FCC Test Report

Equipment	:	Afterburner Wireless Home Gateway
Brand Name	:	ViaSat
Model No.	:	RG1100XXXXX (Where "X", may be 0~9, A~Z, blank or dash)
FCC ID	:	2ABLP-RG1100
Standard	:	47 CFR FCC Part 15.407
Operating Band	:	5150 MHz – 5250 MHz 5725 MHz – 5850 MHz
Applicant	:	ViaSat, Inc. 6155 El Camino Real Carlsbad, CA 92009 USA
Manufacturer	:	CyberTAN Technology, Inc. No. 99, Park Avenue III, Science-based Industrial Park, Hsinchu, 308 Taiwan
Function	:	☐ Outdoor; ☒ Indoor; ☐ Fixed P2P ☐ Client

The product sample received on Apr. 11, 2017 and completely tested on May 12, 2017. We, SPORTON, 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., the test report shall not be reproduced except in full.

Cliff Chang
SPORTON INTERNATIONAL INC.

Testing Laboratory
1190

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Summary of Test Result

Conformance Test Specifications			
Report Clause	**Ref. Std. Clause**	**Description**	**Result**
1.1.2	15.203	Antenna Requirement	Complied
3.1	15.207	AC Power-line Conducted Emissions	Complied
3.2	15.407(a)	Emission Bandwidth	Complied
3.3	15.407(a)	Maximum Conducted Output Power	Complied
3.4	15.407(a)	Peak Power Spectral Density	Complied
3.5	15.407(b)	Unwanted Emissions	Complied
3.6	15.407(g)	Frequency Stability	Complied

Revision History

Report No.	Version	Description	Issued Date
FR750330AB	Rev. 01	Initial issue of report	Jul. 26, 2017
FR750330AB	Rev. 02	1. Revising information of Antenna (2.4G). 2. Revising information of support equipment (RX Device).	Jul. 31, 2017
FR750330AB	Rev. 03	Revising the information of Test Setup Diagram (AC Line Conducted Emission Test).	Aug. 07, 2017
FR750330AB	Rev. 04	Revising the length of the power cable to "0.95m" from "1m".	Aug. 15, 2017

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	3TX
5.15-5.25GHz	802.11a-BF	20	3TX
5.15-5.25GHz	802.11n HT20	20	3TX
5.15-5.25GHz	802.11n HT20-BF	20	3TX
5.15-5.25GHz	802.11n HT40	20	3TX
5.15-5.25GHz	802.11n HT40-BF	20	3TX
5.15-5.25GHz	802.11ac VHT20	20	3TX
5.15-5.25GHz	802.11ac VHT20-BF	20	3TX
5.15-5.25GHz	802.11ac VHT40	20	3TX
5.15-5.25GHz	802.11ac VHT40-BF	40	3TX
5.15-5.25GHz	802.11ac VHT80	20	3TX
5.15-5.25GHz	802.11ac VHT80-BF	80	3TX
5.725-5.85GHz	802.11a	20	3TX
5.725-5.85GHz	802.11a-BF	20	3TX
5.725-5.85GHz	802.11n HT20	20	3TX
5.725-5.85GHz	802.11n HT20-BF	20	3TX
5.725-5.85GHz	802.11n HT40	20	3TX
5.725-5.85GHz	802.11n HT40-BF	20	3TX
5.725-5.85GHz	802.11ac VHT20	20	3TX
5.725-5.85GHz	802.11ac VHT20-BF	20	3TX
5.725-5.85GHz	802.11ac VHT40	20	3TX
5.725-5.85GHz	802.11ac VHT40-BF	20	3TX
5.725-5.85GHz	802.11ac VHT80	40	3TX

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ac VHT80-BF	80	3TX

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Airgain	N2420DGLO-T6-PK1-B1XST55BUR3	PCB Dipole Antenna	I-PEX	Note
2	Airgain	N2420DGLO-T6-PK1-G1XST75BUR3	PCB Dipole Antenna	I-PEX	
3	Airgain	M2450DLCBMSU-T6-G1XST100BU	Metal PIFA Antenna	I-PEX	

Note:

Ant. / Gain	Gain (dBi)		
	2.4G	5G Band 1	5G Band 4
1	2.8	3.4	3.4
2	2.4	3.2	3.3
3	2.8	3.3	3.0

Note: The EUT has three antennas.

Ant.1 = Chain 1(port 1), Ant.2 = Chain 2(port 2), Ant.3 = Chain 3(port 3)

<For 2.4GHz Function>

For IEEE 802.11b/g/n/ac mode (3TX, 3RX):

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

<For 5GHz Function>

For IEEE 802.11a/n/ac mode (3TX, 3RX):

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

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11a-BF	0.873	0.59
802.11ac VHT20-BF	0.847	0.721
802.11ac VHT40-BF	0.863	0.64
802.11ac VHT80-BF	0.879	0.56

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming for 802.11a/g/n/ac	☐	Without beamforming

1.1.5 Table for Multiple Listing

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

Model Name	Description
RG1100XXXXX (Where "X", may be 0~9, A~Z, blank or dash)	Selling in the U.S. market
RG1100	Selling in the Canadian market

From the above models, model: RG1100 was selected as representative model for the test and its data was recorded in this report.

1.2 Testing Applied 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 v01r04
- FCC KDB 644545 D03 v01
- FCC KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location			
☐	HWA YA	ADD :	No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
		TEL :	886-3-327-3456 FAX : 886-3-318-0055
☒	JHUBEI	ADD :	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.
		TEL :	886-3-656-9065 FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Serway Li	20°C / 55%	May 09, 2017~May 10, 2017
Radiated Below 1 GHz	03CH01-CB	Justin Lin / Joy Luo	22°C / 54%	Apr. 11, 2017~May 12, 2017
Radiated Above 1 GHz	03CH01-CB	Justin Lin / Joy Luo	22°C / 54%	May 08, 2017
AC Conduction	CO01-CB	Kane Liu	23°C / 58%	Apr. 11, 2017

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)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74×10^{-8}	Confidence levels of 95%
Frequency Stability	6.06×10^{-8}	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Band	Power Setting
802.11a-BF_(6Mbps)_3TX	-
5180MHz	20.5
5200MHz	21
5240MHz	21
5745MHz	21.5
5785MHz	21.5
5825MHz	22
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-
5180MHz	21.5
5200MHz	21.5
5240MHz	21.5
5745MHz	22
5785MHz	21.5
5825MHz	22
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-
5190MHz	18.5
5230MHz	21
5755MHz	21
5795MHz	21
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-
5210MHz	20
5775MHz	21

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 802.11a/g/n/ac. One is beamforming mode, and the other is non-beamforming mode. Both modes have been tested and recorded in this test report.

2.2 The Worst Case Measurement Configuration

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
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 G 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.: FA750330 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN XP 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 " Telnet " to link with the remote workstation to transmit and receive packet by RX Device and transmit duty cycle no less 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories				
No.	**Brand Name**	**Model Name**	**Rating**	**Remark**
1	CLiCK	CPI135001	Input: 100-240VAC 50/60Hz 2.0A MAX Output: 48.0 VDC, 1.875A MAX 12.0 VDC, 3.75A MAX	DC Power cable: Non-shielded, 1.6m
Others				
RJ-45 Cable*1, Non-shielded, 1.5m				
Power Cable*1, Non-shielded, 0.95m				

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*3	DELL	E6430	DoC
2	Simulated satellite	Viasat	SCOTTY	DoC
3	Flash disk3.0*2	Transcend	639205 7755	DoC
4	Phone	SAMPO	HT-B 907WL	DoC

For Test Site No: 03CH01-CB (below 1GHz)

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*3	DELL	E4300	DoC
2	Flash disk*2	Silicon Power	I-Series	DoC
3	Phone	SAMPO	HT-B 907WL	N/A
4	Simulated satellite	Viasat	SCOTTY	DoC

For Test Site No: 03CH01-CB (above 1GHz)
(Non-Beamforming Mode)

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

For Test Site No: 03CH01-CB (above 1GHz)
(Beamforming Mode)

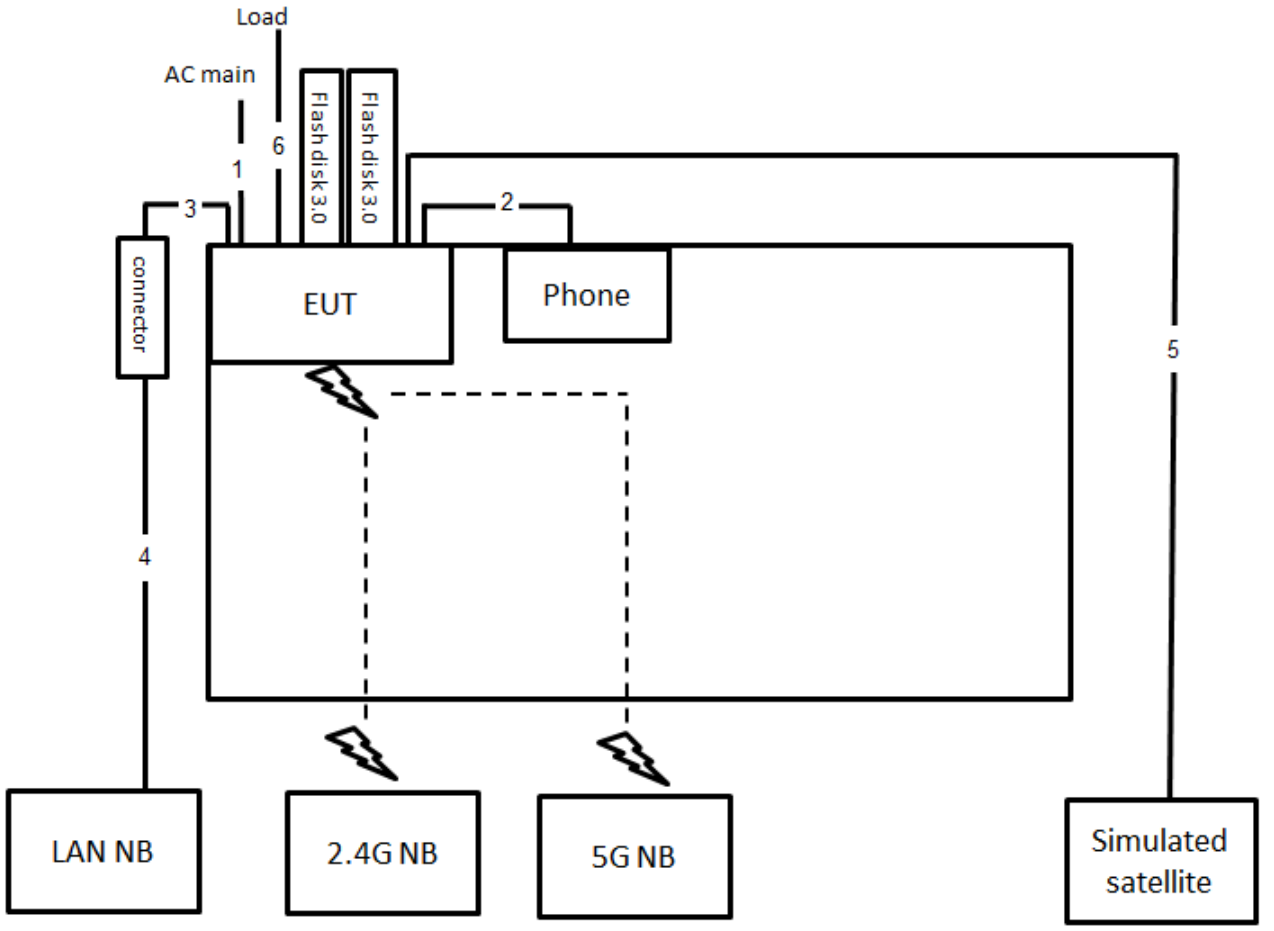
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*2	DELL	E4300	DoC
2	RX Device	Linksys	EA8500	N/A

For Test Site No: TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

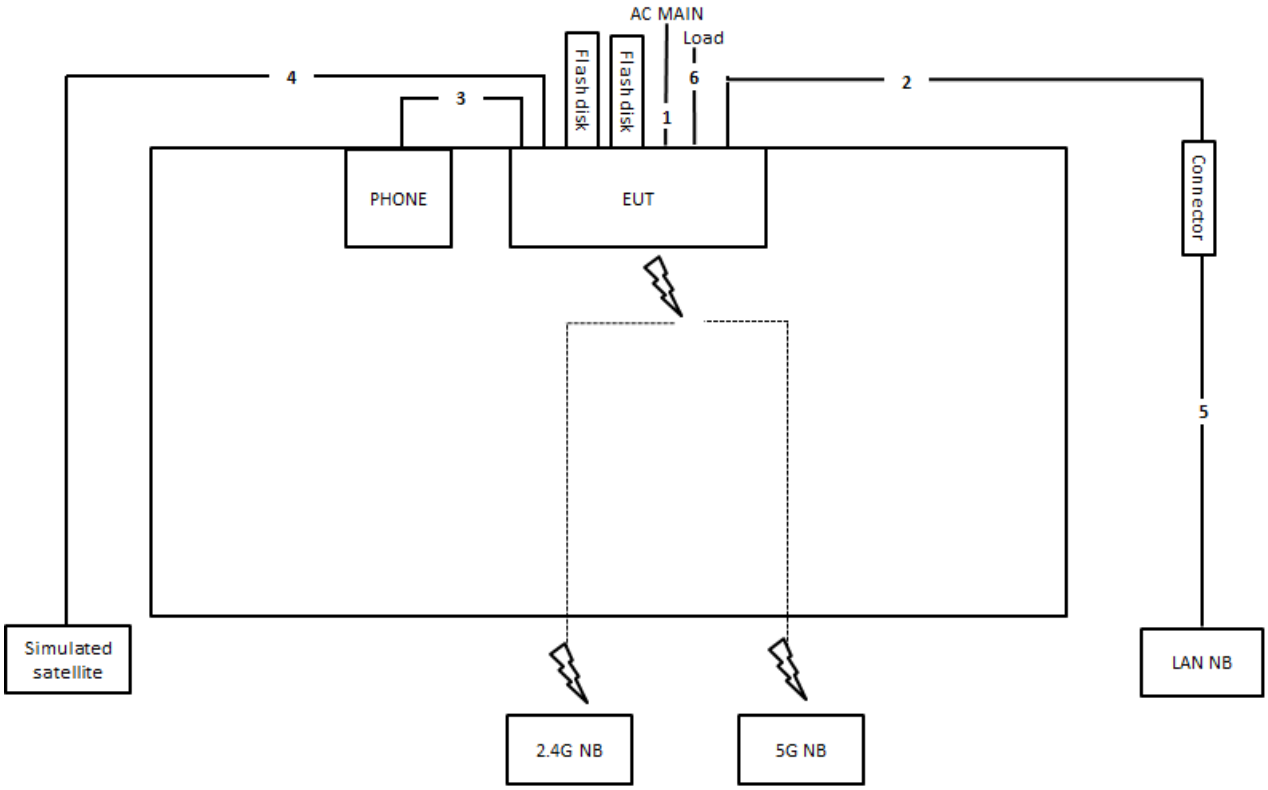
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



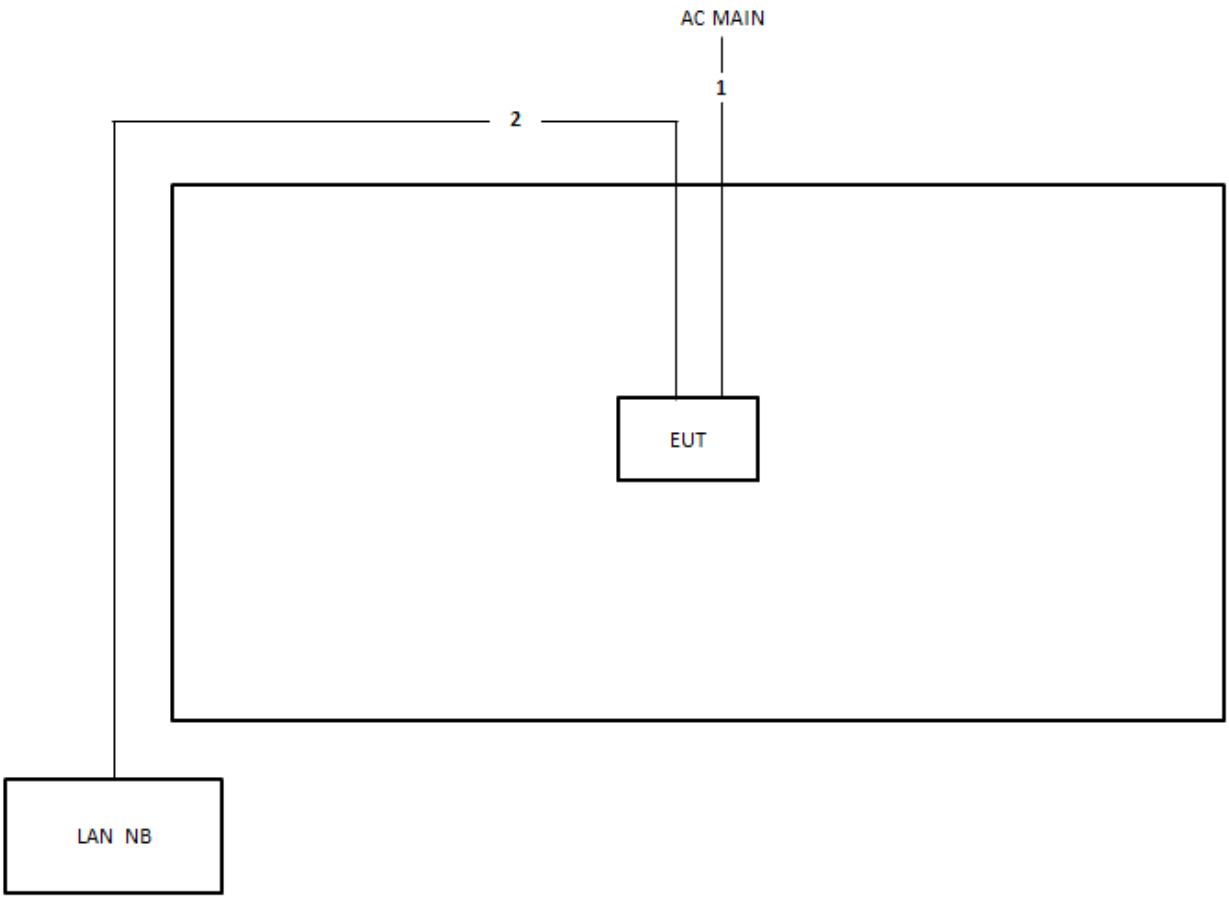
Item	Connection	Shielded	Length
1	Power cable	No	2.55m
2	RJ-11 cable	No	1.5m
3	RJ-45 cable	No	1.5m
4	RJ-45 cable	No	10m
5	Coaxial cable	Yes	10m
6	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



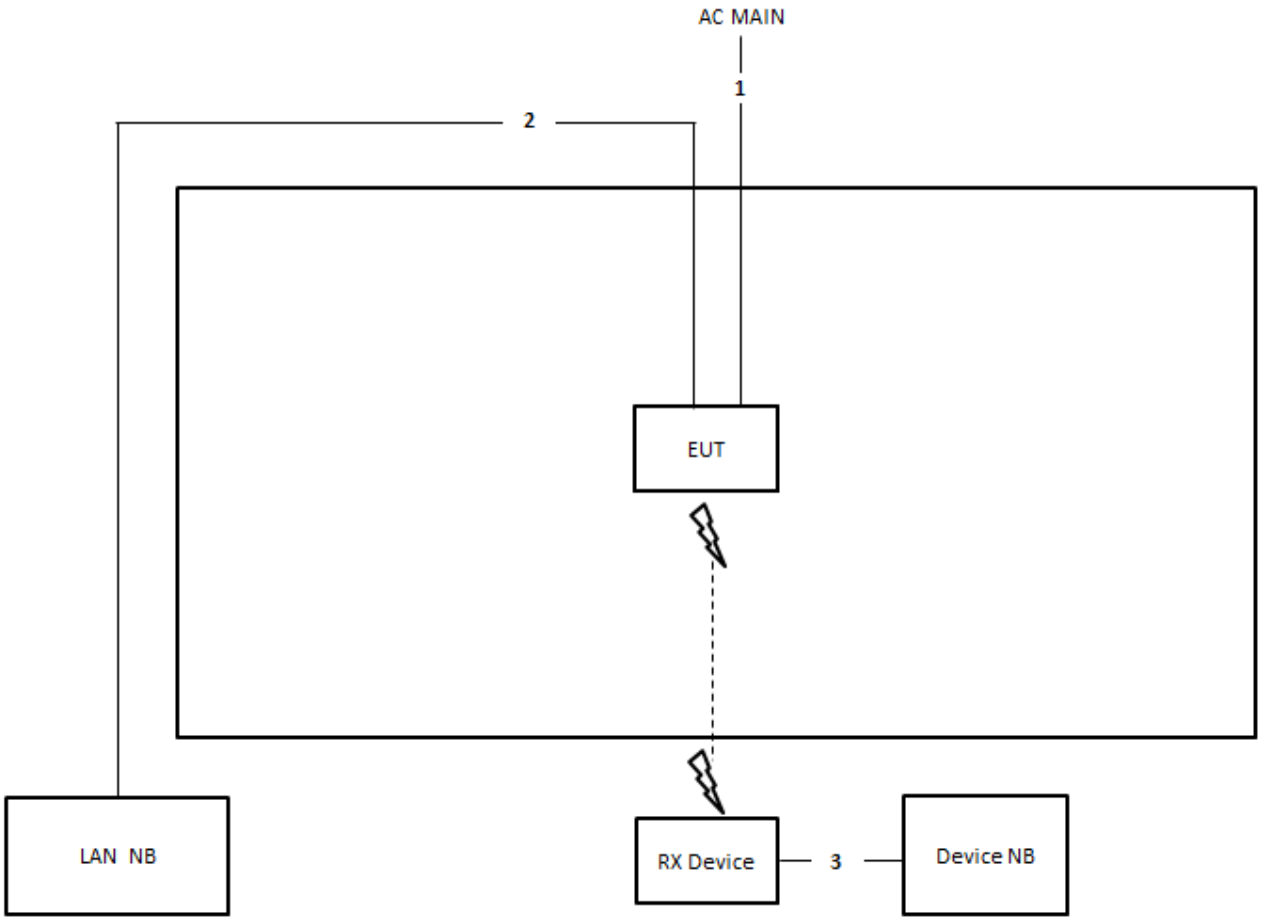
Item	Connection	Shielded	Length
1	Power cable	No	2.55m
2	RJ-45 cable	No	1.5m
3	RJ-11 cable	No	1.5m
4	Coaxial cable	Yes	10m
5	RJ-45 cable	No	10m
6	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz
(Non-Beamforming Mode)



Item	Connection	Shielded	Length
1	Power cable	No	2.55m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz
(Beamforming Mode)



Item	Connection	Shielded	Length
1	Power cable	No	2.55m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	3m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

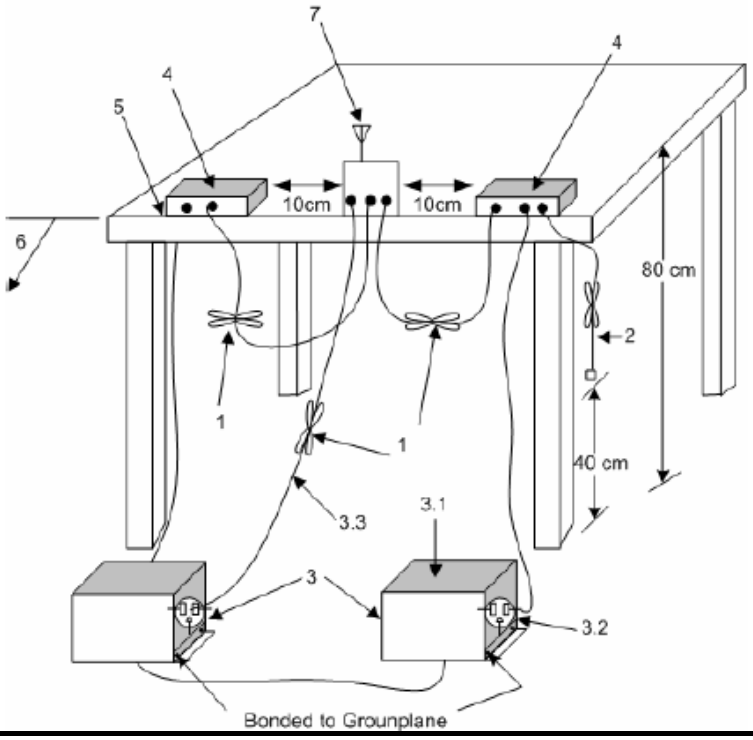
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☐	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

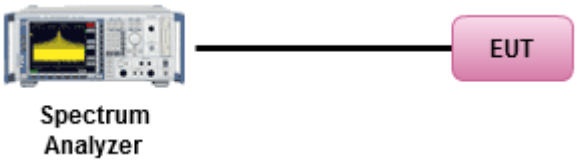
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]
	▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)
	▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If G_{TX} > 23 dBi, then P_{Out} = 30 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	
	Average over on/off periods with duty factor
	☐ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☒ Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 23 dBi, then P_{Out} = 17 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6)..
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the peak power spectral density (PPSD) ≤ 4 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 17 dBm/MHz.
	▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for 0° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40° -35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45°
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 17 dBm/MHz.
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

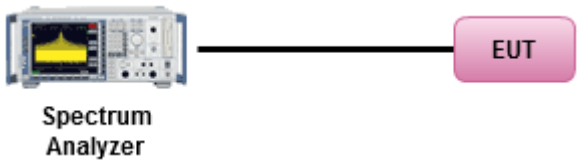
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated 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.

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

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

3.5.2 Measuring Instruments

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

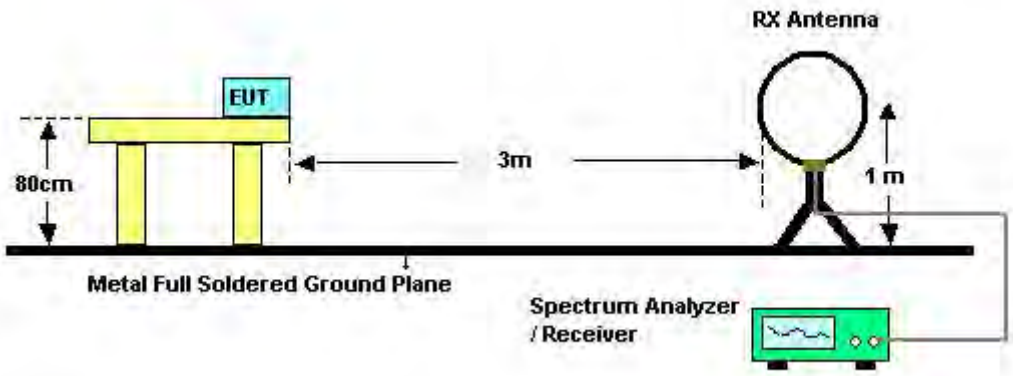
3.5.3 Test Procedures

Test Method		
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
▪ For the transmitter unwanted emissions shall be measured using following options below:		
	▪ Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.	
	▪ Refer as Clause 11.11 of ANSI C63.10-2013 and/or in Section 11.0 of KDB Publication 558074 for unwanted emissions into non-restricted bands.	
	▪ Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.	
		☐ Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).
		☒ Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).
		☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒ Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
▪ For radiated measurement.		
	▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.	
	▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.	
	▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
▪ The any unwanted emissions level shall not exceed the fundamental emission level.		
▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.		

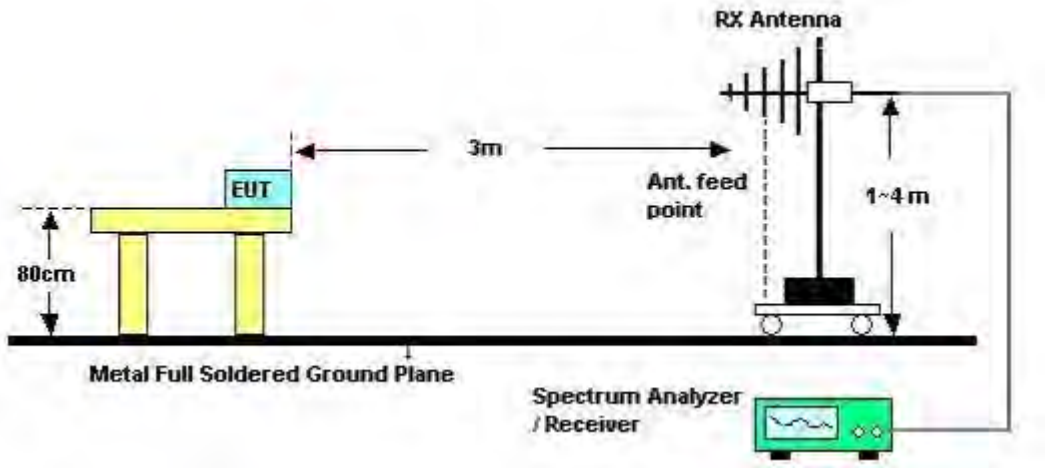
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

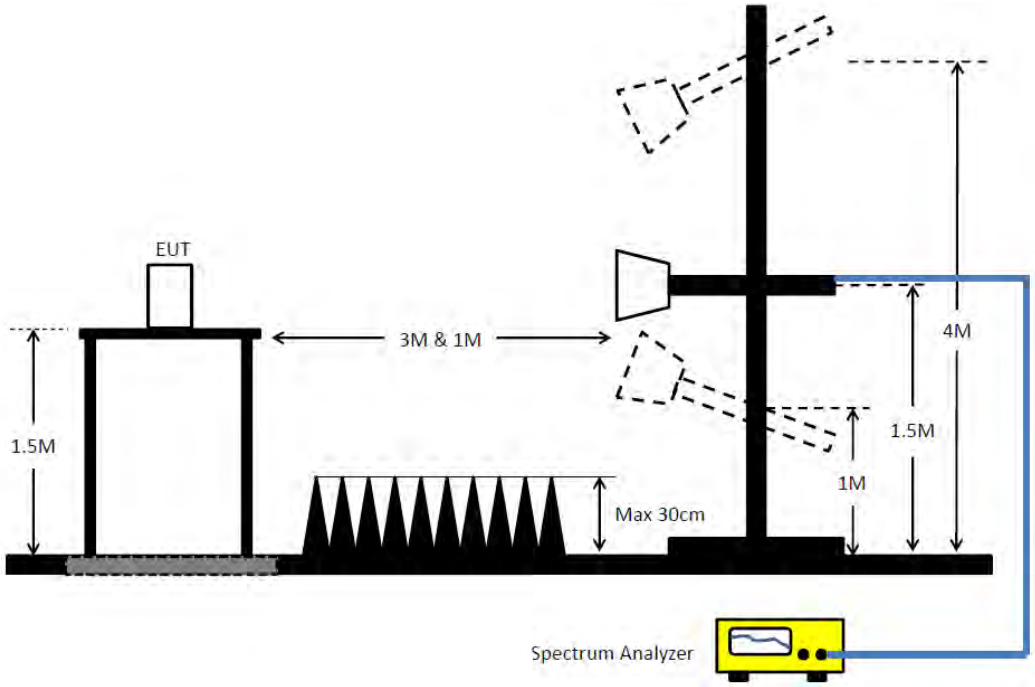
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Frequency Stability

3.6.1 Frequency Stability Limit

Frequency Stability Limit
UNII Devices
▪ In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
LE-LAN Devices
▪ N/A
IEEE Std. 802.11
▪ The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25 ppm maximum for the 2.4 GHz band.

3.6.2 Measuring Instruments

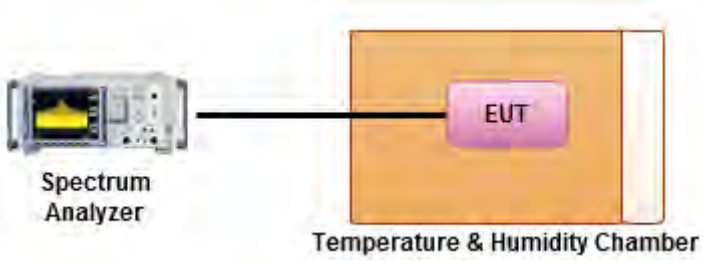
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
▪ Refer as ANSI C63.10, clause 6.8 for frequency stability tests	
	▪ Frequency stability with respect to ambient temperature
	▪ Frequency stability when varying supply voltage
	▪ Extreme temperature is 0℃~40℃.

3.6.4 Test Setup

Frequency Stability



3.6.5 Test Result of Frequency Stability

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 13, 2017	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jun. 28, 2016	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 16, 2016	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-l0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 03, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)

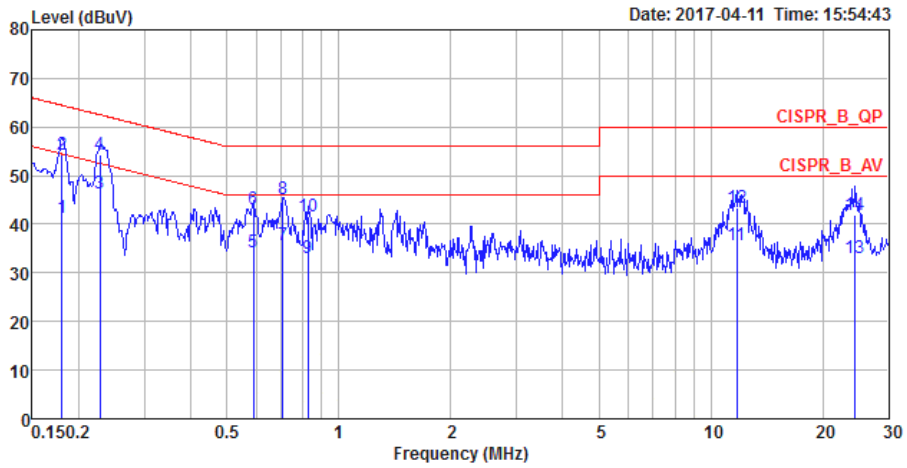
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Conducted (TH01-CB)

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

"*" Calibration Interval of instruments listed above is two years.

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

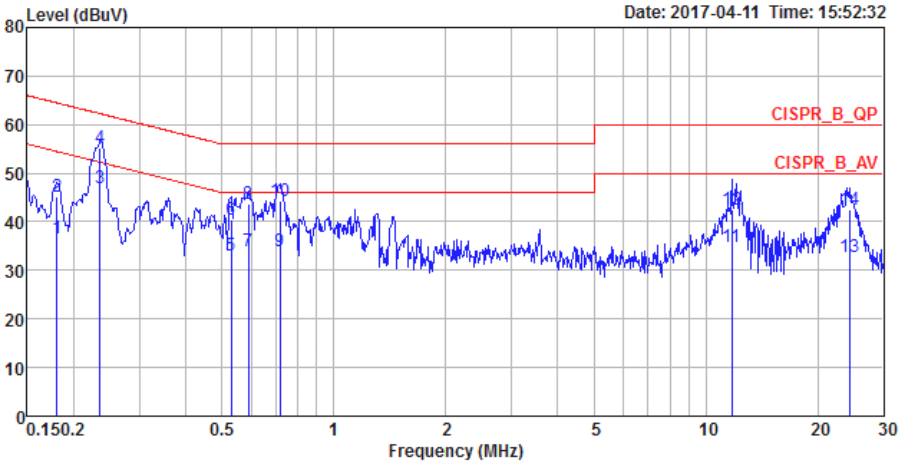
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1806	41.31	-13.15	54.46	31.29	9.97	0.05	Average	NEUTRAL
2	0.1806	54.31	-10.15	64.46	44.29	9.97	0.05	QP	NEUTRAL
3	0.2280	46.33	-6.19	52.52	36.30	9.98	0.05	Average	NEUTRAL
4	0.2280	54.32	-8.20	62.52	44.29	9.98	0.05	QP	NEUTRAL
5	0.5885	34.22	-11.78	46.00	24.20	9.97	0.05	Average	NEUTRAL
6	0.5885	43.16	-12.84	56.00	33.14	9.97	0.05	QP	NEUTRAL
7	0.7084	35.69	-10.31	46.00	25.66	9.98	0.05	Average	NEUTRAL
8	0.7084	45.31	-10.69	56.00	35.28	9.98	0.05	QP	NEUTRAL
9	0.8261	32.96	-13.04	46.00	22.93	9.98	0.05	Average	NEUTRAL
10	0.8261	41.77	-14.23	56.00	31.74	9.98	0.05	QP	NEUTRAL
11	11.7446	35.68	-14.32	50.00	25.29	10.19	0.20	Average	NEUTRAL
12	11.7446	43.49	-16.51	60.00	33.10	10.19	0.20	QP	NEUTRAL
13	24.3995	32.95	-17.05	50.00	22.37	10.31	0.27	Average	NEUTRAL
14	24.3995	41.81	-18.19	60.00	31.23	10.31	0.27	QP	NEUTRAL

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

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



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1806	36.56	-17.90	54.46	26.57	9.94	0.05	Average	LINE
2	0.1806	45.09	-19.37	64.46	35.10	9.94	0.05	QP	LINE
3	0.2353	47.00	-5.26	52.26	37.03	9.92	0.05	Average	LINE
4	0.2353	55.08	-7.18	62.26	45.11	9.92	0.05	QP	LINE
5	0.5293	33.00	-13.00	46.00	23.05	9.91	0.04	Average	LINE
6	0.5293	40.58	-15.42	56.00	30.63	9.91	0.04	QP	LINE
7	0.5885	33.91	-12.09	46.00	23.94	9.92	0.05	Average	LINE
8	0.5885	43.56	-12.44	56.00	33.59	9.92	0.05	QP	LINE
9	0.7160	34.07	-11.93	46.00	24.08	9.94	0.05	Average	LINE
10	0.7160	44.18	-11.82	56.00	34.19	9.94	0.05	QP	LINE
11	11.7446	34.81	-15.19	50.00	24.51	10.10	0.20	Average	LINE
12	11.7446	42.37	-17.63	60.00	32.07	10.10	0.20	QP	LINE
13	24.3995	32.69	-17.31	50.00	22.12	10.30	0.27	Average	LINE
14	24.3995	42.57	-17.43	60.00	32.00	10.30	0.27	QP	LINE

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

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11a-BF_(6Mbps)_3TX	-	-	-	-	-
5.15-5.25GHz	19.725M	16.442M	16M4D1D	18.7M	16.367M
5.725-5.85GHz	16.325M	16.442M	16M4D1D	13.85M	16.367M
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-
5.15-5.25GHz	20.75M	17.641M	17M6D1D	19.525M	17.516M
5.725-5.85GHz	17.55M	17.641M	17M6D1D	16.375M	17.491M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-
5.15-5.25GHz	39.1M	36.082M	36M1D1D	38.7M	35.432M
5.725-5.85GHz	35.35M	36.032M	36M0D1D	31.8M	35.832M
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-
5.15-5.25GHz	83.6M	76.062M	76M1D1D	82.3M	75.062M
5.725-5.85GHz	75.7M	75.862M	75M9D1D	73.6M	75.662M

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;

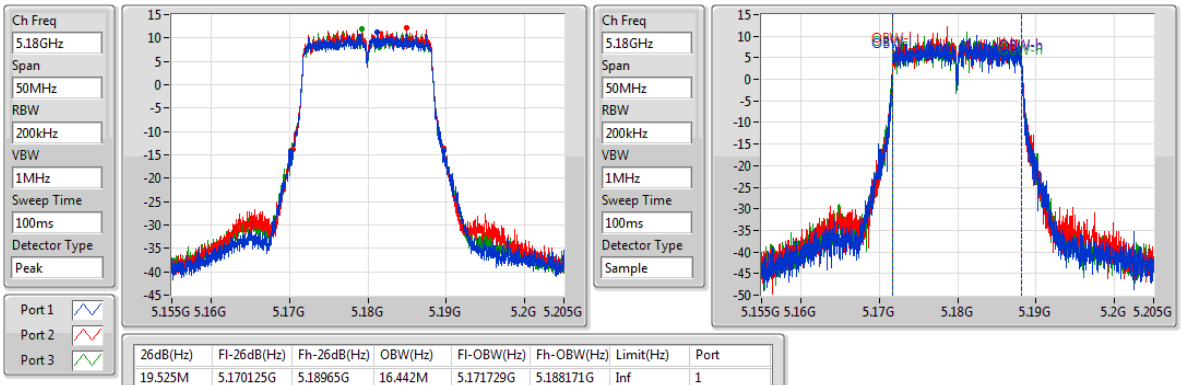
Result

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-BF_(6Mbps)_3TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.525M	16.442M	19.2M	16.417M	19.5M	16.417M
5200MHz	Pass	Inf	19.725M	16.392M	19.15M	16.417M	18.7M	16.367M
5240MHz	Pass	Inf	19.45M	16.367M	18.825M	16.417M	18.975M	16.417M
5745MHz	Pass	500k	16.275M	16.417M	16.275M	16.392M	13.85M	16.367M
5785MHz	Pass	500k	16.3M	16.367M	16.325M	16.442M	15.675M	16.417M
5825MHz	Pass	500k	16.325M	16.417M	15.375M	16.392M	16.3M	16.367M
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.575M	17.641M	19.75M	17.591M	19.8M	17.516M
5200MHz	Pass	Inf	20M	17.541M	19.9M	17.591M	20M	17.591M
5240MHz	Pass	Inf	19.525M	17.516M	20.75M	17.591M	20.225M	17.591M
5745MHz	Pass	500k	17M	17.591M	16.375M	17.566M	17.1M	17.591M
5785MHz	Pass	500k	17.35M	17.616M	17.55M	17.641M	16.725M	17.491M
5825MHz	Pass	500k	16.55M	17.591M	16.925M	17.566M	17.25M	17.616M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	39.1M	35.882M	38.95M	35.732M	38.95M	36.032M
5230MHz	Pass	Inf	38.95M	35.432M	39.05M	36.082M	38.7M	35.632M
5755MHz	Pass	500k	34.3M	36.032M	32.45M	35.832M	31.8M	35.832M
5795MHz	Pass	500k	34.95M	35.932M	35.35M	36.032M	35.35M	35.932M
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.3M	75.062M	83.6M	76.062M	82.8M	75.462M
5775MHz	Pass	500k	73.6M	75.662M	75.7M	75.762M	74.5M	75.862M

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

802.11a-BF_(6Mbps)_3TX **EBW**

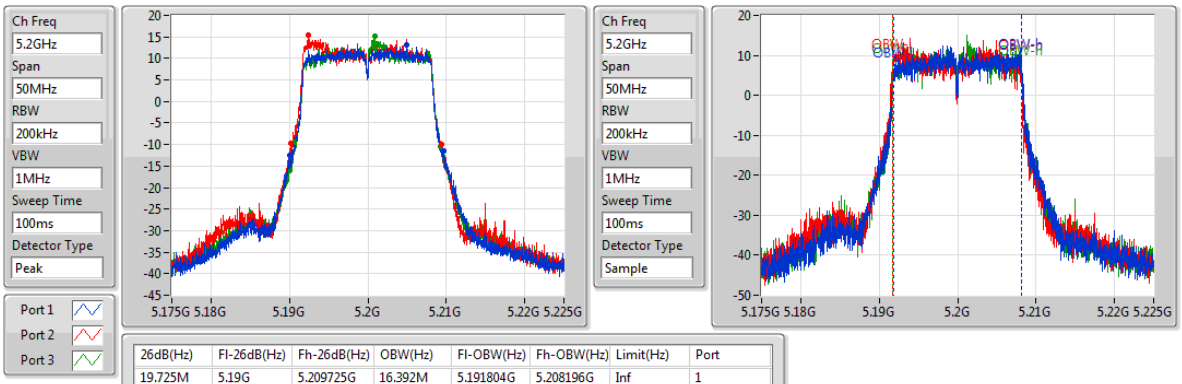
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.525M	5.170125G	5.18965G	16.442M	5.171729G	5.188171G	Inf	1
19.2M	5.170475G	5.189675G	16.417M	5.171754G	5.188171G	Inf	2
19.5M	5.170225G	5.189725G	16.417M	5.171754G	5.188171G	Inf	3

802.11a-BF_(6Mbps)_3TX **EBW**

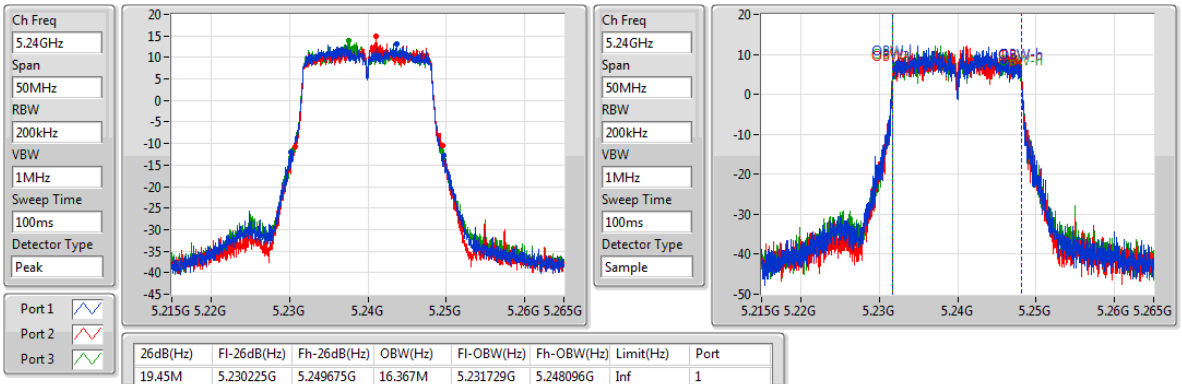
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.725M	5.19G	5.209725G	16.392M	5.191804G	5.208196G	Inf	1
19.15M	5.190225G	5.209375G	16.417M	5.191679G	5.208096G	Inf	2
18.7M	5.1906G	5.2093G	16.367M	5.191779G	5.208146G	Inf	3

802.11a-BF_(6Mbps)_3TX **EBW**

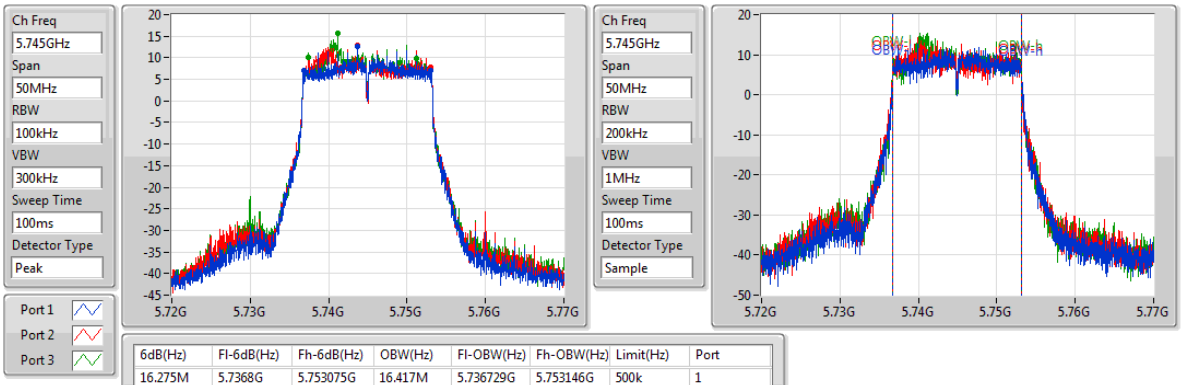
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.45M	5.230225G	5.249675G	16.367M	5.231729G	5.248096G	Inf	1
18.825M	5.2307G	5.249525G	16.417M	5.231754G	5.248171G	Inf	2
18.975M	5.230475G	5.24945G	16.417M	5.231729G	5.248146G	Inf	3

802.11a-BF_(6Mbps)_3TX EBW

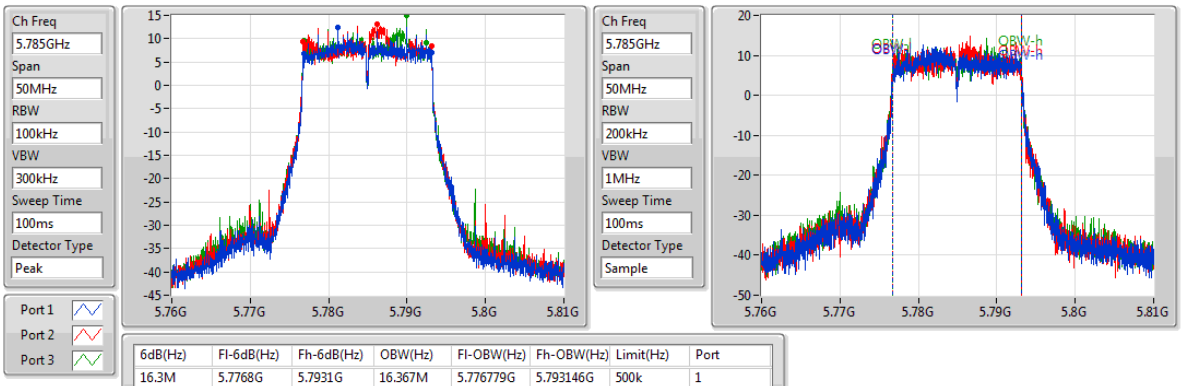
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	5.7368G	5.753075G	16.417M	5.736729G	5.753146G	500k	1
16.275M	5.7368G	5.753075G	16.392M	5.736729G	5.753121G	500k	2
13.85M	5.7374G	5.75125G	16.367M	5.736754G	5.753121G	500k	3

802.11a-BF_(6Mbps)_3TX EBW

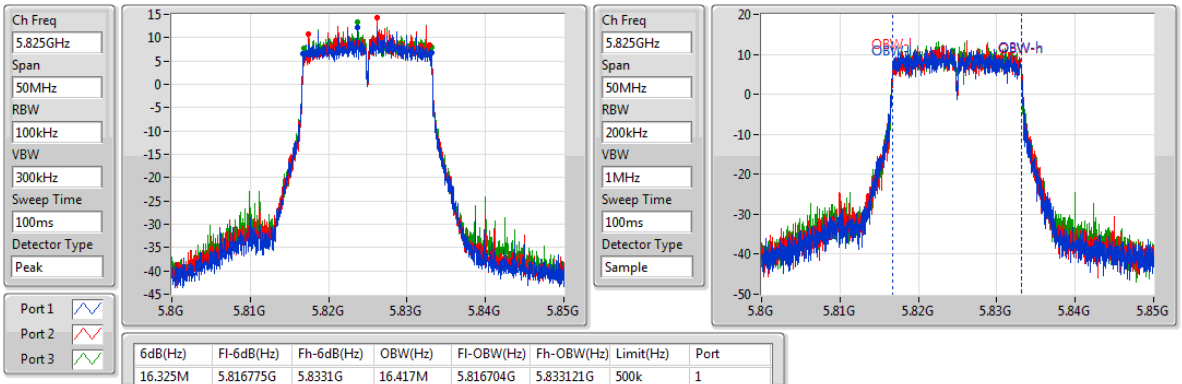
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	5.7768G	5.7931G	16.367M	5.776779G	5.793146G	500k	1
16.325M	5.776775G	5.7931G	16.442M	5.776704G	5.793146G	500k	2
15.675M	5.776825G	5.7925G	16.417M	5.776704G	5.793121G	500k	3

802.11a-BF_(6Mbps)_3TX EBW

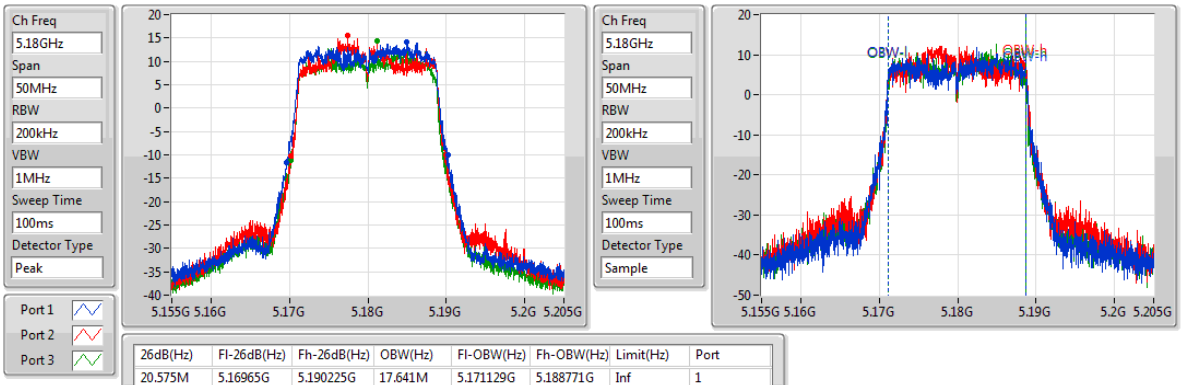
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.816775G	5.8331G	16.417M	5.816704G	5.833121G	500k	1
15.375M	5.81745G	5.832825G	16.392M	5.816754G	5.833146G	500k	2
16.3M	5.8168G	5.8331G	16.367M	5.816754G	5.833121G	500k	3

802.11ac VHT20-BF_Nss1,(MCS0)_3TX **EBW**

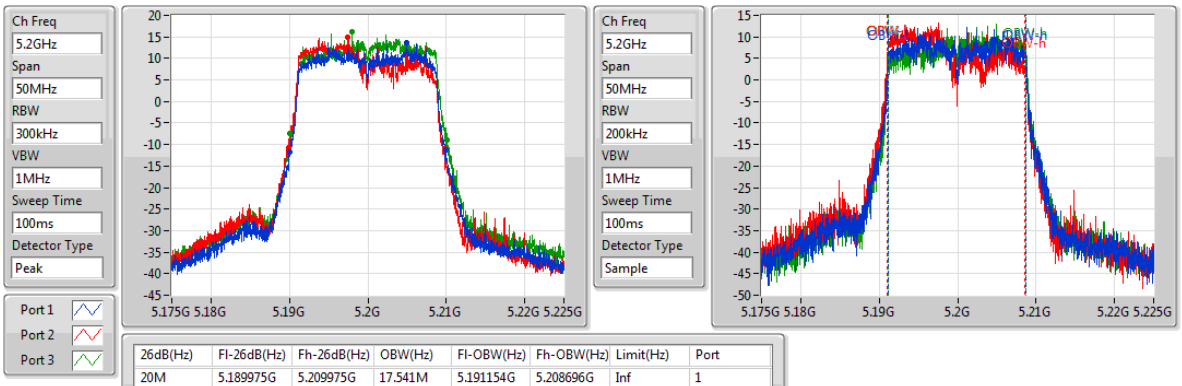
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.575M	5.16965G	5.190225G	17.641M	5.171129G	5.188771G	Inf	1
19.75M	5.170225G	5.189975G	17.591M	5.171179G	5.188771G	Inf	2
19.8M	5.170125G	5.189925G	17.516M	5.171179G	5.188696G	Inf	3

802.11ac VHT20-BF_Nss1,(MCS0)_3TX **EBW**

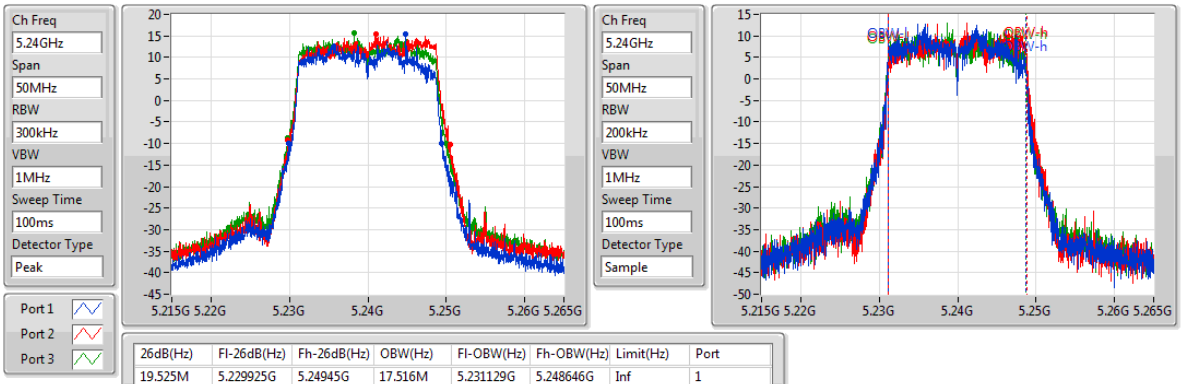
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.189975G	5.209975G	17.541M	5.191154G	5.208696G	Inf	1
19.9M	5.18985G	5.20975G	17.591M	5.191029G	5.208621G	Inf	2
20M	5.190075G	5.210075G	17.591M	5.191179G	5.208771G	Inf	3

802.11ac VHT20-BF_Nss1,(MCS0)_3TX **EBW**

5240MHz

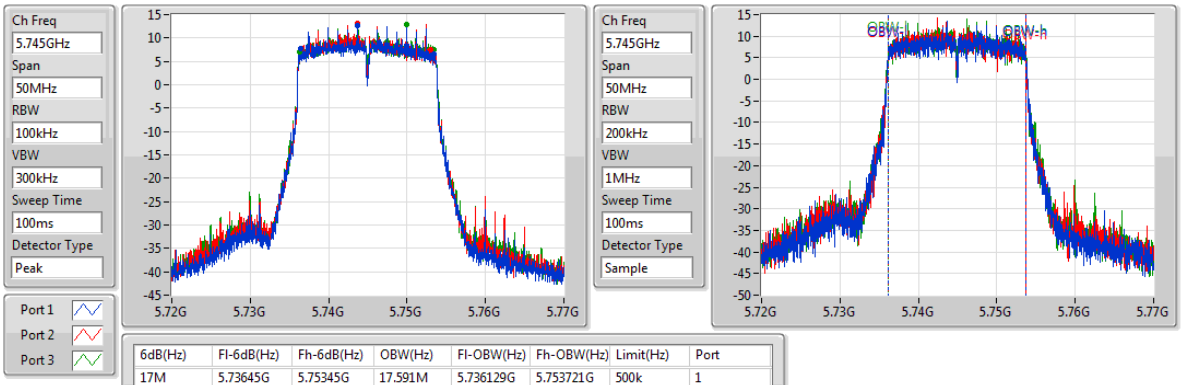


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.525M	5.229925G	5.24945G	17.516M	5.231129G	5.248646G	Inf	1
20.75M	5.2298G	5.25055G	17.591M	5.231204G	5.248796G	Inf	2
20.225M	5.229775G	5.25G	17.591M	5.231104G	5.248696G	Inf	3

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

EBW

5745MHz

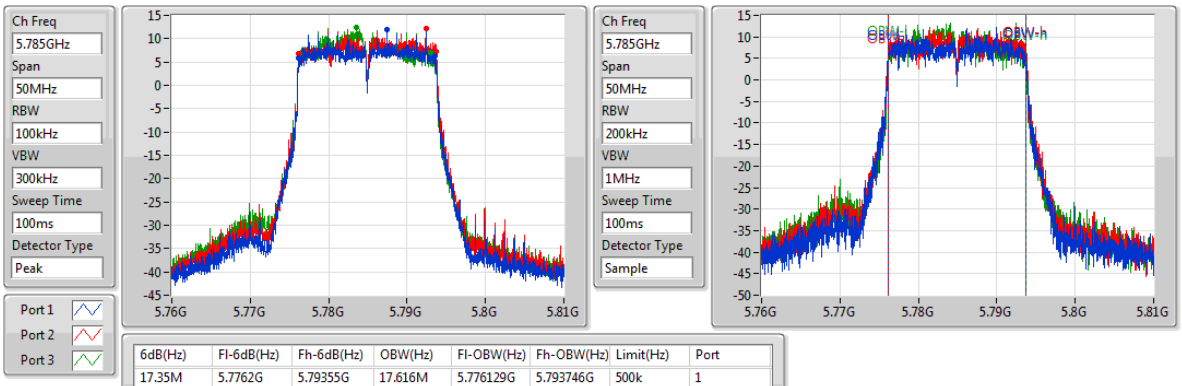


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17M	5.73645G	5.75345G	17.591M	5.736129G	5.753721G	500k	1
16.375M	5.736625G	5.753G	17.566M	5.736129G	5.753696G	500k	2
17.1M	5.73635G	5.75345G	17.591M	5.736129G	5.753721G	500k	3

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

EBW

5785MHz

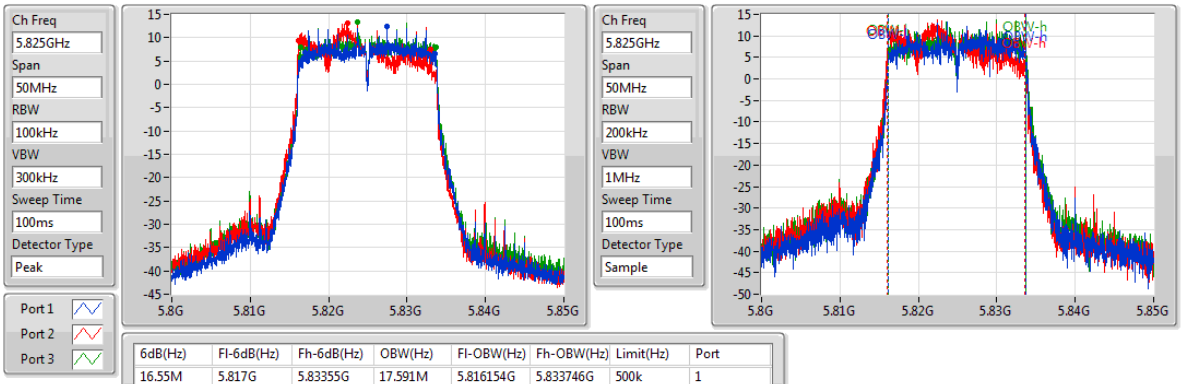


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.35M	5.7762G	5.79355G	17.616M	5.776129G	5.793746G	500k	1
17.55M	5.776175G	5.793725G	17.641M	5.776129G	5.793771G	500k	2
16.725M	5.77635G	5.793075G	17.491M	5.776154G	5.793646G	500k	3

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

EBW

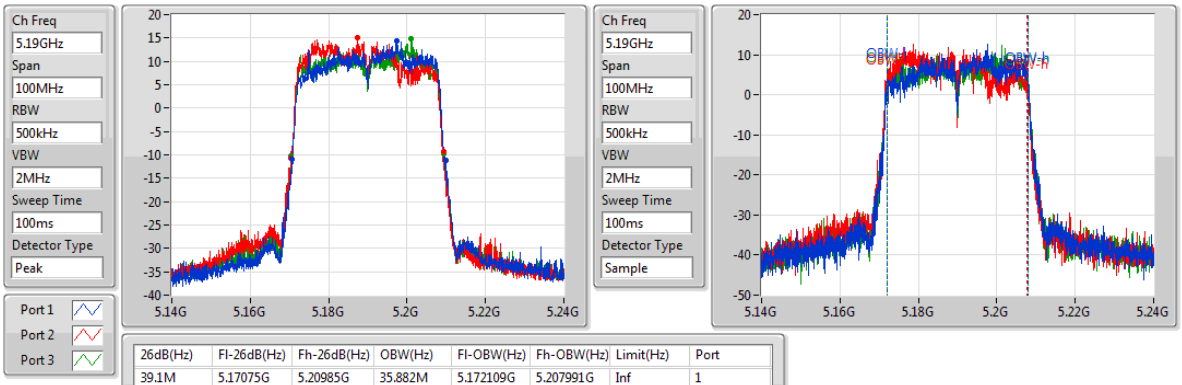
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.55M	5.817G	5.83355G	17.591M	5.816154G	5.833746G	500k	1
16.925M	5.81615G	5.833075G	17.566M	5.816004G	5.833571G	500k	2
17.25M	5.81645G	5.8337G	17.616M	5.816129G	5.833746G	500k	3

802.11ac VHT40-BF_Nss1,(MCS0)_3TX EBW

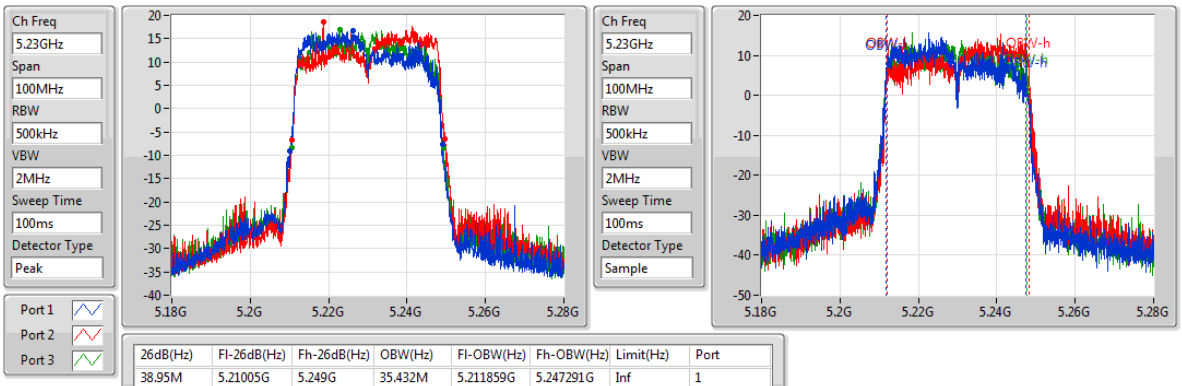
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.1M	5.17075G	5.20985G	35.882M	5.172109G	5.207991G	Inf	1
38.95M	5.17035G	5.2093G	35.732M	5.171909G	5.207641G	Inf	2
38.95M	5.17045G	5.2094G	36.032M	5.171909G	5.207941G	Inf	3

802.11ac VHT40-BF_Nss1,(MCS0)_3TX EBW

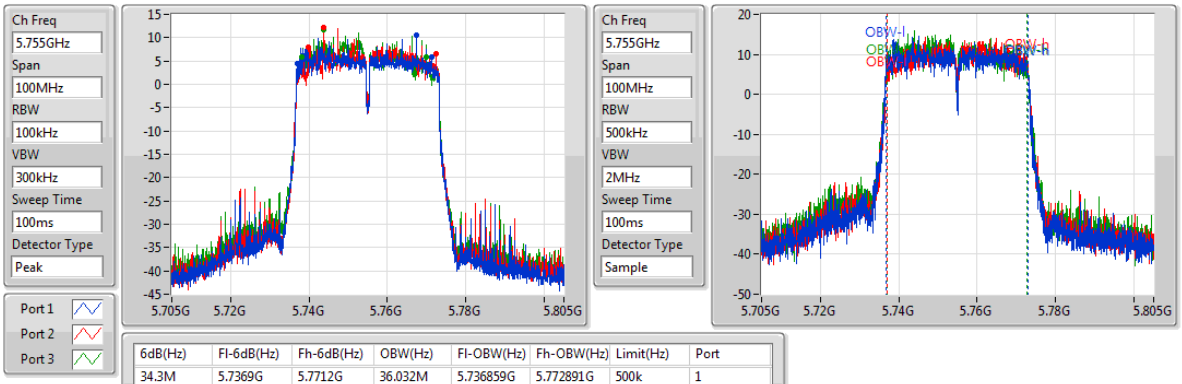
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.95M	5.21005G	5.249G	35.432M	5.211859G	5.247291G	Inf	1
39.05M	5.2107G	5.24975G	36.082M	5.212059G	5.248141G	Inf	2
38.7M	5.2106G	5.2493G	35.632M	5.211959G	5.247591G	Inf	3

802.11ac VHT40-BF_Nss1,(MCS0)_3TX EBW

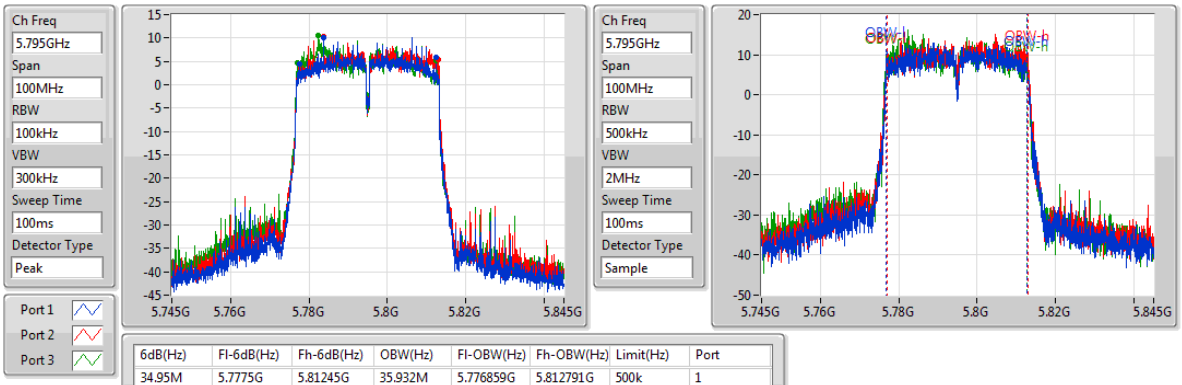
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.3M	5.7369G	5.7712G	36.032M	5.736859G	5.772891G	500k	1
32.45M	5.73995G	5.7724G	35.832M	5.737109G	5.772941G	500k	2
31.8M	5.7382G	5.77G	35.832M	5.736959G	5.772791G	500k	3

802.11ac VHT40-BF_Nss1,(MCS0)_3TX EBW

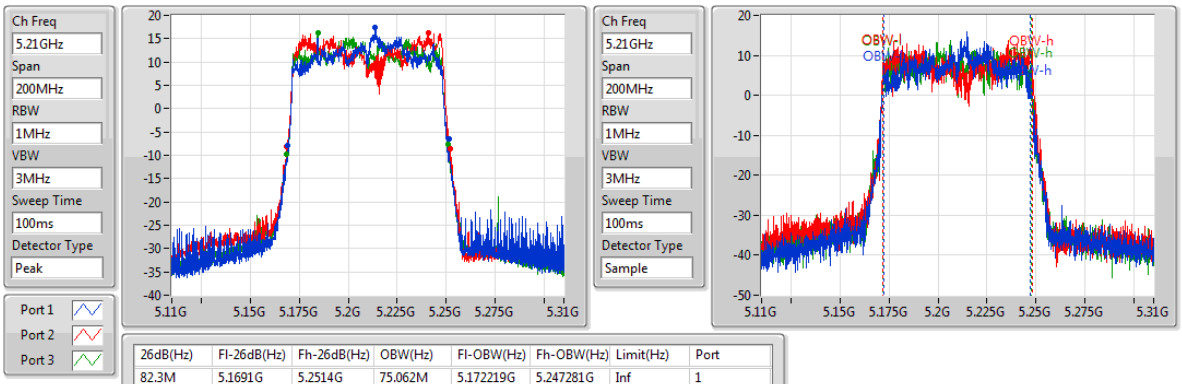
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.95M	5.7775G	5.81245G	35.932M	5.776859G	5.812791G	500k	1
35.35M	5.77755G	5.8129G	36.032M	5.776959G	5.812991G	500k	2
35.35M	5.77715G	5.8125G	35.932M	5.776859G	5.812791G	500k	3

802.11ac VHT80-BF_Nss1,(MCS0)_3TX EBW

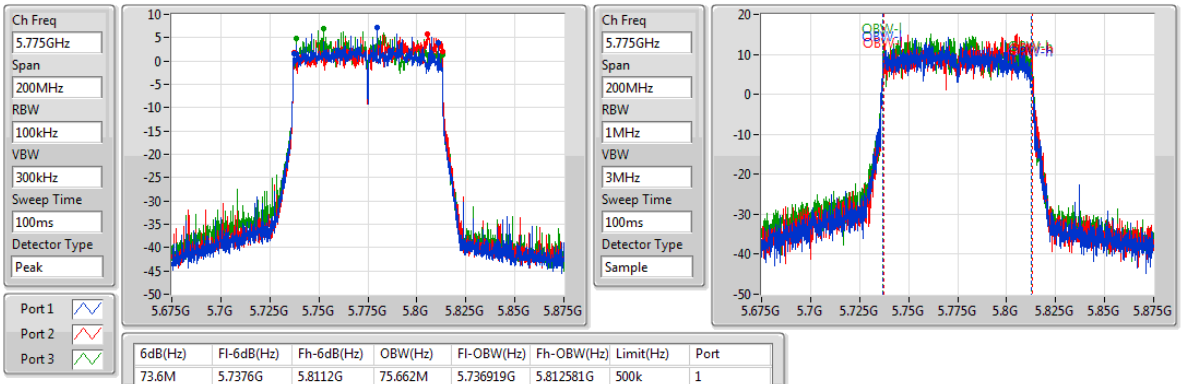
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.3M	5.1691G	5.2514G	75.062M	5.172219G	5.247281G	Inf	1
83.6M	5.1685G	5.2521G	76.062M	5.172019G	5.248081G	Inf	2
82.8M	5.1684G	5.2512G	75.462M	5.172019G	5.247481G	Inf	3

802.11ac VHT80-BF_Nss1,(MCS0)_3TX EBW

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
73.6M	5.7376G	5.8112G	75.662M	5.736919G	5.812581G	500k	1
75.7M	5.7375G	5.8132G	75.762M	5.737319G	5.813081G	500k	2
74.5M	5.7387G	5.8132G	75.862M	5.736919G	5.812781G	500k	3

Summary

Mode	Total Power (dBm)	Total Power (W)
802.11a-BF_(6Mbps)_3TX	-	-
5.15-5.25GHz	27.19	0.52360
5.725-5.85GHz	27.85	0.60954
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-
5.15-5.25GHz	27.35	0.54325
5.725-5.85GHz	27.91	0.61802
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-
5.15-5.25GHz	27.61	0.57677
5.725-5.85GHz	27.96	0.62517
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-
5.15-5.25GHz	26.16	0.41305
5.725-5.85GHz	27.74	0.59429

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a-BF_(6Mbps)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	8.07	21.35	22.28	21.5	26.50	27.93
5200MHz	Pass	8.07	22.27	22.65	22.34	27.19	27.93
5240MHz	Pass	8.07	22.16	22.24	22.39	27.04	27.93
5745MHz	Pass	8.01	22.68	22.82	23.03	27.62	27.99
5785MHz	Pass	8.01	22.56	22.94	22.98	27.60	27.99
5825MHz	Pass	8.01	22.81	22.97	23.42	27.85	27.99
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	8.07	22.23	22.95	22.26	27.26	27.93
5200MHz	Pass	8.07	22.51	22.78	22.43	27.35	27.93
5240MHz	Pass	8.07	22.29	22.71	22.37	27.23	27.93
5745MHz	Pass	8.01	23.02	23.15	23.24	27.91	27.99
5785MHz	Pass	8.01	22.56	23.21	23.36	27.83	27.99
5825MHz	Pass	8.01	22.83	23.06	23.41	27.88	27.99
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5190MHz	Pass	8.07	19.99	20.72	20.13	25.06	27.93
5230MHz	Pass	8.07	22.57	23.05	22.89	27.61	27.93
5755MHz	Pass	8.01	22.85	22.92	23.64	27.92	27.99
5795MHz	Pass	8.01	22.66	23.41	23.45	27.96	27.99
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5210MHz	Pass	8.07	20.88	22.01	21.19	26.16	27.93
5775MHz	Pass	8.01	22.53	23.05	23.28	27.74	27.99

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

Summary

Mode	PD (dBm/RBW)
802.11a-BF_(6Mbps)_3TX	-
5.15-5.25GHz	14.78
5.725-5.85GHz	14.89
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-
5.15-5.25GHz	14.78
5.725-5.85GHz	15.10
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-
5.15-5.25GHz	12.76
5.725-5.85GHz	12.29
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-
5.15-5.25GHz	7.84
5.725-5.85GHz	8.51

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

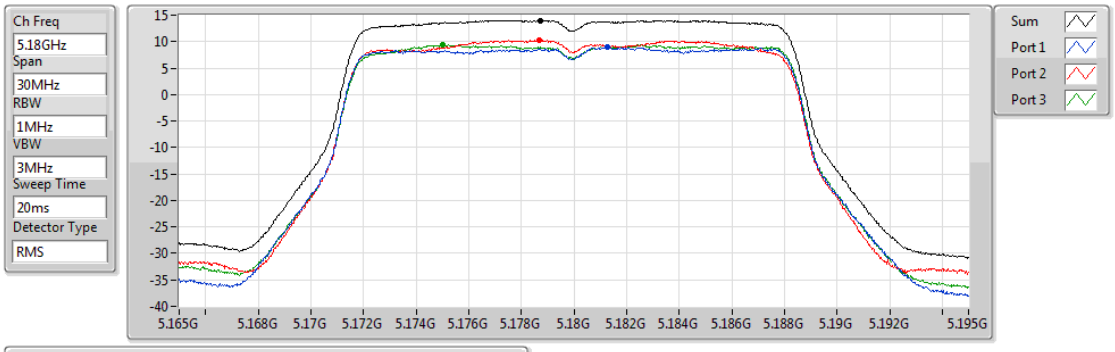
Result

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-BF_(6Mbps)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	8.07	8.93	10.28	9.46	14.03	14.93
5200MHz	Pass	8.07	10.40	10.72	9.99	14.78	14.93
5240MHz	Pass	8.07	10.01	10.18	10.18	14.62	14.93
5745MHz	Pass	8.01	9.53	9.90	10.68	14.62	27.99
5785MHz	Pass	8.01	9.57	10.07	10.31	14.62	27.99
5825MHz	Pass	8.01	9.70	10.10	10.84	14.89	27.99
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	8.07	10.49	12.25	10.66	14.73	14.93
5200MHz	Pass	8.07	10.51	11.93	10.56	14.78	14.93
5240MHz	Pass	8.07	11.13	10.57	9.98	14.62	14.93
5745MHz	Pass	8.01	9.78	10.33	10.56	14.85	27.99
5785MHz	Pass	8.01	8.77	11.01	12.35	14.96	27.99
5825MHz	Pass	8.01	9.24	12.67	11.07	15.10	27.99
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5190MHz	Pass	8.07	6.89	7.75	6.71	10.19	14.93
5230MHz	Pass	8.07	9.74	9.78	9.56	12.76	14.93
5755MHz	Pass	8.01	8.38	8.19	9.90	12.29	27.99
5795MHz	Pass	8.01	6.58	7.88	8.70	11.79	27.99
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5210MHz	Pass	8.07	6.63	5.58	4.99	7.84	14.93
5775MHz	Pass	8.01	3.11	5.63	6.09	8.51	27.99

DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a-BF_(6Mbps)_3TX PSD

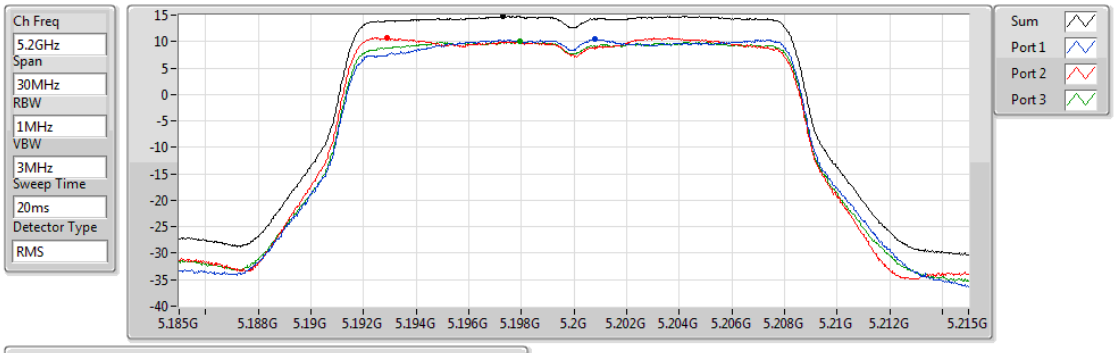
5180MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.03	14.03	8.93	10.28	9.46

802.11a-BF_(6Mbps)_3TX PSD

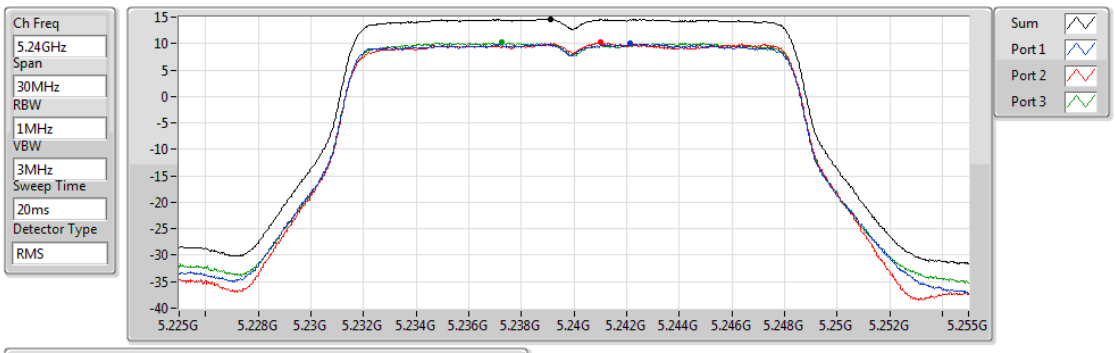
5200MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.78	14.78	10.40	10.72	9.99

802.11a-BF_(6Mbps)_3TX PSD

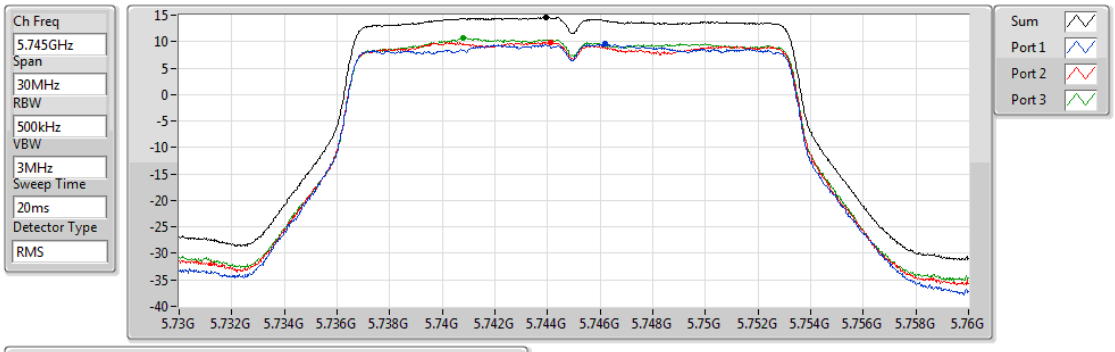
5240MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.62	14.62	10.01	10.18	10.18

802.11a-BF_(6Mbps)_3TX PSD

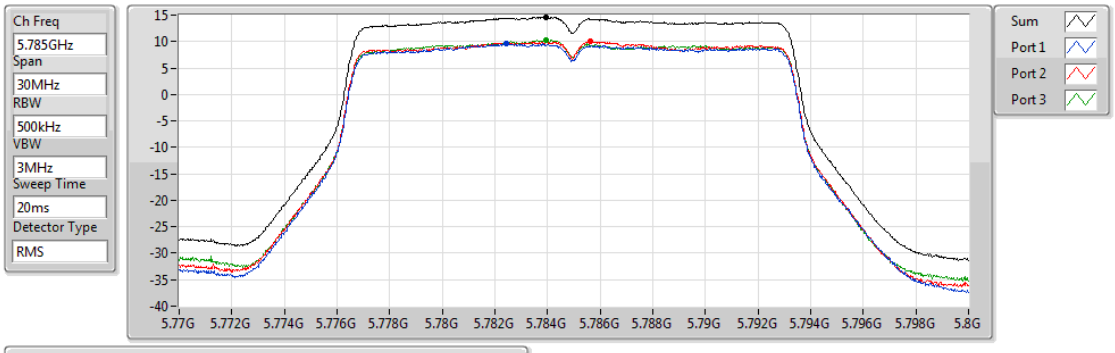
5745MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.62	14.62	9.53	9.90	10.68

802.11a-BF_(6Mbps)_3TX PSD

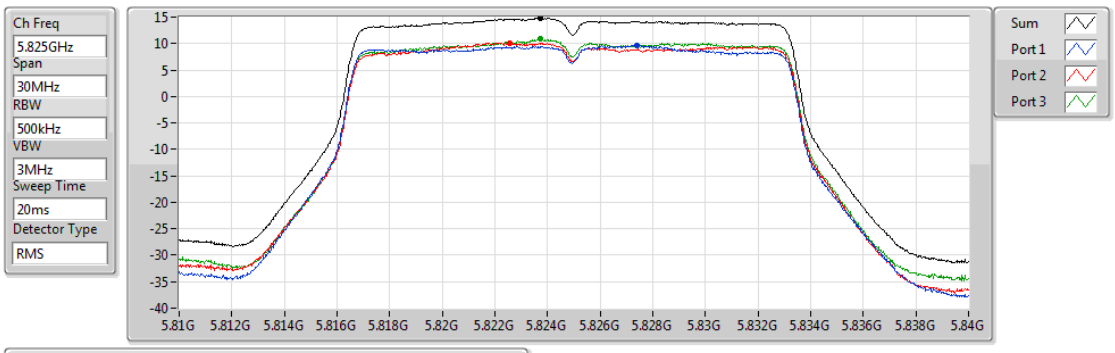
5785MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.62	14.62	9.57	10.07	10.31

802.11a-BF_(6Mbps)_3TX PSD

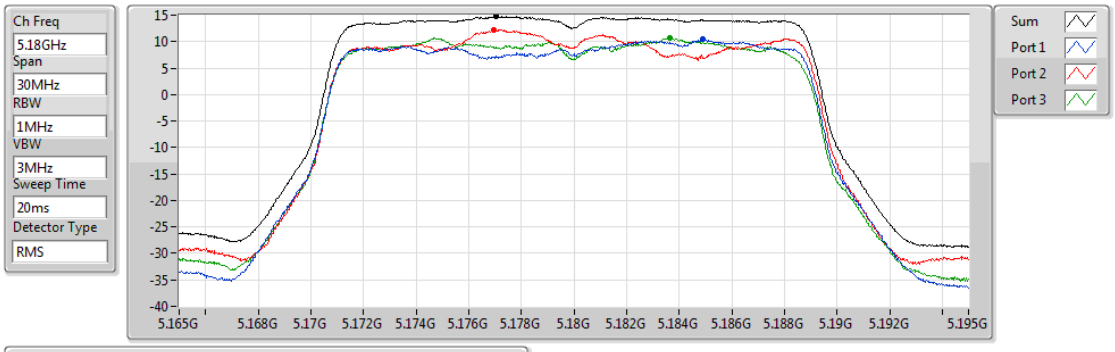
5825MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.89	14.89	9.70	10.10	10.84

802.11ac VHT20-BF_Nss1,(MCS0)_3TX PSD

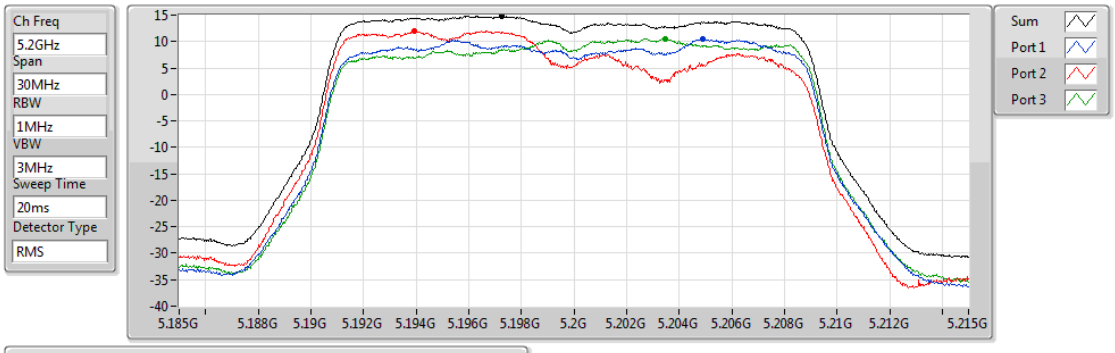
5180MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.73	14.73	10.49	12.25	10.66

802.11ac VHT20-BF_Nss1,(MCS0)_3TX PSD

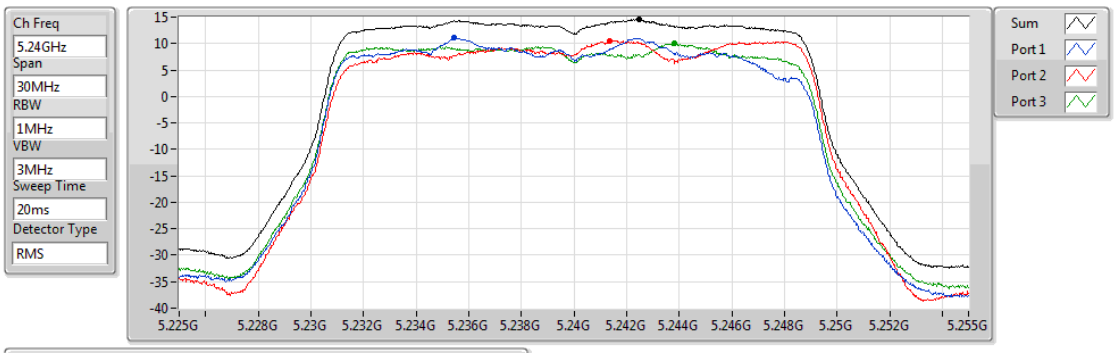
5200MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.78	14.78	10.51	11.93	10.56

802.11ac VHT20-BF_Nss1,(MCS0)_3TX PSD

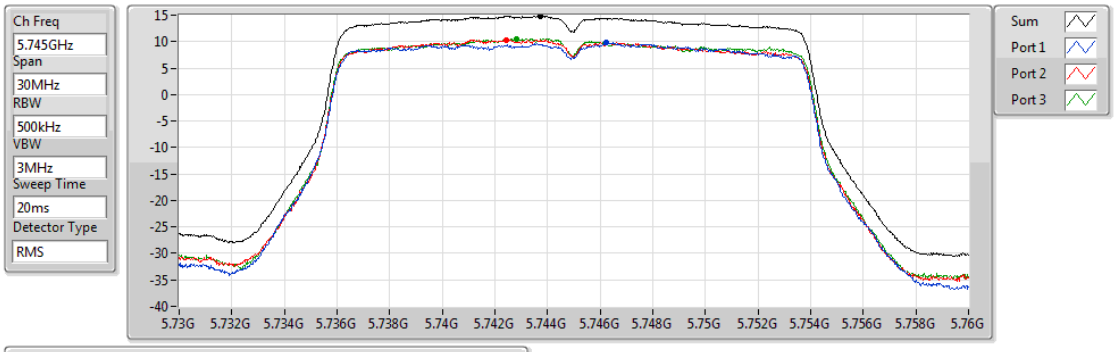
5240MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.62	14.62	11.13	10.57	9.98

802.11ac VHT20-BF_Nss1,(MCS0)_3TX **PSD**

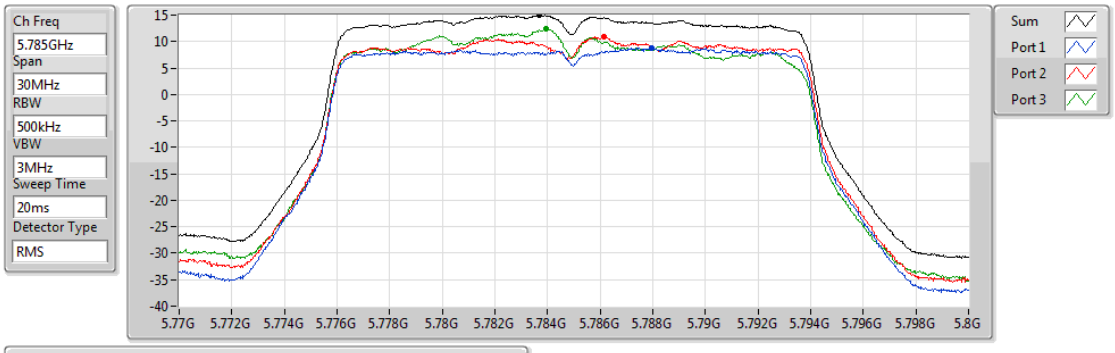
5745MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.85	14.85	9.78	10.33	10.56

802.11ac VHT20-BF_Nss1,(MCS0)_3TX **PSD**

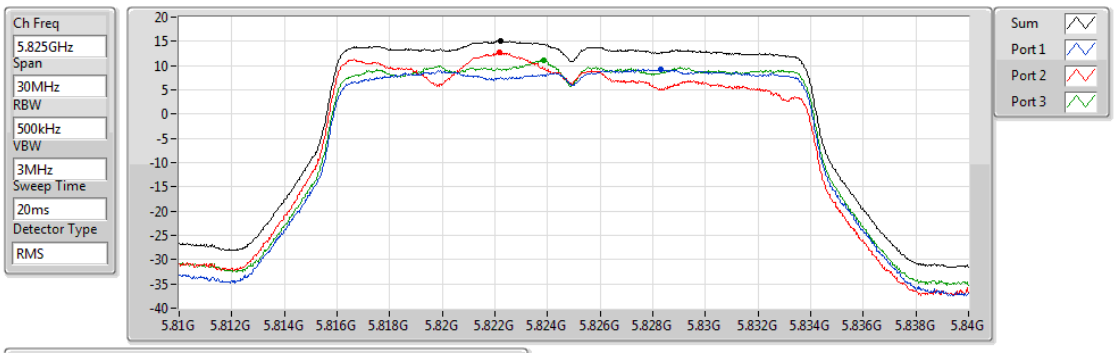
5785MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.96	14.96	8.77	11.01	12.35

802.11ac VHT20-BF_Nss1,(MCS0)_3TX **PSD**

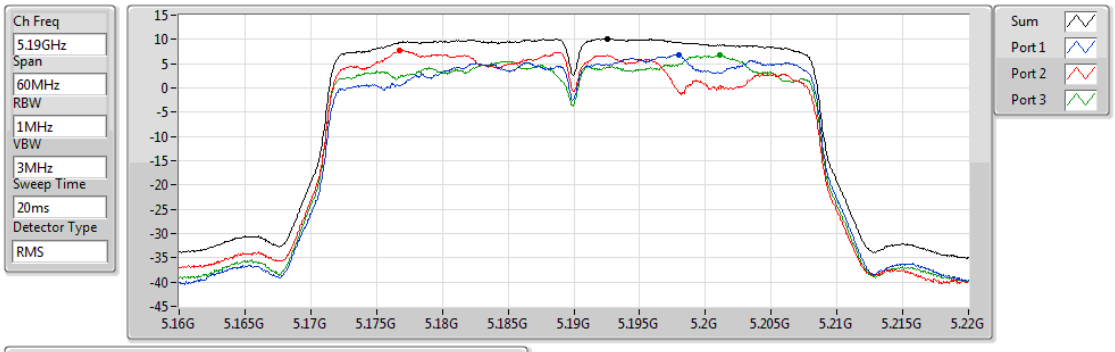
5825MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.10	15.10	9.24	12.67	11.07

802.11ac VHT40-BF_Nss1,(MCS0)_3TX PSD

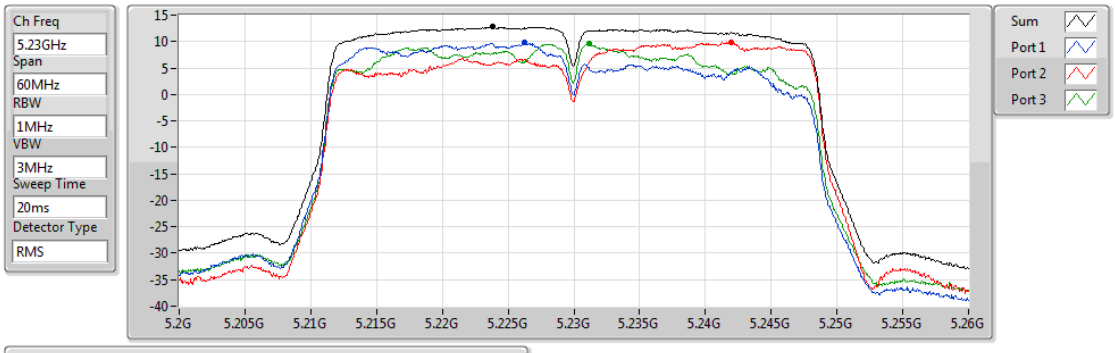
5190MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.19	10.19	6.89	7.75	6.71

802.11ac VHT40-BF_Nss1,(MCS0)_3TX PSD

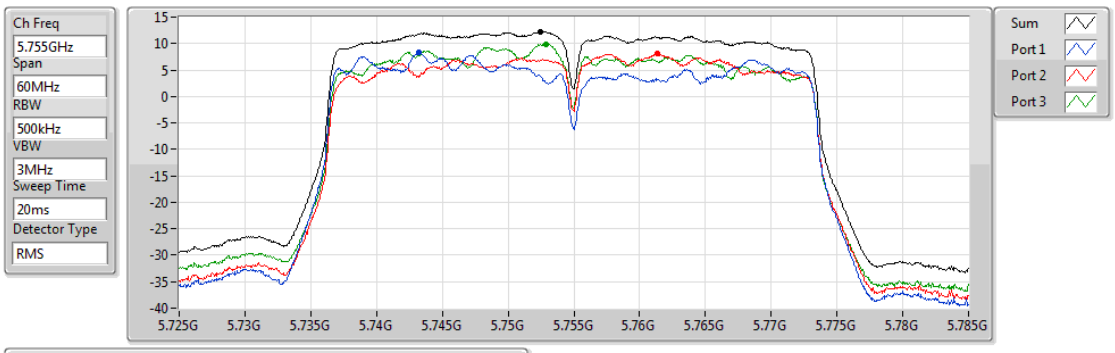
5230MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.76	12.76	9.74	9.78	9.56

802.11ac VHT40-BF_Nss1,(MCS0)_3TX PSD

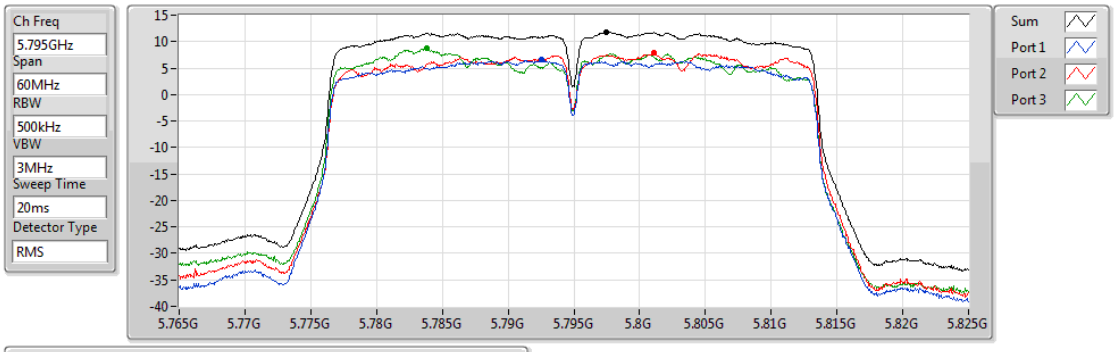
5755MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.29	12.29	8.38	8.19	9.90

802.11ac VHT40-BF_Nss1,(MCS0)_3TX PSD

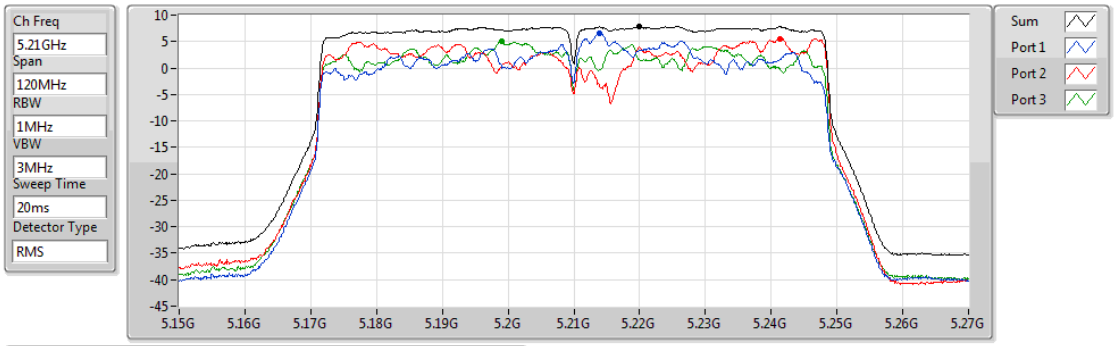
5795MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.79	11.79	6.58	7.88	8.70

802.11ac VHT80-BF_Nss1,(MCS0)_3TX PSD

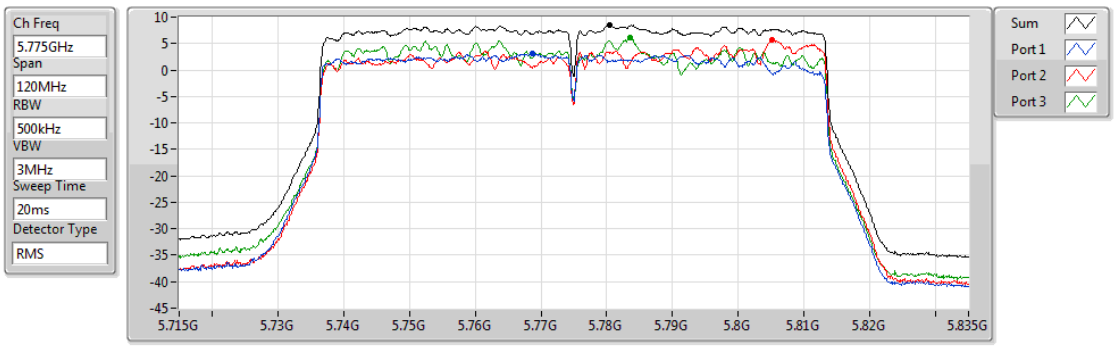
5210MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.84	7.84	6.63	5.58	4.99

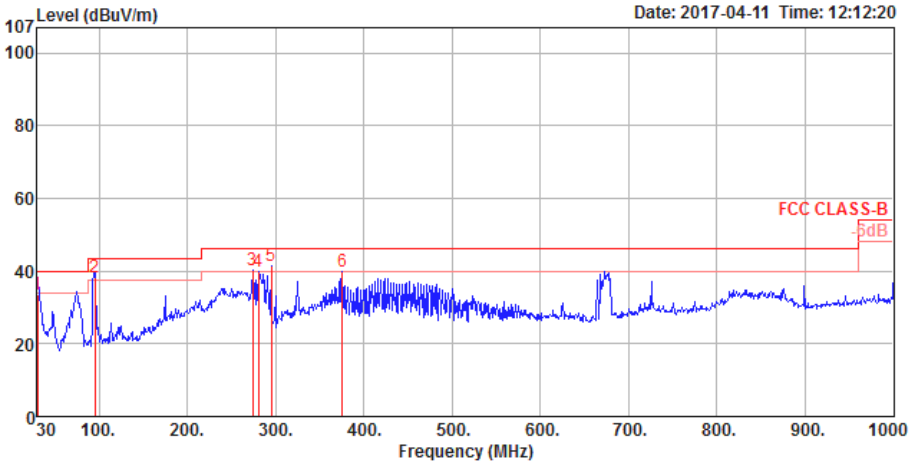
802.11ac VHT80-BF_Nss1,(MCS0)_3TX PSD

5775MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.51	8.51	3.11	5.63	6.09

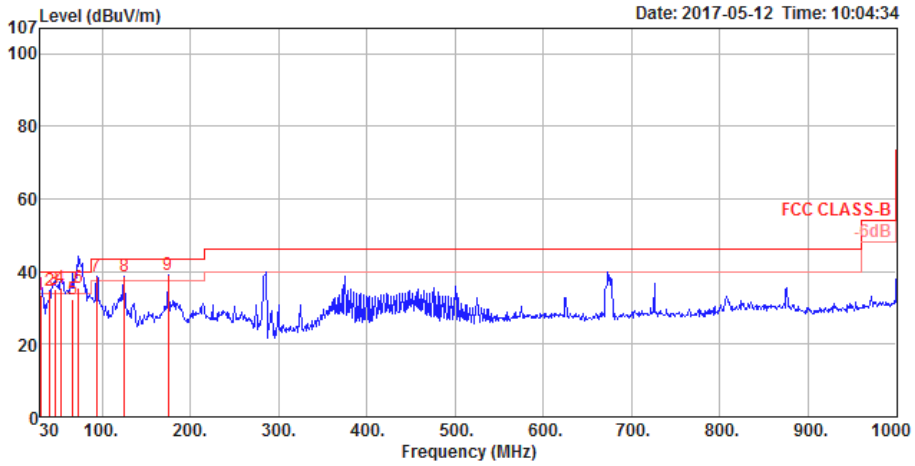
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.00	33.66	40.00	-6.34	39.00	0.53	25.60	31.47	125	150	QP	HORIZONTAL
2	94.99	38.13	43.50	-5.37	53.00	0.87	16.11	31.85	125	146	QP	HORIZONTAL
3	274.44	40.11	46.00	-5.89	51.58	1.31	19.24	32.02	125	146	Peak	HORIZONTAL
4	280.26	39.88	46.00	-6.12	51.29	1.32	19.30	32.03	125	118	Peak	HORIZONTAL
5	294.81	41.49	46.00	-4.51	52.66	1.36	19.50	32.03	125	147	Peak	HORIZONTAL
6	375.32	39.89	46.00	-6.11	48.78	1.50	21.73	32.12	100	250	Peak	HORIZONTAL

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

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



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.00	33.66	40.00	-6.34	39.00	0.53	25.60	31.47	125	23	QP	VERTICAL
2	40.67	34.82	40.00	-5.18	46.66	0.54	19.29	31.67	100	155	Peak	VERTICAL
3	46.49	35.16	40.00	-4.84	50.00	0.61	16.27	31.72	100	246	QP	VERTICAL
4	53.28	35.38	40.00	-4.62	52.50	0.61	14.04	31.77	100	207	QP	VERTICAL
5	66.86	32.38	40.00	-7.62	51.00	0.67	12.53	31.82	150	232	QP	VERTICAL
6	73.65	35.71	40.00	-4.29	54.01	0.75	12.79	31.84	122	87	QP	VERTICAL
7	94.02	38.65	43.50	-4.85	53.73	0.85	15.92	31.85	125	180	Peak	VERTICAL
8	125.06	38.57	43.50	-4.93	51.12	0.89	18.45	31.89	100	75	Peak	VERTICAL
9	174.53	39.23	43.50	-4.27	54.50	1.05	15.61	31.93	150	13	Peak	VERTICAL

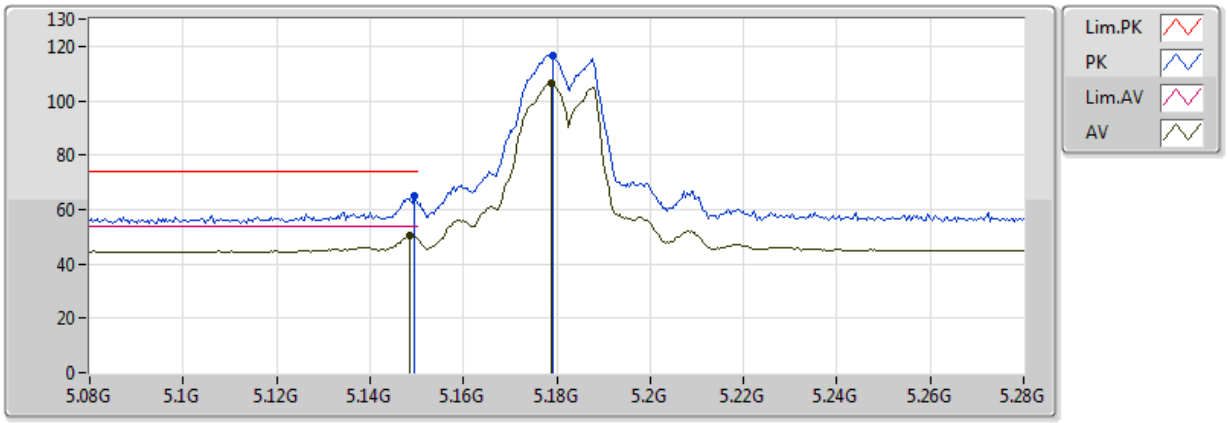
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
5.725-5.85GHz	Pass	PK	5.6504G	67.93	68.50	-0.57	6.21	3	V	300	2.18	-

802.11a-BF_(6Mbps)_3TX

5180MHz_TX

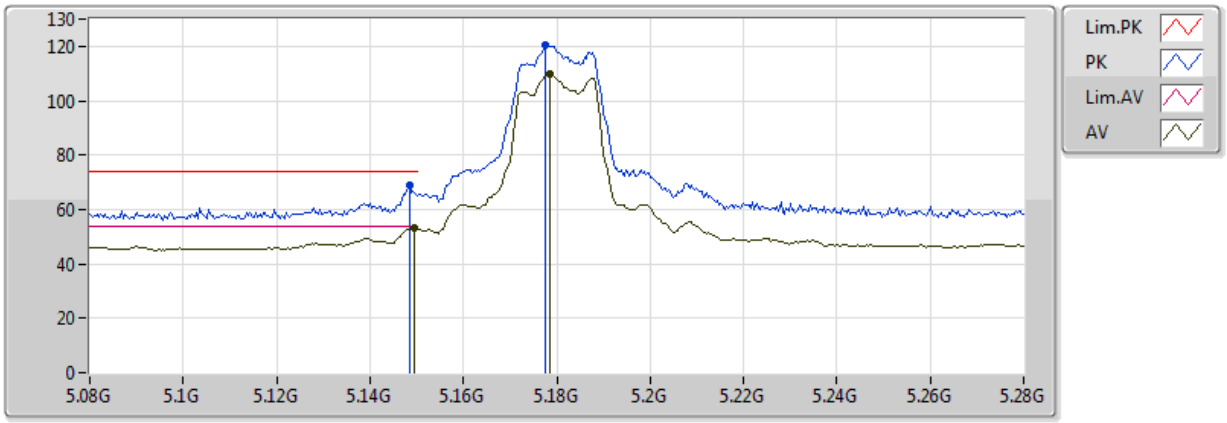


20170412
EUT Z_3TX
TXBF
Setting 20.5
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1484G	50.17	54.00	-3.83	4.27	3	V	334	2.31	-
AV	5.1788G	106.34	Inf	-Inf	4.33	3	V	334	2.31	-
PK	5.1496G	65.05	74.00	-8.95	4.27	3	V	334	2.31	-
PK	5.1792G	116.66	Inf	-Inf	4.33	3	V	334	2.31	-

802.11a-BF_(6Mbps)_3TX

5180MHz_TX

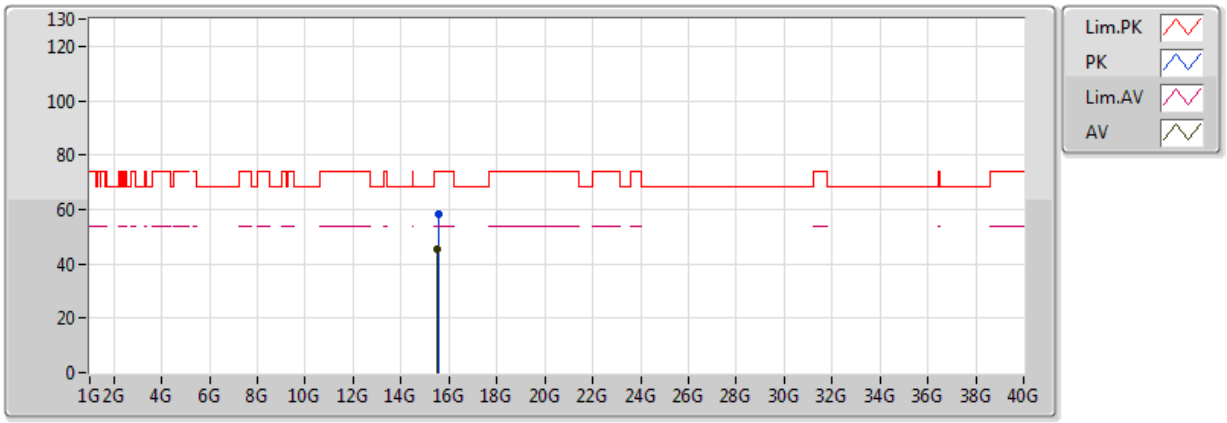


20170412
EUT Z_3TX
TXBF
Setting 20.5
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1496G	53.24	54.00	-0.76	4.27	3	H	0	2.11	-
AV	5.1784G	109.71	Inf	-Inf	4.33	3	H	0	2.11	-
PK	5.1484G	68.86	74.00	-5.14	4.27	3	H	0	2.11	-
PK	5.1776G	120.22	Inf	-Inf	4.33	3	H	0	2.11	-

802.11a-BF_(6Mbps)_3TX

5180MHz_TX

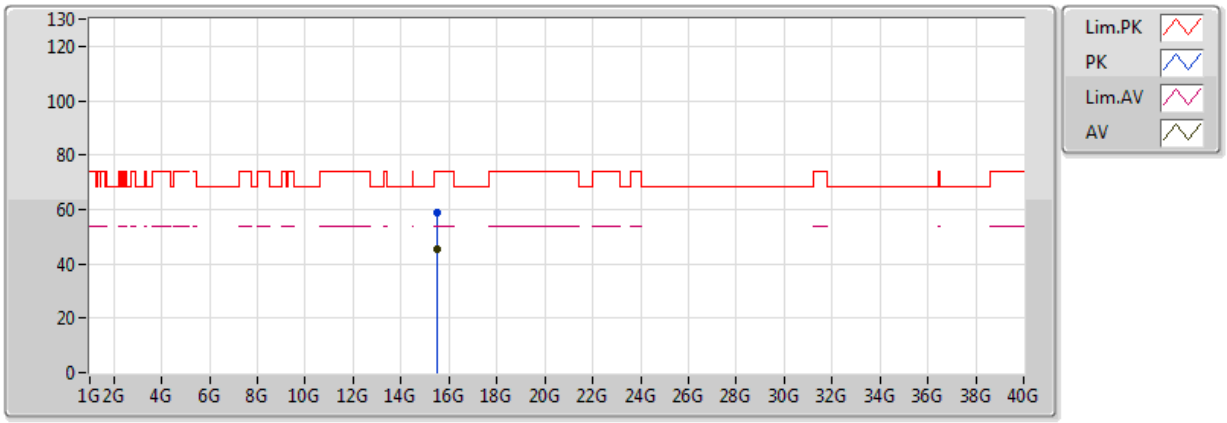


20170508
EUT Z_3TX
TXBF
Setting 20.5
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.5274G	45.51	54.00	-8.49	13.82	3	V	91	1.79	-
PK	15.54882G	58.51	74.00	-15.49	13.79	3	V	91	1.79	-

802.11a-BF_(6Mbps)_3TX

5180MHz_TX

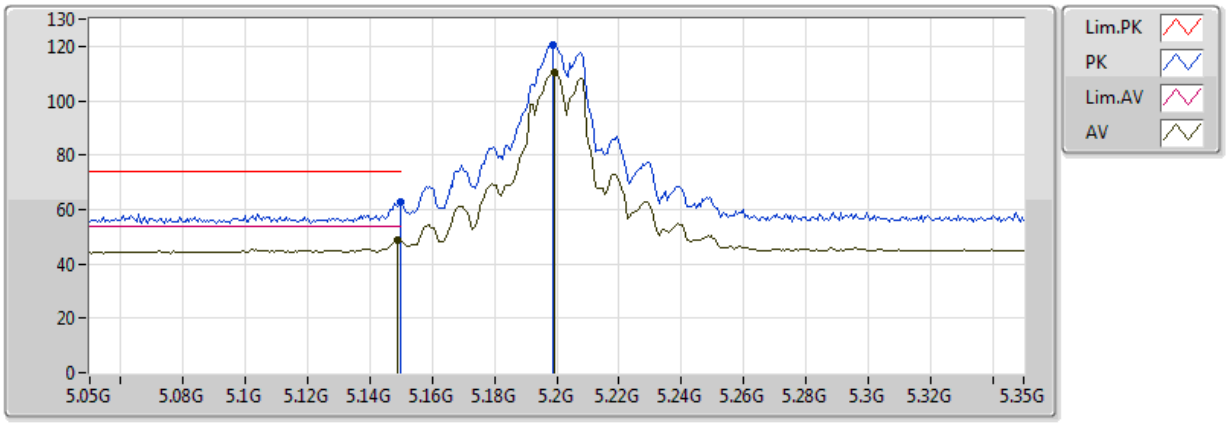


20170508
EUT Z_3TX
TXBF
Setting 20.5
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.53082G	45.56	54.00	-8.44	13.81	3	H	341	1.10	-
PK	15.52878G	58.79	74.00	-15.21	13.81	3	H	341	1.10	-

802.11a-BF_(6Mbps)_3TX

5200MHz_TX

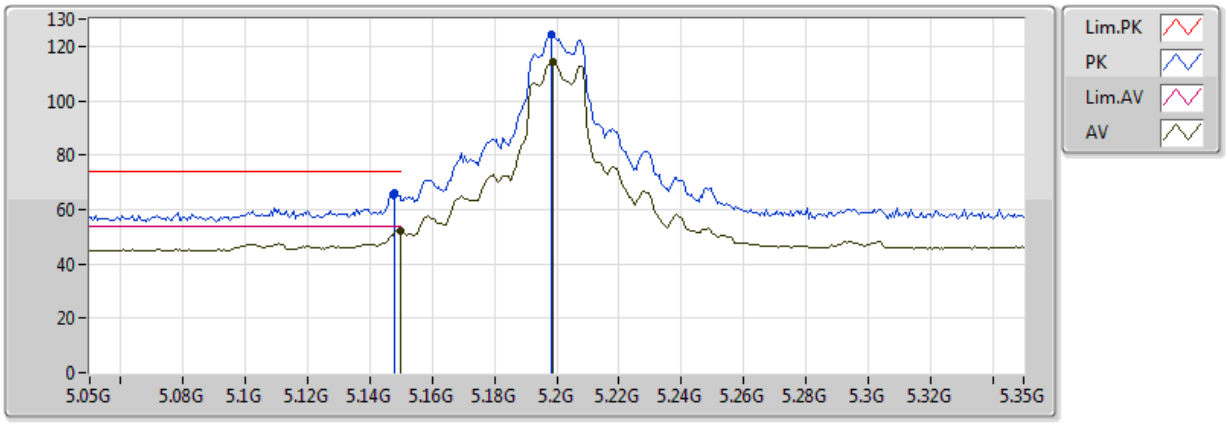


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149G	48.97	54.00	-5.03	4.27	3	V	341	2.60	-
AV	5.1994G	110.39	Inf	-Inf	4.38	3	V	341	2.60	-
PK	5.1496G	62.74	74.00	-11.26	4.27	3	V	341	2.60	-
PK	5.1988G	120.75	Inf	-Inf	4.38	3	V	341	2.60	-

802.11a-BF_(6Mbps)_3TX

5200MHz_TX

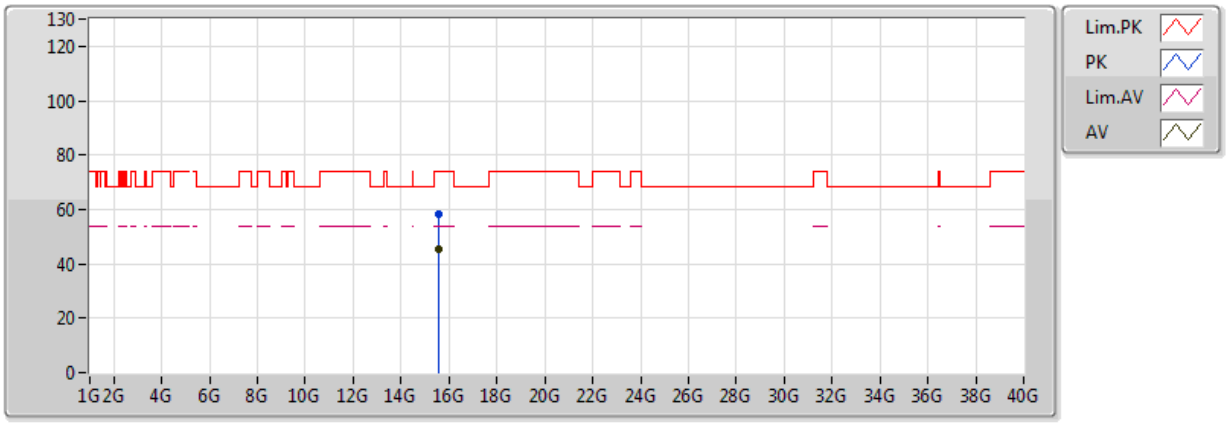


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1496G	52.20	54.00	-1.80	4.27	3	H	352	2.23	-
AV	5.1988G	114.07	Inf	-Inf	4.38	3	H	352	2.23	-
PK	5.1478G	66.08	74.00	-7.92	4.27	3	H	352	2.23	-
PK	5.1982G	124.42	Inf	-Inf	4.38	3	H	352	2.23	-

802.11a-BF_(6Mbps)_3TX

5200MHz_TX

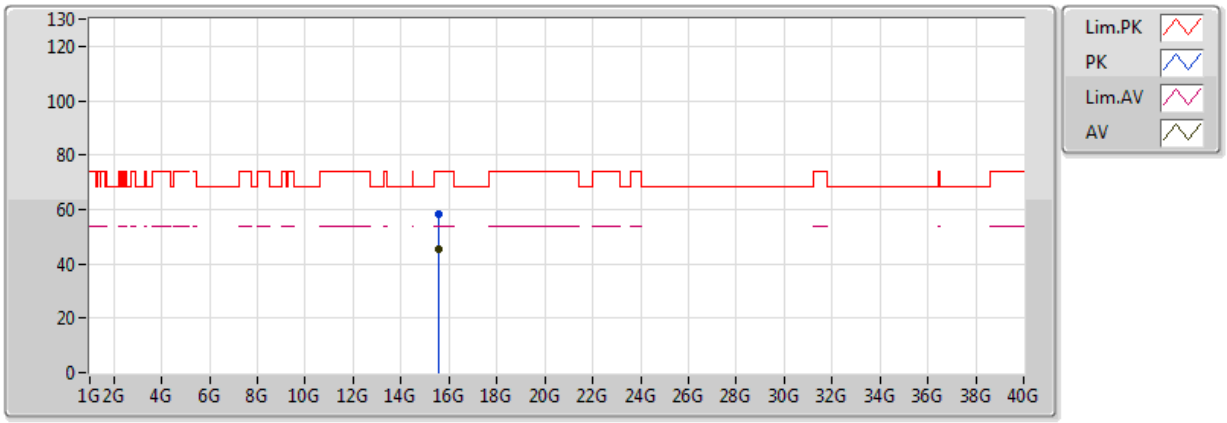


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.59754G	45.26	54.00	-8.74	13.73	3	V	338	1.89	-
PK	15.58578G	58.05	74.00	-15.95	13.74	3	V	338	1.89	-

802.11a-BF_(6Mbps)_3TX

5200MHz_TX

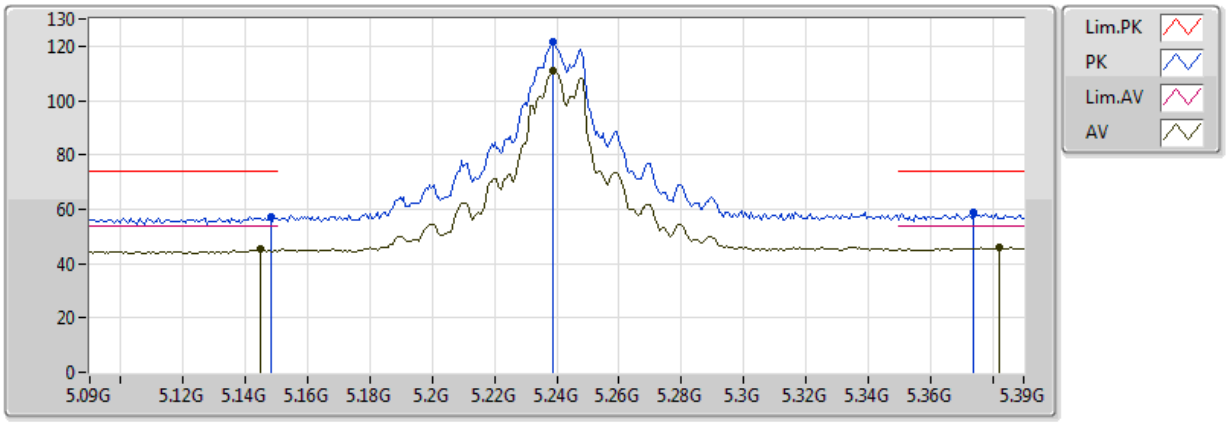


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.59772G	45.27	54.00	-8.73	13.73	3	H	328	1.80	-
PK	15.59436G	58.13	74.00	-15.87	13.73	3	H	328	1.80	-

802.11a-BF_(6Mbps)_3TX

5240MHz_TX

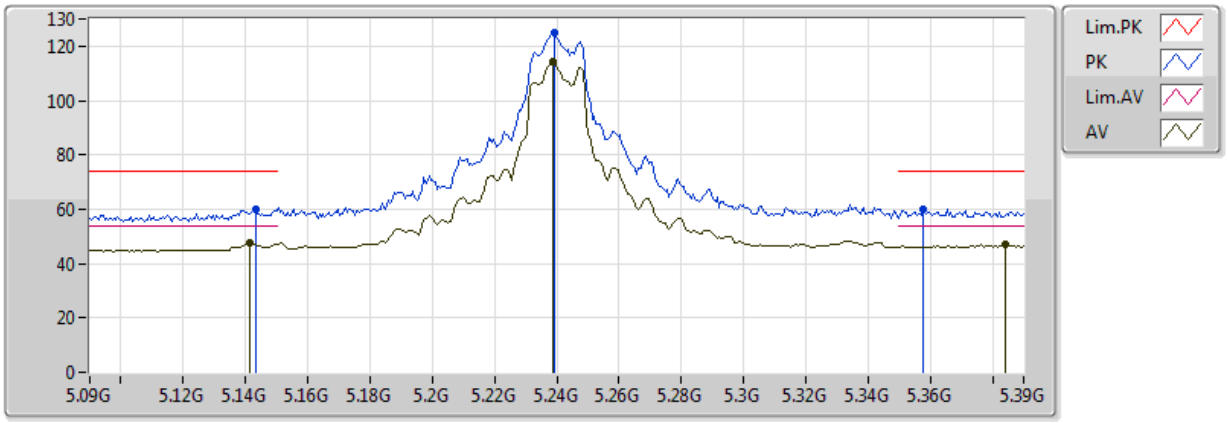


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1446G	45.32	54.00	-8.68	4.26	3	V	338	2.38	-
AV	5.2388G	110.95	Inf	-Inf	4.46	3	V	338	2.38	-
AV	5.3822G	45.72	54.00	-8.28	4.74	3	V	338	2.38	-
PK	5.1482G	57.29	74.00	-16.71	4.27	3	V	338	2.38	-
PK	5.2388G	121.66	Inf	-Inf	4.46	3	V	338	2.38	-
PK	5.3738G	58.57	74.00	-15.43	4.72	3	V	338	2.38	-

802.11a-BF_(6Mbps)_3TX

5240MHz_TX

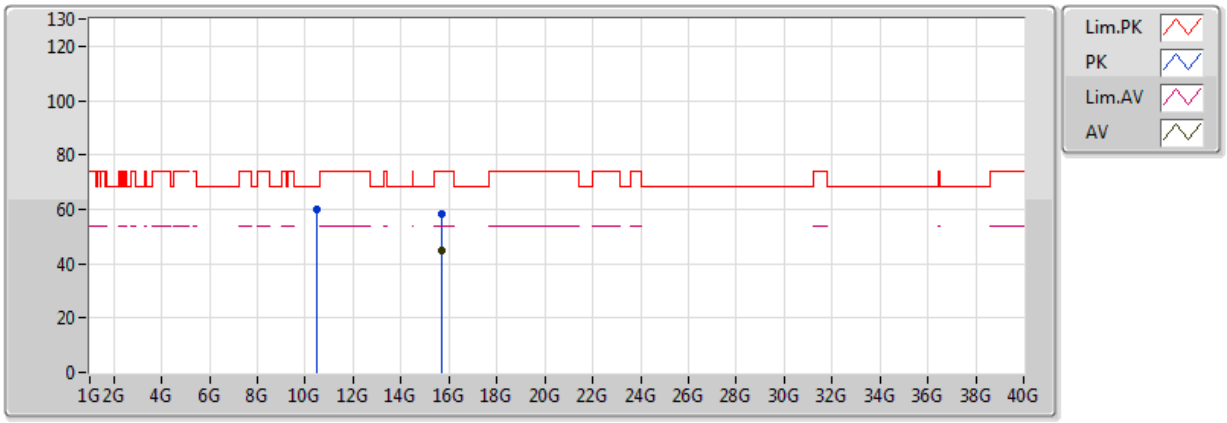


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1416G	47.43	54.00	-6.57	4.25	3	H	352	2.27	-
AV	5.2388G	114.11	Inf	-Inf	4.46	3	H	352	2.27	-
AV	5.384G	46.82	54.00	-7.18	4.74	3	H	352	2.27	-
PK	5.1434G	59.91	74.00	-14.09	4.26	3	H	352	2.27	-
PK	5.2394G	124.91	Inf	-Inf	4.46	3	H	352	2.27	-
PK	5.3576G	60.14	74.00	-13.86	4.69	3	H	352	2.27	-

802.11a-BF_(6Mbps)_3TX

5240MHz_TX

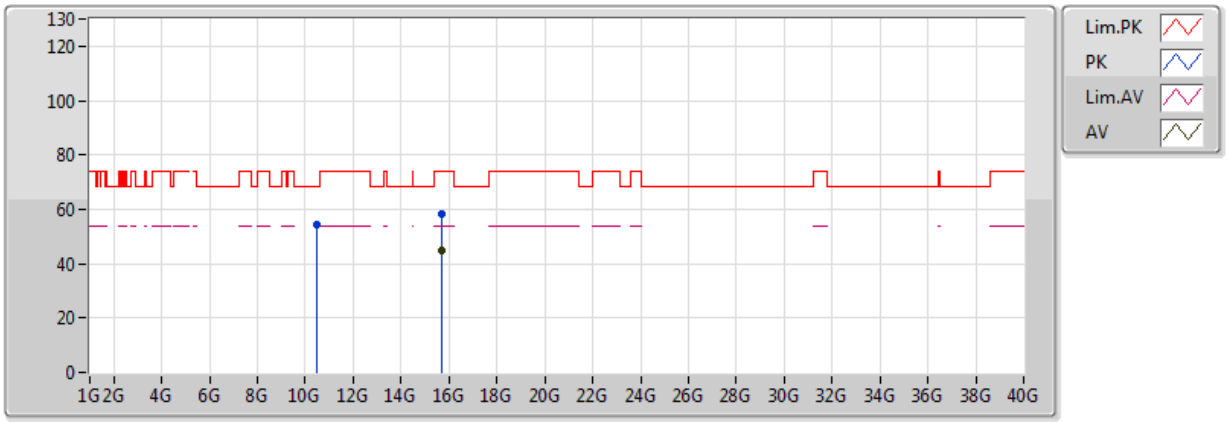


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.7227G	44.64	54.00	-9.36	13.57	3	V	82	2.06	-
PK	10.47991G	59.87	68.20	-8.33	11.21	3	V	97	1.77	-
PK	15.722916G	58.08	74.00	-15.92	13.57	3	V	82	2.06	-

802.11a-BF_(6Mbps)_3TX

5240MHz_TX

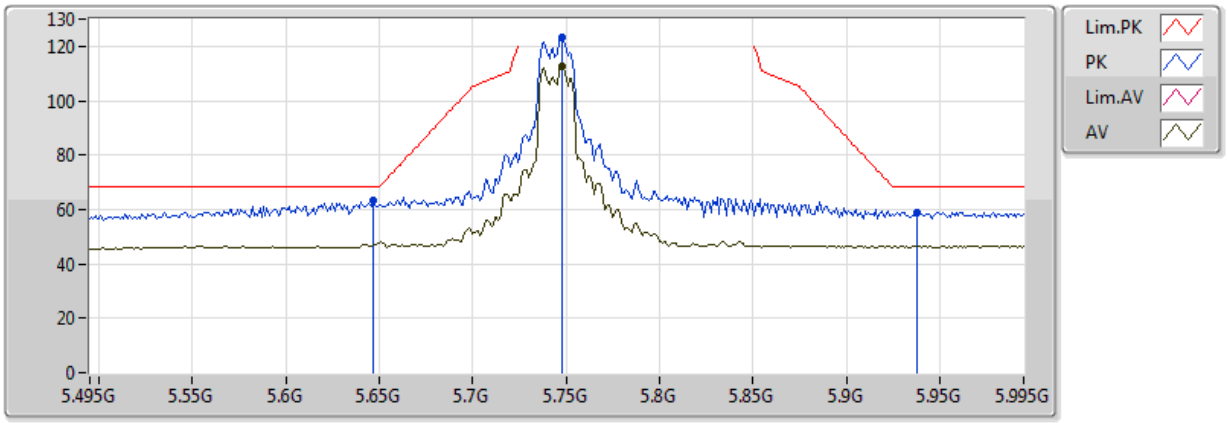


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.72306G	44.95	54.00	-9.05	13.57	3	H	309	1.79	-
PK	10.479514G	54.08	68.20	-14.12	11.21	3	H	93	1.01	-
PK	15.724014G	58.12	74.00	-15.88	13.57	3	H	309	1.79	-

802.11a-BF_(6Mbps)_3TX

5745MHz_TX

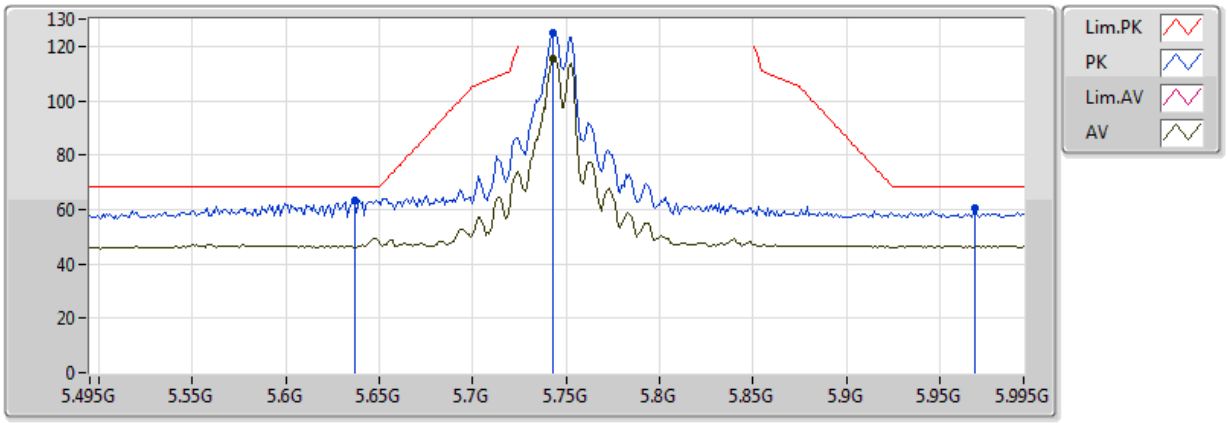


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.748G	112.87	Inf	-Inf	5.81	3	V	304	2.30	-
PK	5.647G	63.06	68.20	-5.14	5.52	3	V	304	2.30	-
PK	5.748G	123.17	Inf	-Inf	5.81	3	V	304	2.30	-
PK	5.938G	59.09	68.20	-9.11	6.48	3	V	304	2.30	-

802.11a-BF_(6Mbps)_3TX

5745MHz_TX

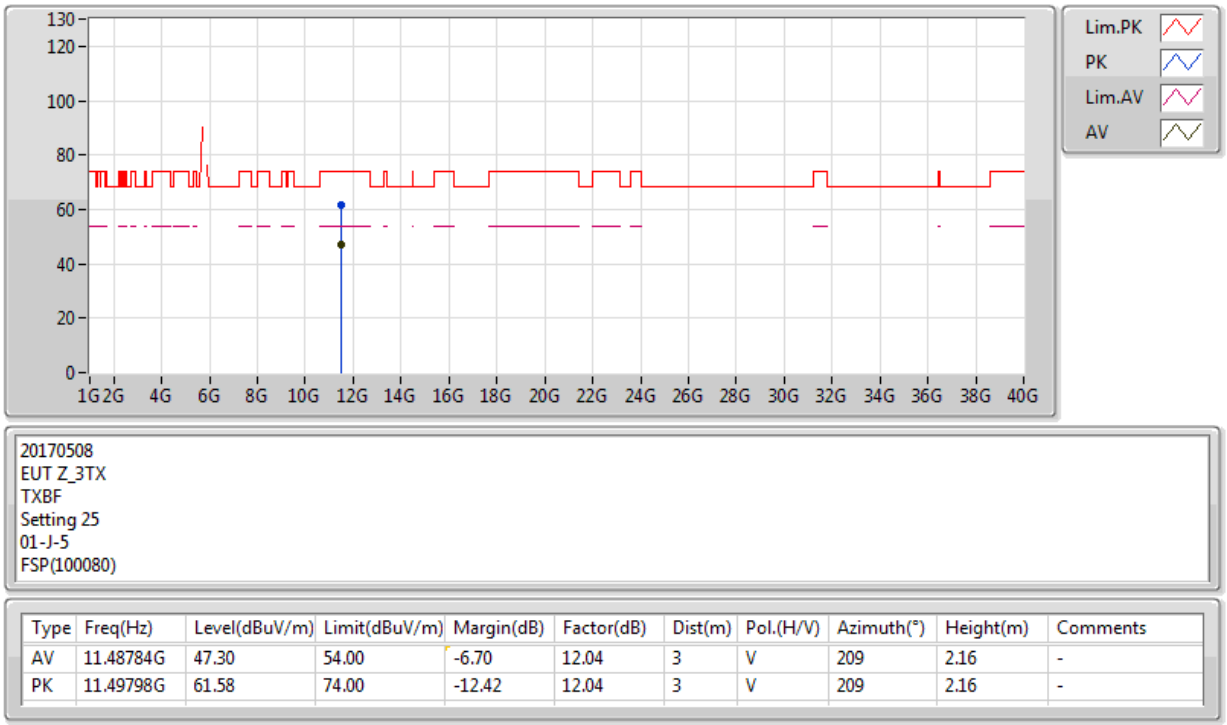


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.743G	115.22	Inf	-Inf	5.80	3	H	327	2.07	-
PK	5.637G	63.58	68.20	-4.62	5.49	3	H	327	2.07	-
PK	5.743G	125.01	Inf	-Inf	5.80	3	H	327	2.07	-
PK	5.969G	60.58	68.20	-7.62	6.60	3	H	327	2.07	-

802.11a-BF_(6Mbps)_3TX

5745MHz_TX

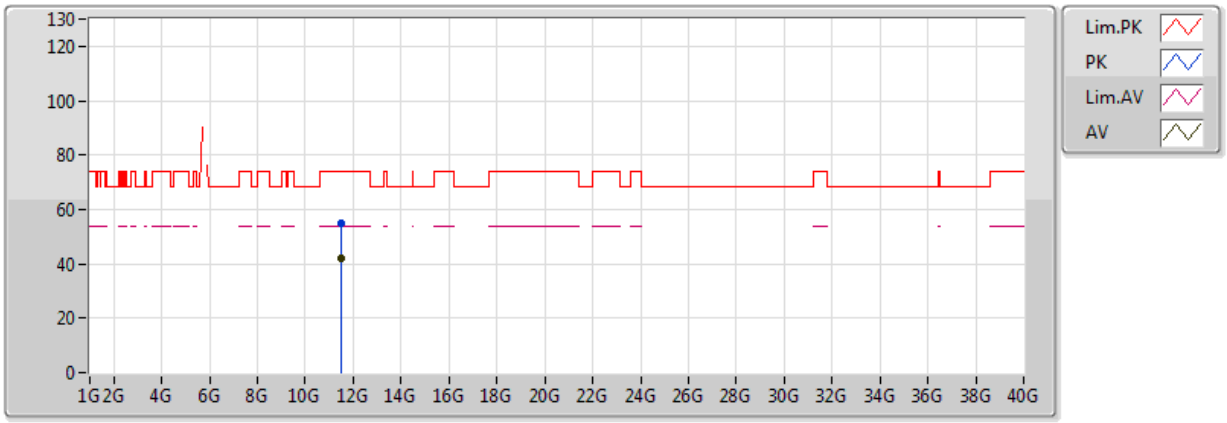


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.48784G	47.30	54.00	-6.70	12.04	3	V	209	2.16	-
PK	11.49798G	61.58	74.00	-12.42	12.04	3	V	209	2.16	-

802.11a-BF_(6Mbps)_3TX

5745MHz_TX

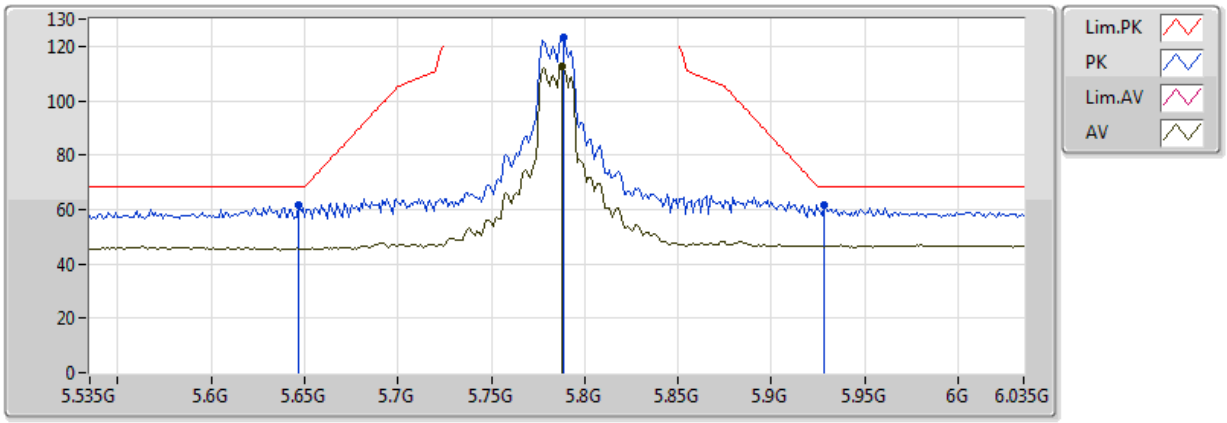


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.48988G	41.93	54.00	-12.07	12.04	3	H	116	1.94	-
PK	11.48904G	55.03	74.00	-18.97	12.04	3	H	116	1.94	-

802.11a-BF_(6Mbps)_3TX

5785MHz_TX

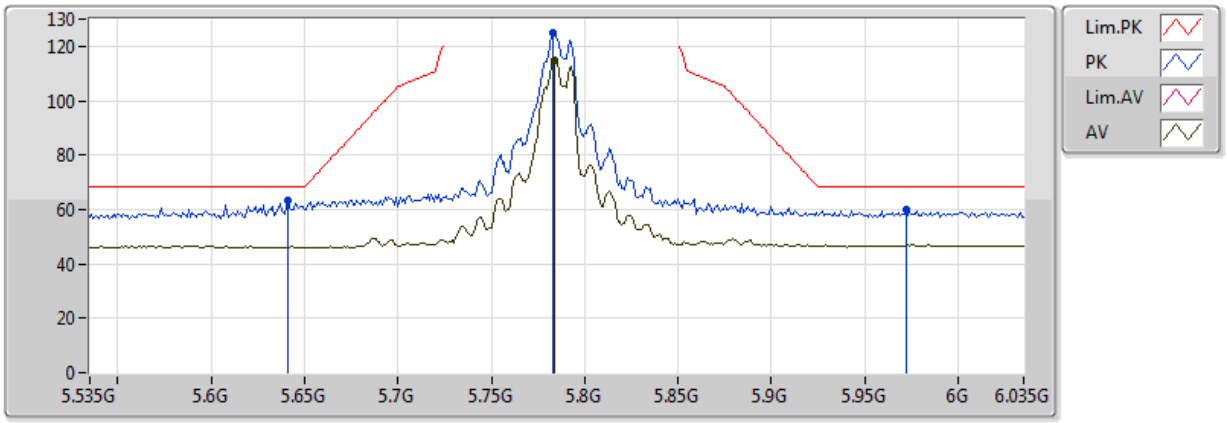


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.788G	112.85	Inf	-Inf	5.93	3	V	304	2.09	-
PK	5.647G	61.90	68.20	-6.30	5.52	3	V	304	2.09	-
PK	5.789G	123.23	Inf	-Inf	5.93	3	V	304	2.09	-
PK	5.928G	61.54	68.20	-6.66	6.45	3	V	304	2.09	-

802.11a-BF_(6Mbps)_3TX

5785MHz_TX

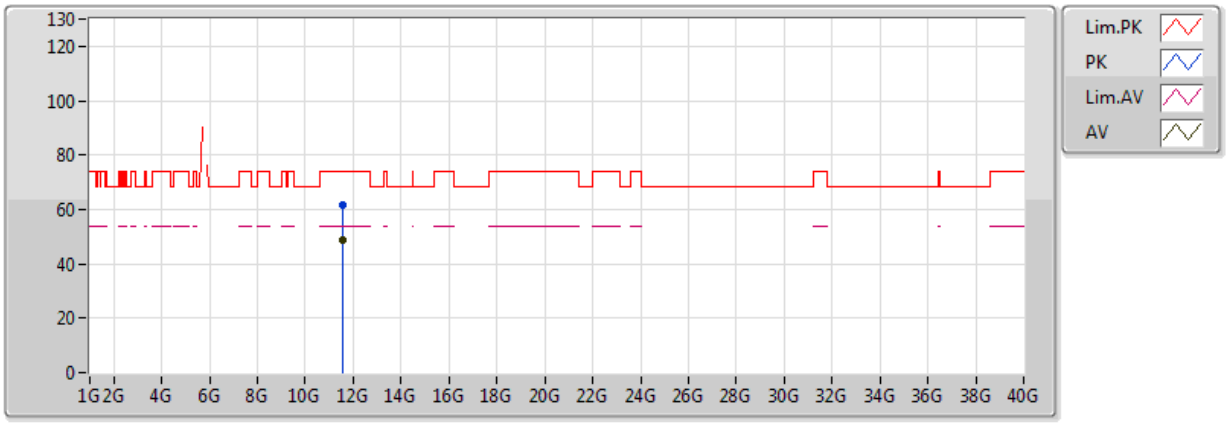


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.784G	114.88	Inf	-Inf	5.92	3	H	332	2.05	-
PK	5.641G	63.06	68.20	-5.14	5.50	3	H	332	2.05	-
PK	5.783G	125.17	Inf	-Inf	5.91	3	H	332	2.05	-
PK	5.972G	59.87	68.20	-8.33	6.61	3	H	332	2.05	-

802.11a-BF_(6Mbps)_3TX

5785MHz_TX

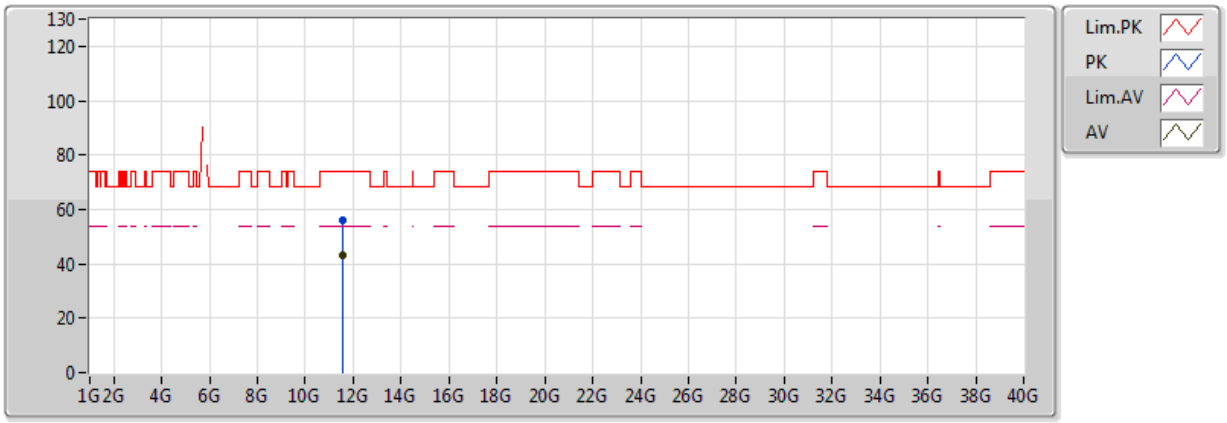


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.56808G	48.61	54.00	-5.39	12.08	3	V	116	1.89	-
PK	11.56832G	61.67	74.00	-12.33	12.08	3	V	116	1.89	-

802.11a-BF_(6Mbps)_3TX

5785MHz_TX

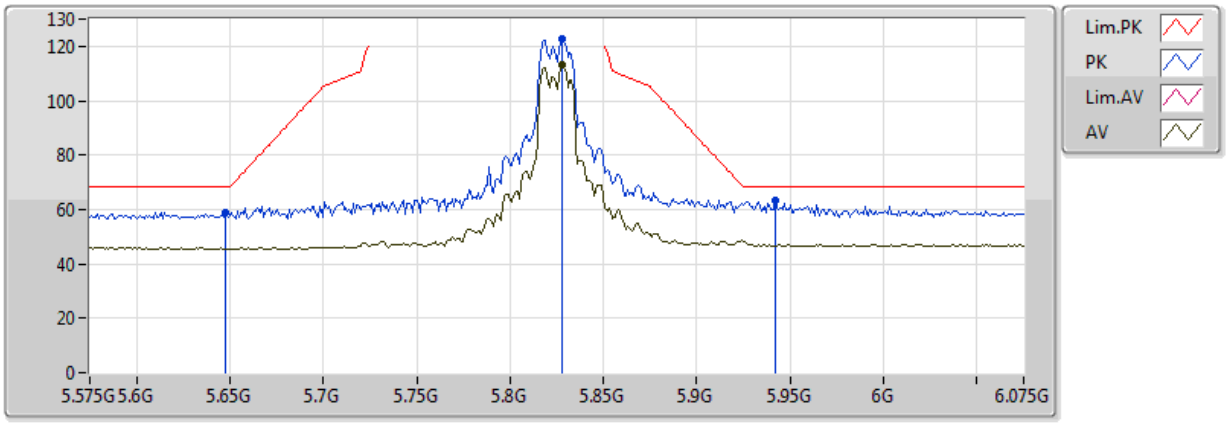


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.56832G	43.04	54.00	-10.96	12.08	3	H	136	2.00	-
PK	11.56784G	56.02	74.00	-17.98	12.08	3	H	136	2.00	-

802.11a-BF_(6Mbps)_3TX

5825MHz_TX

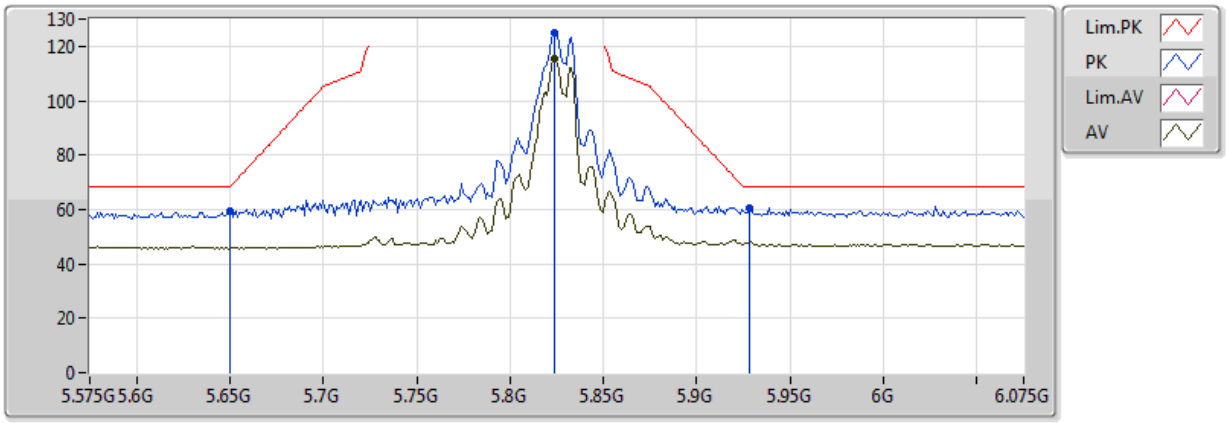


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.828G	113.09	Inf	-Inf	6.07	3	V	303	2.20	-
PK	5.648G	59.08	68.20	-9.12	5.52	3	V	303	2.20	-
PK	5.828G	122.87	Inf	-Inf	6.07	3	V	303	2.20	-
PK	5.942G	63.17	68.20	-5.03	6.50	3	V	303	2.20	-

802.11a-BF_(6Mbps)_3TX

5825MHz_TX

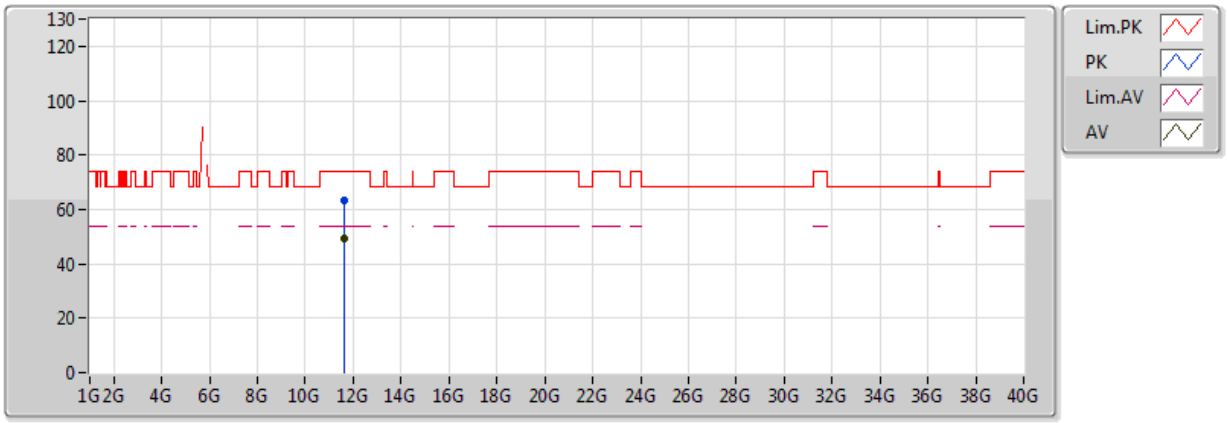


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.824G	115.37	Inf	-Inf	6.05	3	H	328	2.10	-
PK	5.65G	59.21	68.20	-8.99	5.53	3	H	328	2.10	-
PK	5.824G	124.89	Inf	-Inf	6.05	3	H	328	2.10	-
PK	5.928G	60.67	68.20	-7.53	6.45	3	H	328	2.10	-

802.11a-BF_(6Mbps)_3TX

5825MHz_TX

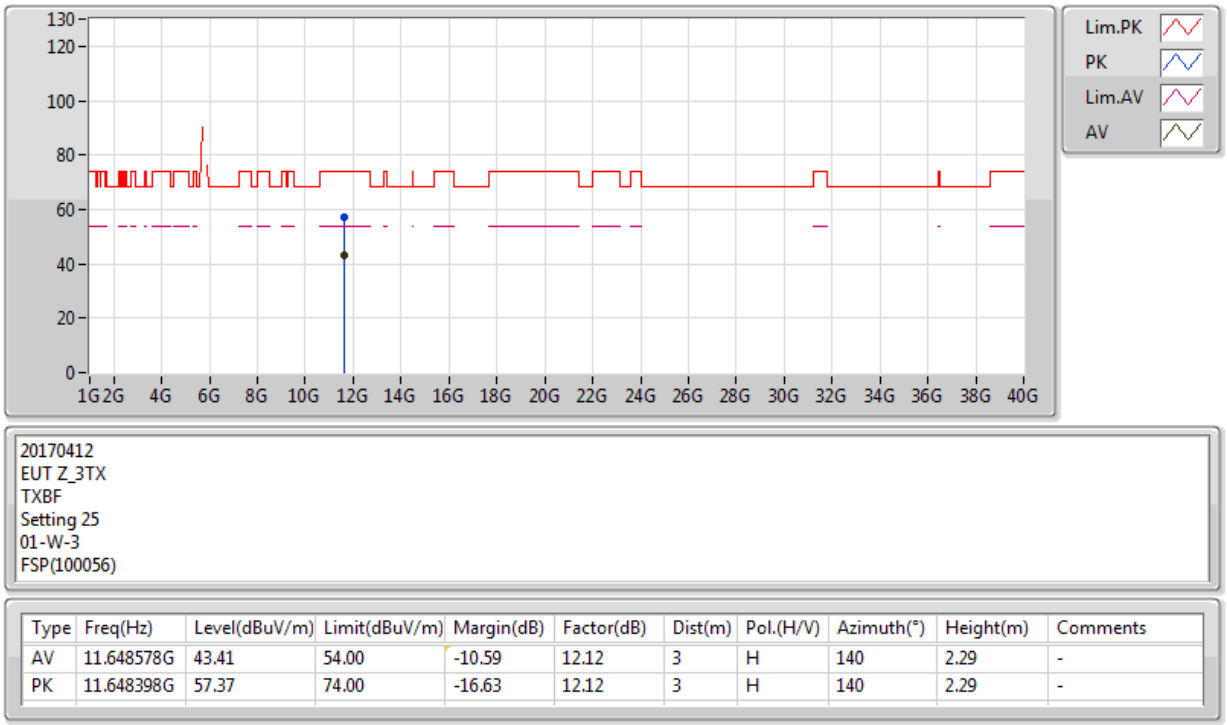


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.64851G	49.53	54.00	-4.47	12.12	3	V	113	1.90	-
PK	11.6492G	63.52	74.00	-10.48	12.12	3	V	113	1.90	-

802.11a-BF_(6Mbps)_3TX

5825MHz_TX

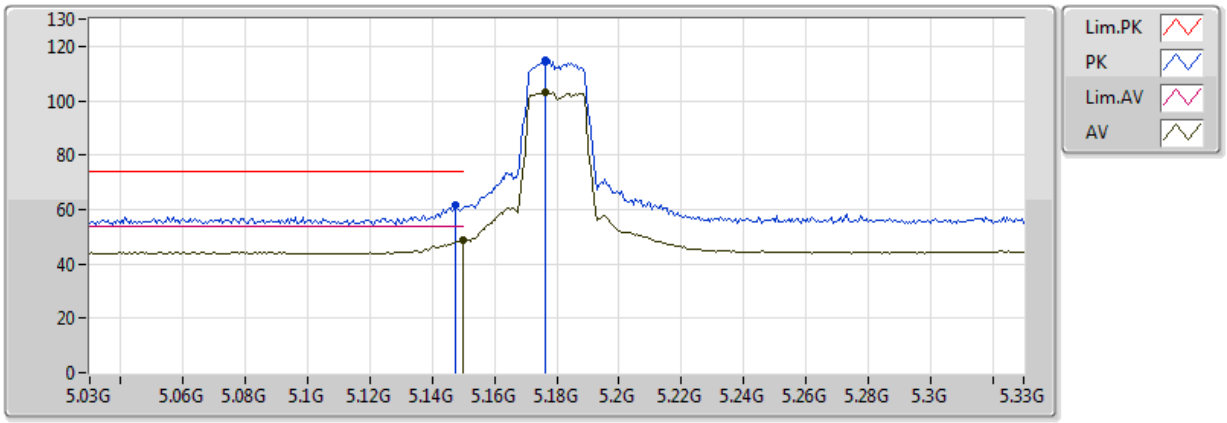


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.648578G	43.41	54.00	-10.59	12.12	3	H	140	2.29	-
PK	11.648398G	57.37	74.00	-16.63	12.12	3	H	140	2.29	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5180MHz_TX

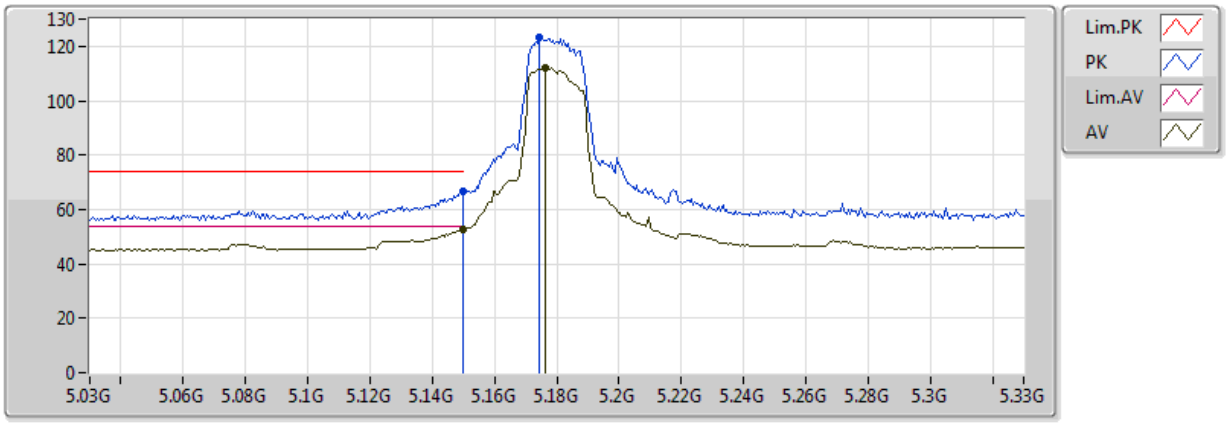


20170412
EUT Z_3TX
TXBF
Setting 22.5
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	48.53	54.00	-5.47	4.27	3	V	163	1.48	-
AV	5.1764G	103.11	Inf	-Inf	4.33	3	V	163	1.48	-
PK	5.1476G	61.81	74.00	-12.19	4.26	3	V	163	1.48	-
PK	5.1764G	115.11	Inf	-Inf	4.33	3	V	163	1.48	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5180MHz_TX

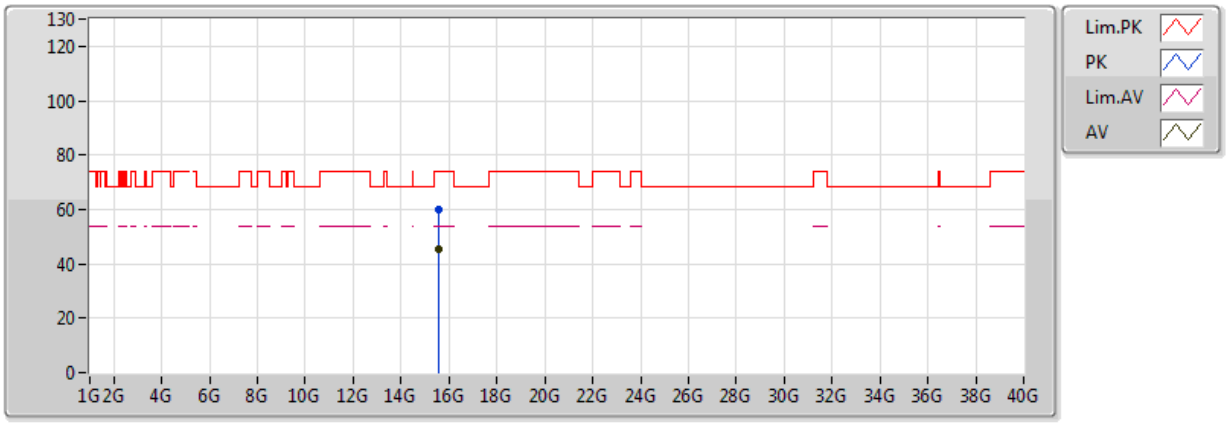


20170412
EUT Z_3TX
TXBF
Setting 22.5
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	52.62	54.00	-1.38	4.27	3	H	357	2.28	-
AV	5.1764G	111.96	Inf	-Inf	4.33	3	H	357	2.28	-
PK	5.149995G	66.57	74.00	-7.43	4.27	3	H	357	2.28	-
PK	5.1746G	123.03	Inf	-Inf	4.32	3	H	357	2.28	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5180MHz_TX

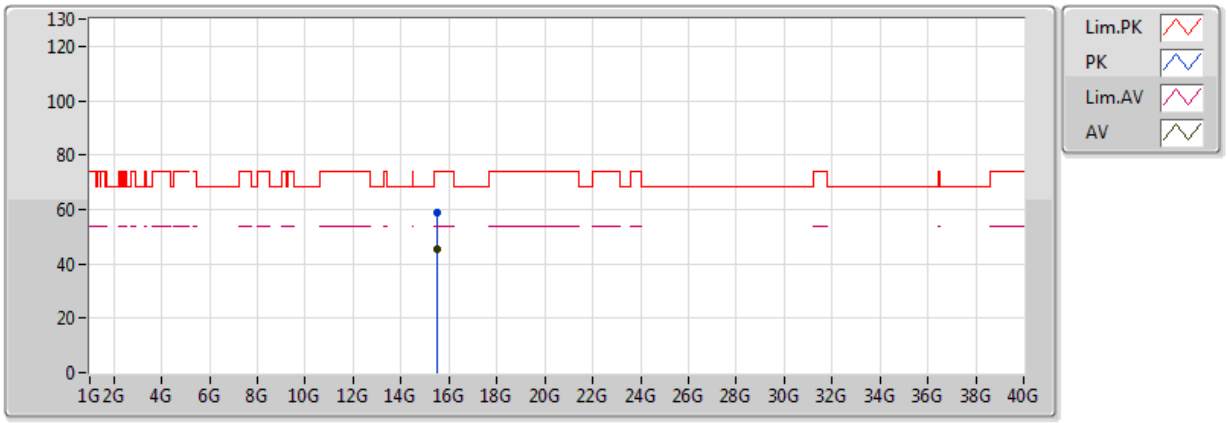


20170508
EUT Z_3TX
TXBF
Setting 22.5
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.5391G	45.45	54.00	-8.55	13.80	3	V	97	1.31	-
PK	15.54894G	59.93	74.00	-14.07	13.79	3	V	97	1.31	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5180MHz_TX

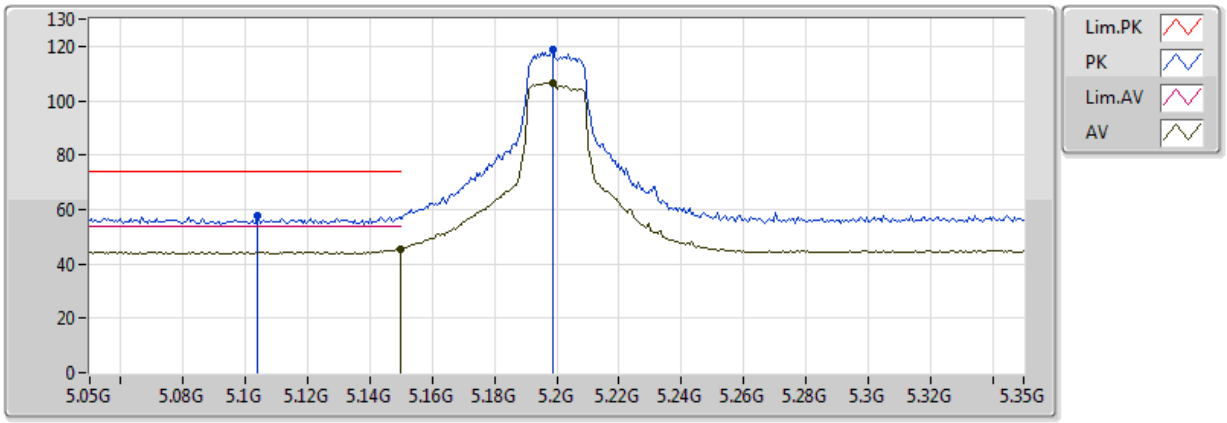


20170508
EUT Z_3TX
TXBF
Setting 22.5
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.53652G	45.46	54.00	-8.54	13.80	3	H	115	2.21	-
PK	15.52578G	58.65	74.00	-15.35	13.82	3	H	115	2.21	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5200MHz_TX

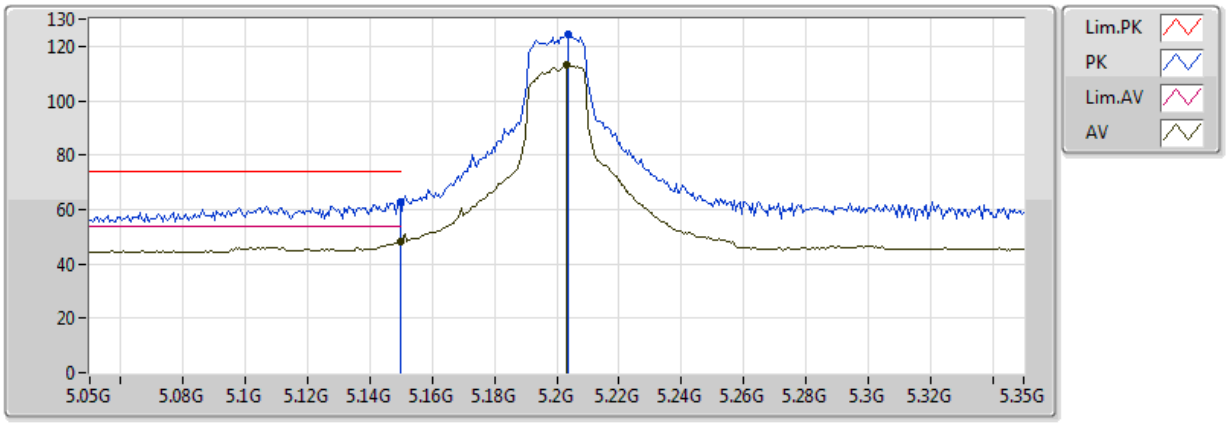


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	45.55	54.00	-8.45	4.27	3	V	163	1.21	-
AV	5.1988G	106.74	Inf	-Inf	4.38	3	V	163	1.21	-
PK	5.104G	57.44	74.00	-16.56	4.17	3	V	163	1.21	-
PK	5.1988G	118.65	Inf	-Inf	4.38	3	V	163	1.21	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5200MHz_TX

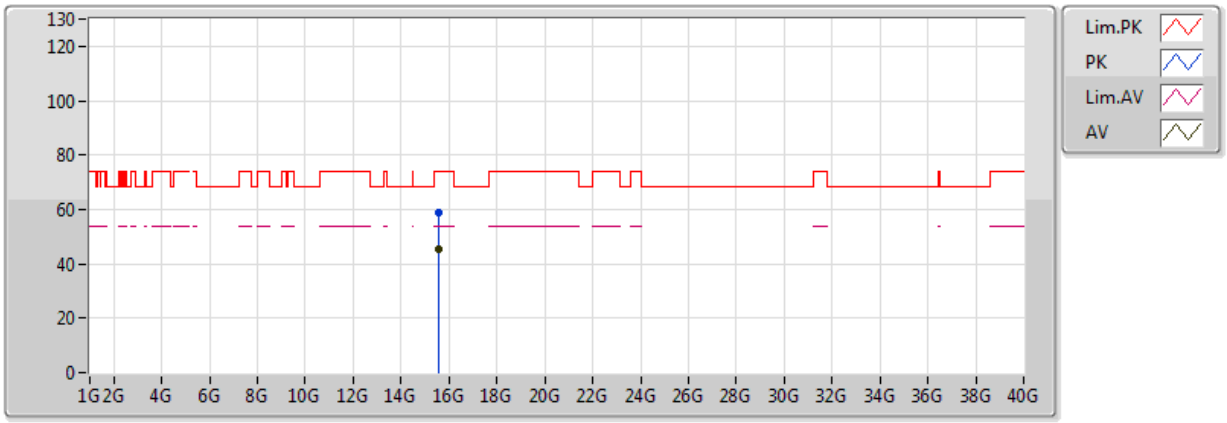


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1496G	47.95	54.00	-6.05	4.27	3	H	252	2.22	-
AV	5.203G	112.99	Inf	-Inf	4.39	3	H	252	2.22	-
PK	5.1496G	62.64	74.00	-11.36	4.27	3	H	252	2.22	-
PK	5.2036G	124.20	Inf	-Inf	4.39	3	H	252	2.22	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5200MHz_TX

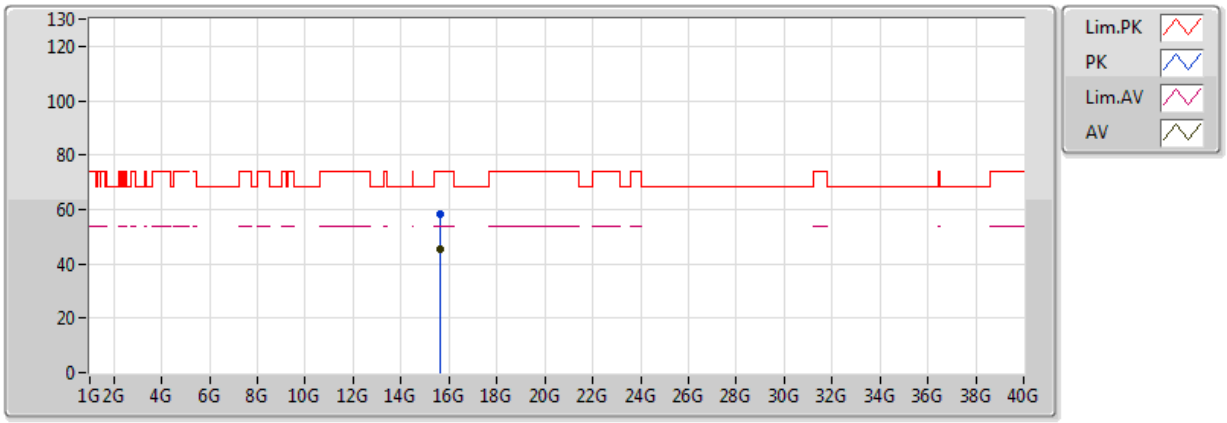


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.58584G	45.33	54.00	-8.67	13.74	3	V	12	1.71	-
PK	15.6006G	58.59	74.00	-15.41	13.73	3	V	12	1.71	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5200MHz_TX

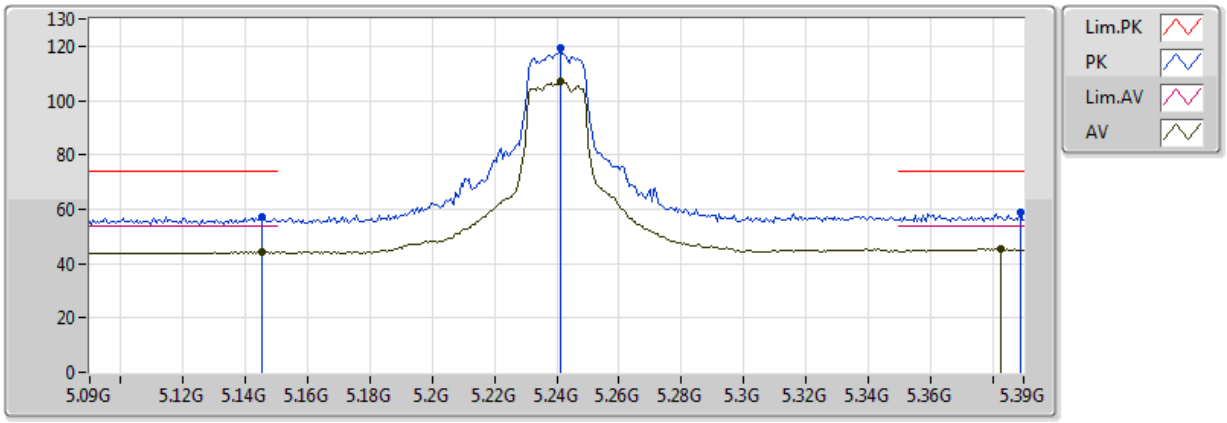


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.60564G	45.29	54.00	-8.71	13.72	3	H	14	2.20	-
PK	15.60672G	58.43	74.00	-15.57	13.72	3	H	14	2.20	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5240MHz_TX

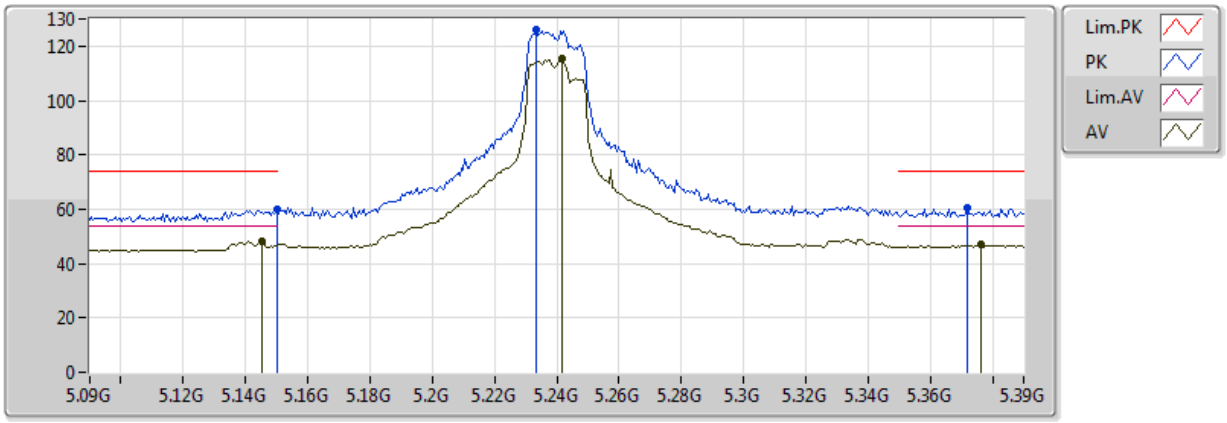


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1452G	44.49	54.00	-9.51	4.26	3	V	172	1.45	-
AV	5.2412G	107.17	Inf	-Inf	4.47	3	V	172	1.45	-
AV	5.3828G	45.40	54.00	-8.60	4.74	3	V	172	1.45	-
PK	5.1452G	57.08	74.00	-16.92	4.26	3	V	172	1.45	-
PK	5.2412G	119.20	Inf	-Inf	4.47	3	V	172	1.45	-
PK	5.3888G	58.80	74.00	-15.20	4.75	3	V	172	1.45	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5240MHz_TX

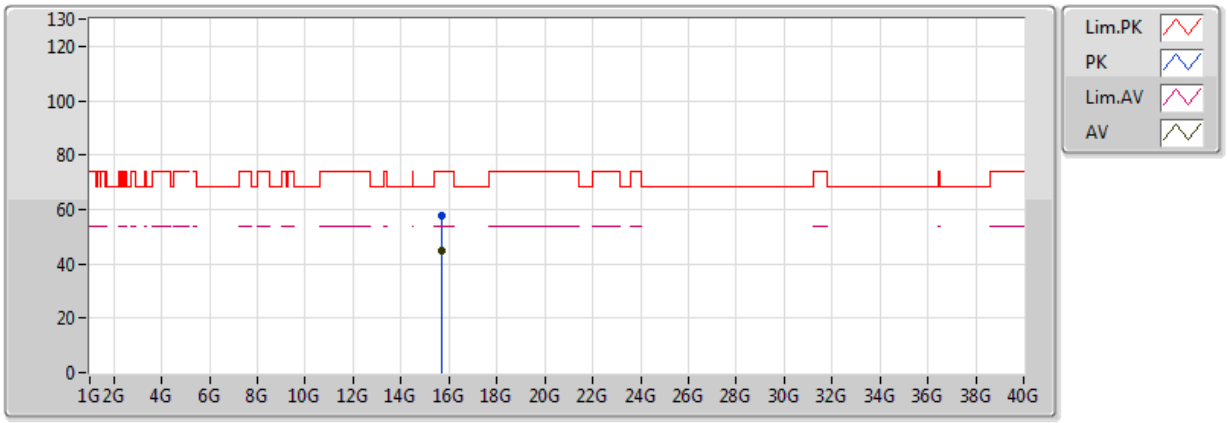


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1452G	48.19	54.00	-5.81	4.26	3	H	353	2.34	-
AV	5.2418G	115.40	Inf	-Inf	4.47	3	H	353	2.34	-
AV	5.3762G	47.09	54.00	-6.91	4.73	3	H	353	2.34	-
PK	5.149995G	59.87	74.00	-14.13	4.27	3	H	353	2.34	-
PK	5.2334G	125.89	Inf	-Inf	4.45	3	H	353	2.34	-
PK	5.372G	60.38	74.00	-13.62	4.72	3	H	353	2.34	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5240MHz_TX

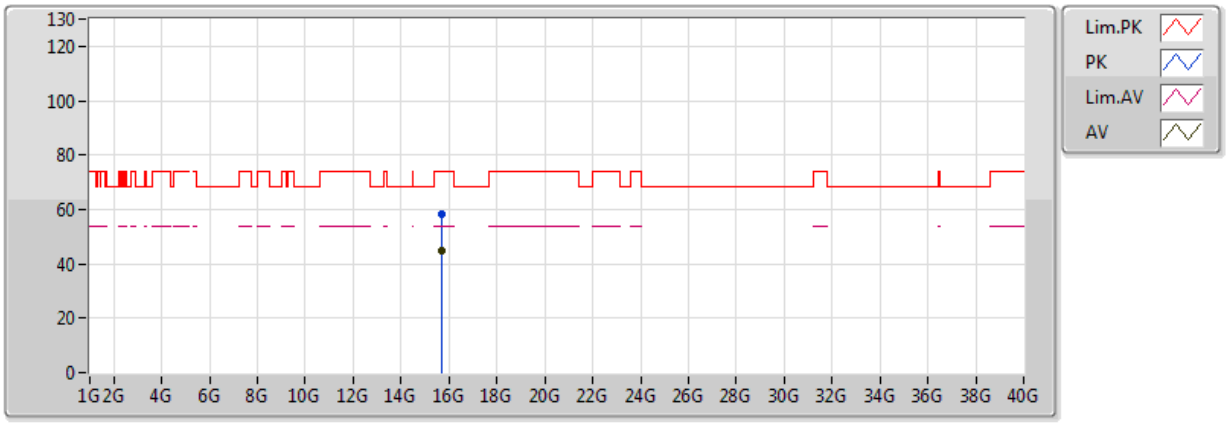


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.71392G	44.76	54.00	-9.24	13.58	3	V	57	1.08	-
PK	15.71876G	57.98	74.00	-16.02	13.58	3	V	57	1.08	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5240MHz_TX

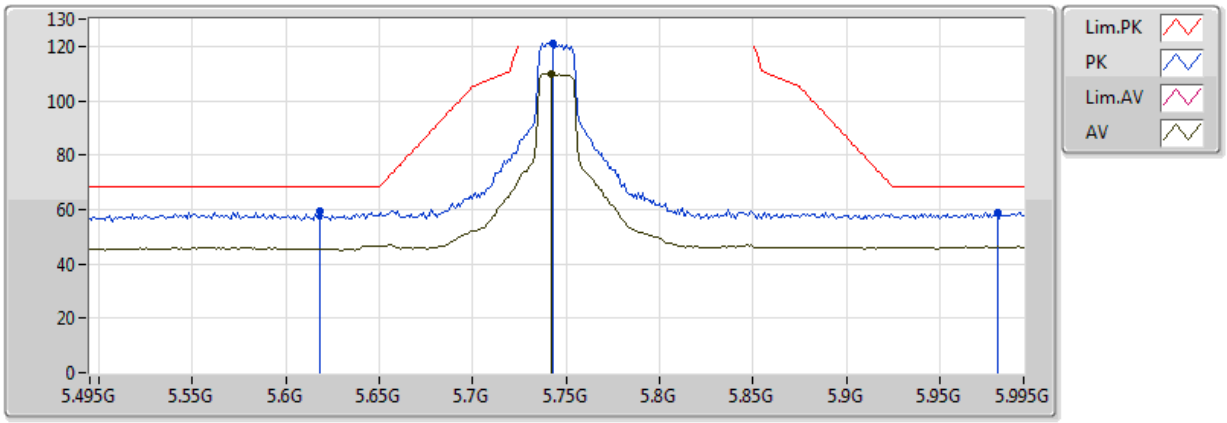


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.7142G	44.69	54.00	-9.31	13.58	3	H	292	1.28	-
PK	15.71188G	58.04	74.00	-15.96	13.59	3	H	292	1.28	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5745MHz_TX

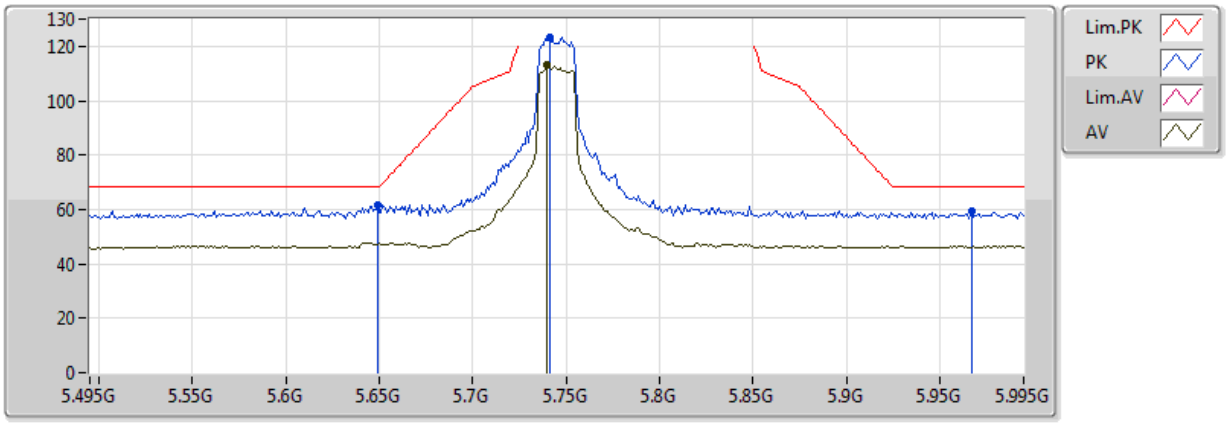


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.742G	109.95	Inf	-Inf	5.80	3	V	179	1.33	-
PK	5.618G	59.30	68.20	-8.90	5.43	3	V	179	1.33	-
PK	5.743G	121.21	Inf	-Inf	5.80	3	V	179	1.33	-
PK	5.981G	59.05	68.20	-9.15	6.65	3	V	179	1.33	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5745MHz_TX

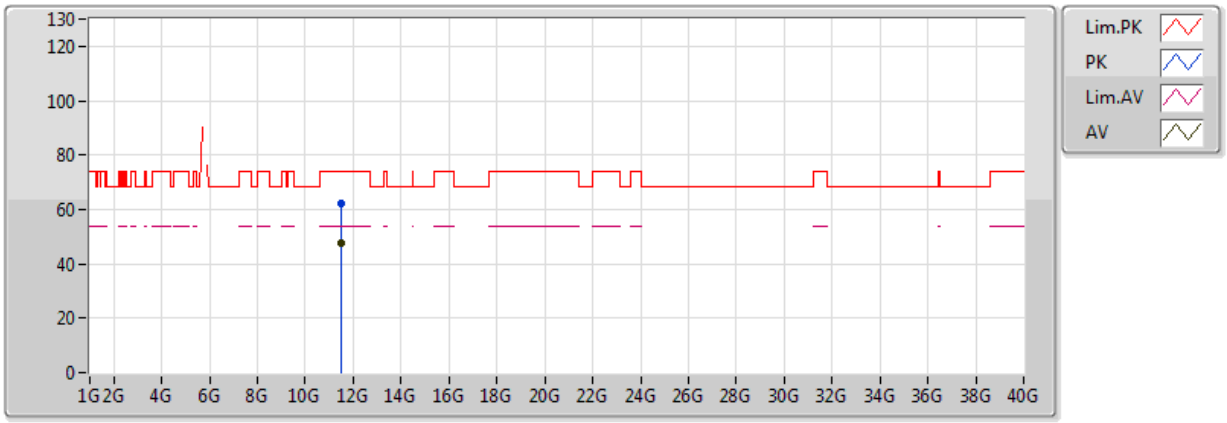


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.74G	112.95	Inf	-Inf	5.79	3	H	238	1.02	-
PK	5.649G	61.60	68.20	-6.60	5.53	3	H	238	1.02	-
PK	5.741G	123.52	Inf	-Inf	5.79	3	H	238	1.02	-
PK	5.967G	59.16	68.20	-9.04	6.59	3	H	238	1.02	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5745MHz_TX

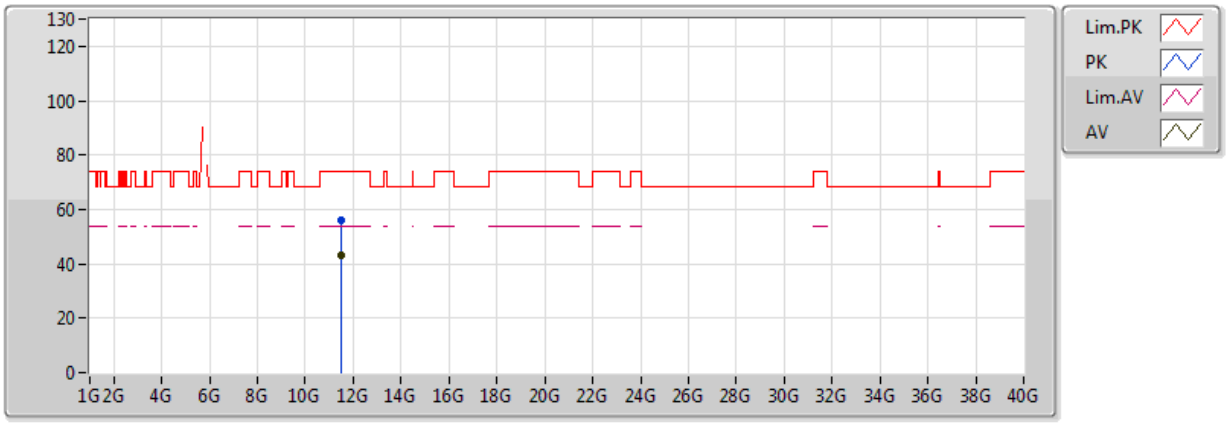


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.48802G	47.66	54.00	-6.34	12.04	3	V	118	1.96	-
PK	11.48814G	62.01	74.00	-11.99	12.04	3	V	118	1.96	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5745MHz_TX

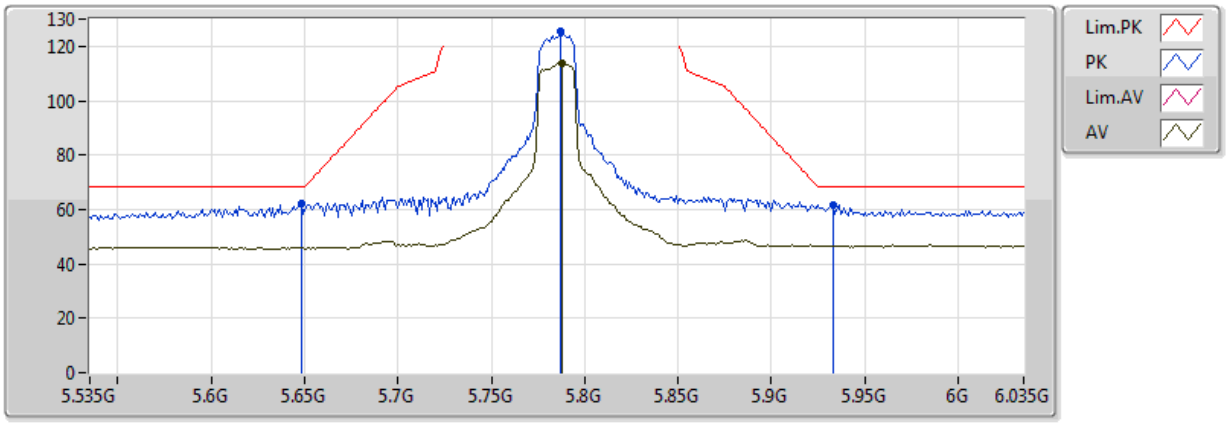


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.48736G	42.94	54.00	-11.06	12.04	3	H	61	2.32	-
PK	11.48622G	56.31	74.00	-17.69	12.04	3	H	61	2.32	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5785MHz_TX

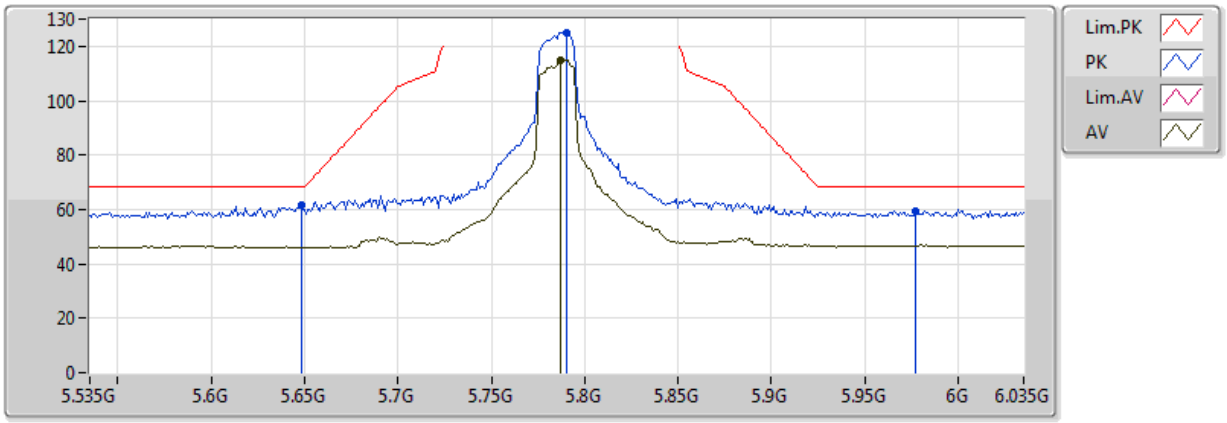


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.788G	113.93	Inf	-Inf	5.93	3	V	305	2.34	-
PK	5.648G	62.18	68.20	-6.02	5.52	3	V	305	2.34	-
PK	5.787G	125.28	Inf	-Inf	5.92	3	V	305	2.34	-
PK	5.933G	61.48	68.20	-6.72	6.47	3	V	305	2.34	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5785MHz_TX

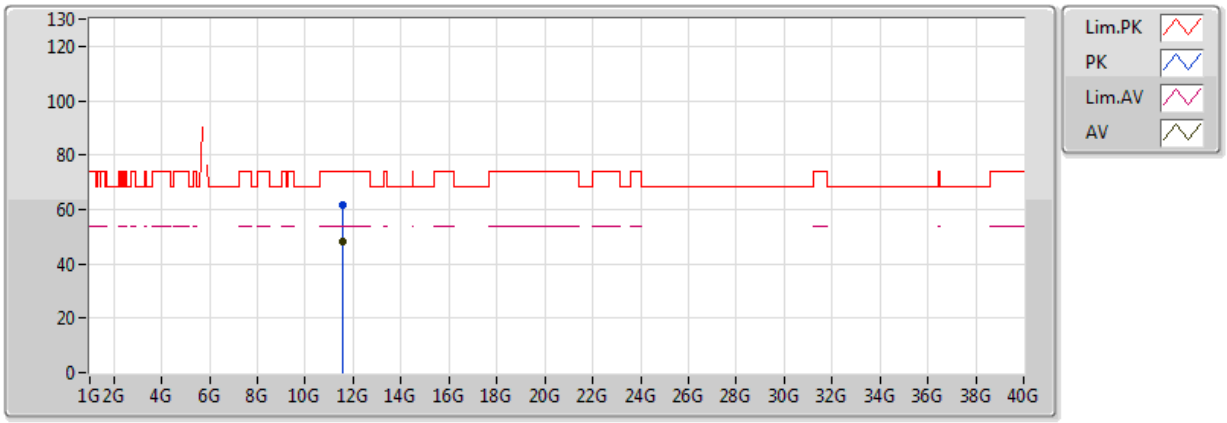


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.787G	115.02	Inf	-Inf	5.92	3	H	335	2.05	-
PK	5.648G	61.57	68.20	-6.63	5.52	3	H	335	2.05	-
PK	5.79G	125.12	Inf	-Inf	5.93	3	H	335	2.05	-
PK	5.977G	59.59	68.20	-8.61	6.63	3	H	335	2.05	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5785MHz_TX

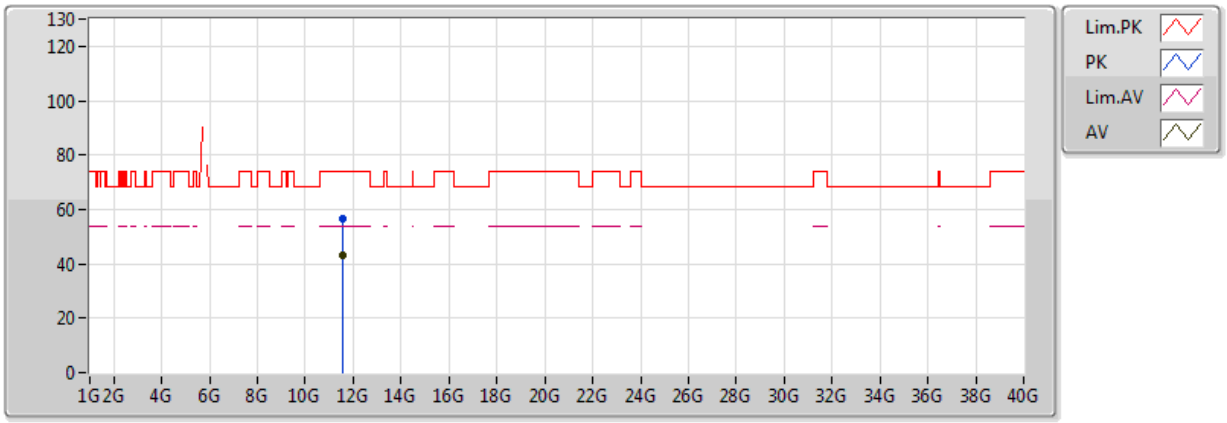


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.57036G	48.34	54.00	-5.66	12.08	3	V	115	1.97	-
PK	11.56778G	61.77	74.00	-12.23	12.08	3	V	115	1.97	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5785MHz_TX

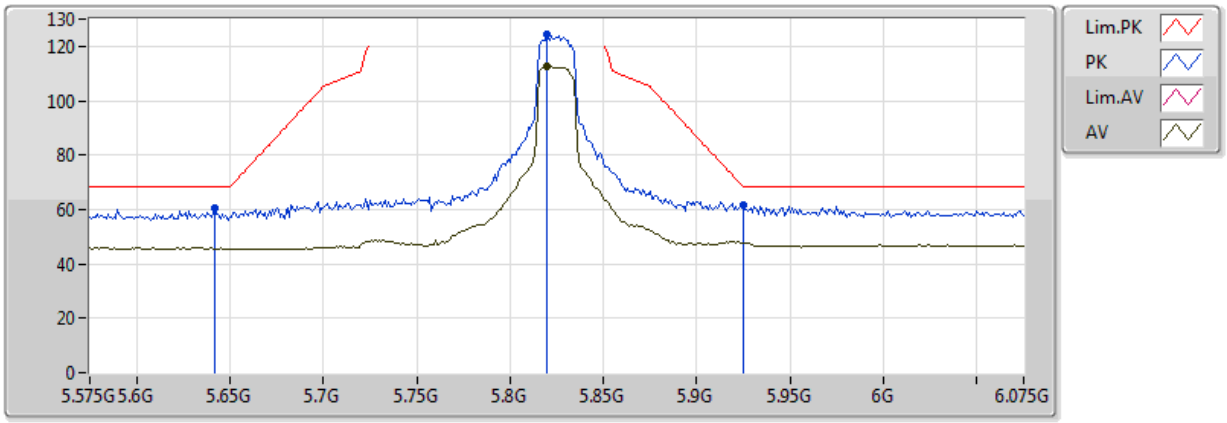


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.57468G	43.28	54.00	-10.72	12.08	3	H	42	1.01	-
PK	11.57216G	56.32	74.00	-17.68	12.08	3	H	42	1.01	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5825MHz_TX

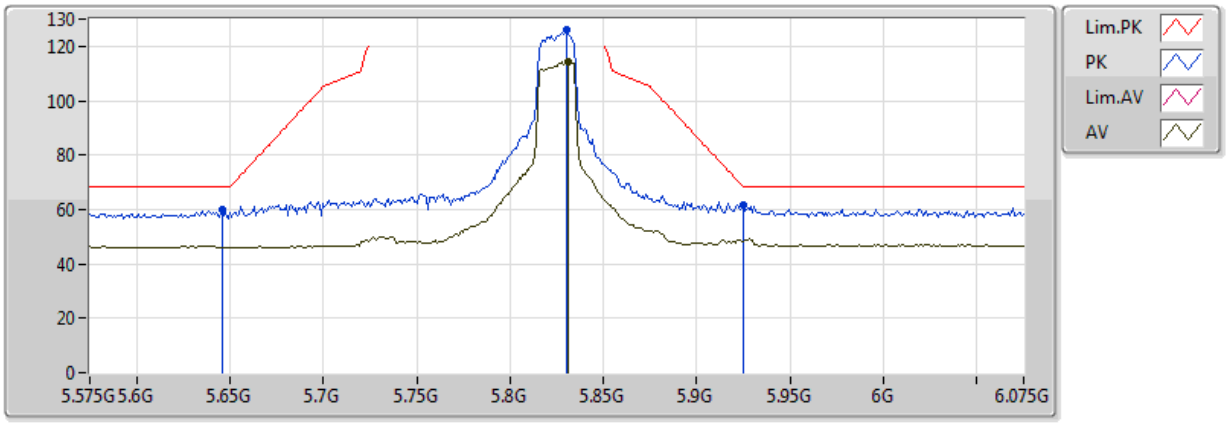


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.82G	112.63	Inf	-Inf	6.04	3	V	306	1.98	-
PK	5.642G	60.47	68.20	-7.73	5.51	3	V	306	1.98	-
PK	5.82G	124.64	Inf	-Inf	6.04	3	V	306	1.98	-
PK	5.925G	61.83	68.20	-6.37	6.43	3	V	306	1.98	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5825MHz_TX

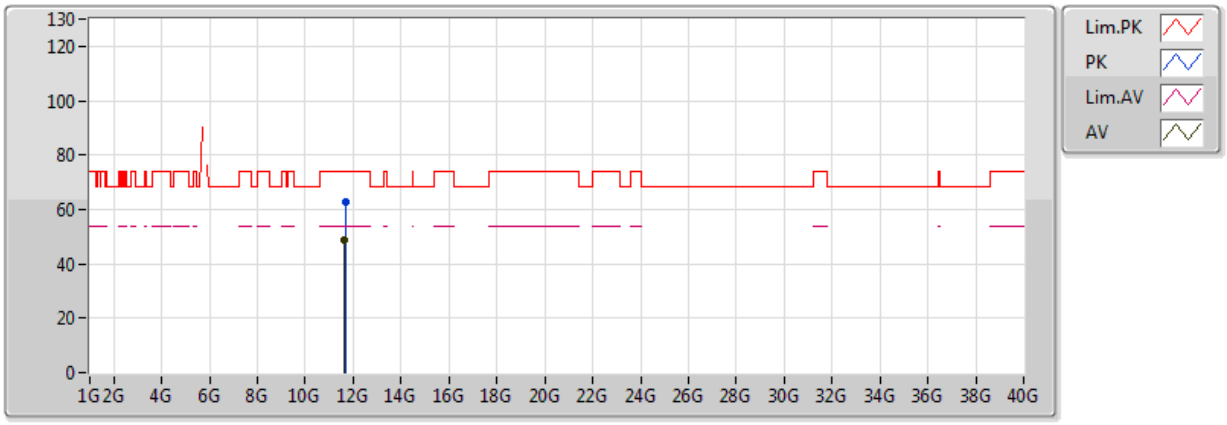


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.831G	114.43	Inf	-Inf	6.08	3	H	336	2.02	-
PK	5.646G	60.06	68.20	-8.14	5.52	3	H	336	2.02	-
PK	5.83G	125.85	Inf	-Inf	6.07	3	H	336	2.02	-
PK	5.925G	61.42	68.20	-6.78	6.43	3	H	336	2.02	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5825MHz_TX

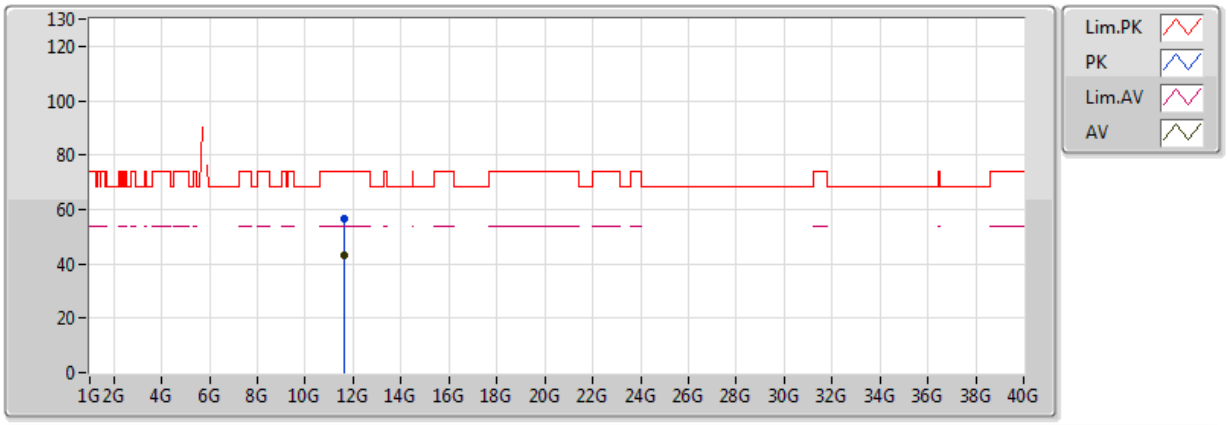


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.64844G	48.98	54.00	-5.02	12.12	3	V	119	1.82	-
PK	11.65714G	62.50	74.00	-11.50	12.12	3	V	119	1.82	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

5825MHz_TX

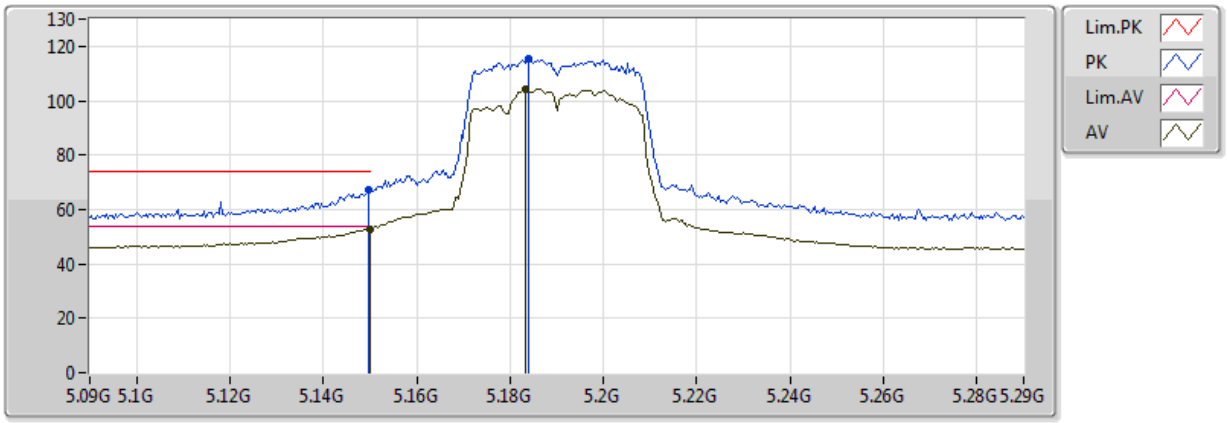


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.65258G	43.01	54.00	-10.99	12.12	3	H	131	2.28	-
PK	11.64862G	56.67	74.00	-17.33	12.12	3	H	131	2.28	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5190MHz_TX

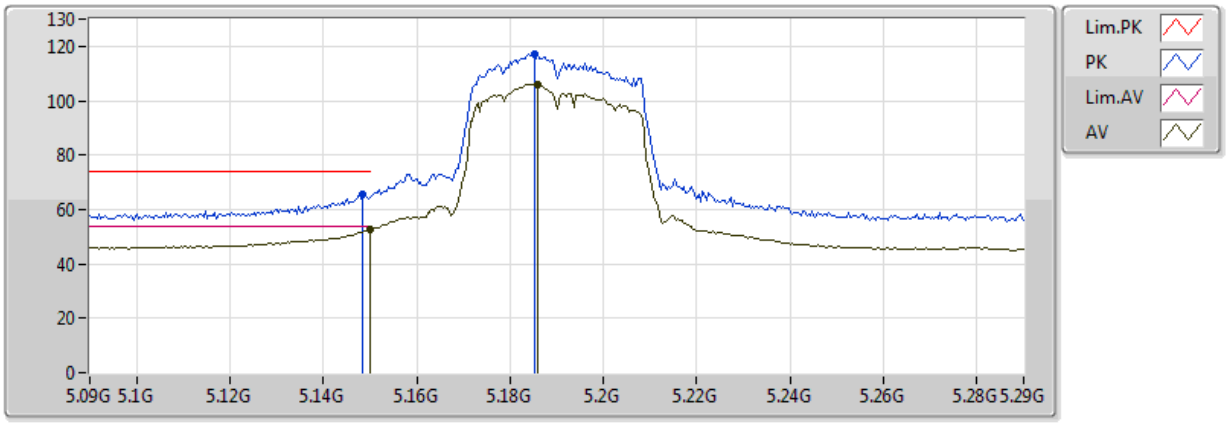


20170414
EUT Z_3TX
TXBF
Setting 18.5
04-J-6-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	52.78	54.00	-1.22	4.77	3	V	0	2.15	-
AV	5.1832G	104.22	Inf	-Inf	4.89	3	V	0	2.15	-
PK	5.1496G	67.41	74.00	-6.59	4.77	3	V	0	2.15	-
PK	5.184G	115.29	Inf	-Inf	4.89	3	V	0	2.15	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5190MHz_TX

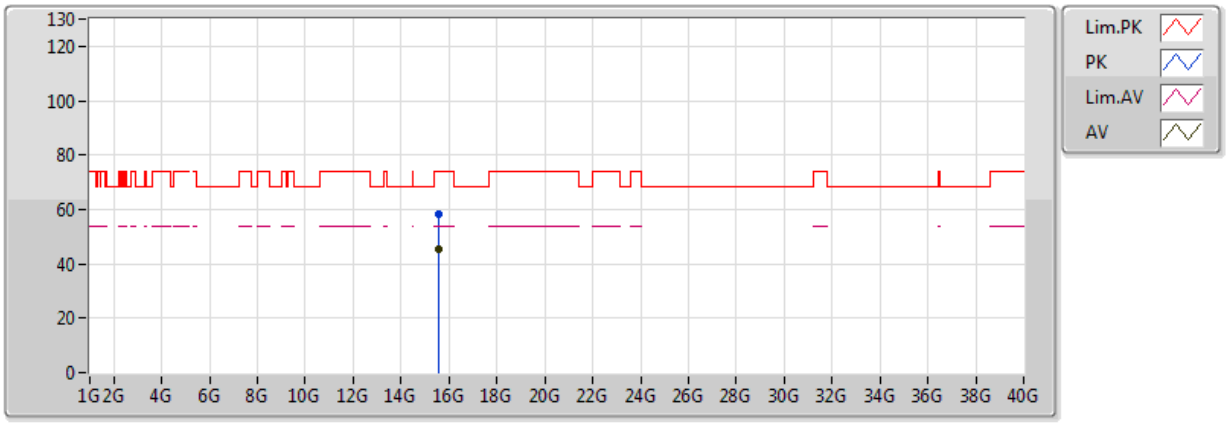


20170414
EUT Z_3TX
TXBF
Setting 18.5
04-J-6-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	52.53	54.00	-1.47	4.77	3	H	358	2.28	-
AV	5.186G	106.07	Inf	-Inf	4.90	3	H	358	2.28	-
PK	5.1484G	65.71	74.00	-8.29	4.77	3	H	358	2.28	-
PK	5.1852G	117.34	Inf	-Inf	4.90	3	H	358	2.28	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5190MHz_TX

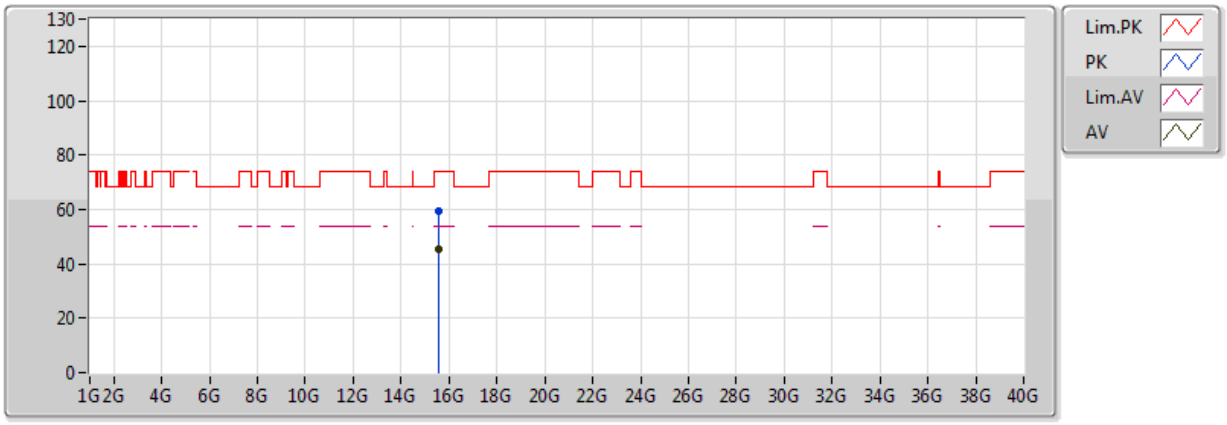


20170508
EUT Z_3TX
TXBF
Setting 18.5
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.55644G	45.14	54.00	-8.86	13.78	3	V	288	1.45	-
PK	15.55608G	58.34	74.00	-15.66	13.78	3	V	288	1.45	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5190MHz_TX

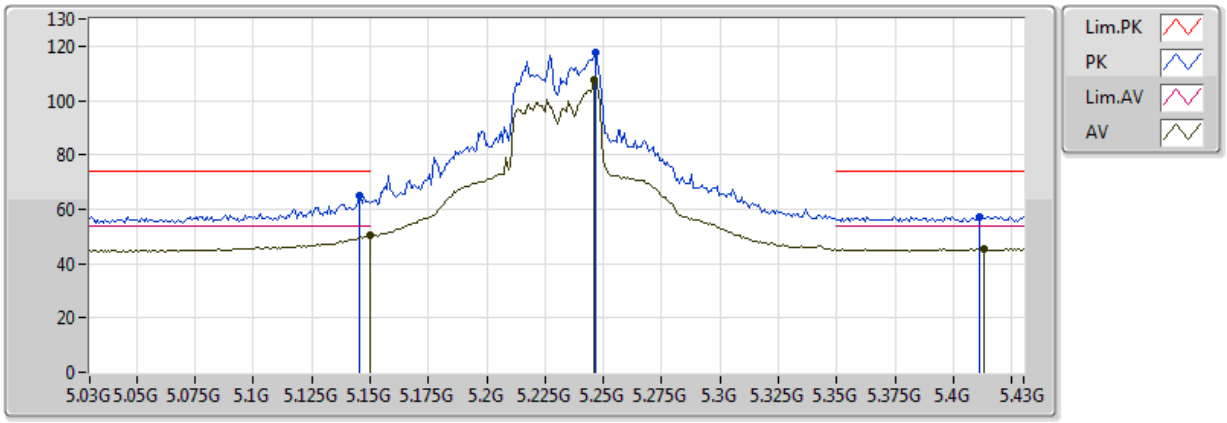


20170508
EUT Z_3TX
TXBF
Setting 18.5
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.57708G	45.19	54.00	-8.81	13.75	3	H	32	1.85	-
PK	15.57156G	59.16	74.00	-14.84	13.76	3	H	32	1.85	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5230MHz_TX

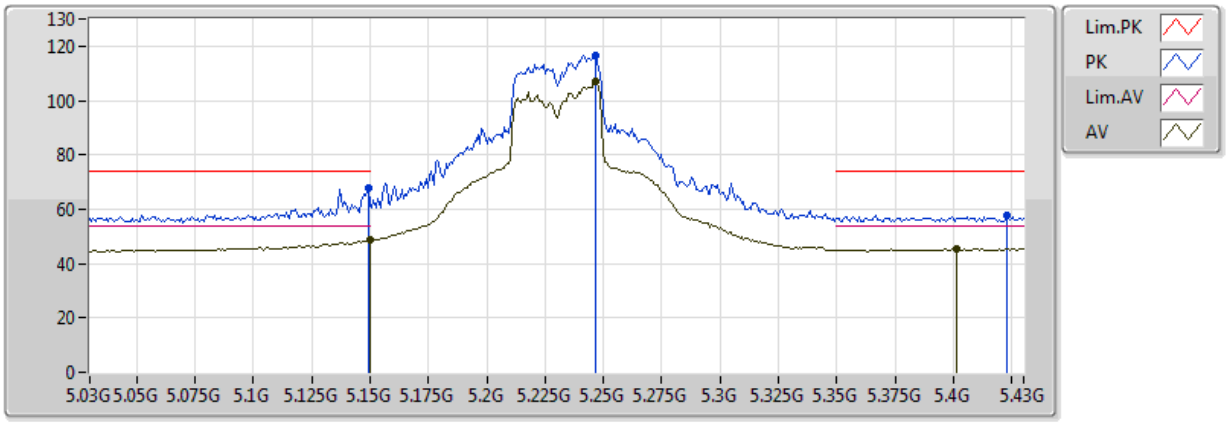


20170414
EUT Z_3TX
TXBF
Setting 25
04-J-6-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	50.21	54.00	-3.79	4.77	3	V	16	1.40	-
AV	5.246G	107.48	Inf	-Inf	5.00	3	V	16	1.40	-
AV	5.4132G	45.37	54.00	-8.63	5.20	3	V	16	1.40	-
PK	5.1452G	64.95	74.00	-9.05	4.76	3	V	16	1.40	-
PK	5.2468G	117.50	Inf	-Inf	5.00	3	V	16	1.40	-
PK	5.4108G	57.25	74.00	-16.75	5.19	3	V	16	1.40	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5230MHz_TX

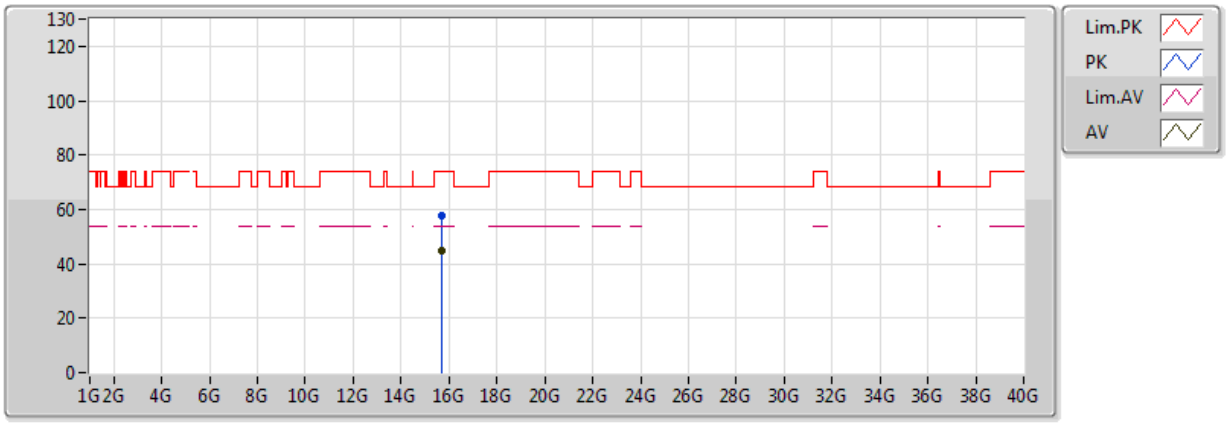


20170414
EUT Z_3TX
TXBF
Setting 25
04-J-6-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	48.98	54.00	-5.02	4.77	3	H	14	1.31	-
AV	5.2468G	107.24	Inf	-Inf	5.00	3	H	14	1.31	-
AV	5.4012G	45.44	54.00	-8.56	5.15	3	H	14	1.31	-
PK	5.1492G	67.75	74.00	-6.25	4.77	3	H	14	1.31	-
PK	5.2468G	116.78	Inf	-Inf	5.00	3	H	14	1.31	-
PK	5.4228G	57.90	74.00	-16.10	5.24	3	H	14	1.31	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5230MHz_TX

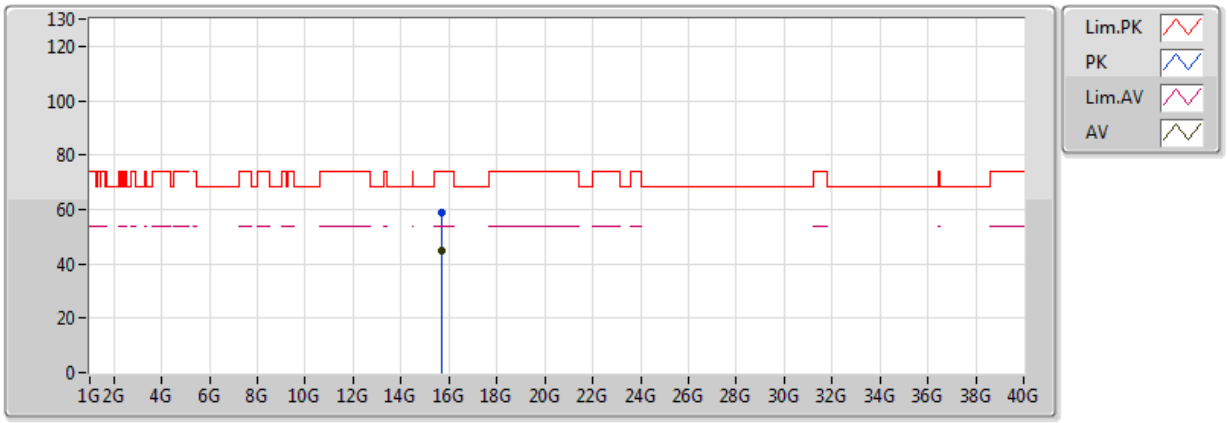


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.6957G	44.60	54.00	-9.40	13.61	3	V	210	1.14	-
PK	15.68286G	57.85	74.00	-16.15	13.62	3	V	210	1.14	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5230MHz_TX

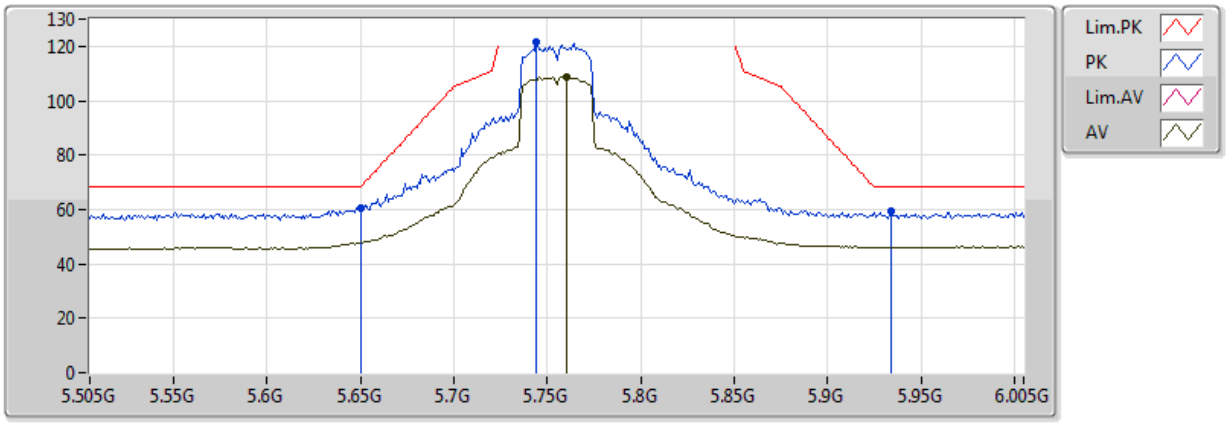


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.68328G	44.82	54.00	-9.18	13.62	3	H	303	1.03	-
PK	15.69408G	58.96	74.00	-15.04	13.61	3	H	303	1.03	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5755MHz_TX

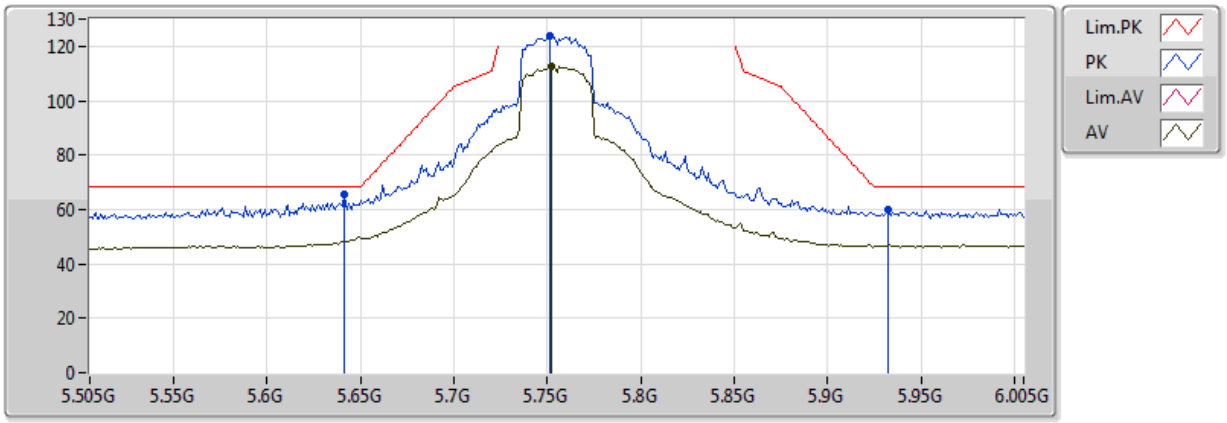


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.76G	108.96	Inf	-Inf	5.85	3	V	182	1.22	-
PK	5.65G	60.53	68.20	-7.67	5.53	3	V	182	1.22	-
PK	5.744G	121.75	Inf	-Inf	5.80	3	V	182	1.22	-
PK	5.934G	59.27	68.20	-8.93	6.47	3	V	182	1.22	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5755MHz_TX

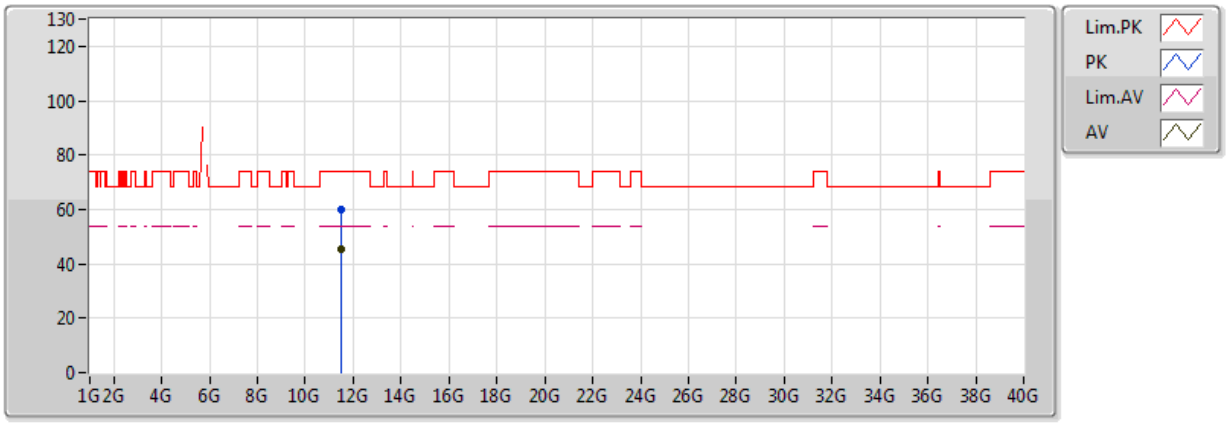


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.752G	112.70	Inf	-Inf	5.83	3	H	322	1.97	-
PK	5.641G	65.64	68.20	-2.56	5.50	3	H	322	1.97	-
PK	5.751G	123.75	Inf	-Inf	5.82	3	H	322	1.97	-
PK	5.932G	60.11	68.20	-8.09	6.46	3	H	322	1.97	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5755MHz_TX

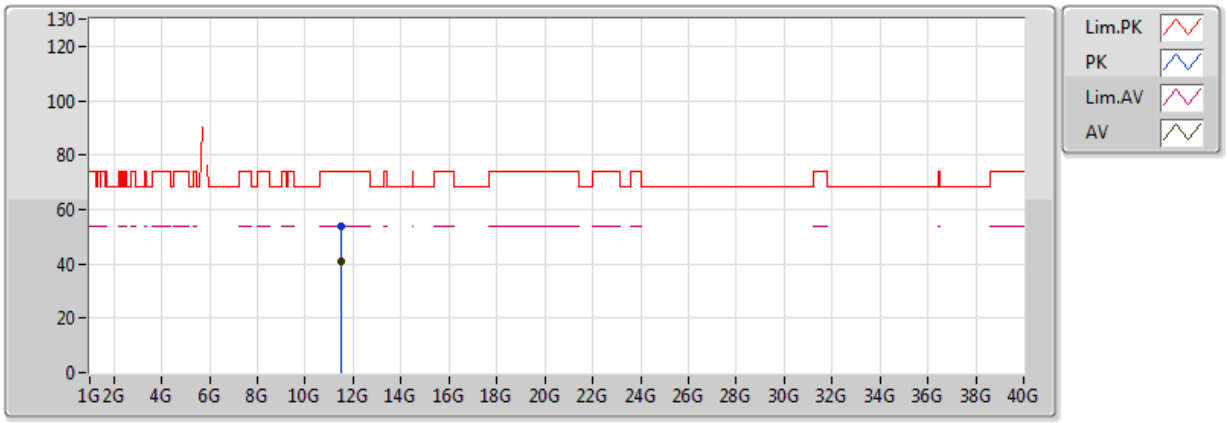


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.51834G	45.46	54.00	-8.54	12.05	3	V	37	1.53	-
PK	11.51156G	59.70	74.00	-14.30	12.05	3	V	37	1.53	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5755MHz_TX

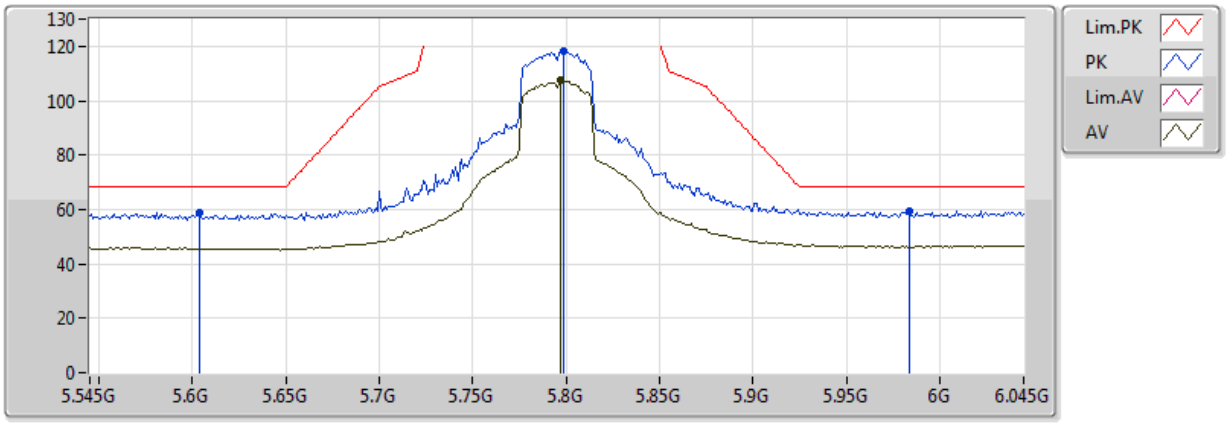


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.50706G	40.66	54.00	-13.34	12.05	3	H	123	2.44	-
PK	11.51702G	53.95	74.00	-20.05	12.05	3	H	123	2.44	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5795MHz_TX

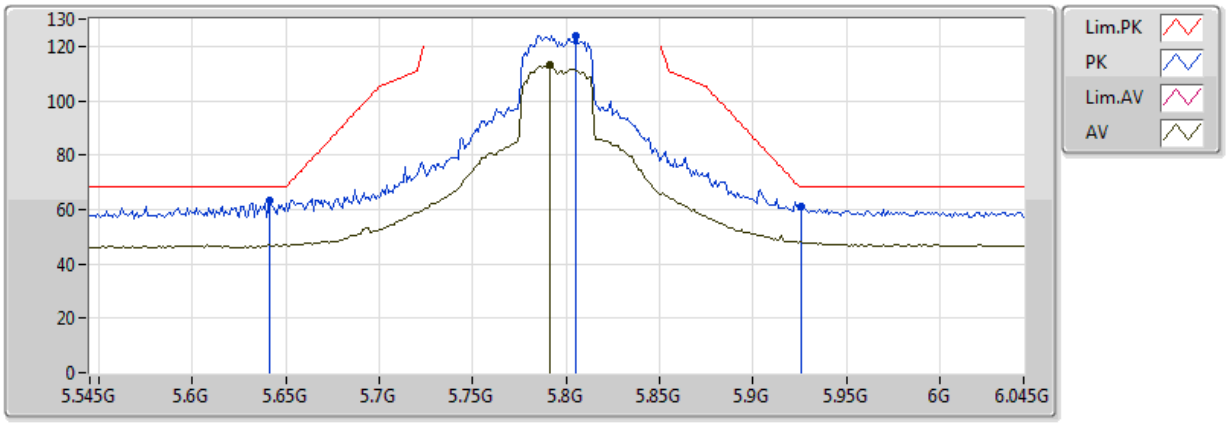


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.797G	107.40	Inf	-Inf	5.95	3	V	0	1.50	-
PK	5.604G	58.74	68.20	-9.46	5.39	3	V	0	1.50	-
PK	5.799G	118.27	Inf	-Inf	5.96	3	V	0	1.50	-
PK	5.984G	59.67	68.20	-8.53	6.66	3	V	0	1.50	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5795MHz_TX

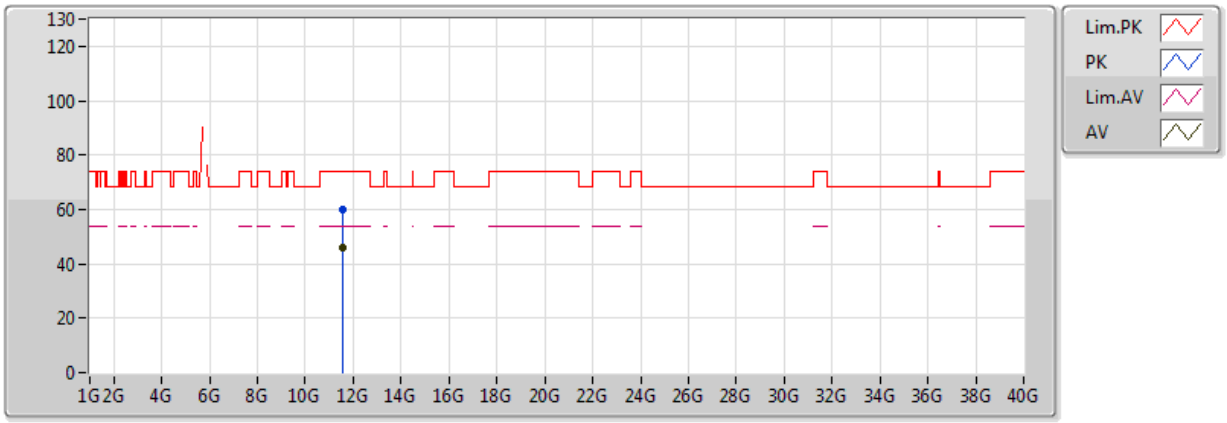


20170412
EUT Z_3TX
TXBF
Setting 25
01-W-3-10
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.791G	113.21	Inf	-Inf	5.93	3	H	332	2.13	-
PK	5.641G	63.52	68.20	-4.68	5.50	3	H	332	2.13	-
PK	5.805G	123.77	Inf	-Inf	5.98	3	H	332	2.13	-
PK	5.926G	60.91	68.20	-7.29	6.44	3	H	332	2.13	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5795MHz_TX

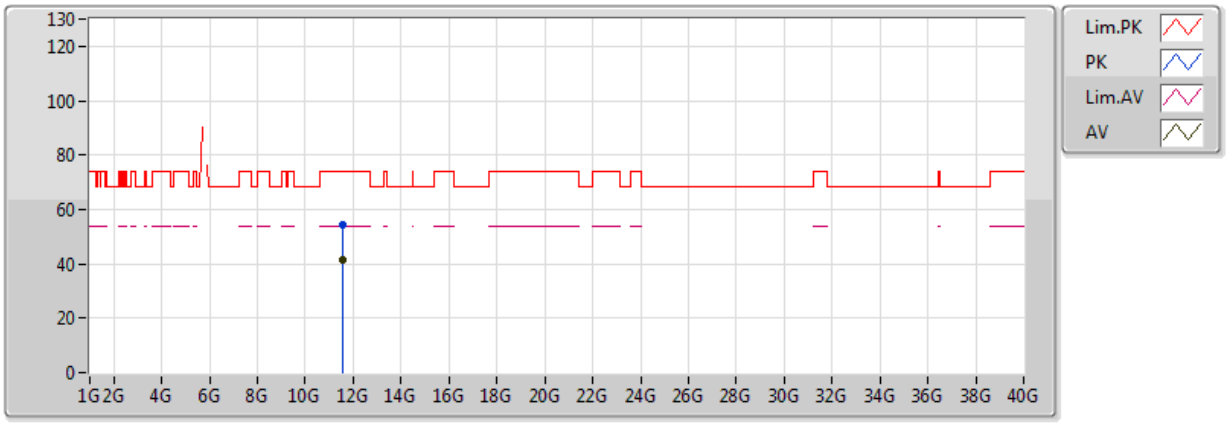


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.5873G	46.22	54.00	-7.78	12.09	3	V	117	1.80	-
PK	11.5864G	59.97	74.00	-14.03	12.09	3	V	117	1.80	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

5795MHz_TX

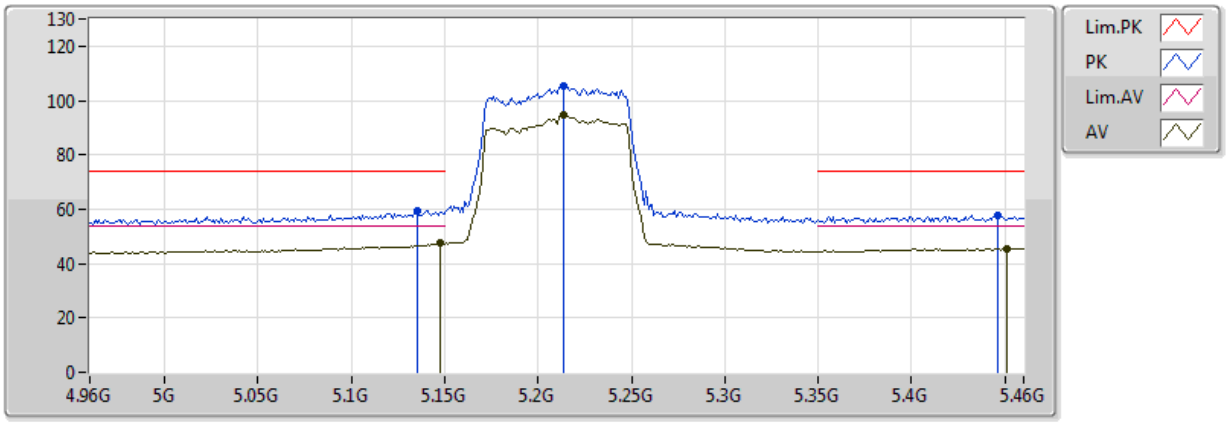


20170508
EUT Z_3TX
TXBF
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.57764G	41.70	54.00	-12.30	12.08	3	H	55	2.26	-
PK	11.5774G	54.38	74.00	-19.62	12.08	3	H	55	2.26	-

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

5210MHz_TX

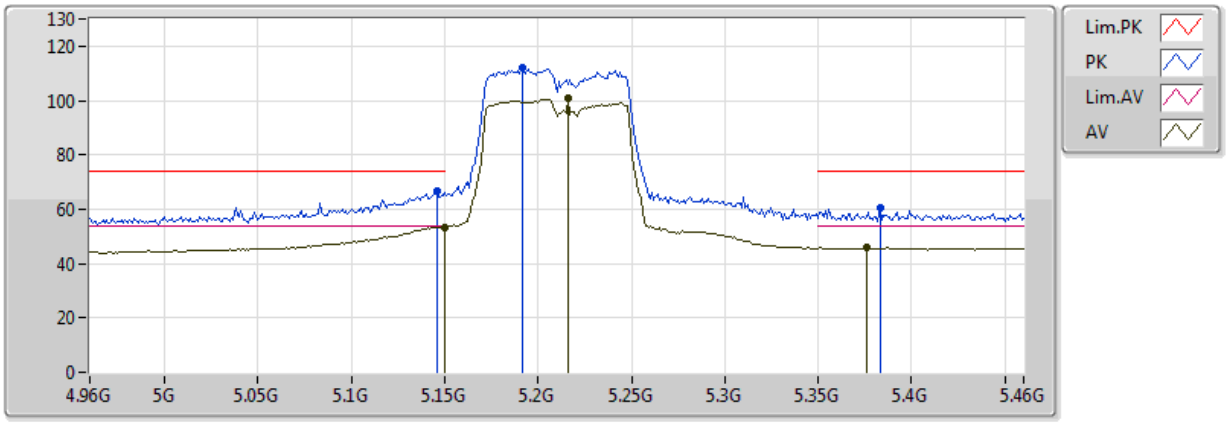


20170414
EUT Z_3TX
TXBF
Setting 20
04-J-6-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.148G	47.39	54.00	-6.61	4.77	3	V	165	1.04	-
AV	5.214G	94.49	Inf	-Inf	4.97	3	V	165	1.04	-
AV	5.451G	45.62	54.00	-8.38	5.37	3	V	165	1.04	-
PK	5.135G	59.44	74.00	-14.56	4.72	3	V	165	1.04	-
PK	5.214G	105.58	Inf	-Inf	4.97	3	V	165	1.04	-
PK	5.446G	57.60	74.00	-16.40	5.35	3	V	165	1.04	-

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

5210MHz_TX

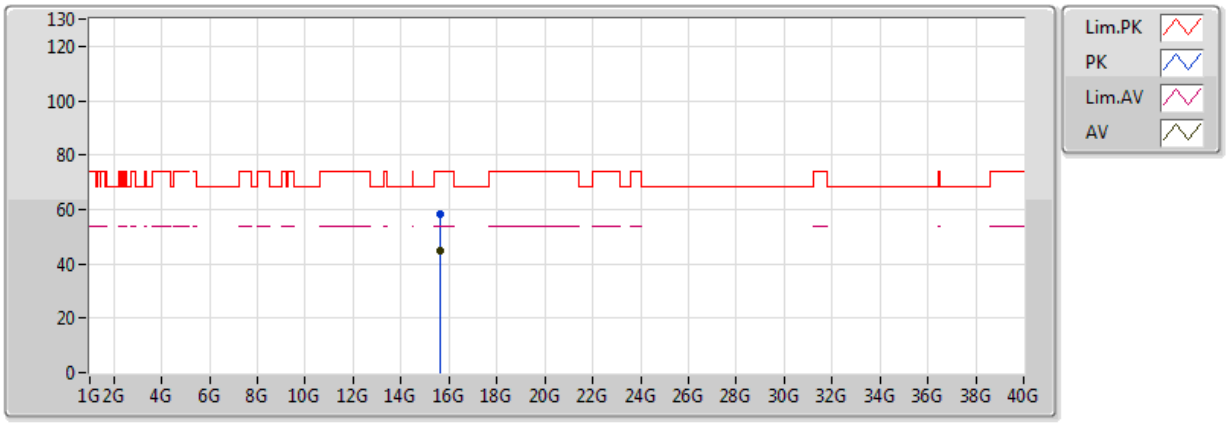


20170414
EUT Z_3TX
TXBF
Setting 20
04-J-6-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	53.33	54.00	-0.67	4.77	3	H	245	1.98	-
AV	5.216G	100.59	Inf	-Inf	4.97	3	H	245	1.98	-
AV	5.376G	45.76	54.00	-8.24	5.12	3	H	245	1.98	-
PK	5.146G	66.74	74.00	-7.26	4.76	3	H	245	1.98	-
PK	5.192G	111.87	Inf	-Inf	4.92	3	H	245	1.98	-
PK	5.383G	60.29	74.00	-13.71	5.13	3	H	245	1.98	-

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

5210MHz_TX

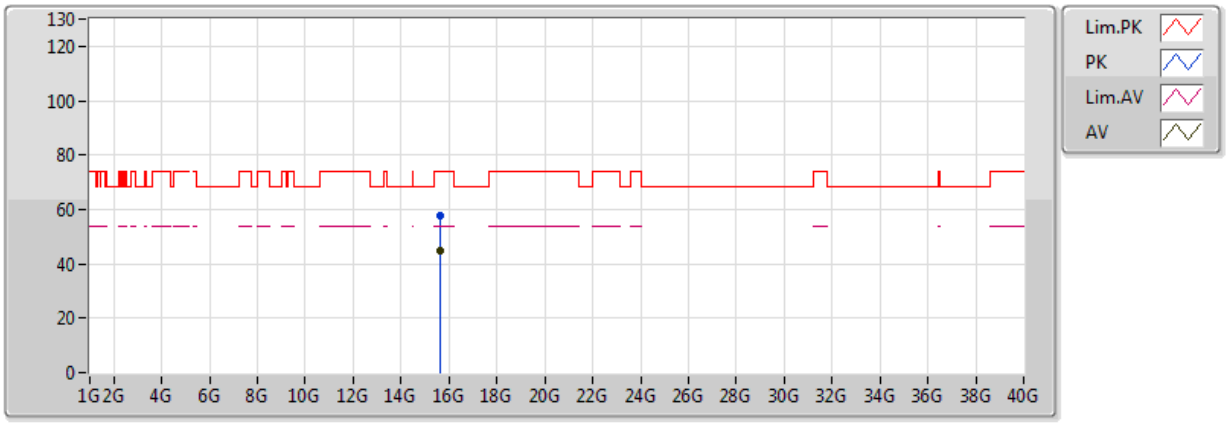


20170508
EUT Z_3TX
TXBF
Setting 20
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.62544G	44.83	54.00	-9.17	13.69	3	V	39	2.38	-
PK	15.62748G	58.02	74.00	-15.98	13.69	3	V	39	2.38	-

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

5210MHz_TX

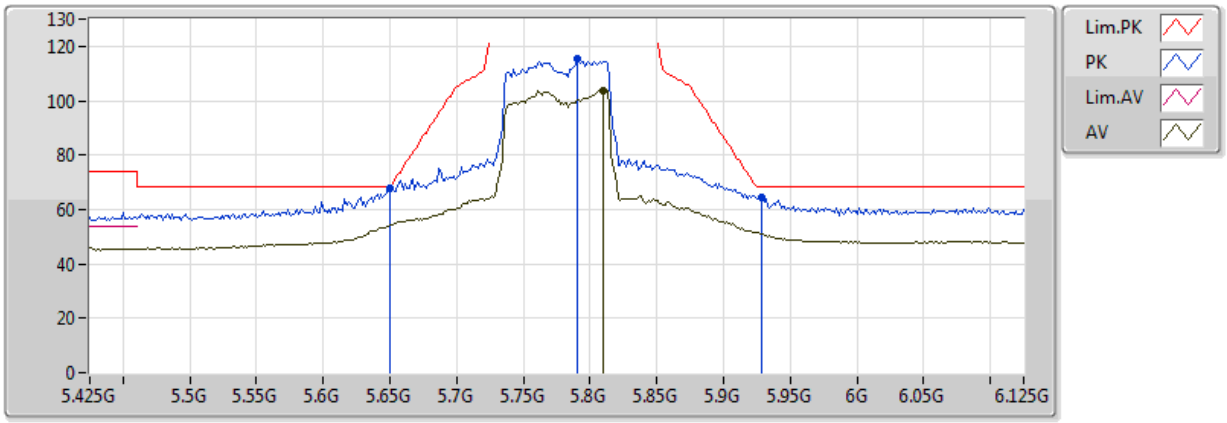


20170508
EUT Z_3TX
TXBF
Setting 20
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.6162G	44.77	54.00	-9.23	13.71	3	H	74	1.58	-
PK	15.63366G	57.99	74.00	-16.01	13.68	3	H	74	1.58	-

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

5775MHz_TX

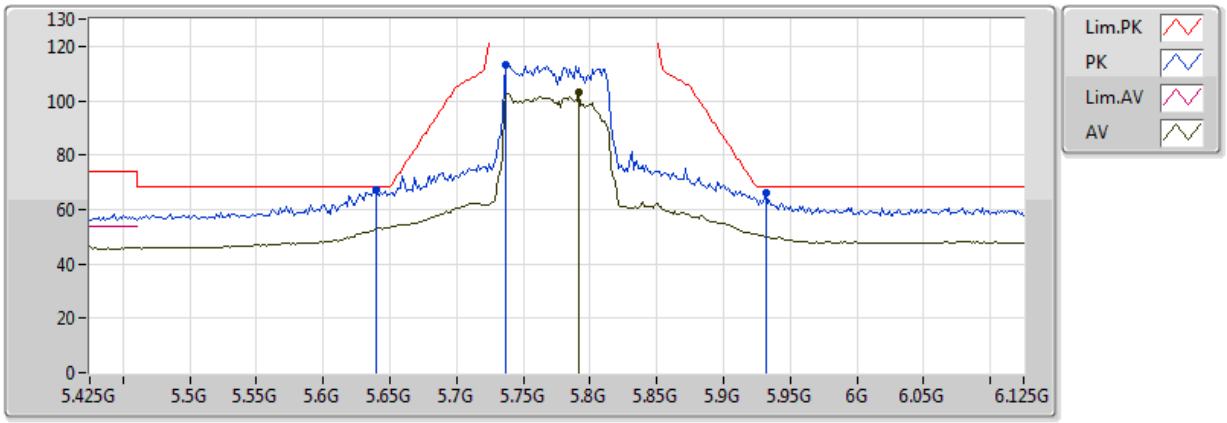


20170414
EUT Z_3TX
TXBF
Setting 23.5
04-J-6-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.81G	103.86	Inf	-Inf	6.45	3	V	300	2.18	-
PK	5.6504G	67.93	68.50	-0.57	6.21	3	V	300	2.18	-
PK	5.7904G	115.21	Inf	-Inf	6.38	3	V	300	2.18	-
PK	5.929G	64.20	68.20	-4.00	7.14	3	V	300	2.18	-

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

5775MHz_TX

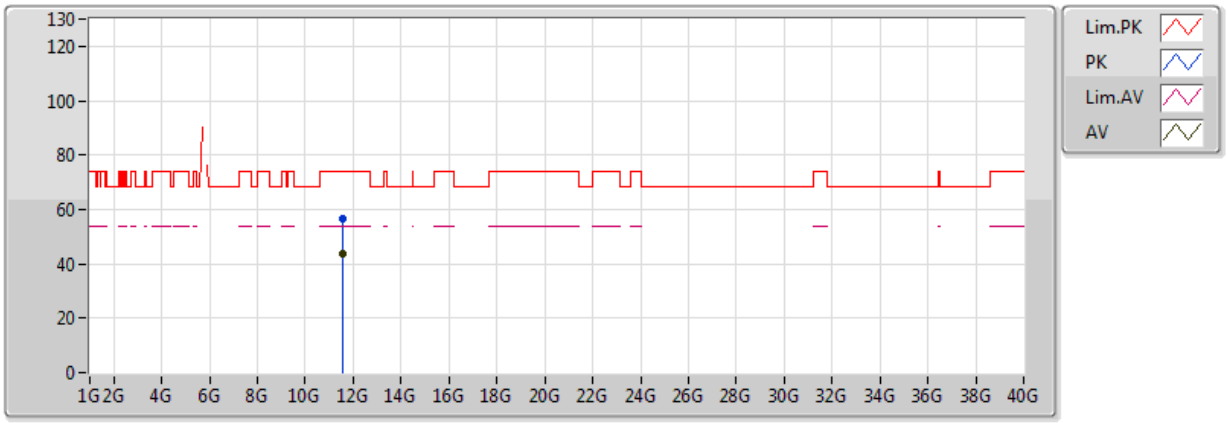


20170414
EUT Z_3TX
TXBF
Setting 23.5
04-J-6-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.7918G	102.88	Inf	-Inf	6.38	3	H	2	2.18	-
PK	5.6392G	67.01	68.20	-1.19	6.20	3	H	2	2.18	-
PK	5.7372G	112.92	Inf	-Inf	6.31	3	H	2	2.18	-
PK	5.9318G	65.99	68.20	-2.21	7.15	3	H	2	2.18	-

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

5775MHz_TX

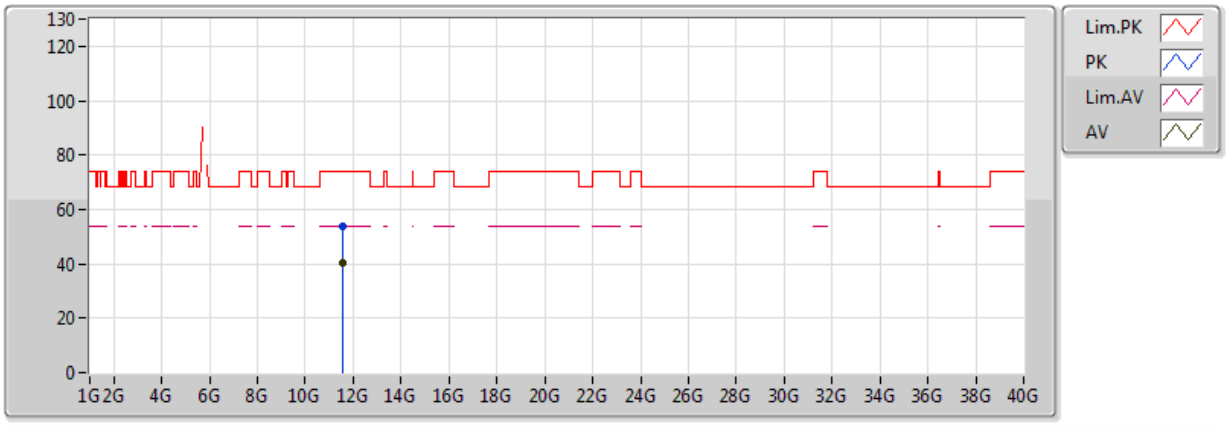


20170508
EUT Z_3TX
TXBF
Setting 23.5
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.56494G	43.44	54.00	-10.56	12.08	3	V	321	1.24	-
PK	11.56182G	56.83	74.00	-17.17	12.08	3	V	321	1.24	-

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

5775MHz_TX



20170508
EUT Z_3TX
TXBF
Setting 23.5
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.55672G	40.53	54.00	-13.47	12.07	3	H	85	1.51	-
PK	11.5614G	53.95	74.00	-20.05	12.08	3	H	85	1.51	-

Mode: 20 MHz / Port 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9703	5199.9695	5199.9692	5199.9687
110.00	5199.9696	5199.9687	5199.9678	5199.9670
93.50	5199.9686	5199.9683	5199.9674	5199.9667
Max. Deviation (MHz)	0.0314	0.0317	0.0326	0.0333
Max. Deviation (ppm)	6.04	6.10	6.27	6.40
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5199.9720	5199.9716	5199.9715	5199.9706
10	5199.9715	5199.9707	5199.9699	5199.9696
20	5199.9696	5199.9694	5199.9689	5199.9681
30	5199.9688	5199.9680	5199.9674	5199.9669
40	5199.9679	5199.9673	5199.9664	5199.9660
Max. Deviation (MHz)	0.0321	0.0327	0.0336	0.0340
Max. Deviation (ppm)	6.17	6.29	6.46	6.54
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9706	5784.9703	5784.9701	5784.9691
110.00	5784.9696	5784.9694	5784.9686	5784.9679
93.50	5784.9693	5784.9692	5784.9687	5784.9686
Max. Deviation (MHz)	0.0307	0.0308	0.0314	0.0321
Max. Deviation (ppm)	5.31	5.32	5.43	5.55
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5784.9724	5784.9715	5784.9712	5784.9706
10	5784.9716	5784.9708	5784.9704	5784.9700
20	5784.9696	5784.9693	5784.9688	5784.9683
30	5784.9688	5784.9682	5784.9677	5784.9675
40	5784.9681	5784.9676	5784.9674	5784.9673
Max. Deviation (MHz)	0.0319	0.0324	0.0326	0.0327
Max. Deviation (ppm)	5.51	5.60	5.64	5.65
Result	Pass			

Mode: 40 MHz / Port 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9706	5189.9703	5189.9698	5189.9693
110.00	5189.9696	5189.9686	5189.9682	5189.9678
93.50	5189.9689	5189.9684	5189.9680	5189.9670
Max. Deviation (MHz)	0.0311	0.0316	0.0320	0.0330
Max. Deviation (ppm)	5.99	6.09	6.17	6.36
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5189.9720	5189.9718	5189.9716	5189.9713
10	5189.9703	5189.9696	5189.9693	5189.9691
20	5189.9696	5189.9688	5189.9684	5189.9676
30	5189.9688	5189.9687	5189.9683	5189.9673
40	5189.9676	5189.9669	5189.9668	5189.9664
Max. Deviation (MHz)	0.0324	0.0331	0.0332	0.0336
Max. Deviation (ppm)	6.24	6.38	6.40	6.47
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9698	5754.9690	5754.9683	5754.9676
110.00	5754.9696	5754.9686	5754.9680	5754.9673
93.50	5754.9692	5754.9691	5754.9690	5754.9688
Max. Deviation (MHz)	0.0308	0.0314	0.0320	0.0327
Max. Deviation (ppm)	5.35	5.46	5.56	5.68
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5754.9721	5754.9715	5754.9711	5754.9706
10	5754.9713	5754.9704	5754.9698	5754.9696
20	5754.9696	5754.9691	5754.9689	5754.9688
30	5754.9688	5754.9684	5754.9679	5754.9672
40	5754.9668	5754.9664	5754.9656	5754.9654
Max. Deviation (MHz)	0.0332	0.0336	0.0344	0.0346
Max. Deviation (ppm)	5.77	5.84	5.98	6.01
Result	Pass			

Mode: 80 MHz / Port 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9697	5209.9696	5209.9687	5209.9677
110.00	5209.9696	5209.9692	5209.9683	5209.9681
93.50	5209.9687	5209.9684	5209.9681	5209.9675
Max. Deviation (MHz)	0.0313	0.0316	0.0319	0.0325
Max. Deviation (ppm)	6.01	6.07	6.12	6.24
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5209.9712	5209.9702	5209.9693	5209.9687
10	5209.9705	5209.9695	5209.9685	5209.9678
20	5209.9696	5209.9688	5209.9687	5209.9677
30	5209.9688	5209.9683	5209.9680	5209.9677
40	5209.9683	5209.9678	5209.9670	5209.9669
Max. Deviation (MHz)	0.0317	0.0322	0.0330	0.0331
Max. Deviation (ppm)	6.08	6.18	6.33	6.35
Result	Pass			

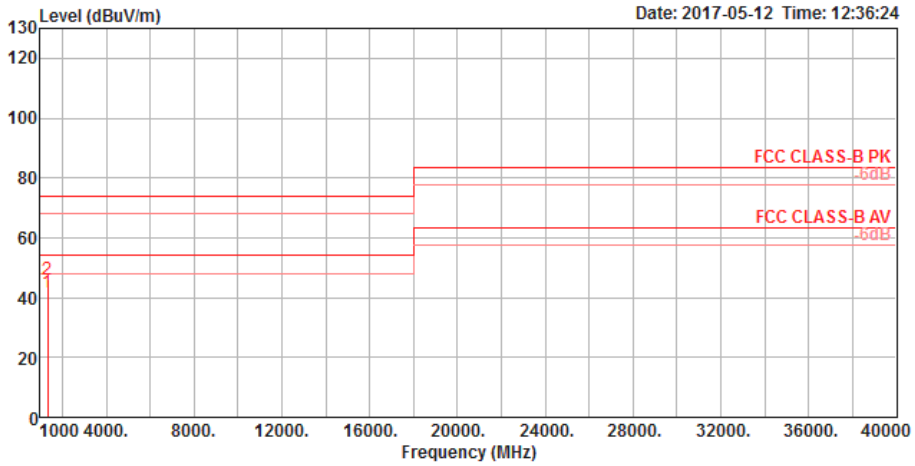
Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9706	5774.9697	5774.9692	5774.9687
110.00	5774.9696	5774.9690	5774.9685	5774.9679
93.50	5774.9686	5774.9684	5774.9680	5774.9679
Max. Deviation (MHz)	0.0314	0.0316	0.0320	0.0321
Max. Deviation (ppm)	5.44	5.47	5.54	5.56
Result	Pass			

Temperature vs. Frequency Stability

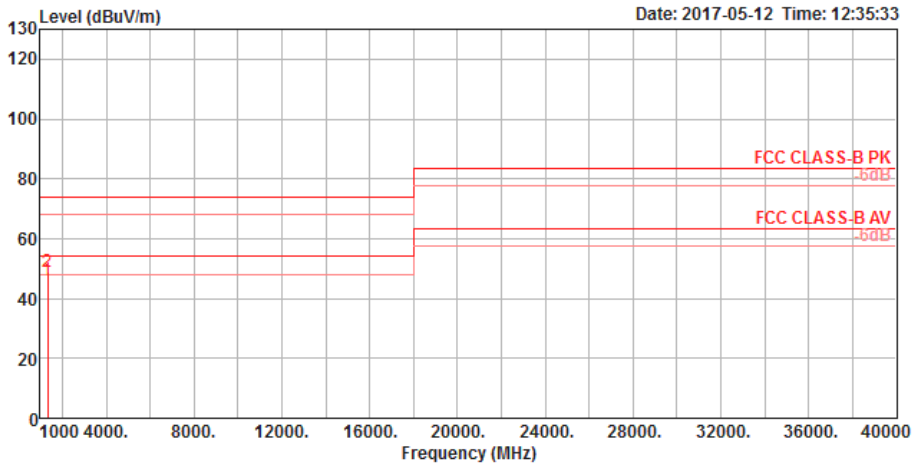
Temperature	Measurement Frequency (MHz)			
(℃)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5774.9704	5774.9702	5774.9698	5774.9694
10	5774.9698	5774.9690	5774.9681	5774.9673
20	5774.9696	5774.9688	5774.9680	5774.9671
30	5774.9688	5774.9683	5774.9675	5774.9671
40	5774.9683	5774.9679	5774.9677	5774.9676
Max. Deviation (MHz)	0.0317	0.0321	0.0325	0.0329
Max. Deviation (ppm)	5.49	5.56	5.63	5.70
Result	Pass			

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



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	1333.12	41.79	54.00	-12.21	49.87	3.84	24.90	36.82	156	201	Average	HORIZONTAL
2	1333.59	46.15	74.00	-27.85	54.22	3.84	24.91	36.82	156	201	Peak	HORIZONTAL

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



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	1333.12	45.95	54.00	-8.05	54.03	3.84	24.90	36.82	156	52	Average	VERTICAL
2	1333.26	48.78	74.00	-25.22	56.85	3.84	24.91	36.82	156	52	Peak	VERTICAL