FCC Test Report

Equipment	:	802.11a/ac/b/g/n Wireless Access Point
Brand Name	:	Edge-corE
Model No.	:	ECW7212-L/ECW7212-O
FCC ID	:	YZKECW7212L
Standard	:	47 CFR FCC Part 15.407
Operating Band	:	5150 MHz – 5250 MHz 5725 MHz – 5850 MHz
Applicant	:	Edgecore networks Corporation No. 1 Creation Rd., III, Hsinchu Science Park, Hsinchu 30077, Taiwan
Manufacturer	:	Accton Technology Corp No. 1 Creation Rd., III, Hsinchu Science Park, Hsinchu 30077, Taiwan
Function	:	☐ Outdoor; ☒ Indoor; ☐ Fixed P2P ☐ Client

The product sample received on Jan. 03, 2017 and completely tested on Apr. 21, 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

Table of Contents

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
FR660306-01AB	Rev. 01	Initial issue of report	Mar. 23, 2017
FR660306-01AB	Rev. 02	Revising operational temperature to “Tmax (45°C)” from “Tmax (40°C)” and revising frequency stability	May 23, 2017
FR660306-01AB	Rev. 03	Revising antenna gain to “ANT.1 2.4GHz: 4.88dBi, 5GHz: 5.09dBi/Ant.2 2.4GHz: 4.73dBi, 5GHz: 5.86dBi” from “ANT.1 2.4GHz: 4.51dBi, 5GHz: 4.60dBi/Ant.2 2.4GHz: 4.53dBi, 5GHz: 5.67dBi”.	Jun. 01, 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	2TX
5.15-5.25GHz	802.11n HT20	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11n HT40	40	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11a	20	2TX
5.725-5.85GHz	802.11n HT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11n HT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX

Note:
- 5.2G/5.2G-I(IC) is the 5.2GHz Band (5.15-5.25GHz).
- 5.8G/5.8G-I(IC) is the 5.8GHz Band (5.725-5.850GHz).
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	Accton	120G00000157A	PIFA Antenna	I-PEX	4.88	5.09
2	Accton	120G00000157A	PIFA Antenna	I-PEX	4.73	5.86

Note: The EUT has two antennas.

For 2.4GHz WLAN function

For IEEE 802.11b mode (1TX, 2RX):

Only Ant. 1 (Port 1) can be use as transmitting antenna

Ant. 1 (Port 1) and Ant. 2 (Port 2) can be used as receiving antennas.

Ant. 1 (Port 1) and Ant. 2 (Port 2) could receive simultaneously.

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

Ant. 1 (Port 1) and Ant. 2 (Port 2) could transmit/receive simultaneously.

For 5GHz WLAN function

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

Ant. 1 (Port 1) and Ant. 2 (Port 2) could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11a	0.987	0.057
802.11ac VHT20	0.985	0.066
802.11ac VHT40	0.956	0.195
802.11ac VHT80	0.94	0.269

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter or PoE			
Beamforming Function	☐	With beamforming	☒	Without beamforming

1.1.5 Table for Multiple Listing

The EUT has two model names which are identical to each other in all aspects except for the following table:

Brand Name	Model Name	Description
Edge-corE	ECW7212-L	All the models are identical, the different model names served as marketing strategy.
	ECW7212-O	

From the above models, model: ECW7212-L 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 v01r03
- 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	Eddie Weng	22°C / 56%	Feb. 20, 2017~ Apr. 21, 2017
Radiated	03CH01-CB	Jay Luo & Justin Lin	22°C / 54%	Jan. 09, 2017~ Mar. 08, 2017
AC Conduction	CO01-CB	GN Hou	21C / 56	Jan. 04, 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

Mode	Power Setting
802.11a_Nss1_2TX	-
5180MHz	82
5200MHz	92
5240MHz	87
5745MHz	92
5785MHz	92
5825MHz	92
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	80
5200MHz	92
5240MHz	87
5745MHz	92
5785MHz	92
5825MHz	92
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	68
5230MHz	86
5755MHz	92
5795MHz	92
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	63
5775MHz	76

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

2.2 The Worst Case Measurement Configuration

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

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
1	EUT in Y axis + Adapter
2	EUT in Z axis + Adapter
Mode 2 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT in Z axis + PoE
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed at Y axis and Z axis position, and the worst case was found at Y axis. So the measurement will follow this same test configuration.	
1	EUT in Y axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	EUT in Y axis - WLAN 2.4GHz + WLAN 5GHz
2	EUT in Z axis - WLAN 2.4GHz + WLAN 5GHz
For operating mode 2 is the worst case and it was record in this test report.	
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.: FA660306-01 for Co-location RF Exposure Evaluation.	

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

Power	Brand	Model
PoE	MOTOROLA	PD-7001G

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter	APD	WA-12M12FU	INPUT: 100-240V~50/60Hz 0.5A Max OUTPUT: 12V-1A

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*4	DELL	E6430	DoC

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

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*4	DELL	E4300	DoC

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

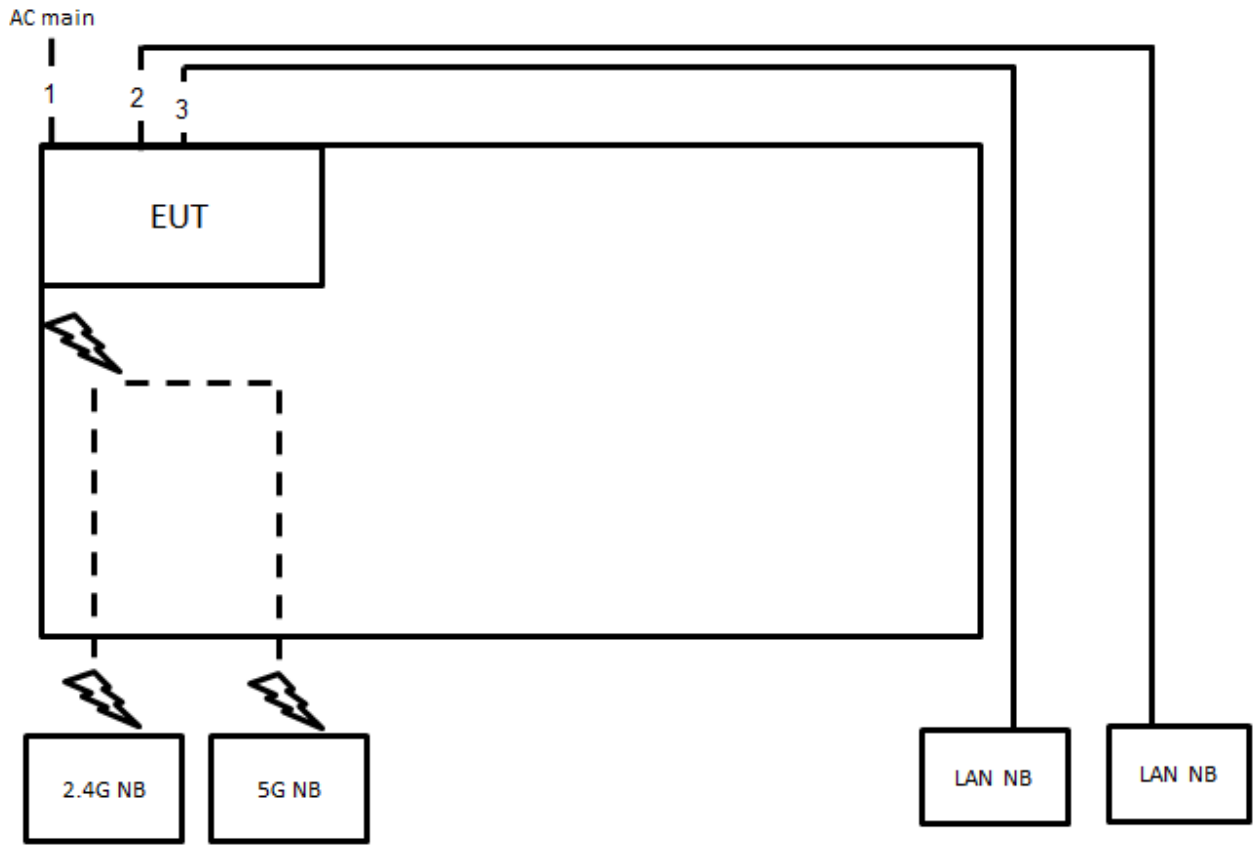
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

For Test Site No: TH01-CB

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

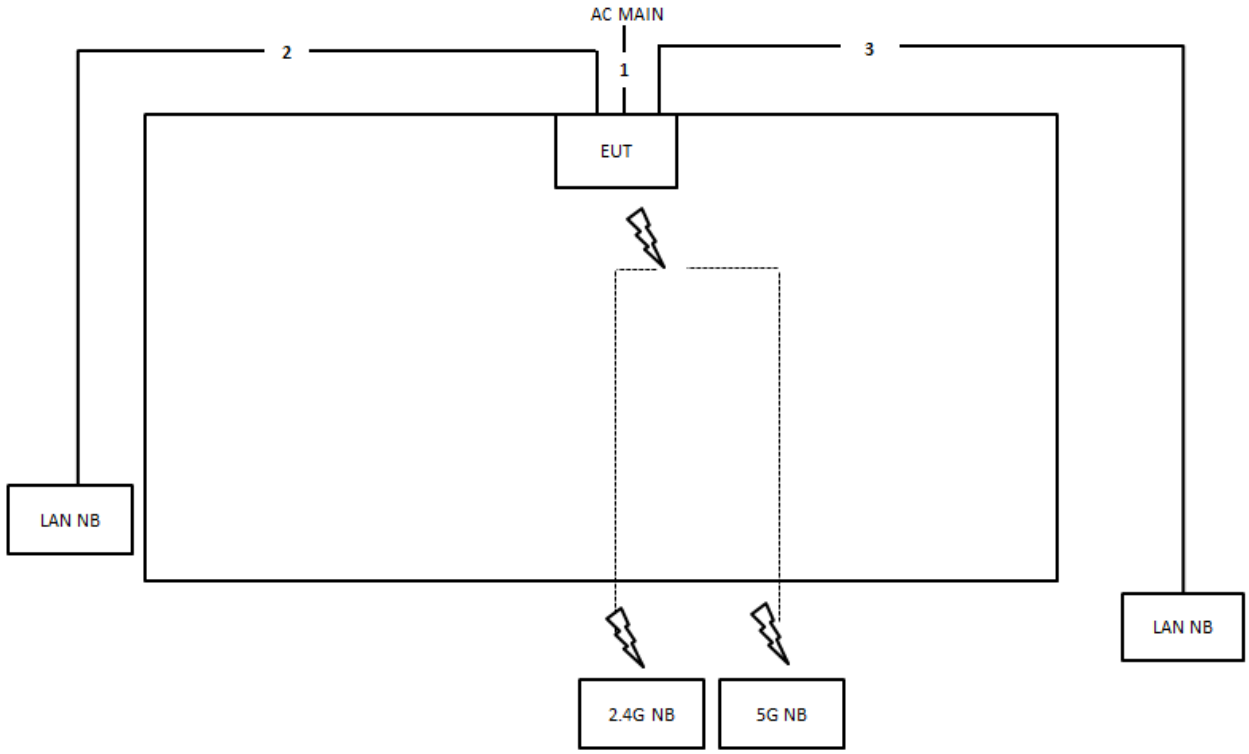
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



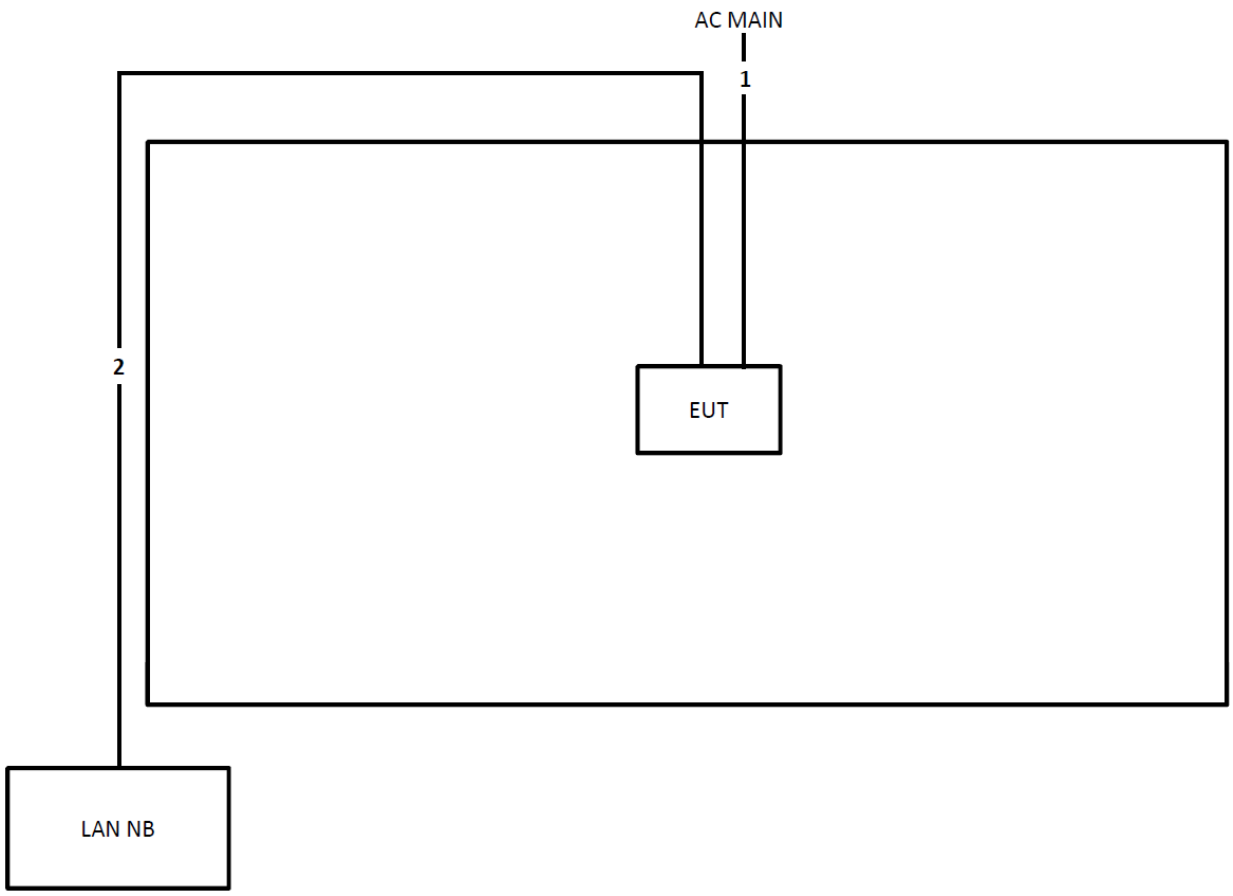
Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test < 1GHz



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

Test Setup Diagram - Radiated Test > 1GHz



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

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

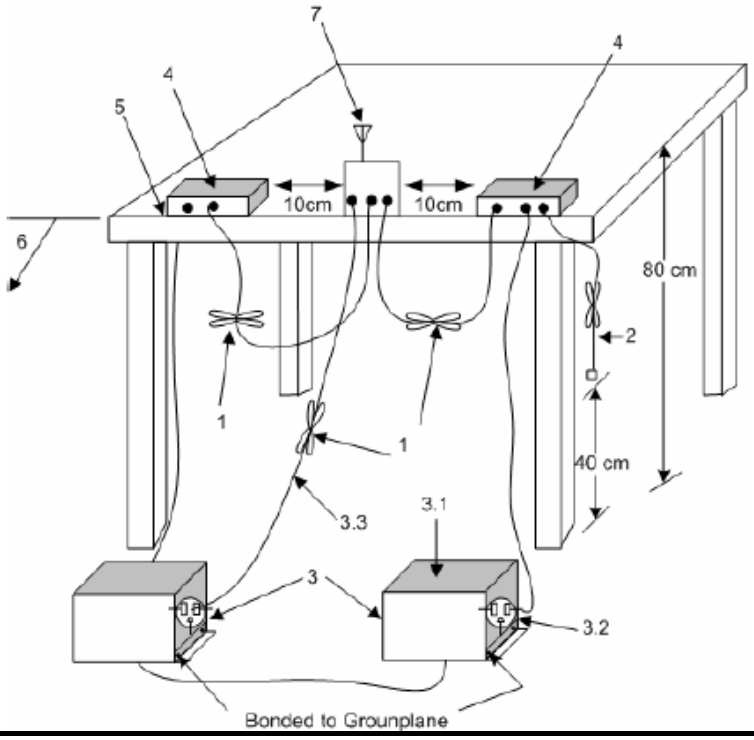
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



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

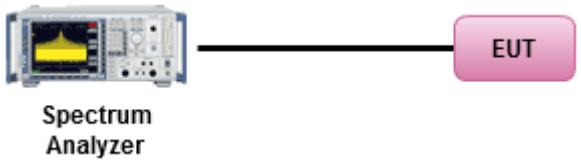
Refer a test equipment and calibration data table in this test report.

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.	

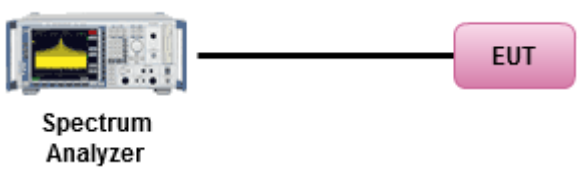
3.4.2 Measuring Instruments

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).

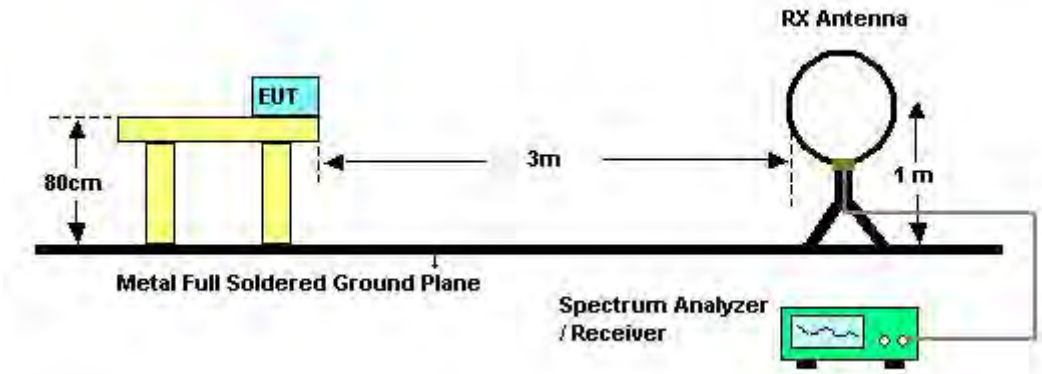
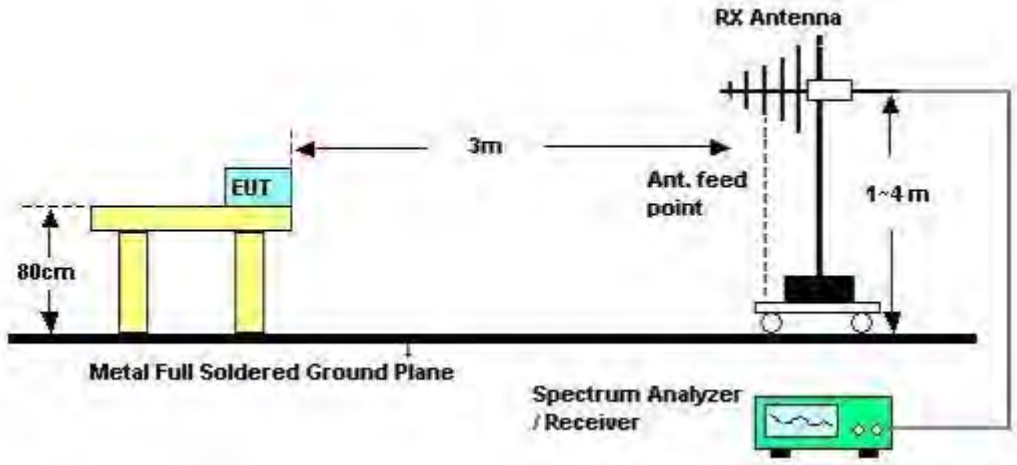
3.5.2 Measuring Instruments

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

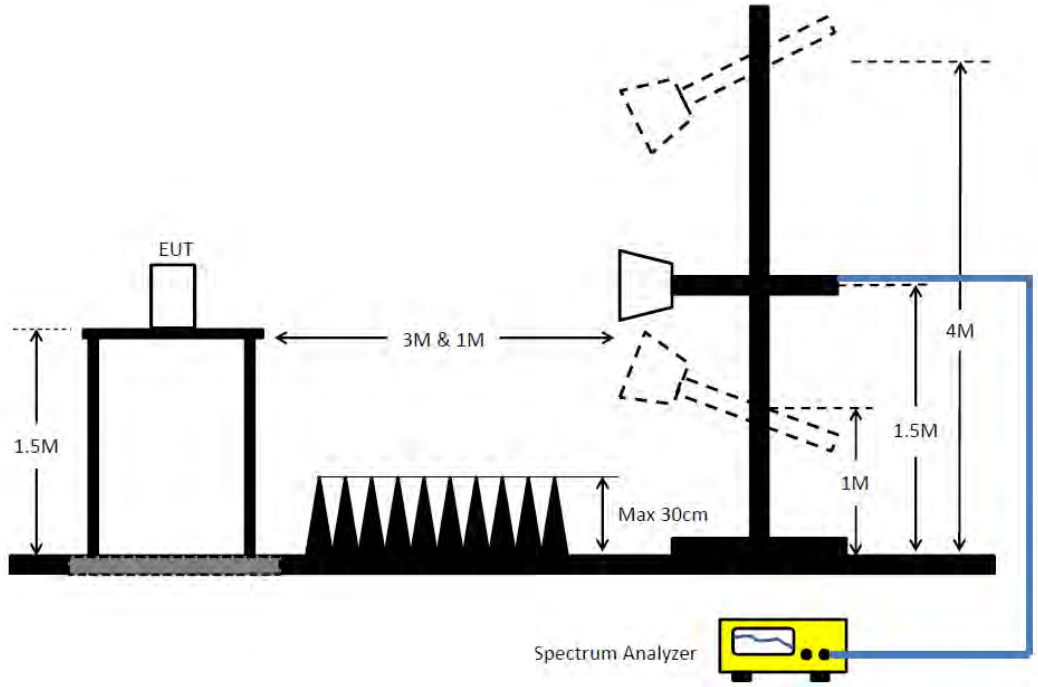
3.5.3 Test Procedures

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 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

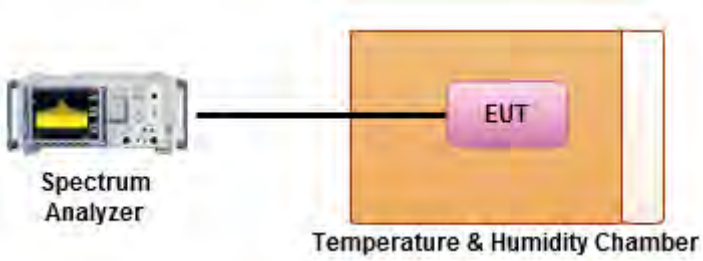
Refer a test equipment and calibration data table in this test report.

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

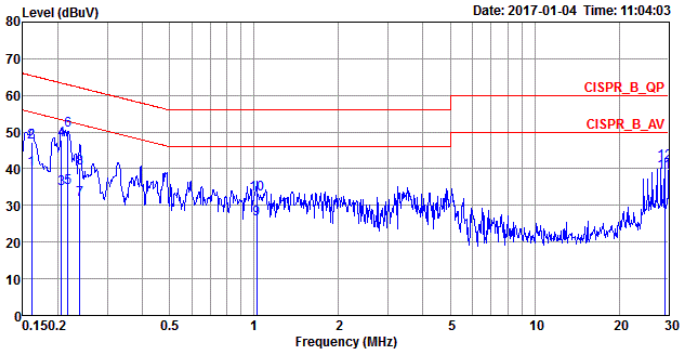
4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 27, 2016	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)
BILOG ANTENNA with 6dB Attenator	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. 15, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 2016	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. 21, 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)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
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)
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)
Cable	Marvelous Microwave	n/a	Cable-REF-1	9k-1GHz	Oct. 21, 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.
NCR means Non-Calibration required.

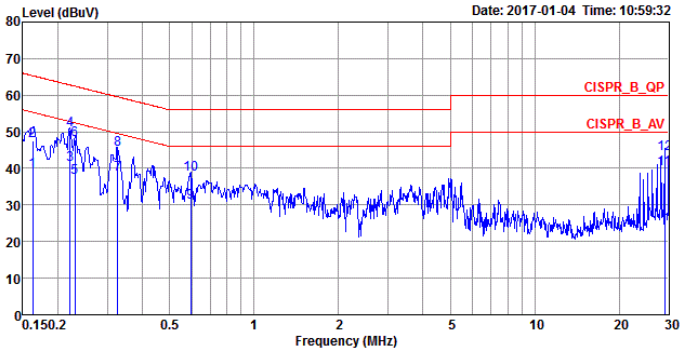
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1616	39.83	-15.55	55.38	29.84	9.95	0.04	Average	NEUTRAL
2	0.1616	47.20	-18.18	65.38	37.21	9.95	0.04	QP	NEUTRAL
3	0.2061	34.49	-18.87	53.36	24.46	9.98	0.05	Average	NEUTRAL
4	0.2061	47.70	-15.66	63.36	37.67	9.98	0.05	QP	NEUTRAL
5	0.2173	34.80	-18.12	52.92	24.77	9.98	0.05	Average	NEUTRAL
6	0.2173	50.41	-12.51	62.92	40.38	9.98	0.05	QP	NEUTRAL
7	0.2391	31.65	-20.48	52.13	21.63	9.97	0.05	Average	NEUTRAL
8	0.2391	40.14	-21.99	62.13	30.12	9.97	0.05	QP	NEUTRAL
9	1.0211	26.13	-19.87	46.00	16.08	9.99	0.06	Average	NEUTRAL
10	1.0211	33.07	-22.93	56.00	23.02	9.99	0.06	QP	NEUTRAL
11	29.0613	39.03	-10.97	50.00	28.40	10.34	0.29	Average	NEUTRAL
12	29.0613	41.69	-18.31	60.00	31.06	10.34	0.29	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	0.1624	39.34	-16.00	55.34	29.36	9.94	0.04	Average	LINE
2	0.1624	47.46	-17.88	65.34	37.48	9.94	0.04	QP	LINE
3	0.2208	40.92	-11.87	52.79	30.95	9.92	0.05	Average	LINE
4	0.2208	50.48	-12.31	62.79	40.51	9.92	0.05	QP	LINE
5	0.2304	37.35	-15.09	52.44	27.38	9.92	0.05	Average	LINE
6	0.2304	47.69	-14.75	62.44	37.72	9.92	0.05	QP	LINE
7	0.3268	38.28	-11.25	49.53	28.34	9.90	0.04	Average	LINE
8	0.3268	45.27	-14.26	59.53	35.33	9.90	0.04	QP	LINE
9	0.5948	30.80	-15.20	46.00	20.83	9.92	0.05	Average	LINE
10	0.5948	38.29	-17.71	56.00	28.32	9.92	0.05	QP	LINE
11	29.0553	39.79	-10.21	50.00	29.13	10.37	0.29	Average	LINE
12	29.0553	43.89	-16.11	60.00	33.23	10.37	0.29	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_Nss1_2TX	-	-	-	-	-
5.15-5.25GHz	44.55M	25.512M	25M5D1D	23.3M	16.692M
5.725-5.85GHz	16.3M	28.836M	28M8D1D	15.125M	25.862M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-
5.15-5.25GHz	47.475M	25.987M	26M0D1D	26.875M	17.791M
5.725-5.85GHz	17.525M	30.86M	30M9D1D	15.7M	26.437M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-
5.15-5.25GHz	91.85M	36.882M	36M9D1D	39.55M	36.232M
5.725-5.85GHz	36M	60.52M	60M5D1D	35.25M	53.223M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-
5.15-5.25GHz	82.1M	75.662M	75M7D1D	82M	75.562M
5.725-5.85GHz	75.7M	75.962M	76M0D1D	75.5M	75.862M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

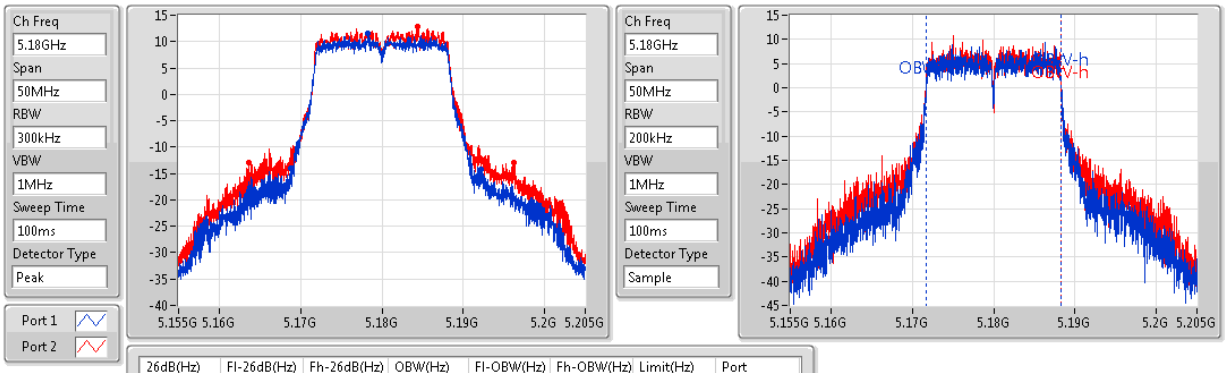
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	23.3M	16.692M	32.575M	16.692M
5200MHz	Pass	Inf	41.7M	19.115M	44.55M	25.512M
5240MHz	Pass	Inf	37.125M	16.792M	38.675M	18.516M
5745MHz	Pass	500k	16M	25.912M	16.3M	28.686M
5785MHz	Pass	500k	16.25M	25.862M	16.3M	28.836M
5825MHz	Pass	500k	16M	26.387M	15.125M	28.586M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	26.875M	17.791M	29.85M	17.841M
5200MHz	Pass	Inf	45.725M	20.115M	47.475M	25.987M
5240MHz	Pass	Inf	40.3M	17.941M	42.35M	19.165M
5745MHz	Pass	500k	17.525M	26.437M	16.5M	30.26M
5785MHz	Pass	500k	16.875M	27.361M	17.5M	30.735M
5825MHz	Pass	500k	17.3M	28.186M	15.7M	30.86M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.05M	36.232M	39.55M	36.282M
5230MHz	Pass	Inf	74.95M	36.382M	91.85M	36.882M
5755MHz	Pass	500k	36M	53.223M	35.25M	58.821M
5795MHz	Pass	500k	35.6M	54.223M	35.7M	60.52M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.1M	75.562M	82M	75.662M
5775MHz	Pass	500k	75.5M	75.862M	75.7M	75.962M

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

802.11a_Nss1_2TX **EBW**

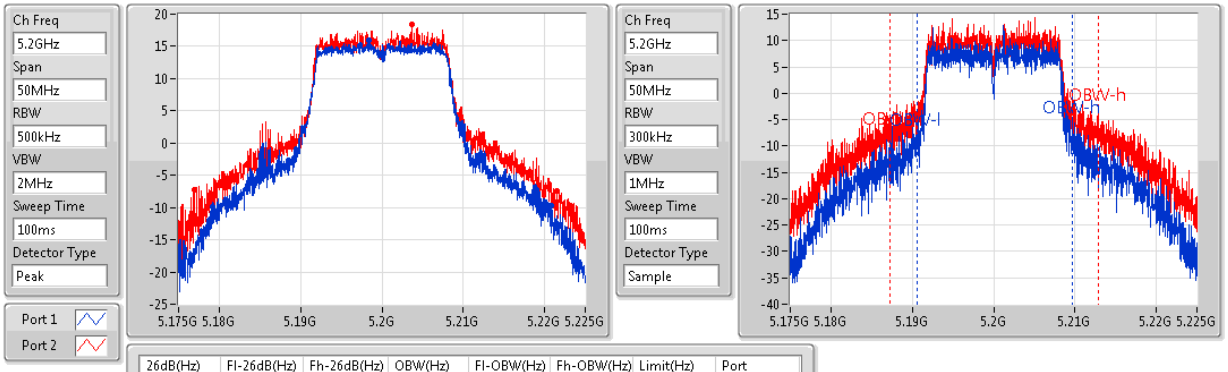
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.3M	5.168825G	5.192125G	16.692M	5.171654G	5.188346G	Inf	1
32.575M	5.16365G	5.196225G	16.692M	5.171654G	5.188346G	Inf	2

802.11a_Nss1_2TX **EBW**

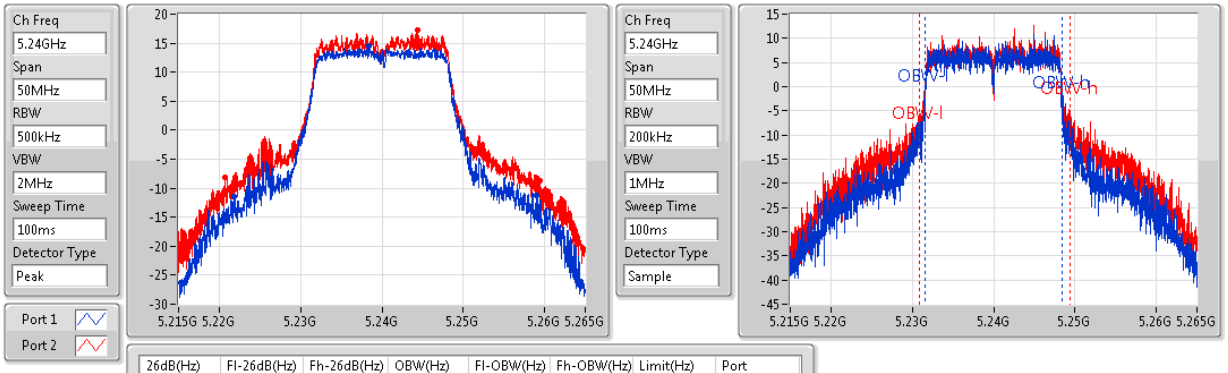
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.7M	5.179125G	5.220825G	19.115M	5.190555G	5.20967G	Inf	1
44.55M	5.1769G	5.22145G	25.512M	5.187306G	5.212819G	Inf	2

802.11a_Nss1_2TX **EBW**

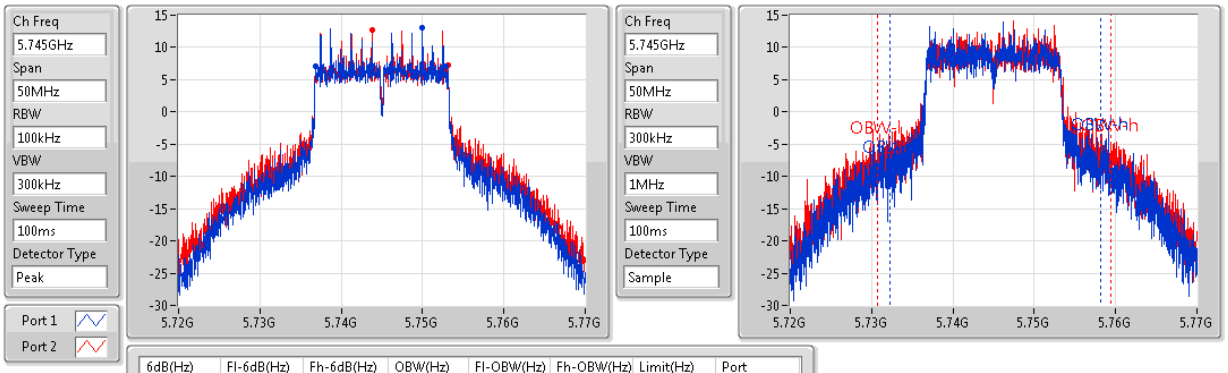
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.125M	5.22185G	5.258975G	16.792M	5.231604G	5.248396G	Inf	1
38.675M	5.220775G	5.25945G	18.516M	5.23093G	5.249445G	Inf	2

802.11a_Nss1_2TX **EBW**

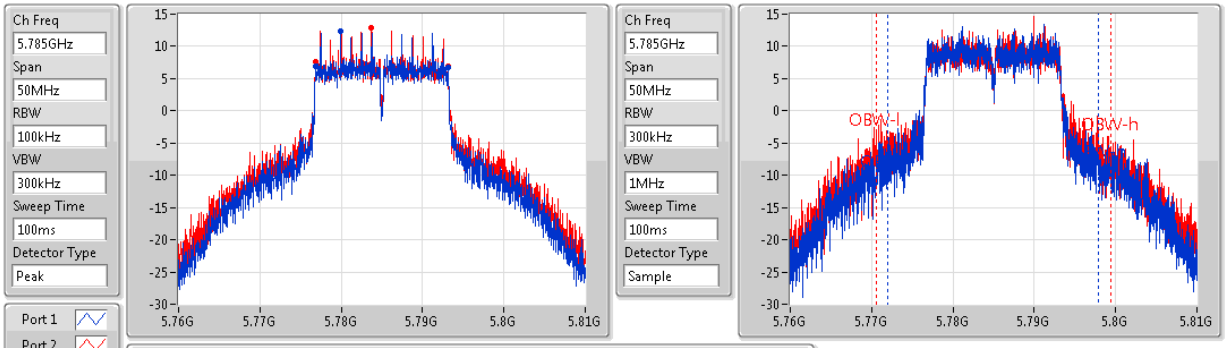
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16M	5.73685G	5.75285G	25.912M	5.732206G	5.758118G	500k	1
16.3M	5.73685G	5.75315G	28.686M	5.730757G	5.759443G	500k	2

802.11a_Nss1_2TX **EBW**

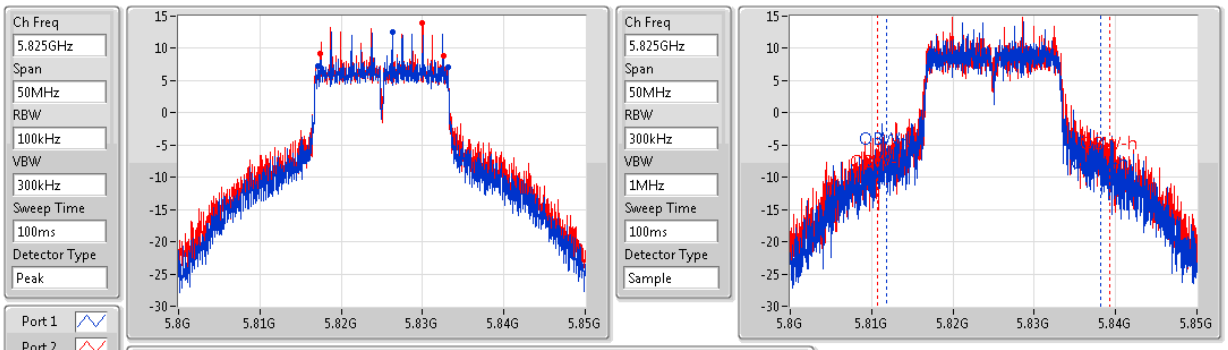
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.25M	5.77685G	5.7931G	25.862M	5.772006G	5.797869G	500k	1
16.3M	5.77685G	5.79315G	28.836M	5.770532G	5.799368G	500k	2

802.11a_Nss1_2TX **EBW**

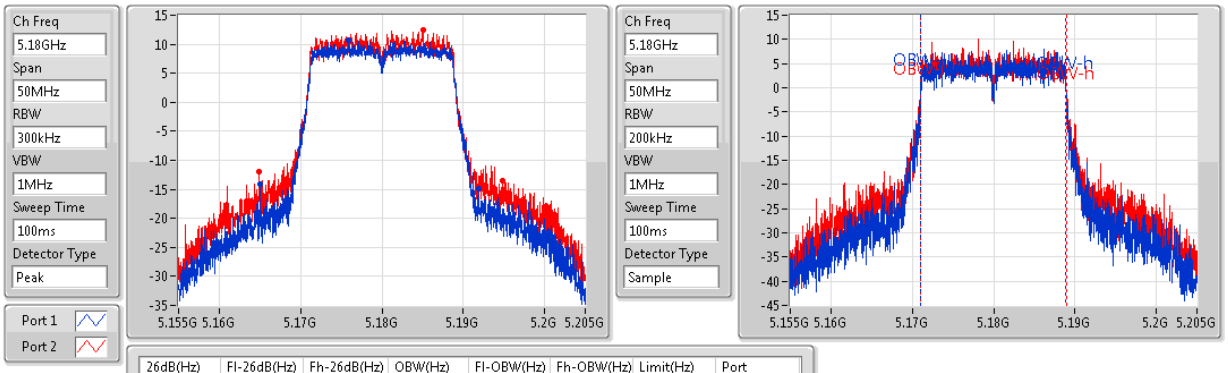
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16M	5.817125G	5.833125G	26.387M	5.811807G	5.838193G	500k	1
15.125M	5.817425G	5.83255G	28.586M	5.810707G	5.839293G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

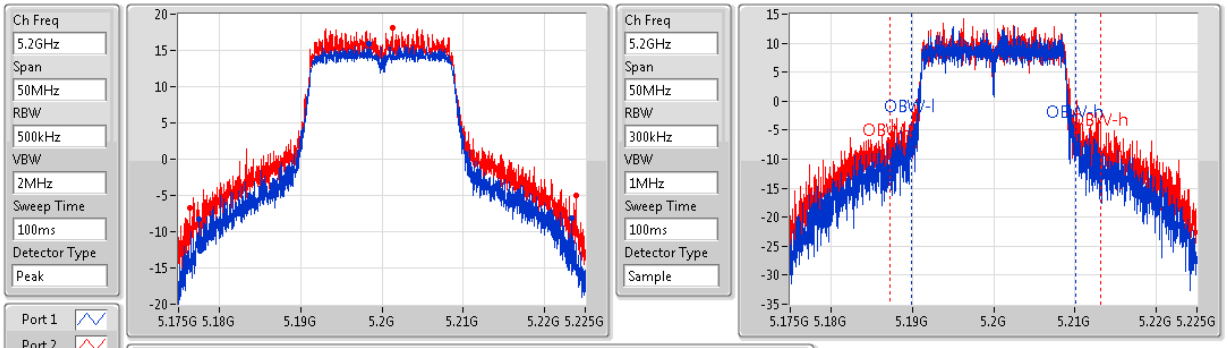
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
26.875M	5.165G	5.191875G	17.791M	5.171079G	5.188871G	Inf	1
29.85M	5.16495G	5.1948G	17.841M	5.171079G	5.188921G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

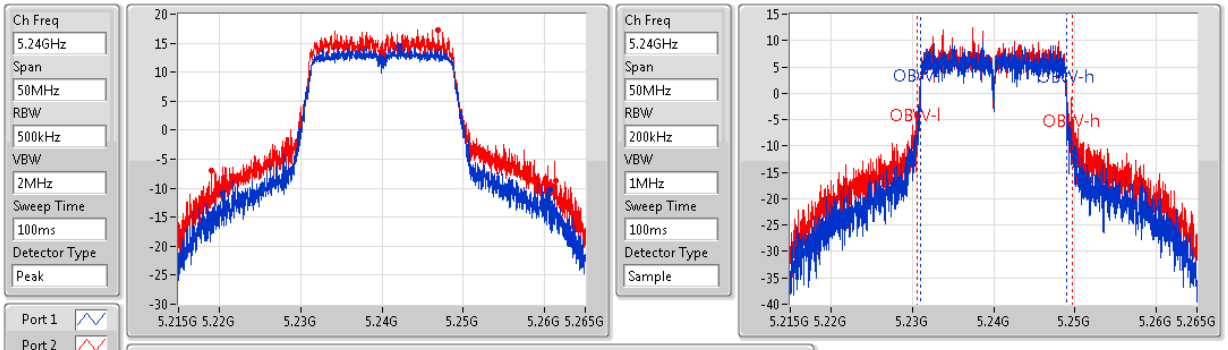
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
45.725M	5.177575G	5.2233G	20.115M	5.18993G	5.210045G	Inf	1
47.475M	5.17635G	5.223825G	25.987M	5.187206G	5.213193G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

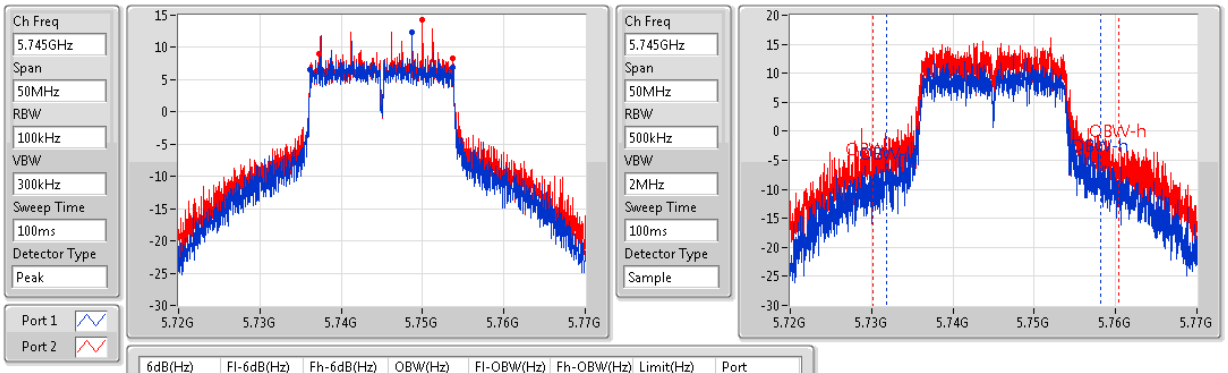
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.3M	5.220375G	5.260675G	17.941M	5.23098G	5.248921G	Inf	1
42.35M	5.219025G	5.261375G	19.165M	5.23058G	5.249745G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

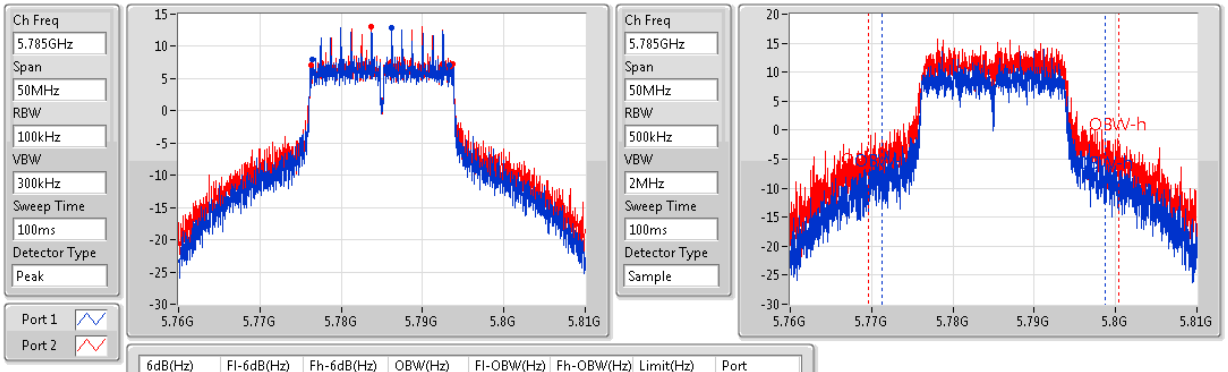
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.525M	5.736225G	5.75375G	26.437M	5.731782G	5.758218G	500k	1
16.5M	5.73725G	5.75375G	30.26M	5.730132G	5.760392G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

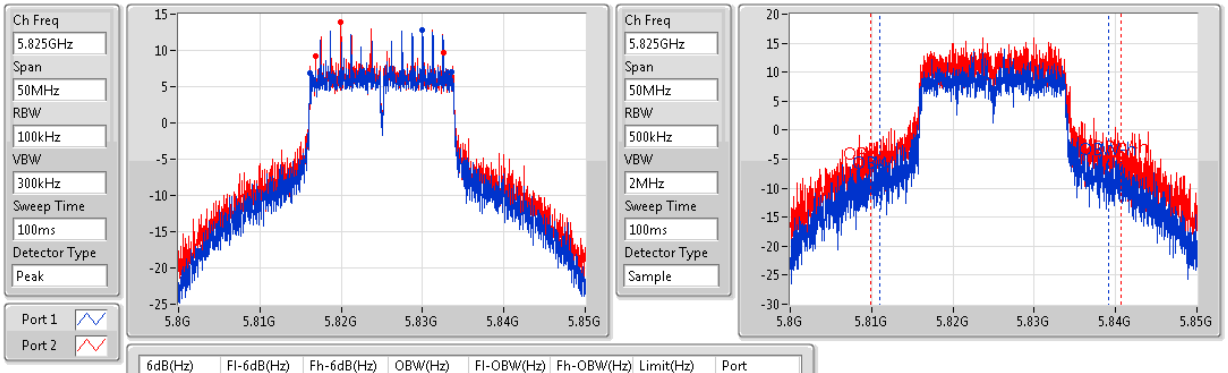
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.875M	5.776475G	5.79335G	27.361M	5.771332G	5.798693G	500k	1
17.5M	5.77625G	5.79375G	30.735M	5.769608G	5.800342G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5825MHz

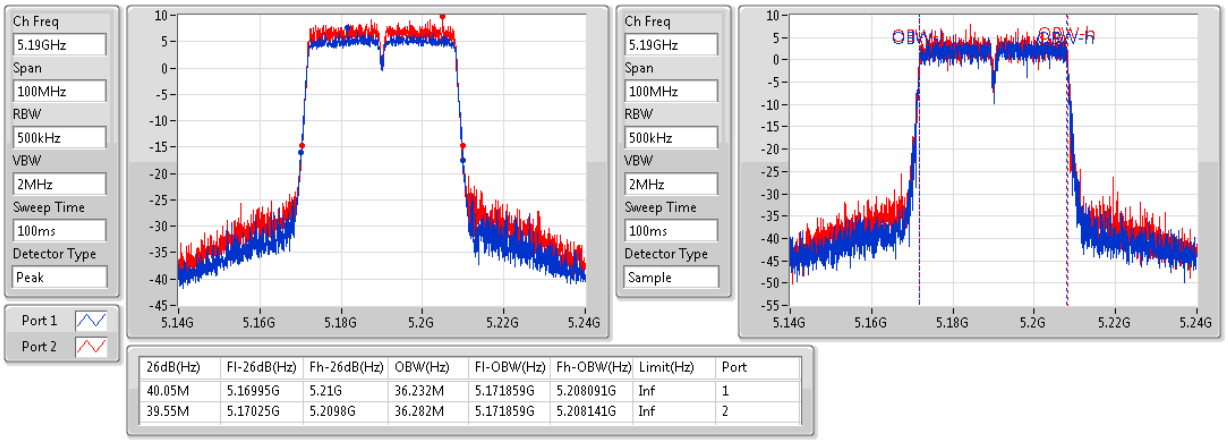


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.3M	5.816225G	5.833525G	28.186M	5.810957G	5.839143G	500k	1
15.7M	5.81685G	5.83255G	30.86M	5.809858G	5.840717G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5190MHz

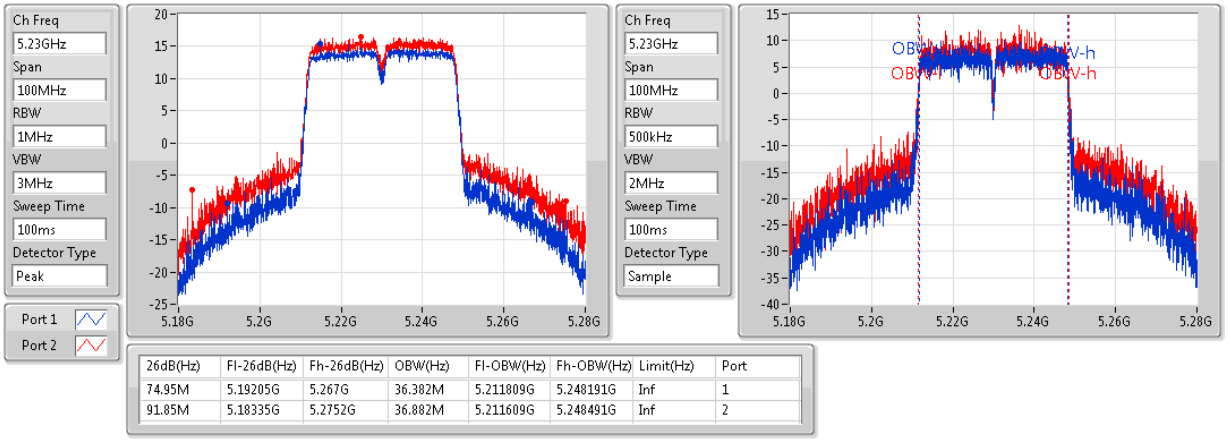


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.05M	5.16995G	5.21G	36.232M	5.171859G	5.208091G	Inf	1
39.55M	5.17025G	5.2098G	36.282M	5.171859G	5.208141G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5230MHz

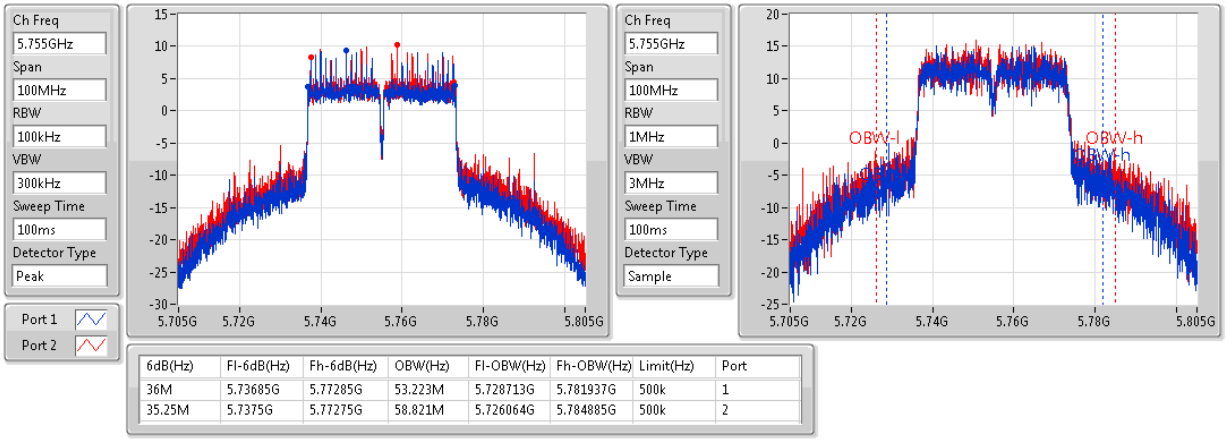


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
74.95M	5.19205G	5.267G	36.382M	5.211809G	5.248191G	Inf	1
91.85M	5.18335G	5.2752G	36.882M	5.211609G	5.248491G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5755MHz

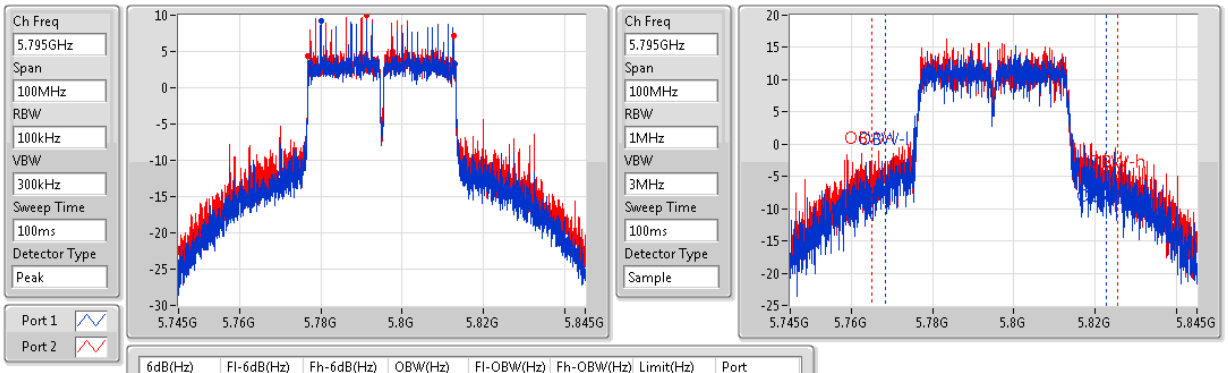


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36M	5.73685G	5.77285G	53.223M	5.728713G	5.781937G	500k	1
35.25M	5.7375G	5.77275G	58.821M	5.726064G	5.784885G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5795MHz

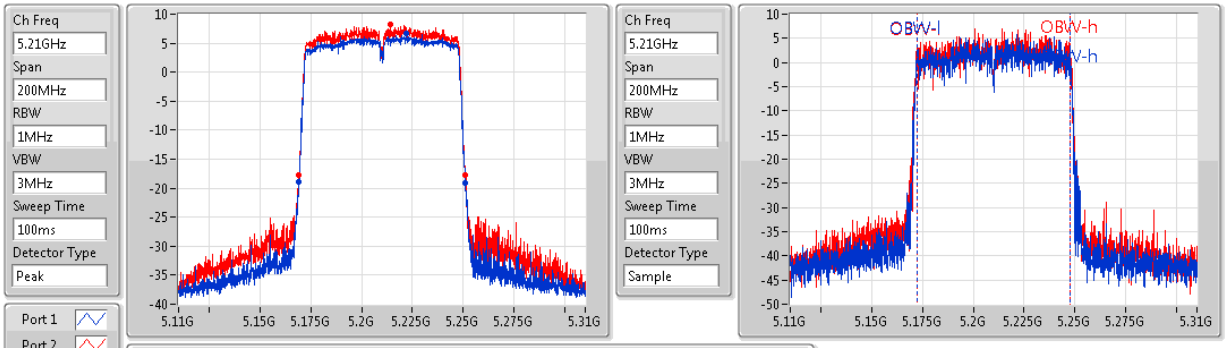


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.6M	5.77725G	5.81285G	54.223M	5.768413G	5.822636G	500k	1
35.7M	5.77685G	5.81255G	60.52M	5.764965G	5.825485G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5210MHz

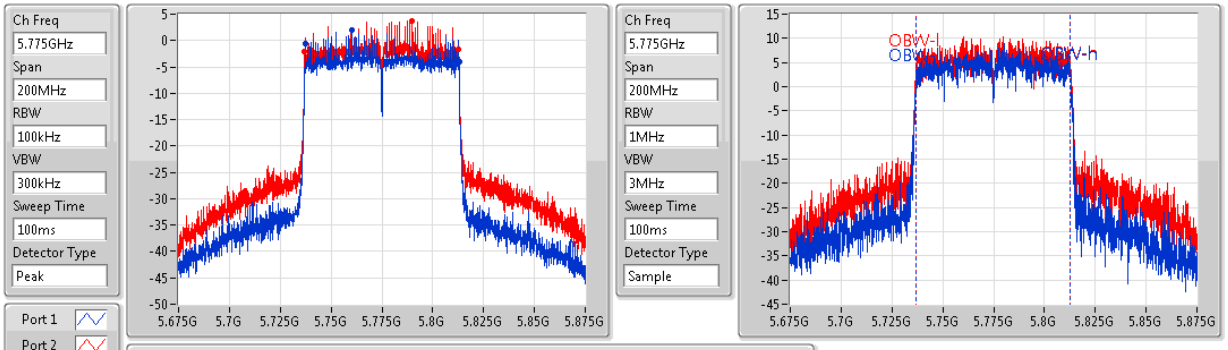


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.1M	5.1691G	5.2512G	75.562M	5.172219G	5.247781G	Inf	1
82M	5.1692G	5.2512G	75.662M	5.172119G	5.247781G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.5M	5.7374G	5.8129G	75.862M	5.736919G	5.812781G	500k	1
75.7M	5.7368G	5.8125G	75.962M	5.736919G	5.812881G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
802.11a_Nss1_2TX	-	-
5.15-5.25GHz	26.10	0.40738
5.725-5.85GHz	25.97	0.39537
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-
5.15-5.25GHz	26.25	0.42170
5.725-5.85GHz	26.12	0.40926
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-
5.15-5.25GHz	24.71	0.29580
5.725-5.85GHz	25.84	0.38371
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-
5.15-5.25GHz	19.09	0.08110
5.725-5.85GHz	22.43	0.17498

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)	Port 1 (dBm)	Port 2 (dBm)
802.11a_Nss1_2TX	-	-	-	-	-	-
5180MHz	Pass	5.86	23.85	30.00	20.76	20.92
5200MHz	Pass	5.86	26.10	30.00	23.08	23.10
5240MHz	Pass	5.86	25.04	30.00	22.10	21.96
5745MHz	Pass	5.86	25.97	30.00	23.07	22.85
5785MHz	Pass	5.86	25.87	30.00	22.91	22.80
5825MHz	Pass	5.86	25.83	30.00	22.89	22.74
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.86	23.44	30.00	20.31	20.54
5200MHz	Pass	5.86	26.25	30.00	23.25	23.22
5240MHz	Pass	5.86	25.20	30.00	22.11	22.26
5745MHz	Pass	5.86	26.12	30.00	23.24	22.98
5785MHz	Pass	5.86	26.01	30.00	22.98	23.01
5825MHz	Pass	5.86	25.79	30.00	22.86	22.70
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	5.86	20.34	30.00	17.28	17.37
5230MHz	Pass	5.86	24.71	30.00	21.44	21.95
5755MHz	Pass	5.86	25.84	30.00	22.93	22.72
5795MHz	Pass	5.86	25.45	30.00	22.46	22.42
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	5.86	19.09	30.00	15.94	16.21
5775MHz	Pass	5.86	22.43	30.00	18.77	19.98

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

Summary

Mode	PD (dBm/RBW)
802.11a_Nss1_2TX	-
5.15-5.25GHz	12.73
5.725-5.85GHz	9.24
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5.15-5.25GHz	12.32
5.725-5.85GHz	9.09
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5.15-5.25GHz	8.51
5.725-5.85GHz	6.16
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5.15-5.25GHz	0.27
5.725-5.85GHz	0.41

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

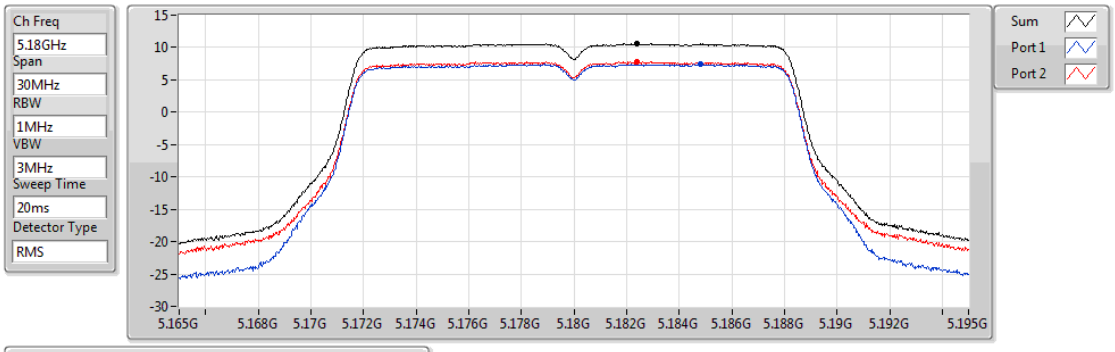
Result

Mode	Result	DG (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)
802.11a_Nss1_2TX	-	-	-	-	-	-
5180MHz	Pass	8.49	10.58	14.51	7.39	7.82
5200MHz	Pass	8.49	12.73	14.51	9.78	9.81
5240MHz	Pass	8.49	11.81	14.51	8.39	9.32
5745MHz	Pass	8.49	9.24	27.51	6.63	6.26
5785MHz	Pass	8.49	9.17	27.51	6.39	6.29
5825MHz	Pass	8.49	8.96	27.51	6.18	6.09
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	8.49	9.48	14.51	6.57	6.59
5200MHz	Pass	8.49	12.32	14.51	9.44	9.41
5240MHz	Pass	8.49	11.46	14.51	8.20	8.96
5745MHz	Pass	8.49	8.97	27.51	6.23	5.88
5785MHz	Pass	8.49	9.09	27.51	6.47	6.52
5825MHz	Pass	8.49	8.69	27.51	6.09	5.72
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	8.49	3.63	14.51	0.67	0.68
5230MHz	Pass	8.49	8.51	14.51	5.38	5.71
5755MHz	Pass	8.49	6.16	27.51	3.35	3.21
5795MHz	Pass	8.49	5.96	27.51	3.17	2.88
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	8.49	0.27	14.51	-2.68	-2.51
5775MHz	Pass	8.49	0.41	27.51	-3.12	-1.98

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_Nss1_2TX **PSD**

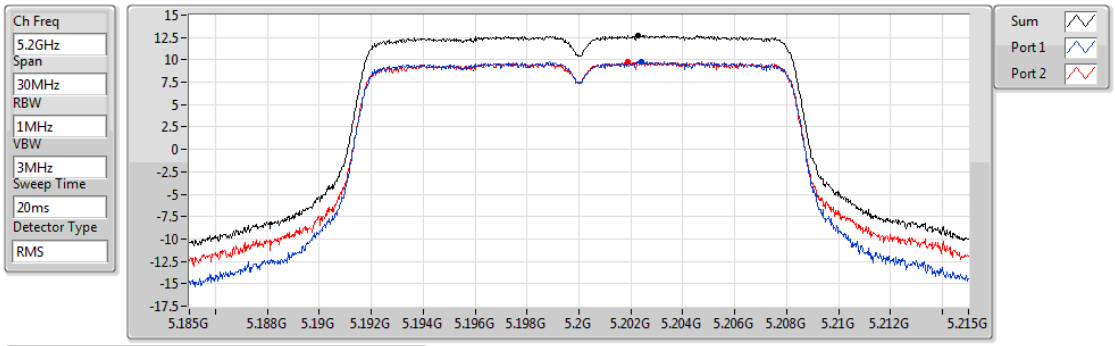
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.58	10.58	7.39	7.82

802.11a_Nss1_2TX **PSD**

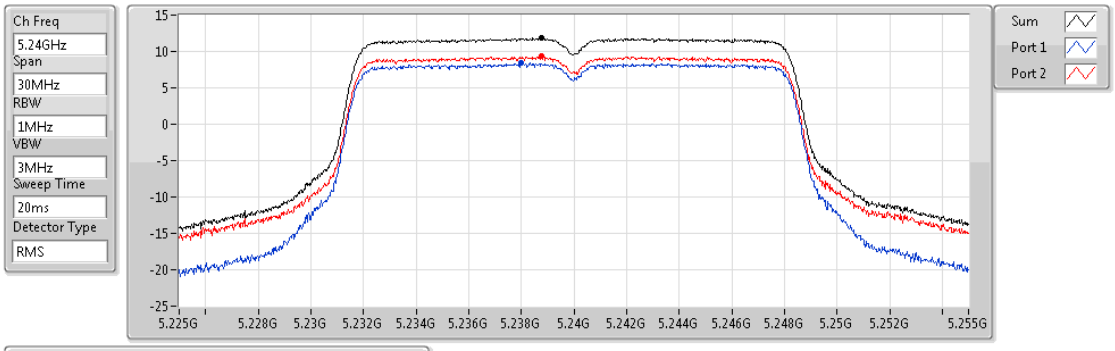
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.73	12.73	9.78	9.81

802.11a_Nss1_2TX **PSD**

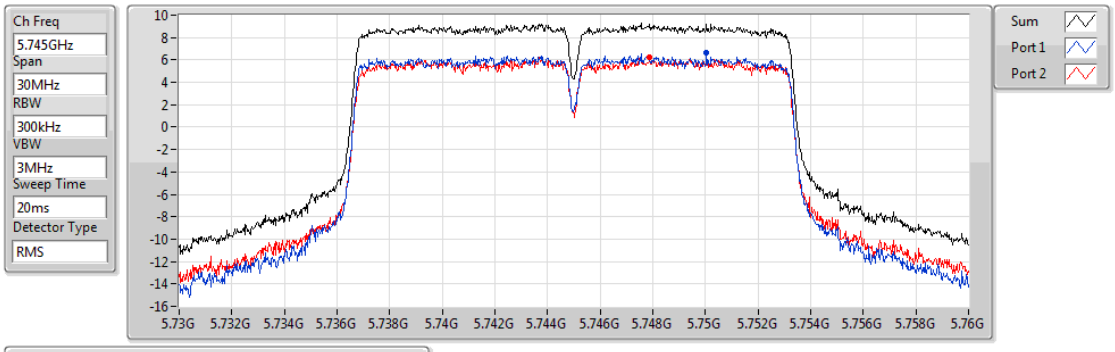
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.81	11.81	8.39	9.32

802.11a_Nss1_2TX **PSD**

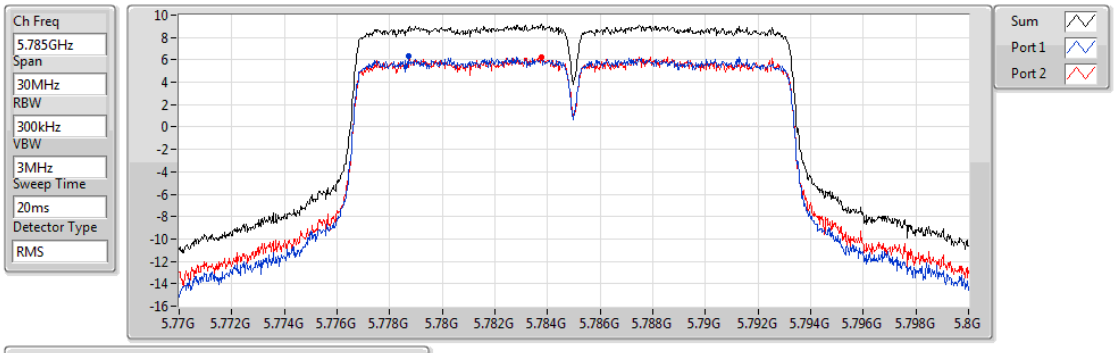
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.24	11.46	6.63	6.26

802.11a_Nss1_2TX **PSD**

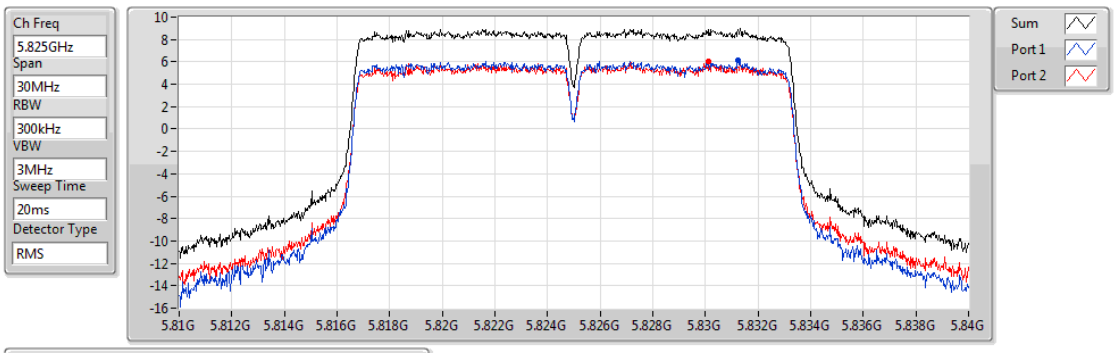
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.17	11.38	6.39	6.29

802.11a_Nss1_2TX **PSD**

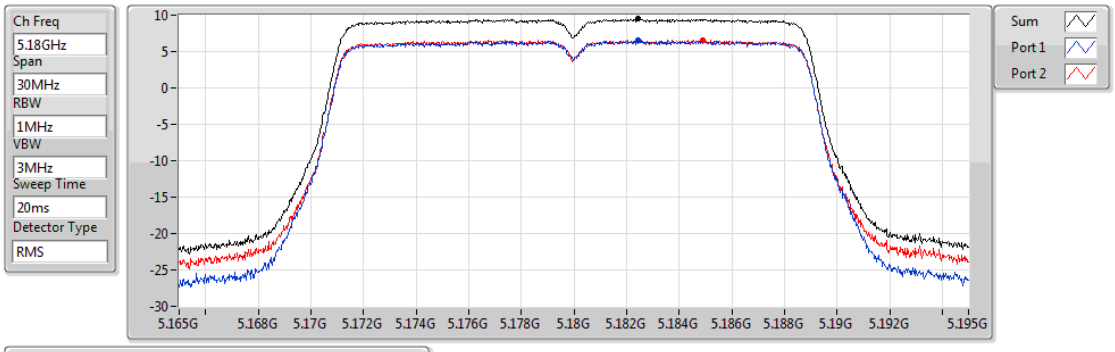
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.96	11.18	6.18	6.09

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

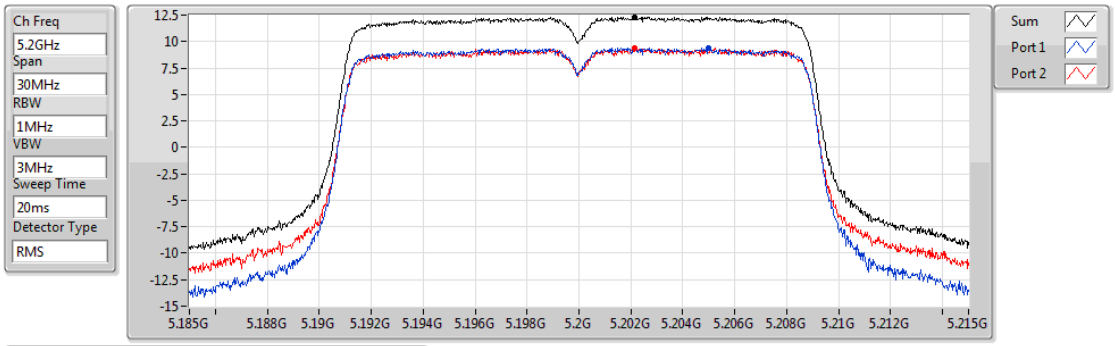
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.48	9.48	6.57	6.59

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

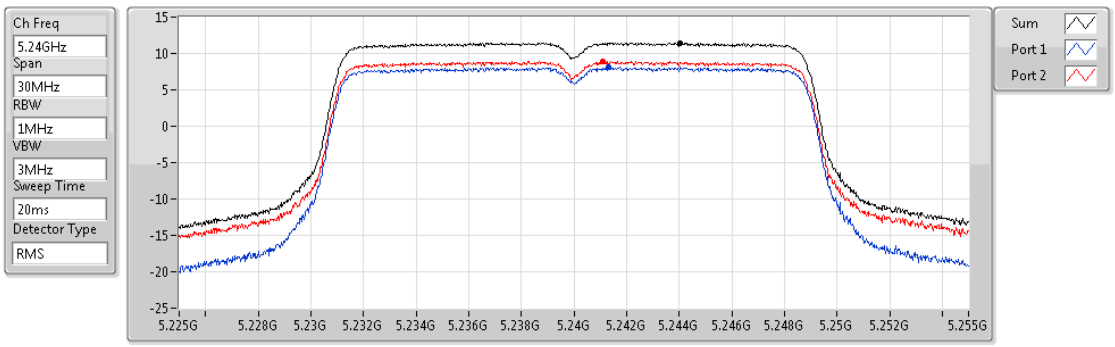
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.32	12.32	9.44	9.41

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

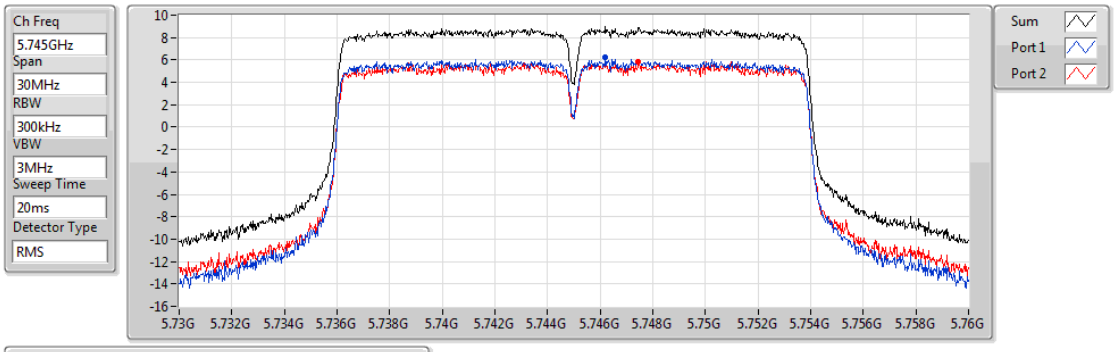
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.46	11.46	8.20	8.96

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

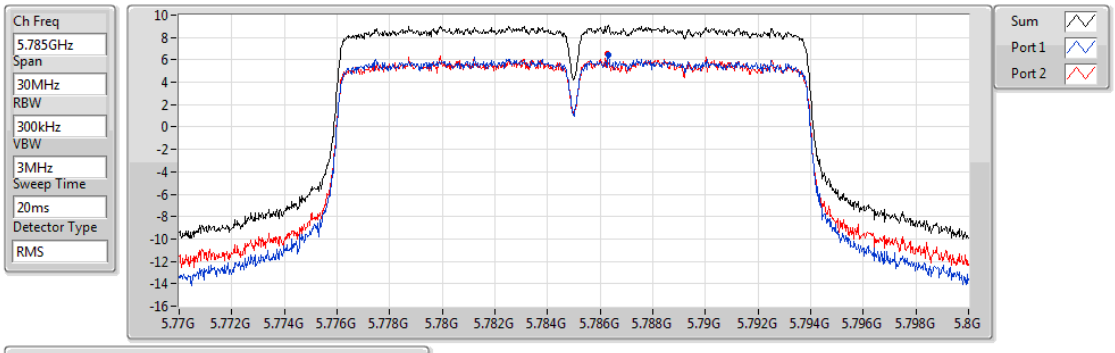
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.97	11.19	6.23	5.88

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

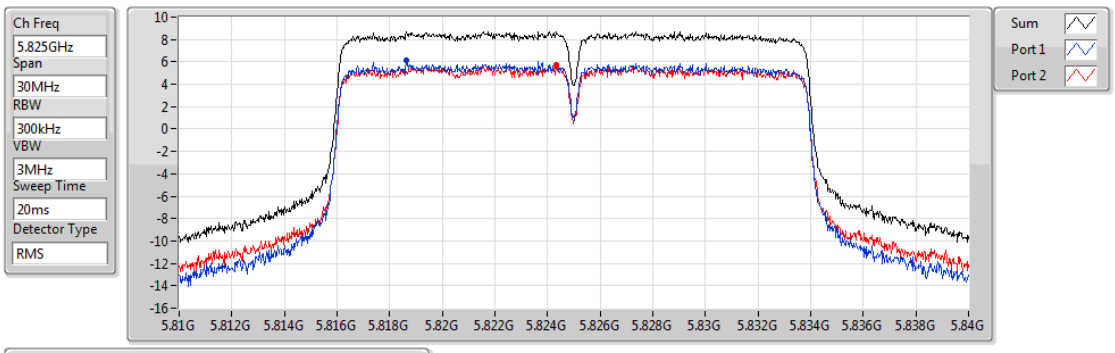
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.09	11.31	6.47	6.52

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

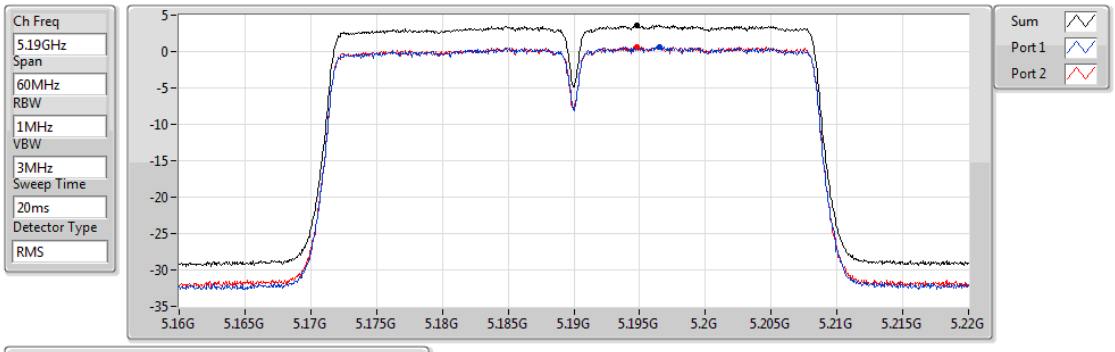
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.69	10.91	6.09	5.72

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

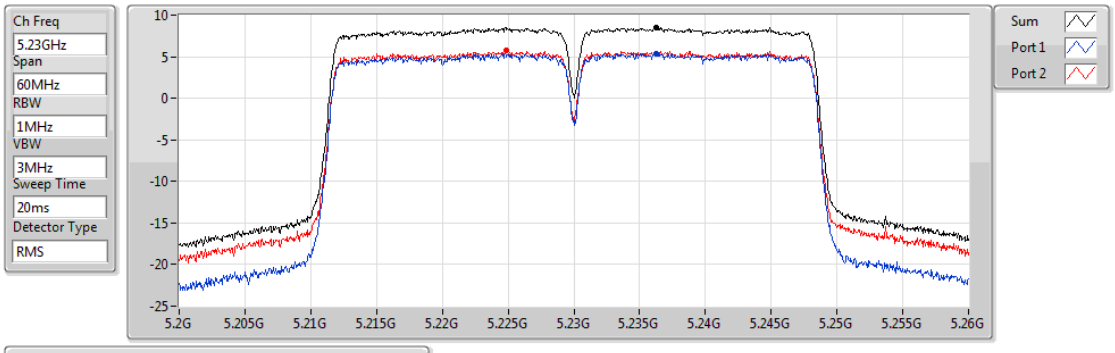
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.63	3.63	0.67	0.68

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

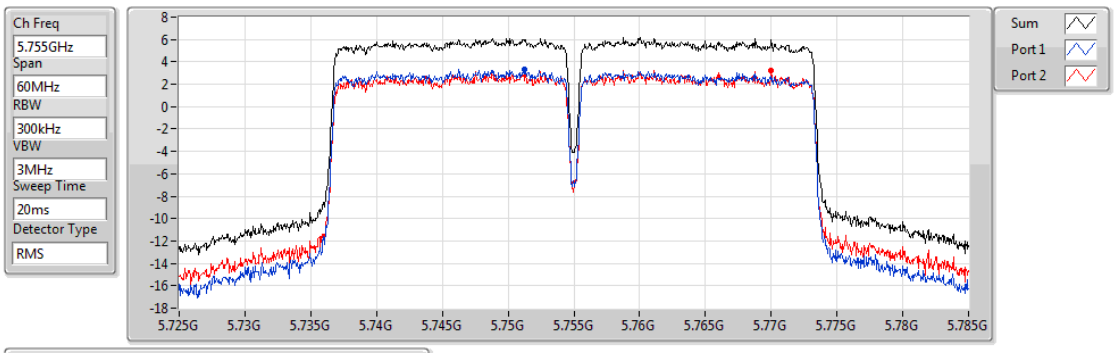
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.51	8.51	5.38	5.71

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

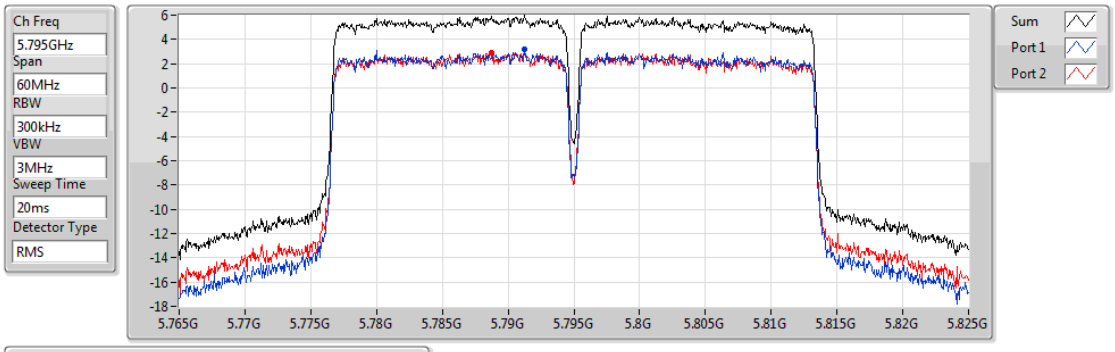
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.16	8.38	3.35	3.21

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

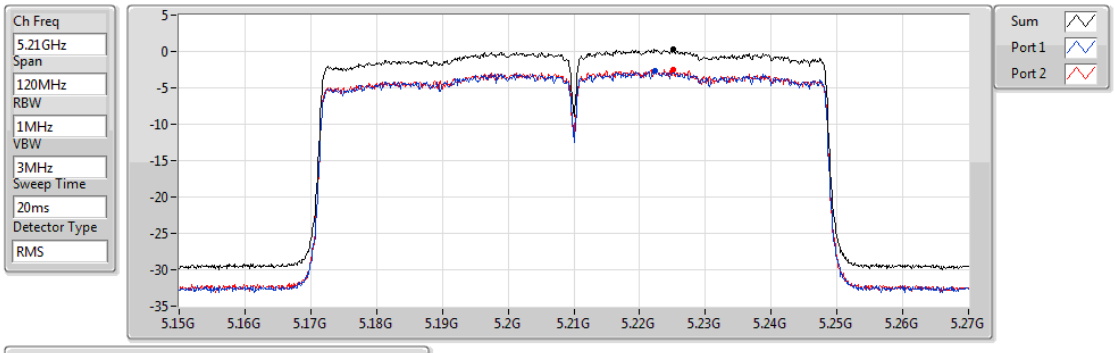
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.96	8.18	3.17	2.88

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

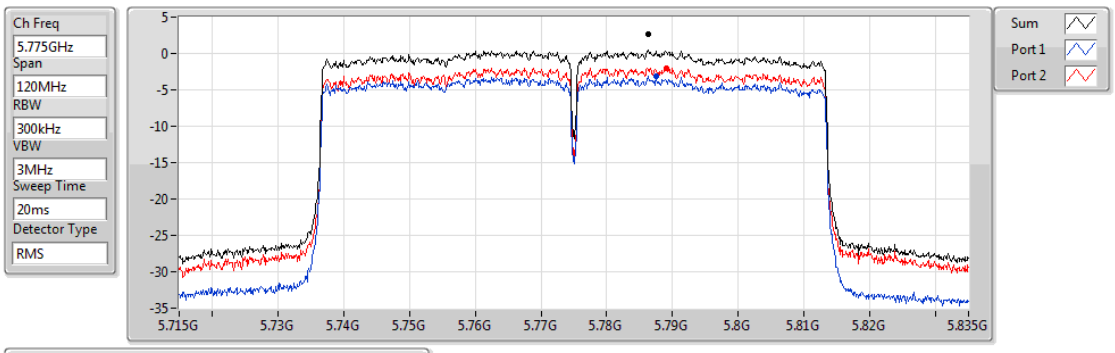
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.27	0.27	-2.68	-2.51

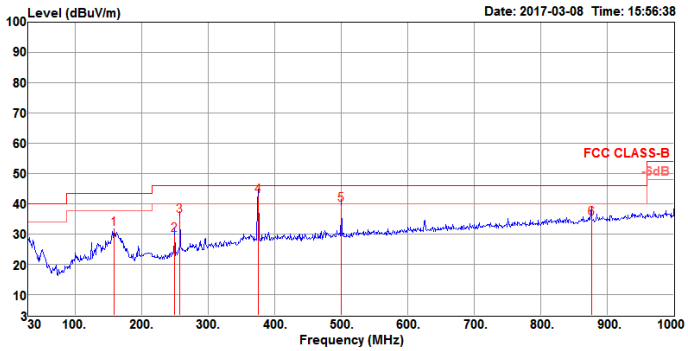
802.11ac VHT80_Nss1,(MCS0)_2TX PSD

5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.41	2.63	-3.12	-1.98

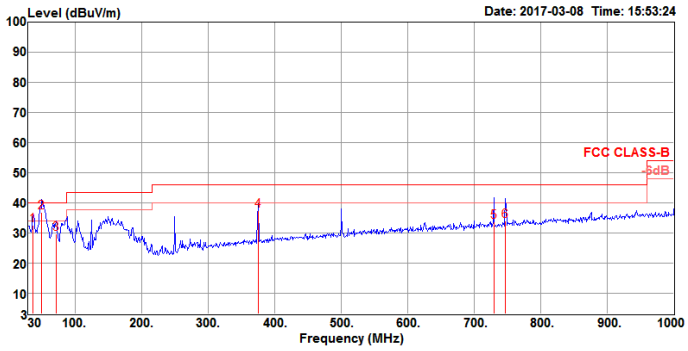
RSE below 1GHz Result			
Operating Mode	2	**Polarization**	Horizontal
Operating Function	Normal Link - EUT in Z axis + Adapter		



	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	159.01	31.61	43.50	-11.89	45.17	2.16	16.63	32.35	200	194	QP	HORIZONTAL
2	250.19	29.54	46.00	-16.46	40.30	2.74	18.80	32.30	134	161	QP	HORIZONTAL
3	257.95	36.04	46.00	-9.96	46.10	2.79	19.45	32.30	114	308	QP	HORIZONTAL
4	375.32	42.40	46.00	-3.60	49.50	3.40	21.78	32.28	161	4	QP	HORIZONTAL
5	500.45	39.54	46.00	-6.46	44.10	3.96	23.82	32.34	126	13	QP	HORIZONTAL
6	875.84	35.00	46.00	-11.00	34.30	5.30	27.20	31.80	156	123	QP	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	2	**Polarization**	Vertical
Operating Function	Normal Link - EUT in Z axis + Adapter		



	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	36.79	32.40	40.00	-7.60	42.11	0.99	21.69	32.39	114	210	QP	VERTICAL
2	50.37	36.70	40.00	-3.30	53.20	1.16	14.71	32.37	107	5	QP	VERTICAL
3	71.71	29.57	40.00	-10.43	47.80	1.41	12.75	32.39	189	90	QP	VERTICAL
4	375.32	37.40	46.00	-8.60	44.50	3.40	21.78	32.28	142	299	QP	VERTICAL
5	729.37	33.50	46.00	-12.50	35.09	4.81	25.90	32.30	113	1	QP	VERTICAL
6	746.83	33.86	46.00	-12.14	35.19	4.86	26.08	32.27	185	203	QP	VERTICAL

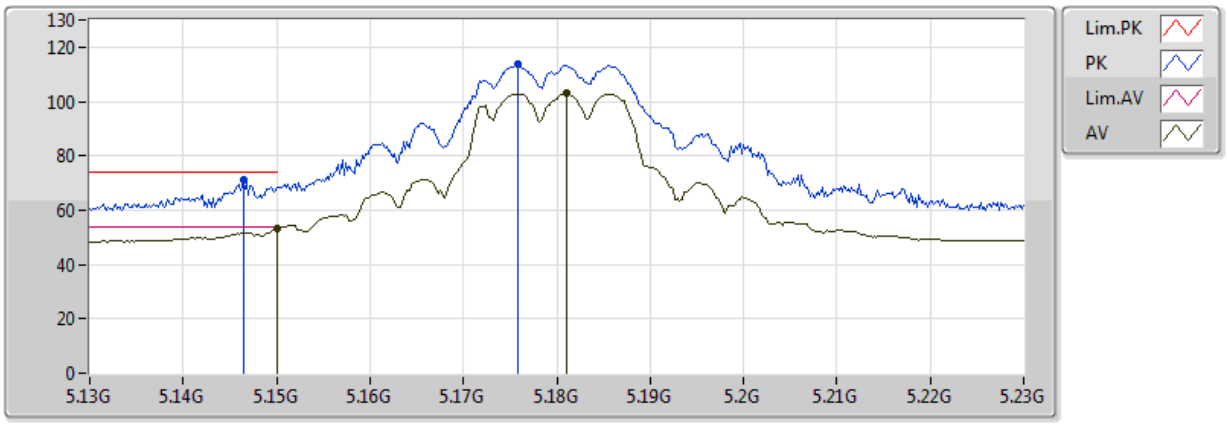
Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

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 VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5.15-5.25GHz	Pass	AV	5.1488G	53.96	54.00	-0.04	6.30	3	H	5	1.01	-

802.11a_Nss1_2TX

5180MHz_TX

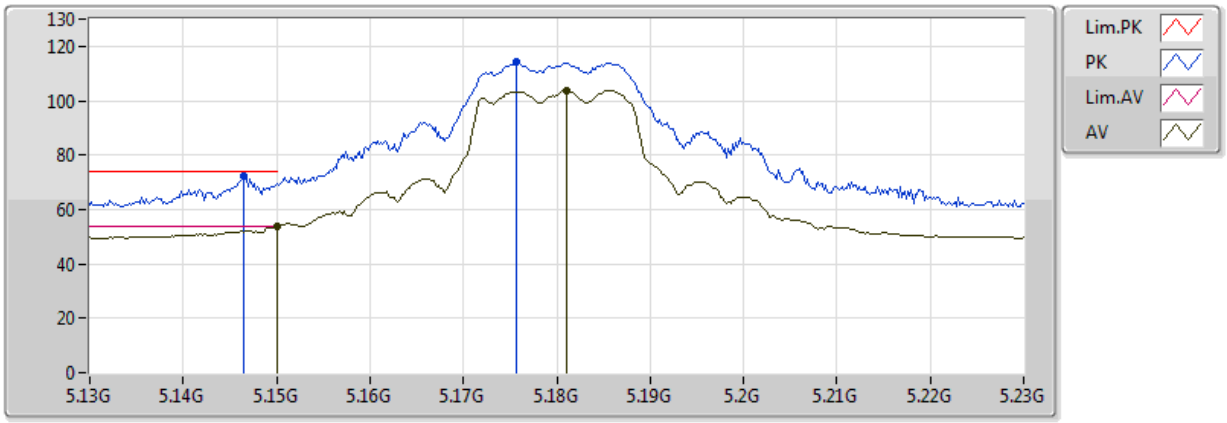


20170218
EUT Y_2TX_Non-TXBF
Setting 82
03-W-3-10
FSP(100019)

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	53.31	54.00	-0.69	6.30	3	V	5	1.82	-
AV	5.181G	102.96	Inf	-Inf	6.36	3	V	5	1.82	-
PK	5.1464G	71.24	74.00	-2.76	6.30	3	V	5	1.82	-
PK	5.1758G	113.49	Inf	-Inf	6.35	3	V	5	1.82	-

802.11a_Nss1_2TX

5180MHz_TX

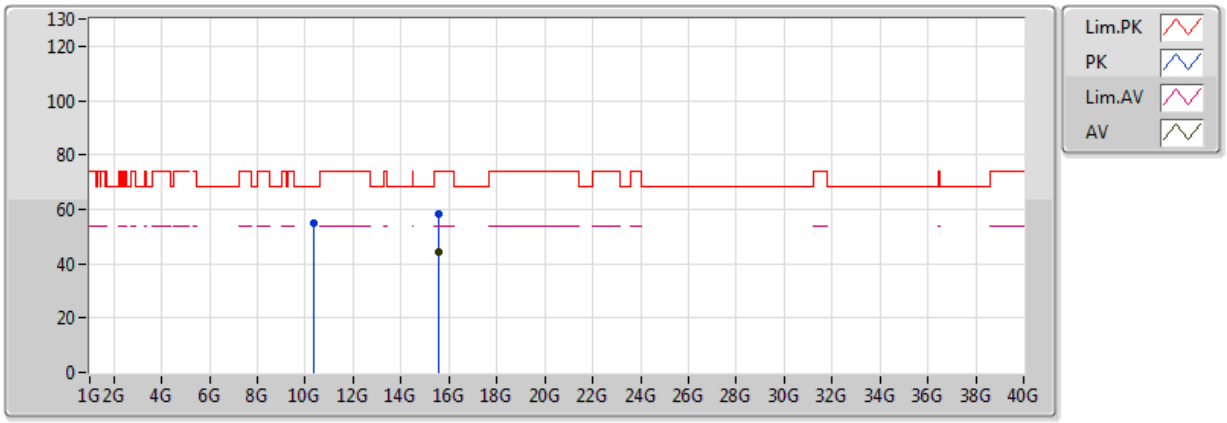


20170218
EUT Y_2TX_Non-TXBF
Setting 82
03-W-3-10
FSP(100019)

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	53.78	54.00	-0.22	6.30	3	H	293	1.87	-
AV	5.181G	103.67	Inf	-Inf	6.36	3	H	293	1.87	-
PK	5.1464G	72.51	74.00	-1.49	6.30	3	H	293	1.87	-
PK	5.1756G	114.04	Inf	-Inf	6.35	3	H	293	1.87	-

802.11a_Nss1_2TX

5180MHz_TX

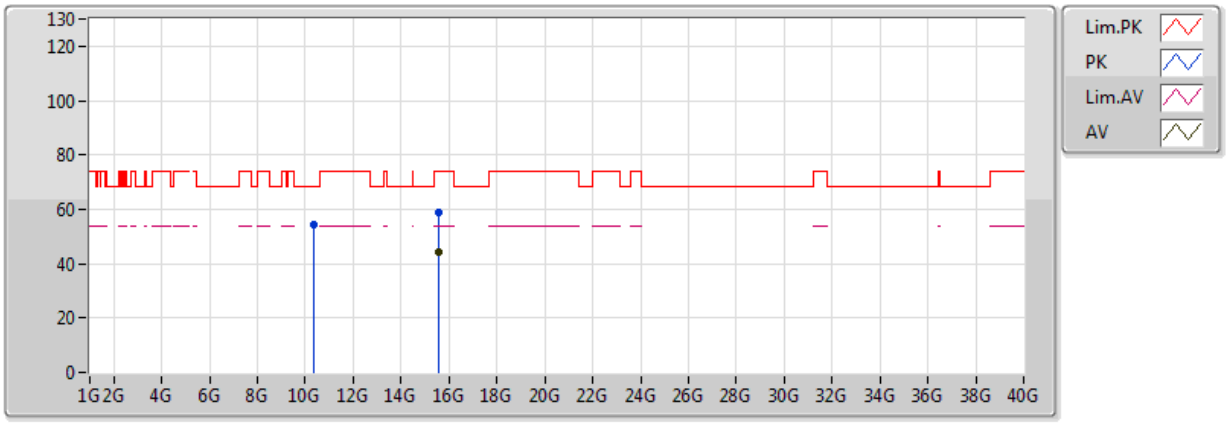


20170218
EUT Y_2TX_Non-TXBF
Setting 82
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.539688G	44.33	54.00	-9.67	16.02	3	V	187	2.38	-
PK	10.360388G	54.75	68.20	-13.45	13.20	3	V	162	1.62	-
PK	15.539488G	58.36	74.00	-15.64	16.02	3	V	187	2.38	-

802.11a_Nss1_2TX

5180MHz_TX

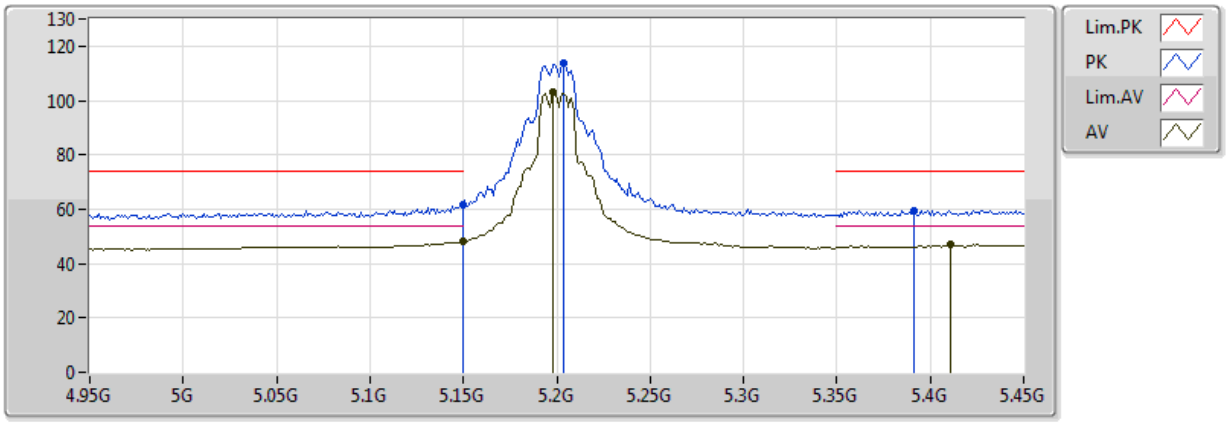


20170218
EUT Y_2TX_Non-TXBF
Setting 82
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.540108G	44.39	54.00	-9.61	16.02	3	H	285	1.77	-
PK	10.359948G	54.62	68.20	-13.58	13.20	3	H	58	2.03	-
PK	15.539356G	58.61	74.00	-15.39	16.02	3	H	285	1.77	-

802.11a_Nss1_2TX

5200MHz_TX

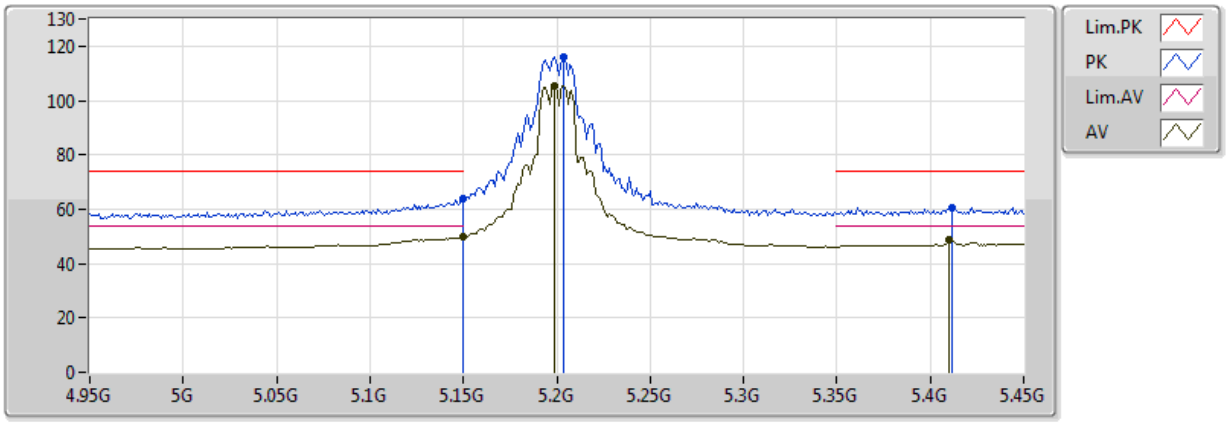


20170114
EUT Y_2TX_Non-TXBF
Setting 120
03-K-1-10
FSP(100142)

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	48.20	54.00	-5.80	6.30	3	V	355	2.70	-
AV	5.198G	102.85	Inf	-Inf	6.39	3	V	355	2.70	-
AV	5.411G	47.29	54.00	-6.71	6.69	3	V	355	2.70	-
PK	5.149995G	61.48	74.00	-12.52	6.30	3	V	355	2.70	-
PK	5.204G	113.87	Inf	-Inf	6.40	3	V	355	2.70	-
PK	5.391G	59.62	74.00	-14.38	6.66	3	V	355	2.70	-

802.11a_Nss1_2TX

5200MHz_TX

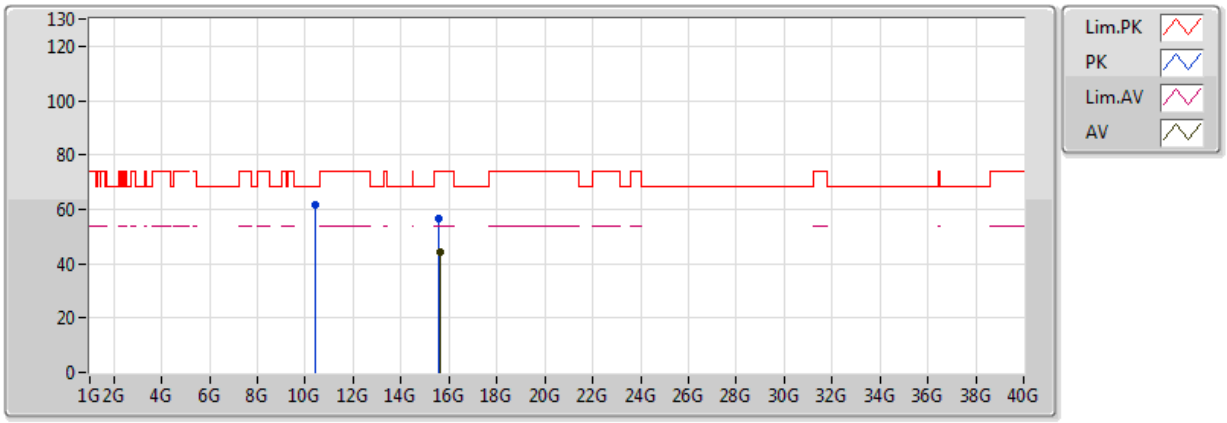


20170114
EUT Y_2TX_Non-TXBF
Setting 120
03-K-1-10
FSP(100142)

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	49.98	54.00	-4.02	6.30	3	H	2	1.85	-
AV	5.199G	105.44	Inf	-Inf	6.39	3	H	2	1.85	-
AV	5.41G	48.94	54.00	-5.06	6.69	3	H	2	1.85	-
PK	5.149995G	63.77	74.00	-10.23	6.30	3	H	2	1.85	-
PK	5.204G	115.85	Inf	-Inf	6.40	3	H	2	1.85	-
PK	5.412G	60.78	74.00	-13.22	6.70	3	H	2	1.85	-

802.11a_Nss1_2TX

5200MHz_TX

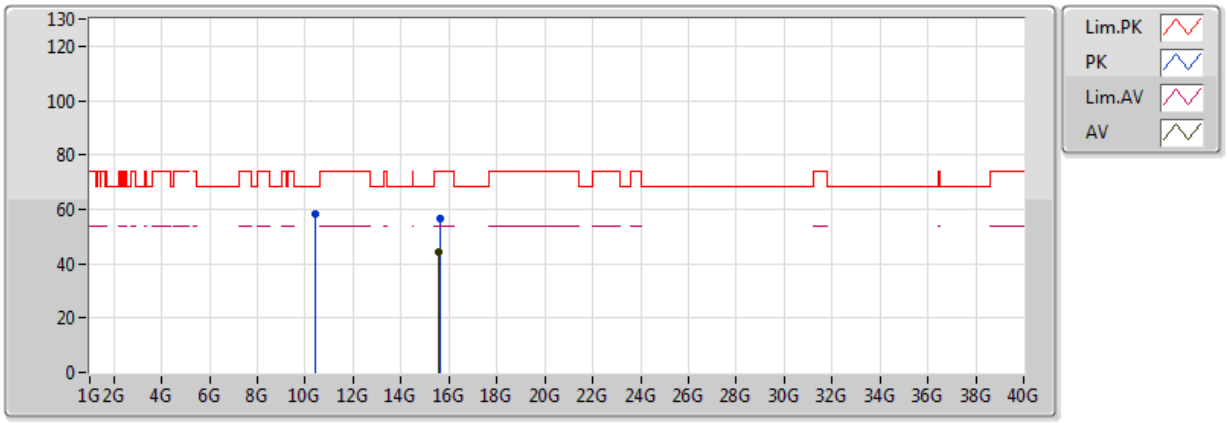


20170116
EUT Y_2TX
Setting 120
02-P-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	10.399952G	61.55	68.20	-6.65	14.79	3	V	192	2.34	-
AV	15.60336G	44.20	54.00	-9.80	15.82	3	V	121	1.62	-
PK	15.6006G	56.67	74.00	-17.33	15.83	3	V	121	1.62	-

802.11a_Nss1_2TX

5200MHz_TX

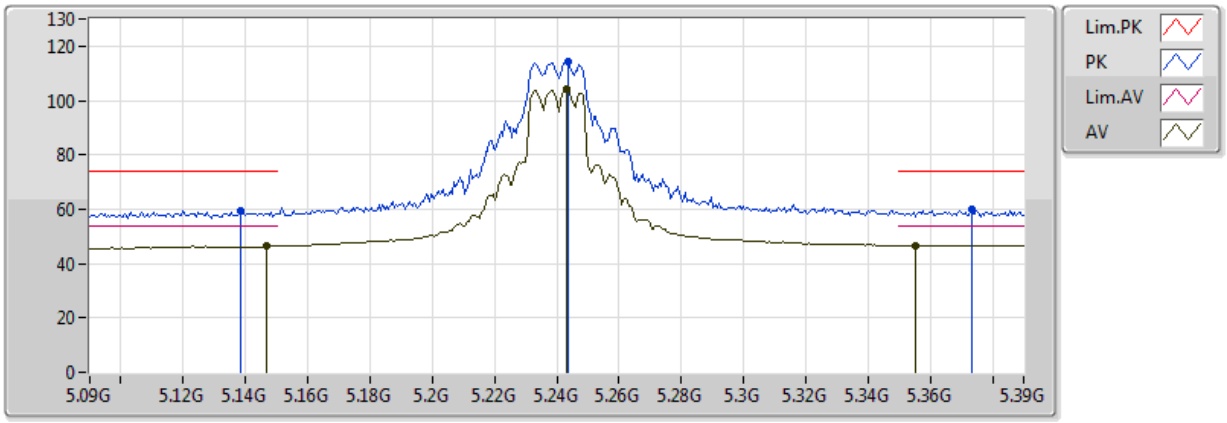


20170116
EUT Y_2TX
Setting 120
02-P-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	10.40019G	58.33	68.20	-9.87	14.79	3	H	329	1.86	-
AV	15.598G	44.08	54.00	-9.92	15.83	3	H	218	2.05	-
PK	15.60362G	56.44	74.00	-17.56	15.82	3	H	218	2.05	-

802.11a_Nss1_2TX

5240MHz_TX

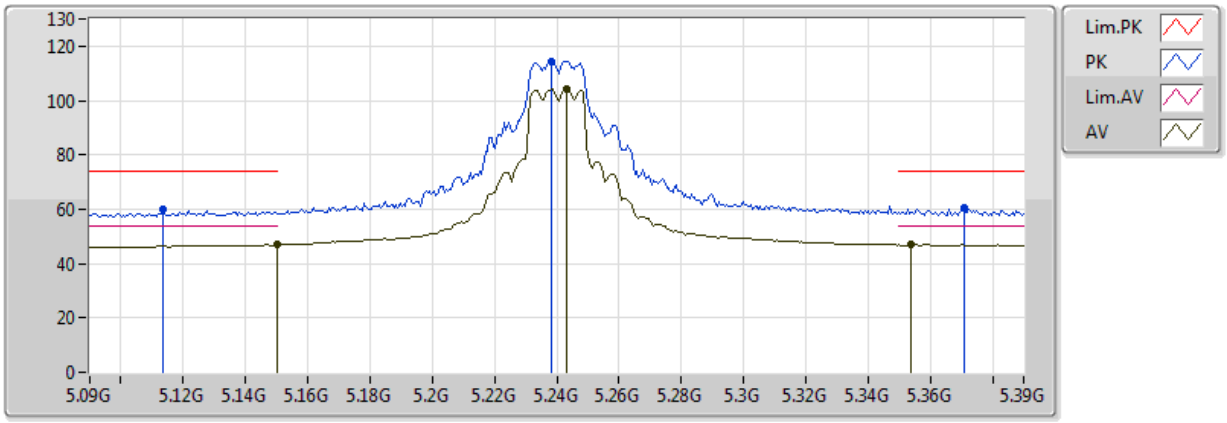


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3-10
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.147G	46.32	54.00	-7.68	6.30	3	V	1	1.81	-
AV	5.243G	104.09	Inf	-Inf	6.45	3	V	1	1.81	-
AV	5.3552G	46.72	54.00	-7.28	6.61	3	V	1	1.81	-
PK	5.1386G	59.25	74.00	-14.75	6.29	3	V	1	1.81	-
PK	5.2436G	114.21	Inf	-Inf	6.46	3	V	1	1.81	-
PK	5.3732G	60.06	74.00	-13.94	6.64	3	V	1	1.81	-

802.11a_Nss1_2TX

5240MHz_TX

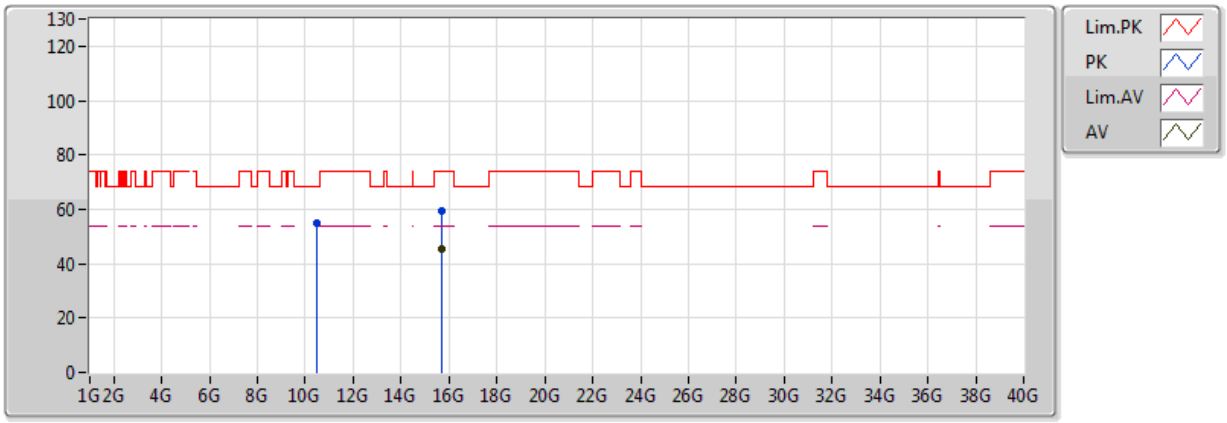


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3-10
FSP(100019)

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	46.84	54.00	-7.16	6.30	3	H	292	1.82	-
AV	5.243G	104.49	Inf	-Inf	6.45	3	H	292	1.82	-
AV	5.354G	46.97	54.00	-7.03	6.61	3	H	292	1.82	-
PK	5.1134G	59.91	74.00	-14.09	6.24	3	H	292	1.82	-
PK	5.2382G	114.53	Inf	-Inf	6.45	3	H	292	1.82	-
PK	5.3708G	60.29	74.00	-13.71	6.63	3	H	292	1.82	-

802.11a_Nss1_2TX

5240MHz_TX

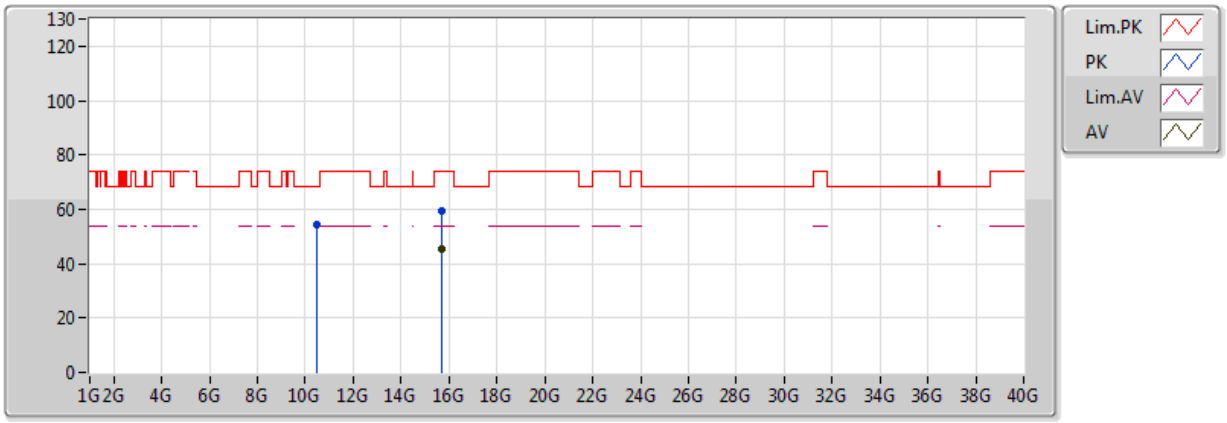


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.719824G	45.24	54.00	-8.76	15.66	3	V	240	2.19	-
PK	10.479716G	54.80	68.20	-13.40	13.30	3	V	159	1.68	-
PK	15.719744G	59.40	74.00	-14.60	15.66	3	V	240	2.19	-

802.11a_Nss1_2TX

5240MHz_TX

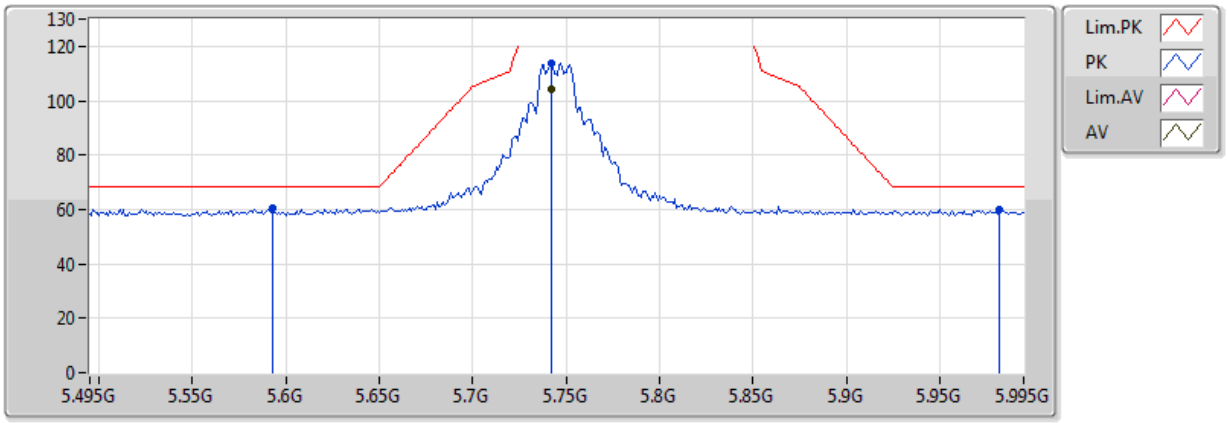


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.719716G	45.21	54.00	-8.79	15.66	3	H	83	1.54	-
PK	10.480276G	54.45	68.20	-13.75	13.30	3	H	46	1.45	-
PK	15.720992G	59.27	74.00	-14.73	15.66	3	H	83	1.54	-

802.11a_Nss1_2TX

5745MHz_TX

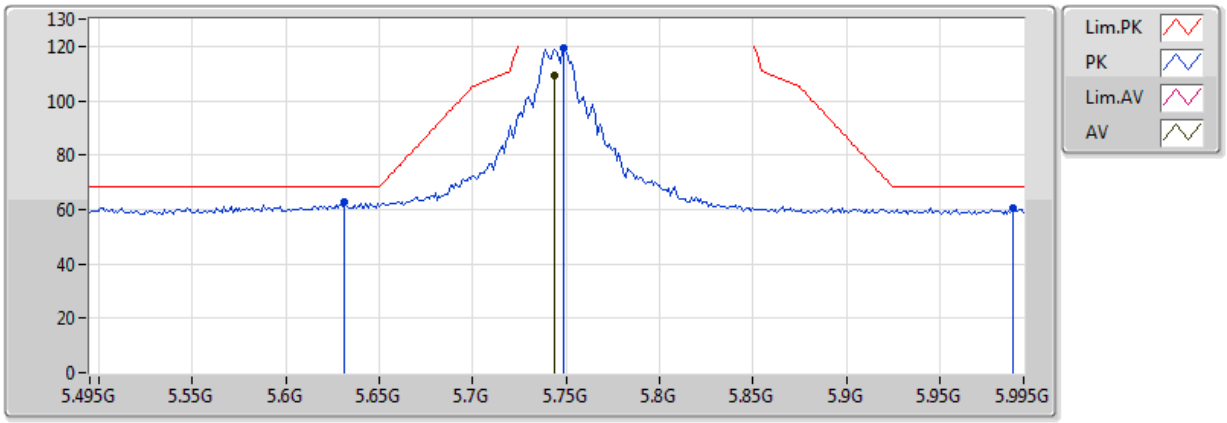


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

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	104.14	Inf	-Inf	8.03	3	V	23	1.91	-
PK	5.593G	60.32	68.20	-7.88	7.95	3	V	23	1.91	-
PK	5.742G	113.69	Inf	-Inf	8.03	3	V	23	1.91	-
PK	5.982G	59.92	68.20	-8.28	8.37	3	V	23	1.91	-

802.11a_Nss1_2TX

5745MHz_TX

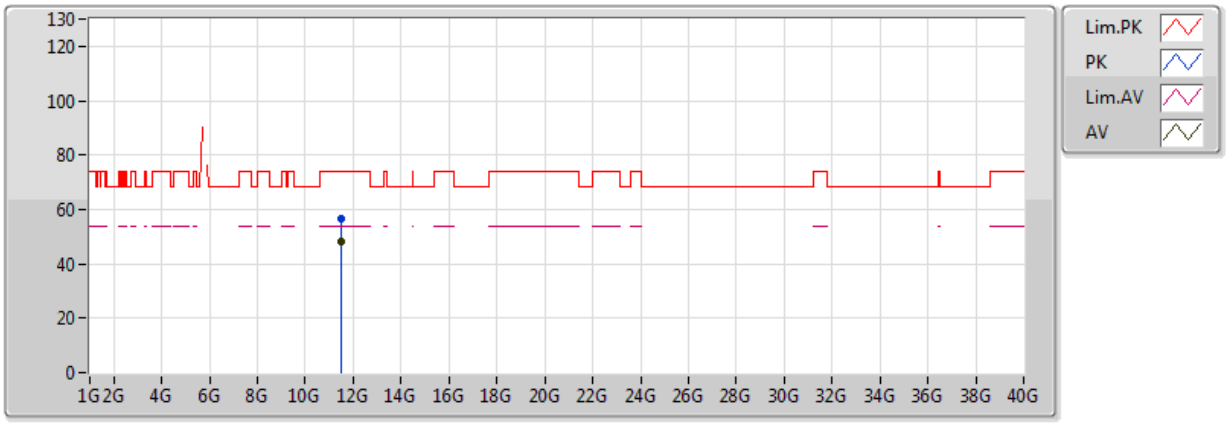


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.744G	109.40	Inf	-Inf	8.03	3	H	0	1.74	-
PK	5.631G	62.51	68.20	-5.69	7.98	3	H	0	1.74	-
PK	5.749G	119.29	Inf	-Inf	8.03	3	H	0	1.74	-
PK	5.989G	60.54	68.20	-7.66	8.38	3	H	0	1.74	-

802.11a_Nss1_2TX

5745MHz_TX

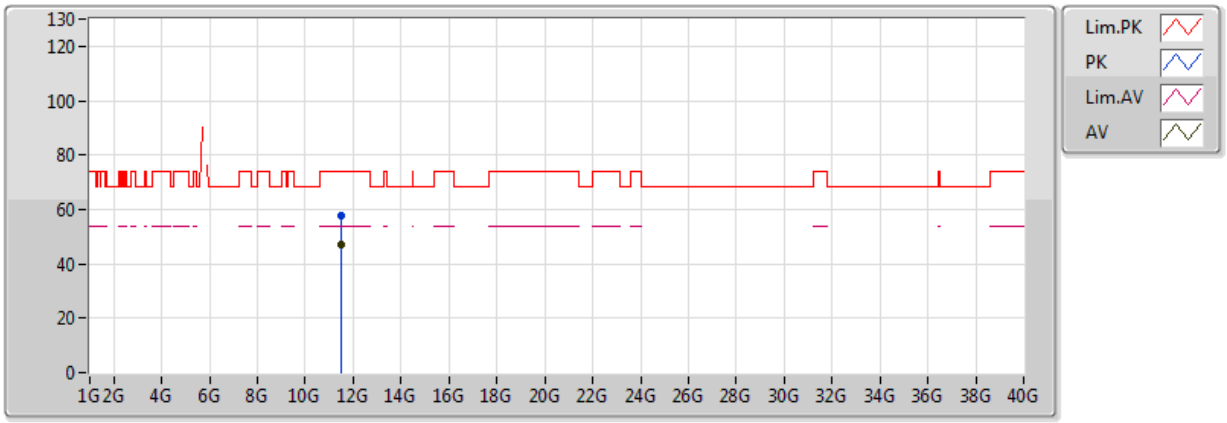


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.48999G	48.26	54.00	-5.74	13.93	3	V	322	2.15	-
PK	11.49005G	56.83	74.00	-17.17	13.93	3	V	322	2.15	-

802.11a_Nss1_2TX

5745MHz_TX

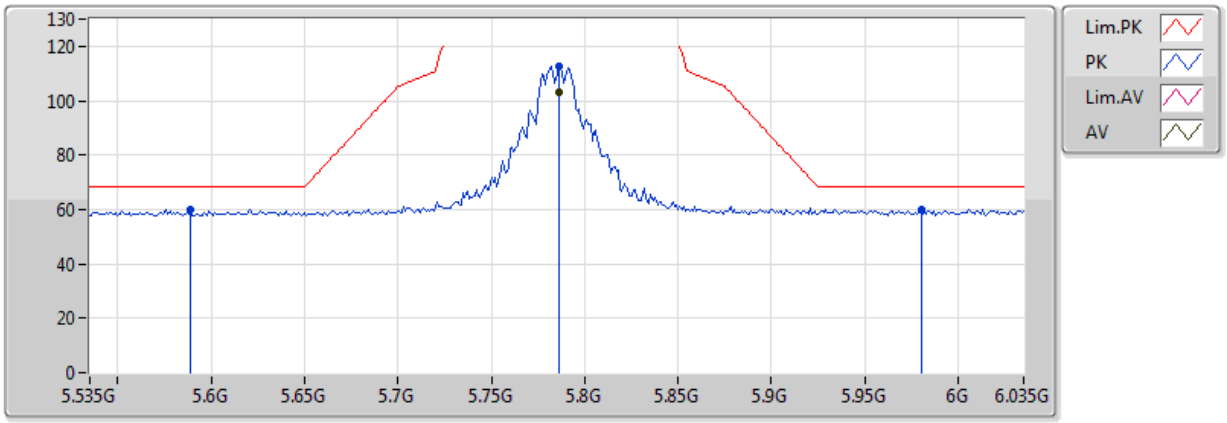


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.489988G	47.26	54.00	-6.74	13.93	3	H	35	2.14	-
PK	11.490108G	57.97	74.00	-16.03	13.93	3	H	35	2.14	-

802.11a_Nss1_2TX

5785MHz_TX

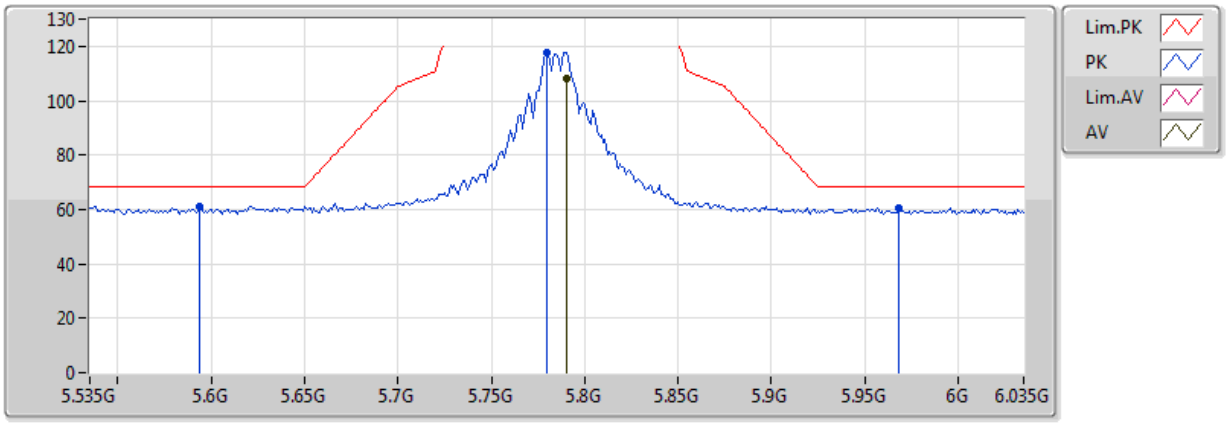


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.786G	103.00	Inf	-Inf	8.05	3	V	67	1.84	-
PK	5.589G	60.00	68.20	-8.20	7.95	3	V	67	1.84	-
PK	5.786G	112.62	Inf	-Inf	8.05	3	V	67	1.84	-
PK	5.98G	59.99	68.20	-8.21	8.37	3	V	67	1.84	-

802.11a_Nss1_2TX

5785MHz_TX

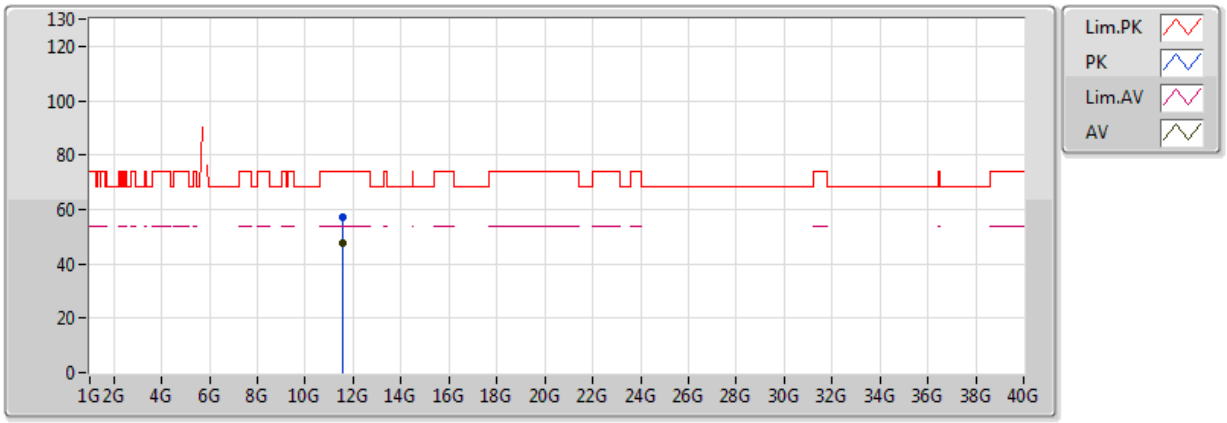


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.79G	107.95	Inf	-Inf	8.05	3	H	359	1.92	-
PK	5.594G	61.19	68.20	-7.01	7.95	3	H	359	1.92	-
PK	5.78G	117.83	Inf	-Inf	8.05	3	H	359	1.92	-
PK	5.968G	60.57	68.20	-7.63	8.35	3	H	359	1.92	-

802.11a_Nss1_2TX

5785MHz_TX

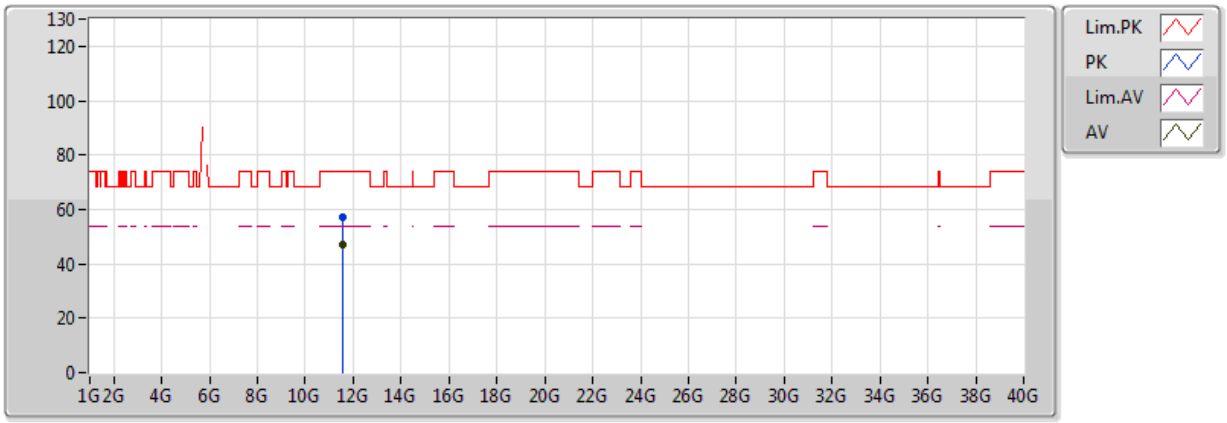


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.57G	47.67	54.00	-6.33	13.96	3	V	324	2.32	-
PK	11.569924G	56.99	74.00	-17.01	13.96	3	V	324	2.32	-

802.11a_Nss1_2TX

5785MHz_TX

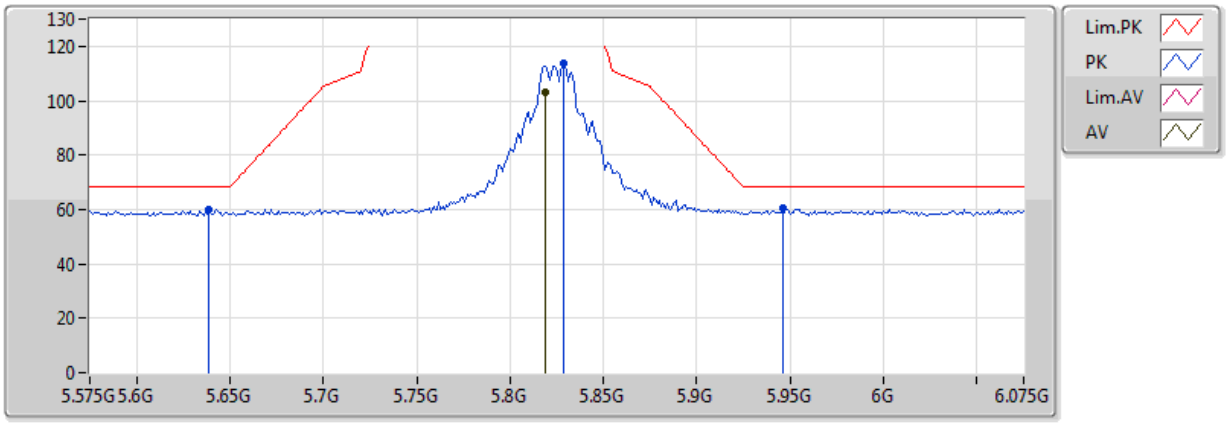


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.570028G	47.00	54.00	-7.00	13.96	3	H	52	2.09	-
PK	11.569916G	57.20	74.00	-16.80	13.96	3	H	52	2.09	-

802.11a_Nss1_2TX

5825MHz_TX

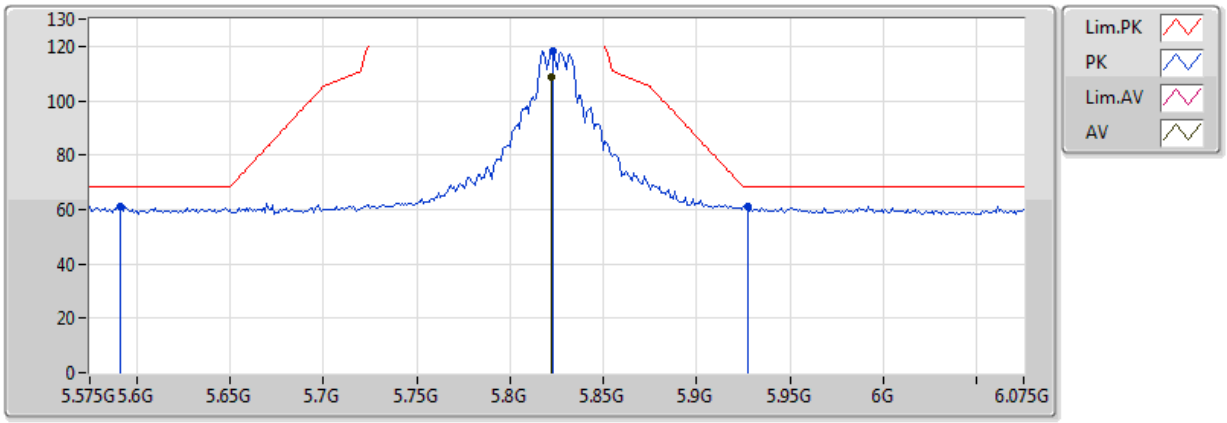


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.819G	103.09	Inf	-Inf	8.09	3	V	60	1.93	-
PK	5.639G	60.07	68.20	-8.13	7.98	3	V	60	1.93	-
PK	5.829G	113.70	Inf	-Inf	8.11	3	V	60	1.93	-
PK	5.946G	60.41	68.20	-7.79	8.31	3	V	60	1.93	-

802.11a_Nss1_2TX

5825MHz_TX

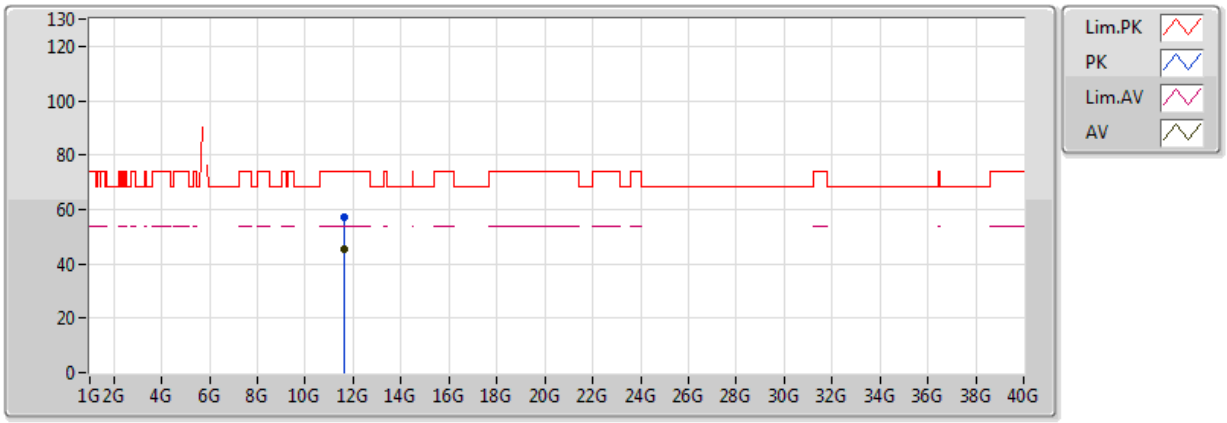


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.822G	108.59	Inf	-Inf	8.10	3	H	4	1.81	-
PK	5.591G	60.97	68.20	-7.23	7.95	3	H	4	1.81	-
PK	5.823G	118.22	Inf	-Inf	8.10	3	H	4	1.81	-
PK	5.927G	61.22	68.20	-6.98	8.28	3	H	4	1.81	-

802.11a_Nss1_2TX

5825MHz_TX

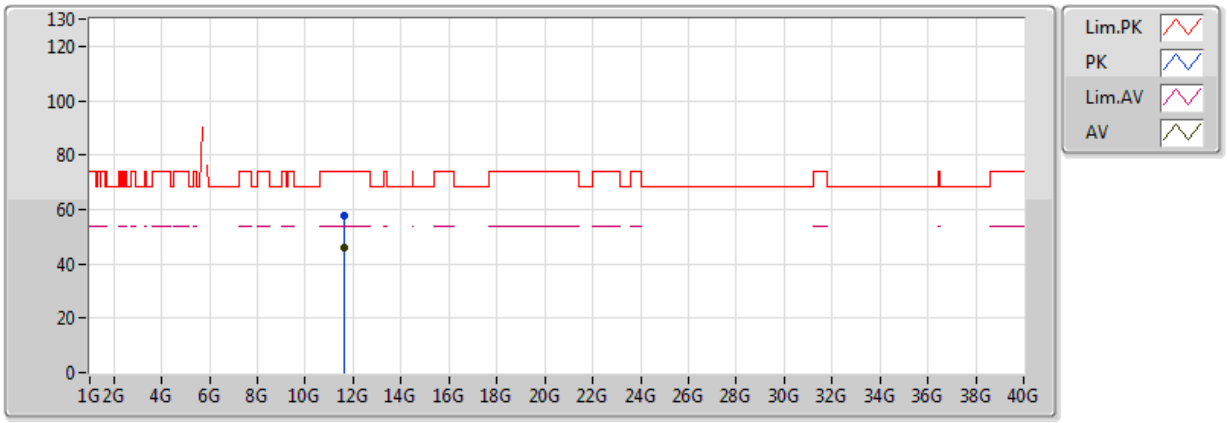


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.650028G	45.43	54.00	-8.57	13.99	3	V	329	1.74	-
PK	11.649896G	56.95	74.00	-17.05	13.99	3	V	329	1.74	-

802.11a_Nss1_2TX

5825MHz_TX

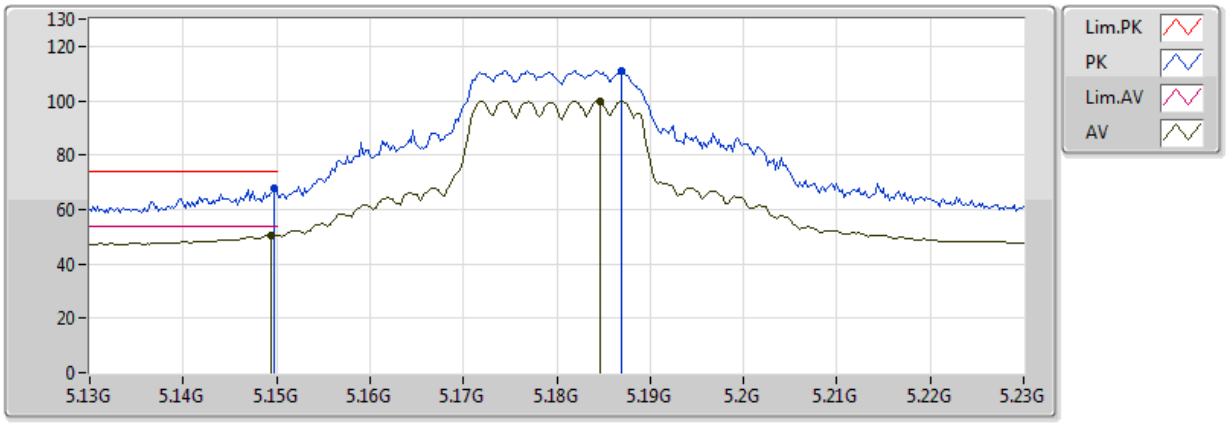


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.649984G	46.04	54.00	-7.96	13.99	3	H	52	2.08	-
PK	11.650032G	57.49	74.00	-16.51	13.99	3	H	52	2.08	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

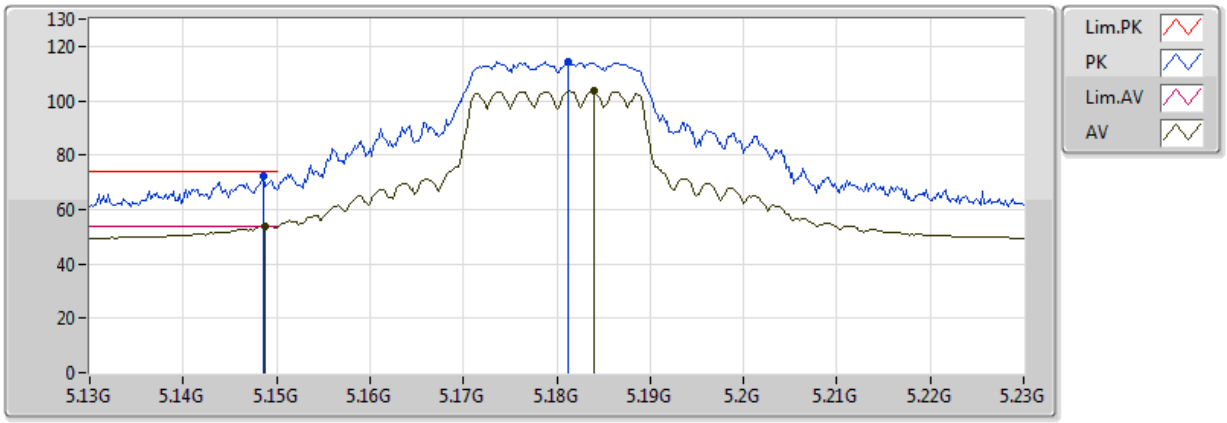


20170114
EUT Y_2TX_Non-TXBF
Setting 80
03-K-1-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1494G	50.57	54.00	-3.43	6.30	3	V	352	2.99	-
AV	5.1846G	99.94	Inf	-Inf	6.36	3	V	352	2.99	-
PK	5.1498G	68.04	74.00	-5.96	6.30	3	V	352	2.99	-
PK	5.187G	111.08	Inf	-Inf	6.37	3	V	352	2.99	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

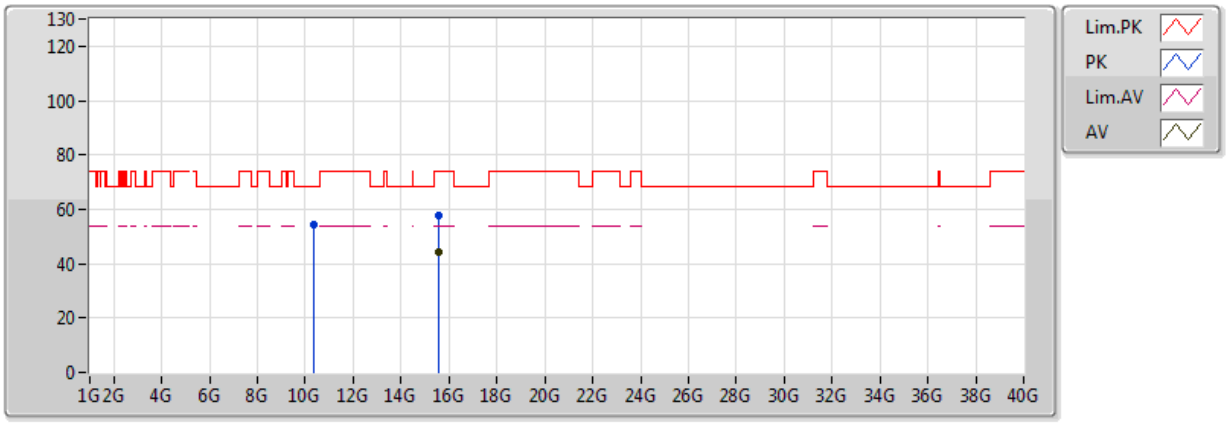


20170114
EUT Y_2TX_Non-TXBF
Setting 80
03-K-1-10
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1488G	53.96	54.00	-0.04	6.30	3	H	5	1.01	-
AV	5.184G	103.47	Inf	-Inf	6.36	3	H	5	1.01	-
PK	5.1486G	72.07	74.00	-1.93	6.30	3	H	5	1.01	-
PK	5.1812G	114.34	Inf	-Inf	6.36	3	H	5	1.01	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

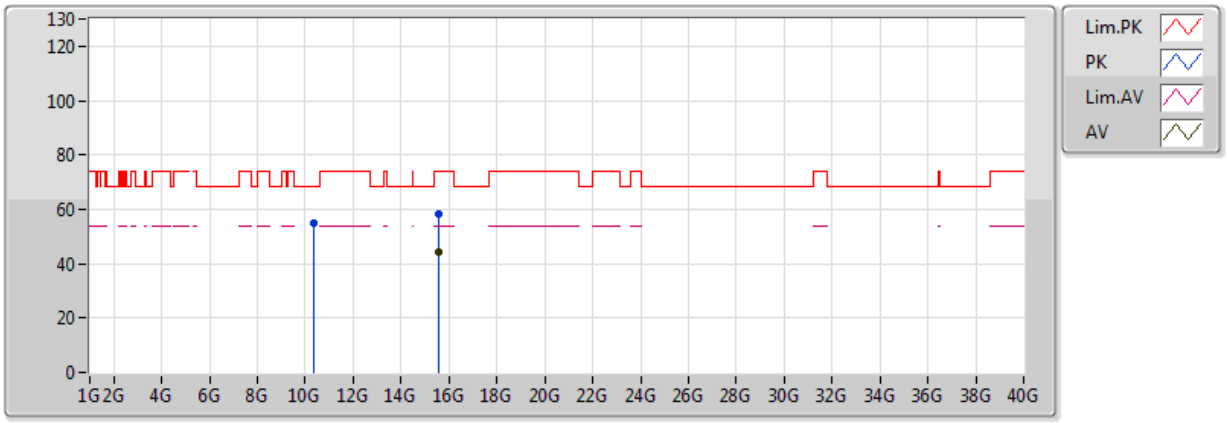


20170218
EUT Y_2TX_Non-TXBF
Setting 80
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.53954G	44.22	54.00	-9.78	16.02	3	V	15	1.50	-
PK	10.36G	54.55	68.20	-13.65	13.20	3	V	332	2.18	-
PK	15.539816G	57.99	74.00	-16.01	16.02	3	V	15	1.50	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

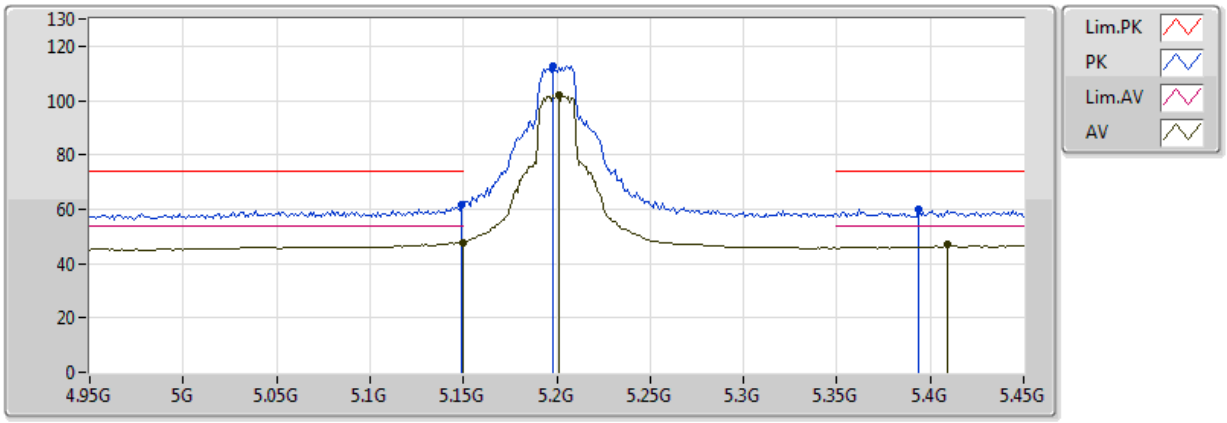


20170218
EUT Y_2TX_Non-TXBF
Setting 80
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.539284G	44.24	54.00	-9.76	16.02	3	H	147	1.89	-
PK	10.359968G	54.80	68.20	-13.40	13.20	3	H	146	2.74	-
PK	15.54068G	58.01	74.00	-15.99	16.01	3	H	147	1.89	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

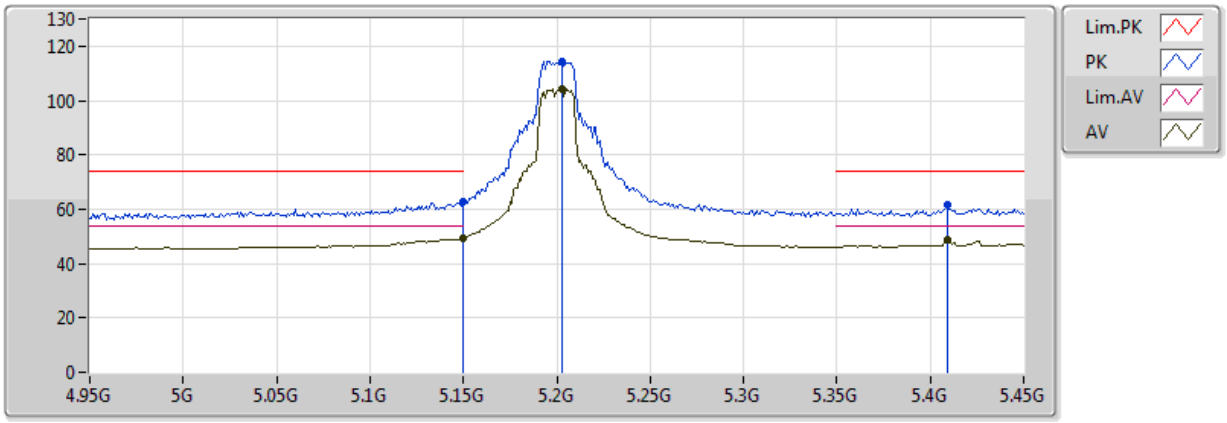


20170114
EUT Y_2TX_Non-TXBF
Setting 120
03-K-1-10
FSP(100142)

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	47.74	54.00	-6.26	6.30	3	V	351	2.99	-
AV	5.201G	101.87	Inf	-Inf	6.39	3	V	351	2.99	-
AV	5.409G	47.31	54.00	-6.69	6.69	3	V	351	2.99	-
PK	5.149G	61.77	74.00	-12.23	6.30	3	V	351	2.99	-
PK	5.198G	112.72	Inf	-Inf	6.39	3	V	351	2.99	-
PK	5.394G	60.09	74.00	-13.91	6.66	3	V	351	2.99	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

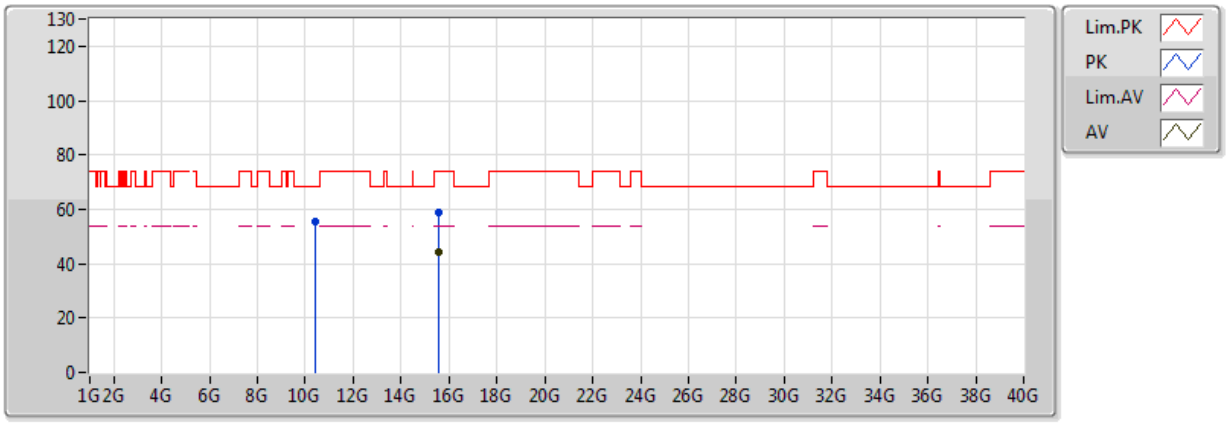


20170114
EUT Y_2TX_Non-TXBF
Setting 120
03-K-1-10
FSP(100142)

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	49.52	54.00	-4.48	6.30	3	H	2	1.49	-
AV	5.203G	104.35	Inf	-Inf	6.39	3	H	2	1.49	-
AV	5.409G	48.98	54.00	-5.02	6.69	3	H	2	1.49	-
PK	5.149995G	62.77	74.00	-11.23	6.30	3	H	2	1.49	-
PK	5.203G	114.43	Inf	-Inf	6.39	3	H	2	1.49	-
PK	5.409G	61.53	74.00	-12.47	6.69	3	H	2	1.49	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

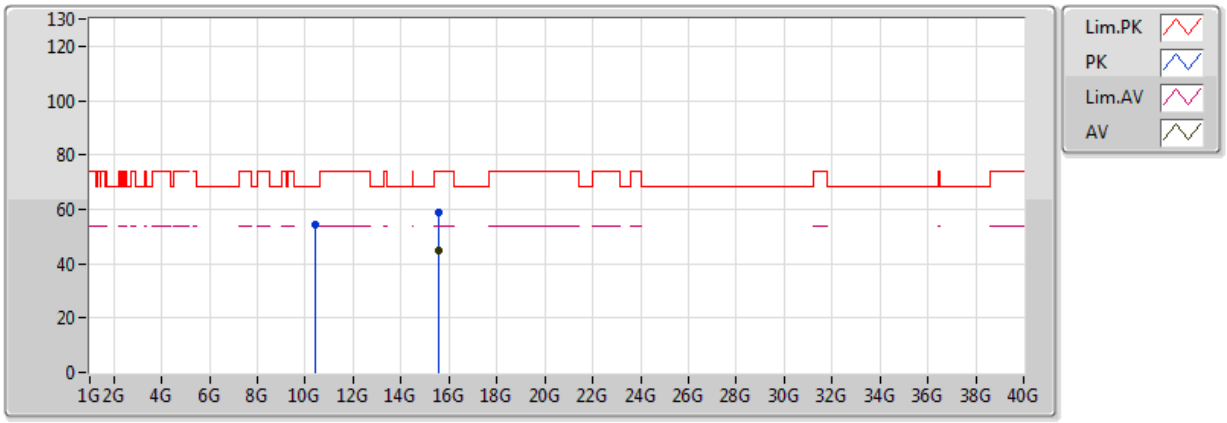


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.600848G	44.50	54.00	-9.50	15.89	3	V	335	1.54	-
PK	10.399832G	55.27	68.20	-12.93	13.23	3	V	158	1.79	-
PK	15.59976G	58.81	74.00	-15.19	15.90	3	V	335	1.54	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5200MHz_TX

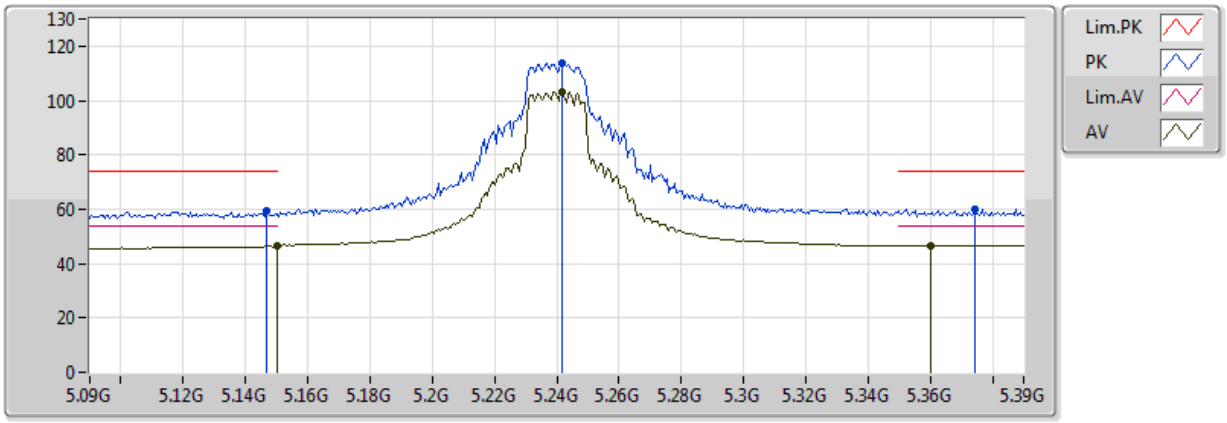


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.600932G	44.55	54.00	-9.45	15.89	3	H	302	2.47	-
PK	10.400168G	54.45	68.20	-13.75	13.23	3	H	266	1.82	-
PK	15.600376G	58.88	74.00	-15.12	15.90	3	H	302	2.47	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5240MHz_TX

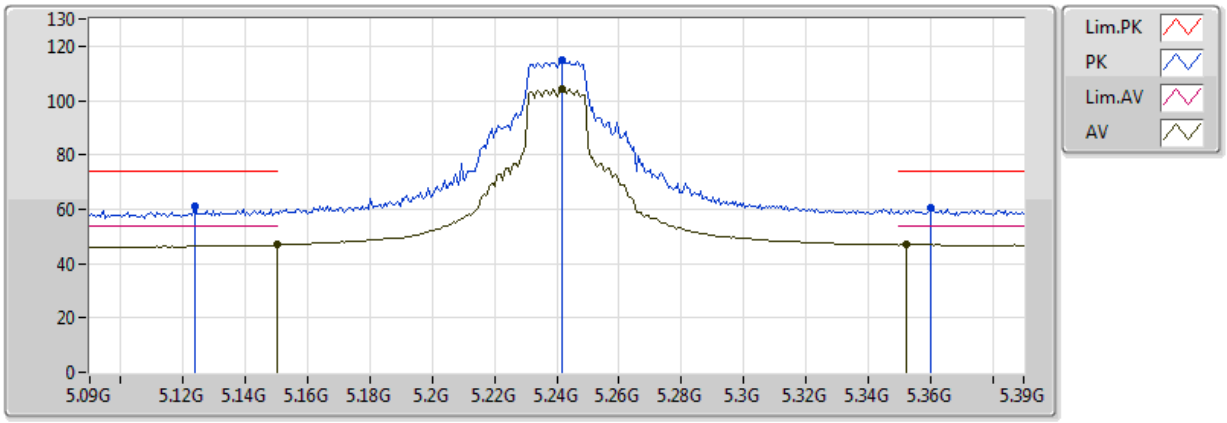


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3-10
FSP(100019)

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	46.34	54.00	-7.66	6.30	3	V	11	1.92	-
AV	5.2418G	103.13	Inf	-Inf	6.45	3	V	11	1.92	-
AV	5.36G	46.63	54.00	-7.37	6.62	3	V	11	1.92	-
PK	5.147G	59.28	74.00	-14.72	6.30	3	V	11	1.92	-
PK	5.2418G	113.68	Inf	-Inf	6.45	3	V	11	1.92	-
PK	5.3744G	59.94	74.00	-14.06	6.64	3	V	11	1.92	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5240MHz_TX

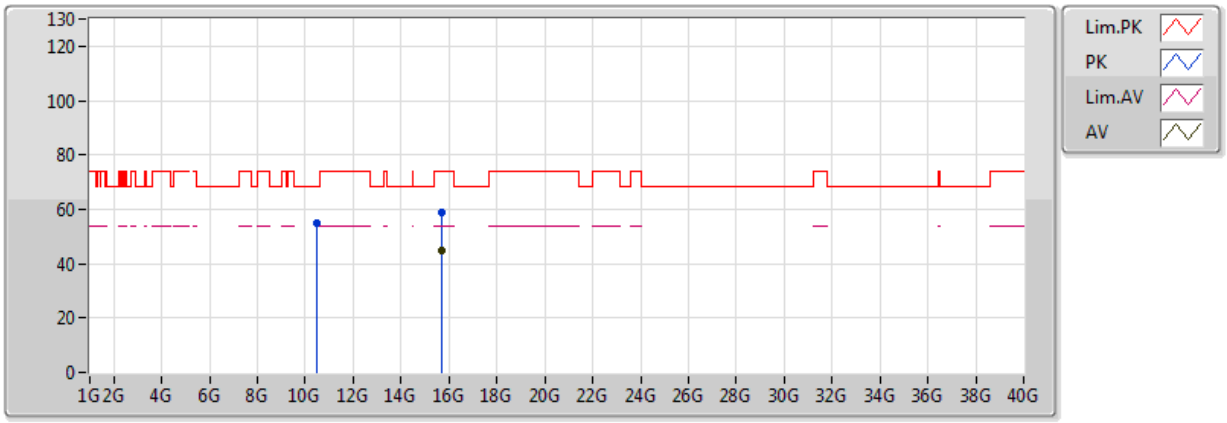


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3-10
FSP(100019)

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	46.88	54.00	-7.12	6.30	3	H	285	1.92	-
AV	5.2418G	104.10	Inf	-Inf	6.45	3	H	285	1.92	-
AV	5.3522G	47.07	54.00	-6.93	6.61	3	H	285	1.92	-
PK	5.1236G	60.84	74.00	-13.16	6.26	3	H	285	1.92	-
PK	5.2418G	114.84	Inf	-Inf	6.45	3	H	285	1.92	-
PK	5.36G	60.32	74.00	-13.68	6.62	3	H	285	1.92	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5240MHz_TX

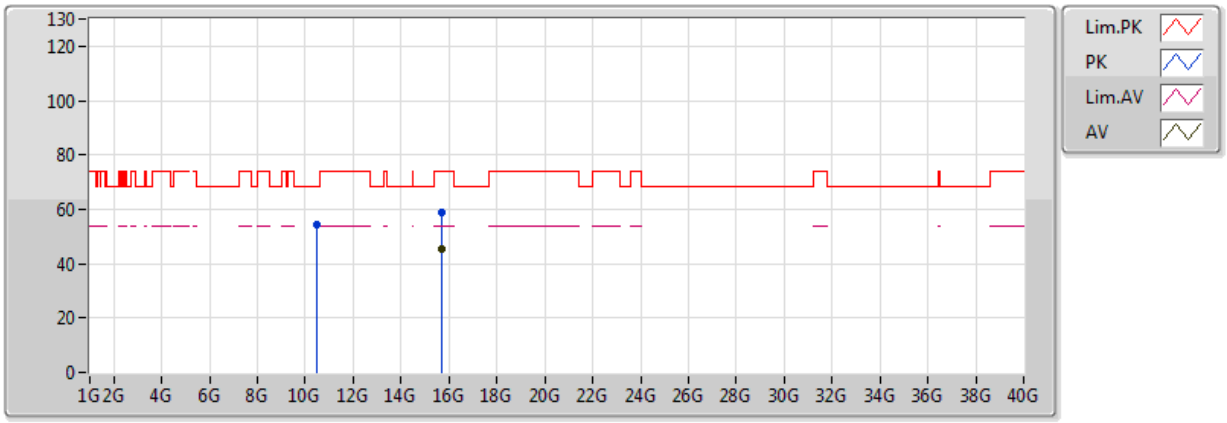


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.7195G	44.85	54.00	-9.15	15.66	3	V	161	2.11	-
PK	10.479908G	55.19	68.20	-13.01	13.30	3	V	163	1.72	-
PK	15.719644G	59.07	74.00	-14.93	15.66	3	V	161	2.11	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5240MHz_TX

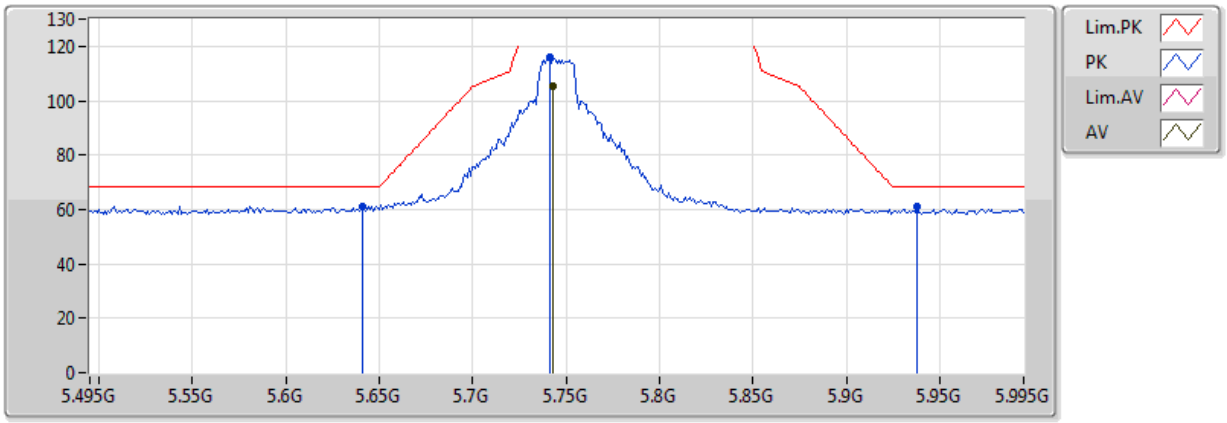


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.719172G	45.25	54.00	-8.75	15.66	3	H	159	1.79	-
PK	10.479828G	54.38	68.20	-13.82	13.30	3	H	91	1.20	-
PK	15.720556G	59.03	74.00	-14.97	15.66	3	H	159	1.79	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5745MHz_TX

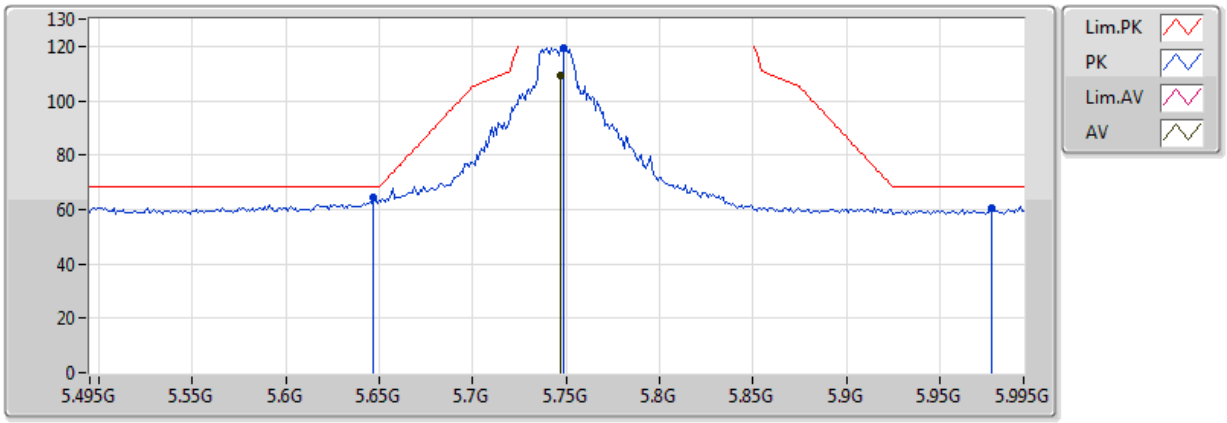


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

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	105.30	Inf	-Inf	8.03	3	V	9	1.83	-
PK	5.641G	61.05	68.20	-7.15	7.98	3	V	9	1.83	-
PK	5.741G	115.79	Inf	-Inf	8.03	3	V	9	1.83	-
PK	5.938G	60.98	68.20	-7.22	8.29	3	V	9	1.83	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5745MHz_TX

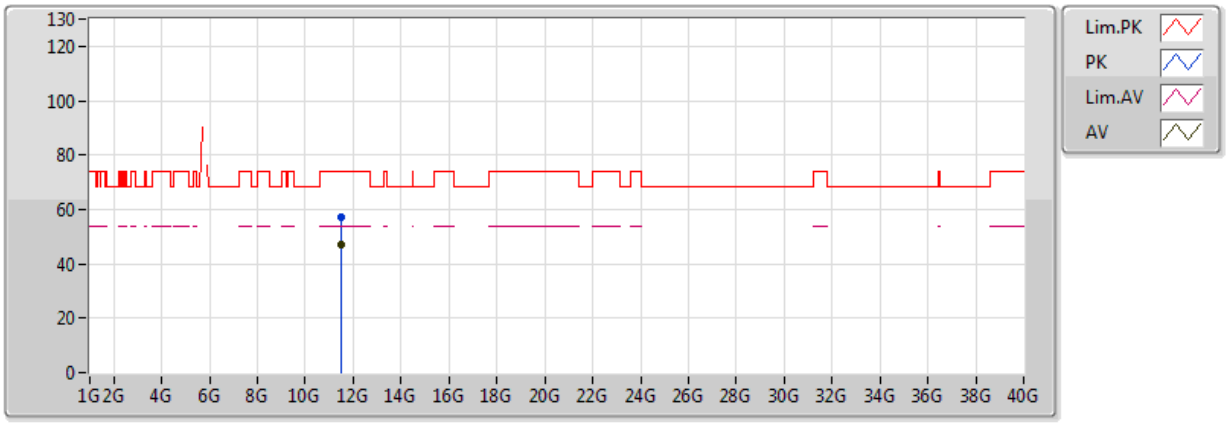


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.747G	109.26	Inf	-Inf	8.03	3	H	350	1.82	-
PK	5.647G	64.27	68.20	-3.93	7.98	3	H	350	1.82	-
PK	5.749G	119.48	Inf	-Inf	8.03	3	H	350	1.82	-
PK	5.978G	60.55	68.20	-7.65	8.36	3	H	350	1.82	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5745MHz_TX

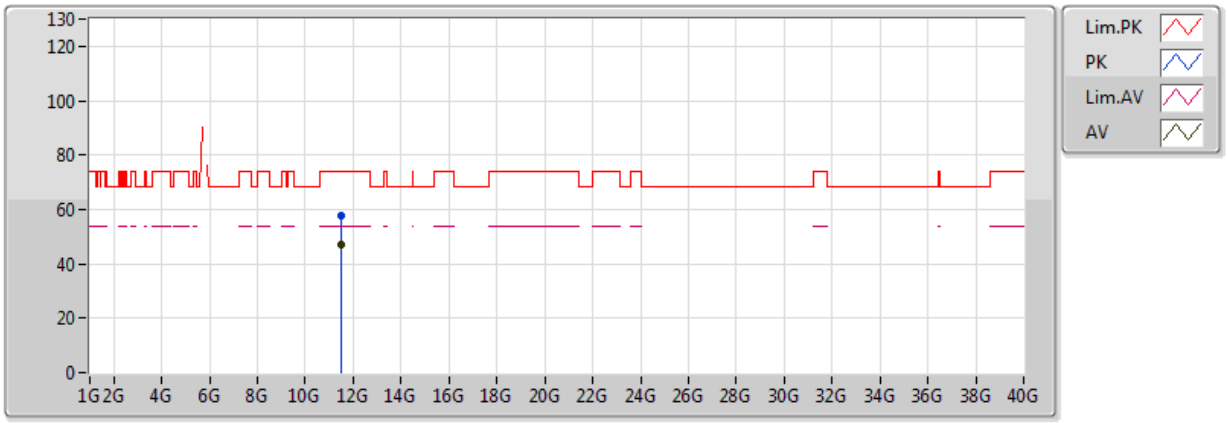


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.490012G	47.05	54.00	-6.95	13.93	3	V	336	2.63	-
PK	11.490056G	57.05	74.00	-16.95	13.93	3	V	336	2.63	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5745MHz_TX

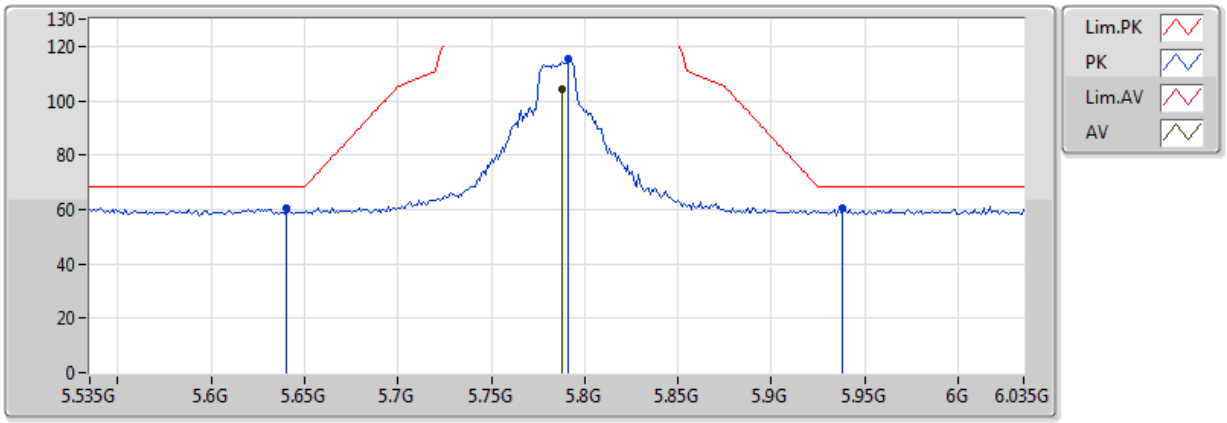


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.49G	47.12	54.00	-6.88	13.93	3	H	36	2.15	-
PK	11.489892G	57.88	74.00	-16.12	13.93	3	H	36	2.15	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5785MHz_TX

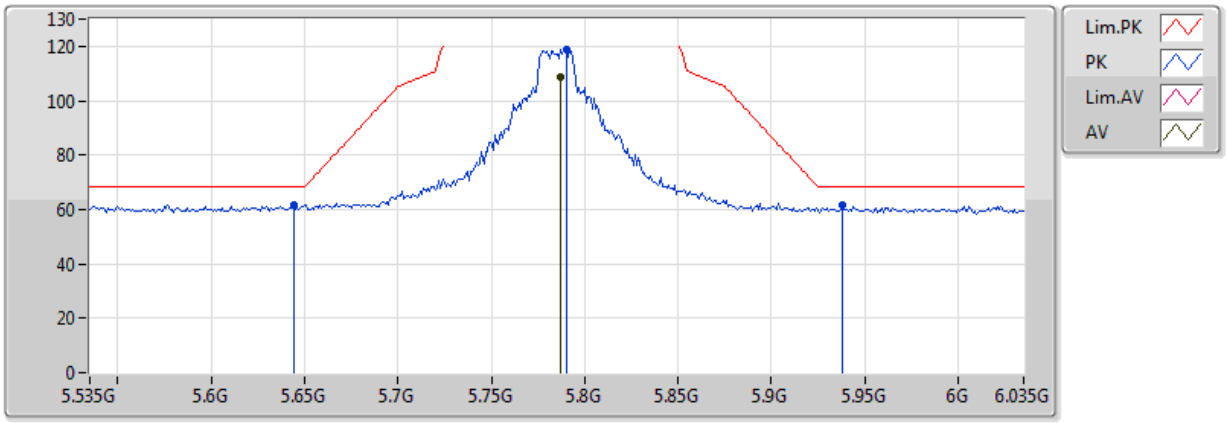


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

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	104.24	Inf	-Inf	8.05	3	V	14	2.04	-
PK	5.64G	60.78	68.20	-7.42	7.98	3	V	14	2.04	-
PK	5.791G	115.31	Inf	-Inf	8.06	3	V	14	2.04	-
PK	5.938G	60.60	68.20	-7.60	8.29	3	V	14	2.04	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5785MHz_TX

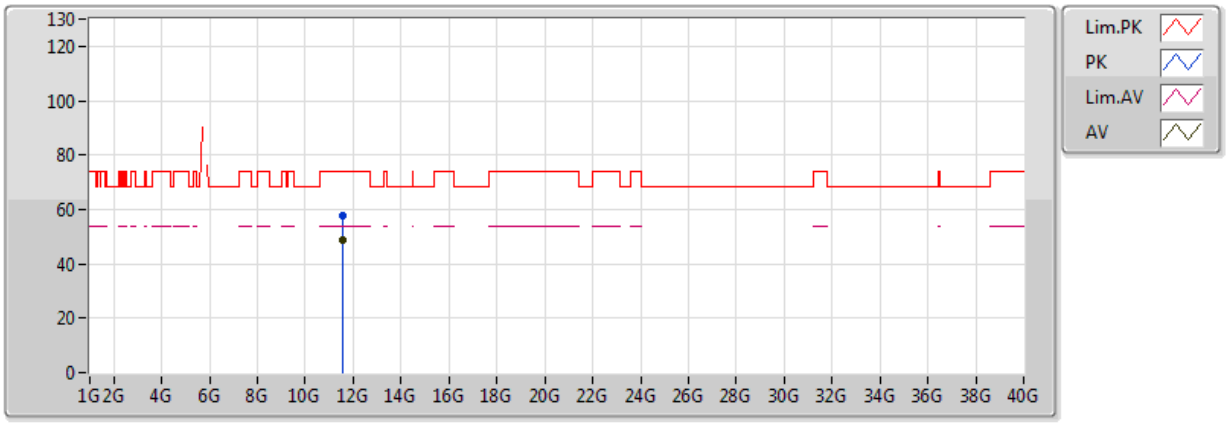


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

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	108.81	Inf	-Inf	8.05	3	H	9	1.73	-
PK	5.644G	61.73	68.20	-6.47	7.98	3	H	9	1.73	-
PK	5.79G	118.76	Inf	-Inf	8.05	3	H	9	1.73	-
PK	5.938G	61.59	68.20	-6.61	8.29	3	H	9	1.73	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5785MHz_TX

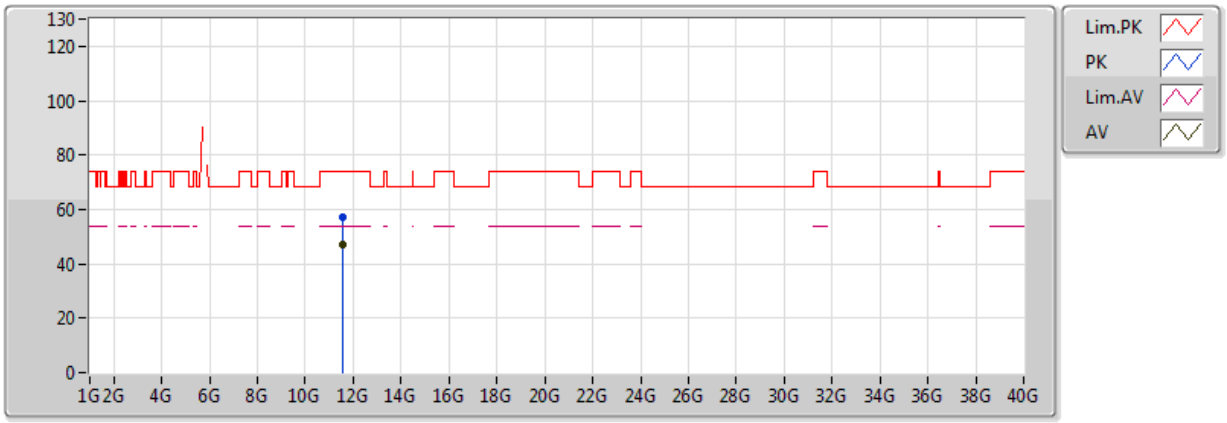


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.570028G	48.83	54.00	-5.17	13.96	3	V	320	2.07	-
PK	11.569824G	57.70	74.00	-16.30	13.96	3	V	320	2.07	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5785MHz_TX

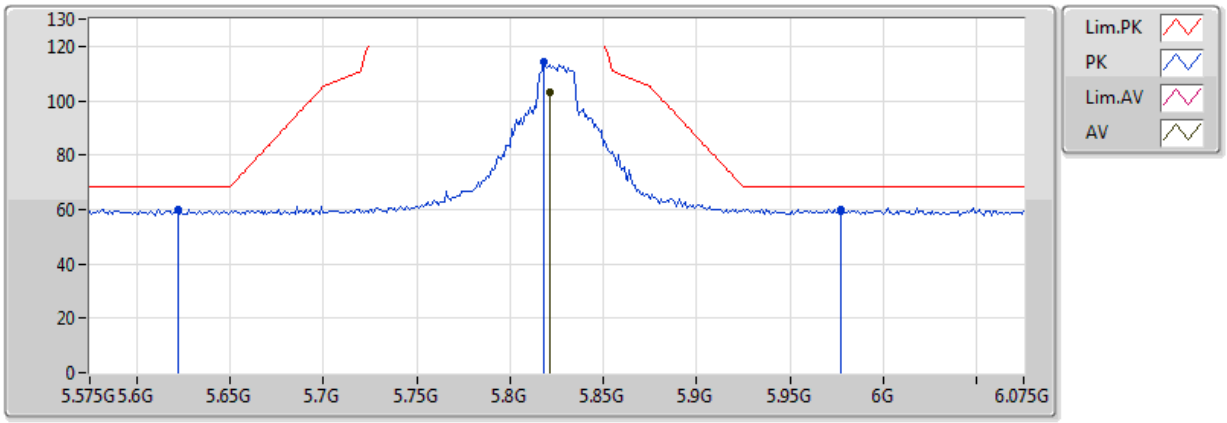


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.570028G	47.33	54.00	-6.67	13.96	3	H	33	2.12	-
PK	11.570176G	57.02	74.00	-16.98	13.96	3	H	33	2.12	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5825MHz_TX

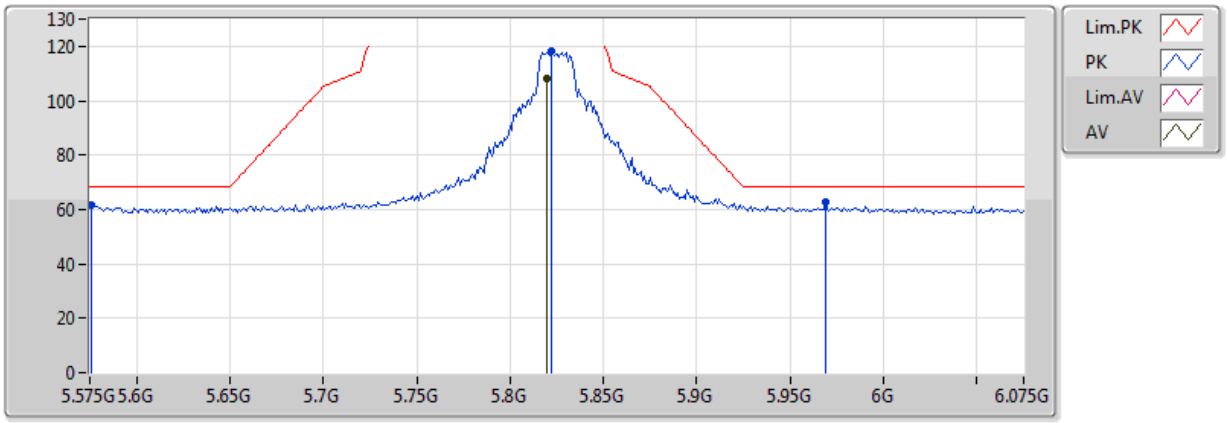


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.821G	103.28	Inf	-Inf	8.10	3	V	15	2.14	-
PK	5.622G	59.90	68.20	-8.30	7.97	3	V	15	2.14	-
PK	5.818G	114.17	Inf	-Inf	8.09	3	V	15	2.14	-
PK	5.977G	60.11	68.20	-8.09	8.36	3	V	15	2.14	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5825MHz_TX

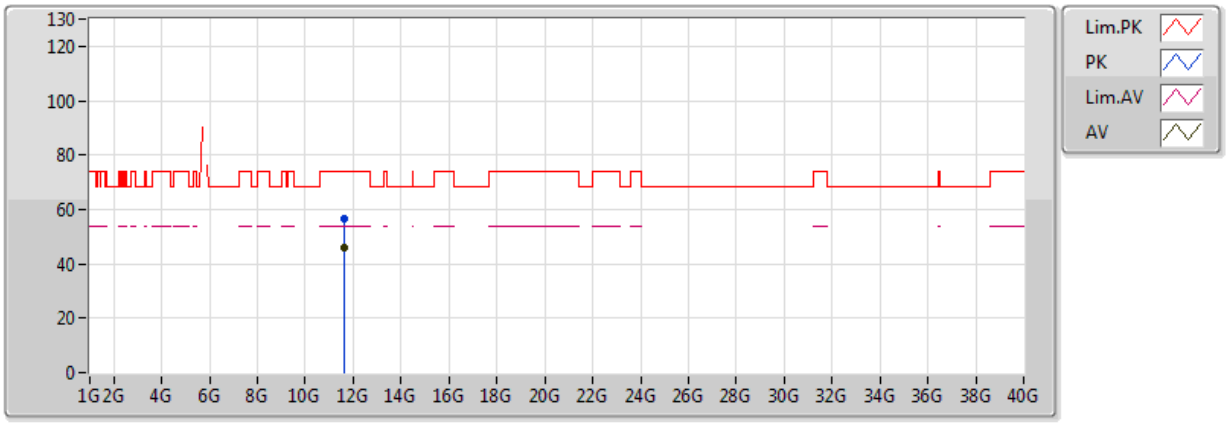


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

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	108.42	Inf	-Inf	8.09	3	H	1	1.77	-
PK	5.576G	61.72	68.20	-6.48	7.93	3	H	1	1.77	-
PK	5.822G	117.99	Inf	-Inf	8.10	3	H	1	1.77	-
PK	5.969G	62.58	68.20	-5.62	8.35	3	H	1	1.77	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5825MHz_TX

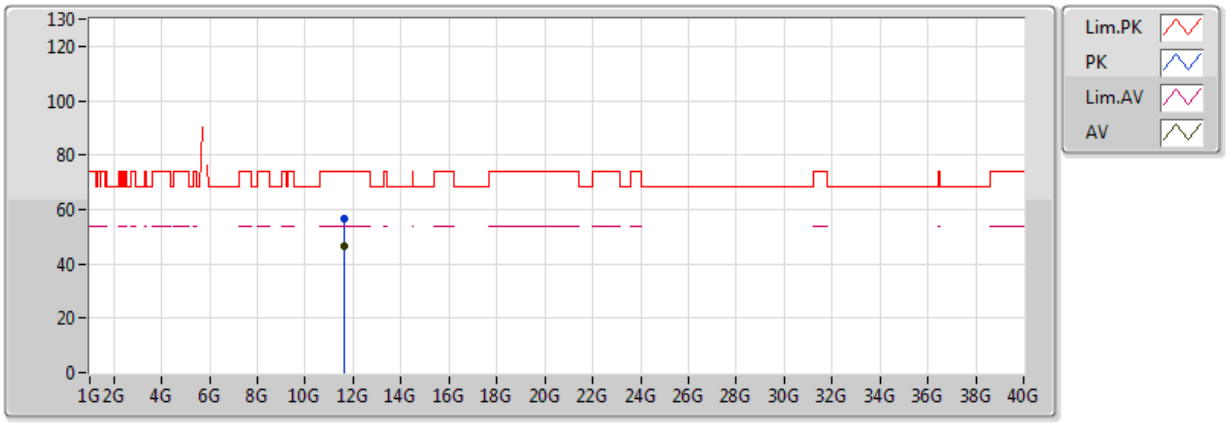


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.650064G	45.95	54.00	-8.05	13.99	3	V	327	1.75	-
PK	11.649944G	56.43	74.00	-17.57	13.99	3	V	327	1.75	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5825MHz_TX

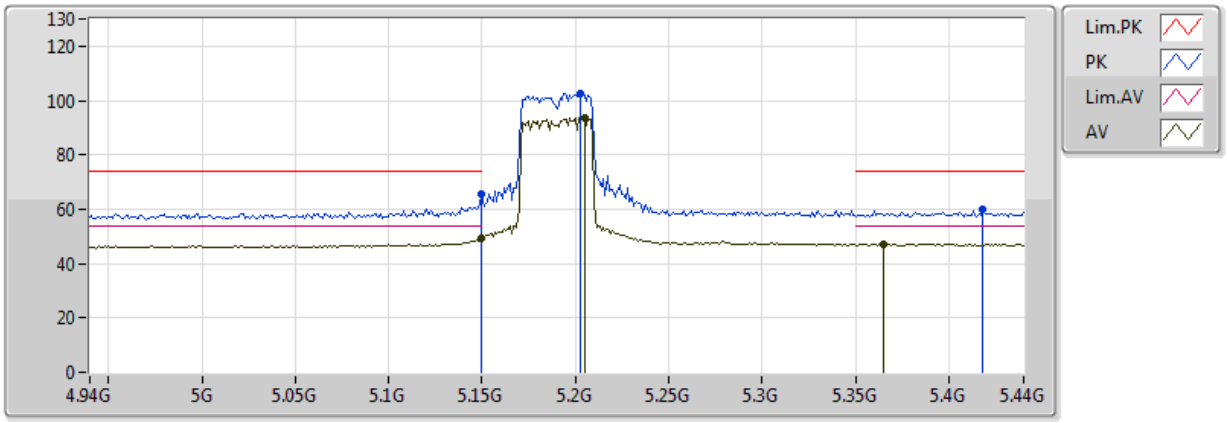


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.650044G	46.47	54.00	-7.53	13.99	3	H	52	2.08	-
PK	11.65004G	56.64	74.00	-17.36	13.99	3	H	52	2.08	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5190MHz_TX

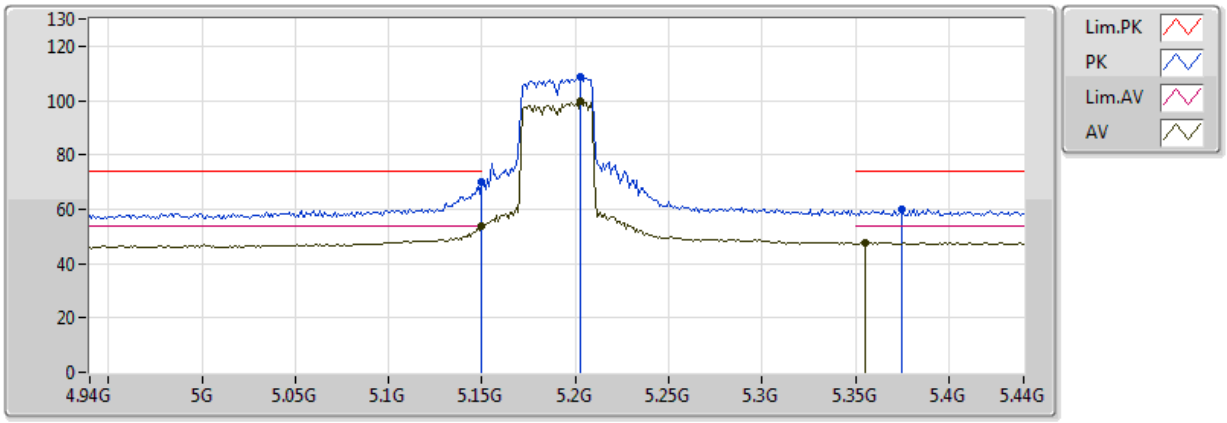


20170116
EUT Y_2TX
Setting 68
02-P-2-10
FSU

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	49.52	54.00	-4.48	7.04	3	V	35	1.85	-
AV	5.205G	93.74	Inf	-Inf	7.19	3	V	35	1.85	-
AV	5.365G	47.11	54.00	-6.89	7.50	3	V	35	1.85	-
PK	5.149995G	65.34	74.00	-8.66	7.04	3	V	35	1.85	-
PK	5.203G	102.53	Inf	-Inf	7.19	3	V	35	1.85	-
PK	5.418G	59.96	74.00	-14.04	7.62	3	V	35	1.85	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5190MHz_TX

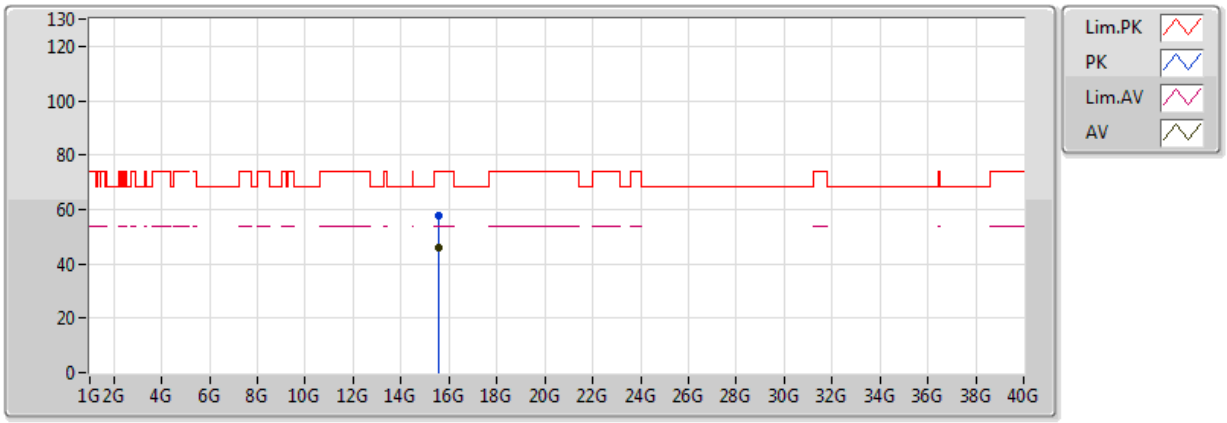


20170116
EUT Y_2TX
Setting 68
02-P-2-10
FSU

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	53.77	54.00	-0.23	7.04	3	H	0	1.72	-
AV	5.203G	99.53	Inf	-Inf	7.19	3	H	0	1.72	-
AV	5.355G	47.69	54.00	-6.31	7.48	3	H	0	1.72	-
PK	5.149995G	70.00	74.00	-4.00	7.04	3	H	0	1.72	-
PK	5.203G	108.80	Inf	-Inf	7.19	3	H	0	1.72	-
PK	5.375G	59.82	74.00	-14.18	7.52	3	H	0	1.72	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5190MHz_TX

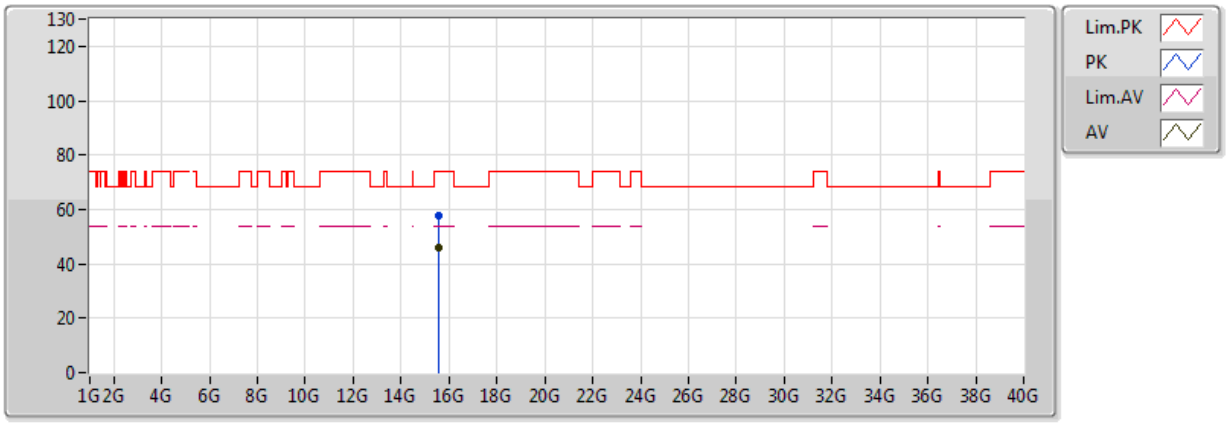


20170218
EUT Y_2TX_Non-TXBF
Setting 68
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.57046G	45.74	54.00	-8.26	15.95	3	V	11	1.32	-
PK	15.569588G	57.98	74.00	-16.02	15.96	3	V	11	1.32	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5190MHz_TX

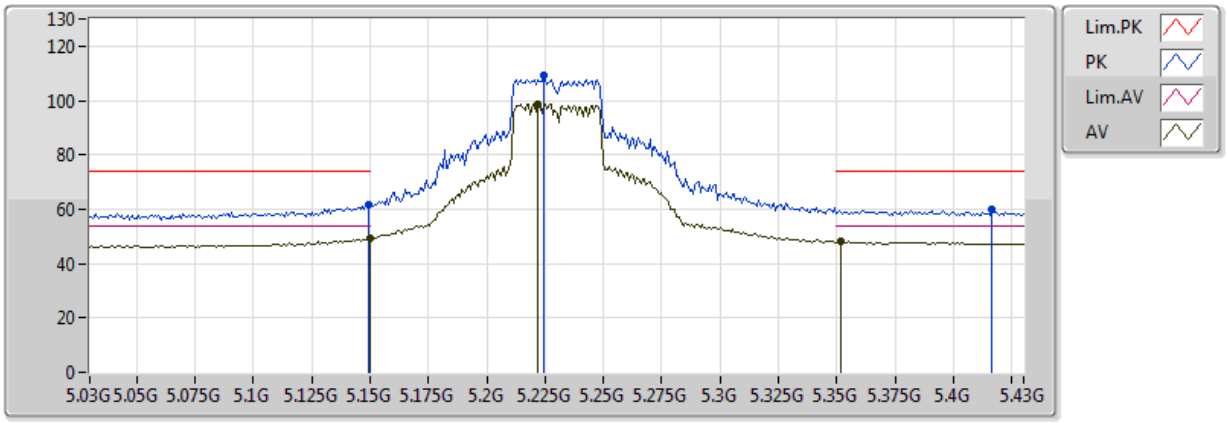


20170218
EUT Y_2TX_Non-TXBF
Setting 68
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.570468G	45.77	54.00	-8.23	15.95	3	H	255	2.25	-
PK	15.569184G	57.92	74.00	-16.08	15.96	3	H	255	2.25	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5230MHz_TX

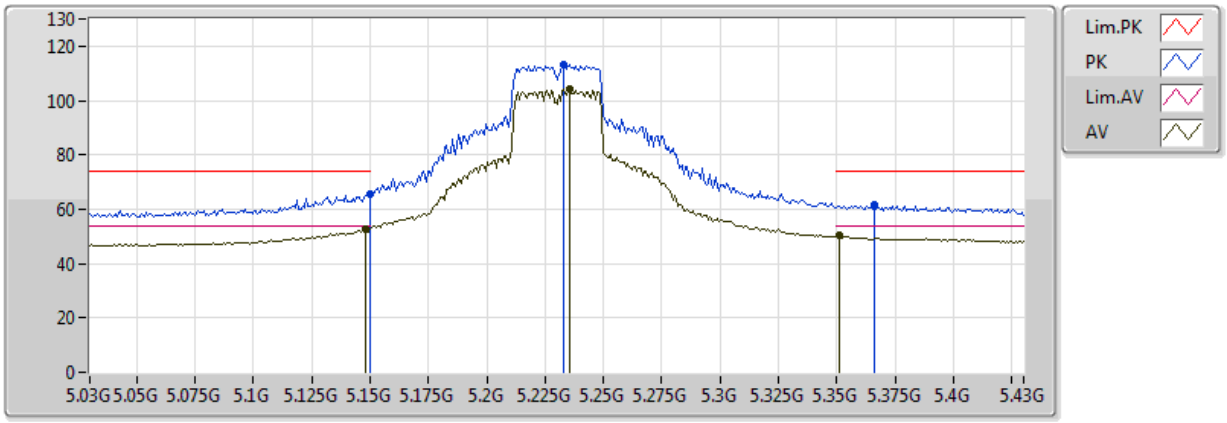


20170116
EUT Y_2TX
Setting 86
02-P-2-10
FSU

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	49.07	54.00	-4.93	7.04	3	V	37	1.73	-
AV	5.222G	98.81	Inf	-Inf	7.22	3	V	37	1.73	-
AV	5.3516G	48.02	54.00	-5.98	7.48	3	V	37	1.73	-
PK	5.1492G	61.90	74.00	-12.10	7.04	3	V	37	1.73	-
PK	5.2244G	109.27	Inf	-Inf	7.23	3	V	37	1.73	-
PK	5.4164G	59.70	74.00	-14.30	7.61	3	V	37	1.73	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5230MHz_TX

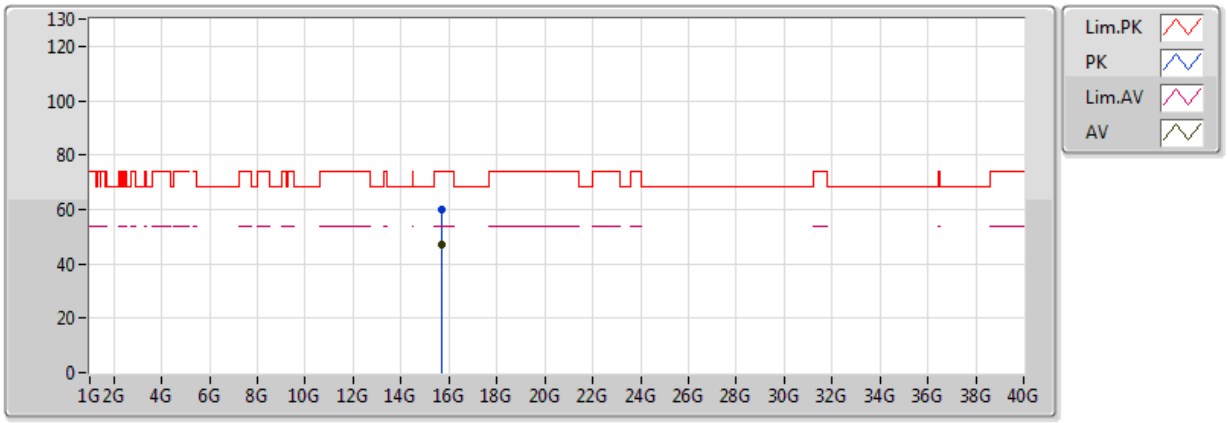


20170116
EUT Y_2TX
Setting 86
02-P-2-10
FSU

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	52.69	54.00	-1.31	7.04	3	H	1	1.64	-
AV	5.2356G	104.31	Inf	-Inf	7.25	3	H	1	1.64	-
AV	5.3508G	50.21	54.00	-3.79	7.48	3	H	1	1.64	-
PK	5.149995G	65.63	74.00	-8.37	7.04	3	H	1	1.64	-
PK	5.2332G	113.08	Inf	-Inf	7.25	3	H	1	1.64	-
PK	5.366G	61.49	74.00	-12.51	7.51	3	H	1	1.64	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5230MHz_TX

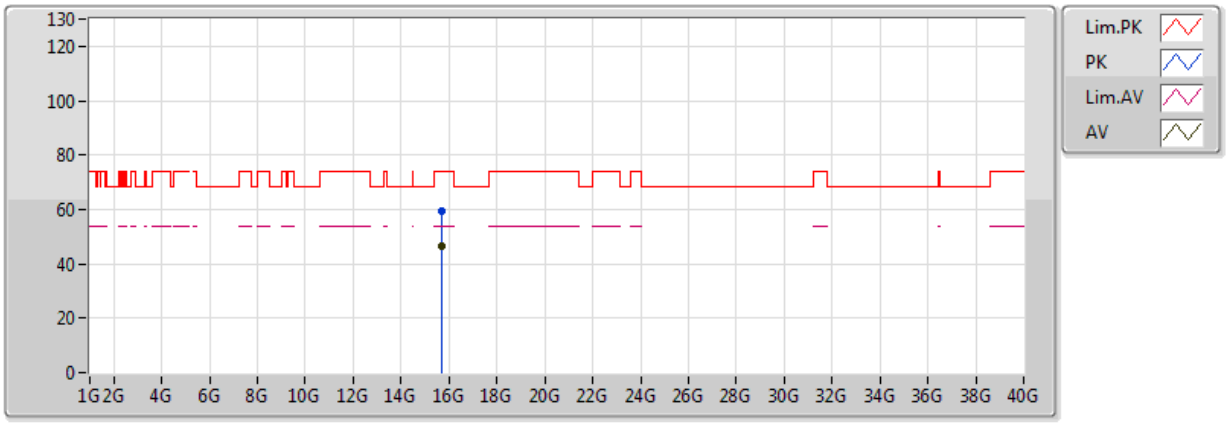


20170218
EUT Y_2TX_Non-TXBF
Setting 86
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.689364G	46.81	54.00	-7.19	15.72	3	V	271	1.02	-
PK	15.689448G	59.80	74.00	-14.20	15.72	3	V	271	1.02	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5230MHz_TX

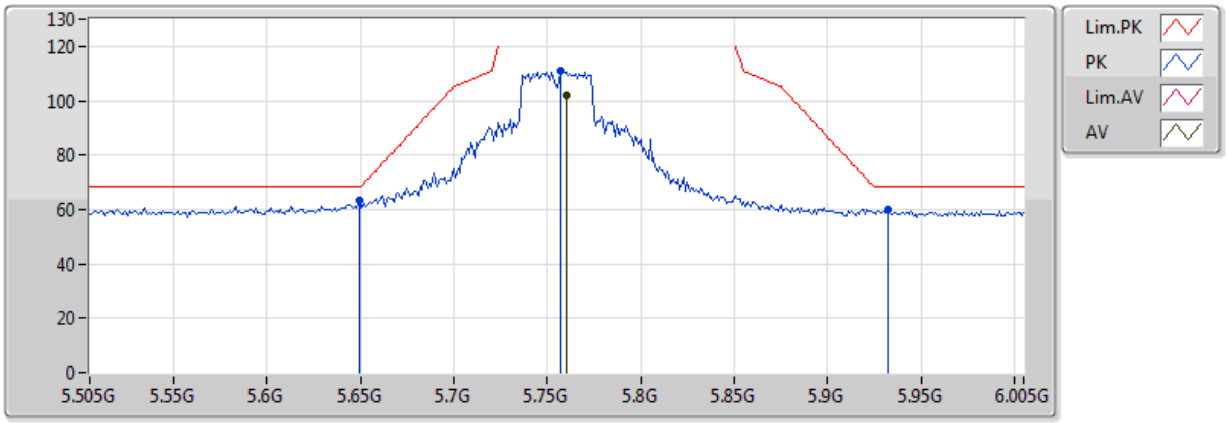


20170218
EUT Y_2TX_Non-TXBF
Setting 86
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.69094G	46.57	54.00	-7.43	15.72	3	H	253	1.49	-
PK	15.689212G	59.39	74.00	-14.61	15.72	3	H	253	1.49	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5755MHz_TX

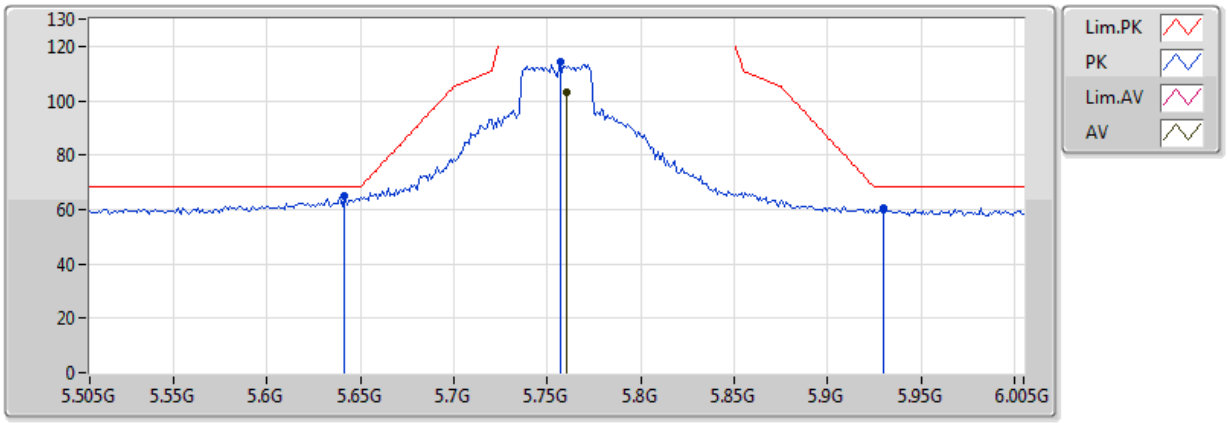


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3-10
FSP(100019)

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	101.75	Inf	-Inf	6.98	3	V	327	1.66	-
PK	5.649G	63.50	68.20	-4.70	6.97	3	V	327	1.66	-
PK	5.757G	111.22	Inf	-Inf	6.98	3	V	327	1.66	-
PK	5.932G	59.91	68.20	-8.29	6.92	3	V	327	1.66	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5755MHz_TX

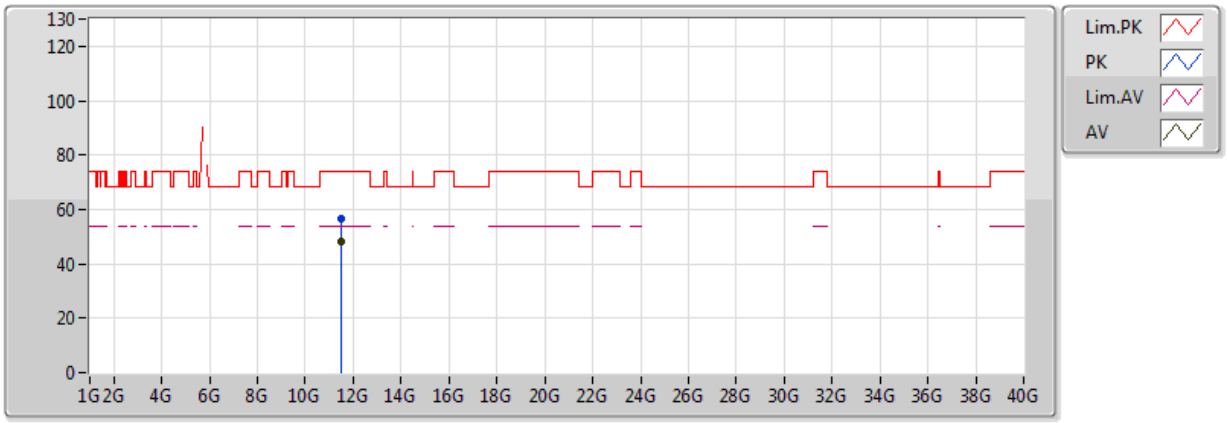


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3-10
FSP(100019)

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	103.19	Inf	-Inf	6.98	3	H	354	1.70	-
PK	5.641G	65.26	68.20	-2.94	6.97	3	H	354	1.70	-
PK	5.757G	114.05	Inf	-Inf	6.98	3	H	354	1.70	-
PK	5.93G	60.47	68.20	-7.73	6.93	3	H	354	1.70	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5755MHz_TX

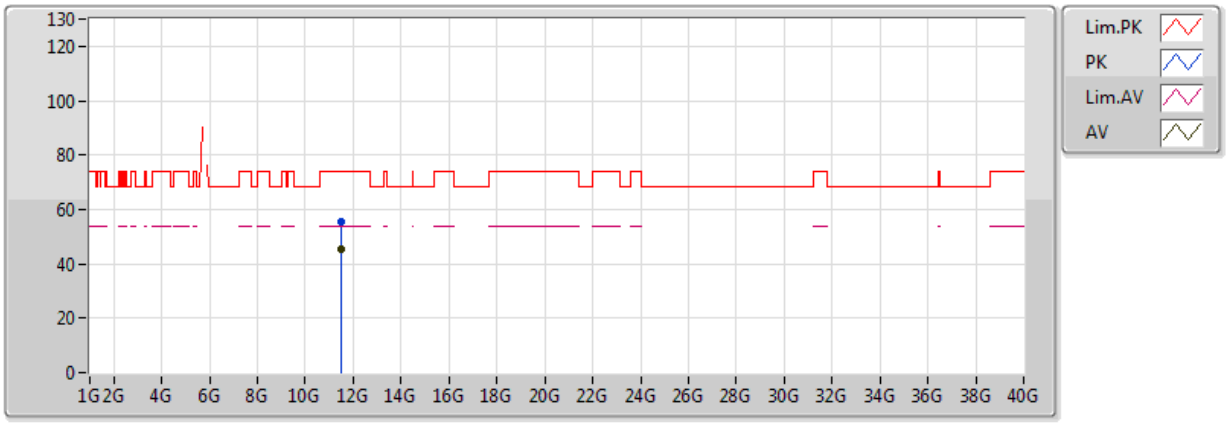


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.509996G	48.28	54.00	-5.72	13.93	3	V	336	2.62	-
PK	11.50986G	56.32	74.00	-17.68	13.93	3	V	336	2.62	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5755MHz_TX

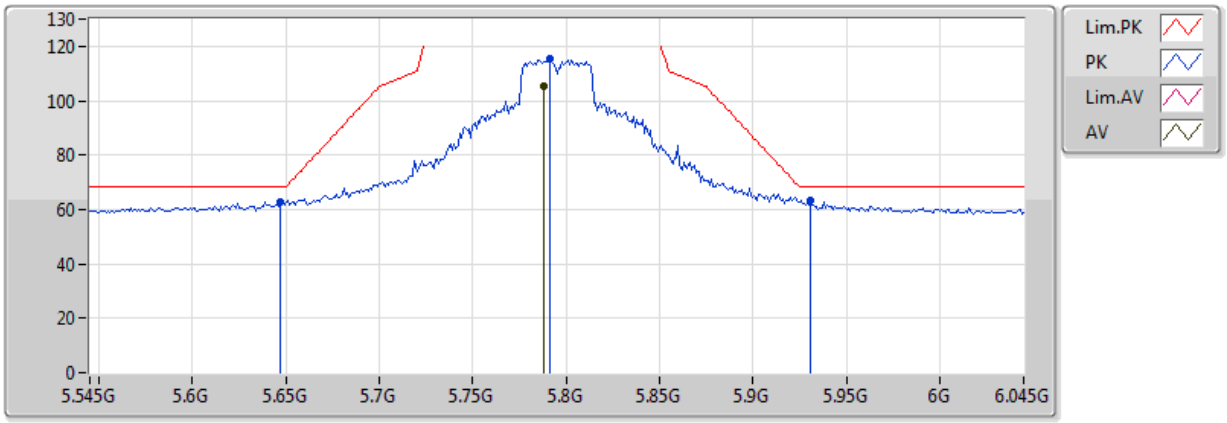


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.510044G	45.22	54.00	-8.78	13.93	3	H	170	2.49	-
PK	11.510136G	55.55	74.00	-18.45	13.93	3	H	170	2.49	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5795MHz_TX

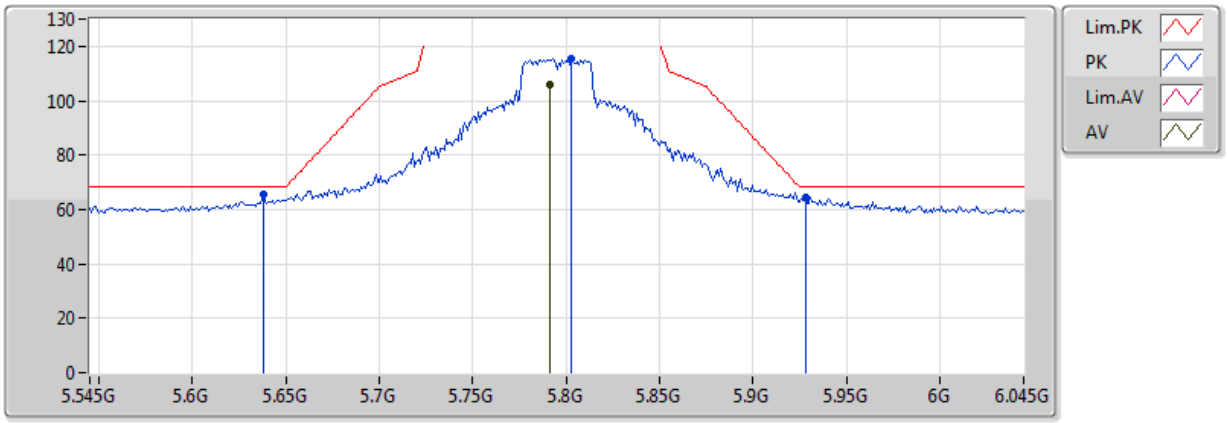


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

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	105.50	Inf	-Inf	8.05	3	V	355	1.55	-
PK	5.647G	62.82	68.20	-5.38	7.98	3	V	355	1.55	-
PK	5.791G	115.17	Inf	-Inf	8.06	3	V	355	1.55	-
PK	5.931G	63.13	68.20	-5.07	8.28	3	V	355	1.55	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5795MHz_TX

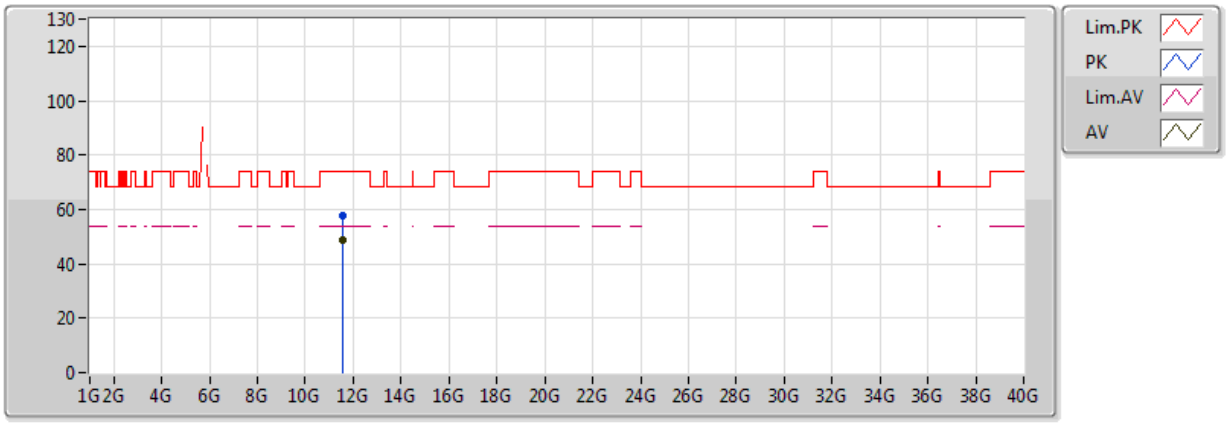


20170116
EUT Y_2TX
Setting 120
02-P-2-10
FSU

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	105.93	Inf	-Inf	8.06	3	H	354	1.81	-
PK	5.638G	65.30	68.20	-2.90	7.98	3	H	354	1.81	-
PK	5.803G	115.36	Inf	-Inf	8.07	3	H	354	1.81	-
PK	5.928G	64.71	68.20	-3.49	8.28	3	H	354	1.81	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5795MHz_TX

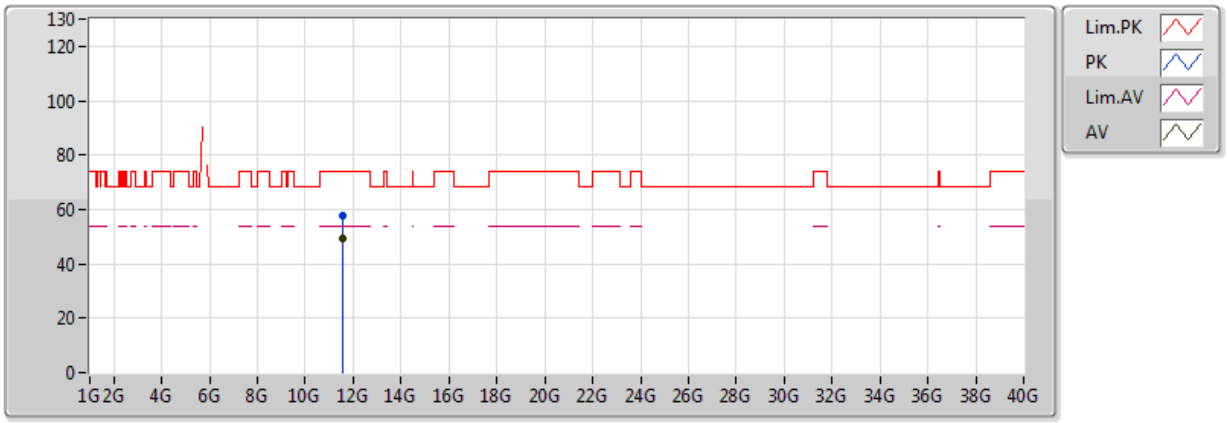


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.590092G	48.97	54.00	-5.03	13.96	3	V	323	2.36	-
PK	11.590104G	57.53	74.00	-16.47	13.96	3	V	323	2.36	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5795MHz_TX

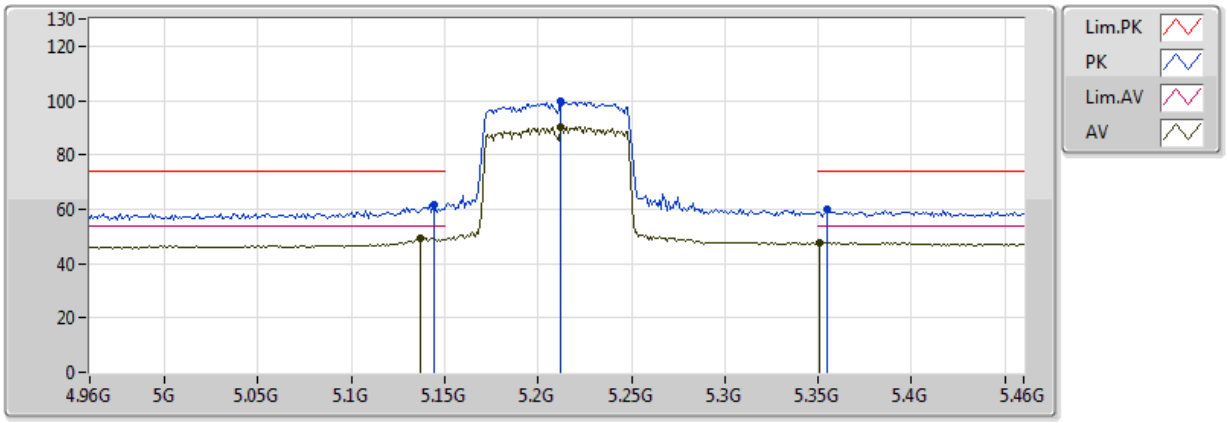


20170218
EUT Y_2TX_Non-TXBF
Setting 120
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.59006G	49.07	54.00	-4.93	13.96	3	H	51	2.10	-
PK	11.589856G	57.59	74.00	-16.41	13.96	3	H	51	2.10	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5210MHz_TX

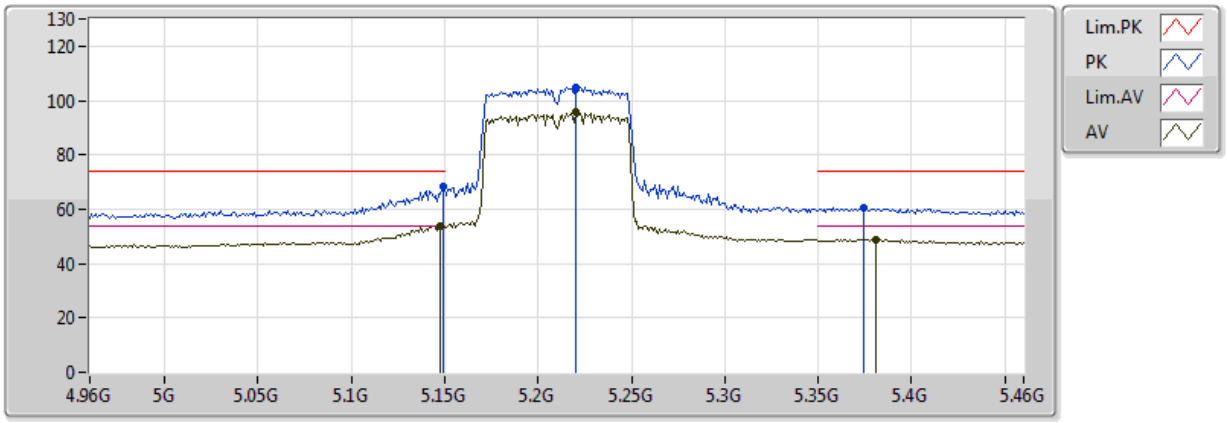


20170116
EUT Y_2TX
Setting 63
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.137G	49.17	54.00	-4.83	7.01	3	V	40	1.89	-
AV	5.212G	90.44	Inf	-Inf	7.20	3	V	40	1.89	-
AV	5.351G	47.64	54.00	-6.36	7.48	3	V	40	1.89	-
PK	5.144G	61.83	74.00	-12.17	7.03	3	V	40	1.89	-
PK	5.212G	99.55	Inf	-Inf	7.20	3	V	40	1.89	-
PK	5.355G	59.81	74.00	-14.19	7.48	3	V	40	1.89	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5210MHz_TX

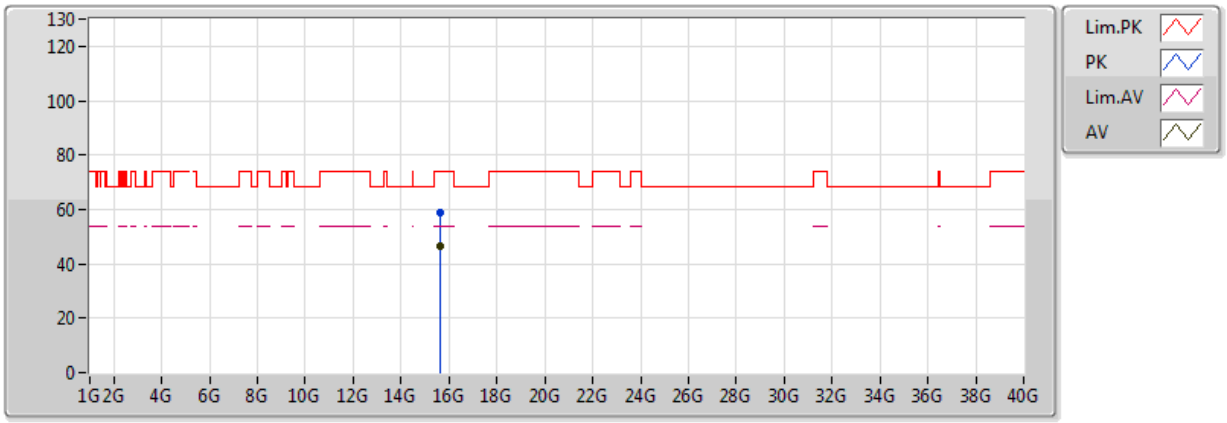


20170116
EUT Y_2TX
Setting 63
02-P-2-10
FSU

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	53.84	54.00	-0.16	7.04	3	H	3	1.09	-
AV	5.22G	95.69	Inf	-Inf	7.22	3	H	3	1.09	-
AV	5.381G	48.85	54.00	-5.15	7.53	3	H	3	1.09	-
PK	5.149G	68.25	74.00	-5.75	7.04	3	H	3	1.09	-
PK	5.22G	104.83	Inf	-Inf	7.22	3	H	3	1.09	-
PK	5.374G	60.50	74.00	-13.50	7.52	3	H	3	1.09	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5210MHz_TX

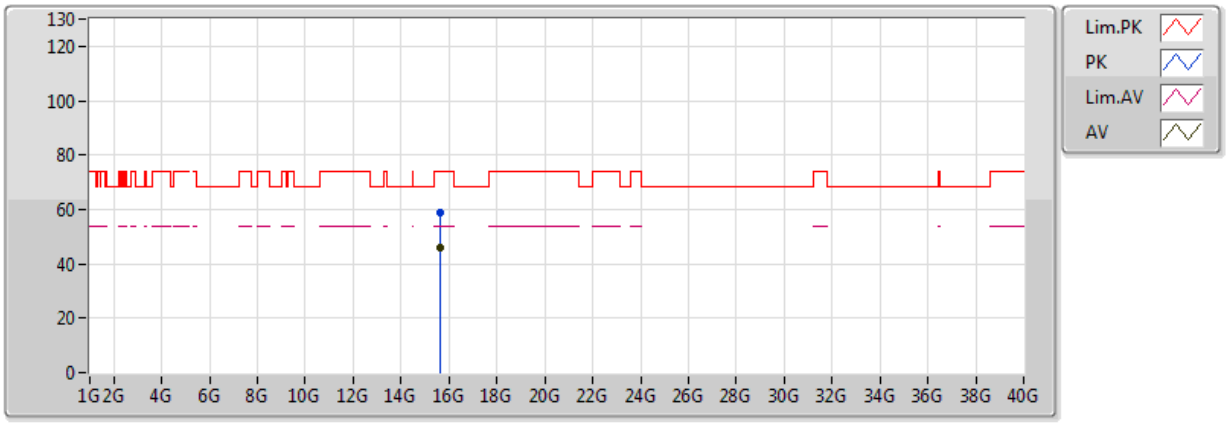


20170218
EUT Y_2TX_Non-TXBF
Setting 63
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.630332G	46.29	54.00	-7.71	15.84	3	V	47	1.21	-
PK	15.630516G	58.90	74.00	-15.10	15.84	3	V	47	1.21	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5210MHz_TX

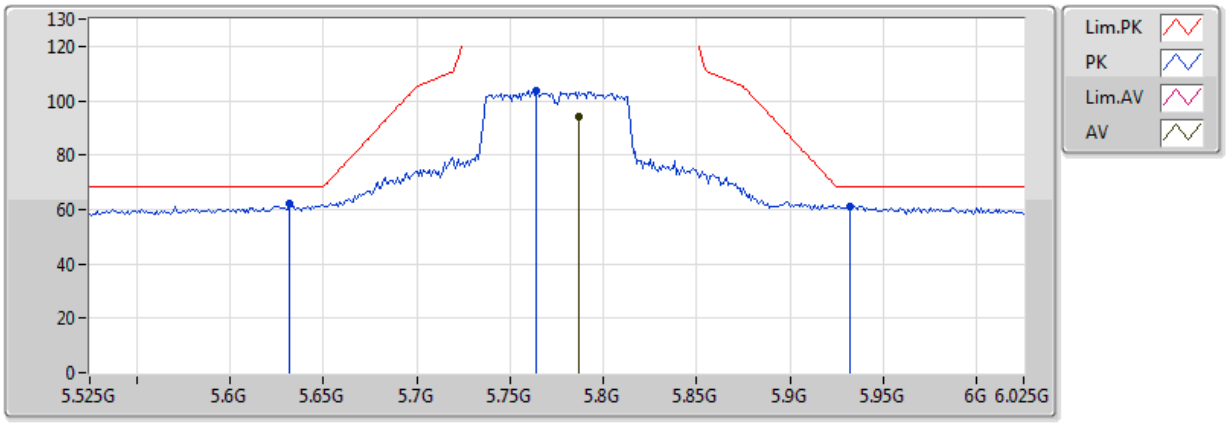


20170218
EUT Y_2TX_Non-TXBF
Setting 63
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.630448G	46.13	54.00	-7.87	15.84	3	H	260	1.25	-
PK	15.630668G	58.57	74.00	-15.43	15.83	3	H	260	1.25	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

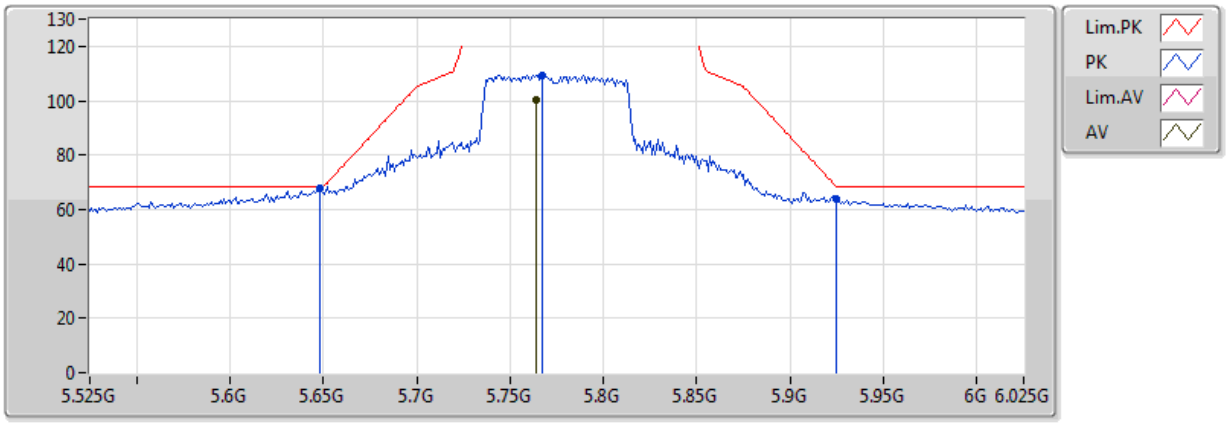


20170116
EUT Y_2TX
Setting 76
02-P-2-10
FSU

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	94.17	Inf	-Inf	8.05	3	V	37	1.94	-
PK	5.632G	62.05	68.20	-6.15	7.98	3	V	37	1.94	-
PK	5.764G	103.86	Inf	-Inf	8.04	3	V	37	1.94	-
PK	5.932G	61.16	68.20	-7.04	8.28	3	V	37	1.94	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

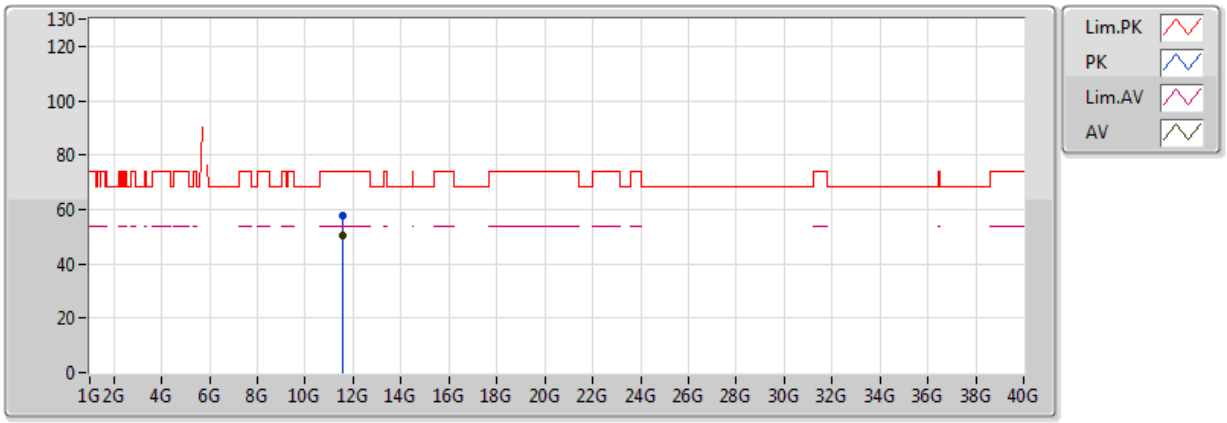


20170116
EUT Y_2TX
Setting 76
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.764G	100.31	Inf	-Inf	8.04	3	H	358	1.76	-
PK	5.648G	68.03	68.20	-0.17	7.98	3	H	358	1.76	-
PK	5.767G	109.24	Inf	-Inf	8.04	3	H	358	1.76	-
PK	5.925G	63.78	68.20	-4.42	8.27	3	H	358	1.76	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

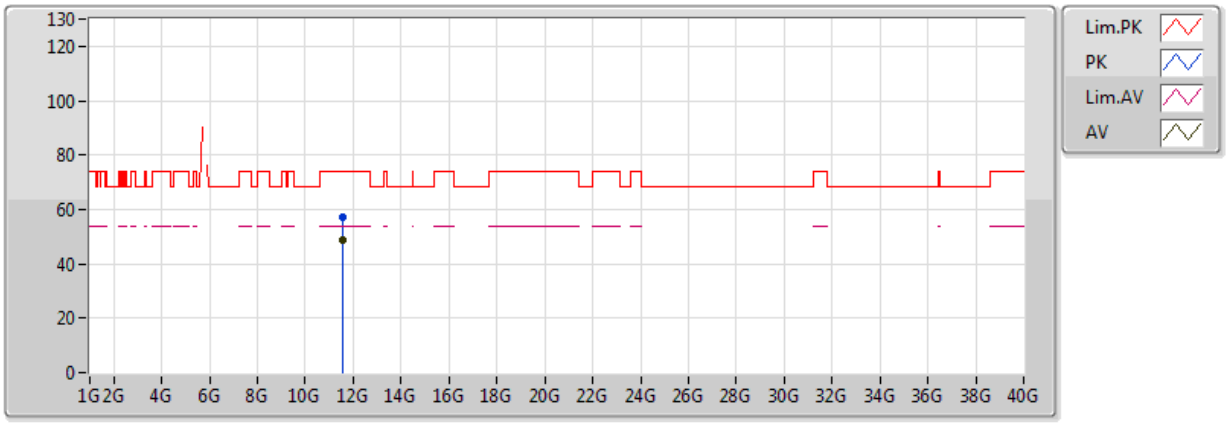


20170218
EUT Y_2TX_Non-TXBF
Setting 76
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.549956G	50.23	54.00	-3.77	13.95	3	V	323	2.13	-
PK	11.550048G	57.46	74.00	-16.54	13.95	3	V	323	2.13	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX



20170218
EUT Y_2TX_Non-TXBF
Setting 76
03-W-3
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.549944G	48.79	54.00	-5.21	13.95	3	H	47	2.86	-
PK	11.549924G	56.96	74.00	-17.04	13.95	3	H	47	2.86	-

Mode: 20 MHz / Ant. 2 (Port 2)
Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9575	5199.9569	5199.9563	5199.9559
110.00	5199.9571	5199.9563	5199.9553	5199.9545
93.50	5199.9562	5199.9555	5199.9552	5199.9548
Max. Deviation (MHz)	0.0438	0.0445	0.0448	0.0455
Max. Deviation (ppm)	8.42	8.56	8.62	8.75
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5199.9545	5199.9544	5199.9538	5199.9529
10	5199.9554	5199.9544	5199.9536	5199.9528
20	5199.9571	5199.9565	5199.9560	5199.9553
30	5199.9958	5199.9953	5199.9943	5199.9937
40	5199.9961	5199.9952	5199.9947	5199.9945
45	5199.9969	5199.9962	5199.9961	5199.9957
Max. Deviation (MHz)	0.0486	0.0491	0.0501	0.0508
Max. Deviation (ppm)	9.35	9.44	9.63	9.77
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9574	5784.9567	5784.9558	5784.9556
110.00	5784.9571	5784.9564	5784.9563	5784.9558
93.50	5784.9562	5784.9561	5784.9554	5784.9549
Max. Deviation (MHz)	0.0438	0.0439	0.0446	0.0451
Max. Deviation (ppm)	7.57	7.59	7.71	7.80
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5784.9567	5784.9563	5784.9553	5784.9545
10	5784.9570	5784.9561	5784.9558	5784.9555
20	5784.9571	5784.9563	5784.9562	5784.9555
30	5784.9958	5784.9951	5784.9941	5784.9931
40	5784.9960	5784.9951	5784.9946	5784.9942
45	5784.9961	5784.9955	5784.9946	5784.9942
Max. Deviation (MHz)	0.0471	0.0472	0.0477	0.0481
Max. Deviation (ppm)	8.14	8.16	8.25	8.31
Result	Pass			

Mode: 40 MHz / Ant. 2 (Port 2)

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9578	5189.9571	5189.9570	5189.9567
110.00	5189.9571	5189.9565	5189.9563	5189.9554
93.50	5189.9564	5189.9558	5189.9553	5189.9546
Max. Deviation (MHz)	0.0436	0.0442	0.0447	0.0454
Max. Deviation (ppm)	8.40	8.52	8.61	8.75
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5189.9550	5189.9543	5189.9541	5189.9538
10	5189.9562	5189.9558	5189.9553	5189.9548
20	5189.9571	5189.9565	5189.9555	5189.9551
30	5189.9958	5189.9948	5189.9941	5189.9933
40	5189.9974	5189.9973	5189.9969	5189.9962
45	5189.9576	5189.9566	5189.9556	5189.9551
Max. Deviation (MHz)	0.0475	0.0479	0.0484	0.0493
Max. Deviation (ppm)	9.15	9.23	9.33	9.50
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9581	5754.9573	5754.9563	5754.9557
110.00	5754.9571	5754.9563	5754.9561	5754.9557
93.50	5754.9561	5754.9554	5754.9546	5754.9540
Max. Deviation (MHz)	0.0439	0.0446	0.0454	0.0460
Max. Deviation (ppm)	7.63	7.75	7.89	7.99
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5754.9550	5754.9540	5754.9533	5754.9524
10	5754.9568	5754.9558	5754.9552	5754.9543
20	5754.9571	5754.9568	5754.9567	5754.9565
30	5754.9958	5754.9952	5754.9949	5754.9946
40	5754.9976	5754.9970	5754.9962	5754.9954
45	5754.9574	5754.9570	5754.9564	5754.9555
Max. Deviation (MHz)	0.0479	0.0484	0.0485	0.0494
Max. Deviation (ppm)	8.32	8.41	8.43	8.58
Result	Pass			

Mode: 80 MHz / Ant. 2 (Port 2)

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9578	5209.9577	5209.9576	5209.9573
110.00	5209.9571	5209.9566	5209.9564	5209.9560
93.50	5209.9568	5209.9564	5209.9554	5209.9545
Max. Deviation (MHz)	0.0432	0.0436	0.0446	0.0455
Max. Deviation (ppm)	8.29	8.37	8.56	8.73
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5209.9546	5209.9542	5209.9539	5209.9532
10	5209.9551	5209.9544	5209.9537	5209.9534
20	5209.9571	5209.9566	5209.9558	5209.9557
30	5209.9958	5209.9956	5209.9955	5209.9950
40	5209.9969	5209.9966	5209.9965	5209.9962
45	5209.9572	5209.9570	5209.9569	5209.9563
Max. Deviation (MHz)	0.0481	0.0489	0.0498	0.0499
Max. Deviation (ppm)	9.23	9.39	9.56	9.58
Result	Pass			

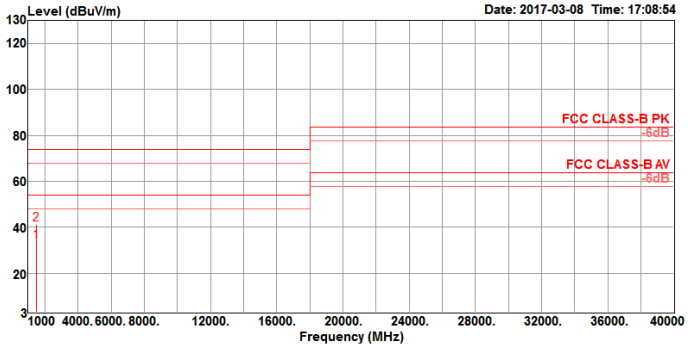
Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9580	5774.9576	5774.9573	5774.9564
110.00	5774.9571	5774.9565	5774.9561	5774.9559
93.50	5774.9563	5774.9556	5774.9547	5774.9540
Max. Deviation (MHz)	0.0437	0.0444	0.0453	0.0460
Max. Deviation (ppm)	7.57	7.69	7.84	7.97
Result	Pass			

Temperature vs. Frequency Stability

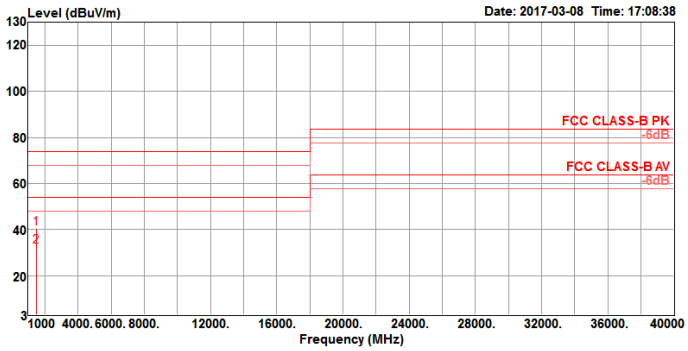
Temperature	Measurement Frequency (MHz)			
(℃)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5774.9545	5774.9542	5774.9538	5774.9537
10	5774.9552	5774.9546	5774.9543	5774.9542
20	5774.9571	5774.9566	5774.9558	5774.9557
30	5774.9958	5774.9954	5774.9950	5774.9947
40	5774.9964	5774.9963	5774.9962	5774.9954
45	5774.9579	5774.9569	5774.9560	5774.9554
Max. Deviation (MHz)	0.0477	0.0487	0.0491	0.0496
Max. Deviation (ppm)	8.26	8.43	8.50	8.59
Result	Pass			

RSE Co-location Result			
Operating Mode	2	**Polarization**	Horizontal
Operating Function	Normal Link - EUT in Z axis - WLAN 2.4GHz + WLAN 5GHz		



	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	1500.00	33.81	54.00	-20.19	38.72	3.90	25.40	34.21	127	325	Average	HORIZONTAL
2	1500.04	41.06	74.00	-32.94	45.97	3.90	25.40	34.21	127	325	Peak	HORIZONTAL

RSE Co-location Result			
Operating Mode	2	**Polarization**	Vertical
Operating Function	Normal Link - EUT in Z axis - WLAN 2.4GHz + WLAN 5GHz		



	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	1499.81	40.65	74.00	-33.35	45.56	3.90	25.40	34.21	149	35	Peak	VERTICAL
2	1499.97	32.58	54.00	-21.42	37.49	3.90	25.40	34.21	149	35	Average	VERTICAL