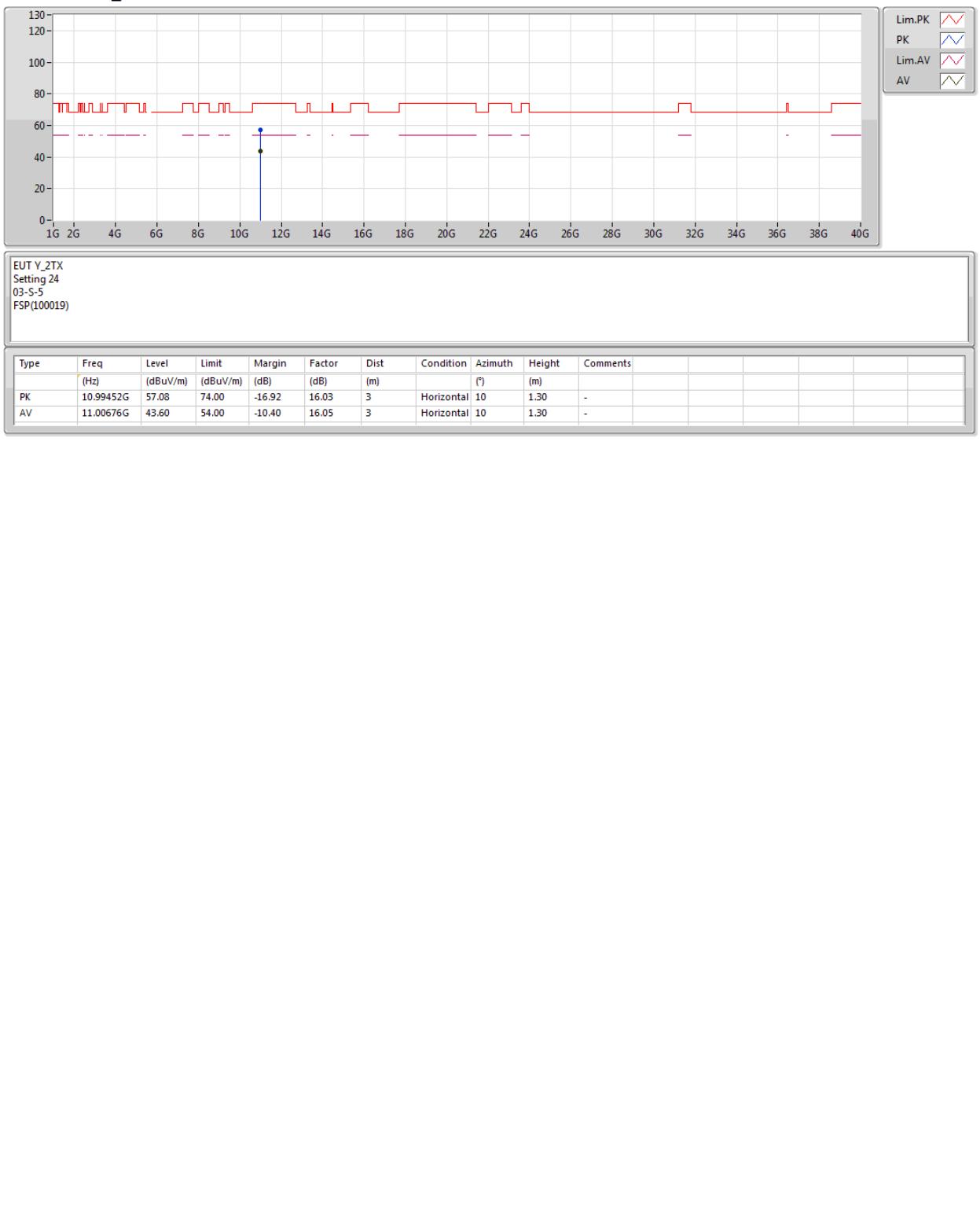
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5500MHz\_TX**


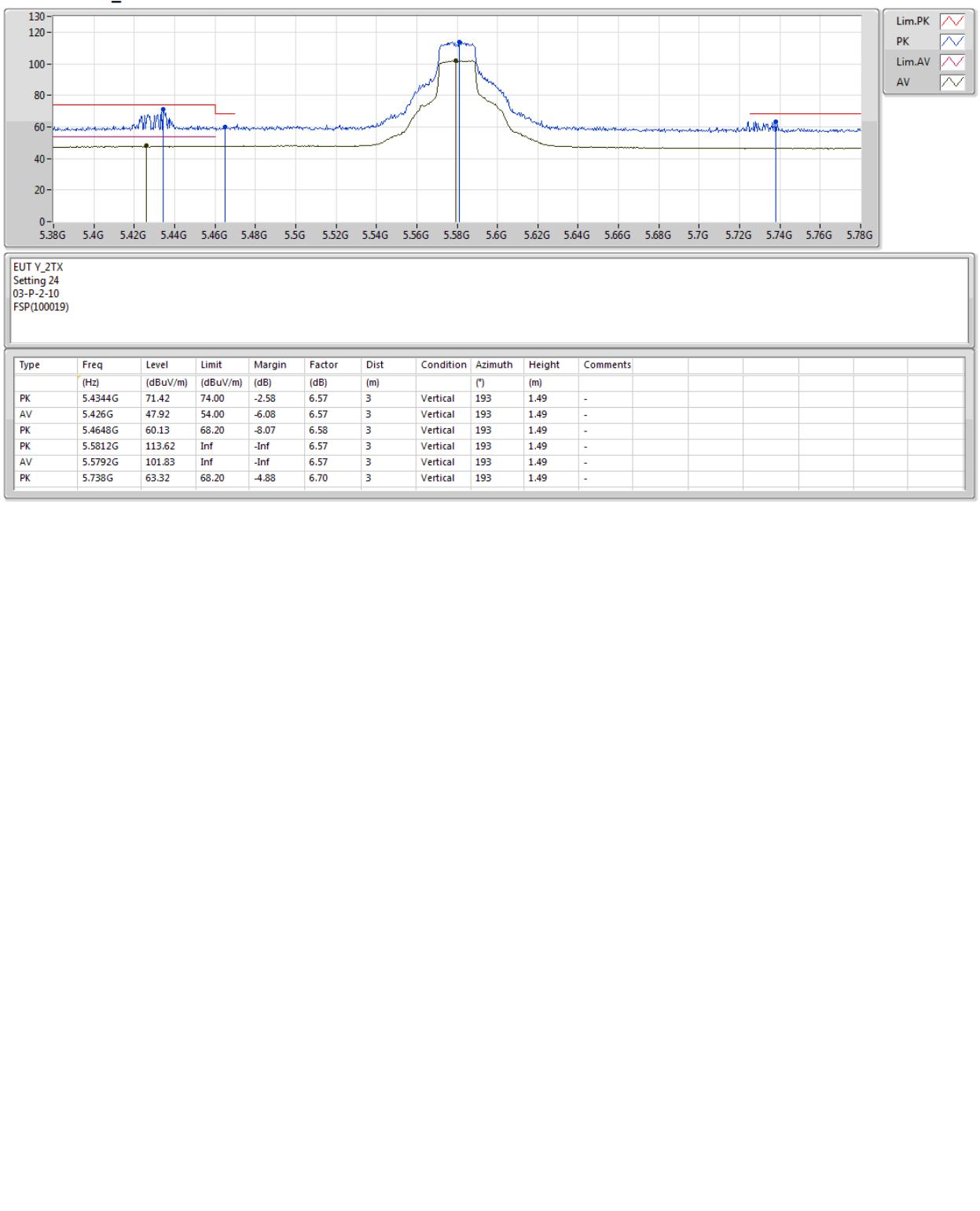
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5500MHz\_TX**


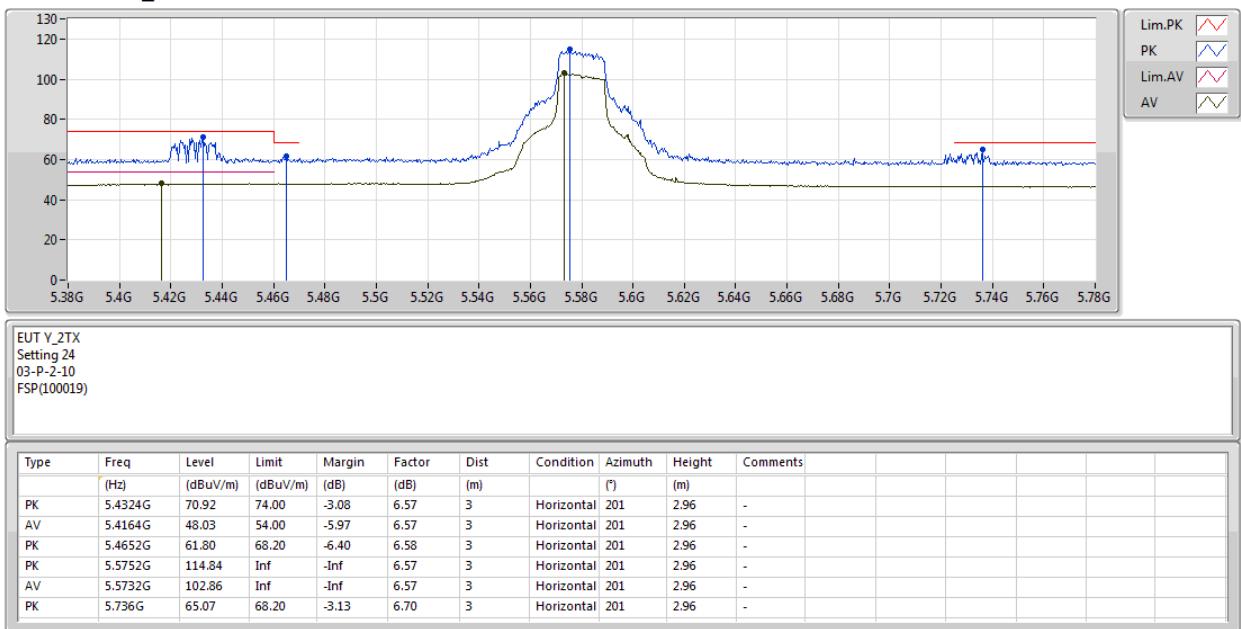
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5580MHz\_TX**


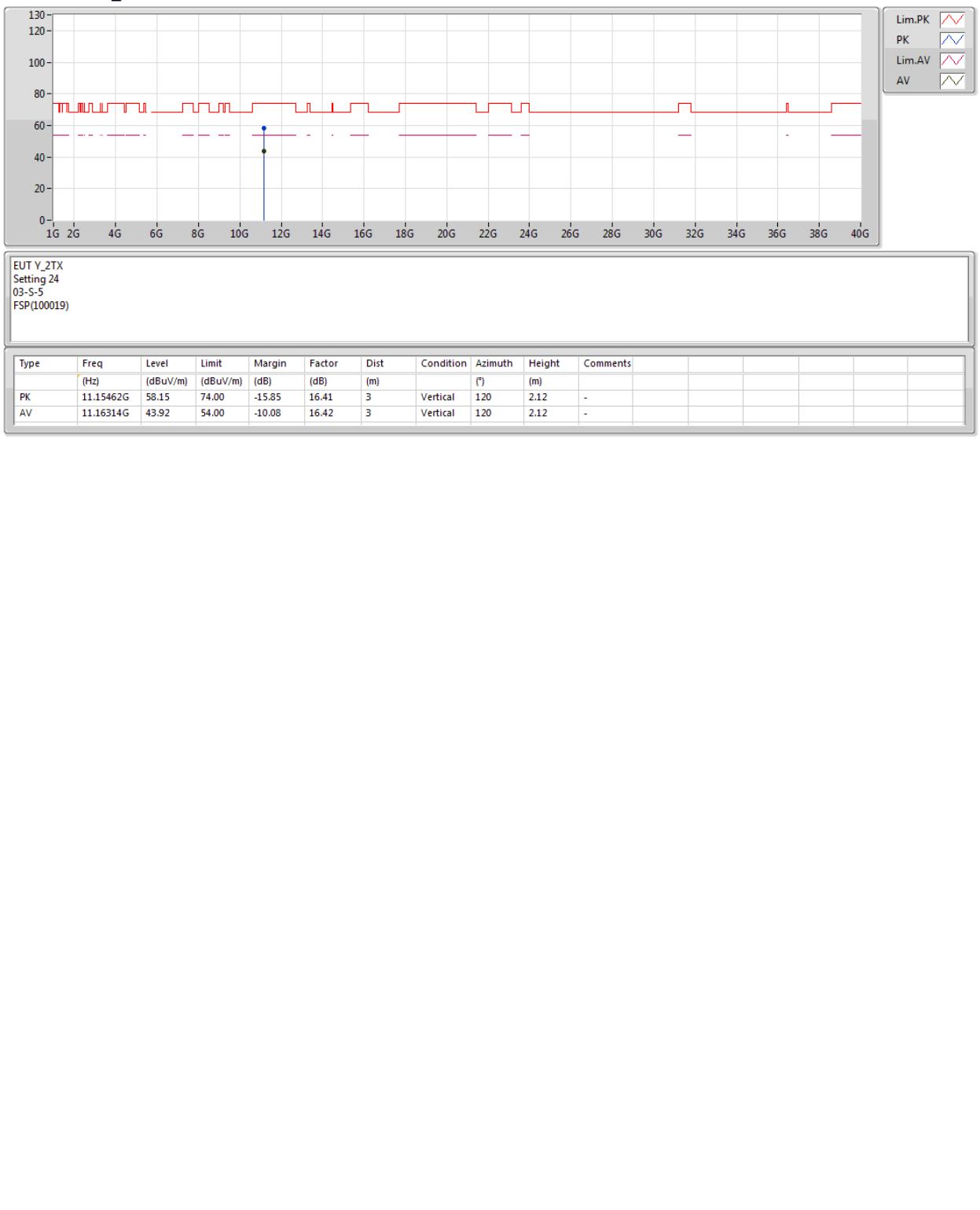
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5580MHz\_TX**


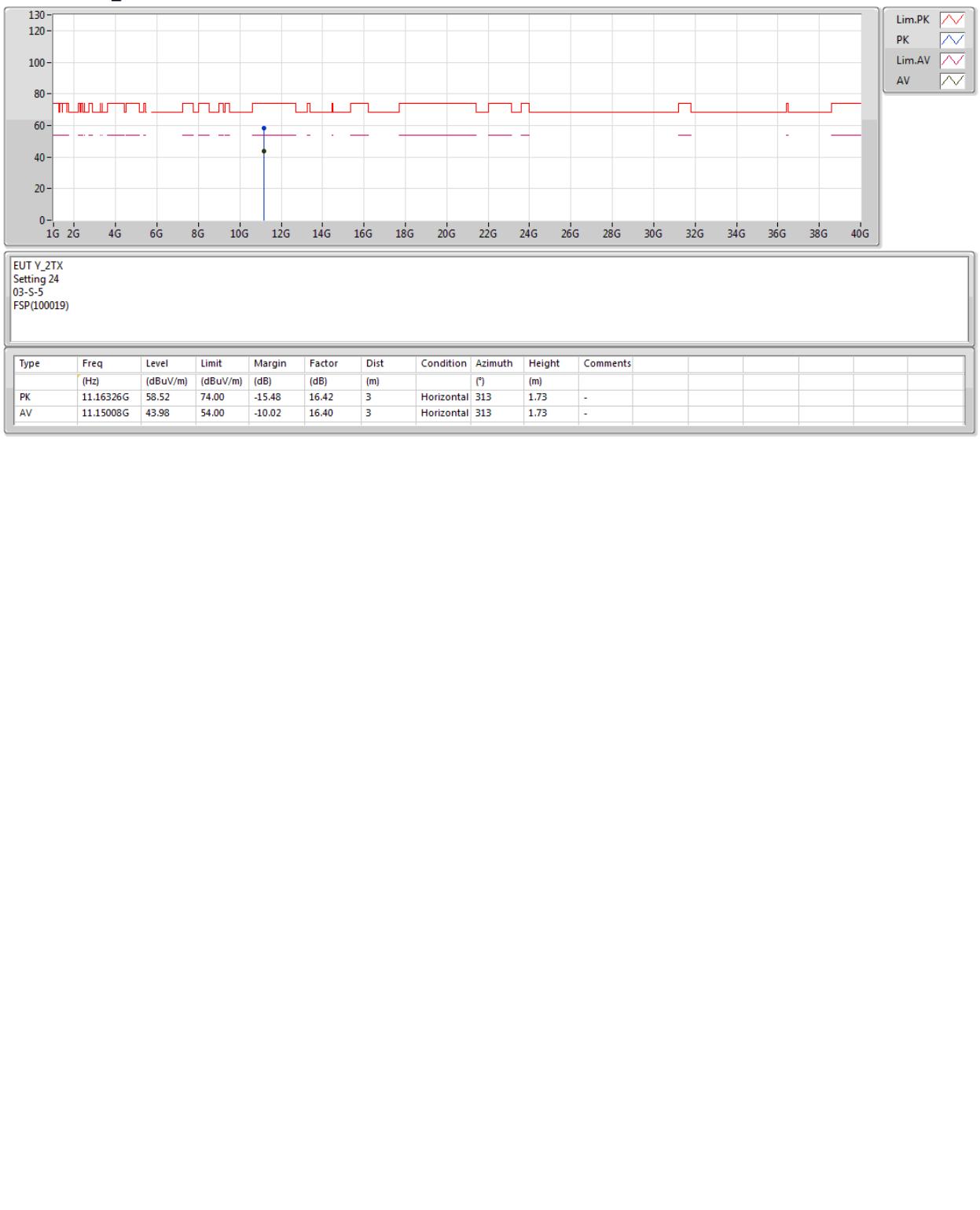
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5580MHz\_TX**


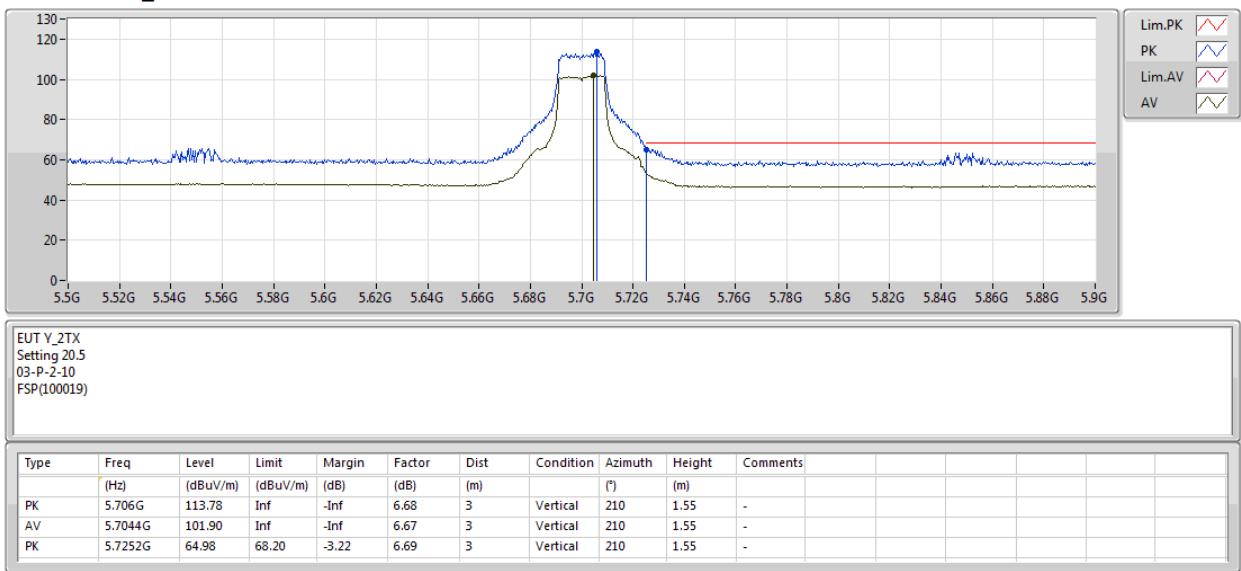
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5580MHz\_TX**


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

22/01/2019

**5700MHz\_TX**


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

22/01/2019

**5700MHz\_TX**

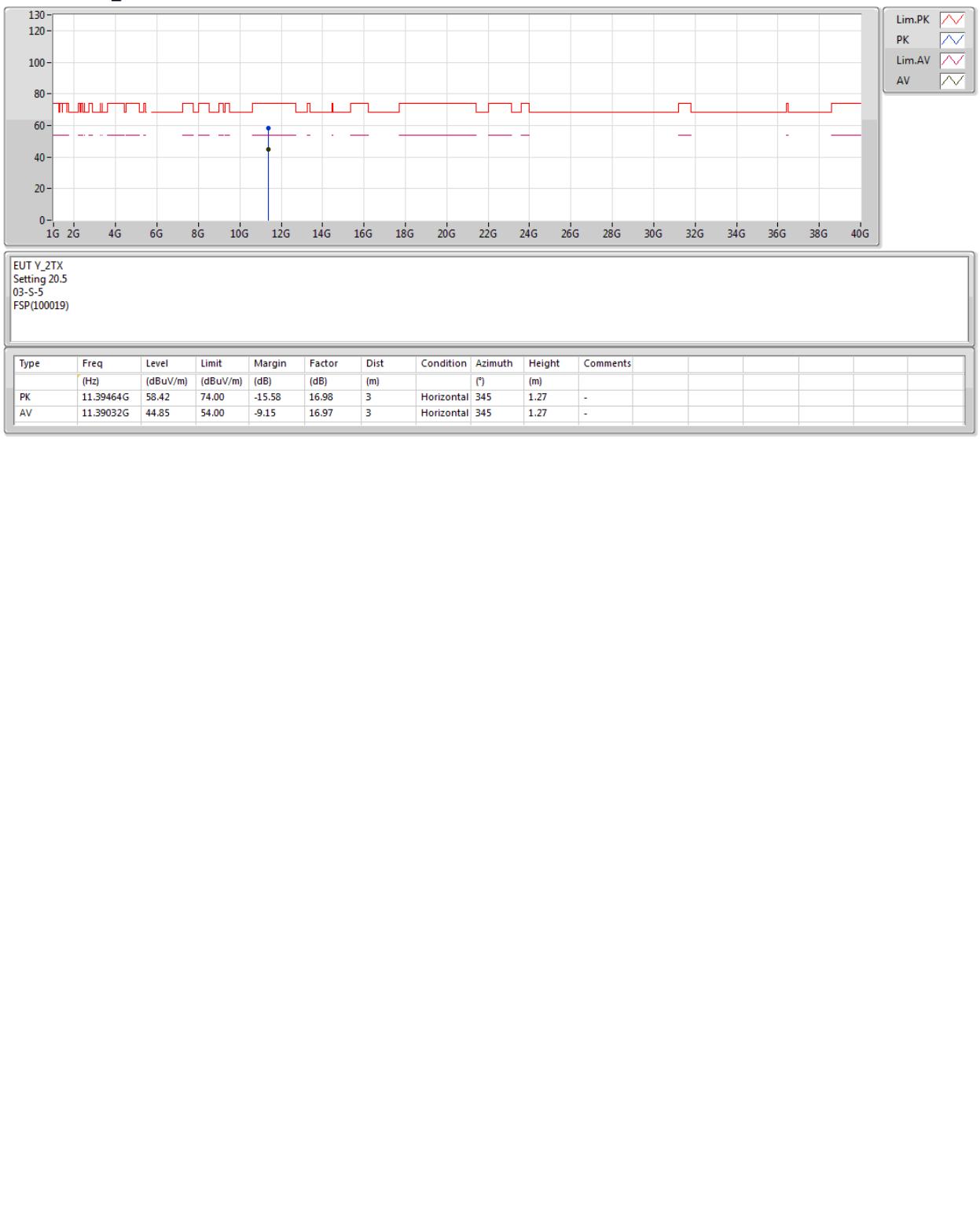

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5700MHz\_TX**

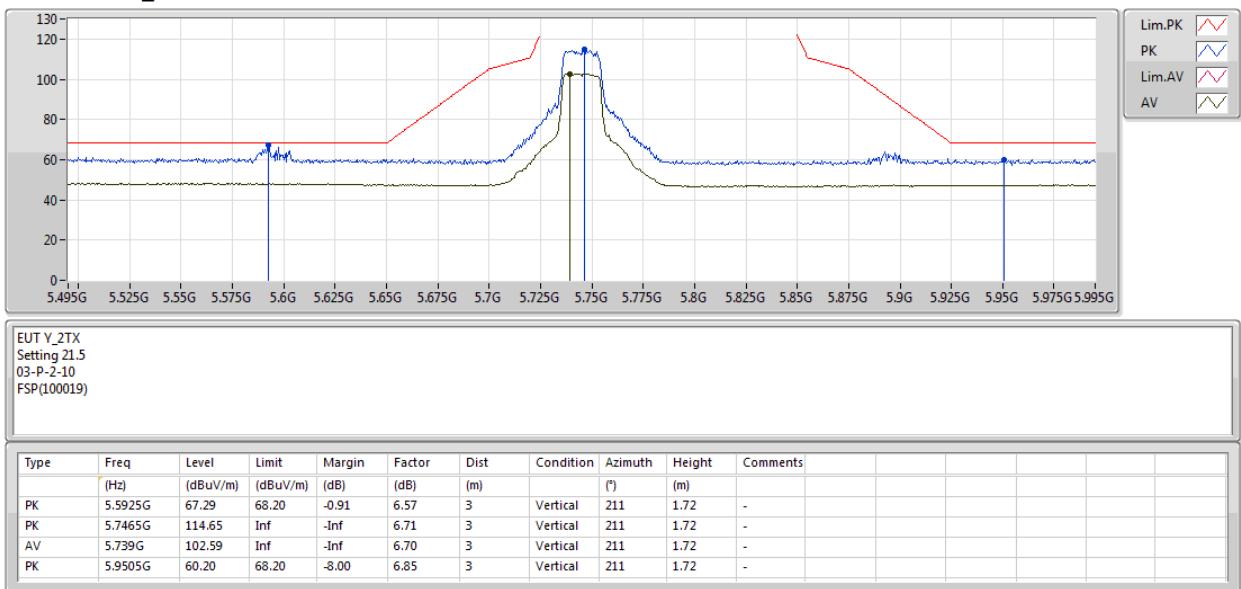

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5700MHz\_TX**


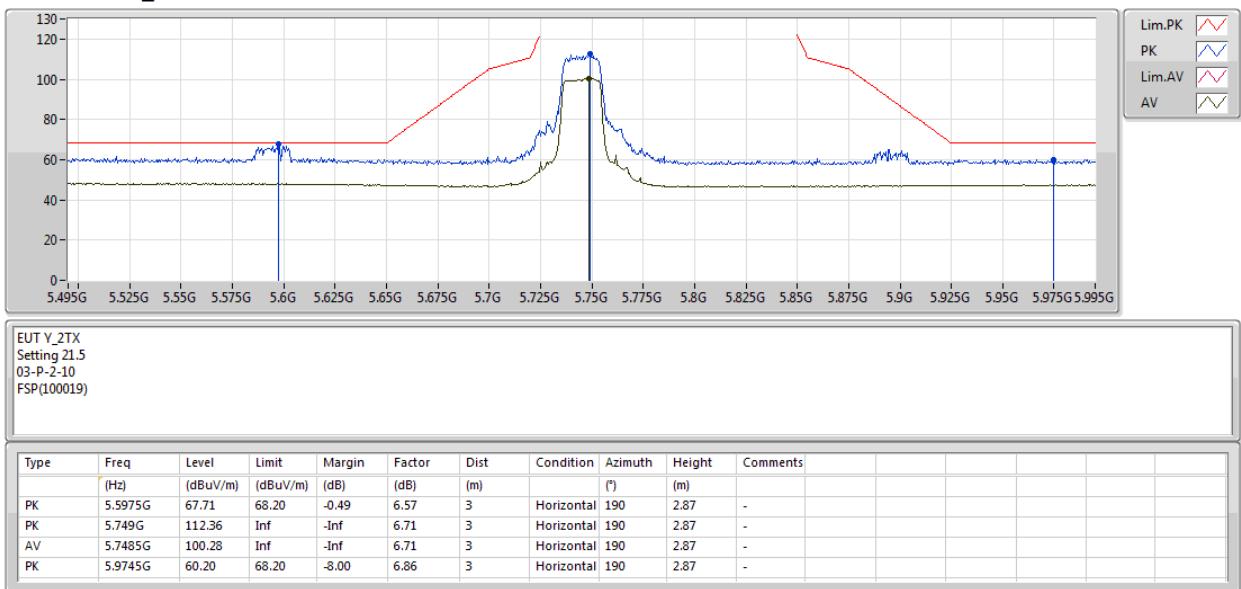
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5745MHz\_TX**


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

22/01/2019

**5745MHz\_TX**


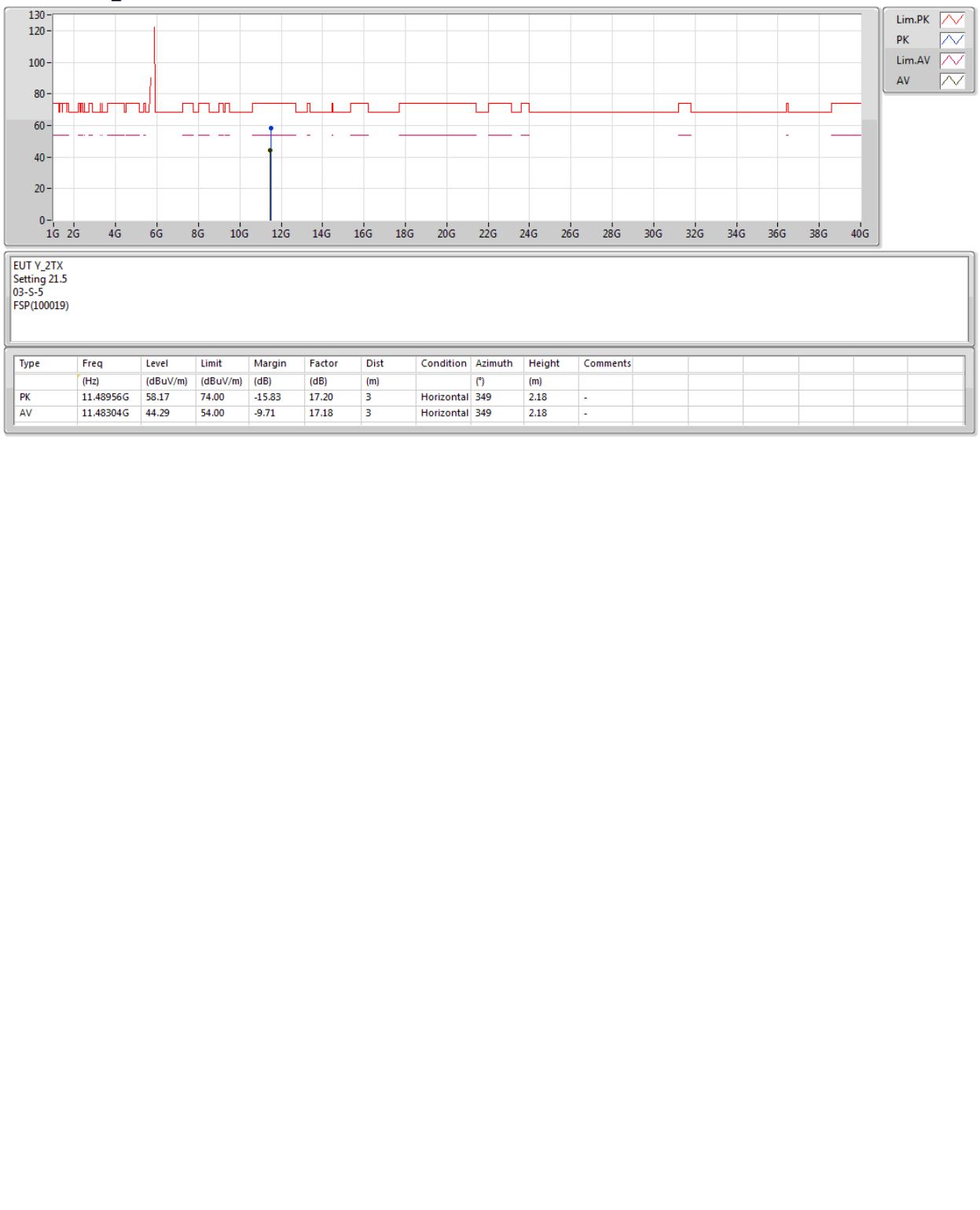
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5745MHz\_TX**

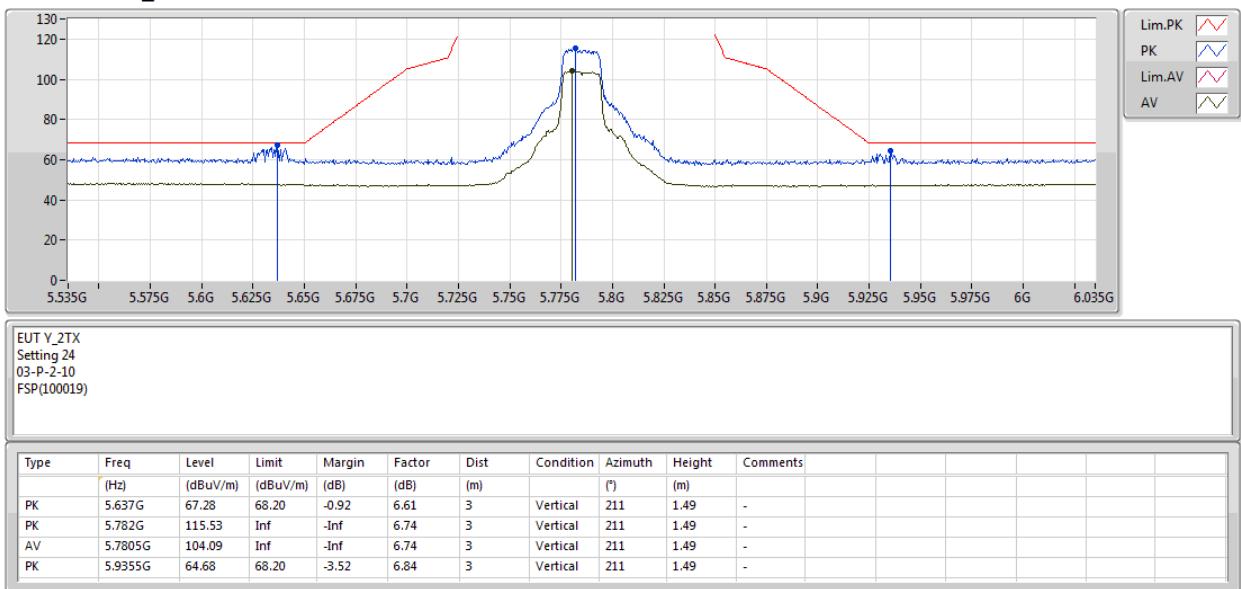

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5745MHz\_TX**


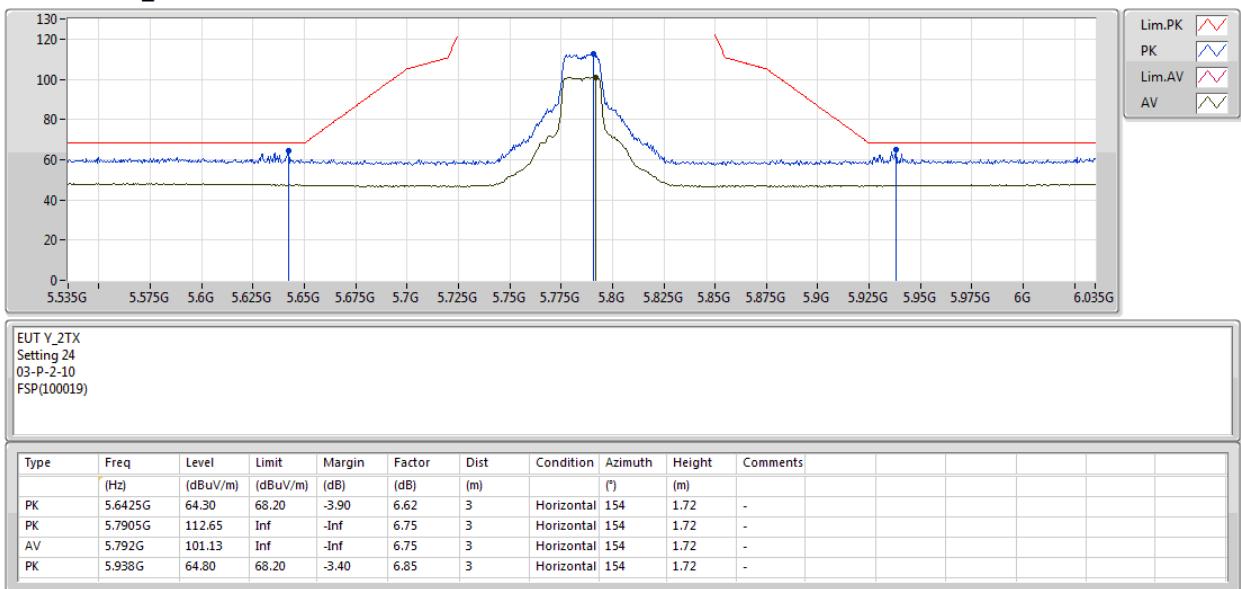
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5785MHz\_TX**


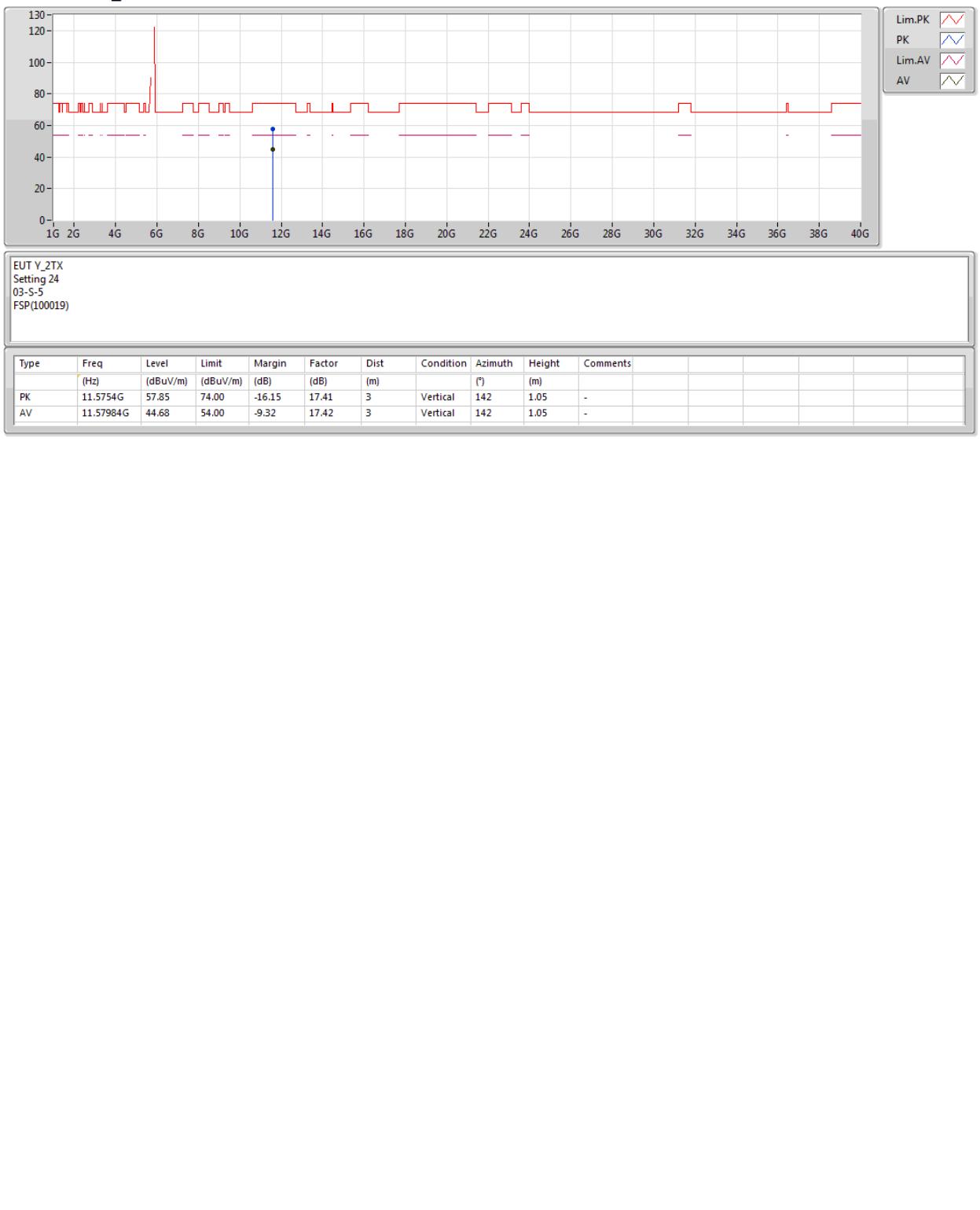
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5785MHz\_TX**


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

23/01/2019

**5785MHz\_TX**


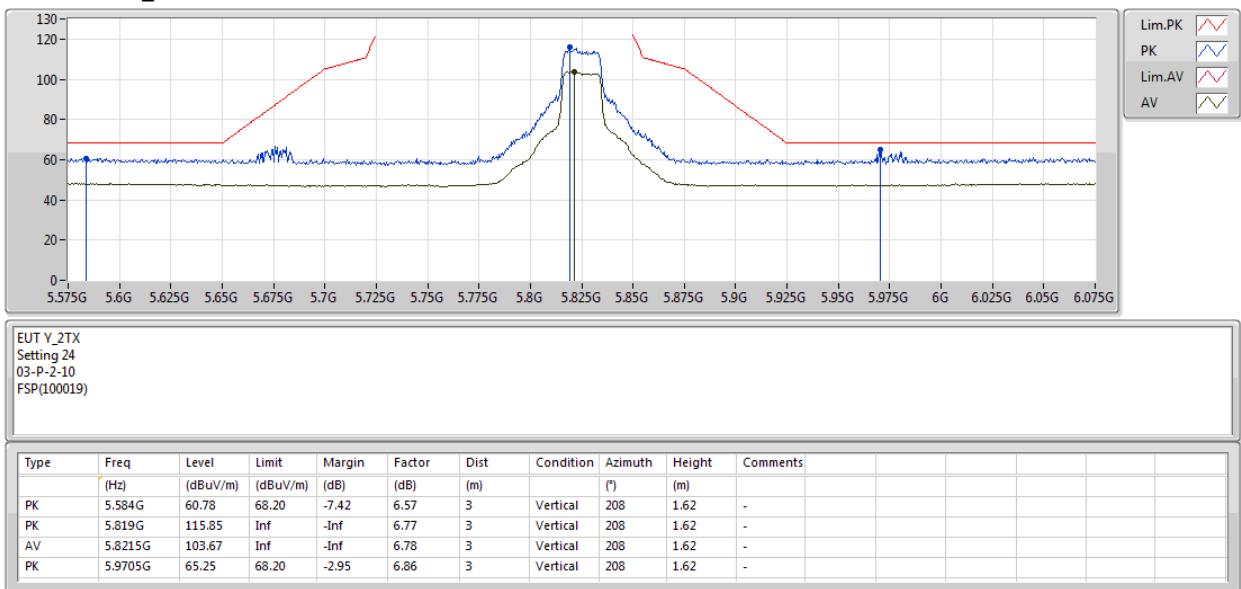
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5785MHz\_TX**

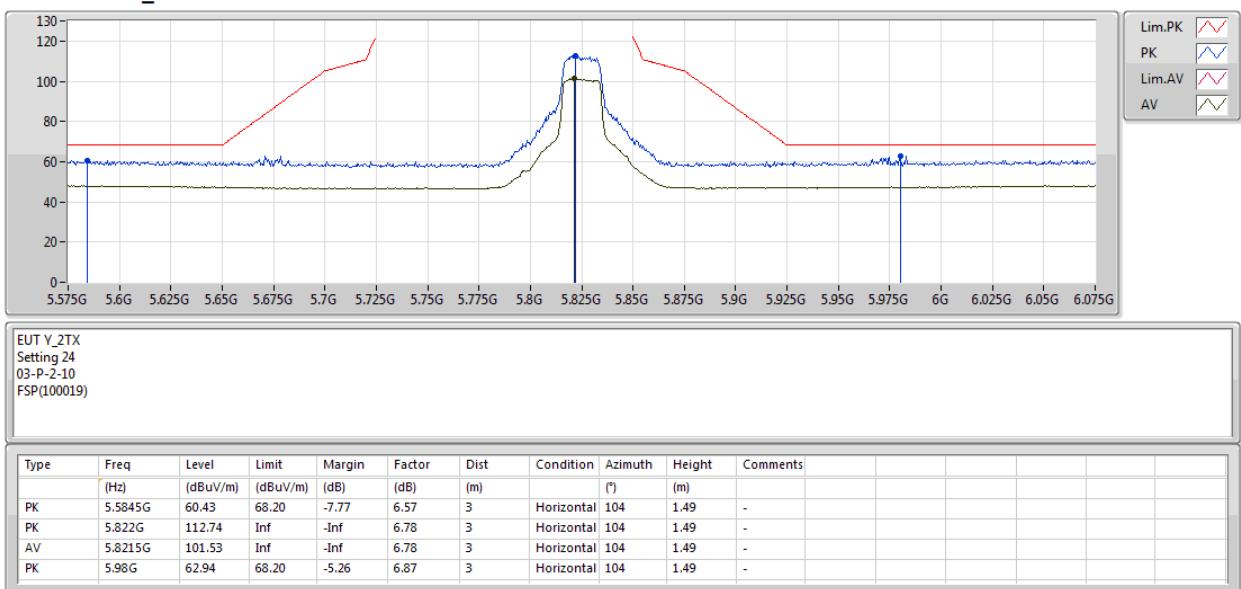

**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5825MHz\_TX**


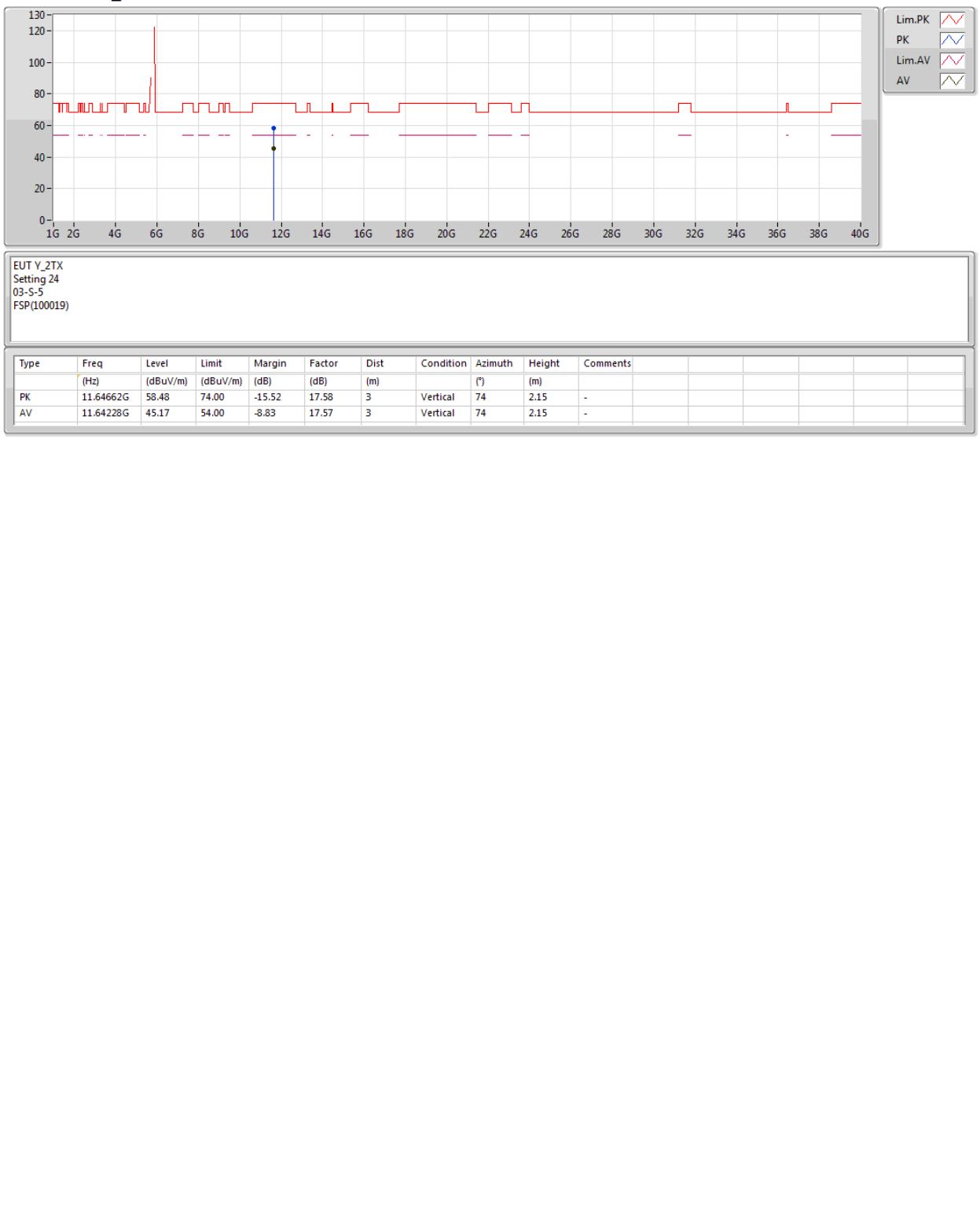
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

22/01/2019

**5825MHz\_TX**


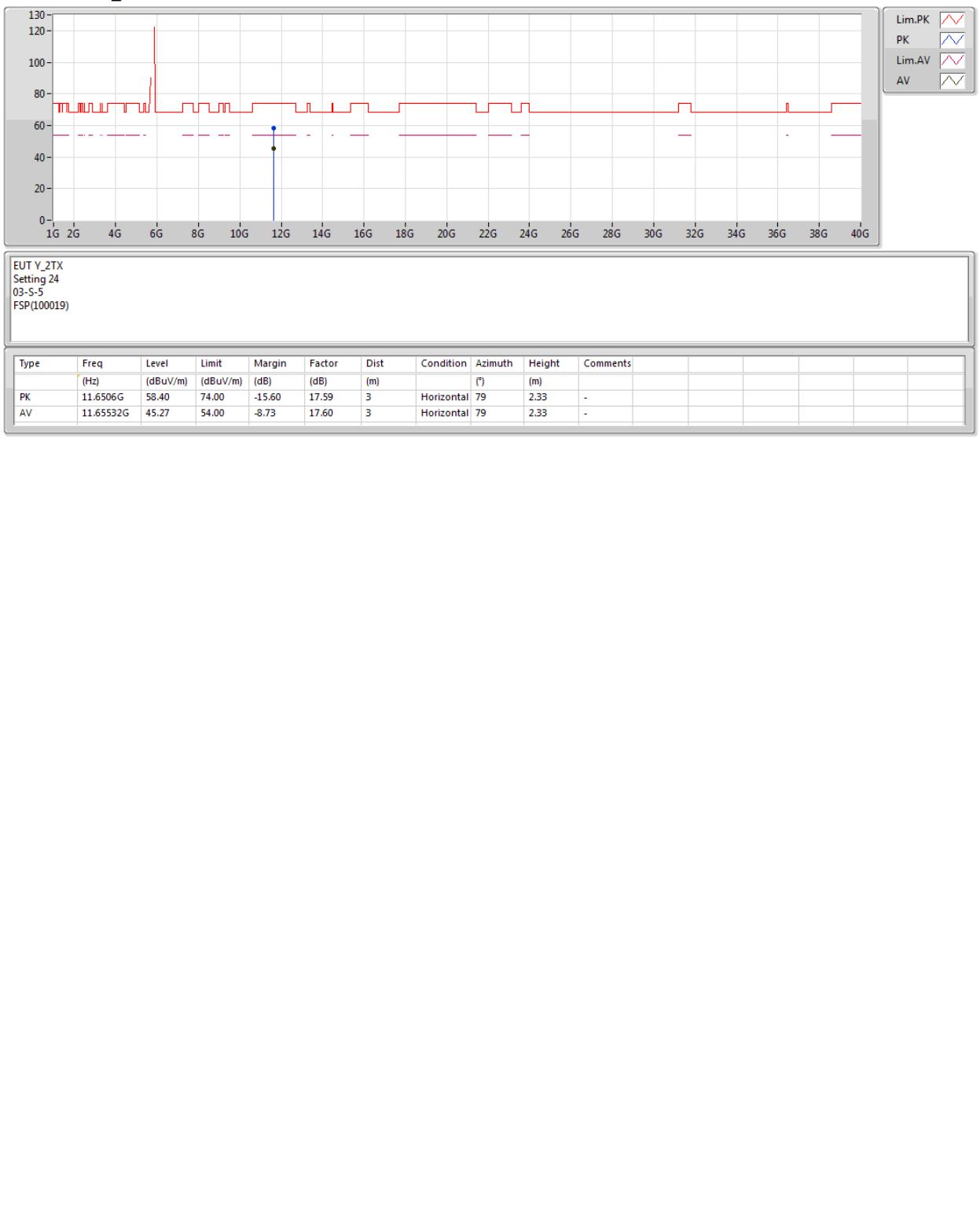
**802.11ac VHT20-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5825MHz\_TX**


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

23/01/2019

**5825MHz\_TX**


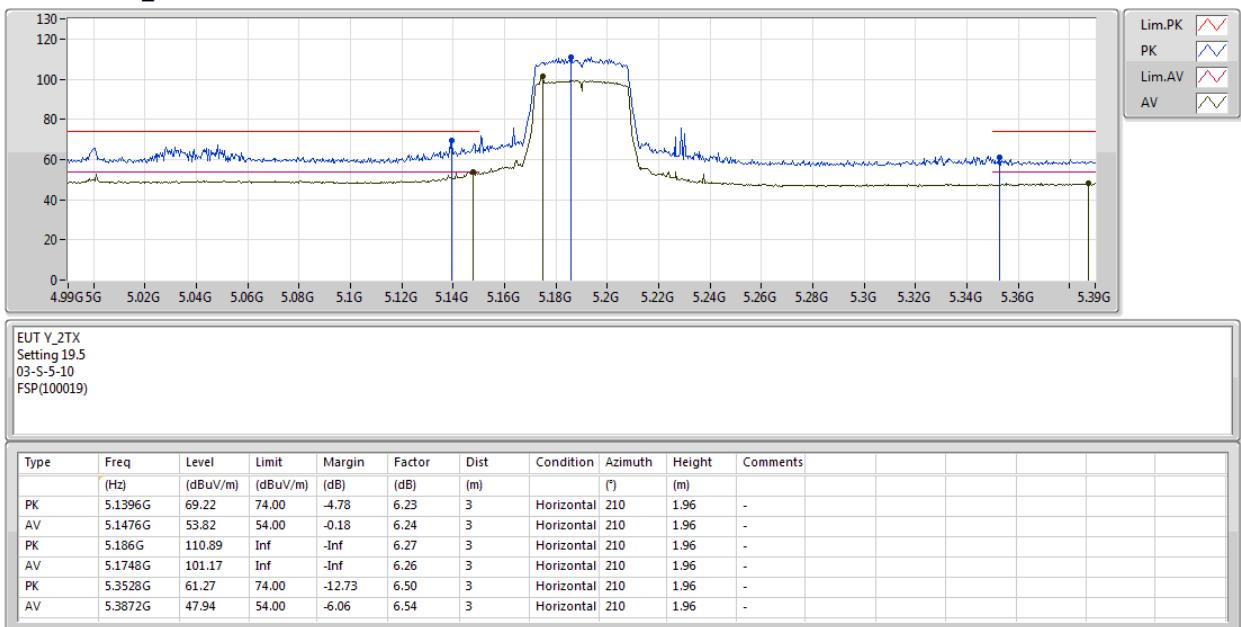
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5190MHz\_TX**

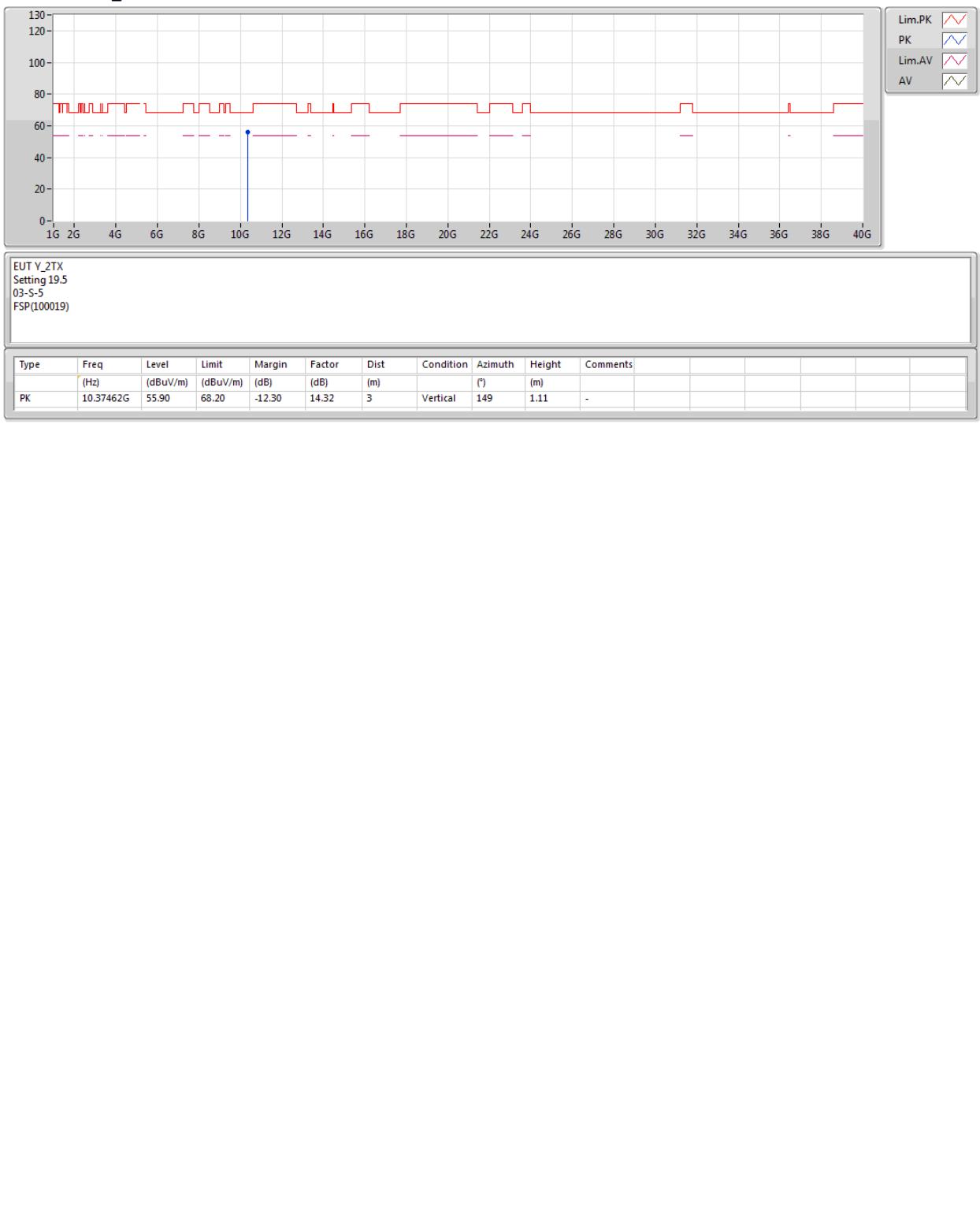

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5190MHz\_TX**


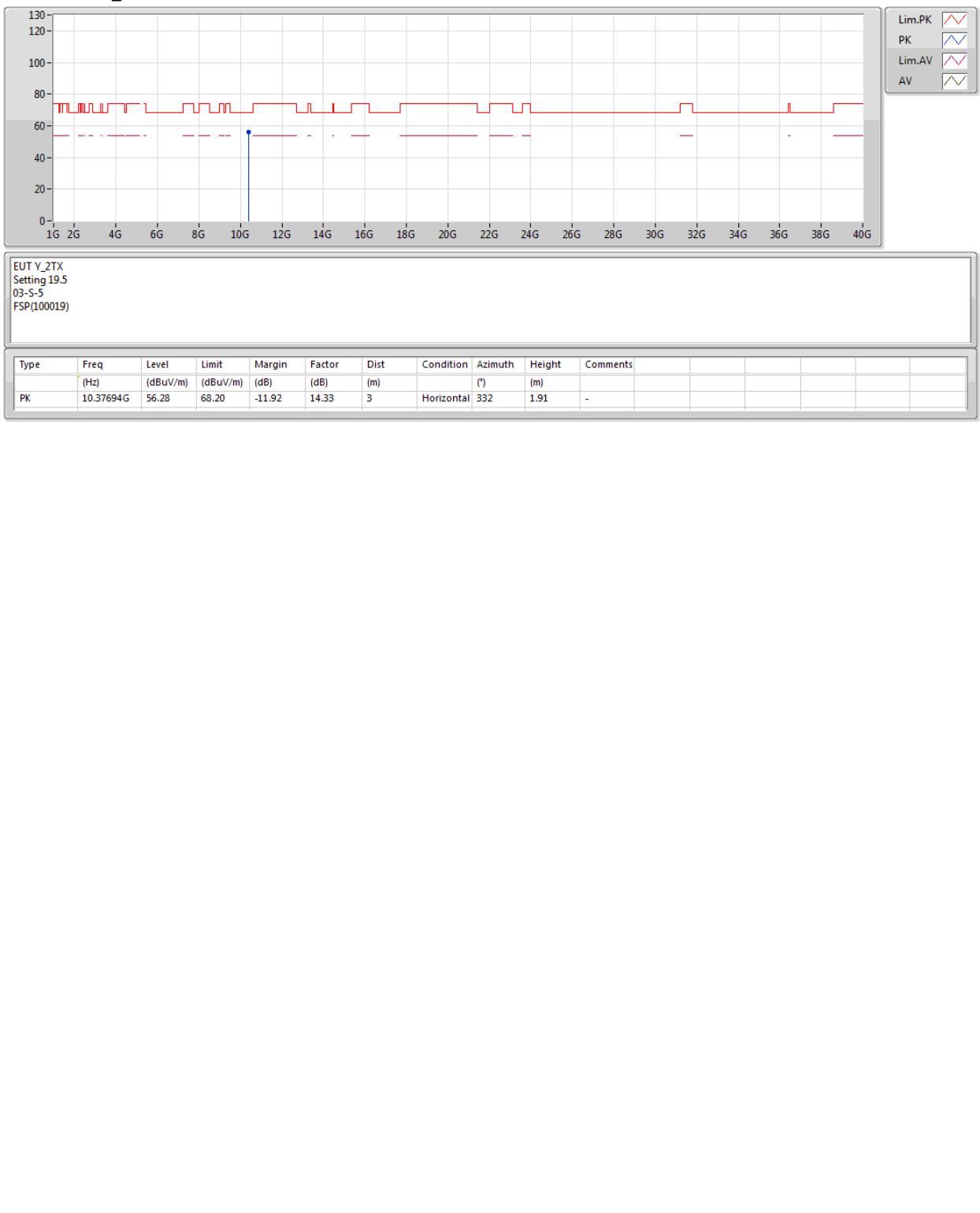
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5190MHz\_TX**


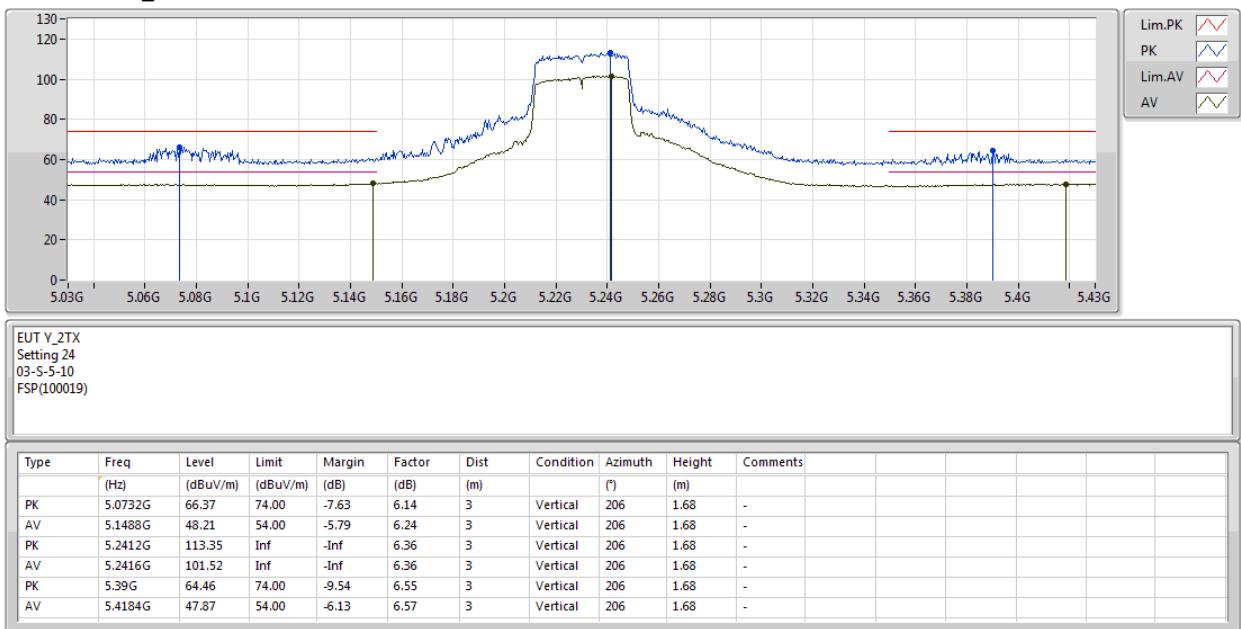
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5190MHz\_TX**


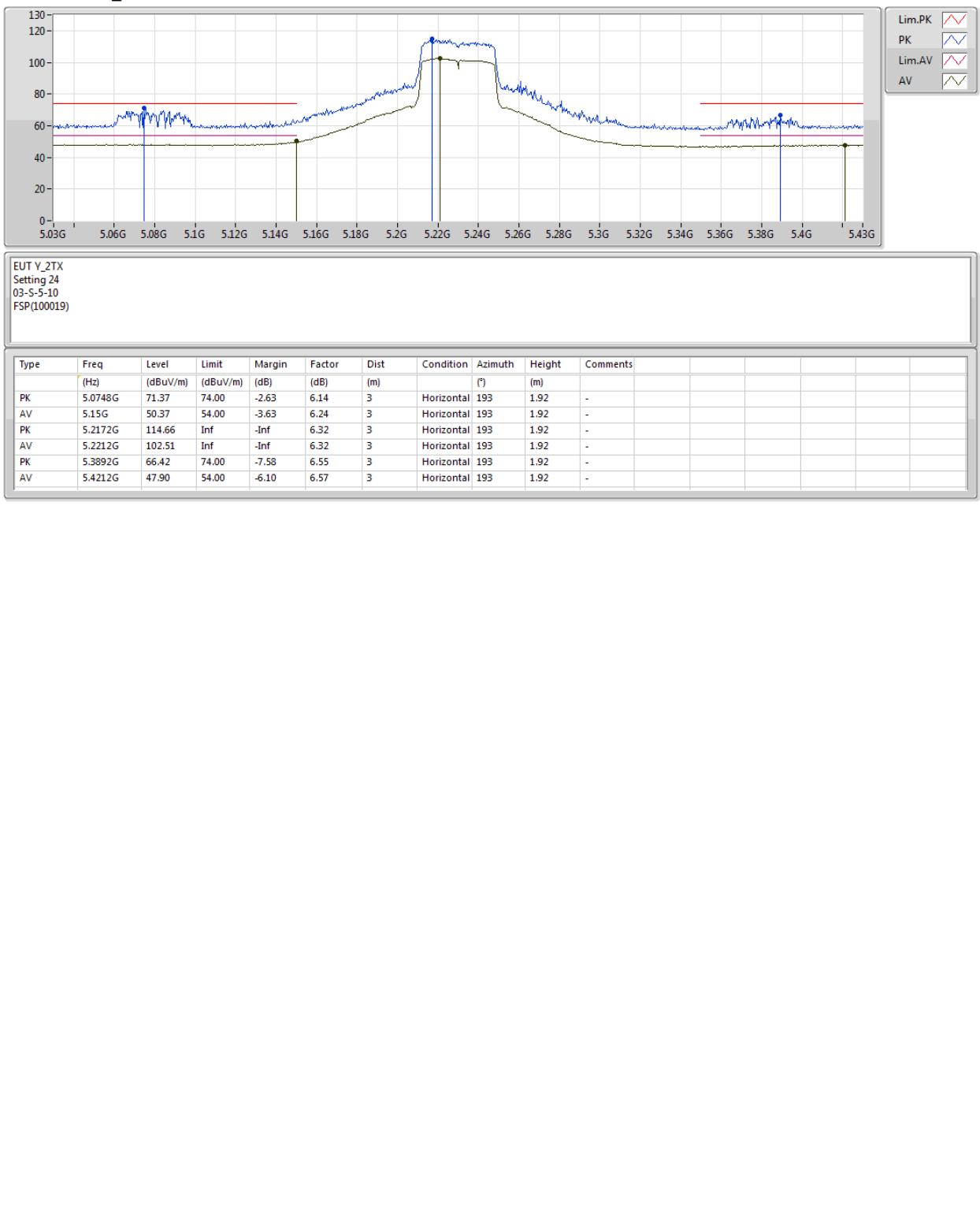
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5230MHz\_TX**


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

23/01/2019

**5230MHz\_TX**


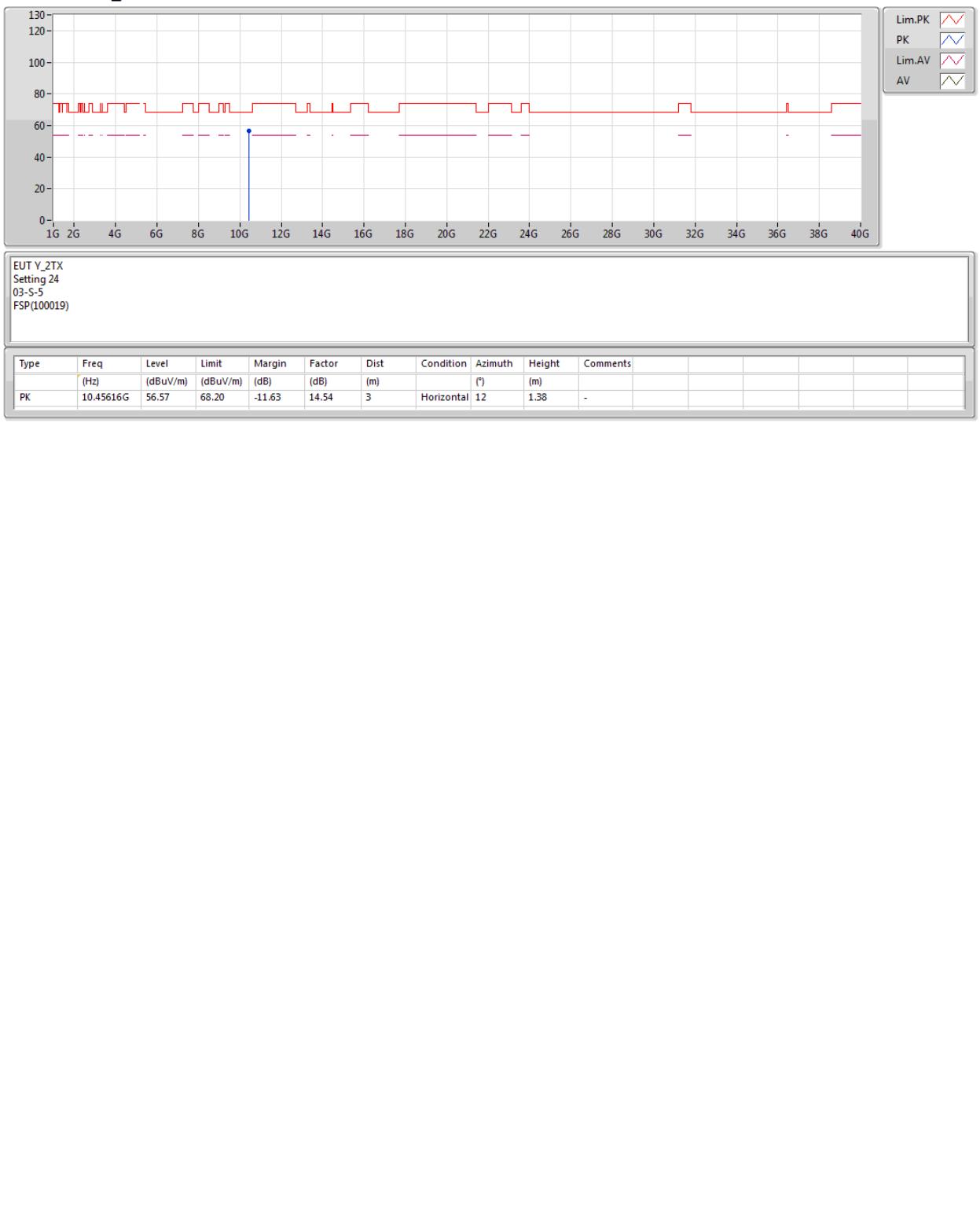
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5230MHz\_TX**

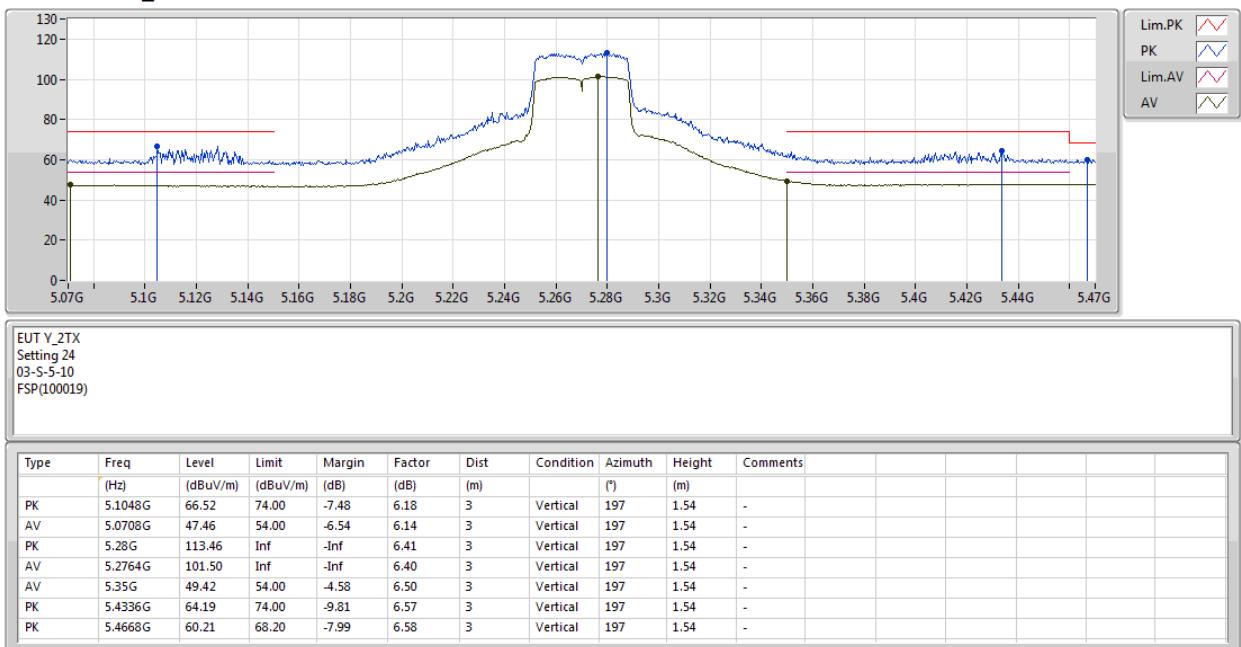

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5230MHz\_TX**


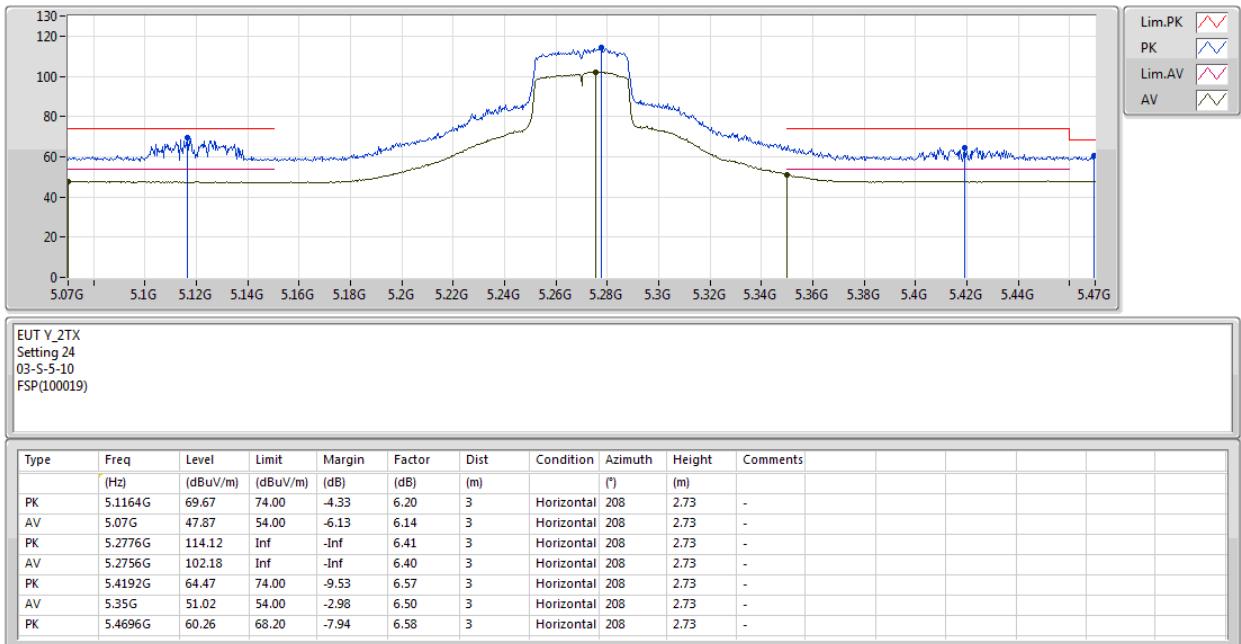
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5270MHz\_TX**


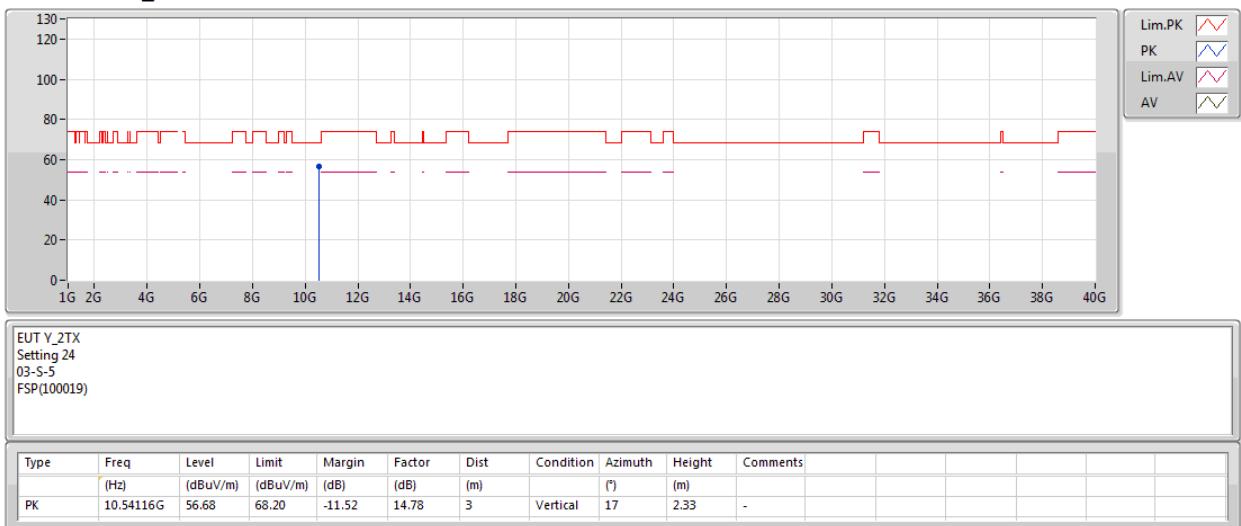
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5270MHz\_TX**


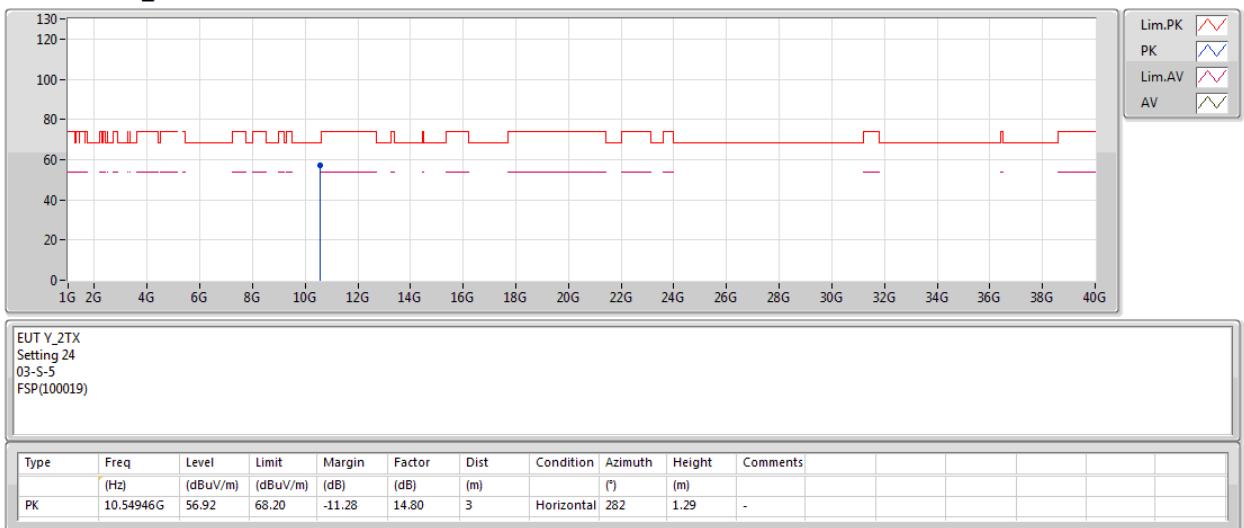
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5270MHz\_TX**


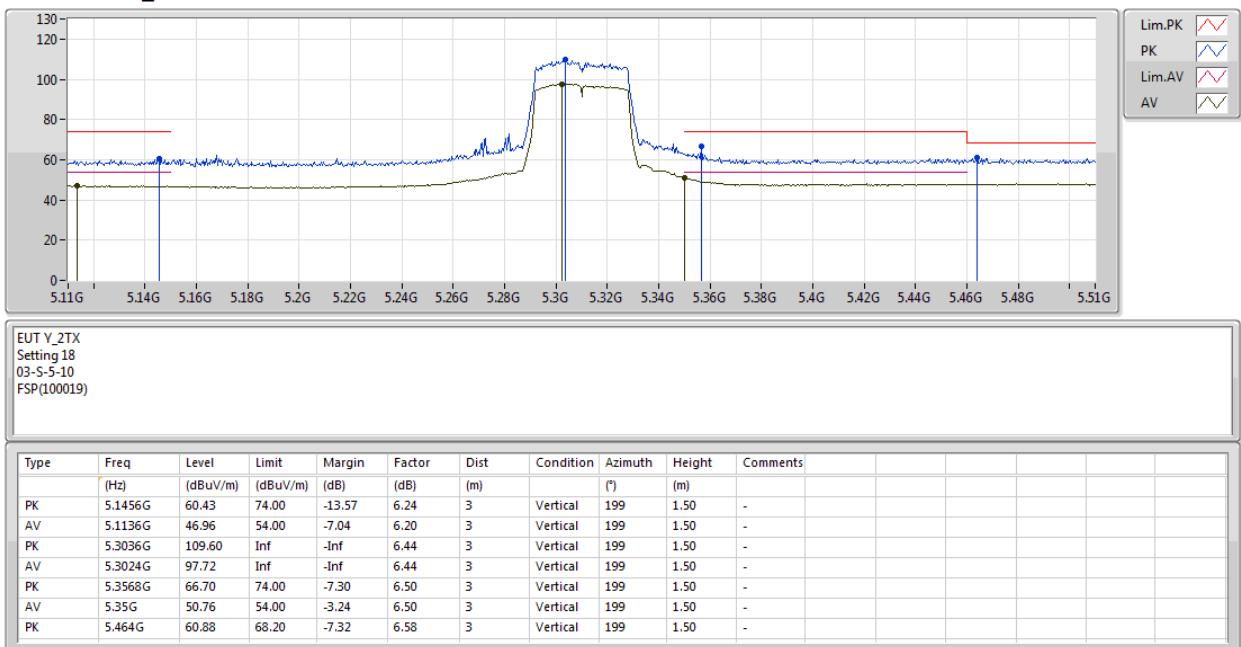
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5270MHz\_TX**


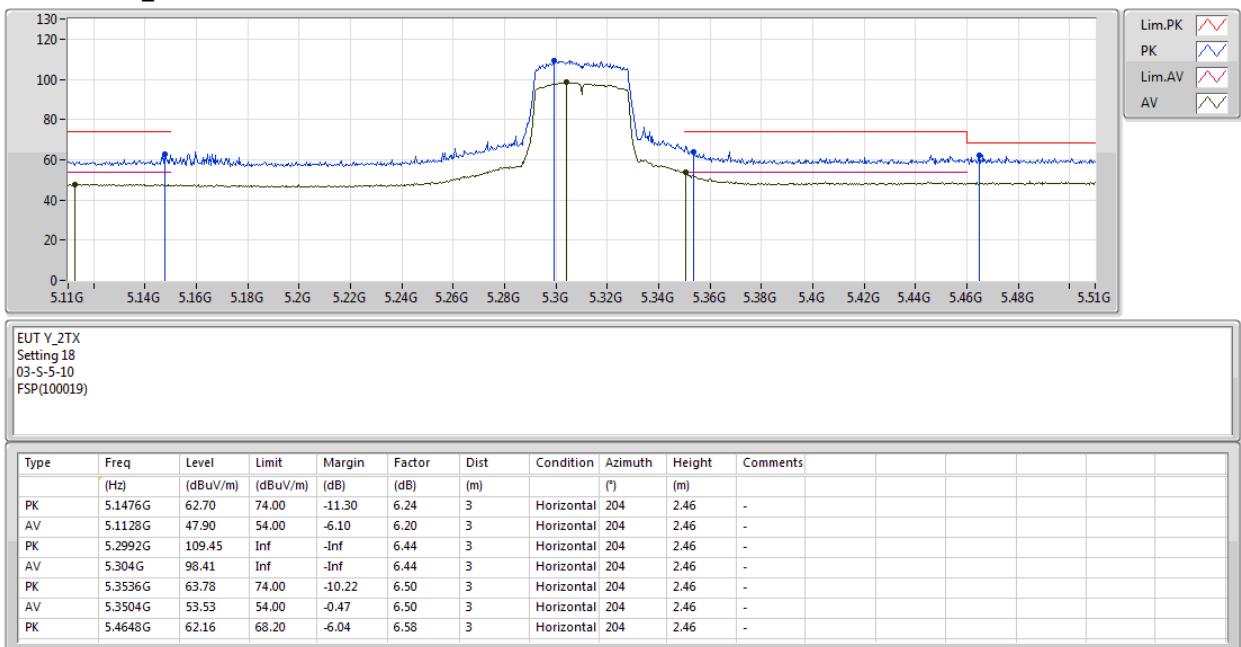
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5310MHz\_TX**


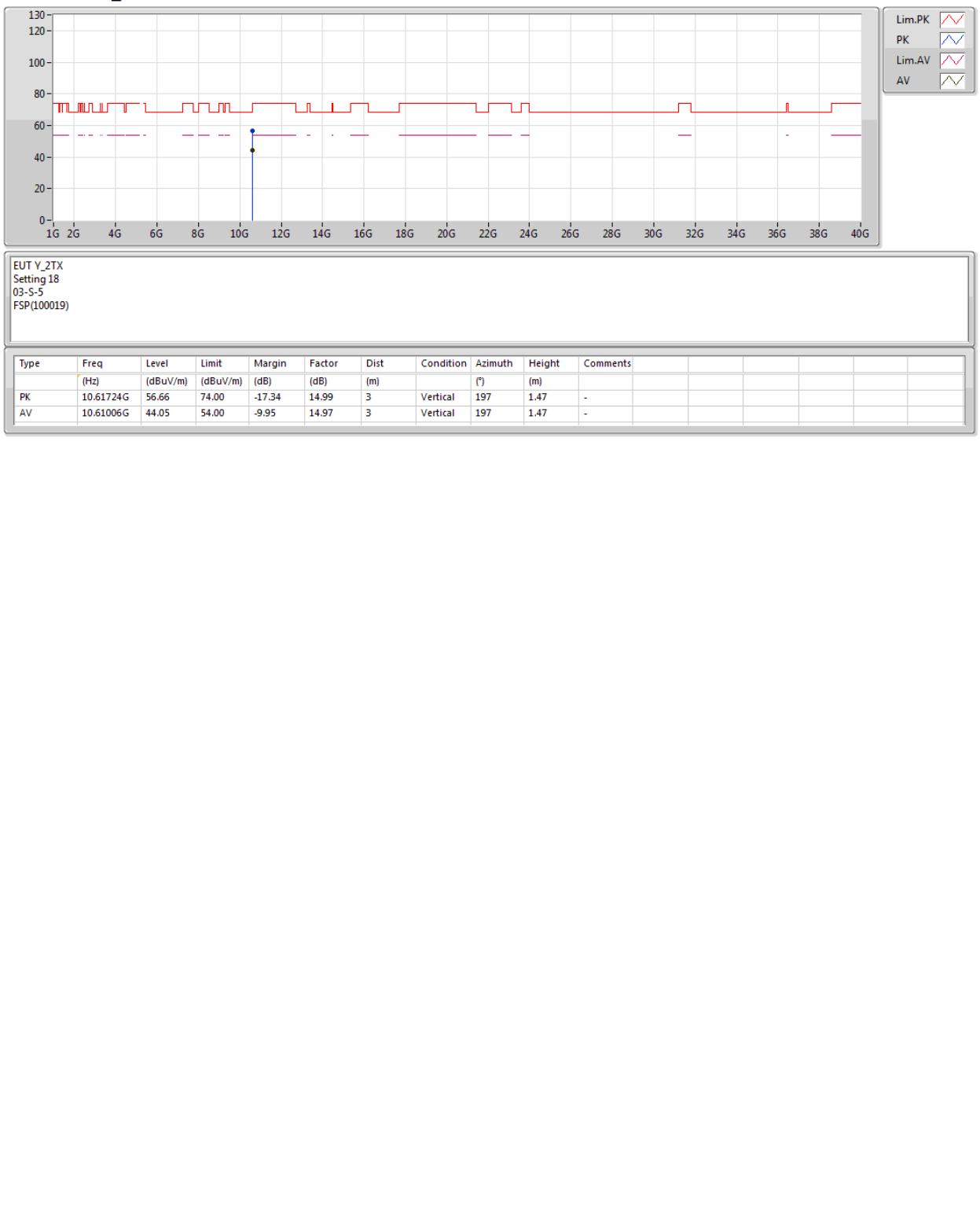
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5310MHz\_TX**


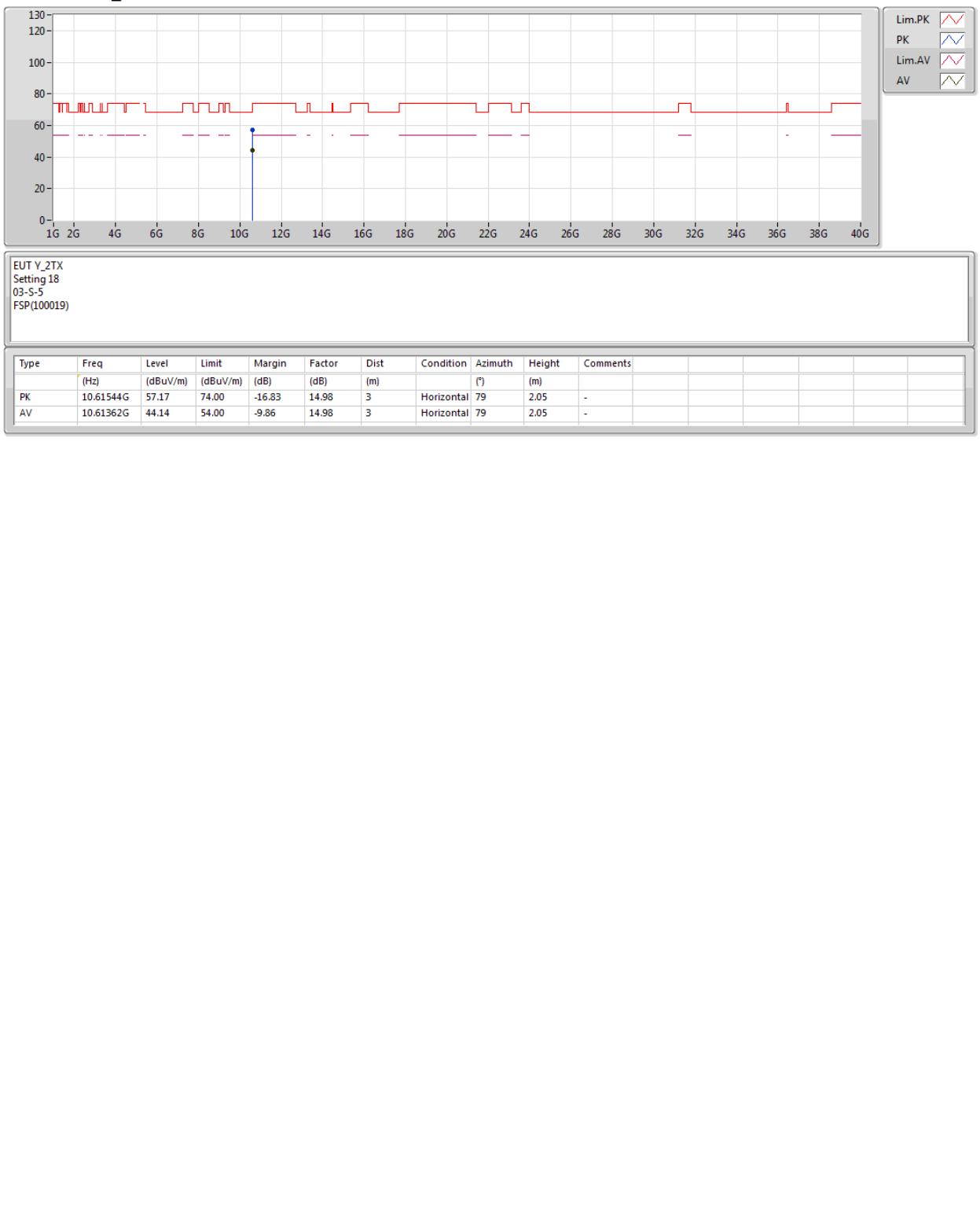
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5310MHz\_TX**


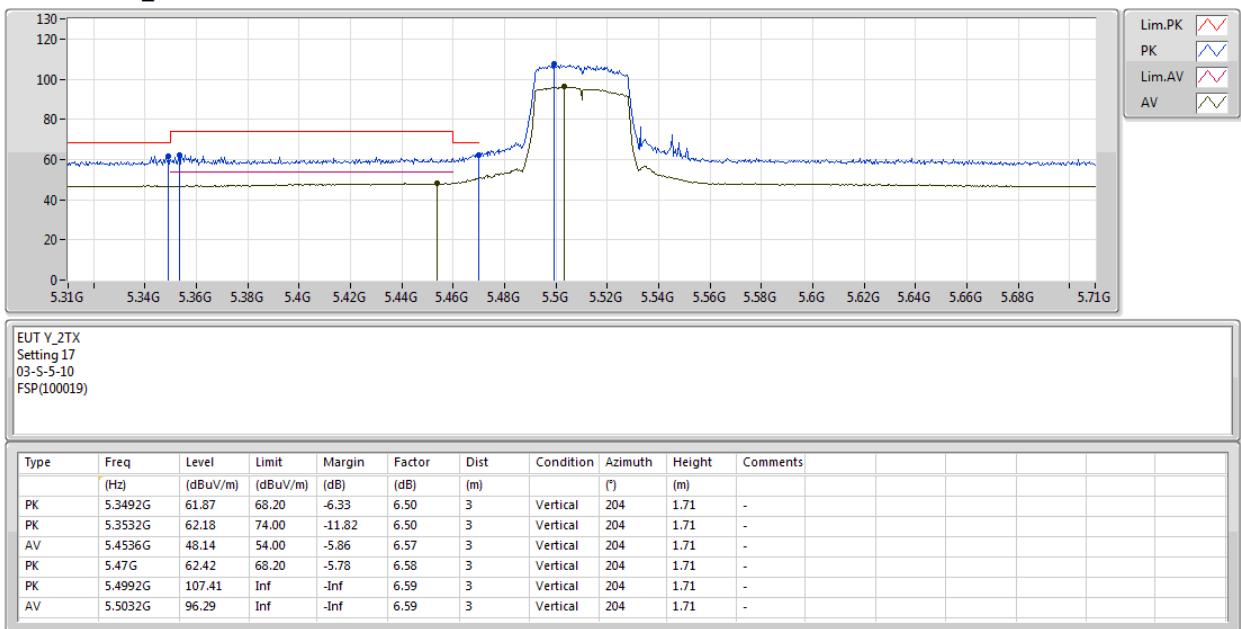
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5310MHz\_TX**


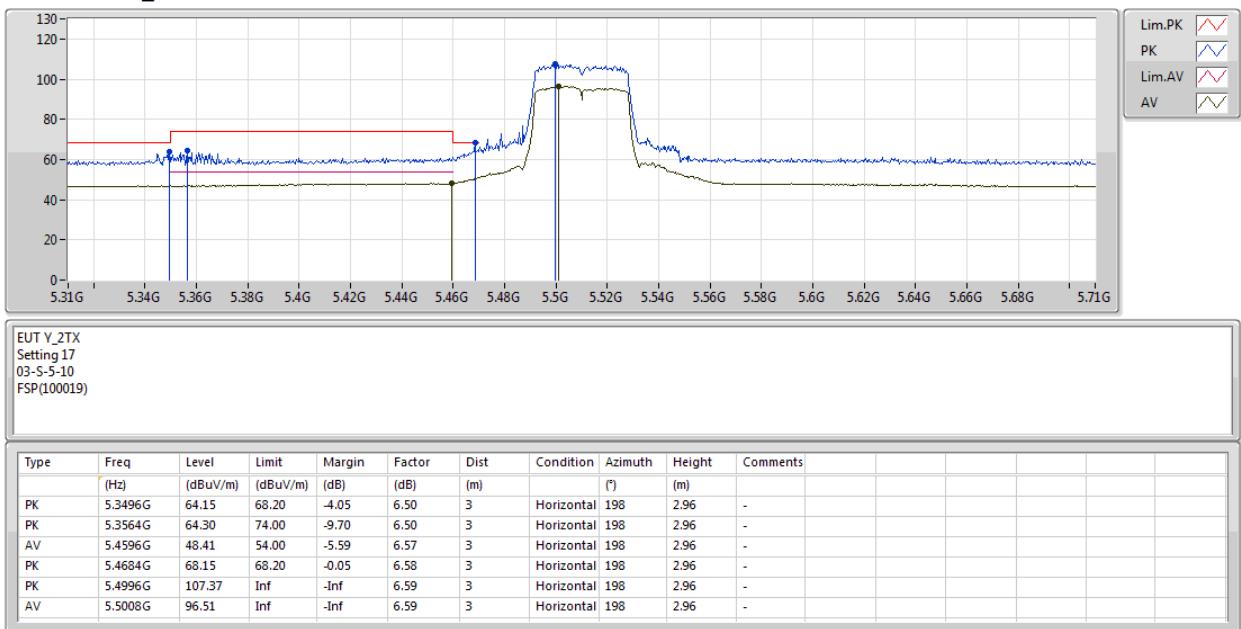
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5510MHz\_TX**


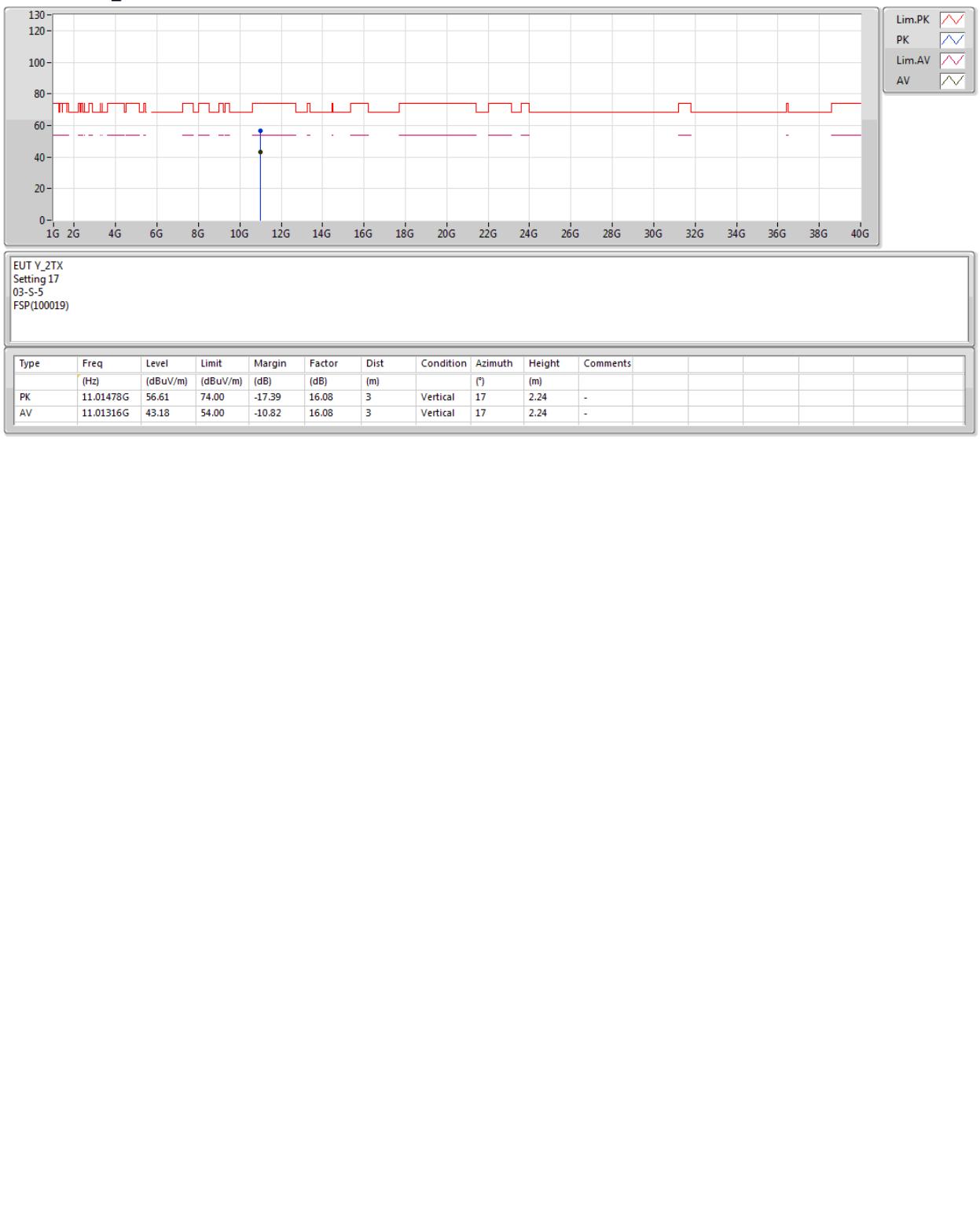
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5510MHz\_TX**


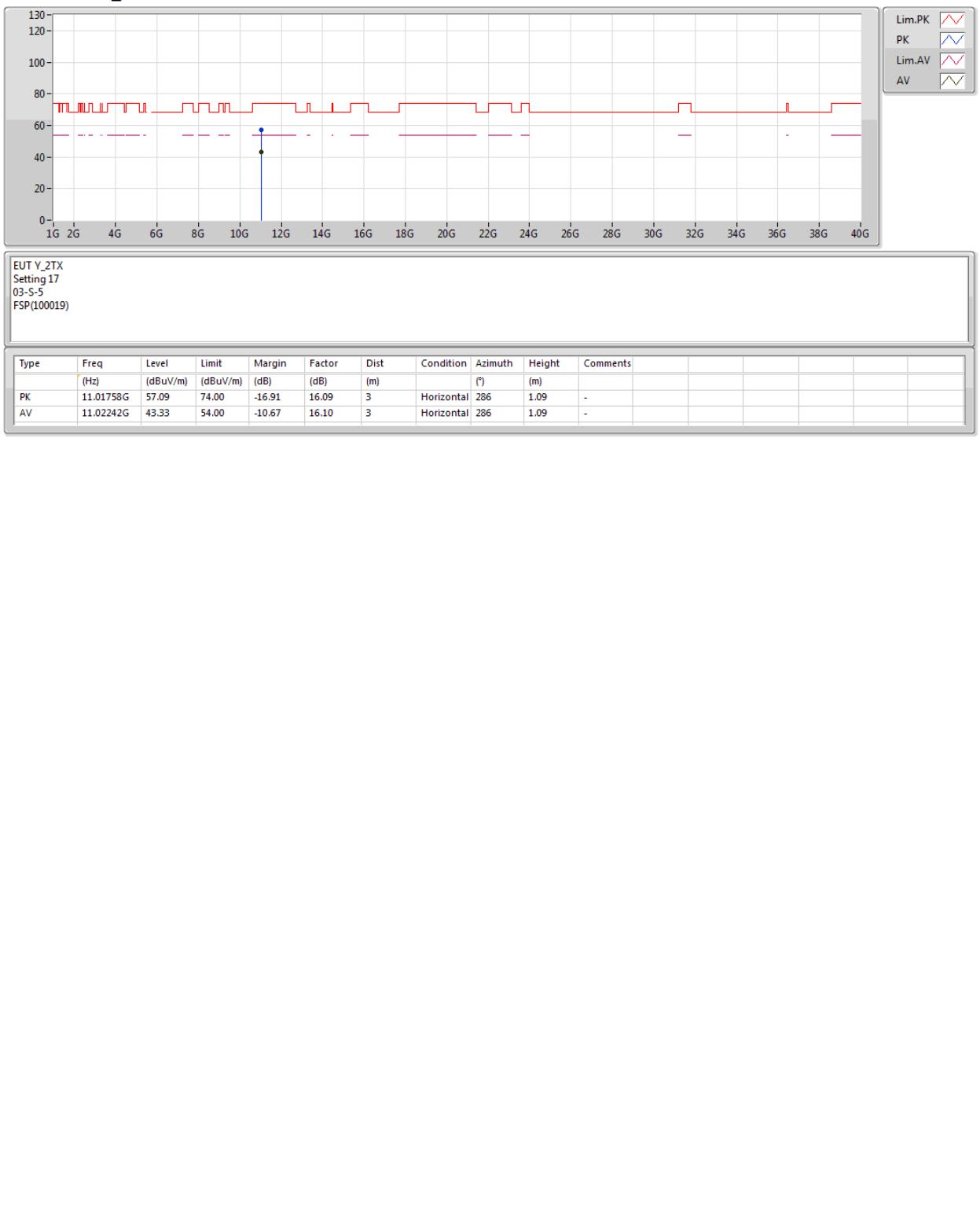
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5510MHz\_TX**


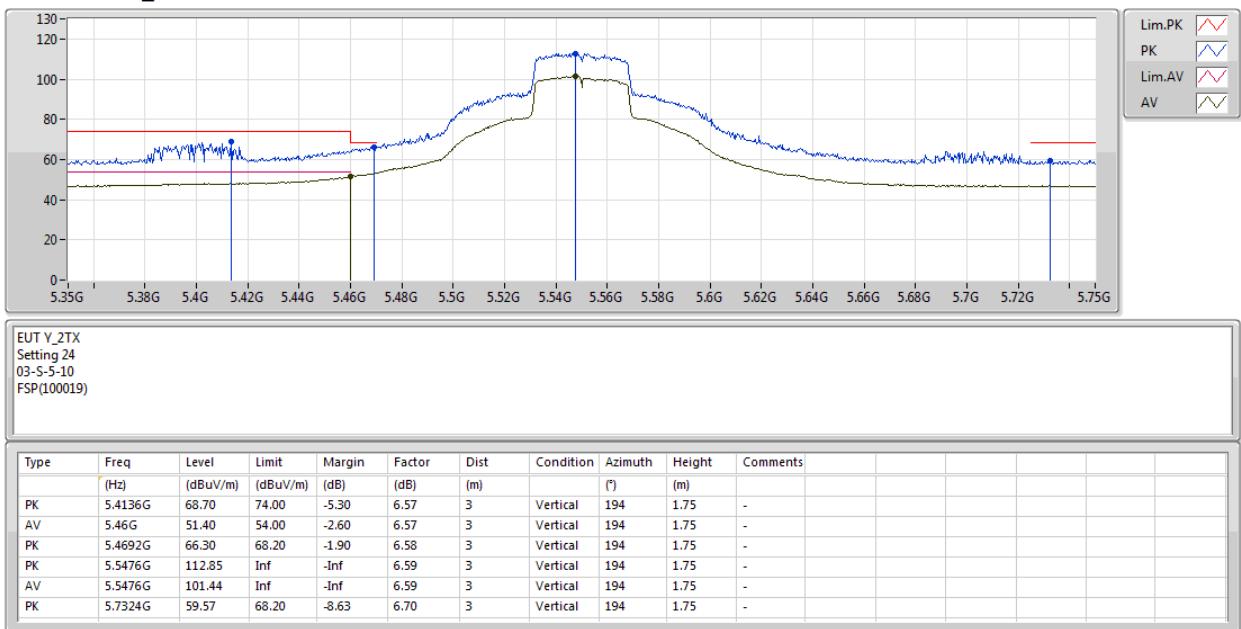
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5510MHz\_TX**


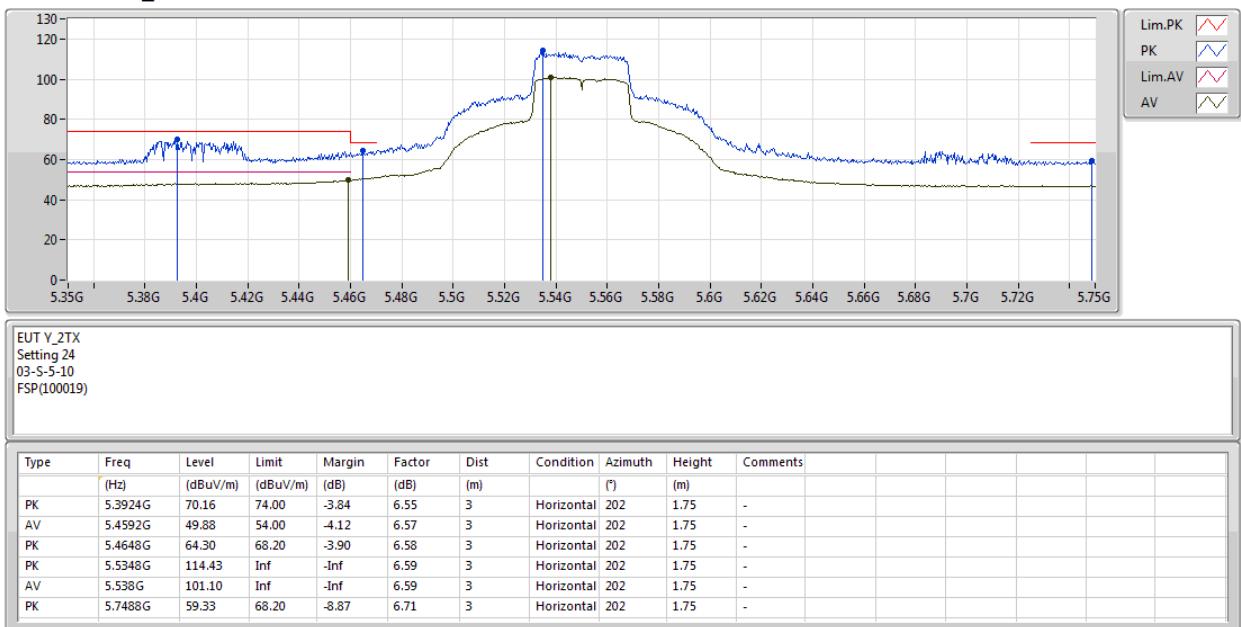
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5550MHz\_TX**


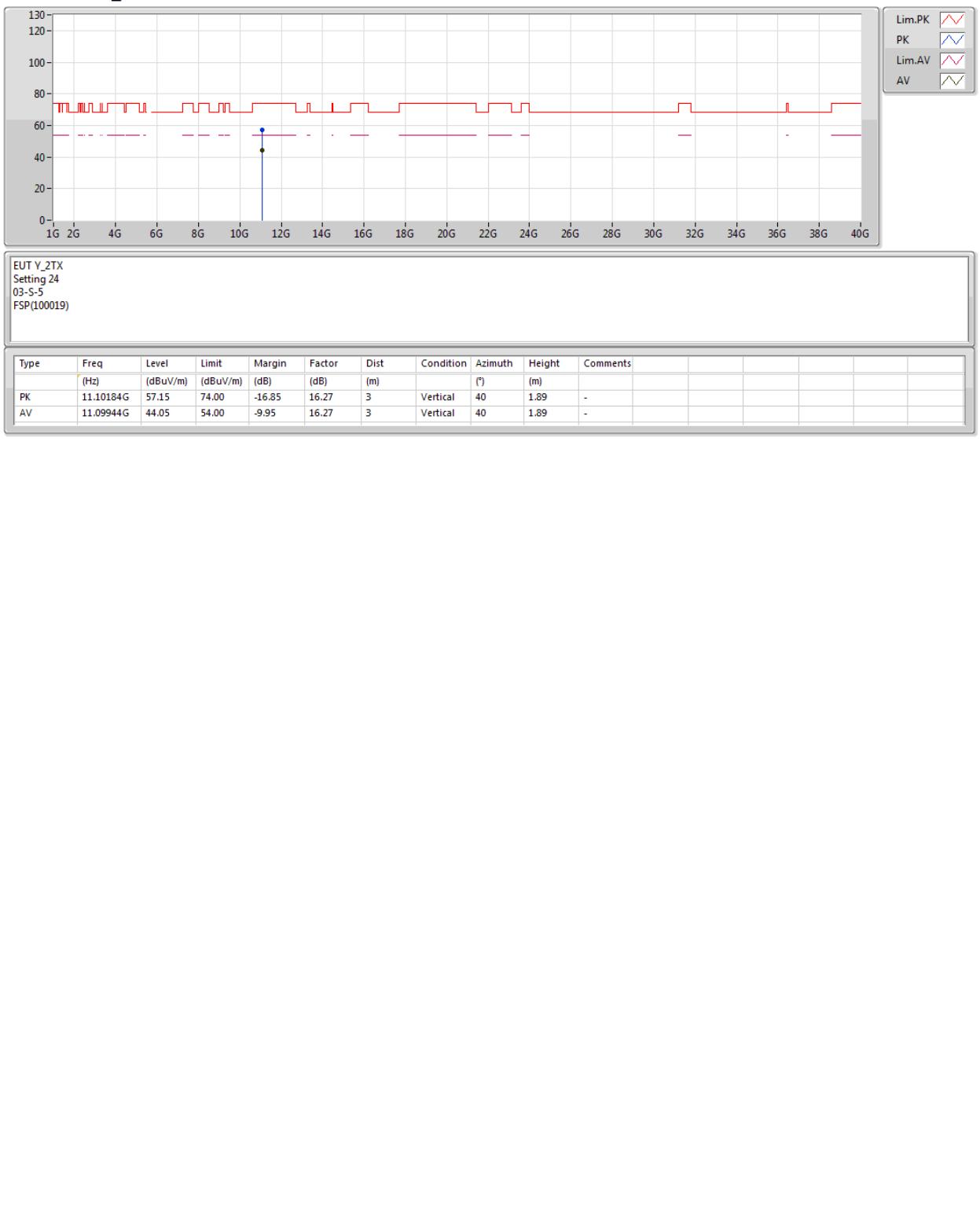
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5550MHz\_TX**


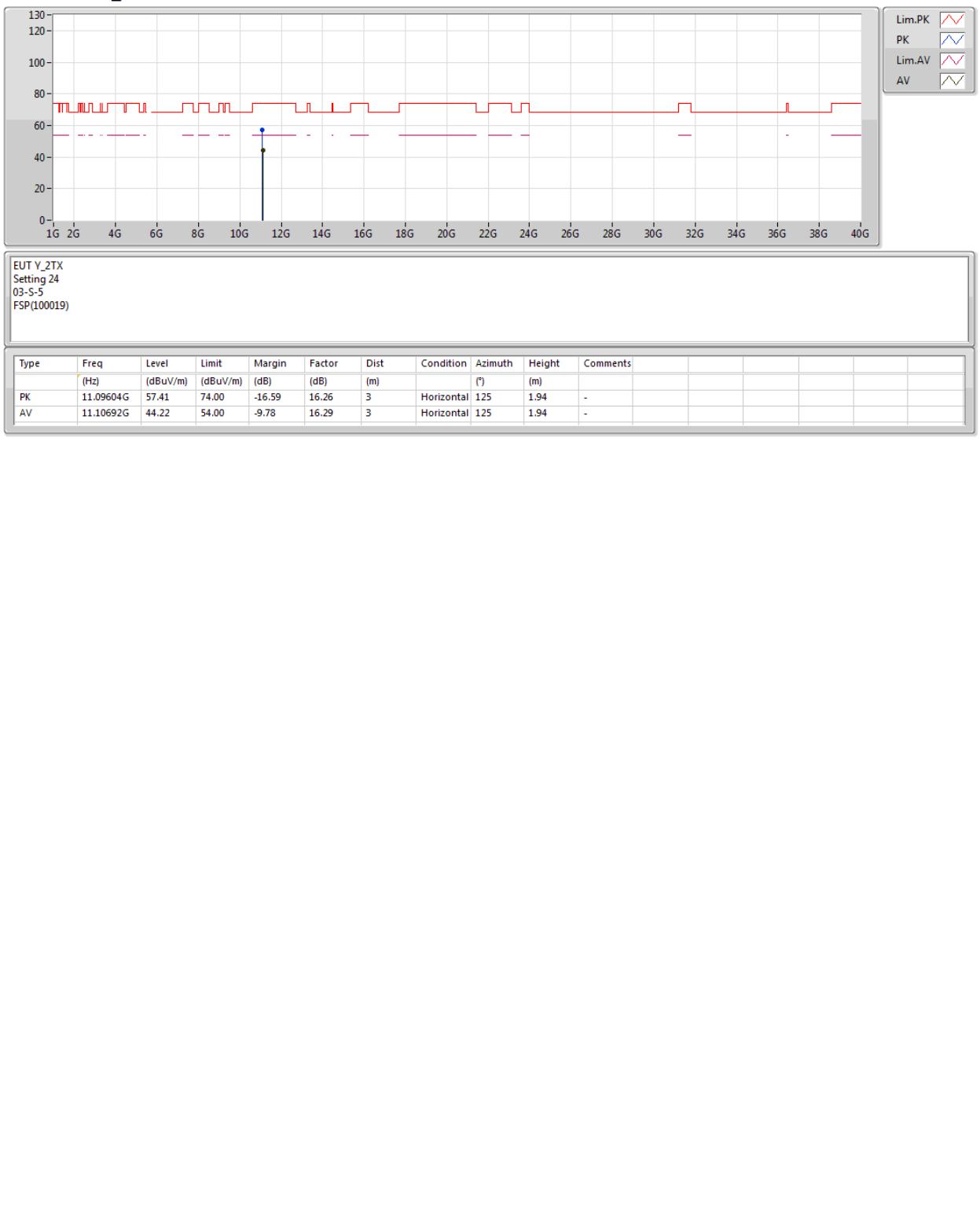
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5550MHz\_TX**


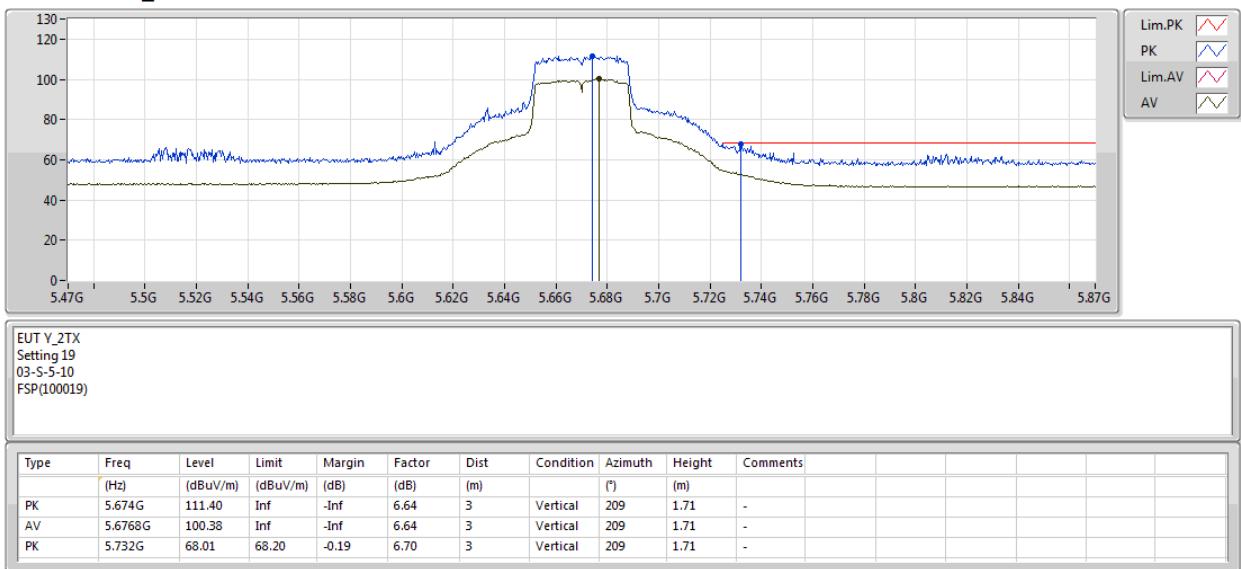
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5550MHz\_TX**


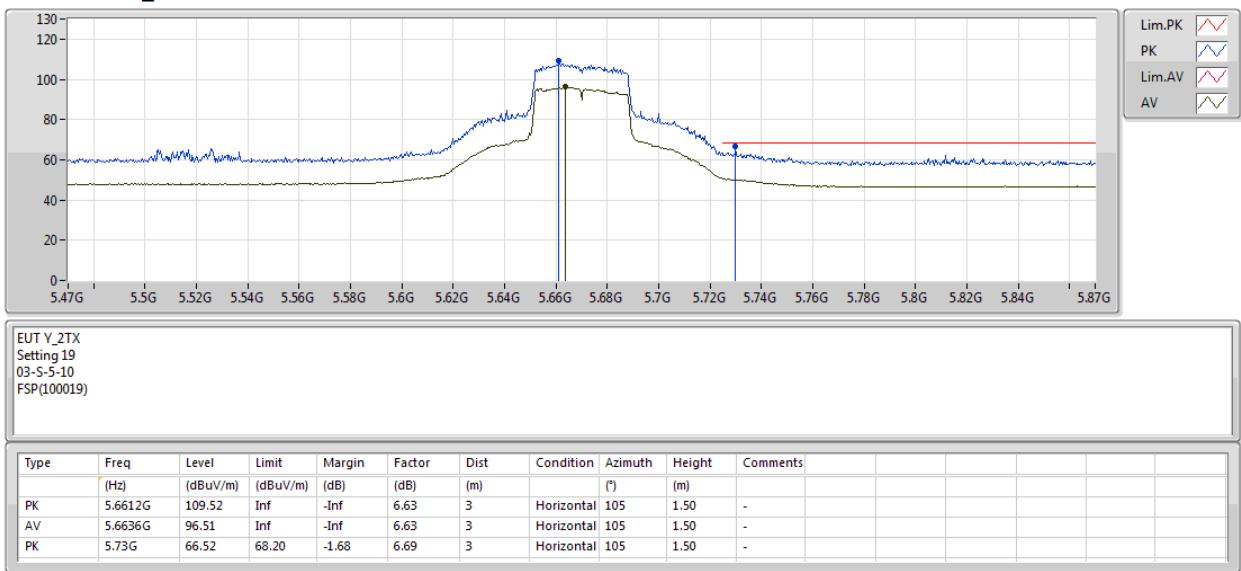
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5670MHz\_TX**


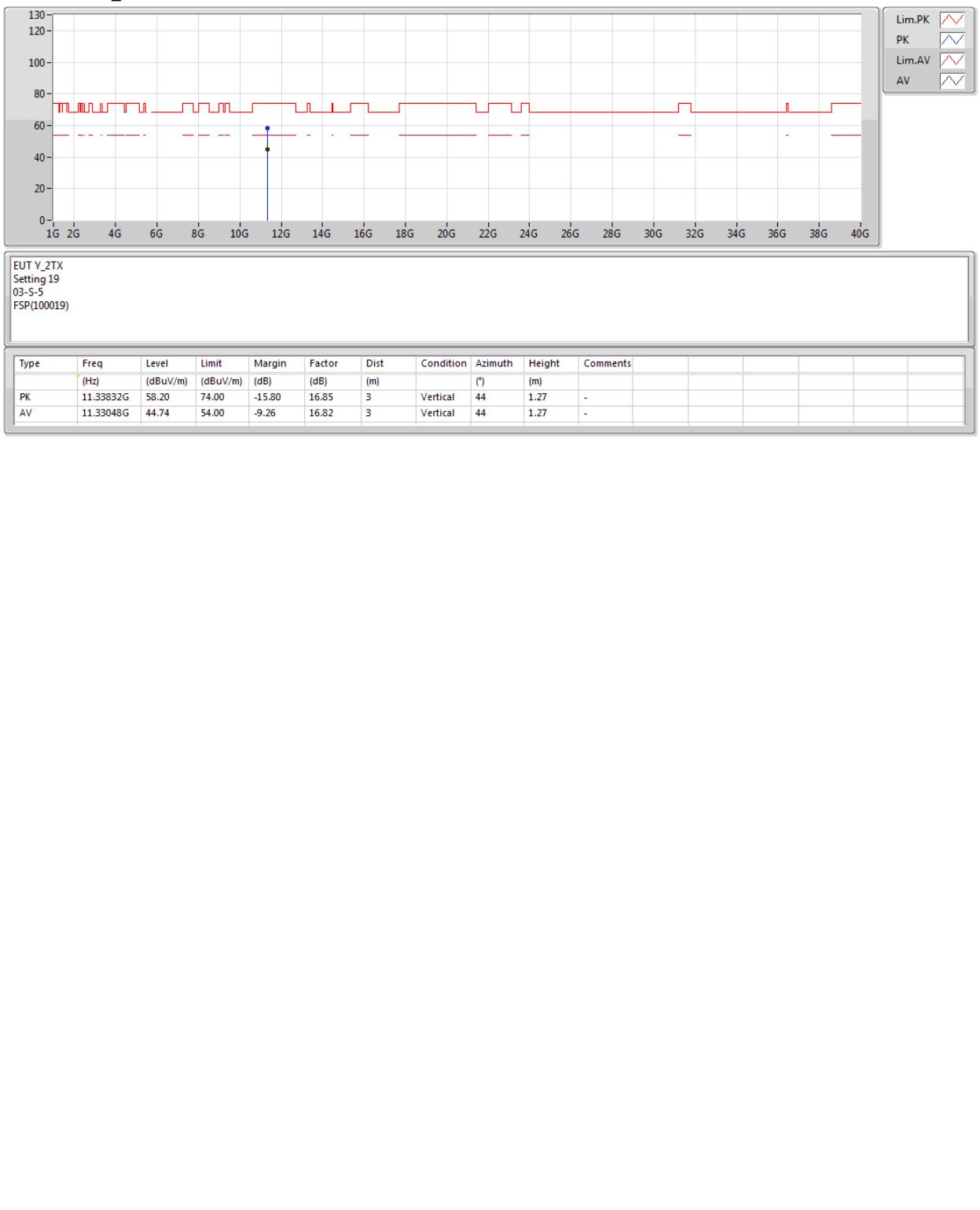
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5670MHz\_TX**


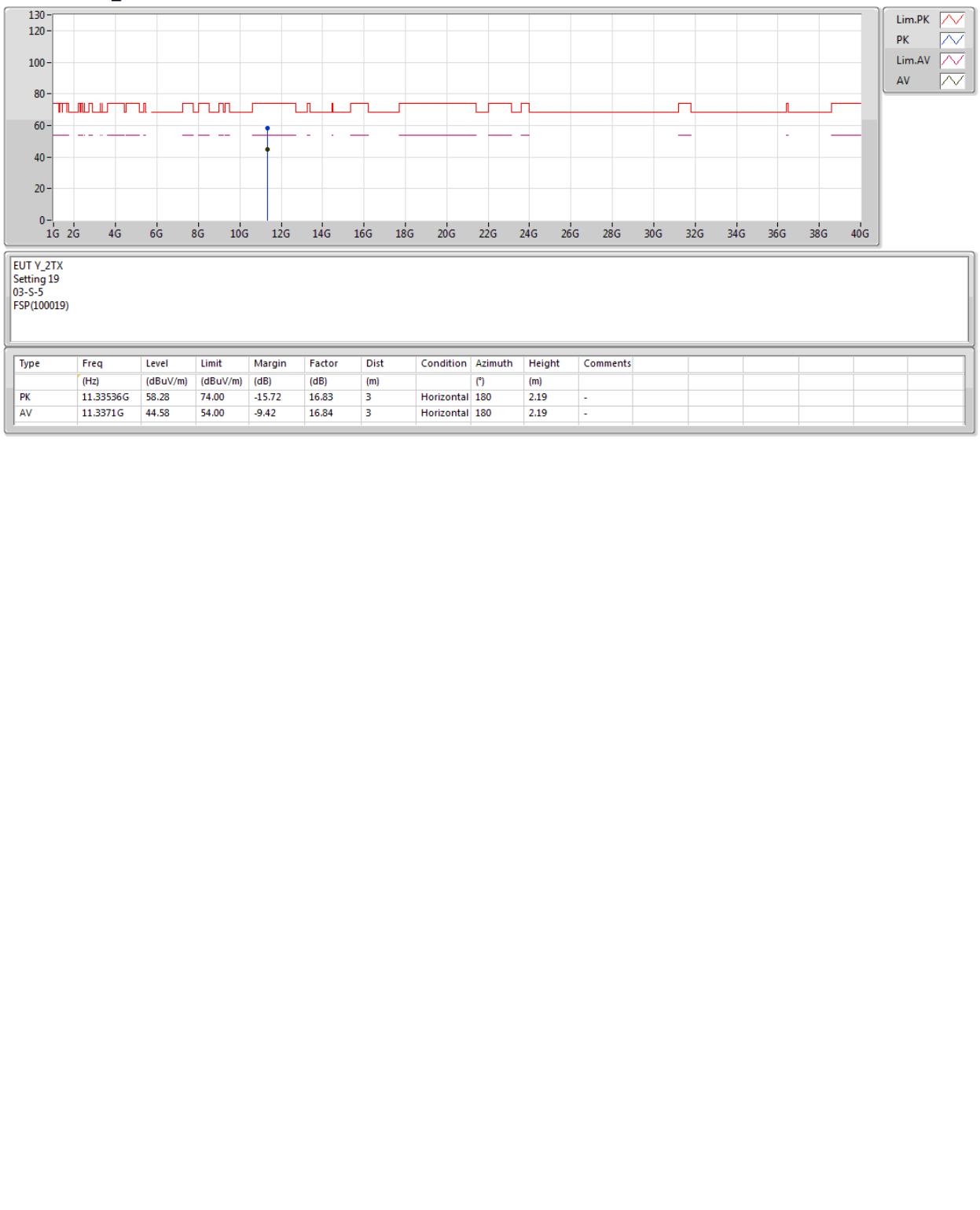
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5670MHz\_TX**


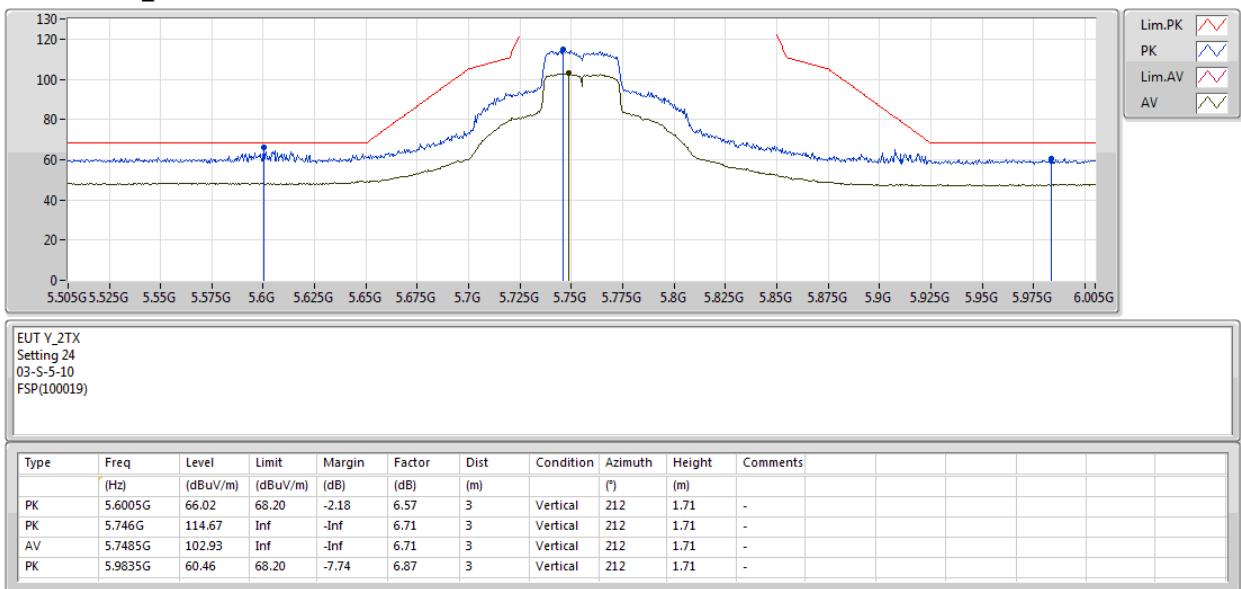
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5670MHz\_TX**


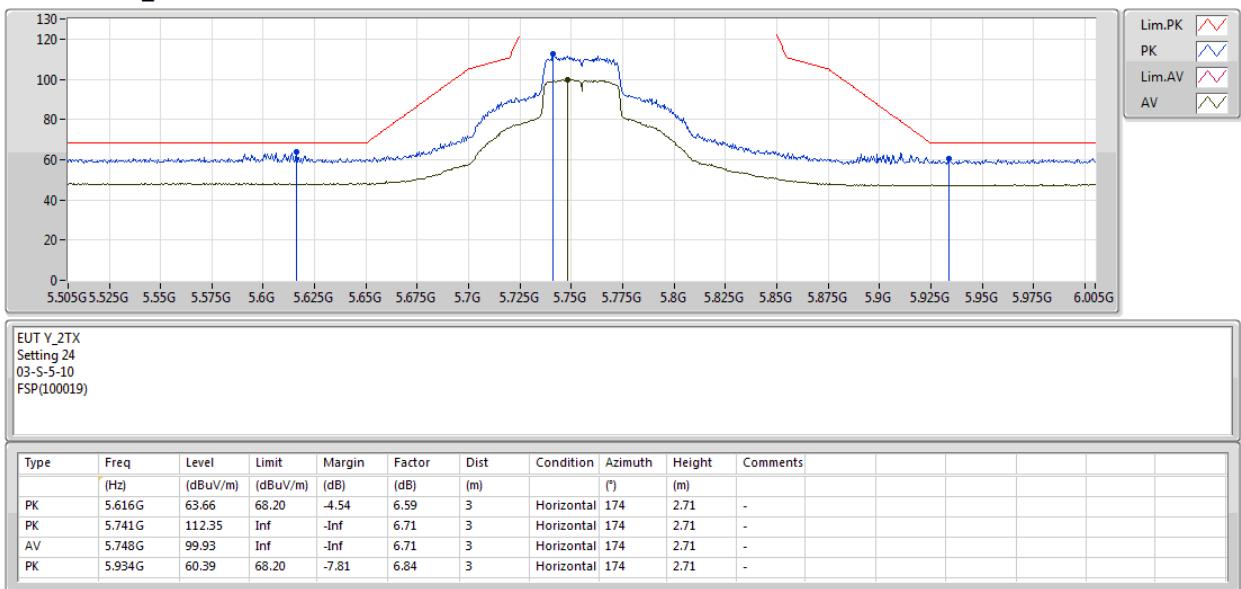
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5755MHz\_TX**


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

23/01/2019

**5755MHz\_TX**


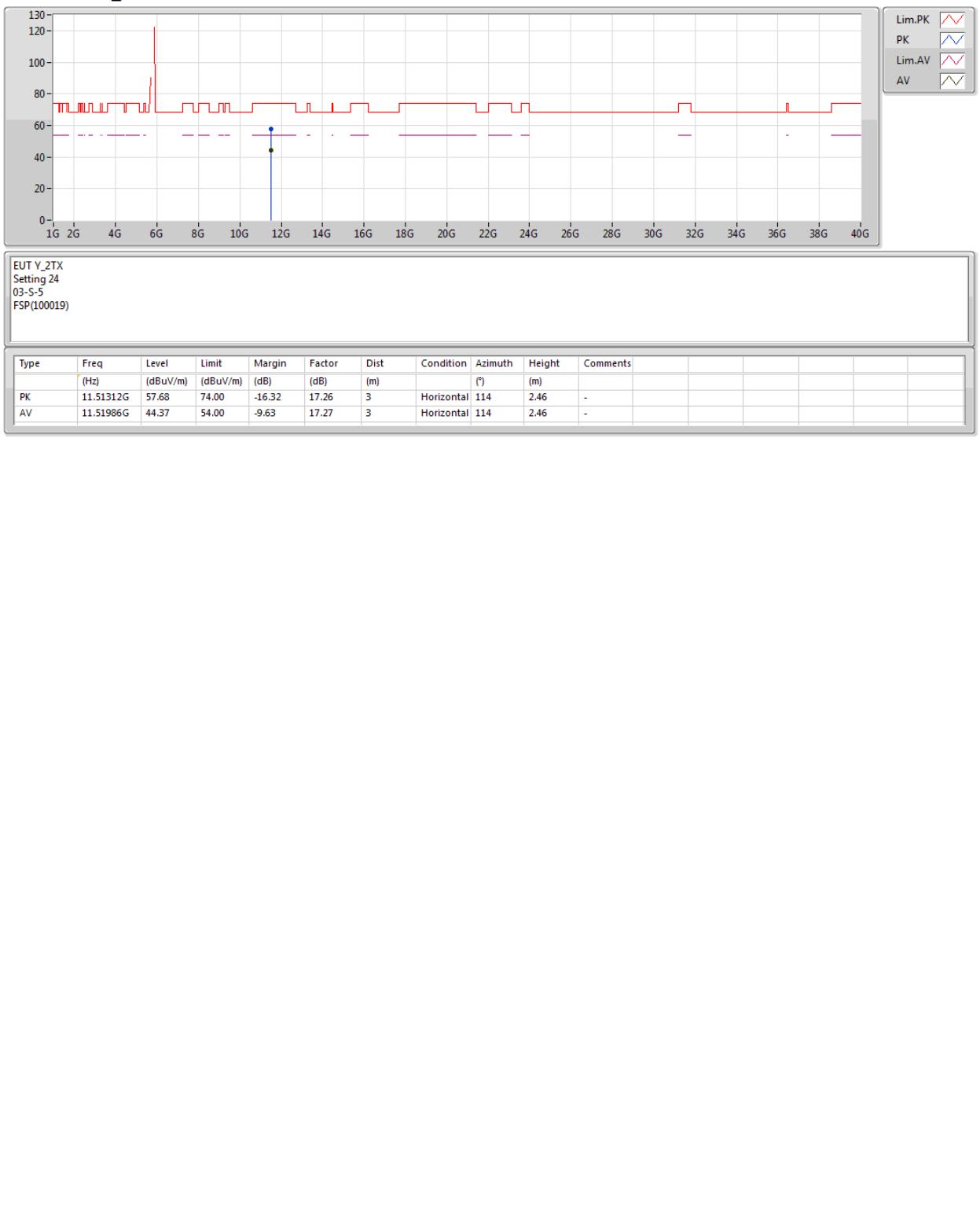
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5755MHz\_TX**


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

23/01/2019

**5755MHz\_TX**


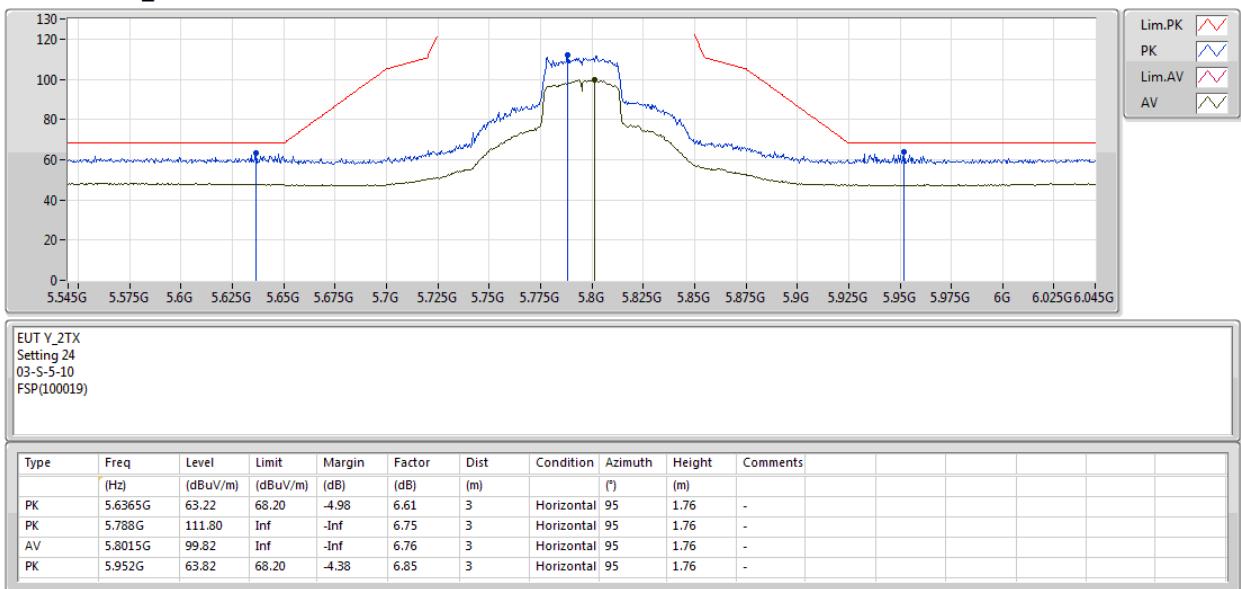
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5795MHz\_TX**

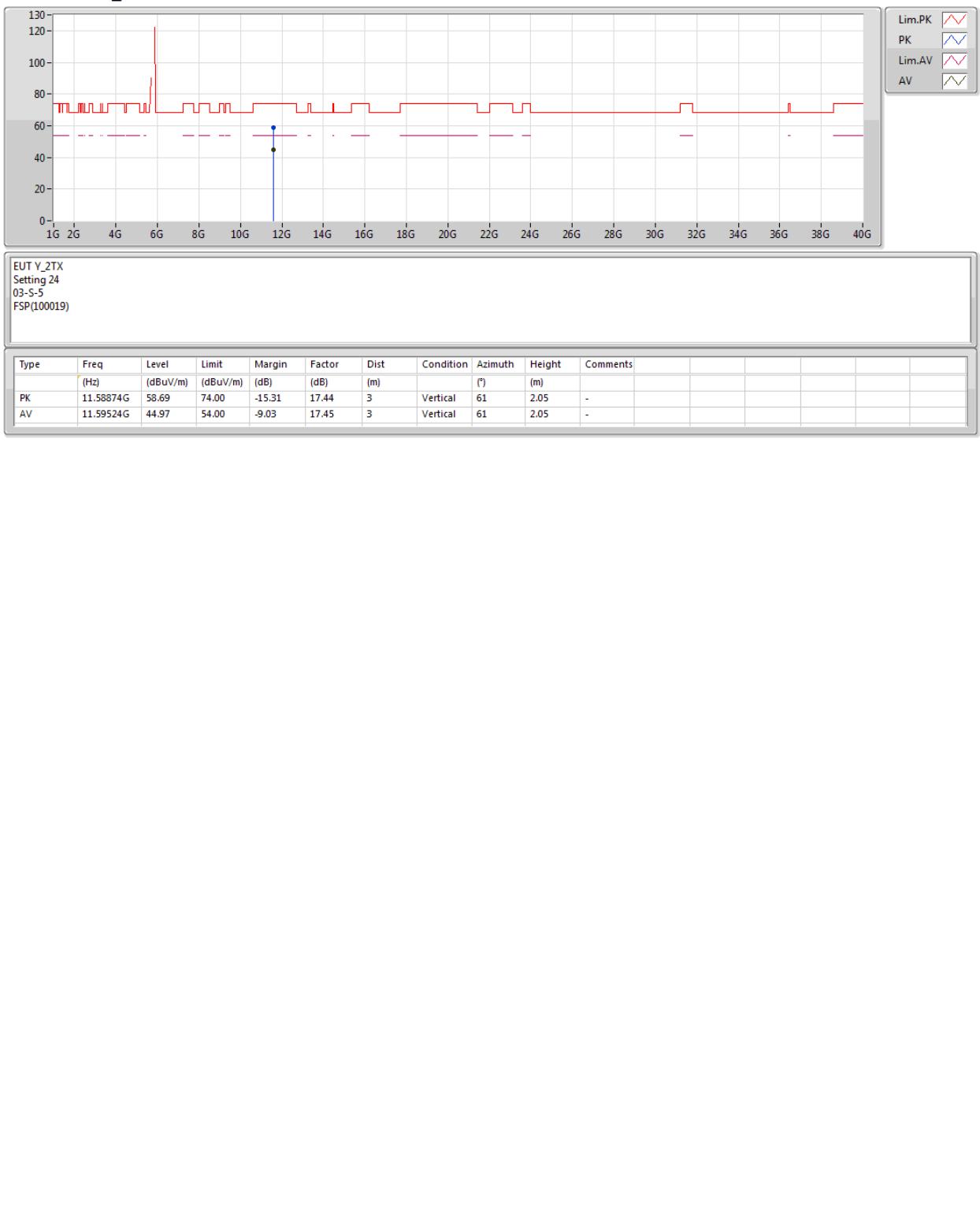

**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5795MHz\_TX**


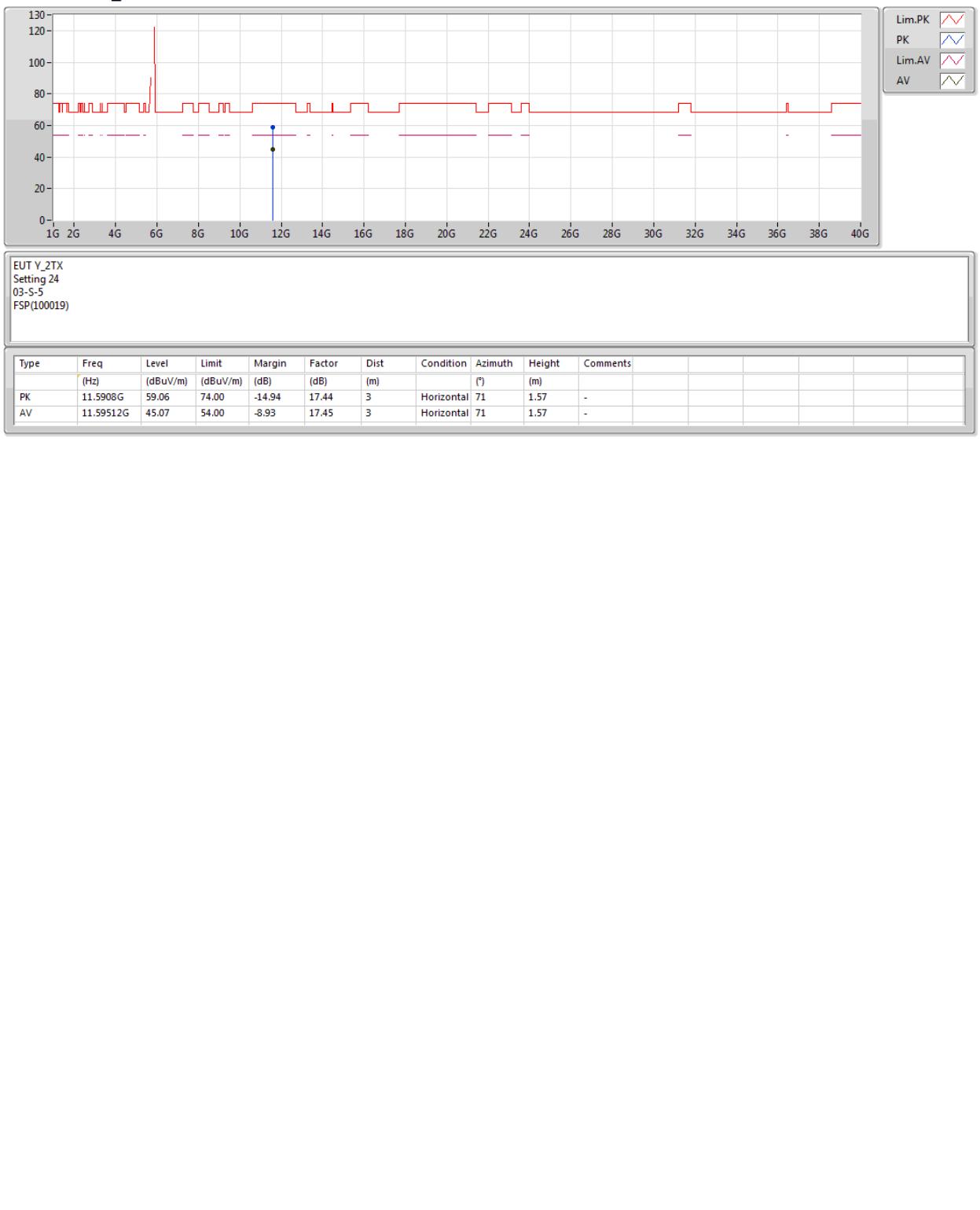
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5795MHz\_TX**


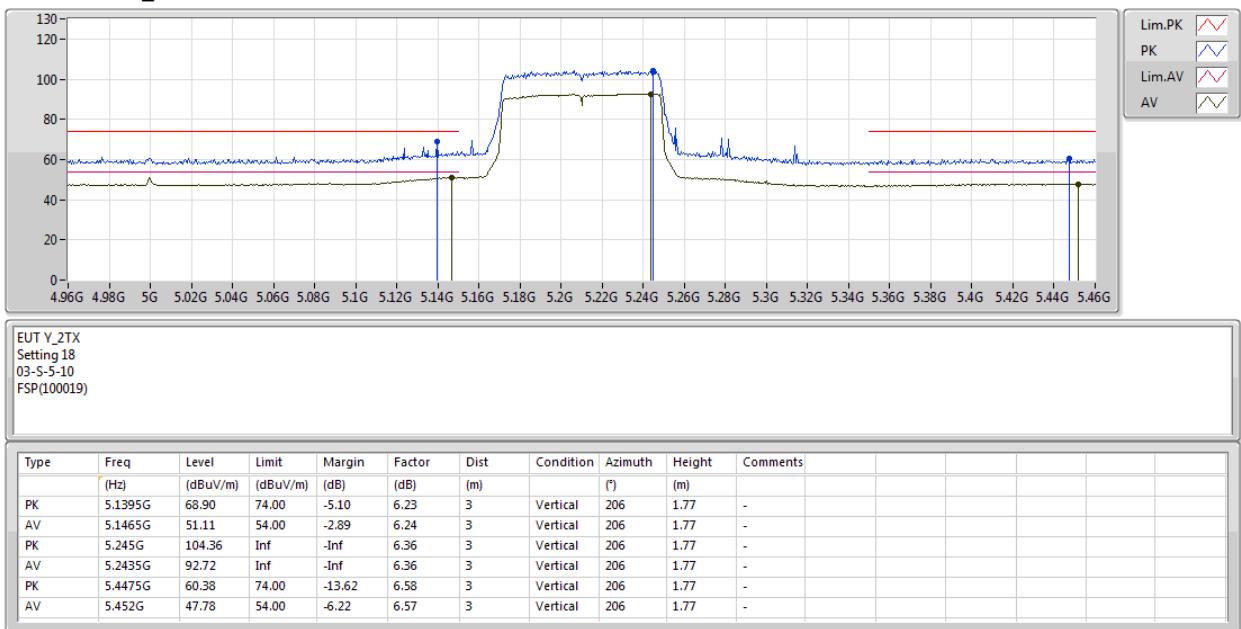
**802.11ac VHT40-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5795MHz\_TX**


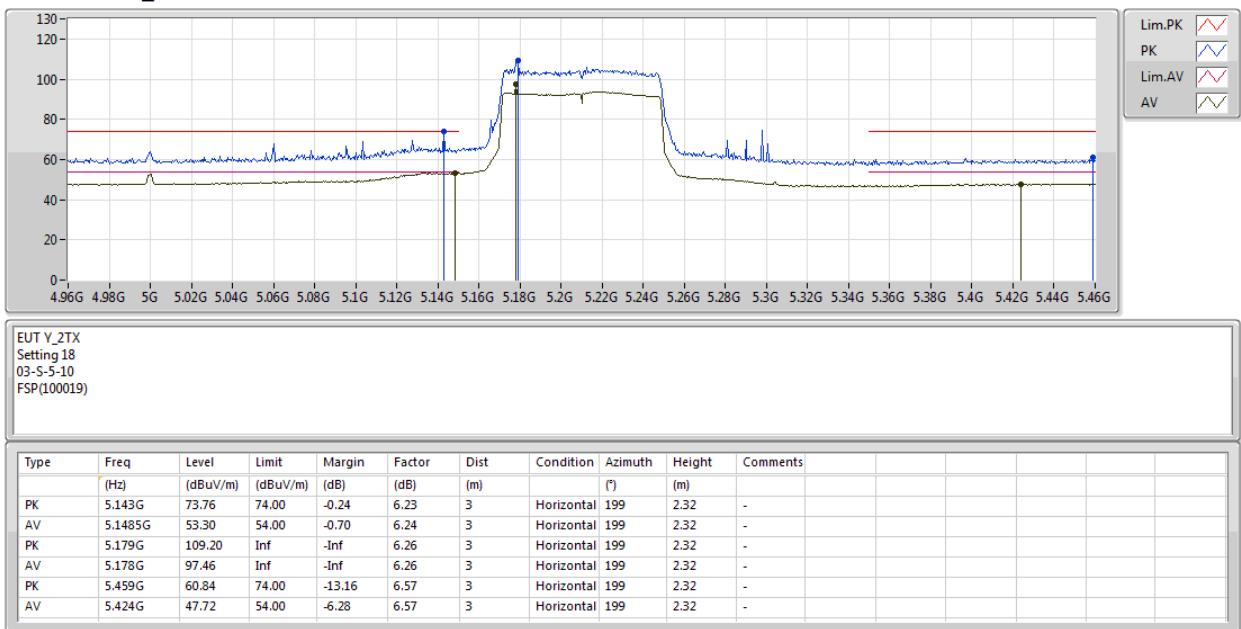
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5210MHz\_TX**


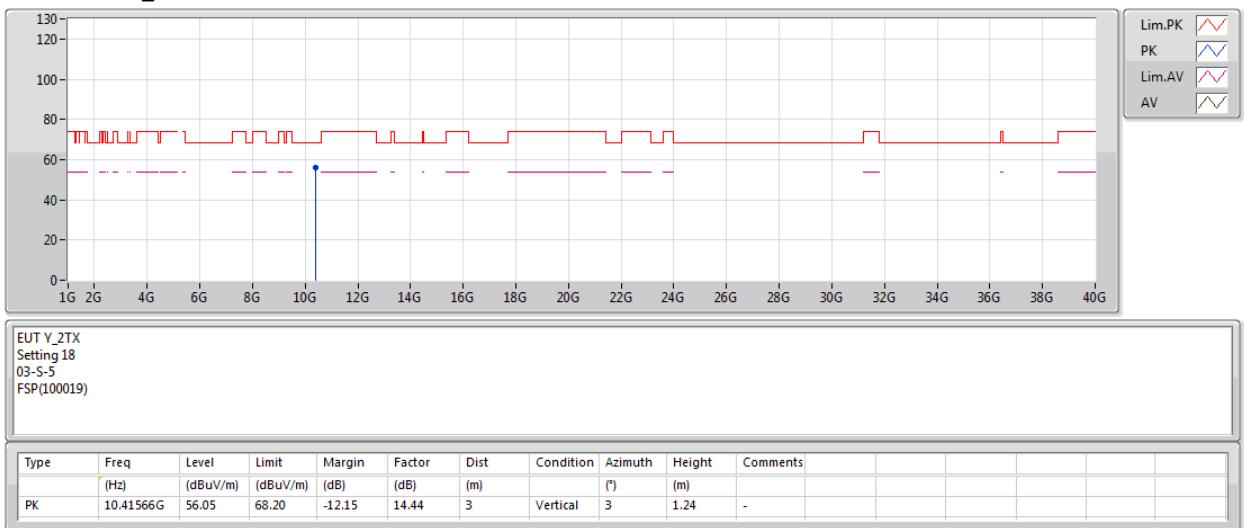
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5210MHz\_TX**


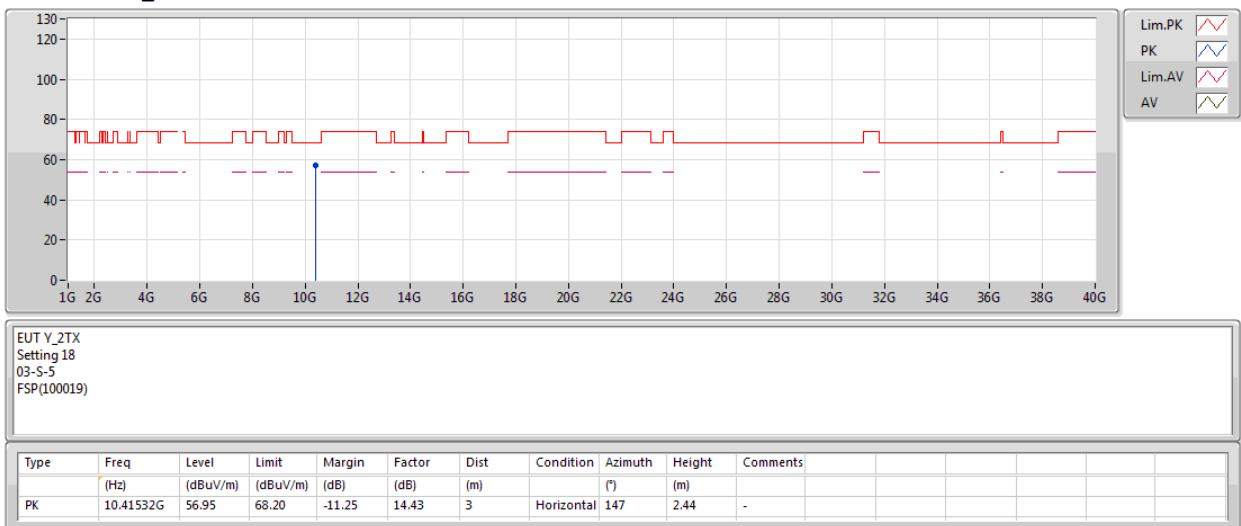
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5210MHz\_TX**


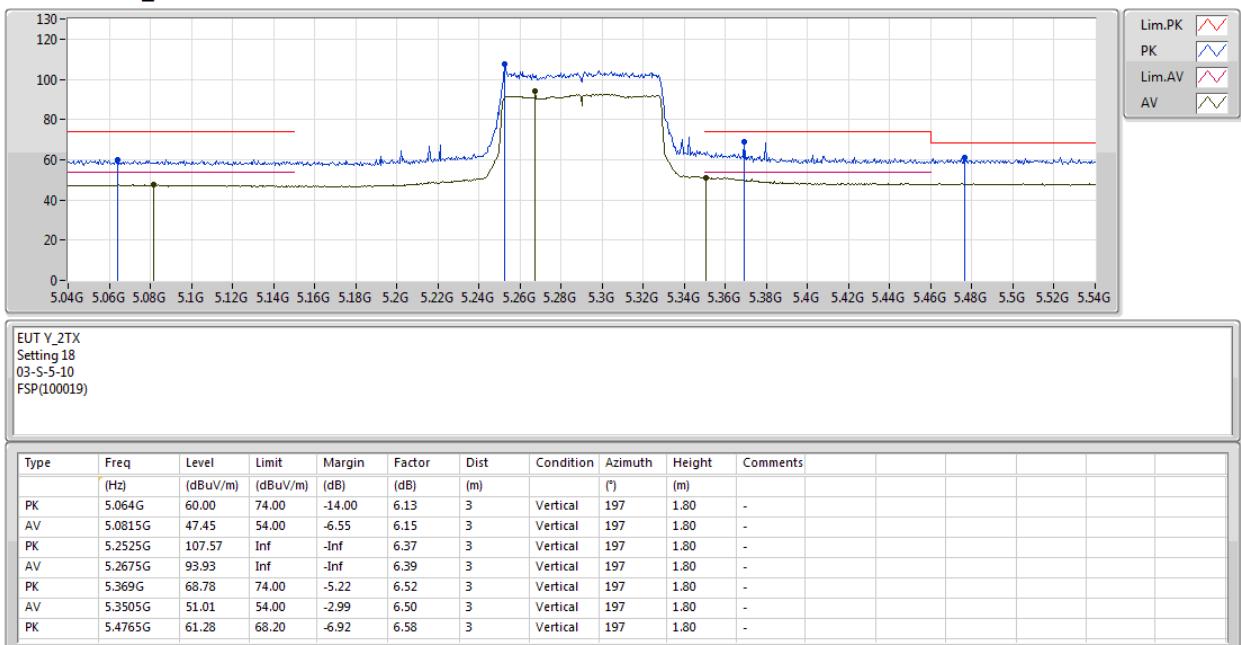
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5210MHz\_TX**


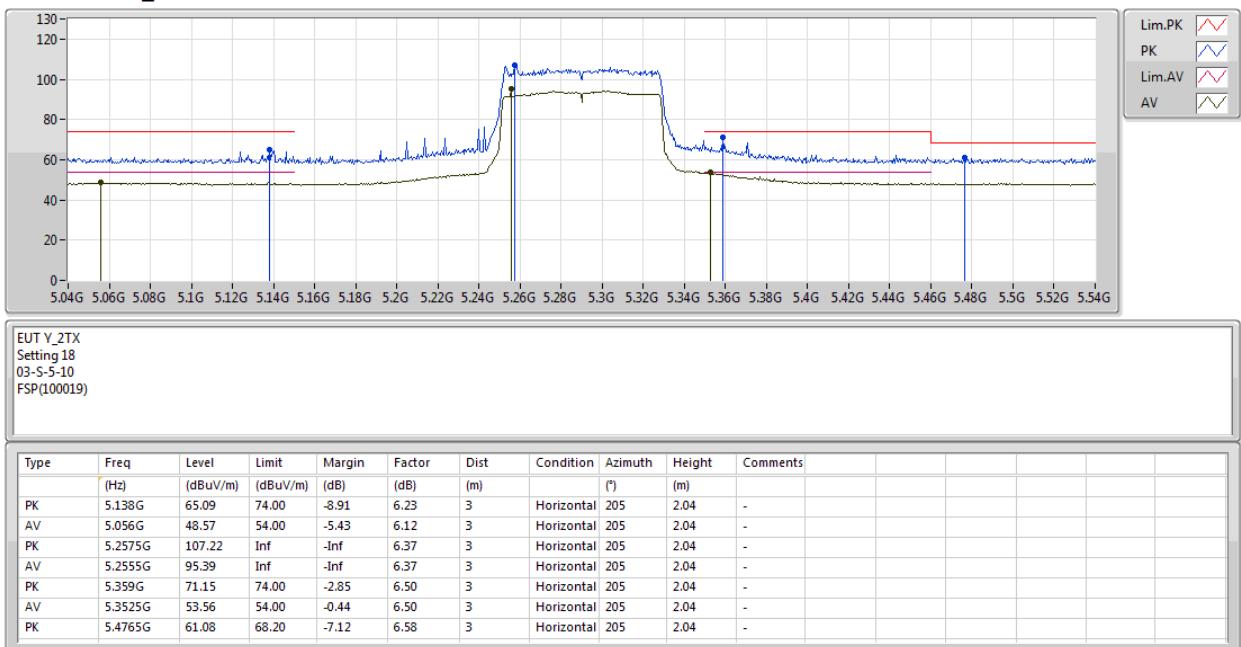
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5290MHz\_TX**


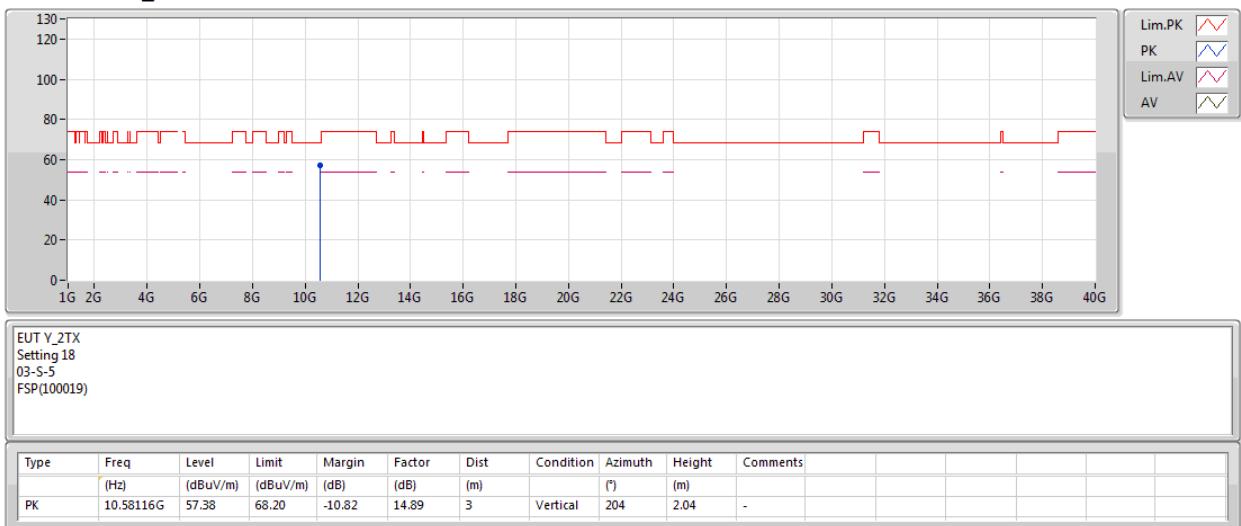
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5290MHz\_TX**


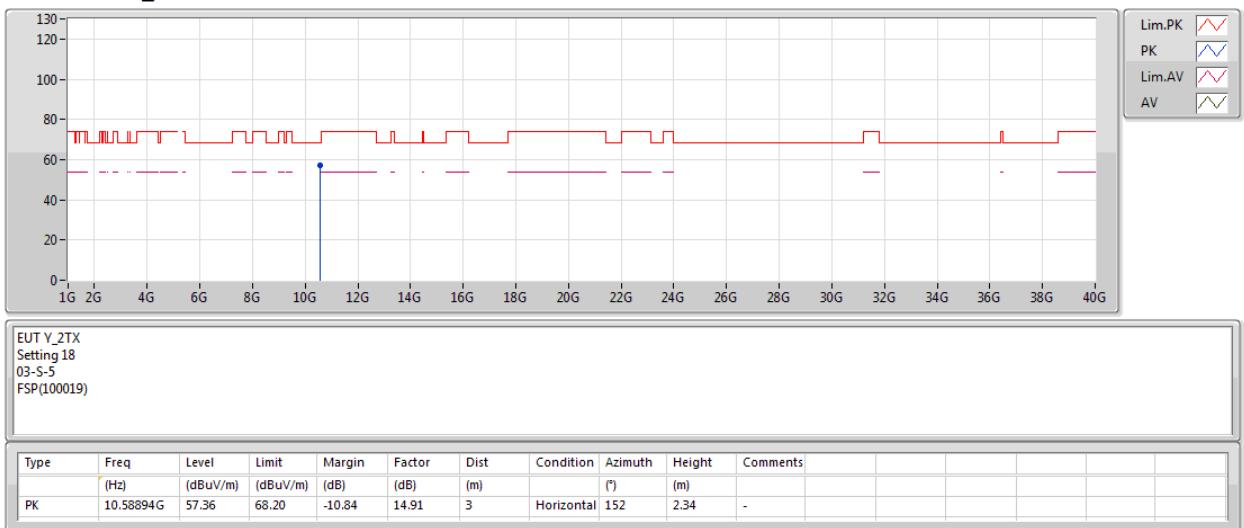
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5290MHz\_TX**


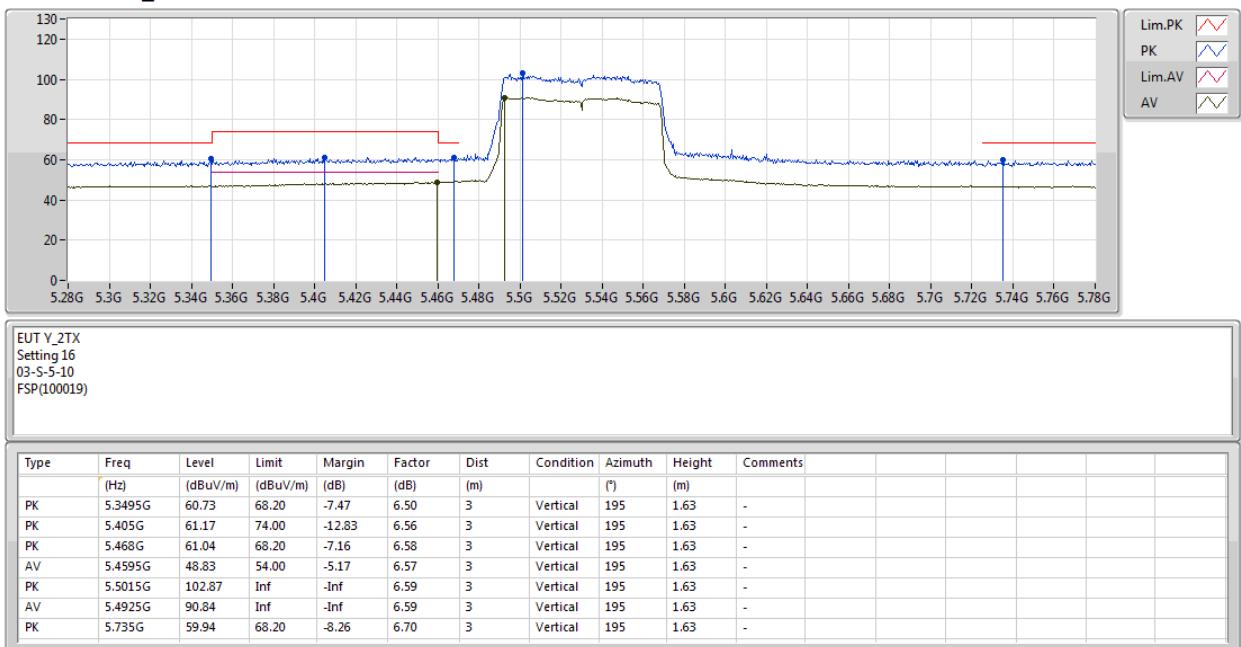
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5290MHz\_TX**


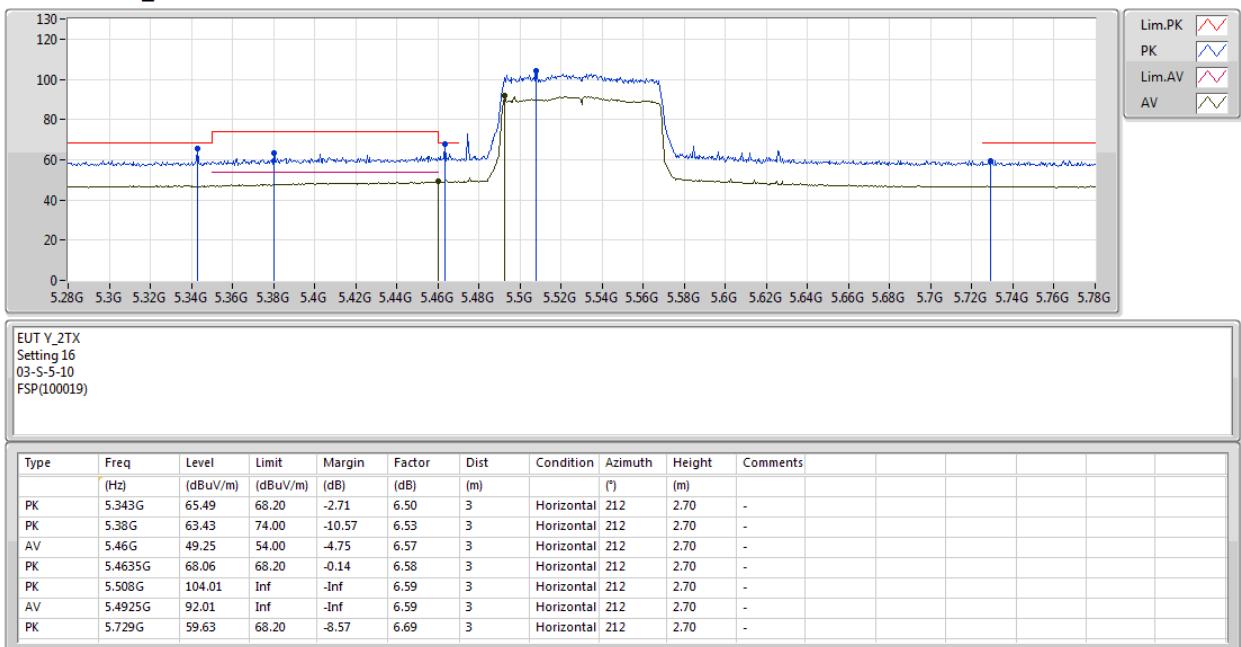
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5530MHz\_TX**


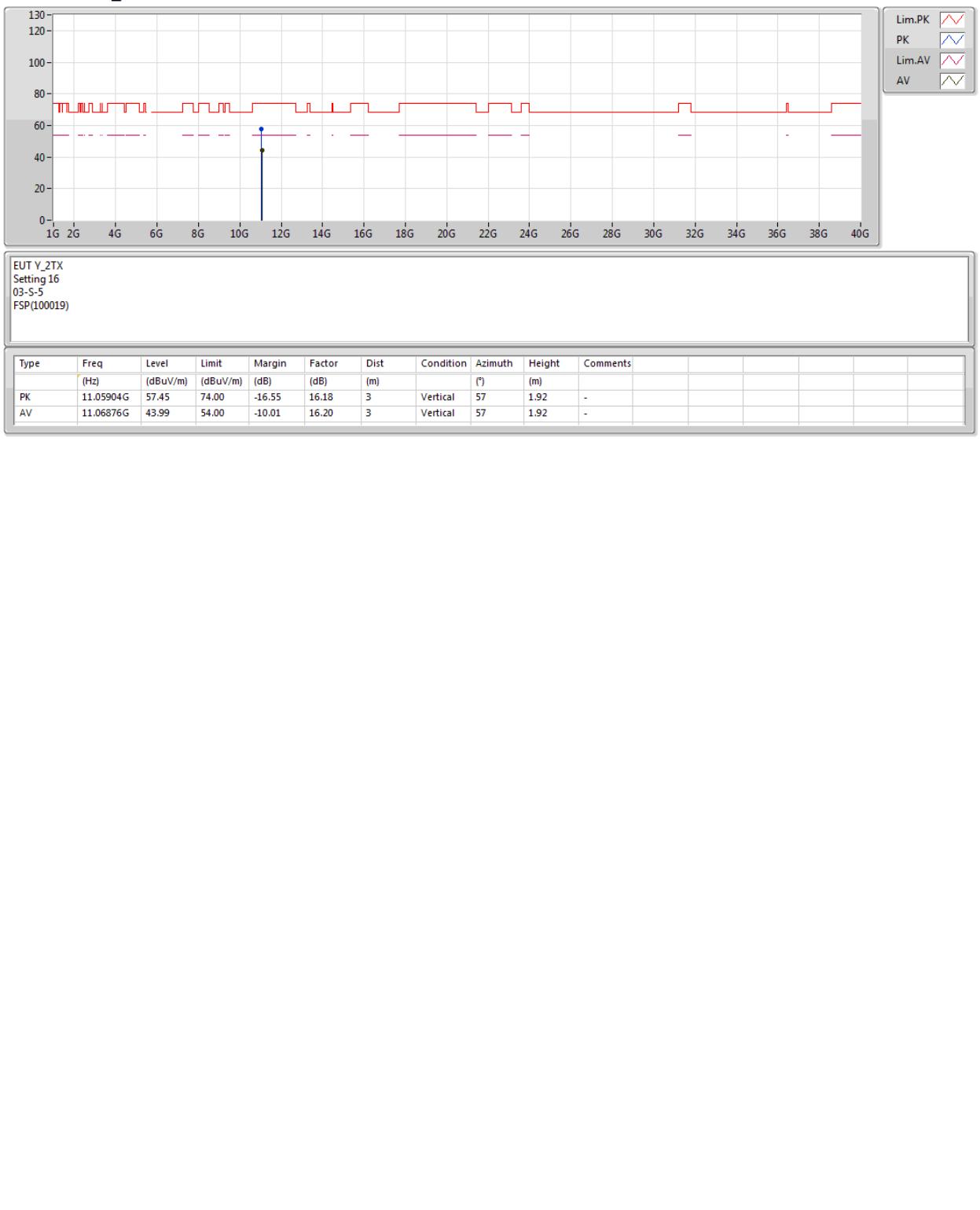
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5530MHz\_TX**


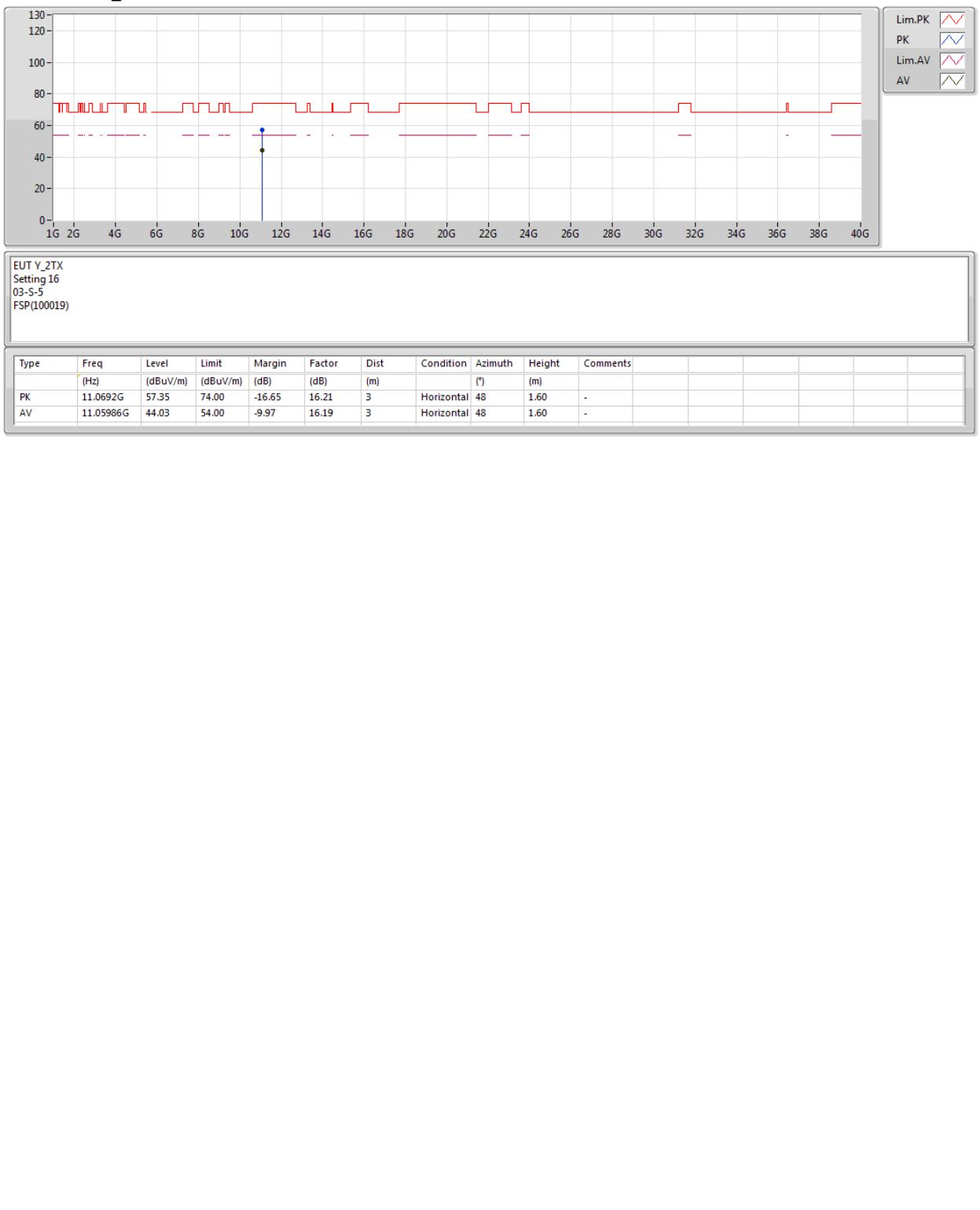
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5530MHz\_TX**


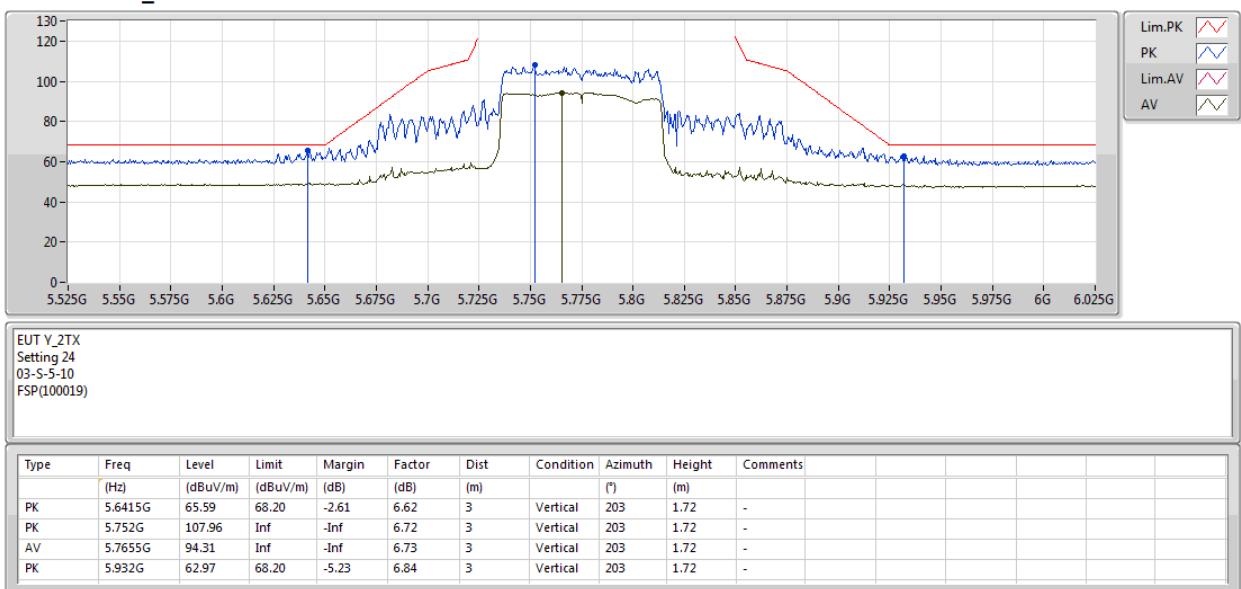
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5530MHz\_TX**


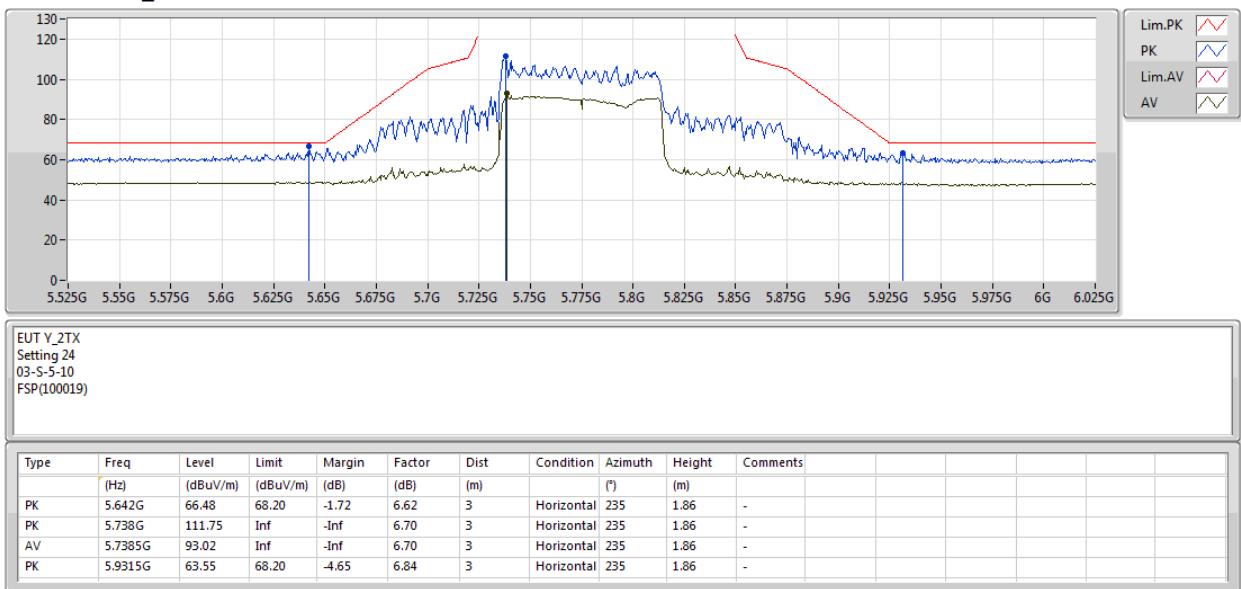
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5775MHz\_TX**


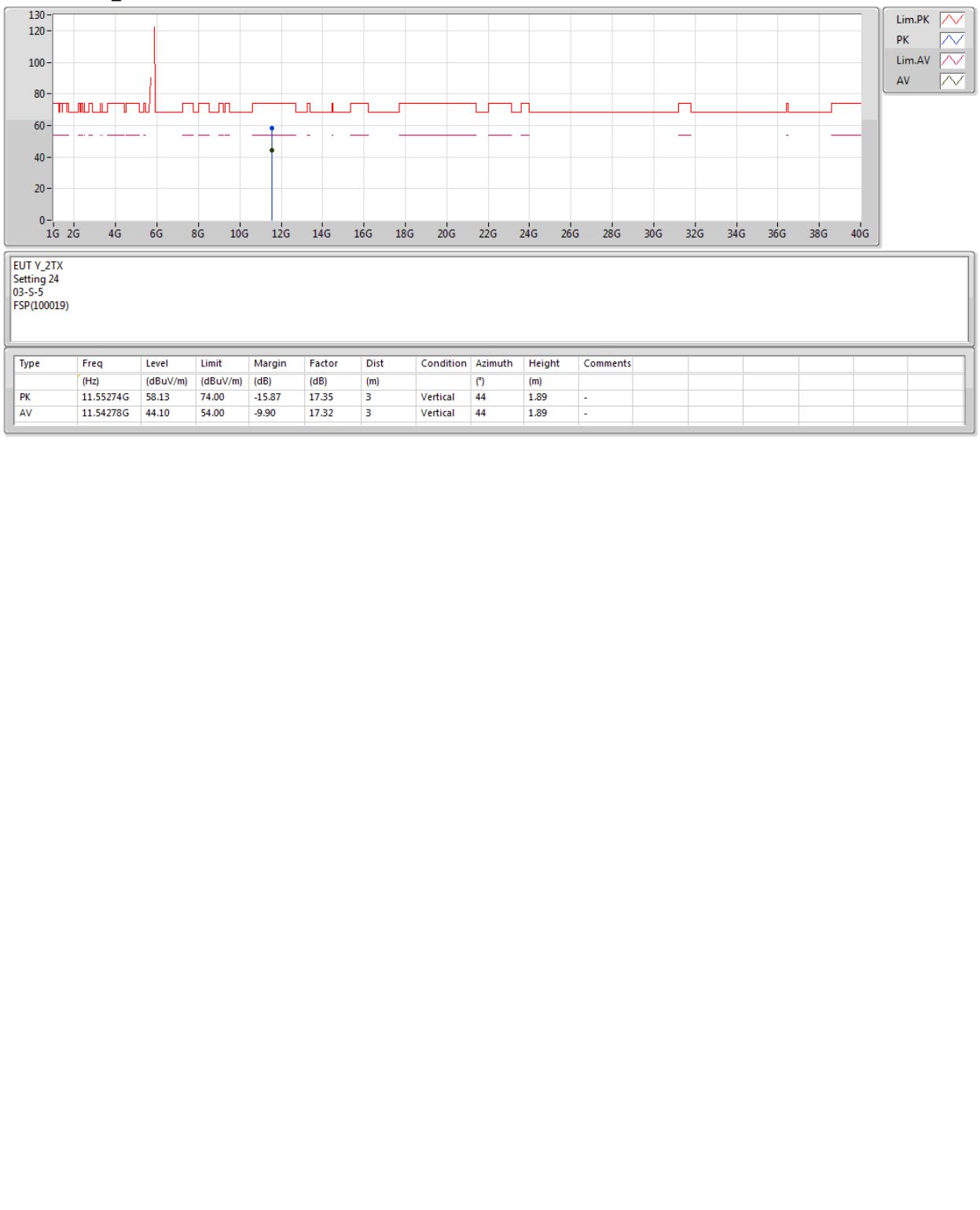
**802.11ac VHT80-BF\_Nss1,(MCS0)\_2TX**

23/01/2019

**5775MHz\_TX**


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

23/01/2019

**5775MHz\_TX**


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

23/01/2019

**5775MHz\_TX**
