



FCC RADIO TEST REPORT

FCC ID : YUATLDPM01D1
Equipment : Enterprise Access Router
Brand Name : Teldat
Model Name : TLDPM01D1, TLDPM02D1
Applicant : Teldat S.A.
Parque Tecnologico de Madrid, Tres Cantos 28760 Madrid
Manufacturer : Teldat S.A.
Parque Tecnologico de Madrid, Tres Cantos 28760 Madrid
Factory : CastleNet Tech Inc.
No.64, Chung-Shan Rd., Tu-Cheng Dist., New Taipei 23680, Taiwan
Standard : 47 CFR FCC Part 15.407

The product was received on Mar. 26, 2019, and testing was started from Mar. 26, 2019 and completed on Jun. 13, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

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


Approved by: Sam Chen

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



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History of this test report



Summary of Test Result

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

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Sam Chen**Report Producer: Viola Huang**



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2TX
5.15-5.25GHz	802.11n HT20	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX
5.15-5.25GHz	802.11n HT40	40	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX
5.725-5.85GHz	802.11a	20	2TX
5.725-5.85GHz	802.11n HT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX
5.725-5.85GHz	802.11n HT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX

Note:

- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.
- The EUT contains a certified RF module (FCC ID: N7NEM7455).



1.1.2 Antenna Information

For WLAN antenna

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	WALSIN	RFMTA441122IMLB701	PIFA Antenna	I-PEX	Note1
2	2	WALSIN	RFMTA441110IMLB701	PIFA Antenna	I-PEX	

For WWAN antenna

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
3	1	WALSIN	RFDPA222200SMTB803	Dipole Antenna	SMA Plug	Note1
4	2	WALSIN	RFDPA222200SMTB803	Dipole Antenna	SMA Plug	

For GPS antenna

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
5	1	ANTENNAE2J	2J660B-2J409-250RG17 4LL-C20N-C04N-ETXES	Combined Antenna	SMA	2.20

Note1:

WLAN antenna Gain (dBi)				
Ant.	Port	2.4GHz	5G Band 1	5G Band 4
1	1	3.28	4.58	4.06
2	2	3.28	4.58	4.06

WWAN antenna Gain (dBi)					
Ant.	Port	698MHz~960MHz	1400MHz~1500MHz	1710MHz~2170MHz	2300MHz~2690MHz
3	1	2.06	4.03	4.99	3.69
4	2	2.06	4.03	4.99	3.69

Note2: The above information was declared by manufacturer.

Note3: Ant.1 and Ant. 2 for wifi antenna, Ant.3 and Ant.4 for WWAN antenna, Ant. 5 for GPS antenna.

For wifi function (2TX/2RX):

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

Port 1 and Port 2 can could transmit/receive simultaneously.

For WWAN function (1TX/2RX):

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

Port 1 and Port 2 can could receive simultaneously.

The EUT supports the antenna with TX diversity functions.

Both Port 1 and Port 2 support transmit functions, but only one of them will be used at one time.

For GPS function (1RX):

Only Port 1 can be used as receiving antenna.



1.1.3 Mode Test Duty Cycle

For Non-beamforming mode

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.962	0.168	2.068m	1k
802.11ac VHT20	0.984	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.97	0.132	2.44m	1k
802.11ac VHT80	0.938	0.278	1.15m	1k

For beamforming mode

Mode	DC	DCF(dB)
802.11ac VHT20-BF	0.875	0.58
802.11ac VHT40-BF	0.842	0.75
802.11ac VHT80-BF	0.843	0.74

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter		
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming for 802.11ac in 5GHz	<input type="checkbox"/> Without beamforming
Function	<input type="checkbox"/>	Outdoor P2M	<input checked="" type="checkbox"/> Indoor P2M
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/> Client
Test Software Version	QCA Radio Control Toolkit v3.0.298.0		

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Brand Name	EUT	Model Name	SKU	Description
Teldat	1	TLDPM01D1	SKU 2	Wi-Fi
	2	TLDPM02D1	SKU 2	Wi-Fi + LTE EM7455

From the above models, model: TLDPM02D1 was selected as representative model for the test and its data was recorded in this report.

1.1.6 Table of WWAN module function

Model Name	FCC ID	Module	Function
EM7455	N7NEM7455	1	LTE: B13 & WCDMA: B4



1.2 Applicable Standards

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

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013
- ◆ FCC KDB 789033 D02 v02r01
- ◆ FCC KDB 662911 D01 v02r01
- ◆ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location				
<input type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973		
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Welson Chen	22~24°C / 54~56%	Mar. 28, 2019 ~ May 21, 2019
Radiated below 1GHz	03CH06-CB	Cola Fan	22~24°C / 50~60%	May 14, 2019~Jun. 13, 2019
Radiated above 1GHz	03CH04-CB	Welson Chen	21~23°C / 53~55%	Mar. 26, 2019 ~ May 21, 2019
AC Conduction	CO02-CB	Deven Huang	24~25°C / 59~61%	May 10, 2019

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086B with Industry Canada.

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.8 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74 x10 ⁻⁸	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For Non-beamforming mode

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	21
5200MHz	21.5
5240MHz	21.5
5745MHz	21.5
5785MHz	21.5
5825MHz	21.5
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	21
5200MHz	21.5
5240MHz	21.5
5745MHz	21.5
5785MHz	21.5
5825MHz	21.5
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	17
5230MHz	21
5755MHz	21
5795MHz	21
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	16.5
5775MHz	20.5

**For beamforming mode**

Mode	PowerSetting
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	23
5200MHz	23
5240MHz	23
5745MHz	23
5785MHz	23
5825MHz	23
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	21
5230MHz	22
5755MHz	23
5795MHz	23
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	20
5775MHz	23

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 802.11ac in 5GHz. One is beamforming mode, and the other is non-beamforming mode. Both modes have been tested and recorded in this test report.



2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	EUT 2 + GPS + WiFi + Fiber Mode + Sim card 1 + LTE B13 (EM7455)
2	EUT 2 + GPS + WiFi + WAN Mode + Sim card 1 + LTE B13 (EM7455)
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT 2 + GPS + WiFi + WAN Mode + Sim card 1 + WCDMA B4 (EM7455)
Mode 2 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT 2 + GPS + WiFi + WAN Mode + Sim card 2 + LTE B13 (EM7455)
Mode 4 generated the worst test result, so it was recorded in this report.	

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

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 EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	EUT 2 + GPS + WiFi + Fiber Mode + Sim card 1 + LTE B13 (EM7455)
2	EUT 2 + GPS + WiFi + WAN Mode + Sim card 1 + LTE B13 (EM7455)
Mode 1 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT 2 + GPS + WiFi + Fiber Mode + Sim card 1 + WCDMA B4 (EM7455)
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.	
4	EUT 2 + GPS + WiFi + Fiber Mode + Sim card 2 + LTE B13 (EM7455)
Mode 1 generated the worst test result, so it was recorded in this report.	
Operating Mode > 1GHz	CTX



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz + WLAN 5GHz

Refer to Appendix F for Radiated Emission Co-location.

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 + WCDMA (EM7455)
2	WLAN 2.4GHz + WLAN 5GHz + LTE (EM7455)

Refer to Sporton Test Report No.: FA932105 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:

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				
Power	Brand Name	Model Name	Rating	Remark
Adapter	AtechOEM	A0403TD-120033	Input: 100-240Vac ~ 50-60Hz, 1.2A Output: 12Vdc, 3.34A	DC Power cable: Non-shielded, 1.6m
Others				
Power cable*1: Non-shielded, 1.5m				
RJ-45 cable*1: Non-shielded, 2m				

2.5 Support Equipment

For AC Conduction (For WAN Mode):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	WAN1 NB	DELL	E6430	N/A
B	WAN2 NB	DELL	E6430	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G NB	DELL	E6430	N/A
E	LAN NB	DELL	E6430	N/A
F	LTE Base station	Anritsu	MT8820C	N/A
G	GPS simulator	WELNAVIGATE	GS-100	N/A
H	SIM card	N/A	N/A	N/A

For Radiated (below 1GHz / For Fiber Mode):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Fiber1 NB	DELL	E4300	N/A
B	Fiber2 NB	DELL	E4300	N/A
C	LAN NB	DELL	E4300	N/A
D	2.4G NB	DELL	E4300	N/A
E	5G NB	DELL	E4300	N/A
F	Media converter	TRON OPTO	TN1000SFP	N/A
G	Media converter	TRON OPTO	TN1000SFP	N/A
H	SIM card	Anritsu	N/A	N/A
I	LTE base station	Anritsu	MT8820C	N/A
J	GPS simulator	WELNAVIGATE	GS-100	N/A

**FCC RADIO TEST REPORT**

Report No. : FR932105AB

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

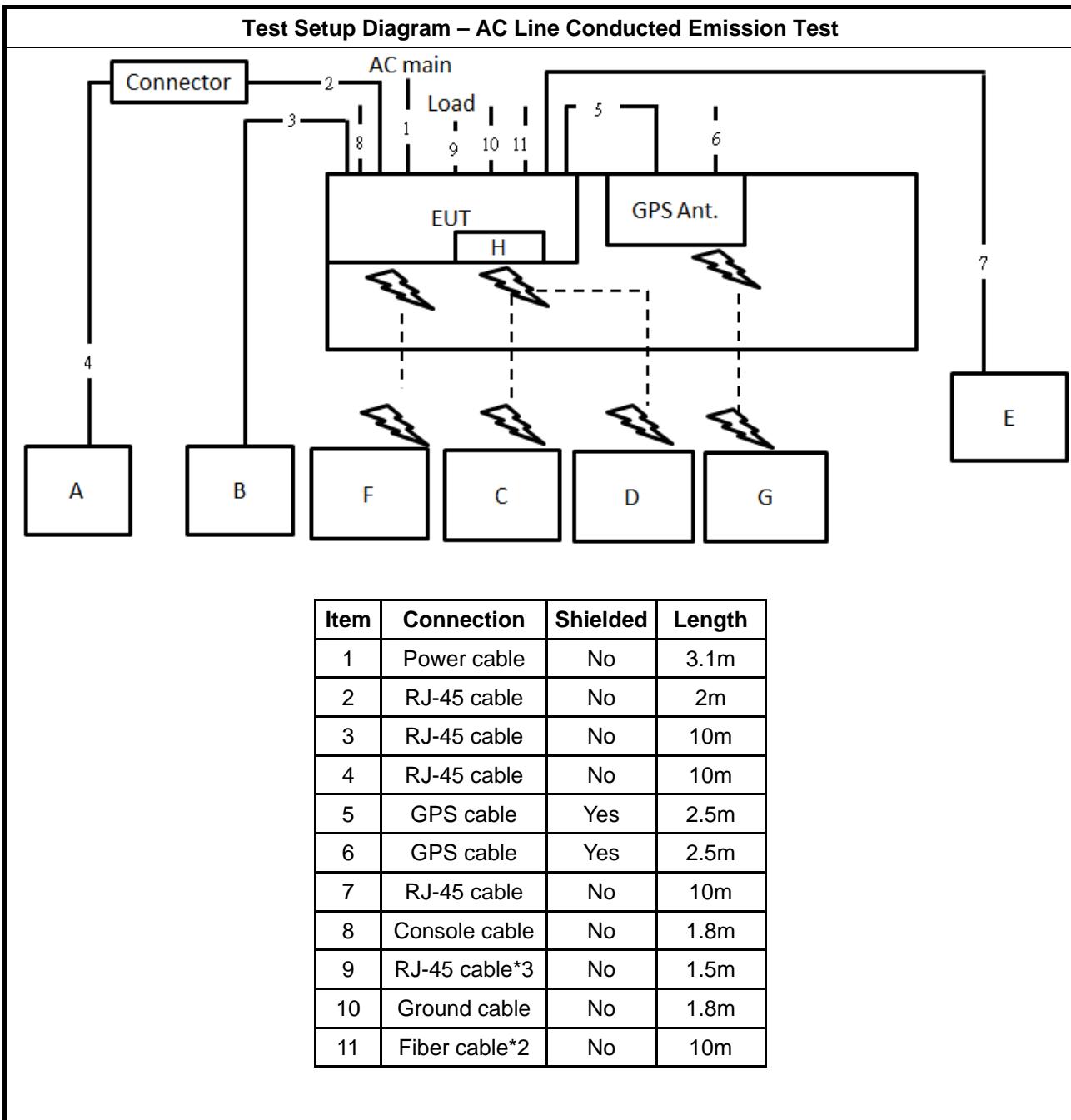
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A

For Radiated (above 1GHz) and RF Conducted / For beamforming mode):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	RX Device	Teldat	TLDPM01D1	YUATLDPM01D1

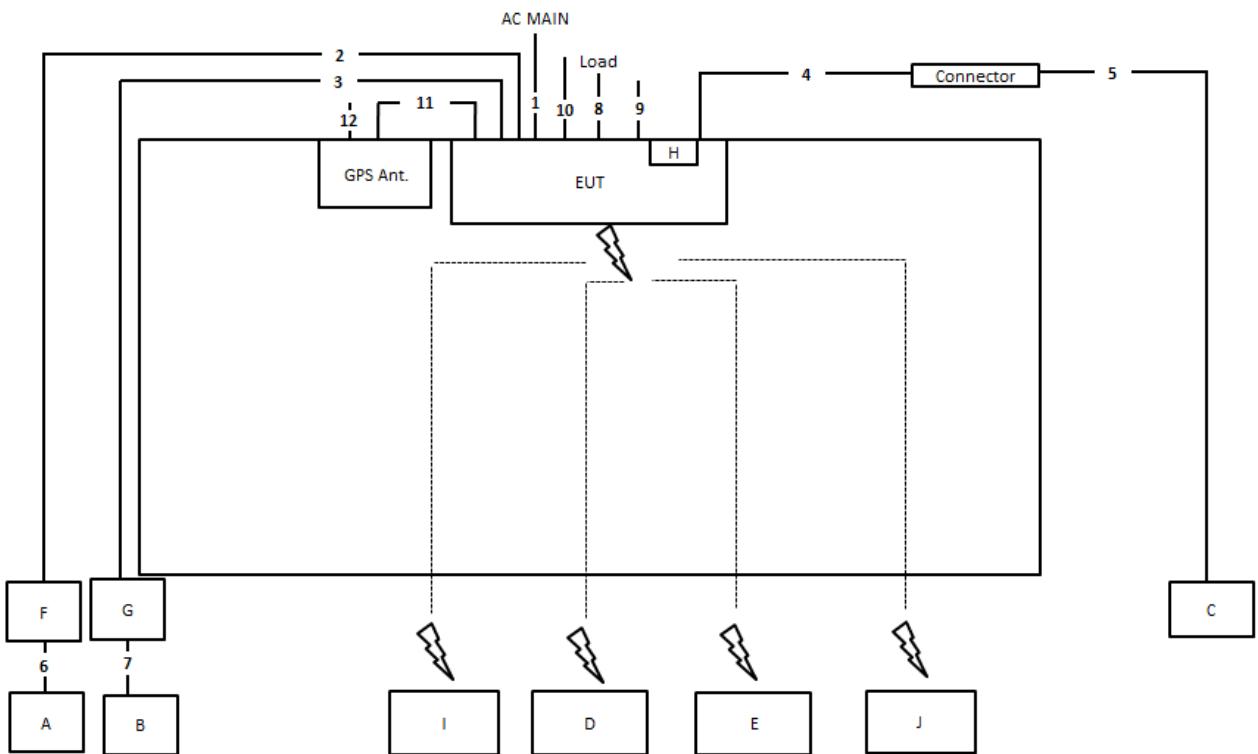


2.6 Test Setup Diagram





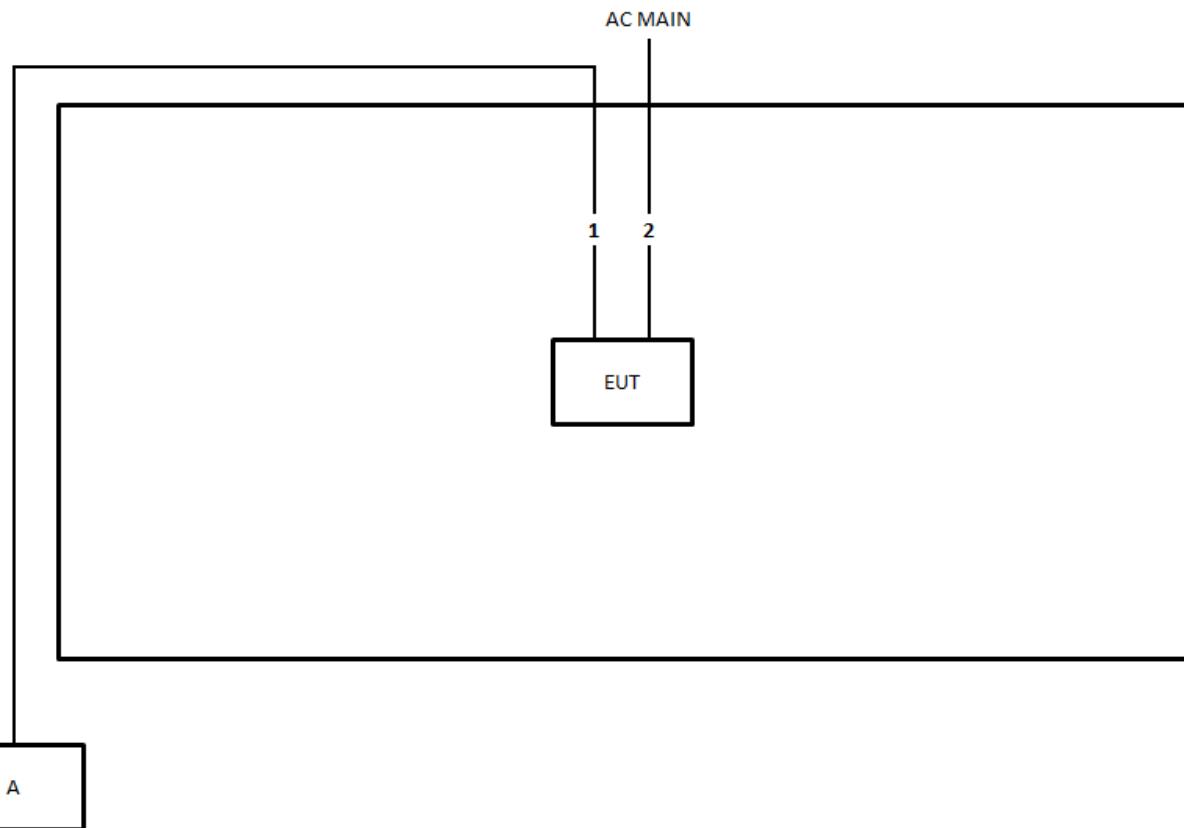
Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	3.1m
2	Fiber cable	No	10m
3	Fiber cable	No	10m
4	RJ-45 cable	No	2m
5	RJ-45 cable	No	10m
6	RJ-45 cable	No	1.5m
7	RJ-45 cable	No	1.5m
8	RJ-45 cable*5	No	1.5m
9	Ground cable	No	1.5m
10	Console cable	No	1.8m
11	GPS cable	Yes	2.5m
12	GPS cable	Yes	2.5m



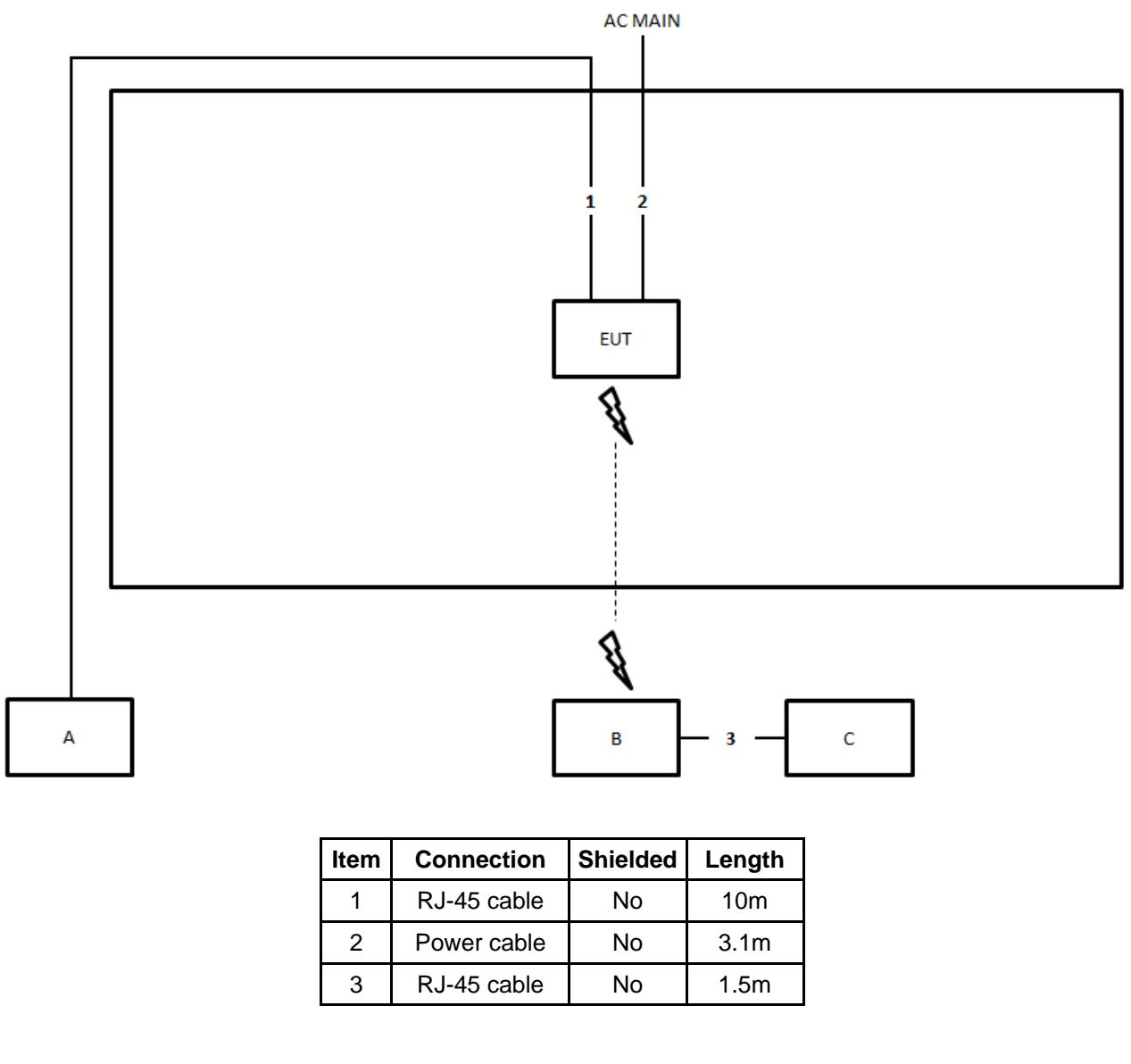
Test Setup Diagram - Radiated Test > 1GHz / For non-beamforming mode



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	3.1m



Test Setup Diagram - Radiated Test > 1GHz / For beamforming mode





3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

3.1.2 Measuring Instruments

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

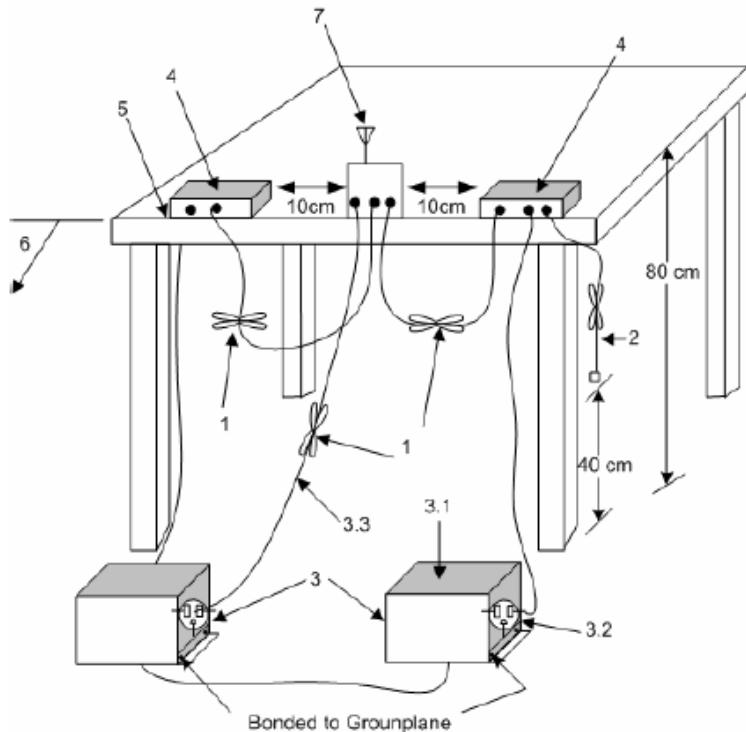
3.1.3 Test Procedures

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



3.1.4 Test Setup

AC Power-line Conducted Emissions



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

3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A



3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

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

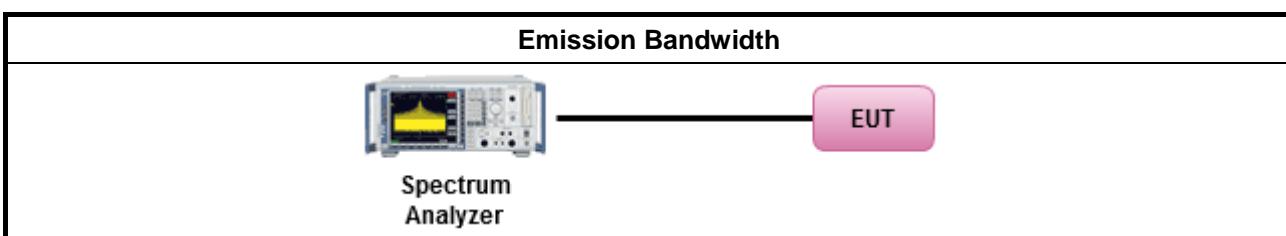
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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



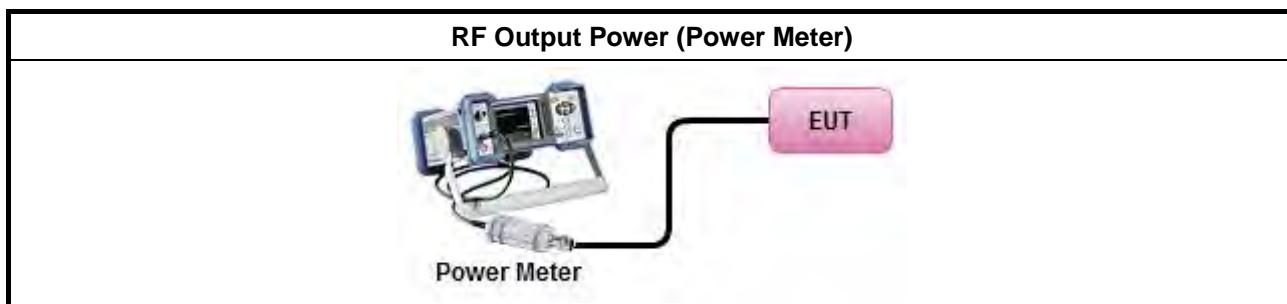
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	Average over on/off periods with duty factor <input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging). <input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed) Wideband RF power meter and average over on/off periods with duty factor <input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
▪ For conducted measurement.	<ul style="list-style-type: none">▪ 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: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	<ul style="list-style-type: none">▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.▪ 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 $P_{Out} = 17 - (G_{TX} - 23)$.▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= $11 - (G_{TX} - 6)$.
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= $11 - (G_{TX} - 6)$.	
<input type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= $11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	<ul style="list-style-type: none">▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 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	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	<ul style="list-style-type: none">▪ 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: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -13 – 0.716 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 – 1.22 (θ-40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
<input type="checkbox"/> For the 5.725-5.85 GHz band:	<ul style="list-style-type: none">▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 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.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	

3.4.2 Measuring Instruments

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

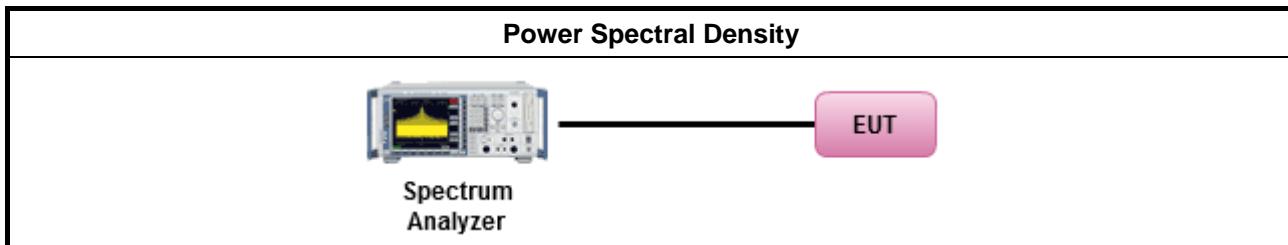


3.4.3 Test Procedures

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



3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

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

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

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



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

3.5.2 Measuring Instruments

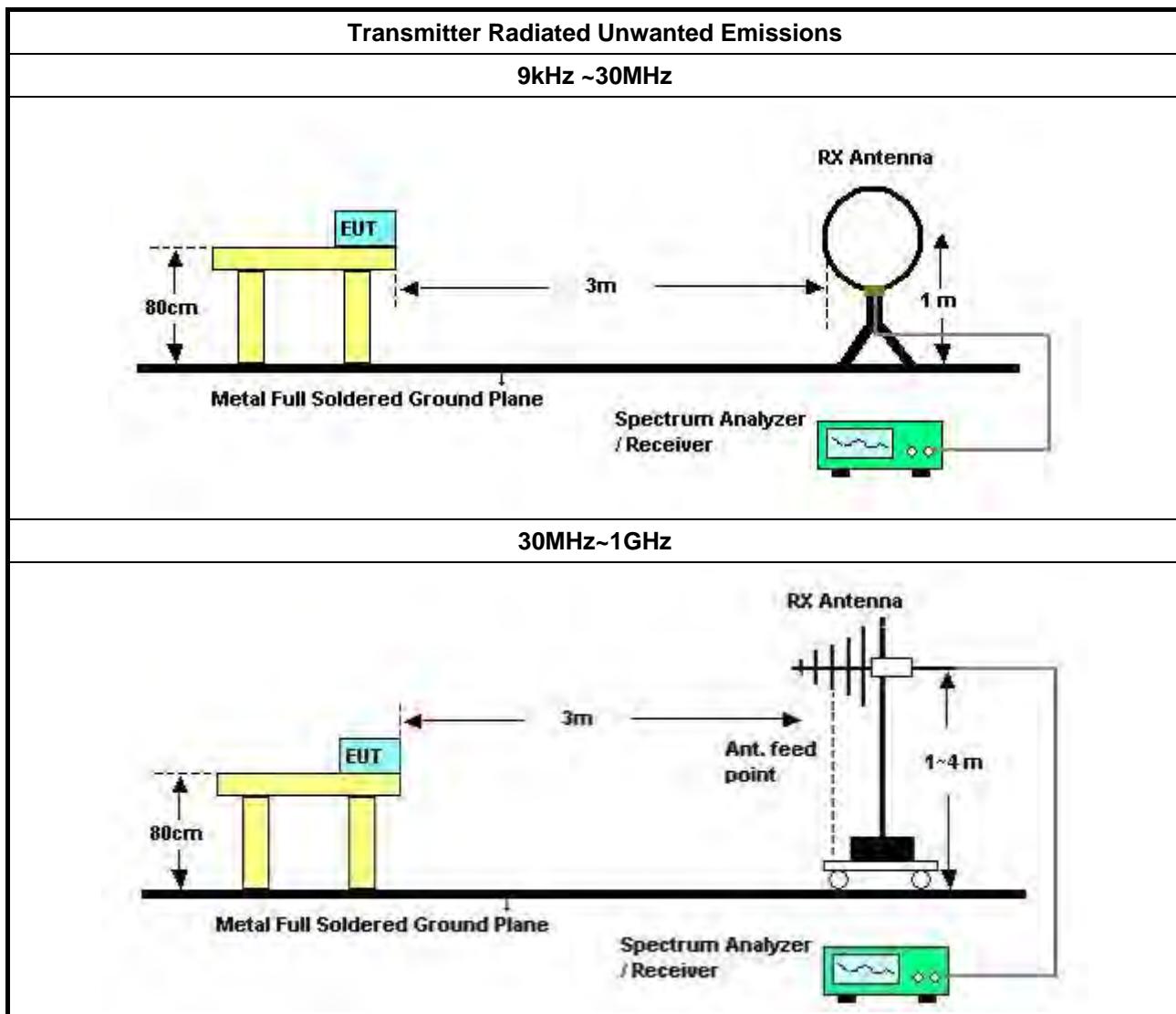
Refer a test equipment and calibration data table in this test report.

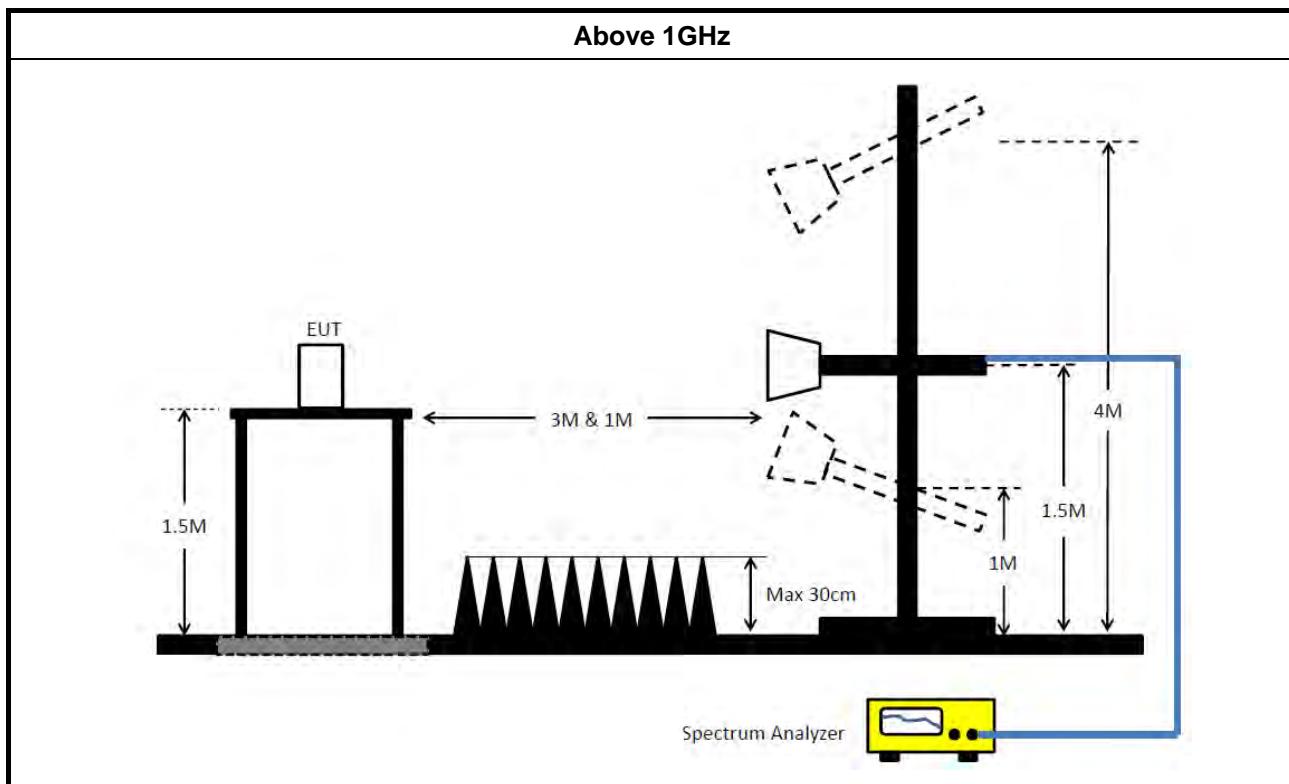
3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none">▪ 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).
<ul style="list-style-type: none">▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].
<ul style="list-style-type: none">▪ For the transmitter unwanted emissions shall be measured using following options below:
<ul style="list-style-type: none">▪ 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.<ul style="list-style-type: none"><input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).<input checked="" type="checkbox"/> Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW \geq 1/T, where T is pulse time.<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
<ul style="list-style-type: none">▪ For radiated measurement.
<ul style="list-style-type: none">▪ 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.
<ul style="list-style-type: none">▪ The any unwanted emissions level shall not exceed the fundamental emission level.
<ul style="list-style-type: none">▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.



3.5.4 Test Setup





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

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

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 21, 2018	Nov. 20, 2019	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 05, 2018	Nov. 04, 2019	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 16, 2019	Jan. 15, 2020	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Nov. 06, 2018	Nov. 05, 2019	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Aug. 04, 2018	Aug. 03, 2019	Radiation (03CH06-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH06-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 26, 2018	Oct. 25, 2019	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 07, 2018	Jun. 06, 2019	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	310N	187290	0.1MHz ~ 1GHz	May 07, 2019	May 06, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Mar. 19, 2019	Mar. 18, 2020	Radiation (03CH04-CB)
Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Dec. 26, 2018	Dec. 25, 2019	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 03, 2018	Oct. 02, 2019	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	100359	9kHz ~ 2.75GHz	Jul. 03, 2018	Jul. 02, 2019	Radiation (03CH06-CB)
RF Cable-low	HUBER+SUHNER	RG402	Low Cable-05+24	30MHz~1GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+22	1GHz - 18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH04-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. 27, 2018	Jul. 26, 2019	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)

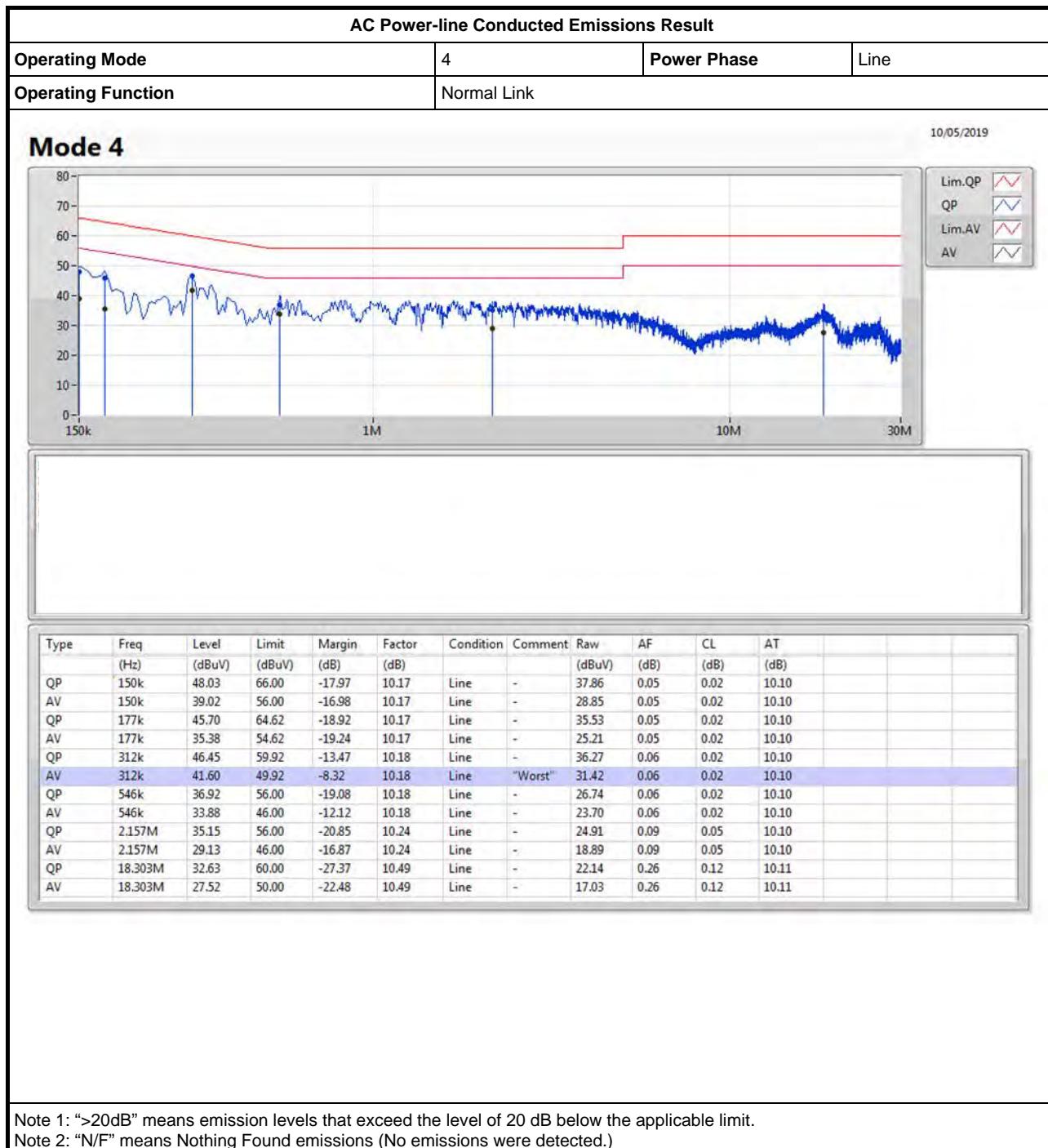
Note: Calibration Interval of instruments listed above is one year.

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



AC Power-line Conducted Emissions Result

Appendix A







EBW Result

Appendix B.1

For Non-beamforming mode

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	33.35M	16.592M	16M6D1D	19M	16.392M
802.11ac VHT20_Nss1,(MCS0)_2TX	34.525M	17.791M	17M8D1D	19.95M	17.616M
802.11ac VHT40_Nss1,(MCS0)_2TX	60.8M	36.082M	36M1D1D	39.45M	35.932M
802.11ac VHT80_Nss1,(MCS0)_2TX	83.4M	75.762M	75M8D1D	83.1M	75.662M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.325M	25.687M	25M7D1D	16.275M	20.84M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.575M	25.662M	25M7D1D	17.55M	19.765M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.45M	48.126M	48M1D1D	34.4M	37.431M
802.11ac VHT80_Nss1,(MCS0)_2TX	76.1M	75.762M	75M8D1D	75.9M	75.762M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth;



EBW Result

Appendix B.1

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19M	16.392M	19.05M	16.417M
5200MHz	Pass	Inf	33.35M	16.517M	31.475M	16.592M
5240MHz	Pass	Inf	30.9M	16.492M	27.85M	16.517M
5745MHz	Pass	500k	16.275M	22.464M	16.325M	23.538M
5785MHz	Pass	500k	16.325M	20.84M	16.3M	23.938M
5825MHz	Pass	500k	16.275M	24.063M	16.3M	25.687M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.95M	17.616M	20M	17.616M
5200MHz	Pass	Inf	33.725M	17.716M	34.525M	17.791M
5240MHz	Pass	Inf	34.225M	17.766M	34.525M	17.766M
5745MHz	Pass	500k	17.55M	22.464M	17.55M	23.488M
5785MHz	Pass	500k	17.575M	19.765M	17.575M	24.163M
5825MHz	Pass	500k	17.575M	24.038M	17.55M	25.662M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.45M	35.982M	39.55M	35.932M
5230MHz	Pass	Inf	58.5M	36.082M	60.8M	36.082M
5755MHz	Pass	500k	34.4M	37.431M	35M	39.43M
5795MHz	Pass	500k	35.45M	39.18M	34.45M	48.126M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	83.4M	75.662M	83.1M	75.762M
5775MHz	Pass	500k	75.9M	75.762M	76.1M	75.762M

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

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

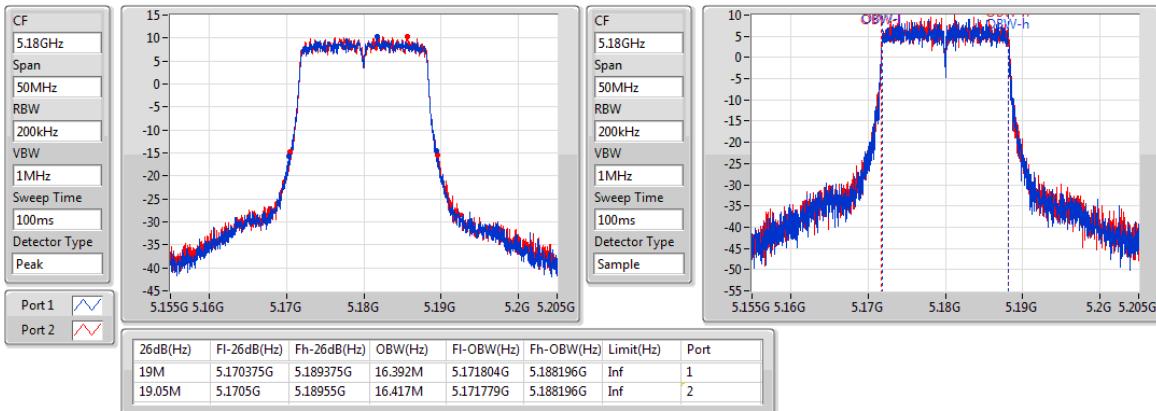


EBW Result

Appendix B.1

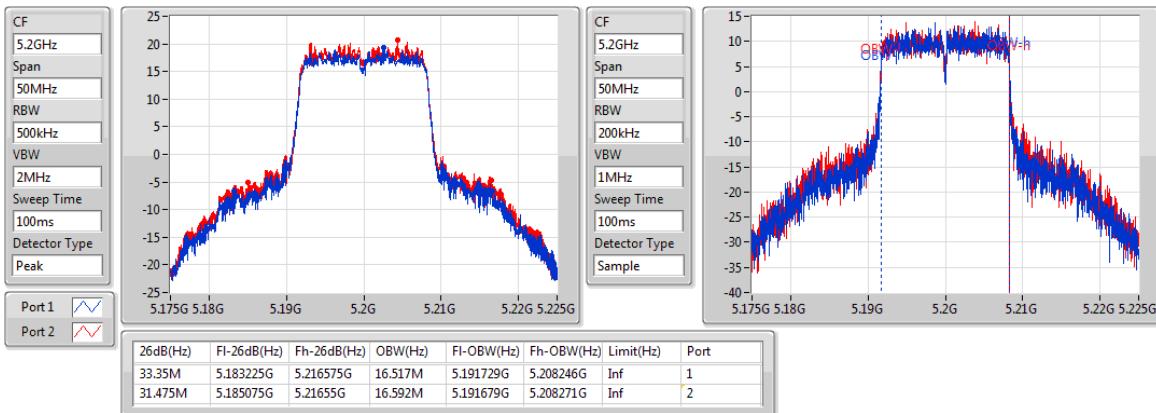
802.11a_Nss1,(6Mbps)_2TX

5180MHz



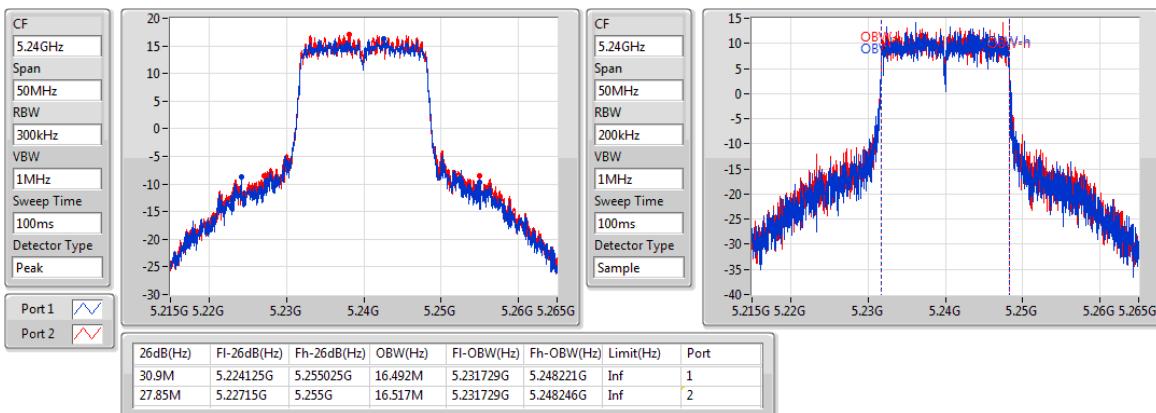
802.11a_Nss1,(6Mbps)_2TX

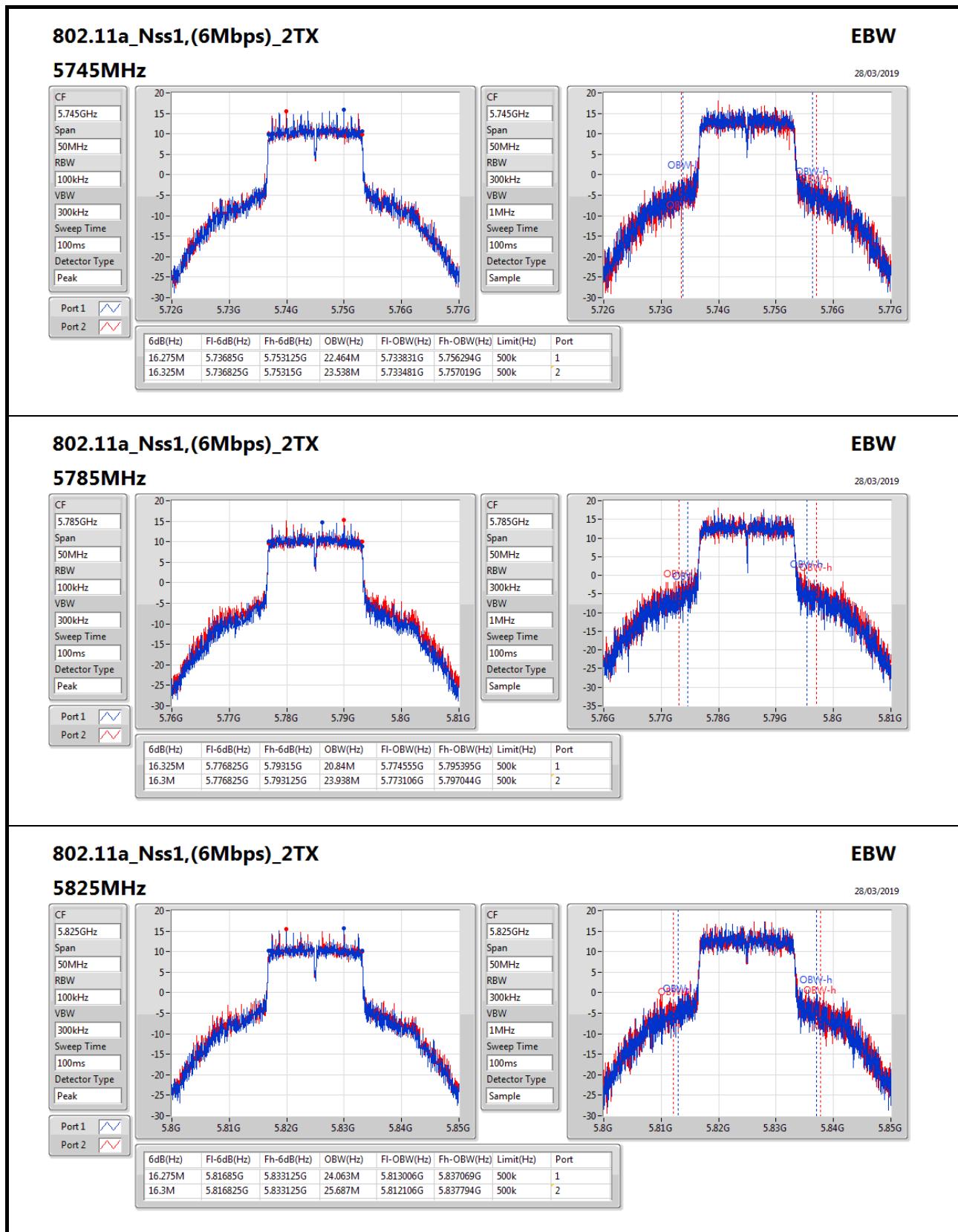
5200MHz



802.11a_Nss1,(6Mbps)_2TX

5240MHz







EBW Result

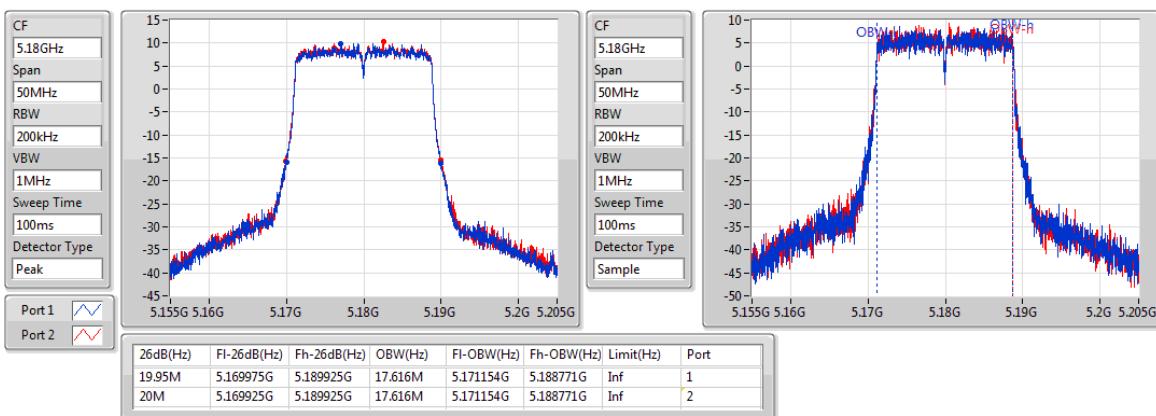
Appendix B.1

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5180MHz

28/03/2019

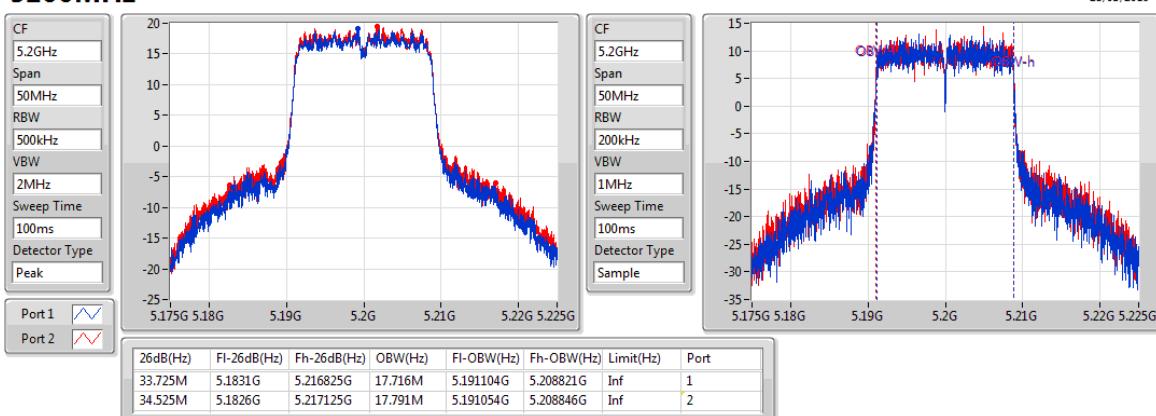


802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5200MHz

28/03/2019

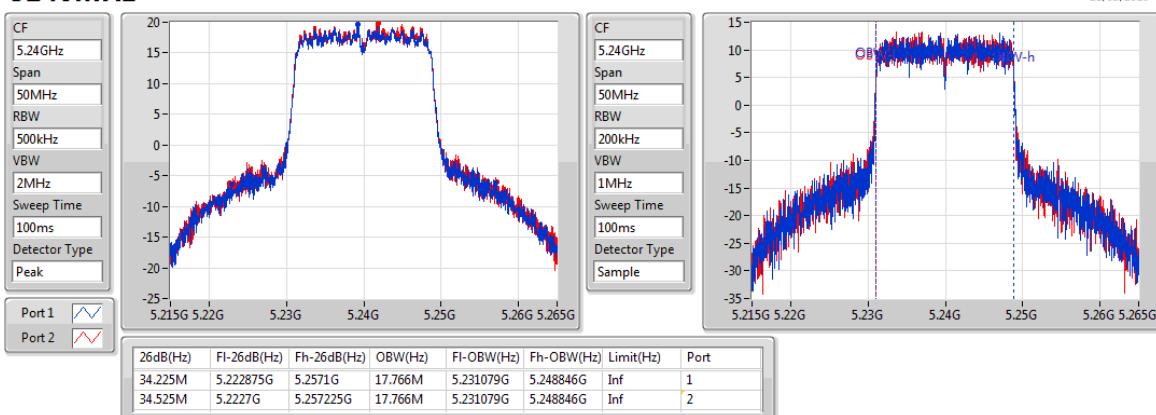


802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

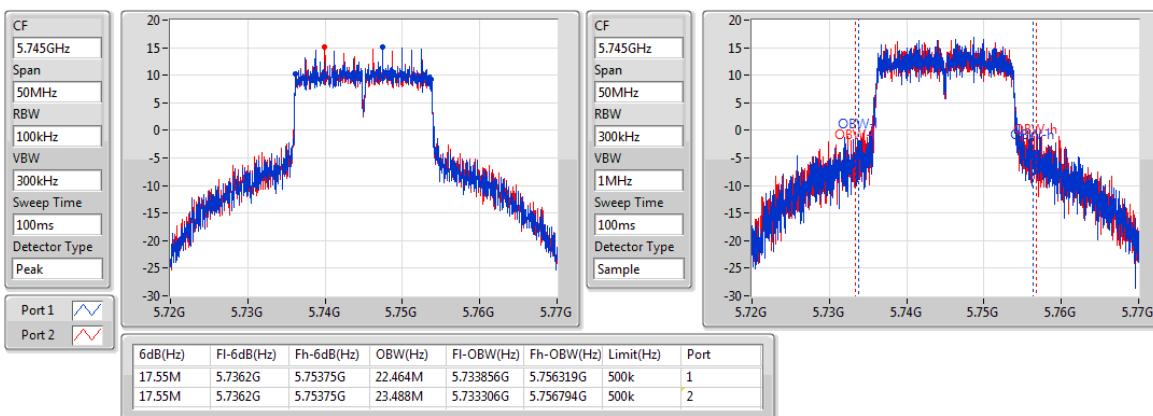
5240MHz

28/03/2019

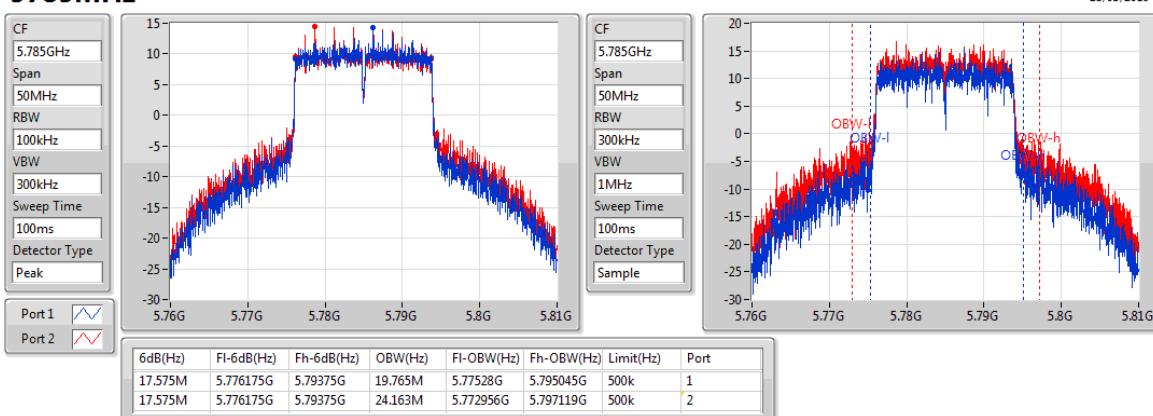


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5745MHz

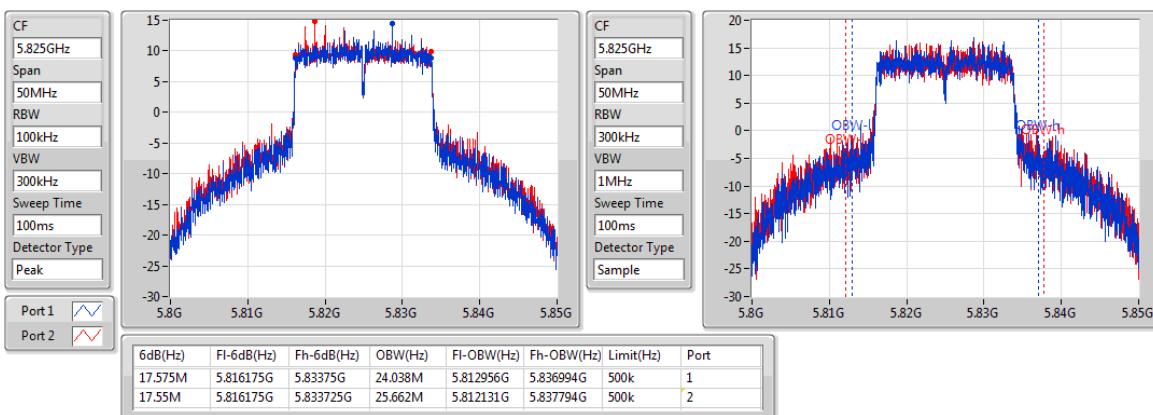
28/03/2019


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5785MHz

28/03/2019


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5825MHz

28/03/2019





EBW Result

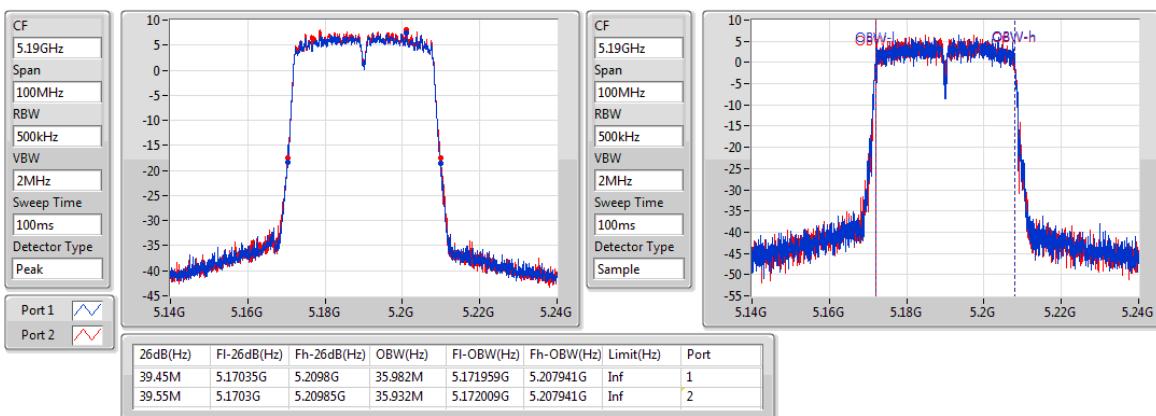
Appendix B.1

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5190MHz

28/03/2019

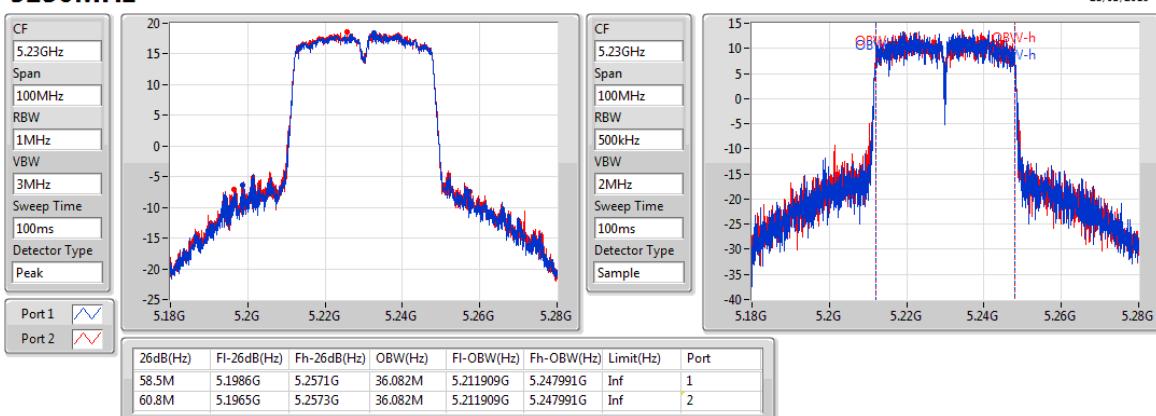


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5230MHz

28/03/2019

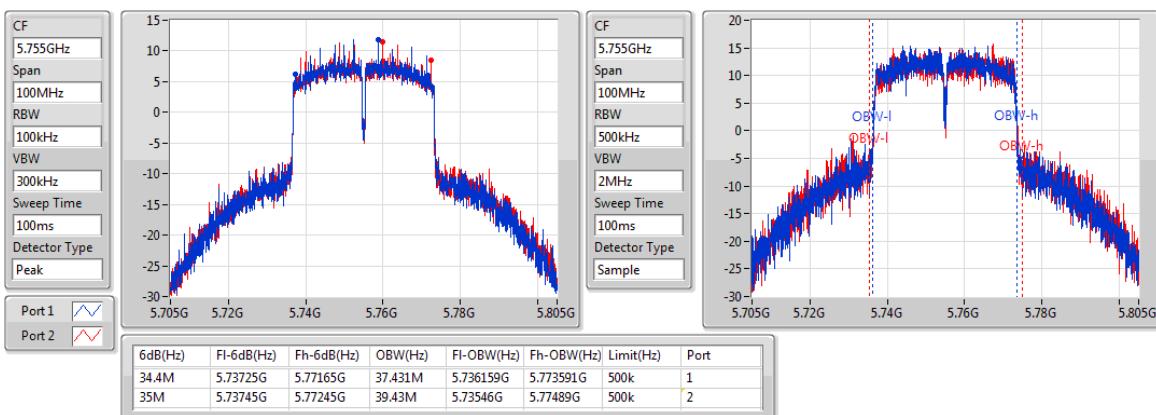


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5755MHz

28/03/2019



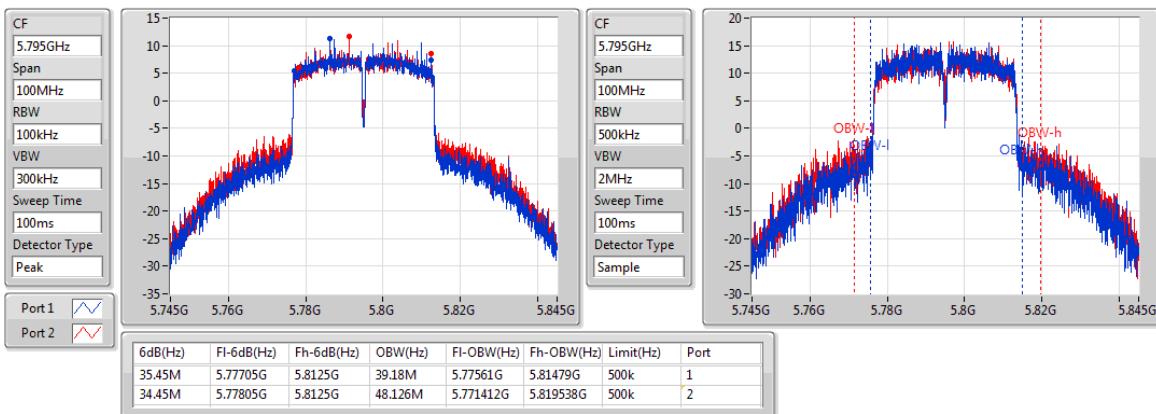


EBW Result

Appendix B.1

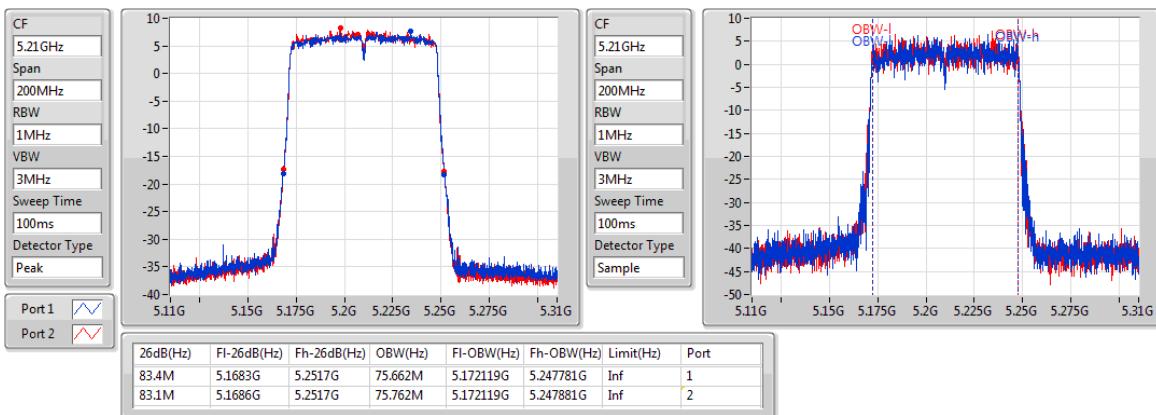
802.11ac VHT40_Nss1,(MCS0)_2TX

5795MHz



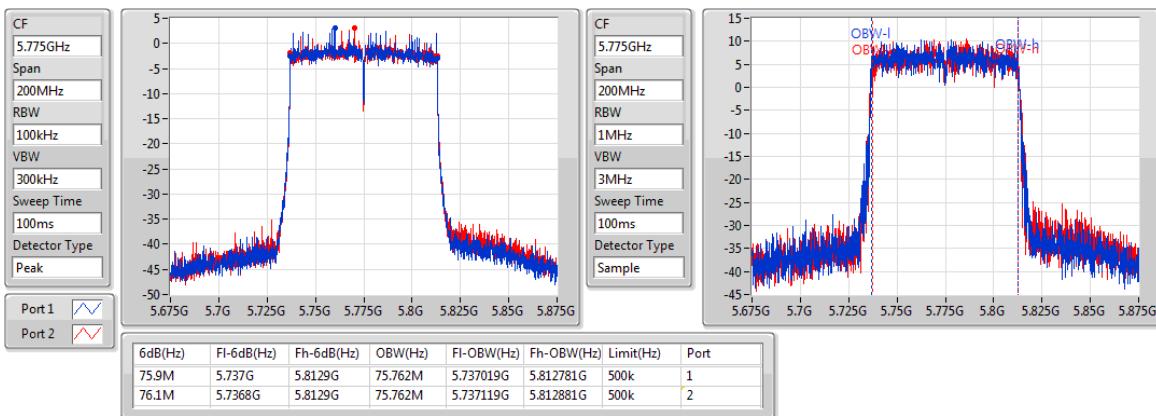
802.11ac VHT80_Nss1,(MCS0)_2TX

5210MHz



802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz



**For beamforming mode
Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.5M	17.691M	17M7D1D	19.825M	17.541M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	39.25M	36.232M	36M2D1D	38.65M	35.882M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	83.6M	75.962M	76M0D1D	81M	75.262M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.575M	17.641M	17M6D1D	17.55M	17.591M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	35M	36.032M	36M0D1D	32.45M	35.882M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	75.3M	75.762M	75M8D1D	22.5M	75.562M

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**

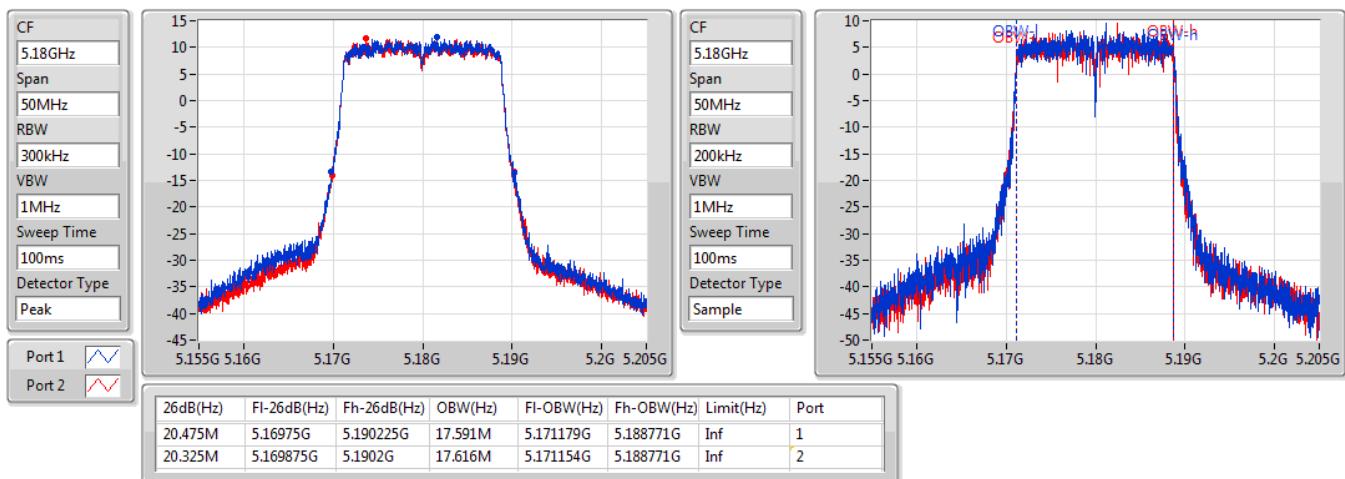
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.475M	17.591M	20.325M	17.616M
5200MHz	Pass	Inf	20.1M	17.641M	19.825M	17.541M
5240MHz	Pass	Inf	20.5M	17.691M	20.3M	17.591M
5745MHz	Pass	500k	17.575M	17.641M	17.55M	17.591M
5785MHz	Pass	500k	17.575M	17.641M	17.575M	17.616M
5825MHz	Pass	500k	17.575M	17.591M	17.575M	17.641M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.25M	35.882M	38.65M	35.932M
5230MHz	Pass	Inf	39.15M	36.232M	38.9M	35.982M
5755MHz	Pass	500k	35M	35.882M	34.45M	36.032M
5795MHz	Pass	500k	34.4M	35.882M	32.45M	35.882M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81M	75.262M	83.6M	75.962M
5775MHz	Pass	500k	75.3M	75.562M	22.5M	75.762M

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

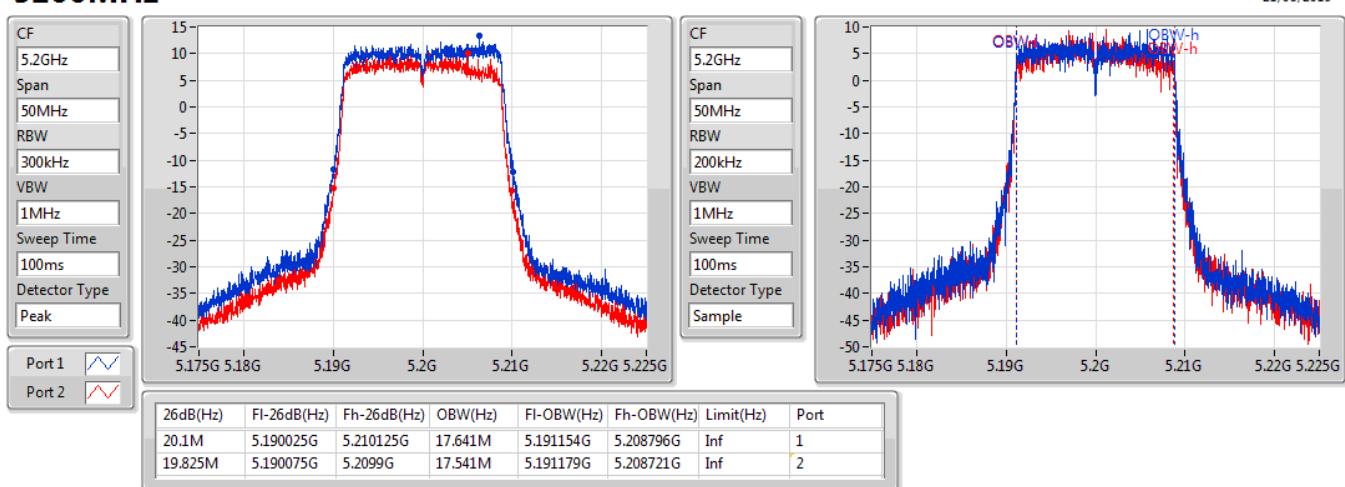
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss1,(MCS0)_2TX
EBW
5180MHz

21/05/2019

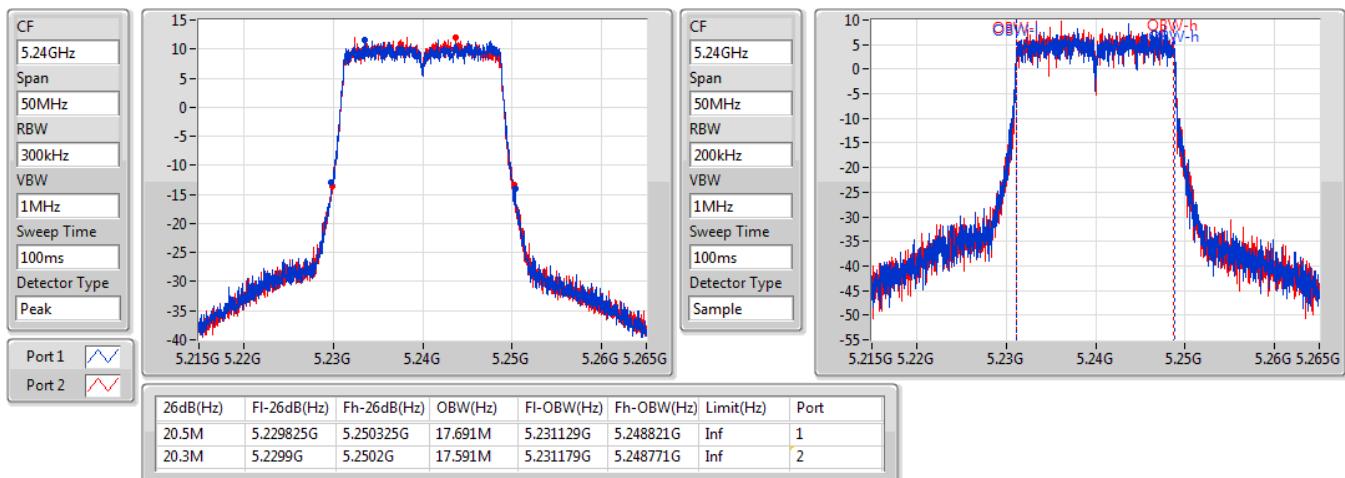

802.11ac VHT20-BF_Nss1,(MCS0)_2TX
EBW
5200MHz

21/05/2019

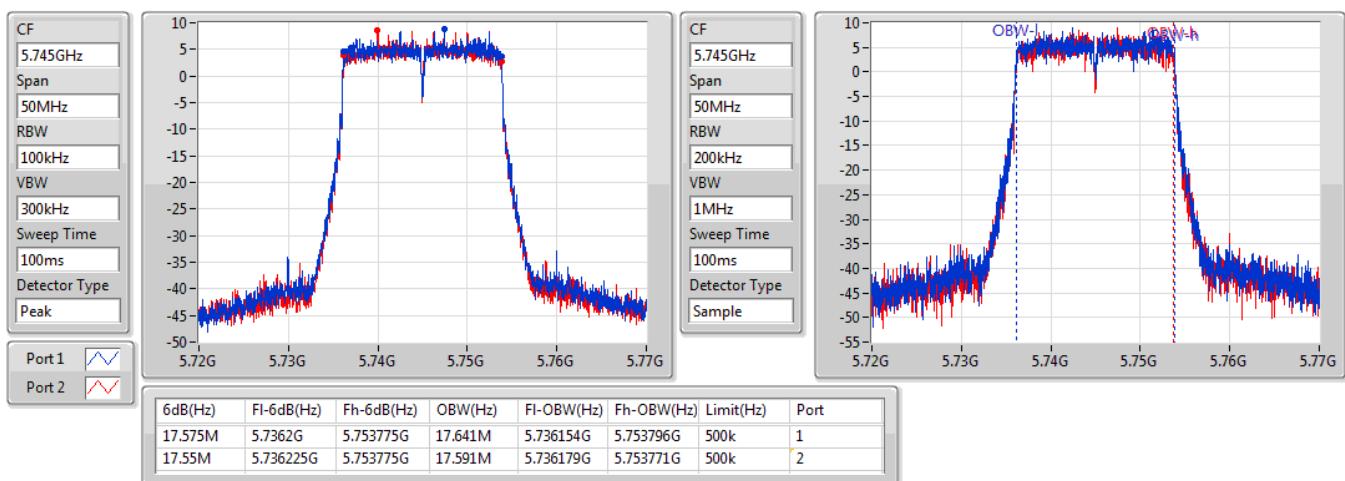


802.11ac VHT20-BF_Nss1,(MCS0)_2TX
EBW
5240MHz

21/05/2019

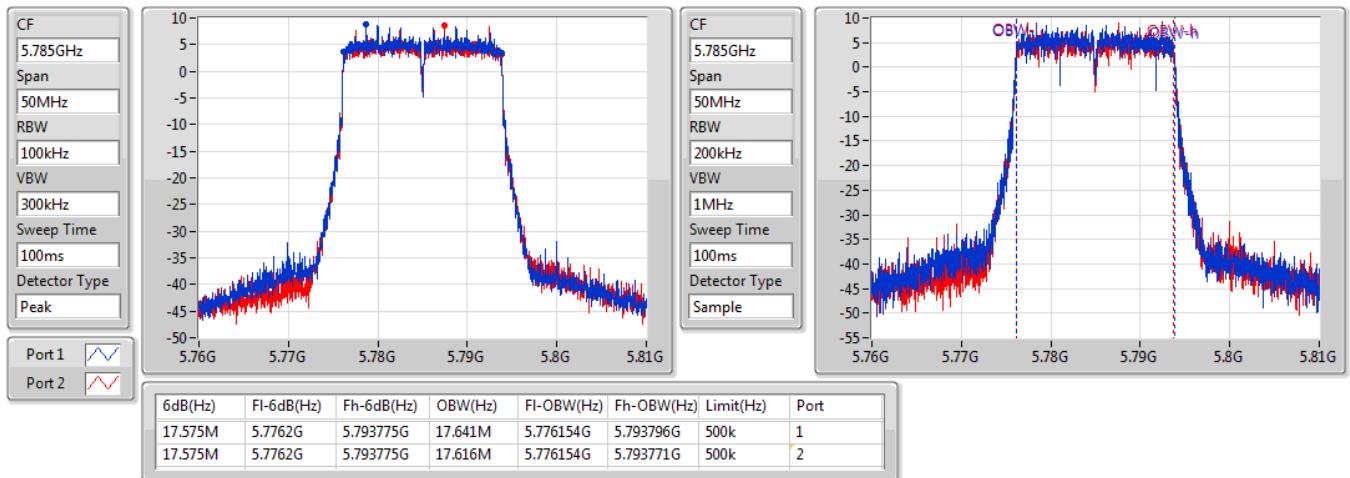

802.11ac VHT20-BF_Nss1,(MCS0)_2TX
EBW
5745MHz

21/05/2019

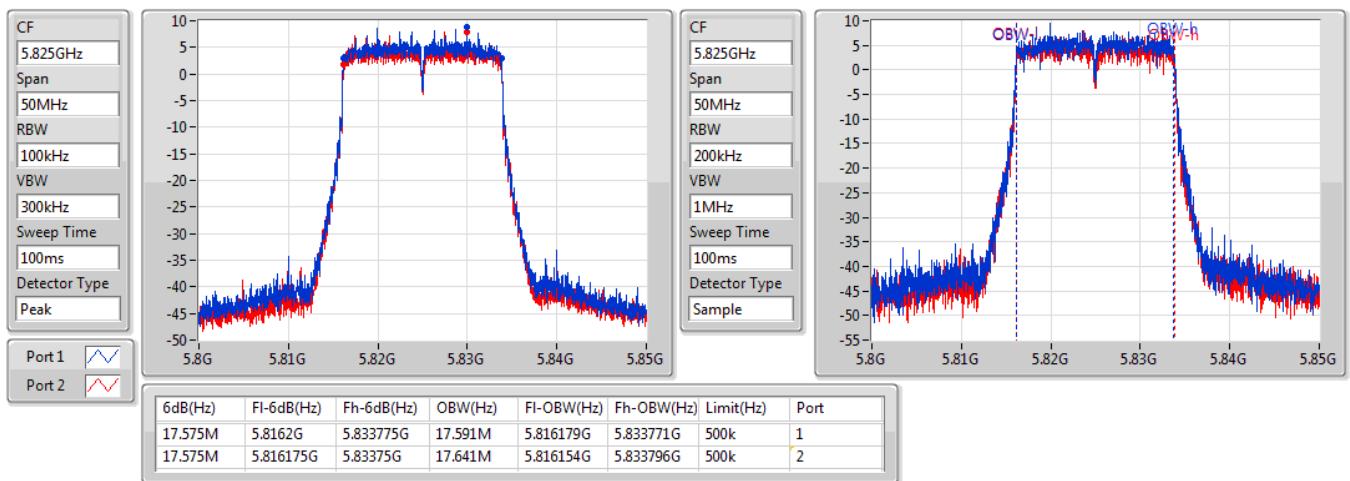


802.11ac VHT20-BF_Nss1,(MCS0)_2TX
EBW
5785MHz

21/05/2019

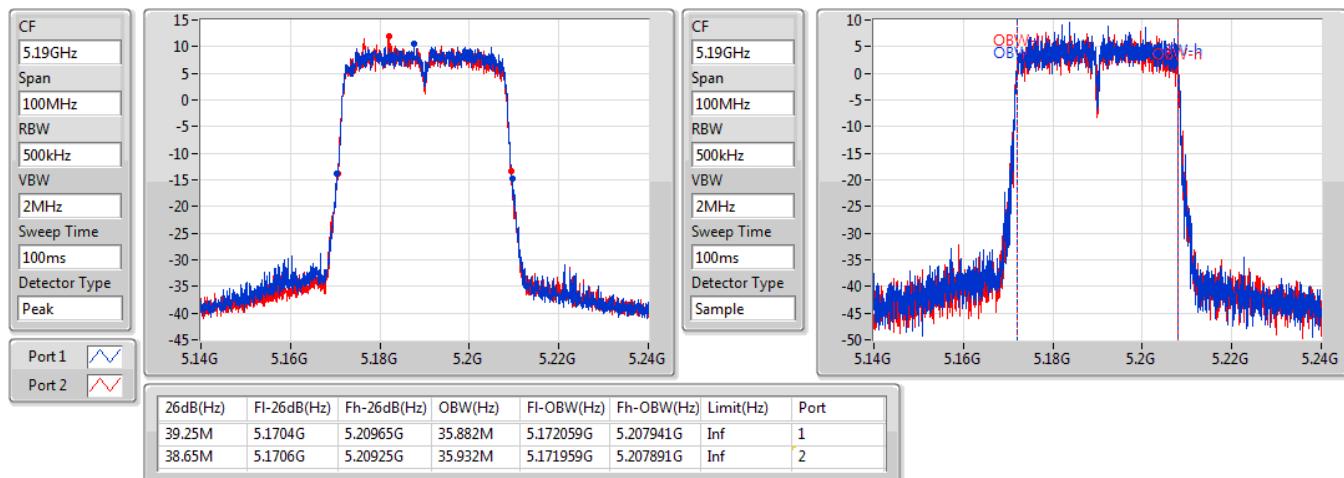

802.11ac VHT20-BF_Nss1,(MCS0)_2TX
EBW
5825MHz

21/05/2019

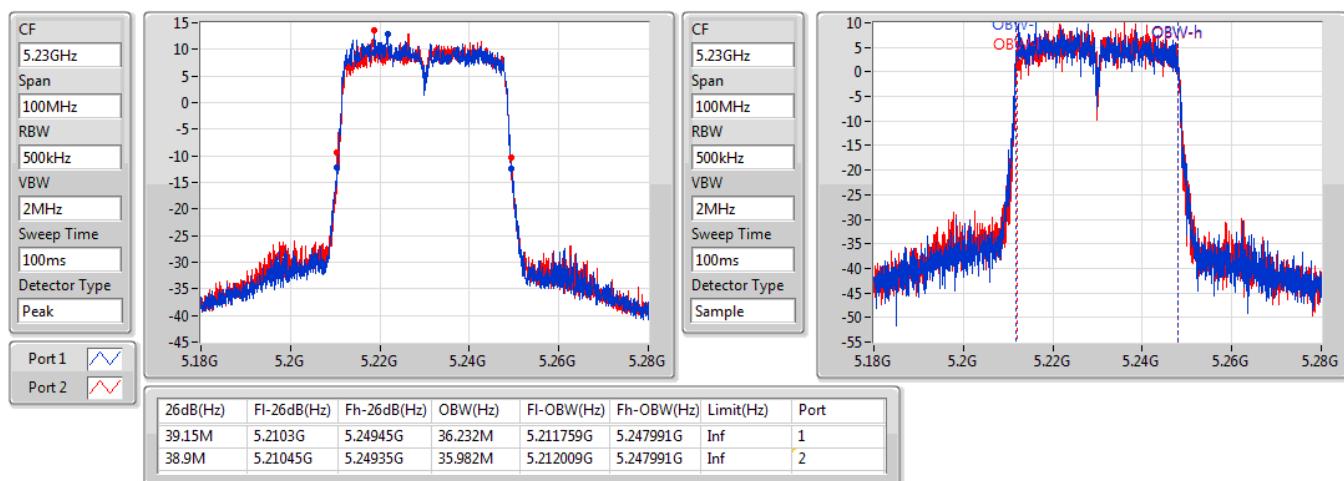


802.11ac VHT40-BF_Nss1,(MCS0)_2TX
EBW
5190MHz

21/05/2019


802.11ac VHT40-BF_Nss1,(MCS0)_2TX
EBW
5230MHz

21/05/2019

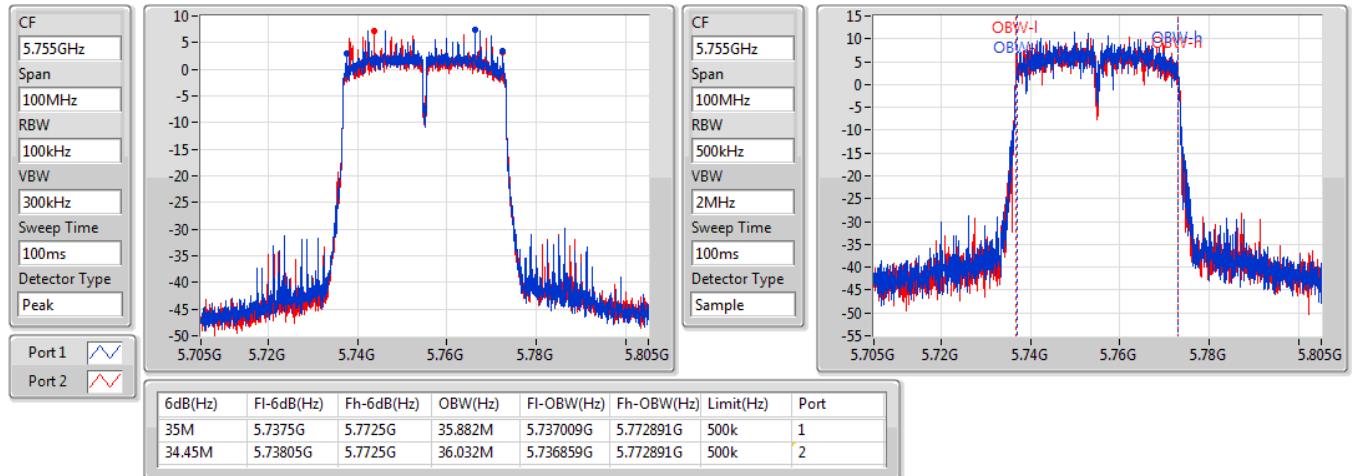


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

5755MHz

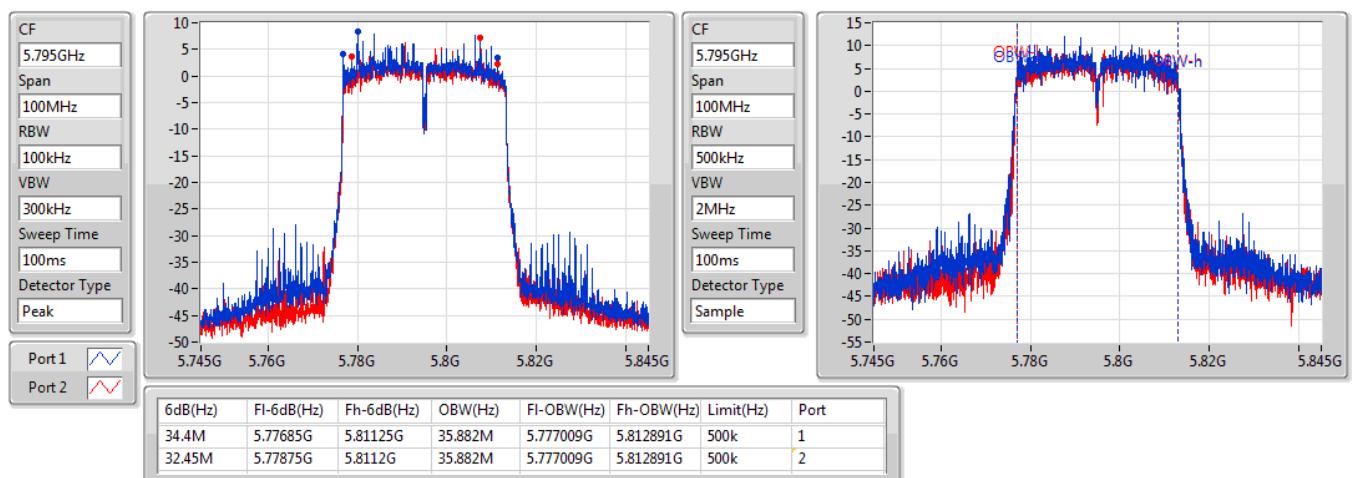
21/05/2019


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

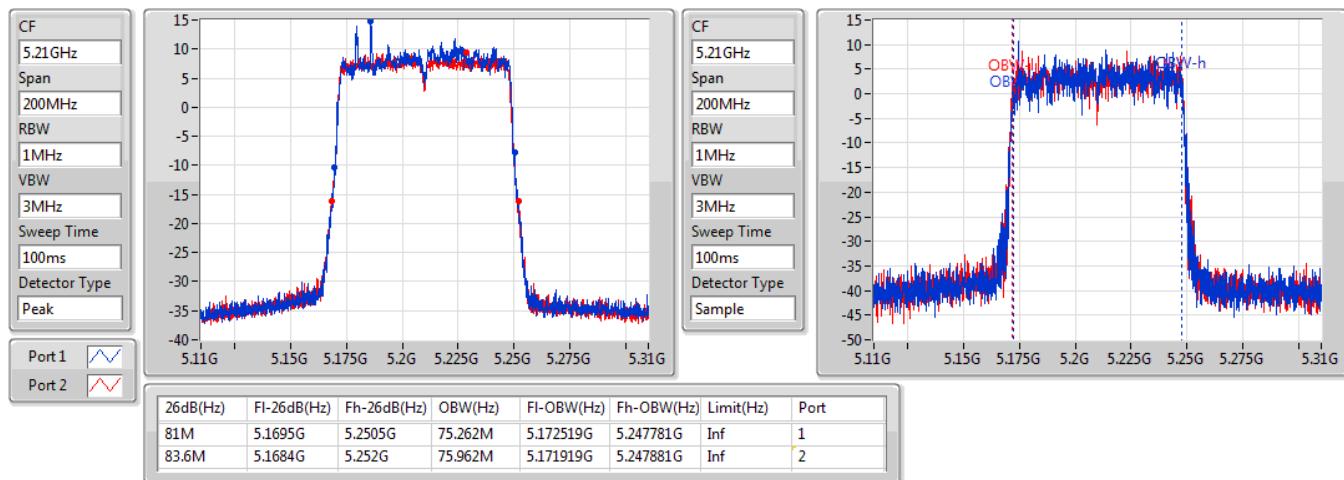
5795MHz

21/05/2019

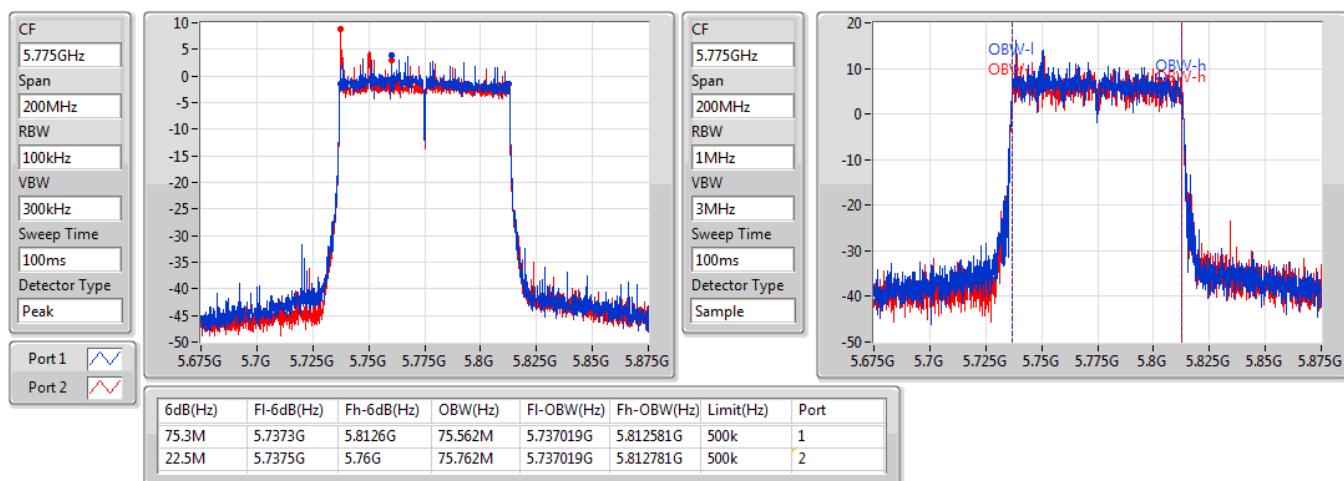


802.11ac VHT80-BF_Nss1,(MCS0)_2TX
EBW
5210MHz

21/05/2019


802.11ac VHT80-BF_Nss1,(MCS0)_2TX
EBW
5775MHz

21/05/2019





Power Result

Appendix C.1

For Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	24.76	0.29923
802.11ac VHT20_Nss1,(MCS0)_2TX	24.79	0.30130
802.11ac VHT40_Nss1,(MCS0)_2TX	24.54	0.28445
802.11ac VHT80_Nss1,(MCS0)_2TX	19.37	0.08650
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	24.78	0.30061
802.11ac VHT20_Nss1,(MCS0)_2TX	24.75	0.29854
802.11ac VHT40_Nss1,(MCS0)_2TX	24.50	0.28184
802.11ac VHT80_Nss1,(MCS0)_2TX	23.62	0.23014



Power Result

Appendix C.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.58	21.01	21.26	24.15	30.00
5200MHz	Pass	4.58	21.62	21.87	24.76	30.00
5240MHz	Pass	4.58	21.58	21.73	24.67	30.00
5745MHz	Pass	4.06	21.70	21.84	24.78	30.00
5785MHz	Pass	4.06	21.54	21.75	24.66	30.00
5825MHz	Pass	4.06	21.27	21.58	24.44	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.58	21.18	21.62	24.42	30.00
5200MHz	Pass	4.58	21.68	21.88	24.79	30.00
5240MHz	Pass	4.58	21.56	21.86	24.72	30.00
5745MHz	Pass	4.06	21.67	21.81	24.75	30.00
5785MHz	Pass	4.06	21.54	21.92	24.74	30.00
5825MHz	Pass	4.06	21.32	21.66	24.50	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	4.58	17.29	17.52	20.42	30.00
5230MHz	Pass	4.58	21.33	21.72	24.54	30.00
5755MHz	Pass	4.06	21.34	21.64	24.50	30.00
5795MHz	Pass	4.06	21.08	21.67	24.40	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	4.58	16.57	16.13	19.37	30.00
5775MHz	Pass	4.06	20.65	20.56	23.62	30.00

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

**For beamforming mode****Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	23.56	0.22699
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	21.29	0.13459
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	19.65	0.09226
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	23.69	0.23388
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	22.35	0.17179
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	22.67	0.18493



Average Power

Appendix C.2

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.59	20.53	20.56	23.56	28.41
5200MHz	Pass	7.59	20.80	20.12	23.48	28.41
5240MHz	Pass	7.59	20.52	20.29	23.42	28.41
5745MHz	Pass	7.07	20.42	20.25	23.35	28.93
5785MHz	Pass	7.07	20.79	20.37	23.60	28.93
5825MHz	Pass	7.07	20.48	20.88	23.69	28.93
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	7.59	18.02	17.69	20.87	28.41
5230MHz	Pass	7.59	18.03	18.51	21.29	28.41
5755MHz	Pass	7.07	19.39	19.29	22.35	28.93
5795MHz	Pass	7.07	19.48	19.02	22.27	28.93
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	7.59	16.65	16.62	19.65	28.41
5775MHz	Pass	7.07	19.93	19.37	22.67	28.93

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



PSD Result

Appendix D.1

For Non-beamforming mode

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	11.18
802.11ac VHT20_Nss1,(MCS0)_2TX	10.97
802.11ac VHT40_Nss1,(MCS0)_2TX	7.91
802.11ac VHT80_Nss1,(MCS0)_2TX	0.39
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	9.52
802.11ac VHT20_Nss1,(MCS0)_2TX	9.29
802.11ac VHT40_Nss1,(MCS0)_2TX	6.23
802.11ac VHT80_Nss1,(MCS0)_2TX	3.06

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



PSD Result

Appendix D.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.59	8.01	8.37	11.17	15.41
5200MHz	Pass	7.59	8.04	8.44	11.18	15.41
5240MHz	Pass	7.59	7.86	8.20	11.00	15.41
5745MHz	Pass	7.07	6.50	6.74	9.52	28.93
5785MHz	Pass	7.07	6.40	6.74	9.47	28.93
5825MHz	Pass	7.07	6.25	6.71	9.44	28.93
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.59	7.83	8.15	10.97	15.41
5200MHz	Pass	7.59	7.64	7.95	10.79	15.41
5240MHz	Pass	7.59	7.70	7.90	10.79	15.41
5745MHz	Pass	7.07	6.34	6.50	9.29	28.93
5785MHz	Pass	7.07	6.11	6.49	9.17	28.93
5825MHz	Pass	7.07	5.87	6.33	9.05	28.93
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	7.59	1.18	1.33	4.24	15.41
5230MHz	Pass	7.59	4.80	5.02	7.91	15.41
5755MHz	Pass	7.07	3.29	3.40	6.23	28.93
5795MHz	Pass	7.07	3.06	3.44	6.19	28.93
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	7.59	-2.55	-2.59	0.39	15.41
5775MHz	Pass	7.07	0.18	-0.08	3.06	28.93

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

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



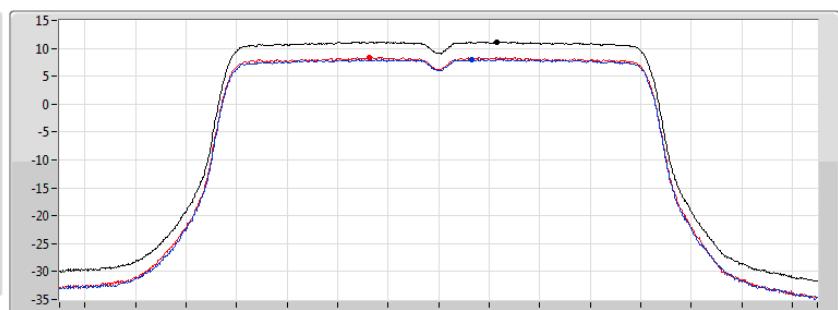
PSD Result

Appendix D.1

802.11a_Nss1,(6Mbps)_2TX

5180MHz

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



PSD

28/03/2019

Sum
Port 1
Port 2

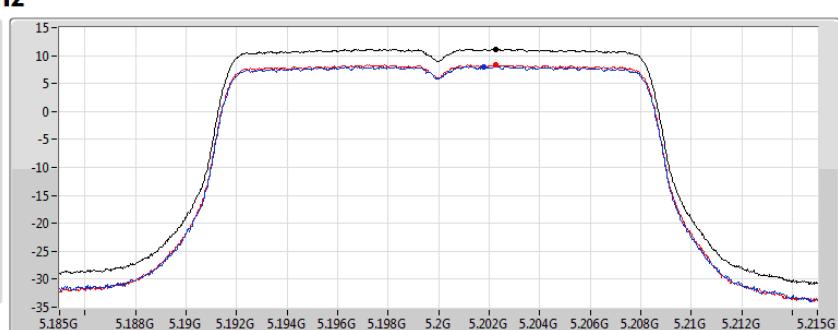
Sum PD Port 1 Port 2
(dBm/RBW) (dBm/RBW) (dBm/RBW) (dBm/RBW)

11.17 11.17 8.01 8.37

PSD

5200MHz

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



PSD

01/04/2019

Sum
Port 1
Port 2

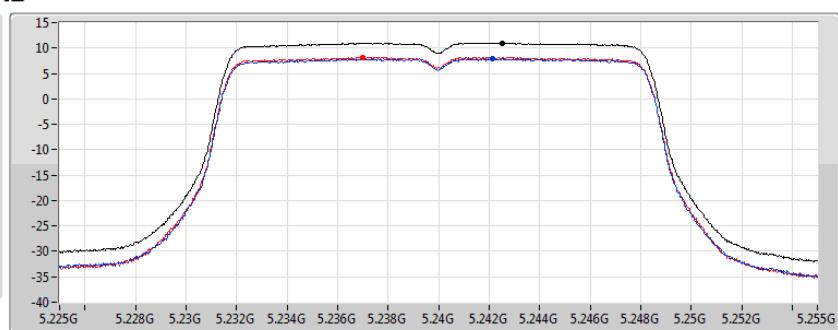
Sum PD Port 1 Port 2
(dBm/RBW) (dBm/RBW) (dBm/RBW) (dBm/RBW)

11.18 11.18 8.04 8.44

PSD

5240MHz

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



PSD

01/04/2019

Sum
Port 1
Port 2

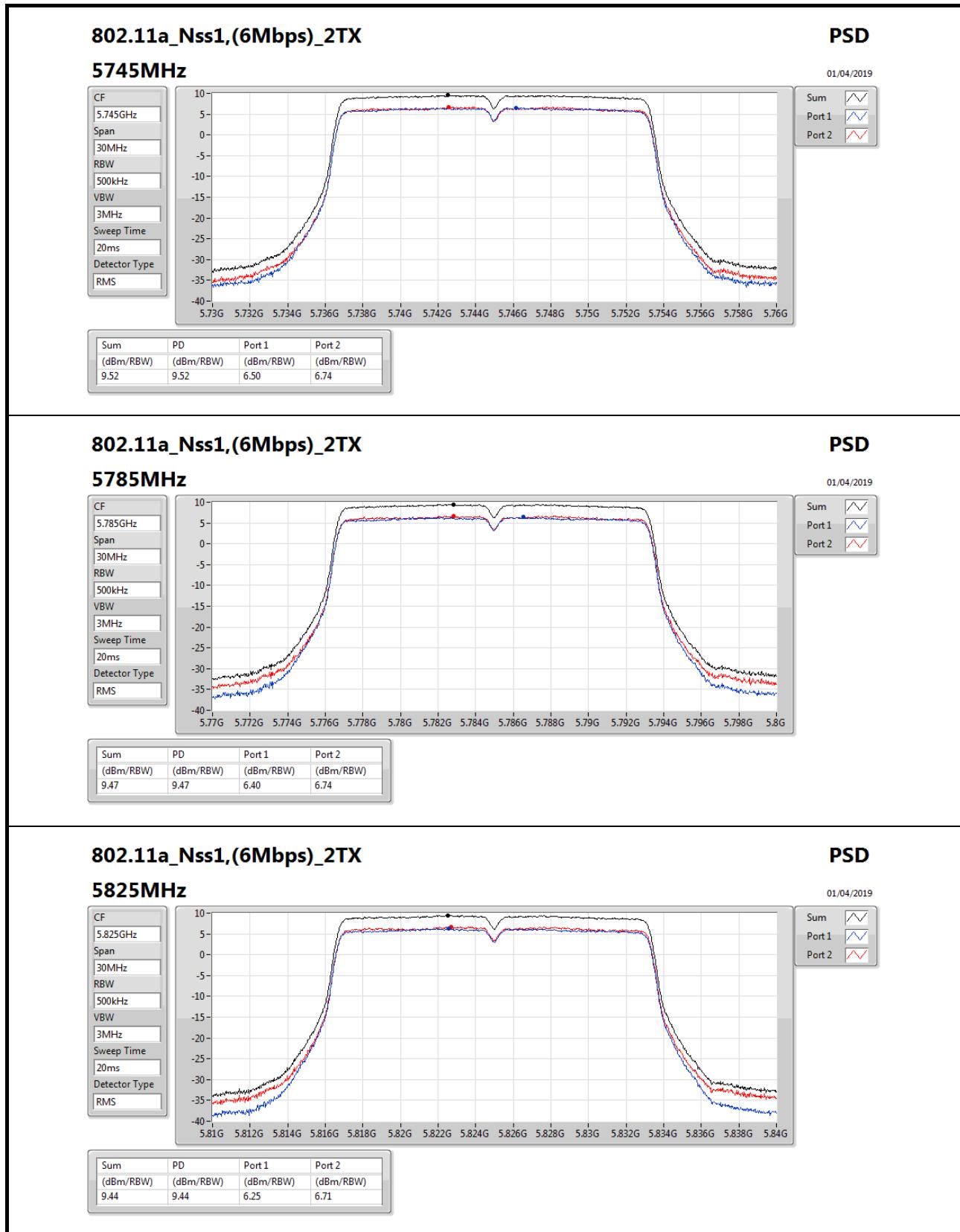
Sum PD Port 1 Port 2
(dBm/RBW) (dBm/RBW) (dBm/RBW) (dBm/RBW)

11.00 11.00 7.86 8.20



PSD Result

Appendix D.1





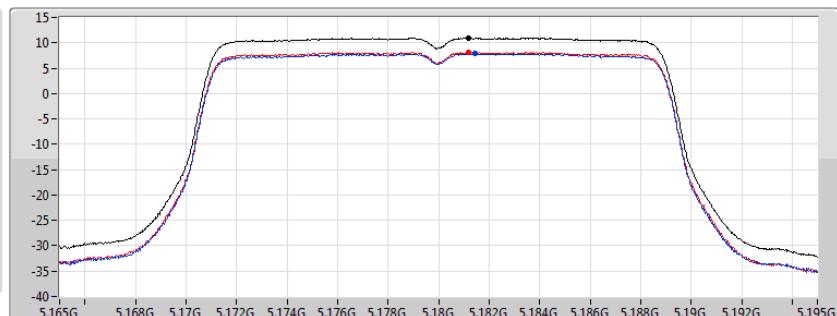
PSD Result

Appendix D.1

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz

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



PSD

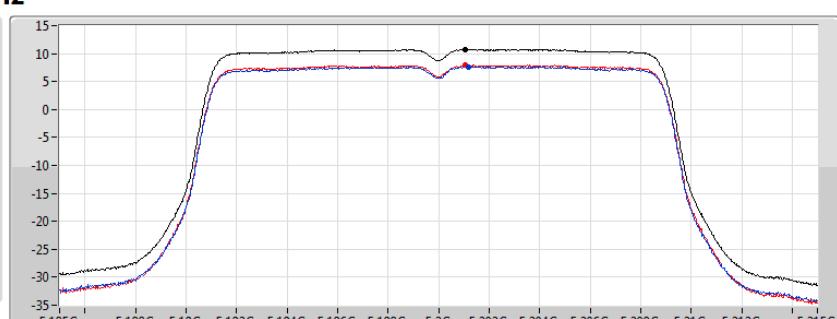
28/03/2019

Sum
Port 1
Port 2

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz

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



PSD

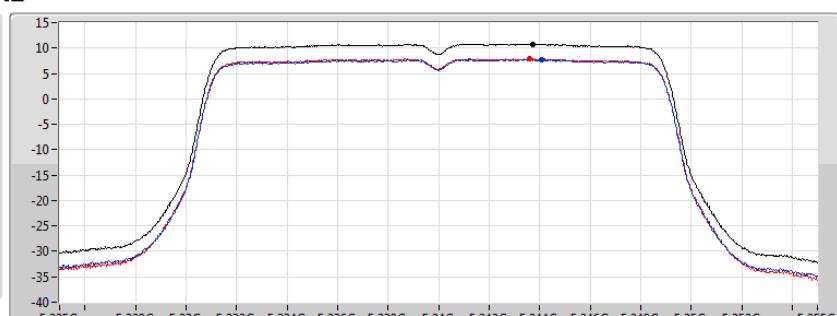
01/04/2019

Sum
Port 1
Port 2

802.11ac VHT20_Nss1,(MCS0)_2TX

5240MHz

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



PSD

01/04/2019

Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.97	10.97	7.83	8.15
10.79	10.79	7.64	7.95



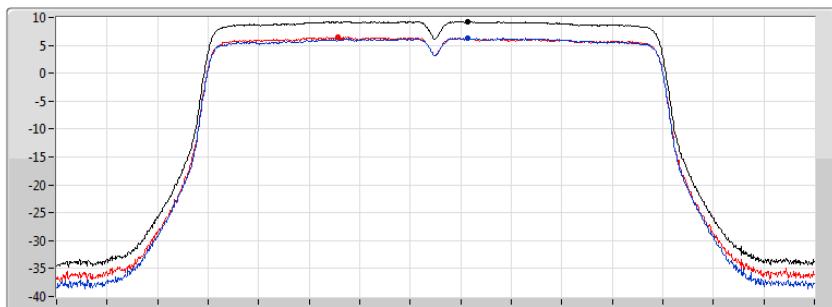
PSD Result

Appendix D.1

802.11ac VHT20_Nss1,(MCS0)_2TX

5745MHz

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



PSD

01/04/2019

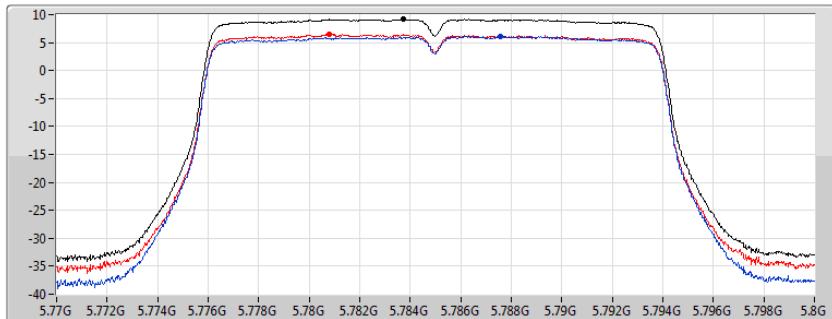
Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.29	9.29	6.34	6.50

802.11ac VHT20_Nss1,(MCS0)_2TX

5785MHz

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



PSD

01/04/2019

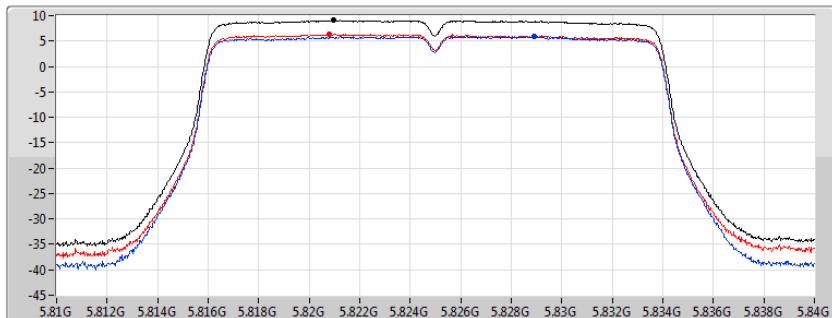
Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.17	9.17	6.11	6.49

802.11ac VHT20_Nss1,(MCS0)_2TX

5825MHz

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



PSD

01/04/2019

Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.05	9.05	5.87	6.33



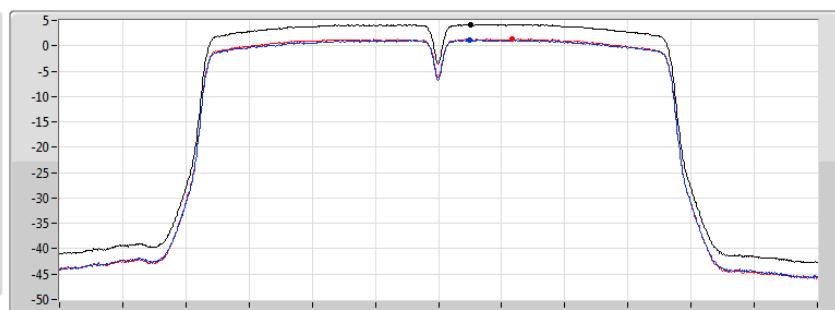
PSD Result

Appendix D.1

802.11ac VHT40_Nss1,(MCS0)_2TX

5190MHz

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



PSD

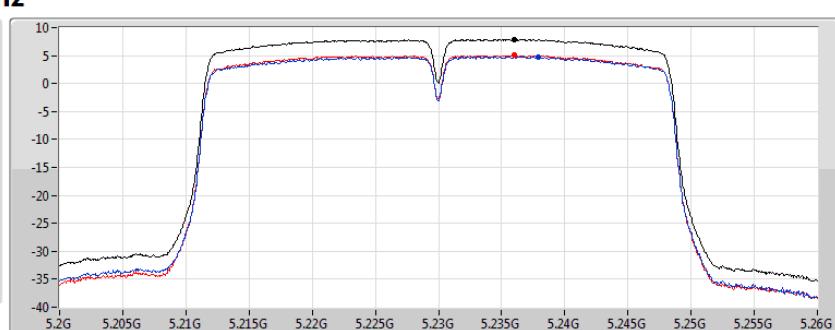
28/03/2019

Sum
Port 1
Port 2

802.11ac VHT40_Nss1,(MCS0)_2TX

5230MHz

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



PSD

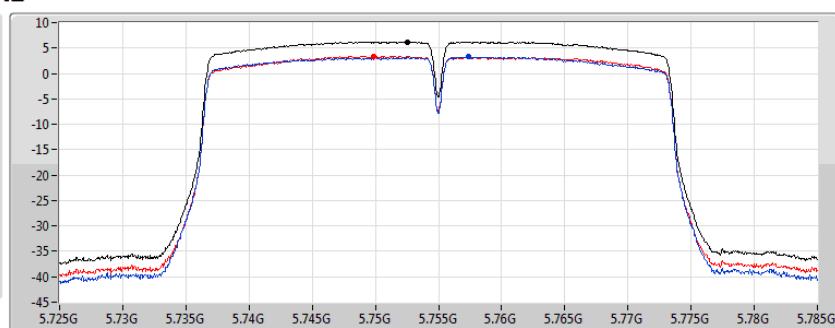
01/04/2019

Sum
Port 1
Port 2

802.11ac VHT40_Nss1,(MCS0)_2TX

5755MHz

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



PSD

01/04/2019

Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.24	4.24	1.18	1.33



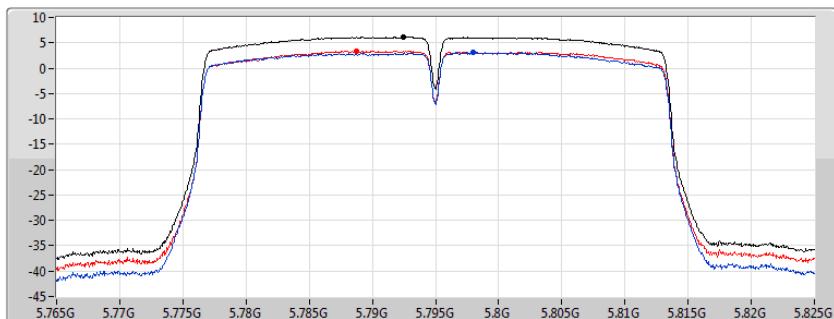
PSD Result

Appendix D.1

802.11ac VHT40_Nss1,(MCS0)_2TX

5795MHz

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



PSD

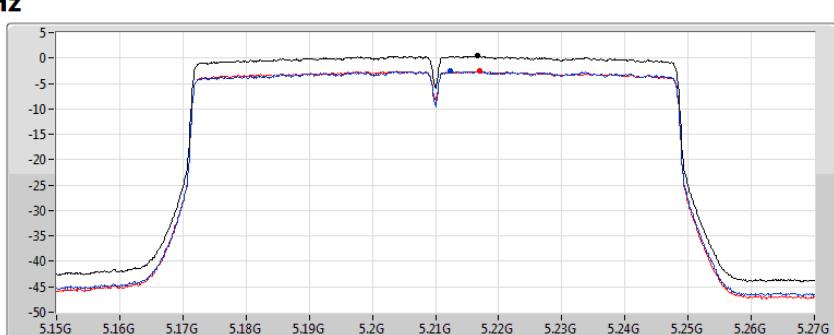
01/04/2019

Sum
Port 1
Port 2

802.11ac VHT80_Nss1,(MCS0)_2TX

5210MHz

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



PSD

28/03/2019

Sum
Port 1
Port 2

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz

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



PSD

28/03/2019

Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.19	6.19	3.06	3.44

**For beamforming mode
Summary**

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	10.64
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	6.53
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	1.27
5.725-5.85GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	9.20
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	5.71
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	2.88

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

**Result**

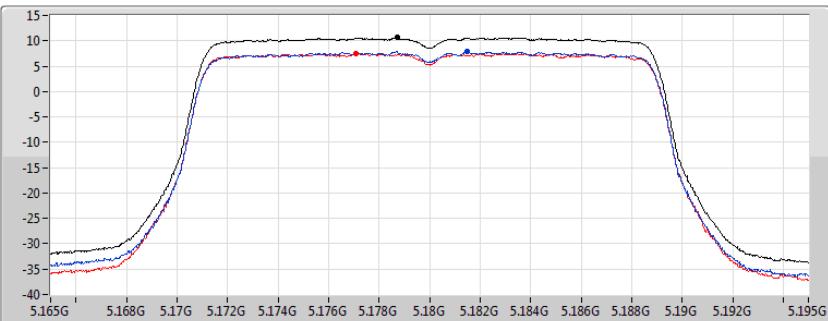
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.59	7.85	7.47	10.61	15.41
5200MHz	Pass	7.59	7.87	7.75	10.64	15.41
5240MHz	Pass	7.59	7.48	7.63	10.57	15.41
5745MHz	Pass	7.07	6.31	6.26	9.20	28.93
5785MHz	Pass	7.07	6.36	5.72	8.99	28.93
5825MHz	Pass	7.07	6.03	5.14	8.55	28.93
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	7.59	2.46	2.32	5.28	15.41
5230MHz	Pass	7.59	4.20	3.76	6.53	15.41
5755MHz	Pass	7.07	3.01	2.72	5.71	28.93
5795MHz	Pass	7.07	2.83	2.15	5.45	28.93
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	7.59	-1.31	-1.78	1.27	15.41
5775MHz	Pass	7.07	0.56	-0.41	2.88	28.93

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; **Port X** = Port X power density;

802.11ac VHT20-BF_Nss1,(MCS0)_2TX
PSD
5180MHz

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



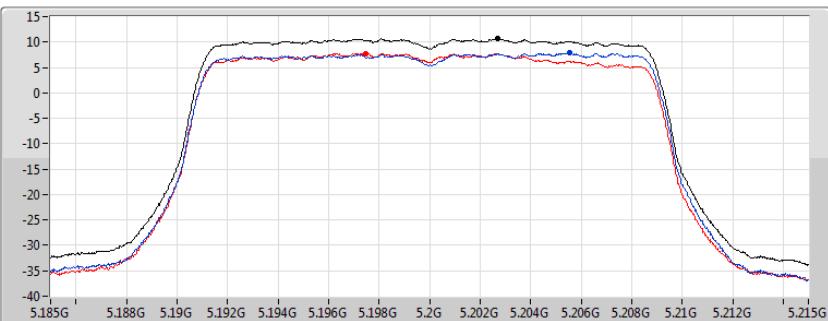
21/05/2019

Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.61	10.61	7.85	7.47

802.11ac VHT20-BF_Nss1,(MCS0)_2TX
PSD
5200MHz

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



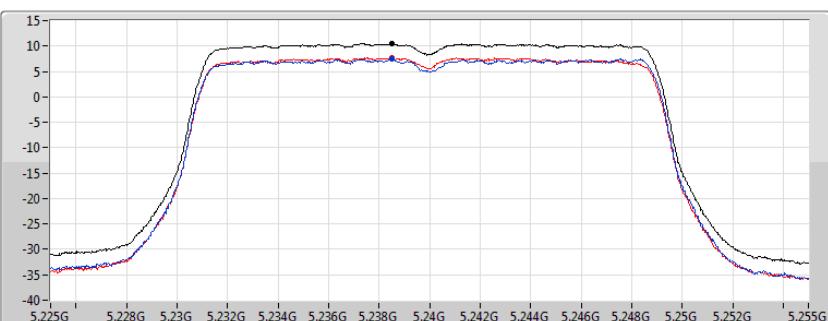
21/05/2019

Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.64	10.64	7.87	7.75

802.11ac VHT20-BF_Nss1,(MCS0)_2TX
PSD
5240MHz

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



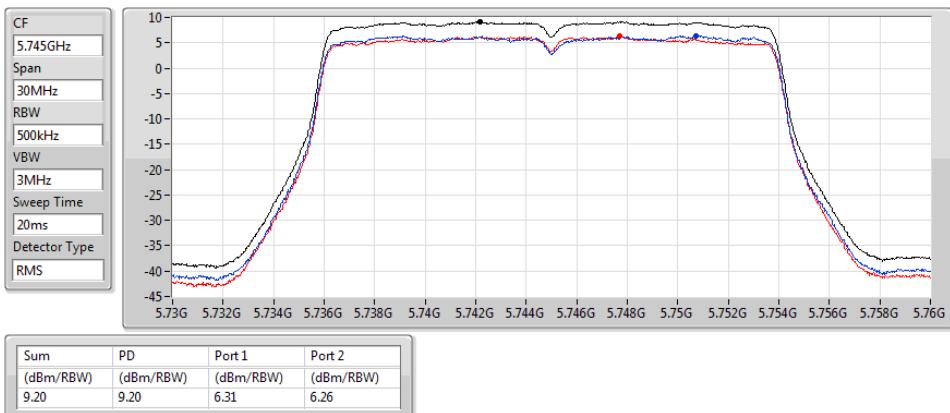
21/05/2019

Sum	/\
Port 1	/\
Port 2	/\

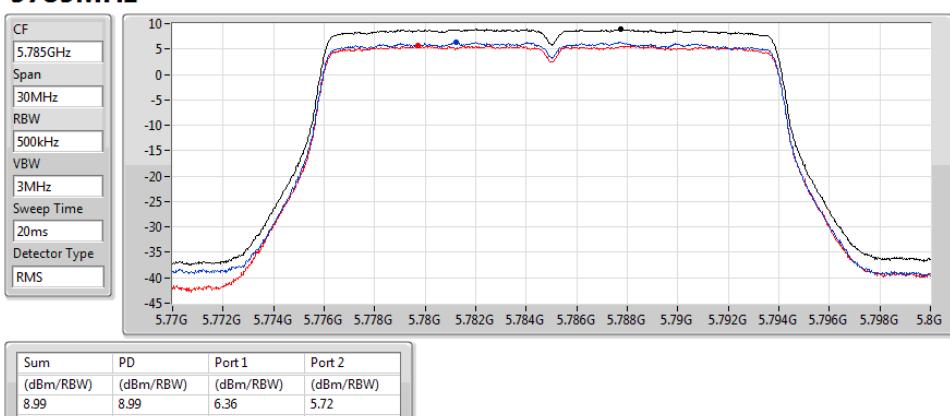
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.57	10.57	7.48	7.63

802.11ac VHT20-BF_Nss1,(MCS0)_2TX
PSD
5745MHz

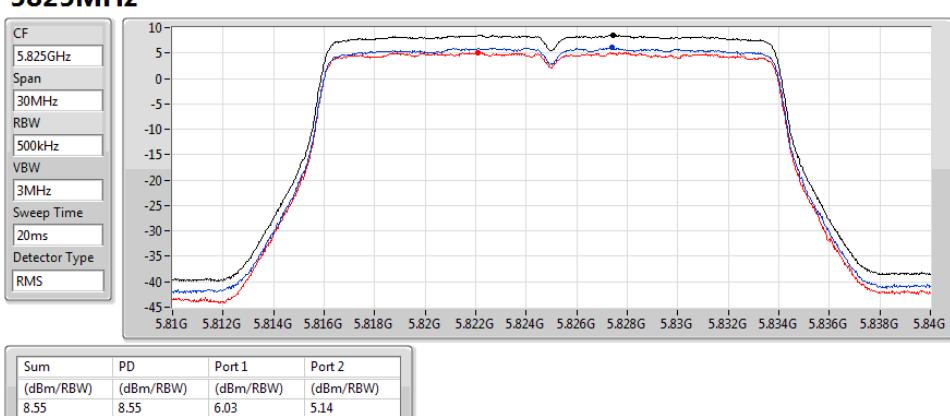
21/05/2019


802.11ac VHT20-BF_Nss1,(MCS0)_2TX
PSD
5785MHz

21/05/2019


802.11ac VHT20-BF_Nss1,(MCS0)_2TX
PSD
5825MHz

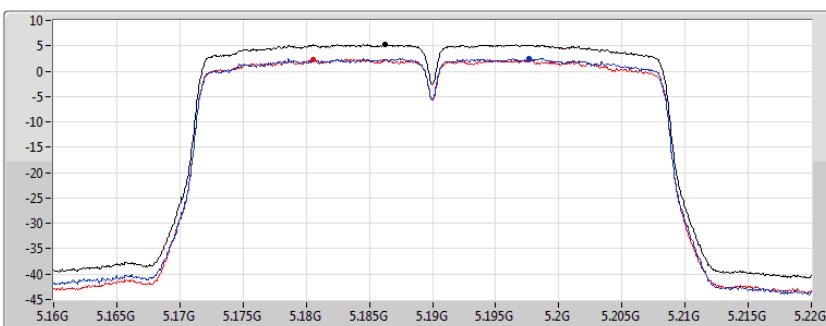
21/05/2019



802.11ac VHT40-BF_Nss1,(MCS0)_2TX
PSD
5190MHz

21/05/2019

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



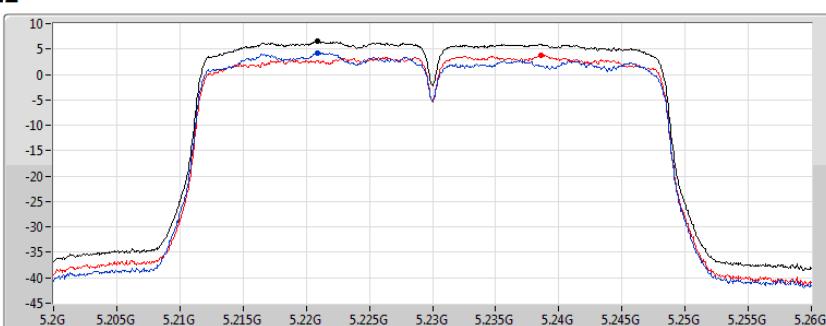
Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.28	5.28	2.46	2.32

802.11ac VHT40-BF_Nss1,(MCS0)_2TX
PSD
5230MHz

21/05/2019

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



Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.53	6.53	4.20	3.76

802.11ac VHT40-BF_Nss1,(MCS0)_2TX
PSD
5755MHz

21/05/2019

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

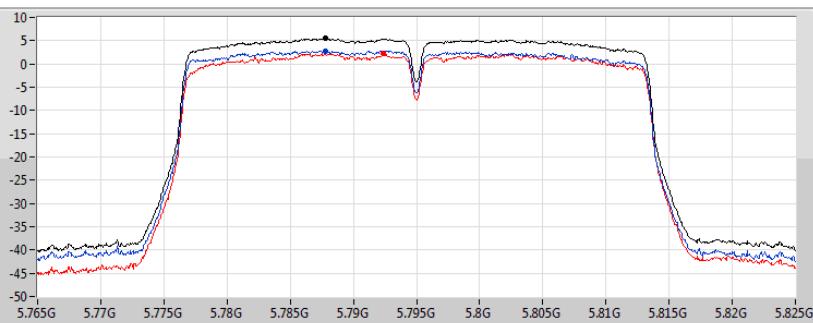


Sum	/\
Port 1	/\
Port 2	/\

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.71	5.71	3.01	2.72

802.11ac VHT40-BF_Nss1,(MCS0)_2TX
PSD
5795MHz

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

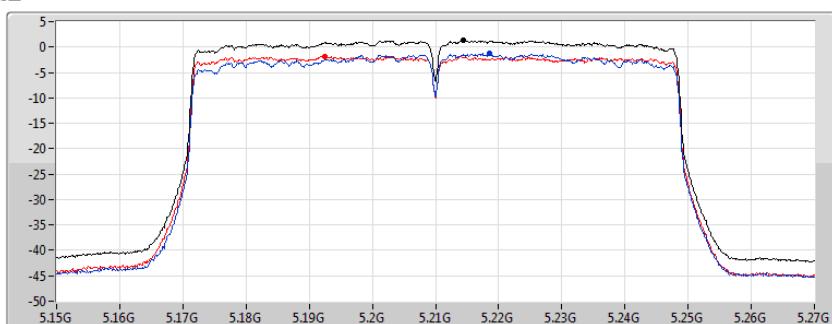


21/05/2019

Sum	/\
Port 1	/\
Port 2	/\

802.11ac VHT80-BF_Nss1,(MCS0)_2TX
PSD
5210MHz

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



21/05/2019

Sum	/\
Port 1	/\
Port 2	/\

802.11ac VHT80-BF_Nss1,(MCS0)_2TX
PSD
5775MHz

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



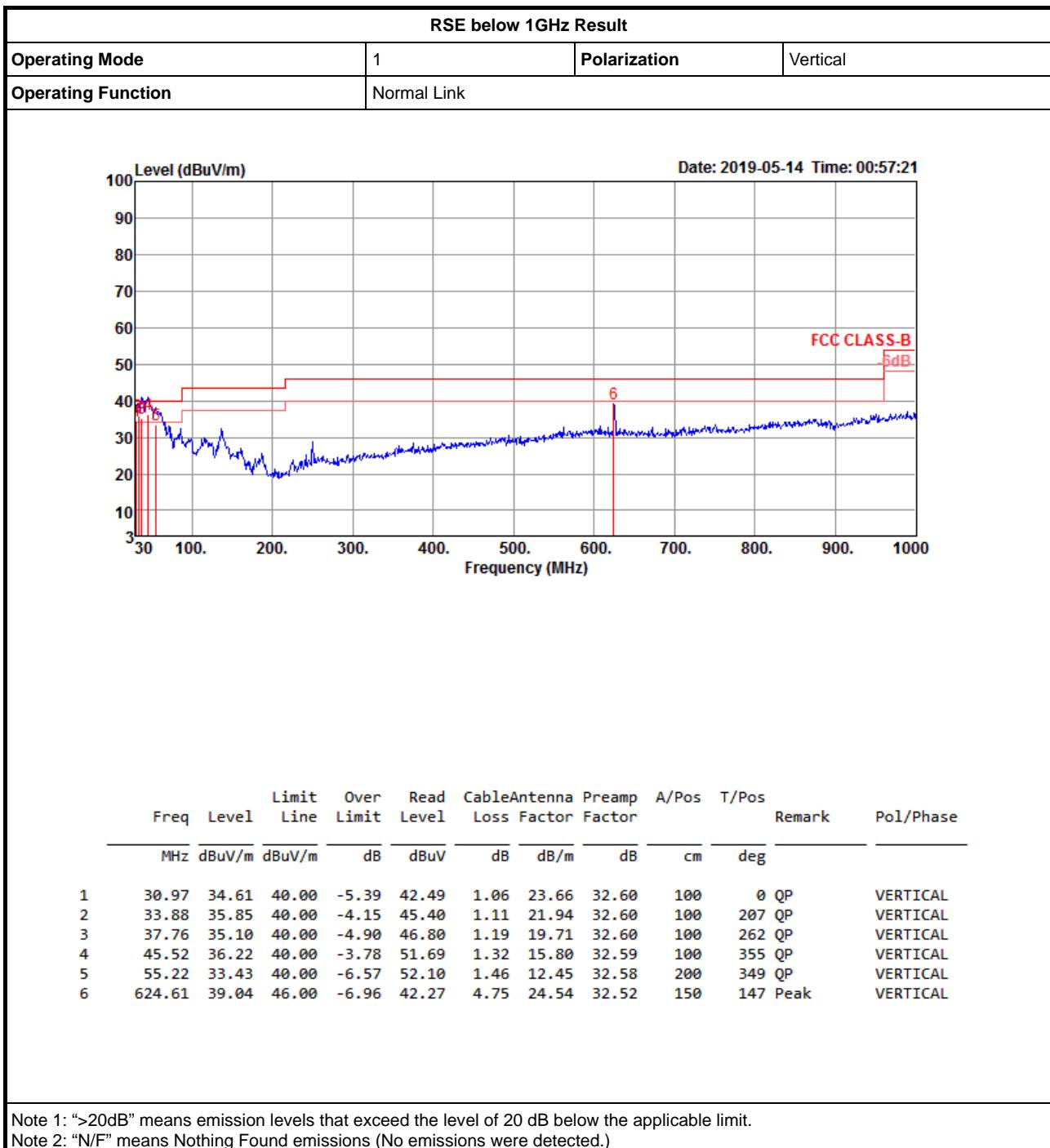
21/05/2019

Sum	/\
Port 1	/\
Port 2	/\



RSE below 1GHz Result

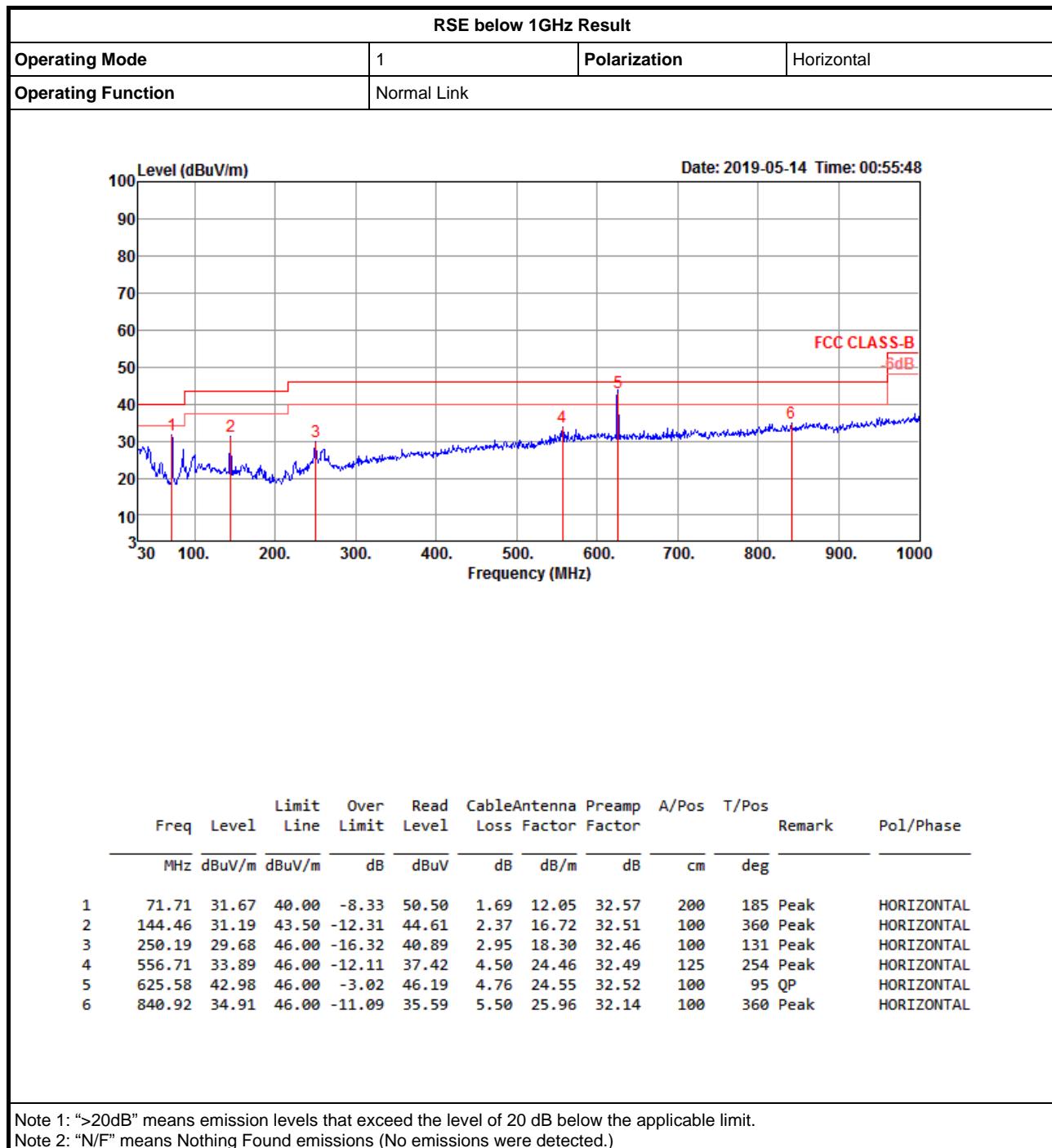
Appendix E.1





RSE below 1GHz Result

Appendix E.1





RSE TX above 1GHz Result

Appendix E.2

For Non-beamforming mode

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ac VHT20_Nss1_(MCS0)_2TX	Pass	PK	5.7253G	68.18	68.20	-0.02	9.34	3	Horizontal	278	1.00	-



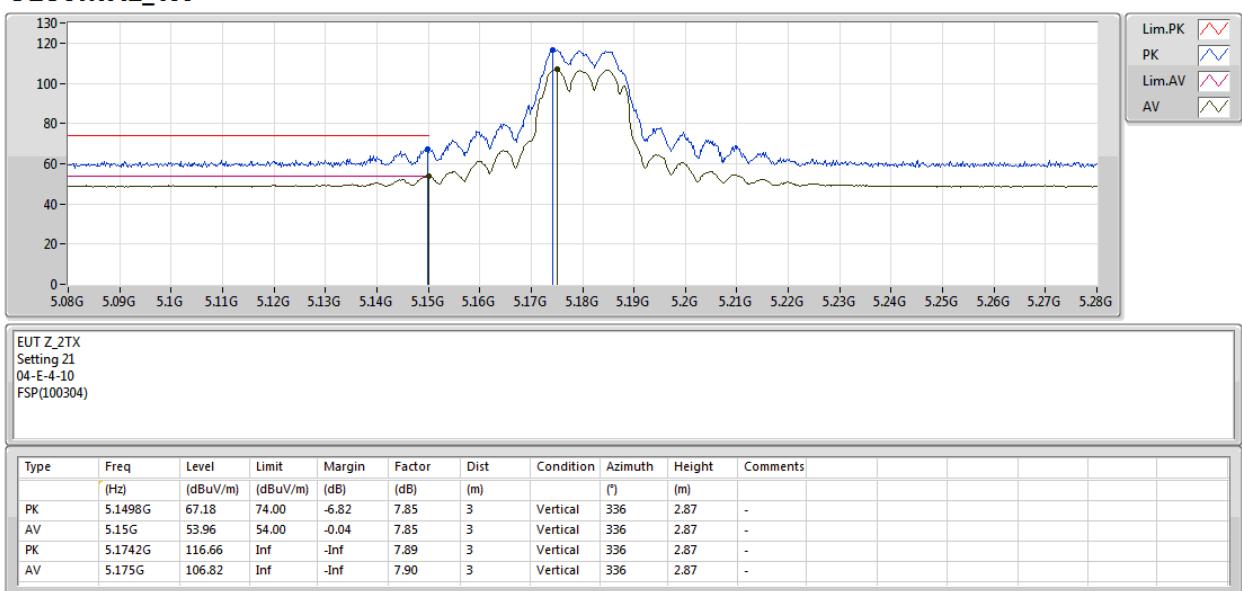
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

26/03/2019

5180MHz_TX





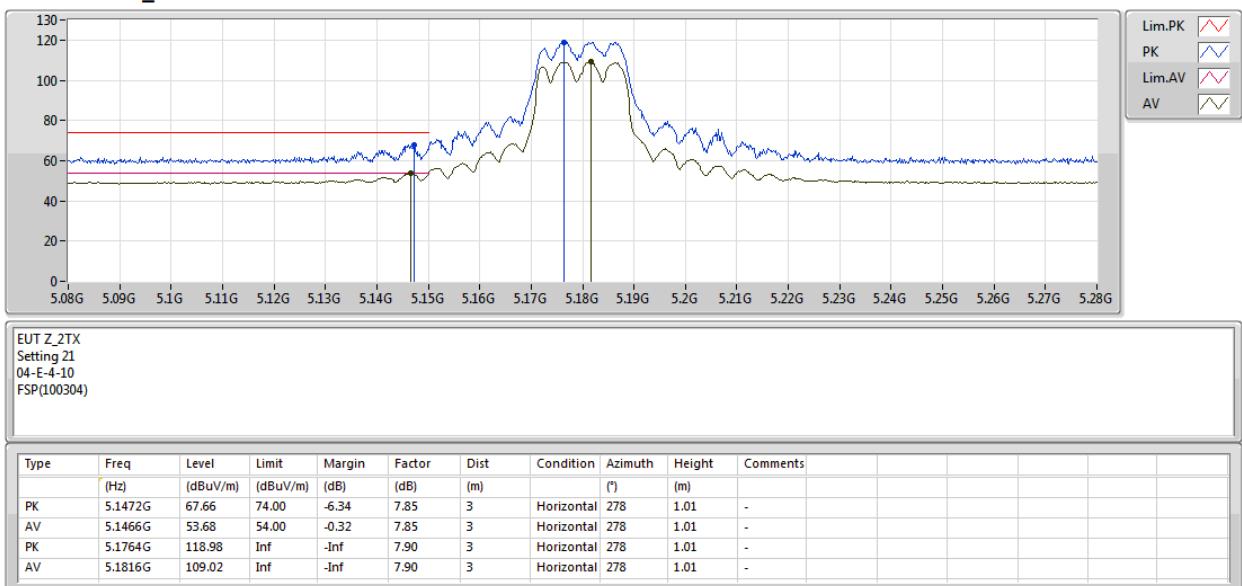
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

26/03/2019

5180MHz_TX





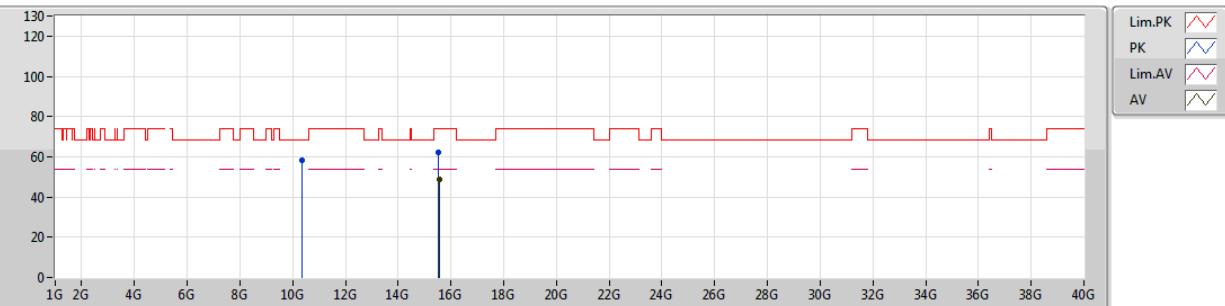
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

26/03/2019

5180MHz_TX



EUT Z_2TX
Setting 21
04-E-4
FSP(100304)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	10.3669G	58.03	68.20	-10.17	15.11	3	Vertical	2	1.38	-
PK	15.52305G	62.24	74.00	-11.76	16.02	3	Vertical	276	1.50	-
AV	15.5603G	48.96	54.00	-5.04	16.00	3	Vertical	276	1.50	-



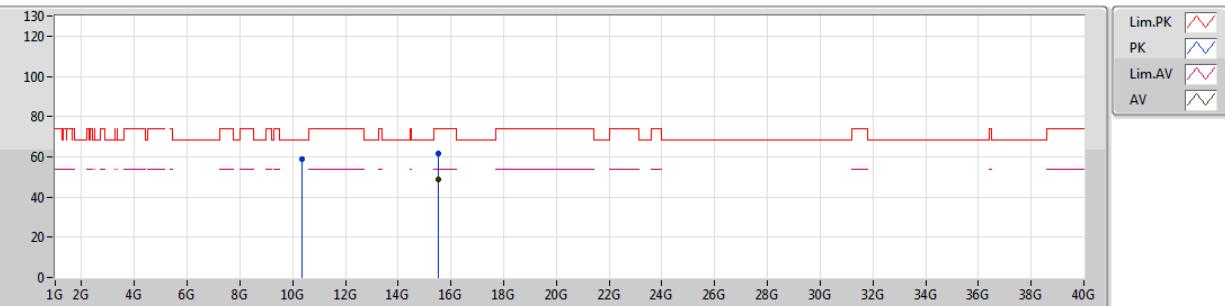
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

26/03/2019

5180MHz_TX



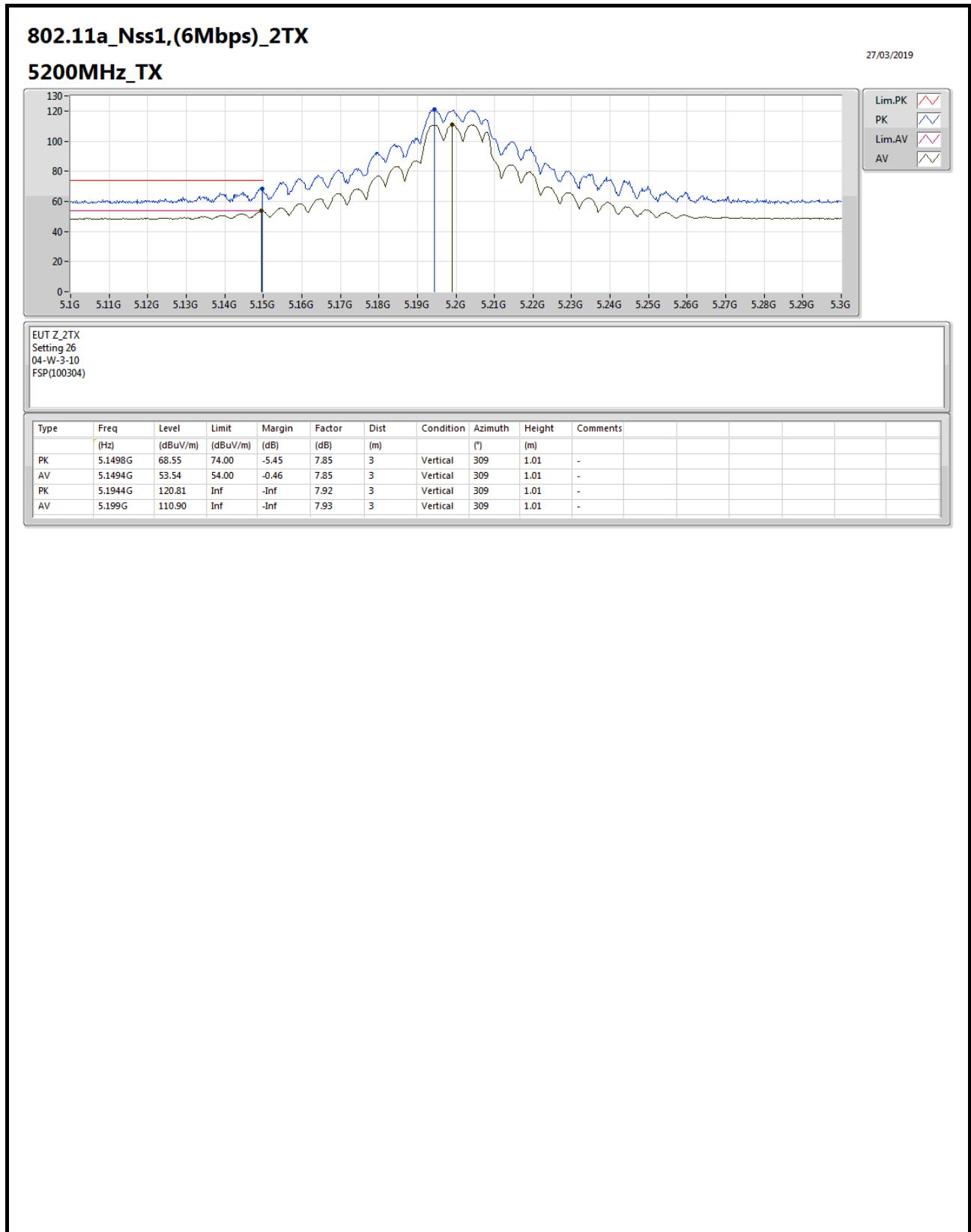
EUT Z_2TX
Setting 21
04-E-4
FSP(100304)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	10.37205G	58.61	68.20	-9.59	15.11	3	Horizontal	298	1.50	-
PK	15.54335G	61.73	74.00	-12.27	16.02	3	Horizontal	75	1.50	-
AV	15.51705G	48.83	54.00	-5.17	16.03	3	Horizontal	75	1.50	-



RSE TX above 1GHz Result

Appendix E.2





RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5200MHz_TX





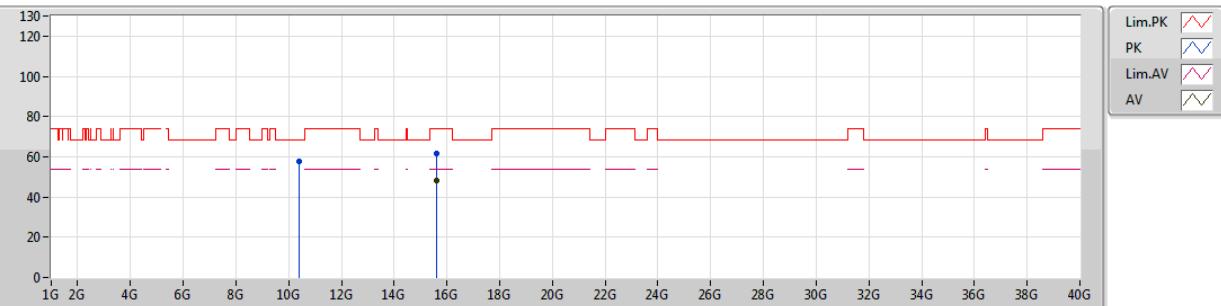
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5200MHz_TX



EUT Z_2TX
Setting 26
04-W-3
FSP(100304)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	10.40416G	57.98	68.20	-10.22	15.12	3	Vertical	325	1.02	-
PK	15.6098G	61.55	74.00	-12.45	15.97	3	Vertical	149	1.50	-
AV	15.60624G	48.16	54.00	-5.84	15.98	3	Vertical	149	1.50	-



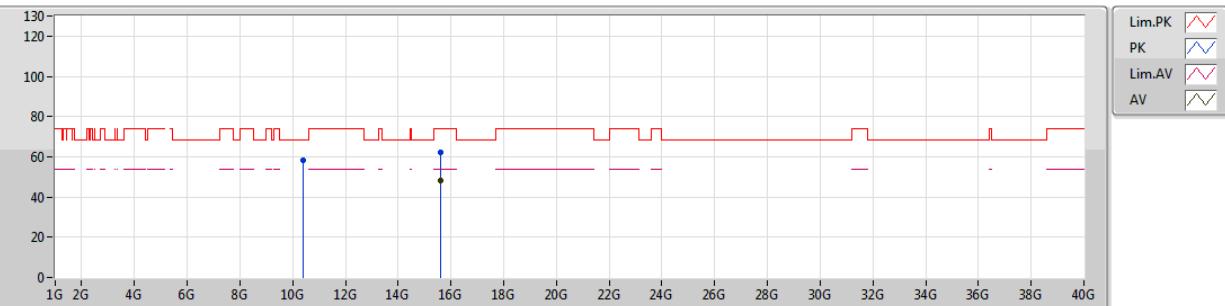
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5200MHz_TX



EUT Z_2TX
Setting 26
04-W-3
FSP(100304)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	10.39384G	58.13	68.20	-10.07	15.12	3	Horizontal	204	1.80	-
PK	15.60658G	62.07	74.00	-11.93	15.97	3	Horizontal	319	1.50	-
AV	15.60542G	48.14	54.00	-5.86	15.98	3	Horizontal	319	1.50	-



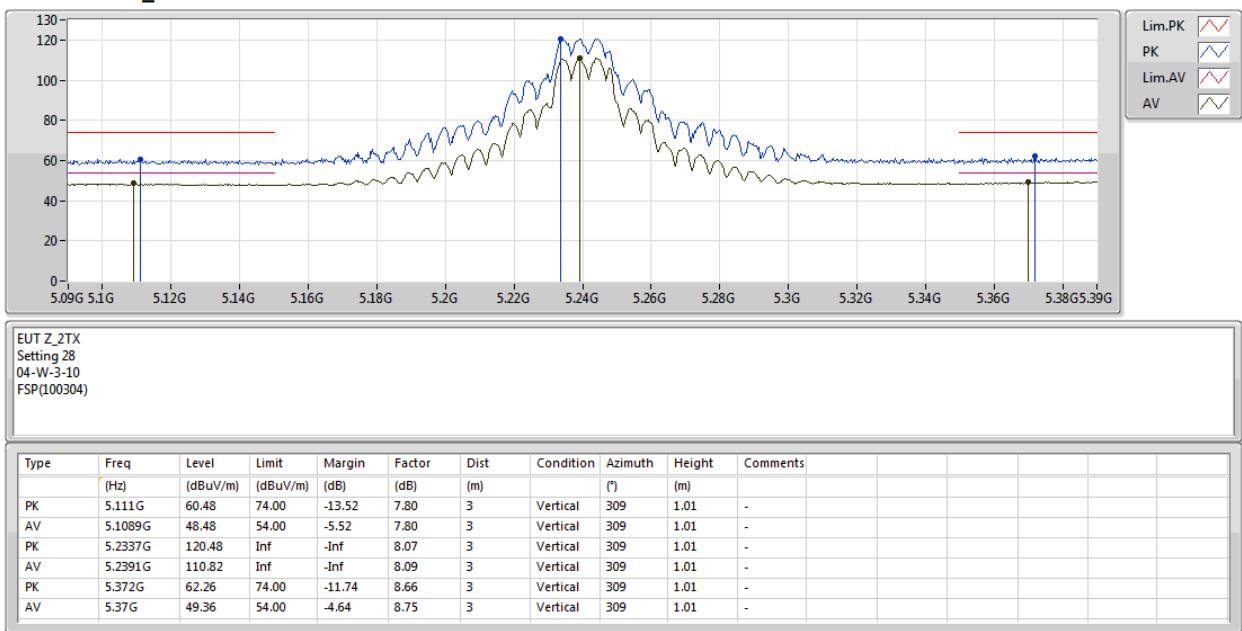
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5240MHz_TX





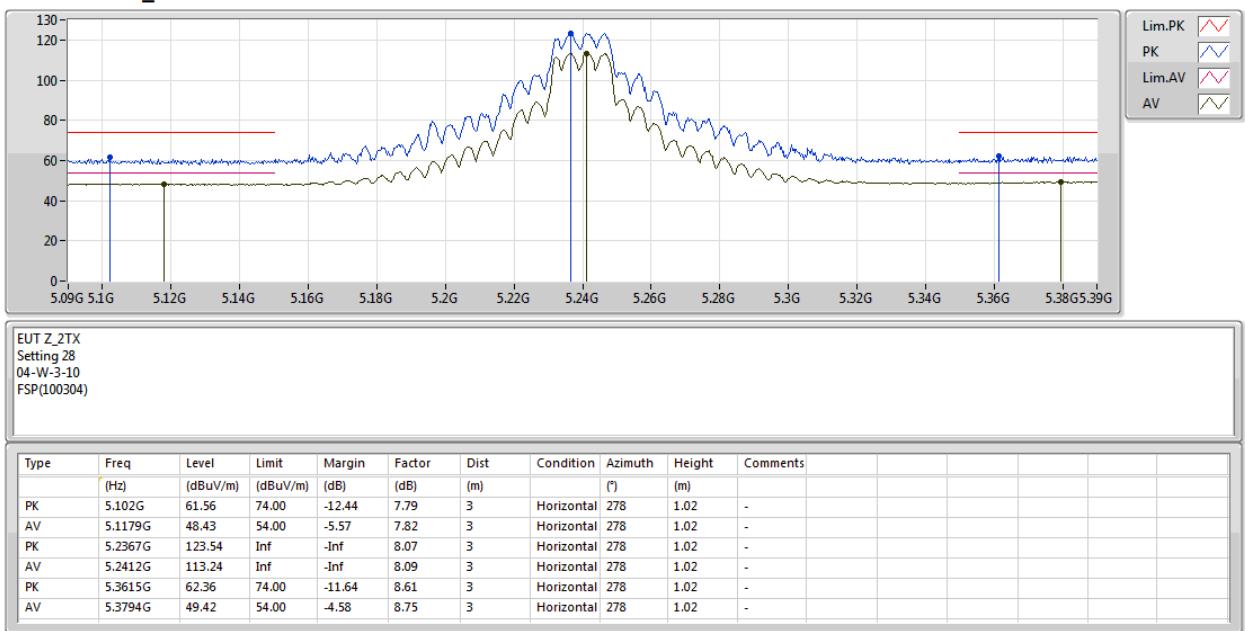
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5240MHz_TX





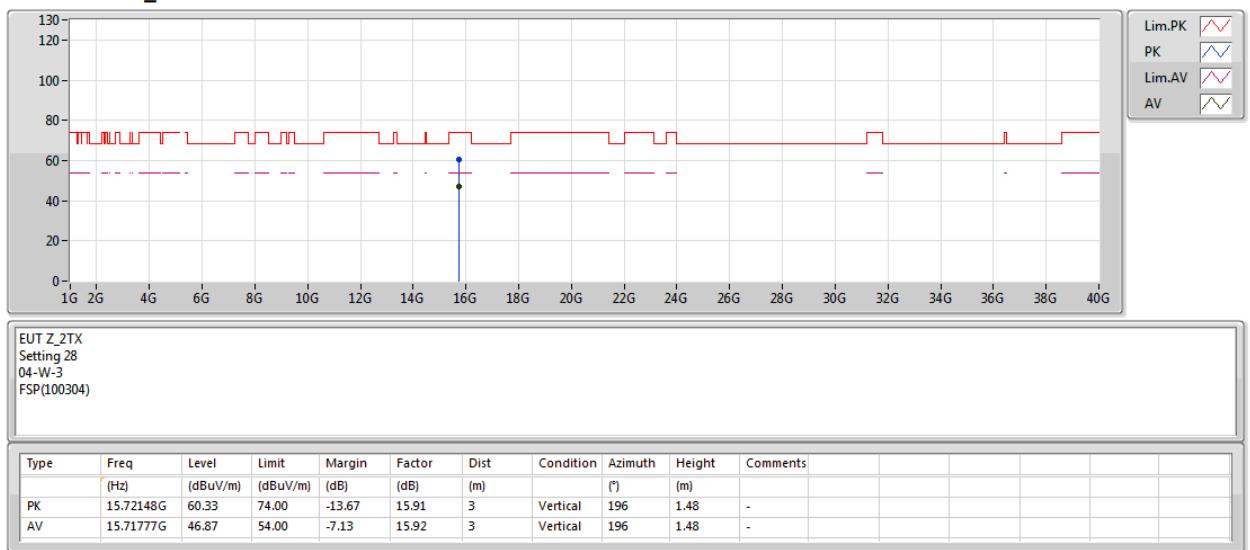
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5240MHz_TX





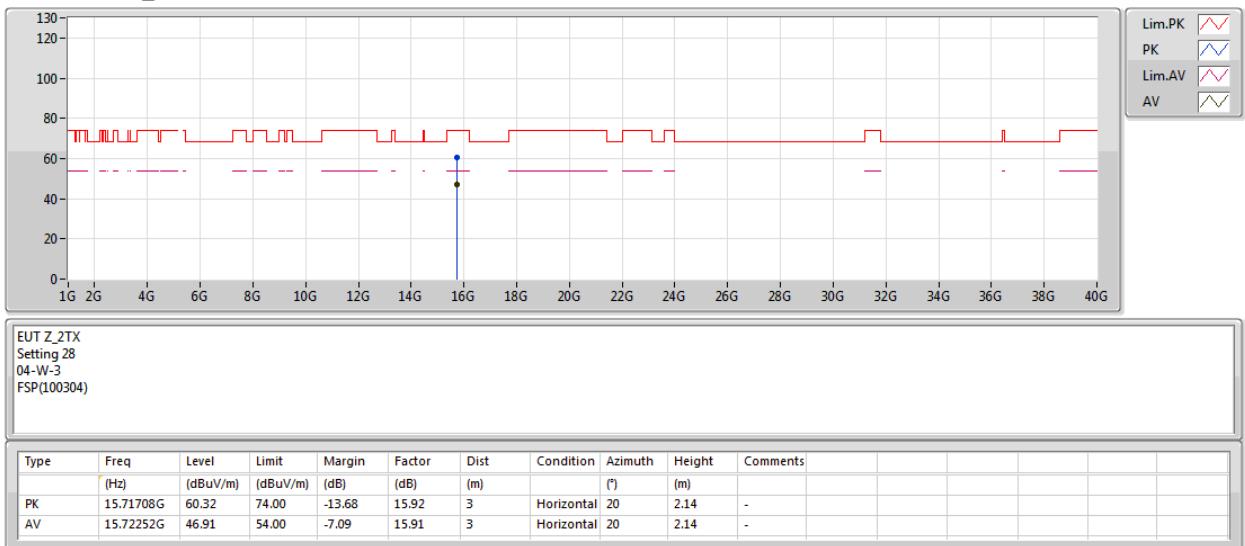
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5240MHz_TX





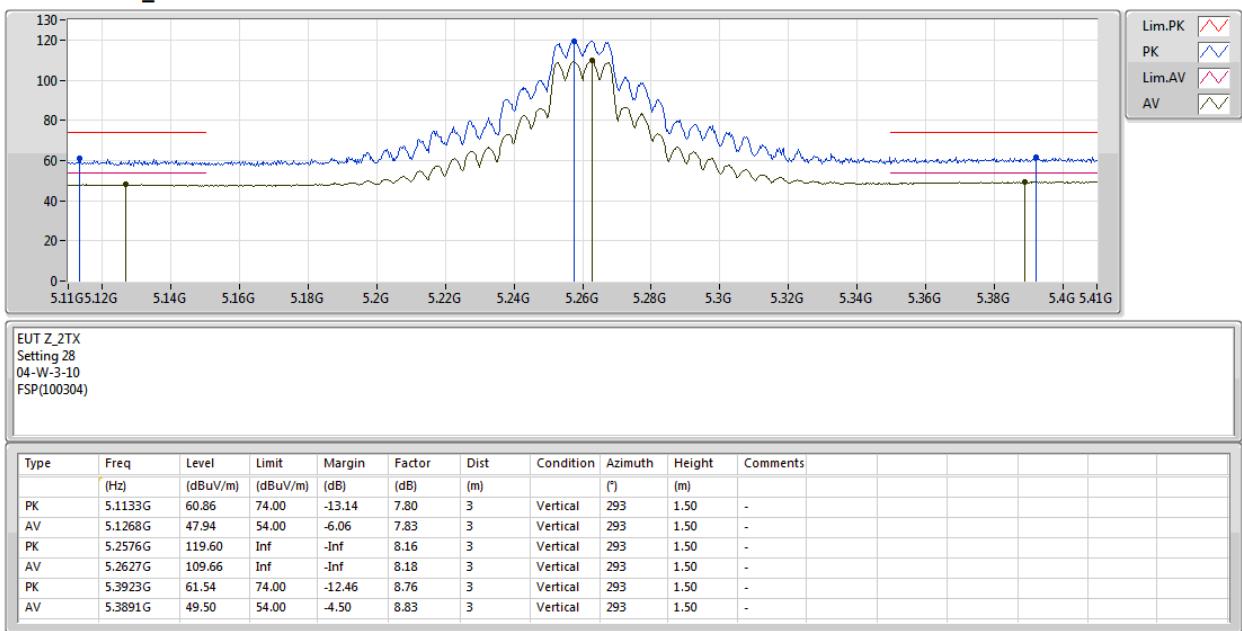
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5260MHz_TX





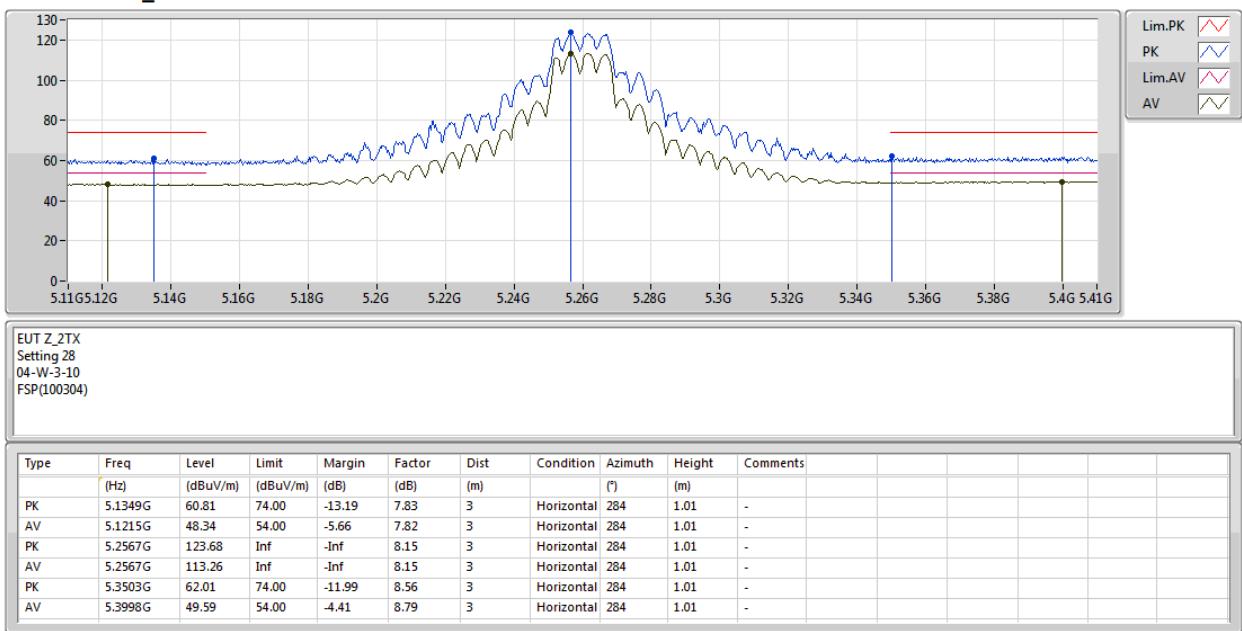
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5260MHz_TX





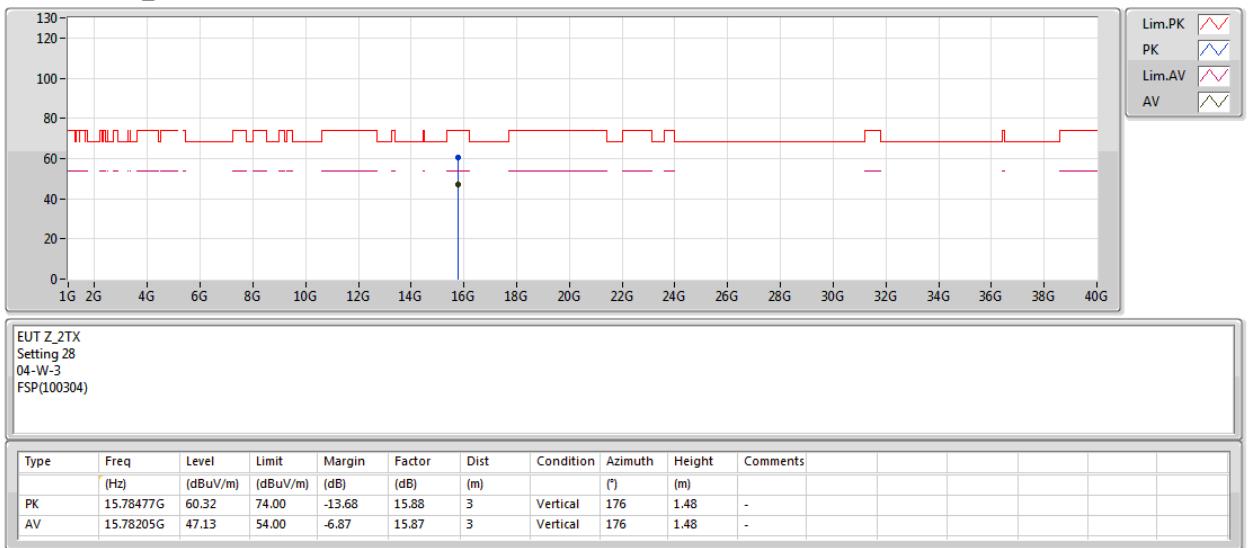
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5260MHz_TX





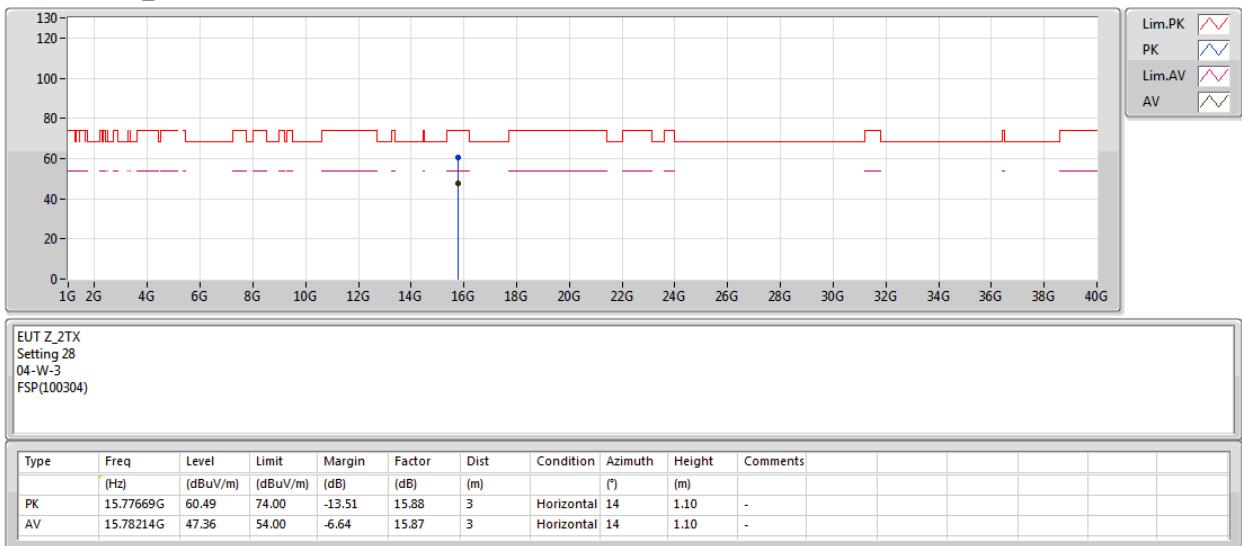
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

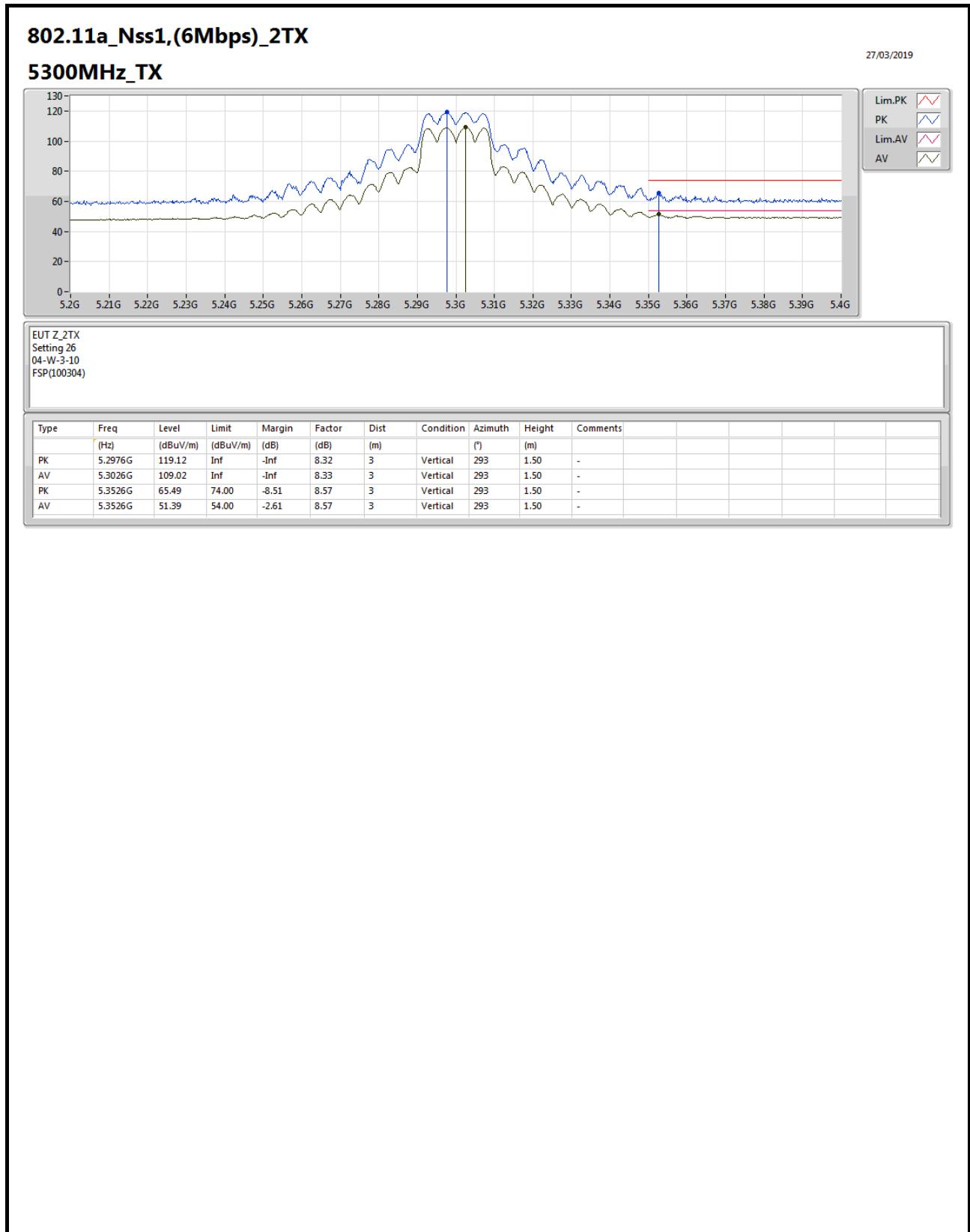
5260MHz_TX





RSE TX above 1GHz Result

Appendix E.2





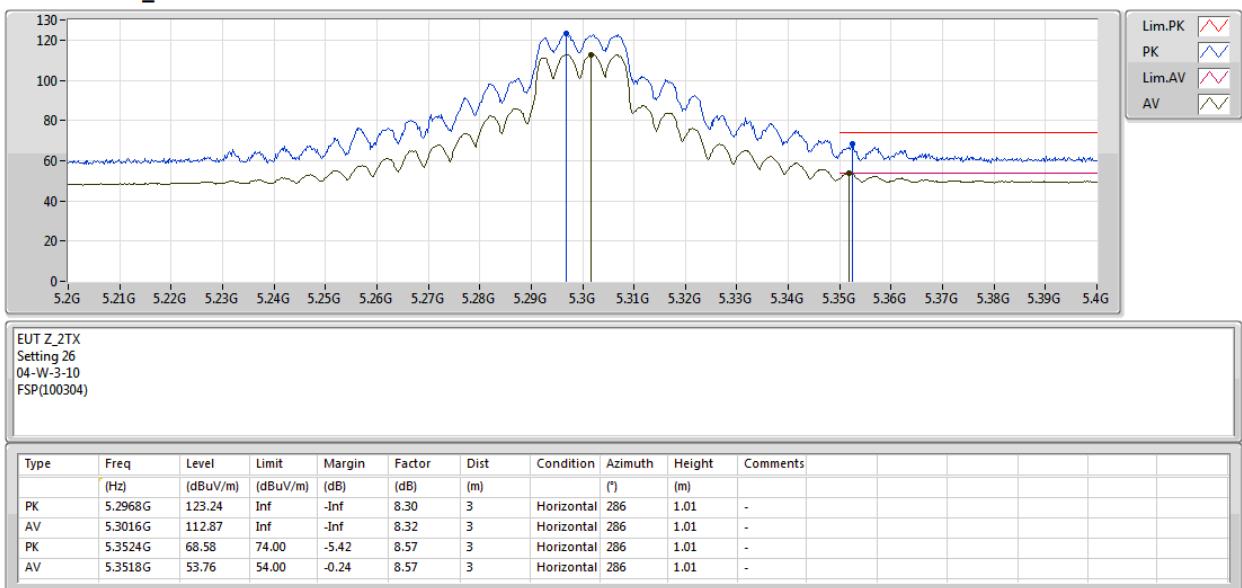
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5300MHz_TX





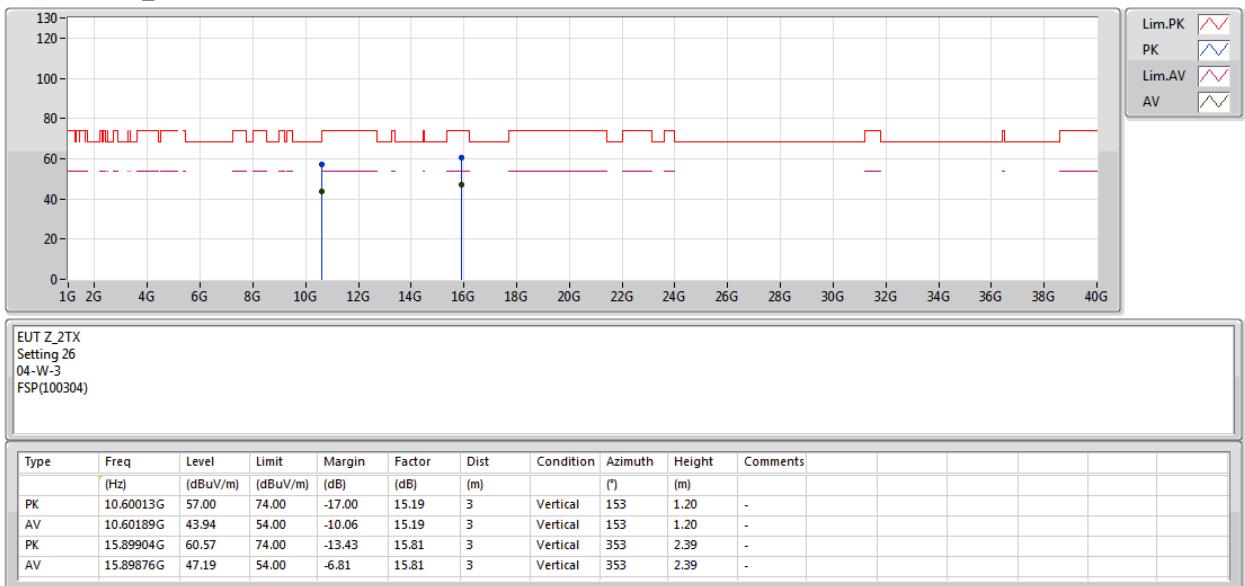
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5300MHz_TX





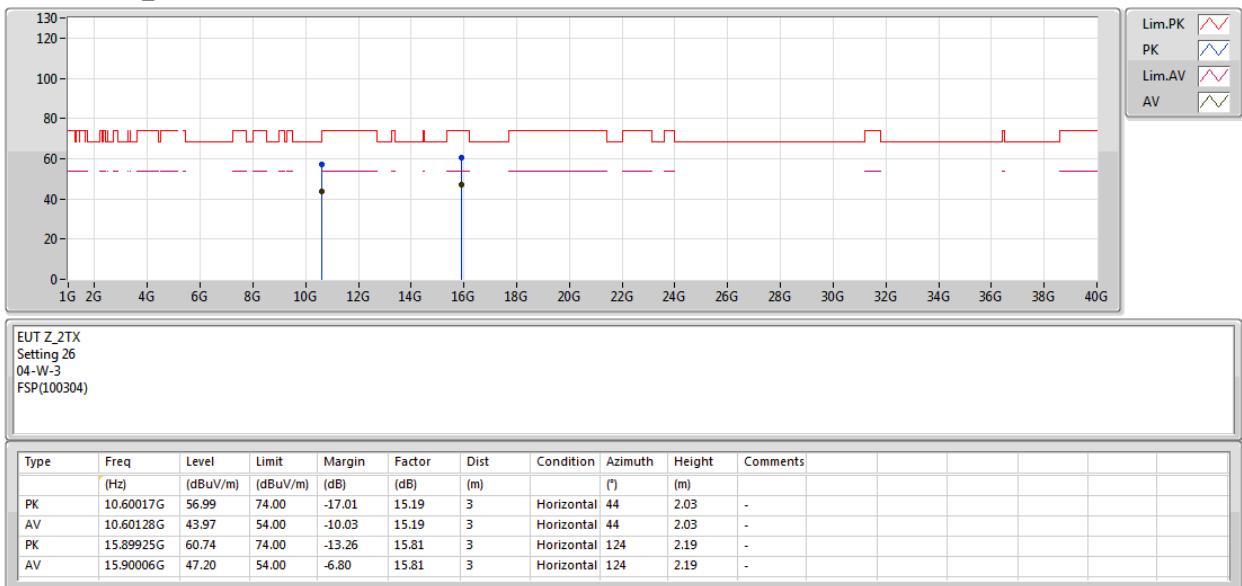
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

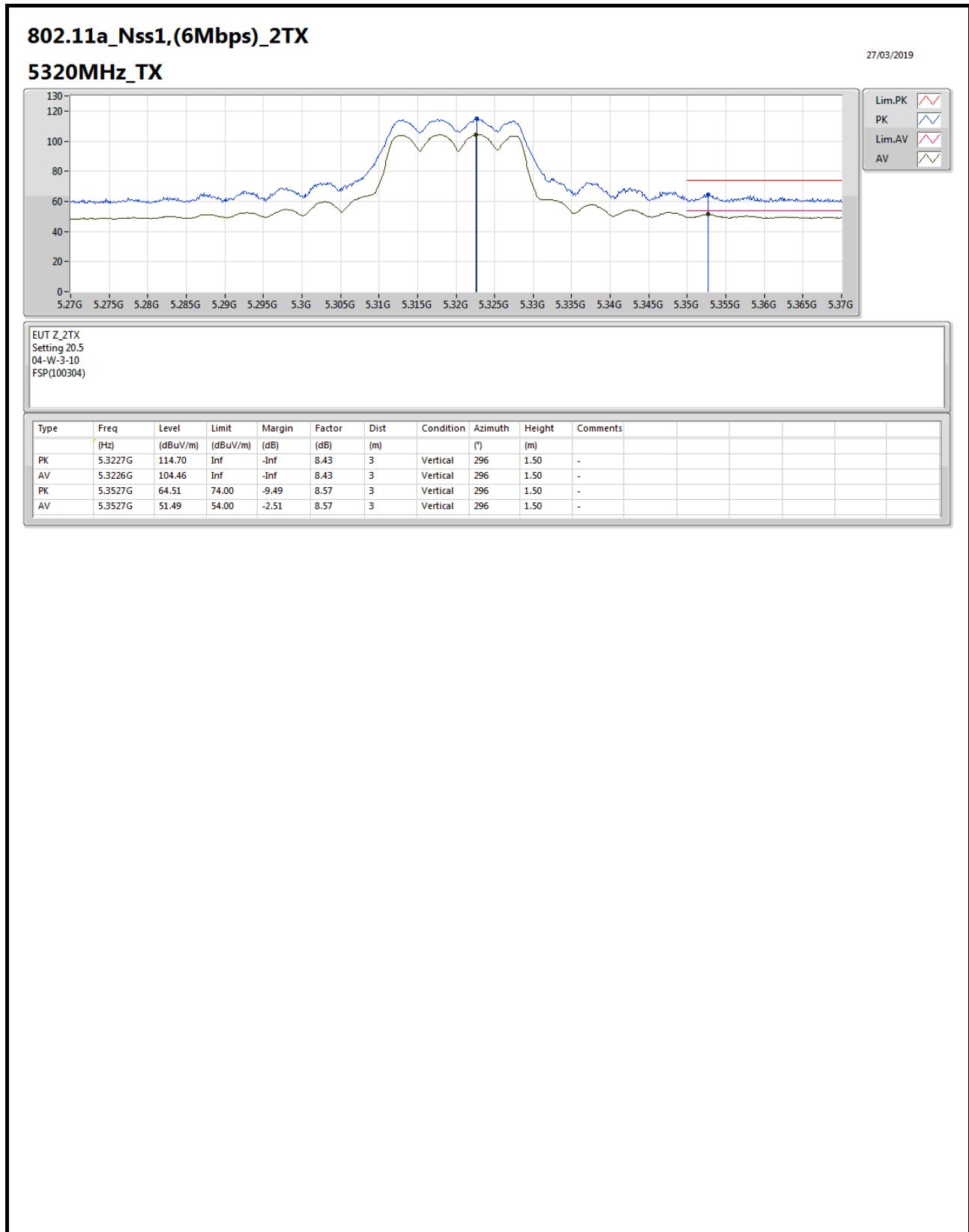
5300MHz_TX





RSE TX above 1GHz Result

Appendix E.2





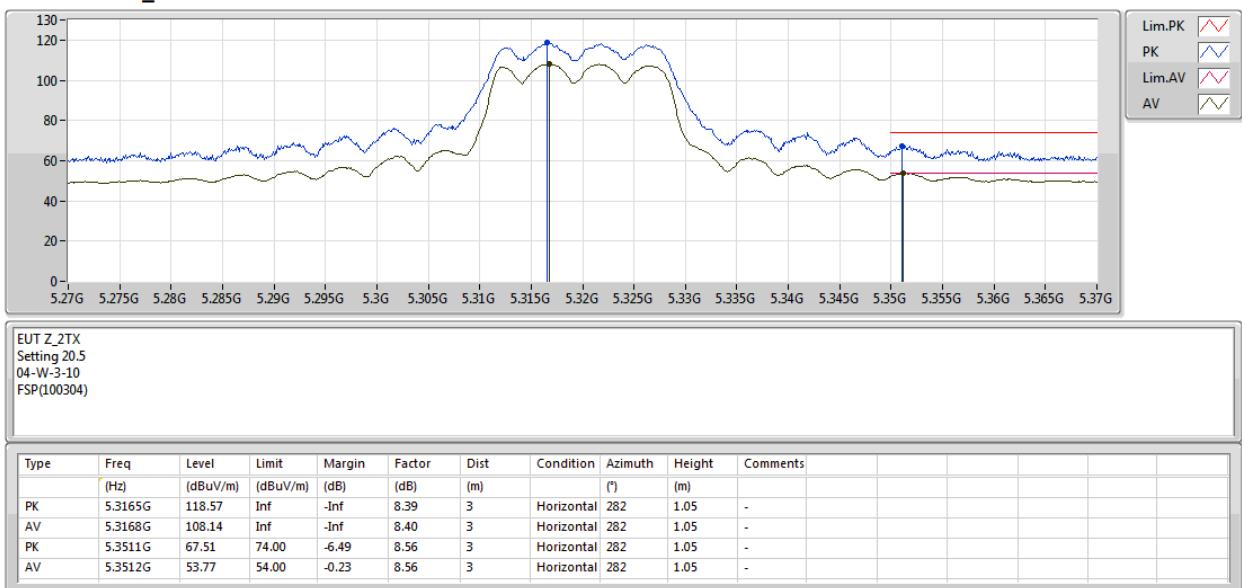
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5320MHz_TX





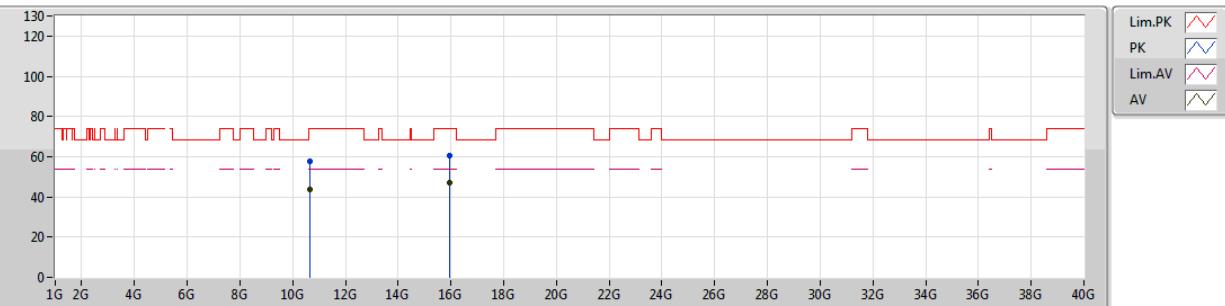
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5320MHz_TX



EUT Z_2TX
Setting 20.5
04-W-3
FSP(100304)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments					
PK	10.64279G	57.75	74.00	-16.25	15.20	3	Vertical	67	1.11	-					
AV	10.63923G	43.80	54.00	-10.20	15.21	3	Vertical	67	1.11	-					
PK	15.95661G	60.42	74.00	-13.58	15.77	3	Vertical	20	1.49	-					
AV	15.96257G	47.01	54.00	-6.99	15.77	3	Vertical	20	1.49	-					



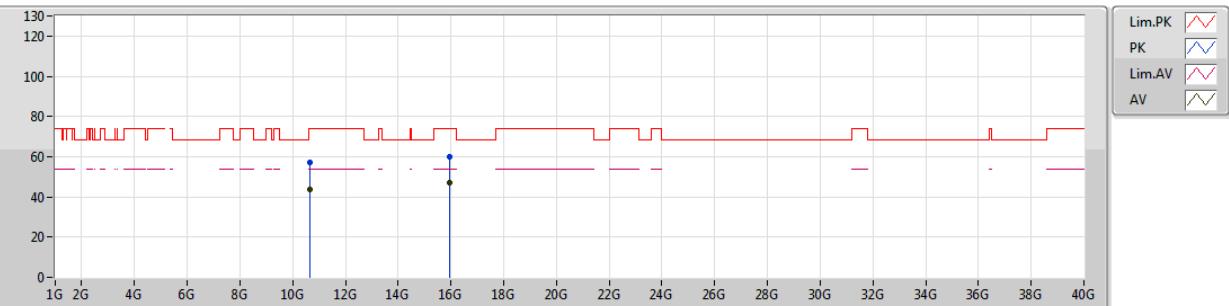
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5320MHz_TX



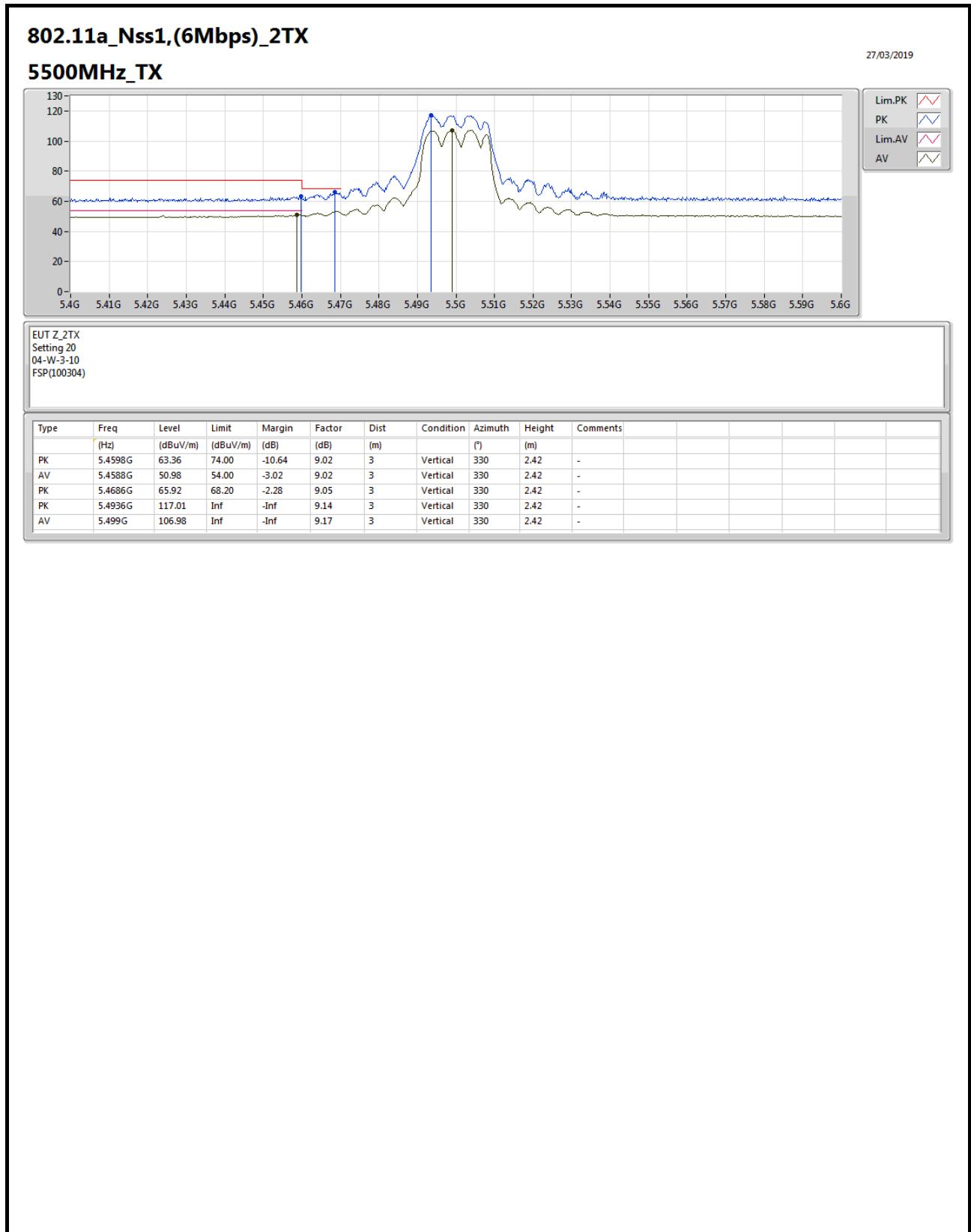
EUT Z_2TX
Setting 20.5
04-W-3
FSP(100304)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments					
PK	10.6391G	57.01	74.00	-16.99	15.21	3	Horizontal	177	2.32	-					
AV	10.63734G	43.75	54.00	-10.25	15.21	3	Horizontal	177	2.32	-					
PK	15.96244G	60.00	74.00	-14.00	15.77	3	Horizontal	64	1.12	-					
AV	15.96036G	46.98	54.00	-7.02	15.77	3	Horizontal	64	1.12	-					



RSE TX above 1GHz Result

Appendix E.2





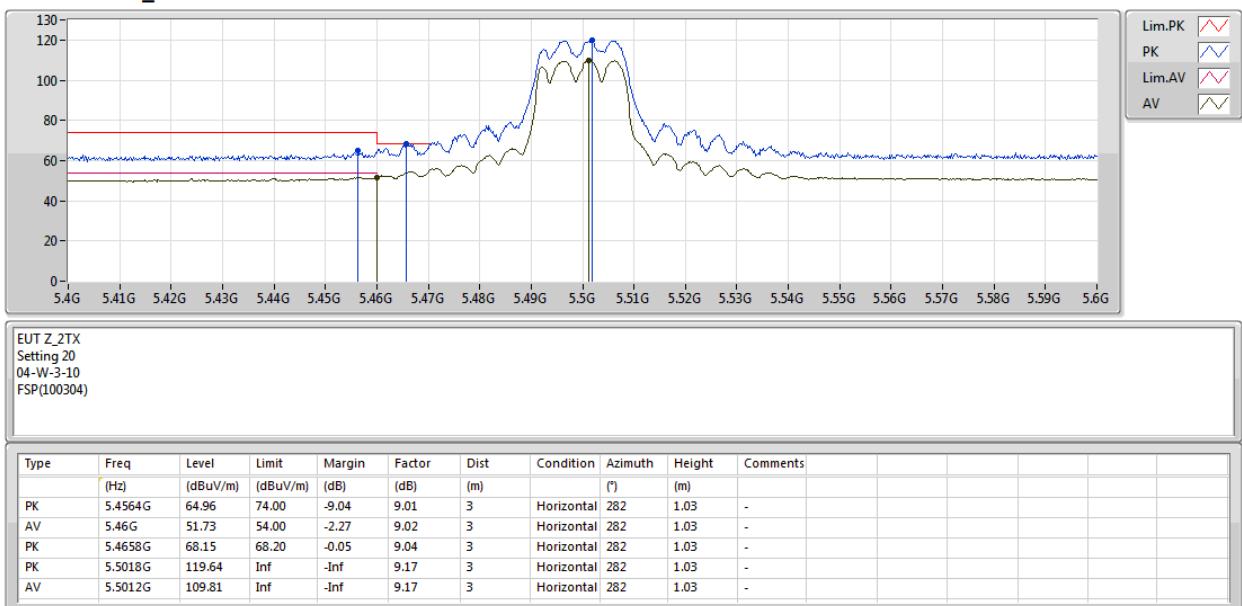
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5500MHz_TX





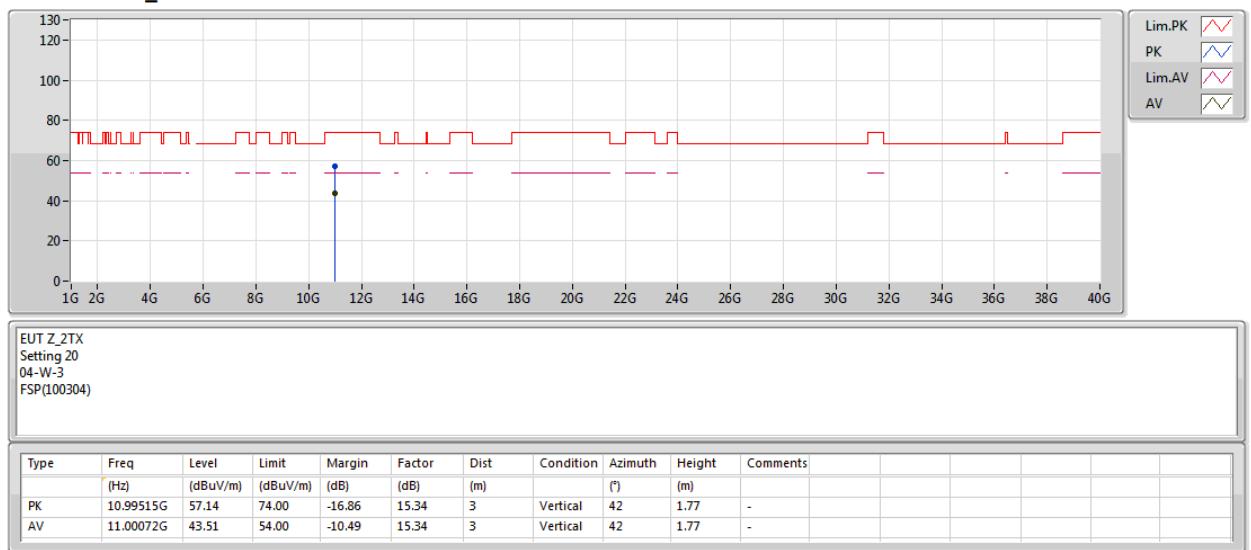
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5500MHz_TX





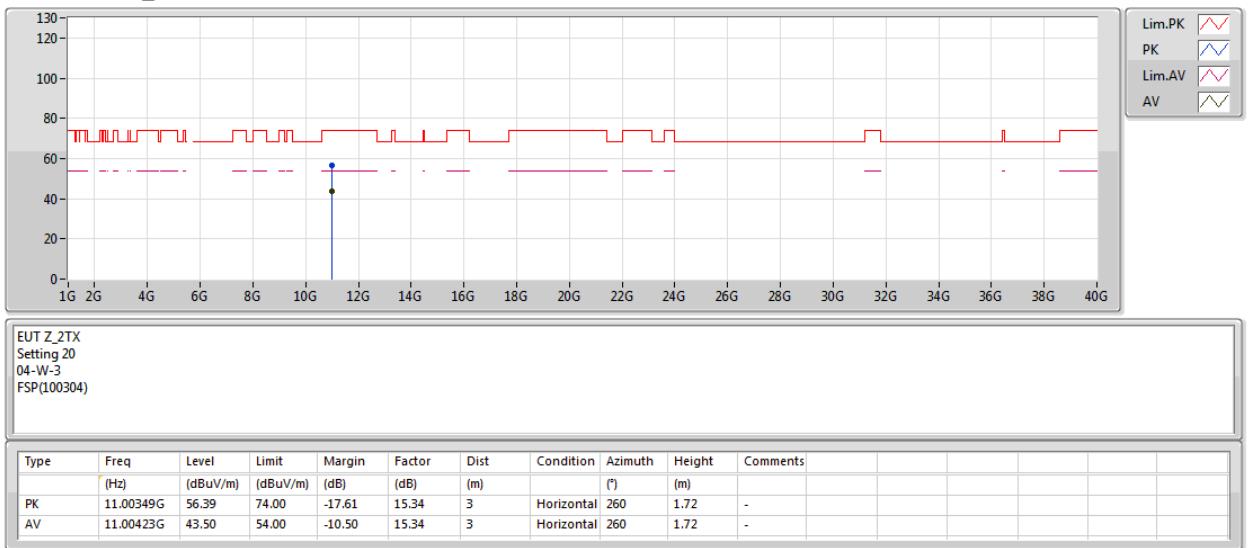
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5500MHz_TX





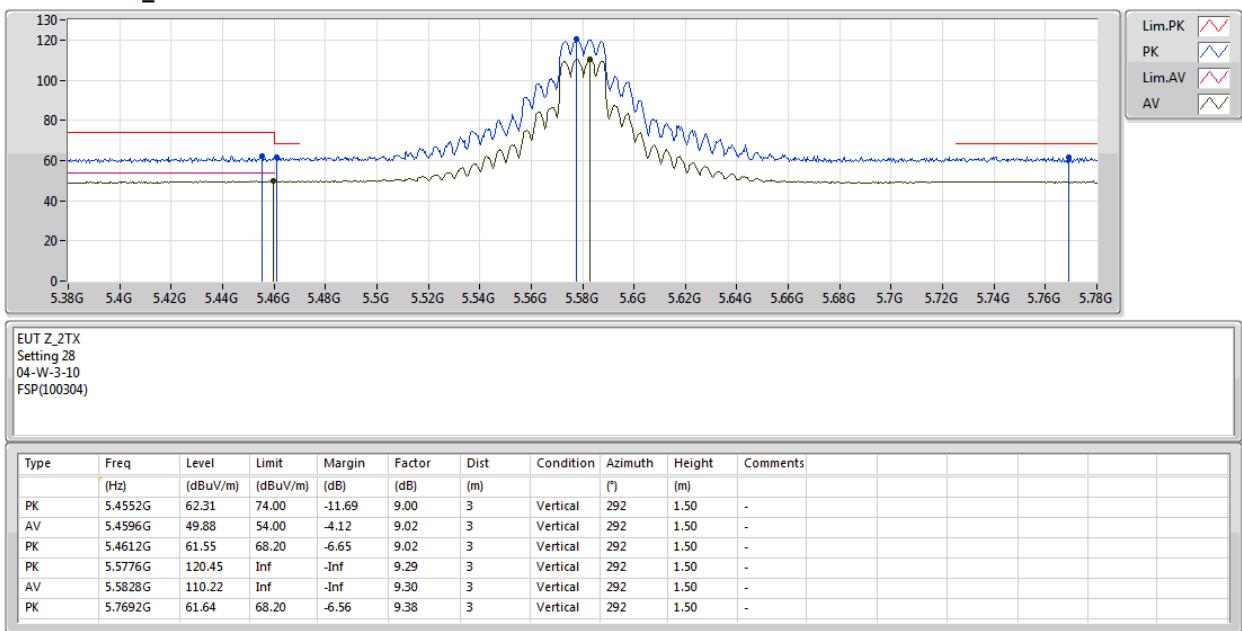
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5580MHz_TX





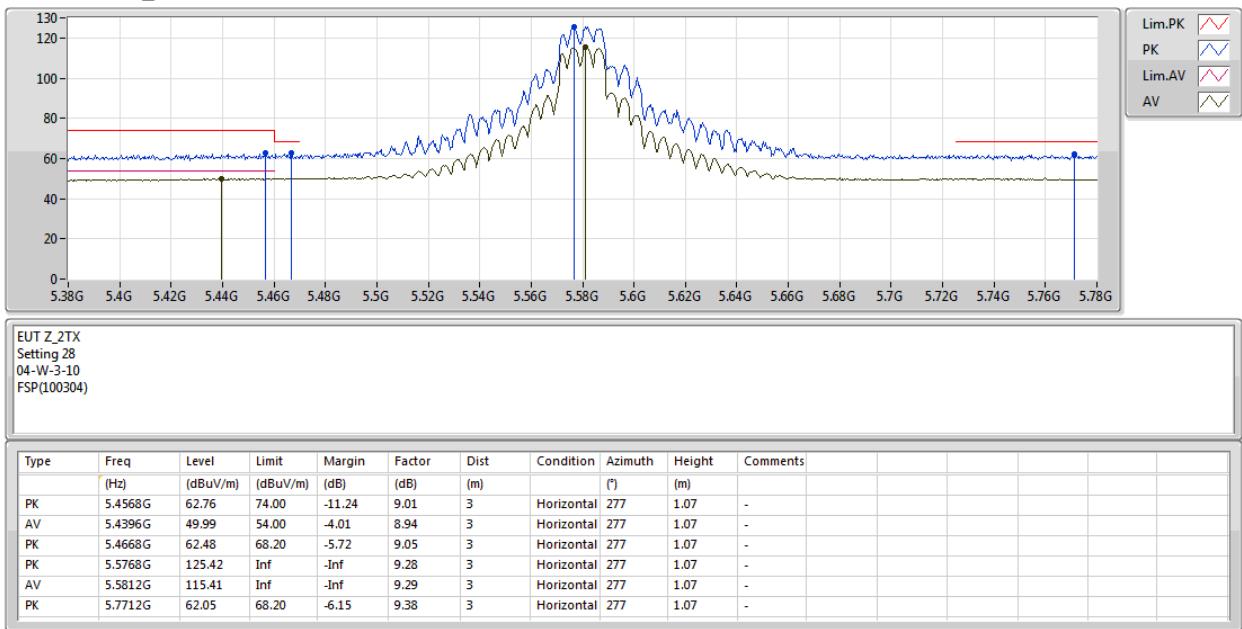
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5580MHz_TX





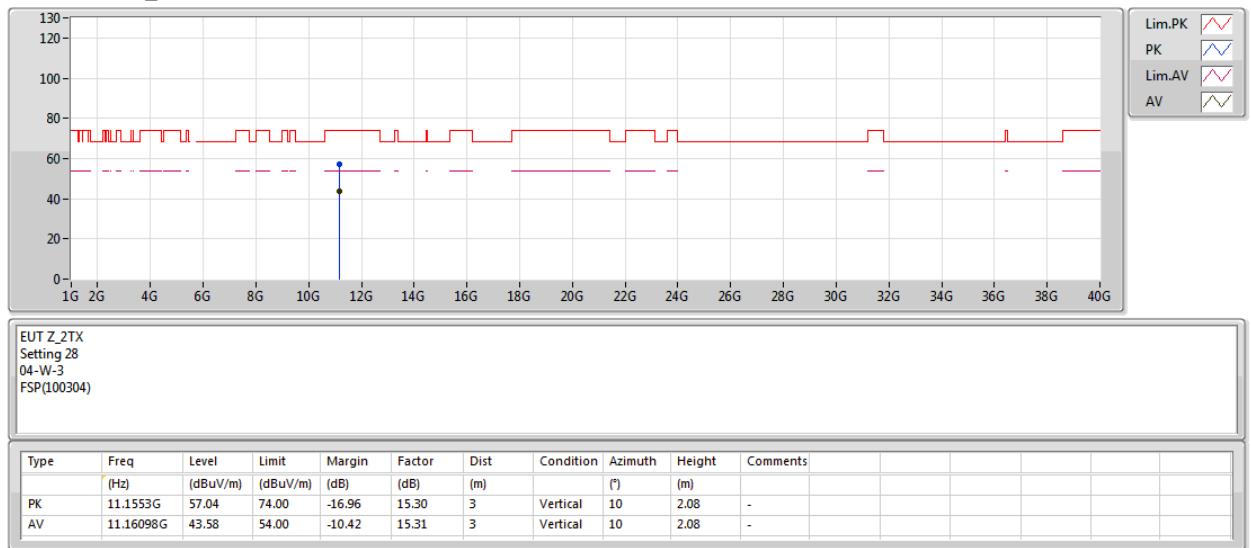
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5580MHz_TX





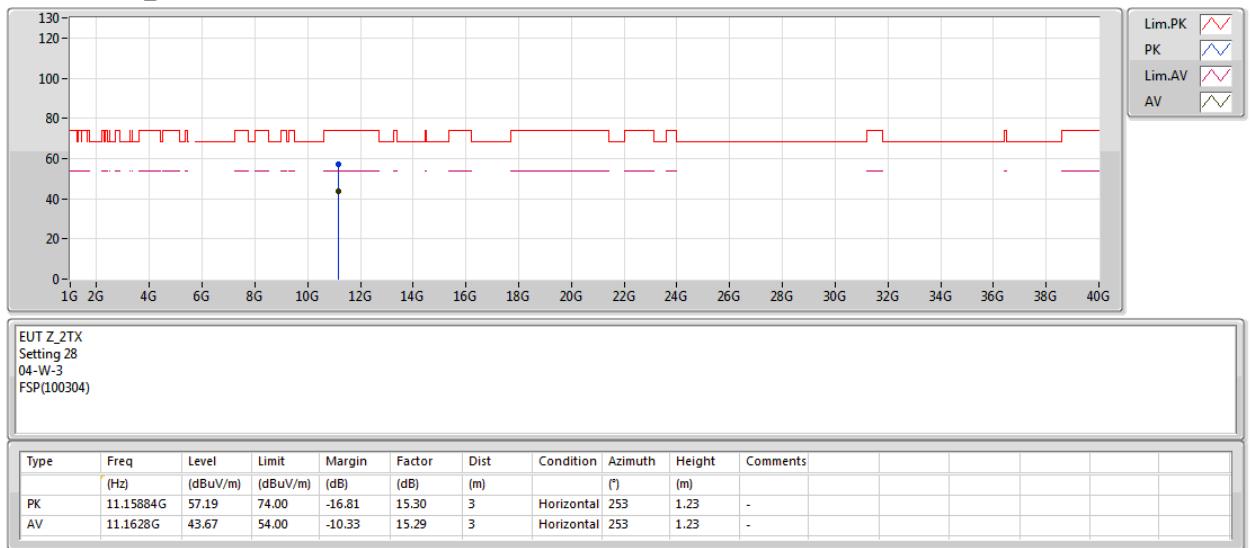
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

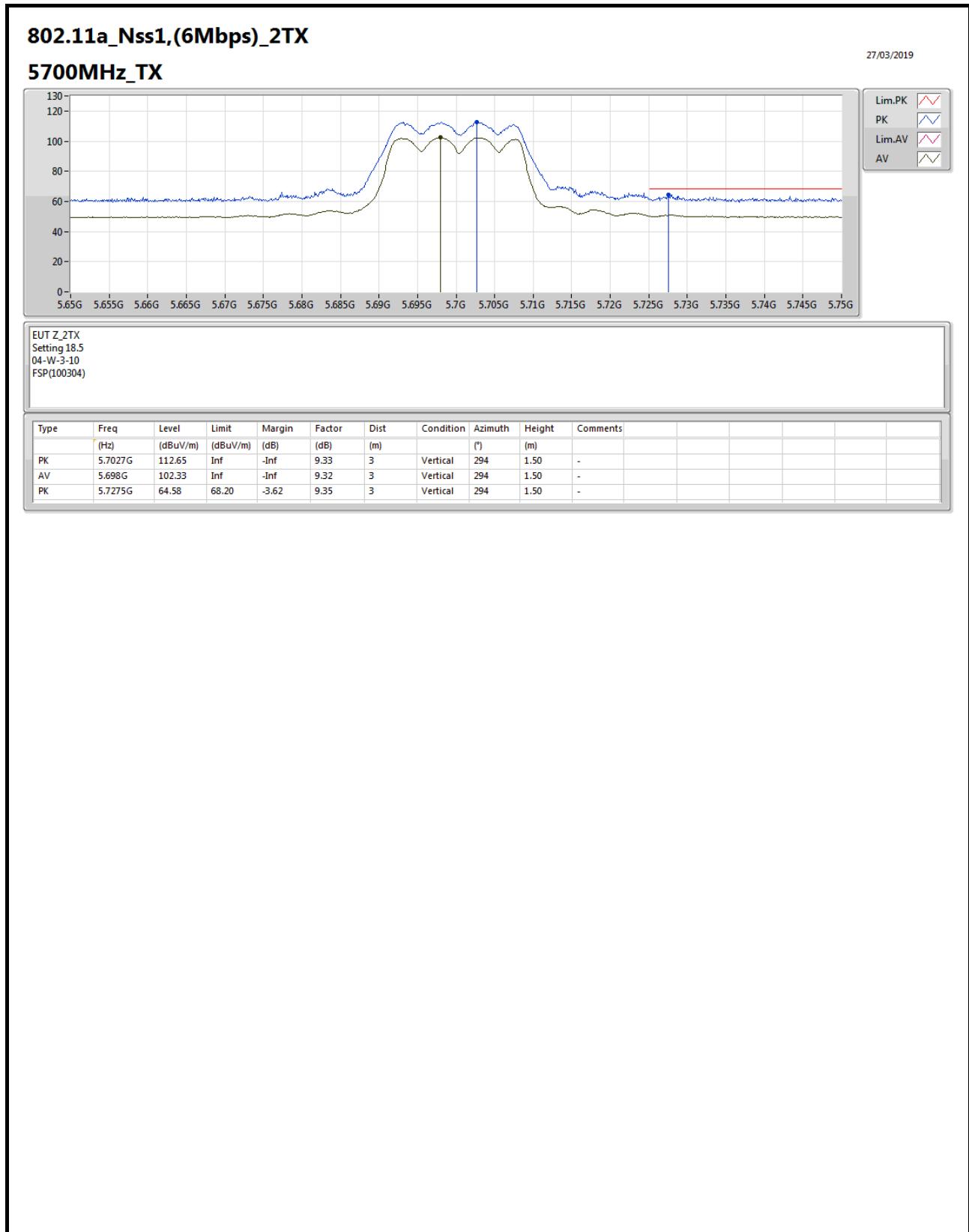
5580MHz_TX





RSE TX above 1GHz Result

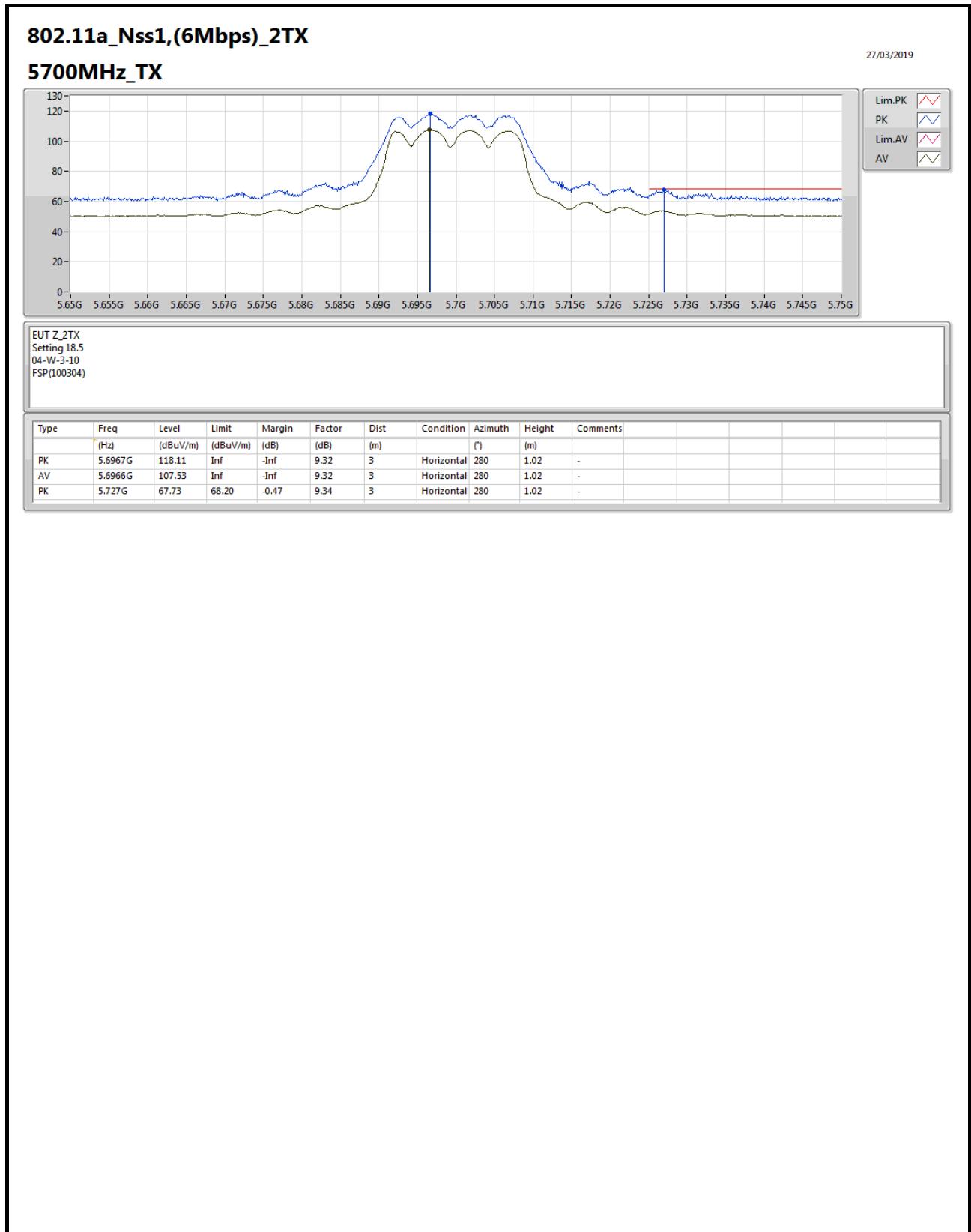
Appendix E.2





RSE TX above 1GHz Result

Appendix E.2





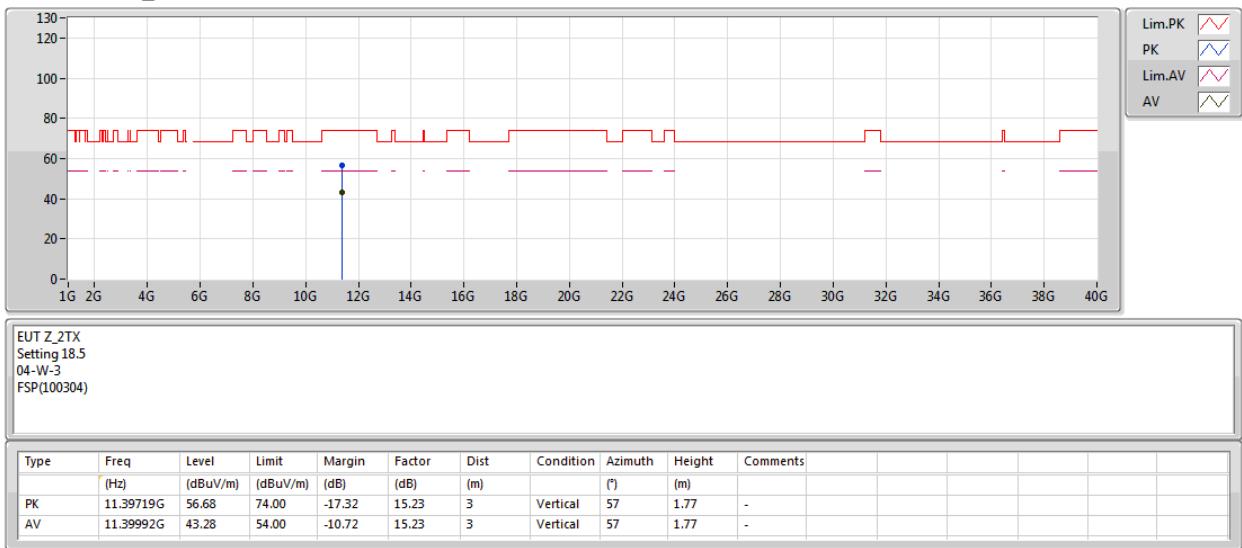
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5700MHz_TX





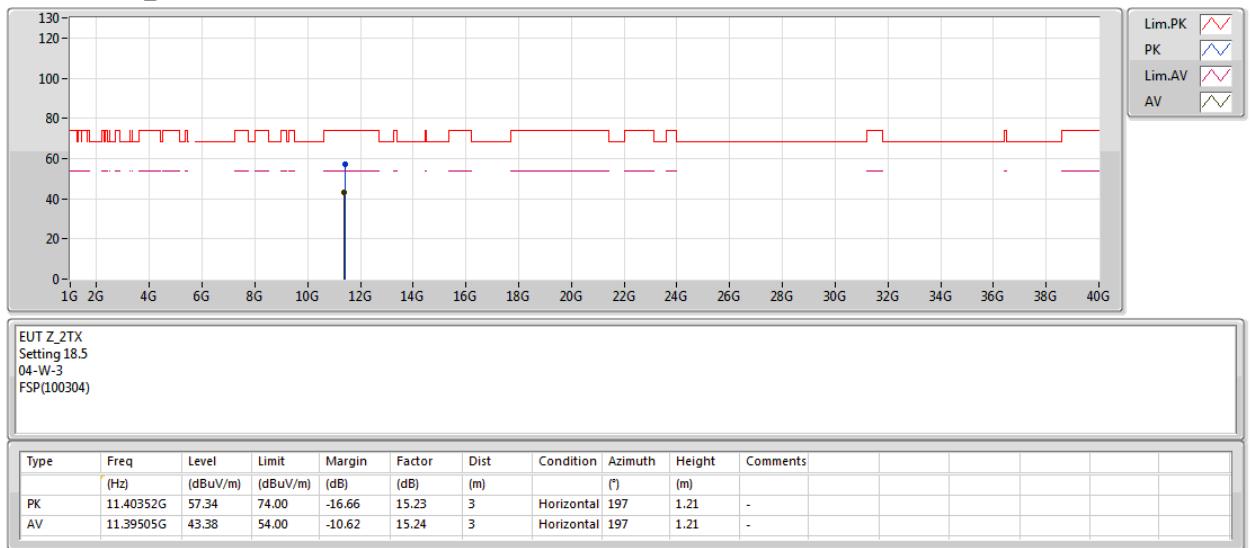
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5700MHz_TX





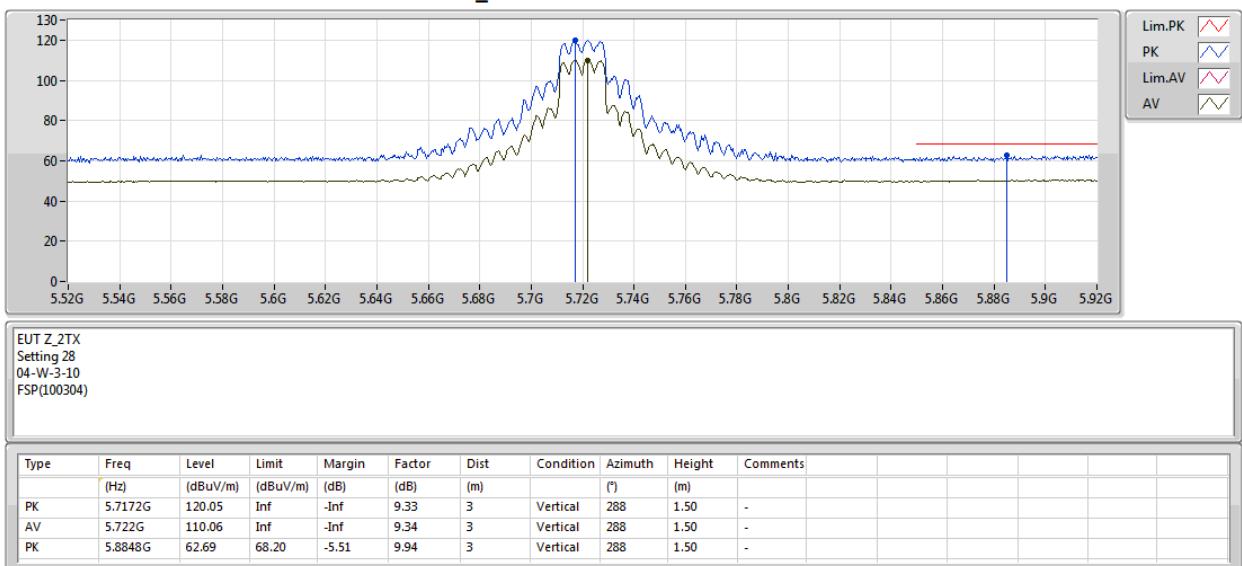
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5720MHz Straddle 5.47-5.725GHz_TX





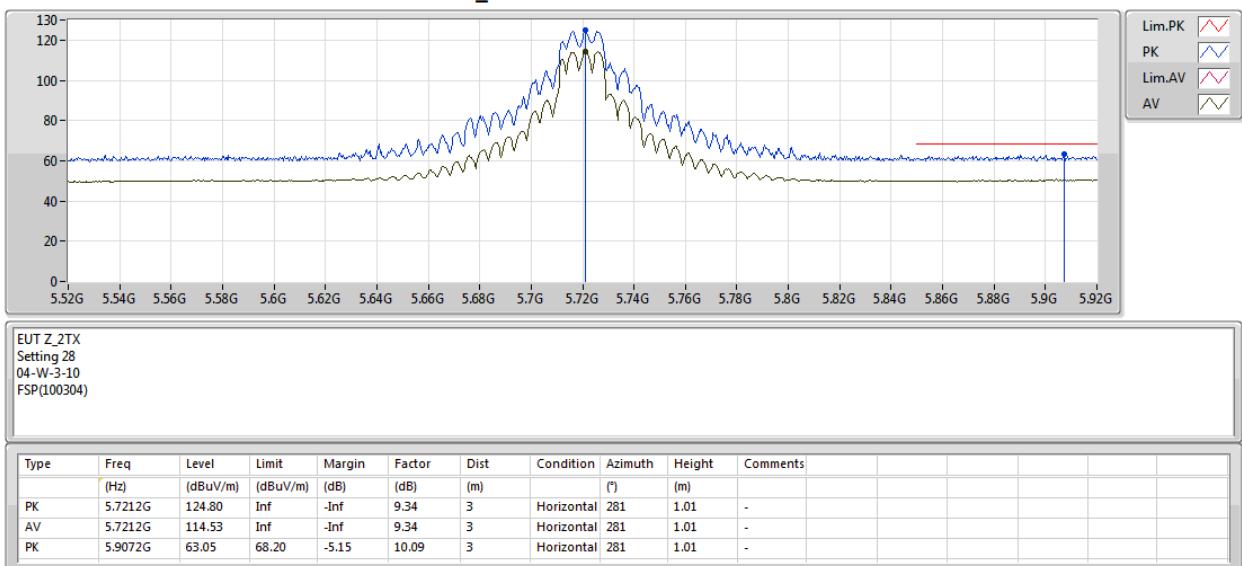
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5720MHz Straddle 5.47-5.725GHz_TX





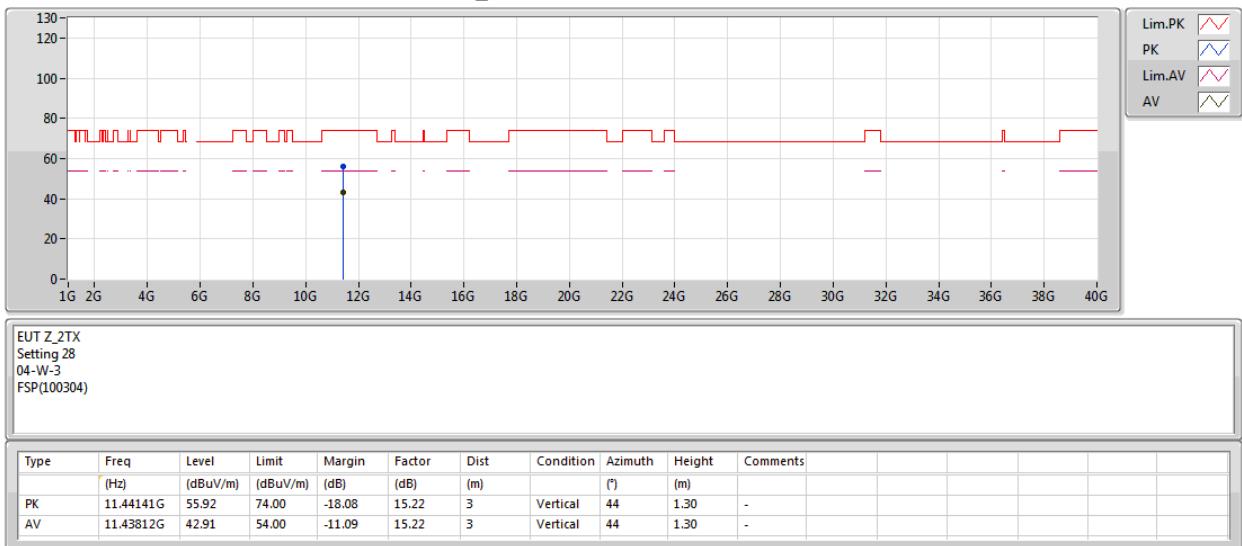
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5720MHz Straddle 5.47-5.725GHz_TX





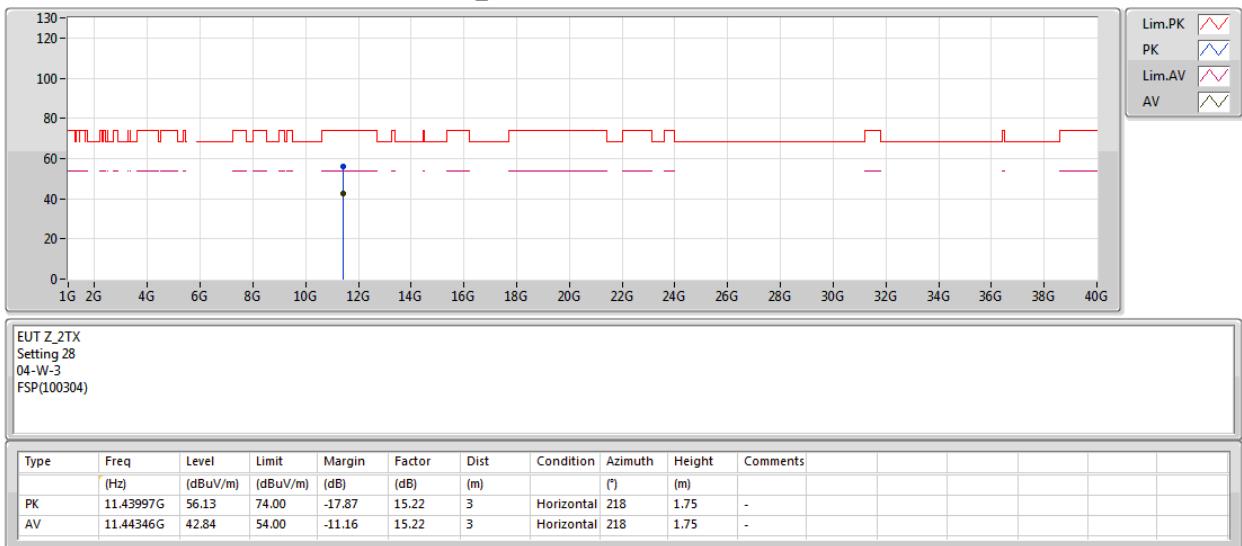
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5720MHz Straddle 5.47-5.725GHz_TX





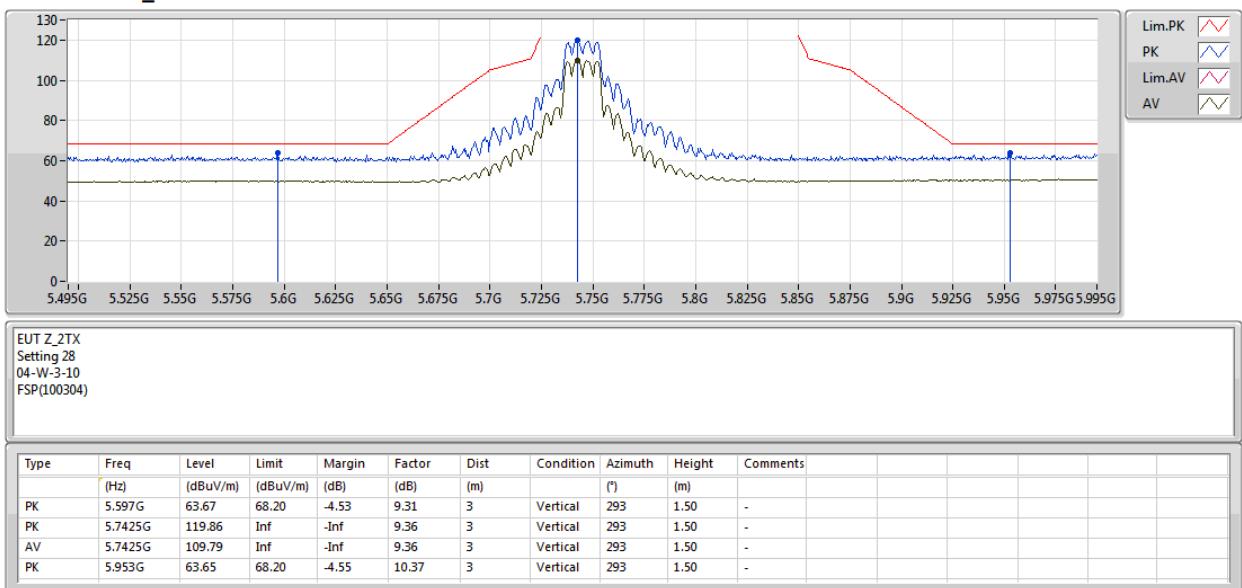
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

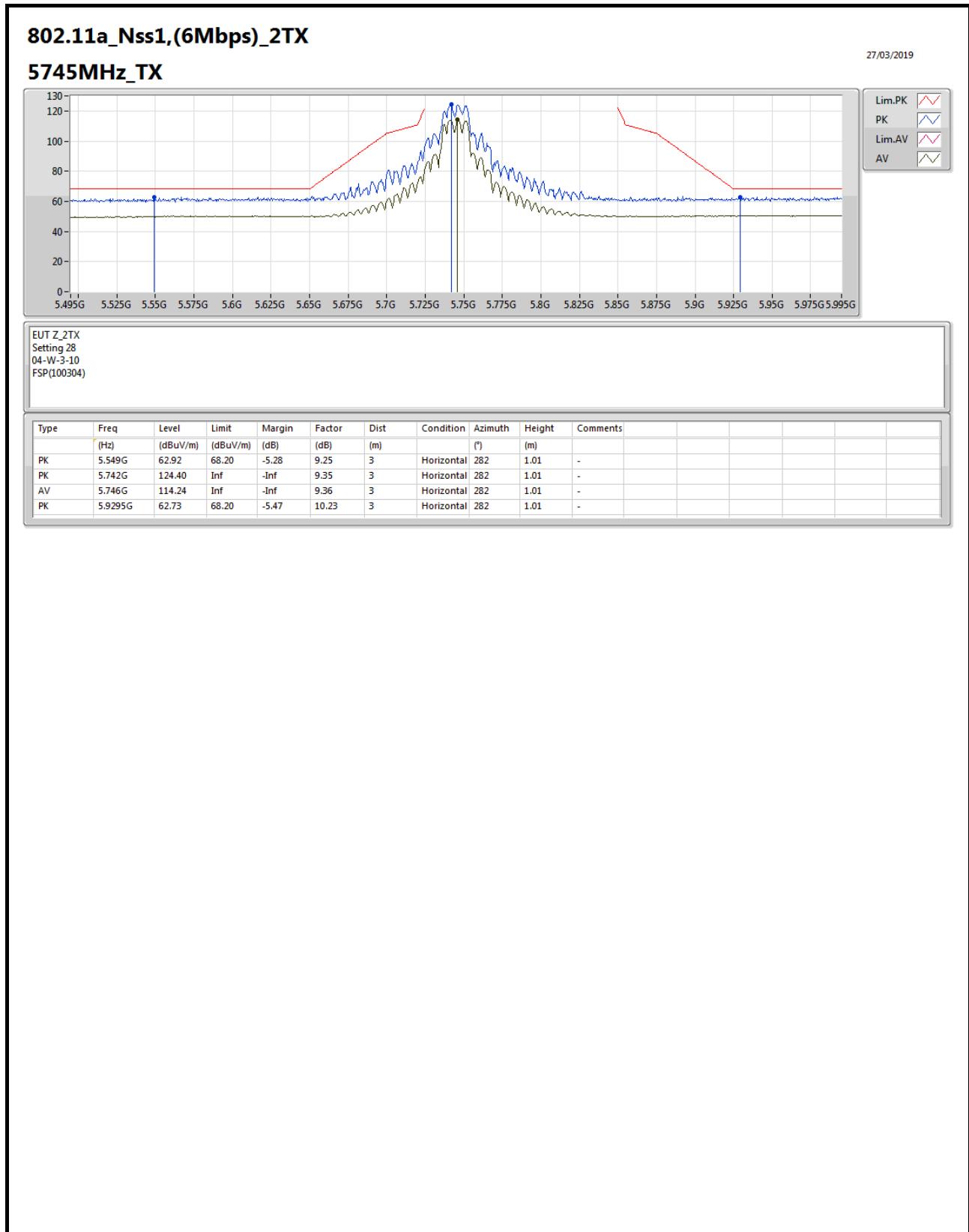
5745MHz_TX





RSE TX above 1GHz Result

Appendix E.2





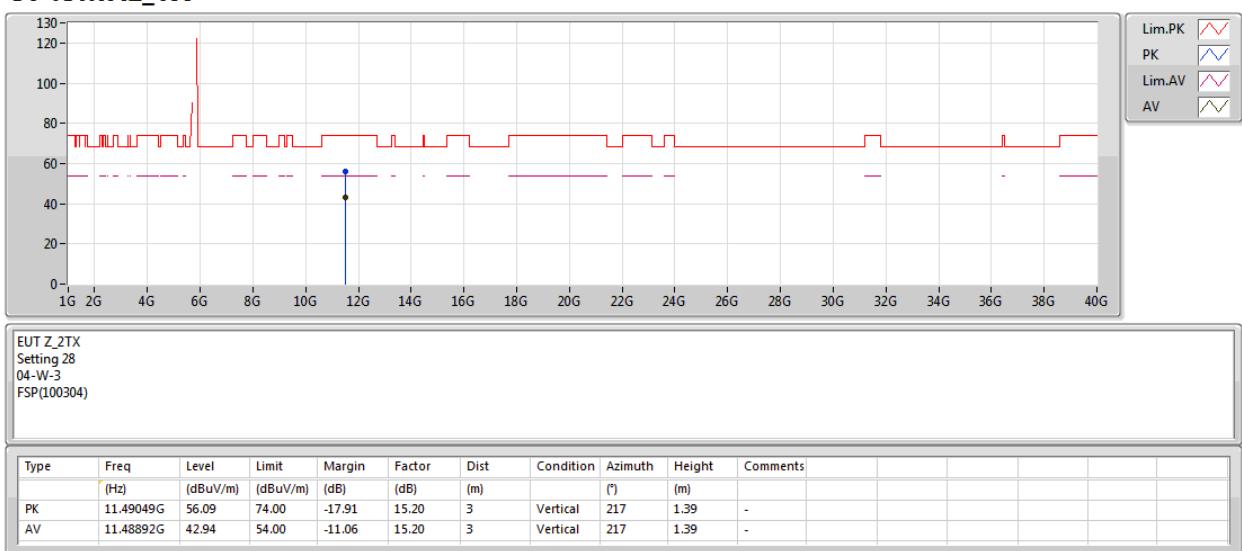
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5745MHz_TX





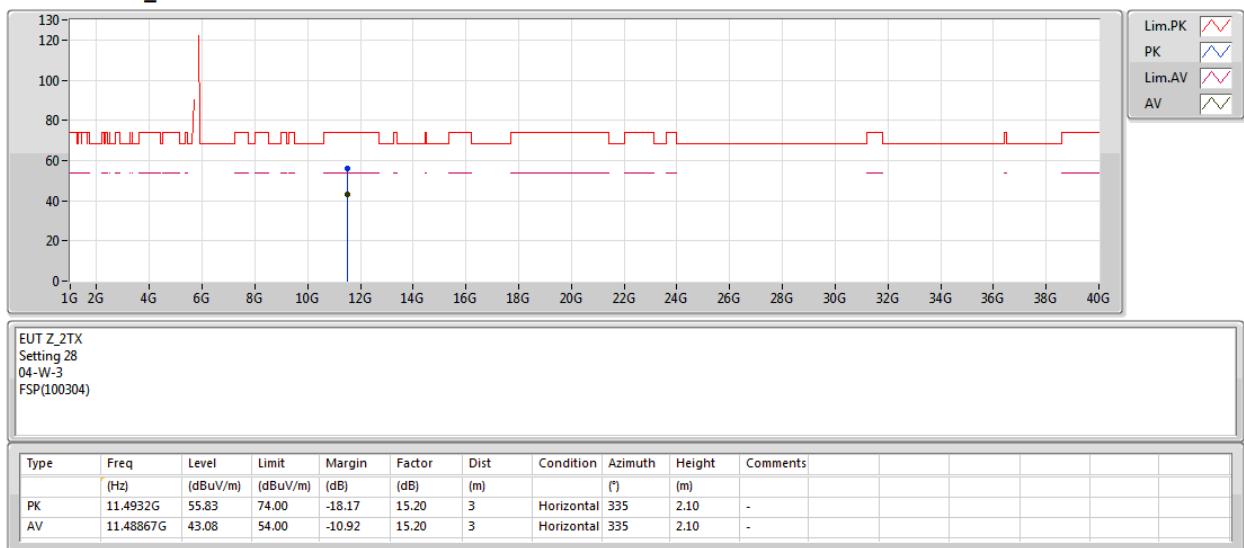
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5745MHz_TX





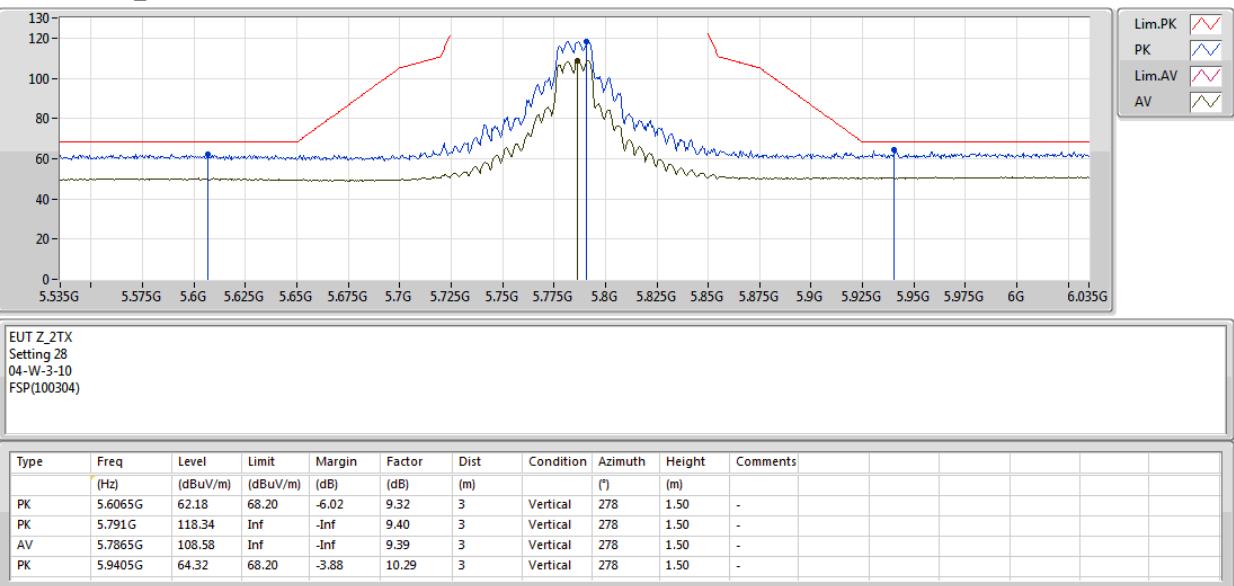
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5785MHz_TX





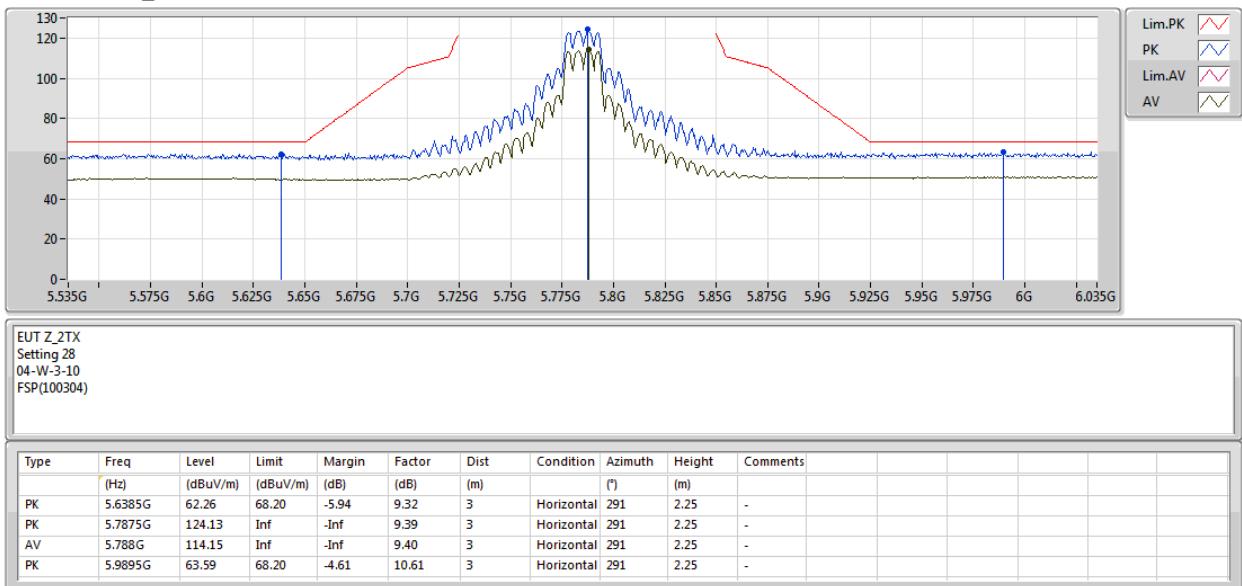
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5785MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5785MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5785MHz_TX





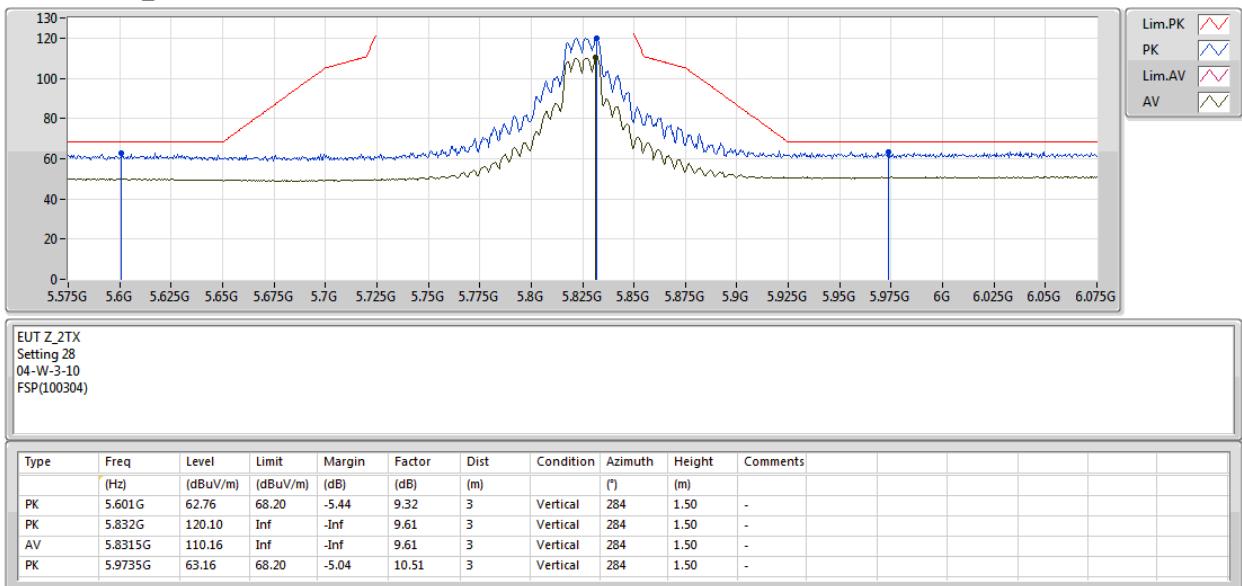
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5825MHz_TX





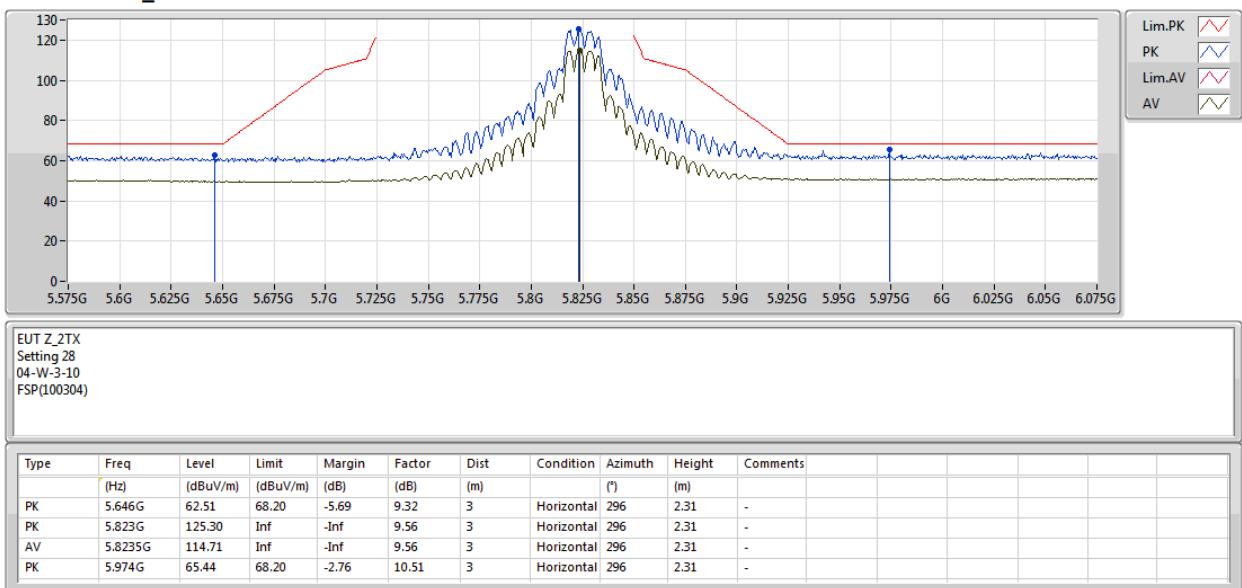
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5825MHz_TX





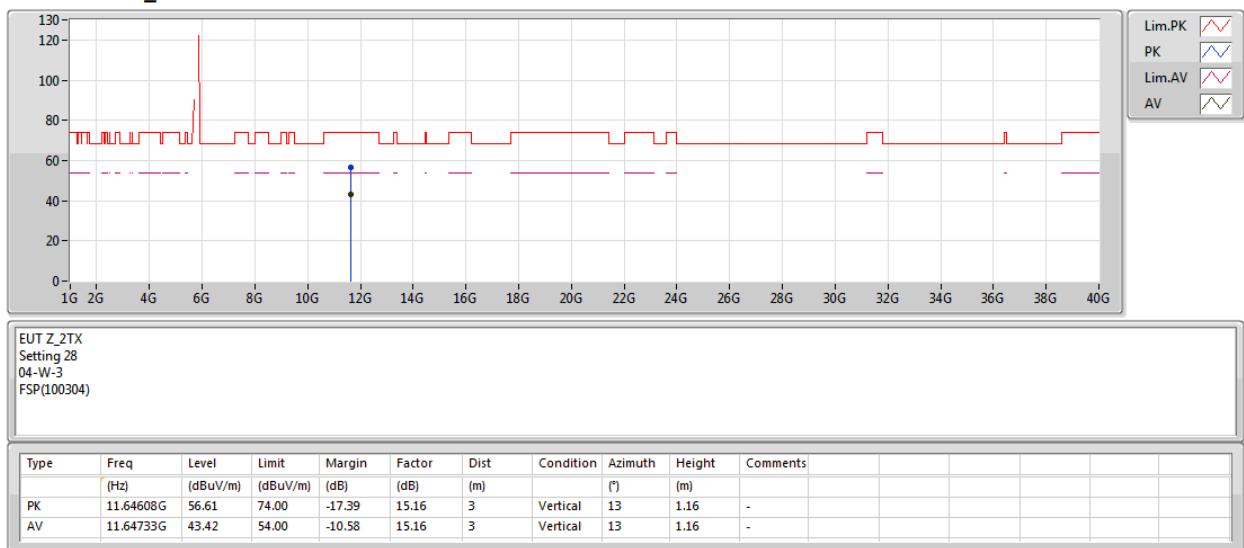
RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5825MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11a_Nss1,(6Mbps)_2TX

27/03/2019

5825MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5180MHz_TX





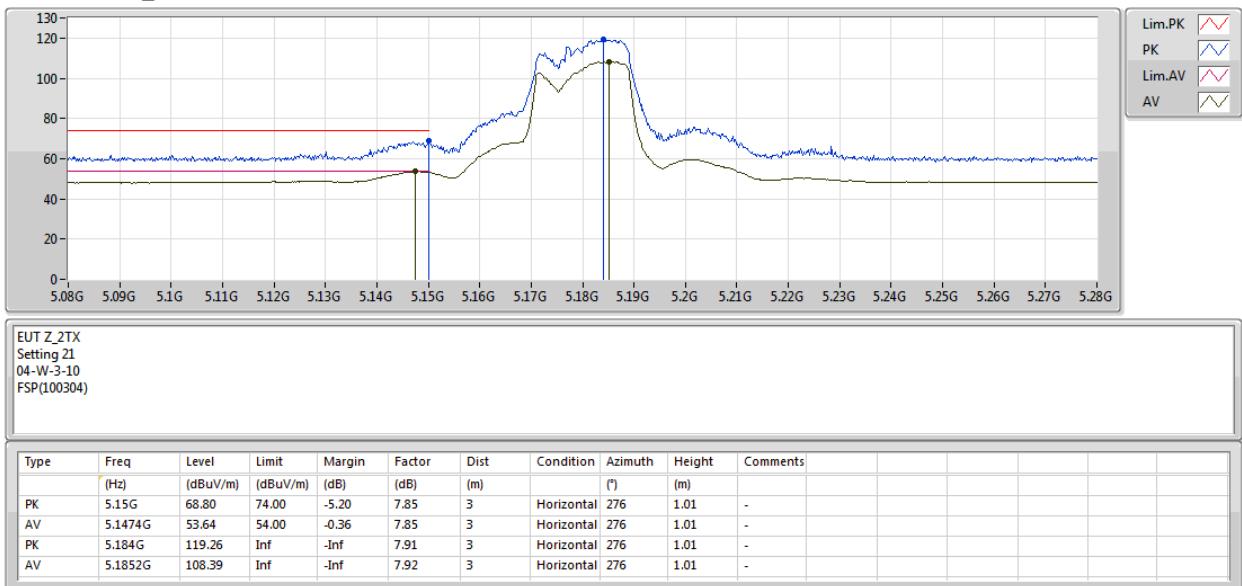
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

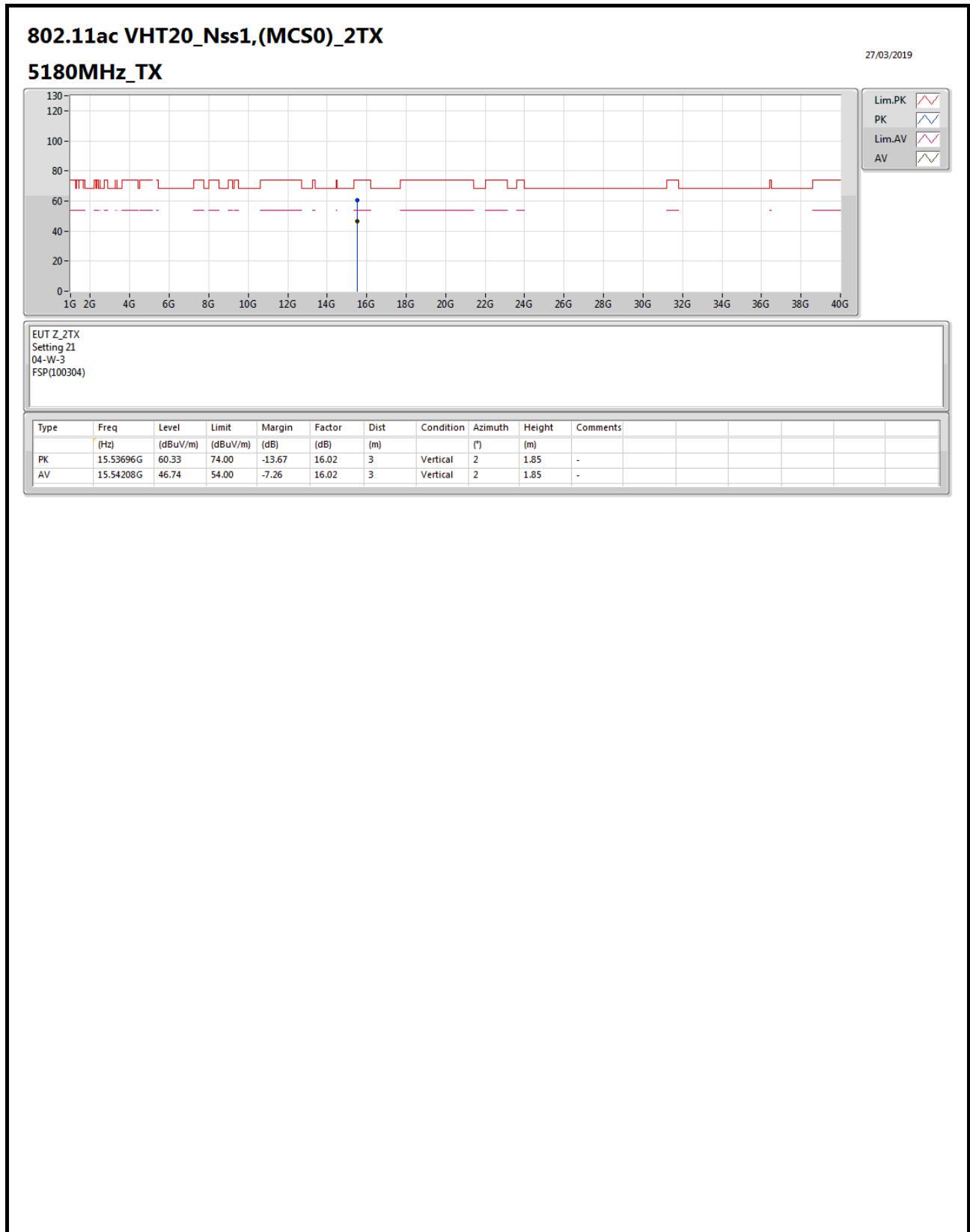
5180MHz_TX





RSE TX above 1GHz Result

Appendix E.2





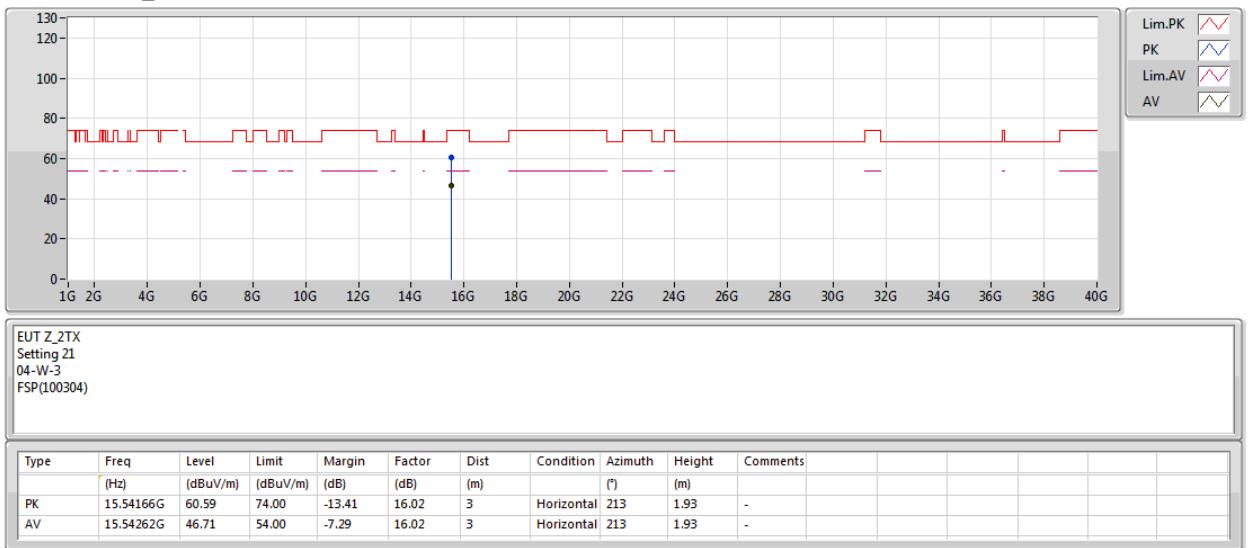
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5180MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5200MHz_TX





RSE TX above 1GHz Result

Appendix E.2





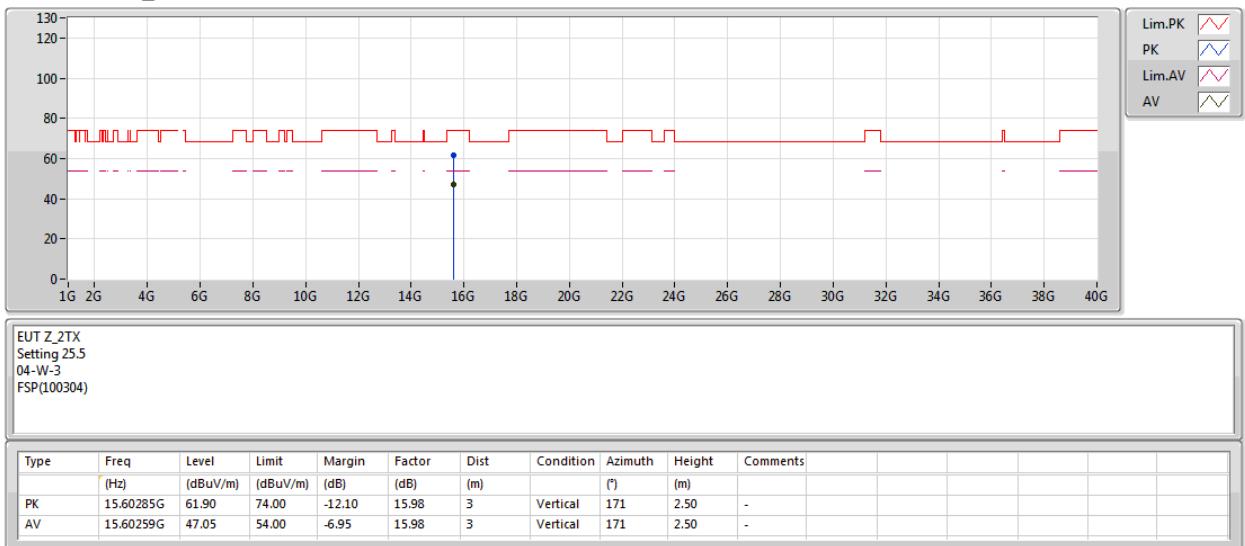
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5200MHz_TX





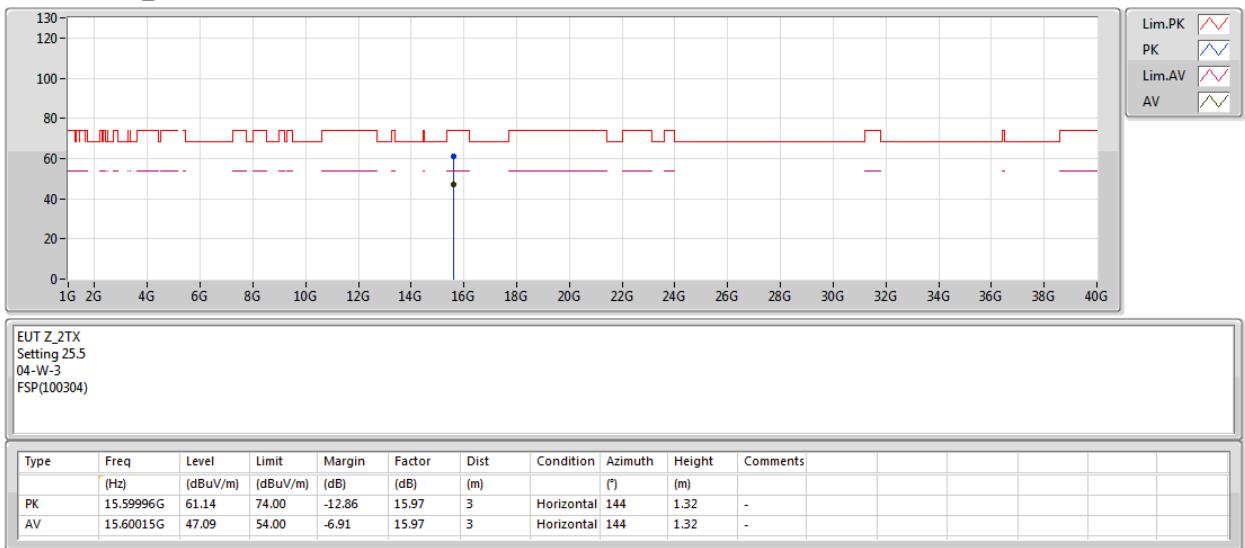
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5200MHz_TX





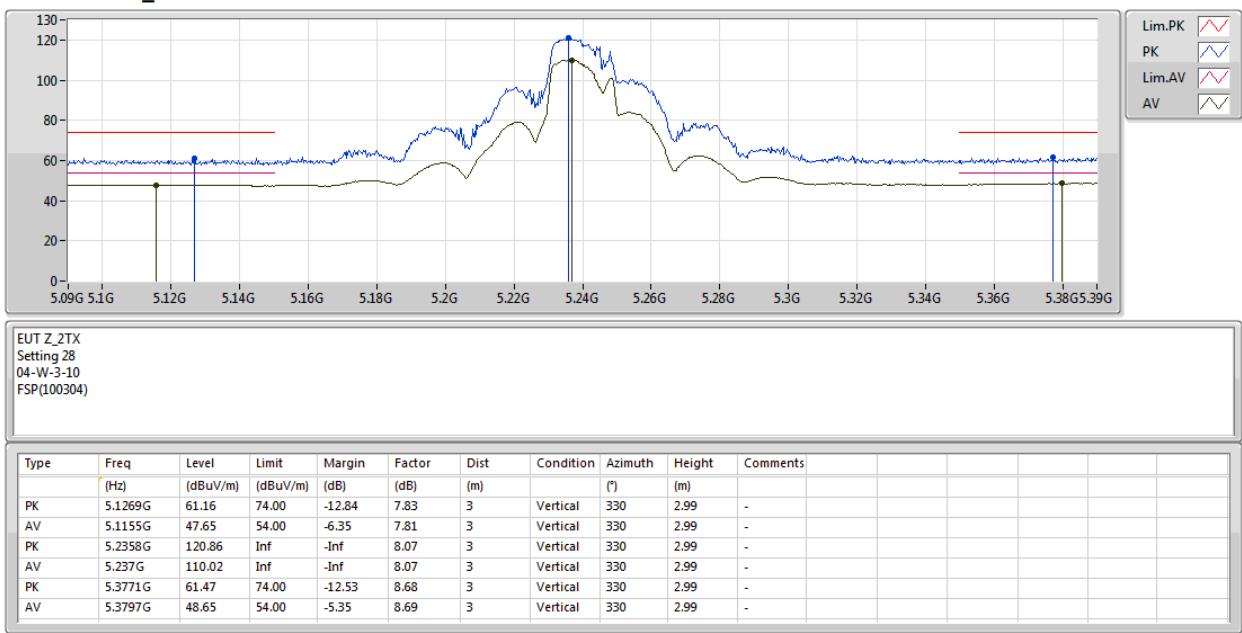
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5240MHz_TX





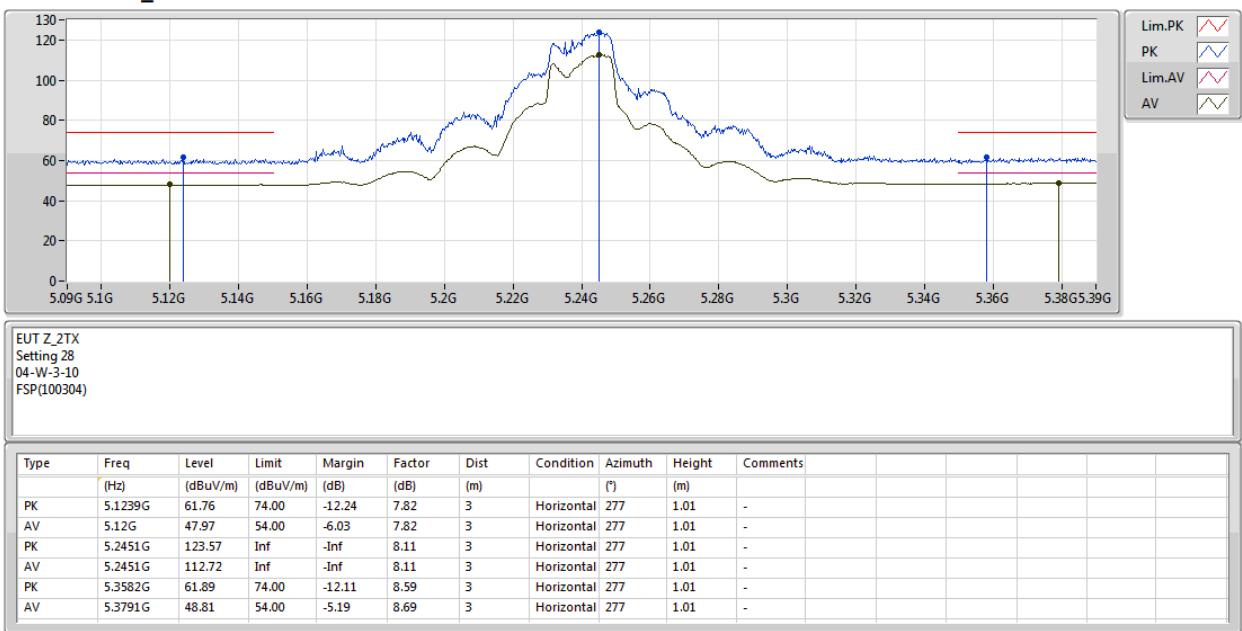
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5240MHz_TX





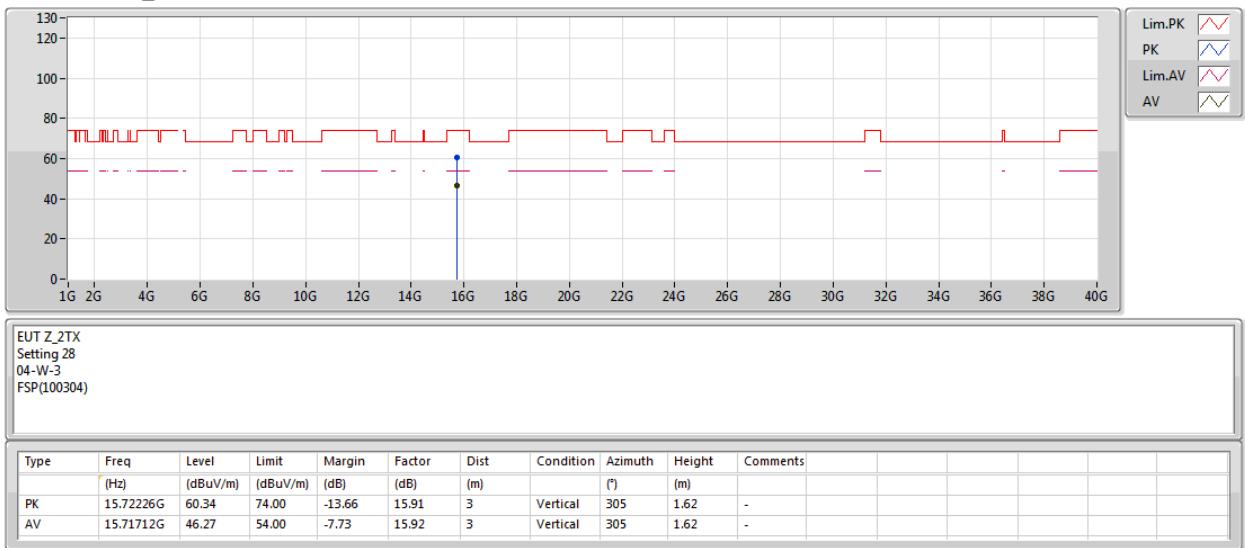
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5240MHz_TX





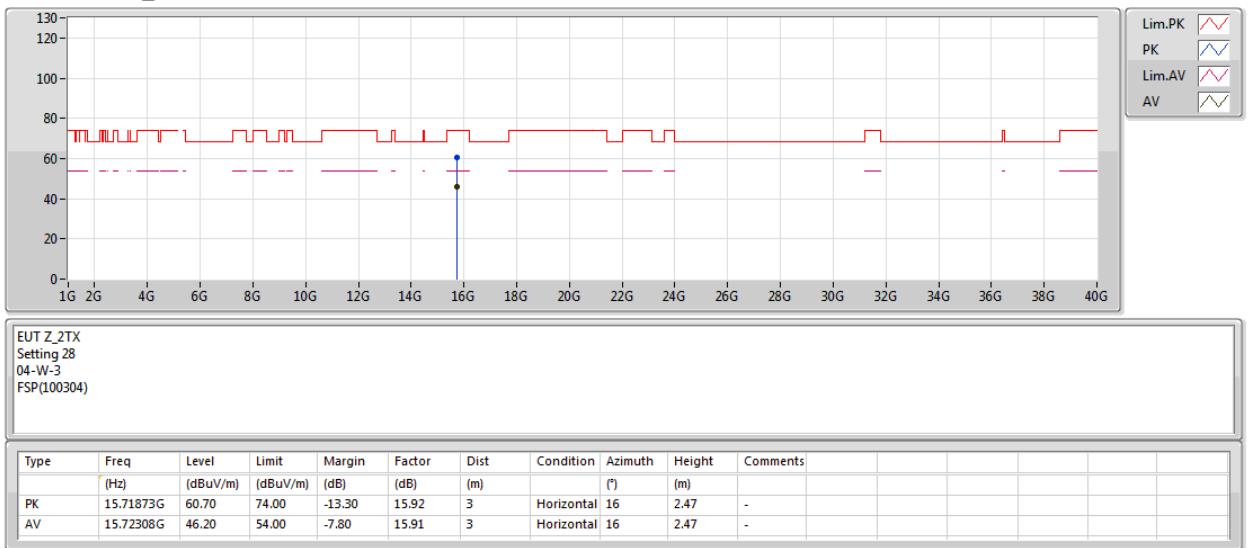
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5240MHz_TX





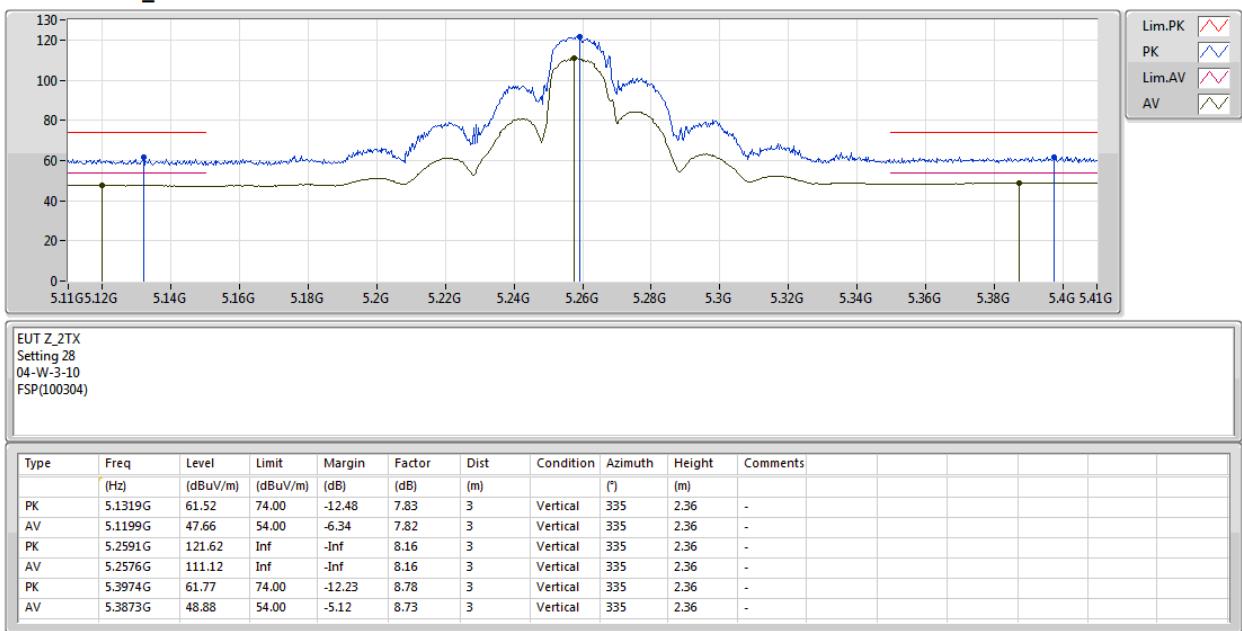
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5260MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5260MHz_TX





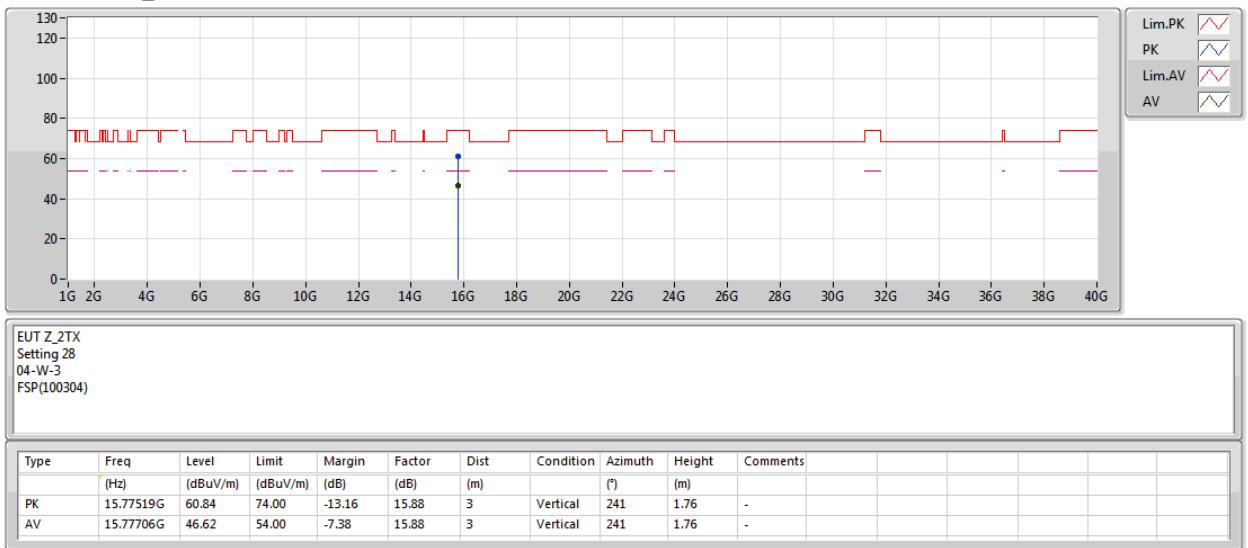
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5260MHz_TX





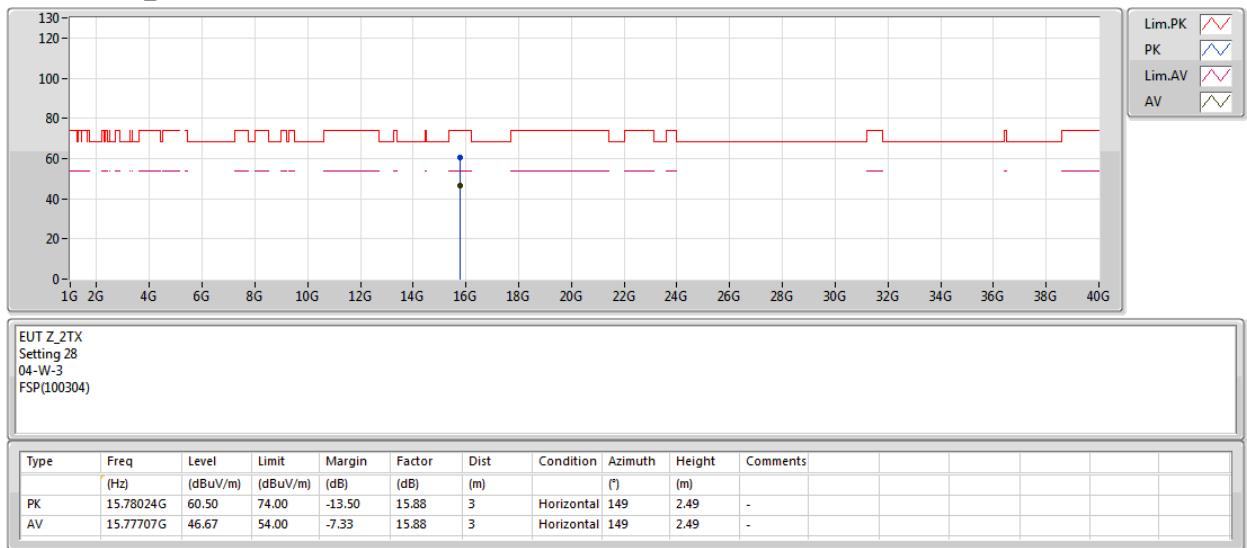
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

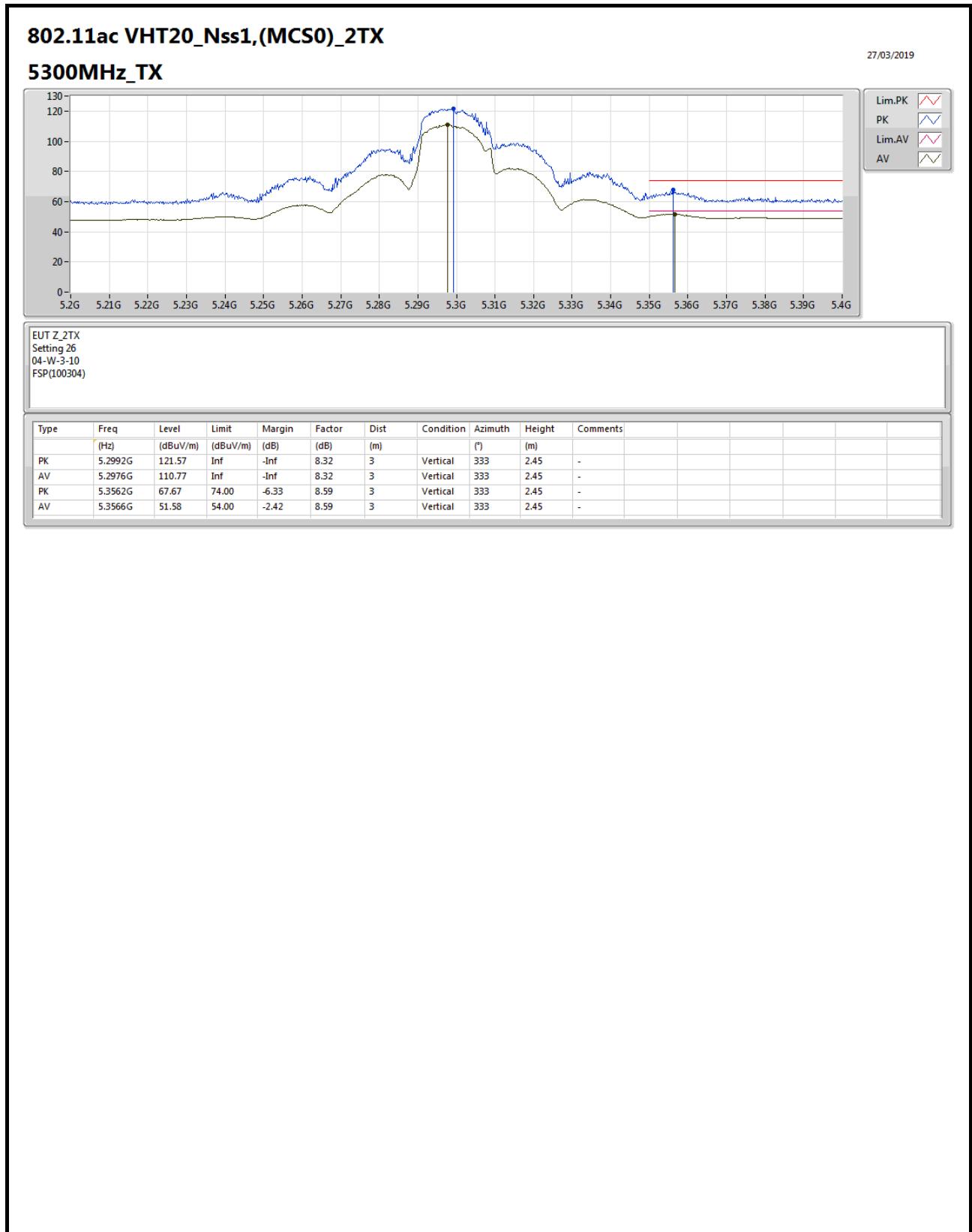
5260MHz_TX





RSE TX above 1GHz Result

Appendix E.2





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5300MHz_TX





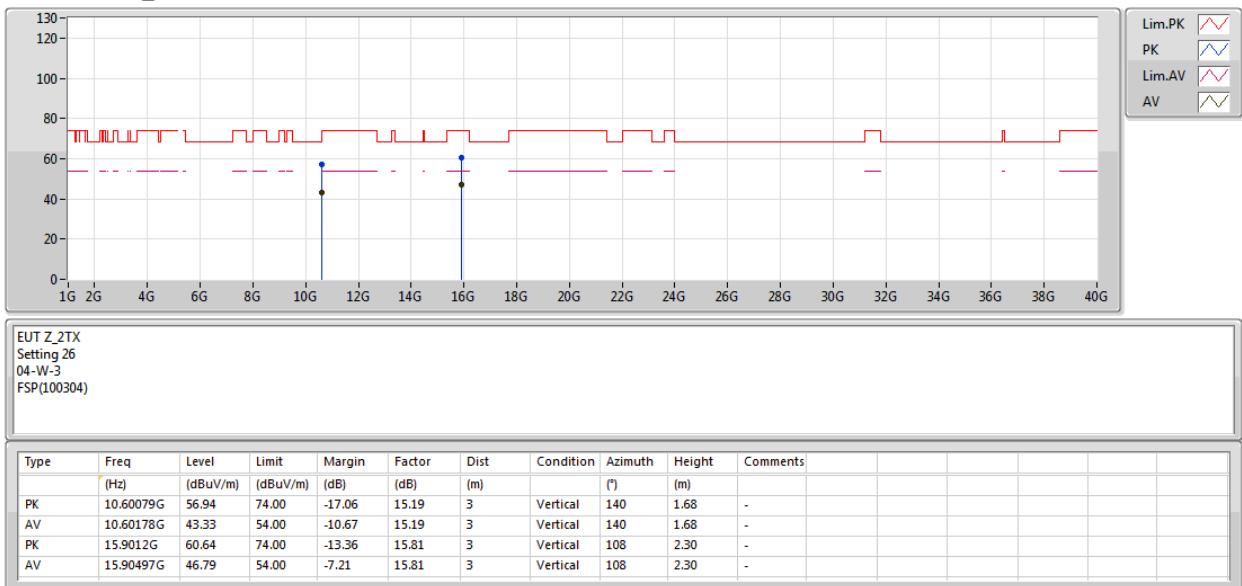
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5300MHz_TX





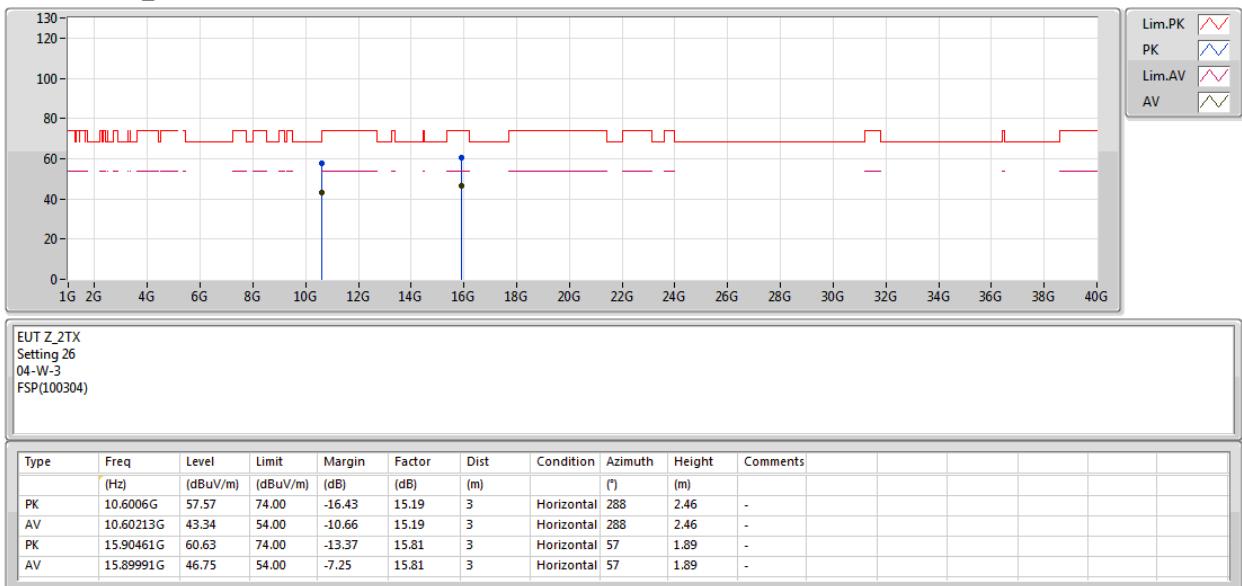
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

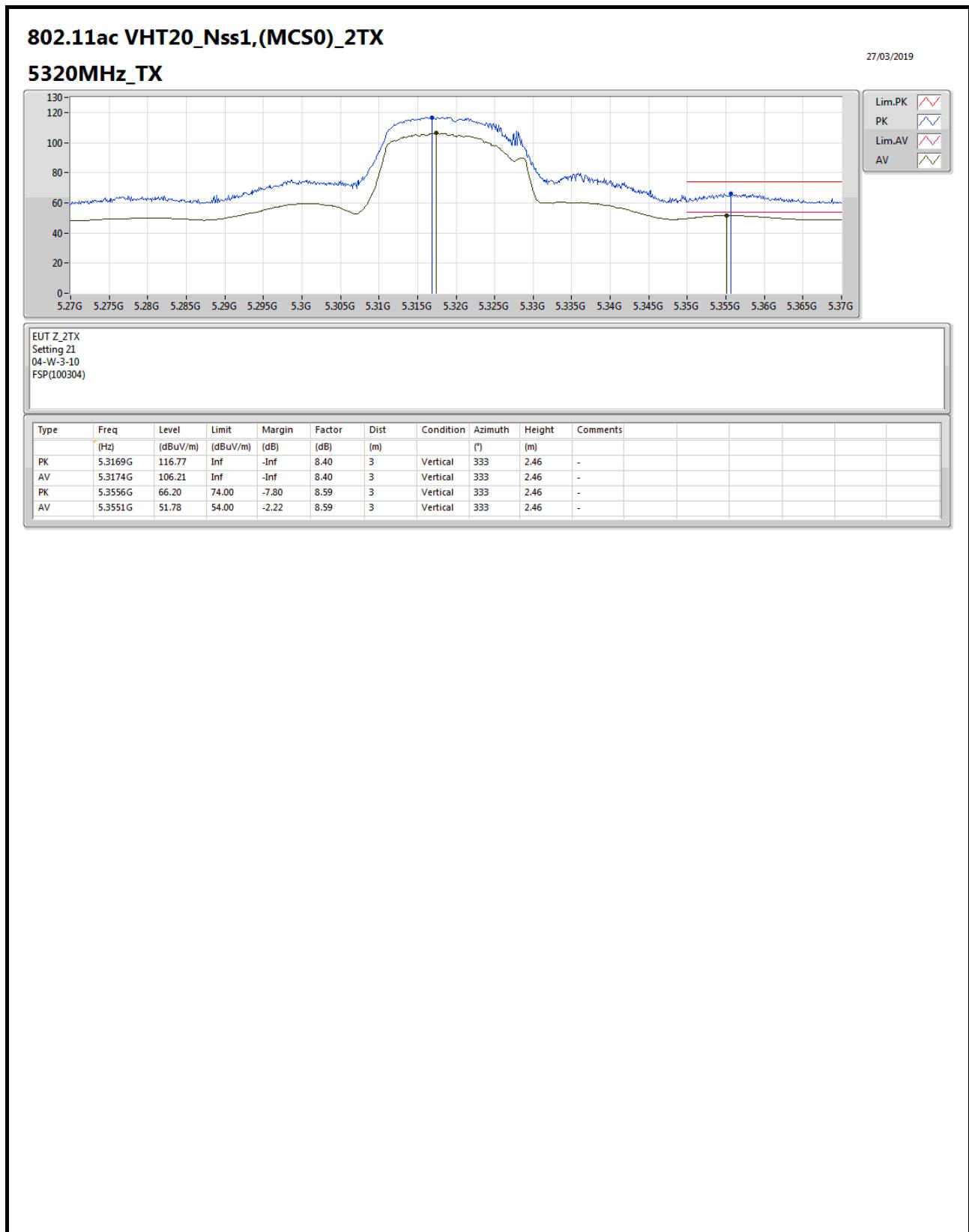
5300MHz_TX





RSE TX above 1GHz Result

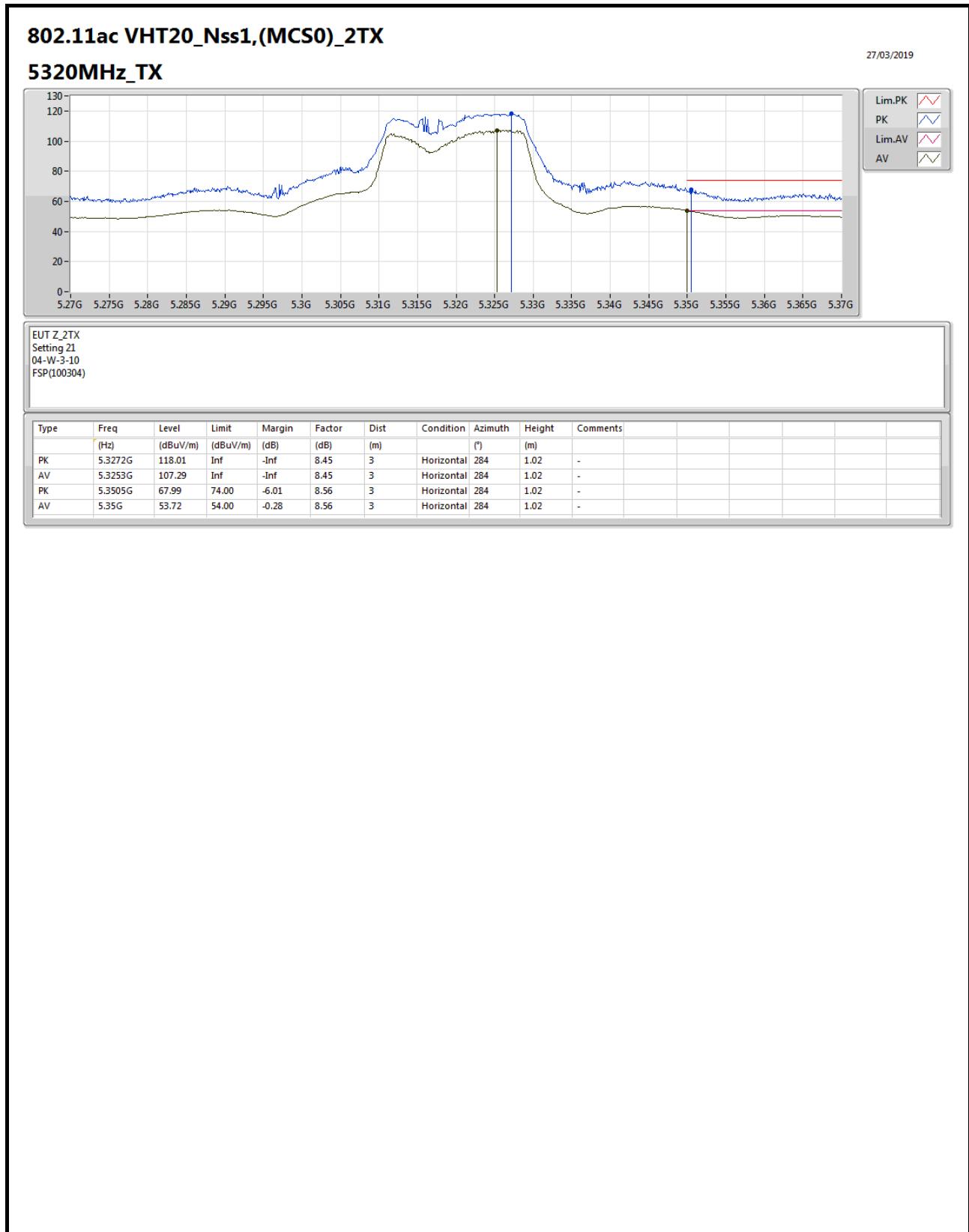
Appendix E.2





RSE TX above 1GHz Result

Appendix E.2





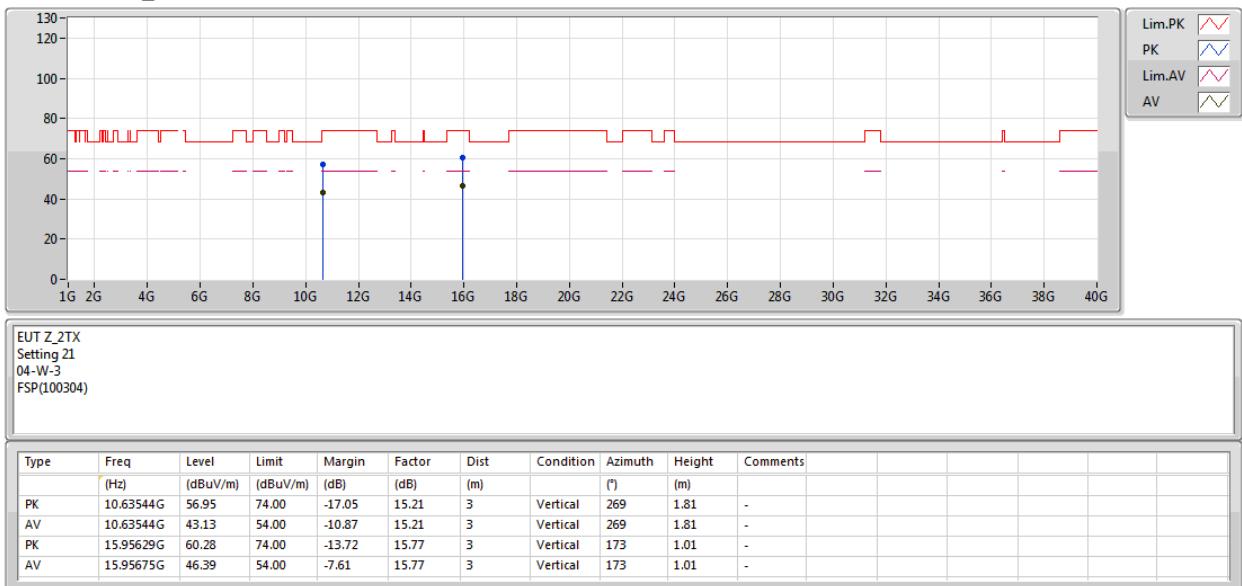
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5320MHz_TX





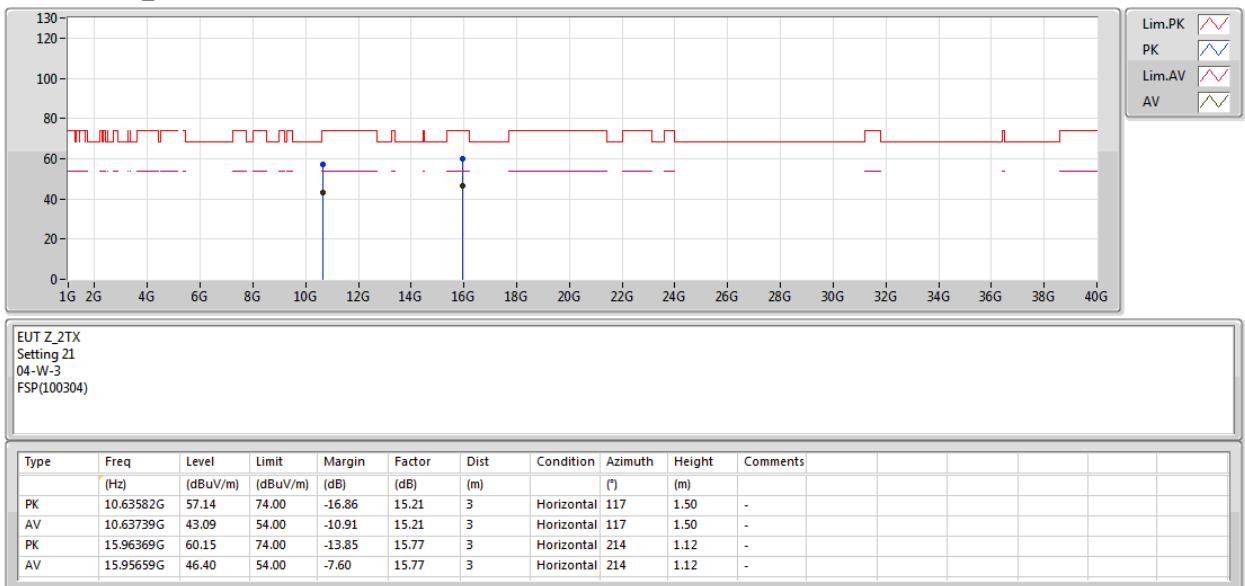
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5320MHz_TX





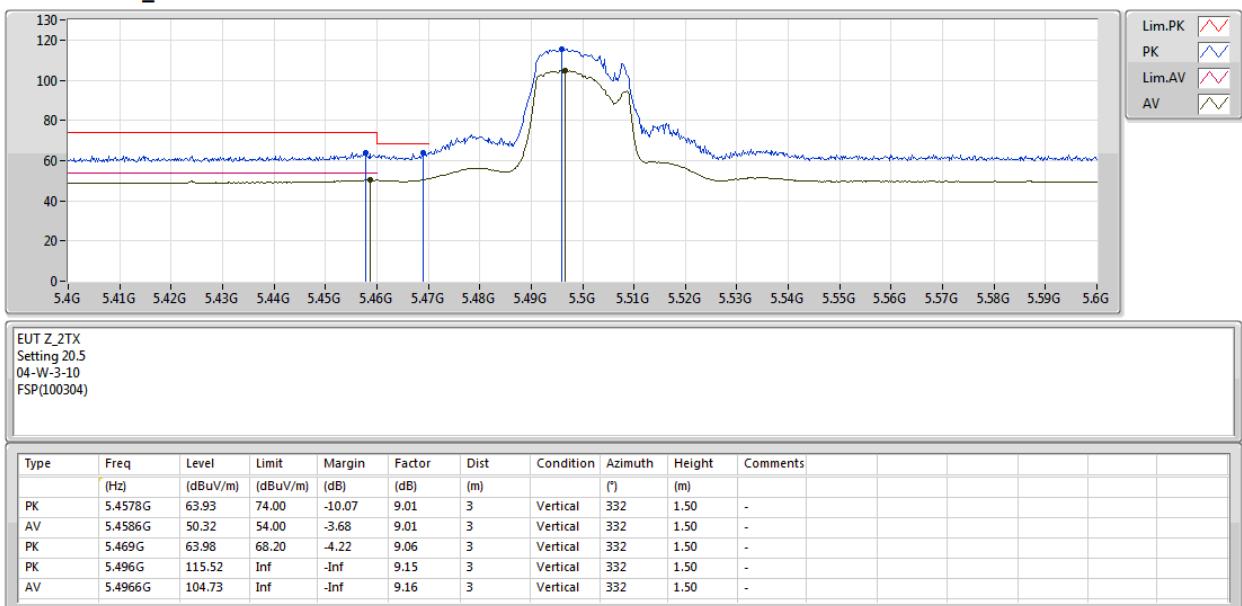
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5500MHz_TX





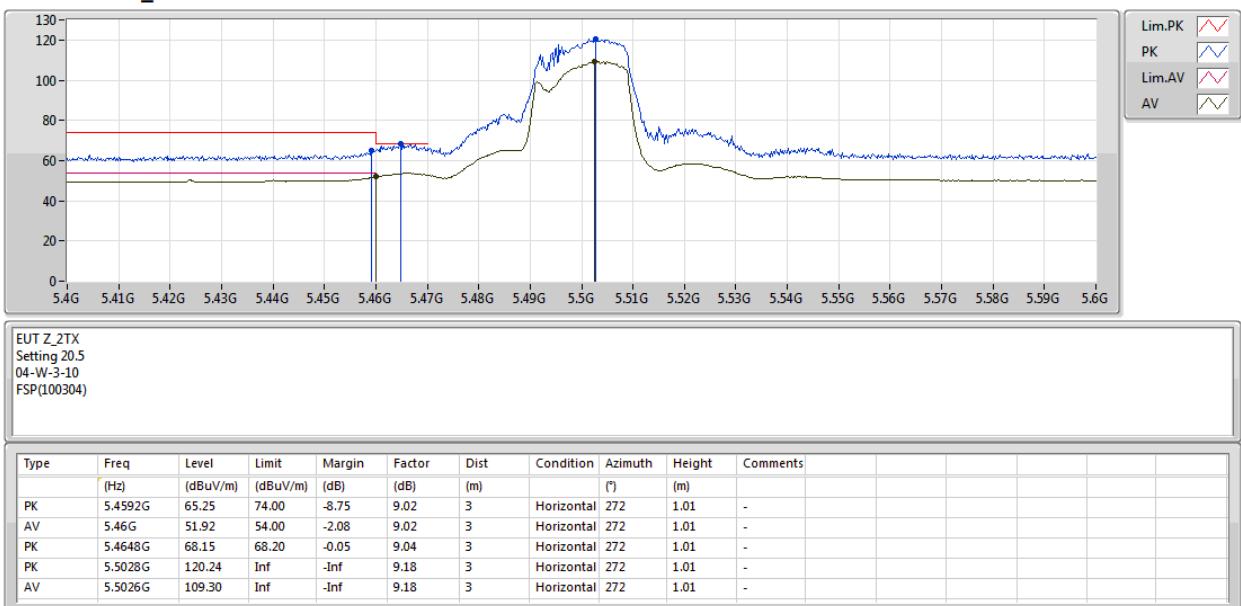
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5500MHz_TX





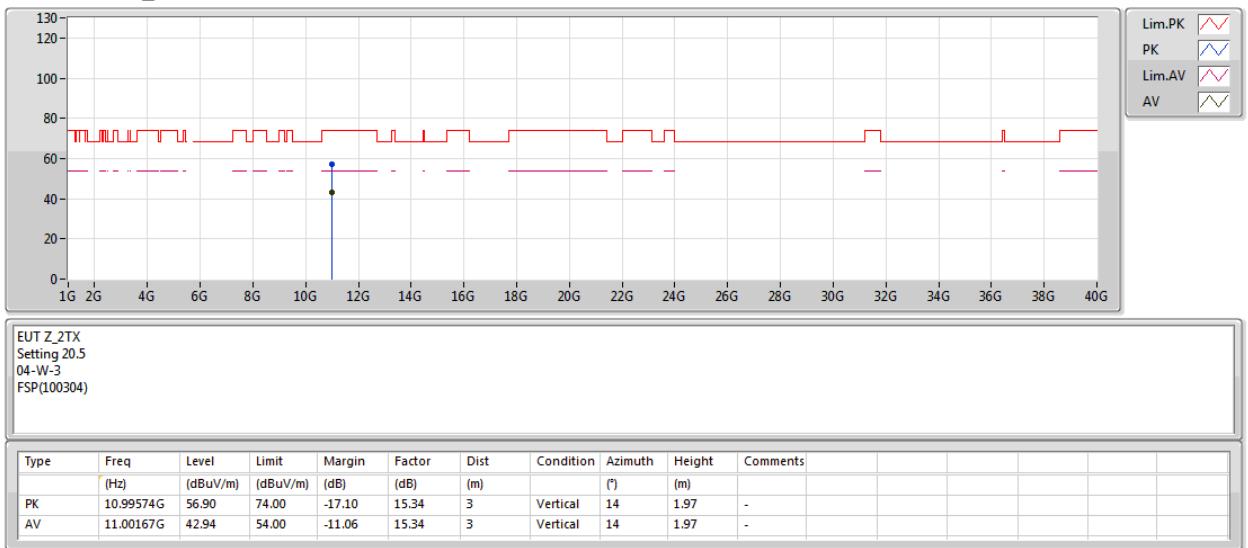
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5500MHz_TX





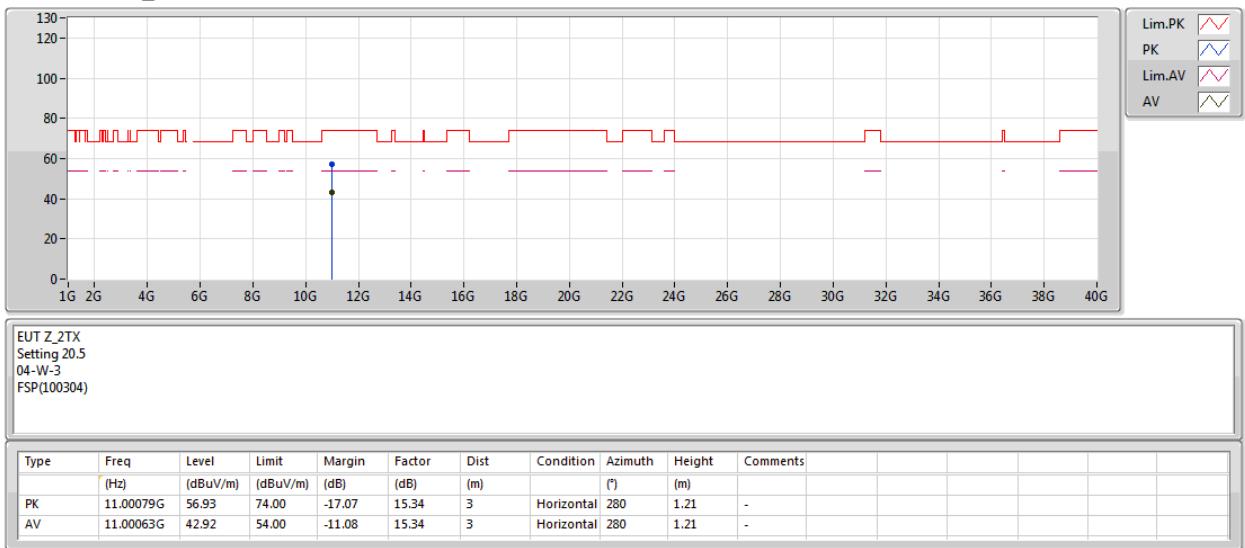
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5500MHz_TX





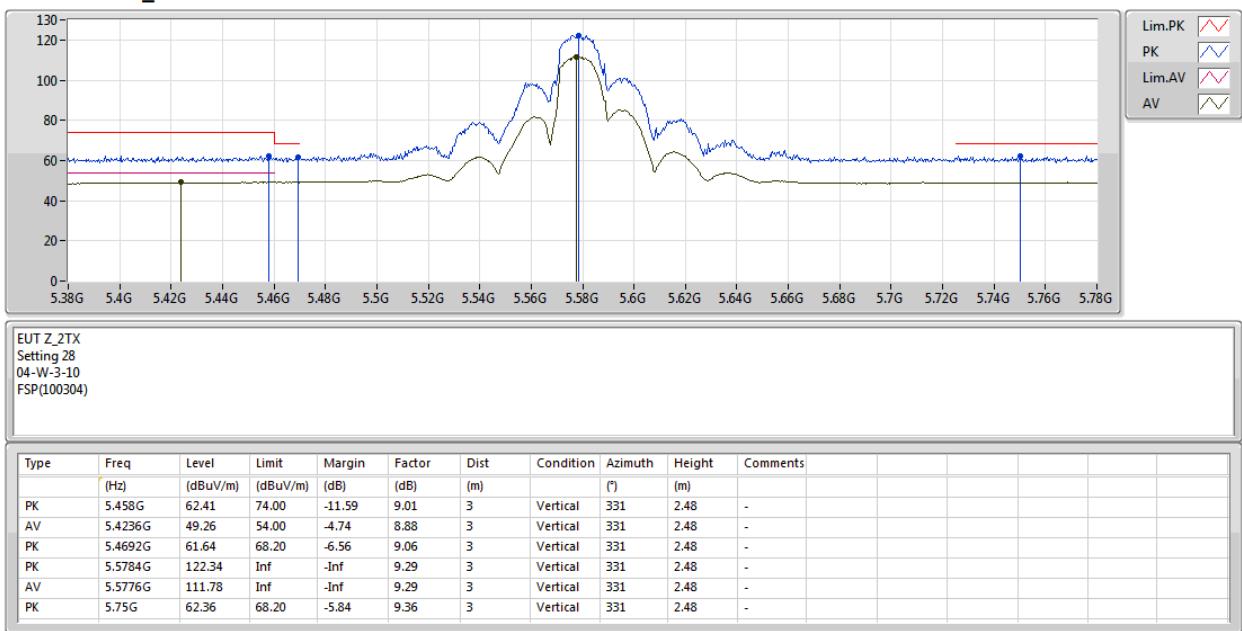
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5580MHz_TX





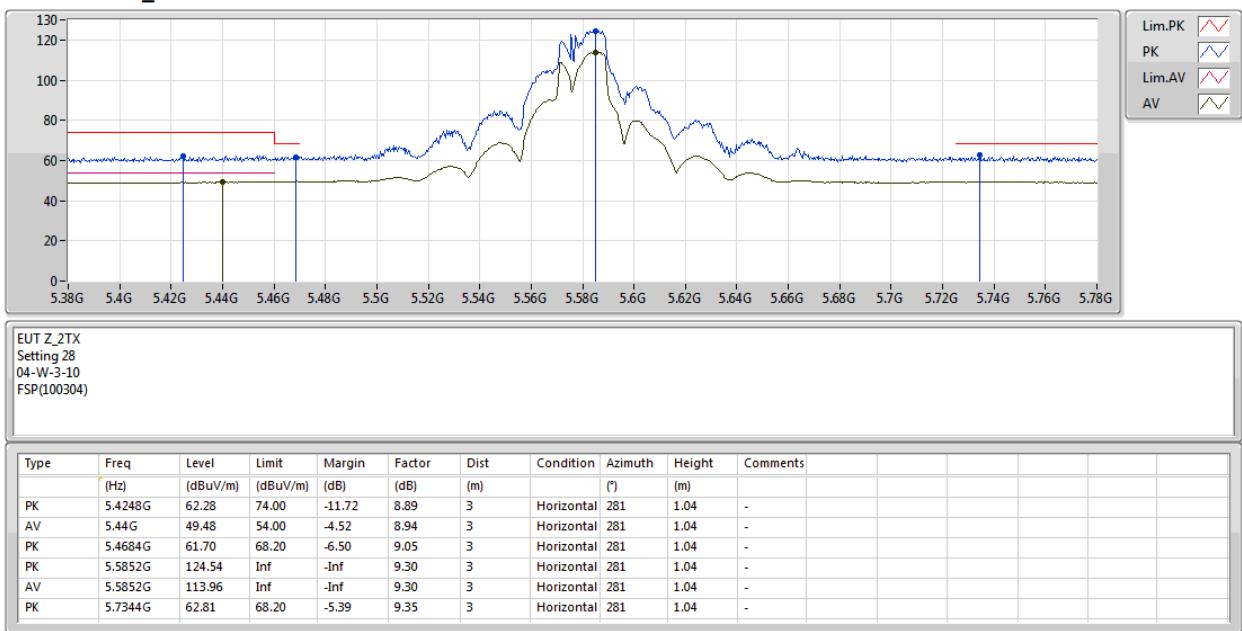
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5580MHz_TX





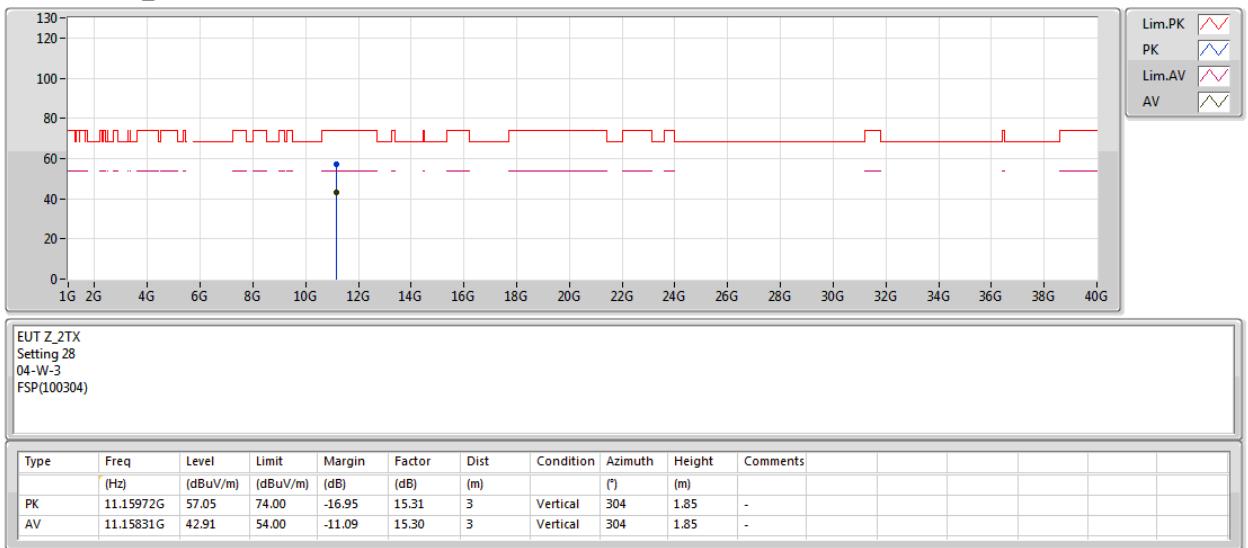
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5580MHz_TX





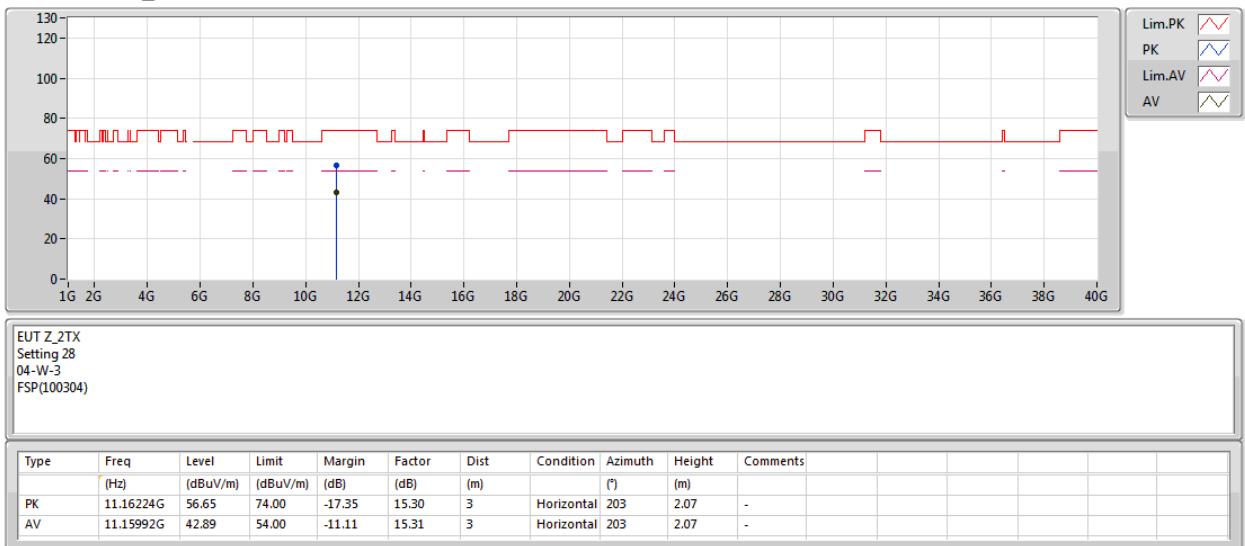
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5580MHz_TX





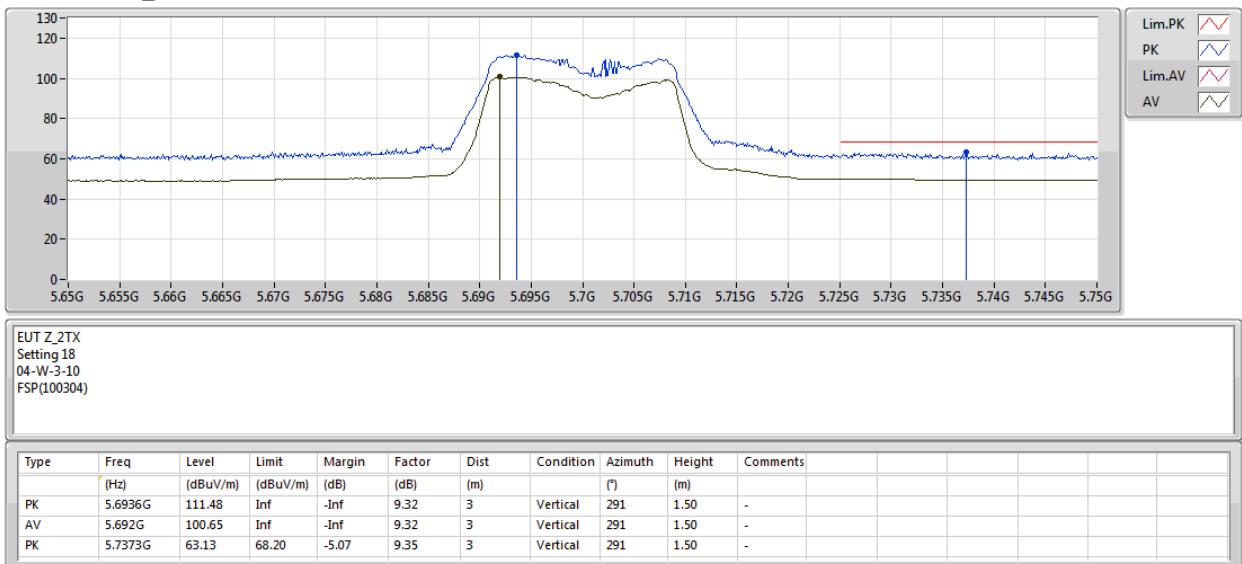
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

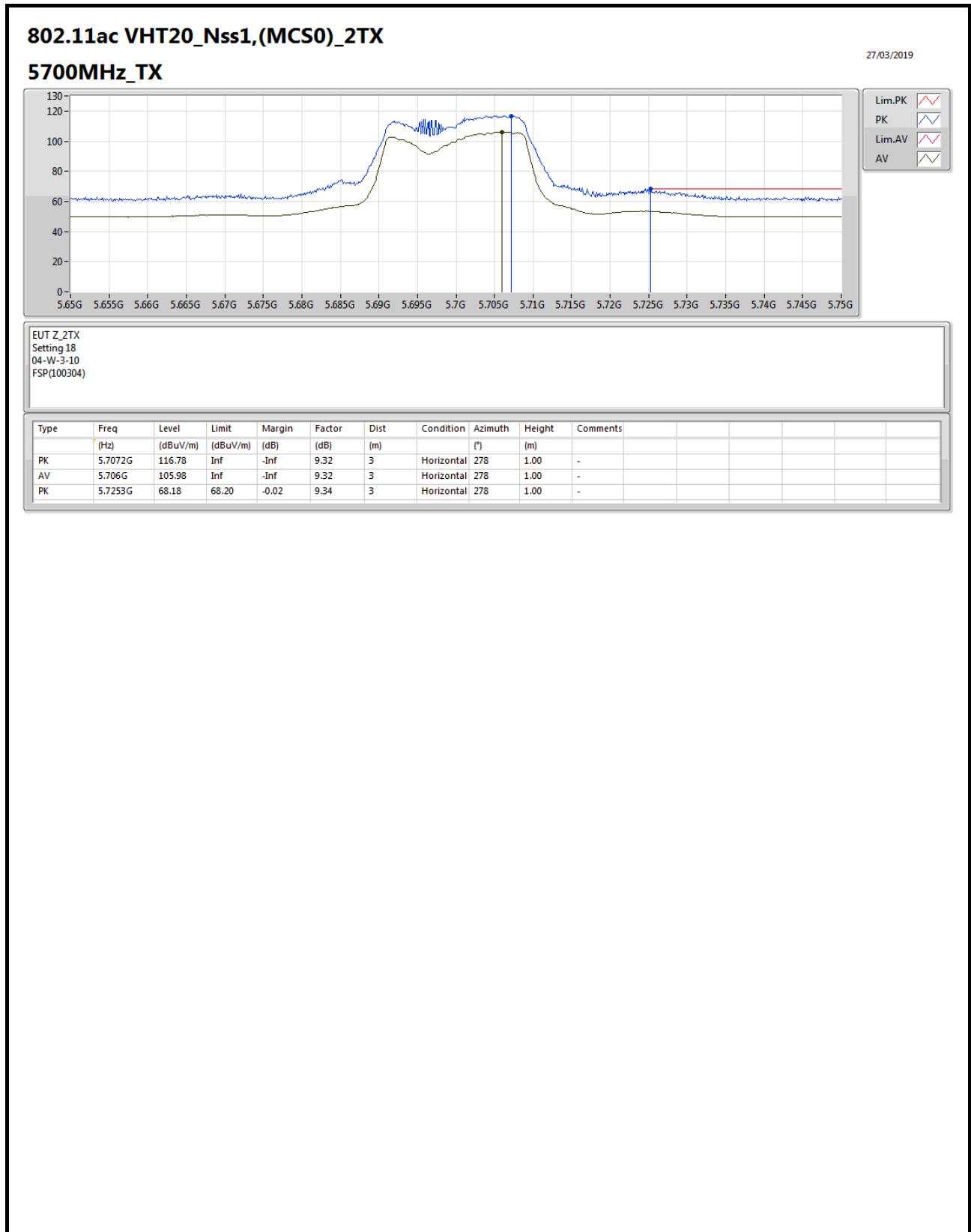
5700MHz_TX





RSE TX above 1GHz Result

Appendix E.2





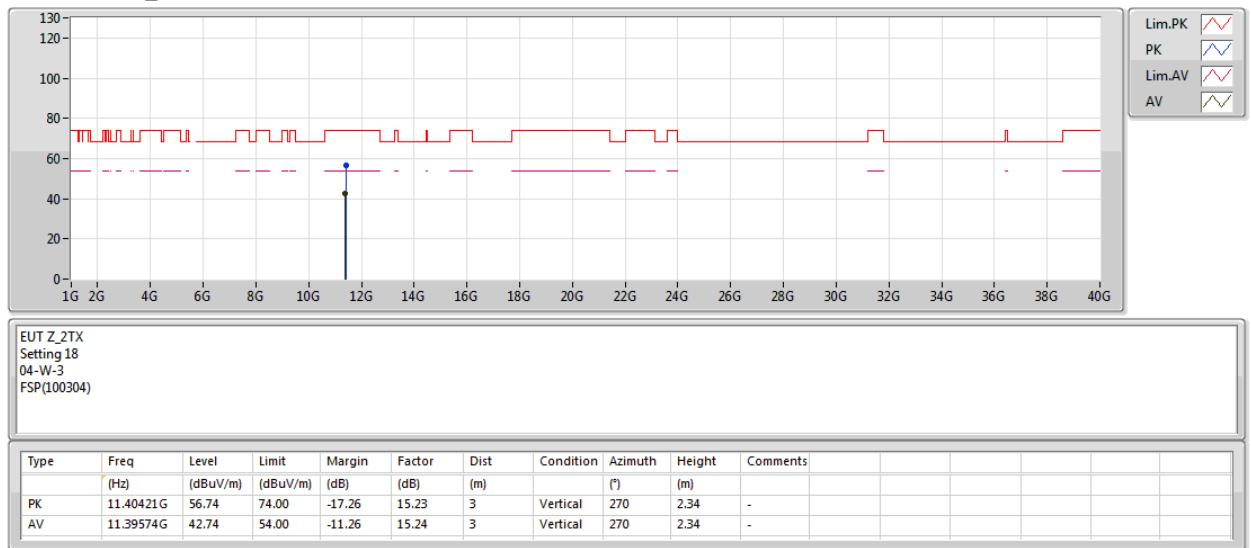
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5700MHz_TX





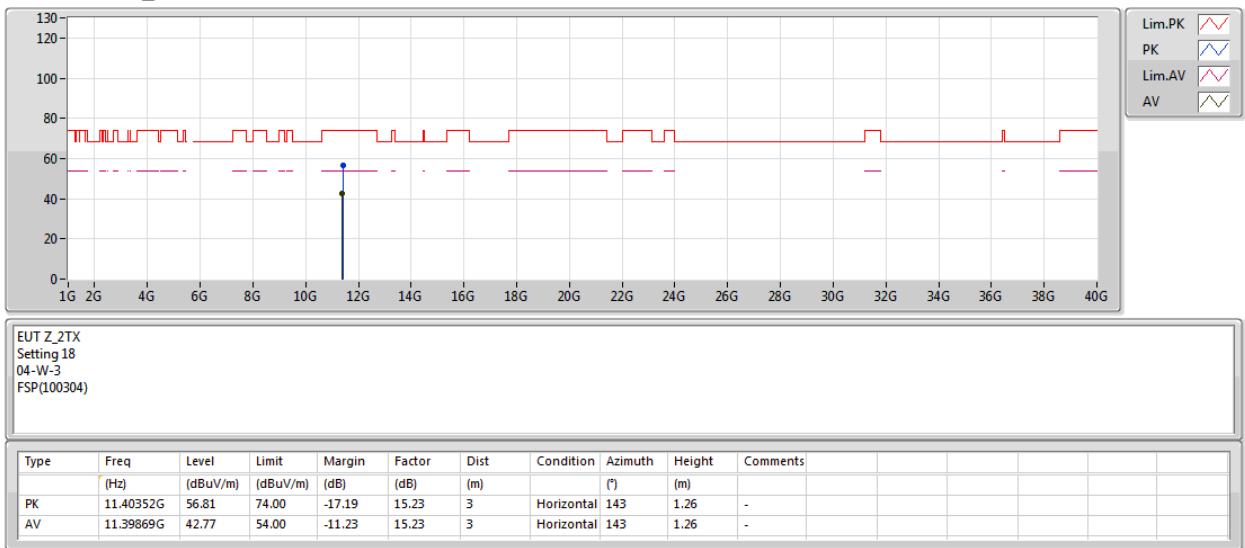
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5700MHz_TX





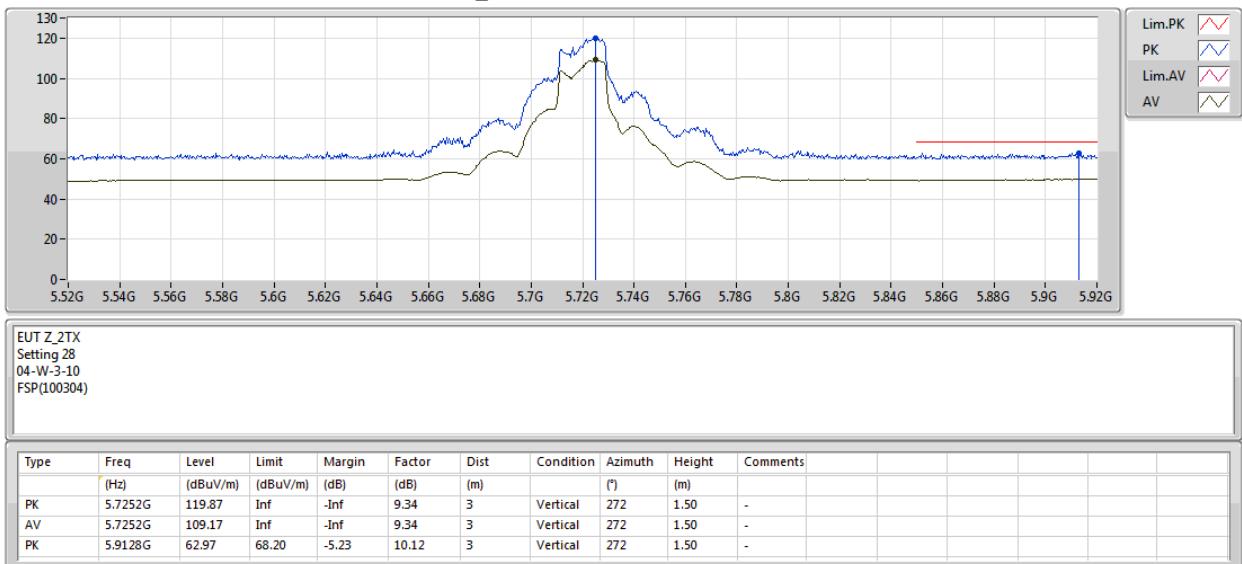
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5720MHz Straddle 5.47-5.725GHz_TX





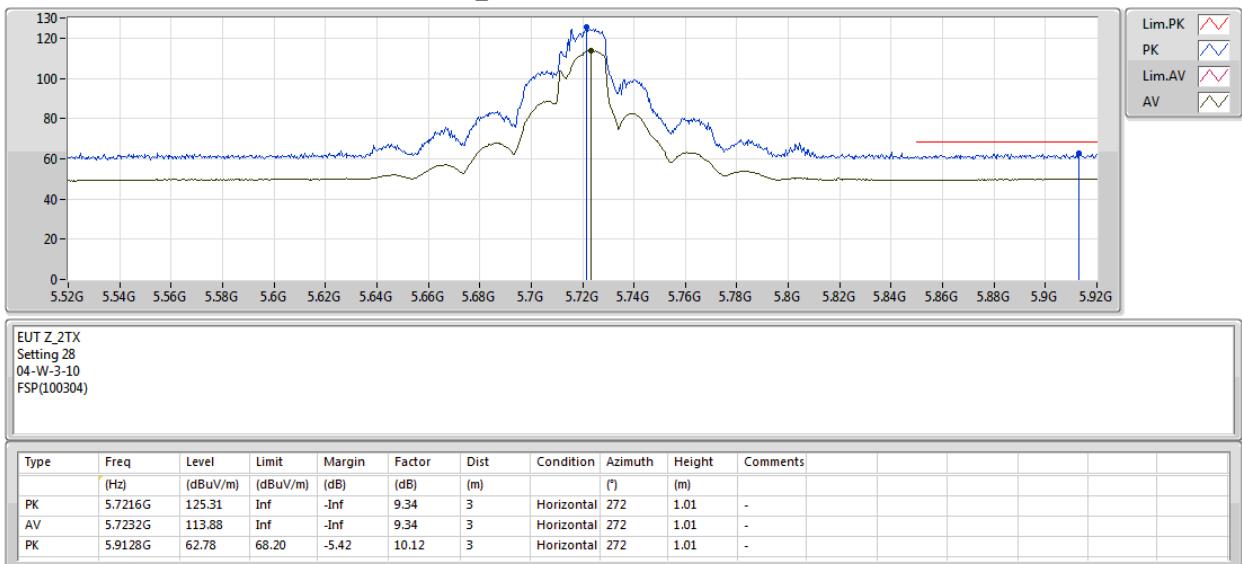
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5720MHz Straddle 5.47-5.725GHz_TX





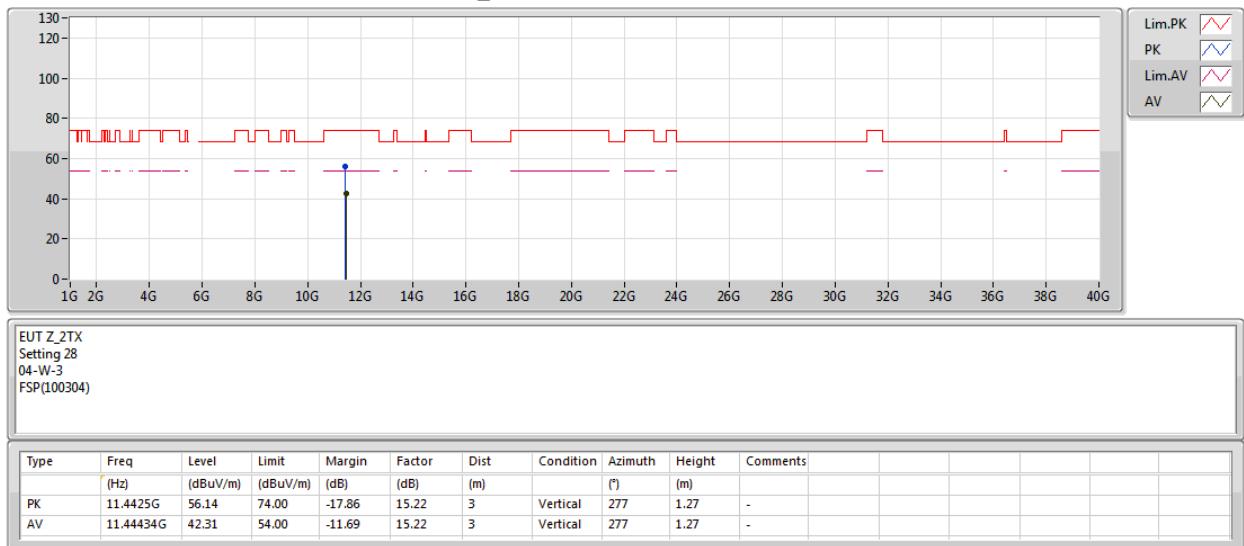
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5720MHz Straddle 5.47-5.725GHz_TX





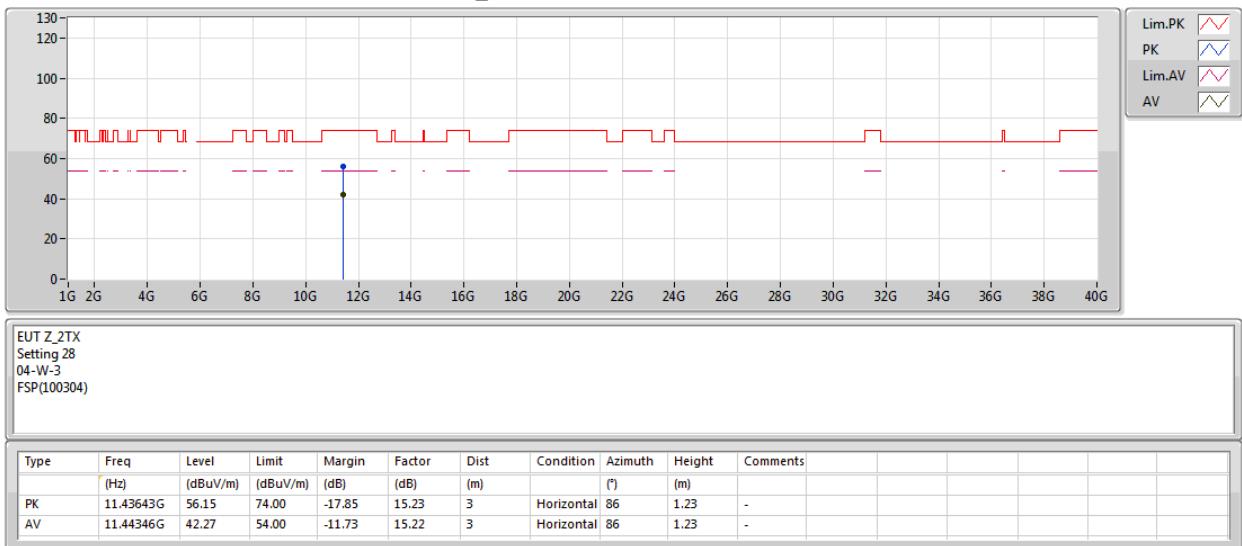
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5720MHz Straddle 5.47-5.725GHz_TX





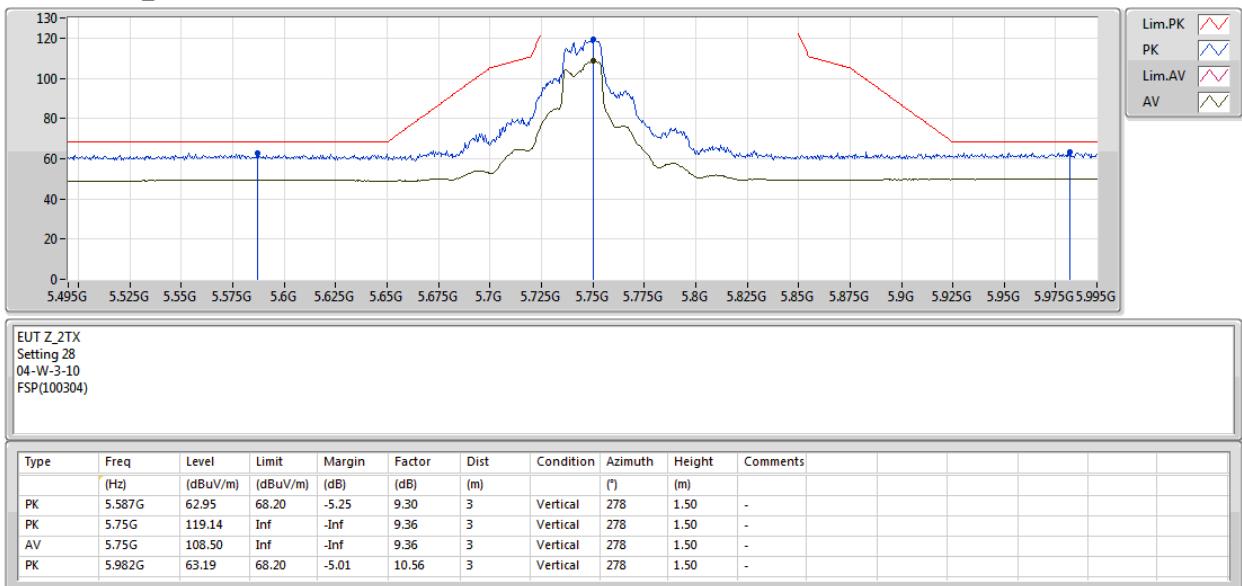
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5745MHz_TX





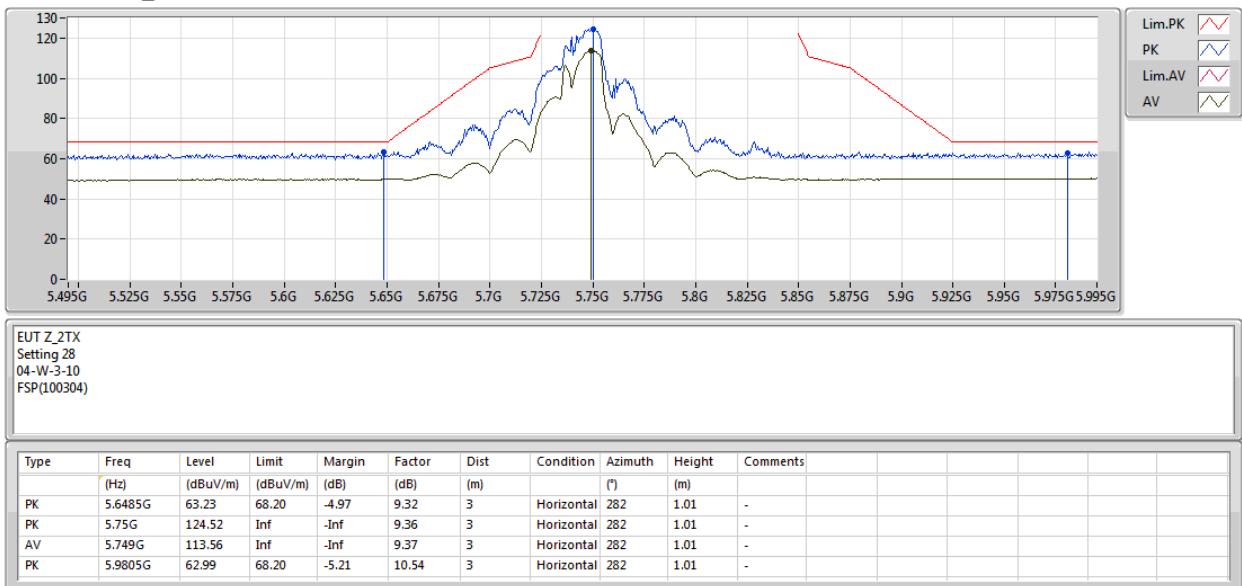
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5745MHz_TX





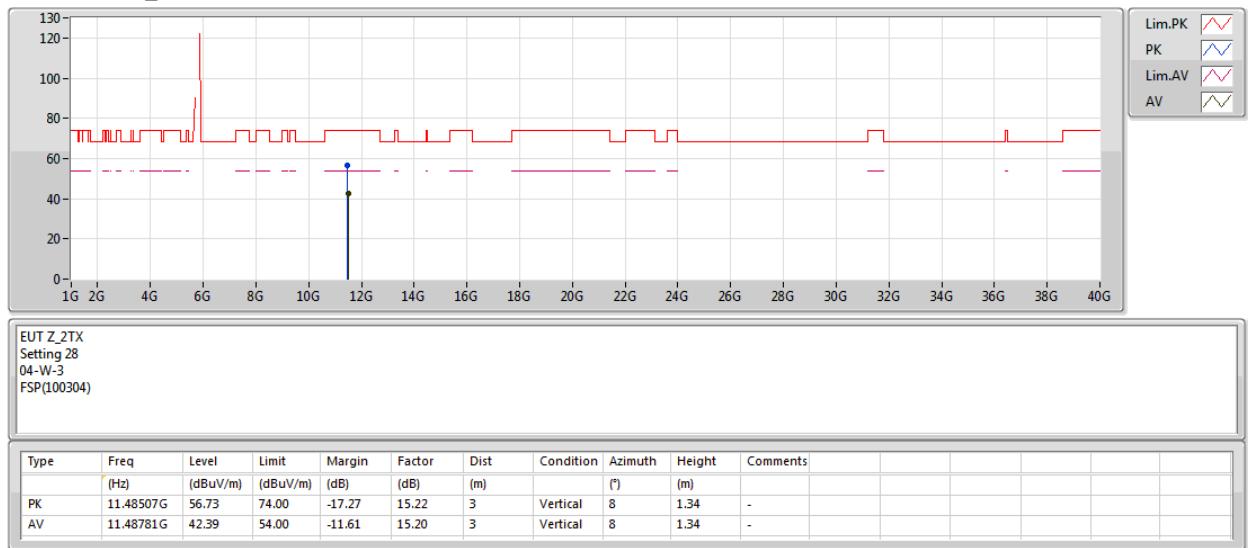
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5745MHz_TX





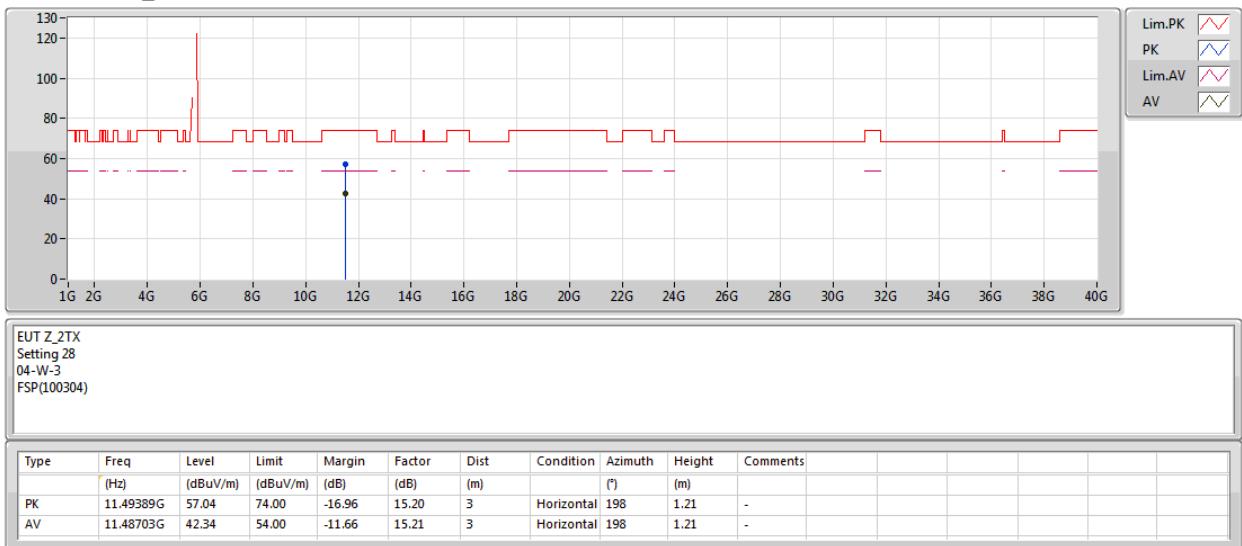
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5745MHz_TX





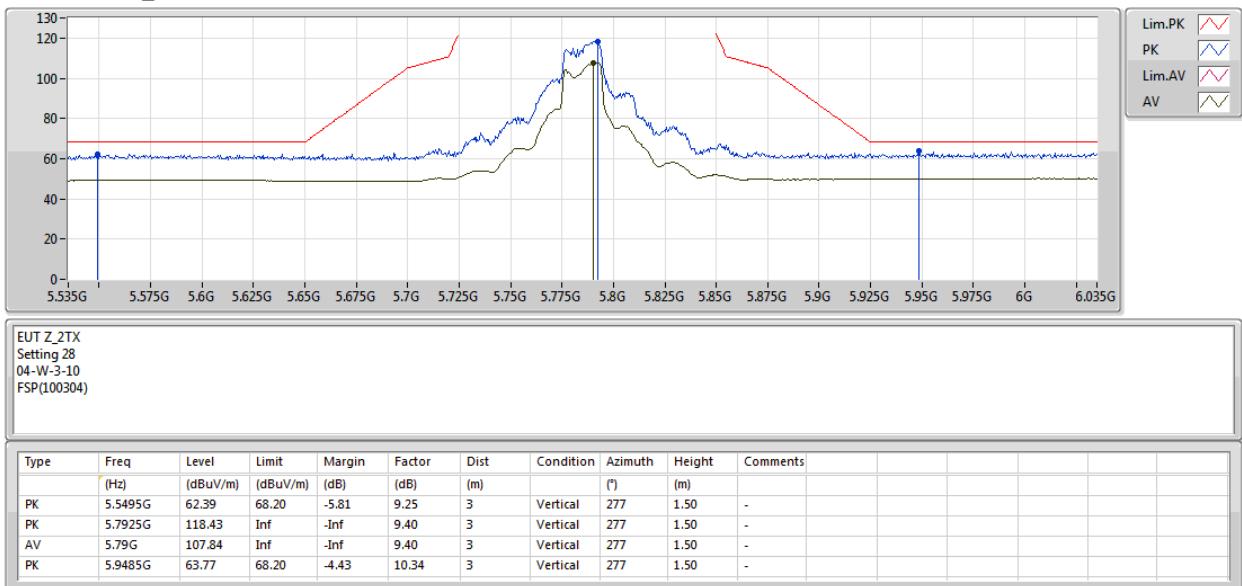
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5785MHz_TX





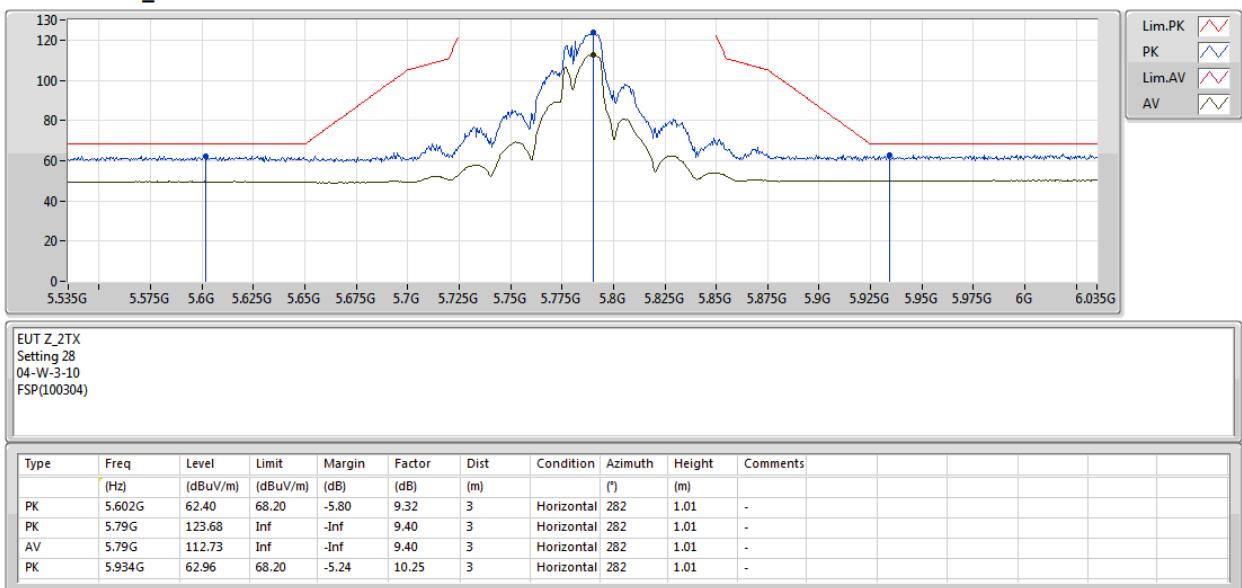
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5785MHz_TX





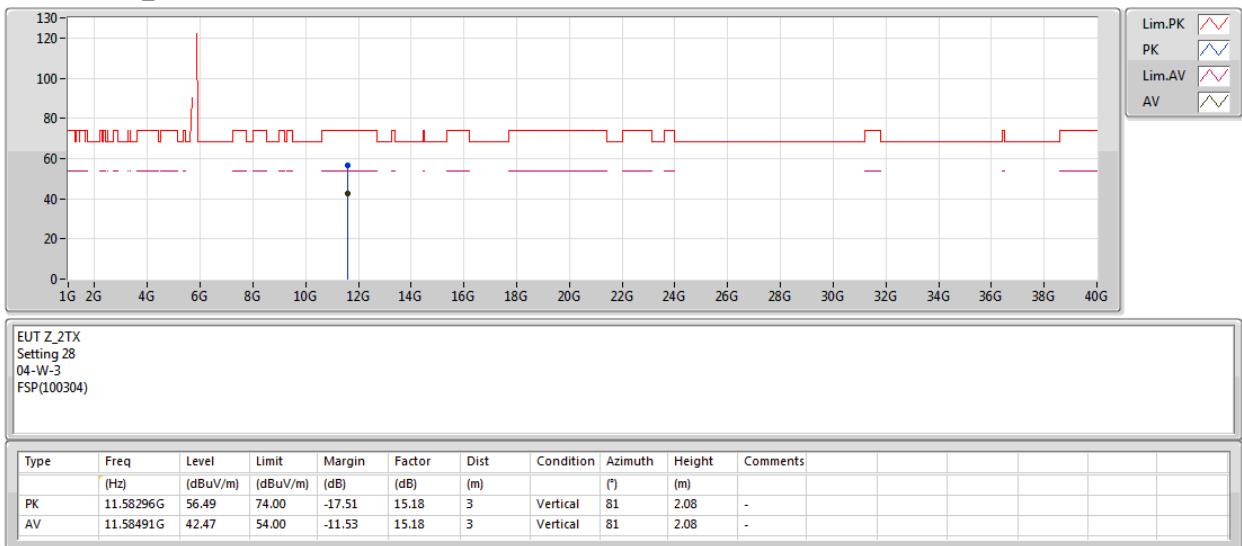
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5785MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5785MHz_TX





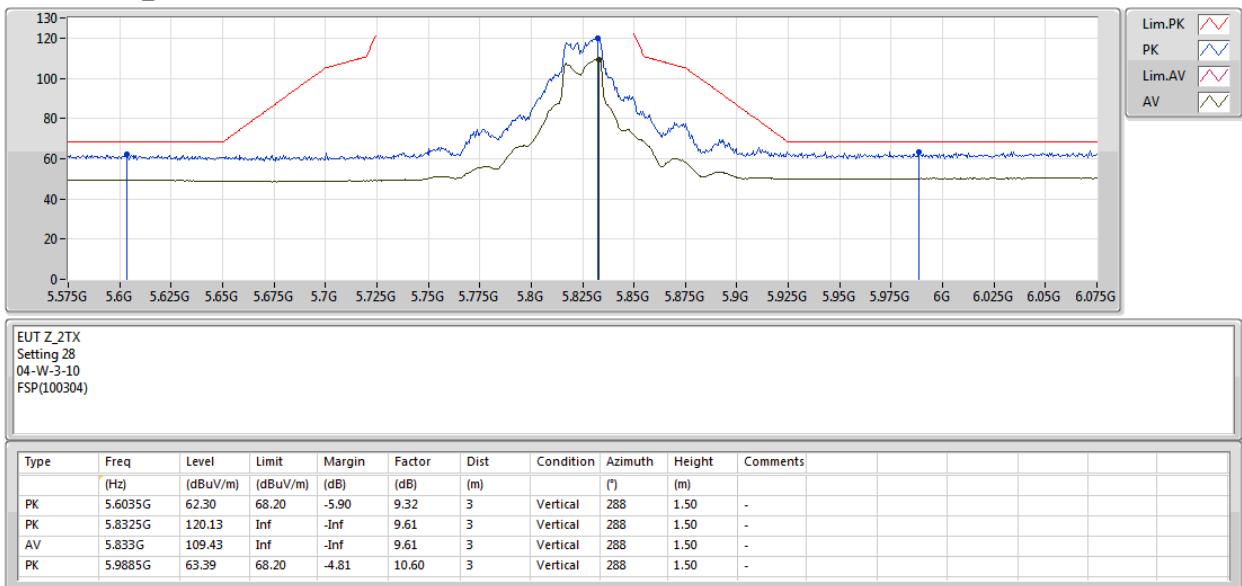
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5825MHz_TX





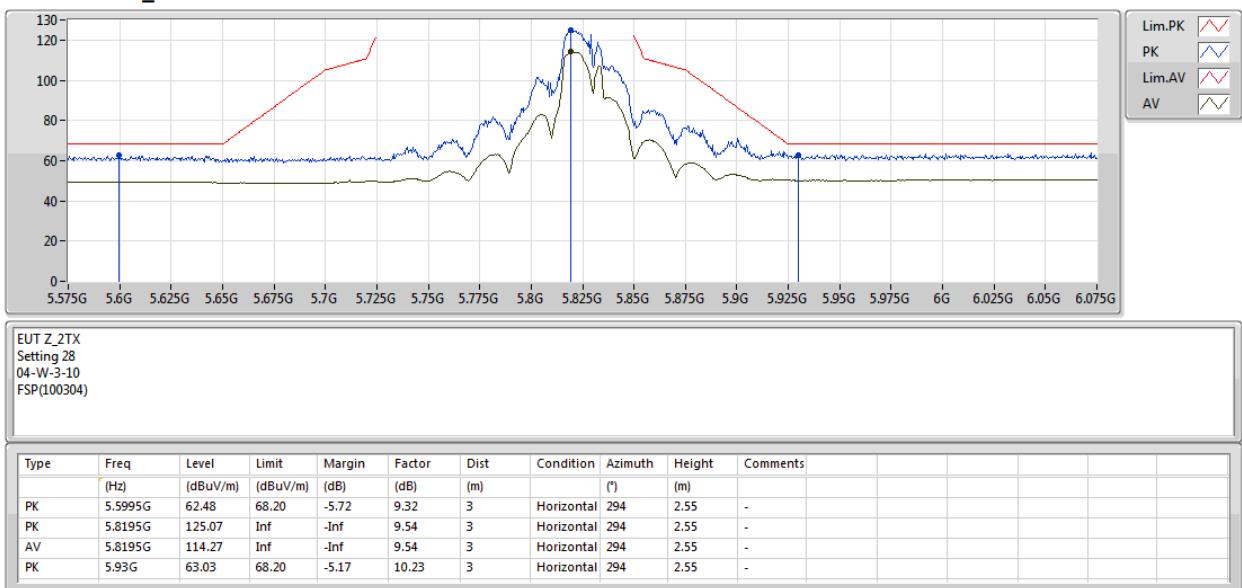
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5825MHz_TX





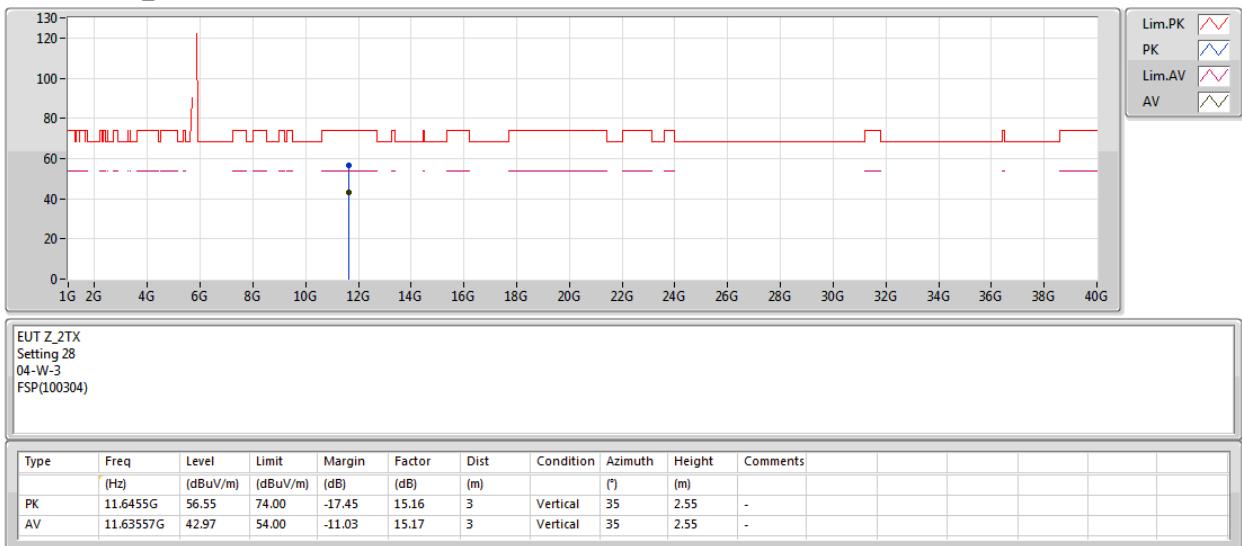
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5825MHz_TX





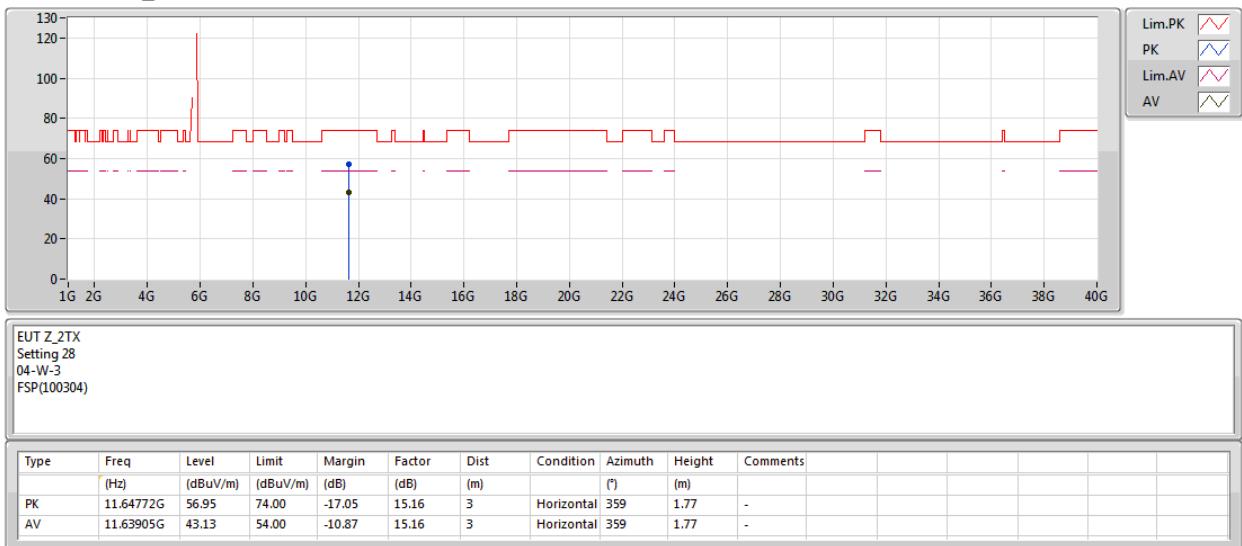
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT20_Nss1,(MCS0)_2TX

27/03/2019

5825MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5190MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5190MHz_TX





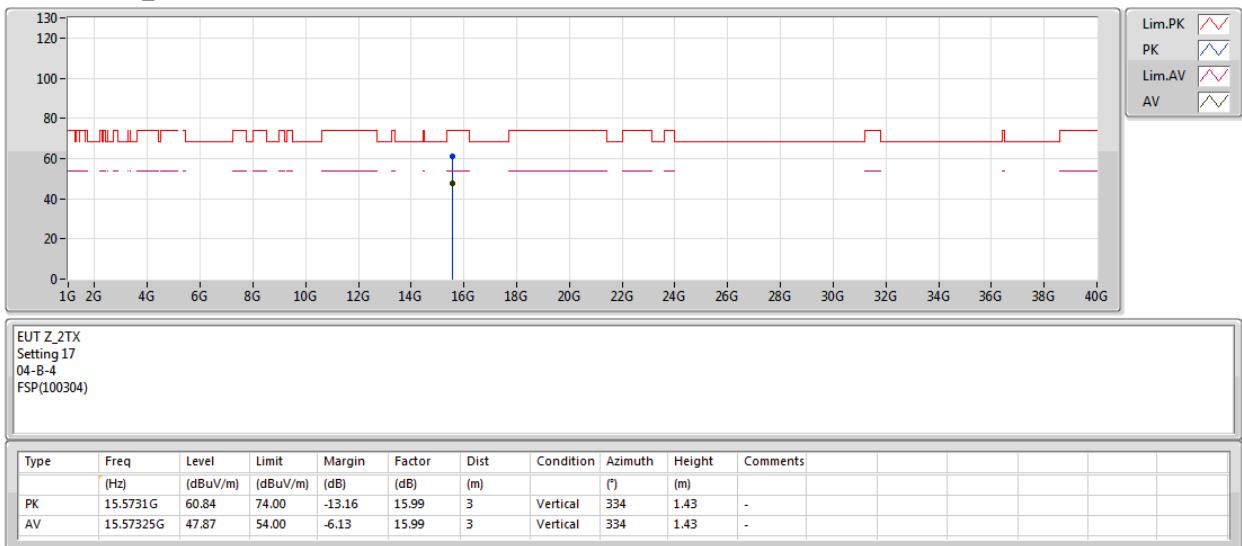
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5190MHz_TX





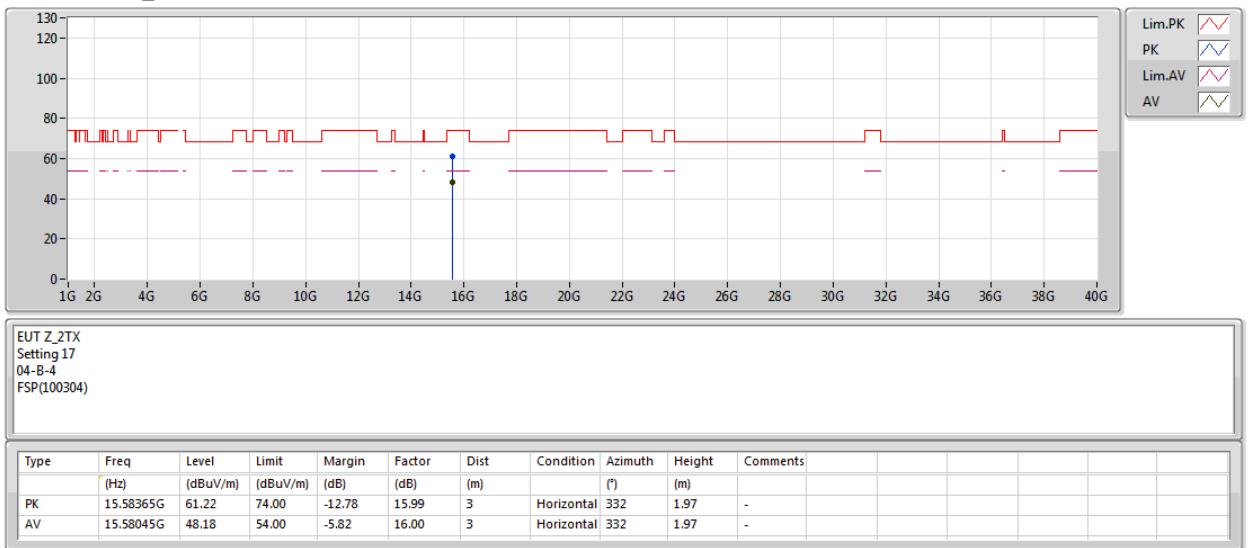
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5190MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5230MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5230MHz_TX





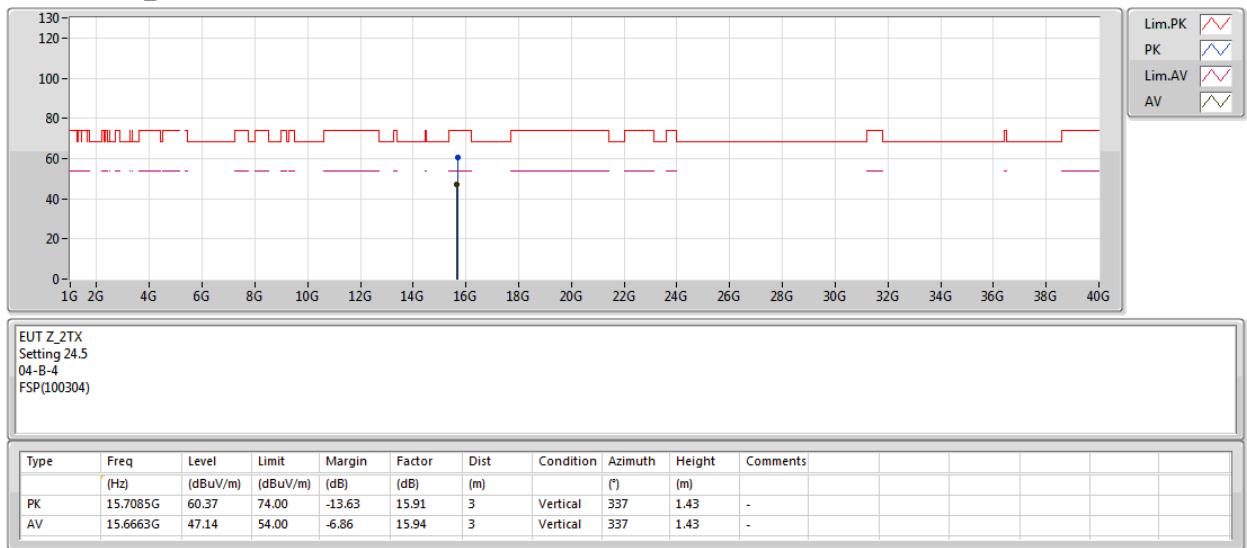
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5230MHz_TX





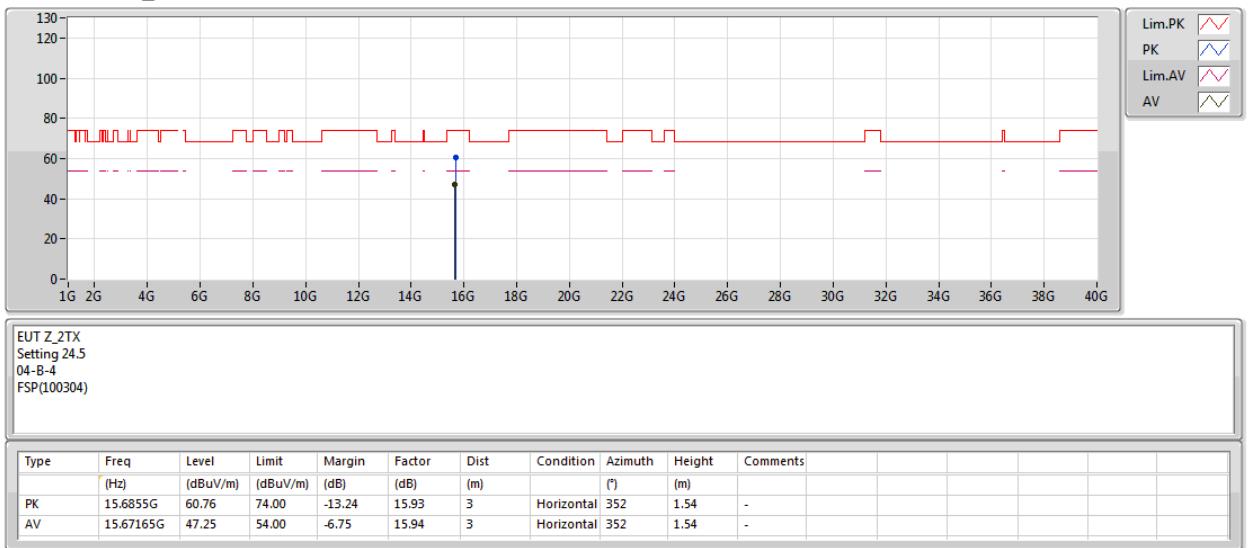
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5230MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5270MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5270MHz_TX





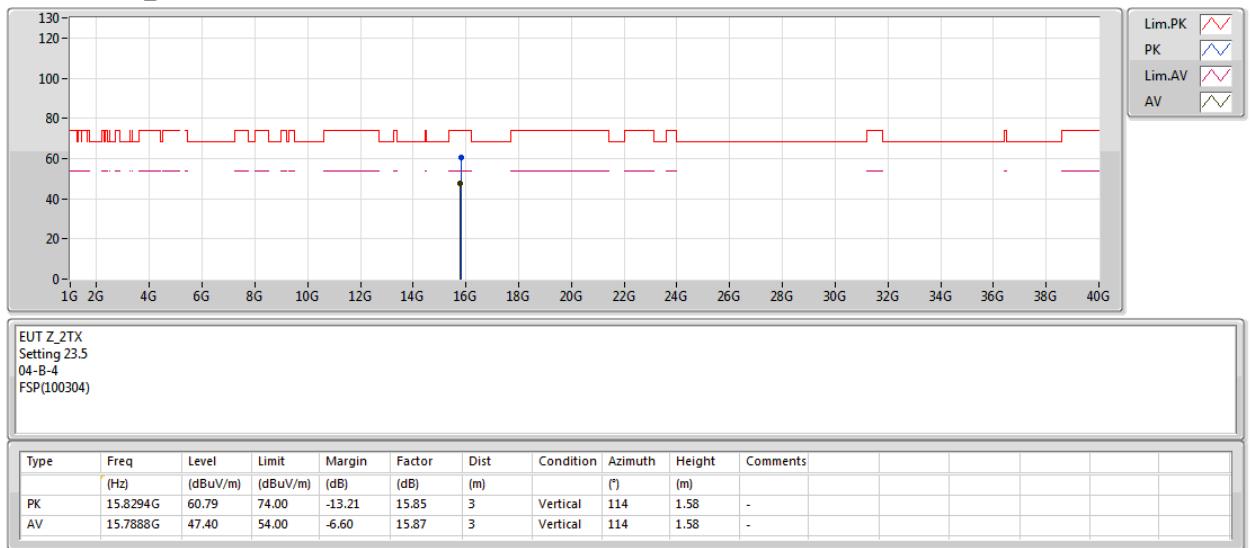
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5270MHz_TX





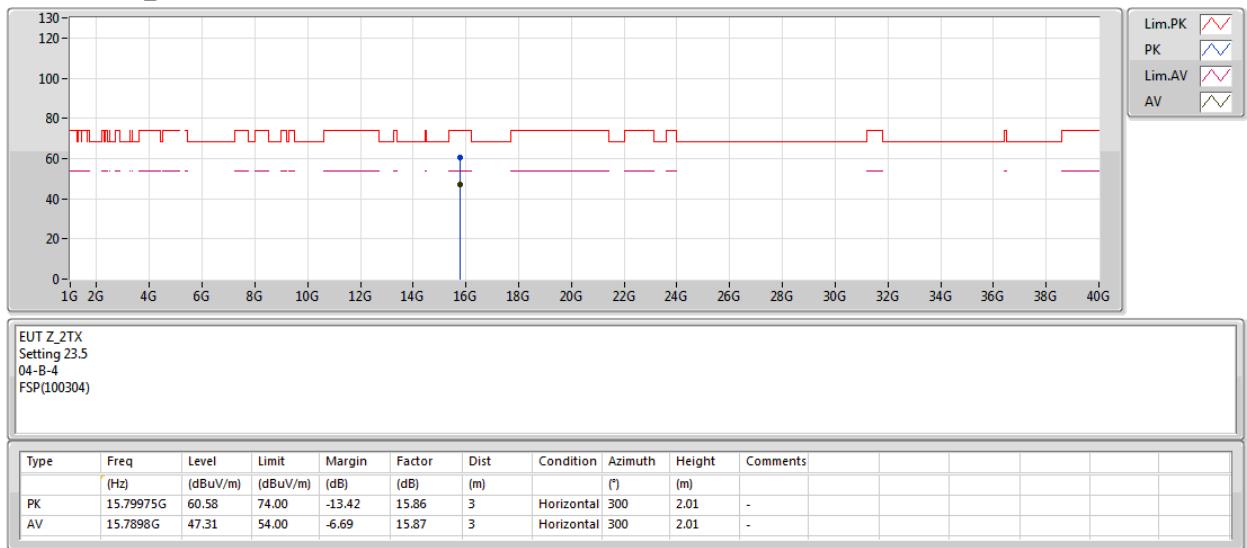
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5270MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5310MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5310MHz_TX





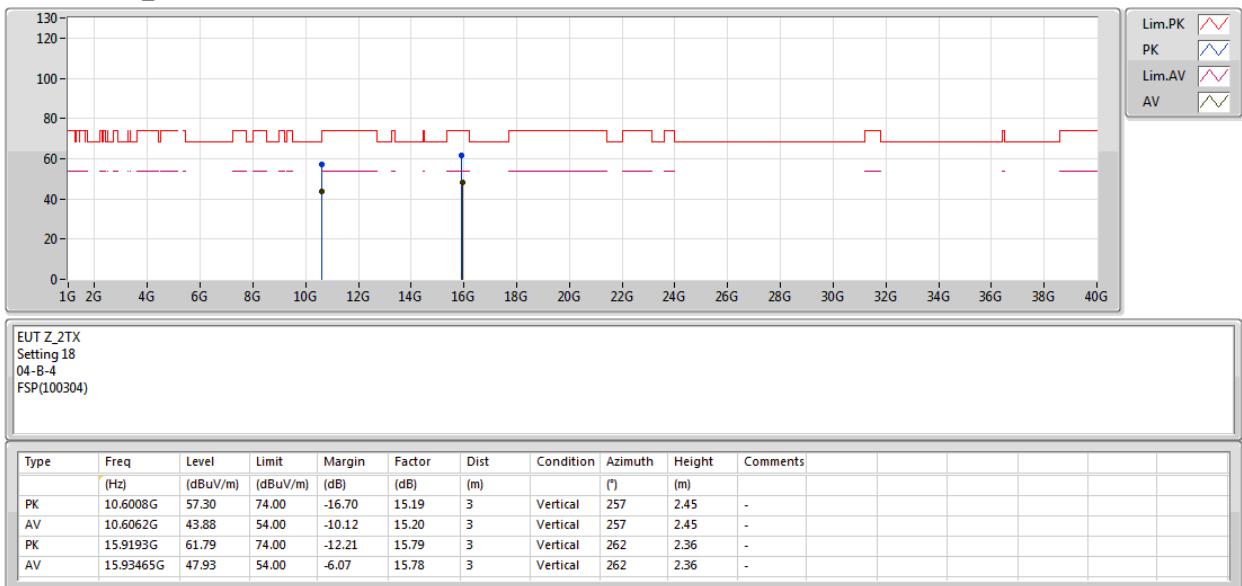
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5310MHz_TX





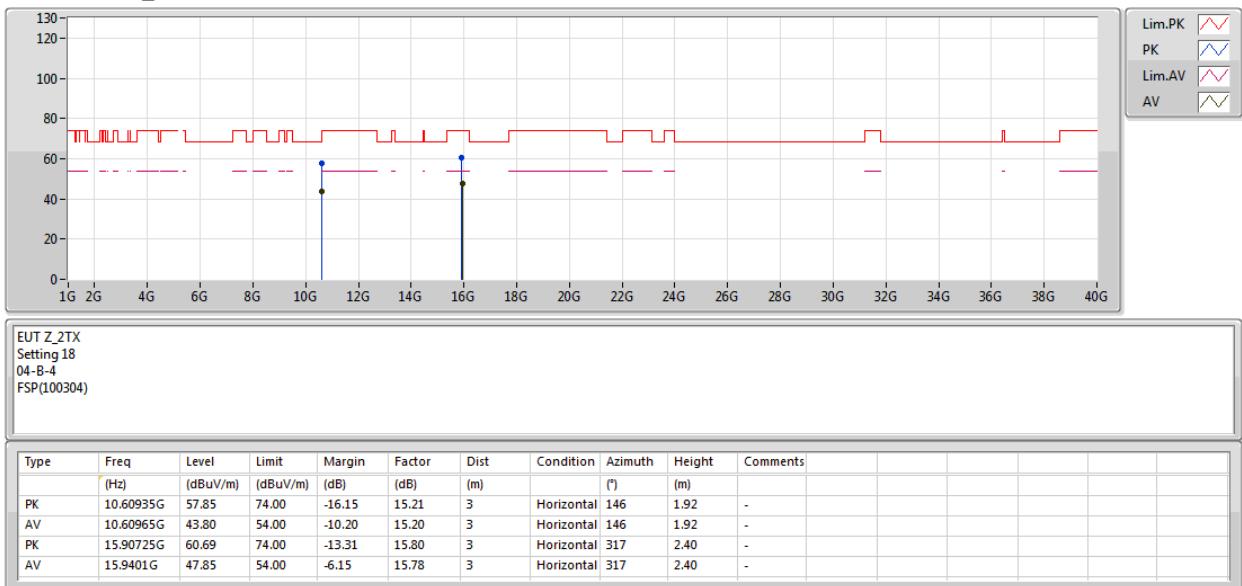
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5310MHz_TX





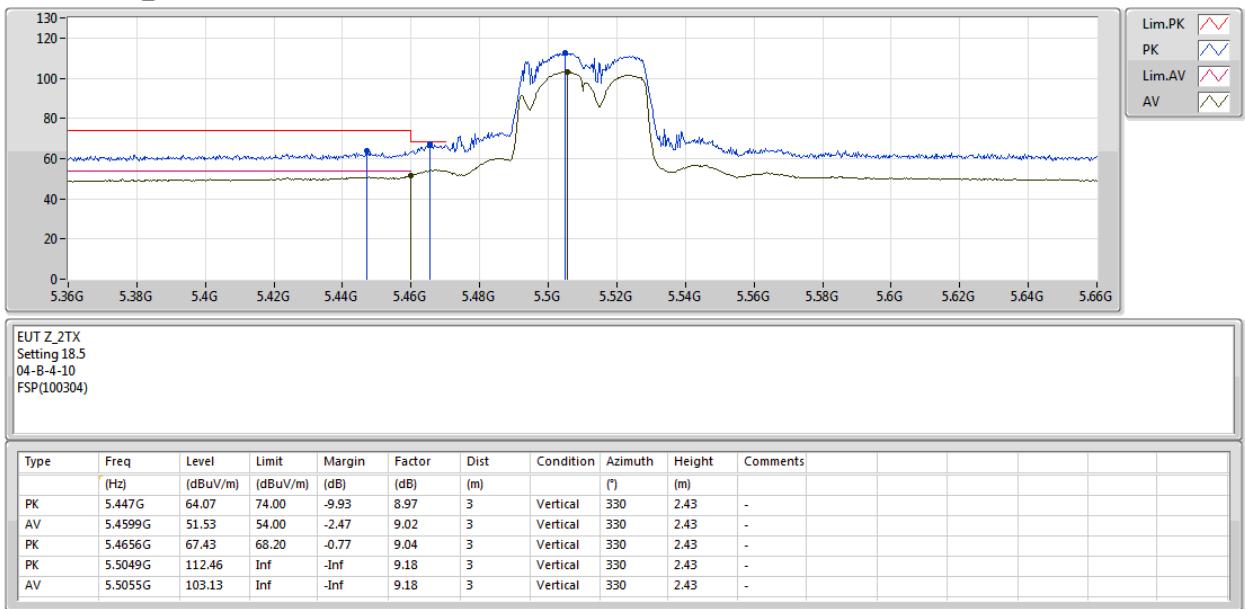
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5510MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5510MHz_TX





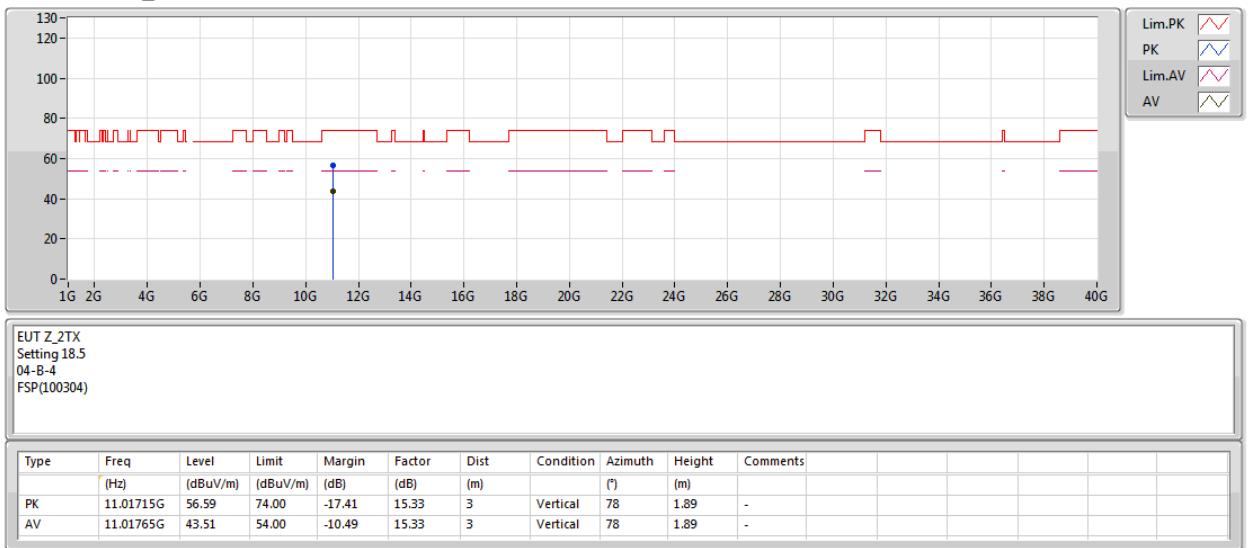
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5510MHz_TX





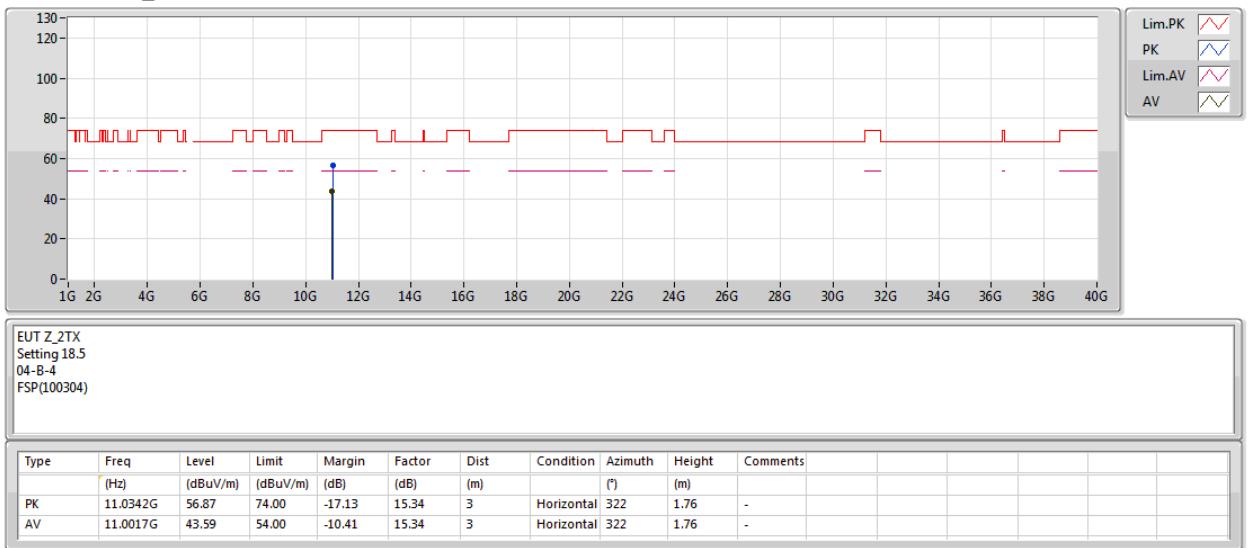
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5510MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5550MHz_TX





RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5550MHz_TX





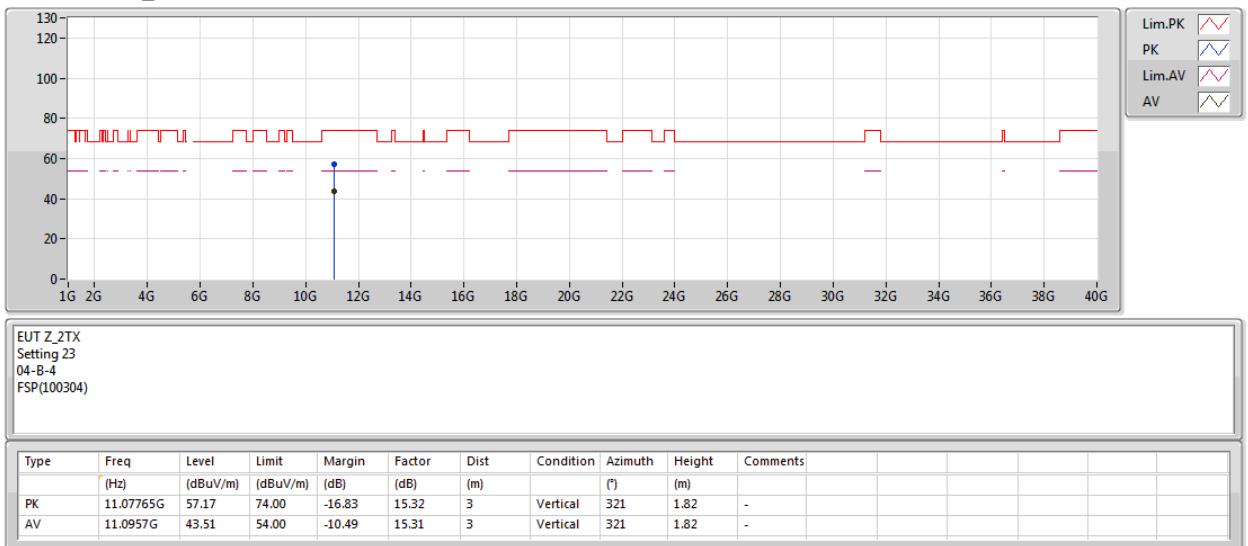
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5550MHz_TX





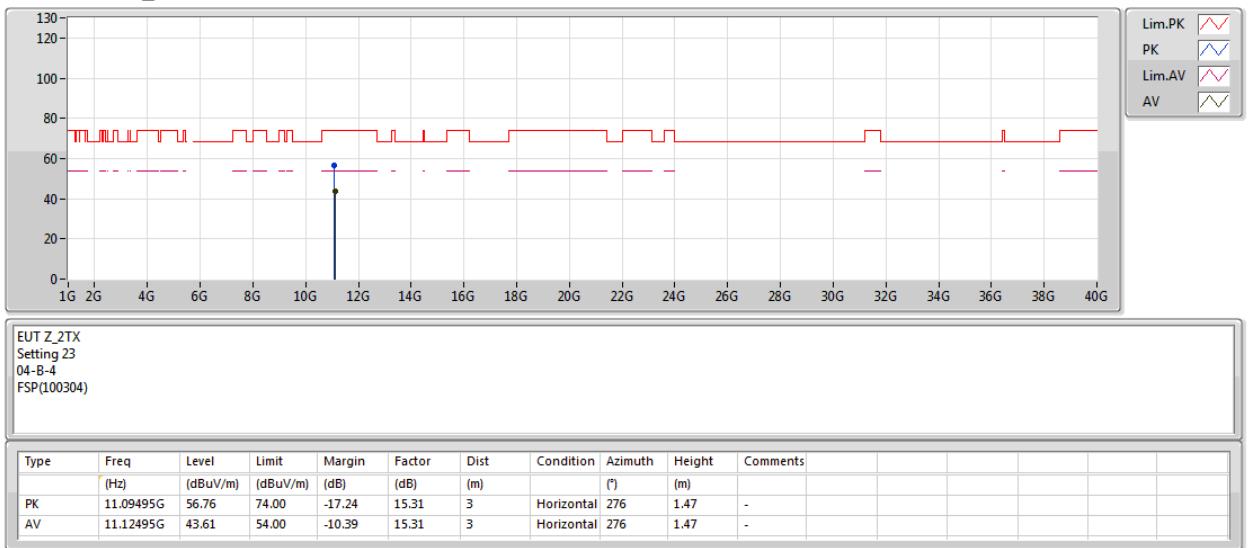
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5550MHz_TX





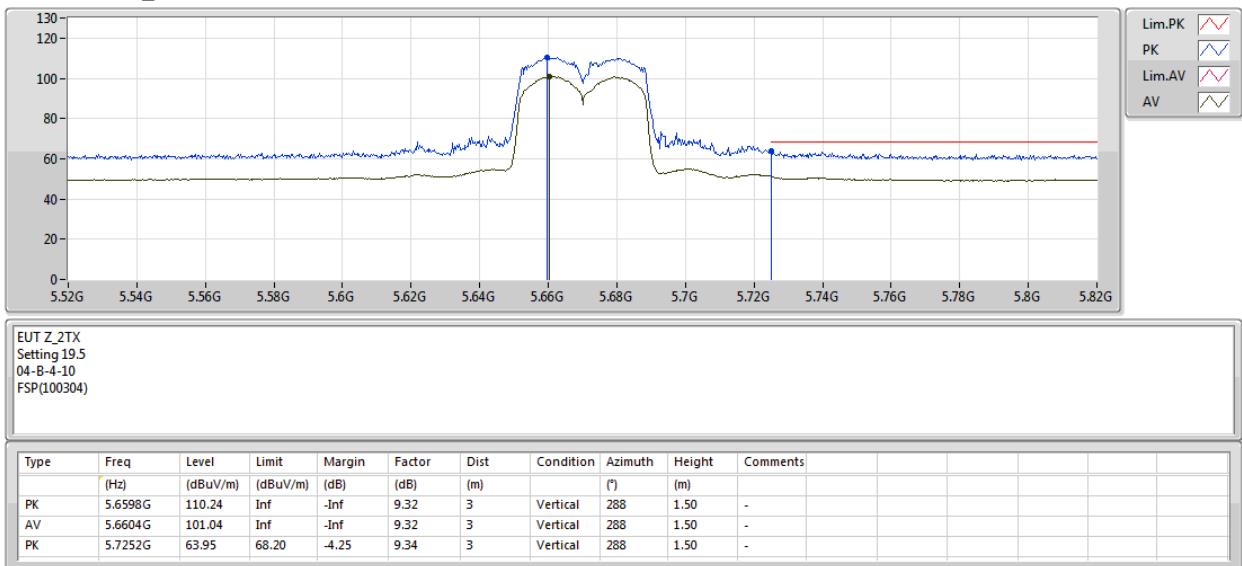
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5670MHz_TX





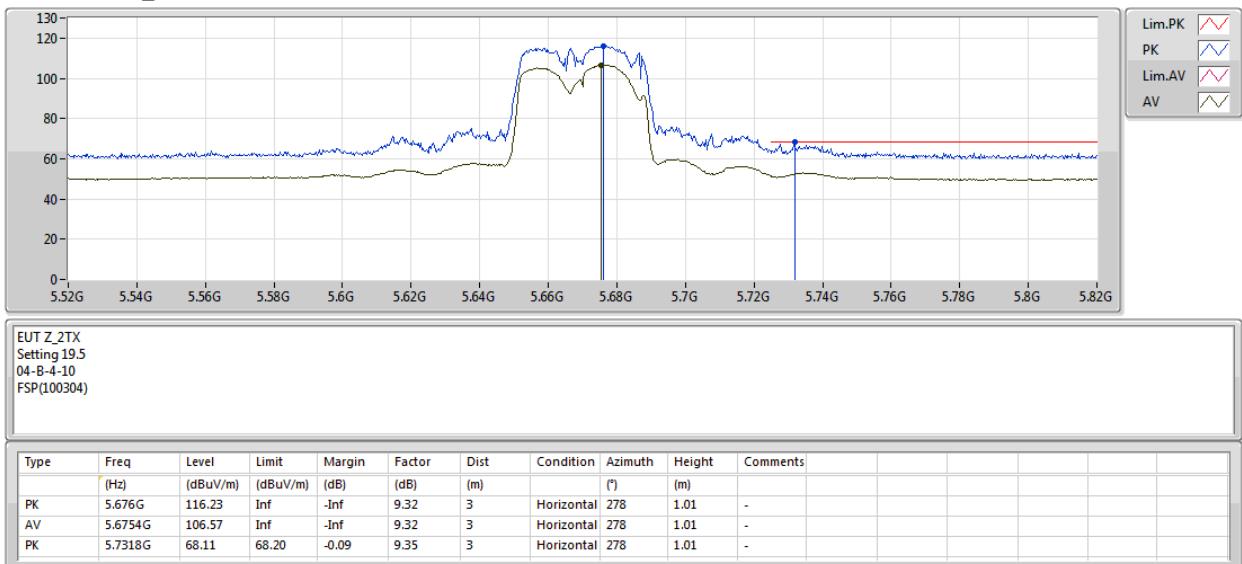
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5670MHz_TX





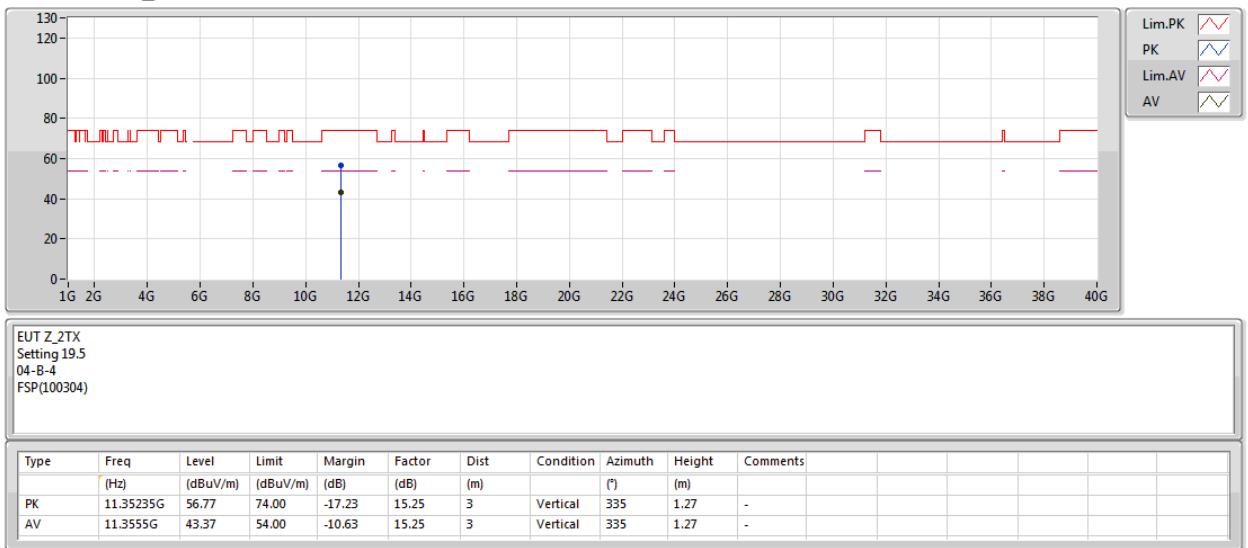
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5670MHz_TX





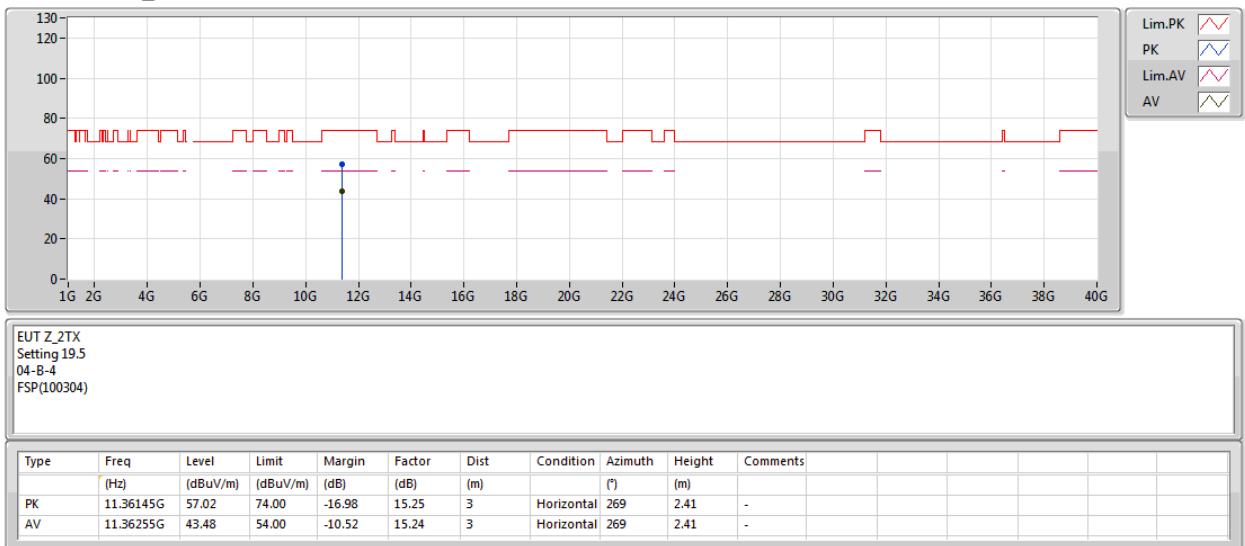
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5670MHz_TX





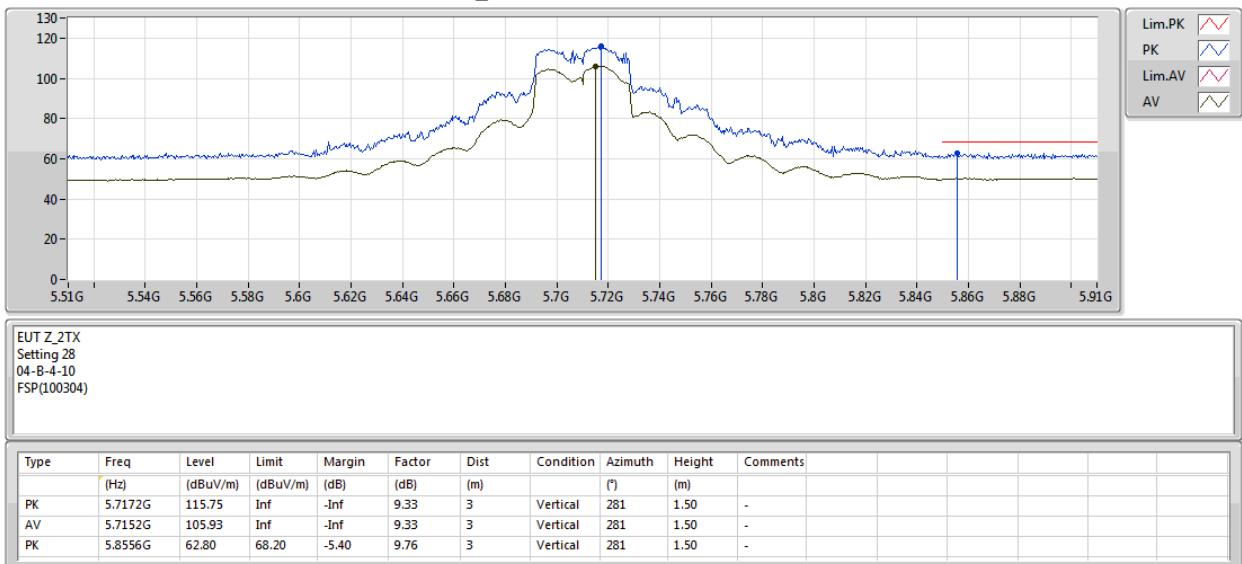
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5710MHz Straddle 5.47-5.725GHz_TX





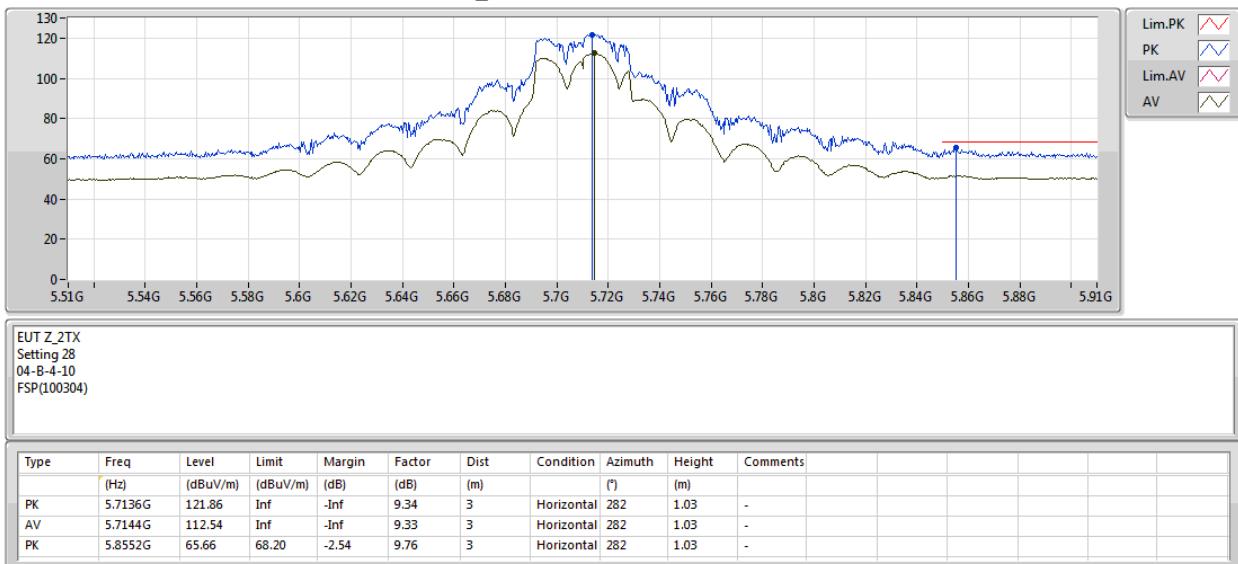
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5710MHz Straddle 5.47-5.725GHz_TX





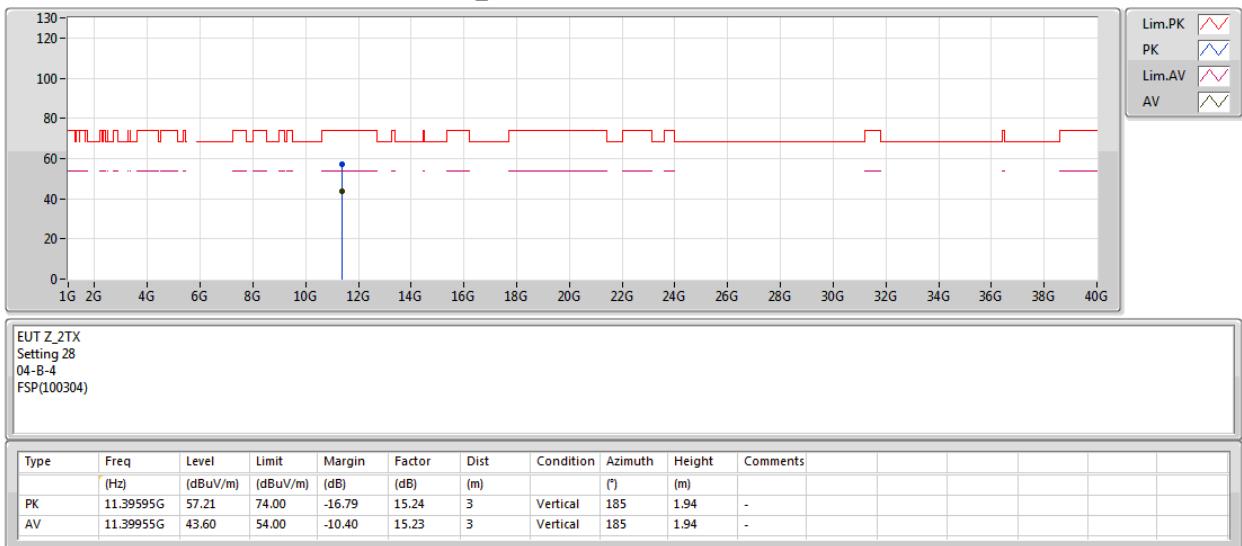
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5710MHz Straddle 5.47-5.725GHz_TX





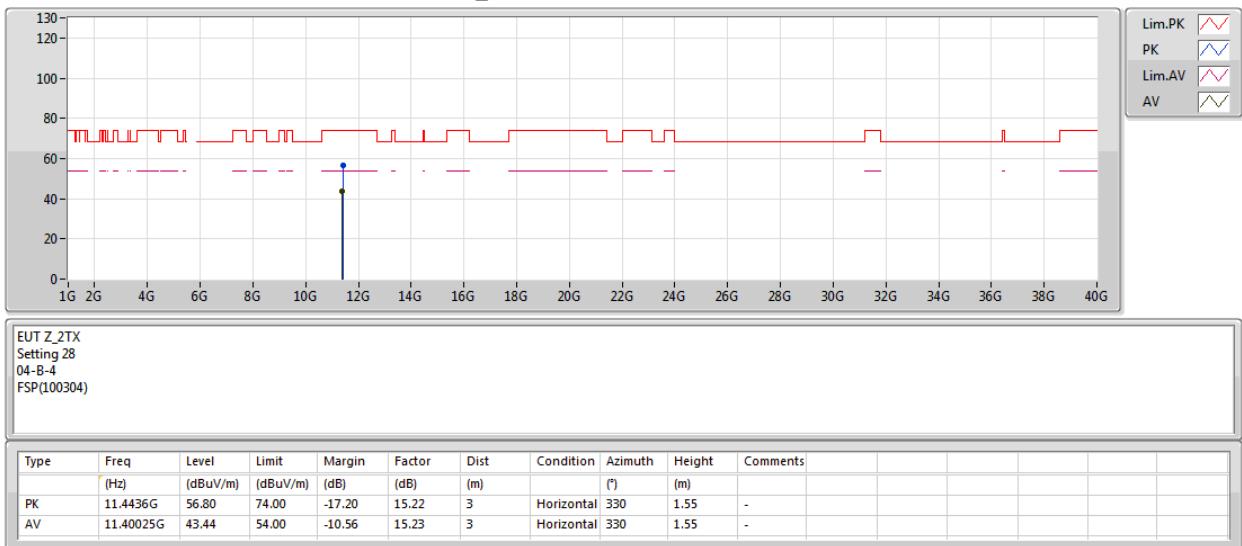
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5710MHz Straddle 5.47-5.725GHz_TX





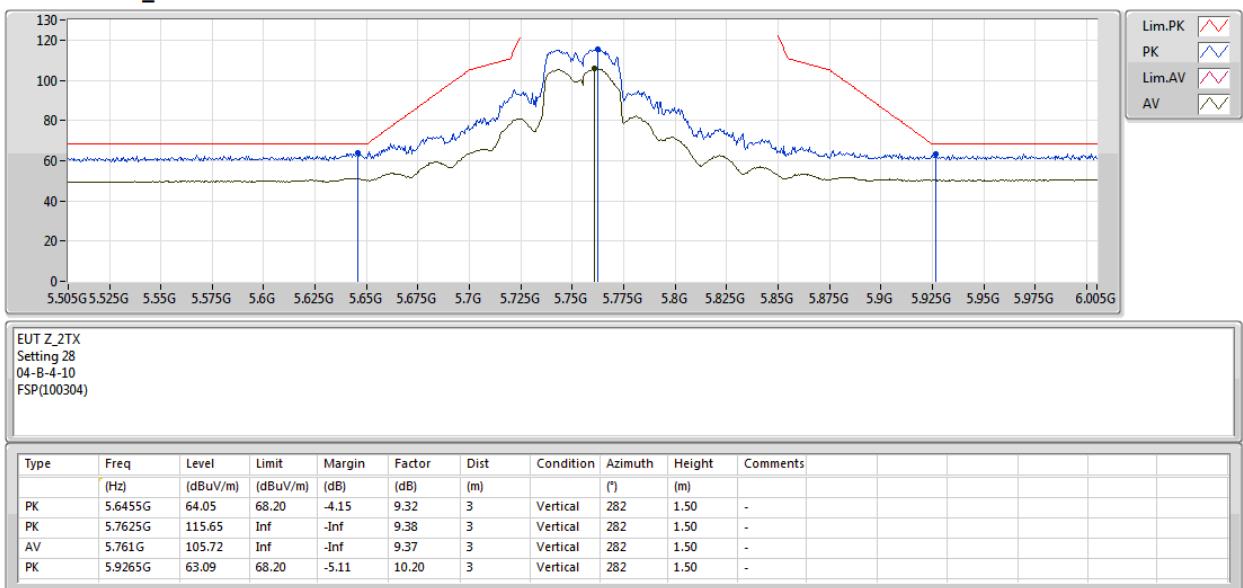
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5755MHz_TX





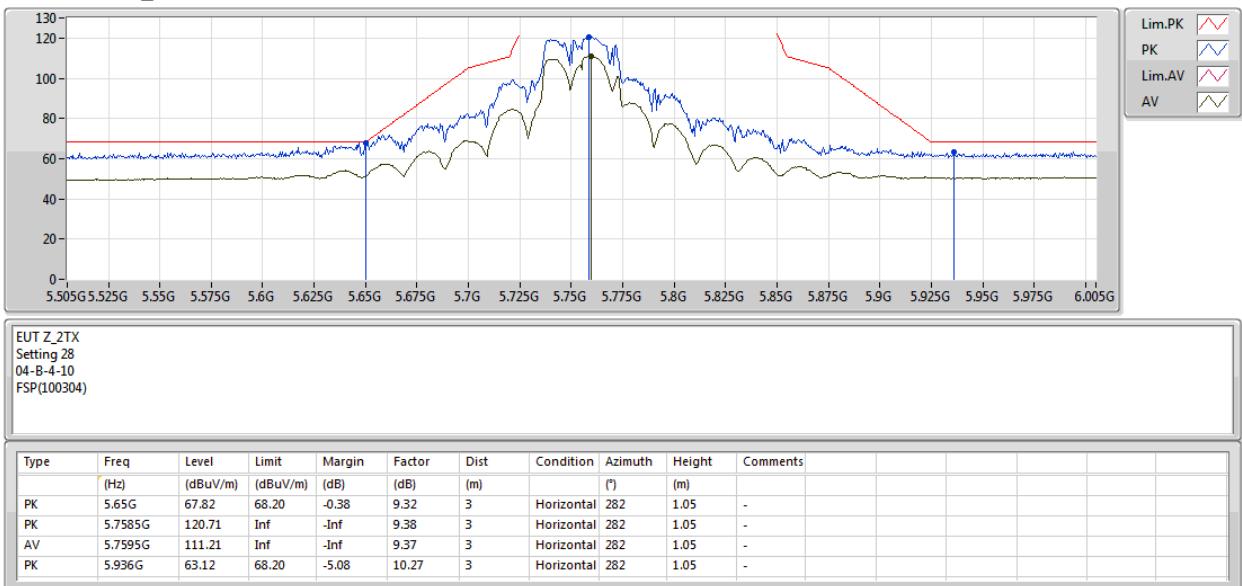
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5755MHz_TX





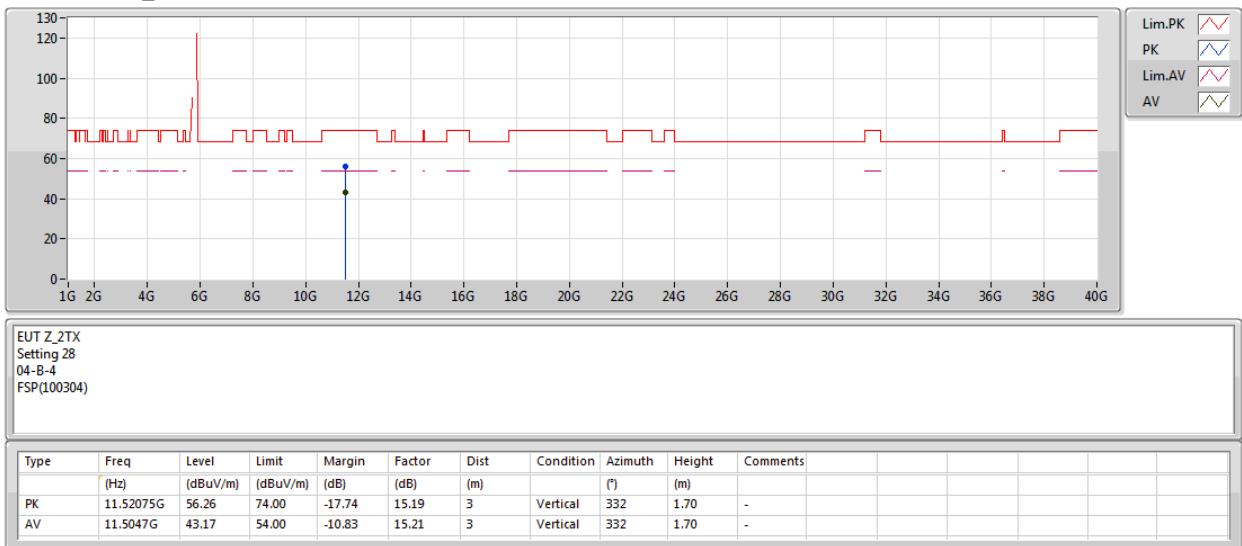
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5755MHz_TX





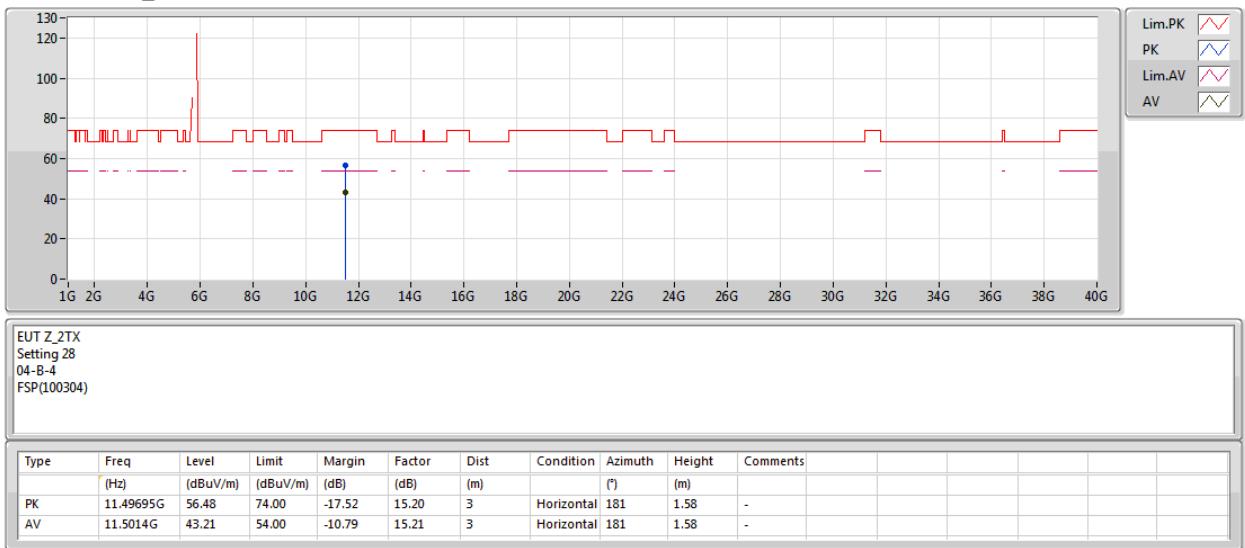
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

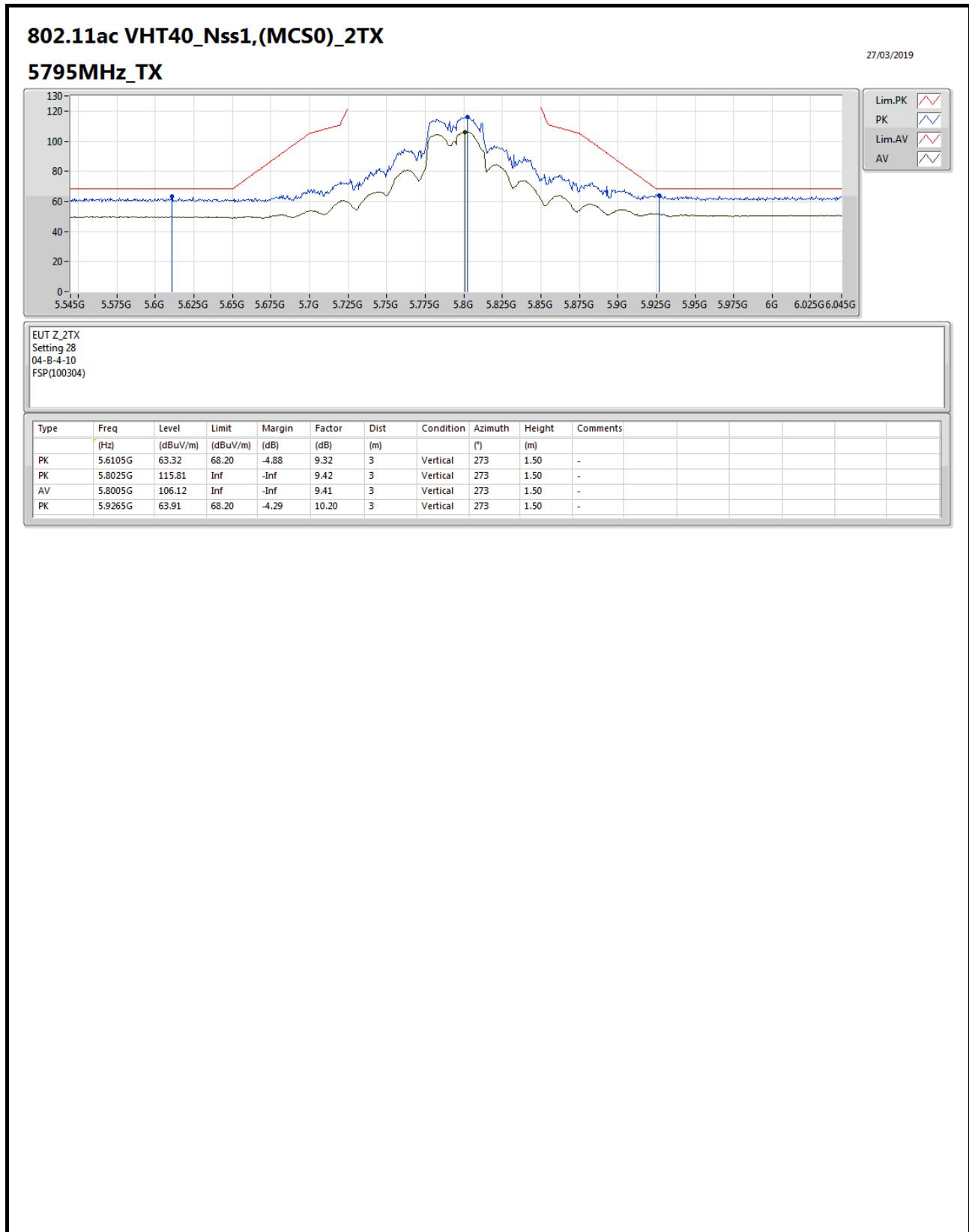
5755MHz_TX





RSE TX above 1GHz Result

Appendix E.2





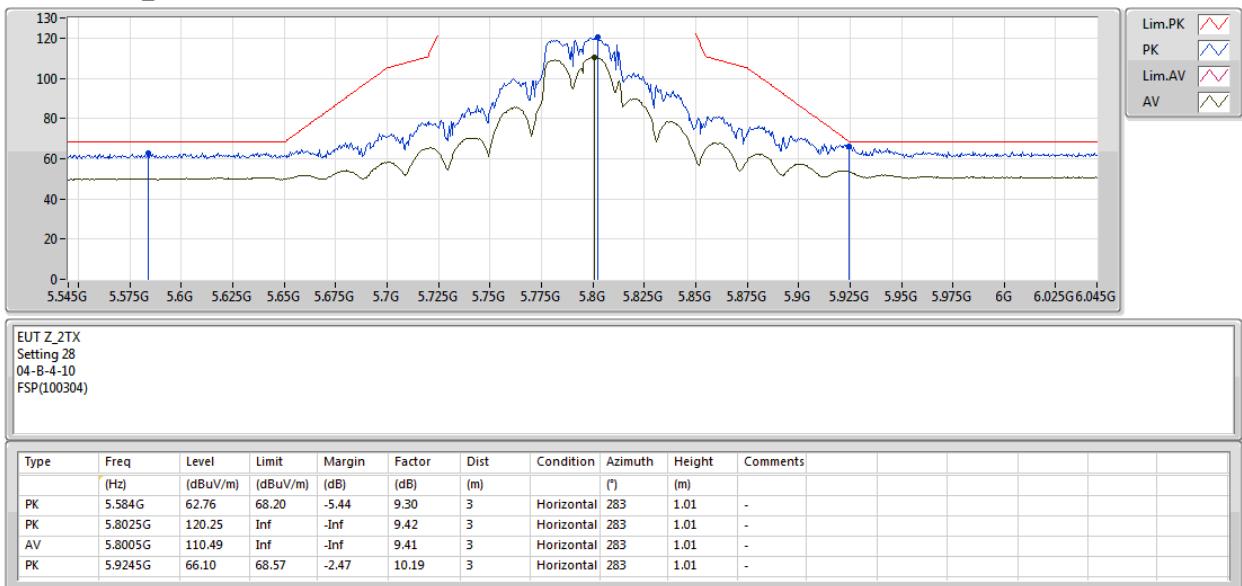
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5795MHz_TX





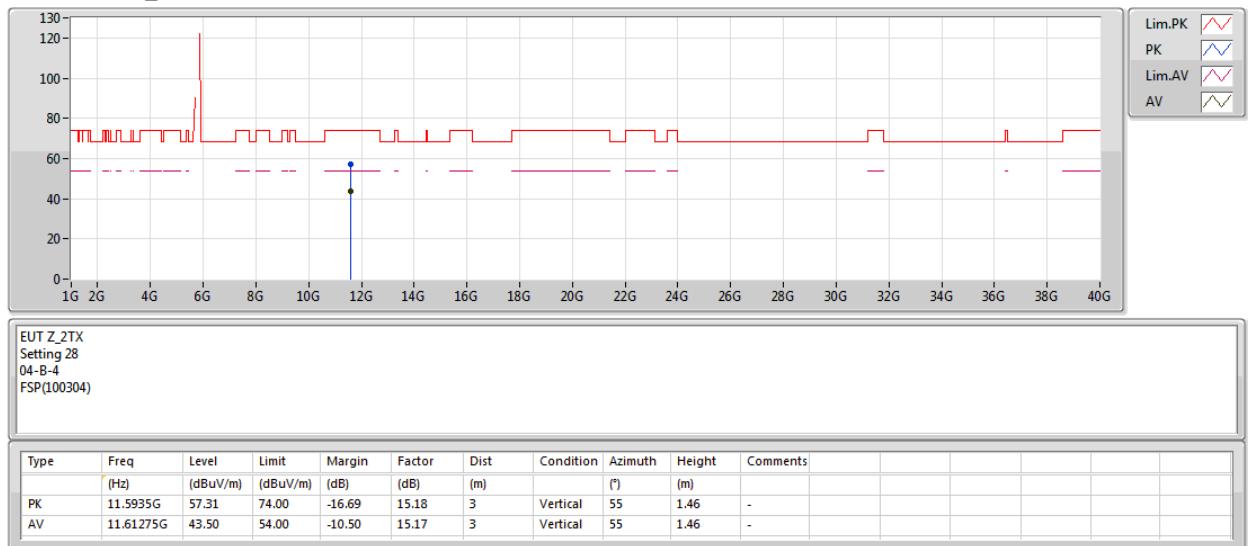
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5795MHz_TX





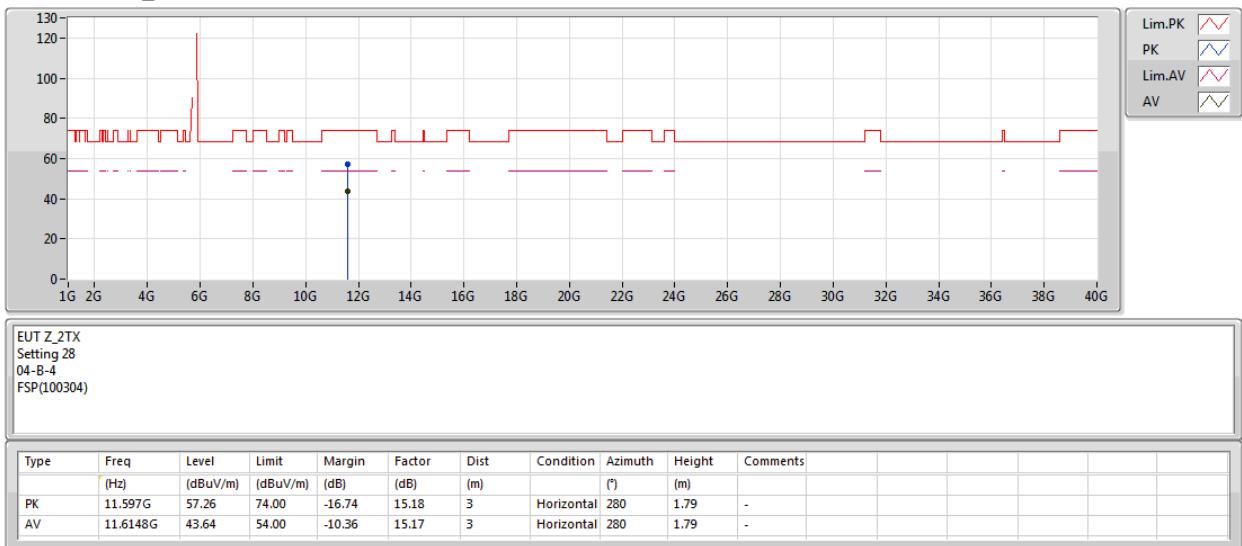
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT40_Nss1,(MCS0)_2TX

27/03/2019

5795MHz_TX





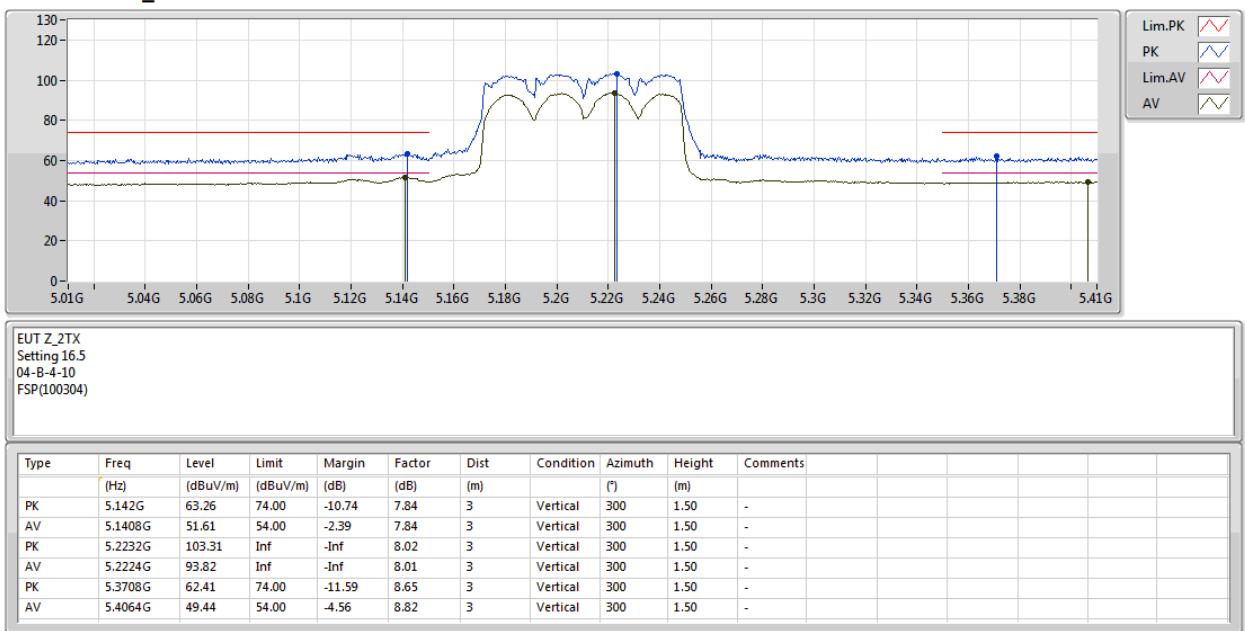
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5210MHz_TX





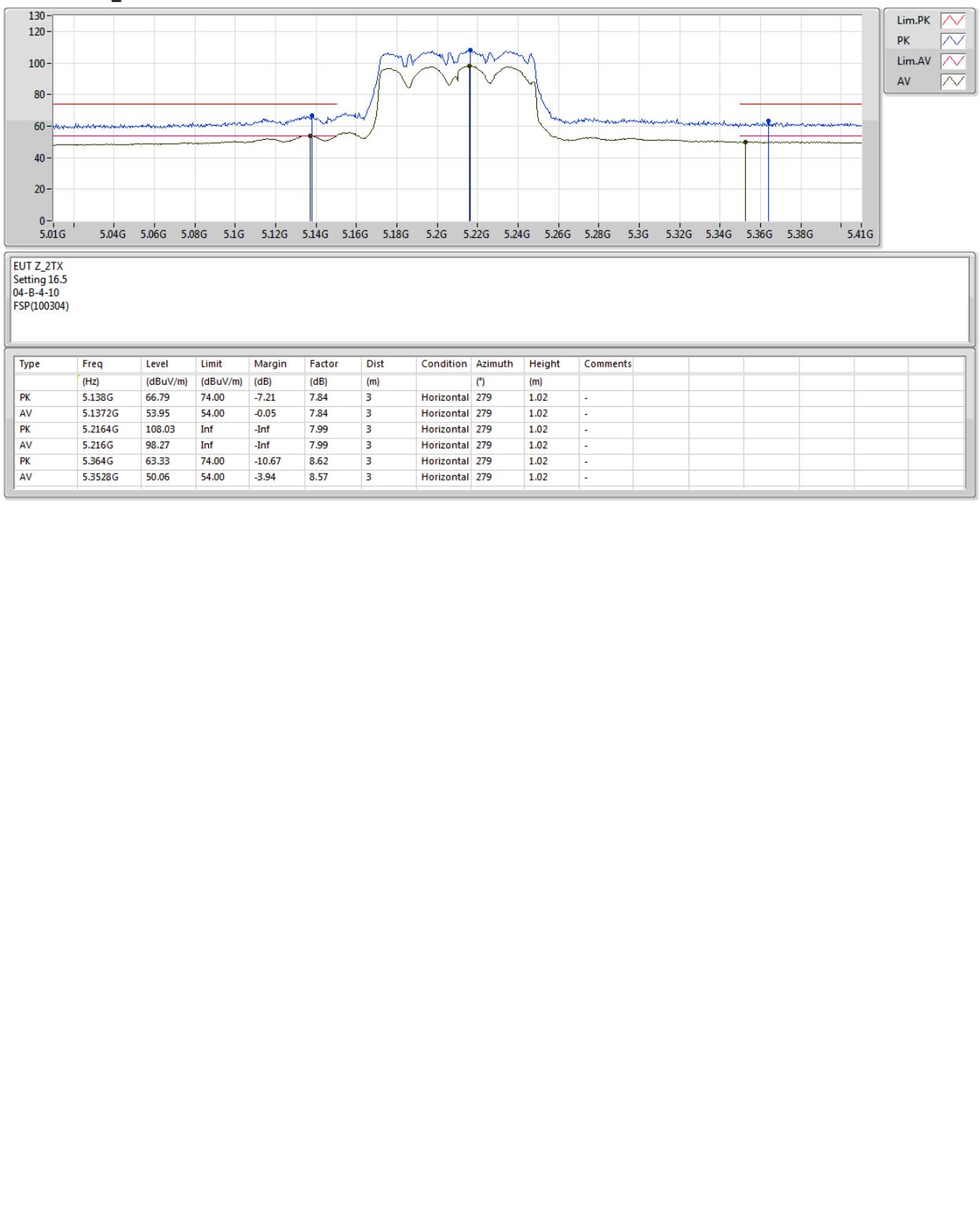
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5210MHz_TX





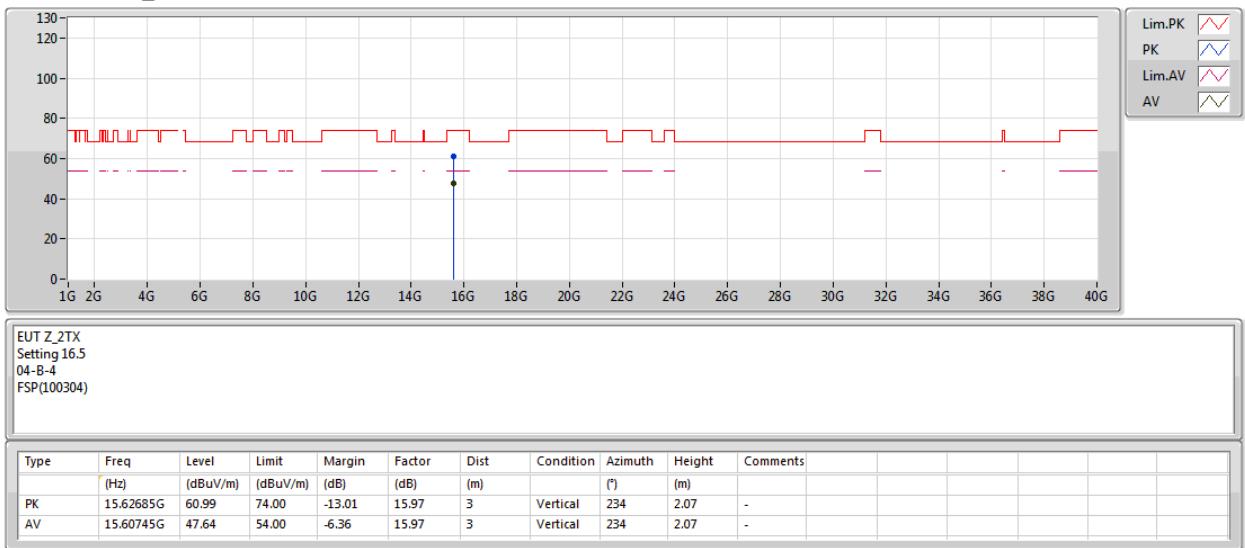
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5210MHz_TX





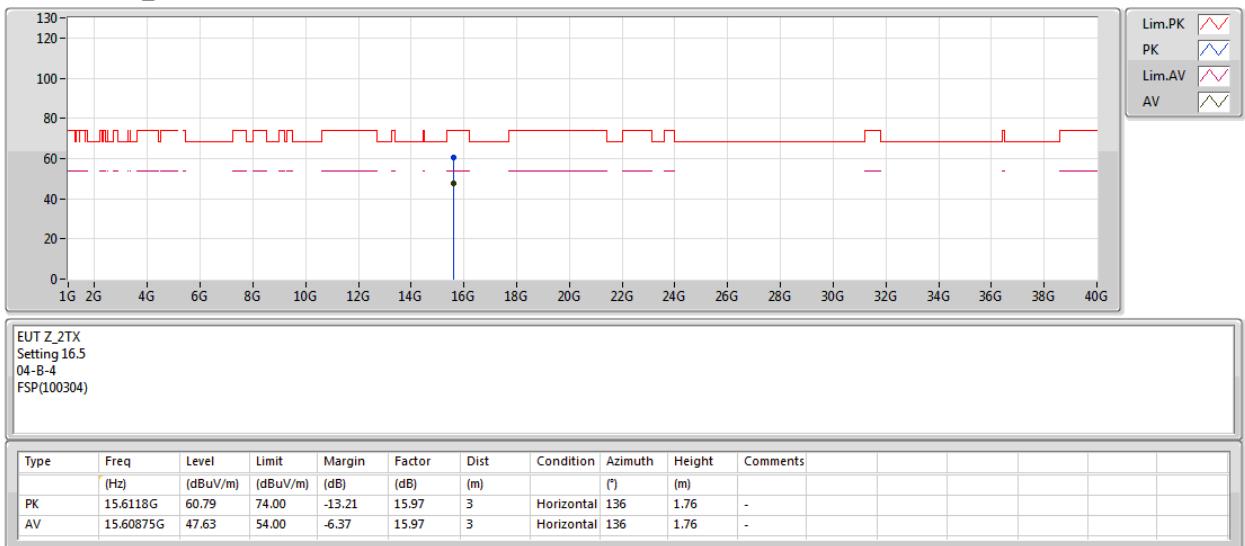
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5210MHz_TX





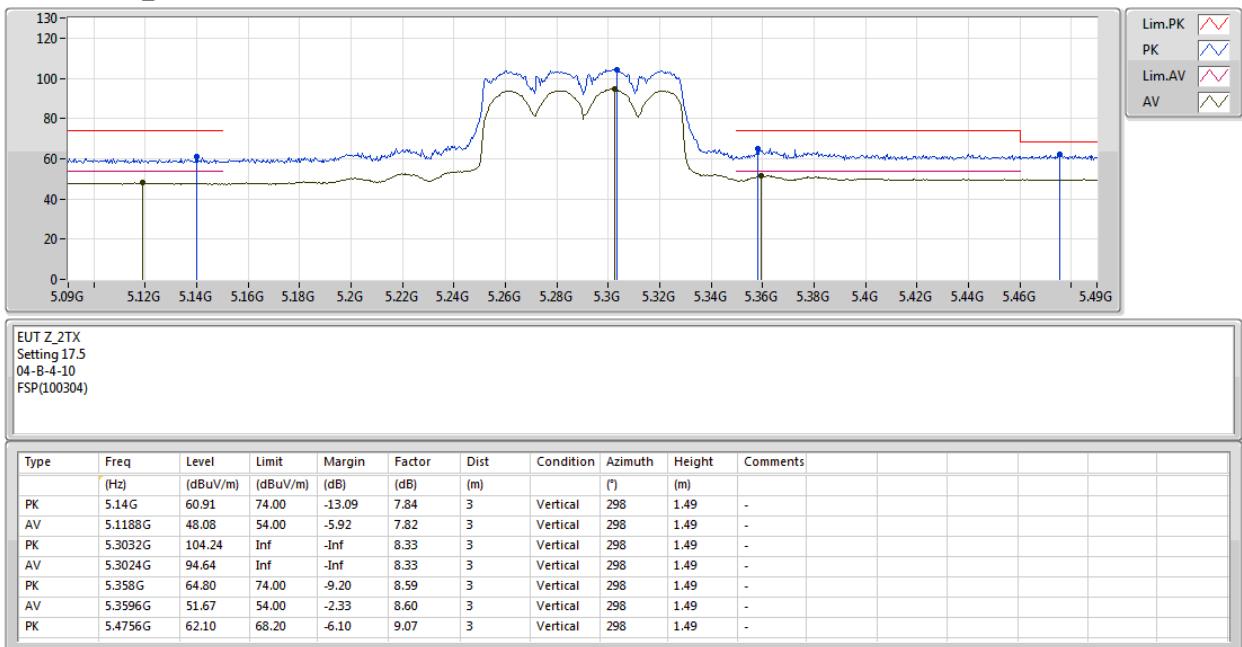
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5290MHz_TX





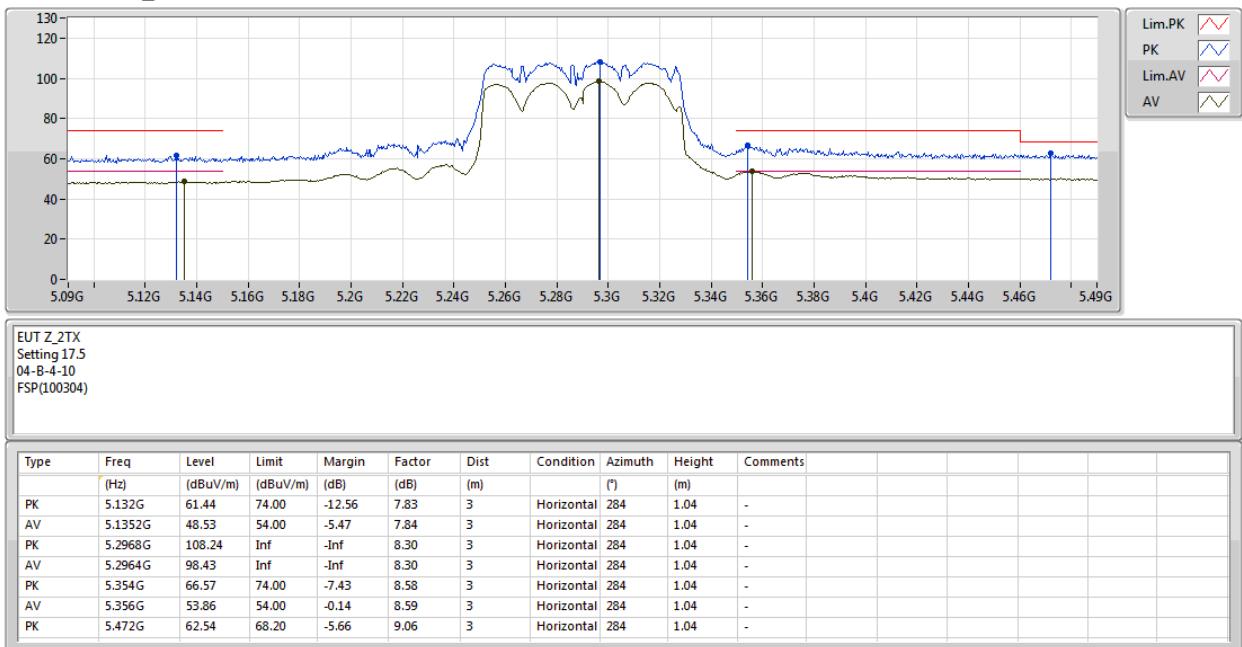
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5290MHz_TX





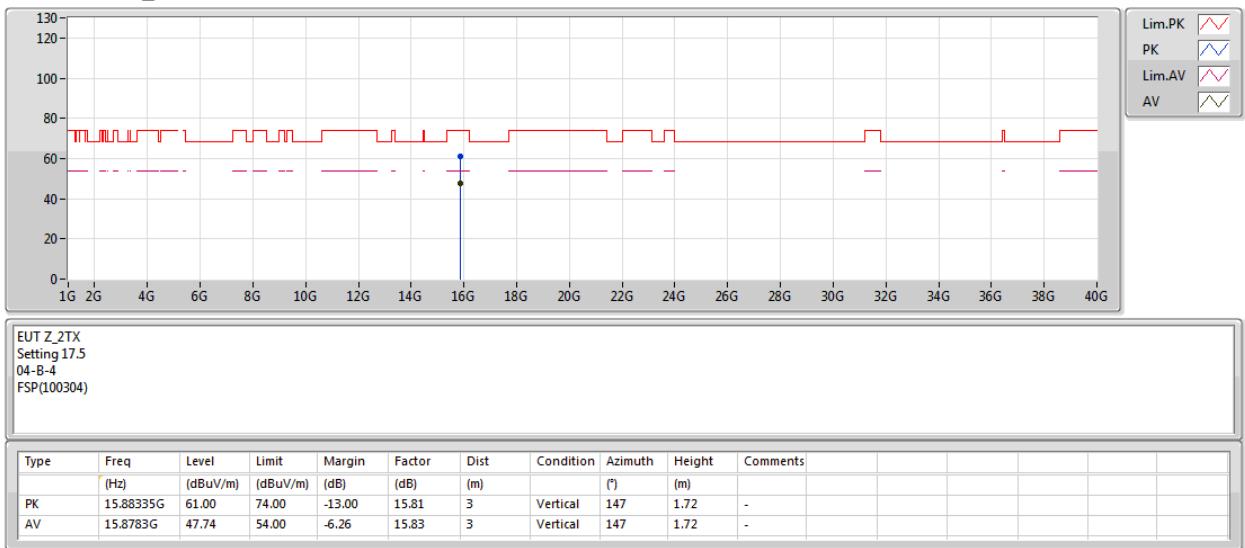
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5290MHz_TX





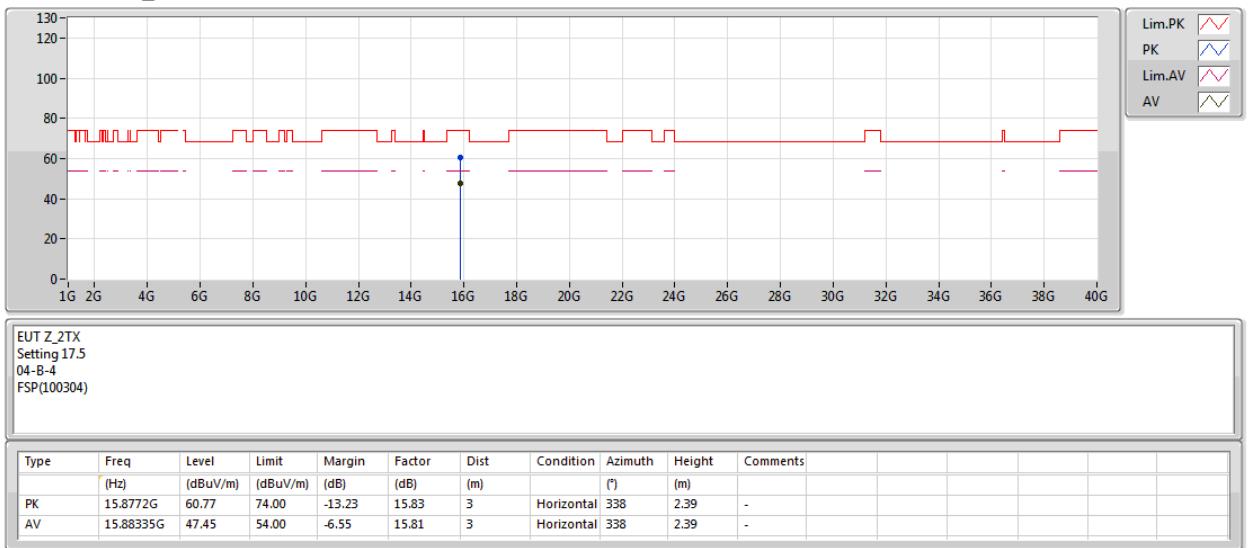
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5290MHz_TX





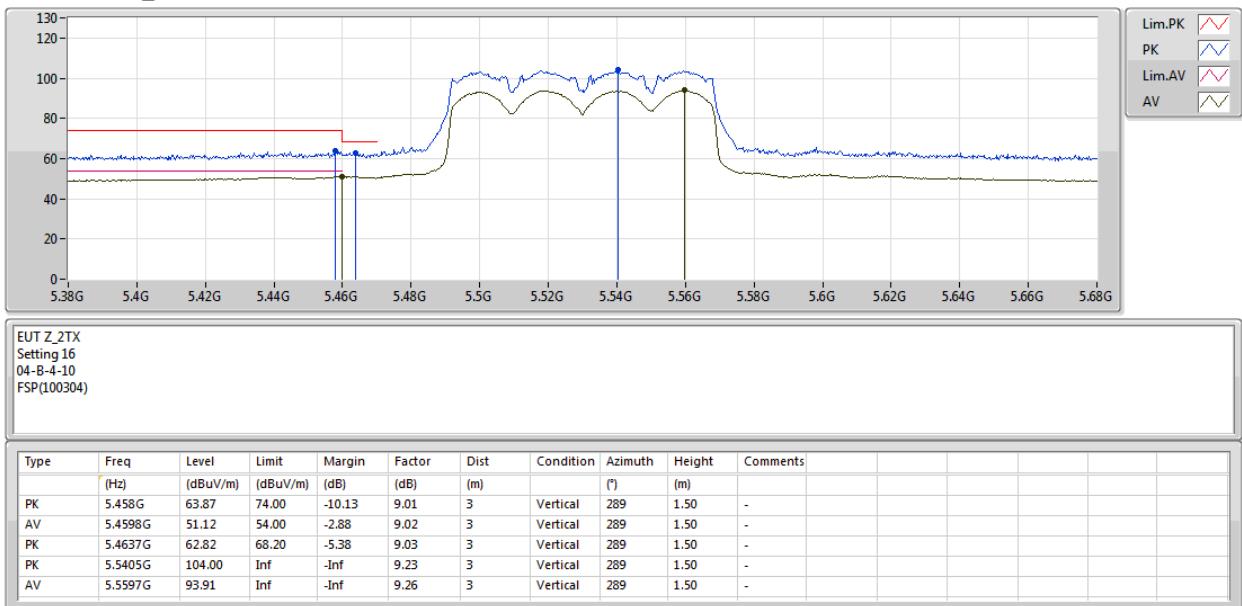
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5530MHz_TX





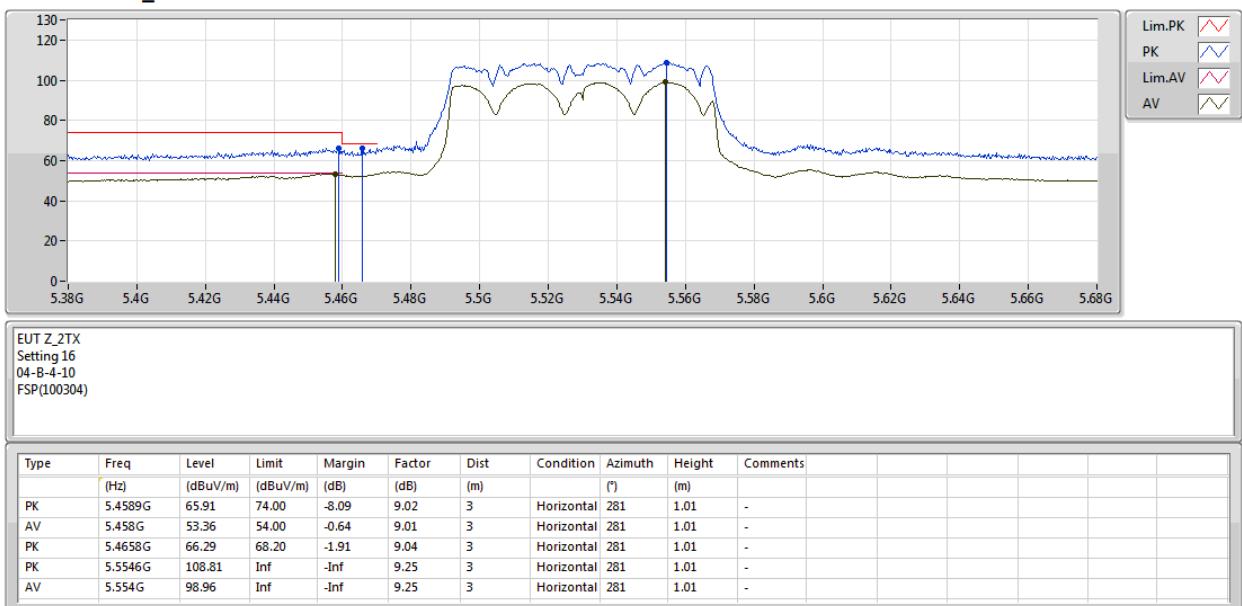
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5530MHz_TX





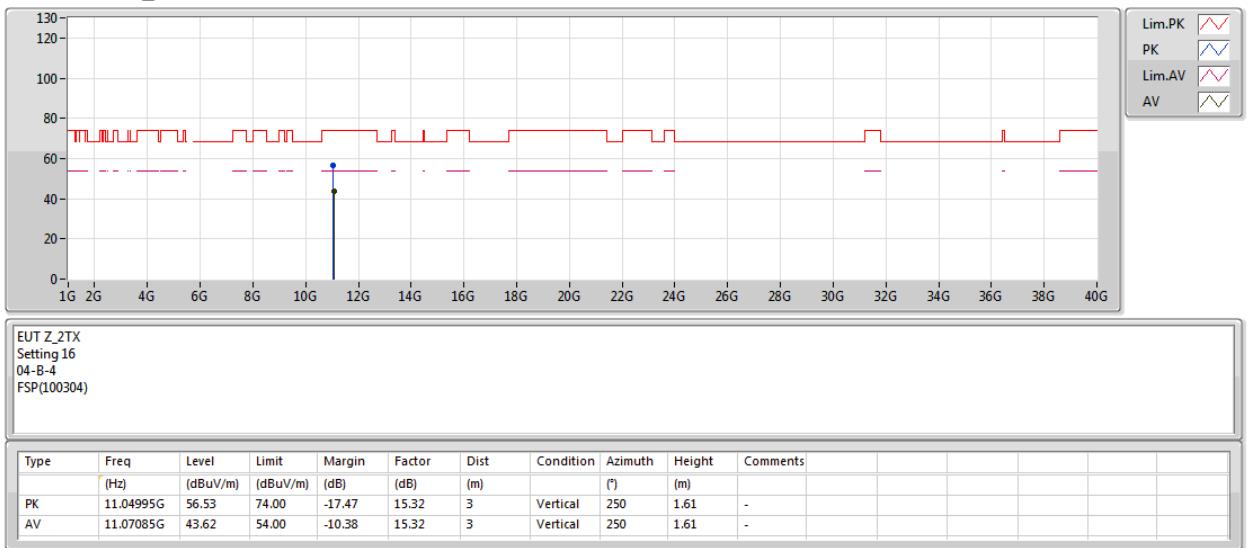
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5530MHz_TX





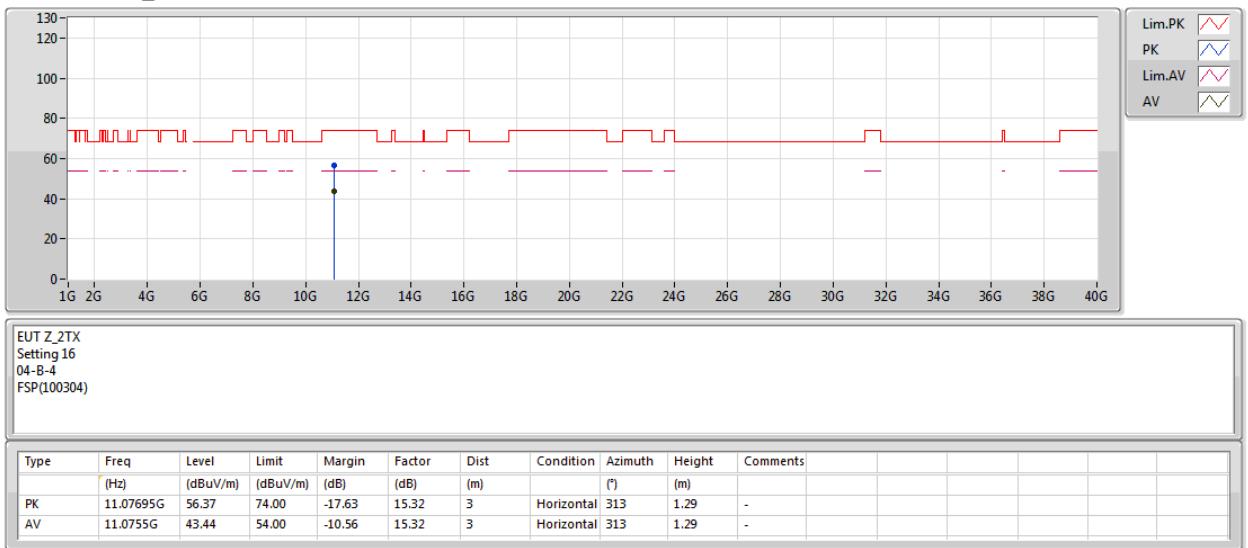
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5530MHz_TX





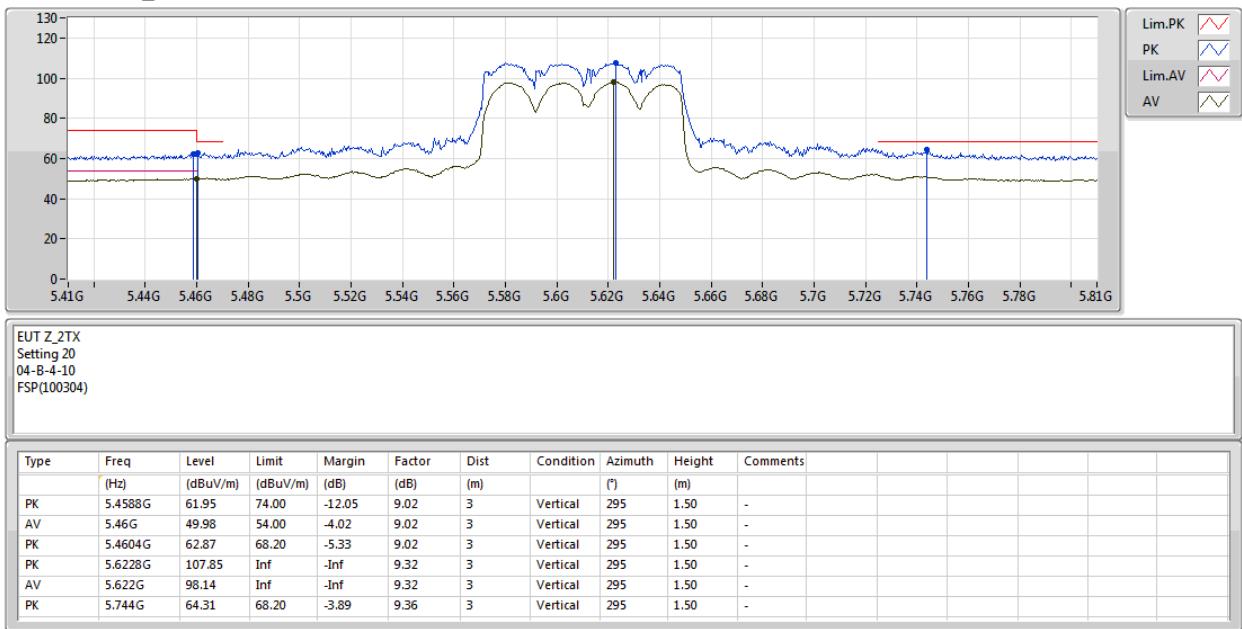
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5610MHz_TX





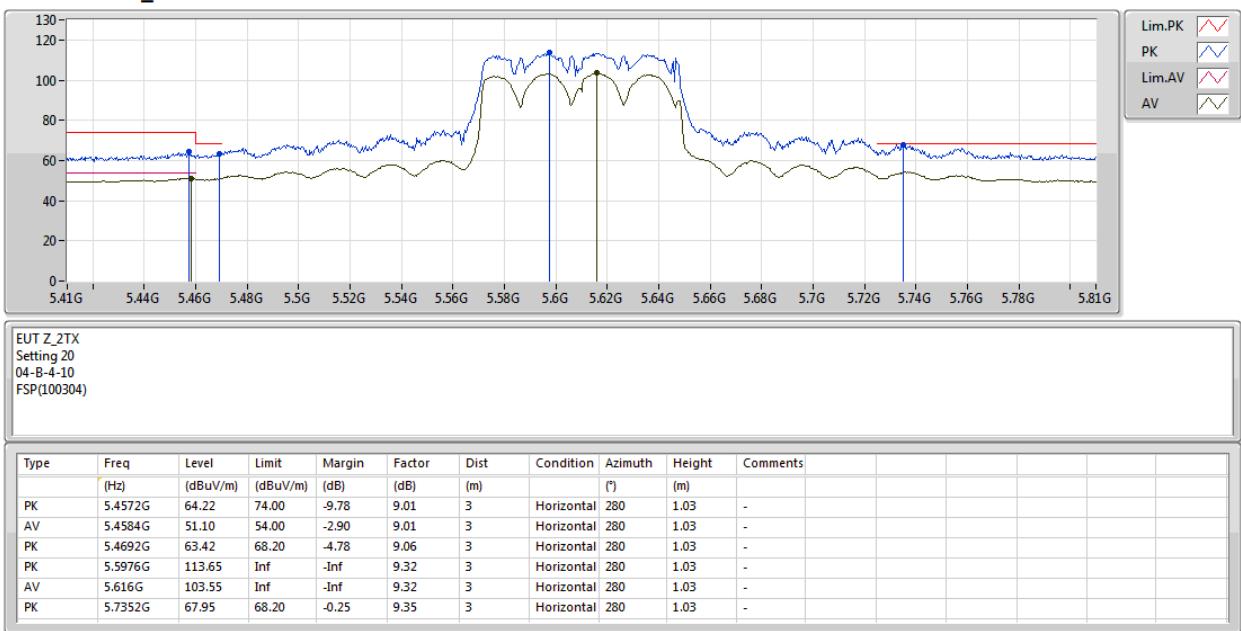
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5610MHz_TX





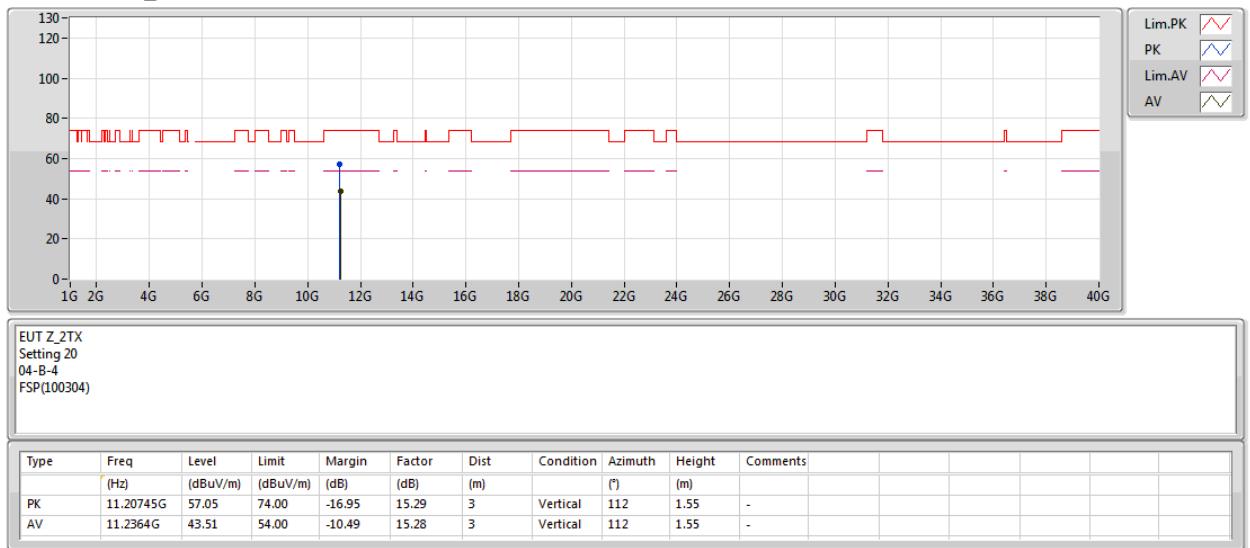
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5610MHz_TX





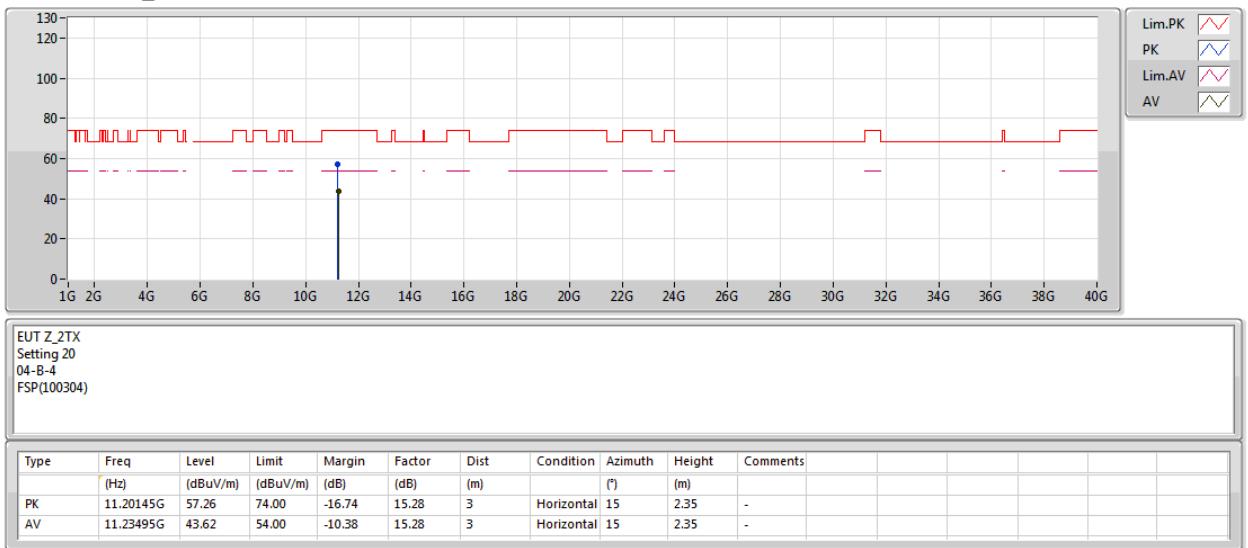
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5610MHz_TX





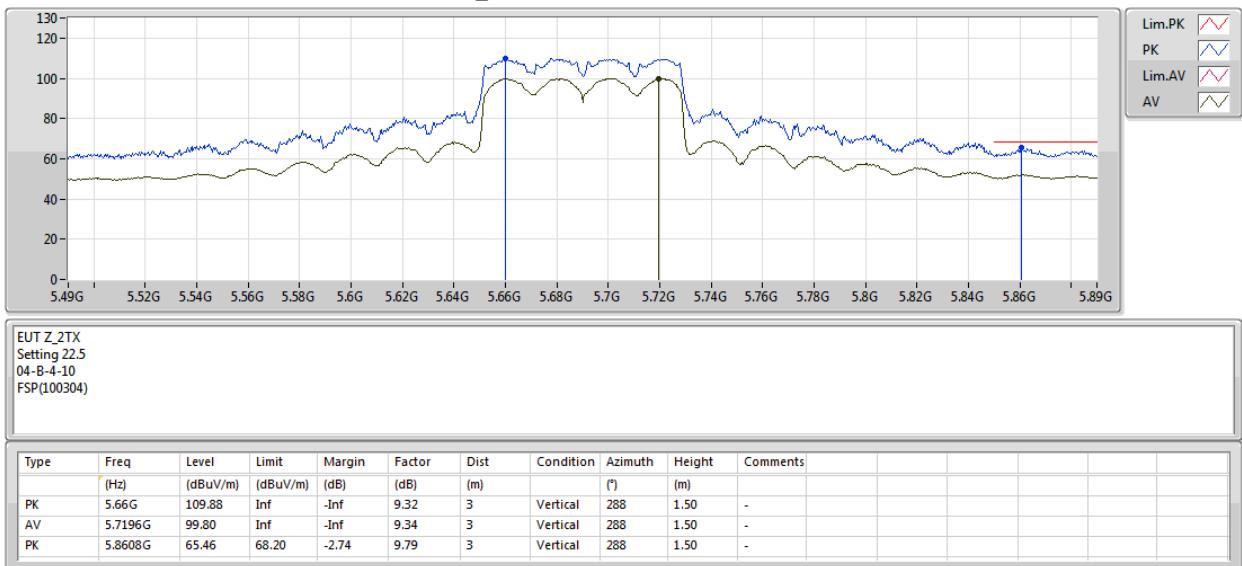
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5690MHz Straddle 5.47-5.725GHz_TX





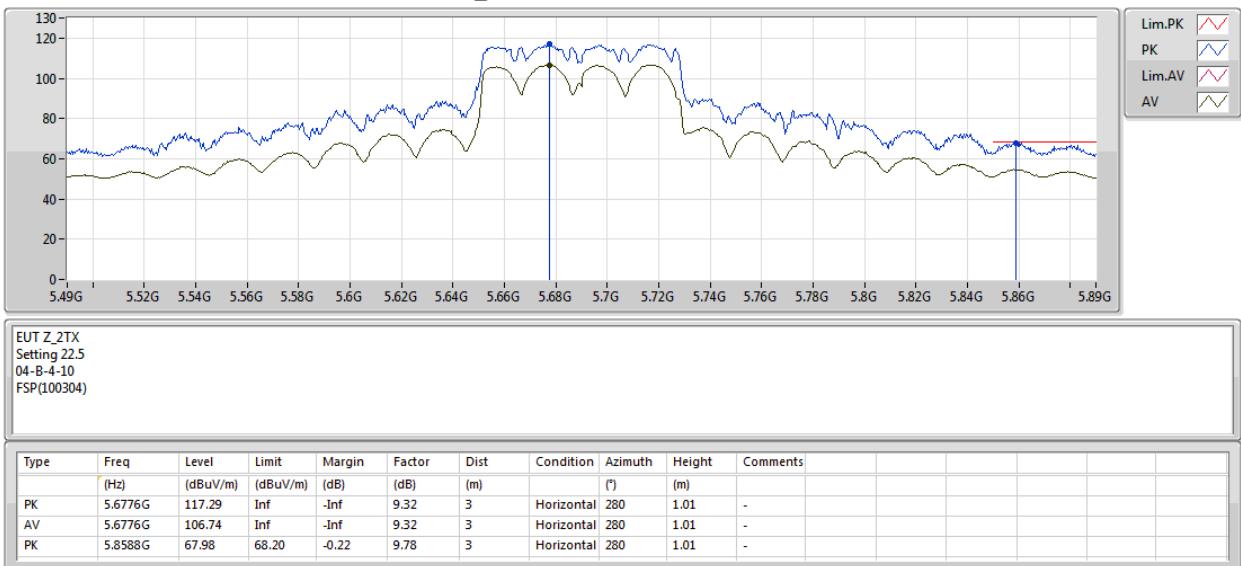
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5690MHz Straddle 5.47-5.725GHz_TX





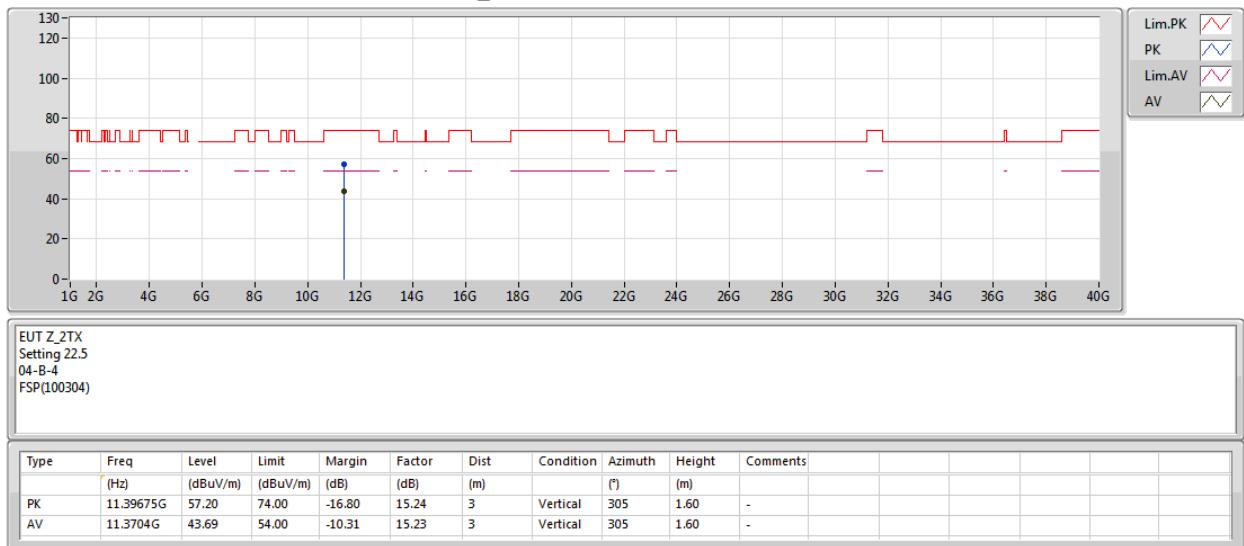
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5690MHz Straddle 5.47-5.725GHz_TX





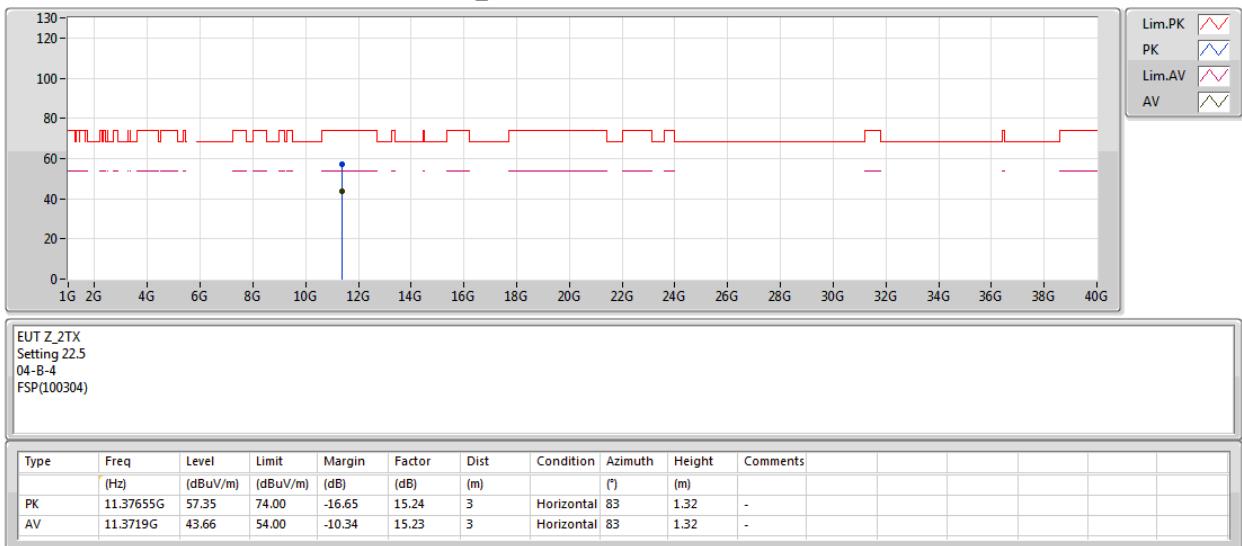
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5690MHz Straddle 5.47-5.725GHz_TX





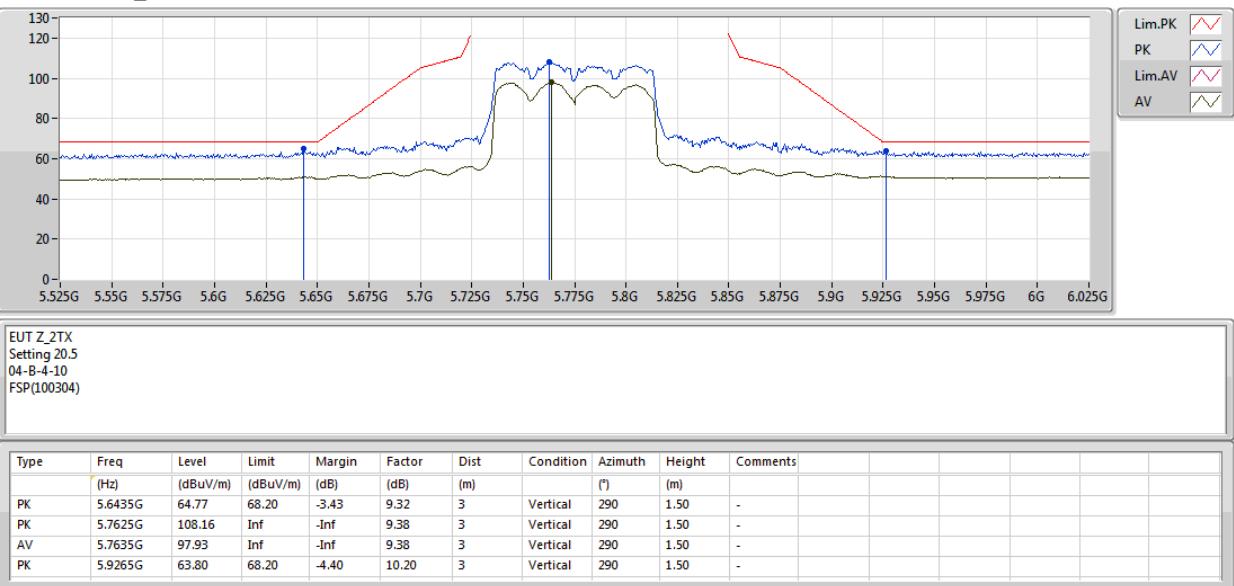
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5775MHz_TX





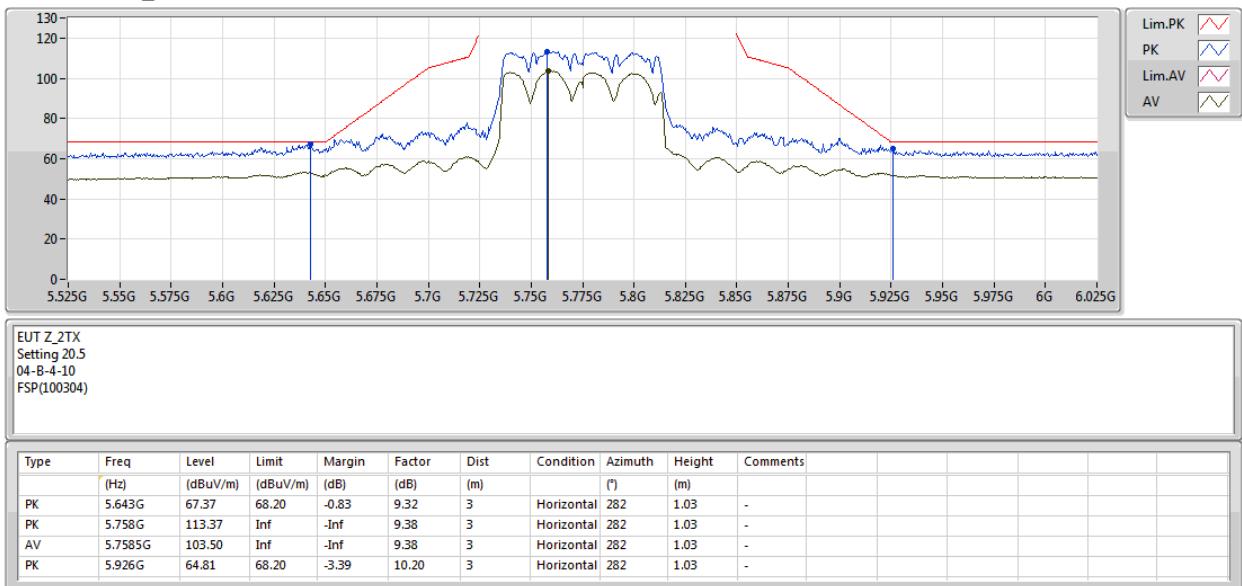
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5775MHz_TX





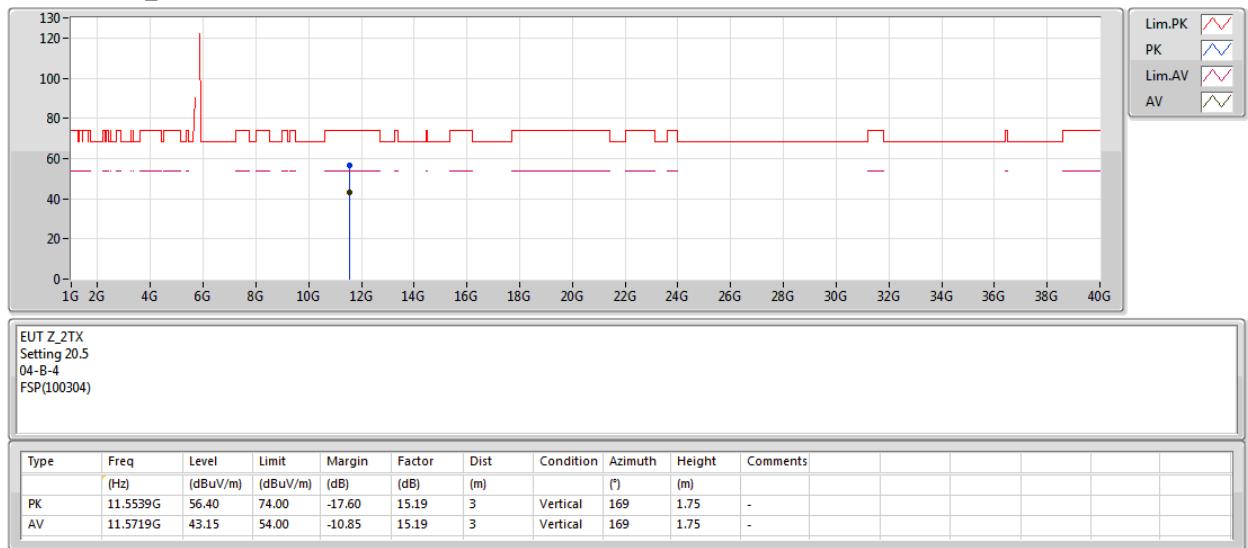
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5775MHz_TX





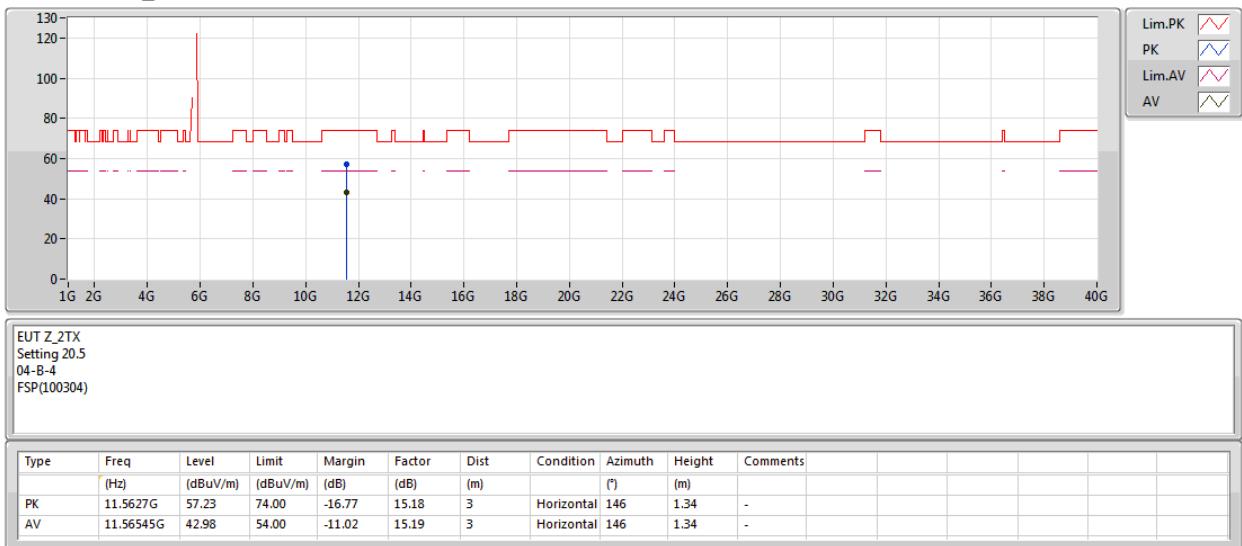
RSE TX above 1GHz Result

Appendix E.2

802.11ac VHT80_Nss1,(MCS0)_2TX

27/03/2019

5775MHz_TX

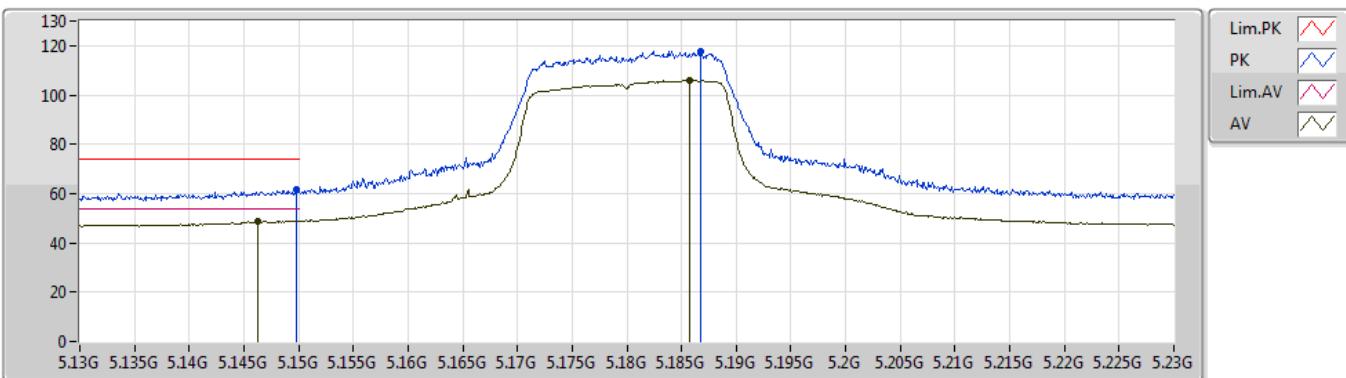


**For beamforming mode****Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	Pass	AV	5.35G	53.72	54.00	-0.28	6.31	3	Vertical	147	2.66	-

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

17/05/2019

5180MHz_TX


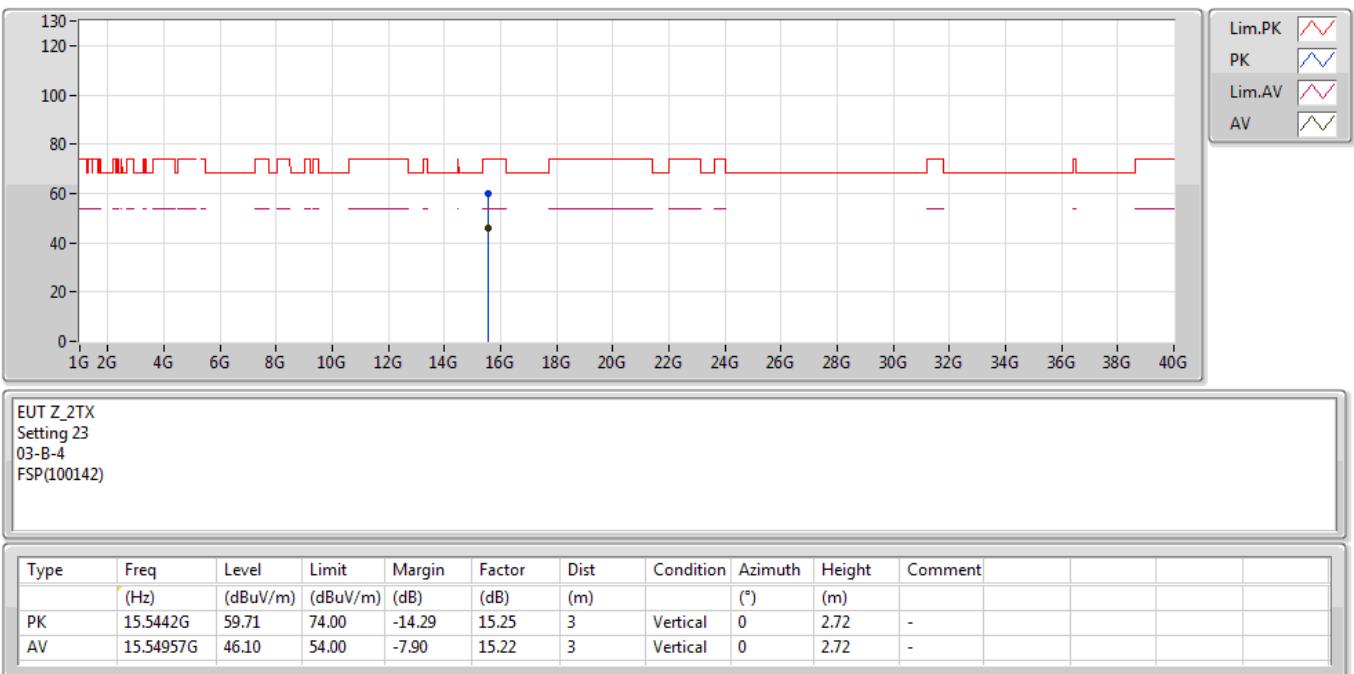
EUT Z_2TX
 Setting 23
 03-B-4-10
 FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	5.1498G	61.58	74.00	-12.42	5.83	3	Vertical	344	1.38	-			
AV	5.1463G	48.93	54.00	-5.07	5.83	3	Vertical	344	1.38	-			
PK	5.1867G	117.83	Inf	-Inf	5.89	3	Vertical	344	1.38	-			
AV	5.1858G	105.95	Inf	-Inf	5.89	3	Vertical	344	1.38	-			

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

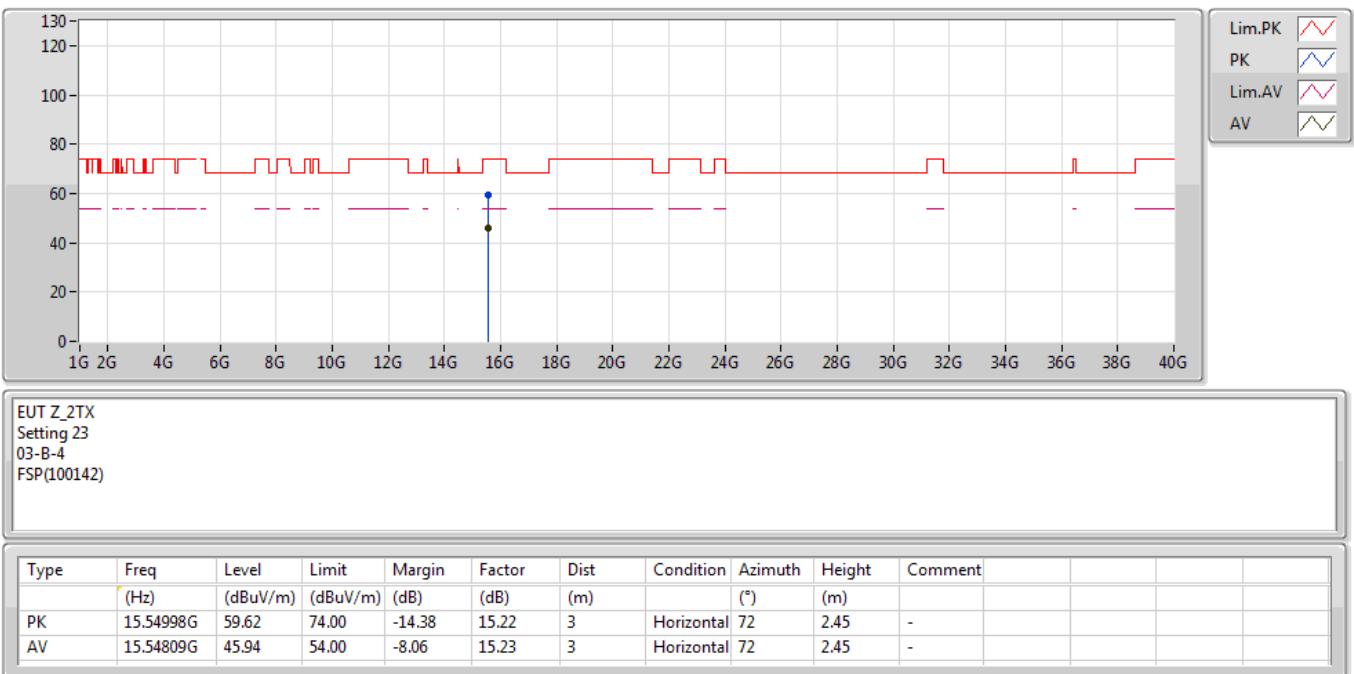
17/05/2019

5180MHz_TX



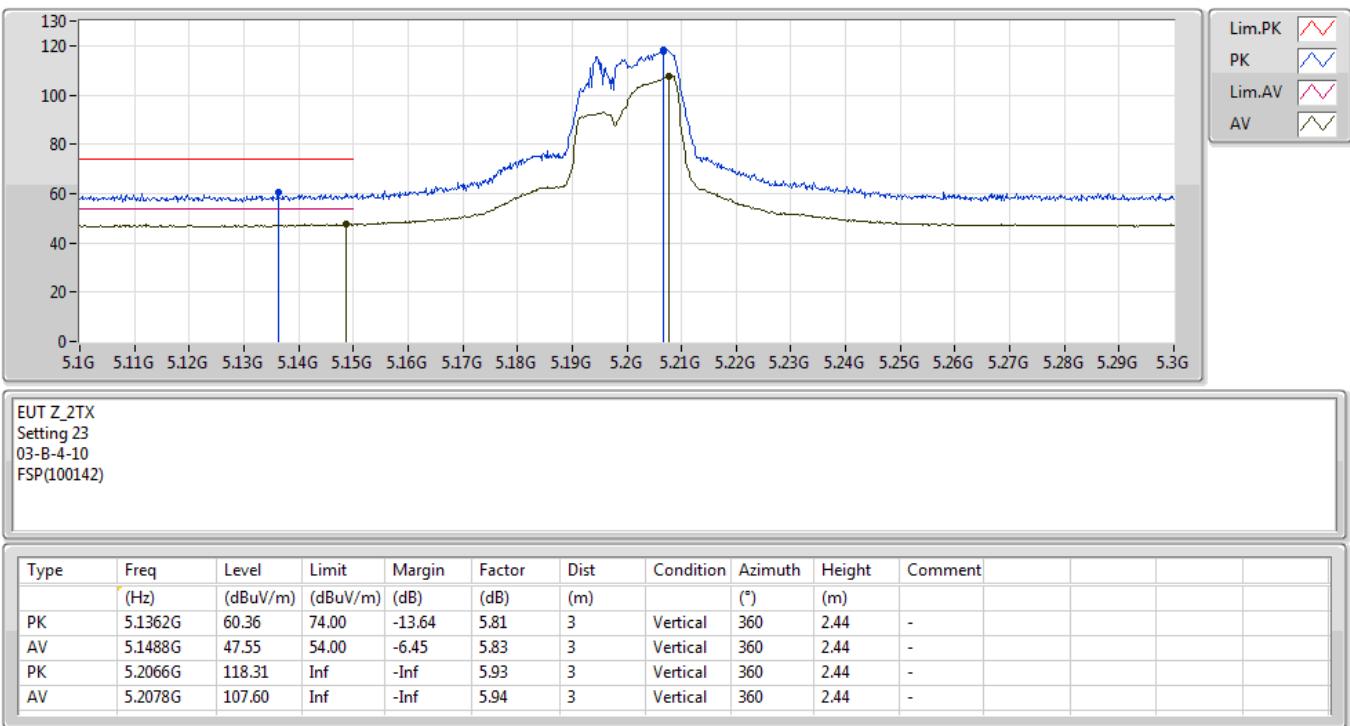
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

17/05/2019

5180MHz_TX


802.11ac VHT20-BF_Nss1,(MCS0)_2TX

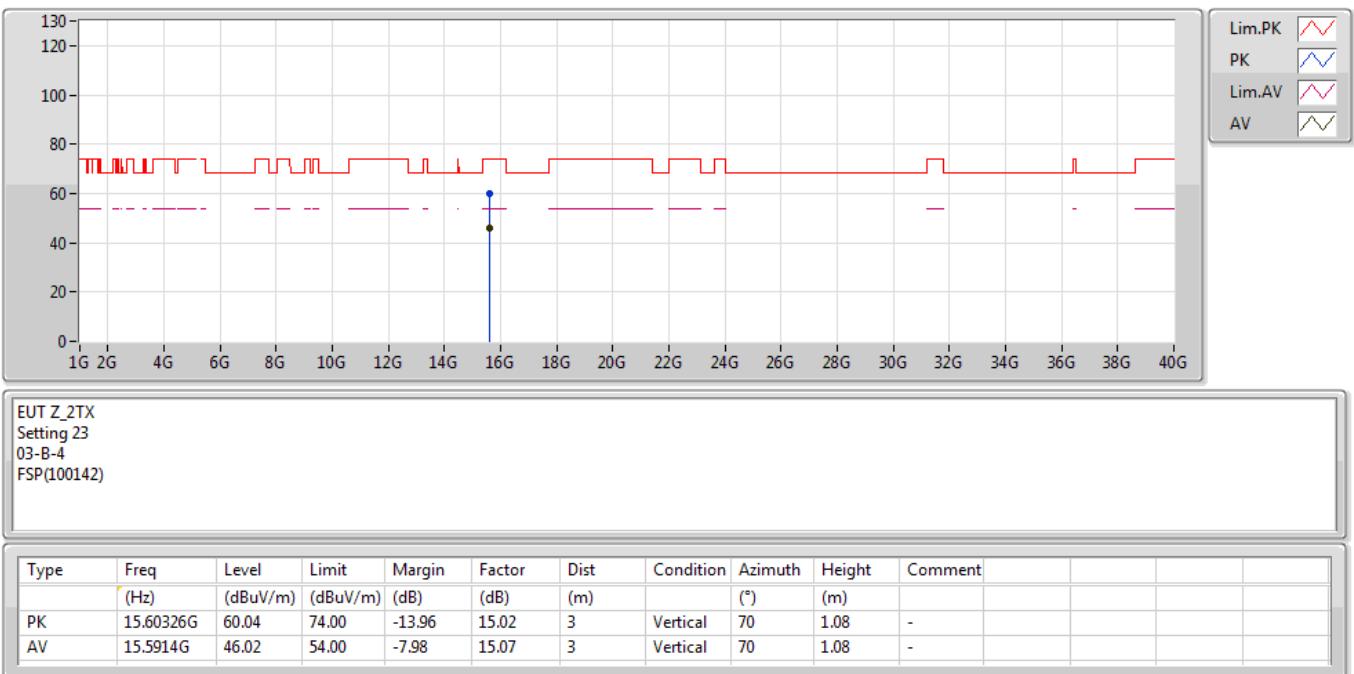
17/05/2019

5200MHz_TX


802.11ac VHT20-BF_Nss1,(MCS0)_2TX

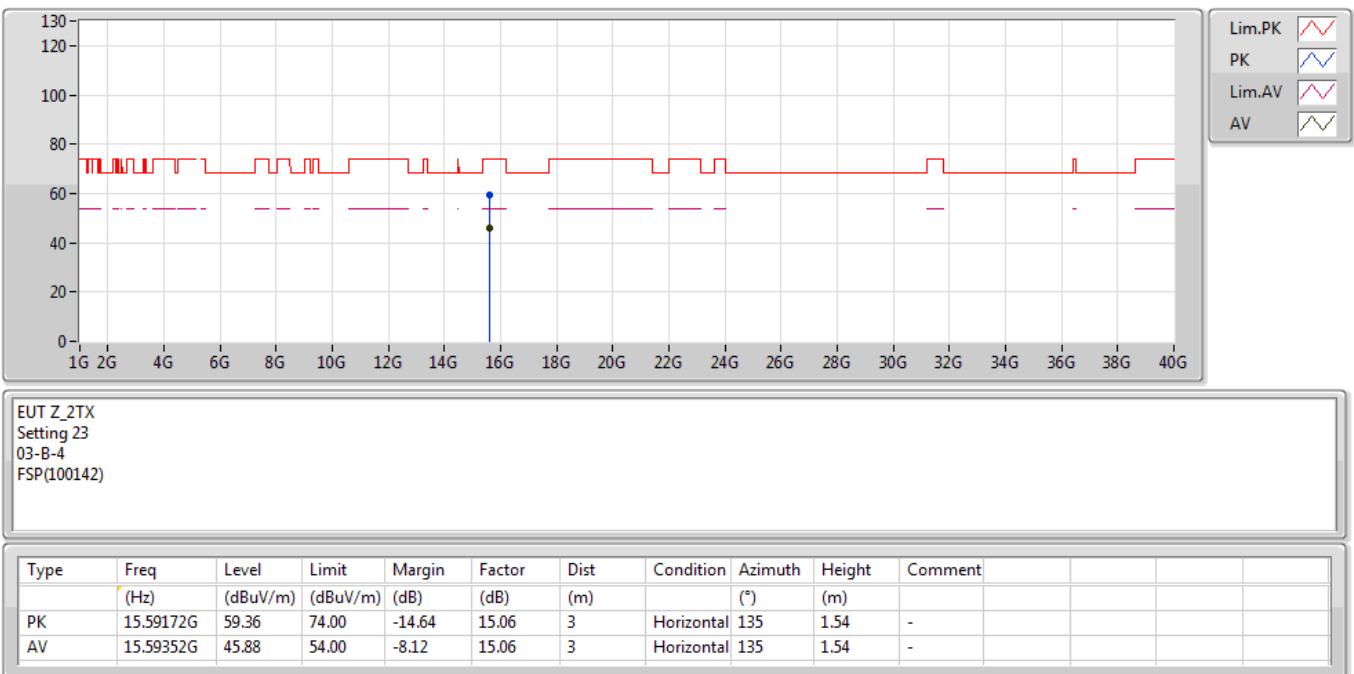
17/05/2019

5200MHz_TX



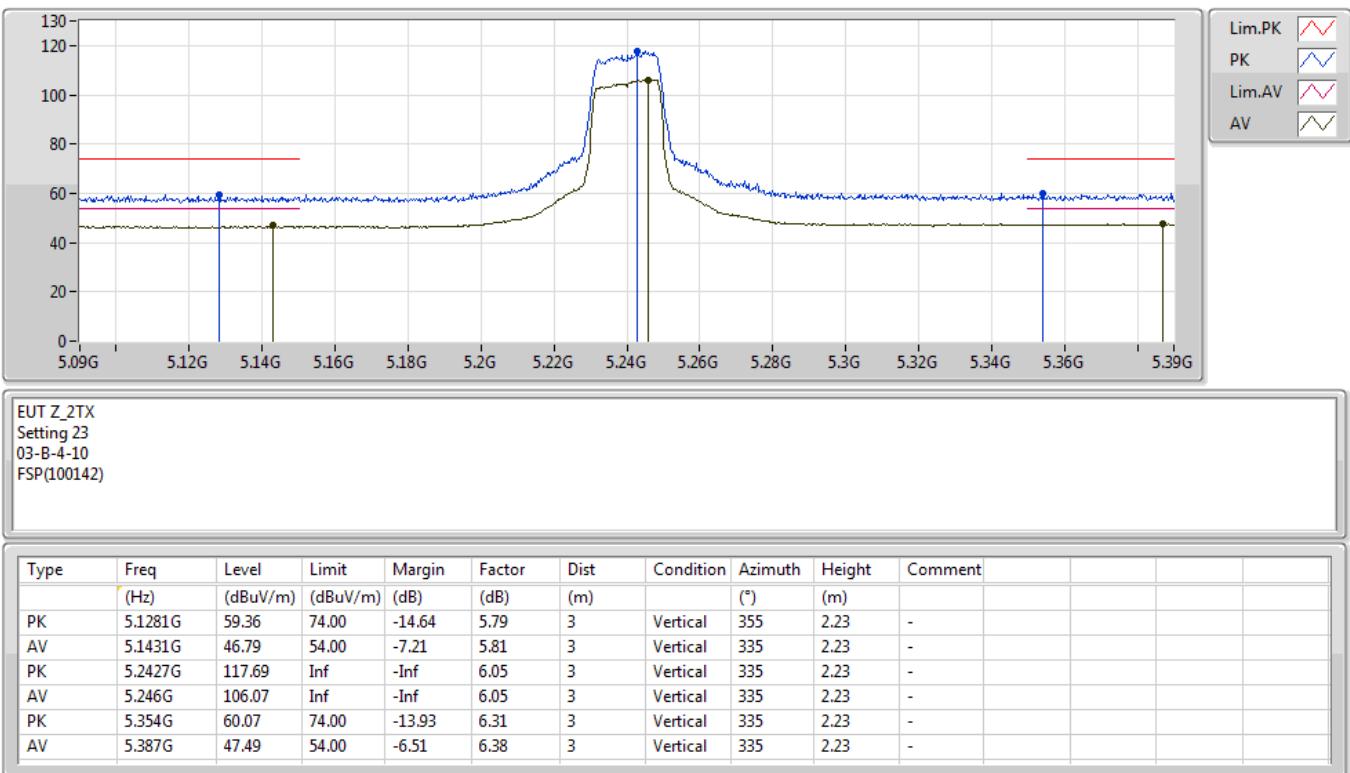
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

17/05/2019

5200MHz_TX


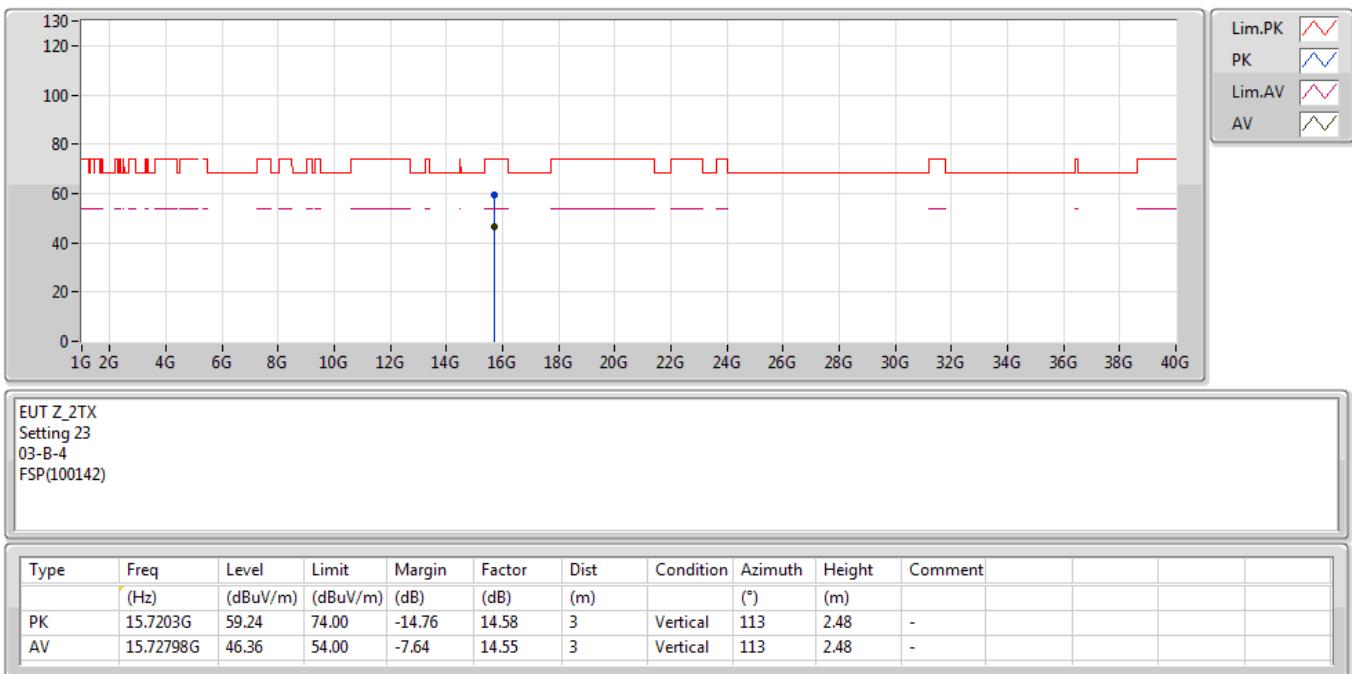
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

17/05/2019

5240MHz_TX


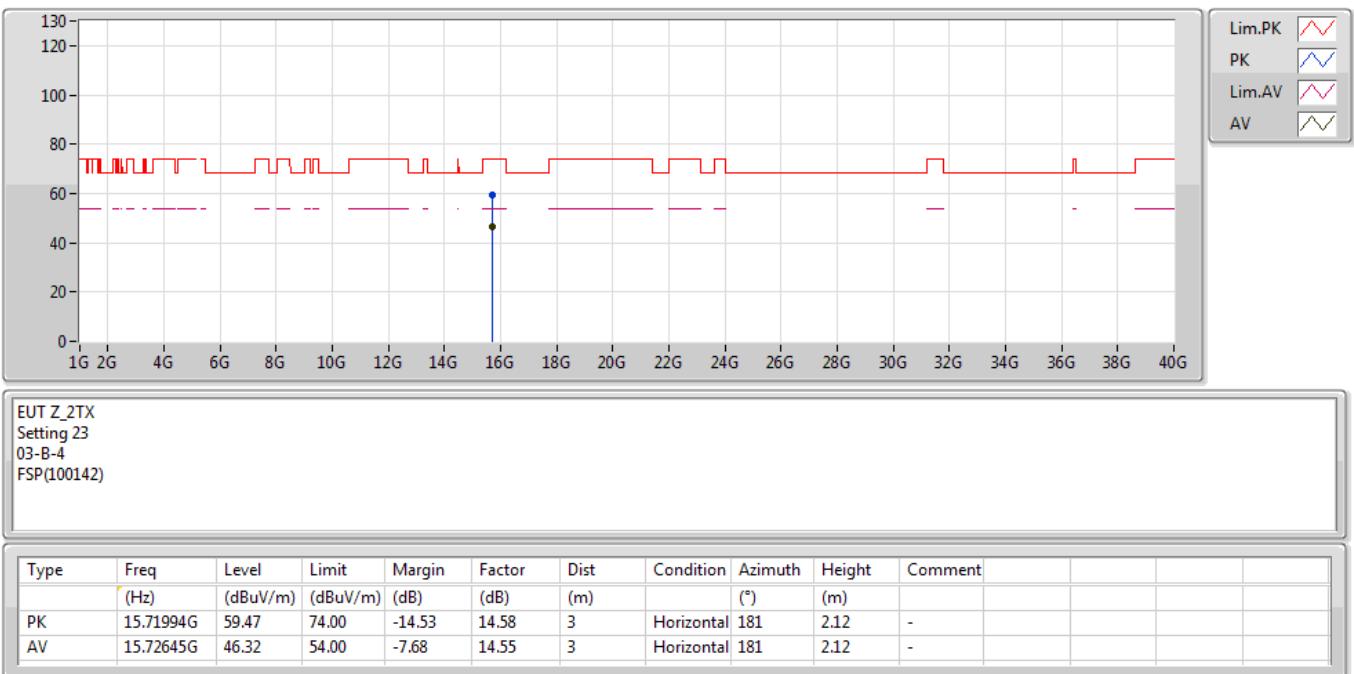
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

17/05/2019

5240MHz_TX


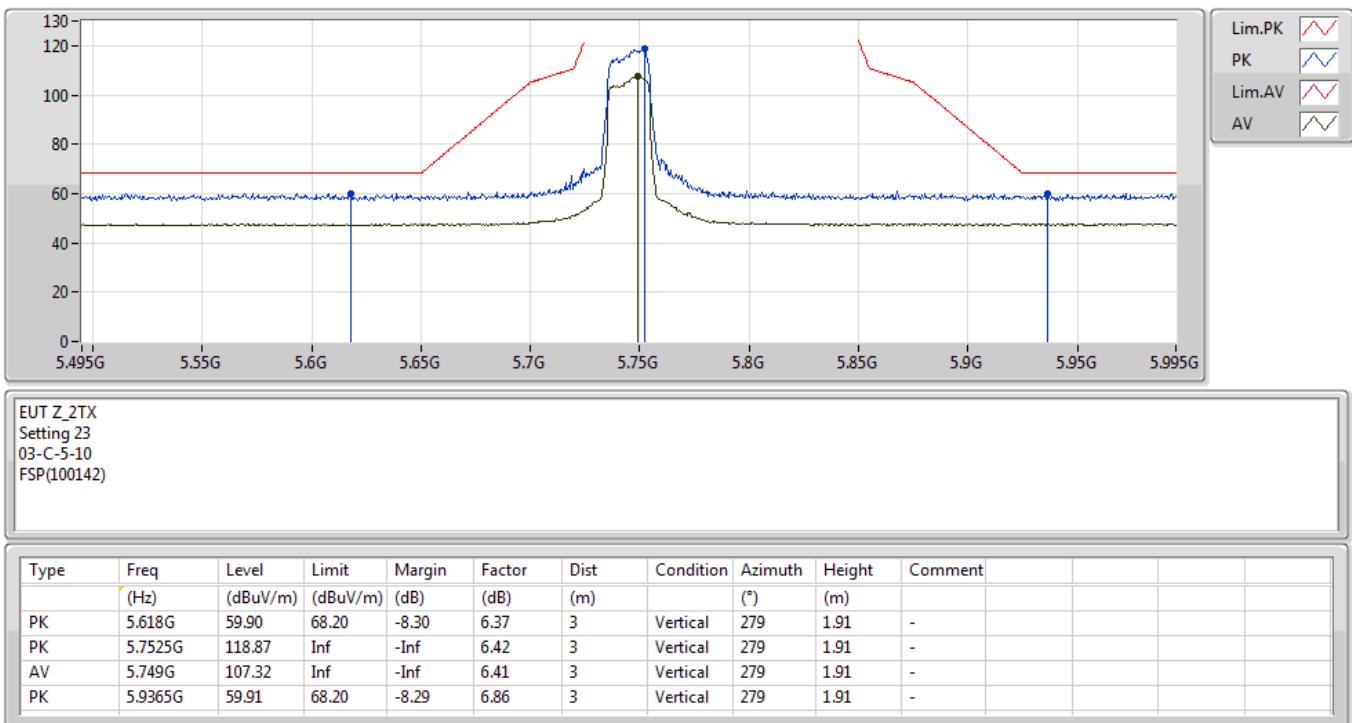
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

17/05/2019

5240MHz_TX


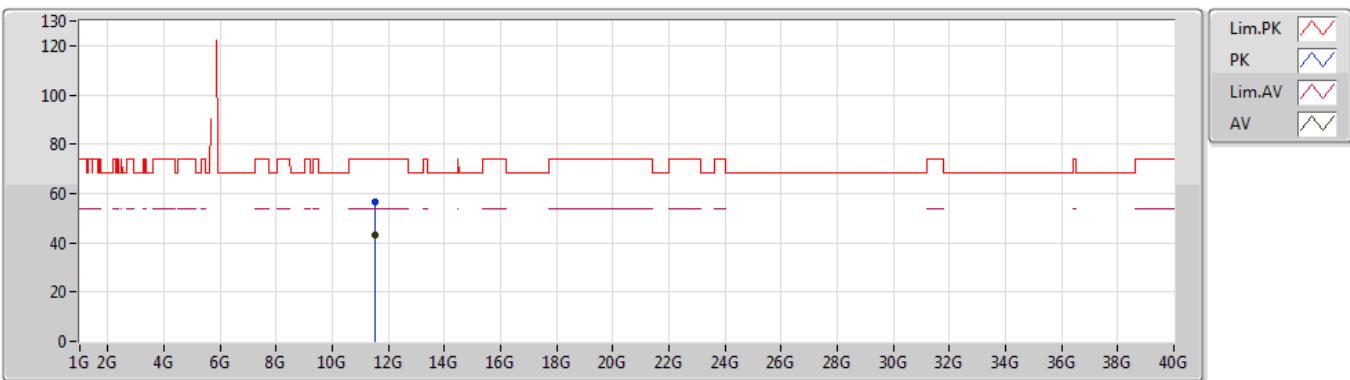
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

20/05/2019

5745MHz_TX


**802.11ac VHT20-BF_Nss1,(MCS0)_2TX**

20/05/2019

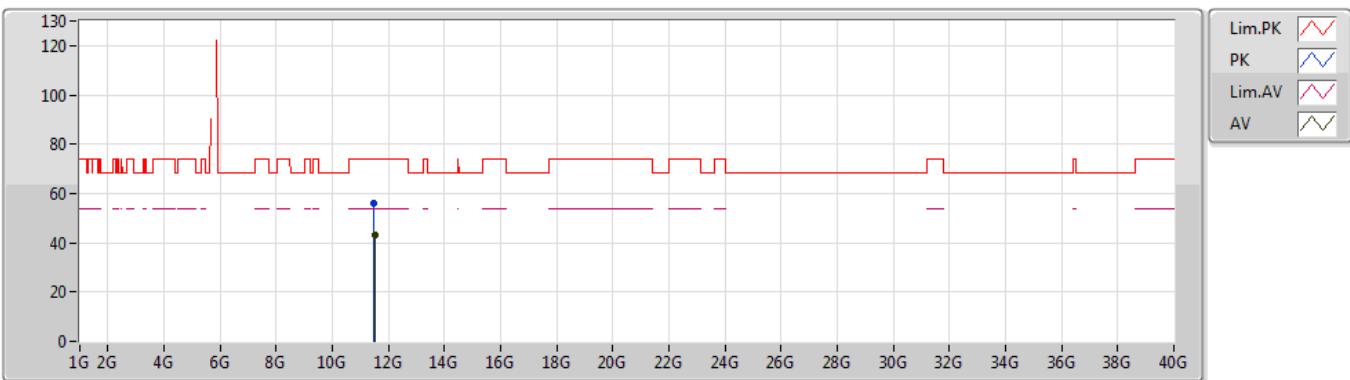
5745MHz_TX

EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment			
PK	11.50089G	56.49	74.00	-17.51	14.43	3	Vertical	55	2.05	-			
AV	11.50455G	43.12	54.00	-10.88	14.43	3	Vertical	55	2.05	-			

**802.11ac VHT20-BF_Nss1,(MCS0)_2TX**

20/05/2019

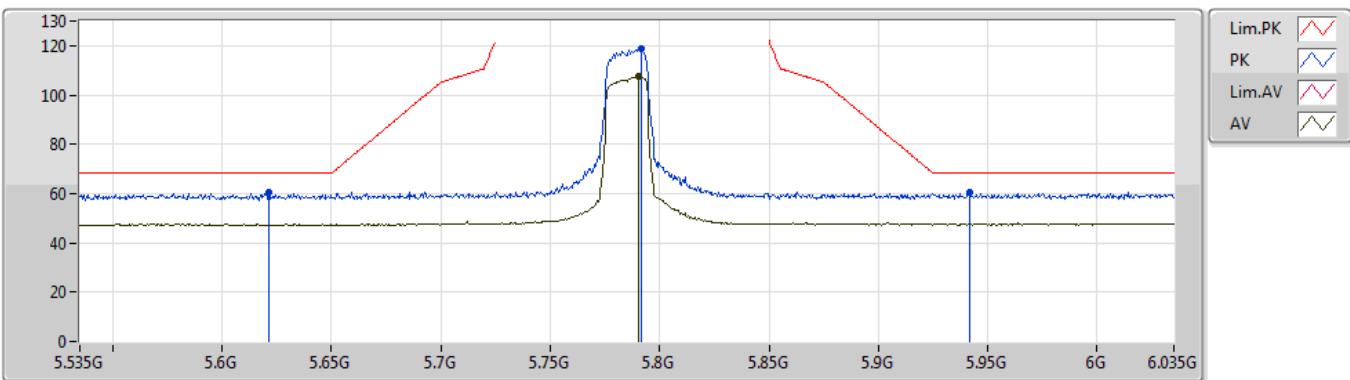
5745MHz_TX

EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	11.47869G	55.98	74.00	-18.02	14.41	3	Horizontal	312	2.04	-			
AV	11.50461G	42.98	54.00	-11.02	14.43	3	Horizontal	312	2.04	-			

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

21/05/2019

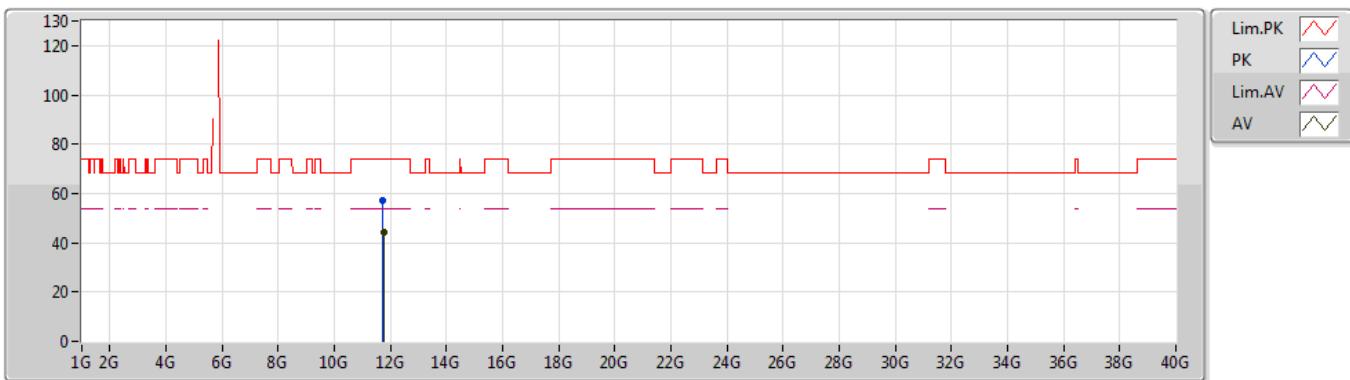
5785MHz_TX


EUT Z_2TX
 Setting 23
 03-C-5-10
 FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	5.6215G	60.56	68.20	-7.64	6.37	3	Vertical	283	1.89	-			
PK	5.7915G	118.71	Inf	-Inf	6.45	3	Vertical	283	1.89	-			
AV	5.7905G	107.35	Inf	-Inf	6.45	3	Vertical	283	1.89	-			
PK	5.9415G	60.63	68.20	-7.57	6.87	3	Vertical	283	1.89	-			

**802.11ac VHT20-BF_Nss1,(MCS0)_2TX**

21/05/2019

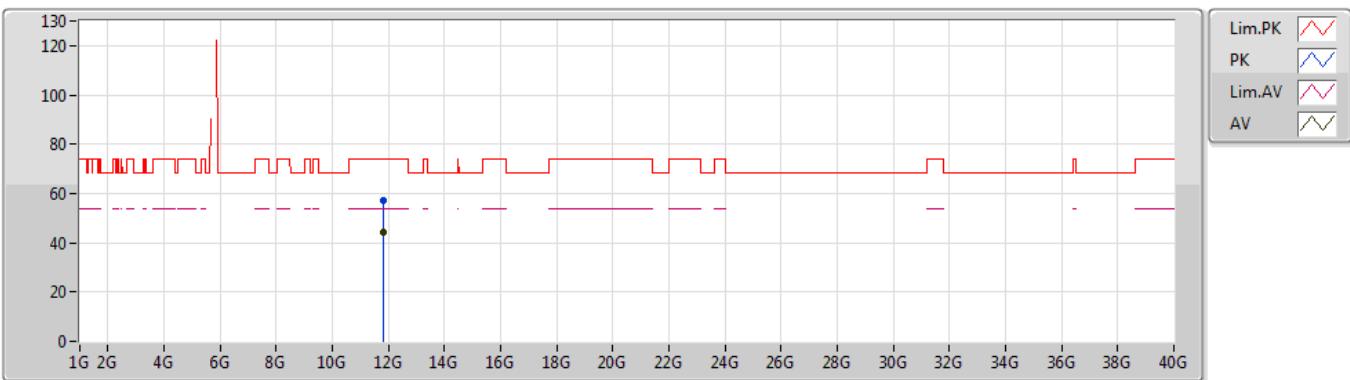
5785MHz_TX

EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
PK	11.722G	57.26	74.00	-16.74	14.64	3	Vertical	148	1.80	-
AV	11.78G	44.14	54.00	-9.86	14.71	3	Vertical	148	1.80	-

**802.11ac VHT20-BF_Nss1,(MCS0)_2TX**

21/05/2019

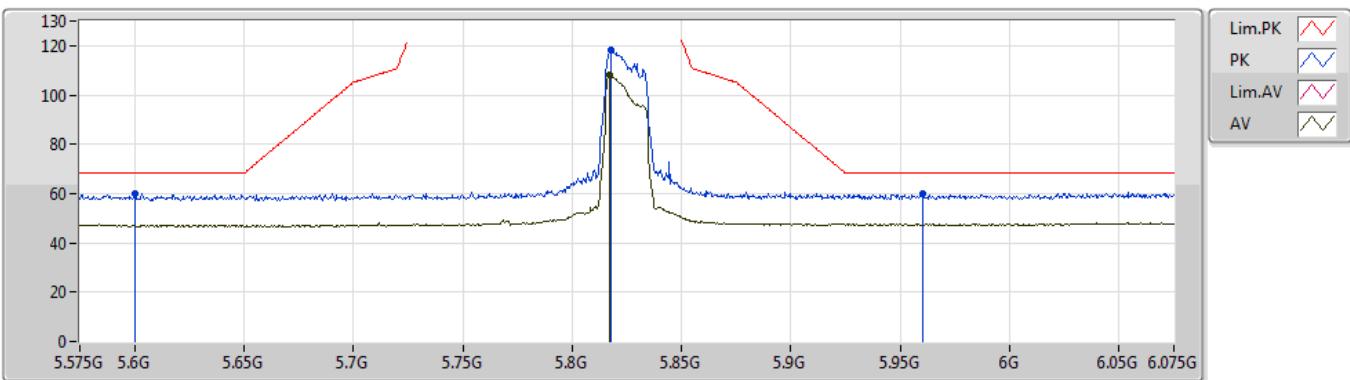
5785MHz_TX

EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	11.818G	56.92	74.00	-17.08	14.73	3	Horizontal	303	1.76	-			
AV	11.8145G	44.05	54.00	-9.95	14.73	3	Horizontal	303	1.76	-			

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

21/05/2019

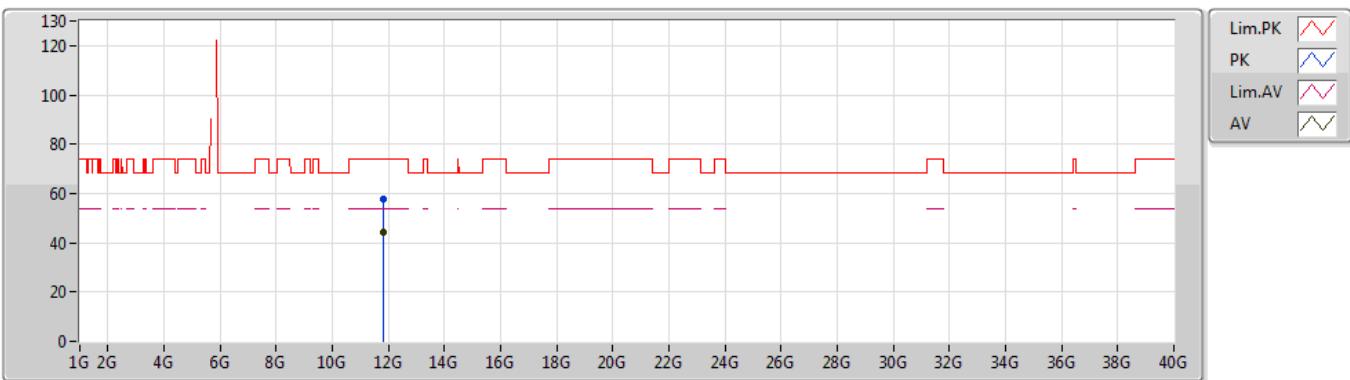
5825MHz_TX


EUT Z_2TX
 Setting 23
 03-C-5-10
 FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	5.6005G	59.73	68.20	-8.47	6.37	3	Vertical	329	2.49	-			
PK	5.8175G	118.50	Inf	-Inf	6.50	3	Vertical	329	2.49	-			
AV	5.817G	108.20	Inf	-Inf	6.50	3	Vertical	329	2.49	-			
PK	5.9605G	59.93	68.20	-8.27	6.93	3	Vertical	329	2.49	-			

**802.11ac VHT20-BF_Nss1,(MCS0)_2TX**

21/05/2019

5825MHz_TX

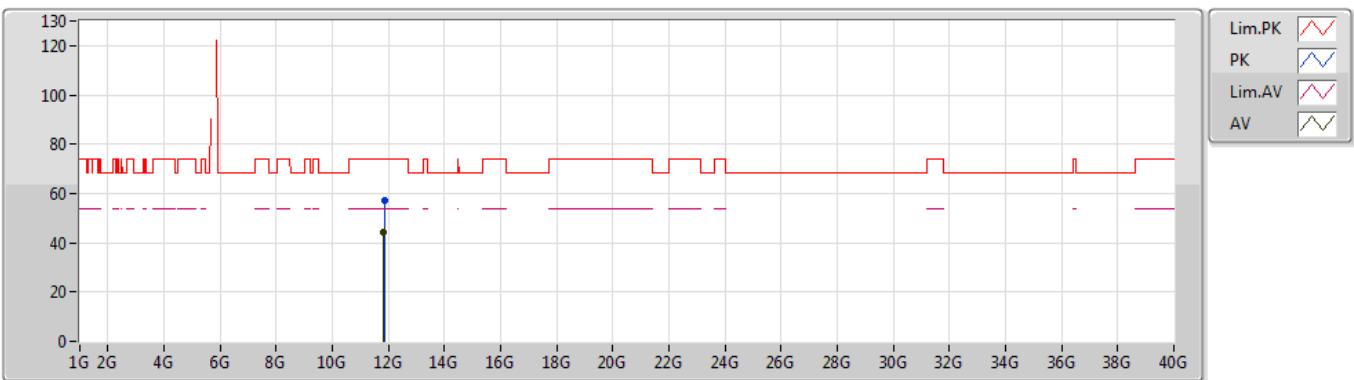
EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	11.8195G	57.54	74.00	-16.46	14.73	3	Vertical	358	1.12	-			
AV	11.8255G	44.07	54.00	-9.93	14.74	3	Vertical	358	1.12	-			

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

21/05/2019

5825MHz_TX

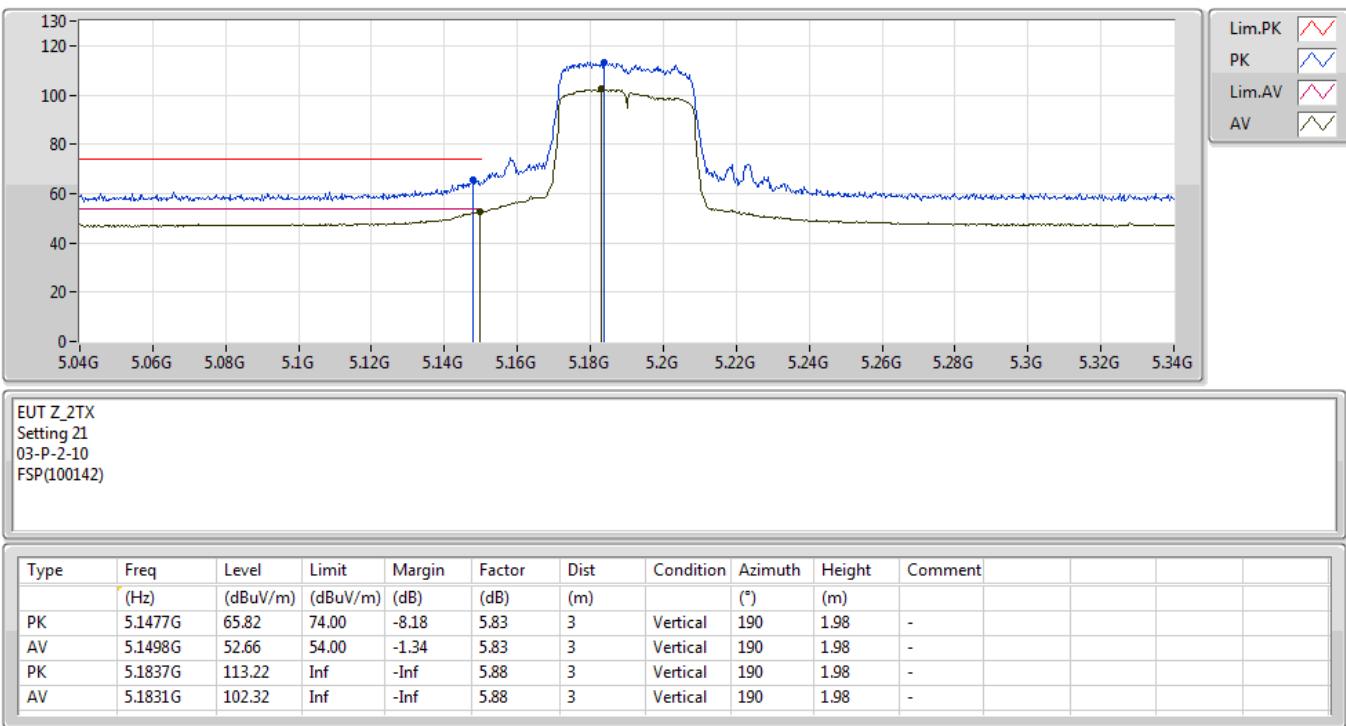


EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	11.872G	56.99	74.00	-17.01	14.78	3	Horizontal	297	2.25	-			
AV	11.8115G	44.10	54.00	-9.90	14.73	3	Horizontal	297	2.25	-			

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

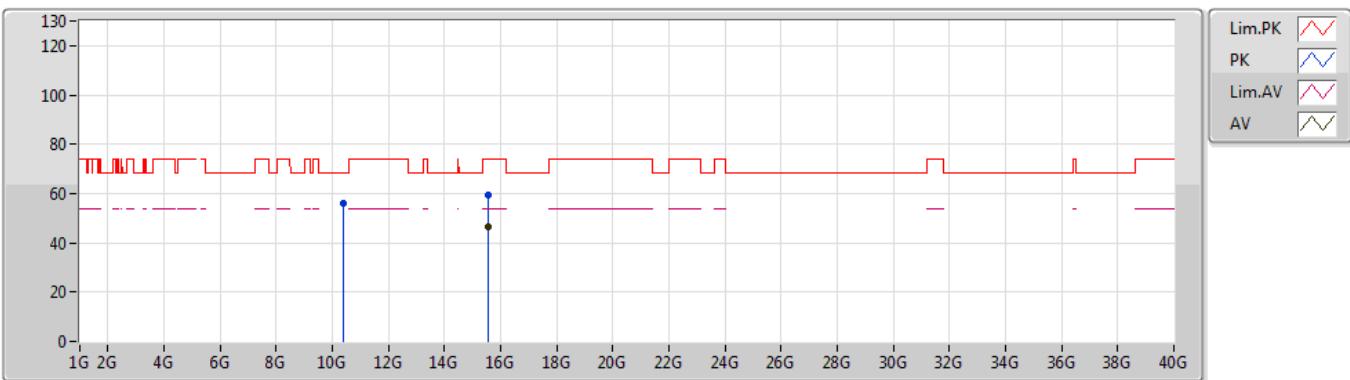
17/05/2019

5190MHz_TX


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

17/05/2019

5190MHz_TX



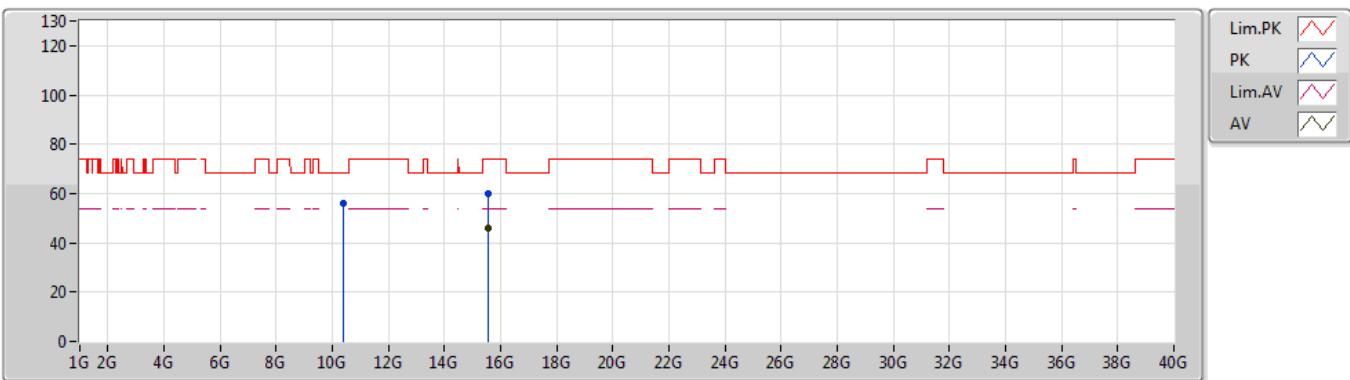
EUT Z_2TX
Setting 21
03-P-2
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	10.3823G	56.24	68.20	-11.96	13.11	3	Vertical	248	2.27	-			
PK	15.56626G	59.54	74.00	-14.46	15.15	3	Vertical	216	1.57	-			
AV	15.57401G	46.36	54.00	-7.64	15.14	3	Vertical	216	1.57	-			

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

17/05/2019

5190MHz_TX

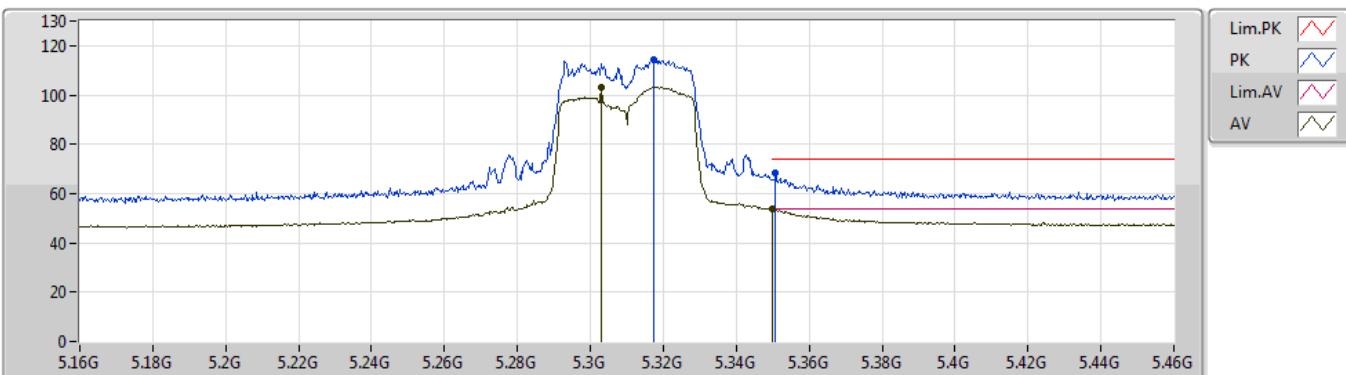


EUT Z_2TX
Setting 21
03-P-2
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	10.37766G	56.22	68.20	-11.98	13.11	3	Horizontal	21	1.96	-			
PK	15.57184G	59.74	74.00	-14.26	15.14	3	Horizontal	268	1.35	-			
AV	15.57216G	46.19	54.00	-7.81	15.14	3	Horizontal	268	1.35	-			

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

17/05/2019

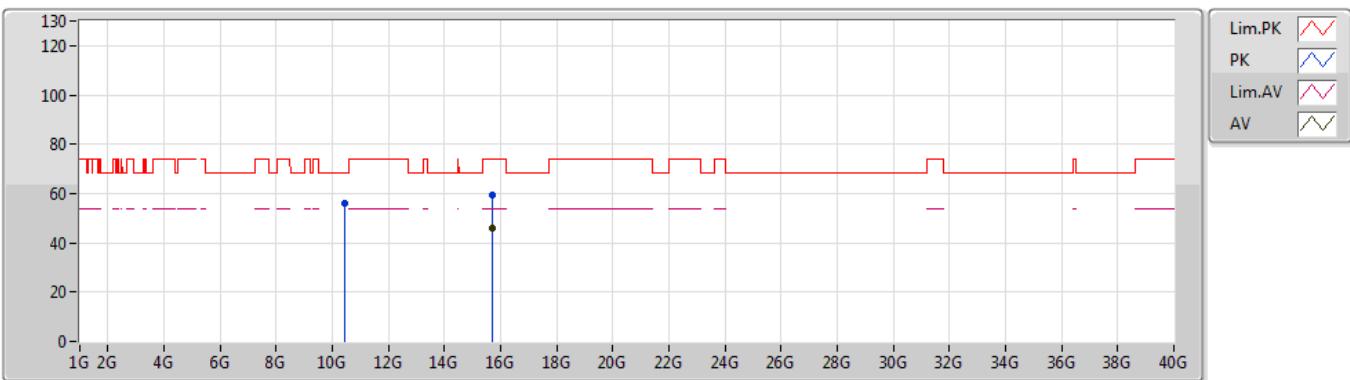
5230MHz_TX


EUT Z_2TX
 Setting 22
 03-P-2-10
 FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	5.3175G	114.37	Inf	-Inf	6.26	3	Vertical	147	2.66	-			
AV	5.3031G	103.26	Inf	-Inf	6.22	3	Vertical	147	2.66	-			
PK	5.3508G	68.59	74.00	-5.41	6.31	3	Vertical	147	2.66	-			
AV	5.35G	53.72	54.00	-0.28	6.31	3	Vertical	147	2.66	-			

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

17/05/2019

5230MHz_TX


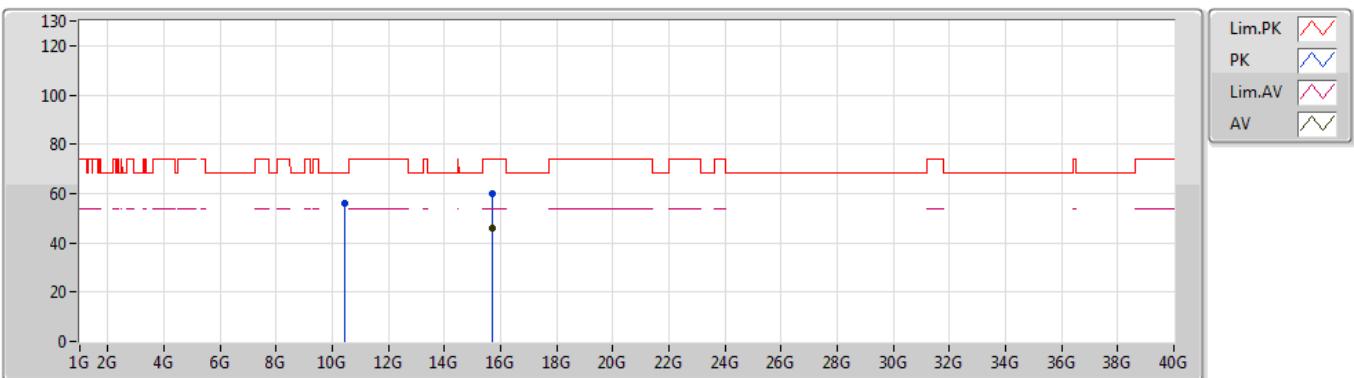
EUT Z_2TX
 Setting 22
 03-P-2
 FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	10.46266G	55.86	68.20	-12.34	13.21	3	Vertical	237	1.72	-			
PK	15.69393G	59.20	74.00	-14.80	14.68	3	Vertical	234	1.89	-			
AV	15.69197G	45.88	54.00	-8.12	14.68	3	Vertical	234	1.89	-			

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

17/05/2019

5230MHz_TX

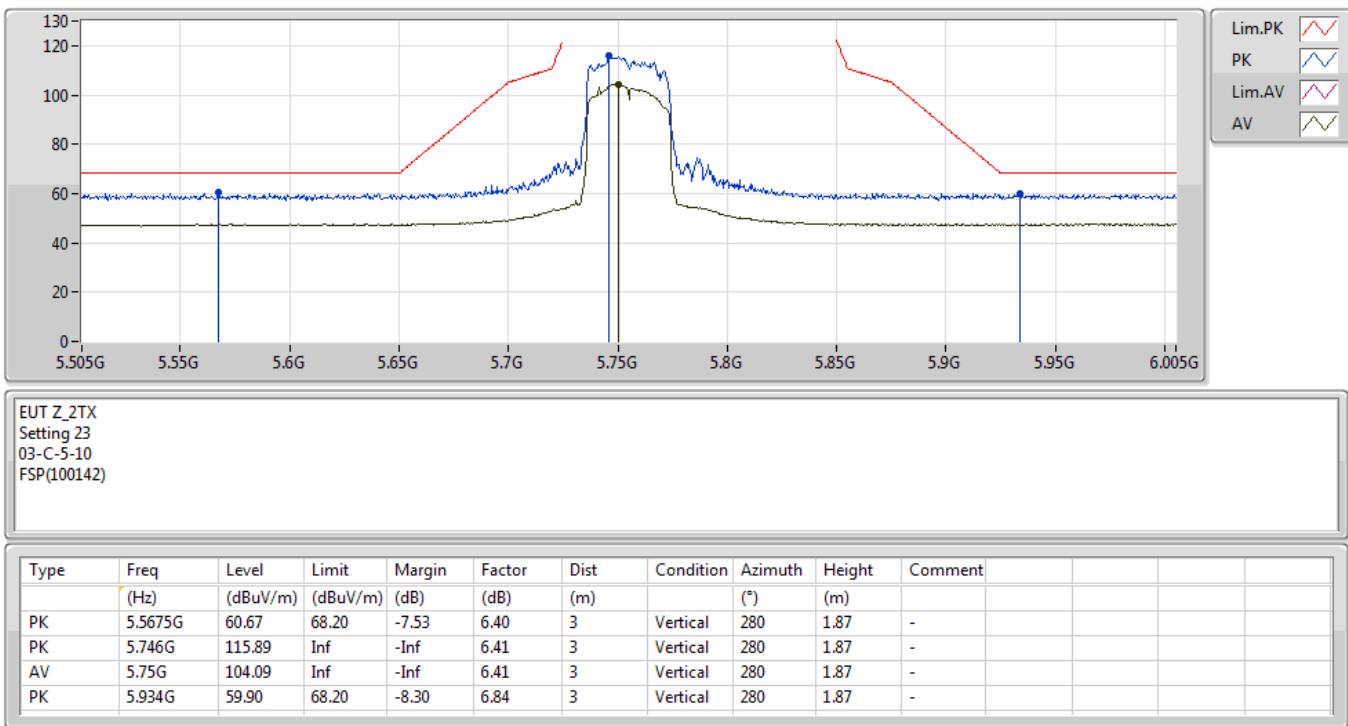


EUT Z_2TX
Setting 22
03-P-2
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	10.4616G	56.29	68.20	-11.91	13.21	3	Horizontal	106	1.06	-			
PK	15.68522G	59.80	74.00	-14.20	14.70	3	Horizontal	301	2.38	-			
AV	15.6946G	45.85	54.00	-8.15	14.68	3	Horizontal	301	2.38	-			

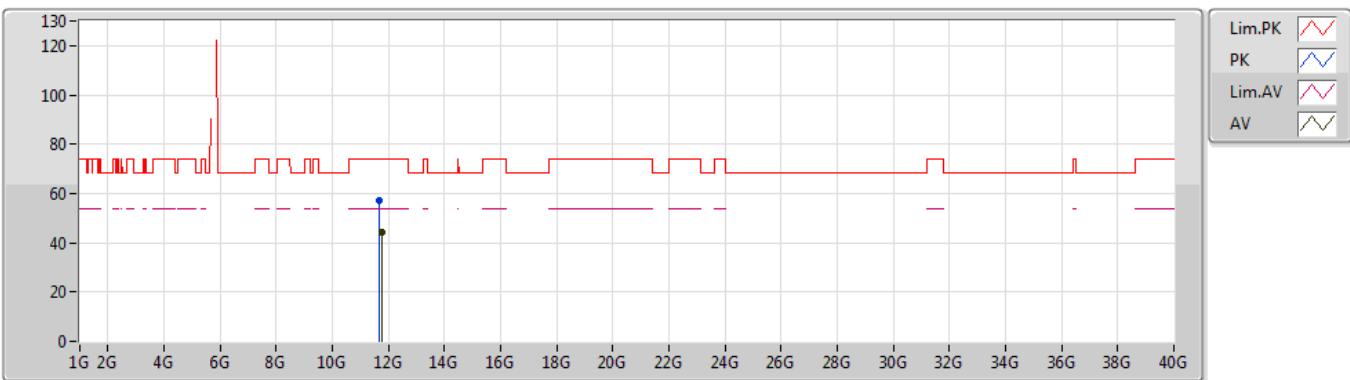
802.11ac VHT40-BF_Nss1,(MCS0)_2TX

21/05/2019

5755MHz_TX


**802.11ac VHT40-BF_Nss1,(MCS0)_2TX**

21/05/2019

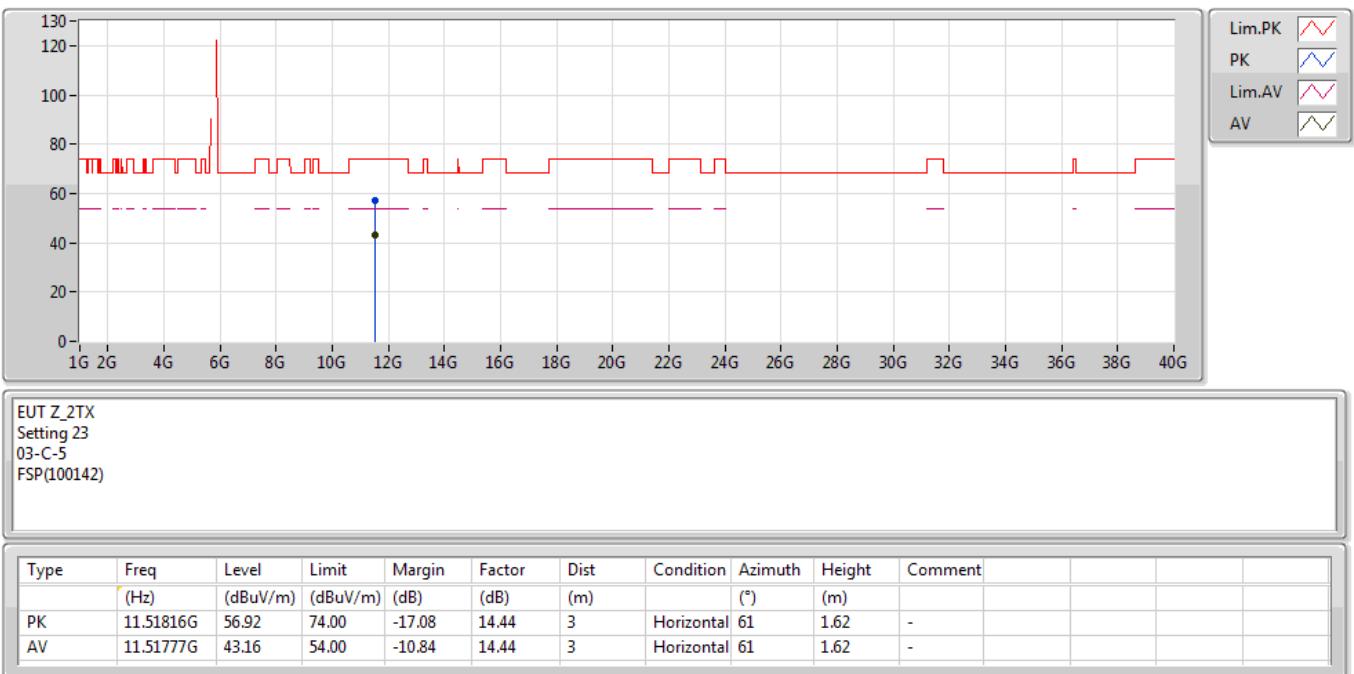
5755MHz_TX

EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment			
PK	11.683G	56.92	74.00	-17.08	14.60	3	Vertical	55	1.56	-			
AV	11.7565G	44.09	54.00	-9.91	14.68	3	Vertical	55	1.56	-			

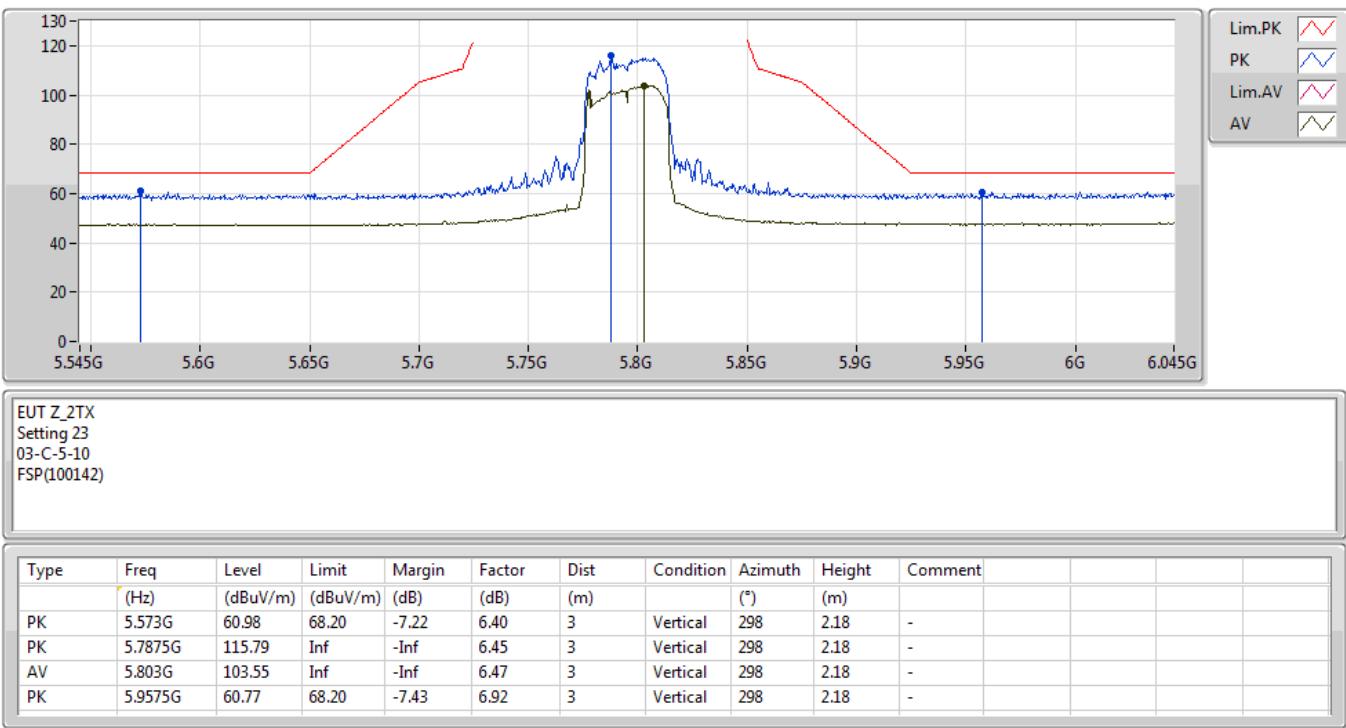
802.11ac VHT40-BF_Nss1,(MCS0)_2TX

21/05/2019

5755MHz_TX


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

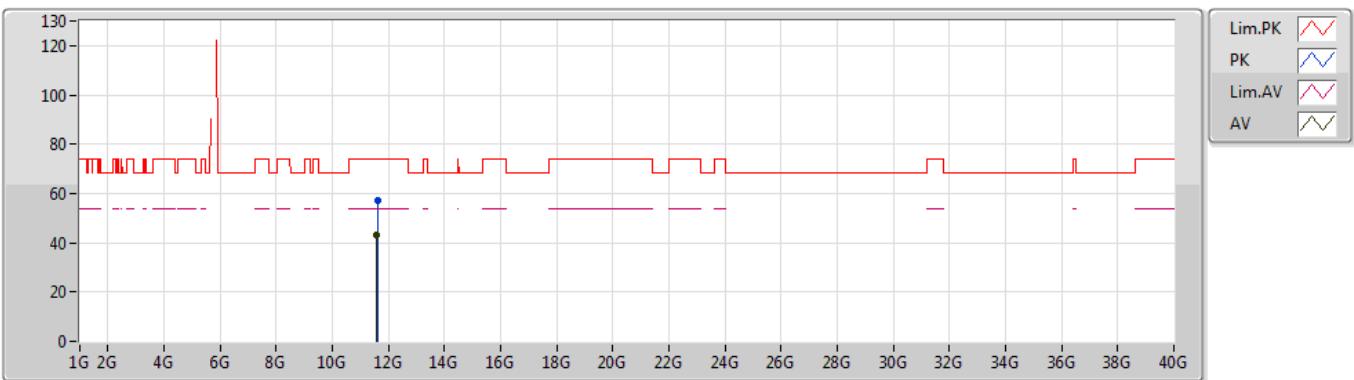
21/05/2019

5795MHz_TX


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

21/05/2019

5795MHz_TX

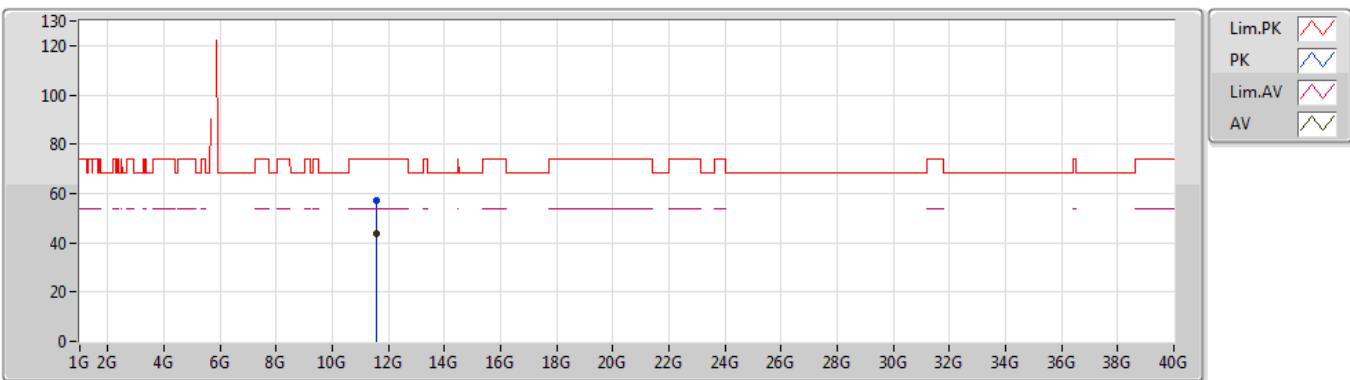


EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	11.60269G	57.06	74.00	-16.94	14.52	3	Vertical	192	2.18	-			
AV	11.58298G	43.38	54.00	-10.62	14.51	3	Vertical	192	2.18	-			

**802.11ac VHT40-BF_Nss1,(MCS0)_2TX**

21/05/2019

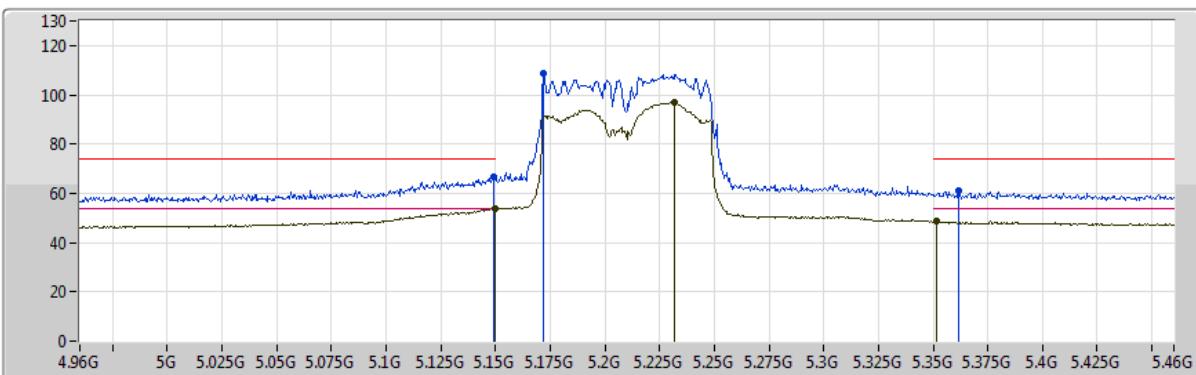
5795MHz_TX

EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	11.5906G	57.30	74.00	-16.70	14.51	3	Horizontal	221	1.19	-			
AV	11.57986G	43.45	54.00	-10.55	14.51	3	Horizontal	221	1.19	-			

802.11ac VHT80-BF_Nss1,(MCS0)_2TX

17/05/2019

5210MHz_TX


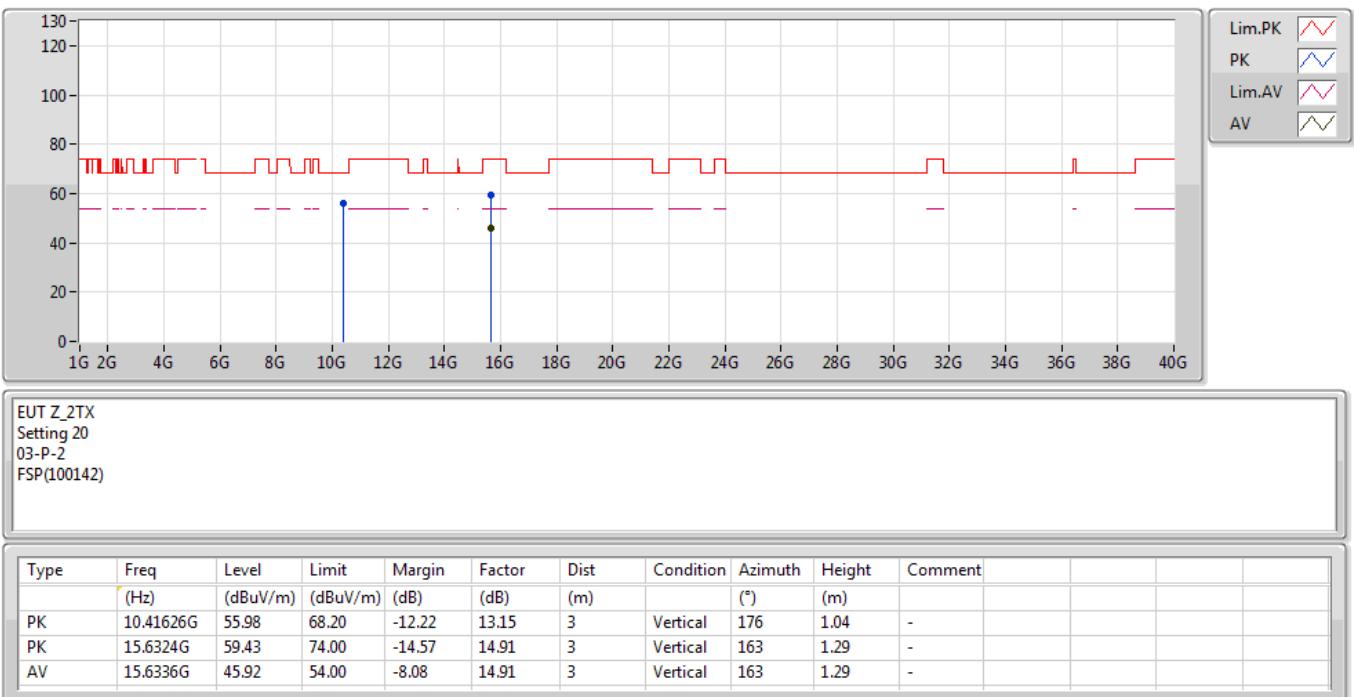
EUT Z_2TX
 Setting 20
 03-P-2-10
 FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment			
PK	5.149G	66.92	74.00	-7.08	5.83	3	Vertical	346	1.50	-			
AV	5.15G	53.53	54.00	-0.47	5.83	3	Vertical	346	1.50	-			
PK	5.172G	108.44	Inf	-Inf	5.86	3	Vertical	346	1.50	-			
AV	5.2315G	97.01	Inf	-Inf	6.00	3	Vertical	346	1.50	-			
PK	5.3615G	61.20	74.00	-12.80	6.33	3	Vertical	346	1.50	-			
AV	5.3515G	48.68	54.00	-5.32	6.31	3	Vertical	346	1.50	-			

802.11ac VHT80-BF_Nss1,(MCS0)_2TX

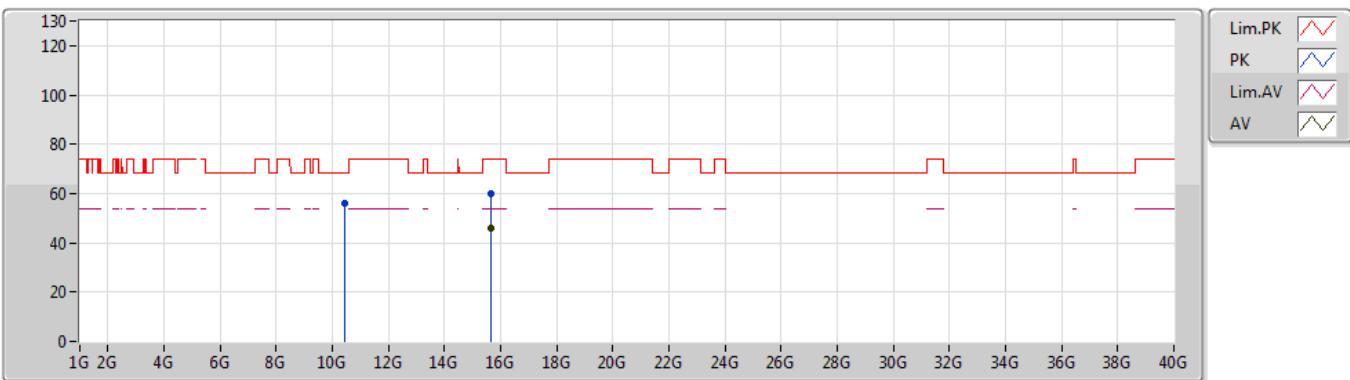
17/05/2019

5210MHz_TX



802.11ac VHT80-BF_Nss1,(MCS0)_2TX

17/05/2019

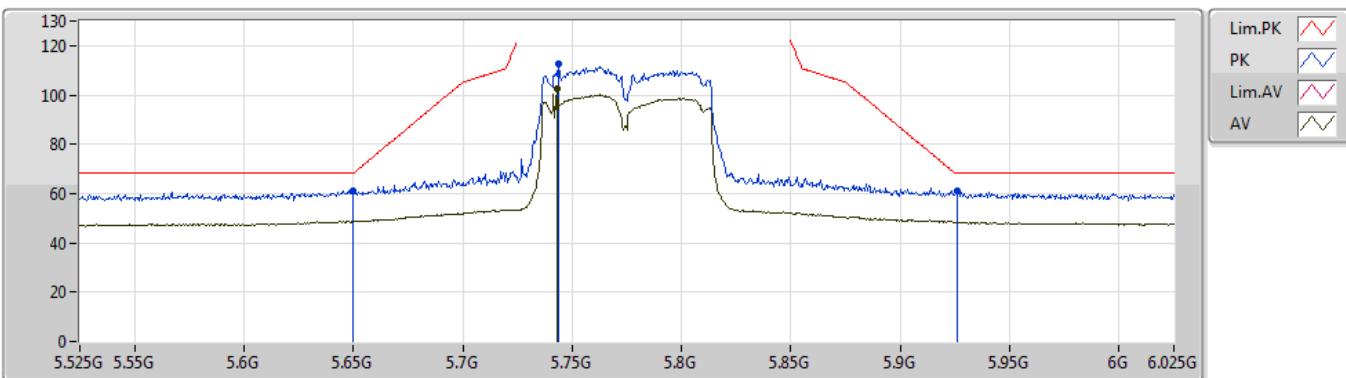
5210MHz_TX


EUT Z_2TX
 Setting 20
 03-P-2
 FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	10.41988G	56.24	68.20	-11.96	13.16	3	Horizontal	284	1.72	-			
PK	15.63266G	59.84	74.00	-14.16	14.91	3	Horizontal	340	1.52	-			
AV	15.63132G	46.04	54.00	-7.96	14.92	3	Horizontal	340	1.52	-			

802.11ac VHT80-BF_Nss1,(MCS0)_2TX

21/05/2019

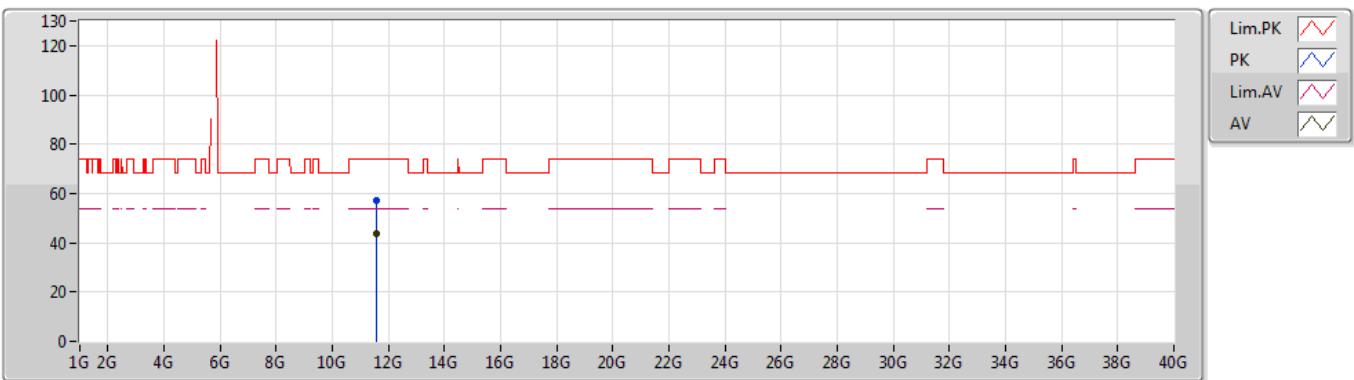
5775MHz_TX


EUT Z_2TX
 Setting 23
 03-C-5-10
 FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment			
PK	5.65G	61.24	68.20	-6.96	6.38	3	Vertical	300	2.04	-			
PK	5.7435G	112.77	68.20	Inf	-Inf	3	Vertical	300	2.04	-			
AV	5.743G	102.55	68.20	Inf	-Inf	3	Vertical	300	2.04	-			
PK	5.926G	61.22	68.20	-6.98	6.82	3	Vertical	300	2.04	-			

802.11ac VHT80-BF_Nss1,(MCS0)_2TX

21/05/2019

5775MHz_TX


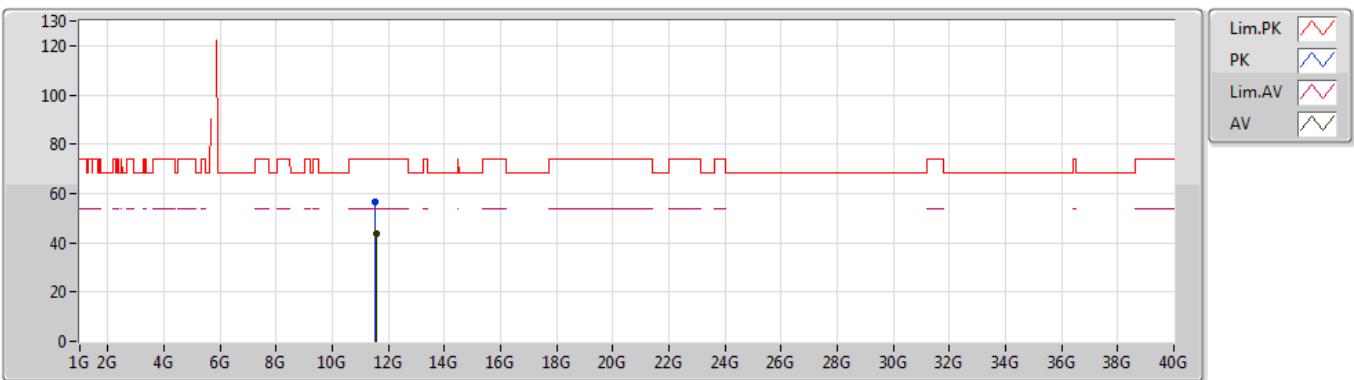
EUT Z_2TX
 Setting 23
 03-C-5
 FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	11.56005G	57.01	74.00	-16.99	14.48	3	Vertical	290	1.76	-			
AV	11.55594G	43.56	54.00	-10.44	14.48	3	Vertical	290	1.76	-			

802.11ac VHT80-BF_Nss1,(MCS0)_2TX

21/05/2019

5775MHz_TX



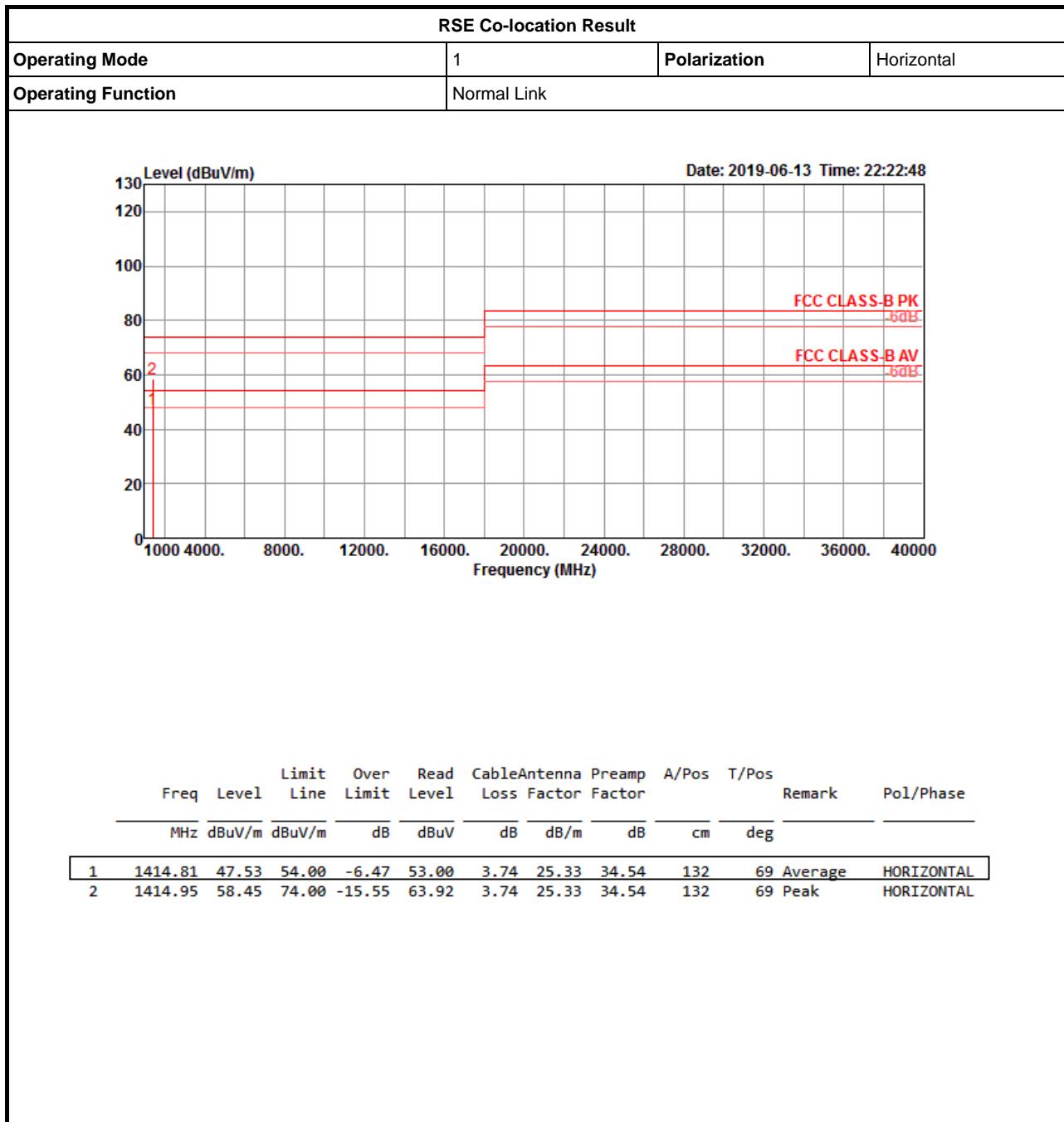
EUT Z_2TX
Setting 23
03-C-5
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (*)	Height (m)	Comment			
PK	11.54265G	56.70	74.00	-17.30	14.46	3	Horizontal	294	2.29	-			
AV	11.56044G	43.47	54.00	-10.53	14.48	3	Horizontal	294	2.29	-			



RSE Co-location Result

Appendix F





RSE Co-location Result

Appendix F

