

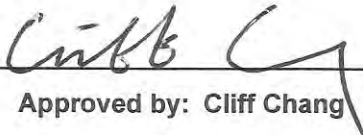


FCC RADIO TEST REPORT

FCC ID : 2AXPF03218
Equipment : devolo Magic 2 WiFi next
Brand Name : devolo AG
Model Name : MT:3218
Applicant/ Manufacturer : devolo AG
Charlottenburger Allee 67
52068 Aachen, Germany
Standard : 47 CFR FCC Part 15.407

The product was received on Sep. 28, 2020, and testing was started from Oct. 06, 2020 and completed on Dec. 09, 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.


Approved by: Cliff Chang

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.2



Summary of Test Result

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

Declaration of Conformity:

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

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Viola Huang

1 General Description

1.1 Information

1.1.1 RF General Information

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

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

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

**1.1.2 Antenna Information**

Ant.	Port	Brand	Model Name	Antenna Type	Connector	WLAN 2.4GHz Gain (dBi)			
						Low channel	Middle channel	Highest channel	
1	1	devolo	N/A	Printed	N/A	1.5	2.6	3.7	
2	2	devolo	N/A	Printed	N/A	1.9	2.4	3.3	
Ant.	Port	Brand	Model Name	Antenna Type	Connector	WLAN 5GHz Gain (dBi)			
						Freq.: 5150-5250 MHz	Freq.: 5250-5350 MHz	Freq.: 5500-5600 MHz	Freq.: 5620-5825 MHz
3	1	devolo	N/A	Printed	N/A	1.2	-0.1	1.4	3.3
4	2	devolo	N/A	Printed	N/A	-0.4	0.0	2.0	3.9

Note: The above information was declared by manufacturer.

For WLAN 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 WLAN 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	0.96	0.18	2.03m	1k
802.11ac VHT20	0.985	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.968	0.14	2.415m	1k
802.11ac VHT80	0.938	0.28	1.144m	1k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	Internal power supply			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
Test Software Version	QSPR Version 5.0-00188			

Note: The above information was declared by manufacturer.



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

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

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

1.3 Testing Location Information

Testing Location			
☐	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973	
☒	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302, Taiwan (R.O.C.) TEL : 886-3-656-9065 FAX : 886-3-656-9085	

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH02-CB	Nyle Chang	23~25.5°C / 56~58%	Oct. 20, 2020~Nov. 12, 2020
Radiated below 1GHz	03CH01-CB	JN Tu	24.2~25.7°C / 54~56%	Dec. 09, 2020
Radiated above 1GHz	03CH02-CB	JN Tu	24.1~25.3°C / 54~57%	Oct. 19, 2020
AC Conduction	CO01-CB	Max Lin	21~22°C / 58~59%	Oct. 06, 2020~Nov. 06, 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 (9kHz ~ 30MHz)	3.8 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.0 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.9 dB	Confidence levels of 95%
Conducted Emission	2.8 dB	Confidence levels of 95%
Output Power Measurement	1.4 dB	Confidence levels of 95%
Power Density Measurement	2.8 dB	Confidence levels of 95%
Bandwidth Measurement	0.4%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	15
5200MHz	15.5
5240MHz	15
5745MHz	18.5
5785MHz	18
5825MHz	18
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	15.5
5200MHz	16
5240MHz	15.5
5745MHz	18.5
5785MHz	18
5825MHz	18
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	15.5
5230MHz	17.5
5755MHz	18
5795MHz	17.5
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	16
5775MHz	17.5

Note:

- ♦ VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	EUT + WLAN 2.4GHz
2	EUT + WLAN 5GHz
For operating mode 2 is the worst case and it was record in this test report.	

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
The EUT was performed at X axis, Y axis and Z axis position for Unwanted Emissions above 1GHz test, and the worst case was found at Z axis for WLAN 2.4GHz and found at X axis for WLAN 5GHz. So the measurement will follow this same test configuration.	
1	EUT in Z axis + WLAN 2.4GHz
2	EUT in X axis + WLAN 5GHz
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 X axis, Y axis and Z axis position, and the worst case was found at X axis. So the measurement will follow this same test configuration.	
1	EUT in X axis

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.: FA091745-01 for Co-location RF Exposure Evaluation.	



2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories
RJ-45 cable, non-shielded, 2m

2.5 Support Equipment

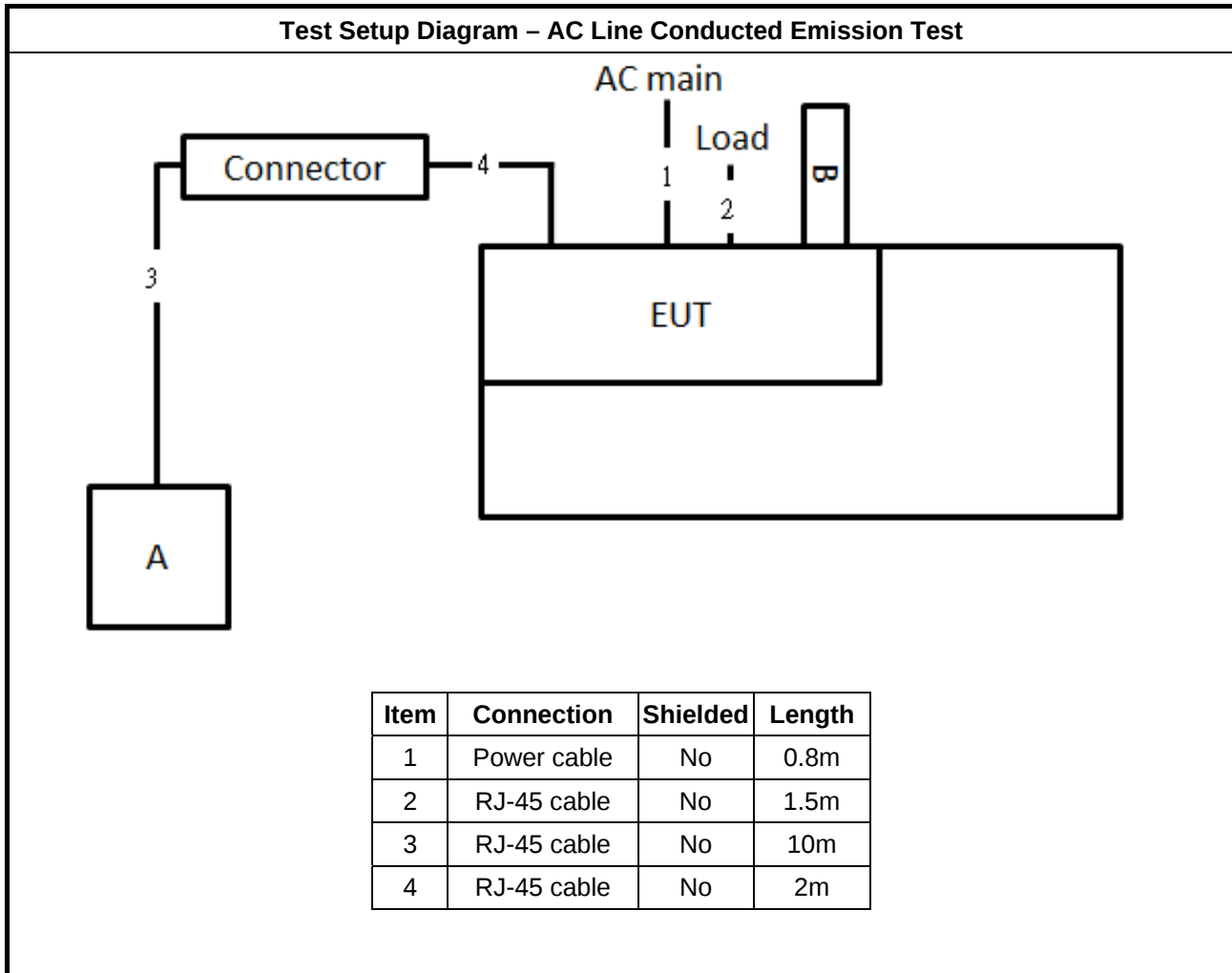
For AC Conduction:

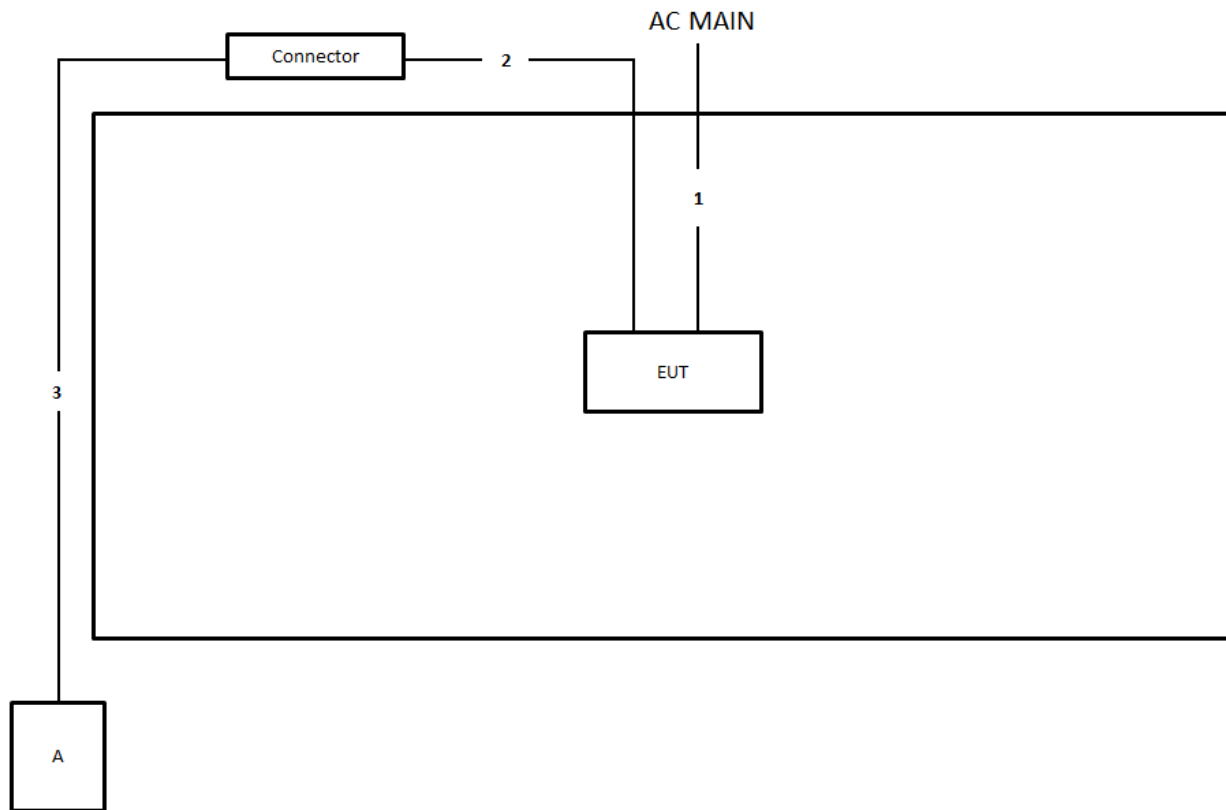
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN NB	DELL	E6430	N/A
B	Lighting	Philips	N/A	N/A

For Radiated and RF Conducted:

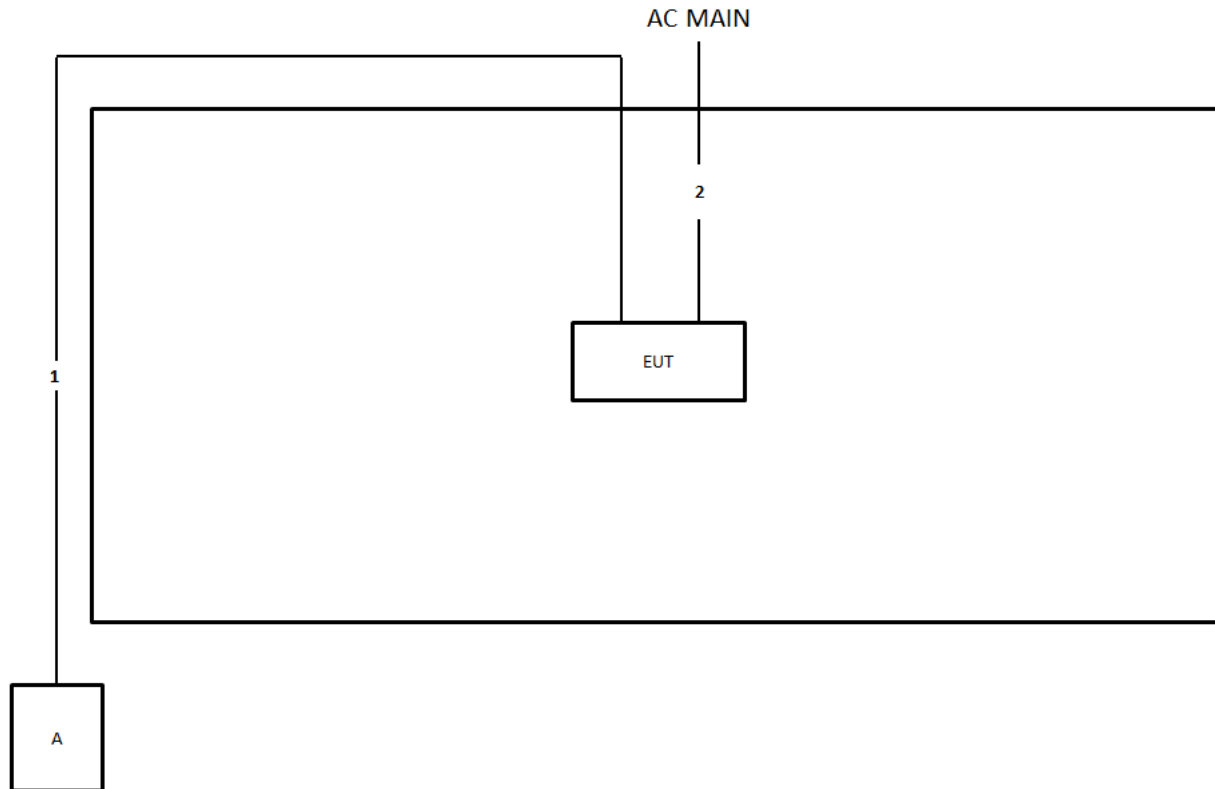
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated below 1GHz Test


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

Test Setup Diagram - Radiated above 1GHz Test


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



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.

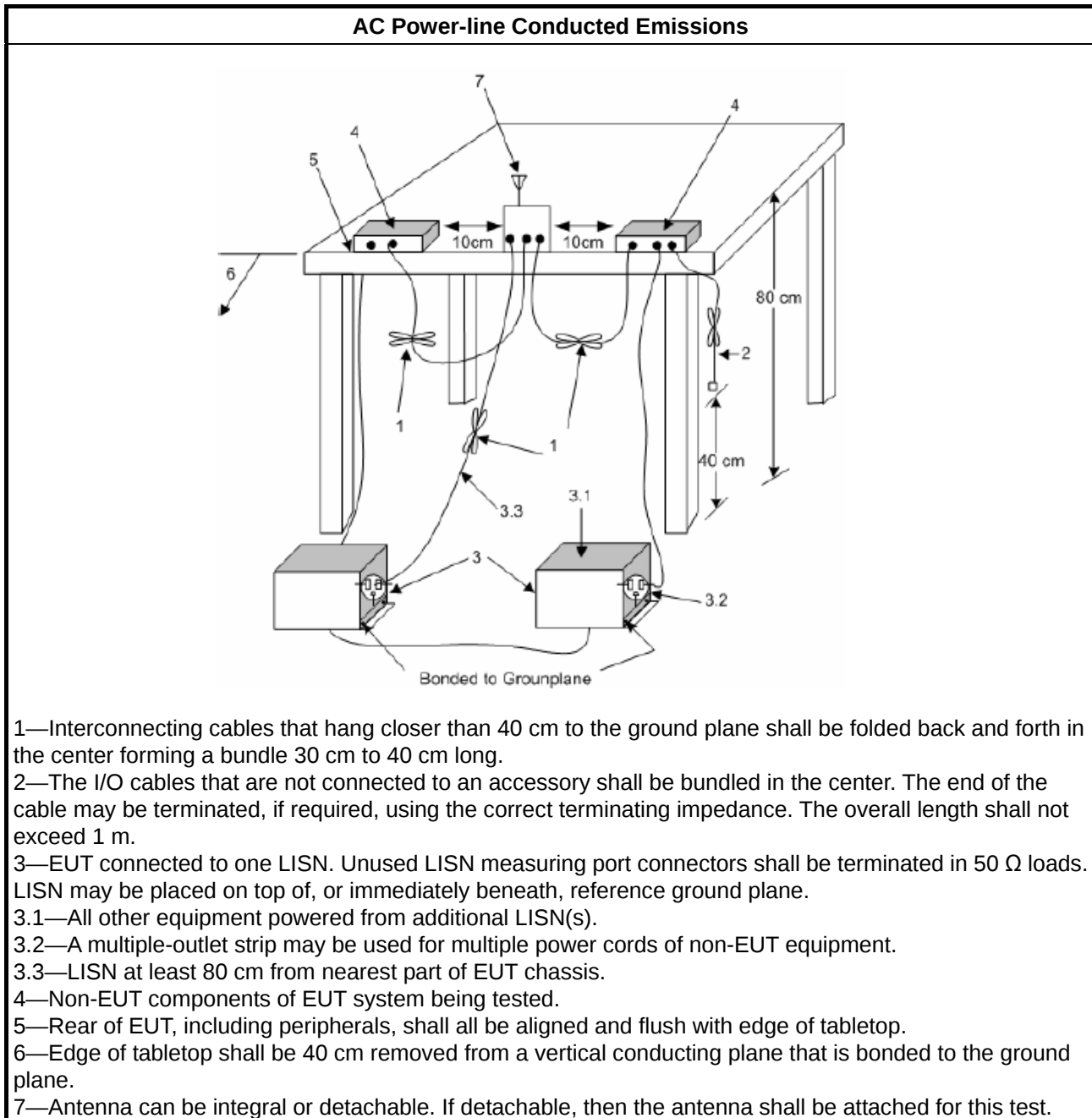
3.1.2 Measuring Instruments

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



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

3.1.6 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 $\geq$ 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 $\geq$ 500kHz.

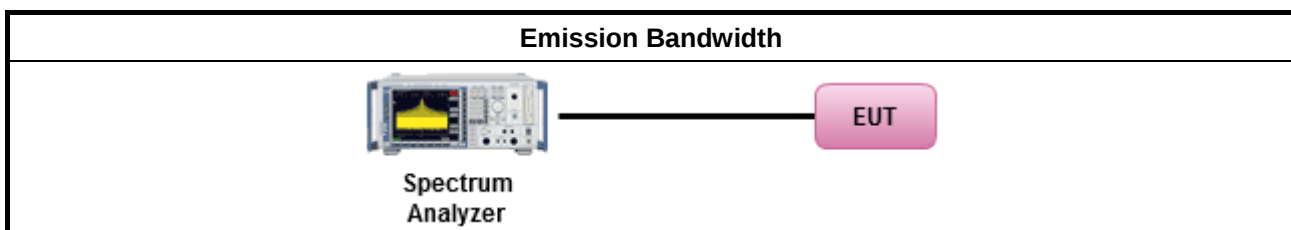
3.2.2 Measuring Instruments

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



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.	

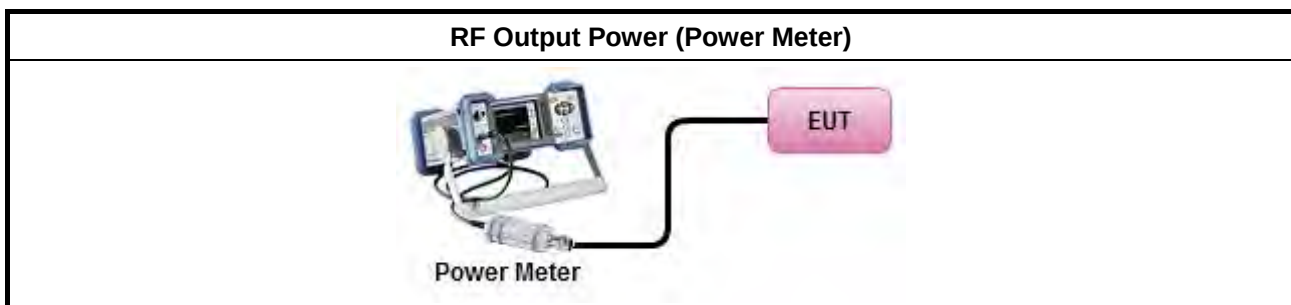
3.3.2 Measuring Instruments

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: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ 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 $0^\circ \leq \theta < 8^\circ$; $-13 - 0.716(\theta - 8)$ dBW/MHz for $8^\circ \leq \theta < 40^\circ$ $-35.9 - 1.22(\theta - 40)$ dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
☐ 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 the 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

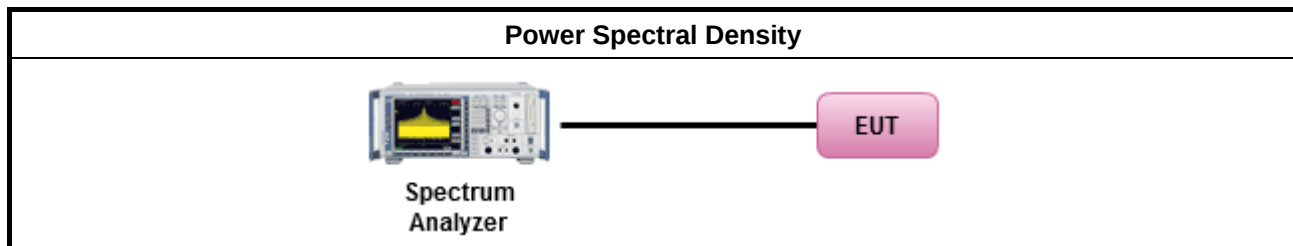
Refer a test equipment and calibration data table in this test report.



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: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
☒ 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).

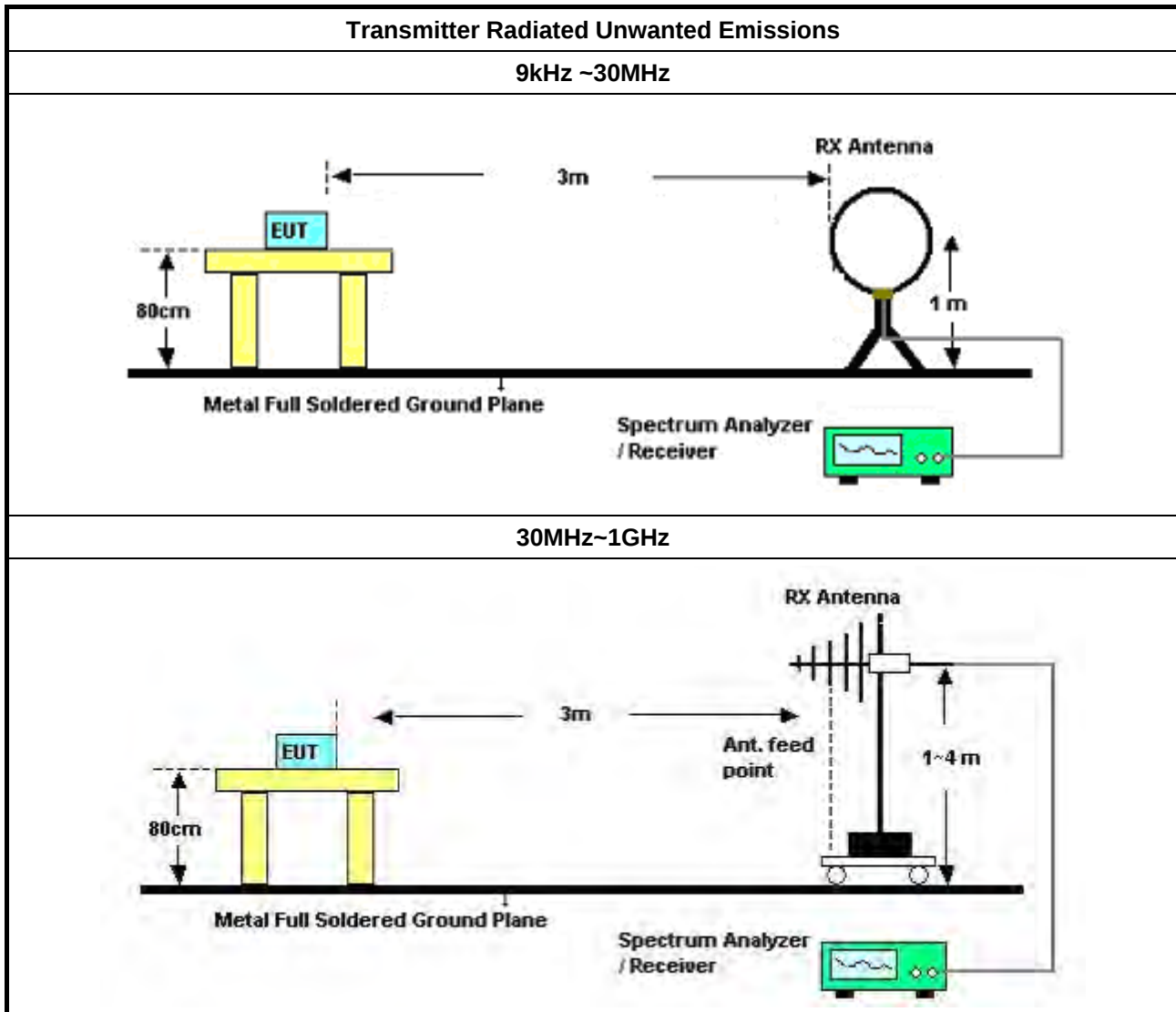
3.5.2 Measuring Instruments

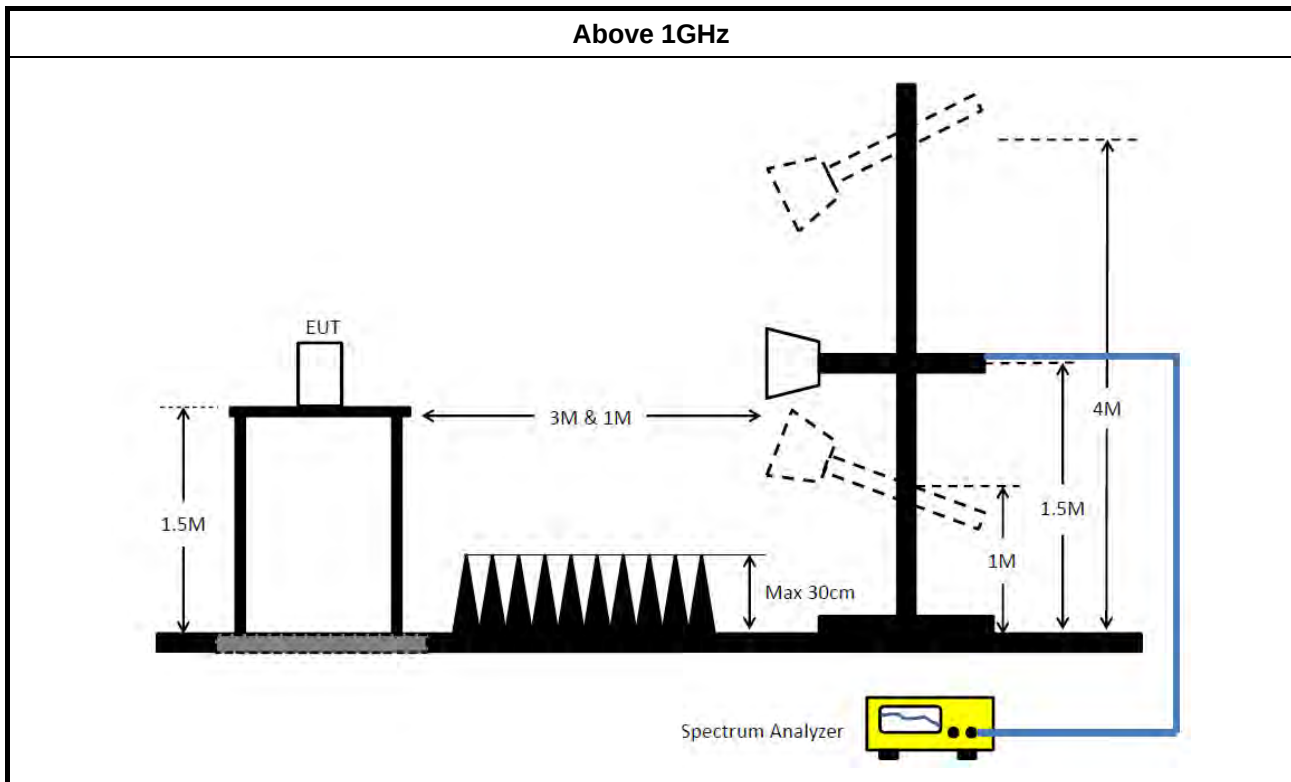
Refer a test equipment and calibration data table in this test report.

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 $\geq 1/T$, 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





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th 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	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 31, 2020	Jan. 30, 2021	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 20, 2020	May 19, 2021	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH01-CB	30 MHz ~ 1 GHz	Jan. 28, 2020	Jan. 27, 2021	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMC	CBL6112D N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Feb. 28, 2020	Feb. 27, 2021	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Apr. 16, 2020	Apr. 15, 2021	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH01-CB)
RF Cable-low	Woken	RG402	Low Cable-16+17	30 MHz ~ 1 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz 3m	Mar. 28, 2020	Mar. 27, 2021	Radiation (03CH02-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 21, 2020	Apr. 20, 2021	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 13, 2020	Jul. 12, 2021	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Oct. 15, 2020	Oct. 14, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 05, 2020	May 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz~ 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz ~26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz ~26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz ~26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz ~26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz ~26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 07, 2020	Feb. 06, 2021	Conducted (TH02-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 07, 2020	Feb. 06, 2021	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

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



Conducted Emissions at Powerline

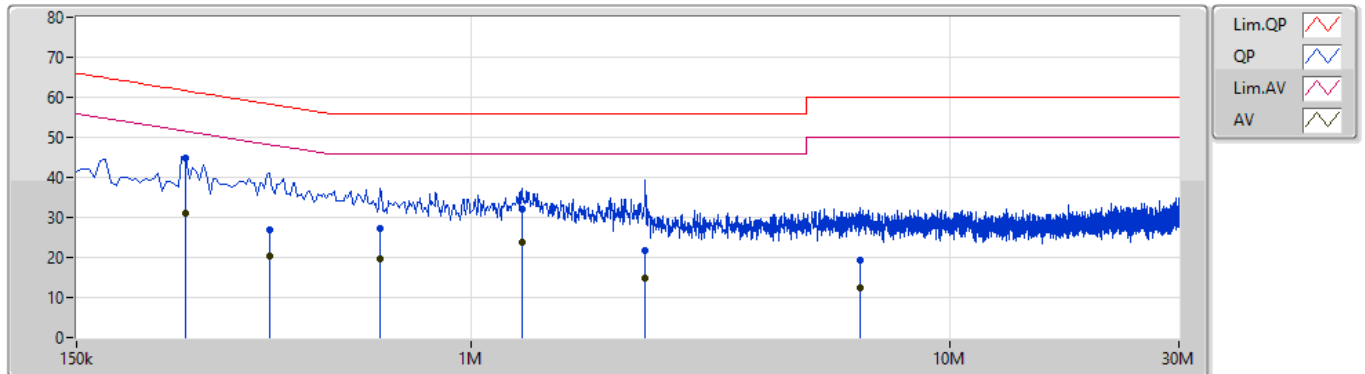
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	QP	253.5k	44.69	61.64	-16.95	Line

Mode 2

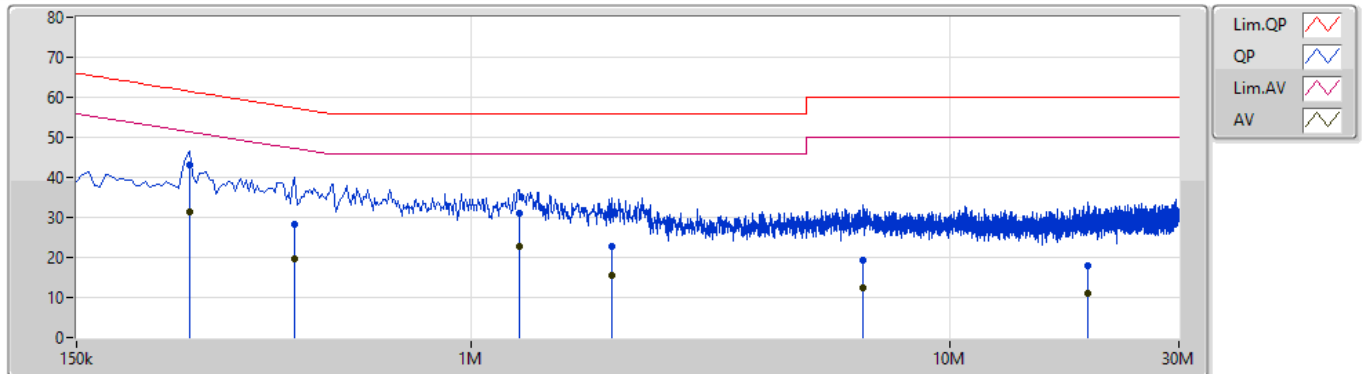
12/10/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	253.5k	44.69	61.64	-16.95	9.87	Line	"Worst"	34.82	0.04	0.03	9.80			
AV	253.5k	30.99	51.64	-20.65	9.87	Line	-	21.12	0.04	0.03	9.80			
QP	379.5k	26.88	58.29	-31.41	9.88	Line	-	17.00	0.04	0.03	9.81			
AV	379.5k	20.19	48.29	-28.10	9.88	Line	-	10.31	0.04	0.03	9.81			
QP	645k	27.13	56.00	-28.87	9.91	Line	-	17.22	0.05	0.04	9.82			
AV	645k	19.79	46.00	-26.21	9.91	Line	-	9.88	0.05	0.04	9.82			
QP	1.275M	31.94	56.00	-24.06	9.92	Line	-	22.02	0.05	0.05	9.82			
AV	1.275M	23.83	46.00	-22.17	9.92	Line	-	13.91	0.05	0.05	9.82			
QP	2.306M	21.64	56.00	-34.36	9.98	Line	-	11.66	0.07	0.08	9.83			
AV	2.306M	14.85	46.00	-31.15	9.98	Line	-	4.87	0.07	0.08	9.83			
QP	6.504M	19.39	60.00	-40.61	10.14	Line	-	9.25	0.13	0.14	9.87			
AV	6.504M	12.55	50.00	-37.45	10.14	Line	-	2.41	0.13	0.14	9.87			

Mode 2

12/10/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	258k	43.13	61.49	-18.36	9.87	Neutral	"Worst"	33.26	0.04	0.03	9.80			
AV	258k	31.40	51.49	-20.09	9.87	Neutral	-	21.53	0.04	0.03	9.80			
QP	429k	28.33	57.28	-28.95	9.88	Neutral	-	18.45	0.04	0.03	9.81			
AV	429k	19.64	47.28	-27.64	9.88	Neutral	-	9.76	0.04	0.03	9.81			
QP	1.257M	30.88	56.00	-25.12	9.93	Neutral	-	20.95	0.06	0.05	9.82			
AV	1.257M	22.67	46.00	-23.33	9.93	Neutral	-	12.74	0.06	0.05	9.82			
QP	1.964M	22.69	56.00	-33.31	9.97	Neutral	-	12.72	0.07	0.07	9.83			
AV	1.964M	15.62	46.00	-30.38	9.97	Neutral	-	5.65	0.07	0.07	9.83			
QP	6.563M	19.32	60.00	-40.68	10.14	Neutral	-	9.18	0.13	0.14	9.87			
AV	6.563M	12.37	50.00	-37.63	10.14	Neutral	-	2.23	0.13	0.14	9.87			
QP	19.41M	17.83	60.00	-42.17	10.51	Neutral	-	7.32	0.21	0.32	9.98			
AV	19.41M	11.16	50.00	-38.84	10.51	Neutral	-	0.65	0.21	0.32	9.98			

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	22.71M	16.702M	16M7D1D	22.08M	16.612M
802.11ac VHT20_Nss1,(MCS0)_2TX	26.31M	17.931M	17M9D1D	22.74M	17.841M
802.11ac VHT40_Nss1,(MCS0)_2TX	66.48M	37.001M	37M0D1D	45.12M	36.762M
802.11ac VHT80_Nss1,(MCS0)_2TX	122.64M	76.642M	76M6D1D	88.32M	76.402M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.35M	17.751M	17M8D1D	16.32M	17.271M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.64M	18.771M	18M8D1D	17.55M	18.381M
802.11ac VHT40_Nss1,(MCS0)_2TX	36.3M	37.601M	37M6D1D	36.06M	37.421M
802.11ac VHT80_Nss1,(MCS0)_2TX	76.32M	76.882M	76M9D1D	76.32M	76.762M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	22.32M	16.672M	22.08M	16.642M
5200MHz	Pass	Inf	22.35M	16.702M	22.71M	16.612M
5240MHz	Pass	Inf	22.62M	16.702M	22.11M	16.672M
5745MHz	Pass	500k	16.32M	17.271M	16.35M	17.601M
5785MHz	Pass	500k	16.32M	17.391M	16.32M	17.601M
5825MHz	Pass	500k	16.32M	17.751M	16.35M	17.751M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	22.74M	17.841M	24.24M	17.871M
5200MHz	Pass	Inf	22.98M	17.841M	26.31M	17.871M
5240MHz	Pass	Inf	23.55M	17.931M	25.95M	17.931M
5745MHz	Pass	500k	17.55M	18.381M	17.55M	18.771M
5785MHz	Pass	500k	17.58M	18.471M	17.64M	18.771M
5825MHz	Pass	500k	17.55M	18.771M	17.58M	18.771M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	49.8M	36.882M	45.12M	36.762M
5230MHz	Pass	Inf	62.16M	36.942M	66.48M	37.001M
5755MHz	Pass	500k	36.3M	37.421M	36.3M	37.481M
5795MHz	Pass	500k	36.3M	37.601M	36.06M	37.481M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	122.64M	76.642M	88.32M	76.402M
5775MHz	Pass	500k	76.32M	76.762M	76.32M	76.882M

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

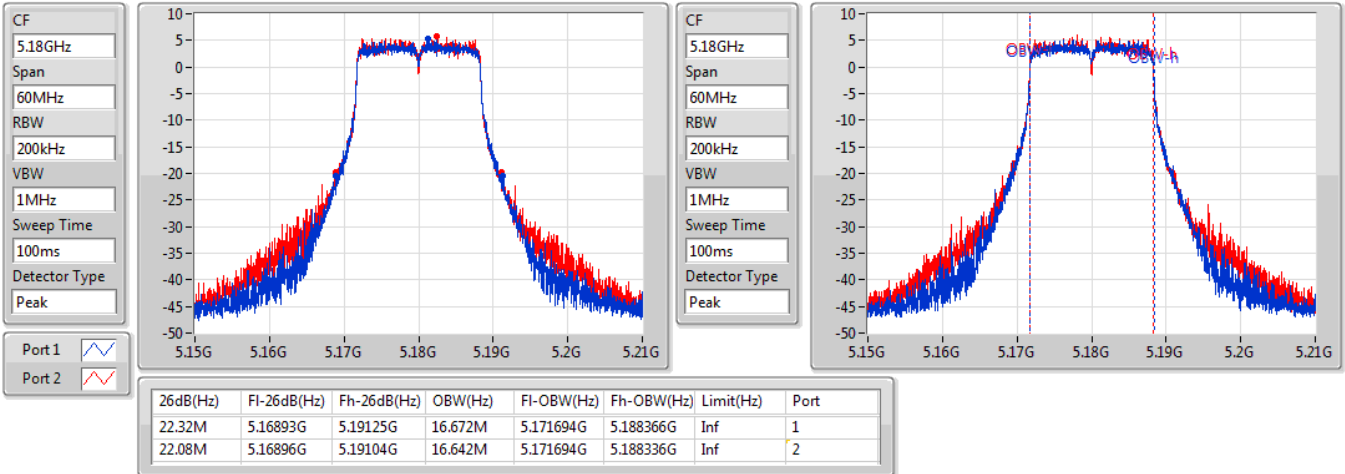
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_2TX

EBW

5180MHz

12/11/2020

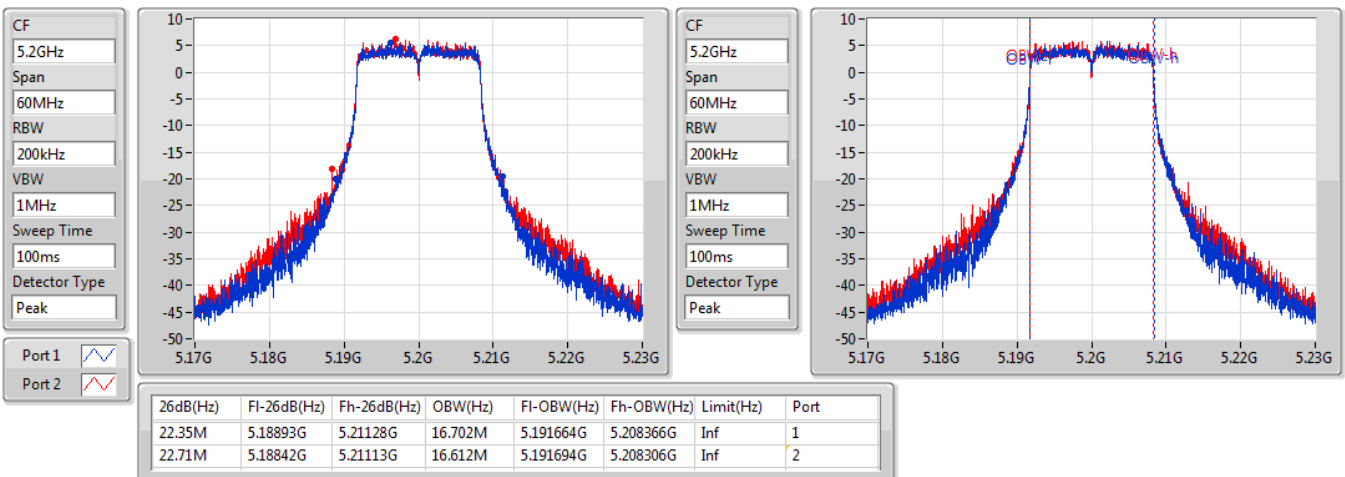


802.11a_Nss1,(6Mbps)_2TX

EBW

5200MHz

12/11/2020

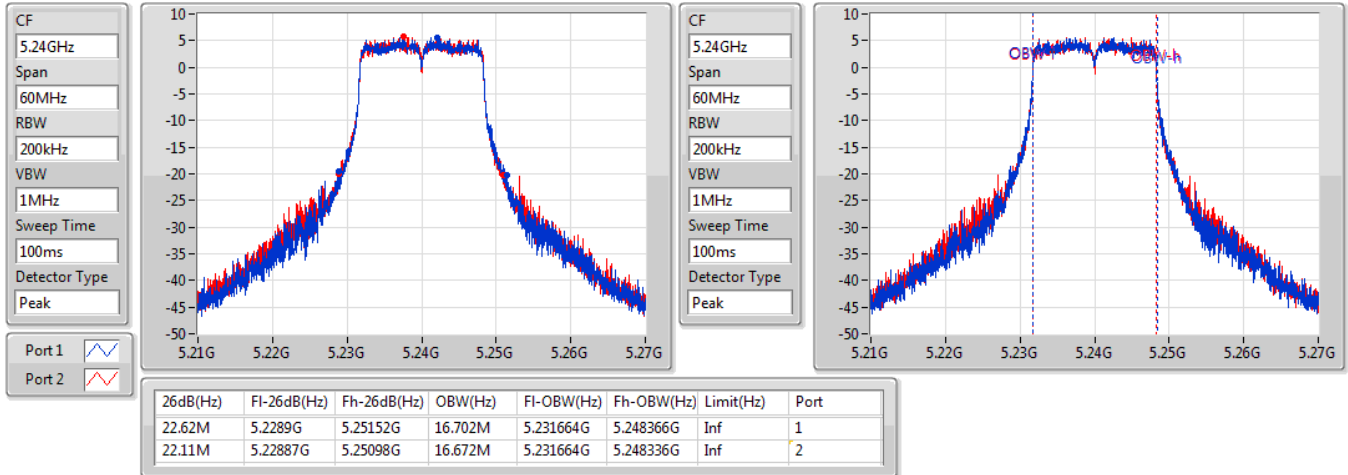


802.11a_Nss1,(6Mbps)_2TX

EBW

5240MHz

12/11/2020

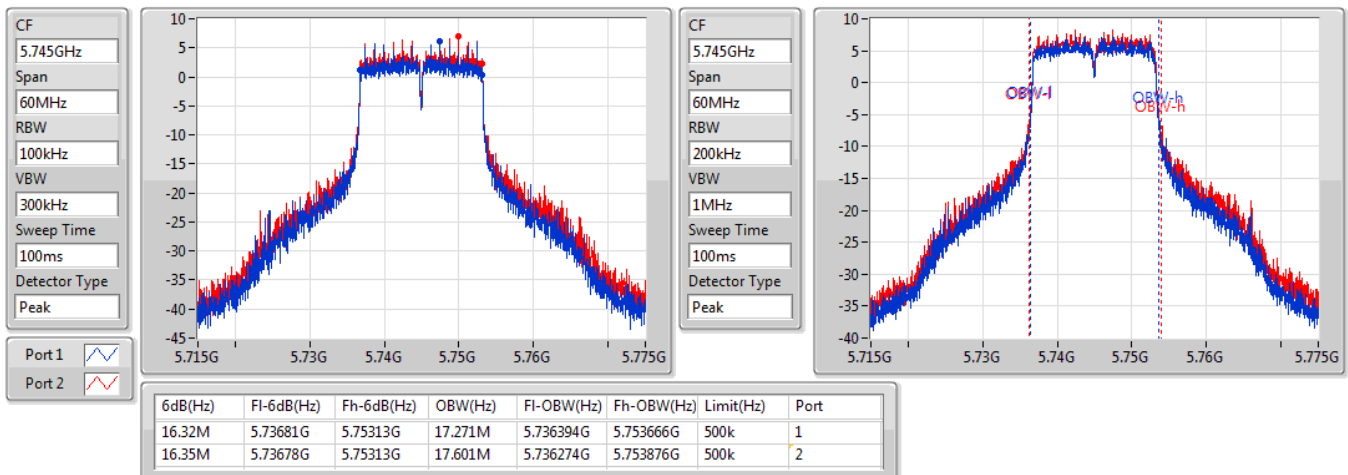


802.11a_Nss1,(6Mbps)_2TX

EBW

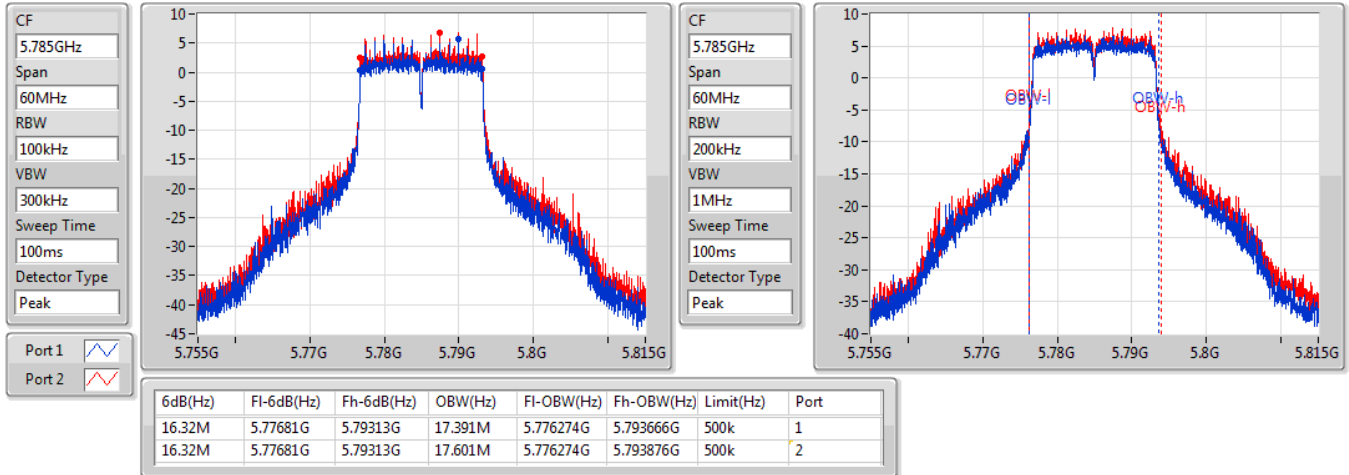
5745MHz

30/10/2020

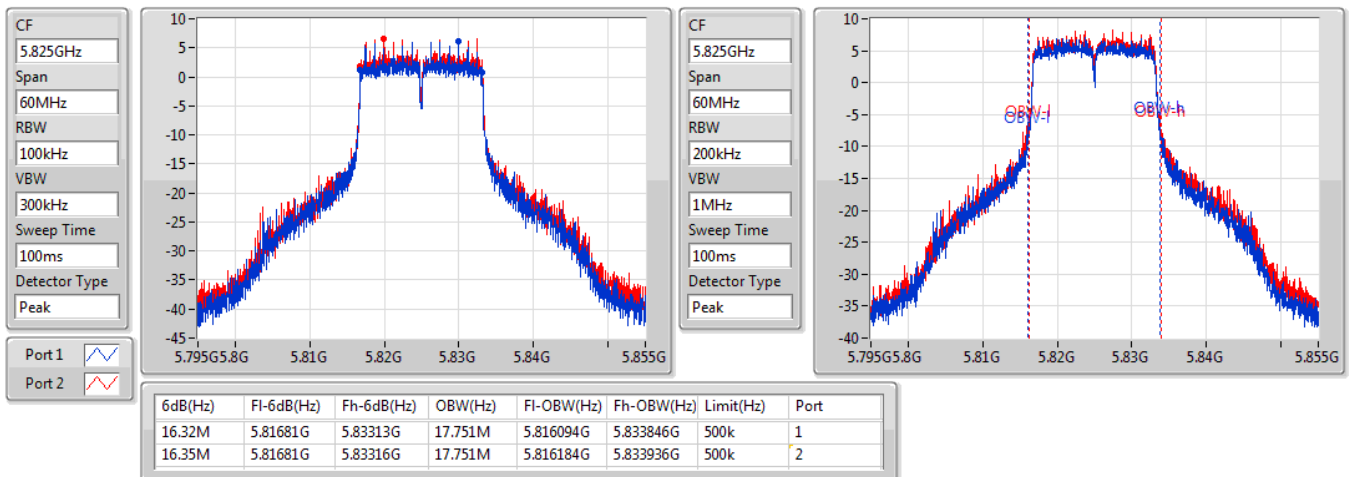


802.11a_Nss1,(6Mbps)_2TX
EBW
5785MHz

30/10/2020

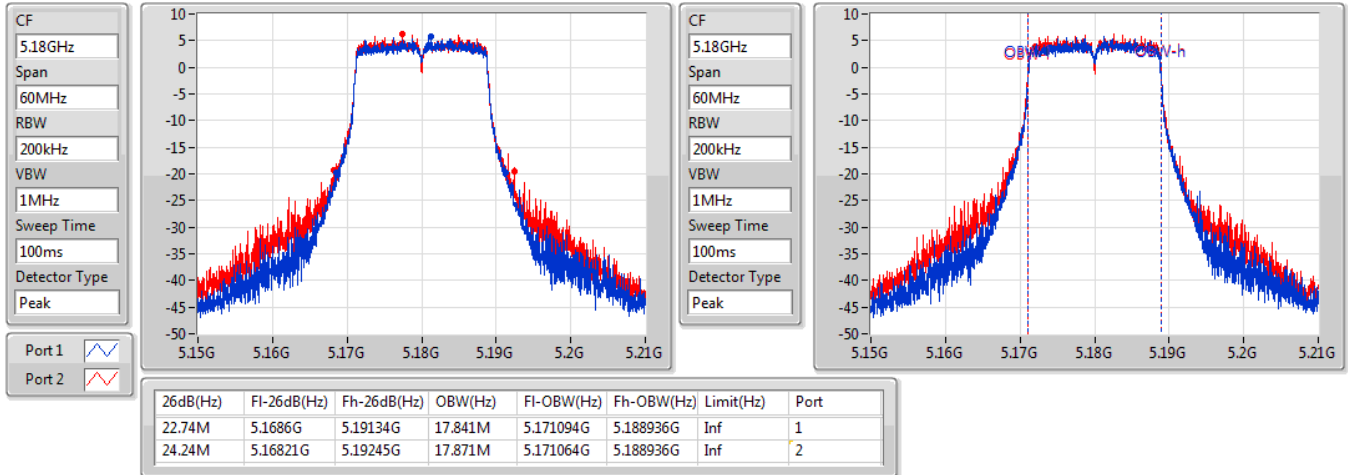

802.11a_Nss1,(6Mbps)_2TX
EBW
5825MHz

30/10/2020

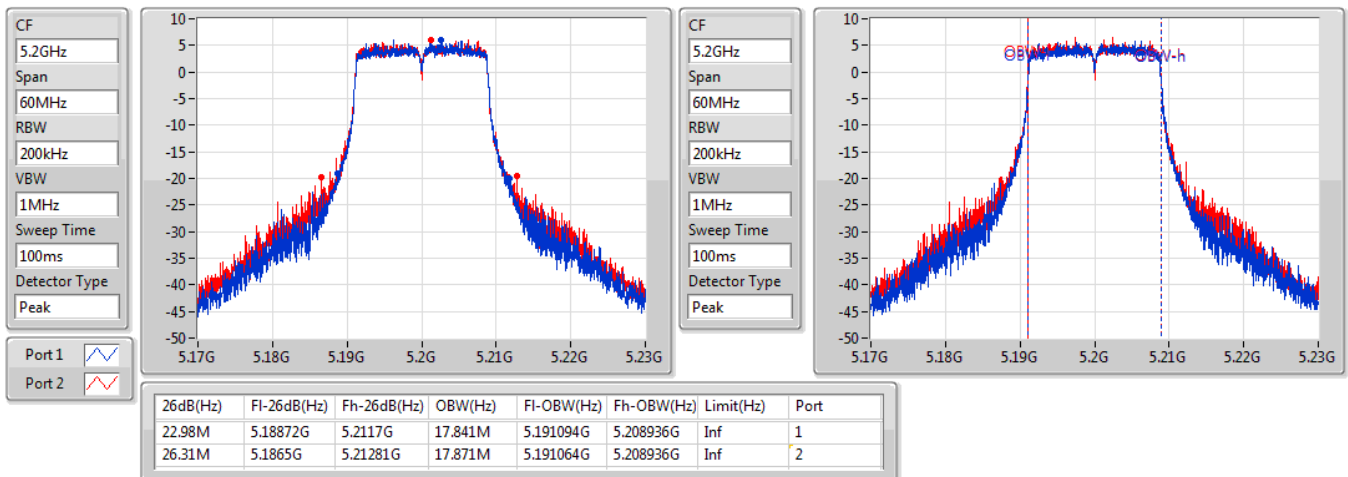


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5180MHz

12/11/2020

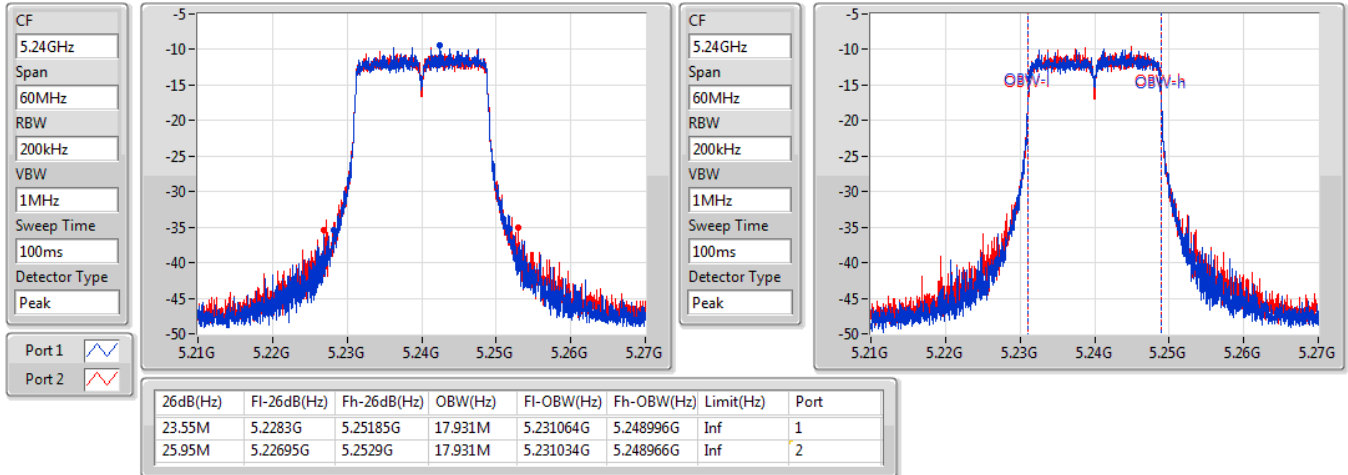

802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5200MHz

12/11/2020

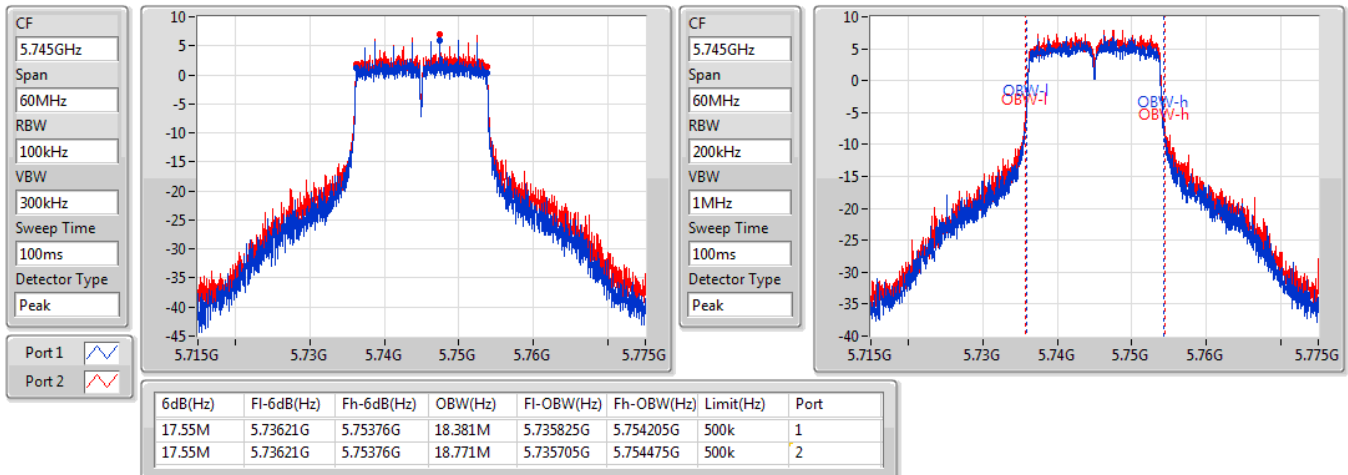


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5240MHz

12/11/2020

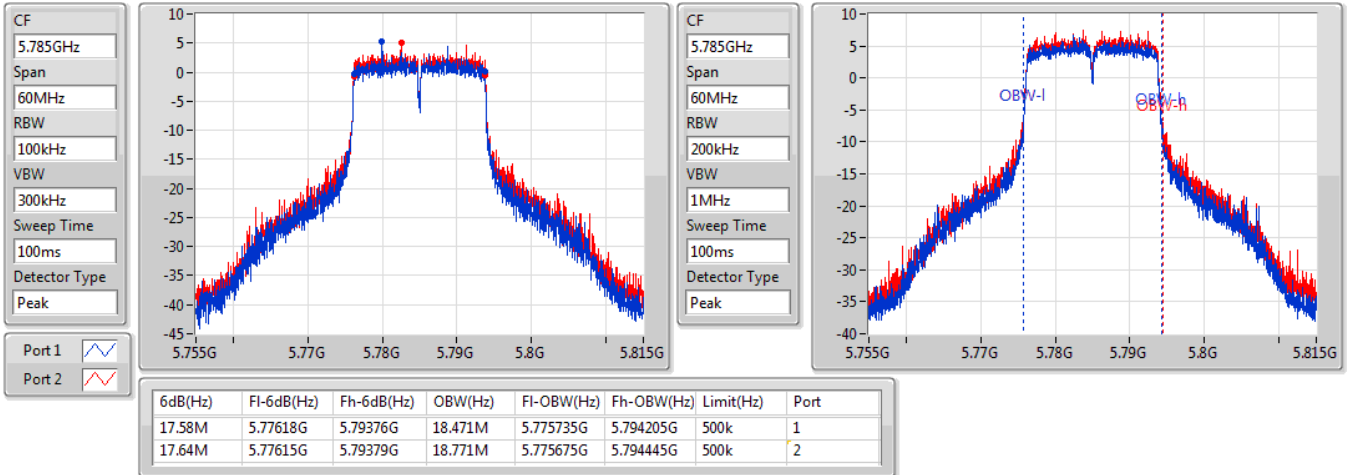

802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5745MHz

30/10/2020

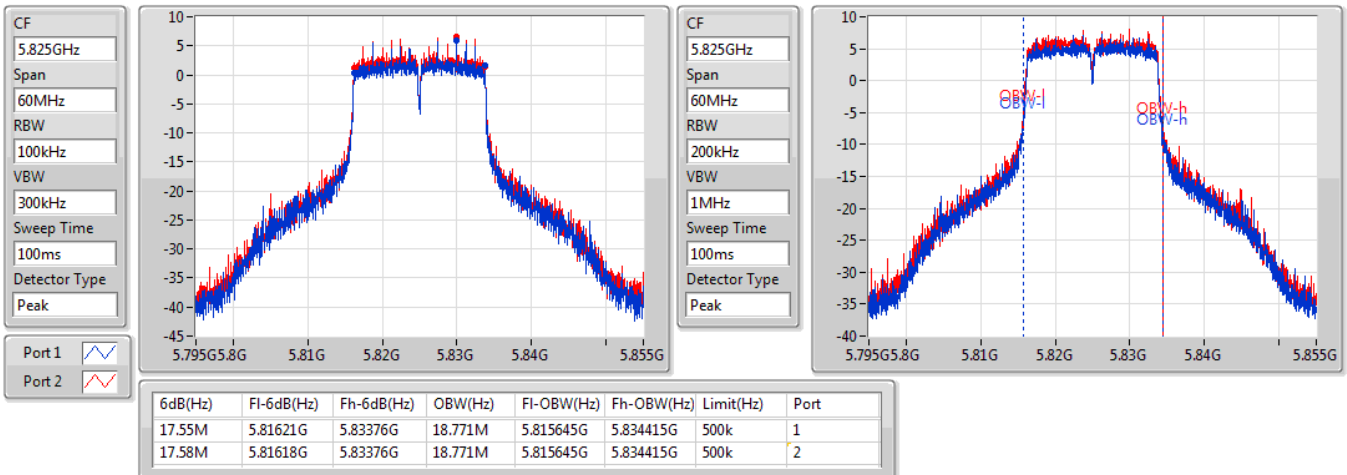


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5785MHz

30/10/2020


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5825MHz

30/10/2020

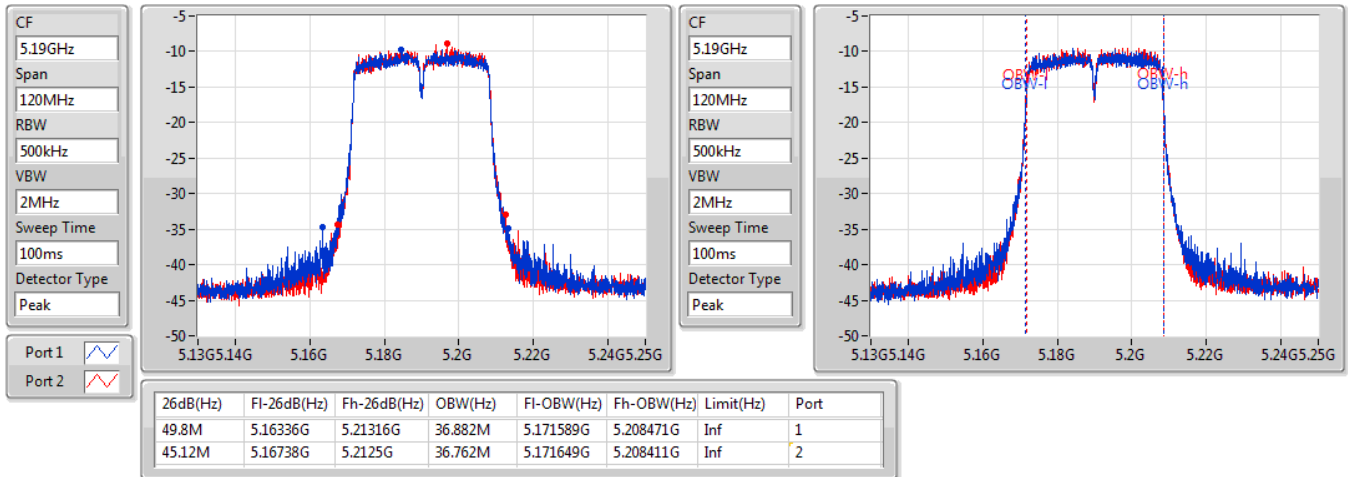


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5190MHz

20/10/2020

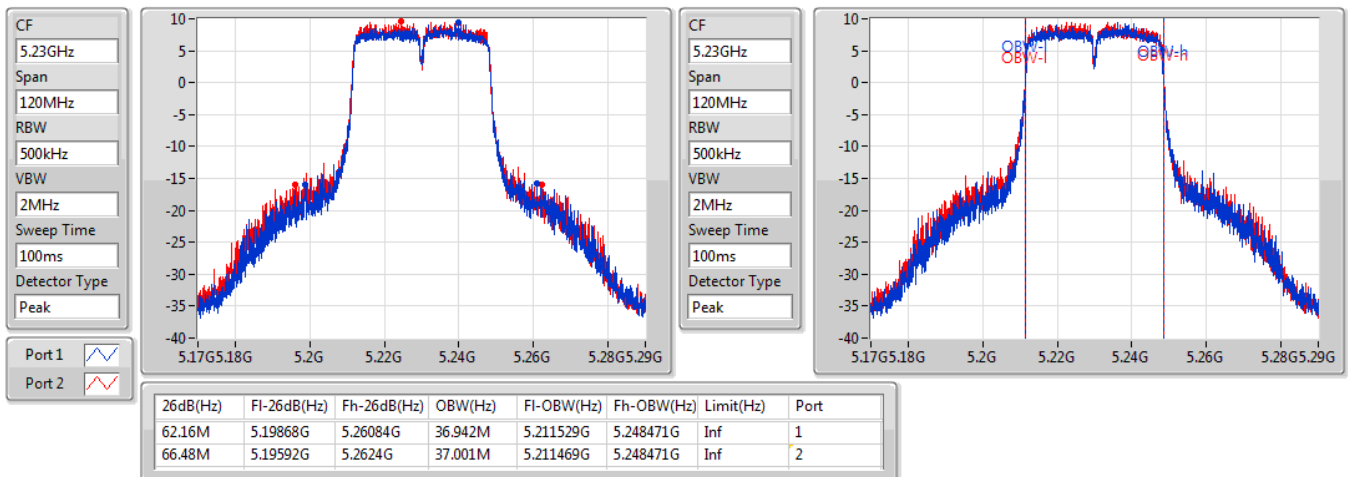


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5230MHz

12/11/2020

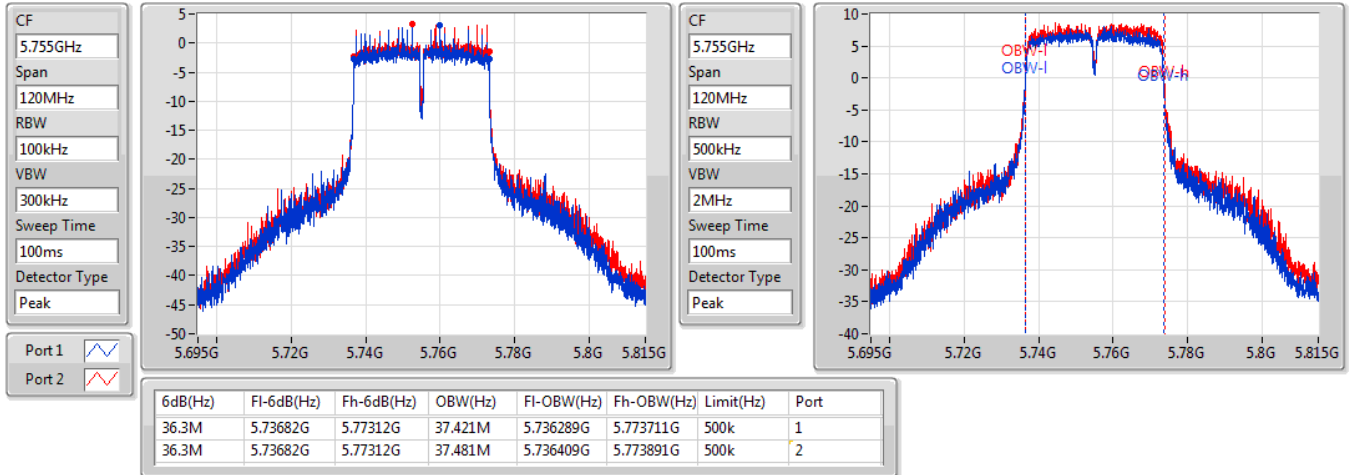


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5755MHz

30/10/2020

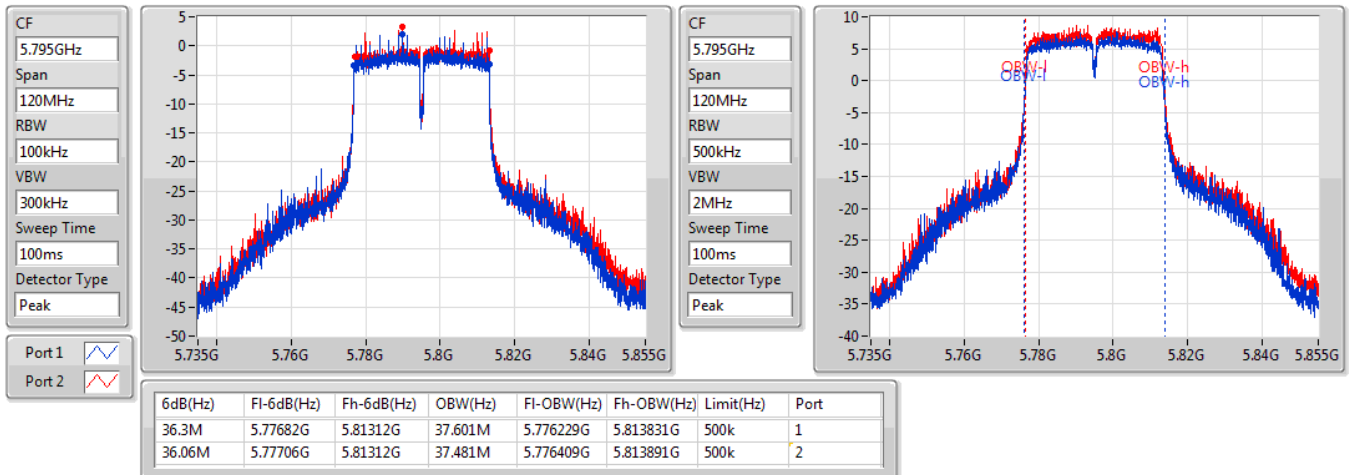


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

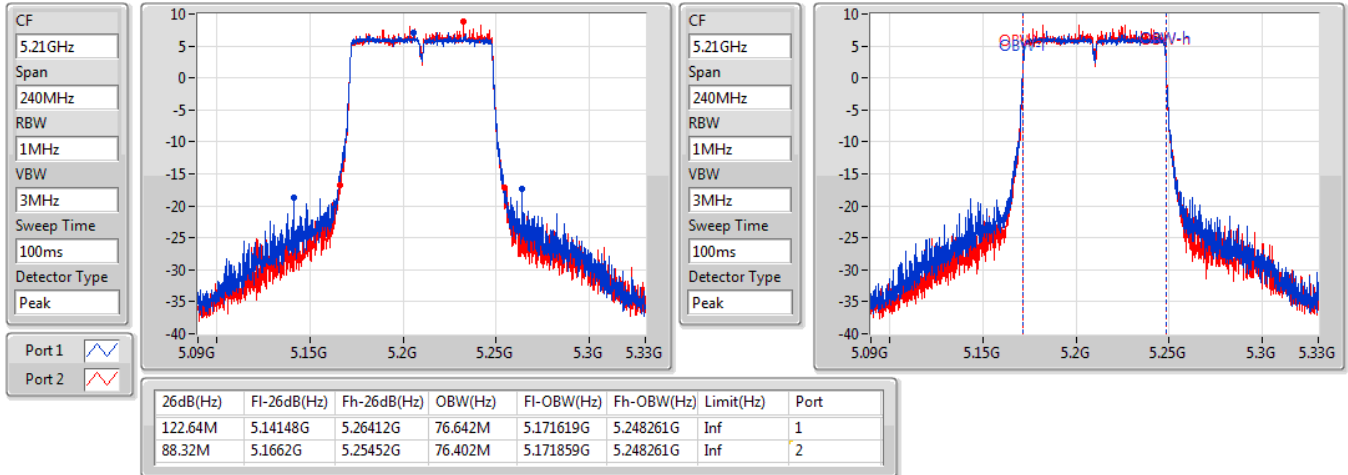
5795MHz

29/10/2020

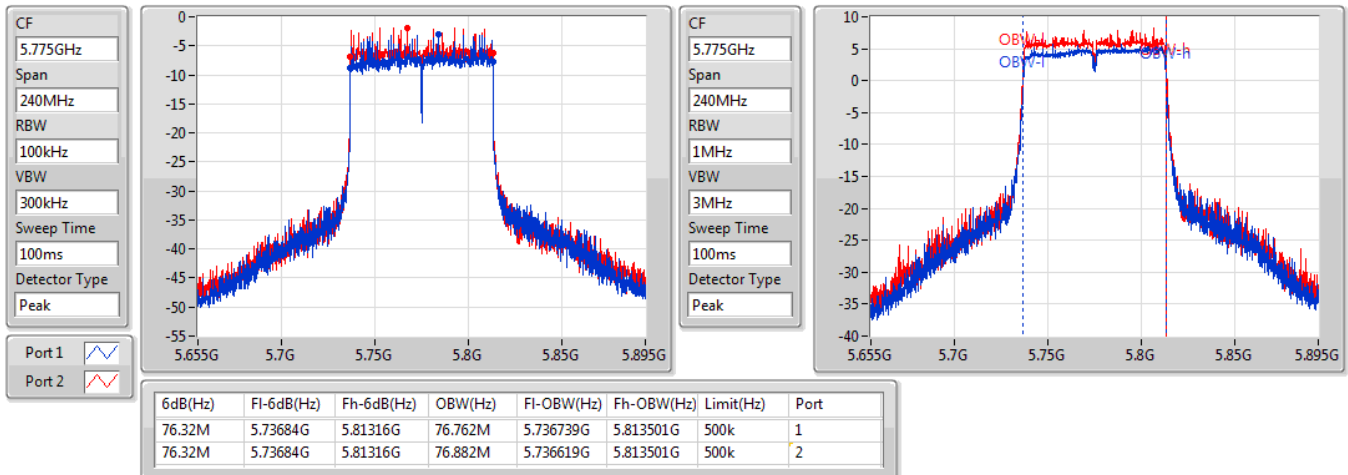


802.11ac VHT80_Nss1,(MCS0)_2TX
EBW
5210MHz

20/10/2020


802.11ac VHT80_Nss1,(MCS0)_2TX
EBW
5775MHz

20/10/2020





Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	19.25	0.08414
802.11ac VHT20_Nss1,(MCS0)_2TX	19.68	0.09290
802.11ac VHT40_Nss1,(MCS0)_2TX	21.44	0.13932
802.11ac VHT80_Nss1,(MCS0)_2TX	20.00	0.10000
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	20.99	0.12560
802.11ac VHT20_Nss1,(MCS0)_2TX	21.03	0.12677
802.11ac VHT40_Nss1,(MCS0)_2TX	20.55	0.11350
802.11ac VHT80_Nss1,(MCS0)_2TX	19.28	0.08472

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	1.20	15.91	16.25	19.09	30.00
5200MHz	Pass	1.20	16.08	16.4	19.25	30.00
5240MHz	Pass	1.20	16.09	16.26	19.19	30.00
5745MHz	Pass	3.90	17.54	18.38	20.99	30.00
5785MHz	Pass	3.90	17.21	18.03	20.65	30.00
5825MHz	Pass	3.90	17.42	18.26	20.87	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	1.20	16.3	16.7	19.51	30.00
5200MHz	Pass	1.20	16.44	16.79	19.63	30.00
5240MHz	Pass	1.20	16.6	16.74	19.68	30.00
5745MHz	Pass	3.90	17.61	18.4	21.03	30.00
5785MHz	Pass	3.90	17.22	18.06	20.67	30.00
5825MHz	Pass	3.90	17.34	18.1	20.75	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	1.20	16.67	16.75	19.72	30.00
5230MHz	Pass	1.20	18.33	18.53	21.44	30.00
5755MHz	Pass	3.90	17.09	17.94	20.55	30.00
5795MHz	Pass	3.90	16.85	17.56	20.23	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	1.20	16.91	17.07	20.00	30.00
5775MHz	Pass	3.90	15.61	16.84	19.28	30.00

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

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	6.39
802.11ac VHT20_Nss1,(MCS0)_2TX	6.37
802.11ac VHT40_Nss1,(MCS0)_2TX	5.31
802.11ac VHT80_Nss1,(MCS0)_2TX	-0.41
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	6.68
802.11ac VHT20_Nss1,(MCS0)_2TX	6.13
802.11ac VHT40_Nss1,(MCS0)_2TX	2.71
802.11ac VHT80_Nss1,(MCS0)_2TX	-2.59

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	3.45	3.14	3.42	6.16	17.00
5200MHz	Pass	3.45	3.29	3.63	6.39	17.00
5240MHz	Pass	3.45	3.29	3.33	6.29	17.00
5745MHz	Pass	6.62	3.22	4.11	6.68	29.38
5785MHz	Pass	6.62	2.69	3.57	6.08	29.38
5825MHz	Pass	6.62	3.1	3.92	6.44	29.38
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	3.45	3.12	3.31	6.23	17.00
5200MHz	Pass	3.45	3.33	3.52	6.37	17.00
5240MHz	Pass	3.45	3.19	3.33	6.23	17.00
5745MHz	Pass	6.62	2.86	3.52	6.13	29.38
5785MHz	Pass	6.62	2.36	3.1	5.70	29.38
5825MHz	Pass	6.62	2.58	3.32	5.93	29.38
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	3.45	-0.37	-0.38	2.58	17.00
5230MHz	Pass	3.45	2.3	2.39	5.31	17.00
5755MHz	Pass	6.62	-0.53	0.12	2.71	29.38
5795MHz	Pass	6.62	-1.08	-0.18	2.35	29.38
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	3.45	-3.4	-3.2	-0.41	17.00
5775MHz	Pass	6.62	-6.14	-4.94	-2.59	29.38

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;

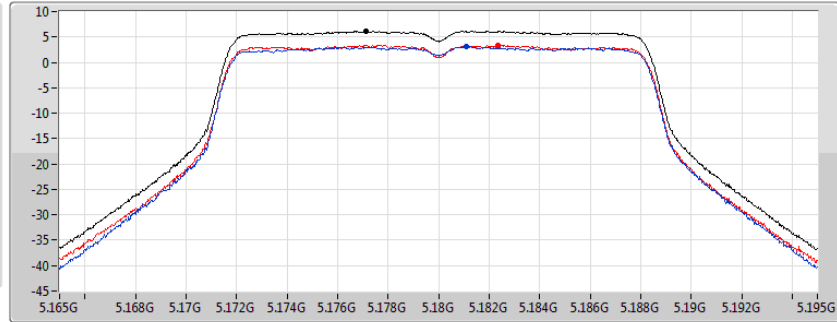
802.11a_Nss1,(6Mbps)_2TX

PSD

5180MHz

12/11/2020

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



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.16	6.16	3.14	3.42

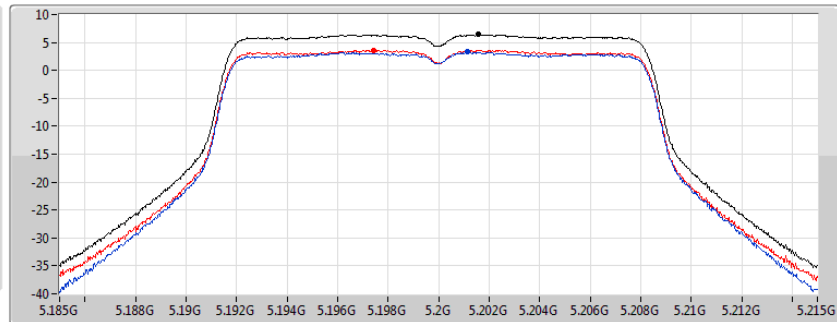
802.11a_Nss1,(6Mbps)_2TX

PSD

5200MHz

12/11/2020

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



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.39	6.39	3.29	3.63

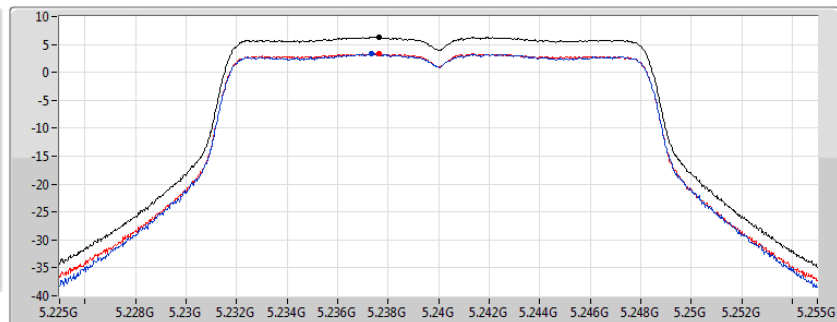
802.11a_Nss1,(6Mbps)_2TX

PSD

5240MHz

12/11/2020

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



Sum
Port 1
Port 2

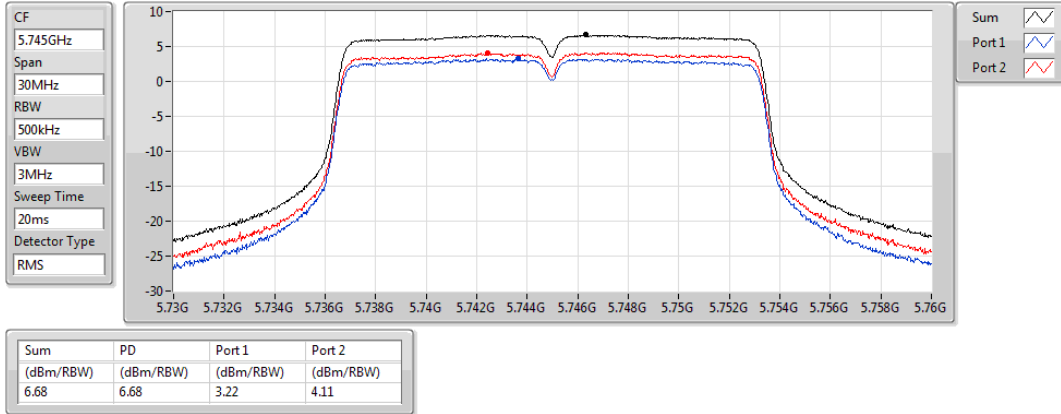
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.29	6.29	3.29	3.33

802.11a_Nss1,(6Mbps)_2TX

PSD

5745MHz

30/10/2020

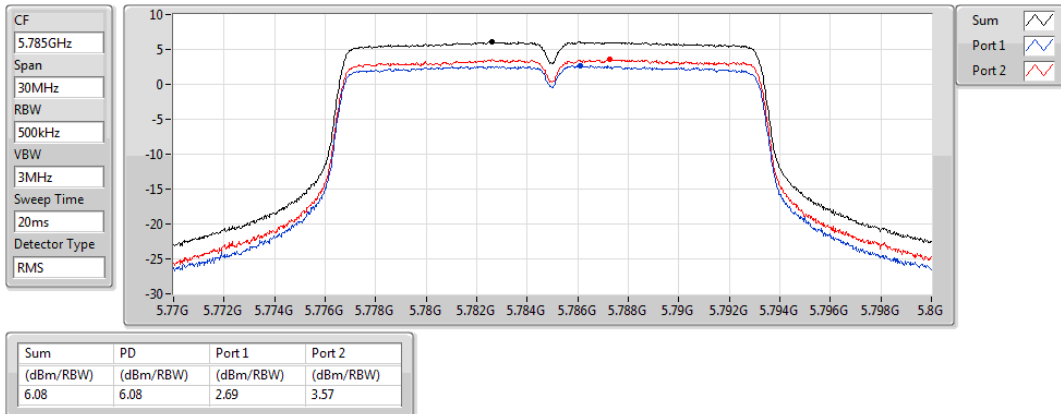


802.11a_Nss1,(6Mbps)_2TX

PSD

5785MHz

30/10/2020

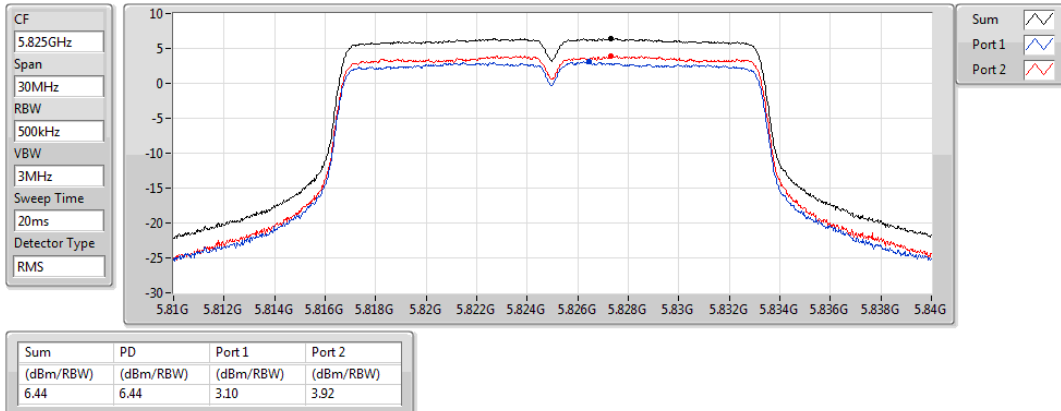


802.11a_Nss1,(6Mbps)_2TX

PSD

5825MHz

30/10/2020

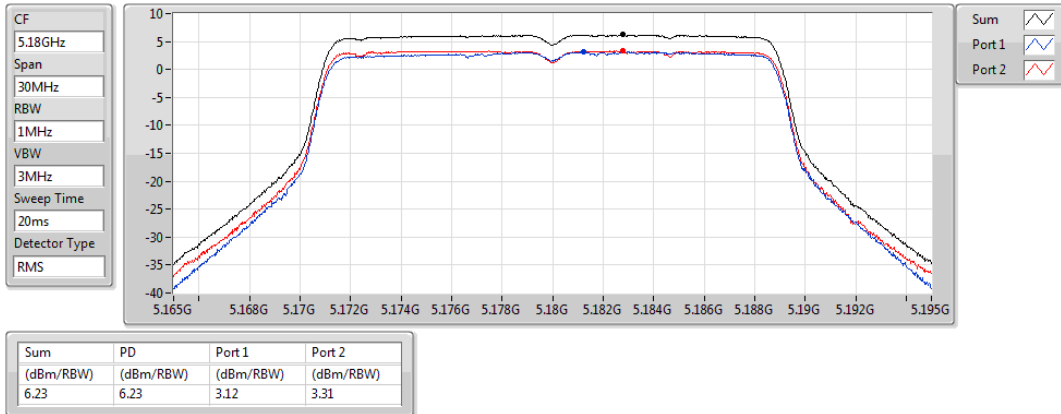


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5180MHz

12/11/2020

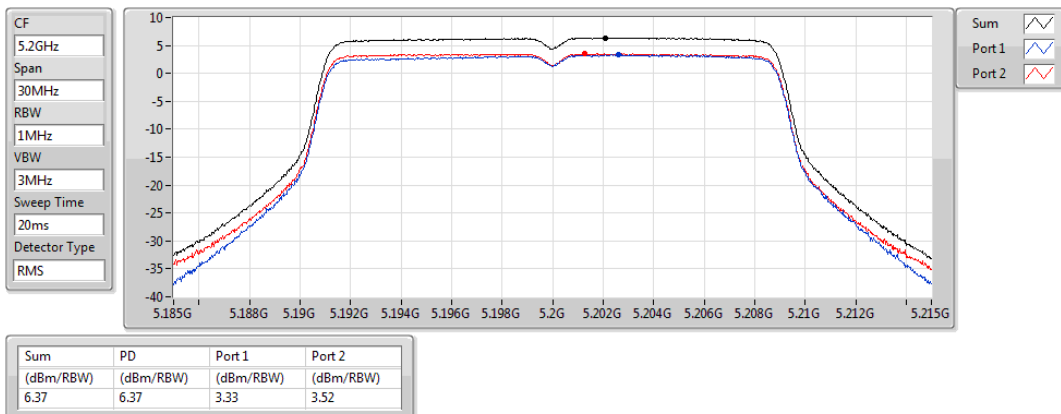


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5200MHz

12/11/2020

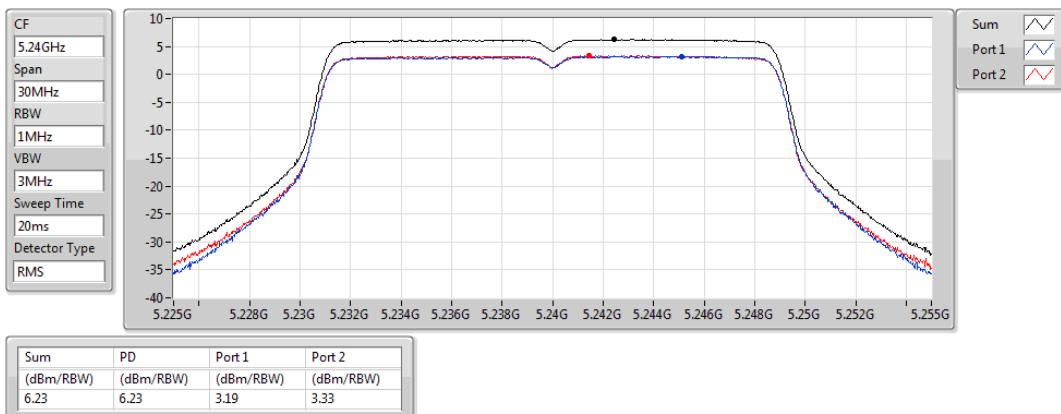


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5240MHz

12/11/2020

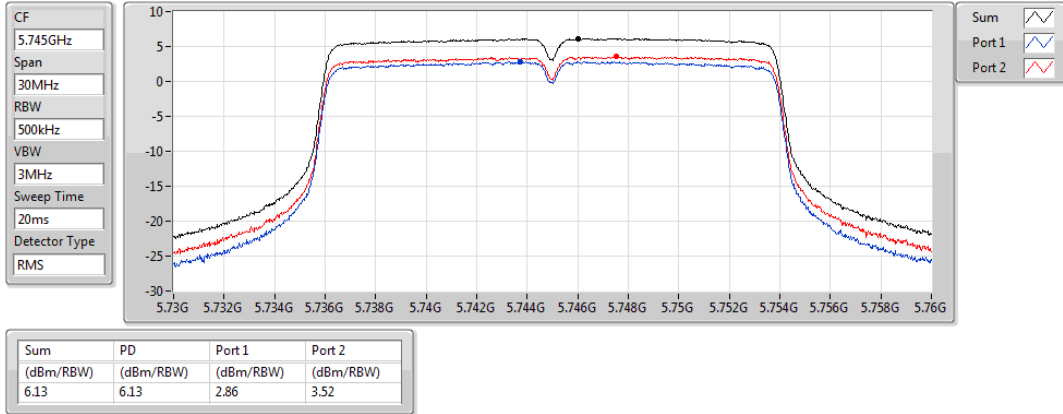


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5745MHz

30/10/2020

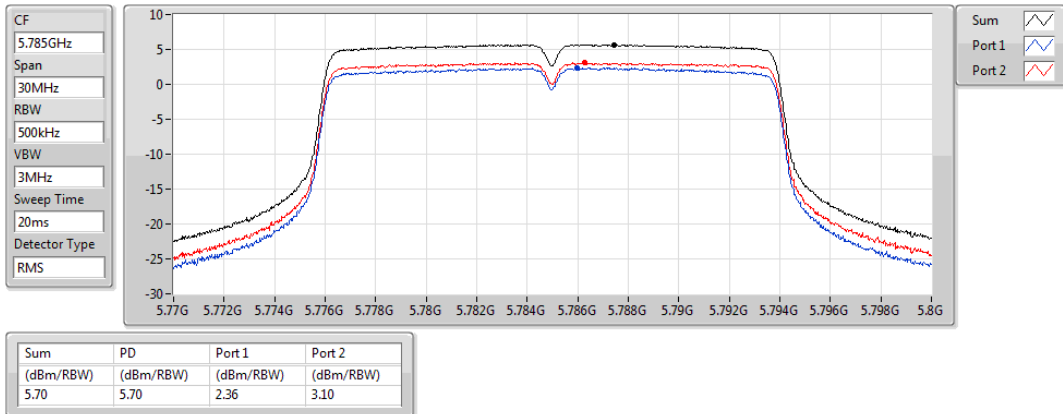


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5785MHz

30/10/2020

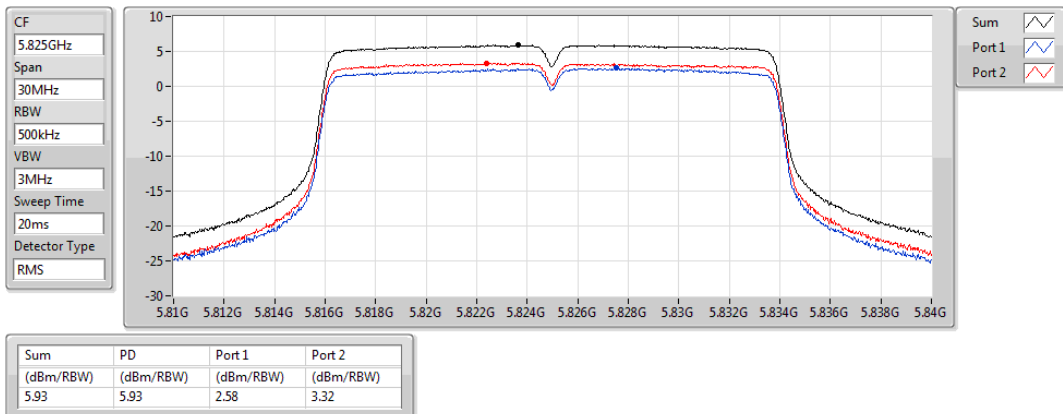


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5825MHz

30/10/2020

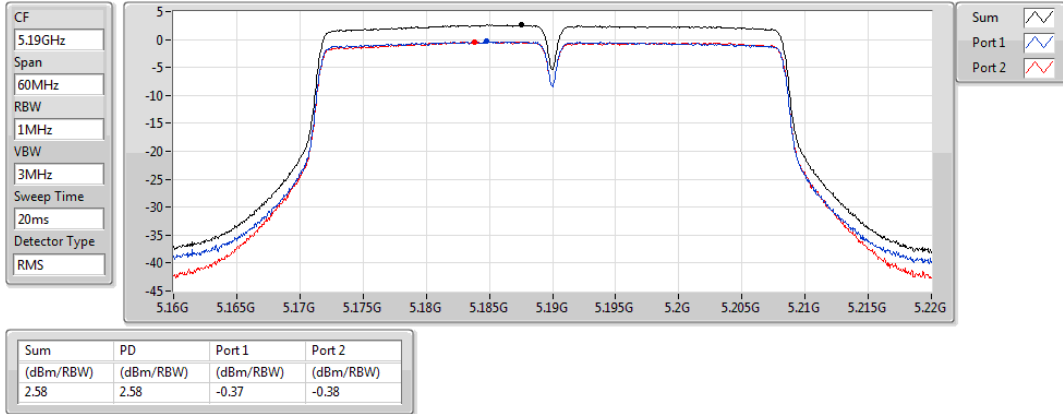


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5190MHz

20/10/2020

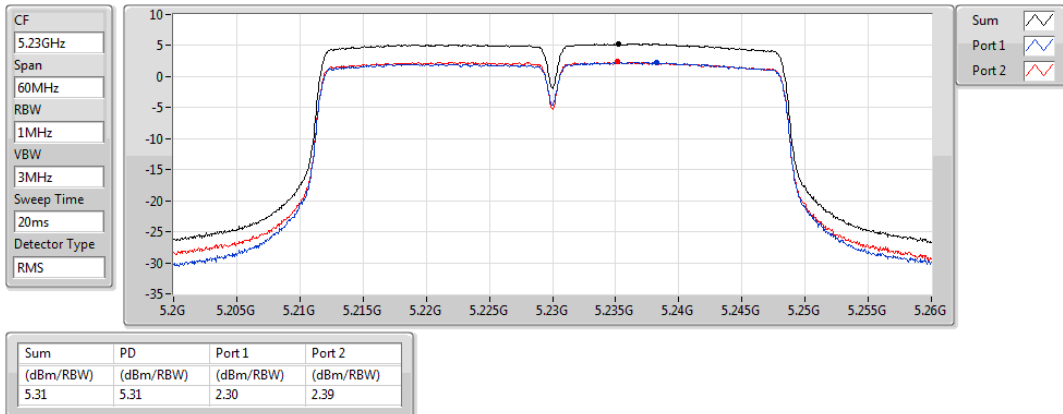


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5230MHz

12/11/2020

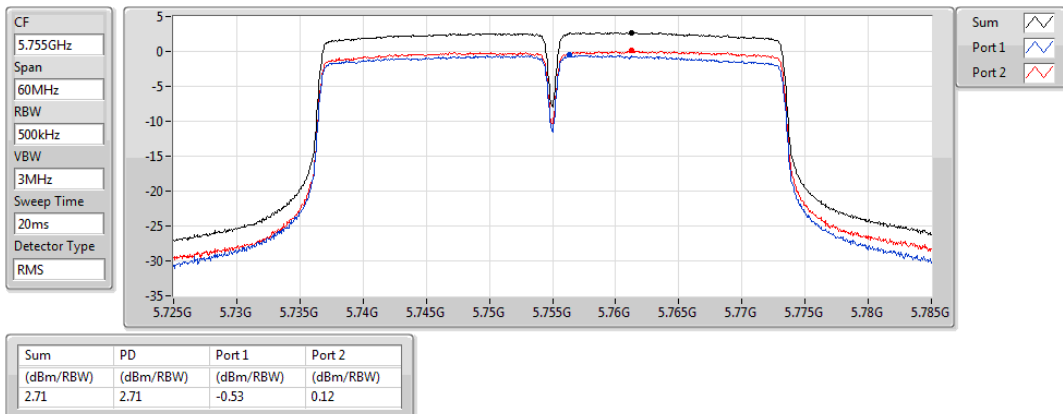


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5755MHz

30/10/2020

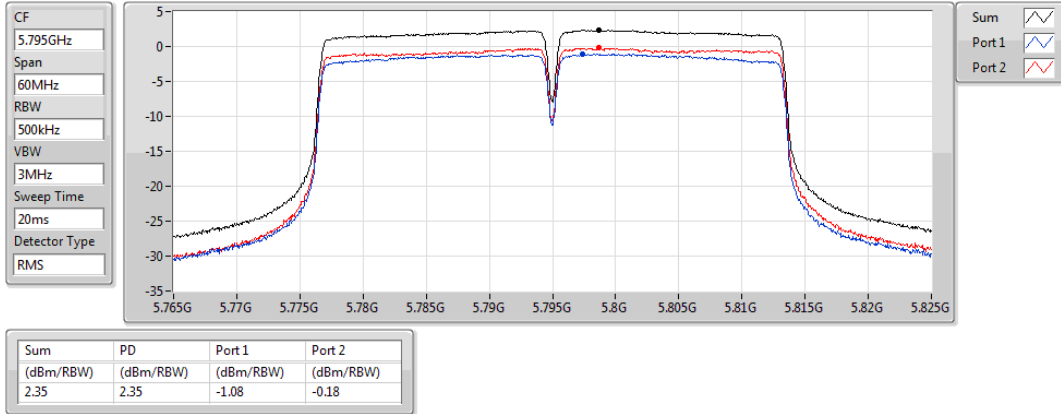


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5795MHz

29/10/2020

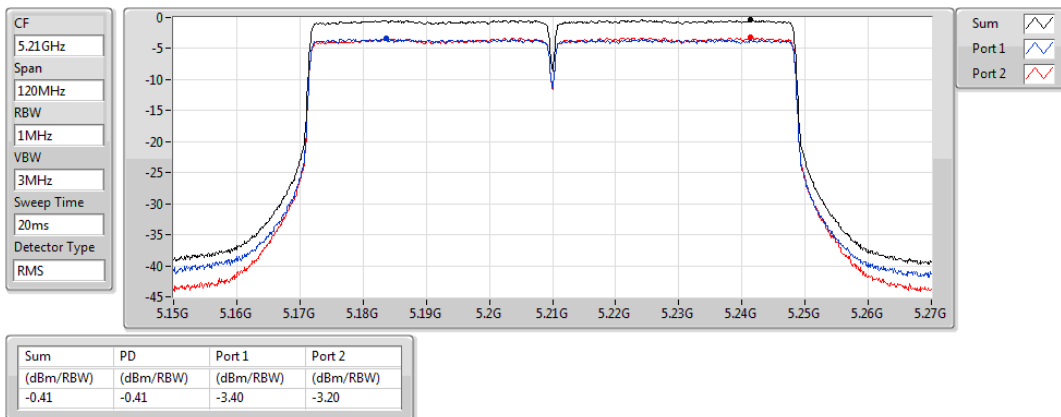


802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5210MHz

20/10/2020

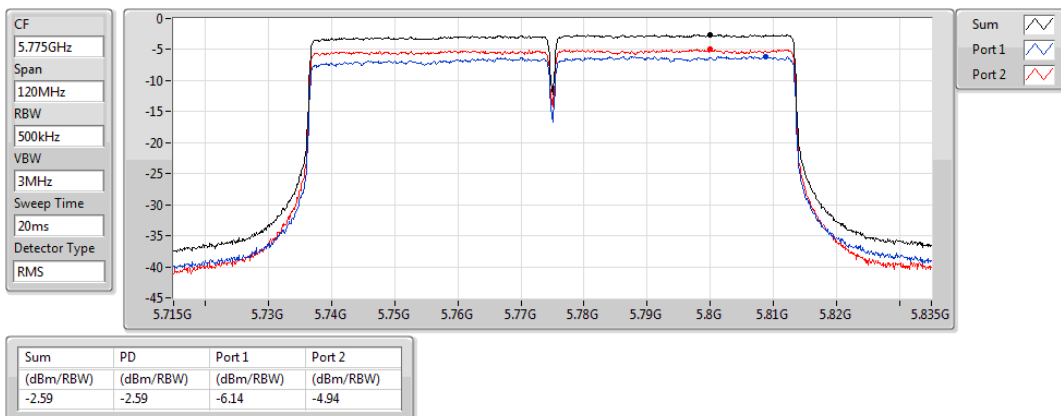


802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5775MHz

20/10/2020





Radiated Emissions below 1GHz

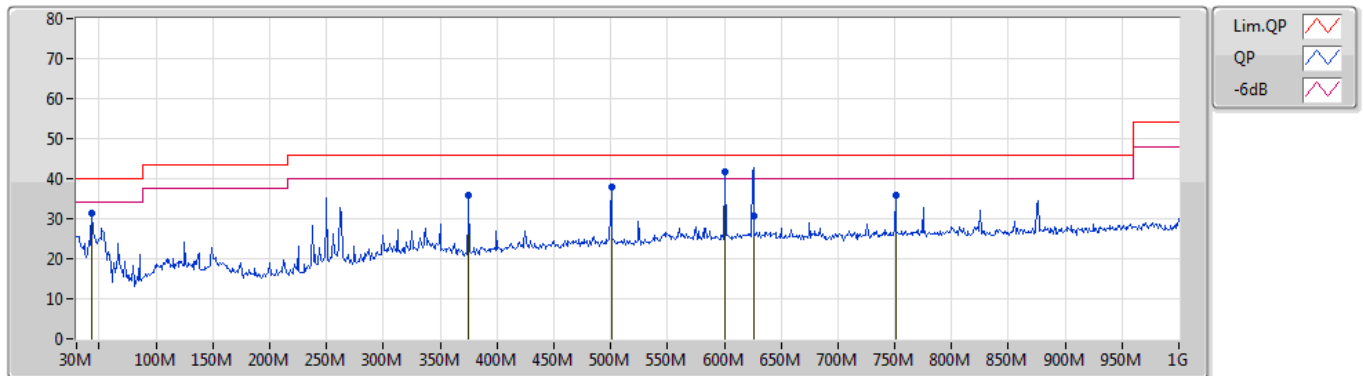
Appendix E.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	600.36	41.75	46.00	-4.25	Vertical

Mode 1

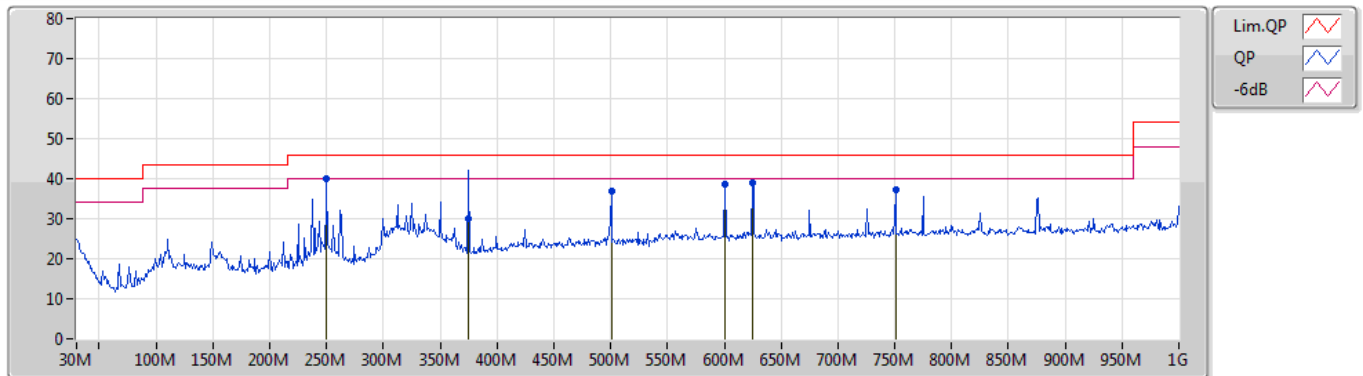
09/12/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	43.58M	31.45	40.00	-8.55	-14.93	3	Vertical	119	1.50	-	46.38	16.15	0.60	31.68
PK	375.32M	35.71	46.00	-10.29	-10.52	3	Vertical	353	1.25	-	46.23	19.92	1.65	32.09
PK	500.45M	37.93	46.00	-8.07	-7.66	3	Vertical	225	1.00	-	45.59	22.65	2.00	32.31
PK	600.36M	41.75	46.00	-4.25	-6.28	3	Vertical	88	1.00	"Worst"	48.03	23.89	2.20	32.37
QP	625.58M	30.64	46.00	-15.36	-5.98	3	Vertical	94	1.00	-	36.62	24.28	2.20	32.46
PK	750.71M	35.85	46.00	-10.15	-5.34	3	Vertical	50	1.50	-	41.19	24.82	2.40	32.56

Mode 1

09/12/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	250.19M	40.13	46.00	-5.87	-13.03	3	Horizontal	62	1.25	"Worst"	53.16	17.55	1.40	31.98
QP	375.32M	30.13	46.00	-15.87	-10.52	3	Horizontal	98	1.00		40.65	19.92	1.65	32.09
PK	500.45M	36.86	46.00	-9.14	-7.66	3	Horizontal	102	2.00	-	44.52	22.65	2.00	32.31
PK	600.36M	38.50	46.00	-7.50	-6.28	3	Horizontal	107	1.50	-	44.78	23.89	2.20	32.37
PK	624.61M	39.11	46.00	-6.89	-6.00	3	Horizontal	296	1.25	-	45.11	24.25	2.20	32.45
PK	750.71M	37.38	46.00	-8.62	-5.34	3	Horizontal	104	3.00	-	42.72	24.82	2.40	32.56



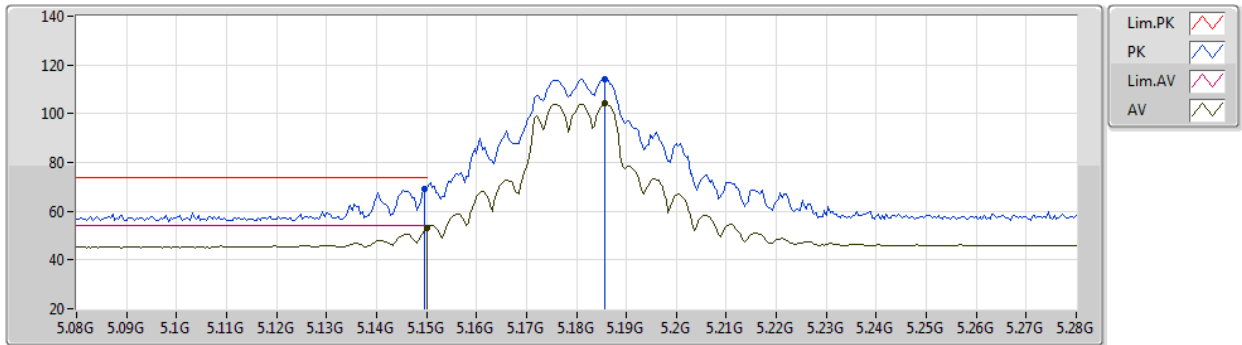
Summary

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	PK	5.1484G	73.98	74.00	-0.02	3	Vertical	330	2.46	-

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5180MHz_TX



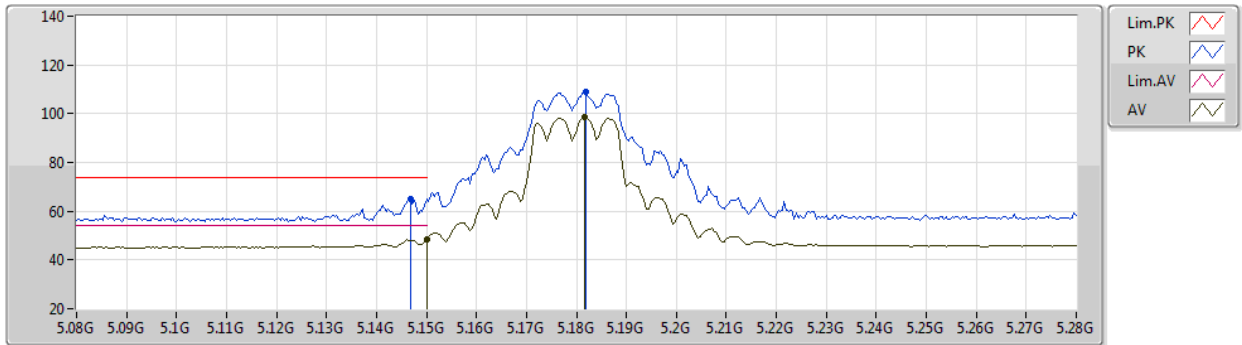
EUT X_2TX
Setting 19
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1496G	69.26	74.00	-4.74	62.54	3	Vertical	331	2.46	-	33.45	5.00	31.73
AV	5.15G	53.21	54.00	-0.79	46.49	3	Vertical	331	2.46	-	33.45	5.00	31.73
PK	5.1856G	114.16	Inf	-Inf	107.30	3	Vertical	331	2.46	-	33.49	5.07	31.70
AV	5.1856G	104.07	Inf	-Inf	97.21	3	Vertical	331	2.46	-	33.49	5.07	31.70

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5180MHz_TX



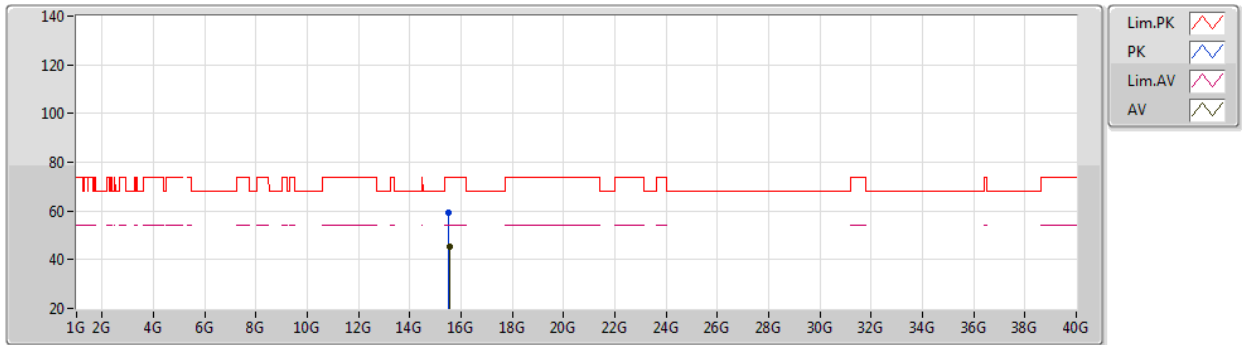
EUT X_2TX
Setting 19
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1468G	65.18	74.00	-8.82	58.47	3	Horizontal	330	1.03	-	33.45	4.99	31.73
AV	5.15G	48.57	54.00	-5.43	41.85	3	Horizontal	330	1.03	-	33.45	5.00	31.73
PK	5.182G	108.86	Inf	-Inf	102.02	3	Horizontal	330	1.03	-	33.48	5.06	31.70
AV	5.1816G	98.62	Inf	-Inf	91.78	3	Horizontal	330	1.03	-	33.48	5.06	31.70

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5180MHz_TX



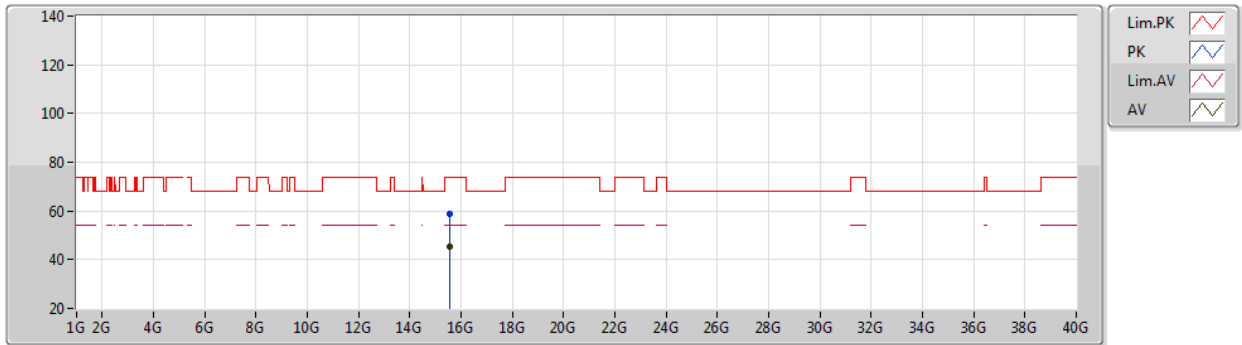
EUT X_2TX
Setting 19
02-E-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.5196G	59.11	74.00	-14.89	44.15	3	Vertical	5	1.89	-	38.79	9.03	32.86
AV	15.53832G	45.15	54.00	-8.85	30.23	3	Vertical	5	1.89	-	38.74	9.04	32.86

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5180MHz_TX



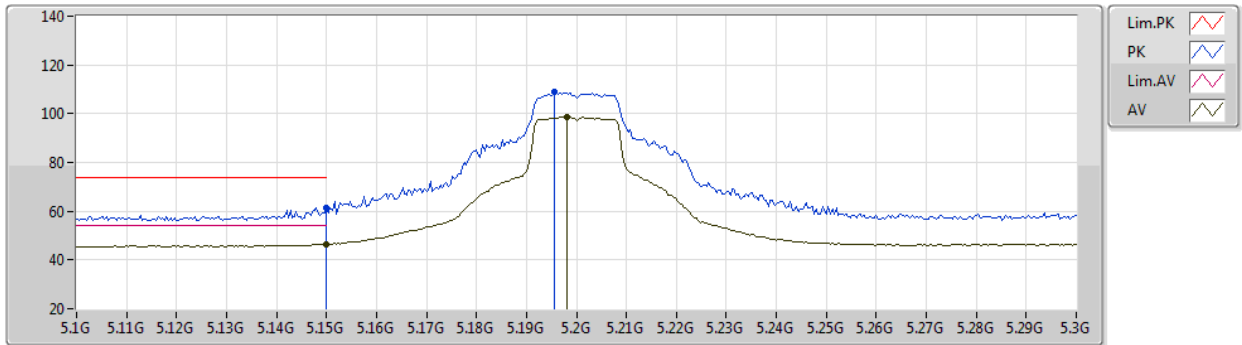
EUT X_2TX
Setting 19
02-E-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.53784G	58.86	74.00	-15.14	43.94	3	Horizontal	4	2.29	-	38.74	9.04	32.86
AV	15.53832G	45.30	54.00	-8.70	30.38	3	Horizontal	4	2.29	-	38.74	9.04	32.86

802.11a_Nss1,(6Mbps)_2TX

27/10/2020

5200MHz_TX



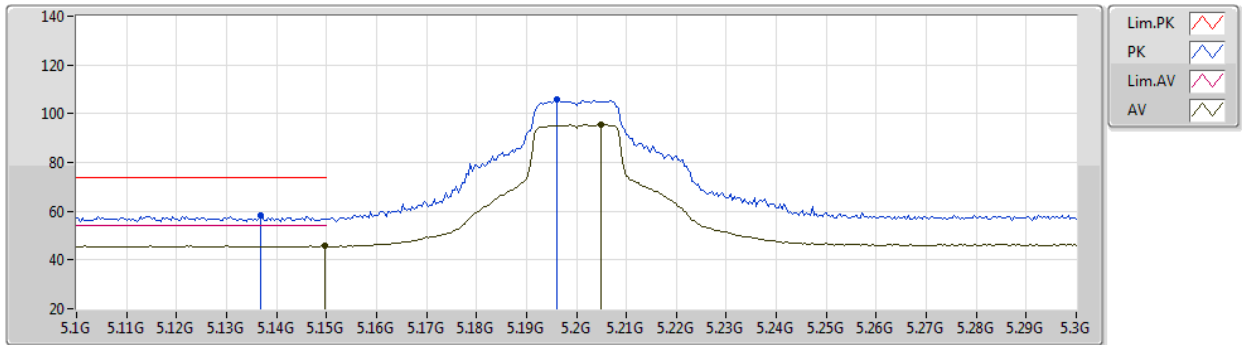
EUT X_2TX
Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	61.49	74.00	-12.51	54.77	3	Vertical	134	2.50	-	33.45	5.00	31.73
AV	5.15G	46.49	54.00	-7.51	39.77	3	Vertical	134	2.50	-	33.45	5.00	31.73
PK	5.1956G	109.12	Inf	-Inf	102.22	3	Vertical	134	2.50	-	33.50	5.09	31.69
AV	5.198G	98.71	Inf	-Inf	91.80	3	Vertical	134	2.50	-	33.50	5.10	31.69

802.11a_Nss1,(6Mbps)_2TX

27/10/2020

5200MHz_TX



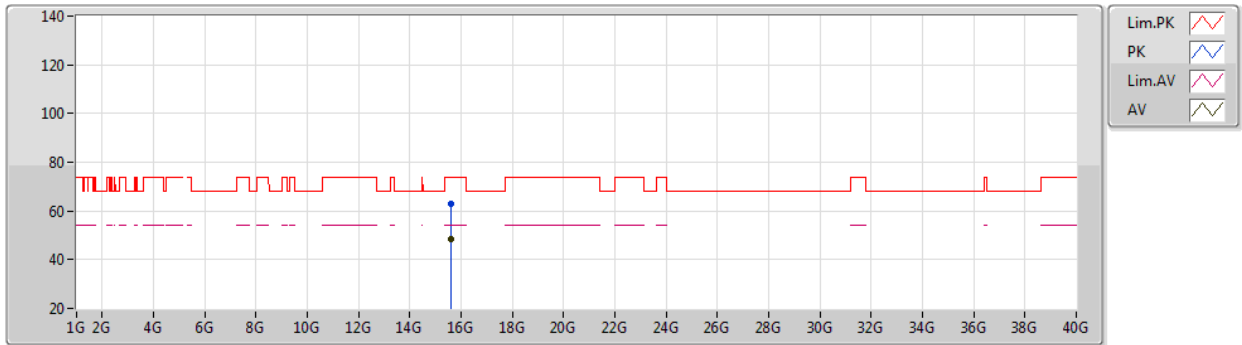
EUT X_2TX
Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1368G	58.18	74.00	-15.82	51.50	3	Horizontal	24	2.63	-	33.44	4.97	31.73
AV	5.1496G	45.76	54.00	-8.24	39.04	3	Horizontal	24	2.63	-	33.45	5.00	31.73
PK	5.196G	105.99	Inf	-Inf	99.09	3	Horizontal	24	2.63	-	33.50	5.09	31.69
AV	5.2048G	95.47	Inf	-Inf	88.55	3	Horizontal	24	2.63	-	33.51	5.10	31.69

802.11a_Nss1,(6Mbps)_2TX

27/10/2020

5200MHz_TX



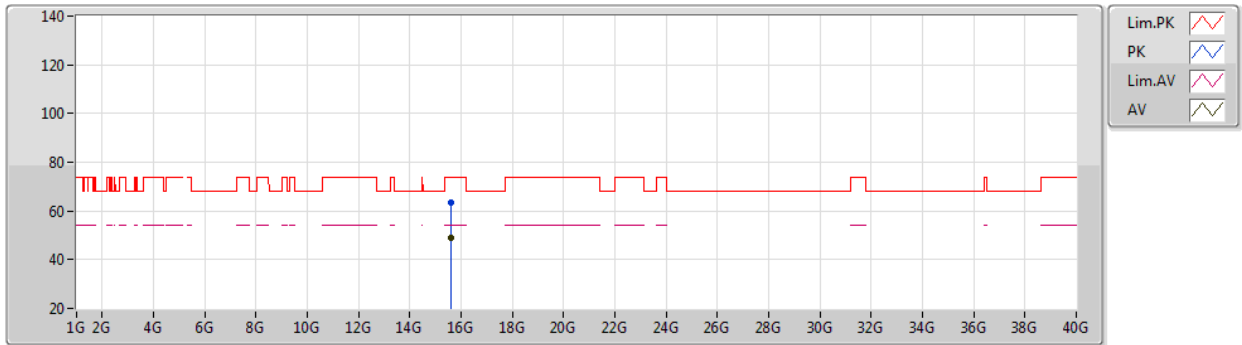
EUT X_2TX
Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.5961G	63.02	74.00	-10.98	48.25	3	Vertical	5	1.02	-	38.57	9.06	32.86
AV	15.60024G	48.28	54.00	-5.72	33.52	3	Vertical	5	1.02	-	38.56	9.06	32.86

802.11a_Nss1,(6Mbps)_2TX

27/10/2020

5200MHz_TX



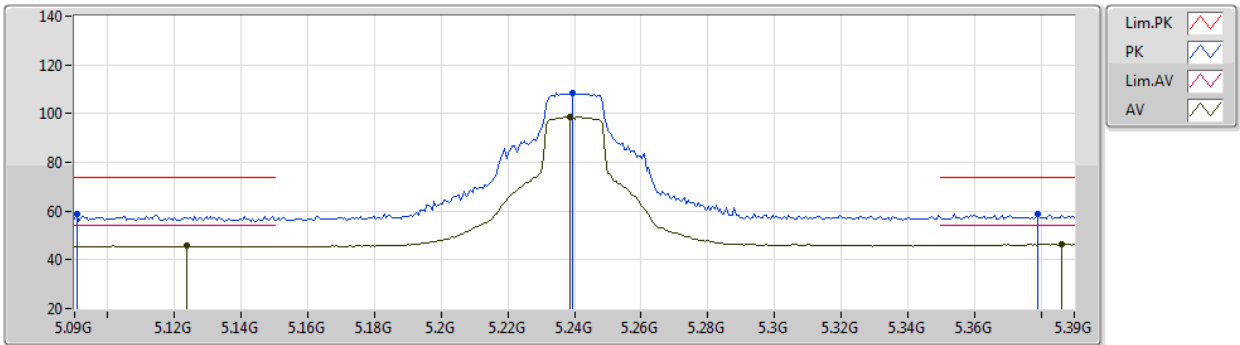
EUT X_2TX
Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.59632G	63.67	74.00	-10.33	48.90	3	Horizontal	54	2.41	-	38.57	9.06	32.86
AV	15.59674G	49.09	54.00	-4.91	34.32	3	Horizontal	54	2.41	-	38.57	9.06	32.86

802.11a_Nss1,(6Mbps)_2TX

27/10/2020

5240MHz_TX



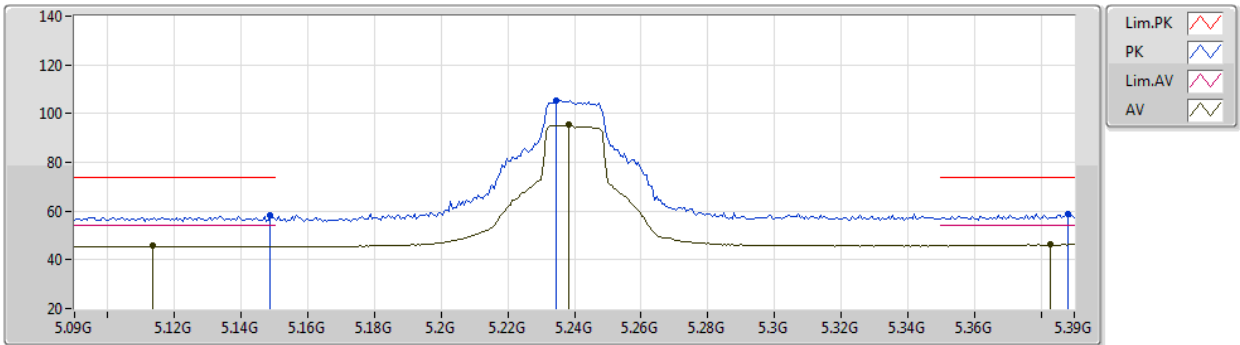
EUT X_2TX
Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.0906G	58.63	74.00	-15.37	52.13	3	Vertical	276	2.55	-	33.39	4.88	31.77
AV	5.1236G	45.67	54.00	-8.33	39.04	3	Vertical	276	2.55	-	33.42	4.95	31.74
PK	5.2394G	108.24	Inf	-Inf	101.24	3	Vertical	276	2.55	-	33.58	5.08	31.66
AV	5.2388G	98.58	Inf	-Inf	91.58	3	Vertical	276	2.55	-	33.58	5.08	31.66
PK	5.3792G	58.58	74.00	-15.42	51.35	3	Vertical	276	2.55	-	33.78	5.01	31.56
AV	5.3864G	46.48	54.00	-7.52	39.24	3	Vertical	276	2.55	-	33.79	5.01	31.56

802.11a_Nss1,(6Mbps)_2TX

27/10/2020

5240MHz_TX



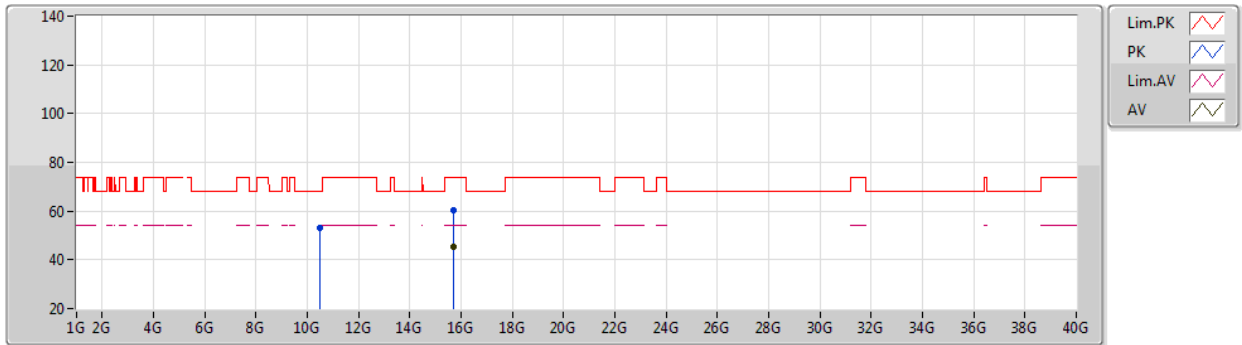
EUT X_2TX
Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1488G	58.21	74.00	-15.79	51.49	3	Horizontal	26	2.62	-	33.45	5.00	31.73
AV	5.1134G	45.63	54.00	-8.37	39.04	3	Horizontal	26	2.62	-	33.41	4.93	31.75
PK	5.2346G	105.59	Inf	-Inf	98.61	3	Horizontal	26	2.62	-	33.57	5.08	31.67
AV	5.2382G	95.38	Inf	-Inf	88.38	3	Horizontal	26	2.62	-	33.58	5.08	31.66
PK	5.3882G	58.80	74.00	-15.20	51.56	3	Horizontal	26	2.62	-	33.79	5.01	31.56
AV	5.3828G	46.30	54.00	-7.70	39.07	3	Horizontal	26	2.62	-	33.78	5.01	31.56

802.11a_Nss1,(6Mbps)_2TX

27/10/2020

5240MHz_TX



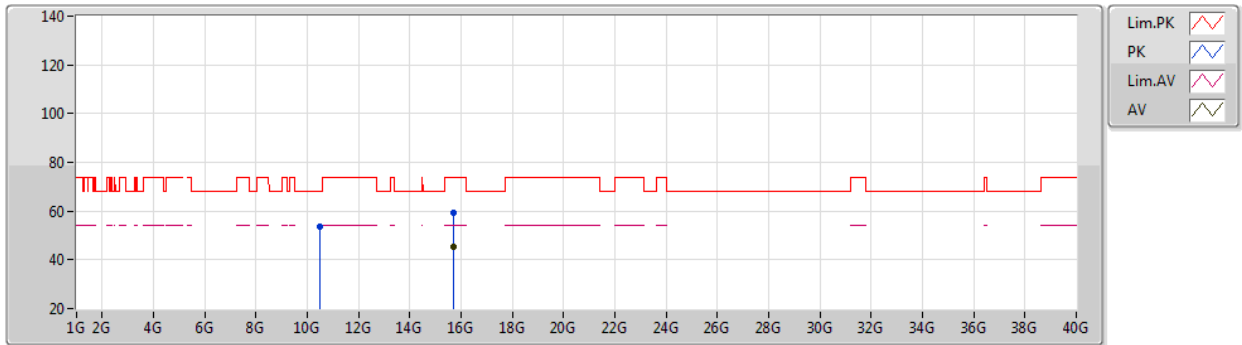
EUT X_2TX
Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.48018G	53.32	68.20	-14.88	39.85	3	Vertical	35	1.79	-	38.81	7.27	32.61
PK	15.72666G	60.12	74.00	-13.88	45.70	3	Vertical	196	1.03	-	38.19	9.10	32.87
AV	15.72054G	45.51	54.00	-8.49	31.07	3	Vertical	196	1.03	-	38.21	9.10	32.87

802.11a_Nss1,(6Mbps)_2TX

27/10/2020

5240MHz_TX



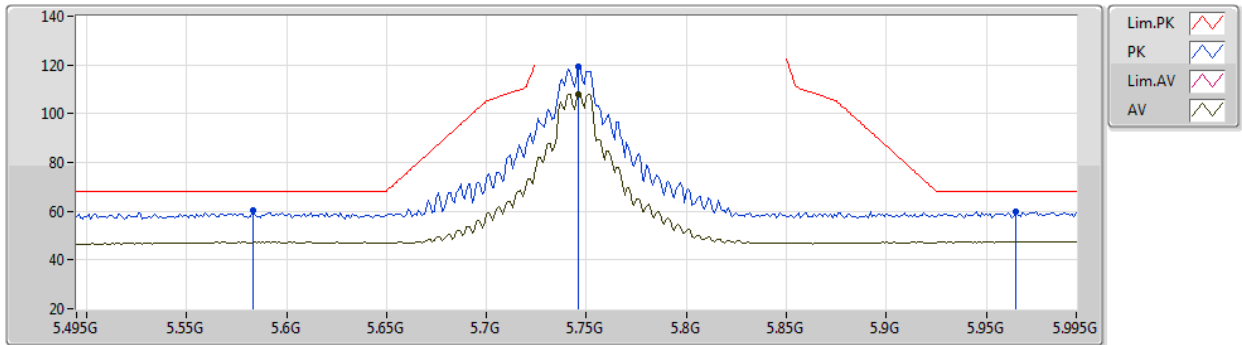
EUT X_2TX
Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.47988G	53.87	68.20	-14.33	40.40	3	Horizontal	44	2.96	-	38.81	7.27	32.61
PK	15.7146G	59.17	74.00	-14.83	44.71	3	Horizontal	57	1.73	-	38.23	9.10	32.87
AV	15.72018G	45.43	54.00	-8.57	30.99	3	Horizontal	57	1.73	-	38.21	9.10	32.87

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5745MHz_TX



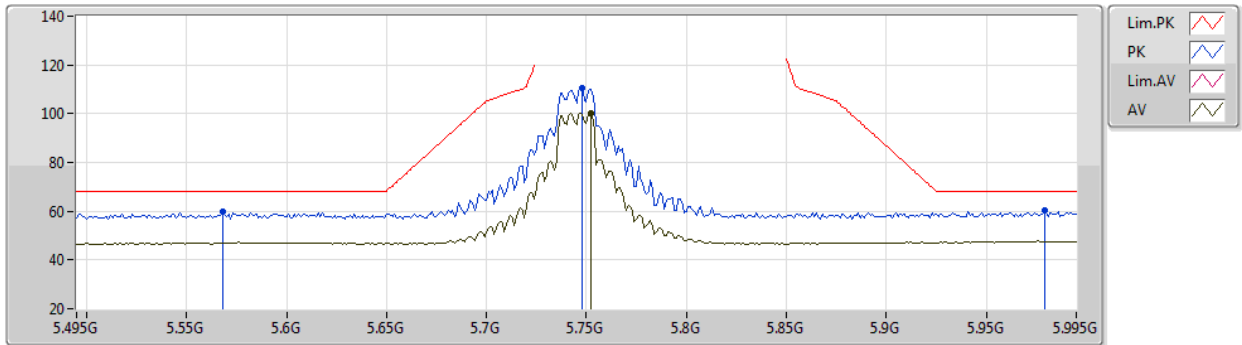
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.583G	60.16	68.20	-8.04	52.55	3	Vertical	325	2.52	-	33.90	5.18	31.47
PK	5.746G	119.10	Inf	-Inf	111.71	3	Vertical	325	2.52	-	33.80	5.05	31.46
AV	5.746G	108.11	Inf	-Inf	100.72	3	Vertical	325	2.52	-	33.80	5.05	31.46
PK	5.965G	59.67	68.20	-8.53	51.47	3	Vertical	325	2.52	-	34.16	5.49	31.45

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5745MHz_TX



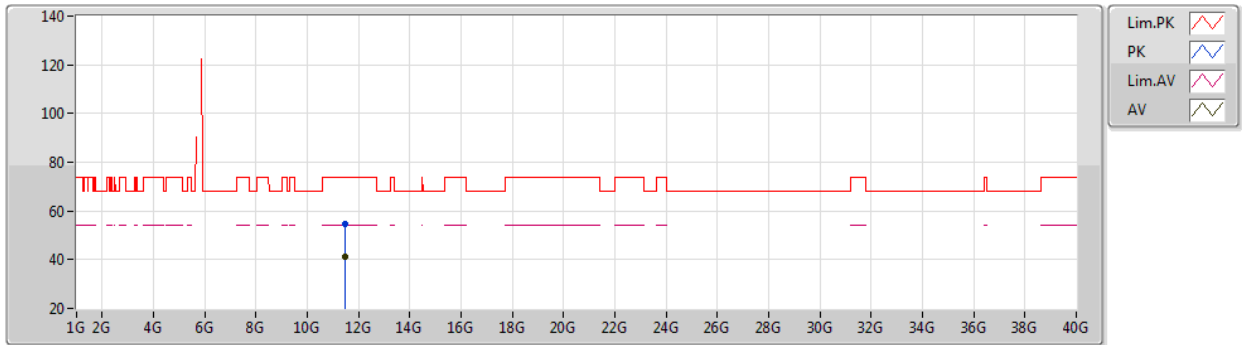
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.568G	60.02	68.20	-8.18	52.42	3	Horizontal	324	1.01	-	33.90	5.17	31.47
PK	5.748G	110.26	Inf	-Inf	102.87	3	Horizontal	324	1.01	-	33.80	5.05	31.46
AV	5.752G	100.30	Inf	-Inf	92.91	3	Horizontal	324	1.01	-	33.80	5.05	31.46
PK	5.979G	60.40	68.20	-7.80	52.13	3	Horizontal	324	1.01	-	34.18	5.54	31.45

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5745MHz_TX



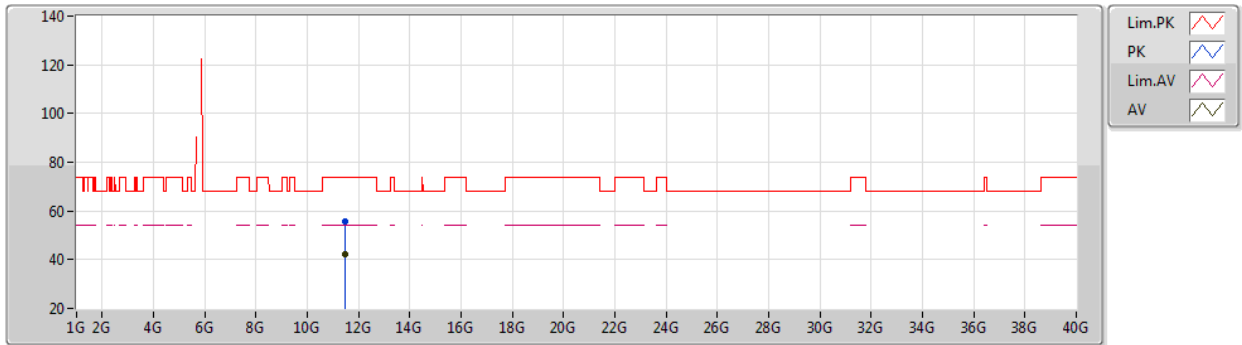
EUT X_2TX
Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.4944G	54.78	74.00	-19.22	41.11	3	Vertical	0	2.92	-	38.90	7.62	32.85
AV	11.4948G	41.38	54.00	-12.62	27.71	3	Vertical	0	2.92	-	38.90	7.62	32.85

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5745MHz_TX



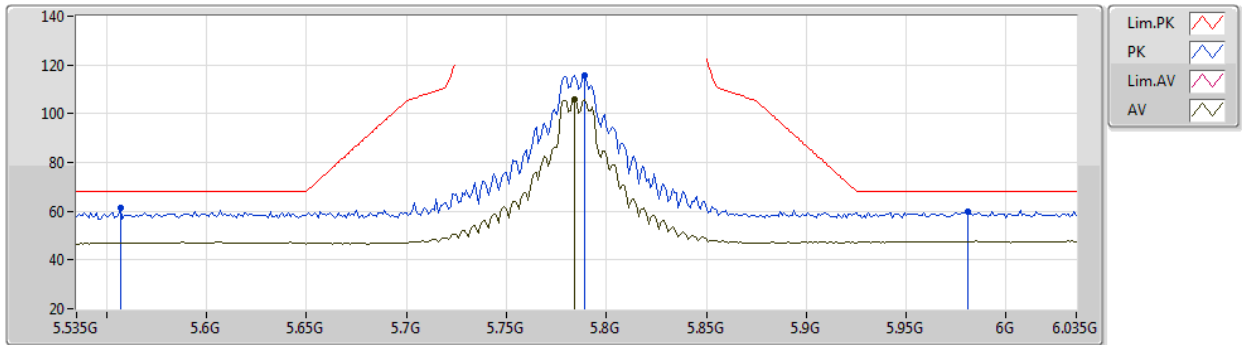
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Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.49632G	55.87	74.00	-18.13	42.20	3	Horizontal	309	2.81	-	38.90	7.62	32.85
AV	11.49144G	42.42	54.00	-11.58	28.76	3	Horizontal	309	2.81	-	38.89	7.62	32.85

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5785MHz_TX



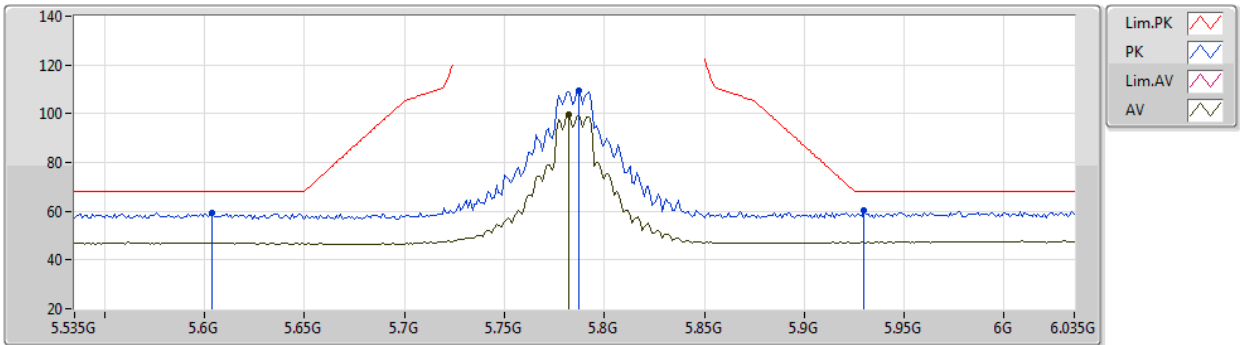
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.557G	61.15	68.20	-7.05	53.56	3	Vertical	69	1.14	-	33.90	5.16	31.47
PK	5.789G	115.94	Inf	-Inf	108.59	3	Vertical	69	1.14	-	33.80	5.01	31.46
AV	5.784G	105.85	Inf	-Inf	98.49	3	Vertical	69	1.14	-	33.80	5.02	31.46
PK	5.981G	60.00	68.20	-8.20	51.73	3	Vertical	69	1.14	-	34.18	5.54	31.45

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5785MHz_TX



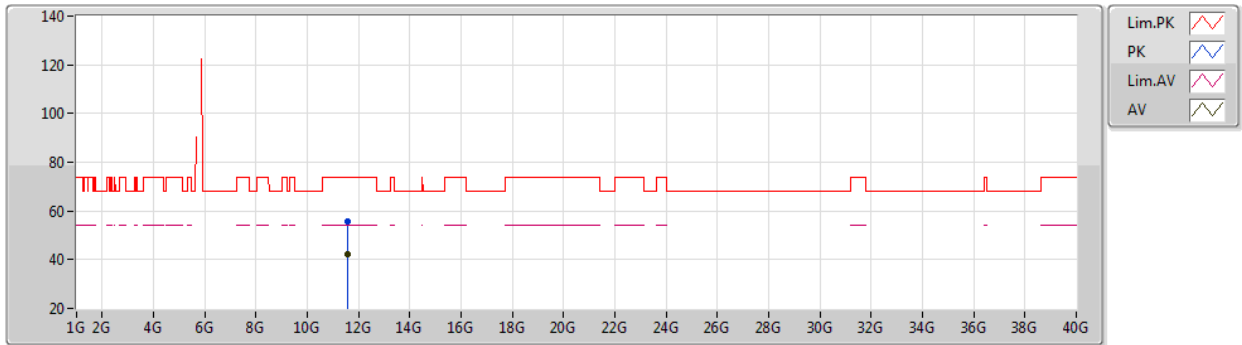
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.604G	59.14	68.20	-9.06	51.51	3	Horizontal	328	2.04	-	33.90	5.20	31.47
PK	5.787G	109.32	Inf	-Inf	101.97	3	Horizontal	328	2.04	-	33.80	5.01	31.46
AV	5.782G	99.50	Inf	-Inf	92.14	3	Horizontal	328	2.04	-	33.80	5.02	31.46
PK	5.93G	60.28	68.20	-7.92	52.21	3	Horizontal	328	2.04	-	34.13	5.39	31.45

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5785MHz_TX



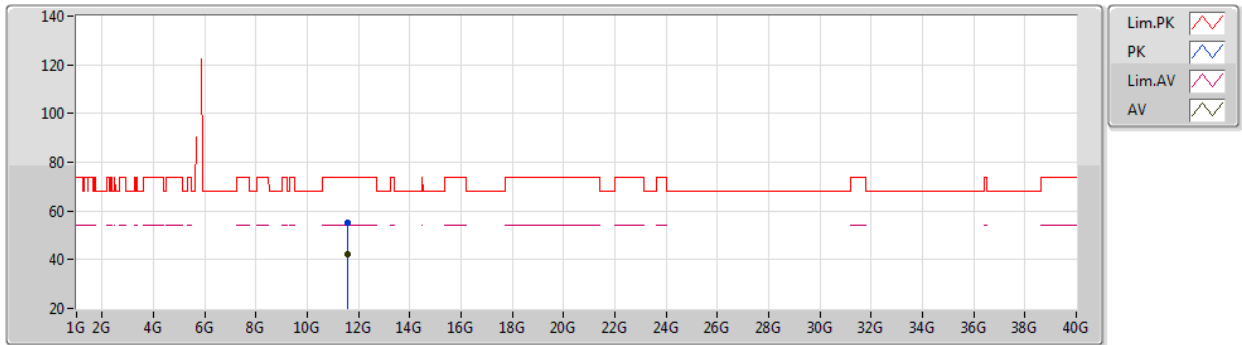
EUT X_2TX
Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.57384G	55.57	74.00	-18.43	41.82	3	Vertical	4	2.97	-	38.96	7.65	32.86
AV	11.57352G	42.20	54.00	-11.80	28.45	3	Vertical	4	2.97	-	38.96	7.65	32.86

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5785MHz_TX



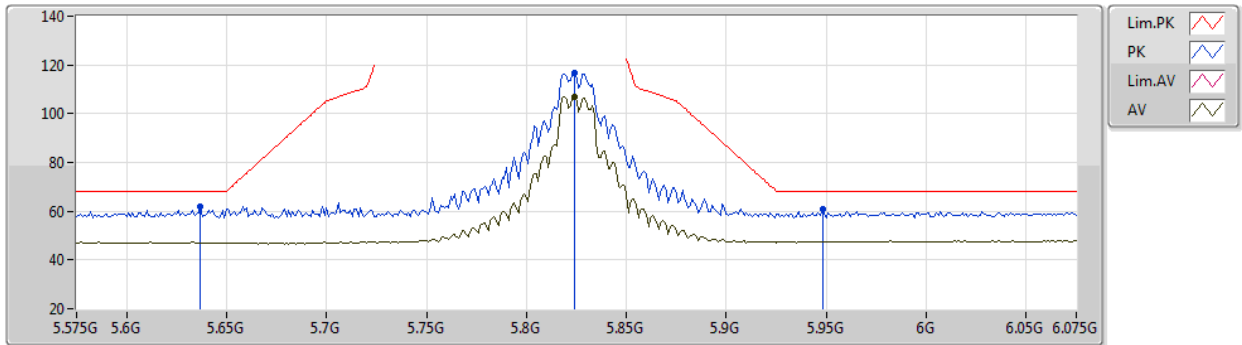
EUT X_2TX
Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.56832G	55.24	74.00	-18.76	41.50	3	Horizontal	79	1.84	-	38.95	7.65	32.86
AV	11.56864G	42.00	54.00	-12.00	28.26	3	Horizontal	79	1.84	-	38.95	7.65	32.86

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5825MHz_TX



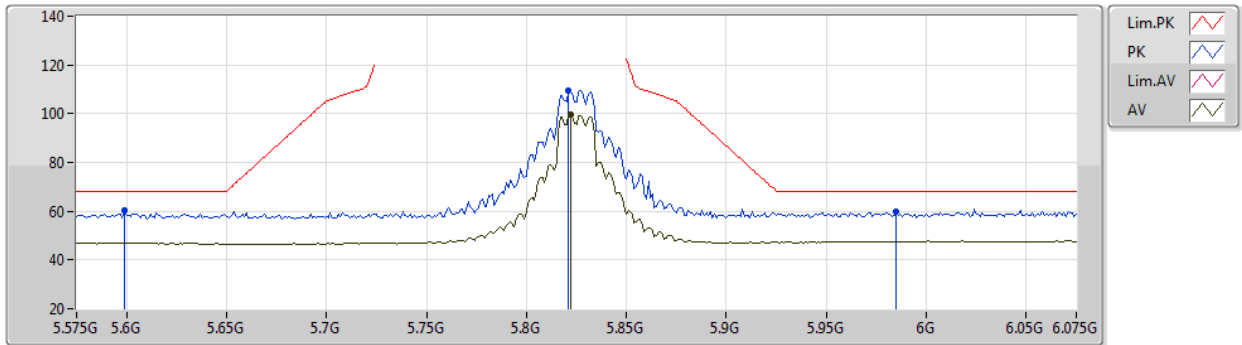
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.637G	62.04	68.20	-6.16	54.49	3	Vertical	326	1.04	-	33.86	5.16	31.47
PK	5.824G	116.82	Inf	-Inf	109.34	3	Vertical	326	1.04	-	33.87	5.07	31.46
AV	5.824G	106.85	Inf	-Inf	99.37	3	Vertical	326	1.04	-	33.87	5.07	31.46
PK	5.948G	60.91	68.20	-7.29	52.77	3	Vertical	326	1.04	-	34.15	5.44	31.45

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5825MHz_TX



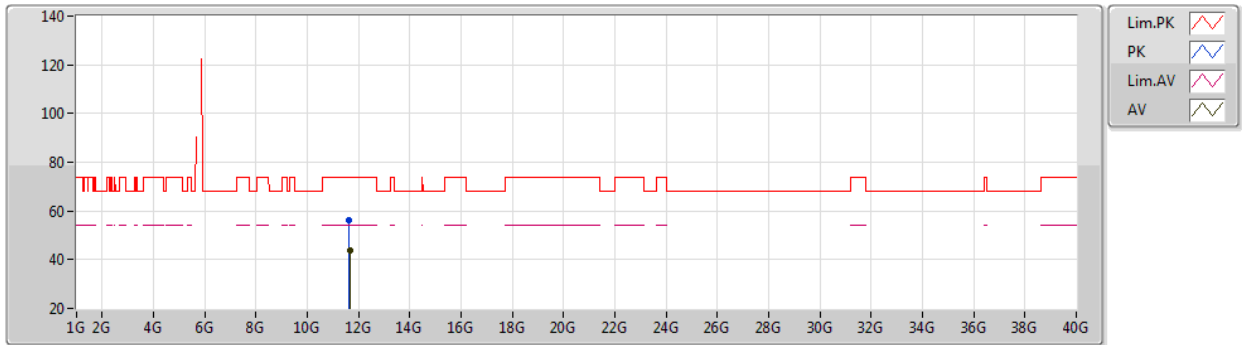
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.599G	60.18	68.20	-8.02	52.55	3	Horizontal	324	2.11	-	33.90	5.20	31.47
PK	5.821G	109.44	Inf	-Inf	101.98	3	Horizontal	324	2.11	-	33.86	5.06	31.46
AV	5.822G	99.67	Inf	-Inf	92.19	3	Horizontal	324	2.11	-	33.87	5.07	31.46
PK	5.985G	59.71	68.20	-8.49	51.42	3	Horizontal	324	2.11	-	34.19	5.55	31.45

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5825MHz_TX



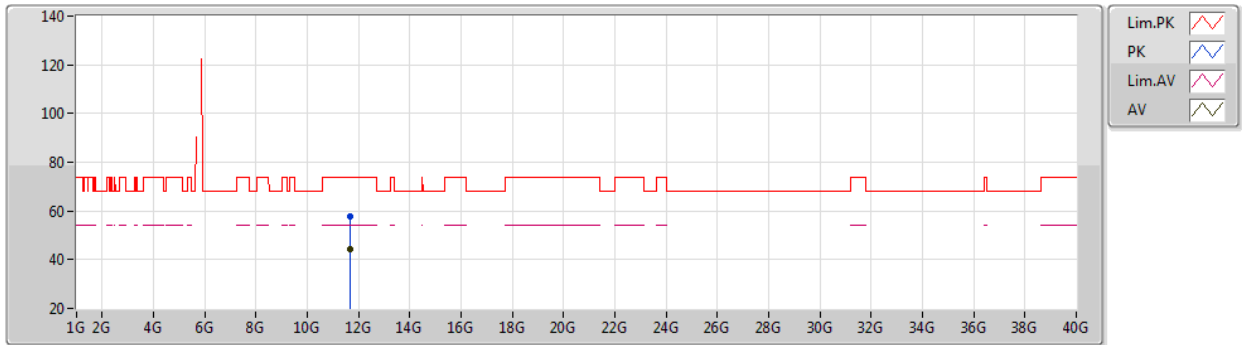
EUT X_2TX
Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.64552G	56.33	74.00	-17.67	42.51	3	Vertical	20	2.01	-	39.02	7.68	32.88
AV	11.65048G	43.65	54.00	-10.35	29.83	3	Vertical	20	2.01	-	39.02	7.68	32.88

802.11a_Nss1,(6Mbps)_2TX

19/10/2020

5825MHz_TX



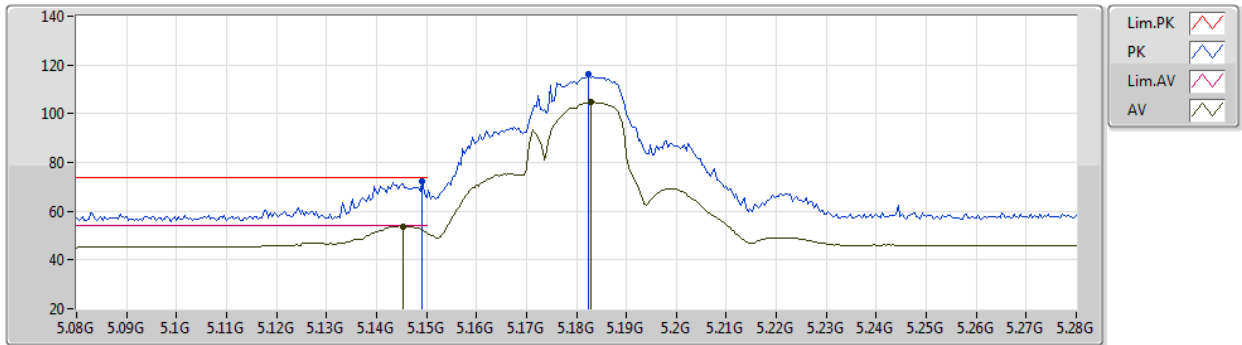
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Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.64848G	57.80	74.00	-16.20	43.98	3	Horizontal	313	1.00	-	39.02	7.68	32.88
AV	11.64864G	44.34	54.00	-9.66	30.52	3	Horizontal	313	1.00	-	39.02	7.68	32.88

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5180MHz_TX



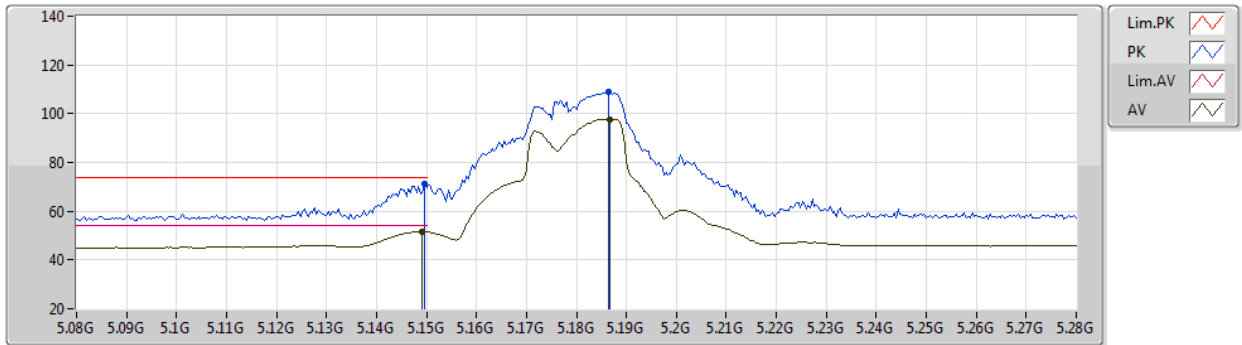
EUT X_2TX
Setting 19
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1492G	72.19	74.00	-1.81	65.47	3	Vertical	336	2.47	-	33.45	5.00	31.73
AV	5.1452G	53.81	54.00	-0.19	47.10	3	Vertical	336	2.47	-	33.45	4.99	31.73
PK	5.1824G	115.98	Inf	-Inf	109.14	3	Vertical	336	2.47	-	33.48	5.06	31.70
AV	5.1828G	104.68	Inf	-Inf	97.83	3	Vertical	336	2.47	-	33.48	5.07	31.70

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5180MHz_TX



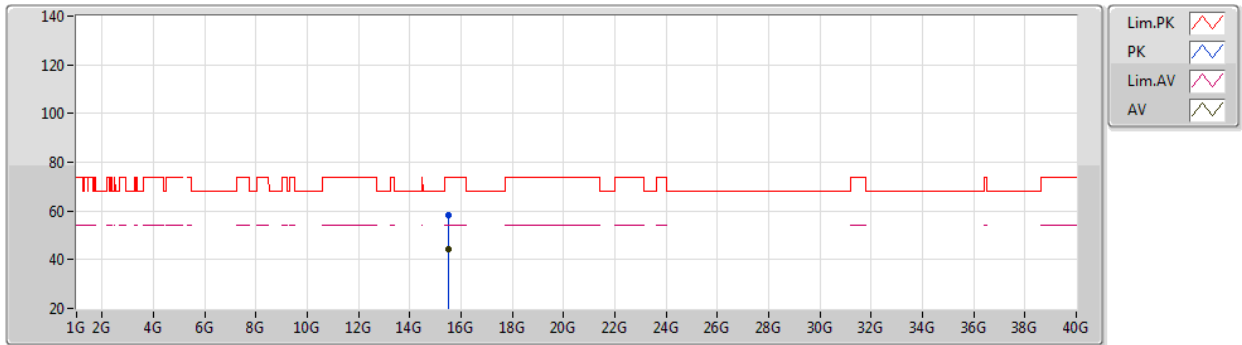
EUT X_2TX
Setting 19
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	51496G	71.23	74.00	-2.77	64.51	3	Horizontal	48	1.00	-	33.45	5.00	31.73	
AV	51492G	51.65	54.00	-2.35	44.93	3	Horizontal	48	1.00	-	33.45	5.00	31.73	
PK	51864G	108.87	Inf	-Inf	102.01	3	Horizontal	48	1.00	-	33.49	5.07	31.70	
AV	51868G	97.76	Inf	-Inf	90.90	3	Horizontal	48	1.00	-	33.49	5.07	31.70	

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5180MHz_TX



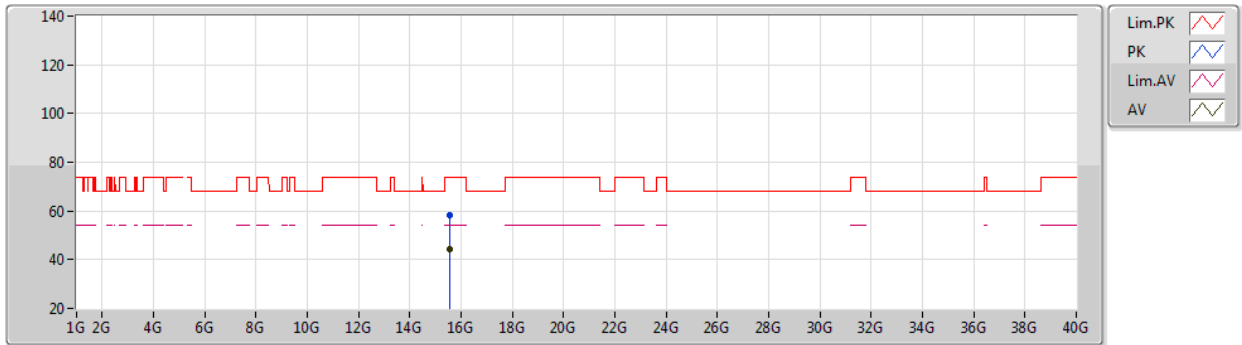
EUT X_2TX
Setting 19
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.52344G	58.51	74.00	-15.49	43.56	3	Vertical	3	1.80	-	38.78	9.03	32.86
AV	15.53224G	44.53	54.00	-9.47	29.59	3	Vertical	3	1.80	-	38.76	9.04	32.86

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5180MHz_TX



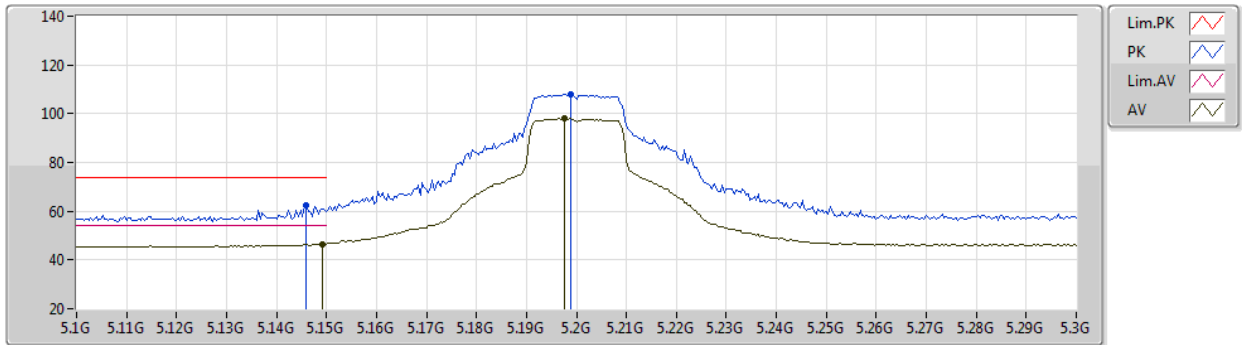
EUT X_2TX
Setting 19
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.54104G	58.10	74.00	-15.90	43.19	3	Horizontal	313	2.25	-	38.73	9.04	32.86
AV	15.5384G	44.39	54.00	-9.61	29.47	3	Horizontal	313	2.25	-	38.74	9.04	32.86

802.11ac VHT20_Nss1,(MCS0)_2TX

27/10/2020

5200MHz_TX



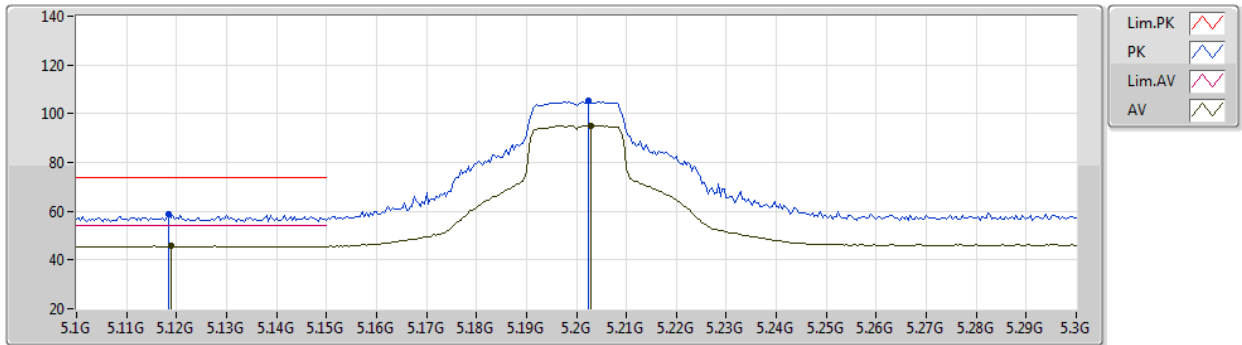
EUT X_2TX
Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.146G	62.33	74.00	-11.67	55.62	3	Vertical	138	2.49	-	33.45	4.99	31.73
AV	5.1492G	46.56	54.00	-7.44	39.84	3	Vertical	138	2.49	-	33.45	5.00	31.73
PK	5.1988G	107.73	Inf	-Inf	100.82	3	Vertical	138	2.49	-	33.50	5.10	31.69
AV	5.1976G	98.03	Inf	-Inf	91.12	3	Vertical	138	2.49	-	33.50	5.10	31.69

802.11ac VHT20_Nss1,(MCS0)_2TX

27/10/2020

5200MHz_TX



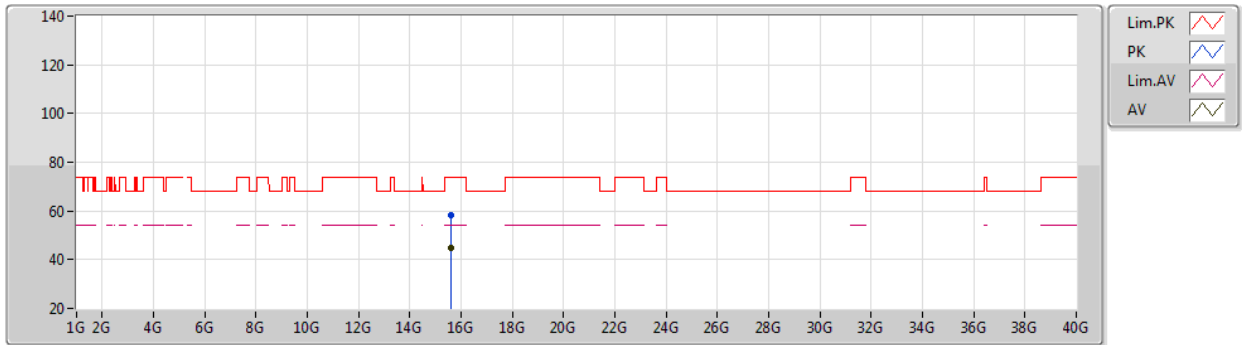
EUT X_2TX
Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1184G	58.70	74.00	-15.30	52.09	3	Horizontal	22	2.63	-	33.42	4.94	31.75
AV	5.1188G	45.71	54.00	-8.29	39.10	3	Horizontal	22	2.63	-	33.42	4.94	31.75
PK	5.2024G	105.40	Inf	-Inf	98.49	3	Horizontal	22	2.63	-	33.50	5.10	31.69
AV	5.2028G	95.06	Inf	-Inf	88.14	3	Horizontal	22	2.63	-	33.51	5.10	31.69

802.11ac VHT20_Nss1,(MCS0)_2TX

27/10/2020

5200MHz_TX



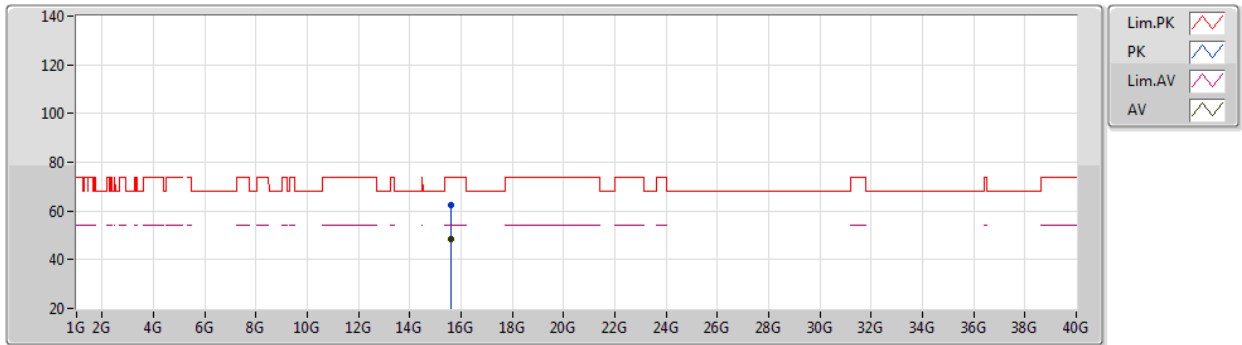
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Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.61056G	58.19	74.00	-15.81	43.46	3	Vertical	195	2.97	-	38.53	9.06	32.86
AV	15.6027G	45.07	54.00	-8.93	30.32	3	Vertical	195	2.97	-	38.55	9.06	32.86

802.11ac VHT20_Nss1,(MCS0)_2TX

27/10/2020

5200MHz_TX



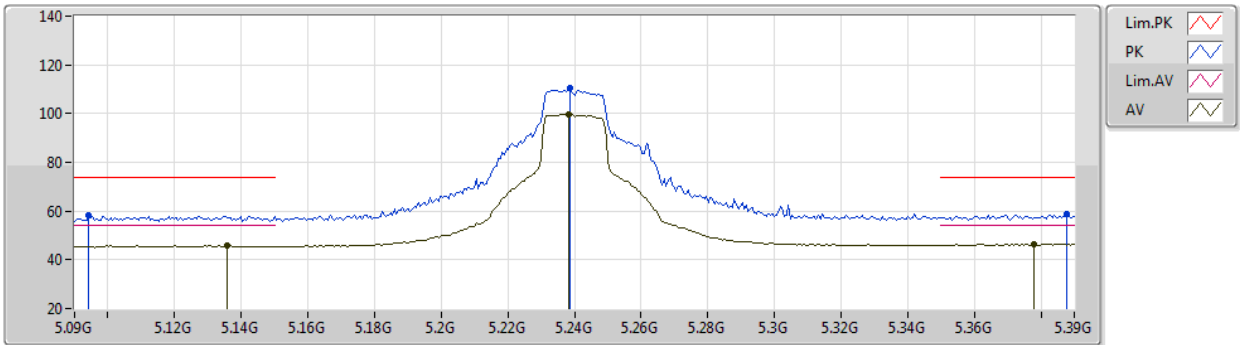
EUT X_2TX
Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.59676G	62.63	74.00	-11.37	47.86	3	Horizontal	53	1.74	-	38.57	9.06	32.86
AV	15.59886G	48.53	54.00	-5.47	33.77	3	Horizontal	53	1.74	-	38.56	9.06	32.86

802.11ac VHT20_Nss1,(MCS0)_2TX

27/10/2020

5240MHz_TX



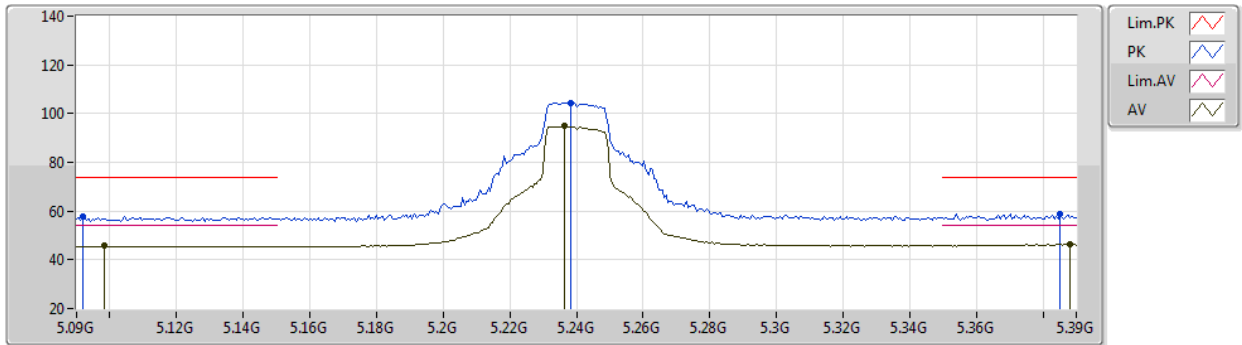
EUT X_2TX
Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.0942G	58.08	74.00	-15.92	51.56	3	Vertical	29	1.03	-	33.39	4.89	31.76
AV	5.1356G	45.83	54.00	-8.17	39.16	3	Vertical	29	1.03	-	33.44	4.97	31.74
PK	5.2388G	110.28	Inf	-Inf	103.28	3	Vertical	29	1.03	-	33.58	5.08	31.66
AV	5.2382G	99.64	Inf	-Inf	92.64	3	Vertical	29	1.03	-	33.58	5.08	31.66
PK	5.3876G	58.55	74.00	-15.45	51.31	3	Vertical	29	1.03	-	33.79	5.01	31.56
AV	5.378G	46.42	54.00	-7.58	39.20	3	Vertical	29	1.03	-	33.78	5.01	31.57

802.11ac VHT20_Nss1,(MCS0)_2TX

27/10/2020

5240MHz_TX



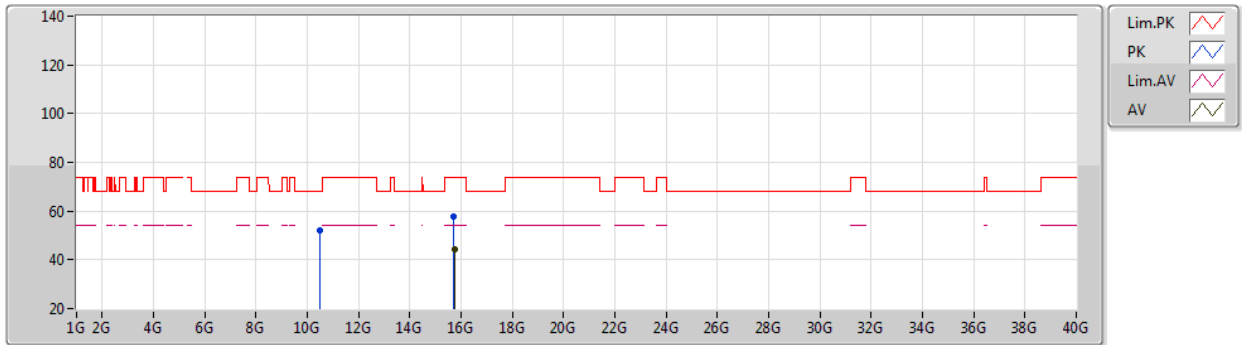
EUT X_2TX
Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.0918G	57.95	74.00	-16.05	51.45	3	Horizontal	22	2.61	-	33.39	4.88	31.77
AV	5.0984G	45.67	54.00	-8.33	39.13	3	Horizontal	22	2.61	-	33.40	4.90	31.76
PK	5.2382G	104.55	Inf	-Inf	97.55	3	Horizontal	22	2.61	-	33.58	5.08	31.66
AV	5.2364G	94.75	Inf	-Inf	87.76	3	Horizontal	22	2.61	-	33.57	5.08	31.66
PK	5.3852G	58.76	74.00	-15.24	51.52	3	Horizontal	22	2.61	-	33.79	5.01	31.56
AV	5.3882G	46.42	54.00	-7.58	39.18	3	Horizontal	22	2.61	-	33.79	5.01	31.56

802.11ac VHT20_Nss1,(MCS0)_2TX

27/10/2020

5240MHz_TX



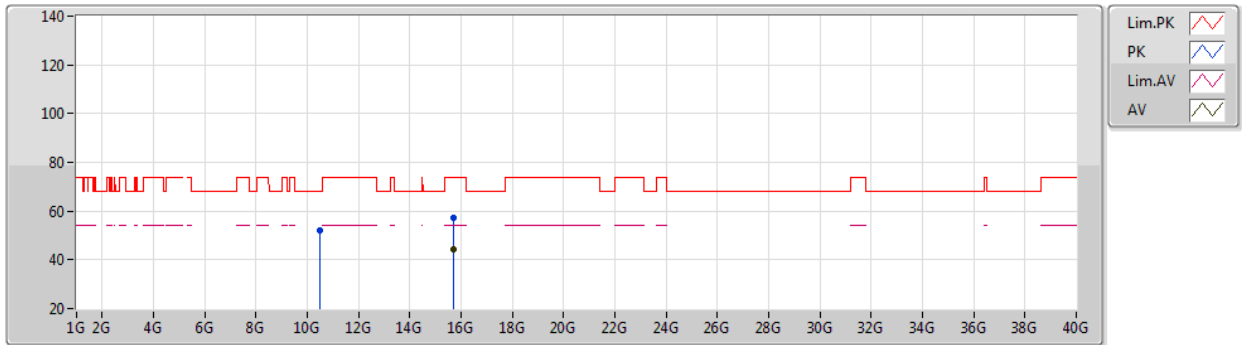
EUT X_2TX
Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.47976G	51.91	68.20	-16.29	38.44	3	Vertical	184	1.96	-	38.81	7.27	32.61
PK	15.7233G	57.61	74.00	-16.39	43.18	3	Vertical	197	2.95	-	38.20	9.10	32.87
AV	15.73038G	44.12	54.00	-9.88	29.70	3	Vertical	197	2.95	-	38.18	9.11	32.87

802.11ac VHT20_Nss1,(MCS0)_2TX

27/10/2020

5240MHz_TX



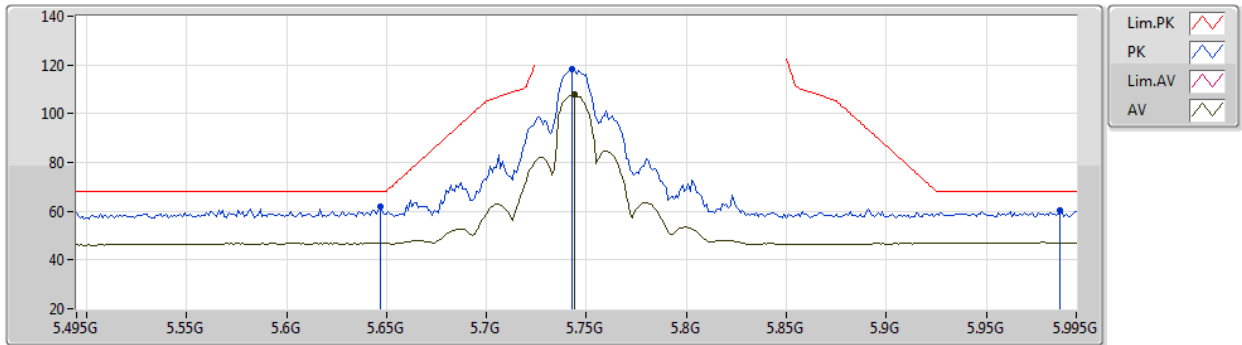
EUT X_2TX
Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.48654G	52.24	68.20	-15.96	38.78	3	Horizontal	255	1.99	-	38.81	7.27	32.62
PK	15.71496G	57.30	74.00	-16.70	42.84	3	Horizontal	354	2.53	-	38.23	9.10	32.87
AV	15.71418G	44.06	54.00	-9.94	29.60	3	Horizontal	354	2.53	-	38.23	9.10	32.87

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5745MHz_TX



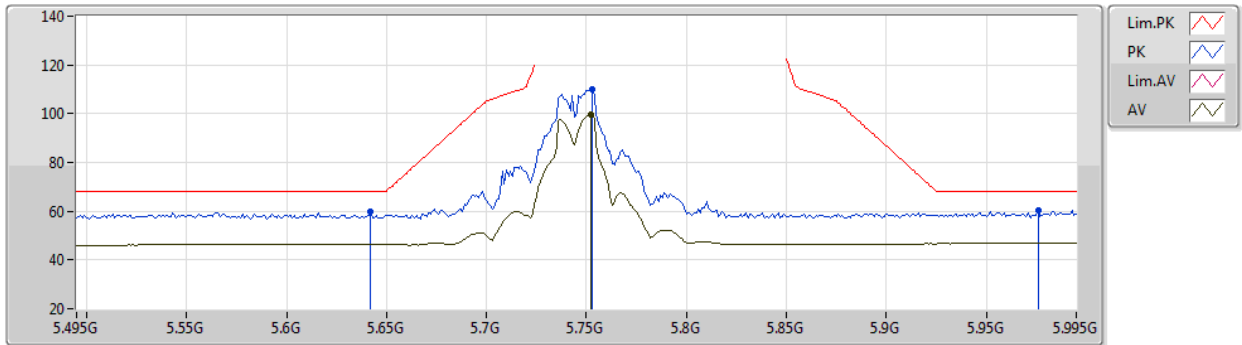
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.647G	61.71	68.20	-6.49	54.18	3	Vertical	331	1.15	-	33.85	5.15	31.47
PK	5.743G	118.07	Inf	-Inf	110.67	3	Vertical	331	1.15	-	33.80	5.06	31.46
AV	5.744G	107.78	Inf	-Inf	100.38	3	Vertical	331	1.15	-	33.80	5.06	31.46
PK	5.987G	60.19	68.20	-8.01	51.89	3	Vertical	331	1.15	-	34.19	5.56	31.45

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5745MHz_TX



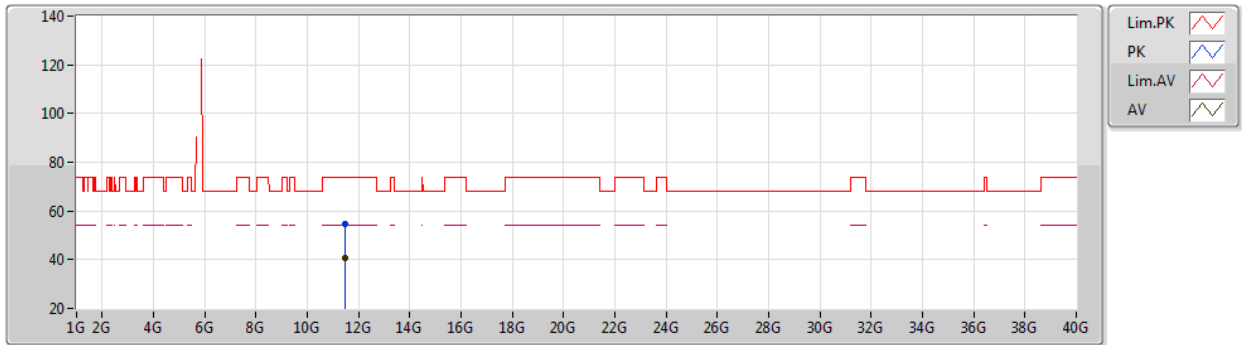
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.642G	59.69	68.20	-8.51	52.14	3	Horizontal	322	1.02	-	33.86	5.16	31.47
PK	5.753G	110.21	Inf	-Inf	102.82	3	Horizontal	322	1.02	-	33.80	5.05	31.46
AV	5.752G	99.48	Inf	-Inf	92.09	3	Horizontal	322	1.02	-	33.80	5.05	31.46
PK	5.976G	60.22	68.20	-7.98	51.96	3	Horizontal	322	1.02	-	34.18	5.53	31.45

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5745MHz_TX



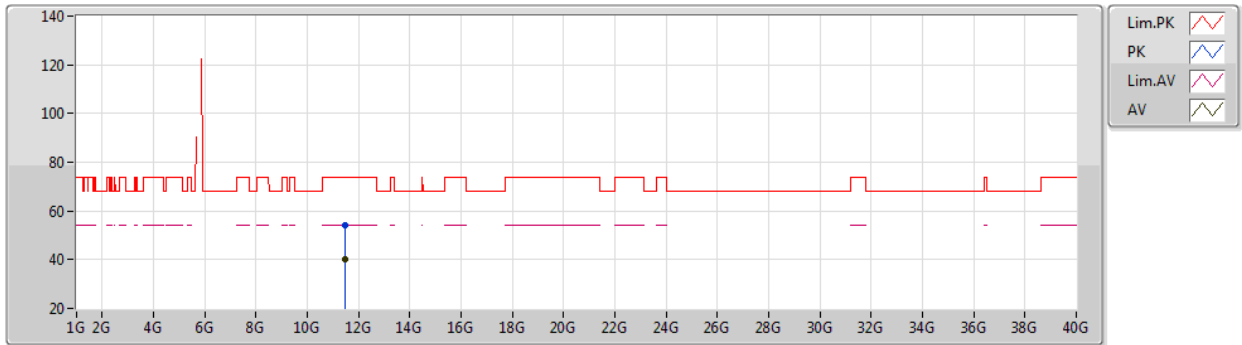
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Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.49272G	54.67	74.00	-19.33	41.01	3	Vertical	298	2.68	-	38.89	7.62	32.85
AV	11.49072G	40.87	54.00	-13.13	27.21	3	Vertical	298	2.68	-	38.89	7.62	32.85

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5745MHz_TX



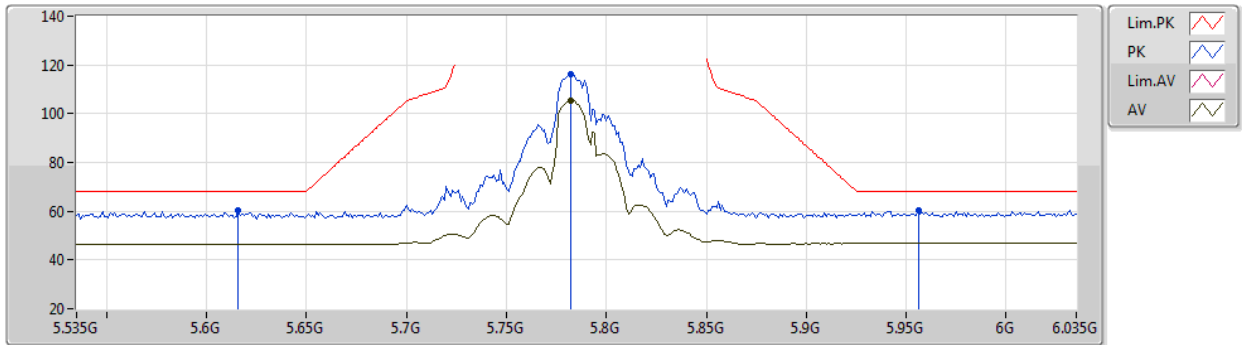
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Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.48624G	54.20	74.00	-19.80	40.54	3	Horizontal	88	1.87	-	38.89	7.62	32.85
AV	11.48888G	40.23	54.00	-13.77	26.57	3	Horizontal	88	1.87	-	38.89	7.62	32.85

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5785MHz_TX



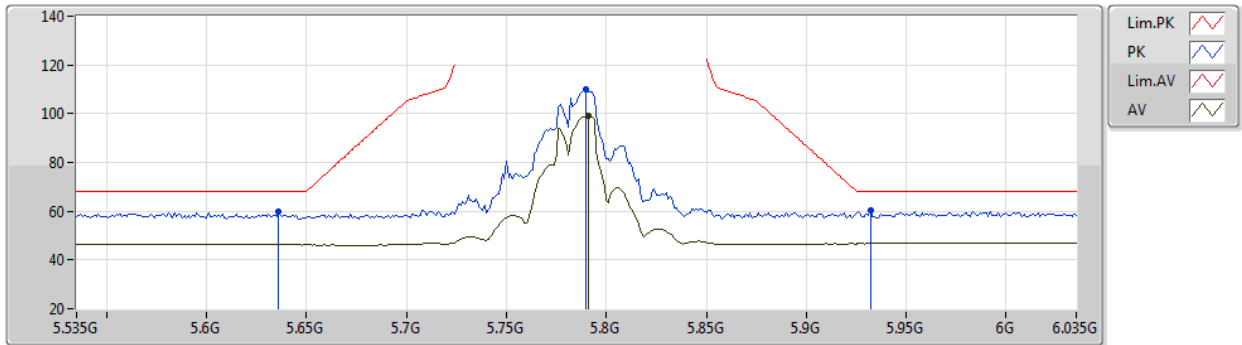
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.616G	60.41	68.20	-7.79	52.82	3	Vertical	70	1.41	-	33.88	5.18	31.47
PK	5.782G	116.17	Inf	-Inf	108.81	3	Vertical	70	1.41	-	33.80	5.02	31.46
AV	5.782G	105.36	Inf	-Inf	98.00	3	Vertical	70	1.41	-	33.80	5.02	31.46
PK	5.956G	60.23	68.20	-7.97	52.05	3	Vertical	70	1.41	-	34.16	5.47	31.45

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5785MHz_TX



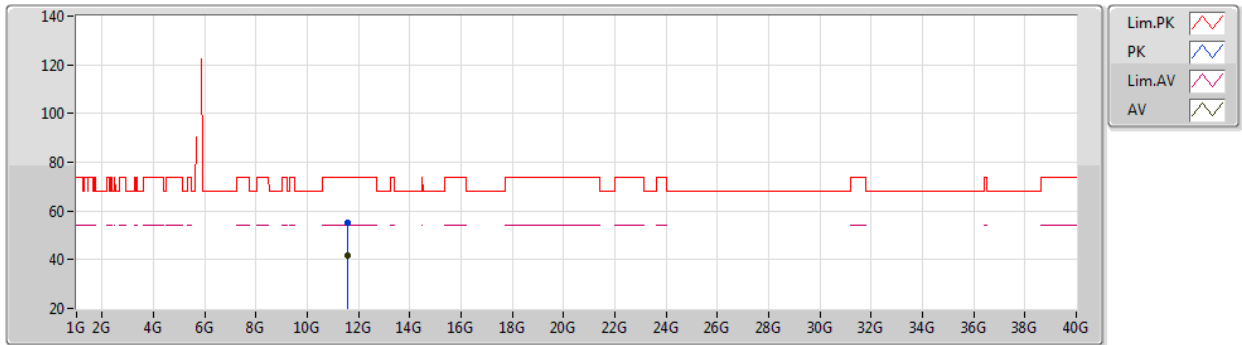
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Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.636G	59.59	68.20	-8.61	52.04	3	Horizontal	323	1.10	-	33.86	5.16	31.47
PK	5.79G	109.89	Inf	-Inf	102.54	3	Horizontal	323	1.10	-	33.80	5.01	31.46
AV	5.791G	98.89	Inf	-Inf	91.54	3	Horizontal	323	1.10	-	33.80	5.01	31.46
PK	5.932G	60.32	68.20	-7.88	52.24	3	Horizontal	323	1.10	-	34.13	5.40	31.45

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5785MHz_TX



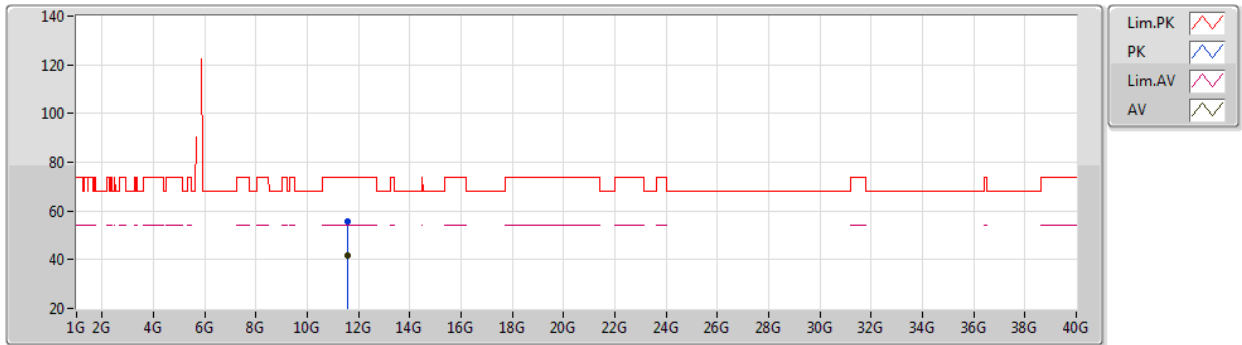
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Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.57184G	55.26	74.00	-18.74	41.51	3	Vertical	360	1.94	-	38.96	7.65	32.86
AV	11.57136G	41.76	54.00	-12.24	28.01	3	Vertical	360	1.94	-	38.96	7.65	32.86

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5785MHz_TX



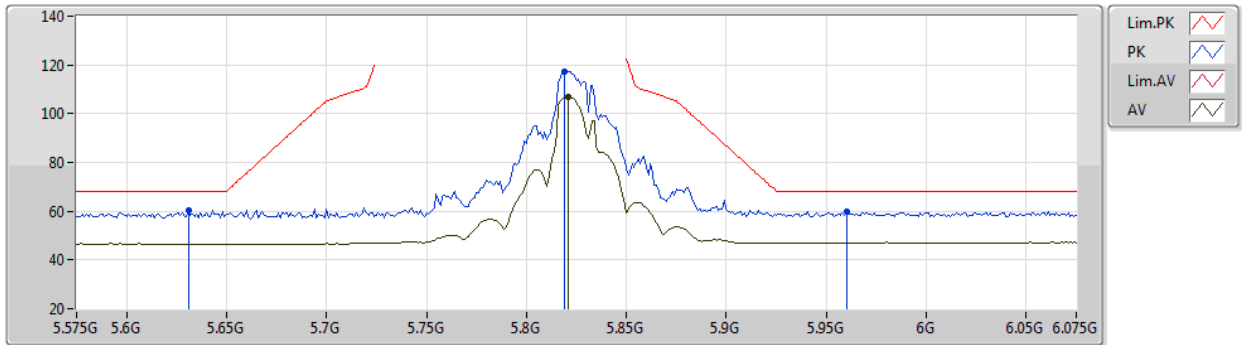
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Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.56824G	55.73	74.00	-18.27	41.99	3	Horizontal	318	1.87	-	38.95	7.65	32.86
AV	11.56824G	41.66	54.00	-12.34	27.92	3	Horizontal	318	1.87	-	38.95	7.65	32.86

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5825MHz_TX



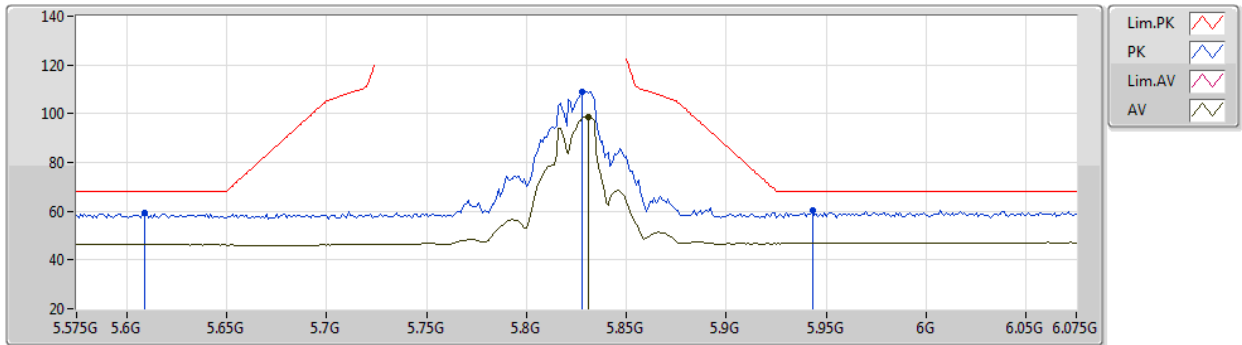
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.631G	60.51	68.20	-7.69	52.94	3	Vertical	329	1.06	-	33.87	5.17	31.47
PK	5.819G	117.42	Inf	-Inf	109.96	3	Vertical	329	1.06	-	33.86	5.06	31.46
AV	5.821G	106.81	Inf	-Inf	99.35	3	Vertical	329	1.06	-	33.86	5.06	31.46
PK	5.96G	59.85	68.20	-8.35	51.66	3	Vertical	329	1.06	-	34.16	5.48	31.45

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5825MHz_TX



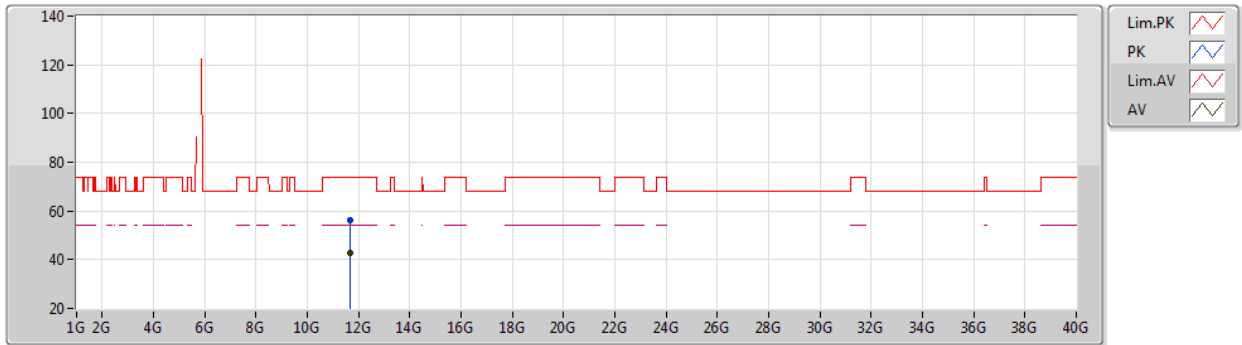
EUT X_2TX
Setting 23
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.609G	59.32	68.20	-8.88	51.71	3	Horizontal	324	1.10	-	33.89	5.19	31.47
PK	5.828G	109.00	Inf	-Inf	101.50	3	Horizontal	324	1.10	-	33.88	5.08	31.46
AV	5.831G	98.62	Inf	-Inf	91.10	3	Horizontal	324	1.10	-	33.89	5.09	31.46
PK	5.943G	60.47	68.20	-7.73	52.35	3	Horizontal	324	1.10	-	34.14	5.43	31.45

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5825MHz_TX



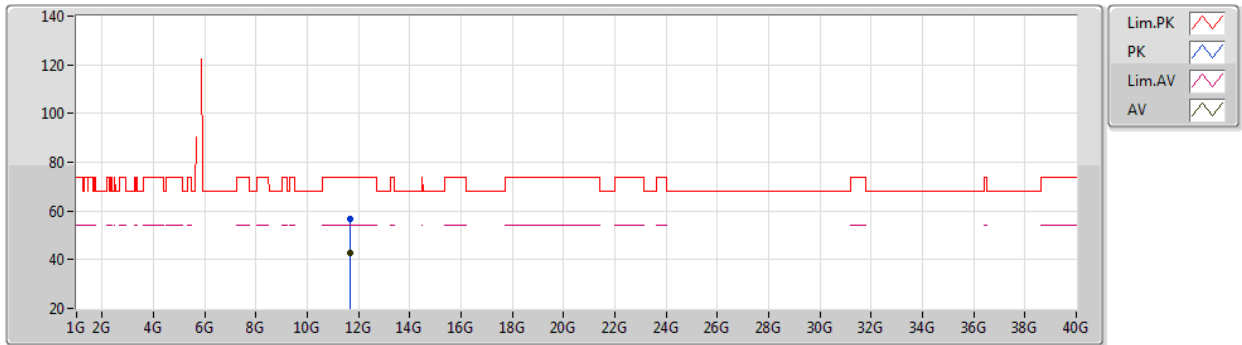
EUT X_2TX
Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.65366G	56.17	74.00	-17.83	42.35	3	Vertical	19	2.01	-	39.02	7.68	32.88
AV	11.65174G	42.73	54.00	-11.27	28.91	3	Vertical	19	2.01	-	39.02	7.68	32.88

802.11ac VHT20_Nss1,(MCS0)_2TX

19/10/2020

5825MHz_TX



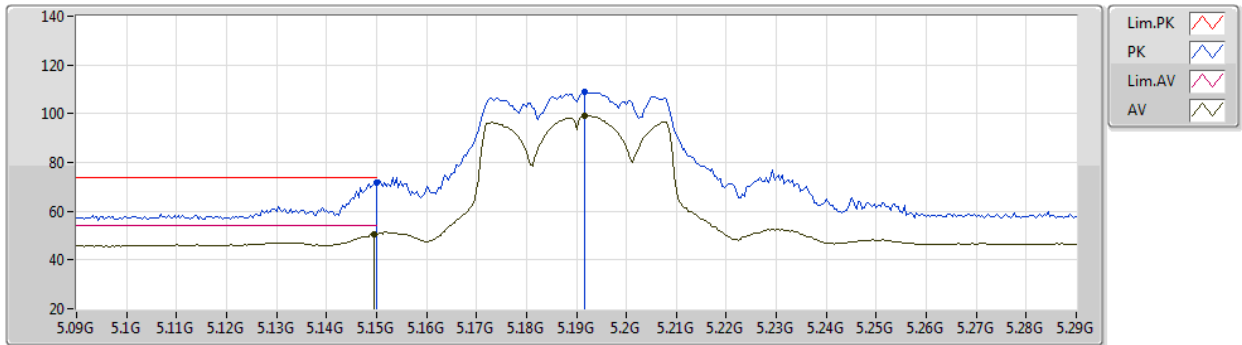
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Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.64952G	56.72	74.00	-17.28	42.90	3	Horizontal	321	1.95	-	39.02	7.68	32.88
AV	11.6497G	42.80	54.00	-11.20	28.98	3	Horizontal	321	1.95	-	39.02	7.68	32.88

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5190MHz_TX



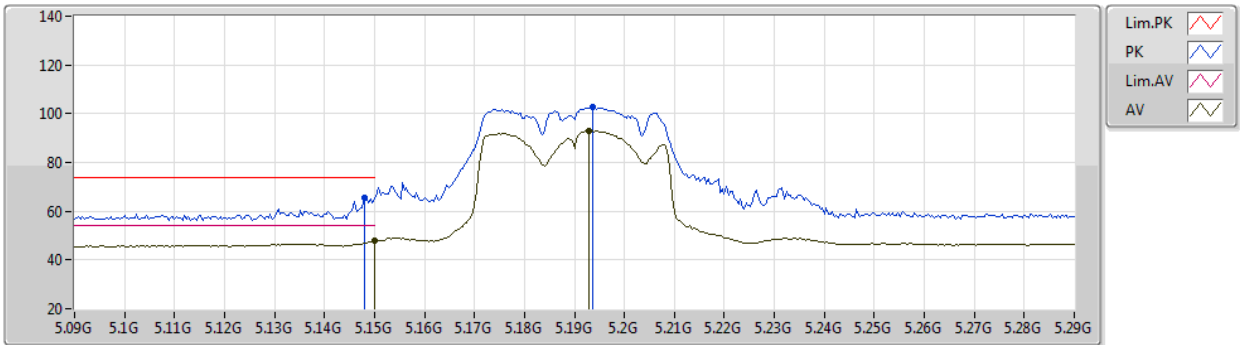
EUT X_2TX
Setting 15.5
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	71.60	74.00	-2.40	64.88	3	Vertical	328	2.45	-	33.45	5.00	31.73
AV	5.1496G	50.47	54.00	-3.53	43.75	3	Vertical	328	2.45	-	33.45	5.00	31.73
PK	5.1916G	108.81	Inf	-Inf	101.94	3	Vertical	328	2.45	-	33.49	5.08	31.70
AV	5.1916G	99.32	Inf	-Inf	92.45	3	Vertical	328	2.45	-	33.49	5.08	31.70

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5190MHz_TX



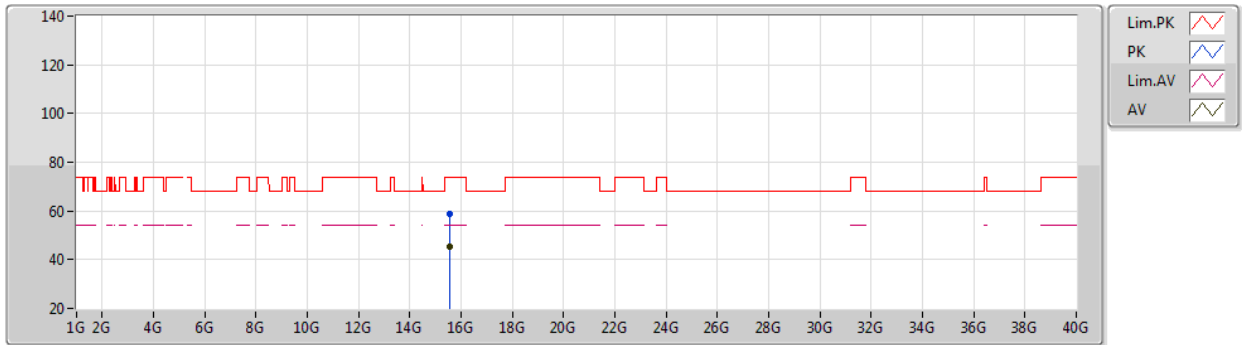
EUT X_2TX
Setting 15.5
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.148G	65.55	74.00	-8.45	58.83	3	Horizontal	330	1.01	-	33.45	5.00	31.73
AV	5.15G	47.93	54.00	-6.07	41.21	3	Horizontal	330	1.01	-	33.45	5.00	31.73
PK	5.1936G	102.57	Inf	-Inf	95.68	3	Horizontal	330	1.01	-	33.49	5.09	31.69
AV	5.1928G	92.85	Inf	-Inf	85.97	3	Horizontal	330	1.01	-	33.49	5.09	31.70

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5190MHz_TX



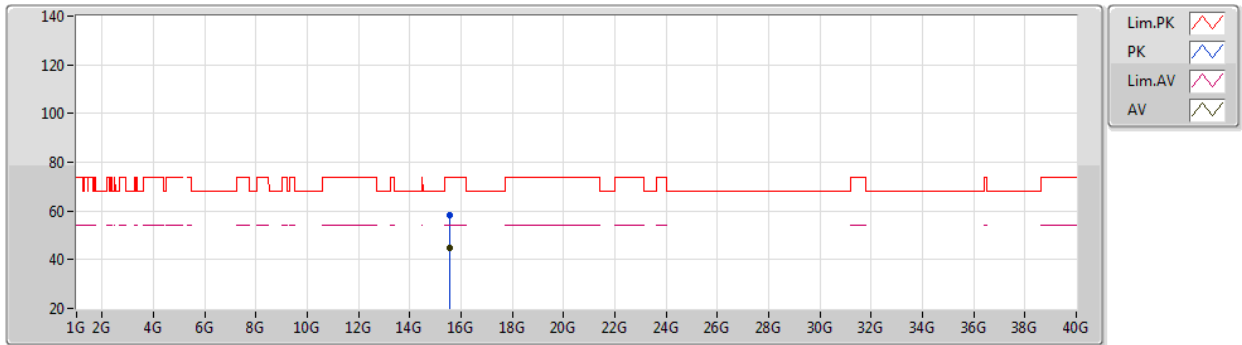
EUT X_2TX
Setting 15.5
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.57392G	58.91	74.00	-15.09	44.08	3	Vertical	173	1.80	-	38.64	9.05	32.86
AV	15.57374G	45.09	54.00	-8.91	30.26	3	Vertical	173	1.80	-	38.64	9.05	32.86

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5190MHz_TX



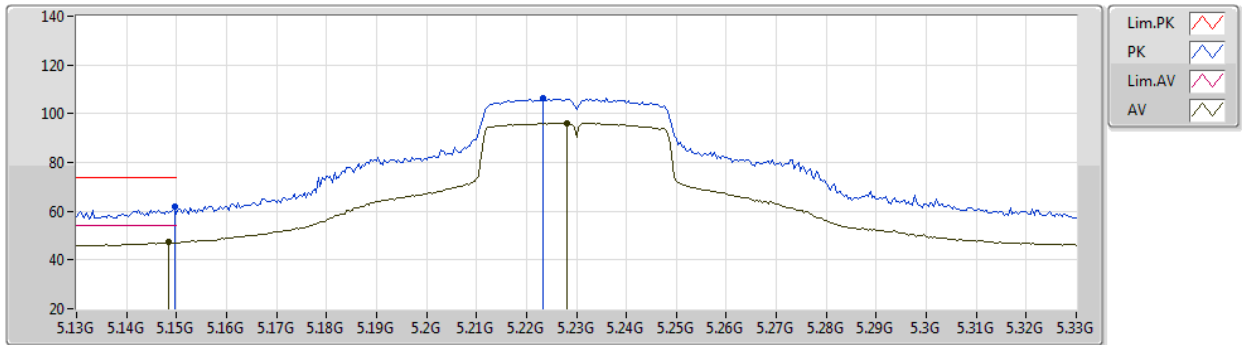
EUT X_2TX
Setting 15.5
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.56698G	58.16	74.00	-15.84	43.31	3	Horizontal	326	1.73	-	38.66	9.05	32.86
AV	15.57328G	45.07	54.00	-8.93	30.24	3	Horizontal	326	1.73	-	38.64	9.05	32.86

802.11ac VHT40_Nss1,(MCS0)_2TX

27/10/2020

5230MHz_TX



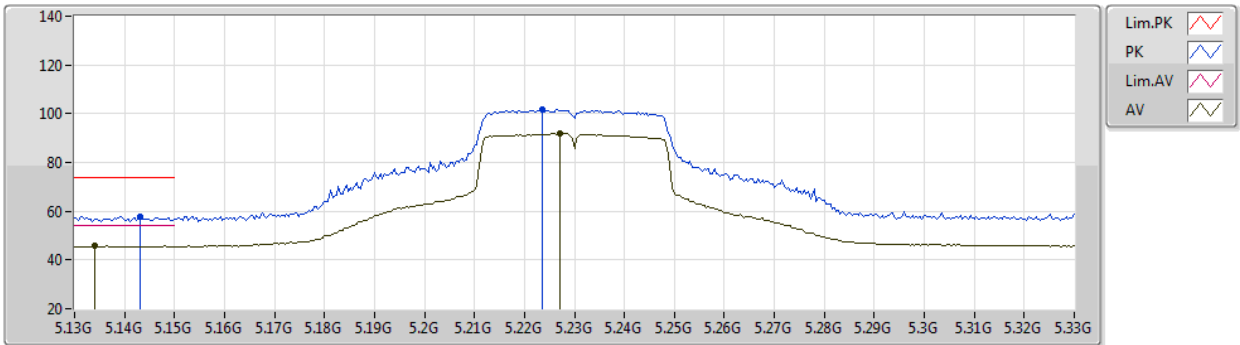
EUT X_2TX
Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1496G	61.75	74.00	-12.25	55.03	3	Vertical	23	1.05	-	33.45	5.00	31.73
AV	5.1484G	47.18	54.00	-6.82	40.46	3	Vertical	23	1.05	-	33.45	5.00	31.73
PK	5.2232G	106.14	Inf	-Inf	99.17	3	Vertical	23	1.05	-	33.55	5.09	31.67
AV	5.228G	96.19	Inf	-Inf	89.21	3	Vertical	23	1.05	-	33.56	5.09	31.67

802.11ac VHT40_Nss1,(MCS0)_2TX

27/10/2020

5230MHz_TX



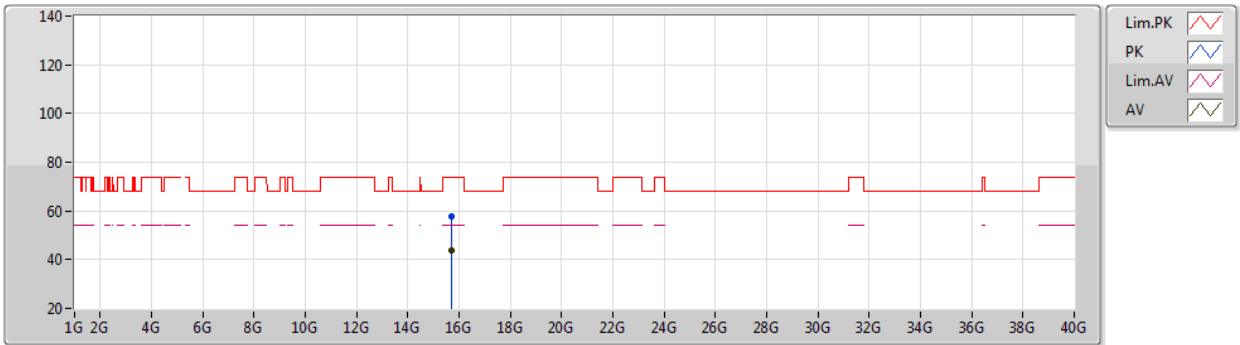
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Setting Default power
02-E-N-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1432G	57.75	74.00	-16.25	51.05	3	Horizontal	24	2.62	-	33.44	4.99	31.73
AV	5.134G	45.69	54.00	-8.31	39.03	3	Horizontal	24	2.62	-	33.43	4.97	31.74
PK	5.2236G	101.60	Inf	-Inf	94.63	3	Horizontal	24	2.62	-	33.55	5.09	31.67
AV	5.2272G	91.86	Inf	-Inf	84.89	3	Horizontal	24	2.62	-	33.55	5.09	31.67

802.11ac VHT40_Nss1,(MCS0)_2TX

27/10/2020

5230MHz_TX



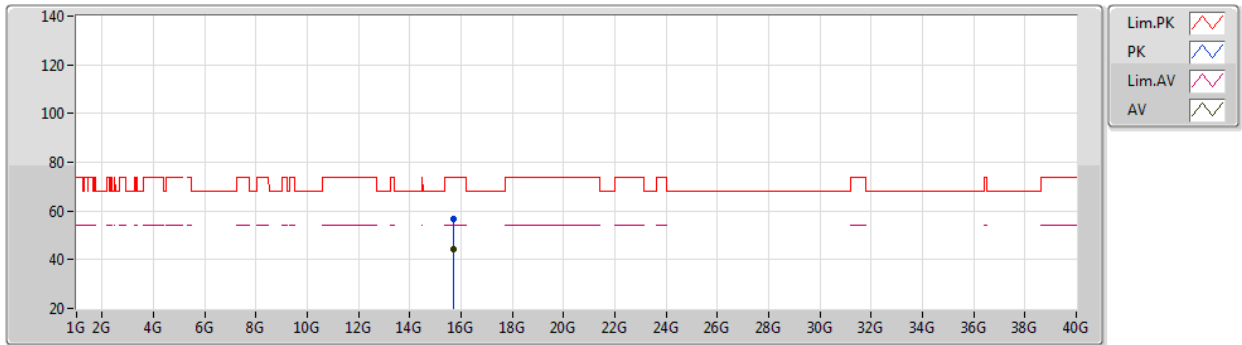
EUT X_2TX
Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.6906G	57.57	74.00	-16.43	43.04	3	Vertical	241	2.38	-	38.30	9.09	32.86
AV	15.68168G	43.96	54.00	-10.04	29.41	3	Vertical	241	2.38	-	38.32	9.09	32.86

802.11ac VHT40_Nss1,(MCS0)_2TX

27/10/2020

5230MHz_TX



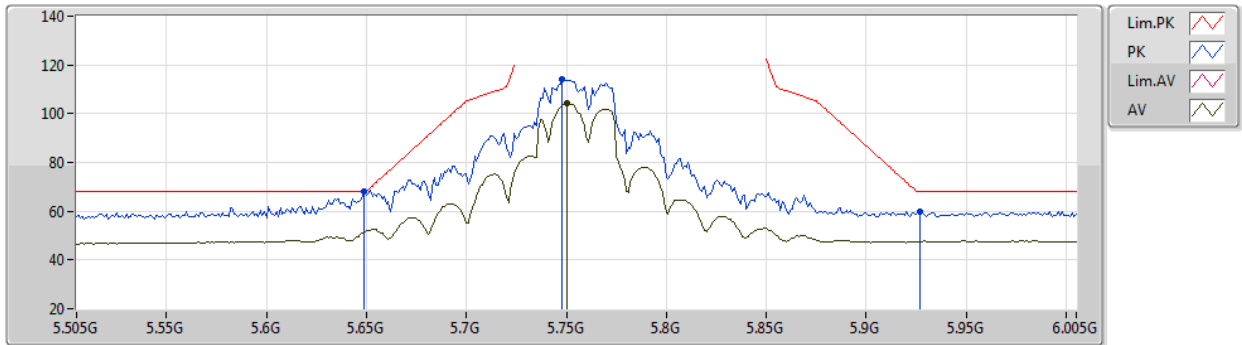
EUT X_2TX
Setting Default power
02-E-N-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.687G	56.96	74.00	-17.04	42.42	3	Horizontal	306	2.79	-	38.31	9.09	32.86
AV	15.68824G	44.53	54.00	-9.47	30.00	3	Horizontal	306	2.79	-	38.30	9.09	32.86

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5755MHz_TX



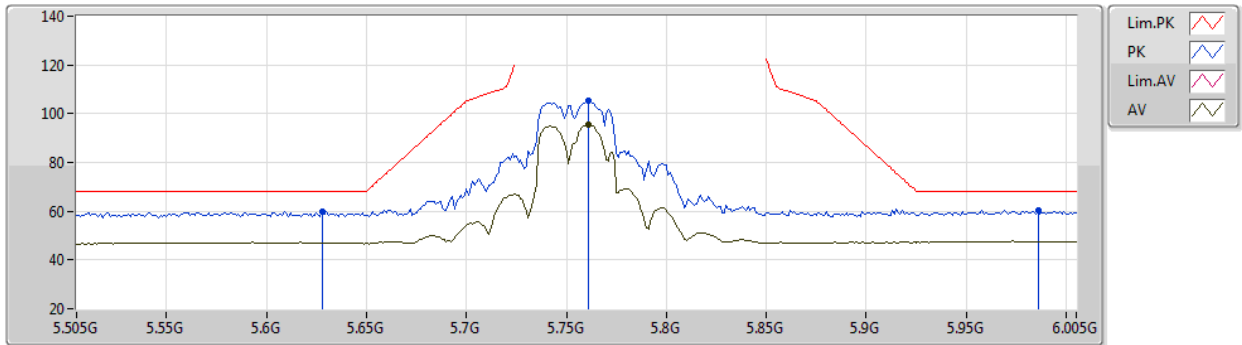
EUT X_2TX
Setting 20
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.649G	68.17	68.20	-0.03	60.64	3	Vertical	330	1.13	-	33.85	5.15	31.47
PK	5.748G	113.96	Inf	-Inf	106.57	3	Vertical	330	1.13	-	33.80	5.05	31.46
AV	5.75G	104.14	Inf	-Inf	96.75	3	Vertical	330	1.13	-	33.80	5.05	31.46
PK	5.927G	59.75	68.20	-8.45	51.69	3	Vertical	330	1.13	-	34.13	5.38	31.45

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5755MHz_TX



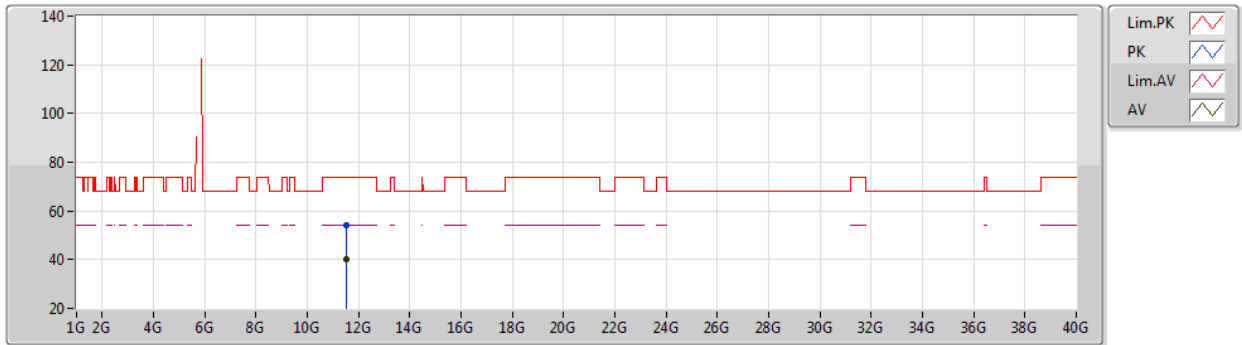
EUT X_2TX
Setting 20
02-E-K-4-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.628G	59.81	68.20	-8.39	52.24	3	Horizontal	323	1.12	-	33.87	5.17	31.47
PK	5.761G	105.24	Inf	-Inf	97.86	3	Horizontal	323	1.12	-	33.80	5.04	31.46
AV	5.761G	95.49	Inf	-Inf	88.11	3	Horizontal	323	1.12	-	33.80	5.04	31.46
PK	5.986G	60.35	68.20	-7.85	52.05	3	Horizontal	323	1.12	-	34.19	5.56	31.45

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5755MHz_TX



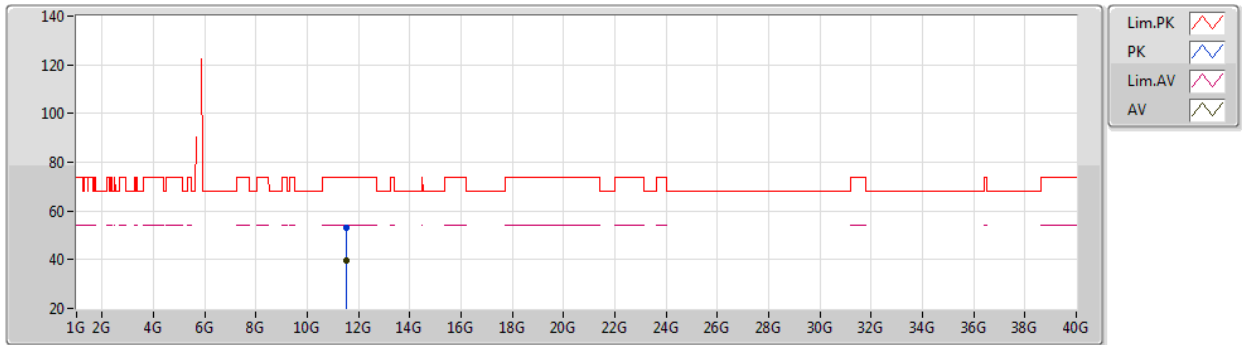
EUT X_2TX
Setting 20
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.51006G	54.27	74.00	-19.73	40.58	3	Vertical	173	1.80	-	38.91	7.63	32.85
AV	11.5109G	40.11	54.00	-13.89	26.42	3	Vertical	173	1.80	-	38.91	7.63	32.85

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5755MHz_TX



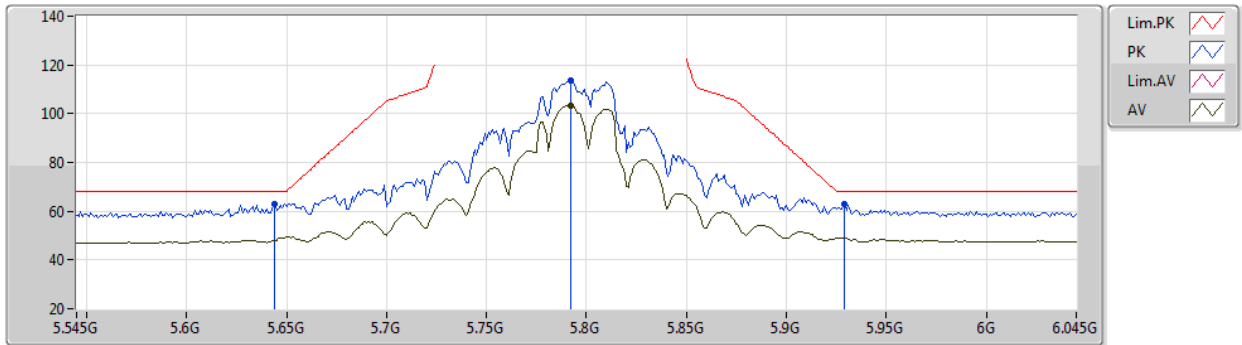
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Setting 20
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.50909G	53.05	74.00	-20.95	39.36	3	Horizontal	159	1.73	-	38.91	7.63	32.85
AV	11.51088G	39.87	54.00	-14.13	26.18	3	Horizontal	159	1.73	-	38.91	7.63	32.85

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5795MHz_TX



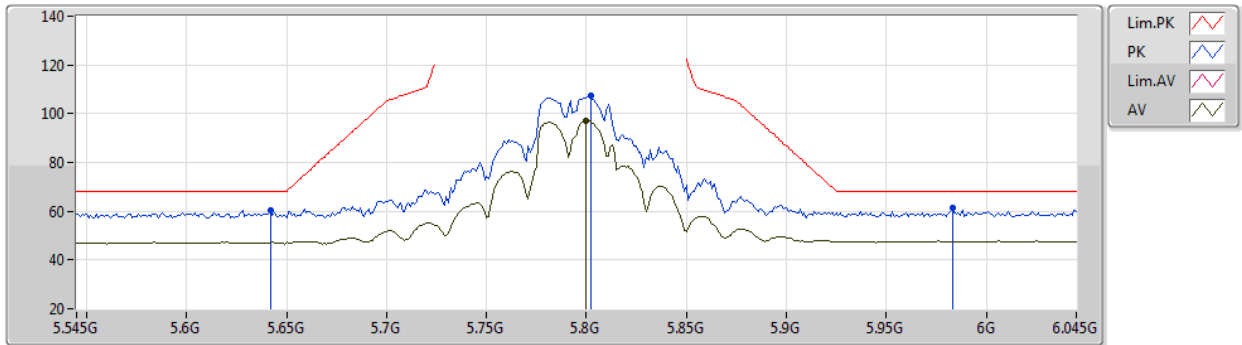
EUT X_2TX
Setting 23
02-E-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.644G	63.18	68.20	-5.02	55.63	3	Vertical	71	1.11	-	33.86	5.16	31.47
PK	5.792G	113.49	Inf	-Inf	106.14	3	Vertical	71	1.11	-	33.80	5.01	31.46
AV	5.792G	103.46	Inf	-Inf	96.11	3	Vertical	71	1.11	-	33.80	5.01	31.46
PK	5.929G	63.01	68.20	-5.19	54.94	3	Vertical	71	1.11	-	34.13	5.39	31.45

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5795MHz_TX



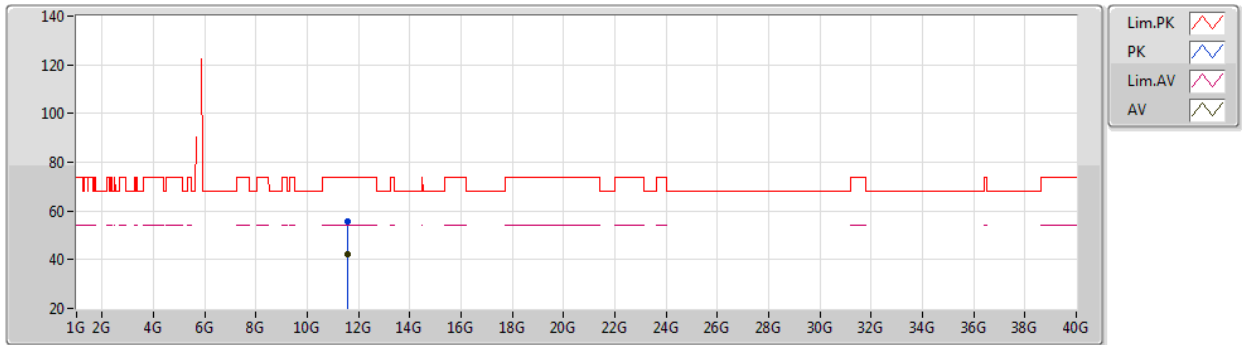
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Setting 23
02-E-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.642G	60.15	68.20	-8.05	52.60	3	Horizontal	323	1.02	-	33.86	5.16	31.47
PK	5.802G	107.39	Inf	-Inf	100.03	3	Horizontal	323	1.02	-	33.81	5.01	31.46
AV	5.8G	96.97	Inf	-Inf	89.63	3	Horizontal	323	1.02	-	33.80	5.00	31.46
PK	5.983G	61.16	68.20	-7.04	52.88	3	Horizontal	323	1.02	-	34.18	5.55	31.45

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5795MHz_TX



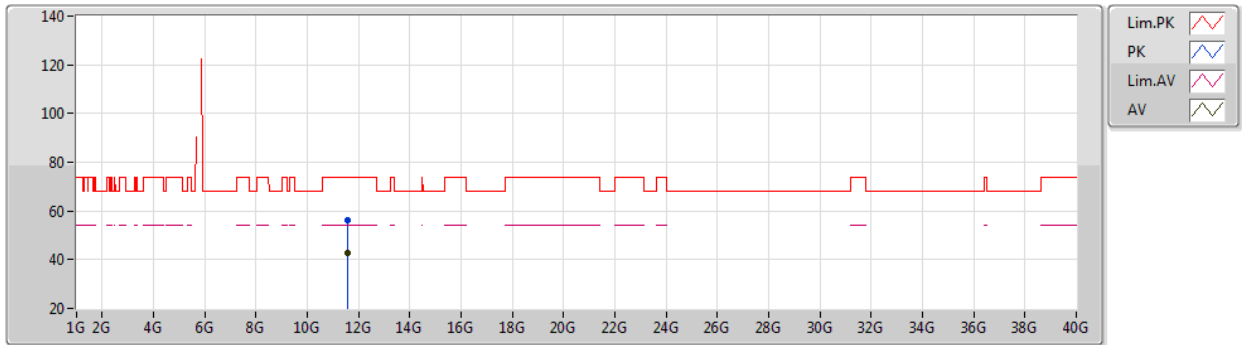
EUT X_2TX
Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.59099G	55.62	74.00	-18.38	41.86	3	Vertical	353	1.94	-	38.97	7.66	32.87
AV	11.59036G	42.01	54.00	-11.99	28.25	3	Vertical	353	1.94	-	38.97	7.66	32.87

802.11ac VHT40_Nss1,(MCS0)_2TX

19/10/2020

5795MHz_TX



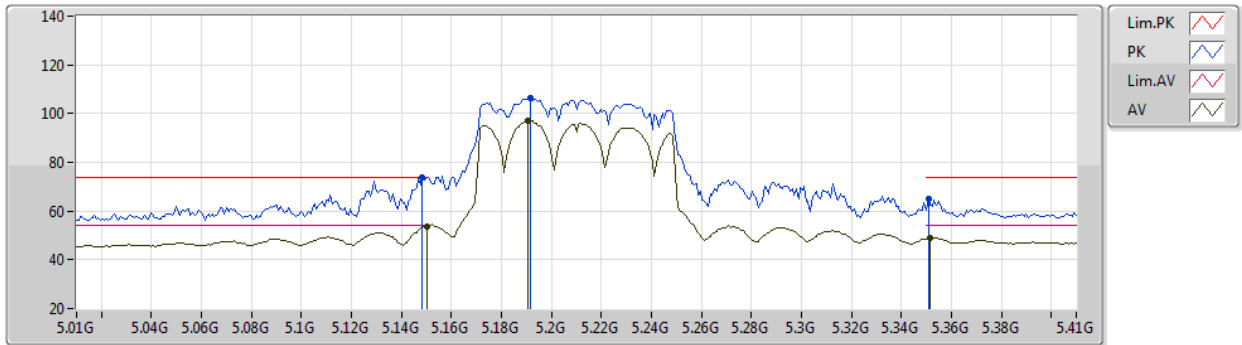
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Setting 23
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.59001G	56.29	74.00	-17.71	42.53	3	Horizontal	311	2.78	-	38.97	7.66	32.87
AV	11.59018G	42.66	54.00	-11.34	28.90	3	Horizontal	311	2.78	-	38.97	7.66	32.87

802.11ac VHT80_Nss1,(MCS0)_2TX

19/10/2020

5210MHz_TX



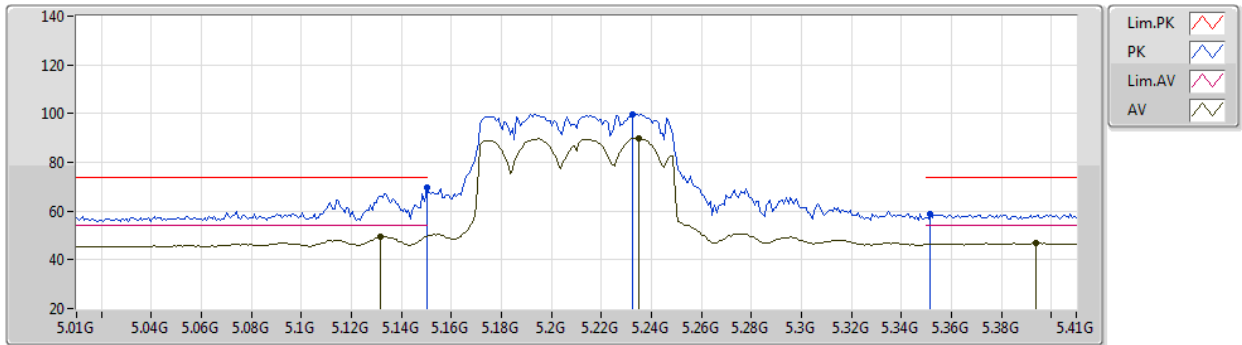
EUT X_2TX
Setting 16
02-E-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1484G	73.98	74.00	-0.02	67.26	3	Vertical	330	2.46	-	33.45	5.00	31.73
AV	5.15G	53.56	54.00	-0.44	46.84	3	Vertical	330	2.46	-	33.45	5.00	31.73
PK	5.1916G	106.37	Inf	-Inf	99.50	3	Vertical	330	2.46	-	33.49	5.08	31.70
AV	5.1908G	96.88	Inf	-Inf	90.01	3	Vertical	330	2.46	-	33.49	5.08	31.70
PK	5.3508G	64.75	74.00	-9.25	57.56	3	Vertical	330	2.46	-	33.75	5.02	31.58
AV	5.3516G	49.20	54.00	-4.80	42.01	3	Vertical	330	2.46	-	33.75	5.02	31.58

802.11ac VHT80_Nss1,(MCS0)_2TX

19/10/2020

5210MHz_TX



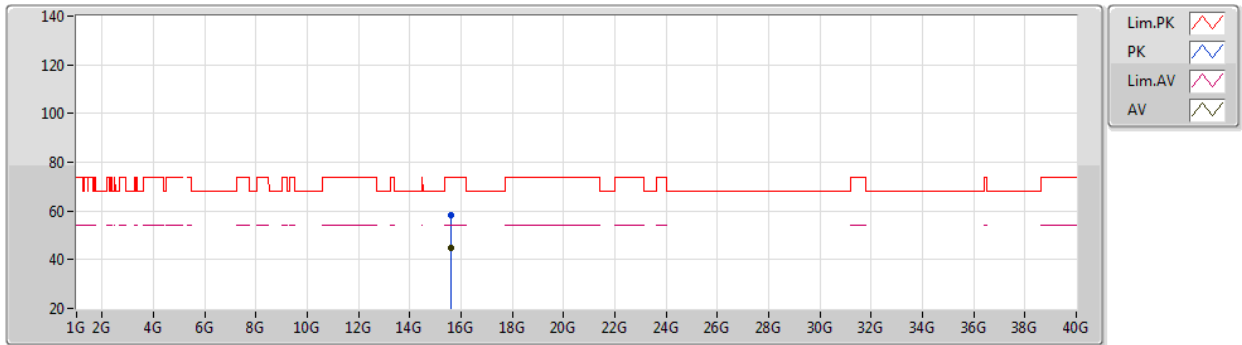
EUT X_2TX
Setting 16
02-E-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	69.80	74.00	-4.20	63.08	3	Horizontal	331	1.00	-	33.45	5.00	31.73
AV	5.1316G	49.51	54.00	-4.49	42.86	3	Horizontal	331	1.00	-	33.43	4.96	31.74
PK	5.2324G	99.59	Inf	-Inf	92.62	3	Horizontal	331	1.00	-	33.56	5.08	31.67
AV	5.2348G	90.08	Inf	-Inf	83.10	3	Horizontal	331	1.00	-	33.57	5.08	31.67
PK	5.3516G	58.88	74.00	-15.12	51.69	3	Horizontal	331	1.00	-	33.75	5.02	31.58
AV	5.394G	46.82	54.00	-7.18	39.58	3	Horizontal	331	1.00	-	33.79	5.00	31.55

802.11ac VHT80_Nss1,(MCS0)_2TX

19/10/2020

5210MHz_TX



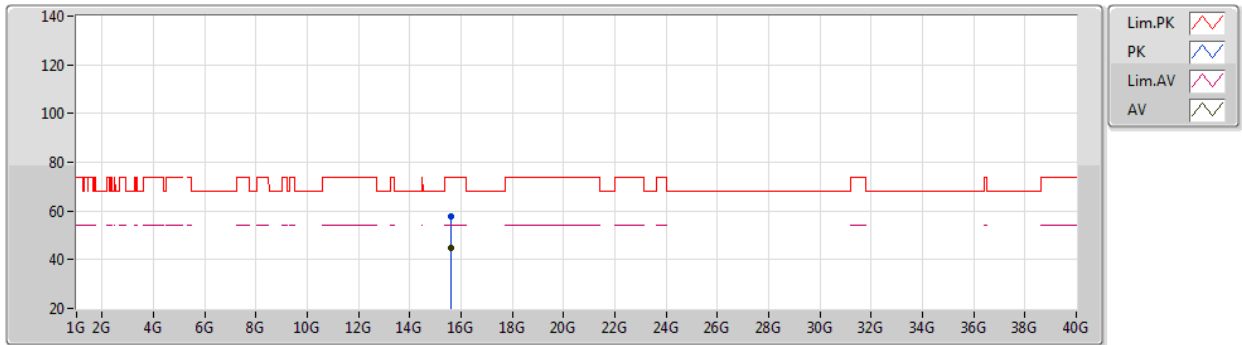
EUT X_2TX
Setting 16
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.62966G	58.13	74.00	-15.87	43.45	3	Vertical	333	1.80	-	38.47	9.07	32.86
AV	15.62972G	44.96	54.00	-9.04	30.28	3	Vertical	333	1.80	-	38.47	9.07	32.86

802.11ac VHT80_Nss1,(MCS0)_2TX

19/10/2020

5210MHz_TX



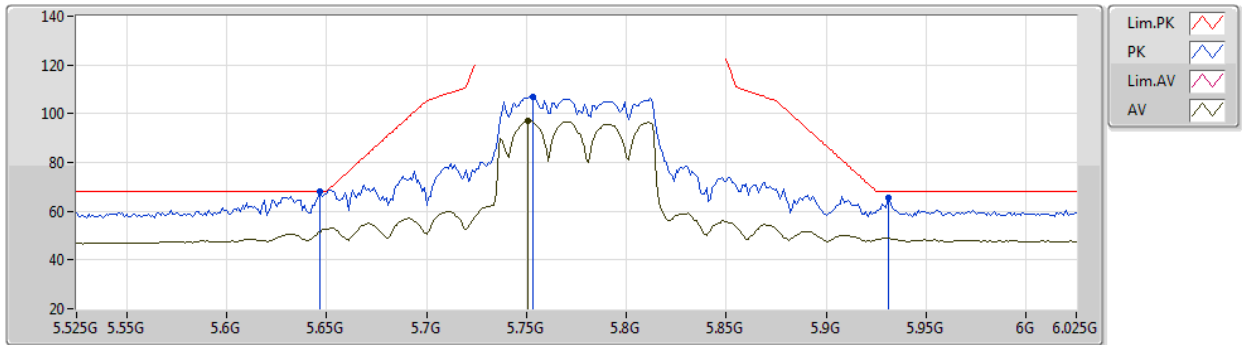
EUT X_2TX
Setting 16
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.62958G	57.62	74.00	-16.38	42.94	3	Horizontal	342	2.99	-	38.47	9.07	32.86
AV	15.63032G	44.60	54.00	-9.40	29.92	3	Horizontal	342	2.99	-	38.47	9.07	32.86

802.11ac VHT80_Nss1,(MCS0)_2TX

19/10/2020

5775MHz_TX



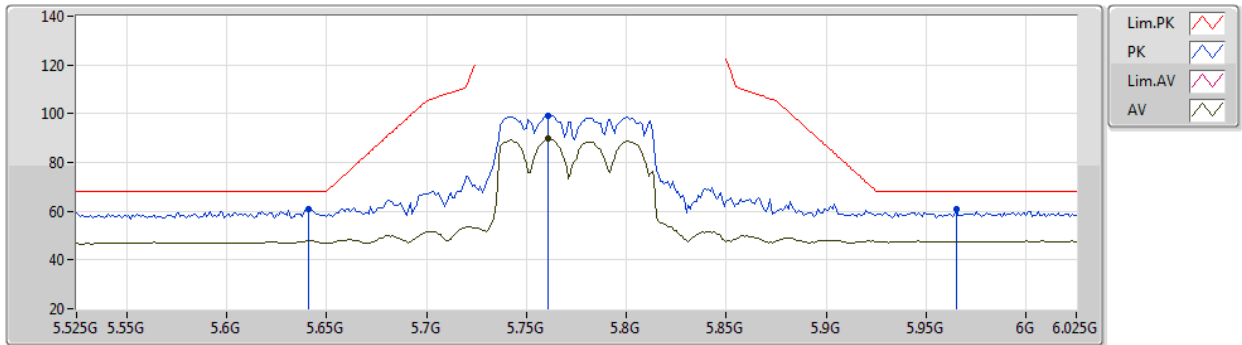
EUT X_2TX
Setting 17.5
02-E-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.647G	68.15	68.20	-0.05	60.62	3	Vertical	332	1.01	-	33.85	5.15	31.47
PK	5.753G	107.09	Inf	-Inf	99.70	3	Vertical	332	1.01	-	33.80	5.05	31.46
AV	5.751G	97.06	Inf	-Inf	89.67	3	Vertical	332	1.01	-	33.80	5.05	31.46
PK	5.931G	65.31	68.20	-2.89	57.24	3	Vertical	332	1.01	-	34.13	5.39	31.45

802.11ac VHT80_Nss1,(MCS0)_2TX

19/10/2020

5775MHz_TX



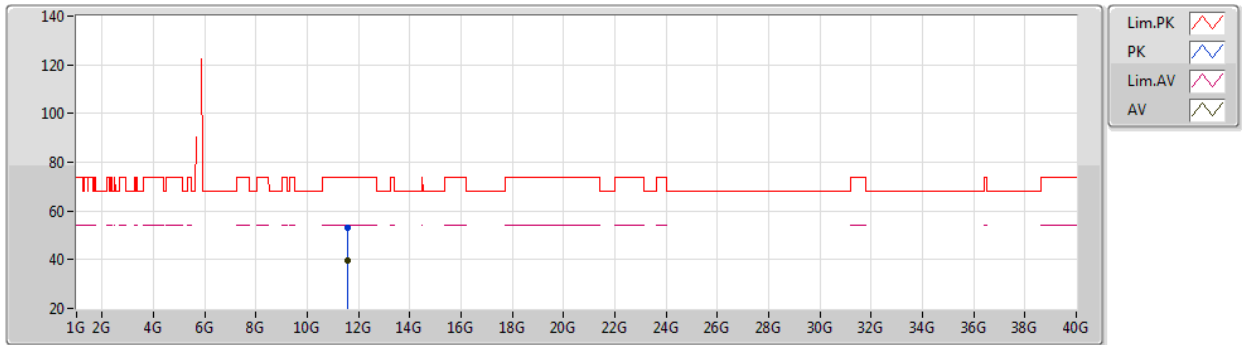
EUT X_2TX
Setting 17.5
02-E-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.641G	60.78	68.20	-7.42	53.23	3	Horizontal	323	1.11	-	33.86	5.16	31.47
PK	5.761G	99.22	Inf	-Inf	91.84	3	Horizontal	323	1.11	-	33.80	5.04	31.46
AV	5.761G	89.76	Inf	-Inf	82.38	3	Horizontal	323	1.11	-	33.80	5.04	31.46
PK	5.965G	60.75	68.20	-7.45	52.55	3	Horizontal	323	1.11	-	34.16	5.49	31.45

802.11ac VHT80_Nss1,(MCS0)_2TX

19/10/2020

5775MHz_TX



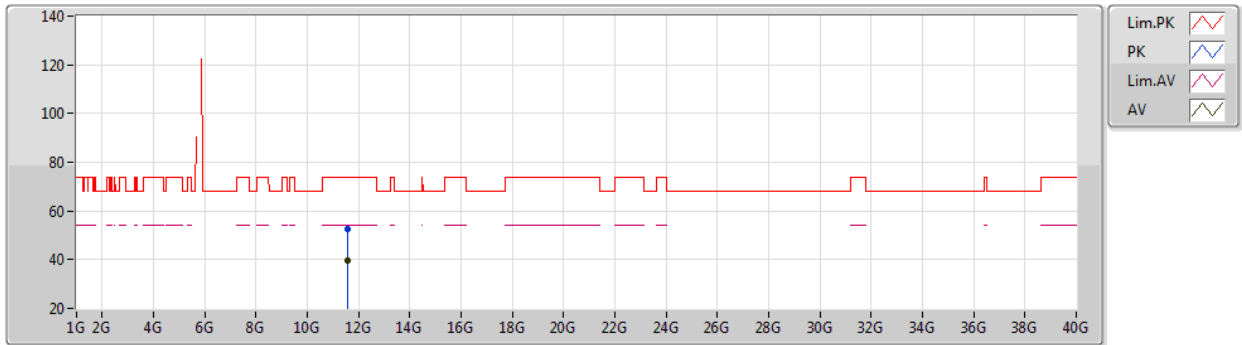
EUT X_2TX
Setting 17.5
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.54945G	53.30	74.00	-20.70	39.58	3	Vertical	139	1.40	-	38.94	7.64	32.86
AV	11.54989G	39.74	54.00	-14.26	26.02	3	Vertical	139	1.40	-	38.94	7.64	32.86

802.11ac VHT80_Nss1,(MCS0)_2TX

19/10/2020

5775MHz_TX



EUT X_2TX
Setting 17.5
02-E-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.54984G	52.68	74.00	-21.32	38.96	3	Horizontal	130	2.31	-	38.94	7.64	32.86
AV	11.55076G	39.55	54.00	-14.45	25.83	3	Horizontal	130	2.31	-	38.94	7.64	32.86