FCC Test Report

FCC ID	:	**UIDTG3442**
Equipment	:	**Wireless Gateway**
Brand Name	:	**ARRIS**
Model Name	:	**TG3442**
Applicant	:	**ARRIS** **3871 Lakefield Drive, Suite 300, Suwanee, GA 30024**
Manufacturer	:	**ARRIS** **3871 Lakefield Drive, Suite 300, Suwanee, GA 30024**
Standard	:	**47 CFR FCC Part 15.407**

The product was received on Mar. 30, 2020, and testing was started from Apr. 01, 2020 and completed on Apr. 11, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The 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 INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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

Table of Contents

HISTORY OF THIS TEST REPORT **3**

SUMMARY OF TEST RESULT **4**

1 GENERAL DESCRIPTION **5**

1.1 Information 5
1.2 Testing Applied Standards 8
1.3 Testing Location Information 8
1.4 Measurement Uncertainty 9

2 TEST CONFIGURATION OF EUT **10**

2.1 Test Condition 10
2.2 Test Channel Mode 10
2.3 The Worst Case Measurement Configuration 11
2.4 Accessories 12
2.5 Support Equipment 12
2.6 Test Setup Diagram 13

3 TRANSMITTER TEST RESULT **14**

3.1 AC Power-line Conducted Emissions 14
3.2 Emission Bandwidth 16
3.3 Maximum Conducted Output Power 17
3.4 Peak Power Spectral Density 19
3.5 Unwanted Emissions 21
3.6 Test Equipment and Calibration Data 25

APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS

APPENDIX B. TEST RESULTS OF EMISSION BANDWIDTH

APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER

APPENDIX D. TEST RESULTS OF PEAK POWER SPECTRAL DENSITY

APPENDIX E. TEST RESULTS OF UNWANTED EMISSIONS

APPENDIX F. TEST PHOTOS

PHOTOGRAPHS OF EUT V01

History of this test report

Report No.	Version	Description	Issued Date
FR030703AN	01	Initial issue of report	Jun. 04, 2020
FR030703AN	02	Revised received date. This report is the latest version replacing for the report issued on Jun. 04, 2020.	Jun. 16, 2020

Summary of Test Result

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

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and explanations:
None

Reviewed by: Sam Tsai

Report Producer: Amber Chiu

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
5.725-5.85GHz	802.11a	20	4TX
5.15-5.25GHz	802.11ac VHT20	20	4TX
5.725-5.85GHz	802.11ac VHT20	20	4TX
5.15-5.25GHz	802.11ac VHT40	40	4TX
5.725-5.85GHz	802.11ac VHT40	40	4TX
5.15-5.25GHz	802.11ac VHT80	80	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, 256QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support
1	Galtronics	02036073-06325A2	PIFA antenna	mini-muruta	2.4G
2	Galtronics	02036073-06325B2	PIFA antenna	mini-muruta	2.4G
3	Galtronics	02036073-06325B1	PIFA antenna	mini-muruta	2.4G
4	Galtronics	02036142-06325A1	PIFA antenna	mini-muruta	5G
5	Galtronics	02036142-06325B1	PIFA antenna	mini-muruta	5G
6	Galtronics	02036142-06325B2	PIFA antenna	mini-muruta	5G
7	Galtronics	02036142-06325A2	PIFA antenna	mini-muruta	5G

Ant.	Peak Gain (dBi)					
	2.4G	5G				
		5150MHz	5250MHz	5350MHz	5725MHz	5825MHz
1~3	3.5	-	-	-	-	-
4~7	-	4.66	4.93	4.98	5.06	5.53

Ant.	Correlated Gain (dBi)					
	2.4G	5G				
		5150MHz	5250MHz	5350MHz	5725MHz	5825MHz
1~3	4.03	-	-	-	-	-
4~7	-	6.50	7.43	7.20	7.02	6.78

Note 1: The EUT has seven antennas.

For 2.4GHz function:

For IEEE 802.11 b mode (1TX/1RX)

Ant. 1 could transmit/receive.

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

Ant. 1 ~ 3 could transmit/receive simultaneously.

For 5GHz function:

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

Ant. 4~7 could transmit/receive simultaneously.

.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter			
EUT Function	☐	Outdoor AP	☒	Indoor AP
	☐	Fixed P2P AP	☐	Outdoor/Indoor Client
Beamforming Function	☐	With beamforming	☒	Without beamforming
TPC Function	☒	With TPC Function	☐	Without TPC Function
Weather Band	☐	With 5600~5650MHz	☒	Without 5600~5650MHz

Type of EUT		
☒	Stand-alone	
☐	Combined (EUT where the radio part is fully integrated within another device)	
	Combined Equipment - Brand Name / Model No.:	…
☐	Plug-in radio (EUT intended for a variety of host systems)	
	Host System - Brand Name / Model No.:	
☐	Other:	

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a_Nss1,(6Mbps)_4TX	0.7	1.55	1.398m	1k
802.11ac VHT20_Nss1,(MCS0)_4TX	0.657	1.82	1.318m	1k
802.11ac VHT40_Nss1,(MCS0)_4TX	0.778	1.09	658.125u	3k
802.11ac VHT80_Nss1,(MCS0)_4TX	0.716	1.45	325.469u	10k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

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
- KDB 789033 D02 v02r01

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

- KDB 662911 D01 v02r01
- KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location					
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)			
		TEL : 886-3-327-3456		FAX : 886-3-327-0973	
Test site Designation No. TW1190 with FCC.					
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)			
		TEL : 886-3-656-9065		FAX : 886-3-656-9085	
Test site Designation No. TW0006 with FCC.					
☐	Wen Shan	ADD : No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)			
		TEL : 886-3-318-0787		FAX : 886-3-318-0287	
Test site Designation No. TW1097 with FCC.					

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Jeff Lin	22.4~23.6°C / 65~72%	09/Apr/2020
RF Conducted	TH06-HY	Edward Wang	20.1~22.7°C / 57~62%	06/Apr/2020~ 11/Apr/2020
Radiated	03CH09-HY	Daniel Hsu	20.2~22.5°C / 62~65%	01/Apr/2020~ 11/Apr/2020

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)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
TnomVnom	Tnom	20°C
-	Vnom	110V

2.2 Test Channel Mode

Test Software	Dos

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	23 23 27 26
5200MHz	30 30 34 33
5240MHz	30 30 33 33
5745MHz	41 36 41 37
5785MHz	43 38 43 39
5825MHz	44 39 44 40
802.11ac VHT20_Nss1,(MCS0)_4TX	-
5180MHz	26 26 30 29
5200MHz	30 30 34 33
5240MHz	30 30 33 33
5745MHz	42 37 42 38
5785MHz	43 38 43 39
5825MHz	45 40 45 41
802.11ac VHT40_Nss1,(MCS0)_4TX	-
5190MHz	18 18 22 21
5230MHz	29 29 32 32
5755MHz	38 33 38 35
5795MHz	46 41 46 42
802.11ac VHT80_Nss1,(MCS0)_4TX	-
5210MHz	17 17 21 20
5775MHz	34 29 34 30

2.3 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	Adapter mode

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	Adapter mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	**Y Plane**

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA030703 for Co-location RF Exposure Evaluation.	

2.4 Accessories

Accessories				
AC Adapter	Brand Name	ARRIS	Model Name	WB-30D12FG
	Power Rating	I/P: 220 - 240Vac, 0.9 A, O/P: 12 Vdc, 2.5 A		
	Power Cord	1.8 meter, non-shielded cable, w/o ferrite core		
RJ45 Cable	Category	-	In/Out door	-
	Power Cord	1.5 meter, non-shielded cable		

Reminder: Regarding to more detail and other information, please refer to user manual.

2.5 Support Equipment

Support Equipment – AC Conduction					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Test fixture	-	-	-	-
2	Test fixture	-	-	-	-

Note 1: Support equipment No.1 & 2 was provided by customer.

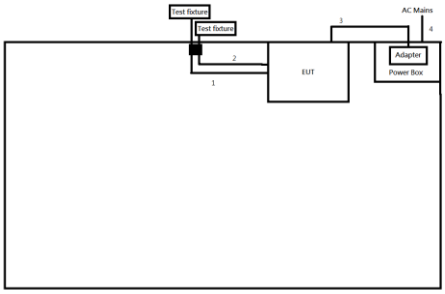
Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	DELL	E5410	DoC	-
2	Adapter for NB	DELL	HA65NM130	DoC	-

Support Equipment – Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Test fixture	-	-	-	-
2	Test fixture	-	-	-	-

Note 1: Support equipment No.1 & 2 was provided by customer.

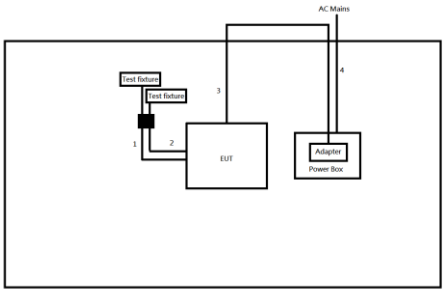
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Test fixture cable	No	0.3
2	Test fixture cable	No	0.2
3	DC Power cable	No	1.8
4	Power cable	No	1.8

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	Test fixture cable	No	0.3
2	Test fixture cable	No	0.2
3	DC Power cable	No	1.8
4	Power cable	No	1.8

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

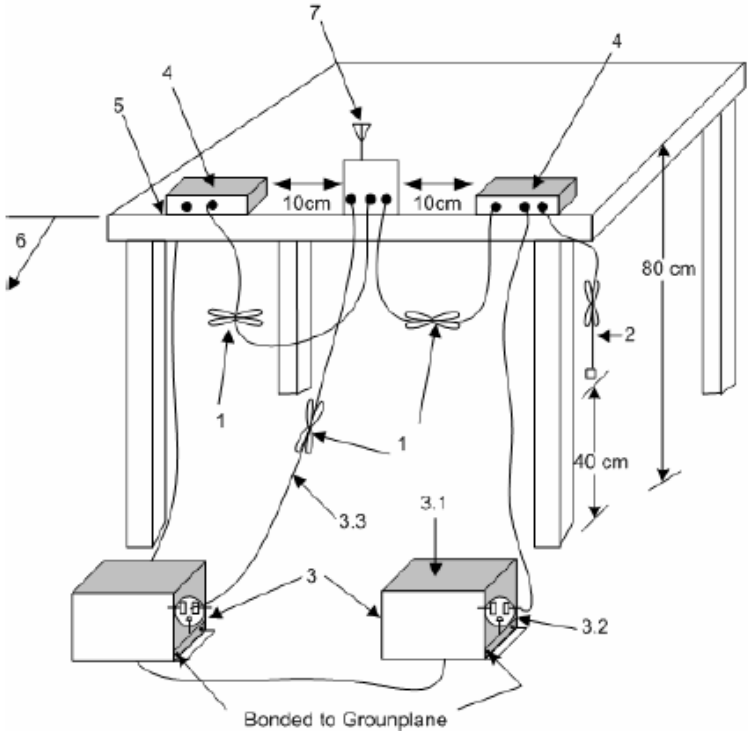
Refer a test equipment and calibration data table in this test report.

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 50Ω 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, N/A
☐ For the 5.47-5.725 GHz band, N/A
☒ For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

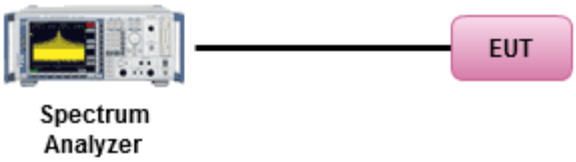
3.2.2 Measuring Instruments

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 KDB 789033, clause C for EBW and clause D for OBW measurement.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
	☐ Refer as IC RSS-Gen, clause 6.7 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.
P_{Out} = maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

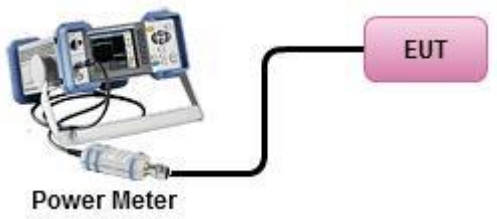
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	
	Duty cycle ≥ 98%
	☐ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle < 98%
	☐ Refer as 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 KDB 789033, clause E Method PM (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as 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.
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.	

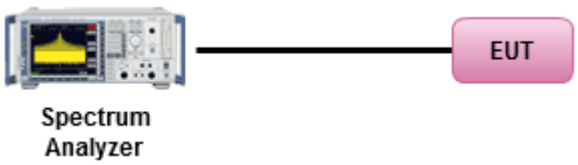
3.4.2 Measuring Instruments

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 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%	
	☐ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).	
	Duty cycle < 98%	
	☒ Refer as 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:	
		▪ Measure and sum the spectra across the outputs. Refer as 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.
	▪	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	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

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.

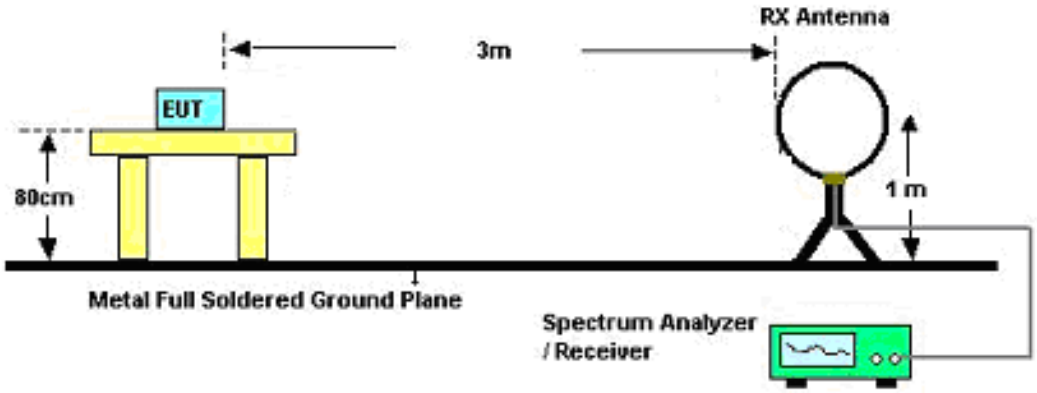
3.5.3 Test Procedures

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 KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.		
	▪ Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.		
		☒ Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.	
		☒ Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.	
▪ For radiated measurement.			
	▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.		
	▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.		
	▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.		
▪ The any unwanted emissions level shall not exceed the fundamental emission level.			
▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.			

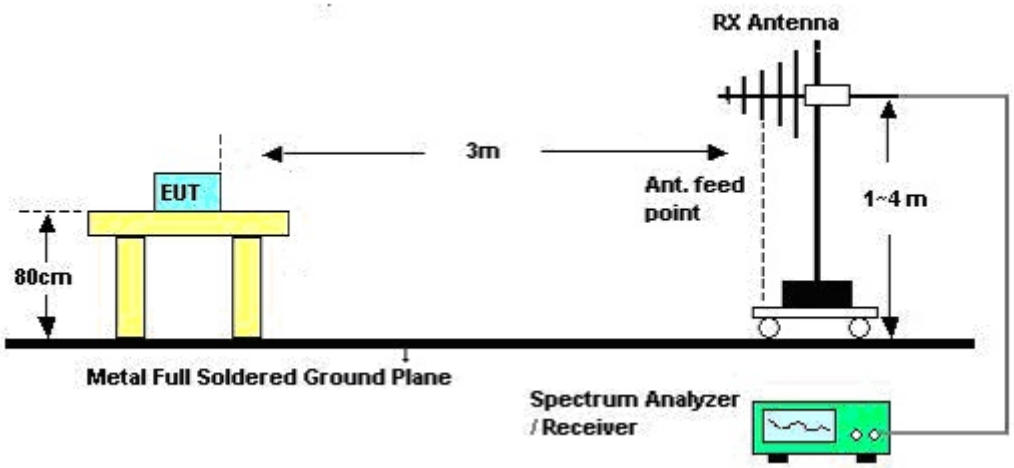
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

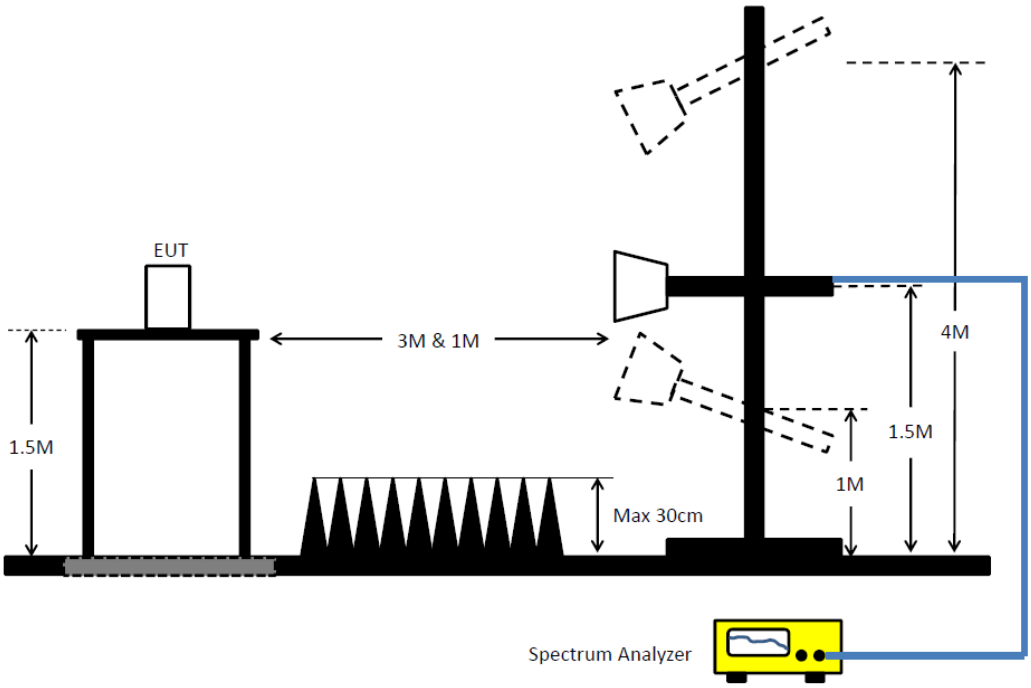
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	28/May/2019	27/May/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	04/Nov/2019	05/Nov/2020
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	12/Sep/2019	11/Sep/2020
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	24/Sep/2019	23/Sep/2020

NCR: Non-Calibration Require

Instrument for Conducted Test

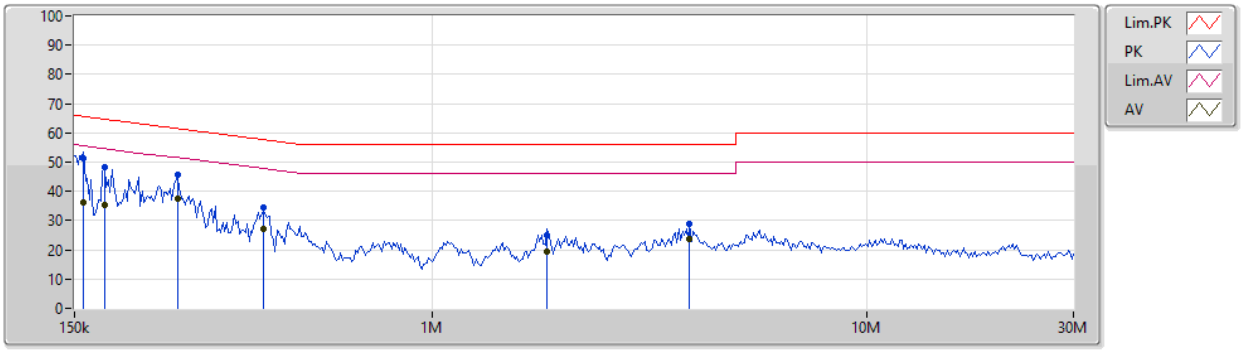
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101029	10kHz ~ 40GHz	01/Oct/2019	30/Sep/2020
Pulse Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	18/Mar/2020	17/Mar/2021
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	18/Mar/2020	17/Mar/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	27/Mar/2020	26/Mar/2021
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	26/Mar/2020	25/Mar/2021
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	04/Sep/2019	03/Sep/2020
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	22/Apr/2019	21/Apr/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	07/Aug/2019	06/Aug/2020
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	11/Oct/2019	10/Oct/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	22May/2020	21/May/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170614	18GHz~40GHz	22/May/2019	21/May/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	05/Aug/2019	04/Aug/2020
Loop Antenna	TESEQ	HLA 6120	31244	9kHz-30MHz	16/Mar/2020	15/Mar/2021
LF-CABLE-2019 0218	Jye Bao	RG142	CB028	9kHz ~ 1GHz	17/Feb/2020	16/Feb/2021
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	324530/4+1717 3/4	1GHz ~ 40GHz	12/Feb/2020	11/Feb/2021

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Adapter mode ; WIFI 5G TX		

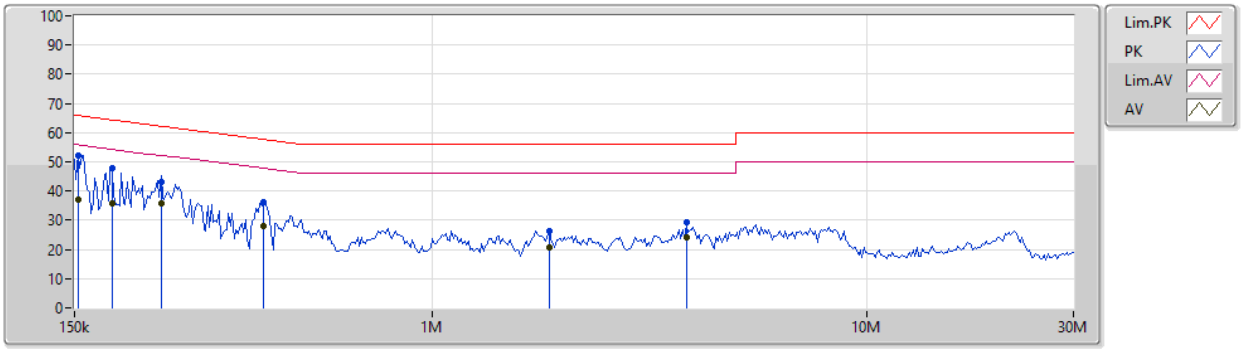
09/04/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	157.652k	51.13	65.58	-14.45	19.63	Neutral	-	31.50	9.65	0.11	9.87
AV	157.652k	36.13	55.58	-19.45	19.63	Neutral	-	16.50	9.65	0.11	9.87
QP	175.887k	48.23	64.68	-16.45	19.62	Neutral	-	28.61	9.64	0.11	9.87
AV	175.887k	35.39	54.68	-19.29	19.62	Neutral	-	15.77	9.64	0.11	9.87
QP	259.279k	45.74	61.45	-15.71	19.63	Neutral	-	26.11	9.64	0.12	9.87
AV	259.279k	37.38	51.45	-14.07	19.63	Neutral	"Worst"	17.75	9.64	0.12	9.87
QP	409.779k	34.50	57.64	-23.14	19.63	Neutral	-	14.87	9.63	0.13	9.87
AV	409.779k	26.98	47.64	-20.66	19.63	Neutral	-	7.35	9.63	0.13	9.87
QP	1.841M	24.85	56.00	-31.15	19.66	Neutral	-	5.19	9.65	0.14	9.87
AV	1.841M	19.23	46.00	-26.77	19.66	Neutral	-	-0.43	9.65	0.14	9.87
QP	3.922M	28.94	56.00	-27.06	19.73	Neutral	-	9.21	9.66	0.19	9.88
AV	3.922M	23.83	46.00	-22.17	19.73	Neutral	-	4.10	9.66	0.19	9.88

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Adapter mode ; WIFI 5G TX		

09/04/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	153.015k	52.00	65.83	-13.83	19.64	Line	"Worst"	32.36	9.66	0.11	9.87
AV	153.015k	37.21	55.83	-18.62	19.64	Line	-	17.57	9.66	0.11	9.87
QP	183.029k	47.70	64.34	-16.64	19.63	Line	-	28.07	9.65	0.11	9.87
AV	183.029k	35.75	54.34	-18.59	19.63	Line	-	16.12	9.65	0.11	9.87
QP	237.069k	43.31	62.20	-18.89	19.64	Line	-	23.67	9.65	0.12	9.87
AV	237.069k	35.75	52.20	-16.45	19.64	Line	-	16.11	9.65	0.12	9.87
QP	409.779k	36.13	57.64	-21.51	19.64	Line	-	16.49	9.64	0.13	9.87
AV	409.779k	28.19	47.64	-19.45	19.64	Line	-	8.55	9.64	0.13	9.87
QP	1.86M	26.30	56.00	-29.70	19.66	Line	-	6.64	9.65	0.14	9.87
AV	1.86M	20.69	46.00	-25.31	19.66	Line	-	1.03	9.65	0.14	9.87
QP	3.845M	29.11	56.00	-26.89	19.73	Line	-	9.38	9.66	0.19	9.88
AV	3.845M	24.29	46.00	-21.71	19.73	Line	-	4.56	9.66	0.19	9.88

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	42.93M	19.55M	19M5D1D	26.22M	16.552M
802.11ac VHT20_Nss1,(MCS0)_4TX	44.76M	20.03M	20M0D1D	32.94M	17.727M
802.11ac VHT40_Nss1,(MCS0)_4TX	84.06M	36.894M	36M9D1D	40.74M	36.126M
802.11ac VHT80_Nss1,(MCS0)_4TX	81.96M	75.706M	75M7D1D	81.36M	75.418M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.35M	30.897M	30M9D1D	16.26M	26.075M
802.11ac VHT20_Nss1,(MCS0)_4TX	17.52M	31.808M	31M8D1D	16.56M	26.555M
802.11ac VHT40_Nss1,(MCS0)_4TX	36.3M	68.078M	68M1D1D	35.1M	43.994M
802.11ac VHT80_Nss1,(MCS0)_4TX	75.36M	84.15M	84M1D1D	73.92M	76.186M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum99% 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

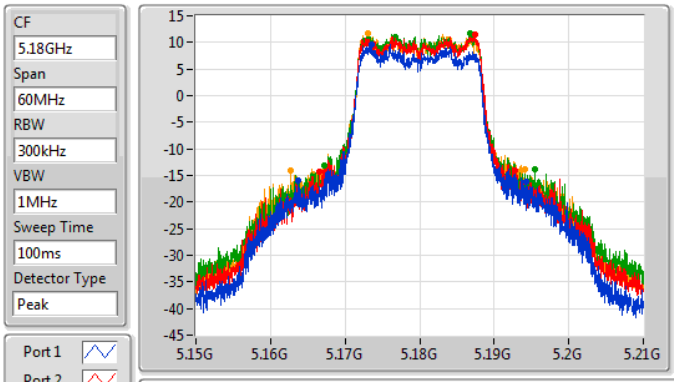
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	30.6M	16.552M	26.22M	16.576M	28.26M	16.576M	31.32M	16.576M
5200MHz	Pass	Inf	40.08M	18.111M	39.51M	17.967M	40.32M	19.55M	41.52M	19.286M
5240MHz	Pass	Inf	36.39M	16.888M	42.51M	17.703M	40.32M	18.423M	42.93M	19.454M
5745MHz	Pass	500k	16.32M	30.225M	16.26M	26.075M	16.29M	29.625M	16.35M	29.457M
5785MHz	Pass	500k	16.32M	30.897M	16.32M	27.01M	16.32M	29.409M	16.32M	29.481M
5825MHz	Pass	500k	16.32M	30.201M	16.32M	26.675M	16.35M	28.426M	16.32M	29.193M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	36.03M	17.775M	32.94M	17.727M	35.76M	17.751M	36.93M	17.823M
5200MHz	Pass	Inf	42.57M	18.255M	44.34M	18.279M	44.22M	19.358M	43.74M	19.814M
5240MHz	Pass	Inf	38.04M	17.823M	44.55M	18.351M	42.78M	18.615M	44.76M	20.03M
5745MHz	Pass	500k	16.89M	30.921M	17.13M	27.634M	16.89M	30.825M	17.52M	30.777M
5785MHz	Pass	500k	17.16M	31.304M	16.92M	26.555M	17.19M	29.121M	17.04M	29.985M
5825MHz	Pass	500k	17.25M	31.808M	16.65M	28.09M	16.56M	29.577M	17.19M	30.681M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.74M	36.174M	40.98M	36.126M	40.8M	36.126M	41.1M	36.174M
5230MHz	Pass	Inf	81.06M	36.462M	80.34M	36.75M	84.06M	36.75M	81.84M	36.894M
5755MHz	Pass	500k	36M	56.708M	35.1M	43.994M	35.34M	51.574M	35.64M	55.748M
5795MHz	Pass	500k	36.3M	68.078M	35.16M	60.834M	35.4M	64.096M	35.4M	66.159M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.84M	75.61M	81.84M	75.418M	81.36M	75.61M	81.96M	75.706M
5775MHz	Pass	500k	73.92M	84.15M	75.12M	76.186M	75.36M	76.57M	75.12M	77.145M

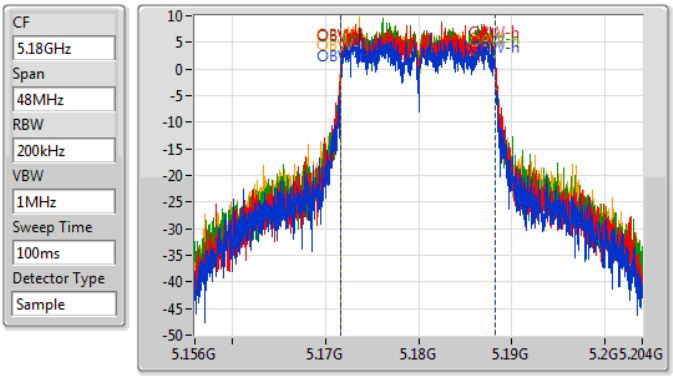
Port X-N dB = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port **X** 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX EBW

5180MHz

08/04/2020



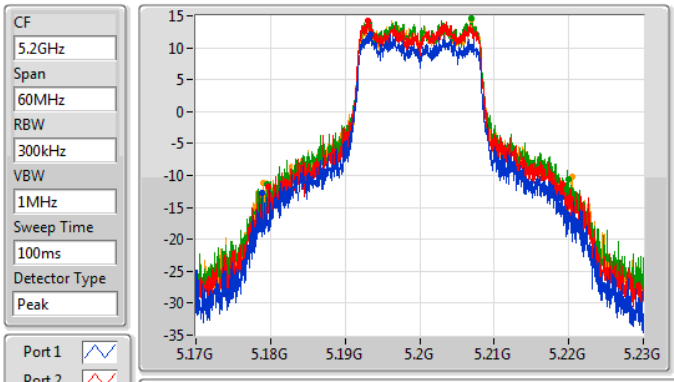


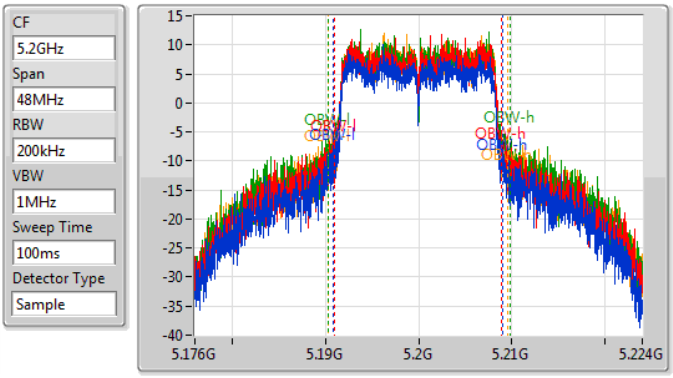
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30.6M	5.16374G	5.19434G	16.552M	5.1717G	5.188252G	Inf	1
26.22M	5.1665G	5.19272G	16.576M	5.1717G	5.188276G	Inf	2
28.26M	5.16716G	5.19542G	16.576M	5.1717G	5.188276G	Inf	3
31.32M	5.16272G	5.19404G	16.576M	5.1717G	5.188276G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

5200MHz

08/04/2020



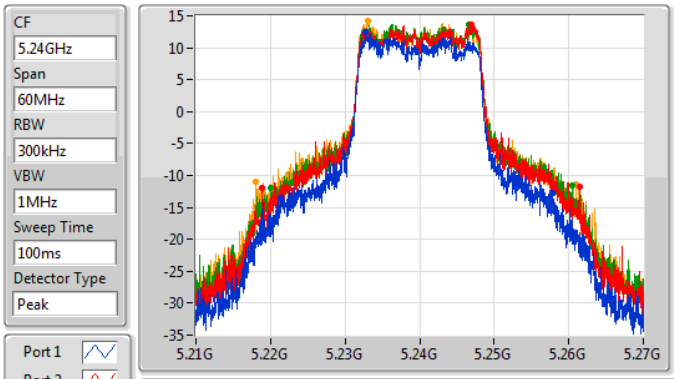


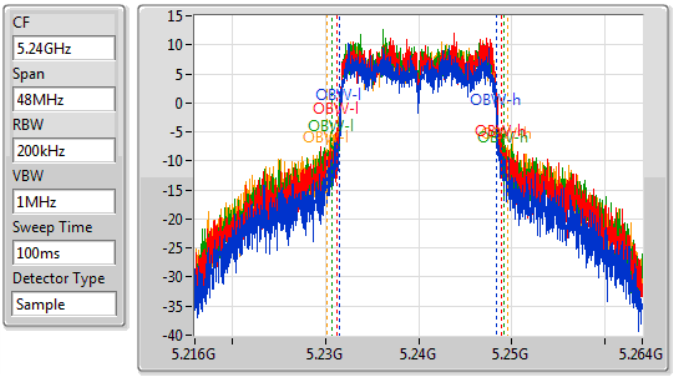
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.08M	5.17882G	5.2189G	18.111M	5.190861G	5.208972G	Inf	1
39.51M	5.17966G	5.21917G	17.967M	5.190933G	5.2089G	Inf	2
40.32M	5.1796G	5.21992G	19.55M	5.190309G	5.209859G	Inf	3
41.52M	5.179G	5.22052G	19.286M	5.190333G	5.209619G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

5240MHz

08/04/2020



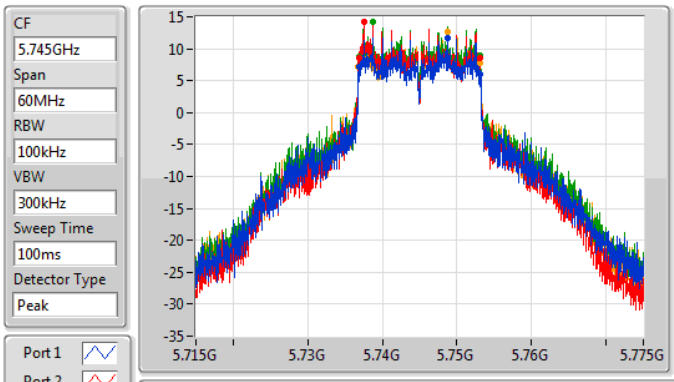


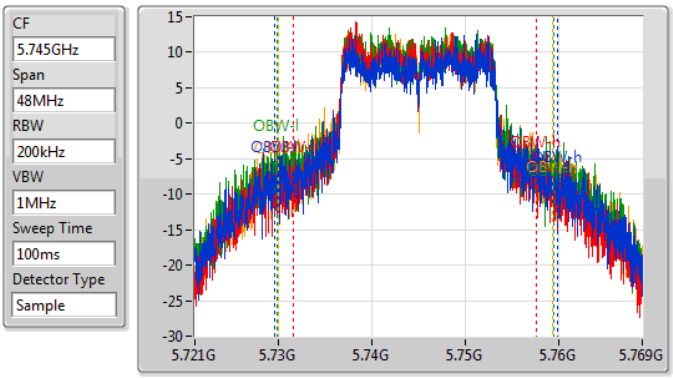
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.39M	5.22143G	5.25782G	16.888M	5.231508G	5.248396G	Inf	1
42.51M	5.21894G	5.26145G	17.703M	5.231196G	5.2489G	Inf	2
40.32M	5.22008G	5.2604G	18.423M	5.230741G	5.249163G	Inf	3
42.93M	5.21801G	5.26094G	19.454M	5.230141G	5.249595G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

5745MHz

08/04/2020



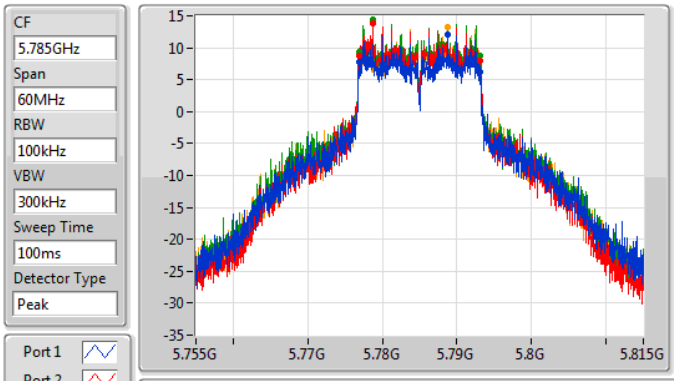


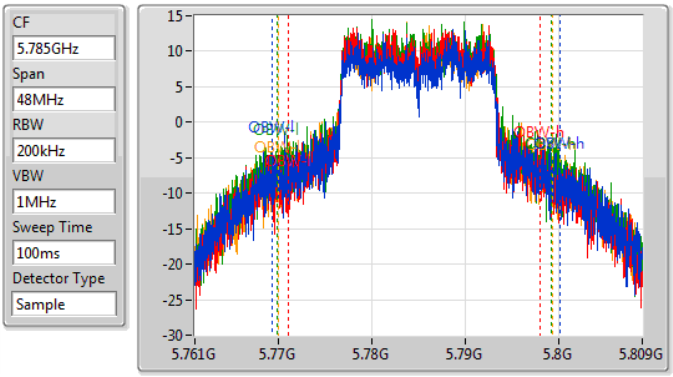
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.32M	5.73684G	5.75316G	30.225M	5.729624G	5.759849G	500k	1
16.26M	5.73684G	5.7531G	26.075M	5.731543G	5.757618G	500k	2
16.29M	5.73684G	5.75313G	29.625M	5.72984G	5.759465G	500k	3
16.35M	5.73681G	5.75316G	29.457M	5.72996G	5.759417G	500k	4

802.11a_Nss1,(6Mbps)_4TX EBW

5785MHz

08/04/2020



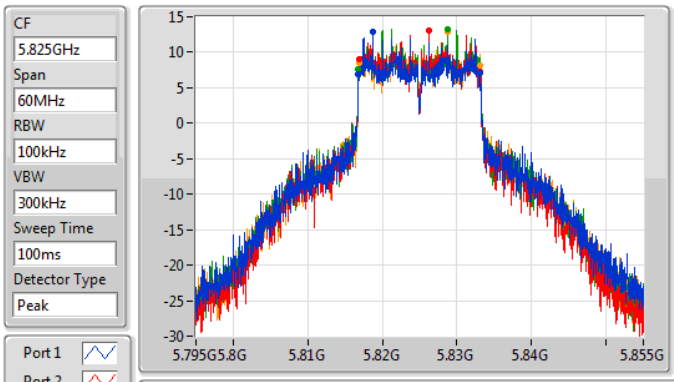


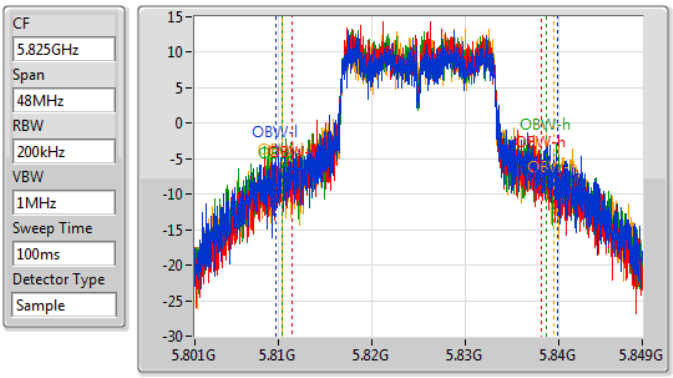
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.32M	5.77684G	5.79316G	30.897M	5.769312G	5.800208G	500k	1
16.32M	5.77684G	5.79316G	27.01M	5.771087G	5.798097G	500k	2
16.32M	5.77684G	5.79316G	29.409M	5.769888G	5.799297G	500k	3
16.32M	5.77684G	5.79316G	29.481M	5.769936G	5.799417G	500k	4

802.11a_Nss1,(6Mbps)_4TX EBW

5825MHz

08/04/2020



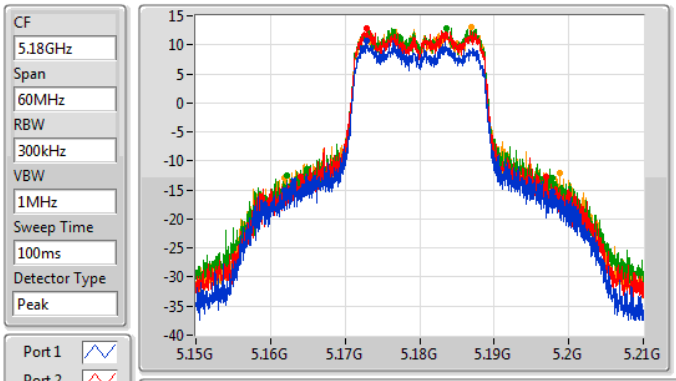


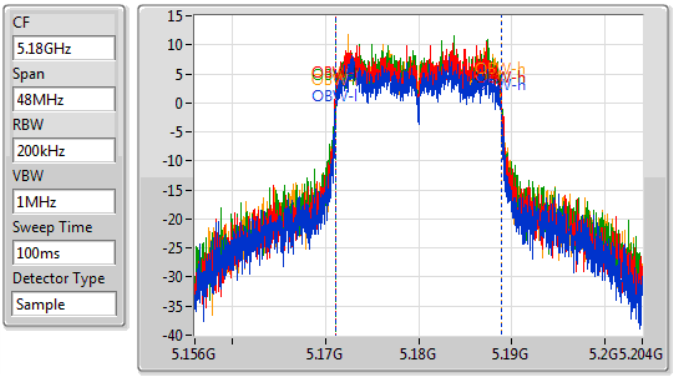
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.32M	5.81681G	5.83313G	30.201M	5.80972G	5.839921G	500k	1
16.32M	5.81684G	5.83316G	26.675M	5.811495G	5.838169G	500k	2
16.35M	5.81681G	5.83316G	28.426M	5.810343G	5.838769G	500k	3
16.32M	5.81684G	5.83316G	29.193M	5.810295G	5.839489G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5180MHz

08/04/2020



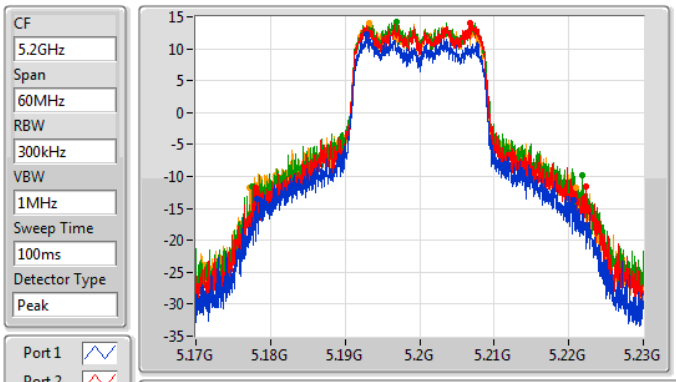


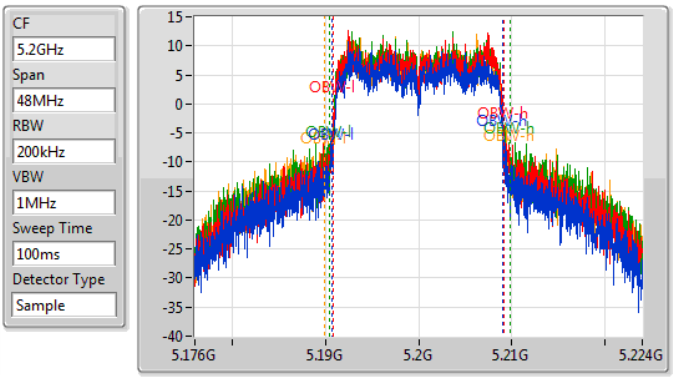
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.03M	5.16179G	5.19782G	17.775M	5.171076G	5.188852G	Inf	1
32.94M	5.16407G	5.19701G	17.727M	5.171124G	5.188852G	Inf	2
35.76M	5.16212G	5.19788G	17.751M	5.171124G	5.188876G	Inf	3
36.93M	5.16185G	5.19878G	17.823M	5.171076G	5.1889G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5200MHz

08/04/2020



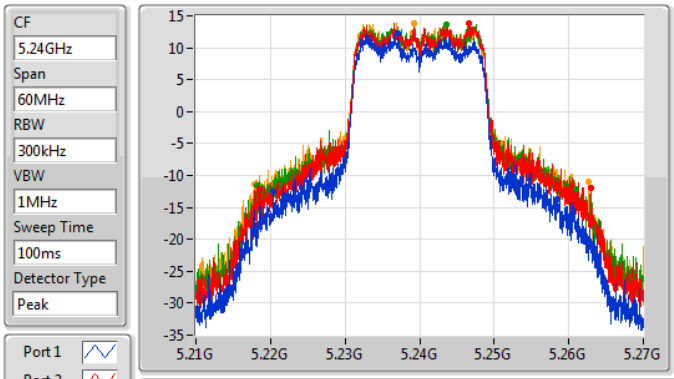


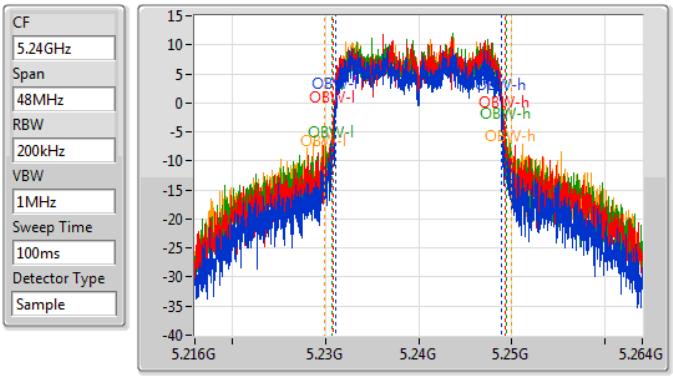
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.57M	5.17813G	5.2207G	18.255M	5.190765G	5.209019G	Inf	1
44.34M	5.17801G	5.22235G	18.279M	5.190837G	5.209115G	Inf	2
44.22M	5.17759G	5.22181G	19.358M	5.190429G	5.209787G	Inf	3
43.74M	5.17723G	5.22097G	19.814M	5.189949G	5.209763G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5240MHz

08/04/2020



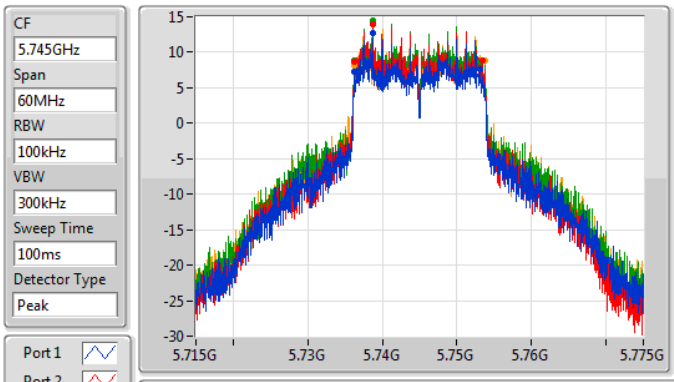


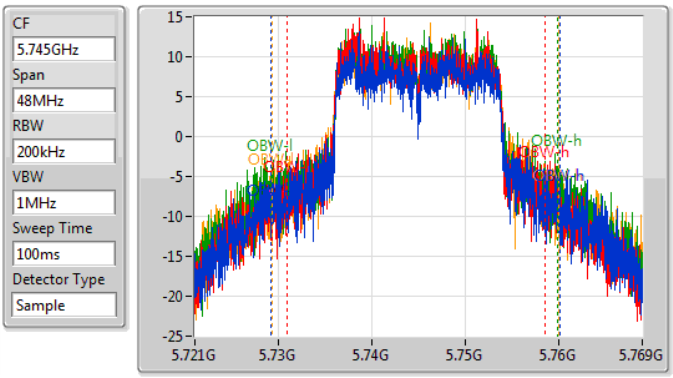
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.04M	5.22035G	5.25839G	17.823M	5.231052G	5.248876G	Inf	1
44.55M	5.21849G	5.26304G	18.351M	5.230885G	5.249235G	Inf	2
42.78M	5.21813G	5.26091G	18.615M	5.230765G	5.249379G	Inf	3
44.76M	5.21786G	5.26262G	20.03M	5.229949G	5.249979G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5745MHz

08/04/2020



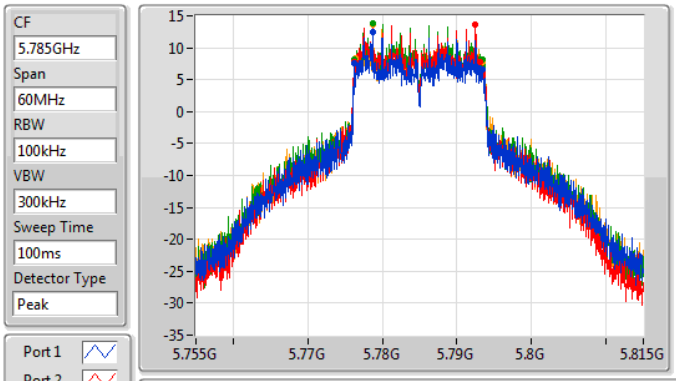


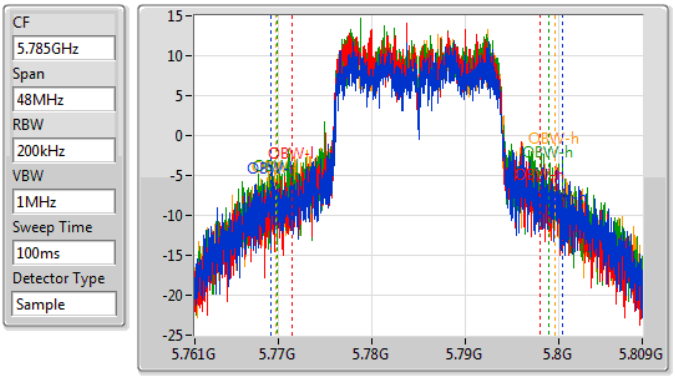
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.89M	5.73624G	5.75313G	30.921M	5.729216G	5.760136G	500k	1
17.13M	5.73624G	5.75337G	27.634M	5.730895G	5.758529G	500k	2
16.89M	5.73624G	5.75313G	30.825M	5.72912G	5.759945G	500k	3
17.52M	5.73624G	5.75376G	30.777M	5.729312G	5.760088G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5785MHz

08/04/2020



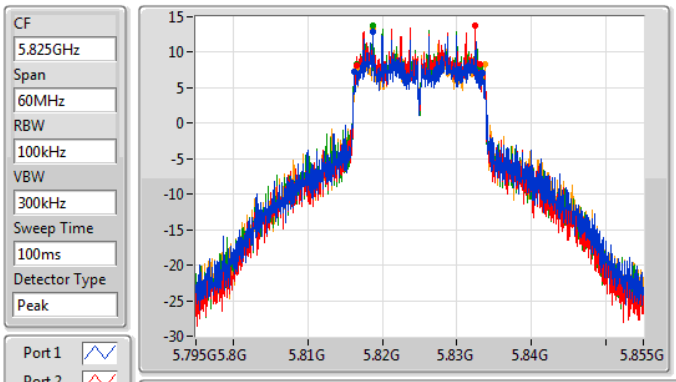


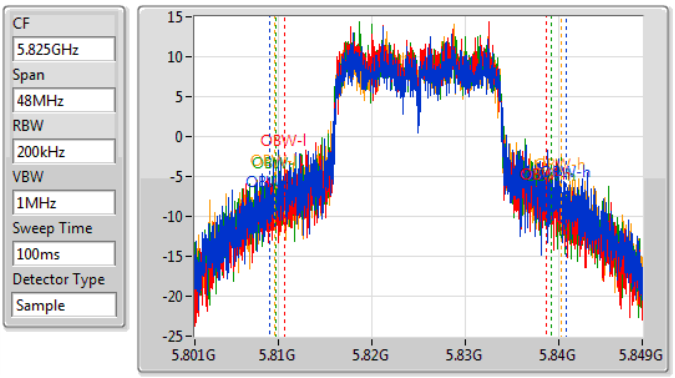
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.16M	5.77624G	5.7934G	31.304M	5.769096G	5.8004G	500k	1
16.92M	5.77621G	5.79313G	26.555M	5.771447G	5.798001G	500k	2
17.19M	5.77621G	5.7934G	29.121M	5.769864G	5.798985G	500k	3
17.04M	5.77645G	5.79349G	29.985M	5.76972G	5.799705G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5825MHz

08/04/2020



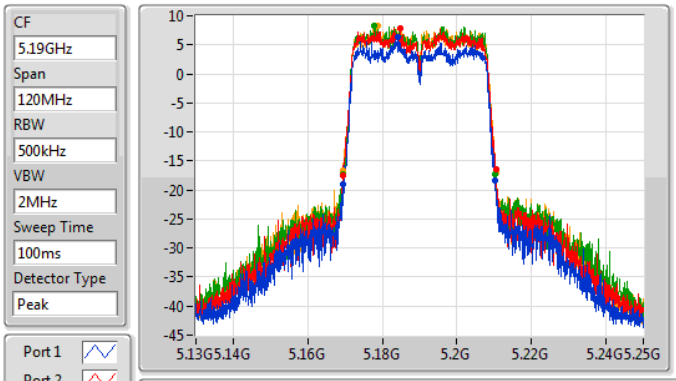


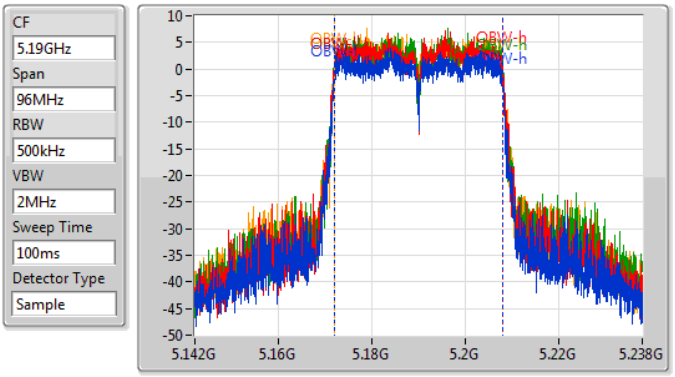
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.25M	5.81624G	5.83349G	31.808M	5.808976G	5.840784G	500k	1
16.65M	5.81648G	5.83313G	28.09M	5.810607G	5.838697G	500k	2
16.56M	5.8166G	5.83316G	29.577M	5.809672G	5.839249G	500k	3
17.19M	5.81657G	5.83376G	30.681M	5.809576G	5.840256G	500k	4

802.11ac VHT40_Nss1,(MCS0)_4TX EBW

5190MHz

08/04/2020



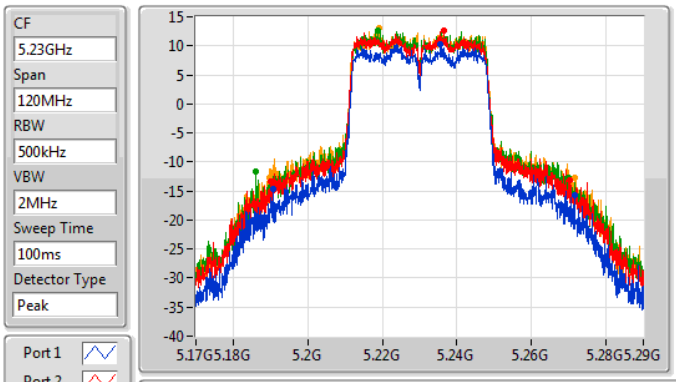


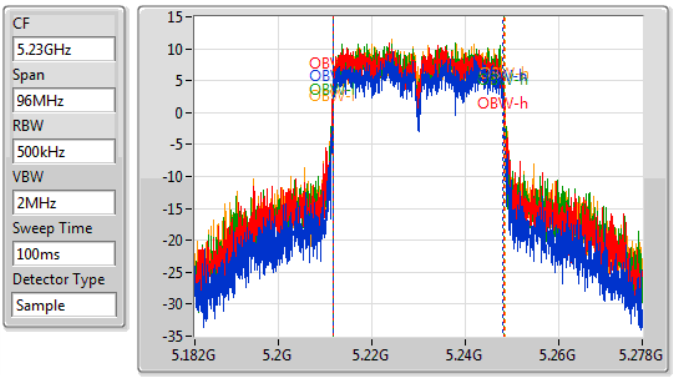
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.74M	5.1696G	5.21034G	36.174M	5.171865G	5.208039G	Inf	1
40.98M	5.16942G	5.2104G	36.126M	5.171865G	5.207991G	Inf	2
40.8M	5.16954G	5.21034G	36.126M	5.171913G	5.208039G	Inf	3
41.1M	5.16942G	5.21052G	36.174M	5.171913G	5.208087G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX EBW

5230MHz

08/04/2020



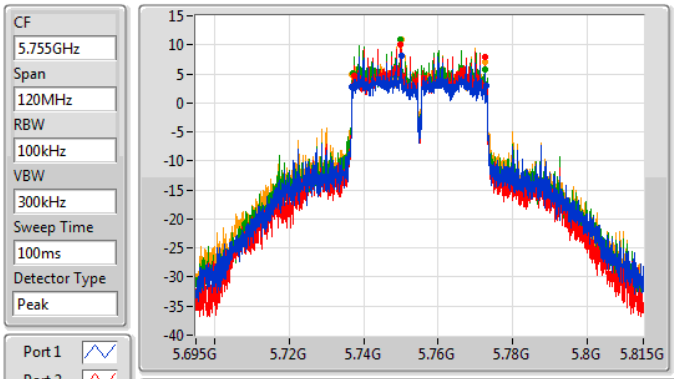


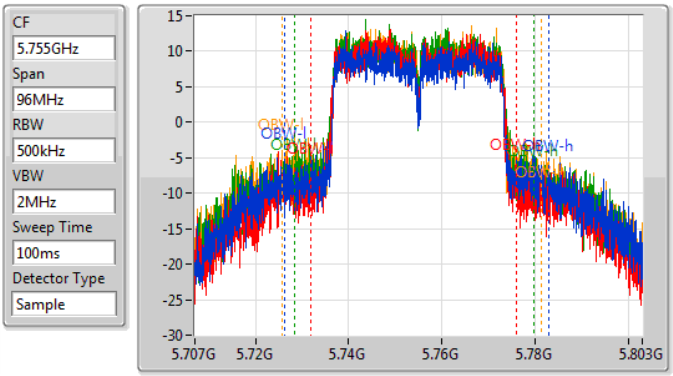
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.06M	5.19058G	5.27164G	36.462M	5.211721G	5.248183G	Inf	1
80.34M	5.1901G	5.27044G	36.75M	5.211625G	5.248375G	Inf	2
84.06M	5.18602G	5.27008G	36.75M	5.211625G	5.248375G	Inf	3
81.84M	5.18974G	5.27158G	36.894M	5.211577G	5.248471G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX EBW

5755MHz

08/04/2020



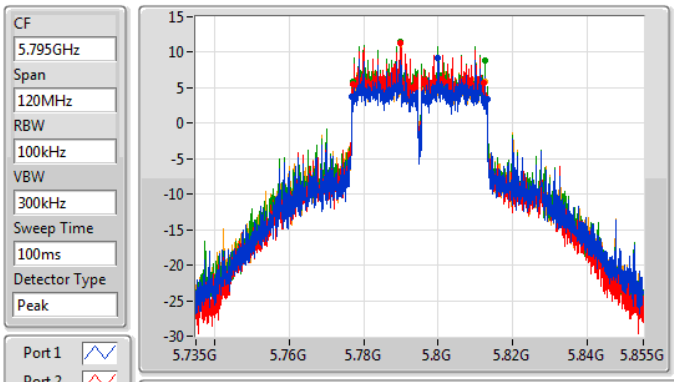


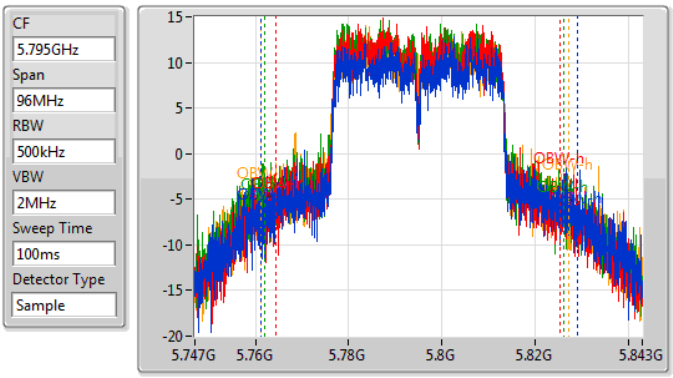
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36M	5.73688G	5.77288G	56.708M	5.726166G	5.782874G	500k	1
35.1M	5.73742G	5.77252G	43.994M	5.731972G	5.775966G	500k	2
35.34M	5.73724G	5.77258G	51.574M	5.728277G	5.779852G	500k	3
35.64M	5.73688G	5.77252G	55.748M	5.725687G	5.781435G	500k	4

802.11ac VHT40_Nss1,(MCS0)_4TX EBW

5795MHz

08/04/2020



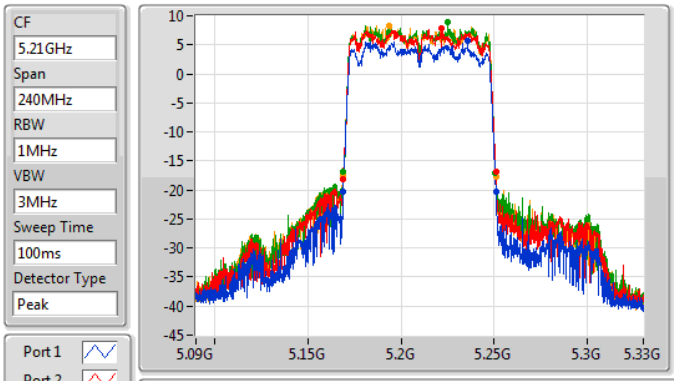


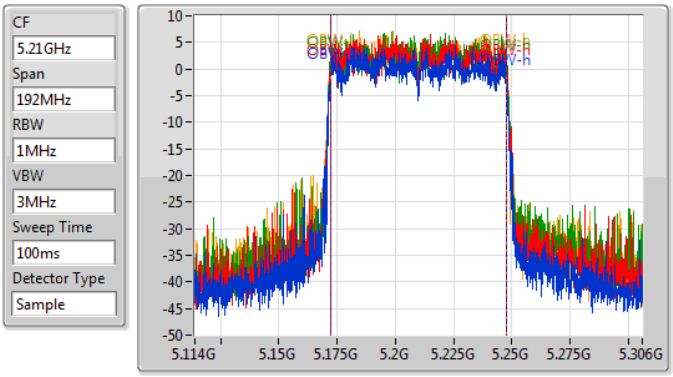
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	5.77682G	5.81312G	68.078M	5.761081G	5.829159G	500k	1
35.16M	5.77712G	5.81228G	60.834M	5.764391G	5.825225G	500k	2
35.4M	5.77712G	5.81252G	64.096M	5.761993G	5.826088G	500k	3
35.4M	5.77712G	5.81252G	66.159M	5.761129G	5.827288G	500k	4

802.11ac VHT80_Nss1,(MCS0)_4TX EBW

5210MHz

08/04/2020



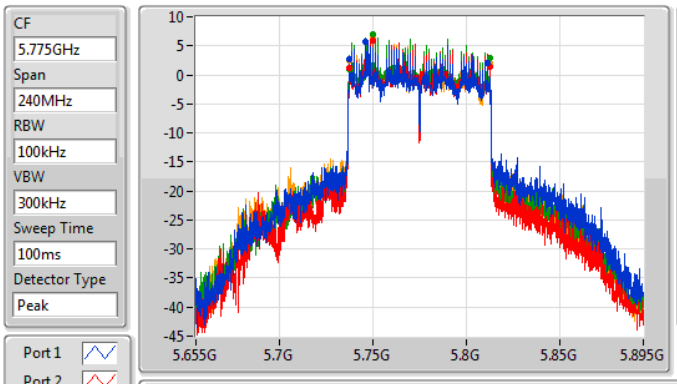


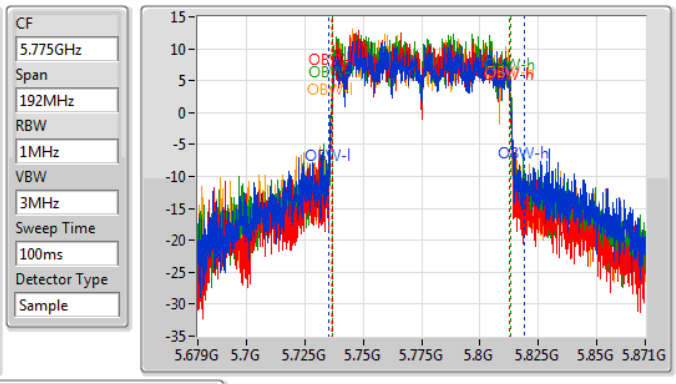
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.84M	5.16908G	5.25092G	75.61M	5.172099G	5.247709G	Inf	1
81.84M	5.16896G	5.2508G	75.418M	5.172195G	5.247613G	Inf	2
81.36M	5.1692G	5.25056G	75.61M	5.172099G	5.247709G	Inf	3
81.96M	5.16896G	5.25092G	75.706M	5.172099G	5.247805G	Inf	4

802.11ac VHT80_Nss1,(MCS0)_4TX EBW

5775MHz

08/04/2020





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
73.92M	5.73744G	5.81136G	84.15M	5.734988G	5.819138G	500k	1
75.12M	5.73744G	5.81256G	76.186M	5.736715G	5.812901G	500k	2
75.36M	5.7372G	5.81256G	76.57M	5.736523G	5.813093G	500k	3
75.12M	5.73744G	5.81256G	77.145M	5.736043G	5.813189G	500k	4

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	27.37	0.54576	32.30	1.69824
802.11ac VHT20_Nss1,(MCS0)_4TX	27.37	0.54576	32.30	1.69824
802.11ac VHT40_Nss1,(MCS0)_4TX	26.35	0.43152	31.28	1.34276
802.11ac VHT80_Nss1,(MCS0)_4TX	21.62	0.14521	26.55	0.45186
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	29.72	0.93756	35.25	3.34965
802.11ac VHT20_Nss1,(MCS0)_4TX	29.63	0.91833	35.16	3.28095
802.11ac VHT40_Nss1,(MCS0)_4TX	29.88	0.97275	35.41	3.47536
802.11ac VHT80_Nss1,(MCS0)_4TX	27.23	0.52845	32.76	1.88799

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.93	17.39	19.23	19.67	19.37	25.02	30.00	29.95	36.00
5200MHz	Pass	4.93	19.79	21.73	22.03	21.52	27.37	30.00	32.30	36.00
5240MHz	Pass	4.93	19.82	21.33	21.51	21.39	27.08	30.00	32.01	36.00
5745MHz	Pass	5.53	22.58	23.81	24.25	23.57	29.61	30.00	35.14	36.00
5785MHz	Pass	5.53	22.55	24.07	24.39	23.59	29.72	30.00	35.25	36.00
5825MHz	Pass	5.53	23.01	23.86	23.88	23.40	29.57	30.00	35.10	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.93	18.52	20.44	20.83	20.42	26.16	30.00	31.09	36.00
5200MHz	Pass	4.93	19.71	21.64	22.06	21.62	27.37	30.00	32.30	36.00
5240MHz	Pass	4.93	19.53	21.39	21.56	21.43	27.07	30.00	32.00	36.00
5745MHz	Pass	5.53	22.47	23.87	24.27	23.62	29.63	30.00	35.16	36.00
5785MHz	Pass	5.53	22.40	23.87	24.19	23.42	29.54	30.00	35.07	36.00
5825MHz	Pass	5.53	22.96	23.88	23.91	23.39	29.57	30.00	35.10	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.93	14.52	16.43	16.70	16.49	22.14	30.00	27.07	36.00
5230MHz	Pass	4.93	18.91	20.71	20.77	20.66	26.35	30.00	31.28	36.00
5755MHz	Pass	5.53	21.74	22.59	23.38	22.96	28.73	30.00	34.26	36.00
5795MHz	Pass	5.53	22.78	24.26	24.51	23.67	29.88	30.00	35.41	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.93	14.07	15.80	16.25	15.95	21.62	30.00	26.55	36.00
5775MHz	Pass	5.53	20.58	21.16	21.75	21.28	27.23	30.00	32.76	36.00

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

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	15.52	22.95
802.11ac VHT20_Nss1,(MCS0)_4TX	15.53	22.96
802.11ac VHT40_Nss1,(MCS0)_4TX	11.29	18.72
802.11ac VHT80_Nss1,(MCS0)_4TX	3.31	10.74
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	16.66	23.68
802.11ac VHT20_Nss1,(MCS0)_4TX	16.23	23.25
802.11ac VHT40_Nss1,(MCS0)_4TX	13.05	20.07
802.11ac VHT80_Nss1,(MCS0)_4TX	8.22	15.24

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

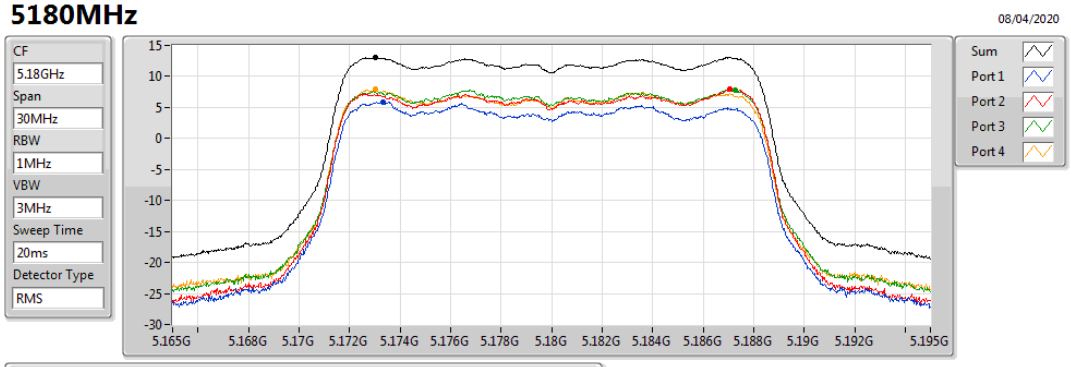
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	7.43	5.86	7.89	7.80	7.91	13.10	15.57	20.53	23.00
5200MHz	Pass	7.43	8.27	10.23	10.48	9.88	15.52	15.57	22.95	23.00
5240MHz	Pass	7.43	8.36	10.05	9.83	10.05	15.26	15.57	22.69	23.00
5745MHz	Pass	7.02	9.78	11.51	11.15	10.33	16.50	28.98	23.52	36.00
5785MHz	Pass	7.02	9.39	11.59	11.45	10.20	16.66	28.98	23.68	36.00
5825MHz	Pass	7.02	10.17	11.21	10.70	10.22	16.40	28.98	23.42	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	7.43	6.84	8.95	9.02	8.85	14.09	15.57	21.52	23.00
5200MHz	Pass	7.43	8.08	10.23	10.43	10.30	15.53	15.57	22.96	23.00
5240MHz	Pass	7.43	8.32	9.85	9.77	10.27	15.23	15.57	22.66	23.00
5745MHz	Pass	7.02	9.15	11.26	10.67	10.10	16.23	28.98	23.25	36.00
5785MHz	Pass	7.02	8.98	10.89	10.98	9.81	16.05	28.98	23.07	36.00
5825MHz	Pass	7.02	9.78	10.80	10.50	9.89	15.99	28.98	23.01	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	7.43	-0.35	1.44	1.50	1.59	6.70	15.57	14.13	23.00
5230MHz	Pass	7.43	4.63	5.93	5.92	5.91	11.29	15.57	18.72	23.00
5755MHz	Pass	7.02	4.90	7.09	6.89	6.59	12.08	28.98	19.10	36.00
5795MHz	Pass	7.02	6.03	8.20	8.15	7.18	13.05	28.98	20.07	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	7.43	-4.10	-2.13	-2.00	-1.77	3.31	15.57	10.74	23.00
5775MHz	Pass	7.02	1.48	3.18	2.69	2.55	8.22	28.98	15.24	36.00

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

802.11a_Nss1,(6Mbps)_4TX PSD

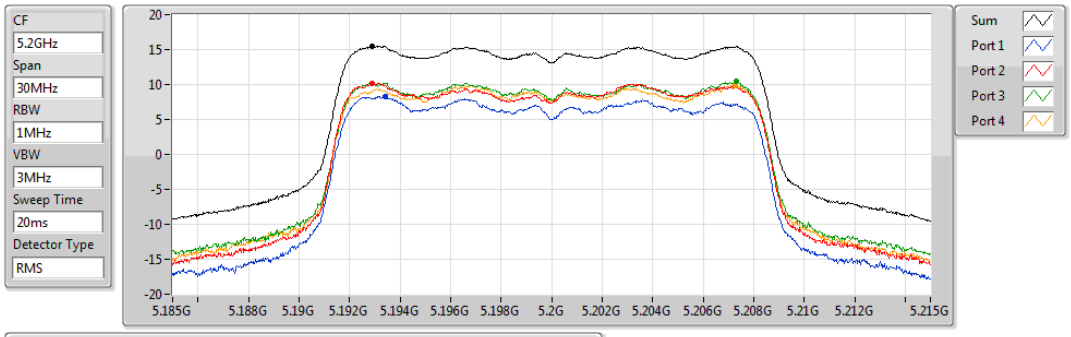
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.10	13.10	5.86	7.89	7.80	7.91

802.11a_Nss1,(6Mbps)_4TX PSD

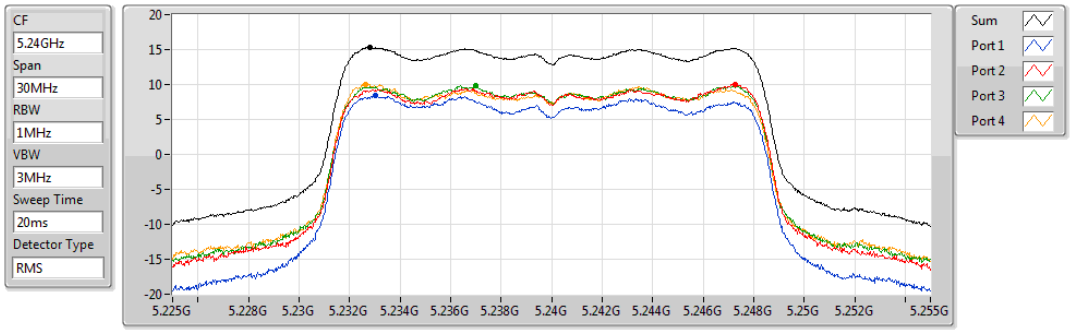
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.52	15.52	8.27	10.23	10.48	9.88

802.11a_Nss1,(6Mbps)_4TX PSD

5240MHz

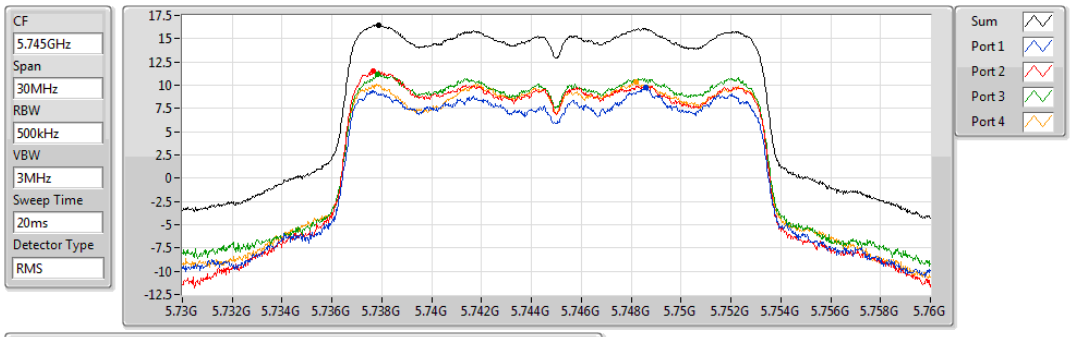


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.26	15.26	8.36	10.05	9.83	10.05

802.11a_Nss1,(6Mbps)_4TX PSD

5745MHz

08/04/2020

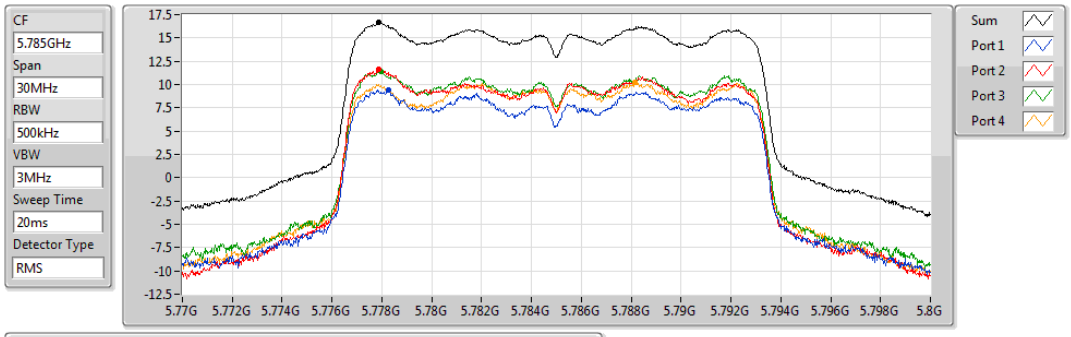


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.50	16.50	9.78	11.51	11.15	10.33

802.11a_Nss1,(6Mbps)_4TX PSD

5785MHz

08/04/2020

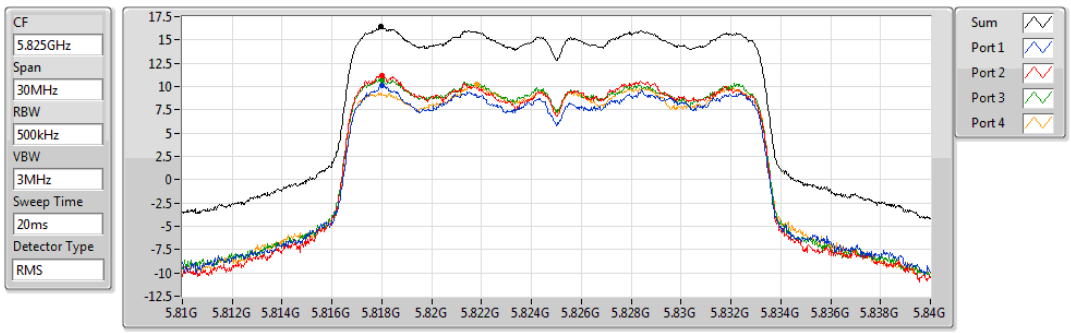


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.66	16.66	9.39	11.59	11.45	10.20

802.11a_Nss1,(6Mbps)_4TX PSD

5825MHz

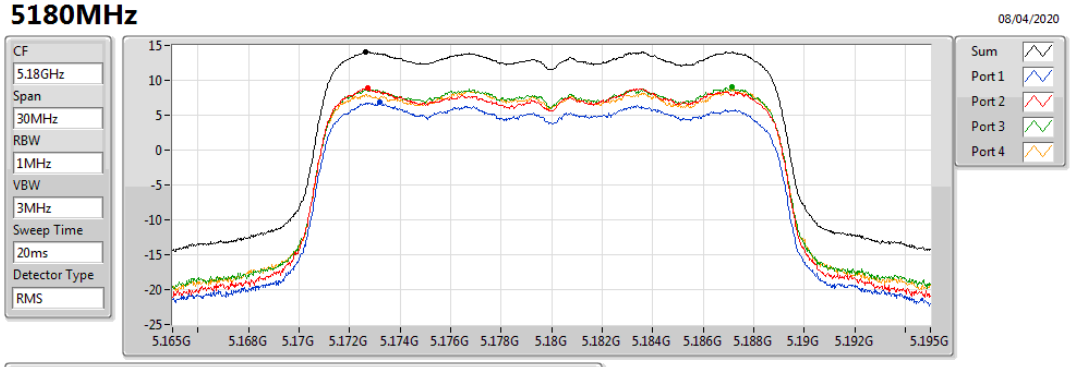
08/04/2020



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.40	16.40	10.17	11.21	10.70	10.22

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

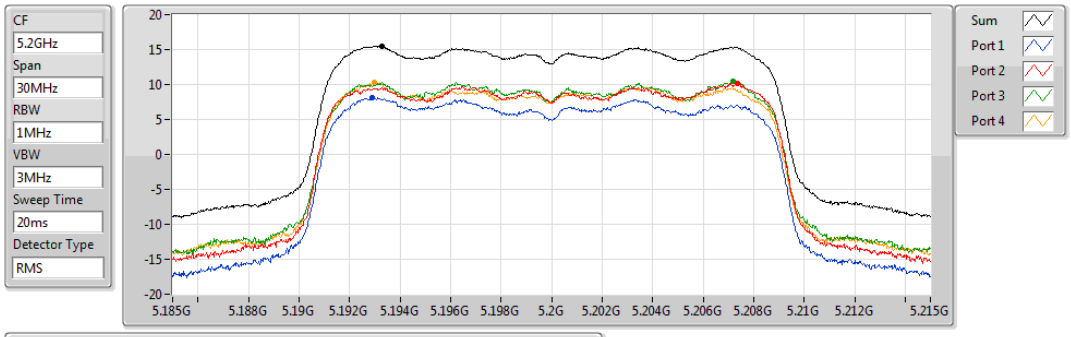
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.09	14.09	6.84	8.95	9.02	8.85

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

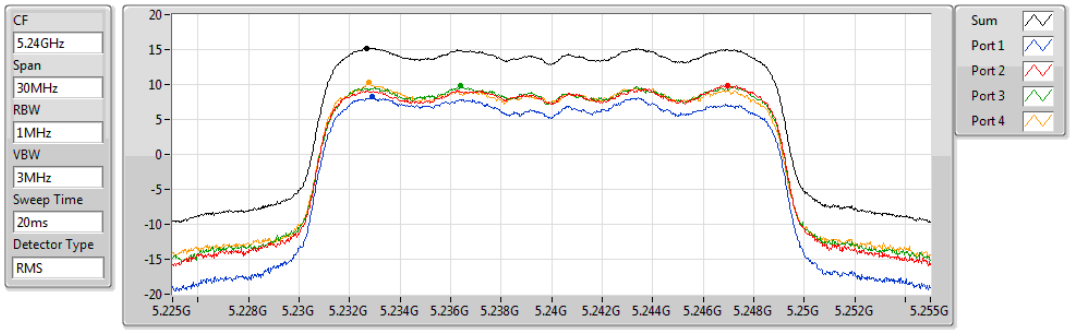
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.53	15.53	8.08	10.23	10.43	10.30

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5240MHz

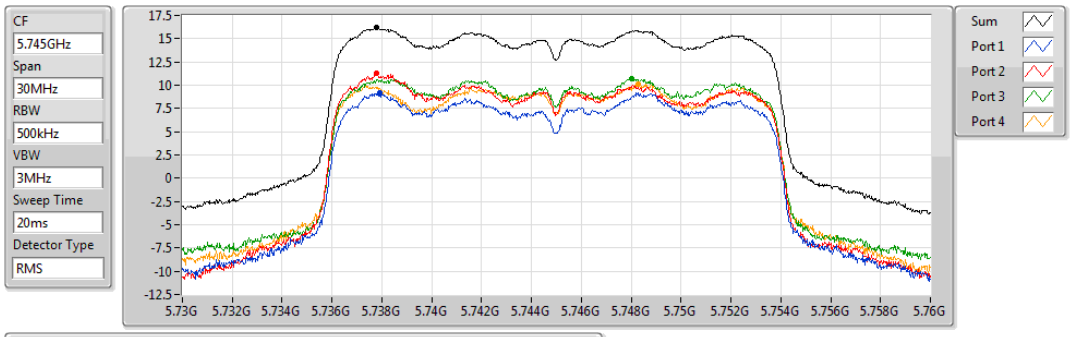


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.23	15.23	8.32	9.85	9.77	10.27

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5745MHz

08/04/2020

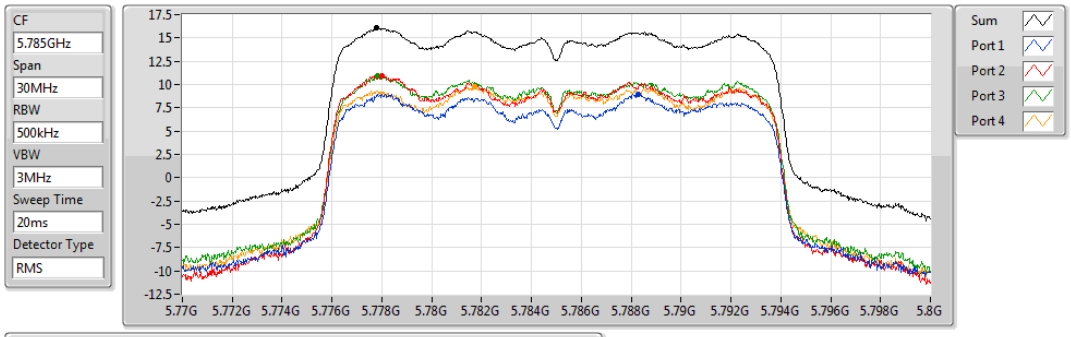


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.23	16.23	9.15	11.26	10.67	10.10

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5785MHz

08/04/2020

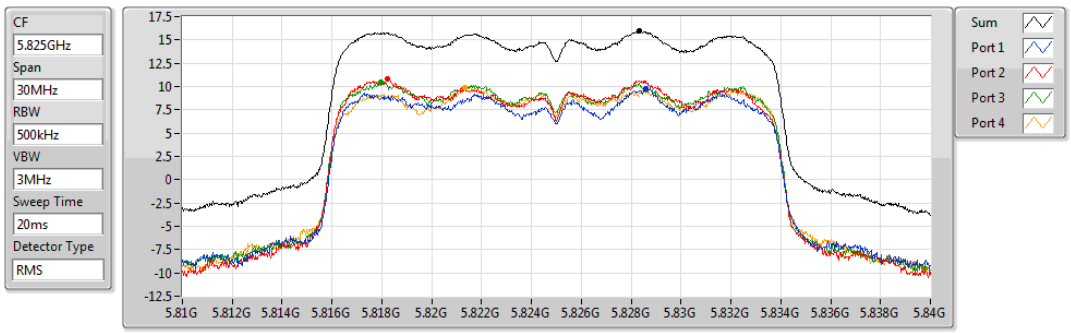


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.05	16.05	8.98	10.89	10.98	9.81

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

5825MHz

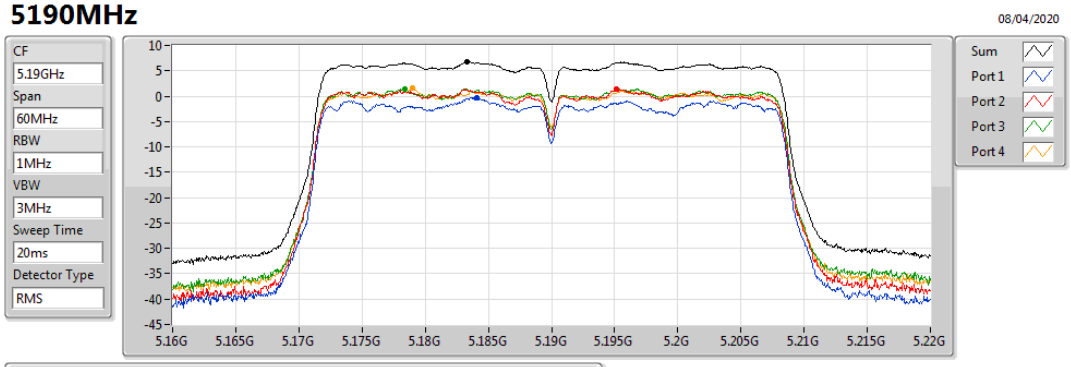
08/04/2020



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.99	15.99	9.78	10.80	10.50	9.89

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

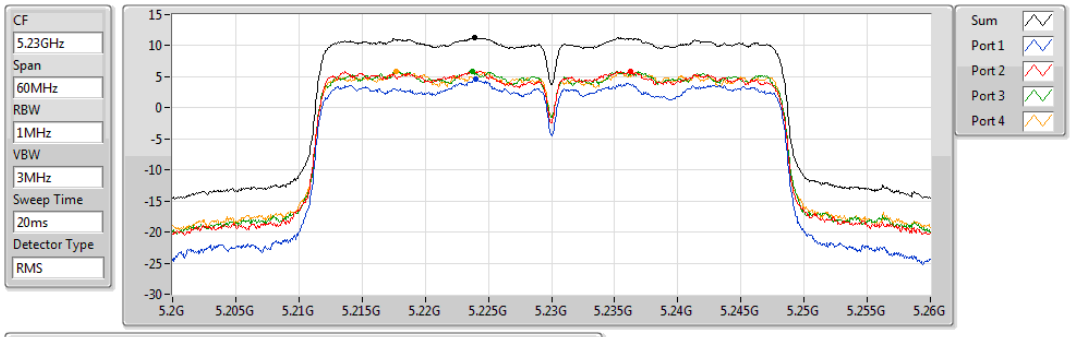
5190MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.70	6.70	-0.35	1.44	1.50	1.59

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

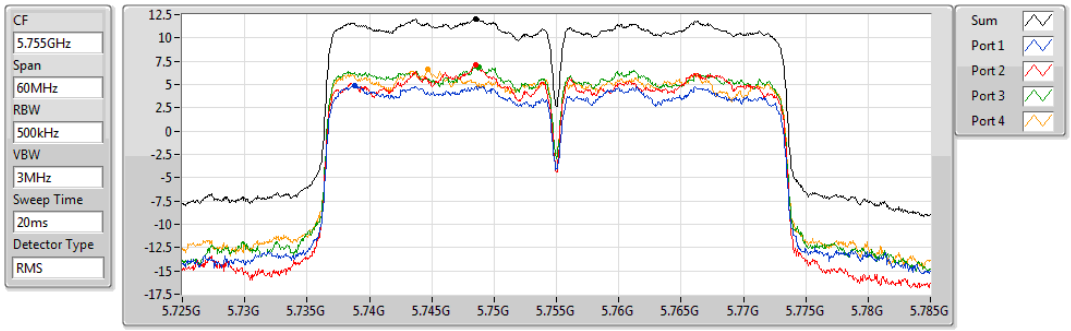
5230MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.29	11.29	4.63	5.93	5.92	5.91

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

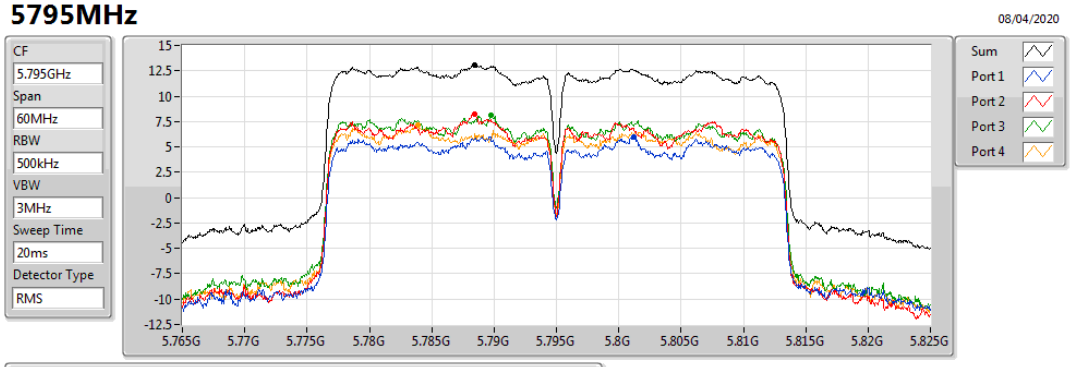
5755MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.08	12.08	4.90	7.09	6.89	6.59

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

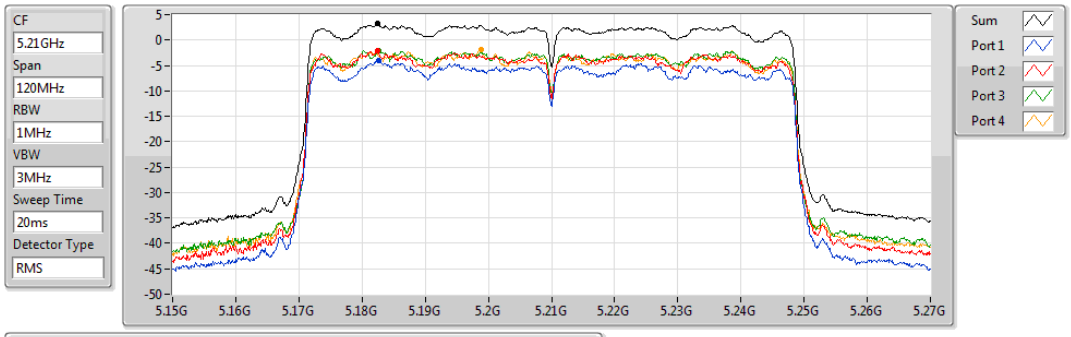
5795MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.05	13.05	6.03	8.20	8.15	7.18

802.11ac VHT80_Nss1,(MCS0)_4TX PSD

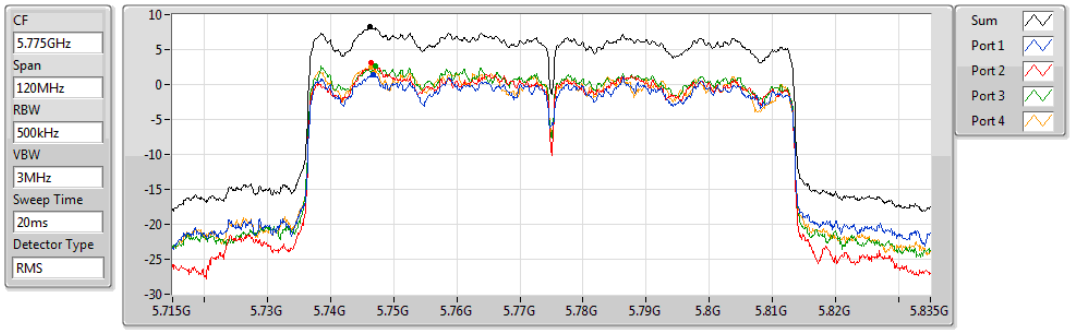
5210MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.31	3.31	-4.10	-2.13	-2.00	-1.77

802.11ac VHT80_Nss1,(MCS0)_4TX PSD

5775MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.22	8.22	1.48	3.18	2.69	2.55

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80_Nss1,(MCS0)_4TX	Pass	PK	255.04M	40.80	46.00	-5.20	3	Vertical	360	3.00	-

Result

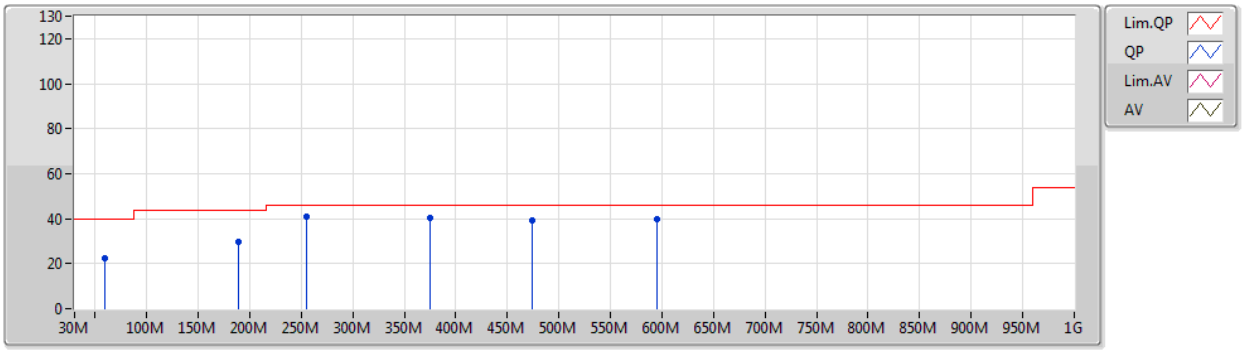
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	PK	59.1M	22.25	40.00	-17.75	3	Vertical	360	1.00	-
5775MHz	Pass	PK	189.08M	29.51	43.50	-13.99	3	Vertical	360	1.00	-
5775MHz	Pass	PK	255.04M	40.80	46.00	-5.20	3	Vertical	360	3.00	-
5775MHz	Pass	PK	375.32M	40.44	46.00	-5.56	3	Vertical	360	1.00	-
5775MHz	Pass	PK	474.26M	39.15	46.00	-6.85	3	Vertical	360	1.00	-
5775MHz	Pass	PK	594.54M	39.59	46.00	-6.41	3	Vertical	360	1.00	-
5775MHz	Pass	PK	68.8M	29.02	40.00	-10.98	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	138.64M	30.06	43.50	-13.44	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	189.08M	34.71	43.50	-8.79	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	375.32M	40.54	46.00	-5.46	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	478.14M	38.27	46.00	-7.73	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	660.5M	40.63	46.00	-5.37	3	Horizontal	0	1.00	-

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_Adapter

07/04/2020

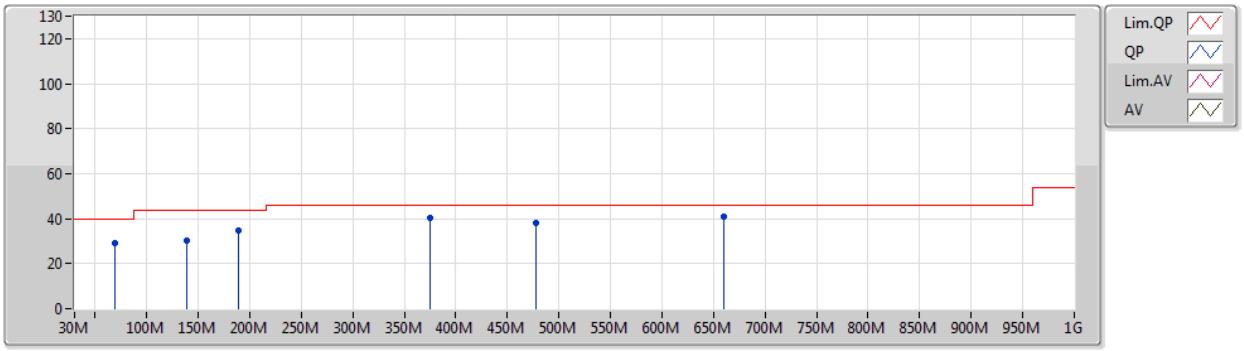


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	59.1M	22.25	40.00	-17.75	-25.78	3	Vertical	360	1.00	-	48.03	10.69	0.62	37.09
PK	189.08M	29.51	43.50	-13.99	-21.33	3	Vertical	360	1.00	-	50.84	13.92	1.15	36.40
PK	255.04M	40.80	46.00	-5.20	-16.68	3	Vertical	360	3.00	-	57.48	18.44	1.31	36.43
PK	375.32M	40.44	46.00	-5.56	-14.98	3	Vertical	360	1.00	-	55.42	19.99	1.63	36.60
PK	474.26M	39.15	46.00	-6.85	-12.37	3	Vertical	360	1.00	-	51.52	22.62	1.85	36.84
PK	594.54M	39.59	46.00	-6.41	-10.37	3	Vertical	360	1.00	-	49.96	24.75	2.08	37.20

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_Adapter

07/04/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	68.8M	29.02	40.00	-10.98	-25.13	3	Horizontal	0	1.00	-	54.15	11.22	0.67	37.02
PK	138.64M	30.06	43.50	-13.44	-19.11	3	Horizontal	0	1.00	-	49.17	16.56	0.95	36.62
PK	189.08M	34.71	43.50	-8.79	-21.33	3	Horizontal	0	1.00	-	56.04	13.92	1.15	36.40
PK	375.32M	40.54	46.00	-5.46	-14.98	3	Horizontal	0	1.00	-	55.52	19.99	1.63	36.60
PK	478.14M	38.27	46.00	-7.73	-12.32	3	Horizontal	0	1.00	-	50.59	22.67	1.86	36.85
PK	660.5M	40.63	46.00	-5.37	-9.76	3	Horizontal	0	1.00	-	50.39	25.32	2.22	37.30

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	PK	5.1488G	73.86	74.00	-0.14	3	Horizontal	332	2.53	-
802.11ac VHT20_Nss1,(MCS0)_4TX	Pass	AV	5.1476G	53.64	54.00	-0.36	3	Horizontal	322	1.72	-
802.11ac VHT40_Nss1,(MCS0)_4TX	Pass	AV	5.1464G	53.30	54.00	-0.70	3	Horizontal	318	1.74	-
802.11ac VHT80_Nss1,(MCS0)_4TX	Pass	AV	5.149G	53.61	54.00	-0.39	3	Horizontal	19	1.60	-
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	PK	5.6526G	66.47	70.12	-3.65	3	Horizontal	16	1.05	-
802.11ac VHT20_Nss1,(MCS0)_4TX	Pass	PK	5.6562G	67.52	72.79	-5.27	3	Horizontal	189	1.48	-
802.11ac VHT40_Nss1,(MCS0)_4TX	Pass	PK	5.6458G	68.07	68.20	-0.13	3	Horizontal	195	1.61	-
802.11ac VHT80_Nss1,(MCS0)_4TX	Pass	PK	5.649G	67.63	68.20	-0.57	3	Horizontal	190	1.49	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.143G	47.57	54.00	-6.43	3	Vertical	323	1.63	-
5180MHz	Pass	AV	5.183G	105.74	Inf	-Inf	3	Vertical	323	1.63	-
5180MHz	Pass	PK	5.1438G	67.08	74.00	-6.92	3	Vertical	323	1.63	-
5180MHz	Pass	PK	5.1836G	114.72	Inf	-Inf	3	Vertical	323	1.63	-
5180MHz	Pass	AV	5.1498G	51.93	54.00	-2.07	3	Horizontal	331	2.57	-
5180MHz	Pass	AV	5.1872G	107.81	Inf	-Inf	3	Horizontal	331	2.57	-
5180MHz	Pass	PK	5.1478G	73.45	74.00	-0.55	3	Horizontal	331	2.57	-
5180MHz	Pass	PK	5.187G	116.82	Inf	-Inf	3	Horizontal	331	2.57	-
5180MHz	Pass	PK	10.3612G	57.27	68.20	-10.93	3	Vertical	0	1.38	-
5180MHz	Pass	PK	10.3598G	56.68	68.20	-11.52	3	Horizontal	267	1.57	-
5200MHz	Pass	AV	5.1428G	49.72	54.00	-4.28	3	Vertical	325	1.50	-
5200MHz	Pass	AV	5.2032G	109.34	Inf	-Inf	3	Vertical	325	1.50	-
5200MHz	Pass	PK	5.1412G	70.24	74.00	-3.76	3	Vertical	325	1.50	-
5200MHz	Pass	PK	5.2032G	117.97	Inf	-Inf	3	Vertical	325	1.50	-
5200MHz	Pass	AV	5.1472G	52.93	54.00	-1.07	3	Horizontal	332	2.53	-
5200MHz	Pass	AV	5.2072G	111.80	Inf	-Inf	3	Horizontal	332	2.53	-
5200MHz	Pass	PK	5.1488G	73.86	74.00	-0.14	3	Horizontal	332	2.53	-
5200MHz	Pass	PK	5.2064G	120.32	Inf	-Inf	3	Horizontal	332	2.53	-
5200MHz	Pass	PK	10.3948G	59.21	68.20	-8.99	3	Vertical	0	1.42	-
5200MHz	Pass	PK	10.3998G	58.81	68.20	-9.39	3	Horizontal	267	1.50	-
5240MHz	Pass	AV	5.1428G	51.19	54.00	-2.81	3	Vertical	325	1.50	-
5240MHz	Pass	AV	5.243G	111.57	Inf	-Inf	3	Vertical	325	1.50	-
5240MHz	Pass	AV	5.3528G	46.54	54.00	-7.46	3	Vertical	325	1.50	-
5240MHz	Pass	PK	5.1422G	67.84	74.00	-6.16	3	Vertical	325	1.50	-
5240MHz	Pass	PK	5.243G	120.66	Inf	-Inf	3	Vertical	325	1.50	-
5240MHz	Pass	PK	5.3642G	61.49	74.00	-12.51	3	Vertical	325	1.50	-
5240MHz	Pass	AV	5.1476G	51.54	54.00	-2.46	3	Horizontal	13	1.06	-
5240MHz	Pass	AV	5.2466G	111.70	Inf	-Inf	3	Horizontal	13	1.06	-
5240MHz	Pass	AV	5.35G	46.86	54.00	-7.14	3	Horizontal	13	1.06	-
5240MHz	Pass	PK	5.1476G	67.11	74.00	-6.89	3	Horizontal	13	1.06	-
5240MHz	Pass	PK	5.2472G	121.41	Inf	-Inf	3	Horizontal	13	1.06	-
5240MHz	Pass	PK	5.3774G	59.08	74.00	-14.92	3	Horizontal	13	1.06	-
5240MHz	Pass	AV	15.7185G	45.02	54.00	-8.98	3	Vertical	94	1.44	-
5240MHz	Pass	PK	10.4806G	60.59	68.20	-7.61	3	Vertical	3	1.32	-
5240MHz	Pass	PK	15.7179G	57.19	74.00	-16.81	3	Vertical	94	1.44	-
5240MHz	Pass	AV	15.7226G	44.32	54.00	-9.68	3	Horizontal	39	3.00	-
5240MHz	Pass	PK	10.4797G	58.80	68.20	-9.40	3	Horizontal	267	1.50	-
5240MHz	Pass	PK	15.7245G	55.79	74.00	-18.21	3	Horizontal	39	3.00	-
5745MHz	Pass	AV	5.7414G	111.76	Inf	-Inf	3	Vertical	260	2.97	-
5745MHz	Pass	PK	5.469G	61.55	68.20	-6.65	3	Vertical	260	2.97	-
5745MHz	Pass	PK	5.7414G	120.18	Inf	-Inf	3	Vertical	260	2.97	-
5745MHz	Pass	PK	5.9262G	59.04	68.20	-9.16	3	Vertical	260	2.97	-
5745MHz	Pass	AV	5.7522G	112.84	Inf	-Inf	3	Horizontal	16	1.05	-
5745MHz	Pass	PK	5.6526G	66.47	70.12	-3.65	3	Horizontal	16	1.05	-
5745MHz	Pass	PK	5.7522G	122.23	Inf	-Inf	3	Horizontal	16	1.05	-
5745MHz	Pass	PK	5.9694G	59.42	68.20	-8.78	3	Horizontal	16	1.05	-
5745MHz	Pass	AV	11.4925G	44.40	54.00	-9.60	3	Vertical	351	1.50	-

Remark :

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5745MHz	Pass	PK	11.4927G	57.07	74.00	-16.93	3	Vertical	351	1.50	-
5745MHz	Pass	PK	17.2294G	60.20	68.20	-8.00	3	Vertical	283	1.47	-
5745MHz	Pass	AV	11.4893G	46.88	54.00	-7.12	3	Horizontal	163	1.45	-
5745MHz	Pass	PK	11.489G	58.23	74.00	-15.77	3	Horizontal	163	1.45	-
5745MHz	Pass	PK	17.2397G	60.66	68.20	-7.54	3	Horizontal	92	1.47	-
5785MHz	Pass	AV	5.7922G	109.98	Inf	-Inf	3	Vertical	340	1.20	-
5785MHz	Pass	PK	5.521G	61.39	68.20	-6.81	3	Vertical	340	1.20	-
5785MHz	Pass	PK	5.7922G	119.21	Inf	-Inf	3	Vertical	340	1.20	-
5785MHz	Pass	PK	6.0718G	59.88	68.20	-8.32	3	Vertical	340	1.20	-
5785MHz	Pass	AV	5.7778G	112.63	Inf	-Inf	3	Horizontal	194	1.56	-
5785MHz	Pass	PK	5.4946G	62.59	68.20	-5.61	3	Horizontal	194	1.56	-
5785MHz	Pass	PK	5.7778G	121.63	Inf	-Inf	3	Horizontal	194	1.56	-
5785MHz	Pass	PK	6.0478G	59.83	68.20	-8.37	3	Horizontal	194	1.56	-
5785MHz	Pass	AV	11.57095G	44.70	54.00	-9.30	3	Vertical	350	1.89	-
5785MHz	Pass	PK	11.56942G	57.34	74.00	-16.66	3	Vertical	350	1.89	-
5785MHz	Pass	PK	17.35519G	60.18	68.20	-8.02	3	Vertical	254	1.24	-
5785MHz	Pass	AV	11.56941G	46.58	54.00	-7.42	3	Horizontal	195	1.80	-
5785MHz	Pass	PK	11.56888G	58.48	74.00	-15.52	3	Horizontal	195	1.80	-
5785MHz	Pass	PK	17.35311G	60.09	68.20	-8.11	3	Horizontal	7	2.17	-
5825MHz	Pass	AV	5.8322G	109.80	Inf	-Inf	3	Vertical	339	1.27	-
5825MHz	Pass	PK	5.5382G	60.69	68.20	-7.51	3	Vertical	339	1.27	-
5825MHz	Pass	PK	5.8322G	118.48	Inf	-Inf	3	Vertical	339	1.27	-
5825MHz	Pass	PK	5.9258G	60.32	68.20	-7.88	3	Vertical	339	1.27	-
5825MHz	Pass	AV	5.8178G	112.55	Inf	-Inf	3	Horizontal	195	1.55	-
5825MHz	Pass	PK	5.5802G	62.14	68.20	-6.06	3	Horizontal	195	1.55	-
5825MHz	Pass	PK	5.8178G	120.99	Inf	-Inf	3	Horizontal	195	1.55	-
5825MHz	Pass	PK	6.0914G	59.52	68.20	-8.68	3	Horizontal	195	1.55	-
5825MHz	Pass	AV	11.64785G	44.66	54.00	-9.34	3	Vertical	336	2.28	-
5825MHz	Pass	PK	11.65107G	57.79	74.00	-16.21	3	Vertical	336	2.28	-
5825MHz	Pass	PK	17.47609G	60.31	68.20	-7.89	3	Vertical	24	1.22	-
5825MHz	Pass	AV	11.64778G	46.66	54.00	-7.34	3	Horizontal	150	1.62	-
5825MHz	Pass	PK	11.64936G	58.20	74.00	-15.80	3	Horizontal	150	1.62	-
5825MHz	Pass	PK	17.47711G	60.05	68.20	-8.15	3	Horizontal	289	2.19	-
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.146G	51.97	54.00	-2.03	3	Vertical	326	1.40	-
5180MHz	Pass	AV	5.1834G	106.67	Inf	-Inf	3	Vertical	326	1.40	-
5180MHz	Pass	PK	5.1434G	73.32	74.00	-0.68	3	Vertical	326	1.40	-
5180MHz	Pass	PK	5.1834G	115.33	Inf	-Inf	3	Vertical	326	1.40	-
5180MHz	Pass	AV	5.1412G	50.17	54.00	-3.83	3	Horizontal	18	1.59	-
5180MHz	Pass	AV	5.1806G	106.48	Inf	-Inf	3	Horizontal	18	1.59	-
5180MHz	Pass	PK	5.1396G	73.38	74.00	-0.62	3	Horizontal	18	1.59	-
5180MHz	Pass	PK	5.1806G	114.79	Inf	-Inf	3	Horizontal	18	1.59	-
5180MHz	Pass	PK	10.3618G	56.81	68.20	-11.39	3	Vertical	360	1.49	-
5180MHz	Pass	PK	10.3594G	56.68	68.20	-11.52	3	Horizontal	267	1.50	-
5200MHz	Pass	AV	5.1448G	50.23	54.00	-3.77	3	Vertical	330	1.30	-
5200MHz	Pass	AV	5.2032G	109.17	Inf	-Inf	3	Vertical	330	1.30	-
5200MHz	Pass	PK	5.1452G	69.77	74.00	-4.23	3	Vertical	330	1.30	-
5200MHz	Pass	PK	5.2036G	117.54	Inf	-Inf	3	Vertical	330	1.30	-
5200MHz	Pass	AV	5.148G	53.60	54.00	-0.40	3	Horizontal	323	1.85	-

Remark :

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5200MHz	Pass	AV	5.2068G	110.57	Inf	-Inf	3	Horizontal	323	1.85	-
5200MHz	Pass	PK	5.1484G	71.84	74.00	-2.16	3	Horizontal	323	1.85	-
5200MHz	Pass	PK	5.2076G	118.82	Inf	-Inf	3	Horizontal	323	1.85	-
5200MHz	Pass	PK	10.4004G	59.43	68.20	-8.77	3	Vertical	360	1.35	-
5200MHz	Pass	PK	10.3987G	57.92	68.20	-10.28	3	Horizontal	264	1.50	-
5240MHz	Pass	AV	5.1452G	50.55	54.00	-3.45	3	Vertical	324	1.36	-
5240MHz	Pass	AV	5.243G	112.19	Inf	-Inf	3	Vertical	324	1.36	-
5240MHz	Pass	AV	5.363G	46.80	54.00	-7.20	3	Vertical	324	1.36	-
5240MHz	Pass	PK	5.1416G	67.00	74.00	-7.00	3	Vertical	324	1.36	-
5240MHz	Pass	PK	5.2436G	121.34	Inf	-Inf	3	Vertical	324	1.36	-
5240MHz	Pass	PK	5.3654G	61.79	74.00	-12.21	3	Vertical	324	1.36	-
5240MHz	Pass	AV	5.1476G	53.64	54.00	-0.36	3	Horizontal	322	1.72	-
5240MHz	Pass	AV	5.2466G	113.50	Inf	-Inf	3	Horizontal	322	1.72	-
5240MHz	Pass	AV	5.351G	48.85	54.00	-5.15	3	Horizontal	322	1.72	-
5240MHz	Pass	PK	5.1482G	72.94	74.00	-1.06	3	Horizontal	322	1.72	-
5240MHz	Pass	PK	5.2472G	122.32	Inf	-Inf	3	Horizontal	322	1.72	-
5240MHz	Pass	PK	5.35G	63.47	74.00	-10.53	3	Horizontal	322	1.72	-
5240MHz	Pass	AV	15.7261G	44.92	54.00	-9.08	3	Vertical	90	1.41	-
5240MHz	Pass	PK	10.4794G	59.58	68.20	-8.62	3	Vertical	3	1.34	-
5240MHz	Pass	PK	15.7244G	56.51	74.00	-17.49	3	Vertical	90	1.41	-
5240MHz	Pass	AV	15.7233G	44.53	54.00	-9.47	3	Horizontal	11	1.52	-
5240MHz	Pass	PK	10.4797G	59.34	68.20	-8.86	3	Horizontal	267	1.50	-
5240MHz	Pass	PK	15.7245G	56.47	74.00	-17.53	3	Horizontal	11	1.52	-
5745MHz	Pass	AV	5.7522G	110.21	Inf	-Inf	3	Vertical	359	1.13	-
5745MHz	Pass	PK	5.4966G	60.85	68.20	-7.35	3	Vertical	359	1.13	-
5745MHz	Pass	PK	5.7522G	118.74	Inf	-Inf	3	Vertical	359	1.13	-
5745MHz	Pass	PK	5.9382G	58.52	68.20	-9.68	3	Vertical	359	1.13	-
5745MHz	Pass	AV	5.7378G	111.83	Inf	-Inf	3	Horizontal	189	1.48	-
5745MHz	Pass	PK	5.6562G	67.52	72.79	-5.27	3	Horizontal	189	1.48	-
5745MHz	Pass	PK	5.7378G	121.22	Inf	-Inf	3	Horizontal	189	1.48	-
5745MHz	Pass	PK	5.9478G	60.57	68.20	-7.63	3	Horizontal	189	1.48	-
5745MHz	Pass	AV	11.4868G	45.36	54.00	-8.64	3	Vertical	294	1.00	-
5745MHz	Pass	PK	11.4865G	57.54	74.00	-16.46	3	Vertical	294	1.00	-
5745MHz	Pass	PK	17.2365G	61.05	68.20	-7.15	3	Vertical	118	2.32	-
5745MHz	Pass	AV	11.4896G	46.80	54.00	-7.20	3	Horizontal	155	1.23	-
5745MHz	Pass	PK	11.49G	58.63	74.00	-15.37	3	Horizontal	155	1.23	-
5745MHz	Pass	PK	17.2245G	60.32	68.20	-7.88	3	Horizontal	95	1.50	-
5785MHz	Pass	AV	5.7922G	107.71	Inf	-Inf	3	Vertical	305	1.50	-
5785MHz	Pass	PK	5.5342G	60.99	68.20	-7.21	3	Vertical	305	1.50	-
5785MHz	Pass	PK	5.7922G	116.30	Inf	-Inf	3	Vertical	305	1.50	-
5785MHz	Pass	PK	5.9578G	58.32	68.20	-9.88	3	Vertical	305	1.50	-
5785MHz	Pass	AV	5.7778G	111.71	Inf	-Inf	3	Horizontal	331	2.57	-
5785MHz	Pass	PK	5.4874G	62.07	68.20	-6.13	3	Horizontal	331	2.57	-
5785MHz	Pass	PK	5.7778G	121.07	Inf	-Inf	3	Horizontal	331	2.57	-
5785MHz	Pass	PK	6.0694G	58.51	68.20	-9.69	3	Horizontal	331	2.57	-
5785MHz	Pass	AV	11.56801G	45.58	54.00	-8.42	3	Vertical	129	1.32	-
5785MHz	Pass	PK	11.5716G	57.86	74.00	-16.14	3	Vertical	129	1.32	-
5785MHz	Pass	PK	17.3538G	61.37	68.20	-6.83	3	Vertical	13	1.40	-
5785MHz	Pass	AV	11.57146G	46.83	54.00	-7.17	3	Horizontal	55	1.09	-

Remark :

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5785MHz	Pass	PK	11.56898G	58.04	74.00	-15.96	3	Horizontal	55	1.09	-
5785MHz	Pass	PK	17.3557G	60.04	68.20	-8.16	3	Horizontal	279	2.47	-
5825MHz	Pass	AV	5.8322G	107.71	Inf	-Inf	3	Vertical	306	1.43	-
5825MHz	Pass	PK	5.555G	61.47	68.20	-6.73	3	Vertical	306	1.43	-
5825MHz	Pass	PK	5.8322G	116.26	Inf	-Inf	3	Vertical	306	1.43	-
5825MHz	Pass	PK	5.9438G	59.15	68.20	-9.05	3	Vertical	306	1.43	-
5825MHz	Pass	AV	5.8178G	111.43	Inf	-Inf	3	Horizontal	321	2.64	-
5825MHz	Pass	PK	5.5382G	61.52	68.20	-6.68	3	Horizontal	321	2.64	-
5825MHz	Pass	PK	5.8178G	120.48	Inf	-Inf	3	Horizontal	321	2.64	-
5825MHz	Pass	PK	6.0194G	59.95	68.20	-8.25	3	Horizontal	321	2.64	-
5825MHz	Pass	AV	11.64928G	45.77	54.00	-8.23	3	Vertical	5	1.97	-
5825MHz	Pass	PK	11.6512G	57.67	74.00	-16.33	3	Vertical	5	1.97	-
5825MHz	Pass	PK	17.47731G	61.15	68.20	-7.05	3	Vertical	0	1.71	-
5825MHz	Pass	AV	11.64756G	46.53	54.00	-7.47	3	Horizontal	56	1.52	-
5825MHz	Pass	PK	11.64852G	58.44	74.00	-15.56	3	Horizontal	56	1.52	-
5825MHz	Pass	PK	17.4741G	60.55	68.20	-7.65	3	Horizontal	130	1.38	-
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	AV	5.15G	53.06	54.00	-0.94	3	Vertical	327	1.54	-
5190MHz	Pass	AV	5.1736G	98.35	Inf	-Inf	3	Vertical	327	1.54	-
5190MHz	Pass	PK	5.15G	67.94	74.00	-6.06	3	Vertical	327	1.54	-
5190MHz	Pass	PK	5.1916G	106.53	Inf	-Inf	3	Vertical	327	1.54	-
5190MHz	Pass	AV	5.1464G	53.30	54.00	-0.70	3	Horizontal	318	1.74	-
5190MHz	Pass	AV	5.206G	100.64	Inf	-Inf	3	Horizontal	318	1.74	-
5190MHz	Pass	PK	5.1484G	68.93	74.00	-5.07	3	Horizontal	318	1.74	-
5190MHz	Pass	PK	5.2056G	109.24	Inf	-Inf	3	Horizontal	318	1.74	-
5190MHz	Pass	PK	10.3825G	57.05	68.20	-11.15	3	Vertical	35	1.27	-
5190MHz	Pass	PK	10.37994G	55.39	68.20	-12.81	3	Horizontal	295	1.60	-
5230MHz	Pass	AV	5.15G	50.42	54.00	-3.58	3	Vertical	325	1.40	-
5230MHz	Pass	AV	5.2316G	102.78	Inf	-Inf	3	Vertical	325	1.40	-
5230MHz	Pass	PK	5.15G	63.33	74.00	-10.67	3	Vertical	325	1.40	-
5230MHz	Pass	PK	5.2344G	111.24	Inf	-Inf	3	Vertical	325	1.40	-
5230MHz	Pass	AV	5.1472G	53.17	54.00	-0.83	3	Horizontal	320	1.78	-
5230MHz	Pass	AV	5.246G	105.55	Inf	-Inf	3	Horizontal	320	1.78	-
5230MHz	Pass	PK	5.1472G	67.04	74.00	-6.96	3	Horizontal	320	1.78	-
5230MHz	Pass	PK	5.2252G	114.13	Inf	-Inf	3	Horizontal	320	1.78	-
5230MHz	Pass	PK	10.4613G	57.87	68.20	-10.33	3	Vertical	360	1.47	-
5230MHz	Pass	PK	10.4604G	57.11	68.20	-11.09	3	Horizontal	156	2.25	-
5755MHz	Pass	AV	5.743G	106.80	Inf	-Inf	3	Vertical	351	1.25	-
5755MHz	Pass	PK	5.6422G	65.40	68.20	-2.80	3	Vertical	351	1.25	-
5755MHz	Pass	PK	5.743G	115.19	Inf	-Inf	3	Vertical	351	1.25	-
5755MHz	Pass	PK	5.929G	59.83	68.20	-8.37	3	Vertical	351	1.25	-
5755MHz	Pass	AV	5.7478G	108.47	Inf	-Inf	3	Horizontal	195	1.61	-
5755MHz	Pass	PK	5.6458G	68.07	68.20	-0.13	3	Horizontal	195	1.61	-
5755MHz	Pass	PK	5.7478G	116.78	Inf	-Inf	3	Horizontal	195	1.61	-
5755MHz	Pass	PK	5.929G	61.38	68.20	-6.82	3	Horizontal	195	1.61	-
5755MHz	Pass	AV	11.50867G	44.14	54.00	-9.86	3	Vertical	149	1.25	-
5755MHz	Pass	PK	11.51116G	56.04	74.00	-17.96	3	Vertical	149	1.25	-
5755MHz	Pass	AV	11.50897G	45.02	54.00	-8.98	3	Horizontal	351	1.90	-
5755MHz	Pass	PK	11.50766G	56.28	74.00	-17.72	3	Horizontal	351	1.90	-

Remark :

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

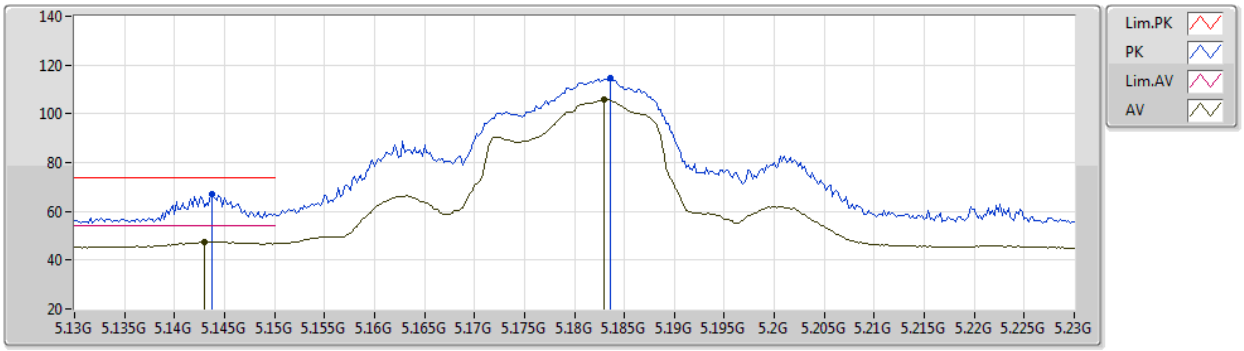
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5795MHz	Pass	AV	5.7842G	107.58	Inf	-Inf	3	Vertical	354	1.31	-
5795MHz	Pass	PK	5.645G	63.50	68.20	-4.70	3	Vertical	354	1.31	-
5795MHz	Pass	PK	5.783G	115.96	Inf	-Inf	3	Vertical	354	1.31	-
5795MHz	Pass	PK	5.9246G	65.76	68.50	-2.74	3	Vertical	354	1.31	-
5795MHz	Pass	AV	5.7878G	109.07	Inf	-Inf	3	Horizontal	199	1.64	-
5795MHz	Pass	PK	5.6474G	65.46	68.20	-2.74	3	Horizontal	199	1.64	-
5795MHz	Pass	PK	5.7878G	117.53	Inf	-Inf	3	Horizontal	199	1.64	-
5795MHz	Pass	PK	5.9282G	67.29	68.20	-0.91	3	Horizontal	199	1.64	-
5795MHz	Pass	AV	11.58988G	44.95	54.00	-9.05	3	Vertical	260	1.66	-
5795MHz	Pass	PK	11.59224G	56.04	74.00	-17.96	3	Vertical	260	1.66	-
5795MHz	Pass	AV	11.59177G	46.72	54.00	-7.28	3	Horizontal	218	1.70	-
5795MHz	Pass	PK	11.58834G	59.26	74.00	-14.74	3	Horizontal	218	1.70	-
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	AV	5.147G	51.91	54.00	-2.09	3	Vertical	284	1.37	-
5210MHz	Pass	AV	5.187G	95.15	Inf	-Inf	3	Vertical	284	1.37	-
5210MHz	Pass	AV	5.454G	46.86	54.00	-7.14	3	Vertical	284	1.37	-
5210MHz	Pass	PK	5.147G	67.79	74.00	-6.21	3	Vertical	284	1.37	-
5210MHz	Pass	PK	5.187G	102.62	Inf	-Inf	3	Vertical	284	1.37	-
5210MHz	Pass	PK	5.421G	56.62	74.00	-17.38	3	Vertical	284	1.37	-
5210MHz	Pass	AV	5.149G	53.61	54.00	-0.39	3	Horizontal	19	1.60	-
5210MHz	Pass	AV	5.211G	96.27	Inf	-Inf	3	Horizontal	19	1.60	-
5210MHz	Pass	AV	5.421G	46.42	54.00	-7.58	3	Horizontal	19	1.60	-
5210MHz	Pass	PK	5.148G	64.63	74.00	-9.37	3	Horizontal	19	1.60	-
5210MHz	Pass	PK	5.211G	102.92	Inf	-Inf	3	Horizontal	19	1.60	-
5210MHz	Pass	PK	5.453G	56.68	74.00	-17.32	3	Horizontal	19	1.60	-
5210MHz	Pass	PK	10.41876G	55.52	68.20	-12.68	3	Vertical	138	1.13	-
5210MHz	Pass	PK	10.41987G	55.06	68.20	-13.14	3	Horizontal	254	1.56	-
5775MHz	Pass	AV	5.7642G	101.41	Inf	-Inf	3	Vertical	0	1.24	-
5775MHz	Pass	PK	5.6442G	66.07	68.20	-2.13	3	Vertical	0	1.24	-
5775MHz	Pass	PK	5.763G	108.96	Inf	-Inf	3	Vertical	0	1.24	-
5775MHz	Pass	PK	5.925G	64.51	68.20	-3.69	3	Vertical	0	1.24	-
5775MHz	Pass	AV	5.7474G	102.92	Inf	-Inf	3	Horizontal	190	1.49	-
5775MHz	Pass	PK	5.649G	67.63	68.20	-0.57	3	Horizontal	190	1.49	-
5775MHz	Pass	PK	5.7474G	110.59	Inf	-Inf	3	Horizontal	190	1.49	-
5775MHz	Pass	PK	5.9262G	65.80	68.20	-2.40	3	Horizontal	190	1.49	-
5775MHz	Pass	AV	11.54959G	45.61	54.00	-8.39	3	Vertical	187	1.14	-
5775MHz	Pass	PK	11.54909G	55.42	74.00	-18.58	3	Vertical	187	1.14	-
5775MHz	Pass	AV	11.54773G	46.70	54.00	-7.30	3	Horizontal	328	2.08	-
5775MHz	Pass	PK	11.55168G	56.95	74.00	-17.05	3	Horizontal	328	2.08	-

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

02/04/2020



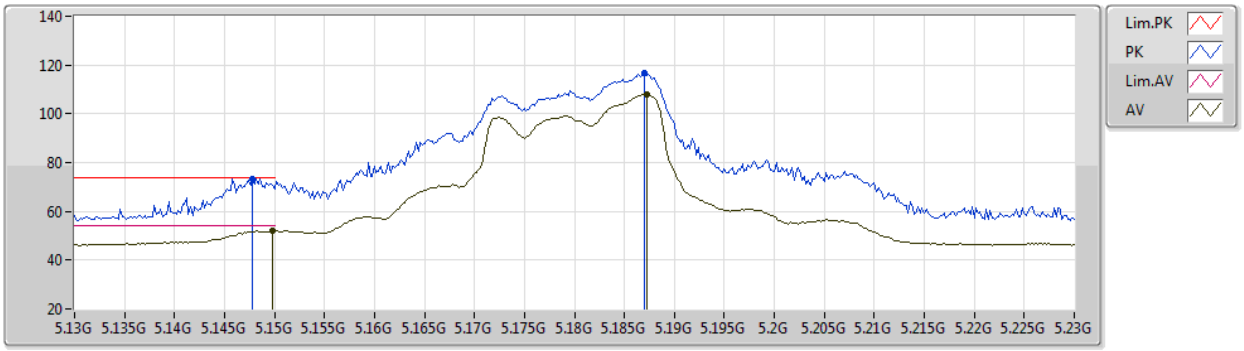
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.143G	47.57	54.00	-6.43	8.66	3	Vertical	323	1.63	-	38.91	31.99	6.00	29.33
AV	5.183G	105.74	Inf	-Inf	8.55	3	Vertical	323	1.63	-	97.19	31.87	6.02	29.34
PK	5.1438G	67.08	74.00	-6.92	8.66	3	Vertical	323	1.63	-	58.42	31.99	6.00	29.33
PK	5.1836G	114.72	Inf	-Inf	8.55	3	Vertical	323	1.63	-	106.17	31.87	6.02	29.34

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

02/04/2020

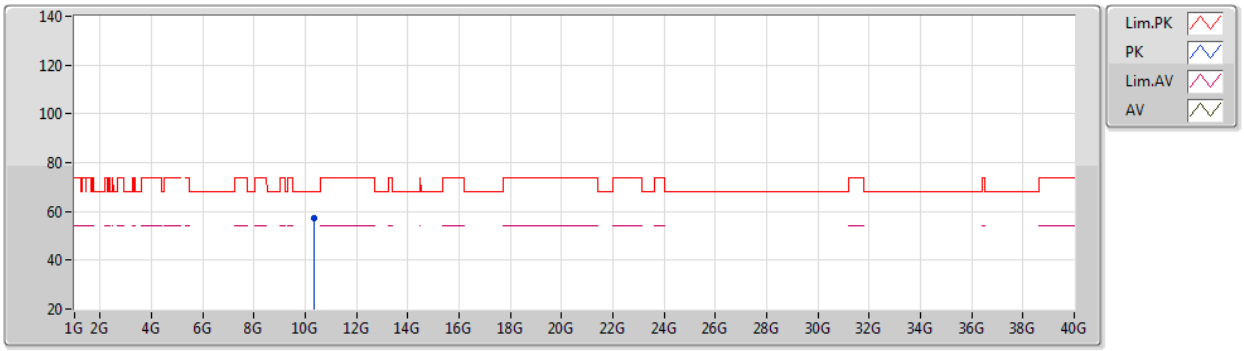


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1498G	51.93	54.00	-2.07	8.67	3	Horizontal	331	2.57	-	43.26	32.00	6.00	29.33
AV	5.1872G	107.81	Inf	-Inf	8.53	3	Horizontal	331	2.57	-	99.28	31.85	6.02	29.34
PK	5.1478G	73.45	74.00	-0.55	8.67	3	Horizontal	331	2.57	-	64.78	32.00	6.00	29.33
PK	5.187G	116.82	Inf	-Inf	8.53	3	Horizontal	331	2.57	-	108.29	31.85	6.02	29.34

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

03/04/2020



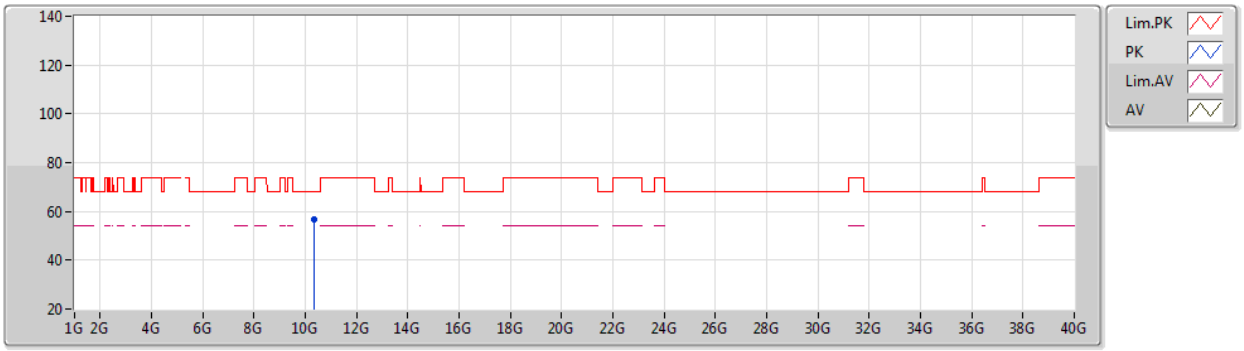
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.3612G	57.27	68.20	-10.93	17.62	3	Vertical	0	1.38	-	39.65	39.44	8.70	30.52

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

03/04/2020

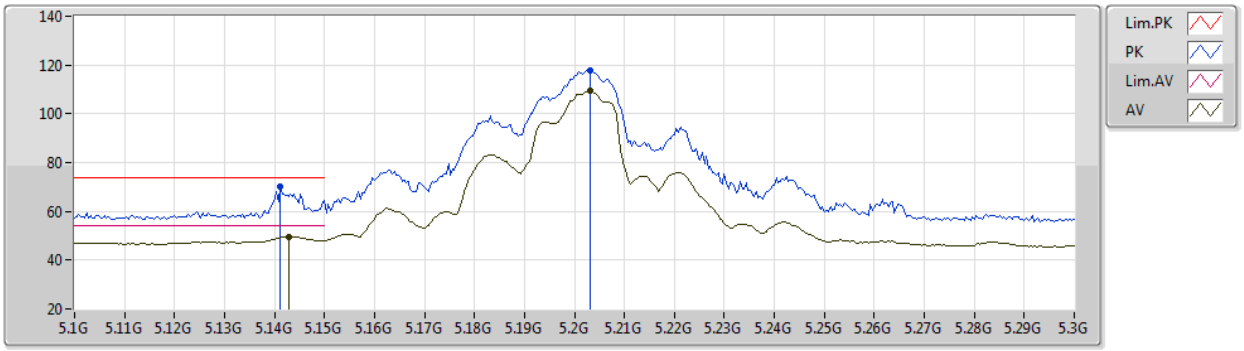


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.3598G	56.68	68.20	-11.52	17.61	3	Horizontal	267	1.57	-	39.07	39.44	8.69	30.52

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

02/04/2020

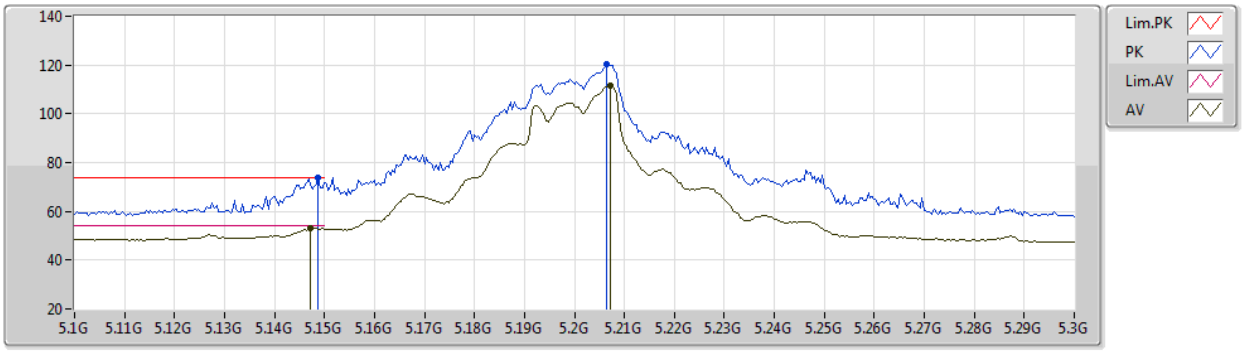


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1428G	49.72	54.00	-4.28	8.66	3	Vertical	325	1.50	-	41.06	31.99	6.00	29.33
AV	5.2032G	109.34	Inf	-Inf	8.46	3	Vertical	325	1.50	-	100.88	31.77	6.03	29.34
PK	5.1412G	70.24	74.00	-3.76	8.65	3	Vertical	325	1.50	-	61.59	31.98	6.00	29.33
PK	5.2032G	117.97	Inf	-Inf	8.46	3	Vertical	325	1.50	-	109.51	31.77	6.03	29.34

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

02/04/2020

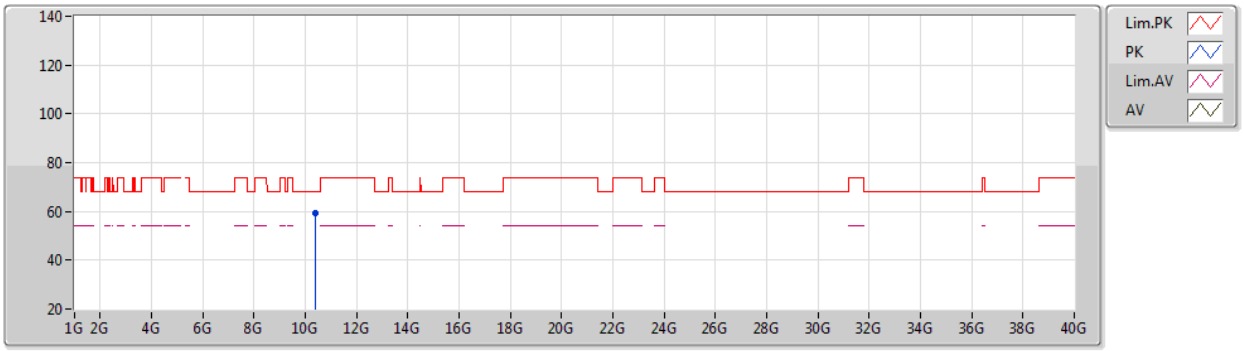


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1472G	52.93	54.00	-1.07	8.66	3	Horizontal	332	2.53	-	44.27	31.99	6.00	29.33
AV	5.2072G	111.80	Inf	-Inf	8.43	3	Horizontal	332	2.53	-	103.37	31.74	6.03	29.34
PK	5.1488G	73.86	74.00	-0.14	8.67	3	Horizontal	332	2.53	-	65.19	32.00	6.00	29.33
PK	5.2064G	120.32	Inf	-Inf	8.44	3	Horizontal	332	2.53	-	111.88	31.75	6.03	29.34

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

03/04/2020

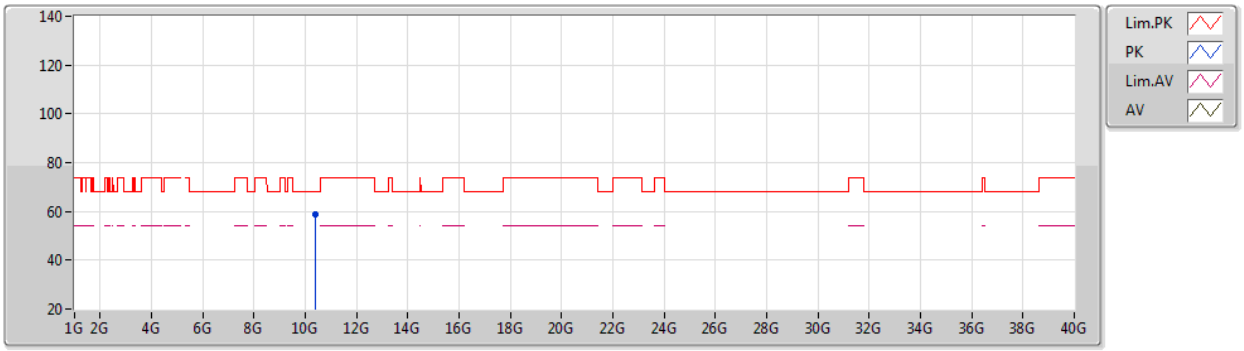


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.3948G	59.21	68.20	-8.99	17.76	3	Vertical	0	1.42	-	41.45	39.58	8.72	30.54

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

03/04/2020

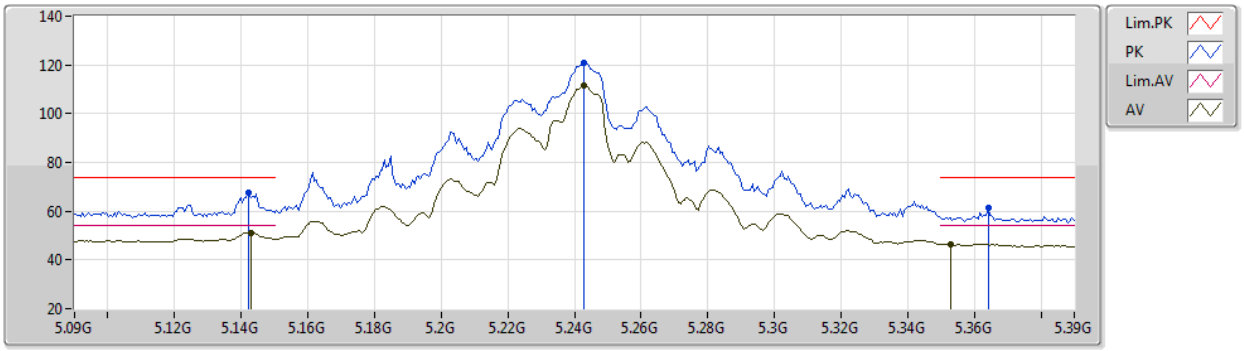


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.3998G	58.81	68.20	-9.39	17.78	3	Horizontal	267	1.50	-	41.03	39.60	8.72	30.54

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

03/04/2020

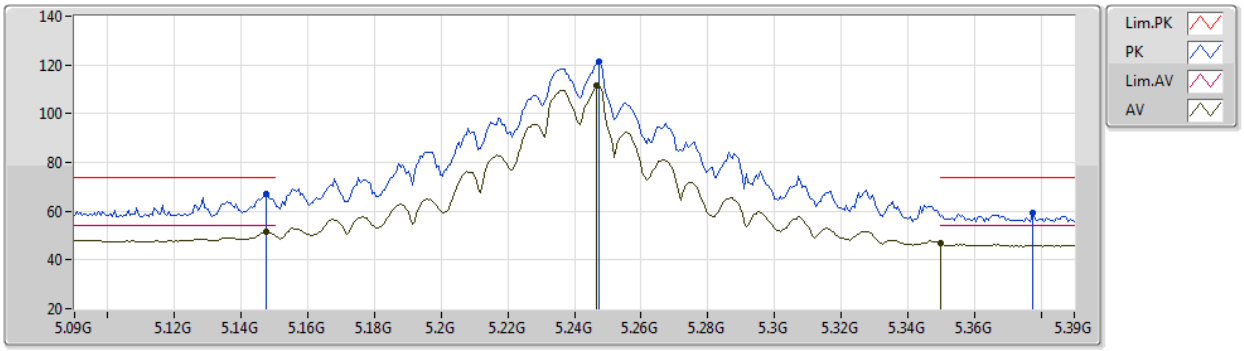


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1428G	51.19	54.00	-2.81	8.66	3	Vertical	325	1.50	-	42.53	31.99	6.00	29.33
AV	5.243G	111.57	Inf	-Inf	8.17	3	Vertical	325	1.50	-	103.40	31.46	6.05	29.34
AV	5.3528G	46.54	54.00	-7.46	7.87	3	Vertical	325	1.50	-	38.67	31.12	6.11	29.36
PK	5.1422G	67.84	74.00	-6.16	8.65	3	Vertical	325	1.50	-	59.19	31.98	6.00	29.33
PK	5.243G	120.66	Inf	-Inf	8.17	3	Vertical	325	1.50	-	112.49	31.46	6.05	29.34
PK	5.3642G	61.49	74.00	-12.51	7.97	3	Vertical	325	1.50	-	53.52	31.21	6.12	29.36

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

03/04/2020

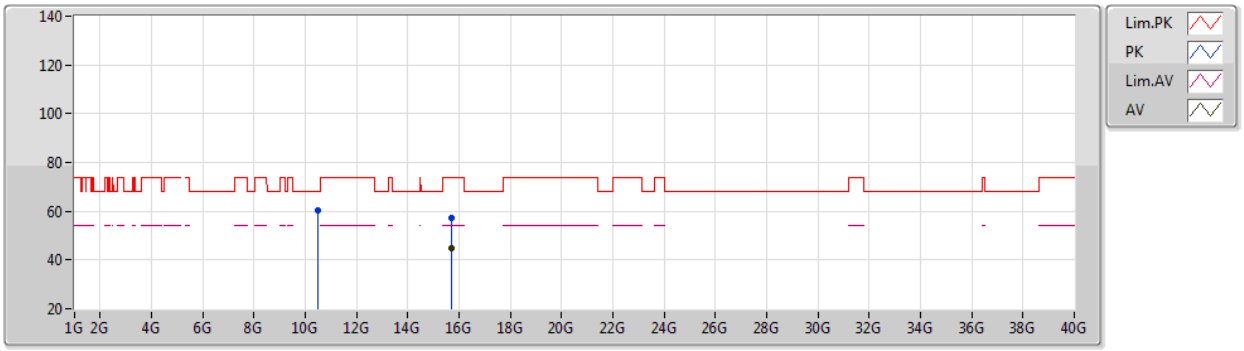


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1476G	51.54	54.00	-2.46	8.67	3	Horizontal	13	1.06	-	42.87	32.00	6.00	29.33
AV	5.2466G	111.70	Inf	-Inf	8.14	3	Horizontal	13	1.06	-	103.56	31.43	6.05	29.34
AV	5.35G	46.86	54.00	-7.14	7.85	3	Horizontal	13	1.06	-	39.01	31.10	6.11	29.36
PK	5.1476G	67.11	74.00	-6.89	8.67	3	Horizontal	13	1.06	-	58.44	32.00	6.00	29.33
PK	5.2472G	121.41	Inf	-Inf	8.13	3	Horizontal	13	1.06	-	113.28	31.42	6.05	29.34
PK	5.3774G	59.08	74.00	-14.92	8.08	3	Horizontal	13	1.06	-	51.00	31.32	6.12	29.36

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

03/04/2020

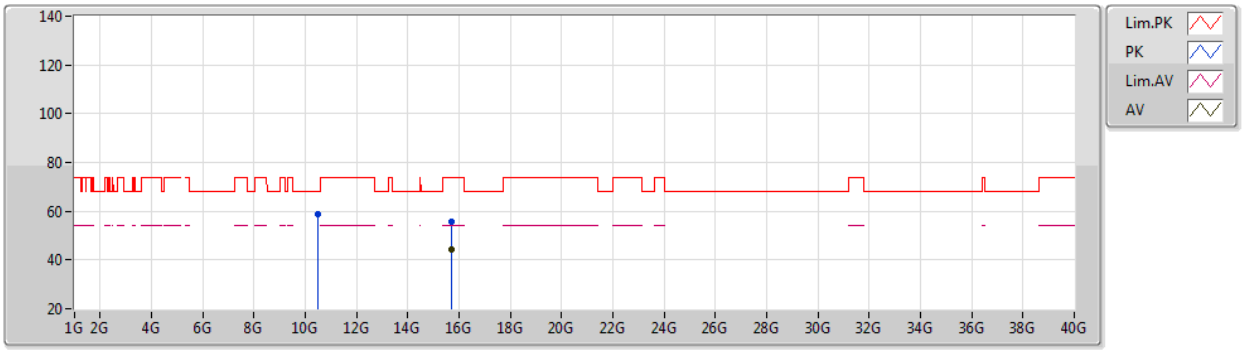


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	15.7185G	45.02	54.00	-8.98	16.64	3	Vertical	94	1.44	-	28.38	37.66	10.88	31.90
PK	10.4806G	60.59	68.20	-7.61	17.89	3	Vertical	3	1.32	-	42.70	39.68	8.78	30.57
PK	15.7179G	57.19	74.00	-16.81	16.64	3	Vertical	94	1.44	-	40.55	37.66	10.88	31.90

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

03/04/2020

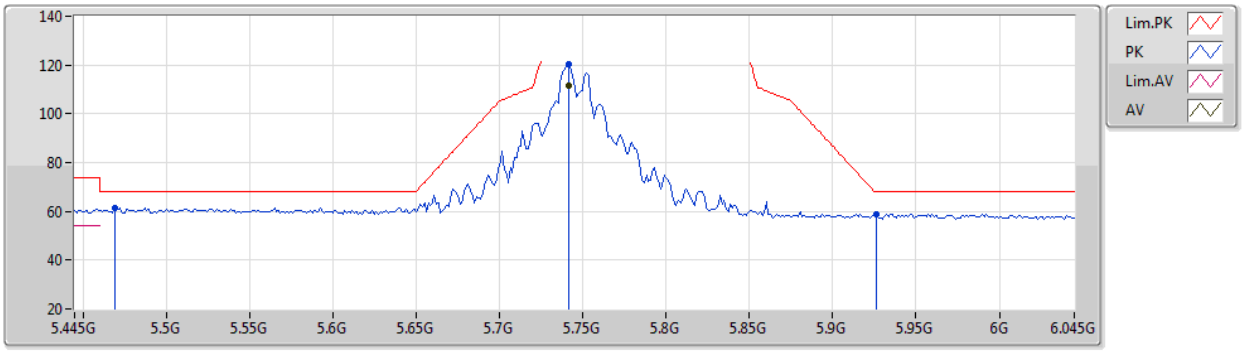


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	15.7226G	44.32	54.00	-9.68	16.63	3	Horizontal	39	3.00	-	27.69	37.65	10.88	31.90
PK	10.4797G	58.80	68.20	-9.40	17.89	3	Horizontal	267	1.50	-	40.91	39.68	8.78	30.57
PK	15.7245G	55.79	74.00	-18.21	16.63	3	Horizontal	39	3.00	-	39.16	37.65	10.88	31.90

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

03/04/2020

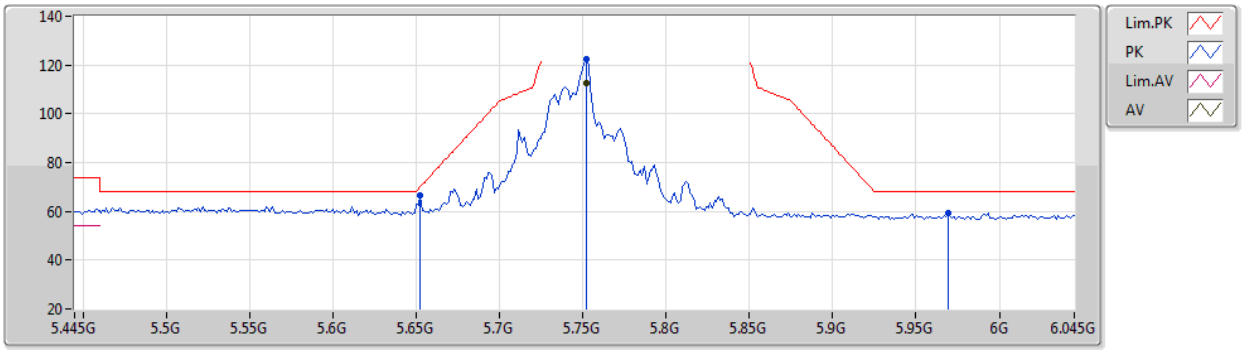


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7414G	111.76	Inf	-Inf	9.00	3	Vertical	260	2.97	-	102.76	31.98	6.38	29.36
PK	5.469G	61.55	68.20	-6.65	8.48	3	Vertical	260	2.97	-	53.07	31.68	6.17	29.37
PK	5.7414G	120.18	Inf	-Inf	9.00	3	Vertical	260	2.97	-	111.18	31.98	6.38	29.36
PK	5.9262G	59.04	68.20	-9.16	9.48	3	Vertical	260	2.97	-	49.56	32.30	6.53	29.35

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

03/04/2020

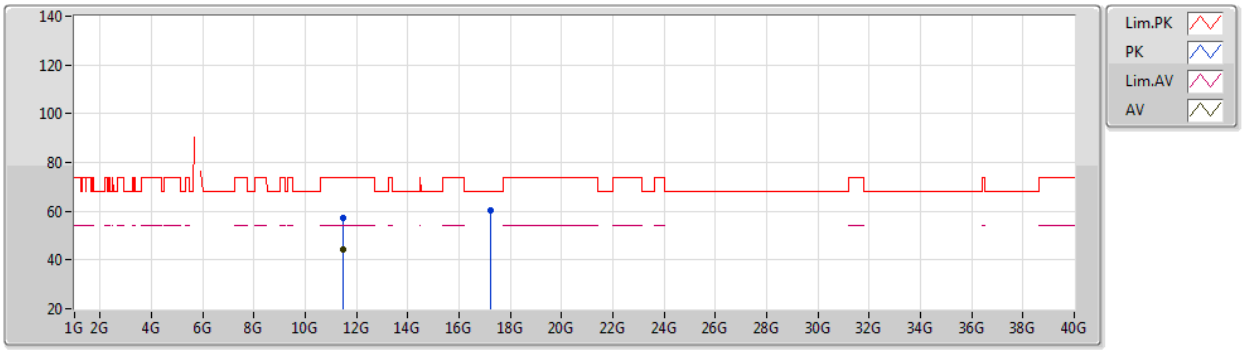


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7522G	112.84	Inf	-Inf	9.03	3	Horizontal	16	1.05	-	103.81	32.00	6.39	29.36
PK	5.6526G	66.47	70.12	-3.65	8.66	3	Horizontal	16	1.05	-	57.81	31.71	6.31	29.36
PK	5.7522G	122.23	Inf	-Inf	9.03	3	Horizontal	16	1.05	-	113.20	32.00	6.39	29.36
PK	5.9694G	59.42	68.20	-8.78	9.58	3	Horizontal	16	1.05	-	49.84	32.36	6.57	29.35

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

03/04/2020

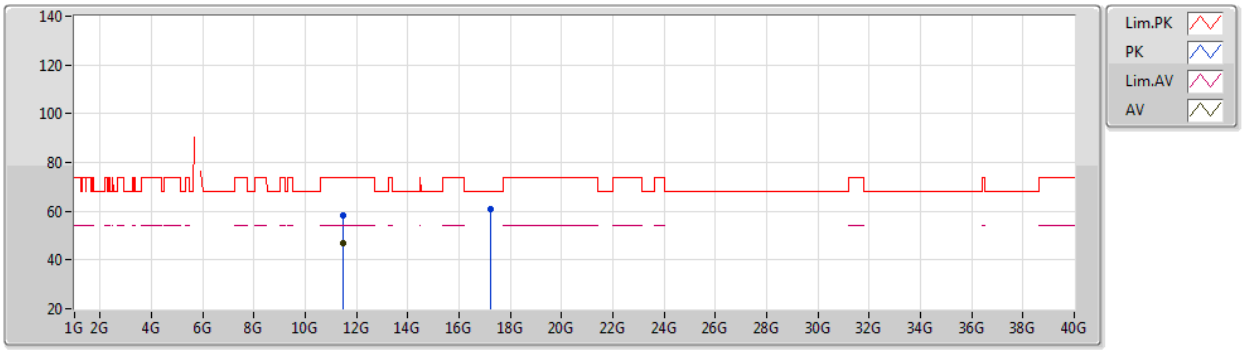


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.4925G	44.40	54.00	-9.60	18.69	3	Vertical	351	1.50	-	25.71	39.99	9.47	30.77
PK	11.4927G	57.07	74.00	-16.93	18.69	3	Vertical	351	1.50	-	38.38	39.99	9.47	30.77
PK	17.2294G	60.20	68.20	-8.00	20.25	3	Vertical	283	1.47	-	39.95	40.43	11.40	31.58

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

03/04/2020

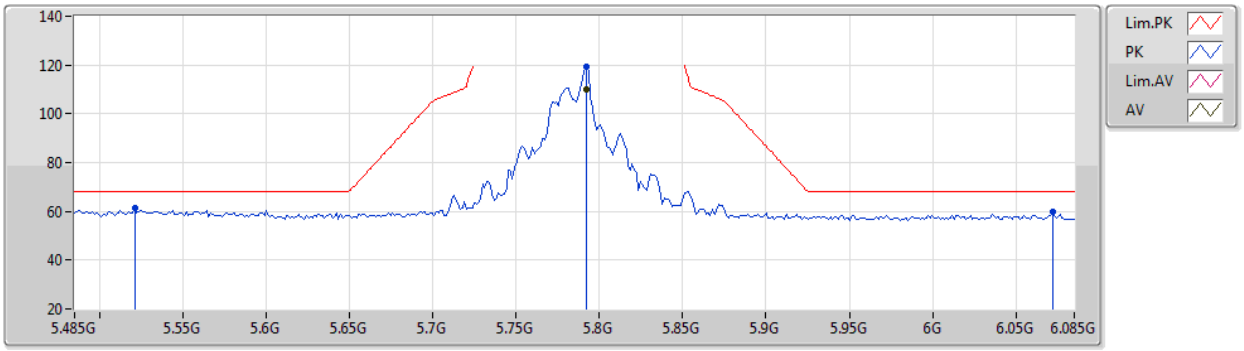


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.4893G	46.88	54.00	-7.12	18.69	3	Horizontal	163	1.45	-	28.19	39.99	9.47	30.77
PK	11.489G	58.23	74.00	-15.77	18.69	3	Horizontal	163	1.45	-	39.54	39.99	9.47	30.77
PK	17.2397G	60.66	68.20	-7.54	20.27	3	Horizontal	92	1.47	-	40.39	40.44	11.40	31.57

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

03/04/2020

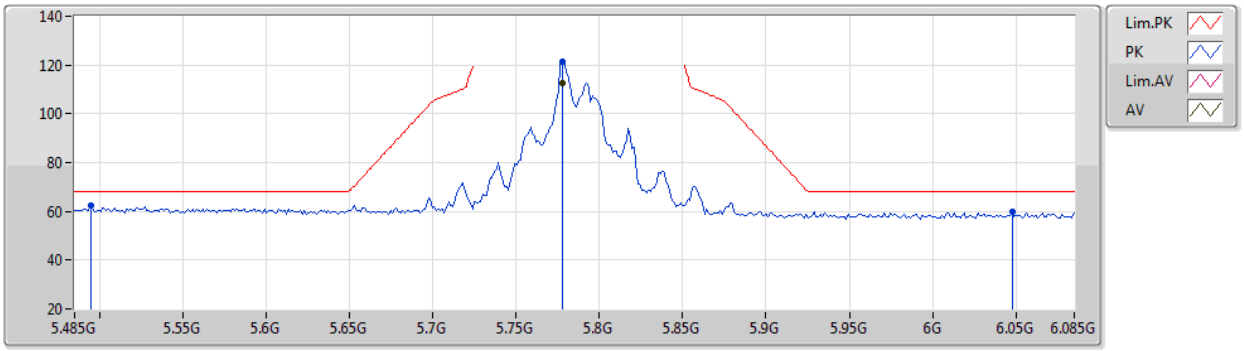


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7922G	109.98	Inf	-Inf	9.06	3	Vertical	340	1.20	-	100.92	32.00	6.42	29.36
PK	5.521G	61.39	68.20	-6.81	8.64	3	Vertical	340	1.20	-	52.75	31.80	6.21	29.37
PK	5.7922G	119.21	Inf	-Inf	9.06	3	Vertical	340	1.20	-	110.15	32.00	6.42	29.36
PK	6.0718G	59.88	68.20	-8.32	9.79	3	Vertical	340	1.20	-	50.09	32.56	6.64	29.41

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

03/04/2020



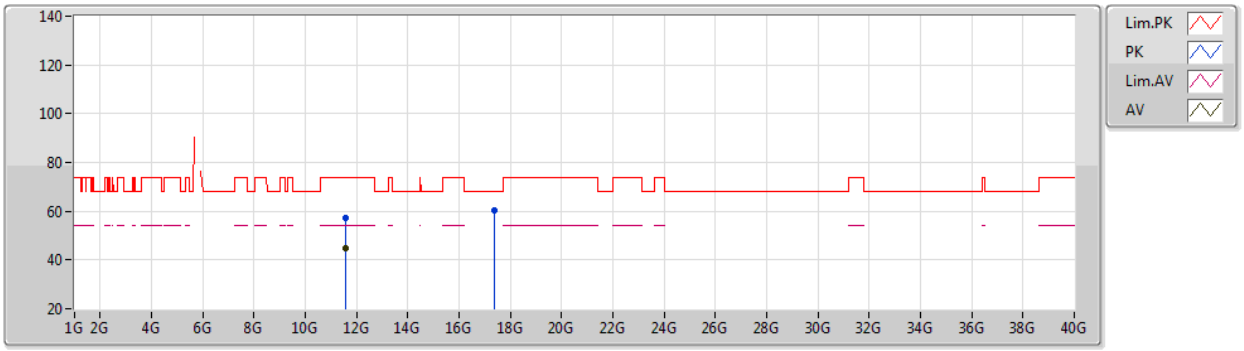
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7778G	112.63	Inf	-Inf	9.05	3	Horizontal	194	1.56	-	103.58	32.00	6.41	29.36
PK	5.4946G	62.59	68.20	-5.61	8.60	3	Horizontal	194	1.56	-	53.99	31.78	6.19	29.37
PK	5.7778G	121.63	Inf	-Inf	9.05	3	Horizontal	194	1.56	-	112.58	32.00	6.41	29.36
PK	6.0478G	59.83	68.20	-8.37	9.82	3	Horizontal	194	1.56	-	50.01	32.59	6.62	29.39

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

03/04/2020

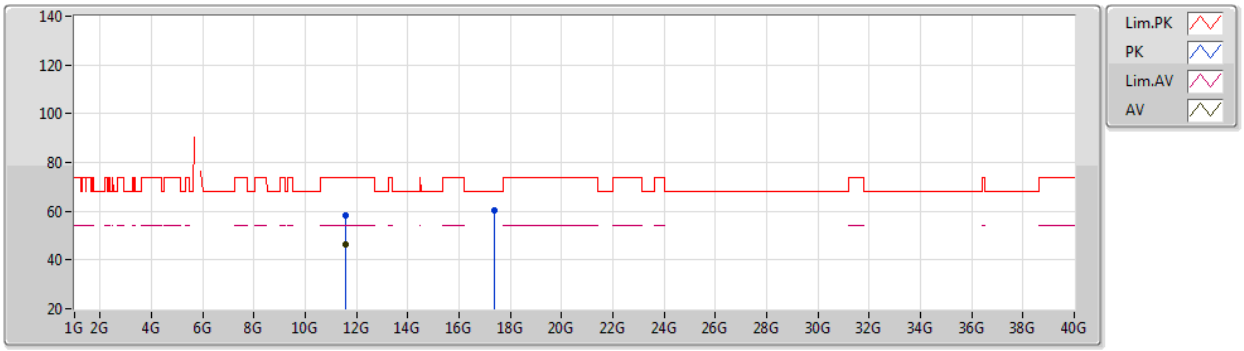


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.57095G	44.70	54.00	-9.30	18.67	3	Vertical	350	1.89	-	26.03	39.93	9.52	30.78
PK	11.56942G	57.34	74.00	-16.66	18.67	3	Vertical	350	1.89	-	38.67	39.93	9.52	30.78
PK	17.35519G	60.18	68.20	-8.02	20.82	3	Vertical	254	1.24	-	39.36	40.89	11.44	31.51

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

03/04/2020

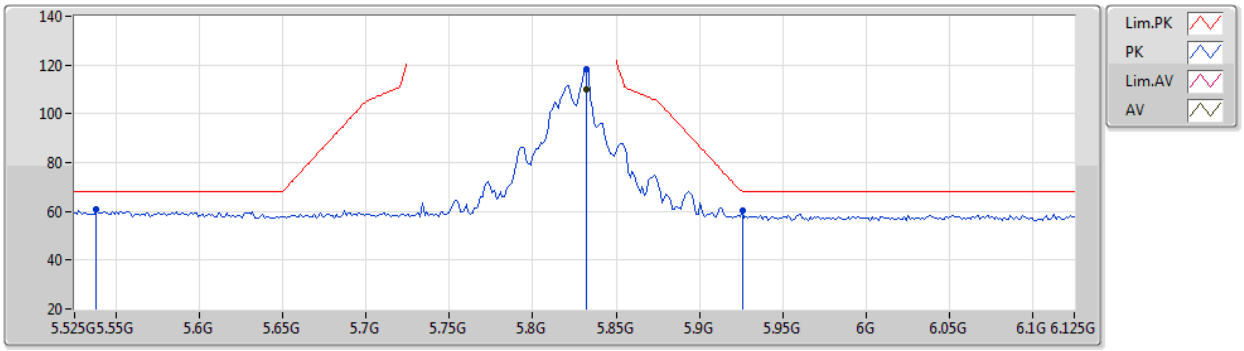


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.56941G	46.58	54.00	-7.42	18.67	3	Horizontal	195	1.80	-	27.91	39.93	9.52	30.78
PK	11.56888G	58.48	74.00	-15.52	18.67	3	Horizontal	195	1.80	-	39.81	39.93	9.52	30.78
PK	17.35311G	60.09	68.20	-8.11	20.80	3	Horizontal	7	2.17	-	39.29	40.87	11.44	31.51

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

03/04/2020

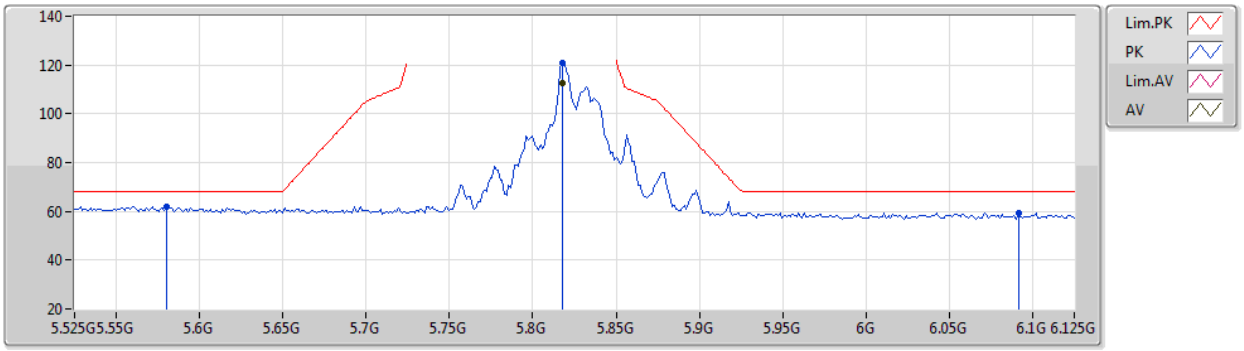


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.8322G	109.80	Inf	-Inf	9.16	3	Vertical	339	1.27	-	100.64	32.06	6.46	29.36
PK	5.5382G	60.69	68.20	-7.51	8.65	3	Vertical	339	1.27	-	52.04	31.80	6.22	29.37
PK	5.8322G	118.48	Inf	-Inf	9.16	3	Vertical	339	1.27	-	109.32	32.06	6.46	29.36
PK	5.9258G	60.32	68.20	-7.88	9.48	3	Vertical	339	1.27	-	50.84	32.30	6.53	29.35

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

03/04/2020

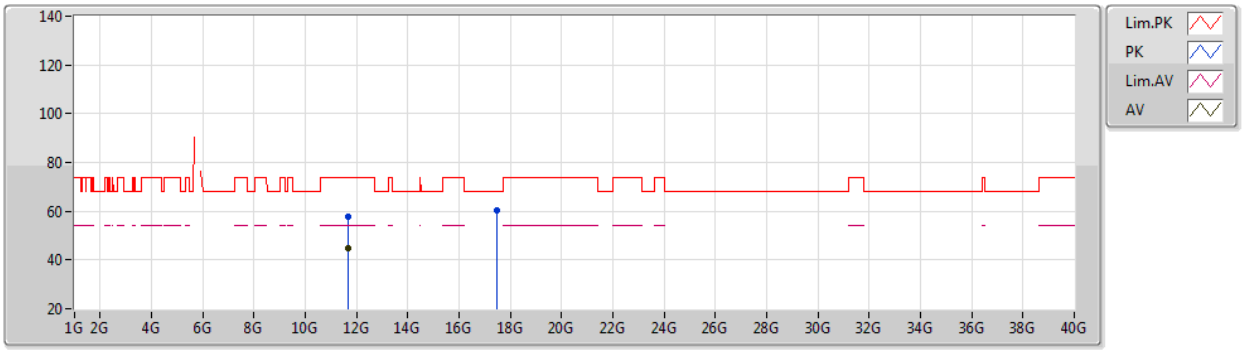


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.8178G	112.55	Inf	-Inf	9.12	3	Horizontal	195	1.55	-	103.43	32.04	6.44	29.36
PK	5.5802G	62.14	68.20	-6.06	8.74	3	Horizontal	195	1.55	-	53.40	31.86	6.25	29.37
PK	5.8178G	120.99	Inf	-Inf	9.12	3	Horizontal	195	1.55	-	111.87	32.04	6.44	29.36
PK	6.0914G	59.52	68.20	-8.68	9.74	3	Horizontal	195	1.55	-	49.78	32.52	6.65	29.43

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

03/04/2020

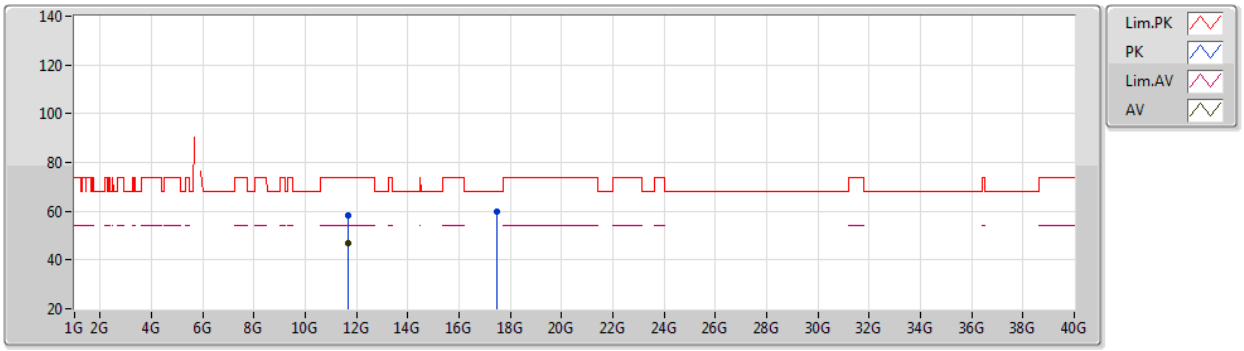


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.64785G	44.66	54.00	-9.34	18.40	3	Vertical	336	2.28	-	26.26	39.61	9.58	30.79
PK	11.65107G	57.79	74.00	-16.21	18.38	3	Vertical	336	2.28	-	39.41	39.59	9.58	30.79
PK	17.47609G	60.31	68.20	-7.89	21.31	3	Vertical	24	1.22	-	39.00	41.28	11.48	31.45

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

03/04/2020

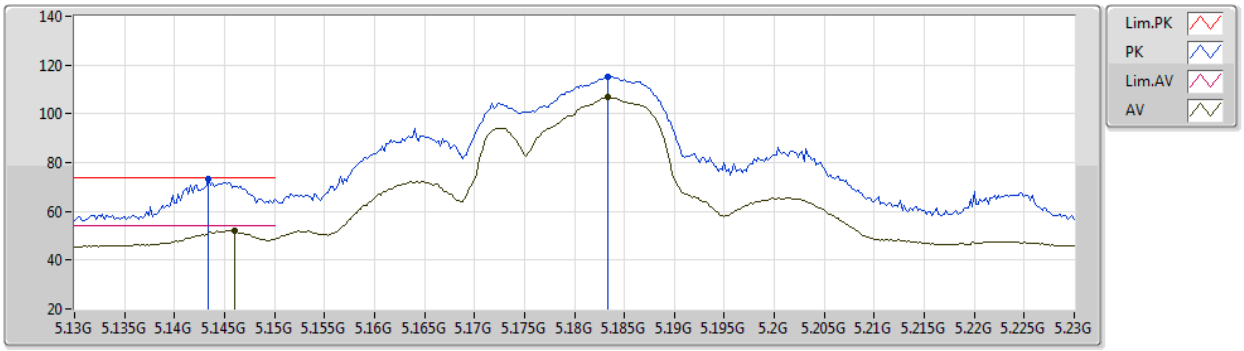


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.64778G	46.66	54.00	-7.34	18.40	3	Horizontal	150	1.62	-	28.26	39.61	9.58	30.79
PK	11.64936G	58.20	74.00	-15.80	18.39	3	Horizontal	150	1.62	-	39.81	39.60	9.58	30.79
PK	17.47711G	60.05	68.20	-8.15	21.31	3	Horizontal	289	2.19	-	38.74	41.28	11.48	31.45

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

03/04/2020



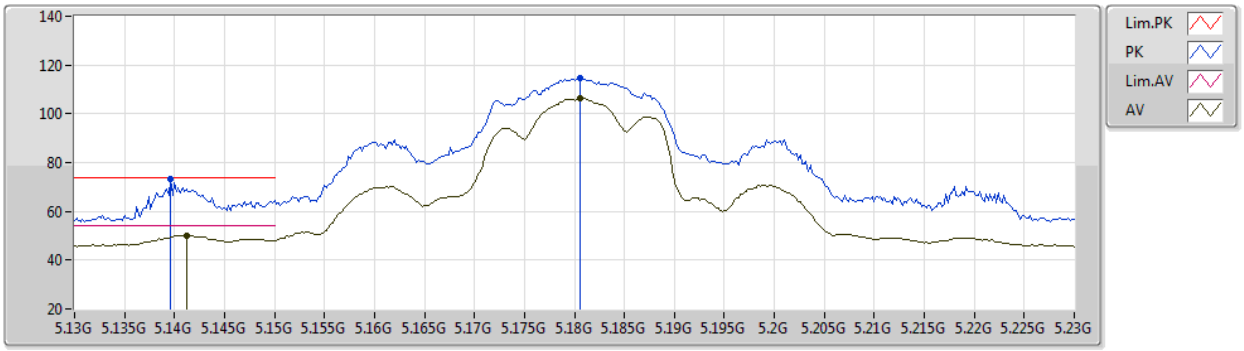
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.146G	51.97	54.00	-2.03	8.66	3	Vertical	326	1.40	-	43.31	31.99	6.00	29.33
AV	5.1834G	106.67	Inf	-Inf	8.55	3	Vertical	326	1.40	-	98.12	31.87	6.02	29.34
PK	5.1434G	73.32	74.00	-0.68	8.66	3	Vertical	326	1.40	-	64.66	31.99	6.00	29.33
PK	5.1834G	115.33	Inf	-Inf	8.55	3	Vertical	326	1.40	-	106.78	31.87	6.02	29.34

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

03/04/2020

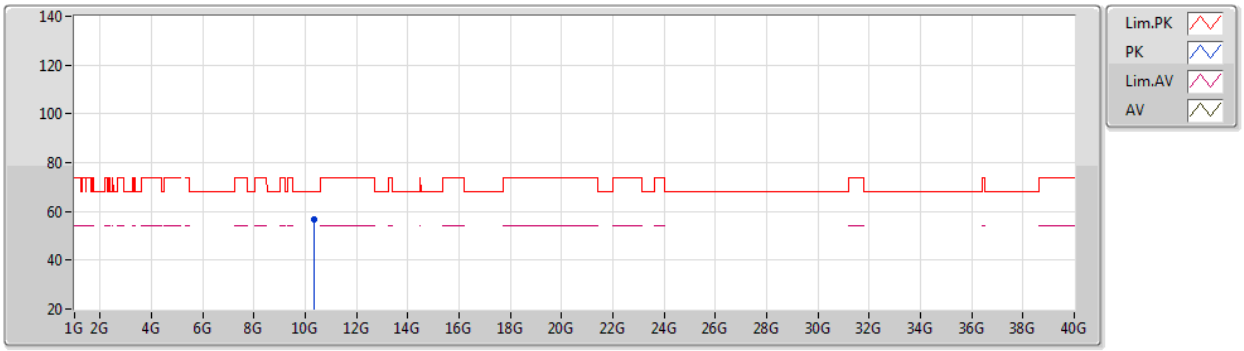


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1412G	50.17	54.00	-3.83	8.65	3	Horizontal	18	1.59	-	41.52	31.98	6.00	29.33
AV	5.1806G	106.48	Inf	-Inf	8.56	3	Horizontal	18	1.59	-	97.92	31.88	6.02	29.34
PK	5.1396G	73.38	74.00	-0.62	8.65	3	Horizontal	18	1.59	-	64.73	31.98	6.00	29.33
PK	5.1806G	114.79	Inf	-Inf	8.56	3	Horizontal	18	1.59	-	106.23	31.88	6.02	29.34

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

03/04/2020

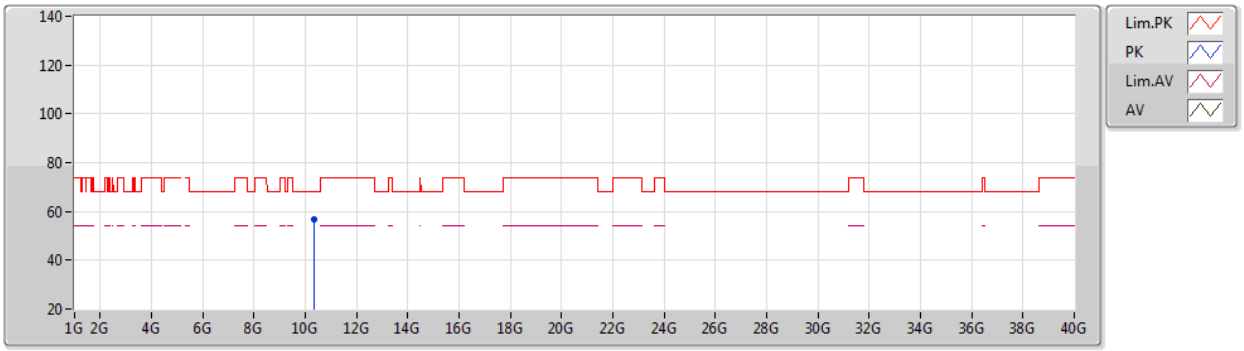


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.3618G	56.81	68.20	-11.39	17.63	3	Vertical	360	1.49	-	39.18	39.45	8.70	30.52

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

03/04/2020

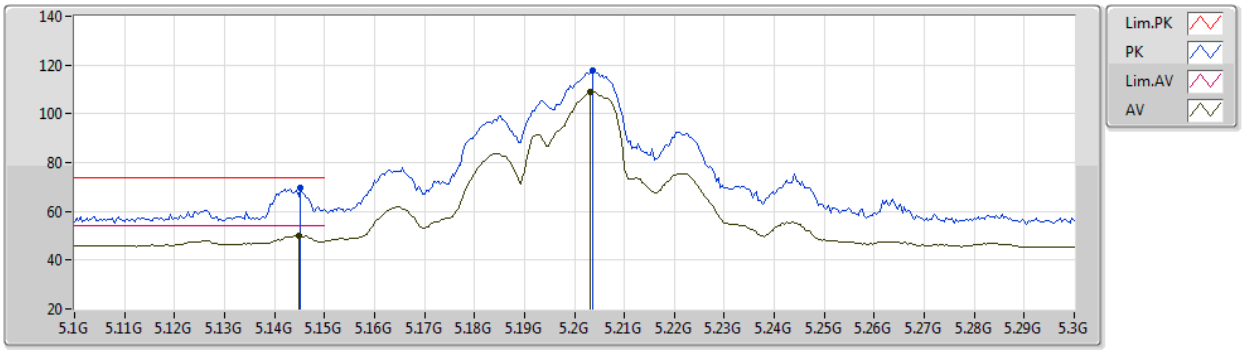


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.3594G	56.68	68.20	-11.52	17.61	3	Horizontal	267	1.50	-	39.07	39.44	8.69	30.52

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

03/04/2020



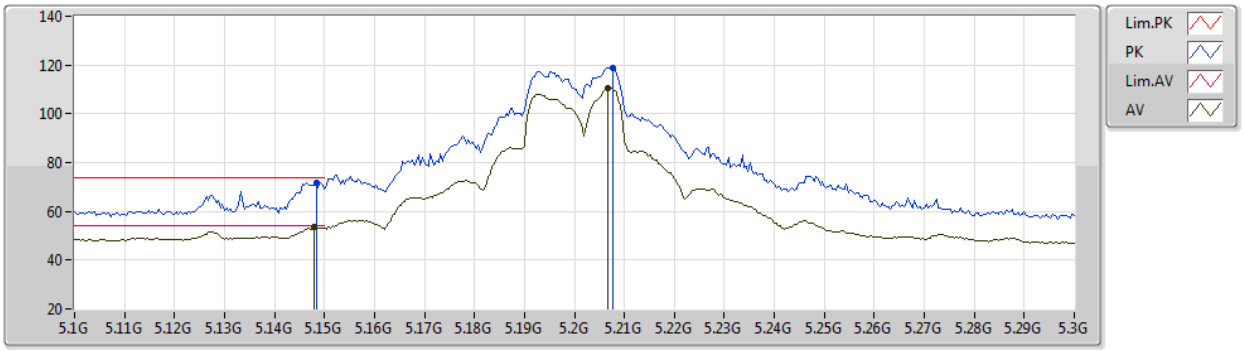
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1448G	50.23	54.00	-3.77	8.66	3	Vertical	330	1.30	-	41.57	31.99	6.00	29.33
AV	5.2032G	109.17	Inf	-Inf	8.46	3	Vertical	330	1.30	-	100.71	31.77	6.03	29.34
PK	5.1452G	69.77	74.00	-4.23	8.66	3	Vertical	330	1.30	-	61.11	31.99	6.00	29.33
PK	5.2036G	117.54	Inf	-Inf	8.46	3	Vertical	330	1.30	-	109.08	31.77	6.03	29.34

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

03/04/2020



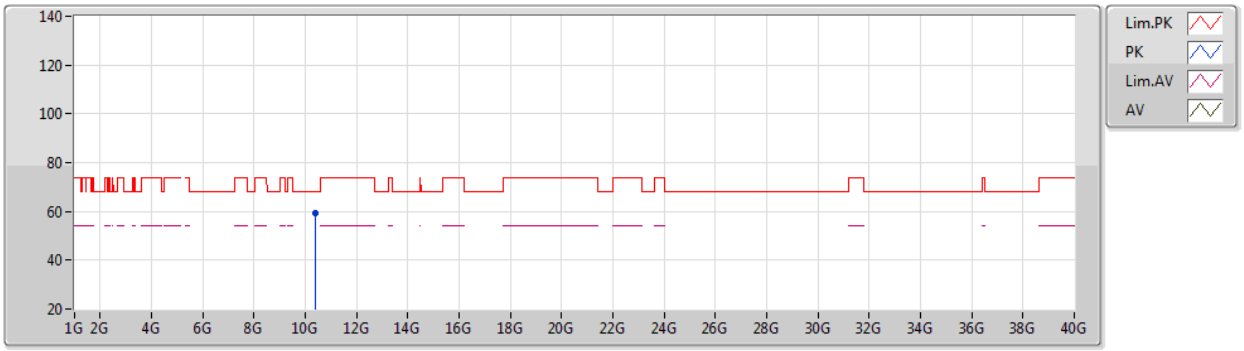
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.148G	53.60	54.00	-0.40	8.67	3	Horizontal	323	1.85	-	44.93	32.00	6.00	29.33
AV	5.2068G	110.57	Inf	-Inf	8.44	3	Horizontal	323	1.85	-	102.13	31.75	6.03	29.34
PK	5.1484G	71.84	74.00	-2.16	8.67	3	Horizontal	323	1.85	-	63.17	32.00	6.00	29.33
PK	5.2076G	118.82	Inf	-Inf	8.43	3	Horizontal	323	1.85	-	110.39	31.74	6.03	29.34

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

03/04/2020

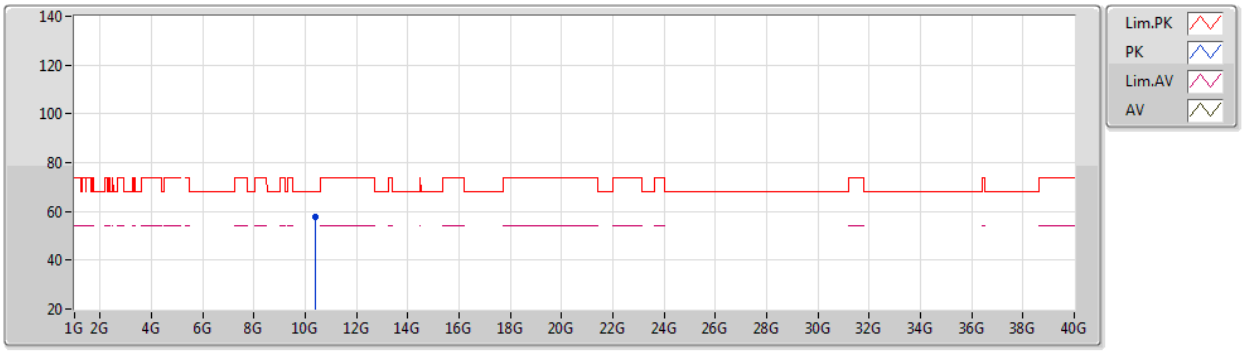


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.4004G	59.43	68.20	-8.77	17.78	3	Vertical	360	1.35	-	41.65	39.60	8.72	30.54

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

03/04/2020



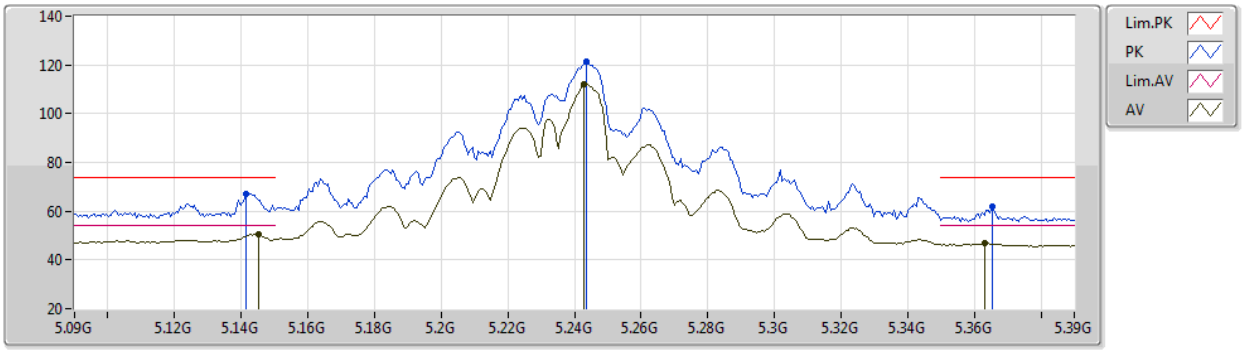
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.3987G	57.92	68.20	-10.28	17.77	3	Horizontal	264	1.50	-	40.15	39.59	8.72	30.54

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

03/04/2020

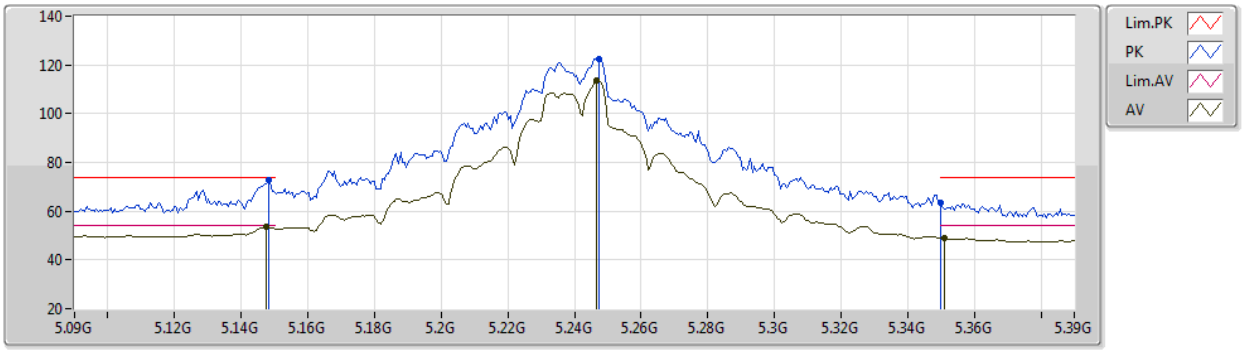


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1452G	50.55	54.00	-3.45	8.66	3	Vertical	324	1.36	-	41.89	31.99	6.00	29.33
AV	5.243G	112.19	Inf	-Inf	8.17	3	Vertical	324	1.36	-	104.02	31.46	6.05	29.34
AV	5.363G	46.80	54.00	-7.20	7.96	3	Vertical	324	1.36	-	38.84	31.20	6.12	29.36
PK	5.1416G	67.00	74.00	-7.00	8.65	3	Vertical	324	1.36	-	58.35	31.98	6.00	29.33
PK	5.2436G	121.34	Inf	-Inf	8.16	3	Vertical	324	1.36	-	113.18	31.45	6.05	29.34
PK	5.3654G	61.79	74.00	-12.21	7.98	3	Vertical	324	1.36	-	53.81	31.22	6.12	29.36

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

03/04/2020

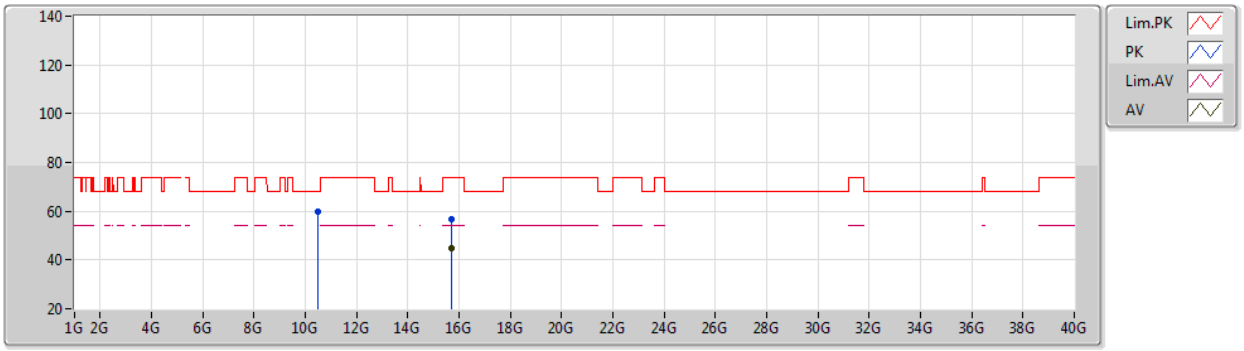


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1476G	53.64	54.00	-0.36	8.67	3	Horizontal	322	1.72	-	44.97	32.00	6.00	29.33
AV	5.2466G	113.50	Inf	-Inf	8.14	3	Horizontal	322	1.72	-	105.36	31.43	6.05	29.34
AV	5.351G	48.85	54.00	-5.15	7.86	3	Horizontal	322	1.72	-	40.99	31.11	6.11	29.36
PK	5.1482G	72.94	74.00	-1.06	8.67	3	Horizontal	322	1.72	-	64.27	32.00	6.00	29.33
PK	5.2472G	122.32	Inf	-Inf	8.13	3	Horizontal	322	1.72	-	114.19	31.42	6.05	29.34
PK	5.35G	63.47	74.00	-10.53	7.85	3	Horizontal	322	1.72	-	55.62	31.10	6.11	29.36

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

03/04/2020

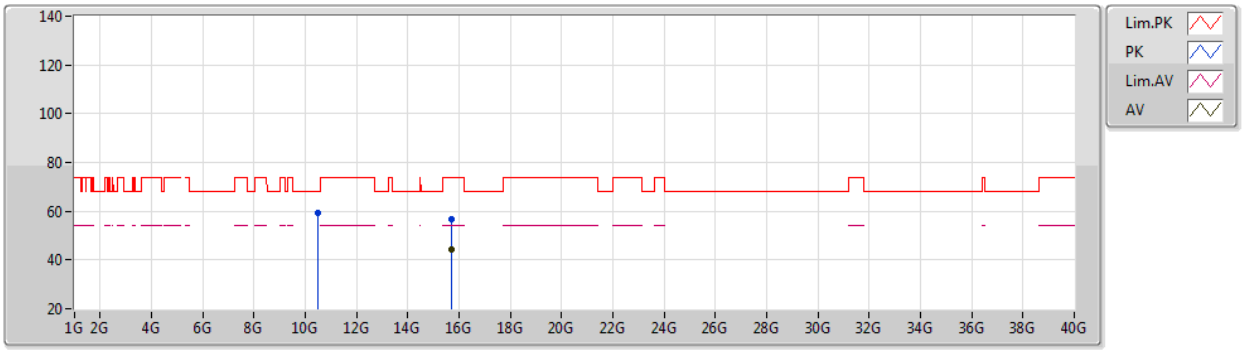


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	15.7261G	44.92	54.00	-9.08	16.63	3	Vertical	90	1.41	-	28.29	37.65	10.88	31.90
PK	10.4794G	59.58	68.20	-8.62	17.89	3	Vertical	3	1.34	-	41.69	39.68	8.78	30.57
PK	15.7244G	56.51	74.00	-17.49	16.63	3	Vertical	90	1.41	-	39.88	37.65	10.88	31.90

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

03/04/2020

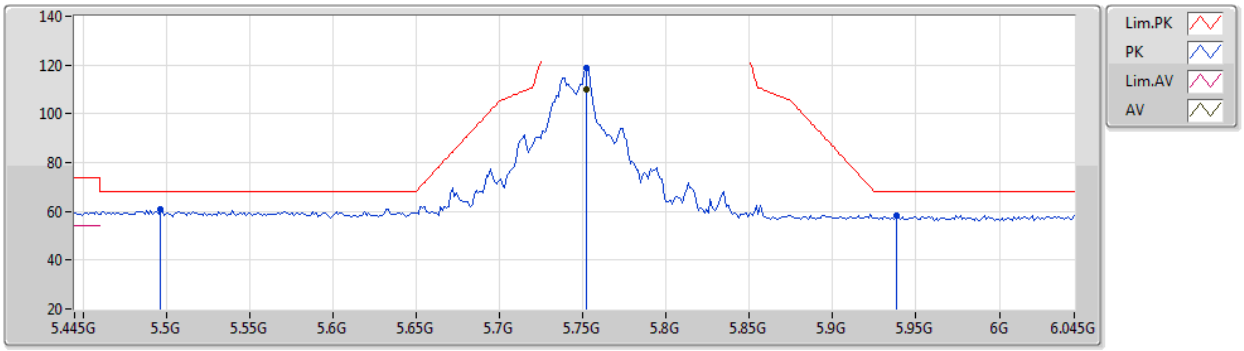


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	15.7233G	44.53	54.00	-9.47	16.63	3	Horizontal	11	1.52	-	27.90	37.65	10.88	31.90
PK	10.4797G	59.34	68.20	-8.86	17.89	3	Horizontal	267	1.50	-	41.45	39.68	8.78	30.57
PK	15.7245G	56.47	74.00	-17.53	16.63	3	Horizontal	11	1.52	-	39.84	37.65	10.88	31.90

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

03/04/2020

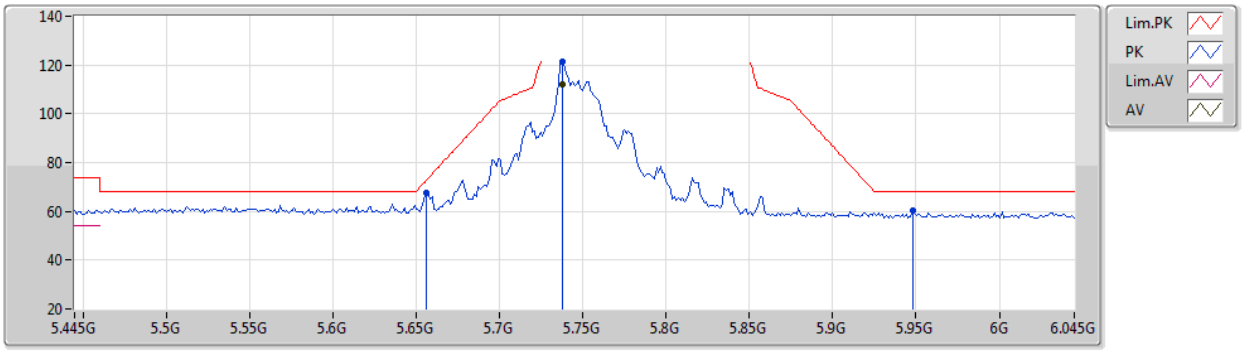


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7522G	110.21	Inf	-Inf	9.03	3	Vertical	359	1.13	-	101.18	32.00	6.39	29.36
PK	5.4966G	60.85	68.20	-7.35	8.61	3	Vertical	359	1.13	-	52.24	31.79	6.19	29.37
PK	5.7522G	118.74	Inf	-Inf	9.03	3	Vertical	359	1.13	-	109.71	32.00	6.39	29.36
PK	5.9382G	58.52	68.20	-9.68	9.54	3	Vertical	359	1.13	-	48.98	32.35	6.54	29.35

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

03/04/2020

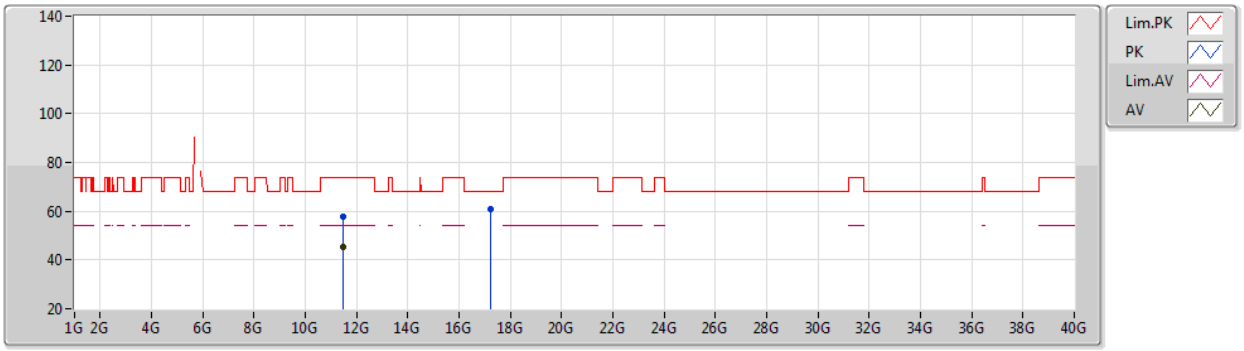


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7378G	111.83	Inf	-Inf	9.00	3	Horizontal	189	1.48	-	102.83	31.98	6.38	29.36
PK	5.6562G	67.52	72.79	-5.27	8.67	3	Horizontal	189	1.48	-	58.85	31.72	6.31	29.36
PK	5.7378G	121.22	Inf	-Inf	9.00	3	Horizontal	189	1.48	-	112.22	31.98	6.38	29.36
PK	5.9478G	60.57	68.20	-7.63	9.59	3	Horizontal	189	1.48	-	50.98	32.39	6.55	29.35

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

03/04/2020

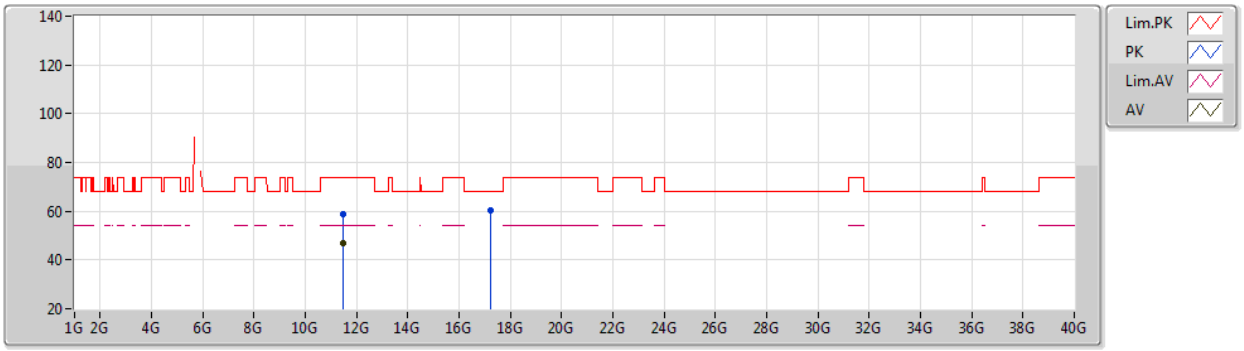


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.4868G	45.36	54.00	-8.64	18.69	3	Vertical	294	1.00	-	26.67	39.99	9.47	30.77
PK	11.4865G	57.54	74.00	-16.46	18.69	3	Vertical	294	1.00	-	38.85	39.99	9.47	30.77
PK	17.2365G	61.05	68.20	-7.15	20.27	3	Vertical	118	2.32	-	40.78	40.44	11.40	31.57

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

03/04/2020

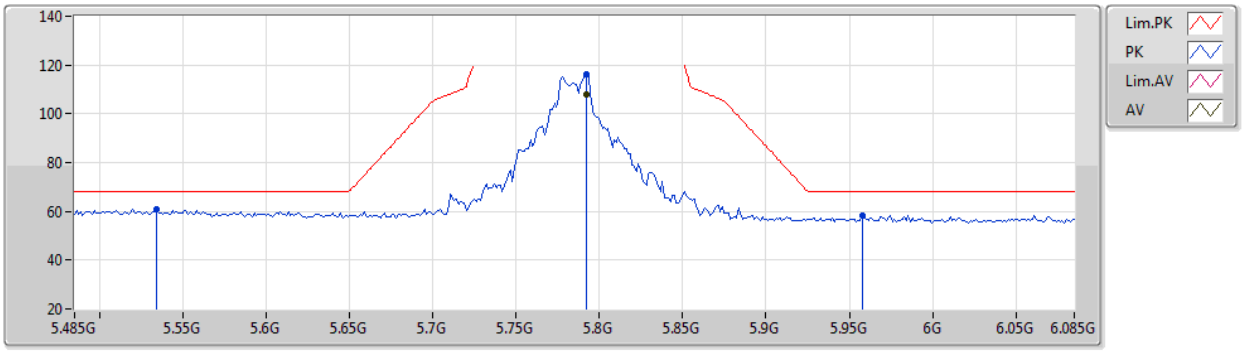


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.4896G	46.80	54.00	-7.20	18.69	3	Horizontal	155	1.23	-	28.11	39.99	9.47	30.77
PK	11.49G	58.63	74.00	-15.37	18.69	3	Horizontal	155	1.23	-	39.94	39.99	9.47	30.77
PK	17.2245G	60.32	68.20	-7.88	20.23	3	Horizontal	95	1.50	-	40.09	40.42	11.39	31.58

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

03/04/2020



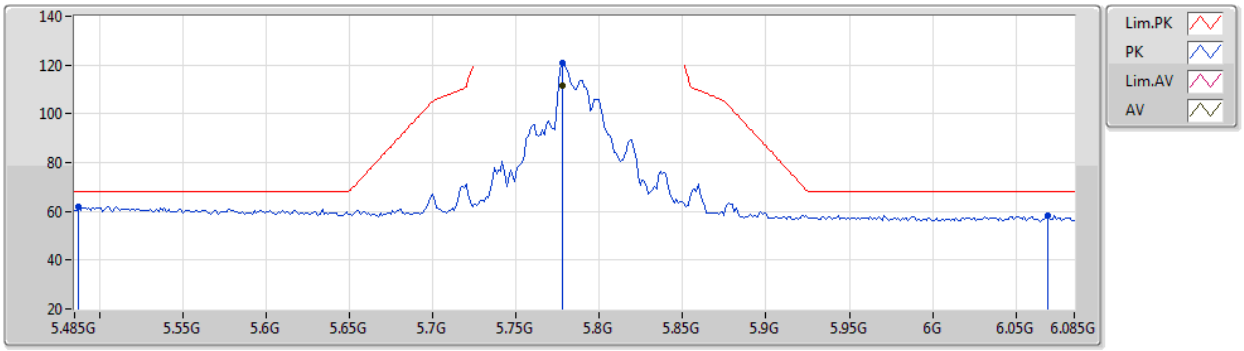
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7922G	107.71	Inf	-Inf	9.06	3	Vertical	305	1.50	-	98.65	32.00	6.42	29.36
PK	5.5342G	60.99	68.20	-7.21	8.65	3	Vertical	305	1.50	-	52.34	31.80	6.22	29.37
PK	5.7922G	116.30	Inf	-Inf	9.06	3	Vertical	305	1.50	-	107.24	32.00	6.42	29.36
PK	5.9578G	58.32	68.20	-9.88	9.59	3	Vertical	305	1.50	-	48.73	32.38	6.56	29.35

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

03/04/2020



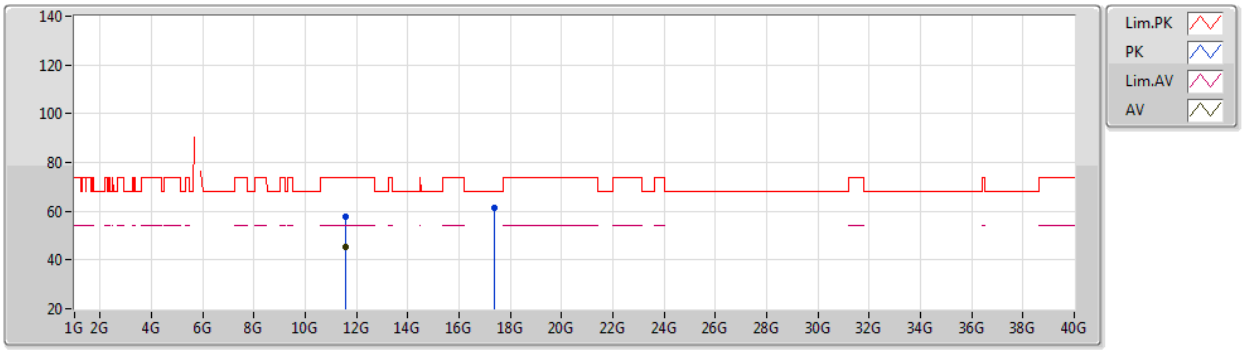
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7778G	111.71	Inf	-Inf	9.05	3	Horizontal	331	2.57	-	102.66	32.00	6.41	29.36
PK	5.4874G	62.07	68.20	-6.13	8.56	3	Horizontal	331	2.57	-	53.51	31.75	6.18	29.37
PK	5.7778G	121.07	Inf	-Inf	9.05	3	Horizontal	331	2.57	-	112.02	32.00	6.41	29.36
PK	6.0694G	58.51	68.20	-9.69	9.79	3	Horizontal	331	2.57	-	48.72	32.56	6.64	29.41

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

03/04/2020



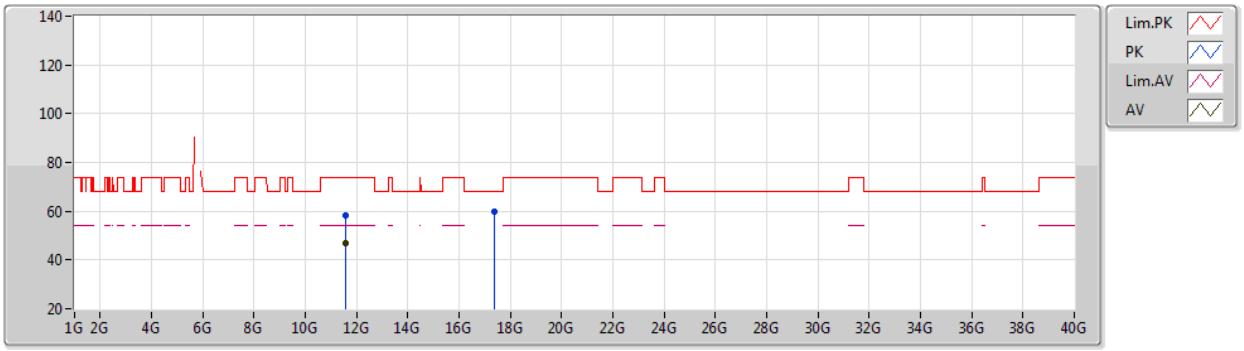
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.56801G	45.58	54.00	-8.42	18.67	3	Vertical	129	1.32	-	26.91	39.93	9.52	30.78
PK	11.5716G	57.86	74.00	-16.14	18.67	3	Vertical	129	1.32	-	39.19	39.93	9.52	30.78
PK	17.3538G	61.37	68.20	-6.83	20.81	3	Vertical	13	1.40	-	40.56	40.88	11.44	31.51

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

03/04/2020

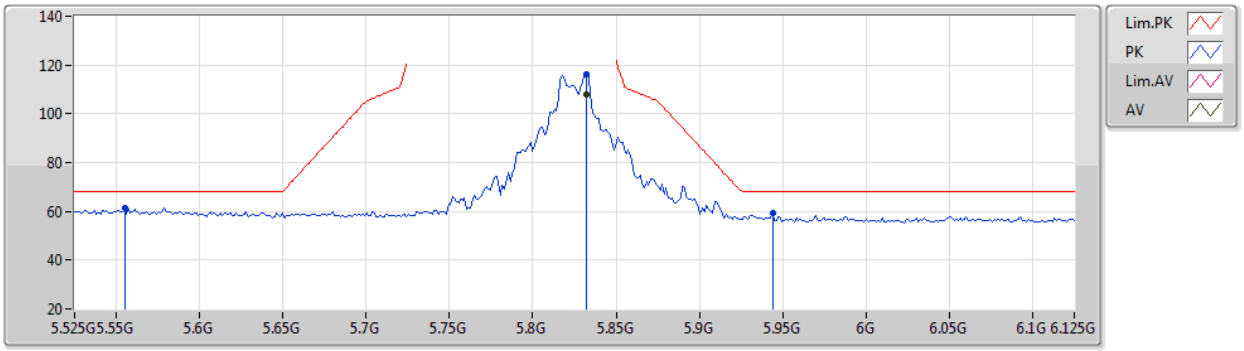


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.57146G	46.83	54.00	-7.17	18.67	3	Horizontal	55	1.09	-	28.16	39.93	9.52	30.78
PK	11.56898G	58.04	74.00	-15.96	18.67	3	Horizontal	55	1.09	-	39.37	39.93	9.52	30.78
PK	17.3557G	60.04	68.20	-8.16	20.82	3	Horizontal	279	2.47	-	39.22	40.89	11.44	31.51

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

03/04/2020

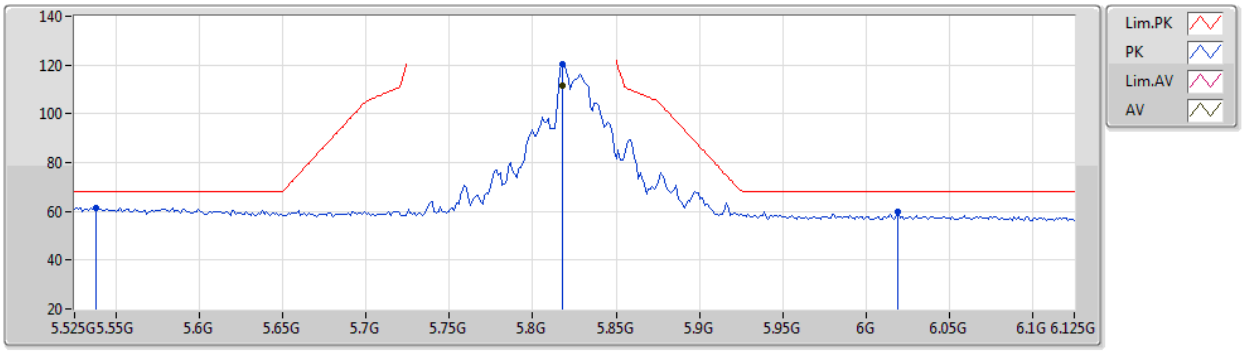


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.8322G	107.71	Inf	-Inf	9.16	3	Vertical	306	1.43	-	98.55	32.06	6.46	29.36
PK	5.555G	61.47	68.20	-6.73	8.67	3	Vertical	306	1.43	-	52.80	31.81	6.23	29.37
PK	5.8322G	116.26	Inf	-Inf	9.16	3	Vertical	306	1.43	-	107.10	32.06	6.46	29.36
PK	5.9438G	59.15	68.20	-9.05	9.58	3	Vertical	306	1.43	-	49.57	32.38	6.55	29.35

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

03/04/2020

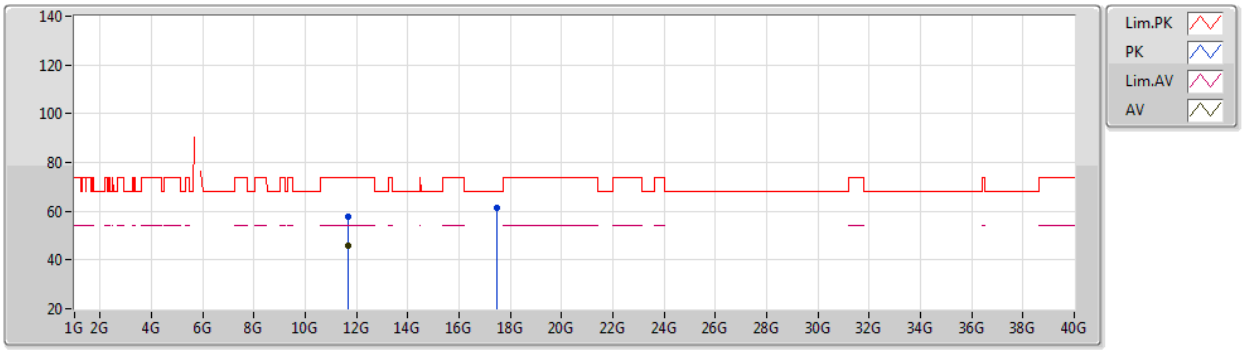


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.8178G	111.43	Inf	-Inf	9.12	3	Horizontal	321	2.64	-	102.31	32.04	6.44	29.36
PK	5.5382G	61.52	68.20	-6.68	8.65	3	Horizontal	321	2.64	-	52.87	31.80	6.22	29.37
PK	5.8178G	120.48	Inf	-Inf	9.12	3	Horizontal	321	2.64	-	111.36	32.04	6.44	29.36
PK	6.0194G	59.95	68.20	-8.25	9.65	3	Horizontal	321	2.64	-	50.30	32.42	6.60	29.37

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

03/04/2020

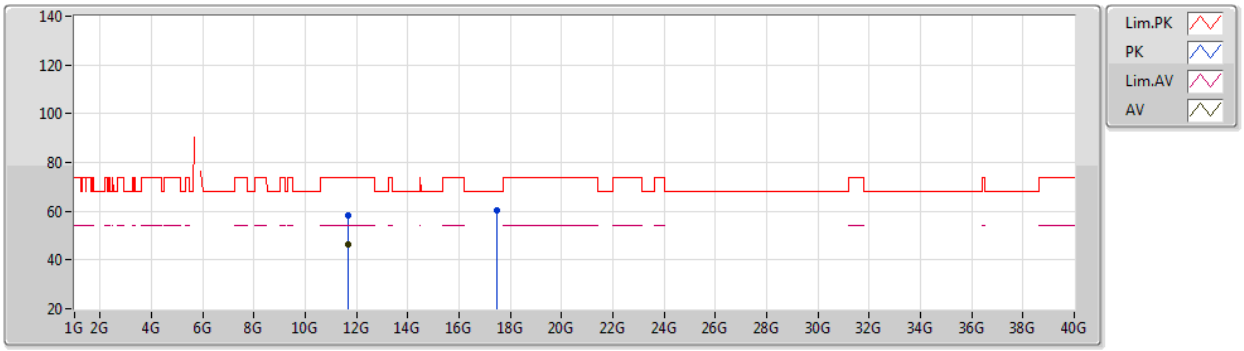


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.64928G	45.77	54.00	-8.23	18.39	3	Vertical	5	1.97	-	27.38	39.60	9.58	30.79
PK	11.6512G	57.67	74.00	-16.33	18.38	3	Vertical	5	1.97	-	39.29	39.59	9.58	30.79
PK	17.47731G	61.15	68.20	-7.05	21.31	3	Vertical	0	1.71	-	39.84	41.28	11.48	31.45

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

03/04/2020

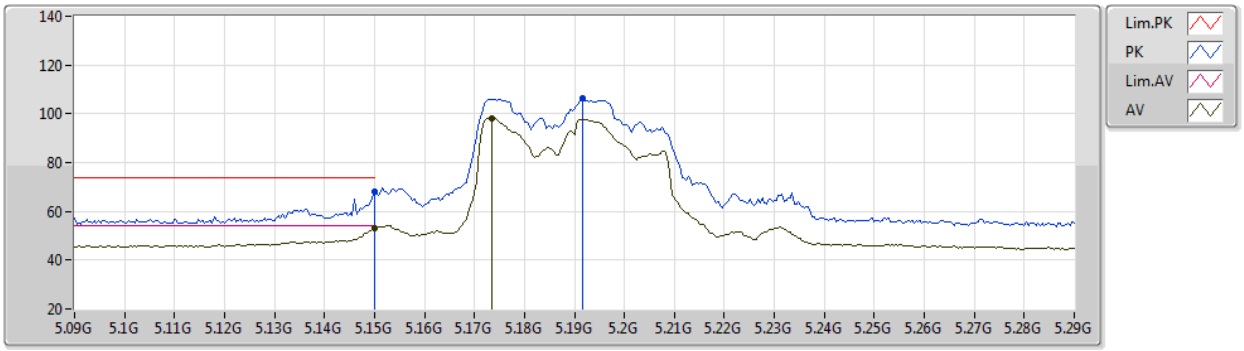


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.64756G	46.53	54.00	-7.47	18.40	3	Horizontal	56	1.52	-	28.13	39.61	9.58	30.79
PK	11.64852G	58.44	74.00	-15.56	18.40	3	Horizontal	56	1.52	-	40.04	39.61	9.58	30.79
PK	17.4741G	60.55	68.20	-7.65	21.30	3	Horizontal	130	1.38	-	39.25	41.27	11.48	31.45

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

03/04/2020



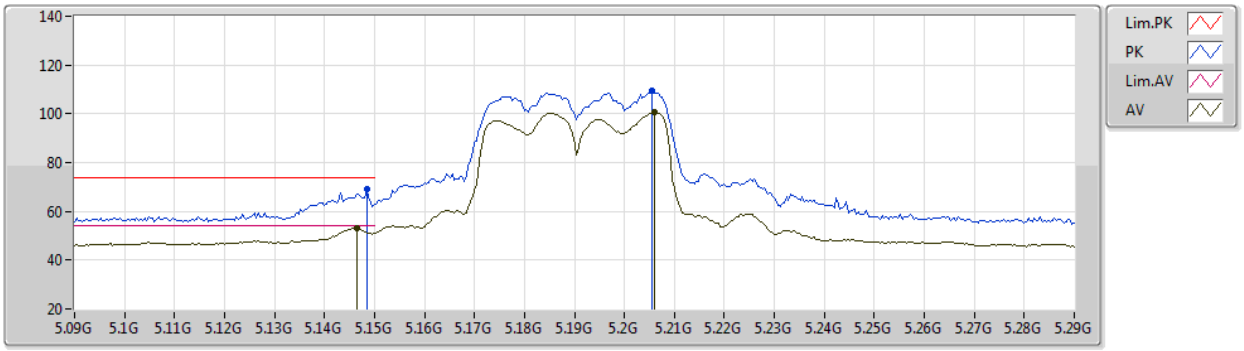
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.15G	53.06	54.00	-0.94	8.67	3	Vertical	327	1.54	-	44.39	32.00	6.00	29.33
AV	5.1736G	98.35	Inf	-Inf	8.58	3	Vertical	327	1.54	-	89.77	31.91	6.01	29.34
PK	5.15G	67.94	74.00	-6.06	8.67	3	Vertical	327	1.54	-	59.27	32.00	6.00	29.33
PK	5.1916G	106.53	Inf	-Inf	8.51	3	Vertical	327	1.54	-	98.02	31.83	6.02	29.34

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

03/04/2020



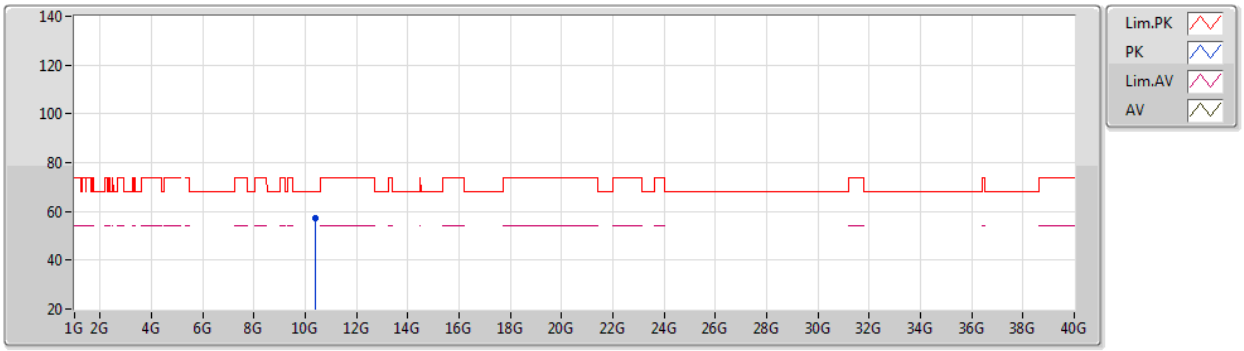
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1464G	53.30	54.00	-0.70	8.66	3	Horizontal	318	1.74	-	44.64	31.99	6.00	29.33
AV	5.206G	100.64	Inf	-Inf	8.44	3	Horizontal	318	1.74	-	92.20	31.75	6.03	29.34
PK	5.1484G	68.93	74.00	-5.07	8.67	3	Horizontal	318	1.74	-	60.26	32.00	6.00	29.33
PK	5.2056G	109.24	Inf	-Inf	8.45	3	Horizontal	318	1.74	-	100.79	31.76	6.03	29.34

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

03/04/2020



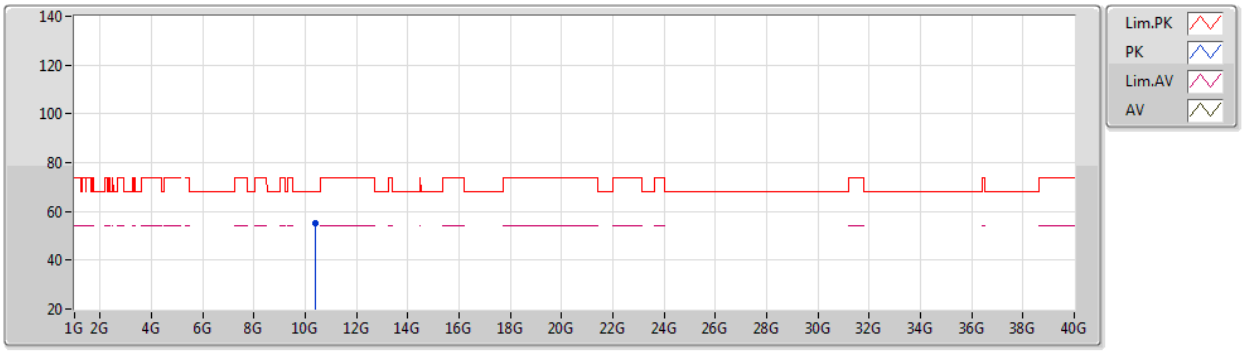
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.3825G	57.05	68.20	-11.15	17.71	3	Vertical	35	1.27	-	39.34	39.53	8.71	30.53

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

03/04/2020



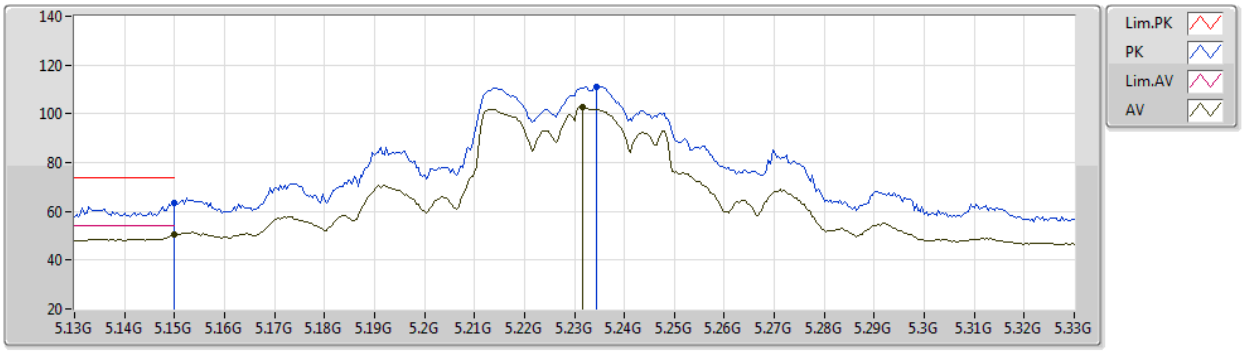
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.37994G	55.39	68.20	-12.81	17.70	3	Horizontal	295	1.60	-	37.69	39.52	8.71	30.53

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

03/04/2020



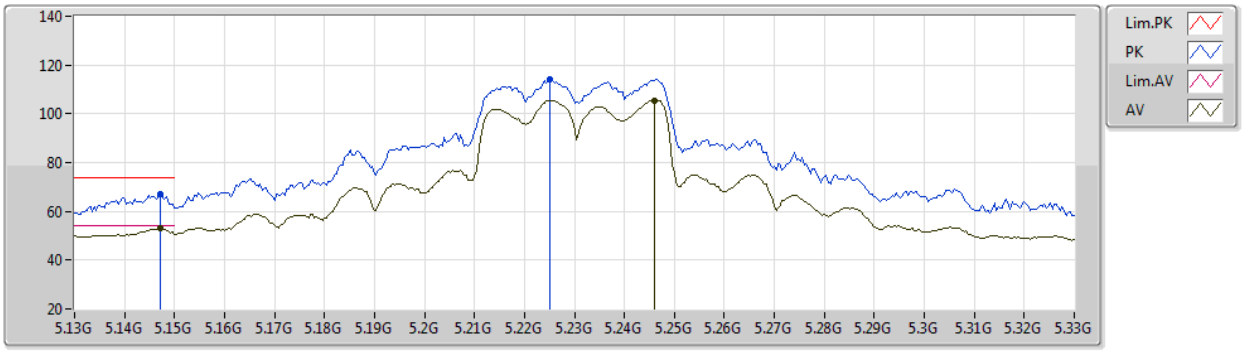
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.15G	50.42	54.00	-3.58	8.67	3	Vertical	325	1.40	-	41.75	32.00	6.00	29.33
AV	5.2316G	102.78	Inf	-Inf	8.26	3	Vertical	325	1.40	-	94.52	31.55	6.05	29.34
PK	5.15G	63.33	74.00	-10.67	8.67	3	Vertical	325	1.40	-	54.66	32.00	6.00	29.33
PK	5.2344G	111.24	Inf	-Inf	8.23	3	Vertical	325	1.40	-	103.01	31.52	6.05	29.34

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

03/04/2020

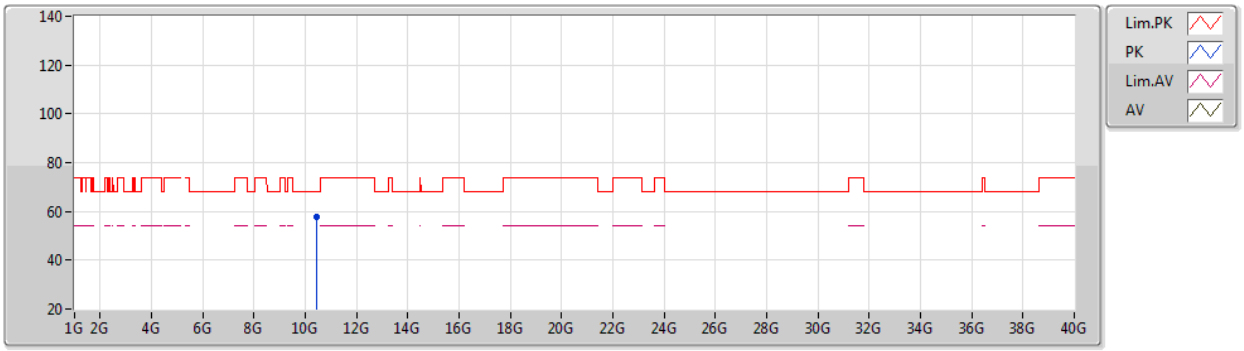


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.1472G	53.17	54.00	-0.83	8.66	3	Horizontal	320	1.78	-	44.51	31.99	6.00	29.33
AV	5.246G	105.55	Inf	-Inf	8.14	3	Horizontal	320	1.78	-	97.41	31.43	6.05	29.34
PK	5.1472G	67.04	74.00	-6.96	8.66	3	Horizontal	320	1.78	-	58.38	31.99	6.00	29.33
PK	5.2252G	114.13	Inf	-Inf	8.30	3	Horizontal	320	1.78	-	105.83	31.60	6.04	29.34

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

03/04/2020

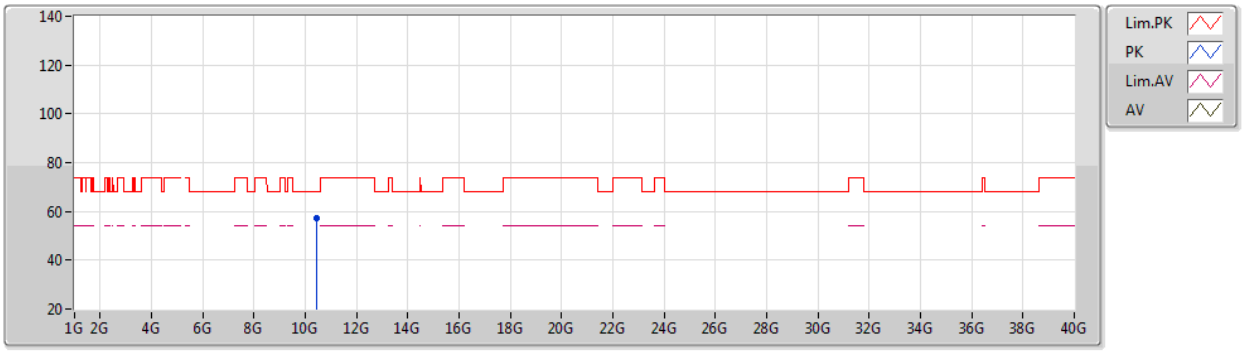


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.4613G	57.87	68.20	-10.33	17.86	3	Vertical	360	1.47	-	40.01	39.66	8.76	30.56

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

03/04/2020

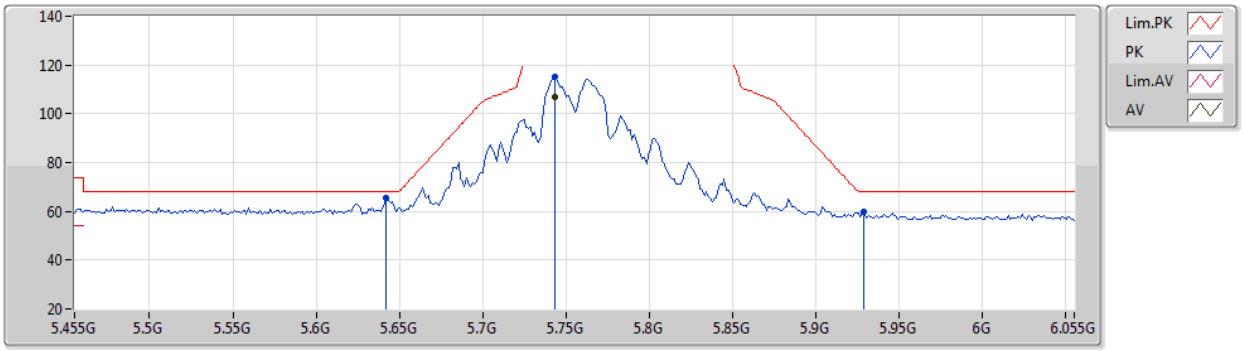


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.4604G	57.11	68.20	-11.09	17.86	3	Horizontal	156	2.25	-	39.25	39.66	8.76	30.56

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

03/04/2020

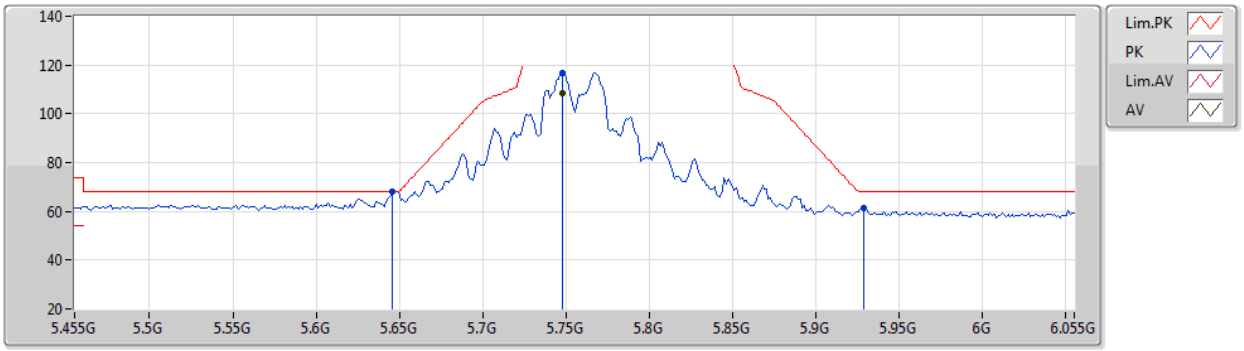


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.743G	106.80	Inf	-Inf	9.01	3	Vertical	351	1.25	-	97.79	31.99	6.38	29.36
PK	5.6422G	65.40	68.20	-2.80	8.67	3	Vertical	351	1.25	-	56.73	31.73	6.30	29.36
PK	5.743G	115.19	Inf	-Inf	9.01	3	Vertical	351	1.25	-	106.18	31.99	6.38	29.36
PK	5.929G	59.83	68.20	-8.37	9.50	3	Vertical	351	1.25	-	50.33	32.32	6.53	29.35

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

03/04/2020

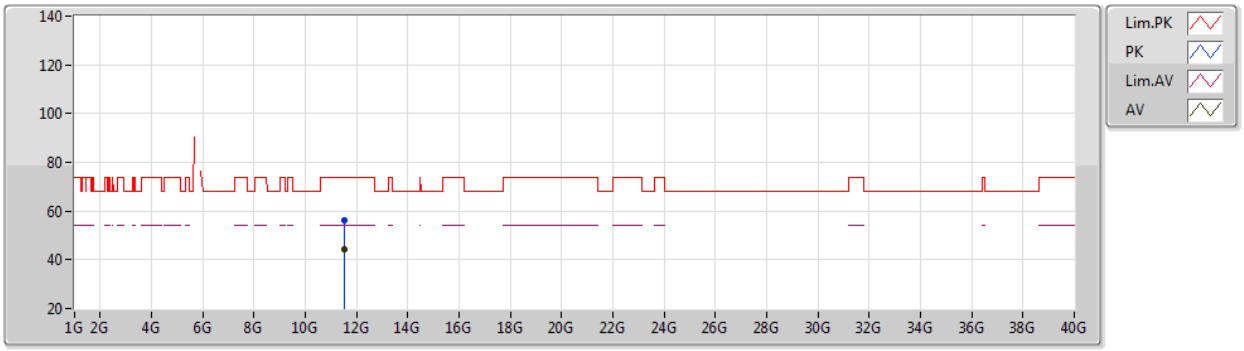


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7478G	108.47	Inf	-Inf	9.03	3	Horizontal	195	1.61	-	99.44	32.00	6.39	29.36
PK	5.6458G	68.07	68.20	-0.13	8.67	3	Horizontal	195	1.61	-	59.40	31.72	6.31	29.36
PK	5.7478G	116.78	Inf	-Inf	9.03	3	Horizontal	195	1.61	-	107.75	32.00	6.39	29.36
PK	5.929G	61.38	68.20	-6.82	9.50	3	Horizontal	195	1.61	-	51.88	32.32	6.53	29.35

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

03/04/2020



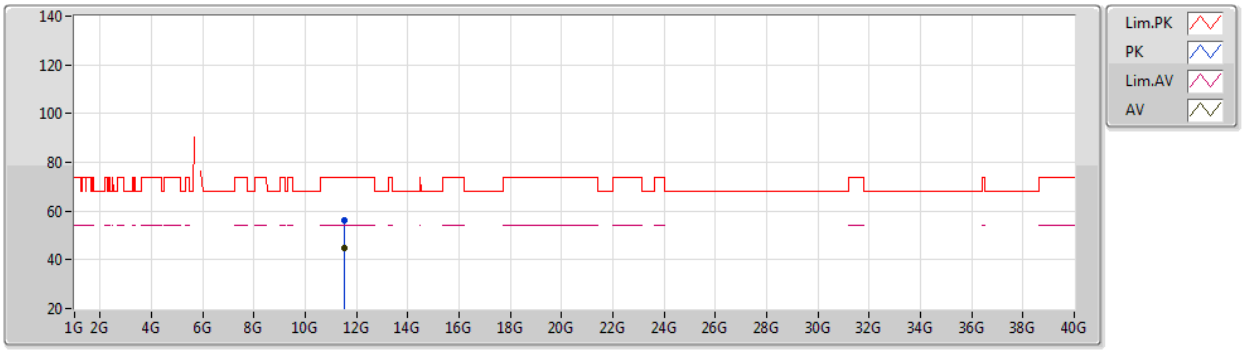
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.50867G	44.14	54.00	-9.86	18.70	3	Vertical	149	1.25	-	25.44	39.99	9.48	30.77
PK	11.51116G	56.04	74.00	-17.96	18.70	3	Vertical	149	1.25	-	37.34	39.99	9.48	30.77

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

03/04/2020

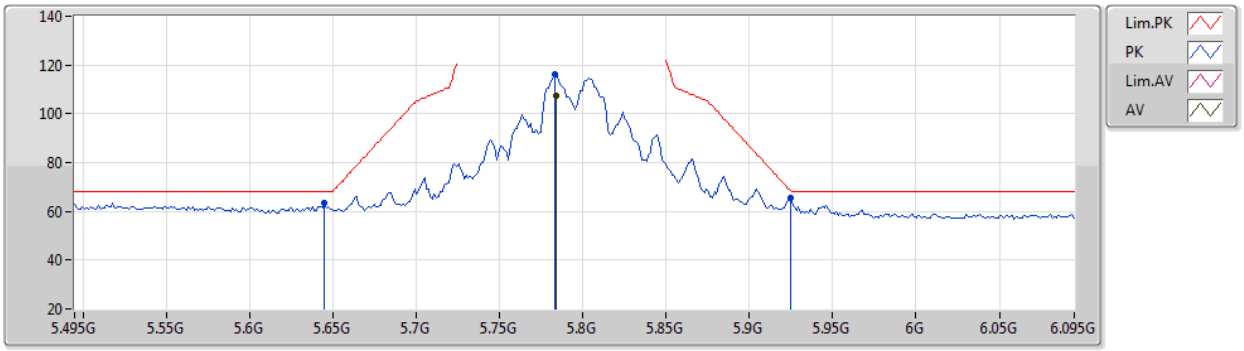


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.50897G	45.02	54.00	-8.98	18.70	3	Horizontal	351	1.90	-	26.32	39.99	9.48	30.77
PK	11.50766G	56.28	74.00	-17.72	18.70	3	Horizontal	351	1.90	-	37.58	39.99	9.48	30.77

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

03/04/2020

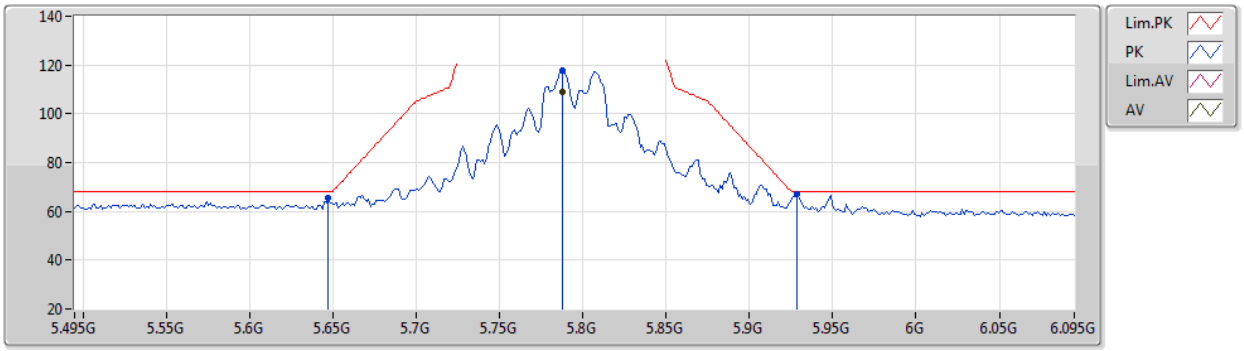


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7842G	107.58	Inf	-Inf	9.06	3	Vertical	354	1.31	-	98.52	32.00	6.42	29.36
PK	5.645G	63.50	68.20	-4.70	8.67	3	Vertical	354	1.31	-	54.83	31.72	6.31	29.36
PK	5.783G	115.96	Inf	-Inf	9.06	3	Vertical	354	1.31	-	106.90	32.00	6.42	29.36
PK	5.9246G	65.76	68.50	-2.74	9.48	3	Vertical	354	1.31	-	56.28	32.30	6.53	29.35

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

03/04/2020

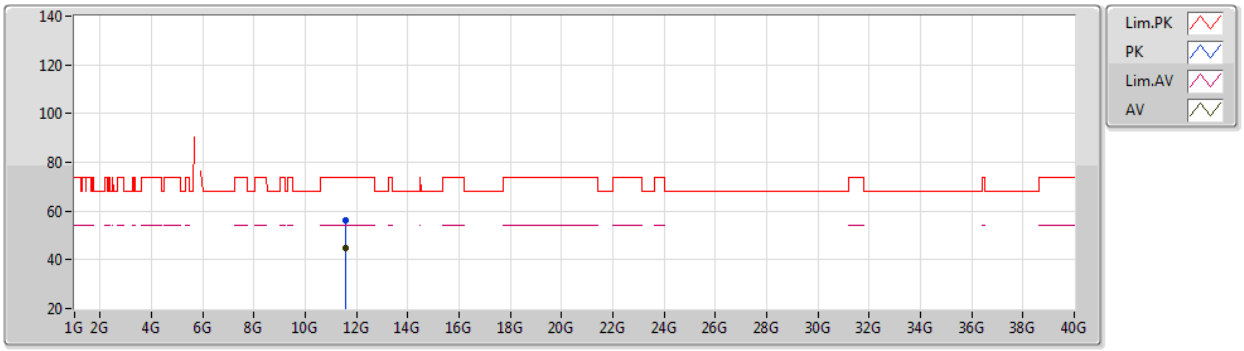


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7878G	109.07	Inf	-Inf	9.06	3	Horizontal	199	1.64	-	100.01	32.00	6.42	29.36
PK	5.6474G	65.46	68.20	-2.74	8.66	3	Horizontal	199	1.64	-	56.80	31.71	6.31	29.36
PK	5.7878G	117.53	Inf	-Inf	9.06	3	Horizontal	199	1.64	-	108.47	32.00	6.42	29.36
PK	5.9282G	67.29	68.20	-0.91	9.49	3	Horizontal	199	1.64	-	57.80	32.31	6.53	29.35

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

03/04/2020



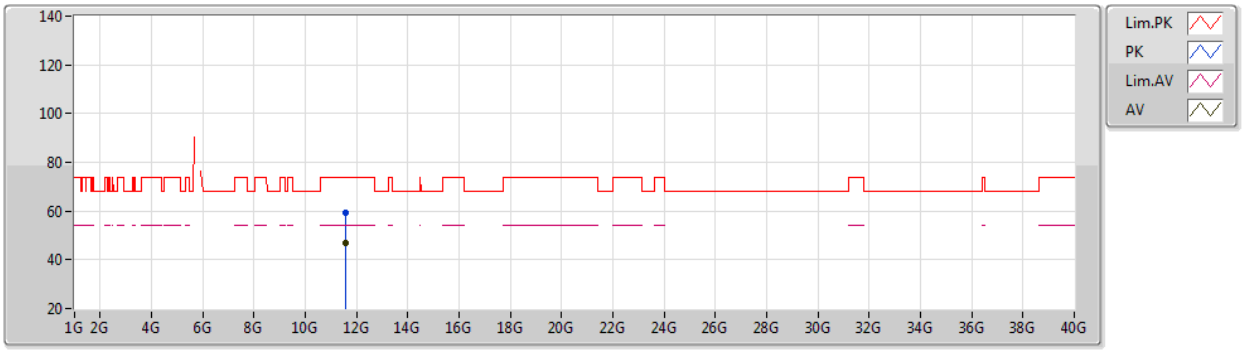
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.58988G	44.95	54.00	-9.05	18.67	3	Vertical	260	1.66	-	26.28	39.91	9.54	30.78
PK	11.59224G	56.04	74.00	-17.96	18.67	3	Vertical	260	1.66	-	37.37	39.91	9.54	30.78

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

03/04/2020



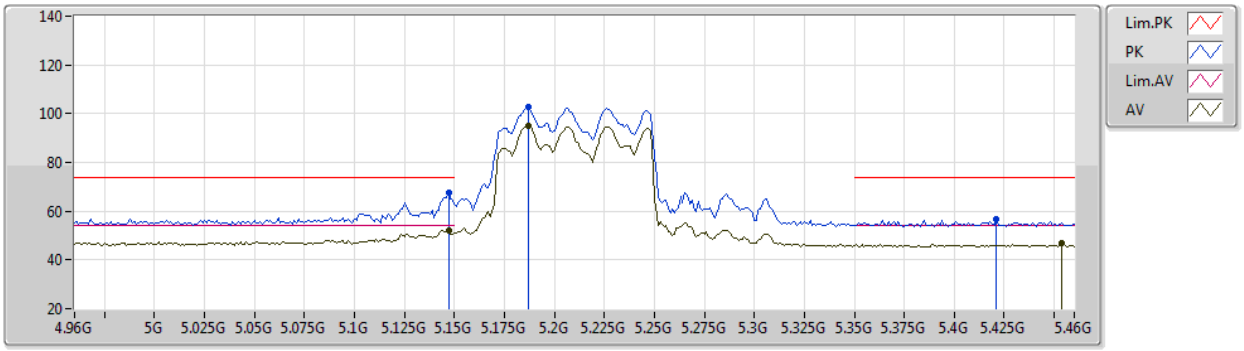
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.59177G	46.72	54.00	-7.28	18.67	3	Horizontal	218	1.70	-	28.05	39.91	9.54	30.78
PK	11.58834G	59.26	74.00	-14.74	18.67	3	Horizontal	218	1.70	-	40.59	39.91	9.54	30.78

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

03/04/2020

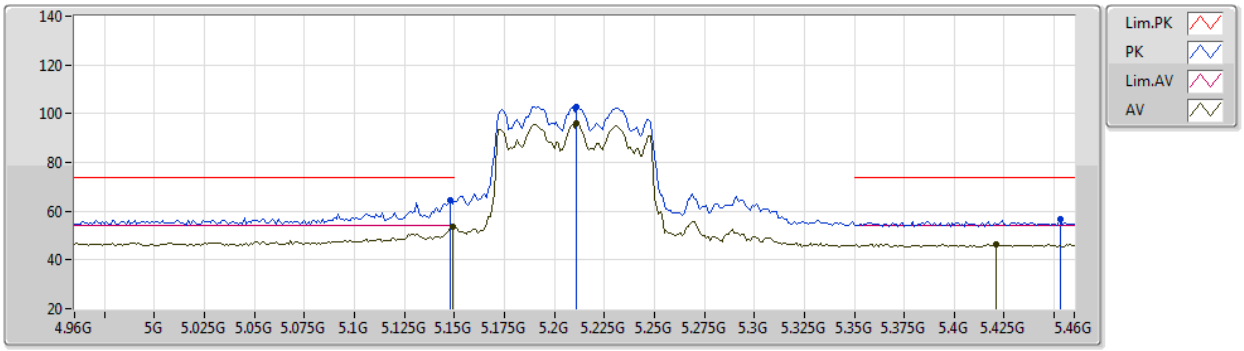


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.147G	51.91	54.00	-2.09	8.66	3	Vertical	284	1.37	-	43.25	31.99	6.00	29.33
AV	5.187G	95.15	Inf	-Inf	8.53	3	Vertical	284	1.37	-	86.62	31.85	6.02	29.34
AV	5.454G	46.86	54.00	-7.14	8.42	3	Vertical	284	1.37	-	38.44	31.62	6.17	29.37
PK	5.147G	67.79	74.00	-6.21	8.66	3	Vertical	284	1.37	-	59.13	31.99	6.00	29.33
PK	5.187G	102.62	Inf	-Inf	8.53	3	Vertical	284	1.37	-	94.09	31.85	6.02	29.34
PK	5.421G	56.62	74.00	-17.38	8.33	3	Vertical	284	1.37	-	48.29	31.54	6.15	29.36

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

03/04/2020

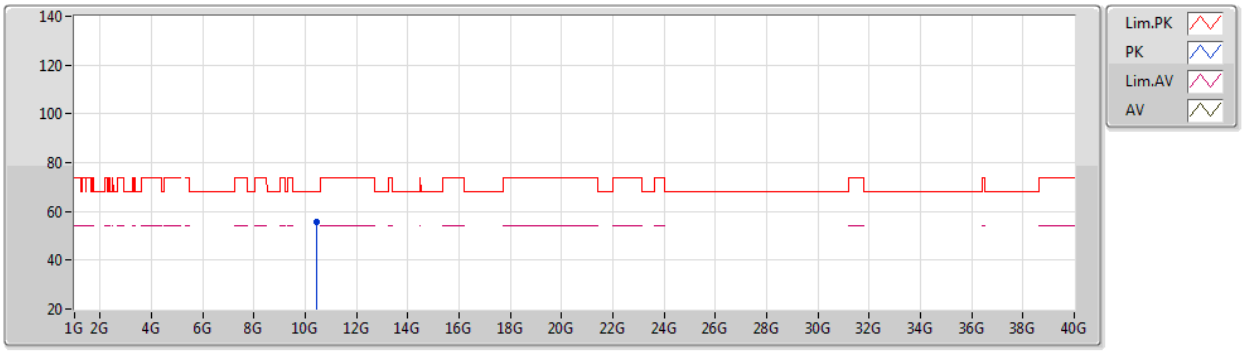


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.149G	53.61	54.00	-0.39	8.67	3	Horizontal	19	1.60	-	44.94	32.00	6.00	29.33
AV	5.211G	96.27	Inf	-Inf	8.40	3	Horizontal	19	1.60	-	87.87	31.71	6.03	29.34
AV	5.421G	46.42	54.00	-7.58	8.33	3	Horizontal	19	1.60	-	38.09	31.54	6.15	29.36
PK	5.148G	64.63	74.00	-9.37	8.67	3	Horizontal	19	1.60	-	55.96	32.00	6.00	29.33
PK	5.211G	102.92	Inf	-Inf	8.40	3	Horizontal	19	1.60	-	94.52	31.71	6.03	29.34
PK	5.453G	56.68	74.00	-17.32	8.40	3	Horizontal	19	1.60	-	48.28	31.61	6.16	29.37

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

03/04/2020



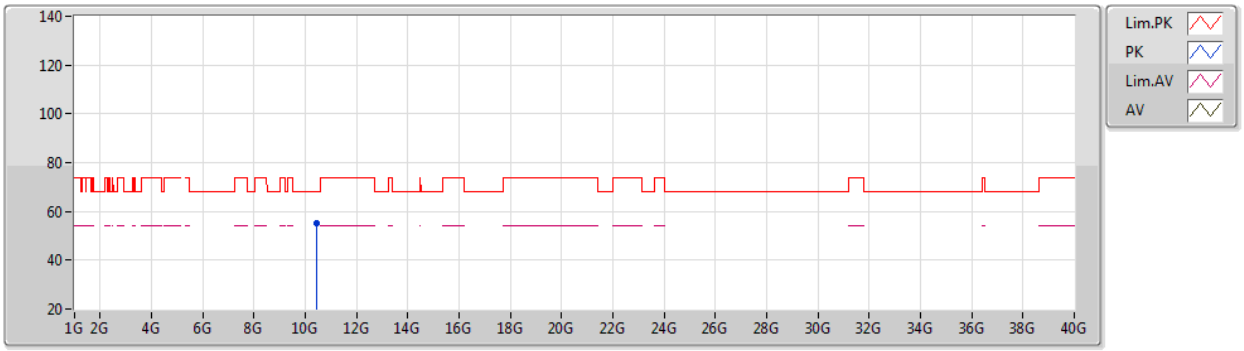
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.41876G	55.52	68.20	-12.68	17.80	3	Vertical	138	1.13	-	37.72	39.62	8.73	30.55

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

03/04/2020

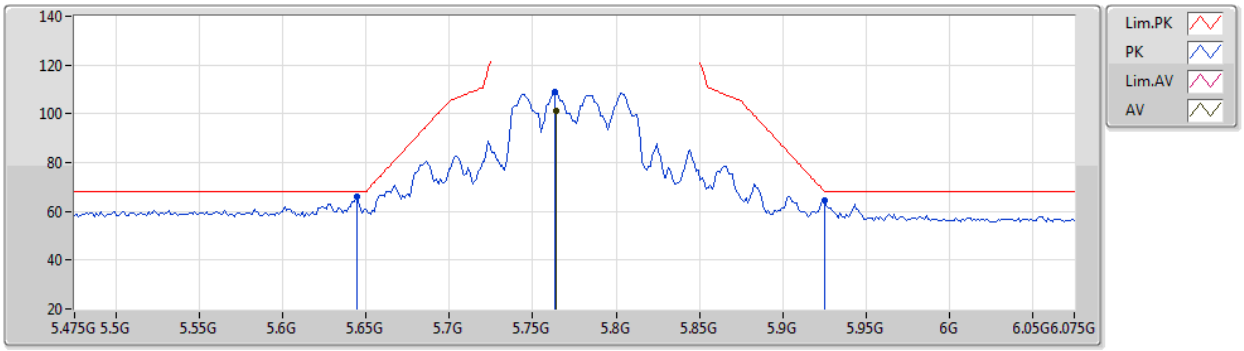


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	10.41987G	55.06	68.20	-13.14	17.81	3	Horizontal	254	1.56	-	37.25	39.62	8.74	30.55

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

03/04/2020

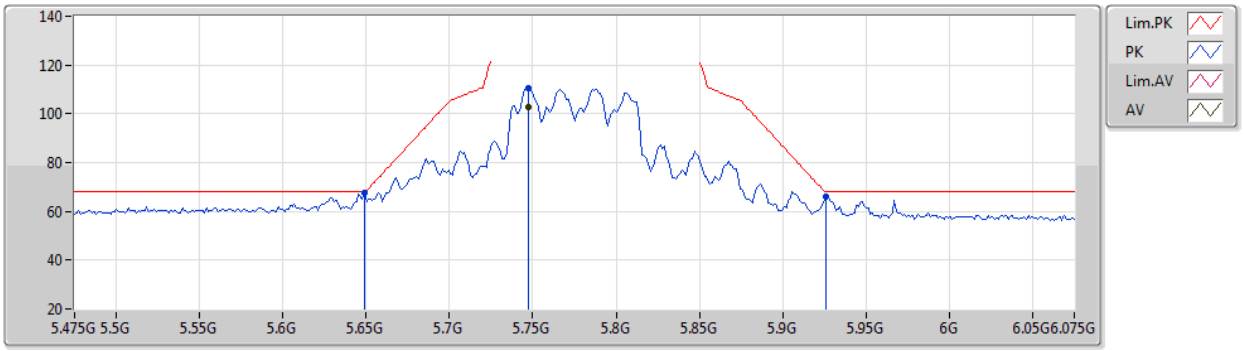


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7642G	101.41	Inf	-Inf	9.04	3	Vertical	0	1.24	-	92.37	32.00	6.40	29.36
PK	5.6442G	66.07	68.20	-2.13	8.67	3	Vertical	0	1.24	-	57.40	31.72	6.31	29.36
PK	5.763G	108.96	Inf	-Inf	9.04	3	Vertical	0	1.24	-	99.92	32.00	6.40	29.36
PK	5.925G	64.51	68.20	-3.69	9.48	3	Vertical	0	1.24	-	55.03	32.30	6.53	29.35

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

03/04/2020

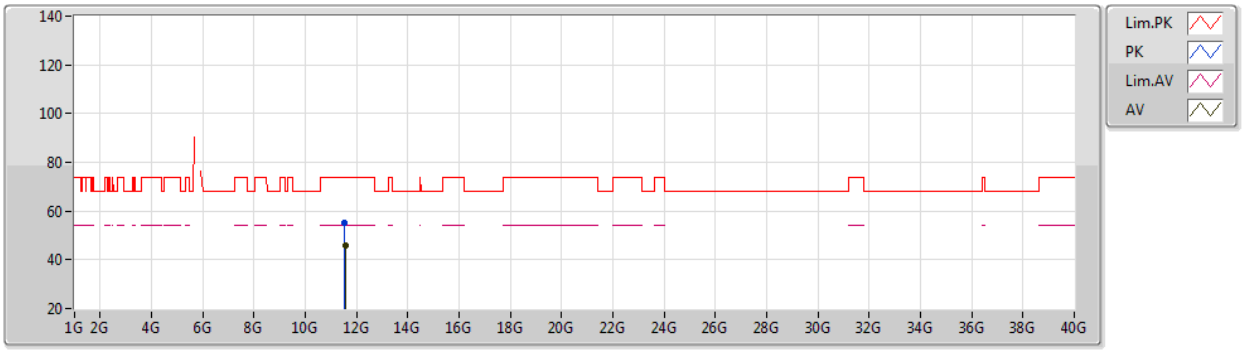


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	5.7474G	102.92	Inf	-Inf	9.02	3	Horizontal	190	1.49	-	93.90	31.99	6.39	29.36
PK	5.649G	67.63	68.20	-0.57	8.65	3	Horizontal	190	1.49	-	58.98	31.70	6.31	29.36
PK	5.7474G	110.59	Inf	-Inf	9.02	3	Horizontal	190	1.49	-	101.57	31.99	6.39	29.36
PK	5.9262G	65.80	68.20	-2.40	9.48	3	Horizontal	190	1.49	-	56.32	32.30	6.53	29.35

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

03/04/2020



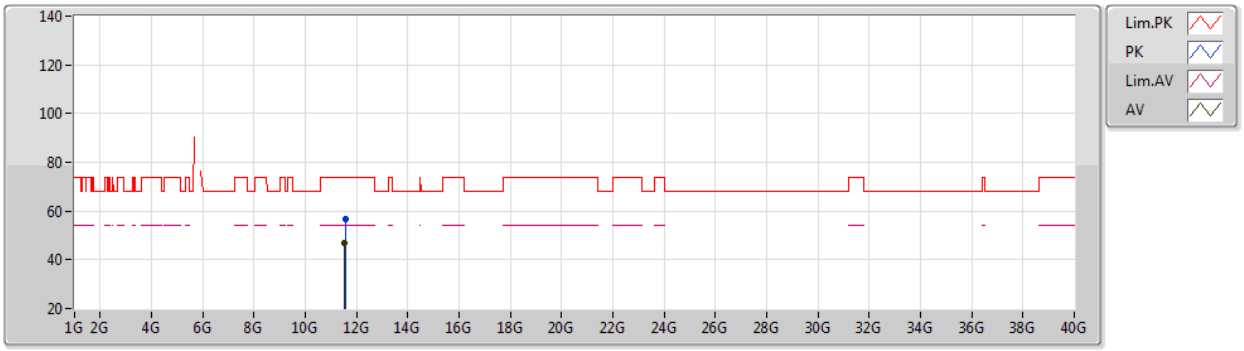
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.54959G	45.61	54.00	-8.39	18.68	3	Vertical	187	1.14	-	26.93	39.95	9.51	30.78
PK	11.54909G	55.42	74.00	-18.58	18.68	3	Vertical	187	1.14	-	36.74	39.95	9.51	30.78

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

03/04/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	11.54773G	46.70	54.00	-7.30	18.68	3	Horizontal	328	2.08	-	28.02	39.95	9.51	30.78
PK	11.55168G	56.95	74.00	-17.05	18.68	3	Horizontal	328	2.08	-	38.27	39.95	9.51	30.78

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)