

FCC Test Report

FCC ID : UIDDG3450P2
Equipment : Data Gateway
Brand Name : ARRIS
Model Name : DG3450
Applicant : ARRIS
3871 Lakefield Drive, #300 Suwanee, GA 30024
Manufacturer : ARRIS
3871 Lakefield Drive, #300 Suwanee, GA 30024
Standard : 47 CFR FCC Part 15.407

The product was received on Jan. 21, 2019, and testing was started from Feb. 02, 2019 and completed on Feb. 15, 2019. 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

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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	8
2 TEST CONFIGURATION OF EUT	9
2.1 Test Condition	9
2.2 Test Channel Mode	9
2.3 The Worst Case Measurement Configuration	10
2.4 Accessories and Support Equipment	11
2.5 Test Setup Diagram	12
3 TRANSMITTER TEST RESULT	13
3.1 AC Power-line Conducted Emissions	13
3.2 Emission Bandwidth	14
3.3 Maximum Conducted Output Power	15
3.4 Peak Power Spectral Density	17
3.5 Unwanted Emissions	19
3.6 Test Equipment and Calibration Data	23
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 V02	



History of this test report

TEL : 886-3-3273456
FAX : 886-3-3270973
Report Template No.: HE1-D1 Ver2.3
FCC ID: UIDDG3450P2

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: Jackson Tsai

Report Producer: Ann Hou

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
1	ARRIS	DG3450	PIFA	N/A
2	ARRIS	DG3450	PIFA	N/A
3	ARRIS	DG3450	PIFA	N/A
4	ARRIS	DG3450	PIFA	N/A
5	ARRIS	DG3450	PIFA	N/A
6	ARRIS	DG3450	PIFA	N/A
7	ARRIS	DG3450	PIFA	N/A

Ant.	Port	2.4G		U-NII-1		U-NII-3	
		Channel(MHz)	Gain (dBi)	Channel(MHz)	Gain (dBi)	Channel(MHz)	Gain (dBi)
1~3	1~3	2412	4	-	-	-	-
		2437	4	-	-	-	-
		2462	4.2	-	-	-	-
		2422	4	-	-	-	-
		2437	4	-	-	-	-
		2452	4.2	-	-	-	-
4~7	1~4	-	-	5180	4.1	5745	4.6
		-	-	5220	4.2	5785	4.4
		-	-	5240	4.3	5825	4
		-	-	5190	4.1	5755	4.6
		-	-	5230	4.2	5795	4.4
		-	-	5210	4.1	5775	4.5

Note 1: The EUT has seven antennas.

For 2.4GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 3 (port 3) and it was record in this test report.

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

Ant. 1 (port 1), Ant. 2 (port 2) and Ant. 3 (port 3) could transmit/receive simultaneously.

For 5GHz function:

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

Ant. 4 (port 1), Ant. 5 (port 2), Ant. 6 (port 3) and Ant. 7 (port 4) could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From AC Adapter		
EUT Function	☐ Outdoor	☒ Indoor	
	☐ Fixed P2P	☐ Client	
Beamforming Function	☐ With beamforming	☒ Without beamforming	
TPC Function	☐ With TPC Function	☒ Without TPC Function	
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) $\geq 1/T$
802.11a	0.695	1.58	1.399m	1k
802.11ac VHT20	0.655	1.838	1.319m	1k
802.11ac VHT40	0.742	1.296	658.75u	3k
802.11ac VHT80	0.619	2.083	318.75u	10k

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

1.1.5 Table for Multiple Listing

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

Brand Name	Model Name	Description
ARRIS	DG3450	There are two enclosures for EUT. All samples are identical, only the color and enclosures are different.

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
- ♦ KDB 662911 D01 v02r01

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.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Lego	22.6~23.4°C / 54~56%	12/Feb/2019
RF Conducted	TH07-HY	Gary	23.2~23.9°C / 62~65%	11/Feb/2019~15/Feb/2019
Radiated	03CH02-HY	Daniel	21.8~22.7°C / 52.6~54.3%	02/Feb/2019~06/Feb/2019

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software	DoS
---------------	-----

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	30,27,26,33
5200MHz	30,28,26,33
5240MHz	29,27,25,32
5745MHz	24,24,25,28
5785MHz	26,24,25,29
5825MHz	27,25,26,30
802.11ac VHT20_Nss4,(MCS0)_4TX	-
5180MHz	29,27,25,32
5200MHz	30,27,26,33
5240MHz	30,28,26,33
5745MHz	25,25,26,29
5785MHz	28,26,27,31
5825MHz	28,26,27,31
802.11ac VHT40_Nss4,(MCS0)_4TX	-
5190MHz	28,25,24,31
5230MHz	32,30,28,35
5755MHz	24,24,27,30
5795MHz	28,26,27,31
802.11ac VHT80_Nss4,(MCS0)_4TX	-
5210MHz	25,22,21,28
5775MHz	28,26,27,31

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
	
Worst Planes of EUT	V

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.: FA911904 for Co-location RF Exposure Evaluation.	

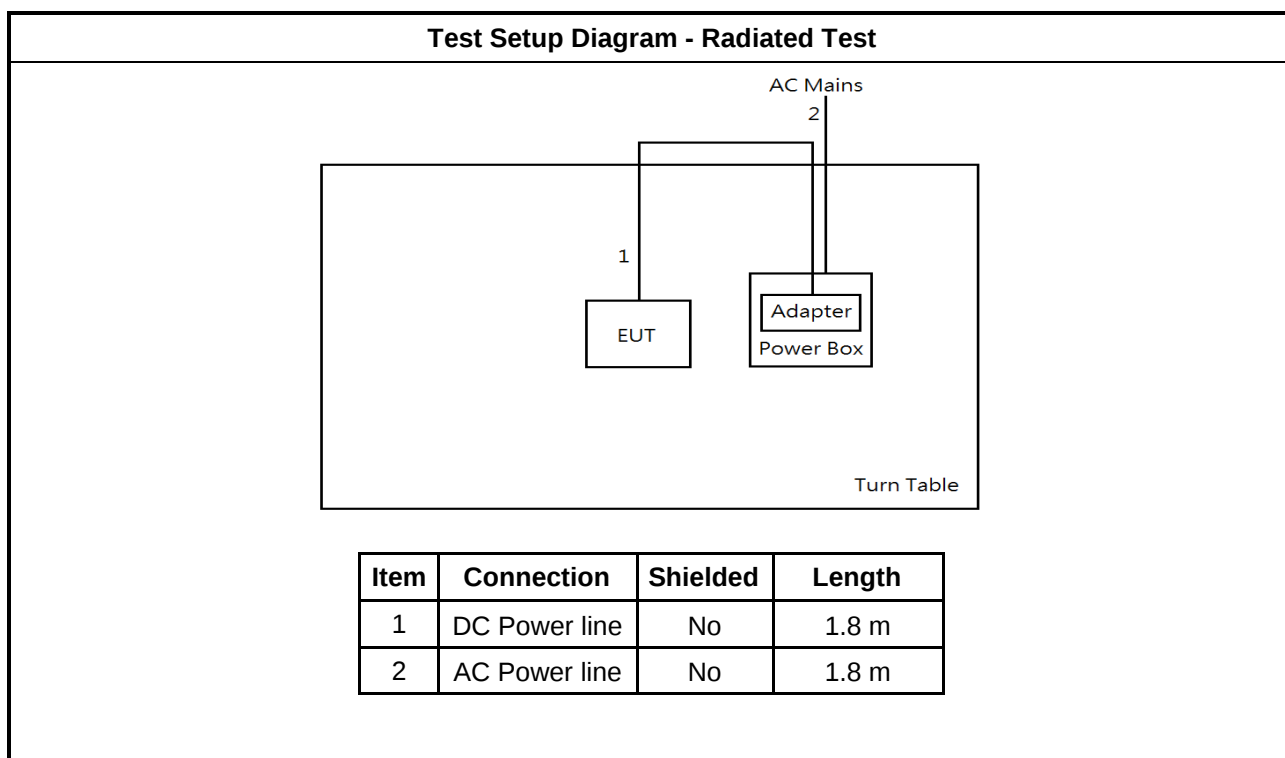
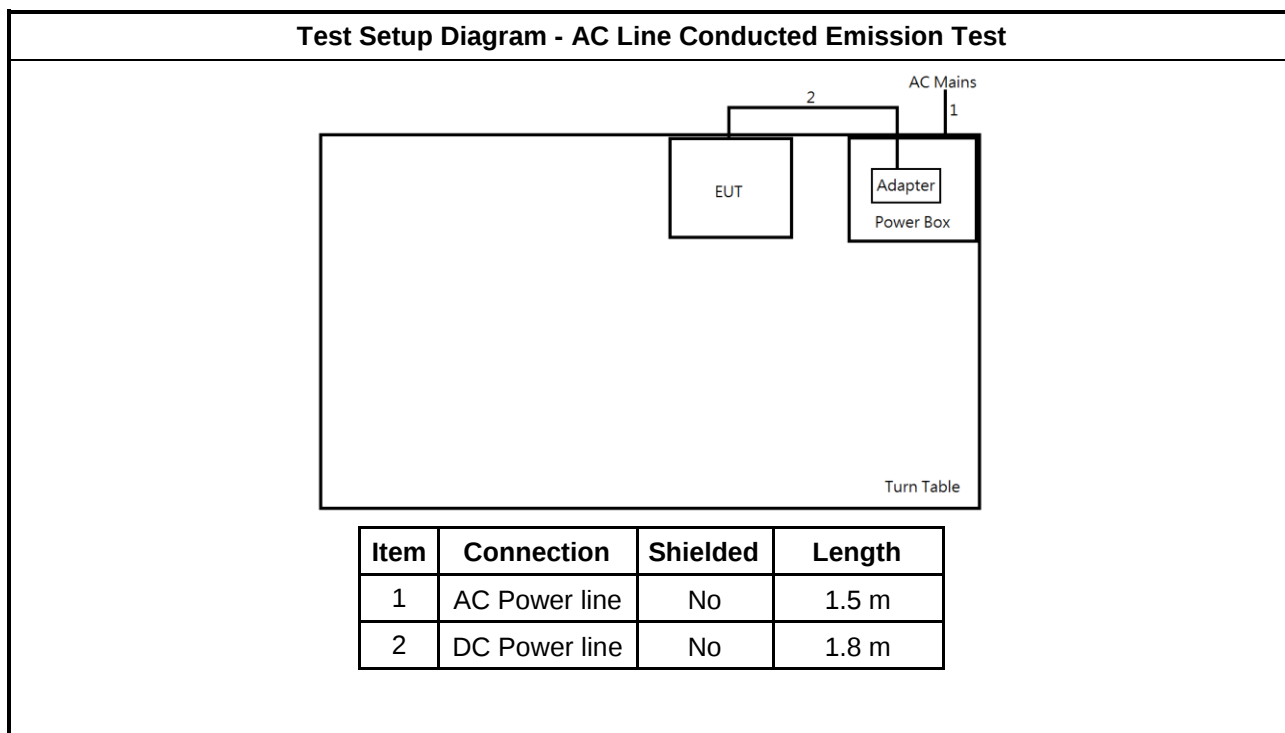
2.4 Accessories and Support Equipment

Accessories				
AC Adapter (US Plug)	Brand Name	ARRIS	Model Name	NBS36H120300VU
	Power Rating	I/P: 100- 240Vac, 0.8A, O/P: 12Vdc, 3A		
	Power Cord	1.8 meter, non-shielded cable, w/o ferrite core		
RJ45	Power Cord	1.0 meter, non-shielded cable, w/o ferrite core		

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

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

2.5 Test Setup Diagram



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.

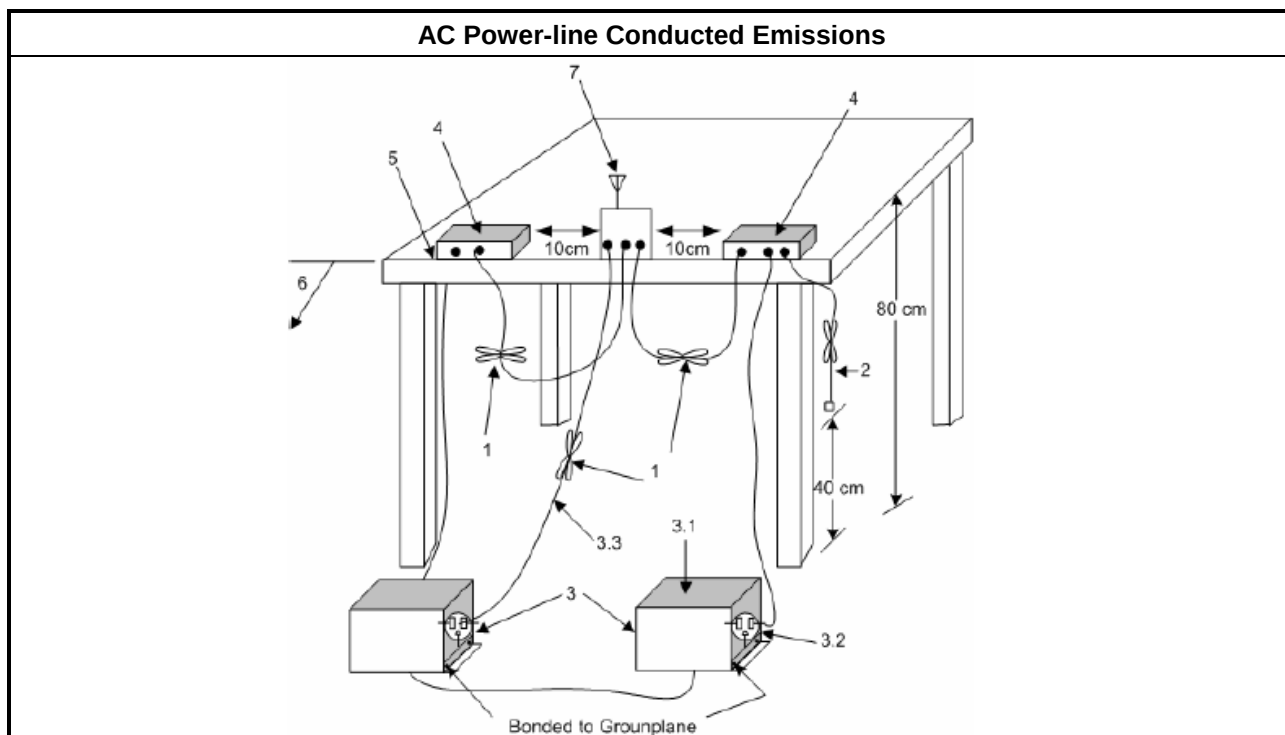
3.1.2 Measuring Instruments

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



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 $\geq$ 500kHz.

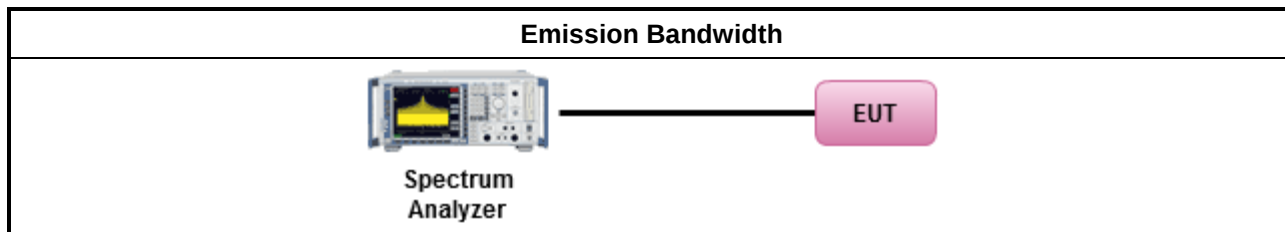
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
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



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.	

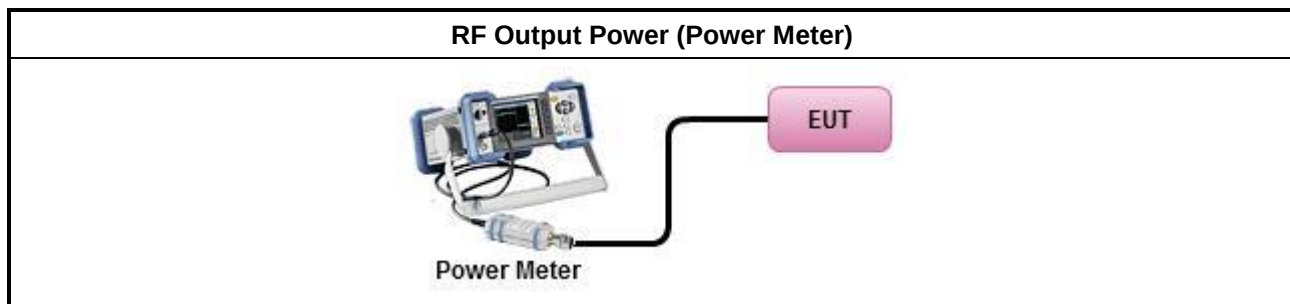
3.3.2 Measuring Instruments

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 $\geq 98\%$
☐	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: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ 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.	

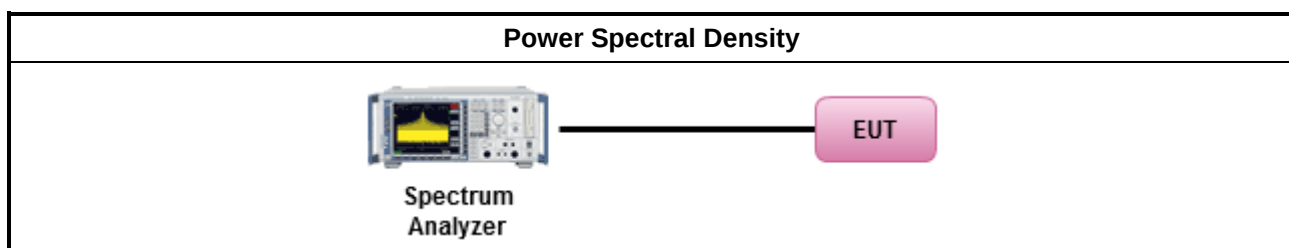
3.4.2 Measuring Instruments

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: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter 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).

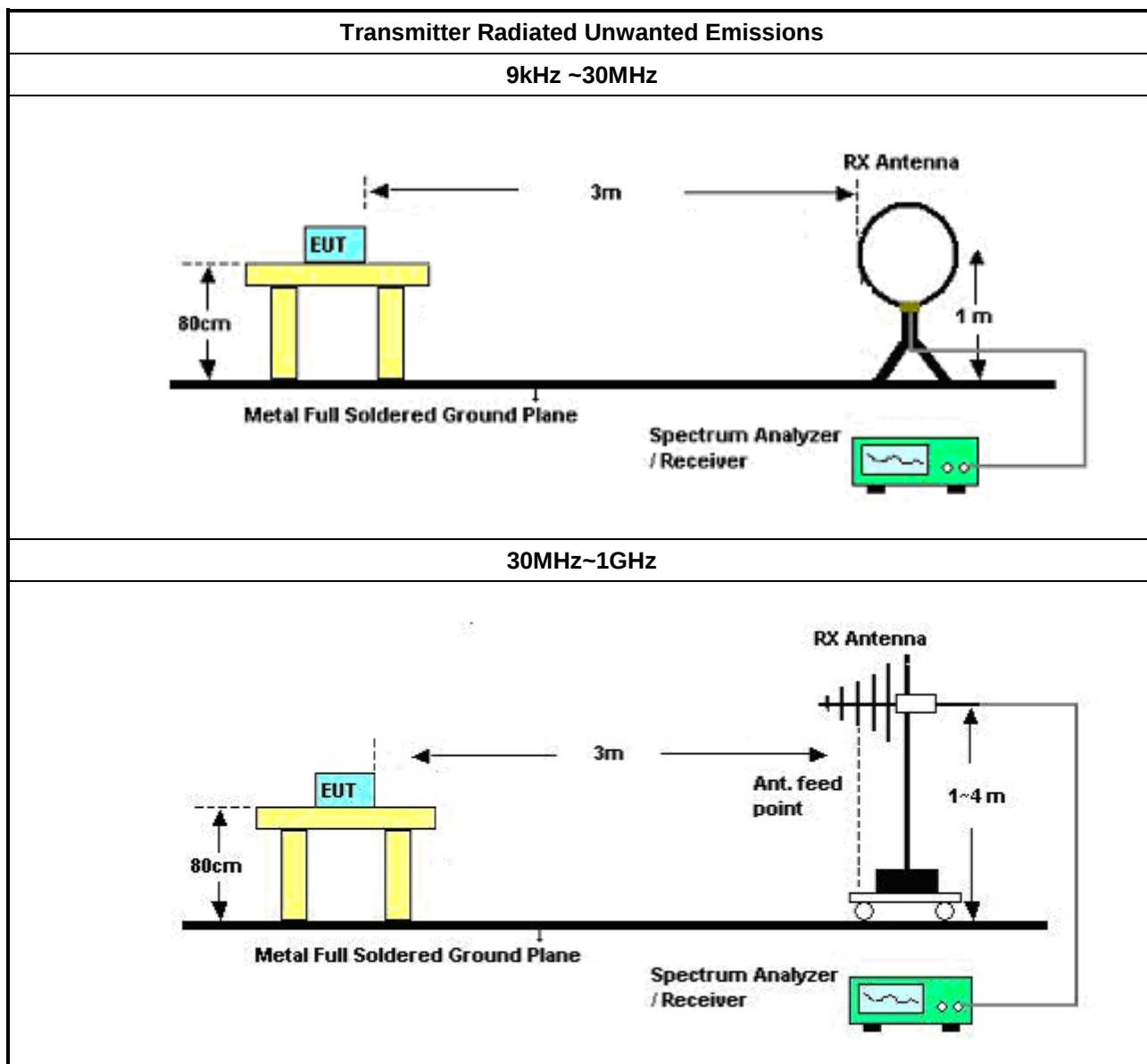
3.5.2 Measuring Instruments

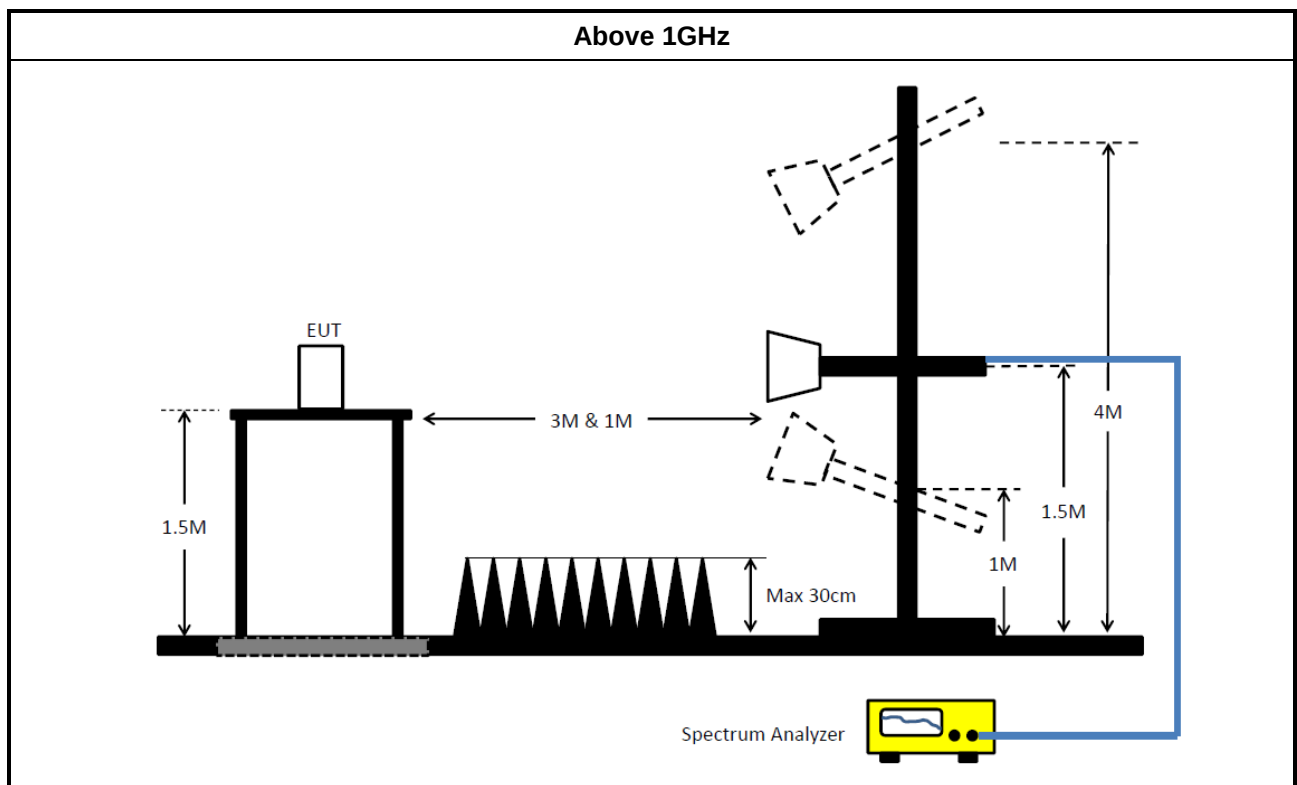
Refer a test equipment and calibration data table in this test report.

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 $\geq$ 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





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	ESR	102051	9KHz ~ 3.6GHz	03/May/2018	02/May/2019
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	17/Sep/2018	16/Sep/2019
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	12/Oct/2018	11/Oct/2019

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	101500	10Hz~40GHz	18/Jul/2018	17/Jul/2019
Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	27/Feb/2018	26/Feb/2019
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	27/Feb/2018	26/Feb/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

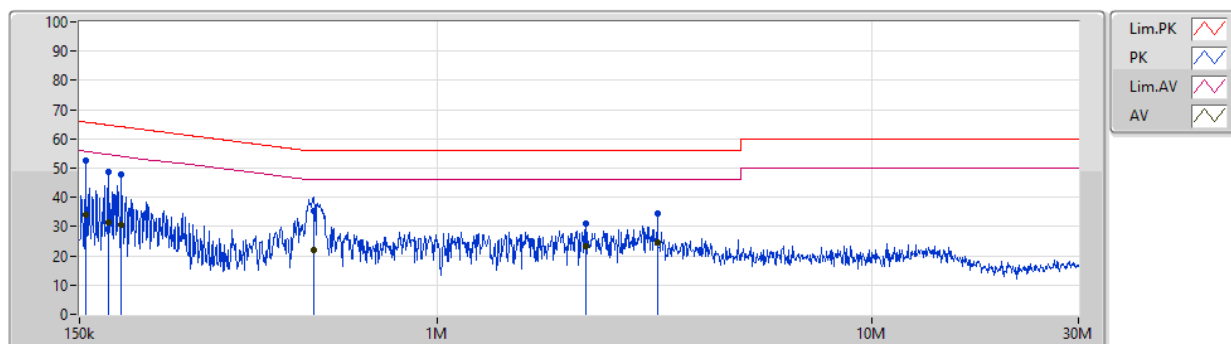
Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	25/Oct/2018	24/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	25/Oct/2018	24/Oct/2019
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	27Jul/2018	02/Jul/2019
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	23/Oct/2018	22/Oct/2019
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	10/Apr/2018	09/Apr/2019
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	18/Jan/2019	17/Jan/2020
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	18/Jan/2019	17/Jan/2020
Bilog Antenna	SCHAFFNER	CBL 6112B	2723	30MHz ~ 1GHz	13/Oct/2018	12/Oct/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k ~ 30MHz	29/Mar/2018	28/Mar/2019
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz ~ 40GHz	12/Mar/2018	11/Mar/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 01543	1GHz ~ 18GHz	11/May/2018	10/May/2019

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Adapter mode		

12/02/2019

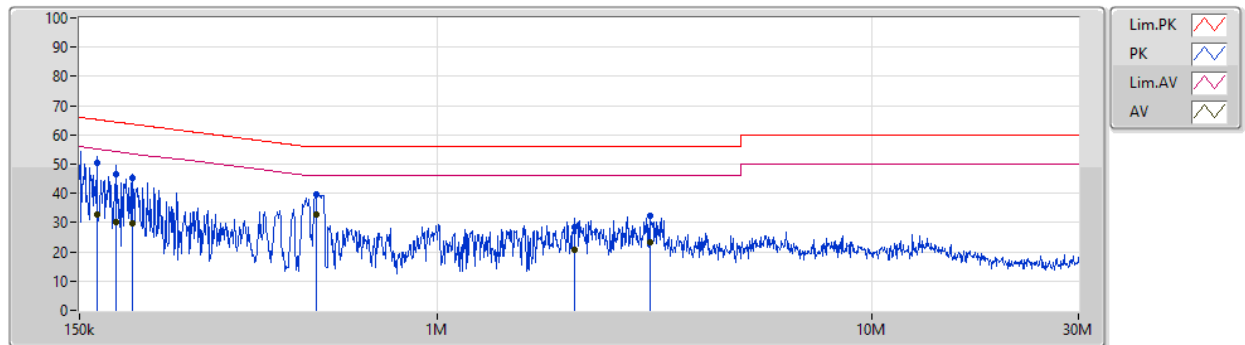


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	155.487k	52.63	65.69	-13.06	19.48	Neutral	"Worst"	33.15	9.60	0.01	9.87			
AV	155.487k	34.20	55.69	-21.49	19.48	Neutral	-	14.72	9.60	0.01	9.87			
QP	174.571k	48.61	64.74	-16.13	19.48	Neutral	-	29.13	9.60	0.01	9.87			
AV	174.571k	31.59	54.74	-23.15	19.48	Neutral	-	12.11	9.60	0.01	9.87			
QP	187.577k	47.70	64.15	-16.45	19.47	Neutral	-	28.23	9.59	0.01	9.87			
AV	187.577k	30.62	54.15	-23.53	19.47	Neutral	-	11.15	9.59	0.01	9.87			
QP	519.13k	35.21	56.00	-20.79	19.48	Neutral	-	15.73	9.59	0.01	9.88			
AV	519.13k	21.77	46.00	-24.23	19.48	Neutral	-	2.29	9.59	0.01	9.88			
QP	2.194M	30.98	56.00	-25.02	19.53	Neutral	-	11.45	9.61	0.03	9.89			
AV	2.194M	23.29	46.00	-22.71	19.53	Neutral	-	3.76	9.61	0.03	9.89			
QP	3.218M	34.52	56.00	-21.48	19.54	Neutral	-	14.98	9.61	0.04	9.89			
AV	3.218M	24.36	46.00	-21.64	19.54	Neutral	-	4.82	9.61	0.04	9.89			

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Adapter mode		

12/02/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	164.425k	50.55	65.24	-14.69	19.48	Line	-	31.07	9.60	0.01	9.87			
AV	164.425k	32.66	55.24	-22.58	19.48	Line	-	13.18	9.60	0.01	9.87			
QP	182.408k	46.71	64.37	-17.66	19.48	Line	-	27.23	9.60	0.01	9.87			
AV	182.408k	30.20	54.37	-24.17	19.48	Line	-	10.72	9.60	0.01	9.87			
QP	198.359k	45.22	63.69	-18.47	19.48	Line	-	25.74	9.60	0.01	9.87			
AV	198.359k	29.79	53.69	-23.90	19.48	Line	-	10.31	9.60	0.01	9.87			
QP	527.486k	39.82	56.00	-16.18	19.48	Line	-	20.34	9.59	0.01	9.88			
AV	527.486k	32.91	46.00	-13.09	19.48	Line	"Worst"	13.43	9.59	0.01	9.88			
QP	2.074M	28.65	56.00	-27.35	19.54	Line	-	9.11	9.62	0.03	9.89			
AV	2.074M	20.79	46.00	-25.21	19.54	Line	-	1.25	9.62	0.03	9.89			
QP	3.092M	32.45	56.00	-23.55	19.56	Line	-	12.89	9.63	0.04	9.89			
AV	3.092M	23.24	46.00	-22.76	19.56	Line	-	3.68	9.63	0.04	9.89			

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	25.675M	16.567M	16M6D1D	22.475M	16.467M
802.11ac VHT20_Nss4,(MCS0)_4TX	26.525M	17.641M	17M6D1D	20.65M	17.566M
802.11ac VHT40_Nss4,(MCS0)_4TX	80.5M	36.382M	36M4D1D	40.85M	36.132M
802.11ac VHT80_Nss4,(MCS0)_4TX	81.9M	75.662M	75M7D1D	81.5M	75.562M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.35M	16.567M	16M6D1D	16.05M	16.492M
802.11ac VHT20_Nss4,(MCS0)_4TX	17.05M	17.641M	17M6D1D	16.55M	17.566M
802.11ac VHT40_Nss4,(MCS0)_4TX	36.05M	36.332M	36M3D1D	35.35M	36.182M
802.11ac VHT80_Nss4,(MCS0)_4TX	75.5M	75.862M	75M9D1D	75.2M	75.862M

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

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

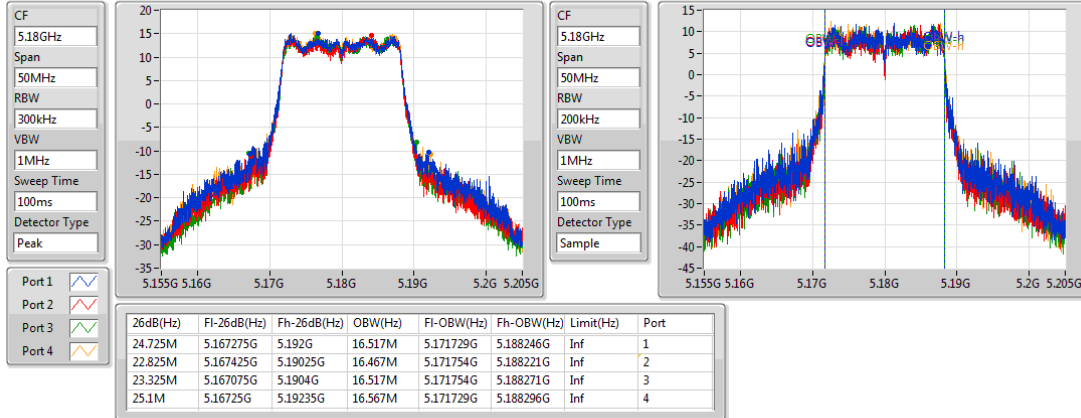
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	24.725M	16.517M	22.825M	16.467M	23.325M	16.517M	25.1M	16.567M
5200MHz	Pass	Inf	25.625M	16.567M	24.025M	16.542M	24.425M	16.542M	24.525M	16.492M
5240MHz	Pass	Inf	25.675M	16.492M	22.475M	16.567M	22.825M	16.492M	25.45M	16.467M
5745MHz	Pass	500k	16.325M	16.517M	16.05M	16.567M	16.3M	16.492M	16.325M	16.567M
5785MHz	Pass	500k	16.3M	16.492M	16.3M	16.542M	16.3M	16.517M	16.3M	16.542M
5825MHz	Pass	500k	16.35M	16.492M	16.075M	16.492M	16.3M	16.542M	16.3M	16.517M
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	22.125M	17.591M	22.7M	17.566M	20.65M	17.591M	22.175M	17.591M
5200MHz	Pass	Inf	26.525M	17.616M	21.45M	17.591M	20.8M	17.616M	22.675M	17.616M
5240MHz	Pass	Inf	25.375M	17.616M	24.45M	17.591M	23.45M	17.566M	24.4M	17.641M
5745MHz	Pass	500k	16.95M	17.566M	17.05M	17.641M	16.8M	17.616M	16.775M	17.591M
5785MHz	Pass	500k	17.025M	17.616M	16.8M	17.616M	17.05M	17.591M	16.55M	17.591M
5825MHz	Pass	500k	16.875M	17.591M	16.75M	17.641M	16.925M	17.591M	16.55M	17.616M
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.85M	36.182M	41.85M	36.232M	40.85M	36.132M	40.9M	36.232M
5230MHz	Pass	Inf	80.5M	36.332M	76.8M	36.332M	73.45M	36.382M	73.85M	36.332M
5755MHz	Pass	500k	35.4M	36.232M	36.05M	36.232M	35.45M	36.282M	36.05M	36.332M
5795MHz	Pass	500k	36.05M	36.232M	35.8M	36.232M	35.5M	36.182M	35.35M	36.332M
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.9M	75.562M	81.7M	75.662M	81.5M	75.562M	81.6M	75.662M
5775MHz	Pass	500k	75.4M	75.862M	75.3M	75.862M	75.2M	75.862M	75.5M	75.862M

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

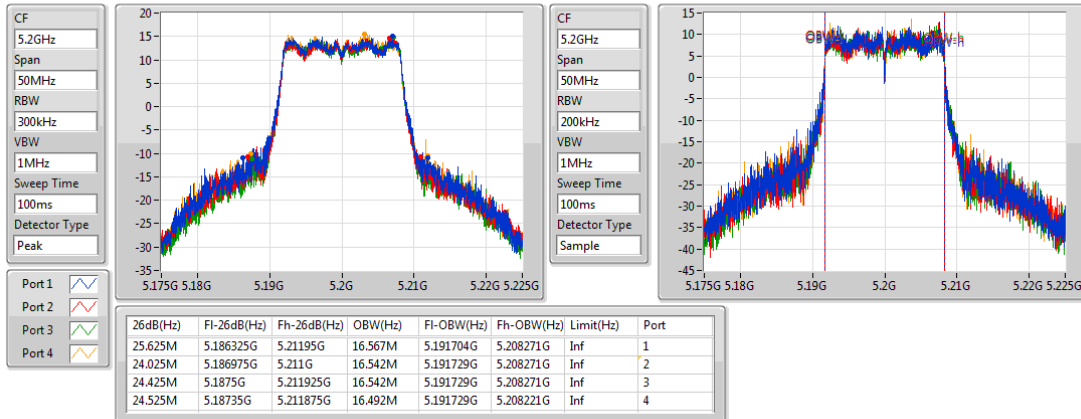
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX
EBW
5180MHz

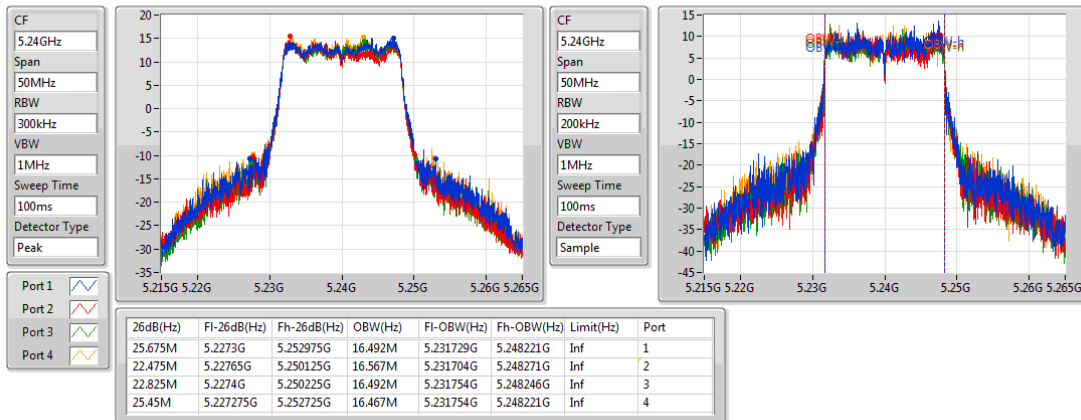
15/02/2019


802.11a_Nss1,(6Mbps)_4TX
EBW
5200MHz

15/02/2019

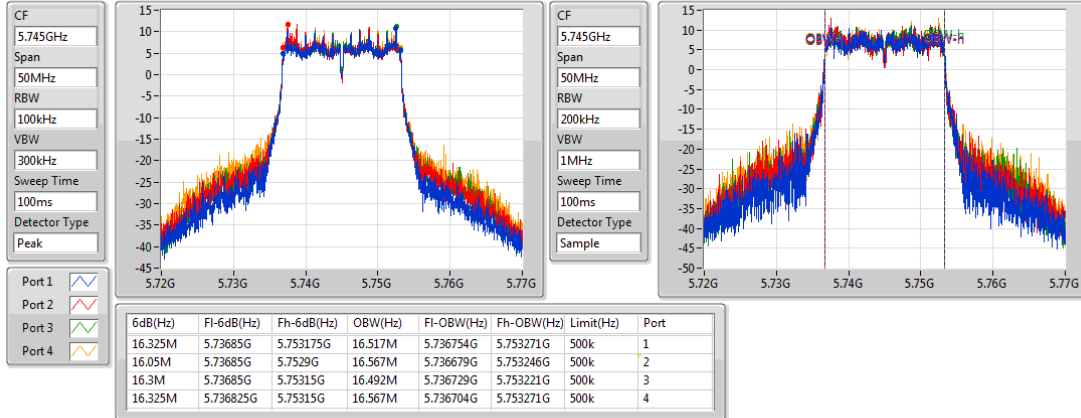

802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz

15/02/2019

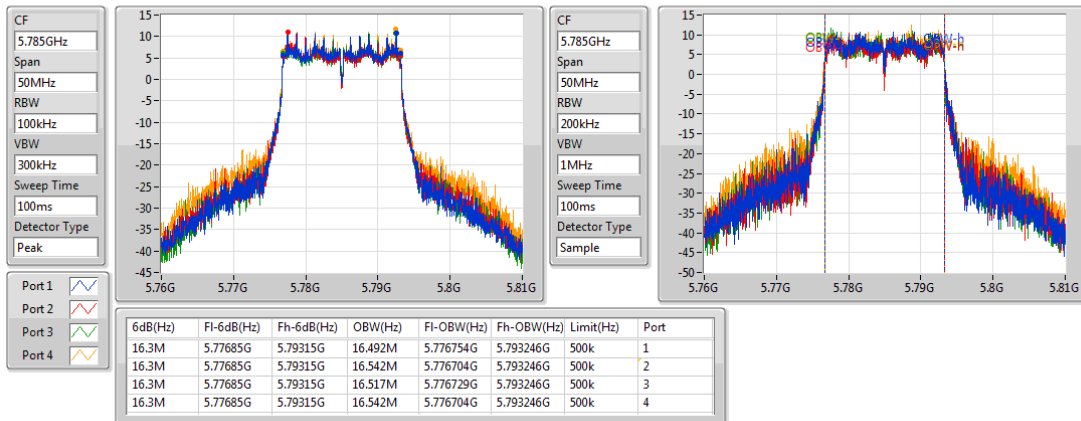


802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

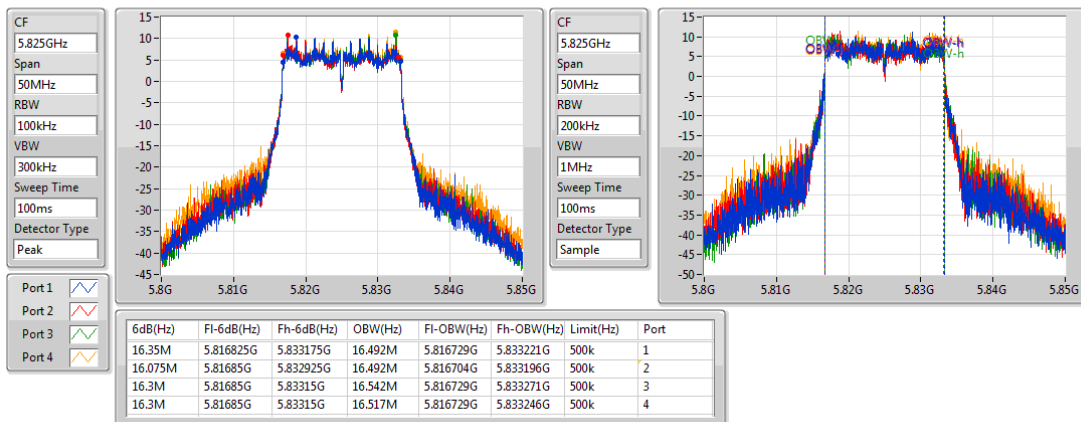
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802.11a_Nss1,(6Mbps)_4TX
EBW
5785MHz

15/02/2019

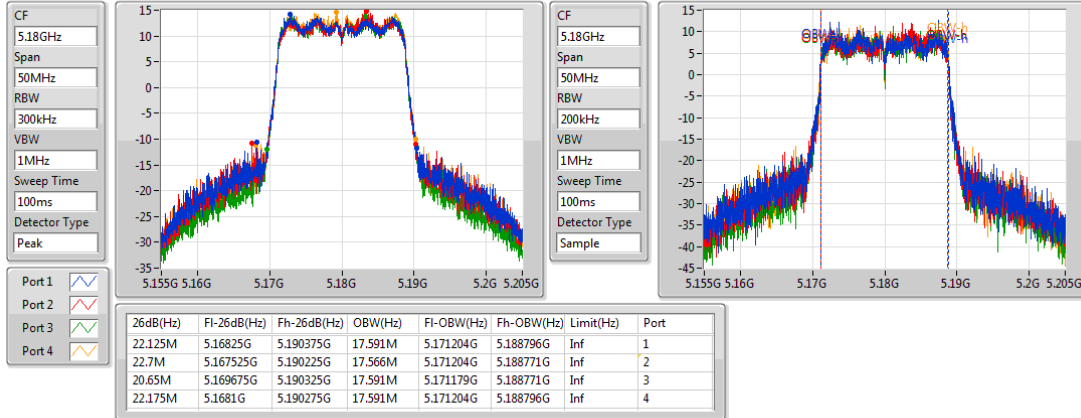

802.11a_Nss1,(6Mbps)_4TX
EBW
5825MHz

15/02/2019

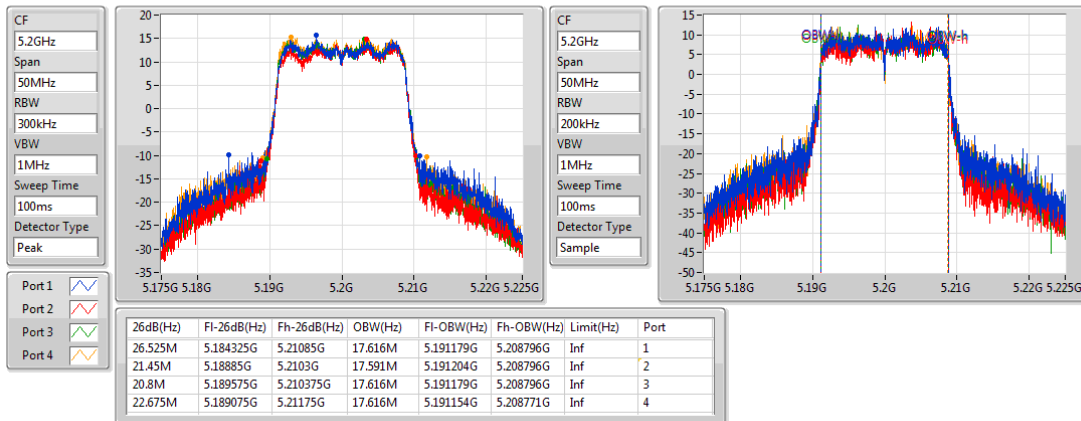


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5180MHz

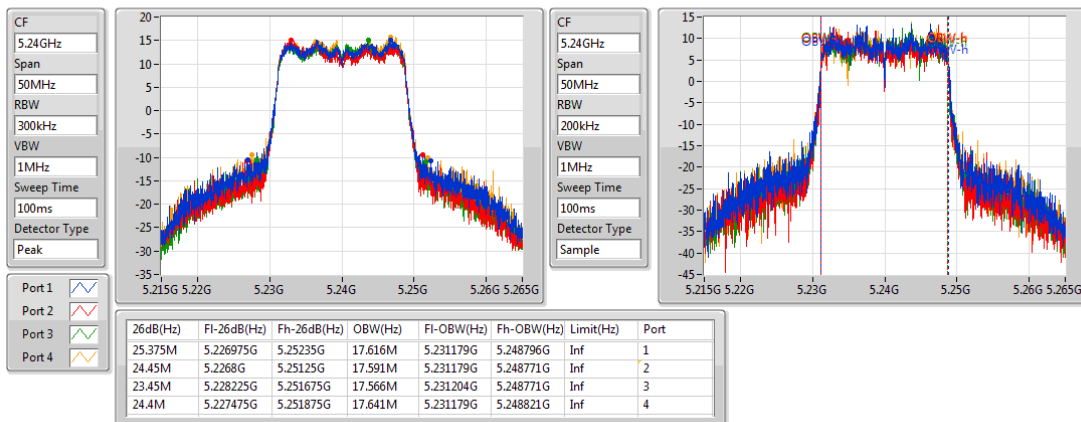
11/02/2019


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5200MHz

11/02/2019


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5240MHz

11/02/2019

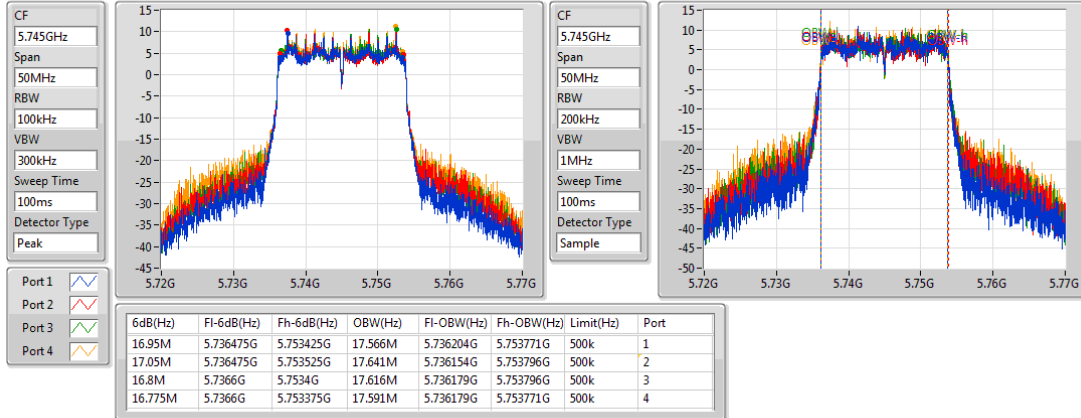


802.11ac VHT20_Nss4,(MCS0)_4TX

EBW

5745MHz

13/02/2019

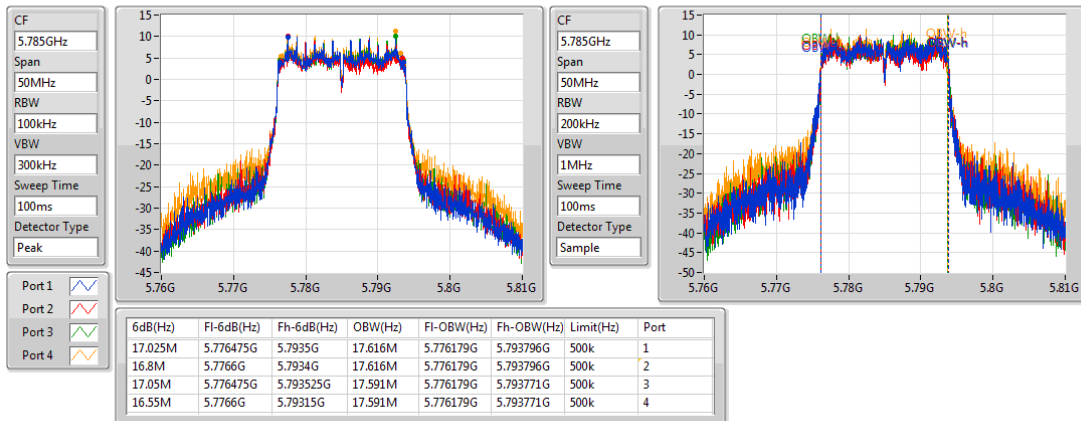


802.11ac VHT20_Nss4,(MCS0)_4TX

EBW

5785MHz

13/02/2019

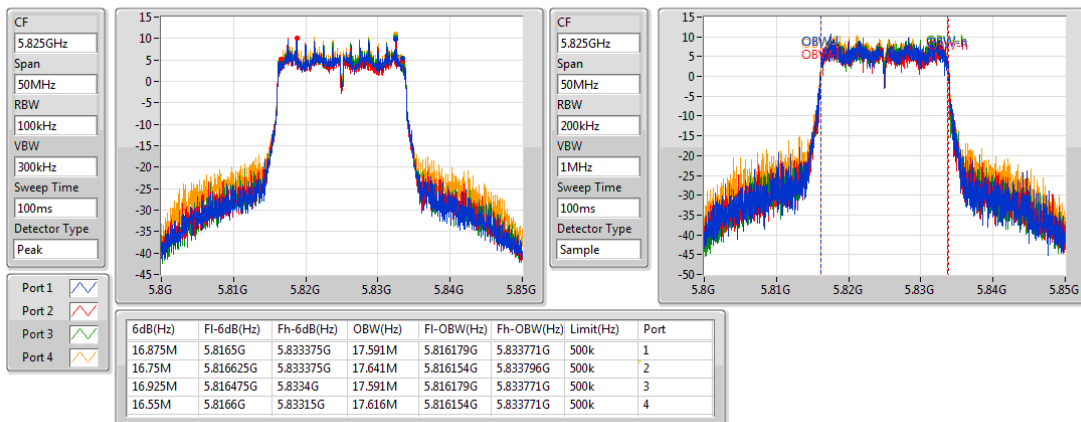


802.11ac VHT20_Nss4,(MCS0)_4TX

EBW

5825MHz

13/02/2019

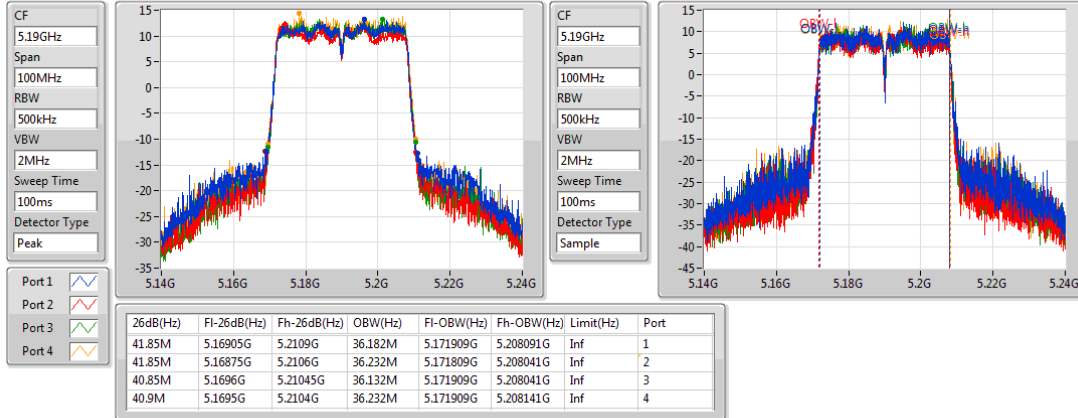


802.11ac VHT40_Nss4,(MCS0)_4TX

EBW

5190MHz

11/02/2019

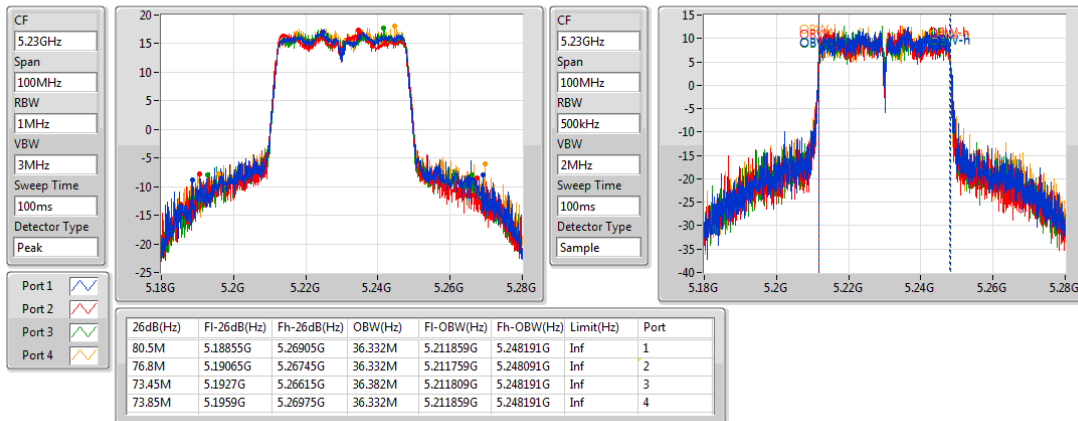


802.11ac VHT40_Nss4,(MCS0)_4TX

EBW

5230MHz

13/02/2019

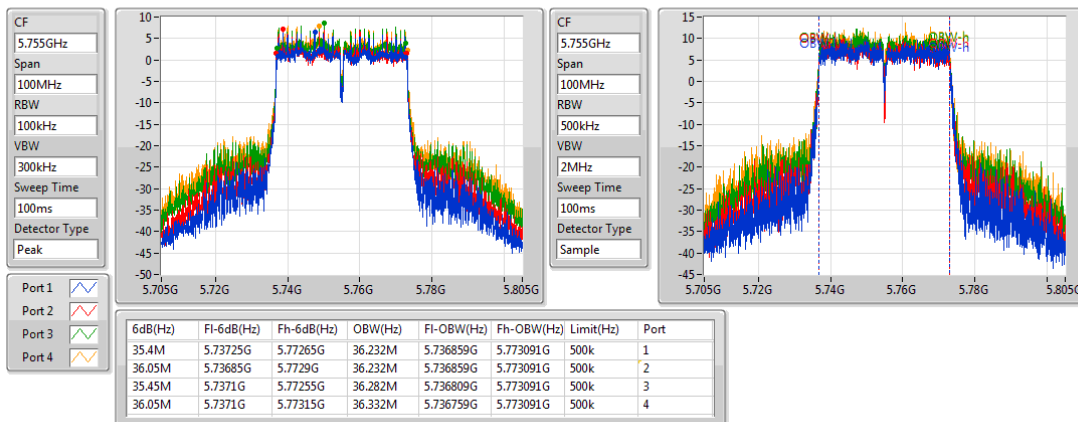


802.11ac VHT40_Nss4,(MCS0)_4TX

EBW

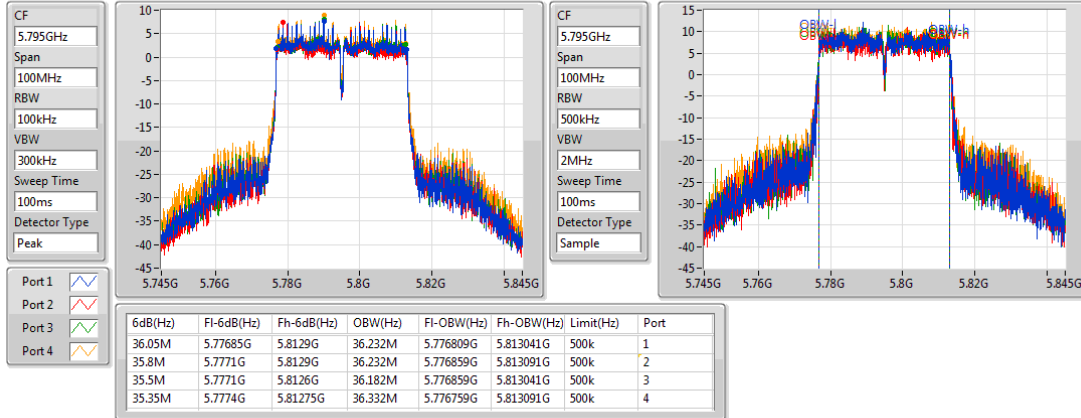
5755MHz

13/02/2019

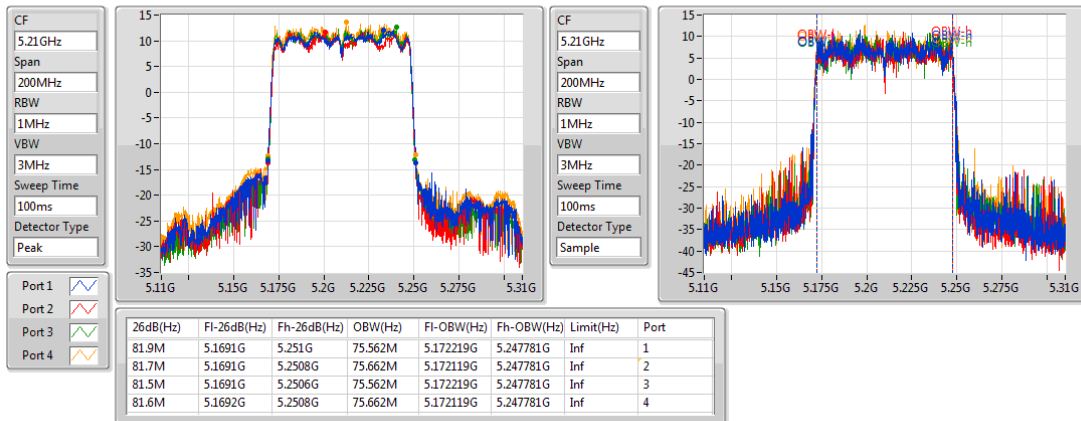


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5795MHz

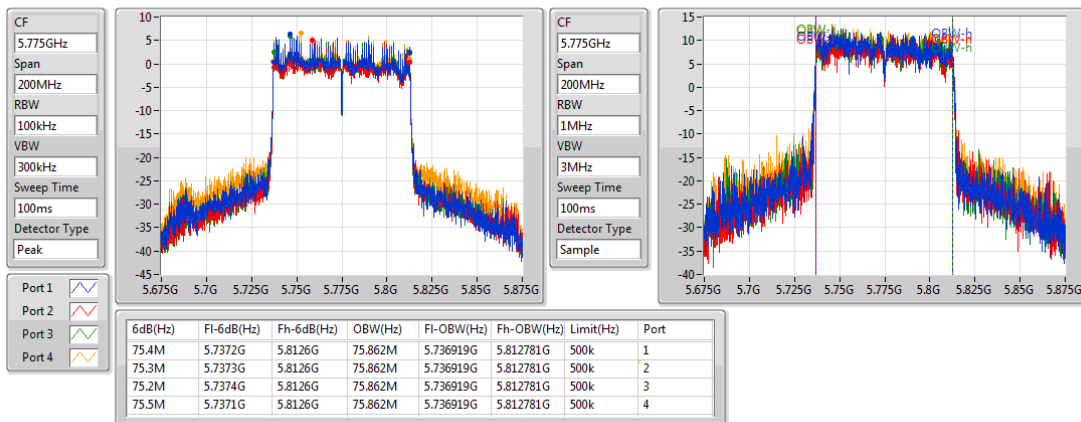
13/02/2019


802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5210MHz

11/02/2019


802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5775MHz

13/02/2019



Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	29.12	0.81658	33.32	2.14783
802.11ac VHT20_Nss4,(MCS0)_4TX	28.82	0.76208	33.12	2.05116
802.11ac VHT40_Nss4,(MCS0)_4TX	29.16	0.82414	33.36	2.16770
802.11ac VHT80_Nss4,(MCS0)_4TX	25.60	0.36308	29.70	0.93325
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	28.35	0.68391	32.95	1.97242
802.11ac VHT20_Nss4,(MCS0)_4TX	28.31	0.67764	32.91	1.95434
802.11ac VHT40_Nss4,(MCS0)_4TX	28.35	0.68391	32.93	1.96336
802.11ac VHT80_Nss4,(MCS0)_4TX	28.20	0.66069	32.70	1.86209

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	4.10	23.13	22.57	22.75	23.18	28.94	30.00	33.04	36.00
5200MHz	Pass	4.20	23.26	22.97	22.89	23.27	29.12	30.00	33.32	36.00
5240MHz	Pass	4.30	23.21	22.41	22.64	23.17	28.89	30.00	33.19	36.00
5745MHz	Pass	4.60	21.91	22.39	22.31	22.67	28.35	30.00	32.95	36.00
5785MHz	Pass	4.40	22.13	21.78	21.83	22.55	28.10	30.00	32.50	36.00
5825MHz	Pass	4.00	21.69	21.68	21.82	22.44	27.94	30.00	31.94	36.00
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.10	22.02	21.86	21.56	22.18	27.93	30.00	32.03	36.00
5200MHz	Pass	4.20	22.64	21.90	22.75	23.23	28.68	30.00	32.88	36.00
5240MHz	Pass	4.30	23.00	22.37	22.66	23.14	28.82	30.00	33.12	36.00
5745MHz	Pass	4.60	21.82	21.89	22.47	22.90	28.31	30.00	32.91	36.00
5785MHz	Pass	4.40	22.08	21.38	22.01	22.77	28.11	30.00	32.51	36.00
5825MHz	Pass	4.00	21.94	21.57	22.23	22.85	28.19	30.00	32.19	36.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.10	21.58	20.82	21.24	21.64	27.35	30.00	31.45	36.00
5230MHz	Pass	4.20	23.29	23.06	23.06	23.16	29.16	30.00	33.36	36.00
5755MHz	Pass	4.60	21.29	21.44	23.04	23.13	28.33	30.00	32.93	36.00
5795MHz	Pass	4.40	22.45	21.20	22.48	22.98	28.35	30.00	32.75	36.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.10	19.58	19.03	19.51	20.13	25.60	30.00	29.70	36.00
5775MHz	Pass	4.50	22.37	21.57	22.06	22.66	28.20	30.00	32.70	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	16.87	21.17
802.11ac VHT20_Nss4,(MCS0)_4TX	16.95	21.25
802.11ac VHT40_Nss4,(MCS0)_4TX	12.70	16.80
802.11ac VHT80_Nss4,(MCS0)_4TX	8.27	12.37
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	14.65	19.25
802.11ac VHT20_Nss4,(MCS0)_4TX	11.95	16.50
802.11ac VHT40_Nss4,(MCS0)_4TX	9.48	14.07
802.11ac VHT80_Nss4,(MCS0)_4TX	7.25	11.75

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.10	11.02	10.66	10.71	11.15	16.58	17.00	20.68	23.00
5200MHz	Pass	4.20	10.98	11.08	10.82	11.24	16.73	17.00	20.93	23.00
5240MHz	Pass	4.30	11.33	10.62	10.34	11.88	16.87	17.00	21.17	23.00
5745MHz	Pass	4.60	8.77	9.33	8.85	9.27	14.65	30.00	19.25	36.00
5785MHz	Pass	4.40	8.26	8.64	8.06	9.01	14.42	30.00	18.82	36.00
5825MHz	Pass	4.00	7.71	8.39	8.14	8.75	14.20	30.00	18.20	36.00
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.10	10.48	10.52	9.99	10.79	16.12	17.00	20.22	23.00
5200MHz	Pass	4.20	11.76	10.64	10.92	11.82	16.84	17.00	21.04	23.00
5240MHz	Pass	4.30	11.51	11.39	10.76	11.72	16.95	17.00	21.25	23.00
5745MHz	Pass	4.60	5.89	6.43	6.70	6.99	11.90	30.00	16.50	36.00
5785MHz	Pass	4.40	6.25	5.64	6.20	6.90	11.85	30.00	16.25	36.00
5825MHz	Pass	4.00	6.11	5.49	6.22	6.96	11.95	30.00	15.95	36.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.10	7.19	6.78	6.60	7.05	12.70	17.00	16.80	23.00
5230MHz	Pass	4.20	6.77	6.61	6.84	6.55	12.10	17.00	16.30	23.00
5755MHz	Pass	4.60	3.30	3.28	4.63	4.81	9.47	30.00	14.07	36.00
5795MHz	Pass	4.40	4.19	3.42	4.06	4.14	9.48	30.00	13.88	36.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.10	2.56	2.19	2.49	2.93	8.27	17.00	12.37	23.00
5775MHz	Pass	4.50	1.57	0.42	1.30	2.26	7.25	30.00	11.75	36.00

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

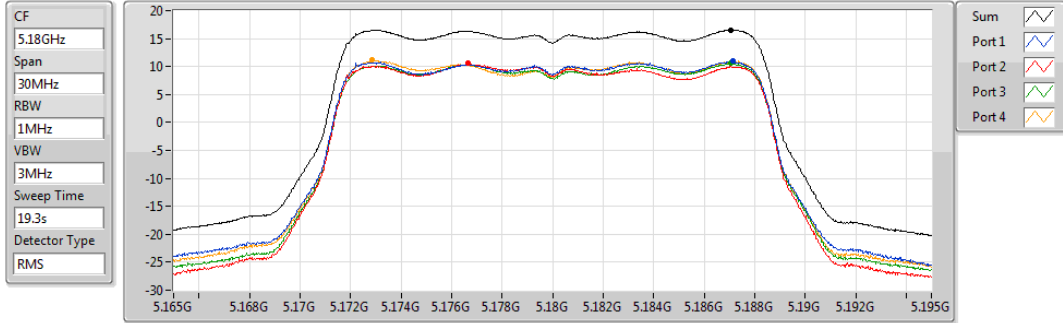
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

802.11a_Nss1,(6Mbps)_4TX

PSD

5180MHz

15/02/2019



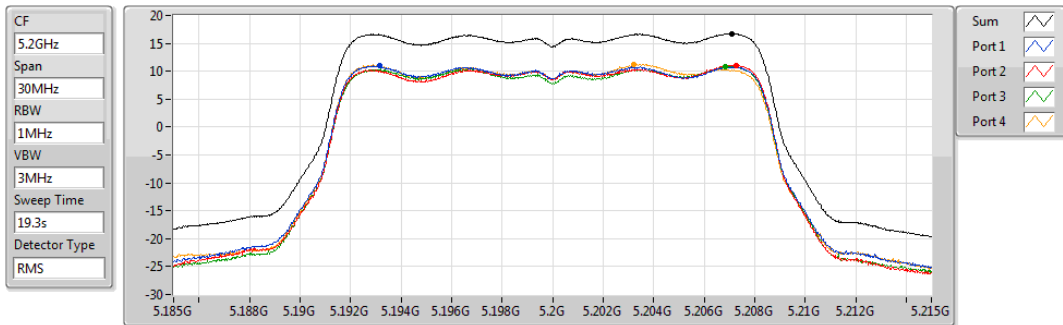
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.58	16.58	11.02	10.66	10.71	11.15

802.11a_Nss1,(6Mbps)_4TX

PSD

5200MHz

15/02/2019



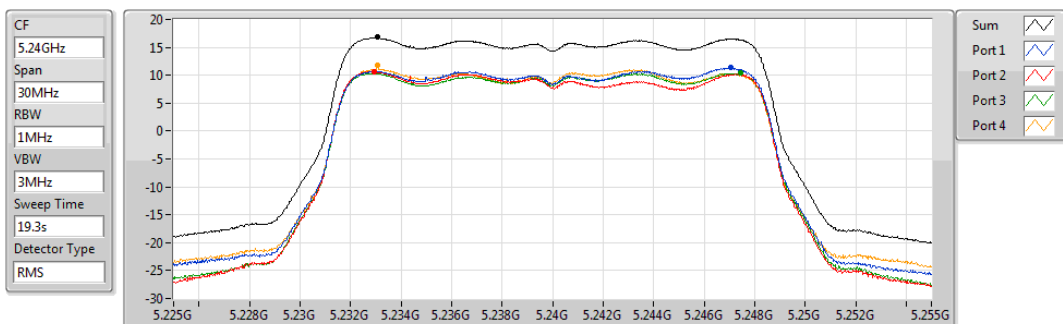
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.73	16.73	10.98	11.08	10.82	11.24

802.11a_Nss1,(6Mbps)_4TX

PSD

5240MHz

15/02/2019



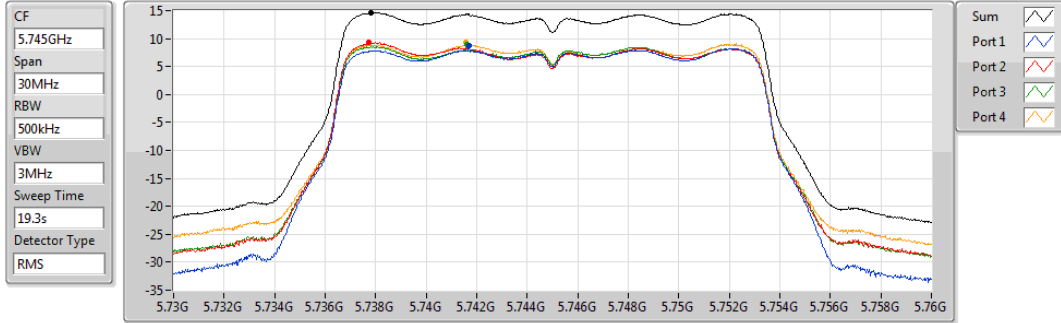
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.87	16.87	11.33	10.62	10.34	11.88

802.11a_Nss1,(6Mbps)_4TX

PSD

5745MHz

15/02/2019



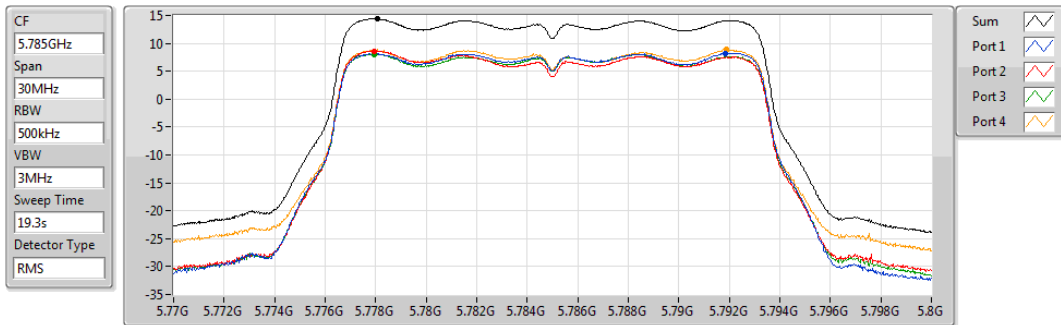
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
14.65	14.65	8.77	9.33	8.85	9.27

802.11a_Nss1,(6Mbps)_4TX

PSD

5785MHz

15/02/2019



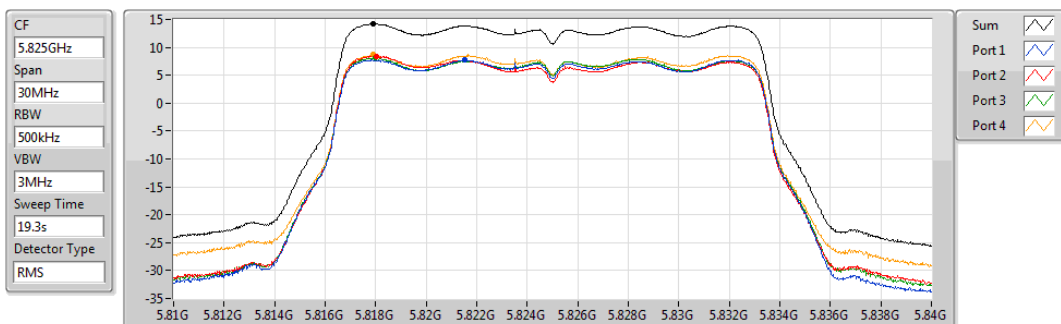
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
14.42	14.42	8.26	8.64	8.06	9.01

802.11a_Nss1,(6Mbps)_4TX

PSD

5825MHz

15/02/2019



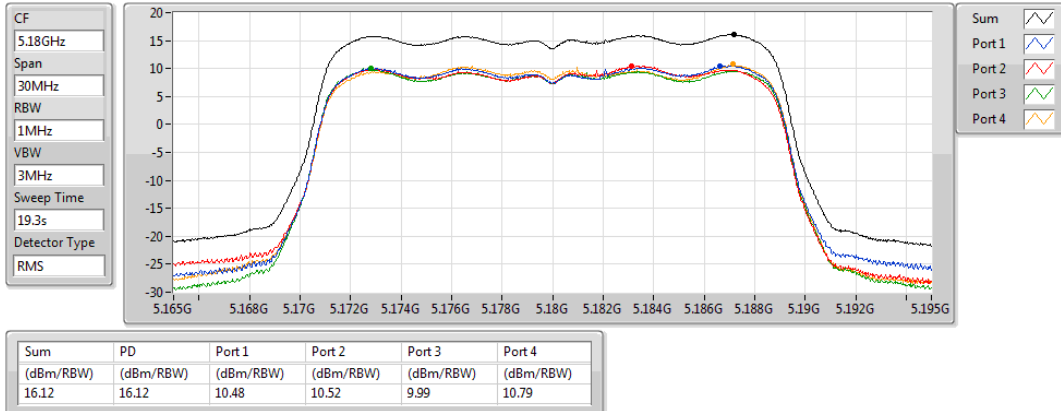
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
14.20	14.20	7.71	8.39	8.14	8.75

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5180MHz

11/02/2019

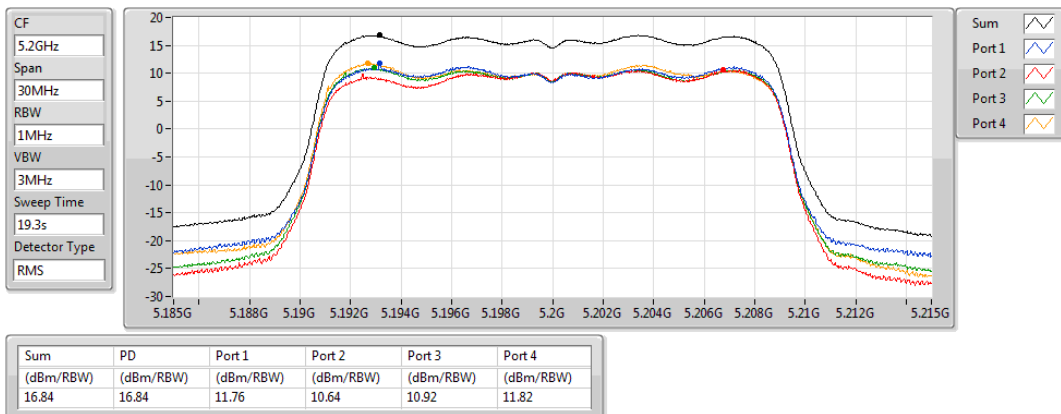


802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5200MHz

11/02/2019

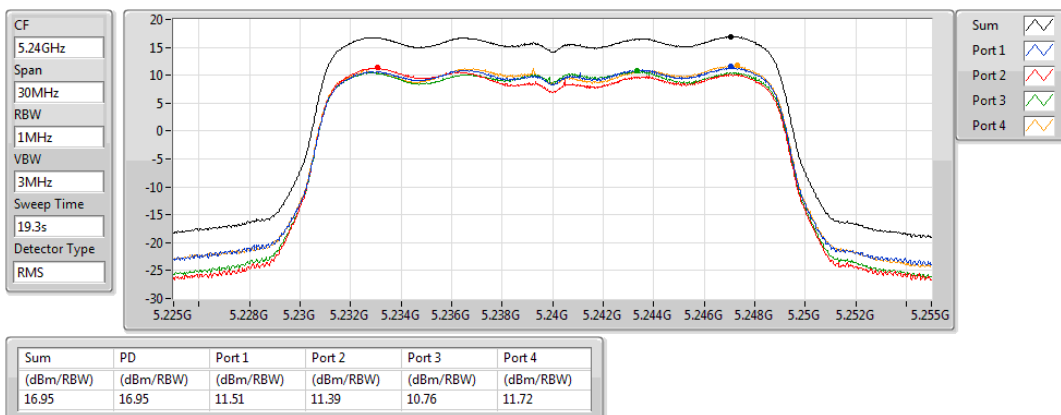


802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5240MHz

11/02/2019

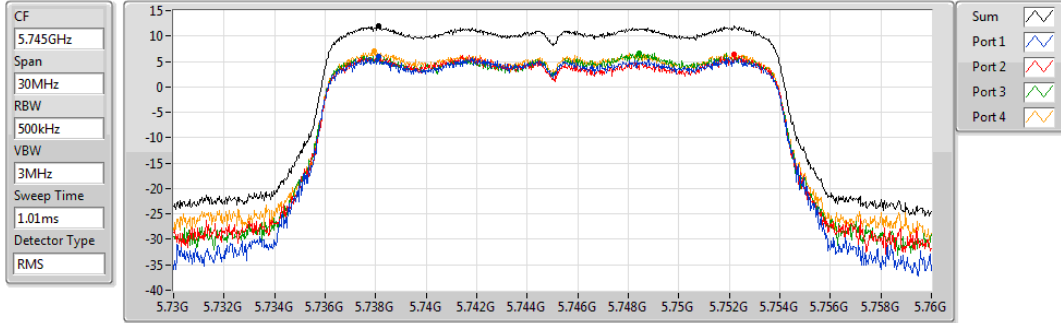


802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5745MHz

13/02/2019



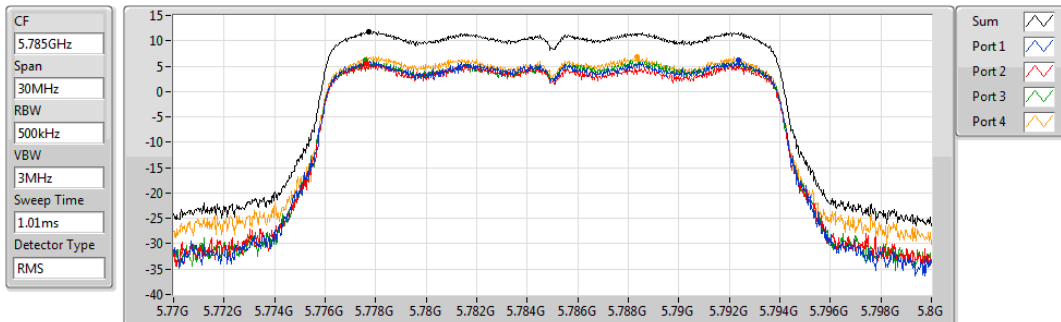
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.90	11.90	5.89	6.43	6.70	6.99

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5785MHz

13/02/2019



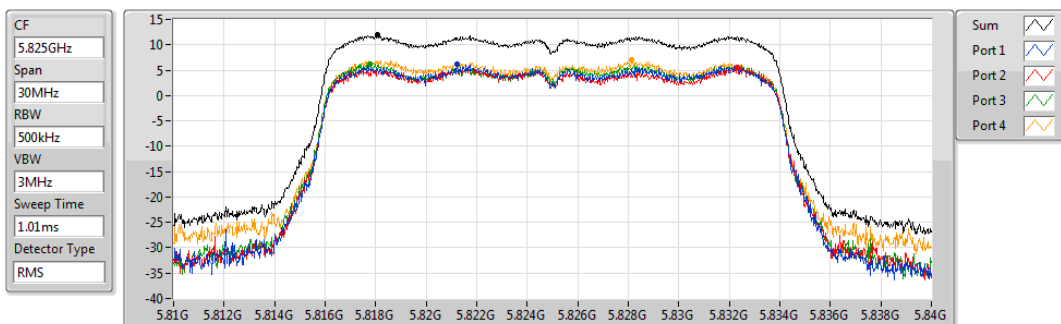
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.85	11.85	6.25	5.64	6.20	6.90

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5825MHz

13/02/2019



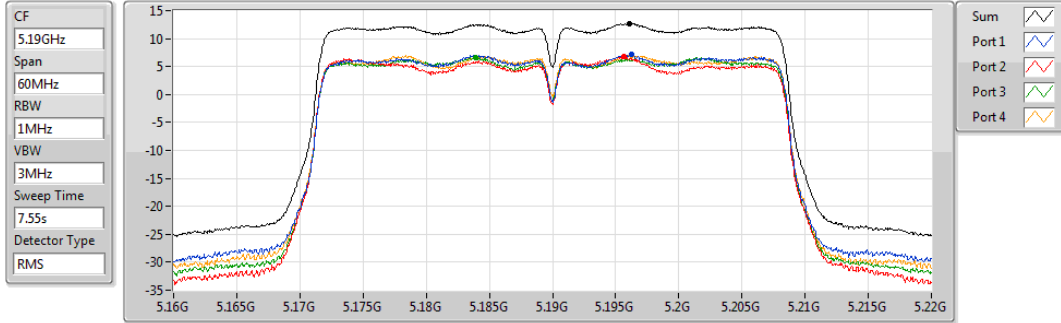
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.95	11.95	6.11	5.49	6.22	6.96

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5190MHz

11/02/2019



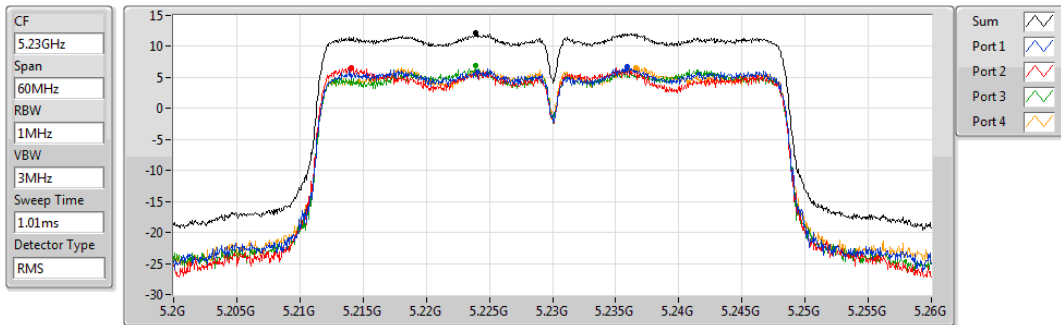
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)
12.70	12.70	7.19	6.78	6.60	7.05

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5230MHz

13/02/2019



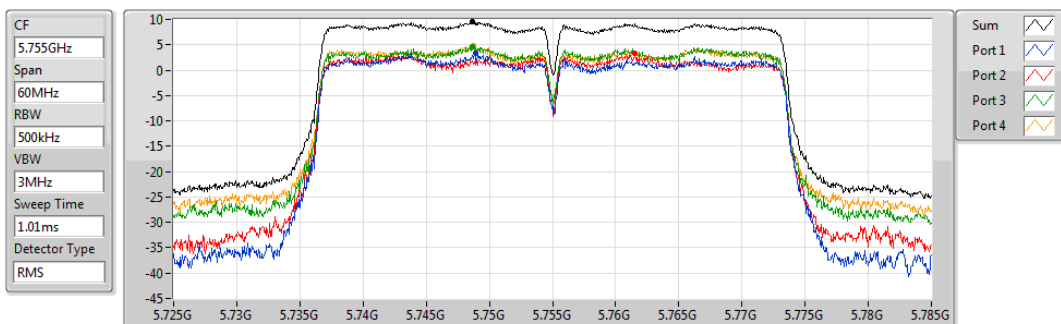
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)
12.10	12.10	6.77	6.61	6.84	6.55

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5755MHz

13/02/2019



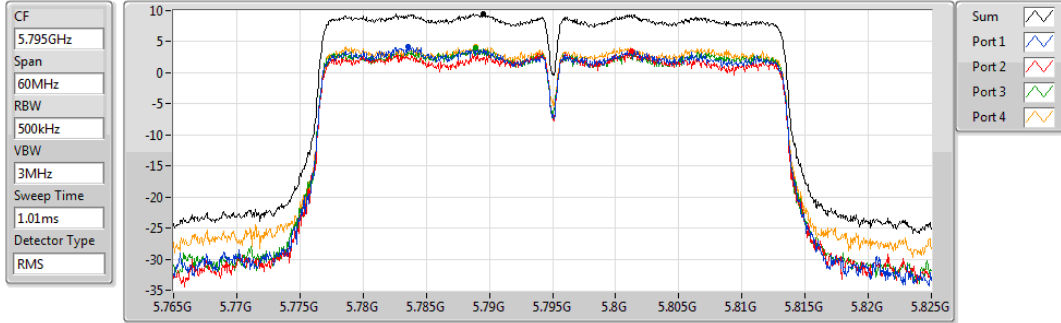
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)	(dBm/ RBW)
9.47	9.47	3.30	3.28	4.63	4.81

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5795MHz

13/02/2019



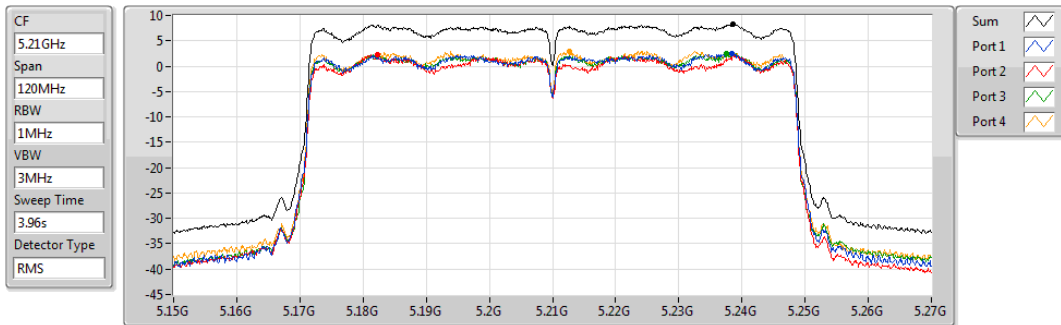
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.48	9.48	4.19	3.42	4.06	4.14

802.11ac VHT80_Nss4,(MCS0)_4TX

PSD

5210MHz

11/02/2019



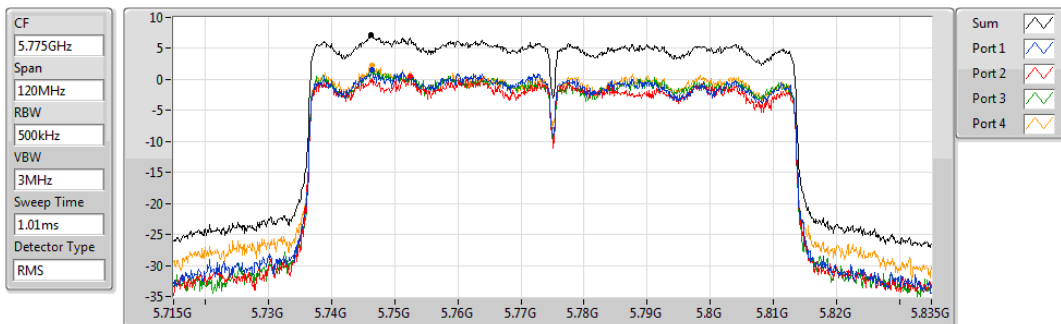
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
8.27	8.27	2.56	2.19	2.49	2.93

802.11ac VHT80_Nss4,(MCS0)_4TX

PSD

5775MHz

13/02/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.25	7.25	1.57	0.42	1.30	2.26



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80_Nss4,(MCS0)_4TX	Pass	PK	480.08M	40.24	46.00	-5.76	-2.34	3	Horizontal	360	1.00	-

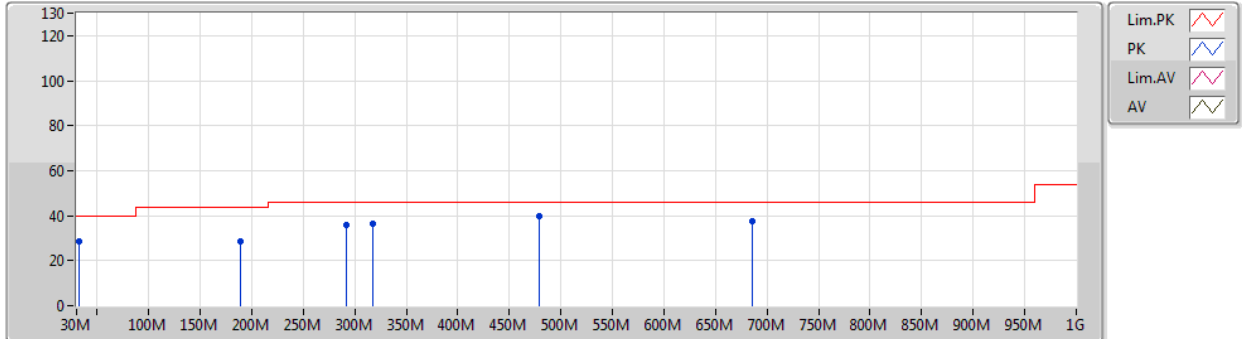
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	PK	31.94M	28.82	40.00	-11.18	-5.66	3	Vertical	0	1.00	-
5775MHz	Pass	PK	189.08M	28.51	43.50	-14.99	-11.08	3	Vertical	0	1.00	-
5775MHz	Pass	PK	291.9M	35.61	46.00	-10.39	-6.02	3	Vertical	0	1.00	-
5775MHz	Pass	PK	317.12M	36.50	46.00	-9.50	-5.56	3	Vertical	0	1.00	-
5775MHz	Pass	PK	685.72M	37.46	46.00	-8.54	-0.24	3	Vertical	0	1.00	-
5775MHz	Pass	QP	479.1M	39.72	46.00	-6.28	-2.35	3	Vertical	76	1.00	-
5775MHz	Pass	PK	194.9M	34.12	43.50	-9.38	-10.85	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	272.5M	37.54	46.00	-8.46	-6.13	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	295.78M	38.84	46.00	-7.16	-5.94	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	480.08M	40.24	46.00	-5.76	-2.34	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	553.8M	39.70	46.00	-6.30	-1.02	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	875.84M	37.05	46.00	-8.95	2.15	3	Horizontal	360	1.00	-

802.11ac VHT80_Nss4,(MCS0)_4TX

06/02/2019

5775MHz_Adapter

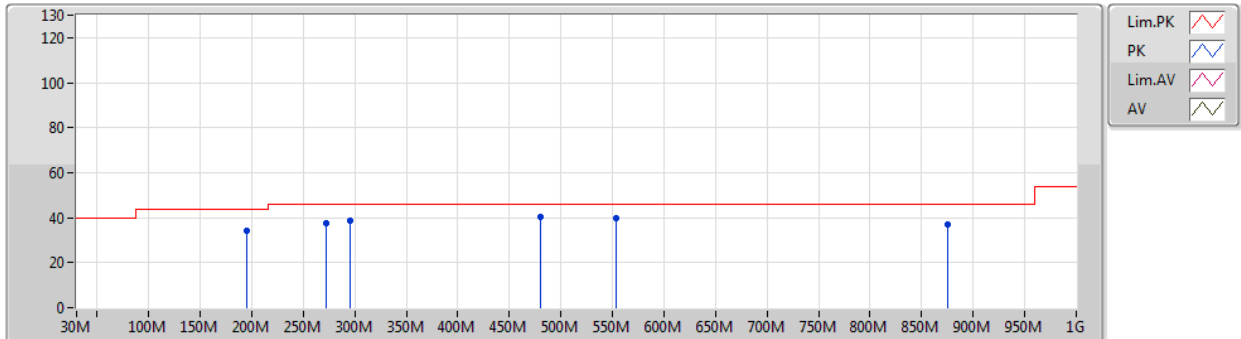


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
PK	31.94M	28.82	40.00	-11.18	-5.66	3	Vertical	0	1.00	-
PK	189.08M	28.51	43.50	-14.99	-11.08	3	Vertical	0	1.00	-
PK	291.9M	35.61	46.00	-10.39	-6.02	3	Vertical	0	1.00	-
PK	317.12M	36.50	46.00	-9.50	-5.56	3	Vertical	0	1.00	-
PK	685.72M	37.46	46.00	-8.54	-0.24	3	Vertical	0	1.00	-
QP	479.1M	39.72	46.00	-6.28	-2.35	3	Vertical	76	1.00	-

802.11ac VHT80_Nss4,(MCS0)_4TX

5775MHz_Adapter

06/02/2019



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
PK	194.9M	34.12	43.50	-9.38	-10.85	3	Horizontal	360	1.00	-
PK	272.5M	37.54	46.00	-8.46	-6.13	3	Horizontal	360	1.00	-
PK	295.78M	38.84	46.00	-7.16	-5.94	3	Horizontal	360	1.00	-
PK	480.08M	40.24	46.00	-5.76	-2.34	3	Horizontal	360	1.00	-
PK	553.8M	39.70	46.00	-6.30	-1.02	3	Horizontal	360	1.00	-
PK	875.84M	37.05	46.00	-8.95	2.15	3	Horizontal	360	1.00	-

**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	AV	10.4846G	53.57	54.00	-0.43	14.40	3	Horizontal	302	2.95	-
802.11ac VHT20_Nss4,(MCS0)_4TX	Pass	AV	10.39922G	53.92	54.00	-0.08	14.20	3	Vertical	303	2.28	-
802.11ac VHT40_Nss4,(MCS0)_4TX	Pass	AV	5.1376G	53.77	54.00	-0.23	4.11	3	Horizontal	328	1.50	-
802.11ac VHT80_Nss4,(MCS0)_4TX	Pass	AV	5.137G	53.56	54.00	-0.44	4.11	3	Horizontal	322	1.50	-
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	AV	17.47398G	53.36	54.00	-0.64	21.81	3	Vertical	26	2.44	-
802.11ac VHT20_Nss4,(MCS0)_4TX	Pass	AV	17.35068G	53.47	54.00	-0.53	20.87	3	Vertical	40	1.77	-
802.11ac VHT40_Nss4,(MCS0)_4TX	Pass	PK	5.6434G	67.70	68.20	-0.50	4.88	3	Horizontal	319	1.50	-
802.11ac VHT80_Nss4,(MCS0)_4TX	Pass	PK	5.649G	68.05	68.20	-0.15	4.89	3	Vertical	301	2.99	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.15G	50.34	54.00	-3.66	4.13	3	Vertical	26	1.50	-
5180MHz	Pass	AV	5.1728G	101.06	Inf	-Inf	4.17	3	Vertical	26	1.50	-
5180MHz	Pass	PK	5.15G	66.26	74.00	-7.74	4.13	3	Vertical	26	1.50	-
5180MHz	Pass	PK	5.1734G	110.35	Inf	-Inf	4.17	3	Vertical	26	1.50	-
5180MHz	Pass	AV	5.1492G	53.32	54.00	-0.68	4.13	3	Horizontal	328	1.50	-
5180MHz	Pass	AV	5.1874G	106.65	Inf	-Inf	4.19	3	Horizontal	328	1.50	-
5180MHz	Pass	PK	5.1498G	72.65	74.00	-1.35	4.13	3	Horizontal	328	1.50	-
5180MHz	Pass	PK	5.1872G	116.03	Inf	-Inf	4.19	3	Horizontal	328	1.50	-
5180MHz	Pass	AV	10.35766G	50.39	54.00	-3.61	14.11	3	Vertical	314	2.08	-
5180MHz	Pass	PK	10.35646G	64.55	74.00	-9.45	14.11	3	Vertical	314	2.08	-
5180MHz	Pass	AV	10.36024G	50.94	54.00	-3.06	14.11	3	Horizontal	282	2.09	-
5180MHz	Pass	PK	10.36072G	63.26	74.00	-10.74	14.11	3	Horizontal	282	2.09	-
5200MHz	Pass	AV	5.1272G	48.01	54.00	-5.99	4.11	3	Vertical	10	2.99	-
5200MHz	Pass	AV	5.2072G	105.40	Inf	-Inf	4.21	3	Vertical	10	2.99	-
5200MHz	Pass	PK	5.1452G	60.17	74.00	-13.83	4.13	3	Vertical	10	2.99	-
5200MHz	Pass	PK	5.2068G	115.24	Inf	-Inf	4.21	3	Vertical	10	2.99	-
5200MHz	Pass	AV	5.1496G	48.53	54.00	-5.47	4.13	3	Horizontal	329	2.24	-
5200MHz	Pass	AV	5.2032G	107.56	Inf	-Inf	4.21	3	Horizontal	329	2.24	-
5200MHz	Pass	PK	5.1496G	61.61	74.00	-12.39	4.13	3	Horizontal	329	2.24	-
5200MHz	Pass	PK	5.2036G	117.23	Inf	-Inf	4.21	3	Horizontal	329	2.24	-
5200MHz	Pass	AV	10.4006G	53.43	54.00	-0.57	14.20	3	Vertical	0	1.01	-
5200MHz	Pass	PK	10.4011G	66.63	74.00	-7.37	14.20	3	Vertical	0	1.01	-
5200MHz	Pass	AV	10.4003G	51.34	54.00	-2.66	14.20	3	Horizontal	307	1.24	-
5200MHz	Pass	PK	10.3997G	64.44	74.00	-9.56	14.20	3	Horizontal	307	1.24	-
5240MHz	Pass	AV	5.1194G	46.75	54.00	-7.25	4.09	3	Vertical	301	2.97	-
5240MHz	Pass	AV	5.2394G	108.93	Inf	-Inf	4.25	3	Vertical	301	2.97	-
5240MHz	Pass	AV	5.39G	46.91	54.00	-7.09	4.43	3	Vertical	301	2.97	-
5240MHz	Pass	PK	5.132G	59.06	74.00	-14.94	4.11	3	Vertical	301	2.97	-
5240MHz	Pass	PK	5.2388G	118.70	Inf	-Inf	4.25	3	Vertical	301	2.97	-
5240MHz	Pass	PK	5.354G	59.10	74.00	-14.90	4.39	3	Vertical	301	2.97	-
5240MHz	Pass	AV	5.1434G	47.33	54.00	-6.67	4.13	3	Horizontal	328	2.38	-
5240MHz	Pass	AV	5.2436G	108.95	Inf	-Inf	4.26	3	Horizontal	328	2.38	-
5240MHz	Pass	AV	5.363G	46.91	54.00	-7.09	4.41	3	Horizontal	328	2.38	-
5240MHz	Pass	PK	5.1494G	59.72	74.00	-14.28	4.13	3	Horizontal	328	2.38	-
5240MHz	Pass	PK	5.2436G	118.60	Inf	-Inf	4.26	3	Horizontal	328	2.38	-
5240MHz	Pass	PK	5.3624G	59.46	74.00	-14.54	4.41	3	Horizontal	328	2.38	-
5240MHz	Pass	AV	10.4807G	53.35	54.00	-0.65	14.40	3	Vertical	280	1.74	-
5240MHz	Pass	PK	10.4796G	66.07	74.00	-7.93	14.40	3	Vertical	280	1.74	-
5240MHz	Pass	AV	10.4846G	53.57	54.00	-0.43	14.40	3	Horizontal	302	2.95	-
5240MHz	Pass	PK	10.4837G	67.41	74.00	-6.59	14.40	3	Horizontal	302	2.95	-
5745MHz	Pass	AV	5.7414G	107.09	Inf	-Inf	5.12	3	Vertical	314	1.49	-
5745MHz	Pass	PK	5.6418G	59.04	68.20	-9.16	4.87	3	Vertical	314	1.49	-
5745MHz	Pass	PK	5.7414G	117.20	Inf	-Inf	5.12	3	Vertical	314	1.49	-
5745MHz	Pass	PK	5.9538G	58.35	68.20	-9.85	5.42	3	Vertical	314	1.49	-
5745MHz	Pass	AV	5.7522G	109.29	Inf	-Inf	5.14	3	Horizontal	314	1.50	-
5745MHz	Pass	PK	5.6358G	63.10	68.20	-5.10	4.86	3	Horizontal	314	1.50	-
5745MHz	Pass	PK	5.7522G	120.57	Inf	-Inf	5.14	3	Horizontal	314	1.50	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5745MHz	Pass	PK	5.979G	58.45	68.20	-9.75	5.43	3	Horizontal	314	1.50	-
5745MHz	Pass	AV	11.4902G	52.30	54.00	-1.70	15.04	3	Vertical	353	1.17	-
5745MHz	Pass	AV	17.2419G	51.23	54.00	-2.77	20.04	3	Vertical	112	2.51	-
5745MHz	Pass	PK	11.4908G	64.94	74.00	-9.06	15.04	3	Vertical	353	1.17	-
5745MHz	Pass	PK	17.2329G	64.44	74.00	-9.56	19.98	3	Vertical	112	2.51	-
5745MHz	Pass	AV	11.4903G	51.18	54.00	-2.82	15.04	3	Horizontal	271	1.45	-
5745MHz	Pass	AV	17.24148G	52.51	54.00	-1.49	20.04	3	Horizontal	245	1.78	-
5745MHz	Pass	PK	11.4906G	64.14	74.00	-9.86	15.04	3	Horizontal	271	1.45	-
5745MHz	Pass	PK	17.24112G	65.68	74.00	-8.32	20.04	3	Horizontal	245	1.78	-
5785MHz	Pass	AV	5.7862G	111.01	Inf	-Inf	5.22	3	Vertical	288	1.71	-
5785MHz	Pass	PK	5.5702G	61.32	68.20	-6.88	4.72	3	Vertical	288	1.71	-
5785MHz	Pass	PK	5.7862G	121.28	Inf	-Inf	5.22	3	Vertical	288	1.71	-
5785MHz	Pass	PK	5.9878G	59.25	68.20	-8.95	5.44	3	Vertical	288	1.71	-
5785MHz	Pass	AV	5.7778G	114.45	Inf	-Inf	5.21	3	Horizontal	314	1.89	-
5785MHz	Pass	PK	5.5666G	63.82	68.20	-4.38	4.71	3	Horizontal	314	1.89	-
5785MHz	Pass	PK	5.7778G	124.05	Inf	-Inf	5.21	3	Horizontal	314	1.89	-
5785MHz	Pass	PK	5.9422G	59.82	68.20	-8.38	5.40	3	Horizontal	314	1.89	-
5785MHz	Pass	AV	11.57G	52.65	54.00	-1.35	14.96	3	Vertical	347	1.19	-
5785MHz	Pass	AV	17.36064G	53.15	54.00	-0.85	20.95	3	Vertical	144	1.33	-
5785MHz	Pass	PK	11.57018G	66.11	74.00	-7.89	14.96	3	Vertical	347	1.19	-
5785MHz	Pass	PK	17.34858G	65.74	74.00	-8.26	20.86	3	Vertical	144	1.33	-
5785MHz	Pass	AV	11.5709G	50.39	54.00	-3.61	14.95	3	Horizontal	273	1.35	-
5785MHz	Pass	AV	17.34948G	53.26	54.00	-0.74	20.86	3	Horizontal	56	1.85	-
5785MHz	Pass	PK	11.57018G	63.16	74.00	-10.84	14.96	3	Horizontal	273	1.35	-
5785MHz	Pass	PK	17.34996G	66.42	74.00	-7.58	20.86	3	Horizontal	56	1.85	-
5825MHz	Pass	AV	5.8286G	110.61	Inf	-Inf	5.28	3	Vertical	289	2.44	-
5825MHz	Pass	PK	5.6282G	62.97	68.20	-5.23	4.84	3	Vertical	289	2.44	-
5825MHz	Pass	PK	5.8274G	120.74	Inf	-Inf	5.28	3	Vertical	289	2.44	-
5825MHz	Pass	PK	5.9342G	60.45	68.20	-7.75	5.39	3	Vertical	289	2.44	-
5825MHz	Pass	AV	5.819G	113.69	Inf	-Inf	5.29	3	Horizontal	315	1.81	-
5825MHz	Pass	PK	5.543G	64.24	Inf	-3.96	4.66	3	Horizontal	315	1.81	-
5825MHz	Pass	PK	5.819G	124.70	Inf	-Inf	5.29	3	Horizontal	315	1.81	-
5825MHz	Pass	PK	5.939G	61.30	68.20	-6.90	5.39	3	Horizontal	315	1.81	-
5825MHz	Pass	AV	11.65072G	50.53	54.00	-3.47	14.85	3	Vertical	345	1.23	-
5825MHz	Pass	AV	17.47398G	53.36	54.00	-0.64	21.81	3	Vertical	26	2.44	-
5825MHz	Pass	PK	11.65138G	63.37	74.00	-10.63	14.85	3	Vertical	345	1.23	-
5825MHz	Pass	PK	17.4825G	66.20	74.00	-7.80	21.87	3	Vertical	26	2.44	-
5825MHz	Pass	AV	11.65828G	48.68	54.00	-5.32	14.84	3	Horizontal	272	1.50	-
5825MHz	Pass	AV	17.48688G	52.71	54.00	-1.29	21.90	3	Horizontal	8	2.38	-
5825MHz	Pass	PK	11.6581G	61.86	74.00	-12.14	14.84	3	Horizontal	272	1.50	-
5825MHz	Pass	PK	17.48472G	65.78	74.00	-8.22	21.89	3	Horizontal	8	2.38	-
802.11ac VHT20_Nss4(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.15G	50.96	54.00	-3.04	4.13	3	Vertical	326	1.87	-
5180MHz	Pass	AV	5.1732G	105.67	Inf	-Inf	4.17	3	Vertical	326	1.87	-
5180MHz	Pass	PK	5.15G	69.18	74.00	-4.82	4.13	3	Vertical	326	1.87	-
5180MHz	Pass	PK	5.1726G	115.29	Inf	-Inf	4.17	3	Vertical	326	1.87	-
5180MHz	Pass	AV	5.15G	53.47	54.00	-0.53	4.13	3	Horizontal	232	1.49	-
5180MHz	Pass	AV	5.1732G	105.79	Inf	-Inf	4.17	3	Horizontal	232	1.49	-
5180MHz	Pass	PK	5.15G	70.51	74.00	-3.49	4.13	3	Horizontal	232	1.49	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5180MHz	Pass	PK	5.173G	115.30	Inf	-Inf	4.17	3	Horizontal	232	1.49	-
5180MHz	Pass	AV	10.3588G	51.57	54.00	-2.43	14.11	3	Vertical	309	2.13	-
5180MHz	Pass	PK	10.36702G	65.48	74.00	-8.52	14.12	3	Vertical	309	2.13	-
5180MHz	Pass	AV	10.36324G	50.32	54.00	-3.68	14.12	3	Horizontal	291	2.46	-
5180MHz	Pass	PK	10.36288G	64.32	74.00	-9.68	14.12	3	Horizontal	291	2.46	-
5200MHz	Pass	AV	5.1284G	46.78	54.00	-7.22	4.11	3	Vertical	315	1.63	-
5200MHz	Pass	AV	5.1936G	102.06	Inf	-Inf	4.21	3	Vertical	315	1.63	-
5200MHz	Pass	PK	5.1492G	60.64	74.00	-13.36	4.13	3	Vertical	315	1.63	-
5200MHz	Pass	PK	5.1932G	113.45	Inf	-Inf	4.20	3	Vertical	315	1.63	-
5200MHz	Pass	AV	5.1488G	48.32	54.00	-5.68	4.13	3	Horizontal	358	2.26	-
5200MHz	Pass	AV	5.2072G	107.96	Inf	-Inf	4.21	3	Horizontal	358	2.26	-
5200MHz	Pass	PK	5.1484G	64.74	74.00	-9.26	4.13	3	Horizontal	358	2.26	-
5200MHz	Pass	PK	5.2076G	117.88	Inf	-Inf	4.21	3	Horizontal	358	2.26	-
5200MHz	Pass	AV	10.39922G	53.92	54.00	-0.08	14.20	3	Vertical	303	2.28	-
5200MHz	Pass	PK	10.39814G	68.45	74.00	-5.55	14.20	3	Vertical	303	2.28	-
5200MHz	Pass	AV	10.40282G	51.77	54.00	-2.23	14.20	3	Horizontal	284	2.38	-
5200MHz	Pass	PK	10.4027G	66.15	74.00	-7.85	14.20	3	Horizontal	284	2.38	-
5240MHz	Pass	AV	5.1116G	45.98	54.00	-8.02	4.08	3	Vertical	26	1.50	-
5240MHz	Pass	AV	5.2334G	101.28	Inf	-Inf	4.25	3	Vertical	26	1.50	-
5240MHz	Pass	AV	5.3528G	45.83	54.00	-8.17	4.39	3	Vertical	26	1.50	-
5240MHz	Pass	PK	5.114G	57.73	74.00	-16.27	4.09	3	Vertical	26	1.50	-
5240MHz	Pass	PK	5.2334G	110.77	Inf	-Inf	4.25	3	Vertical	26	1.50	-
5240MHz	Pass	PK	5.3756G	58.18	74.00	-15.82	4.43	3	Vertical	26	1.50	-
5240MHz	Pass	AV	5.1404G	46.89	54.00	-7.11	4.12	3	Horizontal	327	1.50	-
5240MHz	Pass	AV	5.2466G	104.22	Inf	-Inf	4.27	3	Horizontal	327	1.50	-
5240MHz	Pass	AV	5.3678G	46.85	54.00	-7.15	4.41	3	Horizontal	327	1.50	-
5240MHz	Pass	PK	5.1014G	60.02	74.00	-13.98	4.07	3	Horizontal	327	1.50	-
5240MHz	Pass	PK	5.2478G	115.49	Inf	-Inf	4.27	3	Horizontal	327	1.50	-
5240MHz	Pass	PK	5.3696G	58.89	74.00	-15.11	4.41	3	Horizontal	327	1.50	-
5240MHz	Pass	AV	10.47856G	53.79	54.00	-0.21	14.39	3	Vertical	300	2.27	-
5240MHz	Pass	PK	10.47872G	66.89	74.00	-7.11	14.39	3	Vertical	300	2.27	-
5240MHz	Pass	AV	10.48108G	51.07	54.00	-2.93	14.40	3	Horizontal	307	1.50	-
5240MHz	Pass	PK	10.48018G	64.95	74.00	-9.05	14.40	3	Horizontal	307	1.50	-
5745MHz	Pass	AV	5.7378G	109.44	Inf	-Inf	5.11	3	Vertical	152	1.46	-
5745MHz	Pass	PK	5.6466G	64.73	68.20	-3.47	4.89	3	Vertical	152	1.46	-
5745MHz	Pass	PK	5.739G	120.16	Inf	-Inf	5.11	3	Vertical	152	1.46	-
5745MHz	Pass	PK	5.9526G	59.03	68.20	-9.17	5.41	3	Vertical	152	1.46	-
5745MHz	Pass	AV	5.7486G	111.86	Inf	-Inf	5.14	3	Horizontal	138	2.17	-
5745MHz	Pass	PK	5.6502G	67.29	68.35	-1.06	4.90	3	Horizontal	138	2.17	-
5745MHz	Pass	PK	5.7522G	122.58	Inf	-Inf	5.14	3	Horizontal	138	2.17	-
5745MHz	Pass	PK	5.9886G	59.39	68.20	-8.81	5.44	3	Horizontal	138	2.17	-
5745MHz	Pass	AV	11.49042G	52.61	54.00	-1.39	15.04	3	Vertical	343	1.20	-
5745MHz	Pass	AV	17.24778G	51.60	54.00	-2.40	20.09	3	Vertical	298	1.17	-
5745MHz	Pass	PK	11.4906G	65.63	74.00	-8.37	15.04	3	Vertical	343	1.20	-
5745MHz	Pass	PK	17.2245G	64.87	74.00	-9.13	19.92	3	Vertical	298	1.17	-
5745MHz	Pass	AV	11.48472G	50.31	54.00	-3.69	15.05	3	Horizontal	293	1.50	-
5745MHz	Pass	AV	17.24256G	51.57	54.00	-2.43	20.06	3	Horizontal	4	1.83	-
5745MHz	Pass	PK	11.48316G	63.84	74.00	-10.16	15.05	3	Horizontal	293	1.50	-
5745MHz	Pass	PK	17.24838G	64.18	74.00	-9.82	20.10	3	Horizontal	4	1.83	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5785MHz	Pass	AV	5.7778G	110.94	Inf	-Inf	5.21	3	Vertical	203	1.96	-
5785MHz	Pass	PK	5.5318G	61.43	68.20	-6.77	4.63	3	Vertical	203	1.96	-
5785MHz	Pass	PK	5.7778G	121.85	Inf	-Inf	5.21	3	Vertical	203	1.96	-
5785MHz	Pass	PK	5.9734G	58.43	68.20	-9.77	5.44	3	Vertical	203	1.96	-
5785MHz	Pass	AV	5.7898G	110.63	Inf	-Inf	5.24	3	Horizontal	155	2.22	-
5785MHz	Pass	PK	5.551G	60.93	68.20	-7.27	4.68	3	Horizontal	155	2.22	-
5785MHz	Pass	PK	5.7886G	121.43	Inf	-Inf	5.23	3	Horizontal	155	2.22	-
5785MHz	Pass	PK	5.9338G	58.88	68.20	-9.32	5.39	3	Horizontal	155	2.22	-
5785MHz	Pass	AV	11.56994G	52.05	54.00	-1.95	14.96	3	Vertical	343	1.16	-
5785MHz	Pass	AV	17.35068G	53.47	54.00	-0.53	20.87	3	Vertical	40	1.77	-
5785MHz	Pass	PK	11.57054G	64.87	74.00	-9.13	14.96	3	Vertical	343	1.16	-
5785MHz	Pass	PK	17.35926G	67.80	74.00	-6.20	20.94	3	Vertical	40	1.77	-
5785MHz	Pass	AV	11.57036G	50.51	54.00	-3.49	14.96	3	Horizontal	274	1.40	-
5785MHz	Pass	AV	17.36226G	52.63	54.00	-1.37	20.96	3	Horizontal	152	1.55	-
5785MHz	Pass	PK	11.57012G	63.55	74.00	-10.45	14.96	3	Horizontal	274	1.40	-
5785MHz	Pass	PK	17.36232G	66.53	74.00	-7.47	20.96	3	Horizontal	152	1.55	-
5825MHz	Pass	AV	5.8178G	110.56	Inf	-Inf	5.28	3	Vertical	285	2.80	-
5825MHz	Pass	PK	5.6042G	62.43	68.20	-5.77	4.79	3	Vertical	285	2.80	-
5825MHz	Pass	PK	5.8178G	120.28	Inf	-Inf	5.28	3	Vertical	285	2.80	-
5825MHz	Pass	PK	5.9618G	58.96	68.20	-9.24	5.43	3	Vertical	285	2.80	-
5825MHz	Pass	AV	5.8286G	109.23	Inf	-Inf	5.28	3	Horizontal	128	1.77	-
5825MHz	Pass	PK	5.525G	62.06	68.20	-6.14	4.64	3	Horizontal	128	1.77	-
5825MHz	Pass	PK	5.8298G	119.61	Inf	-Inf	5.28	3	Horizontal	128	1.77	-
5825MHz	Pass	PK	5.9282G	59.65	68.20	-8.55	5.38	3	Horizontal	128	1.77	-
5825MHz	Pass	AV	11.65036G	50.52	54.00	-3.48	14.85	3	Vertical	343	1.16	-
5825MHz	Pass	AV	17.47002G	53.45	54.00	-0.55	21.78	3	Vertical	88	1.50	-
5825MHz	Pass	PK	11.64988G	63.70	74.00	-10.30	14.85	3	Vertical	343	1.16	-
5825MHz	Pass	PK	17.46864G	66.21	74.00	-7.79	21.77	3	Vertical	88	1.50	-
5825MHz	Pass	AV	11.65876G	48.65	54.00	-5.35	14.84	3	Horizontal	272	1.50	-
5825MHz	Pass	AV	17.47908G	53.16	54.00	-0.84	21.85	3	Horizontal	55	2.80	-
5825MHz	Pass	PK	11.65816G	62.66	74.00	-11.34	14.84	3	Horizontal	272	1.50	-
5825MHz	Pass	PK	17.47026G	66.23	74.00	-7.77	21.78	3	Horizontal	55	2.80	-
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	AV	5.144G	51.50	54.00	-2.50	4.13	3	Vertical	17	1.50	-
5190MHz	Pass	AV	5.184G	97.39	Inf	-Inf	4.19	3	Vertical	17	1.50	-
5190MHz	Pass	PK	5.1444G	70.78	74.00	-3.22	4.13	3	Vertical	17	1.50	-
5190MHz	Pass	PK	5.1832G	106.94	Inf	-Inf	4.19	3	Vertical	17	1.50	-
5190MHz	Pass	AV	5.1376G	53.77	54.00	-0.23	4.11	3	Horizontal	328	1.50	-
5190MHz	Pass	AV	5.178G	100.81	Inf	-Inf	4.18	3	Horizontal	328	1.50	-
5190MHz	Pass	PK	5.1376G	69.81	74.00	-4.19	4.11	3	Horizontal	328	1.50	-
5190MHz	Pass	PK	5.1776G	111.49	Inf	-Inf	4.18	3	Horizontal	328	1.50	-
5190MHz	Pass	AV	10.38846G	47.74	54.00	-6.26	14.18	3	Vertical	306	2.10	-
5190MHz	Pass	PK	10.37814G	61.18	74.00	-12.82	14.15	3	Vertical	306	2.10	-
5190MHz	Pass	AV	10.38516G	47.47	54.00	-6.53	14.17	3	Horizontal	301	2.94	-
5190MHz	Pass	PK	10.38294G	60.34	74.00	-13.66	14.17	3	Horizontal	301	2.94	-
5230MHz	Pass	AV	5.1496G	52.97	54.00	-1.03	4.13	3	Vertical	14	2.99	-
5230MHz	Pass	AV	5.236G	102.69	Inf	-Inf	4.25	3	Vertical	14	2.99	-
5230MHz	Pass	PK	5.142G	65.46	74.00	-8.54	4.13	3	Vertical	14	2.99	-
5230MHz	Pass	PK	5.2344G	113.35	Inf	-Inf	4.25	3	Vertical	14	2.99	-

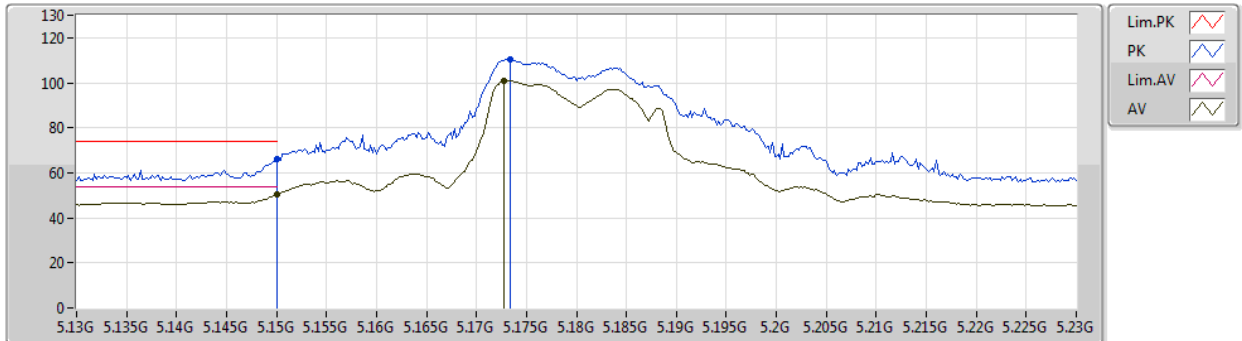
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5230MHz	Pass	AV	5.1376G	53.63	54.00	-0.37	4.11	3	Horizontal	331	1.50	-
5230MHz	Pass	AV	5.218G	105.86	Inf	-Inf	4.23	3	Horizontal	331	1.50	-
5230MHz	Pass	PK	5.1364G	68.35	74.00	-5.65	4.11	3	Horizontal	331	1.50	-
5230MHz	Pass	PK	5.2172G	116.25	Inf	-Inf	4.23	3	Horizontal	331	1.50	-
5230MHz	Pass	AV	10.4546G	52.30	54.00	-1.70	14.34	3	Vertical	300	1.77	-
5230MHz	Pass	PK	10.45394G	65.41	74.00	-8.59	14.33	3	Vertical	300	1.77	-
5230MHz	Pass	AV	10.4648G	52.13	54.00	-1.87	14.36	3	Horizontal	302	2.97	-
5230MHz	Pass	PK	10.4651G	65.41	74.00	-8.59	14.36	3	Horizontal	302	2.97	-
5755MHz	Pass	AV	5.749G	106.51	Inf	-Inf	5.14	3	Vertical	292	2.87	-
5755MHz	Pass	PK	5.647G	67.53	68.20	-0.67	4.89	3	Vertical	292	2.87	-
5755MHz	Pass	PK	5.7502G	117.50	Inf	-Inf	5.14	3	Vertical	292	2.87	-
5755MHz	Pass	PK	5.941G	59.62	68.20	-8.58	5.40	3	Vertical	292	2.87	-
5755MHz	Pass	AV	5.7442G	104.47	Inf	-Inf	5.13	3	Horizontal	319	1.50	-
5755MHz	Pass	PK	5.6434G	67.70	68.20	-0.50	4.88	3	Horizontal	319	1.50	-
5755MHz	Pass	PK	5.761G	116.67	Inf	-Inf	5.17	3	Horizontal	319	1.50	-
5755MHz	Pass	PK	5.965G	60.23	68.20	-7.97	5.43	3	Horizontal	319	1.50	-
5755MHz	Pass	AV	11.51024G	48.89	54.00	-5.11	15.02	3	Vertical	345	1.32	-
5755MHz	Pass	PK	11.5112G	61.97	74.00	-12.03	15.02	3	Vertical	345	1.32	-
5755MHz	Pass	AV	11.51042G	47.80	54.00	-6.20	15.02	3	Horizontal	271	1.44	-
5755MHz	Pass	PK	11.51054G	60.49	74.00	-13.51	15.02	3	Horizontal	271	1.44	-
5795MHz	Pass	AV	5.7902G	106.38	Inf	-Inf	5.24	3	Vertical	305	2.94	-
5795MHz	Pass	PK	5.6474G	63.70	68.20	-4.50	4.89	3	Vertical	305	2.94	-
5795MHz	Pass	PK	5.7902G	116.51	Inf	-Inf	5.24	3	Vertical	305	2.94	-
5795MHz	Pass	PK	5.9294G	63.89	68.20	-4.31	5.38	3	Vertical	305	2.94	-
5795MHz	Pass	AV	5.789G	105.28	Inf	-Inf	5.23	3	Horizontal	317	2.98	-
5795MHz	Pass	PK	5.6318G	63.75	68.20	-4.45	4.84	3	Horizontal	317	2.98	-
5795MHz	Pass	PK	5.7902G	115.77	Inf	-Inf	5.24	3	Horizontal	317	2.98	-
5795MHz	Pass	PK	5.9318G	63.71	68.20	-4.49	5.38	3	Horizontal	317	2.98	-
5795MHz	Pass	AV	11.59012G	48.98	54.00	-5.02	14.92	3	Vertical	342	1.22	-
5795MHz	Pass	PK	11.59072G	61.31	74.00	-12.69	14.92	3	Vertical	342	1.22	-
5795MHz	Pass	AV	11.59792G	47.30	54.00	-6.70	14.92	3	Horizontal	271	1.50	-
5795MHz	Pass	PK	11.59744G	60.43	74.00	-13.57	14.92	3	Horizontal	271	1.50	-
802.11ac VHT80_Nss4_(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	AV	5.141G	52.24	54.00	-1.76	4.12	3	Vertical	21	2.99	-
5210MHz	Pass	AV	5.237G	92.44	Inf	-Inf	4.25	3	Vertical	21	2.99	-
5210MHz	Pass	AV	5.373G	47.13	54.00	-6.87	4.42	3	Vertical	21	2.99	-
5210MHz	Pass	PK	5.15G	70.50	74.00	-3.50	4.13	3	Vertical	21	2.99	-
5210MHz	Pass	PK	5.234G	107.18	Inf	-Inf	4.25	3	Vertical	21	2.99	-
5210MHz	Pass	PK	5.393G	60.00	74.00	-14.00	4.45	3	Vertical	21	2.99	-
5210MHz	Pass	AV	5.137G	53.56	54.00	-0.44	4.11	3	Horizontal	322	1.50	-
5210MHz	Pass	AV	5.197G	94.30	Inf	-Inf	4.21	3	Horizontal	322	1.50	-
5210MHz	Pass	AV	5.358G	47.05	54.00	-6.95	4.40	3	Horizontal	322	1.50	-
5210MHz	Pass	PK	5.139G	69.54	74.00	-4.46	4.11	3	Horizontal	322	1.50	-
5210MHz	Pass	PK	5.198G	106.96	Inf	-Inf	4.21	3	Horizontal	322	1.50	-
5210MHz	Pass	PK	5.359G	59.63	74.00	-14.37	4.41	3	Horizontal	322	1.50	-
5210MHz	Pass	AV	10.43326G	44.82	54.00	-9.18	14.28	3	Vertical	297	1.70	-
5210MHz	Pass	PK	10.41394G	57.85	74.00	-16.15	14.24	3	Vertical	297	1.70	-
5210MHz	Pass	AV	10.43068G	45.60	54.00	-8.40	14.28	3	Horizontal	262	1.13	-
5210MHz	Pass	PK	10.42996G	59.02	74.00	-14.98	14.28	3	Horizontal	262	1.13	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5775MHz	Pass	AV	5.751G	95.90	Inf	-Inf	5.14	3	Vertical	301	2.99	-
5775MHz	Pass	PK	5.649G	68.05	68.20	-0.15	4.89	3	Vertical	301	2.99	-
5775MHz	Pass	PK	5.7474G	110.81	Inf	-Inf	5.14	3	Vertical	301	2.99	-
5775MHz	Pass	PK	5.9382G	62.67	68.20	-5.53	5.39	3	Vertical	301	2.99	-
5775MHz	Pass	AV	5.7834G	96.46	Inf	-Inf	5.22	3	Horizontal	321	1.01	-
5775MHz	Pass	PK	5.6442G	64.29	68.20	-3.91	4.88	3	Horizontal	321	1.01	-
5775MHz	Pass	PK	5.7642G	108.88	Inf	-Inf	5.17	3	Horizontal	321	1.01	-
5775MHz	Pass	PK	5.9238G	65.69	69.09	-3.40	5.39	3	Horizontal	321	1.01	-
5775MHz	Pass	AV	11.54226G	43.50	54.00	-10.50	14.98	3	Vertical	223	1.50	-
5775MHz	Pass	PK	11.56338G	56.52	74.00	-17.48	14.95	3	Vertical	223	1.50	-
5775MHz	Pass	AV	11.55264G	43.61	54.00	-10.39	14.97	3	Horizontal	65	1.98	-
5775MHz	Pass	PK	11.53776G	56.55	74.00	-17.45	14.98	3	Horizontal	65	1.98	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

02/02/2019

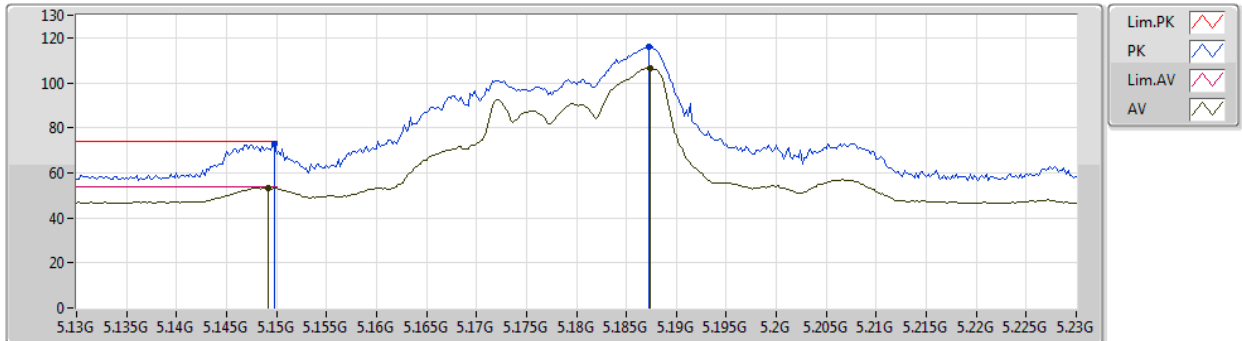


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.15G	50.34	54.00	-3.66	4.13	3	Vertical	26	1.50	-				
AV	5.1728G	101.06	Inf	-Inf	4.17	3	Vertical	26	1.50	-				
PK	5.15G	66.26	74.00	-7.74	4.13	3	Vertical	26	1.50	-				
PK	5.1734G	110.35	Inf	-Inf	4.17	3	Vertical	26	1.50	-				

802.11a_Nss1,(6Mbps)_4TX

02/02/2019

5180MHz_TX

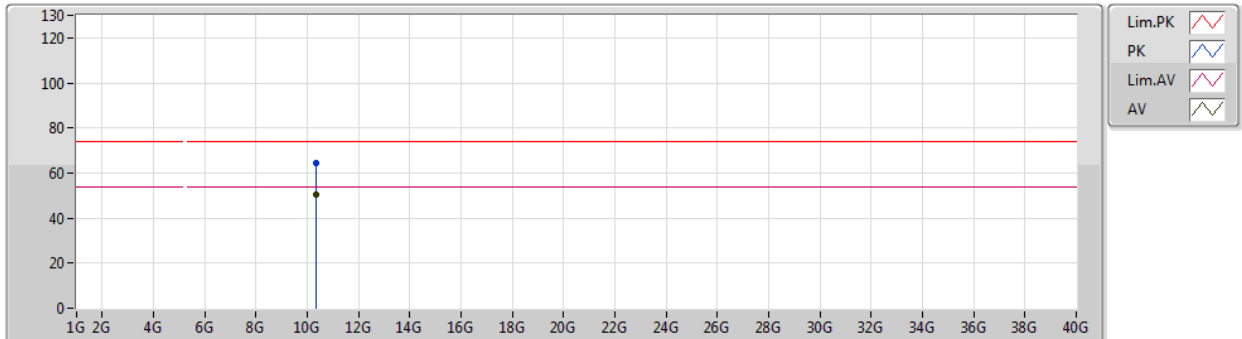


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1492G	53.32	54.00	-0.68	4.13	3	Horizontal	328	1.50	-
AV	5.1874G	106.65	Inf	-Inf	4.19	3	Horizontal	328	1.50	-
PK	5.1498G	72.65	74.00	-1.35	4.13	3	Horizontal	328	1.50	-
PK	5.1872G	116.03	Inf	-Inf	4.19	3	Horizontal	328	1.50	-

802.11a_Nss1,(6Mbps)_4TX

02/02/2019

5180MHz_TX

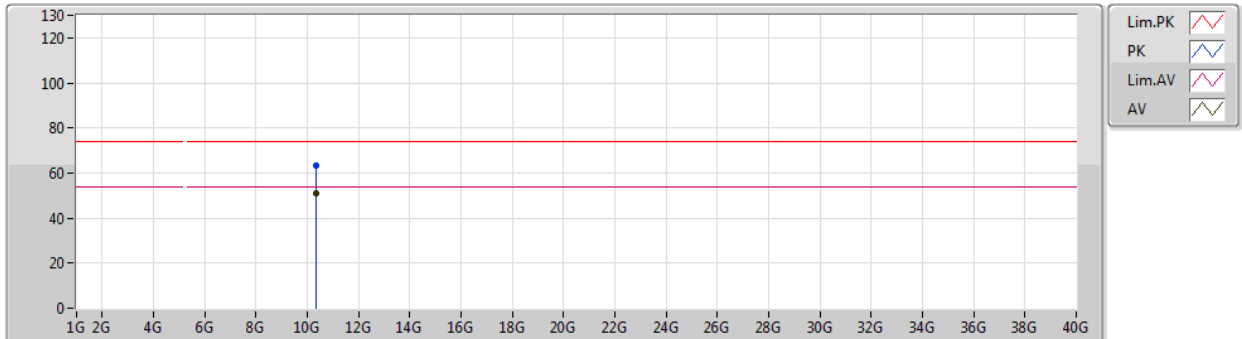


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.35766G	50.39	54.00	-3.61	14.11	3	Vertical	314	2.08	-
PK	10.35646G	64.55	74.00	-9.45	14.11	3	Vertical	314	2.08	-

802.11a_Nss1,(6Mbps)_4TX

02/02/2019

5180MHz_TX

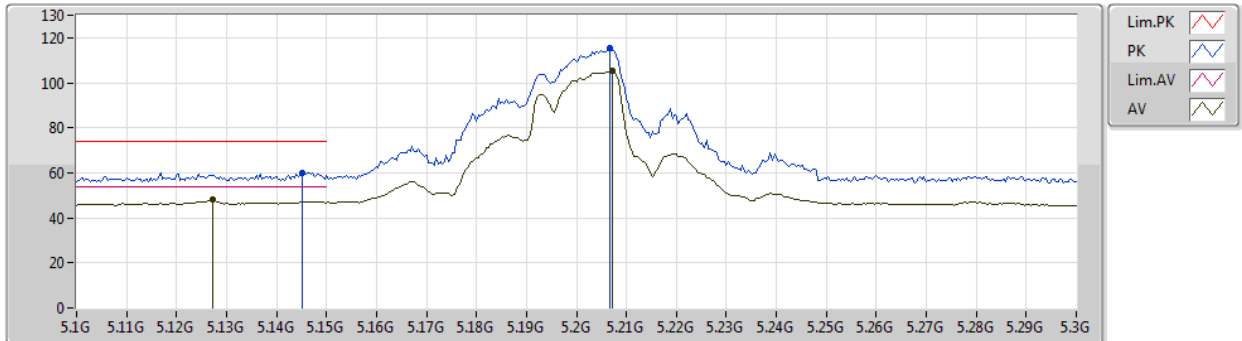


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	10.36024G	50.94	54.00	-3.06	14.11	3	Horizontal	282	2.09	-				
PK	10.36072G	63.26	74.00	-10.74	14.11	3	Horizontal	282	2.09	-				

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

02/02/2019

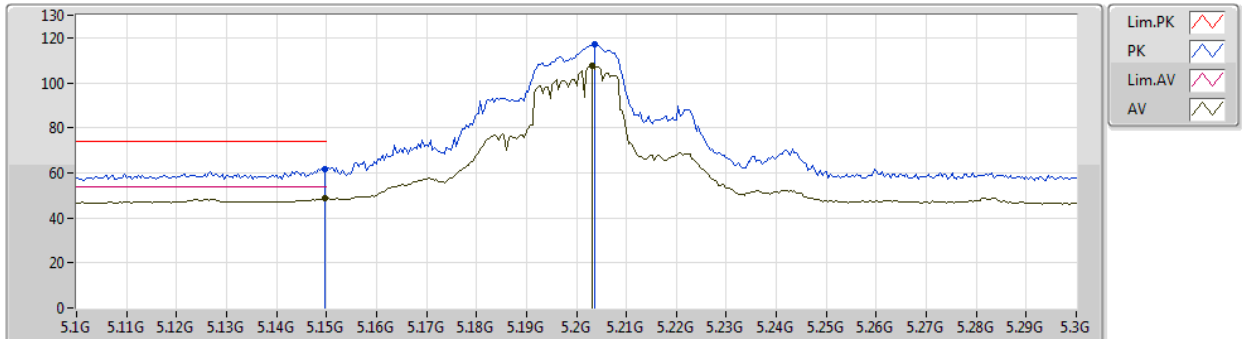


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.1272G	48.01	54.00	-5.99	4.11	3	Vertical	10	2.99	-				
AV	5.2072G	105.40	Inf	-Inf	4.21	3	Vertical	10	2.99	-				
PK	5.1452G	60.17	74.00	-13.83	4.13	3	Vertical	10	2.99	-				
PK	5.2068G	115.24	Inf	-Inf	4.21	3	Vertical	10	2.99	-				

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

02/02/2019

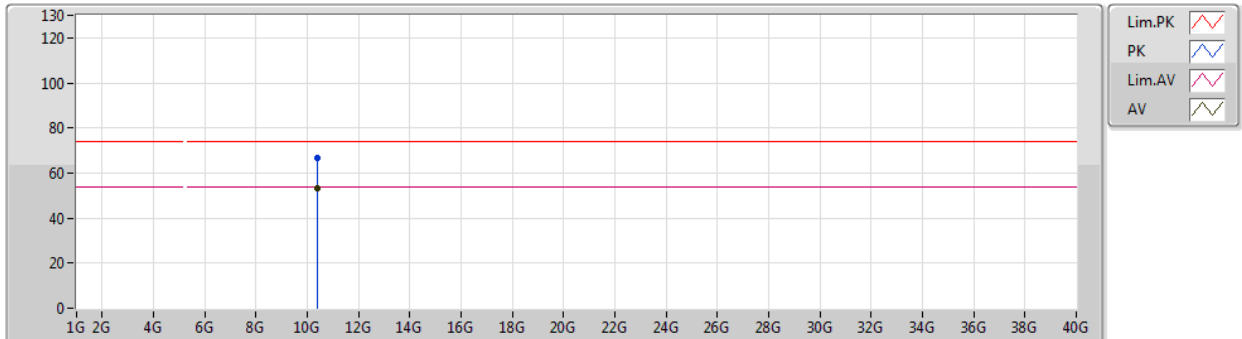


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1496G	48.53	54.00	-5.47	4.13	3	Horizontal	329	2.24	-
AV	5.2032G	107.56	Inf	-Inf	4.21	3	Horizontal	329	2.24	-
PK	5.1496G	61.61	74.00	-12.39	4.13	3	Horizontal	329	2.24	-
PK	5.2036G	117.23	Inf	-Inf	4.21	3	Horizontal	329	2.24	-

802.11a_Nss1,(6Mbps)_4TX

02/02/2019

5200MHz_TX

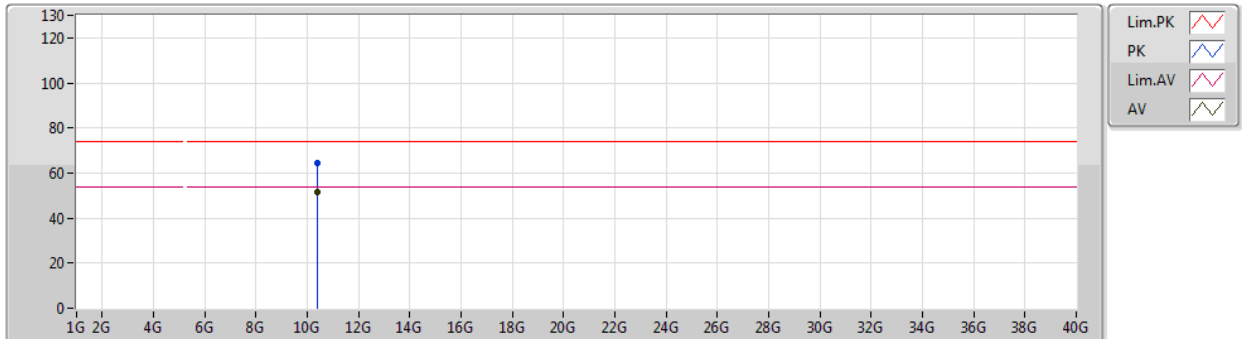


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4006G	53.43	54.00	-0.57	14.20	3	Vertical	0	1.01	-
PK	10.4011G	66.63	74.00	-7.37	14.20	3	Vertical	0	1.01	-

802.11a_Nss1,(6Mbps)_4TX

02/02/2019

5200MHz_TX

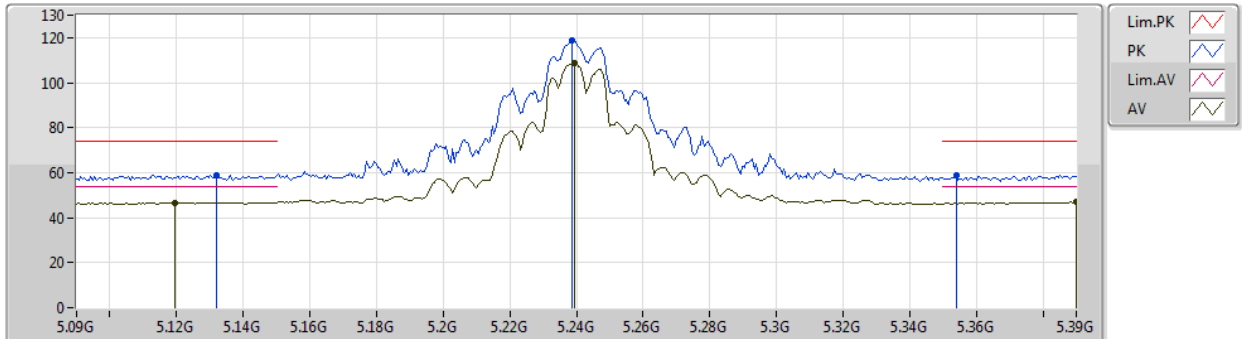


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4003G	51.34	54.00	-2.66	14.20	3	Horizontal	307	1.24	-
PK	10.3997G	64.44	74.00	-9.56	14.20	3	Horizontal	307	1.24	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

02/02/2019

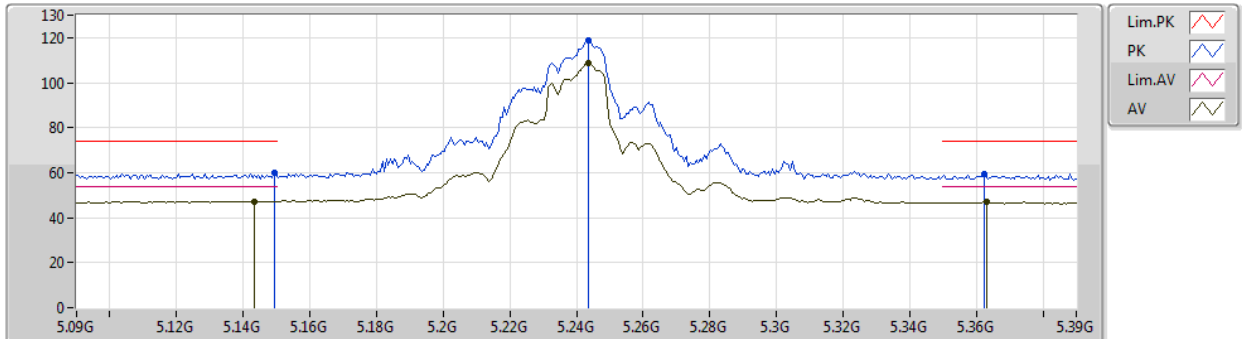


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.1194G	46.75	54.00	-7.25	4.09	3	Vertical	301	2.97	-				
AV	5.2394G	108.93	Inf	-Inf	4.25	3	Vertical	301	2.97	-				
AV	5.39G	46.91	54.00	-7.09	4.43	3	Vertical	301	2.97	-				
PK	5.132G	59.06	74.00	-14.94	4.11	3	Vertical	301	2.97	-				
PK	5.2388G	118.70	Inf	-Inf	4.25	3	Vertical	301	2.97	-				
PK	5.354G	59.10	74.00	-14.90	4.39	3	Vertical	301	2.97	-				

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

02/02/2019

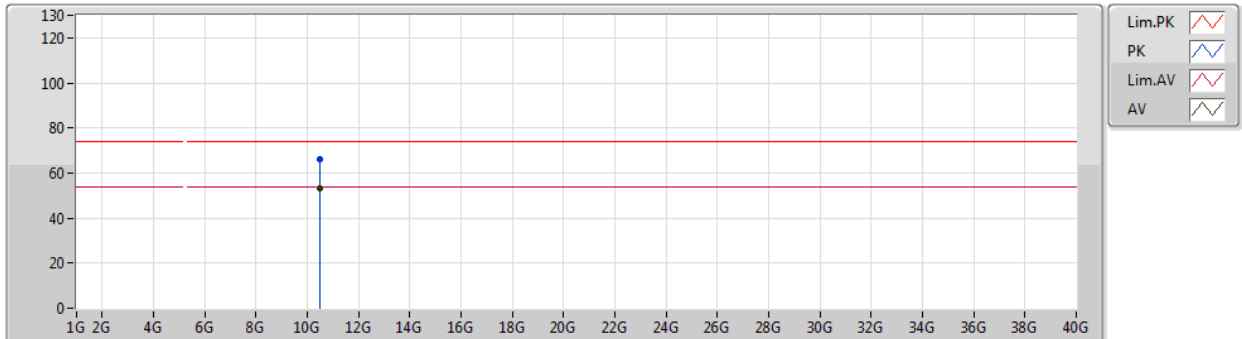


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1434G	47.33	54.00	-6.67	4.13	3	Horizontal	328	2.38	-
AV	5.2436G	108.95	Inf	-Inf	4.26	3	Horizontal	328	2.38	-
AV	5.363G	46.91	54.00	-7.09	4.41	3	Horizontal	328	2.38	-
PK	5.1494G	59.72	74.00	-14.28	4.13	3	Horizontal	328	2.38	-
PK	5.2436G	118.60	Inf	-Inf	4.26	3	Horizontal	328	2.38	-
PK	5.3624G	59.46	74.00	-14.54	4.41	3	Horizontal	328	2.38	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

02/02/2019

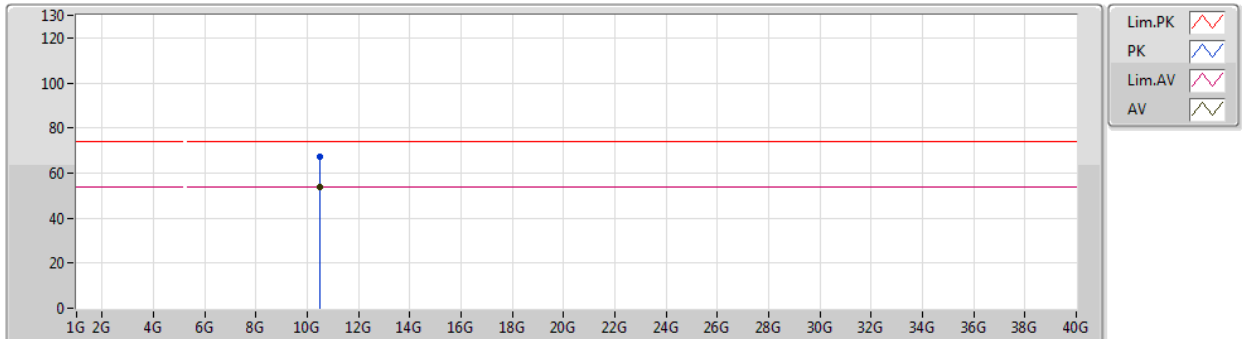


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4807G	53.35	54.00	-0.65	14.40	3	Vertical	280	1.74	-
PK	10.4796G	66.07	74.00	-7.93	14.40	3	Vertical	280	1.74	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

02/02/2019

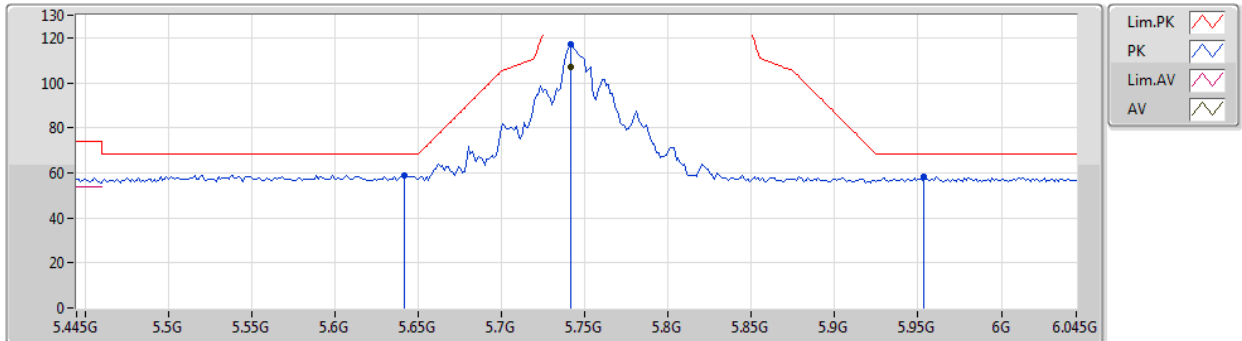


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4846G	53.57	54.00	-0.43	14.40	3	Horizontal	302	2.95	-
PK	10.4837G	67.41	74.00	-6.59	14.40	3	Horizontal	302	2.95	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

02/02/2019

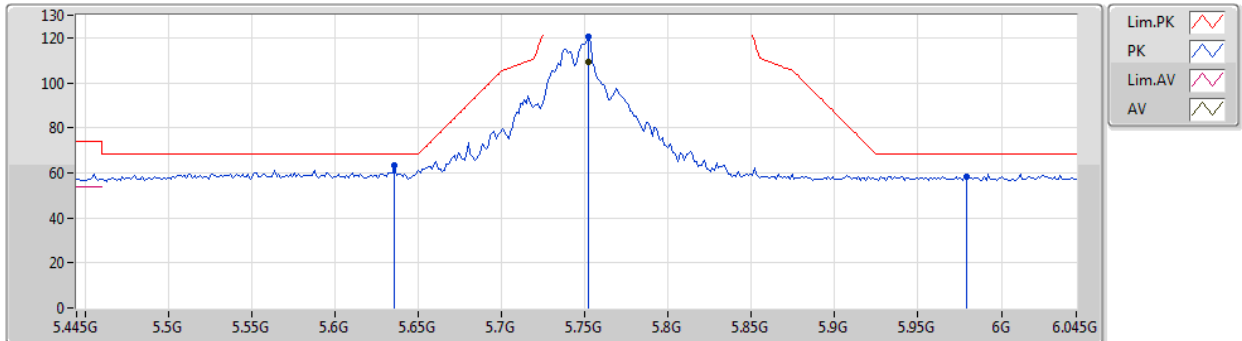


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7414G	107.09	Inf	-Inf	5.12	3	Vertical	314	1.49	-
PK	5.6418G	59.04	68.20	-9.16	4.87	3	Vertical	314	1.49	-
PK	5.7414G	117.20	Inf	-Inf	5.12	3	Vertical	314	1.49	-
PK	5.9538G	58.35	68.20	-9.85	5.42	3	Vertical	314	1.49	-

802.11a_Nss1,(6Mbps)_4TX

02/02/2019

5745MHz_TX

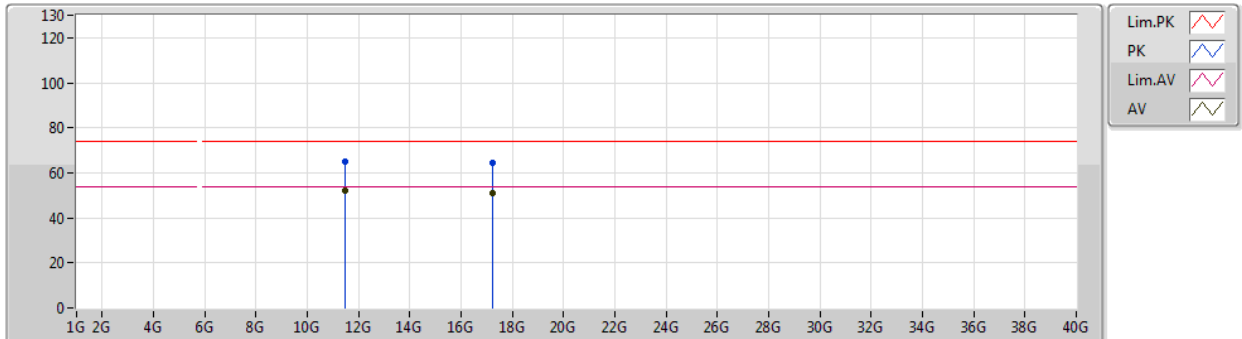


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7522G	109.29	Inf	-Inf	5.14	3	Horizontal	314	1.50	-
PK	5.6358G	63.10	68.20	-5.10	4.86	3	Horizontal	314	1.50	-
PK	5.7522G	120.57	Inf	-Inf	5.14	3	Horizontal	314	1.50	-
PK	5.979G	58.45	68.20	-9.75	5.43	3	Horizontal	314	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

02/02/2019

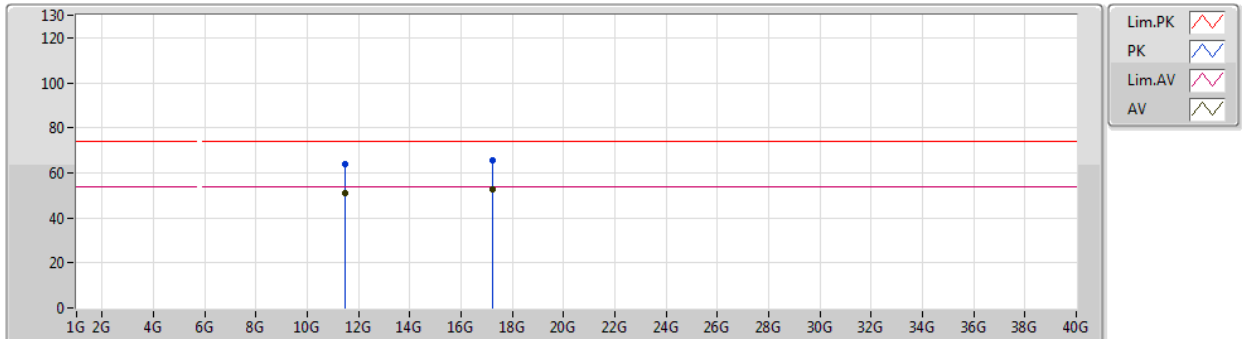


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.4902G	52.30	54.00	-1.70	15.04	3	Vertical	353	1.17	-
AV	17.2419G	51.23	54.00	-2.77	20.04	3	Vertical	112	2.51	-
PK	11.4908G	64.94	74.00	-9.06	15.04	3	Vertical	353	1.17	-
PK	17.2329G	64.44	74.00	-9.56	19.98	3	Vertical	112	2.51	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

02/02/2019

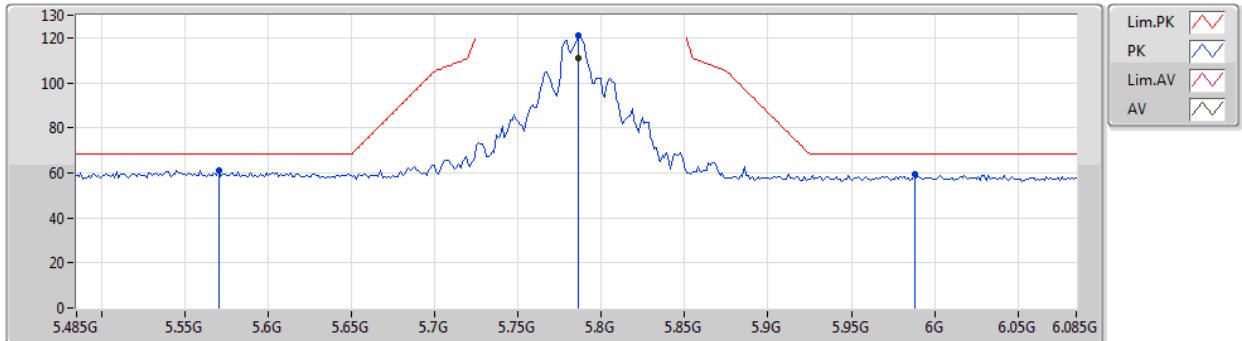


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.4903G	51.18	54.00	-2.82	15.04	3	Horizontal	271	1.45	-
AV	17.24148G	52.51	54.00	-1.49	20.04	3	Horizontal	245	1.78	-
PK	11.4906G	64.14	74.00	-9.86	15.04	3	Horizontal	271	1.45	-
PK	17.24112G	65.68	74.00	-8.32	20.04	3	Horizontal	245	1.78	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

06/02/2019

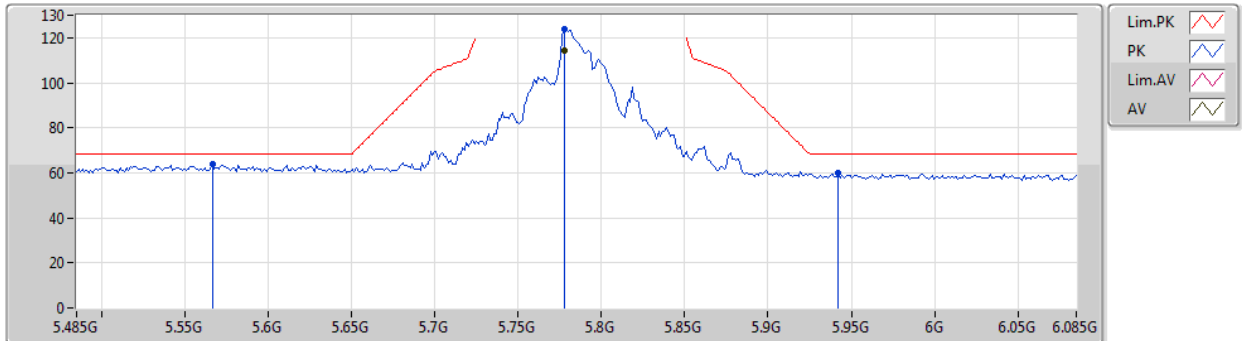


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.7862G	111.01	Inf	-Inf	5.22	3	Vertical	288	1.71	-				
PK	5.5702G	61.32	68.20	-6.88	4.72	3	Vertical	288	1.71	-				
PK	5.7862G	121.28	Inf	-Inf	5.22	3	Vertical	288	1.71	-				
PK	5.9878G	59.25	68.20	-8.95	5.44	3	Vertical	288	1.71	-				

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

06/02/2019

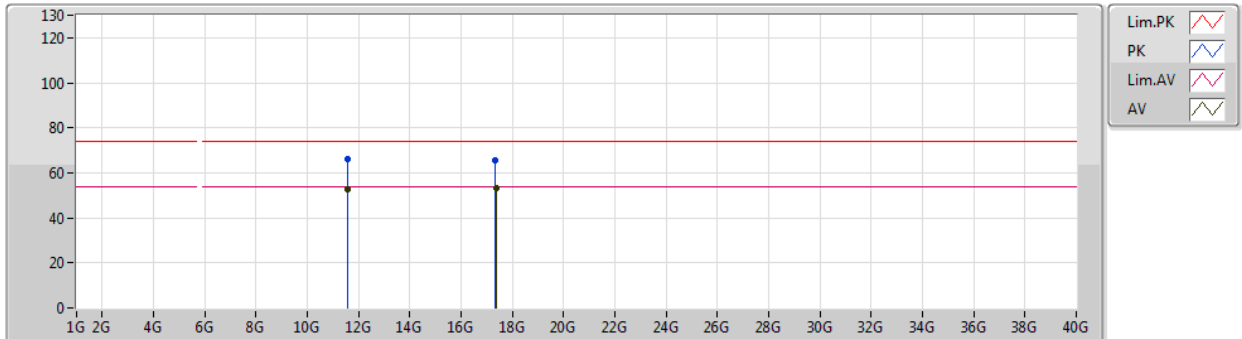


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7778G	114.45	Inf	-Inf	5.21	3	Horizontal	314	1.89	-
PK	5.5666G	63.82	68.20	-4.38	4.71	3	Horizontal	314	1.89	-
PK	5.7778G	124.05	Inf	-Inf	5.21	3	Horizontal	314	1.89	-
PK	5.9422G	59.82	68.20	-8.38	5.40	3	Horizontal	314	1.89	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

06/02/2019

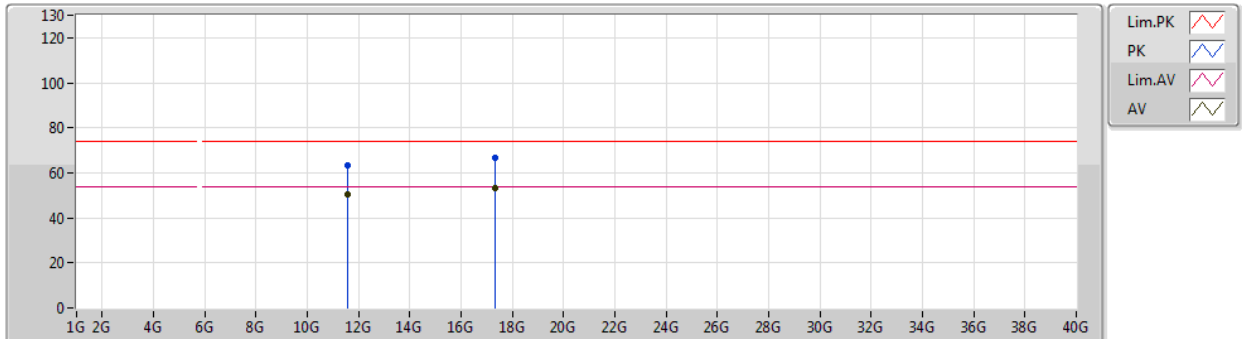


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.57G	52.65	54.00	-1.35	14.96	3	Vertical	347	1.19	-				
AV	17.36064G	53.15	54.00	-0.85	20.95	3	Vertical	144	1.33	-				
PK	11.57018G	66.11	74.00	-7.89	14.96	3	Vertical	347	1.19	-				
PK	17.34858G	65.74	74.00	-8.26	20.86	3	Vertical	144	1.33	-				

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

06/02/2019

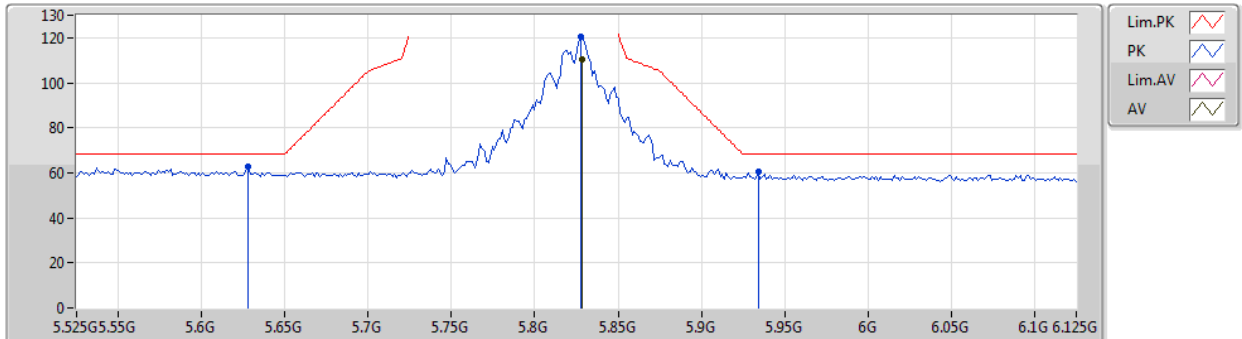


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.5709G	50.39	54.00	-3.61	14.95	3	Horizontal	273	1.35	-
AV	17.34948G	53.26	54.00	-0.74	20.86	3	Horizontal	56	1.85	-
PK	11.57018G	63.16	74.00	-10.84	14.96	3	Horizontal	273	1.35	-
PK	17.34996G	66.42	74.00	-7.58	20.86	3	Horizontal	56	1.85	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

06/02/2019

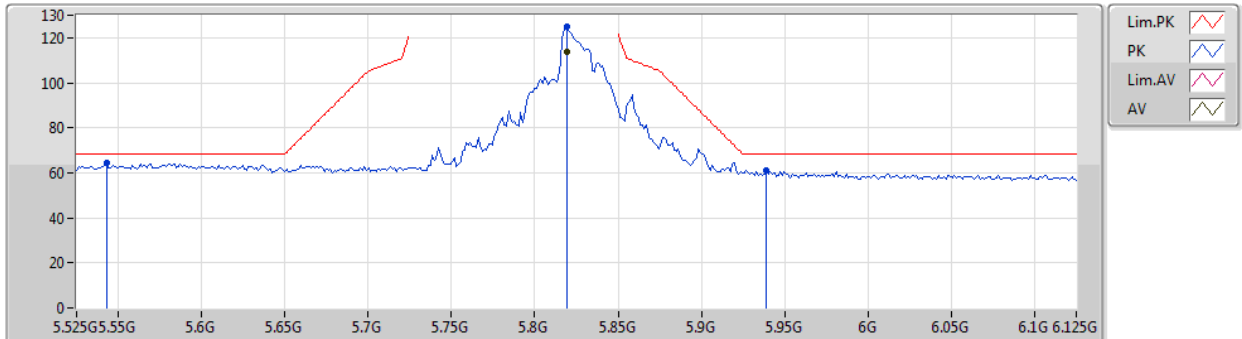


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.8286G	110.61	Inf	-Inf	5.28	3	Vertical	289	2.44	-
PK	5.8282G	62.97	68.20	-5.23	4.84	3	Vertical	289	2.44	-
PK	5.8274G	120.74	Inf	-Inf	5.28	3	Vertical	289	2.44	-
PK	5.9342G	60.45	68.20	-7.75	5.39	3	Vertical	289	2.44	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

06/02/2019

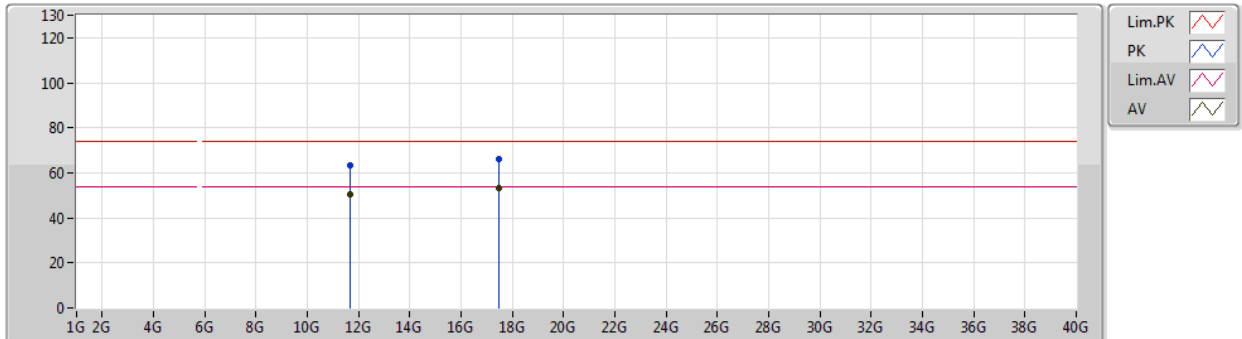


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.819G	113.69	Inf	-Inf	5.29	3	Horizontal	315	1.81	-				
PK	5.543G	64.24	68.20	-3.96	4.66	3	Horizontal	315	1.81	-				
PK	5.819G	124.70	Inf	-Inf	5.29	3	Horizontal	315	1.81	-				
PK	5.939G	61.30	68.20	-6.90	5.39	3	Horizontal	315	1.81	-				

802.11a_Nss1,(6Mbps)_4TX

06/02/2019

5825MHz_TX

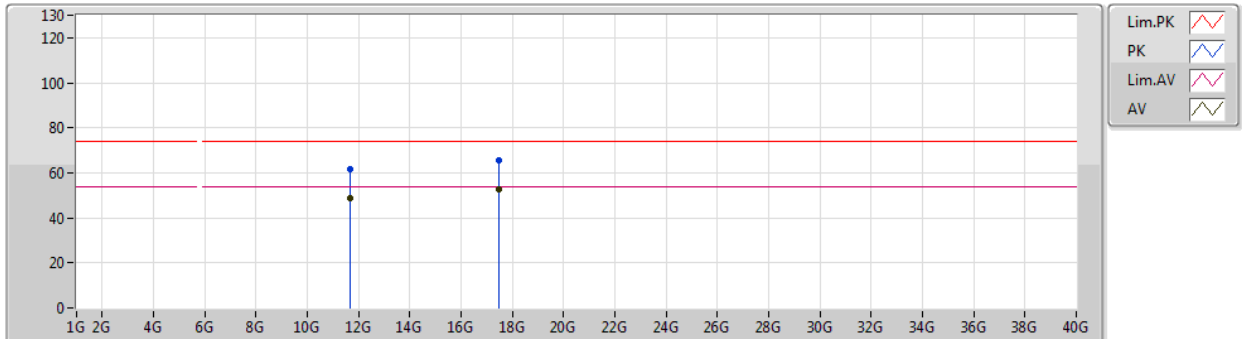


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.65072G	50.53	54.00	-3.47	14.85	3	Vertical	345	1.23	-
AV	17.47398G	53.36	54.00	-0.64	21.81	3	Vertical	26	2.44	-
PK	11.65138G	63.37	74.00	-10.63	14.85	3	Vertical	345	1.23	-
PK	17.4825G	66.20	74.00	-7.80	21.87	3	Vertical	26	2.44	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

06/02/2019

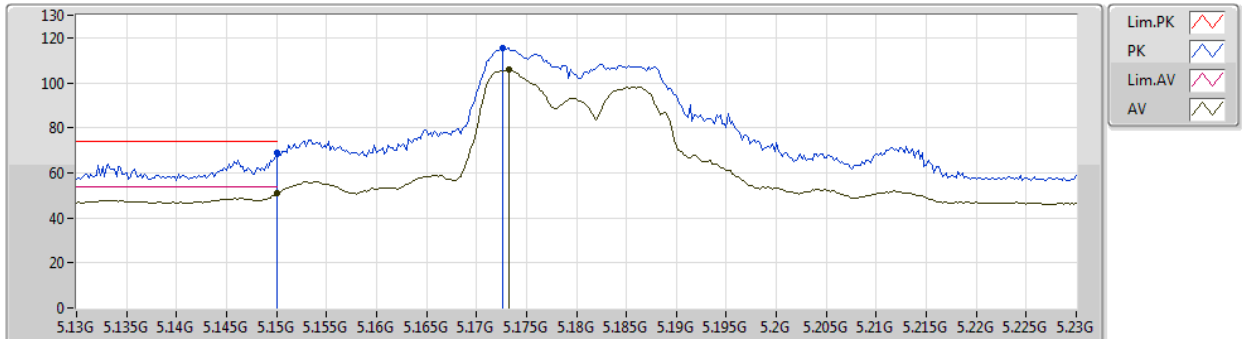


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.65828G	48.68	54.00	-5.32	14.84	3	Horizontal	272	1.50	-
AV	17.48688G	52.71	54.00	-1.29	21.90	3	Horizontal	8	2.38	-
PK	11.6581G	61.86	74.00	-12.14	14.84	3	Horizontal	272	1.50	-
PK	17.48472G	65.78	74.00	-8.22	21.89	3	Horizontal	8	2.38	-

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5180MHz_TX

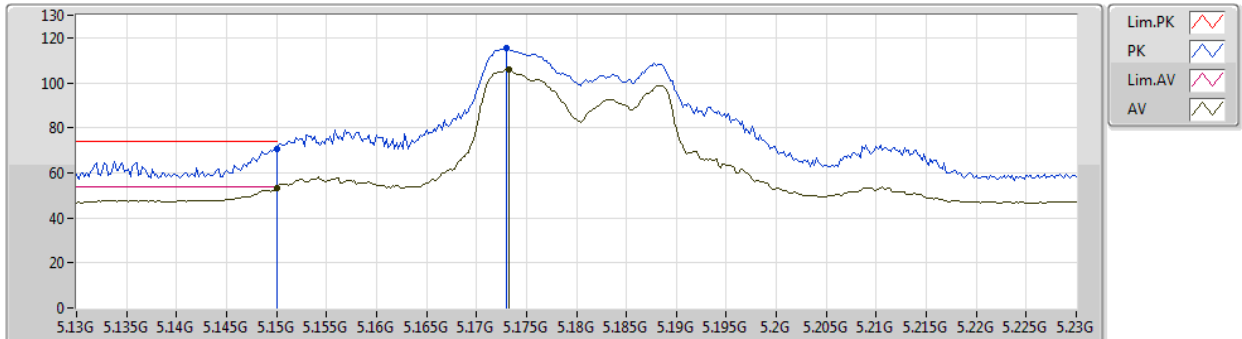


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.15G	50.96	54.00	-3.04	4.13	3	Vertical	326	1.87	-
AV	5.1732G	105.67	Inf	-Inf	4.17	3	Vertical	326	1.87	-
PK	5.15G	69.18	74.00	-4.82	4.13	3	Vertical	326	1.87	-
PK	5.1726G	115.29	Inf	-Inf	4.17	3	Vertical	326	1.87	-

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5180MHz_TX

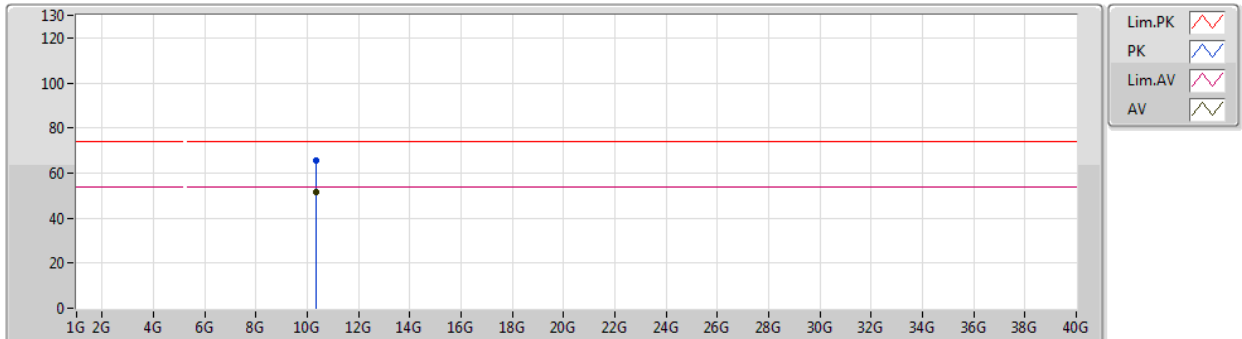


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.15G	53.47	54.00	-0.53	4.13	3	Horizontal	232	1.49	-				
AV	5.1732G	105.79	Inf	-Inf	4.17	3	Horizontal	232	1.49	-				
PK	5.15G	70.51	74.00	-3.49	4.13	3	Horizontal	232	1.49	-				
PK	5.173G	115.30	Inf	-Inf	4.17	3	Horizontal	232	1.49	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5180MHz_TX

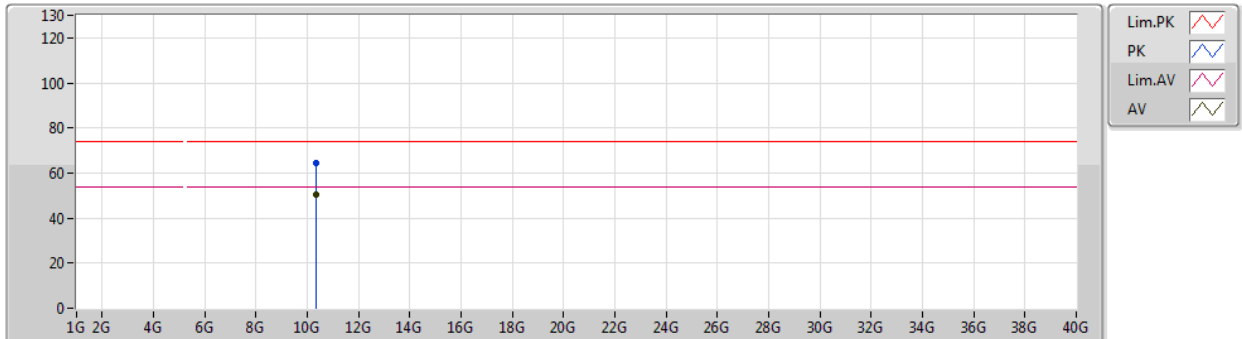


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.3588G	51.57	54.00	-2.43	14.11	3	Vertical	309	2.13	-
PK	10.36702G	65.48	74.00	-8.52	14.12	3	Vertical	309	2.13	-

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5180MHz_TX

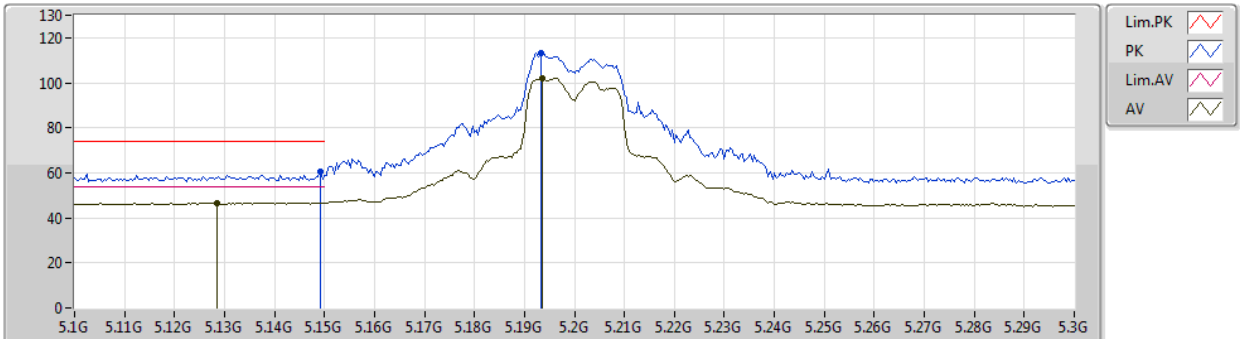


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.36324G	50.32	54.00	-3.68	14.12	3	Horizontal	291	2.46	-
PK	10.36288G	64.32	74.00	-9.68	14.12	3	Horizontal	291	2.46	-

802.11ac VHT20_Nss4,(MCS0)_4TX

5200MHz_TX

05/02/2019

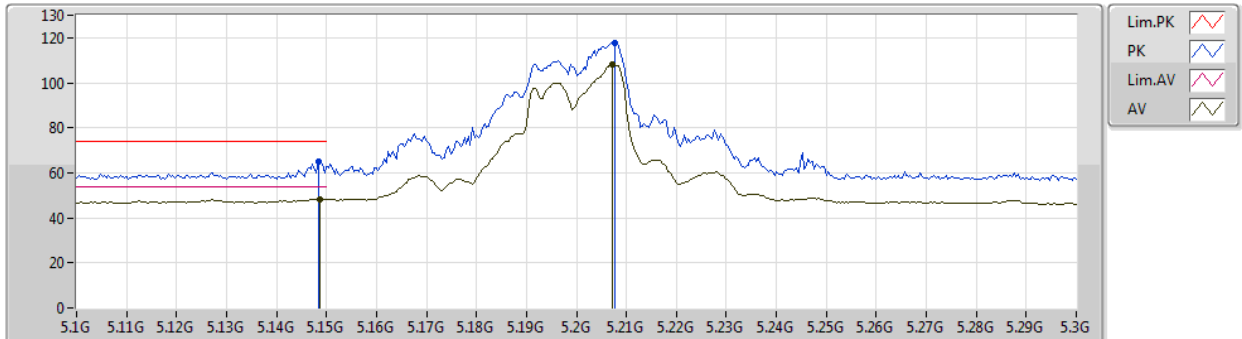


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1284G	46.78	54.00	-7.22	4.11	3	Vertical	315	1.63	-
AV	5.1936G	102.06	Inf	-Inf	4.21	3	Vertical	315	1.63	-
PK	5.1492G	60.64	74.00	-13.36	4.13	3	Vertical	315	1.63	-
PK	5.1932G	113.45	Inf	-Inf	4.20	3	Vertical	315	1.63	-

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5200MHz_TX

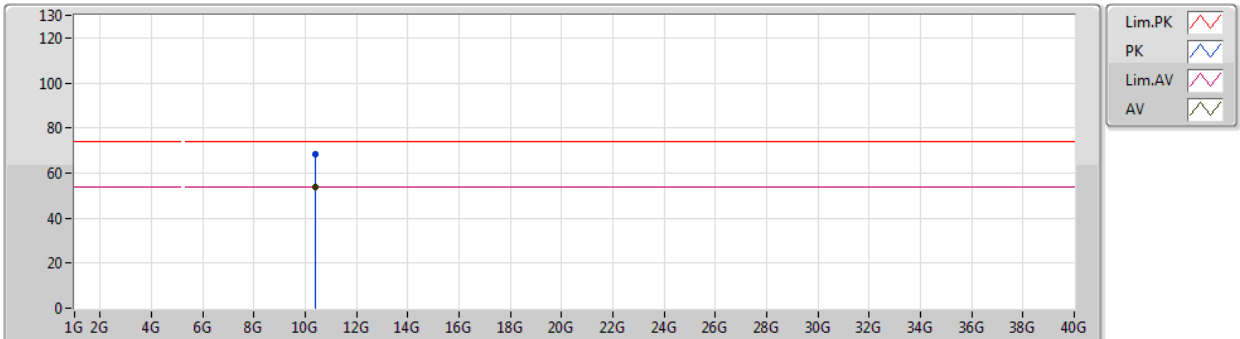


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1488G	48.32	54.00	-5.68	4.13	3	Horizontal	358	2.26	-
AV	5.2072G	107.96	Inf	-Inf	4.21	3	Horizontal	358	2.26	-
PK	5.1484G	64.74	74.00	-9.26	4.13	3	Horizontal	358	2.26	-
PK	5.2076G	117.88	Inf	-Inf	4.21	3	Horizontal	358	2.26	-

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5200MHz_TX

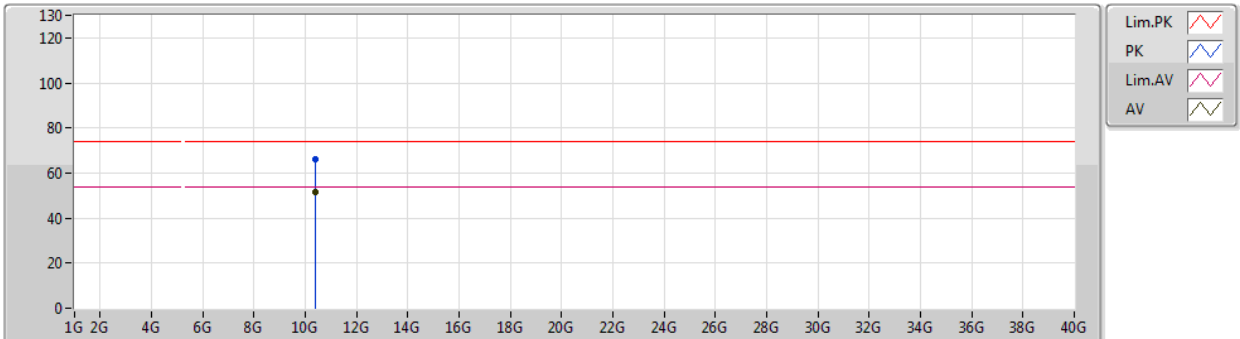


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	10.39922G	53.92	54.00	-0.08	14.20	3	Vertical	303	2.28	-				
PK	10.39814G	68.45	74.00	-5.55	14.20	3	Vertical	303	2.28	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

5200MHz_TX

05/02/2019

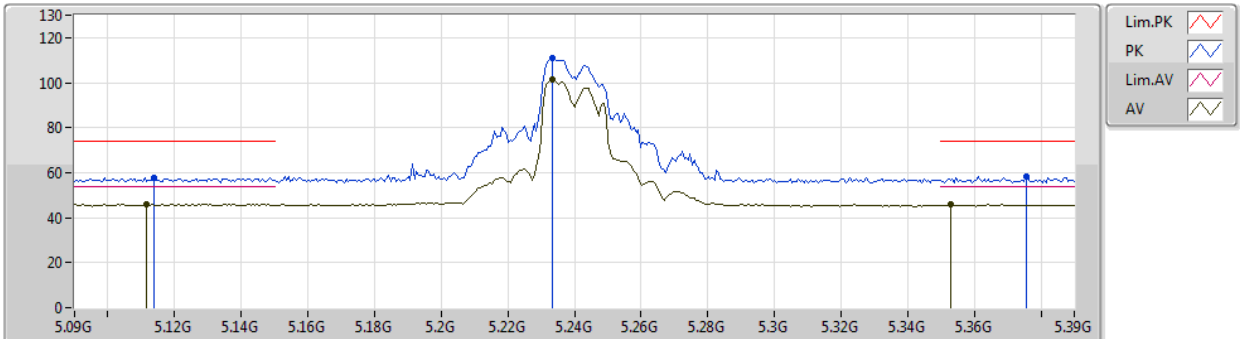


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	10.40282G	51.77	54.00	-2.23	14.20	3	Horizontal	284	2.38	-				
PK	10.4027G	66.15	74.00	-7.85	14.20	3	Horizontal	284	2.38	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5240MHz_TX

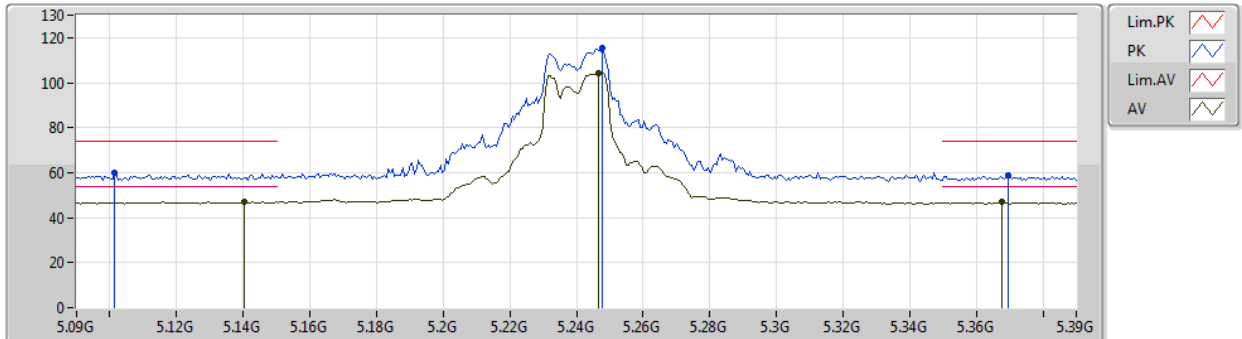


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.1116G	45.98	54.00	-8.02	4.08	3	Vertical	26	1.50	-				
AV	5.2334G	101.28	Inf	-Inf	4.25	3	Vertical	26	1.50	-				
AV	5.3528G	45.83	54.00	-8.17	4.39	3	Vertical	26	1.50	-				
PK	5.114G	57.73	74.00	-16.27	4.09	3	Vertical	26	1.50	-				
PK	5.2334G	110.77	Inf	-Inf	4.25	3	Vertical	26	1.50	-				
PK	5.3756G	58.18	74.00	-15.82	4.43	3	Vertical	26	1.50	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

5240MHz_TX

05/02/2019

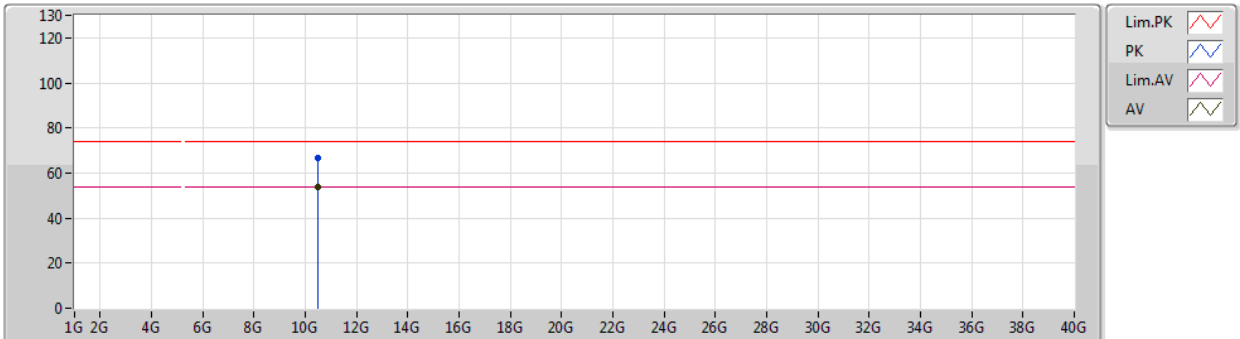


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.1404G	46.89	54.00	-7.11	4.12	3	Horizontal	327	1.50	-				
AV	5.2466G	104.22	Inf	-Inf	4.27	3	Horizontal	327	1.50	-				
AV	5.3678G	46.85	54.00	-7.15	4.41	3	Horizontal	327	1.50	-				
PK	5.1014G	60.02	74.00	-13.98	4.07	3	Horizontal	327	1.50	-				
PK	5.2478G	115.49	Inf	-Inf	4.27	3	Horizontal	327	1.50	-				
PK	5.3696G	58.89	74.00	-15.11	4.41	3	Horizontal	327	1.50	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5240MHz_TX

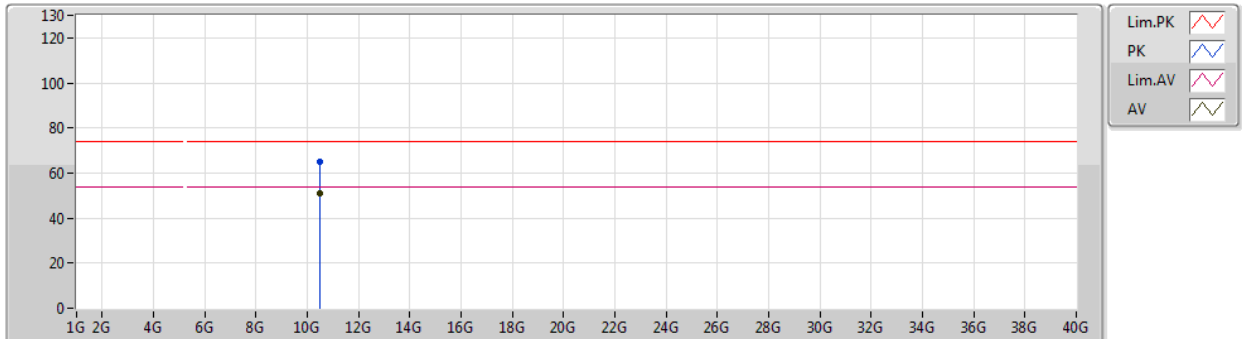


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.47856G	53.79	54.00	-0.21	14.39	3	Vertical	300	2.27	-
PK	10.47872G	66.89	74.00	-7.11	14.39	3	Vertical	300	2.27	-

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5240MHz_TX

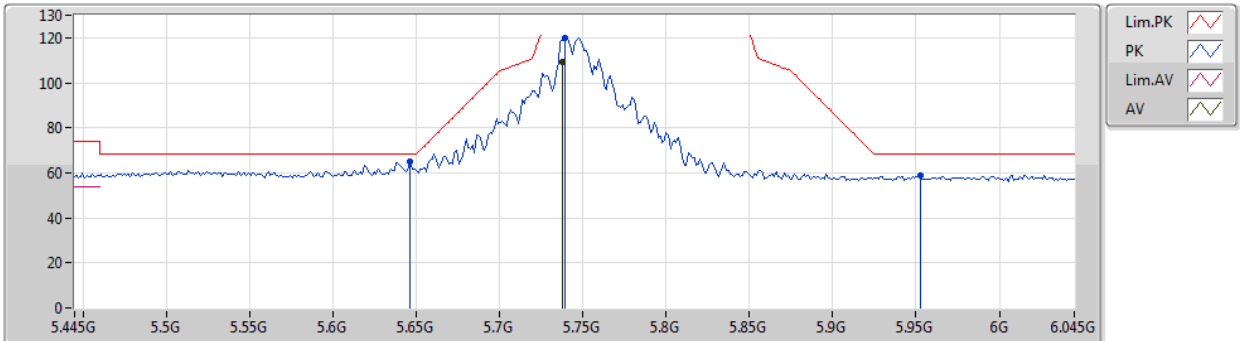


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.48108G	51.07	54.00	-2.93	14.40	3	Horizontal	307	1.50	-
PK	10.48018G	64.95	74.00	-9.05	14.40	3	Horizontal	307	1.50	-

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5745MHz_TX

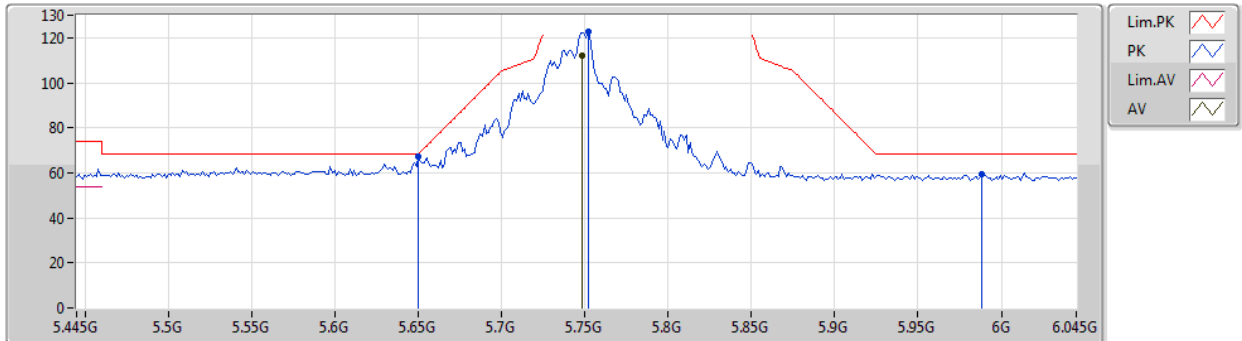


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.7378G	109.44	Inf	-Inf	5.11	3	Vertical	152	1.46	-				
PK	5.6466G	64.73	68.20	-3.47	4.89	3	Vertical	152	1.46	-				
PK	5.739G	120.16	Inf	-Inf	5.11	3	Vertical	152	1.46	-				
PK	5.9526G	59.03	68.20	-9.17	5.41	3	Vertical	152	1.46	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5745MHz_TX

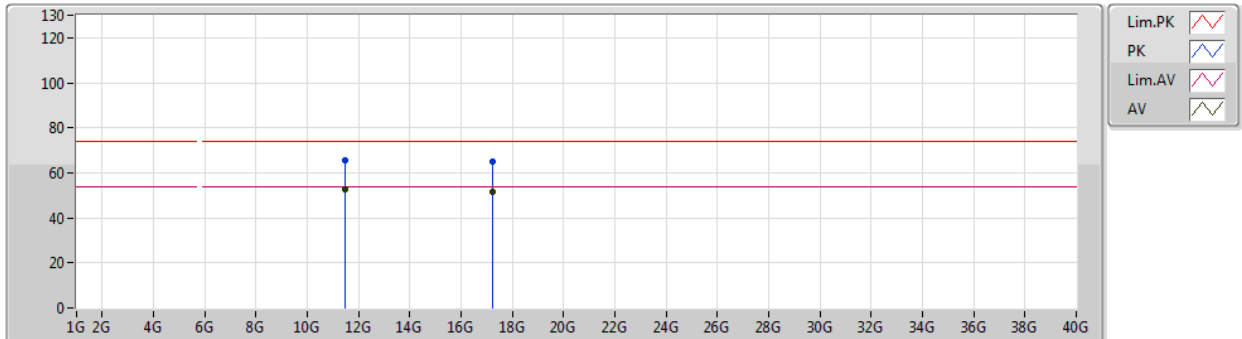


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7486G	111.86	Inf	-Inf	5.14	3	Horizontal	138	2.17	-
PK	5.6502G	67.29	68.35	-1.06	4.90	3	Horizontal	138	2.17	-
PK	5.7522G	122.58	Inf	-Inf	5.14	3	Horizontal	138	2.17	-
PK	5.9886G	59.39	68.20	-8.81	5.44	3	Horizontal	138	2.17	-

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5745MHz_TX

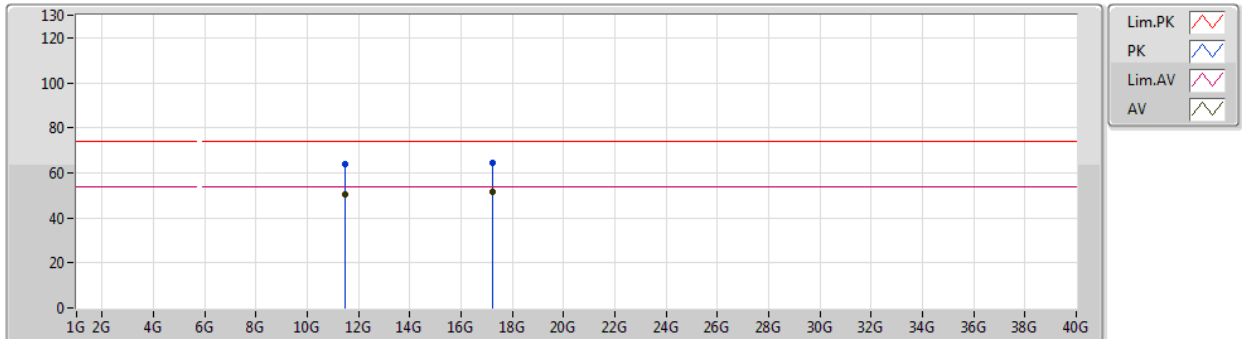


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.49042G	52.61	54.00	-1.39	15.04	3	Vertical	343	1.20	-				
AV	17.24778G	51.60	54.00	-2.40	20.09	3	Vertical	298	1.17	-				
PK	11.4906G	65.63	74.00	-8.37	15.04	3	Vertical	343	1.20	-				
PK	17.2245G	64.87	74.00	-9.13	19.92	3	Vertical	298	1.17	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

05/02/2019

5745MHz_TX

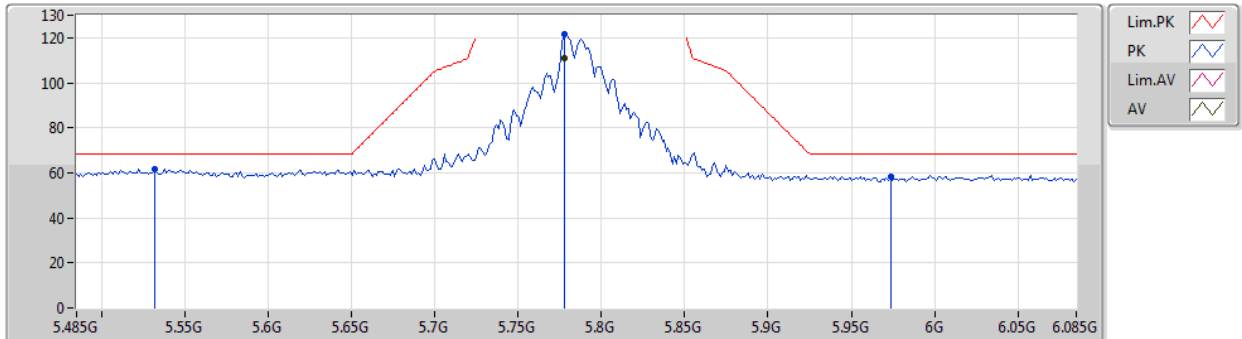


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.48472G	50.31	54.00	-3.69	15.05	3	Horizontal	293	1.50	-				
AV	17.24256G	51.57	54.00	-2.43	20.06	3	Horizontal	4	1.83	-				
PK	11.48316G	63.84	74.00	-10.16	15.05	3	Horizontal	293	1.50	-				
PK	17.24838G	64.18	74.00	-9.82	20.10	3	Horizontal	4	1.83	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5785MHz_TX

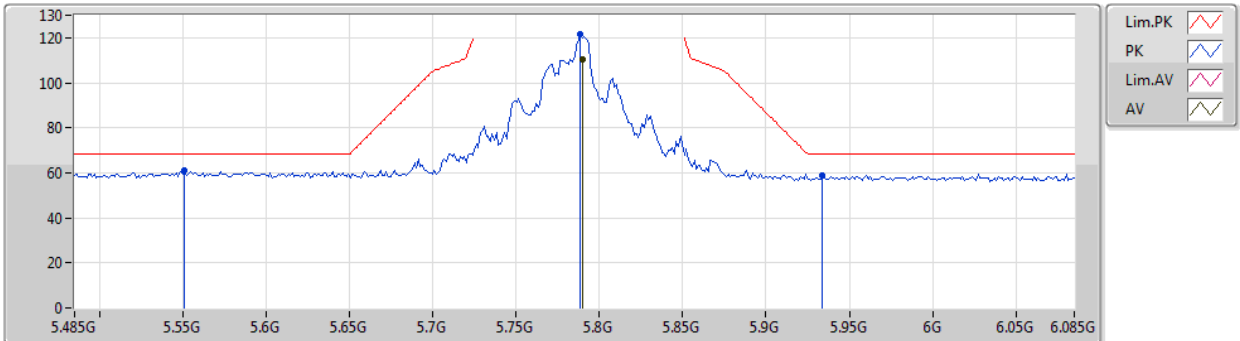


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7778G	110.94	Inf	-Inf	5.21	3	Vertical	203	1.96	-
PK	5.5318G	61.43	68.20	-6.77	4.63	3	Vertical	203	1.96	-
PK	5.7778G	121.85	Inf	-Inf	5.21	3	Vertical	203	1.96	-
PK	5.9734G	58.43	68.20	-9.77	5.44	3	Vertical	203	1.96	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5785MHz_TX

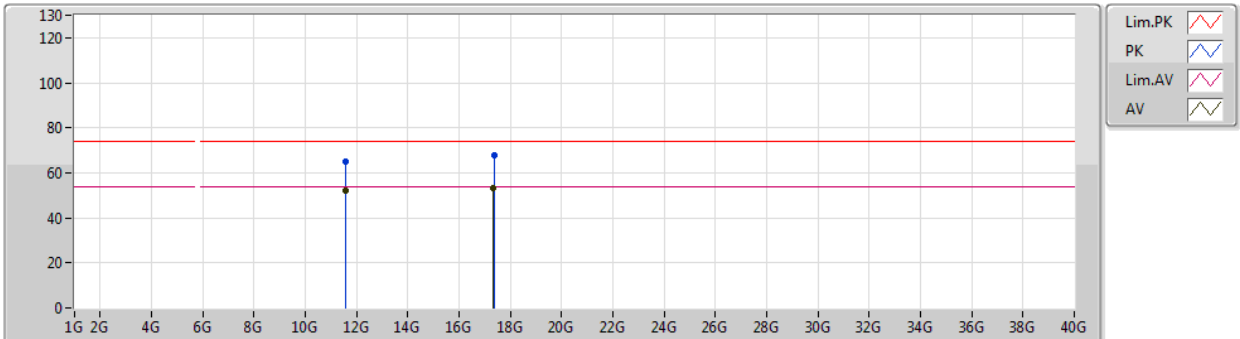


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7898G	110.63	Inf	-Inf	5.24	3	Horizontal	155	2.22	-
PK	5.551G	60.93	68.20	-7.27	4.68	3	Horizontal	155	2.22	-
PK	5.7886G	121.43	Inf	-Inf	5.23	3	Horizontal	155	2.22	-
PK	5.9338G	58.88	68.20	-9.32	5.39	3	Horizontal	155	2.22	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5785MHz_TX

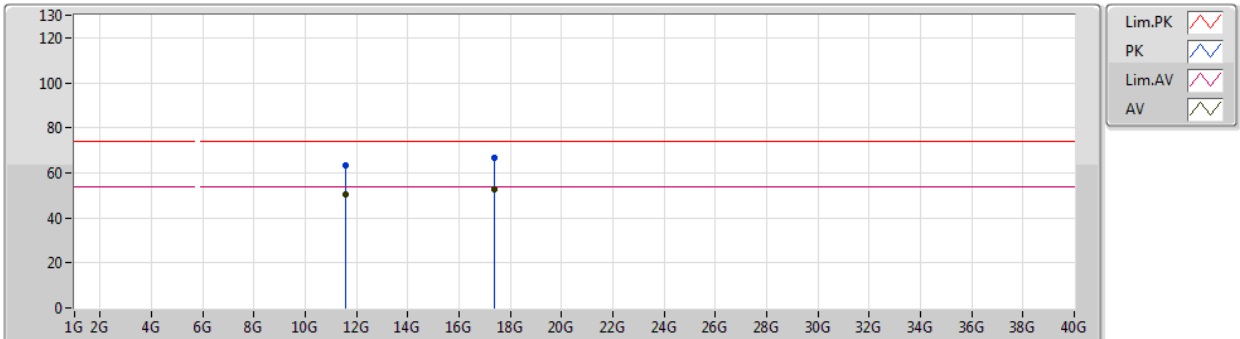


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.56994G	52.05	54.00	-1.95	14.96	3	Vertical	343	1.16	-
AV	17.35068G	53.47	54.00	-0.53	20.87	3	Vertical	40	1.77	-
PK	11.57054G	64.87	74.00	-9.13	14.96	3	Vertical	343	1.16	-
PK	17.35926G	67.80	74.00	-6.20	20.94	3	Vertical	40	1.77	-

802.11ac VHT20_Nss4,(MCS0)_4TX

5785MHz_TX

06/02/2019

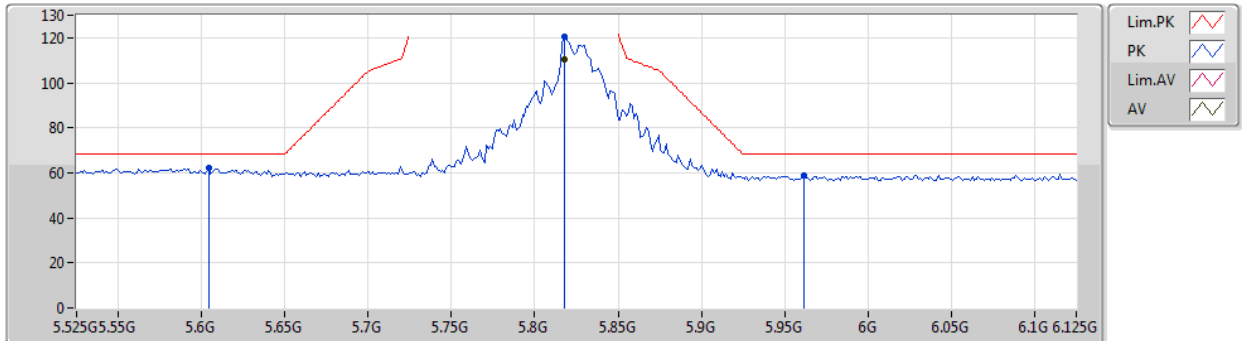


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.57036G	50.51	54.00	-3.49	14.96	3	Horizontal	274	1.40	-
AV	17.36226G	52.63	54.00	-1.37	20.96	3	Horizontal	152	1.55	-
PK	11.57012G	63.55	74.00	-10.45	14.96	3	Horizontal	274	1.40	-
PK	17.36232G	66.53	74.00	-7.47	20.96	3	Horizontal	152	1.55	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5825MHz_TX

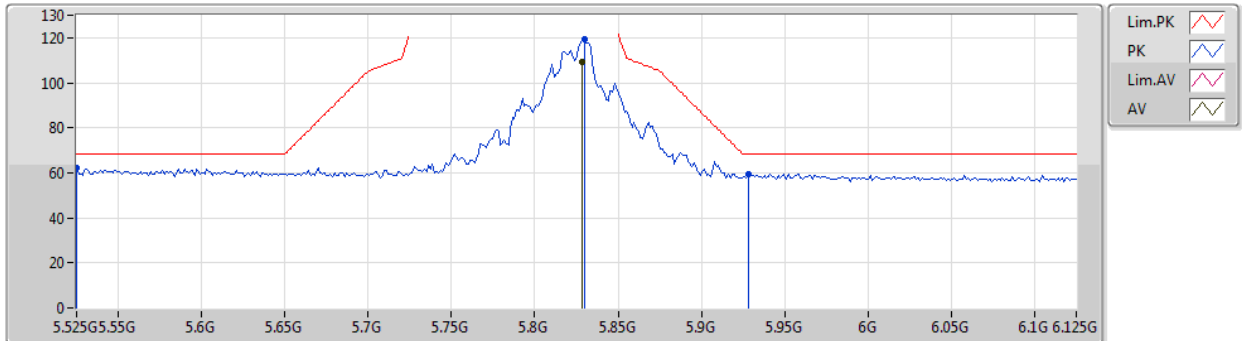


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.8178G	110.56	Inf	-Inf	5.28	3	Vertical	285	2.80	-
PK	5.6042G	62.43	68.20	-5.77	4.79	3	Vertical	285	2.80	-
PK	5.8178G	120.28	Inf	-Inf	5.28	3	Vertical	285	2.80	-
PK	5.9618G	58.96	68.20	-9.24	5.43	3	Vertical	285	2.80	-

802.11ac VHT20_Nss4,(MCS0)_4TX

5825MHz_TX

06/02/2019

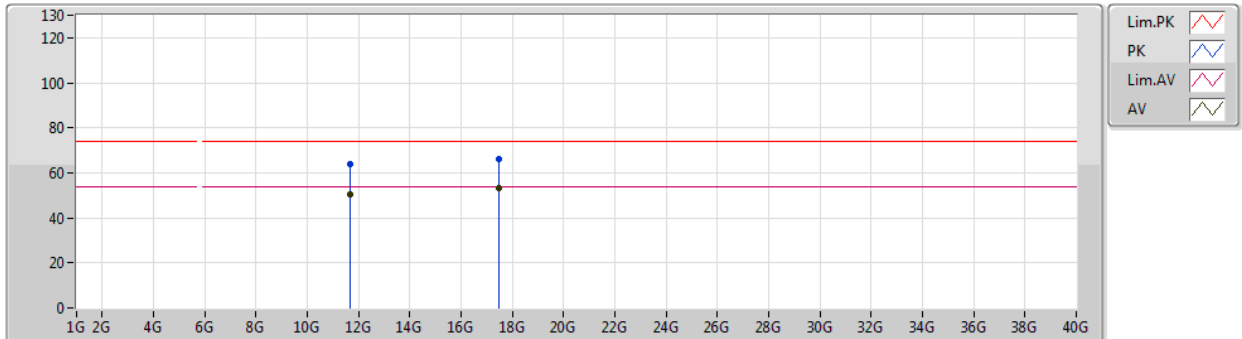


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.8286G	109.23	Inf	-Inf	5.28	3	Horizontal	128	1.77	-				
PK	5.525G	62.06	68.20	-6.14	4.64	3	Horizontal	128	1.77	-				
PK	5.8298G	119.61	Inf	-Inf	5.28	3	Horizontal	128	1.77	-				
PK	5.9282G	59.65	68.20	-8.55	5.38	3	Horizontal	128	1.77	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5825MHz_TX

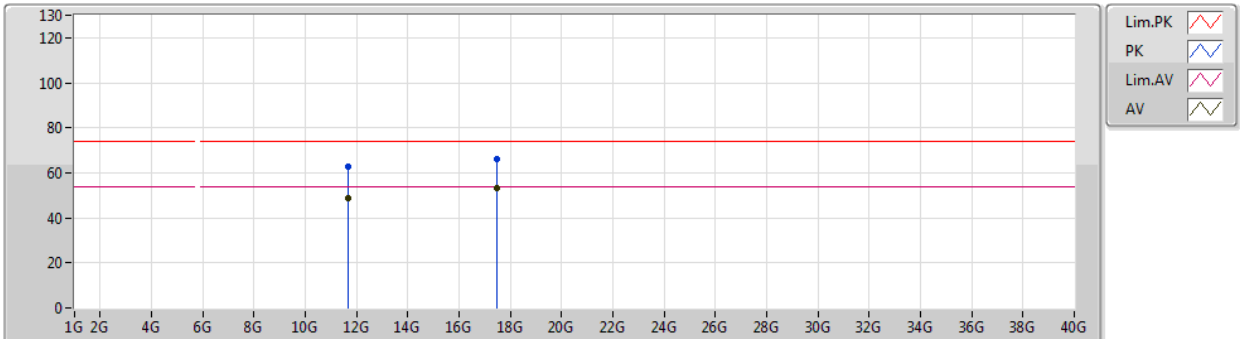


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.65036G	50.52	54.00	-3.48	14.85	3	Vertical	343	1.16	-
AV	17.47002G	53.45	54.00	-0.55	21.78	3	Vertical	88	1.50	-
PK	11.64988G	63.70	74.00	-10.30	14.85	3	Vertical	343	1.16	-
PK	17.46864G	66.21	74.00	-7.79	21.77	3	Vertical	88	1.50	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5825MHz_TX

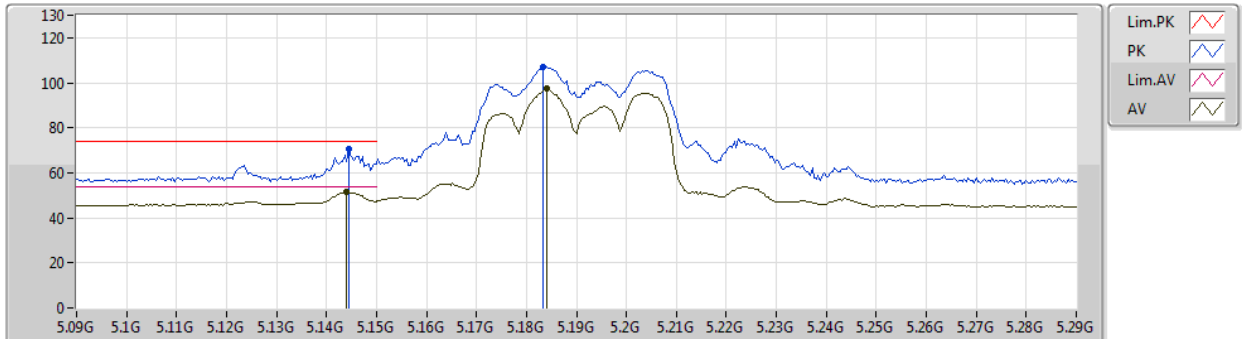


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.65876G	48.65	54.00	-5.35	14.84	3	Horizontal	272	1.50	-
AV	17.47908G	53.16	54.00	-0.84	21.85	3	Horizontal	55	2.80	-
PK	11.65816G	62.66	74.00	-11.34	14.84	3	Horizontal	272	1.50	-
PK	17.47026G	66.23	74.00	-7.77	21.78	3	Horizontal	55	2.80	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5190MHz_TX

06/02/2019

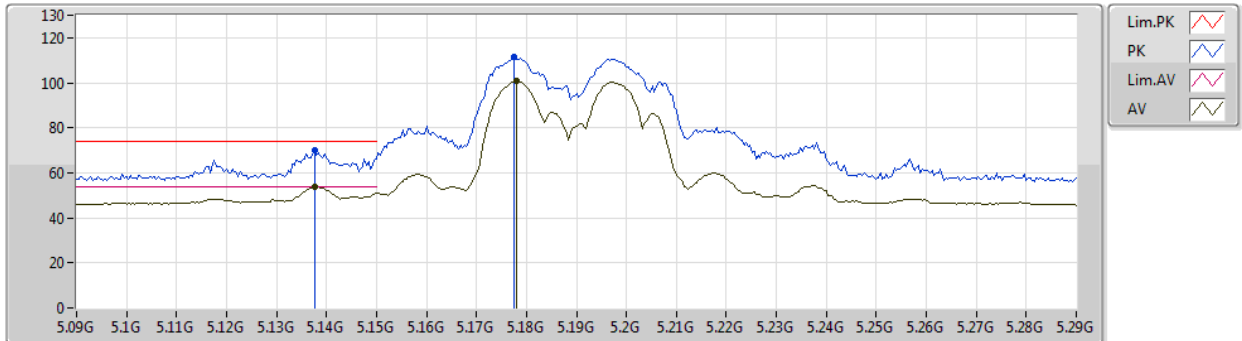


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.144G	51.50	54.00	-2.50	4.13	3	Vertical	17	1.50	-
AV	5.184G	97.39	Inf	-Inf	4.19	3	Vertical	17	1.50	-
PK	5.144G	70.78	74.00	-3.22	4.13	3	Vertical	17	1.50	-
PK	5.1832G	106.94	Inf	-Inf	4.19	3	Vertical	17	1.50	-

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5190MHz_TX

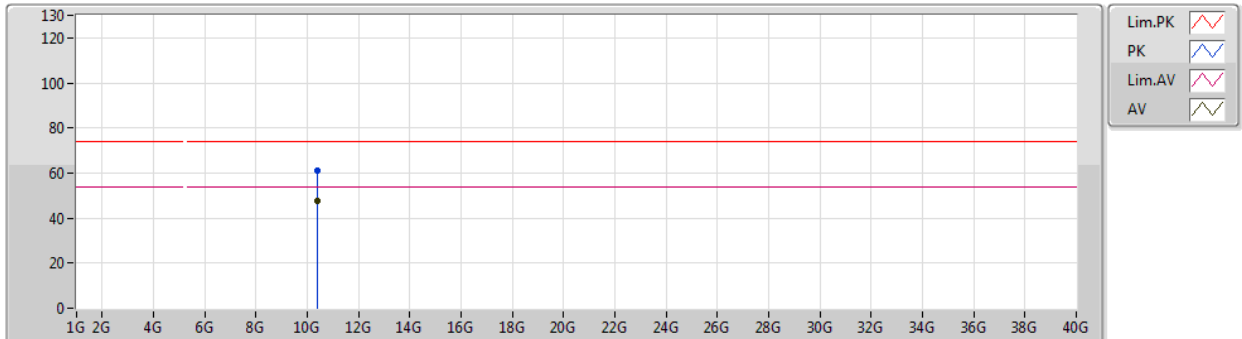


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1376G	53.77	54.00	-0.23	4.11	3	Horizontal	328	1.50	-
AV	5.178G	100.81	Inf	-Inf	4.18	3	Horizontal	328	1.50	-
PK	5.1376G	69.81	74.00	-4.19	4.11	3	Horizontal	328	1.50	-
PK	5.1776G	111.49	Inf	-Inf	4.18	3	Horizontal	328	1.50	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5190MHz_TX

06/02/2019

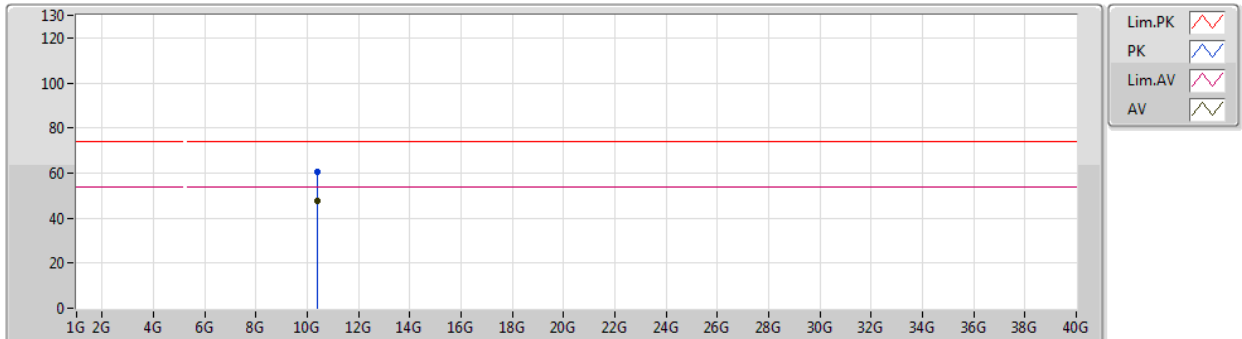


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	10.38846G	47.74	54.00	-6.26	14.18	3	Vertical	306	2.10	-				
PK	10.37814G	61.18	74.00	-12.82	14.15	3	Vertical	306	2.10	-				

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5190MHz_TX

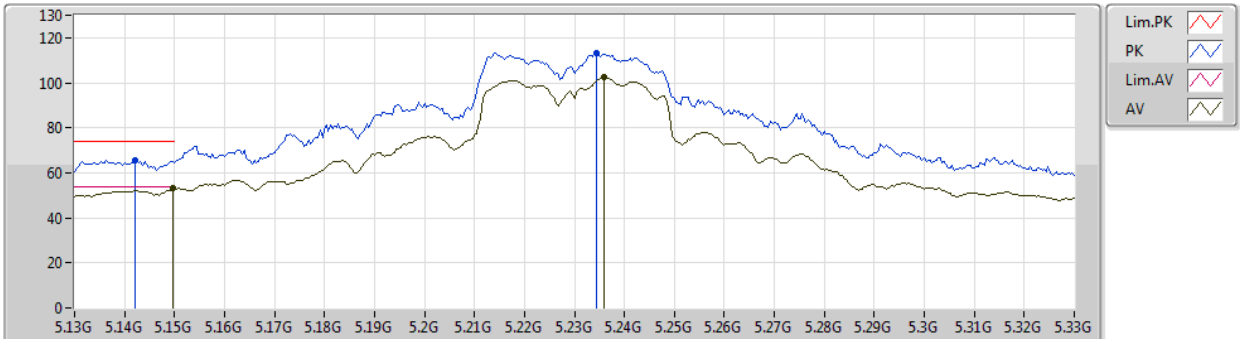


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.38516G	47.47	54.00	-6.53	14.17	3	Horizontal	301	2.94	-
PK	10.38294G	60.34	74.00	-13.66	14.17	3	Horizontal	301	2.94	-

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5230MHz_TX

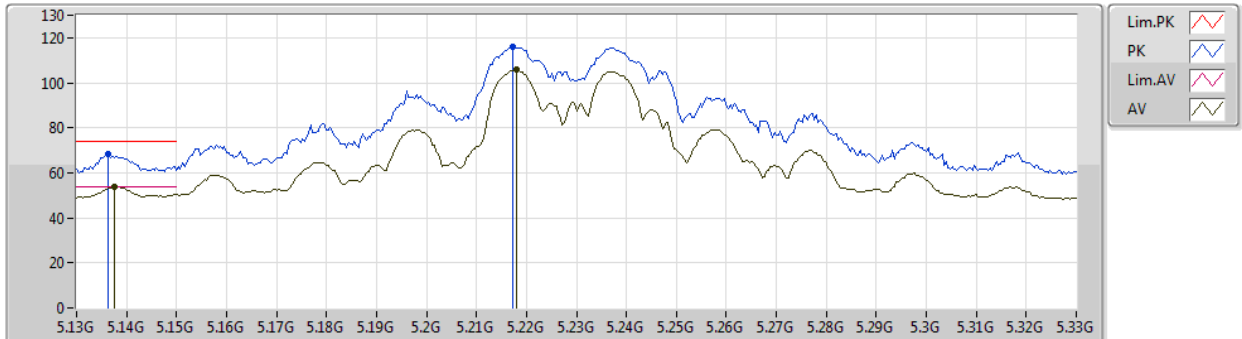


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1496G	52.97	54.00	-1.03	4.13	3	Vertical	14	2.99	-
AV	5.236G	102.69	Inf	-Inf	4.25	3	Vertical	14	2.99	-
PK	5.142G	65.46	74.00	-8.54	4.13	3	Vertical	14	2.99	-
PK	5.2344G	113.35	Inf	-Inf	4.25	3	Vertical	14	2.99	-

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5230MHz_TX

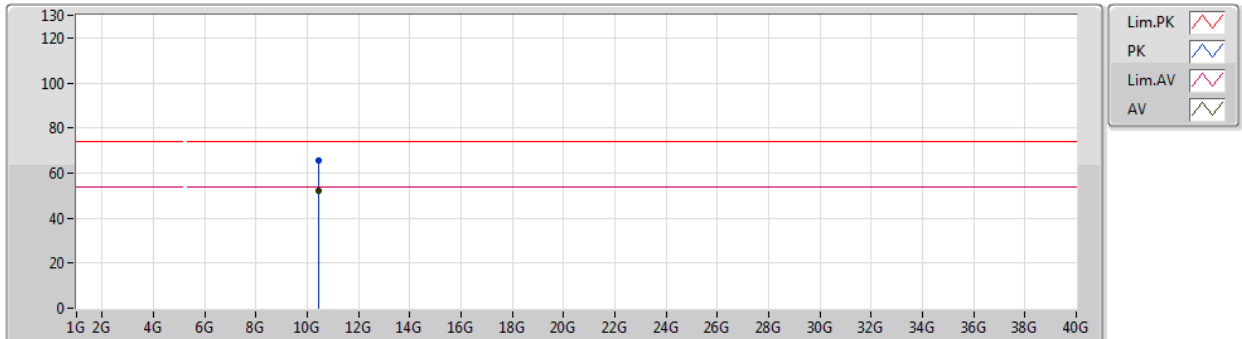


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1376G	53.63	54.00	-0.37	4.11	3	Horizontal	331	1.50	-
AV	5.218G	105.86	Inf	-Inf	4.23	3	Horizontal	331	1.50	-
PK	5.1364G	68.35	74.00	-5.65	4.11	3	Horizontal	331	1.50	-
PK	5.2172G	116.25	Inf	-Inf	4.23	3	Horizontal	331	1.50	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5230MHz_TX

06/02/2019

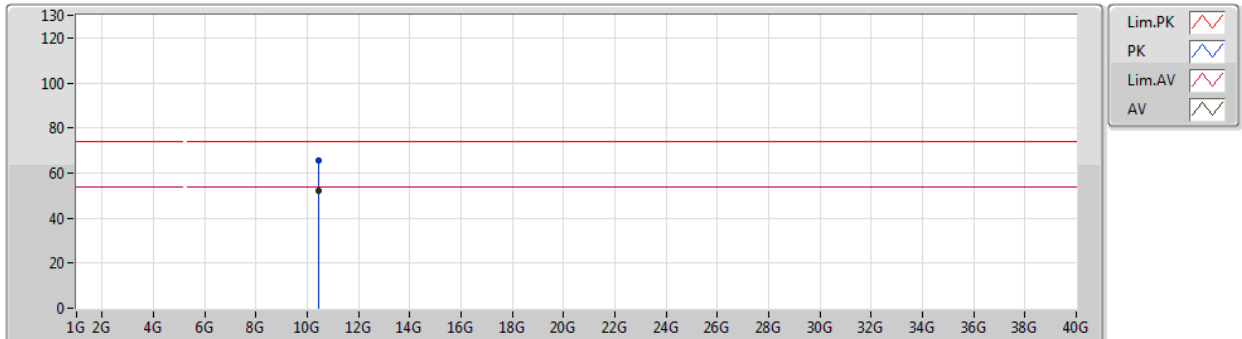


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4546G	52.30	54.00	-1.70	14.34	3	Vertical	300	1.77	-
PK	10.45394G	65.41	74.00	-8.59	14.33	3	Vertical	300	1.77	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5230MHz_TX

06/02/2019

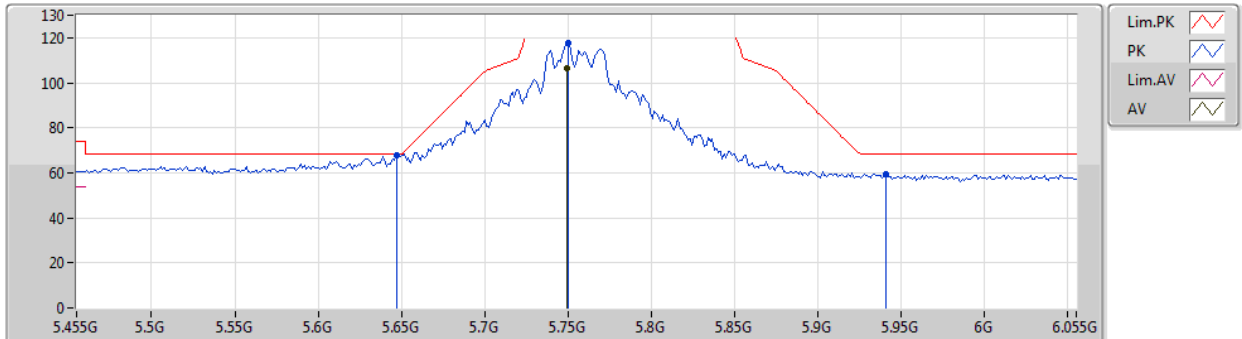


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4648G	52.13	54.00	-1.87	14.36	3	Horizontal	302	2.97	-
PK	10.4651G	65.41	74.00	-8.59	14.36	3	Horizontal	302	2.97	-

802.11ac VHT40_Nss4,(MCS0)_4TX

05/02/2019

5755MHz_TX

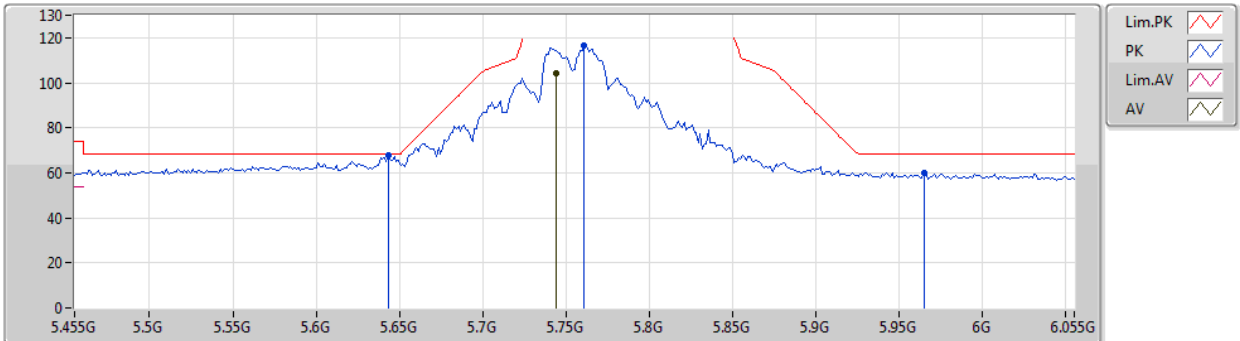


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.749G	106.51	Inf	-Inf	5.14	3	Vertical	292	2.87	-
PK	5.647G	67.53	68.20	-0.67	4.89	3	Vertical	292	2.87	-
PK	5.7502G	117.50	Inf	-Inf	5.14	3	Vertical	292	2.87	-
PK	5.941G	59.62	68.20	-8.58	5.40	3	Vertical	292	2.87	-

802.11ac VHT40_Nss4,(MCS0)_4TX

05/02/2019

5755MHz_TX

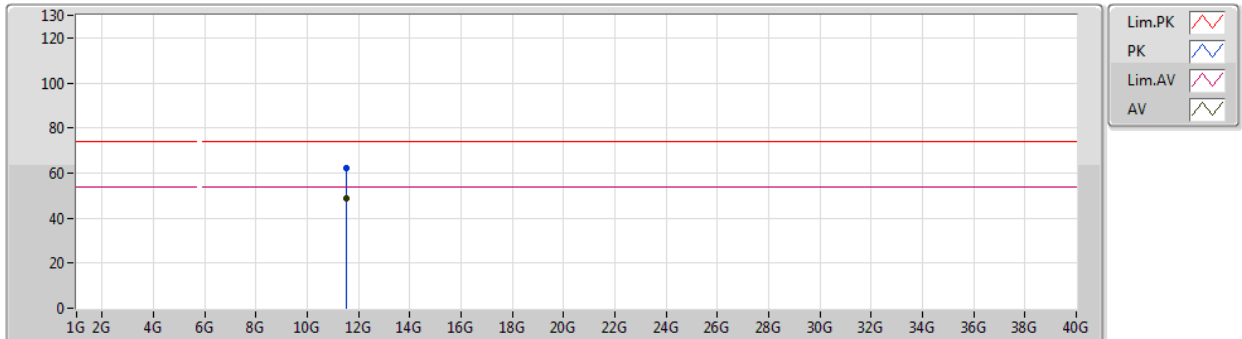


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7442G	104.47	Inf	-Inf	5.13	3	Horizontal	319	1.50	-
PK	5.6434G	67.70	68.20	-0.50	4.88	3	Horizontal	319	1.50	-
PK	5.761G	116.67	Inf	-Inf	5.17	3	Horizontal	319	1.50	-
PK	5.965G	60.23	68.20	-7.97	5.43	3	Horizontal	319	1.50	-

802.11ac VHT40_Nss4,(MCS0)_4TX

05/02/2019

5755MHz_TX

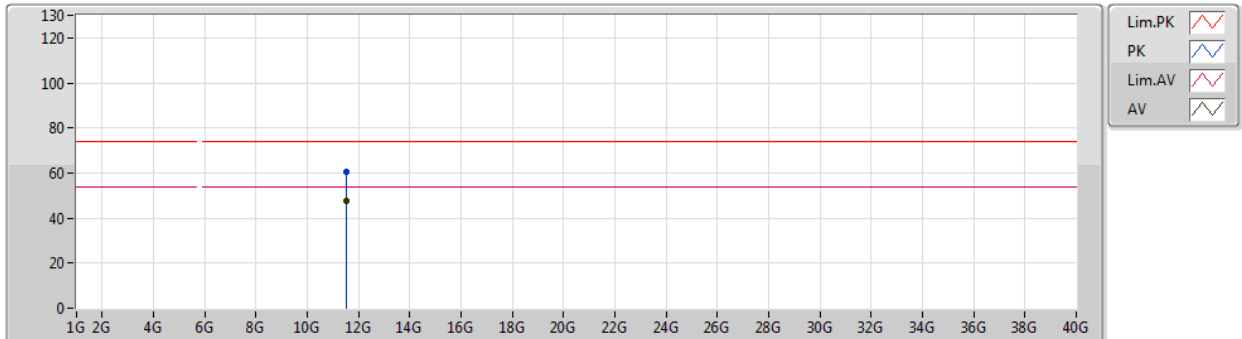


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.51024G	48.89	54.00	-5.11	15.02	3	Vertical	345	1.32	-
PK	11.5112G	61.97	74.00	-12.03	15.02	3	Vertical	345	1.32	-

802.11ac VHT40_Nss4,(MCS0)_4TX

05/02/2019

5755MHz_TX

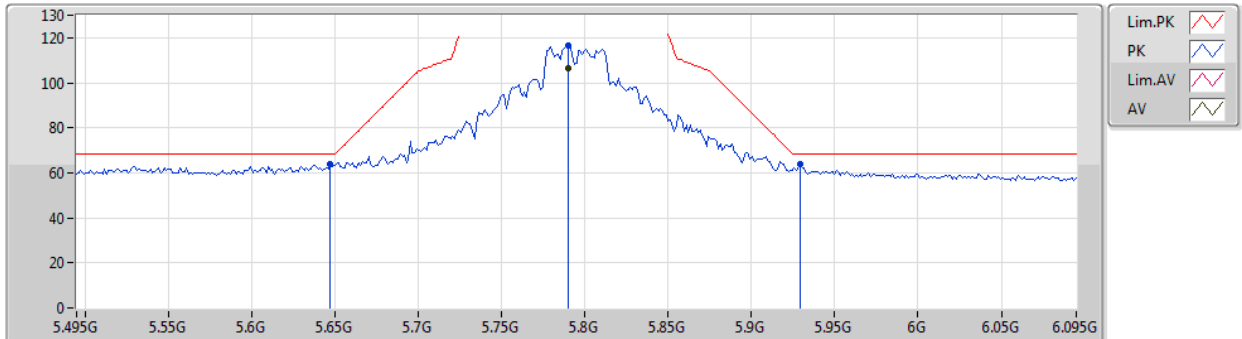


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.51042G	47.80	54.00	-6.20	15.02	3	Horizontal	271	1.44	-
PK	11.51054G	60.49	74.00	-13.51	15.02	3	Horizontal	271	1.44	-

802.11ac VHT40_Nss4,(MCS0)_4TX

05/02/2019

5795MHz_TX

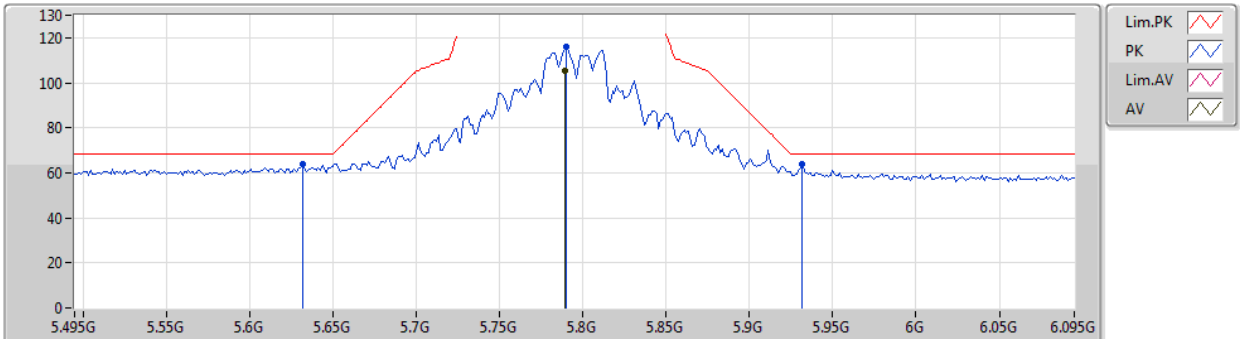


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7902G	106.38	Inf	-Inf	5.24	3	Vertical	305	2.94	-
PK	5.6474G	63.70	68.20	-4.50	4.89	3	Vertical	305	2.94	-
PK	5.7902G	116.51	Inf	-Inf	5.24	3	Vertical	305	2.94	-
PK	5.9294G	63.89	68.20	-4.31	5.38	3	Vertical	305	2.94	-

802.11ac VHT40_Nss4,(MCS0)_4TX

05/02/2019

5795MHz_TX

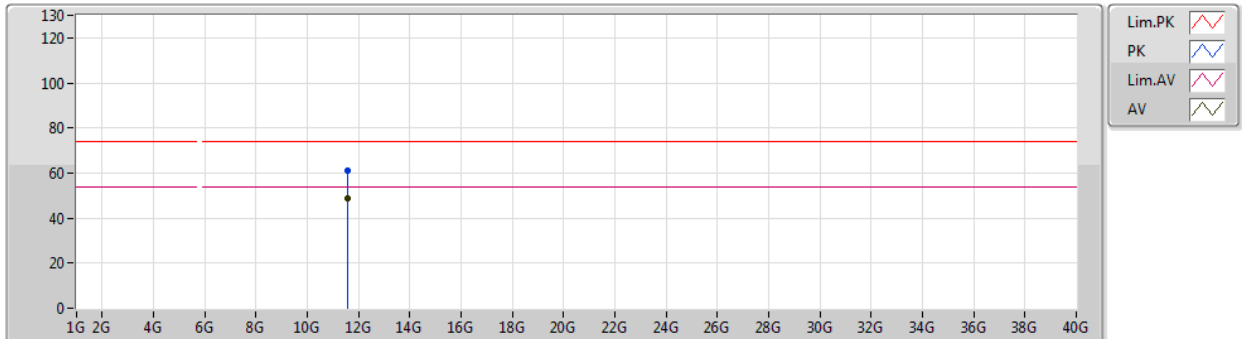


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.789G	105.28	Inf	-Inf	5.23	3	Horizontal	317	2.98	-
PK	5.6318G	63.75	68.20	-4.45	4.84	3	Horizontal	317	2.98	-
PK	5.7902G	115.77	Inf	-Inf	5.24	3	Horizontal	317	2.98	-
PK	5.9318G	63.71	68.20	-4.49	5.38	3	Horizontal	317	2.98	-

802.11ac VHT40_Nss4,(MCS0)_4TX

05/02/2019

5795MHz_TX

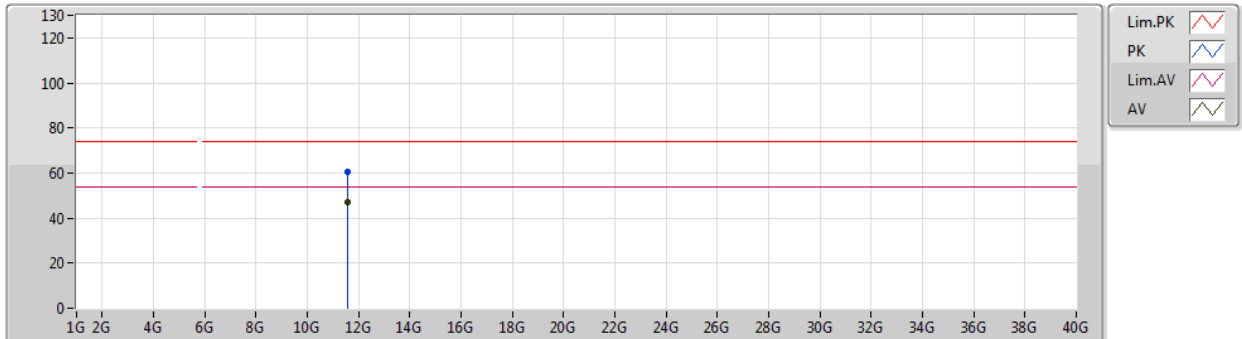


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.59012G	48.98	54.00	-5.02	14.92	3	Vertical	342	1.22	-
PK	11.59072G	61.31	74.00	-12.69	14.92	3	Vertical	342	1.22	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5795MHz_TX

05/02/2019

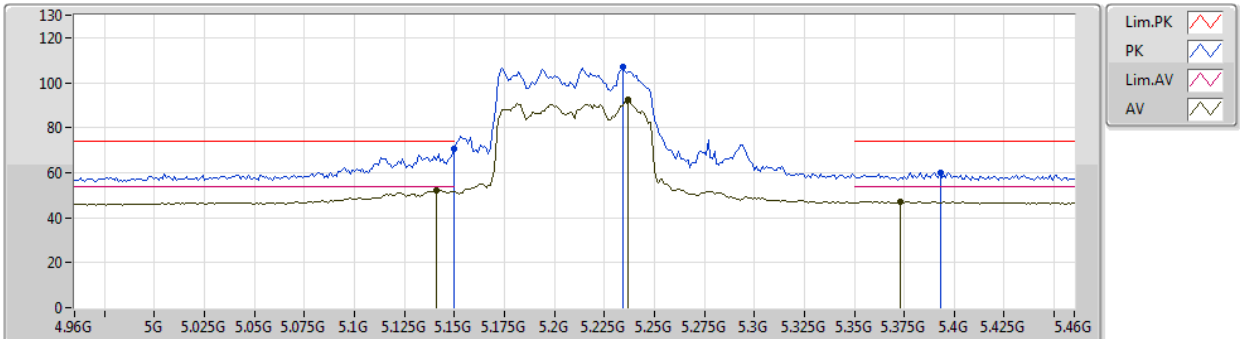


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.59792G	47.30	54.00	-6.70	14.92	3	Horizontal	271	1.50	-
PK	11.59744G	60.43	74.00	-13.57	14.92	3	Horizontal	271	1.50	-

802.11ac VHT80_Nss4,(MCS0)_4TX

05/02/2019

5210MHz_TX

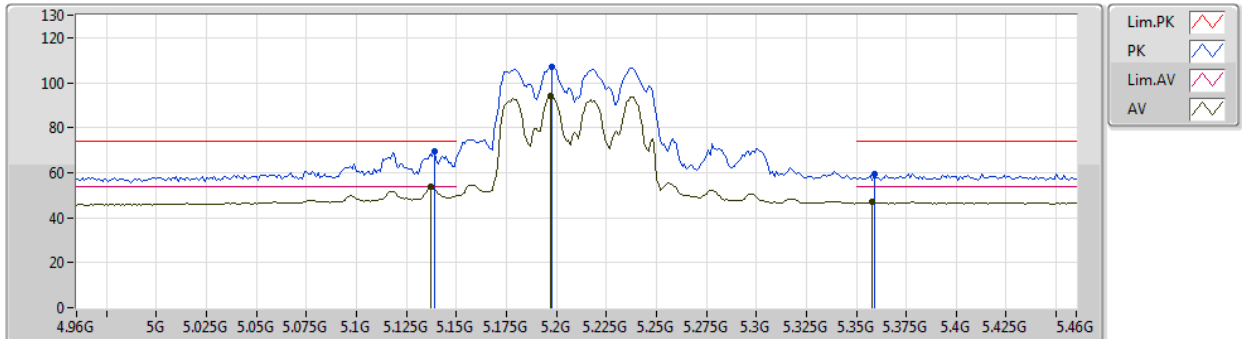


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.141G	52.24	54.00	-1.76	4.12	3	Vertical	21	2.99	-
AV	5.237G	92.44	Inf	-Inf	4.25	3	Vertical	21	2.99	-
AV	5.373G	47.13	54.00	-6.87	4.42	3	Vertical	21	2.99	-
PK	5.15G	70.50	74.00	-3.50	4.13	3	Vertical	21	2.99	-
PK	5.234G	107.18	Inf	-Inf	4.25	3	Vertical	21	2.99	-
PK	5.393G	60.00	74.00	-14.00	4.45	3	Vertical	21	2.99	-

802.11ac VHT80_Nss4,(MCS0)_4TX

05/02/2019

5210MHz_TX

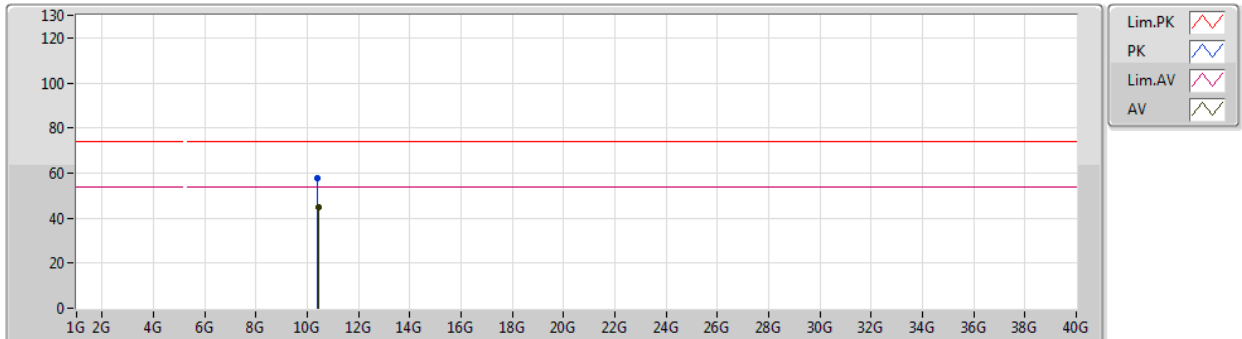


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.137G	53.56	54.00	-0.44	4.11	3	Horizontal	322	1.50	-				
AV	5.197G	94.30	Inf	-Inf	4.21	3	Horizontal	322	1.50	-				
AV	5.358G	47.05	54.00	-6.95	4.40	3	Horizontal	322	1.50	-				
PK	5.139G	69.54	74.00	-4.46	4.11	3	Horizontal	322	1.50	-				
PK	5.198G	106.96	Inf	-Inf	4.21	3	Horizontal	322	1.50	-				
PK	5.359G	59.63	74.00	-14.37	4.41	3	Horizontal	322	1.50	-				

802.11ac VHT80_Nss4,(MCS0)_4TX

05/02/2019

5210MHz_TX

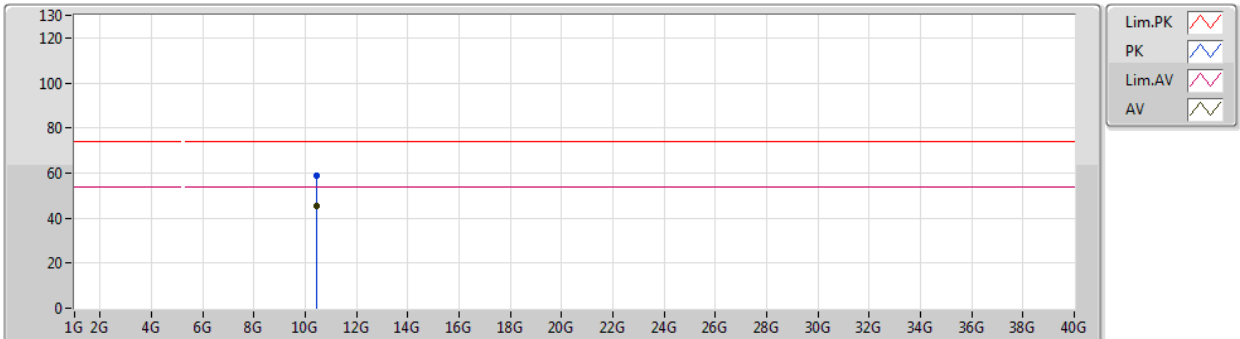


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.43326G	44.82	54.00	-9.18	14.28	3	Vertical	297	1.70	-
PK	10.41394G	57.85	74.00	-16.15	14.24	3	Vertical	297	1.70	-

802.11ac VHT80_Nss4,(MCS0)_4TX

5210MHz_TX

05/02/2019

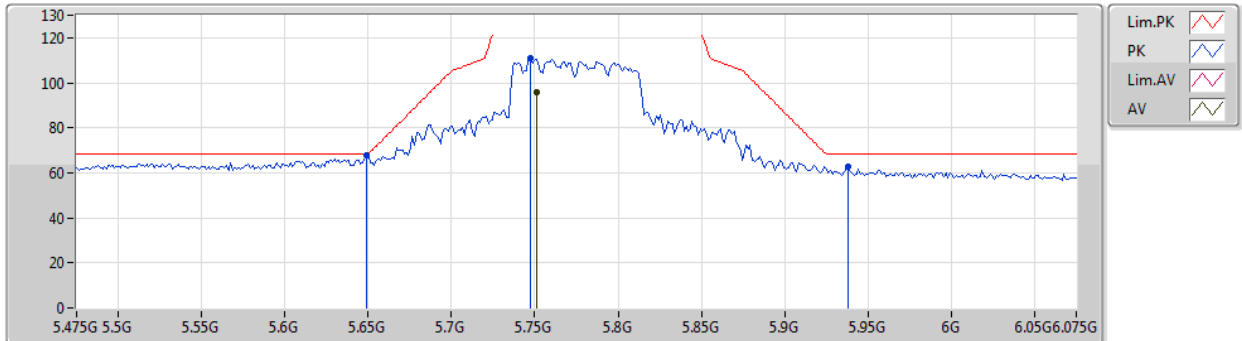


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.43068G	45.60	54.00	-8.40	14.28	3	Horizontal	262	1.13	-
PK	10.42996G	59.02	74.00	-14.98	14.28	3	Horizontal	262	1.13	-

802.11ac VHT80_Nss4,(MCS0)_4TX

05/02/2019

5775MHz_TX

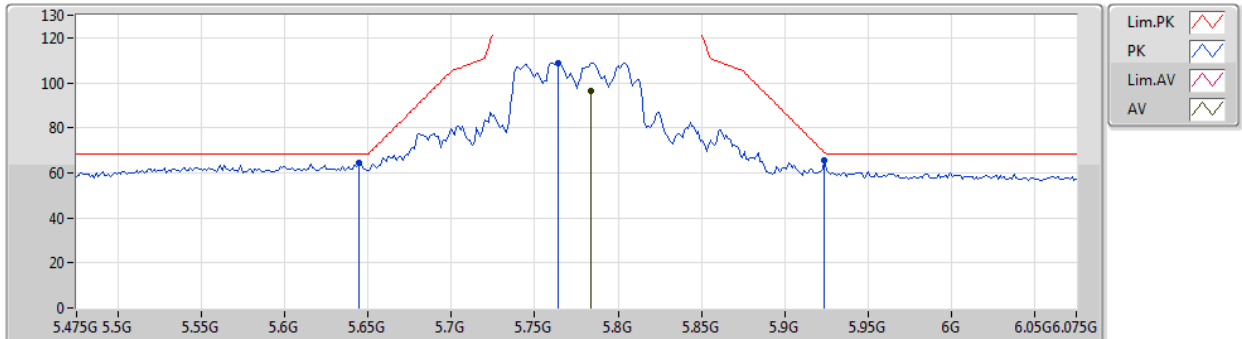


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.751G	95.90	Inf	-Inf	5.14	3	Vertical	301	2.99	-
PK	5.649G	68.05	68.20	-0.15	4.89	3	Vertical	301	2.99	-
PK	5.7474G	110.81	Inf	-Inf	5.14	3	Vertical	301	2.99	-
PK	5.9382G	62.67	68.20	-5.53	5.39	3	Vertical	301	2.99	-

802.11ac VHT80_Nss4,(MCS0)_4TX

05/02/2019

5775MHz_TX

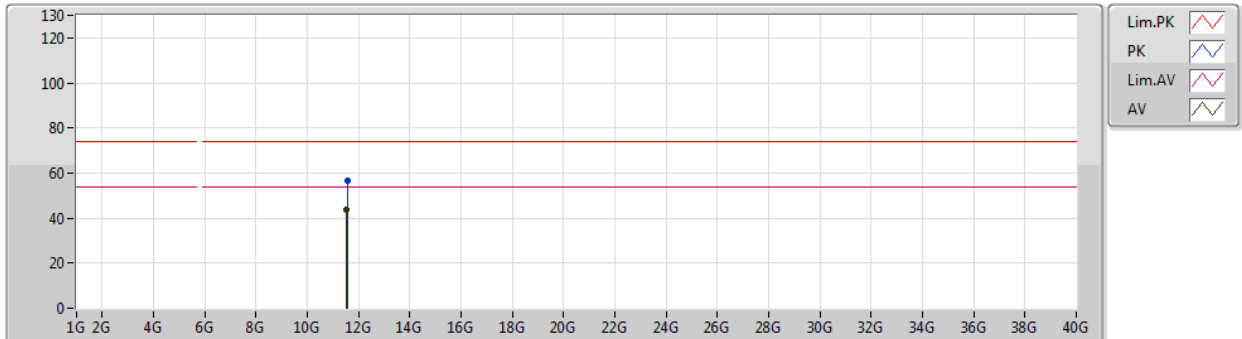


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7834G	96.46	Inf	-Inf	5.22	3	Horizontal	321	1.01	-
PK	5.6442G	64.29	68.20	-3.91	4.88	3	Horizontal	321	1.01	-
PK	5.7642G	108.88	Inf	-Inf	5.17	3	Horizontal	321	1.01	-
PK	5.9238G	65.69	69.09	-3.40	5.39	3	Horizontal	321	1.01	-

802.11ac VHT80_Nss4,(MCS0)_4TX

05/02/2019

5775MHz_TX

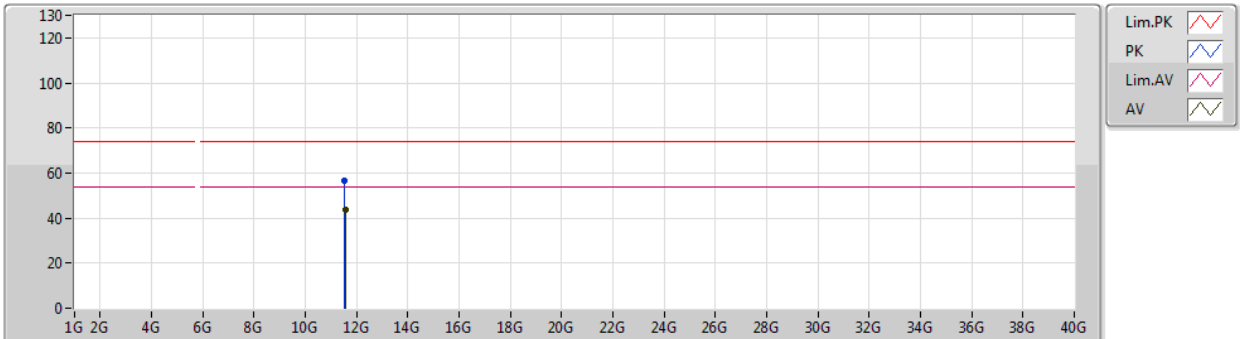


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.54226G	43.50	54.00	-10.50	14.98	3	Vertical	223	1.50	-
PK	11.56338G	56.52	74.00	-17.48	14.95	3	Vertical	223	1.50	-

802.11ac VHT80_Nss4,(MCS0)_4TX

05/02/2019

5775MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.55264G	43.61	54.00	-10.39	14.97	3	Horizontal	65	1.98	-
PK	11.53776G	56.55	74.00	-17.45	14.98	3	Horizontal	65	1.98	-