FCC RADIO TEST REPORT

FCC ID	:	NKR-RAAME1
Equipment	:	Madesafe Gateway, Madesafe/IOT Gateway
Brand Name	:	Catapult TECH
Model Name	:	815-00027, 815-00028, 815-00029
Applicant	:	Wistron NeWeb Corporation 20 Park Avenue II Hsinchu Science Park Hsinchu Taiwan 308
Manufacturer	:	Wistron NeWeb Corporation 20 Park Avenue II Hsinchu Science Park Hsinchu Taiwan 308
Standard	:	47 CFR FCC Part 15.407

The product was received on Jan. 28, 2019, and testing was started from Jun. 01, 2019 and completed on Jun. 19, 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: Cliff Chang

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

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History of this test report

Report No.	Version	Description	Issued Date
FR912811AB	01	Initial issue of report	Jul. 03, 2019

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:
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: Sandy Chuang

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	802.11n HT40	40	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT80	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	802.11n HT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT80	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.
- EUT contains a certified RF module (FCC ID: W7Z-WD907102) for EUT 2.

1.1.2 Antenna Information

Ant.	Port			Brand		P/N		
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	WLAN 2.4GHz、5GHz / Bluetooth (Internal)	Bluetooth (External)	WLAN 2.4GHz、5GHz	Bluetooth (Internal)	Bluetooth (External)
1	1	1	-	WNC	-	3ADHUBW69S1-111	-	-
2	2	2	-	WNC	-	3ADHUBW69S1-111	-	-
3	-	-	1	WNC	-	-	95XKAJ15.G04	-
4	-	-	1	-	RFlink	-	-	08.22100.007

Ant.	Antenna Type			Antenna Connector	Gain (dBi)					
	WLAN 2.4GHz、5GHz	Bluetooth (Internal)	Bluetooth (External)		WLAN 2.4GHz	WLAN 5GHz	Bluetooth (Internal)	Bluetooth (External)		
								Antenna Gain	Cable loss (dB)	True Gain
1	PIFA	-	-	N/A	1.20	4.01	-	-	-	-
2	PIFA	-	-	N/A	0.66	4.02	-	-	-	-
3	-	PCB	-	N/A	-	-	1.25	-	-	-
4	-	-	Dipole	SMA	-	-	-	2.70	3.31	-0.61

Note 1: The above information was declared by manufacturer.

<For 2.4GHz Band>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

<For 5GHz Band>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

<For Bluetooth> (1TX/1RX)

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

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.97	0.13	3.113m	1k
802.11ac VHT20	0.98	0.09	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.96	0.18	2.328m	1k
802.11ac VHT80	0.916	0.38	1.1m	1k

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter or PoE			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☐	Outdoor P2M	☐	Indoor P2M
	☐	Fixed P2P	☒	Client
Test Software Version	DutApiMimoBt.exe			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

The difference for each equipment name/model name is shown as below:

EUT	1	2	3
Equipment Name	Madesafe Gateway	Madesafe/IOT Gateway	Madesafe Gateway
Model Name	815-00027	815-00028	815-00029
Contain certified Module (Zigbee function only)	-	V (FCC ID: W7Z-WD907102)	-
Bluetooth Antenna	Internal	Internal	External
WIFI / Bluetooth Function	V	V	V

Note: From the above models, EUT 1 and EUT 3 were selected as representative model for the test and its data was recorded in this report.

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			
☐	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
☒	JHUBEI	ADD :	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.
		TEL :	886-3-656-9065 FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH02-CB	Eddie Weng	25~27°C / 52~56%	Jun. 11, 2019~ Jun. 12, 2019
Radiated (Below 1GHz)	03CH04-CB	KJ Chang	21~23°C / 45~52%	Jun. 01, 2019~ Jun. 17, 2019
Radiated (Above 1GHz)	03CH06-CB	KJ Chang	22~24°C / 50~60%	Jun. 01, 2019~ Jun. 17, 2019
AC Conduction	CO02-CB	Peter Wu	24.3~24.5°C / 59~63%	Jun. 05, 2019~ Jun. 19, 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)	3.9 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	10.0×10^{-5}	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	15
5200MHz	15
5240MHz	14
5745MHz	10
5785MHz	11
5825MHz	25
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	17
5200MHz	16
5240MHz	14
5745MHz	10
5785MHz	11
5825MHz	25
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	15
5230MHz	19
5755MHz	12
5795MHz	12
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	12
5775MHz	12

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.

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	CTX
The EUT were perform with PoE and Adapter, After evaluating, PoE was selected to record in this test report.	
1	EUT 1 + 5GHz + PoE

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density Unwanted Emissions
Test Condition	Conducted measurement at transmit chains
1	EUT 1

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	CTX
The EUT was perform with PoE and Adapter. After evaluating, the worst case was found as Adapter, thus the measurement will follow this same test configuration. The EUT was performed at Y-axis and Z-axis position. EUT Z axis has been evaluated to be the worst case at Emissions in Unwanted Emissions <Above 1GHz>; thus, the measurement will follow this same test configuration.	
1	EUT 1 in Z axis + 5GHz + Adapter
Operating Mode > 1GHz	CTX
The EUT was performed at Y axis and Z axis position. The worst case was found at Z axis, thus the measurement will follow this same test configuration.	

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
The EUT can be placed in Y-axis and Z-axis. After evaluating, “Z axis” generated the worst test result , so the measurement will follow this same test configuration.	
1	EUT 1 in Z axis + 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 + Bluetooth
2	WLAN 2.4GHz + WLAN 5GHz + Bluetooth + Zigbee (FCC ID: W7Z-WD907102)
Refer to Sporton Test Report No.: FA912811 for Co-location RF Exposure Evaluation.	

Note: The PoE below is for measurement only, would not be marketed.

The PoE information as below:

Support Unit	Brand Name	Model Name
PoE	Microsemi	PD-9001GR/AT/AC

2.3 EUT Operation during Test

For CTX:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories				
No.	**Equipment Name**	**Brand Holder**	**Model Name**	**Rating**
1	Adapter	JIANGSU CHENYANG ELECTRON Co.,LTD	CYSF12G-050200U	INPUT: 100-240V~50/60Hz, 0.35A Max OUTPUT: 5V, 2.0A
Other				
Bluetooth Antenna*1 (For EUT 3 use)				

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	LAN NB	DELL	E6430	N/A
B	Flash disk3.0	Transcend	B06	N/A
C	PoE	Microsemi	PD-9001GR/AT/AC	N/A

For Radiated:

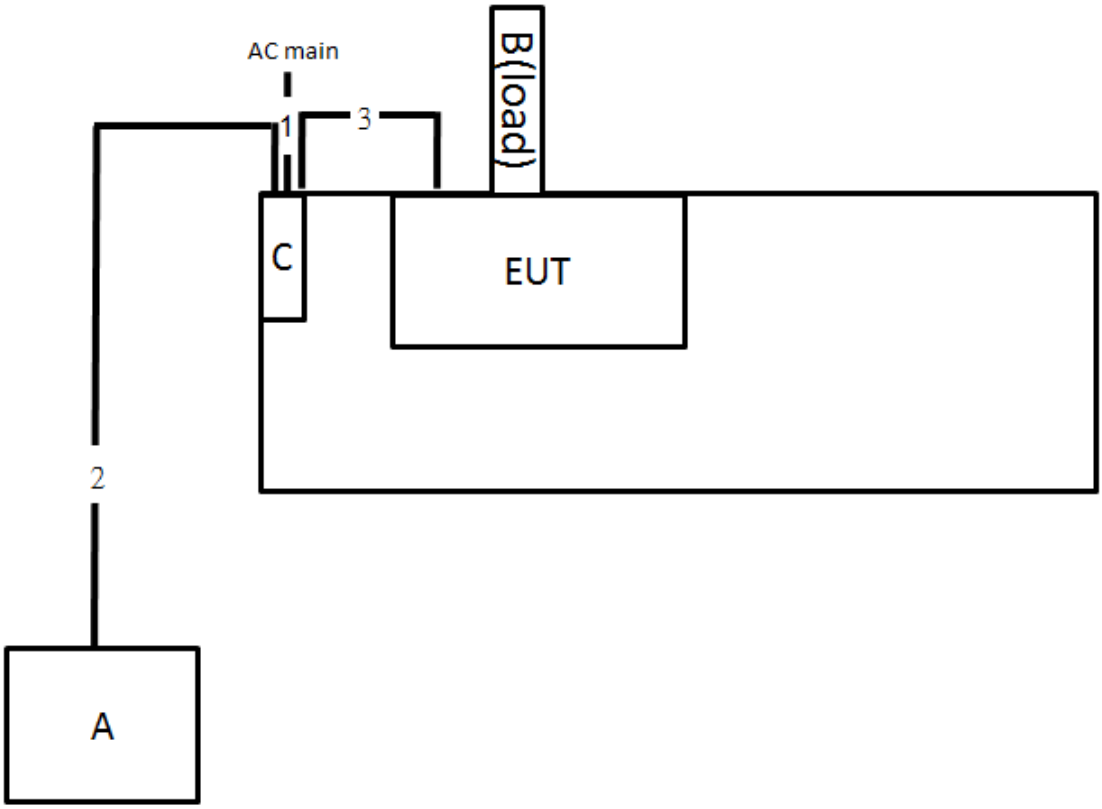
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A

For RF Conducted:

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

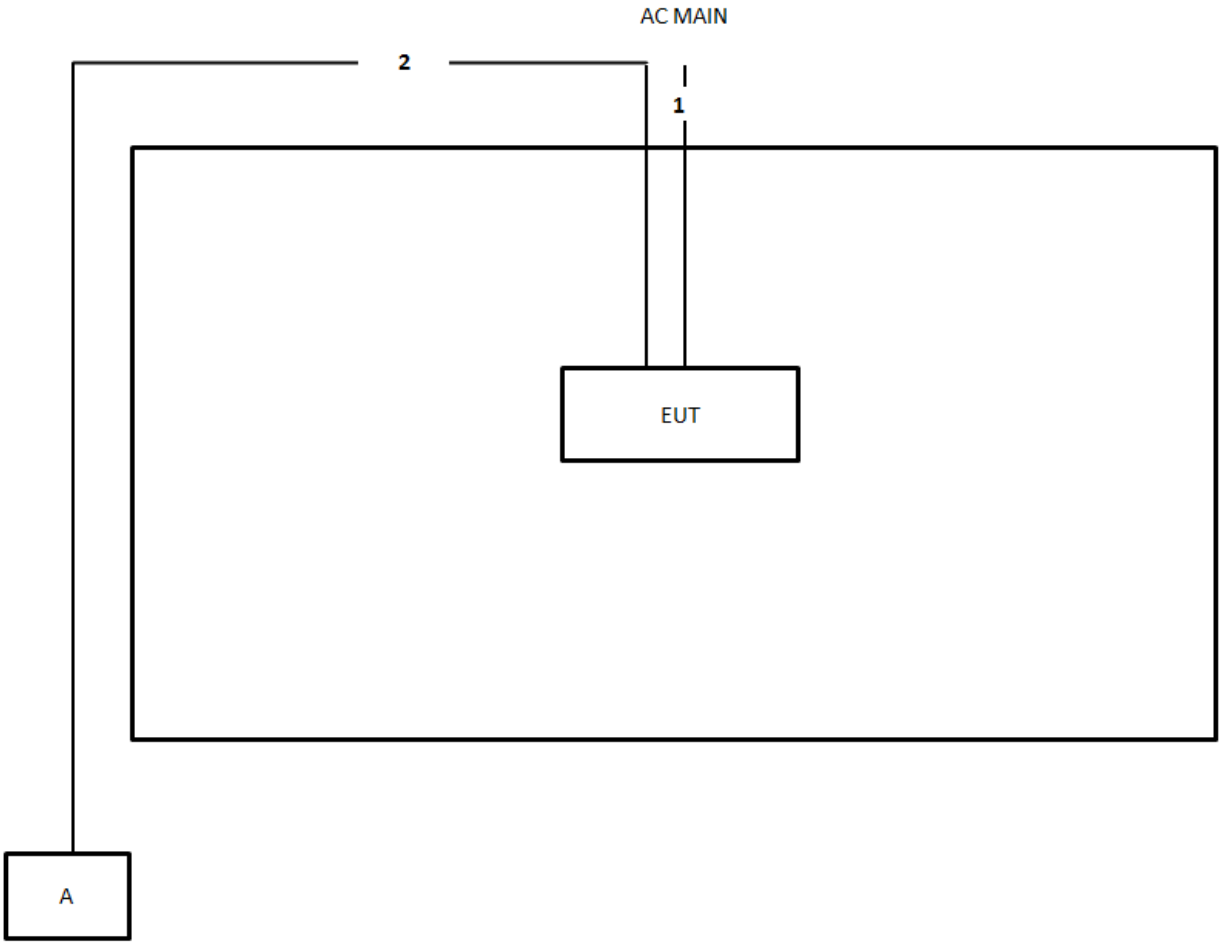
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



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

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	Power cable	No	1.6m
2	RJ-45 cable	No	10m

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

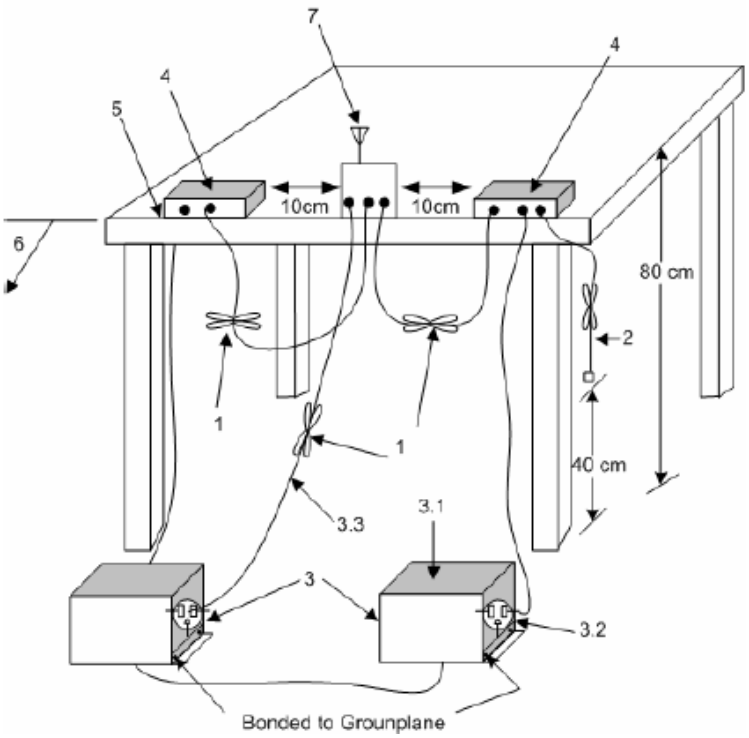
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω 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	
☒	For the 5.15-5.25 GHz band, N/A
☐	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

3.2.2 Measuring Instruments

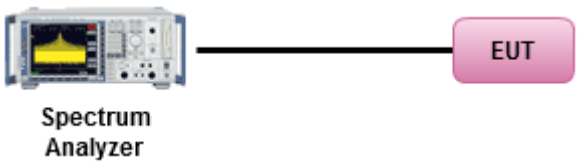
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth



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	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]
	▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 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 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 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (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
	☐ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☒ Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)


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	
☒	For the 5.15-5.25 GHz band:
	▪ 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)..
☐	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).
☐	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).
☒	For the 5.725-5.85 GHz band:
	▪ 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	
☐	For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
	▪ 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° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40° -35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45°
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
☐	For the 5.725-5.85 GHz band:
	▪ 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.	

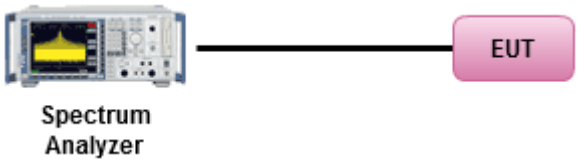
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method		
▪ 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:		
	☐ Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth	
	[duty cycle ≥ 98% or external video / power trigger]	
	☒ Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).	
	☐ Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)	
	duty cycle < 98% and average over on/off periods with duty factor	
	☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).	
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
▪ For conducted measurement.		
	▪ If the EUT supports multiple transmit chains using options given below:	
		☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
	▪	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.4.4 Test Setup

Power Spectral Density


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**
☒ 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☐ 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☐ 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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

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

3.5.2 Measuring Instruments

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

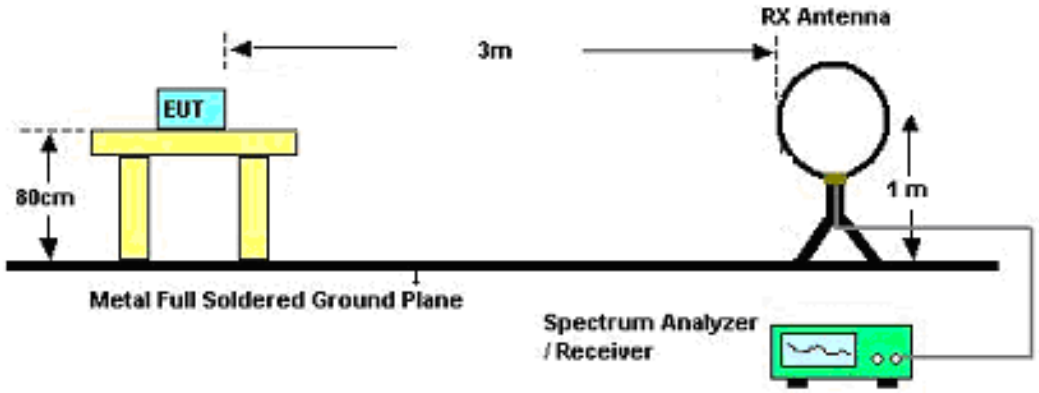
3.5.3 Test Procedures

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

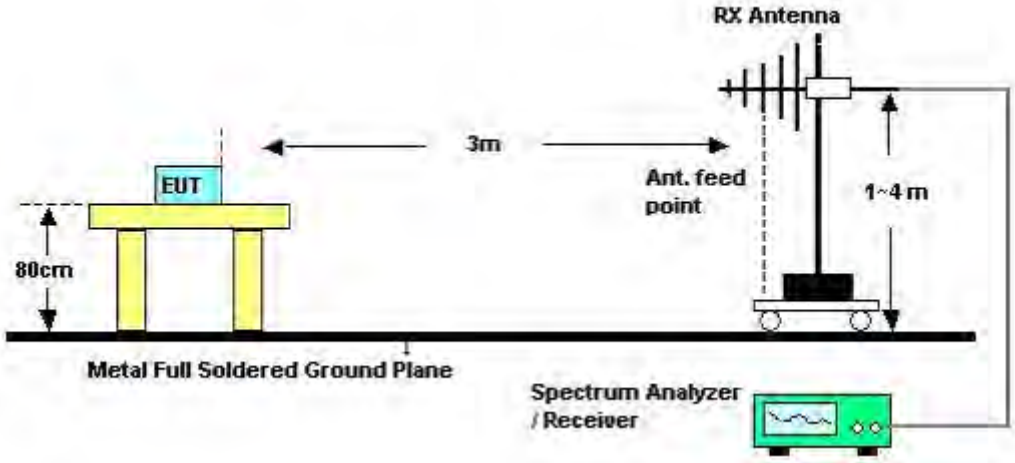
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

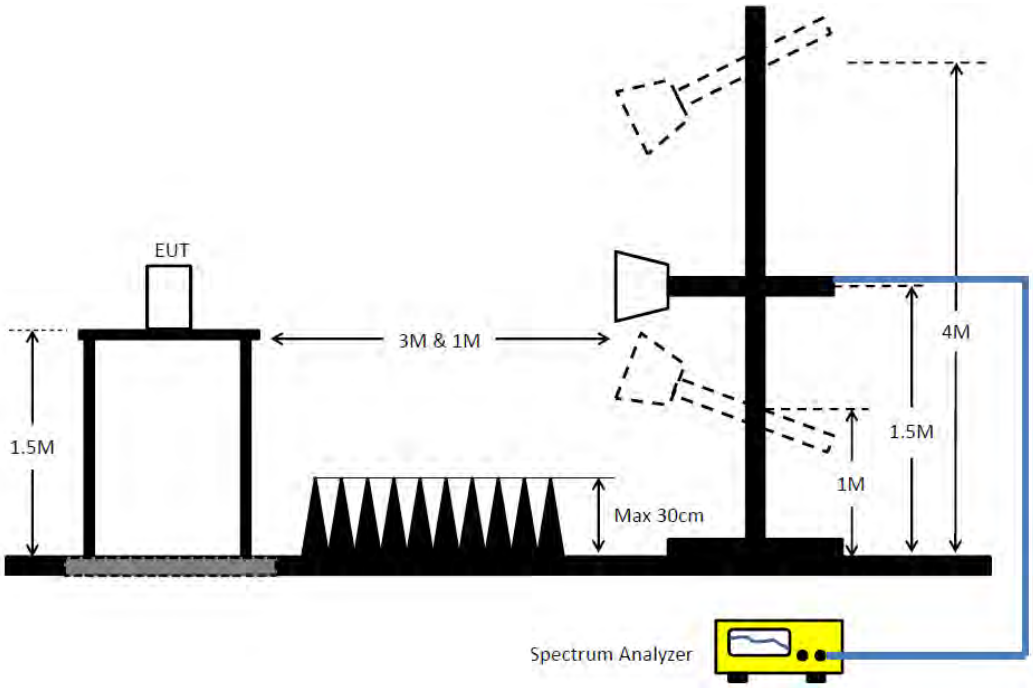
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



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

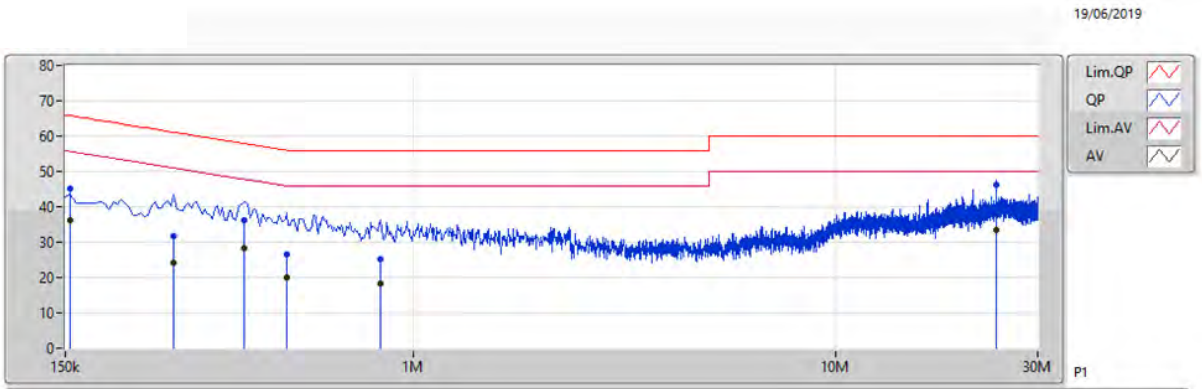
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 21, 2018	Nov. 20, 2019	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 05, 2018	Nov. 04, 2019	Conduction (CO02-CB)
EMI 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)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH04-CB)
Horn Antenna	ETS・Lindgren	3115	00143147	750MHz~18GHz	Oct. 26, 2018	Oct. 25, 2019	Radiation (03CH04-CB)
BILOG ANTENNA	Schaffner	CBL6112B & N-6-06-06	22021&AT-N0607	30MHz ~ 1GHz	Oct. 12, 2018	Oct. 11, 2019	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Mar. 19, 2019	Mar. 18, 2020	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	310N	187291	0.1MHz ~ 1GHz	Mar. 19, 2019	Mar. 18, 2020	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Dec. 26, 2018	Dec. 25, 2019	Radiation (03CH04-CB
EMI Test Receiver	R&S	ESCS	100359	9kHz ~ 2.75GHz	Jul. 03, 2018	Jul. 02, 2019	Radiation (03CH04-CB)
RF Cable	Woken	Low Cable-03+22	N/A	30MHz – 1GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 20, 2018	Jul. 19, 2019	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 28, 2018	Jun. 27, 2019	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2019	Jan. 07, 2020	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 03, 2018	Oct. 02, 2019	Radiation (03CH06-CB)
RF Cable	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH06-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jun. 22, 2018	Jun. 21, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-3	1 GHz – 26.5 GHz	Oct. 24, 2018	Oct. 23, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 03, 2018	Sep. 02, 2019	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 03, 2018	Sep. 02, 2019	Conducted (TH02-CB)

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

NCR means Non-Calibration required.

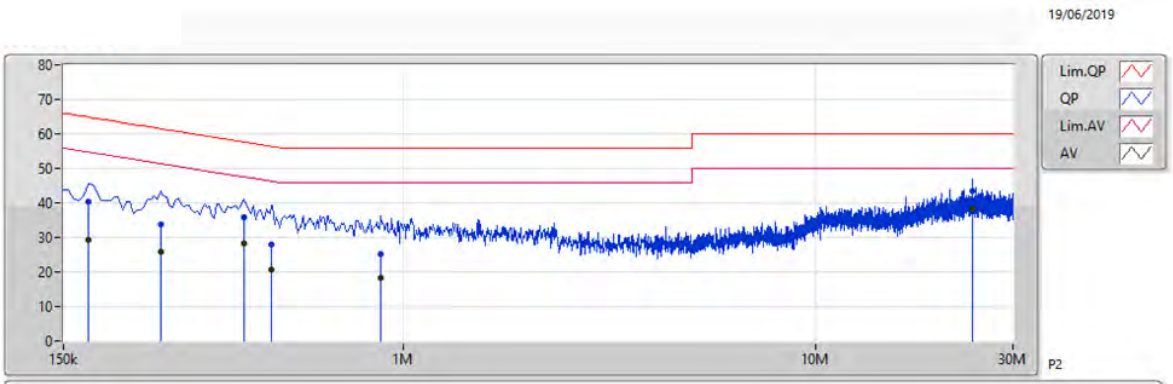
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	CTX		



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	45.19	65.75	-20.56	9.90	Line	-	35.29	0.05	0.06	9.79
AV	154.5k	36.12	55.75	-19.63	9.90	Line	-	26.22	0.05	0.06	9.79
QP	271.5k	31.74	61.07	-29.33	9.92	Line	-	21.82	0.06	0.06	9.80
AV	271.5k	24.03	51.07	-27.04	9.92	Line	-	14.11	0.06	0.06	9.80
QP	397.5k	36.18	57.91	-21.73	9.93	Line	-	26.25	0.06	0.06	9.81
AV	397.5k	28.20	47.91	-19.71	9.93	Line	-	18.27	0.06	0.06	9.81
QP	500k	26.53	56.00	-29.47	9.94	Line	-	16.59	0.06	0.07	9.81
AV	500k	19.91	46.00	-26.09	9.94	Line	-	9.97	0.06	0.07	9.81
QP	834k	25.12	56.00	-30.88	9.97	Line	-	15.15	0.07	0.08	9.82
AV	834k	18.18	46.00	-27.82	9.97	Line	-	8.21	0.07	0.08	9.82
QP	24.005M	46.33	60.00	-13.67	10.67	Line	-	35.66	0.32	0.34	10.01
AV	24.005M	33.35	50.00	-16.65	10.67	Line	"Worst"	22.68	0.32	0.34	10.01

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

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	CTX		



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	172.5k	40.34	64.83	-24.49	9.89	Neutral	-	30.45	0.04	0.06	9.79
AV	172.5k	29.20	54.83	-25.63	9.89	Neutral	-	19.31	0.04	0.06	9.79
QP	258k	33.80	61.49	-27.69	9.90	Neutral	-	23.90	0.04	0.06	9.80
AV	258k	25.97	51.49	-25.52	9.90	Neutral	-	16.07	0.04	0.06	9.80
QP	411k	36.01	57.63	-21.62	9.91	Neutral	-	26.10	0.04	0.06	9.81
AV	411k	28.32	47.63	-19.31	9.91	Neutral	-	18.41	0.04	0.06	9.81
QP	478.5k	27.84	56.36	-28.52	9.92	Neutral	-	17.92	0.04	0.07	9.81
AV	478.5k	20.68	46.36	-25.68	9.92	Neutral	-	10.76	0.04	0.07	9.81
QP	883.5k	25.27	56.00	-30.73	9.97	Neutral	-	15.30	0.06	0.09	9.82
AV	883.5k	18.32	46.00	-27.68	9.97	Neutral	-	8.35	0.06	0.09	9.82
QP	24.009M	43.54	60.00	-16.46	10.66	Neutral	-	32.88	0.31	0.34	10.01
AV	24.009M	38.44	50.00	-11.56	10.66	Neutral	"Worst"	27.78	0.31	0.34	10.01

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

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.825M	16.567M	16M6D1D	19.475M	16.492M
802.11ac VHT20_Nss1,(MCS0)_2TX	29.075M	17.691M	17M7D1D	19.95M	17.616M
802.11ac VHT40_Nss1,(MCS0)_2TX	89.9M	36.582M	36M6D1D	40.45M	36.132M
802.11ac VHT80_Nss1,(MCS0)_2TX	82.3M	75.962M	76M0D1D	81.3M	75.862M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.375M	33.783M	33M8D1D	16.325M	16.517M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.575M	35.882M	35M9D1D	17.525M	17.641M
802.11ac VHT40_Nss1,(MCS0)_2TX	36.3M	36.182M	36M2D1D	35.35M	36.132M
802.11ac VHT80_Nss1,(MCS0)_2TX	76M	75.962M	76M0D1D	75.7M	75.862M

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

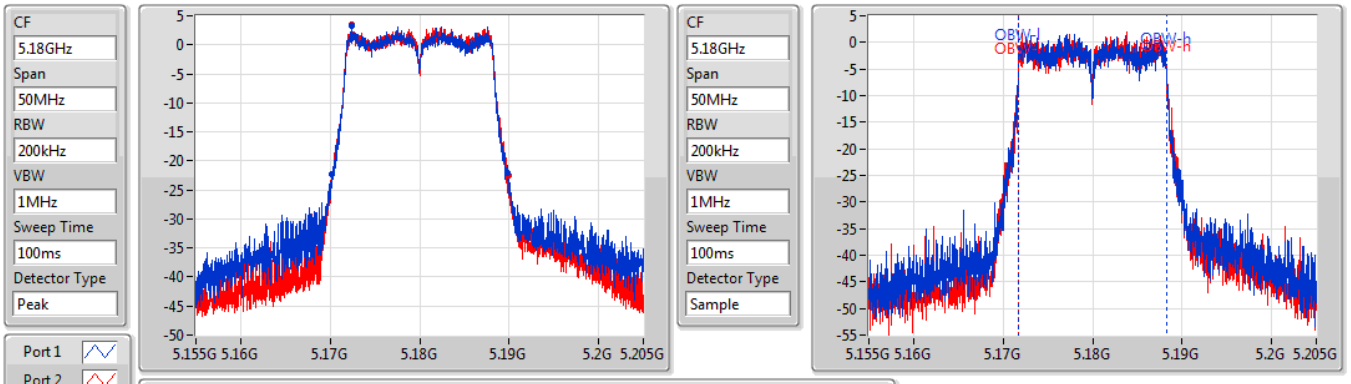
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.75M	16.492M	19.725M	16.542M
5200MHz	Pass	Inf	19.75M	16.567M	19.825M	16.542M
5240MHz	Pass	Inf	19.575M	16.542M	19.475M	16.542M
5745MHz	Pass	500k	16.375M	16.542M	16.35M	16.542M
5785MHz	Pass	500k	16.375M	16.517M	16.325M	16.517M
5825MHz	Pass	500k	16.375M	32.959M	16.325M	33.783M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	29.075M	17.691M	20.55M	17.691M
5200MHz	Pass	Inf	20.5M	17.666M	20.8M	17.641M
5240MHz	Pass	Inf	20.175M	17.616M	19.95M	17.641M
5745MHz	Pass	500k	17.575M	17.641M	17.55M	17.641M
5785MHz	Pass	500k	17.575M	17.641M	17.525M	17.641M
5825MHz	Pass	500k	17.575M	35.782M	17.575M	35.882M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.45M	36.232M	41M	36.132M
5230MHz	Pass	Inf	89.9M	36.582M	82.05M	36.232M
5755MHz	Pass	500k	36.3M	36.182M	35.75M	36.132M
5795MHz	Pass	500k	35.35M	36.182M	35.8M	36.182M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.3M	75.962M	82.3M	75.862M
5775MHz	Pass	500k	76M	75.962M	75.7M	75.862M

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

802.11a_Nss1,(6Mbps)_2TX EBW

5180MHz

11/06/2019

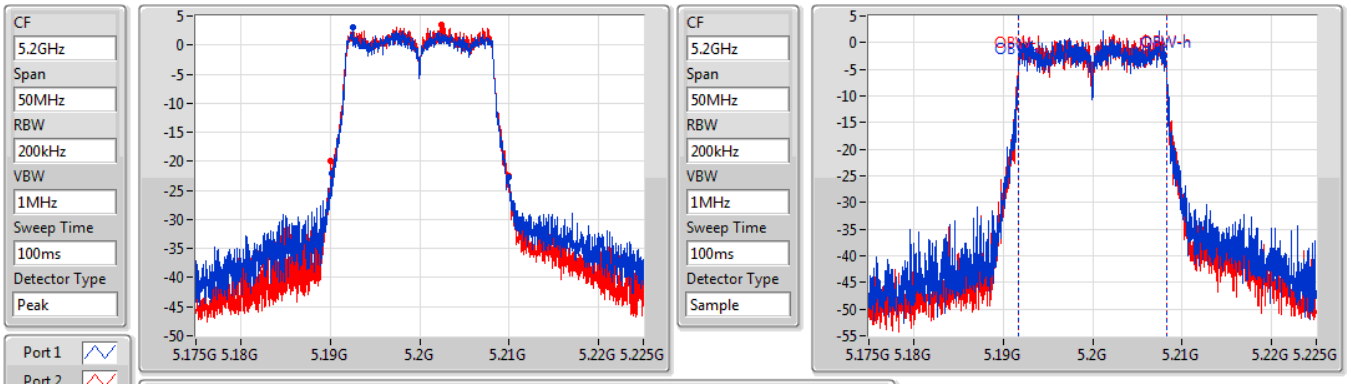


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.75M	5.170125G	5.189875G	16.492M	5.171754G	5.188246G	Inf	1
19.725M	5.1702G	5.189925G	16.542M	5.171729G	5.188271G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5200MHz

11/06/2019

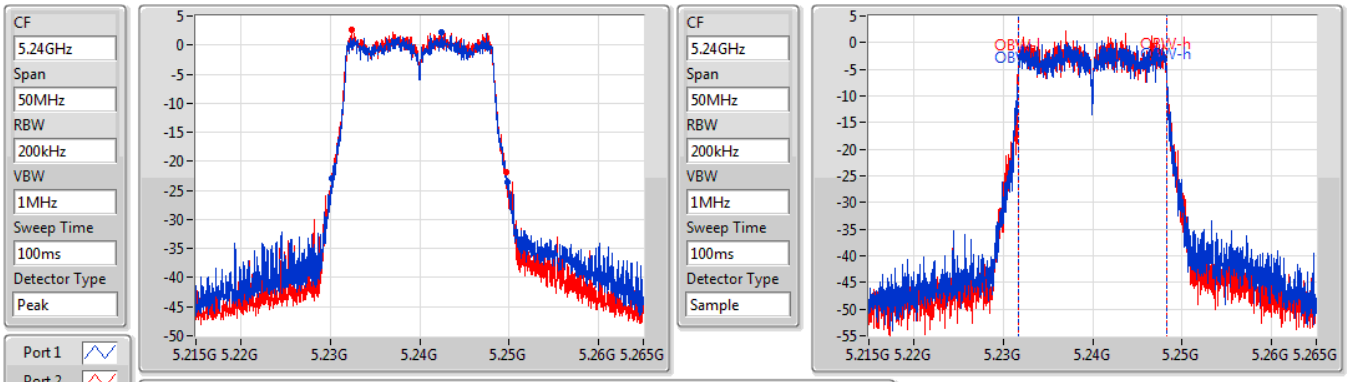


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.75M	5.19015G	5.2099G	16.567M	5.191704G	5.208271G	Inf	1
19.825M	5.1901G	5.209925G	16.542M	5.191679G	5.208221G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5240MHz

11/06/2019

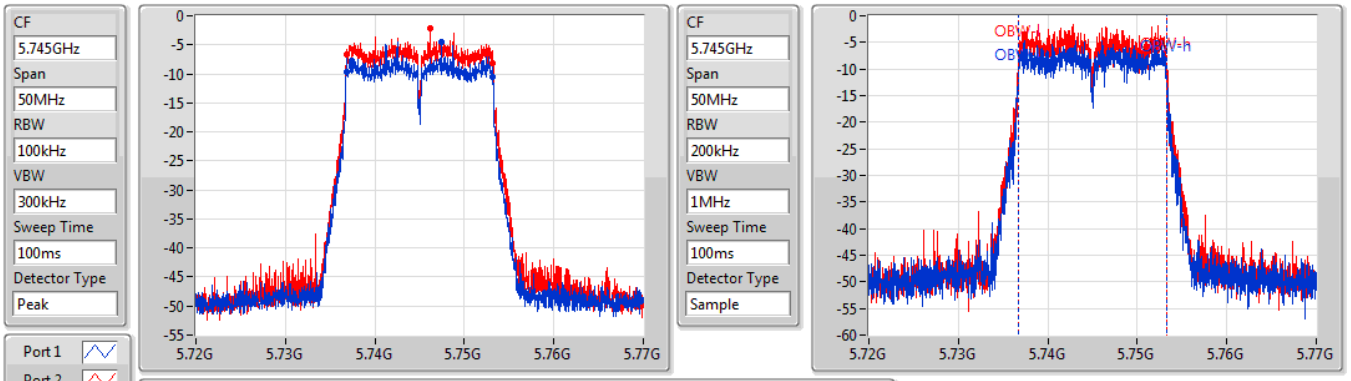


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.575M	5.230225G	5.2498G	16.542M	5.231704G	5.248246G	Inf	1
19.475M	5.2302G	5.249675G	16.542M	5.231704G	5.248246G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5745MHz

11/06/2019

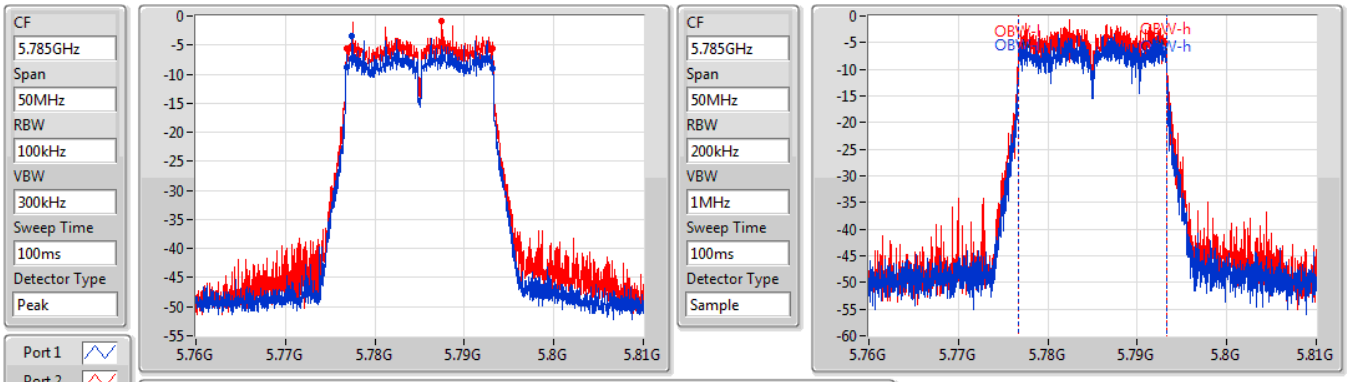


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.375M	5.7368G	5.753175G	16.542M	5.736704G	5.753246G	500k	1
16.35M	5.736825G	5.753175G	16.542M	5.736704G	5.753246G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

5785MHz

11/06/2019

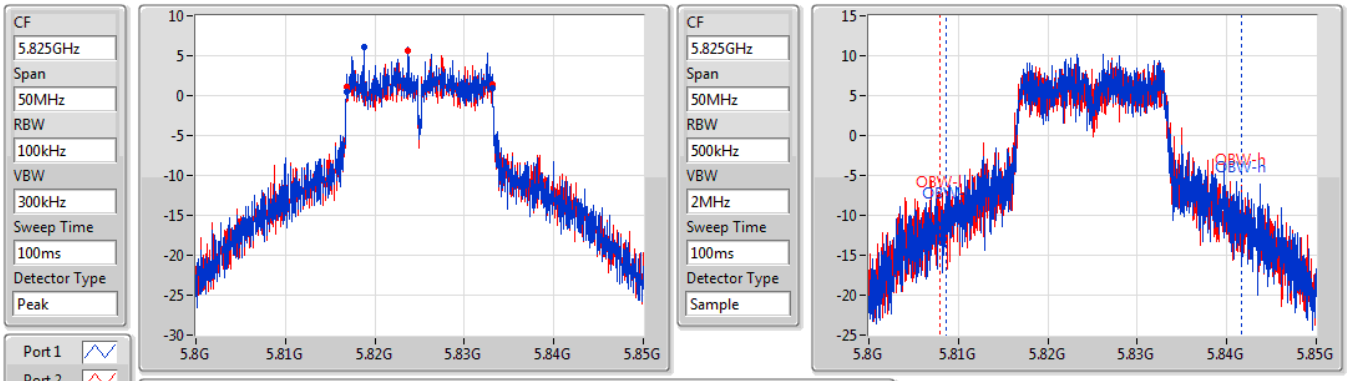


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.375M	5.7768G	5.793175G	16.517M	5.776729G	5.793246G	500k	1
16.325M	5.776825G	5.79315G	16.517M	5.776729G	5.793246G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

5825MHz

11/06/2019

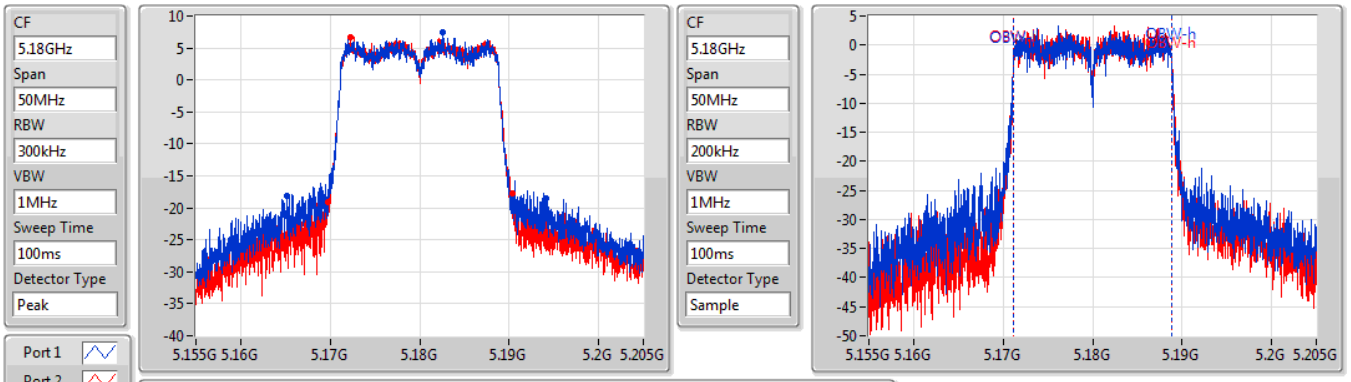


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.375M	5.8168G	5.833175G	32.959M	5.808658G	5.841617G	500k	1
16.325M	5.816825G	5.83315G	33.783M	5.807909G	5.841692G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5180MHz

11/06/2019

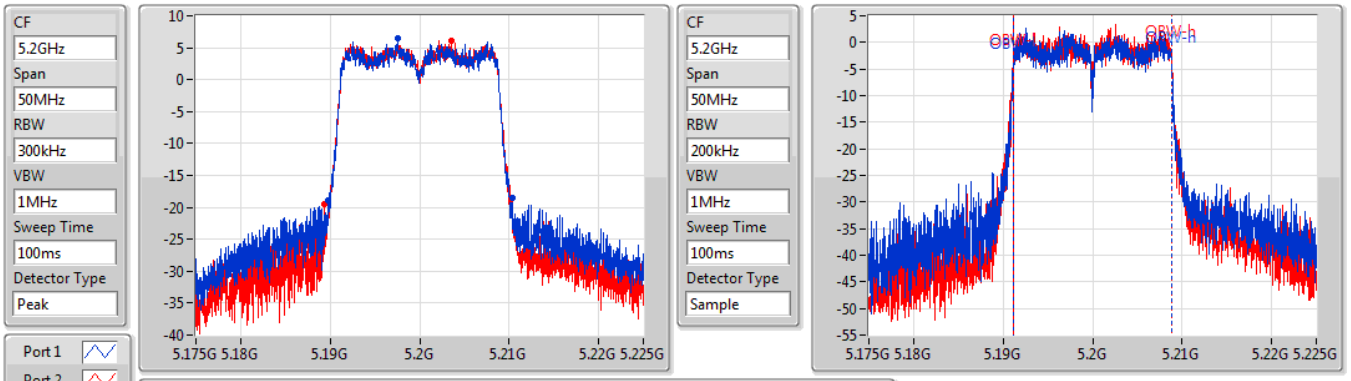


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
29.075M	5.165125G	5.1942G	17.691M	5.171154G	5.188846G	Inf	1
20.55M	5.1698G	5.19035G	17.691M	5.171154G	5.188846G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5200MHz

11/06/2019

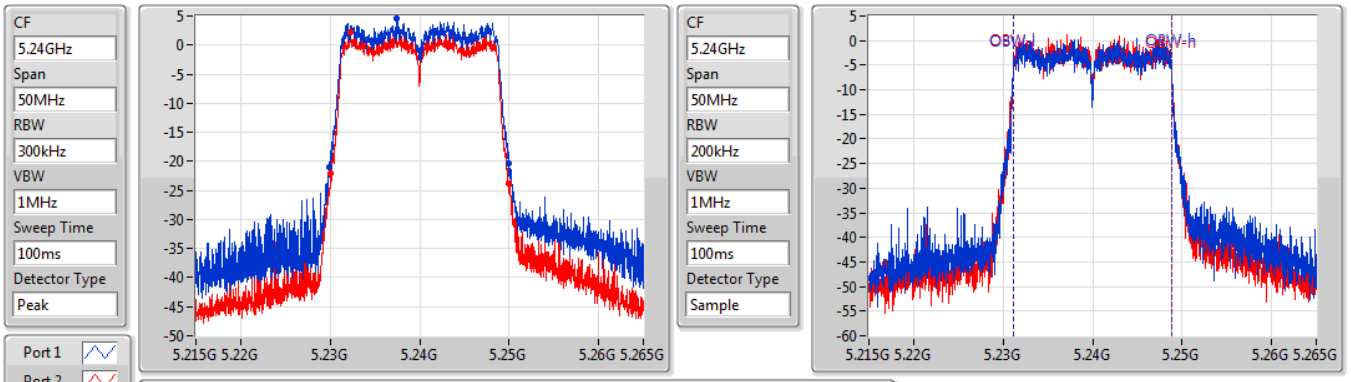


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.5M	5.189825G	5.210325G	17.666M	5.191154G	5.208821G	Inf	1
20.8M	5.189375G	5.210175G	17.641M	5.191154G	5.208796G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5240MHz

11/06/2019

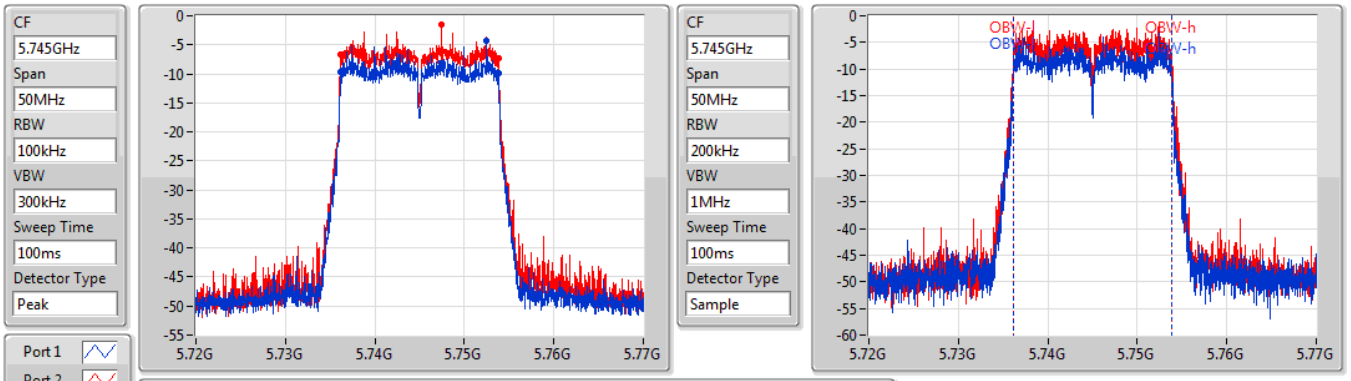


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.175M	5.22985G	5.250025G	17.616M	5.231179G	5.248796G	Inf	1
19.95M	5.23005G	5.25G	17.641M	5.231154G	5.248796G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5745MHz

11/06/2019

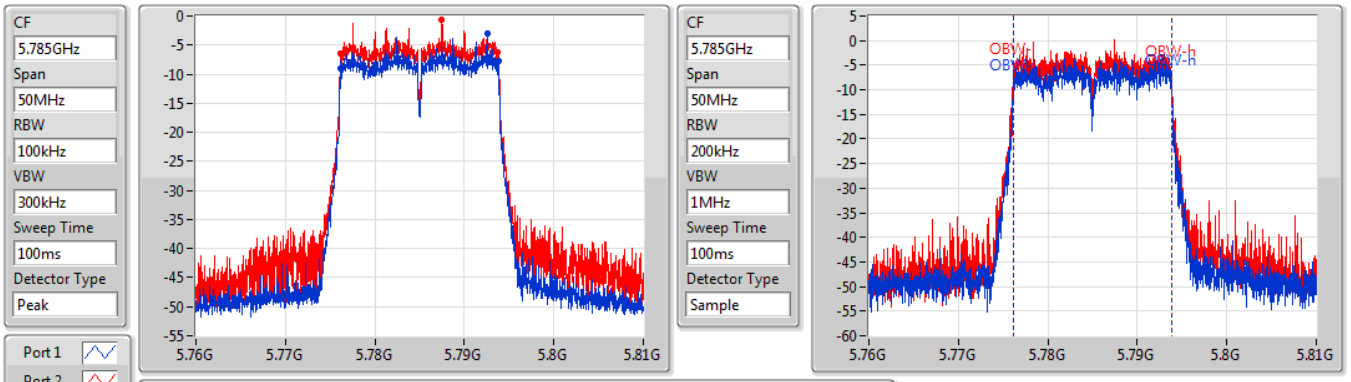


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	5.7362G	5.753775G	17.641M	5.736154G	5.753796G	500k	1
17.55M	5.736225G	5.753775G	17.641M	5.736154G	5.753796G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5785MHz

11/06/2019

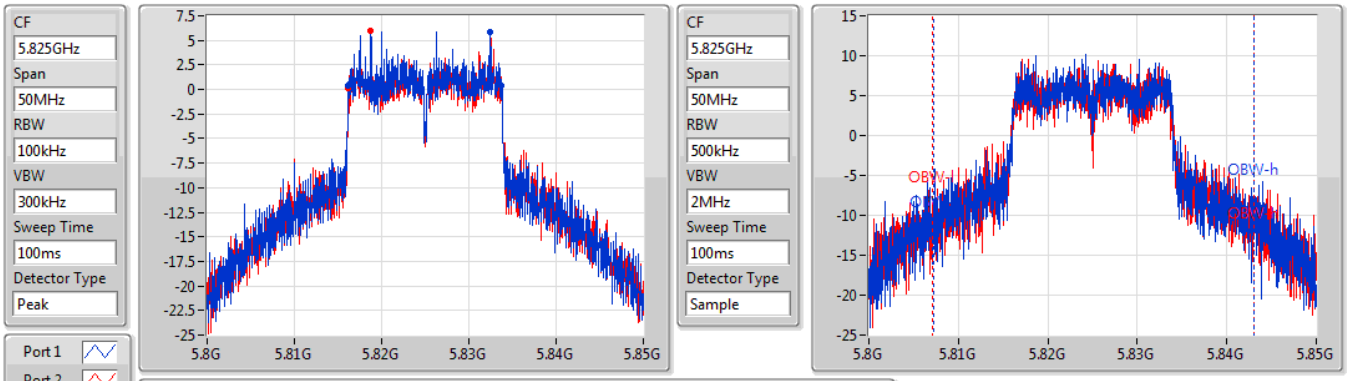


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	5.7762G	5.793775G	17.641M	5.776179G	5.793821G	500k	1
17.525M	5.776225G	5.79375G	17.641M	5.776154G	5.793796G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5825MHz

11/06/2019

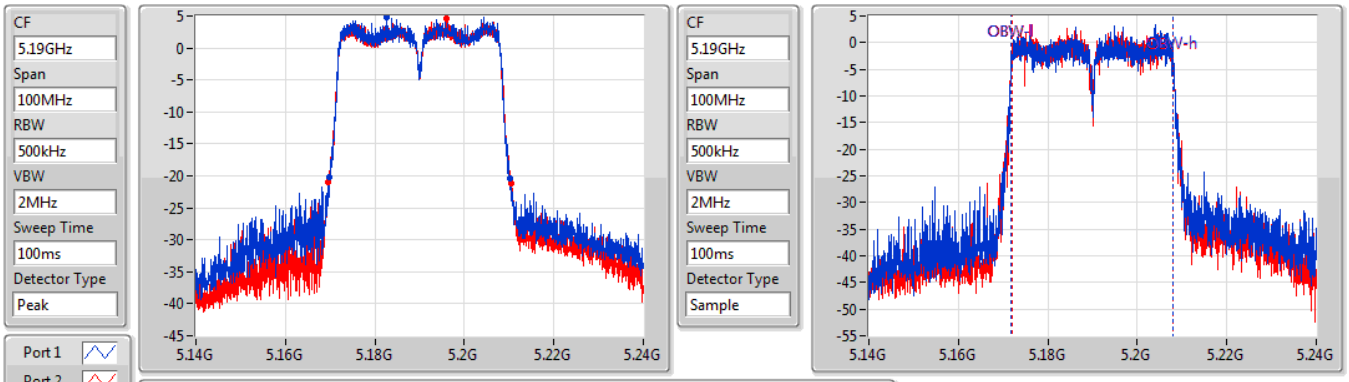


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	5.8162G	5.833775G	35.782M	5.807209G	5.842991G	500k	1
17.575M	5.8162G	5.833775G	35.882M	5.807134G	5.843016G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5190MHz

11/06/2019

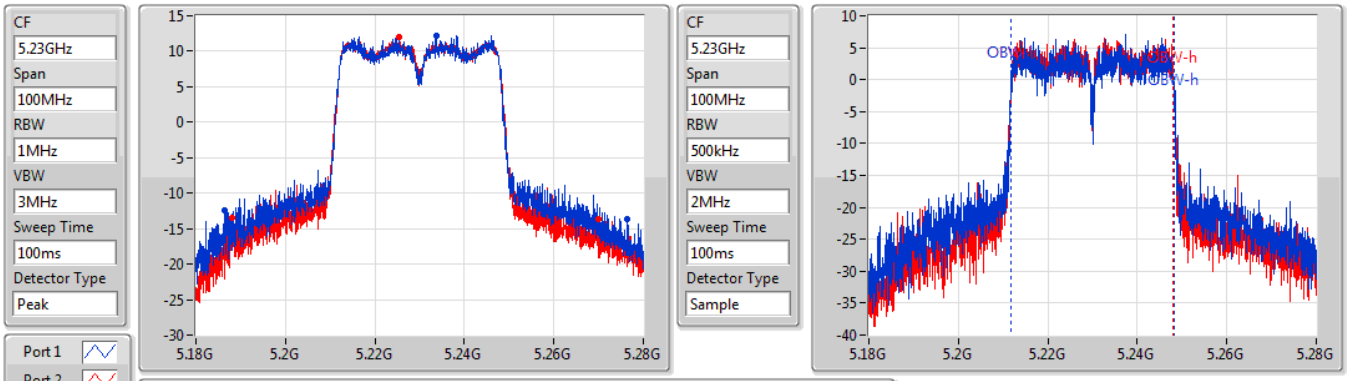


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.45M	5.1698G	5.21025G	36.232M	5.171859G	5.208091G	Inf	1
41M	5.1695G	5.2105G	36.132M	5.171909G	5.208041G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5230MHz

11/06/2019

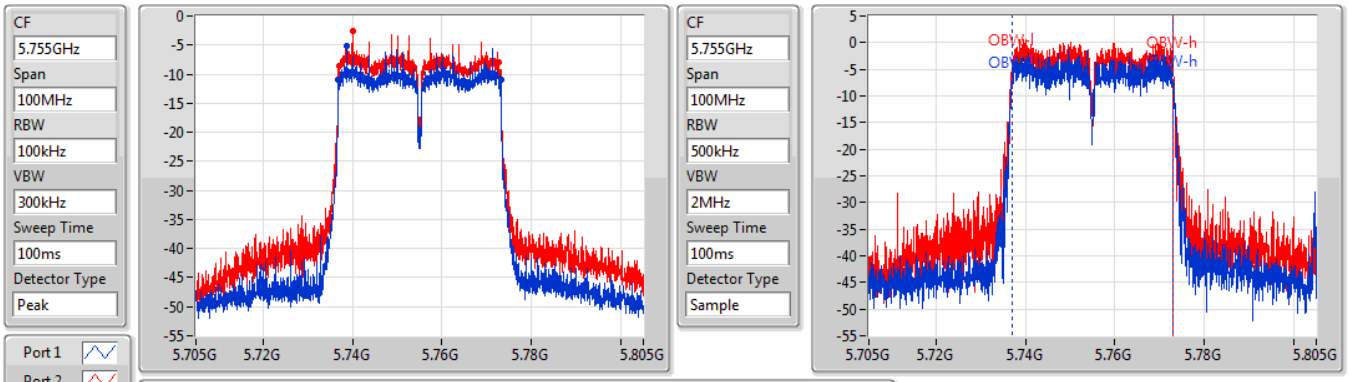


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
89.9M	5.1865G	5.2764G	36.582M	5.211709G	5.248291G	Inf	1
82.05M	5.18795G	5.27G	36.232M	5.211859G	5.248091G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5755MHz

11/06/2019

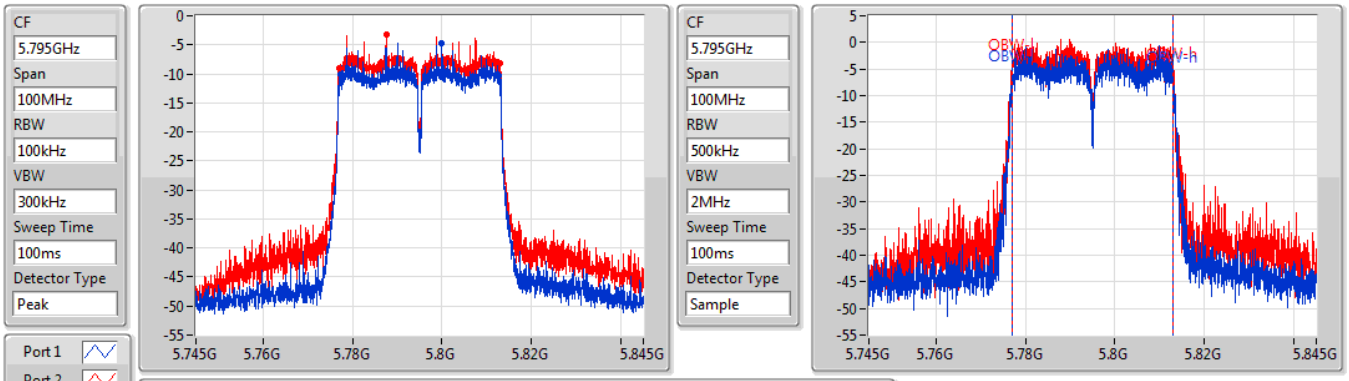


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	5.73685G	5.77315G	36.182M	5.736909G	5.773091G	500k	1
35.75M	5.737G	5.77275G	36.132M	5.736909G	5.773041G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5795MHz

11/06/2019

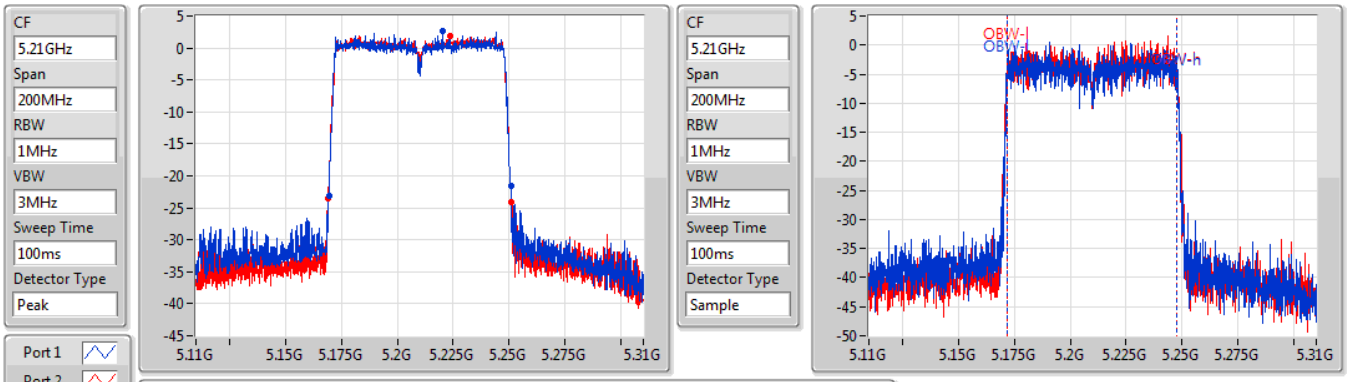


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.35M	5.7772G	5.81255G	36.182M	5.776909G	5.813091G	500k	1
35.8M	5.7771G	5.8129G	36.182M	5.776909G	5.813091G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5210MHz

11/06/2019

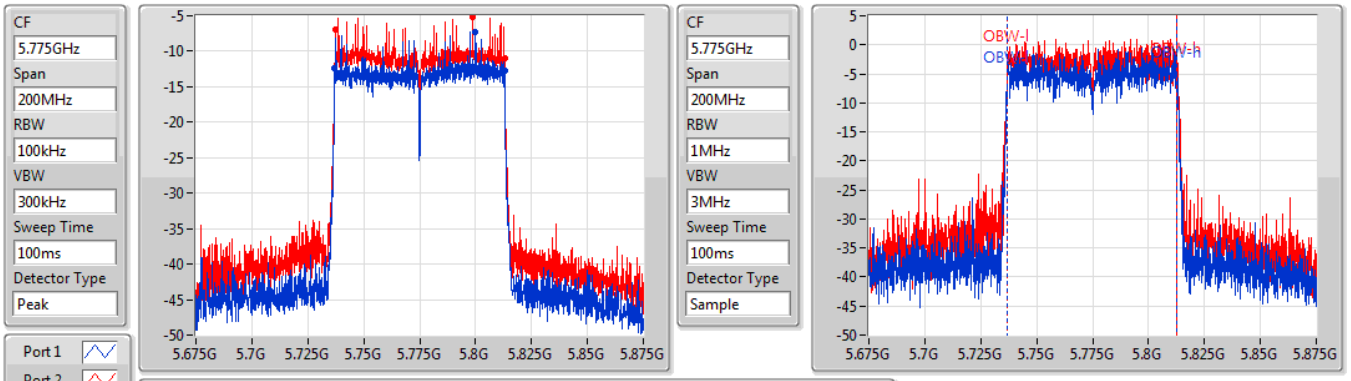


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.3M	5.1694G	5.2507G	75.962M	5.171919G	5.247881G	Inf	1
82.3M	5.1688G	5.2511G	75.862M	5.172019G	5.247881G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5775MHz

11/06/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76M	5.7371G	5.8131G	75.962M	5.736919G	5.812881G	500k	1
75.7M	5.7374G	5.8131G	75.862M	5.737019G	5.812881G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	17.46	0.05572
802.11ac VHT20_Nss1,(MCS0)_2TX	19.21	0.08337
802.11ac VHT40_Nss1,(MCS0)_2TX	20.78	0.11967
802.11ac VHT80_Nss1,(MCS0)_2TX	14.53	0.02838
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	20.59	0.11455
802.11ac VHT20_Nss1,(MCS0)_2TX	20.58	0.11429
802.11ac VHT40_Nss1,(MCS0)_2TX	14.26	0.02667
802.11ac VHT80_Nss1,(MCS0)_2TX	14.60	0.02884

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.02	14.35	14.55	17.46	23.98
5200MHz	Pass	4.02	14.15	14.46	17.32	23.98
5240MHz	Pass	4.02	13.01	13.10	16.07	23.98
5745MHz	Pass	4.02	7.89	10.50	12.40	30.00
5785MHz	Pass	4.02	9.17	11.30	13.37	30.00
5825MHz	Pass	4.02	17.77	17.39	20.59	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.02	16.07	16.33	19.21	23.98
5200MHz	Pass	4.02	15.11	15.43	18.28	23.98
5240MHz	Pass	4.02	13.04	13.35	16.21	23.98
5745MHz	Pass	4.02	8.02	10.56	12.48	30.00
5785MHz	Pass	4.02	9.31	11.41	13.50	30.00
5825MHz	Pass	4.02	17.63	17.51	20.58	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	4.02	13.94	14.27	17.12	23.98
5230MHz	Pass	4.02	17.57	17.97	20.78	23.98
5755MHz	Pass	4.02	9.49	12.09	13.99	30.00
5795MHz	Pass	4.02	10.10	12.16	14.26	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	4.02	11.23	11.80	14.53	23.98
5775MHz	Pass	4.02	10.31	12.58	14.60	30.00

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

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	3.89
802.11ac VHT20_Nss1,(MCS0)_2TX	5.30
802.11ac VHT40_Nss1,(MCS0)_2TX	4.50
802.11ac VHT80_Nss1,(MCS0)_2TX	-5.60
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	5.63
802.11ac VHT20_Nss1,(MCS0)_2TX	5.30
802.11ac VHT40_Nss1,(MCS0)_2TX	-3.80
802.11ac VHT80_Nss1,(MCS0)_2TX	-6.96

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

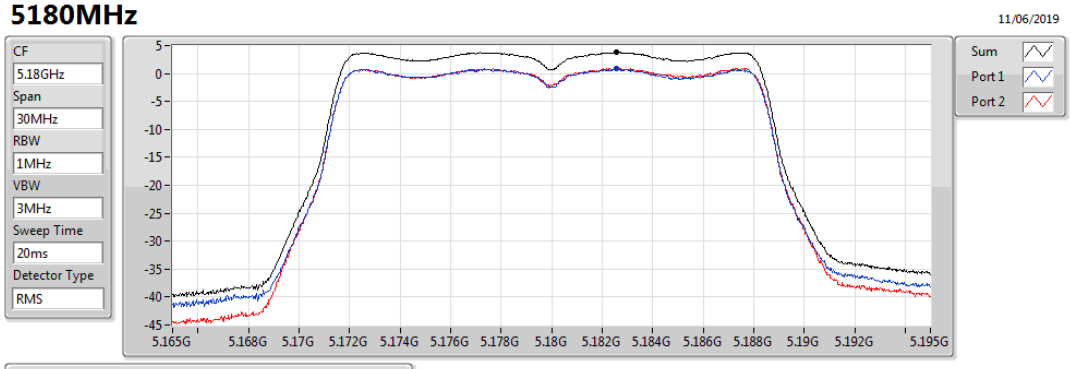
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.03	0.83	0.92	3.89	9.97
5200MHz	Pass	7.03	0.67	0.97	3.80	9.97
5240MHz	Pass	7.03	-0.15	0.17	2.96	9.97
5745MHz	Pass	7.03	-6.83	-4.25	-2.37	28.97
5785MHz	Pass	7.03	-5.64	-3.58	-1.55	28.97
5825MHz	Pass	7.03	2.80	2.50	5.63	28.97
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.03	2.32	2.51	5.30	9.97
5200MHz	Pass	7.03	1.45	1.70	4.55	9.97
5240MHz	Pass	7.03	-0.41	-0.01	2.76	9.97
5745MHz	Pass	7.03	-7.05	-4.47	-2.61	28.97
5785MHz	Pass	7.03	-5.83	-3.70	-1.66	28.97
5825MHz	Pass	7.03	2.48	2.13	5.30	28.97
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	7.03	-2.49	-2.18	0.55	9.97
5230MHz	Pass	7.03	1.41	1.59	4.50	9.97
5755MHz	Pass	7.03	-8.18	-5.66	-3.80	28.97
5795MHz	Pass	7.03	-8.04	-6.05	-4.02	28.97
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	7.03	-8.86	-8.15	-5.60	9.97
5775MHz	Pass	7.03	-11.04	-8.97	-6.96	28.97

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;

802.11a_Nss1,(6Mbps)_2TX PSD

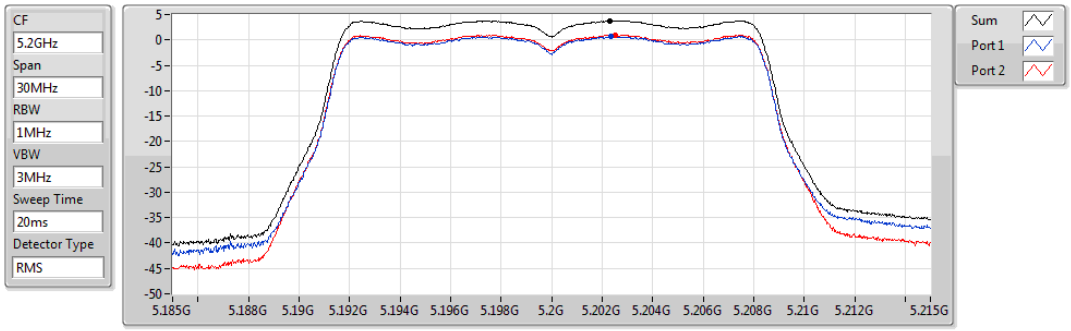
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.89	3.89	0.83	0.92

802.11a_Nss1,(6Mbps)_2TX PSD

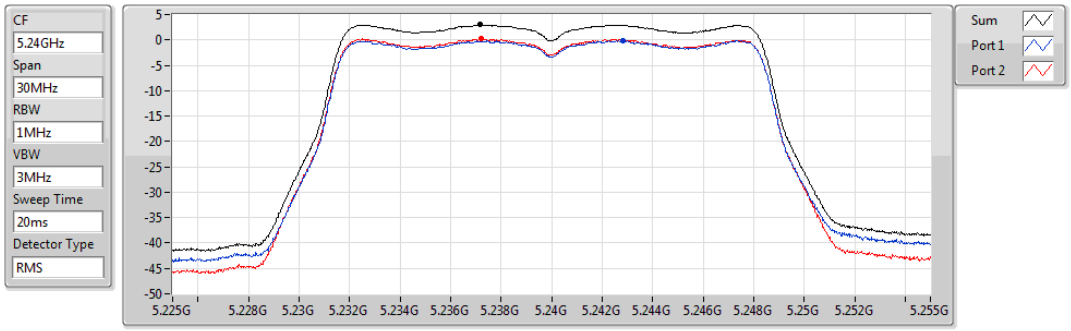
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.80	3.80	0.67	0.97

802.11a_Nss1,(6Mbps)_2TX PSD

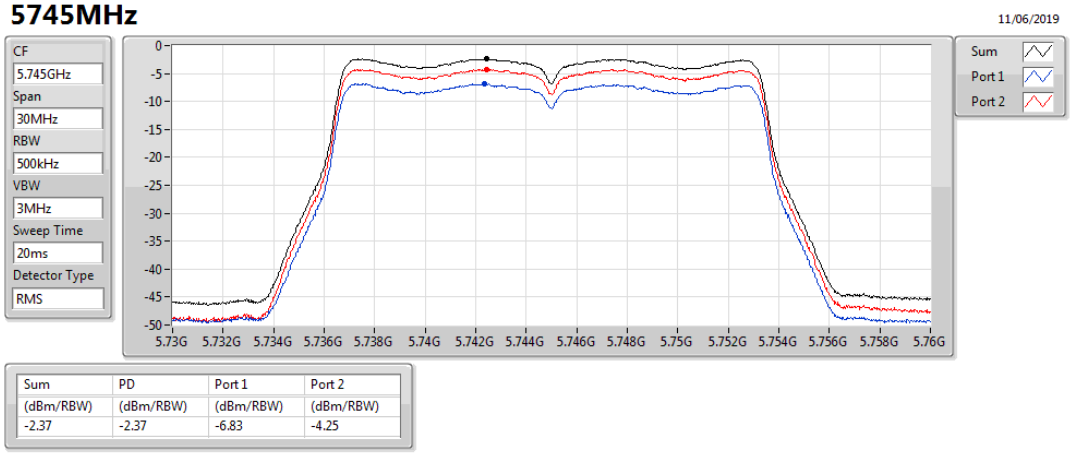
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.96	2.96	-0.15	0.17

802.11a_Nss1,(6Mbps)_2TX PSD

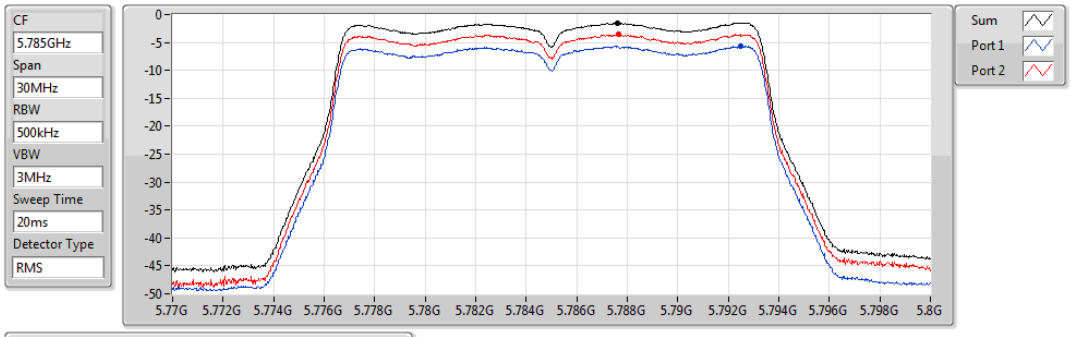
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.37	-2.37	-6.83	-4.25

802.11a_Nss1,(6Mbps)_2TX PSD

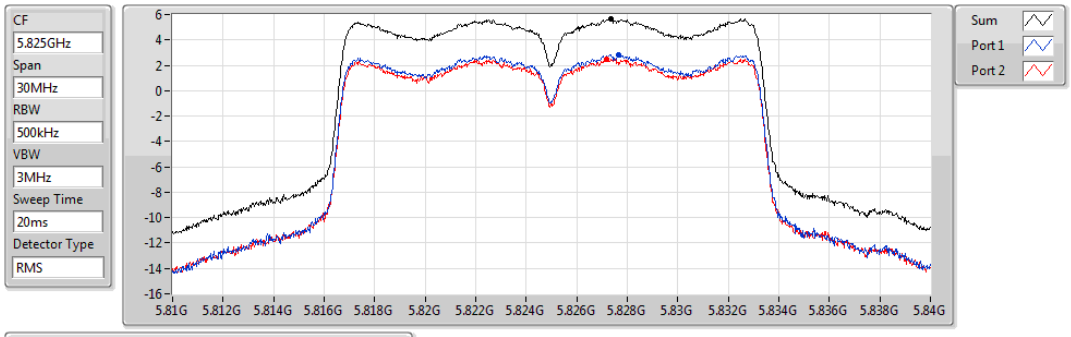
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.55	-1.55	-5.64	-3.58

802.11a_Nss1,(6Mbps)_2TX PSD

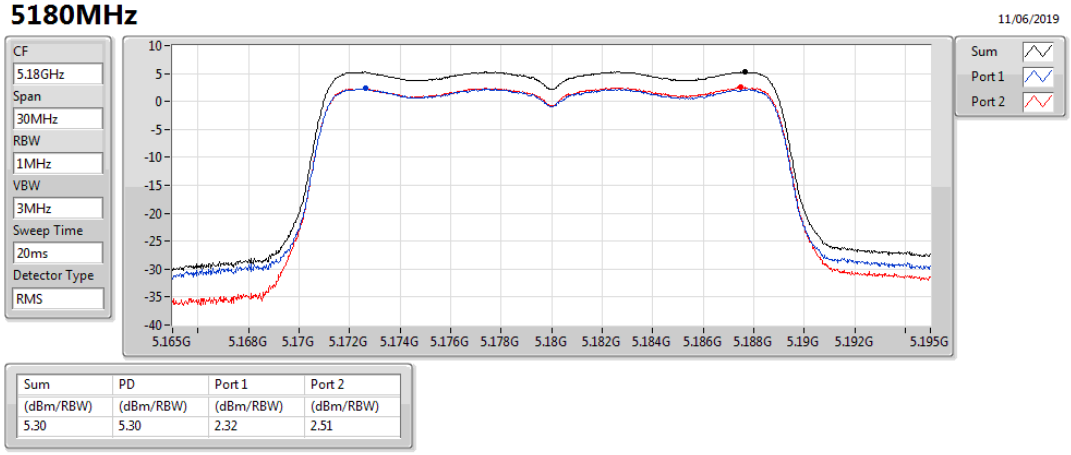
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.63	5.63	2.80	2.50

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

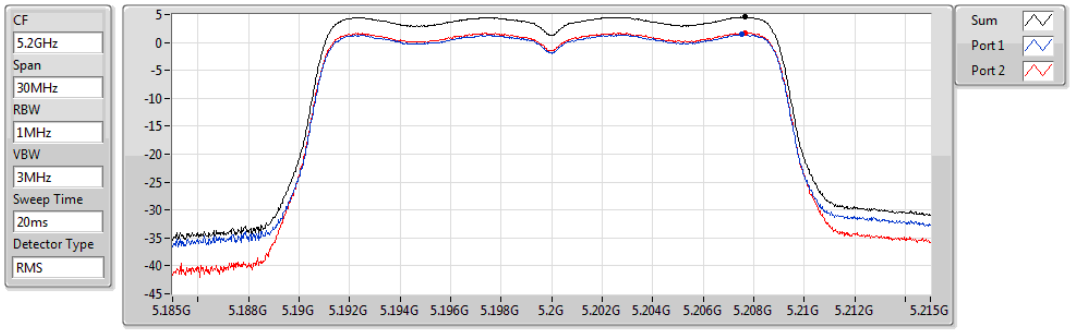
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.30	5.30	2.32	2.51

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

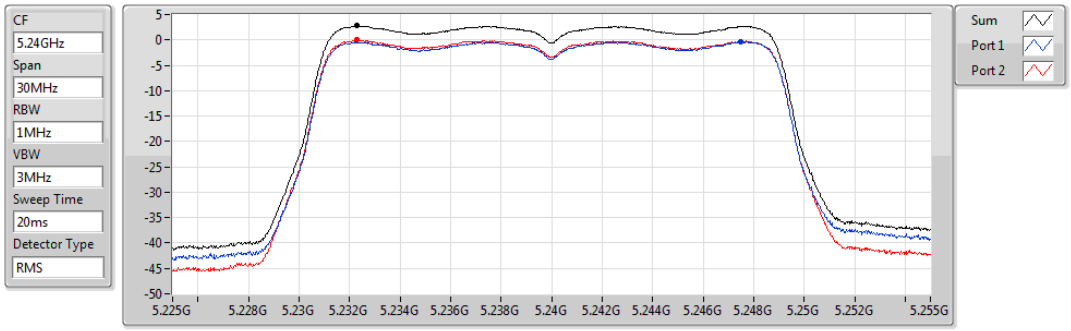
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.55	4.55	1.45	1.70

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

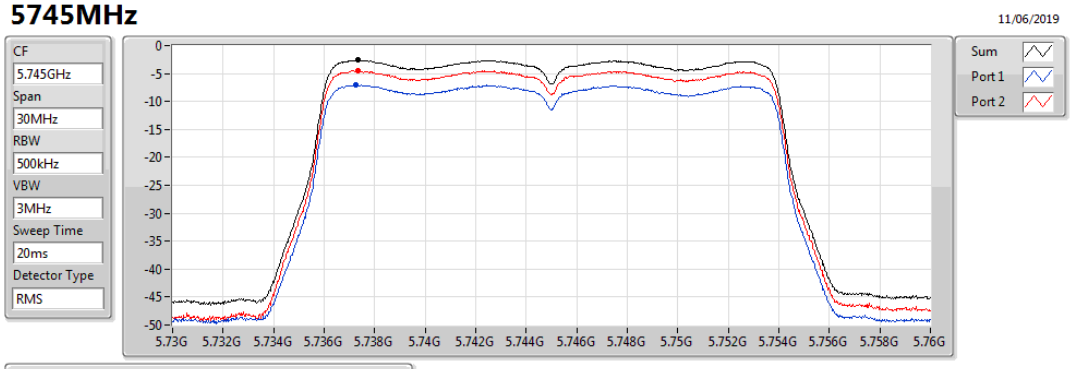
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.76	2.76	-0.41	-0.01

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

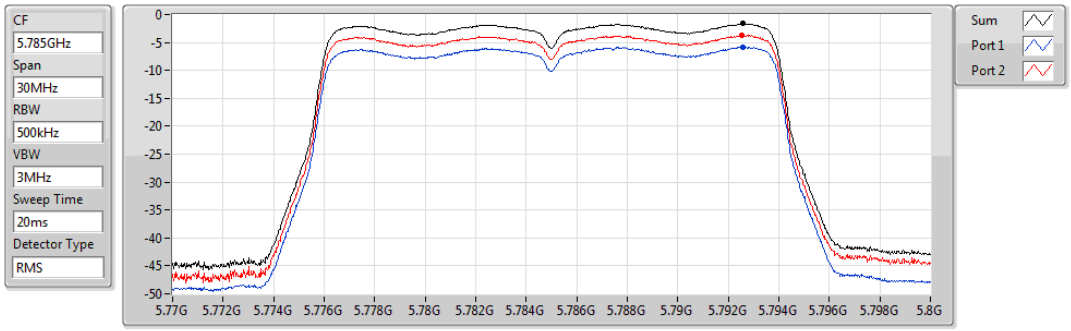
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.61	-2.61	-7.05	-4.47

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

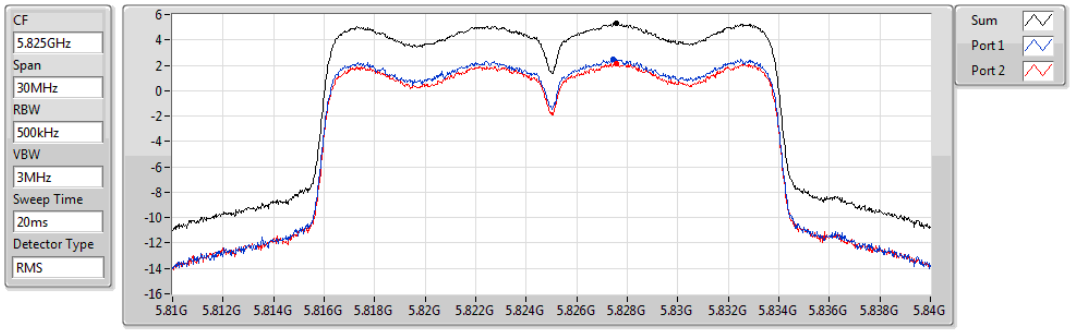
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.66	-1.66	-5.83	-3.70

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

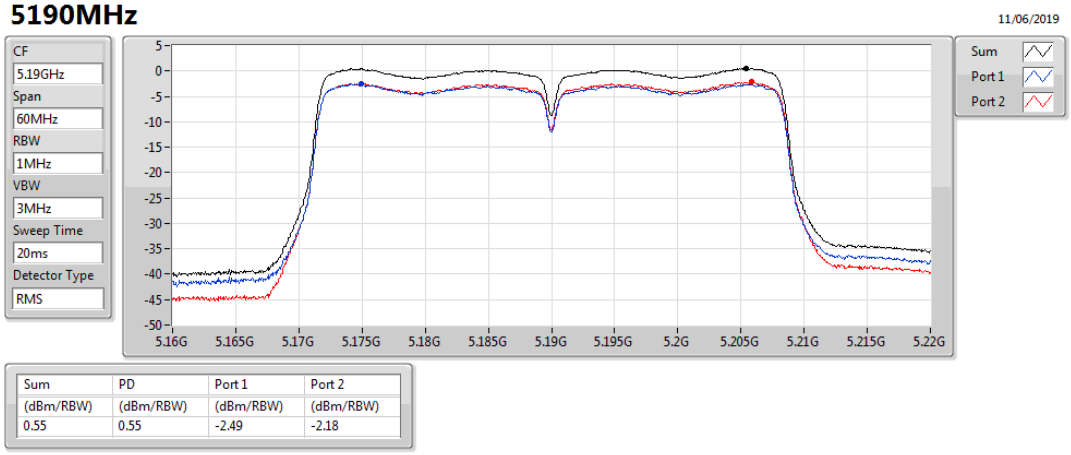
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.30	5.30	2.48	2.13

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

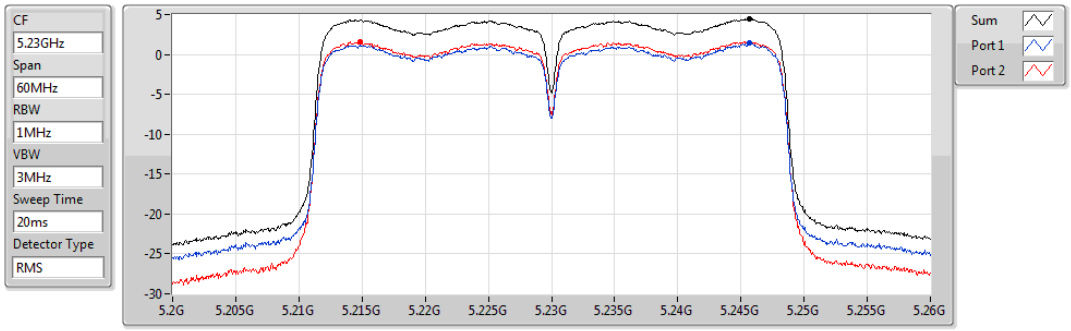
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.55	0.55	-2.49	-2.18

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

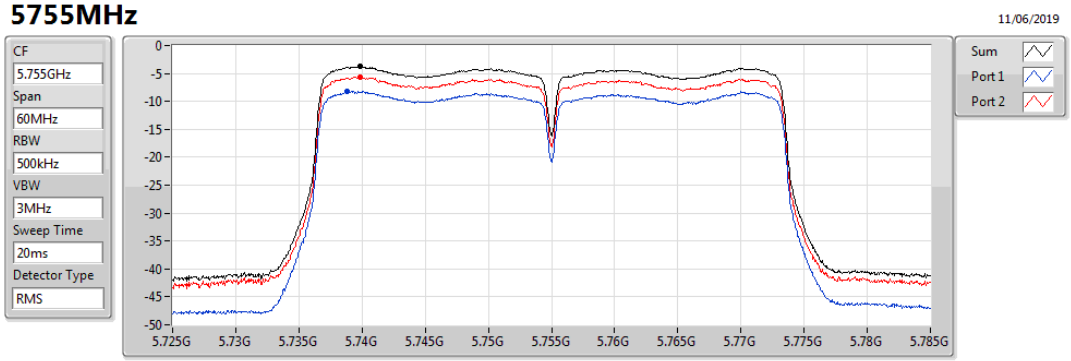
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.50	4.50	1.41	1.59

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

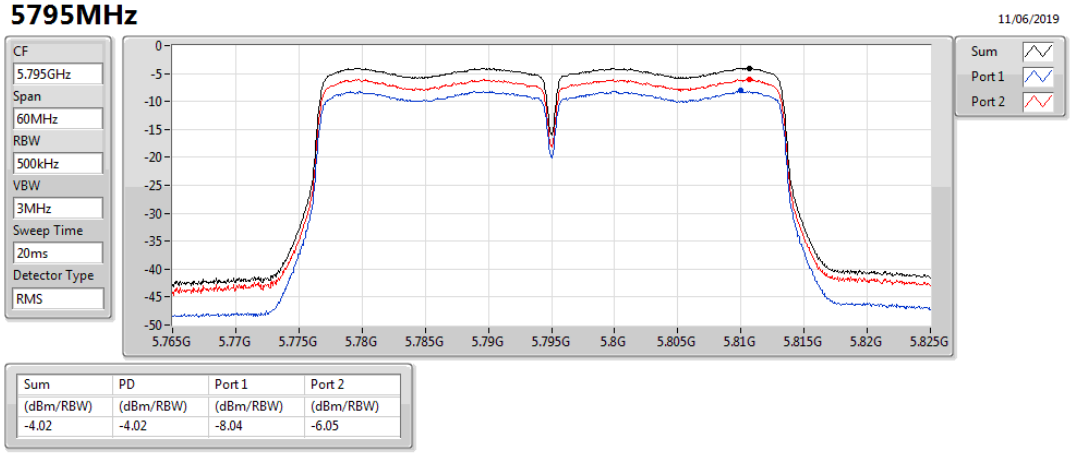
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.80	-3.80	-8.18	-5.66

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

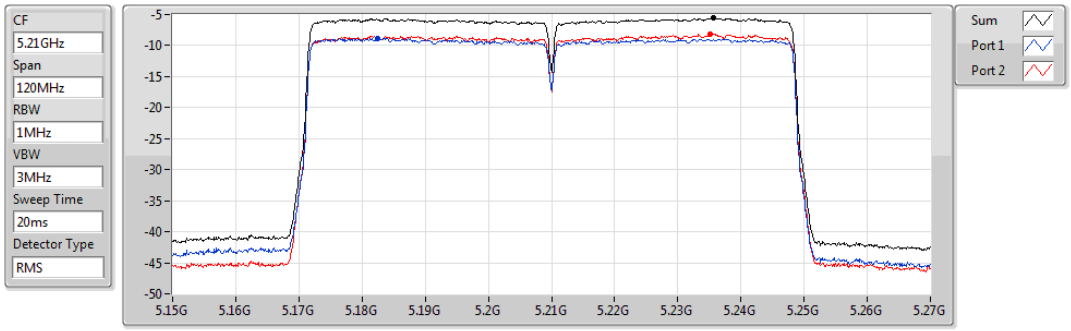
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.02	-4.02	-8.04	-6.05

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

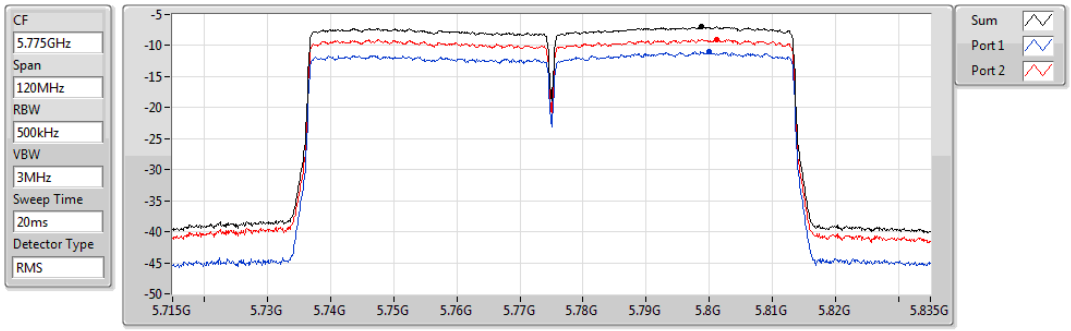
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.60	-5.60	-8.86	-8.15

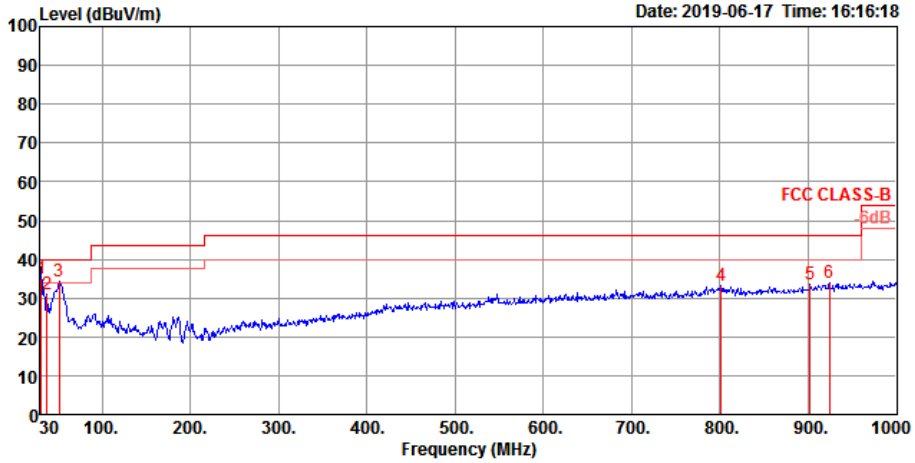
802.11ac VHT80_Nss1,(MCS0)_2TX PSD

5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.96	-6.96	-11.04	-8.97

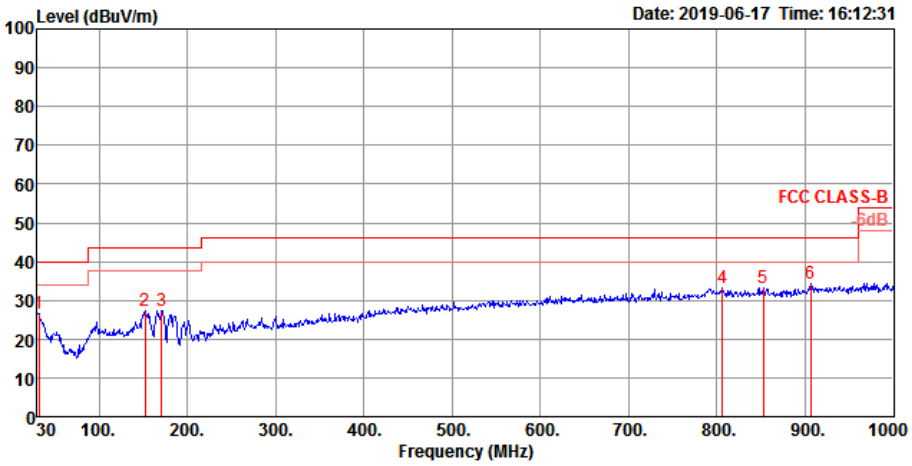
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	CTX		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.97	35.03	40.00	-4.97	43.20	0.51	23.51	32.19	125	99	QP	VERTICAL
2	37.76	31.00	40.00	-9.00	43.12	0.59	19.51	32.22	300	146	Peak	VERTICAL
3	51.34	34.40	40.00	-5.60	52.53	0.74	13.31	32.18	125	359	Peak	VERTICAL
4	801.15	33.08	46.00	-12.92	35.42	3.08	26.23	31.65	125	145	Peak	VERTICAL
5	902.03	33.53	46.00	-12.47	34.87	3.10	26.76	31.20	200	140	Peak	VERTICAL
6	924.34	33.95	46.00	-12.05	35.14	3.21	26.57	30.97	150	334	Peak	VERTICAL

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

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



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	31.94	26.75	40.00	-13.25	35.50	0.52	22.93	32.20	125	237	Peak	HORIZONTAL
2	152.22	27.46	43.50	-16.04	42.07	1.26	16.27	32.14	200	95	Peak	HORIZONTAL
3	170.65	27.43	43.50	-16.07	42.42	1.35	15.69	32.03	150	101	Peak	HORIZONTAL
4	806.00	33.07	46.00	-12.93	35.45	3.08	26.19	31.65	100	96	Peak	HORIZONTAL
5	852.56	33.20	46.00	-12.80	35.56	3.09	26.15	31.60	200	1	Peak	HORIZONTAL
6	905.91	34.37	46.00	-11.63	35.70	3.12	26.71	31.16	200	358	Peak	HORIZONTAL

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

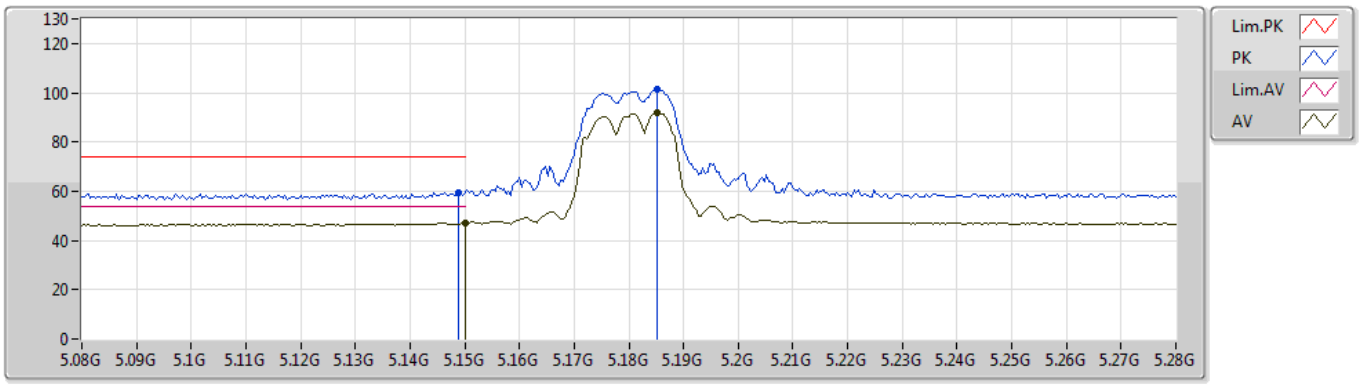
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	PK	6.97344G	68.19	68.20	-0.01	9.63	3	Vertical	314	2.39	-

802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

08/06/2019



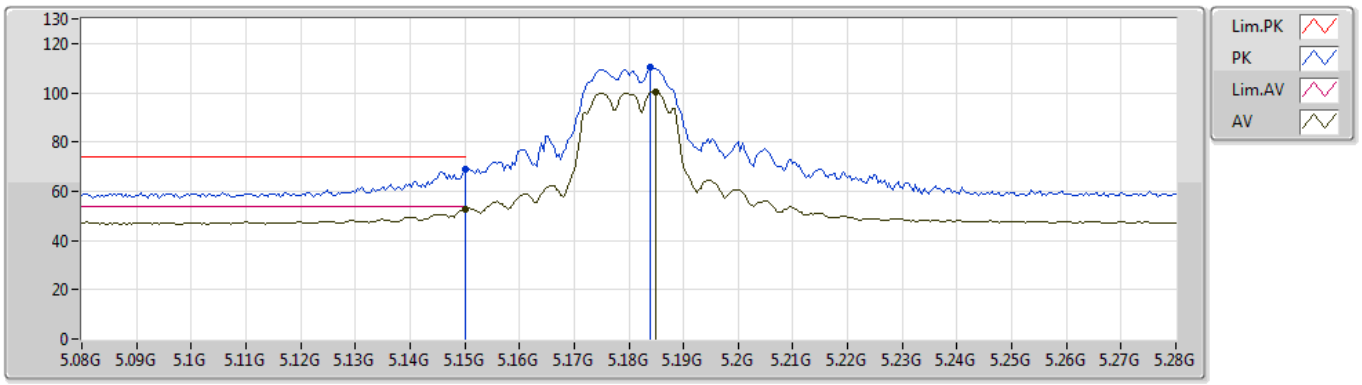
EUT Z_2TX
Setting 15
02-J-5-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1488G	59.63	74.00	-14.37	7.94	3	Vertical	88	1.01	-
AV	5.15G	47.09	54.00	-6.91	7.94	3	Vertical	88	1.01	-
PK	5.1852G	101.26	Inf	-Inf	8.03	3	Vertical	88	1.01	-
AV	5.1852G	91.91	Inf	-Inf	8.03	3	Vertical	88	1.01	-

802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

08/06/2019



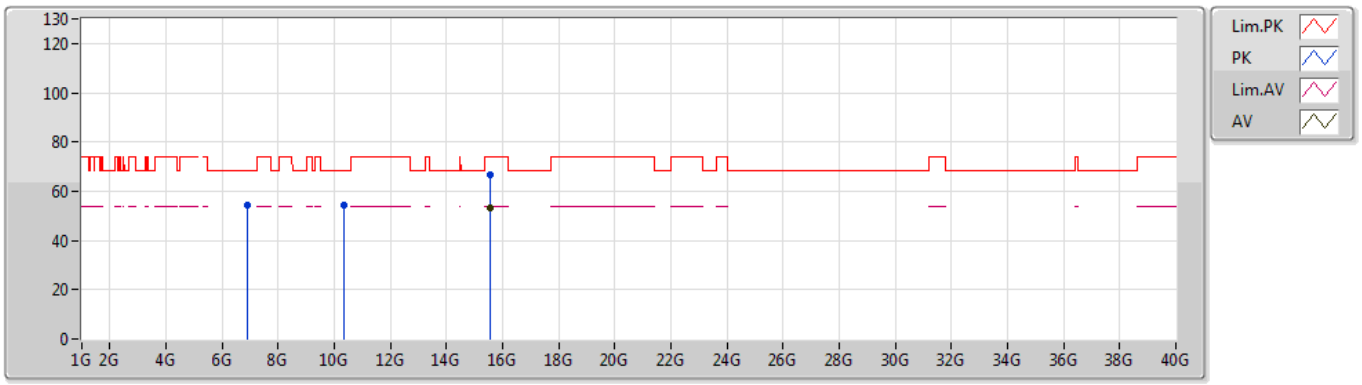
EUT Z_2TX
Setting 15
02-J-5-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.15G	69.08	74.00	-4.92	7.94	3	Horizontal	39	1.02	-
AV	5.15G	52.94	54.00	-1.06	7.94	3	Horizontal	39	1.02	-
PK	5.184G	110.34	Inf	-Inf	8.03	3	Horizontal	39	1.02	-
AV	5.1848G	100.49	Inf	-Inf	8.03	3	Horizontal	39	1.02	-

802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

08/06/2019



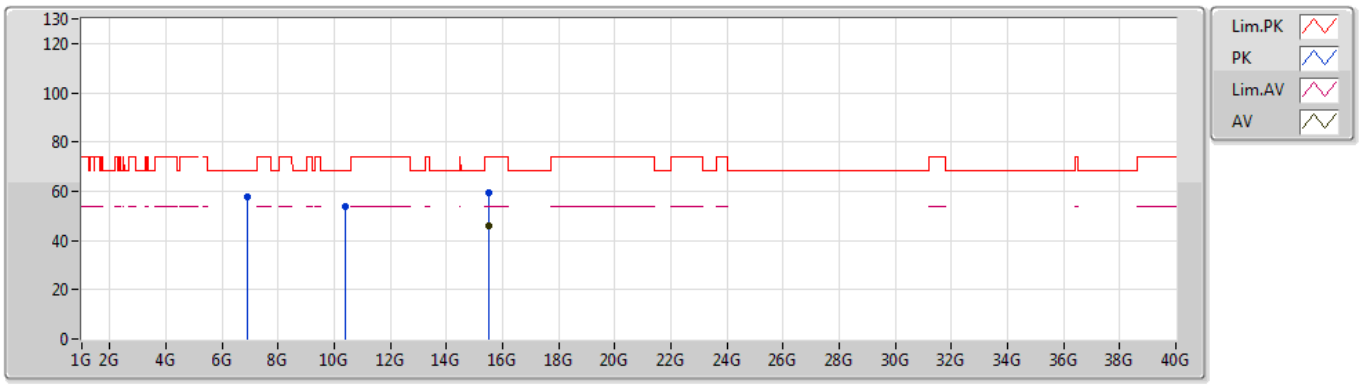
EUT Z_2TX
Setting 15
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.9069G	54.40	68.20	-13.80	9.54	3	Vertical	316	1.28	-
PK	10.3648G	54.11	68.20	-14.09	14.66	3	Vertical	6	1.13	-
PK	15.54252G	66.44	74.00	-7.56	16.07	3	Vertical	131	1.96	-
AV	15.54216G	53.42	54.00	-0.58	16.07	3	Vertical	131	1.96	-

802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

08/06/2019



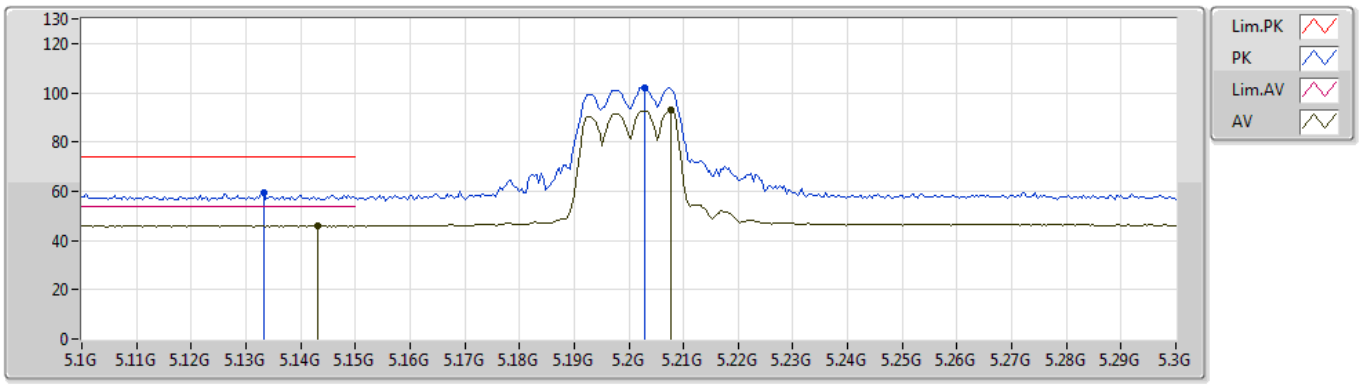
EUT Z_2TX
Setting 15
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.9069G	57.48	68.20	-10.72	9.54	3	Horizontal	346	1.18	-
PK	10.37134G	53.89	68.20	-14.31	14.66	3	Horizontal	143	1.34	-
PK	15.53118G	59.63	74.00	-14.37	16.10	3	Horizontal	204	2.78	-
AV	15.52776G	46.05	54.00	-7.95	16.10	3	Horizontal	204	2.78	-

802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

08/06/2019



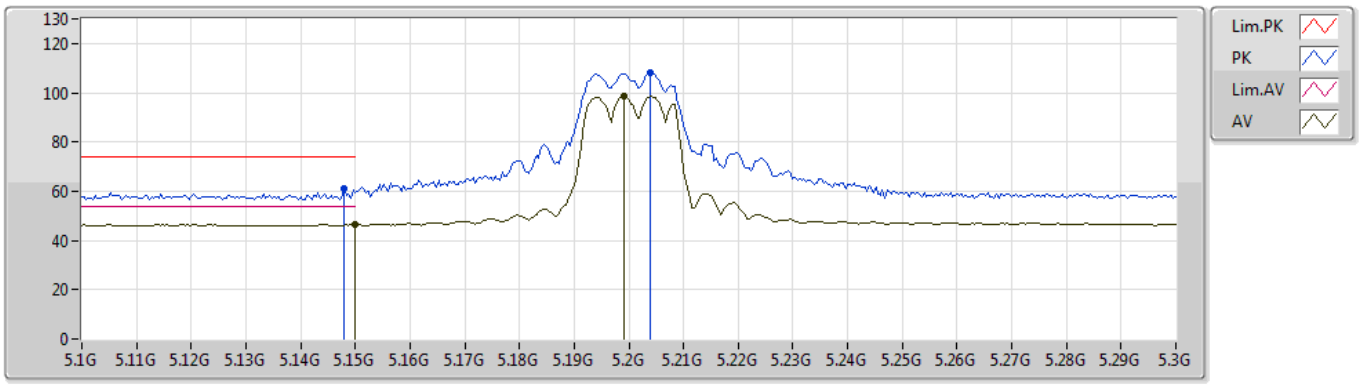
EUT Z_2TX
Setting 15
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1332G	59.19	74.00	-14.81	7.92	3	Vertical	61	1.49	-
AV	5.1432G	45.96	54.00	-8.04	7.94	3	Vertical	61	1.49	-
PK	5.2028G	101.99	Inf	-Inf	8.06	3	Vertical	61	1.49	-
AV	5.2076G	92.81	Inf	-Inf	8.07	3	Vertical	61	1.49	-

802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

08/06/2019



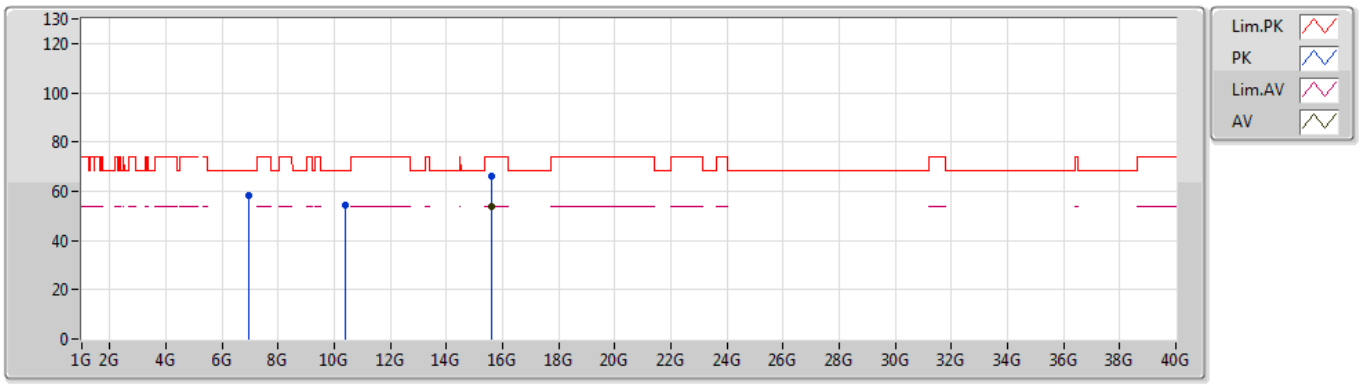
EUT Z_2TX
Setting 15
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.148G	61.24	74.00	-12.76	7.94	3	Horizontal	23	1.01	-
AV	5.15G	46.52	54.00	-7.48	7.94	3	Horizontal	23	1.01	-
PK	5.204G	108.22	Inf	-Inf	8.06	3	Horizontal	23	1.01	-
AV	5.1992G	98.50	Inf	-Inf	8.06	3	Horizontal	23	1.01	-

802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

08/06/2019



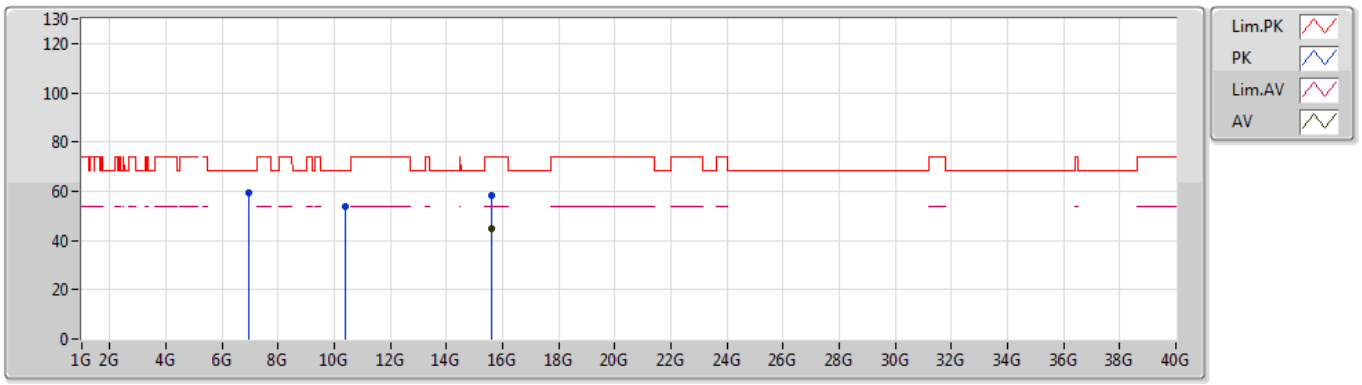
EUT Z_2TX
Setting 15
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.93345G	58.53	68.20	-9.67	9.58	3	Vertical	310	2.68	-
PK	10.39772G	54.18	68.20	-14.02	14.63	3	Vertical	348	1.46	-
PK	15.59268G	65.85	74.00	-8.15	15.93	3	Vertical	135	2.00	-
AV	15.60288G	53.68	54.00	-0.32	15.90	3	Vertical	135	2.00	-

802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

08/06/2019



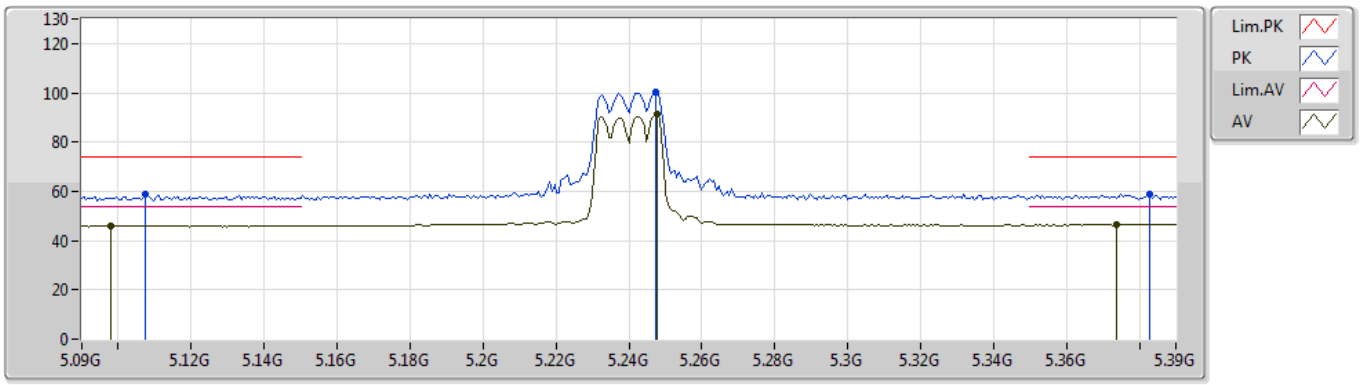
EUT Z_2TX
Setting 15
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.93344G	59.40	68.20	-8.80	9.58	3	Horizontal	8	1.11	-
PK	10.39736G	53.83	68.20	-14.37	14.63	3	Horizontal	168	1.96	-
PK	15.58596G	58.25	74.00	-15.75	15.94	3	Horizontal	216	2.00	-
AV	15.591G	45.05	54.00	-8.95	15.94	3	Horizontal	216	2.00	-

802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

08/06/2019



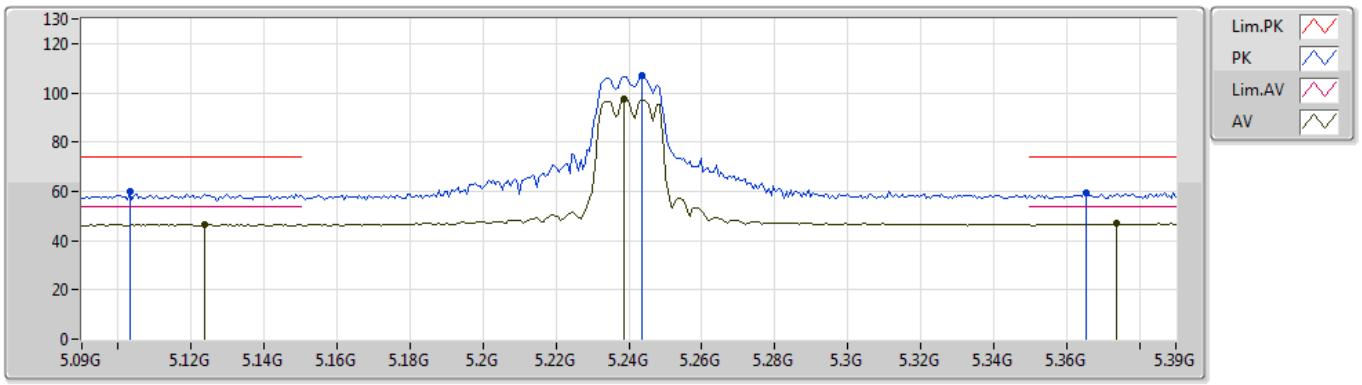
EUT Z_2TX
Setting 14
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1074G	58.69	74.00	-15.31	7.86	3	Vertical	54	1.40	-
AV	5.0978G	46.17	54.00	-7.83	7.84	3	Vertical	54	1.40	-
PK	5.2472G	100.36	Inf	-Inf	8.13	3	Vertical	54	1.40	-
AV	5.2478G	91.11	Inf	-Inf	8.13	3	Vertical	54	1.40	-
PK	5.3828G	58.79	74.00	-15.21	8.32	3	Vertical	54	1.40	-
AV	5.3738G	46.61	54.00	-7.39	8.30	3	Vertical	54	1.40	-

802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

08/06/2019



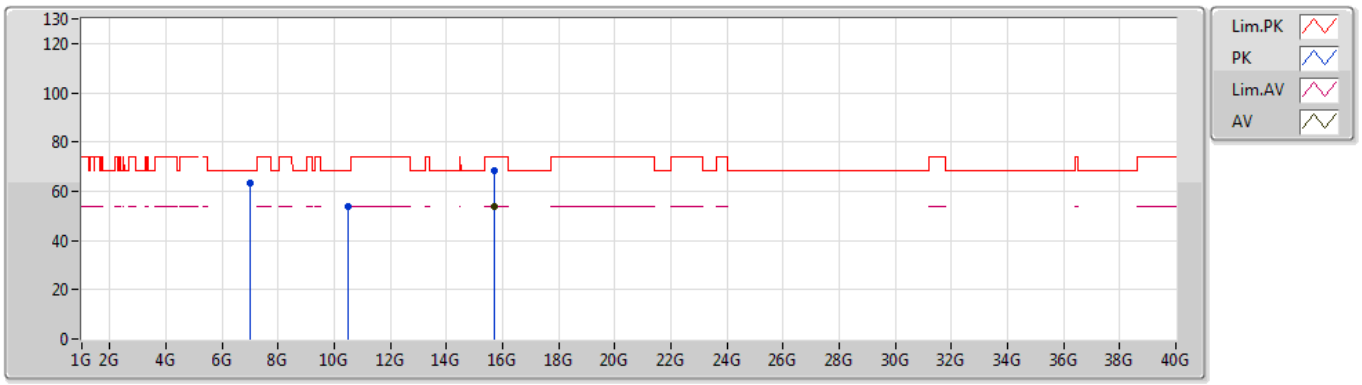
EUT Z_2TX
Setting 14
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1032G	59.78	74.00	-14.22	7.84	3	Horizontal	26	1.03	-
AV	5.1236G	46.62	54.00	-7.38	7.89	3	Horizontal	26	1.03	-
PK	5.2436G	107.02	Inf	-Inf	8.12	3	Horizontal	26	1.03	-
AV	5.2388G	97.63	Inf	-Inf	8.12	3	Horizontal	26	1.03	-
PK	5.3654G	59.32	74.00	-14.68	8.29	3	Horizontal	26	1.03	-
AV	5.3738G	46.79	54.00	-7.21	8.30	3	Horizontal	26	1.03	-

802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

08/06/2019



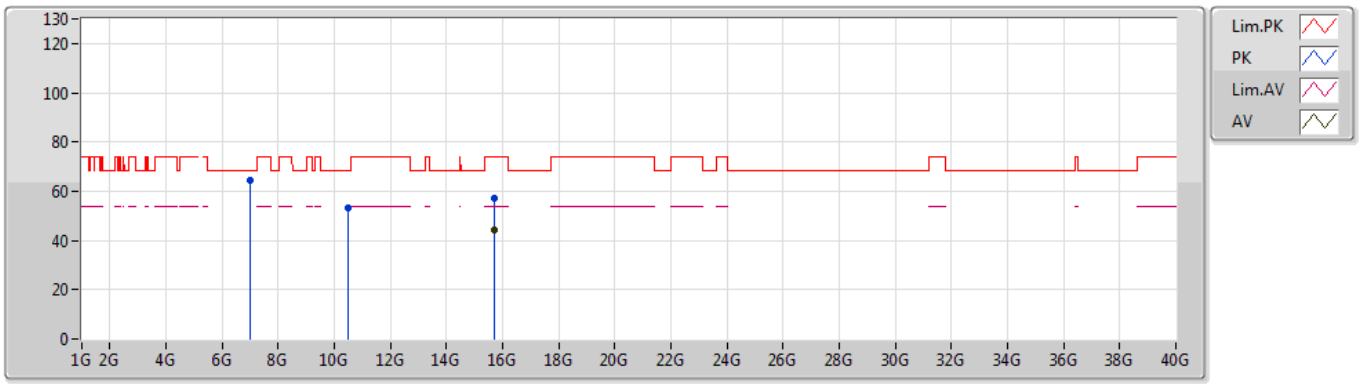
EUT Z_2TX
Setting 14
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.98675G	63.10	68.20	-5.10	9.66	3	Vertical	91	1.05	-
PK	10.48516G	53.56	68.20	-14.64	14.59	3	Vertical	158	1.88	-
PK	15.71928G	68.61	74.00	-5.39	15.60	3	Vertical	123	1.99	-
AV	15.72204G	53.91	54.00	-0.09	15.60	3	Vertical	123	1.99	-

802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

08/06/2019



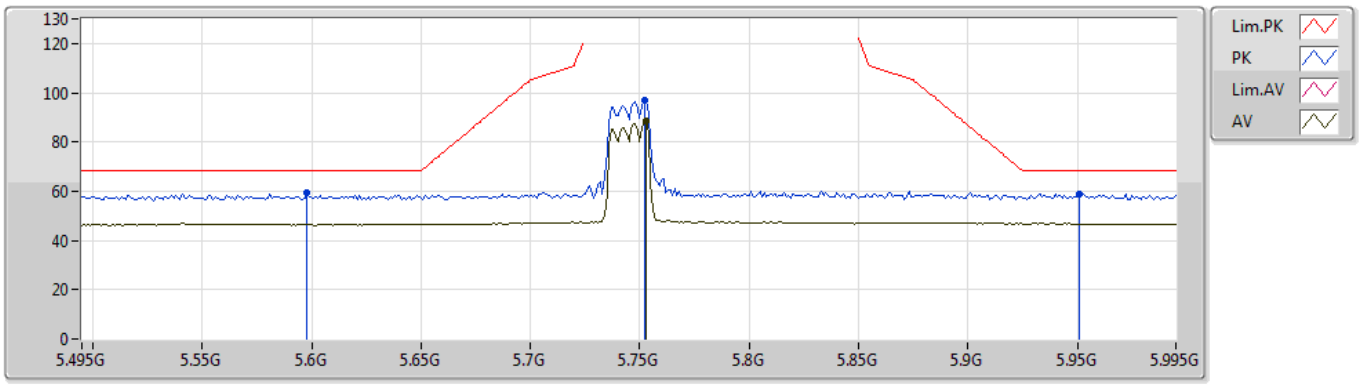
EUT Z_2TX
Setting 14
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.98667G	64.57	68.20	-3.63	9.66	3	Horizontal	5	1.03	-
PK	10.48756G	53.23	68.20	-14.97	14.59	3	Horizontal	117	2.42	-
PK	15.69336G	57.36	74.00	-16.64	15.67	3	Horizontal	185	2.91	-
AV	15.69036G	44.51	54.00	-9.49	15.68	3	Horizontal	185	2.91	-

802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

08/06/2019



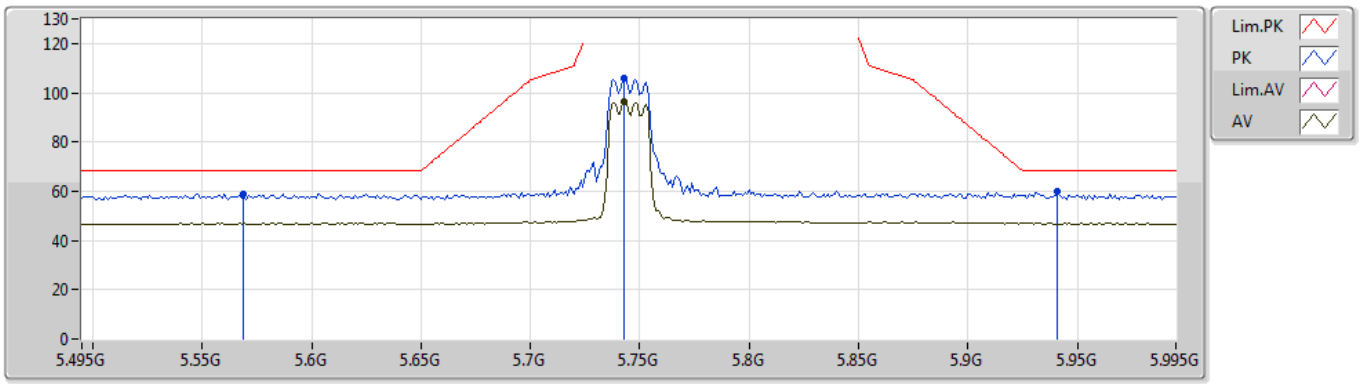
EUT Z_2TX
Setting 10
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.598G	59.13	68.20	-9.07	8.58	3	Vertical	327	1.46	-
PK	5.752G	97.20	Inf	-Inf	8.83	3	Vertical	327	1.46	-
AV	5.753G	88.38	Inf	-Inf	8.83	3	Vertical	327	1.46	-
PK	5.951G	58.87	68.20	-9.33	8.92	3	Vertical	327	1.46	-

802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

08/06/2019



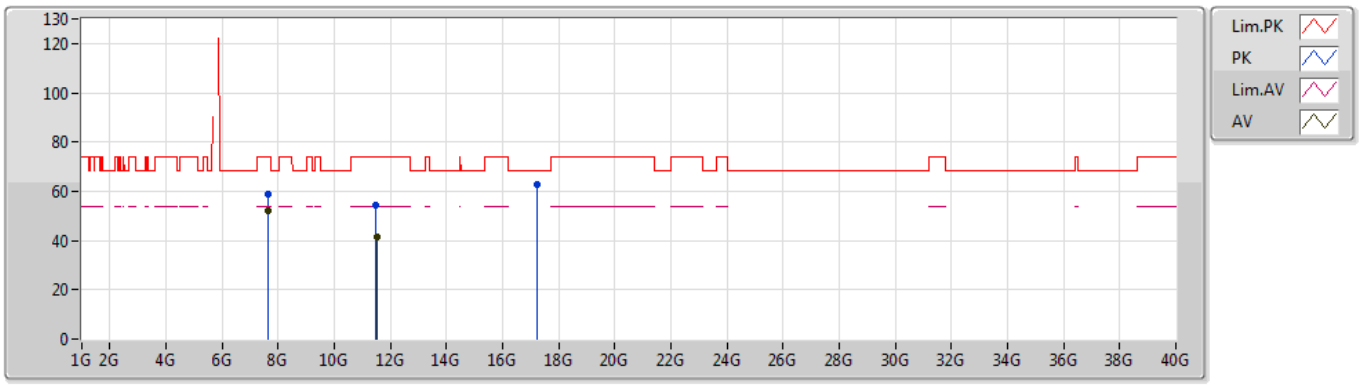
EUT Z_2TX
Setting 10
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.569G	58.95	68.20	-9.25	8.56	3	Horizontal	26	1.13	-
PK	5.743G	105.64	Inf	-Inf	8.82	3	Horizontal	26	1.13	-
AV	5.743G	96.33	Inf	-Inf	8.82	3	Horizontal	26	1.13	-
PK	5.941G	59.76	68.20	-8.44	8.93	3	Horizontal	26	1.13	-

802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

08/06/2019



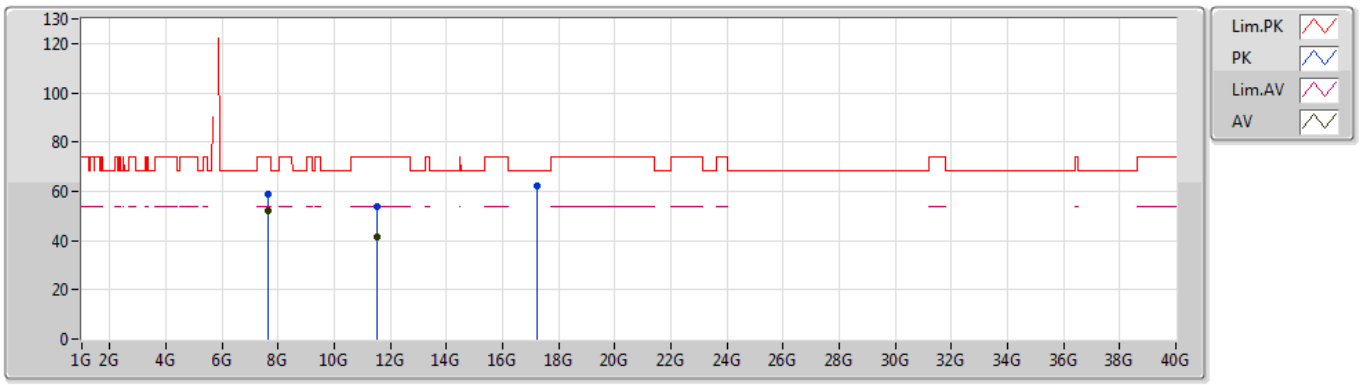
EUT Z_2TX
Setting 10
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.66026G	58.83	74.00	-15.17	11.18	3	Vertical	278	2.90	-
AV	7.66011G	52.04	54.00	-1.96	11.18	3	Vertical	278	2.90	-
PK	11.46396G	54.20	74.00	-19.80	14.86	3	Vertical	79	2.12	-
AV	11.5164G	41.28	54.00	-12.72	14.92	3	Vertical	79	2.12	-
PK	17.23668G	62.86	68.20	-5.34	20.72	3	Vertical	126	2.05	-

802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

08/06/2019



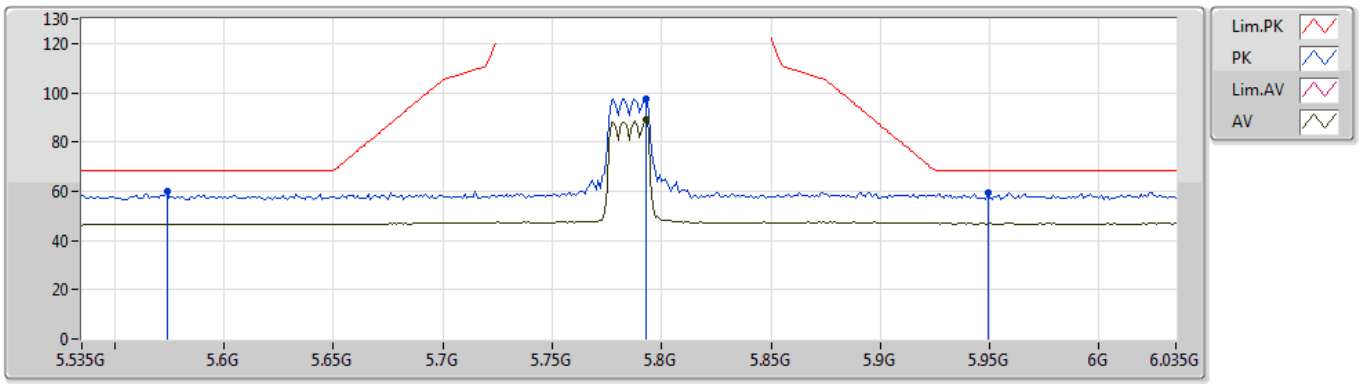
EUT Z_2TX
Setting 10
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.66008G	58.63	74.00	-15.37	11.18	3	Horizontal	338	1.25	-
AV	7.66008G	52.22	54.00	-1.78	11.18	3	Horizontal	338	1.25	-
PK	11.5098G	53.73	74.00	-20.27	14.92	3	Horizontal	191	1.89	-
AV	11.5182G	41.30	54.00	-12.70	14.92	3	Horizontal	191	1.89	-
PK	17.21424G	62.31	68.20	-5.89	20.59	3	Horizontal	134	1.71	-

802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

08/06/2019



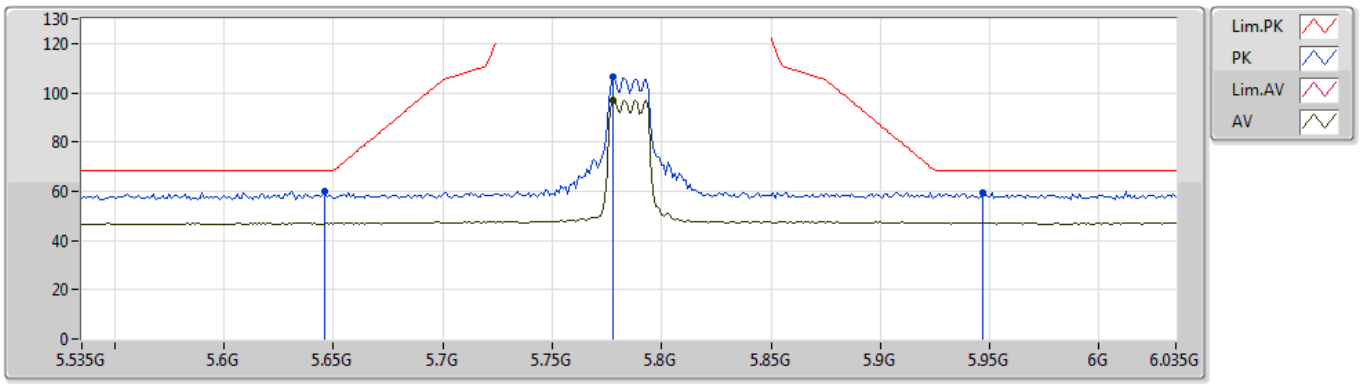
EUT Z_2TX
Setting 11
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.574G	59.71	68.20	-8.49	8.56	3	Vertical	337	2.06	-
PK	5.793G	97.65	Inf	-Inf	8.89	3	Vertical	337	2.06	-
AV	5.793G	89.09	Inf	-Inf	8.89	3	Vertical	337	2.06	-
PK	5.949G	59.24	68.20	-8.96	8.94	3	Vertical	337	2.06	-

802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

08/06/2019



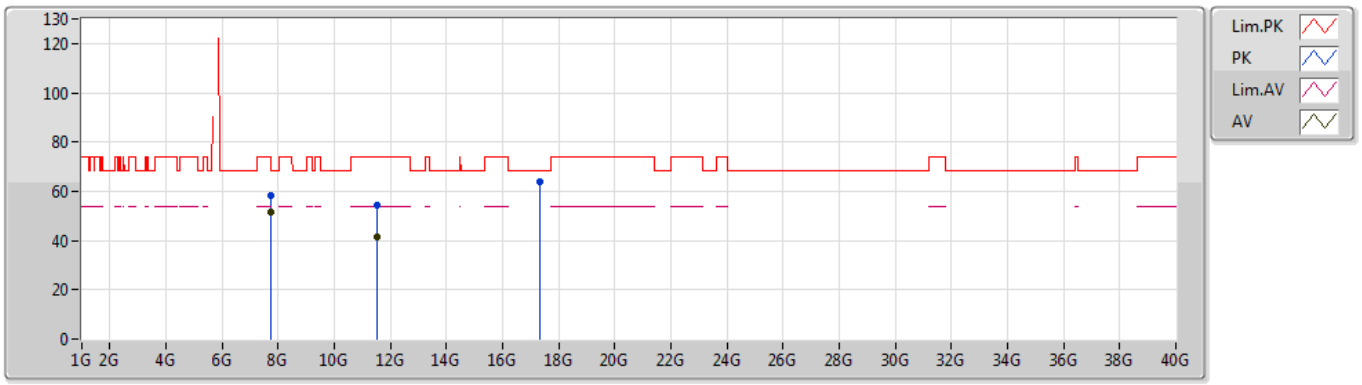
EUT Z_2TX
Setting 11
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.646G	59.79	68.20	-8.41	8.66	3	Horizontal	21	2.81	-
PK	5.778G	106.21	Inf	-Inf	8.87	3	Horizontal	21	2.81	-
AV	5.778G	97.03	Inf	-Inf	8.87	3	Horizontal	21	2.81	-
PK	5.947G	59.63	68.20	-8.57	8.94	3	Horizontal	21	2.81	-

802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

08/06/2019



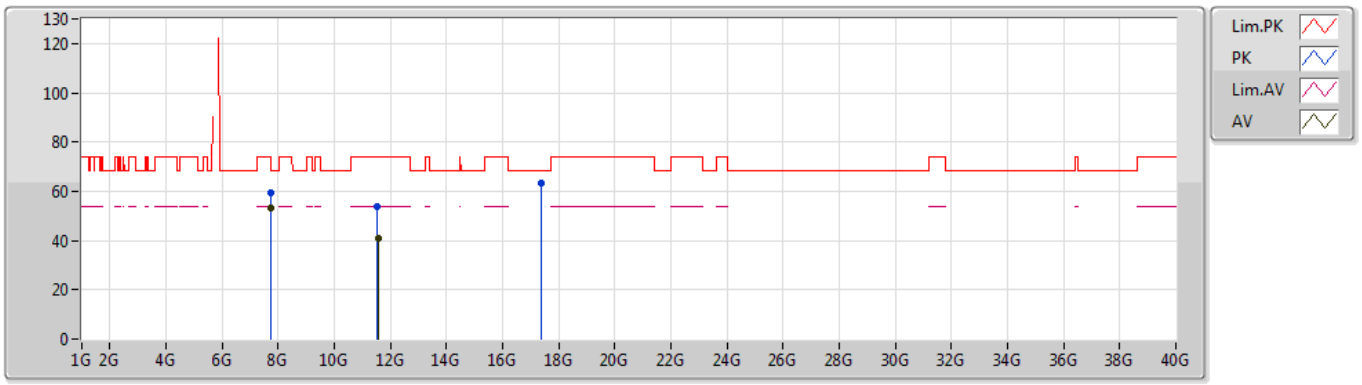
EUT Z_2TX
Setting 11
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.71361G	58.09	74.00	-15.91	11.22	3	Vertical	311	2.96	-
AV	7.71343G	51.31	54.00	-2.69	11.22	3	Vertical	311	2.96	-
PK	11.5442G	54.22	74.00	-19.78	14.97	3	Vertical	231	1.65	-
AV	11.54708G	41.34	54.00	-12.66	14.97	3	Vertical	231	1.65	-
PK	17.3466G	63.77	68.20	-4.43	21.37	3	Vertical	291	1.82	-

802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

08/06/2019



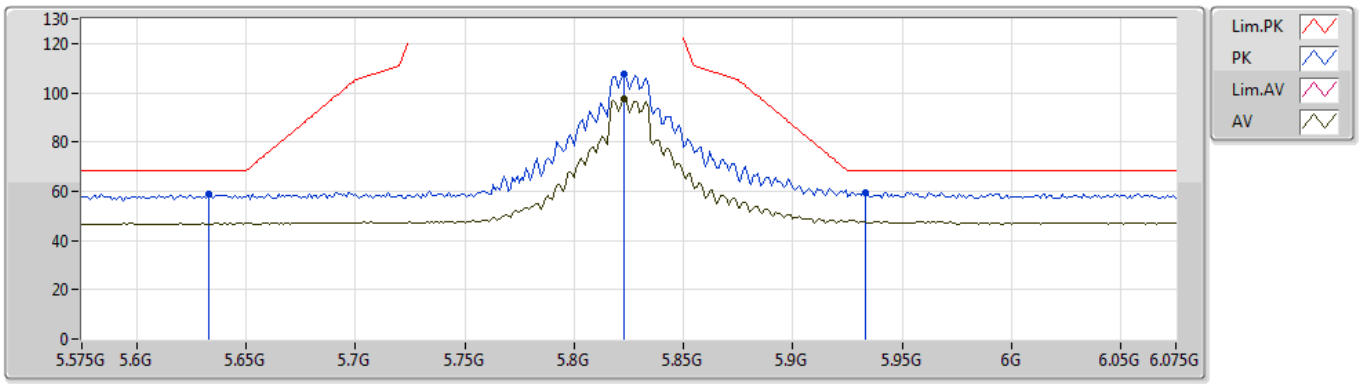
EUT Z_2TX
Setting 11
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.7134G	59.55	74.00	-14.45	11.22	3	Horizontal	17	1.13	-
AV	7.7134G	53.15	54.00	-0.85	11.22	3	Horizontal	17	1.13	-
PK	11.54228G	53.92	74.00	-20.08	14.96	3	Horizontal	169	1.57	-
AV	11.5598G	41.12	54.00	-12.88	14.99	3	Horizontal	169	1.57	-
PK	17.358G	63.27	68.20	-4.93	21.44	3	Horizontal	233	1.32	-

802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

08/06/2019



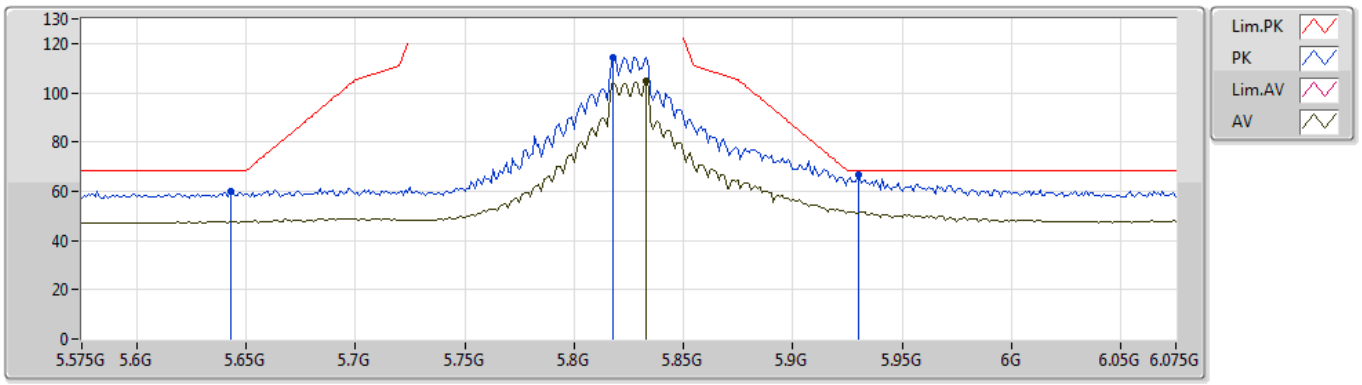
EUT Z_2TX
Setting 25
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.633G	58.95	68.20	-9.25	8.64	3	Vertical	327	2.06	-
PK	5.823G	107.60	Inf	-Inf	8.90	3	Vertical	327	2.06	-
AV	5.823G	97.36	Inf	-Inf	8.90	3	Vertical	327	2.06	-
PK	5.933G	59.64	68.20	-8.56	8.93	3	Vertical	327	2.06	-

802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

08/06/2019



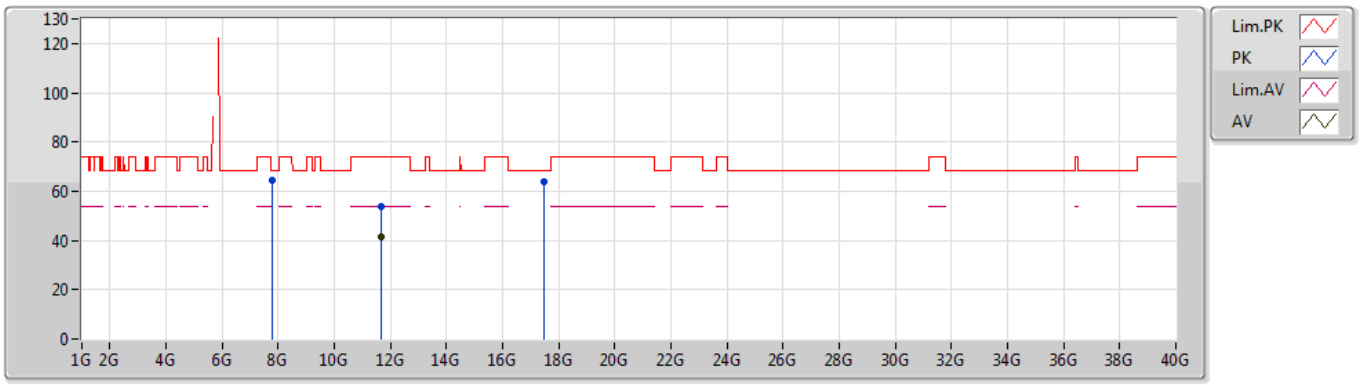
EUT Z_2TX
Setting 25
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.643G	59.80	68.20	-8.40	8.66	3	Horizontal	13	1.10	-
PK	5.818G	114.46	Inf	-Inf	8.90	3	Horizontal	13	1.10	-
AV	5.833G	104.56	Inf	-Inf	8.91	3	Horizontal	13	1.10	-
PK	5.93G	66.78	68.20	-1.42	8.93	3	Horizontal	13	1.10	-

802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

08/06/2019



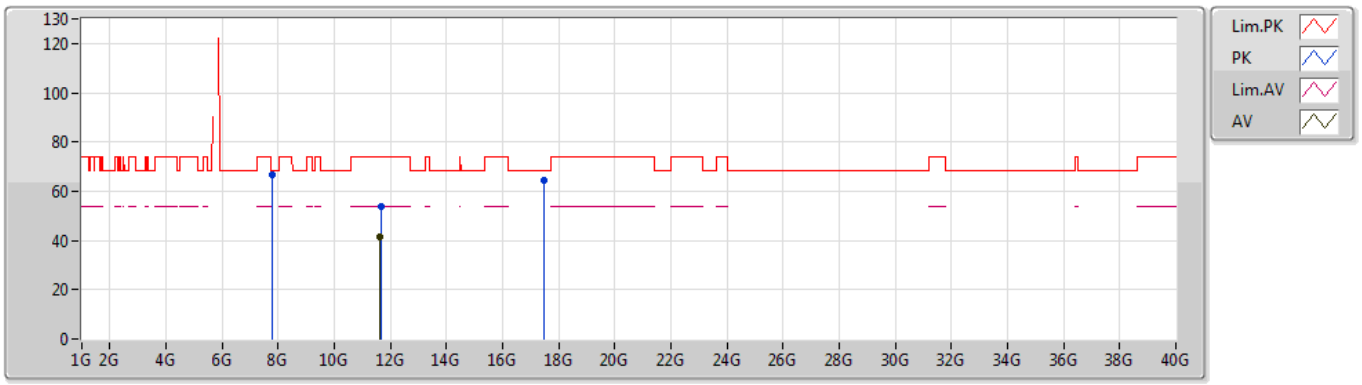
EUT Z_2TX
Setting 25
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.76686G	64.18	68.20	-4.02	11.27	3	Vertical	307	1.15	-
PK	11.66512G	53.80	74.00	-20.20	15.11	3	Vertical	179	1.85	-
AV	11.67352G	41.23	54.00	-12.77	15.13	3	Vertical	179	1.85	-
PK	17.48724G	64.06	68.20	-4.14	22.20	3	Vertical	131	1.97	-

802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

08/06/2019



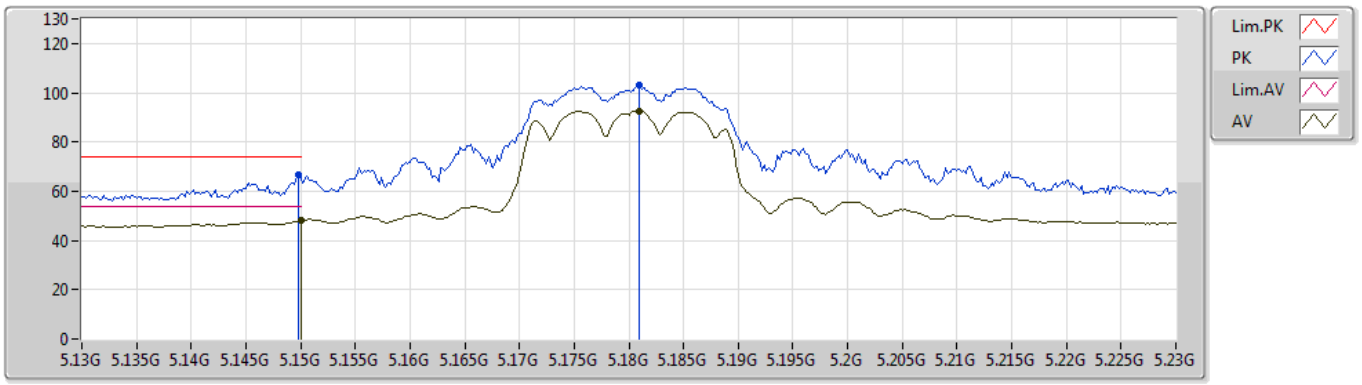
EUT Z_2TX
Setting 25
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.76675G	66.63	68.20	-1.57	11.27	3	Horizontal	336	1.19	-
PK	11.65816G	53.77	74.00	-20.23	15.11	3	Horizontal	245	1.78	-
AV	11.64604G	41.22	54.00	-12.78	15.09	3	Horizontal	245	1.78	-
PK	17.49888G	64.18	68.20	-4.02	22.27	3	Horizontal	104	1.94	-

802.11ac VHT20_Nss1,(MCS0)_2TX

08/06/2019

5180MHz_TX



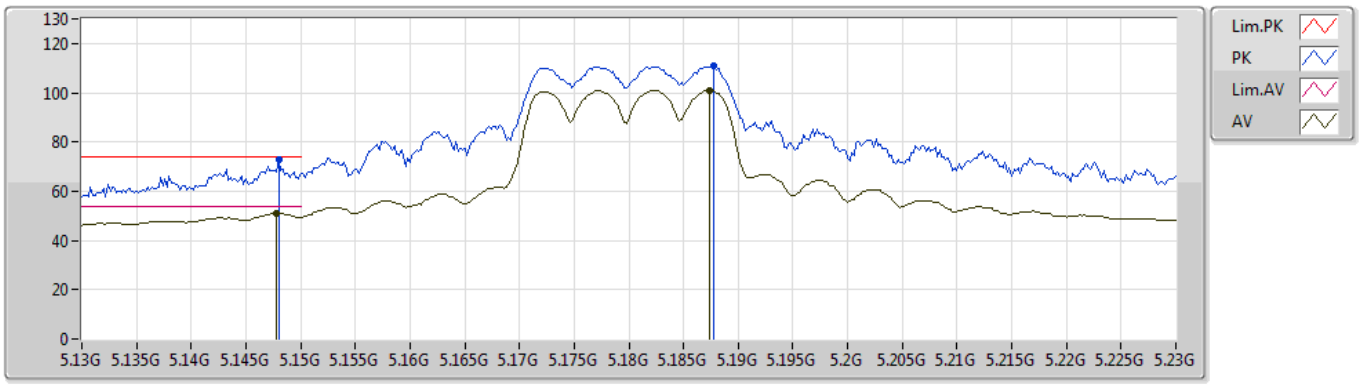
EUT Z_2TX
Setting 17
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1498G	66.64	74.00	-7.36	7.94	3	Vertical	62	1.11	-
AV	5.15G	48.29	54.00	-5.71	7.94	3	Vertical	62	1.11	-
PK	5.181G	103.00	Inf	-Inf	8.02	3	Vertical	62	1.11	-
AV	5.181G	92.55	Inf	-Inf	8.02	3	Vertical	62	1.11	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

08/06/2019



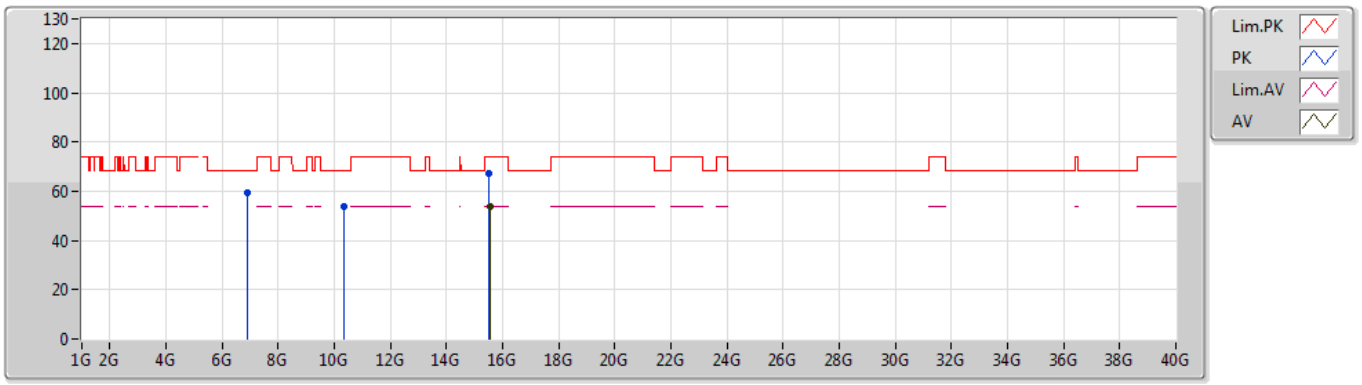
EUT Z_2TX
Setting 17
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.148G	73.04	74.00	-0.96	7.94	3	Horizontal	25	1.38	-
AV	5.1478G	51.08	54.00	-2.92	7.94	3	Horizontal	25	1.38	-
PK	5.1878G	110.92	Inf	-Inf	8.04	3	Horizontal	25	1.38	-
AV	5.1874G	101.06	Inf	-Inf	8.04	3	Horizontal	25	1.38	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

08/06/2019



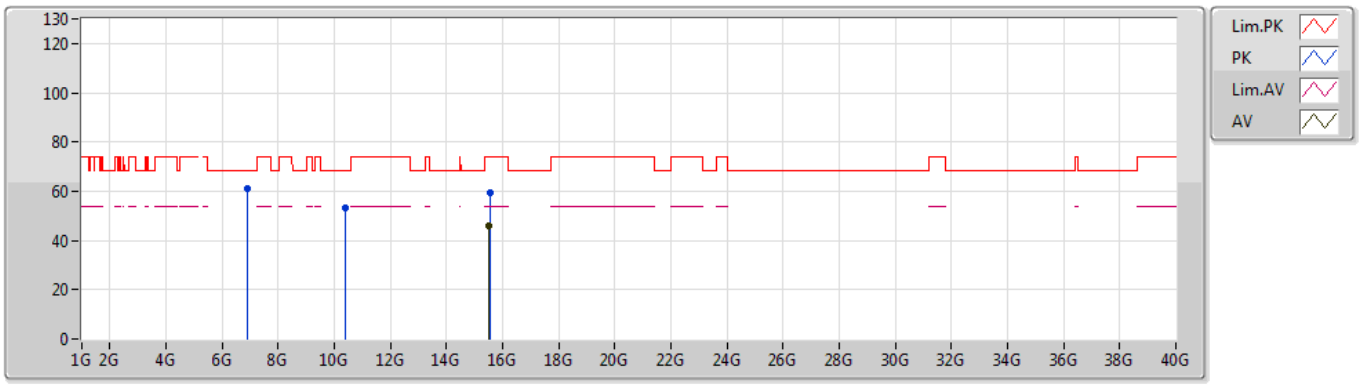
EUT Z_2TX
Setting 17
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.90689G	59.20	68.20	-9.00	9.54	3	Vertical	309	1.26	-
PK	10.34404G	53.65	68.20	-14.55	14.67	3	Vertical	202	1.91	-
PK	15.53028G	67.10	74.00	-6.90	16.09	3	Vertical	134	2.00	-
AV	15.54012G	53.69	54.00	-0.31	16.07	3	Vertical	134	2.00	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

08/06/2019



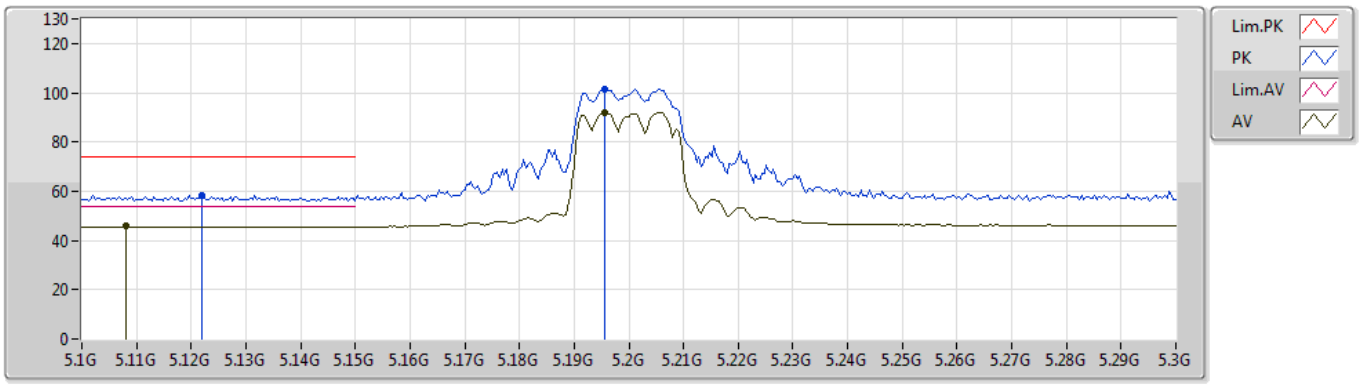
EUT Z_2TX
Setting 17
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.90684G	61.01	68.20	-7.19	9.54	3	Horizontal	336	1.20	-
PK	10.38724G	53.34	68.20	-14.86	14.65	3	Horizontal	156	2.02	-
PK	15.55404G	59.28	74.00	-14.72	16.03	3	Horizontal	232	1.87	-
AV	15.5292G	45.70	54.00	-8.30	16.10	3	Horizontal	232	1.87	-

802.11ac VHT20_Nss1,(MCS0)_2TX

08/06/2019

5200MHz_TX



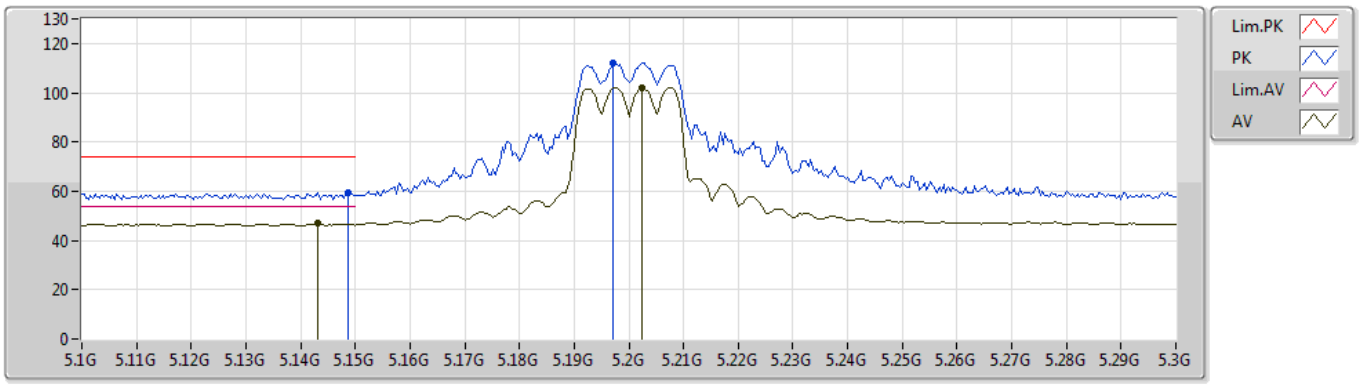
EUT Z_2TX
Setting 16
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.122G	58.44	74.00	-15.56	7.88	3	Vertical	65	2.58	-
AV	5.108G	45.72	54.00	-8.28	7.86	3	Vertical	65	2.58	-
PK	5.1956G	101.70	Inf	-Inf	8.06	3	Vertical	65	2.58	-
AV	5.1956G	91.85	Inf	-Inf	8.06	3	Vertical	65	2.58	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

08/06/2019



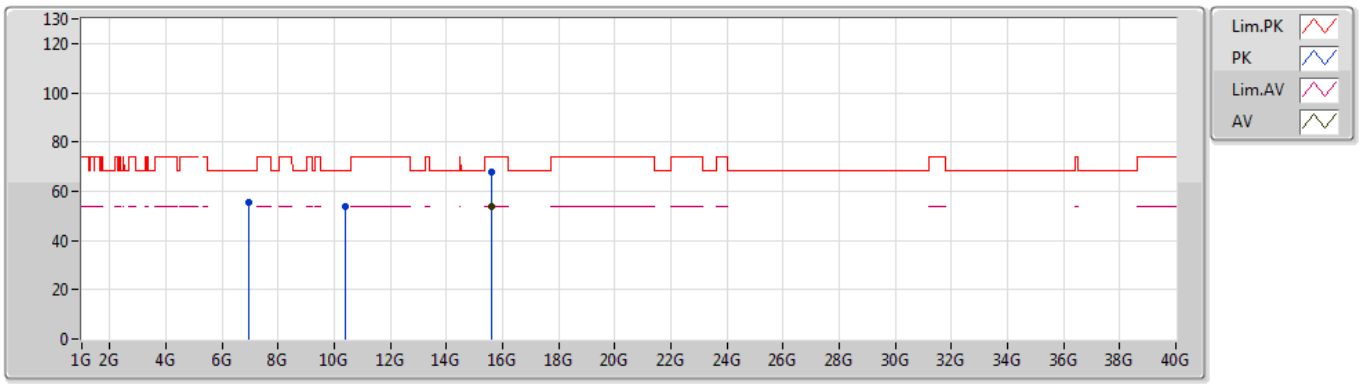
EUT Z_2TX
Setting 16
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1488G	59.59	74.00	-14.41	7.94	3	Horizontal	41	1.00	-
AV	5.1432G	46.85	54.00	-7.15	7.94	3	Horizontal	41	1.00	-
PK	5.1972G	111.93	Inf	-Inf	8.06	3	Horizontal	41	1.00	-
AV	5.2024G	102.04	Inf	-Inf	8.06	3	Horizontal	41	1.00	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

08/06/2019



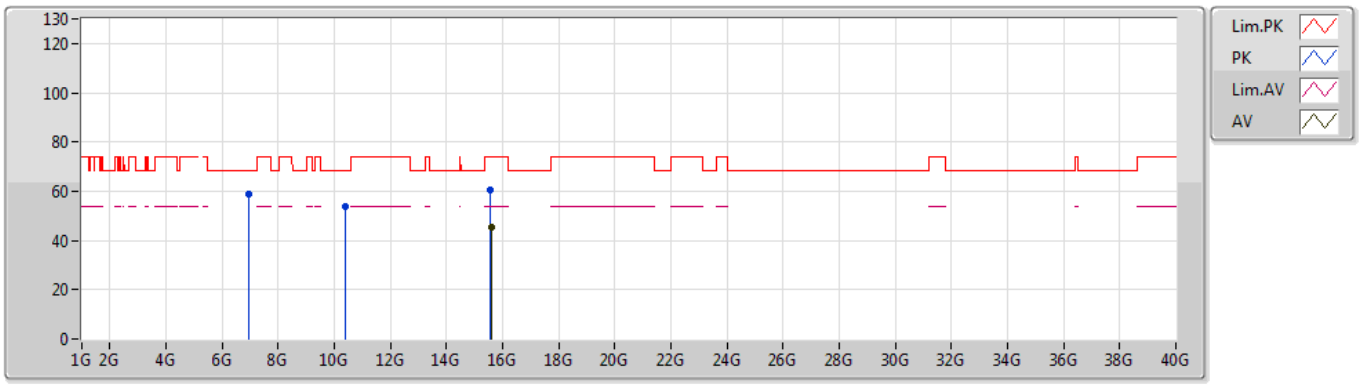
EUT Z_2TX
Setting 16
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.93328G	55.53	68.20	-12.67	9.58	3	Vertical	303	1.47	-
PK	10.39532G	53.52	68.20	-14.68	14.63	3	Vertical	66	1.65	-
PK	15.60024G	67.90	74.00	-6.10	15.91	3	Vertical	129	1.97	-
AV	15.60036G	53.79	54.00	-0.21	15.91	3	Vertical	129	1.97	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

08/06/2019



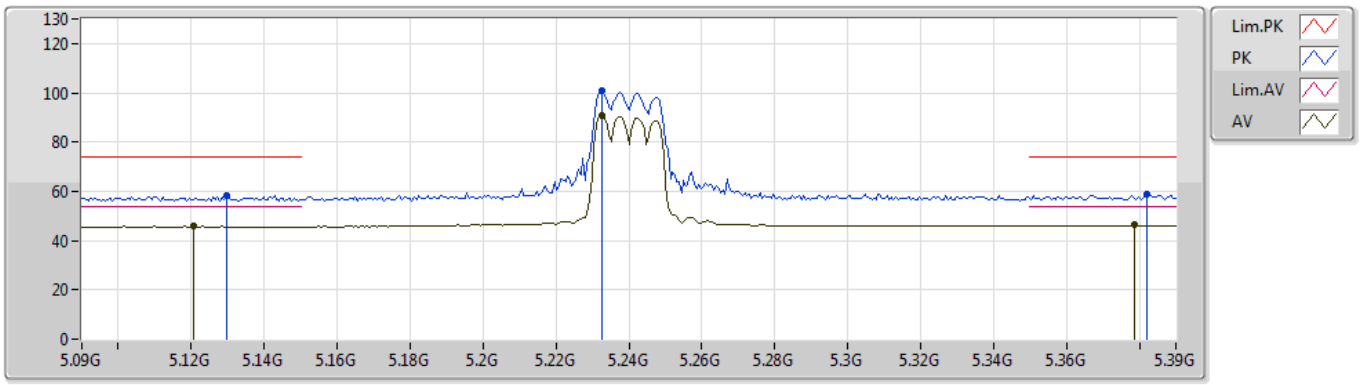
EUT Z_2TX
Setting 16
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.93333G	58.90	68.20	-9.30	9.58	3	Horizontal	331	1.01	-
PK	10.37372G	53.86	68.20	-14.34	14.66	3	Horizontal	194	1.57	-
PK	15.57996G	60.63	74.00	-13.37	15.97	3	Horizontal	124	1.97	-
AV	15.6012G	45.62	54.00	-8.38	15.91	3	Horizontal	124	1.97	-

802.11ac VHT20_Nss1,(MCS0)_2TX

08/06/2019

5240MHz_TX



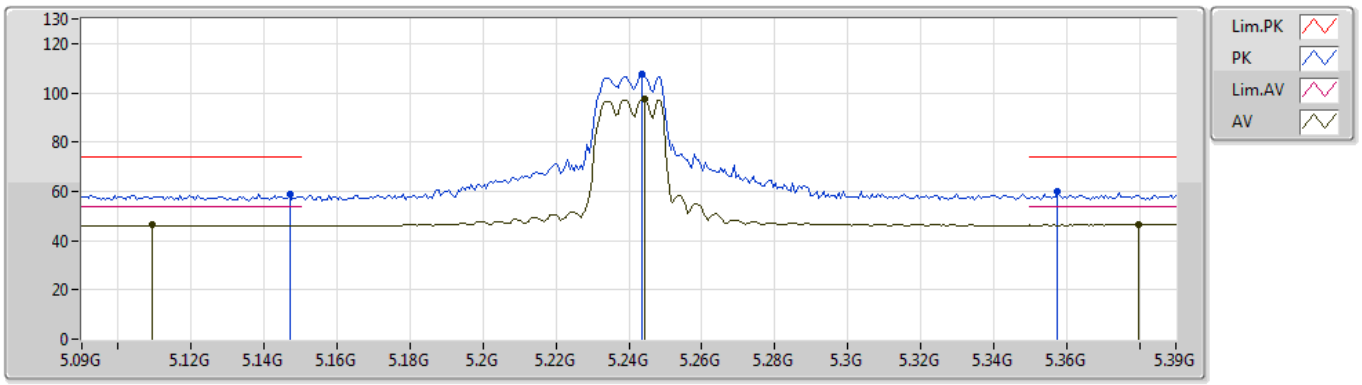
EUT Z_2TX
Setting 14
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1296G	58.36	74.00	-15.64	7.91	3	Vertical	57	2.20	-
AV	5.1206G	45.79	54.00	-8.21	7.88	3	Vertical	57	2.20	-
PK	5.2328G	100.62	Inf	-Inf	8.11	3	Vertical	57	2.20	-
AV	5.2328G	90.80	Inf	-Inf	8.11	3	Vertical	57	2.20	-
PK	5.3822G	58.58	74.00	-15.42	8.32	3	Vertical	57	2.20	-
AV	5.3786G	46.27	54.00	-7.73	8.32	3	Vertical	57	2.20	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5240MHz_TX

08/06/2019



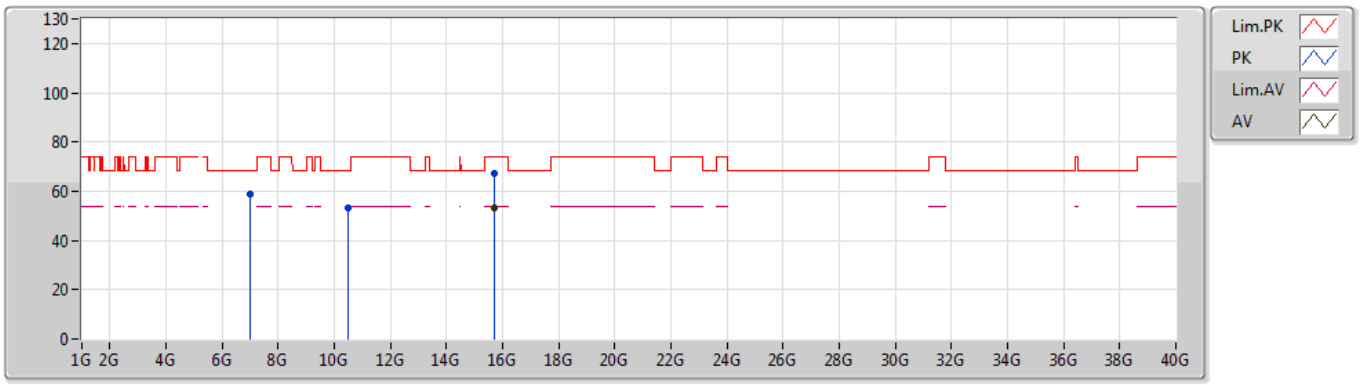
EUT Z_2TX
Setting 14
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.147G	58.93	74.00	-15.07	7.94	3	Horizontal	26	1.06	-
AV	5.1092G	46.32	54.00	-7.68	7.86	3	Horizontal	26	1.06	-
PK	5.2436G	107.32	Inf	-Inf	8.12	3	Horizontal	26	1.06	-
AV	5.2442G	97.24	Inf	-Inf	8.12	3	Horizontal	26	1.06	-
PK	5.3576G	60.18	74.00	-13.82	8.28	3	Horizontal	26	1.06	-
AV	5.3798G	46.52	54.00	-7.48	8.32	3	Horizontal	26	1.06	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5240MHz_TX

08/06/2019



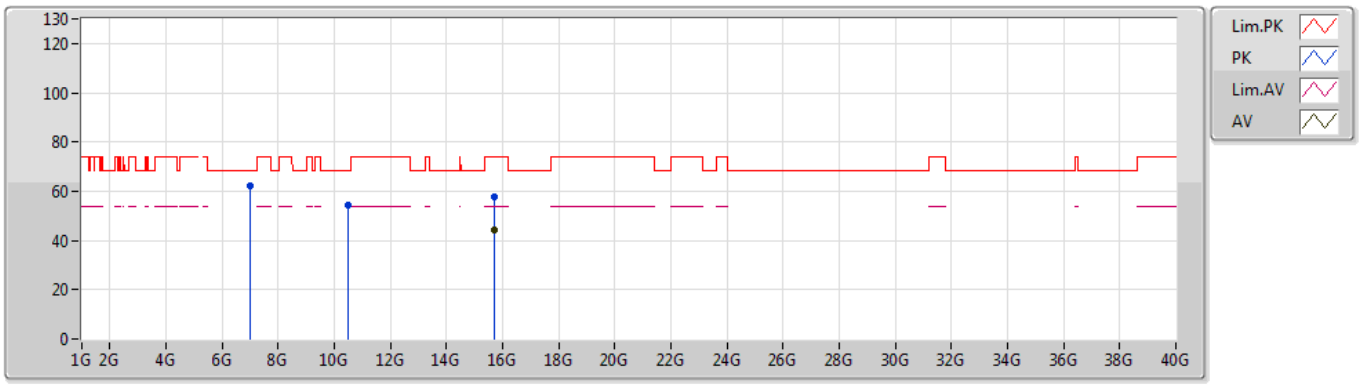
EUT Z_2TX
Setting 14
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.98668G	58.98	68.20	-9.22	9.66	3	Vertical	112	1.32	-
PK	10.48432G	53.41	68.20	-14.79	14.59	3	Vertical	231	2.01	-
PK	15.72264G	67.45	74.00	-6.55	15.59	3	Vertical	137	1.96	-
AV	15.72216G	53.17	54.00	-0.83	15.60	3	Vertical	137	1.96	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5240MHz_TX

08/06/2019



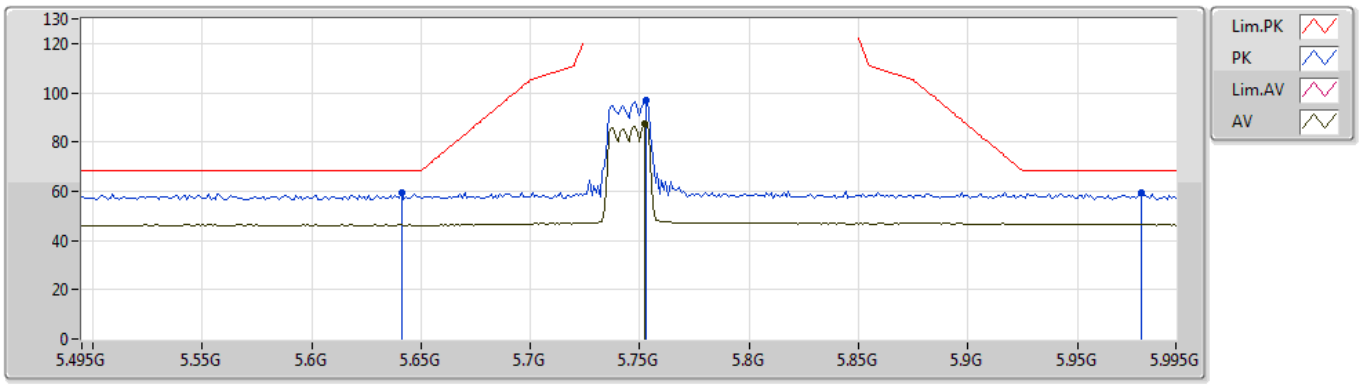
EUT Z_2TX
Setting 14
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.98659G	62.03	68.20	-6.17	9.66	3	Horizontal	343	1.30	-
PK	10.4932G	54.13	68.20	-14.07	14.57	3	Horizontal	293	1.75	-
PK	15.71244G	57.67	74.00	-16.33	15.62	3	Horizontal	252	1.88	-
AV	15.71676G	44.45	54.00	-9.55	15.61	3	Horizontal	252	1.88	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5745MHz_TX

08/06/2019



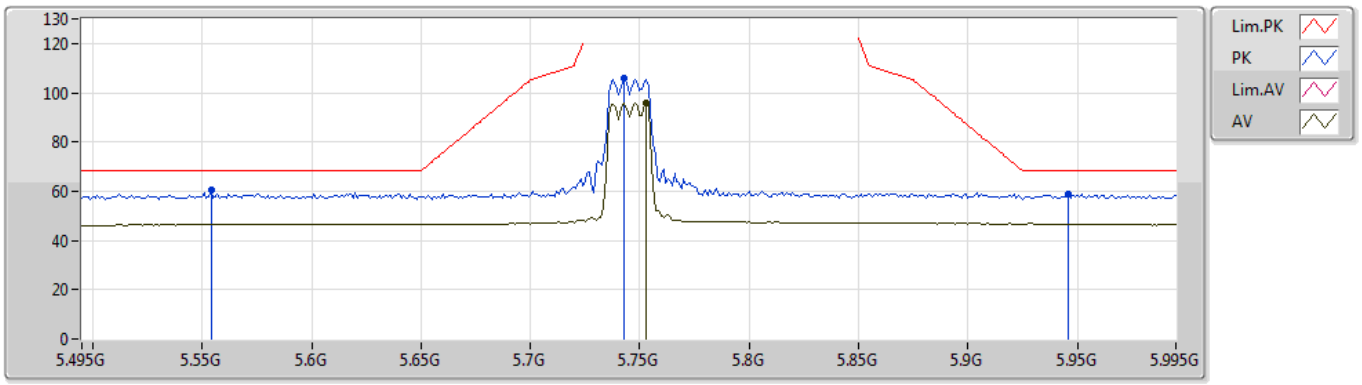
EUT Z_2TX
Setting 10
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.641G	59.38	68.20	-8.82	8.65	3	Vertical	330	1.47	-
PK	5.753G	96.84	Inf	-Inf	8.83	3	Vertical	330	1.47	-
AV	5.752G	87.69	Inf	-Inf	8.83	3	Vertical	330	1.47	-
PK	5.979G	59.36	68.20	-8.84	8.94	3	Vertical	330	1.47	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5745MHz_TX

08/06/2019



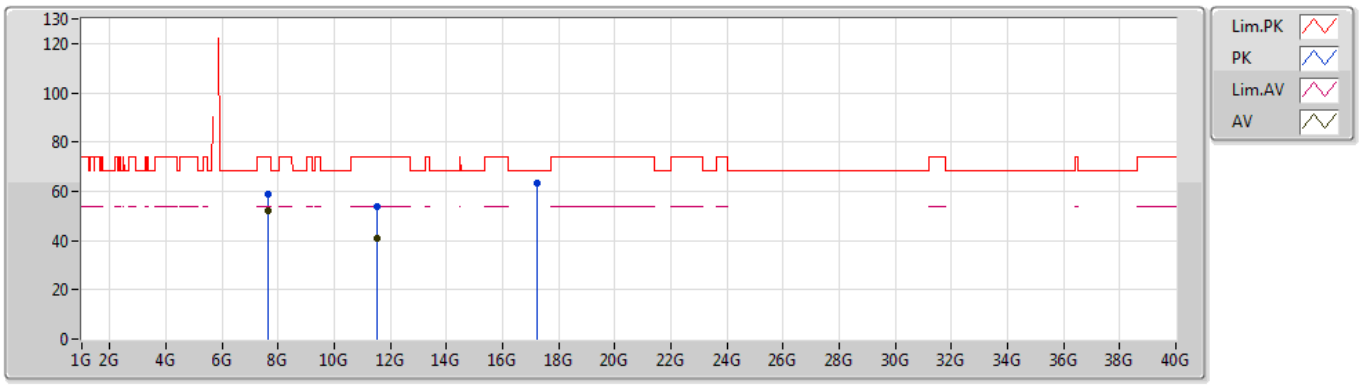
EUT Z_2TX
Setting 10
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.554G	60.29	68.20	-7.91	8.55	3	Horizontal	29	1.09	-
PK	5.743G	105.99	Inf	-Inf	8.82	3	Horizontal	29	1.09	-
AV	5.753G	96.03	Inf	-Inf	8.83	3	Horizontal	29	1.09	-
PK	5.946G	58.74	68.20	-9.46	8.94	3	Horizontal	29	1.09	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5745MHz_TX

08/06/2019



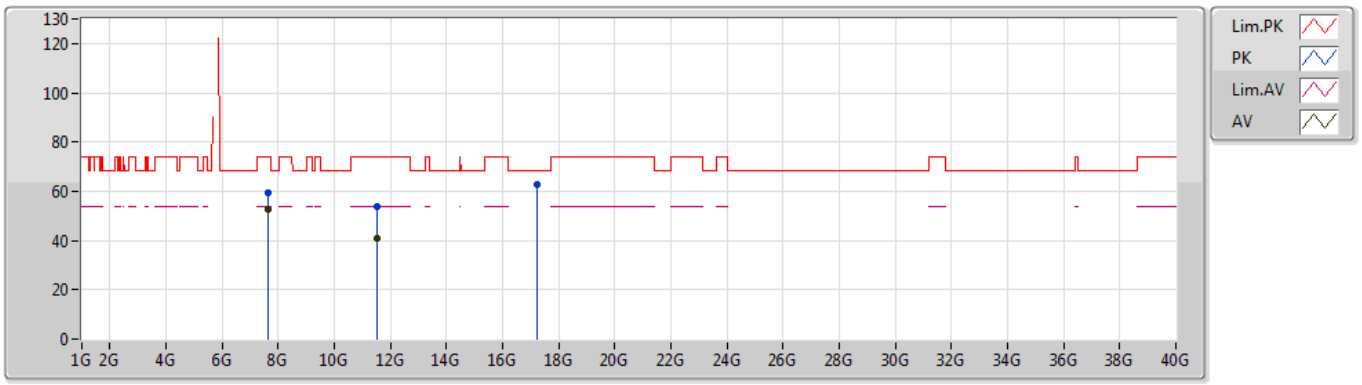
EUT Z_2TX
Setting 10
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.65999G	58.87	74.00	-15.13	11.18	3	Vertical	283	2.72	-
AV	7.66005G	52.05	54.00	-1.95	11.18	3	Vertical	283	2.72	-
PK	11.50392G	53.87	74.00	-20.13	14.91	3	Vertical	211	1.83	-
AV	11.51568G	40.90	54.00	-13.10	14.92	3	Vertical	211	1.83	-
PK	17.2452G	63.47	68.20	-4.73	20.77	3	Vertical	116	1.88	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5745MHz_TX

08/06/2019



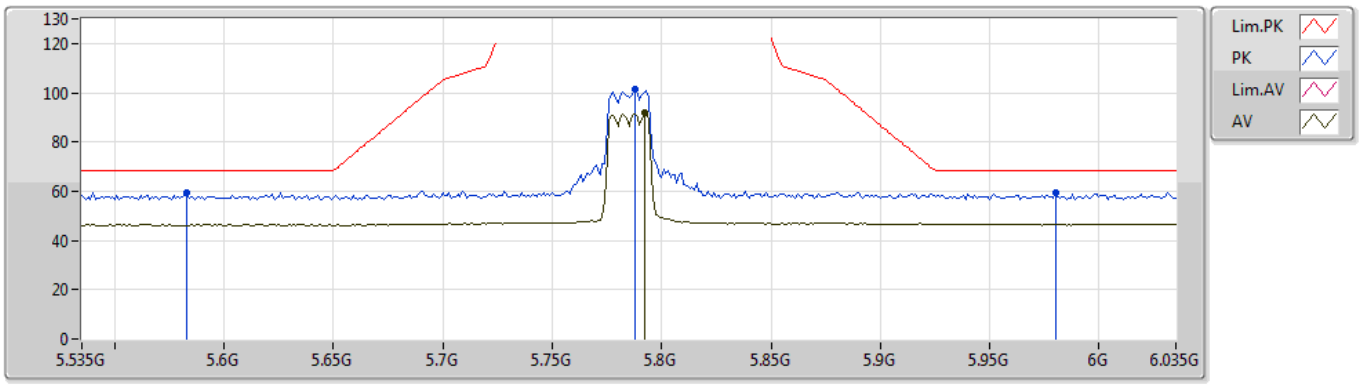
EUT Z_2TX
Setting 10
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.66G	59.31	74.00	-14.69	11.18	3	Horizontal	348	1.23	-
AV	7.66008G	52.73	54.00	-1.27	11.18	3	Horizontal	348	1.23	-
PK	11.51892G	54.05	74.00	-19.95	14.94	3	Horizontal	133	1.69	-
AV	11.50908G	40.74	54.00	-13.26	14.92	3	Horizontal	133	1.69	-
PK	17.217G	62.73	68.20	-5.47	20.60	3	Horizontal	71	1.89	-

802.11ac VHT20_Nss1,(MCS0)_2TX

08/06/2019

5785MHz_TX



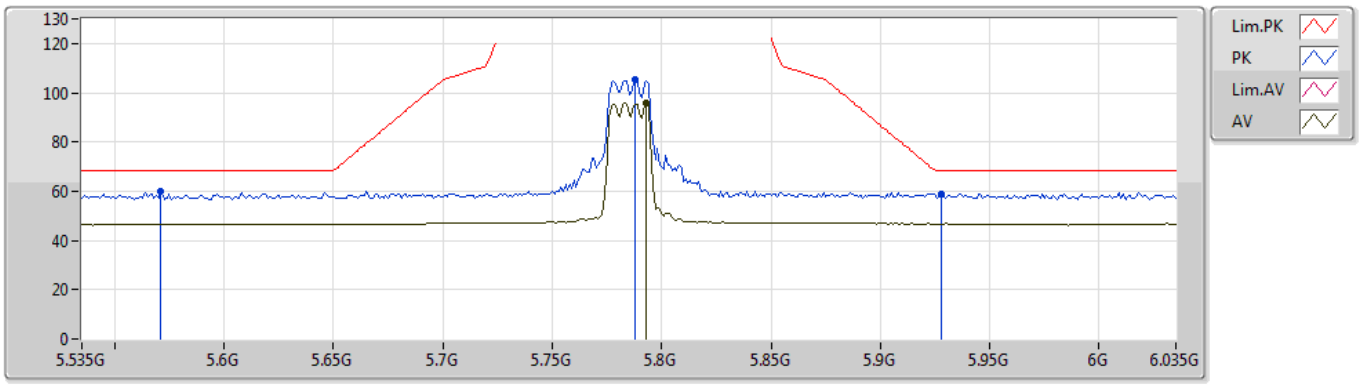
EUT Z_2TX
Setting 11
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.583G	59.50	68.20	-8.70	8.57	3	Vertical	329	2.17	-
PK	5.788G	101.43	Inf	-Inf	8.87	3	Vertical	329	2.17	-
AV	5.792G	91.70	Inf	-Inf	8.89	3	Vertical	329	2.17	-
PK	5.98G	59.21	68.20	-8.99	8.94	3	Vertical	329	2.17	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5785MHz_TX

08/06/2019



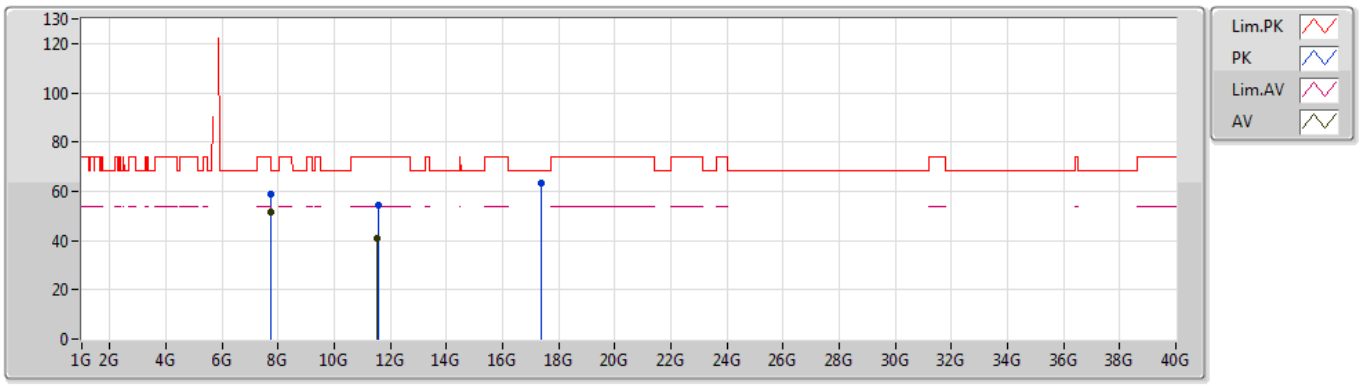
EUT Z_2TX
Setting 11
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.571G	59.76	68.20	-8.44	8.56	3	Horizontal	22	1.37	-
PK	5.788G	105.25	Inf	-Inf	8.87	3	Horizontal	22	1.37	-
AV	5.793G	95.81	Inf	-Inf	8.89	3	Horizontal	22	1.37	-
PK	5.928G	58.98	68.20	-9.22	8.93	3	Horizontal	22	1.37	-

802.11ac VHT20_Nss1,(MCS0)_2TX

08/06/2019

5785MHz_TX



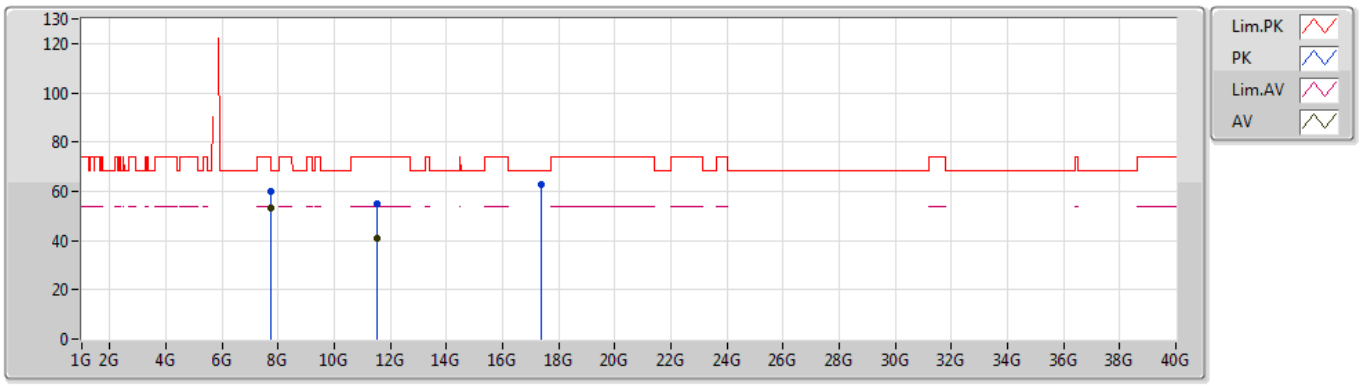
EUT Z_2TX
Setting 11
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.7133G	58.65	74.00	-15.35	11.22	3	Vertical	283	2.95	-
AV	7.7134G	51.38	54.00	-2.62	11.22	3	Vertical	283	2.95	-
PK	11.5532G	54.34	74.00	-19.66	14.97	3	Vertical	223	1.91	-
AV	11.54852G	40.64	54.00	-13.36	14.97	3	Vertical	223	1.91	-
PK	17.35728G	63.05	68.20	-5.15	21.43	3	Vertical	339	2.38	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5785MHz_TX

08/06/2019



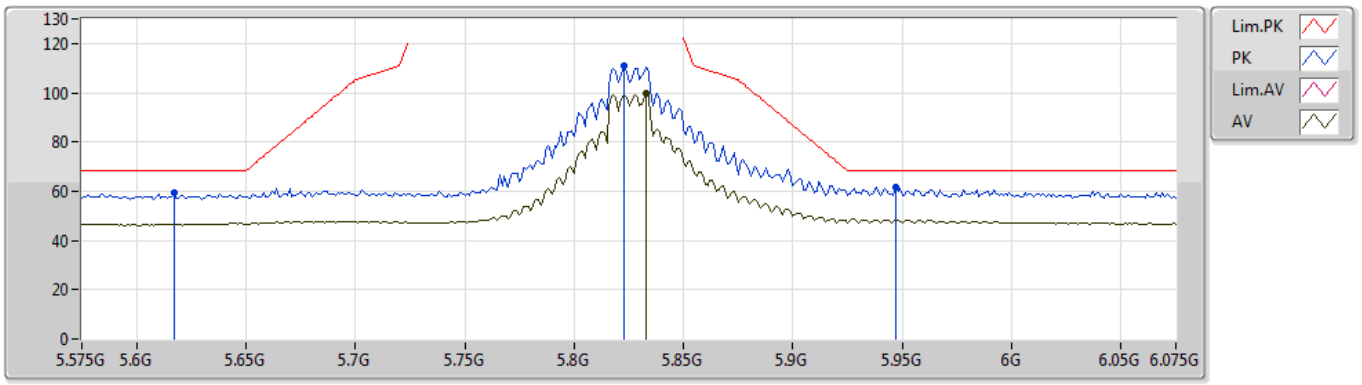
EUT Z_2TX
Setting 11
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.71318G	60.15	74.00	-13.85	11.22	3	Horizontal	9	1.13	-
AV	7.7134G	53.26	54.00	-0.74	11.22	3	Horizontal	9	1.13	-
PK	11.5454G	55.10	74.00	-18.90	14.97	3	Horizontal	329	1.62	-
AV	11.54024G	40.66	54.00	-13.34	14.96	3	Horizontal	329	1.62	-
PK	17.37768G	62.66	68.20	-5.54	21.55	3	Horizontal	212	1.46	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5825MHz_TX

08/06/2019



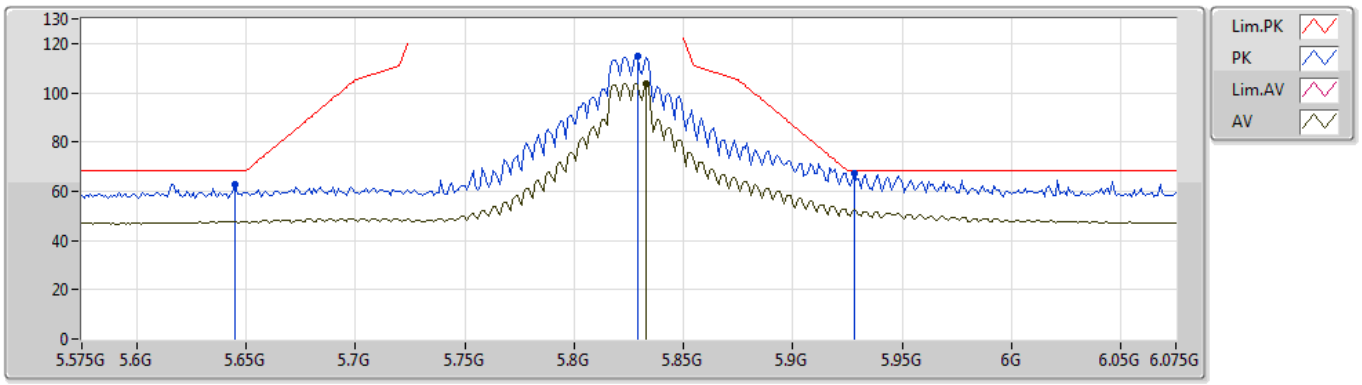
EUT Z_2TX
Setting 25
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.617G	59.24	68.20	-8.96	8.60	3	Vertical	314	2.78	-
PK	5.823G	110.68	Inf	-Inf	8.90	3	Vertical	314	2.78	-
AV	5.833G	99.49	Inf	-Inf	8.91	3	Vertical	314	2.78	-
PK	5.947G	61.68	68.20	-6.52	8.94	3	Vertical	314	2.78	-

802.11ac VHT20_Nss1,(MCS0)_2TX

08/06/2019

5825MHz_TX



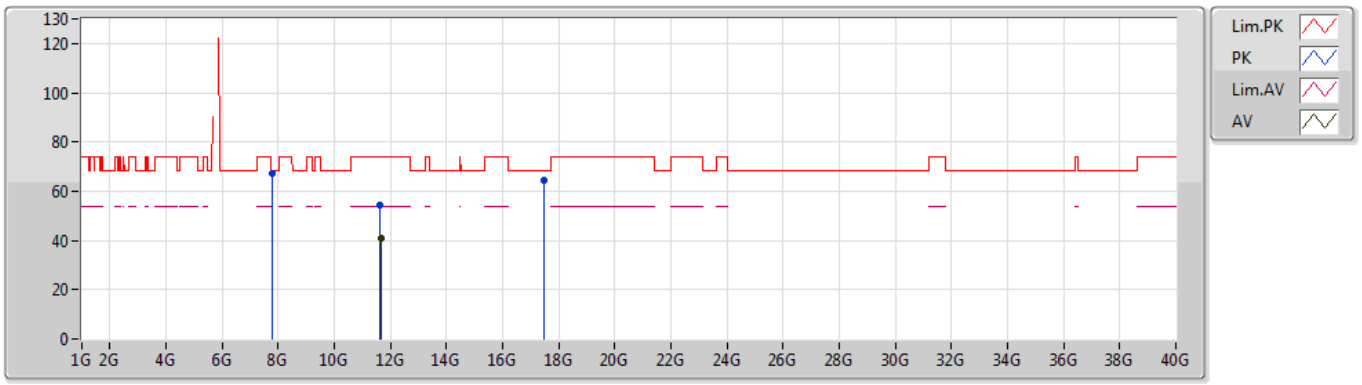
EUT Z_2TX
Setting 25
02-C-4-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.645G	63.02	68.20	-5.18	8.66	3	Horizontal	24	1.00	-
PK	5.829G	114.90	Inf	-Inf	8.91	3	Horizontal	24	1.00	-
AV	5.833G	103.85	Inf	-Inf	8.91	3	Horizontal	24	1.00	-
PK	5.928G	67.27	68.20	-0.93	8.93	3	Horizontal	24	1.00	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5825MHz_TX

08/06/2019



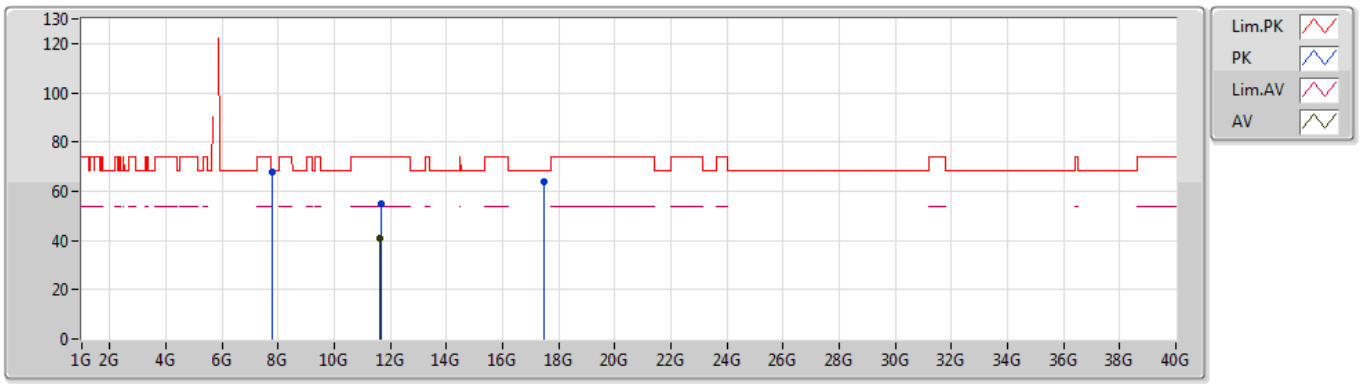
EUT Z_2TX
Setting 25
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.76698G	67.20	68.20	-1.00	11.27	3	Vertical	317	2.90	-
PK	11.6398G	54.50	74.00	-19.50	15.08	3	Vertical	263	1.59	-
AV	11.6518G	40.85	54.00	-13.15	15.10	3	Vertical	263	1.59	-
PK	17.4744G	64.24	68.20	-3.96	22.12	3	Vertical	138	1.12	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5825MHz_TX

08/06/2019



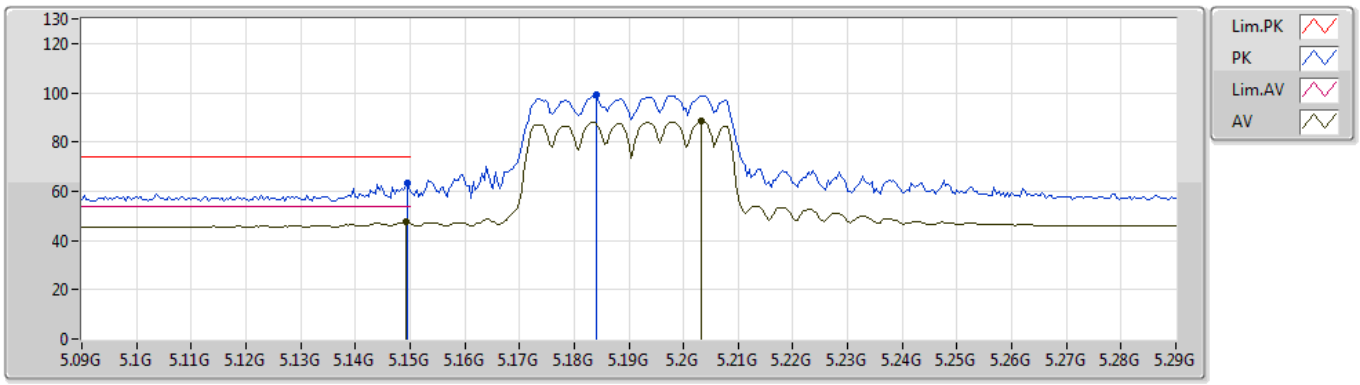
EUT Z_2TX
Setting 25
02-C-4
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.76675G	67.84	68.20	-0.36	11.27	3	Horizontal	16	1.22	-
PK	11.66872G	54.70	74.00	-19.30	15.11	3	Horizontal	163	1.27	-
AV	11.64688G	40.97	54.00	-13.03	15.09	3	Horizontal	163	1.27	-
PK	17.48856G	63.77	68.20	-4.43	22.21	3	Horizontal	97	1.55	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5190MHz_TX



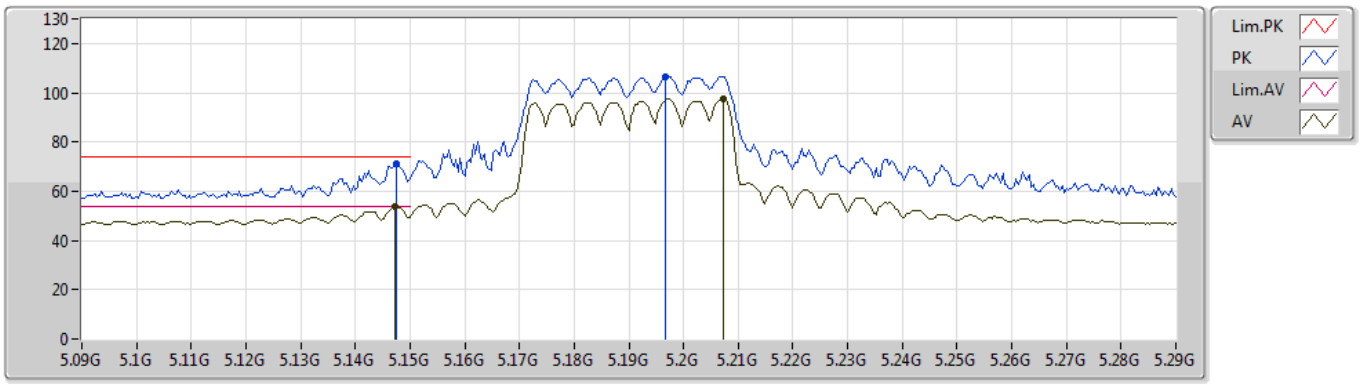
EUT Z_2TX
Setting 15
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1496G	63.06	74.00	-10.94	7.94	3	Vertical	72	2.69	-
AV	5.1492G	47.39	54.00	-6.61	7.94	3	Vertical	72	2.69	-
PK	5.184G	99.01	Inf	-Inf	8.03	3	Vertical	72	2.69	-
AV	5.2032G	88.29	Inf	-Inf	8.06	3	Vertical	72	2.69	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5190MHz_TX



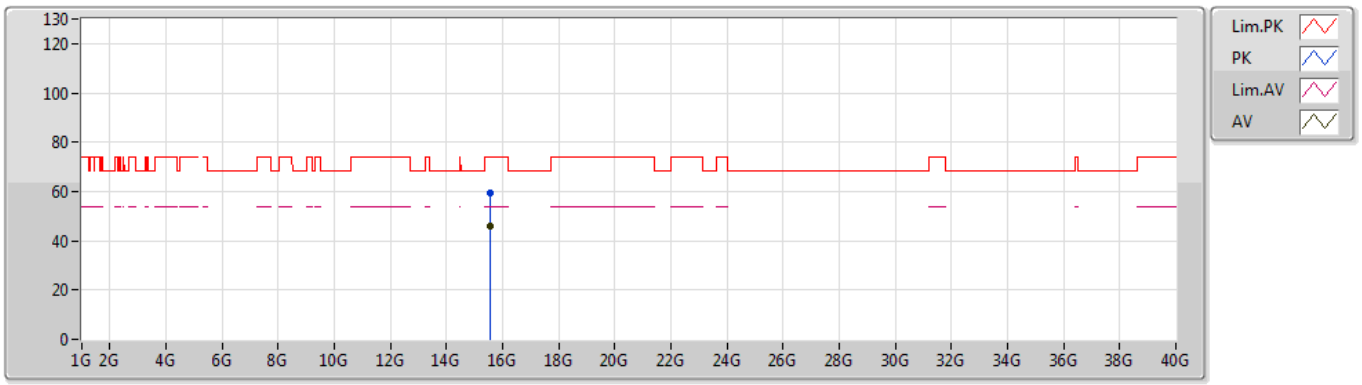
EUT Z_2TX
Setting 15
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1476G	71.13	74.00	-2.87	7.94	3	Horizontal	39	1.01	-
AV	5.1472G	53.62	54.00	-0.38	7.94	3	Horizontal	39	1.01	-
PK	5.1968G	106.74	Inf	-Inf	8.06	3	Horizontal	39	1.01	-
AV	5.2072G	97.28	Inf	-Inf	8.07	3	Horizontal	39	1.01	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5190MHz_TX



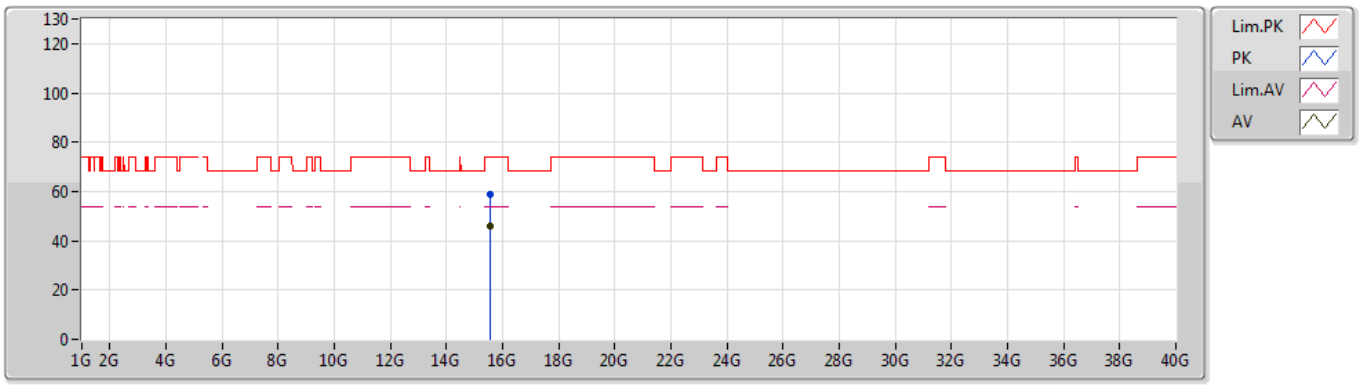
EUT Z_2TX
Setting 15
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.5702G	59.56	74.00	-14.44	16.00	3	Vertical	139	1.55	-
AV	15.57544G	45.90	54.00	-8.10	15.98	3	Vertical	139	1.55	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5190MHz_TX

10/06/2019



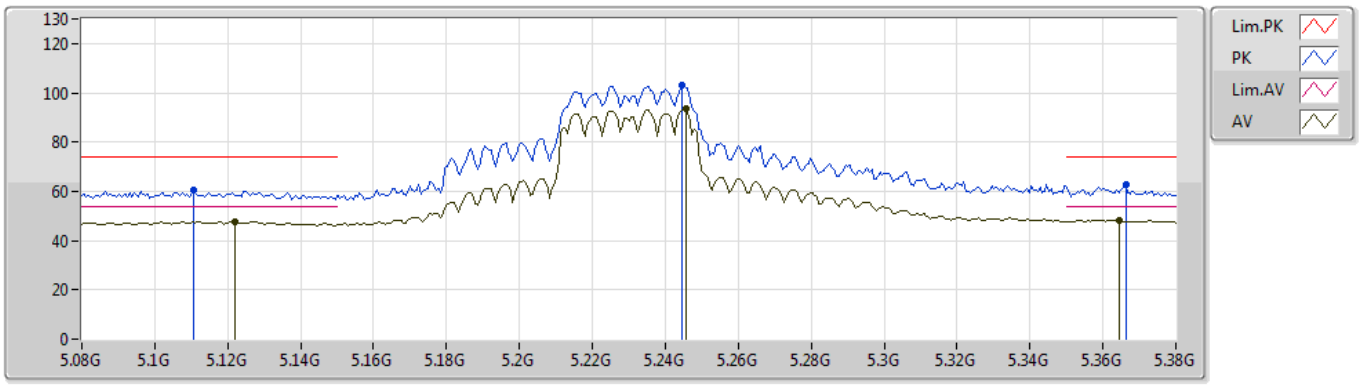
EUT Z_2TX
Setting 15
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.579G	58.69	74.00	-15.31	15.97	3	Horizontal	166	1.89	-
AV	15.57452G	45.68	54.00	-8.32	15.98	3	Horizontal	166	1.89	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5230MHz_TX



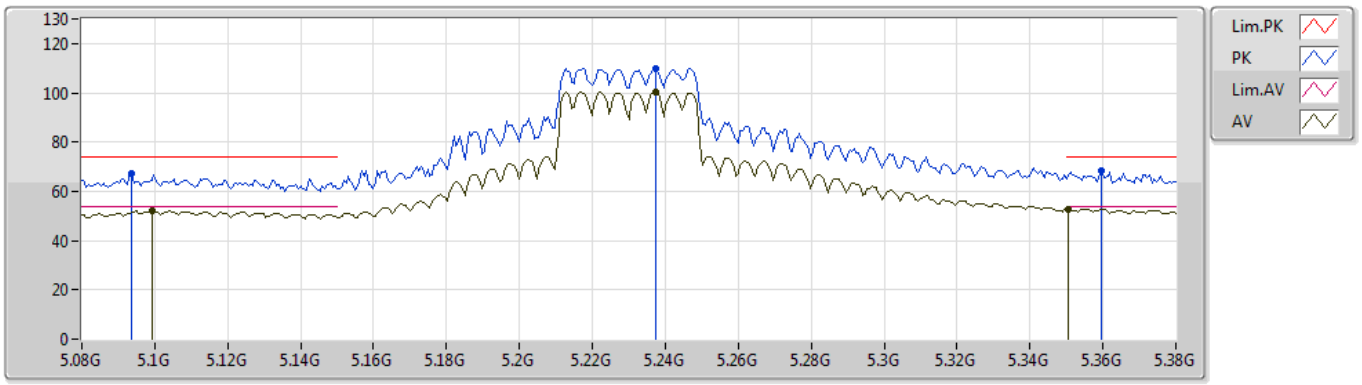
EUT Z_2TX
Setting 19
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1106G	60.79	74.00	-13.21	7.86	3	Vertical	67	2.68	-
AV	5.122G	47.87	54.00	-6.13	7.88	3	Vertical	67	2.68	-
PK	5.2444G	103.24	Inf	-Inf	8.12	3	Vertical	67	2.68	-
AV	5.2456G	93.37	Inf	-Inf	8.12	3	Vertical	67	2.68	-
PK	5.3662G	62.67	74.00	-11.33	8.29	3	Vertical	67	2.68	-
AV	5.3644G	48.39	54.00	-5.61	8.29	3	Vertical	67	2.68	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5230MHz_TX



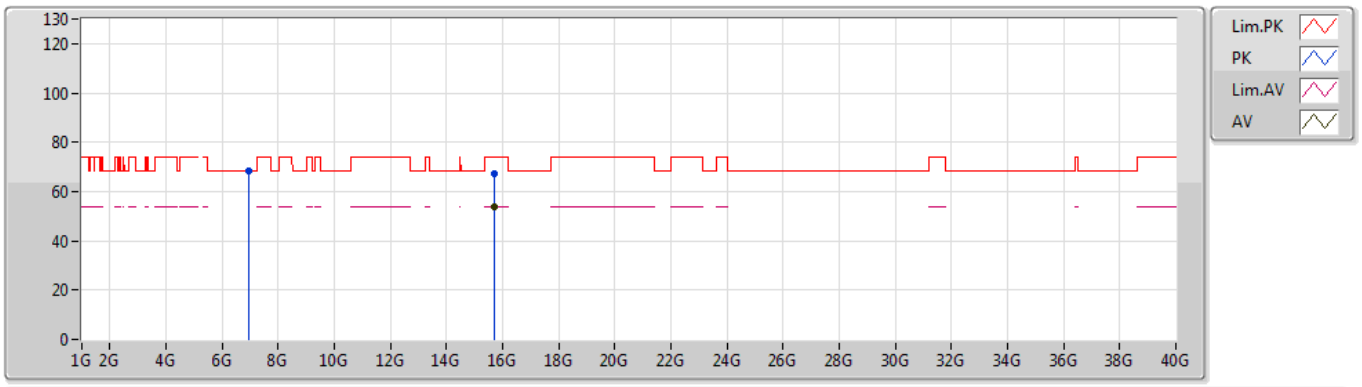
EUT Z_2TX
Setting 19
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.0938G	67.09	74.00	-6.91	7.82	3	Horizontal	40	1.01	-
AV	5.0992G	51.98	54.00	-2.02	7.84	3	Horizontal	40	1.01	-
PK	5.2372G	109.83	Inf	-Inf	8.11	3	Horizontal	40	1.01	-
AV	5.2372G	100.35	Inf	-Inf	8.11	3	Horizontal	40	1.01	-
PK	5.3596G	68.29	74.00	-5.71	8.29	3	Horizontal	40	1.01	-
AV	5.3506G	52.94	54.00	-1.06	8.28	3	Horizontal	40	1.01	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5230MHz_TX



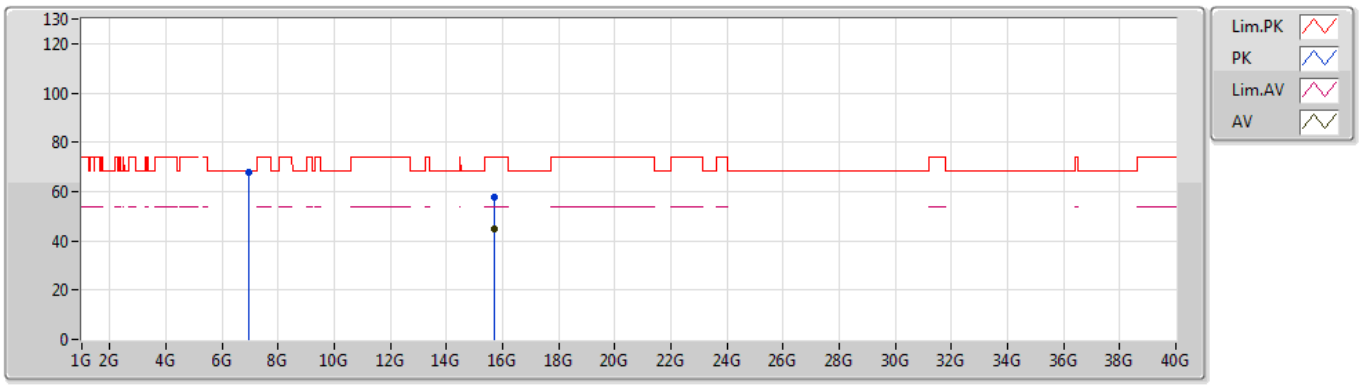
EUT Z_2TX
Setting 19
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.97344G	68.19	68.20	-0.01	9.63	3	Vertical	314	2.39	-
PK	15.69424G	67.07	74.00	-6.93	15.67	3	Vertical	128	1.99	-
AV	15.695G	53.74	54.00	-0.26	15.66	3	Vertical	128	1.99	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5230MHz_TX

10/06/2019



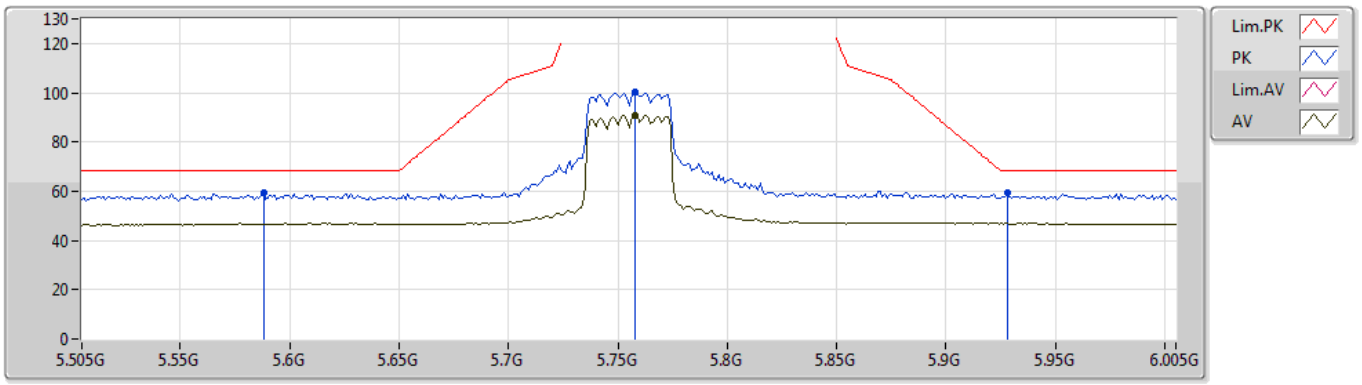
EUT Z_2TX
Setting 19
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	6.97345G	67.74	68.20	-0.46	9.63	3	Horizontal	14	1.21	-
PK	15.69508G	57.97	74.00	-16.03	15.66	3	Horizontal	216	1.83	-
AV	15.69648G	44.99	54.00	-9.01	15.66	3	Horizontal	216	1.83	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5755MHz_TX



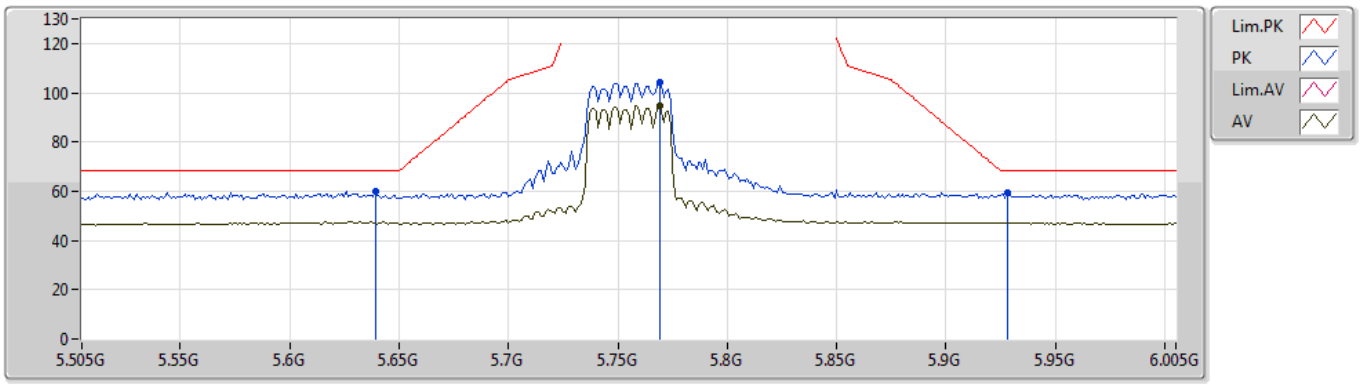
EUT Z_2TX
Setting 12
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.588G	59.26	68.20	-8.94	8.57	3	Vertical	327	2.98	-
PK	5.758G	100.55	Inf	-Inf	8.84	3	Vertical	327	2.98	-
AV	5.758G	90.83	Inf	-Inf	8.84	3	Vertical	327	2.98	-
PK	5.928G	59.19	68.20	-9.01	8.93	3	Vertical	327	2.98	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5755MHz_TX



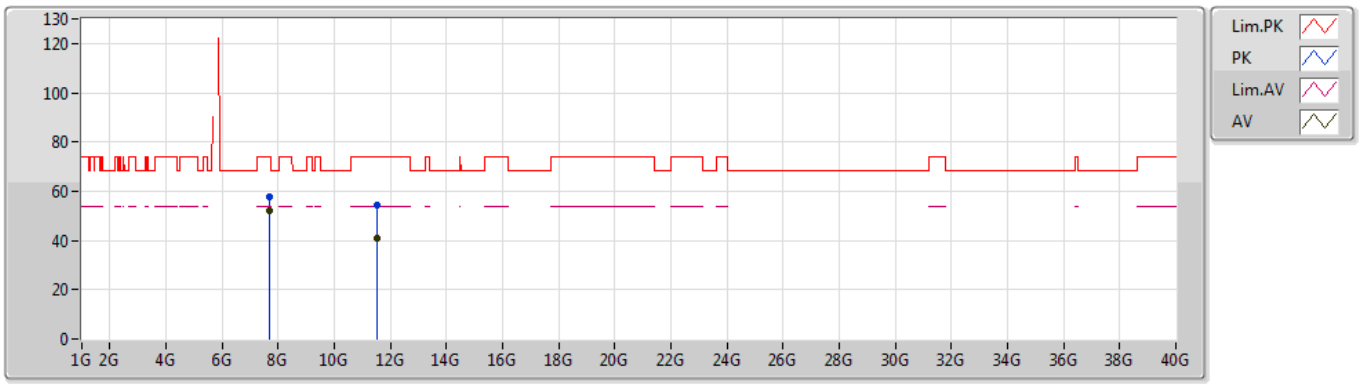
EUT Z_2TX
Setting 12
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.639G	59.70	68.20	-8.50	8.64	3	Horizontal	26	2.81	-
PK	5.769G	104.31	Inf	-Inf	8.85	3	Horizontal	26	2.81	-
AV	5.769G	94.66	Inf	-Inf	8.85	3	Horizontal	26	2.81	-
PK	5.928G	59.27	68.20	-8.93	8.93	3	Horizontal	26	2.81	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5755MHz_TX



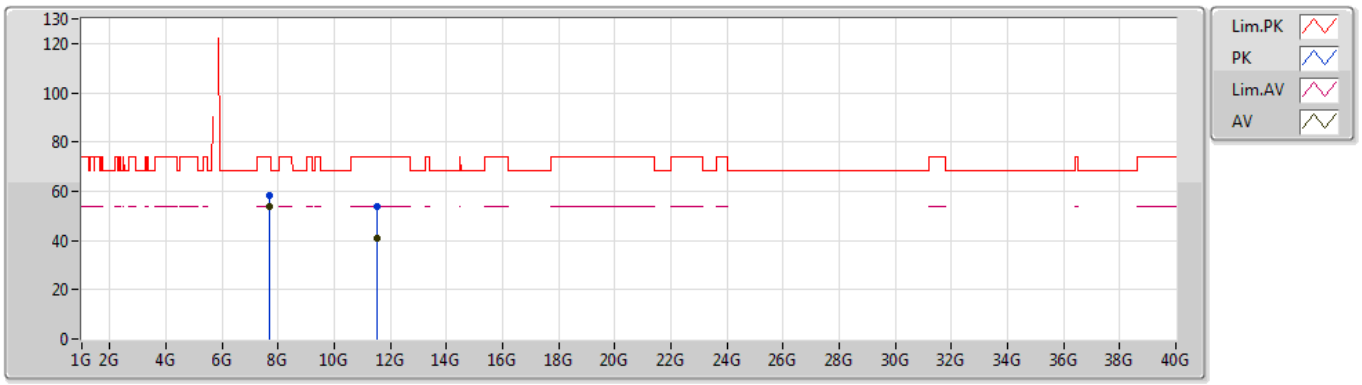
EUT Z_2TX
Setting 12
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.67348G	57.58	74.00	-16.42	11.19	3	Vertical	316	2.79	-
AV	7.67353G	52.33	54.00	-1.67	11.19	3	Vertical	316	2.79	-
PK	11.51124G	54.20	74.00	-19.80	14.92	3	Vertical	129	1.01	-
AV	11.5168G	40.77	54.00	-13.23	14.92	3	Vertical	129	1.01	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5755MHz_TX



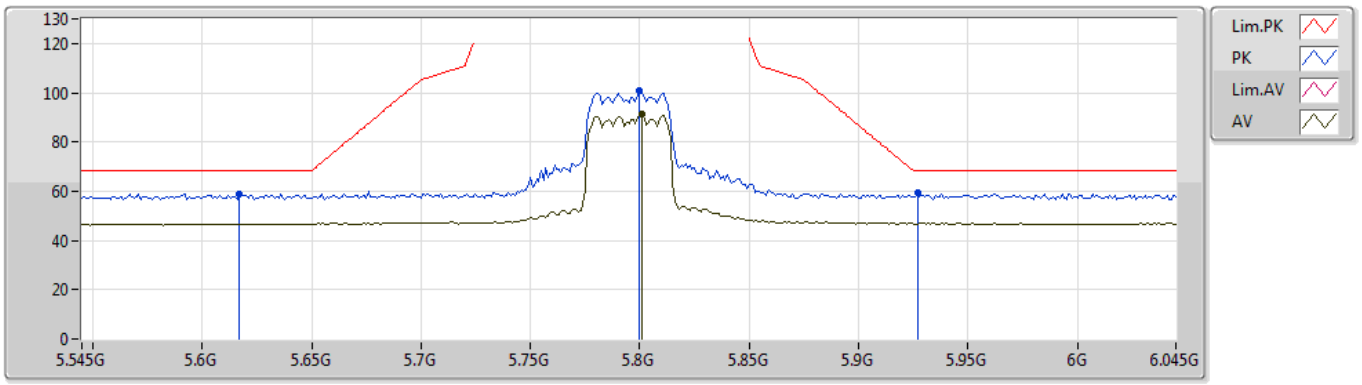
EUT Z_2TX
Setting 12
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.67356G	58.26	74.00	-15.74	11.19	3	Horizontal	340	1.19	-
AV	7.67356G	53.61	54.00	-0.39	11.19	3	Horizontal	340	1.19	-
PK	11.50756G	53.96	74.00	-20.04	14.92	3	Horizontal	136	1.06	-
AV	11.5128G	40.81	54.00	-13.19	14.92	3	Horizontal	136	1.06	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5795MHz_TX



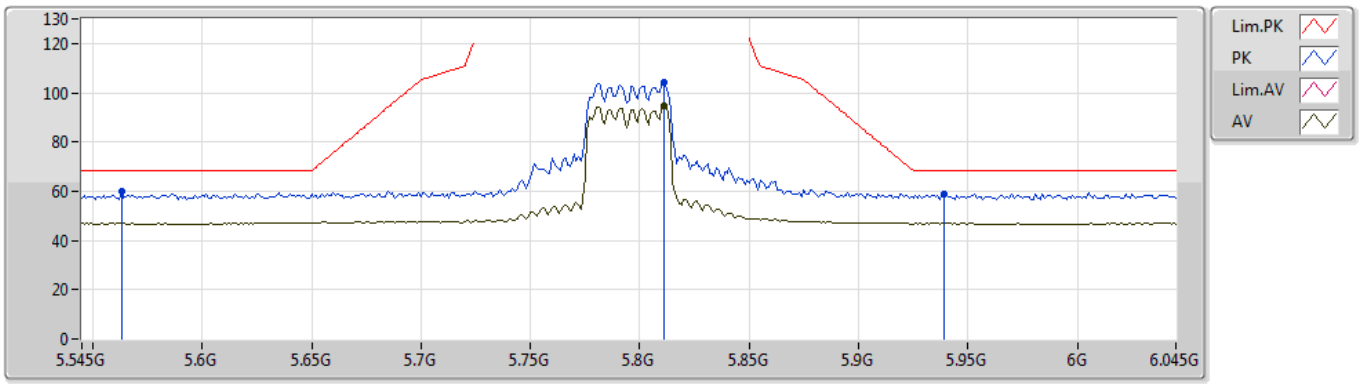
EUT Z_2TX
Setting 12
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.617G	58.69	68.20	-9.51	8.60	3	Vertical	313	2.69	-
PK	5.8G	100.66	Inf	-Inf	8.90	3	Vertical	313	2.69	-
AV	5.801G	91.16	Inf	-Inf	8.90	3	Vertical	313	2.69	-
PK	5.927G	59.12	68.20	-9.08	8.93	3	Vertical	313	2.69	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5795MHz_TX



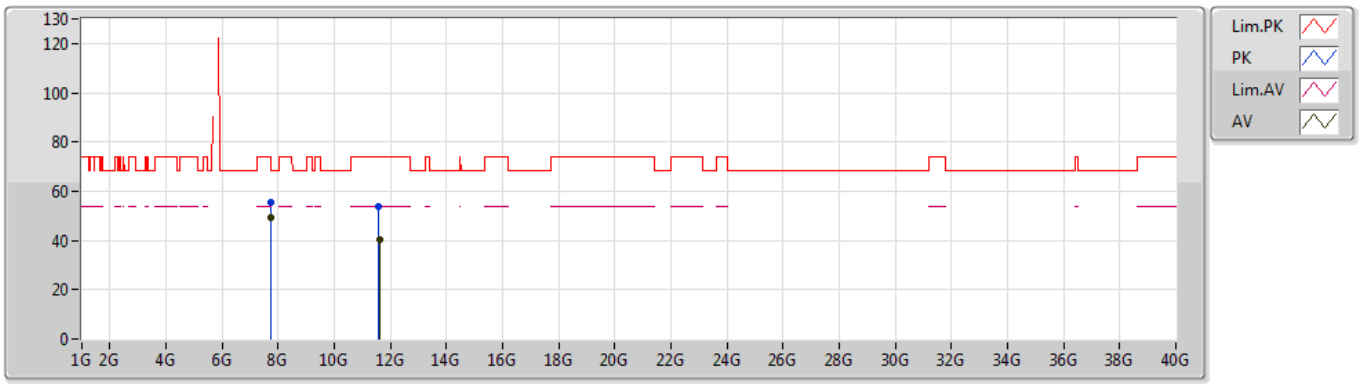
EUT Z_2TX
Setting 12
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.563G	60.00	68.20	-8.20	8.56	3	Horizontal	32	1.16	-
PK	5.811G	104.38	Inf	-Inf	8.91	3	Horizontal	32	1.16	-
AV	5.811G	94.95	Inf	-Inf	8.91	3	Horizontal	32	1.16	-
PK	5.939G	59.00	68.20	-9.20	8.93	3	Horizontal	32	1.16	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5795MHz_TX



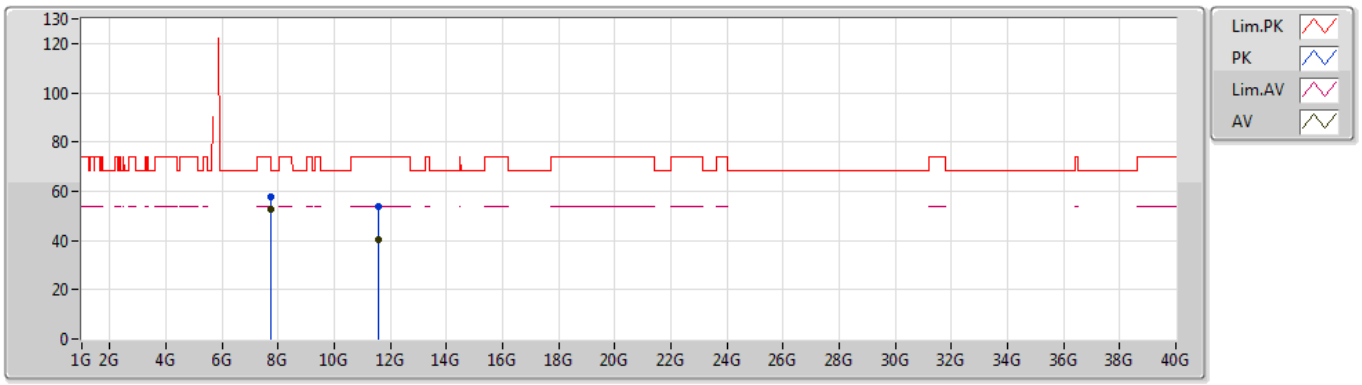
EUT Z_2TX
Setting 12
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.7267G	55.48	74.00	-18.52	11.23	3	Vertical	118	1.01	-
AV	7.7268G	49.53	54.00	-4.47	11.23	3	Vertical	118	1.01	-
PK	11.59108G	53.67	74.00	-20.33	15.02	3	Vertical	153	1.42	-
AV	11.5994G	40.54	54.00	-13.46	15.04	3	Vertical	153	1.42	-

802.11ac VHT40_Nss1,(MCS0)_2TX

10/06/2019

5795MHz_TX



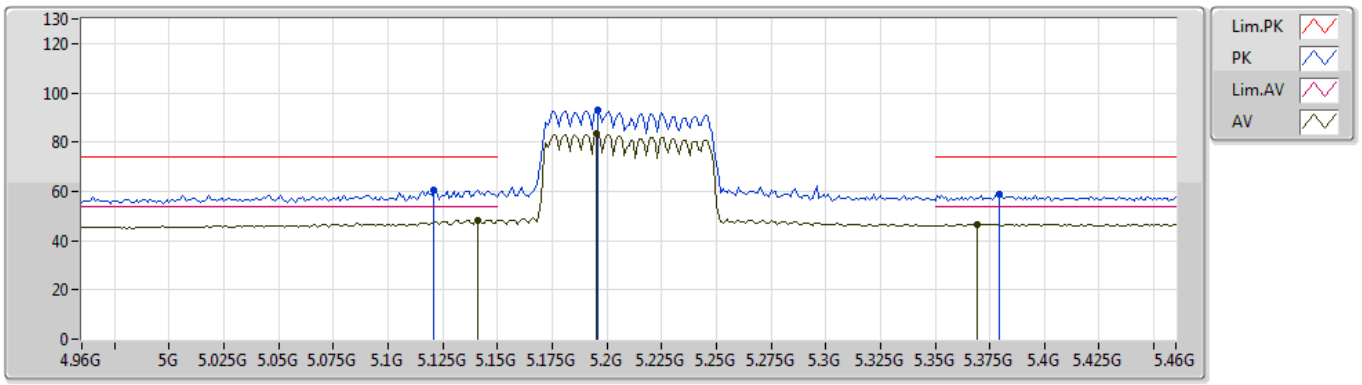
EUT Z_2TX
Setting 12
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.72674G	57.73	74.00	-16.27	11.23	3	Horizontal	21	1.01	-
AV	7.72678G	52.49	54.00	-1.51	11.23	3	Horizontal	21	1.01	-
PK	11.58544G	53.62	74.00	-20.38	15.02	3	Horizontal	215	1.17	-
AV	11.58804G	40.45	54.00	-13.55	15.02	3	Horizontal	215	1.17	-

802.11ac VHT80_Nss1,(MCS0)_2TX

10/06/2019

5210MHz_TX



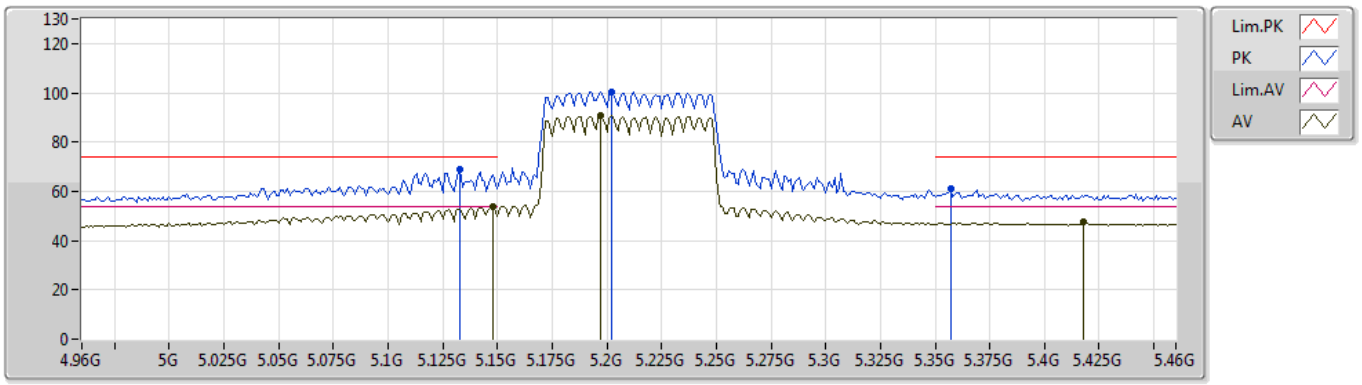
EUT Z_2TX
Setting 12
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.121G	60.72	74.00	-13.28	7.88	3	Vertical	64	3.00	-
AV	5.141G	48.30	54.00	-5.70	7.94	3	Vertical	64	3.00	-
PK	5.196G	93.04	Inf	-Inf	8.06	3	Vertical	64	3.00	-
AV	5.195G	83.67	Inf	-Inf	8.05	3	Vertical	64	3.00	-
PK	5.379G	58.96	74.00	-15.04	8.32	3	Vertical	64	3.00	-
AV	5.369G	46.55	54.00	-7.45	8.30	3	Vertical	64	3.00	-

802.11ac VHT80_Nss1,(MCS0)_2TX

10/06/2019

5210MHz_TX



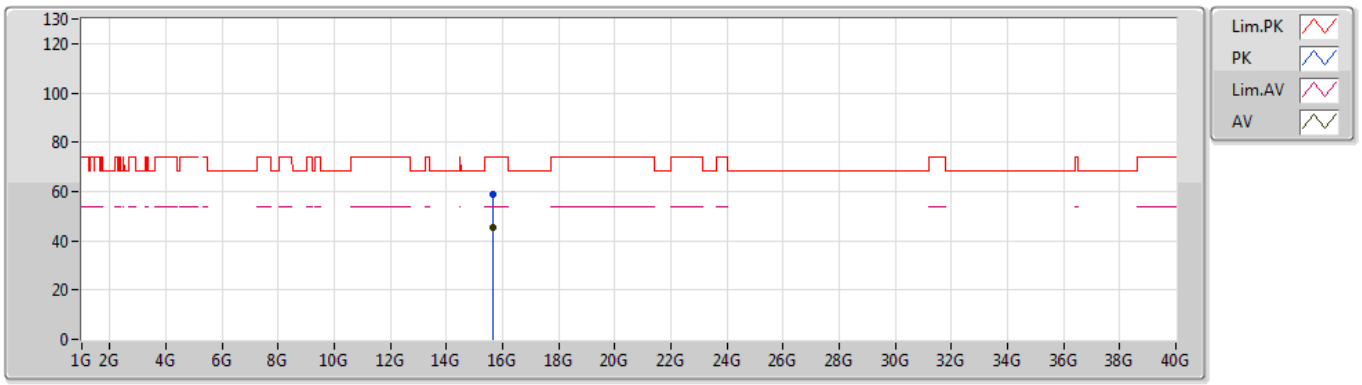
EUT Z_2TX
Setting 12
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.133G	68.84	74.00	-5.16	7.92	3	Horizontal	40	1.07	-
AV	5.148G	53.92	54.00	-0.08	7.94	3	Horizontal	40	1.07	-
PK	5.202G	100.32	Inf	-Inf	8.06	3	Horizontal	40	1.07	-
AV	5.197G	90.77	Inf	-Inf	8.06	3	Horizontal	40	1.07	-
PK	5.357G	60.98	74.00	-13.02	8.28	3	Horizontal	40	1.07	-
AV	5.418G	47.48	54.00	-6.52	8.37	3	Horizontal	40	1.07	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5210MHz_TX

10/06/2019



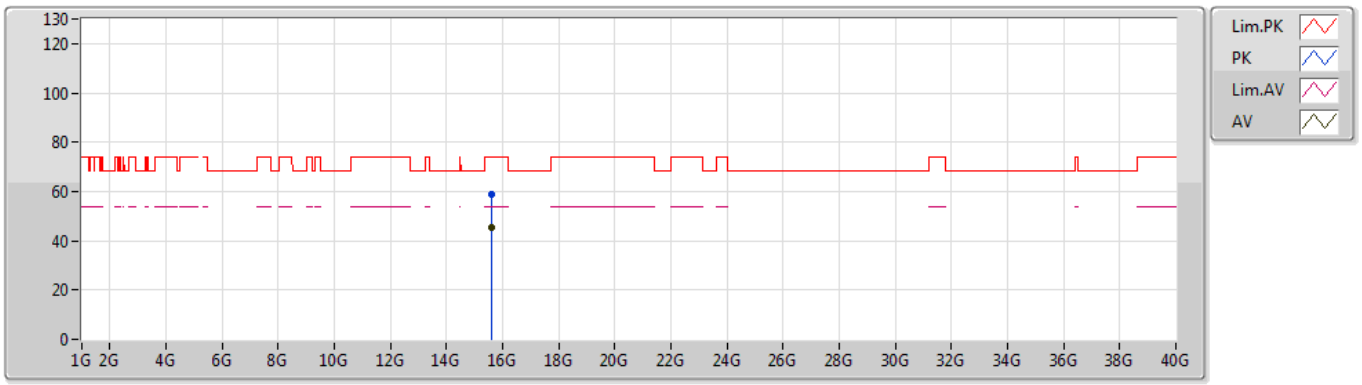
EUT Z_2TX
Setting 12
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.63272G	58.76	74.00	-15.24	15.83	3	Vertical	76	1.72	-
AV	15.63564G	45.45	54.00	-8.55	15.82	3	Vertical	76	1.72	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5210MHz_TX

10/06/2019



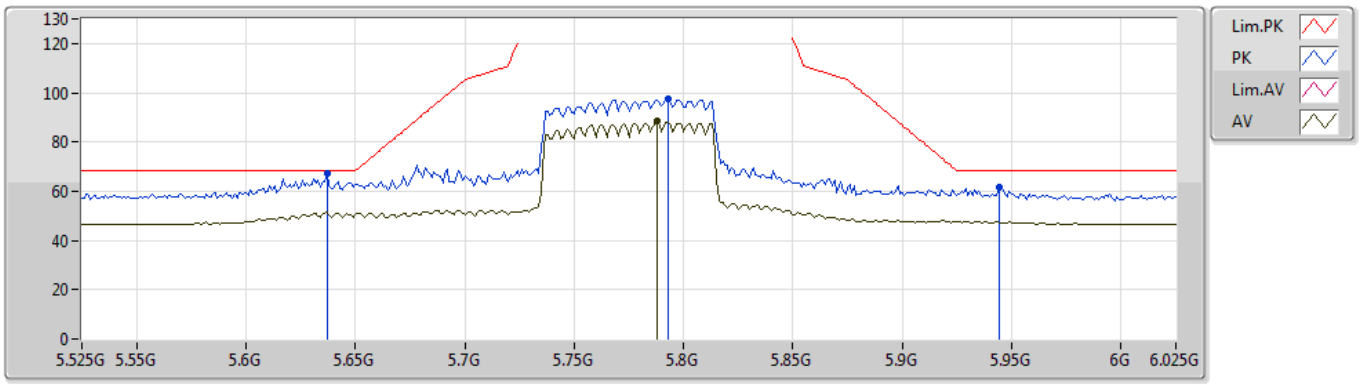
EUT Z_2TX
Setting 12
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.62128G	58.63	74.00	-15.37	15.86	3	Horizontal	338	1.08	-
AV	15.6254G	45.17	54.00	-8.83	15.85	3	Horizontal	338	1.08	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

10/06/2019



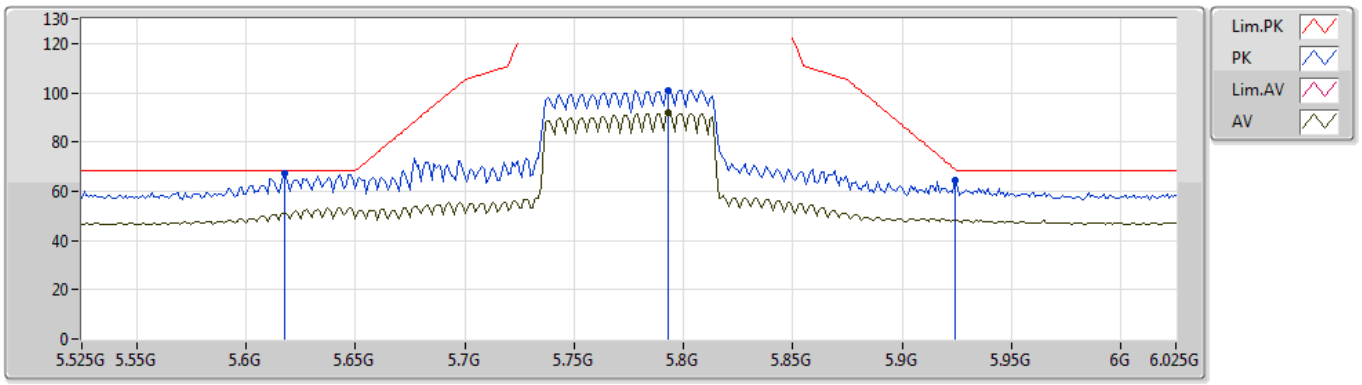
EUT Z_2TX
Setting 12
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.637G	66.97	68.20	-1.23	8.64	3	Vertical	325	2.95	-
PK	5.793G	97.50	Inf	-Inf	8.89	3	Vertical	325	2.95	-
AV	5.788G	88.30	Inf	-Inf	8.87	3	Vertical	325	2.95	-
PK	5.944G	61.71	68.20	-6.49	8.94	3	Vertical	325	2.95	-

802.11ac VHT80_Nss1,(MCS0)_2TX

10/06/2019

5775MHz_TX



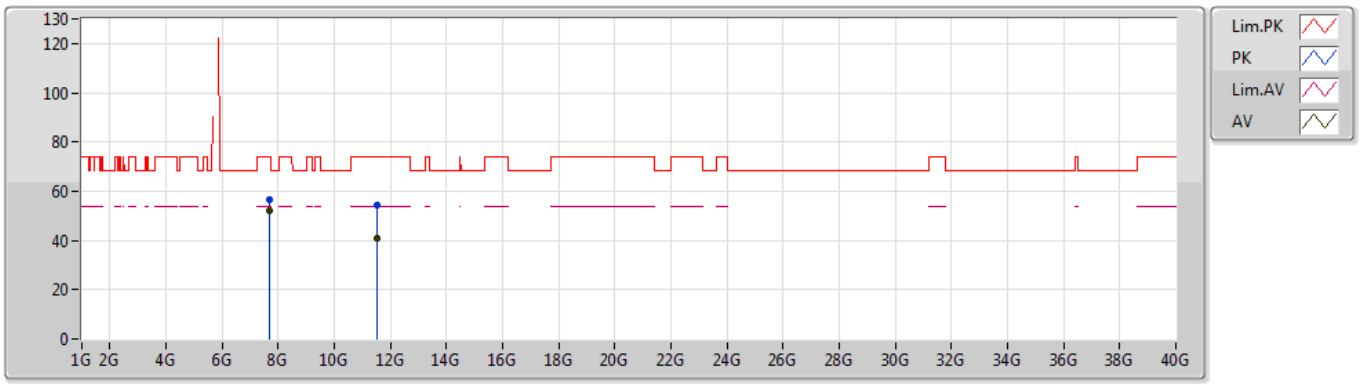
EUT Z_2TX
Setting 12
02-G-2-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.618G	67.13	68.20	-1.07	8.61	3	Horizontal	18	2.80	-
PK	5.793G	101.14	Inf	-Inf	8.89	3	Horizontal	18	2.80	-
AV	5.793G	91.76	Inf	-Inf	8.89	3	Horizontal	18	2.80	-
PK	5.924G	64.70	68.94	-4.24	8.92	3	Horizontal	18	2.80	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

10/06/2019



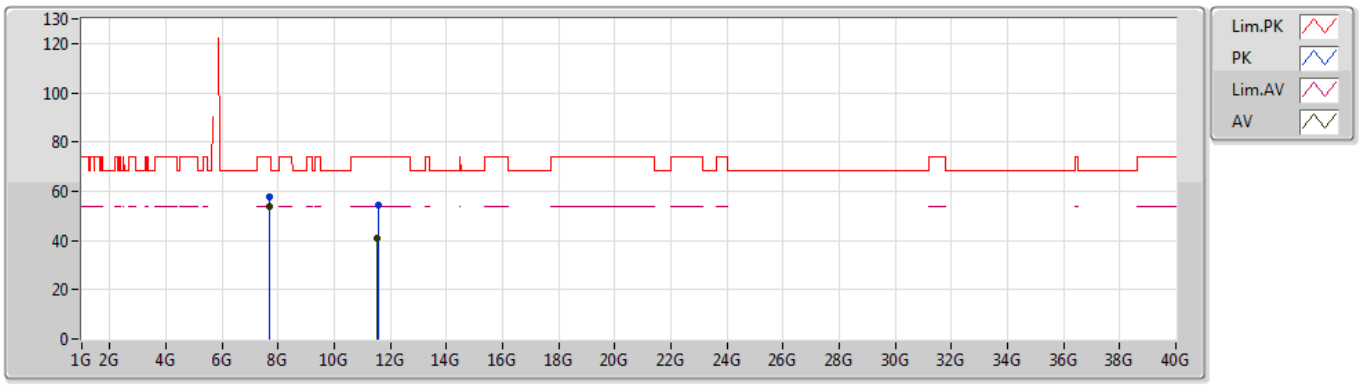
EUT Z_2TX
Setting 12
02-G-2
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.70004G	56.85	74.00	-17.15	11.21	3	Vertical	114	1.05	-
AV	7.70011G	52.13	54.00	-1.87	11.21	3	Vertical	114	1.05	-
PK	11.54772G	54.62	74.00	-19.38	14.97	3	Vertical	150	1.35	-
AV	11.54244G	40.97	54.00	-13.03	14.96	3	Vertical	150	1.35	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

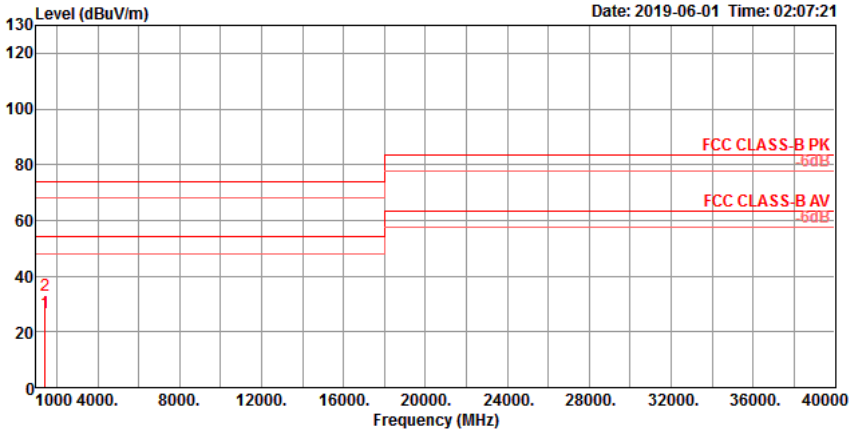
10/06/2019



EUT Z_2TX
Setting 12
02-G-2
FSP(100080)

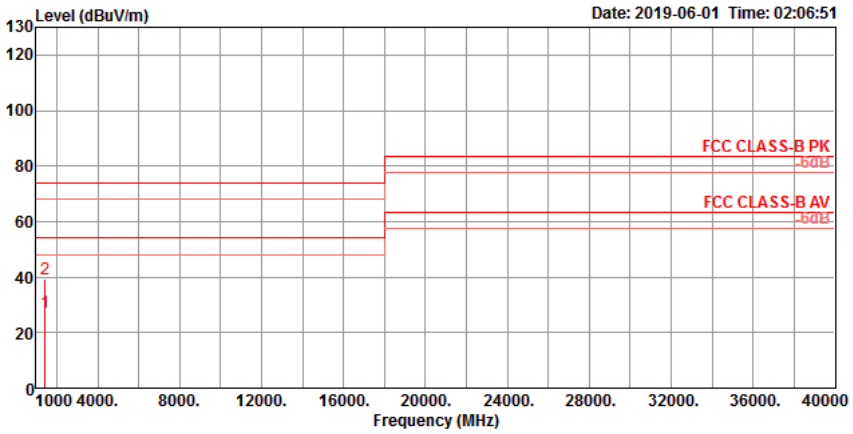
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.70012G	57.86	74.00	-16.14	11.21	3	Horizontal	15	1.13	-
AV	7.70009G	53.64	54.00	-0.36	11.21	3	Horizontal	15	1.13	-
PK	11.5546G	54.24	74.00	-19.76	14.97	3	Horizontal	195	1.58	-
AV	11.5456G	40.90	54.00	-13.10	14.97	3	Horizontal	195	1.58	-

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



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	1439.99	27.03	54.00	-26.97	35.14	2.99	25.82	36.92	124	111	Average	HORIZONTAL
2	1442.19	33.21	74.00	-40.79	41.32	2.99	25.82	36.92	124	111	Peak	HORIZONTAL

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



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	1439.84	27.50	54.00	-26.50	35.61	2.99	25.82	36.92	114	89	Average	VERTICAL
2	1443.51	39.31	74.00	-34.69	47.42	2.99	25.82	36.92	114	89	Peak	VERTICAL