

FCC Test Report

FCC ID : SWX-UBB
Equipment : UniFi Building Bridge
Brand Name : UBIQUITI
Model Name : UBB
Applicant : Ubiquiti Inc.
685 Third Avenue, New York, New York 10017 USA
Manufacturer : Ubiquiti Inc.
685 Third Avenue, New York, New York 10017 USA
Standard : 47 CFR FCC Part 15.407

The product was received on May 02, 2019, and testing was started from May 02, 2019 and completed on May 03, 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

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

Table of Contents

HISTORY OF THIS TEST REPORT	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Information.....	5
1.2 Testing Applied Standards	8
1.3 Testing Location Information	8
1.4 Measurement Uncertainty	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	11
3 TRANSMITTER TEST RESULT	12
3.1 Emission Bandwidth	12
3.2 Maximum Conducted Output Power	13
3.3 Peak Power Spectral Density.....	15
3.4 Unwanted Emissions.....	17
4 TEST EQUIPMENT AND CALIBRATION DATA	22
APPENDIX A. TEST RESULTS OF EMISSION BANDWIDTH	
APPENDIX B. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	
APPENDIX C. TEST RESULTS OF PEAK POWER SPECTRAL DENSITY	
APPENDIX D. TEST RESULTS OF UNWANTED EMISSIONS	
APPENDIX E. TEST PHOTOS	
PHOTOGRAPHS OF EUT V01	



History of this test report

TEL : 886-3-3273456
FAX : 886-3-3270973
Report Template No.: HE1-D1 Ver.2.4
FCC ID: SWX-UBB

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	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Conducted Output Power	PASS	-
3.3	15.407(a)	Peak Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

None

Reviewed by: Sam Tsai

Report Producer: Jenny Yang

1 General Description

1.1 Information

1.1.1 RF General Information

P to M_Indoor & outdoor

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)
5250-5350	n (HT20), ac (VHT20)	5260-5320
5470-5725		5500-5700
5250-5350	n (HT40), ac (VHT40)	5270-5310
5470-5725		5510-5670

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11ac VHT20	20	2TX
5.47-5.725GHz	802.11ac VHT20	20	2TX
5.25-5.35GHz	802.11ac VHT40	40	2TX
5.47-5.725GHz	802.11ac VHT40	40	2TX

P to P

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)
5250-5350	n (HT20), ac (VHT20)	5260-5320
5470-5725		5500-5700
5250-5350	n (HT40), ac (VHT40)	5270-5310
5470-5725		5510-5670
5250-5350	ac (VHT80)	5290
5470-5725		5530-5610

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11ac VHT20	20	2TX
5.47-5.725GHz	802.11ac VHT20	20	2TX
5.25-5.35GHz	802.11ac VHT40	40	2TX
5.47-5.725GHz	802.11ac VHT40	40	2TX
5.25-5.35GHz	802.11ac VHT80	80	2TX
5.47-5.725GHz	802.11ac VHT80	80	2TX

Note:

- ♦ 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.
- ♦ 802.11ac VHT80 only for P to P mode

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	-	-	internal antenna	muruta
2	-	-	internal antenna	muruta

Ant.	Port	Gain (dBi)	
		2.4G	5G
1	1	2	10
2	2	-	10

Note 1: The EUT has two antennas.

For 2.4GHz function:

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

Ant. 1 (port 1) could transmit/receive simultaneously.

For 5GHz function:

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

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

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From PoE		
EUT Function	☒	Outdoor	☒ Indoor
	☒	Fixed P2P	☐ Client
Beamforming Function	☐	With beamforming	☒ Without beamforming
TPC Function	☒	With TPC Function	☐ Without TPC Function
Weather Band	☒	With 5600~5650MHz	☐ Without 5600~5650MHz
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.: ...		
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.: ...		
☐	Other:		

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20	0.757	1.21	249.375u	10k
802.11ac VHT40	0.647	1.89	250u	10k
802.11ac VHT80	0.729	1.37	250u	10k

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

1.1.5 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR951623AN

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
Frequency bands U-NII-2A and U-NII-2C was added	Emission Bandwidth, Maximum Conducted Output Power, Peak Power Spectral Density, Unwanted Emissions
The Applicant's Name and Manufacturer's Name were updated	N/A

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
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH06-HY	Gary	23.5~25.6°C / 65~69%	03/May/2019
Radiated	03CH09-HY	Lego	22.6~23.8°C / 54.5~58.9%	02/May/2019~03/May/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
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software	CMD
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2.3 The Worst Case Measurement Configuration

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	PoE Mode	
Operating Mode > 1GHz	CTX	
Orthogonal Planes of EUT	Y Plane	Z 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
2	WLAN 2.4GHz + 60GHz
Refer to Sporton Test Report No.: FA951623-04 for Co-location RF Exposure Evaluation.	

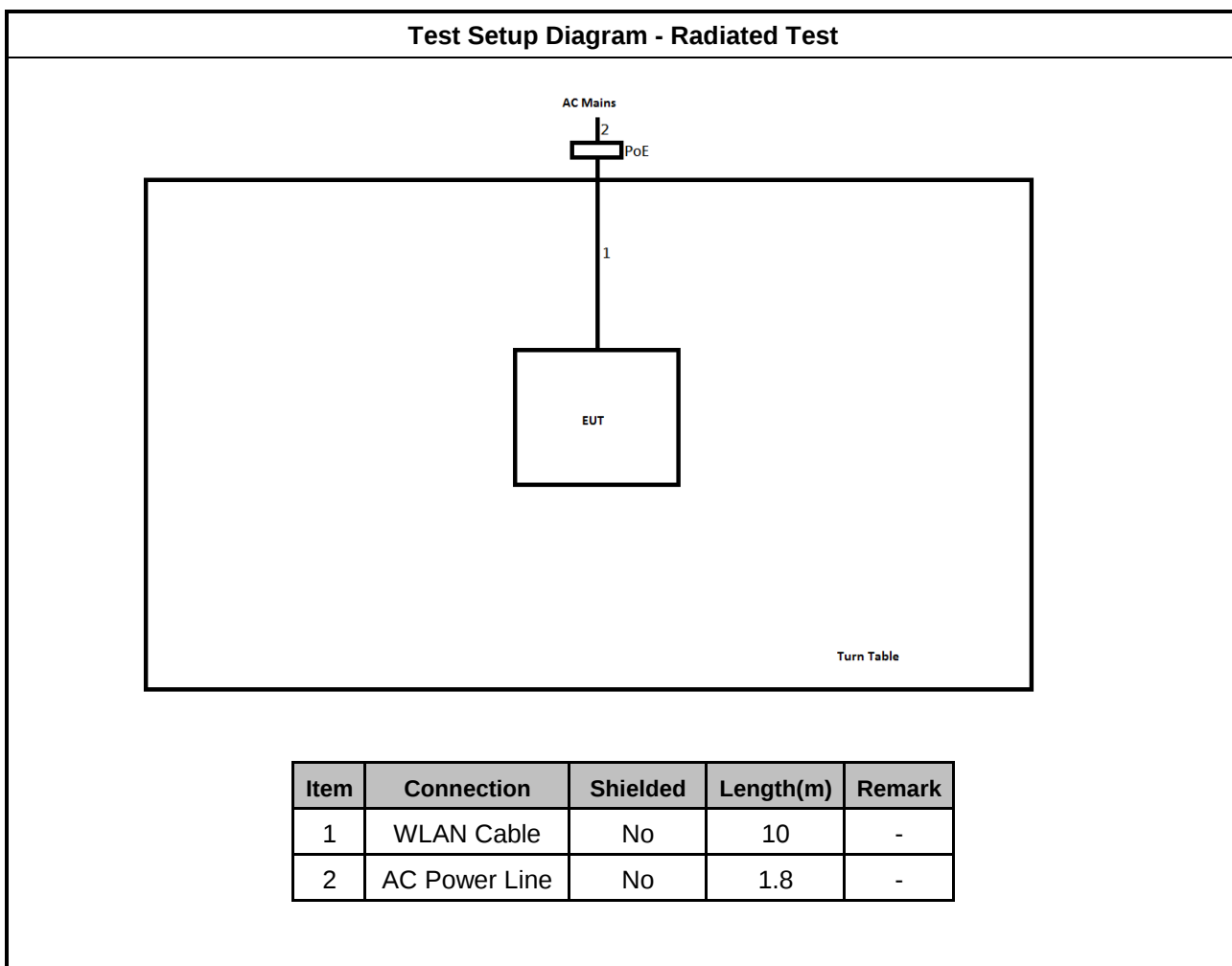
2.4 Accessories and Support Equipment

Accessories				
PoE Adapter	Brand Name	UBIQUITI	Model Name	GP-V480-032G
	Manufacturer	UBIQUITI		
	Power Rating	I/P: 100- 240Vac, 0.5A, O/P: 48Vdc, 0.32A		

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	R33002 / DOC
2	Adapter for NB	DELL	HA65NM130	R35737 / DOC

2.5 Test Setup Diagram



3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 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.

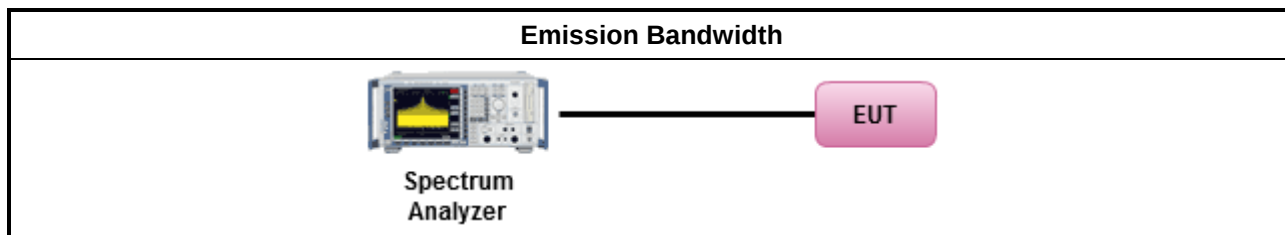
3.1.2 Measuring Instruments

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

3.1.3 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.

3.1.4 Test Setup



3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.2 Maximum Conducted Output Power

3.2.1 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.	

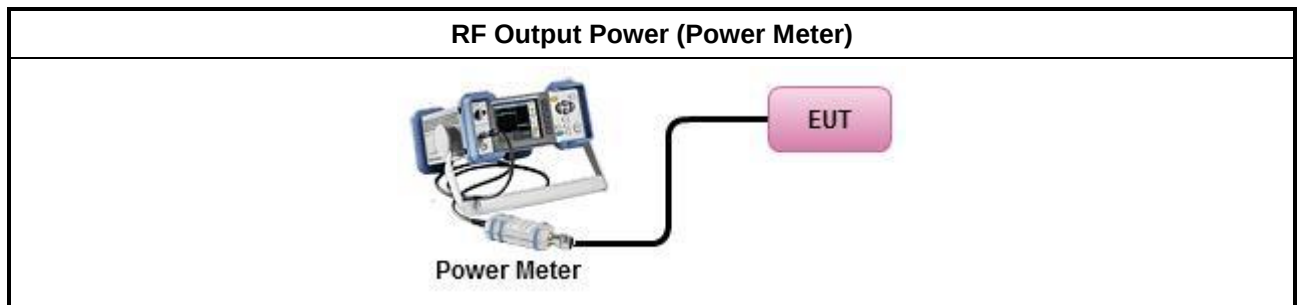
3.2.2 Measuring Instruments

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

3.2.3 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: $P_{\text{total}} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Peak Power Spectral Density

3.3.1 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.	

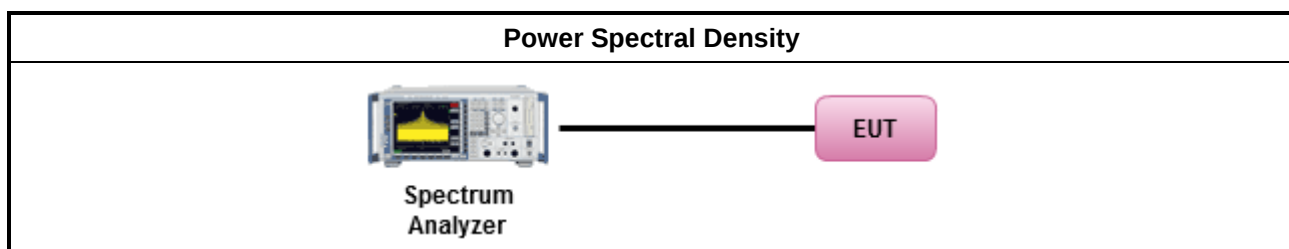
3.3.2 Measuring Instruments

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

3.3.3 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]) $EIRP_{total} = PPSD_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Peak Power Spectral Density

Refer as Appendix C

3.4 Unwanted Emissions

3.4.1 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).	

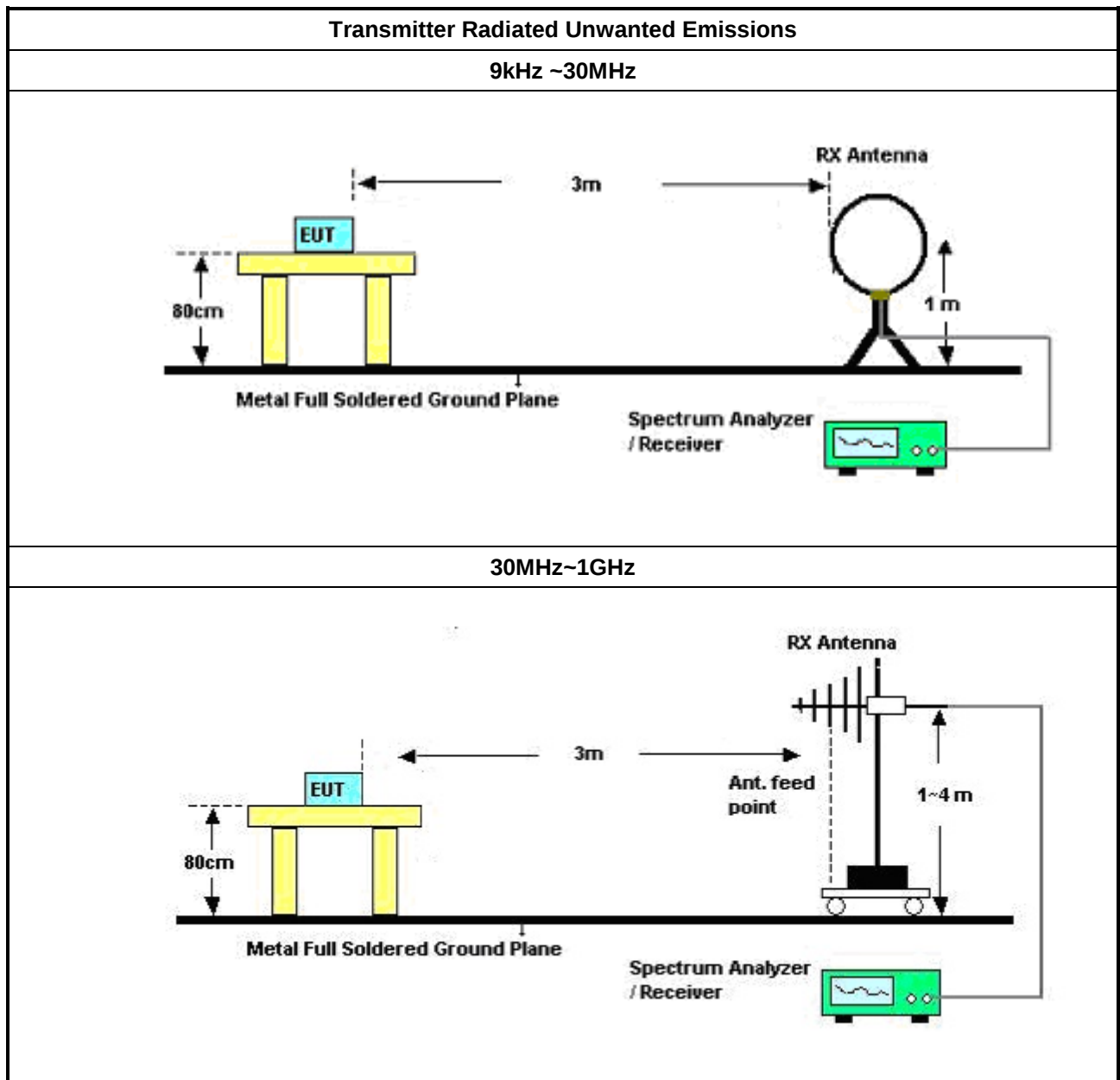
3.4.2 Measuring Instruments

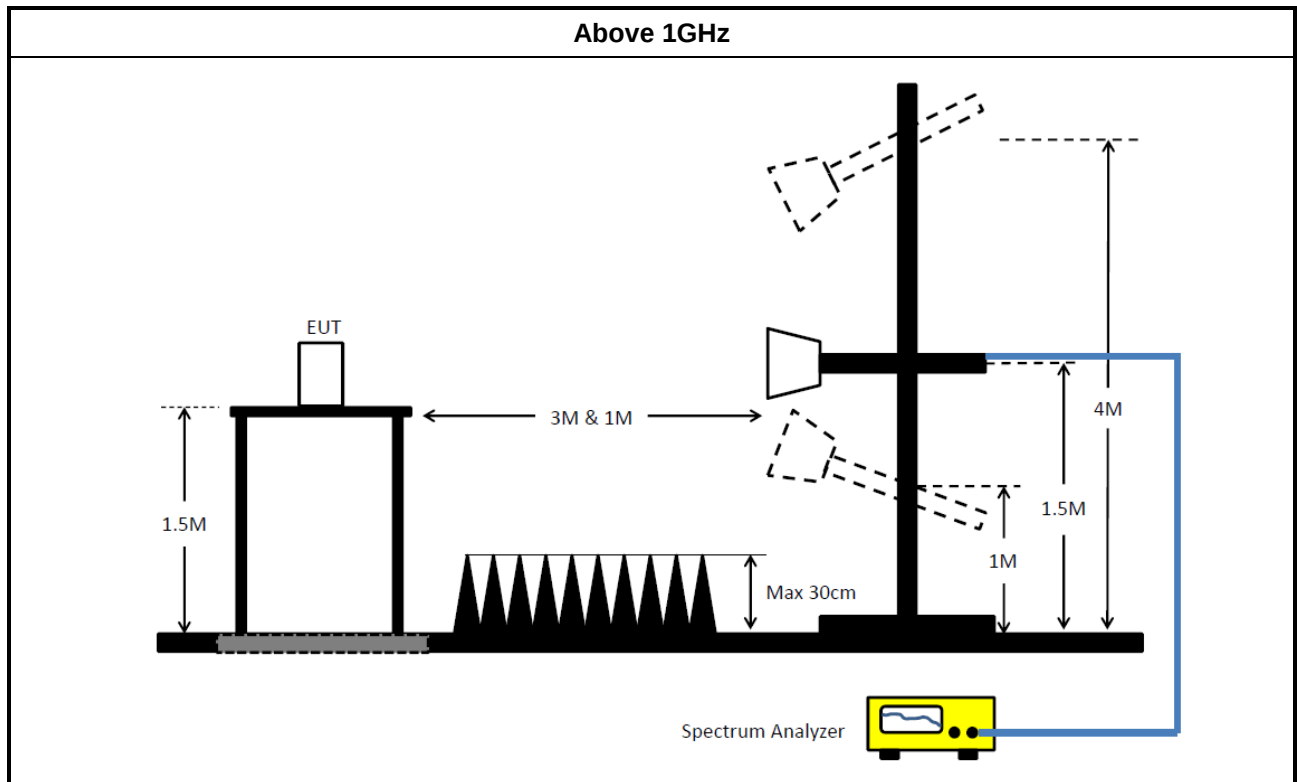
Refer a test equipment and calibration data table in this test report.

3.4.3 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.	

3.4.4 Test Setup





3.4.5 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.

3.4.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D

4 Test Equipment and Calibration Data

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	19/Feb/2019	18/Feb/2020
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	19/Feb/2019	18/Feb/2020
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	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	22/Apr/2019	21/Apr/2020
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	14/Jun/2018	13/Jun/2019
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	10/May/2018	09/May/2019
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	26/Apr/2019	25/Apr/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	31/Jul/2018	30/Jul/2019
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	02/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	29/Apr/2019	28/Apr/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170614	18GHz~40GHz	09/Feb/2018	08/Feb/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	15/Mar/2019	14/Mar/2020
LF-CABLE-2019 0218	Jye Bao	RG142	CB028	9kHz ~ 1GHz	18/Feb/2019	17/Feb/2020
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	13/Mar/2019	12/Mar/2020
Turn Table	ChainTek	T-200S	1308028	-	NCR	NCR
Antenna Mast	ChainTek	MBS-400	1308049	-	NCR	NCR
Controller	ChainTek	3000	MF780208325	-	NCR	NCR
AC Power Source	G.W	AFC-1KW	F104070001	-	NCR	NCR
Soldering iron	XRTRONIC	1f15	-	-	NCR	NCR
Site V.S.W.R	Riken	3m SAC	03CH09-HY	-	14/Jun/2018	13/Jun/2019

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	22.02M	16.522M	16M5D1D	21.48M	16.432M
802.11ac VHT40_Nss1,(MCS0)_2TX	43.02M	36.402M	36M4D1D	42.42M	36.222M
802.11ac VHT80_Nss1,(MCS0)_2TX	84.72M	76.162M	76M2D1D	83.76M	76.162M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	21.78M	16.522M	16M5D1D	21.33M	16.402M
802.11ac VHT40_Nss1,(MCS0)_2TX	42.9M	36.402M	36M4D1D	41.4M	36.342M
802.11ac VHT80_Nss1,(MCS0)_2TX	84.6M	76.042M	76M0D1D	84.24M	75.922M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth;

Result

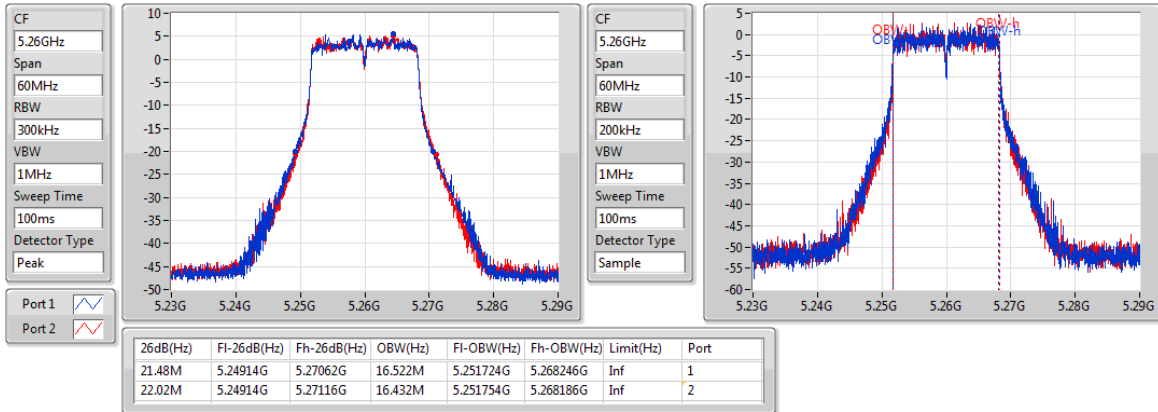
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	Inf	21.48M	16.522M	22.02M	16.432M
5300MHz_TnomVnom	Pass	Inf	21.6M	16.492M	21.81M	16.432M
5320MHz_TnomVnom	Pass	Inf	21.6M	16.522M	21.78M	16.492M
5500MHz_TnomVnom	Pass	Inf	21.54M	16.462M	21.54M	16.492M
5580MHz_TnomVnom	Pass	Inf	21.75M	16.462M	21.33M	16.402M
5700MHz_TnomVnom	Pass	Inf	21.78M	16.522M	21.66M	16.462M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	Inf	42.66M	36.282M	42.66M	36.222M
5310MHz_TnomVnom	Pass	Inf	42.42M	36.402M	43.02M	36.342M
5510MHz_TnomVnom	Pass	Inf	42.48M	36.402M	42M	36.342M
5550MHz_TnomVnom	Pass	Inf	42.9M	36.342M	42.18M	36.342M
5670MHz_TnomVnom	Pass	Inf	42.66M	36.342M	41.4M	36.342M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	Inf	83.76M	76.162M	84.72M	76.162M
5530MHz_TnomVnom	Pass	Inf	84.36M	75.922M	84.24M	75.922M
5610MHz_TnomVnom	Pass	Inf	84.36M	76.042M	84.6M	76.042M

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

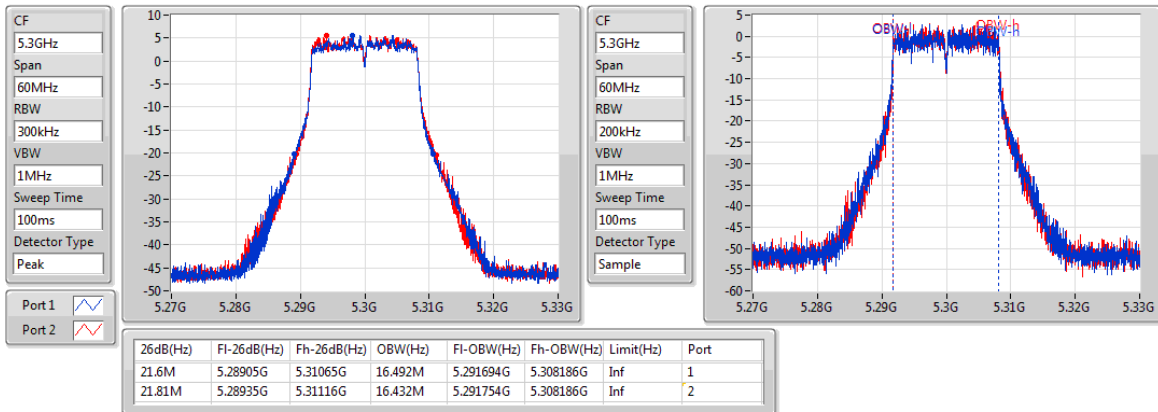
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5260MHz

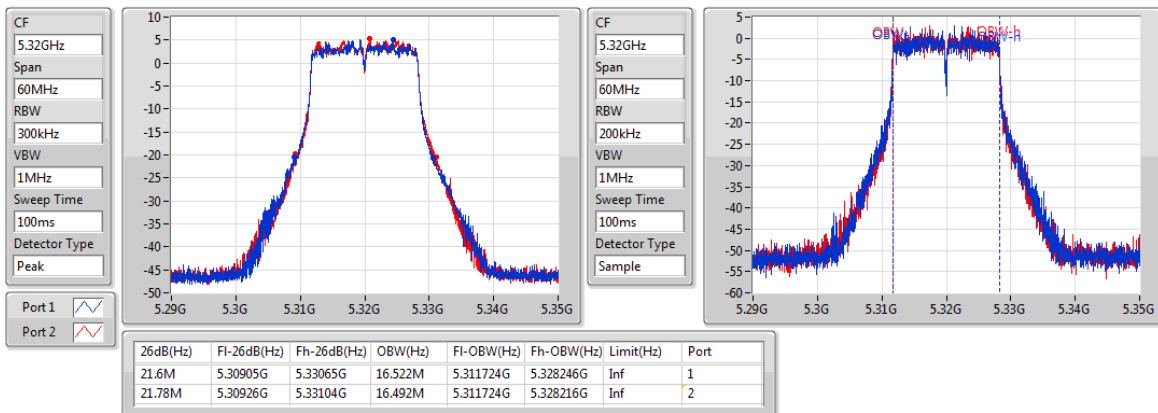
03/05/2019


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5300MHz

03/05/2019

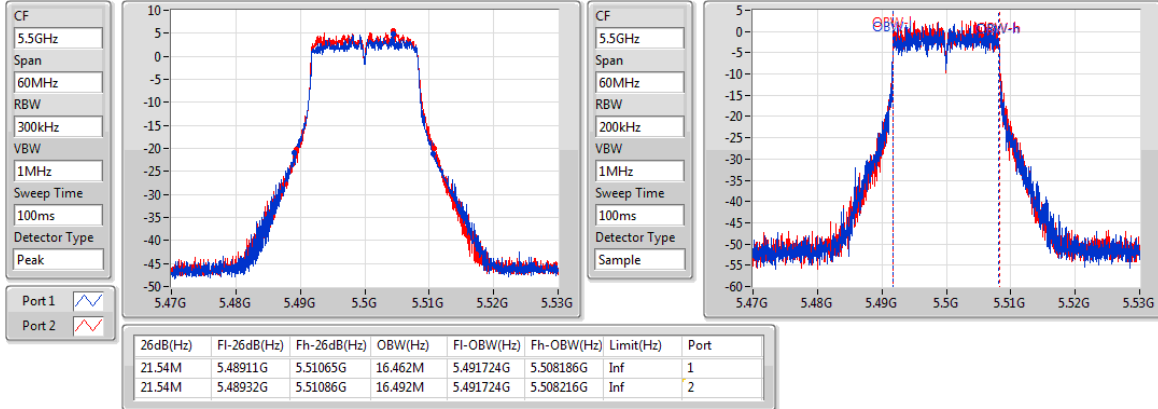

802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5320MHz

03/05/2019

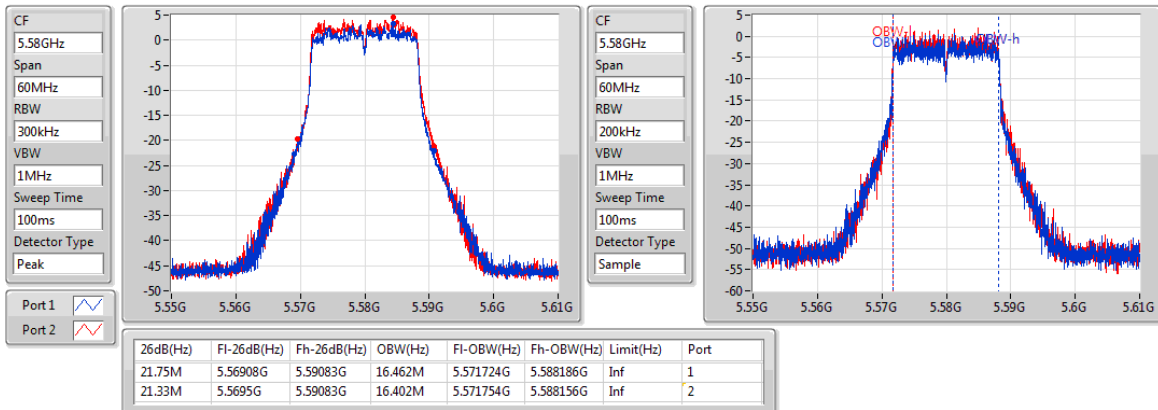


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5500MHz

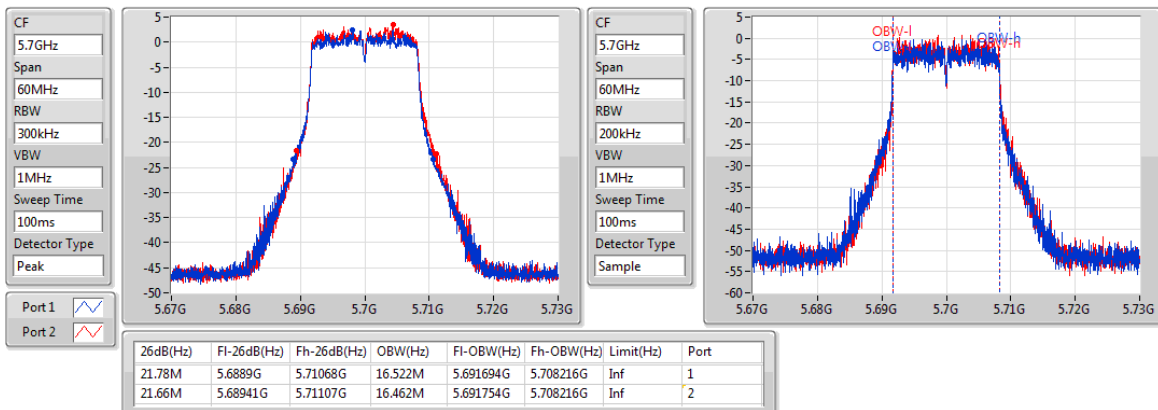
03/05/2019


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5580MHz

03/05/2019

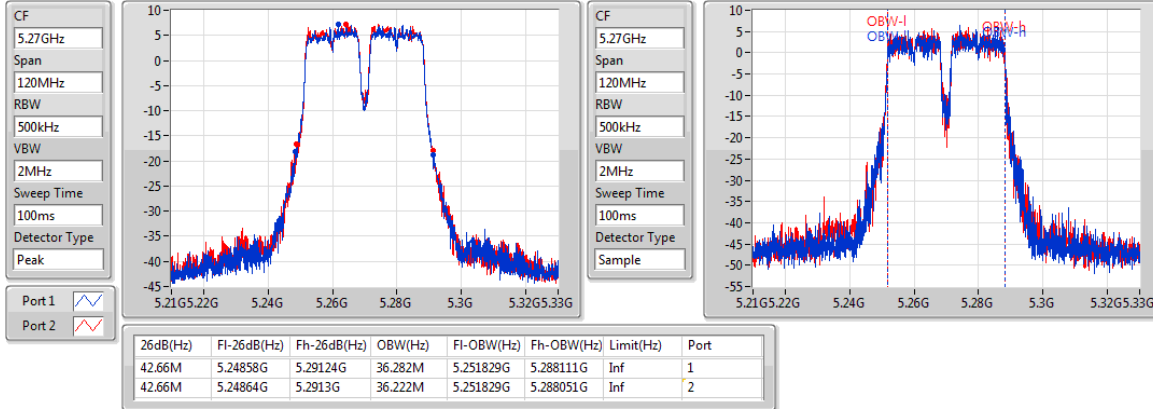

802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5700MHz

03/05/2019

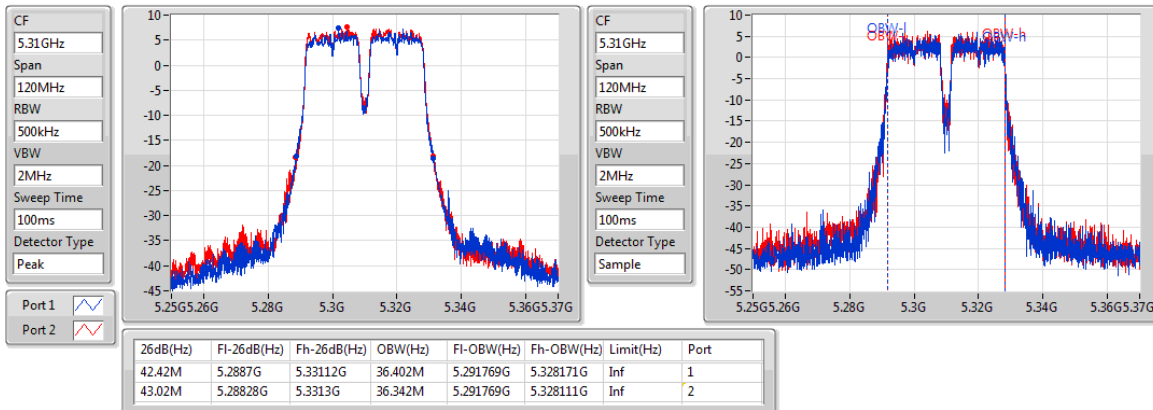


802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
5270MHz

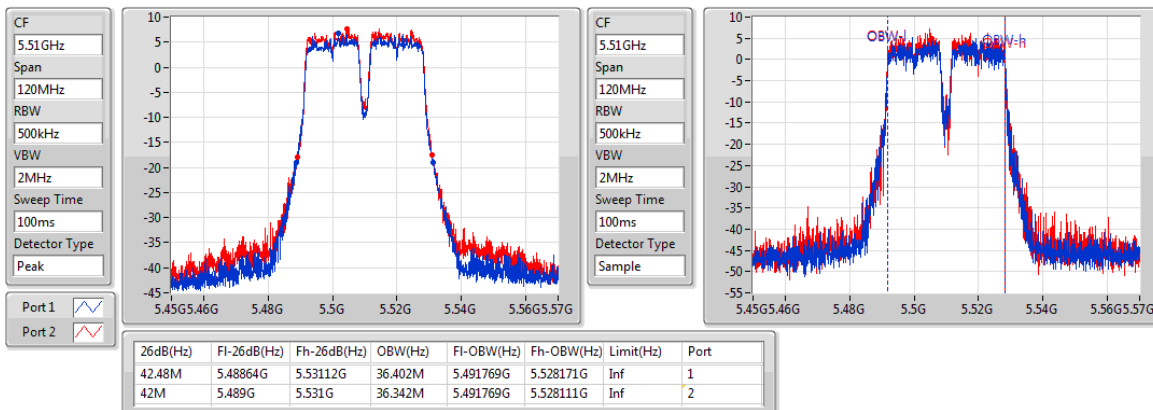
03/05/2019


802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
5310MHz

03/05/2019


802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
5510MHz

03/05/2019

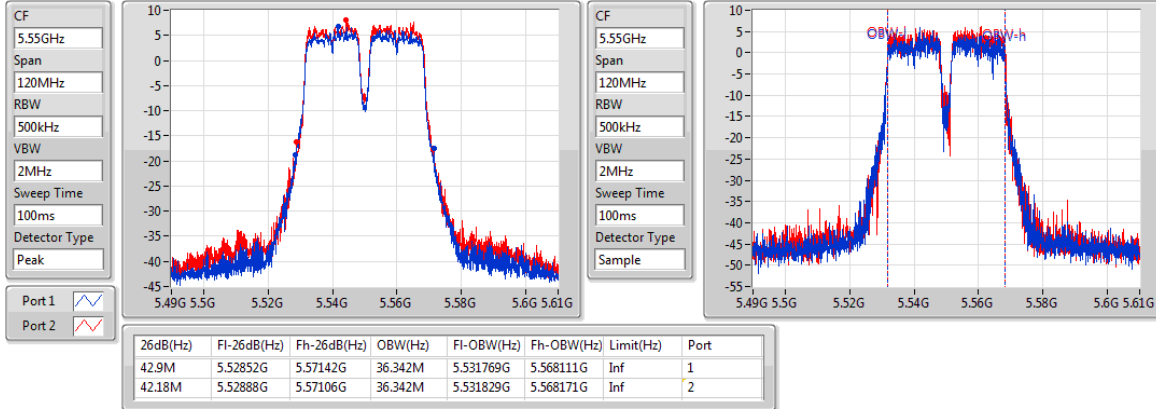


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5550MHz

03/05/2019

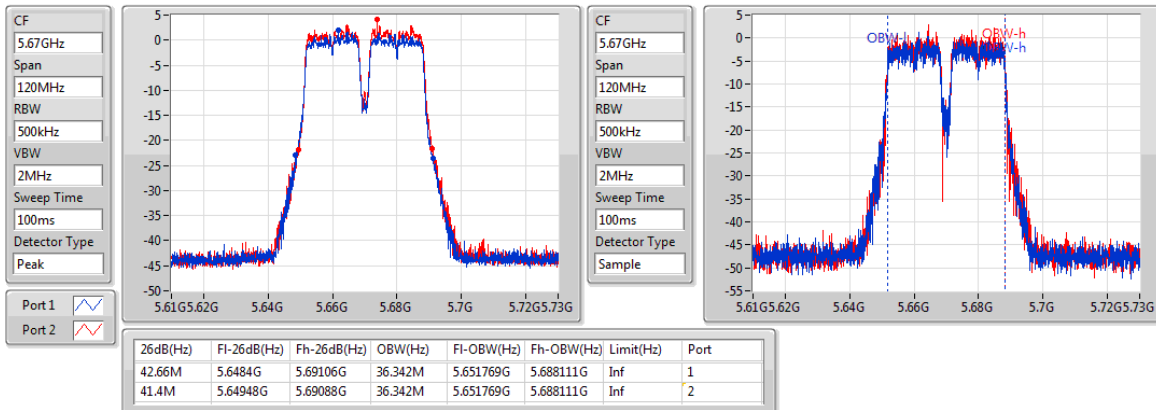


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5670MHz

03/05/2019

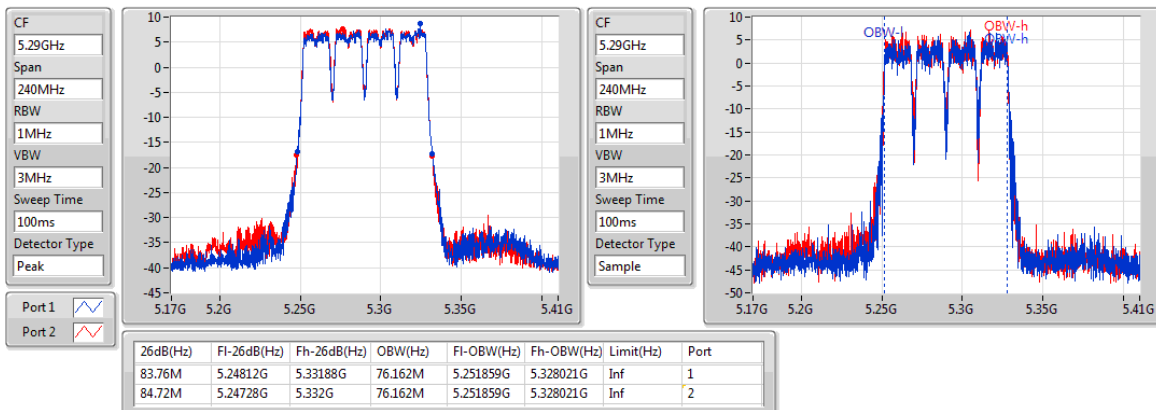


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5290MHz

03/05/2019

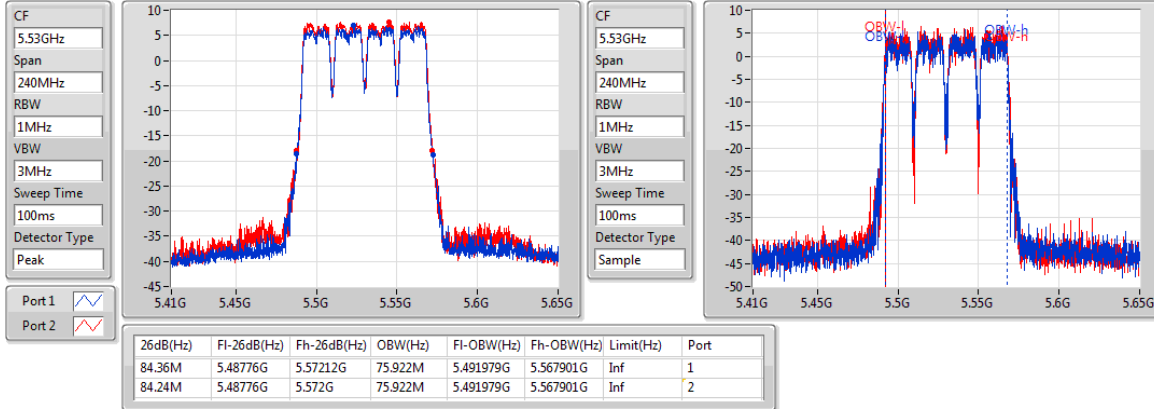


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5530MHz

03/05/2019

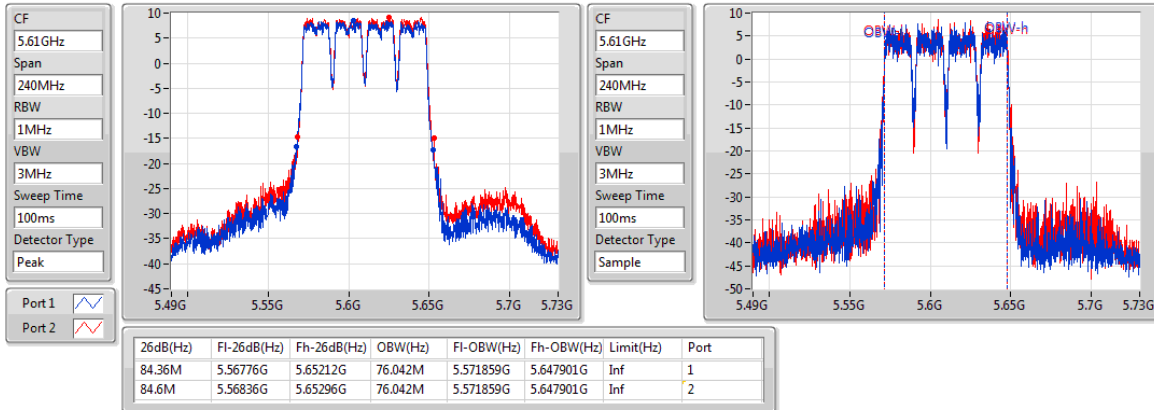


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5610MHz

03/05/2019



**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.25-5.35GHz	-	-	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	16.54	0.04508	26.54	0.45082
802.11ac VHT40_Nss1,(MCS0)_2TX	18.69	0.07396	28.69	0.73961
802.11ac VHT80_Nss1,(MCS0)_2TX	18.68	0.07379	28.68	0.73790
5.47-5.725GHz	-	-	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	15.87	0.03864	25.87	0.38637
802.11ac VHT40_Nss1,(MCS0)_2TX	18.45	0.06998	28.45	0.69984
802.11ac VHT80_Nss1,(MCS0)_2TX	19.48	0.08872	29.48	0.88716

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	10.00	13.19	13.21	16.21	20.00	26.21	30.00
5300MHz_TnomVnom	Pass	10.00	13.37	13.69	16.54	20.00	26.54	30.00
5320MHz_TnomVnom	Pass	10.00	12.98	13.32	16.16	20.00	26.16	30.00
5500MHz_TnomVnom	Pass	10.00	12.40	13.27	15.87	20.00	25.87	30.00
5580MHz_TnomVnom	Pass	10.00	11.01	12.25	14.68	20.00	24.68	30.00
5700MHz_TnomVnom	Pass	10.00	10.28	11.23	13.79	20.00	23.79	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	10.00	15.22	15.57	18.41	20.00	28.41	30.00
5310MHz_TnomVnom	Pass	10.00	15.33	16.01	18.69	20.00	28.69	30.00
5510MHz_TnomVnom	Pass	10.00	14.83	15.98	18.45	20.00	28.45	30.00
5550MHz_TnomVnom	Pass	10.00	14.70	15.88	18.34	20.00	28.34	30.00
5670MHz_TnomVnom	Pass	10.00	10.00	11.16	13.63	20.00	23.63	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	10.00	15.41	15.92	18.68	20.00	28.68	30.00
5530MHz_TnomVnom	Pass	10.00	14.72	15.80	18.30	20.00	28.30	30.00
5610MHz_TnomVnom	Pass	10.00	16.13	16.79	19.48	20.00	29.48	30.00

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

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.25-5.35GHz	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	3.87	16.88
802.11ac VHT40_Nss1,(MCS0)_2TX	3.86	16.87
802.11ac VHT80_Nss1,(MCS0)_2TX	0.20	13.21
5.47-5.725GHz	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	3.13	16.14
802.11ac VHT40_Nss1,(MCS0)_2TX	3.61	16.62
802.11ac VHT80_Nss1,(MCS0)_2TX	1.44	14.45

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)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	13.01	0.53	0.68	3.50	3.99	16.51	17.00
5300MHz_TnomVnom	Pass	13.01	0.79	1.19	3.87	3.99	16.88	17.00
5320MHz_TnomVnom	Pass	13.01	0.38	0.80	3.52	3.99	16.53	17.00
5500MHz_TnomVnom	Pass	13.01	-0.26	0.73	3.13	3.99	16.14	17.00
5580MHz_TnomVnom	Pass	13.01	-1.55	-0.22	1.99	3.99	15.00	17.00
5700MHz_TnomVnom	Pass	13.01	-2.42	-1.39	0.91	3.99	13.92	17.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	13.01	0.40	0.90	3.62	3.99	16.63	17.00
5310MHz_TnomVnom	Pass	13.01	0.55	1.29	3.86	3.99	16.87	17.00
5510MHz_TnomVnom	Pass	13.01	0.12	1.41	3.61	3.99	16.62	17.00
5550MHz_TnomVnom	Pass	13.01	-0.19	1.38	3.58	3.99	16.59	17.00
5670MHz_TnomVnom	Pass	13.01	-4.94	-3.50	-1.31	3.99	11.70	17.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	13.01	-2.91	-2.46	0.20	3.99	13.21	17.00
5530MHz_TnomVnom	Pass	13.01	-3.74	-2.33	-0.16	3.99	12.85	17.00
5610MHz_TnomVnom	Pass	13.01	-1.99	-0.84	1.44	3.99	14.45	17.00

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

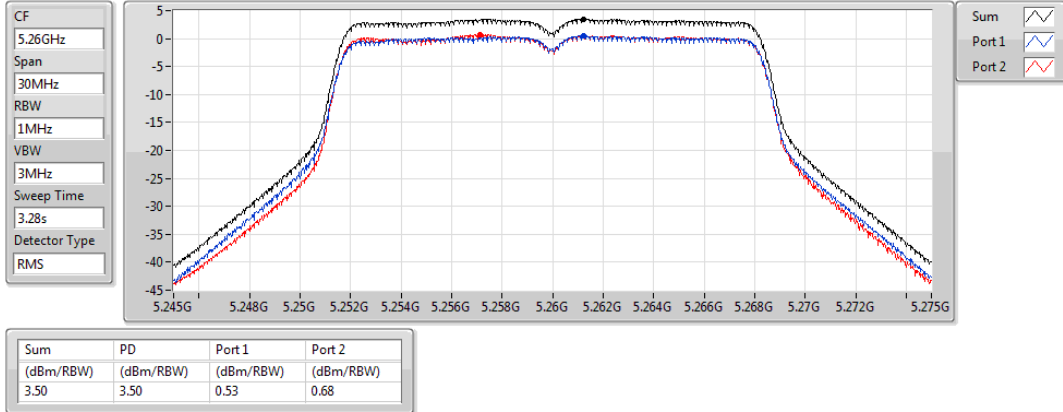
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5260MHz

03/05/2019

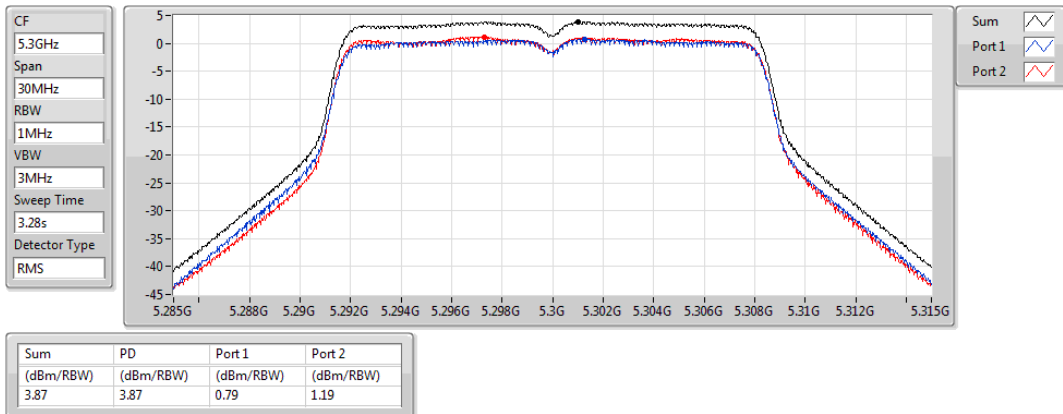


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5300MHz

03/05/2019

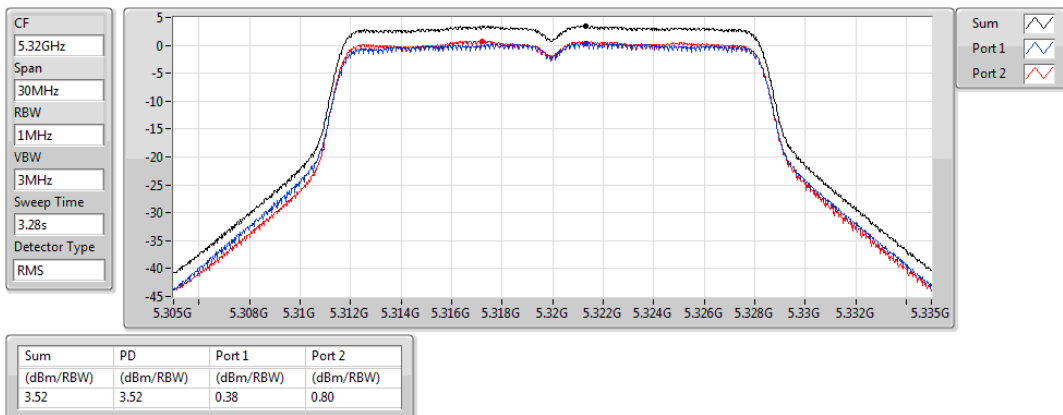


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5320MHz

03/05/2019

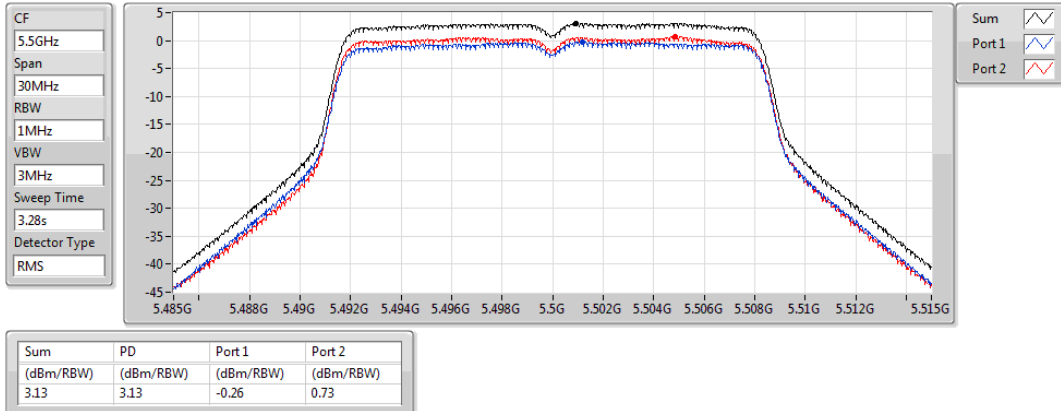


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5500MHz

03/05/2019

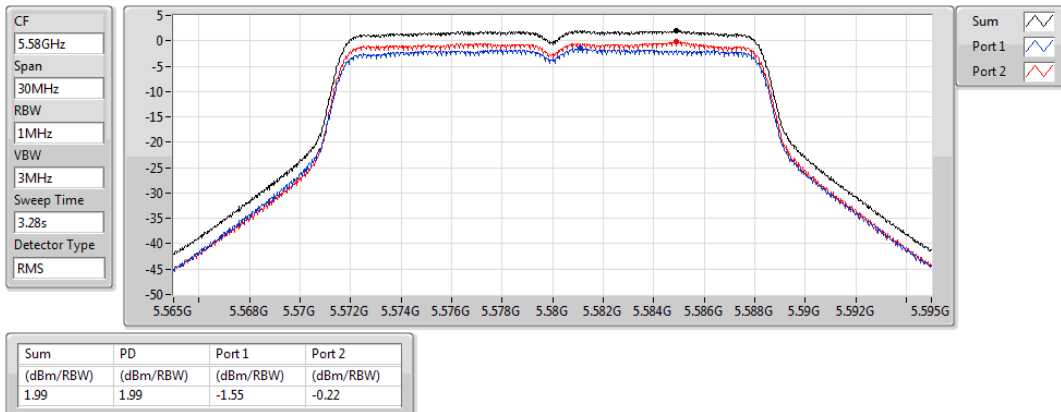


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5580MHz

03/05/2019

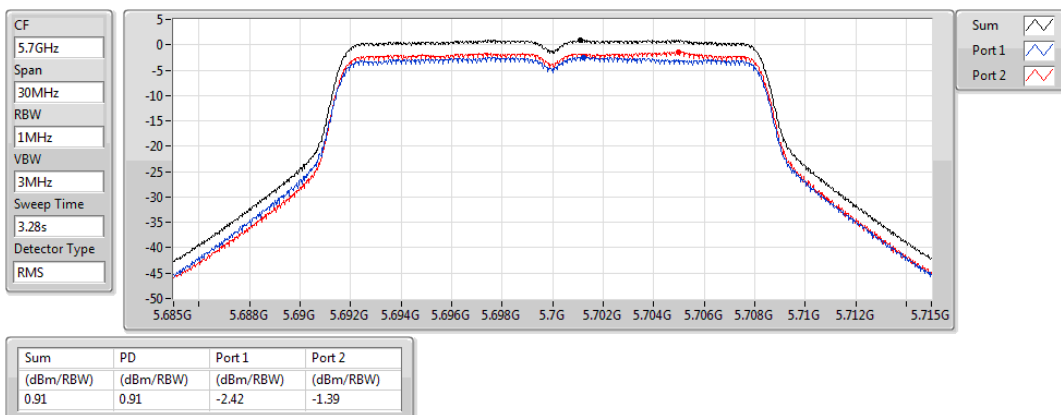


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5700MHz

03/05/2019

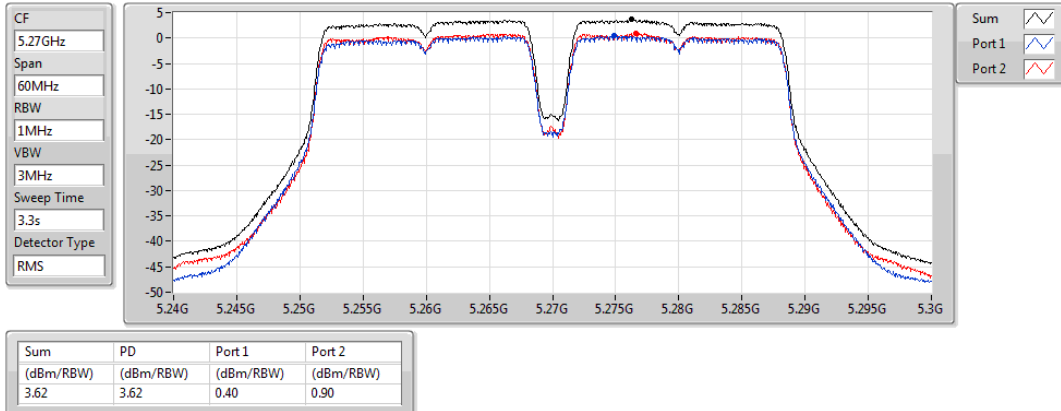


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5270MHz

03/05/2019

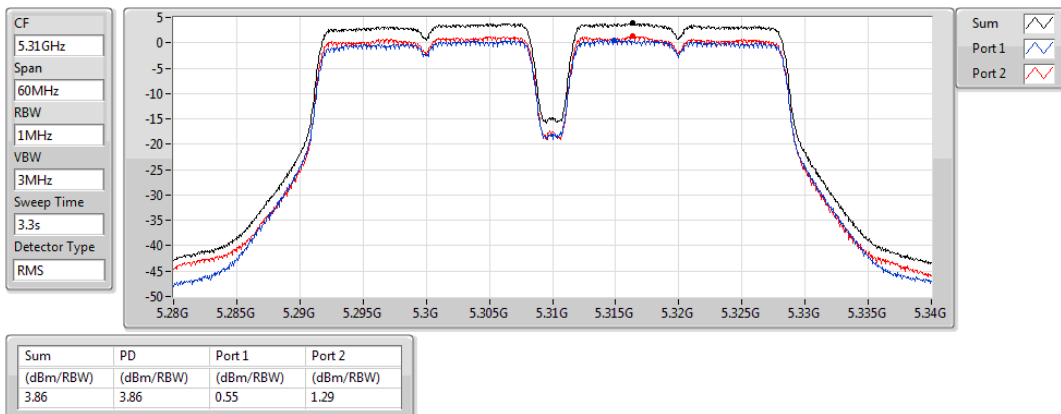


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5310MHz

03/05/2019

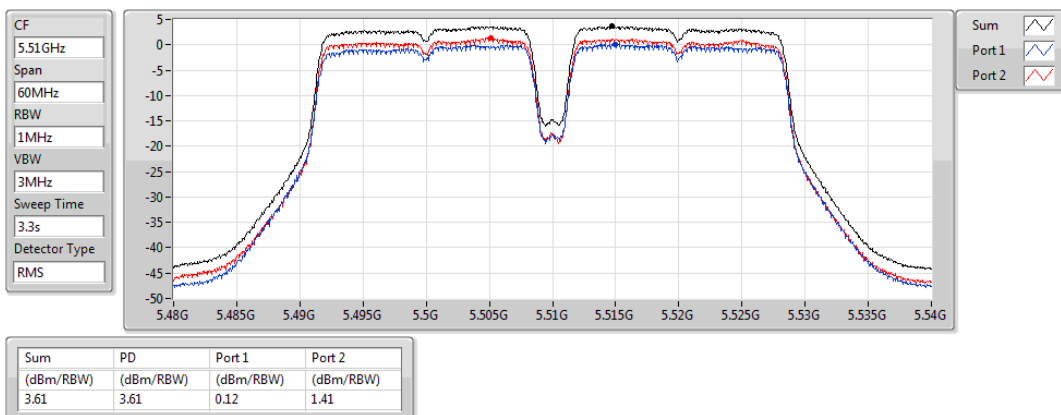


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5510MHz

03/05/2019

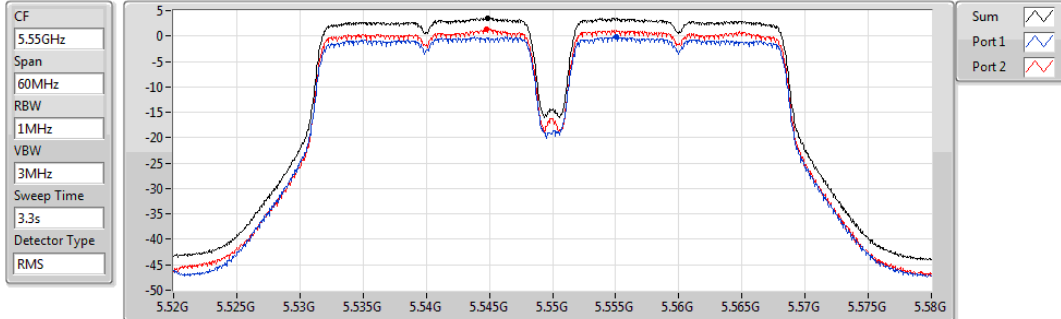


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5550MHz

03/05/2019



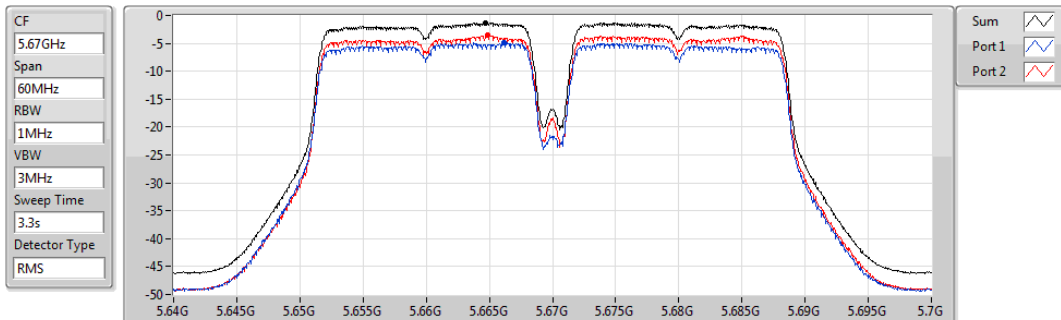
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.58	3.58	-0.19	1.38

802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5670MHz

03/05/2019



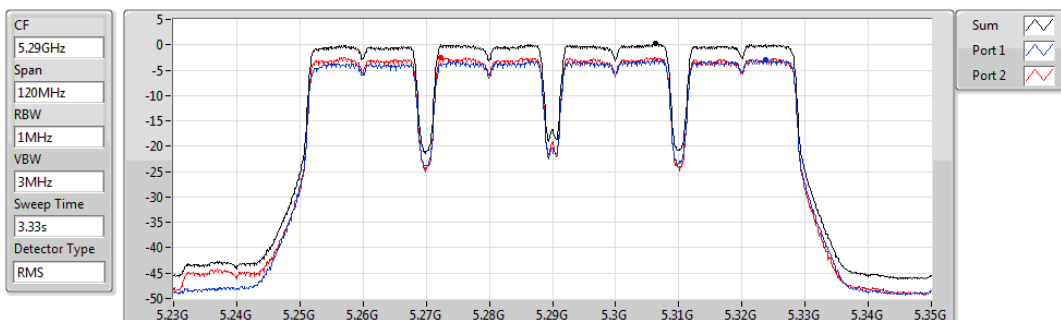
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-1.31	-1.31	-4.94	-3.50

802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5290MHz

03/05/2019



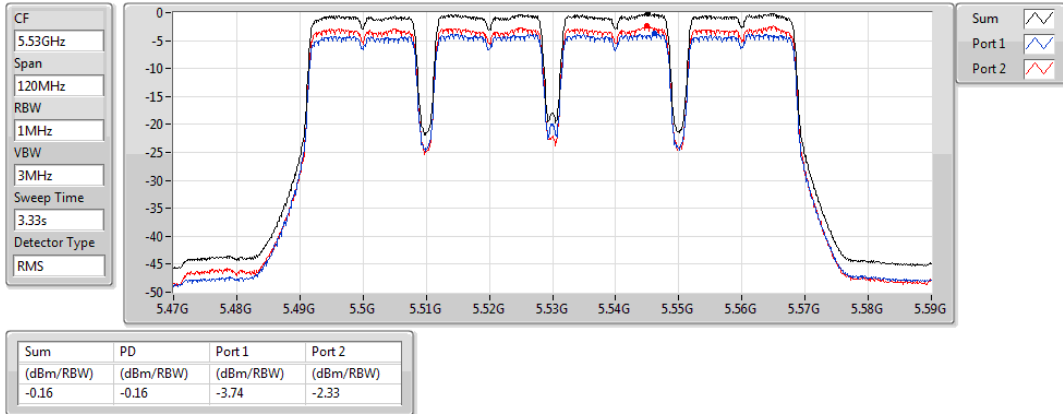
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.20	0.20	-2.91	-2.46

802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5530MHz

03/05/2019

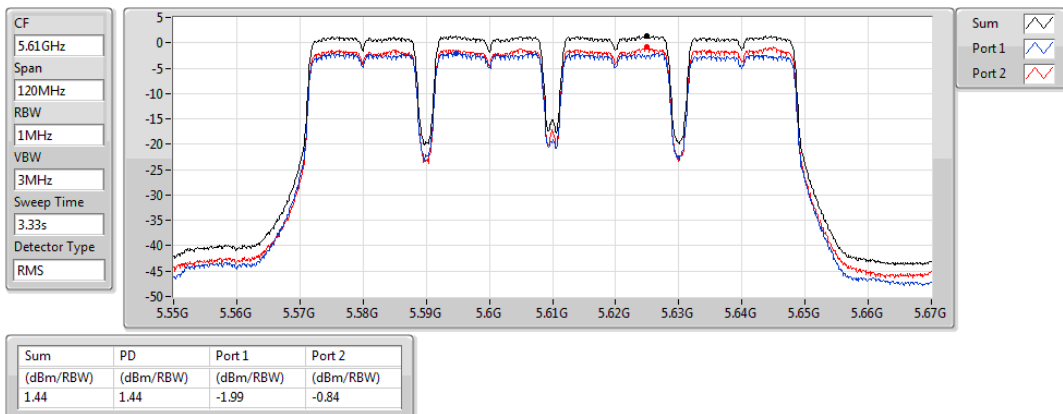


802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5610MHz

03/05/2019





Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.47-5.725GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	PK	64.92M	29.29	40.00	-10.71	-25.36	3	Vertical	0	1.00	-

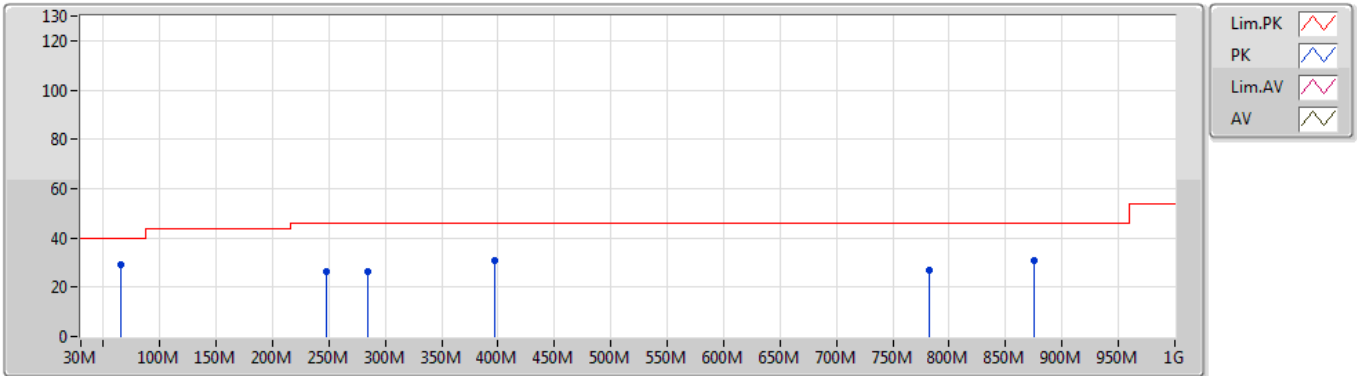
Result

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_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	PK	64.92M	29.29	40.00	-10.71	-25.36	3	Vertical	0	1.00	-
5530MHz	Pass	PK	247.28M	26.30	46.00	-19.70	-17.52	3	Vertical	0	1.00	-
5530MHz	Pass	PK	284.14M	26.10	46.00	-19.90	-16.98	3	Vertical	0	1.00	-
5530MHz	Pass	PK	396.66M	30.96	46.00	-15.04	-14.02	3	Vertical	0	1.00	-
5530MHz	Pass	PK	782.72M	27.01	46.00	-18.99	-7.68	3	Vertical	0	1.00	-
5530MHz	Pass	PK	875.84M	30.60	46.00	-15.40	-6.62	3	Vertical	0	1.00	-
5530MHz	Pass	PK	115.36M	27.29	43.50	-16.21	-19.39	3	Horizontal	360	1.00	-
5530MHz	Pass	PK	249.22M	27.43	46.00	-18.57	-17.23	3	Horizontal	360	1.00	-
5530MHz	Pass	PK	284.14M	27.92	46.00	-18.08	-16.98	3	Horizontal	360	1.00	-
5530MHz	Pass	PK	375.32M	27.27	46.00	-18.73	-14.72	3	Horizontal	360	1.00	-
5530MHz	Pass	PK	546.04M	28.71	46.00	-17.29	-11.12	3	Horizontal	360	1.00	-
5530MHz	Pass	PK	813.76M	27.23	46.00	-18.77	-7.63	3	Horizontal	360	1.00	-

802.11ac VHT80_Nss1,(MCS0)_2TX

03/05/2019

5530MHz_PoE

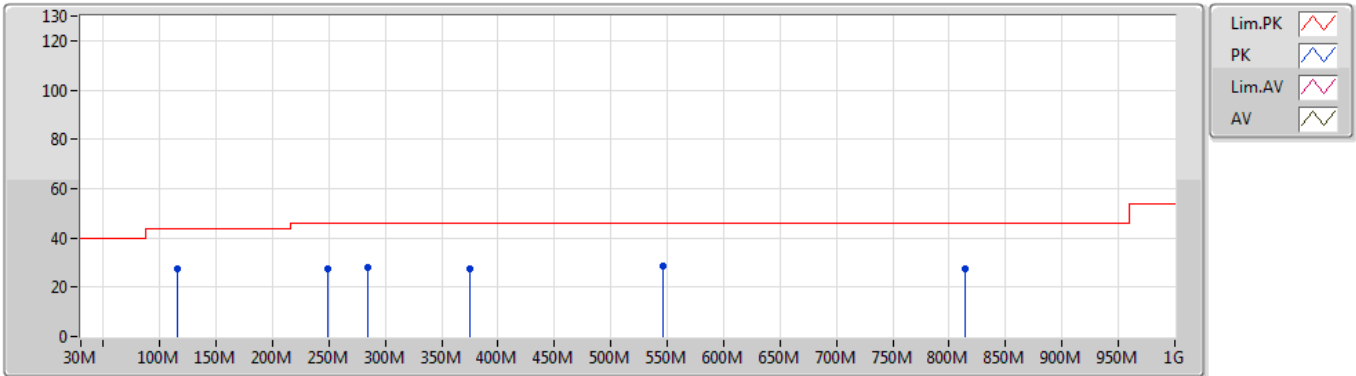


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
PK	64.92M	29.29	40.00	-10.71	-25.36	3	Vertical	0	1.00	-				
PK	247.28M	26.30	46.00	-19.70	-17.52	3	Vertical	0	1.00	-				
PK	284.14M	26.10	46.00	-19.90	-16.98	3	Vertical	0	1.00	-				
PK	396.66M	30.96	46.00	-15.04	-14.02	3	Vertical	0	1.00	-				
PK	782.72M	27.01	46.00	-18.99	-7.68	3	Vertical	0	1.00	-				
PK	875.84M	30.60	46.00	-15.40	-6.62	3	Vertical	0	1.00	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

03/05/2019

5530MHz_PoE



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
PK	115.36M	27.29	43.50	-16.21	-19.39	3	Horizontal	360	1.00	-				
PK	249.22M	27.43	46.00	-18.57	-17.23	3	Horizontal	360	1.00	-				
PK	284.14M	27.92	46.00	-18.08	-16.98	3	Horizontal	360	1.00	-				
PK	375.32M	27.27	46.00	-18.73	-14.72	3	Horizontal	360	1.00	-				
PK	546.04M	28.71	46.00	-17.29	-11.12	3	Horizontal	360	1.00	-				
PK	813.76M	27.23	46.00	-18.77	-7.63	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
5.25-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	AV	5.35G	53.61	54.00	-0.39	4.32	3	Vertical	0	1.93	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	5.3508G	53.93	54.00	-0.07	4.32	3	Vertical	0	1.75	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	AV	5.375G	53.41	54.00	-0.59	4.35	3	Vertical	0	1.85	-
5.47-5.725GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	PK	5.7252G	68.14	68.20	-0.06	4.96	3	Vertical	2	2.02	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	PK	5.4656G	67.79	68.20	-0.41	4.39	3	Vertical	358	1.81	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	PK	5.466G	67.56	68.20	-0.64	4.39	3	Vertical	360	1.77	-

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 VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	AV	5.1388G	46.84	54.00	-7.16	4.07	3	Vertical	0	1.98	-
5260MHz	Pass	AV	5.2594G	114.00	Inf	-Inf	4.22	3	Vertical	0	1.98	-
5260MHz	Pass	AV	5.3506G	49.50	54.00	-4.50	4.32	3	Vertical	0	1.98	-
5260MHz	Pass	PK	5.1136G	57.44	74.00	-16.56	4.04	3	Vertical	0	1.98	-
5260MHz	Pass	PK	5.2642G	122.49	Inf	-Inf	4.23	3	Vertical	0	1.98	-
5260MHz	Pass	PK	5.35G	61.31	74.00	-12.69	4.32	3	Vertical	0	1.98	-
5260MHz	Pass	AV	5.15G	46.58	54.00	-7.42	4.09	3	Horizontal	0	1.89	-
5260MHz	Pass	AV	5.2618G	111.30	Inf	-Inf	4.22	3	Horizontal	0	1.89	-
5260MHz	Pass	AV	5.3518G	47.49	54.00	-6.51	4.32	3	Horizontal	0	1.89	-
5260MHz	Pass	PK	5.1454G	56.87	74.00	-17.13	4.09	3	Horizontal	0	1.89	-
5260MHz	Pass	PK	5.2654G	120.67	Inf	-Inf	4.23	3	Horizontal	0	1.89	-
5260MHz	Pass	PK	5.3548G	59.31	74.00	-14.69	4.32	3	Horizontal	0	1.89	-
5260MHz	Pass	PK	10.5181G	58.16	68.20	-10.04	14.74	3	Vertical	156	1.68	-
5260MHz	Pass	PK	10.52016G	60.17	68.20	-8.03	14.39	3	Horizontal	147	1.24	-
5300MHz	Pass	AV	5.3044G	109.61	Inf	-Inf	4.27	3	Vertical	360	1.95	-
5300MHz	Pass	AV	5.3508G	48.53	54.00	-5.47	4.32	3	Vertical	360	1.95	-
5300MHz	Pass	PK	5.3048G	118.98	Inf	-Inf	4.27	3	Vertical	360	1.95	-
5300MHz	Pass	PK	5.3508G	58.65	74.00	-15.35	4.32	3	Vertical	360	1.95	-
5300MHz	Pass	AV	5.298G	106.08	Inf	-Inf	4.26	3	Horizontal	355	1.98	-
5300MHz	Pass	AV	5.376G	47.30	54.00	-6.70	4.36	3	Horizontal	355	1.98	-
5300MHz	Pass	PK	5.3028G	114.97	Inf	-Inf	4.26	3	Horizontal	355	1.98	-
5300MHz	Pass	PK	5.3764G	56.56	74.00	-17.44	4.36	3	Horizontal	355	1.98	-
5300MHz	Pass	AV	10.60186G	45.90	54.00	-8.10	14.60	3	Vertical	17	1.49	-
5300MHz	Pass	PK	10.60085G	56.36	74.00	-17.64	14.59	3	Vertical	17	1.49	-
5300MHz	Pass	AV	10.6021G	45.74	54.00	-8.26	14.60	3	Horizontal	173	1.50	-
5300MHz	Pass	PK	10.60714G	56.74	74.00	-17.26	14.62	3	Horizontal	173	1.50	-
5320MHz	Pass	AV	5.3246G	108.20	Inf	-Inf	4.29	3	Vertical	0	1.93	-
5320MHz	Pass	AV	5.35G	53.61	54.00	-0.39	4.32	3	Vertical	0	1.93	-
5320MHz	Pass	PK	5.3248G	117.64	Inf	-Inf	4.29	3	Vertical	0	1.93	-
5320MHz	Pass	PK	5.35G	69.41	74.00	-4.59	4.32	3	Vertical	0	1.93	-
5320MHz	Pass	AV	5.3218G	104.57	Inf	-Inf	4.29	3	Horizontal	4	1.77	-
5320MHz	Pass	AV	5.3506G	47.89	54.00	-6.11	4.32	3	Horizontal	4	1.77	-
5320MHz	Pass	PK	5.3218G	113.37	Inf	-Inf	4.29	3	Horizontal	4	1.77	-
5320MHz	Pass	PK	5.3512G	60.94	74.00	-13.06	4.32	3	Horizontal	4	1.77	-
5320MHz	Pass	AV	10.63542G	45.79	54.00	-8.21	14.69	3	Vertical	56	1.50	-
5320MHz	Pass	PK	10.64388G	56.80	74.00	-17.20	14.71	3	Vertical	56	1.50	-
5320MHz	Pass	AV	10.64272G	45.78	54.00	-8.22	14.71	3	Horizontal	300	1.63	-
5320MHz	Pass	PK	10.64374G	56.15	74.00	-17.85	14.71	3	Horizontal	300	1.63	-
5500MHz	Pass	AV	5.459G	49.19	54.00	-4.81	4.40	3	Vertical	4	1.79	-
5500MHz	Pass	AV	5.5042G	107.83	Inf	-Inf	4.41	3	Vertical	4	1.79	-
5500MHz	Pass	PK	5.4678G	67.84	68.20	-0.36	4.40	3	Vertical	4	1.79	-
5500MHz	Pass	PK	5.499G	116.51	Inf	-Inf	4.40	3	Vertical	4	1.79	-
5500MHz	Pass	AV	5.4594G	46.15	54.00	-7.85	4.40	3	Horizontal	0	1.77	-
5500MHz	Pass	AV	5.496G	102.39	Inf	-Inf	4.40	3	Horizontal	0	1.77	-
5500MHz	Pass	PK	5.4698G	59.22	68.20	-8.98	4.40	3	Horizontal	0	1.77	-
5500MHz	Pass	PK	5.4946G	110.98	Inf	-Inf	4.41	3	Horizontal	0	1.77	-
5500MHz	Pass	AV	11.01236G	46.77	54.00	-7.23	15.63	3	Vertical	310	1.50	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5500MHz	Pass	PK	10.99484G	57.17	74.00	-16.83	15.63	3	Vertical	310	1.50	-
5500MHz	Pass	AV	11.01248G	46.68	54.00	-7.32	15.63	3	Horizontal	122	1.50	-
5500MHz	Pass	PK	11.0012G	57.36	74.00	-16.64	15.64	3	Horizontal	122	1.50	-
5580MHz	Pass	AV	5.4396G	46.33	54.00	-7.67	4.39	3	Vertical	3	1.97	-
5580MHz	Pass	AV	5.5848G	112.51	Inf	-Inf	4.66	3	Vertical	3	1.97	-
5580MHz	Pass	PK	5.4666G	56.16	68.20	-12.04	4.40	3	Vertical	3	1.97	-
5580MHz	Pass	PK	5.5848G	121.37	Inf	-Inf	4.66	3	Vertical	3	1.97	-
5580MHz	Pass	PK	5.7264G	56.61	68.20	-11.59	4.96	3	Vertical	3	1.97	-
5580MHz	Pass	AV	5.448G	46.03	54.00	-7.97	4.39	3	Horizontal	3	1.70	-
5580MHz	Pass	AV	5.5764G	106.03	Inf	-Inf	4.64	3	Horizontal	3	1.70	-
5580MHz	Pass	PK	5.4648G	55.57	68.20	-12.63	4.39	3	Horizontal	3	1.70	-
5580MHz	Pass	PK	5.5764G	114.02	Inf	-Inf	4.64	3	Horizontal	3	1.70	-
5580MHz	Pass	PK	5.7294G	56.67	68.20	-11.53	4.96	3	Horizontal	3	1.70	-
5580MHz	Pass	AV	11.15846G	47.77	54.00	-6.23	15.49	3	Vertical	193	2.74	-
5580MHz	Pass	PK	11.16108G	58.82	74.00	-15.18	15.48	3	Vertical	193	2.74	-
5580MHz	Pass	AV	11.16033G	46.93	54.00	-7.07	15.49	3	Horizontal	173	1.50	-
5580MHz	Pass	PK	11.1593G	58.75	74.00	-15.25	15.49	3	Horizontal	173	1.50	-
5700MHz	Pass	AV	5.7044G	107.51	Inf	-Inf	4.93	3	Vertical	2	2.02	-
5700MHz	Pass	PK	5.7048G	116.60	Inf	-Inf	4.93	3	Vertical	2	2.02	-
5700MHz	Pass	PK	5.7252G	68.14	68.20	-0.06	4.96	3	Vertical	2	2.02	-
5700MHz	Pass	AV	5.7024G	104.11	Inf	-Inf	4.91	3	Horizontal	1	1.73	-
5700MHz	Pass	PK	5.7016G	112.37	Inf	-Inf	4.91	3	Horizontal	1	1.73	-
5700MHz	Pass	PK	5.7252G	65.24	68.20	-2.96	4.96	3	Horizontal	1	1.73	-
5700MHz	Pass	AV	11.39943G	46.07	54.00	-7.93	15.28	3	Vertical	190	1.50	-
5700MHz	Pass	PK	11.40215G	57.26	74.00	-16.74	15.28	3	Vertical	190	1.50	-
5700MHz	Pass	AV	11.40086G	46.25	54.00	-7.75	15.28	3	Horizontal	148	2.31	-
5700MHz	Pass	PK	11.39845G	56.90	74.00	-17.10	15.28	3	Horizontal	148	2.31	-
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	AV	5.2744G	105.39	Inf	-Inf	4.23	3	Vertical	0	1.75	-
5270MHz	Pass	AV	5.3508G	53.93	54.00	-0.07	4.32	3	Vertical	0	1.75	-
5270MHz	Pass	PK	5.2748G	114.52	Inf	-Inf	4.23	3	Vertical	0	1.75	-
5270MHz	Pass	PK	5.3512G	66.25	74.00	-7.75	4.32	3	Vertical	0	1.75	-
5270MHz	Pass	AV	5.2664G	102.30	Inf	-Inf	4.23	3	Horizontal	9	1.67	-
5270MHz	Pass	AV	5.3508G	49.38	54.00	-4.62	4.32	3	Horizontal	9	1.67	-
5270MHz	Pass	PK	5.262G	110.71	Inf	-Inf	4.22	3	Horizontal	9	1.67	-
5270MHz	Pass	PK	5.3512G	62.28	74.00	-11.72	4.32	3	Horizontal	9	1.67	-
5270MHz	Pass	PK	10.5359G	56.71	68.20	-11.49	14.43	3	Vertical	262	1.44	-
5270MHz	Pass	PK	10.53676G	56.28	68.20	-11.92	14.43	3	Horizontal	147	1.22	-
5310MHz	Pass	AV	5.3048G	101.73	Inf	-Inf	4.27	3	Vertical	0	1.89	-
5310MHz	Pass	AV	5.35G	53.77	54.00	-0.23	4.32	3	Vertical	0	1.89	-
5310MHz	Pass	PK	5.3136G	111.00	Inf	-Inf	4.28	3	Vertical	0	1.89	-
5310MHz	Pass	PK	5.3512G	70.00	74.00	-4.00	4.32	3	Vertical	0	1.66	-
5310MHz	Pass	AV	5.3068G	98.17	Inf	-Inf	4.27	3	Horizontal	1	1.85	-
5310MHz	Pass	AV	5.3524G	47.91	54.00	-6.09	4.32	3	Horizontal	1	1.85	-
5310MHz	Pass	PK	5.3016G	107.04	Inf	-Inf	4.26	3	Horizontal	1	1.85	-
5310MHz	Pass	PK	5.3528G	63.25	74.00	-10.75	4.32	3	Horizontal	1	1.85	-
5310MHz	Pass	AV	10.6151G	45.46	54.00	-8.54	14.63	3	Vertical	61	1.51	-
5310MHz	Pass	PK	10.61582G	57.04	74.00	-16.96	14.63	3	Vertical	61	1.51	-
5310MHz	Pass	AV	10.61752G	45.37	54.00	-8.63	14.63	3	Horizontal	150	1.20	-

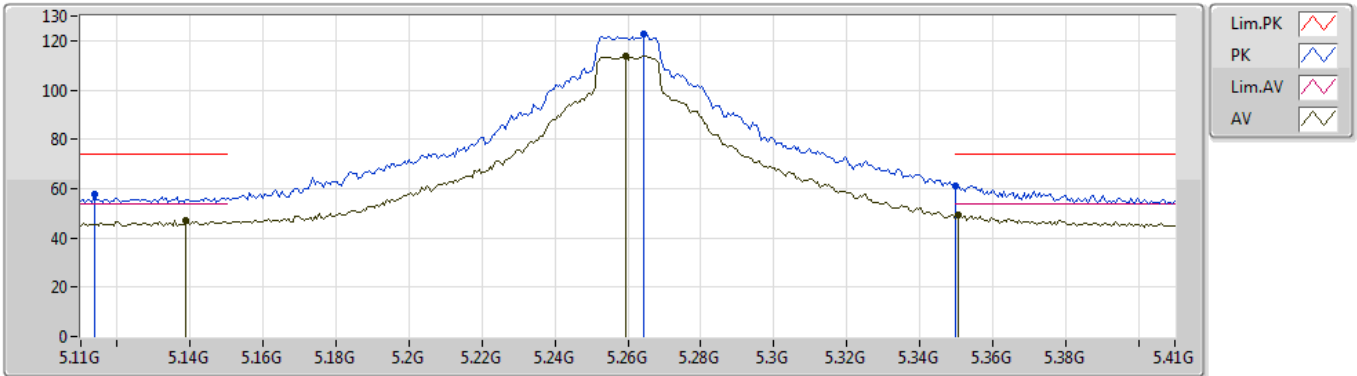
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5310MHz	Pass	PK	10.62426G	56.32	74.00	-17.68	14.66	3	Horizontal	150	1.20	-
5510MHz	Pass	AV	5.4576G	48.99	54.00	-5.01	4.39	3	Vertical	358	1.81	-
5510MHz	Pass	AV	5.514G	100.83	Inf	-Inf	4.44	3	Vertical	358	1.81	-
5510MHz	Pass	PK	5.4656G	67.79	68.20	-0.41	4.39	3	Vertical	358	1.81	-
5510MHz	Pass	PK	5.5144G	110.08	Inf	-Inf	4.44	3	Vertical	358	1.81	-
5510MHz	Pass	AV	5.424G	47.80	54.00	-6.20	4.38	3	Horizontal	7	1.74	-
5510MHz	Pass	AV	5.516G	96.55	Inf	-Inf	4.44	3	Horizontal	7	1.74	-
5510MHz	Pass	PK	5.4668G	62.56	68.20	-5.64	4.40	3	Horizontal	7	1.74	-
5510MHz	Pass	PK	5.506G	104.90	Inf	-Inf	4.42	3	Horizontal	7	1.74	-
5510MHz	Pass	AV	11.0191G	46.62	54.00	-7.38	15.62	3	Vertical	14	1.56	-
5510MHz	Pass	PK	11.01964G	56.82	74.00	-17.18	15.62	3	Vertical	14	1.56	-
5510MHz	Pass	AV	11.02174G	46.41	54.00	-7.59	15.62	3	Horizontal	238	1.59	-
5510MHz	Pass	PK	11.02484G	57.69	74.00	-16.31	15.63	3	Horizontal	238	1.59	-
5550MHz	Pass	AV	5.46G	51.41	54.00	-2.59	4.40	3	Vertical	0	1.87	-
5550MHz	Pass	AV	5.5544G	105.97	Inf	-Inf	4.57	3	Vertical	0	1.87	-
5550MHz	Pass	PK	5.4688G	67.65	68.20	-0.55	4.40	3	Vertical	0	1.87	-
5550MHz	Pass	PK	5.5452G	115.96	Inf	-Inf	4.53	3	Vertical	0	1.87	-
5550MHz	Pass	AV	5.4584G	48.92	54.00	-5.08	4.40	3	Horizontal	356	1.85	-
5550MHz	Pass	AV	5.542G	101.44	Inf	-Inf	4.53	3	Horizontal	356	1.85	-
5550MHz	Pass	PK	5.468G	61.60	68.20	-6.60	4.40	3	Horizontal	356	1.85	-
5550MHz	Pass	PK	5.5616G	110.41	Inf	-Inf	4.60	3	Horizontal	356	1.85	-
5550MHz	Pass	AV	11.08554G	46.54	54.00	-7.46	15.56	3	Vertical	47	1.24	-
5550MHz	Pass	PK	11.09724G	57.70	74.00	-16.30	15.54	3	Vertical	47	1.24	-
5550MHz	Pass	AV	11.08734G	46.80	54.00	-7.20	15.57	3	Horizontal	275	1.99	-
5550MHz	Pass	PK	11.10348G	58.22	74.00	-15.78	15.55	3	Horizontal	275	1.99	-
5670MHz	Pass	AV	5.6754G	103.10	Inf	-Inf	4.86	3	Vertical	358	1.69	-
5670MHz	Pass	PK	5.6742G	112.86	Inf	-Inf	4.85	3	Vertical	358	1.69	-
5670MHz	Pass	PK	5.7258G	66.52	68.20	-1.68	4.96	3	Vertical	358	1.69	-
5670MHz	Pass	AV	5.6766G	99.60	Inf	-Inf	4.86	3	Horizontal	353	1.74	-
5670MHz	Pass	PK	5.682G	108.19	Inf	-Inf	4.87	3	Horizontal	353	1.74	-
5670MHz	Pass	PK	5.7276G	61.94	68.20	-6.26	4.96	3	Horizontal	353	1.74	-
5670MHz	Pass	AV	11.34526G	45.71	54.00	-8.29	15.33	3	Vertical	134	2.35	-
5670MHz	Pass	PK	11.34284G	56.63	74.00	-17.37	15.33	3	Vertical	134	2.35	-
5670MHz	Pass	AV	11.34494G	45.37	54.00	-8.63	15.32	3	Horizontal	332	1.44	-
5670MHz	Pass	PK	11.34204G	56.95	74.00	-17.05	15.33	3	Horizontal	332	1.44	-
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	AV	5.12G	49.14	54.00	-4.86	4.05	3	Vertical	0	1.85	-
5290MHz	Pass	AV	5.325G	99.88	Inf	-Inf	4.30	3	Vertical	0	1.85	-
5290MHz	Pass	AV	5.375G	53.41	54.00	-0.59	4.35	3	Vertical	0	1.85	-
5290MHz	Pass	PK	5.144G	59.48	74.00	-14.52	4.09	3	Vertical	0	1.85	-
5290MHz	Pass	PK	5.255G	108.57	Inf	-Inf	4.21	3	Vertical	0	1.85	-
5290MHz	Pass	PK	5.366G	69.69	74.00	-4.31	4.34	3	Vertical	0	1.85	-
5290MHz	Pass	AV	5.04G	47.91	54.00	-6.09	3.87	3	Horizontal	348	1.87	-
5290MHz	Pass	AV	5.323G	96.30	Inf	-Inf	4.29	3	Horizontal	348	1.87	-
5290MHz	Pass	AV	5.367G	49.02	54.00	-4.98	4.34	3	Horizontal	348	1.87	-
5290MHz	Pass	PK	5.043G	56.86	74.00	-17.14	3.88	3	Horizontal	348	1.87	-
5290MHz	Pass	PK	5.323G	105.24	Inf	-Inf	4.29	3	Horizontal	348	1.87	-
5290MHz	Pass	PK	5.373G	63.93	74.00	-10.07	4.35	3	Horizontal	348	1.87	-
5290MHz	Pass	PK	10.58476G	54.97	68.20	-13.23	14.56	3	Vertical	186	1.77	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5290MHz	Pass	PK	10.58418G	54.55	68.20	-13.65	14.56	3	Horizontal	118	1.56	-
5530MHz	Pass	AV	5.44G	52.70	54.00	-1.30	4.39	3	Vertical	360	1.77	-
5530MHz	Pass	AV	5.545G	99.22	Inf	-Inf	4.53	3	Vertical	360	1.77	-
5530MHz	Pass	PK	5.466G	67.56	68.20	-0.64	4.39	3	Vertical	360	1.77	-
5530MHz	Pass	PK	5.534G	108.22	Inf	-Inf	4.51	3	Vertical	360	1.77	-
5530MHz	Pass	PK	5.75G	58.50	68.20	-9.70	5.01	3	Vertical	360	1.77	-
5530MHz	Pass	AV	5.432G	48.99	54.00	-5.01	4.39	3	Horizontal	355	1.84	-
5530MHz	Pass	AV	5.547G	94.48	Inf	-Inf	4.55	3	Horizontal	355	1.84	-
5530MHz	Pass	PK	5.467G	60.77	68.20	-7.43	4.40	3	Horizontal	355	1.84	-
5530MHz	Pass	PK	5.563G	102.96	Inf	-Inf	4.60	3	Horizontal	355	1.84	-
5530MHz	Pass	PK	5.762G	57.32	68.20	-10.88	5.04	3	Horizontal	355	1.84	-
5530MHz	Pass	AV	11.06176G	46.63	54.00	-7.37	15.58	3	Vertical	288	1.52	-
5530MHz	Pass	PK	11.05618G	57.01	74.00	-16.99	15.59	3	Vertical	288	1.52	-
5530MHz	Pass	AV	11.0591G	46.71	54.00	-7.29	15.59	3	Horizontal	5	1.06	-
5530MHz	Pass	PK	11.0583G	57.49	74.00	-16.51	15.59	3	Horizontal	5	1.06	-
5610MHz	Pass	AV	5.46G	52.48	54.00	-1.52	4.40	3	Vertical	360	1.79	-
5610MHz	Pass	AV	5.625G	102.38	Inf	-Inf	4.76	3	Vertical	360	1.79	-
5610MHz	Pass	PK	5.461G	67.38	68.20	-0.82	4.40	3	Vertical	360	1.79	-
5610MHz	Pass	PK	5.594G	112.14	Inf	-Inf	4.68	3	Vertical	360	1.79	-
5610MHz	Pass	PK	5.726G	65.51	68.20	-2.69	4.96	3	Vertical	360	1.79	-
5610MHz	Pass	AV	5.457G	49.86	54.00	-4.14	4.39	3	Horizontal	358	1.76	-
5610MHz	Pass	AV	5.627G	98.67	Inf	-Inf	4.77	3	Horizontal	358	1.76	-
5610MHz	Pass	PK	5.462G	62.59	68.20	-5.61	4.40	3	Horizontal	358	1.76	-
5610MHz	Pass	PK	5.622G	107.17	Inf	-Inf	4.75	3	Horizontal	358	1.76	-
5610MHz	Pass	PK	5.727G	62.72	68.20	-5.48	4.96	3	Horizontal	358	1.76	-
5610MHz	Pass	AV	11.21682G	44.78	54.00	-9.22	15.45	3	Vertical	156	1.87	-
5610MHz	Pass	PK	11.23374G	55.83	74.00	-18.17	15.42	3	Vertical	156	1.87	-
5610MHz	Pass	AV	11.22944G	44.52	54.00	-9.48	15.43	3	Horizontal	39	1.85	-
5610MHz	Pass	PK	11.2295G	55.41	74.00	-18.59	15.43	3	Horizontal	39	1.85	-

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5260MHz_TX

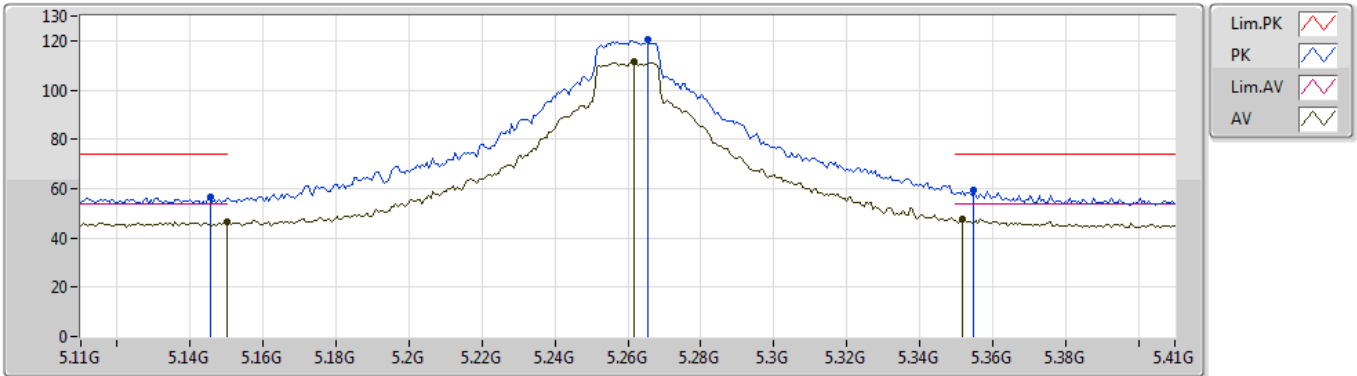


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.1388G	46.84	54.00	-7.16	4.07	3	Vertical	0	1.98	-				
AV	5.2594G	114.00	Inf	-Inf	4.22	3	Vertical	0	1.98	-				
AV	5.3506G	49.50	54.00	-4.50	4.32	3	Vertical	0	1.98	-				
PK	5.1136G	57.44	74.00	-16.56	4.04	3	Vertical	0	1.98	-				
PK	5.2642G	122.49	Inf	-Inf	4.23	3	Vertical	0	1.98	-				
PK	5.35G	61.31	74.00	-12.69	4.32	3	Vertical	0	1.98	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5260MHz_TX

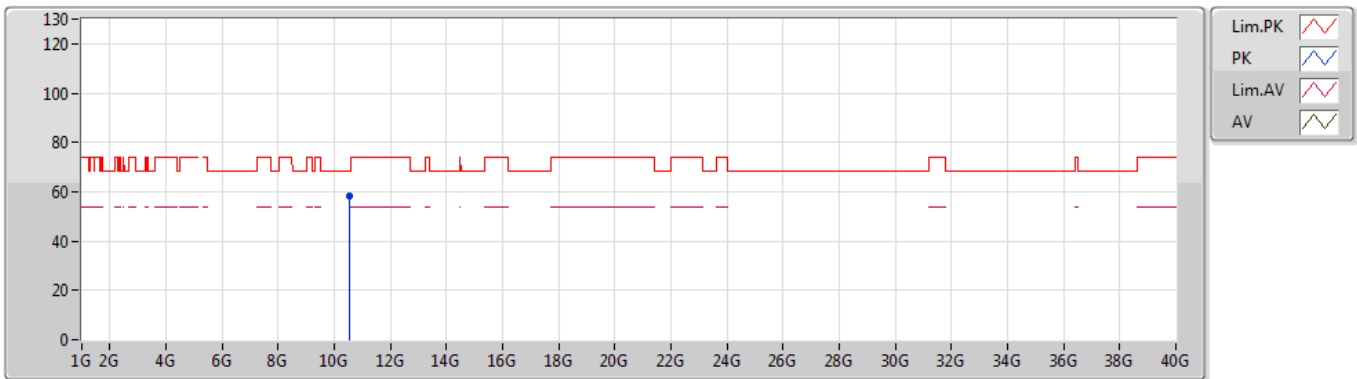


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.15G	46.58	54.00	-7.42	4.09	3	Horizontal	0	1.89	-				
AV	5.2618G	111.30	Inf	-Inf	4.22	3	Horizontal	0	1.89	-				
AV	5.3518G	47.49	54.00	-6.51	4.32	3	Horizontal	0	1.89	-				
PK	5.1454G	56.87	74.00	-17.13	4.09	3	Horizontal	0	1.89	-				
PK	5.2654G	120.67	Inf	-Inf	4.23	3	Horizontal	0	1.89	-				
PK	5.3548G	59.31	74.00	-14.69	4.32	3	Horizontal	0	1.89	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5260MHz_TX

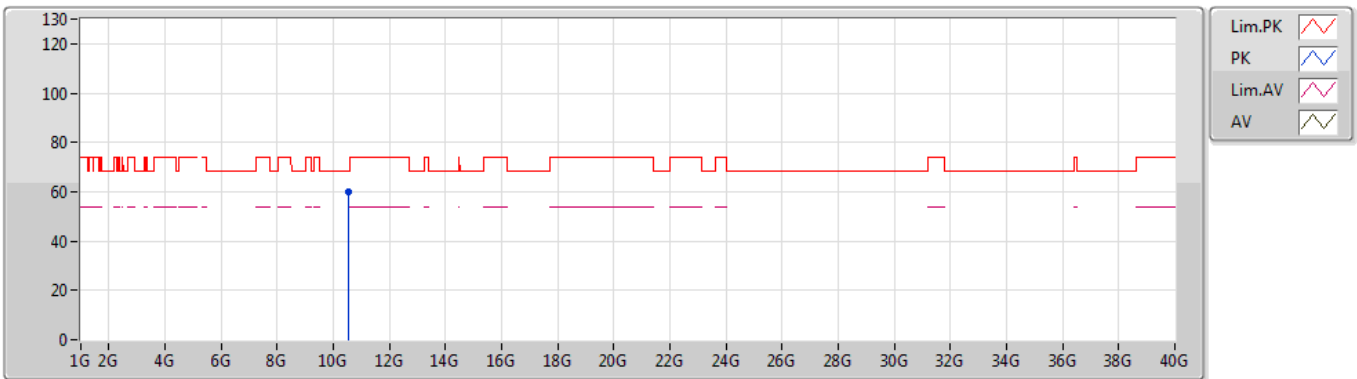


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
PK	10.5181G	58.16	68.20	-10.04	14.74	3	Vertical	156	1.68	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5260MHz_TX

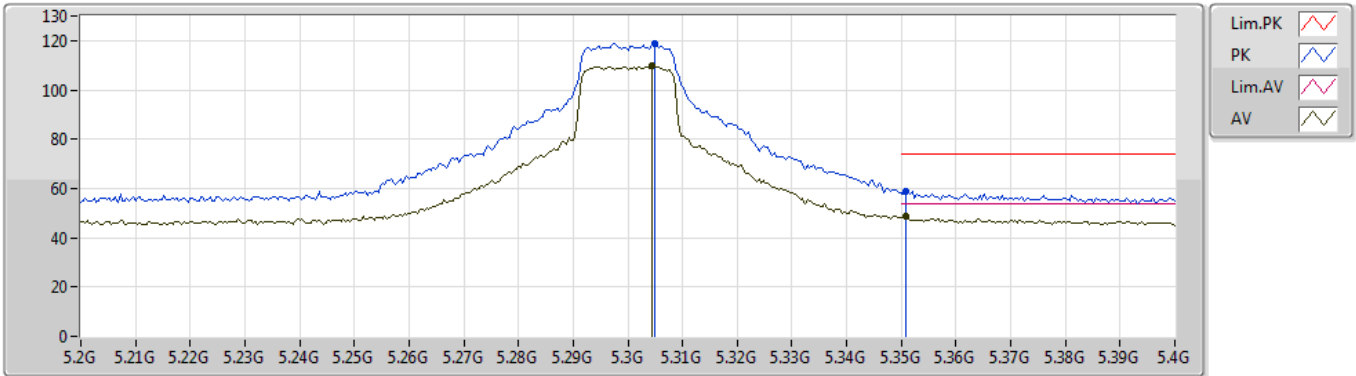


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
PK	10.52016G	60.17	68.20	-8.03	14.39	3	Horizontal	147	1.24	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5300MHz_TX

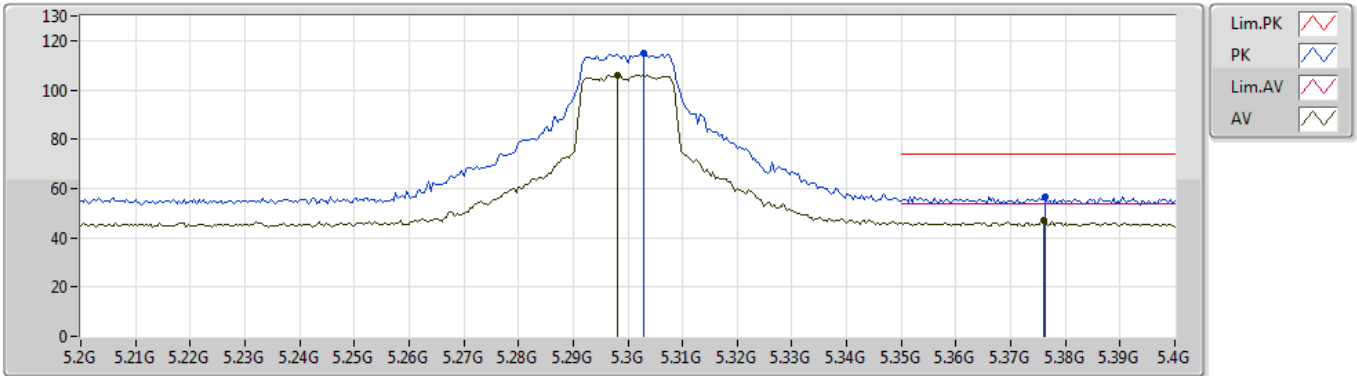


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.3044G	109.61	Inf	-Inf	4.27	3	Vertical	360	1.95	-				
AV	5.3508G	48.53	54.00	-5.47	4.32	3	Vertical	360	1.95	-				
PK	5.3048G	118.98	Inf	-Inf	4.27	3	Vertical	360	1.95	-				
PK	5.3508G	58.65	74.00	-15.35	4.32	3	Vertical	360	1.95	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5300MHz_TX

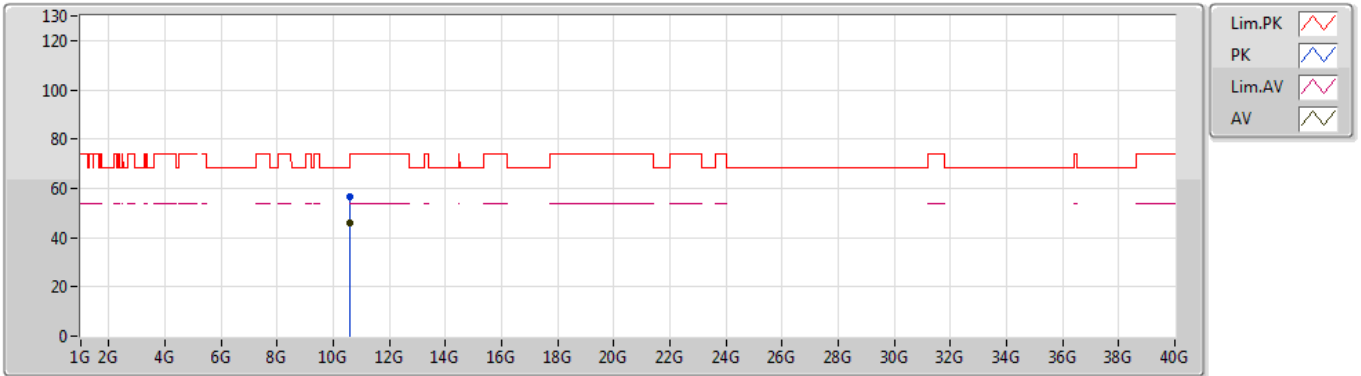


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.298G	106.08	Inf	-Inf	4.26	3	Horizontal	355	1.98	-				
AV	5.376G	47.30	54.00	-6.70	4.36	3	Horizontal	355	1.98	-				
PK	5.3028G	114.97	Inf	-Inf	4.26	3	Horizontal	355	1.98	-				
PK	5.3764G	56.56	74.00	-17.44	4.36	3	Horizontal	355	1.98	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5300MHz_TX

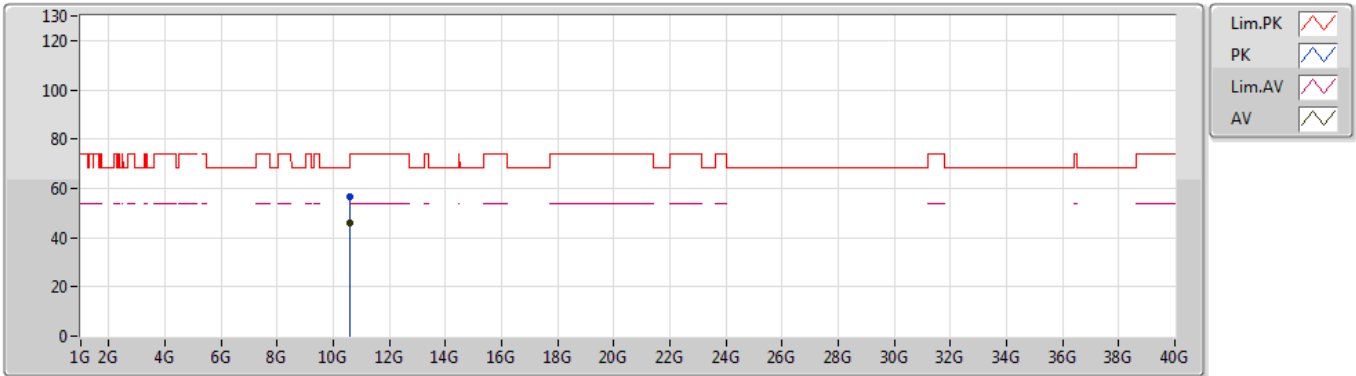


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	10.60186G	45.90	54.00	-8.10	14.60	3	Vertical	17	1.49	-				
PK	10.60085G	56.36	74.00	-17.64	14.59	3	Vertical	17	1.49	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5300MHz_TX

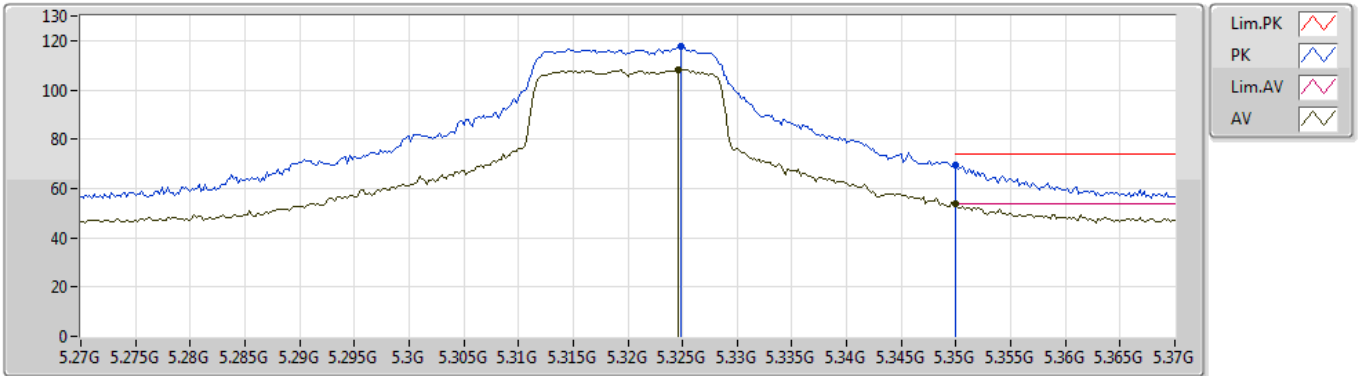


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	10.6021G	45.74	54.00	-8.26	14.60	3	Horizontal	173	1.50	-				
PK	10.60714G	56.74	74.00	-17.26	14.62	3	Horizontal	173	1.50	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5320MHz_TX

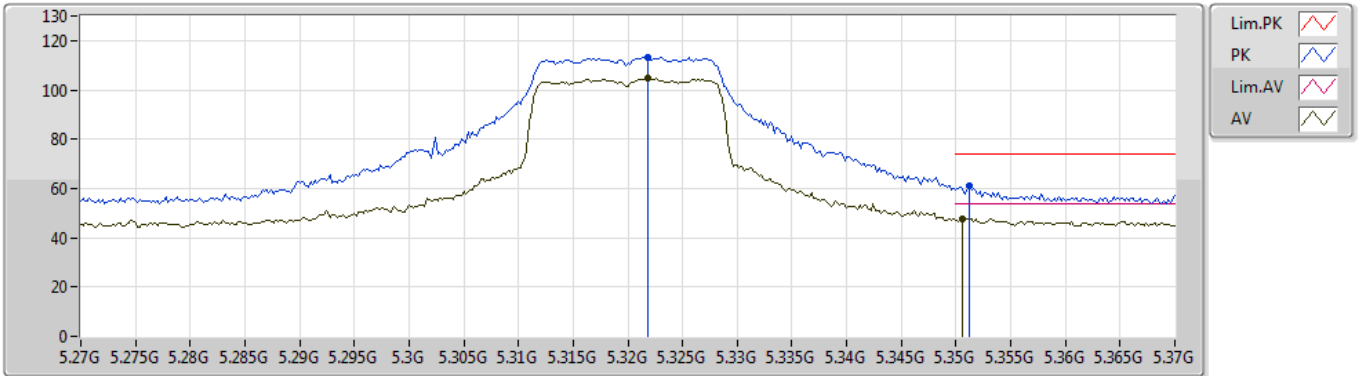


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.3246G	108.20	Inf	-Inf	4.29	3	Vertical	0	1.93	-				
AV	5.35G	53.61	54.00	-0.39	4.32	3	Vertical	0	1.93	-				
PK	5.3248G	117.64	Inf	-Inf	4.29	3	Vertical	0	1.93	-				
PK	5.35G	69.41	74.00	-4.59	4.32	3	Vertical	0	1.93	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5320MHz_TX

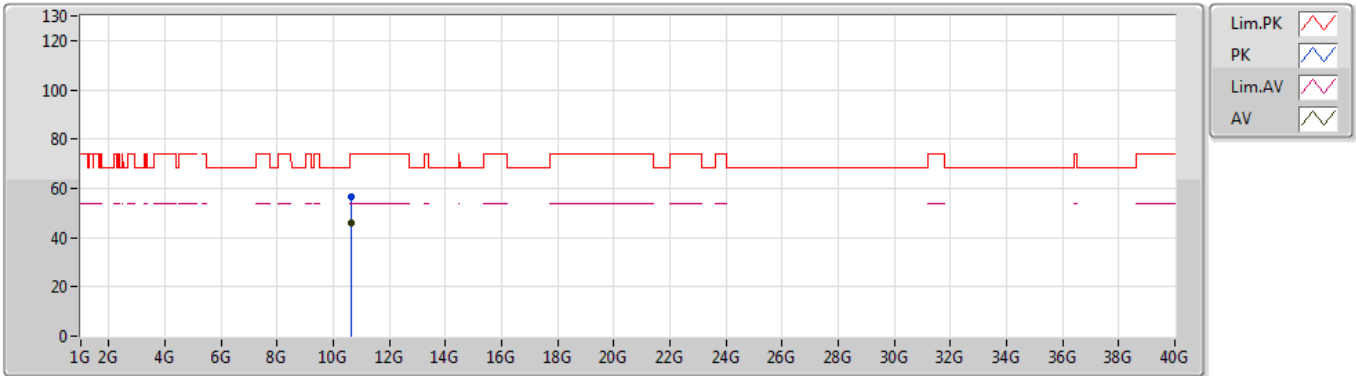


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.3218G	104.57	Inf	-Inf	4.29	3	Horizontal	4	1.77	-				
AV	5.3506G	47.89	54.00	-6.11	4.32	3	Horizontal	4	1.77	-				
PK	5.3218G	113.37	Inf	-Inf	4.29	3	Horizontal	4	1.77	-				
PK	5.3512G	60.94	74.00	-13.06	4.32	3	Horizontal	4	1.77	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5320MHz_TX

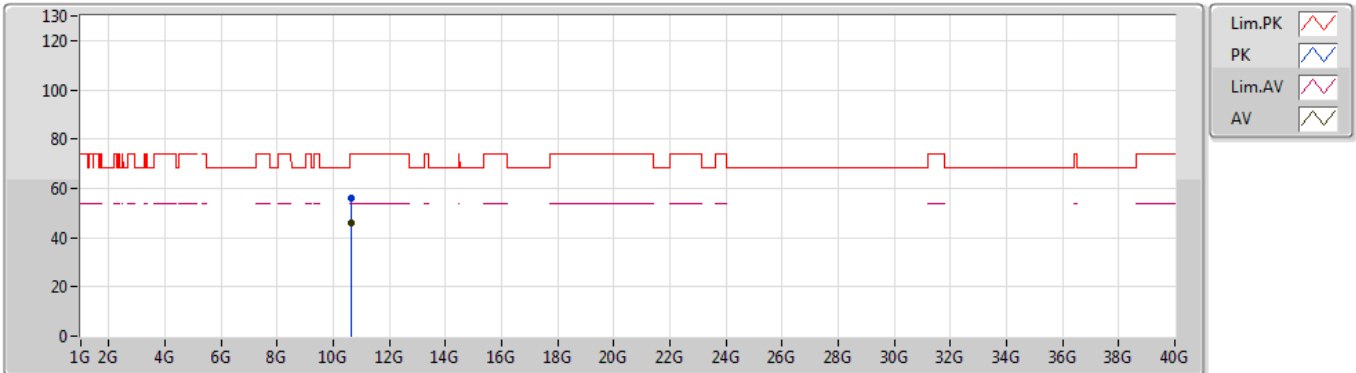


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	10.63542G	45.79	54.00	-8.21	14.69	3	Vertical	56	1.50	-				
PK	10.64388G	56.80	74.00	-17.20	14.71	3	Vertical	56	1.50	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

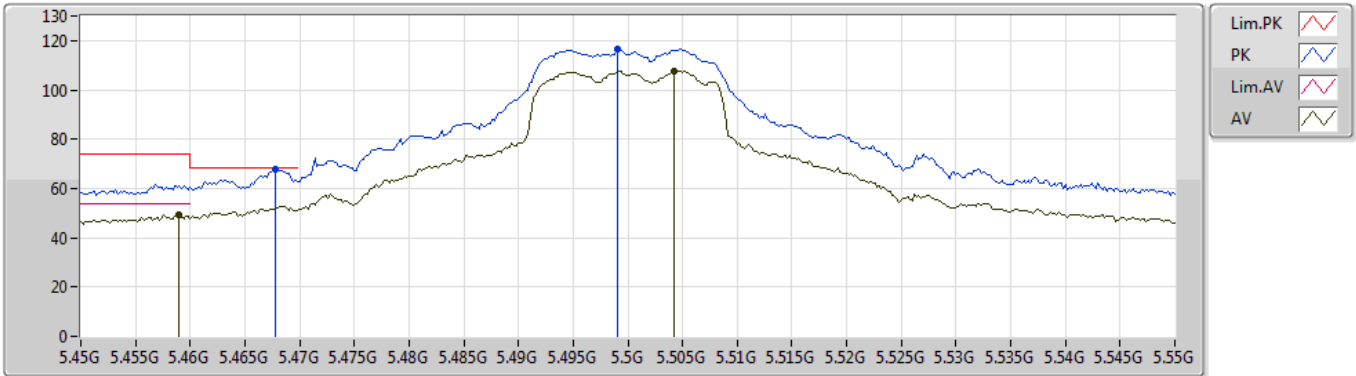
5320MHz_TX



802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5500MHz_TX

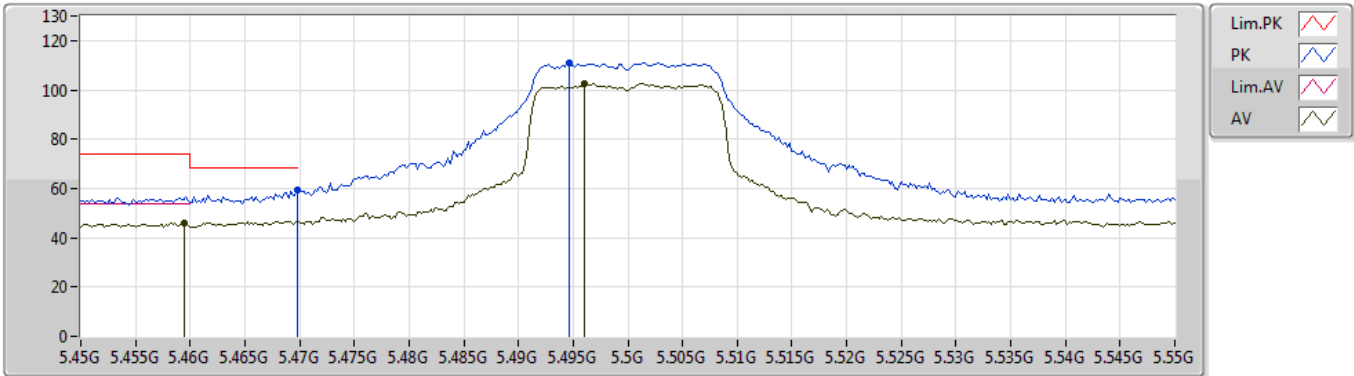


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.459G	49.19	54.00	-4.81	4.40	3	Vertical	4	1.79	-				
AV	5.5042G	107.83	Inf	-Inf	4.41	3	Vertical	4	1.79	-				
PK	5.4678G	67.84	68.20	-0.36	4.40	3	Vertical	4	1.79	-				
PK	5.499G	116.51	Inf	-Inf	4.40	3	Vertical	4	1.79	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5500MHz_TX

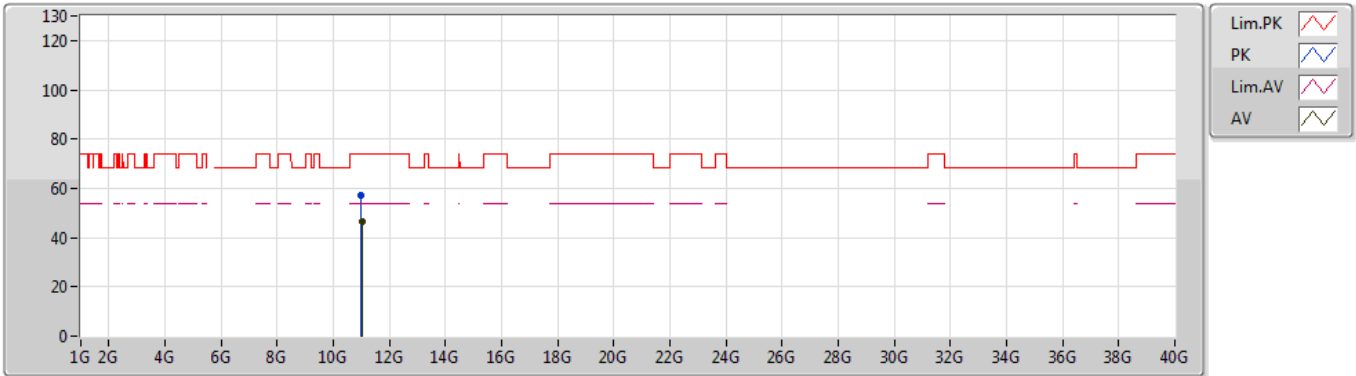


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.4594G	46.15	54.00	-7.85	4.40	3	Horizontal	0	1.77	-				
AV	5.496G	102.39	Inf	-Inf	4.40	3	Horizontal	0	1.77	-				
PK	5.4698G	59.22	68.20	-8.98	4.40	3	Horizontal	0	1.77	-				
PK	5.4946G	110.98	Inf	-Inf	4.41	3	Horizontal	0	1.77	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5500MHz_TX

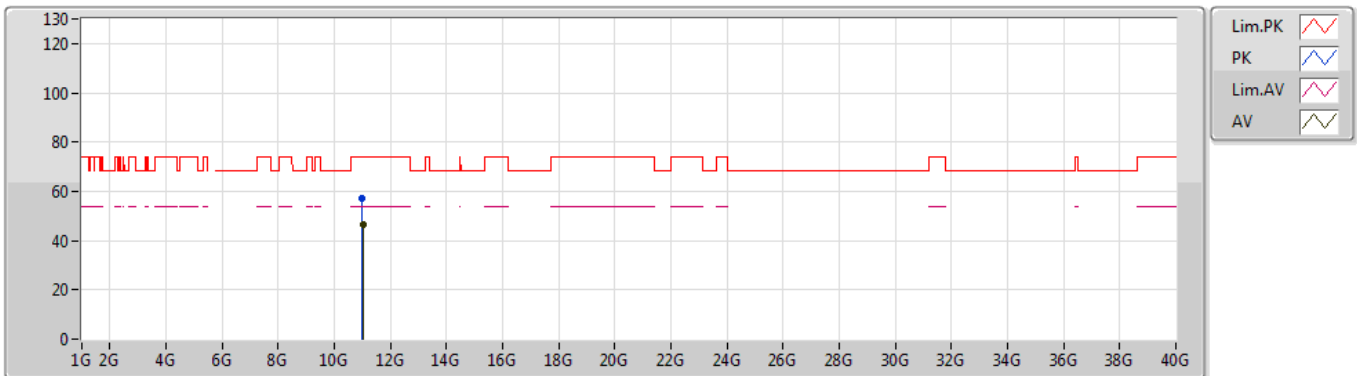


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.01236G	46.77	54.00	-7.23	15.63	3	Vertical	310	1.50	-				
PK	10.99484G	57.17	74.00	-16.83	15.63	3	Vertical	310	1.50	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5500MHz_TX

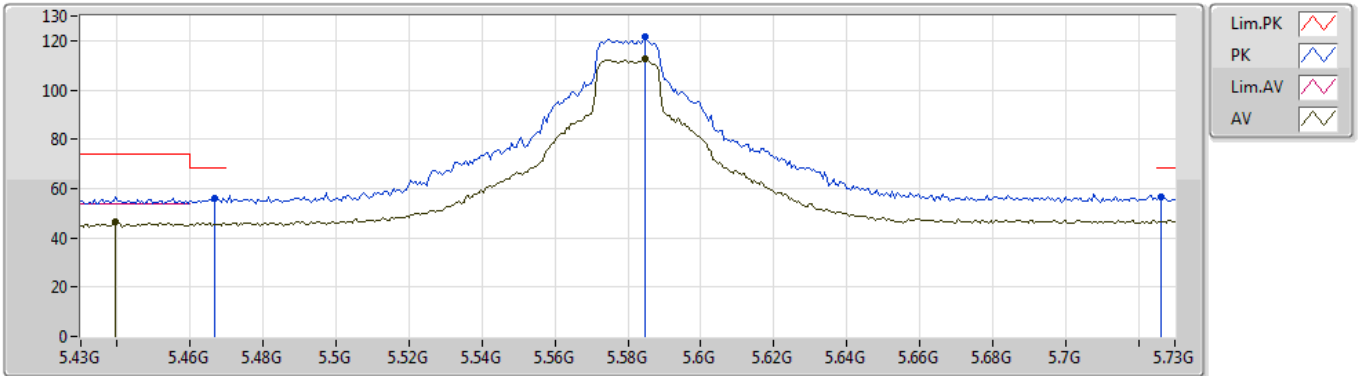


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.01248G	46.68	54.00	-7.32	15.63	3	Horizontal	122	1.50	-				
PK	11.0012G	57.36	74.00	-16.64	15.64	3	Horizontal	122	1.50	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5580MHz_TX

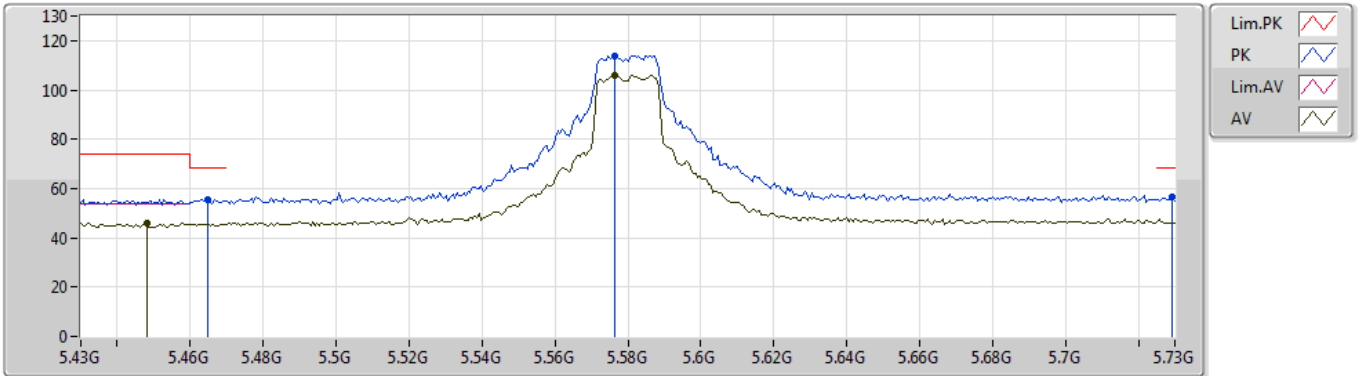


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.4396G	46.33	54.00	-7.67	4.39	3	Vertical	3	1.97	-				
AV	5.5848G	112.51	Inf	-Inf	4.66	3	Vertical	3	1.97	-				
PK	5.4666G	56.16	68.20	-12.04	4.40	3	Vertical	3	1.97	-				
PK	5.5848G	121.37	Inf	-Inf	4.66	3	Vertical	3	1.97	-				
PK	5.7264G	56.61	68.20	-11.59	4.96	3	Vertical	3	1.97	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5580MHz_TX

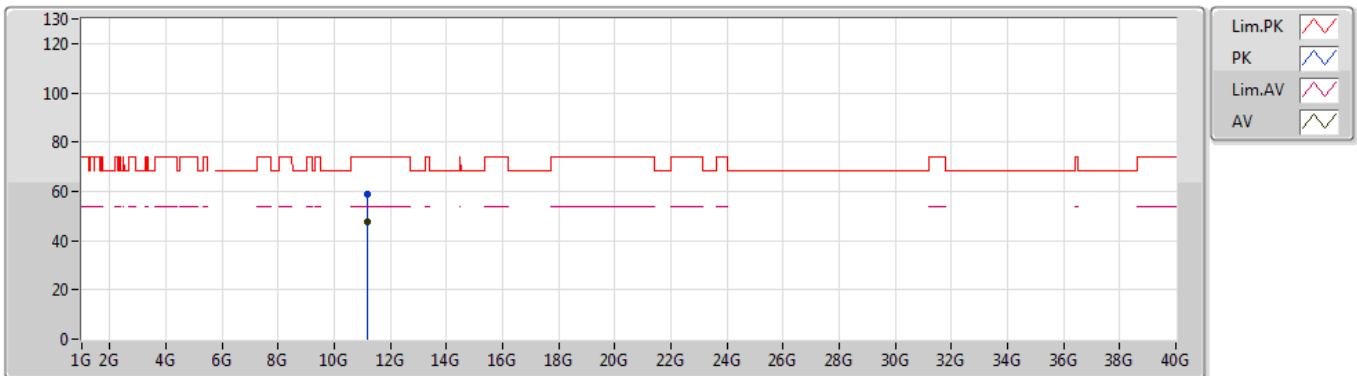


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.448G	46.03	54.00	-7.97	4.39	3	Horizontal	3	1.70	-				
AV	5.5764G	106.03	Inf	-Inf	4.64	3	Horizontal	3	1.70	-				
PK	5.4648G	55.57	68.20	-12.63	4.39	3	Horizontal	3	1.70	-				
PK	5.5764G	114.02	Inf	-Inf	4.64	3	Horizontal	3	1.70	-				
PK	5.7294G	56.67	68.20	-11.53	4.96	3	Horizontal	3	1.70	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5580MHz_TX

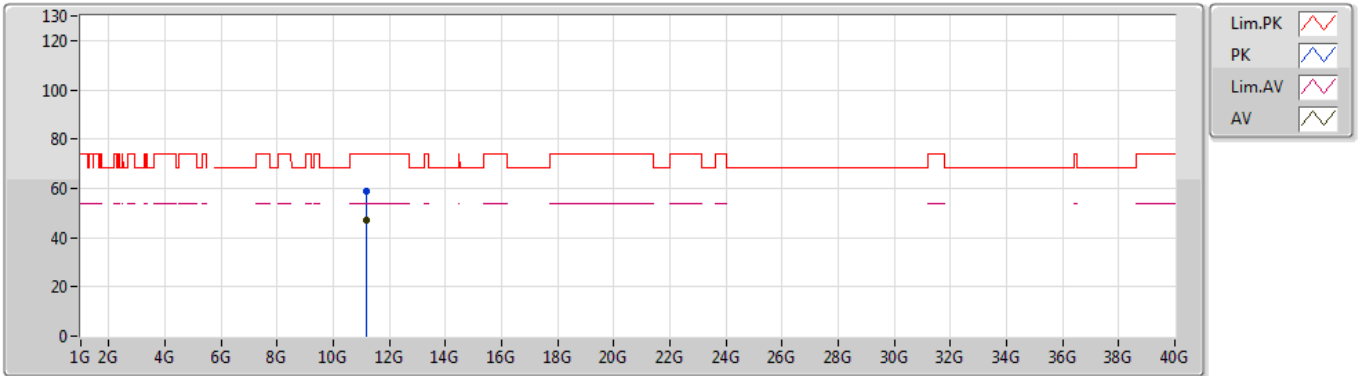


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.15846G	47.77	54.00	-6.23	15.49	3	Vertical	193	2.74	-				
PK	11.16108G	58.82	74.00	-15.18	15.48	3	Vertical	193	2.74	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5580MHz_TX

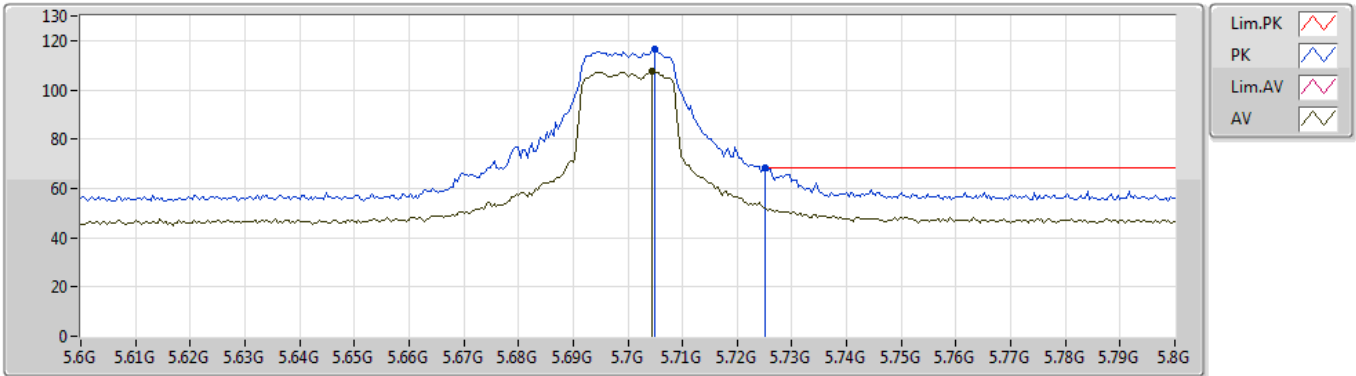


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.16033G	46.93	54.00	-7.07	15.49	3	Horizontal	173	1.50	-				
PK	11.1593G	58.75	74.00	-15.25	15.49	3	Horizontal	173	1.50	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5700MHz_TX

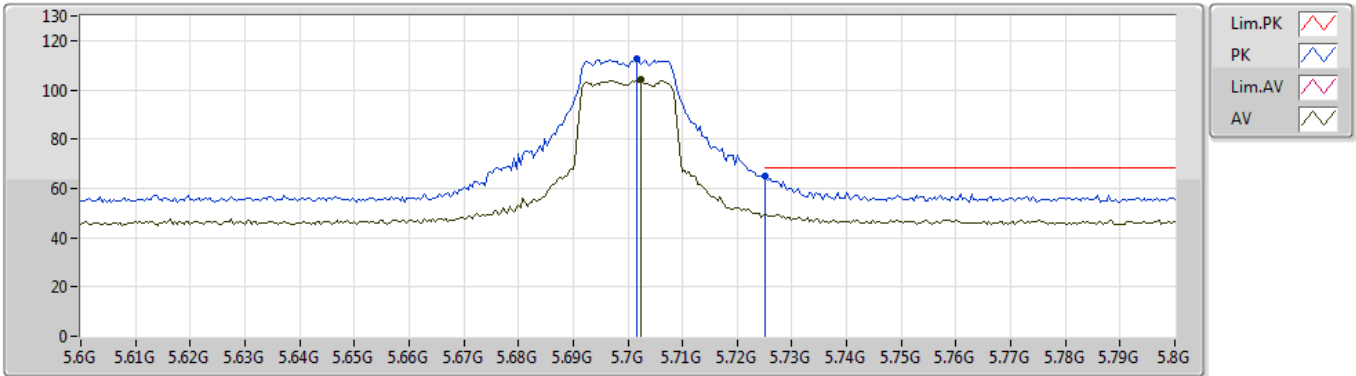


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.7044G	107.51	Inf	-Inf	4.93	3	Vertical	2	2.02	-				
PK	5.7048G	116.60	Inf	-Inf	4.93	3	Vertical	2	2.02	-				
PK	5.7252G	68.14	68.20	-0.06	4.96	3	Vertical	2	2.02	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5700MHz_TX

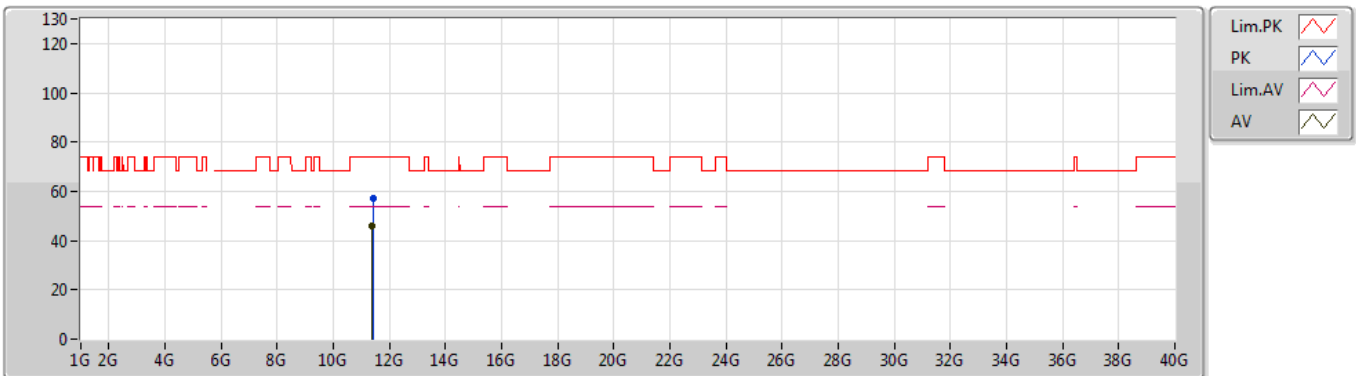


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.7024G	104.11	Inf	-Inf	4.91	3	Horizontal	1	1.73	-				
PK	5.7016G	112.37	Inf	-Inf	4.91	3	Horizontal	1	1.73	-				
PK	5.7252G	65.24	68.20	-2.96	4.96	3	Horizontal	1	1.73	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5700MHz_TX

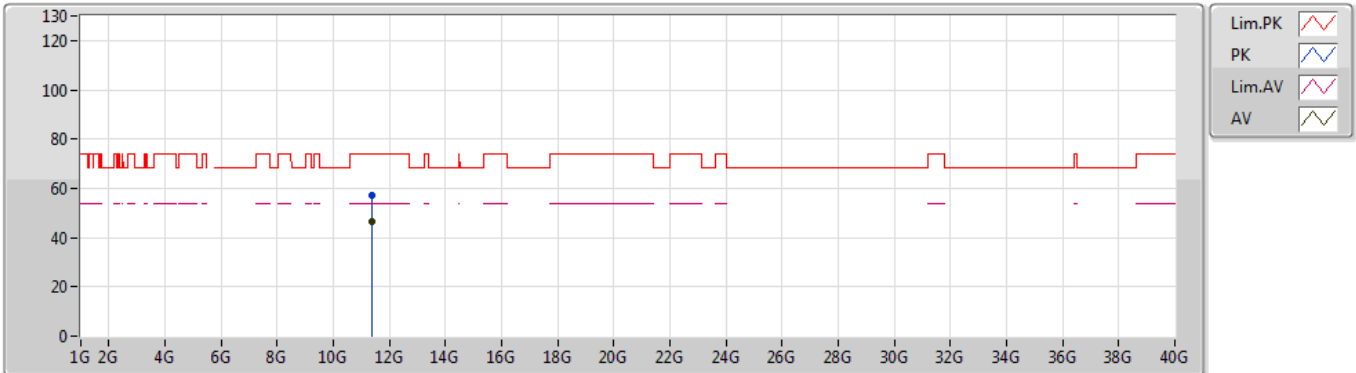


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.39943G	46.07	54.00	-7.93	15.28	3	Vertical	190	1.50	-				
PK	11.40215G	57.26	74.00	-16.74	15.28	3	Vertical	190	1.50	-				

802.11ac VHT20_Nss1,(MCS0)_2TX

02/05/2019

5700MHz_TX

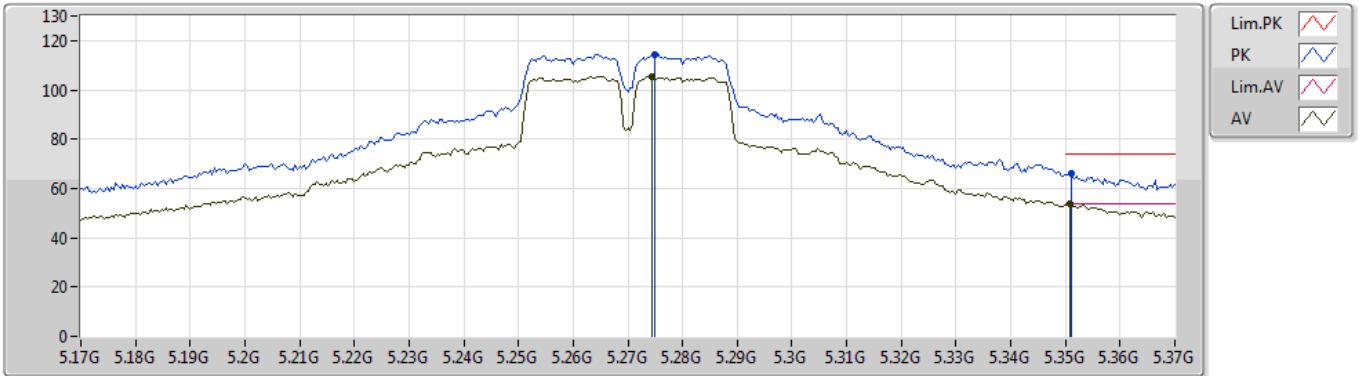


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.40086G	46.25	54.00	-7.75	15.28	3	Horizontal	148	2.31	-				
PK	11.39845G	56.90	74.00	-17.10	15.28	3	Horizontal	148	2.31	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5270MHz_TX

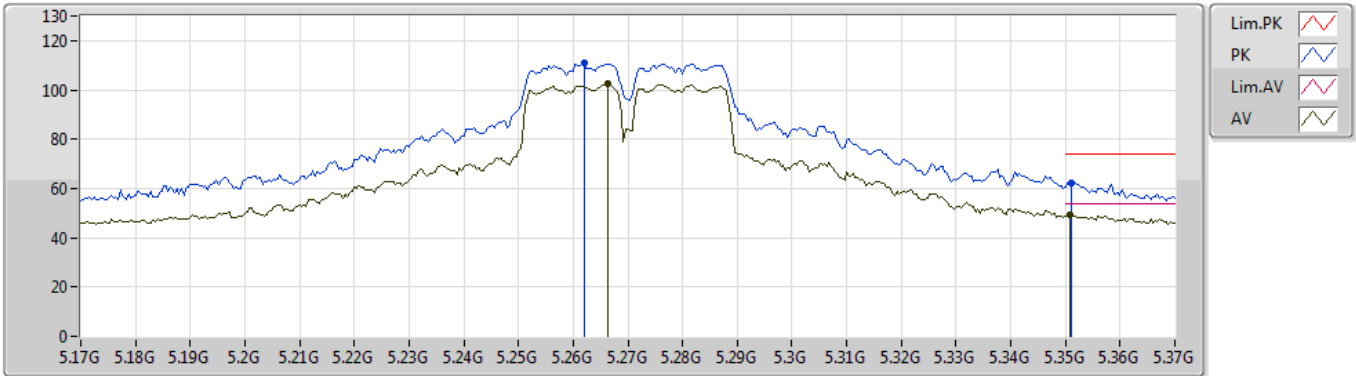


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.2744G	105.39	Inf	-Inf	4.23	3	Vertical	0	1.75	-				
AV	5.3508G	53.93	54.00	-0.07	4.32	3	Vertical	0	1.75	-				
PK	5.2748G	114.52	Inf	-Inf	4.23	3	Vertical	0	1.75	-				
PK	5.3512G	66.25	74.00	-7.75	4.32	3	Vertical	0	1.75	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5270MHz_TX

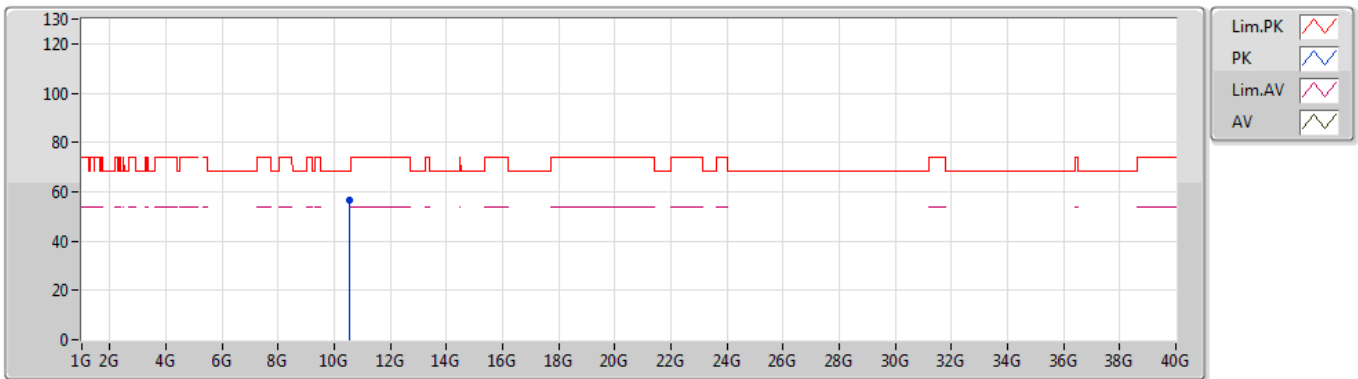


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.2664G	102.30	Inf	-Inf	4.23	3	Horizontal	9	1.67	-				
AV	5.3508G	49.38	54.00	-4.62	4.32	3	Horizontal	9	1.67	-				
PK	5.262G	110.71	Inf	-Inf	4.22	3	Horizontal	9	1.67	-				
PK	5.3512G	62.28	74.00	-11.72	4.32	3	Horizontal	9	1.67	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5270MHz_TX

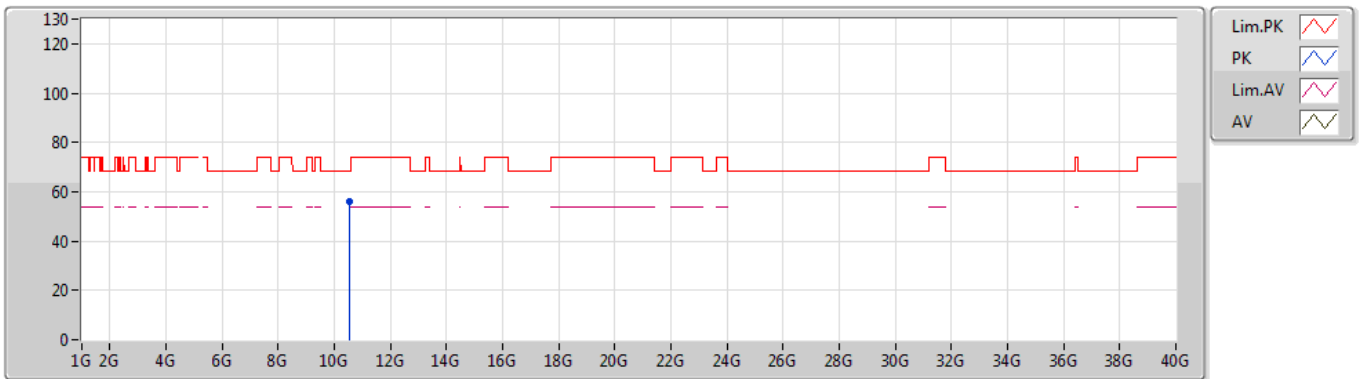


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
PK	10.5359G	56.71	68.20	-11.49	14.43	3	Vertical	262	1.44	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5270MHz_TX

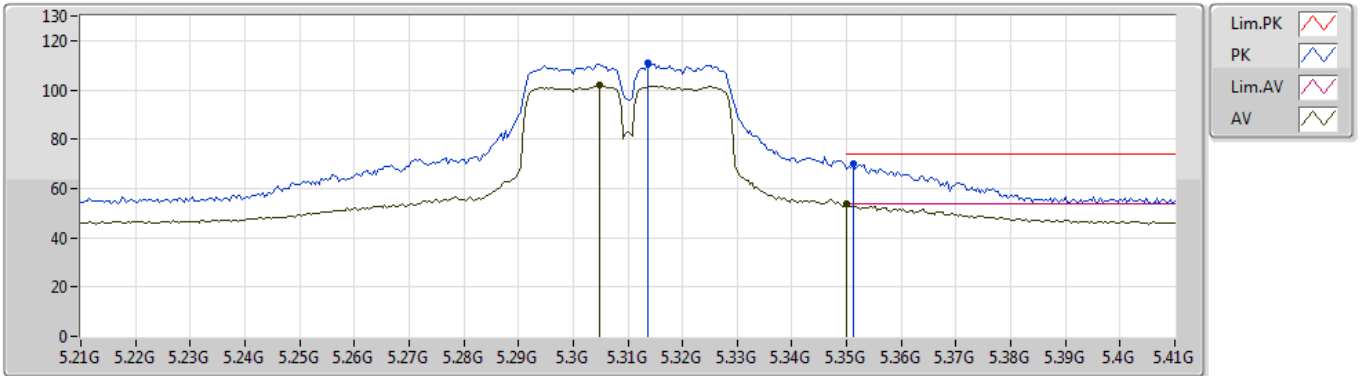


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
PK	10.53676G	56.28	68.20	-11.92	14.43	3	Horizontal	147	1.22	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5310MHz_TX

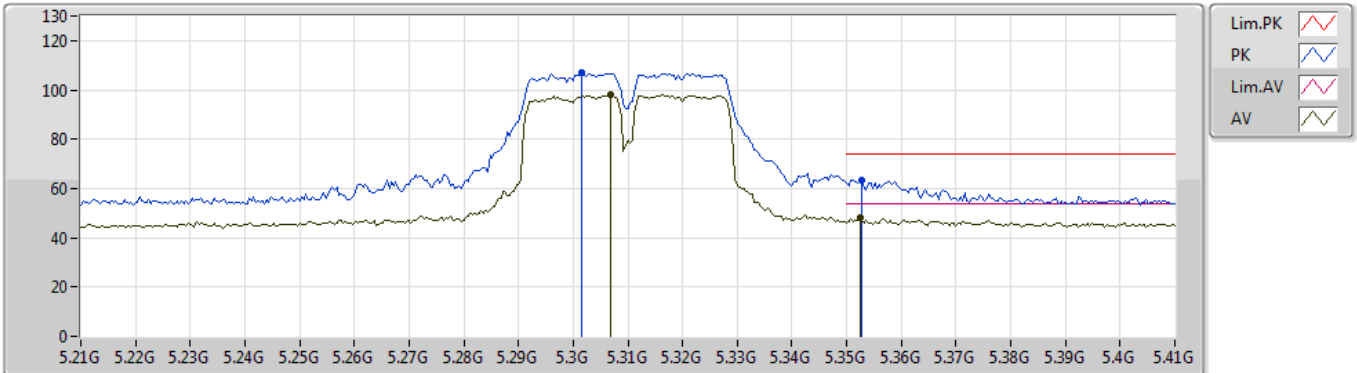


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.3048G	101.73	Inf	-Inf	4.27	3	Vertical	0	1.89	-				
AV	5.35G	53.77	54.00	-0.23	4.32	3	Vertical	0	1.89	-				
PK	5.3136G	111.00	Inf	-Inf	4.28	3	Vertical	0	1.89	-				
PK	5.3512G	70.00	74.00	-4.00	4.32	3	Vertical	0	1.66	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5310MHz_TX

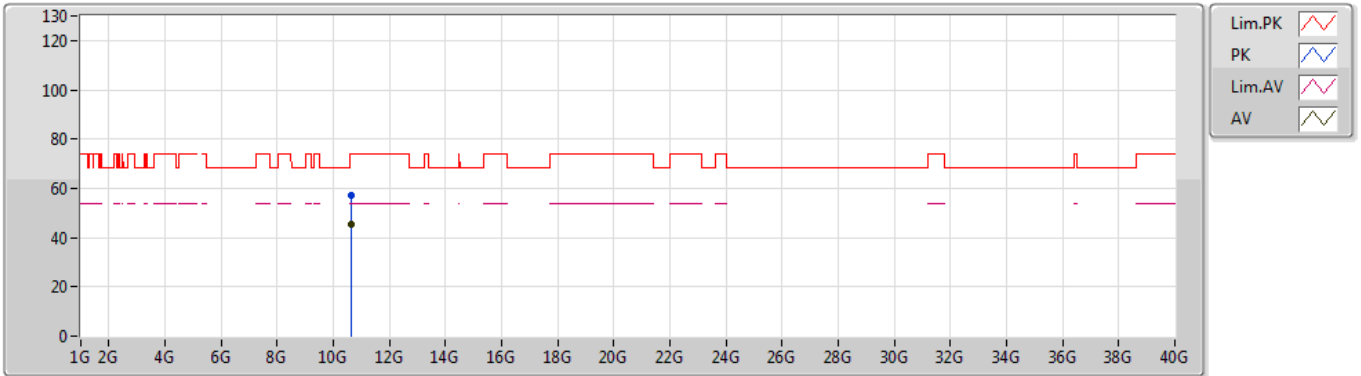


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.3068G	98.17	Inf	-Inf	4.27	3	Horizontal	1	1.85	-				
AV	5.3524G	47.91	54.00	-6.09	4.32	3	Horizontal	1	1.85	-				
PK	5.3016G	107.04	Inf	-Inf	4.26	3	Horizontal	1	1.85	-				
PK	5.3528G	63.25	74.00	-10.75	4.32	3	Horizontal	1	1.85	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5310MHz_TX

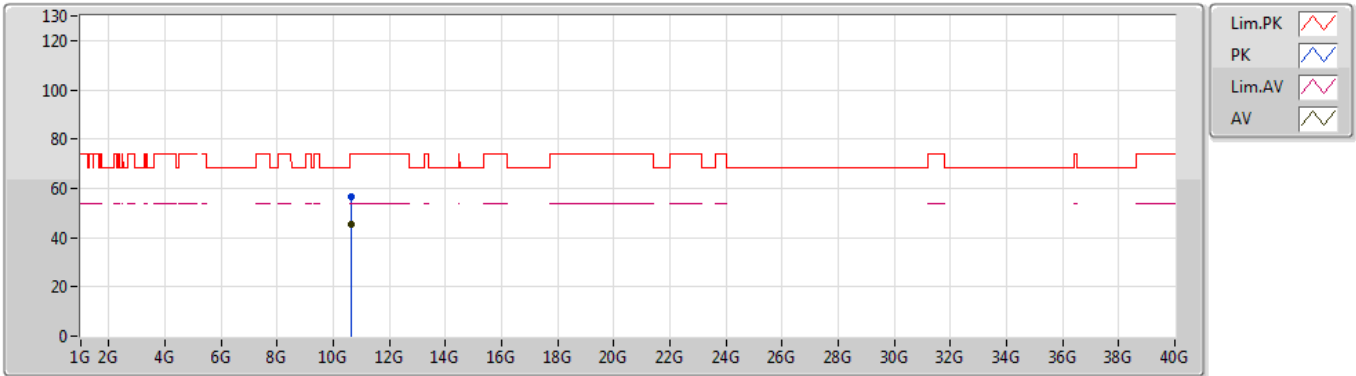


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	10.6151G	45.46	54.00	-8.54	14.63	3	Vertical	61	1.51	-				
PK	10.61582G	57.04	74.00	-16.96	14.63	3	Vertical	61	1.51	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

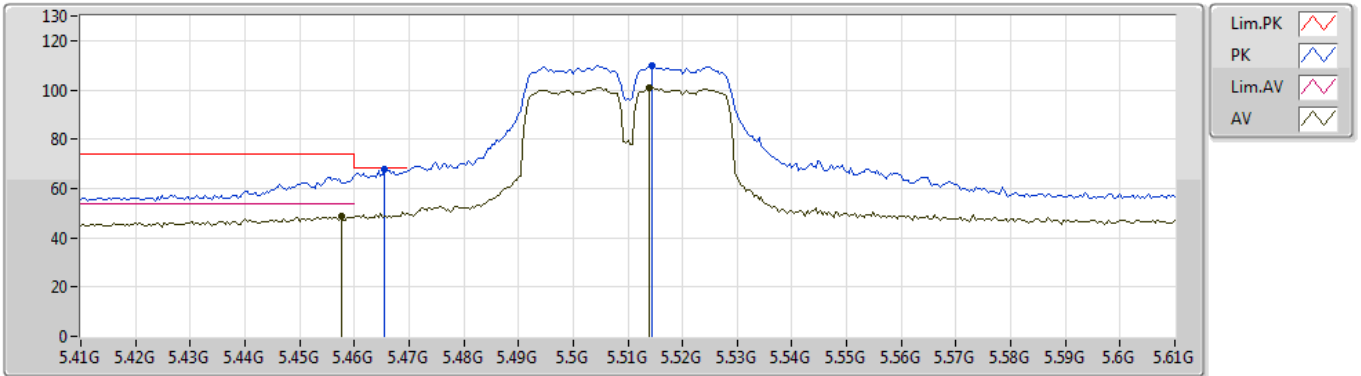
5310MHz_TX



802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5510MHz_TX

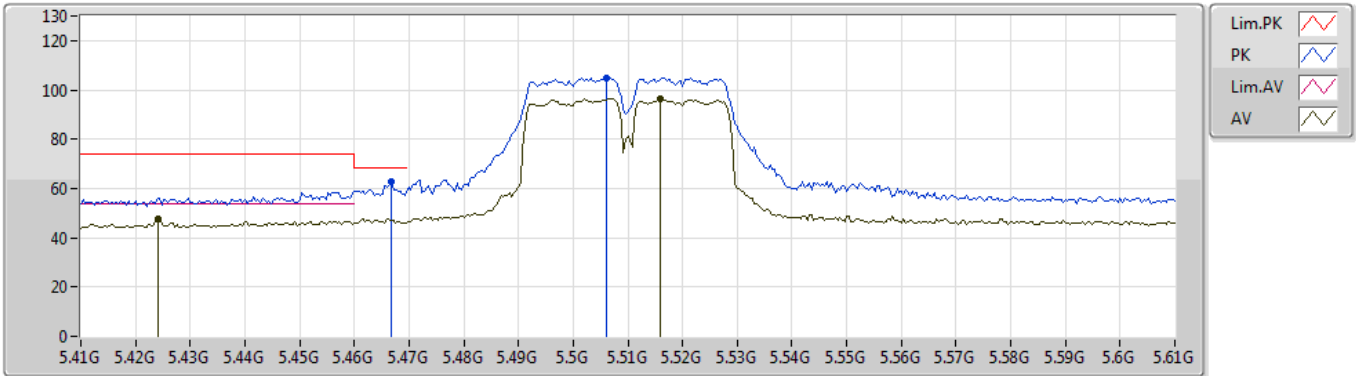


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.4576G	48.99	54.00	-5.01	4.39	3	Vertical	358	1.81	-				
AV	5.514G	100.83	Inf	-Inf	4.44	3	Vertical	358	1.81	-				
PK	5.4656G	67.79	68.20	-0.41	4.39	3	Vertical	358	1.81	-				
PK	5.5144G	110.08	Inf	-Inf	4.44	3	Vertical	358	1.81	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5510MHz_TX

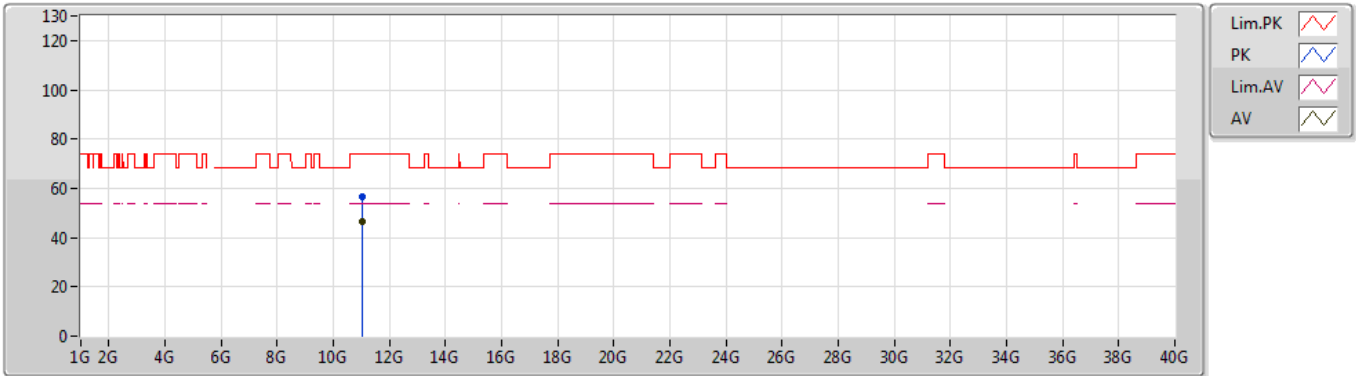


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.424G	47.80	54.00	-6.20	4.38	3	Horizontal	7	1.74	-				
AV	5.516G	96.55	Inf	-Inf	4.44	3	Horizontal	7	1.74	-				
PK	5.4668G	62.56	68.20	-5.64	4.40	3	Horizontal	7	1.74	-				
PK	5.506G	104.90	Inf	-Inf	4.42	3	Horizontal	7	1.74	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5510MHz_TX

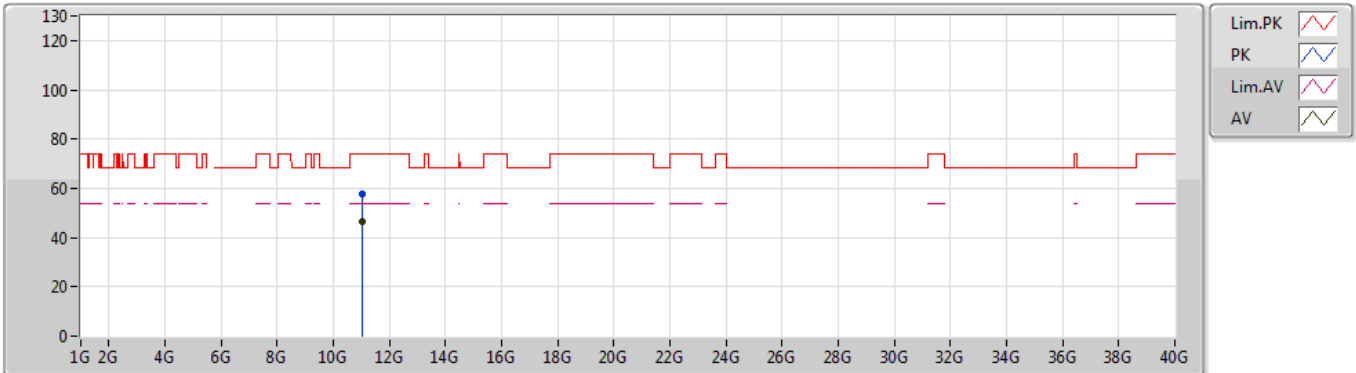


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.0191G	46.62	54.00	-7.38	15.62	3	Vertical	14	1.56	-				
PK	11.01964G	56.82	74.00	-17.18	15.62	3	Vertical	14	1.56	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5510MHz_TX

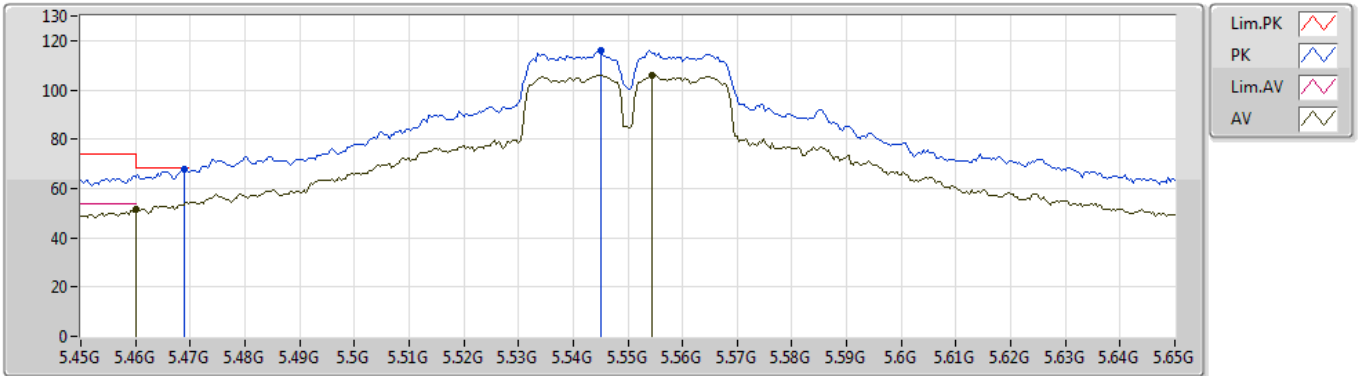


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.02174G	46.41	54.00	-7.59	15.62	3	Horizontal	238	1.59	-				
PK	11.02484G	57.69	74.00	-16.31	15.63	3	Horizontal	238	1.59	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5550MHz_TX

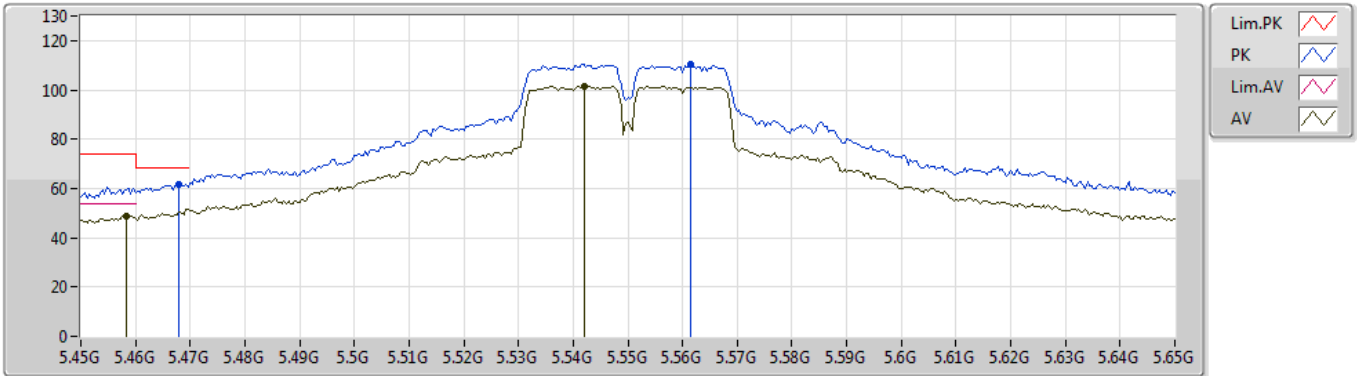


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.46G	51.41	54.00	-2.59	4.40	3	Vertical	0	1.87	-				
AV	5.5544G	105.97	Inf	-Inf	4.57	3	Vertical	0	1.87	-				
PK	5.4688G	67.65	68.20	-0.55	4.40	3	Vertical	0	1.87	-				
PK	5.5452G	115.96	Inf	-Inf	4.53	3	Vertical	0	1.87	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5550MHz_TX

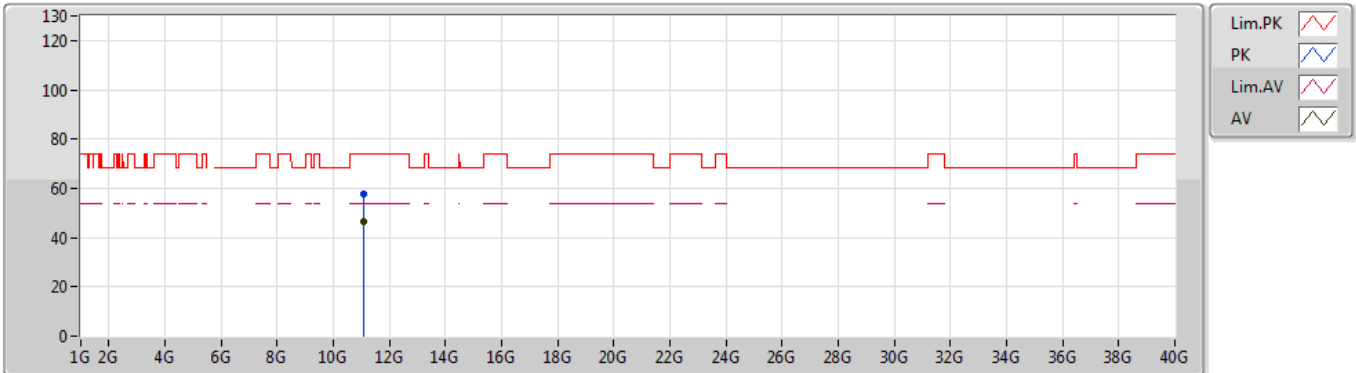


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.4584G	48.92	54.00	-5.08	4.40	3	Horizontal	356	1.85	-				
AV	5.542G	101.44	Inf	-Inf	4.53	3	Horizontal	356	1.85	-				
PK	5.468G	61.60	68.20	-6.60	4.40	3	Horizontal	356	1.85	-				
PK	5.5616G	110.41	Inf	-Inf	4.60	3	Horizontal	356	1.85	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5550MHz_TX

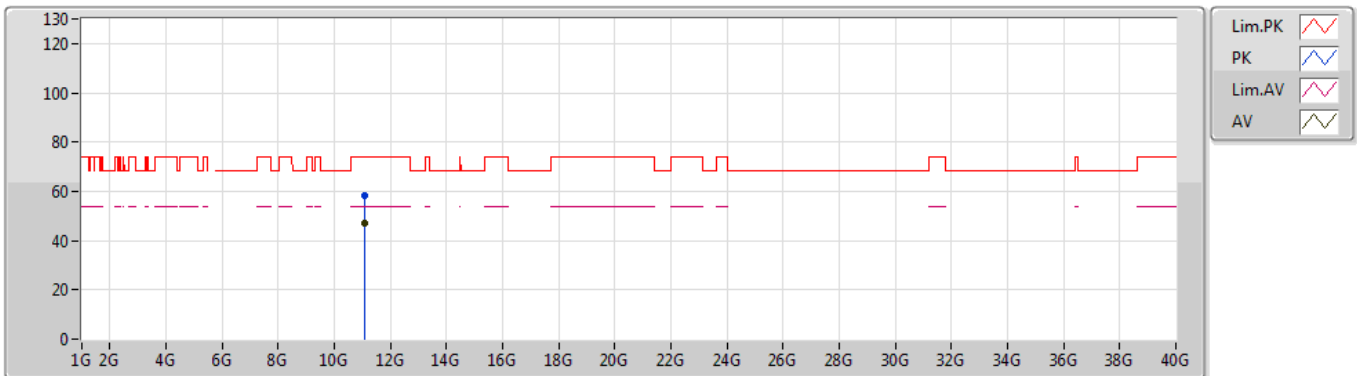


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.08554G	46.54	54.00	-7.46	15.56	3	Vertical	47	1.24	-				
PK	11.09724G	57.70	74.00	-16.30	15.54	3	Vertical	47	1.24	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5550MHz_TX

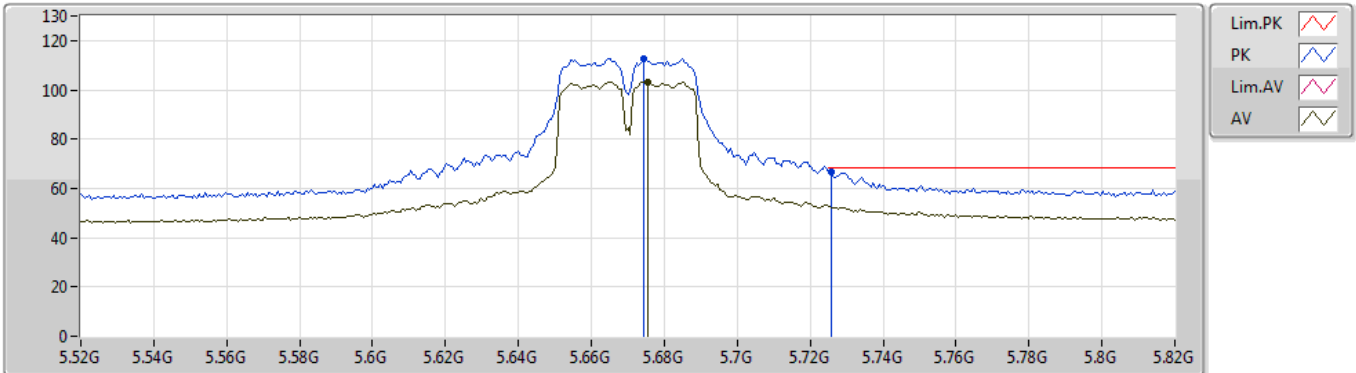


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.08734G	46.80	54.00	-7.20	15.57	3	Horizontal	275	1.99	-				
PK	11.10348G	58.22	74.00	-15.78	15.55	3	Horizontal	275	1.99	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5670MHz_TX

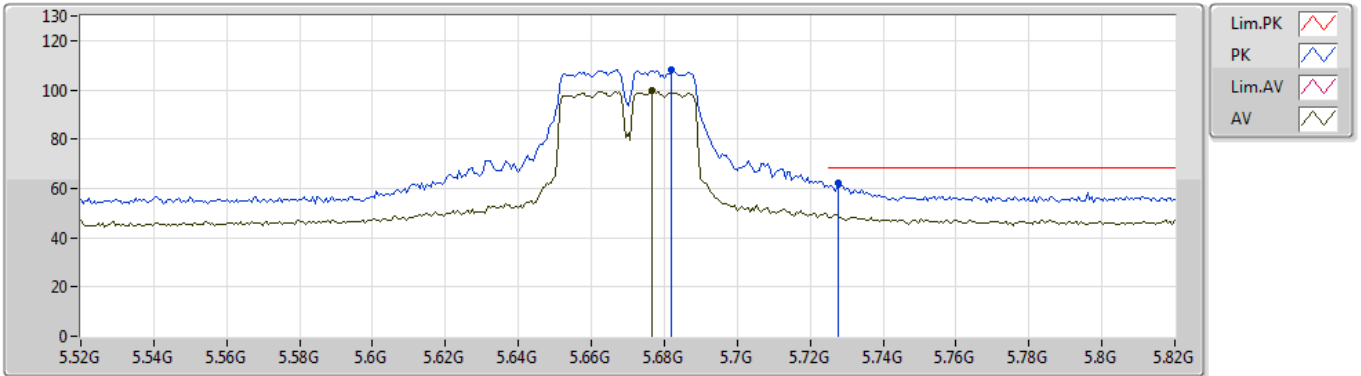


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.6754G	103.10	Inf	-Inf	4.86	3	Vertical	358	1.69	-				
PK	5.6742G	112.86	Inf	-Inf	4.85	3	Vertical	358	1.69	-				
PK	5.7258G	66.52	68.20	-1.68	4.96	3	Vertical	358	1.69	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5670MHz_TX

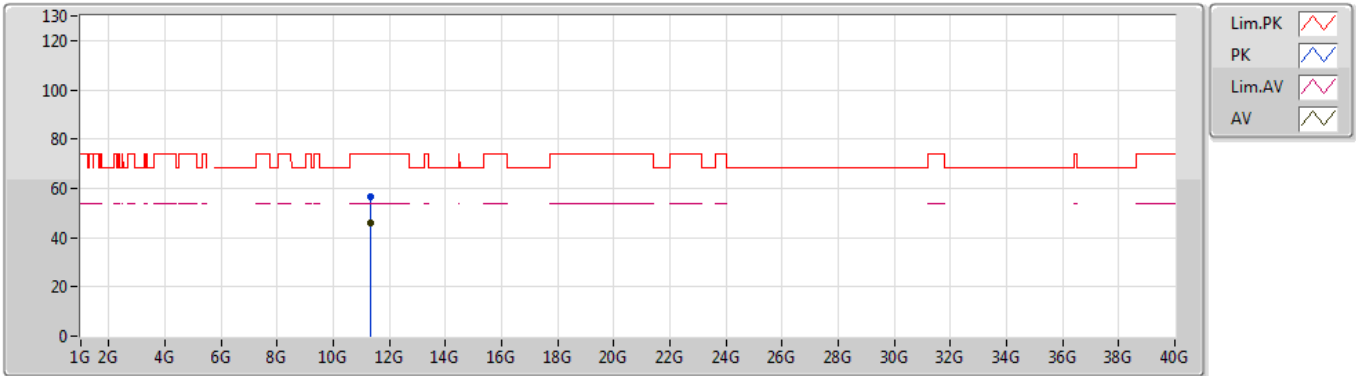


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.6766G	99.60	Inf	-Inf	4.86	3	Horizontal	353	1.74	-				
PK	5.682G	108.19	Inf	-Inf	4.87	3	Horizontal	353	1.74	-				
PK	5.7276G	61.94	68.20	-6.26	4.96	3	Horizontal	353	1.74	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5670MHz_TX

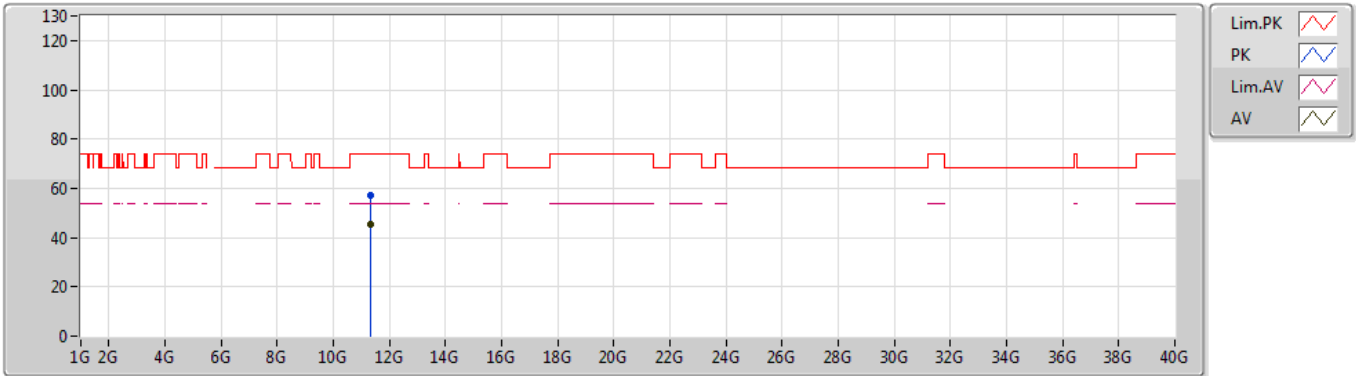


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.34526G	45.71	54.00	-8.29	15.33	3	Vertical	134	2.35	-				
PK	11.34284G	56.63	74.00	-17.37	15.33	3	Vertical	134	2.35	-				

802.11ac VHT40_Nss1,(MCS0)_2TX

02/05/2019

5670MHz_TX

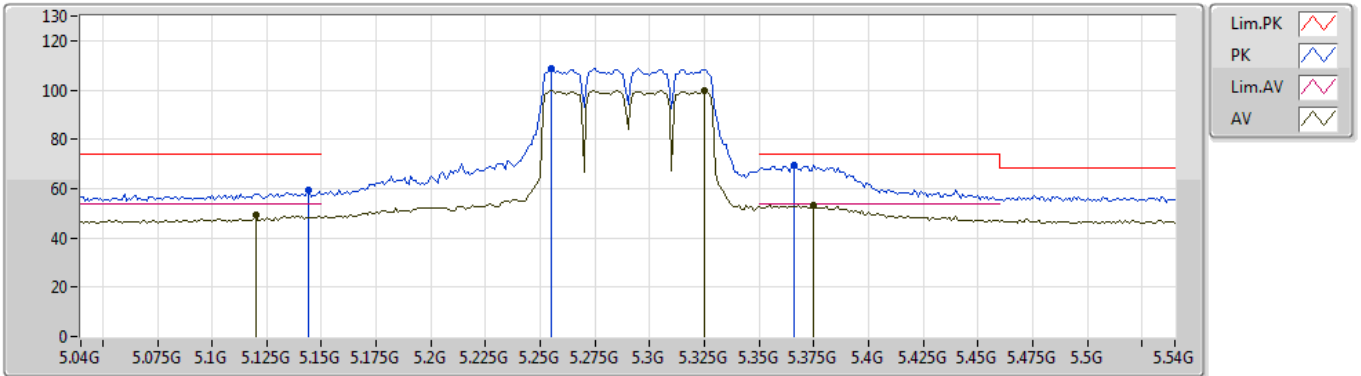


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.34494G	45.37	54.00	-8.63	15.32	3	Horizontal	332	1.44	-				
PK	11.34204G	56.95	74.00	-17.05	15.33	3	Horizontal	332	1.44	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5290MHz_TX

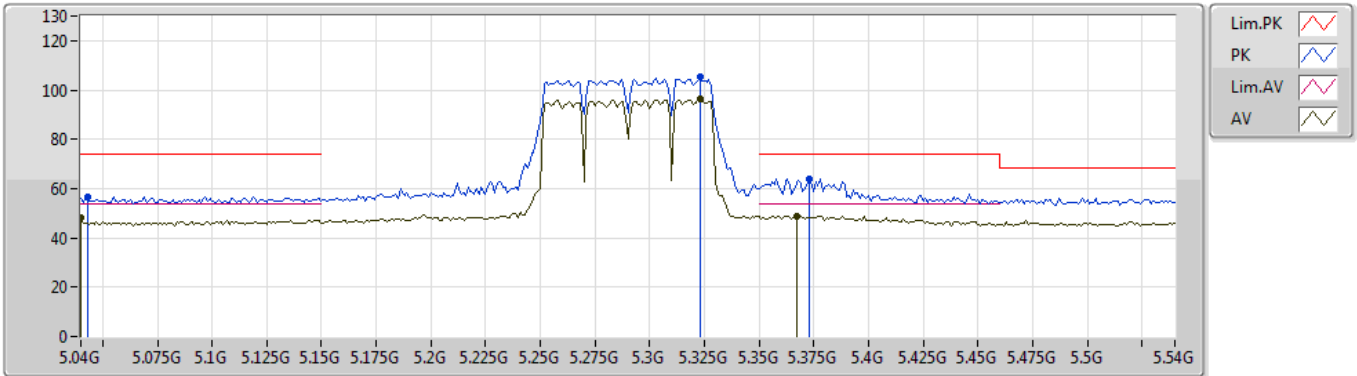


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.12G	49.14	54.00	-4.86	4.05	3	Vertical	0	1.85	-				
AV	5.325G	99.88	Inf	-Inf	4.30	3	Vertical	0	1.85	-				
AV	5.375G	53.41	54.00	-0.59	4.35	3	Vertical	0	1.85	-				
PK	5.144G	59.48	74.00	-14.52	4.09	3	Vertical	0	1.85	-				
PK	5.255G	108.57	Inf	-Inf	4.21	3	Vertical	0	1.85	-				
PK	5.366G	69.69	74.00	-4.31	4.34	3	Vertical	0	1.85	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5290MHz_TX

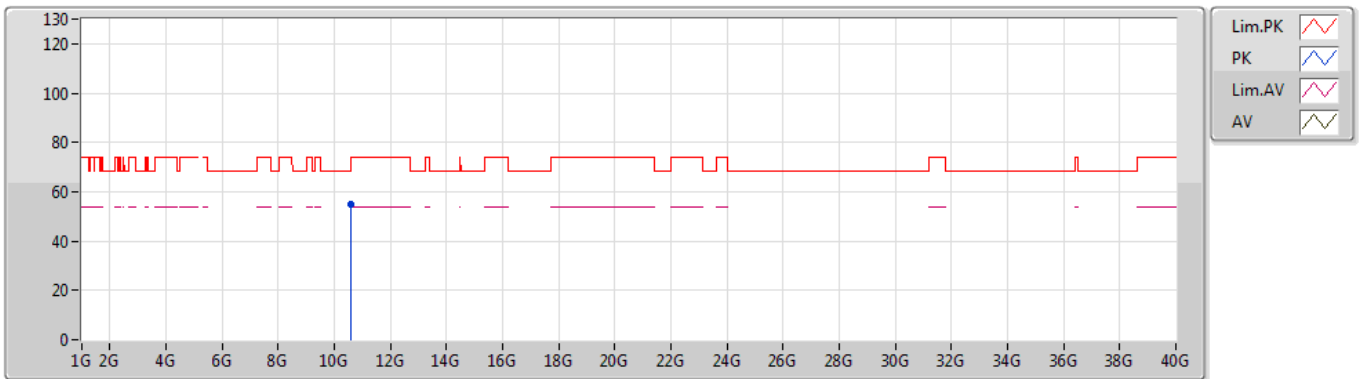


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.04G	47.91	54.00	-6.09	3.87	3	Horizontal	348	1.87	-				
AV	5.323G	96.30	Inf	-Inf	4.29	3	Horizontal	348	1.87	-				
AV	5.367G	49.02	54.00	-4.98	4.34	3	Horizontal	348	1.87	-				
PK	5.043G	56.86	74.00	-17.14	3.88	3	Horizontal	348	1.87	-				
PK	5.323G	105.24	Inf	-Inf	4.29	3	Horizontal	348	1.87	-				
PK	5.373G	63.93	74.00	-10.07	4.35	3	Horizontal	348	1.87	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5290MHz_TX

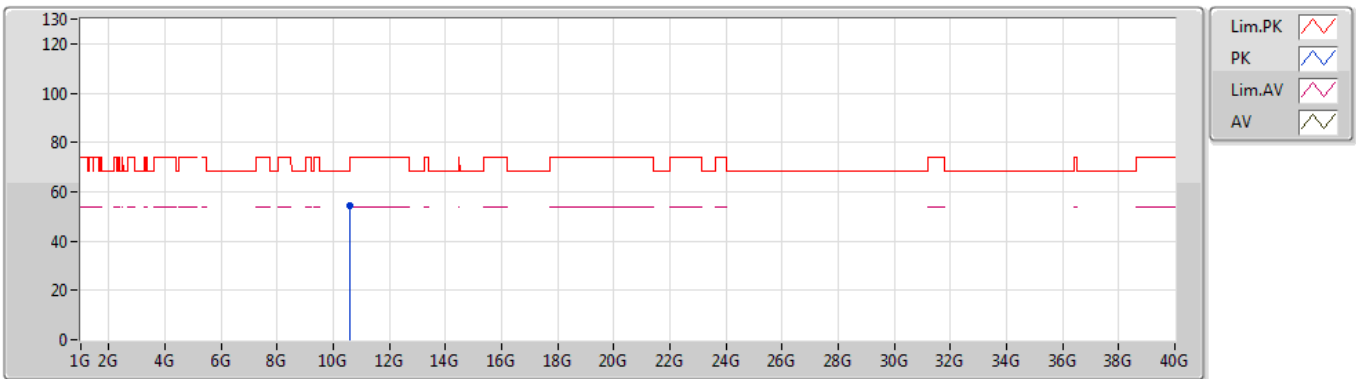


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
PK	10.58476G	54.97	68.20	-13.23	14.56	3	Vertical	186	1.77	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5290MHz_TX

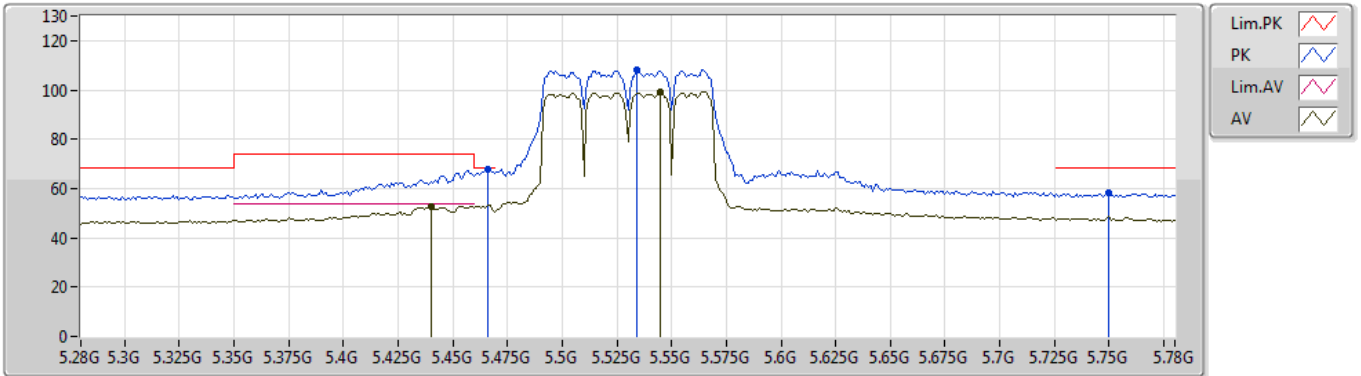


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
PK	10.58418G	54.55	68.20	-13.65	14.56	3	Horizontal	118	1.56	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5530MHz_TX

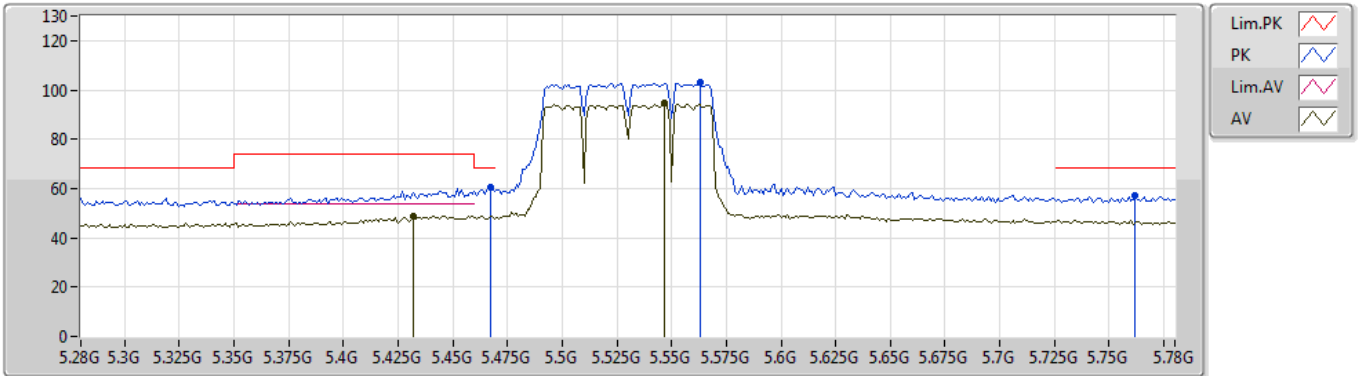


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.44G	52.70	54.00	-1.30	4.39	3	Vertical	360	1.77	-				
AV	5.545G	99.22	Inf	-Inf	4.53	3	Vertical	360	1.77	-				
PK	5.466G	67.56	68.20	-0.64	4.39	3	Vertical	360	1.77	-				
PK	5.534G	108.22	Inf	-Inf	4.51	3	Vertical	360	1.77	-				
PK	5.75G	58.50	68.20	-9.70	5.01	3	Vertical	360	1.77	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5530MHz_TX

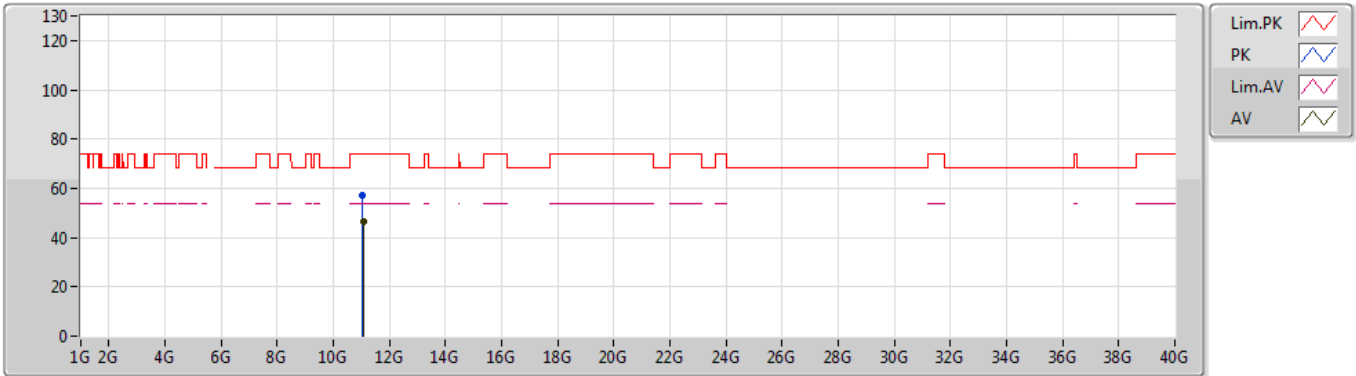


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.432G	48.99	54.00	-5.01	4.39	3	Horizontal	355	1.84	-				
AV	5.547G	94.48	Inf	-Inf	4.55	3	Horizontal	355	1.84	-				
PK	5.467G	60.77	68.20	-7.43	4.40	3	Horizontal	355	1.84	-				
PK	5.563G	102.96	Inf	-Inf	4.60	3	Horizontal	355	1.84	-				
PK	5.762G	57.32	68.20	-10.88	5.04	3	Horizontal	355	1.84	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5530MHz_TX

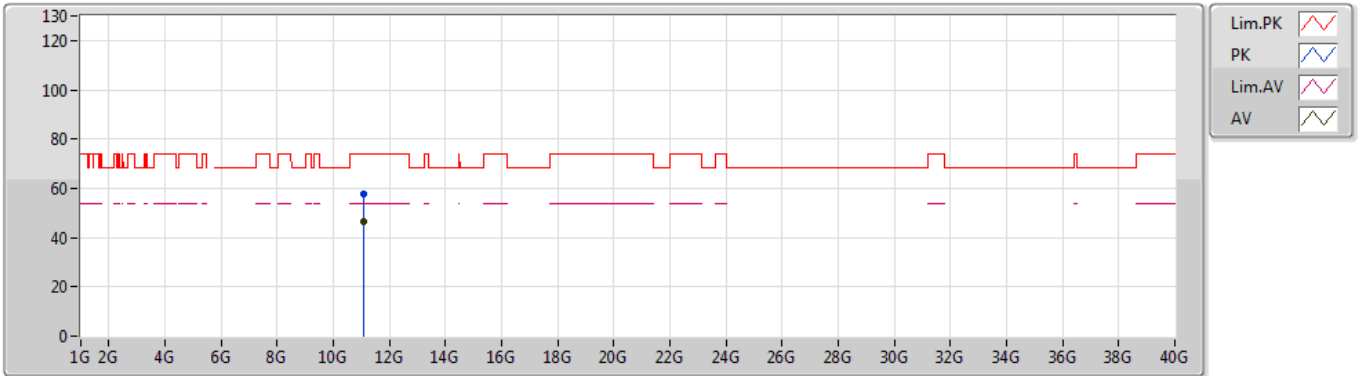


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.06176G	46.63	54.00	-7.37	15.58	3	Vertical	288	1.52	-				
PK	11.05618G	57.01	74.00	-16.99	15.59	3	Vertical	288	1.52	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5530MHz_TX

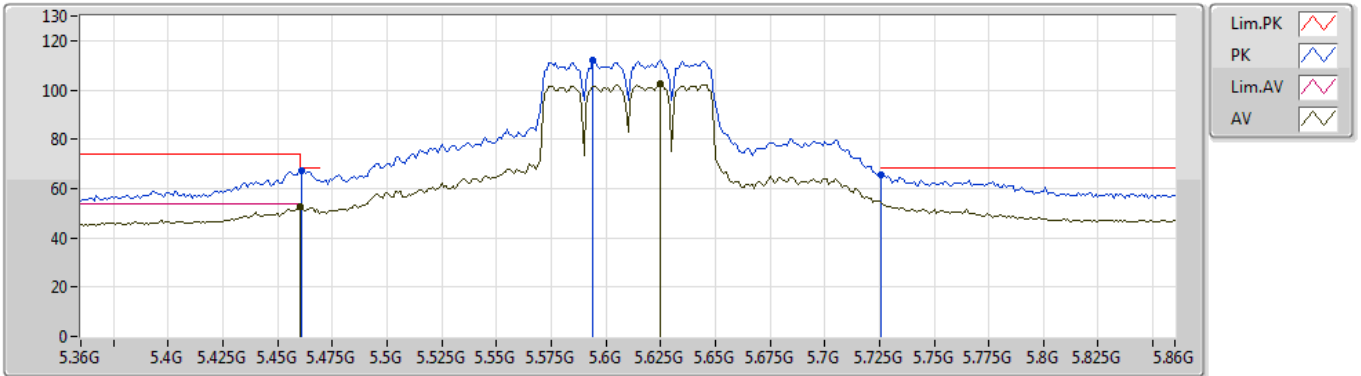


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.0591G	46.71	54.00	-7.29	15.59	3	Horizontal	5	1.06	-				
PK	11.0583G	57.49	74.00	-16.51	15.59	3	Horizontal	5	1.06	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5610MHz_TX

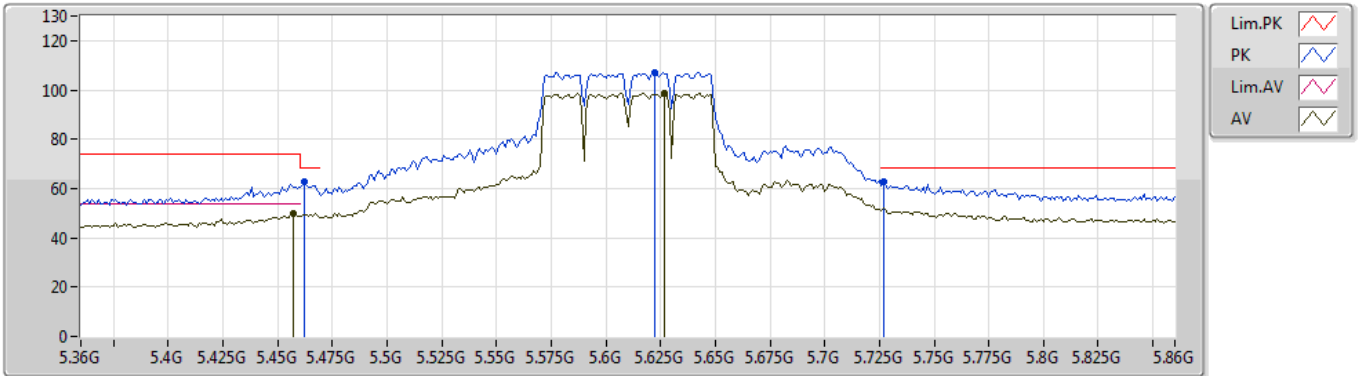


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.46G	52.48	54.00	-1.52	4.40	3	Vertical	360	1.79	-				
AV	5.625G	102.38	Inf	-Inf	4.76	3	Vertical	360	1.79	-				
PK	5.461G	67.38	68.20	-0.82	4.40	3	Vertical	360	1.79	-				
PK	5.594G	112.14	Inf	-Inf	4.68	3	Vertical	360	1.79	-				
PK	5.726G	65.51	68.20	-2.69	4.96	3	Vertical	360	1.79	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5610MHz_TX

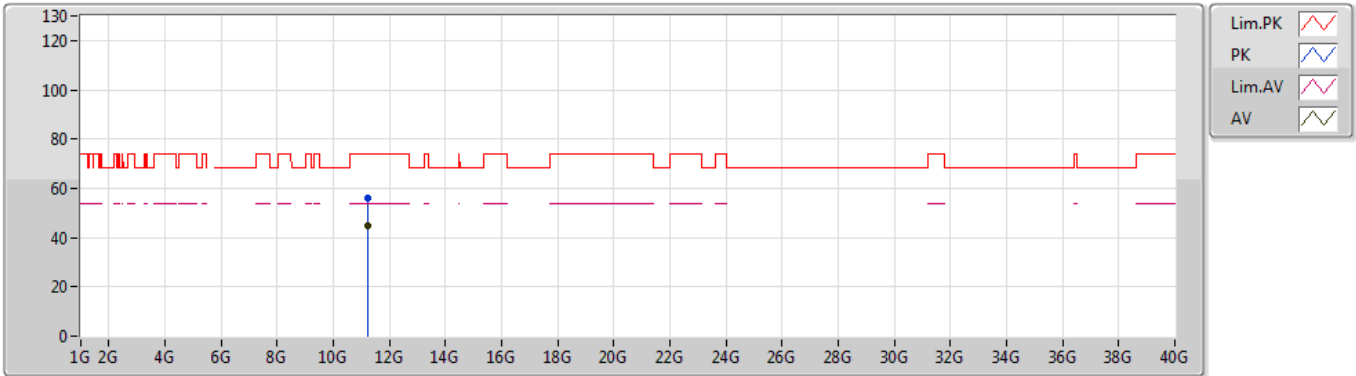


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.457G	49.86	54.00	-4.14	4.39	3	Horizontal	358	1.76	-				
AV	5.627G	98.67	Inf	-Inf	4.77	3	Horizontal	358	1.76	-				
PK	5.462G	62.59	68.20	-5.61	4.40	3	Horizontal	358	1.76	-				
PK	5.622G	107.17	Inf	-Inf	4.75	3	Horizontal	358	1.76	-				
PK	5.727G	62.72	68.20	-5.48	4.96	3	Horizontal	358	1.76	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5610MHz_TX

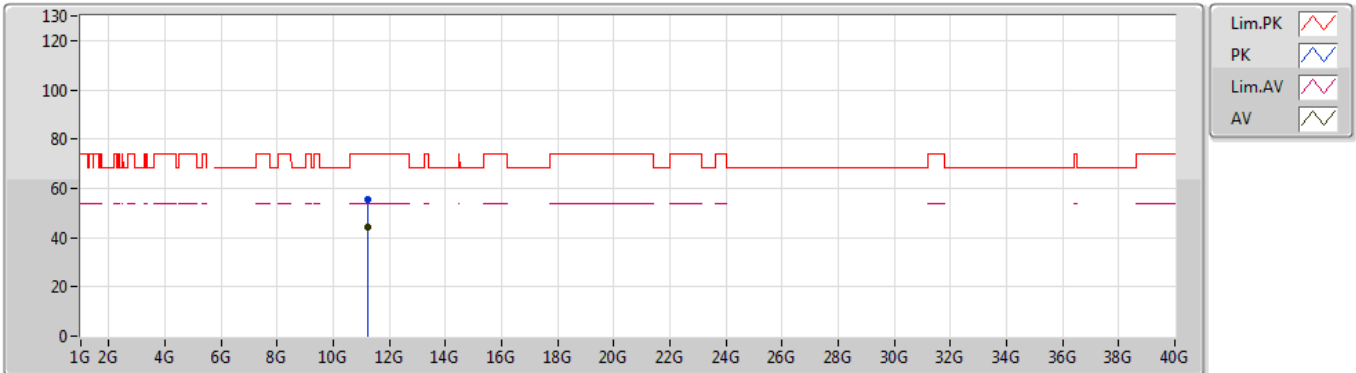


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.21682G	44.78	54.00	-9.22	15.45	3	Vertical	156	1.87	-				
PK	11.23374G	55.83	74.00	-18.17	15.42	3	Vertical	156	1.87	-				

802.11ac VHT80_Nss1,(MCS0)_2TX

02/05/2019

5610MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.22944G	44.52	54.00	-9.48	15.43	3	Horizontal	39	1.85	-				
PK	11.2295G	55.41	74.00	-18.59	15.43	3	Horizontal	39	1.85	-				