




FCC RADIO TEST REPORT

FCC ID : MSQ-RTAC8800
Equipment : Dual band AC WiFi Router
Brand Name : ASUS
Model Name : RT-ACRH18, RT-AC67P, RT-AC65, RT-AC1900, RT-AC175
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan
Manufacturer : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan
Standard : 47 CFR FCC Part 15.407

The product was received on Jun. 03, 2020, and testing was started from Jun. 08, 2020 and completed on Jul. 30, 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	3
5.15-5.25GHz	802.11n HT20	20	3
5.15-5.25GHz	802.11n HT20-BF	20	3
5.15-5.25GHz	802.11ac VHT20	20	3
5.15-5.25GHz	802.11ac VHT20-BF	20	3
5.15-5.25GHz	802.11n HT40	40	3
5.15-5.25GHz	802.11n HT40-BF	40	3
5.15-5.25GHz	802.11ac VHT40	40	3
5.15-5.25GHz	802.11ac VHT40-BF	40	3
5.15-5.25GHz	802.11ac VHT80	80	3
5.15-5.25GHz	802.11ac VHT80-BF	80	3
5.725-5.85GHz	802.11a	20	3
5.725-5.85GHz	802.11n HT20	20	3
5.725-5.85GHz	802.11n HT20-BF	20	3
5.725-5.85GHz	802.11ac VHT20	20	3
5.725-5.85GHz	802.11ac VHT20-BF	20	3
5.725-5.85GHz	802.11n HT40	40	3
5.725-5.85GHz	802.11n HT40-BF	40	3
5.725-5.85GHz	802.11ac VHT40	40	3
5.725-5.85GHz	802.11ac VHT40-BF	40	3
5.725-5.85GHz	802.11ac VHT80	80	3
5.725-5.85GHz	802.11ac VHT80-BF	80	3

**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.	2.4GHz Port	5GHz Port	Brand	P/N	Antenna Type	Connector	Gain (dBi)	
							2.4GHz	5GHz
1	2	2	RFlink	RF21C05448A	Dipole Antenna	I-PEX	1.94	1.83
2	3	1	RFlink	RF21C05449A	Dipole Antenna	I-PEX	1.91	1.97
3	1	3	RFlink	RF21C05450A	Dipole Antenna	I-PEX	1.87	1.99

Note: The above information was declared by manufacturer.

For 2.4GHz function:**IEEE 802.11b/g/n/VHT (3TX/3RX):**

Port 1, Port 2 and Port 3 can be used as transmitting/receiving antenna.

Port 1, Port 2 and Port 3 could transmit/receive simultaneously.

For 5GHz function:**IEEE 802.11a/n/ac (3TX/3RX):**

Port 1, Port 2 and Port 3 can be used as transmitting/receiving antenna.

Port 1, Port 2 and Port 3 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.959	0.18	1.398m	1k
802.11ac VHT20-BF	0.978	0.1	4.983m	300
802.11ac VHT40-BF	0.963	0.16	2.423m	1k
802.11ac VHT80-BF	0.925	0.34	1.143m	1k

Note:

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

**1.1.4 EUT Operational Condition**

EUT Power Type	From Power Adapter			
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	The product has beamforming function for 11n/VHT in 2.4GHz and 11n/11ac in 5GHz.			
Function	<input type="checkbox"/>	Outdoor P2M	<input checked="" type="checkbox"/>	Indoor P2M
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/>	Client
Test Software Version	Non beamforming mode: QATool (ver.0.0.2.8) Beamforming mode: Telnet			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

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

Model Name	Description
RT-ACRH18, RT-AC67P, RT-AC65, RT-AC1900, RT-AC1750	All the models are identical, the different model names served as marketing strategy.

From the above models, model: RT-ACRH18 was selected as representative model for the test and its data was recorded in this report.



1.2 Applicable Standards

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

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

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

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH02-CB	Caster Chang	22.7~23.2°C / 54~57%	Jun. 10, 2020~Jul. 30, 2020
Radiated (For below 1GHz and above 1GHz co-location)	03CH03-CB	Eason Chen	25~27.1°C / 57~59%	Jun. 09, 2020~Jun. 10, 2020
Radiated (For above 1GHz)	03CH02-CB	Eason Chen	24.9~26°C / 60~61%	Jun. 08, 2020~Jul. 30, 2020
	03CH04-CB	Eason Chen	23.9~25.9°C / 61~63%	Jun. 08, 2020~Jul. 30, 2020
AC Conduction	CO01-CB	Ryo Fan	21~22°C / 63~64%	Jun. 08, 2020

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086D with Industry Canada.



1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.6 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11a_Nss1,(6Mbps)_3TX	-
5180MHz	2C
5200MHz	2E
5240MHz	2E
5745MHz	31
5785MHz	31
5825MHz	32
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-
5180MHz	44
5200MHz	47
5240MHz	47
5745MHz	49
5785MHz	49
5825MHz	50
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-
5190MHz	40
5230MHz	47
5755MHz	49
5795MHz	48
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-
5210MHz	35
5775MHz	46

Note:

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

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_2.4GHz + adapter
2	EUT_5GHz + adapter
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
1	EUT_2.4GHz + adapter
2	EUT_5GHz + adapter
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX

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



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA042225 for Co-location RF Exposure Evaluation.	

Note: The EUT can only use Y axis position.

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

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

The program was executed as follows:

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

For Normal Link:

During the test, the EUT operation to normal function.



2.4 Accessories

Accessories			
Equipment Name	Brand Holder	Model Name	Rating
Adapter	Shenzhen Gongjin Electronics Co., Ltd.	S24B72-120A200-0K	Input: 100-240V ~ 50/60Hz, Max 0.8A Output: 12V, 2A
Others			
RJ-45 cable*1: Non-shielded, 1m			

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	HDD3.0	Transcend	TS1TSJ25A3K	N/A

For Radiated (below 1GHz):

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

For Radiated (above 1GHz):

For non-beamforming mode

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

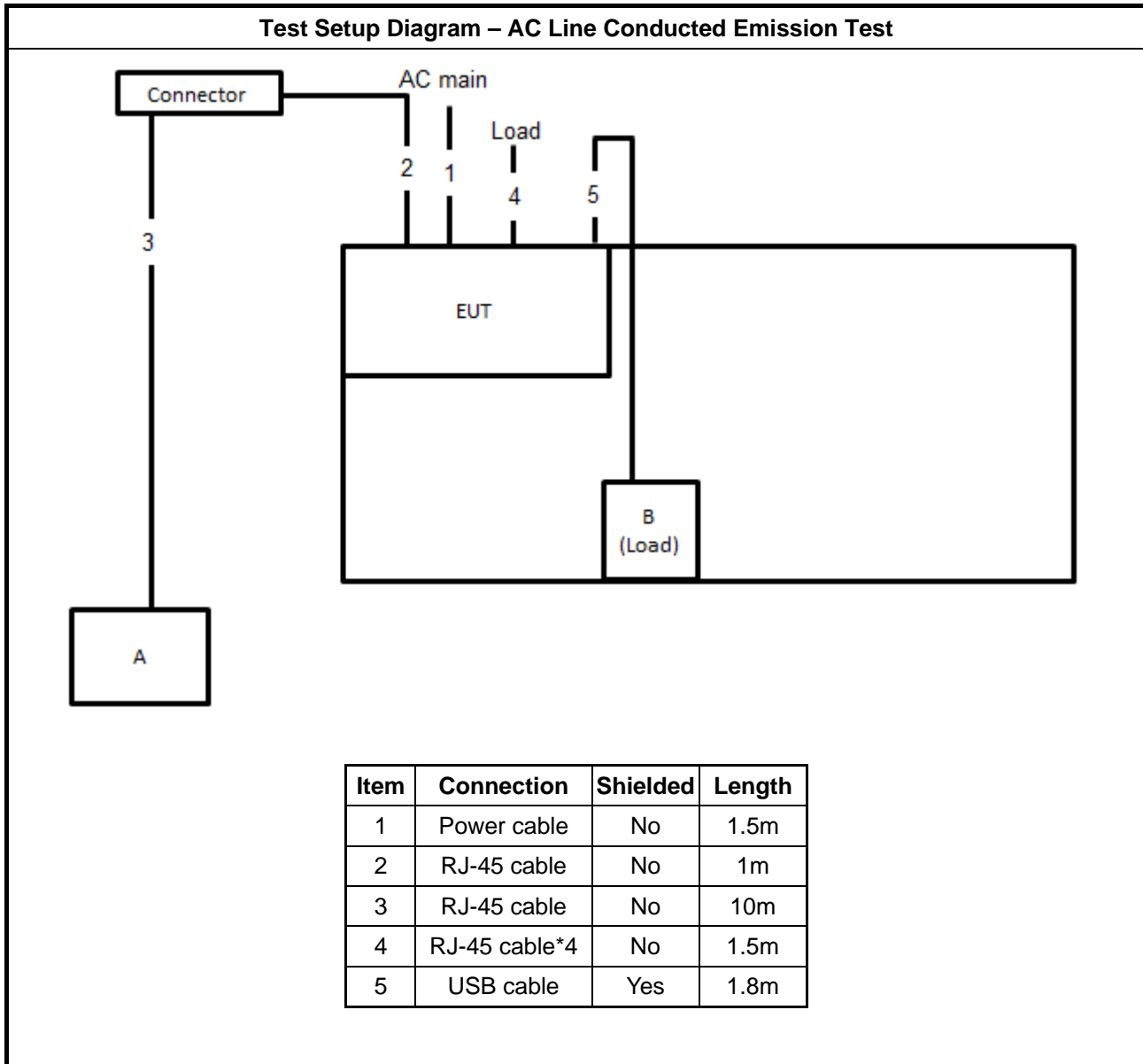
For beamforming mode

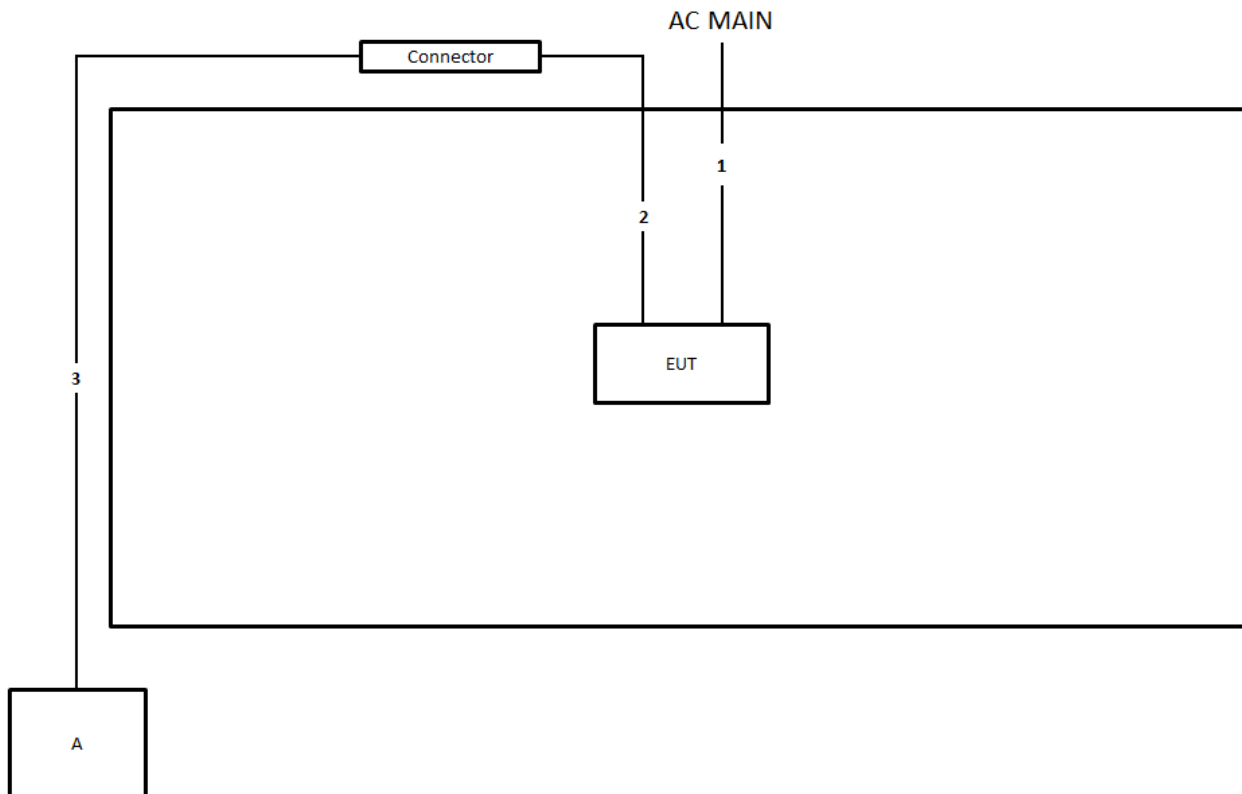
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	RX Device	ASUS	RT-ACRH18	MSQ-RTAC8800

For RF Conducted:

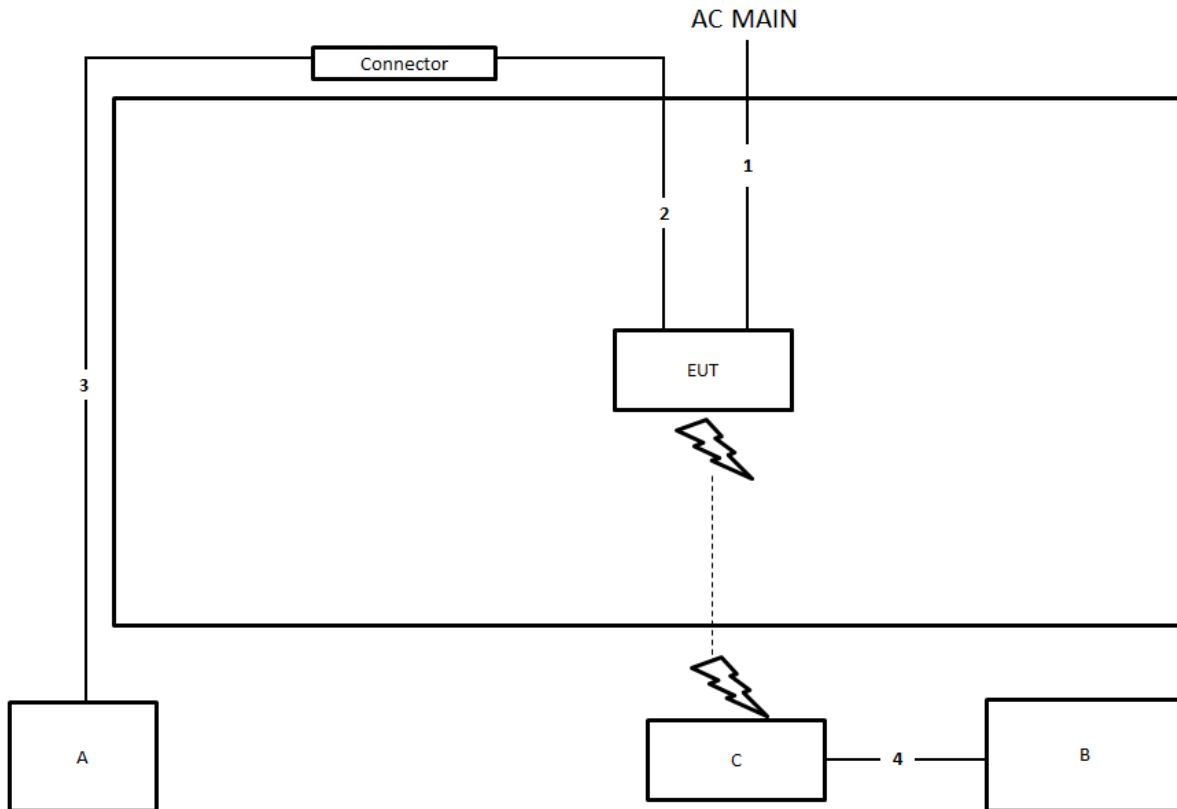
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

2.6 Test Setup Diagram



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


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

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


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

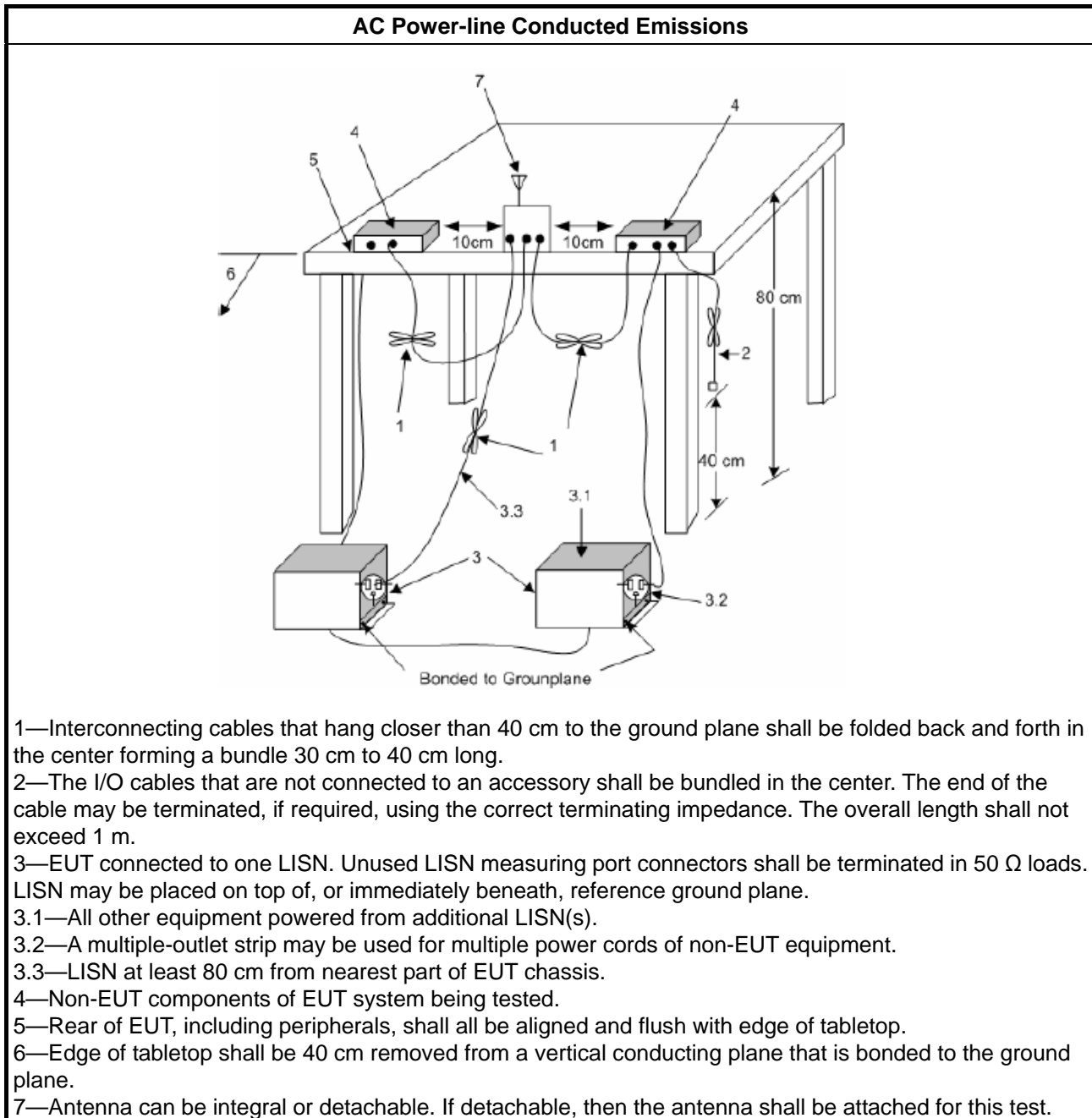
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

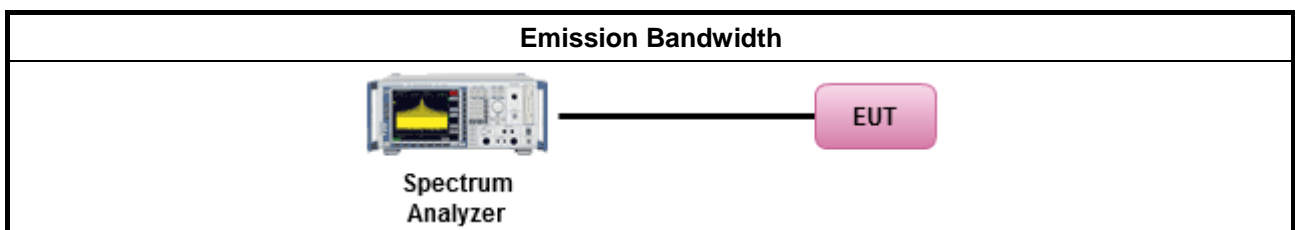
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> For the emission bandwidth shall be measured using one of the options below: 	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

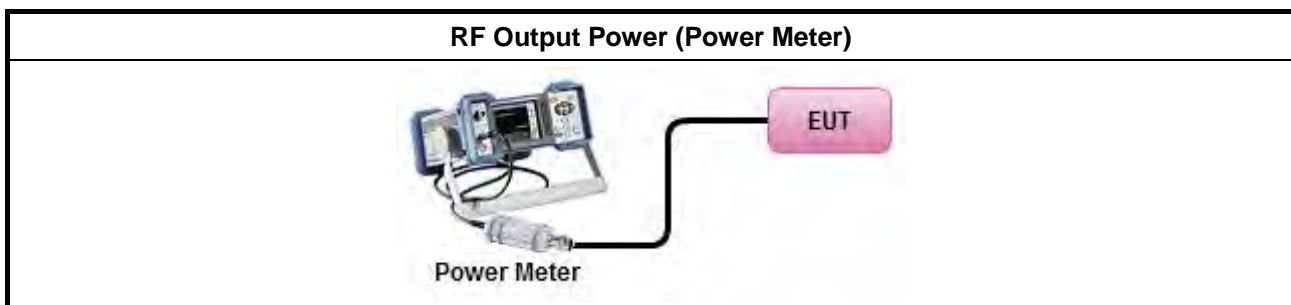
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"> Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$. Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
<input type="checkbox"/>	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"> Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
<input type="checkbox"/>	For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
<input type="checkbox"/>	<ul style="list-style-type: none"> e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 (θ-40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
<input type="checkbox"/>	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"> Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
<p>PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz</p> <p>G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

3.4.2 Measuring Instruments

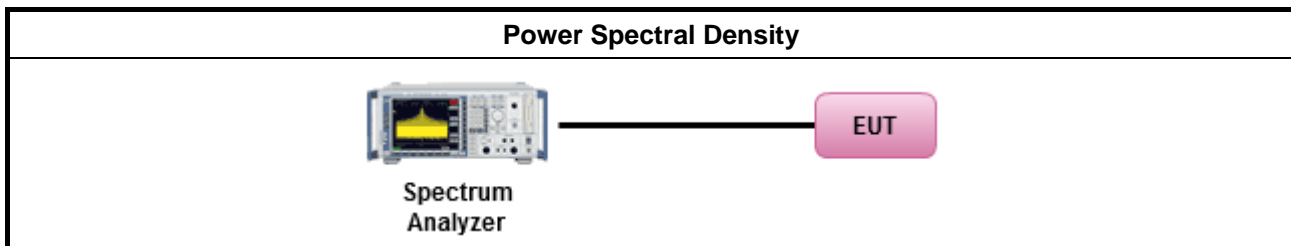
Refer a test equipment and calibration data table in this test report.



3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options: 	
<input type="checkbox"/>	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]	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> If the EUT supports multiple transmit chains using options given below: 	
<input checked="" type="checkbox"/>	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
<input type="checkbox"/>	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
<input type="checkbox"/>	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
<ul style="list-style-type: none"> 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
<input checked="" type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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



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

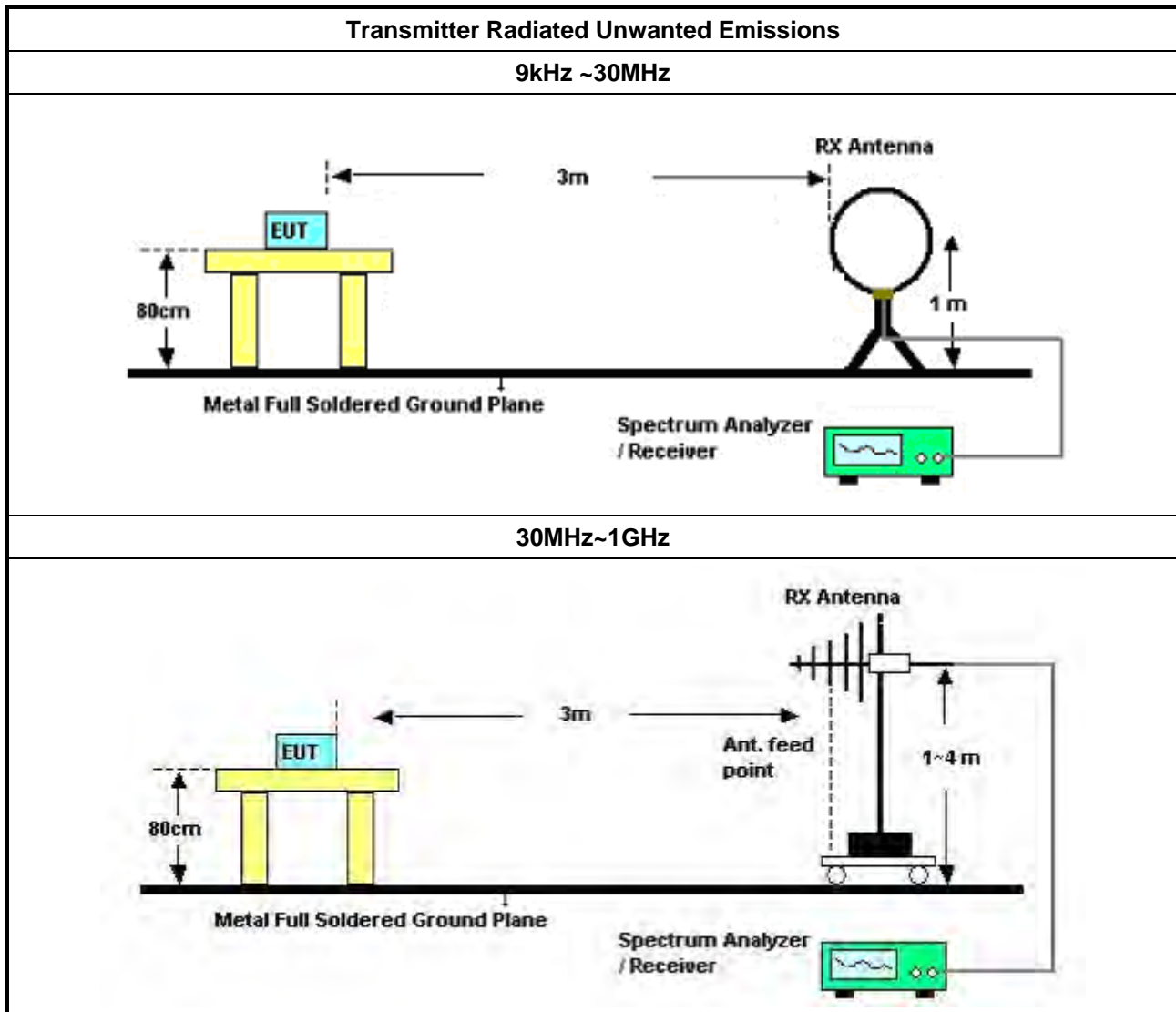
3.5.2 Measuring Instruments

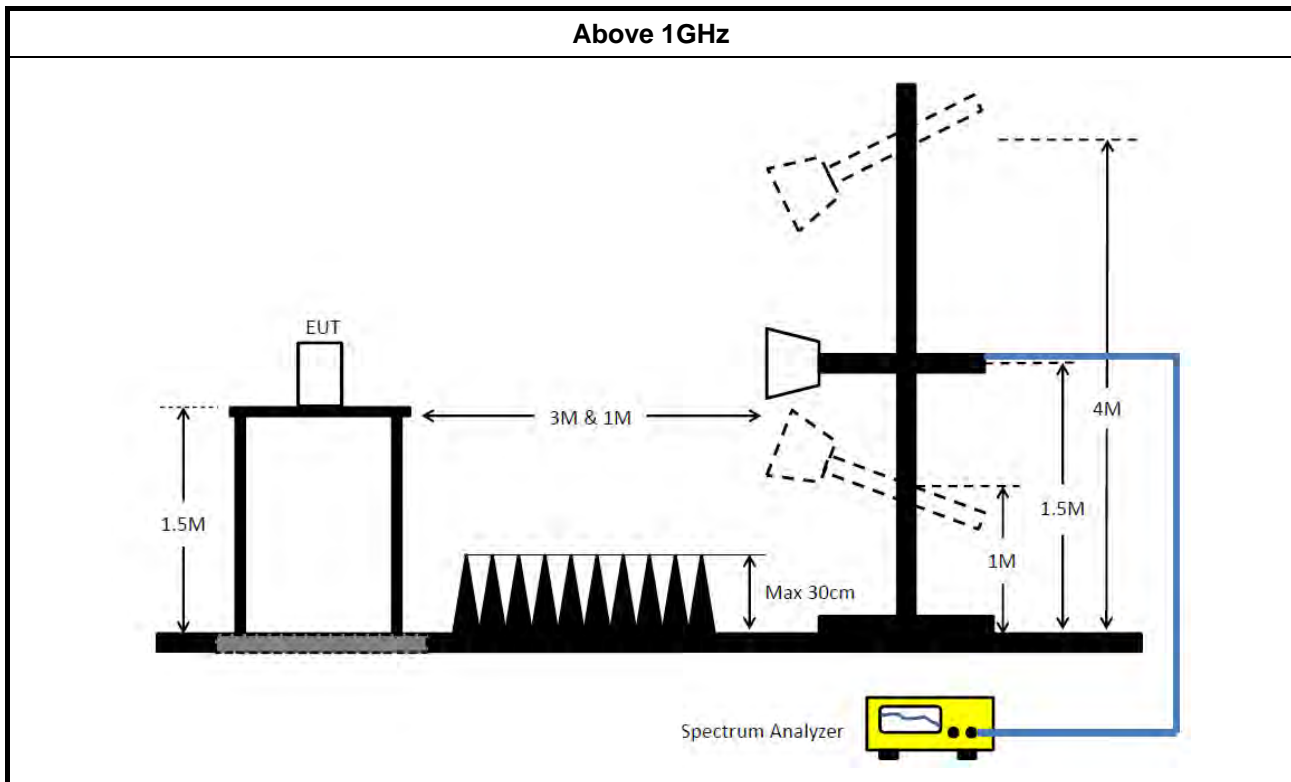
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
<ul style="list-style-type: none">Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
<ul style="list-style-type: none">The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
<ul style="list-style-type: none">For the transmitter unwanted emissions shall be measured using following options below:	
<ul style="list-style-type: none">	<ul style="list-style-type: none">Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	<ul style="list-style-type: none">Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.	
<ul style="list-style-type: none">For radiated measurement.	
<ul style="list-style-type: none">	<ul style="list-style-type: none">Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	<ul style="list-style-type: none">Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	<ul style="list-style-type: none">Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
<ul style="list-style-type: none">The any unwanted emissions level shall not exceed the fundamental emission level.	
<ul style="list-style-type: none">All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (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	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
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 (03CH03-CB)
Bilog Antenna with 6 dB attenuator	Schaffner	CBL6112B & N-6-06	2928 & AT-N0607	20MHz ~ 2GHz	Feb. 28, 2020	Feb. 27, 2021	Radiation (03CH03-CB)
Horn Antenna	ETS • Lindgren	3115	6821	750MHz~18GHz	Jan. 20, 2020	Jan. 19, 2021	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8447D	2944A10259	9kHz ~ 1.3GHz	Jan. 15, 2020	Jan. 14, 2021	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Dec. 19, 2019	Dec. 18, 2020	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH03-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH03-CB)
RF Cable-low	Woken	RG402	Low Cable-02+27	25MHz ~ 1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
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	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH02-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 11, 2020	Jun. 10, 2021	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Aug. 21, 2019	Aug. 20, 2020	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. 03, 2019	Jul. 02, 2020	Radiation (03CH02-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun. 19, 2020	Jun. 18, 2021	Radiation (03CH02-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH02-CB)
High Cable	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH02-CB)
High Cable	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	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. 24, 2019	Jul. 23, 2020	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)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 22, 2019	Oct. 21, 2020	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 11, 2020	Jun. 10, 2021	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Mar. 11, 2020	Mar. 10, 2021	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 14, 2020	Jul. 13, 2021	Radiation (03CH04-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH04-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH04-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun. 19, 2020	Jun. 18, 2021	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Dec. 18, 2019	Dec. 17, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Feb. 01, 2020	Jan. 31, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Jul. 07, 2020	Jul. 06, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+22	1GHz - 18GHz	Feb. 01, 2020	Jan. 31, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 02, 2019	Jul. 01, 2020	Conducted (TH02-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	May 12, 2020	May 11, 2021	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-3	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
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.



AC Power Port Conducted Emission Result

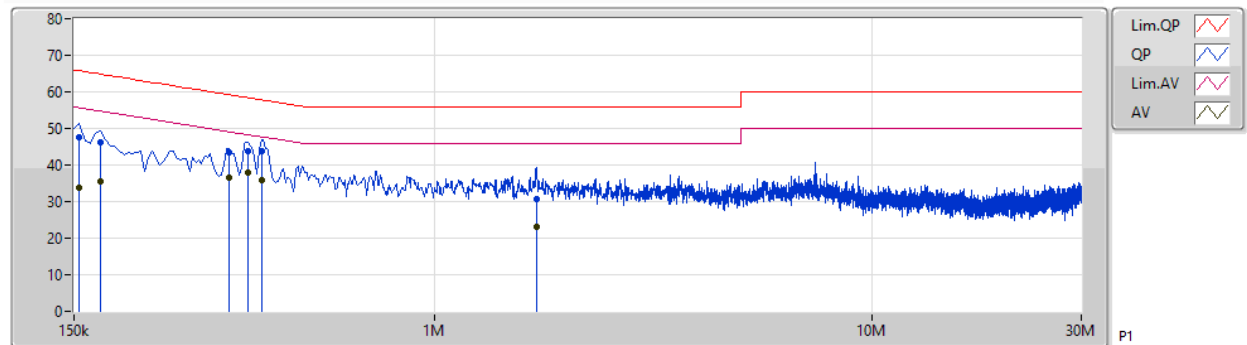
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 2	Pass	AV	375k	37.84	48.39	-10.55	9.88	Line

Mode 2

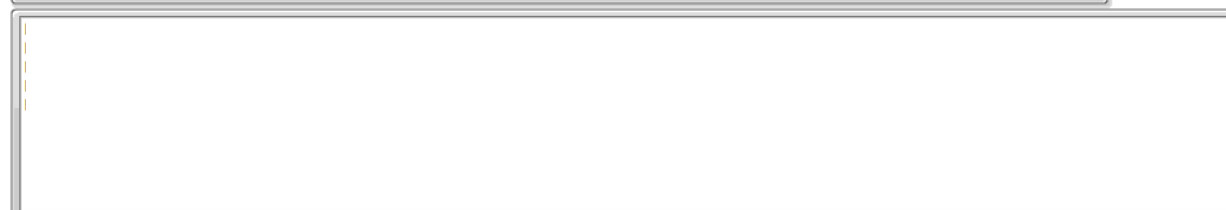
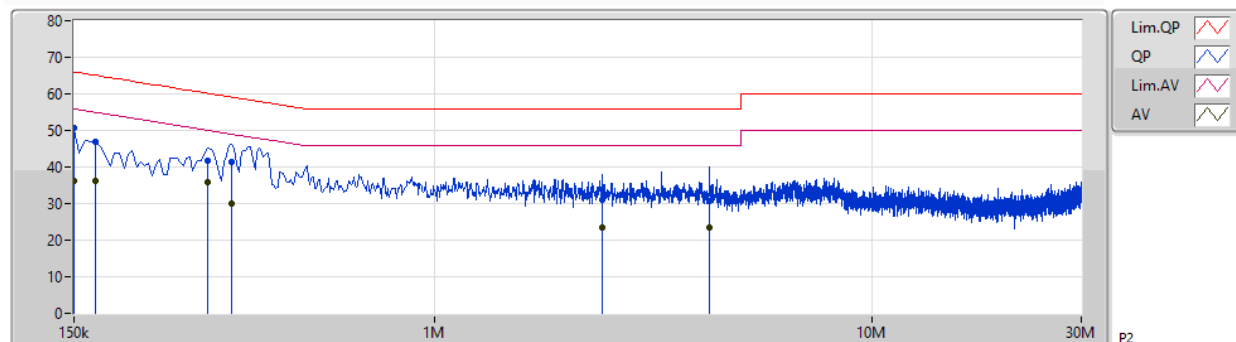
08/06/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	154.5k	47.58	65.75	-18.17	9.87	Line	-	37.71	0.05	0.03	9.79			
AV	154.5k	33.88	55.75	-21.87	9.87	Line	-	24.01	0.05	0.03	9.79			
QP	172.5k	46.23	64.83	-18.60	9.87	Line	-	36.36	0.05	0.03	9.79			
AV	172.5k	35.50	54.83	-19.33	9.87	Line	-	25.63	0.05	0.03	9.79			
QP	339k	43.33	59.23	-15.90	9.88	Line	-	33.45	0.04	0.03	9.81			
AV	339k	36.54	49.23	-12.69	9.88	Line	-	26.66	0.04	0.03	9.81			
QP	375k	43.93	58.39	-14.46	9.88	Line	-	34.05	0.04	0.03	9.81			
AV	375k	37.84	48.39	-10.55	9.88	Line	"Worst"	27.96	0.04	0.03	9.81			
QP	402k	43.73	57.82	-14.09	9.88	Line	-	33.85	0.04	0.03	9.81			
AV	402k	35.96	47.82	-11.86	9.88	Line	-	26.08	0.04	0.03	9.81			
QP	1.707M	30.81	56.00	-25.19	9.95	Line	-	20.86	0.06	0.06	9.83			
AV	1.707M	23.26	46.00	-22.74	9.95	Line	-	13.31	0.06	0.06	9.83			

Mode 2

08/06/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	150k	50.52	66.00	-15.48	9.86	Neutral	-	40.66	0.04	0.03	9.79			
AV	150k	36.11	56.00	-19.89	9.86	Neutral	-	26.25	0.04	0.03	9.79			
QP	168k	46.90	65.06	-18.16	9.86	Neutral	-	37.04	0.04	0.03	9.79			
AV	168k	36.13	55.06	-18.93	9.86	Neutral	-	26.27	0.04	0.03	9.79			
QP	303k	41.74	60.17	-18.43	9.87	Neutral	-	31.87	0.04	0.03	9.80			
AV	303k	35.73	50.17	-14.44	9.87	Neutral	"Worst"	25.86	0.04	0.03	9.80			
QP	343.5k	41.52	59.12	-17.60	9.88	Neutral	-	31.64	0.04	0.03	9.81			
AV	343.5k	29.85	49.12	-19.27	9.88	Neutral	-	19.97	0.04	0.03	9.81			
QP	2.418M	30.90	56.00	-25.10	9.99	Neutral	-	20.91	0.08	0.09	9.82			
AV	2.418M	23.60	46.00	-22.40	9.99	Neutral	-	13.61	0.08	0.09	9.82			
QP	4.241M	30.78	56.00	-25.22	10.05	Neutral	-	20.73	0.10	0.13	9.82			
AV	4.241M	23.46	46.00	-22.54	10.05	Neutral	-	13.41	0.10	0.13	9.82			

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)_3TX	24.84M	16.702M	16M7D1D	19.8M	16.372M
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	24.12M	17.721M	17M7D1D	20.04M	17.541M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	45.48M	36.282M	36M3D1D	39.66M	36.042M
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	81.24M	75.202M	75M2D1D	80.28M	74.603M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	15.45M	21.649M	21M6D1D	15M	16.702M
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	15.93M	17.871M	17M9D1D	15M	17.721M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	35.1M	36.942M	36M9D1D	31.32M	36.342M
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	75M	75.562M	75M6D1D	73.8M	75.322M

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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11a_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.1M	16.522M	19.98M	16.462M	19.8M	16.372M
5200MHz	Pass	Inf	24.48M	16.702M	24.84M	16.702M	24.57M	16.522M
5240MHz	Pass	Inf	19.89M	16.492M	20.43M	16.462M	19.8M	16.432M
5745MHz	Pass	500k	15.03M	20.15M	15.03M	20.18M	15.06M	21.649M
5785MHz	Pass	500k	15.09M	16.762M	15M	16.702M	15.06M	16.792M
5825MHz	Pass	500k	15.03M	16.732M	15.45M	16.792M	15.06M	16.882M
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.19M	17.601M	20.31M	17.571M	20.04M	17.541M
5200MHz	Pass	Inf	22.62M	17.721M	24.12M	17.631M	21.81M	17.631M
5240MHz	Pass	Inf	20.34M	17.661M	21.06M	17.631M	21.33M	17.601M
5745MHz	Pass	500k	15.06M	17.841M	15.03M	17.781M	15M	17.871M
5785MHz	Pass	500k	15.09M	17.811M	15.69M	17.751M	15.93M	17.841M
5825MHz	Pass	500k	15.06M	17.721M	15.03M	17.751M	15.03M	17.781M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.86M	36.162M	39.66M	36.102M	40.26M	36.042M
5230MHz	Pass	Inf	45.06M	36.222M	40.74M	36.282M	45.48M	36.042M
5755MHz	Pass	500k	33.78M	36.942M	33.84M	36.402M	31.32M	36.582M
5795MHz	Pass	500k	34.98M	36.582M	35.1M	36.342M	32.52M	36.402M
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.24M	75.202M	80.4M	74.603M	80.28M	75.202M
5775MHz	Pass	500k	73.8M	75.562M	75M	75.322M	75M	75.442M

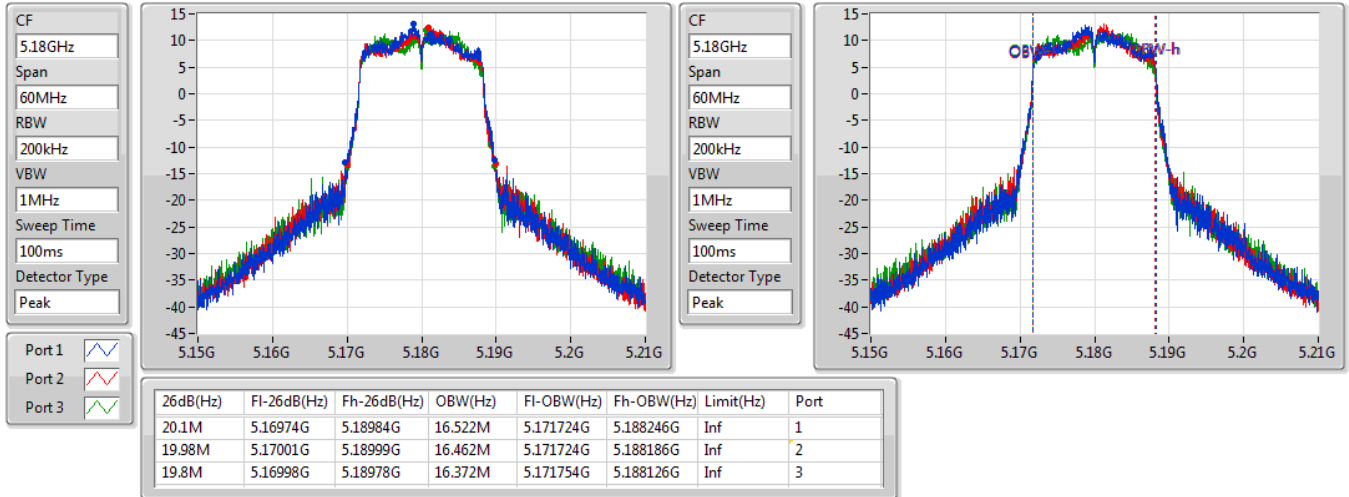
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

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

802.11a_Nss1,(6Mbps)_3TX

EBW
5180MHz

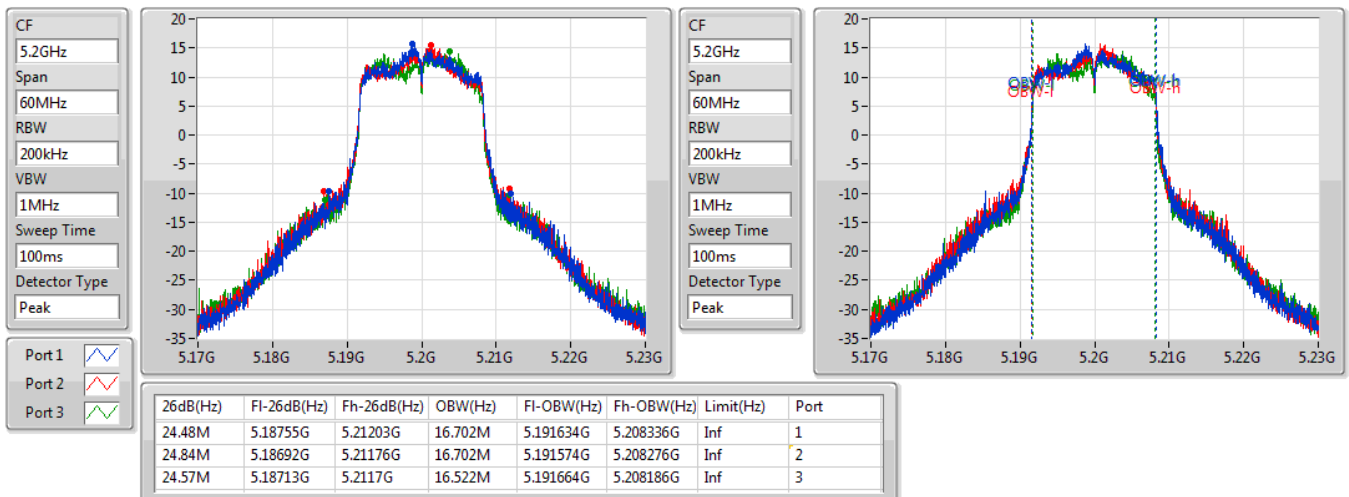
24/07/2020



802.11a_Nss1,(6Mbps)_3TX

EBW
5200MHz

24/07/2020

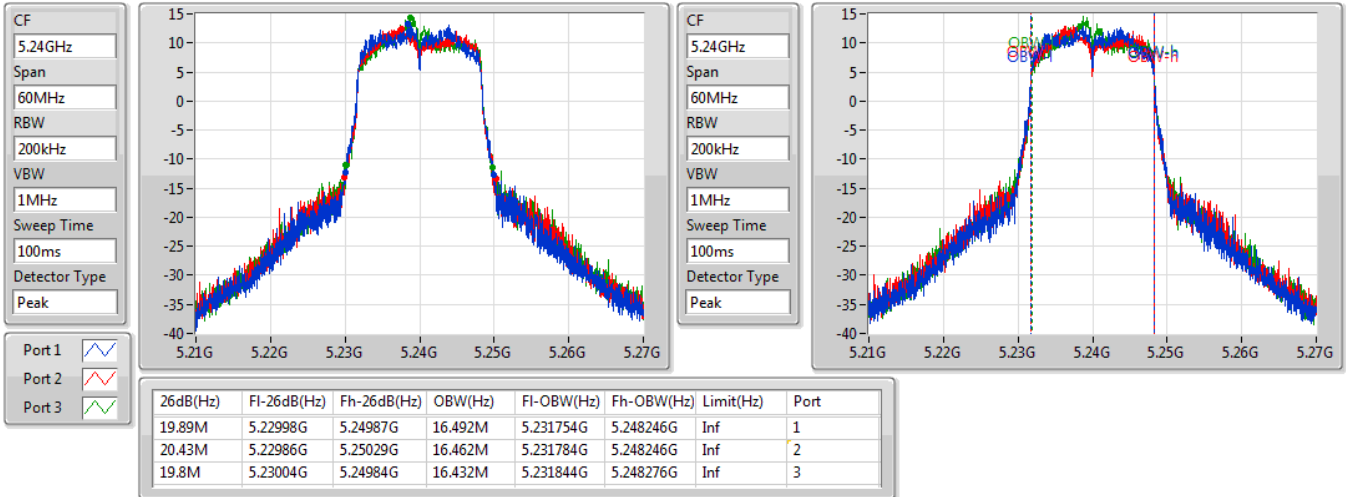


802.11a_Nss1,(6Mbps)_3TX

EBW

5240MHz

24/07/2020

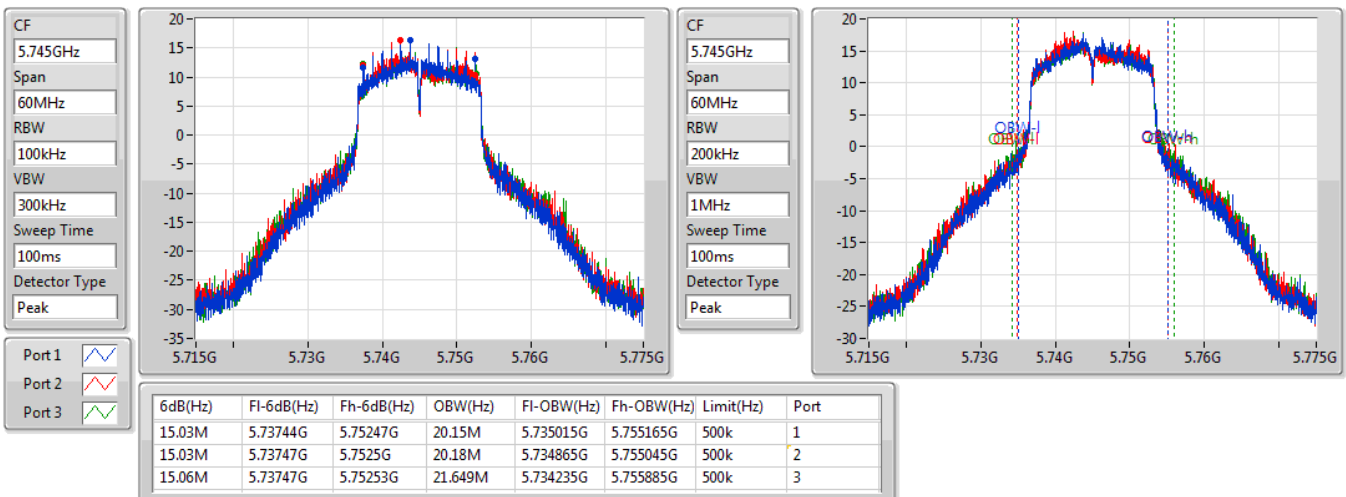


802.11a_Nss1,(6Mbps)_3TX

EBW

5745MHz

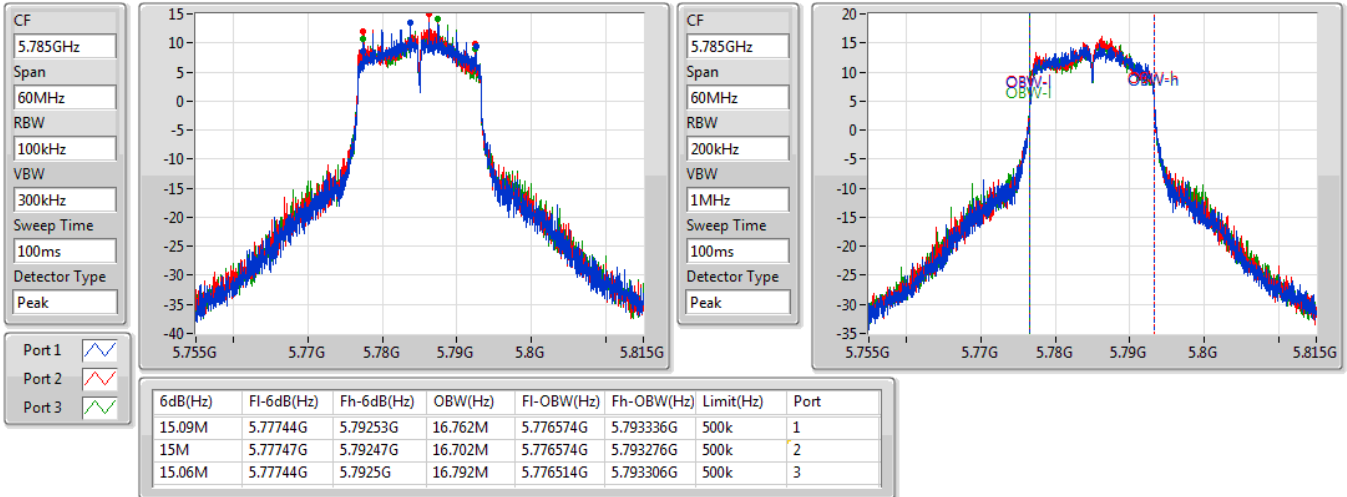
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802.11a_Nss1,(6Mbps)_3TX

EBW
5785MHz

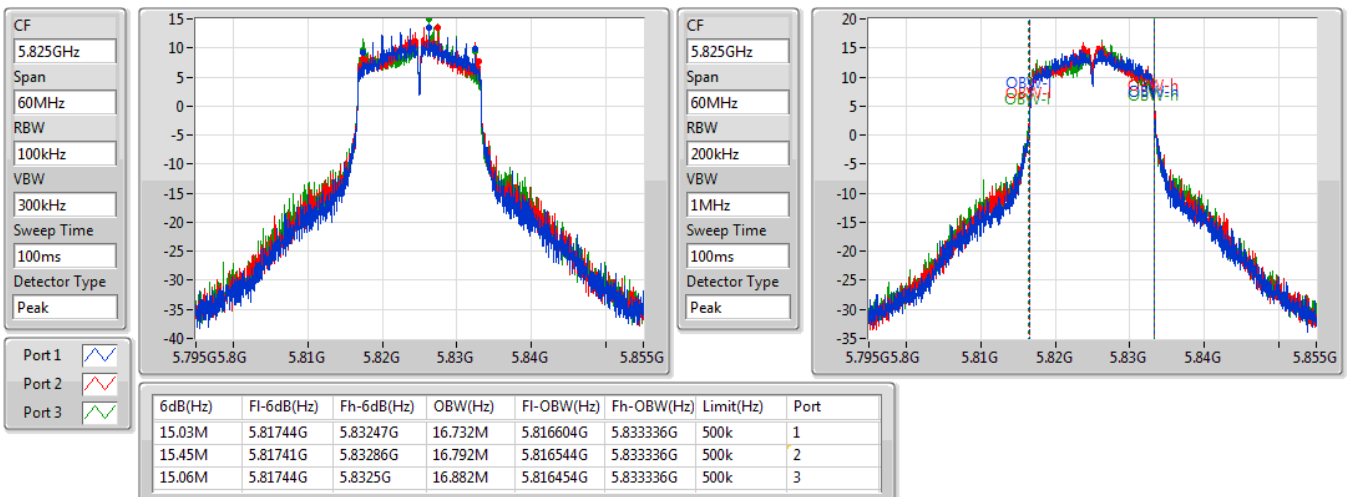
24/07/2020



802.11a_Nss1,(6Mbps)_3TX

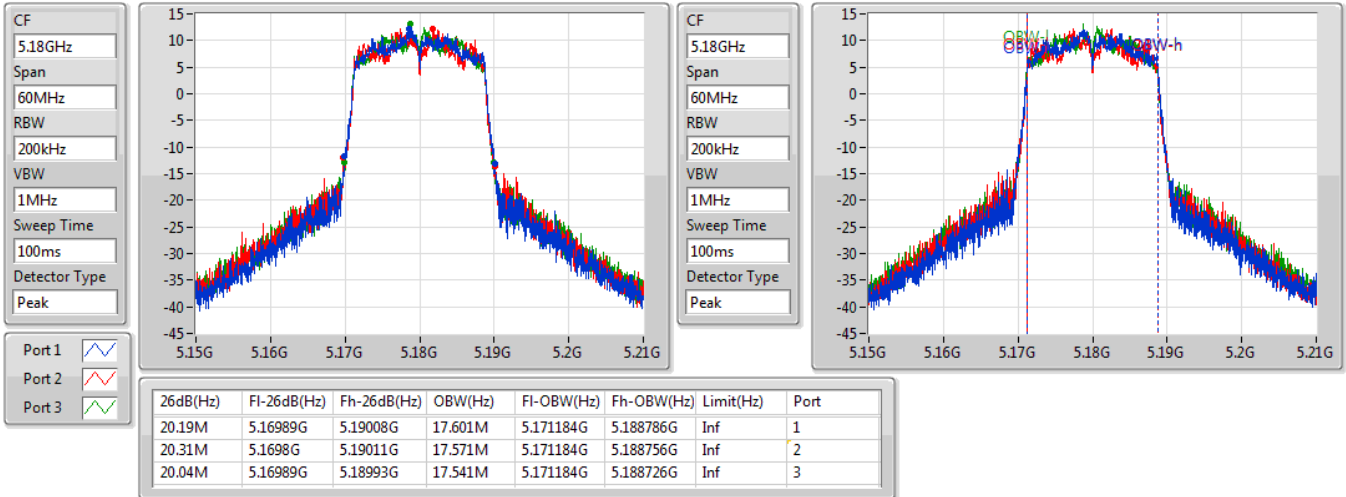
EBW
5825MHz

24/07/2020

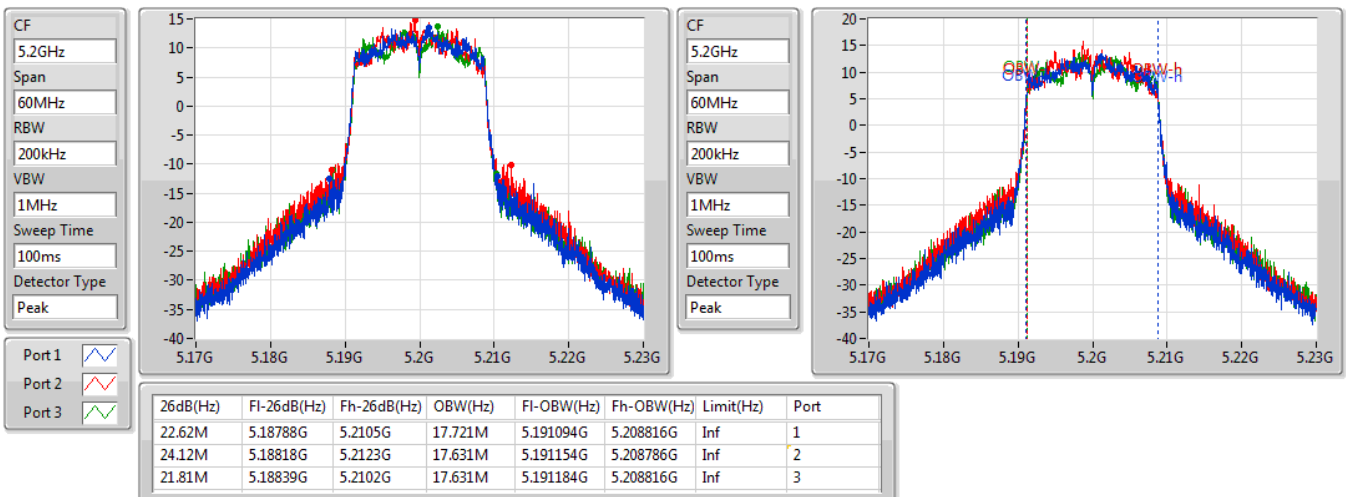


802.11ac VHT20-BF_Nss1,(MCS0)_3TX
EBW
5180MHz

24/07/2020

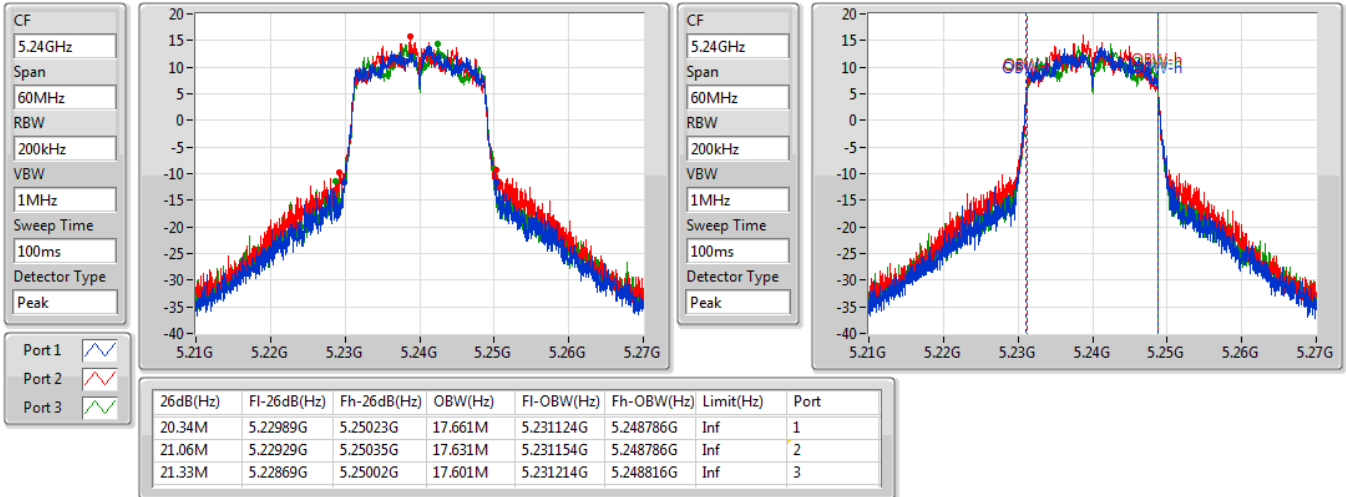

802.11ac VHT20-BF_Nss1,(MCS0)_3TX
EBW
5200MHz

24/07/2020

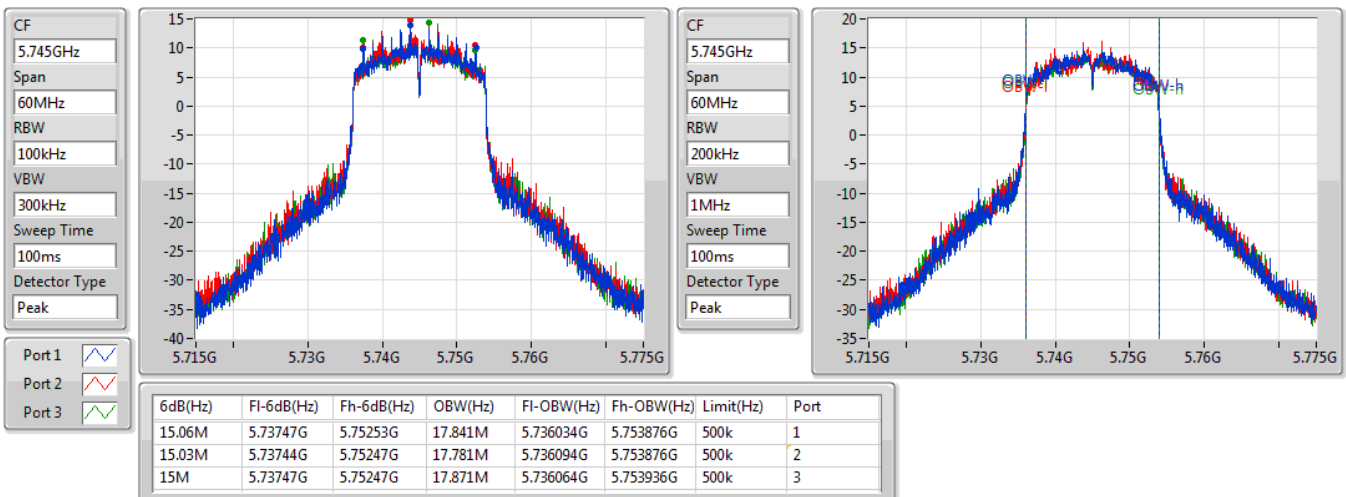


802.11ac VHT20-BF_Nss1,(MCS0)_3TX
EBW
5240MHz

24/07/2020

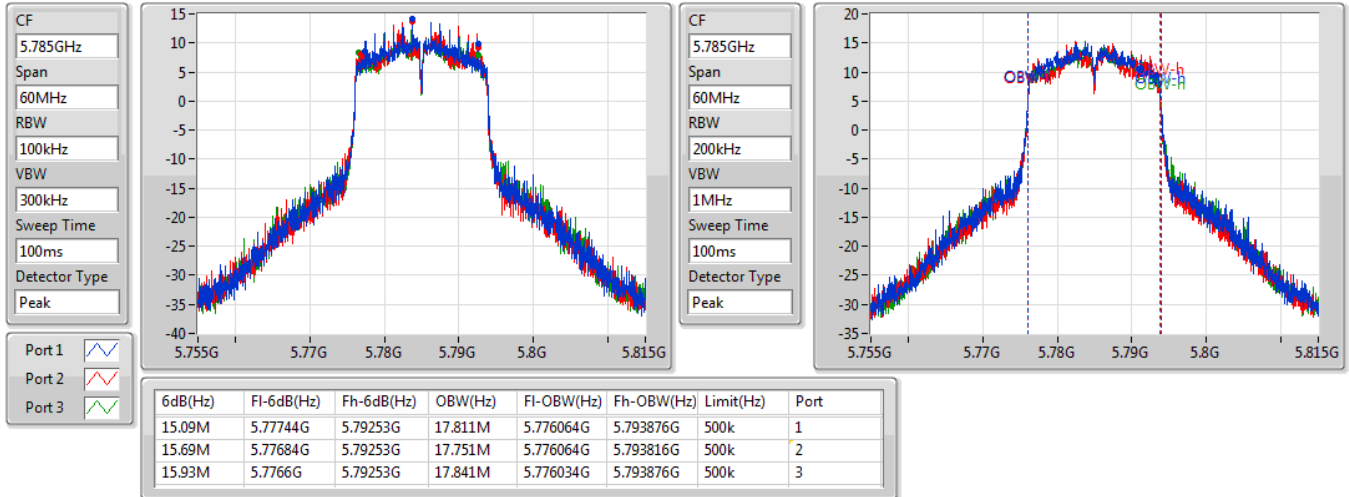

802.11ac VHT20-BF_Nss1,(MCS0)_3TX
EBW
5745MHz

30/07/2020

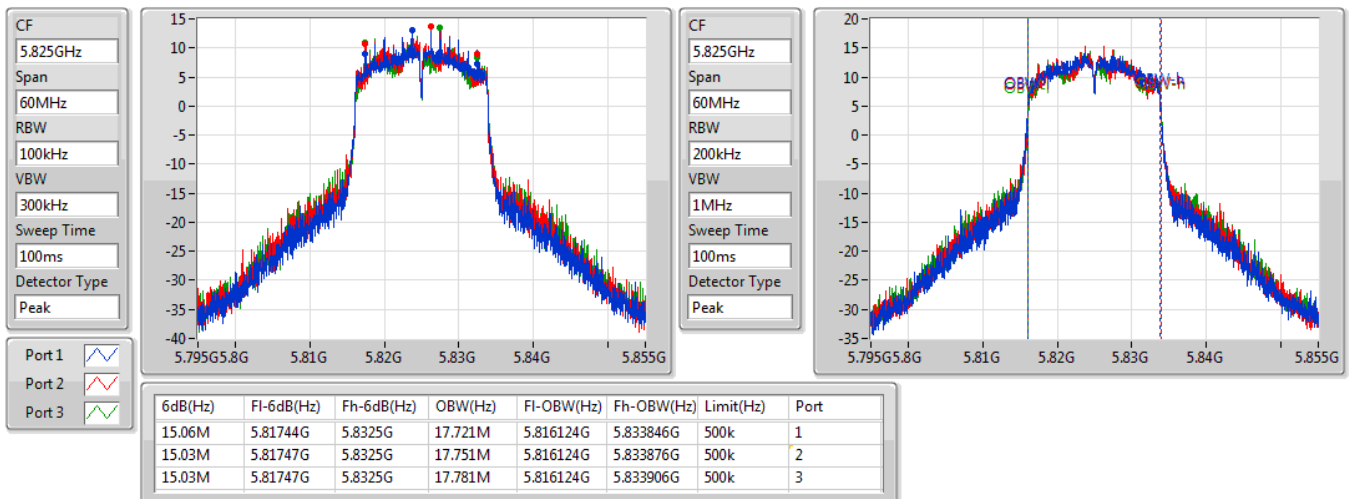


802.11ac VHT20-BF_Nss1,(MCS0)_3TX
EBW
5785MHz

30/07/2020


802.11ac VHT20-BF_Nss1,(MCS0)_3TX
EBW
5825MHz

30/07/2020

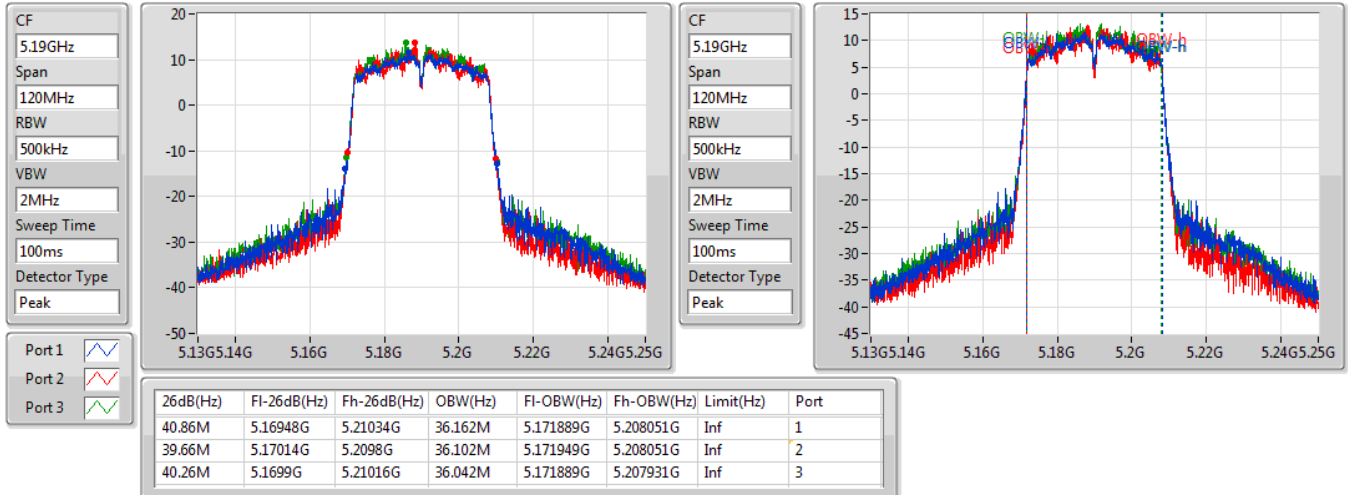


802.11ac VHT40-BF_Nss1,(MCS0)_3TX

EBW

5190MHz

24/07/2020

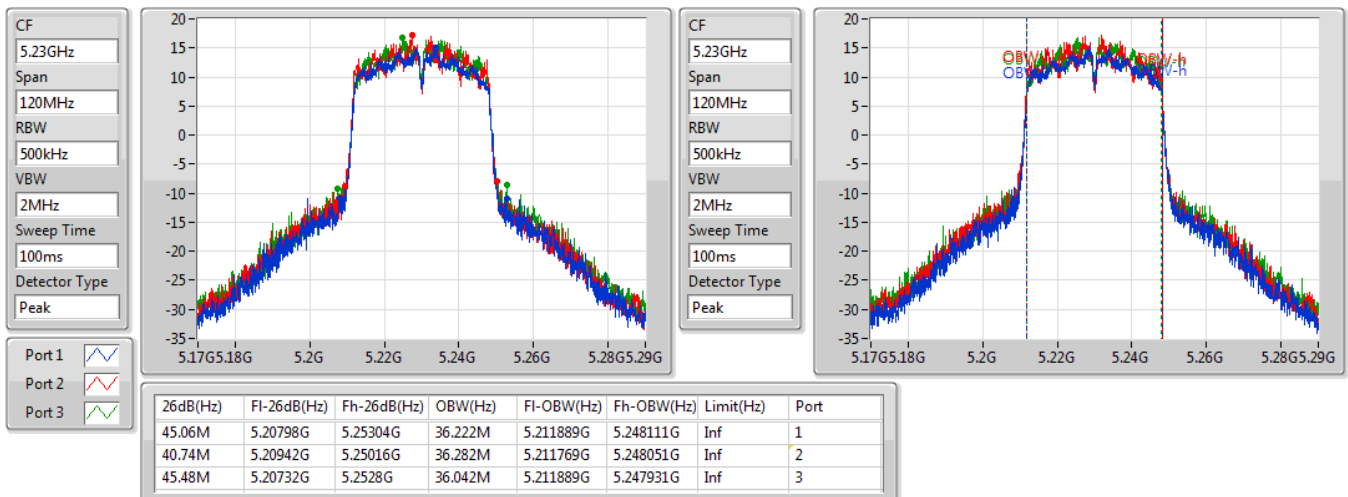


802.11ac VHT40-BF_Nss1,(MCS0)_3TX

EBW

5230MHz

24/07/2020

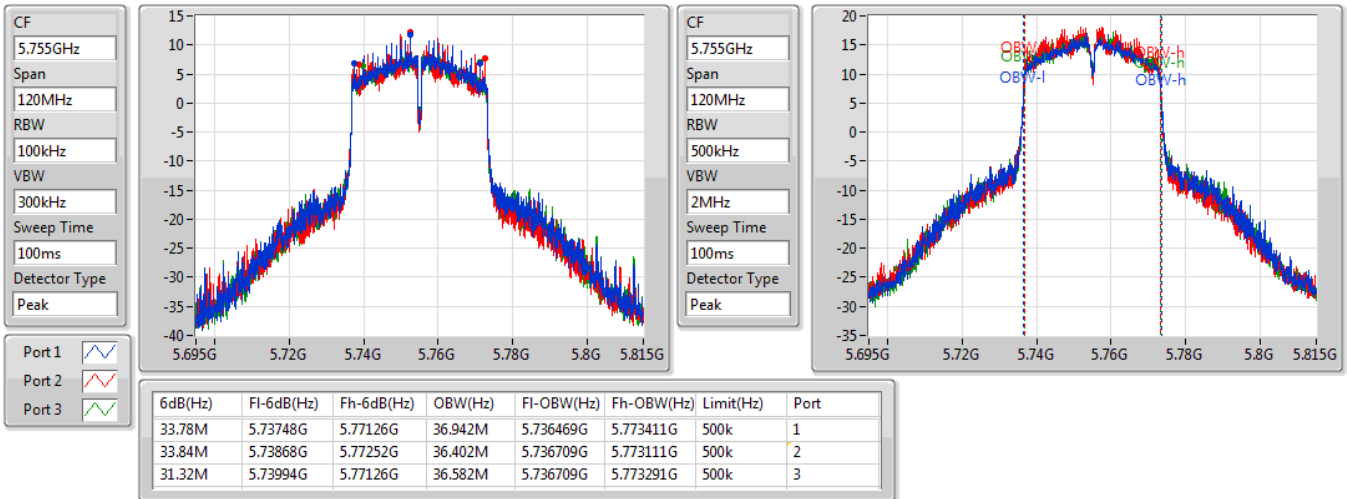


802.11ac VHT40-BF_Nss1,(MCS0)_3TX

EBW

5755MHz

30/07/2020

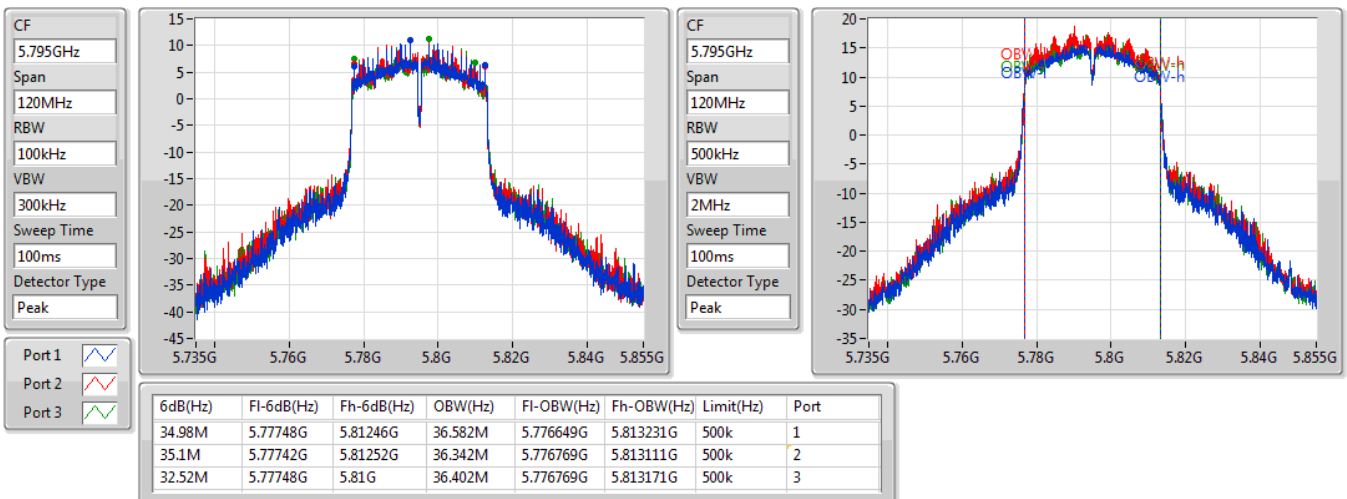


802.11ac VHT40-BF_Nss1,(MCS0)_3TX

EBW

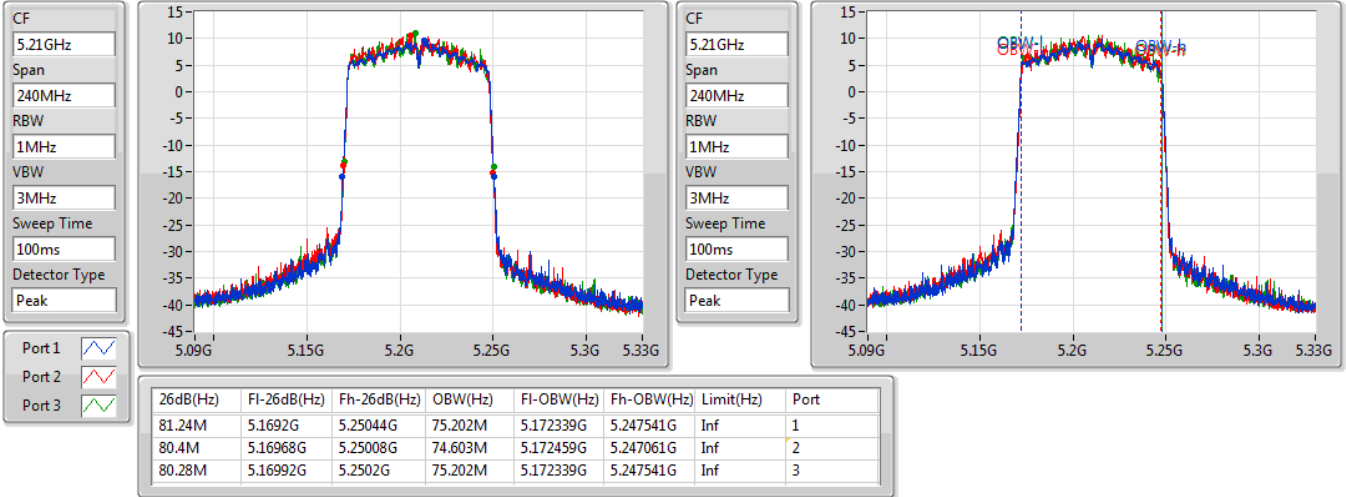
5795MHz

30/07/2020

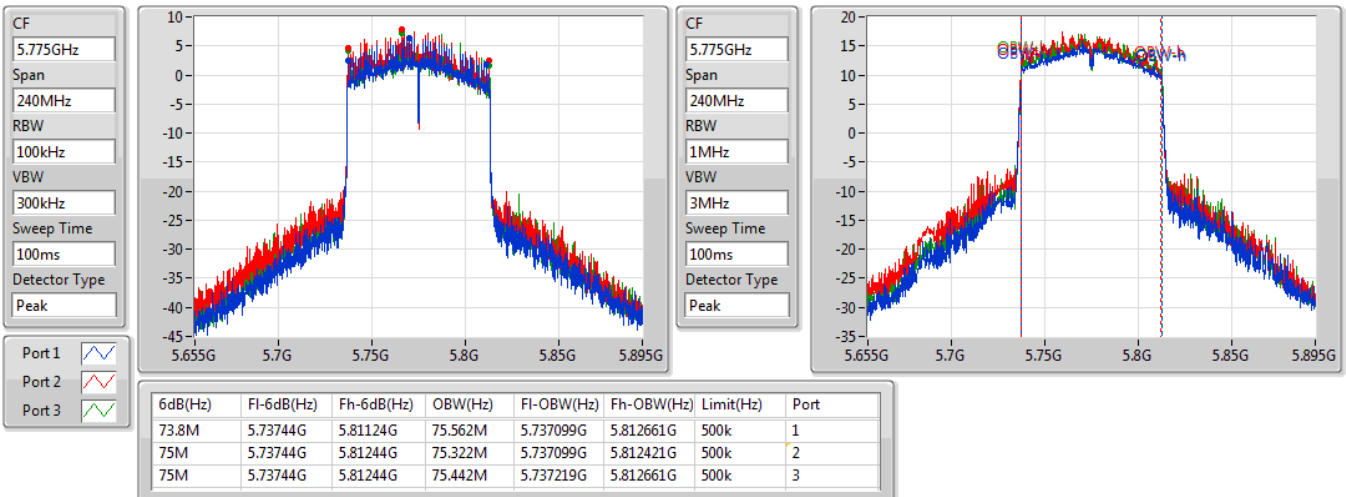


802.11ac VHT80-BF_Nss1,(MCS0)_3TX
EBW
5210MHz

24/07/2020


802.11ac VHT80-BF_Nss1,(MCS0)_3TX
EBW
5775MHz

24/07/2020



**Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_3TX	27.94	0.62230
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	28.56	0.71779
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	28.83	0.76384
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	22.33	0.17100
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_3TX	29.85	0.96605
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	29.23	0.83753
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	29.26	0.84333
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	28.36	0.68549

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	1.99	22.40	22.26	22.31	27.09	30.00
5200MHz	Pass	1.99	23.10	23.32	23.09	27.94	30.00
5240MHz	Pass	1.99	23.05	22.92	23.31	27.87	30.00
5745MHz	Pass	1.99	24.99	25.19	25.05	29.85	30.00
5785MHz	Pass	1.99	24.71	25.12	24.85	29.67	30.00
5825MHz	Pass	1.99	24.78	25.08	24.89	29.69	30.00
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	6.70	22.30	22.21	22.24	27.02	29.30
5200MHz	Pass	6.70	23.78	23.79	23.80	28.56	29.30
5240MHz	Pass	6.70	23.53	23.86	23.25	28.33	29.30
5745MHz	Pass	6.70	24.44	24.48	24.15	29.13	29.30
5785MHz	Pass	6.70	24.34	24.33	24.11	29.03	29.30
5825MHz	Pass	6.70	24.45	24.51	24.42	29.23	29.30
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5190MHz	Pass	6.70	20.40	19.71	20.40	24.95	29.30
5230MHz	Pass	6.70	23.90	24.27	24.01	28.83	29.30
5755MHz	Pass	6.70	24.79	24.30	24.35	29.26	29.30
5795MHz	Pass	6.70	24.18	24.36	24.01	28.96	29.30
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5210MHz	Pass	6.70	17.68	17.68	17.29	22.33	29.30
5775MHz	Pass	6.70	23.10	24.09	23.53	28.36	29.30

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

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_3TX	15.98
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	16.22
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	13.05
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	4.07
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_3TX	16.76
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	16.31
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	13.51
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	8.73

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)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	6.70	11.03	10.91	9.71	14.92	16.30
5200MHz	Pass	6.70	10.79	12.95	11.56	15.93	16.30
5240MHz	Pass	6.70	10.95	11.10	12.61	15.98	16.30
5745MHz	Pass	6.70	11.67	12.09	12.08	16.48	29.30
5785MHz	Pass	6.70	11.14	12.49	11.97	16.58	29.30
5825MHz	Pass	6.70	11.28	12.66	12.51	16.76	29.30
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	6.70	10.28	10.34	10.76	14.30	16.30
5200MHz	Pass	6.70	11.77	12.54	11.88	16.09	16.30
5240MHz	Pass	6.70	11.96	12.98	11.95	16.22	16.30
5745MHz	Pass	6.70	11.13	12.30	11.24	16.31	29.30
5785MHz	Pass	6.70	11.21	11.52	11.12	15.55	29.30
5825MHz	Pass	6.70	11.03	12.30	11.74	16.31	29.30
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5190MHz	Pass	6.70	5.27	5.58	5.81	9.67	16.30
5230MHz	Pass	6.70	9.00	9.51	9.03	13.05	16.30
5755MHz	Pass	6.70	8.64	9.39	8.25	13.51	29.30
5795MHz	Pass	6.70	7.86	8.63	7.91	12.64	29.30
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5210MHz	Pass	6.70	-0.54	0.15	-0.08	4.07	16.30
5775MHz	Pass	6.70	3.47	5.11	4.21	8.73	29.30

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

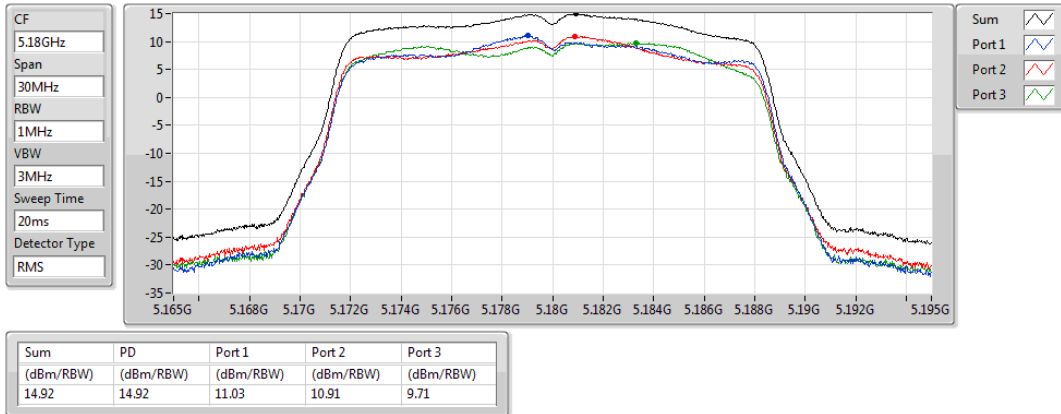
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_3TX

PSD

5180MHz

24/07/2020

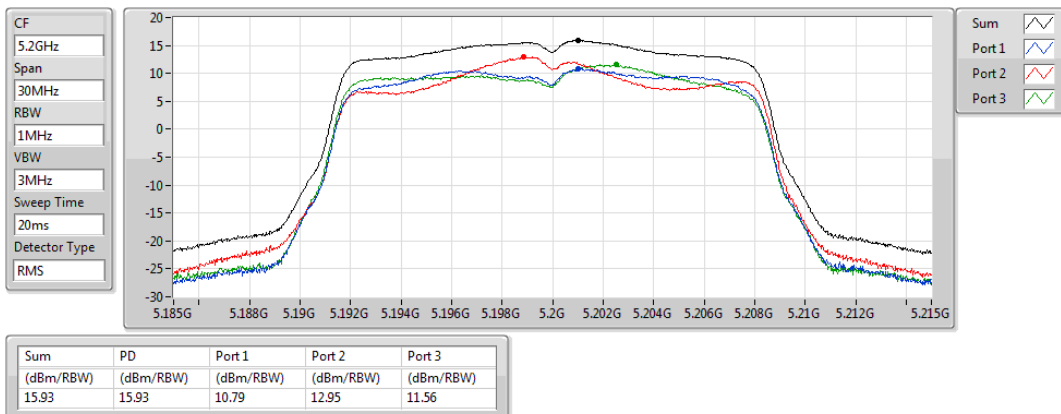


802.11a_Nss1,(6Mbps)_3TX

PSD

5200MHz

24/07/2020

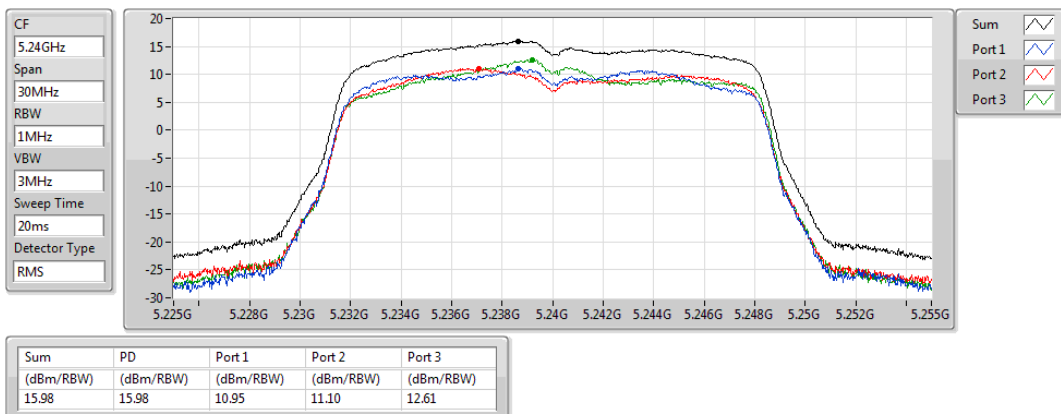


802.11a_Nss1,(6Mbps)_3TX

PSD

5240MHz

24/07/2020

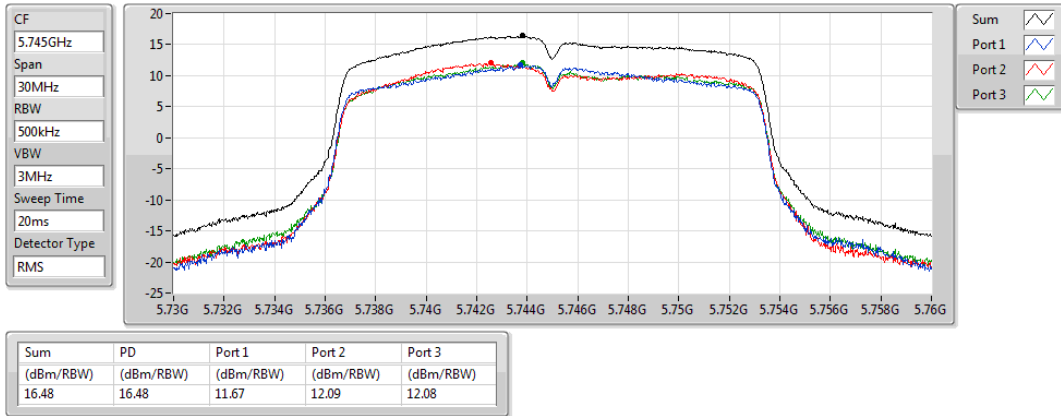


802.11a_Nss1,(6Mbps)_3TX

PSD

5745MHz

24/07/2020

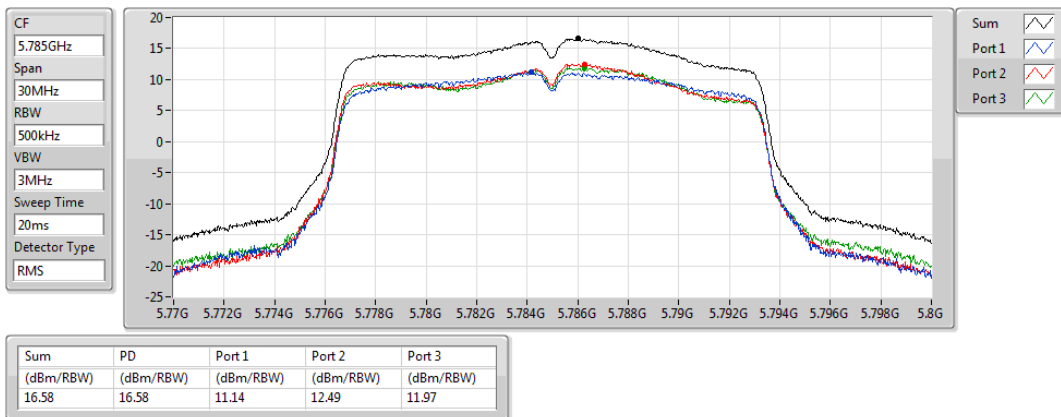


802.11a_Nss1,(6Mbps)_3TX

PSD

5785MHz

24/07/2020

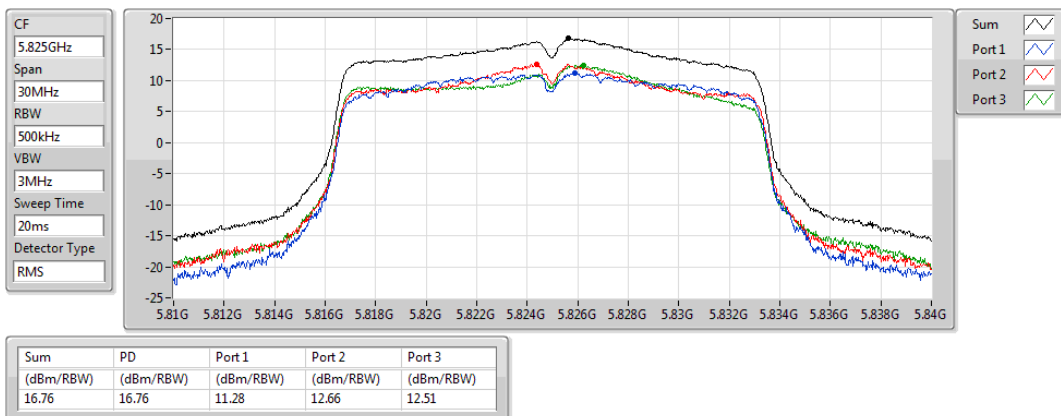


802.11a_Nss1,(6Mbps)_3TX

PSD

5825MHz

24/07/2020

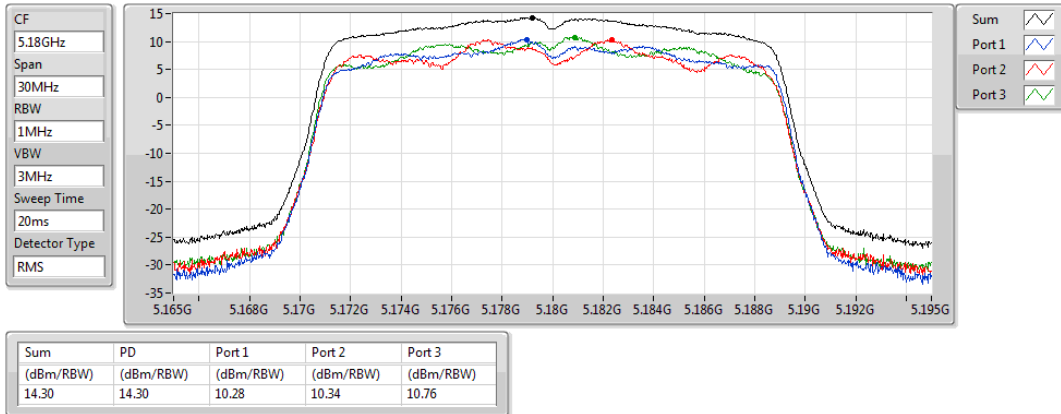


802.11ac VHT20-BF_Nss1,(MCS0)_3TX

PSD

5180MHz

24/07/2020

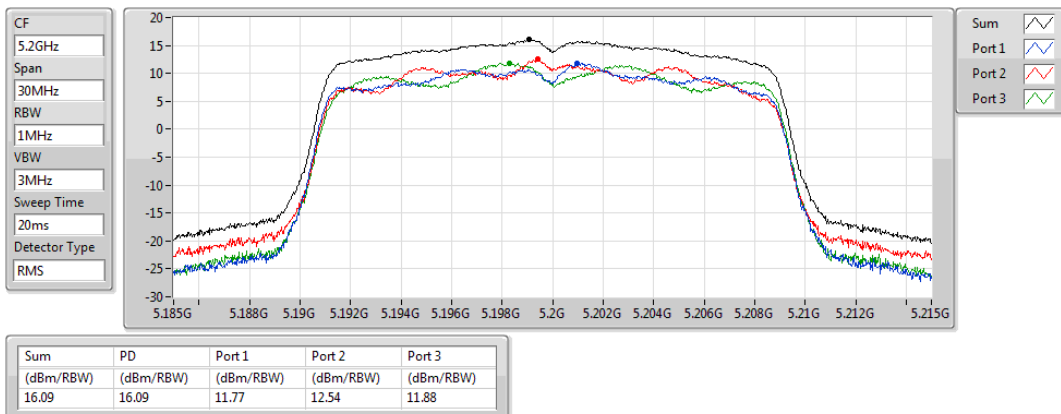


802.11ac VHT20-BF_Nss1,(MCS0)_3TX

PSD

5200MHz

24/07/2020

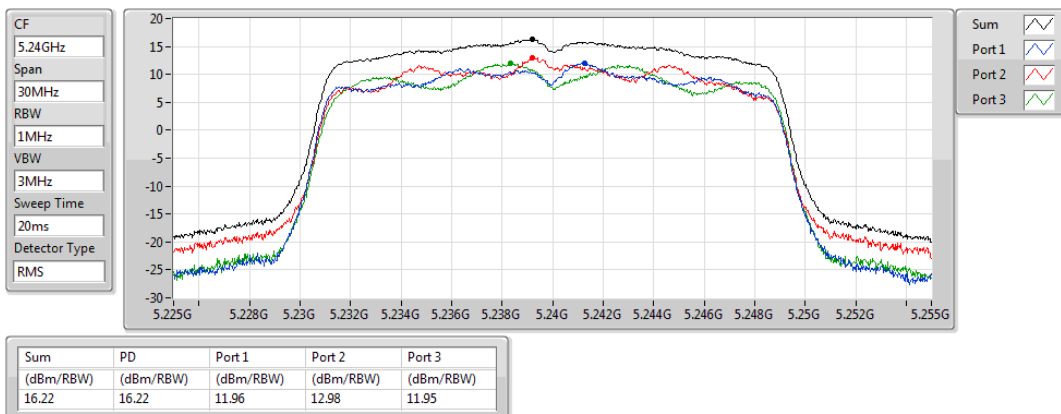


802.11ac VHT20-BF_Nss1,(MCS0)_3TX

PSD

5240MHz

24/07/2020

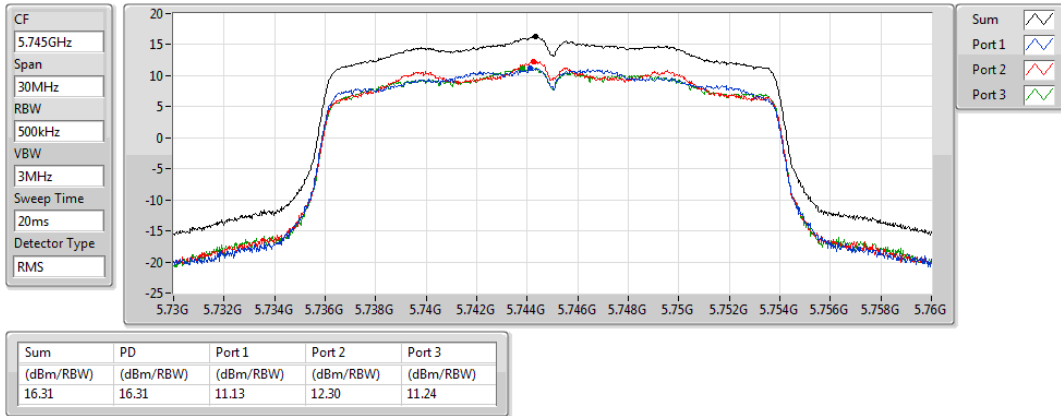


802.11ac VHT20-BF_Nss1,(MCS0)_3TX

PSD

5745MHz

30/07/2020

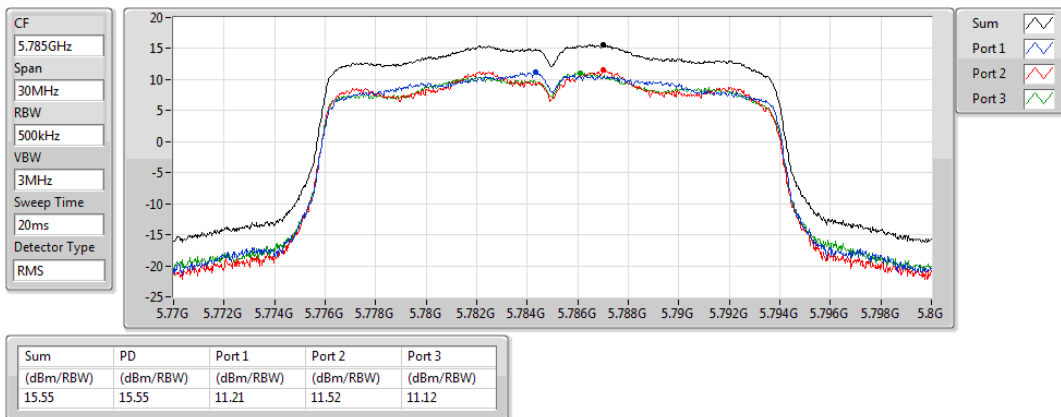


802.11ac VHT20-BF_Nss1,(MCS0)_3TX

PSD

5785MHz

30/07/2020

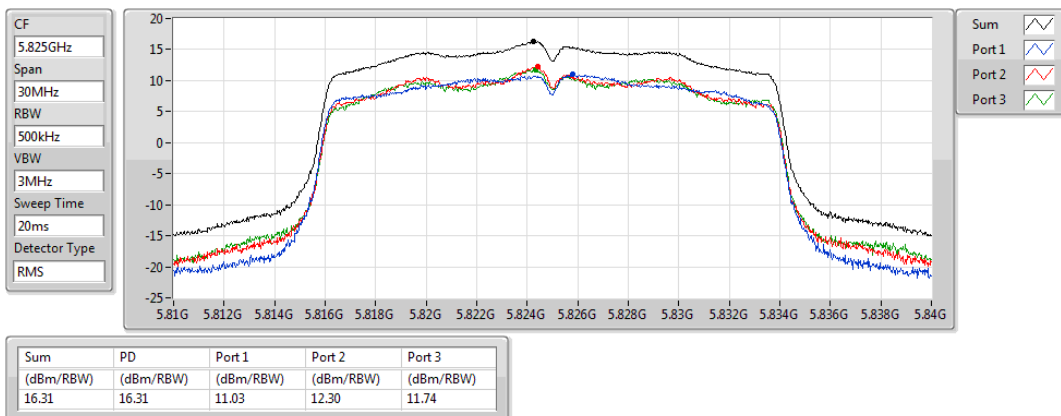


802.11ac VHT20-BF_Nss1,(MCS0)_3TX

PSD

5825MHz

30/07/2020

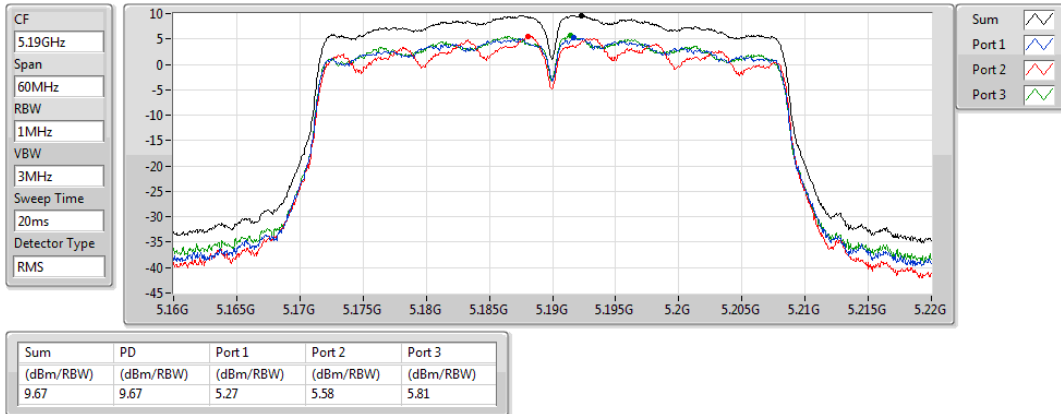


802.11ac VHT40-BF_Nss1,(MCS0)_3TX

PSD

5190MHz

24/07/2020

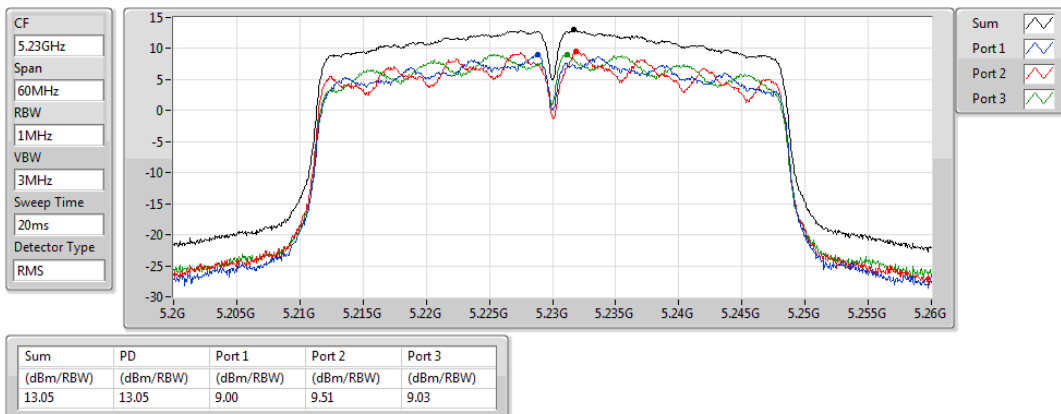


802.11ac VHT40-BF_Nss1,(MCS0)_3TX

PSD

5230MHz

24/07/2020

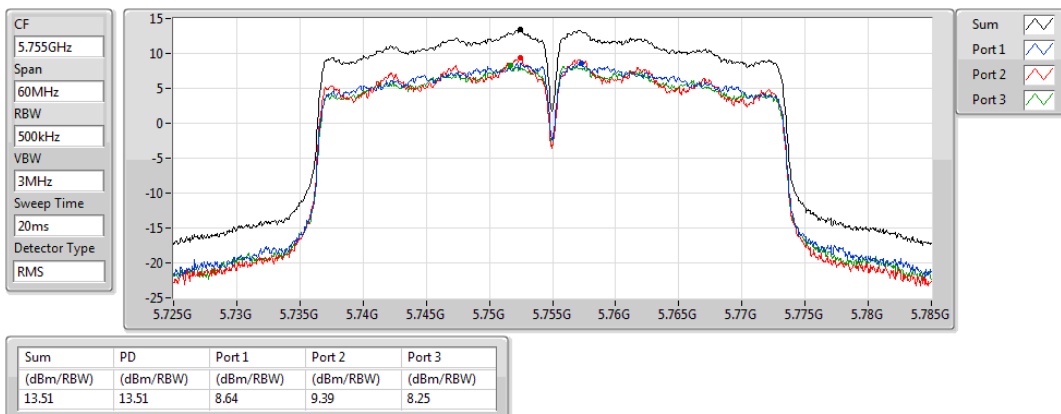


802.11ac VHT40-BF_Nss1,(MCS0)_3TX

PSD

5755MHz

30/07/2020

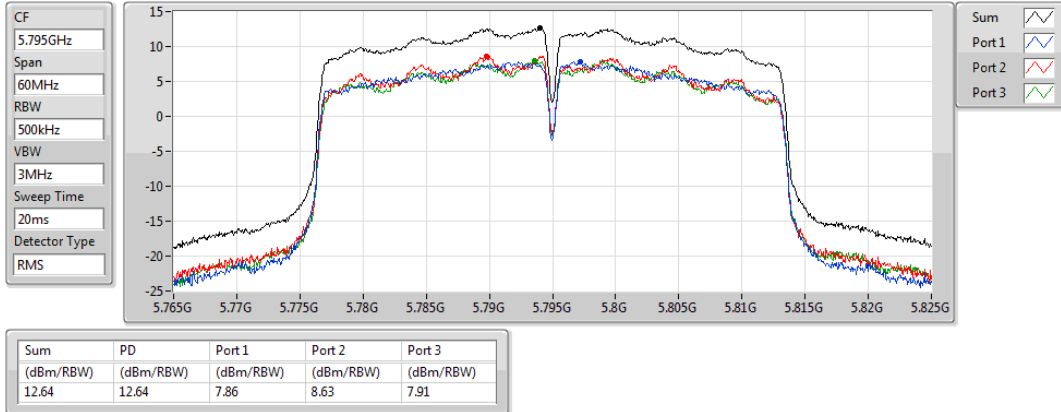


802.11ac VHT40-BF_Nss1,(MCS0)_3TX

PSD

5795MHz

30/07/2020

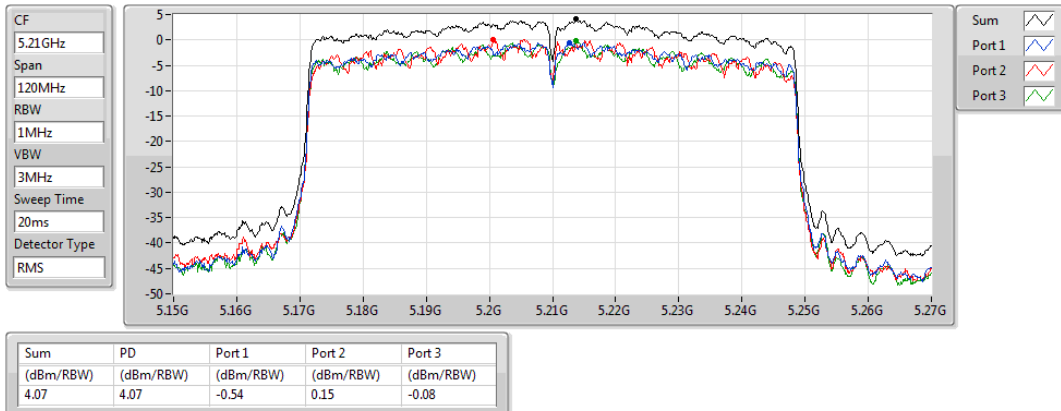


802.11ac VHT80-BF_Nss1,(MCS0)_3TX

PSD

5210MHz

24/07/2020

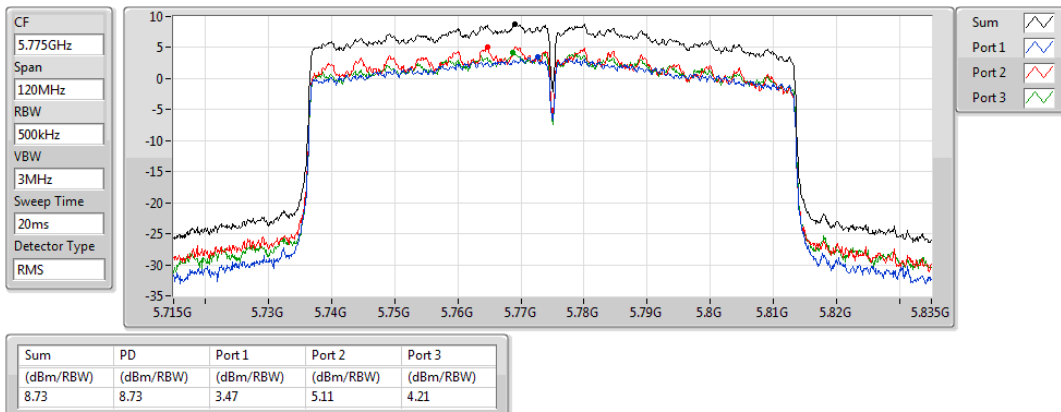


802.11ac VHT80-BF_Nss1,(MCS0)_3TX

PSD

5775MHz

24/07/2020





Radiated Emissions below 1GHz

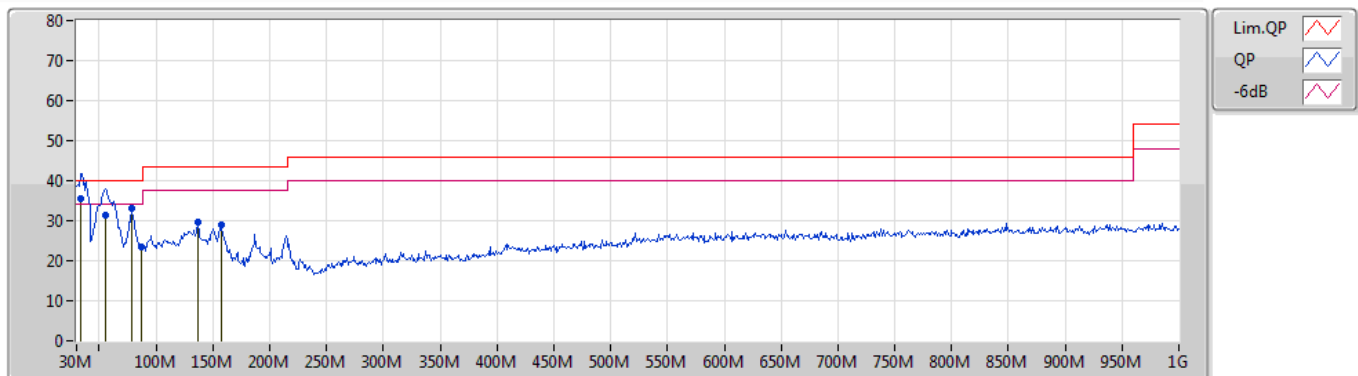
Appendix E.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	QP	33.88M	35.57	40.00	-4.43	Vertical

Mode 2

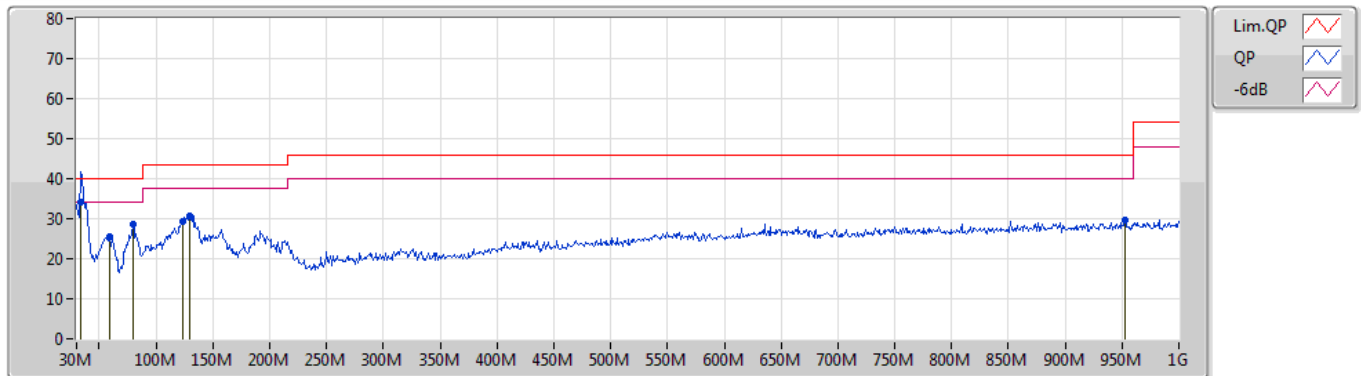
09/06/2020



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)
QP	33.88M	35.57	40.00	-4.43	-5.43	3	Vertical	32	1.25	"Worst"	41.00	22.54	0.60	28.57
QP	55.22M	31.36	40.00	-8.64	-15.14	3	Vertical	281	1.00	-	46.50	12.91	0.50	28.55
PK	78.5M	33.02	40.00	-6.98	-14.91	3	Vertical	159	1.50	-	47.93	12.89	0.70	28.50
PK	87.23M	23.44	40.00	-16.56	-13.59	3	Vertical	112	1.25	-	37.03	14.19	0.70	28.48
PK	136.7M	29.54	43.50	-13.96	-10.04	3	Vertical	242	1.00	-	39.58	17.29	0.98	28.31
PK	157.07M	28.90	43.50	-14.60	-11.05	3	Vertical	121	1.00	-	39.95	16.08	1.09	28.22

Mode 2

09/06/2020



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)
QP	33.88M	33.97	40.00	-6.03	-5.43	3	Horizontal	6	1.25	"Worst"	39.40	22.54	0.60	28.57
PK	59.1M	25.48	40.00	-14.52	-15.37	3	Horizontal	289	1.50	-	40.85	12.67	0.50	28.54
PK	79.47M	28.57	40.00	-11.43	-14.74	3	Horizontal	148	2.00	-	43.31	13.06	0.70	28.50
PK	123.12M	29.31	43.50	-14.19	-9.56	3	Horizontal	0	3.00	-	38.87	17.88	0.92	28.36
PK	129.91M	30.73	43.50	-12.77	-9.61	3	Horizontal	360	3.00	-	40.34	17.77	0.95	28.33
PK	952.47M	29.63	46.00	-16.37	1.48	3	Horizontal	11	1.50	-	28.15	26.80	3.60	28.92



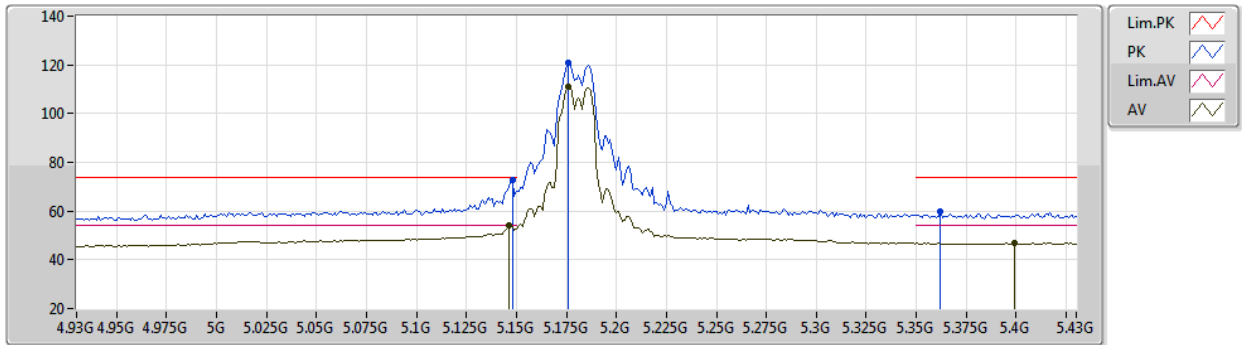
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	Pass	AV	5.146G	53.96	54.00	-0.04	3	Vertical	222	2.87	-

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5180MHz_TX



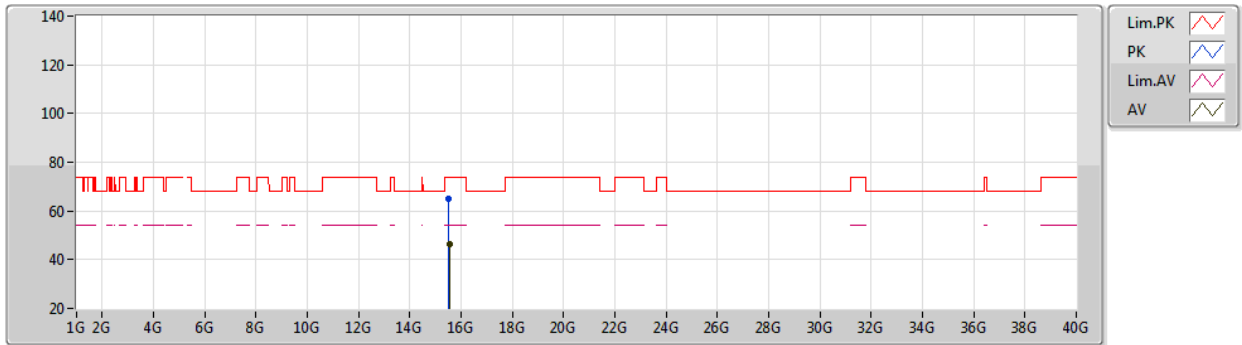
EUT Y_3TX
Setting 2C
04-E-P-2-10

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	5.148G	72.51	74.00	-1.49	67.16	3	Vertical	222	2.87	-	33.05	5.10	32.80
AV	5.146G	53.96	54.00	-0.04	48.61	3	Vertical	222	2.87	-	33.05	5.10	32.80
PK	5.176G	120.92	Inf	-Inf	115.51	3	Vertical	222	2.87	-	33.08	5.12	32.79
AV	5.176G	111.14	Inf	-Inf	105.73	3	Vertical	222	2.87	-	33.08	5.12	32.79
PK	5.362G	59.59	74.00	-14.41	53.71	3	Vertical	222	2.87	-	33.39	5.21	32.72
AV	5.399G	46.80	54.00	-7.20	40.77	3	Vertical	222	2.87	-	33.50	5.23	32.70

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5180MHz_TX



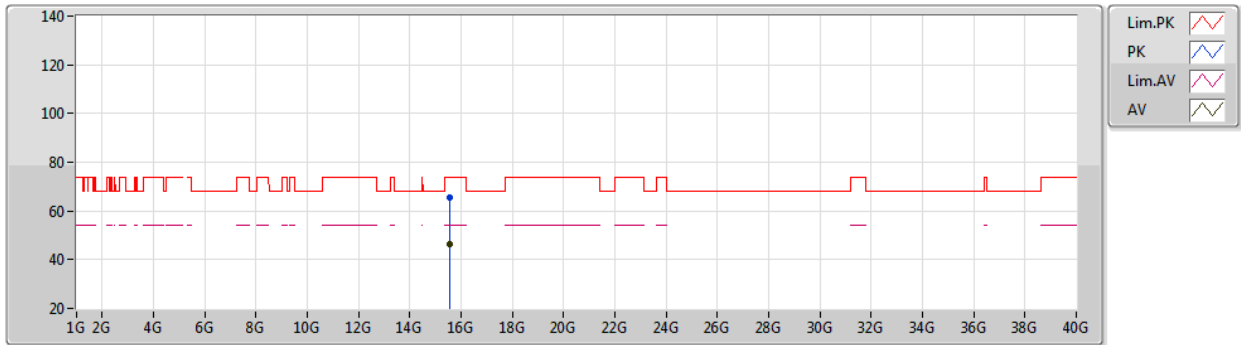
EUT V_3TX
Setting 2C
04-E-P-2

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	15.5314G	65.04	74.00	-8.96	50.81	3	Vertical	153	1.79	-	39.12	9.37	34.26
AV	15.5419G	46.15	54.00	-7.85	31.94	3	Vertical	153	1.79	-	39.10	9.37	34.26

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5180MHz_TX



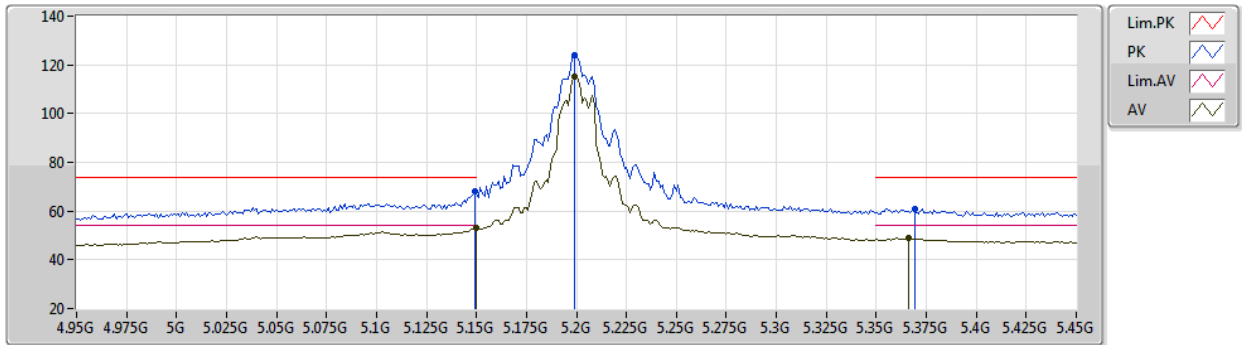
EUT V_3TX
Setting 2C
04-E-P-2

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	15.533G	65.37	74.00	-8.63	51.15	3	Horizontal	239	1.79	-	39.11	9.37	34.26
AV	15.5411G	46.31	54.00	-7.69	32.10	3	Horizontal	239	1.79	-	39.10	9.37	34.26

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5200MHz_TX



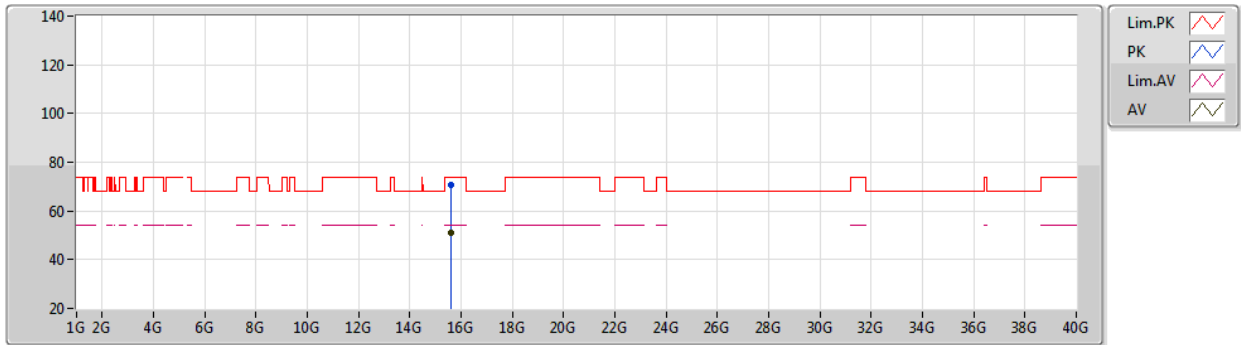
EUT Y_3TX
Setting 31
04-E-P-2-10

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	5.149G	68.24	74.00	-5.76	62.89	3	Vertical	220	1.92	-	33.05	5.10	32.80
AV	5.15G	53.05	54.00	-0.95	47.69	3	Vertical	220	1.92	-	33.05	5.11	32.80
PK	5.199G	124.15	Inf	-Inf	118.70	3	Vertical	220	1.92	-	33.10	5.13	32.78
AV	5.199G	115.34	Inf	-Inf	109.89	3	Vertical	220	1.92	-	33.10	5.13	32.78
PK	5.369G	61.05	74.00	-12.95	55.14	3	Vertical	220	1.92	-	33.41	5.21	32.71
AV	5.366G	49.01	54.00	-4.99	43.11	3	Vertical	220	1.92	-	33.40	5.21	32.71

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5200MHz_TX



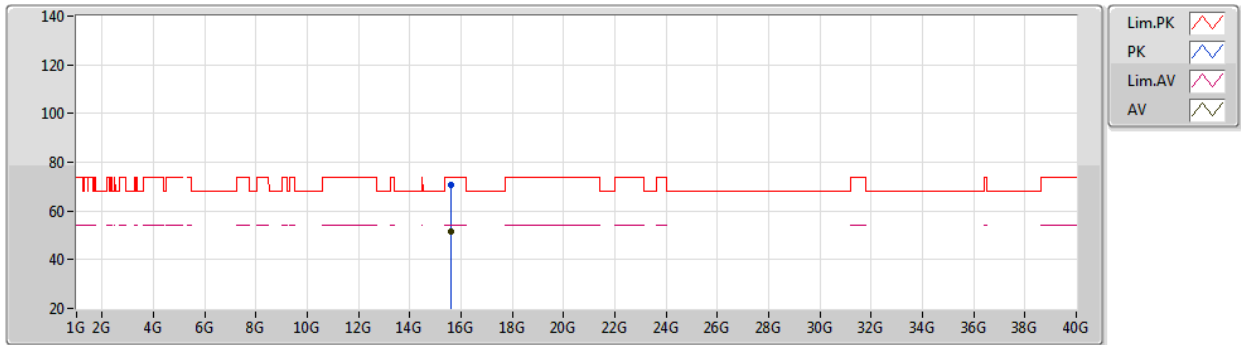
EUT V_3TX
Setting 31
04-E-P-2

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	15.5975G	70.78	74.00	-3.22	56.66	3	Vertical	151	1.80	-	39.04	9.38	34.30
AV	15.5967G	51.20	54.00	-2.80	37.08	3	Vertical	151	1.80	-	39.04	9.38	34.30

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5200MHz_TX



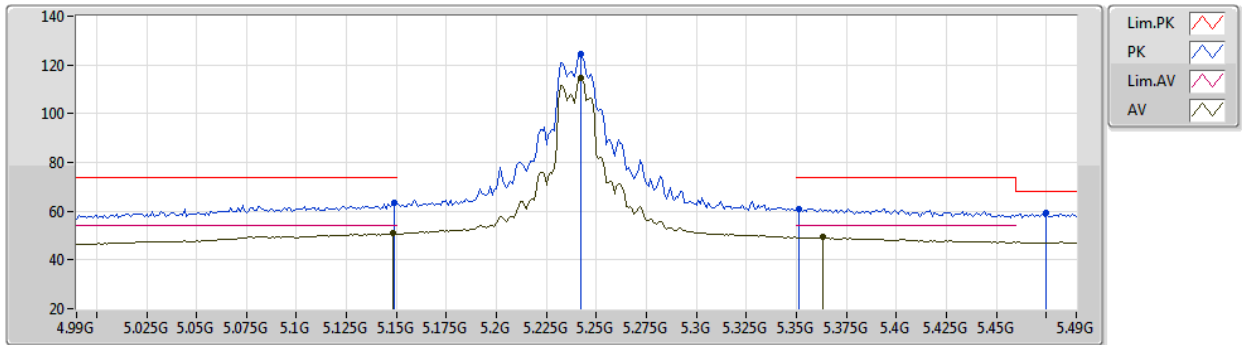
EUT V_3TX
Setting 31
04-E-P-2

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	15.5969G	70.58	74.00	-3.42	56.46	3	Horizontal	241	1.80	-	39.04	9.38	34.30
AV	15.5962G	51.81	54.00	-2.19	37.69	3	Horizontal	241	1.80	-	39.04	9.38	34.30

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5240MHz_TX



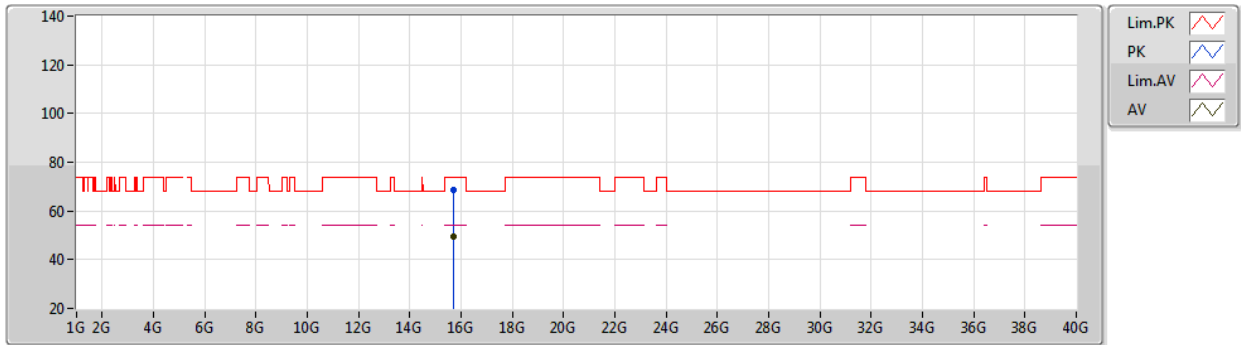
EUT Y_3TX
Setting 31
04-E-P-2-10

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	5.149G	63.44	74.00	-10.56	58.09	3	Vertical	241	1.66	-	33.05	5.10	32.80
AV	5.148G	50.86	54.00	-3.14	45.51	3	Vertical	241	1.66	-	33.05	5.10	32.80
PK	5.242G	124.25	Inf	-Inf	118.72	3	Vertical	241	1.66	-	33.14	5.15	32.76
AV	5.242G	114.71	Inf	-Inf	109.18	3	Vertical	241	1.66	-	33.14	5.15	32.76
PK	5.351G	61.07	74.00	-12.93	55.23	3	Vertical	241	1.66	-	33.35	5.21	32.72
AV	5.363G	49.25	54.00	-4.75	43.36	3	Vertical	241	1.66	-	33.39	5.21	32.71
PK	5.475G	59.16	68.20	-9.04	52.84	3	Vertical	241	1.66	-	33.72	5.28	32.68

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5240MHz_TX



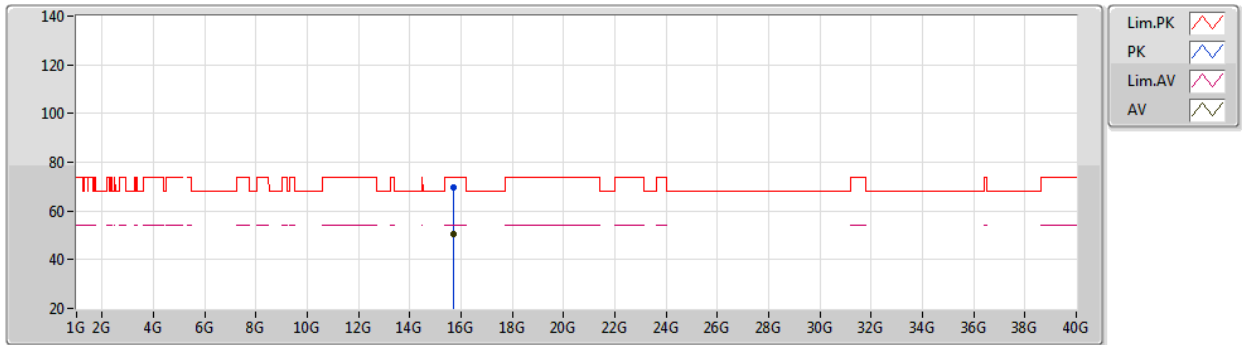
EUT Y_3TX
Setting 31
04-E-P-2

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	15.7117G	68.76	74.00	-5.24	54.83	3	Vertical	154	1.80	-	38.92	9.39	34.38
AV	15.7217G	49.73	54.00	-4.27	35.81	3	Vertical	154	1.80	-	38.91	9.39	34.38

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5240MHz_TX



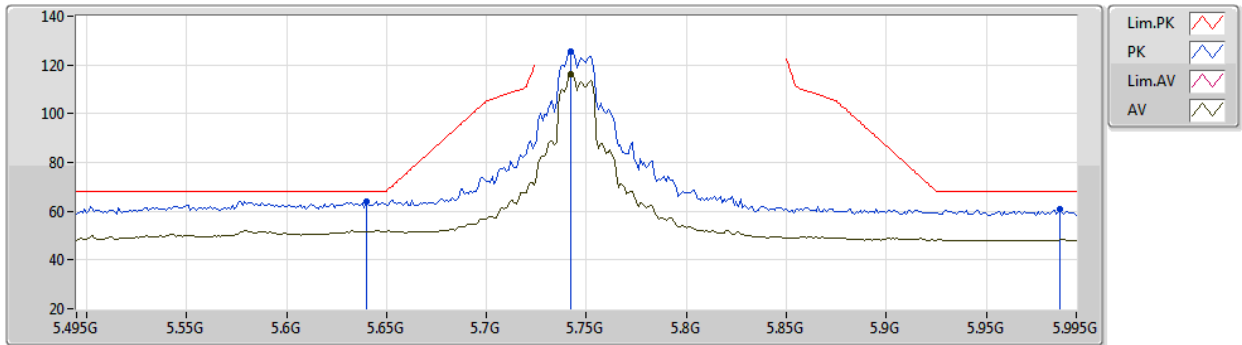
EUT Y_3TX
Setting 31
04-E-P-2

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	15.7225G	69.60	74.00	-4.40	55.68	3	Horizontal	238	1.80	-	38.91	9.39	34.38
AV	15.7224G	50.46	54.00	-3.54	36.54	3	Horizontal	238	1.80	-	38.91	9.39	34.38

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5745MHz_TX



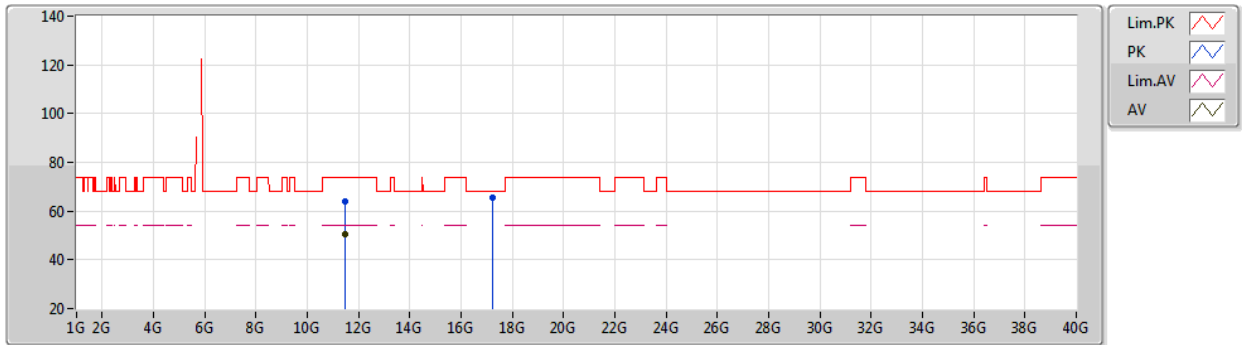
EUT Y_3TX
Setting 35
04-E-P-2-10

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	5.64G	63.98	68.20	-4.22	57.27	3	Vertical	219	1.80	-	34.04	5.39	32.72
PK	5.742G	125.76	Inf	-Inf	118.86	3	Vertical	219	1.80	-	34.18	5.47	32.75
AV	5.742G	116.03	Inf	-Inf	109.13	3	Vertical	219	1.80	-	34.18	5.47	32.75
PK	5.987G	60.78	68.20	-7.42	52.71	3	Vertical	219	1.80	-	35.25	5.65	32.83

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5745MHz_TX



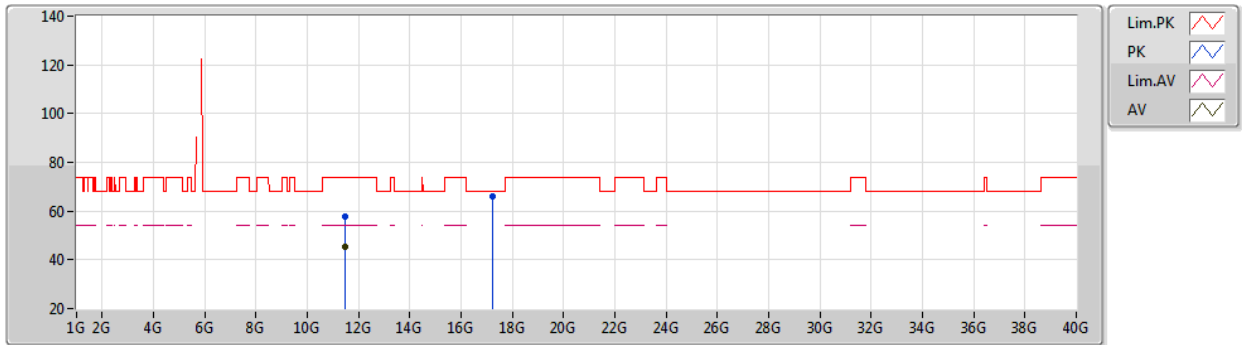
EUT Y_3TX
Setting 35
04-E-P-2

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	11.4884G	63.84	74.00	-10.16	50.57	3	Vertical	172	1.93	-	39.16	8.18	34.07
AV	11.4885G	50.71	54.00	-3.29	37.44	3	Vertical	172	1.93	-	39.16	8.18	34.07
PK	17.2279G	65.52	68.20	-2.68	48.85	3	Vertical	234	1.80	-	41.01	10.14	34.48

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5745MHz_TX



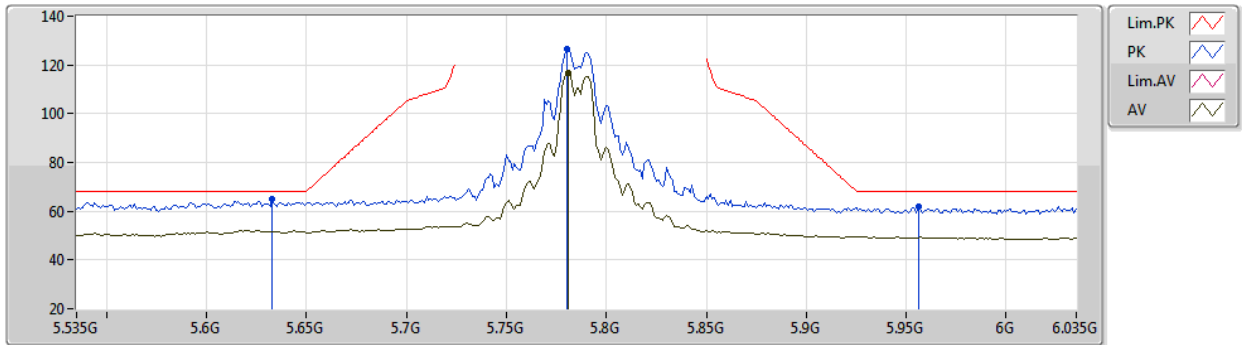
EUT Y_3TX
Setting 35
04-E-P-2

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	11.4878G	57.97	74.00	-16.03	44.70	3	Horizontal	154	1.89	-	39.16	8.18	34.07
AV	11.4878G	45.53	54.00	-8.47	32.26	3	Horizontal	154	1.89	-	39.16	8.18	34.07
PK	17.2343G	66.10	68.20	-2.10	49.44	3	Horizontal	212	1.77	-	41.01	10.13	34.48

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5785MHz_TX



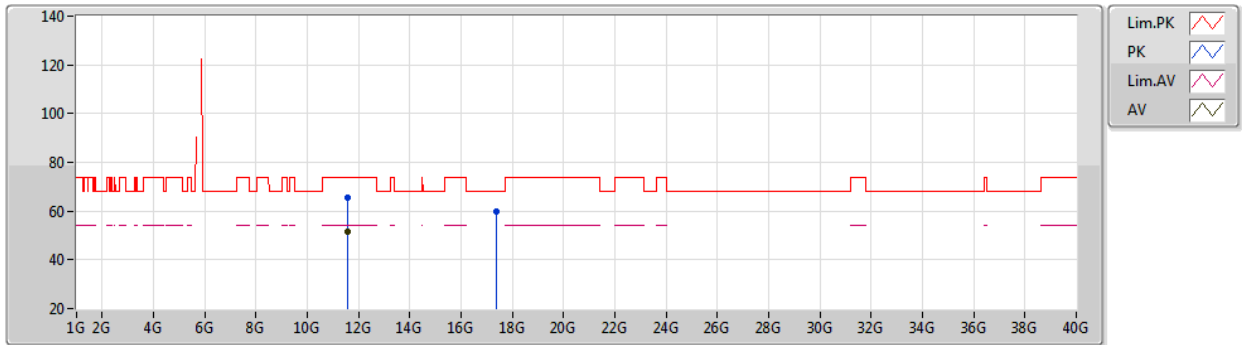
EUT Y_3TX
Setting 34
04-E-P-2-10

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	5.633G	64.83	68.20	-3.37	58.13	3	Vertical	180	1.40	-	34.03	5.39	32.72
PK	5.78G	126.33	Inf	-Inf	119.33	3	Vertical	180	1.40	-	34.26	5.50	32.76
AV	5.781G	116.66	Inf	-Inf	109.66	3	Vertical	180	1.40	-	34.26	5.50	32.76
PK	5.956G	61.88	68.20	-6.32	53.95	3	Vertical	180	1.40	-	35.12	5.63	32.82

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5785MHz_TX



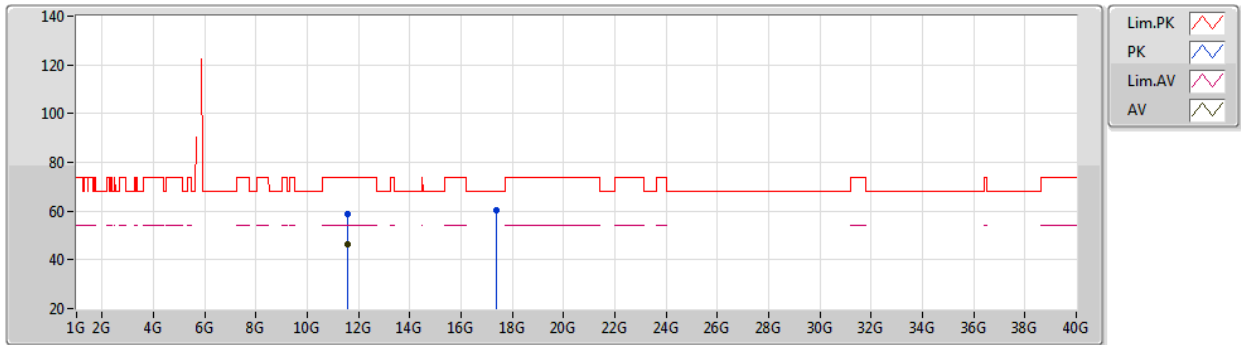
EUT Y_3TX
Setting 34
04-E-P-2

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	11.5673G	65.49	74.00	-8.51	52.26	3	Vertical	175	1.95	-	39.12	8.23	34.12
AV	11.5683G	51.76	54.00	-2.24	38.53	3	Vertical	175	1.95	-	39.12	8.23	34.12
PK	17.3547G	59.88	68.20	-8.32	43.15	3	Vertical	200	1.80	-	41.12	10.10	34.49

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5785MHz_TX



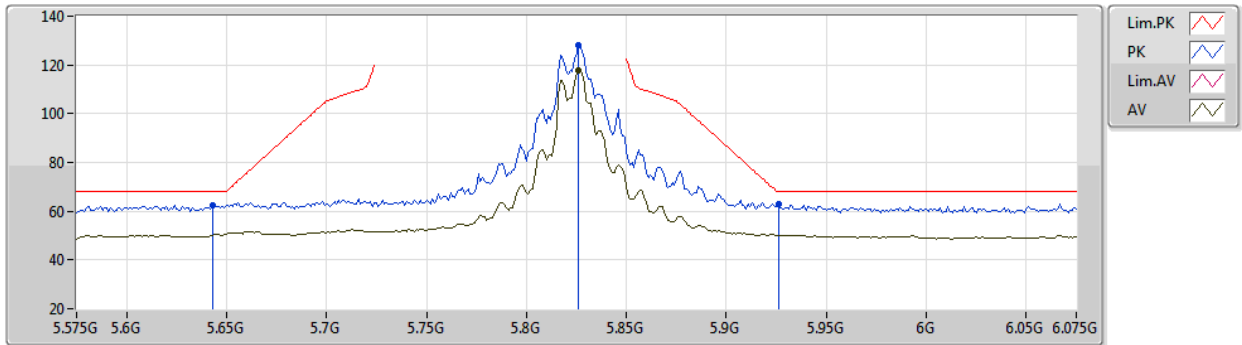
EUT Y_3TX
Setting 34
04-E-P-2

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	11.5675G	58.93	74.00	-15.07	45.70	3	Horizontal	147	1.80	-	39.12	8.23	34.12
AV	11.568G	46.25	54.00	-7.75	33.02	3	Horizontal	147	1.80	-	39.12	8.23	34.12
PK	17.3772G	60.28	68.20	-7.92	43.53	3	Horizontal	210	1.80	-	41.14	10.10	34.49

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5825MHz_TX



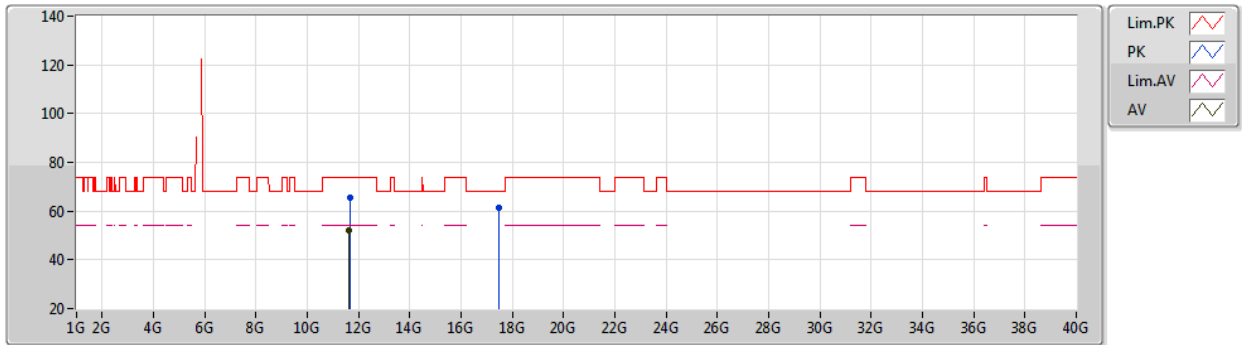
EUT Y_3TX
Setting 36
04-E-P-2-10

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	5.643G	62.66	68.20	-5.54	55.95	3	Vertical	175	1.80	-	34.04	5.39	32.72
PK	5.826G	127.93	Inf	-Inf	120.71	3	Vertical	175	1.80	-	34.46	5.53	32.77
AV	5.826G	117.97	Inf	-Inf	110.75	3	Vertical	175	1.80	-	34.46	5.53	32.77
PK	5.926G	62.96	68.20	-5.24	55.16	3	Vertical	175	1.80	-	35.00	5.61	32.81

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5825MHz_TX



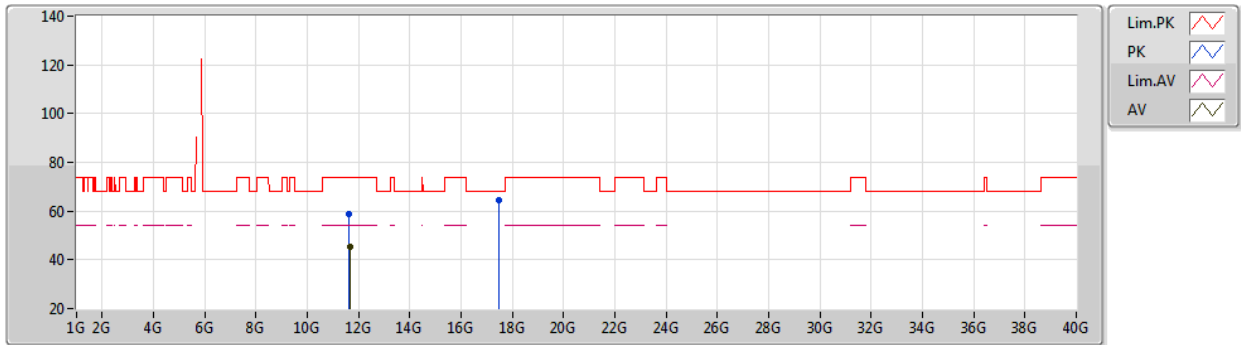
EUT Y_3TX
Setting 36
04-E-P-2

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	11.6476G	65.50	74.00	-8.50	52.31	3	Vertical	173	1.99	-	39.08	8.28	34.17
AV	11.6475G	51.87	54.00	-2.13	38.68	3	Vertical	173	1.99	-	39.08	8.28	34.17
PK	17.4729G	61.61	68.20	-6.59	44.79	3	Vertical	199	1.80	-	41.23	10.08	34.49

802.11a_Nss1,(6Mbps)_3TX

08/06/2020

5825MHz_TX



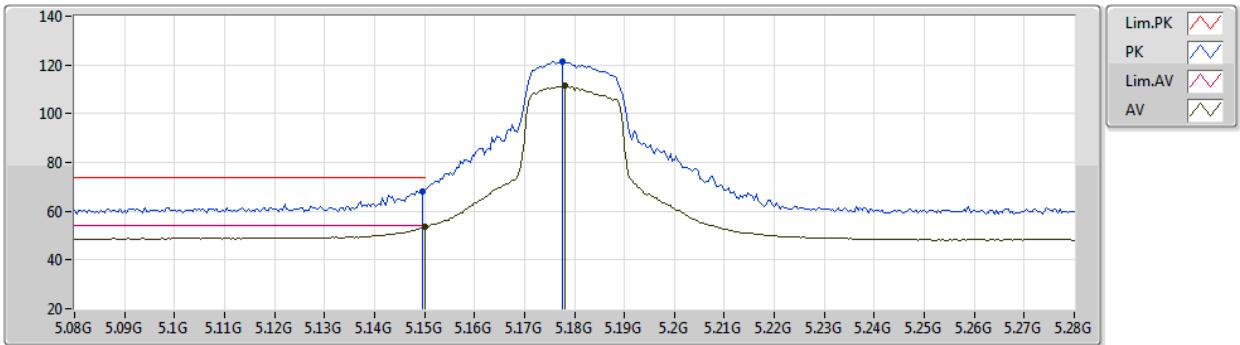
EUT Y_3TX
Setting 36
04-E-P-2

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	11.6472G	58.72	74.00	-15.28	45.53	3	Horizontal	210	1.80	-	39.08	8.28	34.17
AV	11.6476G	45.49	54.00	-8.51	32.30	3	Horizontal	210	1.80	-	39.08	8.28	34.17
PK	17.4812G	64.45	68.20	-3.75	47.64	3	Horizontal	207	2.53	-	41.23	10.07	34.49

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5180MHz_TX



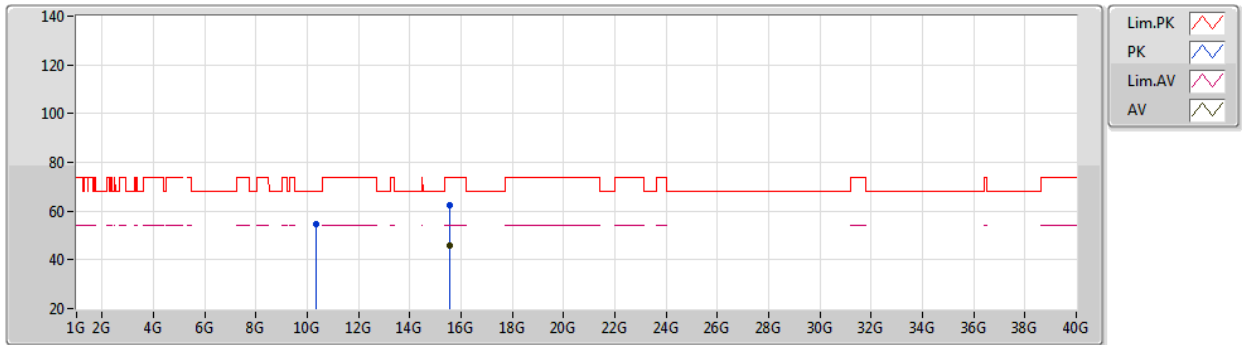
EUT Y_3TX
Setting 44
04-E-P-2

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	5.1496G	68.30	74.00	-5.70	62.95	3	Vertical	234	2.22	-	33.05	5.10	32.80
AV	5.15G	53.39	54.00	-0.61	48.03	3	Vertical	234	2.22	-	33.05	5.11	32.80
PK	5.1776G	121.44	Inf	-Inf	116.03	3	Vertical	234	2.22	-	33.08	5.12	32.79
AV	5.178G	111.32	Inf	-Inf	105.91	3	Vertical	234	2.22	-	33.08	5.12	32.79

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5180MHz_TX



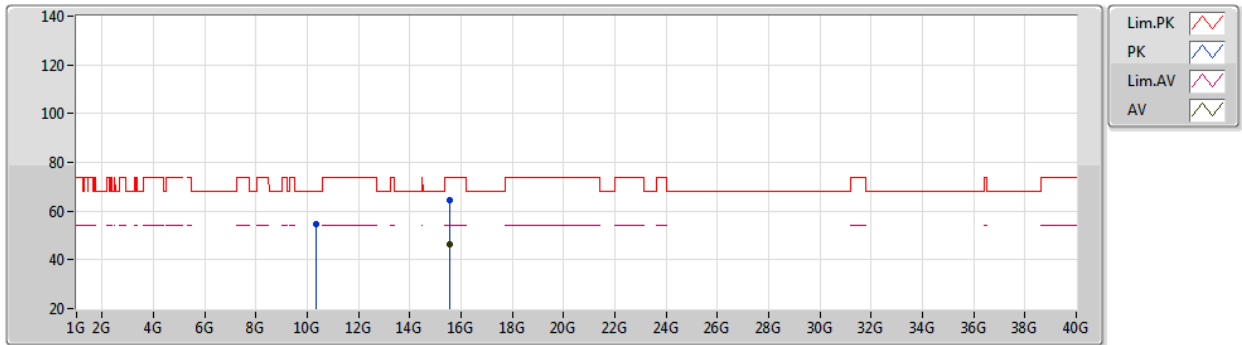
EUT Y_3TX
Setting 44
04-E-P-2

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	10.35682G	54.43	68.20	-13.77	41.31	3	Vertical	75	1.80	-	38.89	7.55	33.32
PK	15.5361G	62.27	74.00	-11.73	48.05	3	Vertical	153	1.83	-	39.11	9.37	34.26
AV	15.538G	45.95	54.00	-8.05	31.73	3	Vertical	153	1.83	-	39.11	9.37	34.26

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5180MHz_TX



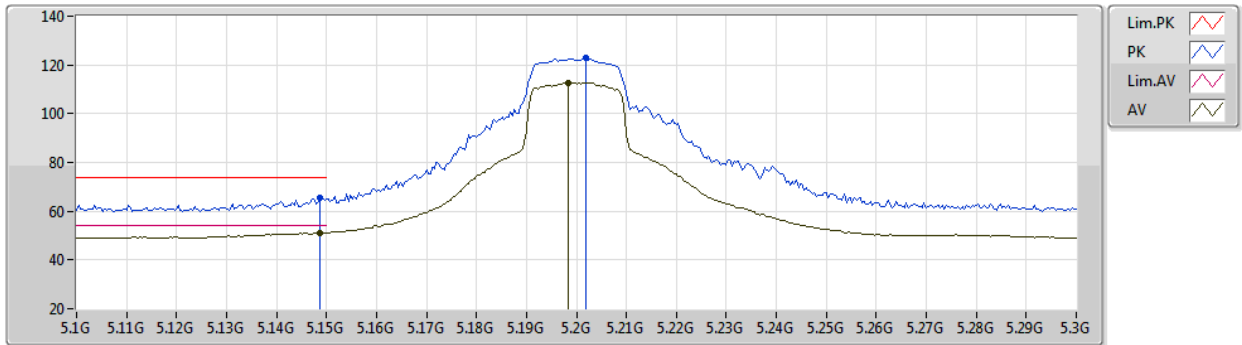
EUT Y_3TX
Setting 44
04-E-P-2

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	10.35968G	54.51	68.20	-13.69	41.39	3	Horizontal	57	1.80	-	38.89	7.55	33.32
PK	15.5427G	64.45	74.00	-9.55	50.24	3	Horizontal	214	1.85	-	39.10	9.37	34.26
AV	15.5385G	46.17	54.00	-7.83	31.95	3	Horizontal	214	1.85	-	39.11	9.37	34.26

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5200MHz_TX



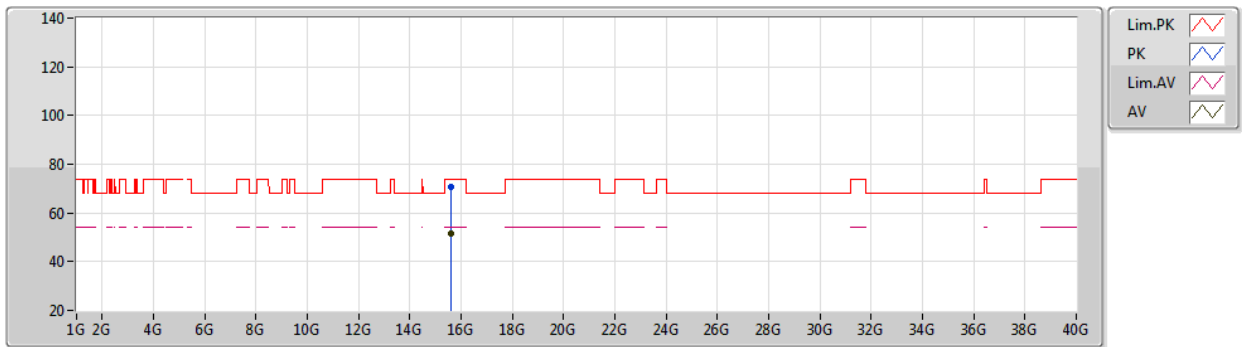
EUT Y_3TX
Setting 48
04-E-L-3-10

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	65.46	74.00	-8.54	60.11	3	Vertical	53	2.23	-	33.05	5.10	32.80
AV	5.1488G	51.28	54.00	-2.72	45.93	3	Vertical	53	2.23	-	33.05	5.10	32.80
PK	5.202G	122.74	Inf	-Inf	117.29	3	Vertical	53	2.23	-	33.10	5.13	32.78
AV	5.1984G	112.82	Inf	-Inf	107.37	3	Vertical	53	2.23	-	33.10	5.13	32.78

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5200MHz_TX



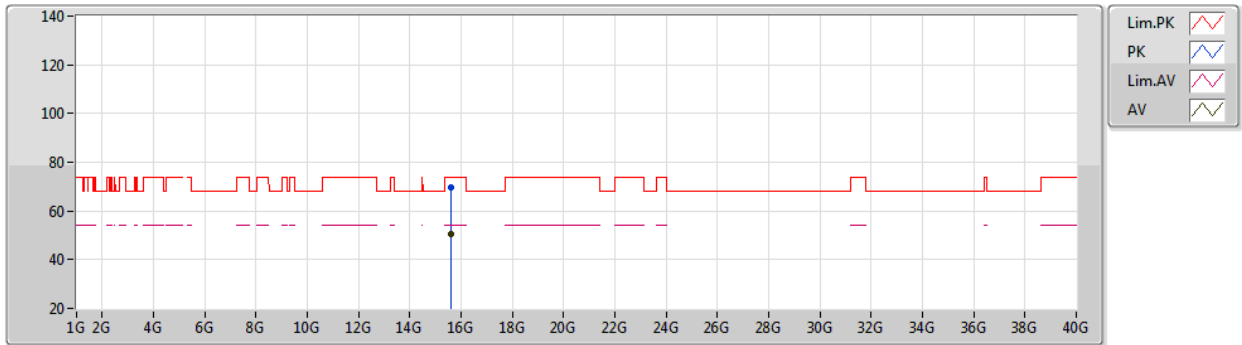
EUT V_3TX
Setting 48
04-E-L-3

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	15.6003G	70.80	74.00	-3.20	56.68	3	Vertical	157	1.80	-	39.04	9.38	34.30
AV	15.59736G	51.33	54.00	-2.67	37.21	3	Vertical	157	1.80	-	39.04	9.38	34.30

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5200MHz_TX



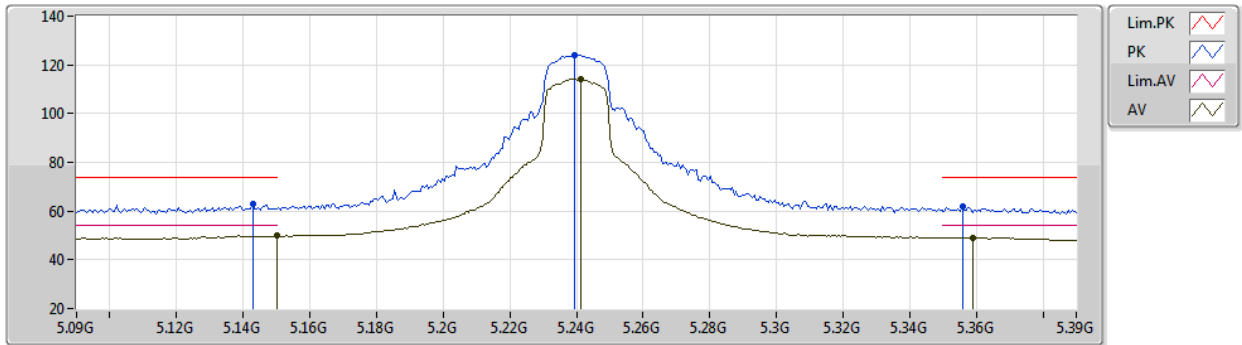
EUT V_3TX
Setting 48
04-E-L-3

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	15.60588G	69.86	74.00	-4.14	55.76	3	Horizontal	212	1.80	-	39.03	9.38	34.31
AV	15.60234G	50.33	54.00	-3.67	36.21	3	Horizontal	212	1.80	-	39.04	9.38	34.30

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5240MHz_TX



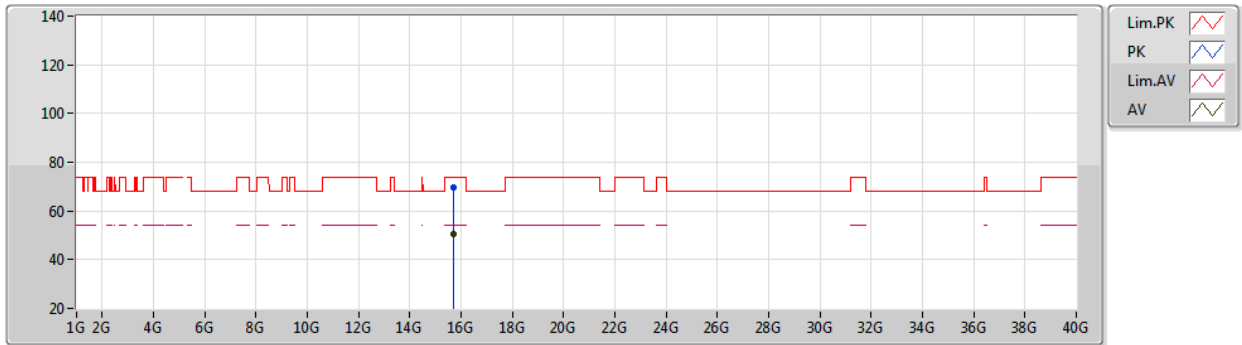
EUT Y_3TX
Setting 48
04-E-L-3-10

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	5.1428G	62.81	74.00	-11.19	57.47	3	Vertical	52	2.22	-	33.04	5.10	32.80
AV	5.15G	49.94	54.00	-4.06	44.58	3	Vertical	52	2.22	-	33.05	5.11	32.80
PK	5.2394G	124.06	Inf	-Inf	118.53	3	Vertical	52	2.22	-	33.14	5.15	32.76
AV	5.2412G	114.18	Inf	-Inf	108.65	3	Vertical	52	2.22	-	33.14	5.15	32.76
PK	5.3558G	61.77	74.00	-12.23	55.91	3	Vertical	52	2.22	-	33.37	5.21	32.72
AV	5.3588G	49.16	54.00	-4.84	43.29	3	Vertical	52	2.22	-	33.38	5.21	32.72

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5240MHz_TX



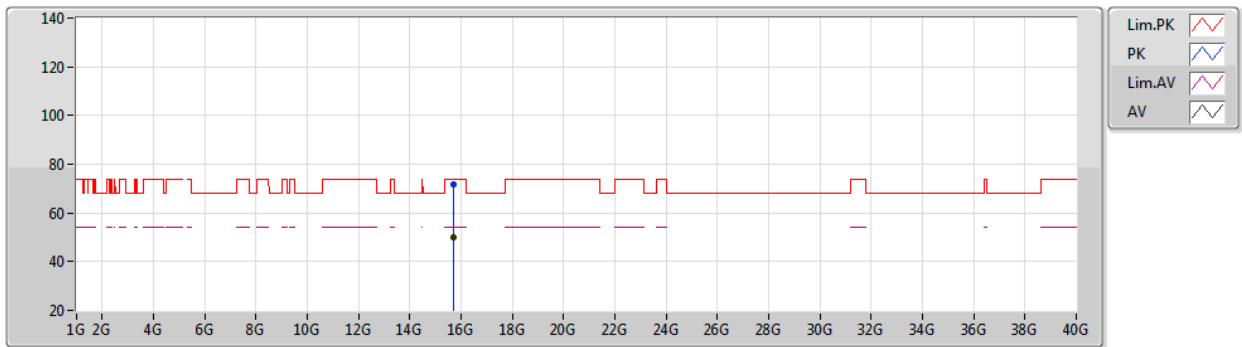
EUT V_3TX
Setting 48
04-E-L-3

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	15.72684G	69.91	74.00	-4.09	56.01	3	Vertical	224	1.80	-	38.90	9.39	34.39
AV	15.71976G	50.62	54.00	-3.38	36.70	3	Vertical	224	1.80	-	38.91	9.39	34.38

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5240MHz_TX



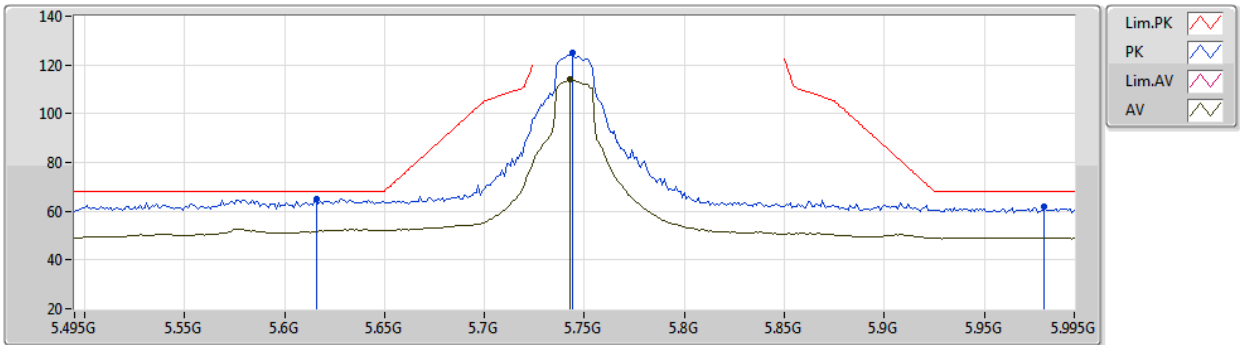
EUT V_3TX
Setting 48
04-E-L-3

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	15.72672G	71.72	74.00	-2.28	57.82	3	Horizontal	212	1.80	-	38.90	9.39	34.39
AV	15.72612G	50.10	54.00	-3.90	36.20	3	Horizontal	212	1.80	-	38.90	9.39	34.39

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5745MHz_TX



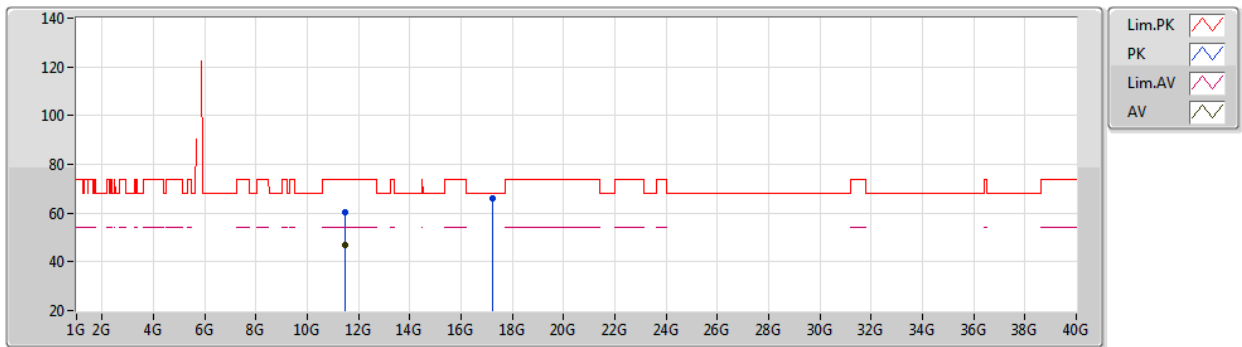
EUT Y_3TX
Setting 52
04-E-L-3-10

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	65.05	68.20	-3.15	58.37	3	Vertical	181	1.80	-	34.02	5.37	32.71
PK	5.744G	124.84	Inf	-Inf	117.93	3	Vertical	181	1.80	-	34.19	5.47	32.75
AV	5.743G	114.20	Inf	-Inf	107.29	3	Vertical	181	1.80	-	34.19	5.47	32.75
PK	5.98G	61.71	68.20	-6.49	53.66	3	Vertical	181	1.80	-	35.22	5.65	32.82

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5745MHz_TX



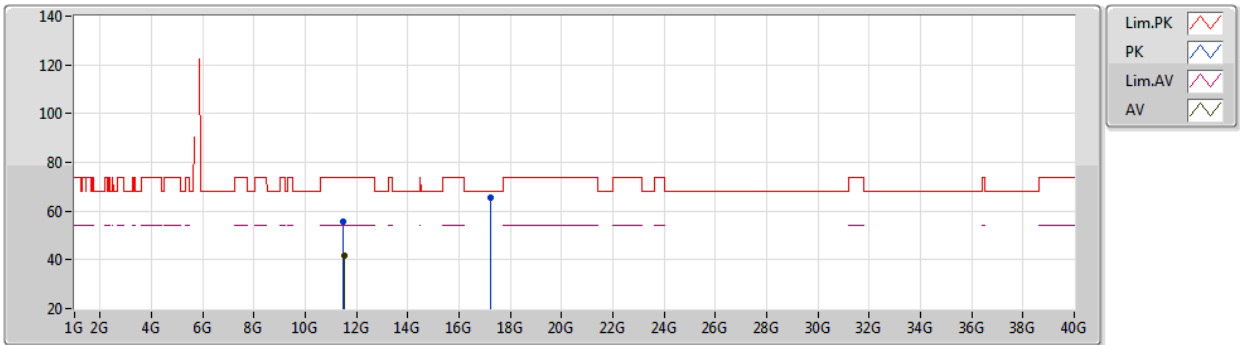
EUT Y_3TX
Setting 52
04-E-L-3

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	11.49204G	60.12	74.00	-13.88	46.87	3	Vertical	209	1.80	-	39.15	8.18	34.08
AV	11.49018G	46.79	54.00	-7.21	33.53	3	Vertical	209	1.80	-	39.15	8.18	34.07
PK	17.23602G	65.92	68.20	-2.28	49.26	3	Vertical	234	1.80	-	41.01	10.13	34.48

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5745MHz_TX



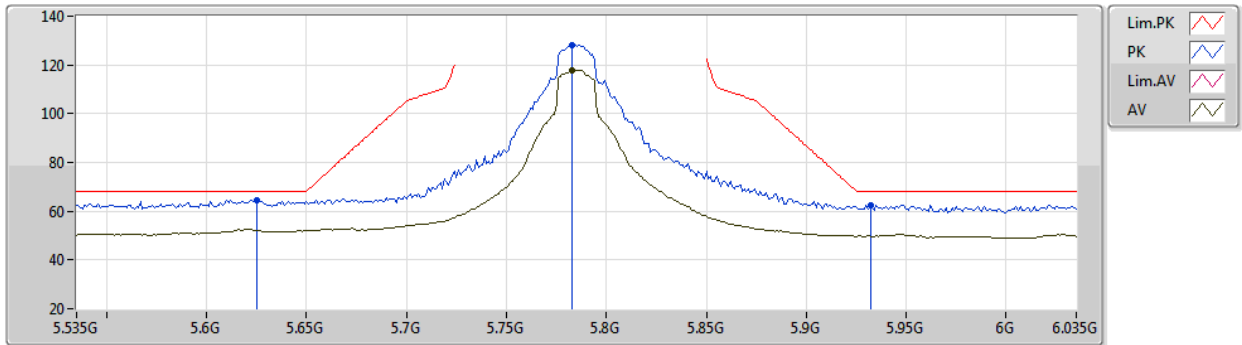
EUT Y_3TX
Setting 52
04-E-L-3

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	11.48694G	55.84	74.00	-18.16	42.57	3	Horizontal	210	1.90	-	39.16	8.18	34.07
AV	11.5005G	41.83	54.00	-12.17	28.57	3	Horizontal	210	1.90	-	39.15	8.19	34.08
PK	17.23182G	65.54	68.20	-2.66	48.88	3	Horizontal	215	1.80	-	41.01	10.13	34.48

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5785MHz_TX



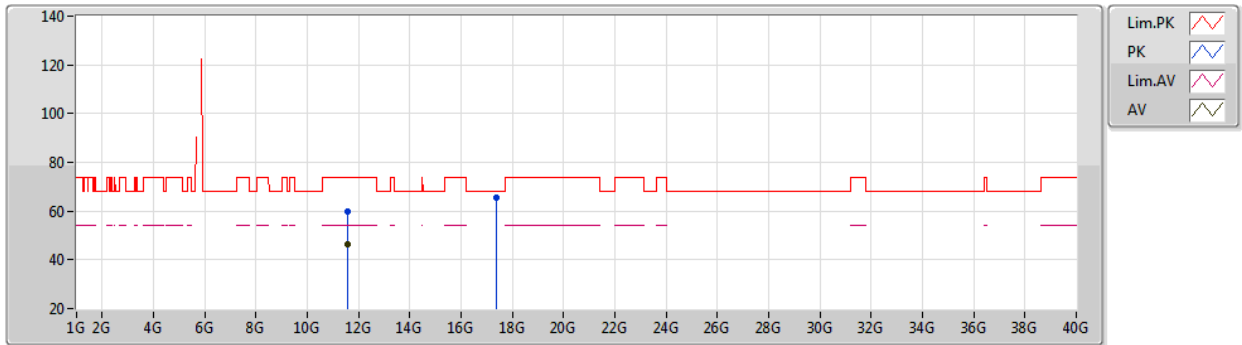
EUT Y_3TX
Setting 56
04-E-L-3-10

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	5.625G	64.51	68.20	-3.69	57.83	3	Vertical	141	1.62	-	34.02	5.38	32.72
PK	5.783G	128.34	Inf	-Inf	121.33	3	Vertical	141	1.62	-	34.27	5.50	32.76
AV	5.783G	118.00	Inf	-Inf	110.99	3	Vertical	141	1.62	-	34.27	5.50	32.76
PK	5.932G	62.61	68.20	-5.59	54.78	3	Vertical	141	1.62	-	35.03	5.61	32.81

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5785MHz_TX



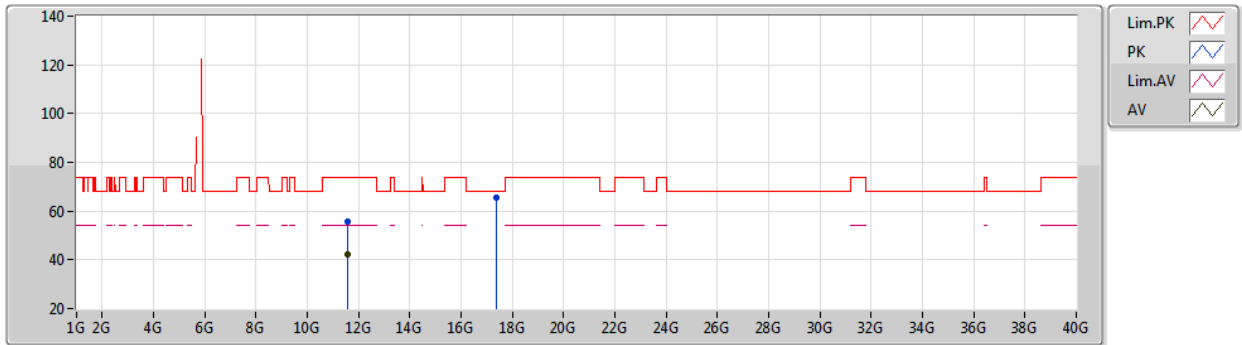
EUT Y_3TX
Setting 56
04-E-L-3

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	11.57042G	60.08	74.00	-13.92	46.86	3	Vertical	211	1.80	-	39.11	8.23	34.12
AV	11.5649G	46.57	54.00	-7.43	33.34	3	Vertical	211	1.80	-	39.12	8.23	34.12
PK	17.35482G	65.47	68.20	-2.73	48.74	3	Vertical	232	1.80	-	41.12	10.10	34.49

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5785MHz_TX



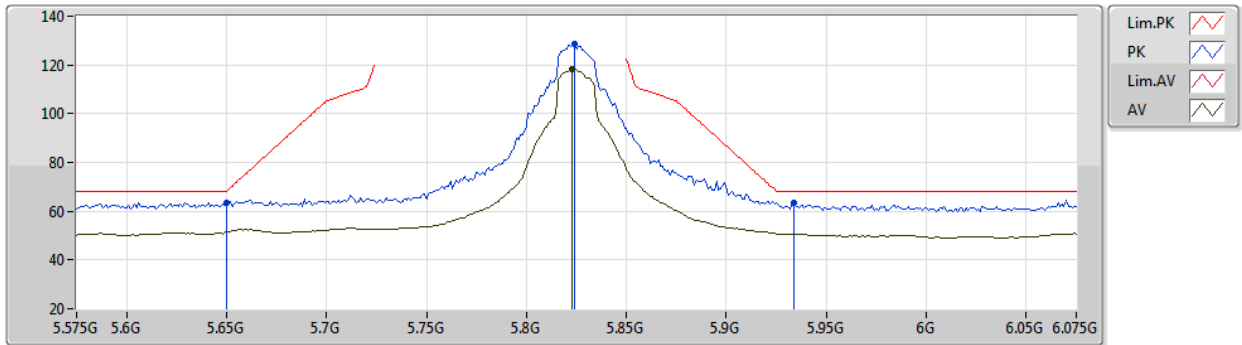
EUT Y_3TX
Setting 56
04-E-L-3

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	11.5652G	55.58	74.00	-18.42	42.35	3	Horizontal	212	1.91	-	39.12	8.23	34.12
AV	11.56808G	42.15	54.00	-11.85	28.92	3	Horizontal	212	1.91	-	39.12	8.23	34.12
PK	17.3598G	65.65	68.20	-2.55	48.92	3	Horizontal	215	1.80	-	41.12	10.10	34.49

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5825MHz_TX



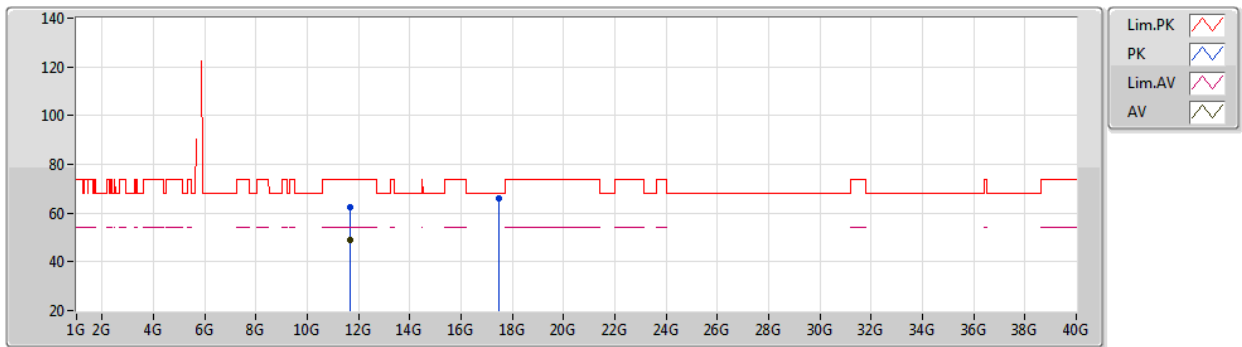
EUT Y_3TX
Setting 55
04-E-L-3-10

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	5.65G	63.64	68.20	-4.56	56.92	3	Vertical	142	1.49	-	34.05	5.40	32.73
PK	5.824G	128.52	Inf	-Inf	121.32	3	Vertical	142	1.49	-	34.44	5.53	32.77
AV	5.823G	118.37	Inf	-Inf	111.17	3	Vertical	142	1.49	-	34.44	5.53	32.77
PK	5.934G	63.70	68.20	-4.50	55.86	3	Vertical	142	1.49	-	35.04	5.61	32.81

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5825MHz_TX



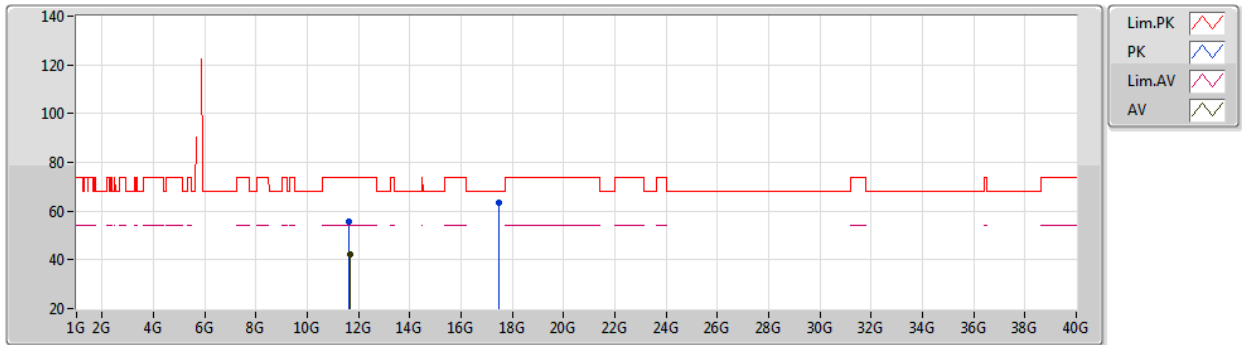
EUT Y_3TX
Setting 55
04-E-L-3

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	11.65348G	62.32	74.00	-11.68	49.14	3	Vertical	170	1.80	-	39.07	8.28	34.17
AV	11.6557G	48.93	54.00	-5.07	35.74	3	Vertical	170	1.80	-	39.07	8.29	34.17
PK	17.48094G	66.18	68.20	-2.02	49.37	3	Vertical	235	1.80	-	41.23	10.07	34.49

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

08/06/2020

5825MHz_TX



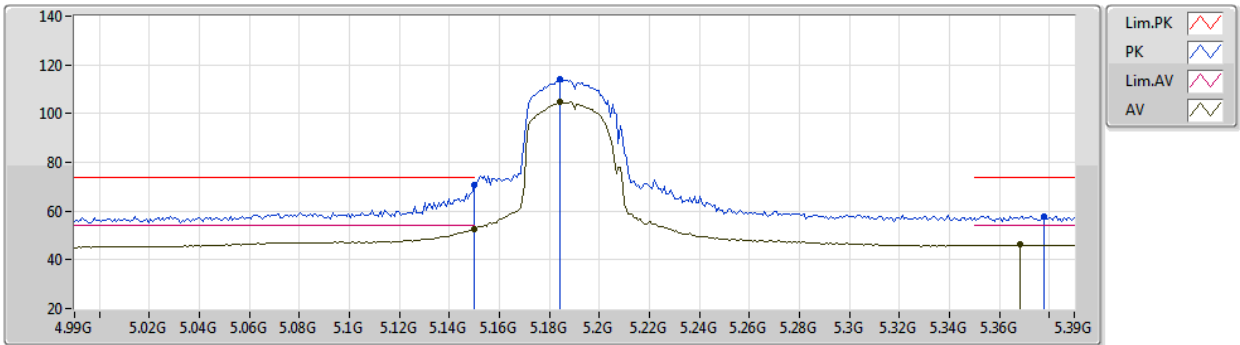
EUT Y_3TX
Setting 55
04-E-L-3

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	11.63572G	55.47	74.00	-18.53	42.28	3	Horizontal	205	1.81	-	39.08	8.27	34.16
AV	11.65426G	42.07	54.00	-11.93	28.88	3	Horizontal	205	1.81	-	39.07	8.29	34.17
PK	17.47656G	63.29	68.20	-4.91	46.47	3	Horizontal	194	1.70	-	41.23	10.08	34.49

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5190MHz_TX



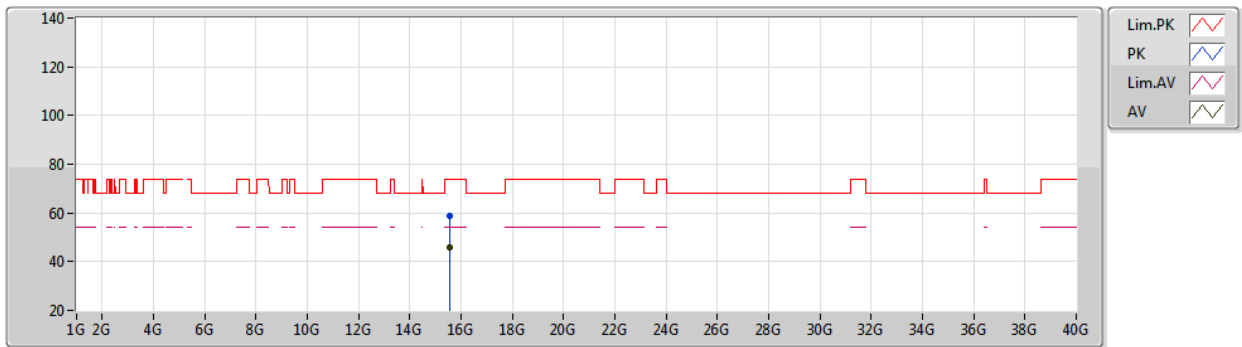
EUT Y_3TX
Setting 40
04-E-P-2-10

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	70.57	74.00	-3.43	65.21	3	Vertical	3	1.42	-	33.05	5.11	32.80
AV	5.15G	52.79	54.00	-1.21	47.43	3	Vertical	3	1.42	-	33.05	5.11	32.80
PK	5.1844G	114.11	Inf	-Inf	108.69	3	Vertical	3	1.42	-	33.08	5.12	32.78
AV	5.1844G	104.58	Inf	-Inf	99.16	3	Vertical	3	1.42	-	33.08	5.12	32.78
PK	5.378G	57.90	74.00	-16.10	51.96	3	Vertical	3	1.42	-	33.43	5.22	32.71
AV	5.3684G	46.20	54.00	-7.80	40.29	3	Vertical	3	1.42	-	33.41	5.21	32.71

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5190MHz_TX



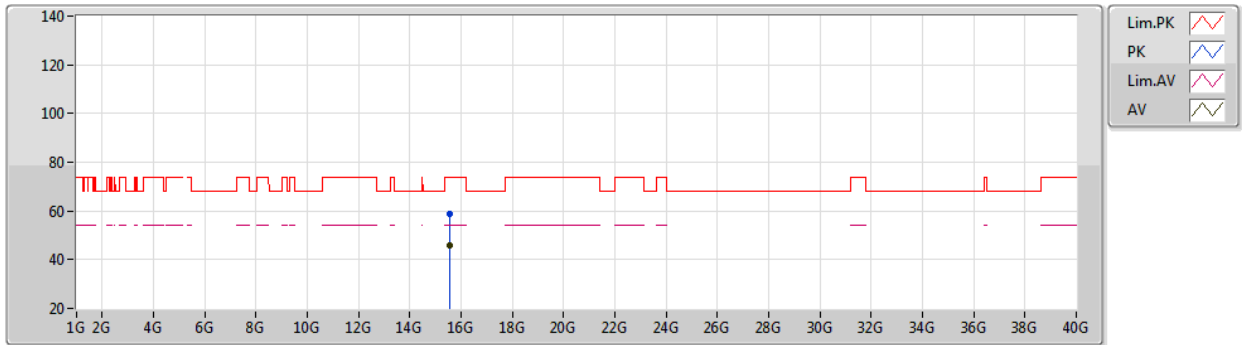
EUT V_3TX
Setting 40
04-E-P-2

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	15.57196G	58.96	74.00	-15.04	44.79	3	Vertical	226	1.80	-	39.07	9.38	34.28
AV	15.57244G	45.69	54.00	-8.31	31.52	3	Vertical	226	1.80	-	39.07	9.38	34.28

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5190MHz_TX



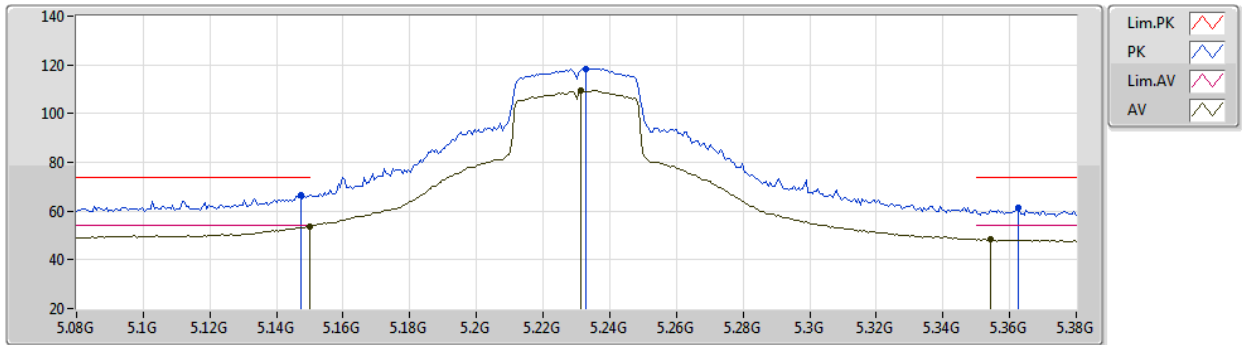
EUT V_3TX
Setting 40
04-E-P-2

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	15.57116G	58.81	74.00	-15.19	44.64	3	Horizontal	99	1.80	-	39.07	9.38	34.28
AV	15.56758G	45.64	54.00	-8.36	31.46	3	Horizontal	99	1.80	-	39.08	9.38	34.28

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5230MHz_TX



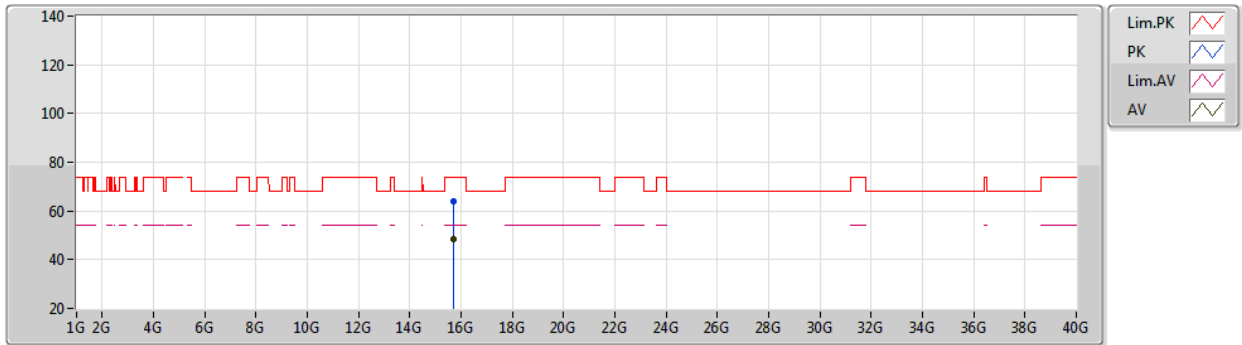
EUT Y_3TX
Setting 47
04-E-E-2

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	5.1472G	66.68	74.00	-7.32	61.33	3	Vertical	229	2.46	-	33.05	5.10	32.80
AV	5.15G	53.79	54.00	-0.21	48.44	3	Vertical	229	2.46	-	33.05	5.10	32.80
PK	5.233G	118.46	Inf	-Inf	112.95	3	Vertical	229	2.46	-	33.13	5.15	32.77
AV	5.2312G	109.53	Inf	-Inf	104.02	3	Vertical	229	2.46	-	33.13	5.15	32.77
PK	5.3626G	61.13	74.00	-12.87	55.24	3	Vertical	229	2.46	-	33.39	5.21	32.71
AV	5.3542G	48.26	54.00	-5.74	42.41	3	Vertical	229	2.46	-	33.36	5.21	32.72

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5230MHz_TX



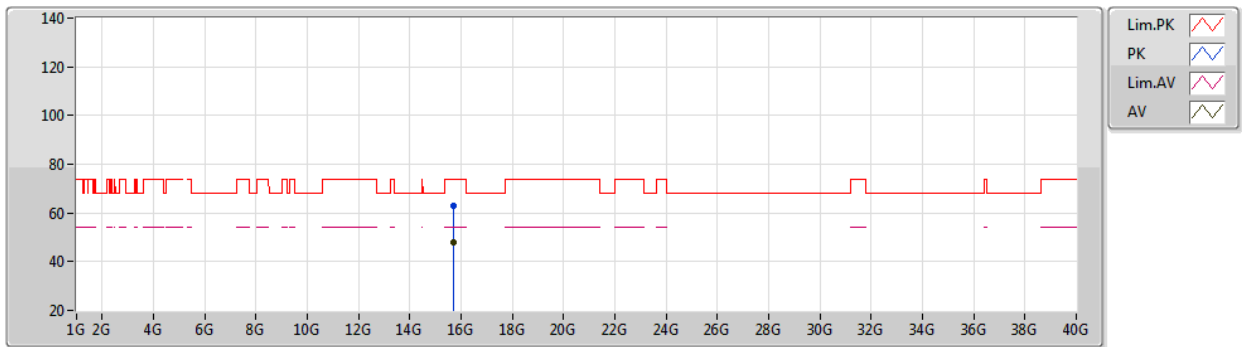
EUT V_3TX
Setting 47
04-E-E-2

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	15.7012G	64.03	74.00	-9.97	50.08	3	Vertical	211	2.79	-	38.93	9.39	34.37
AV	15.6954G	48.41	54.00	-5.59	34.45	3	Vertical	211	2.79	-	38.94	9.39	34.37

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5230MHz_TX



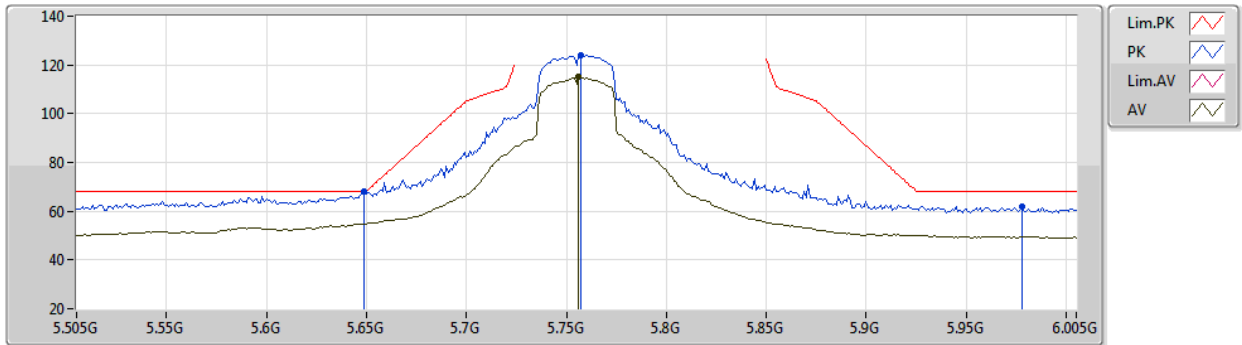
EUT V_3TX
Setting 47
04-E-E-2

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	15.7018G	63.18	74.00	-10.82	49.23	3	Horizontal	212	1.80	-	38.93	9.39	34.37
AV	15.6918G	47.82	54.00	-6.18	33.85	3	Horizontal	212	1.80	-	38.94	9.39	34.36

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5755MHz_TX



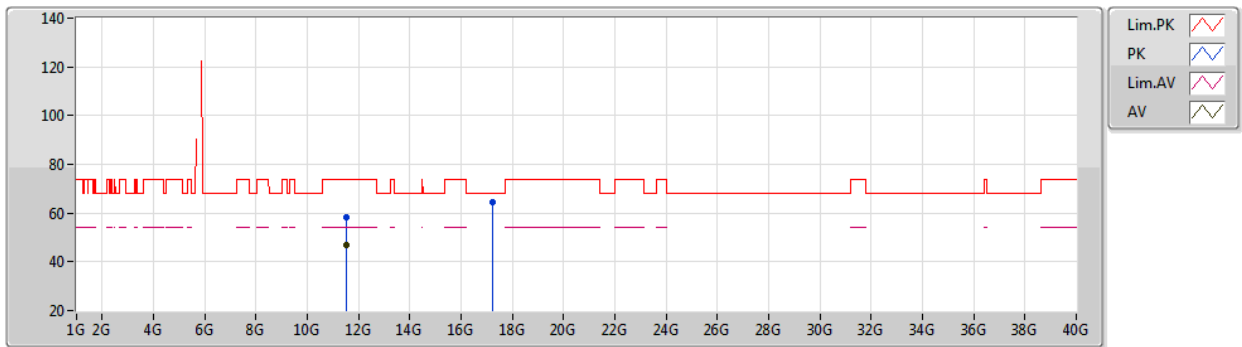
EUT Y_3TX
Setting 53
04-E-L-3-10

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	67.93	68.20	-0.27	61.20	3	Vertical	140	1.35	-	34.05	5.40	32.72
PK	5.757G	124.03	Inf	-Inf	117.09	3	Vertical	140	1.35	-	34.21	5.48	32.75
AV	5.756G	115.00	Inf	-Inf	108.06	3	Vertical	140	1.35	-	34.21	5.48	32.75
PK	5.978G	62.03	68.20	-6.17	54.00	3	Vertical	140	1.35	-	35.21	5.64	32.82

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5755MHz_TX



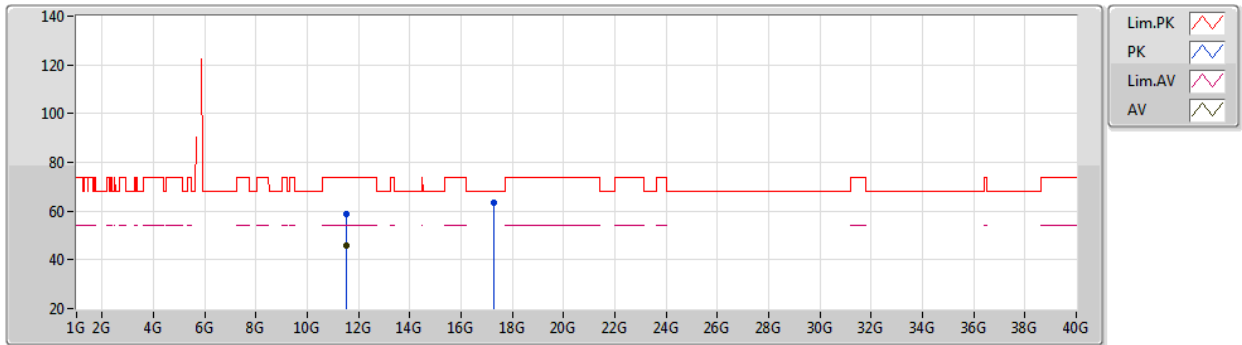
EUT Y_3TX
Setting 53
04-E-L-3

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	11.51132G	58.24	74.00	-15.76	45.00	3	Vertical	6	1.80	-	39.14	8.19	34.09
AV	11.51006G	47.01	54.00	-6.99	33.77	3	Vertical	6	1.80	-	39.14	8.19	34.09
PK	17.2502G	64.53	68.20	-3.67	47.85	3	Vertical	202	1.80	-	41.03	10.13	34.48

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5755MHz_TX



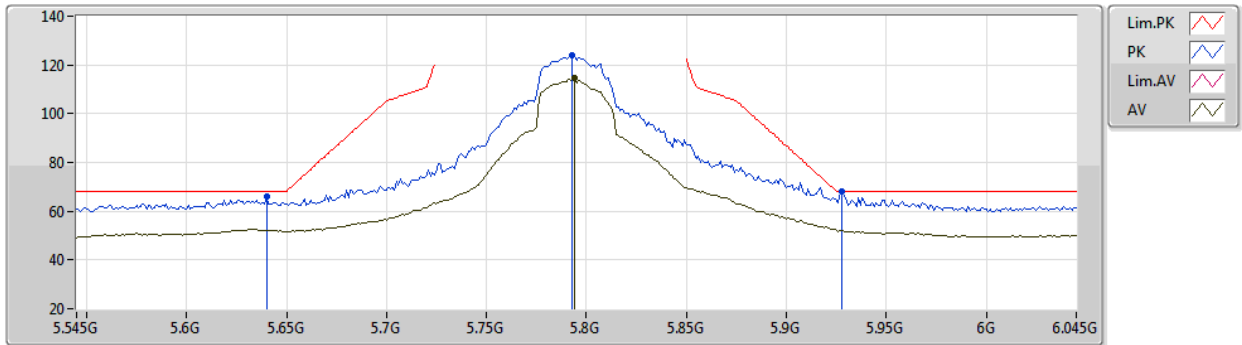
EUT Y_3TX
Setting 53
04-E-L-3

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	11.51084G	58.54	74.00	-15.46	45.30	3	Horizontal	67	2.39	-	39.14	8.19	34.09
AV	11.50976G	46.00	54.00	-8.00	32.75	3	Horizontal	67	2.39	-	39.15	8.19	34.09
PK	17.2568G	63.67	68.20	-4.53	46.99	3	Horizontal	221	1.80	-	41.03	10.13	34.48

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5795MHz_TX



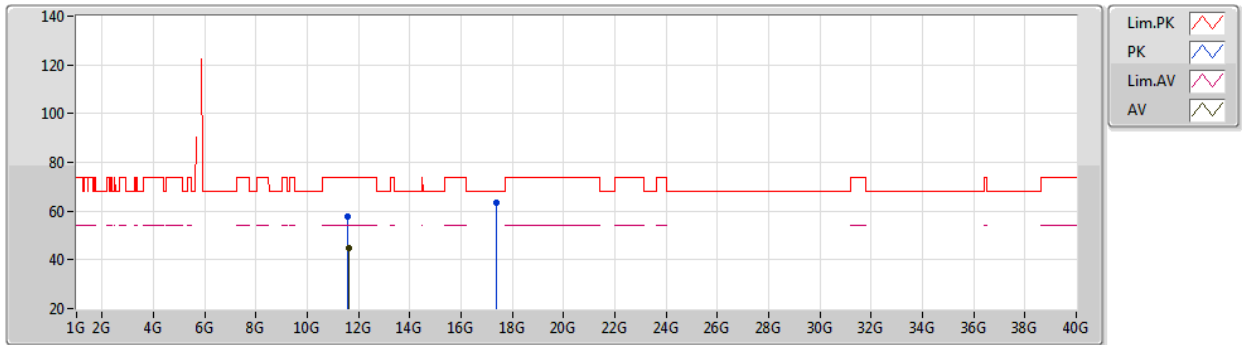
EUT Y_3TX
Setting 53
04-E-L-3-10

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	5.64G	66.13	68.20	-2.07	59.42	3	Vertical	178	1.80	-	34.04	5.39	32.72
PK	5.793G	123.92	Inf	-Inf	116.88	3	Vertical	178	1.80	-	34.29	5.51	32.76
AV	5.794G	114.45	Inf	-Inf	107.41	3	Vertical	178	1.80	-	34.29	5.51	32.76
PK	5.928G	68.11	68.20	-0.09	60.30	3	Vertical	178	1.80	-	35.01	5.61	32.81

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5795MHz_TX



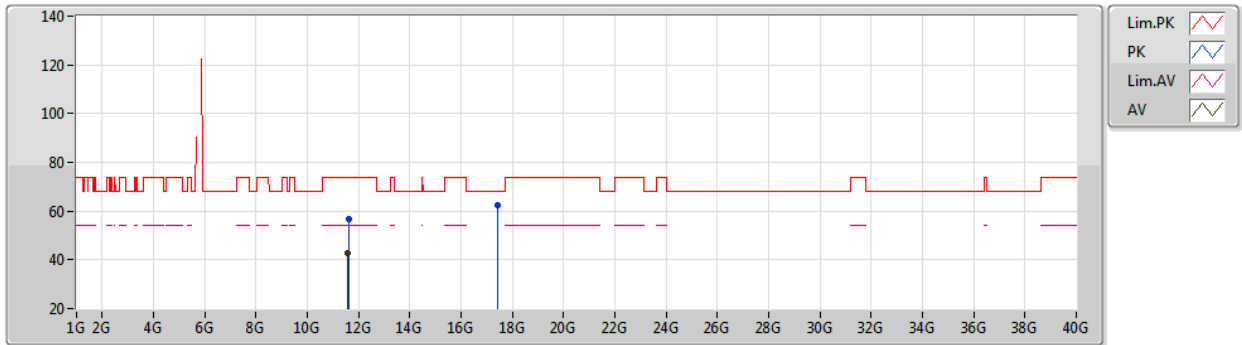
EUT Y_3TX
Setting 53
04-E-L-3

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	11.577G	57.57	74.00	-16.43	44.35	3	Vertical	24	1.80	-	39.11	8.24	34.13
AV	11.6235G	44.88	54.00	-9.12	31.67	3	Vertical	24	1.80	-	39.09	8.27	34.15
PK	17.37142G	63.62	68.20	-4.58	46.88	3	Vertical	132	2.65	-	41.13	10.10	34.49

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

08/06/2020

5795MHz_TX



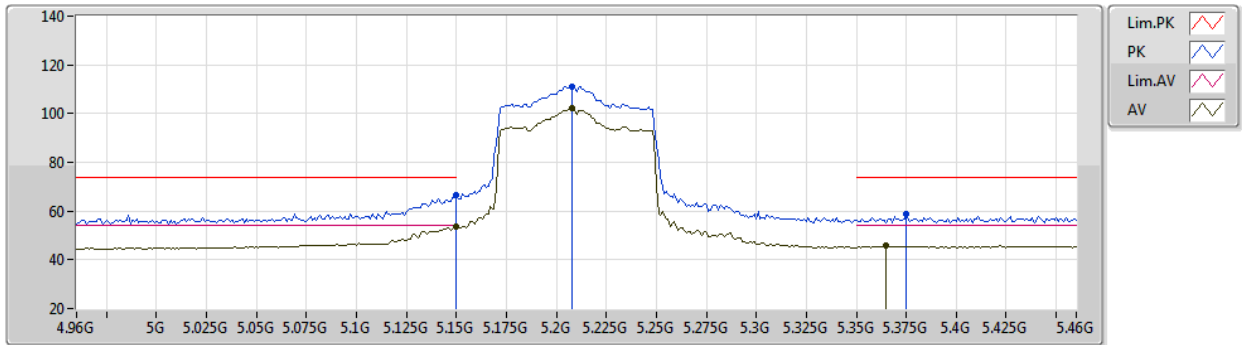
EUT Y_3TX
Setting 53
04-E-L-3

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	11.6243G	56.71	74.00	-17.29	43.50	3	Horizontal	112	2.31	-	39.09	8.27	34.15
AV	11.5537G	42.62	54.00	-11.38	29.39	3	Horizontal	112	2.31	-	39.12	8.22	34.11
PK	17.41153G	62.55	68.20	-5.65	45.78	3	Horizontal	253	1.80	-	41.17	10.09	34.49

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

08/06/2020

5210MHz_TX



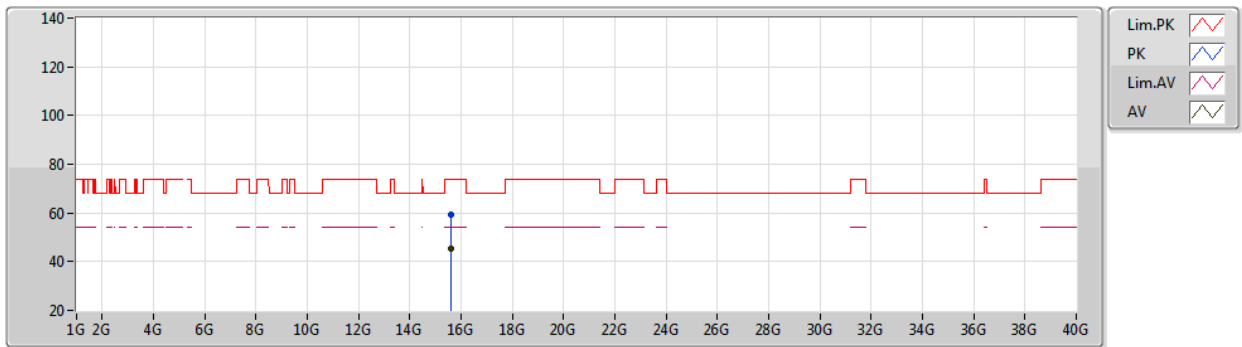
EUT Y_3TX
Setting 35
04-E-P-2-10

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	66.69	74.00	-7.31	61.33	3	Vertical	168	1.18	-	33.05	5.11	32.80
AV	5.15G	53.54	54.00	-0.46	48.18	3	Vertical	168	1.18	-	33.05	5.11	32.80
PK	5.208G	111.12	Inf	-Inf	105.66	3	Vertical	168	1.18	-	33.11	5.13	32.78
AV	5.208G	102.00	Inf	-Inf	96.54	3	Vertical	168	1.18	-	33.11	5.13	32.78
PK	5.375G	58.74	74.00	-15.26	52.81	3	Vertical	168	1.18	-	33.42	5.22	32.71
AV	5.365G	45.78	54.00	-8.22	39.88	3	Vertical	168	1.18	-	33.40	5.21	32.71

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

08/06/2020

5210MHz_TX



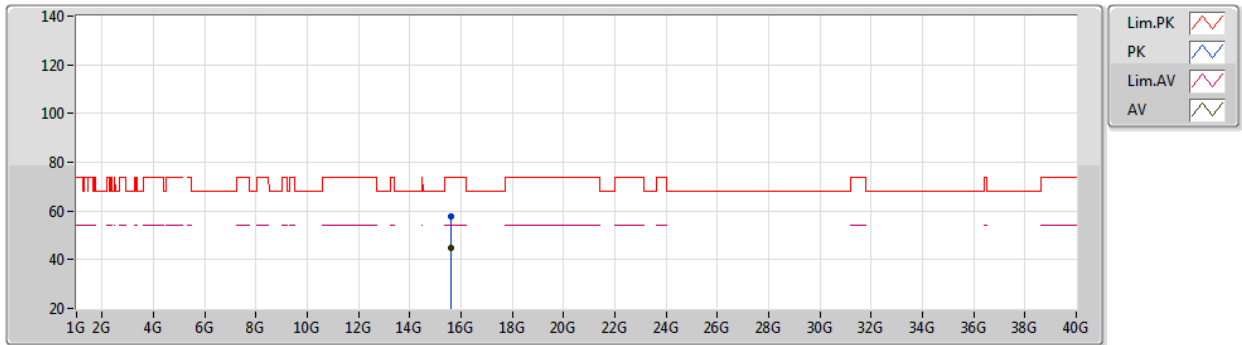
EUT V_3TX
Setting 32
04-E-P-2

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	15.6272G	59.17	74.00	-14.83	45.10	3	Vertical	0	3.00	-	39.01	9.38	34.32
AV	15.63018G	45.15	54.00	-8.85	31.08	3	Vertical	0	3.00	-	39.01	9.38	34.32

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

08/06/2020

5210MHz_TX



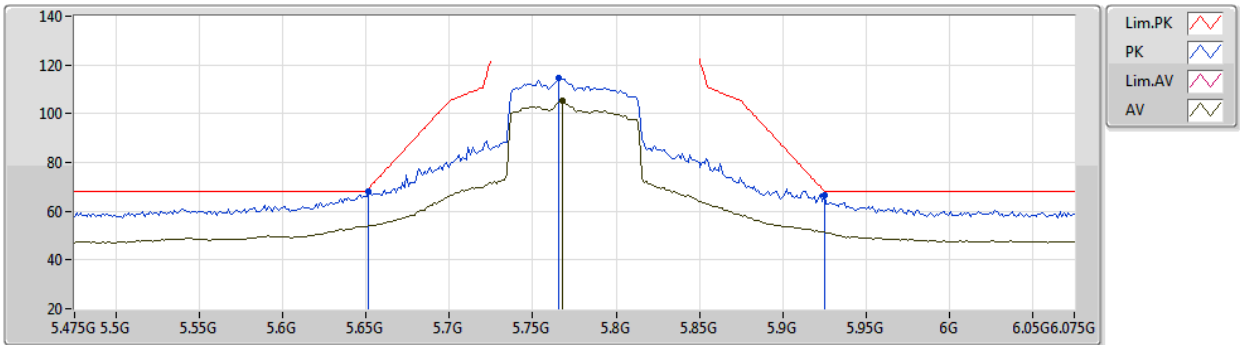
EUT V_3TX
Setting 35
04-E-P-2

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	15.62932G	57.91	74.00	-16.09	43.84	3	Horizontal	325	1.80	-	39.01	9.38	34.32
AV	15.62884G	44.93	54.00	-9.07	30.86	3	Horizontal	325	1.80	-	39.01	9.38	34.32

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

08/06/2020

5775MHz_TX



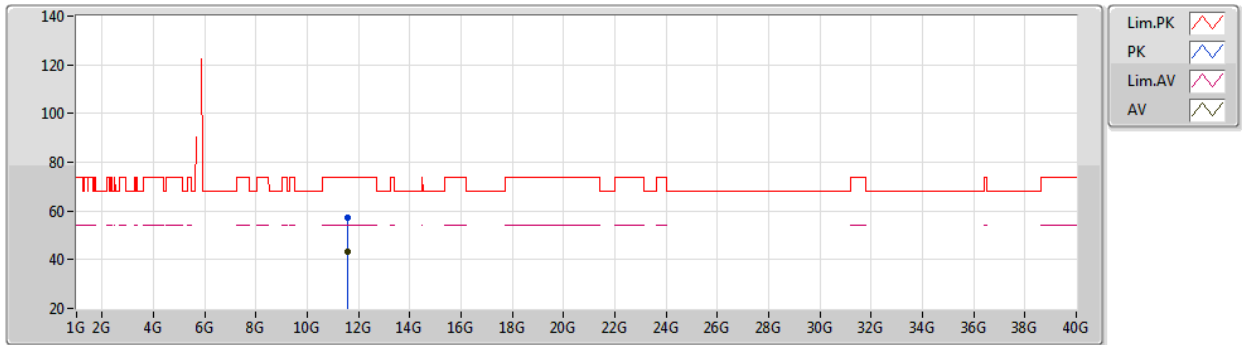
EUT Y_3TX
Setting 46
04-E-P-2-10

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	5.6514G	68.18	69.24	-1.06	61.46	3	Vertical	178	1.88	-	34.05	5.40	32.73
PK	5.7654G	114.50	Inf	-Inf	107.53	3	Vertical	178	1.88	-	34.23	5.49	32.75
AV	5.7678G	105.27	Inf	-Inf	98.29	3	Vertical	178	1.88	-	34.24	5.49	32.75
PK	5.925G	66.71	68.20	-1.49	58.91	3	Vertical	178	1.88	-	35.00	5.61	32.81

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

08/06/2020

5775MHz_TX



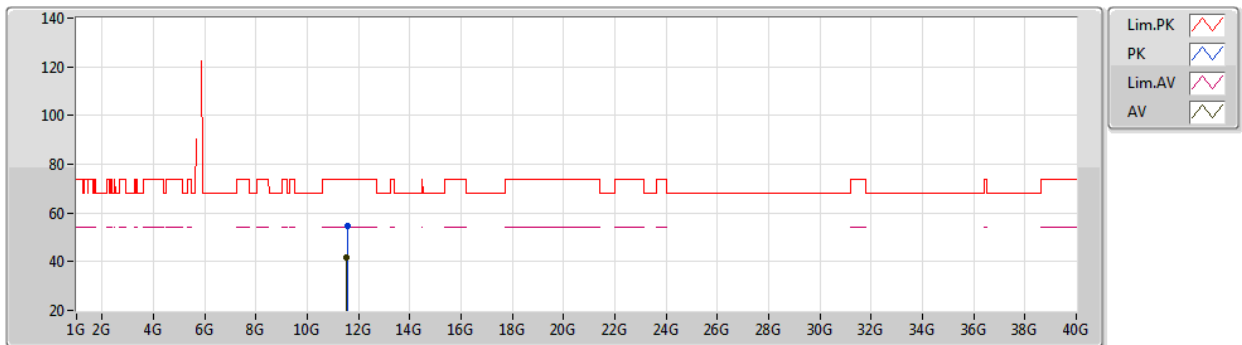
EUT V_3TX
Setting 46
04-E-P-2

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	11.5493G	57.17	74.00	-16.83	43.93	3	Vertical	205	1.80	-	39.13	8.22	34.11
AV	11.5689G	43.34	54.00	-10.66	30.11	3	Vertical	205	1.80	-	39.12	8.23	34.12

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

08/06/2020

5775MHz_TX



EUT V_3TX
Setting 46
04-E-P-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	11.55224G	54.81	74.00	-19.19	41.58	3	Horizontal	21	2.42	-	39.12	8.22	34.11
AV	11.54866G	41.84	54.00	-12.16	28.60	3	Horizontal	21	2.42	-	39.13	8.22	34.11

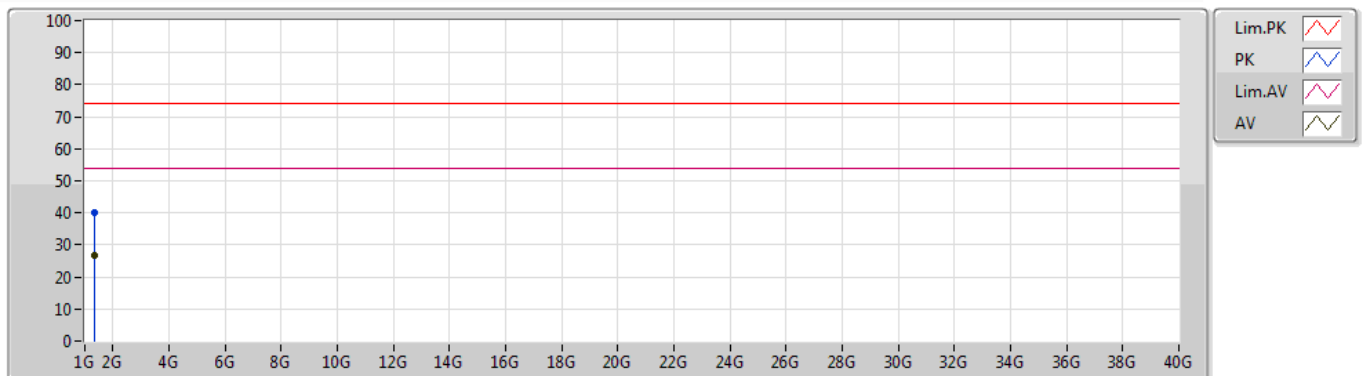


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.34013G	26.68	54.00	-27.32	Vertical

Mode 1

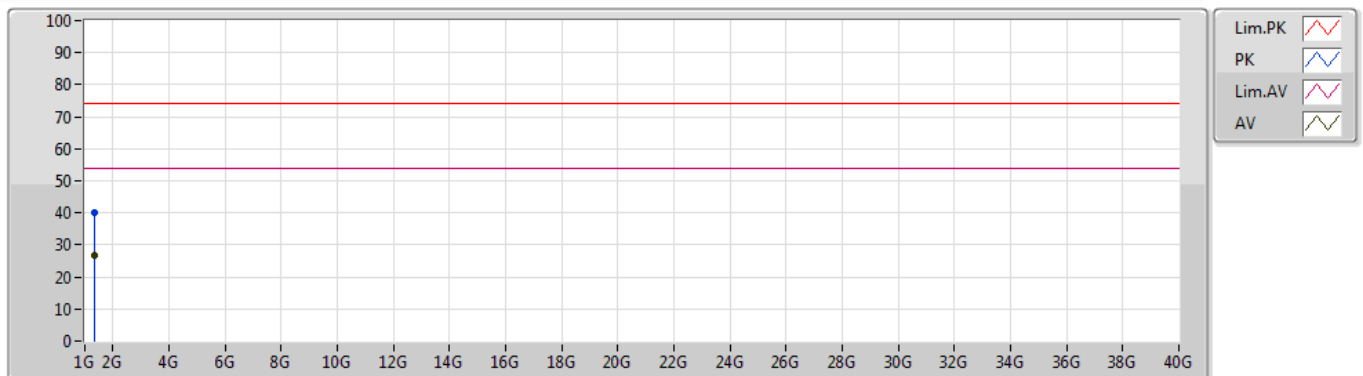
10/06/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	1.33886G	39.99	74.00	-34.01	-5.97	3	Vertical	358	1.00	-	45.96	25.04	3.45	34.46
AV	1.34013G	26.68	54.00	-27.32	-5.97	3	Vertical	358	1.00	"Worst"	32.65	25.04	3.45	34.46

Mode 1

10/06/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	1.33895G	40.18	74.00	-33.82	-5.97	3	Horizontal	51	1.03	-	46.15	25.04	3.45	34.46
AV	1.34037G	26.68	54.00	-27.32	-5.97	3	Horizontal	51	1.03	"Worst"	32.65	25.04	3.45	34.46