Testing Laboratory 1190

FCC RADIO TEST REPORT

FCC ID	:	TE7RE230
Equipment	:	AC750 Wi-Fi Range Extender
Brand Name	:	tp-link
Model Name	:	RE230
Applicant	:	TP-Link Technologies Co., Ltd. Building 24 (floors 1,3,4,5) and 28 (floors1-4),Central Science and Technology Park,Nanshan › Shenzhen,518057 › China
Manufacturer	:	TP-Link Technologies Co., Ltd. Building 24 (floors 1,3,4,5) and 28 (floors1-4),Central Science and Technology Park,Nanshan › Shenzhen,518057 › China
Standard	:	47 CFR FCC Part 15.407

The product was received on Mar. 03, 2020, and testing was started from Mar. 13, 2020 and completed on Apr. 13, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

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

Approved by: Sam Chen

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

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR030222AB	01	Initial issue of report	Apr. 28, 2020

Summary of Test Result

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

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Sam Chen

Report Producer: Vicky Huang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
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.

1.1.2 Antenna Information

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
	WLAN 2.4GHz	WLAN 5GHz					WLAN 2.4GHz	WLAN 5GHz
1	2	1	tp-link	-	PIFA	N/A	2	2
2	1	2	tp-link	-	PIFA	N/A	2	2

Note: The above information was declared by manufacturer.

For 2.4GHz function:
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 function:
For IEEE 802.11a/n/ac mode (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.99	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT20	0.99	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.981	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT80	0.963	0.16	336.875u	3k

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

1.1.4 EUT Operational Condition

EUT Power Type	Internal power supply			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
Test Software Version	1.0.0 Build 20200114 Rel. 39556			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT support function

Function
AP (Master) Mode
Extender (Client with radar detection) Mode

Note:

The EUT supports AP and Extender mode, Extender mode only for AC power-line conducted emissions and Unwanted Emissions below 1GHz were tested and recorded in this test report by manufacturer request.

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
- FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location			
☐	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
☒	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	TH03-CB	Justin Lin	20.9~23°C / 46~48%	Mar. 16, 2020~ Mar. 17, 2020
Radiated (Below 1GHz test)	03CH05-CB	Eason Chen	24~25.3°C / 53~55%	Apr. 10, 2020
Radiated (Above 1GHz test)	03CH01-CB	Justin Lin	21.3~22°C / 46~47%	Mar. 13, 2020~ Mar. 16, 2020
AC Conduction	CO02-CB	Peter Wu	22~23°C / 61~62%	Apr. 13, 2020

Test site Designation No. TW0006 with FCC
Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	25
5200MHz	63
5240MHz	24
5745MHz	63
5785MHz	63
5825MHz	63
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	25
5200MHz	63
5240MHz	24
5745MHz	63
5785MHz	63
5825MHz	63
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	16
5230MHz	23
5755MHz	28
5795MHz	63
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	13
5775MHz	27

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	Normal Link - Extender Mode

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	Normal Link - Extender Mode - EUT in Y axis
2	Normal Link - Extender Mode - EUT in Z axis
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed at Y axis and Z axis position, and the worst case was found at Y axis. So the measurement will follow this same test configuration.	
1	EUT in Y axis

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz+WLAN 5GHz
Refer to Sporton Test Report No.: FA030222 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

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

N/A

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	2.4G NB	DELL	E6430	N/A
C	5G NB	DELL	E6430	N/A
D	AC750 Wi-Fi Range Extender (Device)	tp-link	RE230	TE7RE230

For Radiated (below 1GHz):

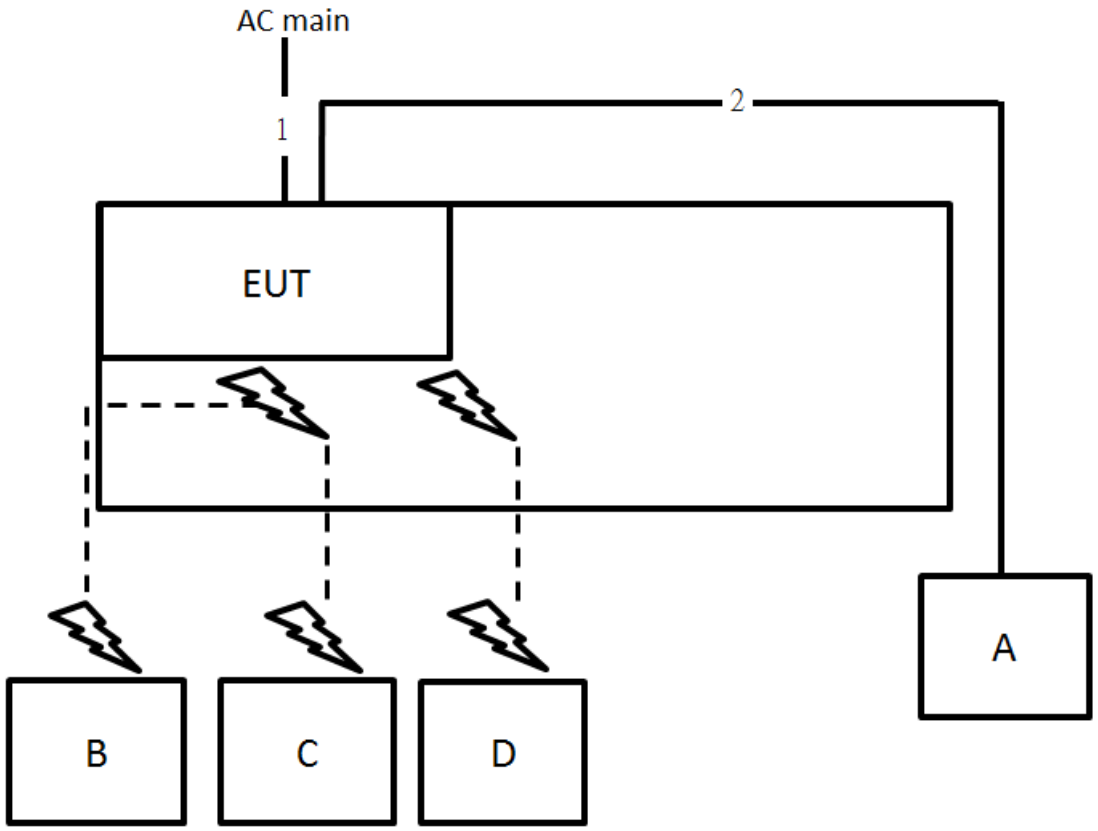
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	LAN NB	DELL	E4300	N/A
B	2.4G NB	DELL	E4300	N/A
C	5G NB	DELL	E4300	N/A
D	AC750 Wi-Fi Range Extender (Device)	tp-link	RE230	TE7RE230

For Radiated (above 1GHz) and RF Conducted:

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

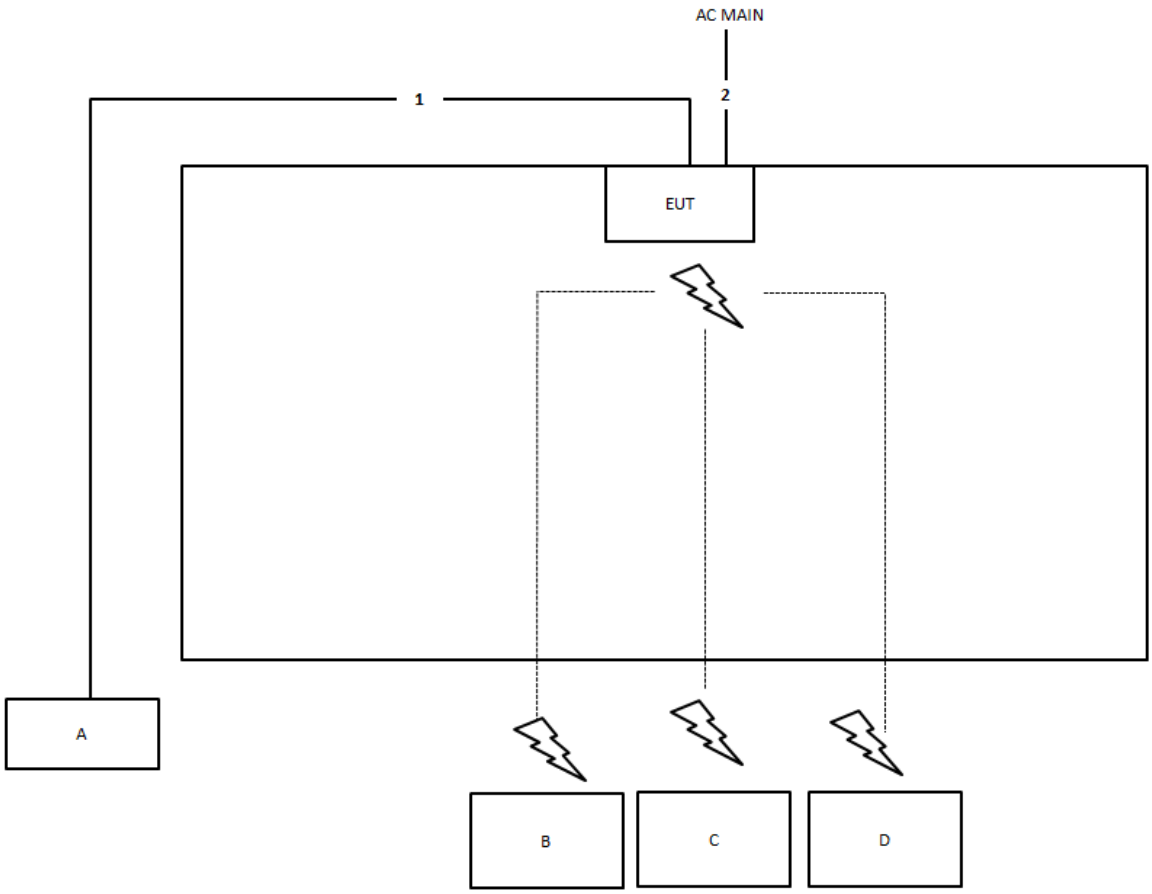
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



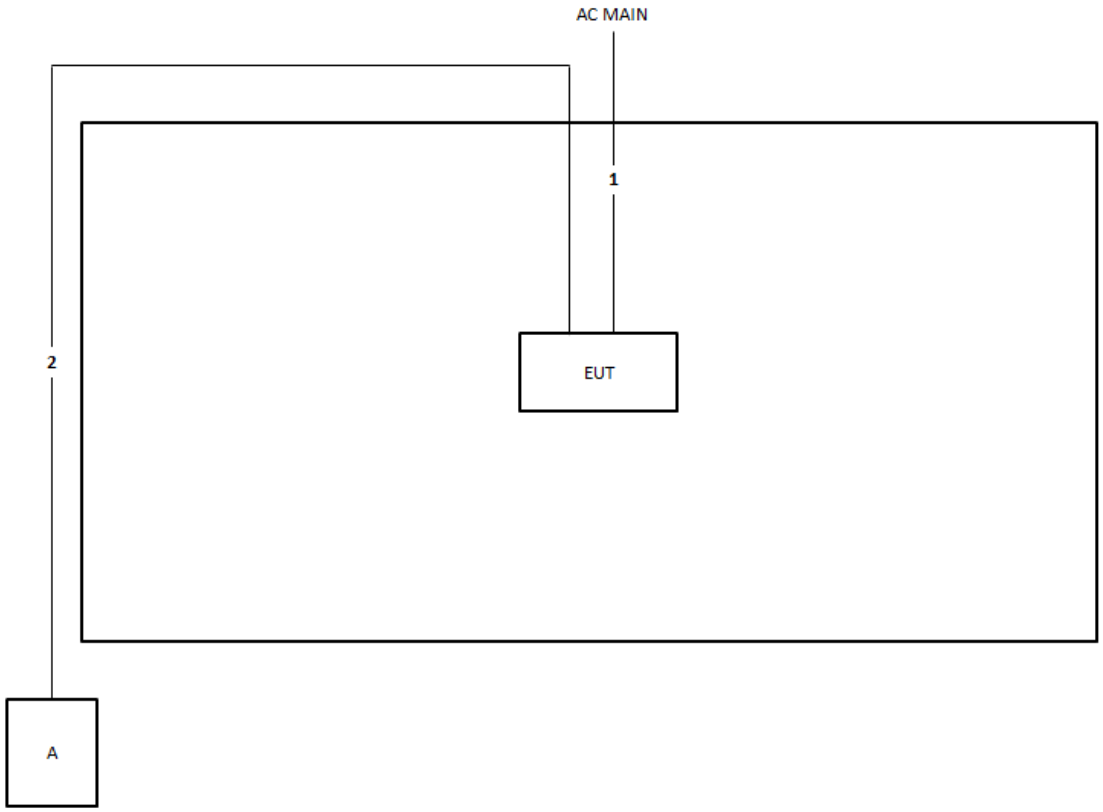
Item	Connection	Shielded	Length
1	Power cable	No	0.8m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test < 1GHz



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

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
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

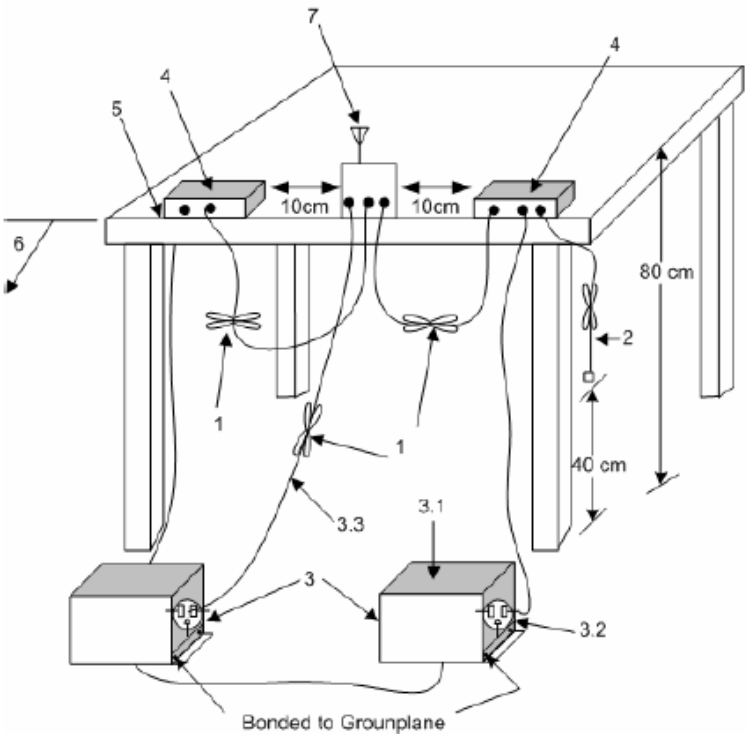
Refer a test equipment and calibration data table in this test report.

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.

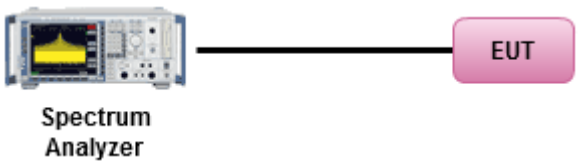
3.2.2 Measuring Instruments

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.	

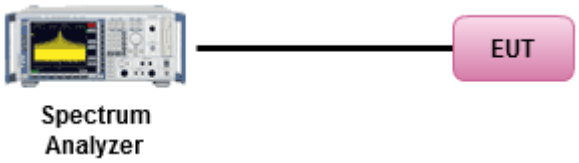
3.4.2 Measuring Instruments

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).

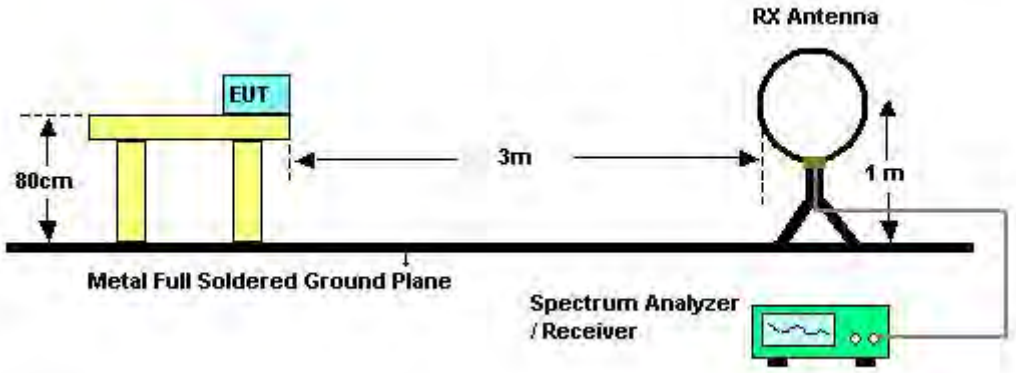
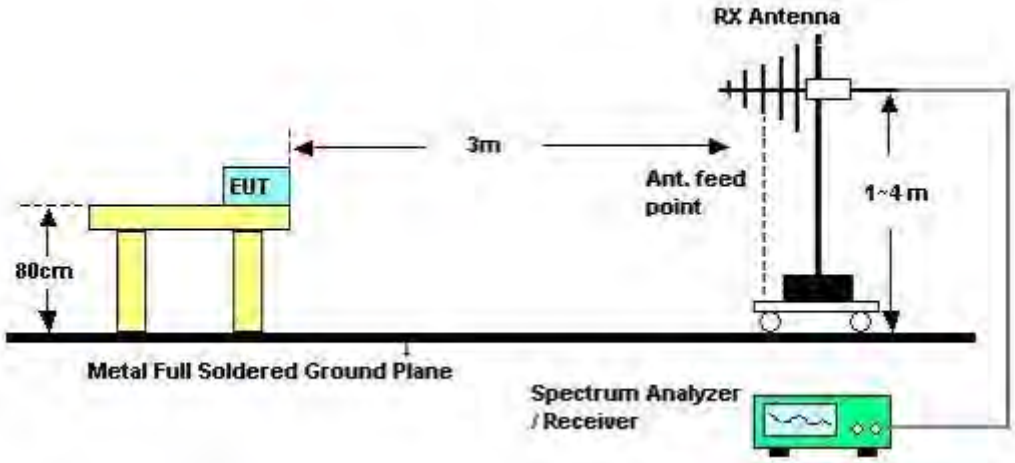
3.5.2 Measuring Instruments

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

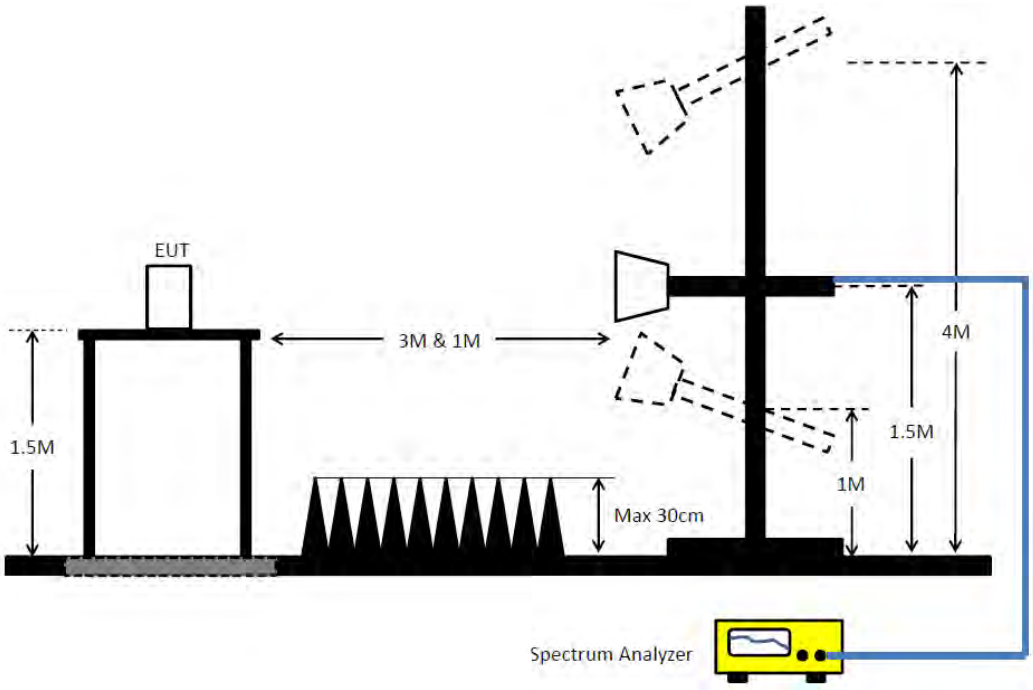
3.5.3 Test Procedures

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)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.5.7 Test Result of Transmitter Unwanted Emissions

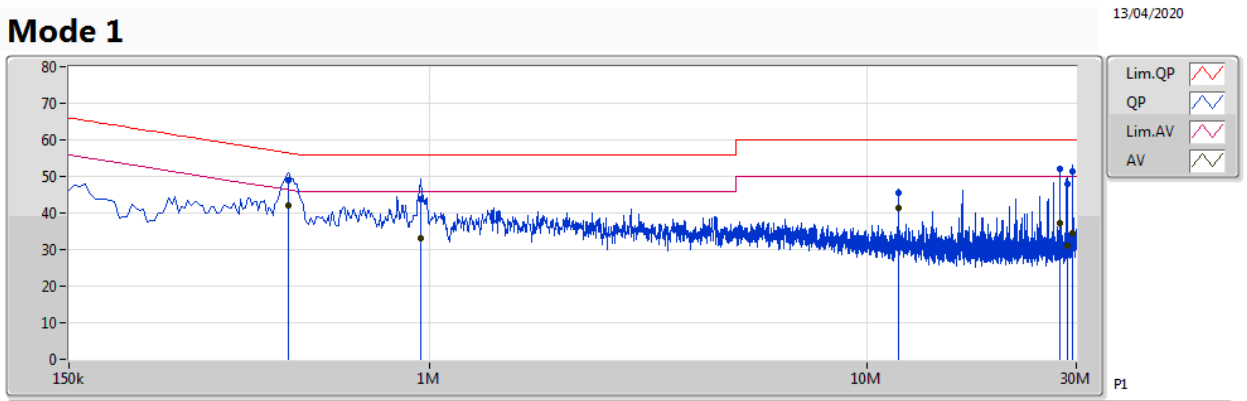
Refer as Appendix E

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, 2019	Nov. 20, 2020	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Oct. 30, 2019	Oct. 29, 2020	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Mar. 10, 2020	Mar. 09, 2021	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 21, 2019	Oct. 20, 2020	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 27, 2020	Mar. 26, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 01, 2019	Apr. 30, 2020	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	LOW Cable-04+23	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 16, 2020	Mar. 15, 2021	Radiation (03CH05-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 04, 2019	Nov. 03, 2020	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 19, 2019	Jun. 18, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Nov. 01, 2019	Oct. 31, 2020	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~ 40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Power Meter	Anritsu	ML2495A	1035008	300MHz~ 40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)

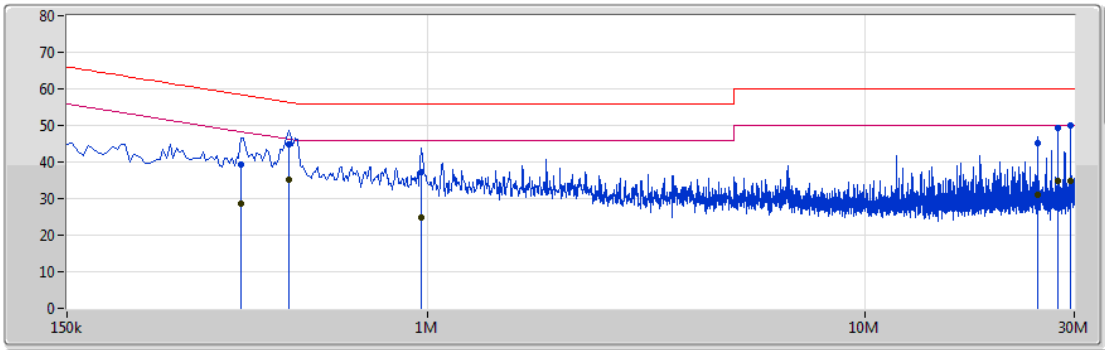
Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	474k	48.89	56.44	-7.55	10.24	Line	-	38.65	0.05	0.09	10.10
AV	474k	42.10	46.44	-4.34	10.24	Line	"Worst"	31.86	0.05	0.09	10.10
QP	951k	43.79	56.00	-12.21	10.28	Line	-	33.51	0.06	0.12	10.10
AV	951k	33.25	46.00	-12.75	10.28	Line	-	22.97	0.06	0.12	10.10
QP	11.76M	45.62	60.00	-14.38	10.56	Line	-	35.06	0.27	0.18	10.11
AV	11.76M	41.21	50.00	-8.79	10.56	Line	-	30.65	0.27	0.18	10.11
QP	27.591M	51.94	60.00	-8.06	10.95	Line	-	40.99	0.58	0.24	10.13
AV	27.591M	37.17	50.00	-12.83	10.95	Line	-	26.22	0.58	0.24	10.13
QP	28.545M	47.90	60.00	-12.10	10.97	Line	-	36.93	0.60	0.24	10.13
AV	28.545M	31.16	50.00	-18.84	10.97	Line	-	20.19	0.60	0.24	10.13
QP	29.495M	51.22	60.00	-8.78	10.99	Line	-	40.23	0.62	0.24	10.13
AV	29.495M	34.50	50.00	-15.50	10.99	Line	-	23.51	0.62	0.24	10.13

Mode 1

13/04/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	375k	39.43	58.39	-18.96	10.23	Neutral	-	29.20	0.05	0.08	10.10
AV	375k	28.54	48.39	-19.85	10.23	Neutral	-	18.31	0.05	0.08	10.10
QP	483k	44.81	56.29	-11.48	10.24	Neutral	-	34.57	0.05	0.09	10.10
AV	483k	35.26	46.29	-11.03	10.24	Neutral	-	25.02	0.05	0.09	10.10
QP	964.5k	37.11	56.00	-18.89	10.28	Neutral	-	26.83	0.06	0.12	10.10
AV	964.5k	24.77	46.00	-21.23	10.28	Neutral	-	14.49	0.06	0.12	10.10
QP	24.734M	45.29	60.00	-14.71	10.67	Neutral	-	34.62	0.32	0.23	10.12
AV	24.734M	31.12	50.00	-18.88	10.67	Neutral	-	20.45	0.32	0.23	10.12
QP	27.591M	49.27	60.00	-10.73	10.72	Neutral	-	38.55	0.35	0.24	10.13
AV	27.591M	34.69	50.00	-15.31	10.72	Neutral	-	23.97	0.35	0.24	10.13
QP	29.49M	49.85	60.00	-10.15	10.74	Neutral	"Worst"	39.11	0.37	0.24	10.13
AV	29.49M	34.88	50.00	-15.12	10.74	Neutral	-	24.14	0.37	0.24	10.13

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	43.89M	30.705M	30M7D1D	32.55M	17.991M
802.11ac VHT20_Nss1,(MCS0)_2TX	48.27M	31.634M	31M6D1D	32.55M	18.261M
802.11ac VHT40_Nss1,(MCS0)_2TX	74.4M	38.021M	38M0D1D	40.32M	36.162M
802.11ac VHT80_Nss1,(MCS0)_2TX	81.48M	75.202M	75M2D1D	81.48M	75.082M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.32M	33.133M	33M1D1D	16.29M	30.165M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.55M	34.273M	34M3D1D	17.28M	31.904M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.4M	69.625M	69M6D1D	35.04M	55.832M
802.11ac VHT80_Nss1,(MCS0)_2TX	73.8M	96.072M	96M1D1D	72.6M	88.876M

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

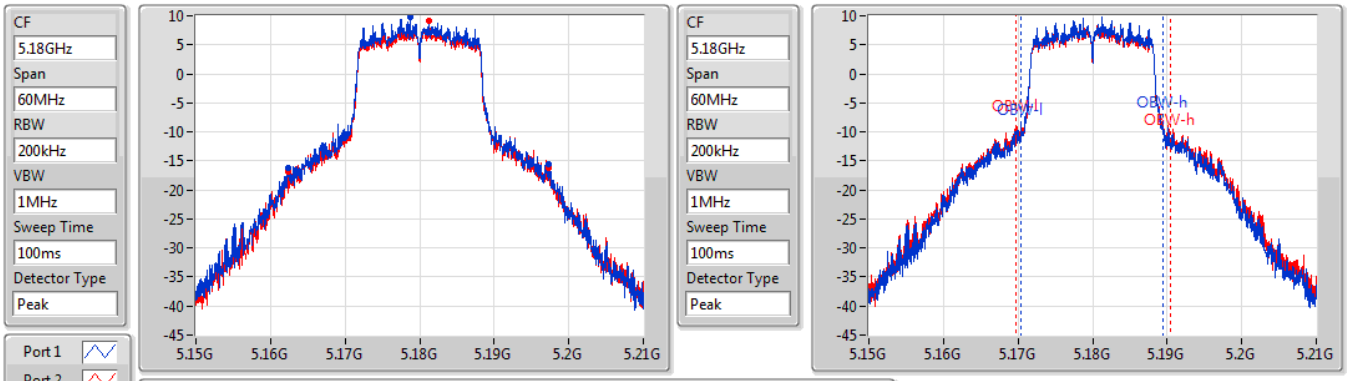
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	34.77M	19.07M	34.77M	20.87M
5200MHz	Pass	Inf	43.89M	30.705M	41.22M	28.156M
5240MHz	Pass	Inf	32.55M	17.991M	33.81M	19.22M
5745MHz	Pass	500k	16.32M	33.133M	16.32M	30.165M
5785MHz	Pass	500k	16.29M	32.864M	16.29M	30.915M
5825MHz	Pass	500k	16.29M	32.714M	16.32M	30.615M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	33.24M	18.981M	33.9M	20.06M
5200MHz	Pass	Inf	48.27M	31.634M	44.01M	28.006M
5240MHz	Pass	Inf	32.55M	18.261M	32.73M	18.411M
5745MHz	Pass	500k	17.52M	34.123M	17.49M	32.264M
5785MHz	Pass	500k	17.28M	34.273M	17.55M	31.964M
5825MHz	Pass	500k	17.52M	34.213M	17.52M	31.904M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.32M	36.162M	40.5M	36.222M
5230MHz	Pass	Inf	73.32M	37.421M	74.4M	38.021M
5755MHz	Pass	500k	35.1M	56.612M	35.04M	55.832M
5795MHz	Pass	500k	35.1M	69.625M	35.4M	65.967M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.48M	75.202M	81.48M	75.082M
5775MHz	Pass	500k	72.6M	96.072M	73.8M	88.876M

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

17/03/2020

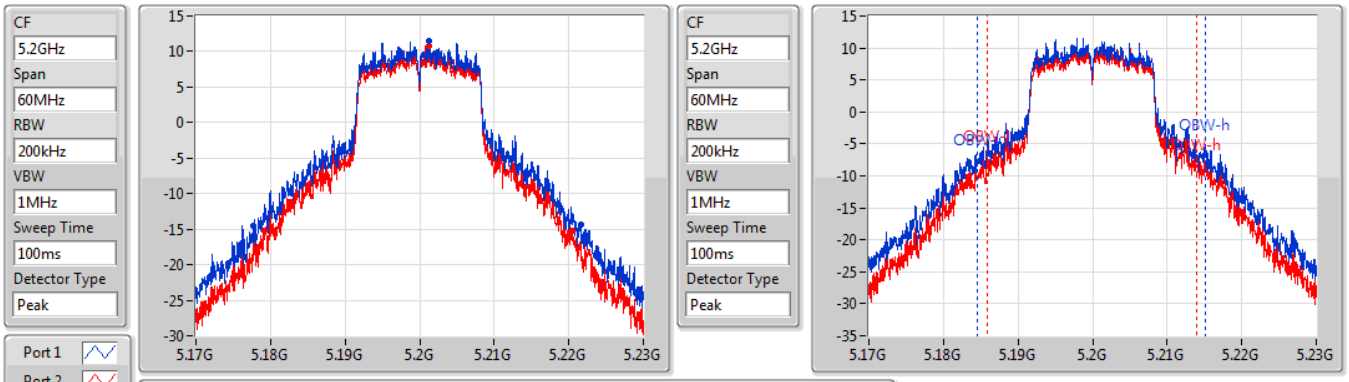


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.77M	5.16245G	5.19722G	19.07M	5.170435G	5.189505G	Inf	1
34.77M	5.16245G	5.19722G	20.87M	5.169655G	5.190525G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5200MHz

17/03/2020

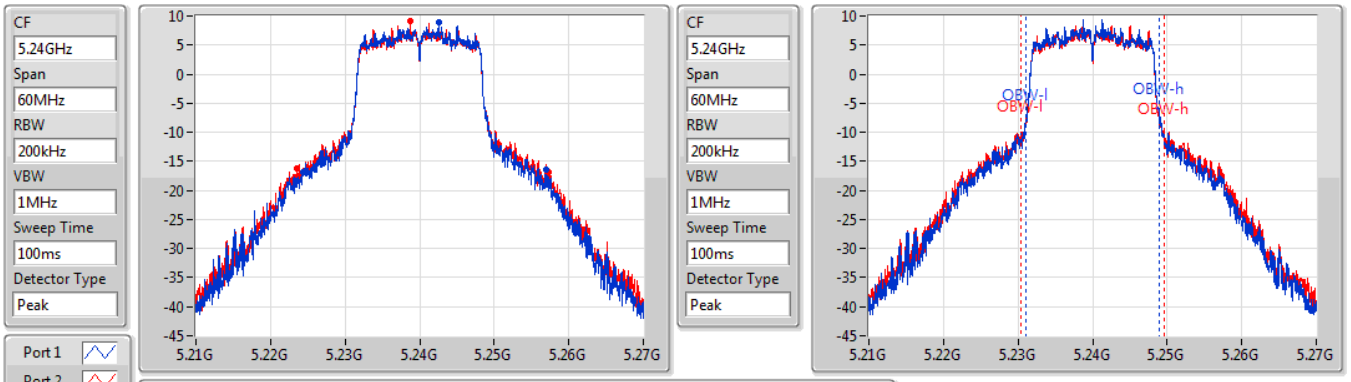


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.89M	5.17774G	5.22163G	30.705M	5.184498G	5.215202G	Inf	1
41.22M	5.17918G	5.2204G	28.156M	5.185877G	5.214033G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5240MHz

17/03/2020

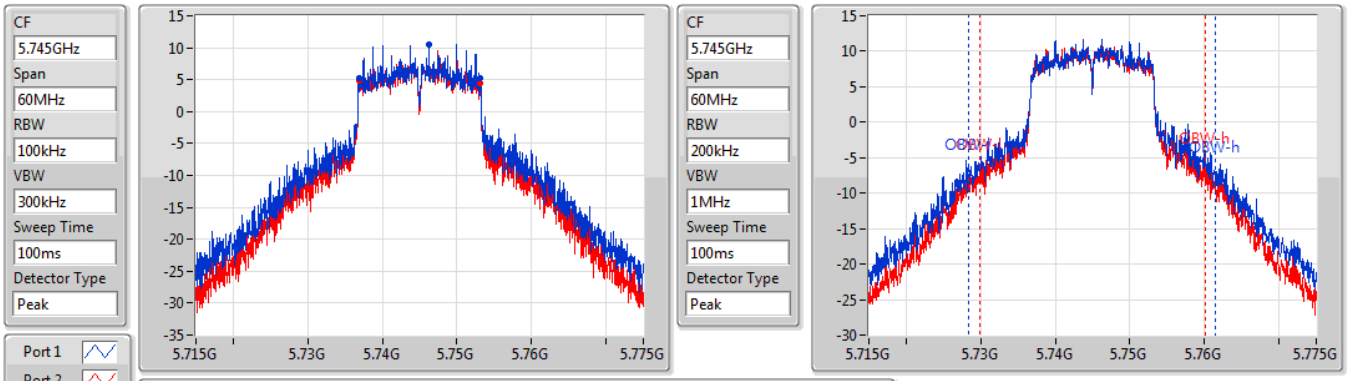


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.55M	5.2244G	5.25695G	17.991M	5.231004G	5.248996G	Inf	1
33.81M	5.22347G	5.25728G	19.22M	5.230375G	5.249595G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5745MHz

17/03/2020

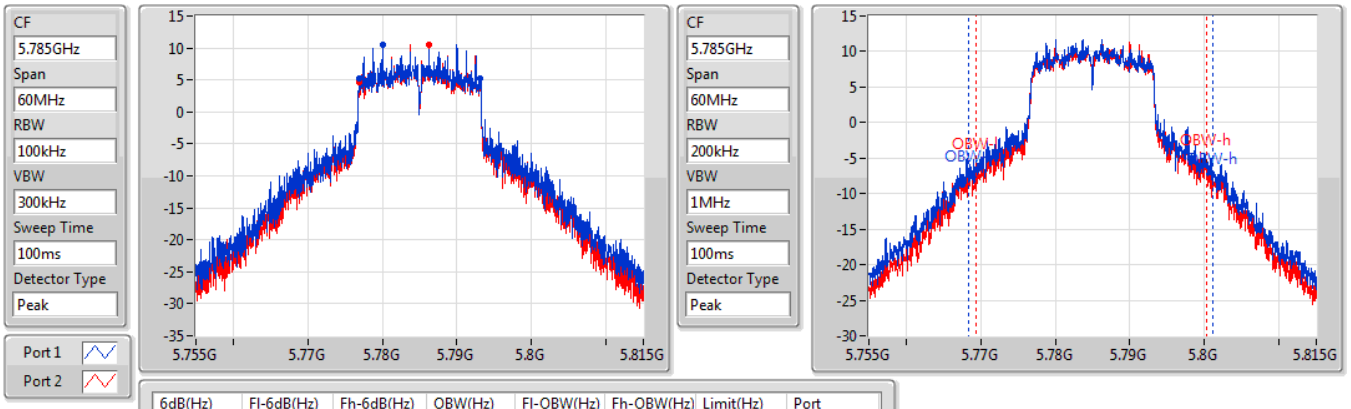


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.32M	5.73684G	5.75316G	33.133M	5.728358G	5.761492G	500k	1
16.32M	5.73684G	5.75316G	30.165M	5.729948G	5.760112G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

5785MHz

17/03/2020

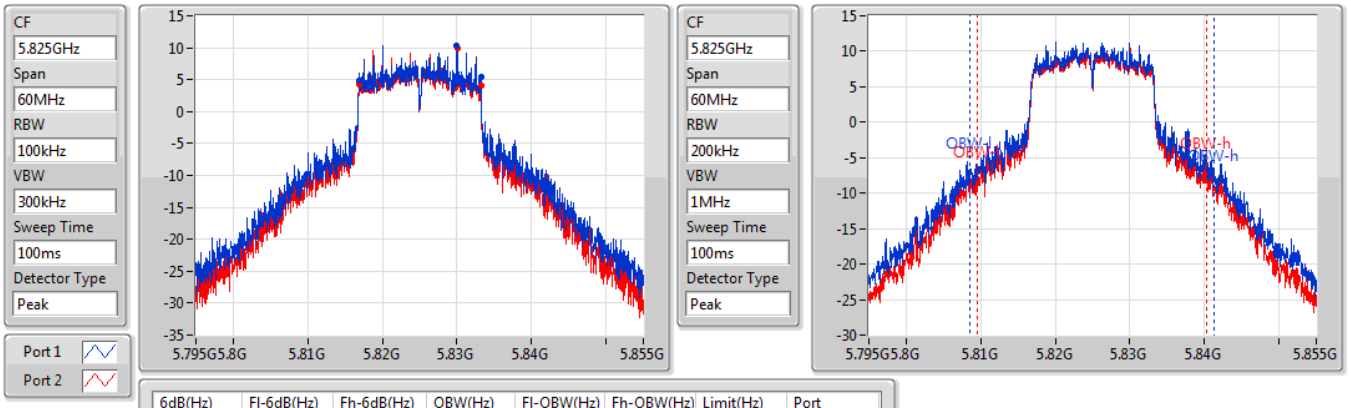


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.29M	5.77687G	5.79316G	32.864M	5.768298G	5.801162G	500k	1
16.29M	5.77687G	5.79316G	30.915M	5.769348G	5.800262G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

5825MHz

17/03/2020

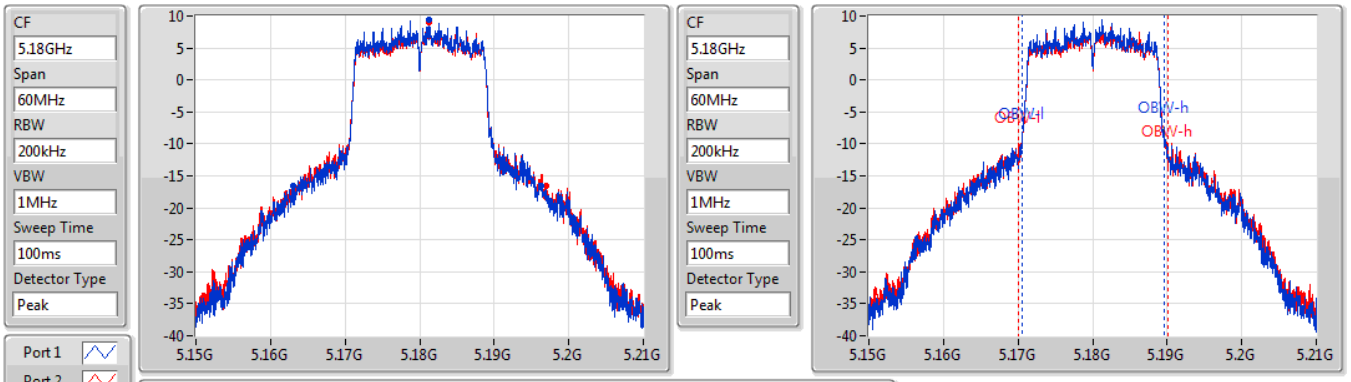


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.29M	5.8169G	5.83319G	32.714M	5.808508G	5.841222G	500k	1
16.32M	5.81687G	5.83319G	30.615M	5.809618G	5.840232G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5180MHz

17/03/2020

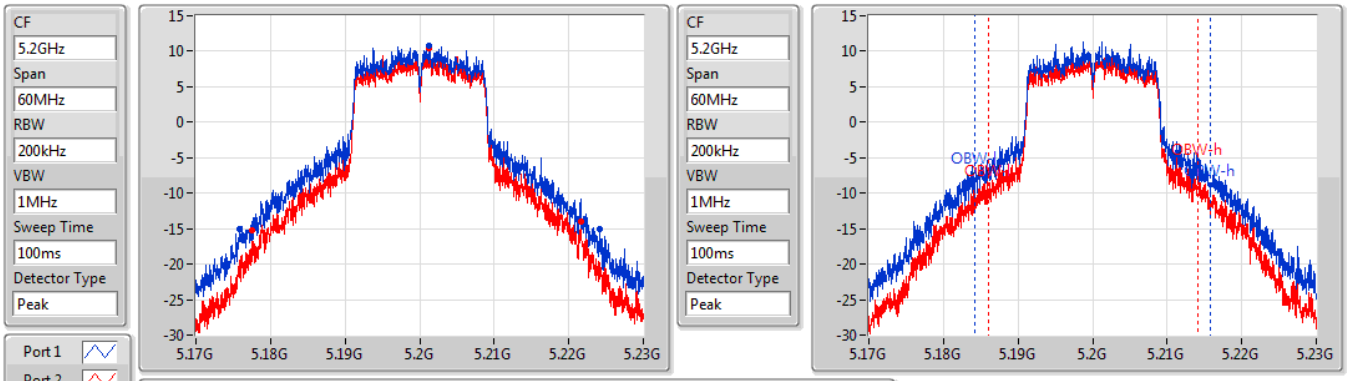


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.24M	5.16311G	5.19635G	18.981M	5.170615G	5.189595G	Inf	1
33.9M	5.16302G	5.19692G	20.06M	5.170135G	5.190195G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5200MHz

17/03/2020

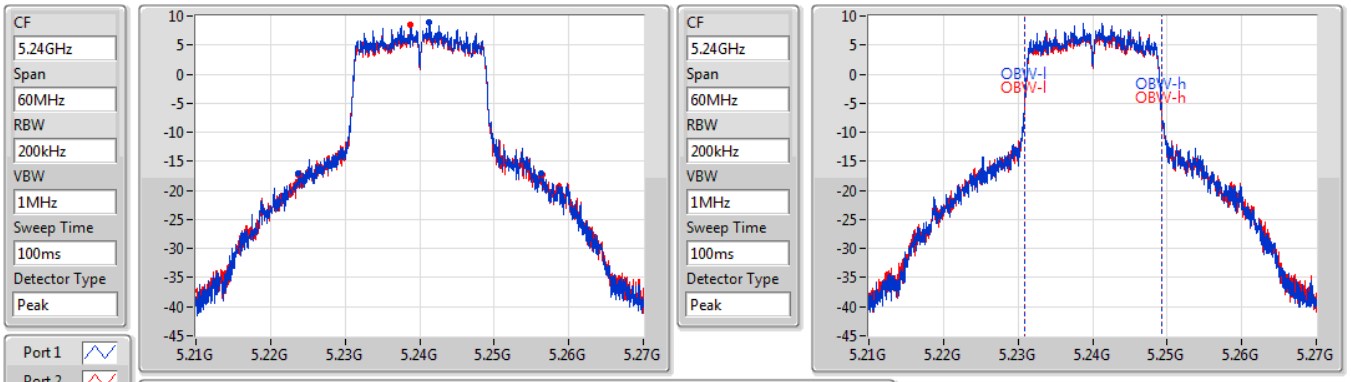


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
48.27M	5.17585G	5.22412G	31.634M	5.184138G	5.215772G	Inf	1
44.01M	5.17759G	5.2216G	28.006M	5.186117G	5.214123G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5240MHz

17/03/2020

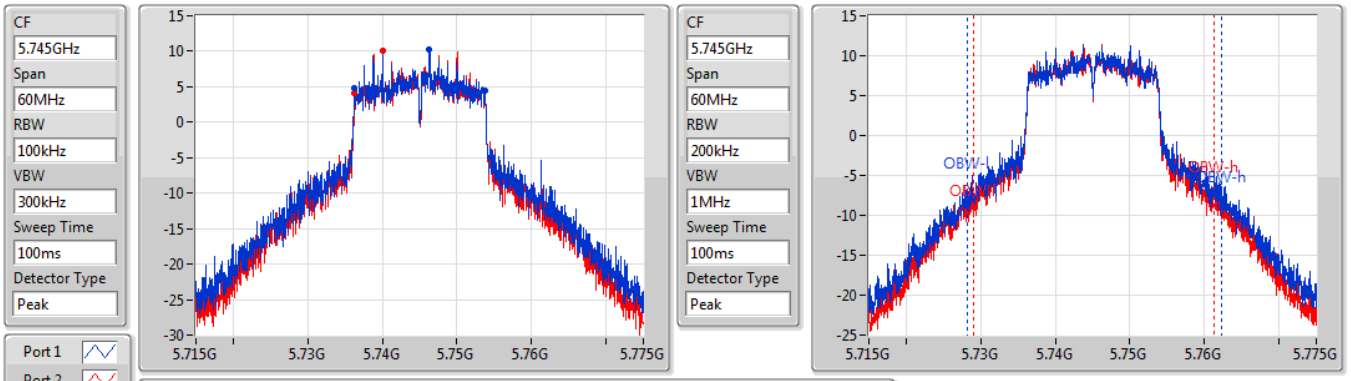


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.55M	5.22374G	5.25629G	18.261M	5.230975G	5.249235G	Inf	1
32.73M	5.22365G	5.25638G	18.411M	5.230915G	5.249325G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5745MHz

17/03/2020

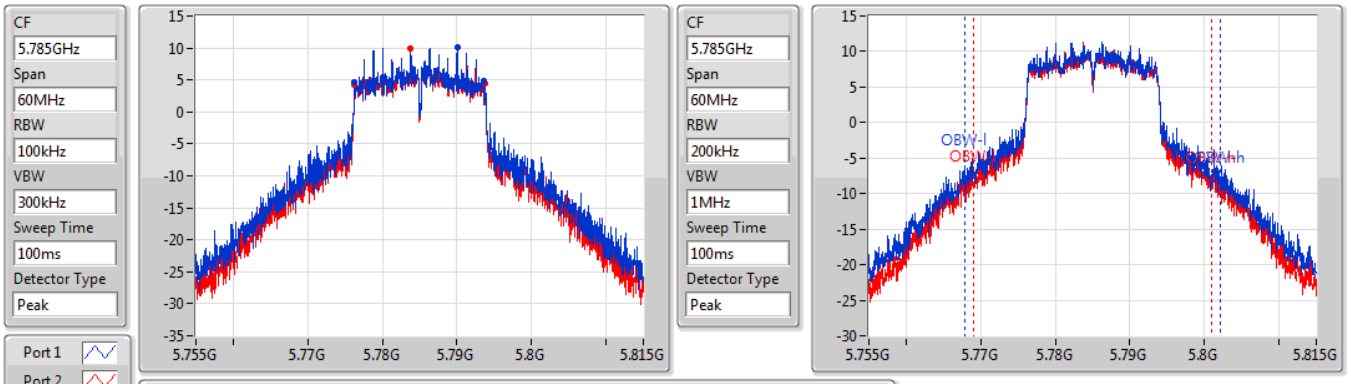


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.52M	5.73627G	5.75379G	34.123M	5.728178G	5.762301G	500k	1
17.49M	5.7363G	5.75379G	32.264M	5.728988G	5.761252G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5785MHz

17/03/2020

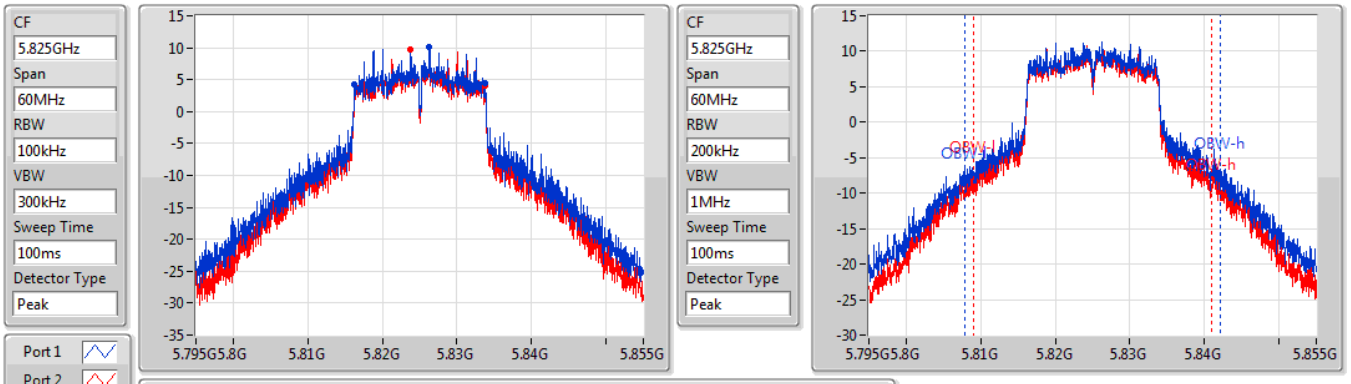


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.28M	5.77627G	5.79355G	34.273M	5.767879G	5.802151G	500k	1
17.55M	5.77627G	5.79382G	31.964M	5.769048G	5.801012G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5825MHz

17/03/2020

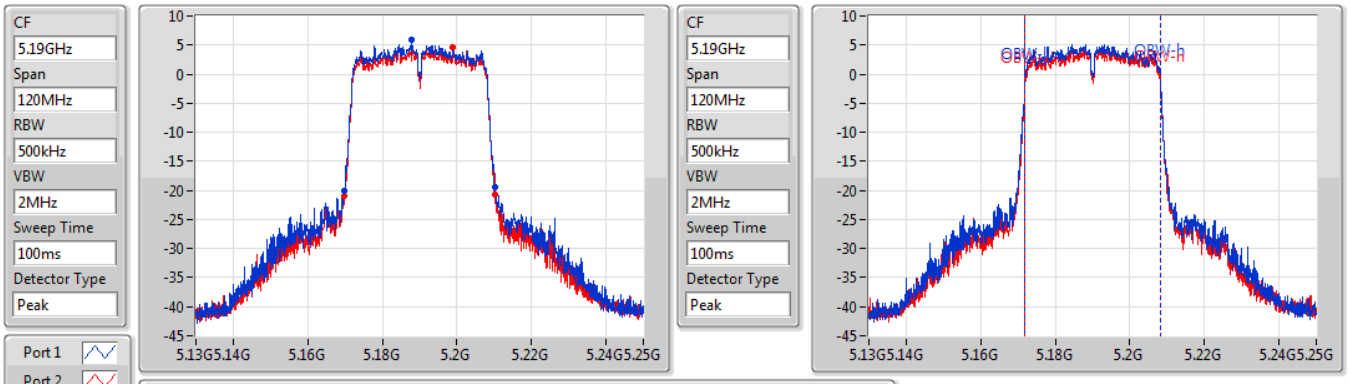


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.52M	5.8163G	5.83382G	34.213M	5.807939G	5.842151G	500k	1
17.52M	5.8163G	5.83382G	31.904M	5.809078G	5.840982G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5190MHz

17/03/2020

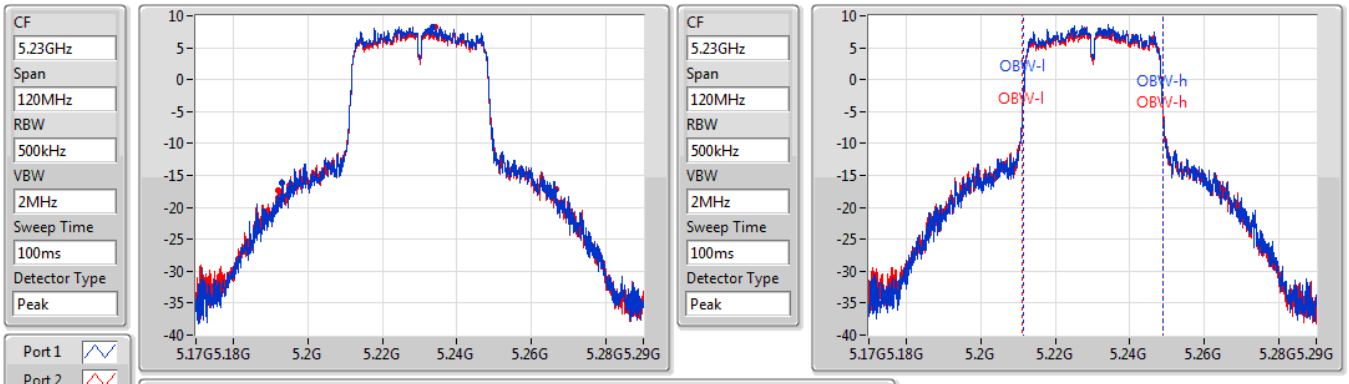


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.32M	5.16984G	5.21016G	36.162M	5.171949G	5.208111G	Inf	1
40.5M	5.16972G	5.21022G	36.222M	5.171949G	5.208171G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5230MHz

17/03/2020

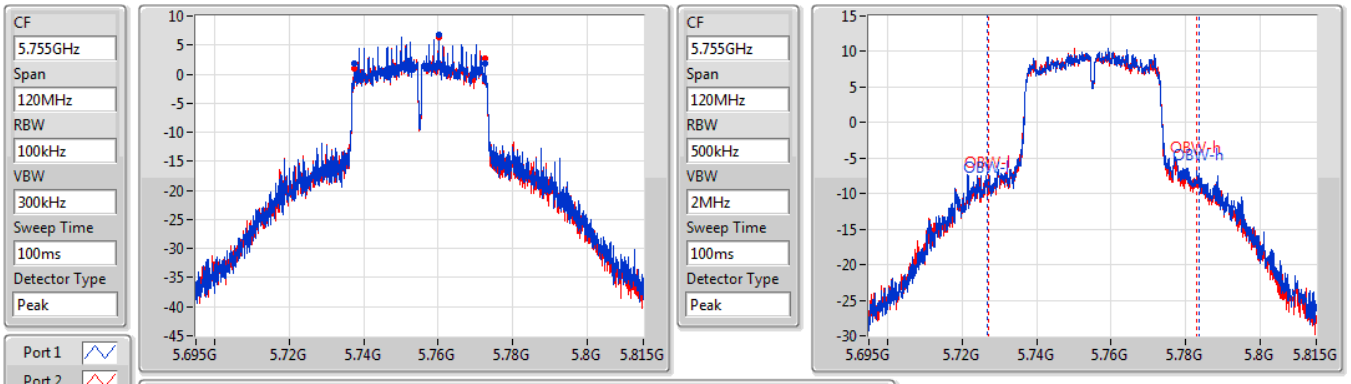


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
73.32M	5.1931G	5.26642G	37.421M	5.211409G	5.248831G	Inf	1
74.4M	5.19214G	5.26654G	38.021M	5.21099G	5.24901G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5755MHz

17/03/2020

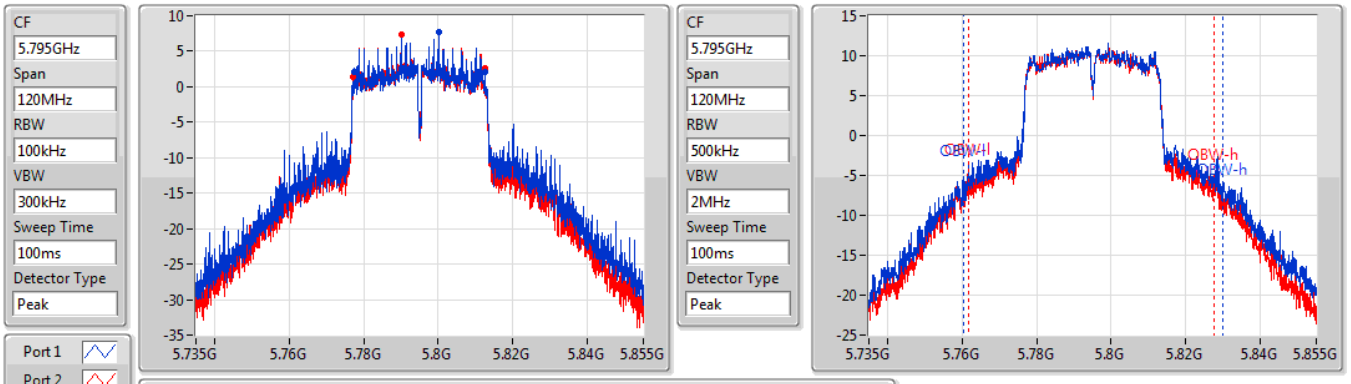


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.1M	5.73754G	5.77264G	56.612M	5.726874G	5.783486G	500k	1
35.04M	5.73754G	5.77258G	55.832M	5.726994G	5.782826G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5795MHz

17/03/2020

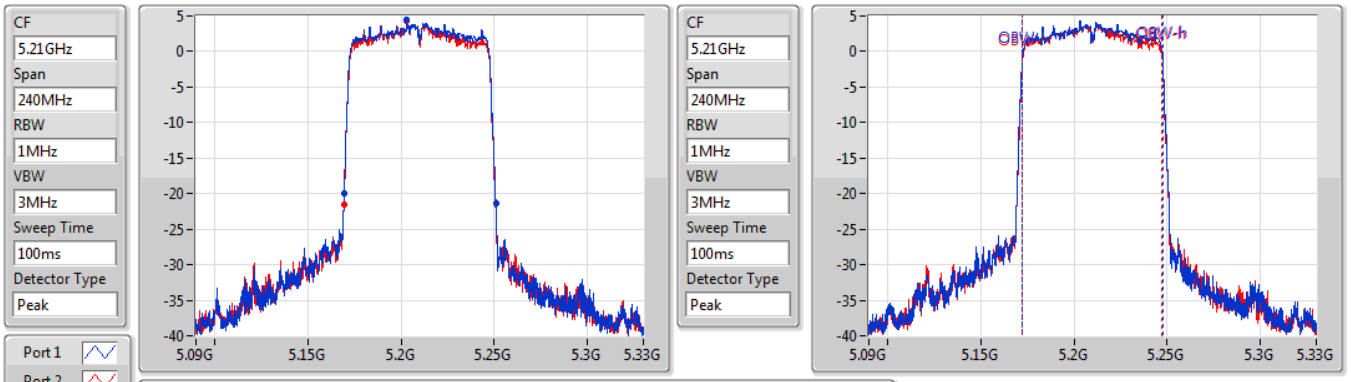


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.1M	5.77754G	5.81264G	69.625M	5.760337G	5.829963G	500k	1
35.4M	5.77724G	5.81264G	65.967M	5.761657G	5.827624G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5210MHz

17/03/2020

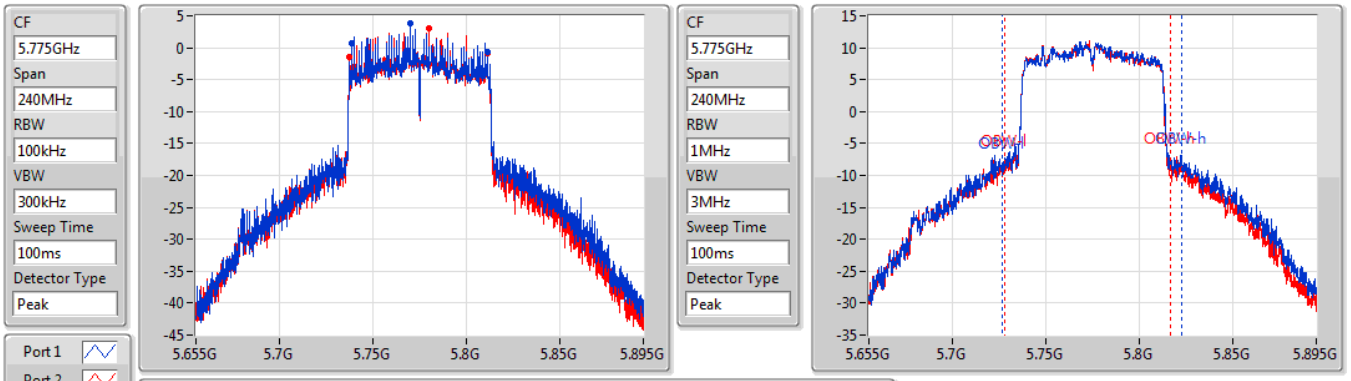


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.48M	5.16944G	5.25092G	75.202M	5.172339G	5.247541G	Inf	1
81.48M	5.16944G	5.25092G	75.082M	5.172339G	5.247421G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5775MHz

17/03/2020



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
72.6M	5.73876G	5.81136G	96.072M	5.726784G	5.822856G	500k	1
73.8M	5.73756G	5.81136G	88.876M	5.728103G	5.816979G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	23.55	0.22646	25.55	0.35892
802.11ac VHT20_Nss1,(MCS0)_2TX	23.19	0.20845	25.19	0.33037
802.11ac VHT40_Nss1,(MCS0)_2TX	20.69	0.11722	22.69	0.18578
802.11ac VHT80_Nss1,(MCS0)_2TX	15.74	0.03750	17.74	0.05943
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	23.92	0.24660	25.92	0.39084
802.11ac VHT20_Nss1,(MCS0)_2TX	23.59	0.22856	25.59	0.36224
802.11ac VHT40_Nss1,(MCS0)_2TX	24.27	0.26730	26.27	0.42364
802.11ac VHT80_Nss1,(MCS0)_2TX	21.59	0.14421	23.59	0.22856

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	2.00	19.06	18.73	21.91	30.00	23.91	36.00
5200MHz	Pass	2.00	20.93	20.11	23.55	30.00	25.55	36.00
5240MHz	Pass	2.00	18.48	18.11	21.31	30.00	23.31	36.00
5745MHz	Pass	2.00	20.83	20.88	23.87	30.00	25.87	36.00
5785MHz	Pass	2.00	20.99	20.82	23.92	30.00	25.92	36.00
5825MHz	Pass	2.00	20.92	20.54	23.74	30.00	25.74	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	2.00	18.49	18.18	21.35	30.00	23.35	36.00
5200MHz	Pass	2.00	20.66	19.63	23.19	30.00	25.19	36.00
5240MHz	Pass	2.00	17.97	17.66	20.83	30.00	22.83	36.00
5745MHz	Pass	2.00	20.56	20.59	23.59	30.00	25.59	36.00
5785MHz	Pass	2.00	20.72	20.42	23.58	30.00	25.58	36.00
5825MHz	Pass	2.00	20.76	20.29	23.54	30.00	25.54	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	2.00	15.35	13.93	17.71	30.00	19.71	36.00
5230MHz	Pass	2.00	17.87	17.49	20.69	30.00	22.69	36.00
5755MHz	Pass	2.00	19.39	19.38	22.40	30.00	24.40	36.00
5795MHz	Pass	2.00	22.04	20.32	24.27	30.00	26.27	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	2.00	12.84	12.61	15.74	30.00	17.74	36.00
5775MHz	Pass	2.00	18.56	18.59	21.59	30.00	23.59	36.00

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

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	11.42	16.43
802.11ac VHT20_Nss1,(MCS0)_2TX	10.75	15.76
802.11ac VHT40_Nss1,(MCS0)_2TX	5.29	10.30
802.11ac VHT80_Nss1,(MCS0)_2TX	-2.55	2.46
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	10.52	15.53
802.11ac VHT20_Nss1,(MCS0)_2TX	9.70	14.71
802.11ac VHT40_Nss1,(MCS0)_2TX	6.19	11.20
802.11ac VHT80_Nss1,(MCS0)_2TX	2.10	7.11

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

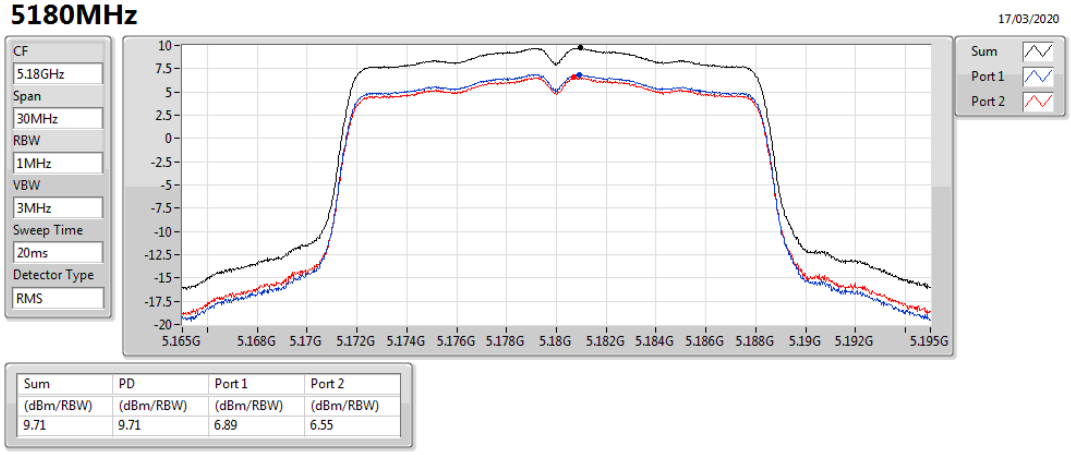
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.01	6.89	6.55	9.71	17.00	14.72	23.00
5200MHz	Pass	5.01	8.81	8.03	11.42	17.00	16.43	23.00
5240MHz	Pass	5.01	6.45	6.16	9.29	17.00	14.30	23.00
5745MHz	Pass	5.01	7.50	7.38	10.38	30.00	15.39	36.00
5785MHz	Pass	5.01	7.52	7.50	10.52	30.00	15.53	36.00
5825MHz	Pass	5.01	7.41	7.05	10.19	30.00	15.20	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.01	6.06	5.74	8.89	17.00	13.90	23.00
5200MHz	Pass	5.01	8.21	7.22	10.75	17.00	15.76	23.00
5240MHz	Pass	5.01	5.70	5.38	8.52	17.00	13.53	23.00
5745MHz	Pass	5.01	6.70	6.75	9.68	30.00	14.69	36.00
5785MHz	Pass	5.01	6.82	6.56	9.70	30.00	14.71	36.00
5825MHz	Pass	5.01	6.90	6.47	9.70	30.00	14.71	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.01	-1.20	-1.55	1.56	17.00	6.57	23.00
5230MHz	Pass	5.01	2.49	2.10	5.29	17.00	10.30	23.00
5755MHz	Pass	5.01	2.47	2.55	5.50	30.00	10.51	36.00
5795MHz	Pass	5.01	3.23	3.26	6.19	30.00	11.20	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.01	-5.47	-5.61	-2.55	17.00	2.46	23.00
5775MHz	Pass	5.01	-0.87	-0.96	2.10	30.00	7.11	36.00

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

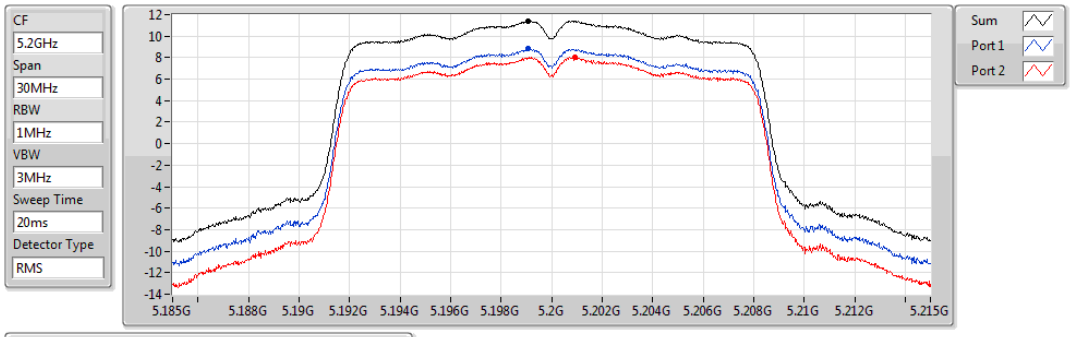
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.71	9.71	6.89	6.55

802.11a_Nss1,(6Mbps)_2TX PSD

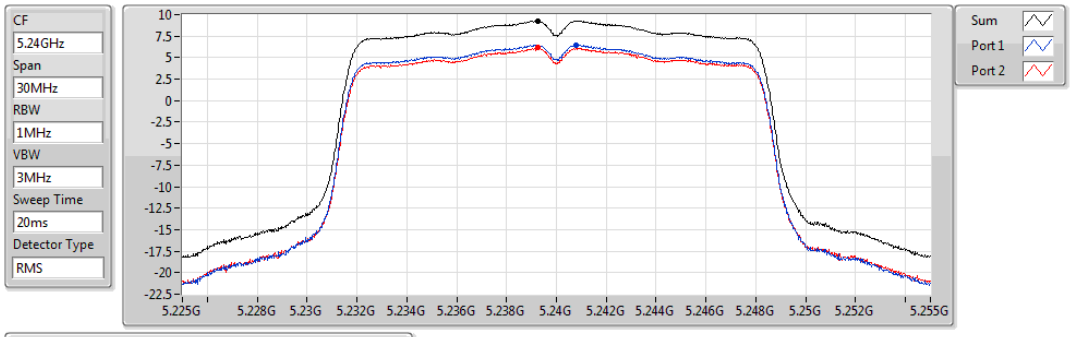
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.42	11.42	8.81	8.03

802.11a_Nss1,(6Mbps)_2TX PSD

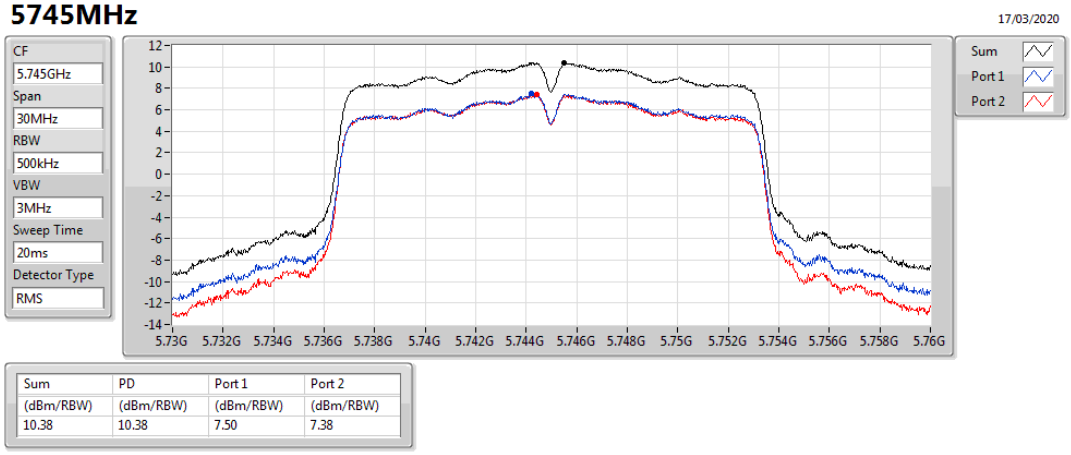
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.29	9.29	6.45	6.16

802.11a_Nss1,(6Mbps)_2TX PSD

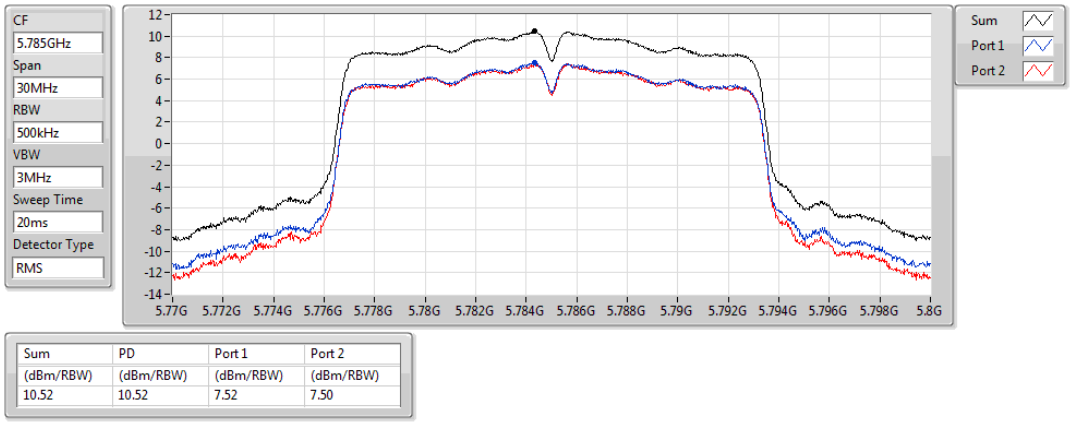
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.38	10.38	7.50	7.38

802.11a_Nss1,(6Mbps)_2TX PSD

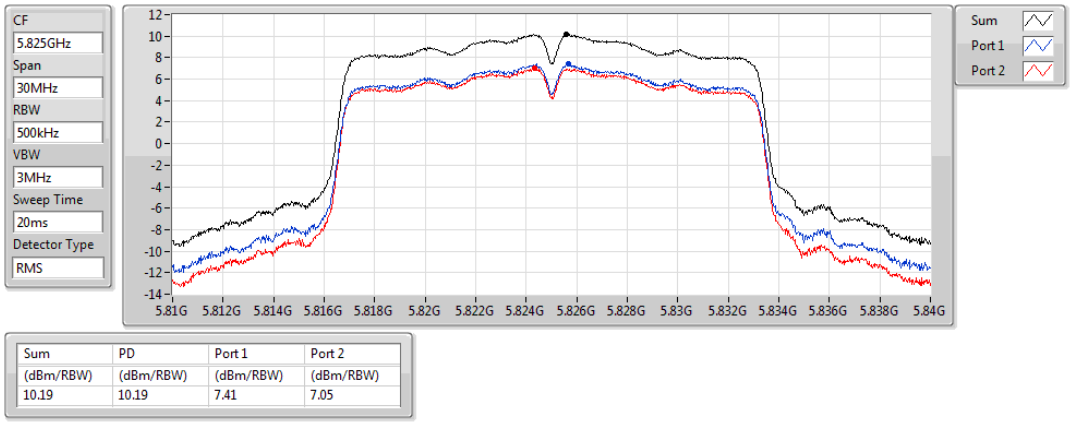
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.52	10.52	7.52	7.50

802.11a_Nss1,(6Mbps)_2TX PSD

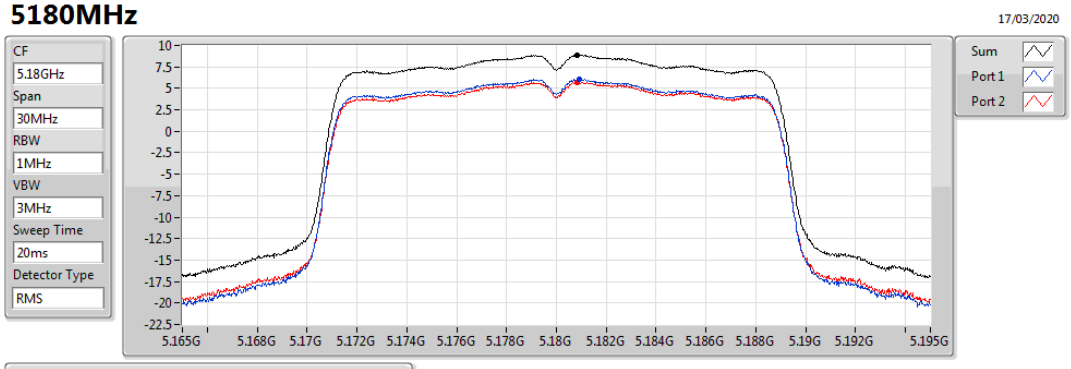
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.19	10.19	7.41	7.05

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

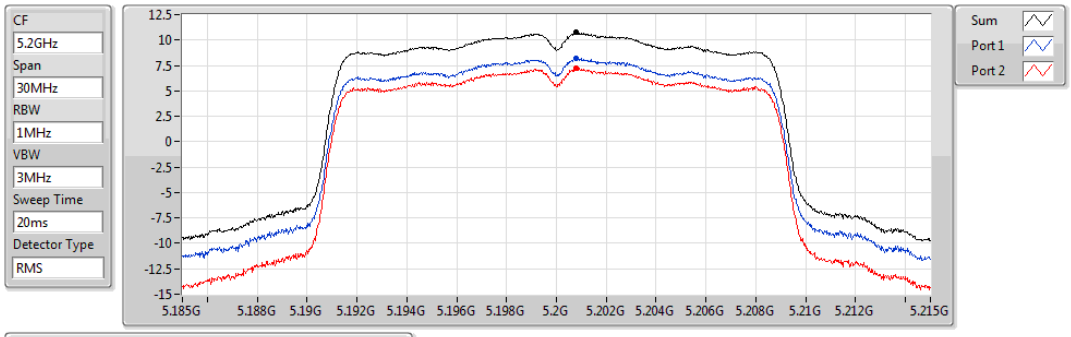
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.89	8.89	6.06	5.74

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

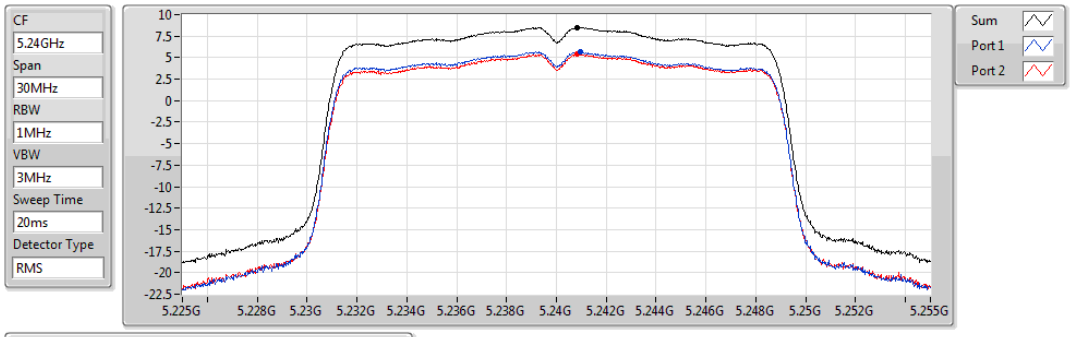
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.75	10.75	8.21	7.22

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

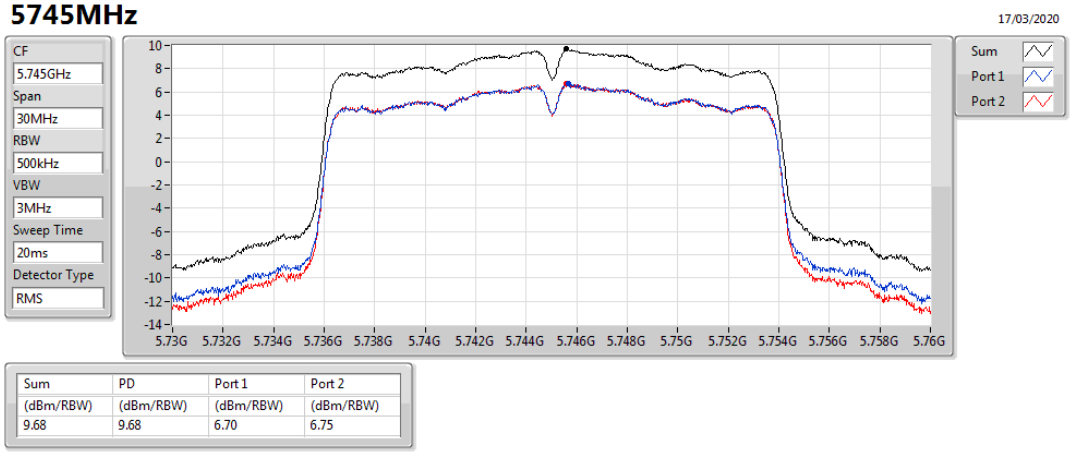
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.52	8.52	5.70	5.38

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

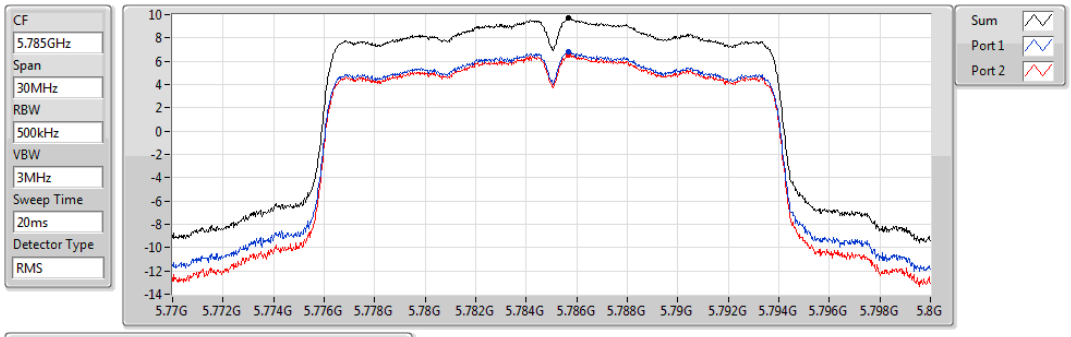
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.68	9.68	6.70	6.75

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

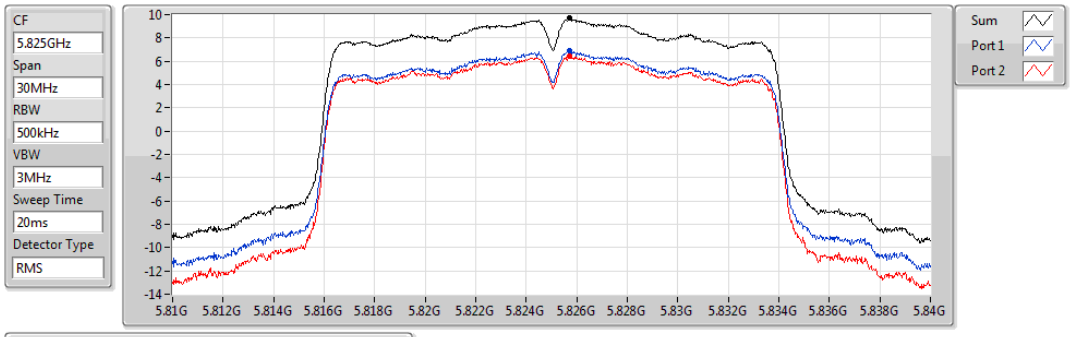
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.70	9.70	6.82	6.56

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

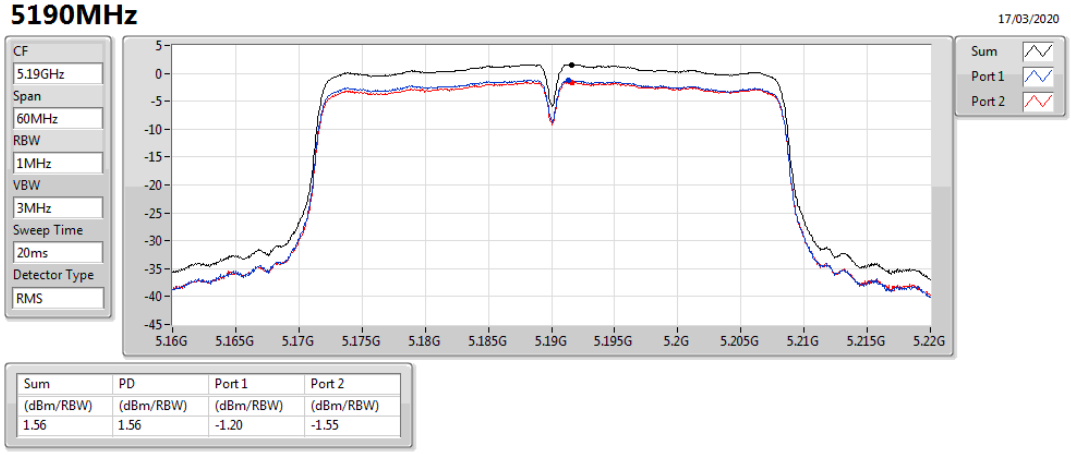
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.70	9.70	6.90	6.47

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

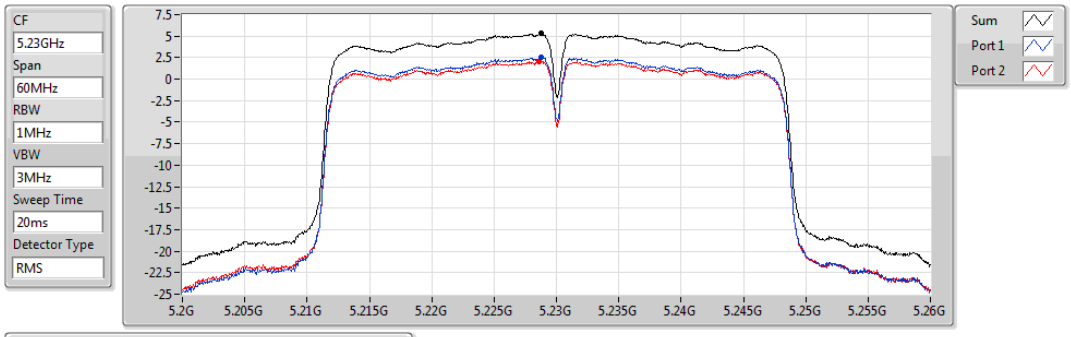
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.56	1.56	-1.20	-1.55

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

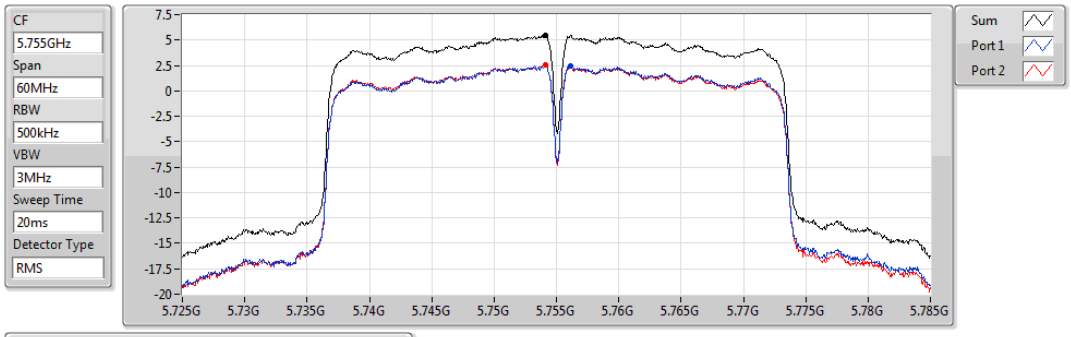
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.29	5.29	2.49	2.10

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

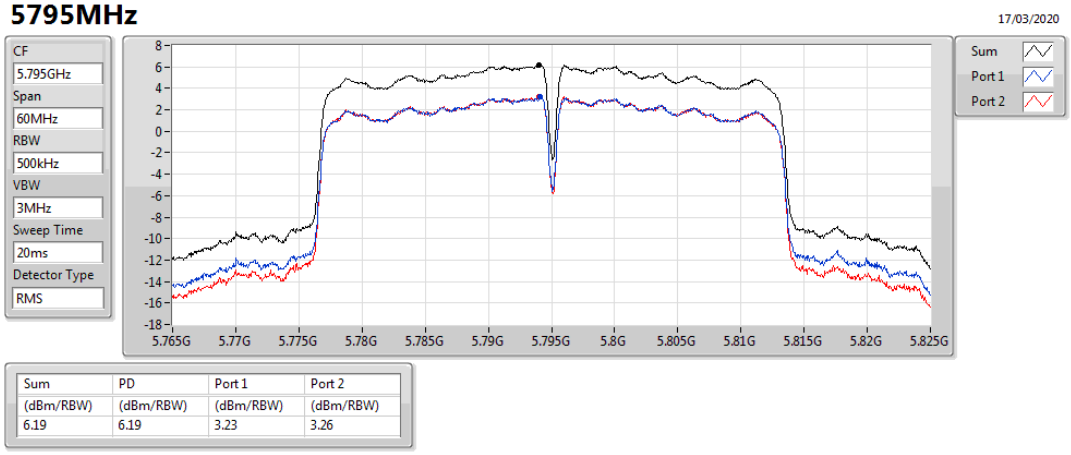
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.50	5.50	2.47	2.55

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

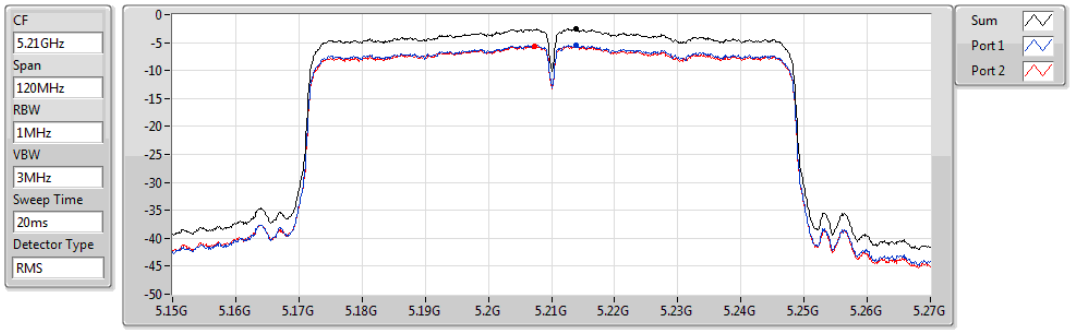
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.19	6.19	3.23	3.26

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

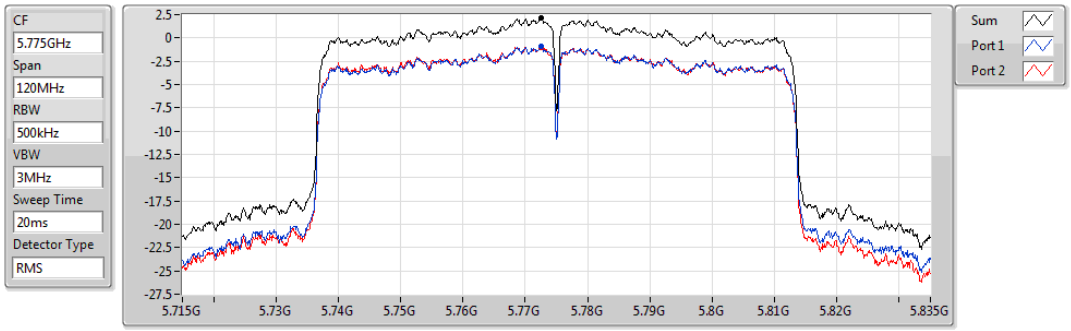
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.55	-2.55	-5.47	-5.61

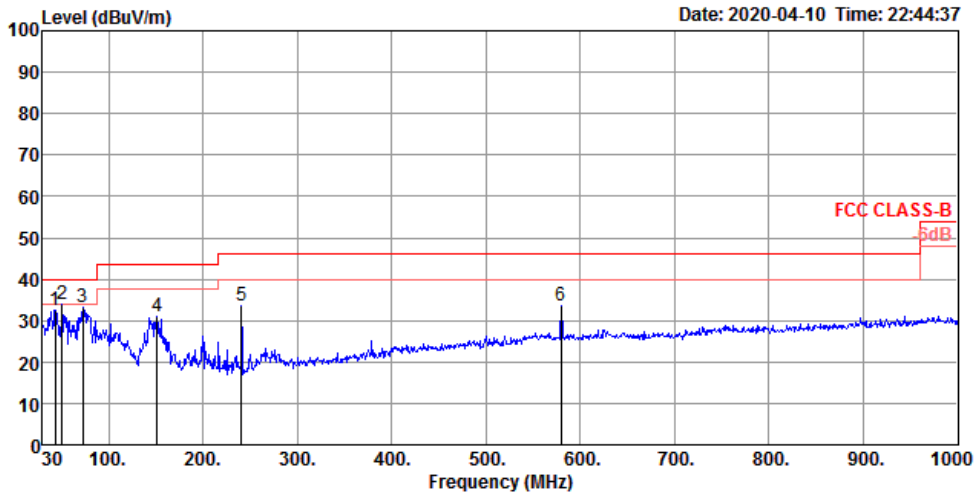
802.11ac VHT80_Nss1,(MCS0)_2TX PSD

5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.10	2.10	-0.87	-0.96

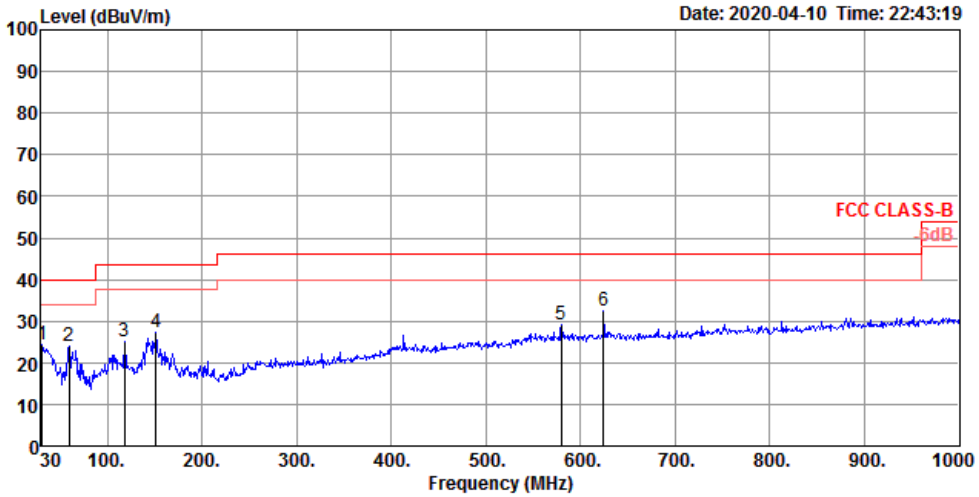
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	Normal Link		



	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	43.58	32.57	40.00	-7.43	45.66	1.26	17.22	31.57	100	232	Peak	VERTICAL
2	50.37	33.95	40.00	-6.05	50.16	1.19	14.34	31.74	100	302	Peak	VERTICAL
3	72.68	33.18	40.00	-6.82	51.23	1.30	12.53	31.88	200	2	Peak	VERTICAL
4	151.25	30.94	43.50	-12.56	44.67	1.80	16.41	31.94	100	144	Peak	VERTICAL
5	240.49	33.44	46.00	-12.56	46.51	2.17	16.77	32.01	300	145	Peak	VERTICAL
6	579.99	33.61	46.00	-12.39	38.51	3.42	24.00	32.32	100	221	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	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	30.97	24.31	40.00	-15.69	31.05	1.22	23.60	31.56	300	27	Peak	HORIZONTAL
2	59.10	23.91	40.00	-16.09	41.74	1.18	12.83	31.84	100	34	Peak	HORIZONTAL
3	118.27	25.20	43.50	-18.30	37.07	1.68	18.22	31.77	100	347	Peak	HORIZONTAL
4	151.25	27.30	43.50	-16.20	41.03	1.80	16.41	31.94	200	49	Peak	HORIZONTAL
5	579.99	29.17	46.00	-16.83	34.07	3.42	24.00	32.32	300	0	Peak	HORIZONTAL
6	624.61	32.46	46.00	-13.54	36.94	3.55	24.40	32.43	200	359	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.)

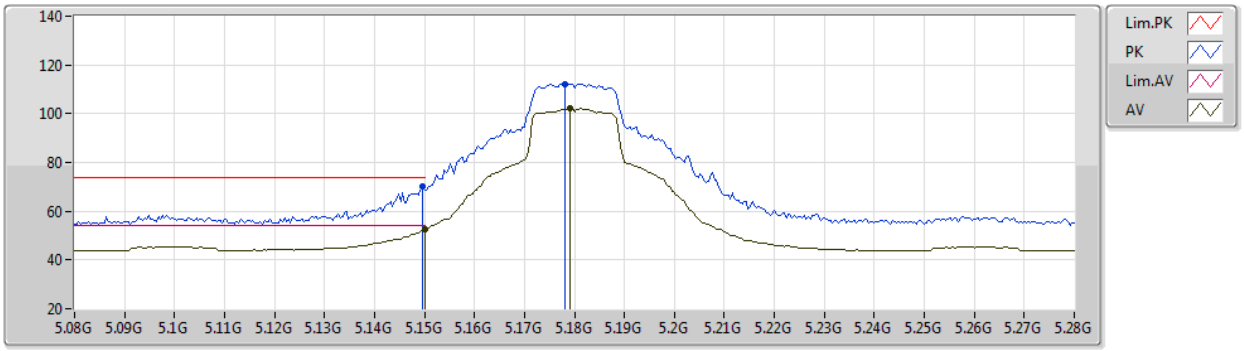
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	AV	5.15G	53.95	54.00	-0.05	3	Vertical	340	1.00	-

802.11a_Nss1,(6Mbps)_2TX

14/03/2020

5180MHz_TX



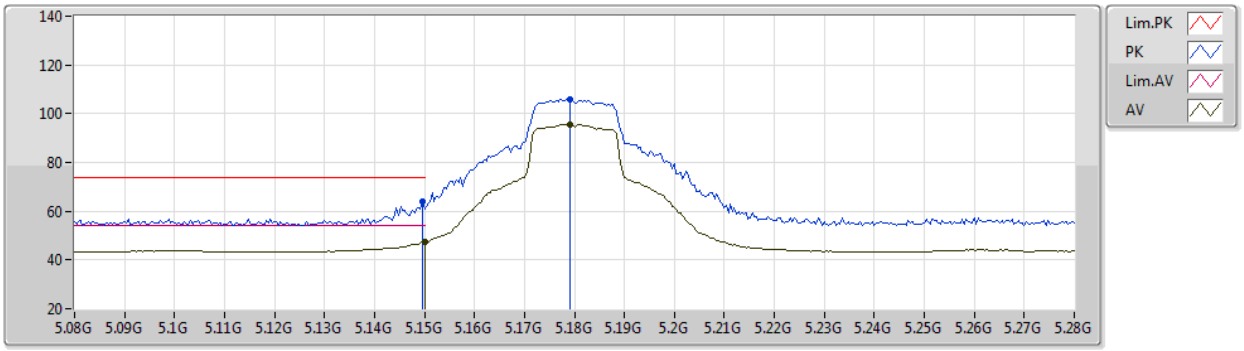
EUT Y_2TX
Setting 25
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1496G	70.34	74.00	-3.66	66.30	3	Vertical	166	2.58	-	32.80	5.87	34.63
AV	5.15G	52.49	54.00	-1.51	48.45	3	Vertical	166	2.58	-	32.80	5.87	34.63
PK	5.178G	112.09	Inf	-Inf	108.04	3	Vertical	166	2.58	-	32.80	5.89	34.64
AV	5.1792G	102.02	Inf	-Inf	97.97	3	Vertical	166	2.58	-	32.80	5.89	34.64

802.11a_Nss1,(6Mbps)_2TX

14/03/2020

5180MHz_TX



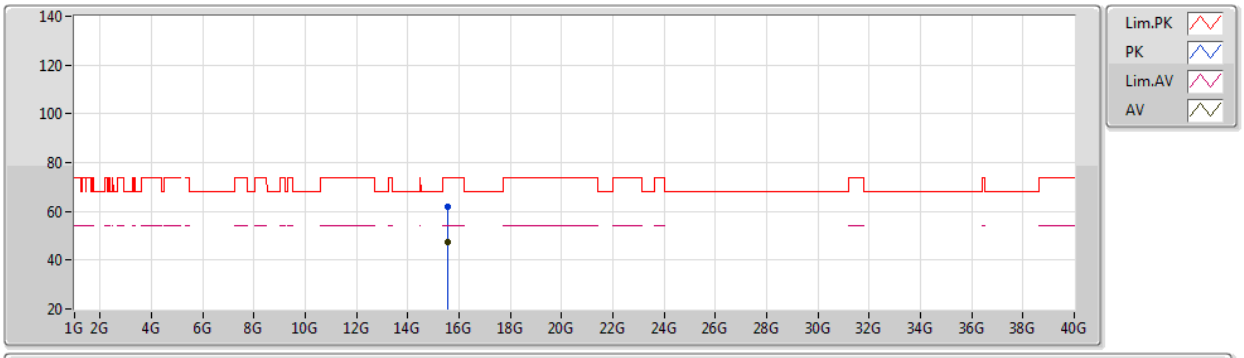
EUT Y_2TX
Setting 25
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1496G	63.73	74.00	-10.27	59.69	3	Horizontal	207	2.97	-	32.80	5.87	34.63
AV	5.15G	47.39	54.00	-6.61	43.35	3	Horizontal	207	2.97	-	32.80	5.87	34.63
PK	5.1792G	105.85	Inf	-Inf	101.80	3	Horizontal	207	2.97	-	32.80	5.89	34.64
AV	5.1792G	95.67	Inf	-Inf	91.62	3	Horizontal	207	2.97	-	32.80	5.89	34.64

802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

14/03/2020



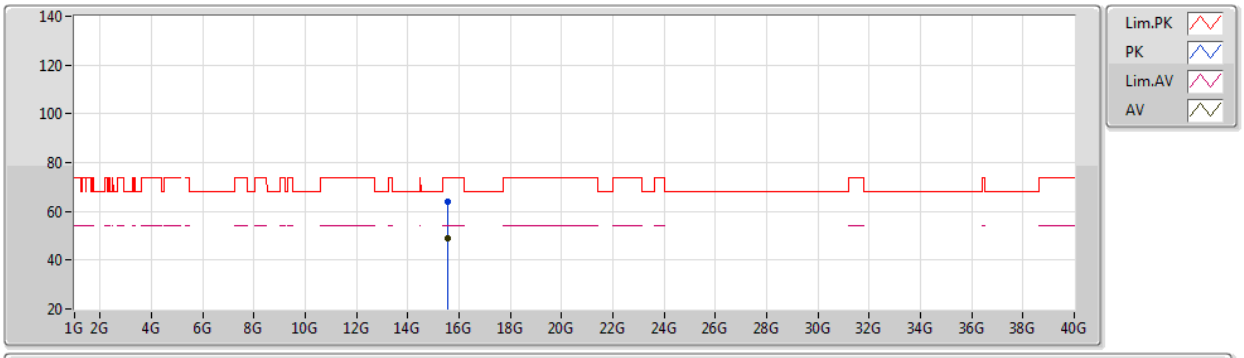
EUT Y_2TX
Setting 25
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.54372G	61.96	74.00	-12.04	48.18	3	Vertical	164	1.91	-	38.77	9.79	34.78
AV	15.53946G	47.26	54.00	-6.74	33.48	3	Vertical	164	1.91	-	38.77	9.79	34.78

802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

14/03/2020



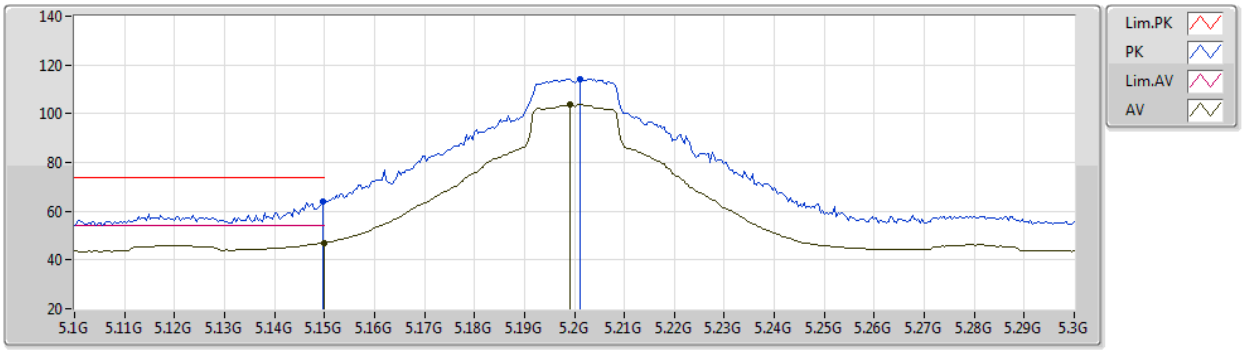
EUT Y_2TX
Setting 25
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.53466G	63.72	74.00	-10.28	49.93	3	Horizontal	140	1.80	-	38.77	9.79	34.77
AV	15.53958G	48.98	54.00	-5.02	35.20	3	Horizontal	140	1.80	-	38.77	9.79	34.78

802.11a_Nss1,(6Mbps)_2TX

14/03/2020

5200MHz_TX



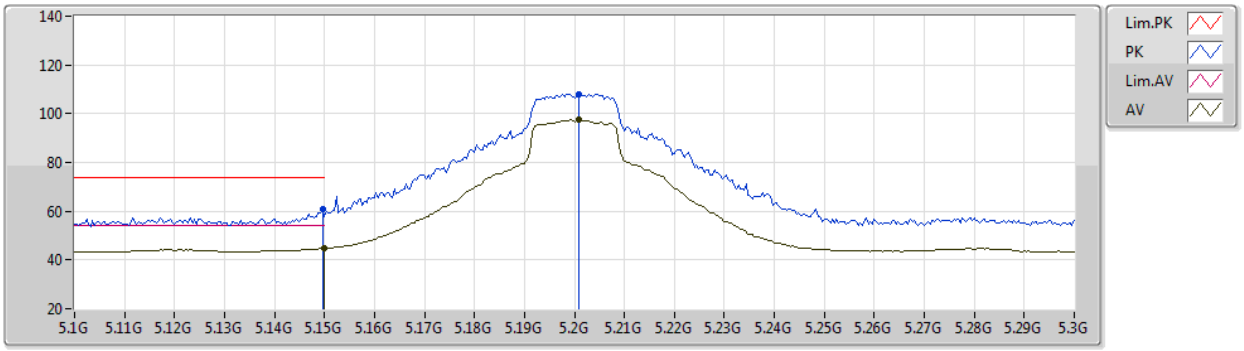
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1496G	64.17	74.00	-9.83	60.13	3	Vertical	167	2.55	-	32.80	5.87	34.63
AV	5.15G	47.03	54.00	-6.97	42.99	3	Vertical	167	2.55	-	32.80	5.87	34.63
PK	5.2012G	114.37	Inf	-Inf	110.32	3	Vertical	167	2.55	-	32.80	5.90	34.65
AV	5.1992G	103.73	Inf	-Inf	99.68	3	Vertical	167	2.55	-	32.80	5.90	34.65

802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

14/03/2020



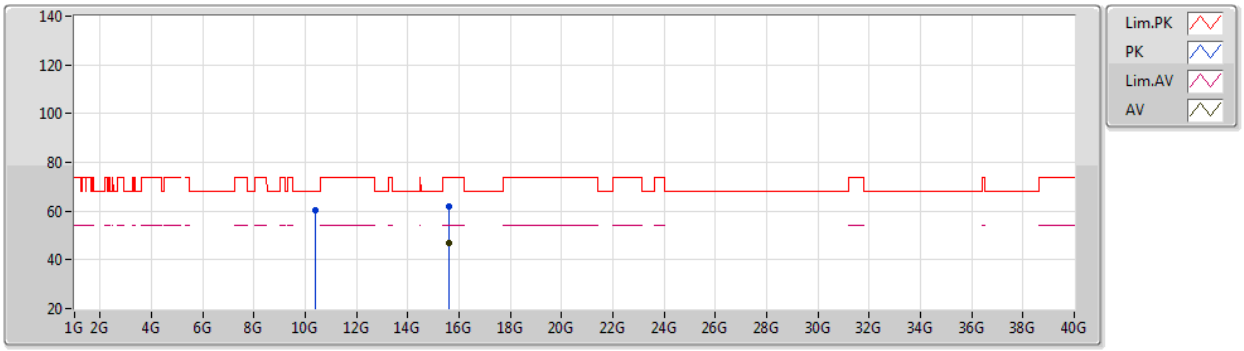
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1496G	61.03	74.00	-12.97	56.99	3	Horizontal	215	3.00	-	32.80	5.87	34.63
AV	5.15G	44.78	54.00	-9.22	40.74	3	Horizontal	215	3.00	-	32.80	5.87	34.63
PK	5.2008G	108.08	Inf	-Inf	104.03	3	Horizontal	215	3.00	-	32.80	5.90	34.65
AV	5.2008G	97.42	Inf	-Inf	93.37	3	Horizontal	215	3.00	-	32.80	5.90	34.65

802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

14/03/2020



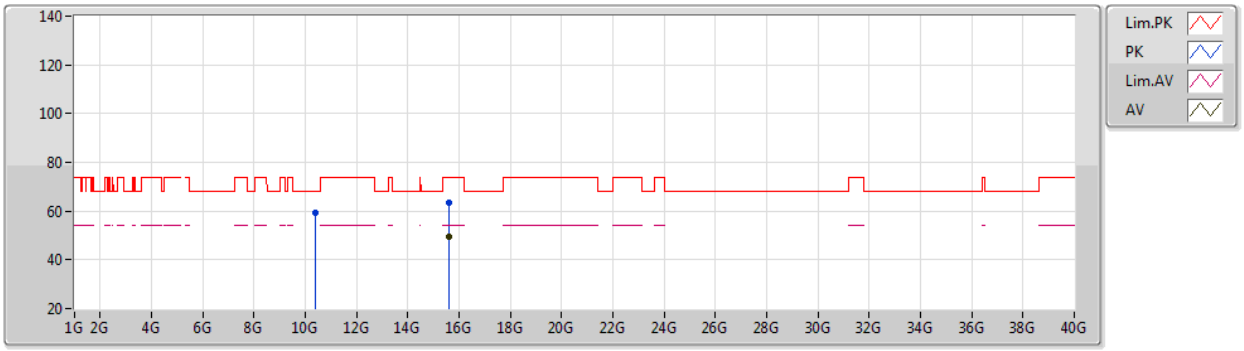
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.3985G	60.44	68.20	-7.76	48.64	3	Vertical	158	2.15	-	38.22	8.92	35.34
PK	15.60408G	61.64	74.00	-12.36	47.99	3	Vertical	48	2.12	-	38.72	9.78	34.85
AV	15.60252G	47.14	54.00	-6.86	33.49	3	Vertical	48	2.12	-	38.72	9.78	34.85

802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

14/03/2020



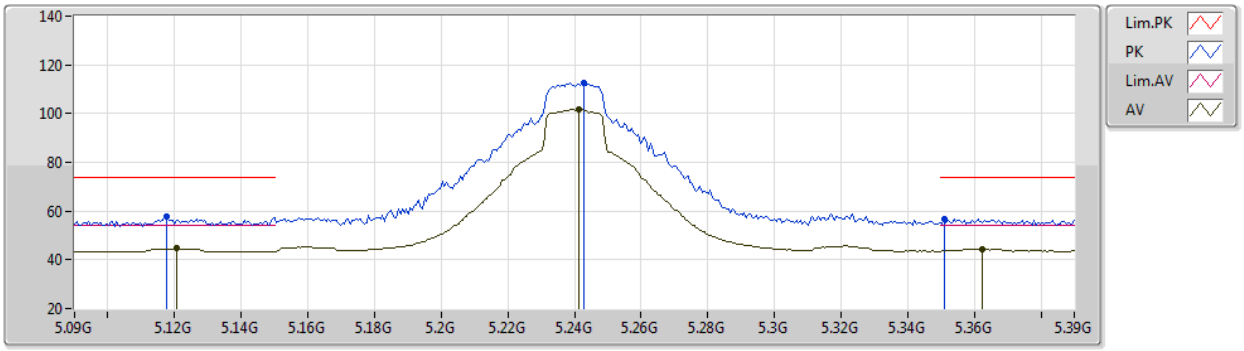
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.39874G	59.24	68.20	-8.96	47.44	3	Horizontal	98	1.80	-	38.22	8.92	35.34
PK	15.60366G	63.47	74.00	-10.53	49.82	3	Horizontal	148	1.81	-	38.72	9.78	34.85
AV	15.60234G	49.26	54.00	-4.74	35.61	3	Horizontal	148	1.81	-	38.72	9.78	34.85

802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

14/03/2020



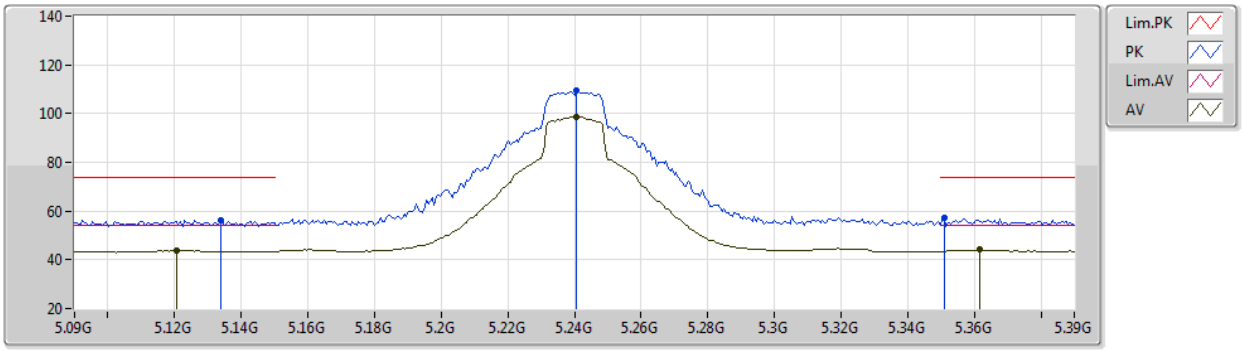
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1176G	57.54	74.00	-16.46	53.51	3	Vertical	185	1.07	-	32.80	5.86	34.63
AV	5.1206G	44.58	54.00	-9.42	40.55	3	Vertical	185	1.07	-	32.80	5.86	34.63
PK	5.243G	112.41	Inf	-Inf	108.13	3	Vertical	185	1.07	-	32.93	6.02	34.67
AV	5.2412G	101.93	Inf	-Inf	97.67	3	Vertical	185	1.07	-	32.92	6.01	34.67
PK	5.351G	56.81	74.00	-17.19	52.08	3	Vertical	185	1.07	-	33.15	6.29	34.71
AV	5.3624G	44.34	54.00	-9.66	39.58	3	Vertical	185	1.07	-	33.16	6.31	34.71

802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

14/03/2020



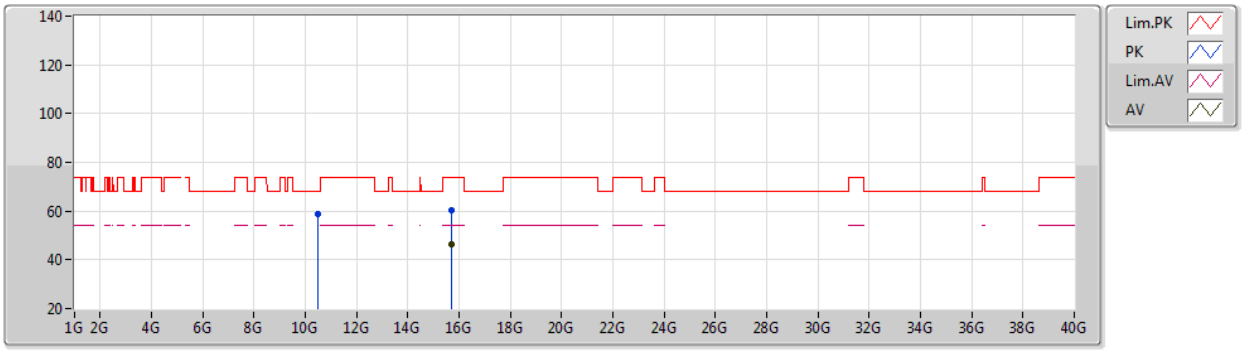
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1338G	56.38	74.00	-17.62	52.34	3	Horizontal	21	2.93	-	32.80	5.87	34.63
AV	5.1206G	43.68	54.00	-10.32	39.65	3	Horizontal	21	2.93	-	32.80	5.86	34.63
PK	5.2406G	109.32	Inf	-Inf	105.06	3	Horizontal	21	2.93	-	32.92	6.01	34.67
AV	5.2406G	98.55	Inf	-Inf	94.29	3	Horizontal	21	2.93	-	32.92	6.01	34.67
PK	5.351G	57.11	74.00	-16.89	52.38	3	Horizontal	21	2.93	-	33.15	6.29	34.71
AV	5.3618G	44.06	54.00	-9.94	39.30	3	Horizontal	21	2.93	-	33.16	6.31	34.71

802.11a_Nss1,(6Mbps)_2TX

14/03/2020

5240MHz_TX



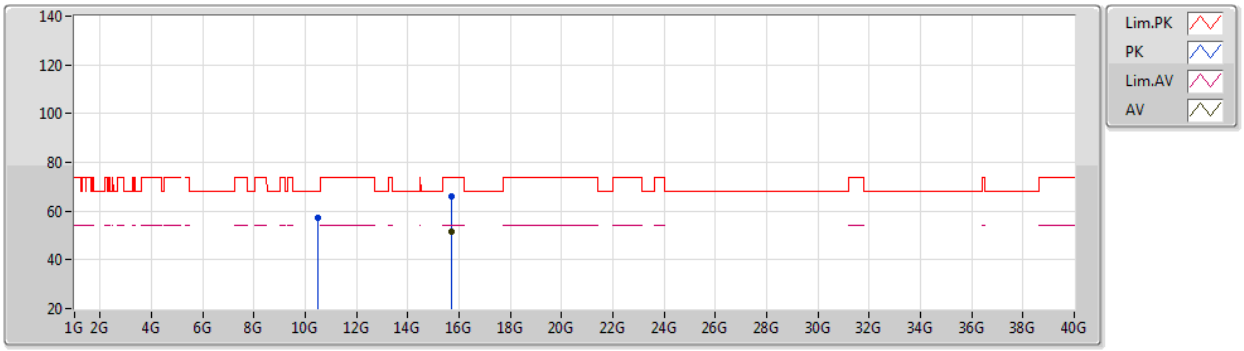
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.4782G	58.70	68.20	-9.50	46.78	3	Vertical	172	2.18	-	38.24	8.95	35.27
PK	15.71466G	60.45	74.00	-13.55	47.04	3	Vertical	103	1.96	-	38.63	9.75	34.97
AV	15.71982G	46.35	54.00	-7.65	32.96	3	Vertical	103	1.96	-	38.62	9.75	34.98

802.11a_Nss1,(6Mbps)_2TX

14/03/2020

5240MHz_TX



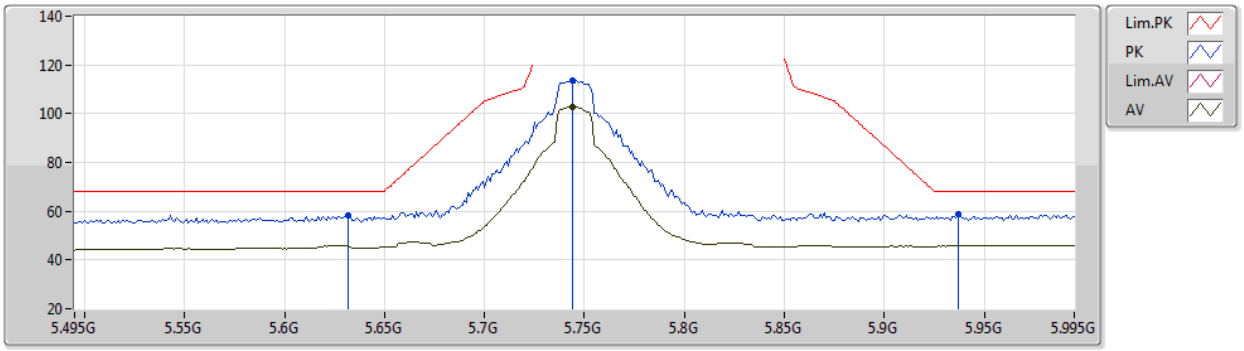
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.47766G	57.43	68.20	-10.77	45.51	3	Horizontal	94	1.80	-	38.24	8.95	35.27
PK	15.7239G	65.95	74.00	-8.05	52.56	3	Horizontal	135	1.79	-	38.62	9.75	34.98
AV	15.71982G	51.47	54.00	-2.53	38.08	3	Horizontal	135	1.79	-	38.62	9.75	34.98

802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

14/03/2020



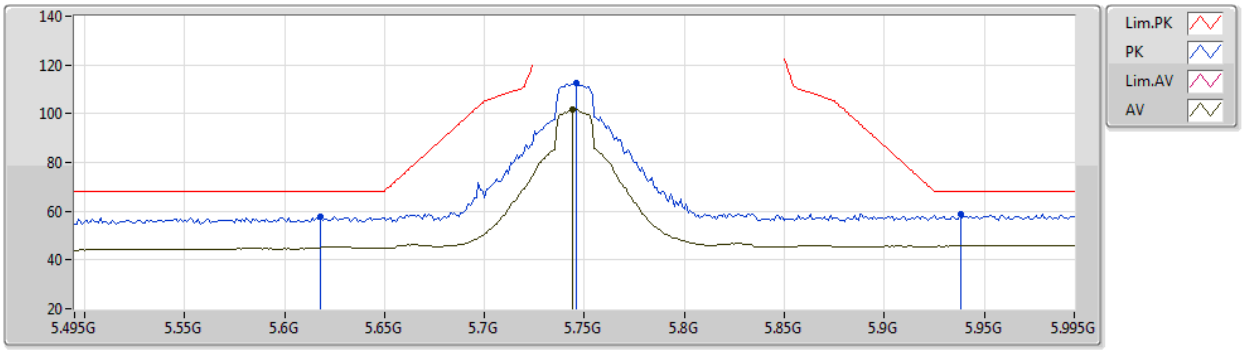
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.632G	58.23	68.20	-9.97	52.62	3	Vertical	90	3.00	-	34.00	6.32	34.71
PK	5.744G	113.82	Inf	-Inf	107.99	3	Vertical	90	3.00	-	34.13	6.37	34.67
AV	5.744G	102.97	Inf	-Inf	97.14	3	Vertical	90	3.00	-	34.13	6.37	34.67
PK	5.937G	58.69	68.20	-9.51	51.84	3	Vertical	90	3.00	-	34.98	6.47	34.60

802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

14/03/2020



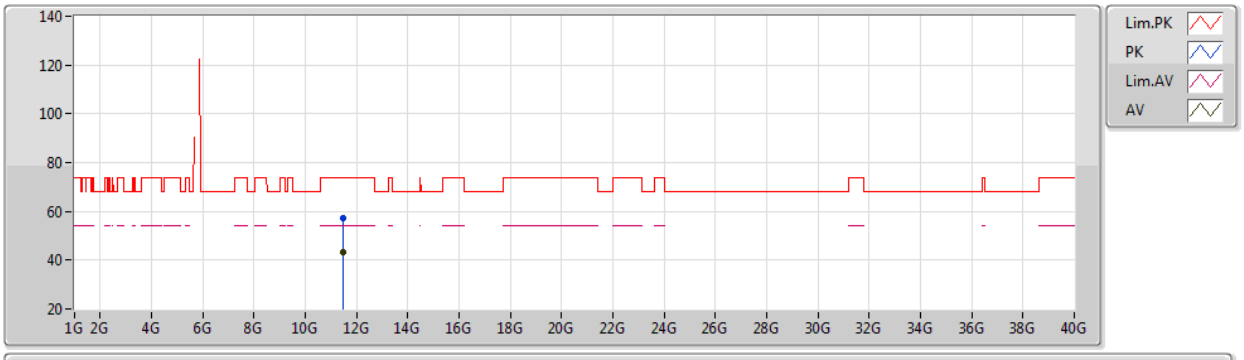
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.618G	57.69	68.20	-10.51	52.09	3	Horizontal	117	2.35	-	34.00	6.31	34.71
PK	5.746G	112.52	Inf	-Inf	106.68	3	Horizontal	117	2.35	-	34.14	6.37	34.67
AV	5.744G	101.67	Inf	-Inf	95.84	3	Horizontal	117	2.35	-	34.13	6.37	34.67
PK	5.938G	59.04	68.20	-9.16	52.17	3	Horizontal	117	2.35	-	34.99	6.47	34.59

802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

14/03/2020



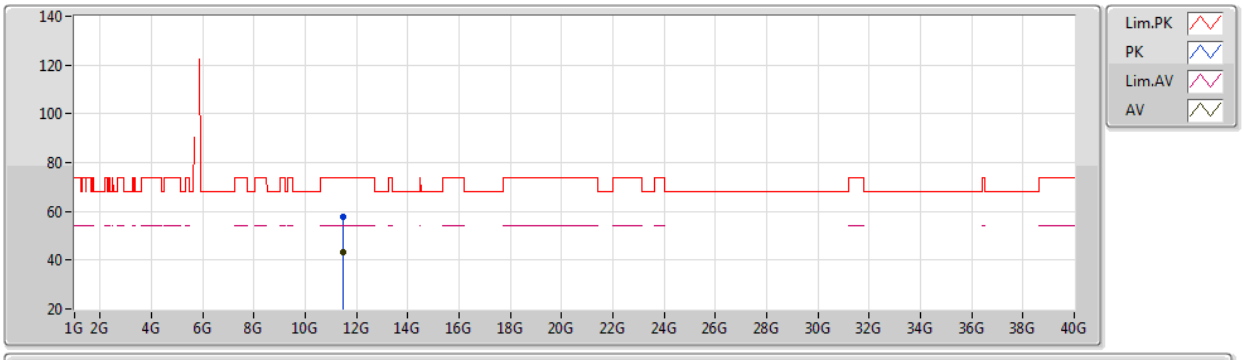
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.49198G	57.12	74.00	-16.88	44.35	3	Vertical	328	1.00	-	38.45	9.25	34.93
AV	11.49126G	43.50	54.00	-10.50	30.73	3	Vertical	328	1.00	-	38.45	9.25	34.93

802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

14/03/2020



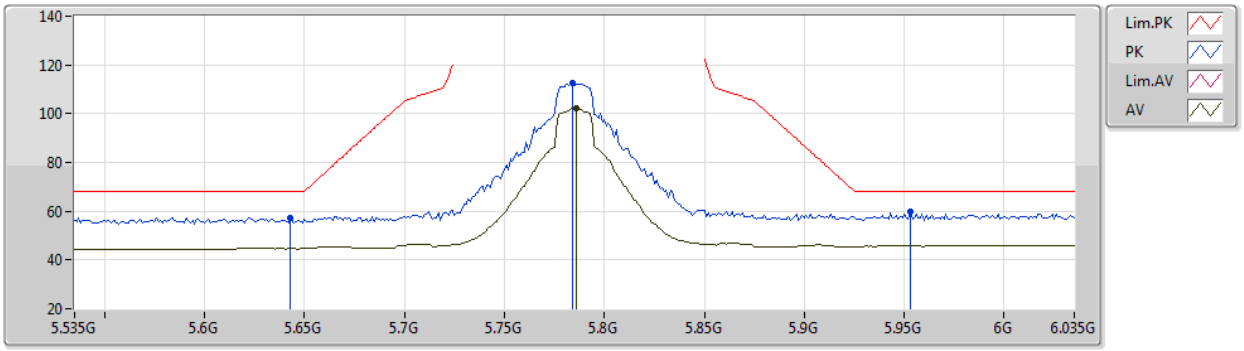
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.48508G	57.77	74.00	-16.23	45.00	3	Horizontal	174	2.17	-	38.45	9.25	34.93
AV	11.49192G	43.49	54.00	-10.51	30.72	3	Horizontal	174	2.17	-	38.45	9.25	34.93

802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

14/03/2020



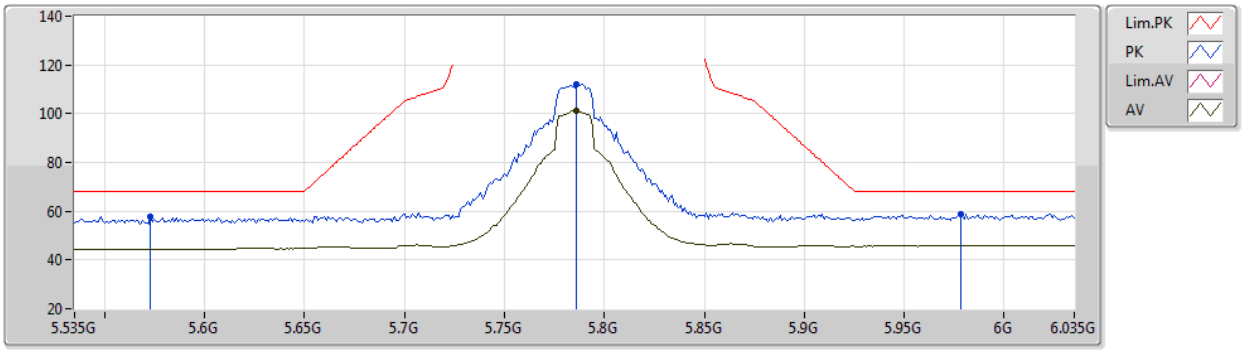
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.643G	57.49	68.20	-10.71	51.87	3	Vertical	166	2.08	-	34.00	6.32	34.70
PK	5.784G	112.59	Inf	-Inf	106.60	3	Vertical	166	2.08	-	34.25	6.39	34.65
AV	5.786G	102.19	Inf	-Inf	96.19	3	Vertical	166	2.08	-	34.26	6.39	34.65
PK	5.953G	59.87	68.20	-8.33	52.92	3	Vertical	166	2.08	-	35.06	6.48	34.59

802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

14/03/2020



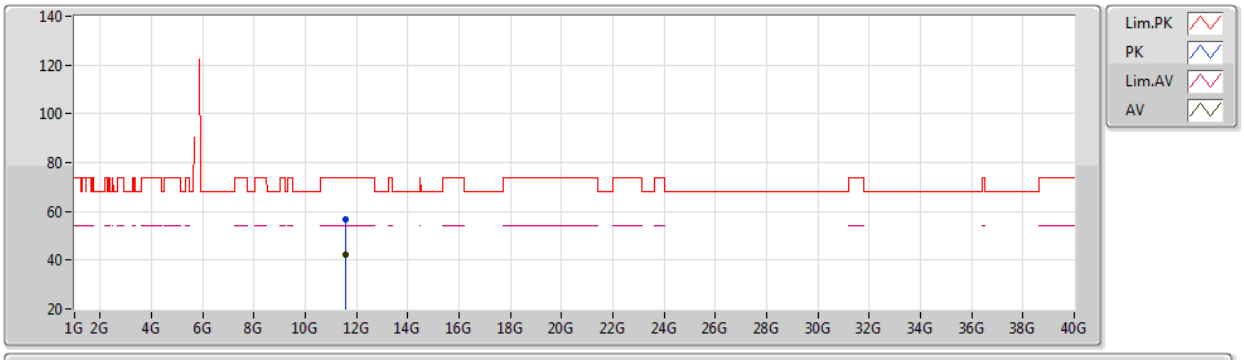
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.573G	57.59	68.20	-10.61	52.06	3	Horizontal	119	2.40	-	33.95	6.31	34.73
PK	5.786G	112.22	Inf	-Inf	106.22	3	Horizontal	119	2.40	-	34.26	6.39	34.65
AV	5.786G	101.36	Inf	-Inf	95.36	3	Horizontal	119	2.40	-	34.26	6.39	34.65
PK	5.978G	58.90	68.20	-9.30	51.80	3	Horizontal	119	2.40	-	35.19	6.49	34.58

802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

14/03/2020



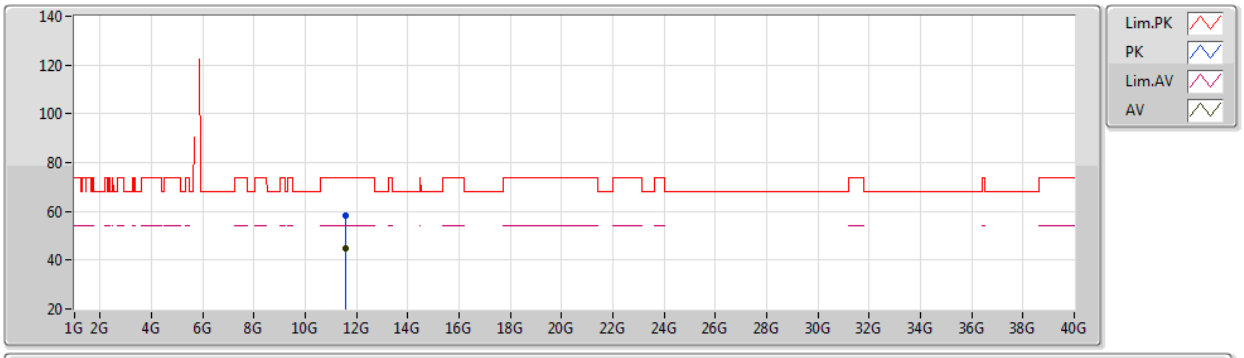
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.56664G	56.49	74.00	-17.51	43.70	3	Vertical	109	1.80	-	38.46	9.27	34.94
AV	11.5682G	41.99	54.00	-12.01	29.20	3	Vertical	109	1.80	-	38.46	9.27	34.94

802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

14/03/2020



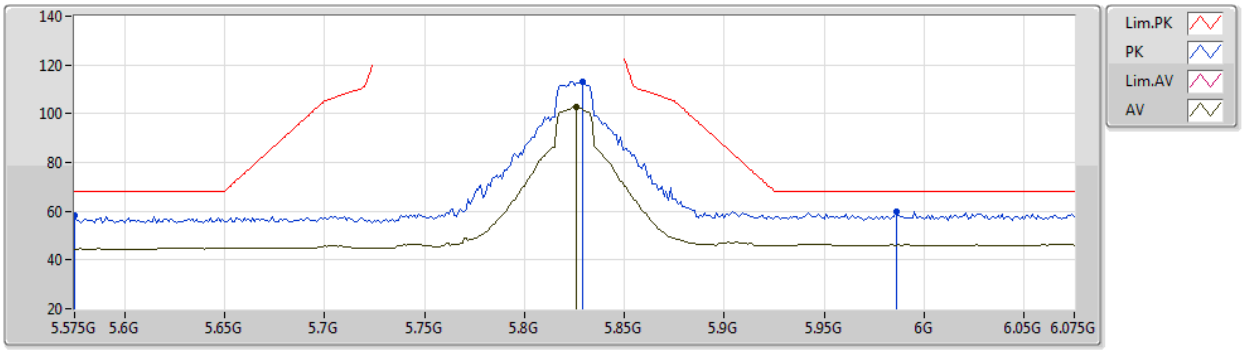
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.57006G	58.48	74.00	-15.52	45.68	3	Horizontal	175	2.05	-	38.46	9.28	34.94
AV	11.57192G	44.68	54.00	-9.32	31.88	3	Horizontal	175	2.05	-	38.46	9.28	34.94

802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

14/03/2020



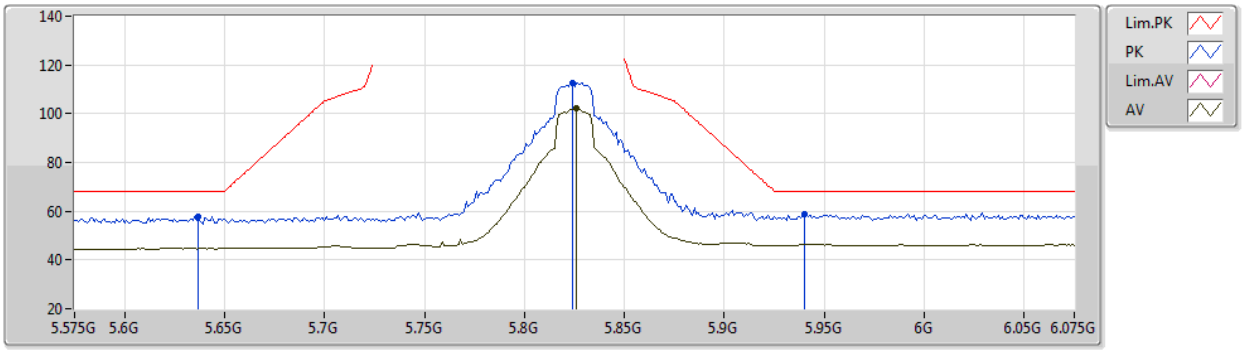
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.575G	58.05	68.20	-10.15	52.52	3	Vertical	166	2.12	-	33.95	6.31	34.73
PK	5.829G	113.27	Inf	-Inf	107.06	3	Vertical	166	2.12	-	34.44	6.41	34.64
AV	5.826G	102.60	Inf	-Inf	96.40	3	Vertical	166	2.12	-	34.43	6.41	34.64
PK	5.986G	60.08	68.20	-8.12	52.94	3	Vertical	166	2.12	-	35.23	6.49	34.58

802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

14/03/2020



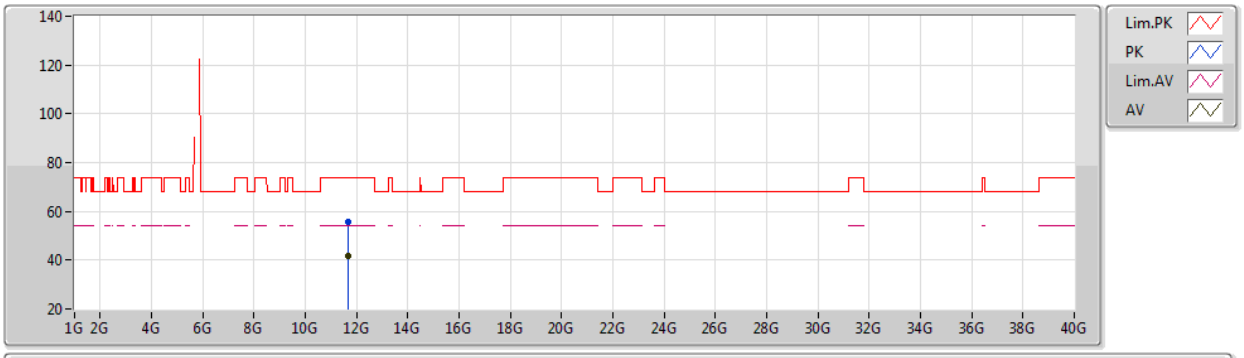
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.637G	57.92	68.20	-10.28	52.31	3	Horizontal	117	2.30	-	34.00	6.32	34.71
PK	5.824G	112.62	Inf	-Inf	106.43	3	Horizontal	117	2.30	-	34.42	6.41	34.64
AV	5.826G	102.10	Inf	-Inf	95.90	3	Horizontal	117	2.30	-	34.43	6.41	34.64
PK	5.94G	58.76	68.20	-9.44	51.88	3	Horizontal	117	2.30	-	35.00	6.47	34.59

802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

14/03/2020



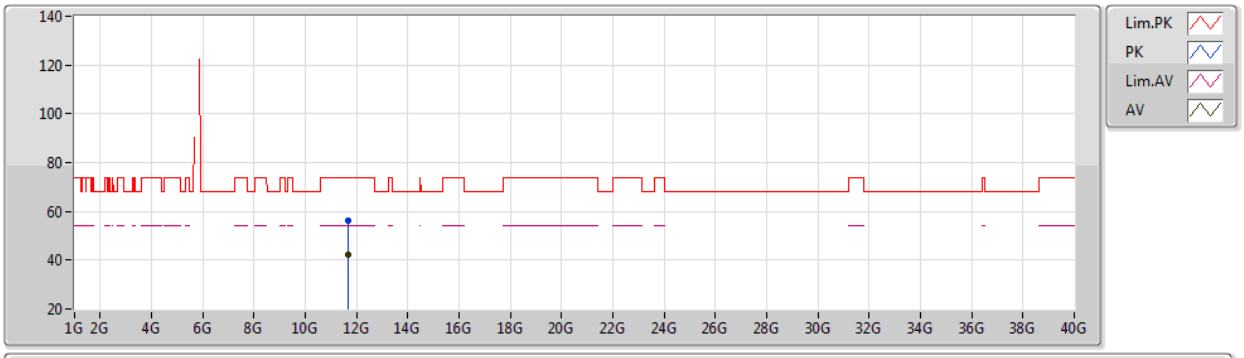
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.6521G	55.55	74.00	-18.45	42.73	3	Vertical	181	2.12	-	38.47	9.30	34.95
AV	11.65138G	41.81	54.00	-12.19	28.99	3	Vertical	181	2.12	-	38.47	9.30	34.95

802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

14/03/2020



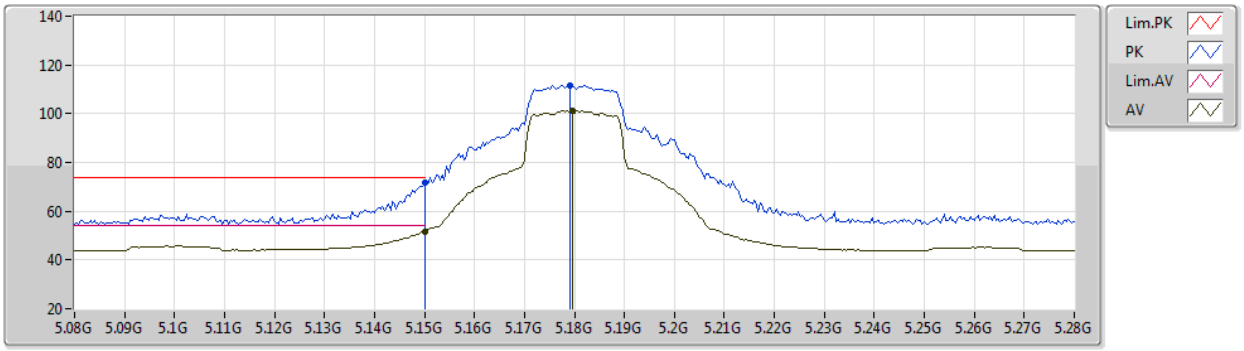
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.65882G	55.95	74.00	-18.05	43.14	3	Horizontal	122	2.07	-	38.47	9.30	34.96
AV	11.64778G	42.35	54.00	-11.65	29.54	3	Horizontal	122	2.07	-	38.46	9.30	34.95

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5180MHz_TX



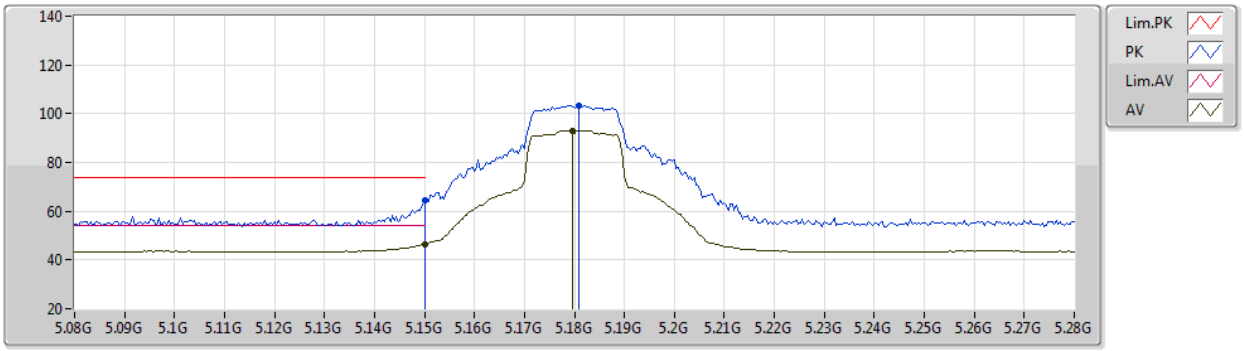
EUT Y_2TX
Setting 25
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	71.89	74.00	-2.11	67.85	3	Vertical	77	1.00	-	32.80	5.87	34.63
AV	5.15G	51.61	54.00	-2.39	47.57	3	Vertical	77	1.00	-	32.80	5.87	34.63
PK	5.1792G	111.48	Inf	-Inf	107.43	3	Vertical	77	1.00	-	32.80	5.89	34.64
AV	5.1796G	101.21	Inf	-Inf	97.16	3	Vertical	77	1.00	-	32.80	5.89	34.64

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5180MHz_TX



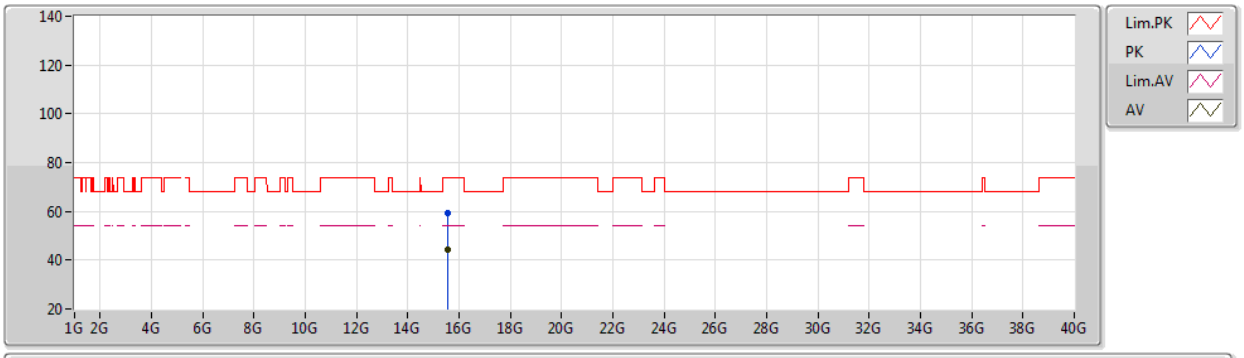
EUT Y_2TX
Setting 25
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	64.52	74.00	-9.48	60.48	3	Horizontal	33	1.64	-	32.80	5.87	34.63
AV	5.15G	46.44	54.00	-7.56	42.40	3	Horizontal	33	1.64	-	32.80	5.87	34.63
PK	5.1808G	103.41	Inf	-Inf	99.36	3	Horizontal	33	1.64	-	32.80	5.89	34.64
AV	5.1796G	93.12	Inf	-Inf	89.07	3	Horizontal	33	1.64	-	32.80	5.89	34.64

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5180MHz_TX



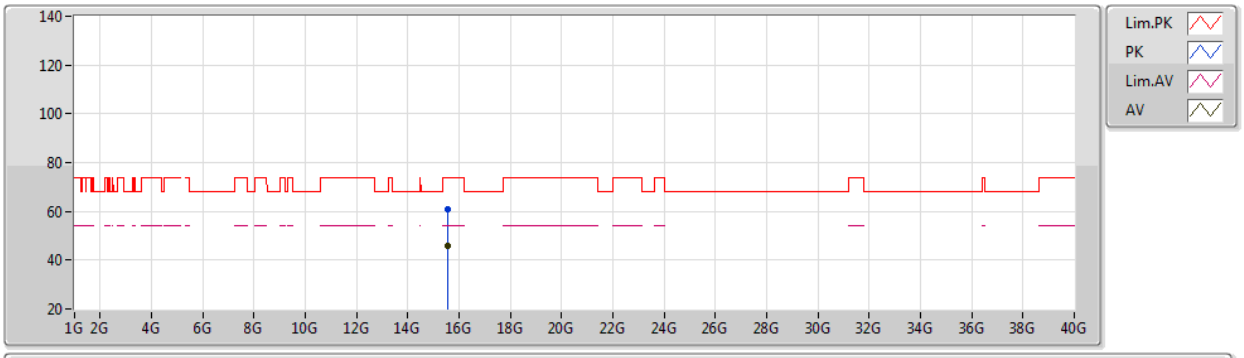
EUT Y_2TX
Setting 25
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.54702G	59.33	74.00	-14.67	45.57	3	Vertical	262	1.80	-	38.76	9.79	34.79
AV	15.54048G	44.25	54.00	-9.75	30.47	3	Vertical	262	1.80	-	38.77	9.79	34.78

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5180MHz_TX



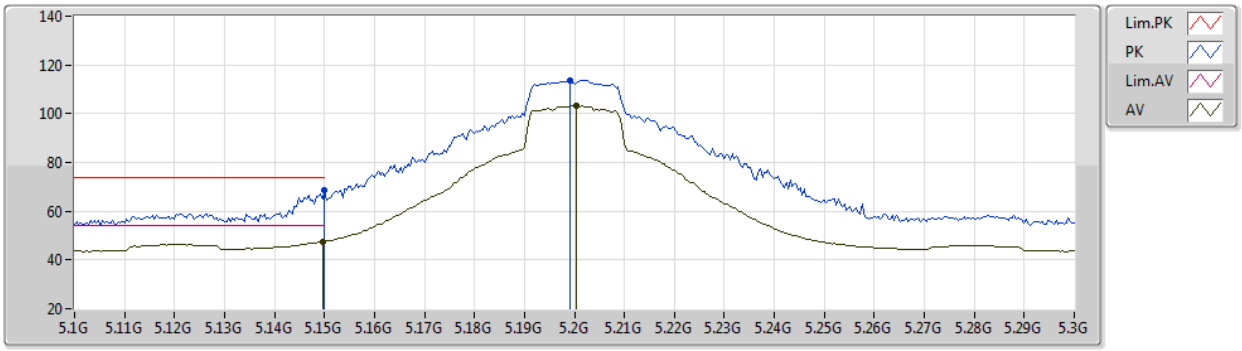
EUT Y_2TX
Setting 25
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.543G	60.71	74.00	-13.29	46.93	3	Horizontal	133	2.97	-	38.77	9.79	34.78
AV	15.53988G	46.06	54.00	-7.94	32.28	3	Horizontal	133	2.97	-	38.77	9.79	34.78

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5200MHz_TX



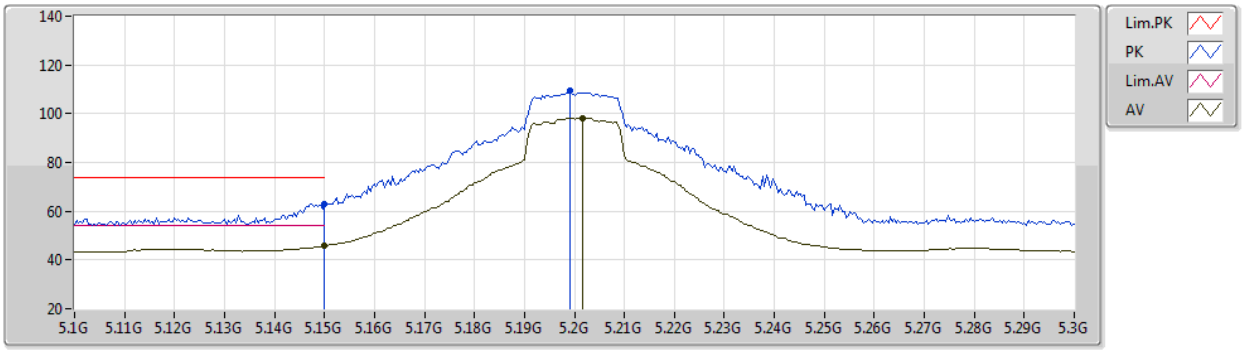
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	68.47	74.00	-5.53	64.43	3	Vertical	80	1.05	-	32.80	5.87	34.63
AV	5.1496G	47.59	54.00	-6.41	43.55	3	Vertical	80	1.05	-	32.80	5.87	34.63
PK	5.1992G	113.66	Inf	-Inf	109.61	3	Vertical	80	1.05	-	32.80	5.90	34.65
AV	5.2004G	103.13	Inf	-Inf	99.08	3	Vertical	80	1.05	-	32.80	5.90	34.65

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

14/03/2020



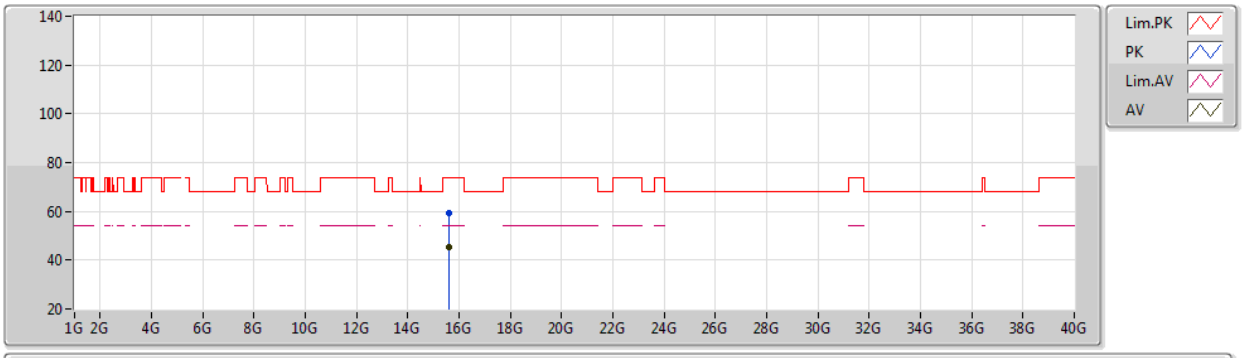
EUT Y_2TX
Setting 63
01-B-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	62.89	74.00	-11.11	58.85	3	Horizontal	52	2.12	-	32.80	5.87	34.63
AV	5.15G	45.71	54.00	-8.29	41.67	3	Horizontal	52	2.12	-	32.80	5.87	34.63
PK	5.1992G	109.30	Inf	-Inf	105.25	3	Horizontal	52	2.12	-	32.80	5.90	34.65
AV	5.2016G	98.23	Inf	-Inf	94.18	3	Horizontal	52	2.12	-	32.80	5.90	34.65

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

14/03/2020



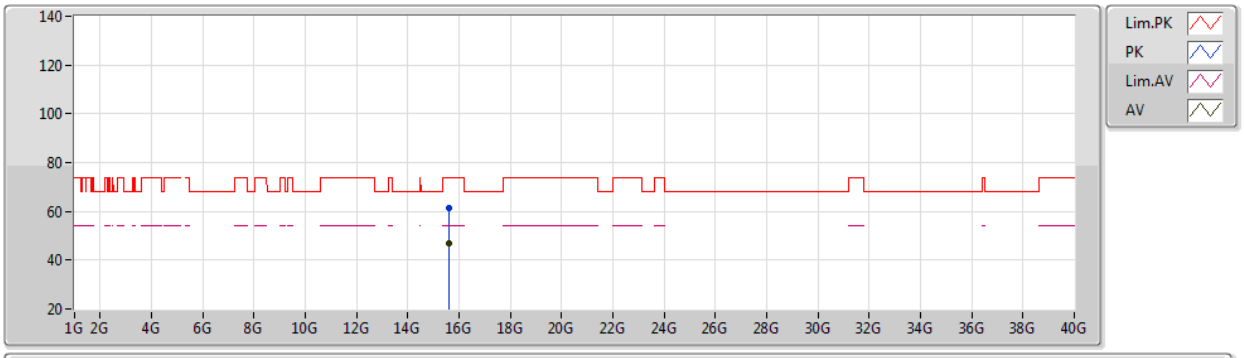
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.60012G	59.11	74.00	-14.89	45.46	3	Vertical	263	1.97	-	38.72	9.78	34.85
AV	15.60402G	45.28	54.00	-8.72	31.63	3	Vertical	263	1.97	-	38.72	9.78	34.85

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

14/03/2020



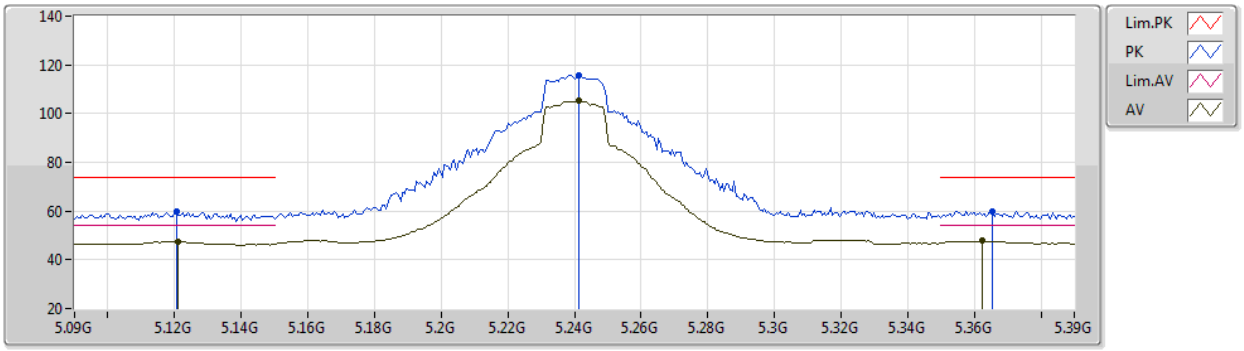
EUT Y_2TX
Setting 63
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.60492G	61.60	74.00	-12.40	47.95	3	Horizontal	133	2.97	-	38.72	9.78	34.85
AV	15.60024G	46.77	54.00	-7.23	33.12	3	Horizontal	133	2.97	-	38.72	9.78	34.85

802.11ac VHT20_Nss1,(MCS0)_2TX

5240MHz_TX

14/03/2020



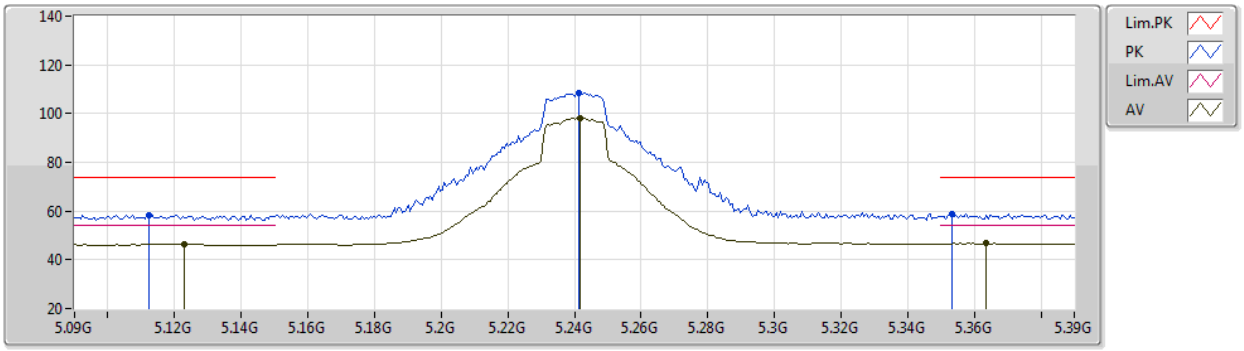
EUT Y_2TX
Setting 63
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1206G	59.65	74.00	-14.35	50.55	3	Vertical	346	2.51	-	33.52	5.96	30.38
AV	5.1212G	47.43	54.00	-6.57	38.33	3	Vertical	346	2.51	-	33.52	5.96	30.38
PK	5.2412G	115.64	Inf	-Inf	106.36	3	Vertical	346	2.51	-	33.68	6.02	30.42
AV	5.2412G	105.09	Inf	-Inf	95.81	3	Vertical	346	2.51	-	33.68	6.02	30.42
PK	5.3654G	59.95	74.00	-14.05	50.46	3	Vertical	346	2.51	-	33.87	6.08	30.46
AV	5.3624G	47.68	54.00	-6.32	38.20	3	Vertical	346	2.51	-	33.86	6.08	30.46

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5240MHz_TX



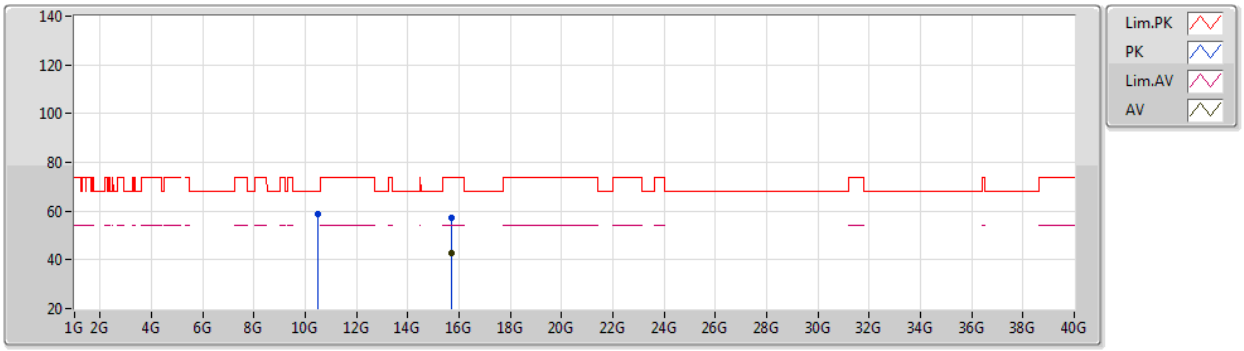
EUT Y_2TX
Setting 63
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1122G	58.49	74.00	-15.51	49.39	3	Horizontal	137	1.43	-	33.51	5.96	30.37
AV	5.123G	46.41	54.00	-7.59	37.31	3	Horizontal	137	1.43	-	33.52	5.96	30.38
PK	5.2412G	108.62	Inf	-Inf	99.34	3	Horizontal	137	1.43	-	33.68	6.02	30.42
AV	5.2418G	98.34	Inf	-Inf	89.06	3	Horizontal	137	1.43	-	33.68	6.02	30.42
PK	5.3534G	58.97	74.00	-15.03	49.50	3	Horizontal	137	1.43	-	33.85	6.08	30.46
AV	5.3636G	46.71	54.00	-7.29	37.23	3	Horizontal	137	1.43	-	33.86	6.08	30.46

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5240MHz_TX



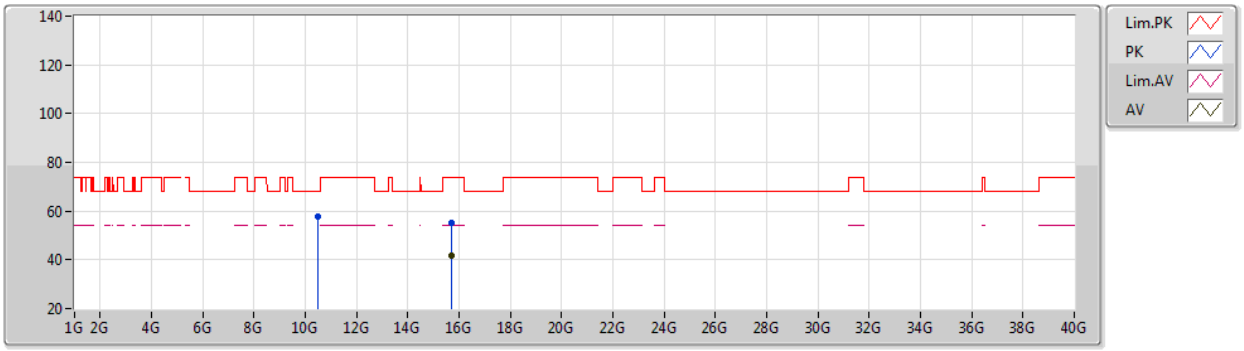
EUT Y_2TX
Setting 63
01-D-J-7

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.47864G	58.98	68.20	-9.22	43.16	3	Vertical	338	2.11	-	38.76	8.55	31.49
PK	15.71664G	57.29	74.00	-16.71	41.78	3	Vertical	343	1.80	-	38.22	9.31	32.02
AV	15.71628G	42.51	54.00	-11.49	27.00	3	Vertical	343	1.80	-	38.22	9.31	32.02

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5240MHz_TX



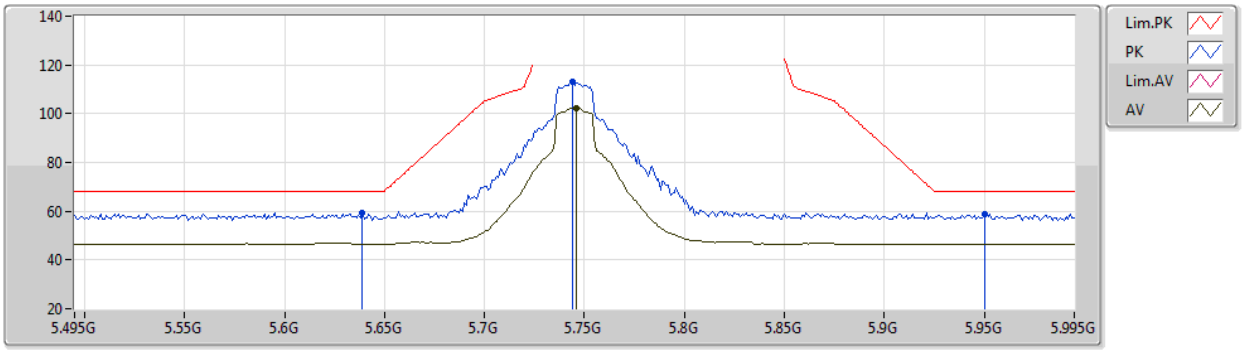
EUT Y_2TX
Setting 63
01-D-J-7

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.48058G	57.56	68.20	-10.64	41.74	3	Horizontal	61	1.86	-	38.76	8.55	31.49
PK	15.72408G	55.15	74.00	-18.85	39.66	3	Horizontal	247	1.80	-	38.20	9.31	32.02
AV	15.71898G	41.72	54.00	-12.28	26.22	3	Horizontal	247	1.80	-	38.21	9.31	32.02

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5745MHz_TX



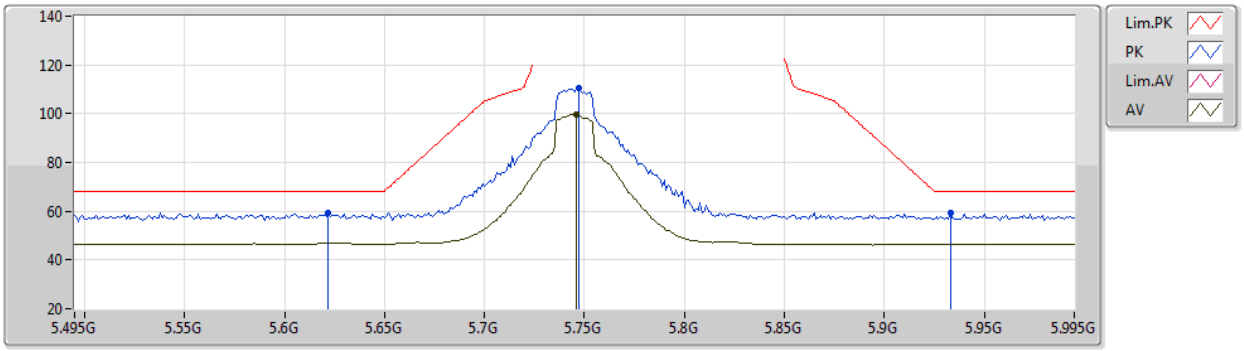
EUT Y_2TX
Setting 63
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.639G	59.56	68.20	-8.64	49.86	3	Vertical	79	2.17	-	33.92	6.32	30.54
PK	5.744G	112.85	Inf	-Inf	103.25	3	Vertical	79	2.17	-	33.80	6.37	30.57
AV	5.746G	102.39	Inf	-Inf	92.79	3	Vertical	79	2.17	-	33.80	6.37	30.57
PK	5.95G	58.95	68.20	-9.25	49.15	3	Vertical	79	2.17	-	34.10	6.32	30.62

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5745MHz_TX



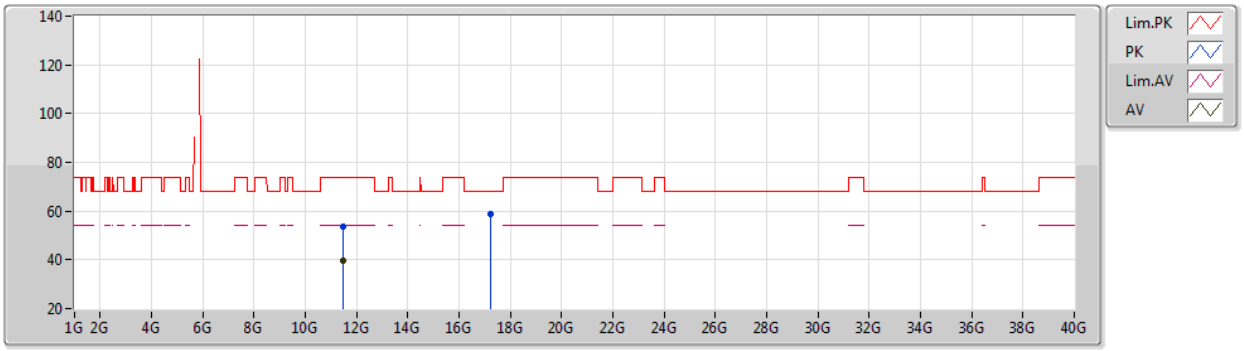
EUT Y_2TX
Setting 63
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.622G	59.49	68.20	-8.71	49.76	3	Horizontal	47	2.82	-	33.96	6.31	30.54
PK	5.747G	110.51	Inf	-Inf	100.91	3	Horizontal	47	2.82	-	33.80	6.37	30.57
AV	5.746G	99.64	Inf	-Inf	90.04	3	Horizontal	47	2.82	-	33.80	6.37	30.57
PK	5.933G	59.30	68.20	-8.90	49.52	3	Horizontal	47	2.82	-	34.07	6.33	30.62

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5745MHz_TX



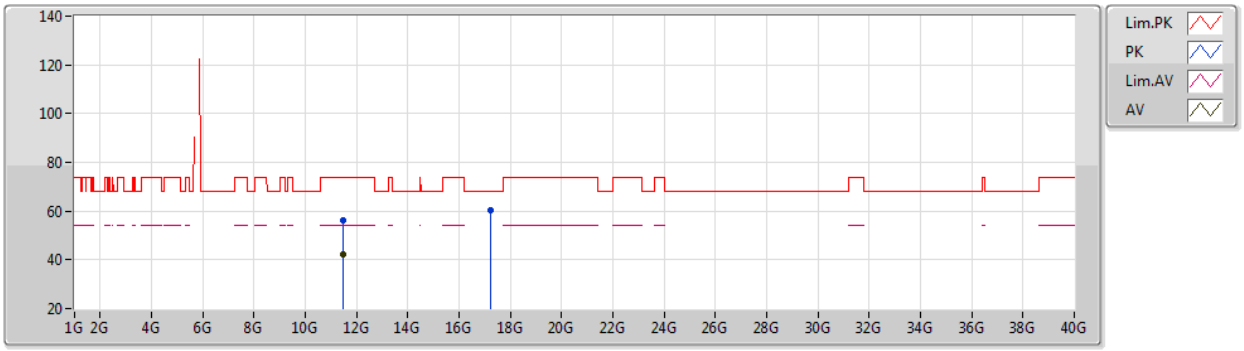
EUT Y_2TX
Setting 63
01-D-J-7

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.48868G	53.82	74.00	-20.18	37.78	3	Vertical	303	2.21	-	38.79	8.85	31.60
AV	11.489G	39.82	54.00	-14.18	23.78	3	Vertical	303	2.21	-	38.79	8.85	31.60
PK	17.23194G	58.87	68.20	-9.33	38.09	3	Vertical	353	1.80	-	42.43	10.15	31.80

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5745MHz_TX



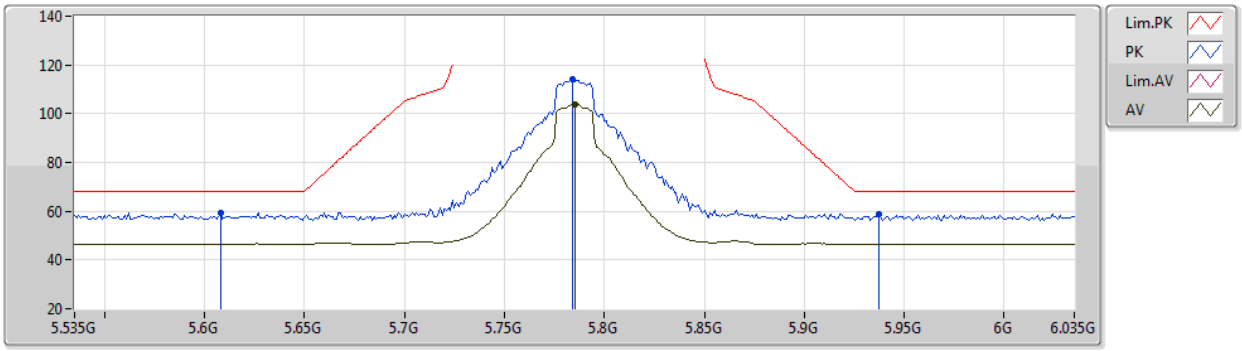
EUT Y_2TX
Setting 63
01-D-J-7

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.49274G	56.11	74.00	-17.89	40.07	3	Horizontal	176	1.58	-	38.79	8.85	31.60
AV	11.48866G	42.20	54.00	-11.80	26.16	3	Horizontal	176	1.58	-	38.79	8.85	31.60
PK	17.2372G	60.19	68.20	-8.01	39.39	3	Horizontal	67	1.80	-	42.46	10.15	31.81

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5785MHz_TX



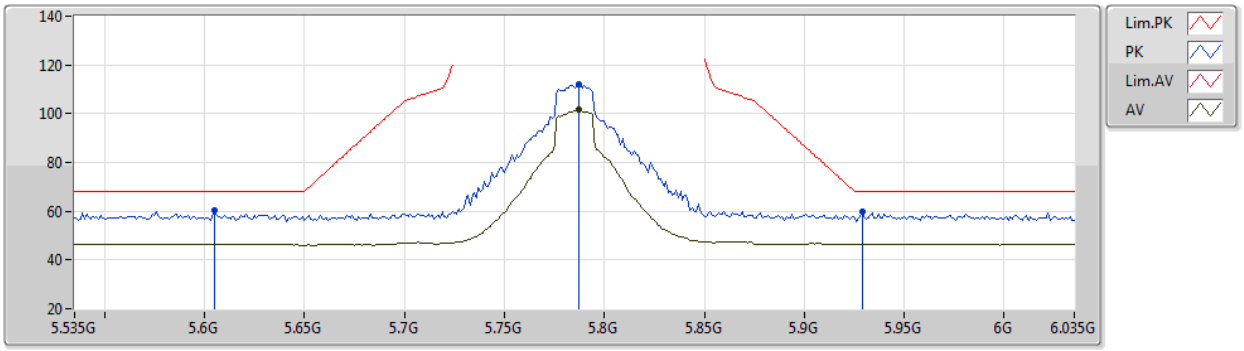
EUT Y_2TX
Setting 63
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.608G	59.40	68.20	-8.80	49.65	3	Vertical	344	2.93	-	33.98	6.30	30.53
PK	5.784G	114.00	Inf	-Inf	104.39	3	Vertical	344	2.93	-	33.80	6.39	30.58
AV	5.785G	103.79	Inf	-Inf	94.18	3	Vertical	344	2.93	-	33.80	6.39	30.58
PK	5.937G	58.63	68.20	-9.57	48.85	3	Vertical	344	2.93	-	34.07	6.33	30.62

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5785MHz_TX



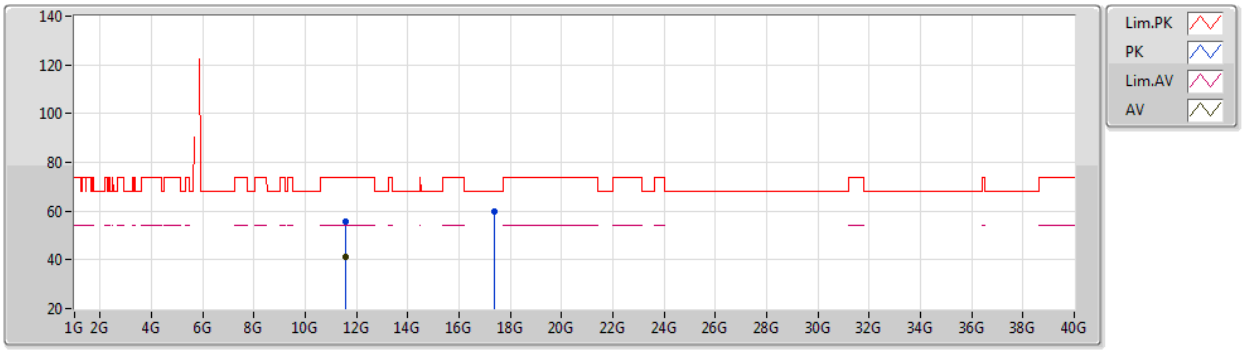
EUT Y_2TX
Setting 63
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.605G	60.48	68.20	-7.72	50.72	3	Horizontal	313	2.13	-	33.99	6.30	30.53
PK	5.787G	112.01	Inf	-Inf	102.40	3	Horizontal	313	2.13	-	33.80	6.39	30.58
AV	5.787G	101.52	Inf	-Inf	91.91	3	Horizontal	313	2.13	-	33.80	6.39	30.58
PK	5.929G	59.66	68.20	-8.54	49.88	3	Horizontal	313	2.13	-	34.06	6.34	30.62

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5785MHz_TX



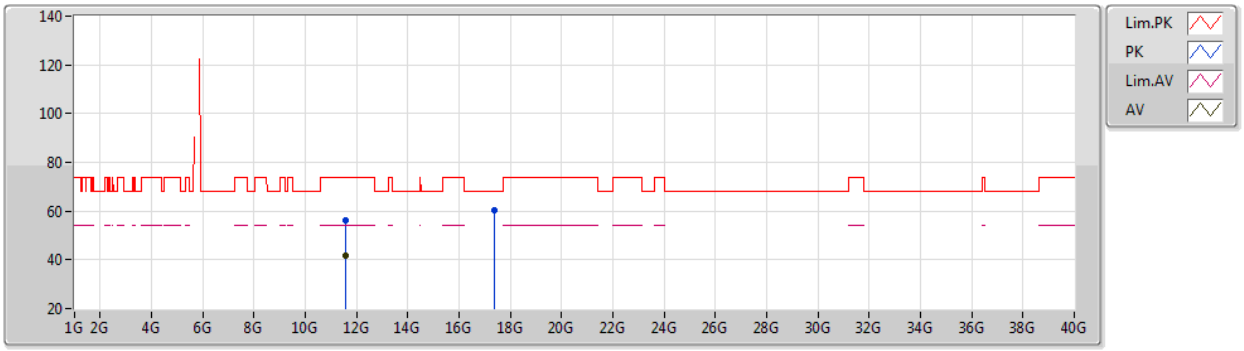
EUT Y_2TX
Setting 63
01-D-J-7

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.56854G	55.59	74.00	-18.41	39.50	3	Vertical	146	2.87	-	38.85	8.87	31.63
AV	11.56838G	40.96	54.00	-13.04	24.87	3	Vertical	146	2.87	-	38.85	8.87	31.63
PK	17.35738G	59.83	68.20	-8.37	38.36	3	Vertical	0	2.79	-	43.09	10.22	31.84

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5785MHz_TX



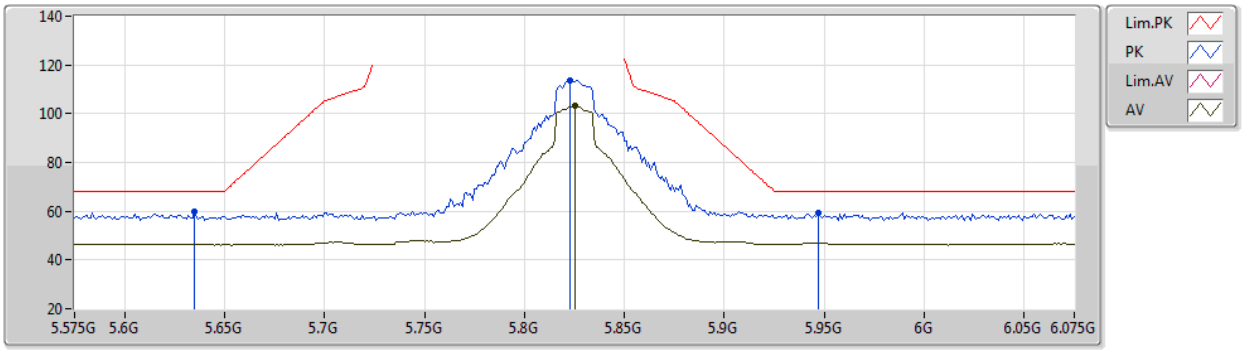
EUT Y_2TX
Setting 63
01-D-J-7

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.56686G	56.17	74.00	-17.83	40.08	3	Horizontal	176	1.60	-	38.85	8.87	31.63
AV	11.56834G	41.79	54.00	-12.21	25.70	3	Horizontal	176	1.60	-	38.85	8.87	31.63
PK	17.35842G	60.59	68.20	-7.61	39.11	3	Horizontal	169	1.80	-	43.10	10.22	31.84

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5825MHz_TX



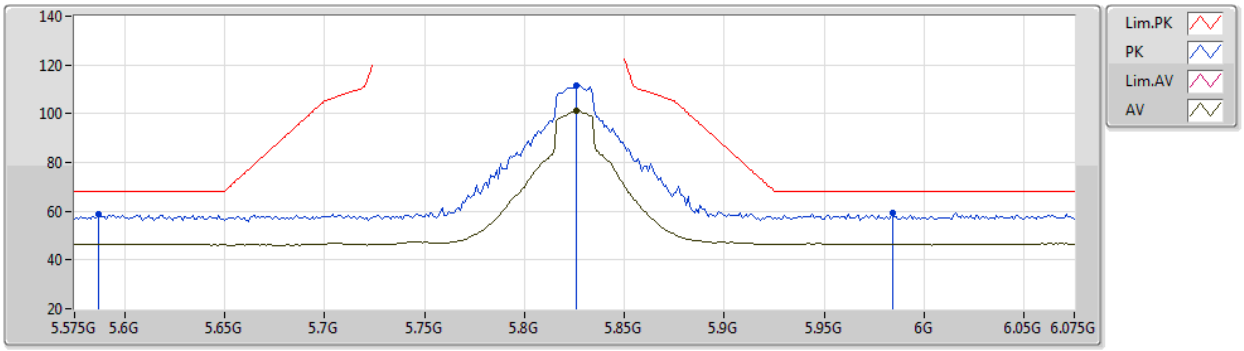
EUT Y_2TX
Setting 63
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.635G	59.70	68.20	-8.50	49.99	3	Vertical	344	2.74	-	33.93	6.32	30.54
PK	5.823G	113.57	Inf	-Inf	103.92	3	Vertical	344	2.74	-	33.85	6.39	30.59
AV	5.825G	103.07	Inf	-Inf	93.42	3	Vertical	344	2.74	-	33.85	6.39	30.59
PK	5.947G	59.46	68.20	-8.74	49.66	3	Vertical	344	2.74	-	34.09	6.33	30.62

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5825MHz_TX



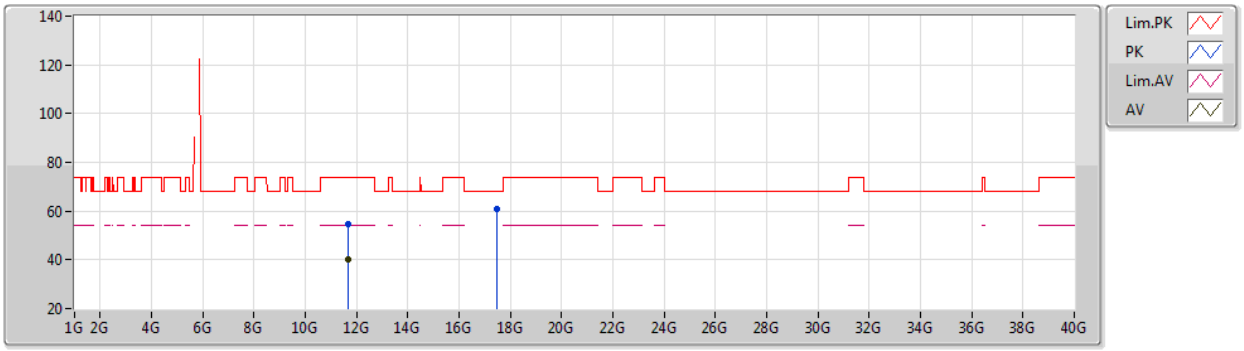
EUT Y_2TX
Setting 63
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.587G	58.64	68.20	-9.56	48.89	3	Horizontal	0	1.80	-	33.99	6.29	30.53
PK	5.826G	111.72	Inf	-Inf	102.07	3	Horizontal	0	1.80	-	33.85	6.39	30.59
AV	5.826G	101.09	Inf	-Inf	91.44	3	Horizontal	0	1.80	-	33.85	6.39	30.59
PK	5.984G	59.52	68.20	-8.68	49.67	3	Horizontal	0	1.80	-	34.17	6.31	30.63

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5825MHz_TX



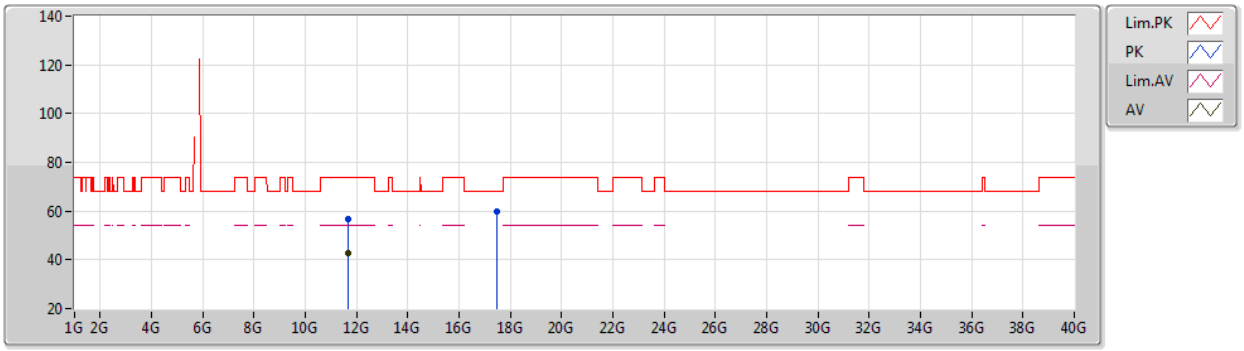
EUT Y_2TX
Setting 63
01-D-J-7

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.65014G	54.42	74.00	-19.58	38.25	3	Vertical	5	2.27	-	38.92	8.90	31.65
AV	11.64988G	40.28	54.00	-13.72	24.11	3	Vertical	5	2.27	-	38.92	8.90	31.65
PK	17.4738G	61.02	68.20	-7.18	38.89	3	Vertical	186	2.25	-	43.71	10.29	31.87

802.11ac VHT20_Nss1,(MCS0)_2TX

14/03/2020

5825MHz_TX



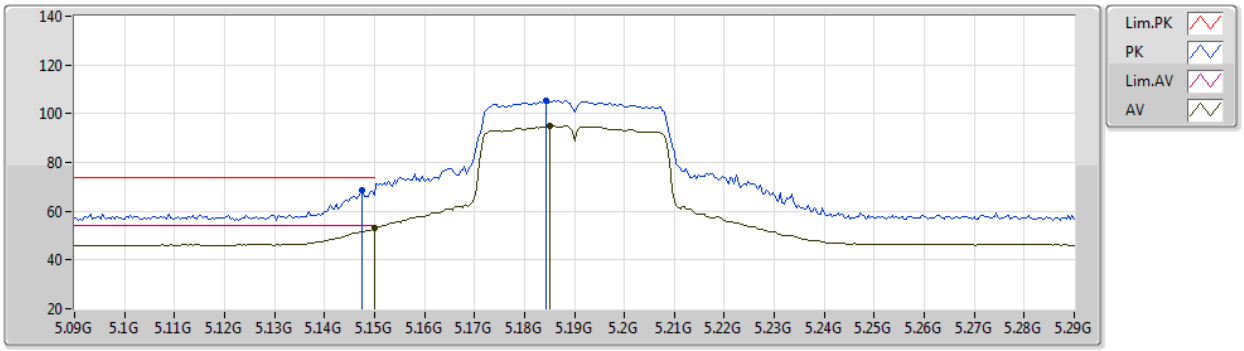
EUT Y_2TX
Setting 63
01-D-J-7

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.65346G	56.78	74.00	-17.22	40.61	3	Horizontal	177	1.62	-	38.92	8.90	31.65
AV	11.65002G	42.63	54.00	-11.37	26.46	3	Horizontal	177	1.62	-	38.92	8.90	31.65
PK	17.47958G	60.08	68.20	-8.12	37.92	3	Horizontal	293	1.80	-	43.74	10.29	31.87

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5190MHz_TX



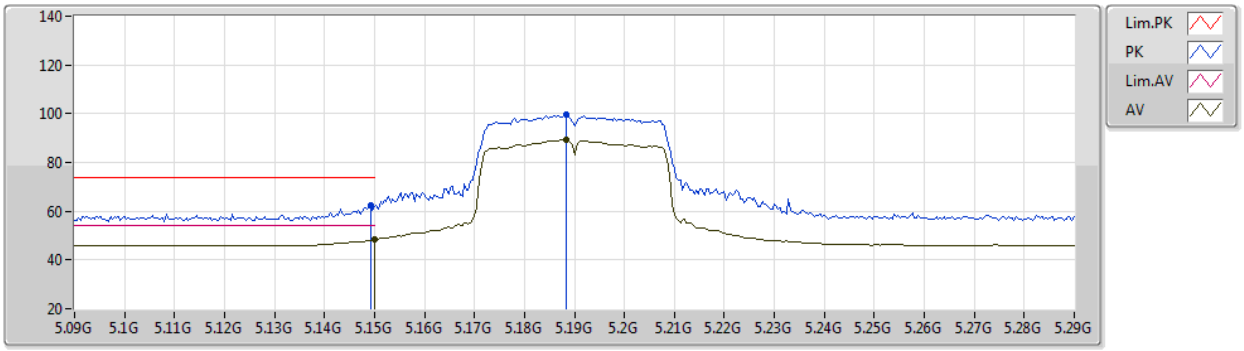
EUT Y_2TX
Setting 16
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1476G	68.46	74.00	-5.54	59.32	3	Vertical	344	2.68	-	33.55	5.97	30.38
AV	5.15G	53.35	54.00	-0.65	44.21	3	Vertical	344	2.68	-	33.55	5.97	30.38
PK	5.1844G	105.57	Inf	-Inf	96.40	3	Vertical	344	2.68	-	33.58	5.99	30.40
AV	5.1852G	94.90	Inf	-Inf	85.72	3	Vertical	344	2.68	-	33.59	5.99	30.40

802.11ac VHT40_Nss1,(MCS0)_2TX

5190MHz_TX

14/03/2020



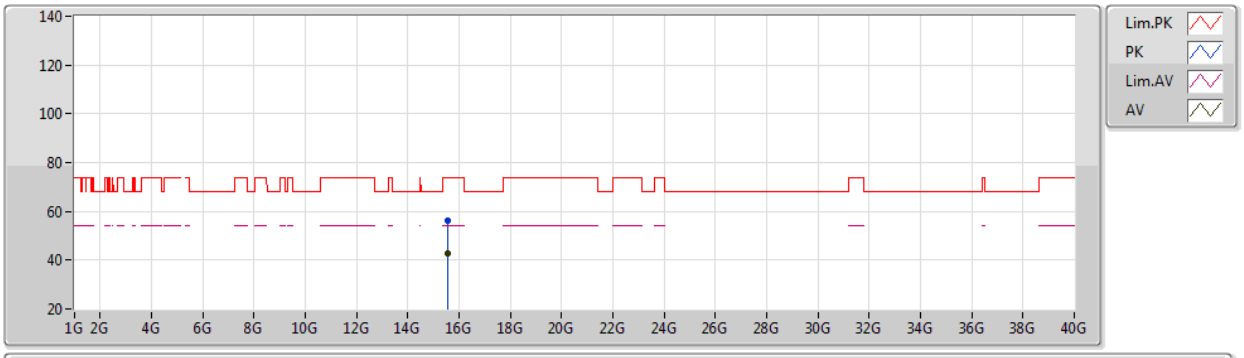
EUT Y_2TX
Setting 16
01-D-J-7-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1492G	62.24	74.00	-11.76	53.10	3	Horizontal	185	1.19	-	33.55	5.97	30.38
AV	5.15G	48.56	54.00	-5.44	39.42	3	Horizontal	185	1.19	-	33.55	5.97	30.38
PK	5.1884G	99.52	Inf	-Inf	90.34	3	Horizontal	185	1.19	-	33.59	5.99	30.40
AV	5.1884G	89.22	Inf	-Inf	80.04	3	Horizontal	185	1.19	-	33.59	5.99	30.40

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5190MHz_TX



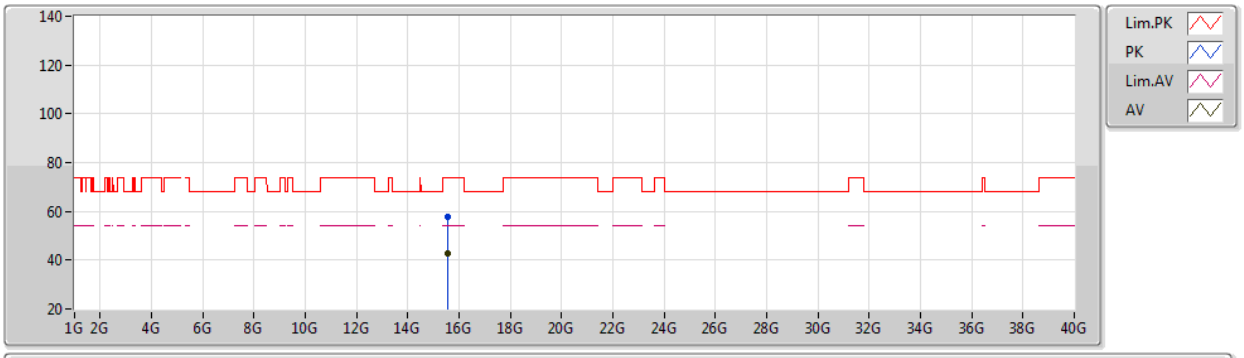
EUT Y_2TX
Setting 16
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.56958G	56.17	74.00	-17.83	42.46	3	Vertical	105	1.80	-	38.74	9.78	34.81
AV	15.55806G	42.70	54.00	-11.30	28.97	3	Vertical	105	1.80	-	38.75	9.78	34.80

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5190MHz_TX



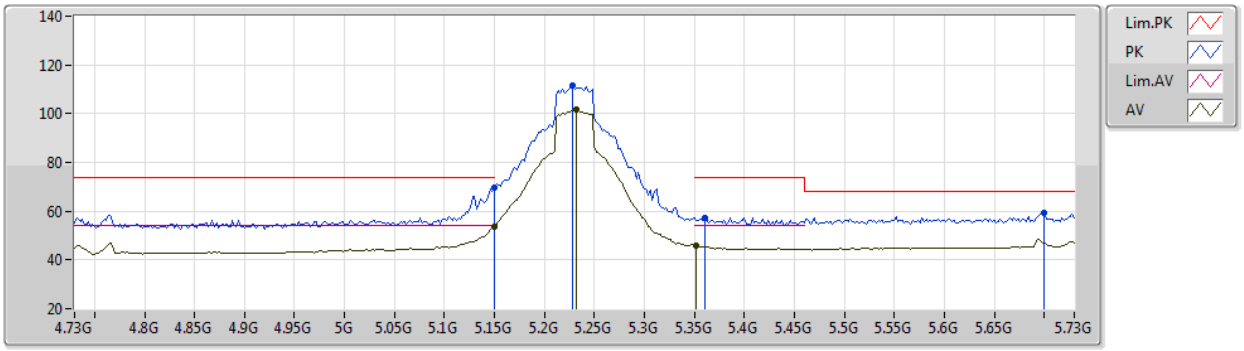
EUT Y_2TX
Setting 16
01-B-E-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.55746G	57.73	74.00	-16.27	44.00	3	Horizontal	304	1.80	-	38.75	9.78	34.80
AV	15.56424G	42.96	54.00	-11.04	29.24	3	Horizontal	304	1.80	-	38.75	9.78	34.81

802.11ac VHT40_Nss1,(MCS0)_2TX

5230MHz_TX

14/03/2020



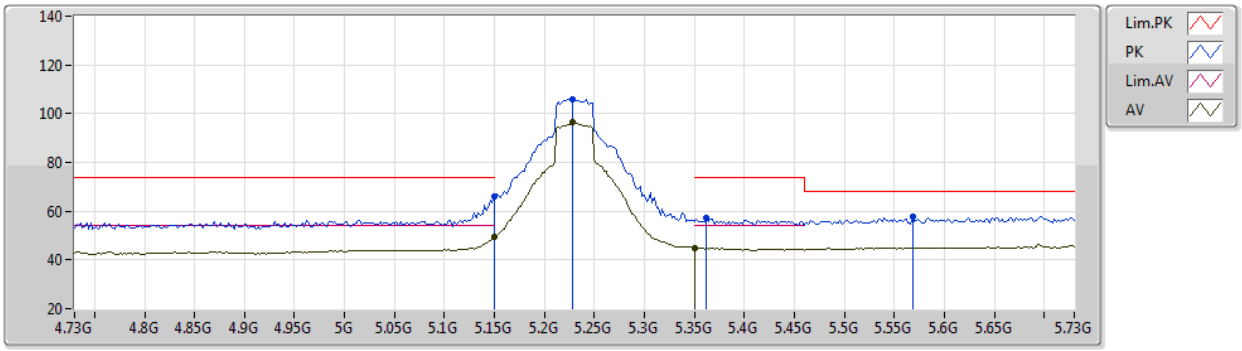
EUT Y_2TX
Setting 28
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	69.54	74.00	-4.46	65.50	3	Vertical	337	1.00	-	32.80	5.87	34.63
AV	5.15G	53.79	54.00	-0.21	49.75	3	Vertical	337	1.00	-	32.80	5.87	34.63
PK	5.228G	111.55	Inf	-Inf	107.35	3	Vertical	337	1.00	-	32.88	5.98	34.66
AV	5.232G	101.47	Inf	-Inf	97.24	3	Vertical	337	1.00	-	32.90	5.99	34.66
PK	5.36G	57.34	74.00	-16.66	52.58	3	Vertical	337	1.00	-	33.16	6.31	34.71
AV	5.352G	45.93	54.00	-8.07	41.20	3	Vertical	337	1.00	-	33.15	6.29	34.71
PK	5.7G	59.14	68.20	-9.06	53.47	3	Vertical	337	1.00	-	34.00	6.35	34.68

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5230MHz_TX



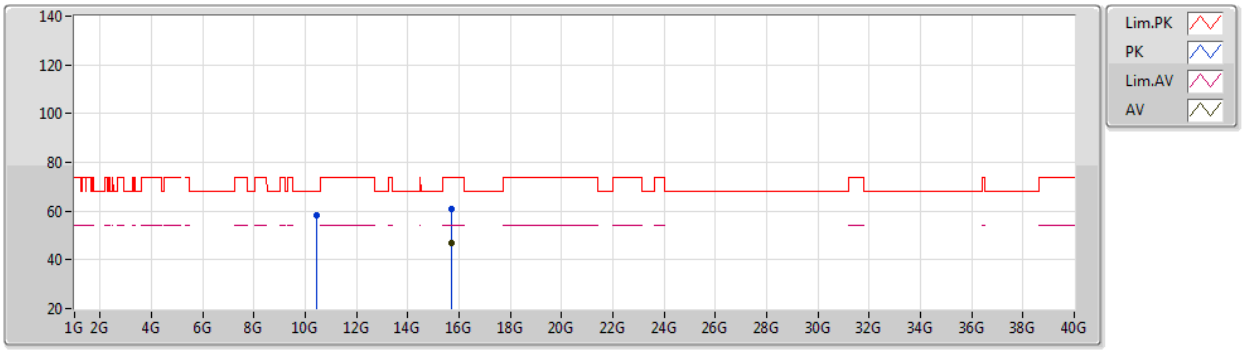
EUT Y_2TX
Setting 28
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	65.93	74.00	-8.07	61.89	3	Horizontal	172	3.00	-	32.80	5.87	34.63
AV	5.15G	49.26	54.00	-4.74	45.22	3	Horizontal	172	3.00	-	32.80	5.87	34.63
PK	5.228G	106.09	Inf	-Inf	101.89	3	Horizontal	172	3.00	-	32.88	5.98	34.66
AV	5.228G	96.43	Inf	-Inf	92.23	3	Horizontal	172	3.00	-	32.88	5.98	34.66
PK	5.362G	57.02	74.00	-16.98	52.26	3	Horizontal	172	3.00	-	33.16	6.31	34.71
AV	5.35G	45.04	54.00	-8.96	40.30	3	Horizontal	172	3.00	-	33.15	6.29	34.70
PK	5.568G	57.79	68.20	-10.41	52.26	3	Horizontal	172	3.00	-	33.94	6.32	34.73

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5230MHz_TX



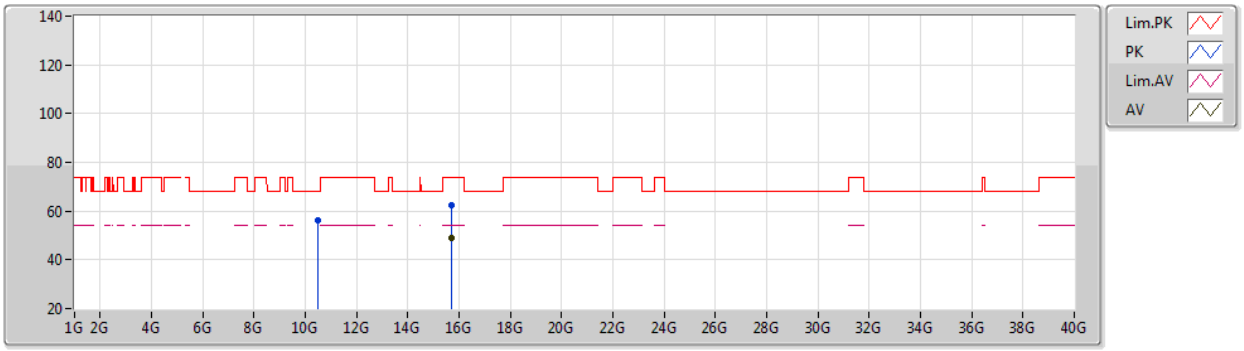
EUT Y_2TX
Setting 28
01-B-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.46084G	58.07	68.20	-10.13	46.18	3	Vertical	345	2.09	-	38.24	8.94	35.29
PK	15.69456G	60.90	74.00	-13.10	47.45	3	Vertical	345	1.97	-	38.64	9.76	34.95
AV	15.69288G	47.10	54.00	-6.90	33.64	3	Vertical	345	1.97	-	38.65	9.76	34.95

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5230MHz_TX



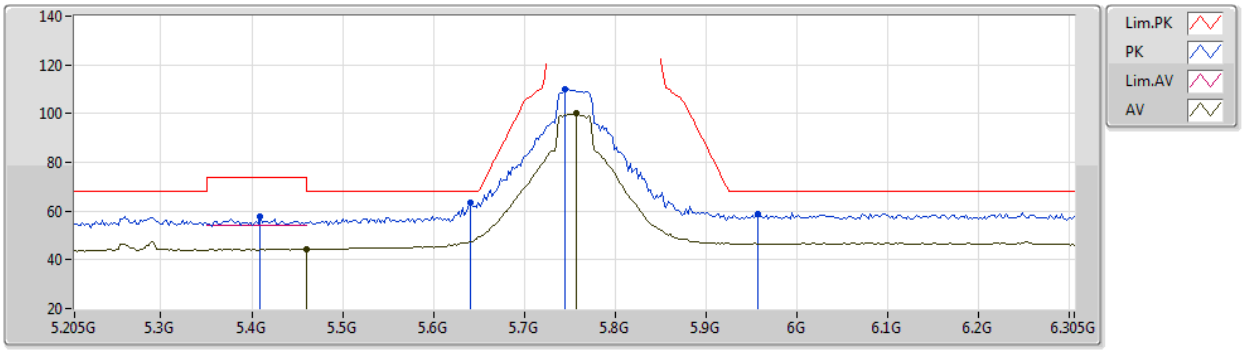
EUT Y_2TX
Setting 28
01-B-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	10.46912G	56.35	68.20	-11.85	44.44	3	Horizontal	283	2.63	-	38.24	8.95	35.28
PK	15.69468G	62.46	74.00	-11.54	49.01	3	Horizontal	313	1.85	-	38.64	9.76	34.95
AV	15.69312G	49.22	54.00	-4.78	35.76	3	Horizontal	313	1.85	-	38.65	9.76	34.95

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5755MHz_TX



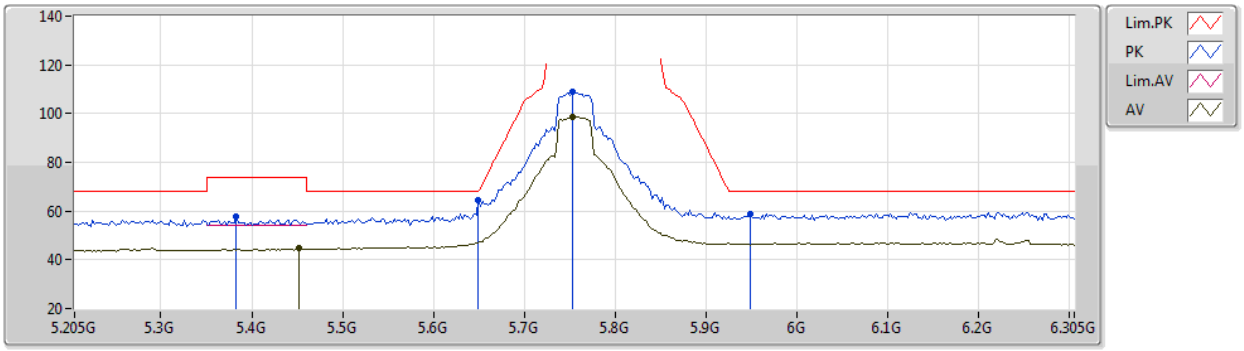
EUT Y_2TX
Setting 63
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.4096G	57.51	74.00	-16.49	52.57	3	Vertical	354	1.26	-	33.26	6.40	34.72
AV	5.46G	44.49	54.00	-9.51	39.30	3	Vertical	354	1.26	-	33.56	6.37	34.74
PK	5.6406G	63.70	68.20	-4.50	58.08	3	Vertical	354	1.26	-	34.00	6.32	34.70
PK	5.744G	109.96	Inf	-Inf	104.13	3	Vertical	354	1.26	-	34.13	6.37	34.67
AV	5.7572G	100.08	Inf	-Inf	94.19	3	Vertical	354	1.26	-	34.17	6.38	34.66
PK	5.9574G	58.71	68.20	-9.49	51.73	3	Vertical	354	1.26	-	35.09	6.48	34.59

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5755MHz_TX



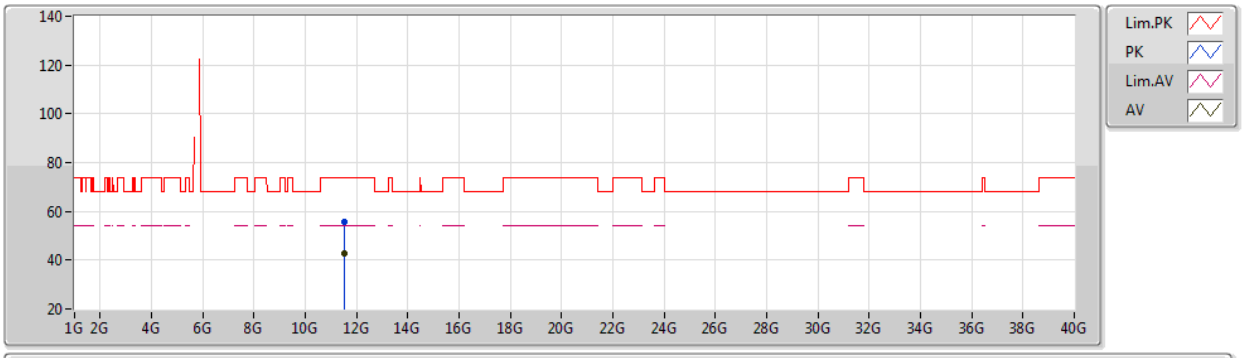
EUT Y_2TX
Setting 63
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.3832G	57.58	74.00	-16.42	52.75	3	Horizontal	305	2.31	-	33.18	6.36	34.71
AV	5.4514G	44.57	54.00	-9.43	39.43	3	Horizontal	305	2.31	-	33.51	6.37	34.74
PK	5.6494G	64.36	68.20	-3.84	58.74	3	Horizontal	305	2.31	-	34.00	6.32	34.70
PK	5.7528G	108.77	Inf	-Inf	102.89	3	Horizontal	305	2.31	-	34.16	6.38	34.66
AV	5.7528G	98.65	Inf	-Inf	92.77	3	Horizontal	305	2.31	-	34.16	6.38	34.66
PK	5.9486G	59.03	68.20	-9.17	52.11	3	Horizontal	305	2.31	-	35.04	6.47	34.59

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5755MHz_TX



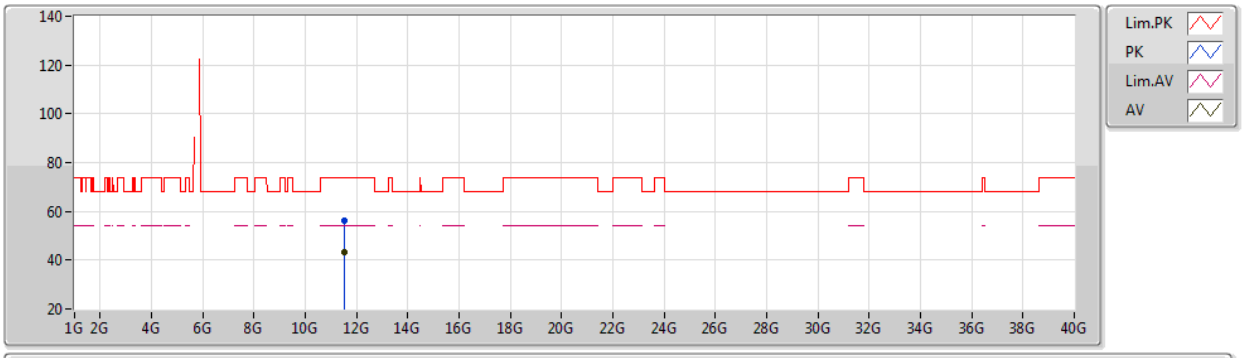
EUT Y_2TX
Setting 63
01-B-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.51084G	55.79	74.00	-18.21	43.01	3	Vertical	208	2.29	-	38.45	9.26	34.93
AV	11.50988G	42.57	54.00	-11.43	29.79	3	Vertical	208	2.29	-	38.45	9.26	34.93

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5755MHz_TX



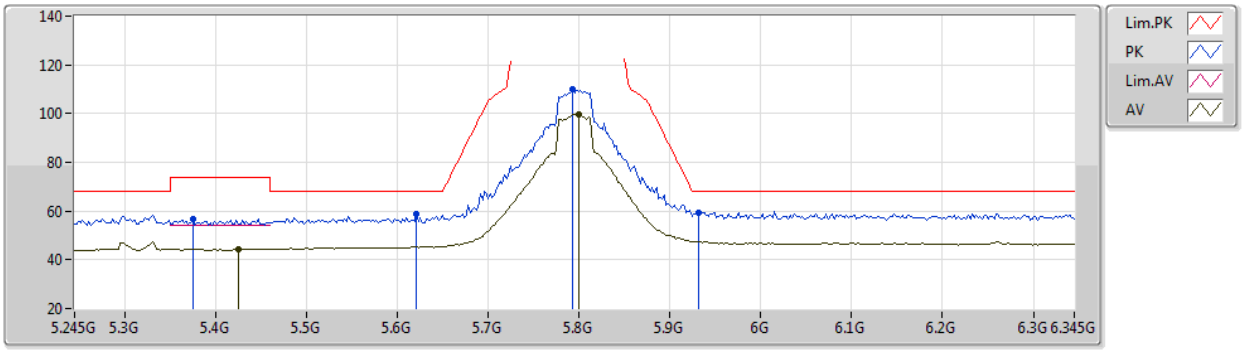
EUT Y_2TX
Setting 63
01-B-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.51984G	56.38	74.00	-17.62	43.60	3	Horizontal	350	2.15	-	38.45	9.26	34.93
AV	11.51132G	43.28	54.00	-10.72	30.50	3	Horizontal	350	2.15	-	38.45	9.26	34.93

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5795MHz_TX



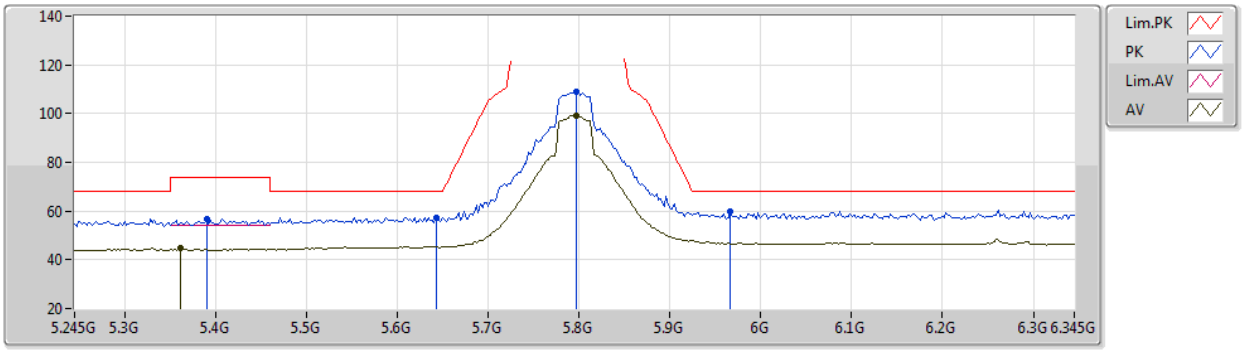
EUT Y_2TX
Setting 63
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.3748G	56.92	74.00	-17.08	52.12	3	Vertical	353	1.30	-	33.17	6.34	34.71
AV	5.4254G	44.38	54.00	-9.62	39.37	3	Vertical	353	1.30	-	33.35	6.39	34.73
PK	5.6212G	58.61	68.20	-9.59	53.01	3	Vertical	353	1.30	-	34.00	6.31	34.71
PK	5.7928G	109.94	Inf	-Inf	103.91	3	Vertical	353	1.30	-	34.28	6.40	34.65
AV	5.7994G	99.86	Inf	-Inf	93.81	3	Vertical	353	1.30	-	34.30	6.40	34.65
PK	5.9314G	59.44	68.20	-8.76	52.61	3	Vertical	353	1.30	-	34.96	6.47	34.60

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5795MHz_TX



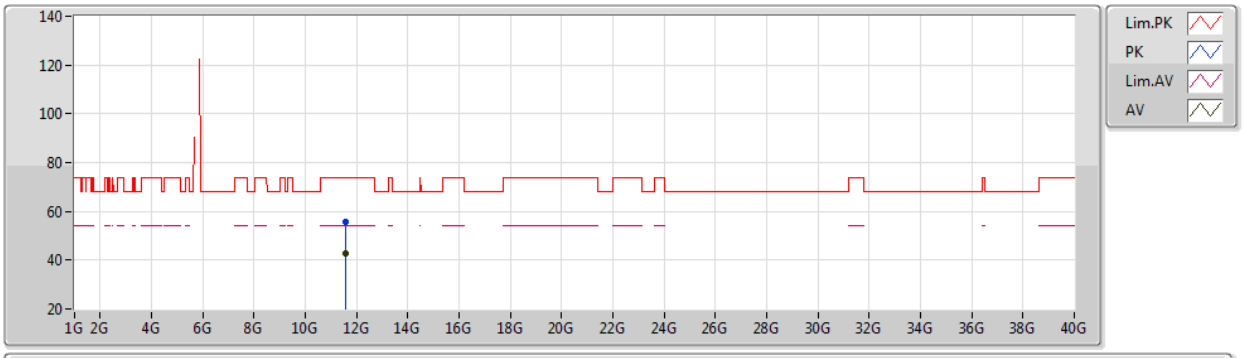
EUT Y_2TX
Setting 63
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.3902G	56.97	74.00	-17.03	52.12	3	Horizontal	304	2.29	-	33.19	6.38	34.72
AV	5.3616G	44.64	54.00	-9.36	39.88	3	Horizontal	304	2.29	-	33.16	6.31	34.71
PK	5.6432G	57.39	68.20	-10.81	51.77	3	Horizontal	304	2.29	-	34.00	6.32	34.70
PK	5.7972G	109.21	Inf	-Inf	103.17	3	Horizontal	304	2.29	-	34.29	6.40	34.65
AV	5.7972G	99.32	Inf	-Inf	93.28	3	Horizontal	304	2.29	-	34.29	6.40	34.65
PK	5.9666G	59.89	68.20	-8.31	52.86	3	Horizontal	304	2.29	-	35.13	6.48	34.58

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5795MHz_TX



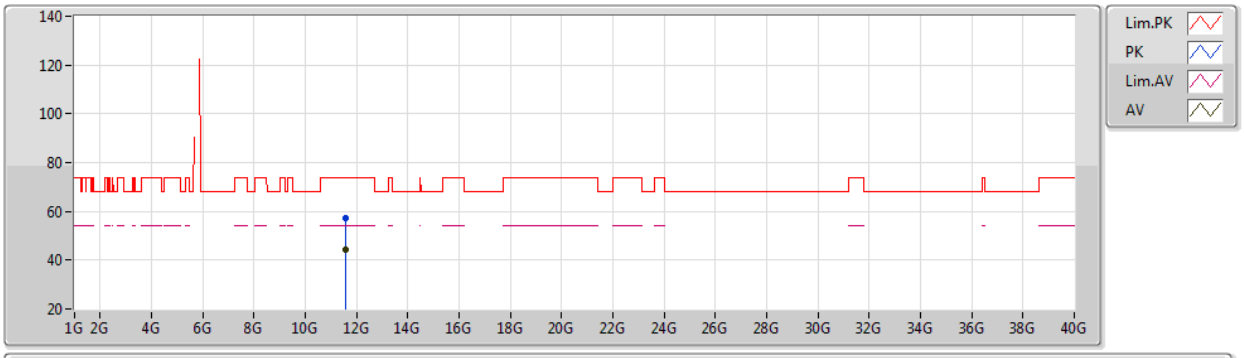
EUT Y_2TX
Setting 63
01-B-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5672G	55.46	74.00	-18.54	42.67	3	Vertical	149	2.23	-	38.46	9.27	34.94
AV	11.5702G	42.82	54.00	-11.18	30.02	3	Vertical	149	2.23	-	38.46	9.28	34.94

802.11ac VHT40_Nss1,(MCS0)_2TX

14/03/2020

5795MHz_TX



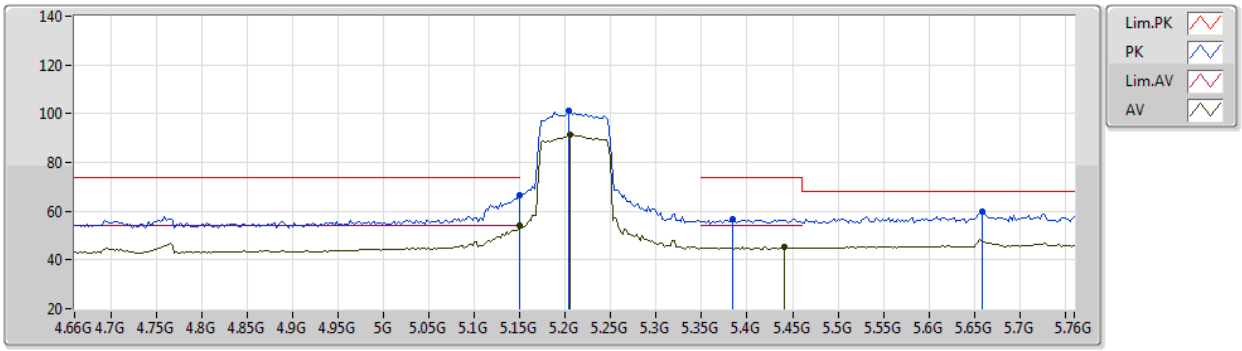
EUT Y_2TX
Setting 63
01-B-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.56672G	57.01	74.00	-16.99	44.22	3	Horizontal	359	2.13	-	38.46	9.27	34.94
AV	11.56984G	44.06	54.00	-9.94	31.26	3	Horizontal	359	2.13	-	38.46	9.28	34.94

802.11ac VHT80_Nss1,(MCS0)_2TX

14/03/2020

5210MHz_TX



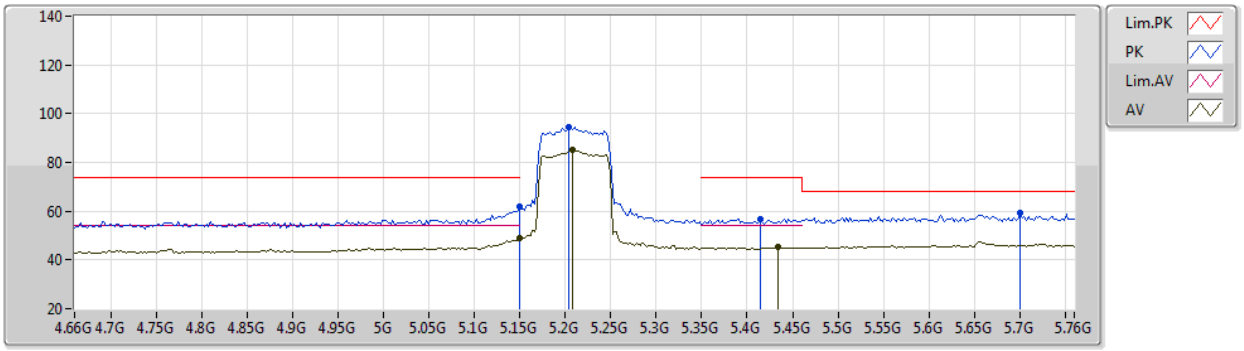
EUT Y_2TX
Setting 13
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	66.81	74.00	-7.19	62.77	3	Vertical	340	1.00	-	32.80	5.87	34.63
AV	5.15G	53.95	54.00	-0.05	49.91	3	Vertical	340	1.00	-	32.80	5.87	34.63
PK	5.2034G	100.99	Inf	-Inf	96.92	3	Vertical	340	1.00	-	32.81	5.91	34.65
AV	5.2056G	91.25	Inf	-Inf	87.16	3	Vertical	340	1.00	-	32.82	5.92	34.65
PK	5.3838G	56.76	74.00	-17.24	51.94	3	Vertical	340	1.00	-	33.18	6.36	34.72
AV	5.441G	45.30	54.00	-8.70	40.21	3	Vertical	340	1.00	-	33.45	6.38	34.74
PK	5.6588G	59.59	68.20	-8.61	53.96	3	Vertical	340	1.00	-	34.00	6.33	34.70

802.11ac VHT80_Nss1,(MCS0)_2TX

14/03/2020

5210MHz_TX



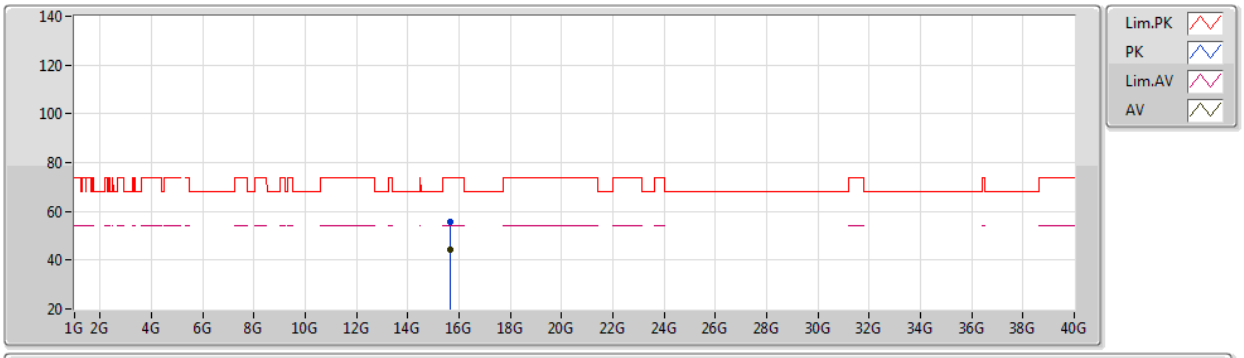
EUT Y_2TX
Setting 13
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	61.65	74.00	-12.35	57.61	3	Horizontal	51	1.07	-	32.80	5.87	34.63
AV	5.15G	48.81	54.00	-5.19	44.77	3	Horizontal	51	1.07	-	32.80	5.87	34.63
PK	5.2034G	94.46	Inf	-Inf	90.39	3	Horizontal	51	1.07	-	32.81	5.91	34.65
AV	5.2078G	84.98	Inf	-Inf	80.89	3	Horizontal	51	1.07	-	32.82	5.92	34.65
PK	5.4146G	56.98	74.00	-17.02	52.03	3	Horizontal	51	1.07	-	33.29	6.39	34.73
AV	5.4344G	45.09	54.00	-8.91	40.03	3	Horizontal	51	1.07	-	33.41	6.38	34.73
PK	5.7006G	59.15	68.20	-9.05	53.48	3	Horizontal	51	1.07	-	34.00	6.35	34.68

802.11ac VHT80_Nss1,(MCS0)_2TX

5210MHz_TX

14/03/2020



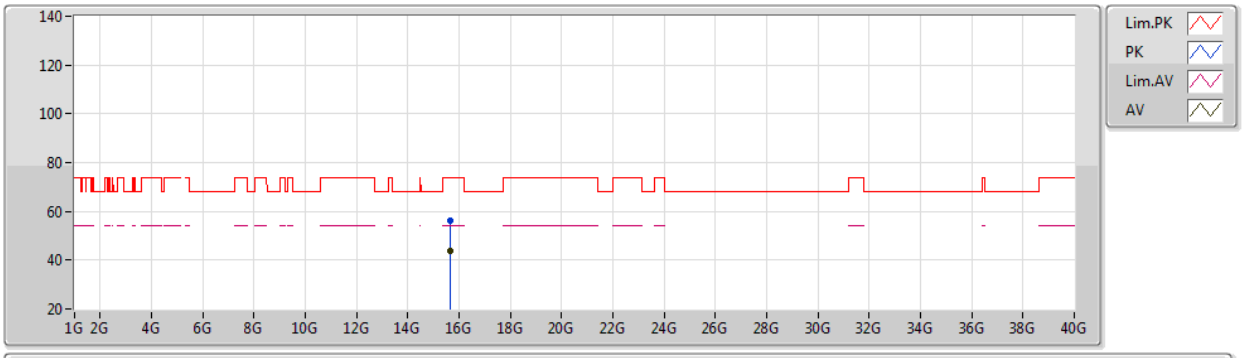
EUT Y_2TX
Setting 13
01-B-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.64968G	55.79	74.00	-18.21	42.24	3	Vertical	204	2.26	-	38.68	9.77	34.90
AV	15.63768G	44.07	54.00	-9.93	30.50	3	Vertical	204	2.26	-	38.69	9.77	34.89

802.11ac VHT80_Nss1,(MCS0)_2TX

14/03/2020

5210MHz_TX



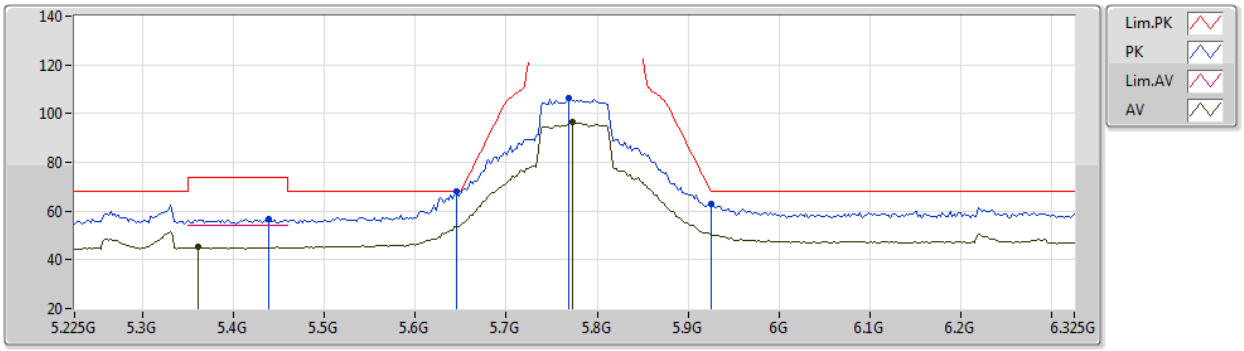
EUT Y_2TX
Setting 13
01-B-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.6396G	56.19	74.00	-17.81	42.62	3	Horizontal	59	1.32	-	38.69	9.77	34.89
AV	15.63204G	43.84	54.00	-10.16	30.26	3	Horizontal	59	1.32	-	38.69	9.77	34.88

802.11ac VHT80_Nss1,(MCS0)_2TX

14/03/2020

5775MHz_TX



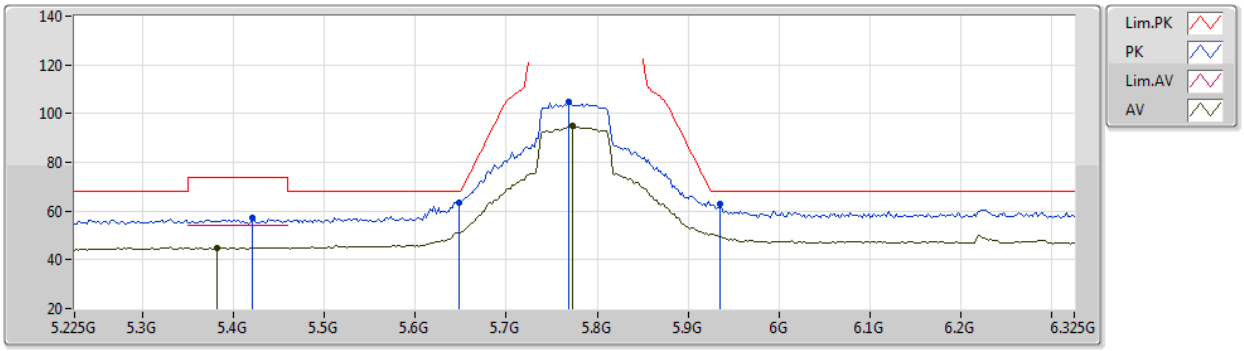
EUT Y_2TX
Setting 28
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.4384G	56.85	74.00	-17.15	51.78	3	Vertical	320	1.00	-	33.43	6.38	34.74
AV	5.3614G	45.23	54.00	-8.77	40.47	3	Vertical	320	1.00	-	33.16	6.31	34.71
PK	5.6452G	68.07	68.20	-0.13	62.45	3	Vertical	320	1.00	-	34.00	6.32	34.70
PK	5.7684G	106.49	Inf	-Inf	100.56	3	Vertical	320	1.00	-	34.21	6.38	34.66
AV	5.7728G	96.65	Inf	-Inf	90.70	3	Vertical	320	1.00	-	34.22	6.39	34.66
PK	5.925G	62.74	68.20	-5.46	55.95	3	Vertical	320	1.00	-	34.93	6.46	34.60

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

14/03/2020



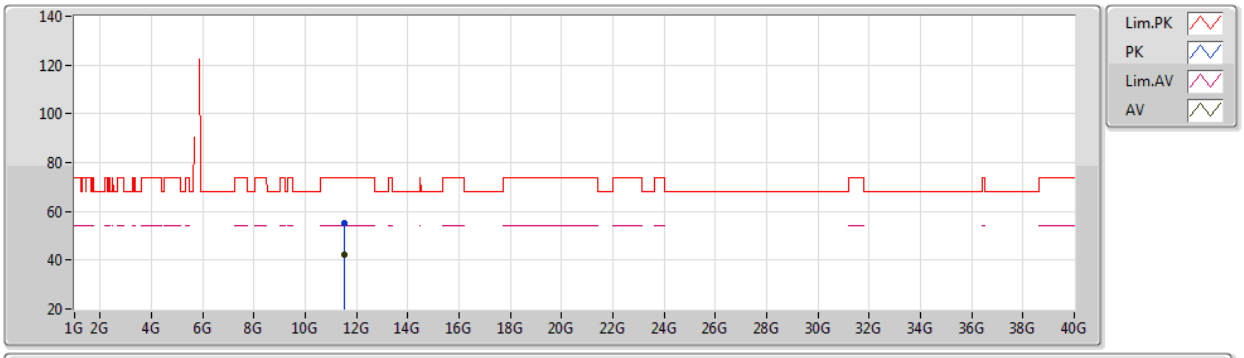
EUT Y_2TX
Setting 28
01-B-J-5-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.4208G	57.03	74.00	-16.97	52.05	3	Horizontal	131	2.76	-	33.32	6.39	34.73
AV	5.3812G	45.01	54.00	-8.99	40.18	3	Horizontal	131	2.76	-	33.18	6.36	34.71
PK	5.6474G	63.53	68.20	-4.67	57.91	3	Horizontal	131	2.76	-	34.00	6.32	34.70
PK	5.7684G	104.92	Inf	-Inf	98.99	3	Horizontal	131	2.76	-	34.21	6.38	34.66
AV	5.7728G	94.92	Inf	-Inf	88.97	3	Horizontal	131	2.76	-	34.22	6.39	34.66
PK	5.9356G	62.76	68.20	-5.44	55.91	3	Horizontal	131	2.76	-	34.98	6.47	34.60

802.11ac VHT80_Nss1,(MCS0)_2TX

14/03/2020

5775MHz_TX



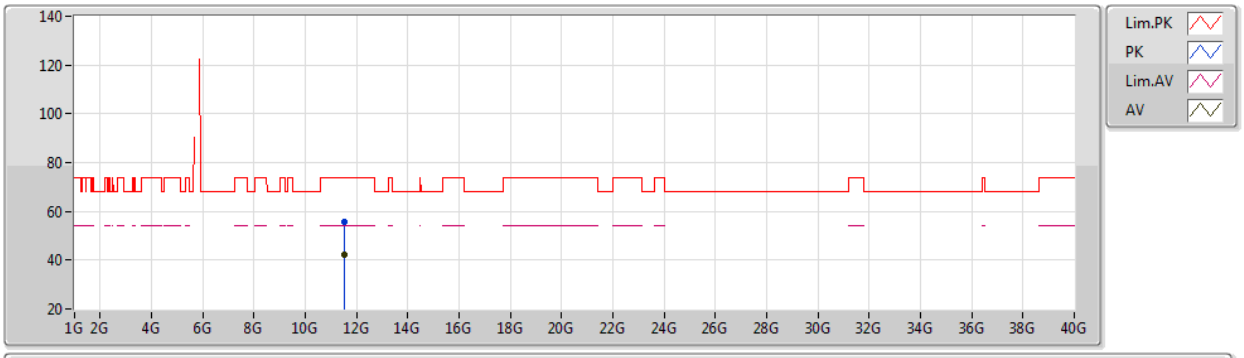
EUT Y_2TX
Setting 28
01-B-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5236G	55.29	74.00	-18.71	42.51	3	Vertical	144	1.01	-	38.45	9.26	34.93
AV	11.52172G	42.33	54.00	-11.67	29.55	3	Vertical	144	1.01	-	38.45	9.26	34.93

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

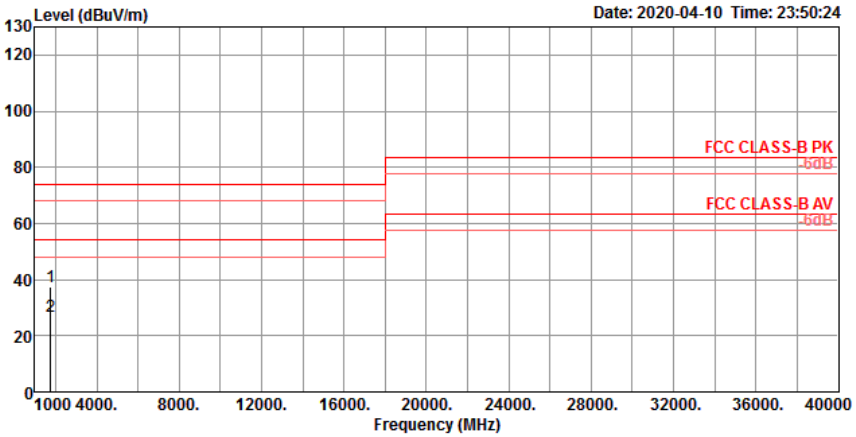
14/03/2020



EUT Y_2TX
Setting 28
01-B-J-5

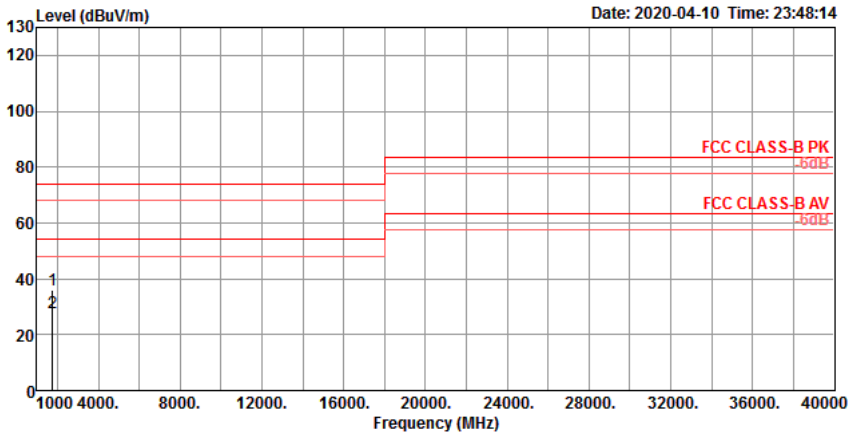
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.52804G	55.44	74.00	-18.56	42.66	3	Horizontal	353	2.21	-	38.45	9.26	34.93
AV	11.52318G	42.46	54.00	-11.54	29.68	3	Horizontal	353	2.21	-	38.45	9.26	34.93

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	1747.51	37.60	74.00	-36.40	45.91	3.61	25.04	36.96	100	155	Peak	HORIZONTAL
2	1752.32	26.98	54.00	-27.02	35.26	3.62	25.06	36.96	100	155	Average	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	1751.59	35.84	74.00	-38.16	44.12	3.62	25.06	36.96	100	299	Peak	VERTICAL
2	1752.88	27.61	54.00	-26.39	35.89	3.62	25.06	36.96	100	299	Average	VERTICAL