FCC RADIO TEST REPORT

FCC ID	:	**UIDW31**
Equipment	:	**W31**
Brand Name	:	**ARRIS**
Model Name	:	**W31**
Applicant	:	**ARRIS** **3871 Lakefield Drive Suite 300,Suwanee, Georgia, 30024 United States**
Manufacturer	:	**ARRIS** **3871 Lakefield Drive Suite 300,Suwanee, Georgia, 30024 United States**
Standard	:	**47 CFR FCC Part 15.407**

The product was received on Mar. 26, 2018, and testing was started from Mar. 26, 2018 and completed on May 07, 2018. We, SPORTON INTERTIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

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

Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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Photographs of EUT v02

History of this test report

Report No.	Version	Description	Issued Date
FR842742AB	01	Initial issue of report	Jun. 28, 2018
FR842742AB	02	Updating photographs of EUT version to “Version 2” from “Version 1”	Jul. 17, 2018

Summary of Test Result

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

Reviewed by: Sam Chen

Report Producer: Viola Huang

1 General Description

1.1 Information

1.1.1 RF General Information

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

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	4TX
5.15-5.25GHz	802.11n HT20	20	4TX
5.15-5.25GHz	802.11ac VHT20	20	4TX
5.15-5.25GHz	802.11n HT40	40	4TX
5.15-5.25GHz	802.11ac VHT40	40	4TX
5.15-5.25GHz	802.11ac VHT80	80	4TX
5.725-5.85GHz	802.11a	20	4TX
5.725-5.85GHz	802.11n HT20	20	4TX
5.725-5.85GHz	802.11ac VHT20	20	4TX
5.725-5.85GHz	802.11n HT40	40	4TX
5.725-5.85GHz	802.11ac VHT40	40	4TX
5.725-5.85GHz	802.11ac VHT80	80	4TX

Note:
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	PEGATRON	RFPCA2620-01_Rev02	Dual band PCB dipole antenna	I-PEX	Note
2	PEGATRON	RFPCA2620-02_Rev02	Dual band PCB dipole antenna	I-PEX	
3	PEGATRON	RFPCA2620-03_Rev01	Dual band PCB dipole antenna	I-PEX	
4	PEGATRON	RFPCA2620-04_Rev02	Dual band PCB dipole antenna	I-PEX	
5	PEGATRON	RFPCA2307-02 Rev02	PCB dipole antenna	I-PEX	
6	PEGATRON	RFPCA2211-03 Rev01	PCB dipole antenna	I-PEX	
7	PEGATRON	RFPCA2211-04 Rev02	PCB dipole antenna	I-PEX	
8	PEGATRON	RFPCA1806-03 Rev01	PCB dipole antenna	I-PEX	
9	PEGATRON	RFPCA3508-05_Rev02	PCB antenna	I-PEX	
10	PEGATRON	RFPCA1806-03 Rev01	PCB dipole antenna	I-PEX	

Note:

Ant.	Port	Uncorrelated (dBi)			Correlated (dBi)			(dBi)
		2.4G	5G B1	5G B4	2.4G	5G B1	5G B4	Bluetooth
1	1	4.22	5.71	-	5.35	6.23		-
2	2	4.22	5.71	-	5.35	6.23		-
3	3	4.22	5.71	-	5.35	6.23		-
4	4	4.22	5.71	-	5.35	6.23		-
5	1	-	-	5.82	-	-	6.93	-
6	2	-	-	5.82	-	-	6.93	-
7	3	-	-	5.82	-	-	6.93	-
8	4	-	-	5.82	-	-	6.93	-
9	1	-	-	-	-	-	-	4.12
10	-	-	5.23	5.23	-	-	-	-

Note: The EUT has ten antennas.

For Radio 1

2.4GHz Functions

For IEEE 802.11b/g/n/ac mode (4TX, 4RX):

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

5GHz Functions (1RX):

The EUT only supports the antenna receive function.

For Radio 3

5GHz B1 Functions

For IEEE 802.11a/n/ac mode (4TX, 4RX):

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For Radio 2

5GHz B4 Functions

For IEEE 802.11a/n/ac mode (4TX, 4RX):

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For Radio 4

Bluetooth Functions (1TX, 1RX):

Only Port 1 could transmit/receive simultaneously.

1.1.3 Table for radio type

Radio No.	2.4G	5G B1	5G B4	BT
Radio 1	V	Only RX function	Only RX function	-
Radio 2	-	-	V	-
Radio 3	-	V	-	-
Radio 4	-	-	-	V

1.1.4 Mode Test Duty Cycle

For Radio 3

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.965	0.155	2.068m	1k
802.11ac VHT20	0.965	0.155	1.93m	1k
802.11ac VHT40	0.934	0.297	955u	3k
802.11ac VHT80	0.868	0.615	462.5u	3k

For Radio 2

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.969	0.137	2.068m	1k
802.11ac VHT20	0.965	0.155	1.933m	1k
802.11ac VHT40	0.934	0.297	955u	3k
802.11ac VHT80	0.871	0.6	462.5u	3k

1.1.5 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
Test Software Version	accessMTool(version 3.0.0.6)			

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 v02r01
- 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	Stim Sung	22°C / 55%	Mar. 26, 2018 ~ May 04, 2018
Radiated below 1GHz	03CH01-CB	Joy Tseng & Cola Fan	22°C / 54%	May 04, 2018
Radiated above 1GHz	03CH01-CB	Joy Tseng & Cola Fan	22°C / 54%	Apr. 03, 2018 ~ May 07, 2018
AC Conduction	CO01-CB	Rick Yeh	24°C / 52%	May 07, 2018

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%

2 Test Configuration of EUT

2.1 Test Channel Mode

For Radio 3

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	83
5200MHz	91
5240MHz	90
802.11ac VHT20_Nss1,(MCS0)_4TX	-
5180MHz	79
5200MHz	91
5240MHz	91
802.11ac VHT40_Nss1,(MCS0)_4TX	-
5190MHz	72
5230MHz	90
802.11ac VHT80_Nss1,(MCS0)_4TX	-
5210MHz	73

For Radio 2

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5745MHz	94
5785MHz	94
5825MHz	96
802.11ac VHT20_Nss1,(MCS0)_4TX	-
5745MHz	94
5785MHz	94
5825MHz	95
802.11ac VHT40_Nss1,(MCS0)_4TX	-
5755MHz	94
5795MHz	94
802.11ac VHT80_Nss1,(MCS0)_4TX	-
5775MHz	85

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

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	EUT in Y axis - Radio 1 (2.4GHz)
2	EUT in Y axis - Radio 3 (5GHz B1)
3	EUT in Y axis - Radio 2 (5GHz B4)
4	EUT in Y axis - Radio 4 (Bluetooth)
For operating mode 2 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains
1	Radio 3 (5GHz B1)
2	Radio 2 (5GHz B4)

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	EUT in Y axis - Radio 1 (2.4GHz)
2	EUT in Y axis - Radio 3 (5GHz B1)
3	EUT in Y axis - Radio 2 (5GHz B4)
4	EUT in Y axis - Radio 4 (Bluetooth)
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
1	EUT in Y axis - Radio 3 (5GHz B1)
2	EUT in Y axis - Radio 2 (5GHz B4)

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	CTX
1	Radio 1 (2.4GHz) + Radio 3 (WLAN 5GHz B1)
Refer to Appendix F for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Radio 1 (2.4GHz) + Radio 3 (WLAN 5GHz B1) + Radio 2 (WLAN 5GHz B4) + Radio 4 (Bluetooth)
Refer to Sporton Test Report No.: FA842742 for Co-location RF Exposure Evaluation.	

Note 1: The EUT can only be used at Y axis position.

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories				
Equipment Name	**Brand Name**	**Model Name**	**P/N**	**Rating**
Adapter	APD	WA-36L12FU	AREP05681	INPUT: 100-120V ~, 60Hz, 0.9A Max OUTPUT: 12V, 3A

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E6430	DoC
2	Flash disk3.0	Transcend	JetFlash-700	N/A

For Test Site No: 03CH01-CB

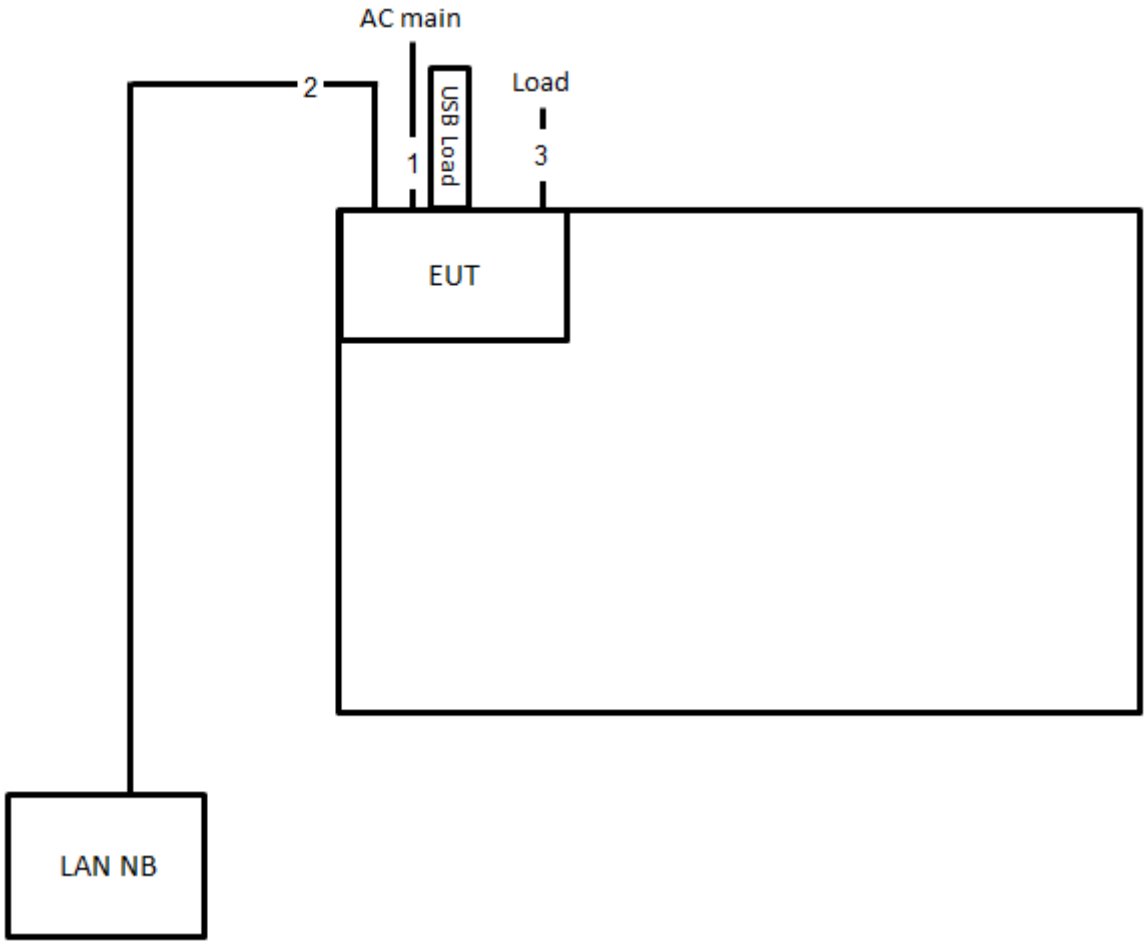
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

For Test Site No: TH01-CB

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

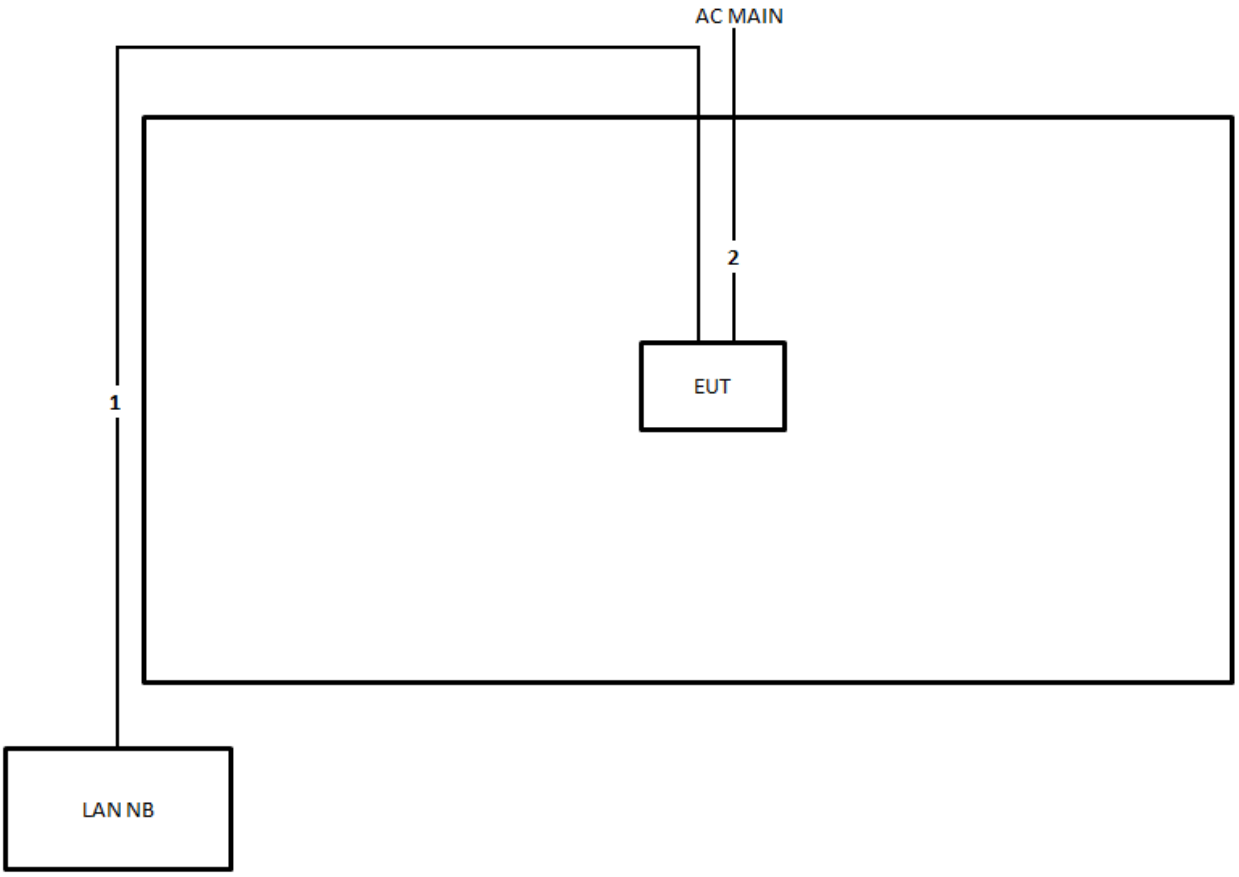
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable*3	No	1.5m

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.8m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

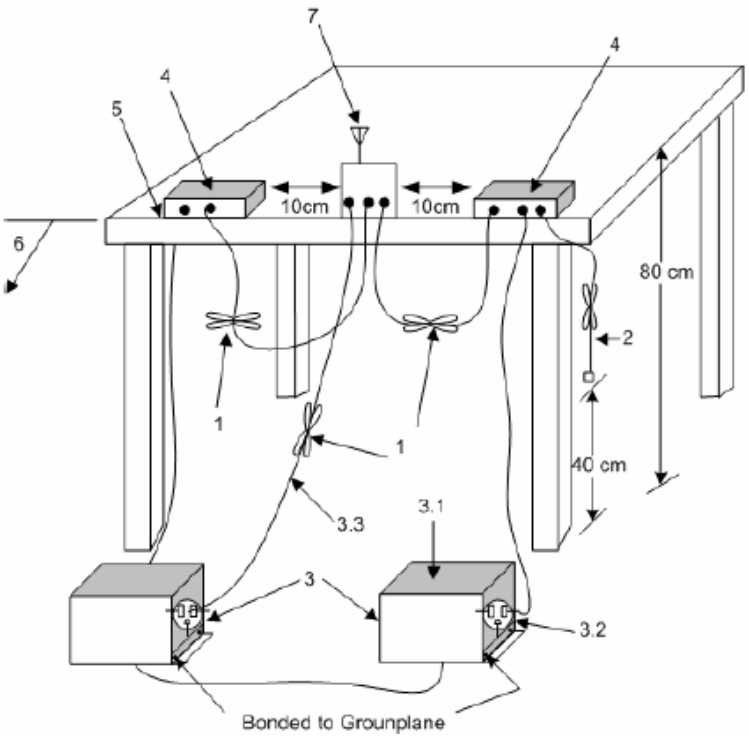
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

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

3.2.2 Measuring Instruments

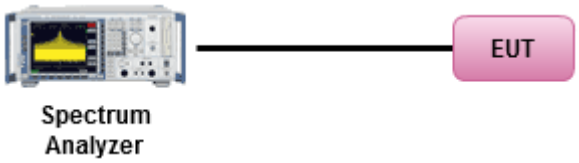
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

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

3.2.4 Test Setup

Emission Bandwidth



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

RF Output Power (Power Meter)

3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 23 dBi, then P_{Out} = 17 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6)..
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the 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

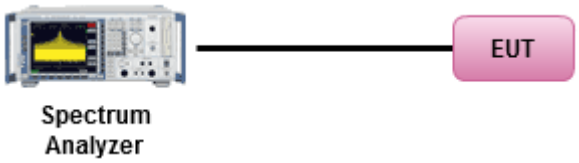
Refer a test equipment and calibration data table in this test report.

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.

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

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

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

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

3.5.2 Measuring Instruments

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

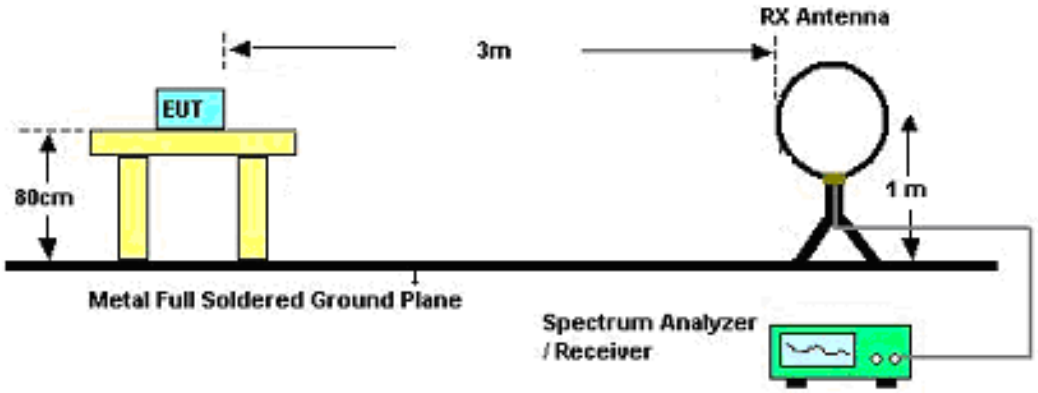
3.5.3 Test Procedures

Test Method		
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
▪ For the transmitter unwanted emissions shall be measured using following options below:		
	▪ Refer as FCC KDB 789033, clause 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.		

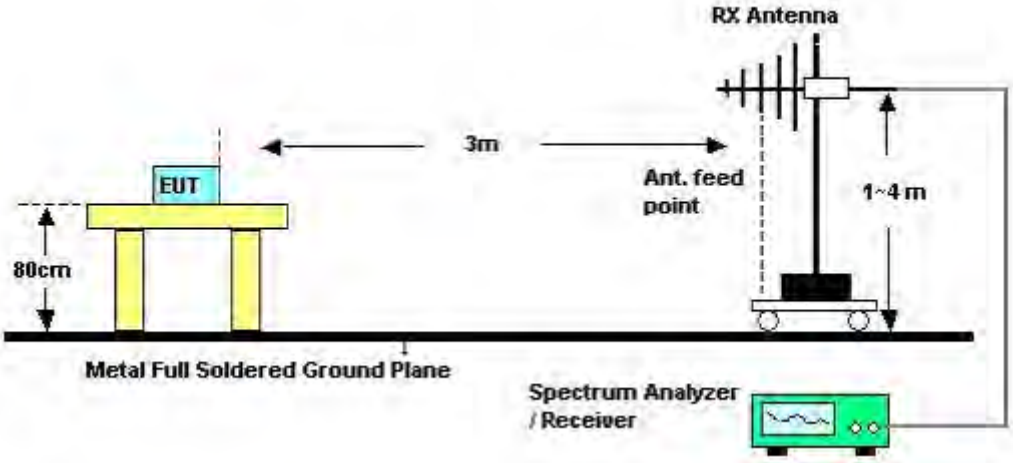
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

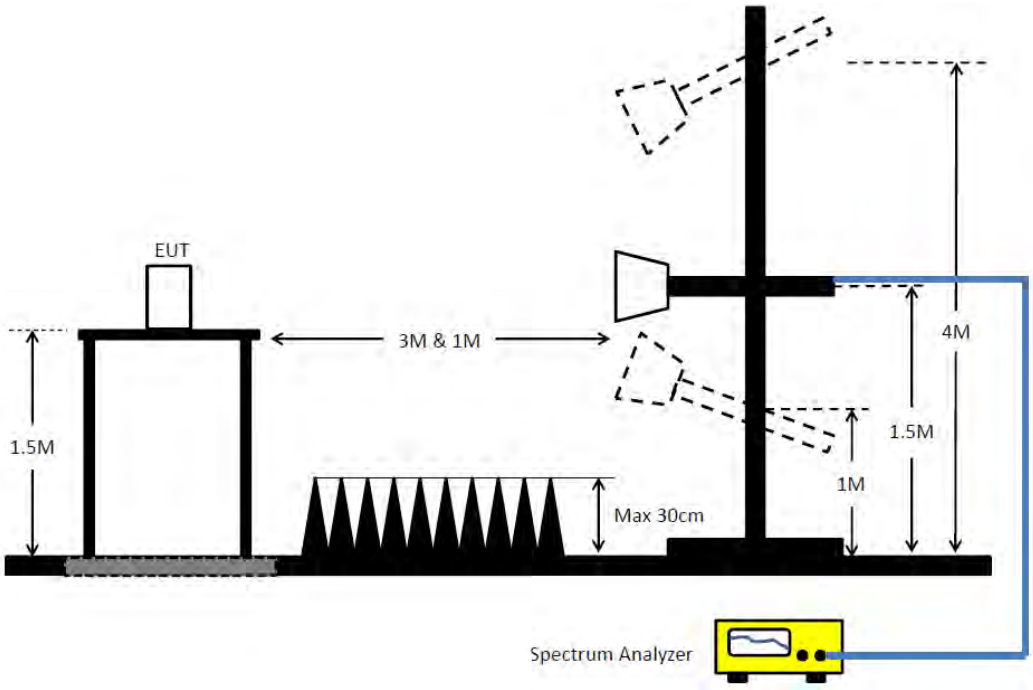
9kHz ~30MHz



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.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

4 Test Equipment and Calibration Data

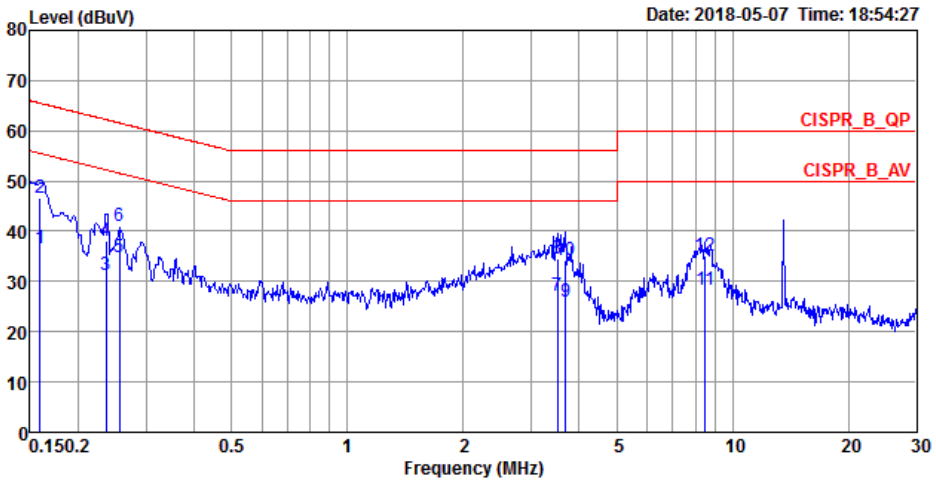
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 31, 2018	Jan. 30, 2019	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz~100MHz	Dec. 20, 2017	Dec. 19, 2018	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 29, 2017	Dec. 28, 2018	Conduction (CO01-CB)
Impulsbegrenzer Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 06, 2018	Feb. 05, 2019	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	May 22, 2018	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2017	Aug. 29, 2018	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2018	Mar. 15, 2019	Radiation (03CH01-CB
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 20, 2017	Nov. 19, 2018	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2018	May 01, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 09, 2018	Jan. 08, 2019	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Jul. 09, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 23, 2017	Nov. 22, 2018	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	May 05, 2018	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 21, 2017	Dec. 20, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 20, 2017	Nov. 19, 2018	Conducted (TH01-CB)

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

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

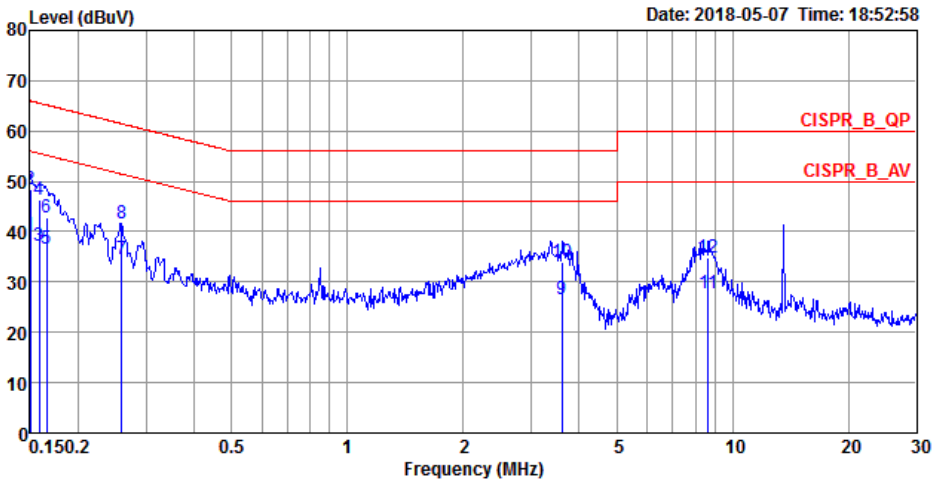
AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Neutral
Operating Function	CTX - Radio 3 (5GHz B1)		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1590	36.47	-19.05	55.52	26.40	9.92	0.15	Average	NEUTRAL
2	0.1590	46.73	-18.79	65.52	36.66	9.92	0.15	QP	NEUTRAL
3	0.2366	31.40	-20.82	52.22	21.38	9.92	0.10	Average	NEUTRAL
4	0.2366	38.07	-24.15	62.22	28.05	9.92	0.10	QP	NEUTRAL
5	0.2562	34.83	-16.73	51.56	24.82	9.92	0.09	Average	NEUTRAL
6	0.2562	40.97	-20.59	61.56	30.96	9.92	0.09	QP	NEUTRAL
7	3.5092	27.26	-18.74	46.00	17.16	9.98	0.12	Average	NEUTRAL
8	3.5092	34.47	-21.53	56.00	24.37	9.98	0.12	QP	NEUTRAL
9	3.6806	25.99	-20.01	46.00	15.90	9.98	0.11	Average	NEUTRAL
10	3.6806	34.16	-21.84	56.00	24.07	9.98	0.11	QP	NEUTRAL
11	8.5011	28.22	-21.78	50.00	18.00	10.08	0.14	Average	NEUTRAL
12	8.5011	35.20	-24.80	60.00	24.98	10.08	0.14	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	2	**Power Phase**	Line
Operating Function	CTX - Radio 3 (5GHz B1)		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1500	39.16	-16.84	56.00	29.09	9.91	0.16	Average	LINE
2	0.1500	48.39	-17.61	66.00	38.32	9.91	0.16	QP	LINE
3	0.1582	37.26	-18.30	55.56	27.20	9.91	0.15	Average	LINE
4	0.1582	46.30	-19.26	65.56	36.24	9.91	0.15	QP	LINE
5	0.1659	36.47	-18.69	55.16	26.41	9.91	0.15	Average	LINE
6	0.1659	42.94	-22.22	65.16	32.88	9.91	0.15	QP	LINE
7	0.2589	34.55	-16.92	51.47	24.56	9.91	0.08	Average	LINE
8	0.2589	41.73	-19.74	61.47	31.74	9.91	0.08	QP	LINE
9	3.6034	26.54	-19.46	46.00	16.44	9.98	0.12	Average	LINE
10	3.6034	33.99	-22.01	56.00	23.89	9.98	0.12	QP	LINE
11	8.6373	27.68	-22.32	50.00	17.43	10.11	0.14	Average	LINE
12	8.6373	34.75	-25.25	60.00	24.50	10.11	0.14	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.)

Test Mode: Mode 1 / Radio 3
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	24.2M	16.667M	16M7D1D	21.325M	16.542M
802.11ac VHT20_Nss1,(MCS0)_4TX	27.2M	17.841M	17M8D1D	21.425M	17.741M
802.11ac VHT40_Nss1,(MCS0)_4TX	49.65M	36.332M	36M3D1D	39.75M	36.182M
802.11ac VHT80_Nss1,(MCS0)_4TX	81.8M	75.762M	75M8D1D	81.3M	75.562M

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

Result

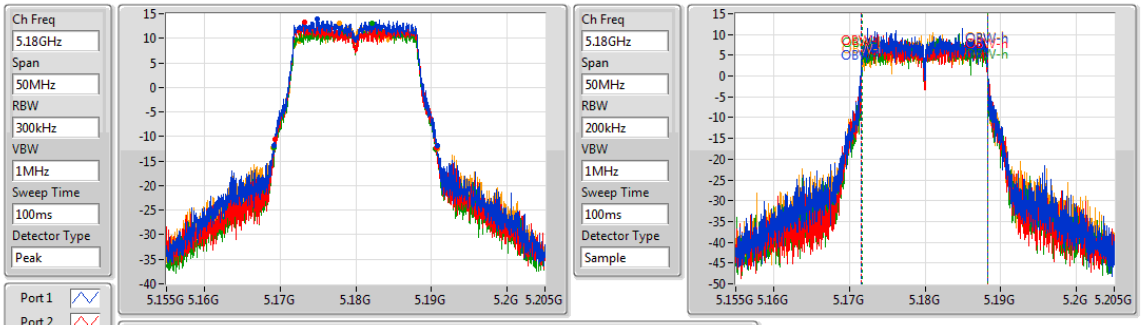
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.55M	16.617M	21.35M	16.617M	21.325M	16.567M	21.6M	16.592M
5200MHz	Pass	Inf	21.575M	16.567M	24.2M	16.667M	23.775M	16.617M	22.1M	16.667M
5240MHz	Pass	Inf	21.65M	16.542M	21.7M	16.617M	21.975M	16.592M	23.875M	16.617M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.675M	17.791M	21.425M	17.766M	21.675M	17.766M	21.7M	17.766M
5200MHz	Pass	Inf	22.75M	17.766M	21.8M	17.841M	21.95M	17.791M	27.2M	17.816M
5240MHz	Pass	Inf	21.9M	17.766M	21.65M	17.766M	22.125M	17.791M	21.925M	17.741M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.2M	36.182M	39.9M	36.182M	40M	36.232M	39.75M	36.182M
5230MHz	Pass	Inf	39.8M	36.182M	40M	36.282M	40.05M	36.332M	49.65M	36.332M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.6M	75.762M	81.3M	75.762M	81.4M	75.562M	81.8M	75.662M

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

802.11a_Nss1,(6Mbps)_4TX — EBW

5180MHz

29/03/2018

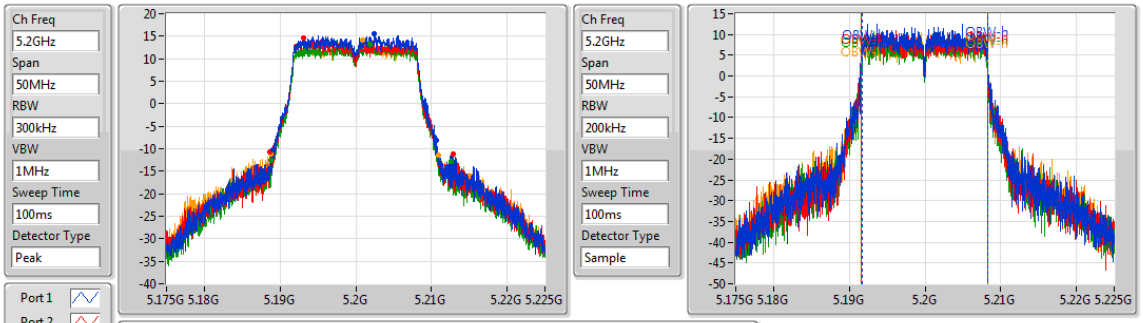


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.55M	5.169175G	5.190725G	16.617M	5.171629G	5.188246G	Inf	1
21.35M	5.1693G	5.19065G	16.617M	5.171629G	5.188246G	Inf	2
21.325M	5.169225G	5.19055G	16.567M	5.171679G	5.188246G	Inf	3
21.6M	5.169125G	5.190725G	16.592M	5.171679G	5.188271G	Inf	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5200MHz

29/03/2018

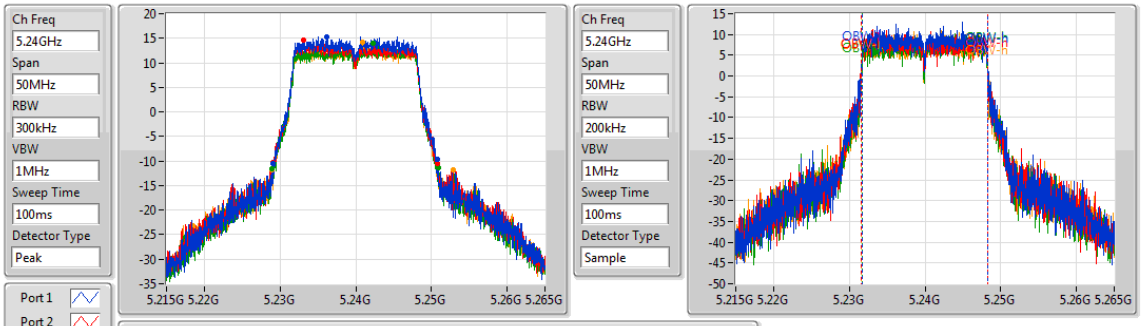


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.575M	5.189125G	5.2107G	16.567M	5.191654G	5.208221G	Inf	1
24.2M	5.1887G	5.2129G	16.667M	5.191579G	5.208246G	Inf	2
23.775M	5.18885G	5.212625G	16.617M	5.191629G	5.208246G	Inf	3
22.1M	5.1888G	5.2109G	16.667M	5.191604G	5.208271G	Inf	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5240MHz

29/03/2018

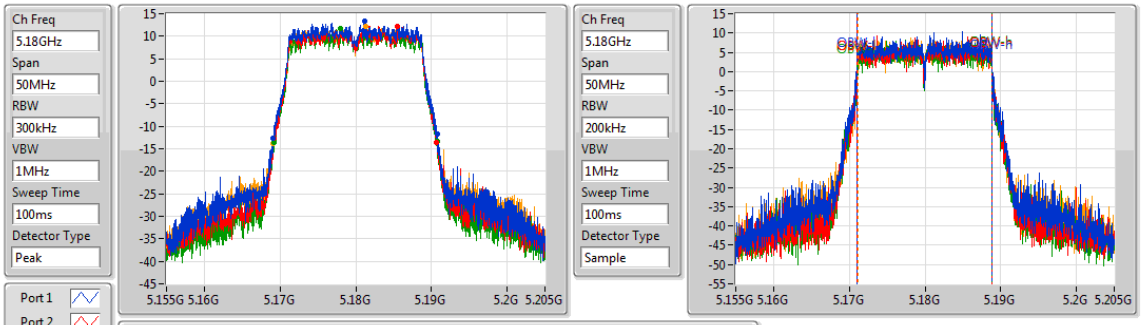


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.65M	5.229125G	5.250775G	16.542M	5.231679G	5.248221G	Inf	1
21.7M	5.229075G	5.250775G	16.617M	5.231604G	5.248221G	Inf	2
21.975M	5.228925G	5.2509G	16.592M	5.231654G	5.248246G	Inf	3
23.875M	5.22895G	5.252825G	16.617M	5.231629G	5.248246G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX — EBW

5180MHz

29/03/2018

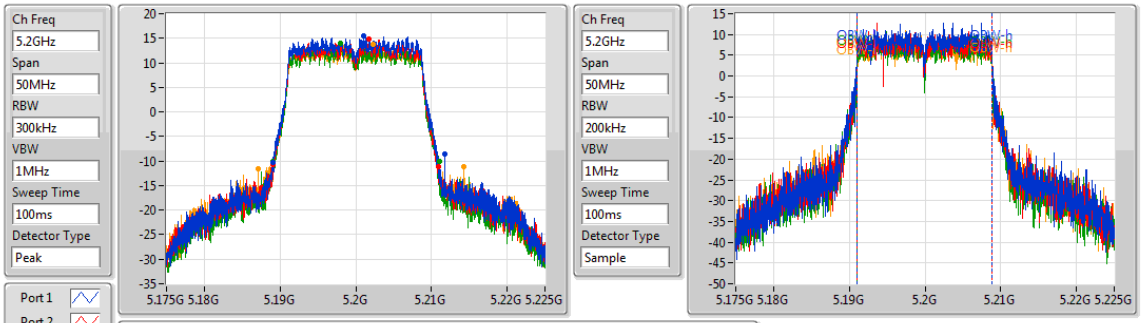


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.675M	5.1691G	5.190775G	17.791M	5.171029G	5.188821G	Inf	1
21.425M	5.16925G	5.190675G	17.766M	5.171054G	5.188821G	Inf	2
21.675M	5.16915G	5.190825G	17.766M	5.171079G	5.188846G	Inf	3
21.7M	5.1691G	5.1908G	17.766M	5.171104G	5.188871G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX — EBW

5200MHz

29/03/2018

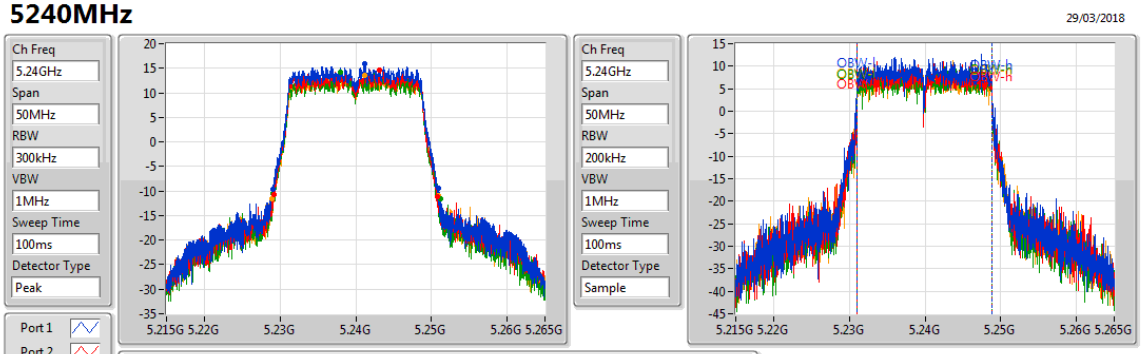


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.75M	5.189G	5.21175G	17.766M	5.191054G	5.208821G	Inf	1
21.8M	5.189125G	5.210925G	17.841M	5.191029G	5.208871G	Inf	2
21.95M	5.189075G	5.211025G	17.791M	5.191054G	5.208846G	Inf	3
27.2M	5.187125G	5.214325G	17.816M	5.191054G	5.208871G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX — EBW

5240MHz

29/03/2018

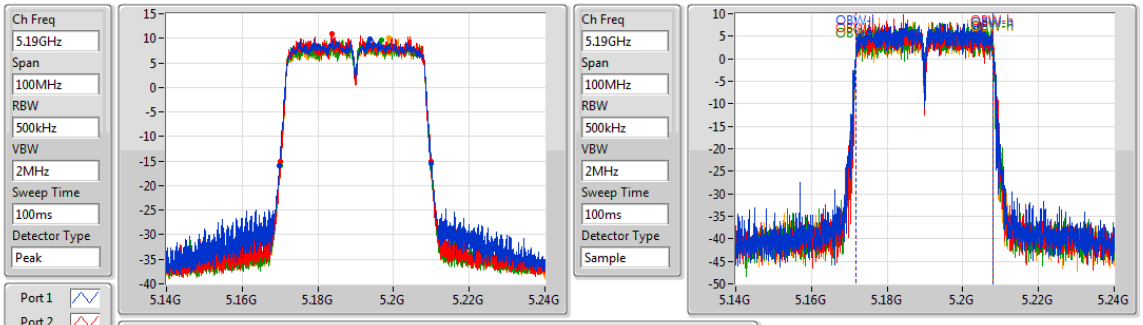


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.9M	5.229025G	5.250925G	17.766M	5.231054G	5.248821G	Inf	1
21.65M	5.229175G	5.250825G	17.766M	5.231029G	5.248796G	Inf	2
22.125M	5.22905G	5.251175G	17.791M	5.231054G	5.248846G	Inf	3
21.925M	5.22895G	5.250875G	17.741M	5.231079G	5.248821G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX — EBW

5190MHz

27/03/2018

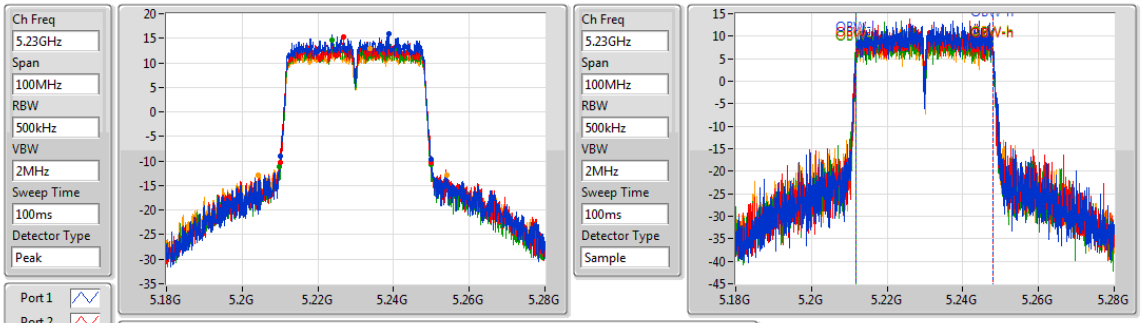


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.2M	5.16985G	5.21005G	36.182M	5.171809G	5.207991G	Inf	1
39.9M	5.1701G	5.21G	36.182M	5.171859G	5.208041G	Inf	2
40M	5.17G	5.21G	36.232M	5.171759G	5.207991G	Inf	3
39.75M	5.17015G	5.2099G	36.182M	5.171859G	5.208041G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX — EBW

5230MHz

29/03/2018

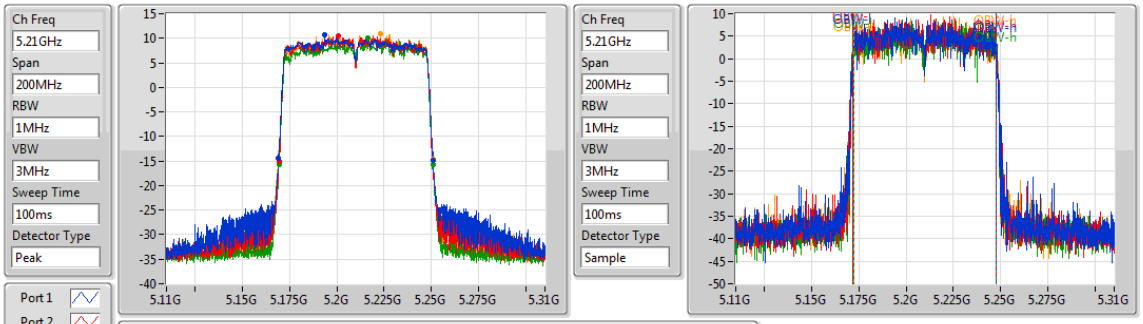


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.8M	5.2101G	5.2499G	36.182M	5.211809G	5.247991G	Inf	1
40M	5.20995G	5.24995G	36.282M	5.211809G	5.248091G	Inf	2
40.05M	5.20985G	5.2499G	36.332M	5.211759G	5.248091G	Inf	3
49.65M	5.20435G	5.254G	36.332M	5.211759G	5.248091G	Inf	4

802.11ac VHT80_Nss1,(MCS0)_4TX — EBW

5210MHz

27/03/2018



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.6M	5.1692G	5.2508G	75.762M	5.172019G	5.247781G	Inf	1
81.3M	5.1694G	5.2507G	75.762M	5.172019G	5.247781G	Inf	2
81.4M	5.1694G	5.2508G	75.562M	5.172119G	5.247681G	Inf	3
81.8M	5.1691G	5.2509G	75.662M	5.172119G	5.247781G	Inf	4

Test Mode: Mode 2 / Radio 2
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.375M	16.667M	16M7D1D	16.05M	16.542M
802.11ac VHT20_Nss1,(MCS0)_4TX	17.6M	17.816M	17M8D1D	17.55M	17.716M
802.11ac VHT40_Nss1,(MCS0)_4TX	36.35M	36.382M	36M4D1D	35.65M	36.182M
802.11ac VHT80_Nss1,(MCS0)_4TX	75.9M	75.962M	76M0D1D	75.1M	75.562M

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

Result

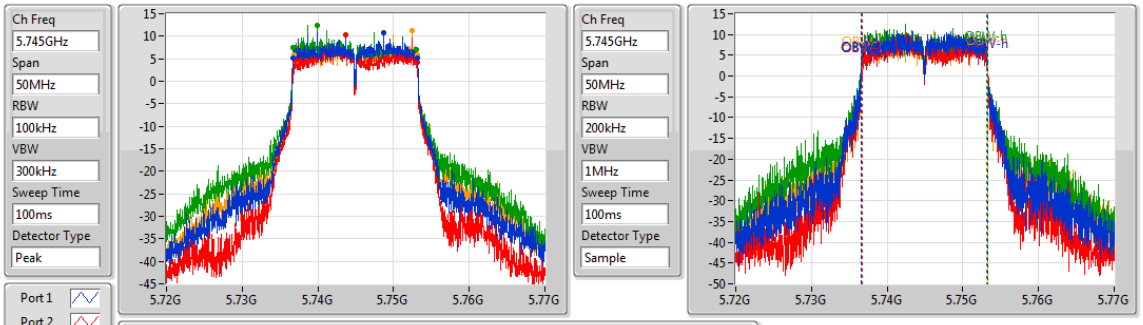
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	16.375M	16.592M	16.05M	16.542M	16.3M	16.667M	16.3M	16.617M
5785MHz	Pass	500k	16.325M	16.592M	16.325M	16.567M	16.35M	16.592M	16.325M	16.617M
5825MHz	Pass	500k	16.35M	16.642M	16.3M	16.567M	16.35M	16.567M	16.325M	16.592M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	17.55M	17.791M	17.575M	17.766M	17.575M	17.816M	17.55M	17.816M
5785MHz	Pass	500k	17.55M	17.791M	17.575M	17.716M	17.55M	17.766M	17.575M	17.766M
5825MHz	Pass	500k	17.575M	17.766M	17.575M	17.791M	17.575M	17.766M	17.6M	17.741M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	500k	36.35M	36.282M	36.35M	36.382M	36.3M	36.282M	36.3M	36.332M
5795MHz	Pass	500k	36.35M	36.232M	35.65M	36.182M	36.3M	36.282M	36.35M	36.332M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.1M	75.762M	75.9M	75.662M	75.4M	75.962M	75.1M	75.562M

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

802.11a_Nss1,(6Mbps)_4TX — EBW

5745MHz

27/03/2018

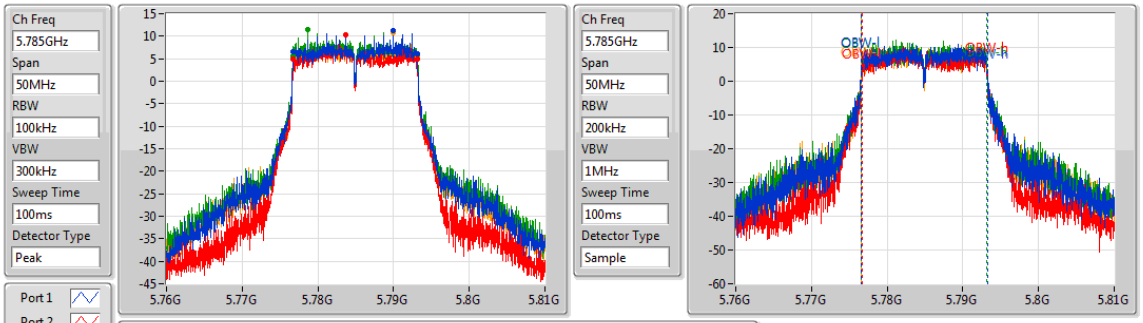


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.375M	5.73675G	5.753125G	16.592M	5.736629G	5.753221G	500k	1
16.05M	5.73705G	5.7531G	16.542M	5.736679G	5.753221G	500k	2
16.3M	5.736775G	5.753075G	16.667M	5.736529G	5.753196G	500k	3
16.3M	5.7368G	5.7531G	16.617M	5.736654G	5.753271G	500k	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5785MHz

27/03/2018

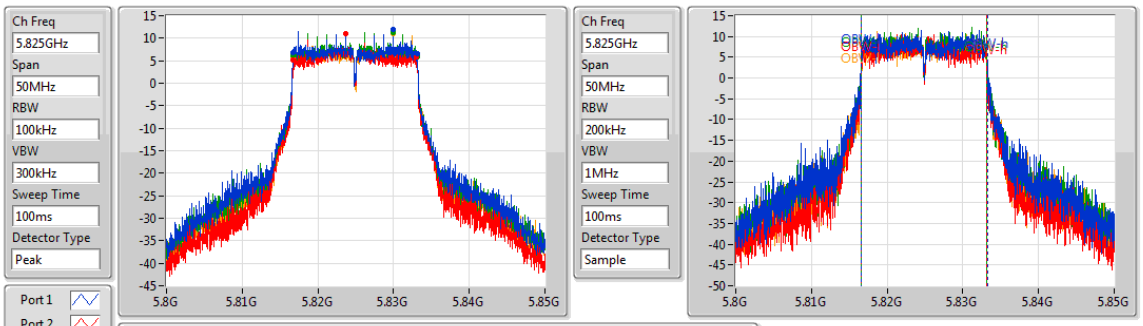


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.776775G	5.7931G	16.592M	5.776629G	5.793221G	500k	1
16.325M	5.776775G	5.7931G	16.567M	5.776679G	5.793246G	500k	2
16.35M	5.77675G	5.7931G	16.592M	5.776604G	5.793196G	500k	3
16.325M	5.776775G	5.7931G	16.617M	5.776629G	5.793246G	500k	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5825MHz

27/03/2018

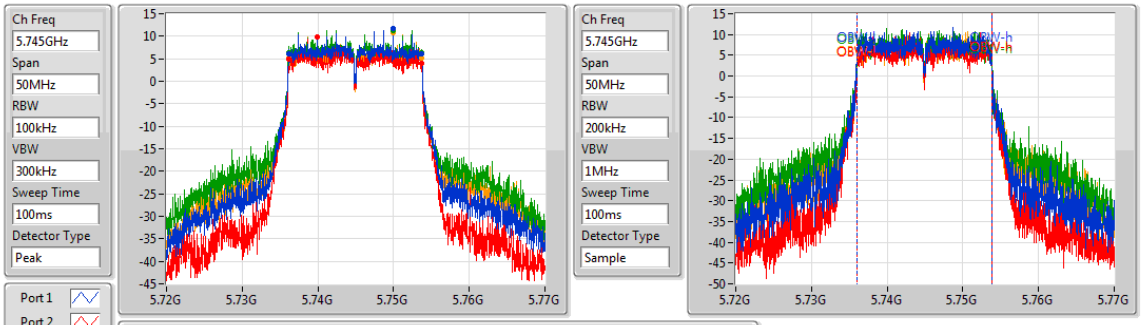


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	5.81675G	5.8331G	16.642M	5.816604G	5.833246G	500k	1
16.3M	5.816775G	5.833075G	16.567M	5.816629G	5.833196G	500k	2
16.35M	5.81675G	5.8331G	16.567M	5.816629G	5.833196G	500k	3
16.325M	5.816775G	5.8331G	16.592M	5.816629G	5.833221G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX — EBW

5745MHz

27/03/2018

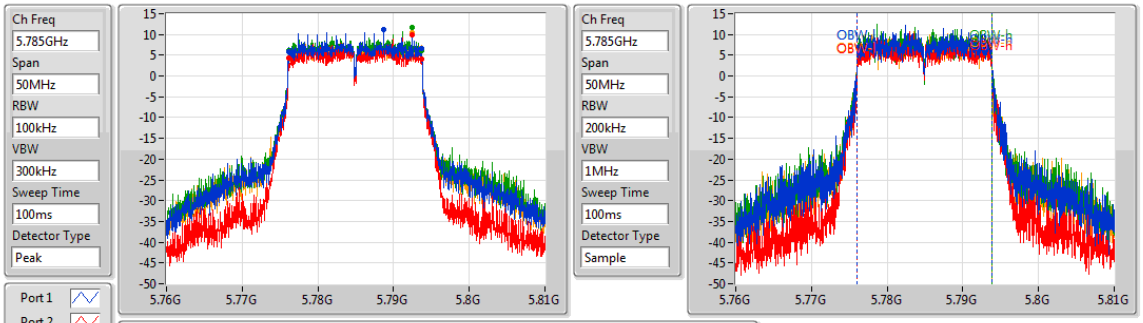


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.73615G	5.7537G	17.791M	5.736029G	5.753821G	500k	1
17.575M	5.73615G	5.753725G	17.766M	5.736029G	5.753796G	500k	2
17.575M	5.736125G	5.7537G	17.816M	5.73598G	5.753796G	500k	3
17.55M	5.736175G	5.753725G	17.816M	5.736004G	5.753821G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX — EBW

5785MHz

27/03/2018

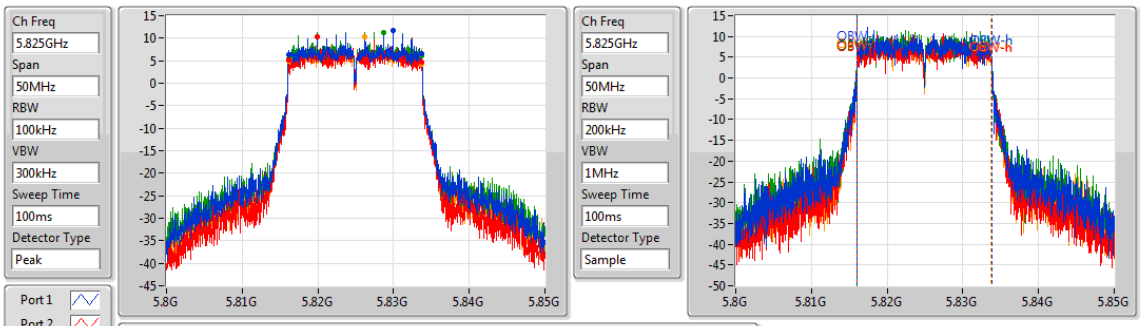


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.77615G	5.7937G	17.791M	5.776029G	5.793821G	500k	1
17.575M	5.77615G	5.793725G	17.716M	5.776079G	5.793796G	500k	2
17.55M	5.776175G	5.793725G	17.766M	5.776054G	5.793821G	500k	3
17.575M	5.776125G	5.7937G	17.766M	5.776029G	5.793796G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX — EBW

5825MHz

27/03/2018

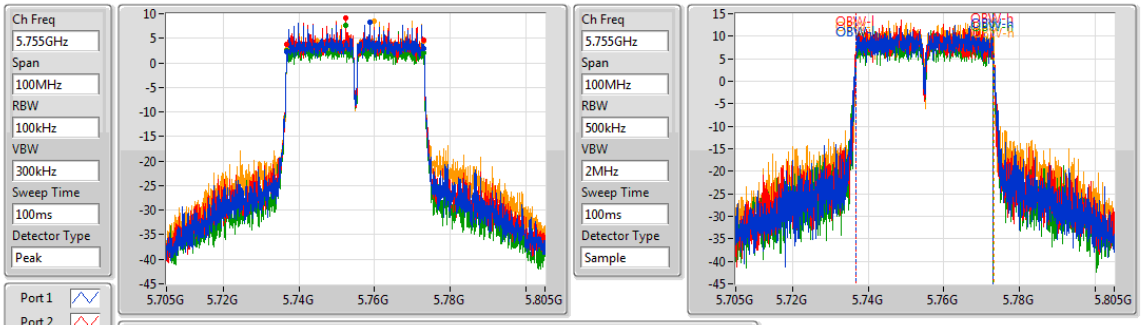


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	5.816125G	5.8337G	17.766M	5.816029G	5.833796G	500k	1
17.575M	5.81615G	5.833725G	17.791M	5.816054G	5.833846G	500k	2
17.575M	5.81615G	5.833725G	17.766M	5.816029G	5.833796G	500k	3
17.6M	5.816125G	5.833725G	17.741M	5.816029G	5.833771G	500k	4

802.11ac VHT40_Nss1,(MCS0)_4TX — EBW

5755MHz

27/03/2018

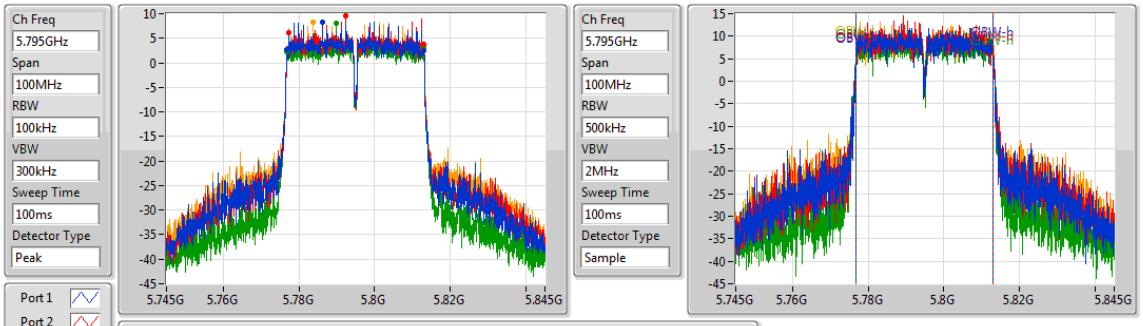


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.35M	5.73675G	5.7731G	36.282M	5.736809G	5.773091G	500k	1
36.35M	5.73675G	5.7731G	36.382M	5.736709G	5.773091G	500k	2
36.3M	5.73675G	5.77305G	36.282M	5.736709G	5.772991G	500k	3
36.3M	5.7368G	5.7731G	36.332M	5.736859G	5.773191G	500k	4

802.11ac VHT40_Nss1,(MCS0)_4TX — EBW

5795MHz

27/03/2018

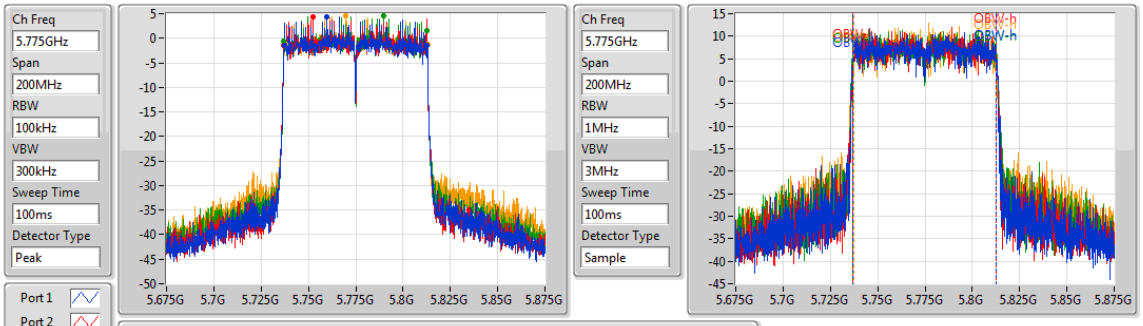


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.35M	5.77675G	5.8131G	36.232M	5.776809G	5.813041G	500k	1
35.65M	5.7774G	5.81305G	36.182M	5.776859G	5.813041G	500k	2
36.3M	5.77675G	5.81305G	36.282M	5.776759G	5.813041G	500k	3
36.35M	5.77675G	5.8131G	36.332M	5.776759G	5.813091G	500k	4

802.11ac VHT80_Nss1,(MCS0)_4TX — EBW

5775MHz

27/03/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.1M	5.7373G	5.8124G	75.762M	5.737019G	5.812781G	500k	1
75.9M	5.7368G	5.8127G	75.662M	5.737019G	5.812681G	500k	2
75.4M	5.7371G	5.8125G	75.962M	5.736819G	5.812781G	500k	3
75.1M	5.738G	5.8131G	75.562M	5.737219G	5.812781G	500k	4

Test Mode: Mode 1 / Radio 3
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.77	0.94842
802.11ac VHT20_Nss1,(MCS0)_4TX	29.81	0.95719
802.11ac VHT40_Nss1,(MCS0)_4TX	29.17	0.82604
802.11ac VHT80_Nss1,(MCS0)_4TX	24.99	0.31550

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.71	22.43	21.45	21.08	21.54	27.67	30.00
5200MHz	Pass	5.71	24.68	24.01	23.08	22.98	29.77	30.00
5240MHz	Pass	5.71	24.50	23.85	22.93	22.87	29.61	30.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.71	21.43	20.71	19.88	20.60	26.71	30.00
5200MHz	Pass	5.71	24.68	24.01	22.66	22.96	29.67	30.00
5240MHz	Pass	5.71	24.71	24.00	23.17	23.07	29.81	30.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.71	19.54	18.61	18.39	18.19	24.73	30.00
5230MHz	Pass	5.71	23.85	23.12	22.79	22.75	29.17	30.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.71	19.32	19.23	18.03	19.18	24.99	30.00

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

Test Mode: Mode 2 / Radio 2
Summary

Mode	Total Power (dBm)	Total Power (W)
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.87	0.97051
802.11ac VHT20_Nss1,(MCS0)_4TX	29.91	0.97949
802.11ac VHT40_Nss1,(MCS0)_4TX	29.93	0.98401
802.11ac VHT80_Nss1,(MCS0)_4TX	27.82	0.60534

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5745MHz	Pass	5.82	24.26	22.82	24.52	23.62	29.87	30.00
5785MHz	Pass	5.82	24.20	22.55	24.31	23.68	29.76	30.00
5825MHz	Pass	5.82	23.94	22.79	24.45	23.89	29.83	30.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5745MHz	Pass	5.82	24.00	22.89	24.72	23.75	29.91	30.00
5785MHz	Pass	5.82	24.19	22.64	24.49	23.47	29.78	30.00
5825MHz	Pass	5.82	24.41	22.40	24.29	23.62	29.77	30.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5755MHz	Pass	5.82	24.15	22.73	24.42	23.46	29.76	30.00
5795MHz	Pass	5.82	24.42	22.96	24.52	23.56	29.93	30.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5775MHz	Pass	5.82	21.55	21.60	21.94	22.07	27.82	30.00

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

Test Mode: Mode 1 / Radio 3
Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_4TX	16.74
802.11ac VHT20_Nss1,(MCS0)_4TX	16.59
802.11ac VHT40_Nss1,(MCS0)_4TX	13.18
802.11ac VHT80_Nss1,(MCS0)_4TX	5.92

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

Result

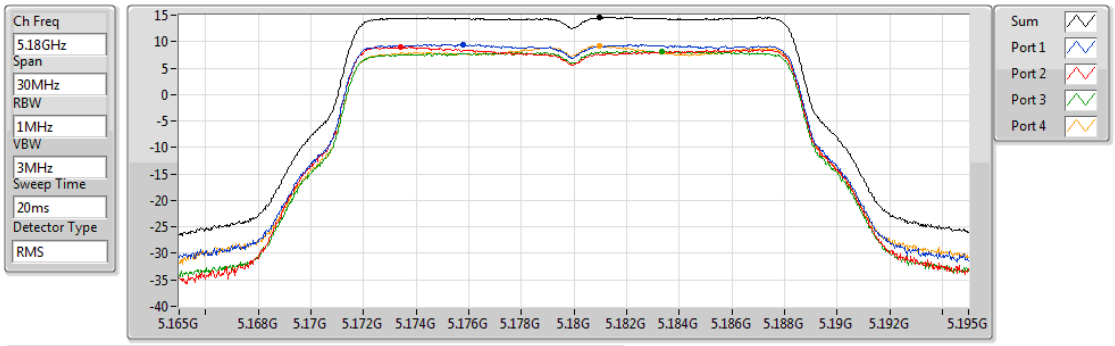
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.23	9.51	8.93	8.22	9.27	14.58	16.77
5200MHz	Pass	6.23	11.77	11.28	10.14	11.07	16.74	16.77
5240MHz	Pass	6.23	11.61	11.00	10.00	11.06	16.63	16.77
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.23	8.29	7.94	7.02	7.75	13.56	16.77
5200MHz	Pass	6.23	11.39	11.11	9.95	10.42	16.57	16.77
5240MHz	Pass	6.23	11.37	10.87	10.09	10.58	16.59	16.77
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.23	3.75	2.95	2.70	2.08	8.61	16.77
5230MHz	Pass	6.23	7.67	7.72	6.72	7.25	13.18	16.77
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.23	0.71	0.29	-0.50	0.27	5.92	16.77

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 Xpower density;

802.11a_Nss1,(6Mbps)_4TX PSD

5180MHz

29/03/2018

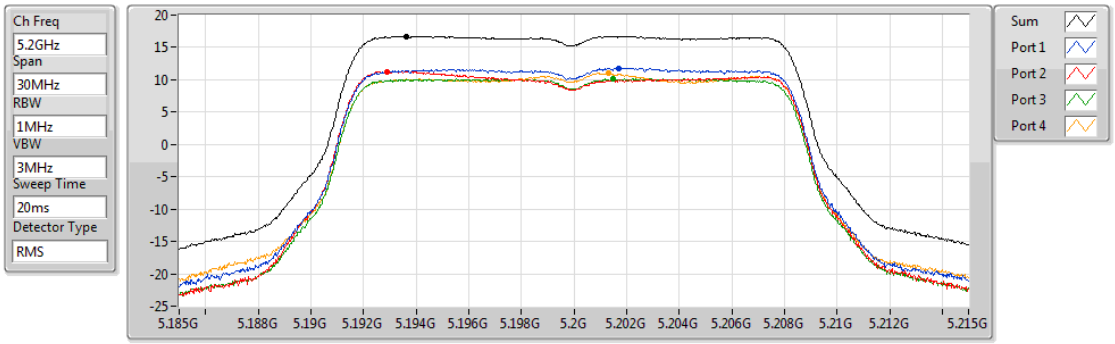


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.58	14.58	9.51	8.93	8.22	9.27

802.11a_Nss1,(6Mbps)_4TX PSD

5200MHz

02/04/2018

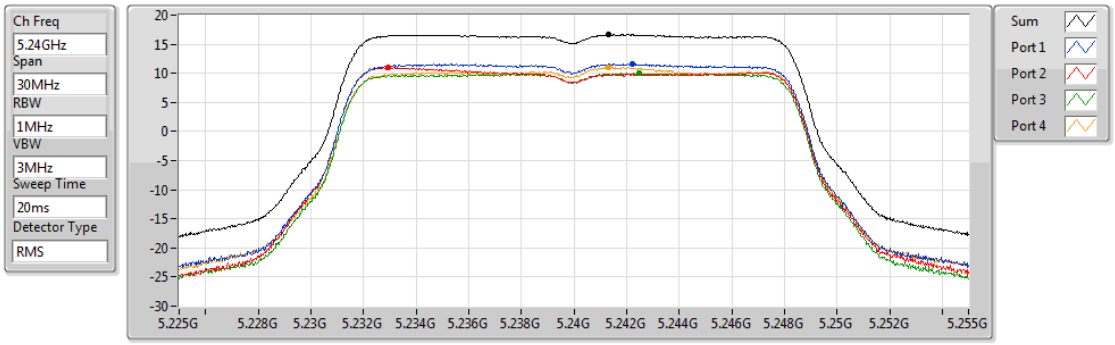


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.74	16.74	11.77	11.28	10.14	11.07

802.11a_Nss1,(6Mbps)_4TX PSD

5240MHz

02/04/2018

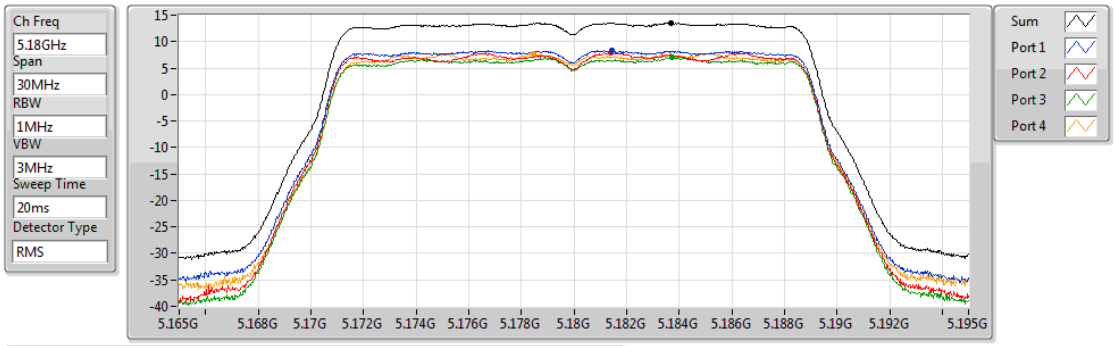


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.63	16.63	11.61	11.00	10.00	11.06

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5180MHz

29/03/2018

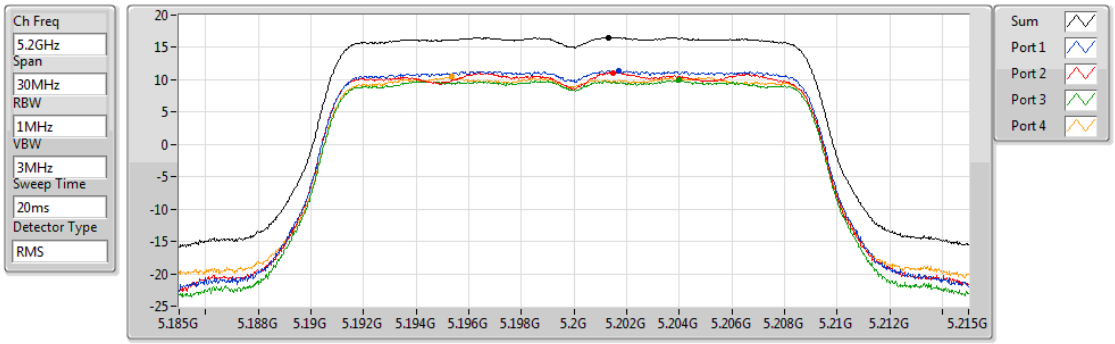


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.56	13.56	8.29	7.94	7.02	7.75

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5200MHz

02/04/2018

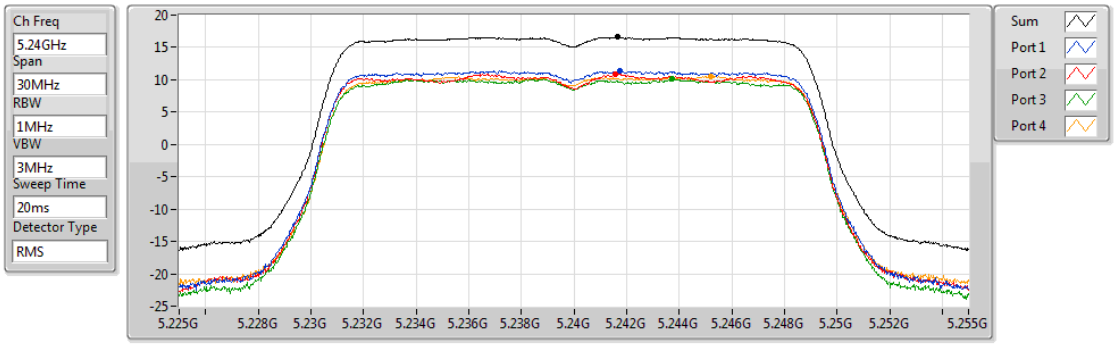


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.57	16.57	11.39	11.11	9.95	10.42

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5240MHz

02/04/2018

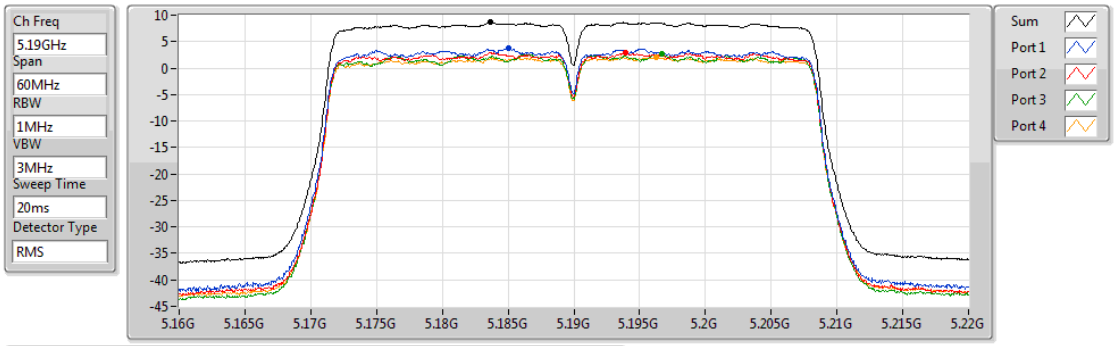


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.59	16.59	11.37	10.87	10.09	10.58

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

5190MHz

27/03/2018

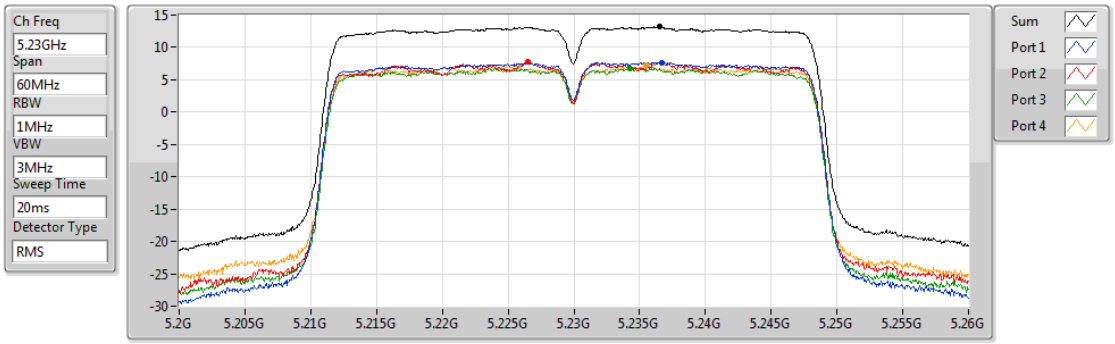


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.61	8.61	3.75	2.95	2.70	2.08

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

5230MHz

02/04/2018

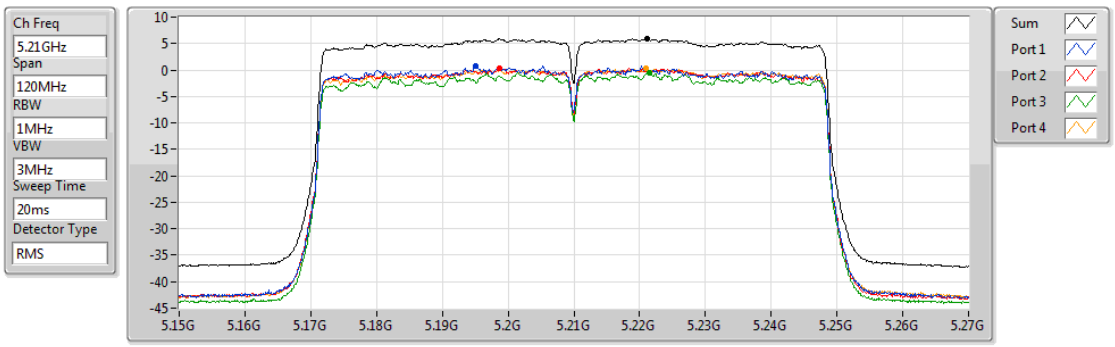


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.18	13.18	7.67	7.72	6.72	7.25

802.11ac VHT80_Nss1,(MCS0)_4TX PSD

5210MHz

27/03/2018



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.92	5.92	0.71	0.29	-0.50	0.27

Test Mode: Mode 2 / Radio 2
Summary

Mode	PD (dBm/RBW)
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_4TX	15.72
802.11ac VHT20_Nss1,(MCS0)_4TX	15.27
802.11ac VHT40_Nss1,(MCS0)_4TX	12.29
802.11ac VHT80_Nss1,(MCS0)_4TX	7.34

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

Result

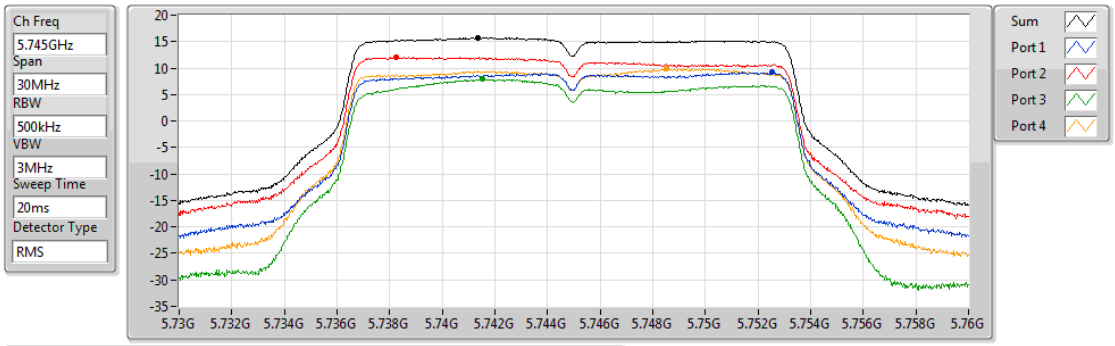
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5745MHz	Pass	6.93	9.16	12.07	7.87	9.83	15.72	29.07
5785MHz	Pass	6.93	9.24	11.44	7.86	9.79	15.45	29.07
5825MHz	Pass	6.93	9.17	11.56	8.30	9.80	15.70	29.07
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5745MHz	Pass	6.93	9.09	11.67	7.28	9.28	15.27	29.07
5785MHz	Pass	6.93	8.99	11.31	6.86	9.38	15.13	29.07
5825MHz	Pass	6.93	8.77	11.34	7.42	9.63	15.17	29.07
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5755MHz	Pass	6.93	6.81	7.51	5.13	6.42	12.29	29.07
5795MHz	Pass	6.93	6.62	7.59	5.38	6.48	12.26	29.07
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5775MHz	Pass	6.93	1.55	1.57	1.59	2.07	7.34	29.07

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 Xpower density;

802.11a_Nss1,(6Mbps)_4TX PSD

5745MHz

02/04/2018

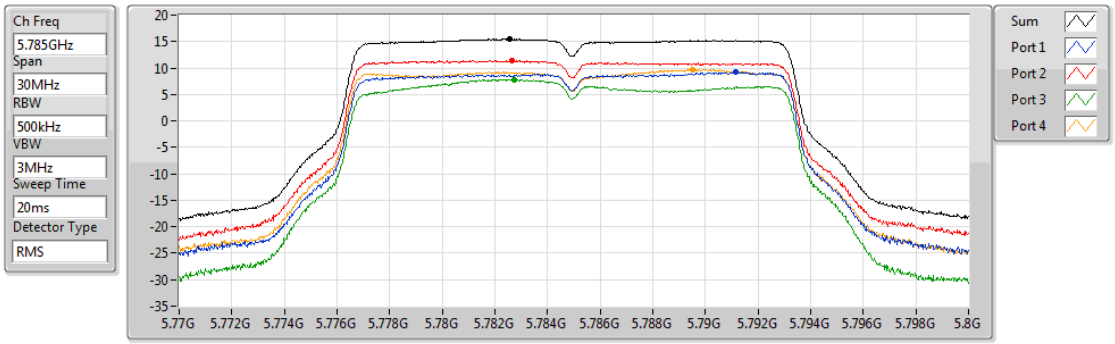


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.72	15.72	9.16	12.07	7.87	9.83

802.11a_Nss1,(6Mbps)_4TX PSD

5785MHz

02/04/2018

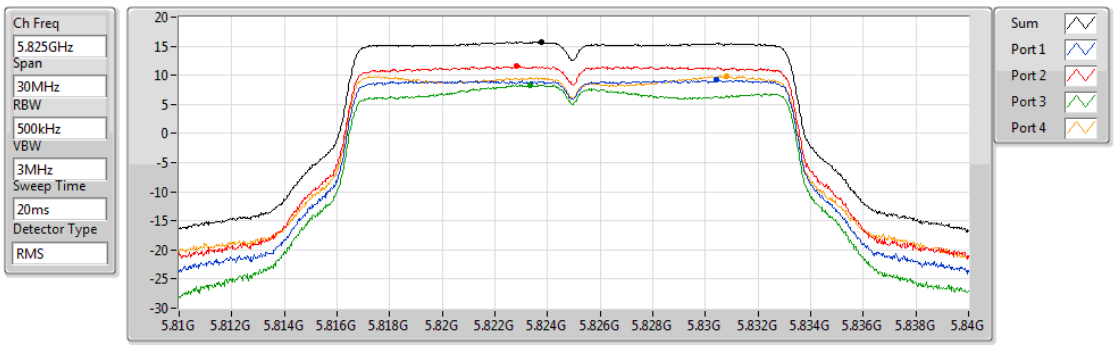


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.45	15.45	9.24	11.44	7.86	9.79

802.11a_Nss1,(6Mbps)_4TX PSD

5825MHz

02/04/2018

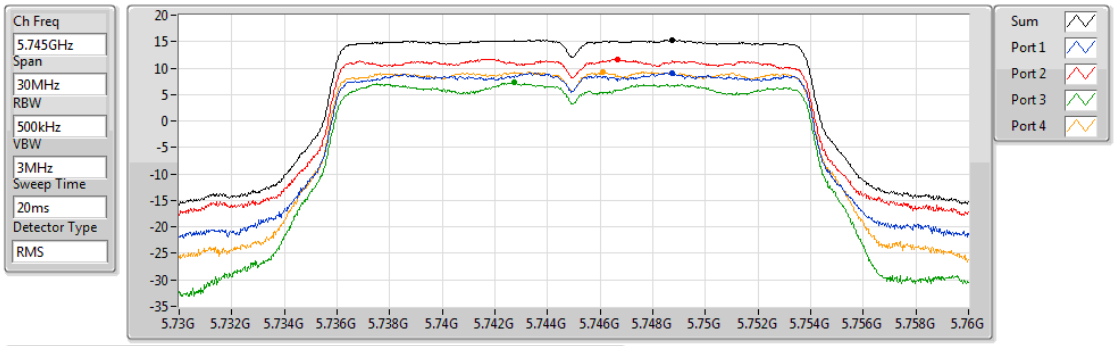


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.70	15.70	9.17	11.56	8.30	9.80

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5745MHz

02/04/2018

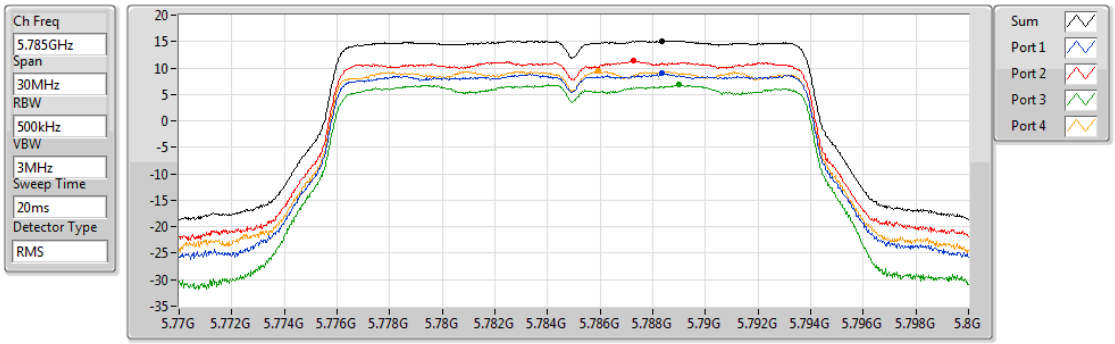


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.27	15.27	9.09	11.67	7.28	9.28

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5785MHz

02/04/2018

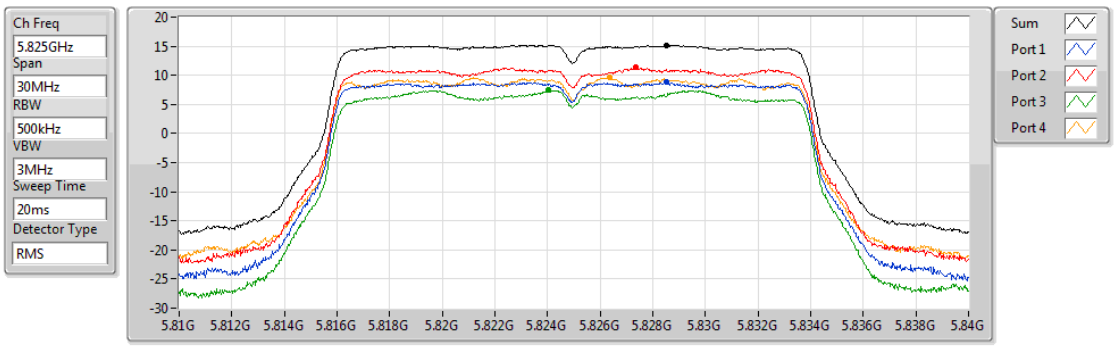


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.13	15.13	8.99	11.31	6.86	9.38

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5825MHz

02/04/2018

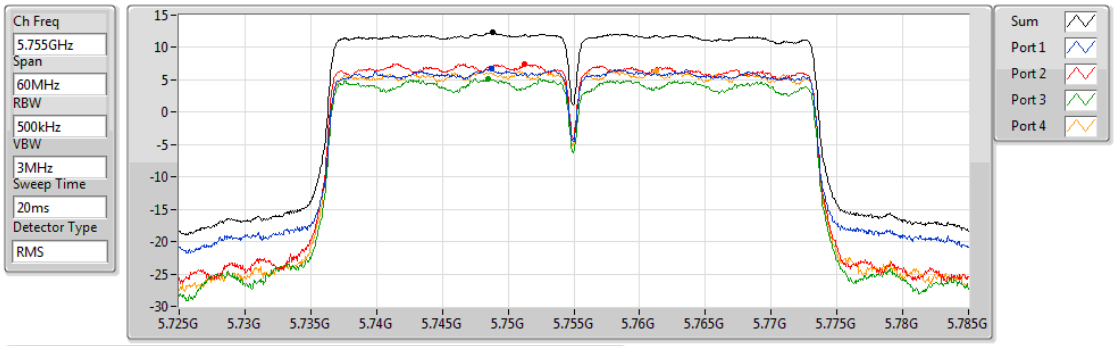


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.17	15.17	8.77	11.34	7.42	9.63

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

5755MHz

02/04/2018

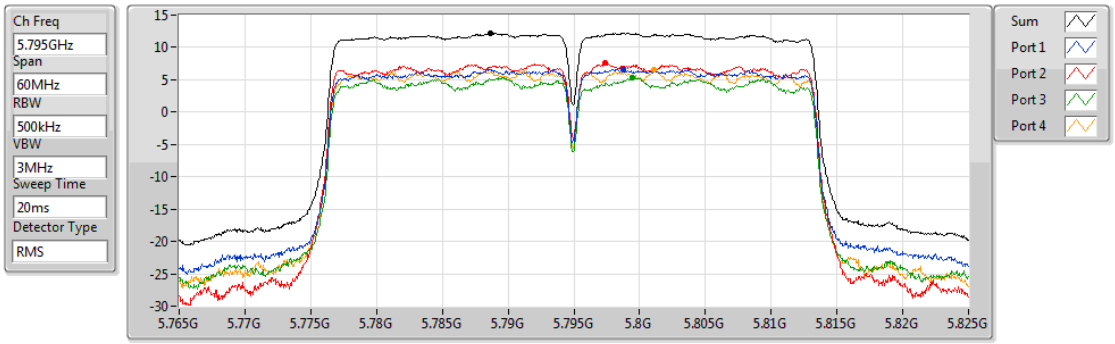


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.29	12.29	6.81	7.51	5.13	6.42

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

5795MHz

02/04/2018

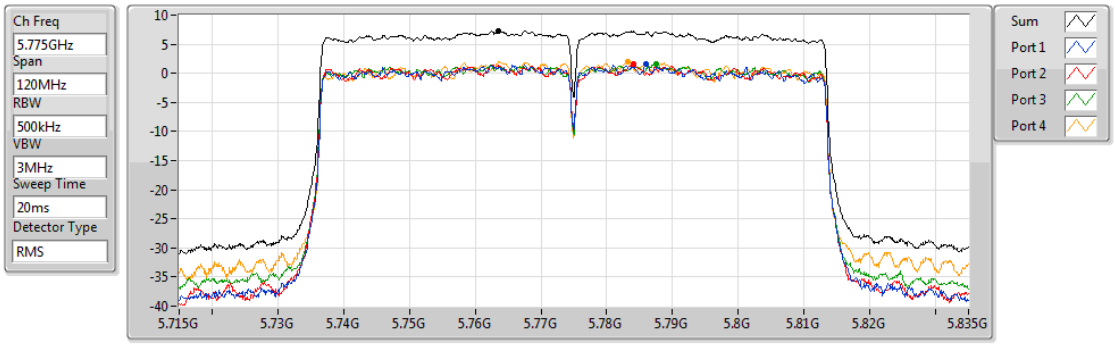


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.26	12.26	6.62	7.59	5.38	6.48

802.11ac VHT80_Nss1,(MCS0)_4TX PSD

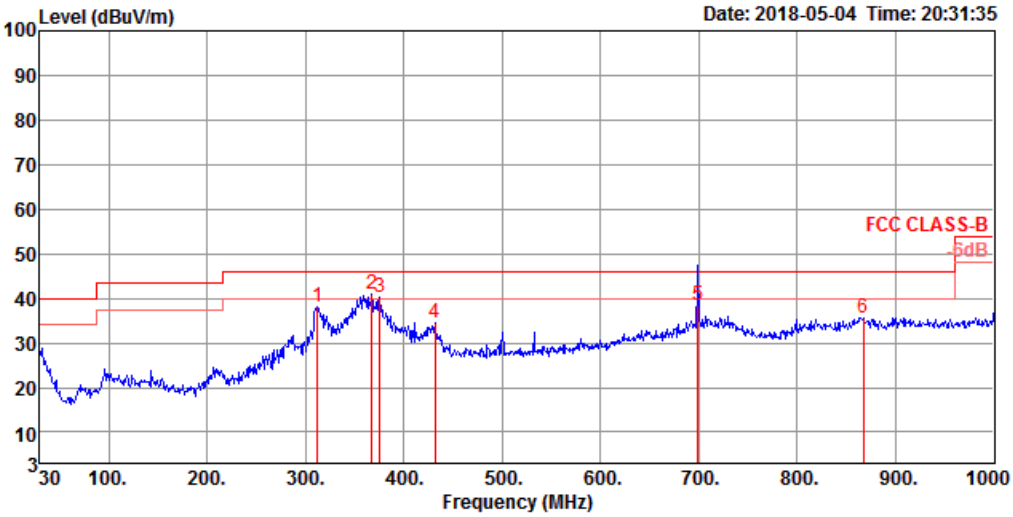
5775MHz

27/03/2018



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.34	7.34	1.55	1.57	1.59	2.07

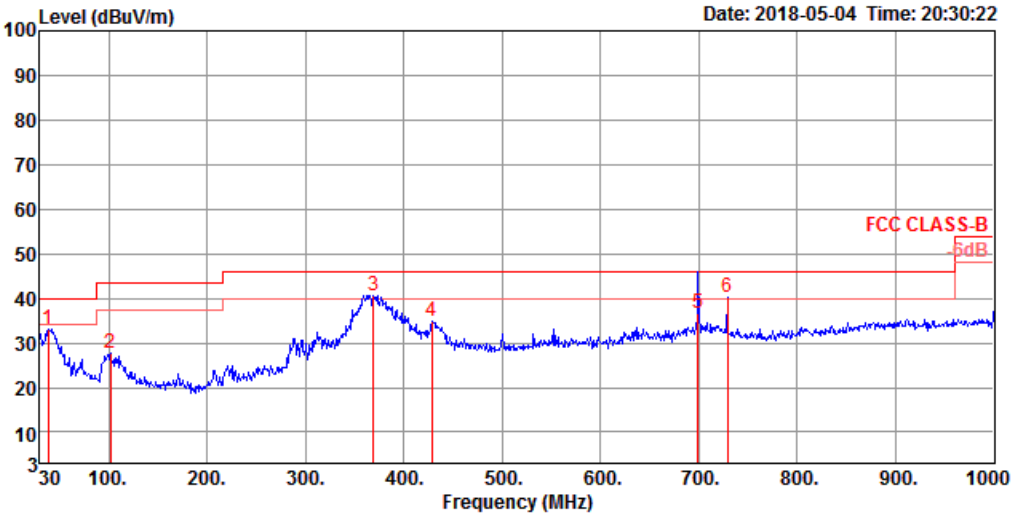
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	CTX - Radio 1 (2.4GHz)		



	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	312.27	38.06	46.00	-7.94	47.86	2.31	20.15	32.26	100	162	Peak	HORIZONTAL
2	367.56	40.94	46.00	-5.06	49.57	1.96	21.68	32.27	125	210	Peak	HORIZONTAL
3	375.32	40.10	46.00	-5.90	48.28	2.22	21.88	32.28	150	210	Peak	HORIZONTAL
4	431.58	34.53	46.00	-11.47	41.19	2.82	22.82	32.30	200	264	Peak	HORIZONTAL
5	699.30	38.52	46.00	-7.48	42.00	3.28	25.60	32.36	169	210	QP	HORIZONTAL
6	867.11	35.58	46.00	-10.42	36.75	3.16	27.42	31.75	100	273	Peak	HORIZONTAL

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

RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	CTX - Radio 1 (2.4GHz)		



	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	38.73	33.07	40.00	-6.93	43.86	1.12	20.51	32.42	100	6	Peak	VERTICAL
2	101.78	27.60	43.50	-15.90	41.81	0.86	17.30	32.37	300	234	Peak	VERTICAL
3	369.50	40.70	46.00	-5.30	49.26	2.00	21.71	32.27	200	79	Peak	VERTICAL
4	428.67	34.97	46.00	-11.03	41.64	2.84	22.79	32.30	150	284	Peak	VERTICAL
5	699.30	36.52	46.00	-9.48	40.00	3.28	25.60	32.36	135	88	QP	VERTICAL
6	729.37	40.17	46.00	-5.83	42.90	3.58	25.96	32.27	125	185	Peak	VERTICAL

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

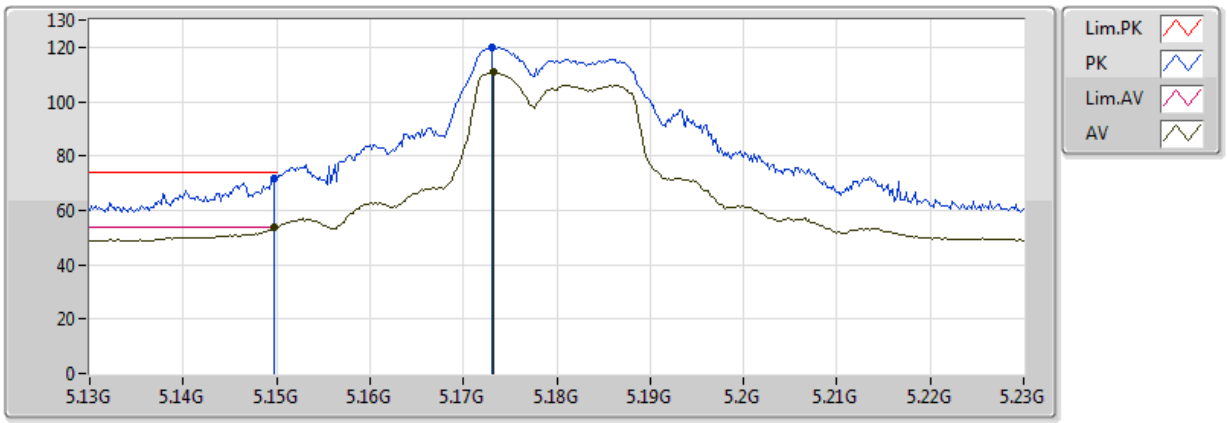
Test Mode: Mode 1 / Radio 3
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_4TX	Pass	AV	5.1472G	53.99	54.00	-0.01	4.90	3	Vertical	285	1.45	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

24/03/2018



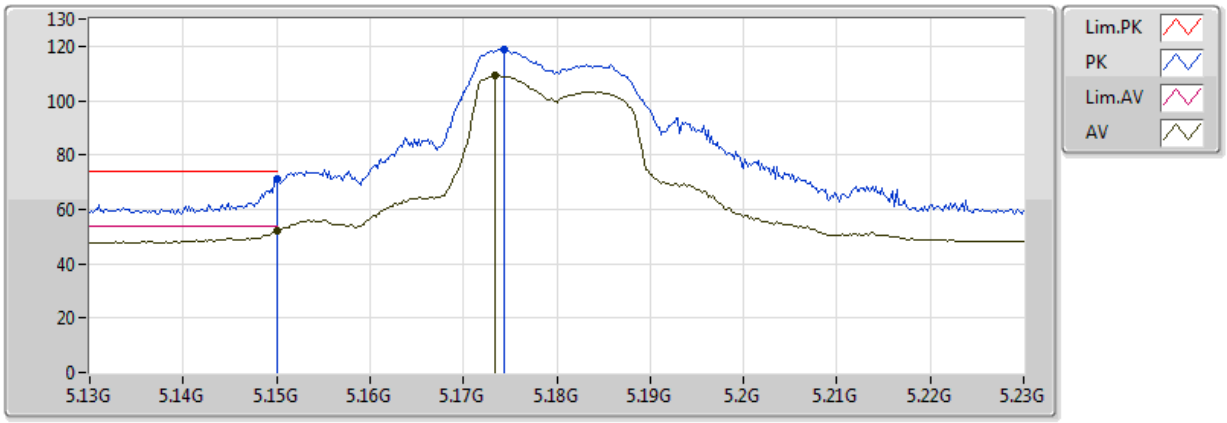
EUT Y_4TX
Setting 83
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1498G	71.86	74.00	-2.14	4.90	3	Vertical	290	1.50	-
AV	5.1498G	53.94	54.00	-0.06	4.90	3	Vertical	290	1.50	-
PK	5.173G	120.15	Inf	-Inf	4.93	3	Vertical	290	1.50	-
AV	5.1732G	110.72	Inf	-Inf	4.93	3	Vertical	290	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

24/03/2018



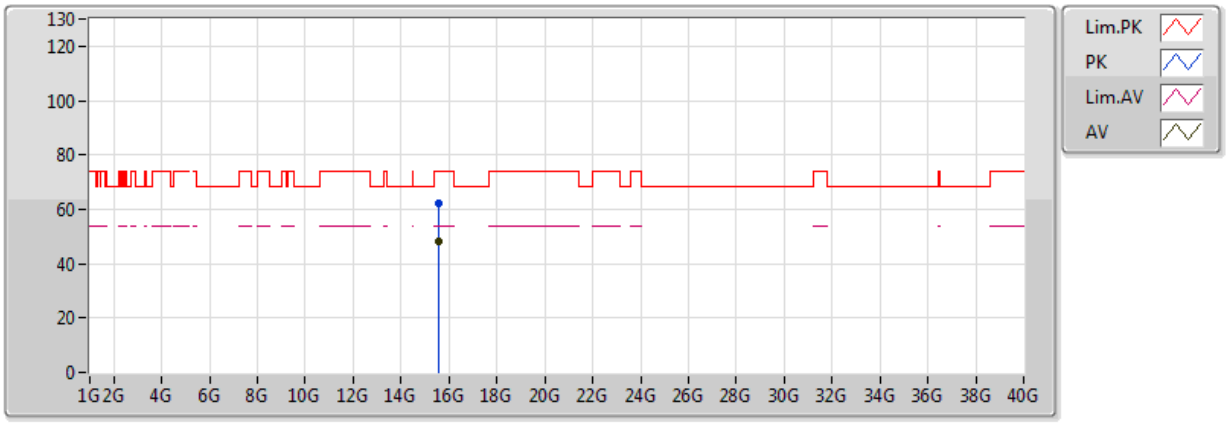
EUT Y_4TX
Setting 83
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.149995G	71.01	74.00	-2.99	4.90	3	Horizontal	136	2.27	-
AV	5.149995G	51.87	54.00	-2.13	4.90	3	Horizontal	136	2.27	-
PK	5.1744G	118.65	Inf	-Inf	4.93	3	Horizontal	136	2.27	-
AV	5.1734G	109.11	Inf	-Inf	4.93	3	Horizontal	136	2.27	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

24/03/2018



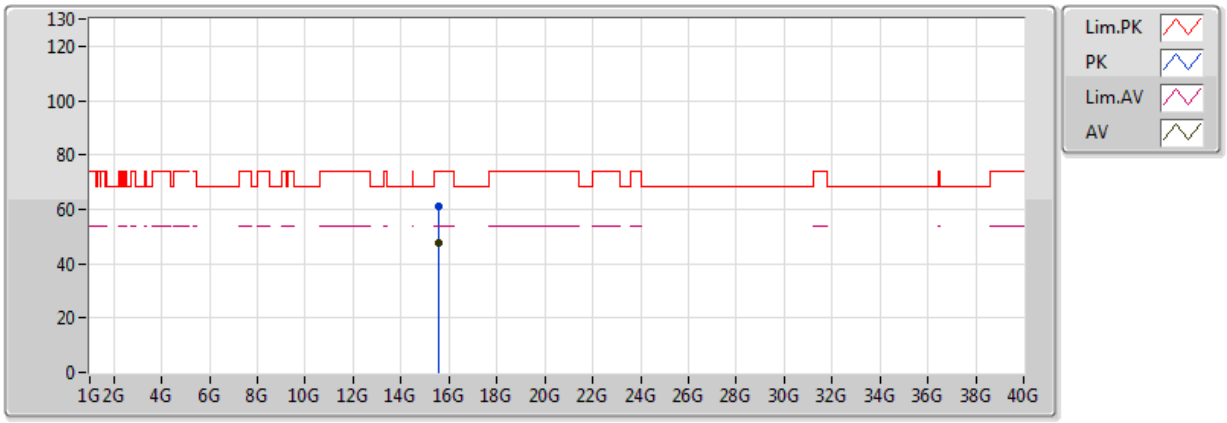
EUT Y_4TX
Setting 83
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.5541G	62.10	74.00	-11.90	15.91	3	Vertical	307	2.14	-
AV	15.54882G	48.02	54.00	-5.98	15.92	3	Vertical	307	2.14	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

24/03/2018



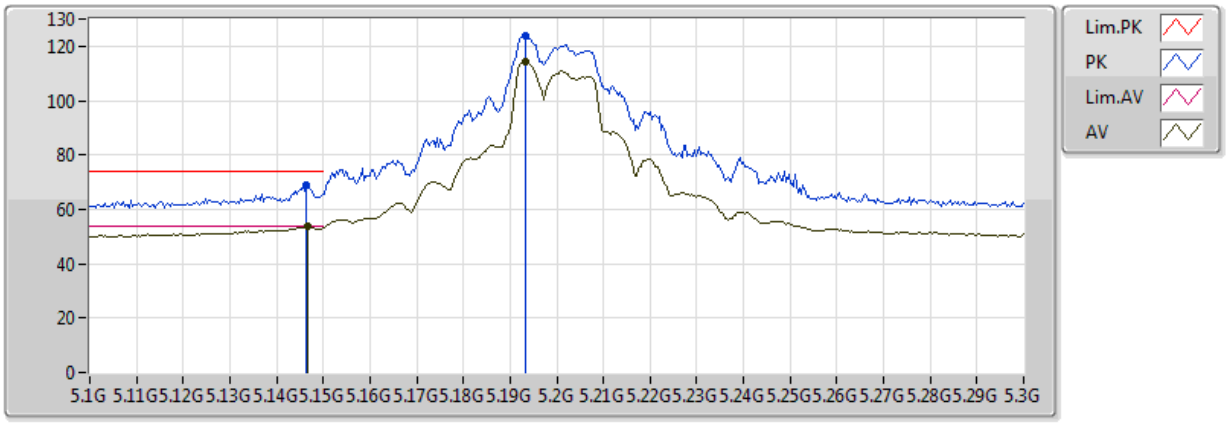
EUT Y_4TX
Setting 83
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.54088G	61.07	74.00	-12.93	15.93	3	Horizontal	283	1.50	-
AV	15.5382G	47.86	54.00	-6.14	15.93	3	Horizontal	283	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

24/03/2018



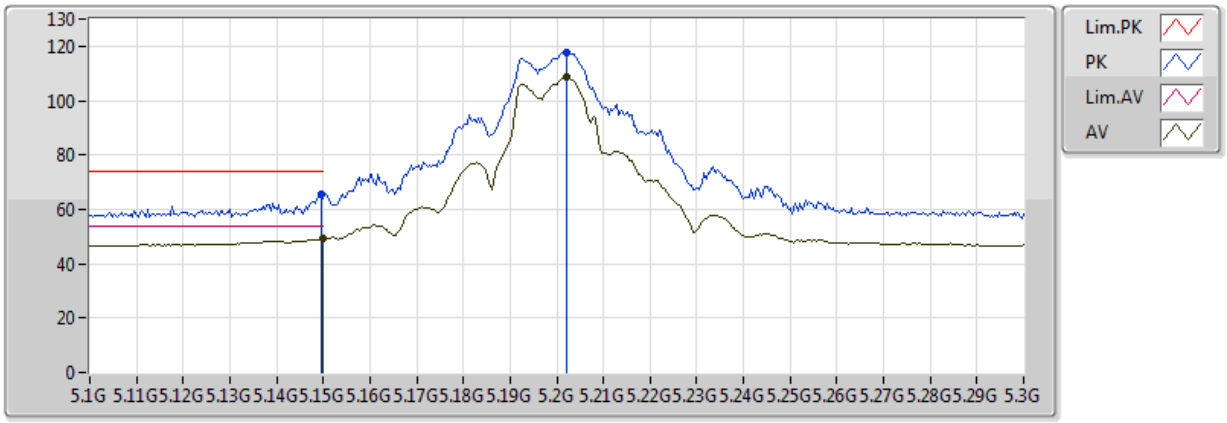
EUT Y_4TX
Setting 96
01-L-3-13
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1464G	69.20	74.00	-4.80	4.89	3	Vertical	288	1.49	-
AV	5.1468G	53.73	54.00	-0.27	4.89	3	Vertical	288	1.49	-
PK	5.1932G	123.84	Inf	-Inf	4.95	3	Vertical	288	1.49	-
AV	5.1932G	114.39	Inf	-Inf	4.95	3	Vertical	288	1.49	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

24/03/2018



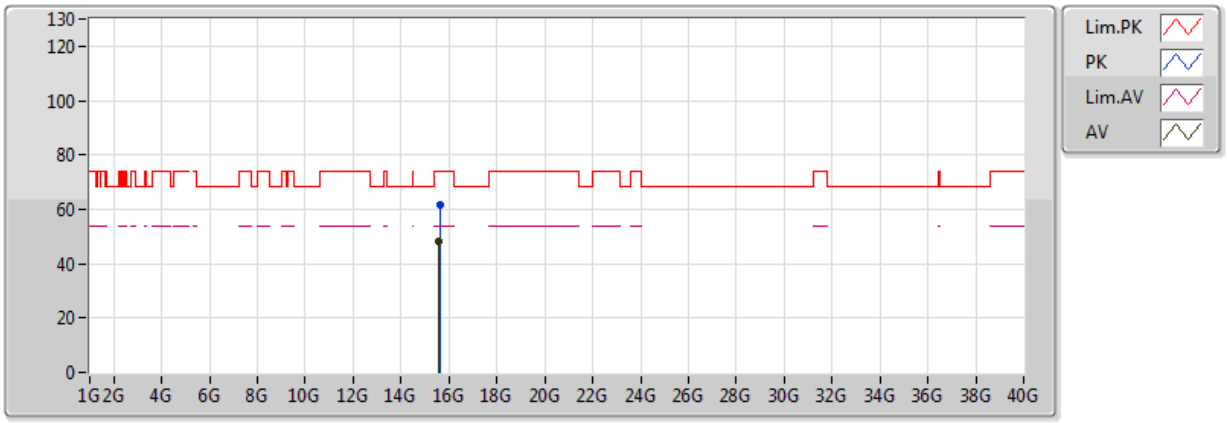
EUT Y_4TX
Setting 96
01-L-3-13
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1496G	65.44	74.00	-8.56	4.90	3	Horizontal	119	1.54	-
AV	5.149995G	49.42	54.00	-4.58	4.90	3	Horizontal	119	1.54	-
PK	5.202G	117.69	Inf	-Inf	4.97	3	Horizontal	119	1.54	-
AV	5.202G	108.53	Inf	-Inf	4.97	3	Horizontal	119	1.54	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

24/03/2018



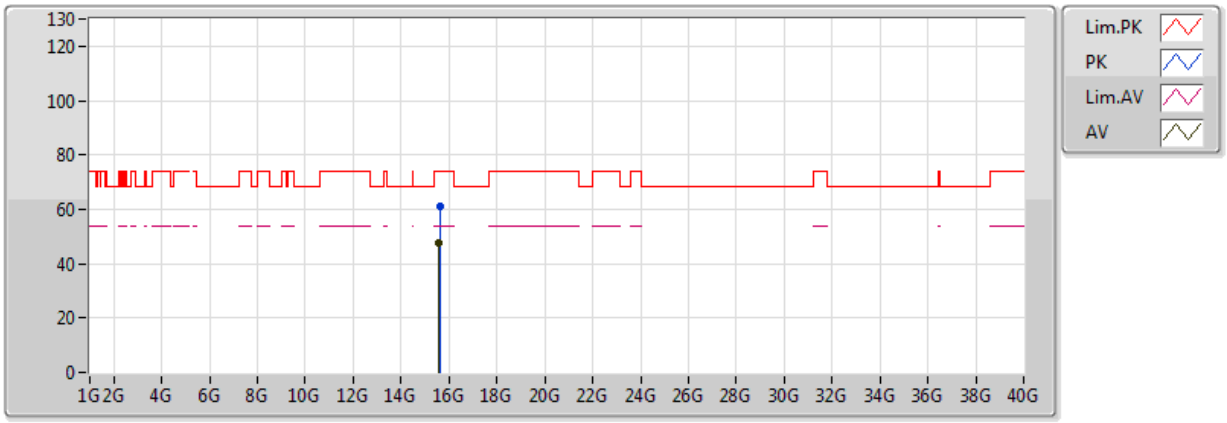
EUT Y_4TX
Setting 96
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.60158G	61.84	74.00	-12.16	15.83	3	Vertical	352	1.96	-
AV	15.5967G	47.94	54.00	-6.06	15.84	3	Vertical	352	1.96	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

24/03/2018



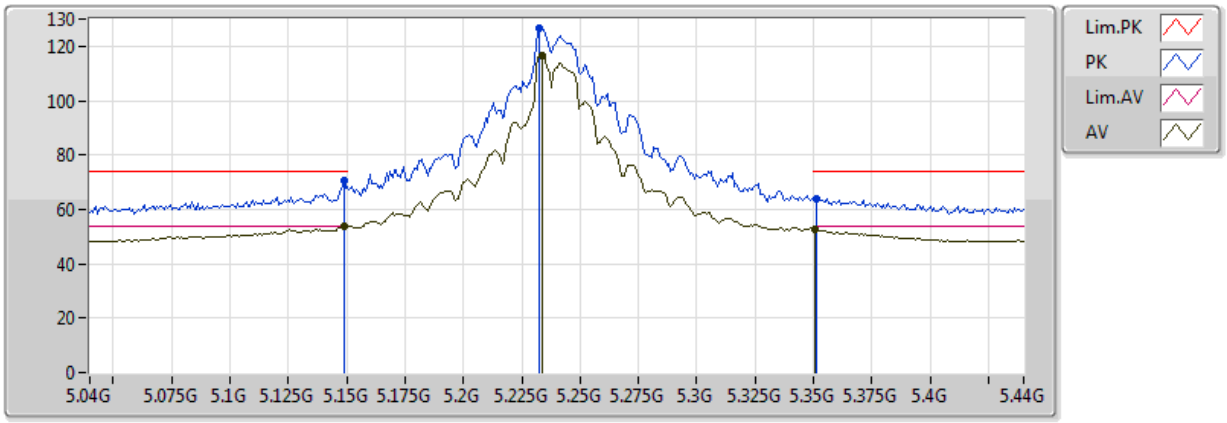
EUT Y_4TX
Setting 96
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.60156G	61.07	74.00	-12.93	15.83	3	Horizontal	152	0.00	-
AV	15.59674G	47.85	54.00	-6.15	15.84	3	Horizontal	152	0.00	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

24/03/2018



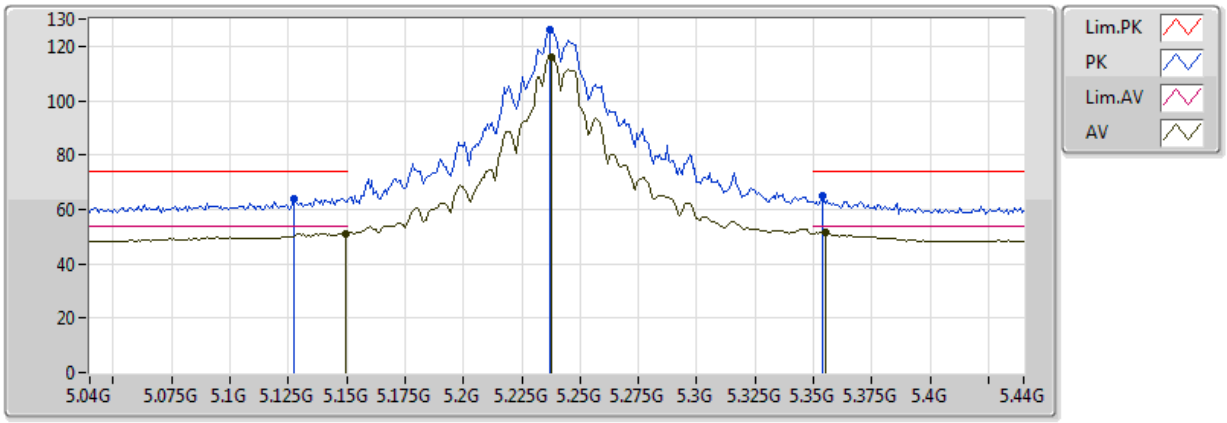
EUT Y_4TX
Setting 107
01-L-3-13
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1488G	70.56	74.00	-3.44	4.90	3	Vertical	287	1.44	-
AV	5.1488G	53.76	54.00	-0.24	4.90	3	Vertical	287	1.44	-
PK	5.2328G	126.68	Inf	-Inf	5.11	3	Vertical	287	1.44	-
AV	5.2336G	116.69	Inf	-Inf	5.11	3	Vertical	287	1.44	-
PK	5.3512G	64.07	74.00	-9.93	5.60	3	Vertical	287	1.44	-
AV	5.3504G	52.80	54.00	-1.20	5.60	3	Vertical	287	1.44	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

24/03/2018



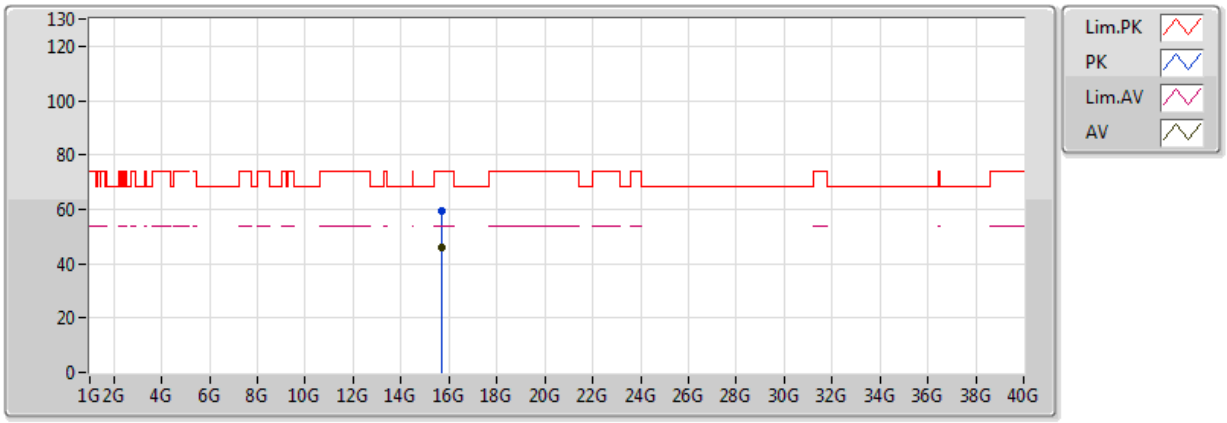
EUT Y_4TX
Setting 107
01-L-3-13
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1272G	63.93	74.00	-10.07	4.87	3	Horizontal	337	2.77	-
AV	5.1496G	51.18	54.00	-2.82	4.90	3	Horizontal	337	2.77	-
PK	5.2368G	126.19	Inf	-Inf	5.13	3	Horizontal	337	2.77	-
AV	5.2376G	115.97	Inf	-Inf	5.13	3	Horizontal	337	2.77	-
PK	5.3536G	65.18	74.00	-8.82	5.62	3	Horizontal	337	2.77	-
AV	5.3552G	51.54	54.00	-2.46	5.62	3	Horizontal	337	2.77	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

24/03/2018

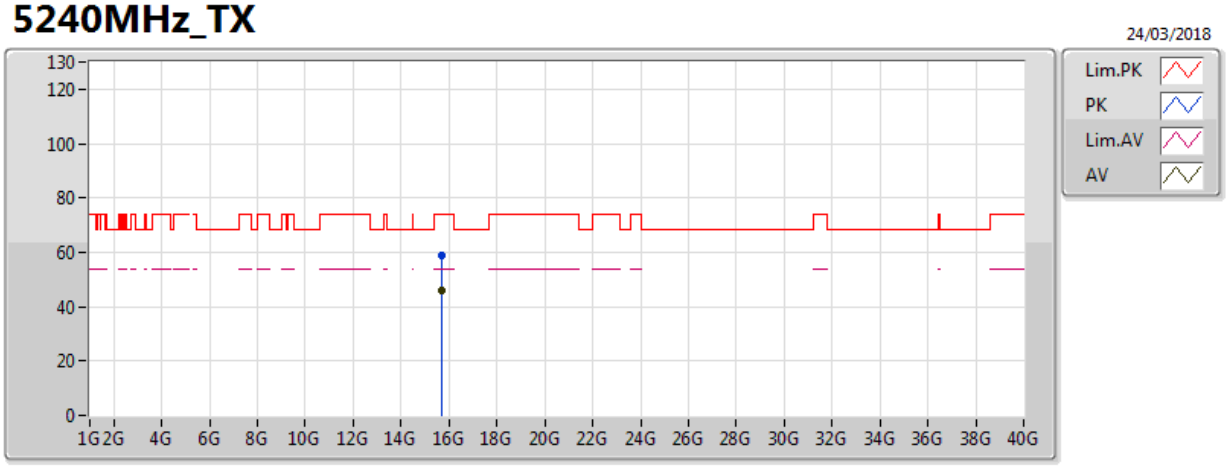


EUT Y_4TX
Setting 107
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.71914G	59.62	74.00	-14.38	15.65	3	Vertical	360	0.00	-
AV	15.71636G	45.88	54.00	-8.12	15.65	3	Vertical	360	0.00	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX



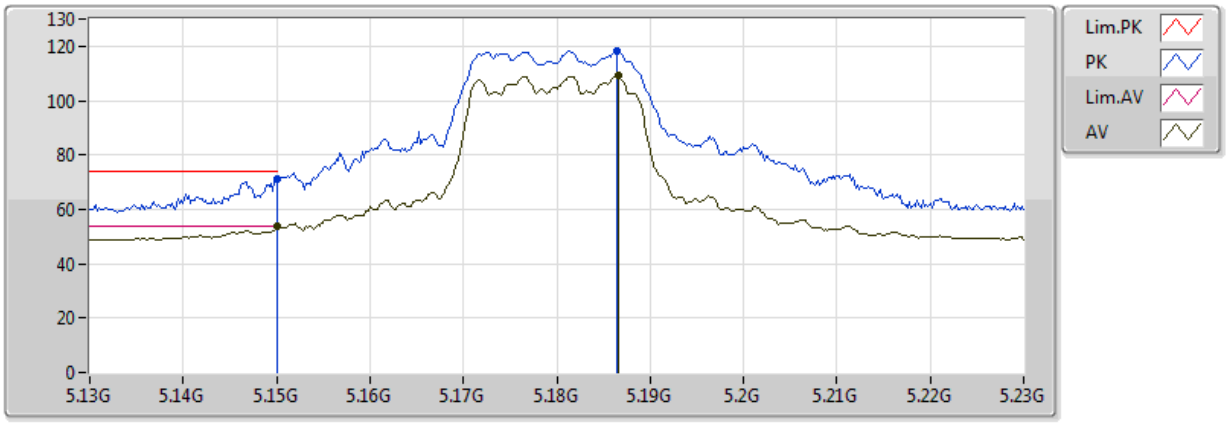
EUT Y_4TX
Setting 107
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.71994G	58.94	74.00	-15.06	15.65	3	Horizontal	3	1.50	-
AV	15.71938G	45.86	54.00	-8.14	15.65	3	Horizontal	3	1.50	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

24/03/2018



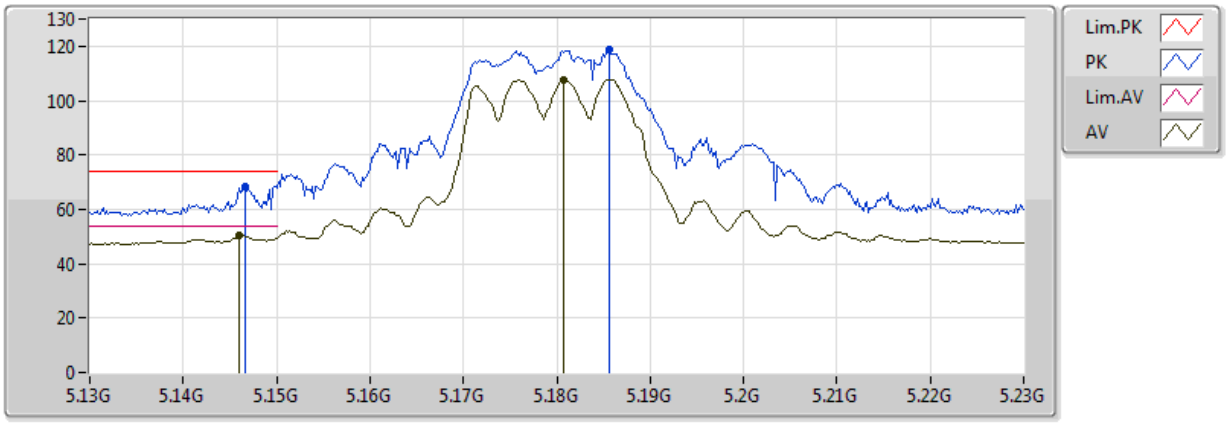
EUT Y_4TX
Setting 79
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.149995G	71.28	74.00	-2.72	4.90	3	Vertical	286	1.50	-
AV	5.149995G	53.58	54.00	-0.42	4.90	3	Vertical	286	1.50	-
PK	5.1864G	118.21	Inf	-Inf	4.94	3	Vertical	286	1.50	-
AV	5.1866G	109.02	Inf	-Inf	4.94	3	Vertical	286	1.50	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

24/03/2018

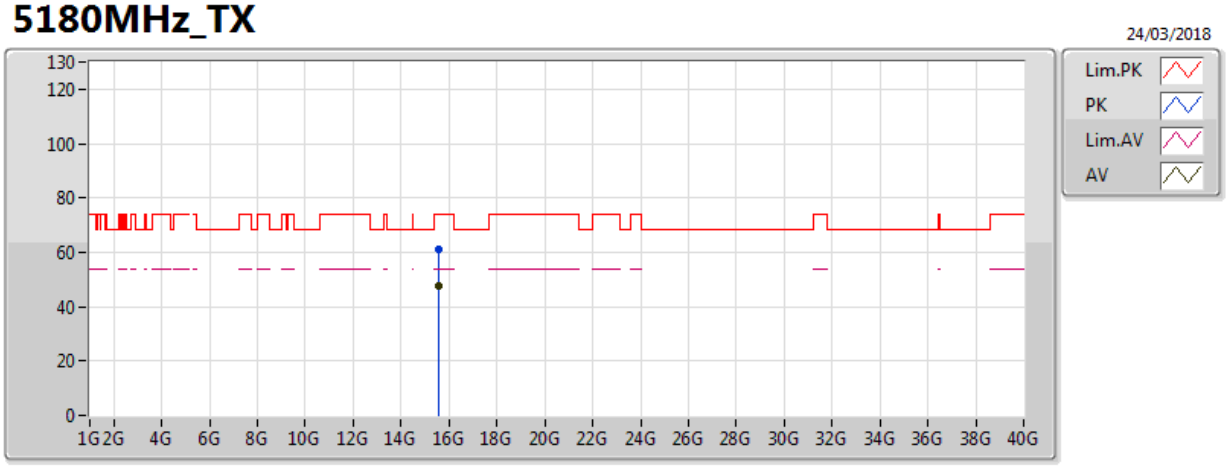


EUT Y_4TX
Setting 79
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1466G	68.59	74.00	-5.41	4.89	3	Horizontal	118	1.56	-
AV	5.146G	50.47	54.00	-3.53	4.89	3	Horizontal	118	1.56	-
PK	5.1856G	118.65	Inf	-Inf	4.94	3	Horizontal	118	1.56	-
AV	5.1808G	107.67	Inf	-Inf	4.94	3	Horizontal	118	1.56	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX



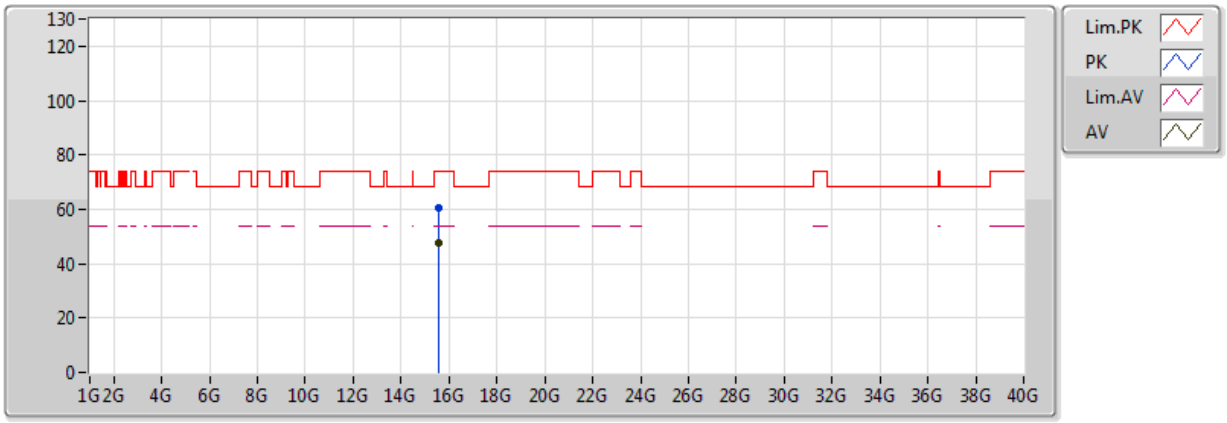
EUT Y_4TX
Setting 79
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.53898G	61.04	74.00	-12.96	15.93	3	Vertical	293	1.02	-
AV	15.54128G	47.67	54.00	-6.33	15.93	3	Vertical	293	1.02	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

24/03/2018



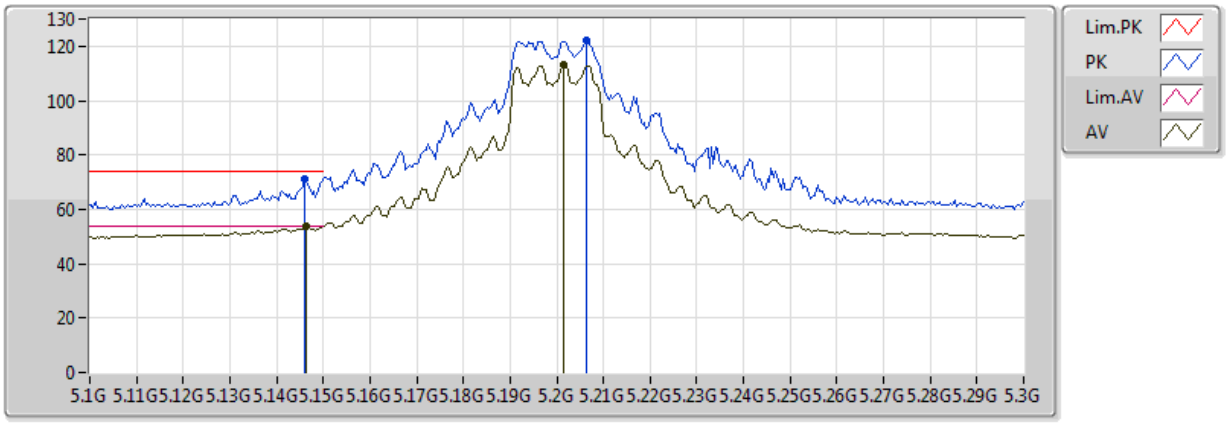
EUT Y_4TX
Setting 79
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.5438G	60.48	74.00	-13.52	15.93	3	Horizontal	142	1.29	-
AV	15.53918G	47.75	54.00	-6.25	15.93	3	Horizontal	142	1.29	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

24/03/2018

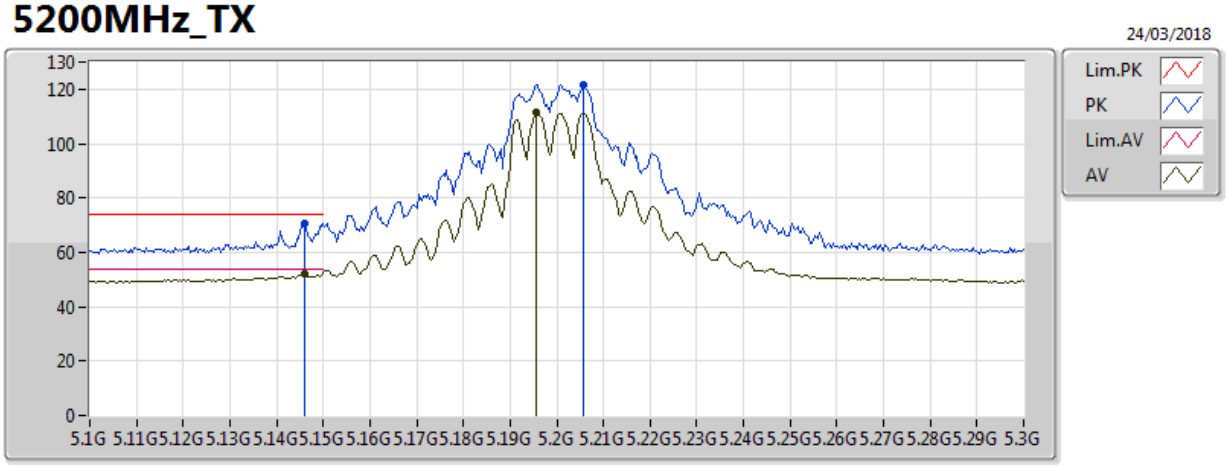


EUT Y_4TX
Setting 95
01-L-3-13
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.146G	70.89	74.00	-3.11	4.89	3	Vertical	290	1.52	-
AV	5.1464G	53.73	54.00	-0.27	4.89	3	Vertical	290	1.52	-
PK	5.2064G	122.29	Inf	-Inf	4.99	3	Vertical	290	1.52	-
AV	5.2016G	112.94	Inf	-Inf	4.97	3	Vertical	290	1.52	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

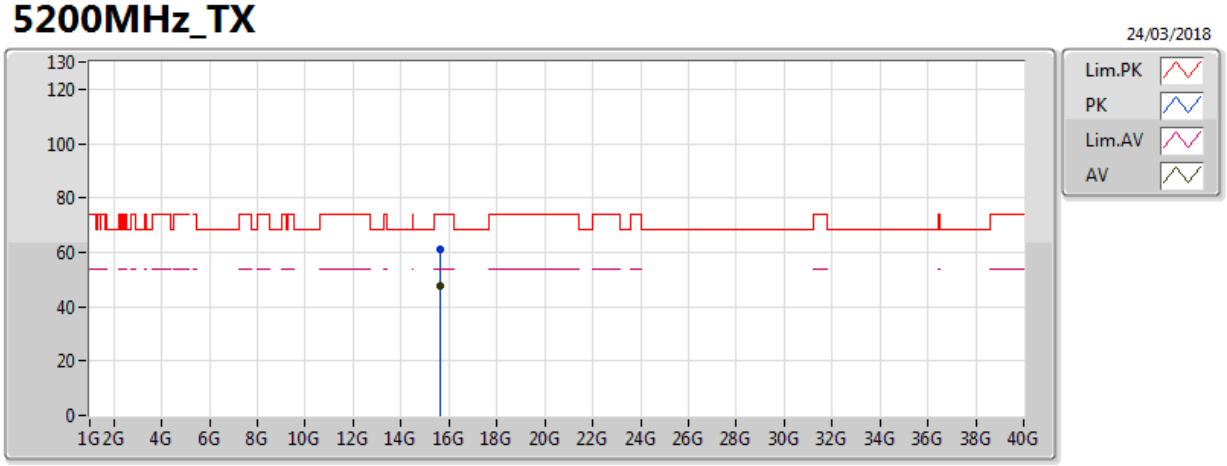


EUT Y_4TX
Setting 95
01-L-3-13
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.146G	70.64	74.00	-3.36	4.89	3	Horizontal	120	1.51	-
AV	5.146G	52.12	54.00	-1.88	4.89	3	Horizontal	120	1.51	-
PK	5.2056G	121.84	Inf	-Inf	4.99	3	Horizontal	120	1.51	-
AV	5.1956G	111.37	Inf	-Inf	4.95	3	Horizontal	120	1.51	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

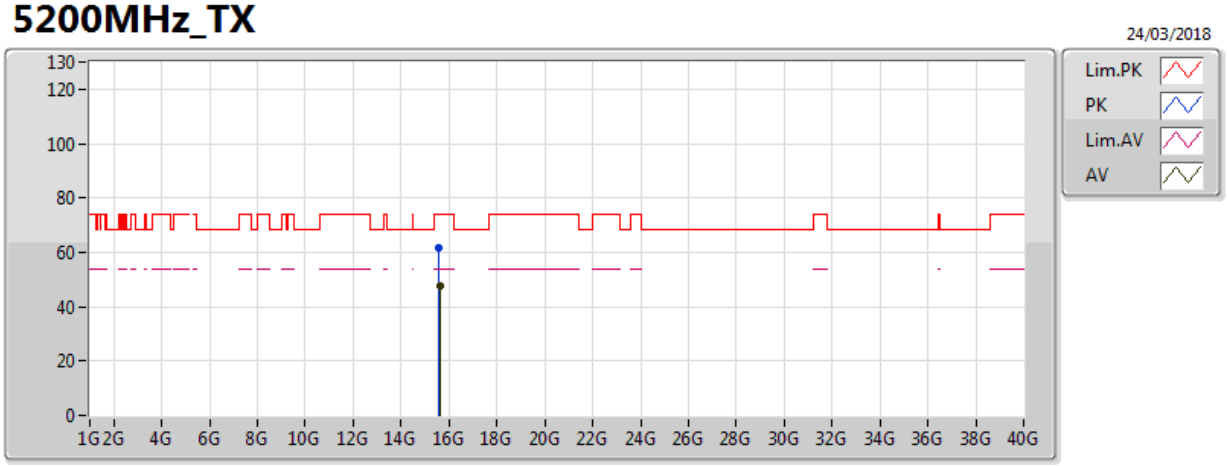


EUT Y_4TX
Setting 95
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.60126G	61.32	74.00	-12.68	15.83	3	Vertical	345	2.30	-
AV	15.60226G	47.87	54.00	-6.13	15.83	3	Vertical	345	2.30	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

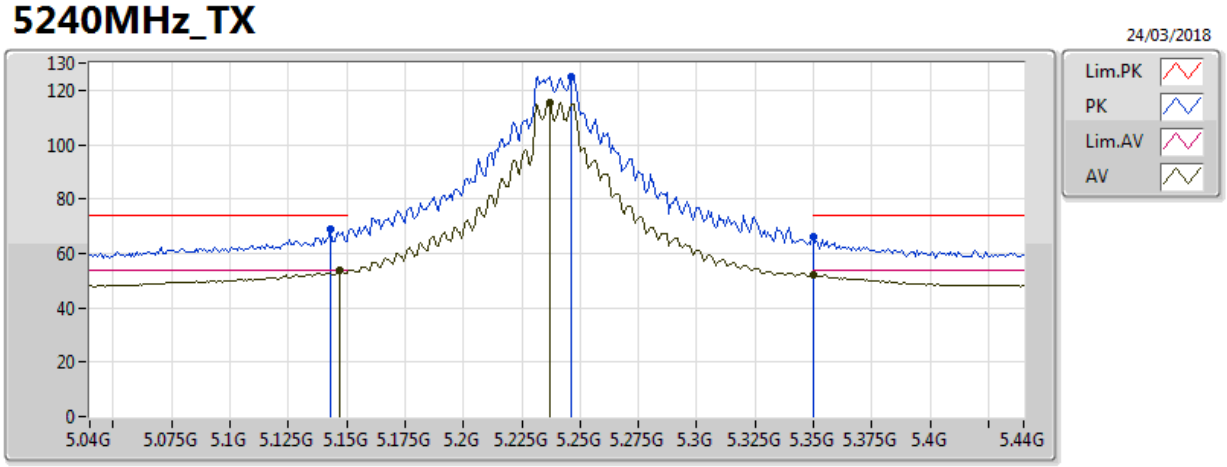


EUT Y_4TX
Setting 95
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.60072G	61.84	74.00	-12.16	15.83	3	Horizontal	17	2.17	-
AV	15.60136G	47.68	54.00	-6.32	15.83	3	Horizontal	17	2.17	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

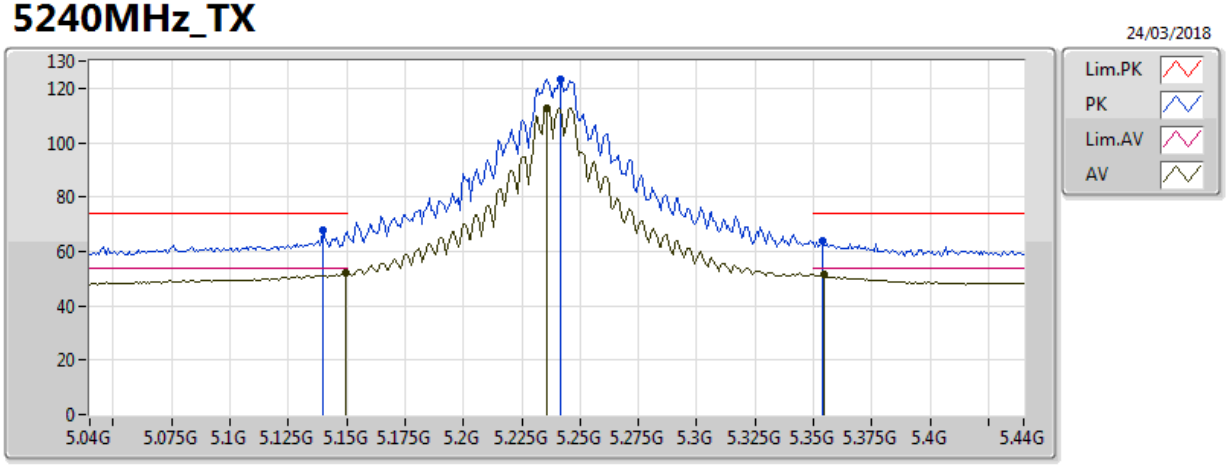


EUT Y_4TX
Setting 106
01-L-3-13
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1432G	69.02	74.00	-4.98	4.89	3	Vertical	288	1.45	-
AV	5.1472G	53.59	54.00	-0.41	4.90	3	Vertical	288	1.45	-
PK	5.2464G	125.20	Inf	-Inf	5.17	3	Vertical	288	1.45	-
AV	5.2368G	115.57	Inf	-Inf	5.13	3	Vertical	288	1.45	-
PK	5.350005G	65.85	74.00	-8.15	5.60	3	Vertical	288	1.45	-
AV	5.350005G	52.32	54.00	-1.68	5.60	3	Vertical	288	1.45	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX



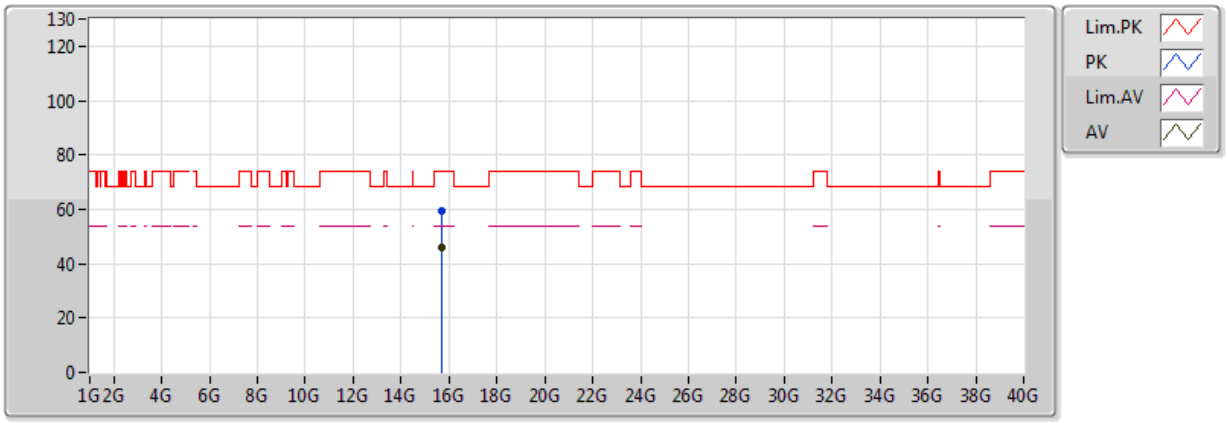
EUT Y_4TX
Setting 106
01-L-3-13
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.14G	67.81	74.00	-6.19	4.88	3	Horizontal	117	1.53	-
AV	5.1496G	51.97	54.00	-2.03	4.90	3	Horizontal	117	1.53	-
PK	5.2416G	123.24	Inf	-Inf	5.15	3	Horizontal	117	1.53	-
AV	5.236G	112.82	Inf	-Inf	5.12	3	Horizontal	117	1.53	-
PK	5.3536G	63.78	74.00	-10.22	5.62	3	Horizontal	117	1.53	-
AV	5.3544G	51.32	54.00	-2.68	5.62	3	Horizontal	117	1.53	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

24/03/2018

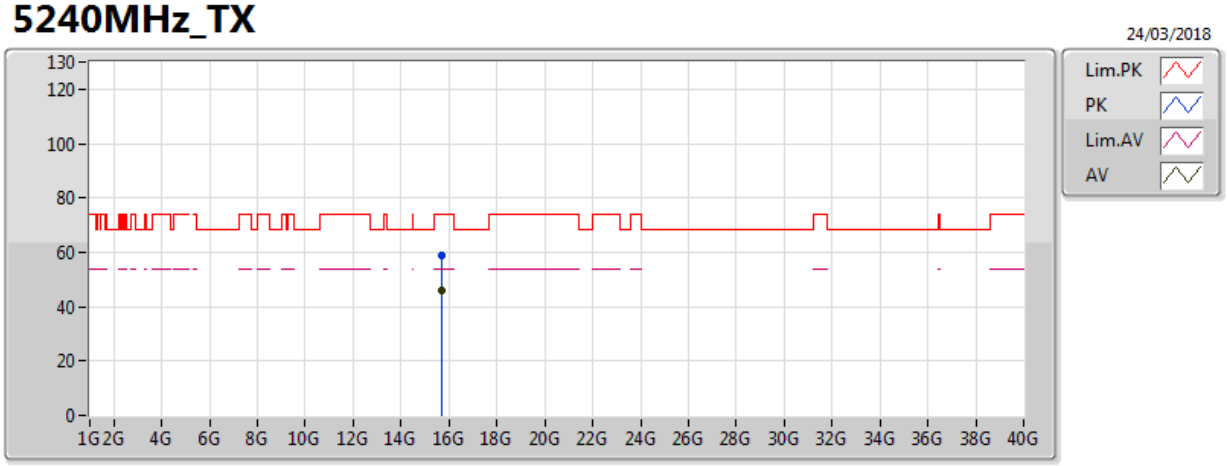


EUT Y_4TX
Setting 106
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.7201G	59.12	74.00	-14.88	15.65	3	Vertical	1	1.50	-
AV	15.72372G	45.70	54.00	-8.30	15.64	3	Vertical	1	1.50	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

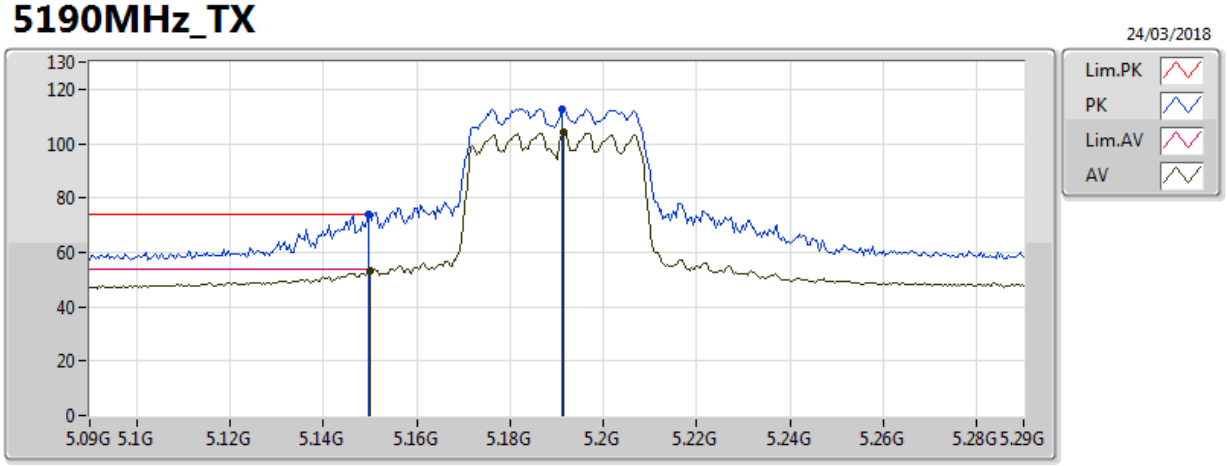


EUT Y_4TX
Setting 106
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.72348G	58.73	74.00	-15.27	15.64	3	Horizontal	190	1.47	-
AV	15.71886G	45.72	54.00	-8.28	15.65	3	Horizontal	190	1.47	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX



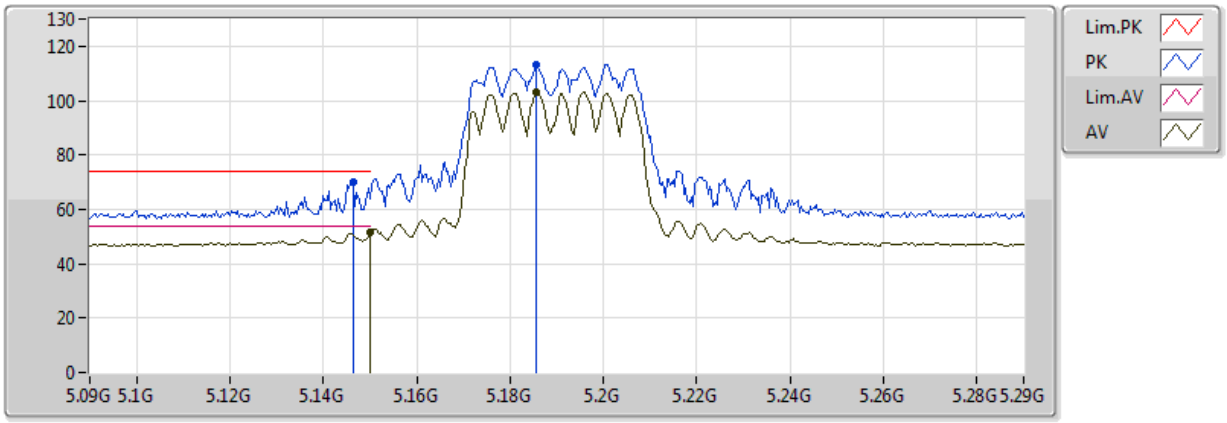
EUT Y_4TX
Setting 72
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1496G	73.78	74.00	-0.22	4.90	3	Vertical	286	1.32	-
AV	5.149995G	53.33	54.00	-0.67	4.90	3	Vertical	286	1.32	-
PK	5.1912G	112.88	Inf	-Inf	4.95	3	Vertical	286	1.32	-
AV	5.1916G	104.27	Inf	-Inf	4.95	3	Vertical	286	1.32	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

24/03/2018

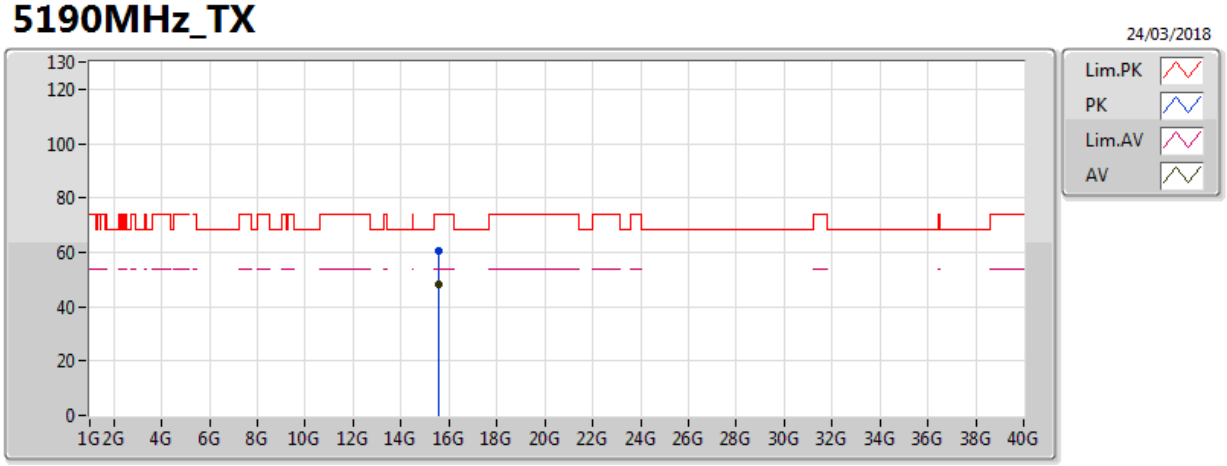


EUT Y_4TX
Setting 72
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1464G	70.18	74.00	-3.82	4.89	3	Horizontal	119	1.50	-
AV	5.149995G	51.30	54.00	-2.70	4.90	3	Horizontal	119	1.50	-
PK	5.1856G	113.06	Inf	-Inf	4.94	3	Horizontal	119	1.50	-
AV	5.1856G	103.05	Inf	-Inf	4.94	3	Horizontal	119	1.50	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

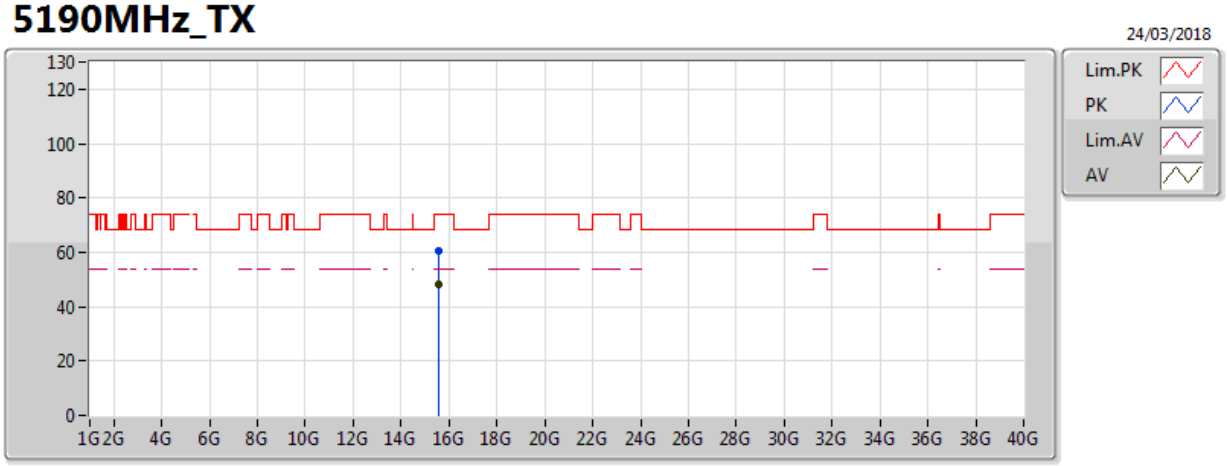


EUT Y_4TX
Setting 72
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.57118G	60.55	74.00	-13.45	15.88	3	Vertical	357	1.67	-
AV	15.57144G	48.29	54.00	-5.71	15.88	3	Vertical	357	1.67	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

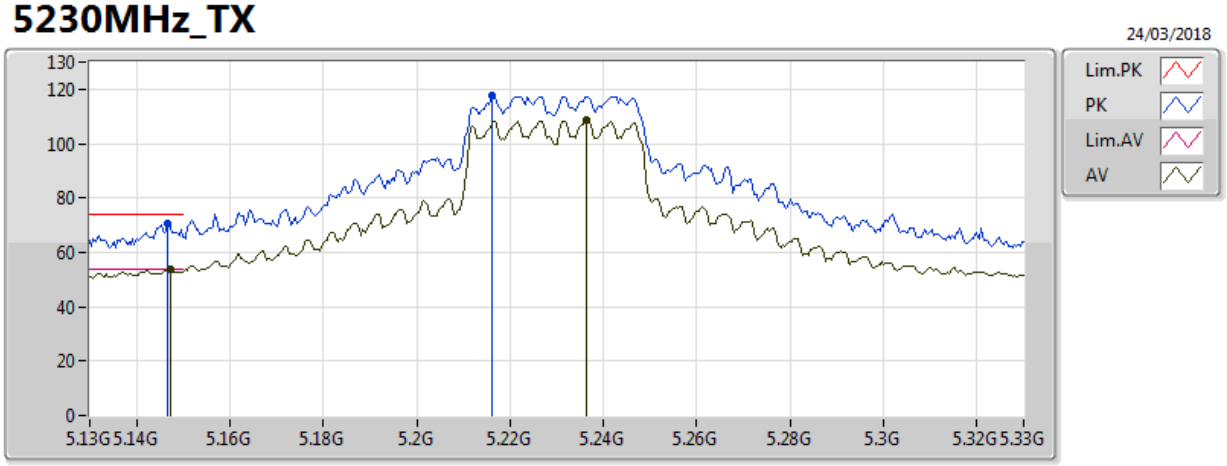


EUT Y_4TX
Setting 72
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.56896G	60.51	74.00	-13.49	15.89	3	Horizontal	28	2.03	-
AV	15.57204G	47.94	54.00	-6.06	15.88	3	Horizontal	28	2.03	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

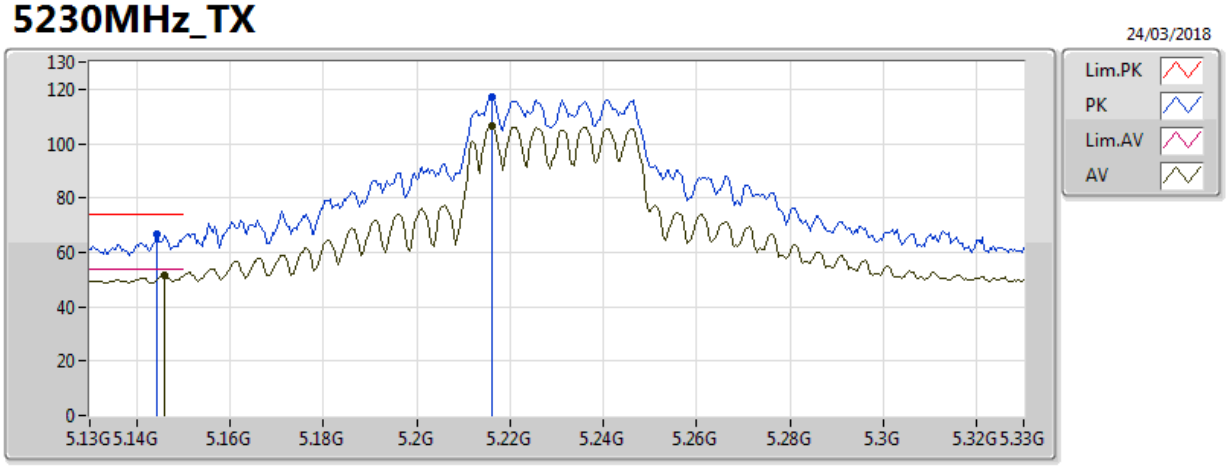


EUT Y_4TX
Setting 90
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1468G	70.39	74.00	-3.61	4.89	3	Vertical	285	1.45	-
AV	5.1472G	53.99	54.00	-0.01	4.90	3	Vertical	285	1.45	-
PK	5.216G	117.42	Inf	-Inf	5.03	3	Vertical	285	1.45	-
AV	5.2364G	108.64	Inf	-Inf	5.12	3	Vertical	285	1.45	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

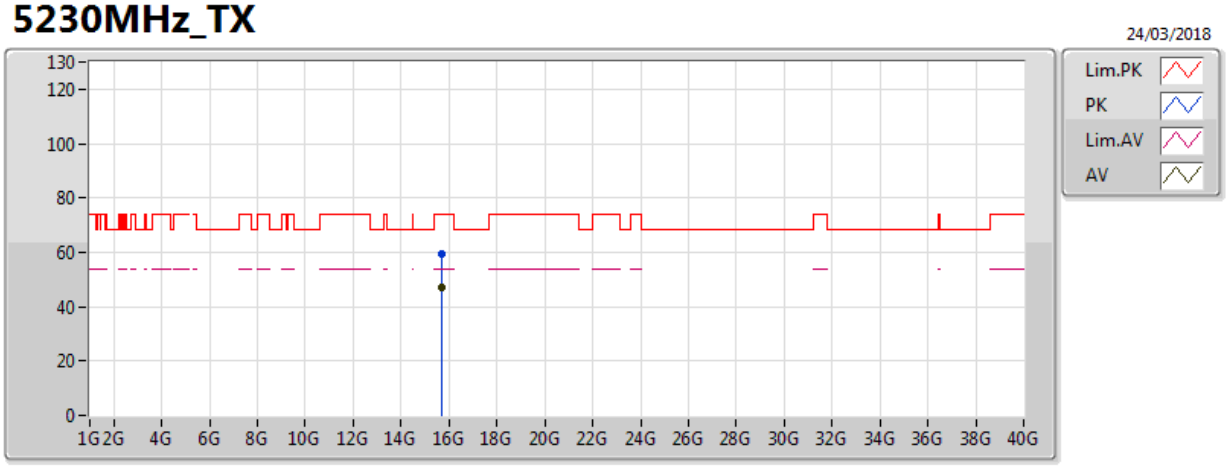


EUT Y_4TX
Setting 90
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1444G	66.41	74.00	-7.59	4.89	3	Horizontal	119	1.36	-
AV	5.146G	51.82	54.00	-2.18	4.89	3	Horizontal	119	1.36	-
PK	5.216G	116.94	Inf	-Inf	5.03	3	Horizontal	119	1.36	-
AV	5.216G	106.19	Inf	-Inf	5.03	3	Horizontal	119	1.36	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

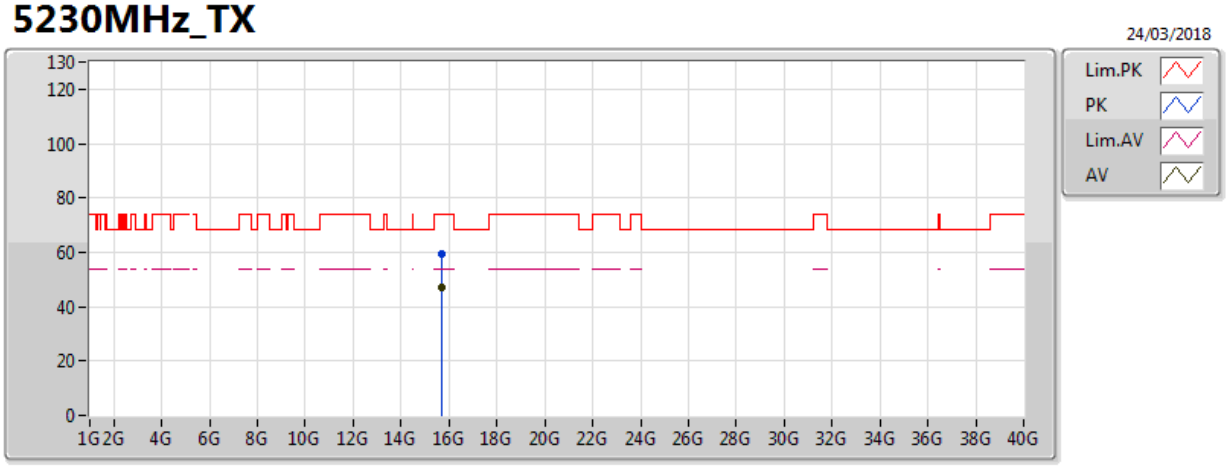


EUT Y_4TX
Setting 90
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.69338G	59.33	74.00	-14.67	15.69	3	Vertical	1	1.50	-
AV	15.69088G	47.32	54.00	-6.68	15.69	3	Vertical	1	1.50	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

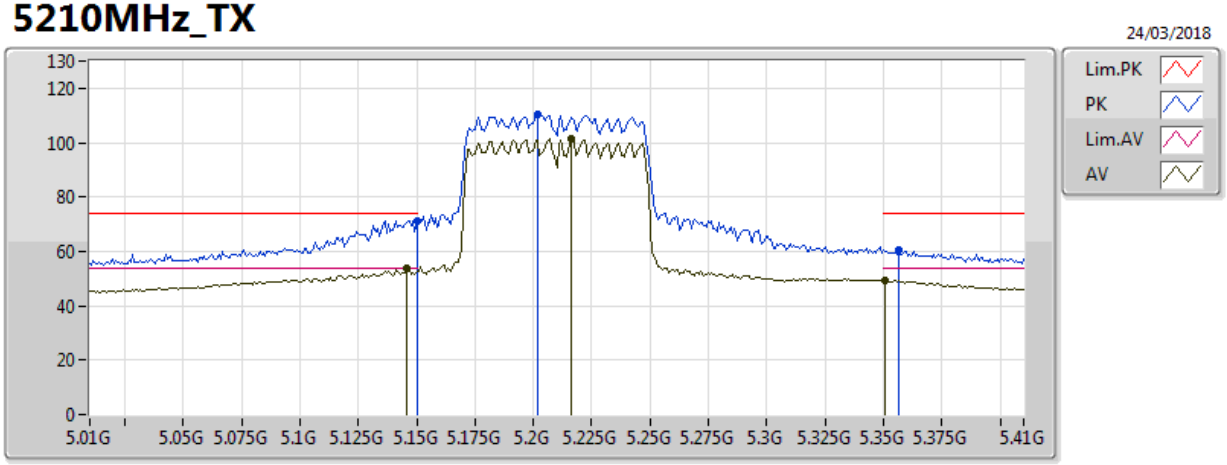


EUT Y_4TX
Setting 90
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.6853G	59.32	74.00	-14.68	15.70	3	Horizontal	360	1.04	-
AV	15.69086G	47.30	54.00	-6.70	15.69	3	Horizontal	360	1.04	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

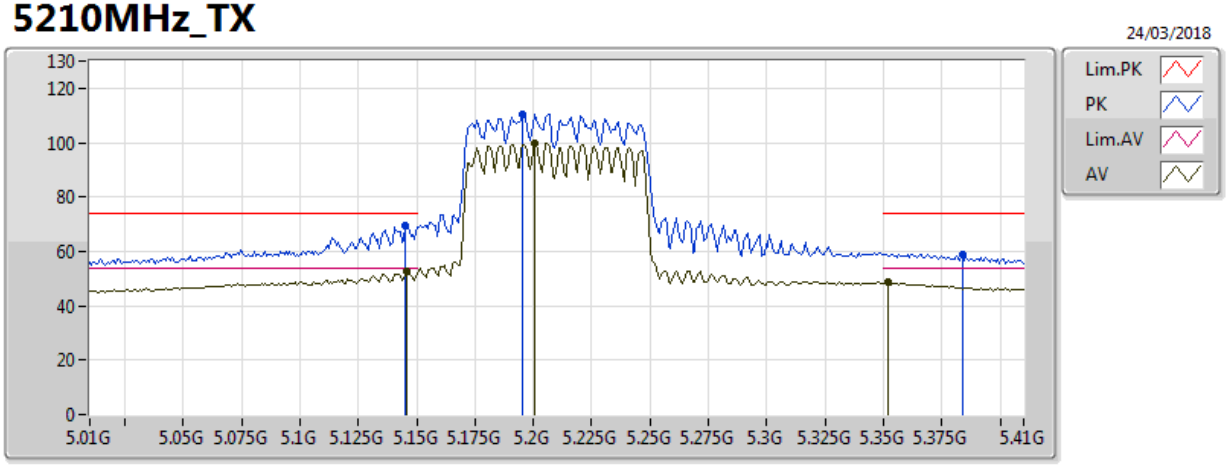


EUT Y_4TX
Setting 73
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.149995G	71.41	74.00	-2.59	4.90	3	Vertical	286	1.47	-
AV	5.146G	53.57	54.00	-0.43	4.89	3	Vertical	286	1.47	-
PK	5.202G	110.47	Inf	-Inf	4.97	3	Vertical	286	1.47	-
AV	5.2164G	101.20	Inf	-Inf	5.03	3	Vertical	286	1.47	-
PK	5.3564G	60.69	74.00	-13.31	5.62	3	Vertical	286	1.47	-
AV	5.3508G	49.39	54.00	-4.61	5.60	3	Vertical	286	1.47	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

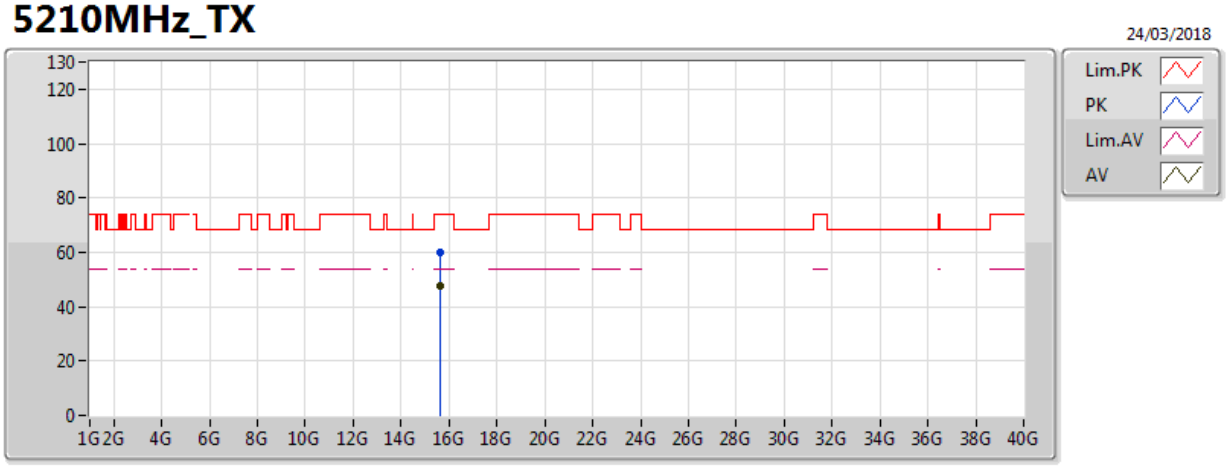


EUT Y_4TX
Setting 73
01-L-3-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1452G	69.24	74.00	-4.76	4.89	3	Horizontal	119	1.50	-
AV	5.146G	52.71	54.00	-1.29	4.89	3	Horizontal	119	1.50	-
PK	5.1956G	110.45	Inf	-Inf	4.95	3	Horizontal	119	1.50	-
AV	5.2004G	99.59	Inf	-Inf	4.96	3	Horizontal	119	1.50	-
PK	5.3836G	58.94	74.00	-15.06	5.72	3	Horizontal	119	1.50	-
AV	5.3516G	48.51	54.00	-5.49	5.60	3	Horizontal	119	1.50	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

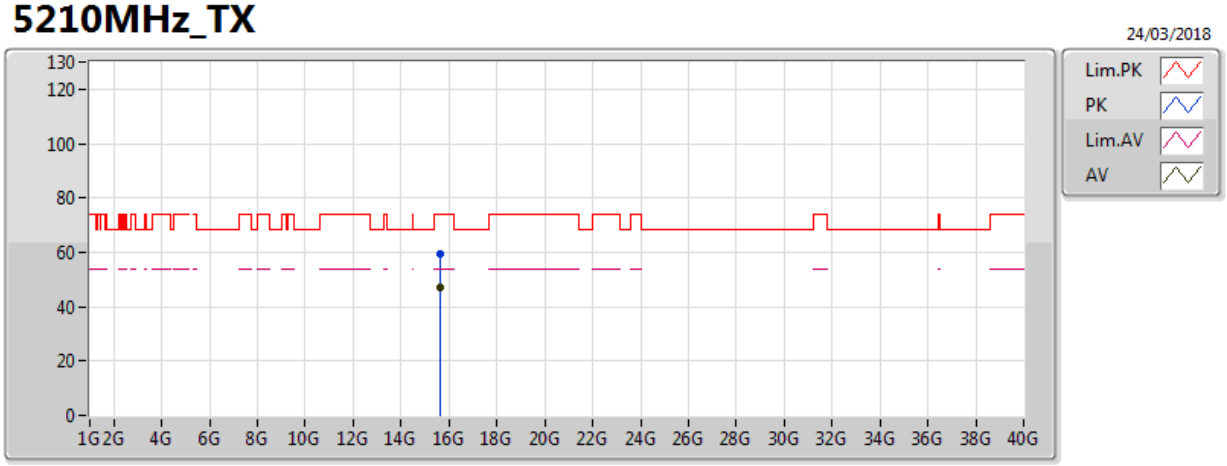


EUT Y_4TX
Setting 73
01-L-3
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.63316G	60.05	74.00	-13.95	15.78	3	Vertical	16	1.49	-
AV	15.63258G	47.57	54.00	-6.43	15.78	3	Vertical	16	1.49	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX



EUT Y_4TX
Setting 73
01-L-3
FSP(100080)

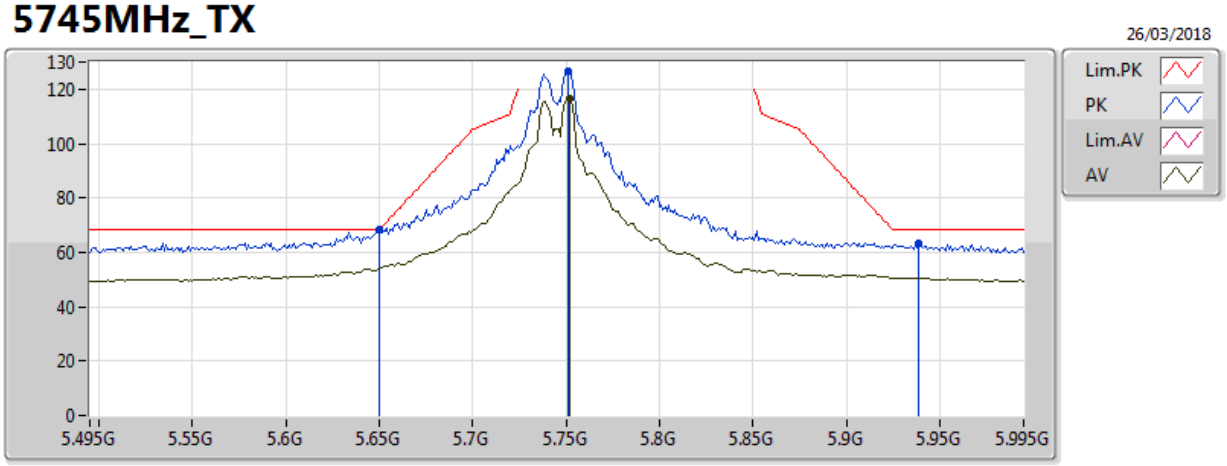
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	15.6273G	59.66	74.00	-14.34	15.79	3	Horizontal	47	1.84	-
AV	15.63004G	46.92	54.00	-7.08	15.79	3	Horizontal	47	1.84	-

Test Mode: Mode 2 / Radio 2
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT20_Nss1,(MCS0)_4TX	Pass	PK	5.649G	68.18	68.20	-0.02	6.47	3	Vertical	246	1.58	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX



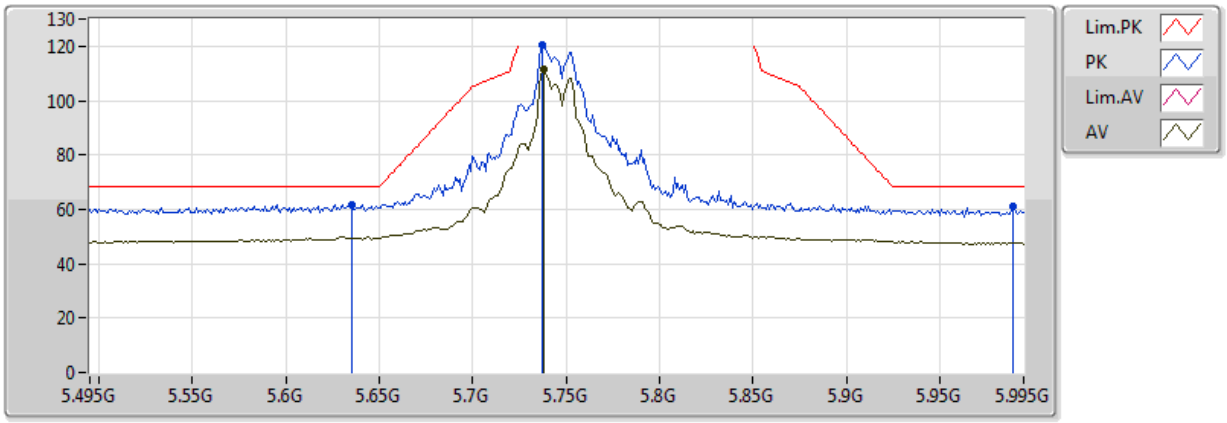
EUT Y_4TX
Setting 106
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.6499G	68.17	68.20	-0.03	6.48	3	Vertical	25	1.29	-
PK	5.751G	126.52	Inf	-Inf	6.89	3	Vertical	25	1.29	-
AV	5.752G	116.79	Inf	-Inf	6.90	3	Vertical	25	1.29	-
PK	5.939G	63.35	68.20	-4.85	7.36	3	Vertical	25	1.29	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

26/03/2018

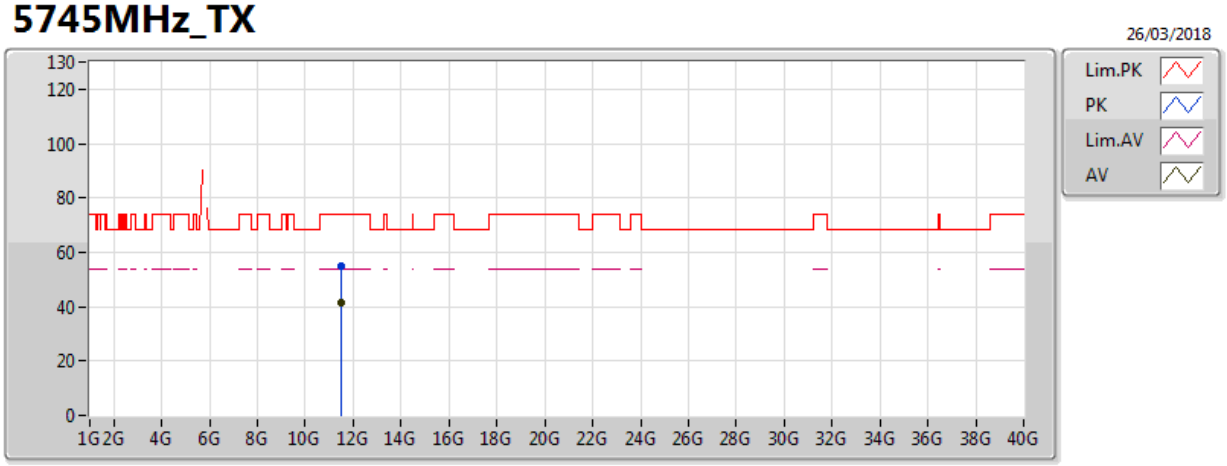


EUT Y_4TX
Setting 106
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.635G	61.79	68.20	-6.41	6.41	3	Horizontal	139	1.22	-
PK	5.737G	120.73	Inf	-Inf	6.84	3	Horizontal	139	1.22	-
AV	5.738G	111.64	Inf	-Inf	6.84	3	Horizontal	139	1.22	-
PK	5.989G	61.31	68.20	-6.89	7.46	3	Horizontal	139	1.22	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

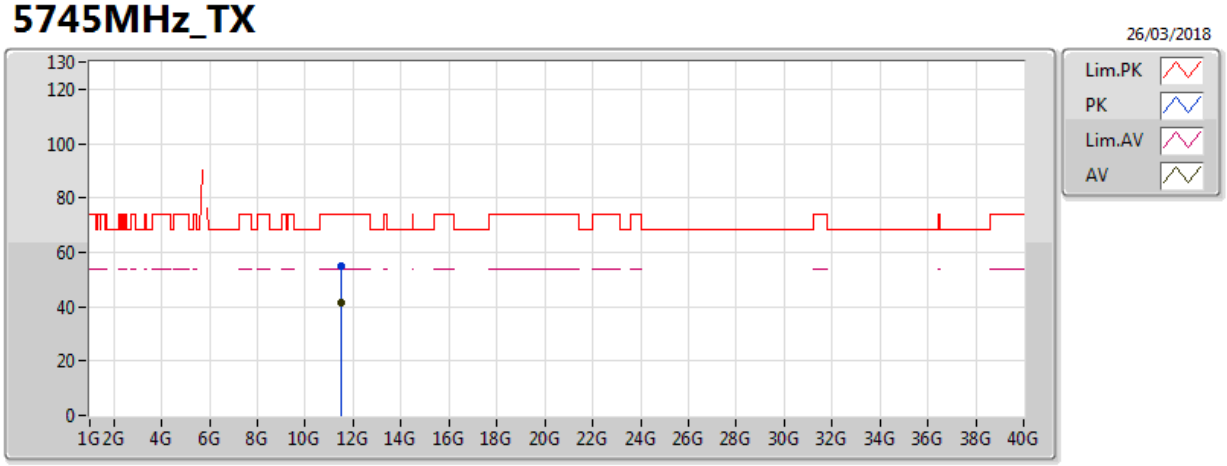


EUT Y_4TX
Setting 106
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.49876G	54.97	74.00	-19.03	13.32	3	Vertical	256	1.99	-
AV	11.4932G	41.56	54.00	-12.44	13.32	3	Vertical	256	1.99	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX



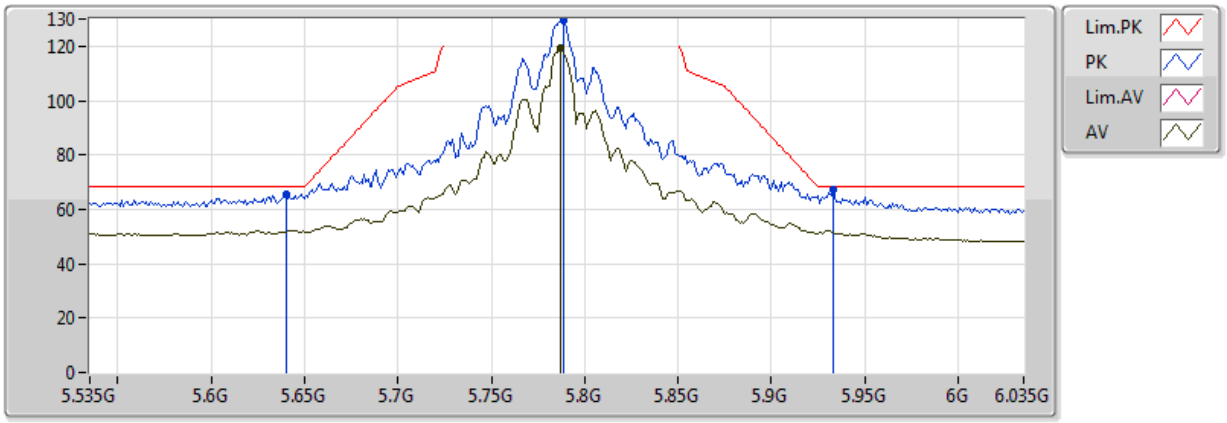
EUT Y_4TX
Setting 106
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.49616G	54.80	74.00	-19.20	13.32	3	Horizontal	58	1.67	-
AV	11.48564G	41.55	54.00	-12.45	13.32	3	Horizontal	58	1.67	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

26/03/2018



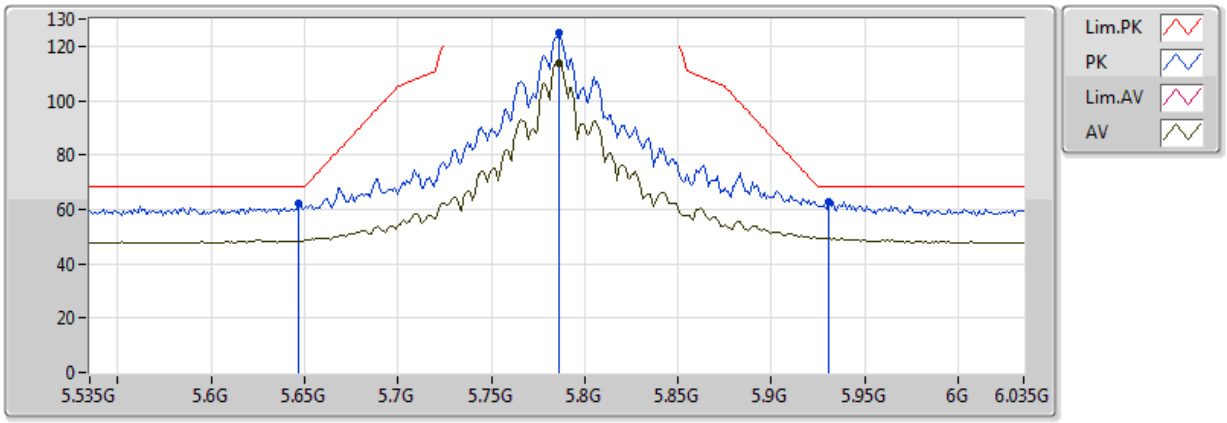
EUT Y_4TX
Setting 120
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.64G	65.43	68.20	-2.77	6.43	3	Vertical	258	1.23	-
PK	5.789G	129.29	Inf	-Inf	7.05	3	Vertical	258	1.23	-
AV	5.787G	119.31	Inf	-Inf	7.05	3	Vertical	258	1.23	-
PK	5.933G	67.34	68.20	-0.86	7.35	3	Vertical	258	1.23	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

26/03/2018

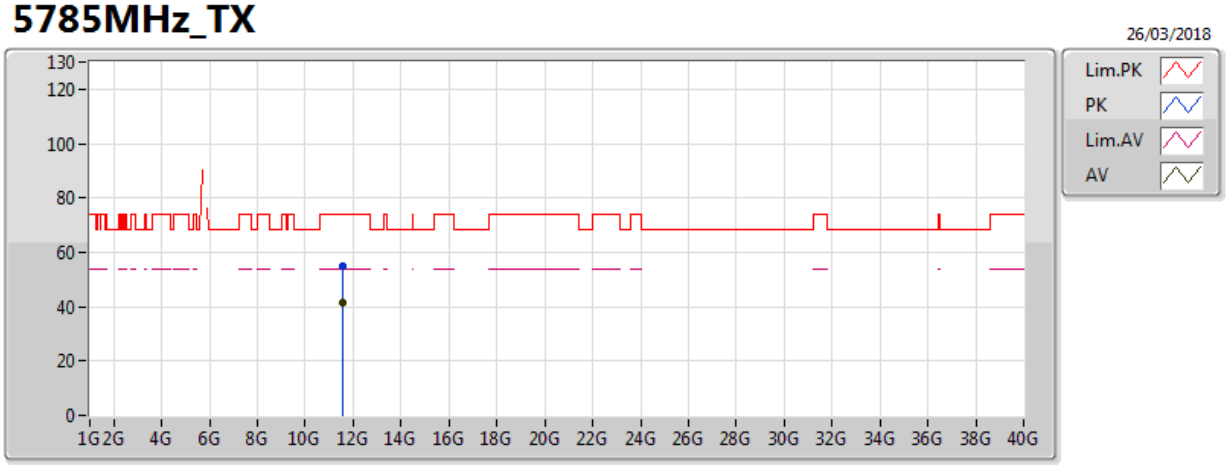


EUT Y_4TX
Setting 120
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.647G	62.12	68.20	-6.08	6.46	3	Horizontal	268	1.67	-
PK	5.786G	124.70	Inf	-Inf	7.04	3	Horizontal	268	1.67	-
AV	5.786G	113.94	Inf	-Inf	7.04	3	Horizontal	268	1.67	-
PK	5.931G	62.80	68.20	-5.40	7.35	3	Horizontal	268	1.67	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

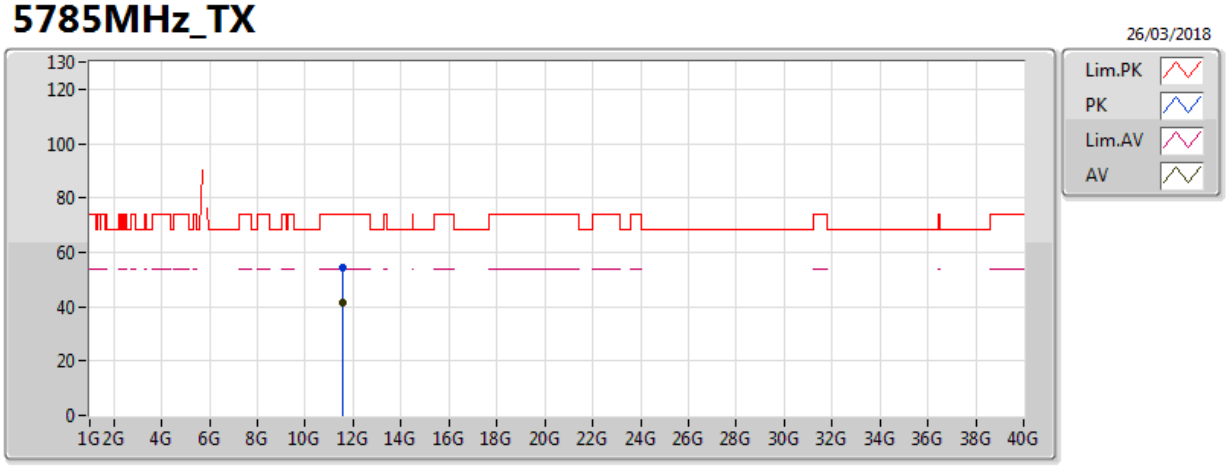


EUT Y_4TX
Setting 120
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.56296G	55.09	74.00	-18.91	13.33	3	Vertical	303	1.54	-
AV	11.56272G	41.32	54.00	-12.68	13.33	3	Vertical	303	1.54	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

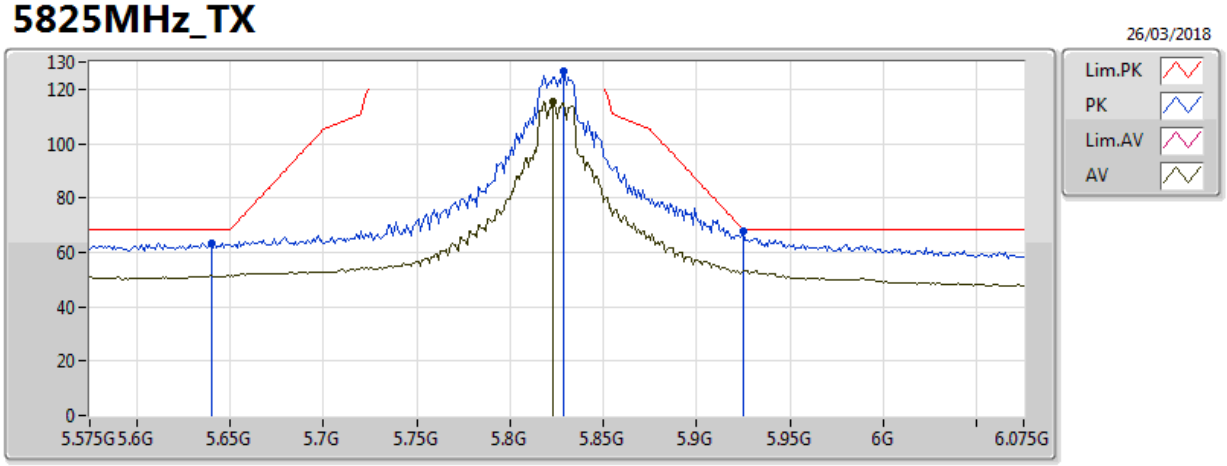


EUT Y_4TX
Setting 120
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.56252G	54.33	74.00	-19.67	13.33	3	Horizontal	174	1.66	-
AV	11.56156G	41.24	54.00	-12.76	13.33	3	Horizontal	174	1.66	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX



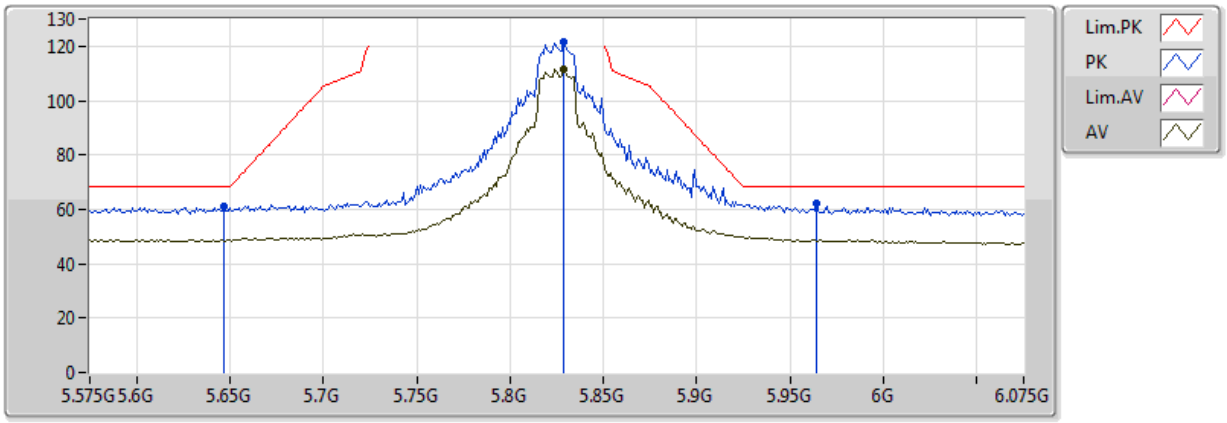
EUT Y_4TX
Setting 107
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.64G	63.49	68.20	-4.71	6.43	3	Vertical	25	1.40	-
PK	5.829G	126.44	Inf	-Inf	7.16	3	Vertical	25	1.40	-
AV	5.823G	115.33	Inf	-Inf	7.14	3	Vertical	25	1.40	-
PK	5.925G	67.77	68.20	-0.43	7.34	3	Vertical	25	1.40	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

26/03/2018

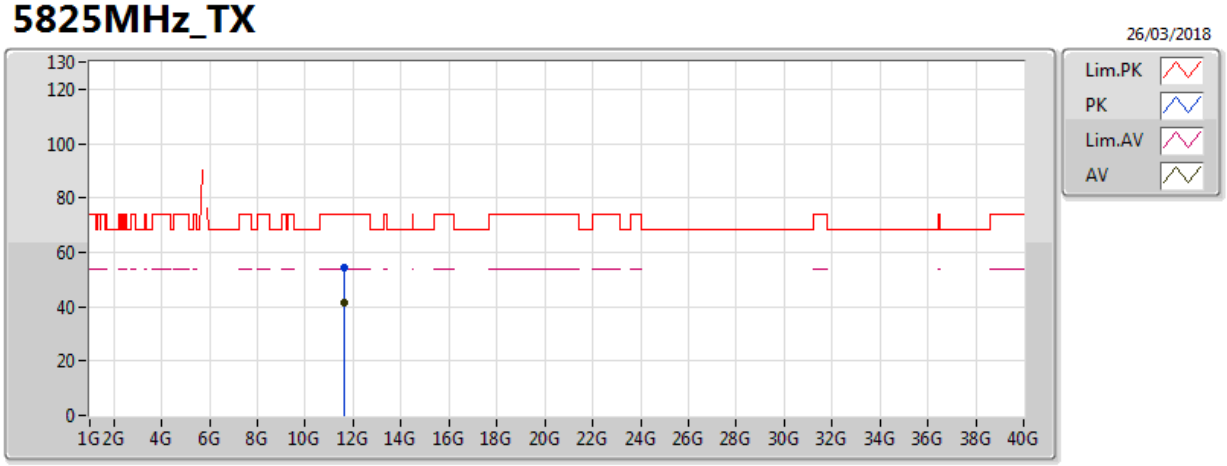


EUT Y_4TX
Setting 107
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.647G	60.81	68.20	-7.39	6.46	3	Horizontal	54	1.57	-
PK	5.829G	121.54	Inf	-Inf	7.16	3	Horizontal	54	1.57	-
AV	5.829G	111.53	Inf	-Inf	7.16	3	Horizontal	54	1.57	-
PK	5.964G	62.20	68.20	-6.00	7.42	3	Horizontal	54	1.57	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

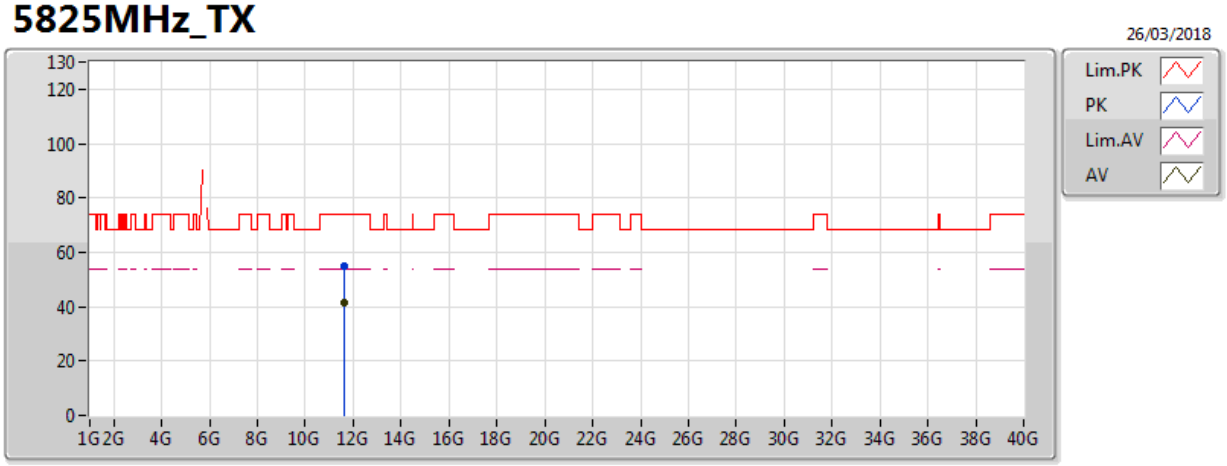


EUT Y_4TX
Setting 107
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.6452G	54.30	74.00	-19.70	13.34	3	Vertical	220	2.01	-
AV	11.6554G	41.22	54.00	-12.78	13.34	3	Vertical	220	2.01	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

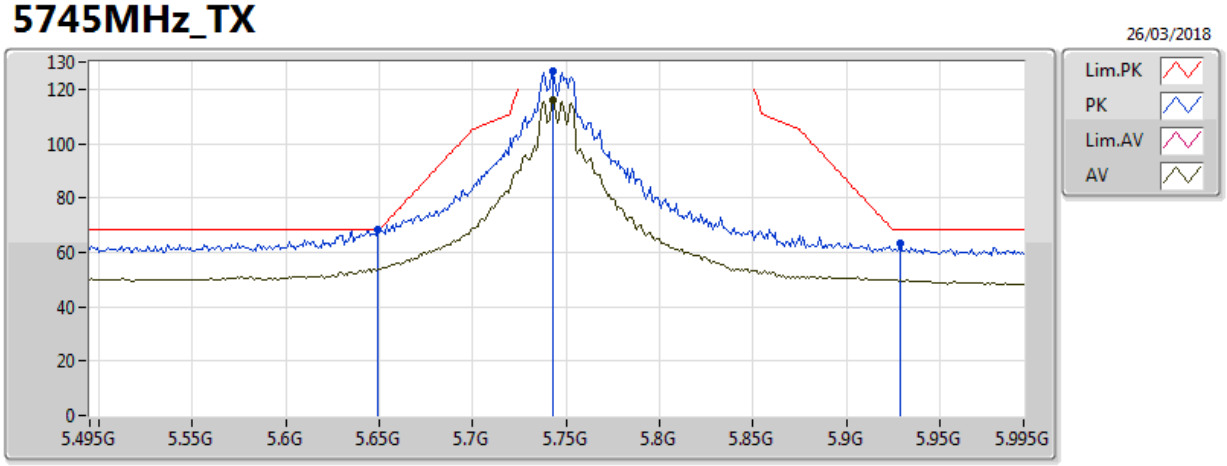


EUT Y_4TX
Setting 107
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.6456G	54.67	74.00	-19.33	13.34	3	Horizontal	92	2.31	-
AV	11.65212G	41.20	54.00	-12.80	13.34	3	Horizontal	92	2.31	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

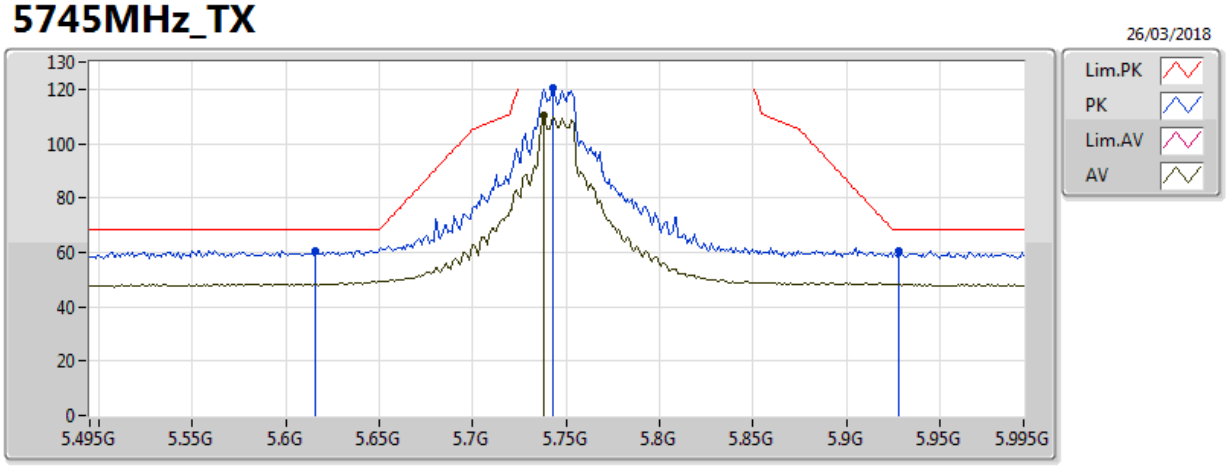


EUT Y_4TX
Setting 105
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.649G	68.18	68.20	-0.02	6.47	3	Vertical	246	1.58	-
PK	5.743G	126.52	Inf	-Inf	6.86	3	Vertical	246	1.58	-
AV	5.743G	115.90	Inf	-Inf	6.86	3	Vertical	246	1.58	-
PK	5.929G	63.08	68.20	-5.12	7.35	3	Vertical	246	1.58	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

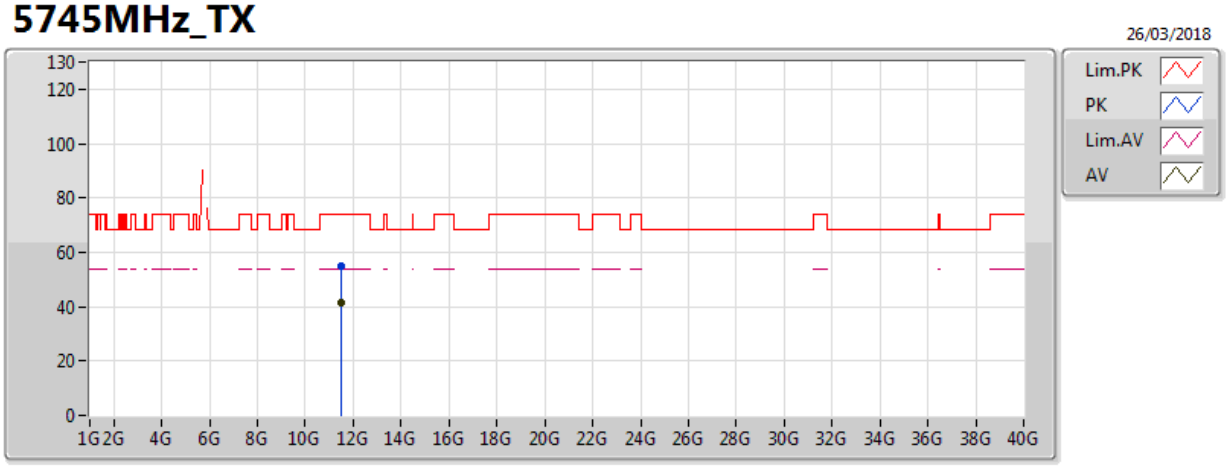


EUT Y_4TX
Setting 105
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.616G	60.54	68.20	-7.66	6.34	3	Horizontal	119	1.69	-
PK	5.743G	120.47	Inf	-Inf	6.86	3	Horizontal	119	1.69	-
AV	5.738G	110.15	Inf	-Inf	6.84	3	Horizontal	119	1.69	-
PK	5.928G	60.47	68.20	-7.73	7.34	3	Horizontal	119	1.69	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

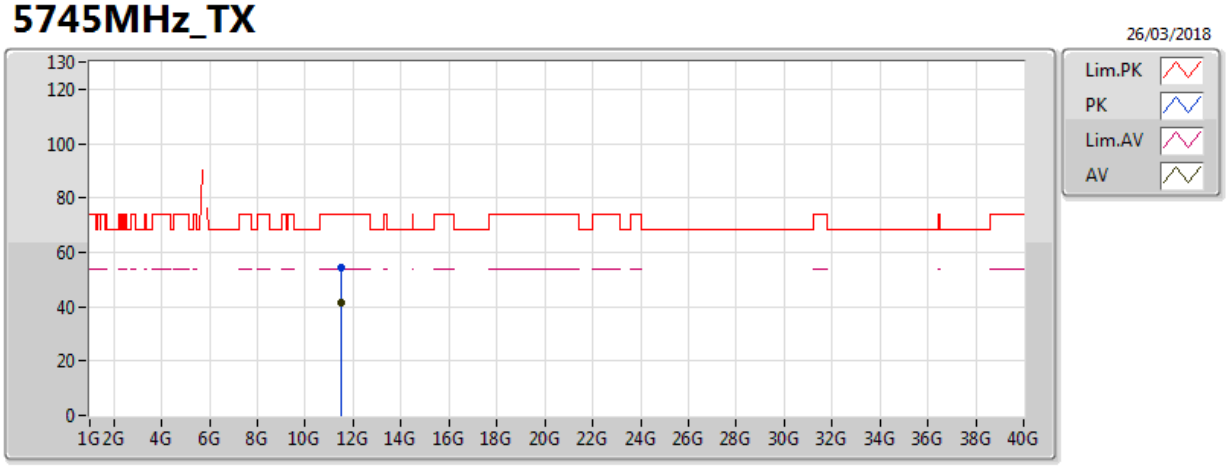


EUT Y_4TX
Setting 105
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.49616G	54.84	74.00	-19.16	13.32	3	Vertical	325	1.24	-
AV	11.49324G	41.36	54.00	-12.64	13.32	3	Vertical	325	1.24	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

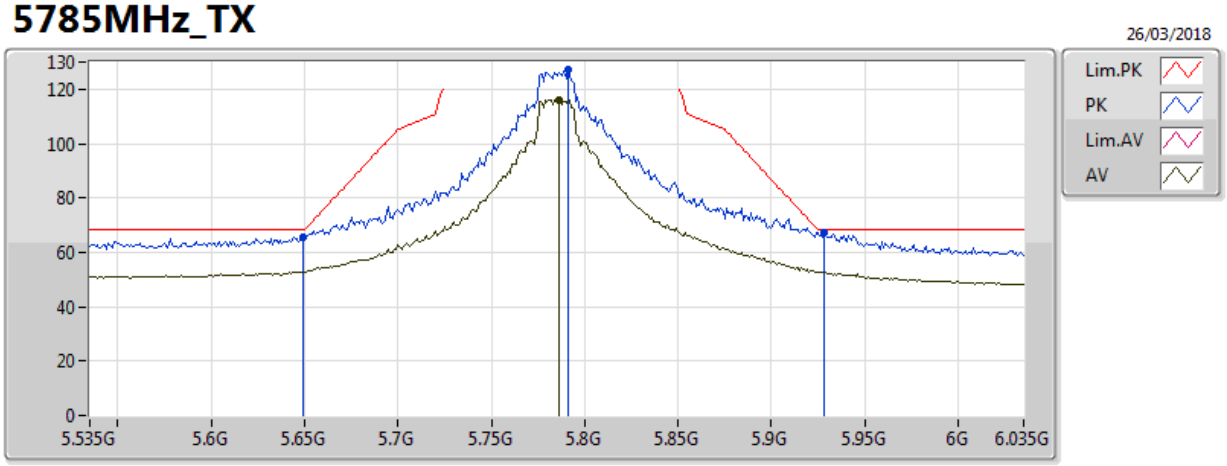


EUT Y_4TX
Setting 105
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.487G	54.38	74.00	-19.62	13.32	3	Horizontal	282	2.79	-
AV	11.4826G	41.57	54.00	-12.43	13.32	3	Horizontal	282	2.79	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX



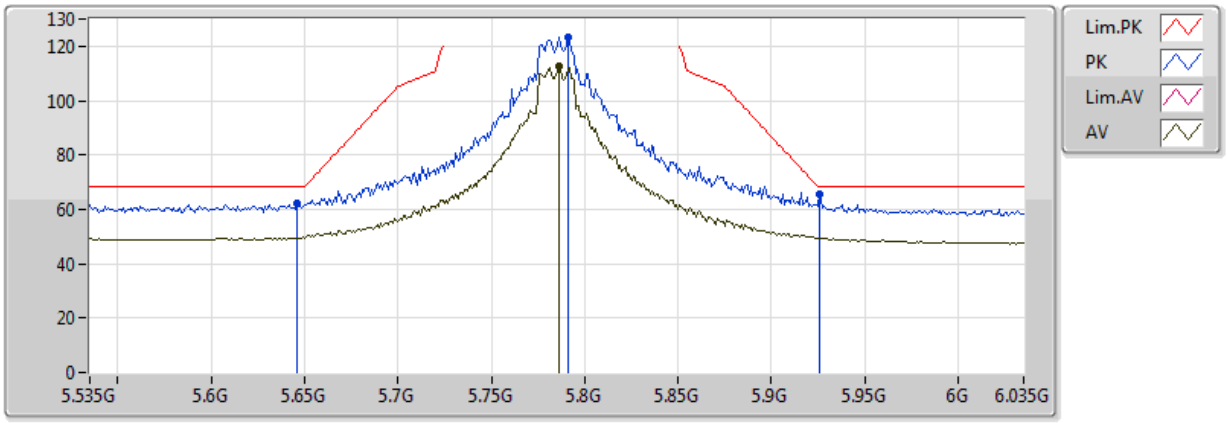
EUT Y_4TX
Setting 120
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.649G	65.82	68.20	-2.38	6.47	3	Vertical	14	1.38	-
PK	5.791G	127.35	Inf	-Inf	7.06	3	Vertical	14	1.38	-
AV	5.786G	116.27	Inf	-Inf	7.04	3	Vertical	14	1.38	-
PK	5.928G	67.30	68.20	-0.90	7.34	3	Vertical	14	1.38	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

26/03/2018

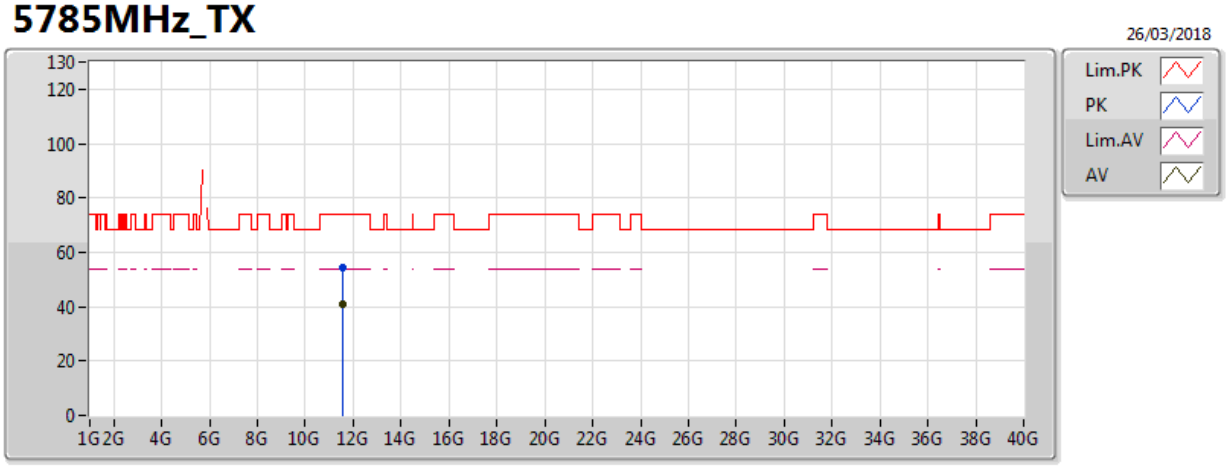


EUT Y_4TX
Setting 120
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.646G	61.92	68.20	-6.28	6.46	3	Horizontal	111	2.19	-
PK	5.791G	123.02	Inf	-Inf	7.06	3	Horizontal	111	2.19	-
AV	5.786G	112.42	Inf	-Inf	7.04	3	Horizontal	111	2.19	-
PK	5.926G	65.51	68.20	-2.69	7.33	3	Horizontal	111	2.19	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

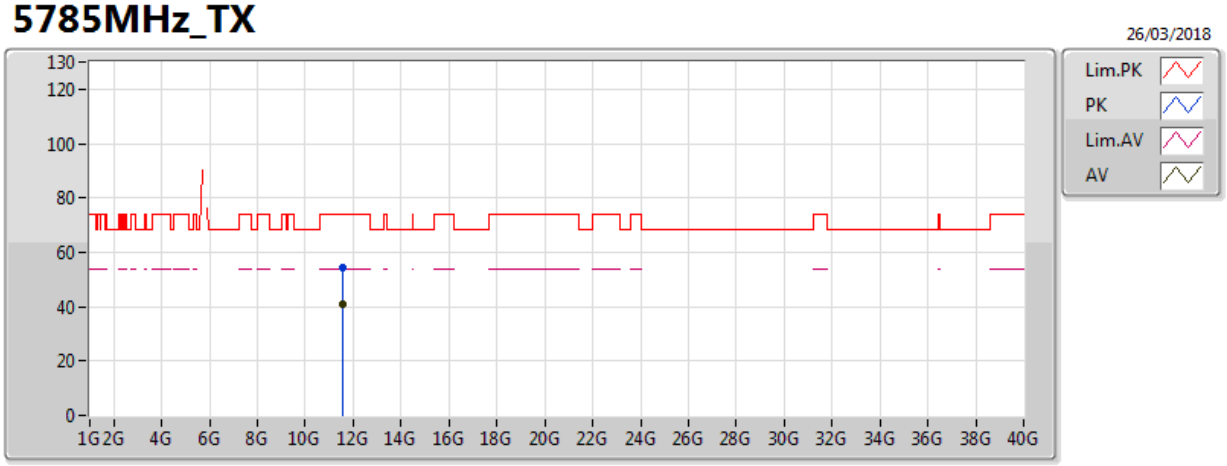


EUT Y_4TX
Setting 120
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.56948G	54.37	74.00	-19.63	13.33	3	Vertical	190	1.76	-
AV	11.56868G	41.03	54.00	-12.97	13.33	3	Vertical	190	1.76	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

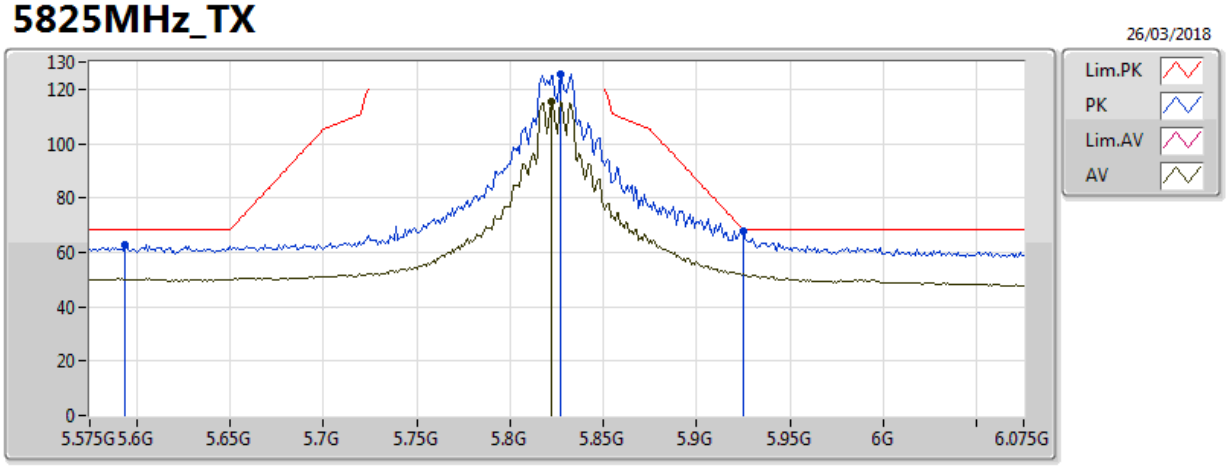


EUT Y_4TX
Setting 120
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.57992G	54.36	74.00	-19.64	13.33	3	Horizontal	64	2.34	-
AV	11.56096G	41.11	54.00	-12.89	13.33	3	Horizontal	64	2.34	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

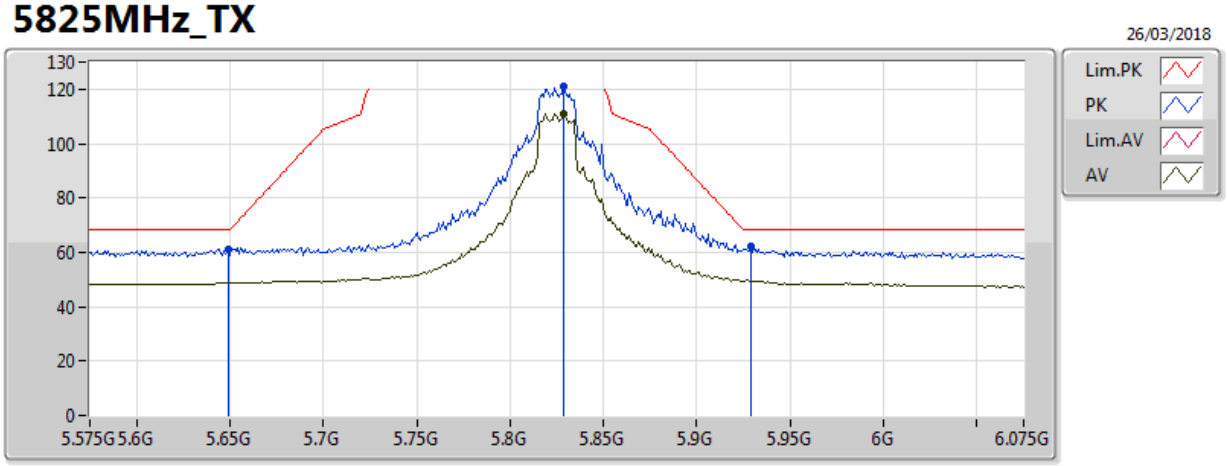


EUT Y_4TX
Setting 106
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.594G	62.65	68.20	-5.55	6.25	3	Vertical	205	1.96	-
PK	5.827G	125.36	Inf	-Inf	7.15	3	Vertical	205	1.96	-
AV	5.822G	115.34	Inf	-Inf	7.14	3	Vertical	205	1.96	-
PK	5.925G	67.74	68.20	-0.46	7.33	3	Vertical	205	1.96	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

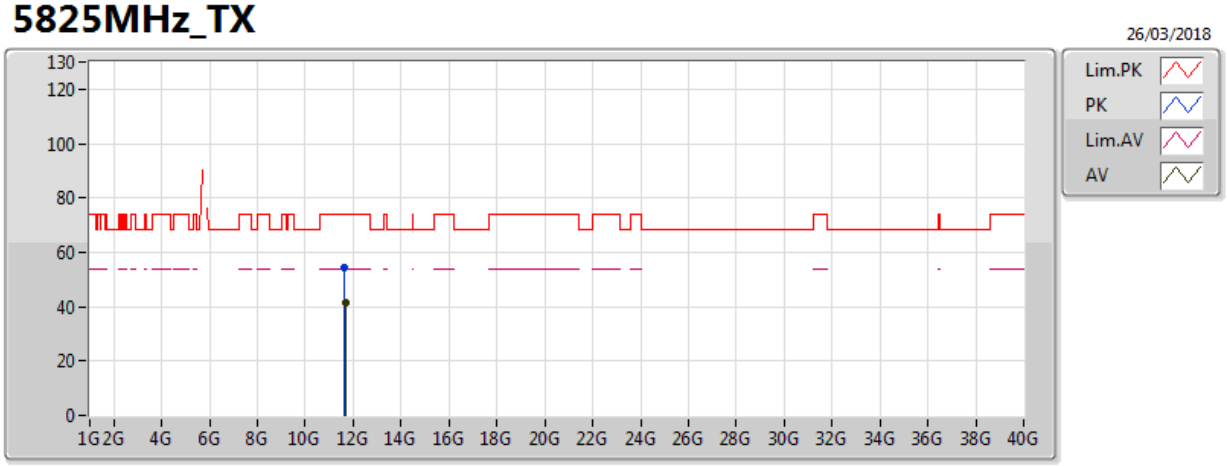


EUT Y_4TX
Setting 106
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.649G	60.97	68.20	-7.23	6.47	3	Horizontal	52	1.65	-
PK	5.829G	121.23	Inf	-Inf	7.16	3	Horizontal	52	1.65	-
AV	5.829G	110.91	Inf	-Inf	7.16	3	Horizontal	52	1.65	-
PK	5.929G	61.99	68.20	-6.21	7.34	3	Horizontal	52	1.65	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

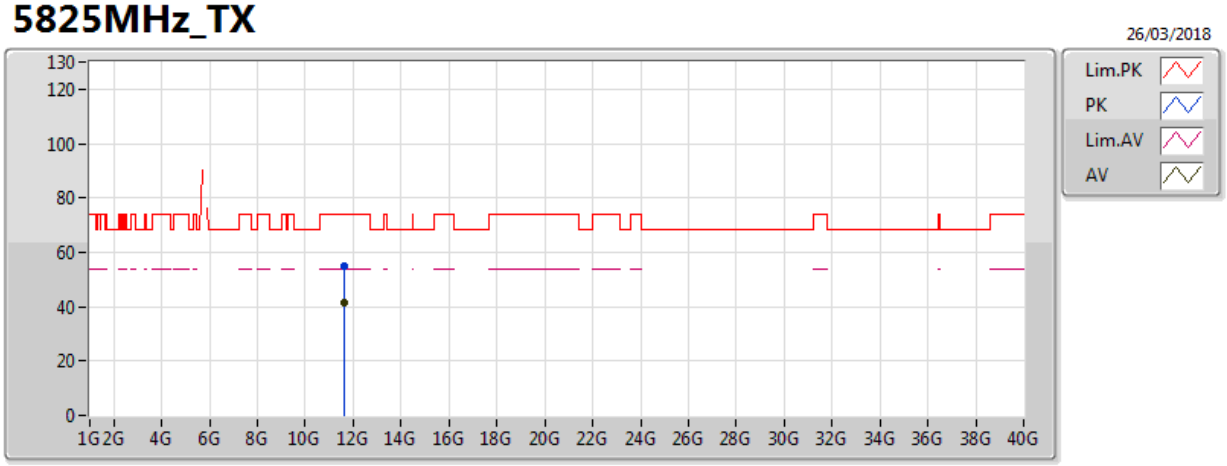


EUT Y_4TX
Setting 106
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.65632G	54.52	74.00	-19.48	13.34	3	Vertical	79	2.00	-
AV	11.65872G	41.34	54.00	-12.66	13.34	3	Vertical	79	2.00	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

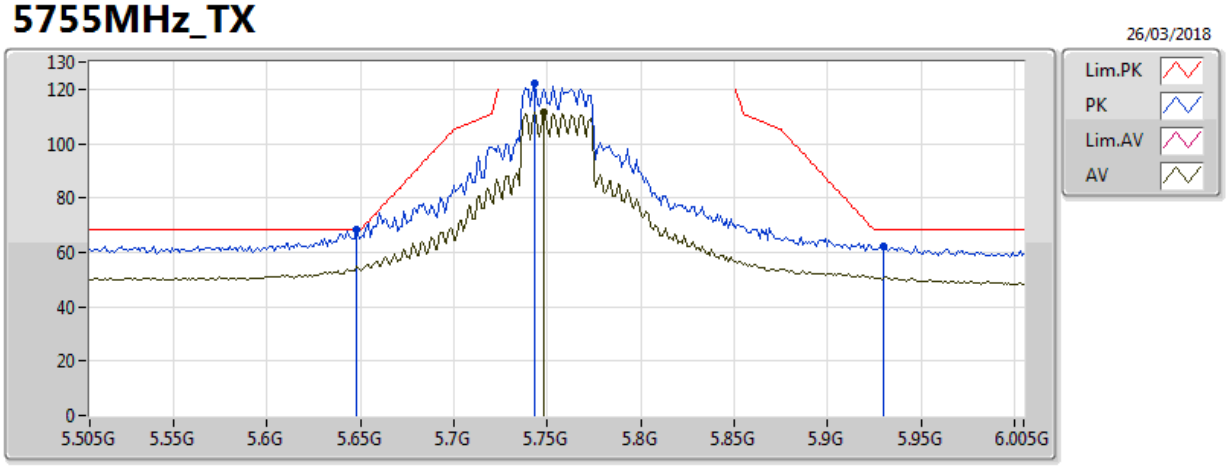


EUT Y_4TX
Setting 106
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.65348G	54.68	74.00	-19.32	13.34	3	Horizontal	47	1.33	-
AV	11.65484G	41.52	54.00	-12.48	13.34	3	Horizontal	47	1.33	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

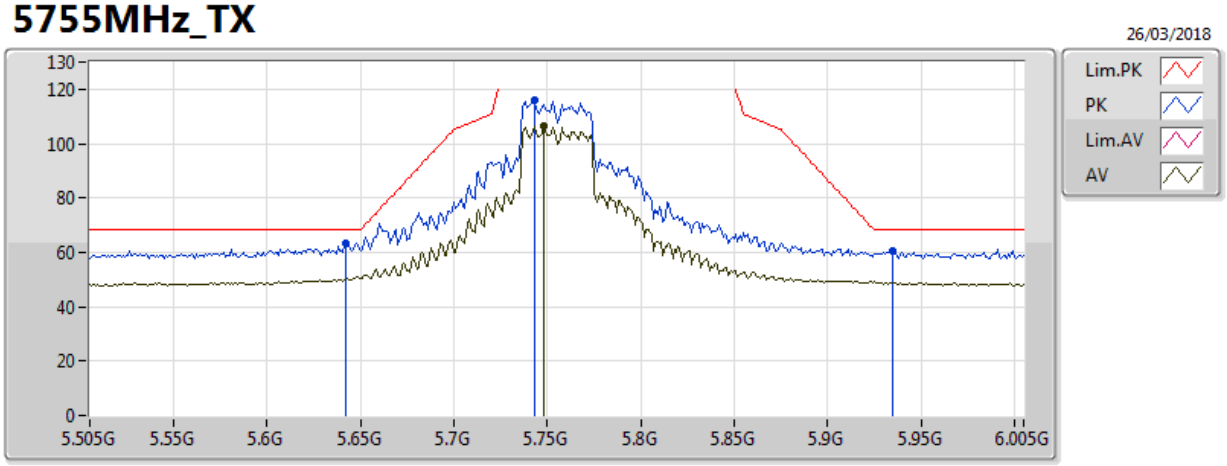


EUT Y_4TX
Setting 98
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.648G	68.15	68.20	-0.05	6.47	3	Vertical	247	2.33	-
PK	5.743G	121.94	Inf	-Inf	6.86	3	Vertical	247	2.33	-
AV	5.748G	111.40	Inf	-Inf	6.88	3	Vertical	247	2.33	-
PK	5.93G	62.03	68.20	-6.17	7.35	3	Vertical	247	2.33	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

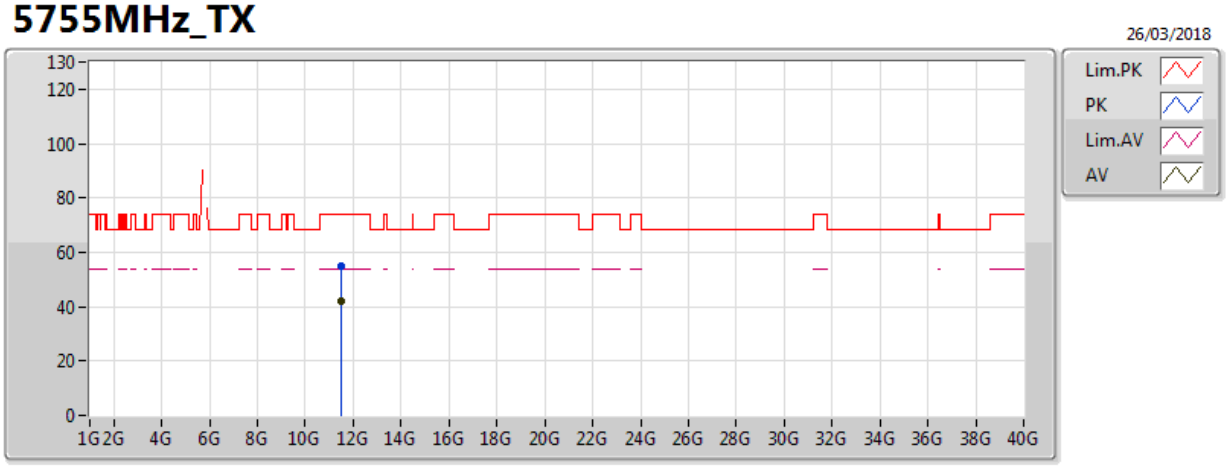


EUT Y_4TX
Setting 98
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.642G	63.47	68.20	-4.73	6.44	3	Horizontal	122	1.72	-
PK	5.743G	115.89	Inf	-Inf	6.86	3	Horizontal	122	1.72	-
AV	5.748G	106.29	Inf	-Inf	6.88	3	Horizontal	122	1.72	-
PK	5.935G	60.52	68.20	-7.68	7.36	3	Horizontal	122	1.72	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

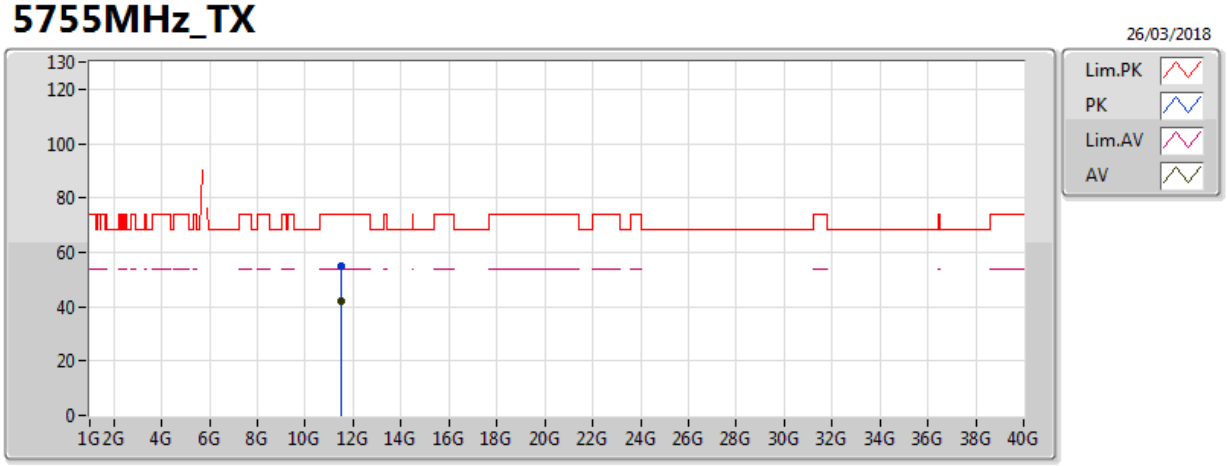


EUT Y_4TX
Setting 98
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.50908G	54.90	74.00	-19.10	13.33	3	Vertical	152	2.97	-
AV	11.50304G	42.02	54.00	-11.98	13.33	3	Vertical	152	2.97	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

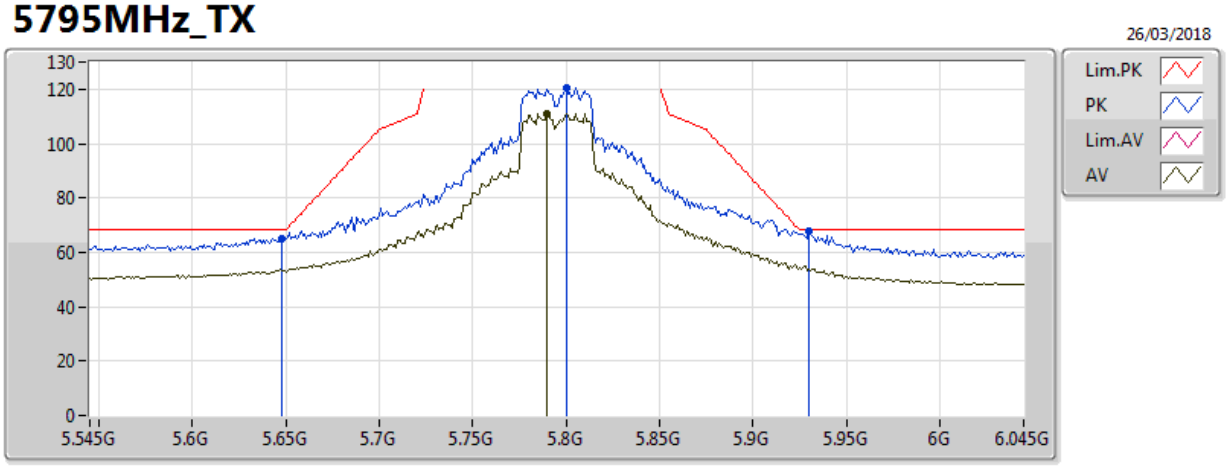


EUT Y_4TX
Setting 98
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.50084G	54.78	74.00	-19.22	13.33	3	Horizontal	153	1.95	-
AV	11.50808G	41.91	54.00	-12.09	13.33	3	Horizontal	153	1.95	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

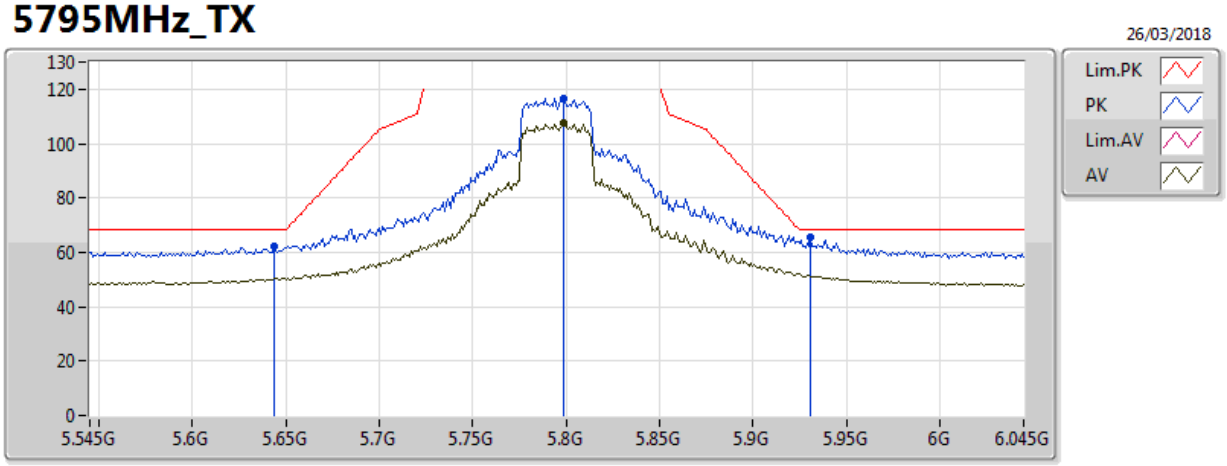


EUT Y_4TX
Setting 102
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.648G	65.19	68.20	-3.01	6.47	3	Vertical	353	1.47	-
PK	5.8G	120.60	Inf	-Inf	7.10	3	Vertical	353	1.47	-
AV	5.79G	111.16	Inf	-Inf	7.06	3	Vertical	353	1.47	-
PK	5.93G	67.98	68.20	-0.22	7.34	3	Vertical	353	1.47	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

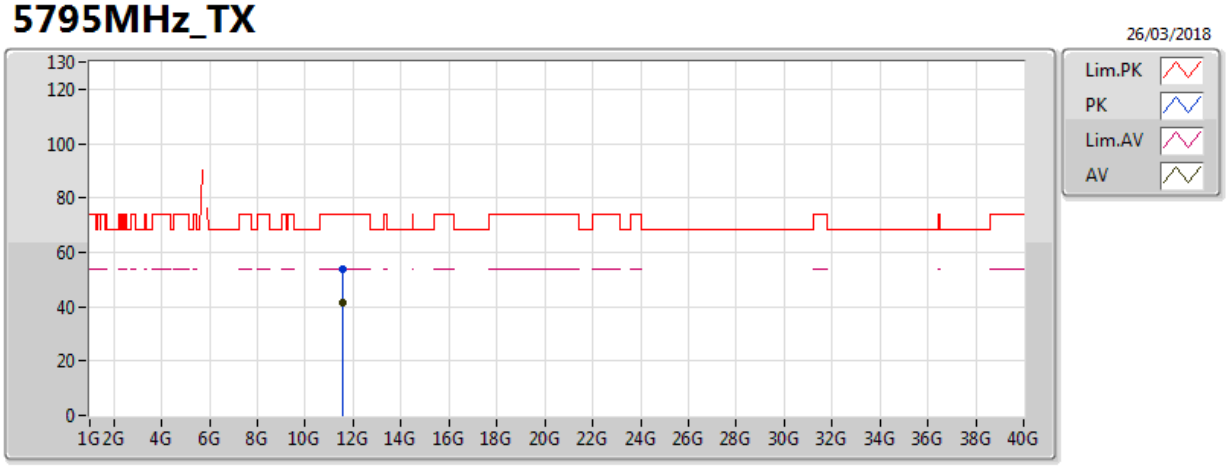


EUT Y_4TX
Setting 102
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.644G	62.46	68.20	-5.74	6.45	3	Horizontal	50	1.54	-
PK	5.799G	116.59	Inf	-Inf	7.10	3	Horizontal	50	1.54	-
AV	5.799G	107.33	Inf	-Inf	7.10	3	Horizontal	50	1.54	-
PK	5.931G	65.39	68.20	-2.81	7.35	3	Horizontal	50	1.54	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

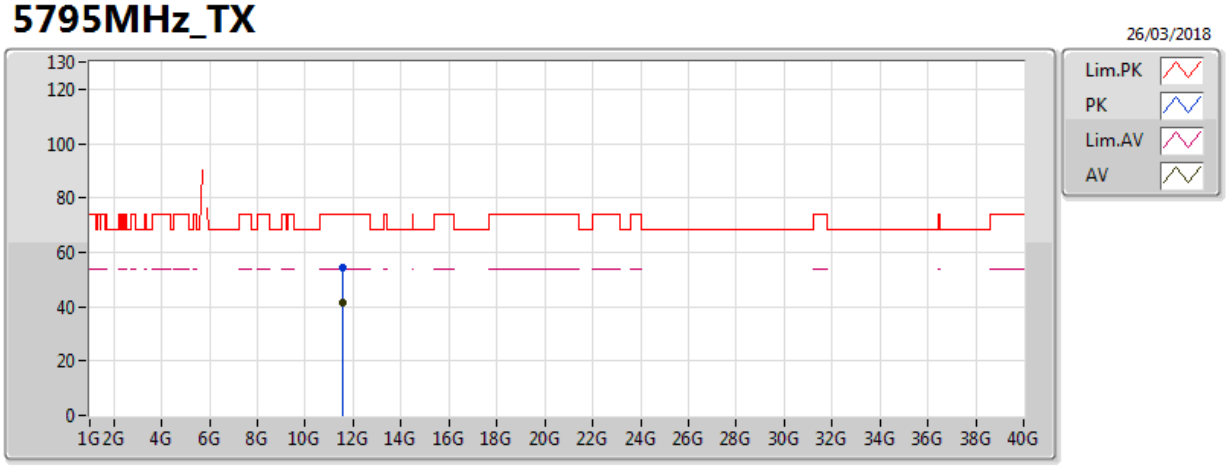


EUT Y_4TX
Setting 102
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.58652G	53.95	74.00	-20.05	13.33	3	Vertical	323	1.95	-
AV	11.58364G	41.43	54.00	-12.57	13.33	3	Vertical	323	1.95	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX



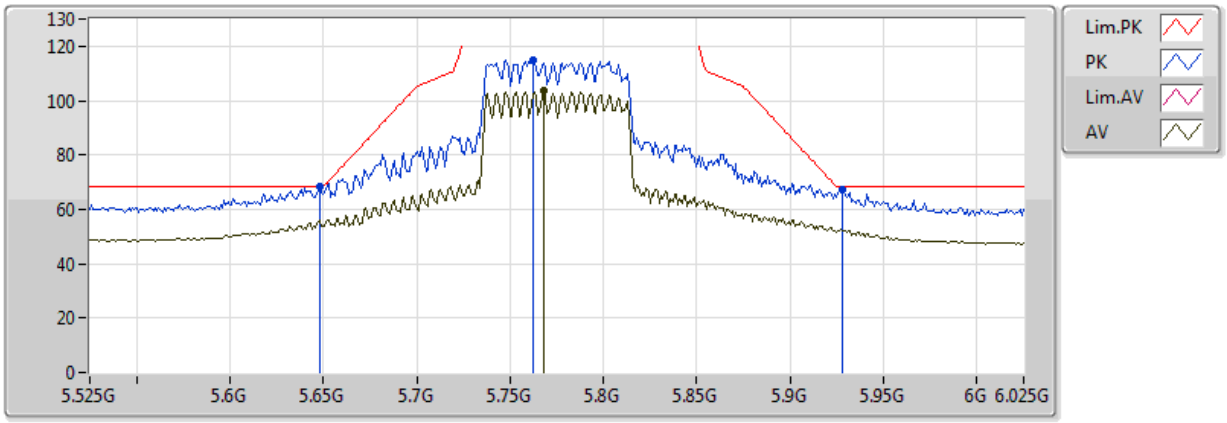
EUT Y_4TX
Setting 102
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.5888G	54.56	74.00	-19.44	13.33	3	Horizontal	92	2.14	-
AV	11.59232G	41.51	54.00	-12.49	13.33	3	Horizontal	92	2.14	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

26/03/2018



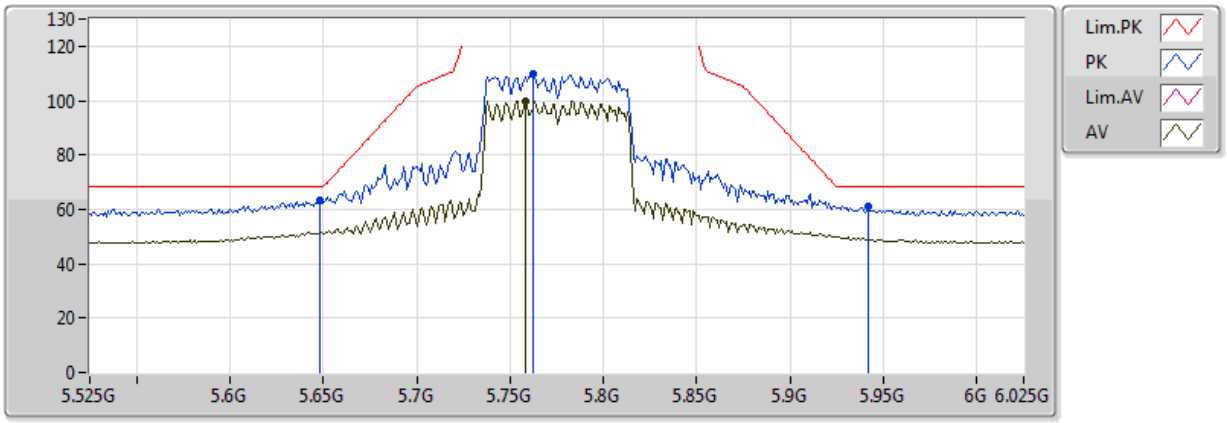
EUT Y_4TX
Setting 85
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.648G	68.11	68.20	-0.09	6.47	3	Vertical	244	1.56	-
PK	5.762G	114.79	Inf	-Inf	6.94	3	Vertical	244	1.56	-
AV	5.768G	103.49	Inf	-Inf	6.97	3	Vertical	244	1.56	-
PK	5.928G	67.25	68.20	-0.95	7.34	3	Vertical	244	1.56	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

26/03/2018

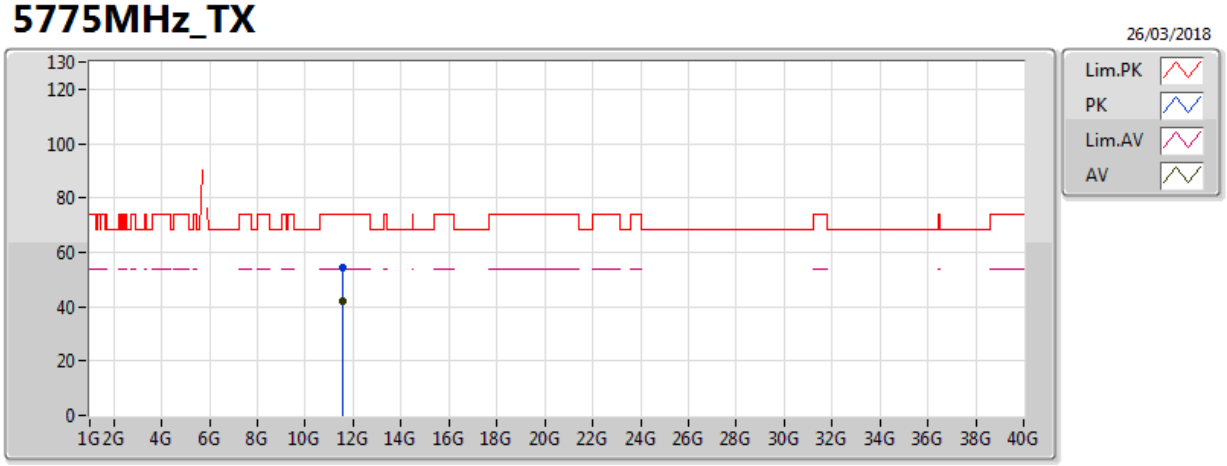


EUT Y_4TX
Setting 85
01-J-6-10
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.648G	63.59	68.20	-4.61	6.46	3	Horizontal	119	1.55	-
PK	5.762G	109.68	Inf	-Inf	6.94	3	Horizontal	119	1.55	-
AV	5.758G	99.88	Inf	-Inf	6.92	3	Horizontal	119	1.55	-
PK	5.942G	61.02	68.20	-7.18	7.37	3	Horizontal	119	1.55	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

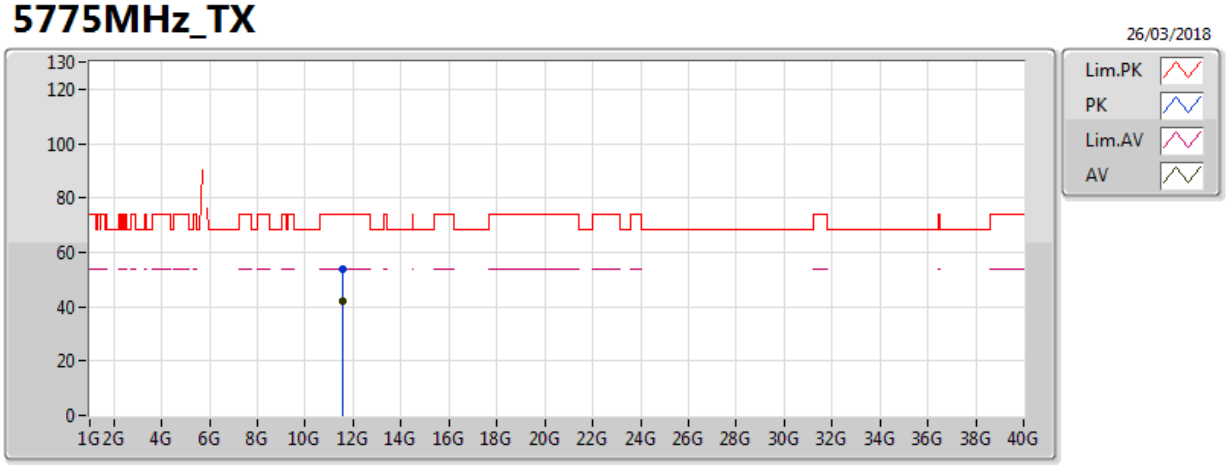


EUT Y_4TX
Setting 85
01-J-6
FSP(100080)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.55088G	54.42	74.00	-19.58	13.33	3	Vertical	289	1.54	-
AV	11.54188G	42.06	54.00	-11.94	13.33	3	Vertical	289	1.54	-

802.11ac VHT80_Nss1,(MCS0)_4TX

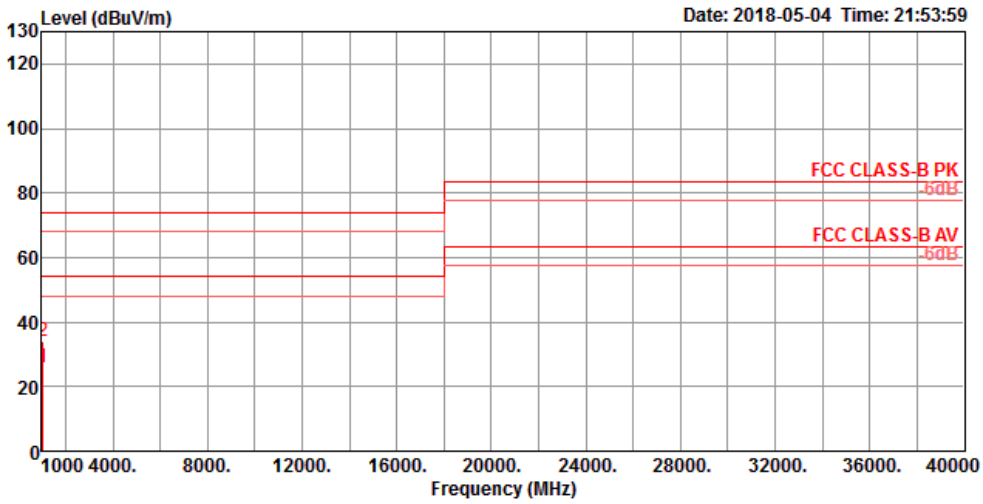
5775MHz_TX



EUT Y_4TX
Setting 85
01-J-6
FSP(100080)

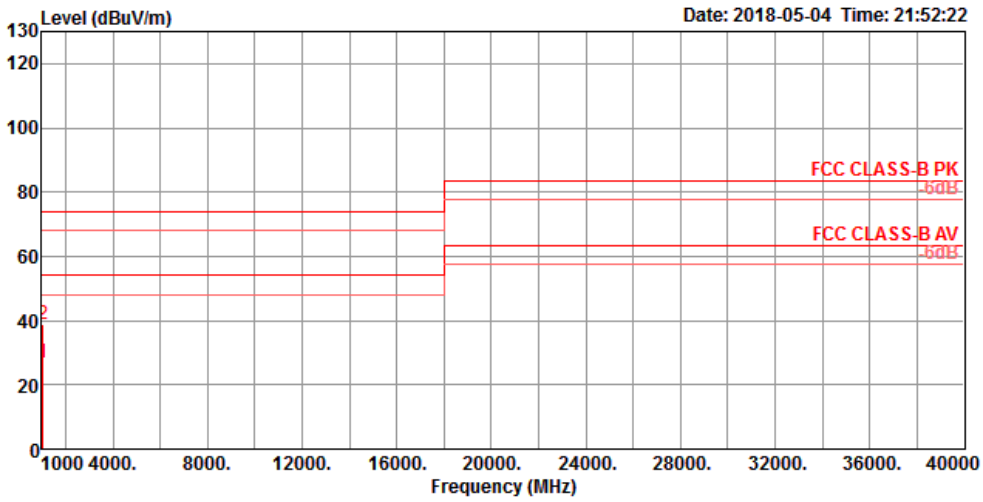
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.5522G	54.06	74.00	-19.94	13.33	3	Horizontal	198	1.39	-
AV	11.54496G	42.02	54.00	-11.98	13.33	3	Horizontal	198	1.39	-

RSE Co-location Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	CTX - Radio 1 (2.4GHz) + Radio 3 (WLAN 5GHz B1)		



	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	1056.62	25.81	54.00	-28.19	33.88	4.49	24.45	37.01	118	171	Average	HORIZONTAL
2	1056.93	34.08	74.00	-39.92	42.15	4.49	24.45	37.01	118	171	Peak	HORIZONTAL

RSE Co-location Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	CTX - Radio 1 (2.4GHz) + Radio 3 (WLAN 5GHz B1)		



	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	1056.56	26.63	54.00	-27.37	34.70	4.49	24.45	37.01	140	329	Average	VERTICAL
2	1058.08	39.07	74.00	-34.93	47.10	4.50	24.46	36.99	140	329	Peak	VERTICAL