



# **FCC RADIO TEST REPORT**

FCC ID

: Q87-03566

Equipment

: Linksys Tri-Band Wireless-AC Router

**Brand Name** 

: Linksys

**Model Name** 

: EA8300 V1.1

**Applicant** 

: Linksys LLC

121 Theory Drive Irvine, CA 92617, United States

Standard

: 47 CFR FCC Part 15.407

The product was received on Mar. 06, 2020, and testing was started from Mar. 06, 2020 and completed on Apr. 07, 2020. 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 report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

TEL: 886-3-656-9065

FAX: 886-3-656-9085

Report Template No.: CB-A12\_1 Ver1.1

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: Jun. 12, 2020

Report Version : 01

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Photographs of EUT v01

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Report Version : 01

# History of this test report

Report No. : FR710901-07AB

Version	Description	Issued Date
01	Initial issue of report	Jun. 12, 2020

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# **Summary of Test Result**

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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 -				-			
Note: Refe	erence to Sport	Note: Reference to Sporton Project No.: 710901-06					

#### **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: Sam Chen Report Producer: Viola Huang

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# 1 General Description

# 1.1 Information

### 1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	<b>Channel Number</b>
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5610	106-122 [2]
5725-5850		5775	155 [1]

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

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

#### 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.

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#### 1.1.2 Antenna Information

Ant.	Port	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	1	FIT	ANEP5M2-CCG05-EH	Dipole Antenna	I-PEX	
2	2	FIT	ANEP5M2-CCG06-EH	Dipole Antenna	I-PEX	Note1
3	1	FIT	ANEP5M2-CCG07-EH	Dipole Antenna	I-PEX	Note
4	2	FIT	ANEP5M2-CCG08-EH	Dipole Antenna	I-PEX	

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#### Note 1:

Ant.	Port	WLAN 2.4GHz	WLAN 5GHz Band 1	WLAN 5GHz Band 2	WLAN 5GHz Band 3	WLAN 5GHz Band 4
1	1	2.81	2.54	2.87	-	-
2	2	2.35	2.75	2.41	-	-
3	1	-	-	-	3.15	2.89
4	2	-	-	-	3.35	2.97

Note 2: The above information was declared by manufacturer.

Note 3:

#### For 2.4GHz function:

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

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

Ant. 1 (Port 1) and Ant. 2 (Port 2) could transmit/receive simultaneously.

#### For 5GHz function:

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

#### Band 1~Band 2

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

Ant. 1 (Port 1) and Ant. 2 (Port 2) could transmit/receive simultaneously.

#### Band 3~Band 4

Ant. 3 (Port 1) and Ant. 4 (Port 2) can be used as transmitting/receiving antenna.

Ant. 3 (Port 1) and Ant. 4 (Port 2) could transmit/receive simultaneously.

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# 1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a-BF	0.969	0.14	2.065m	1k
802.11ac VHT20-BF	0.984	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40-BF	0.97	0.13	2.437m	1k
802.11ac VHT80-BF	0.937	0.28	1.148m	1k

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

### 1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter				
	$\boxtimes$	With beamforming		Without beamforming	
Beamforming Function	The product has beamforming function for 11g/11n/VHT in 2.4GHz and 11a/11n/11ac in 5GHz.				
Weather Band	$\boxtimes$	With 5600~5650MHz		Without 5600~5650MHz	
Function		Outdoor P2M	$\boxtimes$	Indoor P2M	
Tunction		Fixed P2P		Client	
TPC Function		With TPC		Without TPC	
Test Software Version	st Software Version QCA Tool version 3.0.187.0				

Note: The above information was declared by manufacturer.

### 1.1.5 Table for EUT support function

Software Versions	Equip Adapter	Support Function		
WLAN: 2.0.0.200811	Adapter 1~3	Master (AP Router, Repeater, bridge)		

Note: Only AP Router mode has been selected to test and recorded in the test report from manufacturer requirement.

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# 1.2 Applicable Standards

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

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

The following reference test guidance is not within the scope of accreditation of TAF.

- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

### 1.3 Testing Location Information

Testing Location						
	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		
$\boxtimes$	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	TH02-CB	Jay Luo	20.9~22.3°C / 47~48%	Mar. 19, 2020 ~ Mar. 27, 2020
Radiated below 1GHz	03CH05-CB	Cola Fan	21.3~23.2°C / 46~49%	Mar. 13, 2020 ~ Apr. 07, 2020
Radiated above 1GHz	03CH01-CB	Cola Fan	20~21.5°C / 46~50%	Mar. 06, 2020 ~ Apr. 07, 2020
AC Conduction	CO01-CB	Peter Wu	23~24°C / 55~58%	Mar. 14, 2020

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)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%

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# 2 Test Configuration of EUT

# 2.1 Test Channel Mode

Mode	Power Setting
802.11a-BF_Nss1,(6Mbps)_2TX	-
5180MHz	20.5
5200MHz	26
5240MHz	25.5
5260MHz	19.5
5300MHz	19.5
5320MHz	20
5500MHz	20.5
5580MHz	20.5
5700MHz	20
5745MHz	26
5785MHz	26
5825MHz	26
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	20.5
5200MHz	26
5240MHz	25.5
5260MHz	20
5300MHz	19.5
5320MHz	20
5500MHz	21
5580MHz	20.5
5700MHz	20.5
5745MHz	26
5785MHz	26
5825MHz	26
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	19.5
5230MHz	25
5270MHz	19.5
5310MHz	19
5510MHz	19
5550MHz	20
5670MHz	19.5
5755MHz	24.5
5795MHz	26

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Mode	Power Setting
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	18.5
5290MHz	19
5530MHz	19
5610MHz	19.5
5775MHz	22

### Note:

- VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.
- There are two modes of EUT for 802.11g/n/VHT in 2.4GHz and 11a/n/ac in 5GHz. One is beamforming mode, and the other is non-beamforming mode, after evaluating, beamforming mode has been evaluated to be the worst case, so it was selected to test and record in this test report.

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# 2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests			
Tests Item AC power-line conducted emissions			
Condition AC power-line conducted measurement for line and neutral			
Operating Mode	Normal Link		
1	AP Router mode: EUT + Adapter 1		
2 AP Router mode: EUT + Adapter 2 + US plug			
3 AP Router mode: EUT + Adapter 3			
For operating mode 3 is the worst case and it was record in this test report.			

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

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The Worst Case Mode for Following Conformance Tests			
Tests Item Unwanted Emissions			
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EU regardless of spatial multiplexing MIMO configuration), the radiated test shoul be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	СТХ		
WLAN 2.4GHz: The EUT was performed at Y axis and Z axis position for Emissions in Restricted Frequency			

WLAN 2.4GHz: The EUT was performed at Y axis and Z axis position for Emissions in Restricted Frequency Bands above 1GHz test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.

WLAN 5GHz: The EUT was performed at Y axis and Z axis position for Emissions in Restricted Frequency Bands above 1GHz test, and the worst case was found at Z axis. So the measurement will follow this same test configuration.

1 WLAN 2.4GHz: EUT in Y axis + Adapter 1			
2	WLAN 2.4GHz: EUT in Y axis + Adapter 2 + US plug		
3 WLAN 2.4GHz: EUT in Y axis + Adapter 3			
4 WLAN 5GHz: EUT in Z axis + Adapter 1			

Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.

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

# Operating Mode > 1GHz CTX

The EUT was performed at Y axis and Z axis position, and the worst case was found at Z axis. So the measurement will follow this same test configuration.

1 EUT in Z axis

Tł	ne Worst Case Mode for Following Conformance Tests			
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location			
Test Condition Radiated measurement				
Operating Mode Normal Link				
The EUT was performed at Y axis and Z axis position for Emissions in Restricted Frequency Bands above 1GHz test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.				
1 EUT in Y axis - WLAN 2.4GHz + WLAN 5GHz Band 1~2				
Refer to Appendix F for Radiated Emission Co-location.				

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The Worst Case Mode for Following Conformance Tests			
Tests Item Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation			
Operating Mode			
1 WLAN 2.4GHz + WLAN 5GHz Band 1~2 + WLAN 5GHz Band 3~4			
Refer to Sporton Test Report No.: FA710901-07 for Co-location RF Exposure Evaluation.			

# 2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

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

The program was executed as follows:

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

For Normal Link:

During the test, the EUT operation to normal function.

### 2.4 Accessories

Accessories				
Equipment Name	<b>Brand Name</b>	Model Name	Rating	
Adapter 1 (Fixed plug)	Ktec	KSA-24W-120200HU	Input: 100-240V, 50/60Hz, 0.6A Output: 12V, 2.0A	
Adapter 2 (Interchangeable plug)	Ktec	KSA-24W-120200D5	Input: 100-240V, 50/60Hz, 0.6A Output: 12V, 2.0A	
Adapter 3 (Fixed plug)	APD	WB-24J12FU	Input: 100-240V, 50-60Hz, 0.7A Max. Output: 12V, 2A	
Others				
US plug*1 (for adapter 2 use only)				
RJ-45 cable*1, Non-shielded, 0.9m				

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# 2.5 Support Equipment

#### For AC Conduction:

	Support Equipment					
No.	Equipment	Brand Name	Model Name	FCC ID		
Α	LAN1 NB	DELL	E6430	N/A		
В	WAN NB	DELL	E6430	N/A		
С	2.4G NB	DELL	E6430	N/A		
D	5G-1 NB	Apple	A1278	N/A		
Е	5G-2 NB	DELL	E6430	N/A		
F	Flash disk3.0	Transcend	JetFlash-700	N/A		

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For Radiated (below 1GHz) and Radiated (above 1GHz) / Non-beamforming mode:

	Support Equipment					
No.	No. Equipment Brand Name Model Name FCC ID					
Α	NB	DELL	M4800	N/A		

For Radiated (above 1GHz) / Beamforming mode:

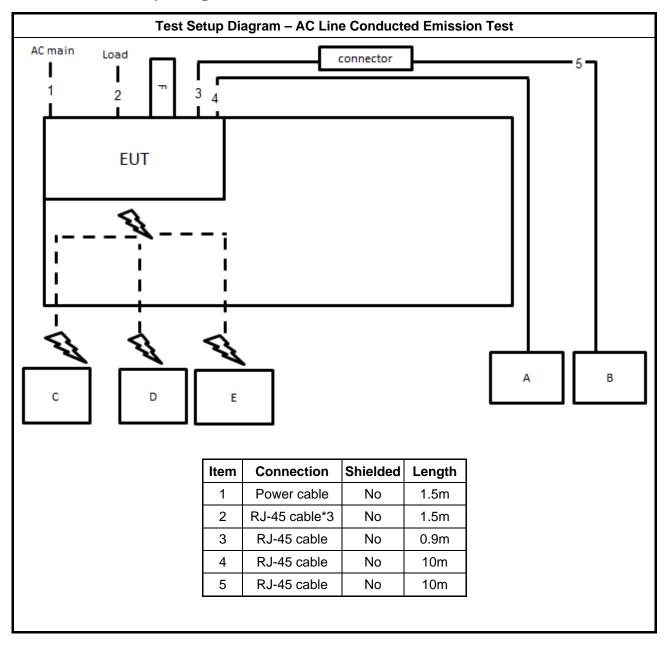
	Support Equipment					
No. Equipment Brand Name Model Name FCC ID						
Α	NB	DELL	M4800	N/A		
В	Linksys Tri-Band Wireless-AC Router (RX Device)	Linksys	MR8300 V2	N/A		
С	NB	DELL	E4300	N/A		

### For RF Conducted:

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

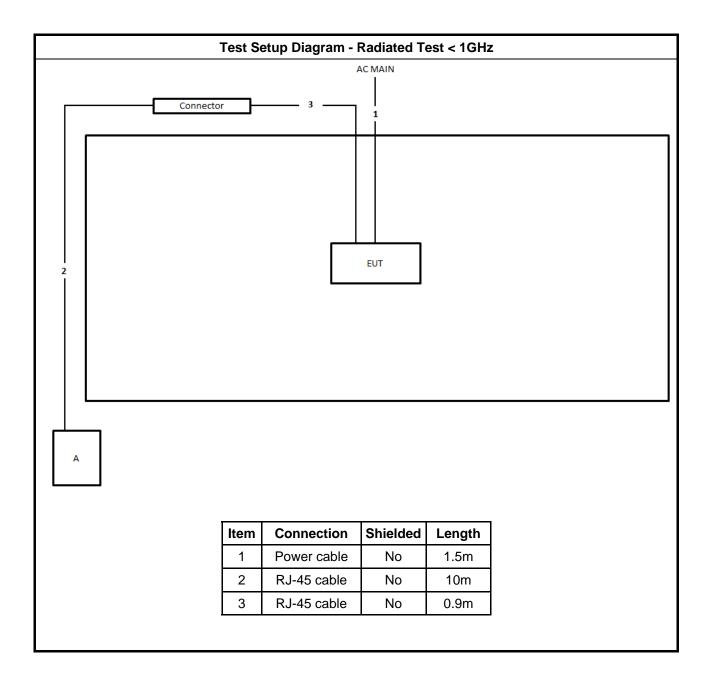
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# 2.6 Test Setup Diagram

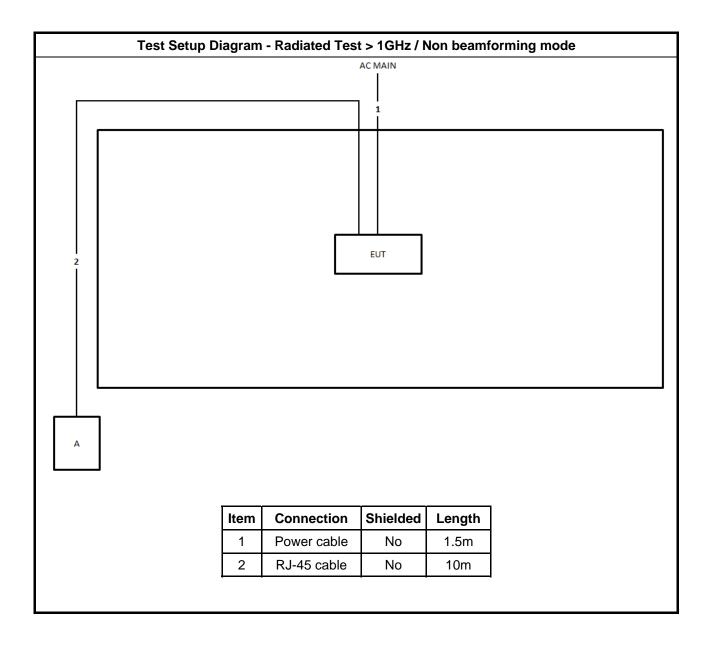


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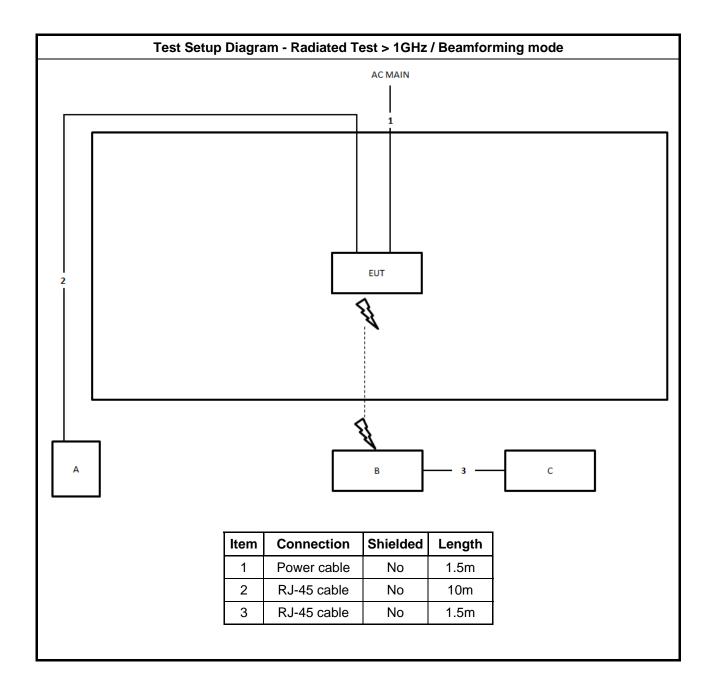
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# 3 Transmitter Test Result

# 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)	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.				

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# 3.1.2 Measuring Instruments

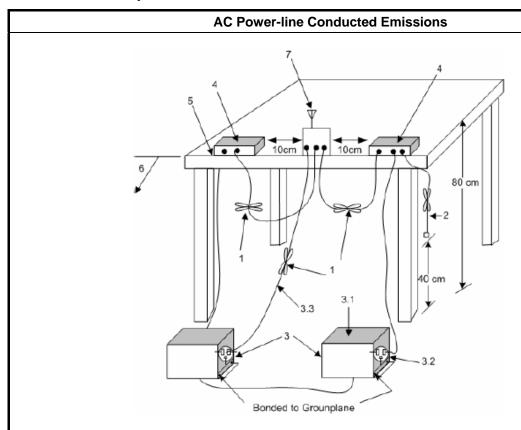
Refer a test equipment and calibration data table in this test report.

### 3.1.3 Test Procedures

Test Method	
Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.	

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### 3.1.4 Test Setup



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.

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- 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 Measurement Results Calculation

The measured Level is calculated using:

- a. Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- b. Margin = Limit + (Read Level + LISN Factor + Cable Loss)

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

Refer as Appendix A

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# 3.2 Emission Bandwidth

### 3.2.1 Emission Bandwidth Limit

	Emission Bandwidth Limit				
UNI	JNII Devices				
$\boxtimes$	For the 5.15-5.25 GHz band, N/A				
$\boxtimes$	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.				
$\boxtimes$	For the $5.47-5.725$ GHz band, the maximum conducted output power shall not exceed the lesser of $250$ mW or $11$ dBm + $10$ log B, where B is the $26$ dB emission bandwidth in MHz.				
$\boxtimes$	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.				
LE-	LAN Devices				
	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.				
	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				
	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				
	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.				

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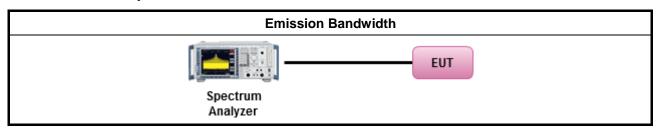
# 3.2.2 Measuring Instruments

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:				
Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.		Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.			
		Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.			
		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

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# 3.3 Maximum Conducted Output Power

#### 3.3.1 Maximum Conducted Output Power Limit

# **Maximum Conducted Output Power Limit UNII Devices** For the 5.15-5.25 GHz band: Outdoor AP: the maximum conducted output power (Pout) shall not exceed the lesser of 1 W. If GTX > 6 dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ . e.i.r.p. at any elevation angle above 30 degrees $\leq 125$ mW [21dBm] Indoor AP: the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W. If G<sub>TX</sub> > 6 dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ Point-to-point AP: the maximum conducted output power (Pout) shall not exceed the lesser of 1 W If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$ . Mobile or Portable Client: the maximum conducted output power (Pout) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$ . For the 5.25-5.35 GHz band, the maximum conducted output power (P<sub>Out</sub>) 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 $P_{Out} = 24 - (G_{TX} - 6).$ For the 5.47-5.725 GHz band, the maximum conducted output power (Pout) 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<sub>TX</sub> > 6 dBi, then $P_{Out} = 24 - (G_{TX} - 6).$ For the 5.725-5.85 GHz band: Point-to-multipoint systems (P2M): the maximum conducted output power (Pout) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ . Point-to-point systems (P2P): the maximum conducted output power (Pout) shall not exceed the lesser of 1 W. **LE-LAN Devices** 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. 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 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 For the 5.725-5.85 GHz band: Point-to-multipoint systems (P2M): the maximum conducted output power (Pout) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ . Point-to-point systems (P2P): the maximum conducted output power (Pout) shall not exceed the lesser of 1 W. Pout = maximum conducted output power in dBm, $G_{TX}$ = the maximum transmitting antenna directional gain in dBi.

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# 3.3.2 Measuring Instruments

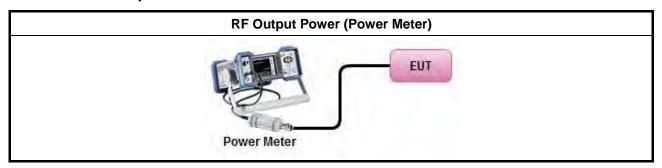
Refer a test equipment and calibration data table in this test report.

#### 3.3.3 Test Procedures

	Test Method
-	Maximum Conducted Output Power
	Average over on/off periods with duty factor
	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	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
	Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
•	For conducted measurement.
	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.
	If multiple transmit chains, EIRP calculation could be following as methods: P <sub>total</sub> = P <sub>1</sub> + P <sub>2</sub> + + P <sub>n</sub> (calculated in linear unit [mW] and transfer to log unit [dBm]) EIRP <sub>total</sub> = P <sub>total</sub> + DG

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### 3.3.4 Test Setup



# 3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

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# 3.4 Peak Power Spectral Density

# 3.4.1 Peak Power Spectral Density Limit

	Peak Power Spectral Density Limit				
UN	II Devices				
$\boxtimes$	For the 5.15-5.25 GHz band:				
	<ul> <li>Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G<sub>TX</sub> &gt; 6 dBi, then P<sub>Out</sub> = 17 - (G<sub>TX</sub> - 6).</li> </ul>				
	Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$ .				
	Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$ .				
	<ul> <li>Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G<sub>TX</sub> &gt; 6 dBi, then PPSD= 11 - (G<sub>TX</sub> - 6)</li> </ul>				
	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 – ( $G_{TX} - 6$ ).				
	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 $-$ ( $G_{TX} - 6$ ).				
$\boxtimes$	For the 5.725-5.85 GHz band:				
	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) $\leq$ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then PPSD= $30 - (G_{TX} - 6)$ .				
	Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.				
LE-	LAN Devices				
	For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.				
	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.				
	<ul> <li>e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below:</li> <li>-13 dBW/MHz for 0° ≤ θ &lt; 8°; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ &lt; 40°</li> <li>-35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45°; -42 dBW/MHz for θ &gt; 45°</li> </ul>				
	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.				
	For the 5.725-5.85 GHz band:				
	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) $\leq$ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then PPSD= $30 - (G_{TX} - 6)$ .				
	Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.				
pov	SD = peak power spectral density that he same method as used to determine the conducted output ver shall be used to determine the power spectral density. And power spectral density in dBm/MHz = the maximum transmitting antenna directional gain in dBi.				

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# 3.4.2 Measuring Instruments

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

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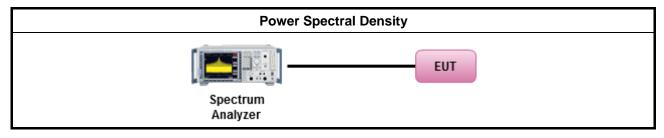
### 3.4.3 Test Procedures

		Test Method
•	outp func	k power spectral density procedures that the same method as used to determine the conducted out power shall be used to determine the peak power spectral density and use the peak search tion on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density I be measured using below options:
		Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
	[duty	y cycle ≥ 98% or external video / power trigger]
	$\boxtimes$	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
		Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty	cycle < 98% and average over on/off periods with duty factor
		Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
		Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
•	For o	conducted measurement.
	•	If the EUT supports multiple transmit chains using options given below:
		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.
		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,
		Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
	•	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $ PPSD_{total} = PPSD_1 + PPSD_2 + + PPSD_n \\ (calculated in linear unit [mW] and transfer to log unit [dBm]) \\ EIRP_{total} = PPSD_{total} + DG $

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# 3.4.4 Test Setup



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# 3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

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#### 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		

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- Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).
- Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

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

Un-restricted band emissions above 1GHz Limit						
Operating Band	Limit					
⊠ 5.15 - 5.25 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]					
☑ 5.25 - 5.35 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]					
☑ 5.47 - 5.725 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]					
⊠ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.					

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of

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linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

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### 3.5.2 Measuring Instruments

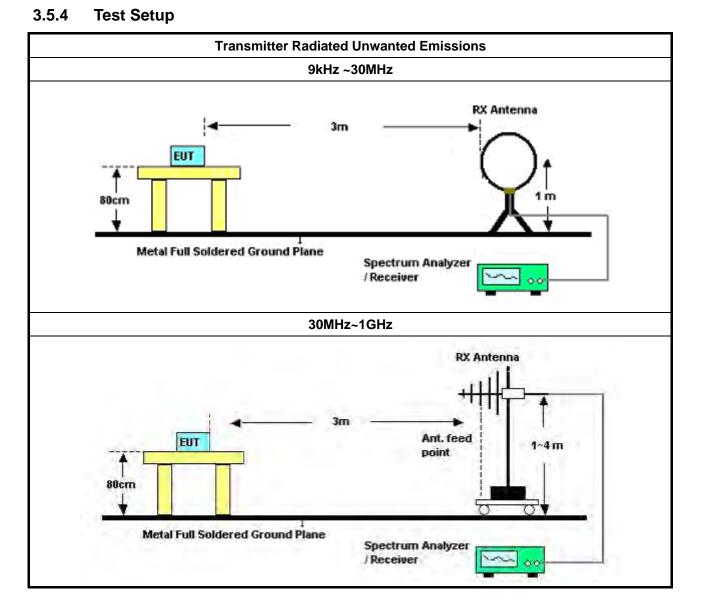
Refer a test equipment and calibration data table in this test report.

#### 3.5.3 Test Procedures

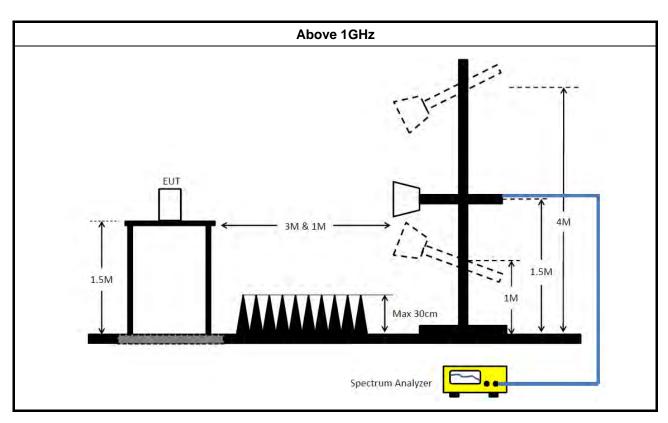
#### **Test Method**

- Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).
- The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
- For the transmitter unwanted emissions shall be measured using following options below:
  - Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
  - Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
    - Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
    - Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
    - Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
    - Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
    - Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
    - Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
- For radiated measurement.
  - Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
  - Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
  - Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
- The any unwanted emissions level shall not exceed the fundamental emission level.
- All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

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#### 3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor (if applicable) = Level.

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

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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.

#### 3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

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# 4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50 -16-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
Impedance Stabilization Network	Teseq	ISN T800	24557	150kHz ~ 230MHz	Nov. 25, 2019	Nov. 24, 2020	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019	May 20, 2020	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	- N.C.R.		N.C.R.	Conduction (CO01-CB)
Bilog Antenna with 6dB Attenuator	Schaffner & EMCI	CBL6112 & N-6-06	2888 & AT-N0611	30MHz ~ 1GHz	Oct. 12, 2019	Oct. 11, 2020	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 16, 2020	Mar. 15, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 01, 2019	Apr. 30, 2020	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	LOW Cable-04+23	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 04, 2019	Nov. 03, 2020	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2020	Jan. 07, 2021	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35- HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 19, 2019	Jun. 18, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH01-CB)

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Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 02, 2019	Jul. 01, 2020	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-3	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)

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

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

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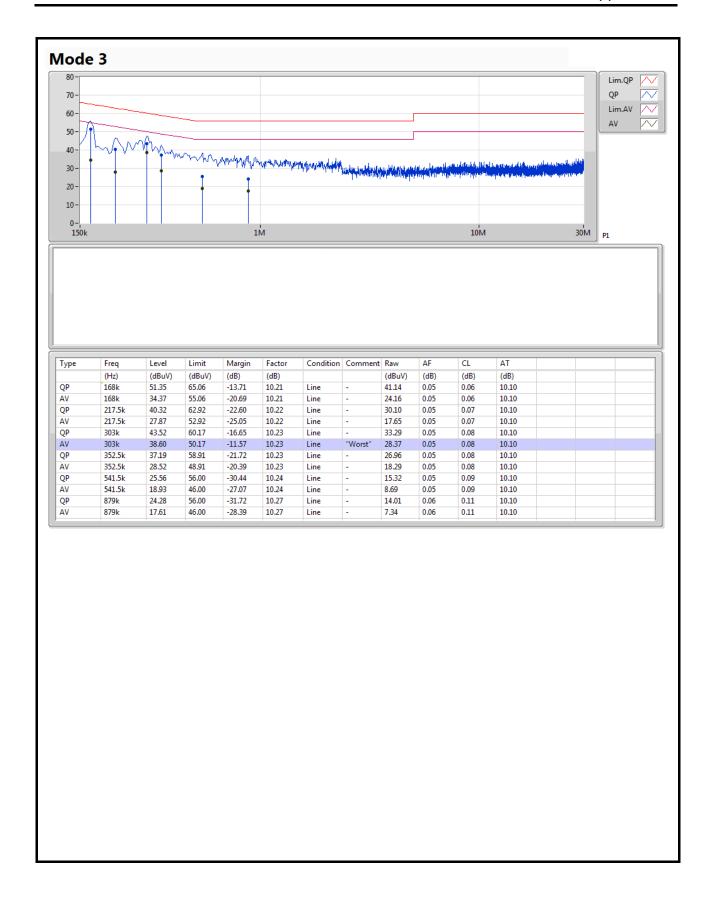
# AC Power Port Conducted Emission Result

Appendix A

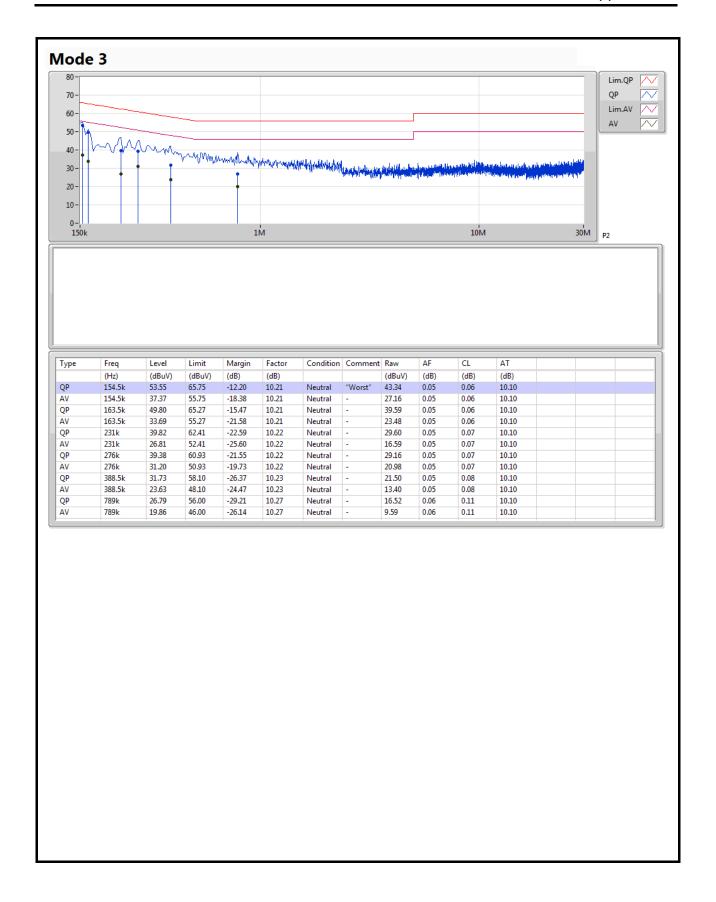
**Summary** 

Mode	Result	Туре	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 3	Pass	AV	303k	38.60	50.17	-11.57	10.23	Line











**Summary** 

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a-BF_Nss1,(6Mbps)_2TX	35.94M	20.96M	21M0D1D	18.87M	16.372M
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	37.53M	20.66M	20M7D1D	19.86M	17.571M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	78.06M	38.681M	38M7D1D	39.54M	35.922M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	83.16M	75.682M	75M7D1D	83.16M	75.562M
5.25-5.35GHz	-	-	-	-	-
802.11a-BF_Nss1,(6Mbps)_2TX	19.14M	16.432M	16M4D1D	18.99M	16.372M
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.04M	17.601M	17M6D1D	19.86M	17.571M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	39.72M	35.982M	36M0D1D	39.48M	35.802M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	82.92M	75.562M	75M6D1D	82.44M	75.442M
5.47-5.725GHz	-	-	-	-	-
802.11a-BF_Nss1,(6Mbps)_2TX	19.77M	16.402M	16M4D1D	19.65M	16.402M
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.28M	17.601M	17M6D1D	20.07M	17.571M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	40.02M	35.922M	35M9D1D	39.78M	35.802M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	83.88M	75.802M	75M8D1D	83.16M	75.682M
5.725-5.85GHz	-	-	-	-	-
802.11a-BF_Nss1,(6Mbps)_2TX	16.32M	16.762M	16M8D1D	16.26M	16.492M
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.58M	17.751M	17M8D1D	16.8M	17.631M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	35.64M	38.561M	38M6D1D	35.04M	36.102M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	75.96M	75.802M	75M8D1D	75.6M	75.802M

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

Max-OBW = Maximum99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

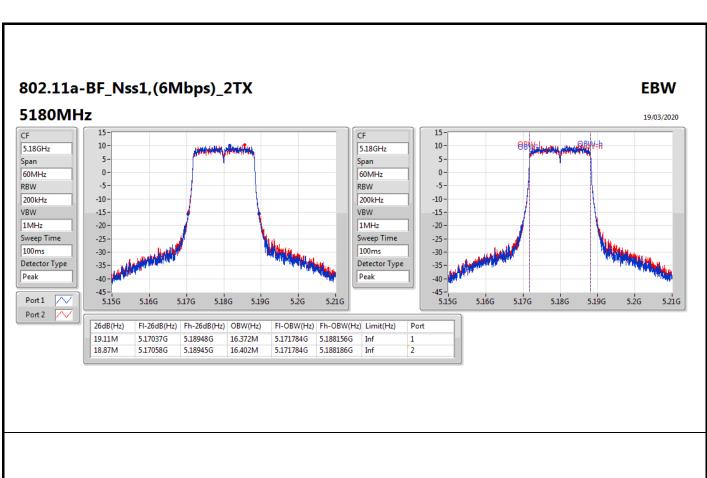
**Min-OBW** = Minimum 99% occupied bandwidth;

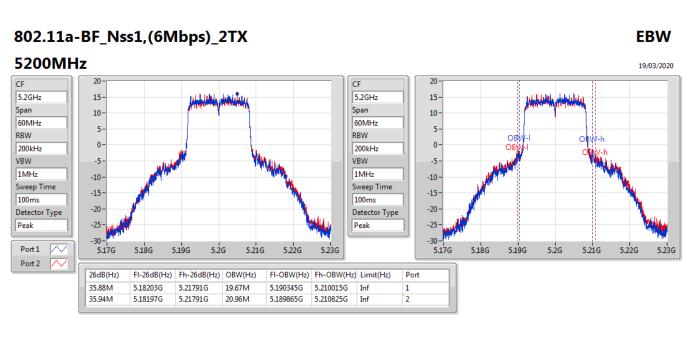


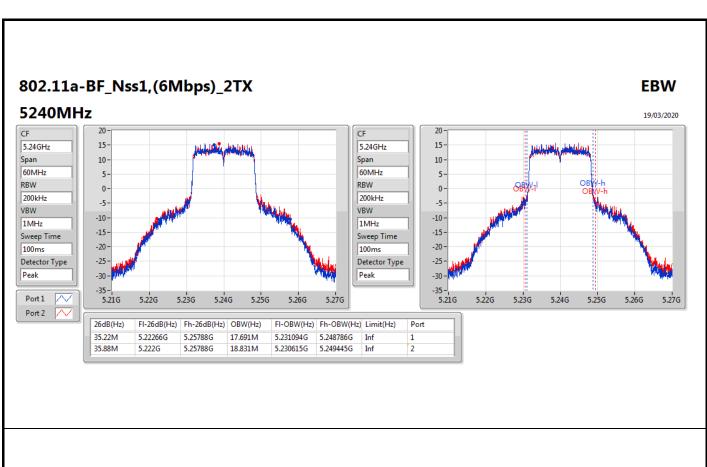
## Result

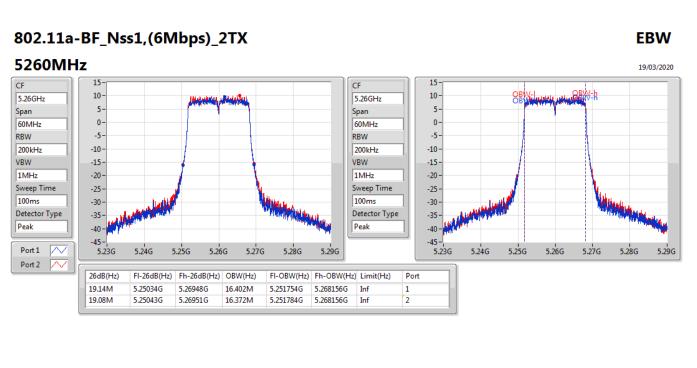
Result	1	Τ	ı	Τ	Τ	Г
Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11a-BF_Nss1,(6Mbps)_2TX	-	=	-	-	=	-
5180MHz	Pass	Inf	19.11M	16.372M	18.87M	16.402M
5200MHz	Pass	Inf	35.88M	19.67M	35.94M	20.96M
5240MHz	Pass	Inf	35.22M	17.691M	35.88M	18.831M
5260MHz	Pass	Inf	19.14M	16.402M	19.08M	16.372M
5300MHz	Pass	Inf	19.11M	16.402M	19.08M	16.372M
5320MHz	Pass	Inf	19.05M	16.432M	18.99M	16.402M
5500MHz	Pass	Inf	19.65M	16.402M	19.77M	16.402M
5580MHz	Pass	Inf	19.65M	16.402M	19.71M	16.402M
5700MHz	Pass	Inf	19.65M	16.402M	19.68M	16.402M
5745MHz	Pass	500k	16.26M	16.642M	16.32M	16.552M
5785MHz	Pass	500k	16.29M	16.762M	16.32M	16.762M
5825MHz	Pass	500k	16.32M	16.492M	16.32M	16.582M
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	=	-	=	=	-
5180MHz	Pass	Inf	19.86M	17.571M	19.95M	17.571M
5200MHz	Pass	Inf	37.53M	20.66M	36.9M	19.79M
5240MHz	Pass	Inf	36.96M	18.501M	35.94M	18.951M
5260MHz	Pass	Inf	19.89M	17.571M	19.86M	17.571M
5300MHz	Pass	Inf	20.01M	17.571M	19.92M	17.571M
5320MHz	Pass	Inf	19.89M	17.601M	20.04M	17.571M
5500MHz	Pass	Inf	20.16M	17.571M	20.22M	17.601M
5580MHz	Pass	Inf	20.07M	17.571M	20.16M	17.571M
5700MHz	Pass	Inf	20.19M	17.571M	20.28M	17.571M
5745MHz	Pass	500k	16.8M	17.721M	16.92M	17.691M
5785MHz	Pass	500k	17.16M	17.751M	17.55M	17.721M
5825MHz	Pass	500k	16.92M	17.631M	17.58M	17.691M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.54M	35.982M	39.78M	35.922M
	Pass	Inf	78.06M	38.681M	77.7M	37.901M
	Pass	Inf	39.54M	35.982M	39.72M	35.922M
5310MHz	Pass	Inf	39.48M	35.802M	39.6M	35.862M
5510MHz	Pass	Inf	39.9M	35.862M	40.02M	35.862M
5550MHz	Pass	Inf	39.9M	35.922M	39.78M	35.922M
5670MHz	Pass	Inf	39.96M	35.862M	39.9M	35.802M
5755MHz	Pass	500k	35.64M	36.162M	35.28M	36.102M
5795MHz	Pass	500k	35.04M	37.661M	35.04M	38.561M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	83.16M	75.682M	83.16M	75.562M
5290MHz	Pass	Inf	82.92M	75.442M	82.44M	75.562M
5530MHz	Pass	Inf	83.88M	75.442W	83.28M	75.802M
5610MHz	Pass	Inf	83.16M	75.682M	83.28M	75.682M
5010MHz	Pass	500k	75.6M	75.802M	75.96M	75.802M
Don't V.N. d.D. Don't V.C.d.D. down in our dividable for 5.705.5.0				/J.OUZIVI	/ J. 70IVI	7 J.OUZIVI

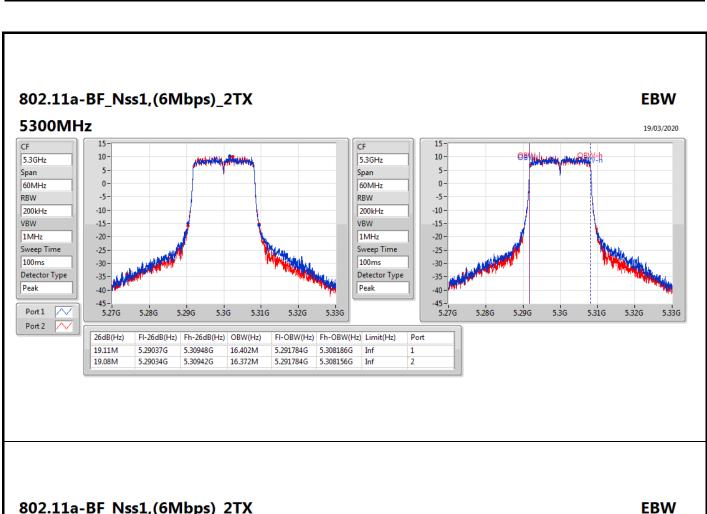
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band Port X-OBW = Port X 99% occupied bandwidth;

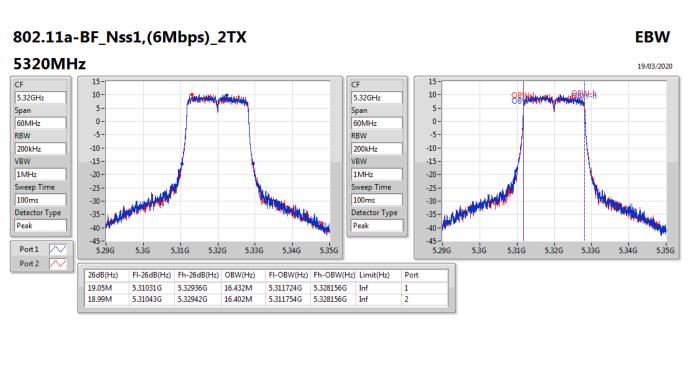


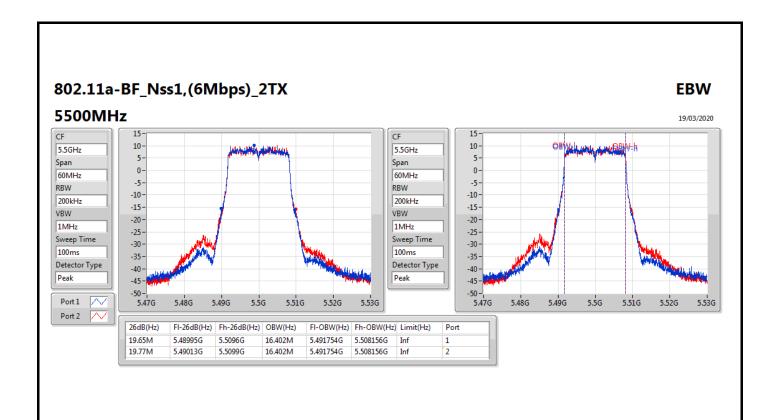


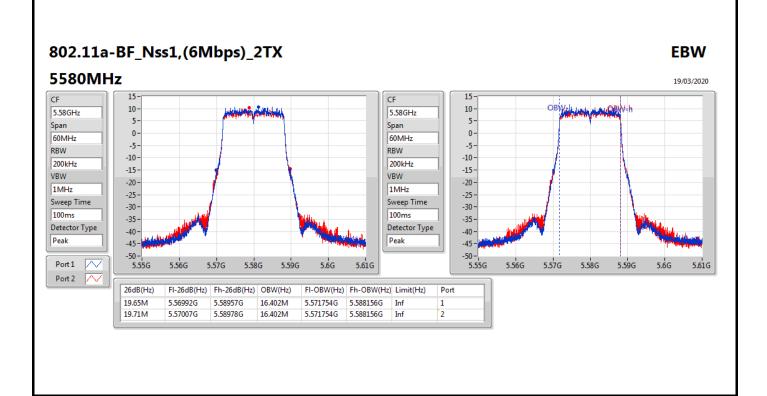


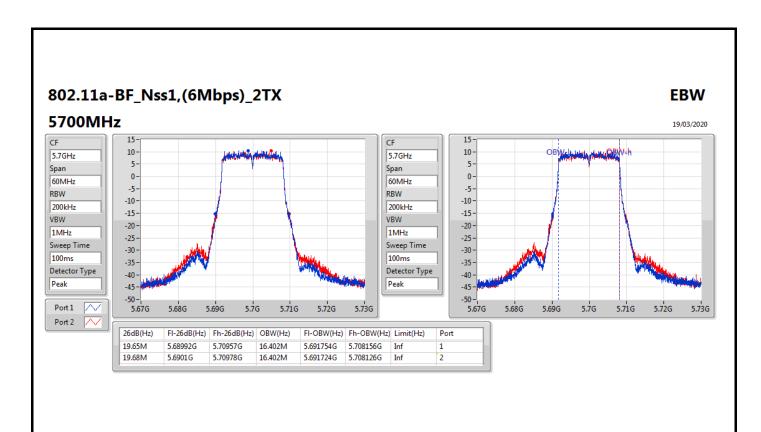


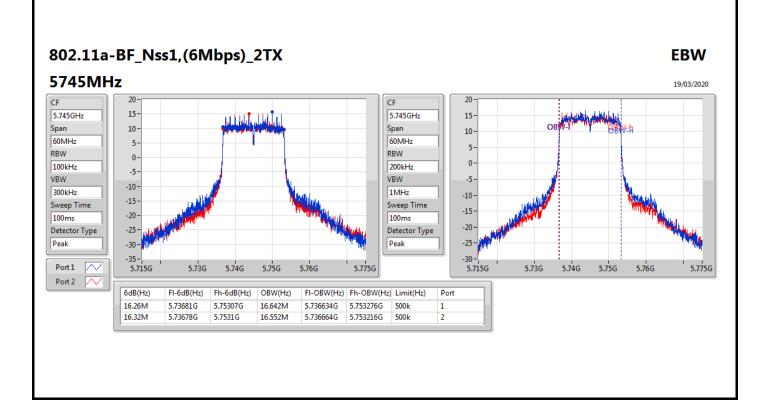


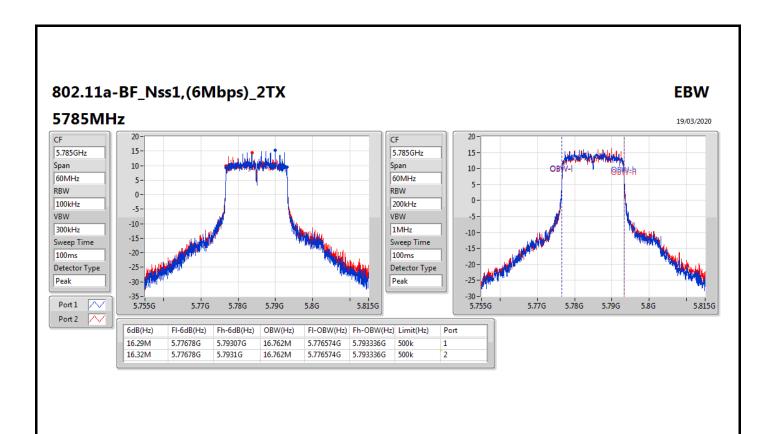


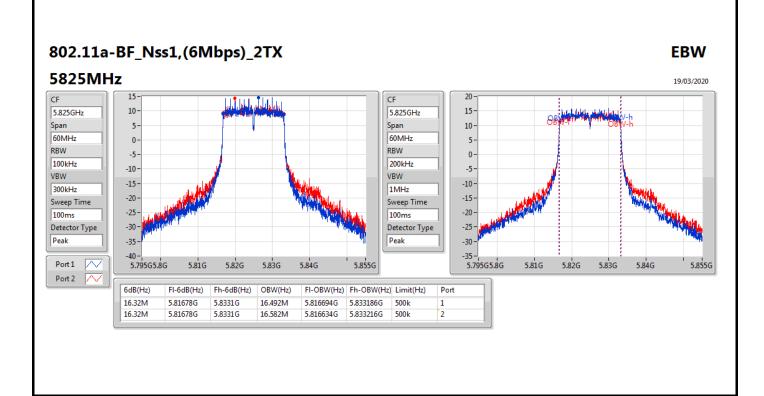


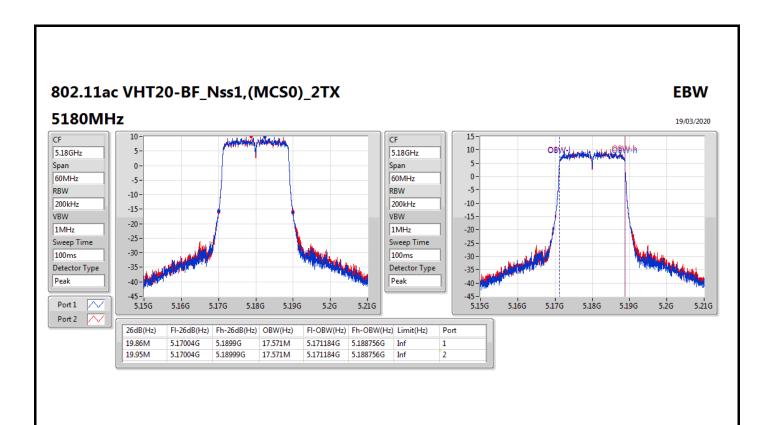


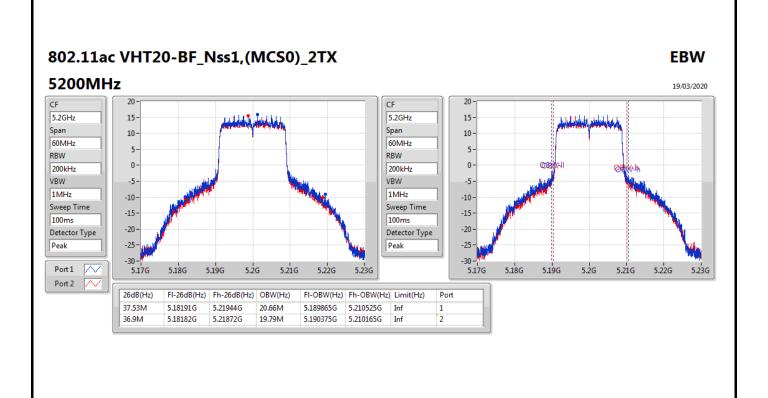


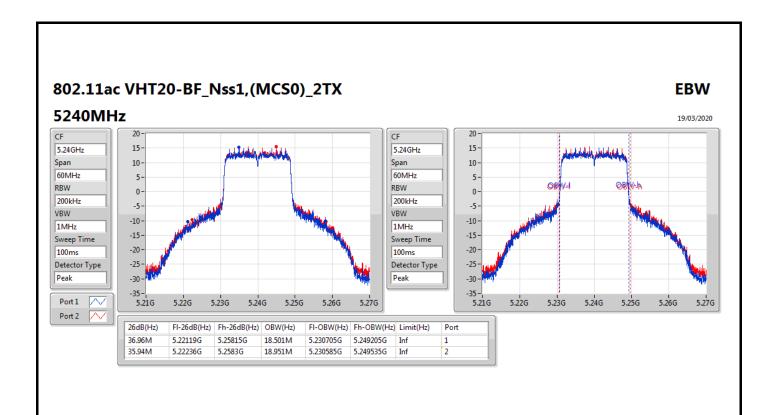


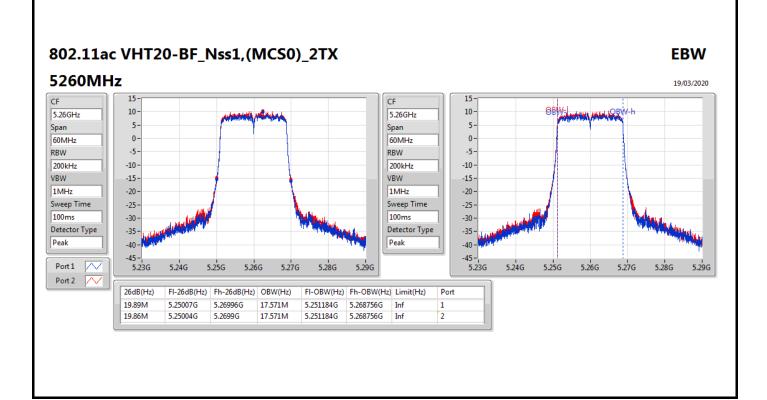


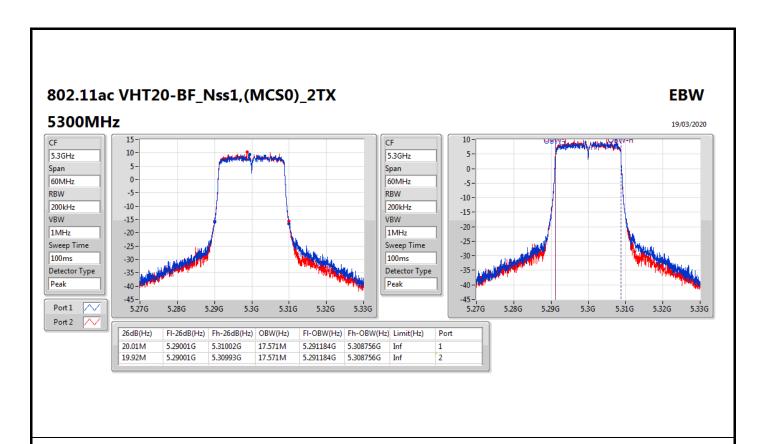


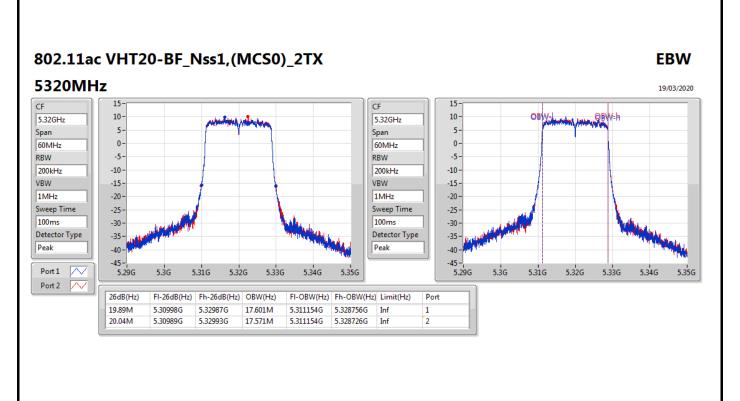


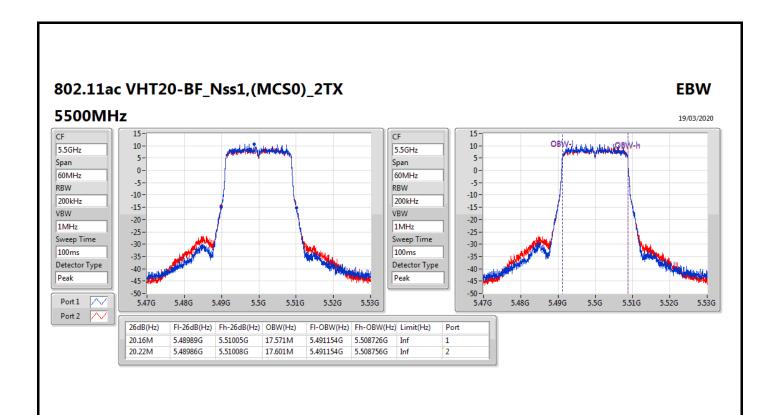


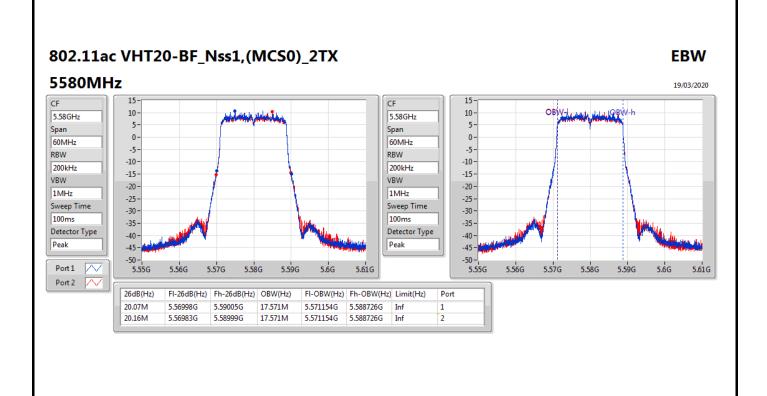


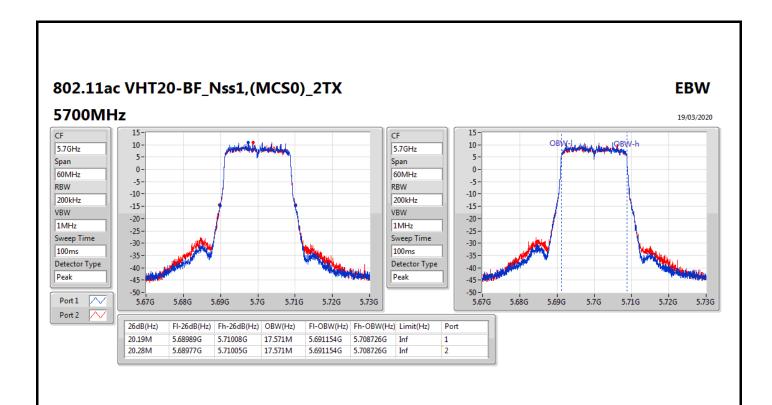


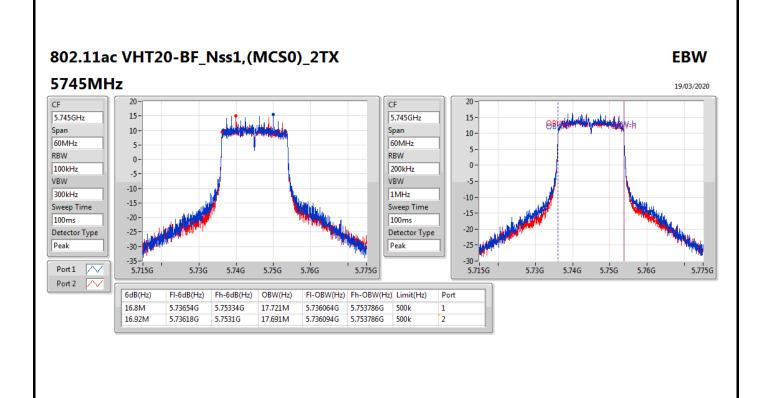


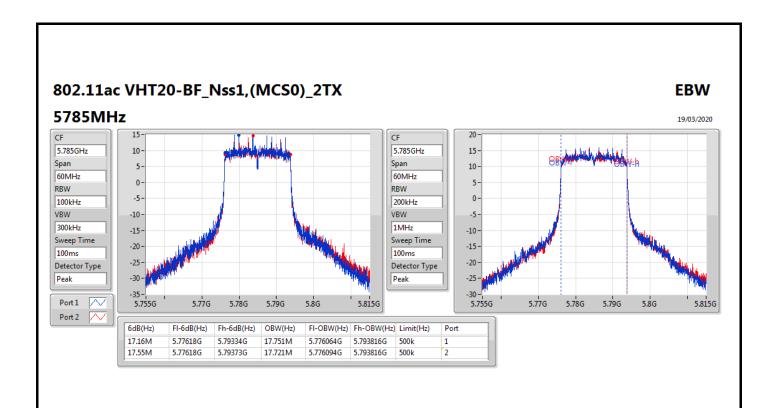


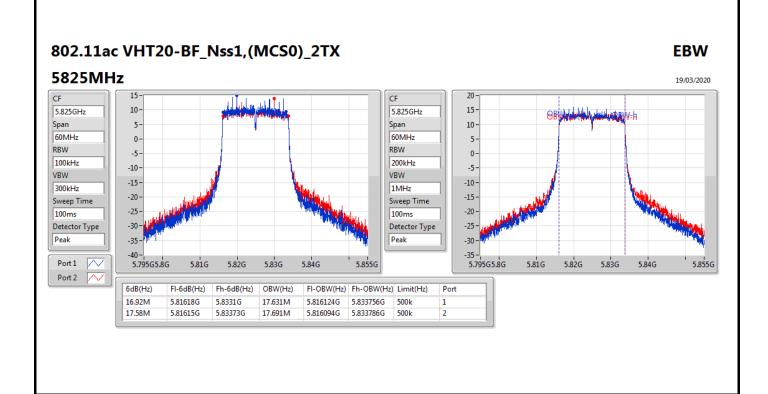


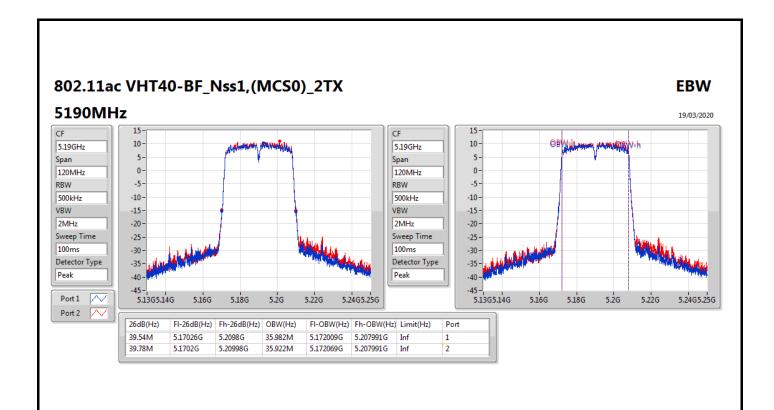


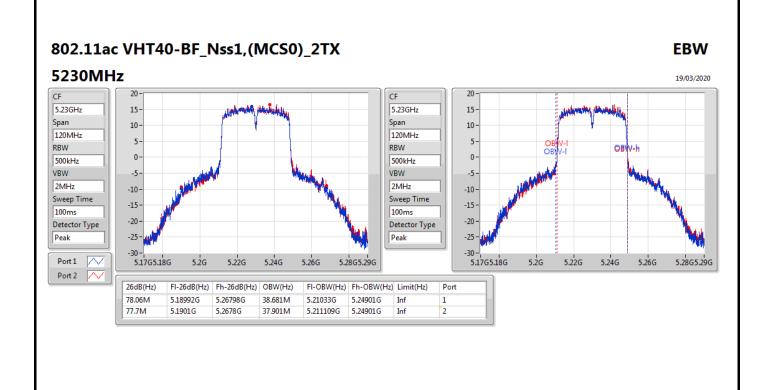


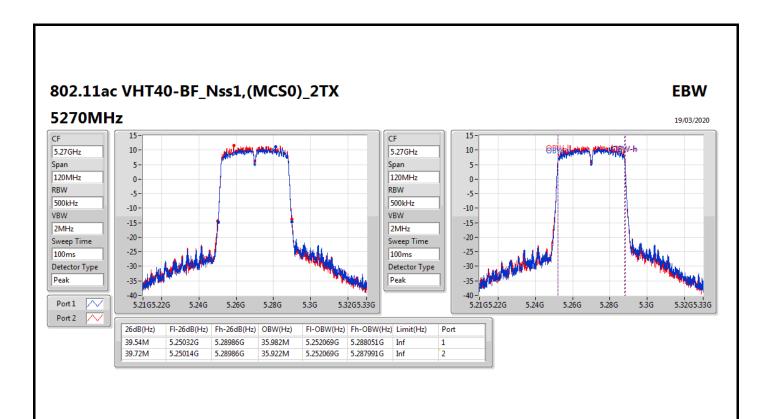


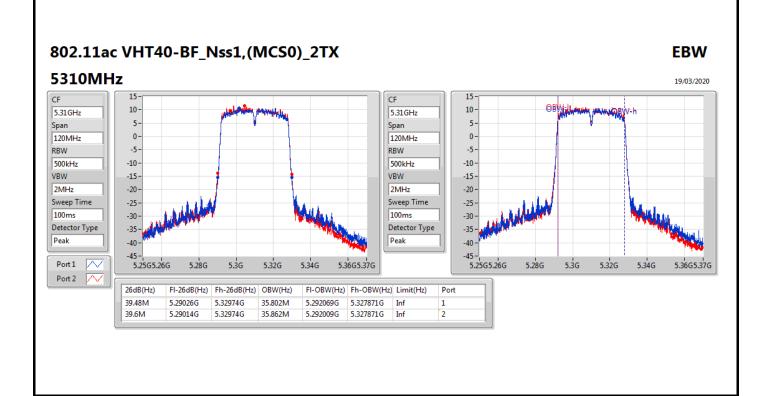


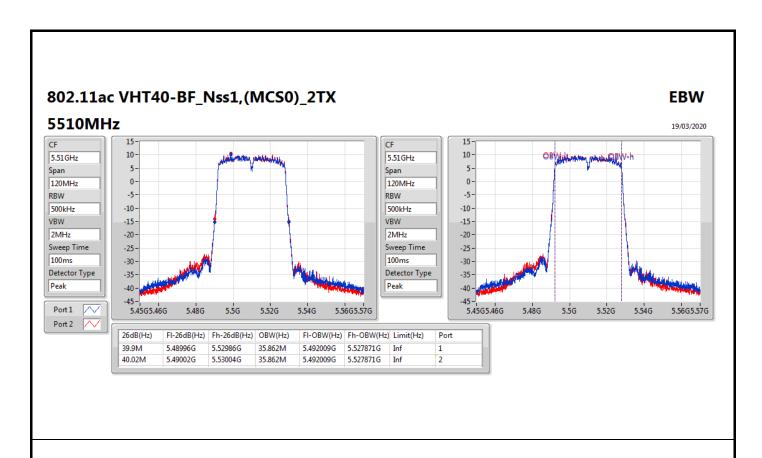


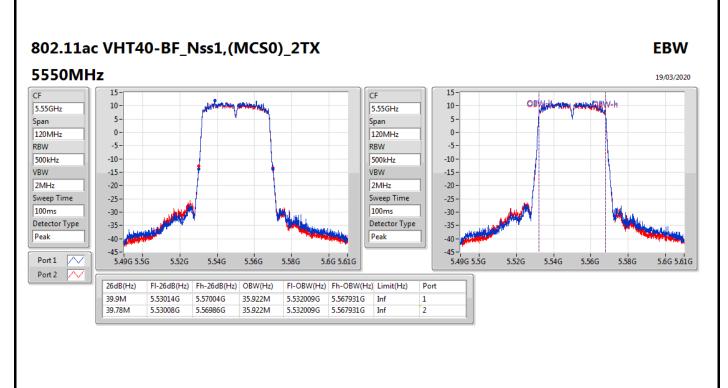


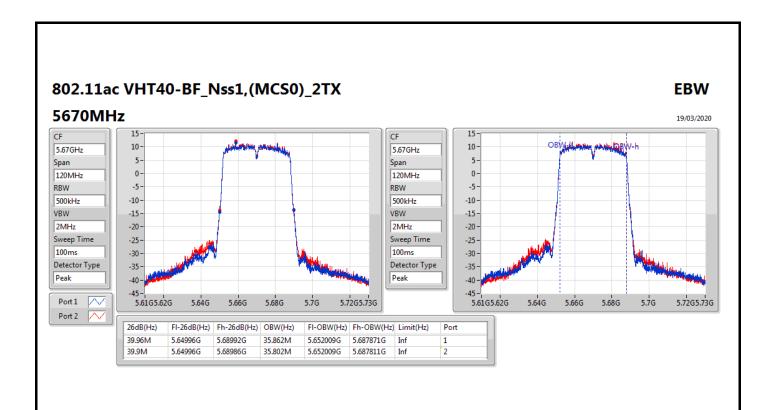


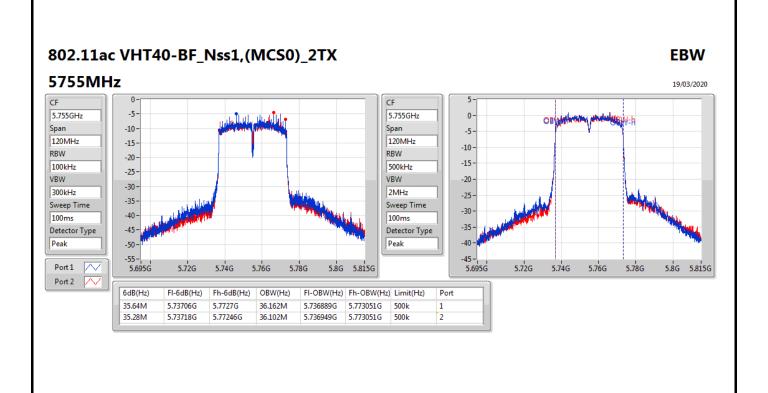


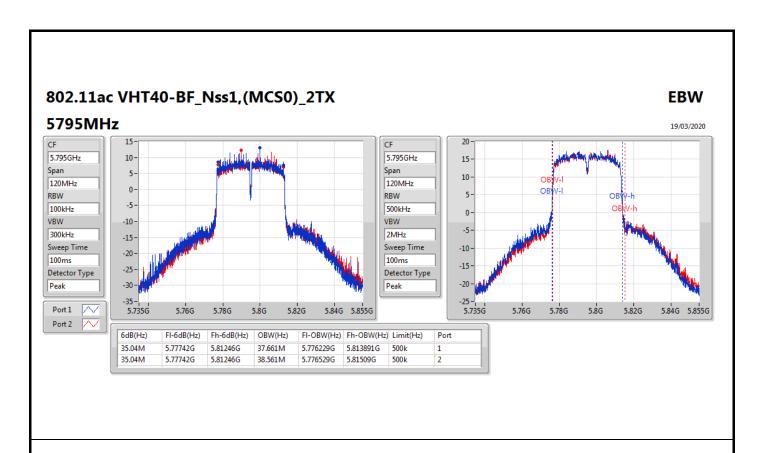


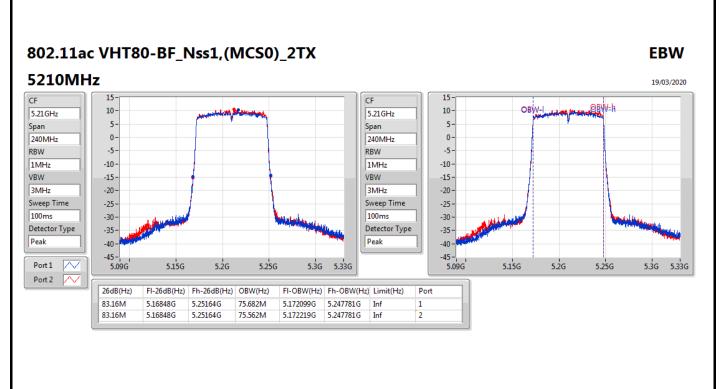


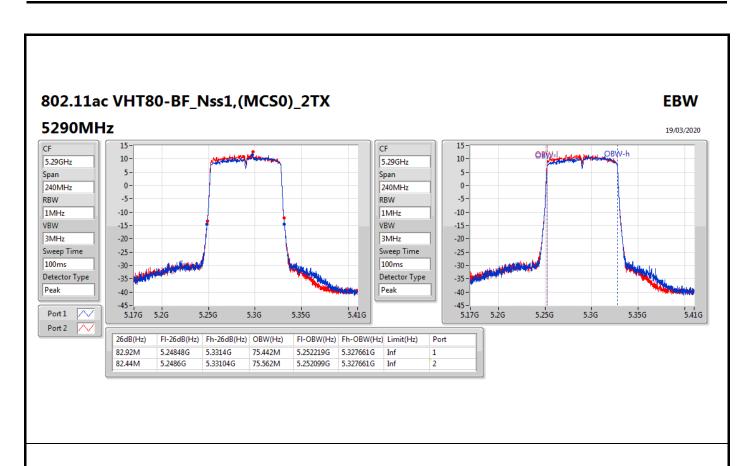


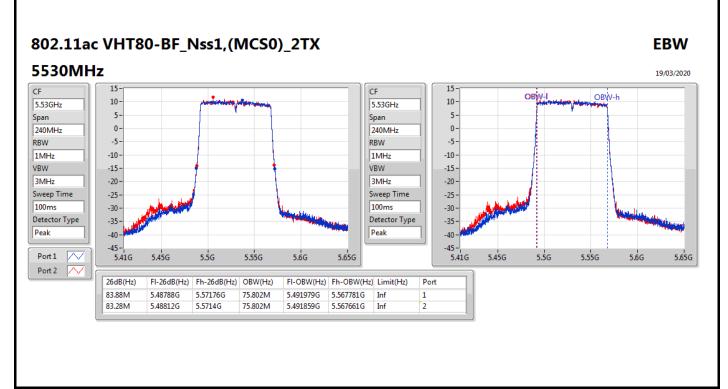


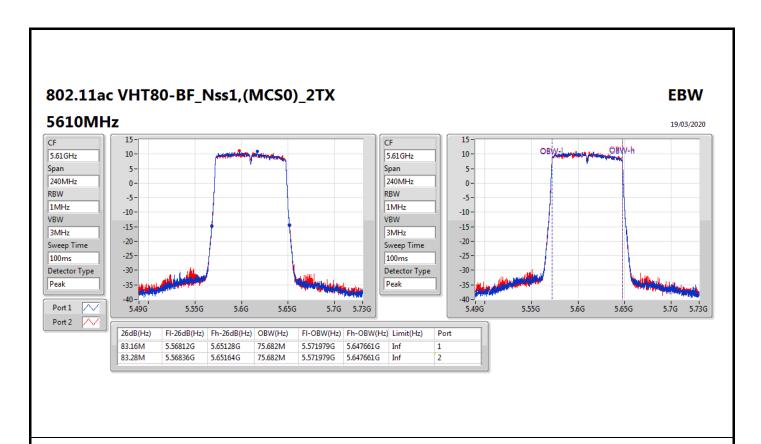


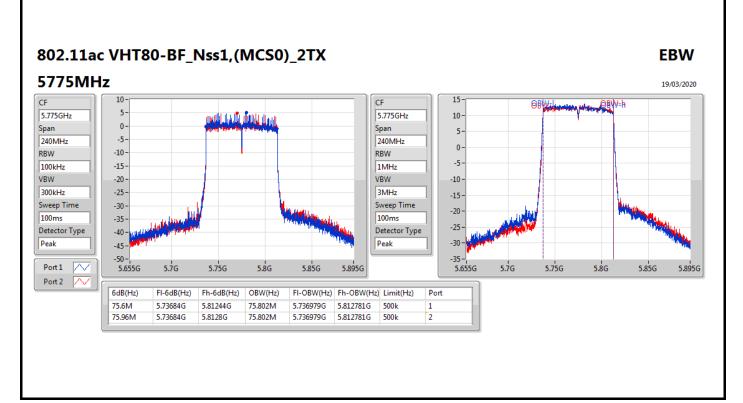














Average Power Appendix C

Summary

Mode	Total Power	Total Power		
	(dBm)	(W)		
5.15-5.25GHz	-	-		
802.11a-BF_Nss1,(6Mbps)_2TX	28.79	0.75683		
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	28.54	0.71450		
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	28.40	0.69183		
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	21.86	0.15346		
5.25-5.35GHz	-	-		
802.11a-BF_Nss1,(6Mbps)_2TX	23.78	0.23878		
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	23.94	0.24774		
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	23.70	0.23442		
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	22.84	0.19231		
5.47-5.725GHz	-	-		
802.11a-BF_Nss1,(6Mbps)_2TX	23.51	0.22439		
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	23.68	0.23335		
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	23.68	0.23335		
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	22.44	0.17539		
5.725-5.85GHz	-	-		
802.11a-BF_Nss1,(6Mbps)_2TX	28.98	0.79068		
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	28.83	0.76384		
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	29.36	0.86298		
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	25.32	0.34041		



Average Power Appendix C

## Result

Mode	Result	DG	Port 1	Port 2	Total Power	Power Limit
		(dBi)	(dBm)	(dBm)	(dBm)	(dBm)
802.11a-BF_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.66	20.83	20.88	23.87	30.00
5200MHz	Pass	5.66	25.74	25.82	28.79	30.00
5240MHz	Pass	5.66	25.10	25.50	28.31	30.00
5260MHz	Pass	5.65	20.11	20.76	23.46	23.81
5300MHz	Pass	5.65	20.62	20.91	23.78	23.81
5320MHz	Pass	5.65	20.46	20.77	23.63	23.79
5500MHz	Pass	6.26	20.02	20.15	23.10	23.67
5580MHz	Pass	6.26	20.54	20.22	23.39	23.67
5700MHz	Pass	6.26	20.53	20.46	23.51	23.67
5745MHz	Pass	5.94	26.04	25.90	28.98	30.00
5785MHz	Pass	5.94	25.50	25.62	28.57	30.00
5825MHz	Pass	5.94	25.37	25.29	28.34	30.00
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.66	20.89	21.00	23.96	30.00
5200MHz	Pass	5.66	25.57	25.48	28.54	30.00
5240MHz	Pass	5.66	25.16	25.52	28.35	30.00
5240WHz	Pass	5.65	20.67	21.18	23.94	23.98
5300MHz	Pass	5.65	20.67	20.91	23.80	23.98
5320MHz	Pass	5.65	20.54	20.84	23.70	23.98
5500MHz	Pass	6.26	20.25	20.34	23.31	23.72
5580MHz	Pass	6.26	20.46	20.15	23.32	23.72
5700MHz	Pass	6.26	20.74	20.59	23.68	23.72
5745MHz	Pass	5.94	25.86	25.77	28.83	30.00
5785MHz	Pass	5.94	25.63	25.40	28.53	30.00
5825MHz	Pass	5.94	25.22	25.01	28.13	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	5.66	19.99	20.28	23.15	30.00
5230MHz	Pass	5.66	25.29	25.48	28.40	30.00
5270MHz	Pass	5.65	20.47	20.90	23.70	23.98
5310MHz	Pass	5.65	20.02	20.19	23.12	23.98
5510MHz	Pass	6.26	19.14	19.16	22.16	23.72
5550MHz	Pass	6.26	20.91	20.42	23.68	23.72
5670MHz	Pass	6.26	20.34	20.48	23.42	23.72
5755MHz	Pass	5.94	25.09	24.96	28.04	30.00
5795MHz	Pass	5.94	26.49	26.20	29.36	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	5.66	18.70	18.99	21.86	30.00
5290MHz	Pass	5.65	19.55	20.10	22.84	23.98
5530MHz	Pass	6.26	19.40	19.34	22.38	23.72
5610MHz	Pass	6.26	19.43	19.43	22.44	23.72
5775MHz	Pass	5.94	22.40	22.22	25.32	30.00

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



**Summary** 

Mode	PD				
	(dBm/RBW)				
5.15-5.25GHz					
802.11a-BF_Nss1,(6Mbps)_2TX	15.99				
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	15.31				
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	12.37				
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	2.86				
5.25-5.35GHz	-				
802.11a-BF_Nss1,(6Mbps)_2TX	10.98				
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	10.78				
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	7.81				
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	4.03				
5.47-5.725GHz	-				
802.11a-BF_Nss1,(6Mbps)_2TX	10.71				
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	10.42				
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	7.83				
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	3.44				
5.725-5.85GHz	-				
802.11a-BF_Nss1,(6Mbps)_2TX	14.76				
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	14.08				
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	11.99				
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	4.63				

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



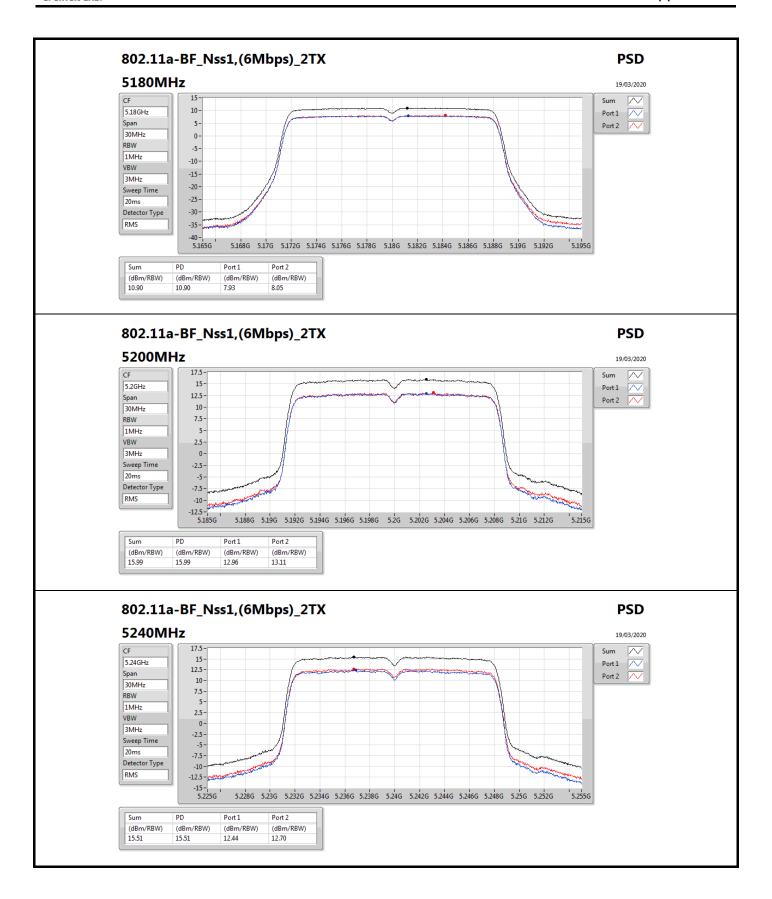
Appendix D **PSD** 

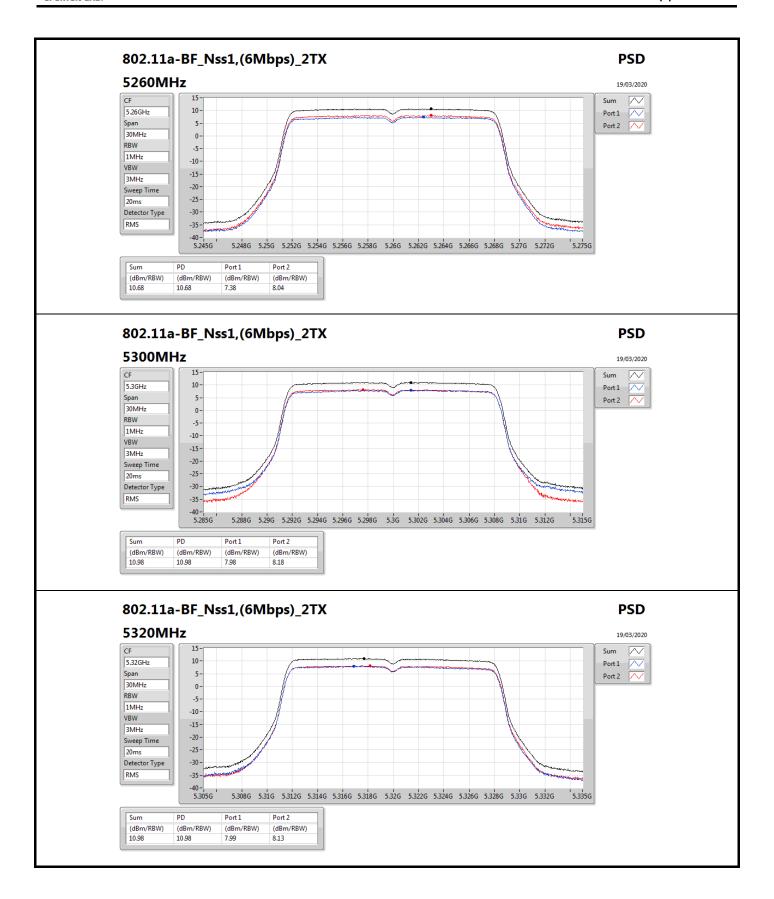
## Result

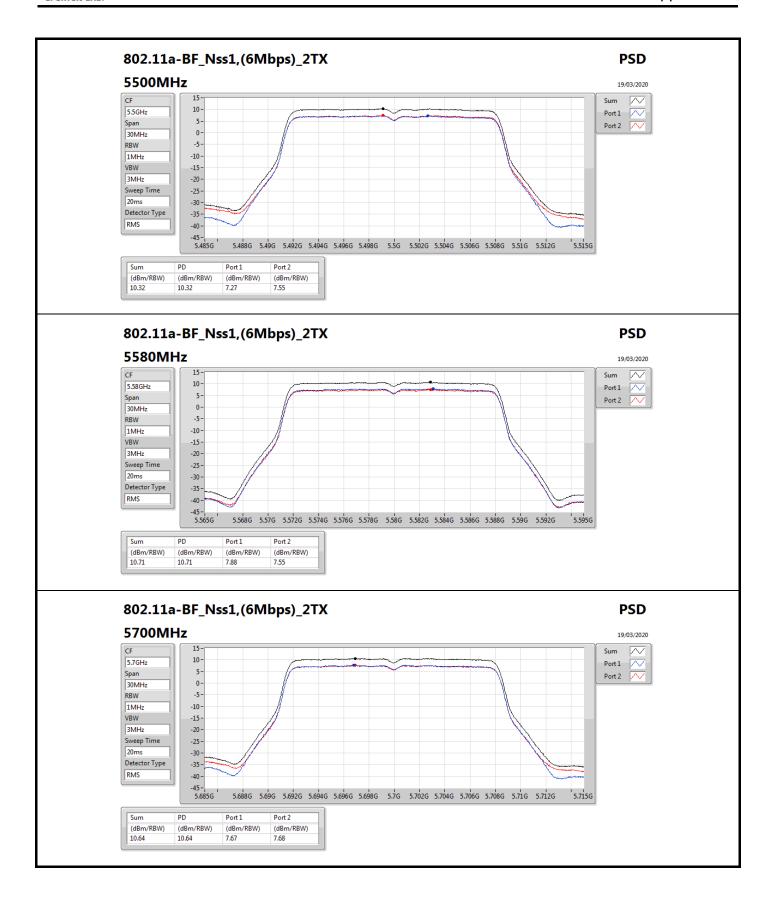
Result Mode	Result	DG	Port 1	Port 2	PD	PD Limit
.mode	Rosult	(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
802.11a-BF_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.66	7.93	8.05	10.90	17.00
5200MHz	Pass	5.66	12.96	13.11	15.99	17.00
5240MHz	Pass	5.66	12.44	12.70	15.51	17.00
5260MHz	Pass	5.65	7.38	8.04	10.68	11.00
5300MHz	Pass	5.65	7.98	8.18	10.98	11.00
5320MHz	Pass	5.65	7.99	8.13	10.78	11.00
5500MHz	Pass	6.26	7.27	7.55	10.76	10.74
5580MHz	Pass	6.26	7.88	7.55	10.32	10.74
5700MHz	Pass	6.26	7.67	7.68	10.64	10.74
5745MHz	Pass	5.94	11.86	11.73	14.76	30.00
5785MHz	Pass	5.94	11.49	11.47	14.38	30.00
5825MHz	Pass	5.94	11.24	11.26	14.18	30.00
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.66	7.66	7.67	10.63	17.00
5200MHz	Pass	5.66	12.50	12.19	15.31	17.00
5240MHz	Pass	5.66	11.86	12.29	15.03	17.00
5260MHz	Pass	5.65	7.43	8.16	10.78	11.00
5300MHz	Pass	5.65	7.58	7.83	10.61	11.00
5320MHz	Pass	5.65	7.45	7.87	10.61	11.00
5500MHz	Pass	6.26	7.39	7.37	10.33	10.74
5580MHz	Pass	6.26	7.30	6.99	10.13	10.74
5700MHz	Pass	6.26	7.56	7.38	10.42	10.74
5745MHz	Pass	5.94	11.21	11.03	14.08	30.00
5785MHz	Pass	5.94	10.97	10.78	13.82	30.00
5825MHz	Pass	5.94	10.66	10.52	13.53	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	5.66	4.13	4.28	7.17	17.00
5230MHz	Pass	5.66	9.42	9.47	12.37	17.00
5270MHz	Pass	5.65	4.65	5.12	7.81	11.00
5310MHz	Pass	5.65	4.43	4.64	7.45	11.00
5510MHz	Pass	6.26	3.47	3.41	6.40	10.74
5550MHz	Pass	6.26	5.10	4.61	7.83	10.74
5670MHz	Pass	6.26	4.52	4.69	7.54	10.74
5755MHz	Pass	5.94	7.77	7.61	10.62	30.00
5795MHz	Pass	5.94	9.12	8.84	11.99	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	5.66	-0.12	0.01	2.86	17.00
5290MHz	Pass	5.65	1.01	1.23	4.03	11.00
5530MHz	Pass	6.26	0.40	0.43	3.35	10.74
5610MHz	Pass	6.26	0.63	0.34	3.44	10.74
5775MHz	Pass	5.94	1.84	1.55	4.63	30.00

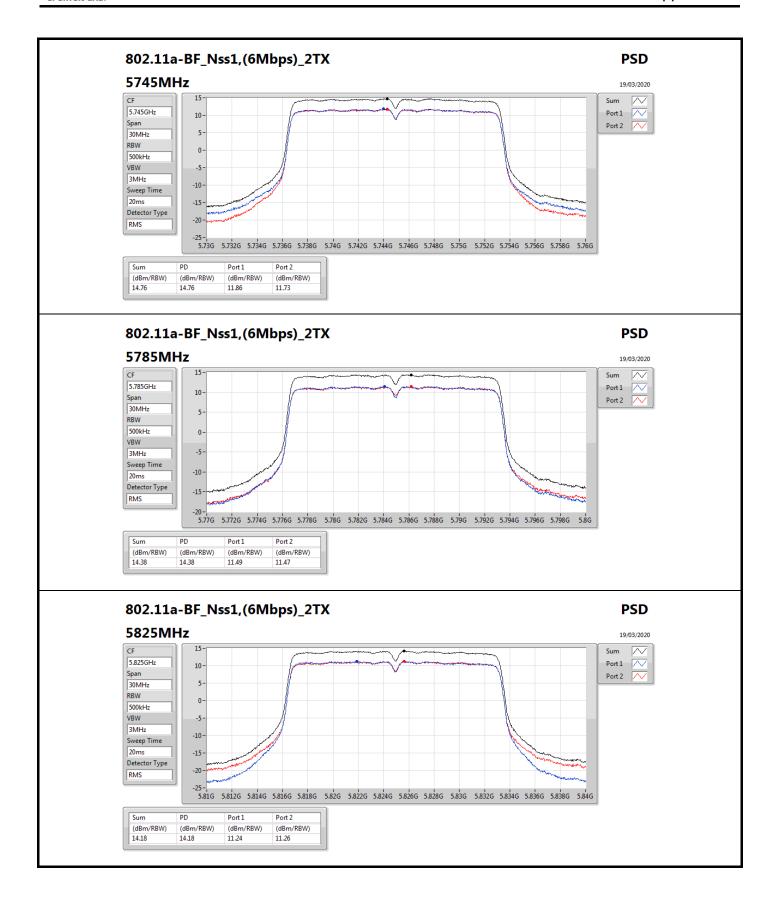
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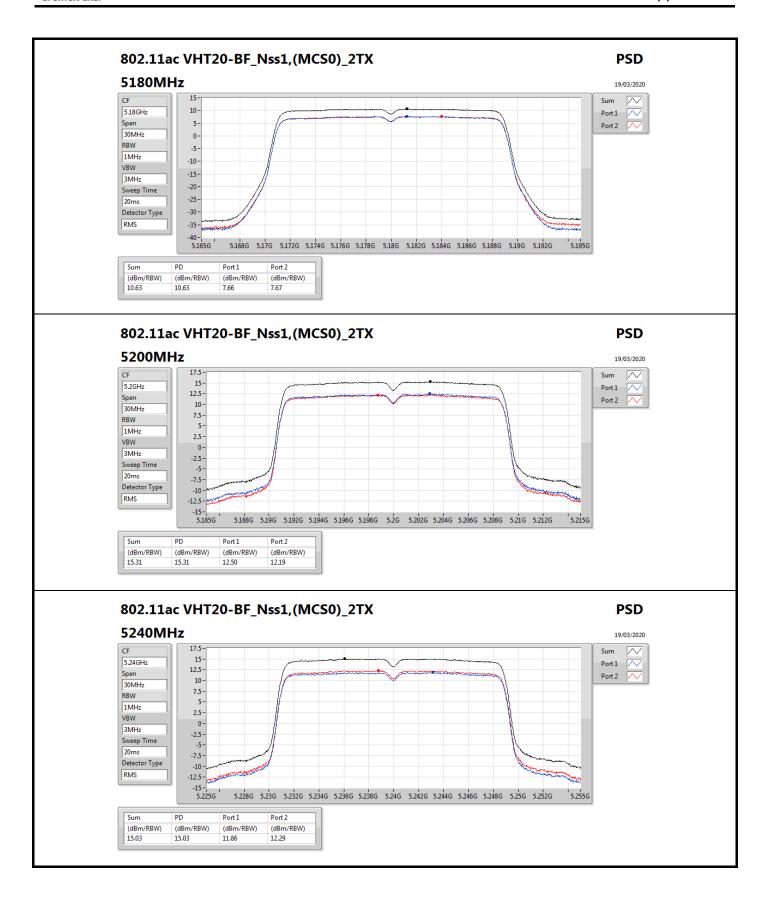
DG = Directional Gain; RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density;

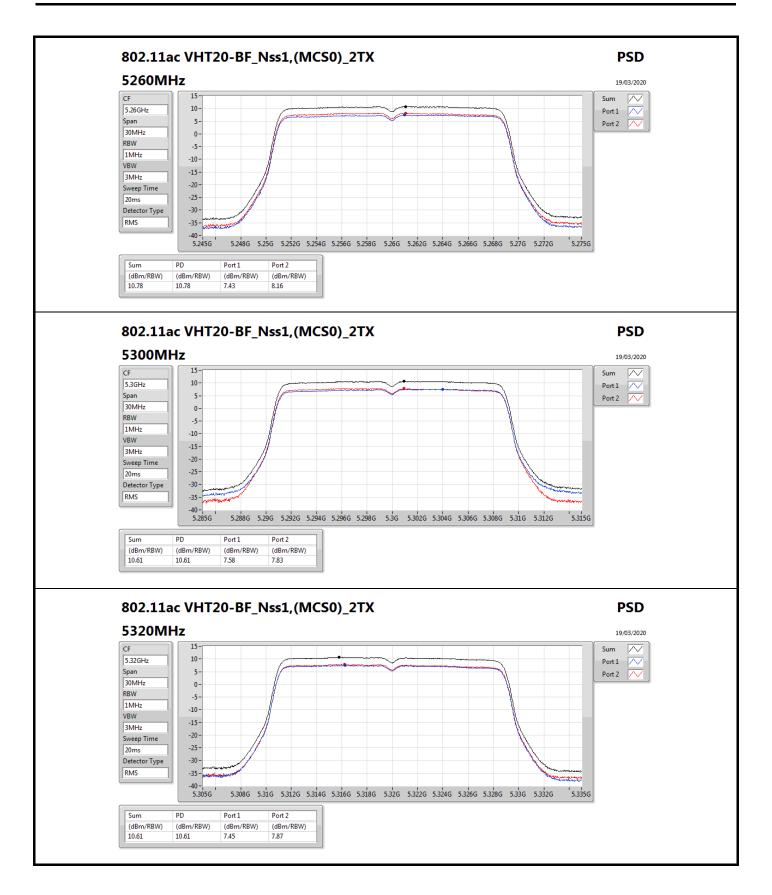


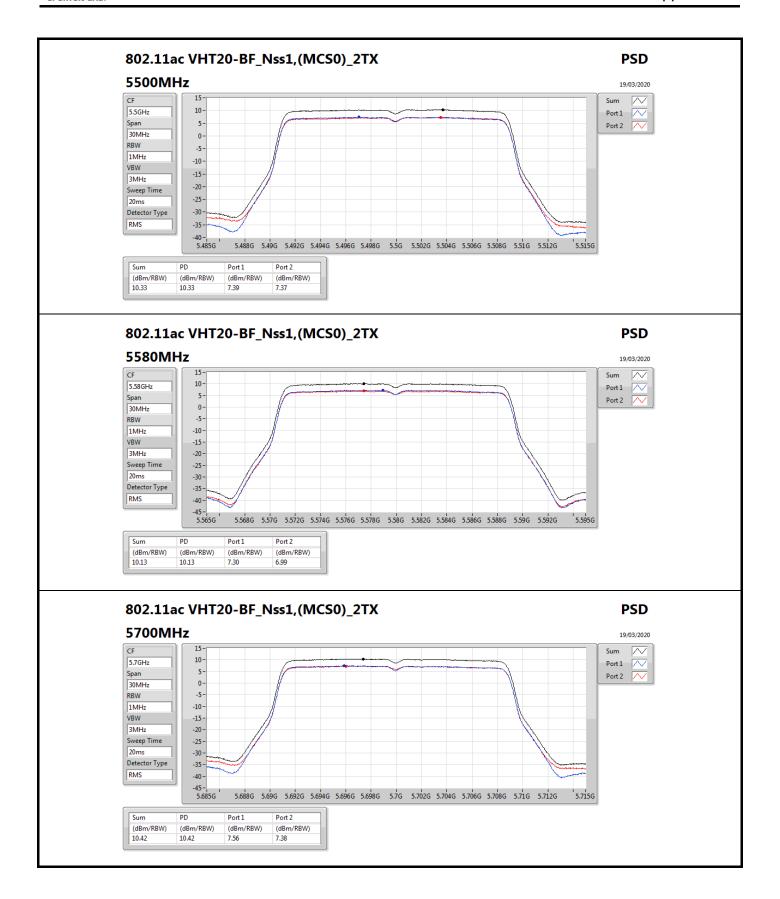


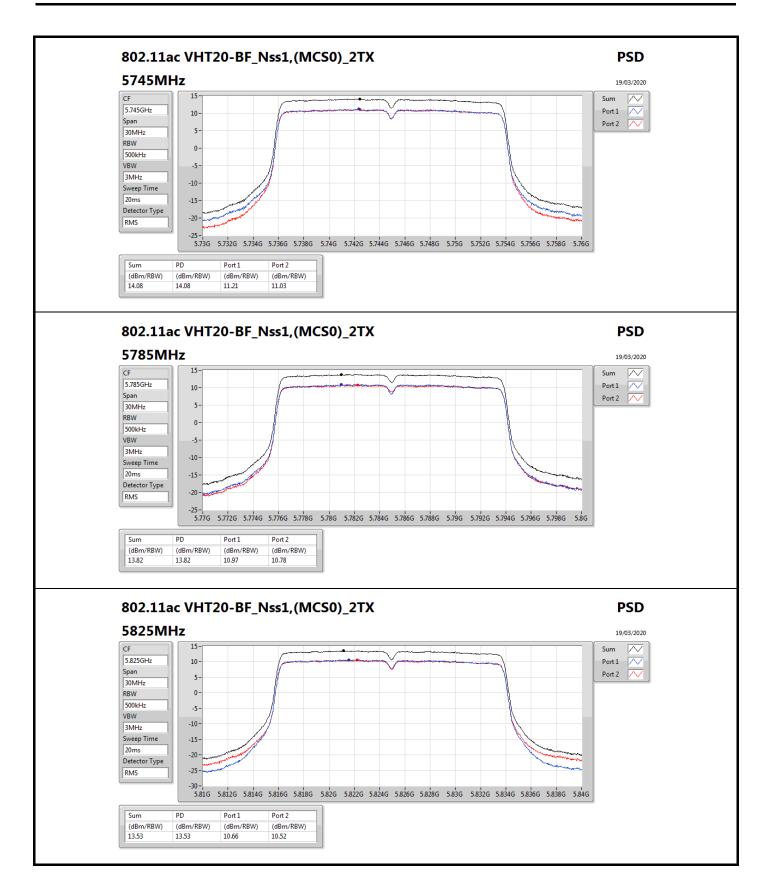


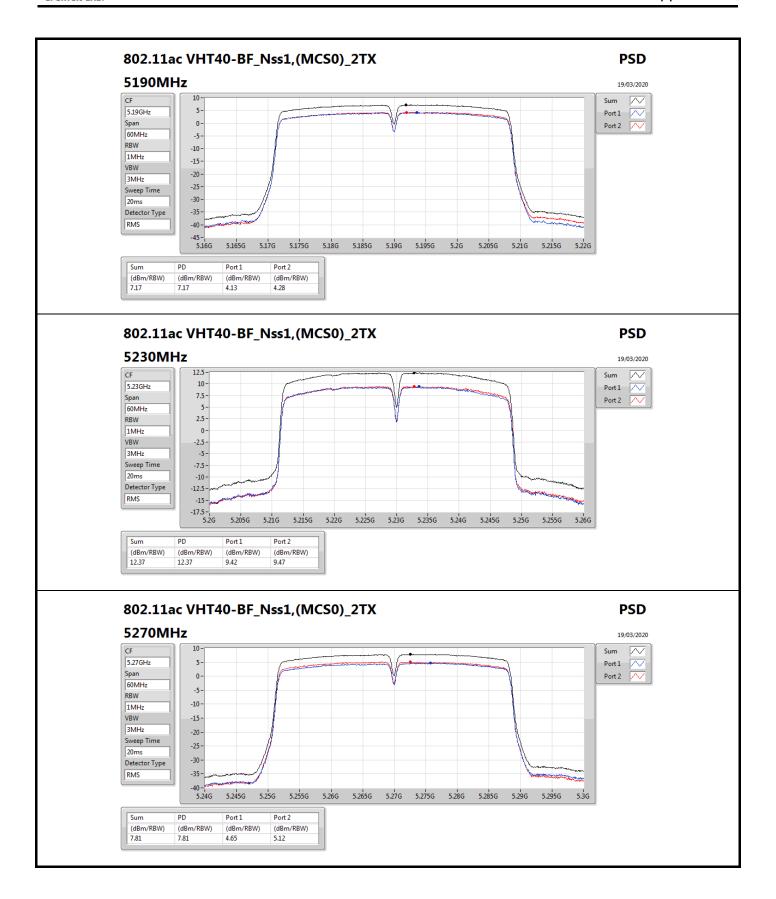


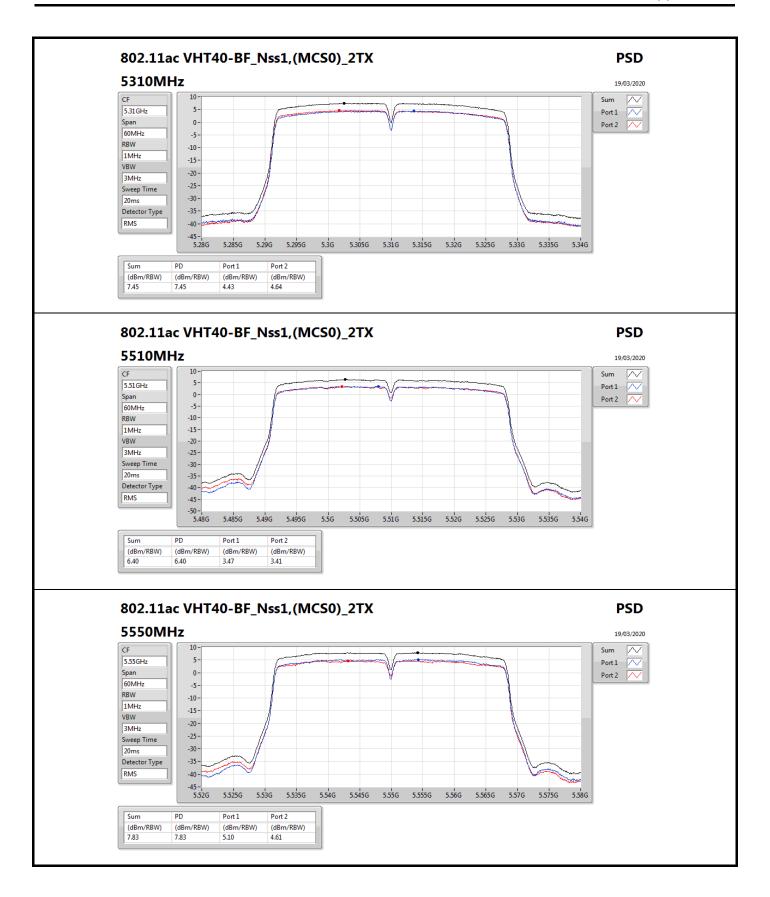


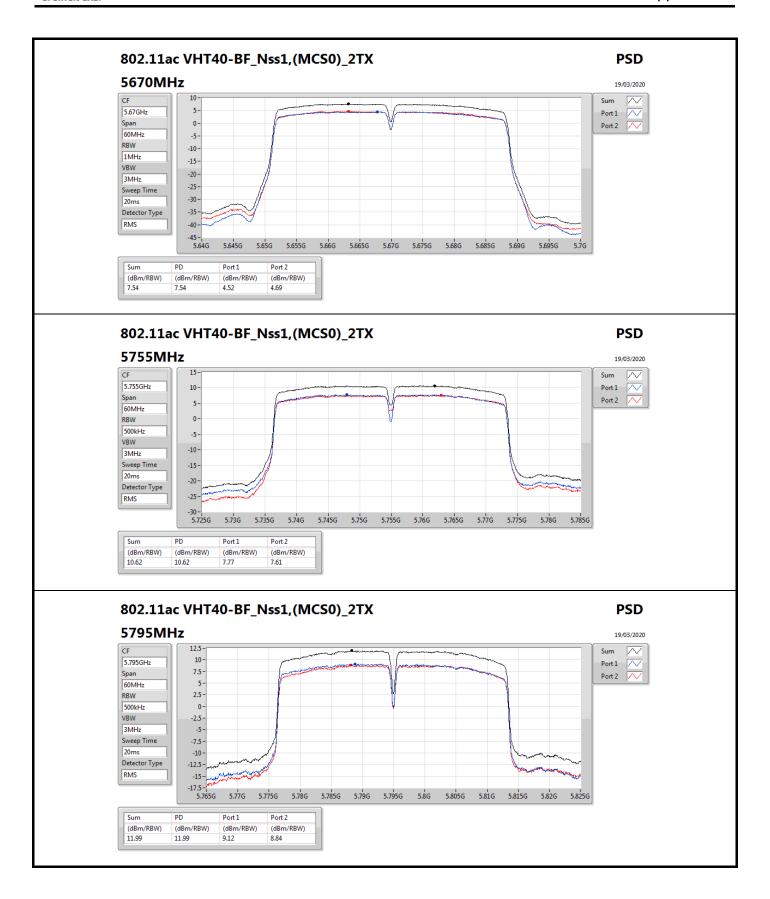




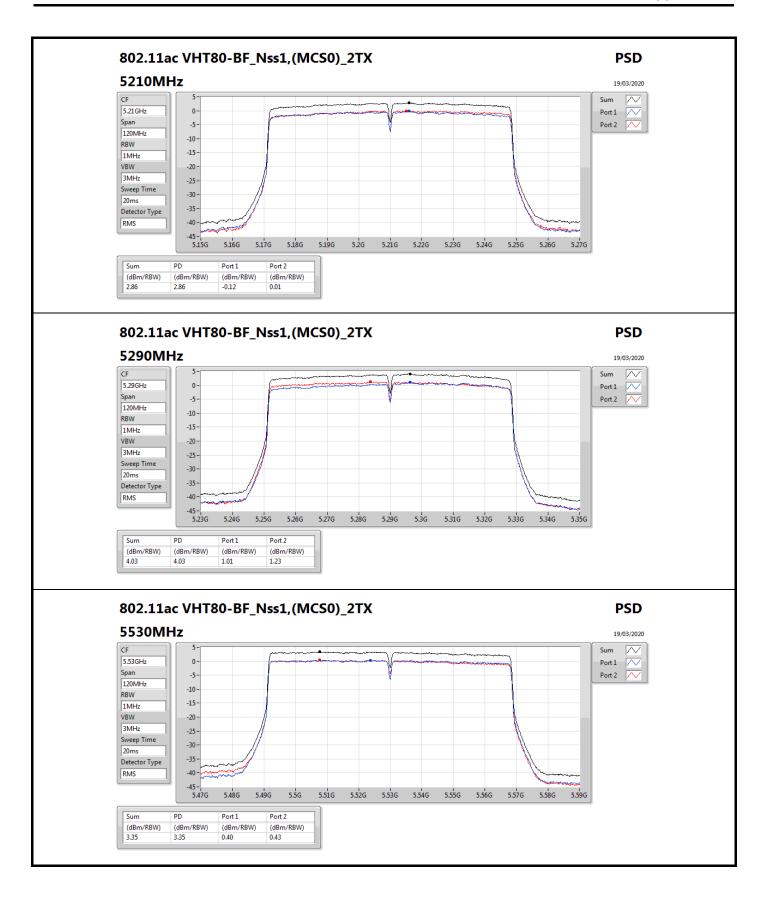




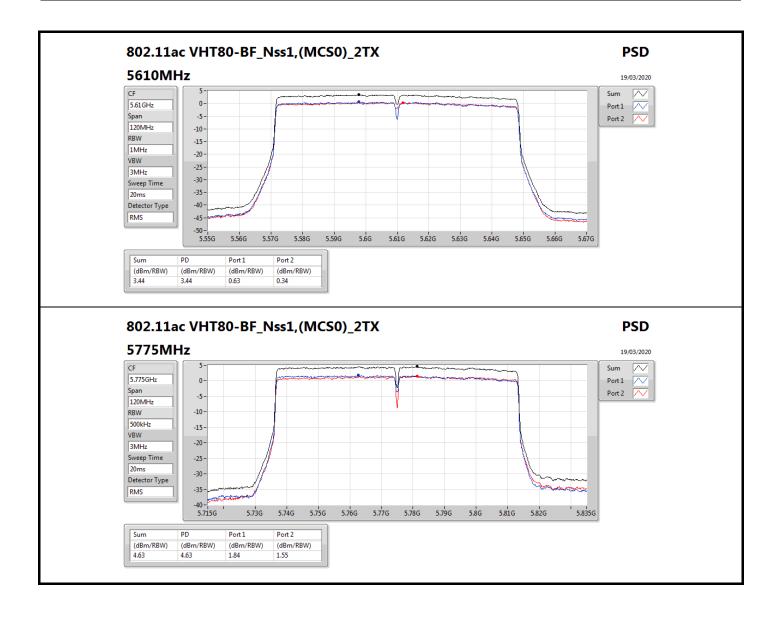




**PSD** Appendix D

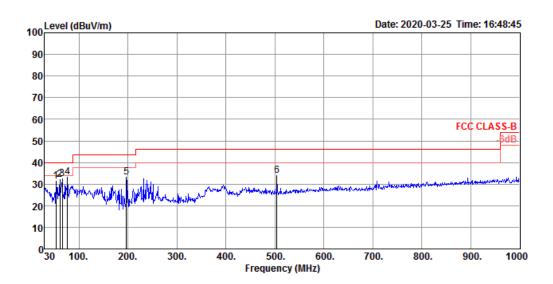


**PSD** Appendix D





RSE below 1GHz Result									
Operating Mode	1	Vertical							
Operating Function	CTX								

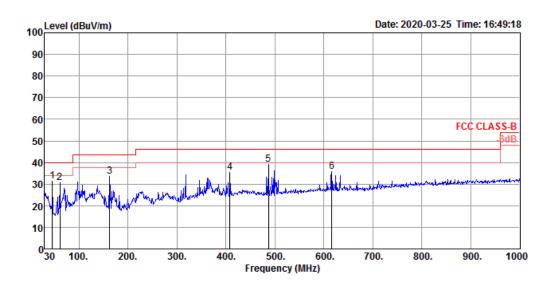


	Freq	Level						Preamp Factor		T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	53.28	31.24	40.00	-8.76	48.06	0.92	14.04	31.78	100	191	Peak	VERTICAL
2	61.04	32.25	40.00	-7.75	50.50	1.00	12.60	31.85	200	94	Peak	VERTICAL
3	65.89	32.44	40.00	-7.56	50.71	1.00	12.60	31.87	100	196	Peak	VERTICAL
4	76.56	33.03	40.00	-6.97	50.70	1.14	13.06	31.87	125	233	Peak	VERTICAL
5	196.84	33.26	43.50	-10.24	47.51	1.73	15.97	31.95	100	108	Peak	VERTICAL
6	504.33	33.87	46.00	-12.13	39.50	2.95	23.89	32.47	100	102	Peak	VERTICAL

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)



RSE below 1GHz Result									
Operating Mode	1	Polarization	Horizontal						
Operating Function	CTX								



	Freq	Level					Antenna Pream Factor Facto		Preamp A/Pos Factor		Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	45.52	31.46	40.00	-8.54	45.39	0.90	16.78	31.61	125	32	Peak	HORIZONTAL
2	61.04	30.49	40.00	-9.51	48.74	1.00	12.60	31.85	300	273	Peak	HORIZONTAL
3	162.89	33.42	43.50	-10.08	47.28	1.62	16.36	31.84	100	102	Peak	HORIZONTAL
4	408.30	35.36	46.00	-10.64	42.38	2.60	22.59	32.21	100	236	Peak	HORIZONTAL
5	486.87	39.23	46.00	-6.77	45.17	2.89	23.61	32.44	300	113	Peak	HORIZONTAL
6	615.88	35.67	46.00	-10.33	39.65	3.29	25.11	32.38	100	248	Peak	HORIZONTAL

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)



## RSE TX above 1GHz

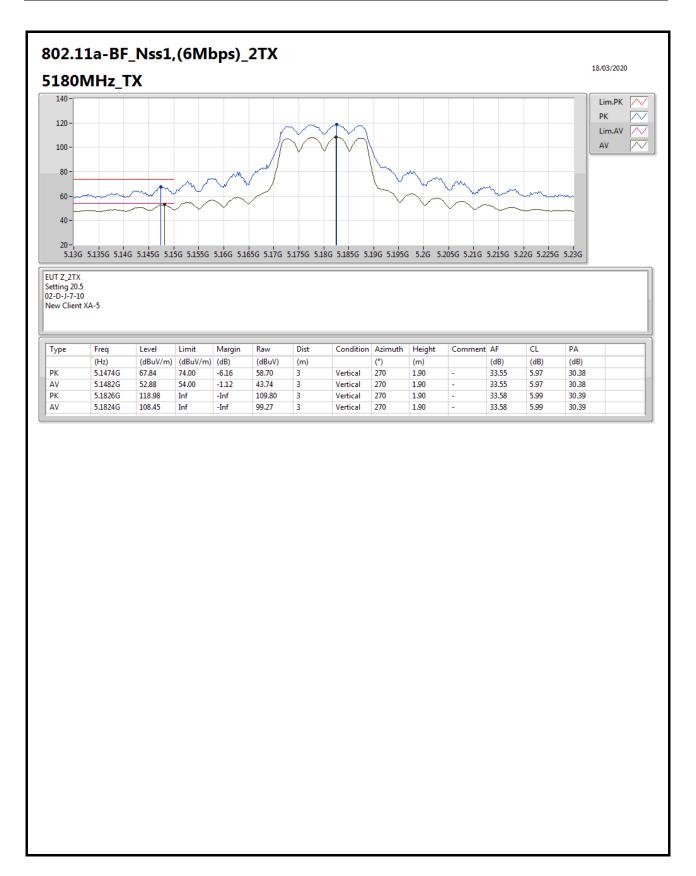
Appendix E.2

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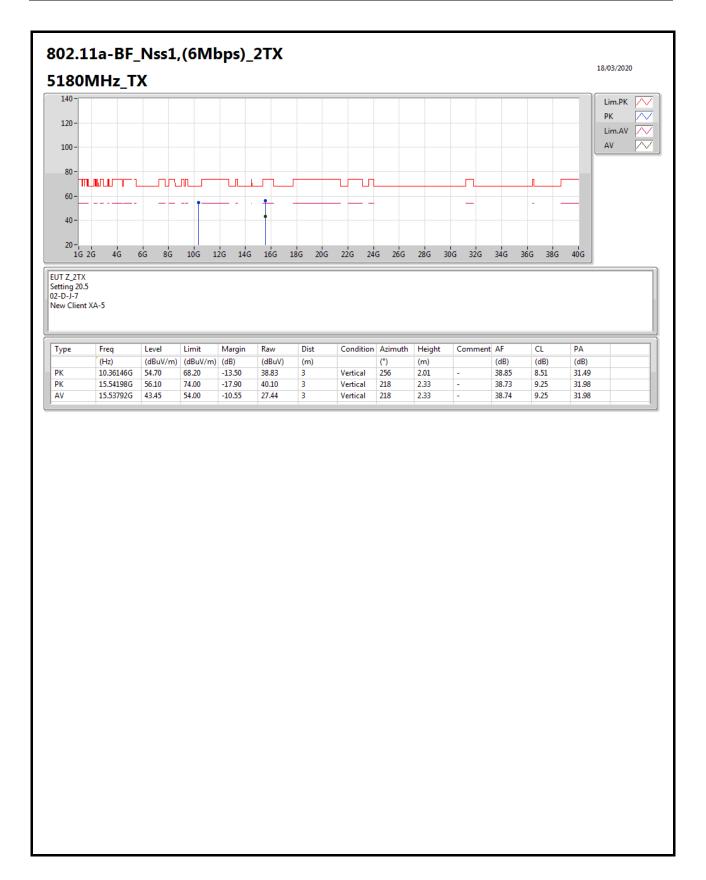
Summary

Mode	Result	Туре	Freq	Level	Limit	Margin	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(m)		(°)	(m)	
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	Pass	AV	5.15G	52.91	54.00	-1.09	3	Vertical	119	1.80	-

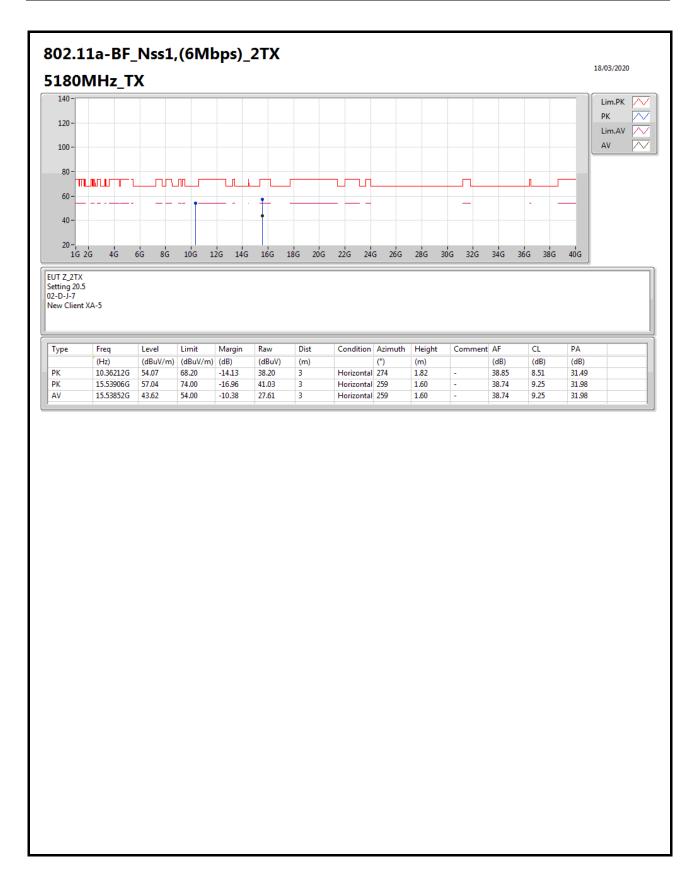




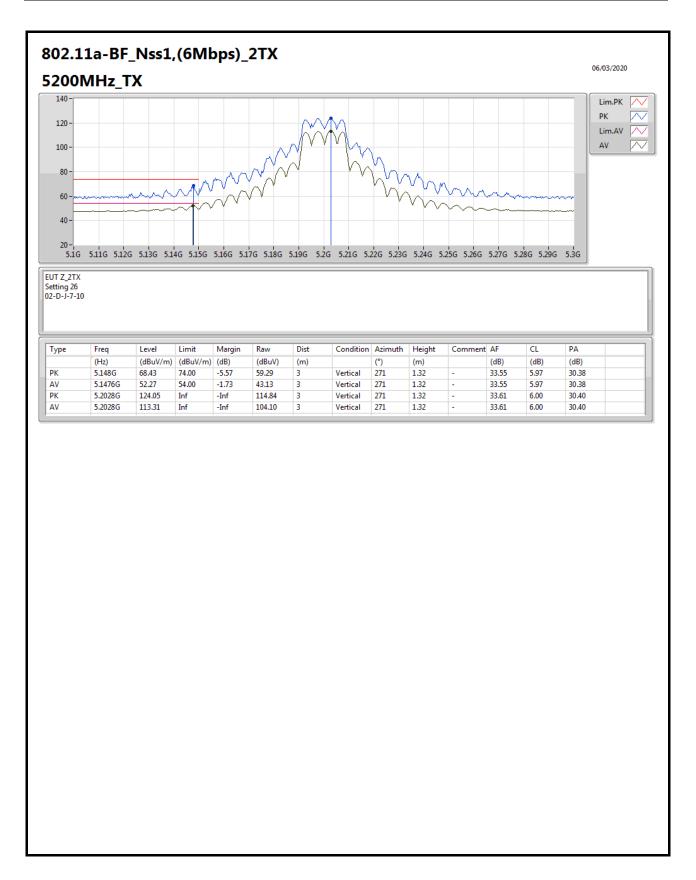




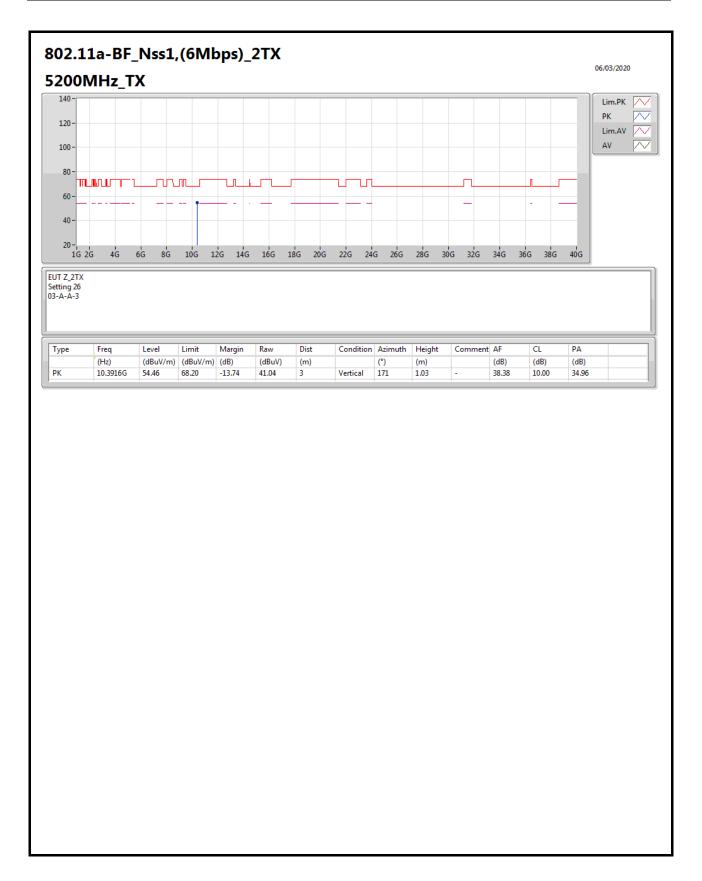




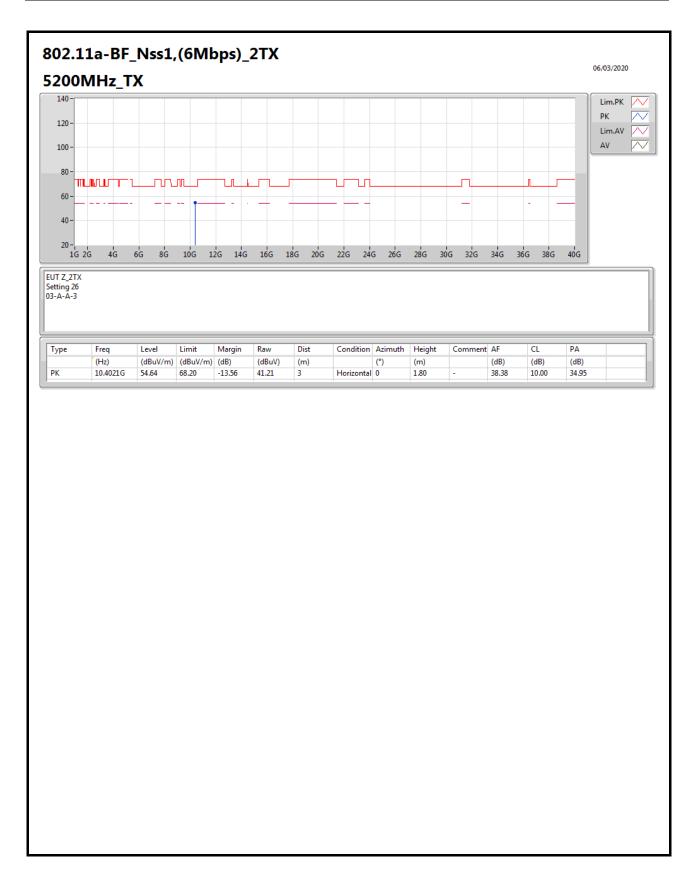




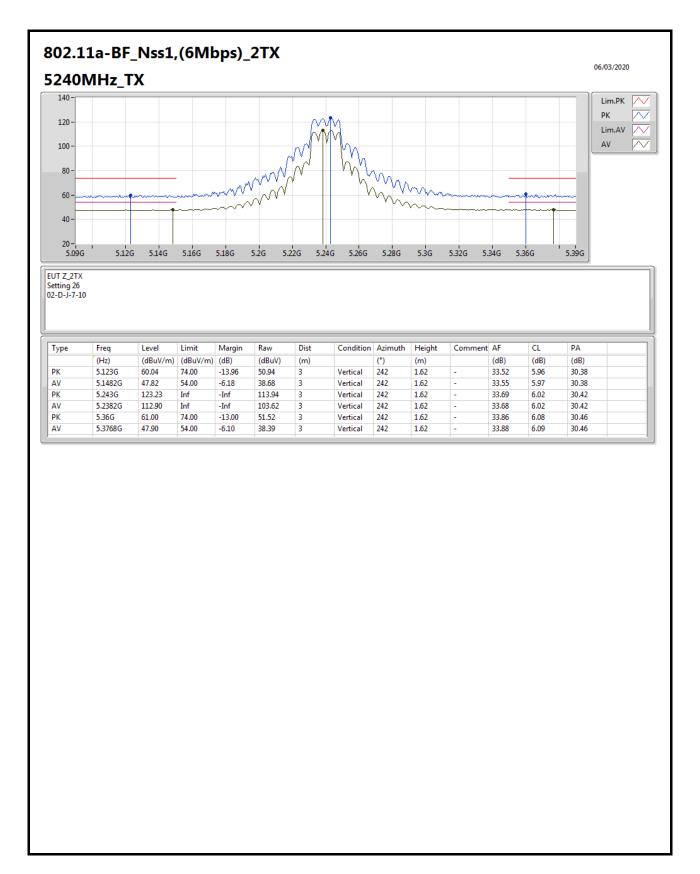




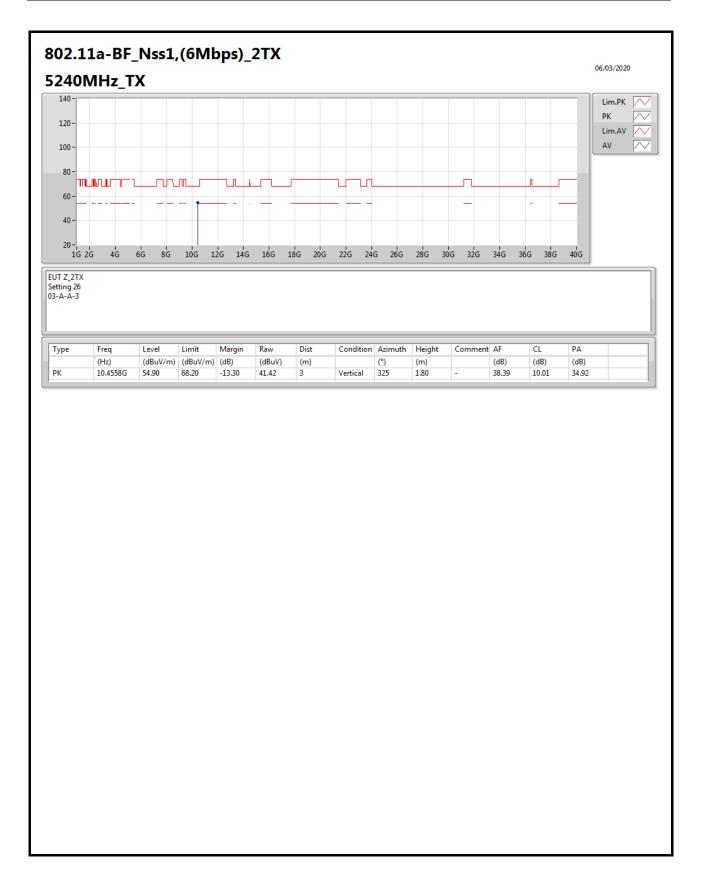




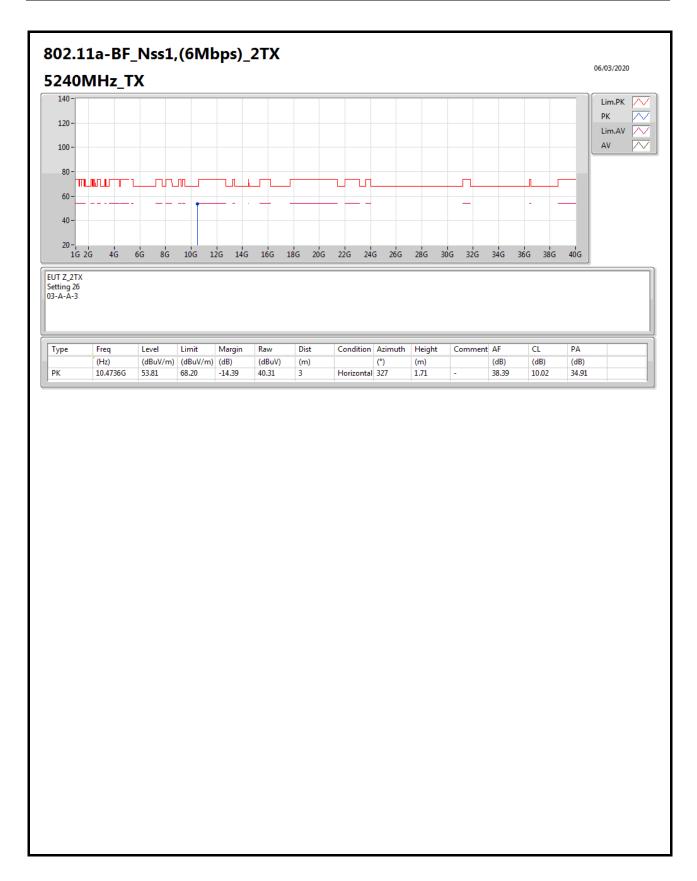




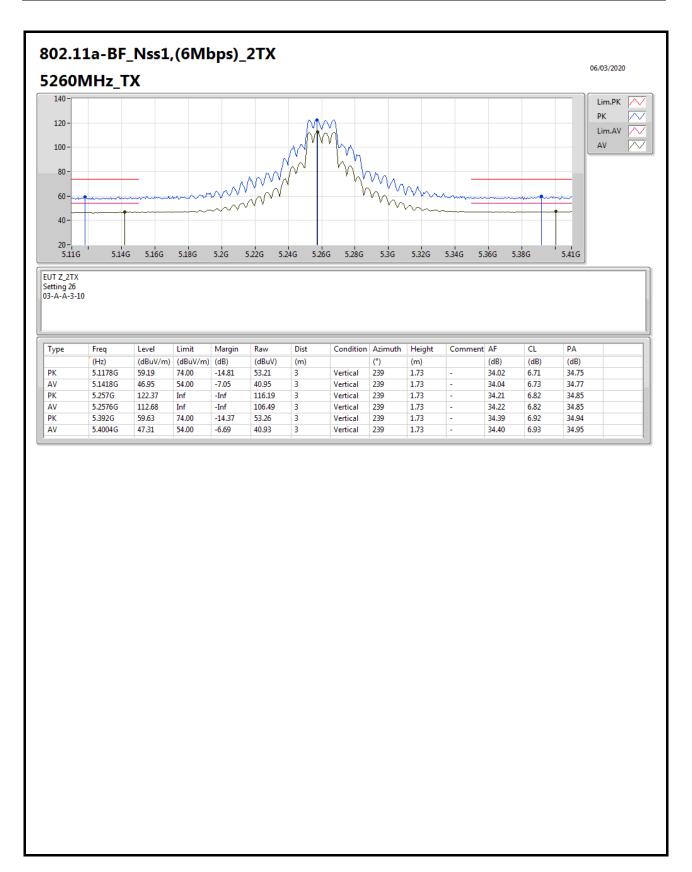




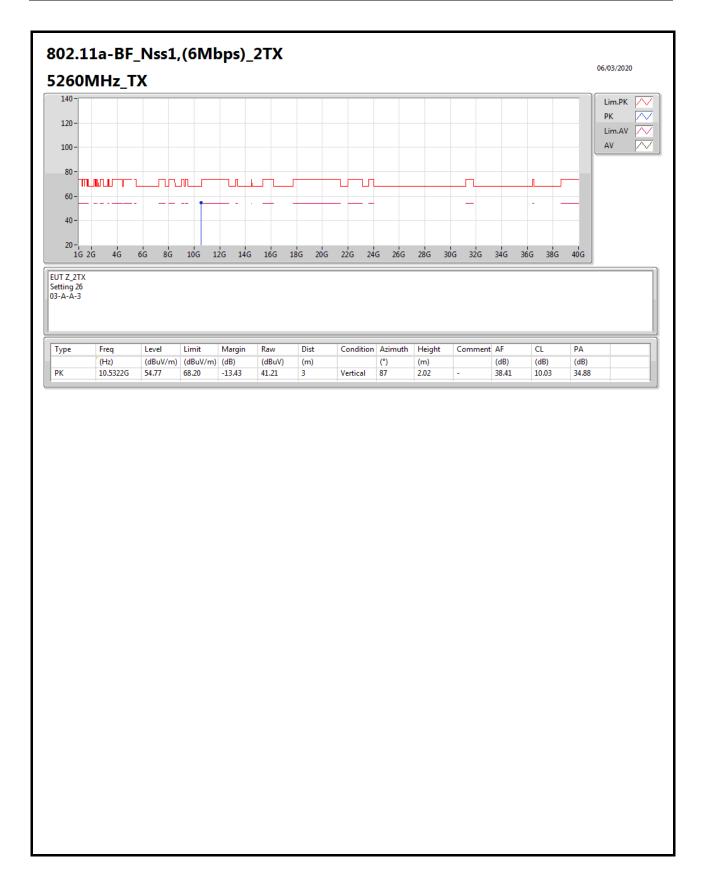






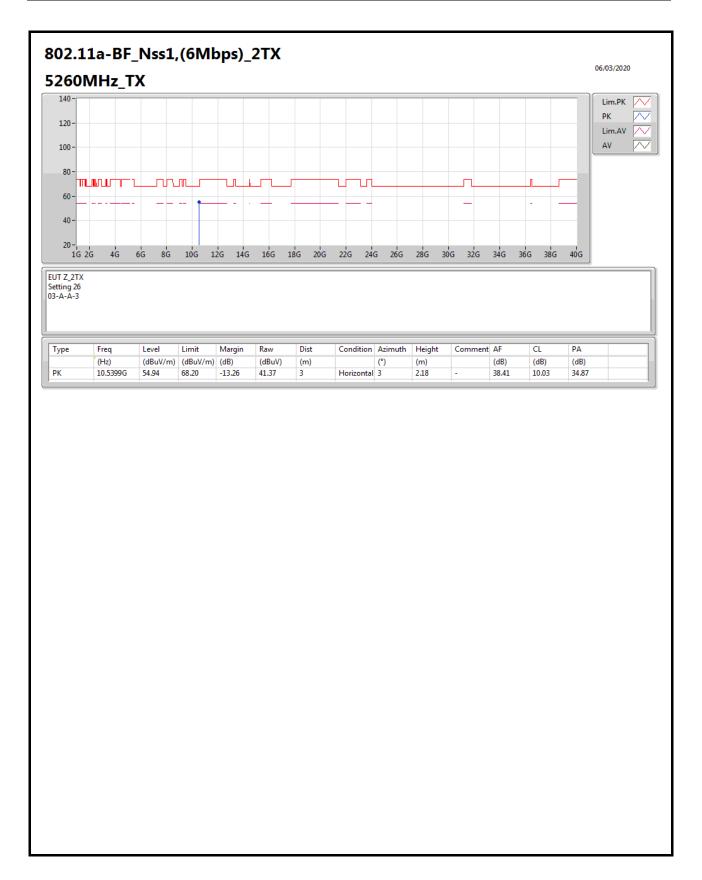




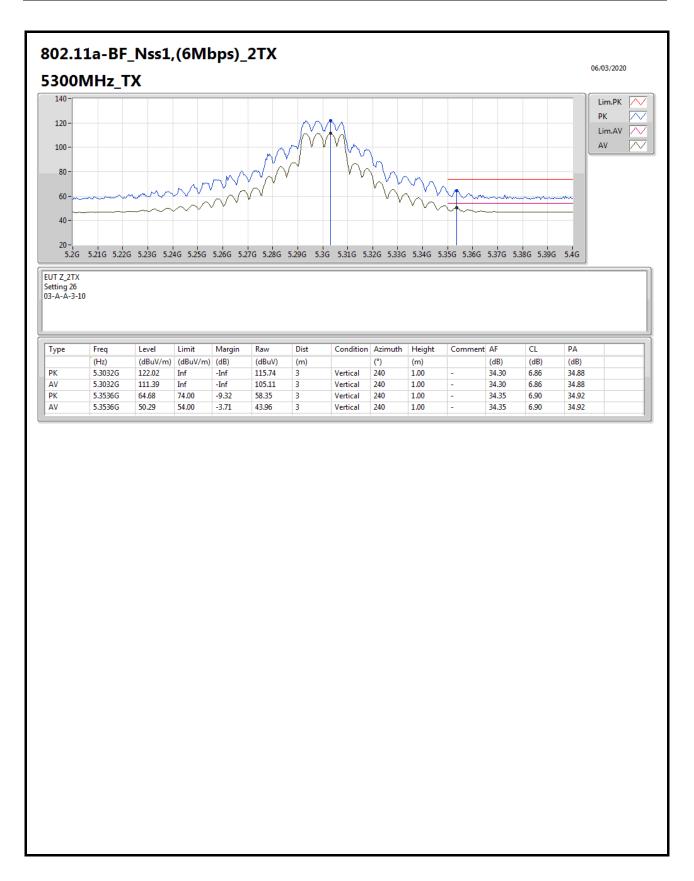


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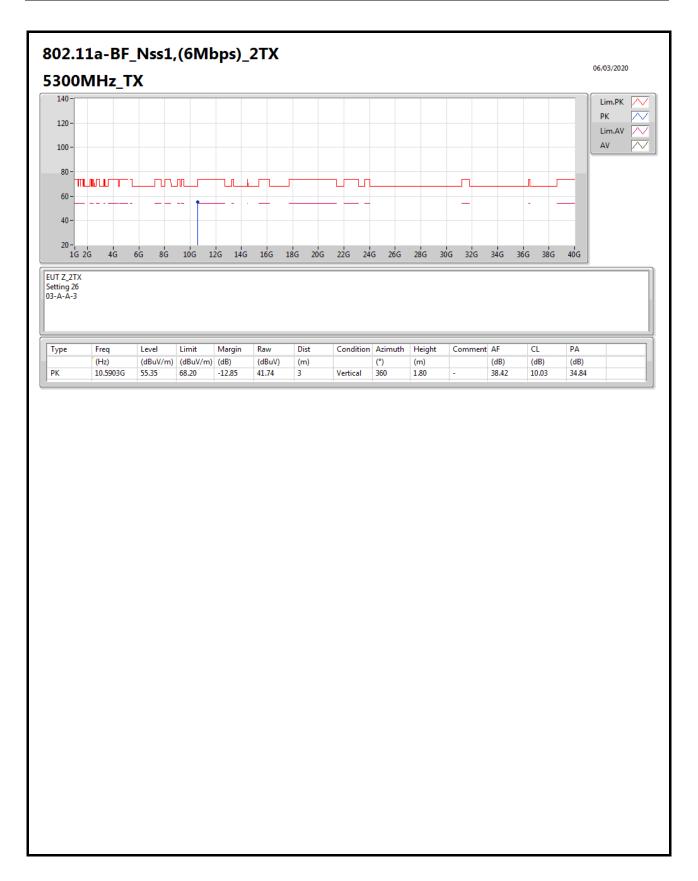






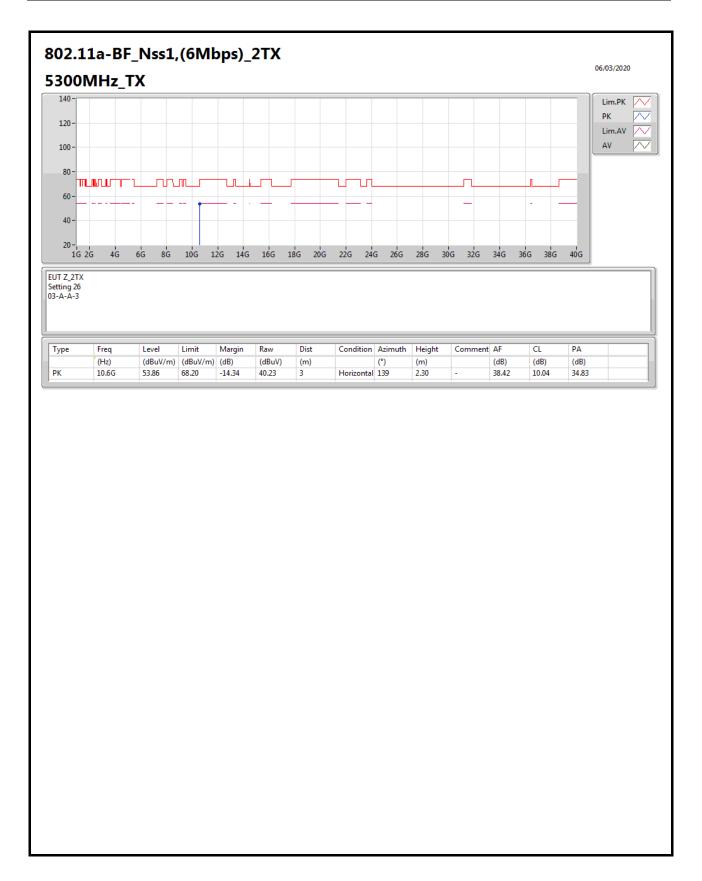
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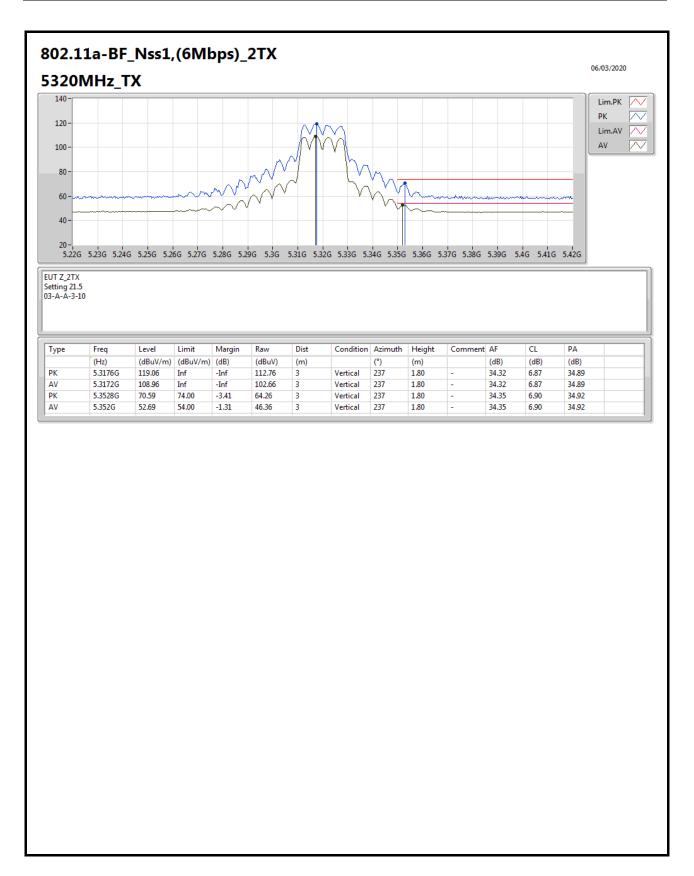


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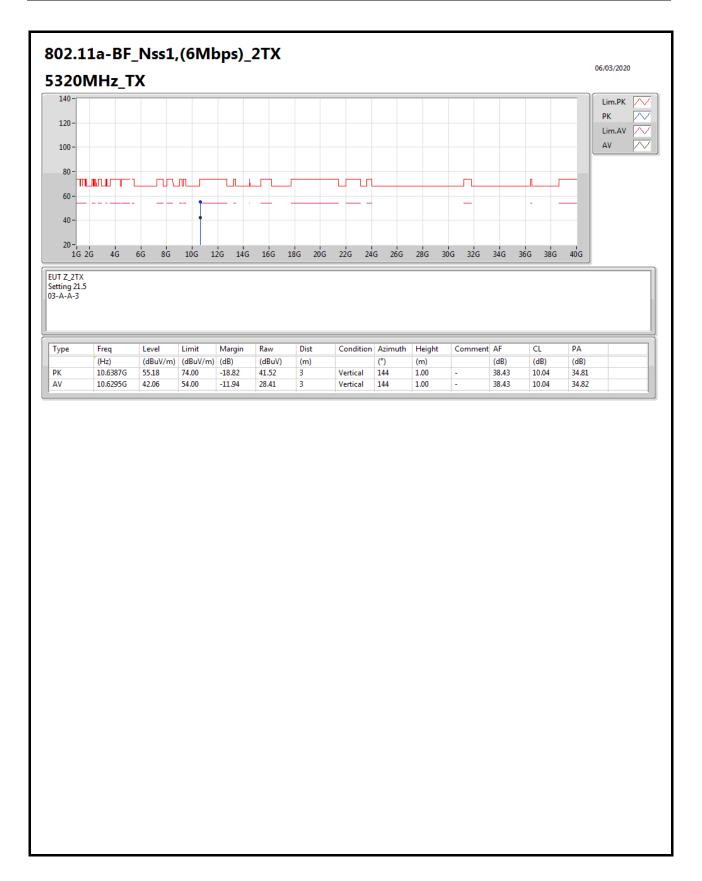






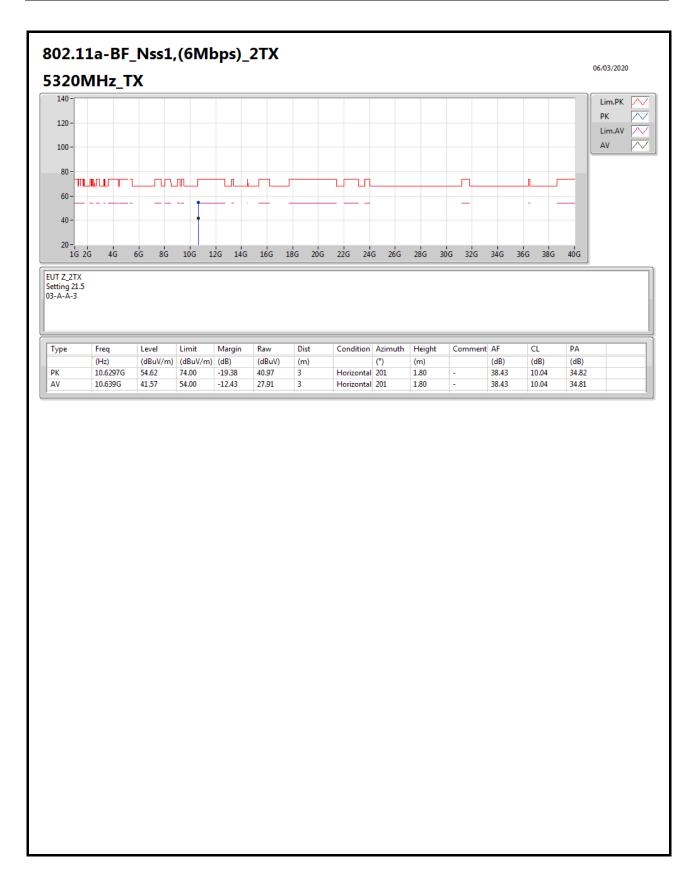




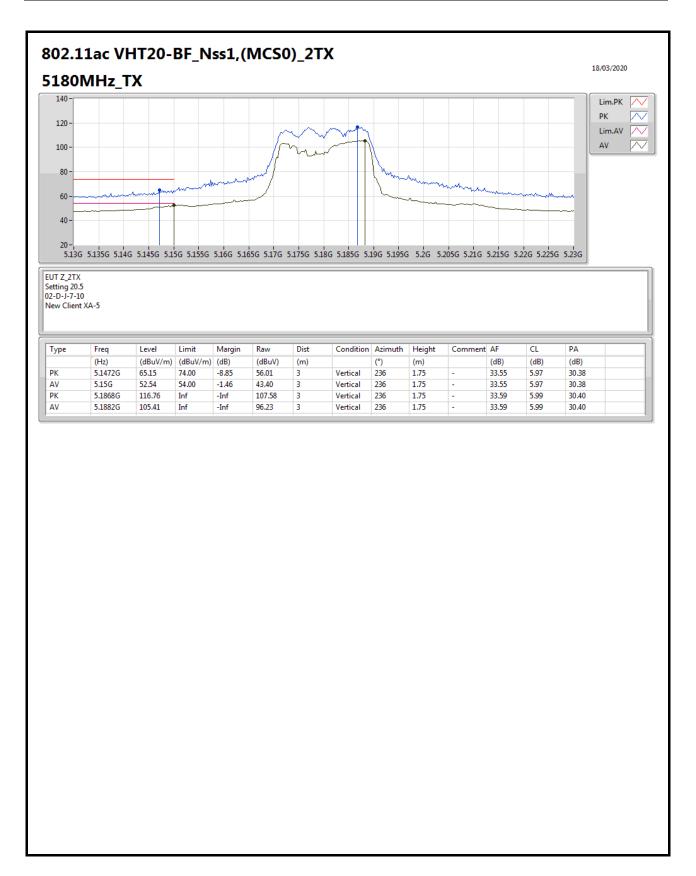


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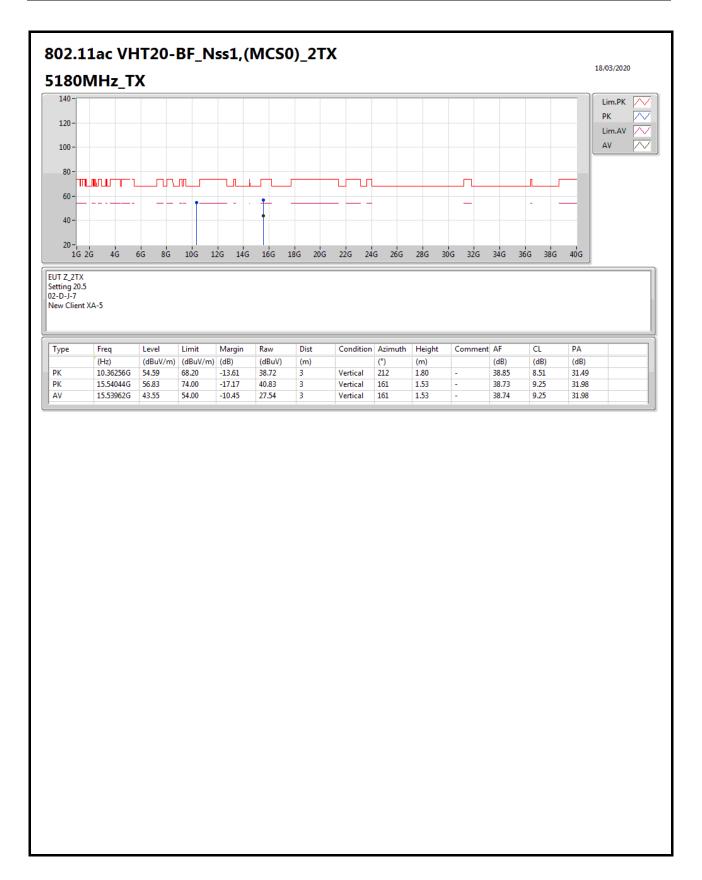




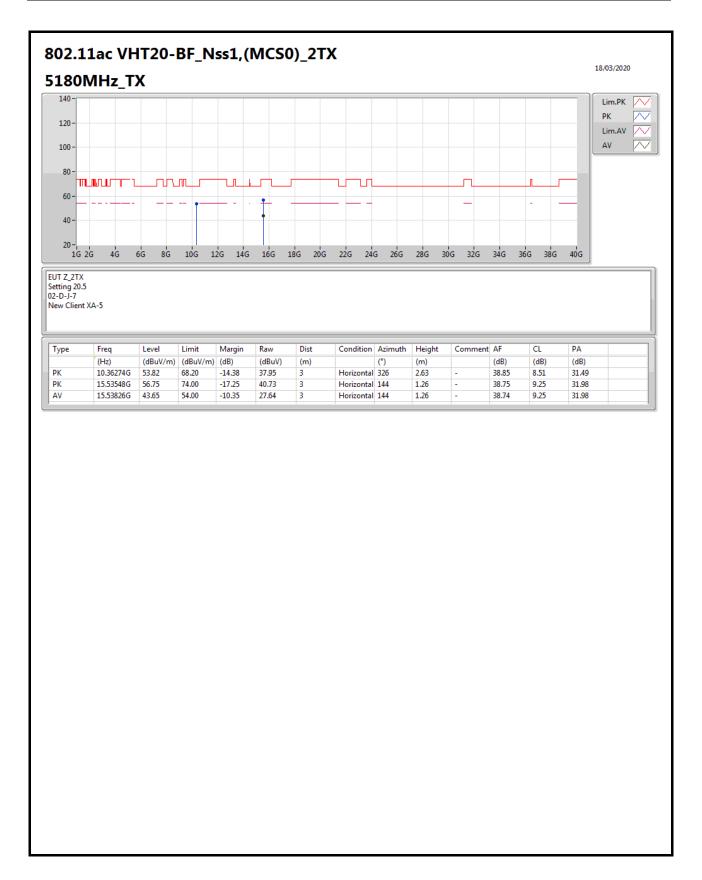


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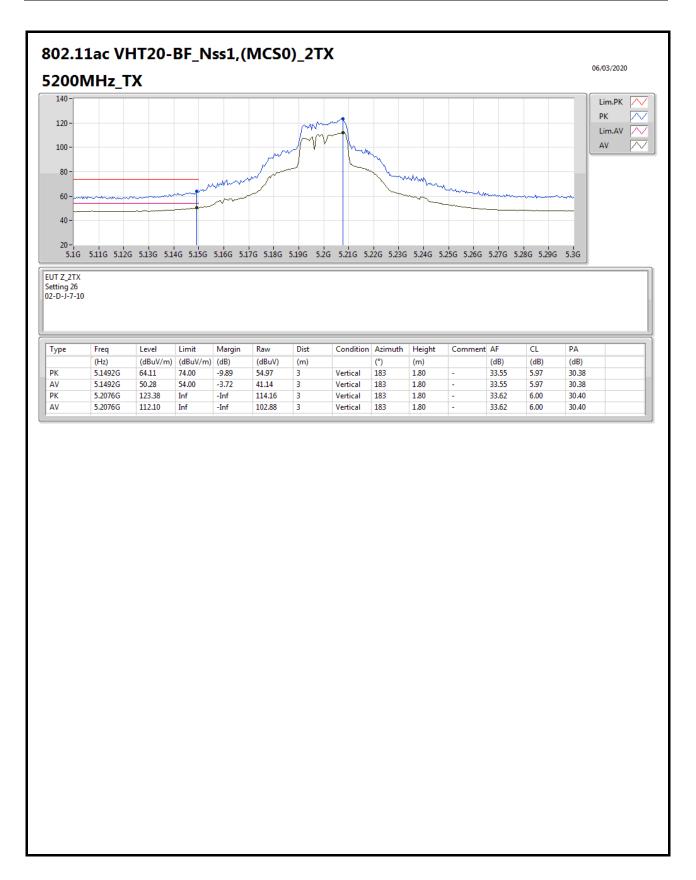




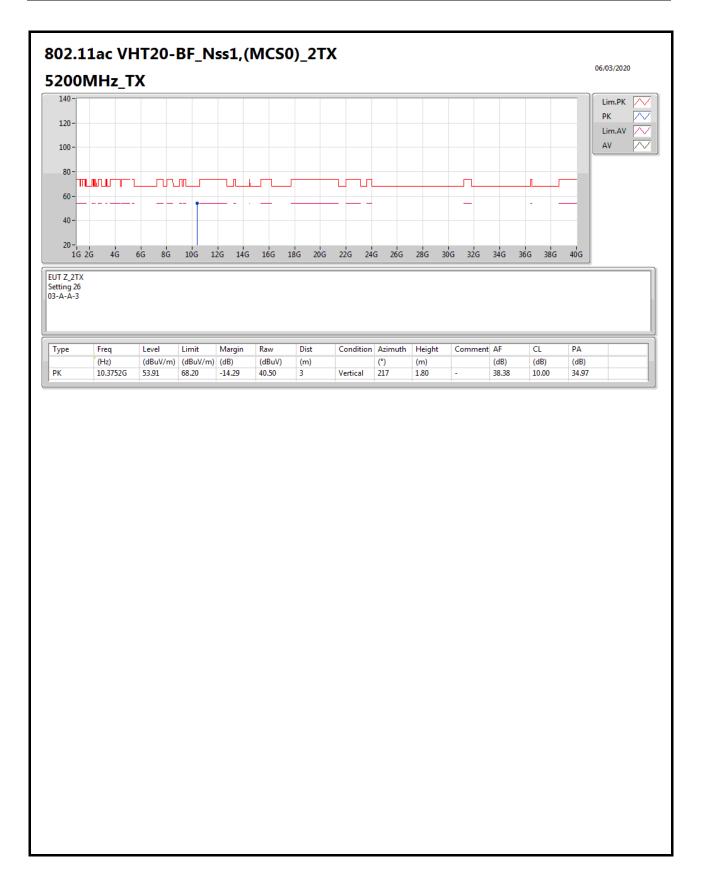




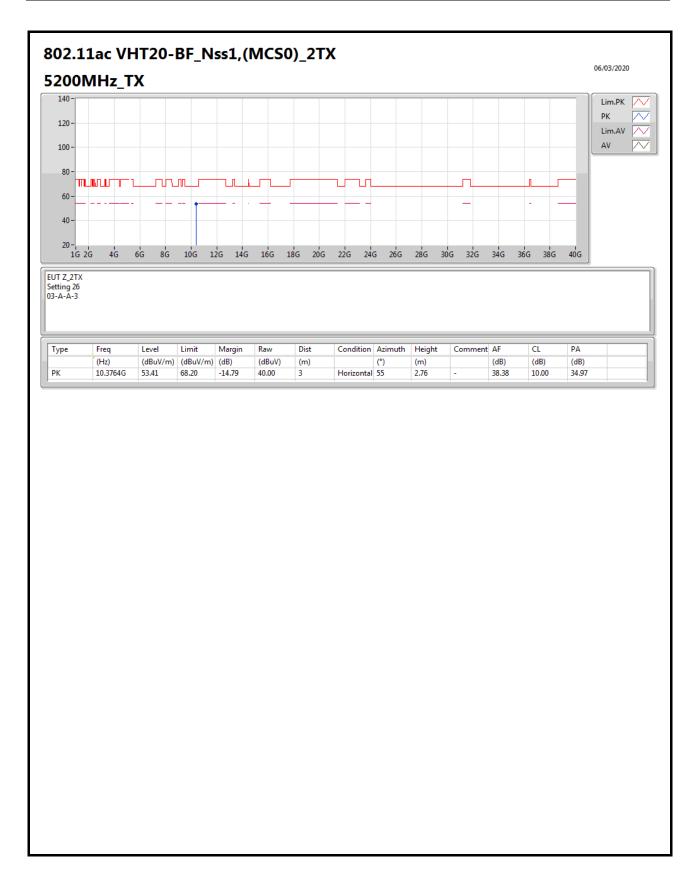




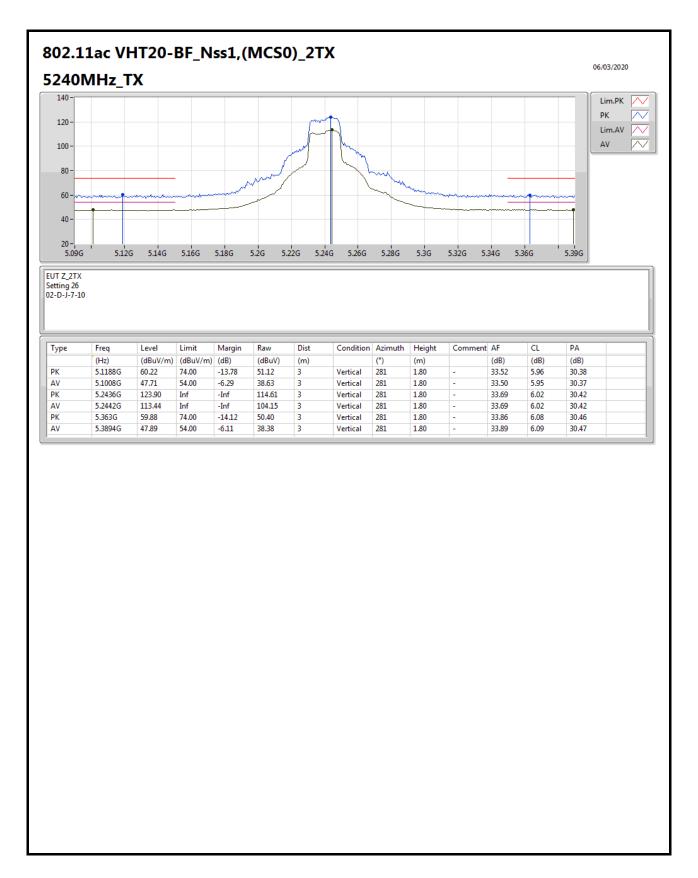






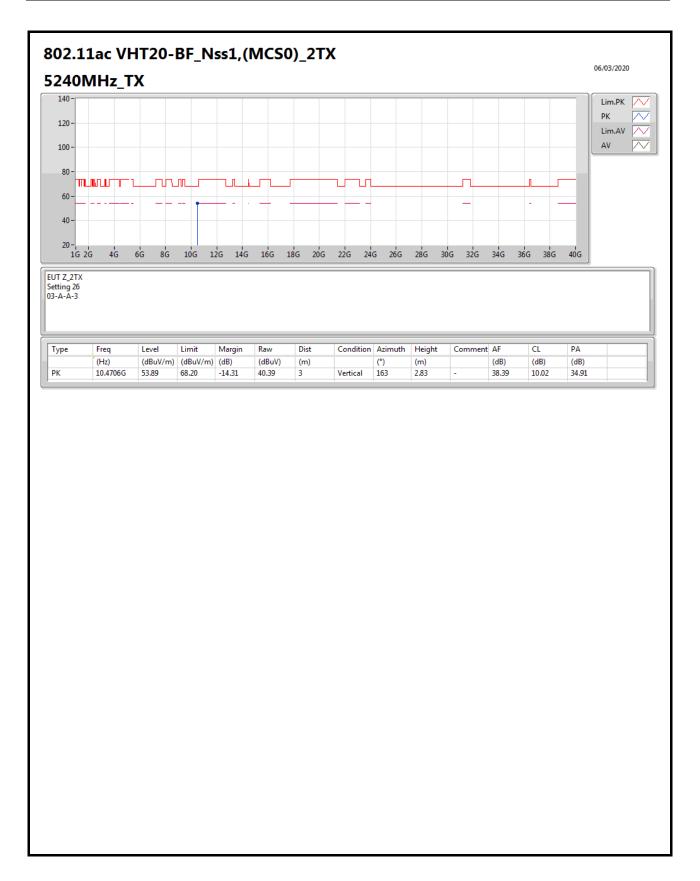






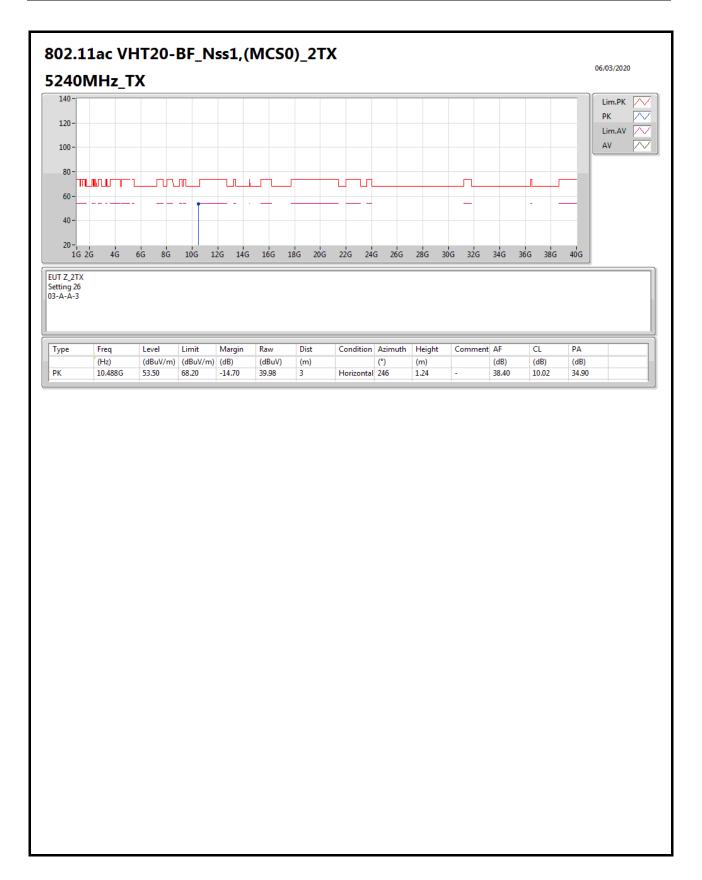
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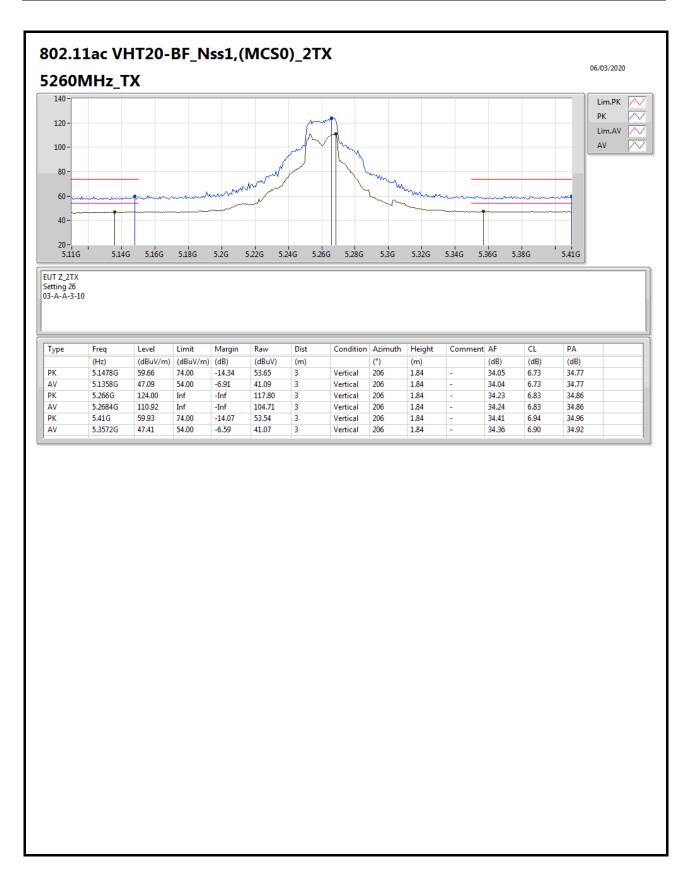


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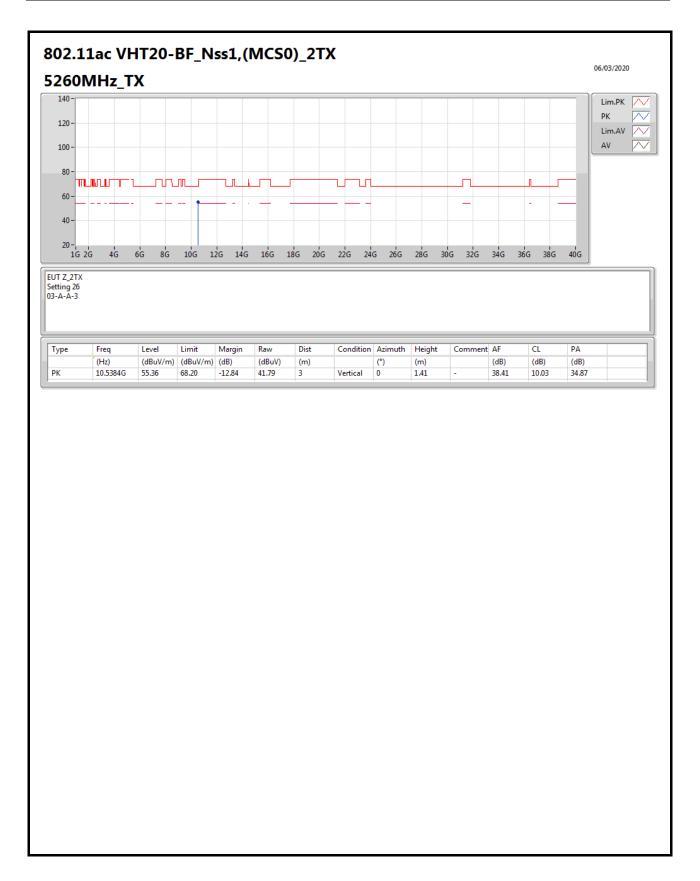




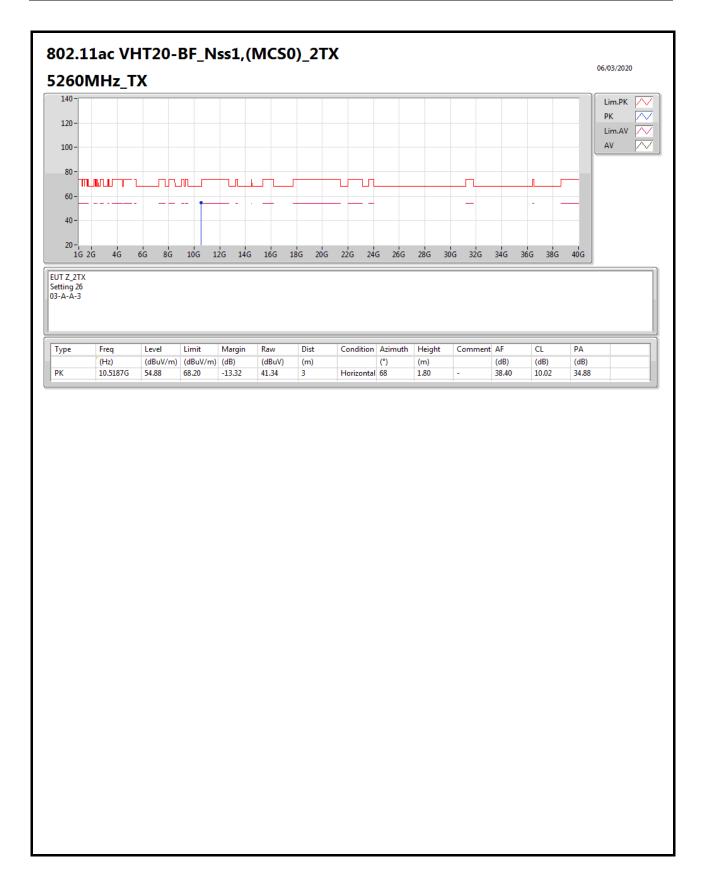




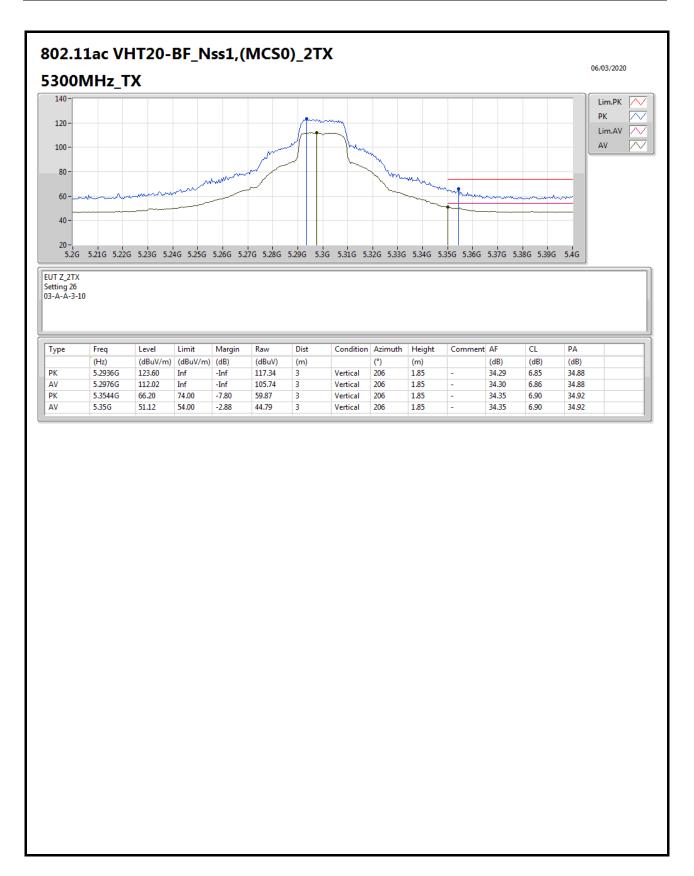






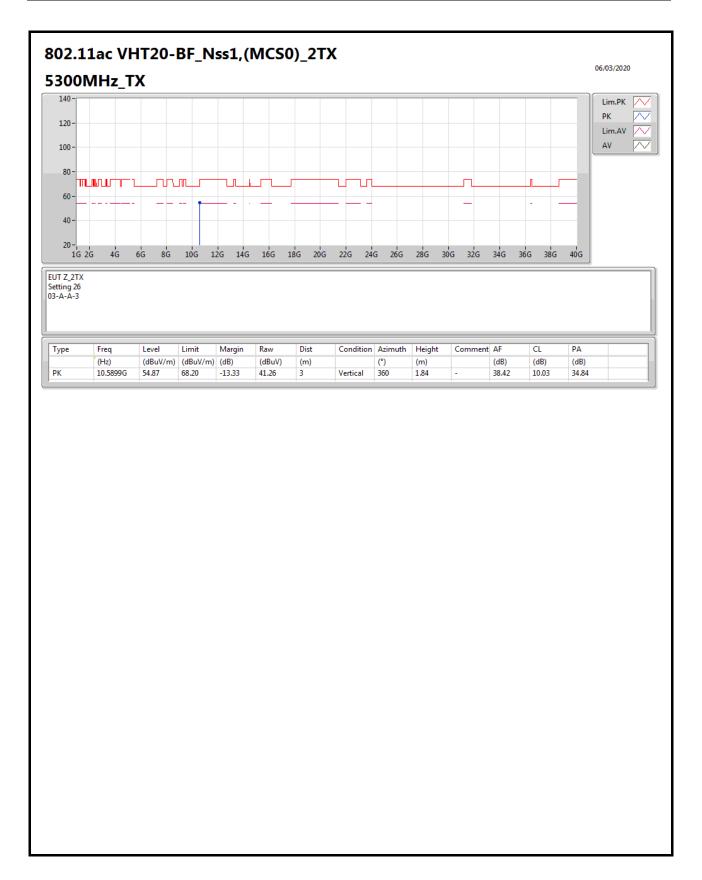




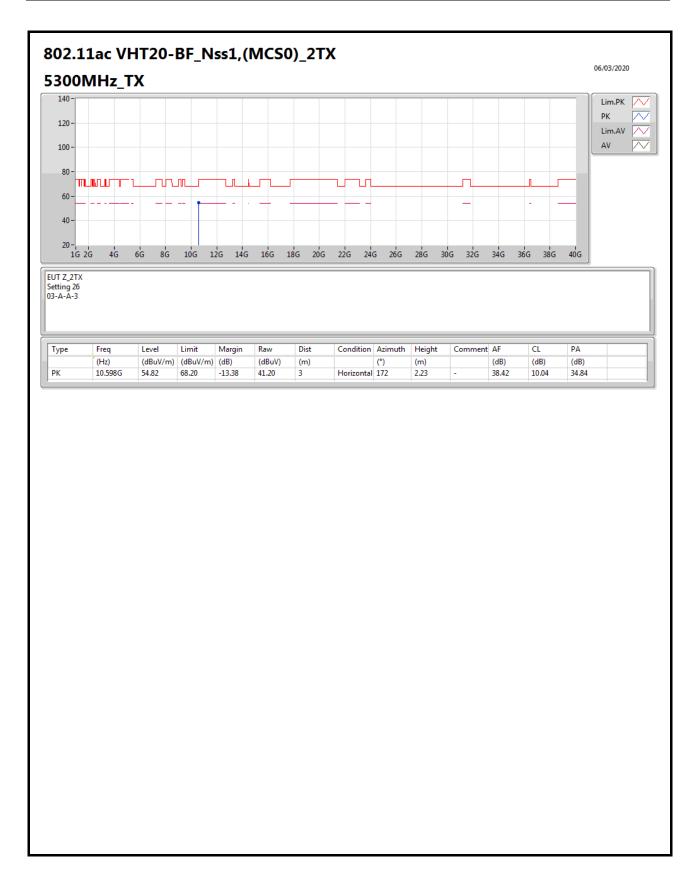


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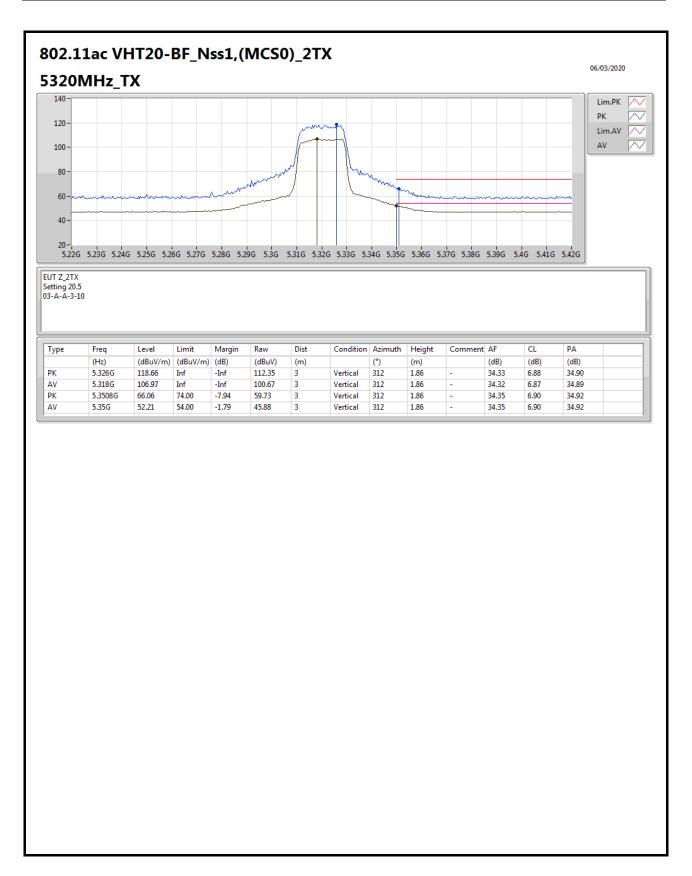




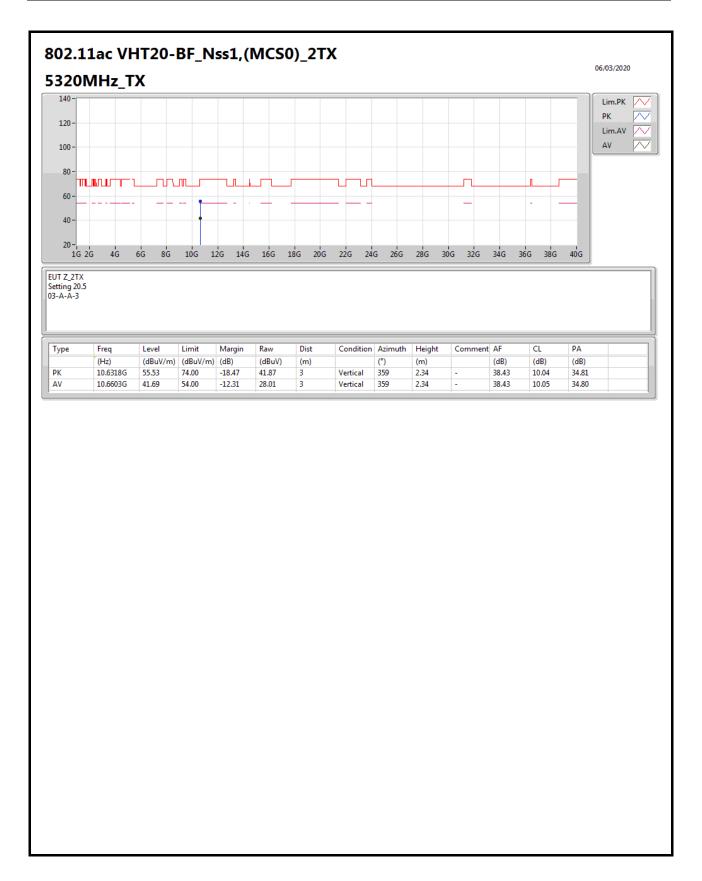




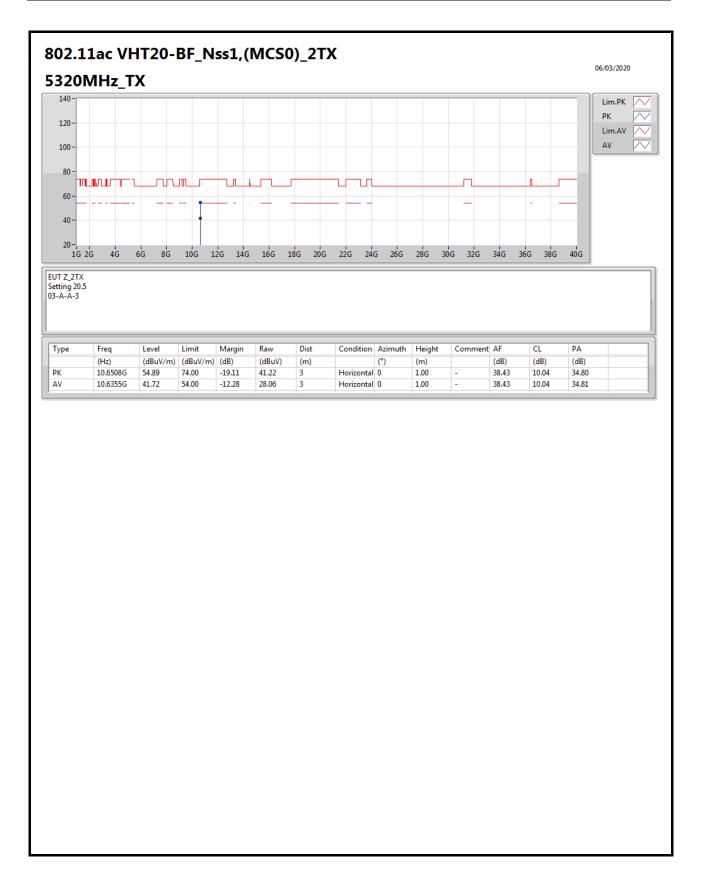




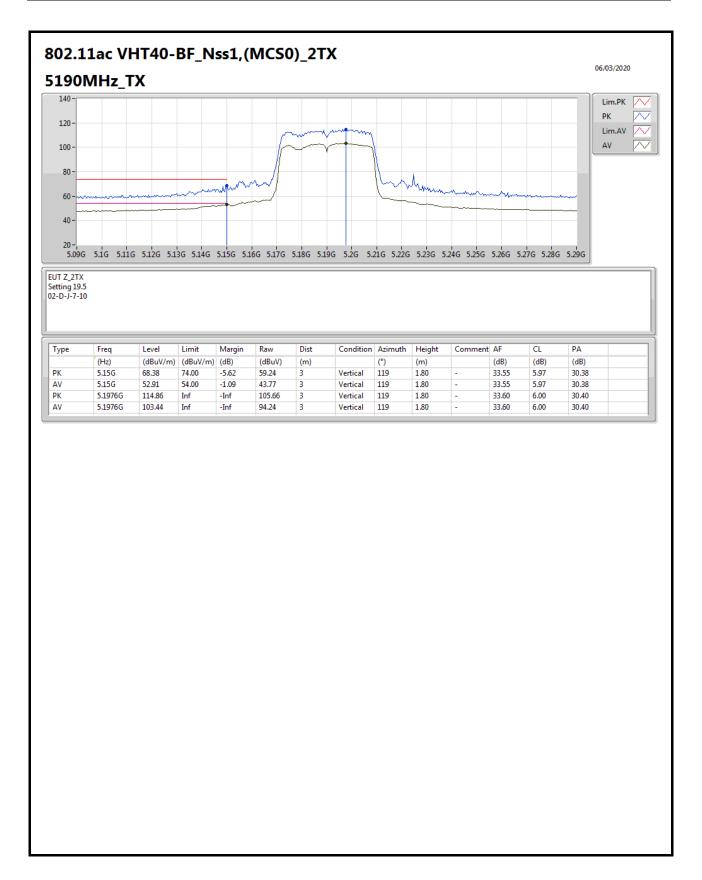




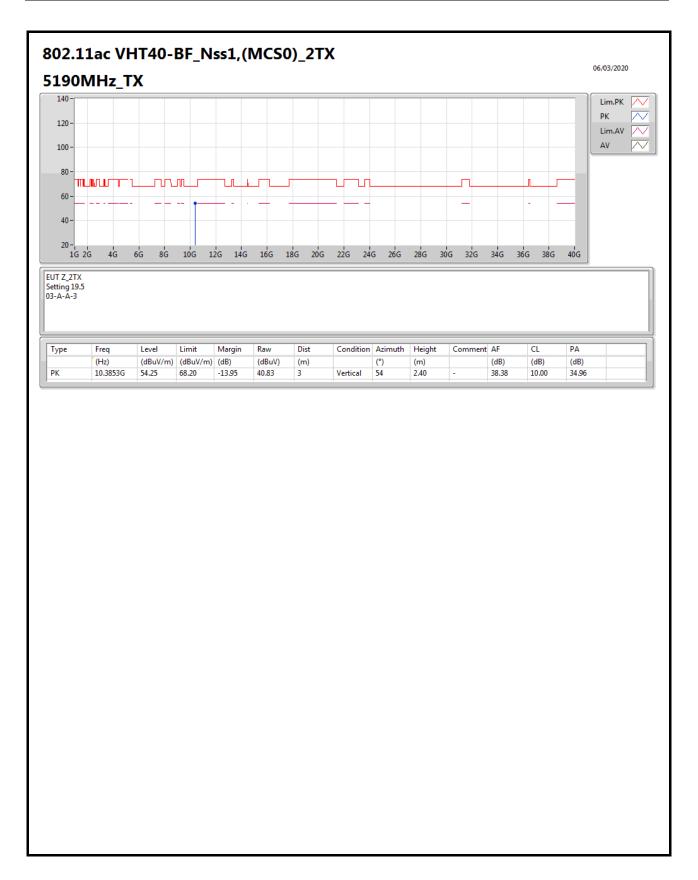






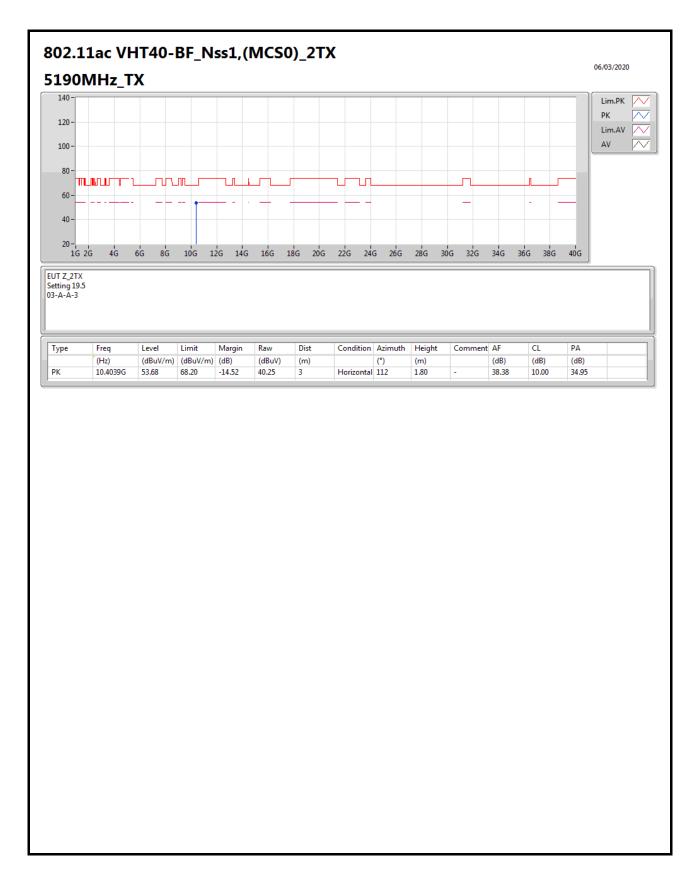




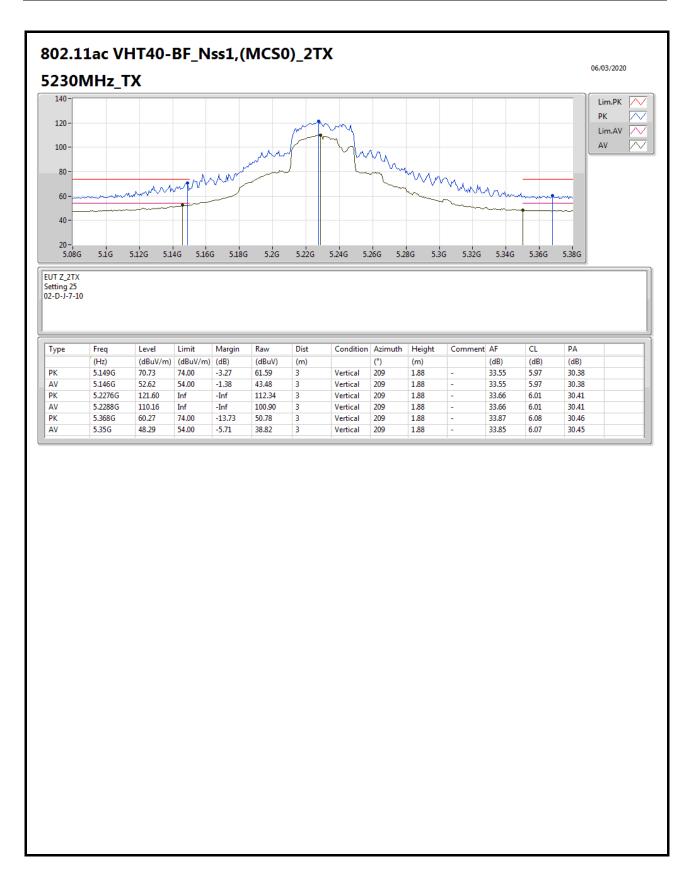


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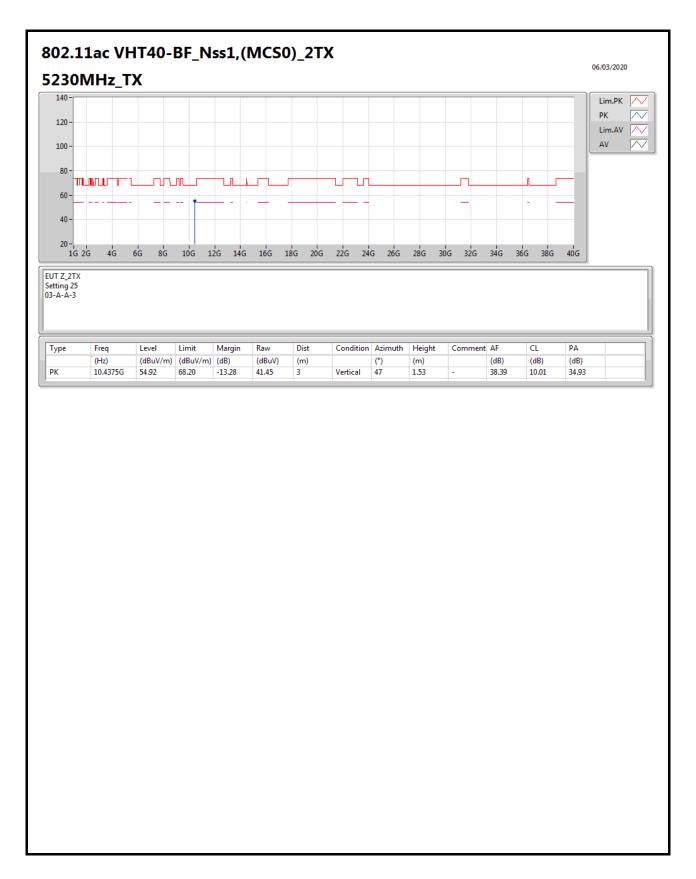






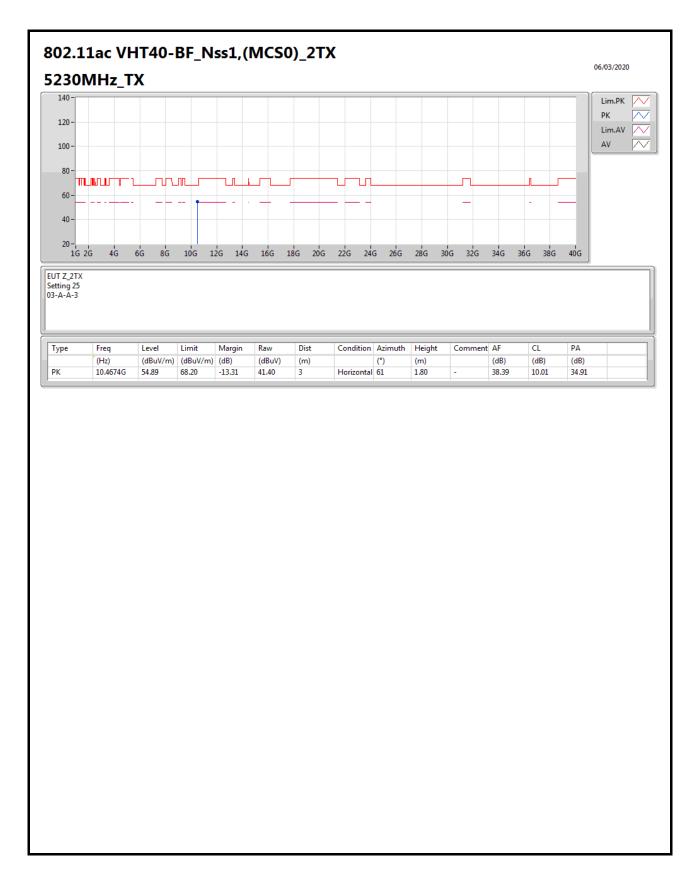




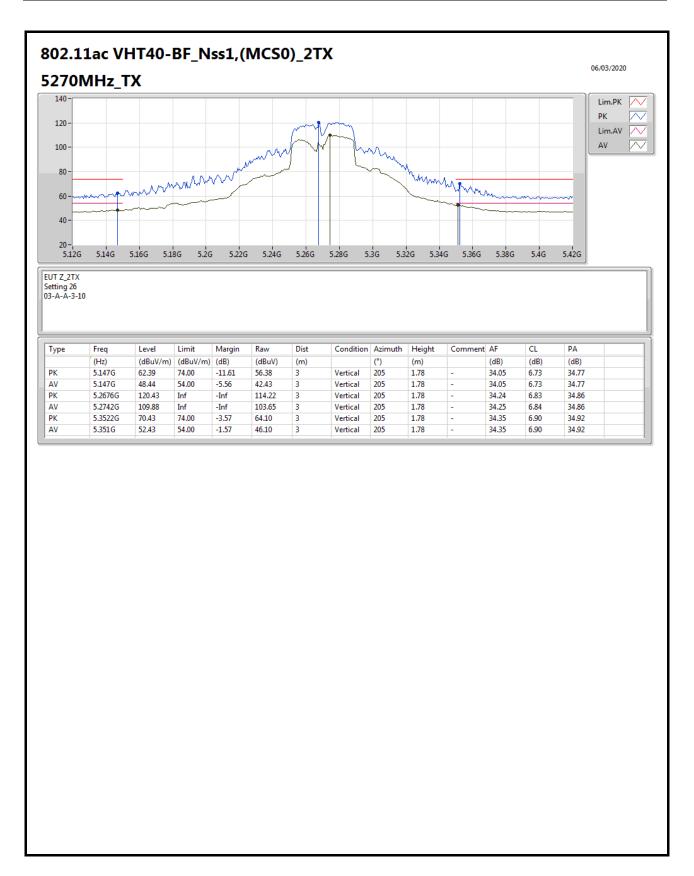


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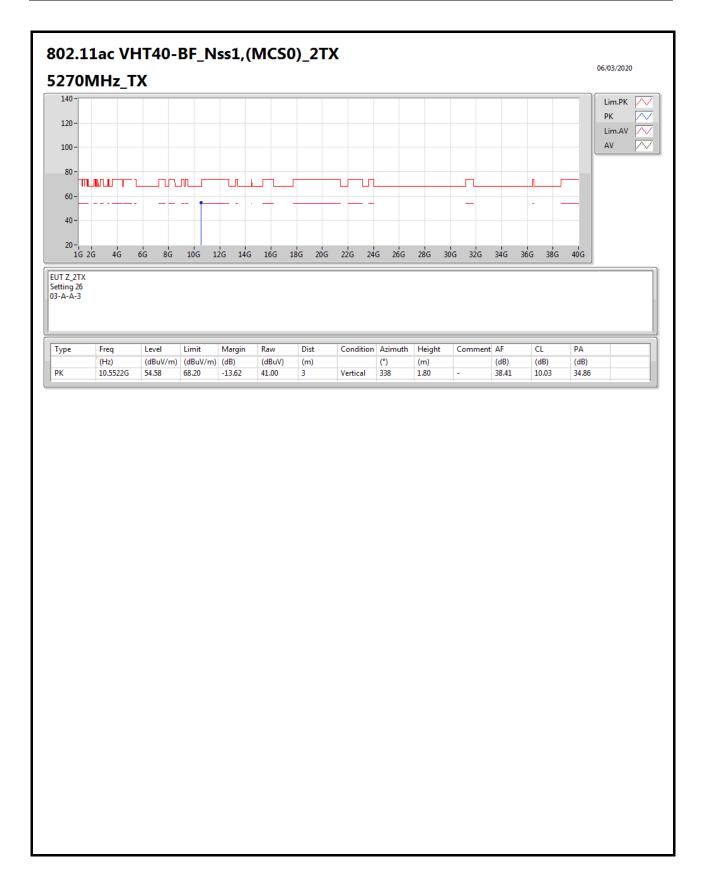




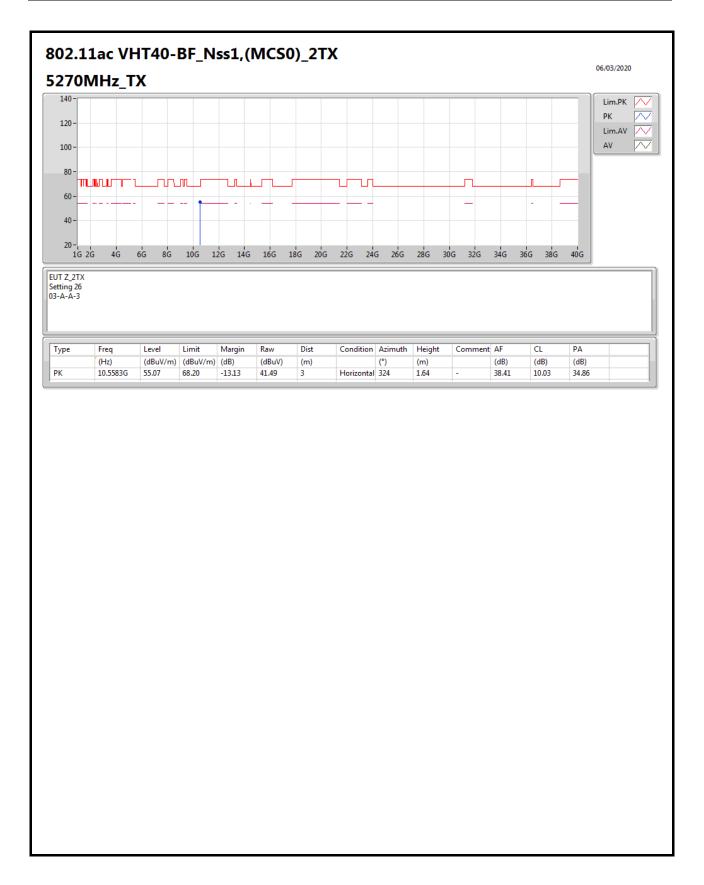




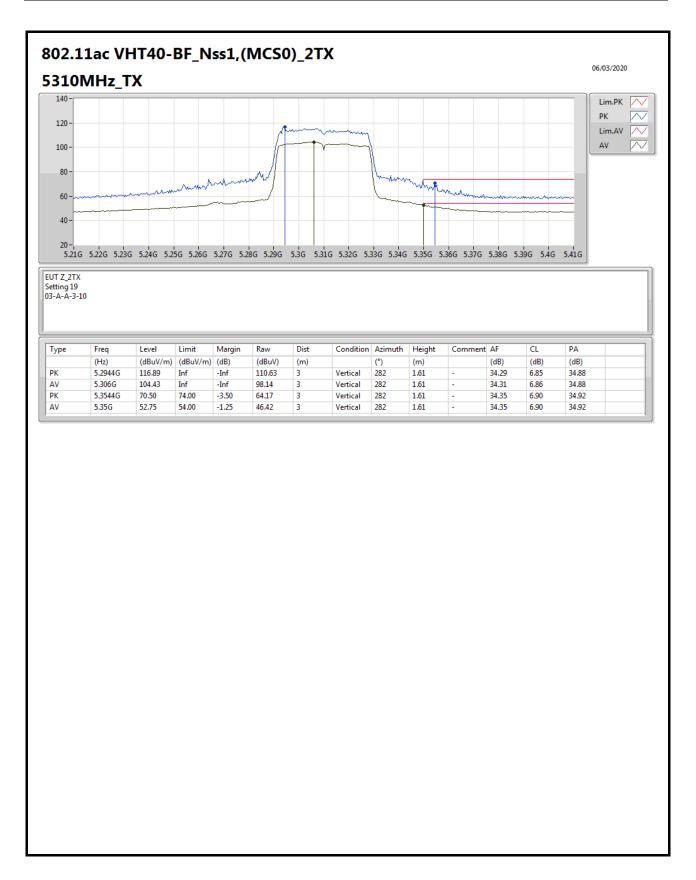




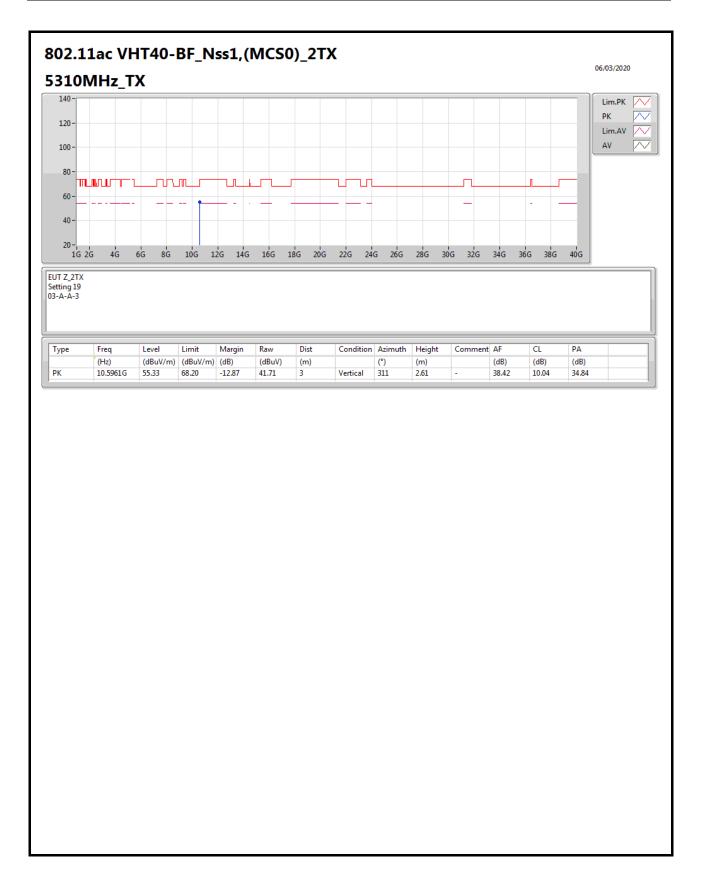






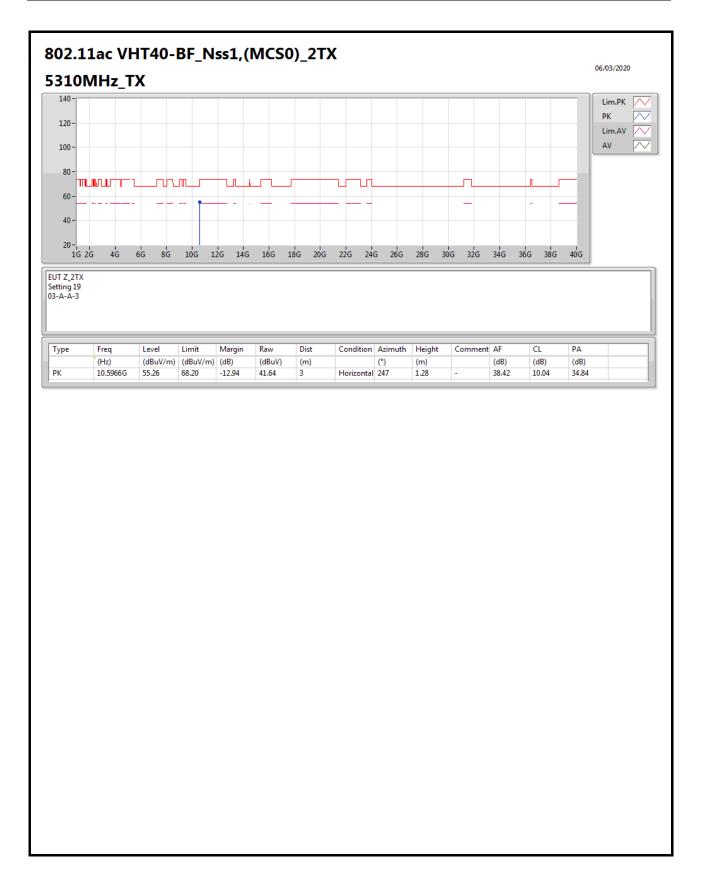






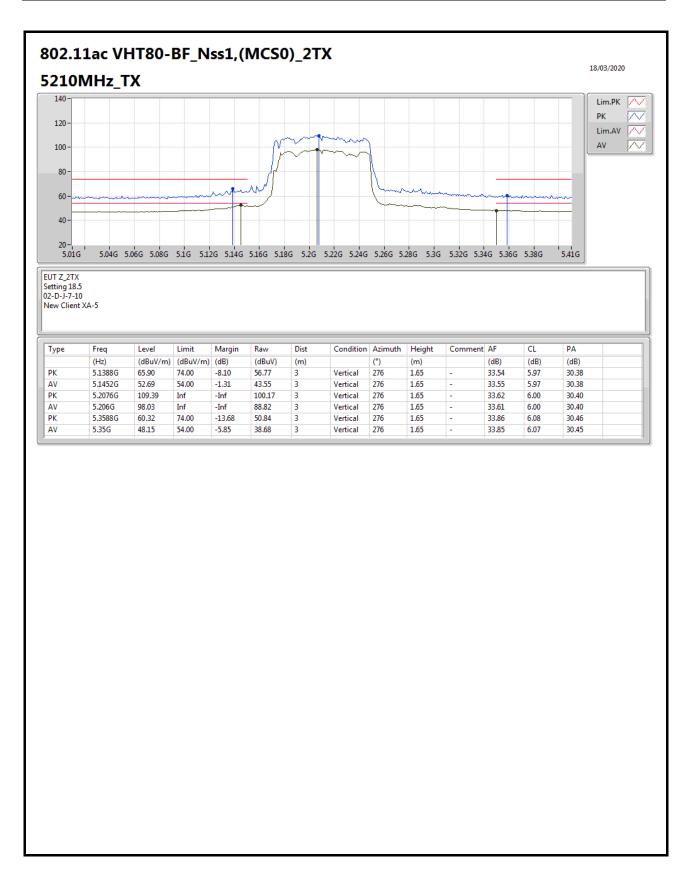
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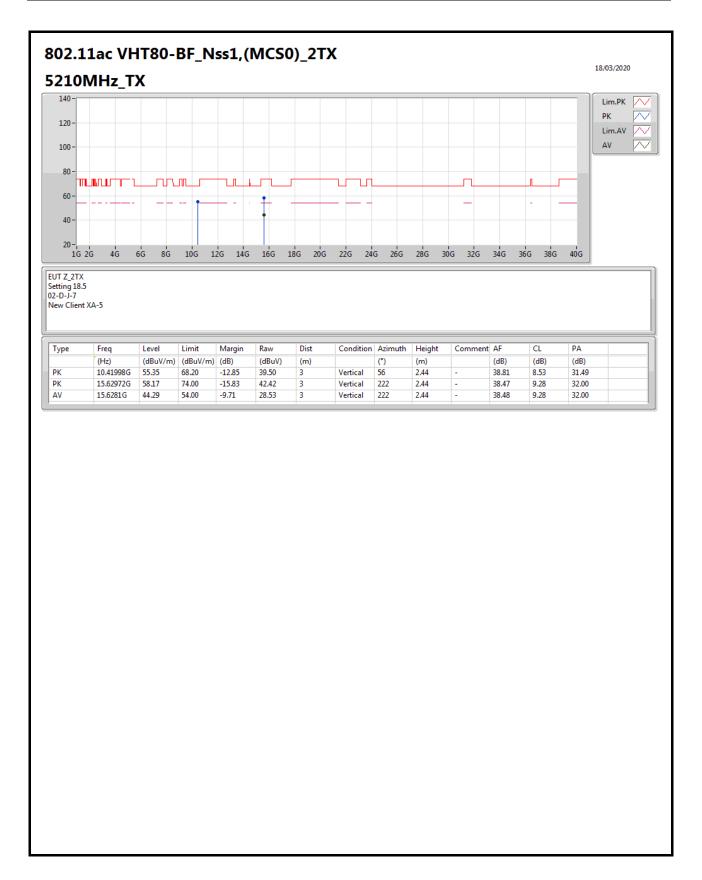


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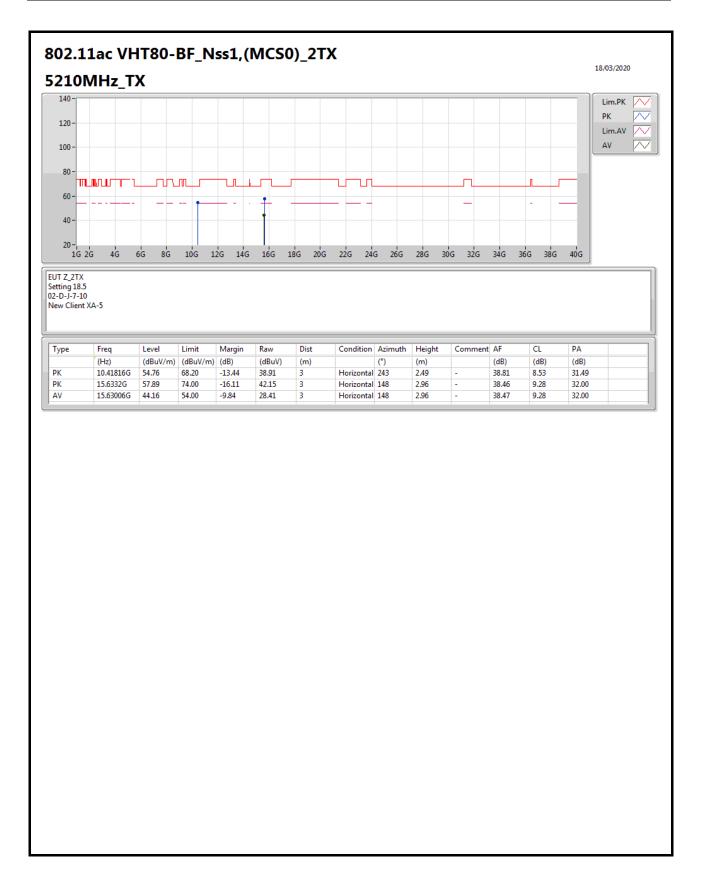




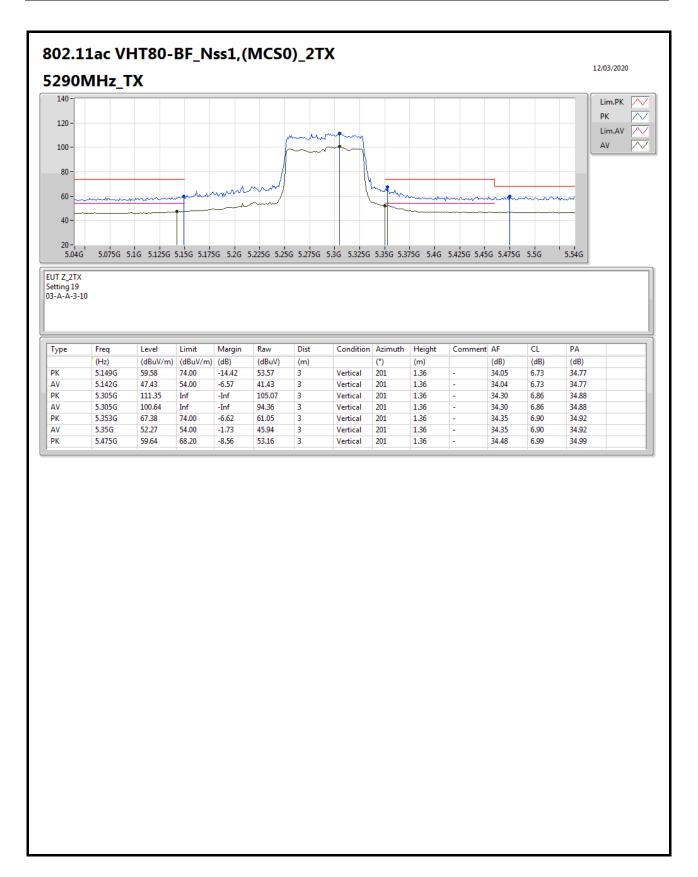


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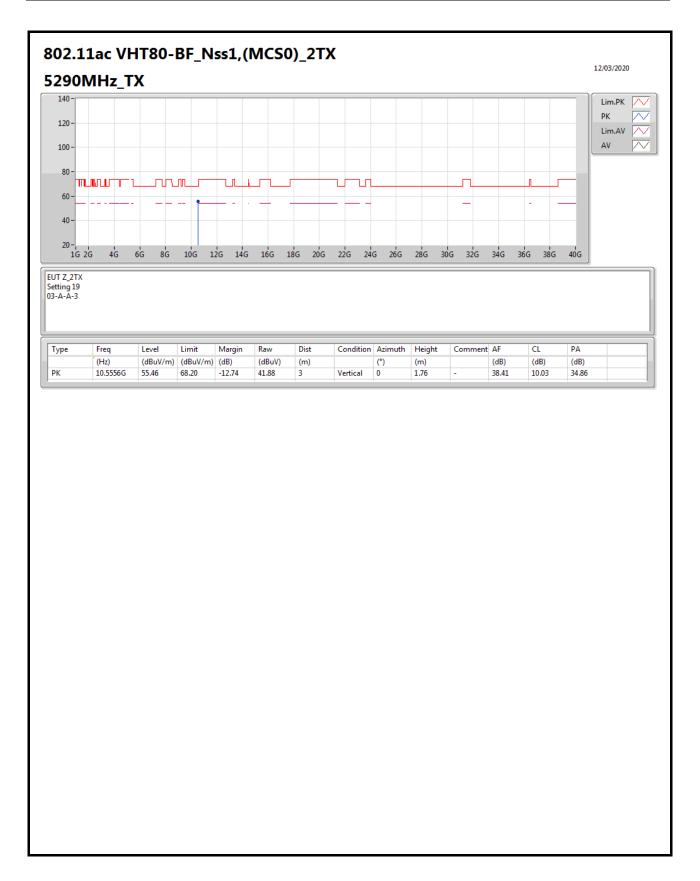






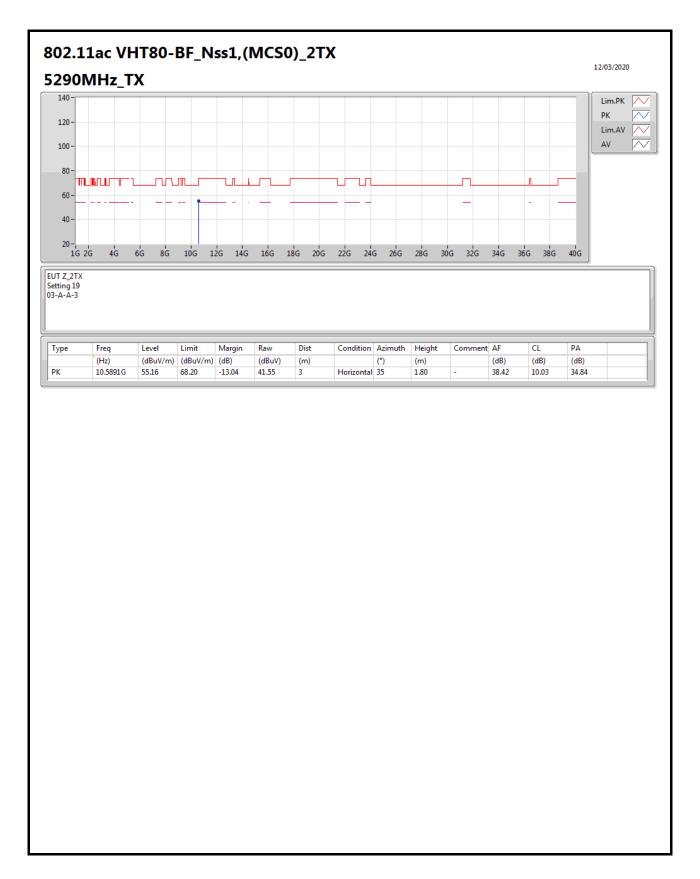






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## RSE TX above 1GHz

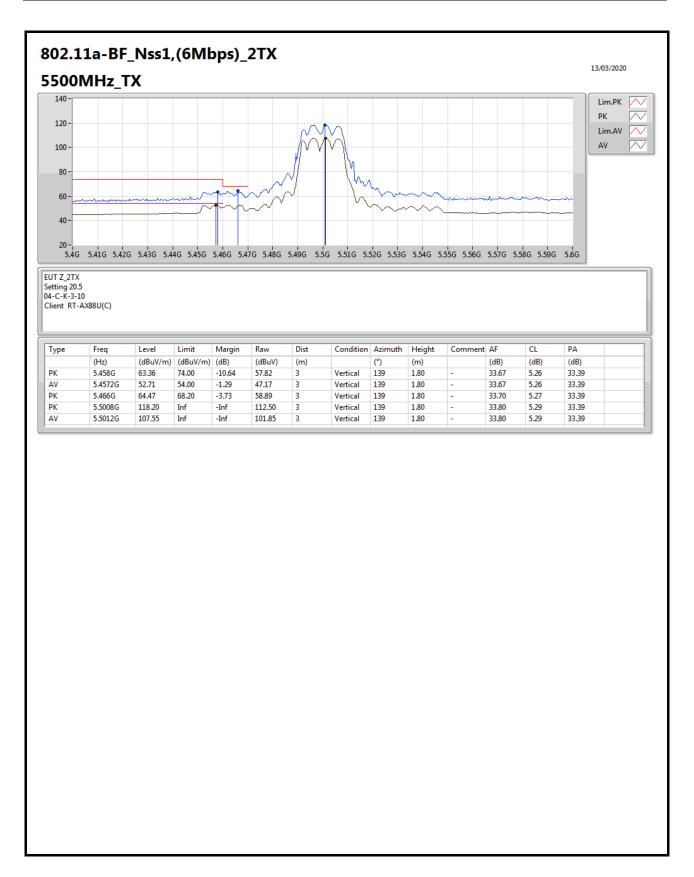
Appendix E.3

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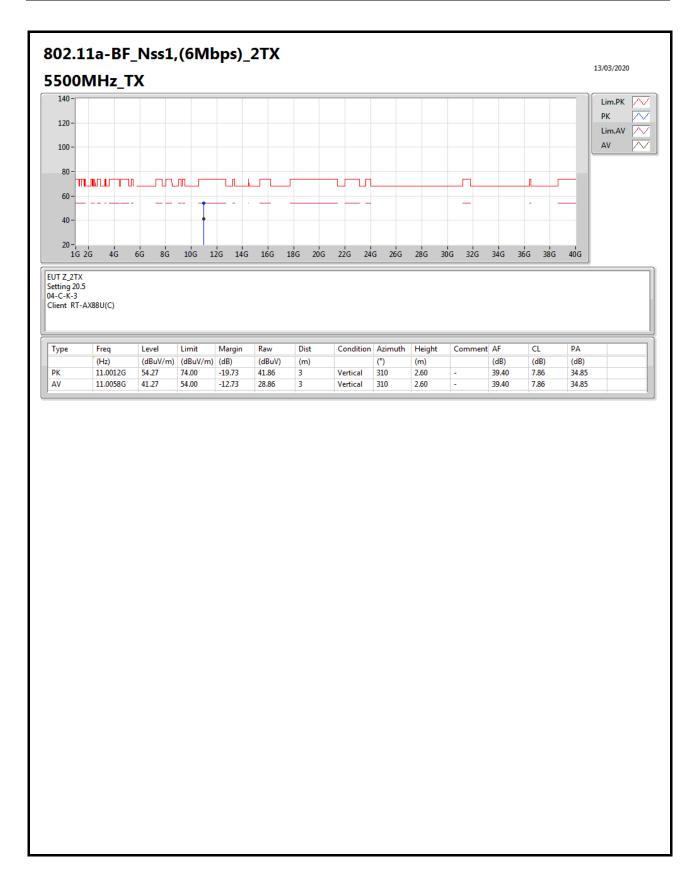
Summary

Mode	Result	Туре	Freq	Level	Limit	Margin	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(m)		(°)	(m)	
5.47-5.725GHz	-	-	•	-	-	-	-	-	-	-	-
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	Pass	PK	5.4652G	67.19	68.20	-1.01	3	Vertical	141	1.65	-

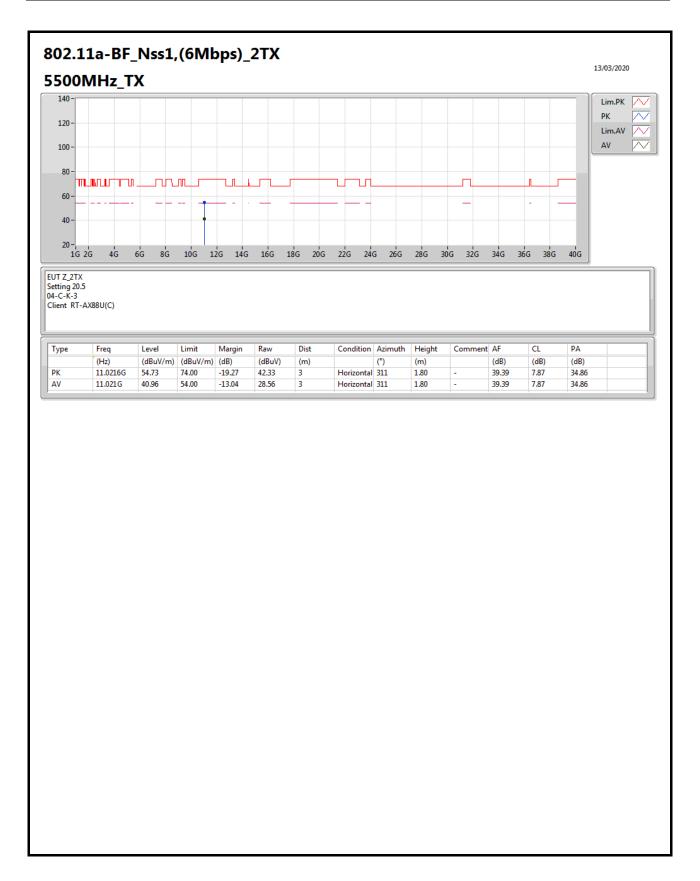




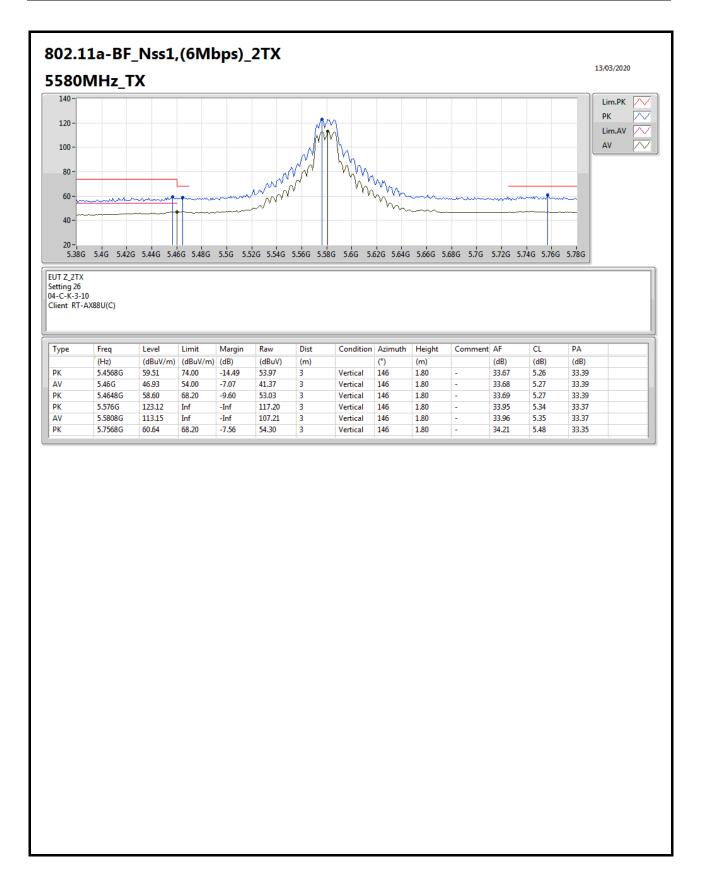




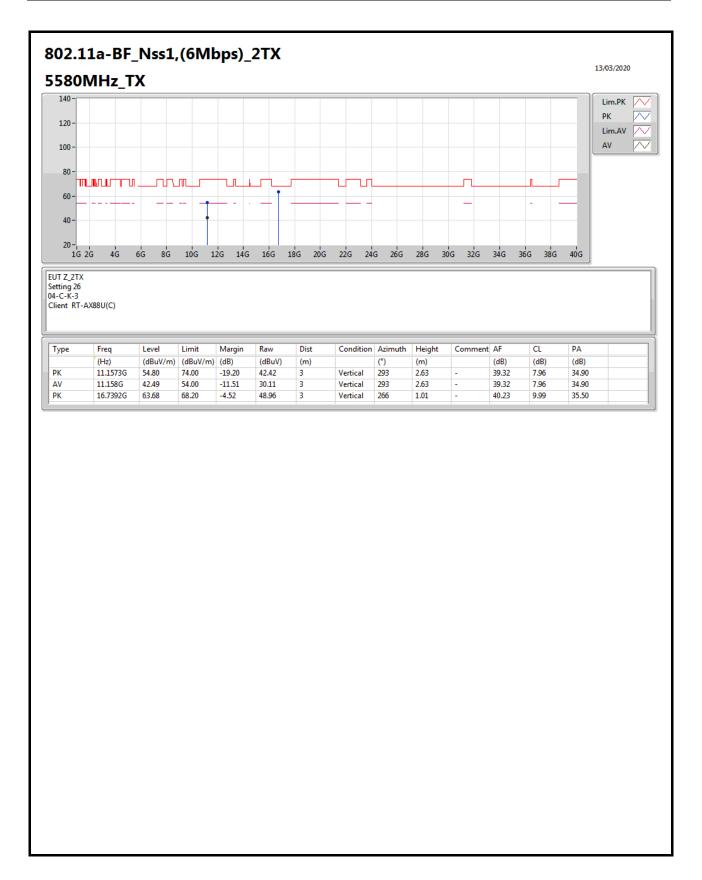






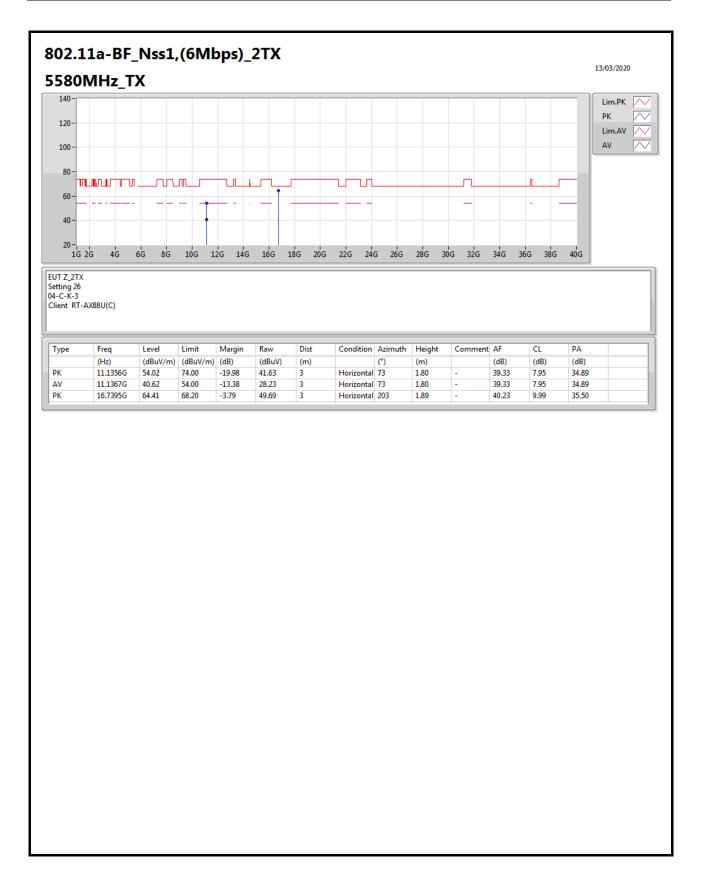




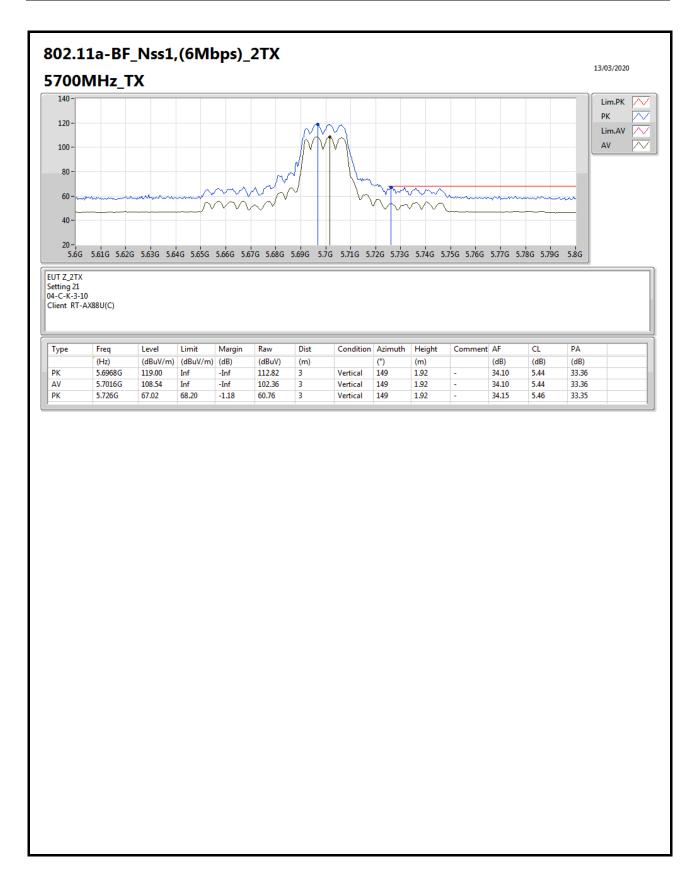


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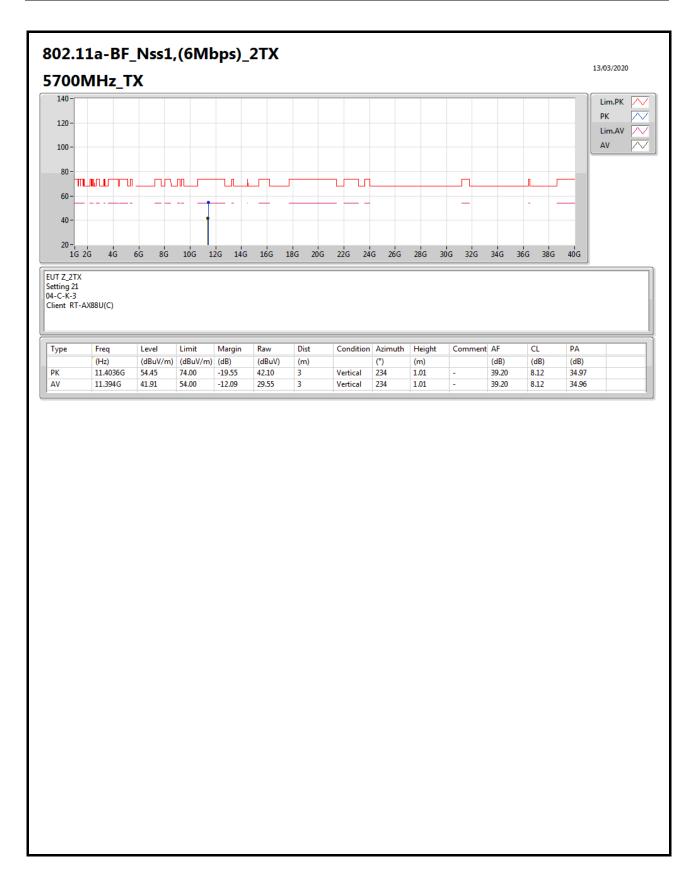






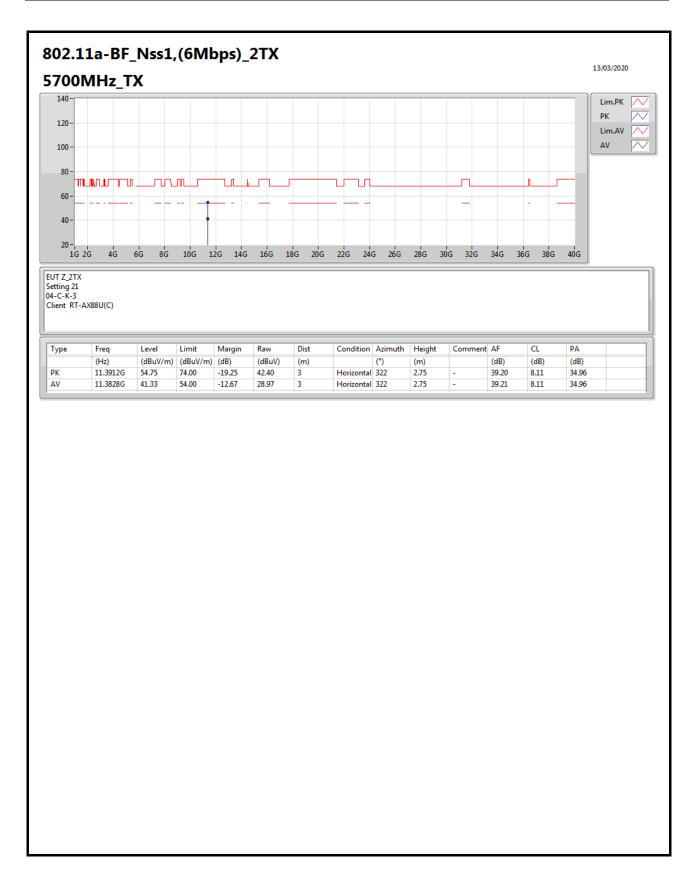




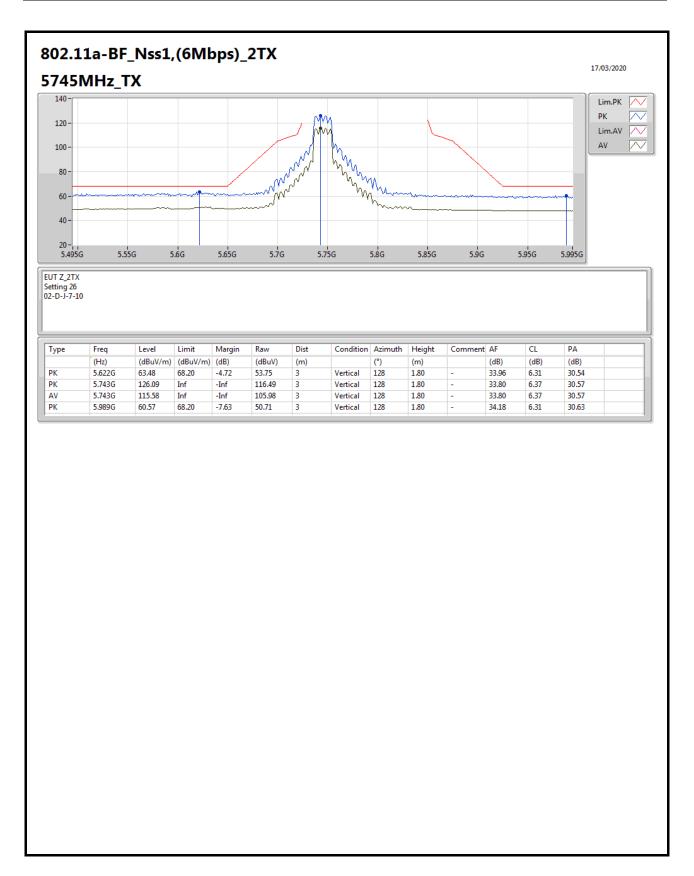


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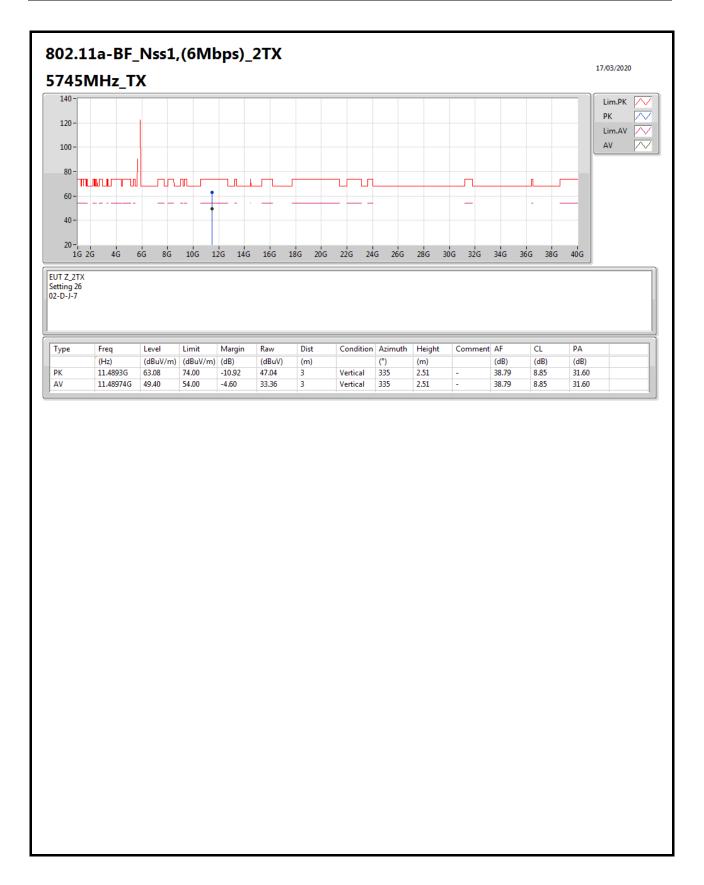






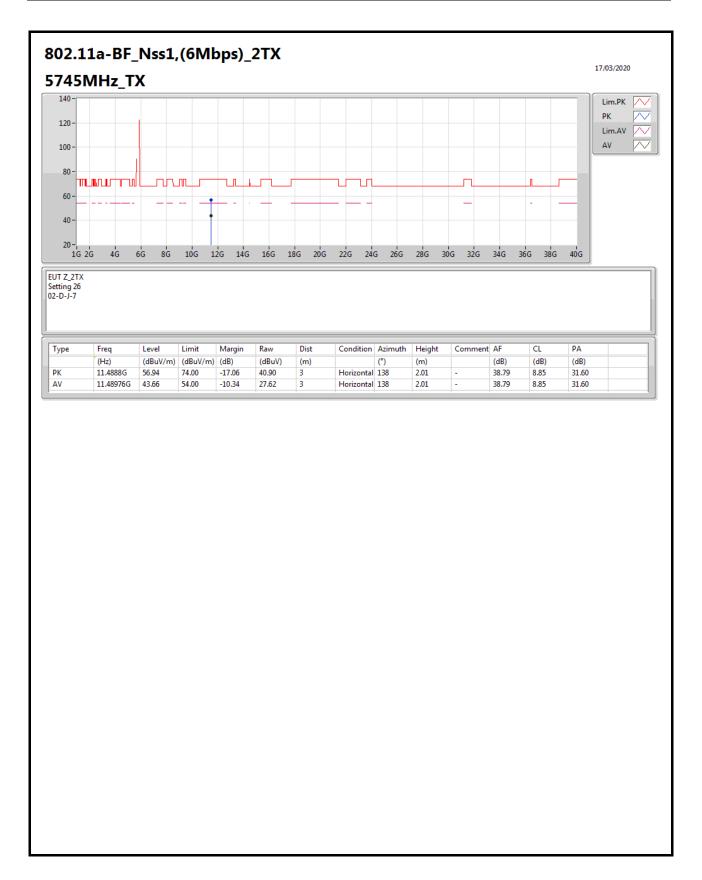




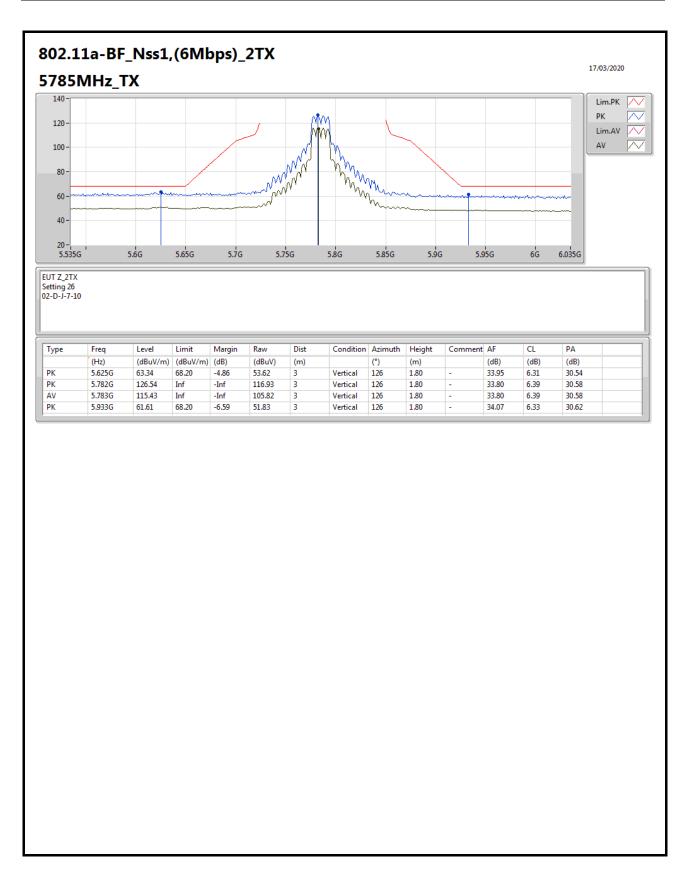


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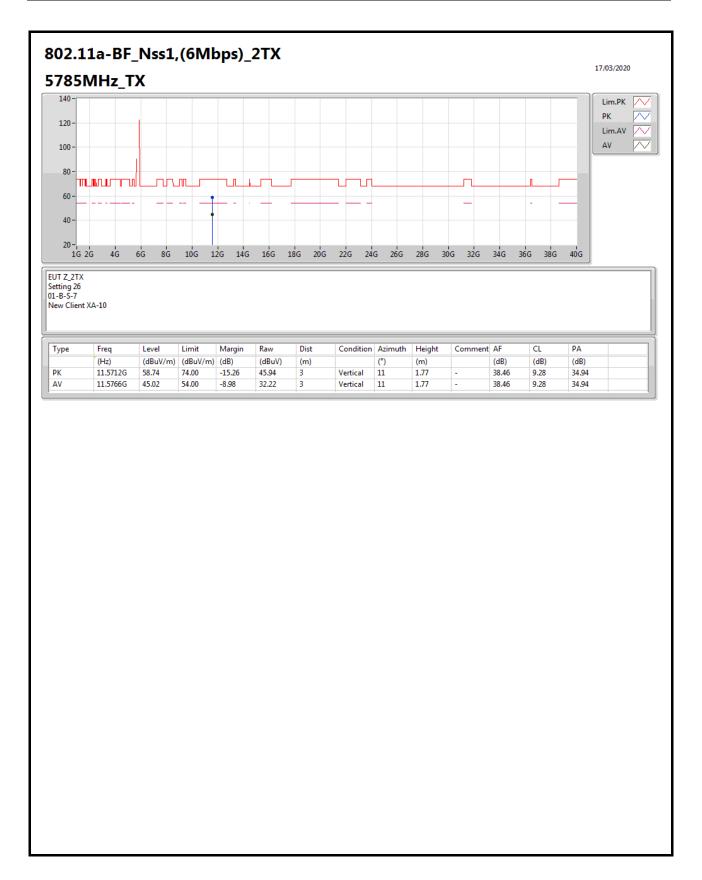




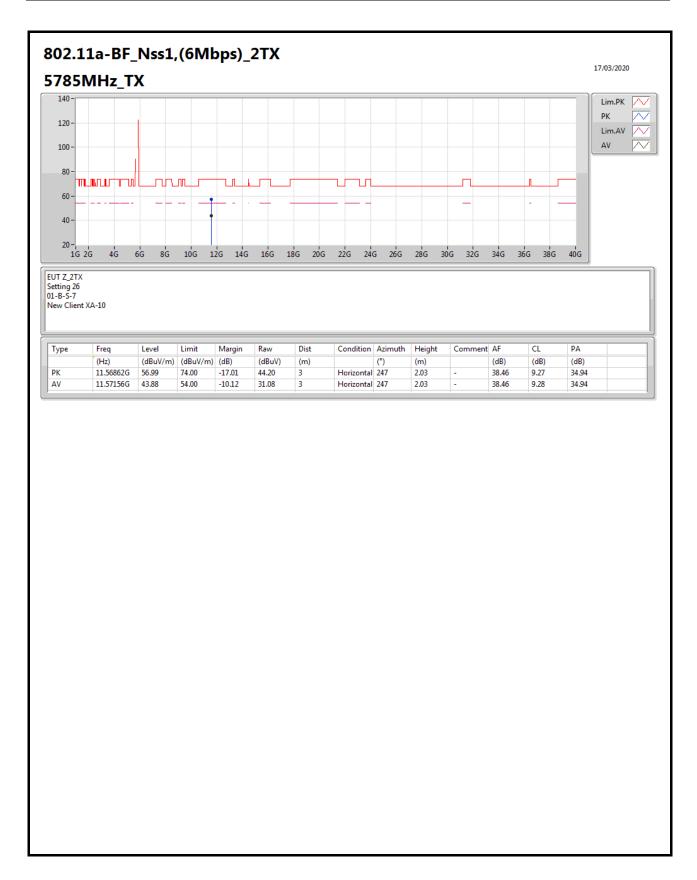






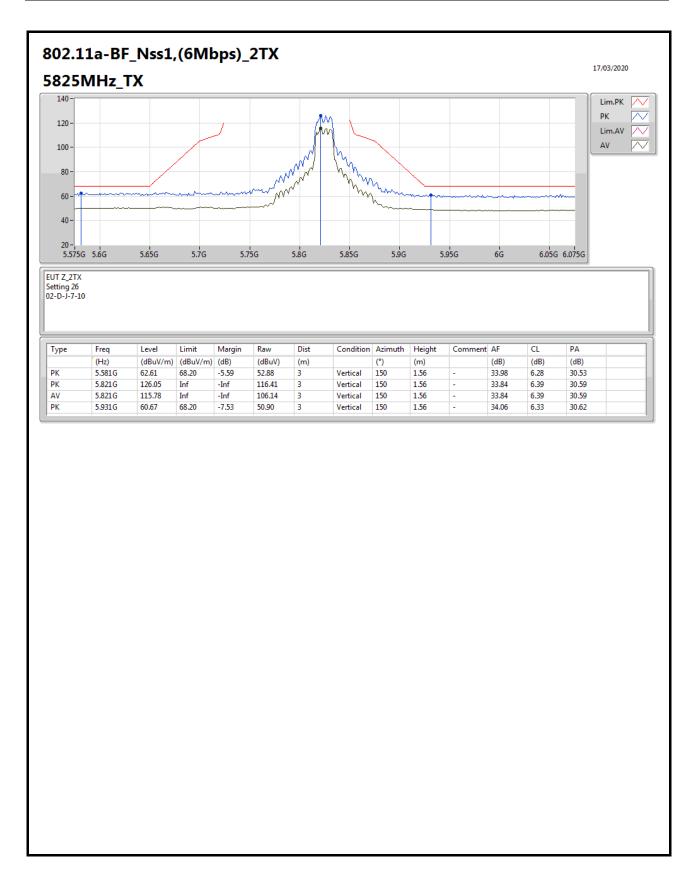




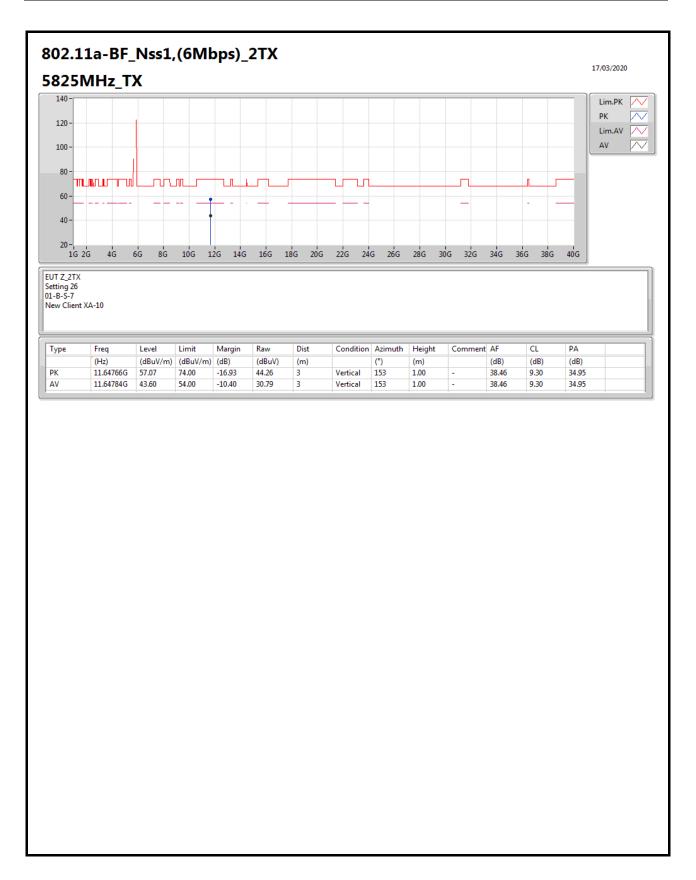


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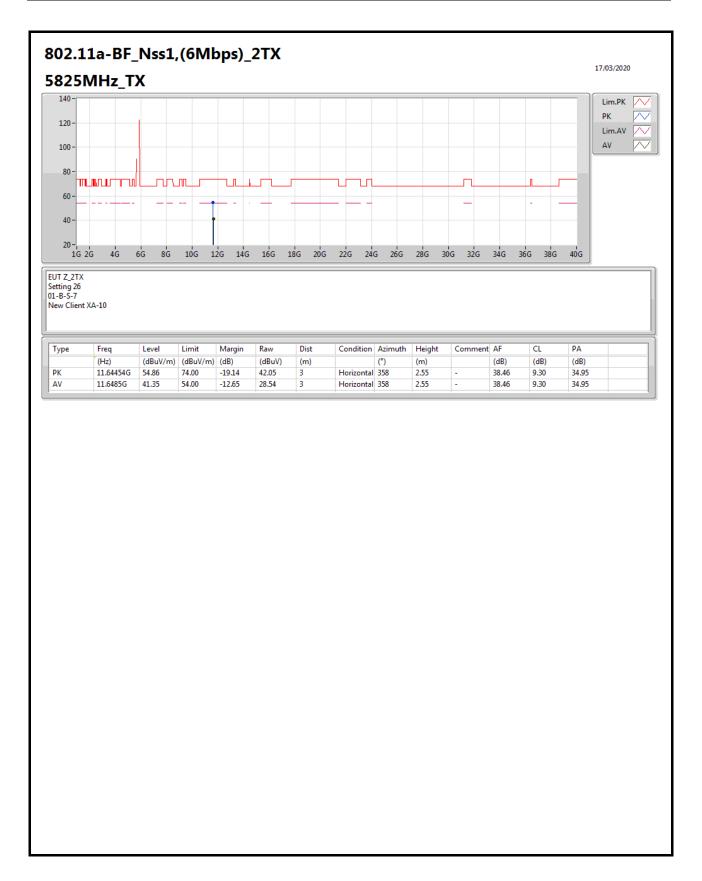




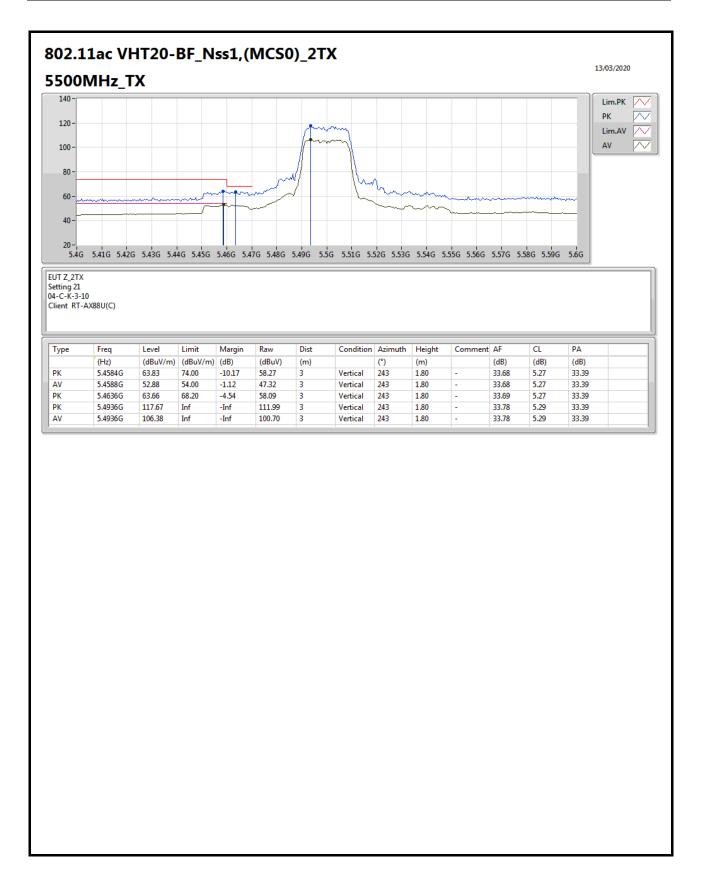


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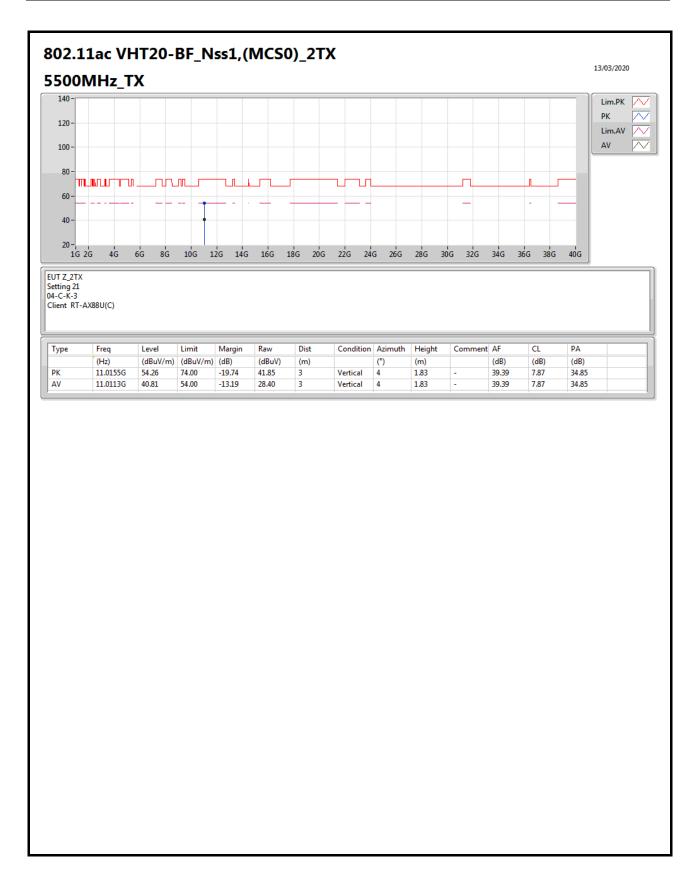




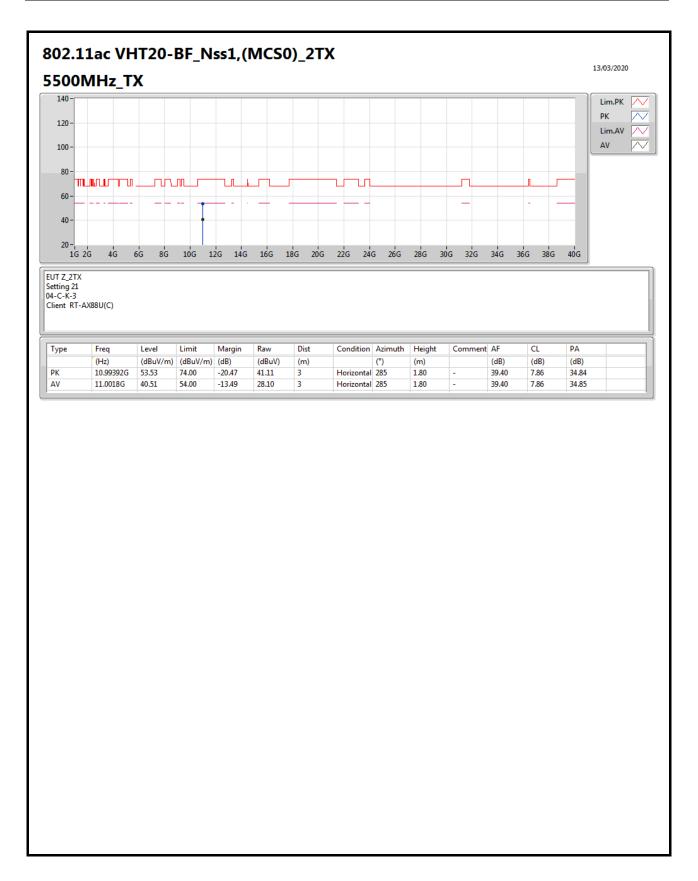




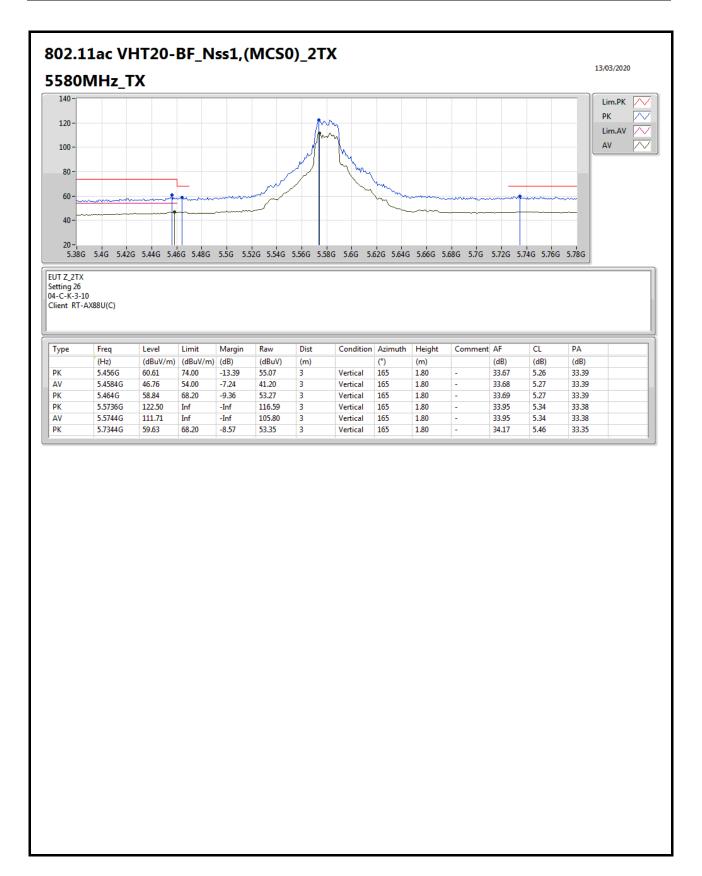




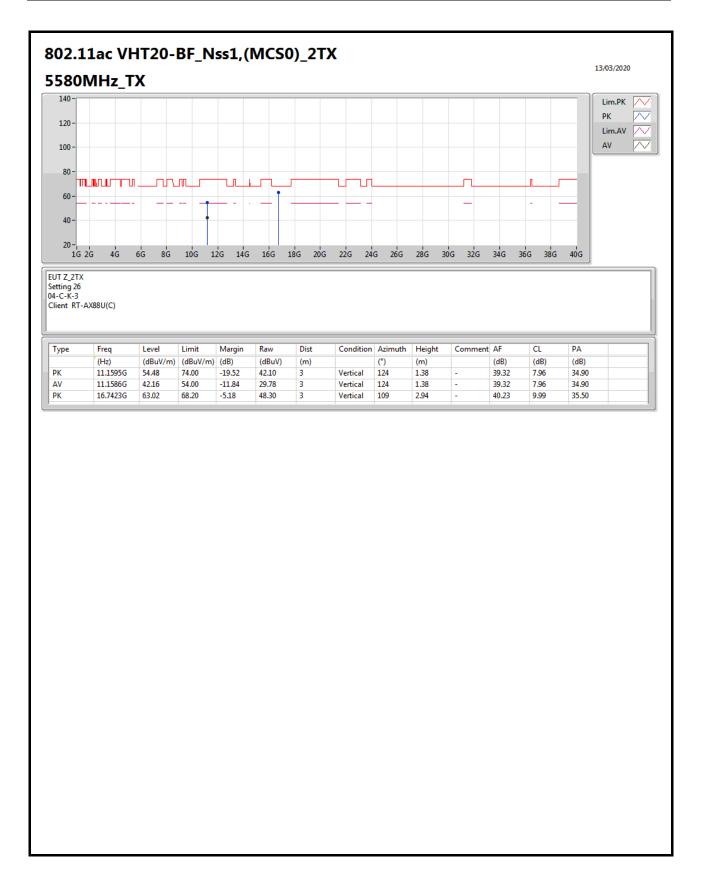






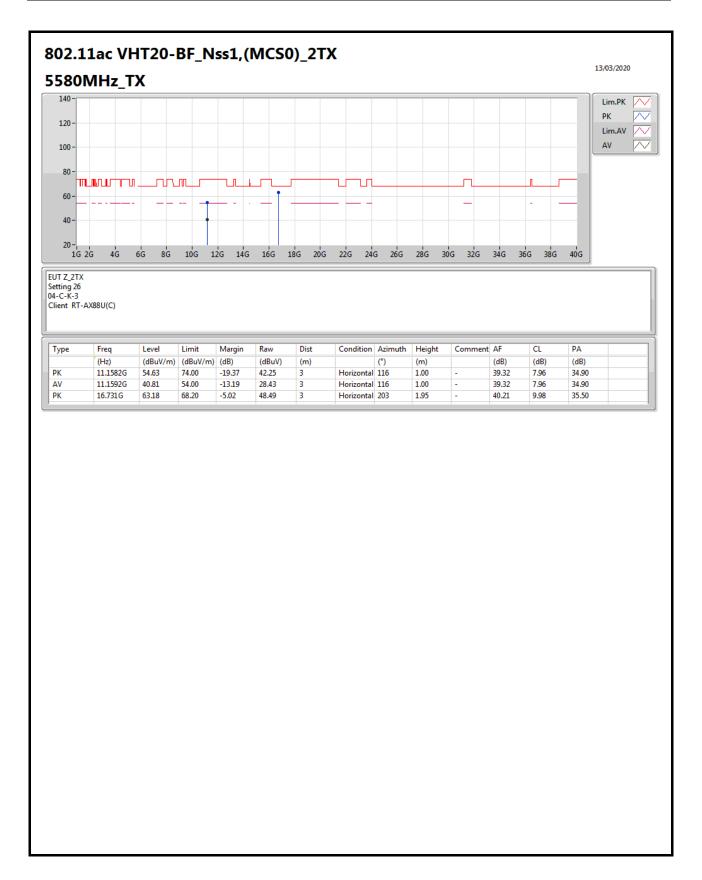




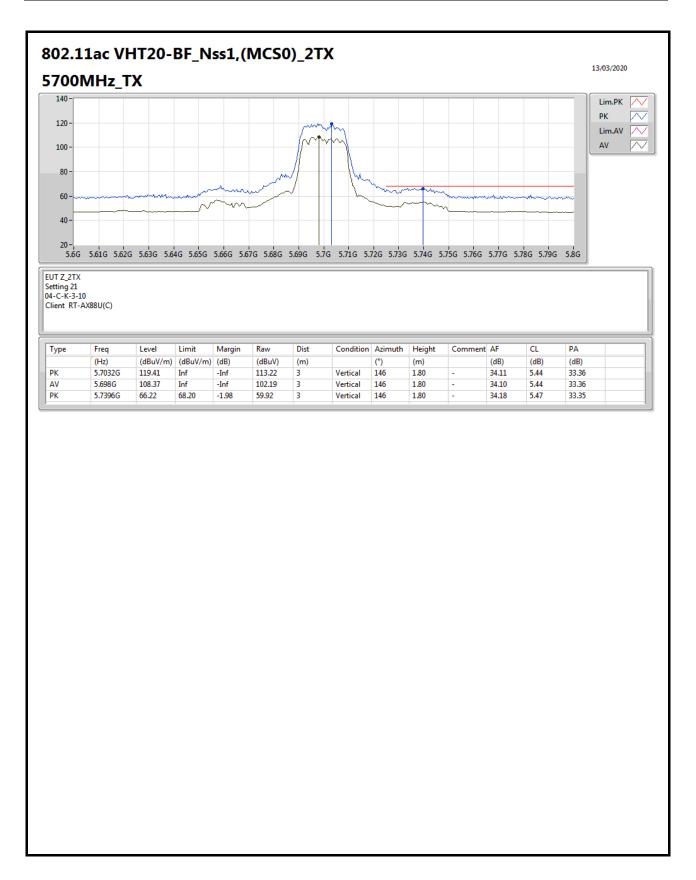


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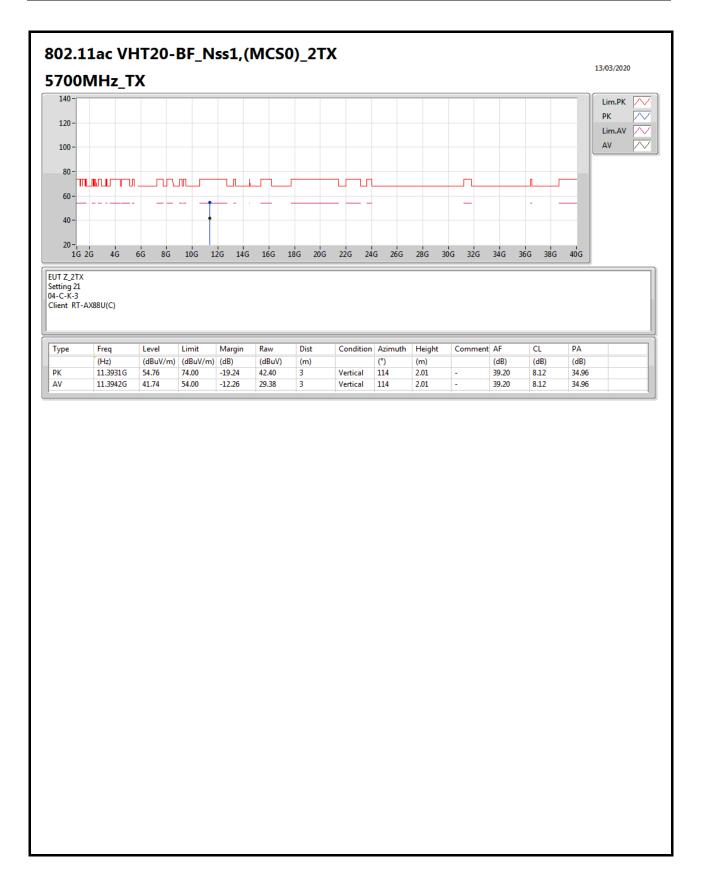




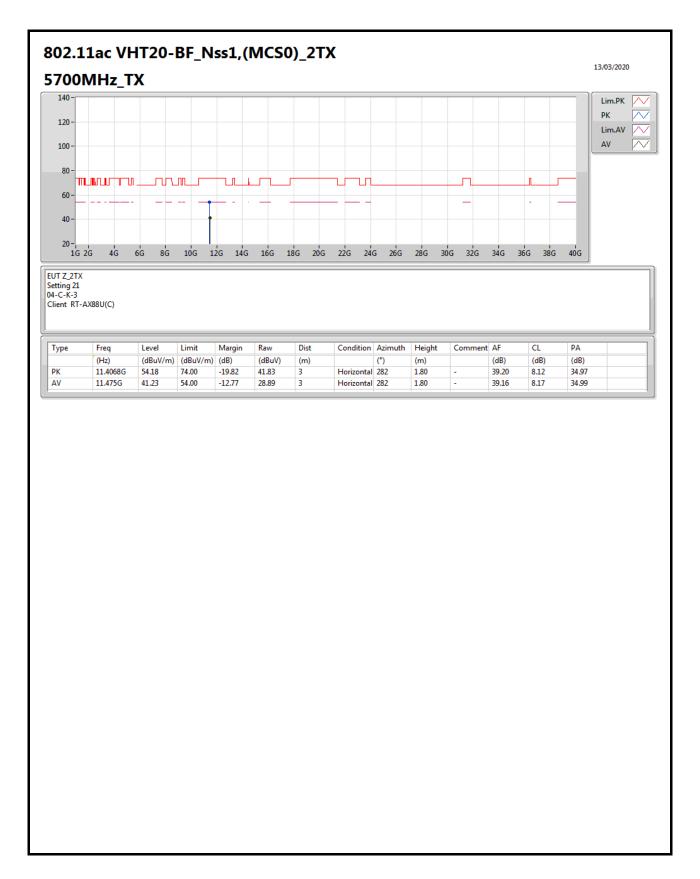


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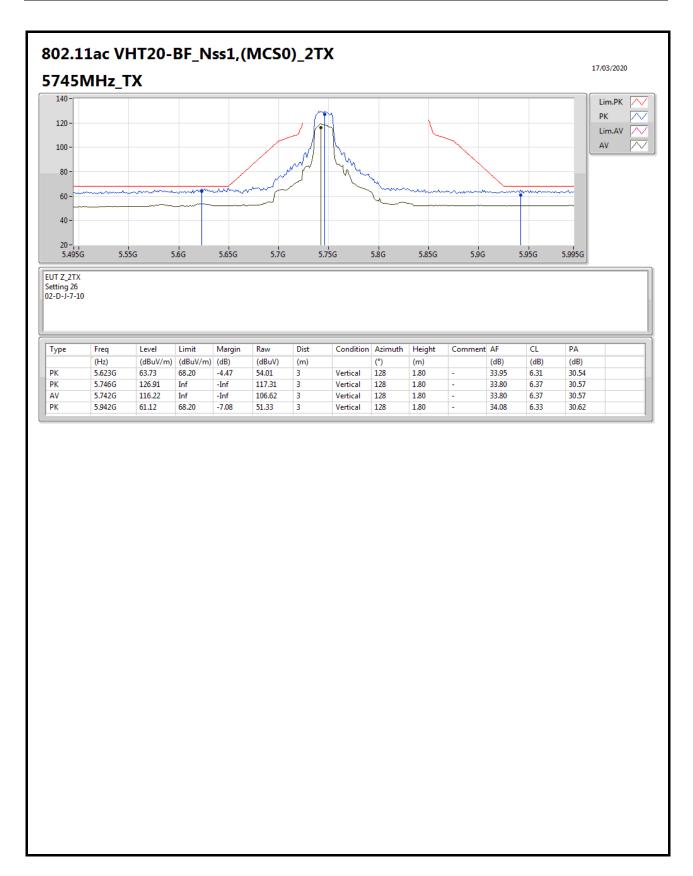




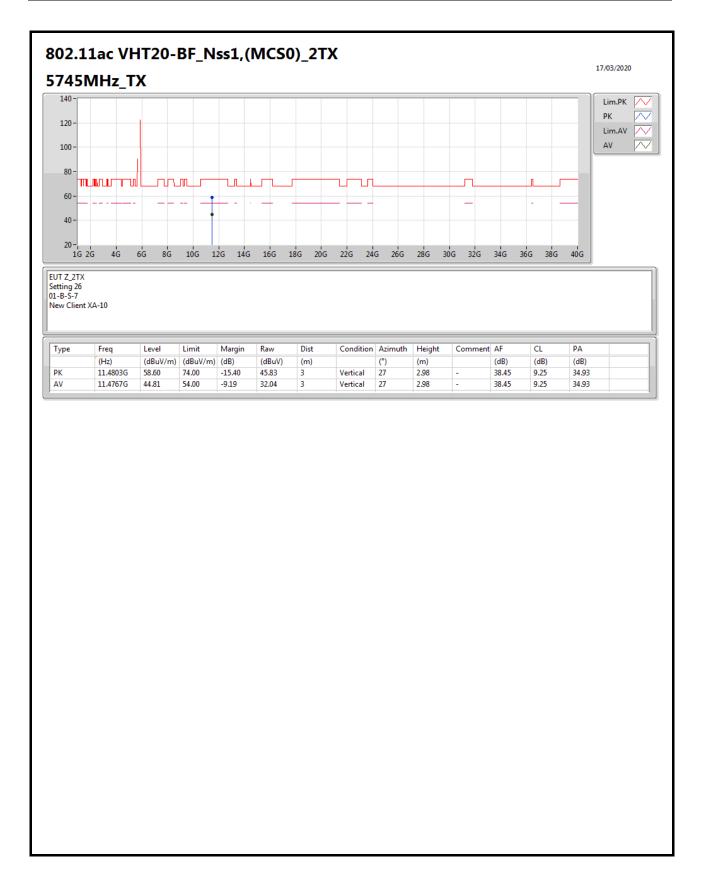




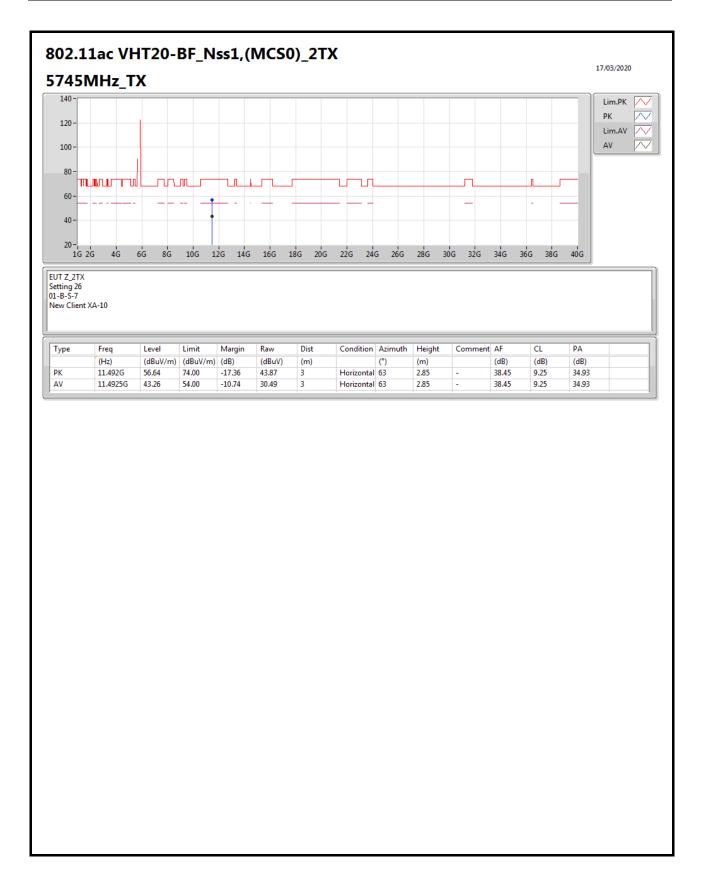




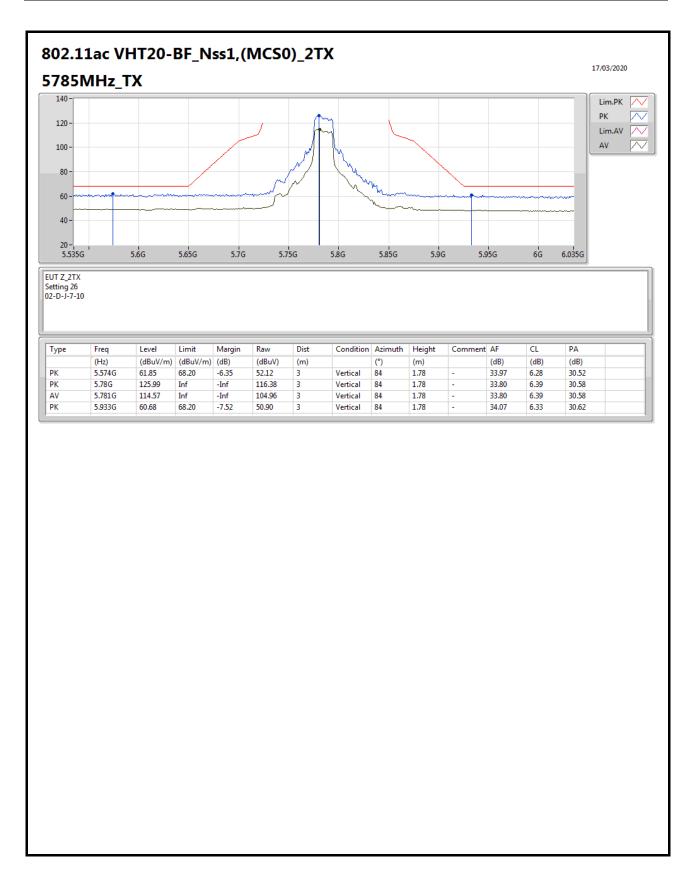




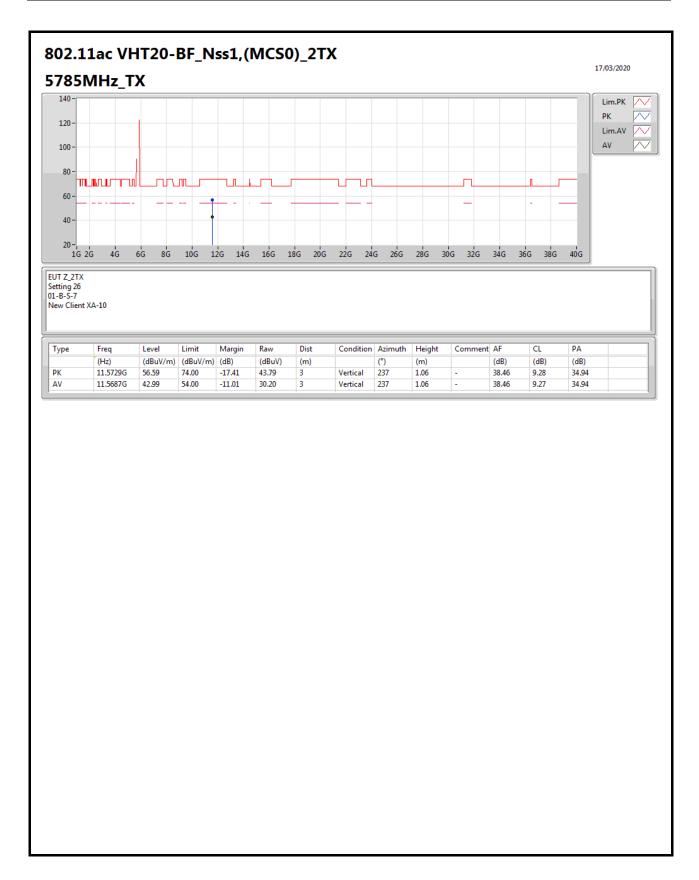




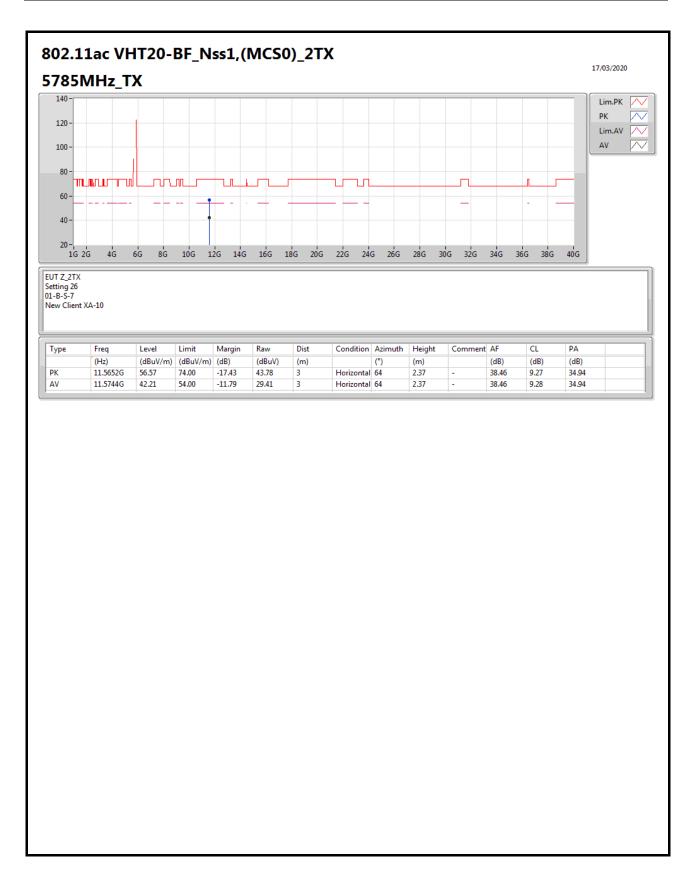




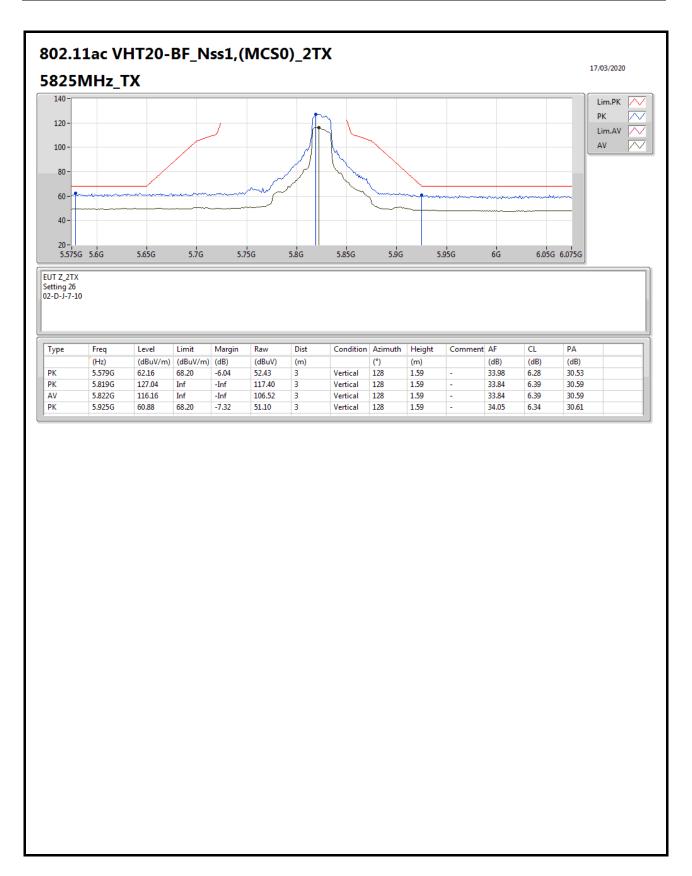




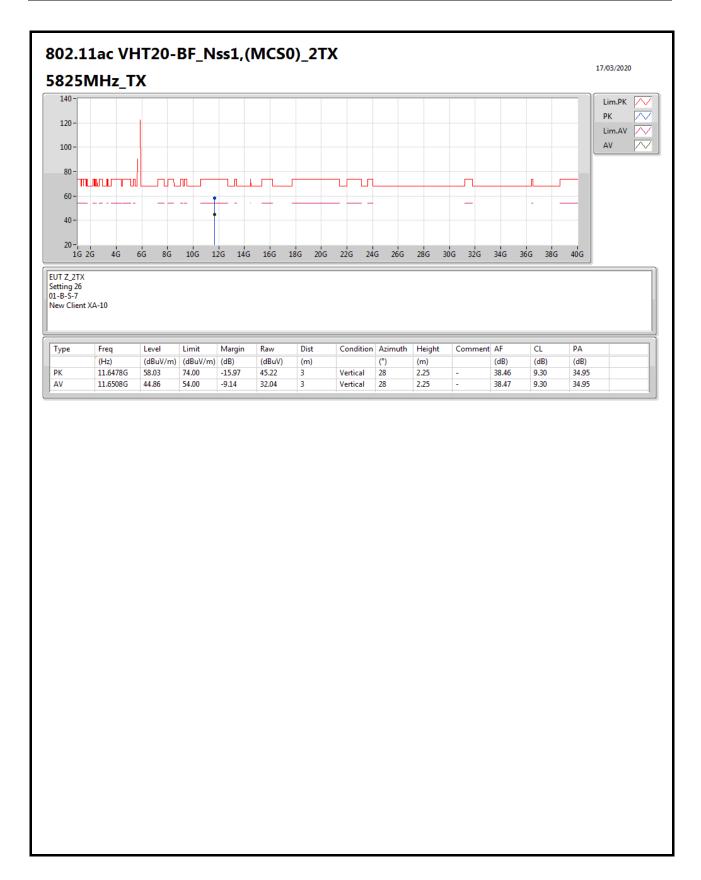




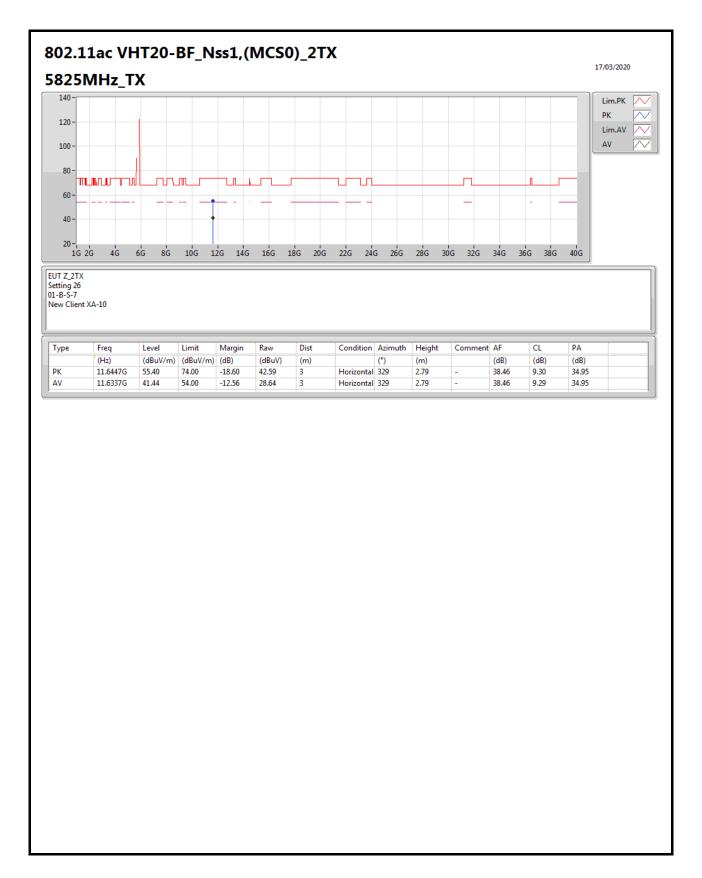




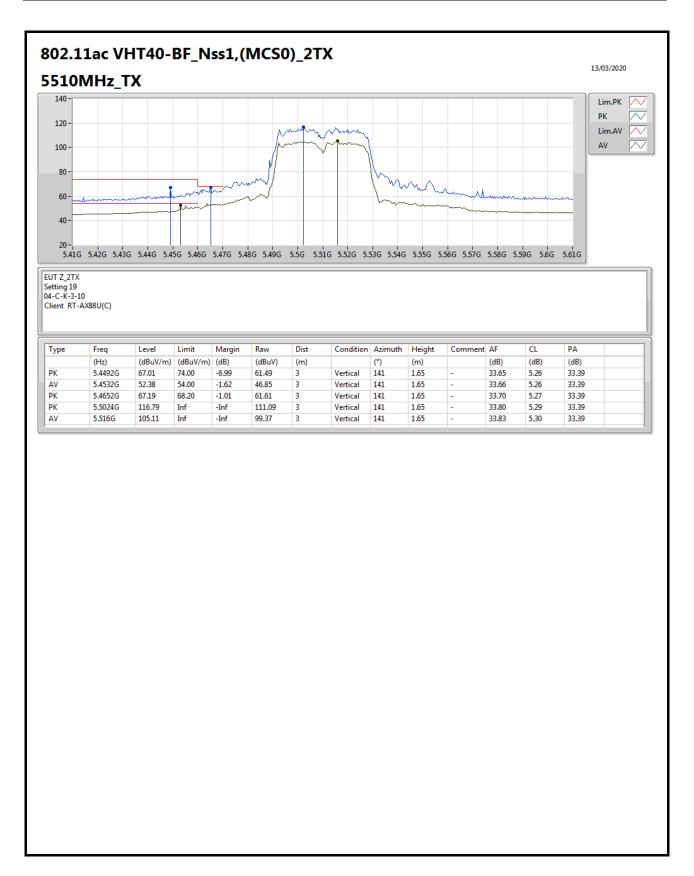




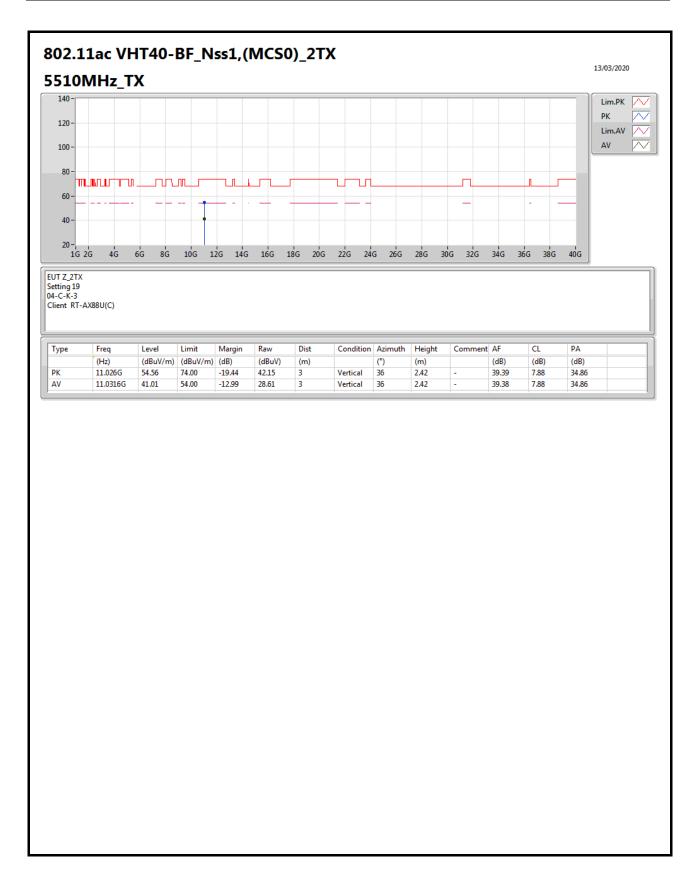




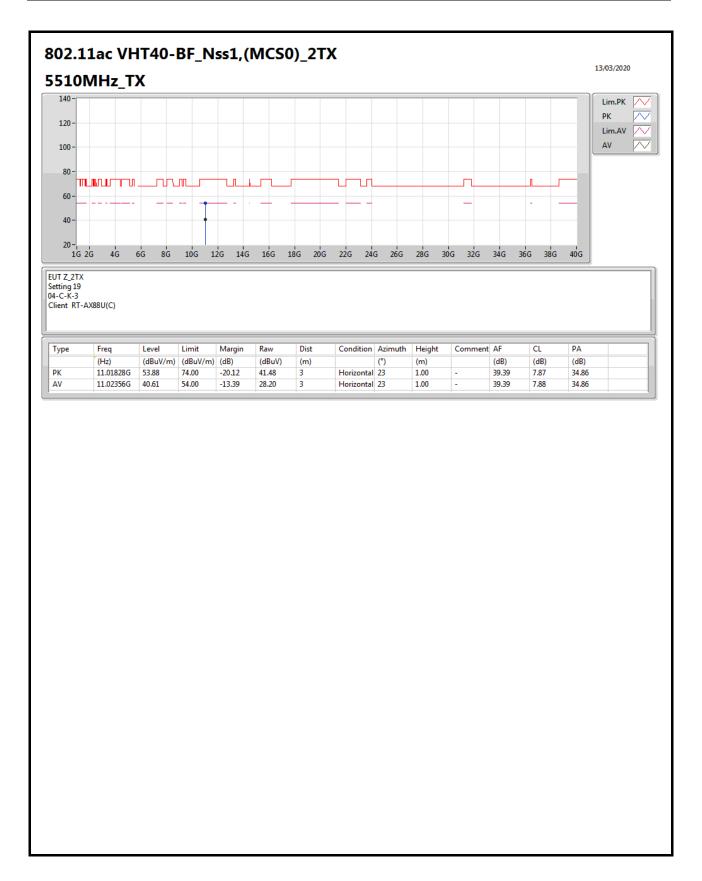




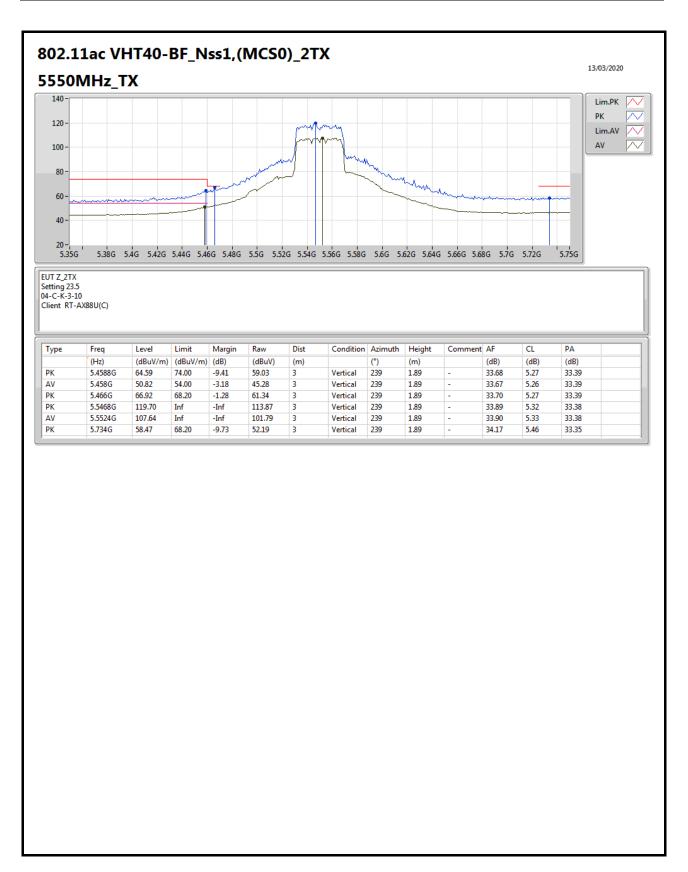




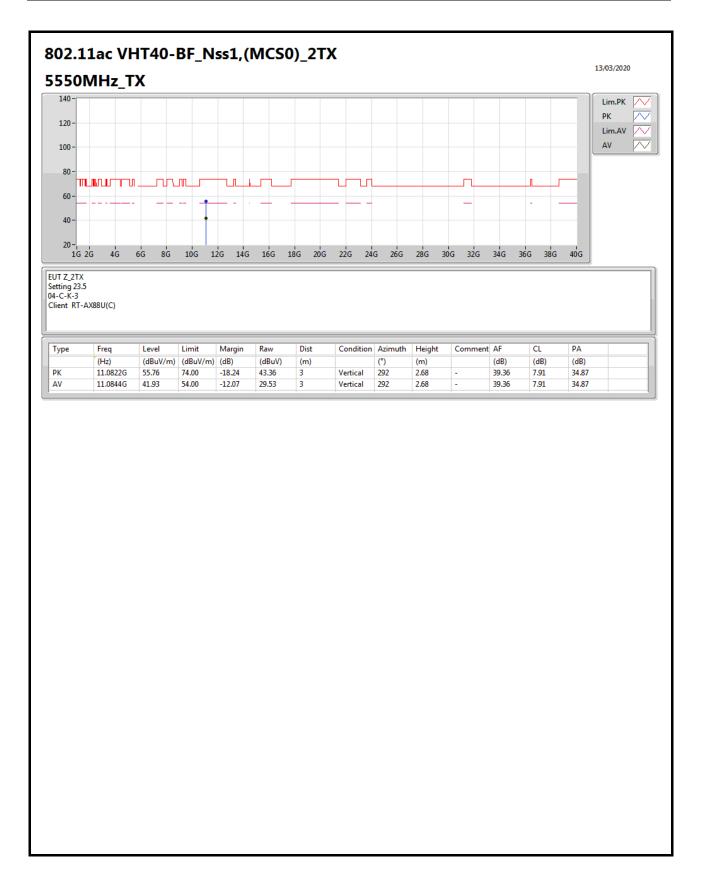




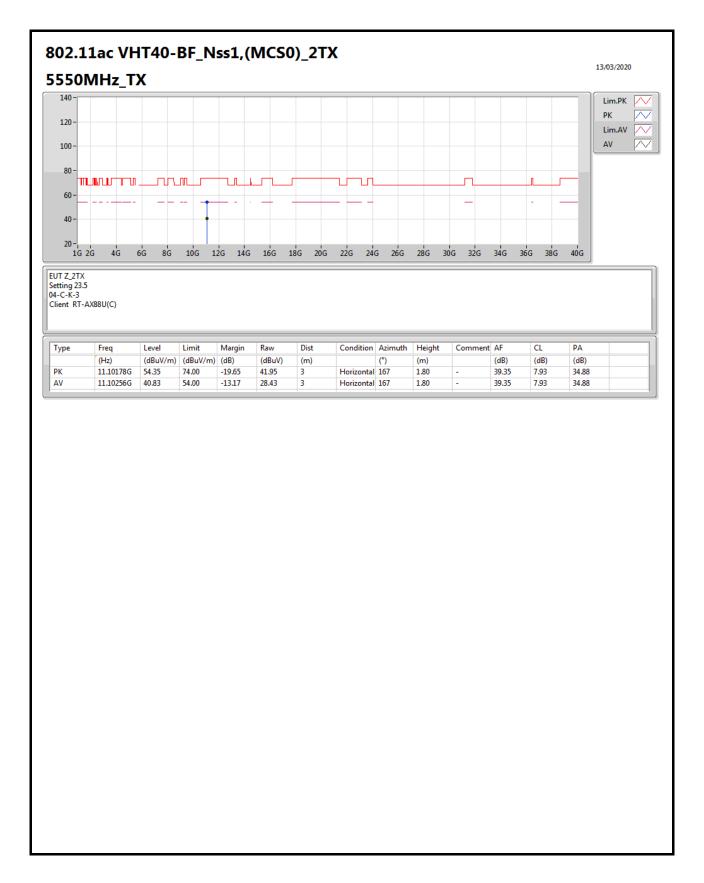




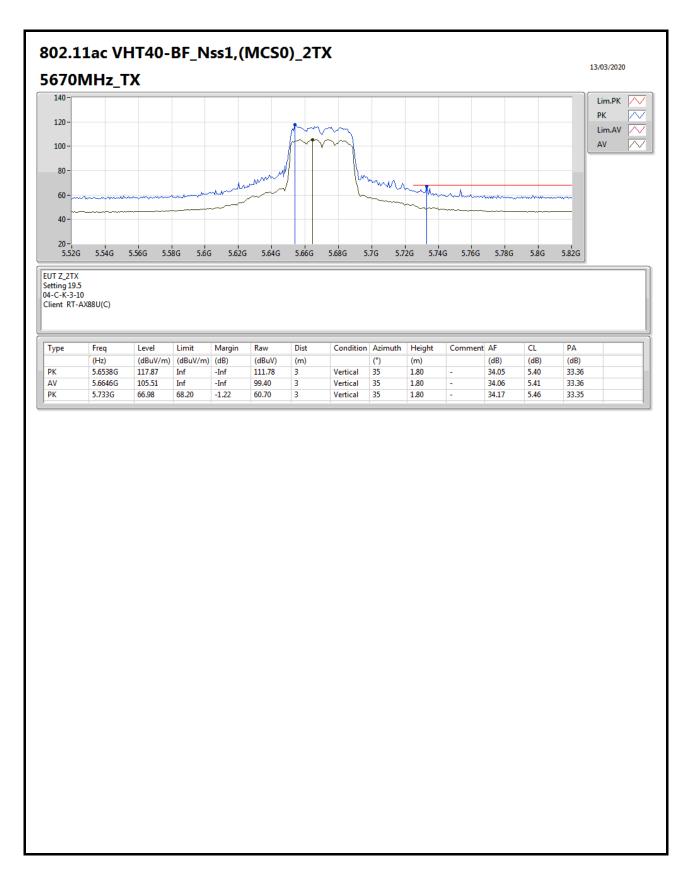






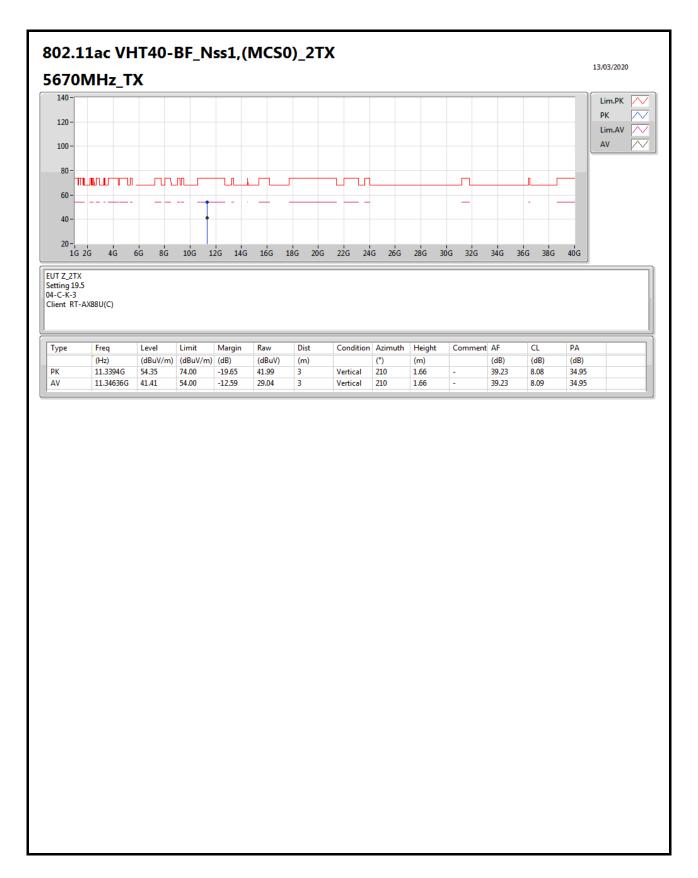






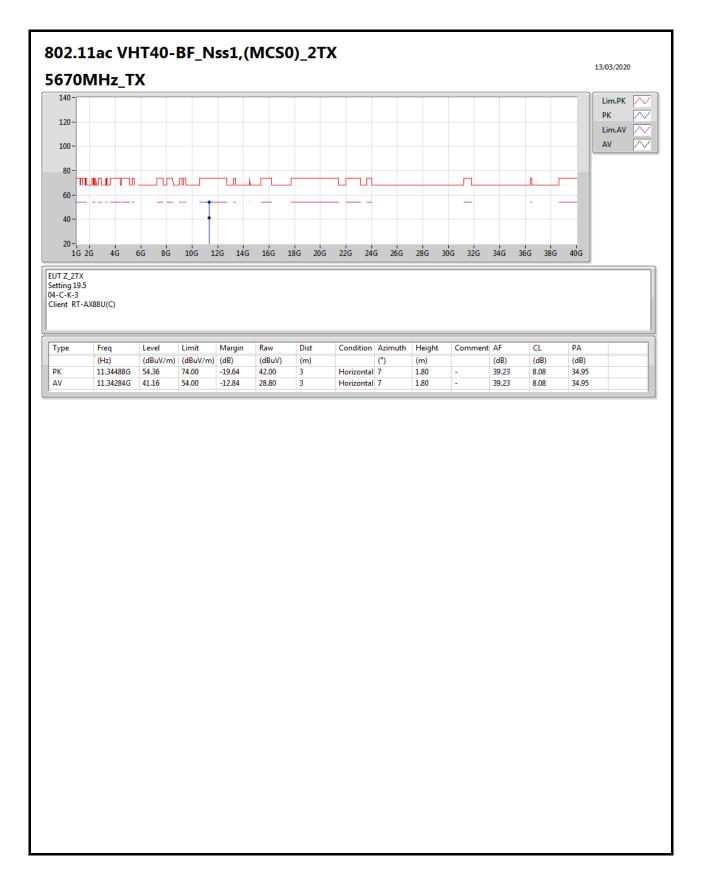
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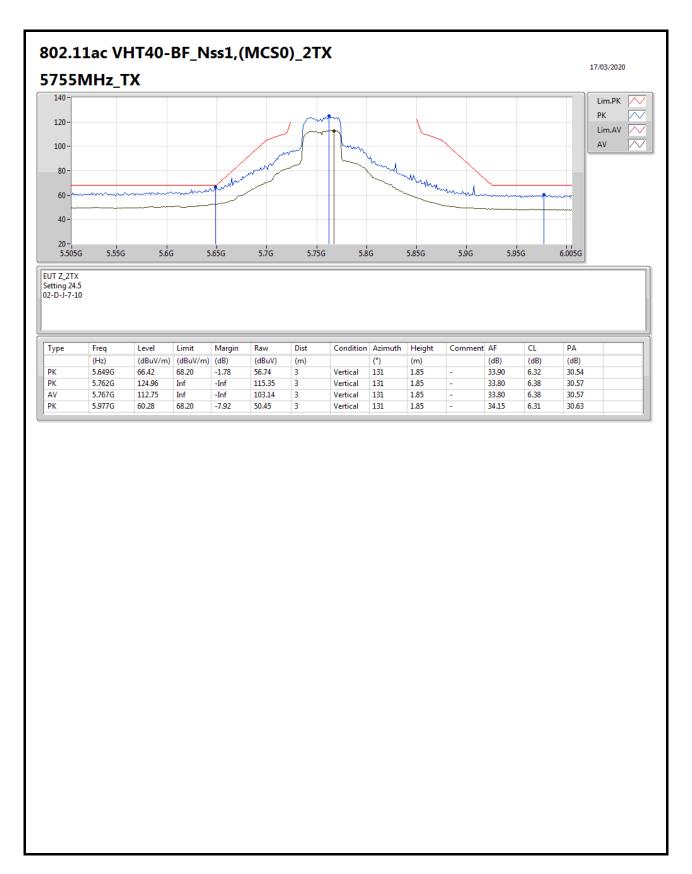


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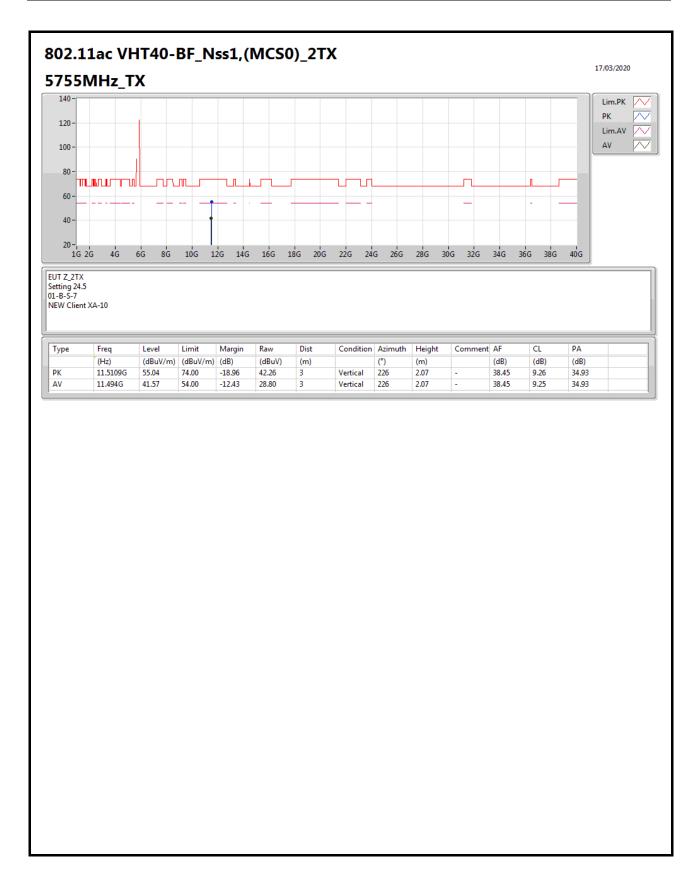






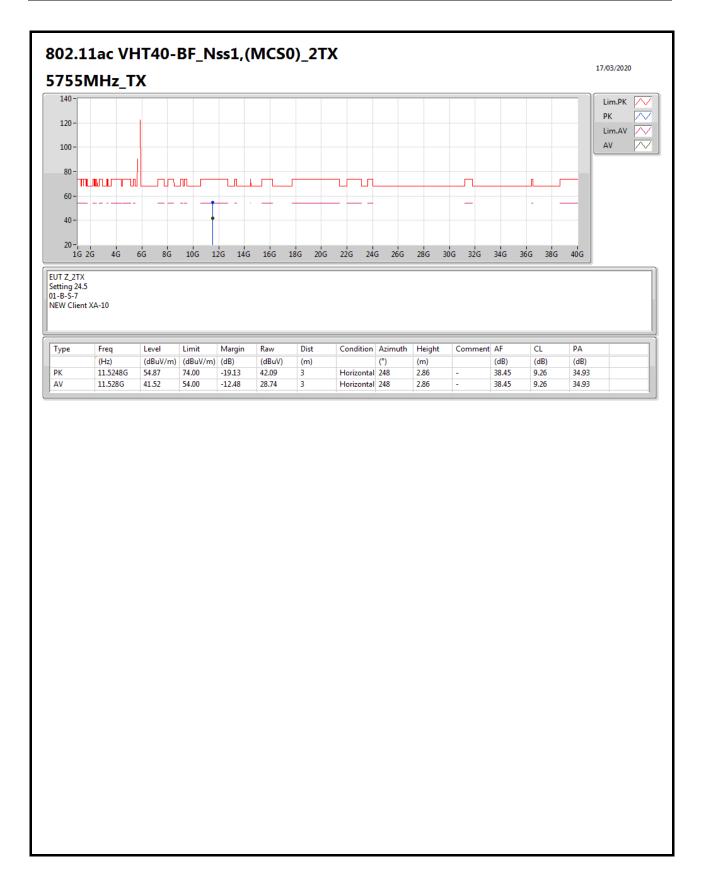




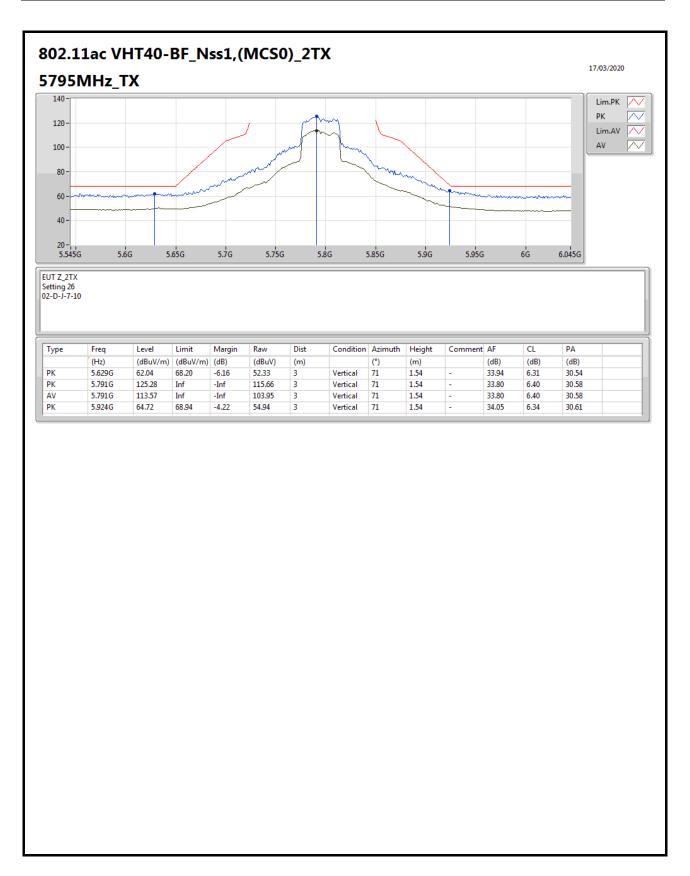


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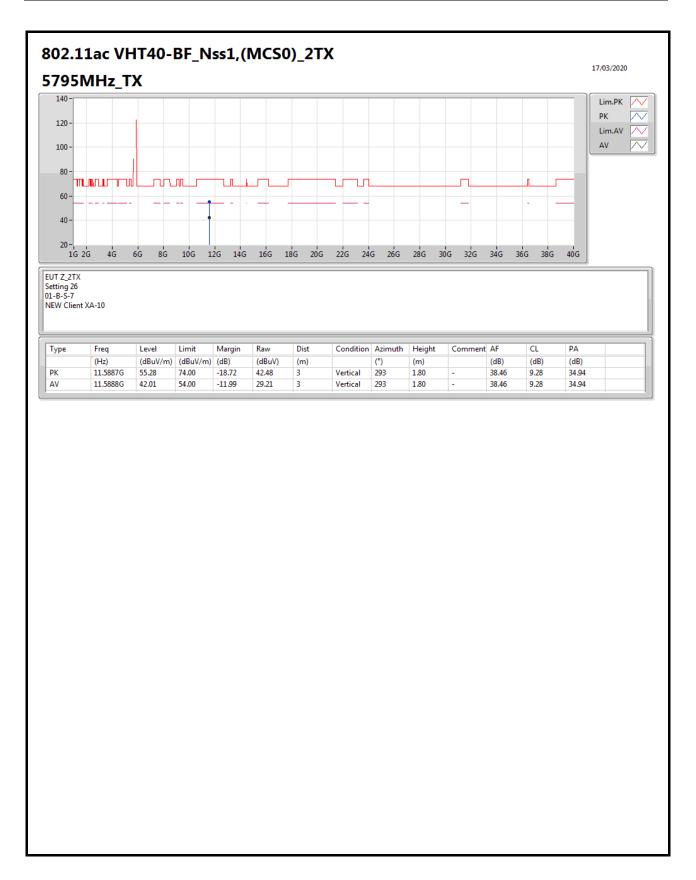






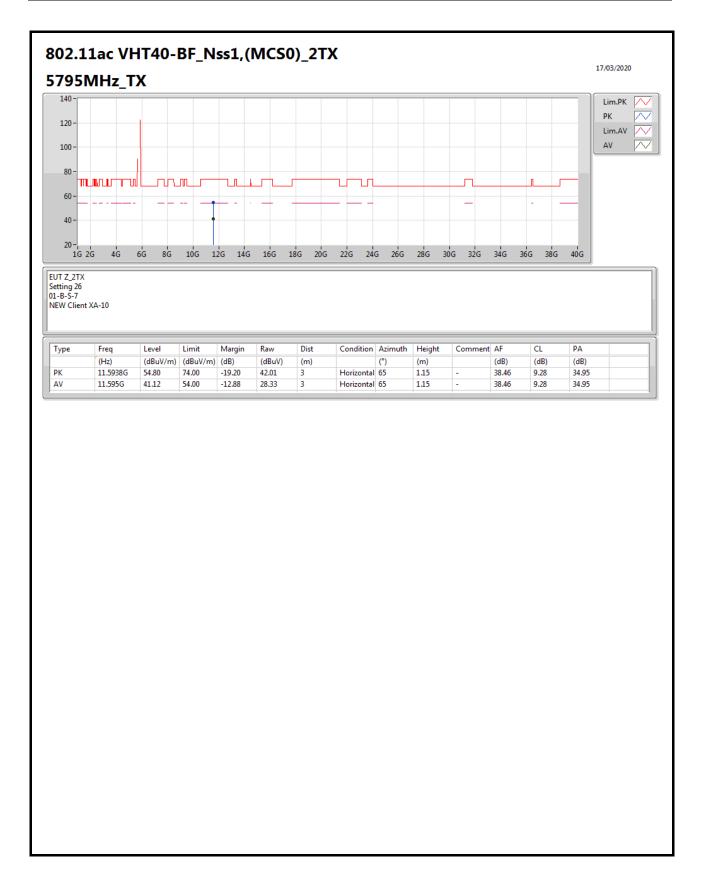






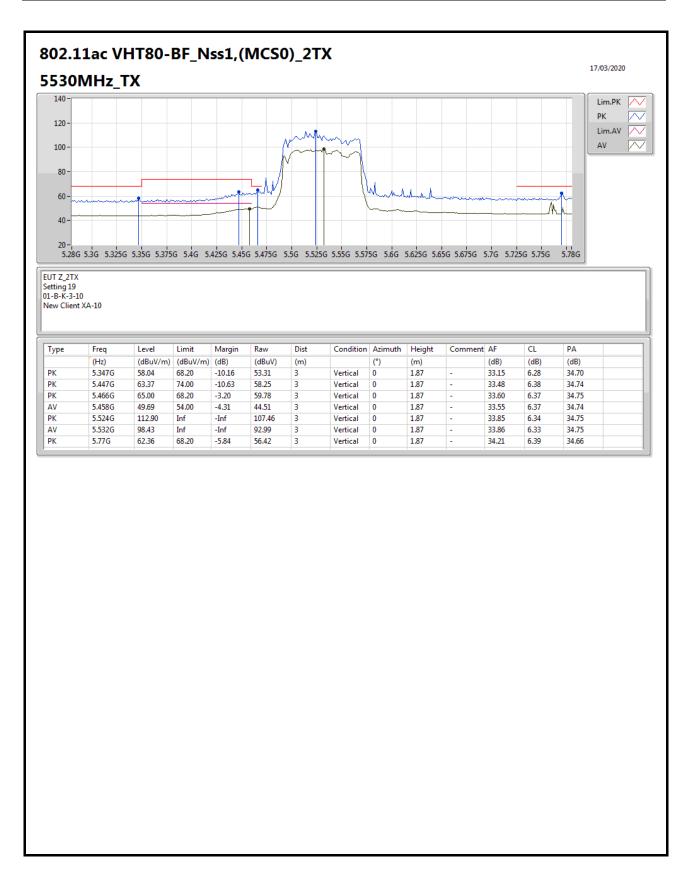
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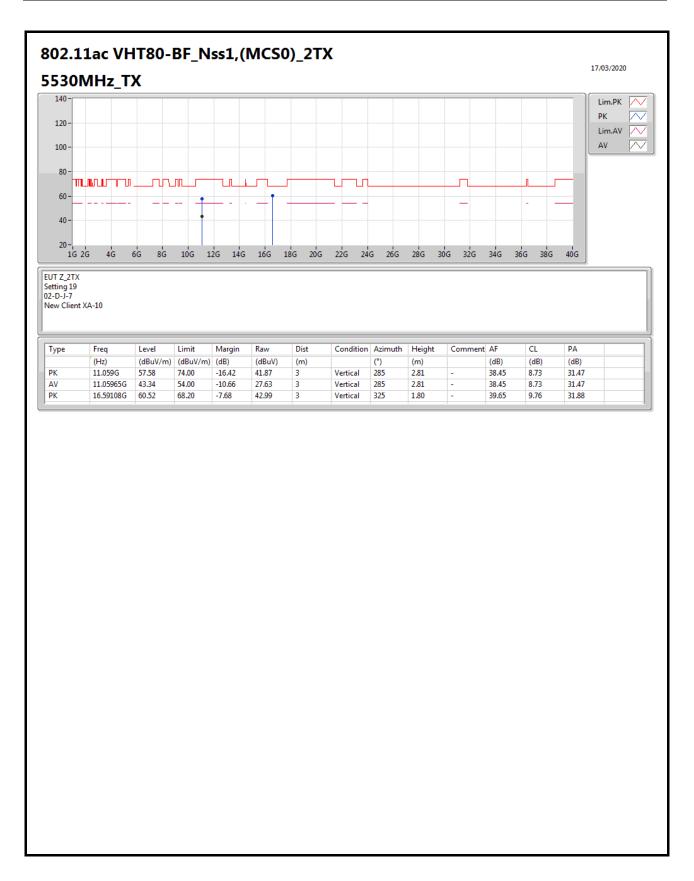
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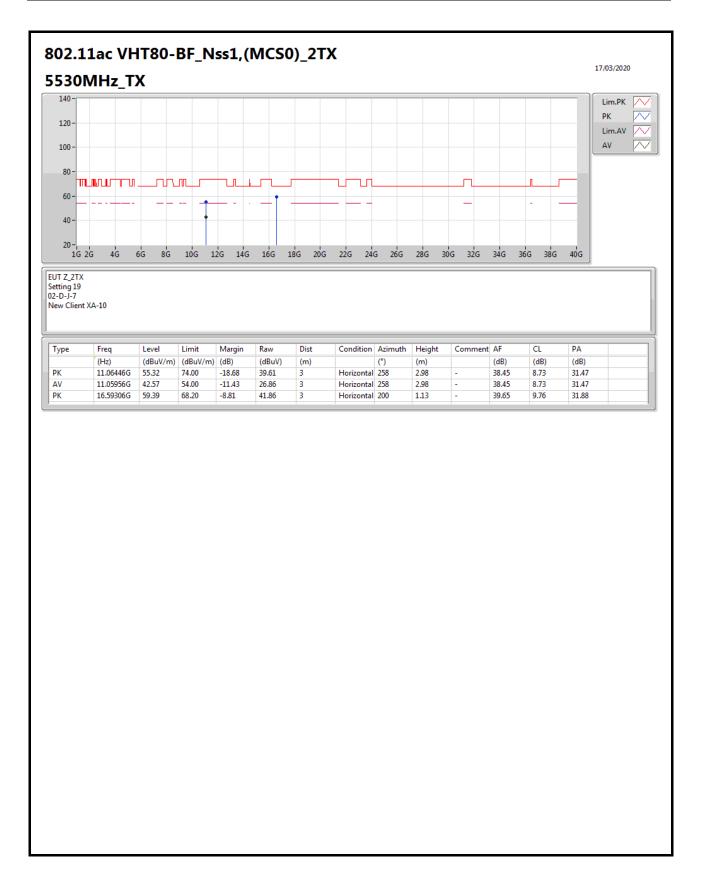
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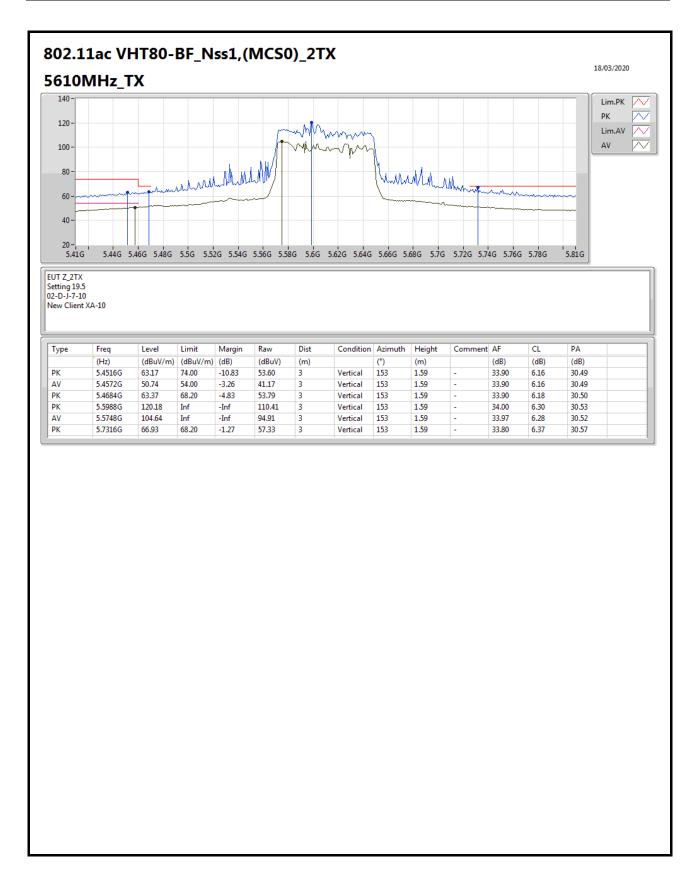
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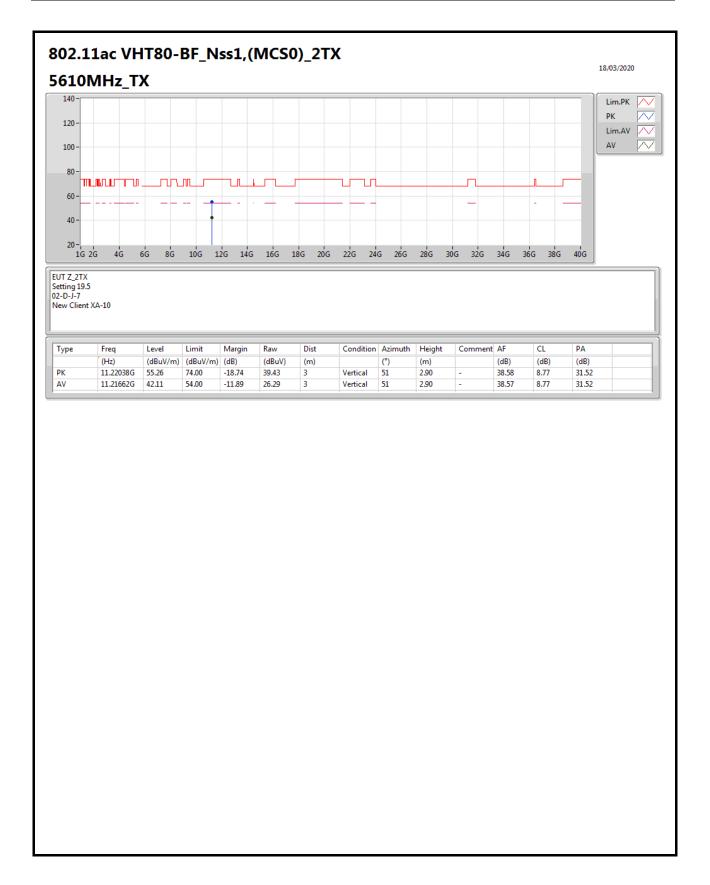
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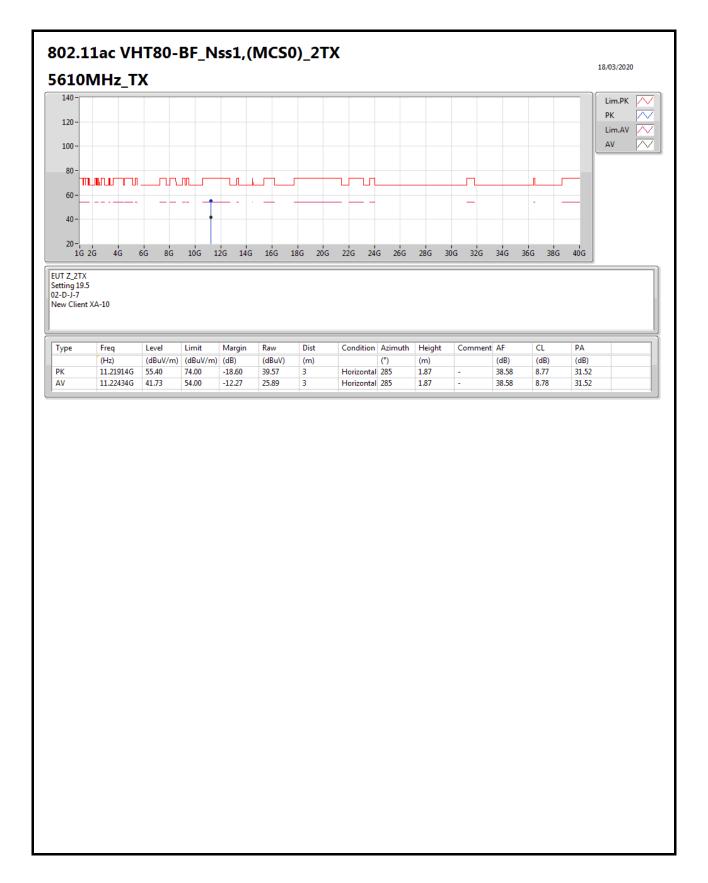
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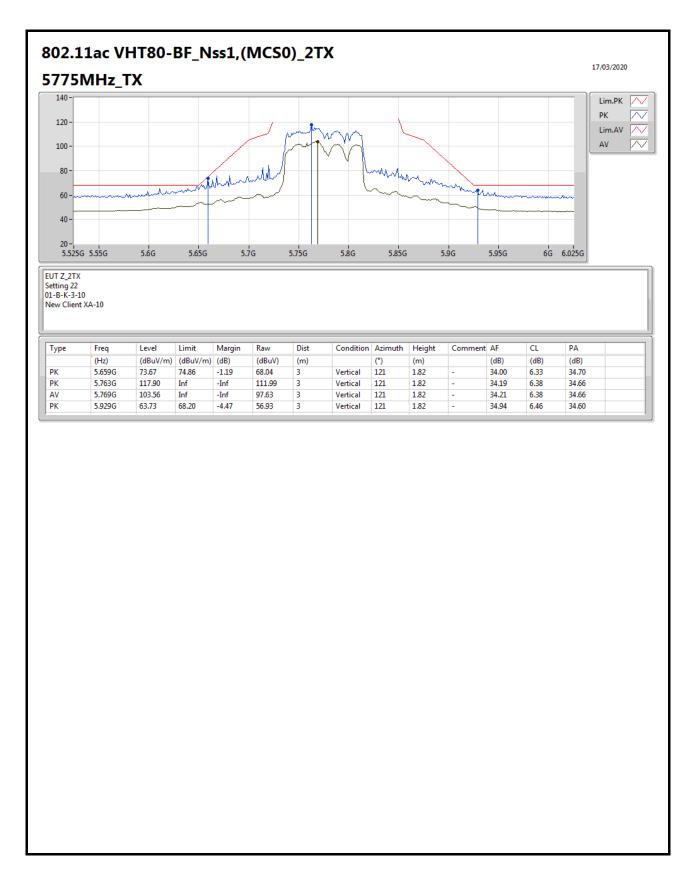


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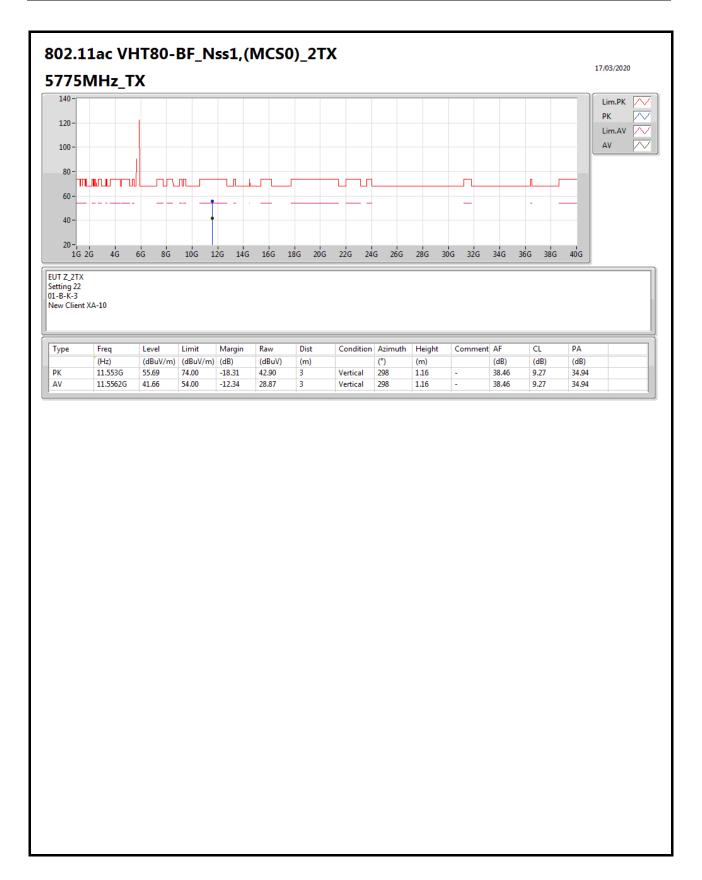




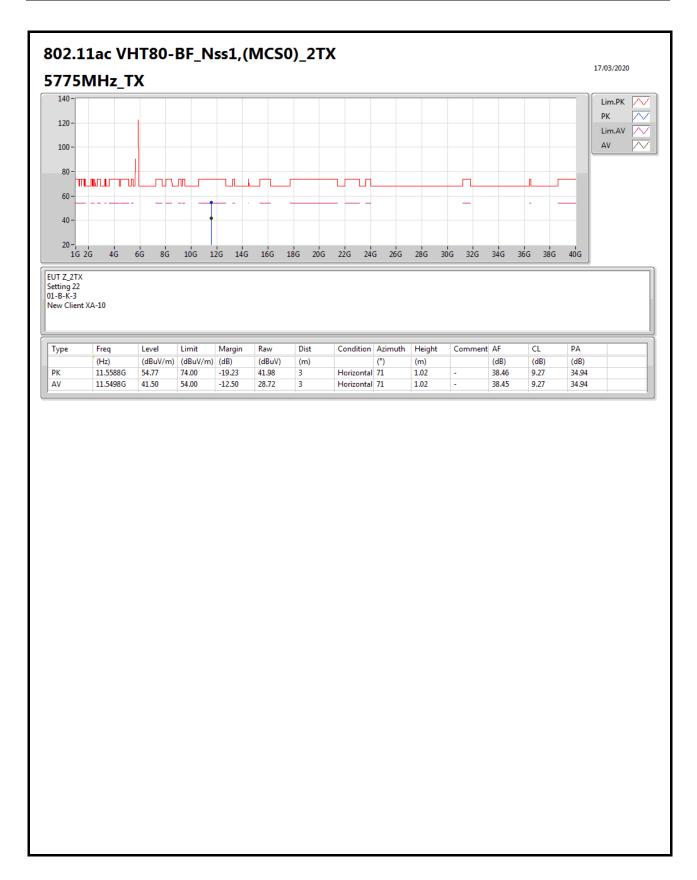


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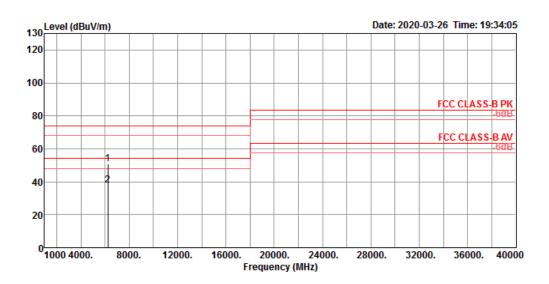








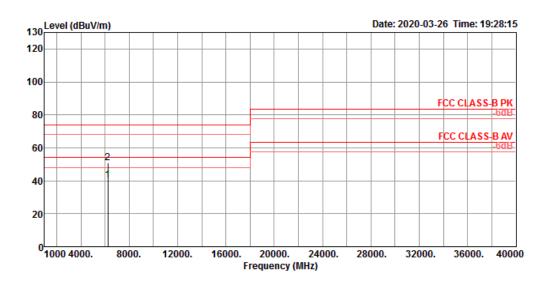
RSE Co-location Result								
Operating Mode	1	Polarization	Horizontal					
Operating Function	Normal Link							



	Freq	Level		Over Limit						T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	6249.74	50.64	74.00	-23.36	43.37	7.22	34.90	34.85	100	168	Peak	HORIZONTAL
2	6250 10	37 98	54 00	-16 02	30 71	7 22	34 90	34 85	100	168	Average	HORTZONTAL



RSE Co-location Result								
Operating Mode	1	Polarization	Vertical					
Operating Function	Normal Link							



	Freq	Level						Preamp Factor			mark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	6249.91	40.42	54.00	-13.58	33.15	7.22	34.90	34.85	122	167 Ave	erage	VERTICAL
2	6249.97	50.99	74.00	-23.01	43.72	7.22	34.90	34.85	122	167 Pe	ak	VERTICAL