

FCC Test Report

FCC ID : UIDTG3452P2
Equipment : Wireless Voice Gateway
Brand Name : ARRIS
Model Name : TG3452
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

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

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PHOTOGRAPHS OF EUT V02	

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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	TG3452	PIFA	N/A
2	ARRIS	TG3452	PIFA	N/A
3	ARRIS	TG3452	PIFA	N/A
4	ARRIS	TG3452	PIFA	N/A
5	ARRIS	TG3452	PIFA	N/A
6	ARRIS	TG3452	PIFA	N/A
7	ARRIS	TG3452	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	0.686	1.637	1.398m	1k
802.11ac VHT20	0.657	1.824	1.318m	1k
802.11ac VHT40	0.742	1.296	658.75u	3k
802.11ac VHT80	0.613	2.125	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	TG3452	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	TH01-HY	Gary	23.3~23.9°C / 63~65%	11/Feb/2019~15/Feb/2019
Radiated	03CH02-HY	Daniel	21.3~23.1°C / 52.1~54.1%	02/Feb/2019~15/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	27,25,25,28
5200MHz	29,27,27,30
5240MHz	29,27,27,30
5745MHz	26,24,27,28
5785MHz	29,26,27,29
5825MHz	30,27,28,30
802.11ac VHT20_Nss4,(MCS0)_4TX	-
5180MHz	26,24,24,27
5200MHz	29,27,27,30
5240MHz	29,27,27,30
5745MHz	27,25,28,29
5785MHz	30,27,28,30
5825MHz	31,28,29,31
802.11ac VHT40_Nss4,(MCS0)_4TX	-
5190MHz	22,20,20,23
5230MHz	31,28,27,31
5755MHz	28,26,29,30
5795MHz	29,27,30,31
802.11ac VHT80_Nss4,(MCS0)_4TX	-
5210MHz	20.18.18.21
5775MHz	31,28,29,31

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.: FA911906 for Co-location RF Exposure Evaluation.	

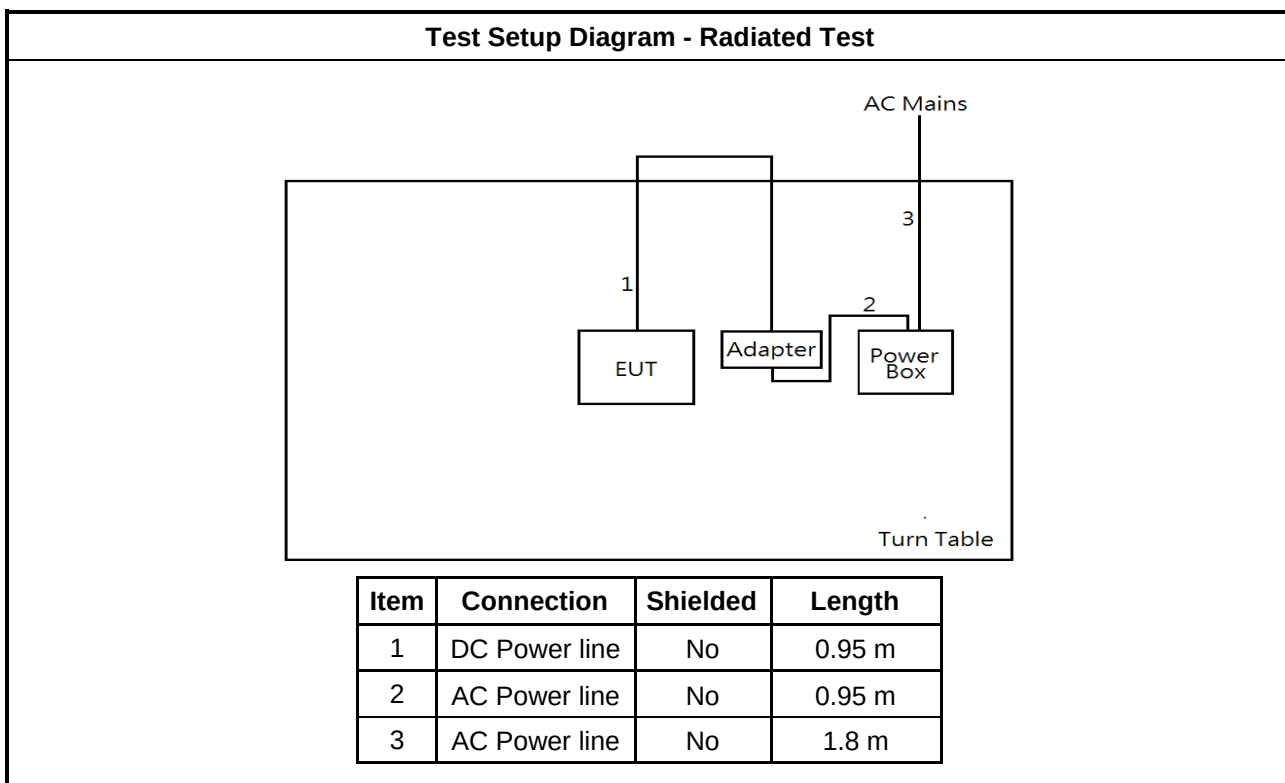
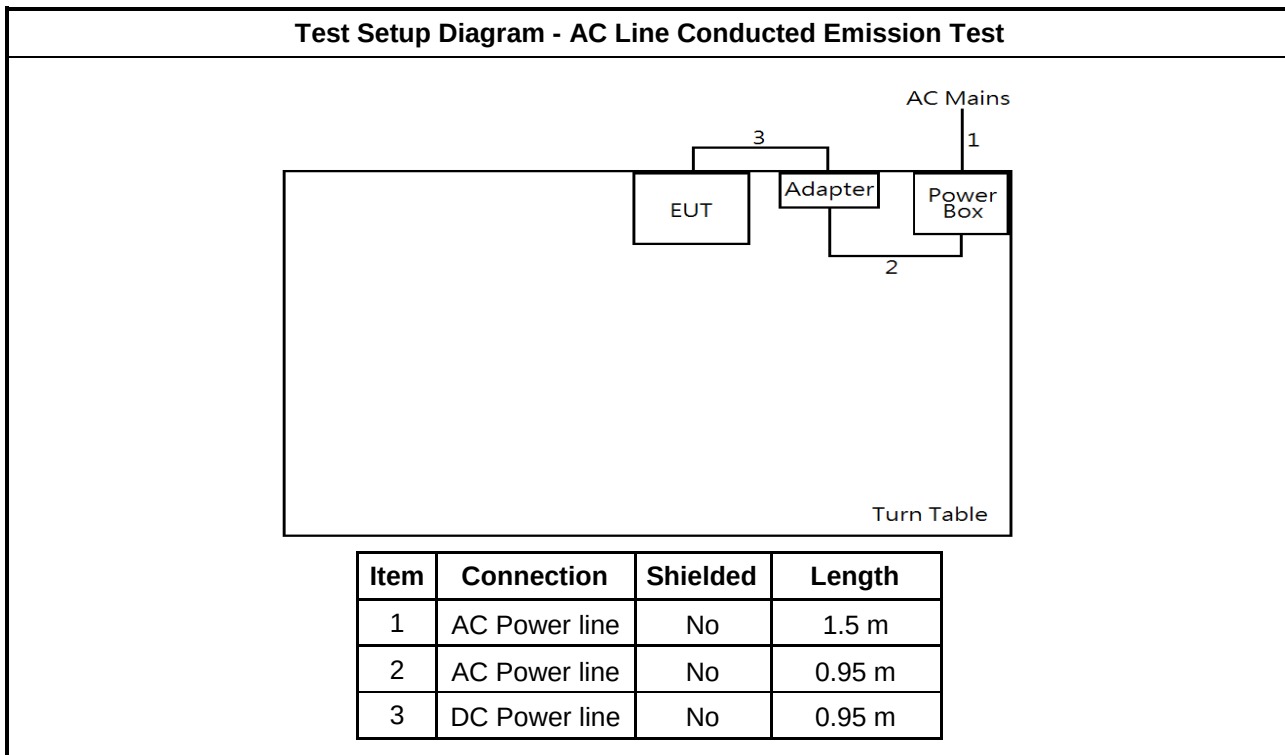
2.4 Accessories and Support Equipment

Accessories				
AC Adapter (US Plug)	Brand Name	ADP	Model Name	DA-50C12
	Power Rating	I/P: 100- 240Vac, 1.5A, O/P: 12Vdc, 4.17A		
	AC Power Cord	0.95 meter, non-shielded cable, w/o ferrite core		
	DC Power Cord	0.95 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.

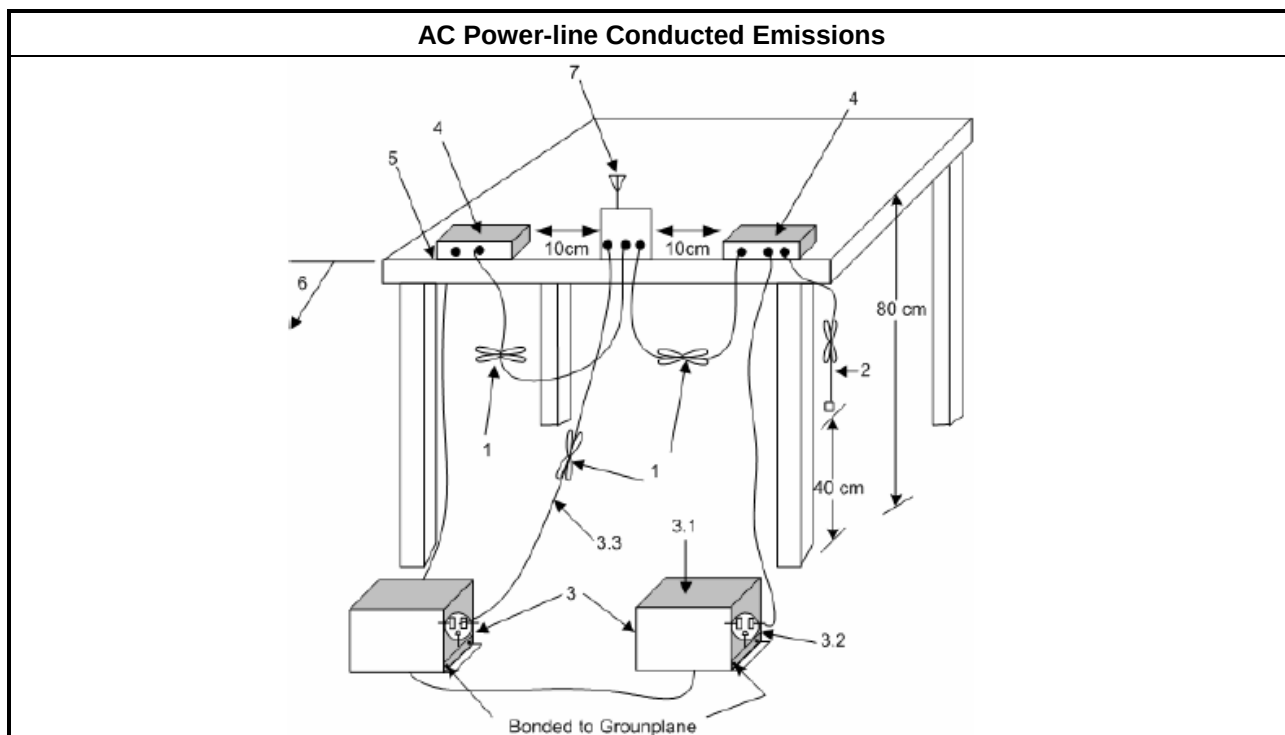
3.1.2 Measuring Instruments

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.

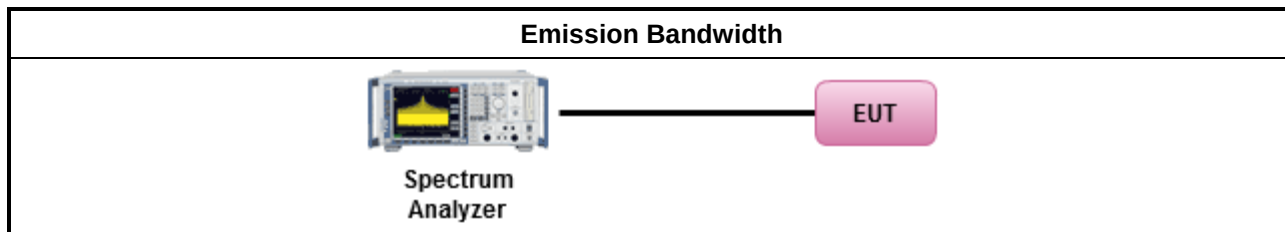
3.2.2 Measuring Instruments

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.	

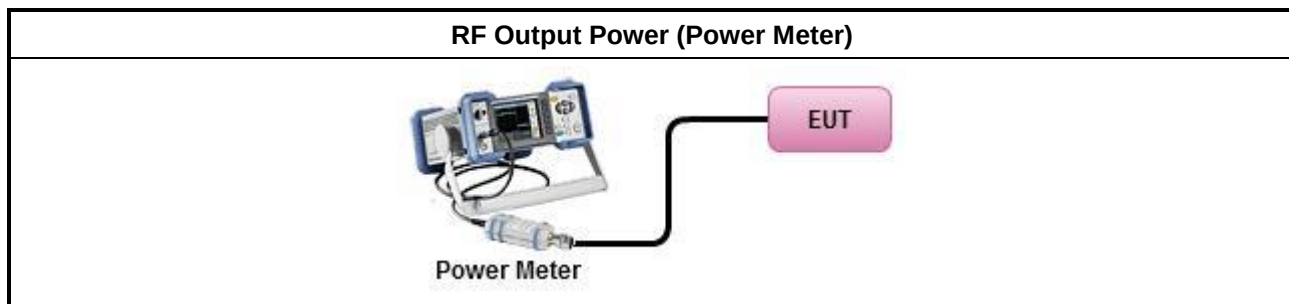
3.3.2 Measuring Instruments

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

3.3.4 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 the 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.	

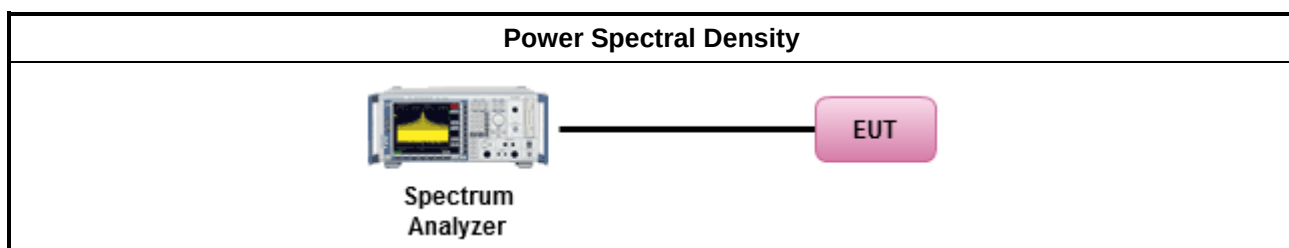
3.4.2 Measuring Instruments

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).

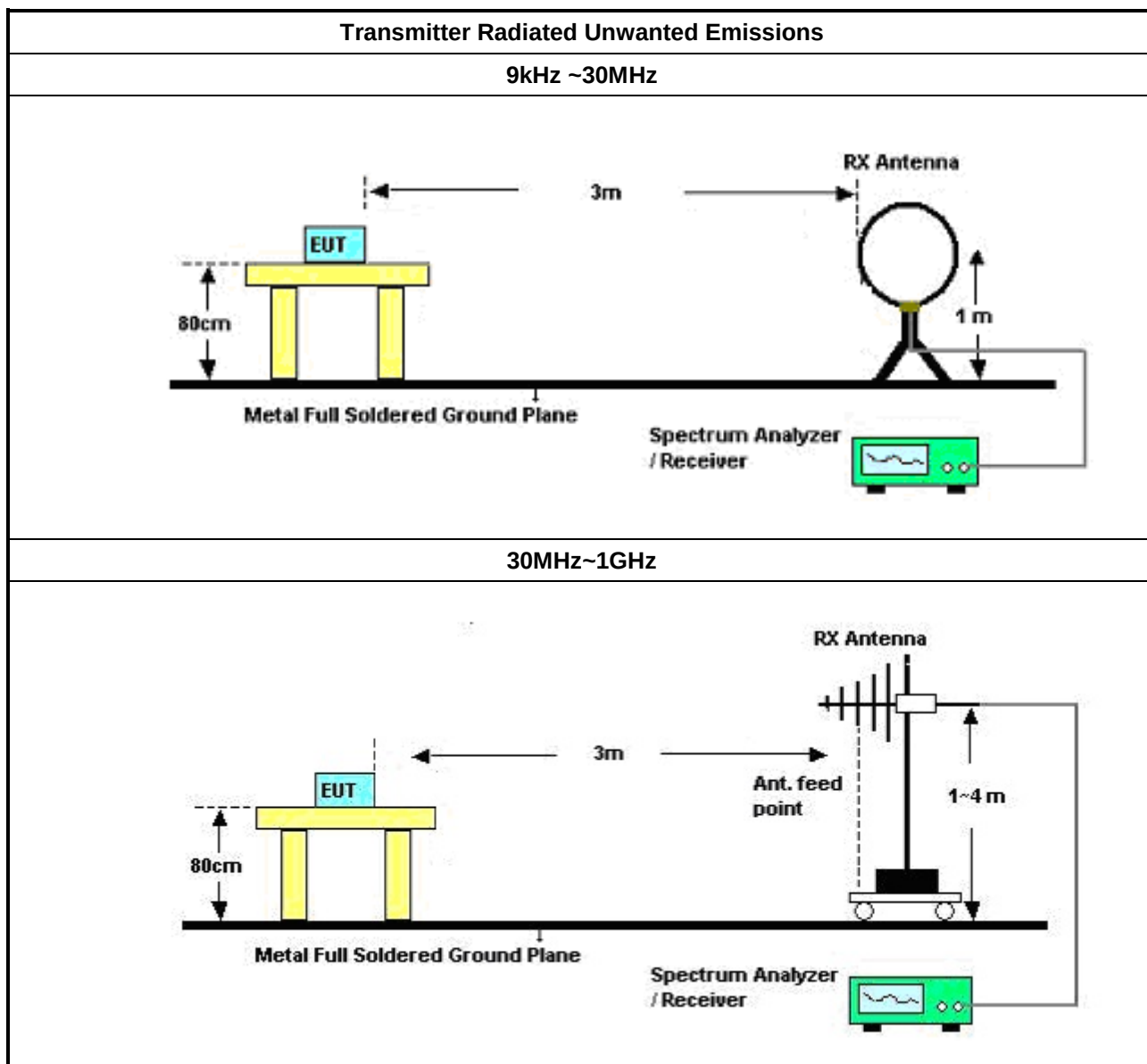
3.5.2 Measuring Instruments

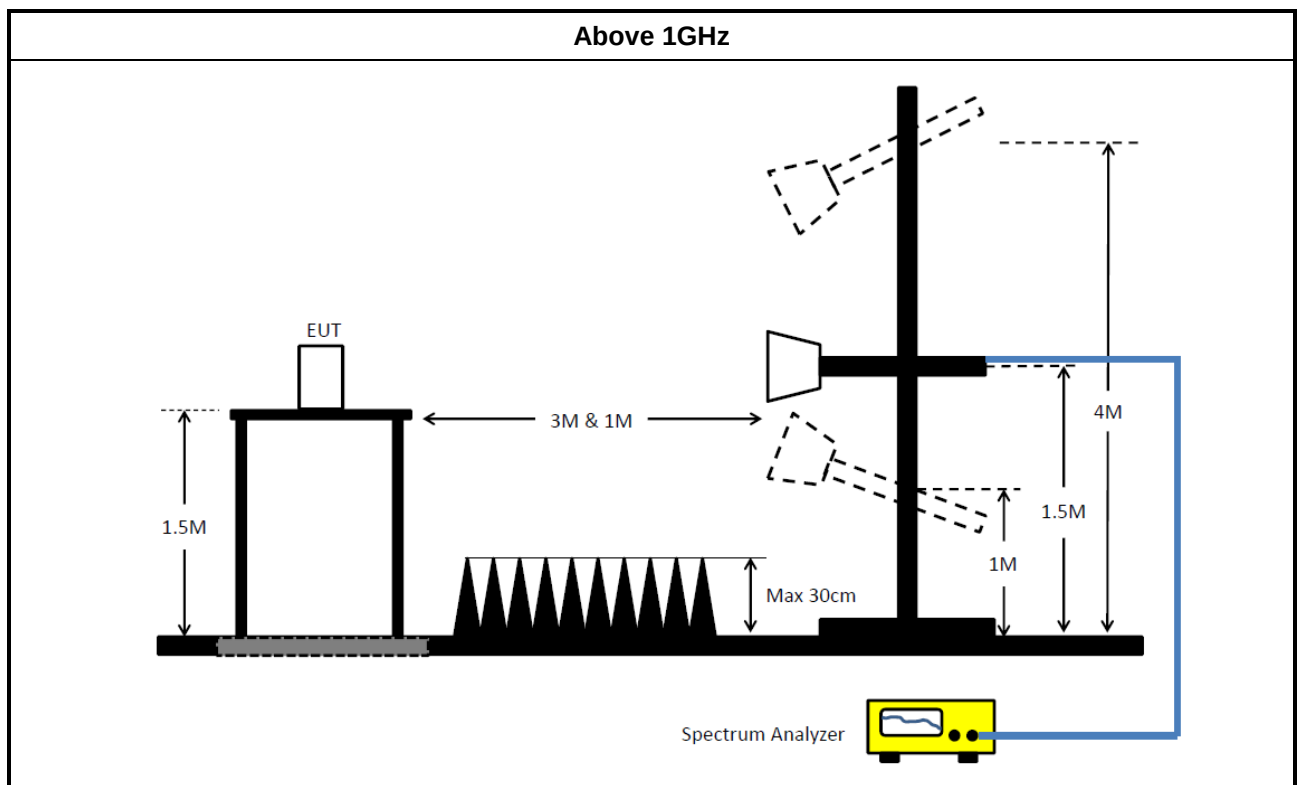
Refer a test equipment and calibration data table in this test report.

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

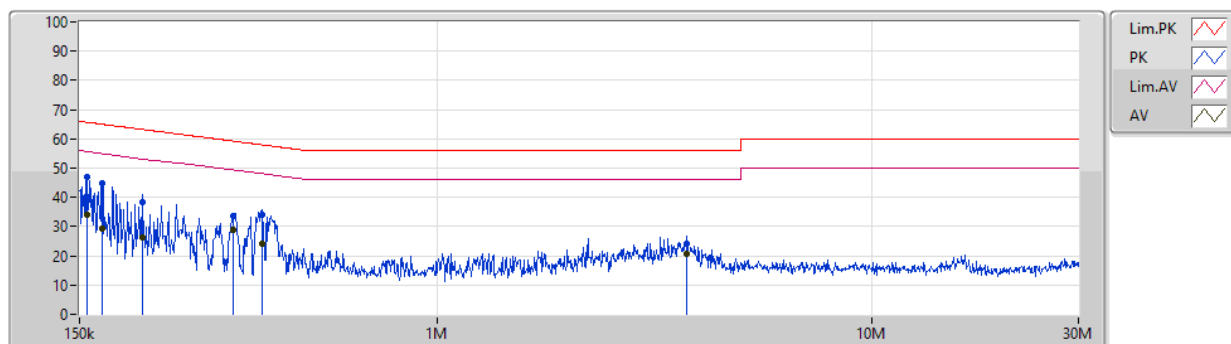
Instrument for Radiated Test

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

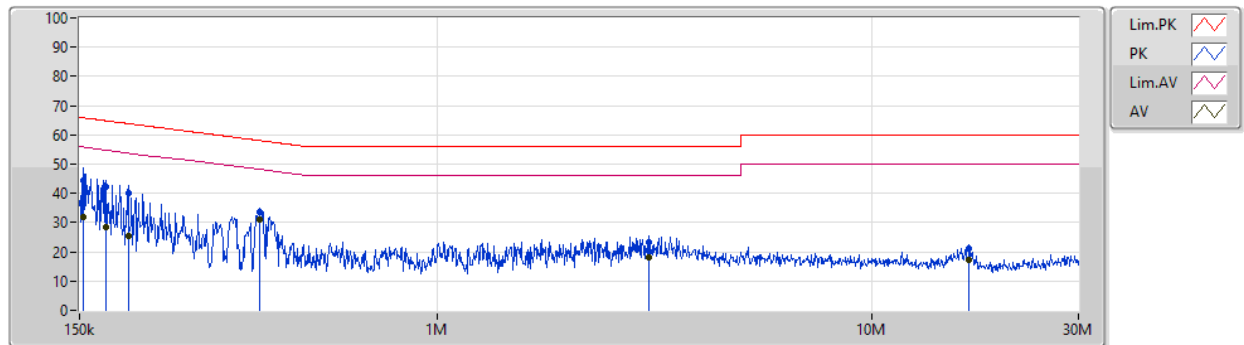


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	156.109k	46.98	65.67	-18.69	19.48	Neutral	"Worst"	27.50	9.60	0.01	9.87			
AV	156.109k	33.91	55.67	-21.76	19.48	Neutral	-	14.43	9.60	0.01	9.87			
QP	169.084k	44.81	65.01	-20.20	19.48	Neutral	-	25.33	9.60	0.01	9.87			
AV	169.084k	29.12	55.01	-25.89	19.48	Neutral	-	9.64	9.60	0.01	9.87			
QP	208.925k	38.38	63.25	-24.87	19.47	Neutral	-	18.91	9.59	0.01	9.87			
AV	208.925k	26.32	53.25	-26.93	19.47	Neutral	-	6.85	9.59	0.01	9.87			
QP	338.664k	33.53	59.23	-25.70	19.48	Neutral	-	14.05	9.59	0.01	9.88			
AV	338.664k	28.75	49.23	-20.48	19.48	Neutral	-	9.27	9.59	0.01	9.88			
QP	395.716k	34.07	57.95	-23.88	19.48	Neutral	-	14.59	9.59	0.01	9.88			
AV	395.716k	24.13	47.95	-23.82	19.48	Neutral	-	4.65	9.59	0.01	9.88			
QP	3.76M	24.06	56.00	-31.94	19.54	Neutral	-	4.52	9.61	0.04	9.89			
AV	3.76M	20.57	46.00	-25.43	19.54	Neutral	-	1.03	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	153.024k	44.50	65.83	-21.33	19.48	Line	-	25.02	9.60	0.01	9.87			
AV	153.024k	31.74	55.83	-24.09	19.48	Line	-	12.26	9.60	0.01	9.87			
QP	172.493k	42.23	64.83	-22.60	19.48	Line	-	22.75	9.60	0.01	9.87			
AV	172.493k	28.44	54.83	-26.39	19.48	Line	-	8.96	9.60	0.01	9.87			
QP	194.439k	40.09	63.84	-23.75	19.48	Line	-	20.61	9.60	0.01	9.87			
AV	194.439k	25.38	53.84	-28.46	19.48	Line	-	5.90	9.60	0.01	9.87			
QP	389.447k	33.80	58.08	-24.28	19.48	Line	-	14.32	9.59	0.01	9.88			
AV	389.447k	30.91	48.08	-17.17	19.48	Line	"Worst"	11.43	9.59	0.01	9.88			
QP	3.067M	23.26	56.00	-32.74	19.56	Line	-	3.70	9.63	0.04	9.89			
AV	3.067M	18.00	46.00	-28.00	19.56	Line	-	-1.56	9.63	0.04	9.89			
QP	16.801M	20.97	60.00	-39.03	19.64	Line	-	1.33	9.64	0.10	9.90			
AV	16.801M	17.44	50.00	-32.56	19.64	Line	-	-2.20	9.64	0.10	9.90			

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	32.675M	16.617M	16M6D1D	22.975M	16.467M
802.11ac VHT20_Nss4,(MCS0)_4TX	30.525M	17.691M	17M7D1D	20.575M	17.566M
802.11ac VHT40_Nss4,(MCS0)_4TX	80.8M	36.382M	36M4D1D	40.6M	36.082M
802.11ac VHT80_Nss4,(MCS0)_4TX	81.9M	75.662M	75M7D1D	80.9M	75.462M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.325M	16.592M	16M6D1D	16.05M	16.517M
802.11ac VHT20_Nss4,(MCS0)_4TX	16.925M	17.941M	17M9D1D	16.525M	17.666M
802.11ac VHT40_Nss4,(MCS0)_4TX	36.25M	36.982M	37M0D1D	35.3M	36.382M
802.11ac VHT80_Nss4,(MCS0)_4TX	75.3M	76.162M	76M2D1D	75.1M	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	24.075M	16.492M	24.6M	16.542M	23M	16.517M	22.975M	16.467M
5200MHz	Pass	Inf	25.75M	16.567M	27M	16.517M	31.3M	16.542M	25.675M	16.617M
5240MHz	Pass	Inf	28.875M	16.567M	25.125M	16.567M	29.9M	16.567M	32.675M	16.617M
5745MHz	Pass	500k	16.075M	16.567M	16.325M	16.567M	16.275M	16.592M	16.275M	16.592M
5785MHz	Pass	500k	16.05M	16.517M	16.3M	16.542M	16.275M	16.517M	16.3M	16.592M
5825MHz	Pass	500k	16.3M	16.517M	16.3M	16.517M	16.275M	16.567M	16.325M	16.542M
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.75M	17.566M	20.575M	17.591M	20.725M	17.591M	20.65M	17.591M
5200MHz	Pass	Inf	27.325M	17.616M	23.225M	17.666M	25.9M	17.591M	27.675M	17.641M
5240MHz	Pass	Inf	24.65M	17.616M	23.475M	17.566M	29.725M	17.691M	30.525M	17.641M
5745MHz	Pass	500k	16.875M	17.691M	16.775M	17.666M	16.925M	17.766M	16.55M	17.866M
5785MHz	Pass	500k	16.925M	17.766M	16.775M	17.766M	16.875M	17.766M	16.55M	17.941M
5825MHz	Pass	500k	16.775M	17.766M	16.875M	17.741M	16.55M	17.691M	16.525M	17.791M
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.6M	36.132M	41.1M	36.082M	40.75M	36.132M	41.15M	36.232M
5230MHz	Pass	Inf	80.8M	36.382M	78.3M	36.282M	71.75M	36.282M	71.65M	36.332M
5755MHz	Pass	500k	36.05M	36.382M	35.9M	36.532M	35.35M	36.882M	35.7M	36.982M
5795MHz	Pass	500k	35.4M	36.482M	36.25M	36.732M	35.9M	36.632M	35.3M	36.782M
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.9M	75.562M	81.4M	75.562M	80.9M	75.462M	81M	75.662M
5775MHz	Pass	500k	75.2M	76.062M	75.3M	75.862M	75.3M	75.862M	75.1M	76.162M

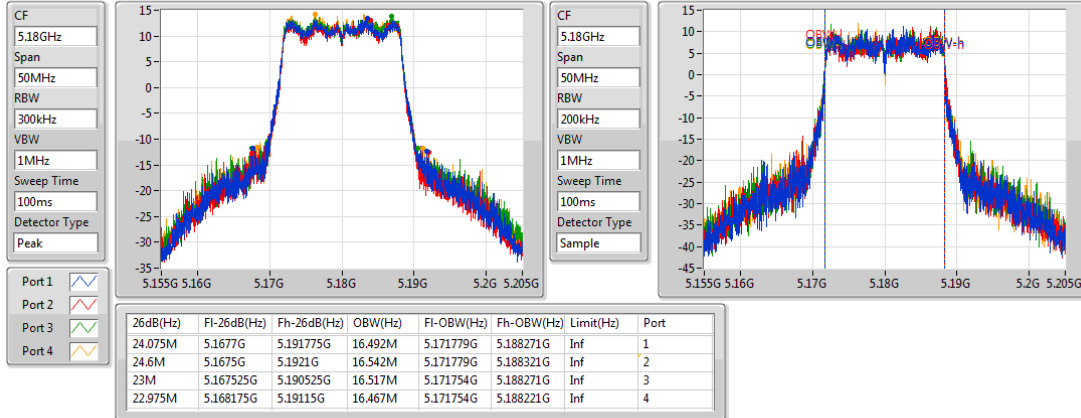
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX

EBW

5180MHz

15/02/2019

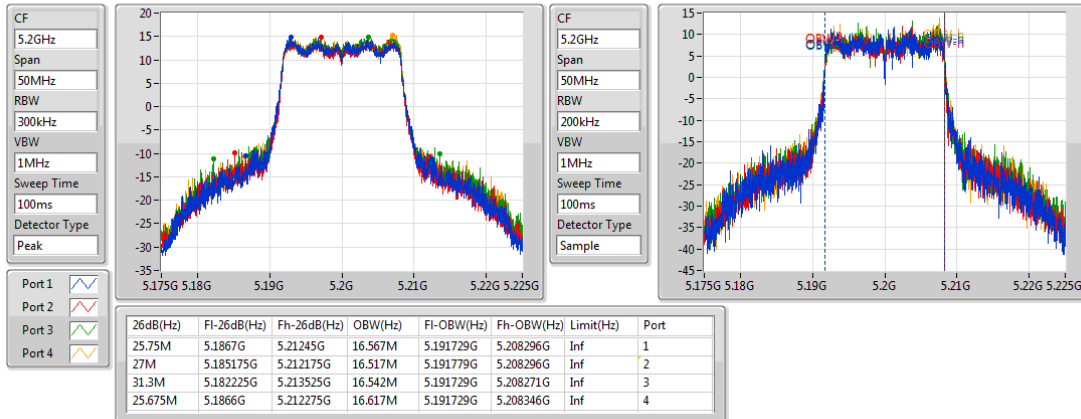


802.11a_Nss1,(6Mbps)_4TX

EBW

5200MHz

15/02/2019

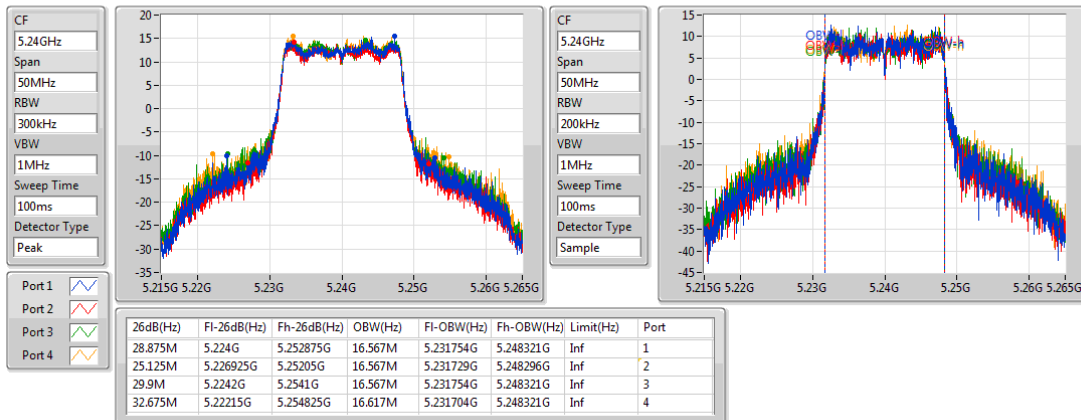


802.11a_Nss1,(6Mbps)_4TX

EBW

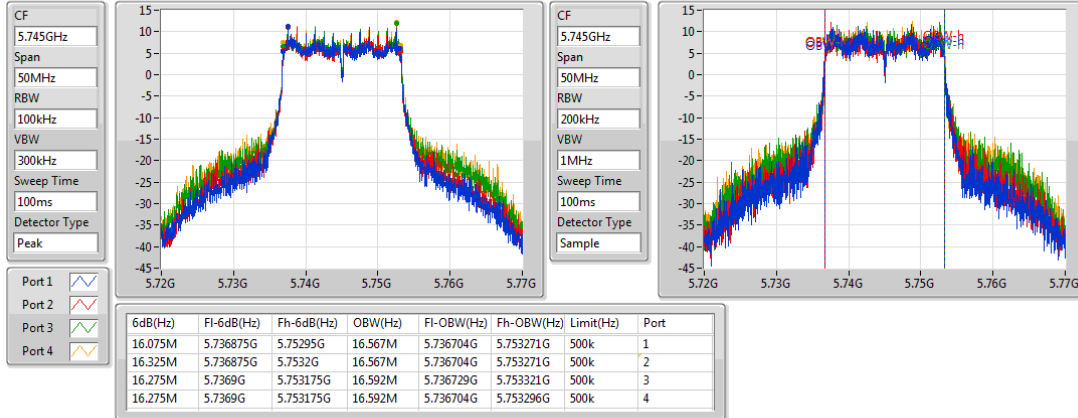
5240MHz

15/02/2019

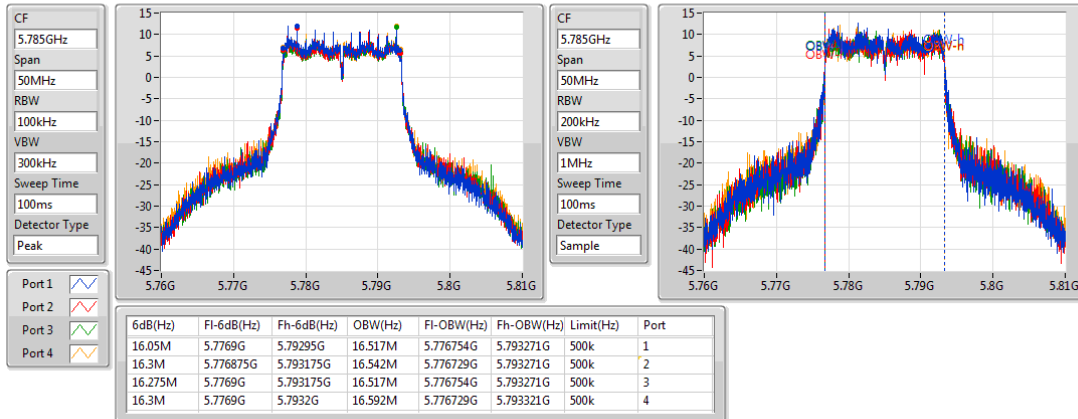


802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

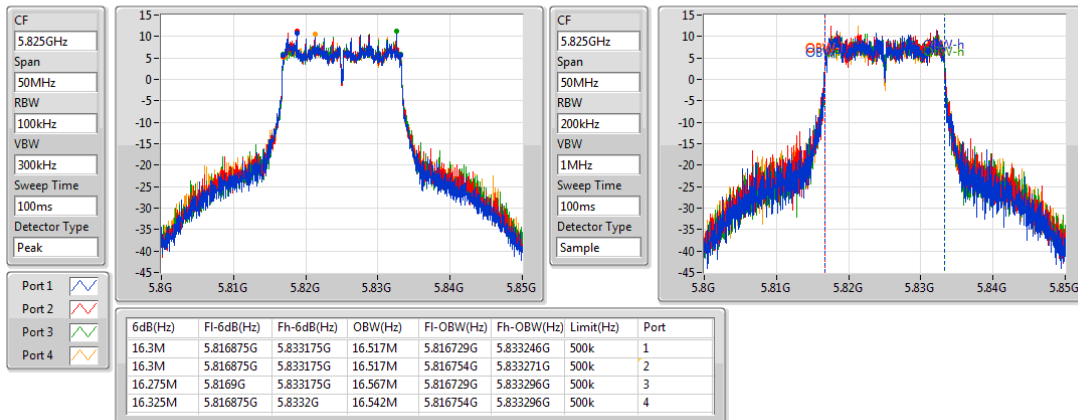
15/02/2019


802.11a_Nss1,(6Mbps)_4TX
EBW
5785MHz

15/02/2019


802.11a_Nss1,(6Mbps)_4TX
EBW
5825MHz

15/02/2019

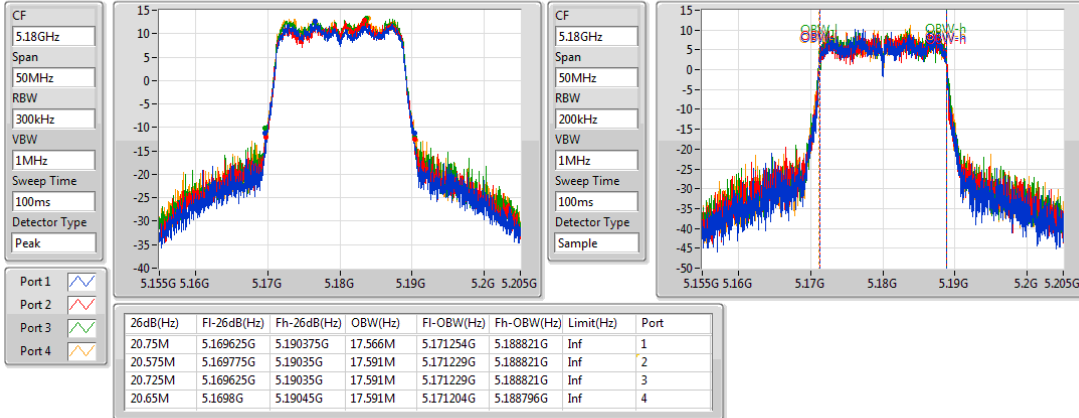


802.11ac VHT20_Nss4,(MCS0)_4TX

EBW

5180MHz

12/02/2019

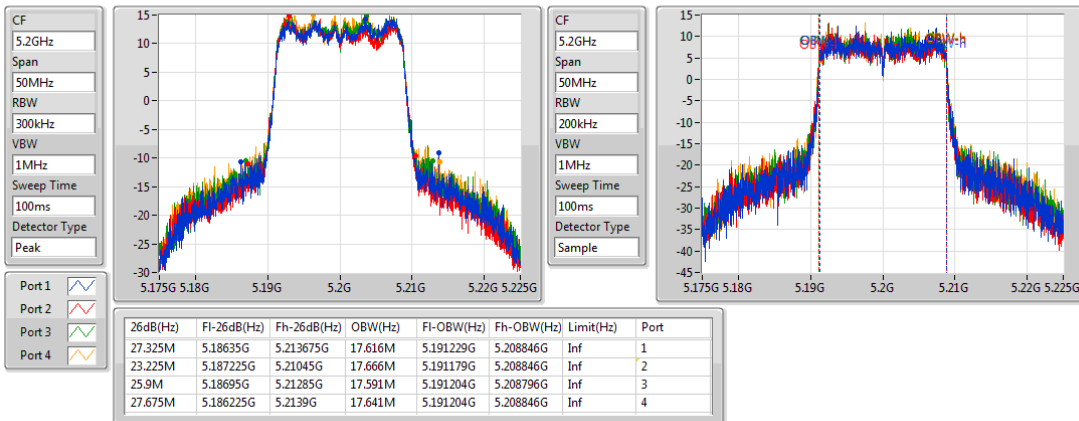


802.11ac VHT20_Nss4,(MCS0)_4TX

EBW

5200MHz

12/02/2019

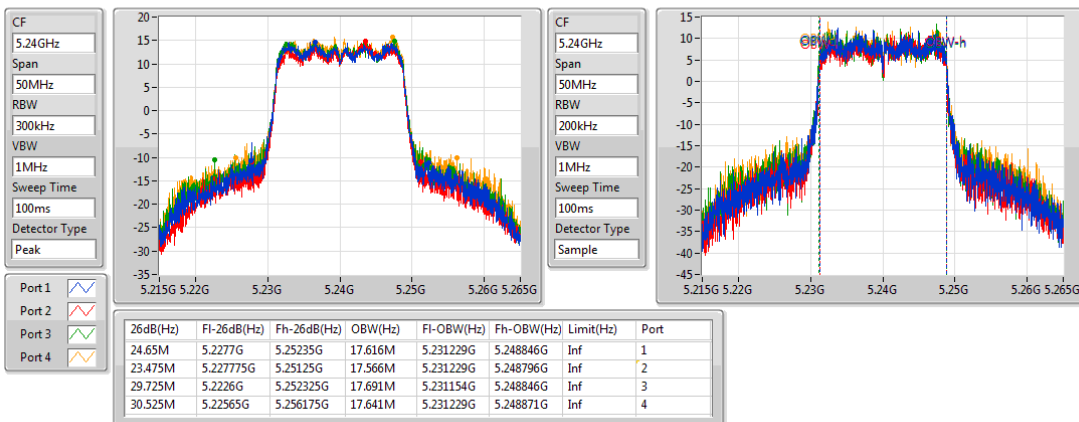


802.11ac VHT20_Nss4,(MCS0)_4TX

EBW

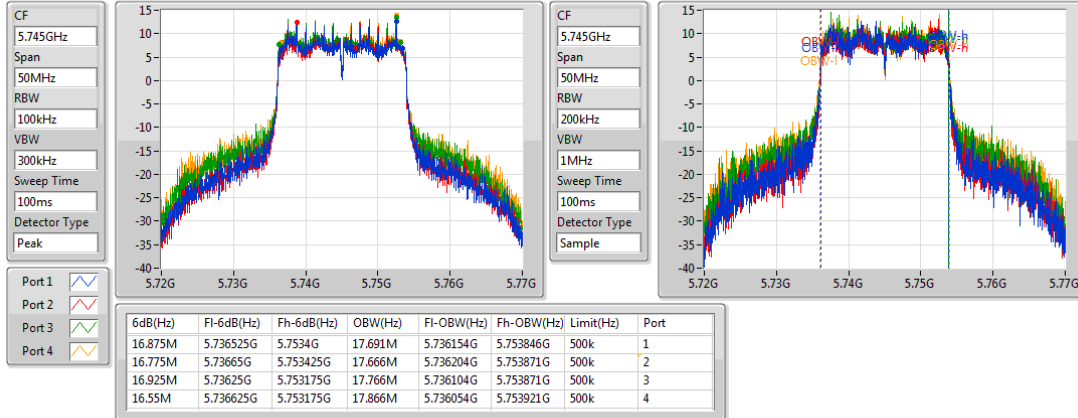
5240MHz

12/02/2019

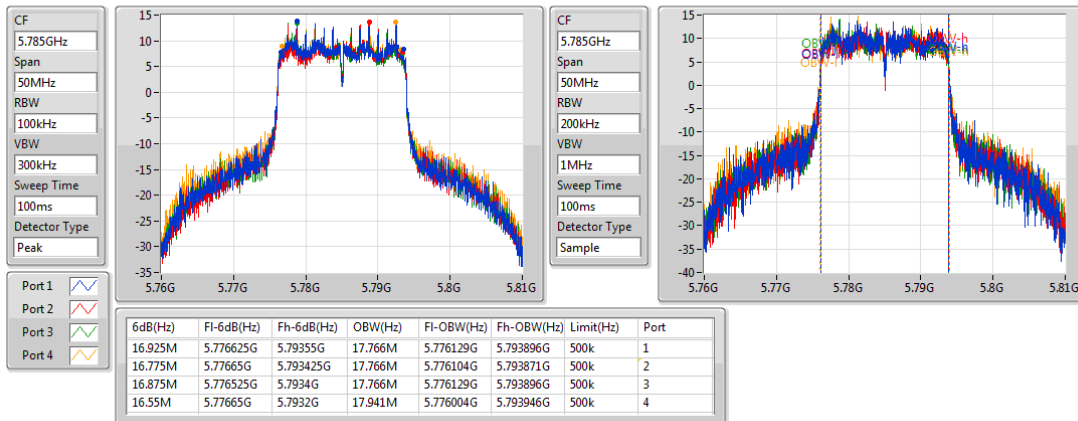


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5745MHz

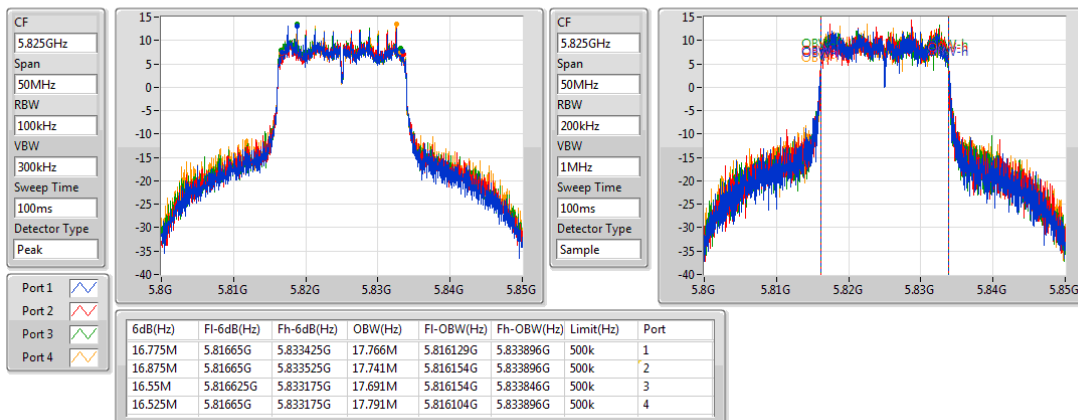
12/02/2019


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5785MHz

12/02/2019


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5825MHz

12/02/2019

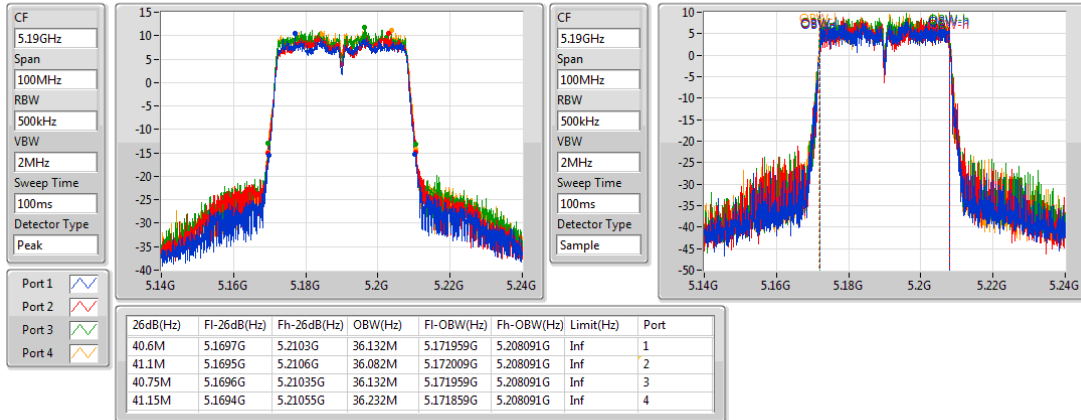


802.11ac VHT40_Nss4,(MCS0)_4TX

EBW

5190MHz

12/02/2019

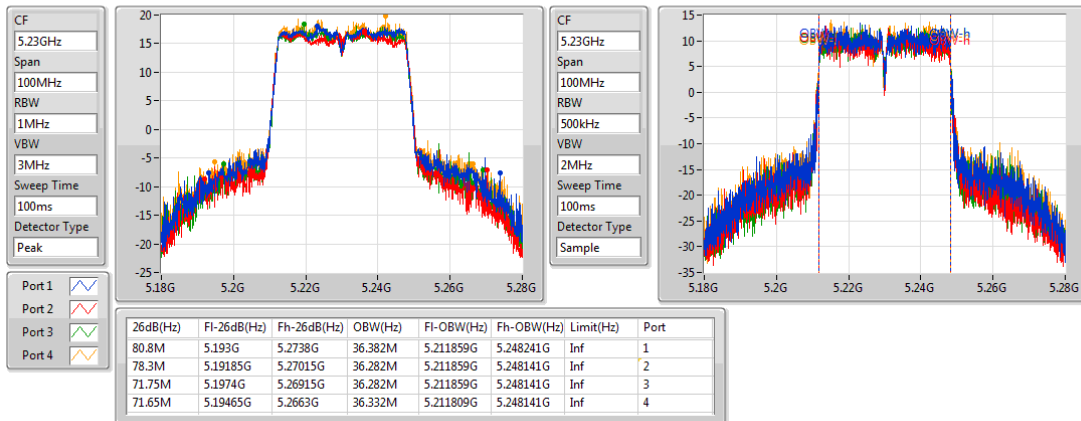


802.11ac VHT40_Nss4,(MCS0)_4TX

EBW

5230MHz

12/02/2019

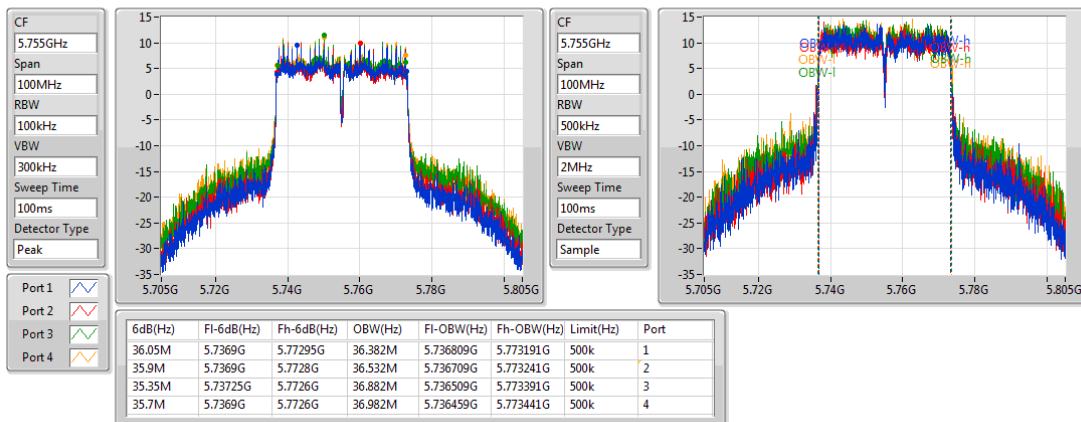


802.11ac VHT40_Nss4,(MCS0)_4TX

EBW

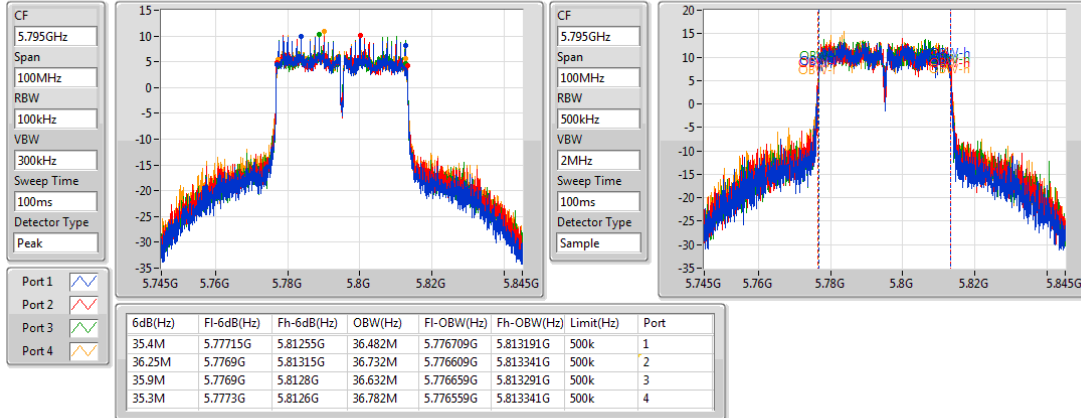
5755MHz

12/02/2019

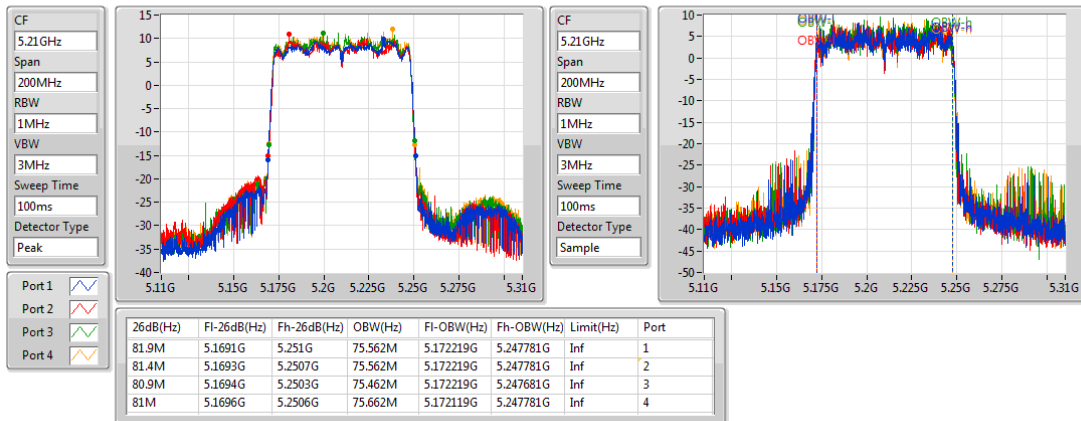


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5795MHz

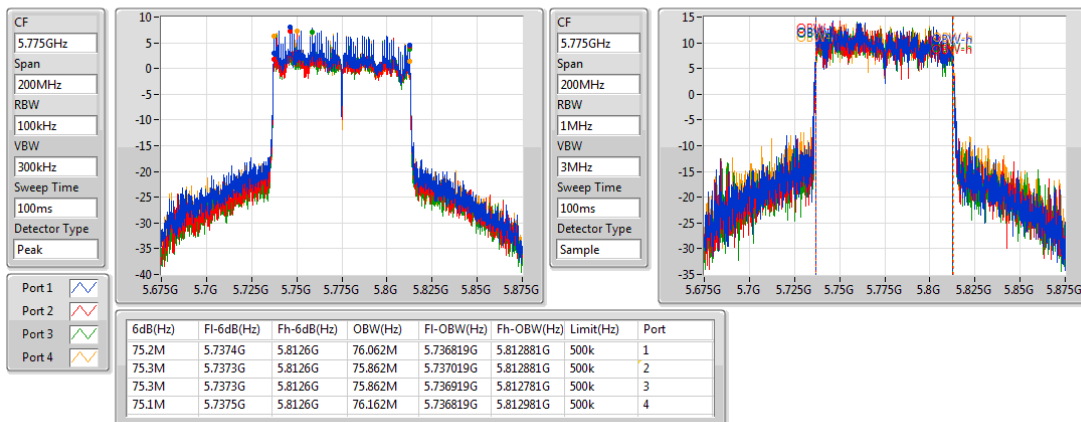
12/02/2019


802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5210MHz

12/02/2019


802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5775MHz

12/02/2019



Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	29.02	0.79799	33.32	2.14783
802.11ac VHT20_Nss4,(MCS0)_4TX	28.86	0.76913	33.16	2.07014
802.11ac VHT40_Nss4,(MCS0)_4TX	28.78	0.75509	32.98	1.98609
802.11ac VHT80_Nss4,(MCS0)_4TX	23.99	0.25061	28.09	0.64417
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	28.39	0.69024	32.79	1.90108
802.11ac VHT20_Nss4,(MCS0)_4TX	28.39	0.69024	32.95	1.97242
802.11ac VHT40_Nss4,(MCS0)_4TX	28.37	0.68707	32.97	1.98153
802.11ac VHT80_Nss4,(MCS0)_4TX	28.39	0.69024	32.89	1.94536

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	21.67	21.38	22.04	22.02	27.81	30.00	31.91	36.00
5200MHz	Pass	4.20	22.84	22.67	23.12	22.99	28.93	30.00	33.13	36.00
5240MHz	Pass	4.30	23.07	22.47	23.16	23.26	29.02	30.00	33.32	36.00
5745MHz	Pass	4.60	21.58	21.86	22.49	22.57	28.17	30.00	32.77	36.00
5785MHz	Pass	4.40	22.57	22.34	22.13	22.43	28.39	30.00	32.79	36.00
5825MHz	Pass	4.00	22.11	22.21	22.21	22.19	28.20	30.00	32.20	36.00
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.10	20.70	20.83	21.29	21.33	27.07	30.00	31.17	36.00
5200MHz	Pass	4.20	22.55	22.13	22.85	23.08	28.69	30.00	32.89	36.00
5240MHz	Pass	4.30	22.82	22.25	22.90	23.31	28.86	30.00	33.16	36.00
5745MHz	Pass	4.60	22.02	21.89	22.63	22.72	28.35	30.00	32.95	36.00
5785MHz	Pass	4.40	22.49	22.19	22.27	22.53	28.39	30.00	32.79	36.00
5825MHz	Pass	4.00	22.01	22.23	22.42	22.44	28.30	30.00	32.30	36.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.10	18.68	18.9	19.46	19.3	25.12	30.00	29.22	36.00
5230MHz	Pass	4.20	23.10	22.24	22.43	23.19	28.78	30.00	32.98	36.00
5755MHz	Pass	4.60	22.04	22.01	22.65	22.67	28.37	30.00	32.97	36.00
5795MHz	Pass	4.40	22.08	22.22	22.30	22.26	28.24	30.00	32.64	36.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.10	17.60	17.63	18.34	18.25	23.99	30.00	28.09	36.00
5775MHz	Pass	4.50	22.55	22.29	22.04	22.56	28.39	30.00	32.89	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	16.77	21.04
802.11ac VHT20_Nss4,(MCS0)_4TX	16.78	21.08
802.11ac VHT40_Nss4,(MCS0)_4TX	13.87	18.07
802.11ac VHT80_Nss4,(MCS0)_4TX	6.47	10.57
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	14.77	19.17
802.11ac VHT20_Nss4,(MCS0)_4TX	16.45	20.85
802.11ac VHT40_Nss4,(MCS0)_4TX	13.56	18.16
802.11ac VHT80_Nss4,(MCS0)_4TX	10.4	14.90

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	9.43	9.51	10.00	9.98	15.50	17.00	19.60	23.00
5200MHz	Pass	4.20	10.70	10.45	10.98	11.48	16.77	17.00	20.97	23.00
5240MHz	Pass	4.30	10.86	10.21	10.90	11.37	16.74	17.00	21.04	23.00
5745MHz	Pass	4.60	8.78	8.59	9.05	8.96	14.55	30.00	19.15	36.00
5785MHz	Pass	4.40	9.42	8.81	8.63	8.84	14.77	30.00	19.17	36.00
5825MHz	Pass	4.00	8.76	8.95	8.86	8.50	14.48	30.00	18.48	36.00
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.10	8.79	8.87	9.38	9.5	14.80	17.00	18.90	23.00
5200MHz	Pass	4.20	10.81	10.56	10.67	11.13	16.51	17.00	20.71	23.00
5240MHz	Pass	4.30	10.74	10.8	11.23	11.63	16.78	17.00	21.08	23.00
5745MHz	Pass	4.60	10.23	9.5	10.57	10.68	16.02	30.00	20.62	36.00
5785MHz	Pass	4.40	10.73	10.31	10.58	10.87	16.45	30.00	20.85	36.00
5825MHz	Pass	4.00	10.37	10.5	10.46	10.62	16.04	30.00	20.04	36.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.10	4.18	4.28	4.41	4.51	10.16	17.00	14.26	23.00
5230MHz	Pass	4.20	8.45	7.64	7.57	8.58	13.87	17.00	18.07	23.00
5755MHz	Pass	4.60	7.35	7.29	8.12	7.87	13.56	30.00	18.16	36.00
5795MHz	Pass	4.40	7.45	7.46	7.8	7.7	13.45	30.00	17.85	36.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.10	0.49	0.87	0.97	1.26	6.47	17.00	10.57	23.00
5775MHz	Pass	4.50	4.63	4.66	4.43	4.42	10.40	30.00	14.90	36.00

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

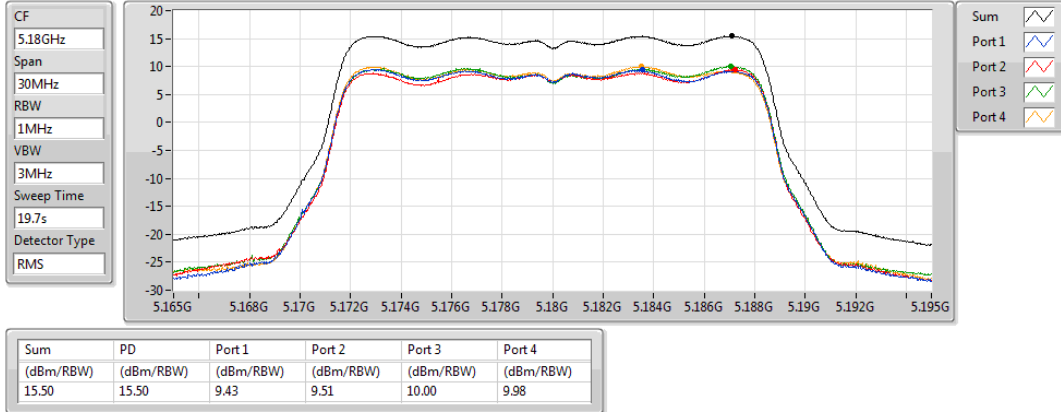
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

802.11a_Nss1,(6Mbps)_4TX

PSD

5180MHz

15/02/2019

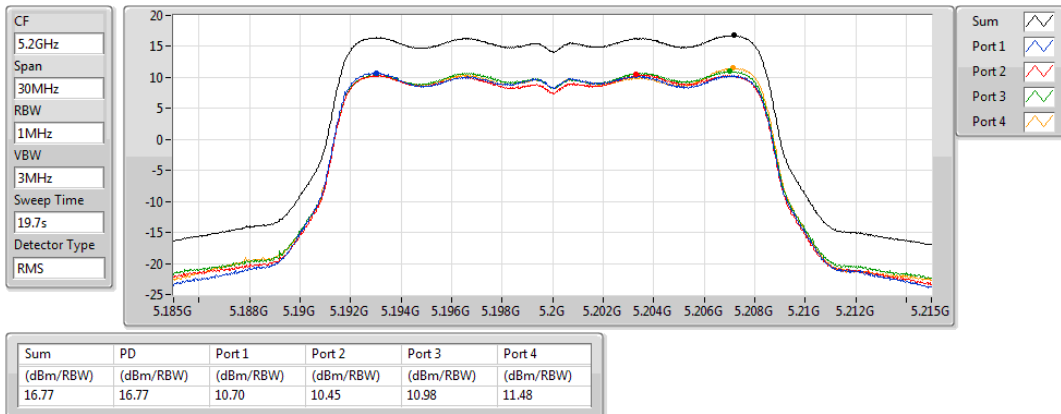


802.11a_Nss1,(6Mbps)_4TX

PSD

5200MHz

15/02/2019

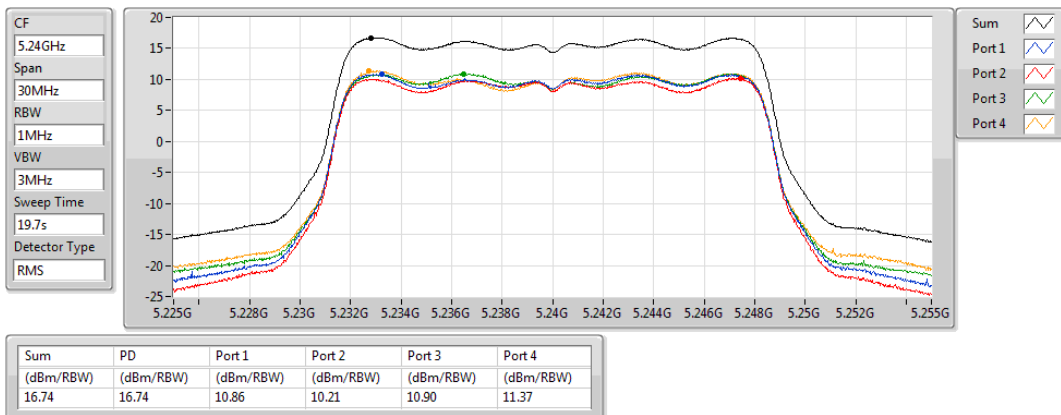


802.11a_Nss1,(6Mbps)_4TX

PSD

5240MHz

15/02/2019

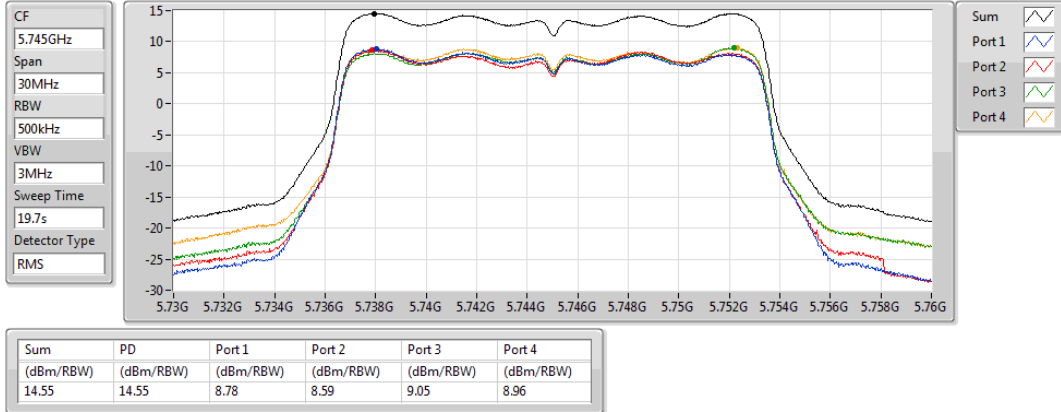


802.11a_Nss1,(6Mbps)_4TX

PSD

5745MHz

15/02/2019

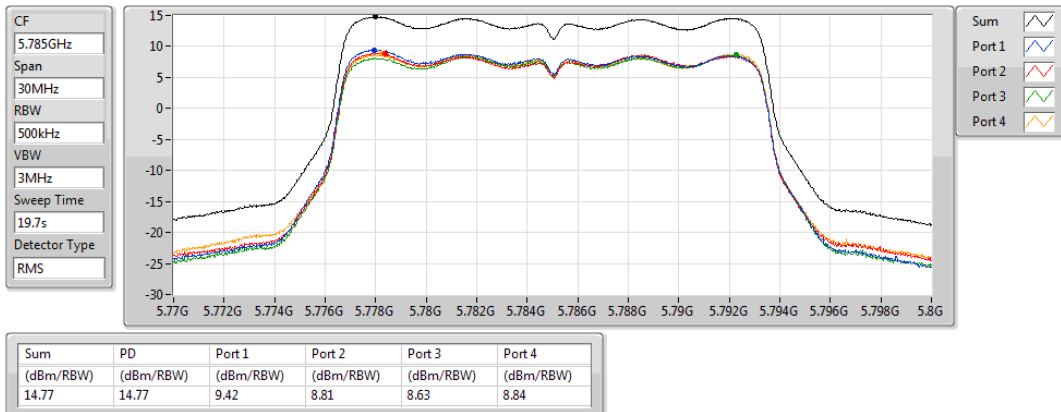


802.11a_Nss1,(6Mbps)_4TX

PSD

5785MHz

15/02/2019

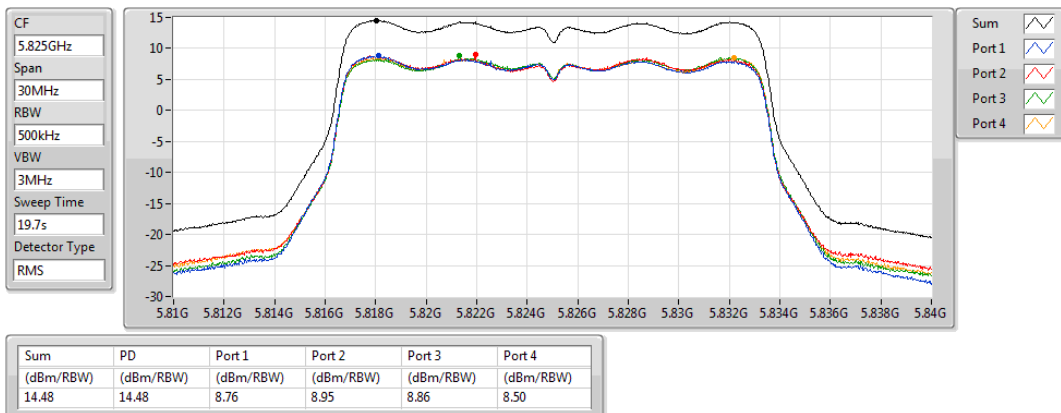


802.11a_Nss1,(6Mbps)_4TX

PSD

5825MHz

15/02/2019

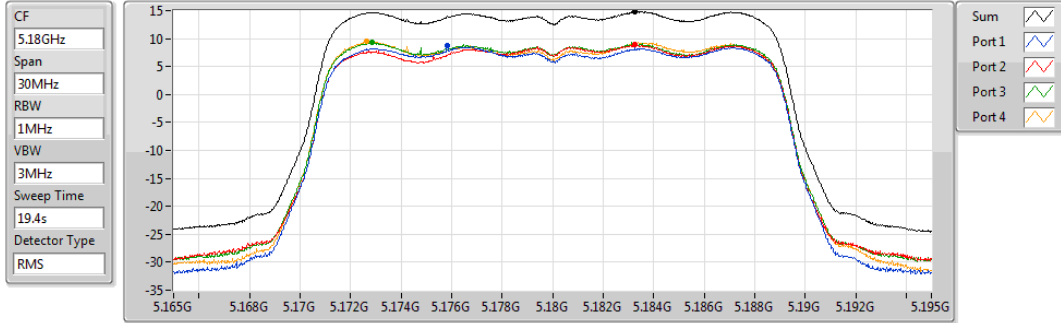


802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5180MHz

12/02/2019



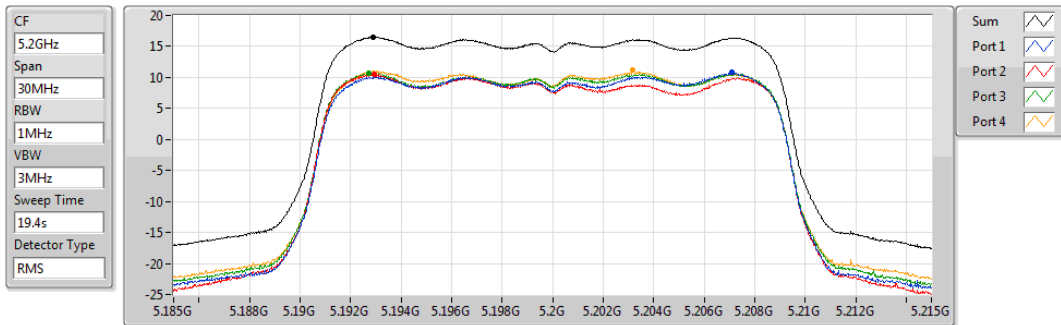
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.80	14.80	8.79	8.87	9.38	9.50

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5200MHz

12/02/2019



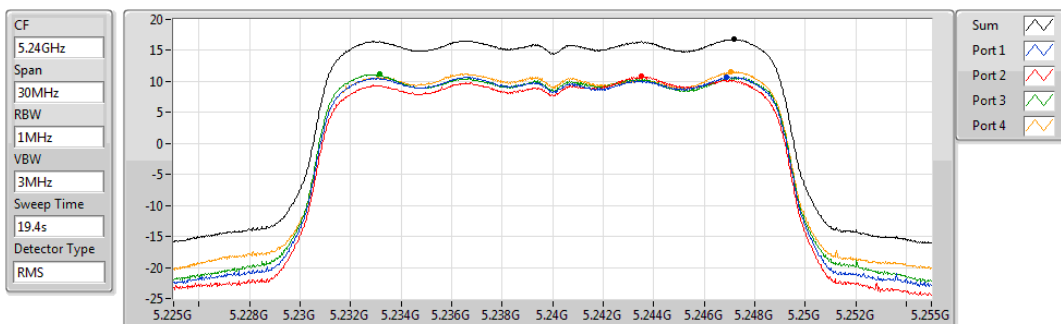
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.51	16.51	10.81	10.56	10.67	11.13

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5240MHz

12/02/2019



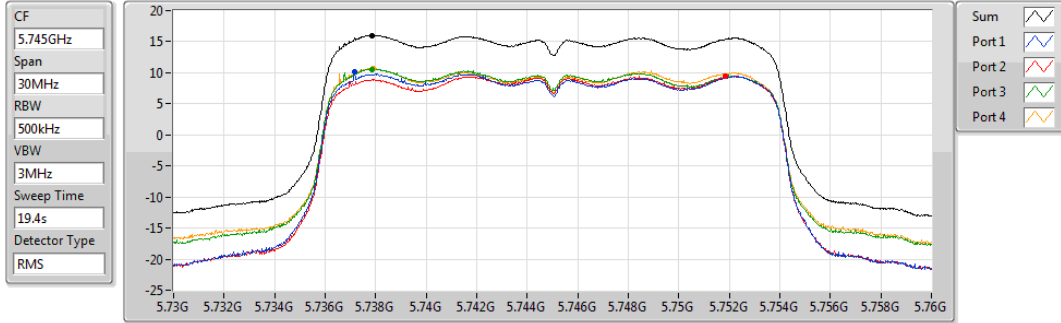
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.78	16.78	10.74	10.80	11.23	11.63

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5745MHz

12/02/2019



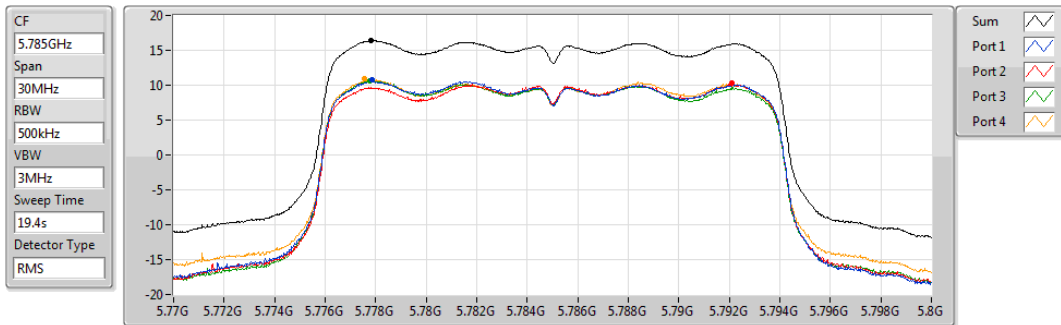
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.02	16.02	10.23	9.50	10.57	10.68

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5785MHz

12/02/2019



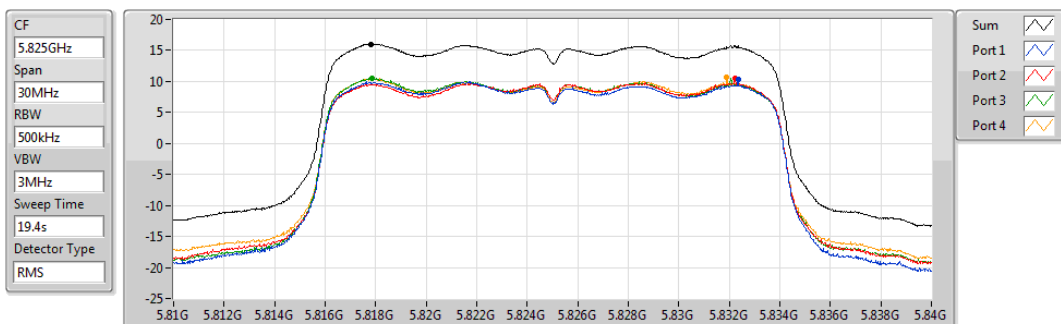
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.45	16.45	10.73	10.31	10.58	10.87

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5825MHz

12/02/2019



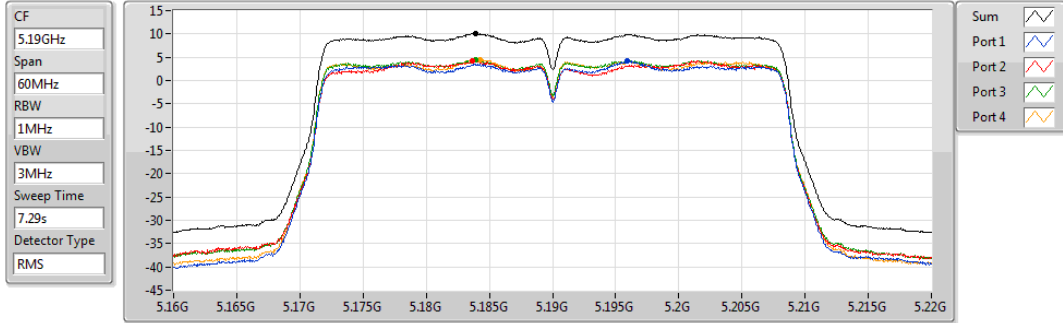
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.04	16.04	10.37	10.50	10.46	10.62

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5190MHz

12/02/2019



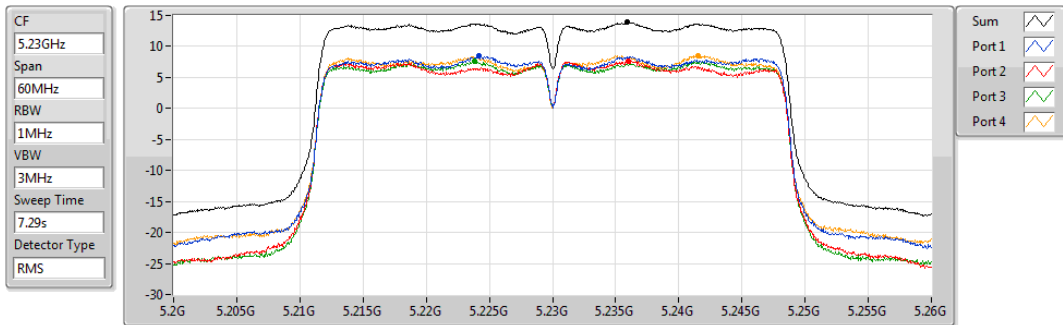
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
10.16	10.16	4.18	4.28	4.41	4.51

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5230MHz

12/02/2019



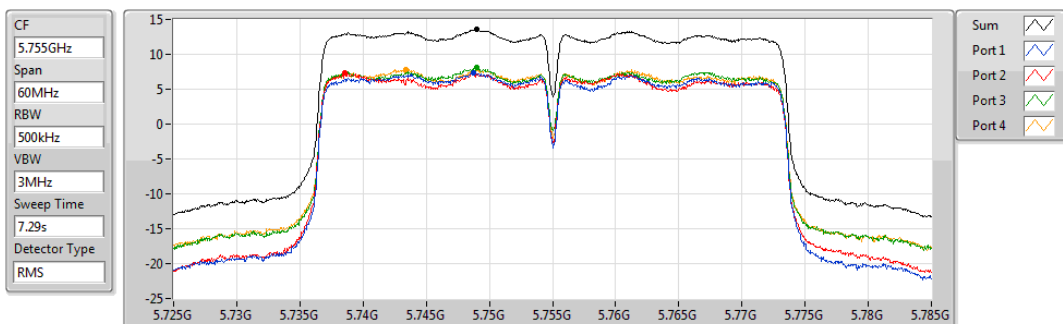
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
13.87	13.87	8.45	7.64	7.57	8.58

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5755MHz

12/02/2019



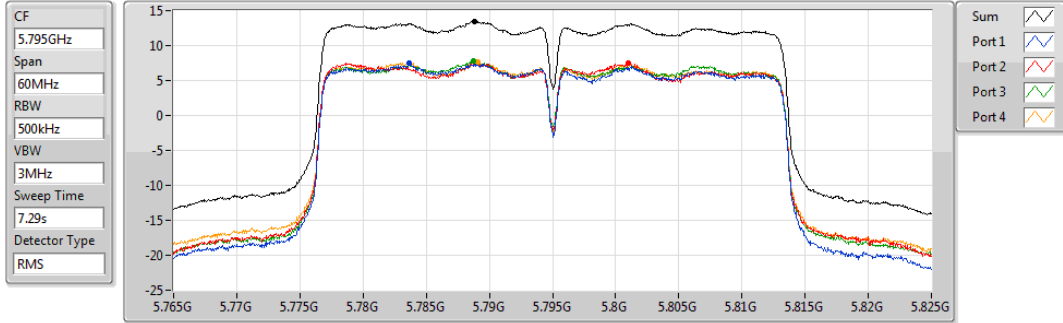
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
13.56	13.56	7.35	7.29	8.12	7.87

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5795MHz

12/02/2019



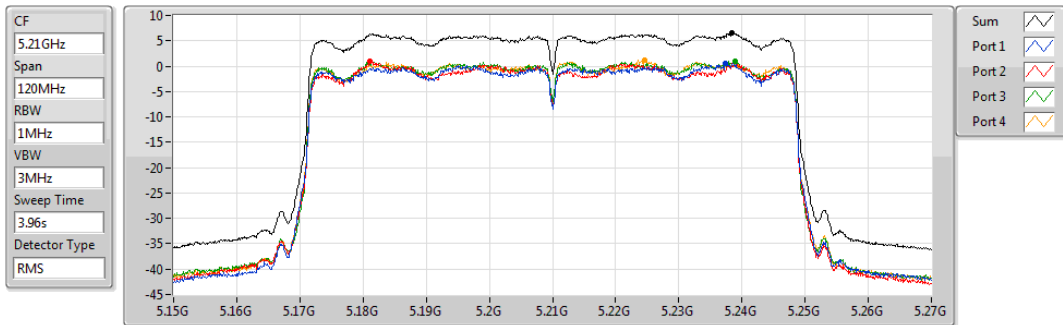
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
13.45	13.45	7.45	7.46	7.80	7.70

802.11ac VHT80_Nss4,(MCS0)_4TX

PSD

5210MHz

12/02/2019



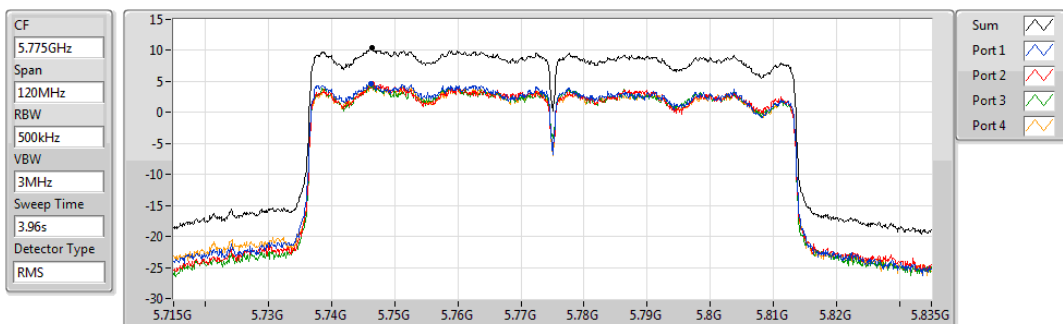
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.47	6.47	0.49	0.87	0.97	1.26

802.11ac VHT80_Nss4,(MCS0)_4TX

PSD

5775MHz

12/02/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.40	10.40	4.63	4.66	4.43	4.42

**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	579.02M	40.32	46.00	-5.68	-1.41	3	Vertical	360	1.00	-

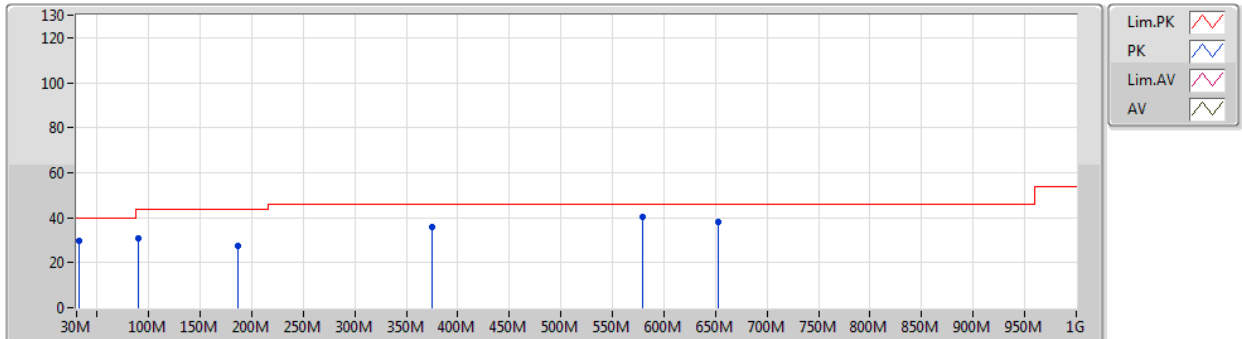
Result

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_Adapter	Pass	PK	31.94M	29.67	40.00	-10.33	-5.66	3	Vertical	360	1.00	-
5775MHz_Adapter	Pass	PK	90.14M	31.02	43.50	-12.48	-12.55	3	Vertical	360	1.00	-
5775MHz_Adapter	Pass	PK	187.14M	27.59	43.50	-15.91	-11.07	3	Vertical	360	1.00	-
5775MHz_Adapter	Pass	PK	375.32M	35.88	46.00	-10.12	-4.48	3	Vertical	360	1.00	-
5775MHz_Adapter	Pass	PK	579.02M	40.32	46.00	-5.68	-1.41	3	Vertical	360	1.00	-
5775MHz_Adapter	Pass	PK	652.74M	37.88	46.00	-8.12	-0.32	3	Vertical	360	1.00	-
5775MHz_Adapter	Pass	PK	31.94M	28.23	40.00	-11.77	-5.66	3	Horizontal	0	1.00	-
5775MHz_Adapter	Pass	PK	198.78M	32.81	43.50	-10.69	-10.65	3	Horizontal	0	1.00	-
5775MHz_Adapter	Pass	PK	272.5M	35.51	46.00	-10.49	-6.13	3	Horizontal	0	1.00	-
5775MHz_Adapter	Pass	PK	375.32M	38.17	46.00	-7.83	-4.48	3	Horizontal	0	1.00	-
5775MHz_Adapter	Pass	PK	522.76M	39.05	46.00	-6.95	-2.21	3	Horizontal	0	1.00	-
5775MHz_Adapter	Pass	PK	662.44M	39.48	46.00	-6.52	-0.29	3	Horizontal	0	1.00	-

802.11ac VHT80_Nss4,(MCS0)_4TX

06/02/2019

5775MHz_Adapter

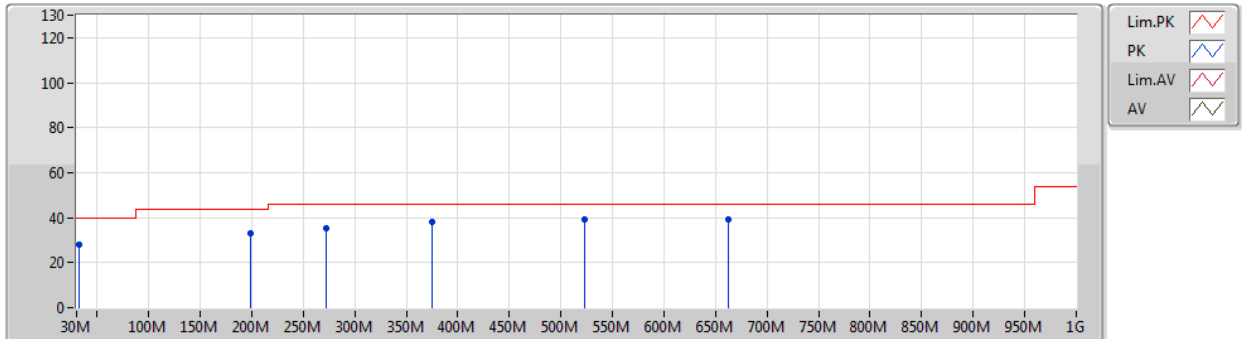


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
PK	31.94M	29.67	40.00	-10.33	-5.66	3	Vertical	360	1.00	-				
PK	90.14M	31.02	43.50	-12.48	-12.55	3	Vertical	360	1.00	-				
PK	187.14M	27.59	43.50	-15.91	-11.07	3	Vertical	360	1.00	-				
PK	375.32M	35.88	46.00	-10.12	-4.48	3	Vertical	360	1.00	-				
PK	579.02M	40.32	46.00	-5.68	-1.41	3	Vertical	360	1.00	-				
PK	652.74M	37.88	46.00	-8.12	-0.32	3	Vertical	360	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	31.94M	28.23	40.00	-11.77	-5.66	3	Horizontal	0	1.00	-
PK	198.78M	32.81	43.50	-10.69	-10.65	3	Horizontal	0	1.00	-
PK	272.5M	35.51	46.00	-10.49	-6.13	3	Horizontal	0	1.00	-
PK	375.32M	38.17	46.00	-7.83	-4.48	3	Horizontal	0	1.00	-
PK	522.76M	39.05	46.00	-6.95	-2.21	3	Horizontal	0	1.00	-
PK	662.44M	39.48	46.00	-6.52	-0.29	3	Horizontal	0	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	10.40048G	53.90	54.00	-0.10	14.20	3	Horizontal	275	1.72	-
802.11ac VHT20_Nss4,(MCS0)_4TX	Pass	AV	5.15G	53.94	54.00	-0.06	4.13	3	Horizontal	326	2.99	-
802.11ac VHT40_Nss4,(MCS0)_4TX	Pass	AV	5.15G	53.81	54.00	-0.19	4.13	3	Horizontal	327	2.99	-
802.11ac VHT80_Nss4,(MCS0)_4TX	Pass	AV	5.138G	53.49	54.00	-0.51	4.11	3	Horizontal	316	3.06	-
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	AV	17.35044G	53.30	54.00	-0.70	20.87	3	Horizontal	44	2.89	-
802.11ac VHT20_Nss4,(MCS0)_4TX	Pass	AV	17.35044G	53.78	54.00	-0.22	20.87	3	Vertical	45	1.82	-
802.11ac VHT40_Nss4,(MCS0)_4TX	Pass	PK	5.6506G	68.26	68.64	-0.38	4.90	3	Vertical	279	2.99	-
802.11ac VHT80_Nss4,(MCS0)_4TX	Pass	PK	5.6466G	67.93	68.20	-0.27	4.89	3	Horizontal	320	3.01	-

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_TX	Pass	AV	5.15G	51.05	54.00	-2.95	4.13	3	Vertical	327	2.99	-
5180MHz_TX	Pass	AV	5.1768G	105.83	Inf	-Inf	4.18	3	Vertical	327	2.99	-
5180MHz_TX	Pass	PK	5.1496G	68.05	74.00	-5.95	4.13	3	Vertical	327	2.99	-
5180MHz_TX	Pass	PK	5.1768G	115.35	Inf	-Inf	4.18	3	Vertical	327	2.99	-
5180MHz_TX	Pass	AV	5.15G	53.02	54.00	-0.98	4.13	3	Horizontal	322	1.20	-
5180MHz_TX	Pass	AV	5.1834G	107.54	Inf	-Inf	4.19	3	Horizontal	322	1.20	-
5180MHz_TX	Pass	PK	5.1498G	70.60	74.00	-3.40	4.13	3	Horizontal	322	1.20	-
5180MHz_TX	Pass	PK	5.1832G	117.10	Inf	-Inf	4.19	3	Horizontal	322	1.20	-
5180MHz_TX	Pass	AV	10.3669G	49.55	54.00	-4.45	14.12	3	Vertical	268	2.94	-
5180MHz_TX	Pass	PK	10.36702G	62.62	74.00	-11.38	14.12	3	Vertical	268	2.94	-
5180MHz_TX	Pass	AV	10.36114G	50.19	54.00	-3.81	14.11	3	Horizontal	274	1.94	-
5180MHz_TX	Pass	PK	10.36252G	63.71	74.00	-10.29	14.12	3	Horizontal	274	1.94	-
5200MHz_TX	Pass	AV	5.1488G	49.13	54.00	-4.87	4.13	3	Vertical	348	2.44	-
5200MHz_TX	Pass	AV	5.2072G	106.82	Inf	-Inf	4.21	3	Vertical	348	2.44	-
5200MHz_TX	Pass	PK	5.1484G	65.97	74.00	-8.03	4.13	3	Vertical	348	2.44	-
5200MHz_TX	Pass	PK	5.2076G	116.04	Inf	-Inf	4.21	3	Vertical	348	2.44	-
5200MHz_TX	Pass	AV	5.1416G	50.01	54.00	-3.99	4.12	3	Horizontal	326	2.99	-
5200MHz_TX	Pass	AV	5.2032G	113.00	Inf	-Inf	4.21	3	Horizontal	326	2.99	-
5200MHz_TX	Pass	PK	5.1432G	68.96	74.00	-5.04	4.13	3	Horizontal	326	2.99	-
5200MHz_TX	Pass	PK	5.2028G	122.52	Inf	-Inf	4.21	3	Horizontal	326	2.99	-
5200MHz_TX	Pass	AV	10.4063G	52.82	54.00	-1.18	14.23	3	Vertical	271	2.99	-
5200MHz_TX	Pass	PK	10.4075G	66.24	74.00	-7.76	14.23	3	Vertical	271	2.99	-
5200MHz_TX	Pass	AV	10.40048G	53.90	54.00	-0.10	14.20	3	Horizontal	275	1.72	-
5200MHz_TX	Pass	PK	10.40066G	67.18	74.00	-6.82	14.20	3	Horizontal	275	1.72	-
5240MHz_TX	Pass	AV	5.1476G	46.92	54.00	-7.08	4.13	3	Vertical	325	2.99	-
5240MHz_TX	Pass	AV	5.2364G	107.89	Inf	-Inf	4.25	3	Vertical	325	2.99	-
5240MHz_TX	Pass	AV	5.3558G	46.98	54.00	-7.02	4.40	3	Vertical	325	2.99	-
5240MHz_TX	Pass	PK	5.0978G	59.44	74.00	-14.56	4.06	3	Vertical	325	2.99	-
5240MHz_TX	Pass	PK	5.2364G	117.61	Inf	-Inf	4.25	3	Vertical	325	2.99	-
5240MHz_TX	Pass	PK	5.3816G	58.94	74.00	-15.06	4.43	3	Vertical	325	2.99	-
5240MHz_TX	Pass	AV	5.147G	47.17	54.00	-6.83	4.13	3	Horizontal	311	1.50	-
5240MHz_TX	Pass	AV	5.2436G	107.18	Inf	-Inf	4.26	3	Horizontal	311	1.50	-
5240MHz_TX	Pass	AV	5.3552G	46.66	54.00	-7.34	4.40	3	Horizontal	311	1.50	-
5240MHz_TX	Pass	PK	5.1386G	60.24	74.00	-13.76	4.11	3	Horizontal	311	1.50	-
5240MHz_TX	Pass	PK	5.2436G	117.30	Inf	-Inf	4.26	3	Horizontal	311	1.50	-
5240MHz_TX	Pass	PK	5.3846G	58.89	74.00	-15.11	4.43	3	Horizontal	311	1.50	-
5240MHz_TX	Pass	AV	10.48216G	52.17	54.00	-1.83	14.40	3	Vertical	223	1.67	-
5240MHz_TX	Pass	PK	10.48126G	65.48	74.00	-8.52	14.40	3	Vertical	223	1.67	-
5240MHz_TX	Pass	AV	10.48138G	53.86	54.00	-0.14	14.40	3	Horizontal	272	1.90	-
5240MHz_TX	Pass	PK	10.48078G	67.17	74.00	-6.83	14.40	3	Horizontal	272	1.90	-
5745MHz_TX	Pass	AV	5.7438G	108.40	Inf	-Inf	5.13	3	Vertical	309	2.99	-
5745MHz_TX	Pass	PK	5.643G	61.08	68.20	-7.12	4.88	3	Vertical	309	2.99	-
5745MHz_TX	Pass	PK	5.7522G	118.39	Inf	-Inf	5.14	3	Vertical	309	2.99	-
5745MHz_TX	Pass	PK	5.943G	58.93	68.20	-9.27	5.40	3	Vertical	309	2.99	-
5745MHz_TX	Pass	AV	5.7378G	111.12	Inf	-Inf	5.11	3	Horizontal	326	1.50	-
5745MHz_TX	Pass	PK	5.6382G	63.92	68.20	-4.28	4.86	3	Horizontal	326	1.50	-
5745MHz_TX	Pass	PK	5.7378G	121.33	Inf	-Inf	5.11	3	Horizontal	326	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_TX	Pass	PK	5.9334G	59.40	68.20	-8.80	5.39	3	Horizontal	326	1.50	-
5745MHz_TX	Pass	AV	11.49288G	51.86	54.00	-2.14	15.04	3	Vertical	267	1.48	-
5745MHz_TX	Pass	AV	17.23398G	53.28	54.00	-0.72	19.99	3	Vertical	43	1.63	-
5745MHz_TX	Pass	PK	11.49318G	64.46	74.00	-9.54	15.04	3	Vertical	267	1.48	-
5745MHz_TX	Pass	PK	17.22666G	66.81	74.00	-7.19	19.93	3	Vertical	43	1.63	-
5745MHz_TX	Pass	AV	11.49366G	51.22	54.00	-2.78	15.04	3	Horizontal	153	1.77	-
5745MHz_TX	Pass	AV	17.24106G	53.14	54.00	-0.86	20.04	3	Horizontal	41	1.50	-
5745MHz_TX	Pass	PK	11.49306G	64.07	74.00	-9.93	15.04	3	Horizontal	153	1.77	-
5745MHz_TX	Pass	PK	17.24142G	65.85	74.00	-8.15	20.04	3	Horizontal	41	1.50	-
5785MHz_TX	Pass	AV	5.7838G	112.34	Inf	-Inf	5.22	3	Vertical	278	2.99	-
5785MHz_TX	Pass	PK	5.509G	62.84	68.20	-5.36	4.60	3	Vertical	278	2.99	-
5785MHz_TX	Pass	PK	5.7826G	122.39	Inf	-Inf	5.23	3	Vertical	278	2.99	-
5785MHz_TX	Pass	PK	5.9602G	59.76	68.20	-8.44	5.42	3	Vertical	278	2.99	-
5785MHz_TX	Pass	AV	5.7778G	112.24	Inf	-Inf	5.21	3	Horizontal	326	1.49	-
5785MHz_TX	Pass	PK	5.5258G	61.53	68.20	-6.67	4.63	3	Horizontal	326	1.49	-
5785MHz_TX	Pass	PK	5.7778G	122.61	Inf	-Inf	5.21	3	Horizontal	326	1.49	-
5785MHz_TX	Pass	PK	5.929G	59.23	68.20	-8.97	5.38	3	Horizontal	326	1.49	-
5785MHz_TX	Pass	AV	11.57312G	50.08	54.00	-3.92	14.95	3	Vertical	268	1.50	-
5785MHz_TX	Pass	AV	17.3592G	53.22	54.00	-0.78	20.94	3	Vertical	44	1.50	-
5785MHz_TX	Pass	PK	11.57228G	63.69	74.00	-10.31	14.95	3	Vertical	268	1.50	-
5785MHz_TX	Pass	PK	17.35992G	67.55	74.00	-6.45	20.95	3	Vertical	44	1.50	-
5785MHz_TX	Pass	AV	11.57222G	51.45	54.00	-2.55	14.95	3	Horizontal	155	1.57	-
5785MHz_TX	Pass	AV	17.35044G	53.30	54.00	-0.70	20.87	3	Horizontal	44	2.89	-
5785MHz_TX	Pass	PK	11.5715G	64.34	74.00	-9.66	14.95	3	Horizontal	155	1.57	-
5785MHz_TX	Pass	PK	17.34132G	66.14	74.00	-7.86	20.80	3	Horizontal	44	2.89	-
5825MHz_TX	Pass	AV	5.825G	111.24	Inf	-Inf	5.28	3	Vertical	278	2.99	-
5825MHz_TX	Pass	PK	5.6462G	61.65	68.20	-6.55	4.88	3	Vertical	278	2.99	-
5825MHz_TX	Pass	PK	5.8238G	120.74	Inf	-Inf	5.29	3	Vertical	278	2.99	-
5825MHz_TX	Pass	PK	5.9306G	59.76	68.20	-8.44	5.38	3	Vertical	278	2.99	-
5825MHz_TX	Pass	AV	5.8178G	111.04	Inf	-Inf	5.28	3	Horizontal	323	1.30	-
5825MHz_TX	Pass	PK	5.5634G	60.92	68.20	-7.28	4.70	3	Horizontal	323	1.30	-
5825MHz_TX	Pass	PK	5.8178G	120.43	Inf	-Inf	5.28	3	Horizontal	323	1.30	-
5825MHz_TX	Pass	PK	5.927G	59.05	68.20	-9.15	5.38	3	Horizontal	323	1.30	-
5825MHz_TX	Pass	AV	11.65018G	50.19	54.00	-3.81	14.85	3	Vertical	338	1.00	-
5825MHz_TX	Pass	AV	17.47512G	53.25	54.00	-0.75	21.82	3	Vertical	54	2.23	-
5825MHz_TX	Pass	PK	11.6497G	63.27	74.00	-10.73	14.85	3	Vertical	338	1.00	-
5825MHz_TX	Pass	PK	17.4834G	66.25	74.00	-7.75	21.88	3	Vertical	54	2.23	-
5825MHz_TX	Pass	AV	11.65192G	51.00	54.00	-3.00	14.85	3	Horizontal	155	1.62	-
5825MHz_TX	Pass	AV	17.47854G	52.95	54.00	-1.05	21.84	3	Horizontal	328	1.50	-
5825MHz_TX	Pass	PK	11.65192G	64.17	74.00	-9.83	14.85	3	Horizontal	155	1.62	-
5825MHz_TX	Pass	PK	17.48856G	65.89	74.00	-8.11	21.92	3	Horizontal	328	1.50	-
802.11ac VHT20_Nss4(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz_TX	Pass	AV	5.15G	49.41	54.00	-4.59	4.13	3	Vertical	323	2.99	-
5180MHz_TX	Pass	AV	5.1764G	104.73	Inf	-Inf	4.18	3	Vertical	323	2.99	-
5180MHz_TX	Pass	PK	5.1476G	64.31	74.00	-9.69	4.13	3	Vertical	323	2.99	-
5180MHz_TX	Pass	PK	5.1764G	114.78	Inf	-Inf	4.18	3	Vertical	323	2.99	-
5180MHz_TX	Pass	AV	5.15G	53.94	54.00	-0.06	4.13	3	Horizontal	326	2.99	-
5180MHz_TX	Pass	AV	5.1876G	106.14	Inf	-Inf	4.19	3	Horizontal	326	2.99	-
5180MHz_TX	Pass	PK	5.1492G	72.78	74.00	-1.22	4.13	3	Horizontal	326	2.99	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5180MHz_TX	Pass	PK	5.1734G	116.61	Inf	-Inf	4.17	3	Horizontal	326	2.99	-
5180MHz_TX	Pass	AV	10.36522G	49.50	54.00	-4.50	14.12	3	Vertical	1	1.90	-
5180MHz_TX	Pass	PK	10.3657G	63.64	74.00	-10.36	14.12	3	Vertical	1	1.90	-
5180MHz_TX	Pass	AV	10.36198G	49.22	54.00	-4.78	14.11	3	Horizontal	279	1.86	-
5180MHz_TX	Pass	PK	10.36096G	62.99	74.00	-11.01	14.11	3	Horizontal	279	1.86	-
5200MHz_TX	Pass	AV	5.1492G	49.72	54.00	-4.28	4.13	3	Vertical	337	2.99	-
5200MHz_TX	Pass	AV	5.1996G	107.73	Inf	-Inf	4.21	3	Vertical	337	2.99	-
5200MHz_TX	Pass	PK	5.1396G	66.65	74.00	-7.35	4.11	3	Vertical	337	2.99	-
5200MHz_TX	Pass	PK	5.1992G	117.16	Inf	-Inf	4.21	3	Vertical	337	2.99	-
5200MHz_TX	Pass	AV	5.15G	52.85	54.00	-1.15	4.13	3	Horizontal	324	2.99	-
5200MHz_TX	Pass	AV	5.1928G	111.92	Inf	-Inf	4.20	3	Horizontal	324	2.99	-
5200MHz_TX	Pass	PK	5.1492G	70.60	74.00	-3.40	4.13	3	Horizontal	324	2.99	-
5200MHz_TX	Pass	PK	5.1924G	121.52	Inf	-Inf	4.20	3	Horizontal	324	2.99	-
5200MHz_TX	Pass	AV	10.4042G	52.62	54.00	-1.38	14.23	3	Vertical	325	1.47	-
5200MHz_TX	Pass	PK	10.40264G	66.17	74.00	-7.83	14.20	3	Vertical	325	1.47	-
5200MHz_TX	Pass	AV	10.3997G	53.75	54.00	-0.25	14.20	3	Horizontal	271	1.59	-
5200MHz_TX	Pass	PK	10.39946G	67.40	74.00	-6.60	14.20	3	Horizontal	271	1.59	-
5240MHz_TX	Pass	AV	5.1278G	47.31	54.00	-6.69	4.11	3	Vertical	329	2.99	-
5240MHz_TX	Pass	AV	5.2394G	105.92	Inf	-Inf	4.25	3	Vertical	329	2.99	-
5240MHz_TX	Pass	AV	5.3648G	46.77	54.00	-7.23	4.41	3	Vertical	329	2.99	-
5240MHz_TX	Pass	PK	5.138G	59.65	74.00	-14.35	4.11	3	Vertical	329	2.99	-
5240MHz_TX	Pass	PK	5.2358G	115.54	Inf	-Inf	4.25	3	Vertical	329	2.99	-
5240MHz_TX	Pass	PK	5.3606G	58.63	74.00	-15.37	4.41	3	Vertical	329	2.99	-
5240MHz_TX	Pass	AV	5.1134G	48.23	54.00	-5.77	4.09	3	Horizontal	315	2.99	-
5240MHz_TX	Pass	AV	5.2334G	110.54	Inf	-Inf	4.25	3	Horizontal	315	2.99	-
5240MHz_TX	Pass	AV	5.3516G	47.79	54.00	-6.21	4.39	3	Horizontal	315	2.99	-
5240MHz_TX	Pass	PK	5.1104G	60.74	74.00	-13.26	4.08	3	Horizontal	315	2.99	-
5240MHz_TX	Pass	PK	5.2334G	120.55	Inf	-Inf	4.25	3	Horizontal	315	2.99	-
5240MHz_TX	Pass	PK	5.3636G	59.97	74.00	-14.03	4.41	3	Horizontal	315	2.99	-
5240MHz_TX	Pass	AV	10.48216G	52.17	54.00	-1.83	14.40	3	Vertical	226	1.77	-
5240MHz_TX	Pass	PK	10.48312G	66.12	74.00	-7.88	14.40	3	Vertical	226	1.77	-
5240MHz_TX	Pass	AV	10.48174G	53.85	54.00	-0.15	14.40	3	Horizontal	287	1.91	-
5240MHz_TX	Pass	PK	10.48264G	68.84	74.00	-5.16	14.40	3	Horizontal	287	1.91	-
5745MHz_TX	Pass	AV	5.7378G	108.03	Inf	-Inf	5.11	3	Vertical	29	2.97	-
5745MHz_TX	Pass	PK	5.6394G	62.85	68.20	-5.35	4.87	3	Vertical	29	2.97	-
5745MHz_TX	Pass	PK	5.7378G	118.53	Inf	-Inf	5.11	3	Vertical	29	2.97	-
5745MHz_TX	Pass	PK	5.9802G	59.27	68.20	-8.93	5.43	3	Vertical	29	2.97	-
5745MHz_TX	Pass	AV	5.7462G	110.04	Inf	-Inf	5.13	3	Horizontal	329	1.01	-
5745MHz_TX	Pass	PK	5.6466G	65.93	68.20	-2.27	4.89	3	Horizontal	329	1.01	-
5745MHz_TX	Pass	PK	5.7462G	121.14	Inf	-Inf	5.13	3	Horizontal	329	1.01	-
5745MHz_TX	Pass	PK	5.979G	58.62	68.20	-9.58	5.43	3	Horizontal	329	1.01	-
5745MHz_TX	Pass	AV	11.49174G	51.92	54.00	-2.08	15.04	3	Vertical	1	1.38	-
5745MHz_TX	Pass	AV	17.23026G	53.75	54.00	-0.25	19.97	3	Vertical	41	1.71	-
5745MHz_TX	Pass	PK	11.49138G	65.73	74.00	-8.27	15.04	3	Vertical	1	1.38	-
5745MHz_TX	Pass	PK	17.23092G	67.14	74.00	-6.86	19.97	3	Vertical	41	1.71	-
5745MHz_TX	Pass	AV	11.49168G	51.45	54.00	-2.55	15.04	3	Horizontal	156	1.58	-
5745MHz_TX	Pass	AV	17.2308G	53.65	54.00	-0.35	19.97	3	Horizontal	40	1.79	-
5745MHz_TX	Pass	PK	11.49282G	65.05	74.00	-8.95	15.04	3	Horizontal	156	1.58	-
5745MHz_TX	Pass	PK	17.23056G	66.73	74.00	-7.27	19.97	3	Horizontal	40	1.79	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5785MHz_TX	Pass	AV	5.7922G	106.47	Inf	-Inf	5.24	3	Vertical	326	1.50	-
5785MHz_TX	Pass	PK	5.5102G	59.46	68.20	-8.74	4.60	3	Vertical	326	1.50	-
5785MHz_TX	Pass	PK	5.7922G	117.21	Inf	-Inf	5.24	3	Vertical	326	1.50	-
5785MHz_TX	Pass	PK	5.935G	58.33	68.20	-9.87	5.39	3	Vertical	326	1.50	-
5785MHz_TX	Pass	AV	5.7886G	110.08	Inf	-Inf	5.23	3	Horizontal	326	1.49	-
5785MHz_TX	Pass	PK	5.4898G	60.20	68.20	-8.00	4.56	3	Horizontal	326	1.49	-
5785MHz_TX	Pass	PK	5.7886G	119.58	Inf	-Inf	5.23	3	Horizontal	326	1.49	-
5785MHz_TX	Pass	PK	5.9698G	58.93	68.20	-9.27	5.44	3	Horizontal	326	1.49	-
5785MHz_TX	Pass	AV	11.57126G	51.60	54.00	-2.40	14.95	3	Vertical	0	1.35	-
5785MHz_TX	Pass	AV	17.35044G	53.78	54.00	-0.22	20.87	3	Vertical	45	1.82	-
5785MHz_TX	Pass	PK	11.57072G	65.07	74.00	-8.93	14.96	3	Vertical	0	1.35	-
5785MHz_TX	Pass	PK	17.36328G	66.79	74.00	-7.21	20.97	3	Vertical	45	1.82	-
5785MHz_TX	Pass	AV	11.57222G	51.83	54.00	-2.17	14.95	3	Horizontal	155	1.60	-
5785MHz_TX	Pass	AV	17.36172G	52.91	54.00	-1.09	20.96	3	Horizontal	150	1.51	-
5785MHz_TX	Pass	PK	11.57216G	64.86	74.00	-9.14	14.95	3	Horizontal	155	1.60	-
5785MHz_TX	Pass	PK	17.34156G	66.64	74.00	-7.36	20.80	3	Horizontal	150	1.51	-
5825MHz_TX	Pass	AV	5.8334G	111.15	Inf	-Inf	5.29	3	Vertical	278	2.99	-
5825MHz_TX	Pass	PK	5.6162G	62.37	68.20	-5.83	4.81	3	Vertical	278	2.99	-
5825MHz_TX	Pass	PK	5.8322G	121.82	Inf	-Inf	5.29	3	Vertical	278	2.99	-
5825MHz_TX	Pass	PK	5.9234G	62.64	69.38	-6.74	5.39	3	Vertical	278	2.99	-
5825MHz_TX	Pass	AV	5.8286G	109.43	Inf	-Inf	5.28	3	Horizontal	326	1.50	-
5825MHz_TX	Pass	PK	5.525G	60.49	68.20	-7.71	4.64	3	Horizontal	326	1.50	-
5825MHz_TX	Pass	PK	5.8274G	119.29	Inf	-Inf	5.28	3	Horizontal	326	1.50	-
5825MHz_TX	Pass	PK	5.9282G	61.25	68.20	-6.95	5.38	3	Horizontal	326	1.50	-
5825MHz_TX	Pass	AV	11.64922G	50.16	54.00	-3.84	14.85	3	Vertical	340	1.01	-
5825MHz_TX	Pass	AV	17.4702G	53.30	54.00	-0.70	21.78	3	Vertical	62	1.50	-
5825MHz_TX	Pass	PK	11.64934G	63.64	74.00	-10.36	14.85	3	Vertical	340	1.01	-
5825MHz_TX	Pass	PK	17.46876G	66.53	74.00	-7.47	21.77	3	Vertical	62	1.50	-
5825MHz_TX	Pass	AV	11.65192G	50.76	54.00	-3.24	14.85	3	Horizontal	156	1.59	-
5825MHz_TX	Pass	AV	17.47902G	53.46	54.00	-0.54	21.85	3	Horizontal	47	2.72	-
5825MHz_TX	Pass	PK	11.65258G	64.70	74.00	-9.30	14.85	3	Horizontal	156	1.59	-
5825MHz_TX	Pass	PK	17.48886G	66.99	74.00	-7.01	21.92	3	Horizontal	47	2.72	-
802.11ac VHT40_Nss4_(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz_TX	Pass	AV	5.1464G	53.15	54.00	-0.85	4.13	3	Vertical	351	2.99	-
5190MHz_TX	Pass	AV	5.1844G	99.89	Inf	-Inf	4.19	3	Vertical	351	2.99	-
5190MHz_TX	Pass	PK	5.1476G	70.24	74.00	-3.76	4.13	3	Vertical	351	2.99	-
5190MHz_TX	Pass	PK	5.1852G	109.20	Inf	-Inf	4.19	3	Vertical	351	2.99	-
5190MHz_TX	Pass	AV	5.15G	53.81	54.00	-0.19	4.13	3	Horizontal	327	2.99	-
5190MHz_TX	Pass	AV	5.1792G	102.74	Inf	-Inf	4.18	3	Horizontal	327	2.99	-
5190MHz_TX	Pass	PK	5.1428G	69.57	74.00	-4.43	4.13	3	Horizontal	327	2.99	-
5190MHz_TX	Pass	PK	5.1832G	113.96	Inf	-Inf	4.19	3	Horizontal	327	2.99	-
5190MHz_TX	Pass	AV	10.38G	47.57	54.00	-6.43	14.17	3	Vertical	2	1.01	-
5190MHz_TX	Pass	PK	10.38036G	59.26	74.00	-14.74	14.17	3	Vertical	2	1.01	-
5190MHz_TX	Pass	AV	10.38174G	47.80	54.00	-6.20	14.17	3	Horizontal	274	1.93	-
5190MHz_TX	Pass	PK	10.38138G	60.12	74.00	-13.88	14.17	3	Horizontal	274	1.93	-
5230MHz_TX	Pass	AV	5.1496G	50.04	54.00	-3.96	4.13	3	Vertical	280	2.99	-
5230MHz_TX	Pass	AV	5.2368G	105.14	Inf	-Inf	4.25	3	Vertical	280	2.99	-
5230MHz_TX	Pass	PK	5.1356G	66.10	74.00	-7.90	4.11	3	Vertical	280	2.99	-
5230MHz_TX	Pass	PK	5.236G	113.82	Inf	-Inf	4.25	3	Vertical	280	2.99	-

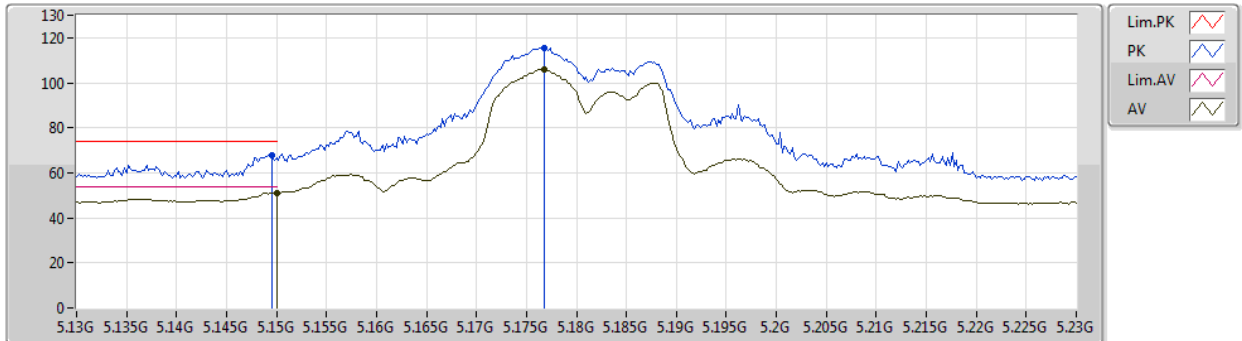
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5230MHz_TX	Pass	AV	5.1496G	53.55	54.00	-0.45	4.13	3	Horizontal	315	2.99	-
5230MHz_TX	Pass	AV	5.2292G	105.80	Inf	-Inf	4.25	3	Horizontal	315	2.99	-
5230MHz_TX	Pass	PK	5.1496G	67.39	74.00	-6.61	4.13	3	Horizontal	315	2.99	-
5230MHz_TX	Pass	PK	5.2288G	115.03	Inf	-Inf	4.25	3	Horizontal	315	2.99	-
5230MHz_TX	Pass	AV	10.45994G	51.64	54.00	-2.36	14.34	3	Vertical	2	1.01	-
5230MHz_TX	Pass	PK	10.45928G	62.97	74.00	-11.03	14.34	3	Vertical	2	1.01	-
5230MHz_TX	Pass	AV	10.46042G	51.08	54.00	-2.92	14.34	3	Horizontal	276	1.70	-
5230MHz_TX	Pass	PK	10.45958G	62.80	74.00	-11.20	14.34	3	Horizontal	276	1.70	-
5755MHz_TX	Pass	AV	5.7502G	108.26	Inf	-Inf	5.14	3	Vertical	279	2.99	-
5755MHz_TX	Pass	PK	5.6506G	68.26	68.64	-0.38	4.90	3	Vertical	279	2.99	-
5755MHz_TX	Pass	PK	5.7502G	117.68	Inf	-Inf	5.14	3	Vertical	279	2.99	-
5755MHz_TX	Pass	PK	5.9434G	61.24	68.20	-6.96	5.40	3	Vertical	279	2.99	-
5755MHz_TX	Pass	AV	5.7574G	108.29	Inf	-Inf	5.15	3	Horizontal	333	2.97	-
5755MHz_TX	Pass	PK	5.6518G	67.44	69.53	-2.09	4.90	3	Horizontal	333	2.97	-
5755MHz_TX	Pass	PK	5.7562G	117.53	Inf	-Inf	5.15	3	Horizontal	333	2.97	-
5755MHz_TX	Pass	PK	5.9806G	60.64	68.20	-7.56	5.43	3	Horizontal	333	2.97	-
5755MHz_TX	Pass	AV	11.49902G	47.67	54.00	-6.33	15.03	3	Vertical	16	1.50	-
5755MHz_TX	Pass	PK	11.49854G	60.22	74.00	-13.78	15.03	3	Vertical	16	1.50	-
5755MHz_TX	Pass	AV	11.51354G	48.31	54.00	-5.69	15.01	3	Horizontal	154	1.60	-
5755MHz_TX	Pass	PK	11.51144G	60.83	74.00	-13.17	15.02	3	Horizontal	154	1.60	-
5795MHz_TX	Pass	AV	5.7818G	107.14	Inf	-Inf	5.22	3	Vertical	14	1.50	-
5795MHz_TX	Pass	PK	5.6438G	64.08	68.20	-4.12	4.88	3	Vertical	14	1.50	-
5795MHz_TX	Pass	PK	5.783G	117.13	Inf	-Inf	5.23	3	Vertical	14	1.50	-
5795MHz_TX	Pass	PK	5.9222G	69.54	70.27	-0.73	5.39	3	Vertical	14	1.50	-
5795MHz_TX	Pass	AV	5.7938G	107.96	Inf	-Inf	5.24	3	Horizontal	304	1.50	-
5795MHz_TX	Pass	PK	5.651G	64.55	68.94	-4.39	4.90	3	Horizontal	304	1.50	-
5795MHz_TX	Pass	PK	5.7938G	117.60	Inf	-Inf	5.24	3	Horizontal	304	1.50	-
5795MHz_TX	Pass	PK	5.9354G	64.06	68.20	-4.14	5.39	3	Horizontal	304	1.50	-
5795MHz_TX	Pass	AV	11.5902G	50.16	54.00	-3.84	14.92	3	Vertical	338	1.02	-
5795MHz_TX	Pass	PK	11.5689G	61.31	74.00	-12.69	14.96	3	Vertical	338	1.02	-
5795MHz_TX	Pass	AV	11.5902G	48.41	54.00	-5.59	14.92	3	Horizontal	195	1.50	-
5795MHz_TX	Pass	PK	11.5913G	60.07	74.00	-13.93	14.92	3	Horizontal	195	1.50	-
802.11ac VHT80_Nss4_(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_TX	Pass	AV	5.148G	52.04	54.00	-1.96	4.13	3	Vertical	278	3.07	-
5210MHz_TX	Pass	AV	5.187G	95.89	Inf	-Inf	4.19	3	Vertical	278	3.07	-
5210MHz_TX	Pass	AV	5.367G	48.13	54.00	-5.87	4.41	3	Vertical	278	3.07	-
5210MHz_TX	Pass	PK	5.149G	66.47	74.00	-7.53	4.13	3	Vertical	278	3.07	-
5210MHz_TX	Pass	PK	5.186G	105.24	Inf	-Inf	4.19	3	Vertical	278	3.07	-
5210MHz_TX	Pass	PK	5.433G	59.57	74.00	-14.43	4.49	3	Vertical	278	3.07	-
5210MHz_TX	Pass	AV	5.138G	53.49	54.00	-0.51	4.11	3	Horizontal	316	3.06	-
5210MHz_TX	Pass	AV	5.199G	97.12	Inf	-Inf	4.21	3	Horizontal	316	3.06	-
5210MHz_TX	Pass	AV	5.439G	47.86	54.00	-6.14	4.50	3	Horizontal	316	3.06	-
5210MHz_TX	Pass	PK	5.143G	70.63	74.00	-3.37	4.13	3	Horizontal	316	3.06	-
5210MHz_TX	Pass	PK	5.182G	108.45	Inf	-Inf	4.19	3	Horizontal	316	3.06	-
5210MHz_TX	Pass	PK	5.421G	59.61	74.00	-14.39	4.47	3	Horizontal	316	3.06	-
5210MHz_TX	Pass	AV	10.4257G	45.90	54.00	-8.10	14.26	3	Vertical	0	1.82	-
5210MHz_TX	Pass	PK	10.4248G	57.71	74.00	-16.29	14.26	3	Vertical	0	1.82	-
5210MHz_TX	Pass	AV	10.4349G	45.13	54.00	-8.87	14.28	3	Horizontal	176	1.84	-
5210MHz_TX	Pass	PK	10.4384G	58.14	74.00	-15.86	14.30	3	Horizontal	176	1.84	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5775MHz_TX	Pass	AV	5.7522G	99.64	Inf	-Inf	5.14	3	Vertical	16	2.68	-
5775MHz_TX	Pass	PK	5.6322G	65.40	68.20	-2.80	4.85	3	Vertical	16	2.68	-
5775MHz_TX	Pass	PK	5.7726G	109.22	Inf	-Inf	5.19	3	Vertical	16	2.68	-
5775MHz_TX	Pass	PK	5.9322G	62.15	68.20	-6.05	5.39	3	Vertical	16	2.68	-
5775MHz_TX	Pass	AV	5.7474G	101.76	Inf	-Inf	5.14	3	Horizontal	320	3.01	-
5775MHz_TX	Pass	PK	5.6466G	67.93	68.20	-0.27	4.89	3	Horizontal	320	3.01	-
5775MHz_TX	Pass	PK	5.7474G	111.24	Inf	-Inf	5.14	3	Horizontal	320	3.01	-
5775MHz_TX	Pass	PK	5.9262G	63.78	68.20	-4.42	5.38	3	Horizontal	320	3.01	-
5775MHz_TX	Pass	AV	11.5521G	44.47	54.00	-9.53	14.97	3	Vertical	356	1.41	-
5775MHz_TX	Pass	PK	11.5422G	57.17	74.00	-16.83	14.98	3	Vertical	356	1.41	-
5775MHz_TX	Pass	AV	11.55156G	44.36	54.00	-9.64	14.97	3	Horizontal	156	1.50	-
5775MHz_TX	Pass	PK	11.56494G	56.88	74.00	-17.12	14.96	3	Horizontal	156	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

06/02/2019

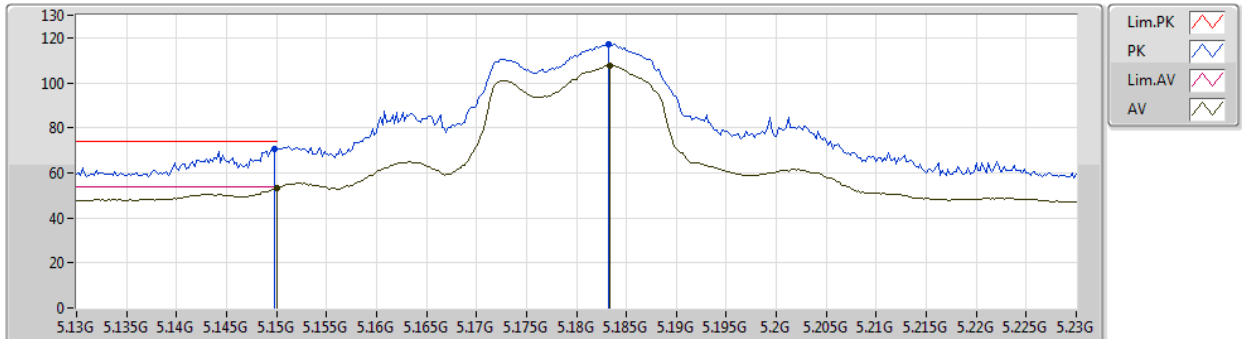


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.15G	51.05	54.00	-2.95	4.13	3	Vertical	327	2.99	-				
AV	5.1768G	105.83	Inf	-Inf	4.18	3	Vertical	327	2.99	-				
PK	5.1496G	68.05	74.00	-5.95	4.13	3	Vertical	327	2.99	-				
PK	5.1768G	115.35	Inf	-Inf	4.18	3	Vertical	327	2.99	-				

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

06/02/2019

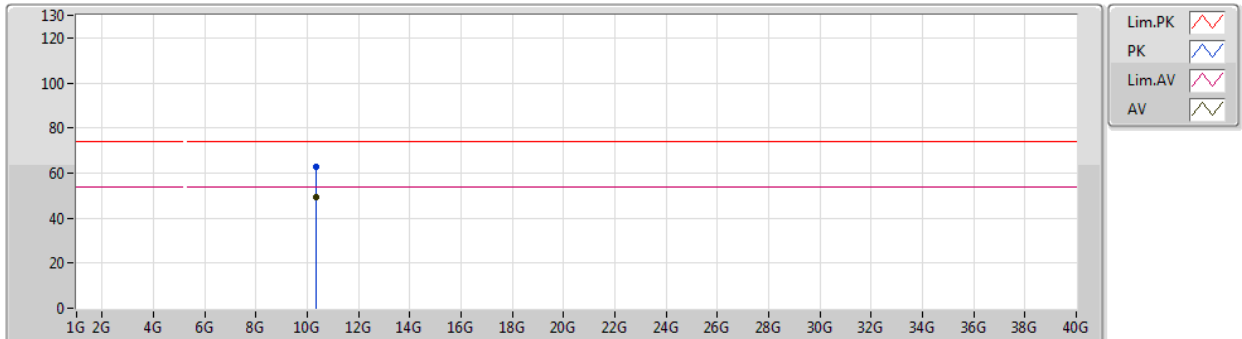


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.15G	53.02	54.00	-0.98	4.13	3	Horizontal	322	1.20	-
AV	5.1834G	107.54	Inf	-Inf	4.19	3	Horizontal	322	1.20	-
PK	5.1498G	70.60	74.00	-3.40	4.13	3	Horizontal	322	1.20	-
PK	5.1832G	117.10	Inf	-Inf	4.19	3	Horizontal	322	1.20	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

06/02/2019

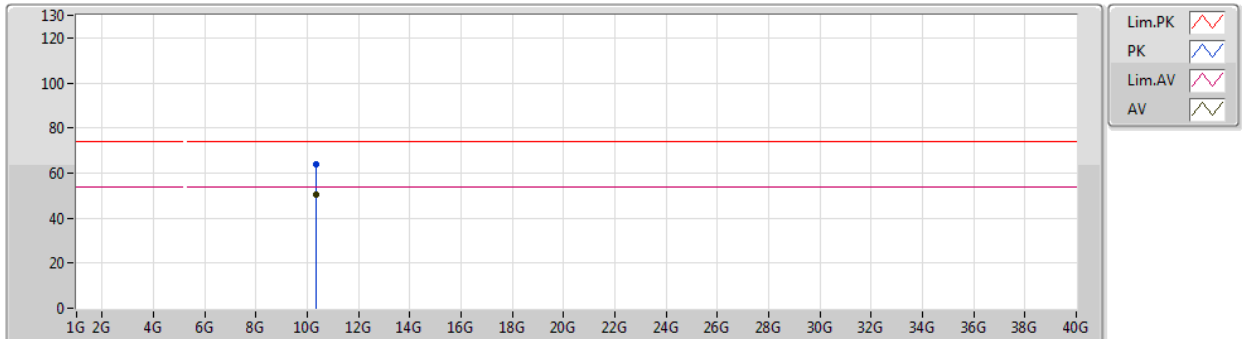


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.3669G	49.55	54.00	-4.45	14.12	3	Vertical	268	2.94	-
PK	10.36702G	62.62	74.00	-11.38	14.12	3	Vertical	268	2.94	-

802.11a_Nss1,(6Mbps)_4TX

06/02/2019

5180MHz_TX

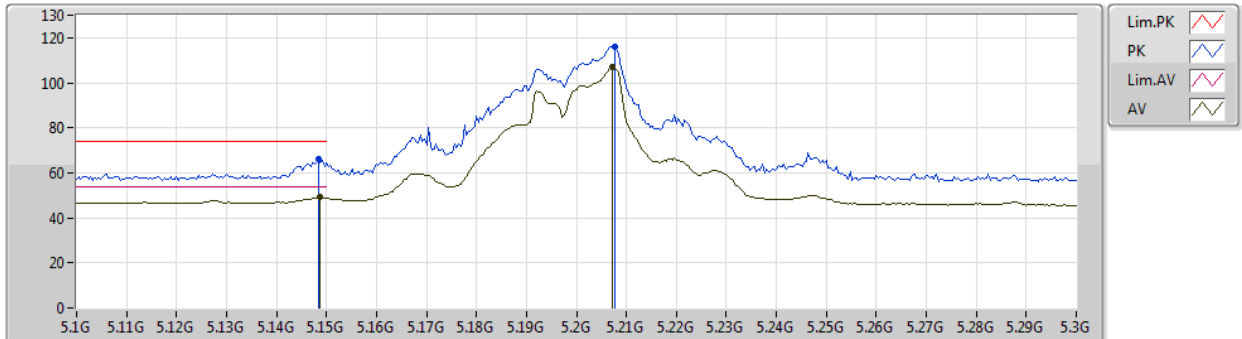


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.36114G	50.19	54.00	-3.81	14.11	3	Horizontal	274	1.94	-
PK	10.36252G	63.71	74.00	-10.29	14.12	3	Horizontal	274	1.94	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

06/02/2019

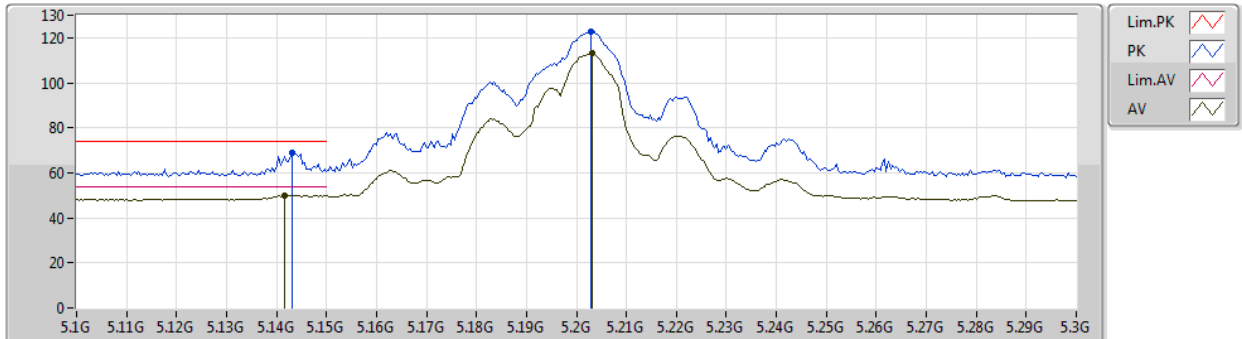


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1488G	49.13	54.00	-4.87	4.13	3	Vertical	348	2.44	-
AV	5.2072G	106.82	Inf	-Inf	4.21	3	Vertical	348	2.44	-
PK	5.1484G	65.97	74.00	-8.03	4.13	3	Vertical	348	2.44	-
PK	5.2076G	116.04	Inf	-Inf	4.21	3	Vertical	348	2.44	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

06/02/2019

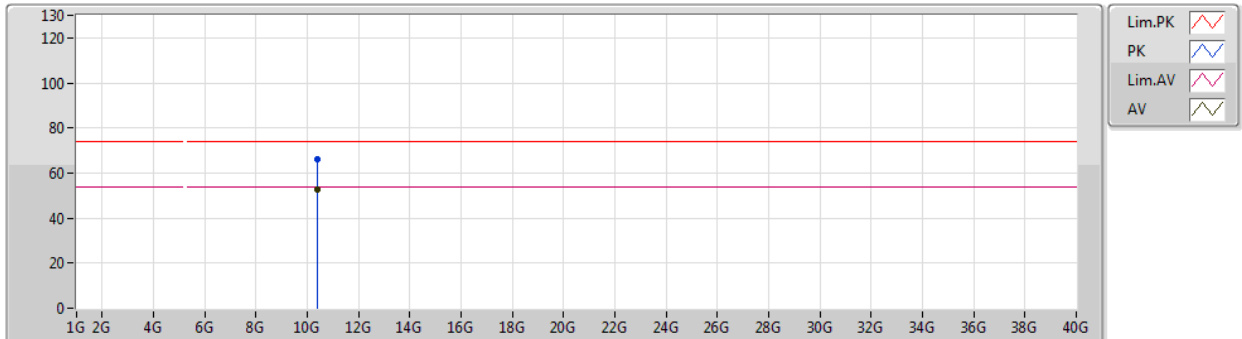


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1416G	50.01	54.00	-3.99	4.12	3	Horizontal	326	2.99	-
AV	5.2032G	113.00	Inf	-Inf	4.21	3	Horizontal	326	2.99	-
PK	5.1432G	68.96	74.00	-5.04	4.13	3	Horizontal	326	2.99	-
PK	5.2028G	122.52	Inf	-Inf	4.21	3	Horizontal	326	2.99	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

06/02/2019

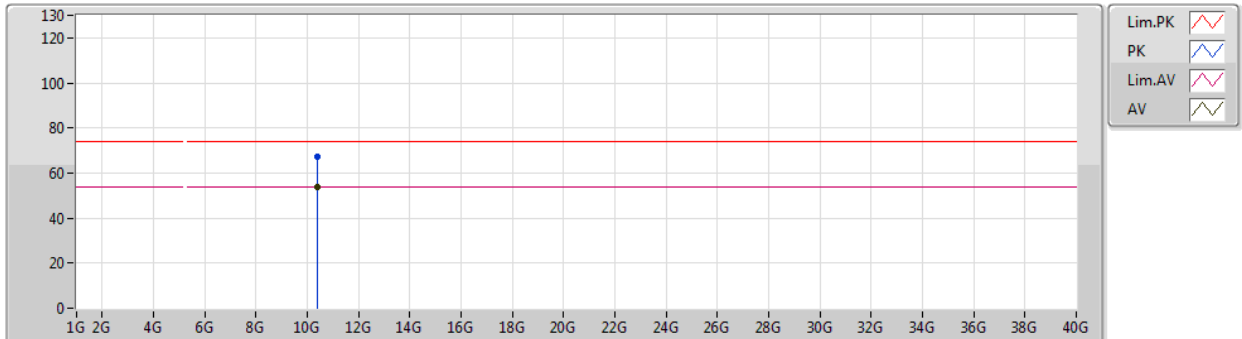


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4063G	52.82	54.00	-1.18	14.23	3	Vertical	271	2.99	-
PK	10.4075G	66.24	74.00	-7.76	14.23	3	Vertical	271	2.99	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

06/02/2019

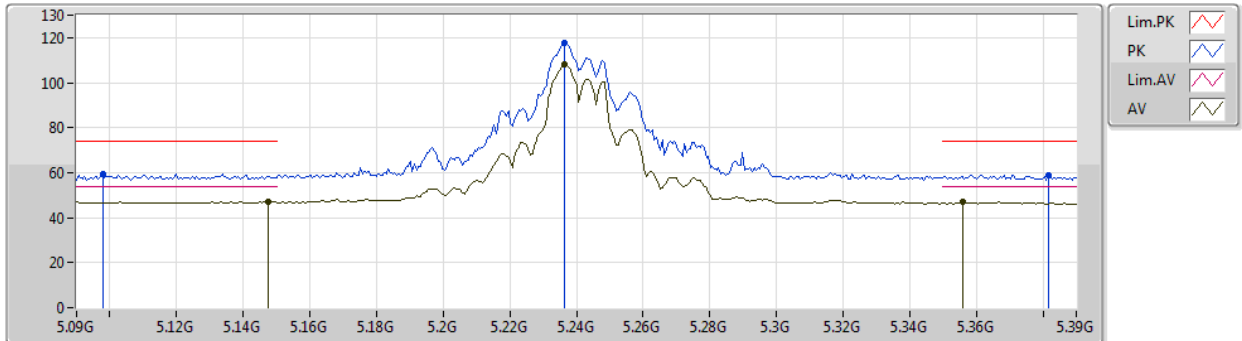


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	10.40048G	53.90	54.00	-0.10	14.20	3	Horizontal	275	1.72	-				
PK	10.40066G	67.18	74.00	-6.82	14.20	3	Horizontal	275	1.72	-				

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

06/02/2019

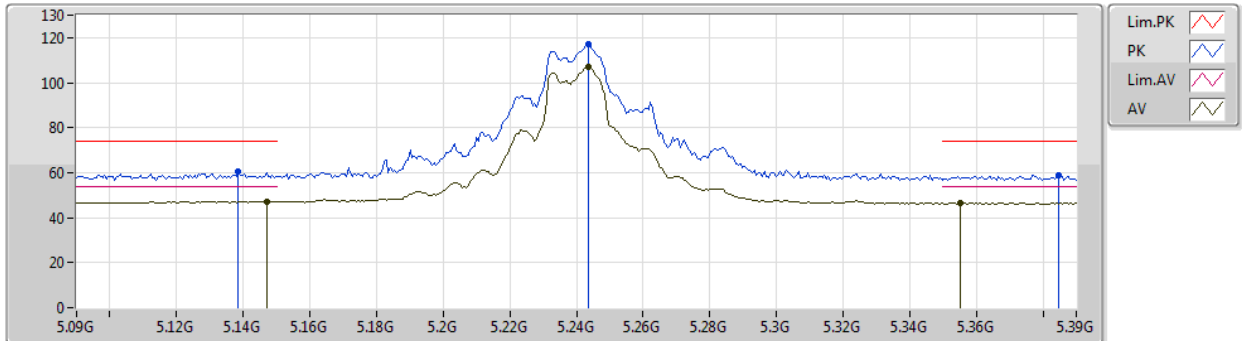


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	5.1476G	46.92	54.00	-7.08	4.13	3	Vertical	325	2.99	-				
AV	5.2364G	107.89	Inf	-Inf	4.25	3	Vertical	325	2.99	-				
AV	5.3558G	46.98	54.00	-7.02	4.40	3	Vertical	325	2.99	-				
PK	5.0978G	59.44	74.00	-14.56	4.06	3	Vertical	325	2.99	-				
PK	5.2364G	117.61	Inf	-Inf	4.25	3	Vertical	325	2.99	-				
PK	5.3816G	58.94	74.00	-15.06	4.43	3	Vertical	325	2.99	-				

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

06/02/2019

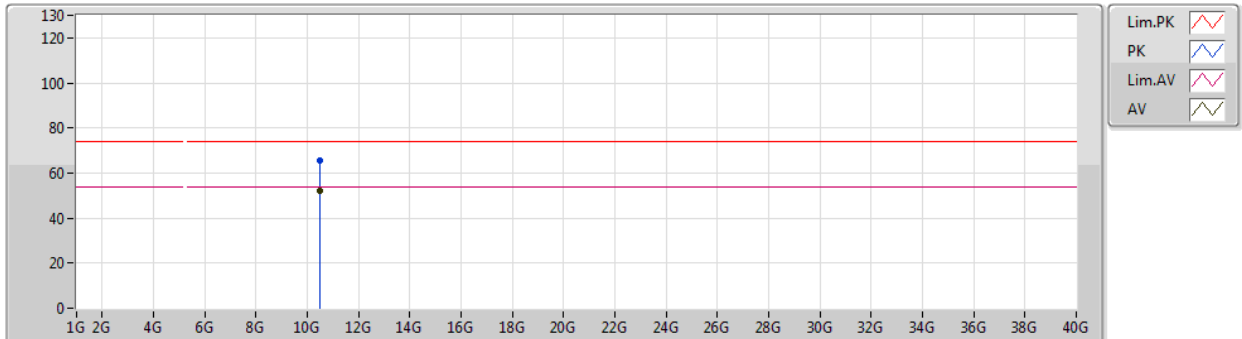


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.147G	47.17	54.00	-6.83	4.13	3	Horizontal	311	1.50	-				
AV	5.2436G	107.18	Inf	-Inf	4.26	3	Horizontal	311	1.50	-				
AV	5.3552G	46.66	54.00	-7.34	4.40	3	Horizontal	311	1.50	-				
PK	5.1386G	60.24	74.00	-13.76	4.11	3	Horizontal	311	1.50	-				
PK	5.2436G	117.30	Inf	-Inf	4.26	3	Horizontal	311	1.50	-				
PK	5.3846G	58.89	74.00	-15.11	4.43	3	Horizontal	311	1.50	-				

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

06/02/2019

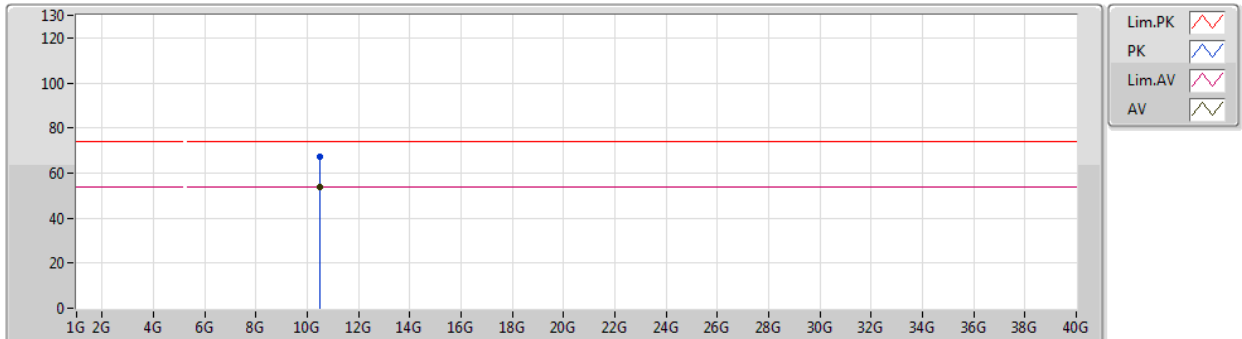


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.48216G	52.17	54.00	-1.83	14.40	3	Vertical	223	1.67	-
PK	10.48126G	65.48	74.00	-8.52	14.40	3	Vertical	223	1.67	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

06/02/2019

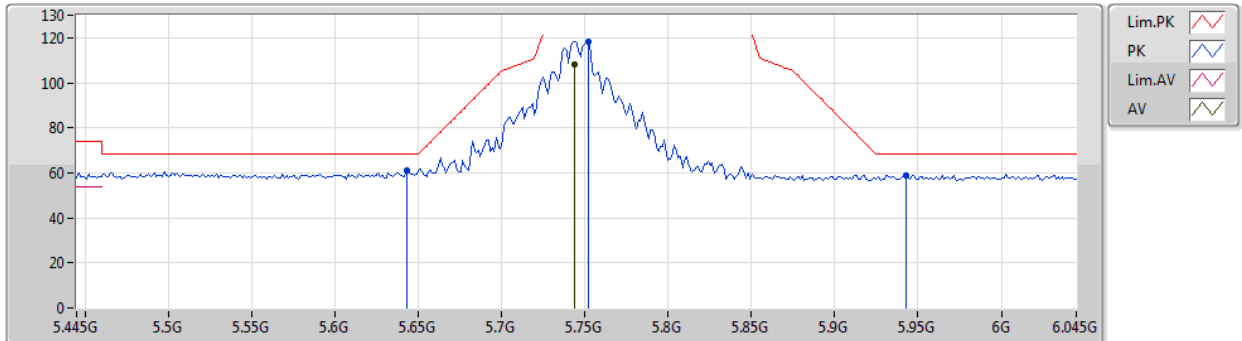


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.48138G	53.86	54.00	-0.14	14.40	3	Horizontal	272	1.90	-
PK	10.48078G	67.17	74.00	-6.83	14.40	3	Horizontal	272	1.90	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

06/02/2019

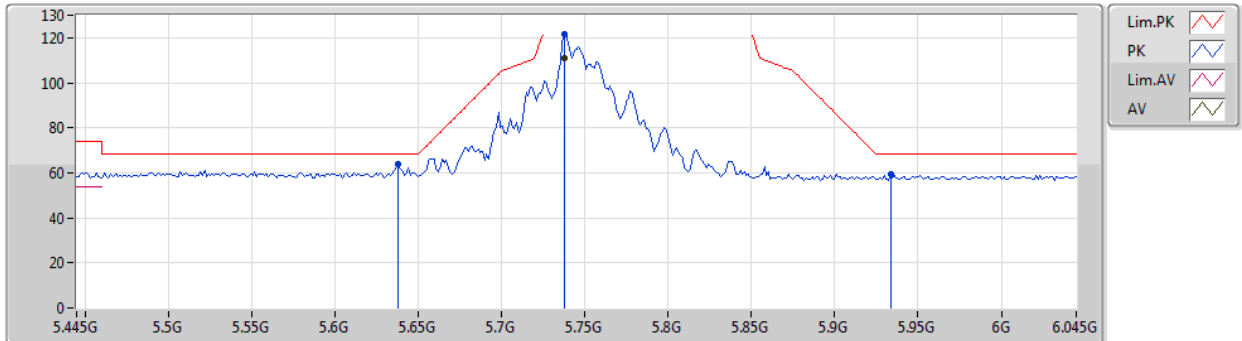


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7438G	108.40	Inf	-Inf	5.13	3	Vertical	309	2.99	-
PK	5.643G	61.08	68.20	-7.12	4.88	3	Vertical	309	2.99	-
PK	5.7522G	118.39	Inf	-Inf	5.14	3	Vertical	309	2.99	-
PK	5.943G	58.93	68.20	-9.27	5.40	3	Vertical	309	2.99	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

06/02/2019

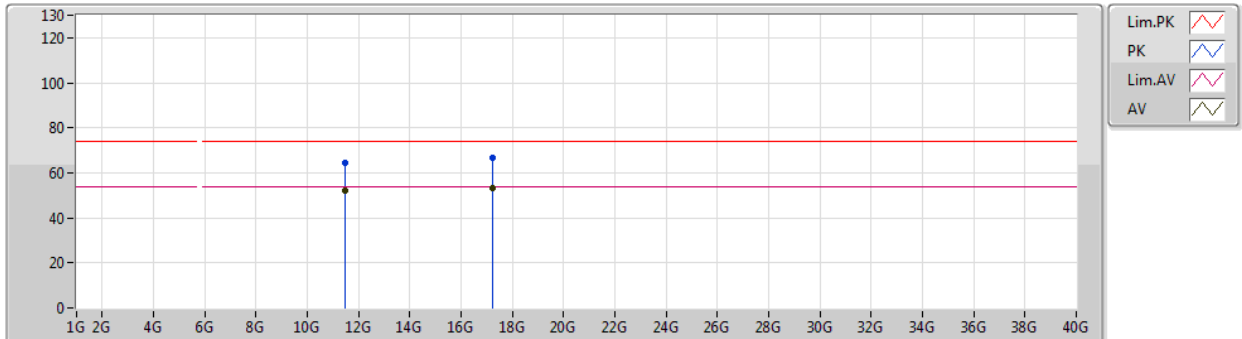


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7378G	111.12	Inf	-Inf	5.11	3	Horizontal	326	1.50	-
PK	5.6382G	63.92	68.20	-4.28	4.86	3	Horizontal	326	1.50	-
PK	5.7378G	121.33	Inf	-Inf	5.11	3	Horizontal	326	1.50	-
PK	5.9334G	59.40	68.20	-8.80	5.39	3	Horizontal	326	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

06/02/2019

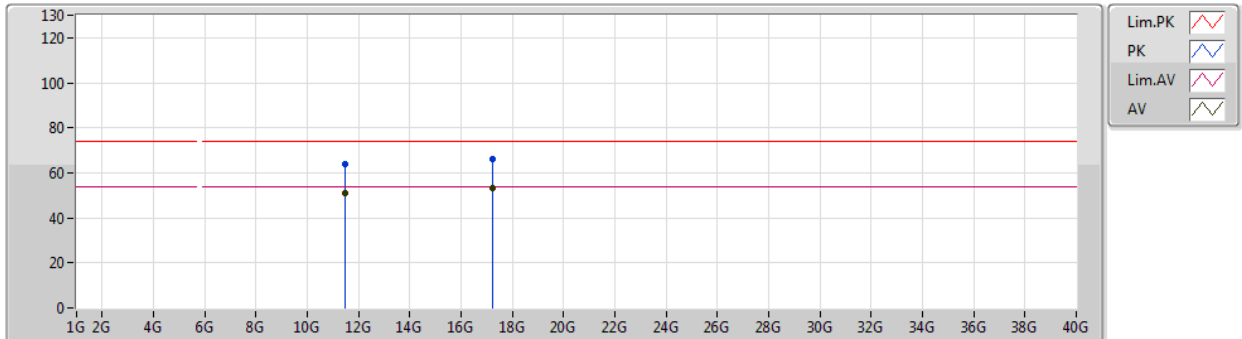


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.49288G	51.86	54.00	-2.14	15.04	3	Vertical	267	1.48	-
AV	17.23398G	53.28	54.00	-0.72	19.99	3	Vertical	43	1.63	-
PK	11.49318G	64.46	74.00	-9.54	15.04	3	Vertical	267	1.48	-
PK	17.22666G	66.81	74.00	-7.19	19.93	3	Vertical	43	1.63	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

06/02/2019

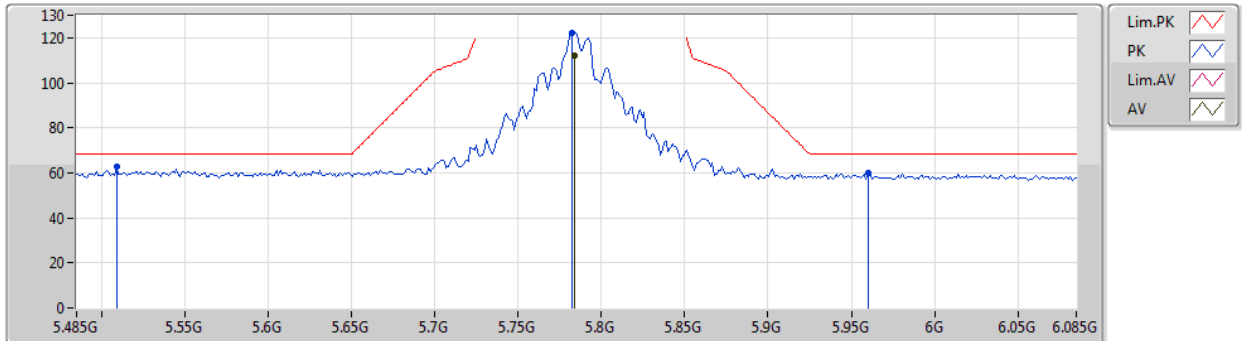


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.49366G	51.22	54.00	-2.78	15.04	3	Horizontal	153	1.77	-
AV	17.24106G	53.14	54.00	-0.86	20.04	3	Horizontal	41	1.50	-
PK	11.49306G	64.07	74.00	-9.93	15.04	3	Horizontal	153	1.77	-
PK	17.24142G	65.85	74.00	-8.15	20.04	3	Horizontal	41	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

06/02/2019

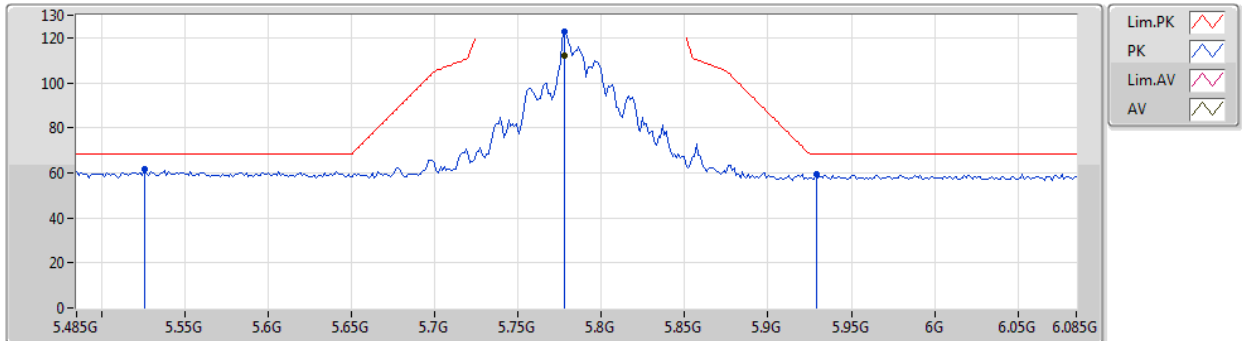


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7838G	112.34	Inf	-Inf	5.22	3	Vertical	278	2.99	-
PK	5.509G	62.84	68.20	-5.36	4.60	3	Vertical	278	2.99	-
PK	5.7826G	122.39	Inf	-Inf	5.23	3	Vertical	278	2.99	-
PK	5.9602G	59.76	68.20	-8.44	5.42	3	Vertical	278	2.99	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

06/02/2019

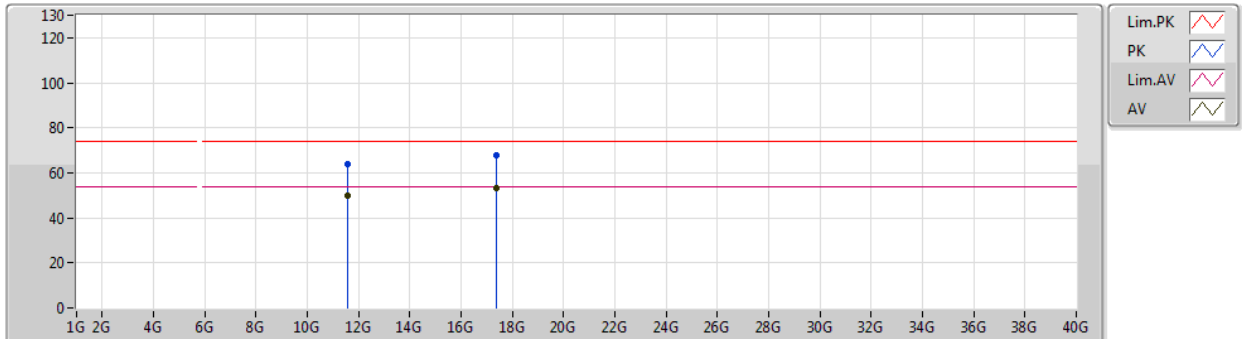


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7778G	112.24	Inf	-Inf	5.21	3	Horizontal	326	1.49	-
PK	5.5258G	61.53	68.20	-6.67	4.63	3	Horizontal	326	1.49	-
PK	5.7778G	122.61	Inf	-Inf	5.21	3	Horizontal	326	1.49	-
PK	5.929G	59.23	68.20	-8.97	5.38	3	Horizontal	326	1.49	-

802.11a_Nss1,(6Mbps)_4TX

06/02/2019

5785MHz_TX

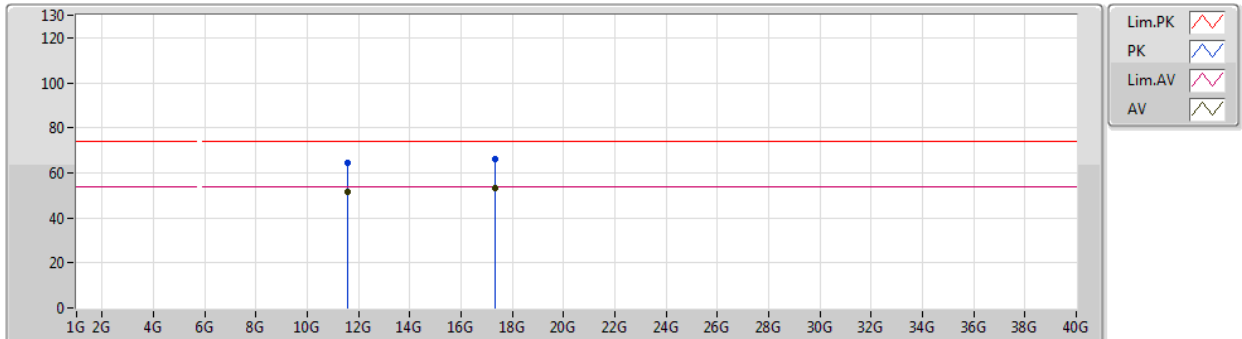


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.57312G	50.08	54.00	-3.92	14.95	3	Vertical	268	1.50	-
AV	17.3592G	53.22	54.00	-0.78	20.94	3	Vertical	44	1.50	-
PK	11.57228G	63.69	74.00	-10.31	14.95	3	Vertical	268	1.50	-
PK	17.35992G	67.55	74.00	-6.45	20.95	3	Vertical	44	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

06/02/2019

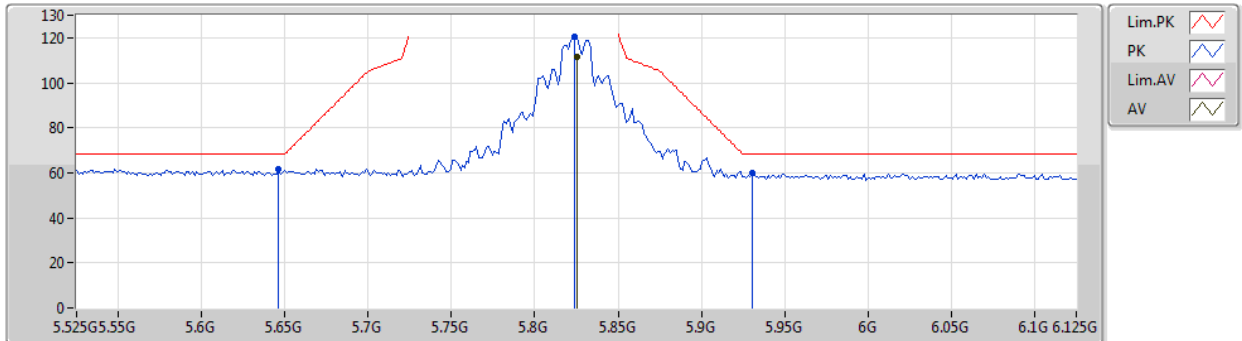


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.57222G	51.45	54.00	-2.55	14.95	3	Horizontal	155	1.57	-				
AV	17.35044G	53.30	54.00	-0.70	20.87	3	Horizontal	44	2.89	-				
PK	11.5715G	64.34	74.00	-9.66	14.95	3	Horizontal	155	1.57	-				
PK	17.34132G	66.14	74.00	-7.86	20.80	3	Horizontal	44	2.89	-				

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

06/02/2019

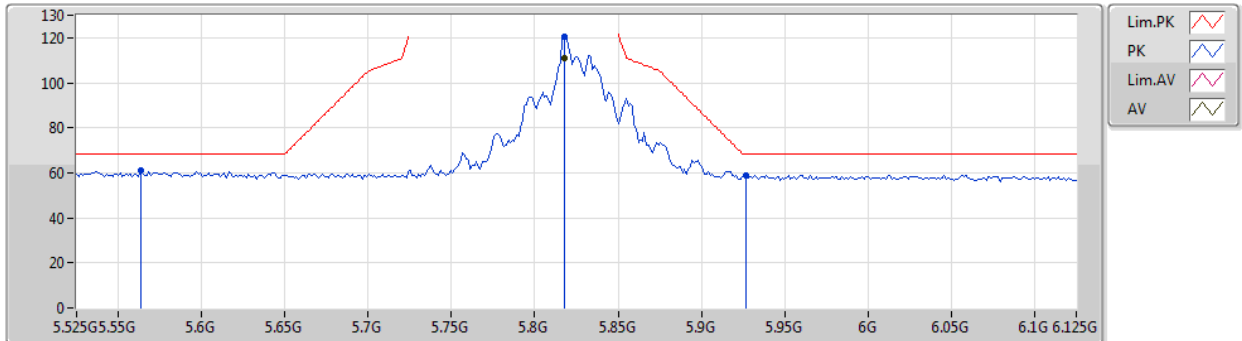


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.825G	111.24	Inf	-Inf	5.28	3	Vertical	278	2.99	-				
PK	5.6462G	61.65	68.20	-6.55	4.88	3	Vertical	278	2.99	-				
PK	5.8238G	120.74	Inf	-Inf	5.29	3	Vertical	278	2.99	-				
PK	5.9306G	59.76	68.20	-8.44	5.38	3	Vertical	278	2.99	-				

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

06/02/2019

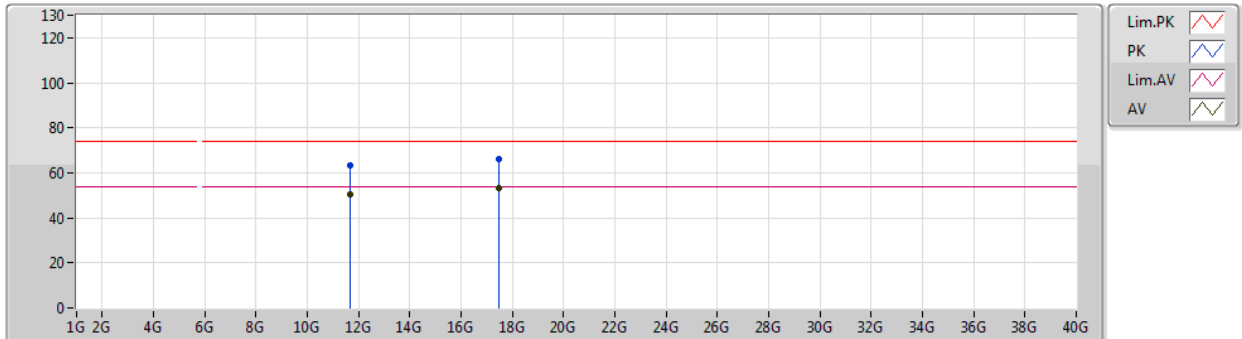


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.8178G	111.04	Inf	-Inf	5.28	3	Horizontal	323	1.30	-
PK	5.5634G	60.92	68.20	-7.28	4.70	3	Horizontal	323	1.30	-
PK	5.8178G	120.43	Inf	-Inf	5.28	3	Horizontal	323	1.30	-
PK	5.927G	59.05	68.20	-9.15	5.38	3	Horizontal	323	1.30	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

06/02/2019

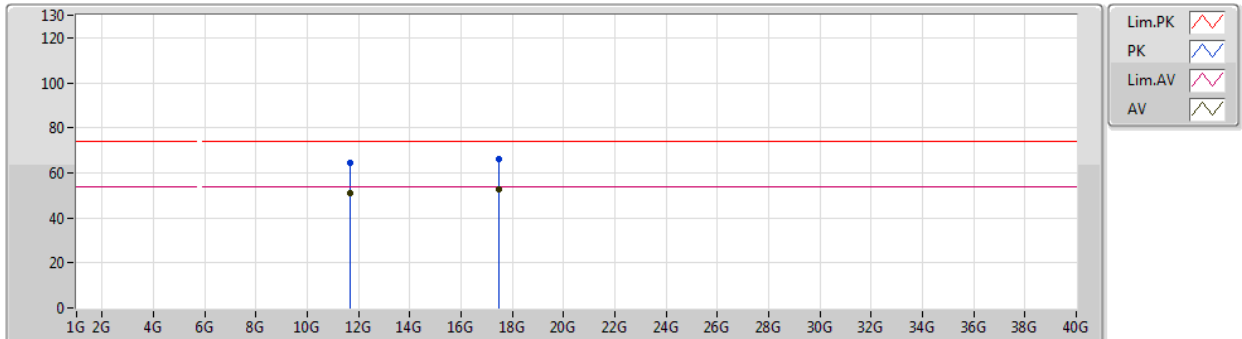


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.65018G	50.19	54.00	-3.81	14.85	3	Vertical	338	1.00	-
AV	17.47512G	53.25	54.00	-0.75	21.82	3	Vertical	54	2.23	-
PK	11.6497G	63.27	74.00	-10.73	14.85	3	Vertical	338	1.00	-
PK	17.4834G	66.25	74.00	-7.75	21.88	3	Vertical	54	2.23	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

06/02/2019

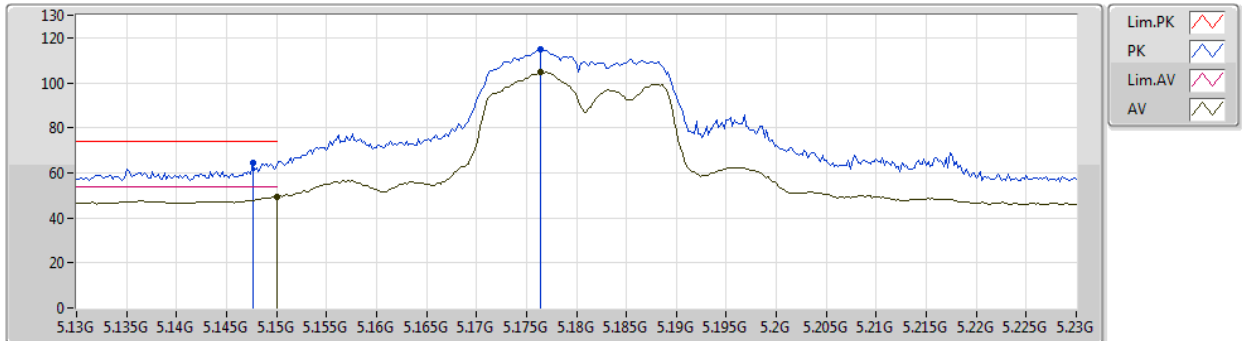


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.65192G	51.00	54.00	-3.00	14.85	3	Horizontal	155	1.62	-
AV	17.47854G	52.95	54.00	-1.05	21.84	3	Horizontal	328	1.50	-
PK	11.65192G	64.17	74.00	-9.83	14.85	3	Horizontal	155	1.62	-
PK	17.48856G	65.89	74.00	-8.11	21.92	3	Horizontal	328	1.50	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5180MHz_TX

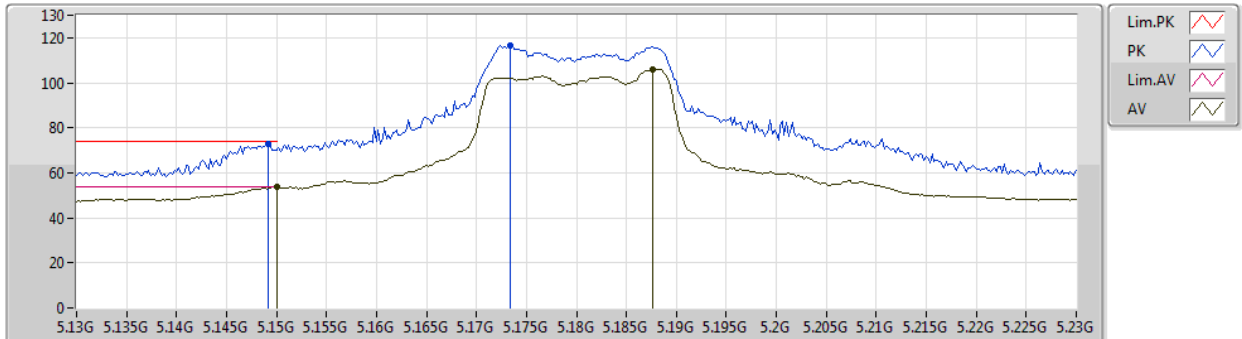


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.15G	49.41	54.00	-4.59	4.13	3	Vertical	323	2.99	-				
AV	5.1764G	104.73	Inf	-Inf	4.18	3	Vertical	323	2.99	-				
PK	5.1476G	64.31	74.00	-9.69	4.13	3	Vertical	323	2.99	-				
PK	5.1764G	114.78	Inf	-Inf	4.18	3	Vertical	323	2.99	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

5180MHz_TX

06/02/2019

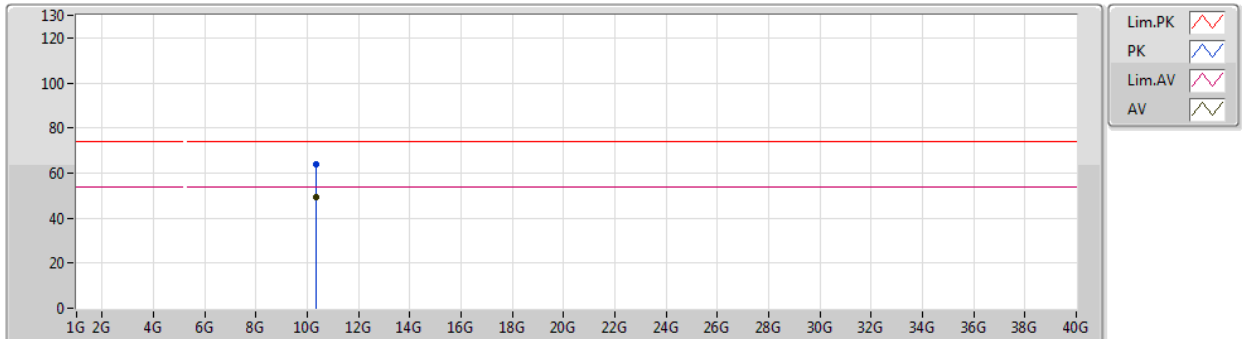


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.15G	53.94	54.00	-0.06	4.13	3	Horizontal	326	2.99	-
AV	5.1876G	106.14	Inf	-Inf	4.19	3	Horizontal	326	2.99	-
PK	5.1492G	72.78	74.00	-1.22	4.13	3	Horizontal	326	2.99	-
PK	5.1734G	116.61	Inf	-Inf	4.17	3	Horizontal	326	2.99	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5180MHz_TX

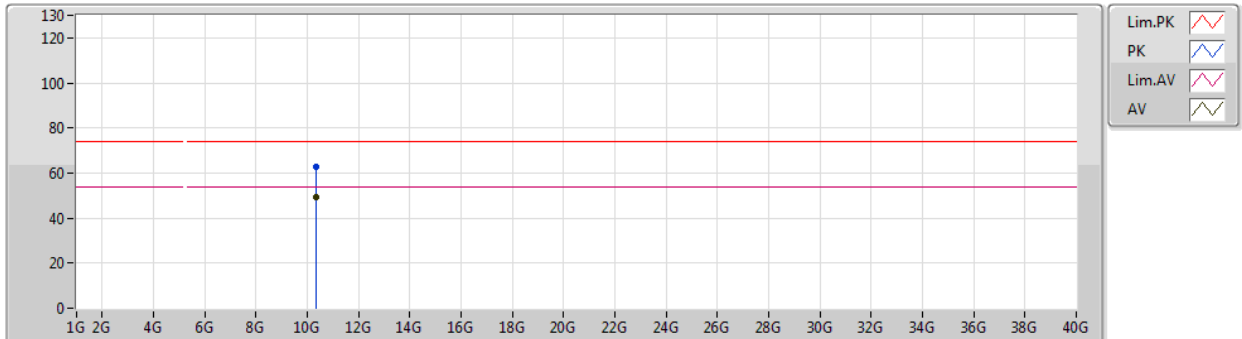


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.36522G	49.50	54.00	-4.50	14.12	3	Vertical	1	1.90	-
PK	10.3657G	63.64	74.00	-10.36	14.12	3	Vertical	1	1.90	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5180MHz_TX

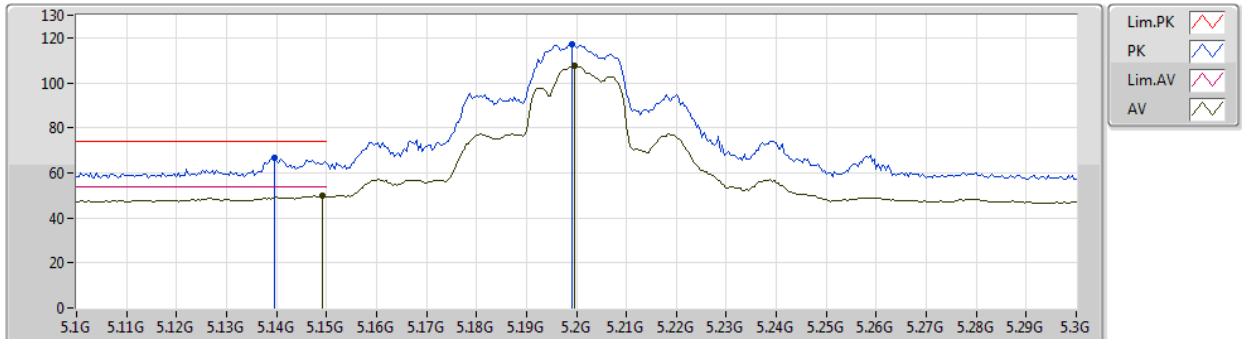


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.36198G	49.22	54.00	-4.78	14.11	3	Horizontal	279	1.86	-
PK	10.36096G	62.99	74.00	-11.01	14.11	3	Horizontal	279	1.86	-

802.11ac VHT20_Nss4,(MCS0)_4TX

5200MHz_TX

06/02/2019

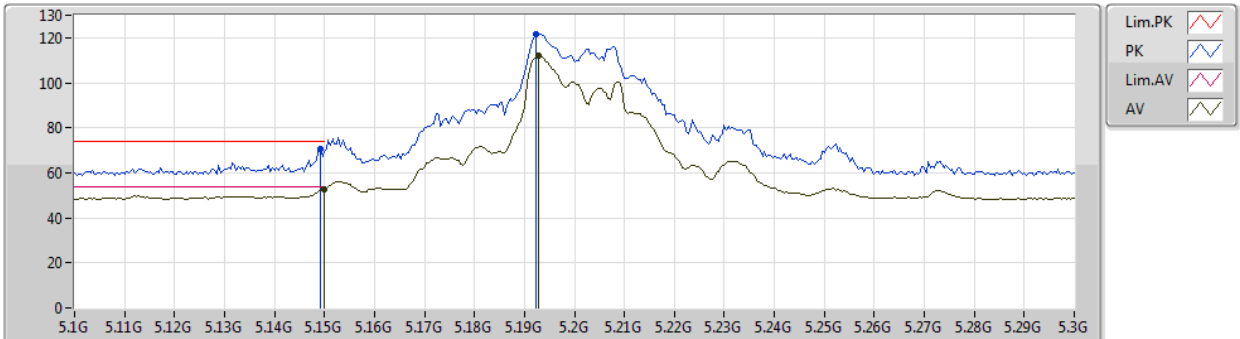


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1492G	49.72	54.00	-4.28	4.13	3	Vertical	337	2.99	-
AV	5.1996G	107.73	Inf	-Inf	4.21	3	Vertical	337	2.99	-
PK	5.1396G	66.65	74.00	-7.35	4.11	3	Vertical	337	2.99	-
PK	5.1992G	117.16	Inf	-Inf	4.21	3	Vertical	337	2.99	-

802.11ac VHT20_Nss4,(MCS0)_4TX

5200MHz_TX

06/02/2019

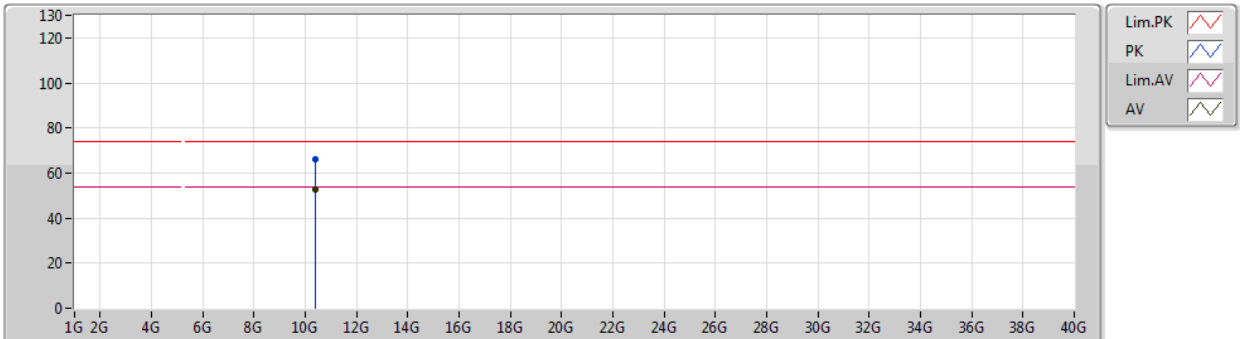


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.15G	52.85	54.00	-1.15	4.13	3	Horizontal	324	2.99	-				
AV	5.1928G	111.92	Inf	-Inf	4.20	3	Horizontal	324	2.99	-				
PK	5.1492G	70.60	74.00	-3.40	4.13	3	Horizontal	324	2.99	-				
PK	5.1924G	121.52	Inf	-Inf	4.20	3	Horizontal	324	2.99	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

5200MHz_TX

06/02/2019

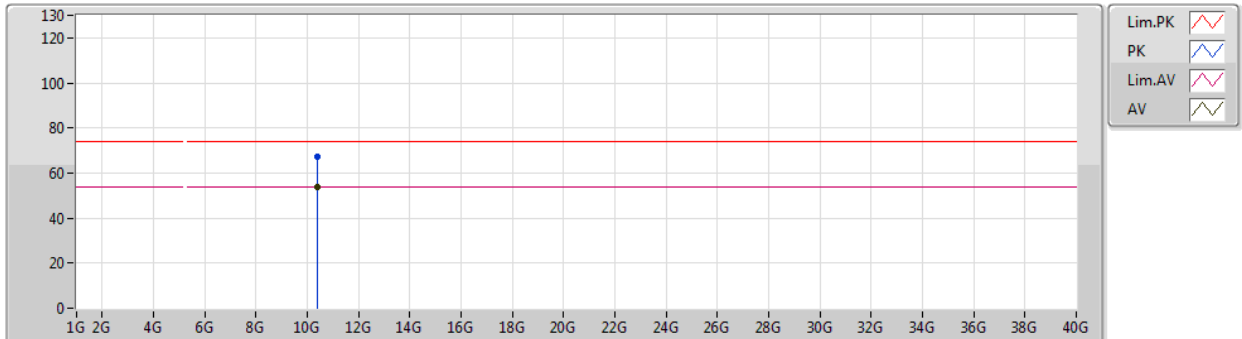


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4042G	52.62	54.00	-1.38	14.23	3	Vertical	325	1.47	-
PK	10.40264G	66.17	74.00	-7.83	14.20	3	Vertical	325	1.47	-

802.11ac VHT20_Nss4,(MCS0)_4TX

5200MHz_TX

06/02/2019

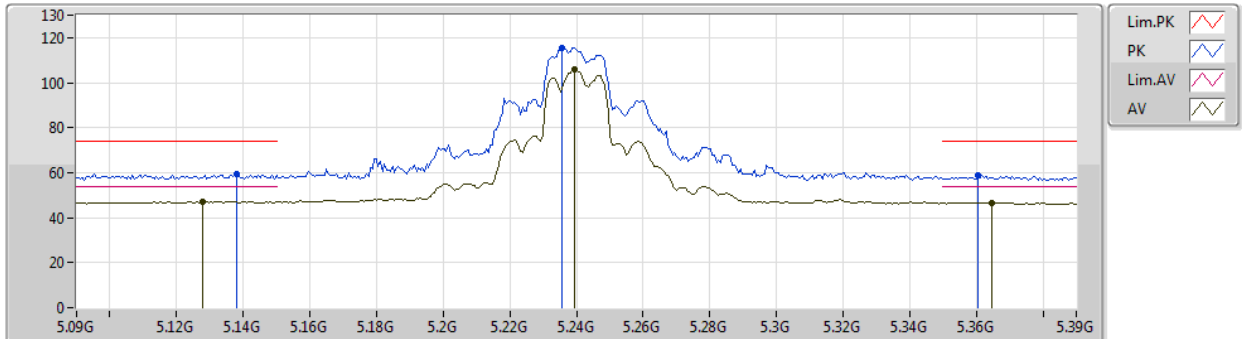


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.3997G	53.75	54.00	-0.25	14.20	3	Horizontal	271	1.59	-
PK	10.39946G	67.40	74.00	-6.60	14.20	3	Horizontal	271	1.59	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5240MHz_TX

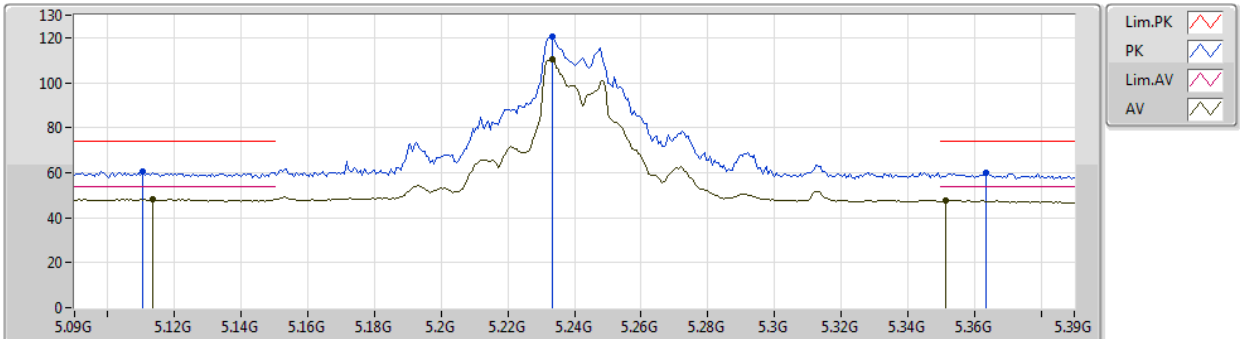


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.1278G	47.31	54.00	-6.69	4.11	3	Vertical	329	2.99	-				
AV	5.2394G	105.92	Inf	-Inf	4.25	3	Vertical	329	2.99	-				
AV	5.3648G	46.77	54.00	-7.23	4.41	3	Vertical	329	2.99	-				
PK	5.138G	59.65	74.00	-14.35	4.11	3	Vertical	329	2.99	-				
PK	5.2358G	115.54	Inf	-Inf	4.25	3	Vertical	329	2.99	-				
PK	5.3606G	58.63	74.00	-15.37	4.41	3	Vertical	329	2.99	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

5240MHz_TX

06/02/2019

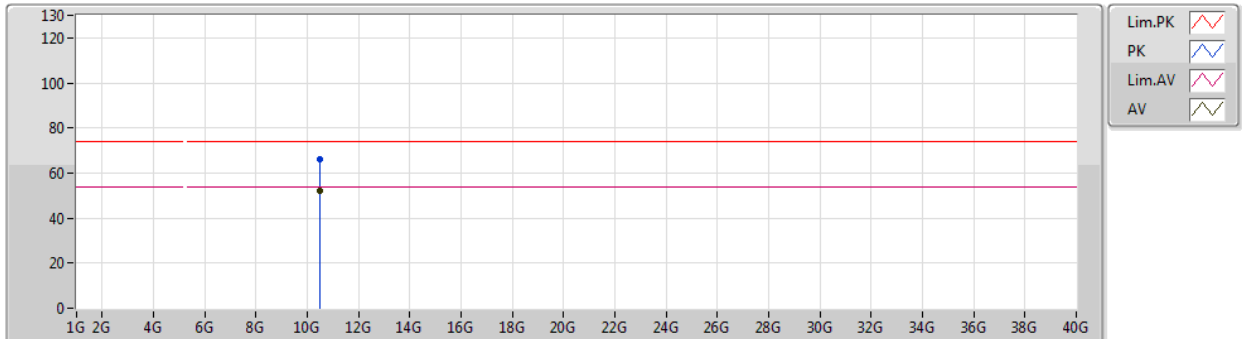


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.1134G	48.23	54.00	-5.77	4.09	3	Horizontal	315	2.99	-				
AV	5.2334G	110.54	Inf	-Inf	4.25	3	Horizontal	315	2.99	-				
AV	5.3516G	47.79	54.00	-6.21	4.39	3	Horizontal	315	2.99	-				
PK	5.1104G	60.74	74.00	-13.26	4.08	3	Horizontal	315	2.99	-				
PK	5.2334G	120.55	Inf	-Inf	4.25	3	Horizontal	315	2.99	-				
PK	5.3636G	59.97	74.00	-14.03	4.41	3	Horizontal	315	2.99	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

5240MHz_TX

06/02/2019

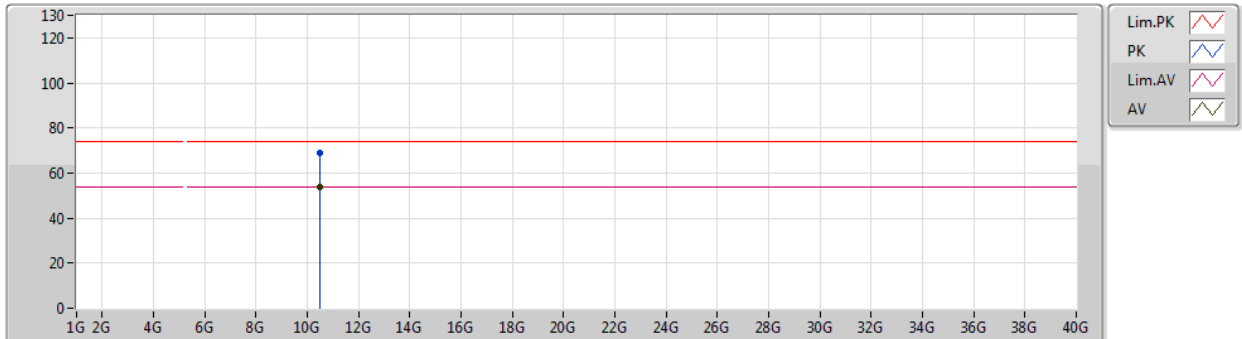


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.48216G	52.17	54.00	-1.83	14.40	3	Vertical	226	1.77	-
PK	10.48312G	66.12	74.00	-7.88	14.40	3	Vertical	226	1.77	-

802.11ac VHT20_Nss4,(MCS0)_4TX

5240MHz_TX

06/02/2019

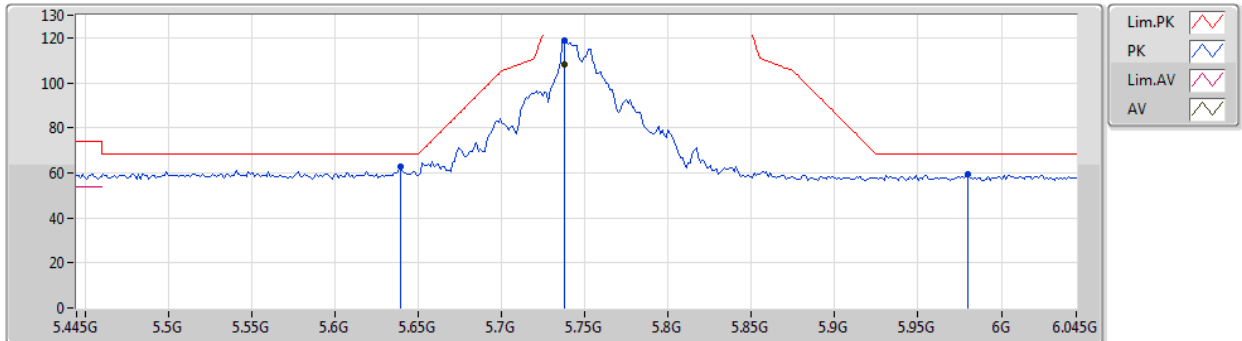


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.48174G	53.85	54.00	-0.15	14.40	3	Horizontal	287	1.91	-
PK	10.48264G	68.84	74.00	-5.16	14.40	3	Horizontal	287	1.91	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5745MHz_TX

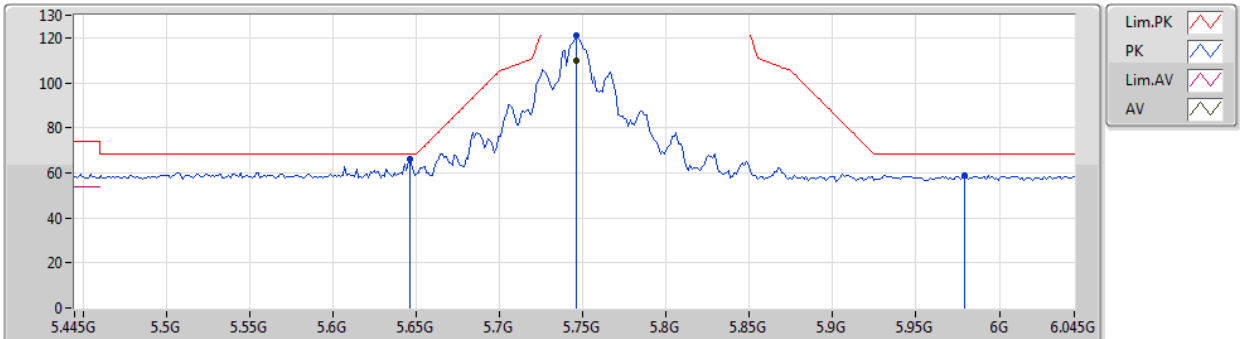


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7378G	108.03	Inf	-Inf	5.11	3	Vertical	29	2.97	-
PK	5.6394G	62.85	68.20	-5.35	4.87	3	Vertical	29	2.97	-
PK	5.7378G	118.53	Inf	-Inf	5.11	3	Vertical	29	2.97	-
PK	5.9802G	59.27	68.20	-8.93	5.43	3	Vertical	29	2.97	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5745MHz_TX

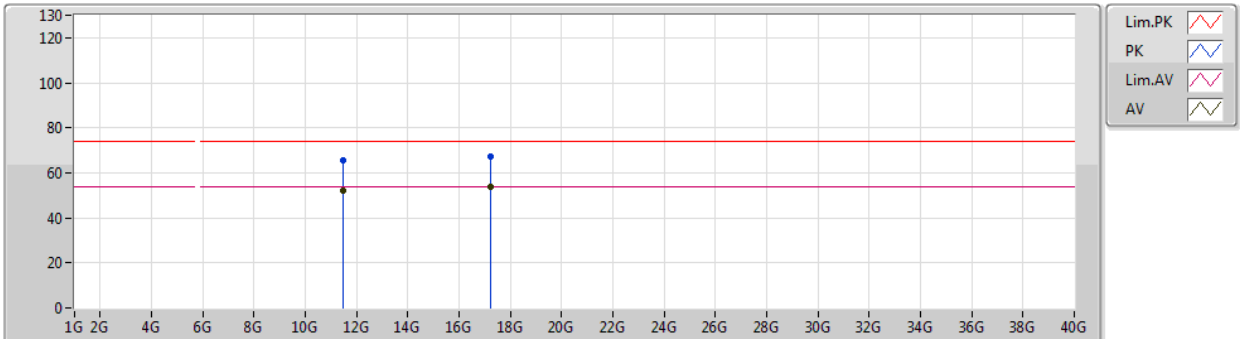


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7462G	110.04	Inf	-Inf	5.13	3	Horizontal	329	1.01	-
PK	5.6466G	65.93	68.20	-2.27	4.89	3	Horizontal	329	1.01	-
PK	5.7462G	121.14	Inf	-Inf	5.13	3	Horizontal	329	1.01	-
PK	5.979G	58.62	68.20	-9.58	5.43	3	Horizontal	329	1.01	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5745MHz_TX

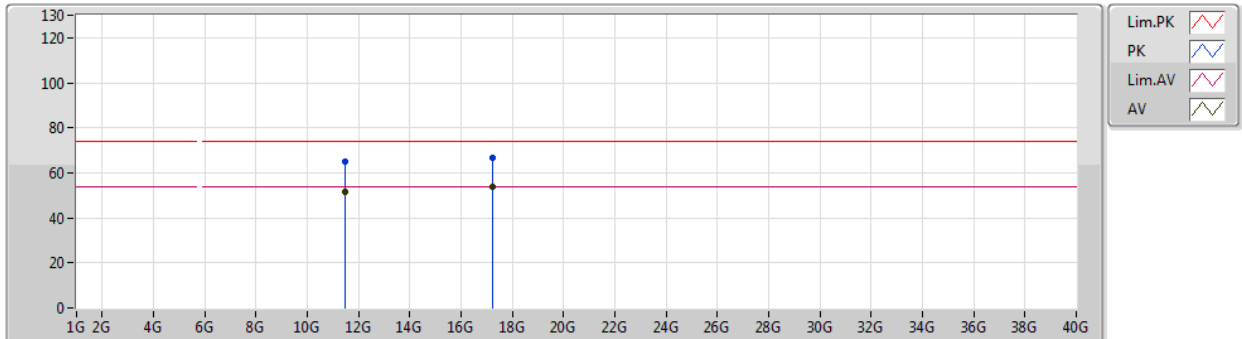


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.49174G	51.92	54.00	-2.08	15.04	3	Vertical	1	1.38	-
AV	17.23026G	53.75	54.00	-0.25	19.97	3	Vertical	41	1.71	-
PK	11.49138G	65.73	74.00	-8.27	15.04	3	Vertical	1	1.38	-
PK	17.23092G	67.14	74.00	-6.86	19.97	3	Vertical	41	1.71	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5745MHz_TX

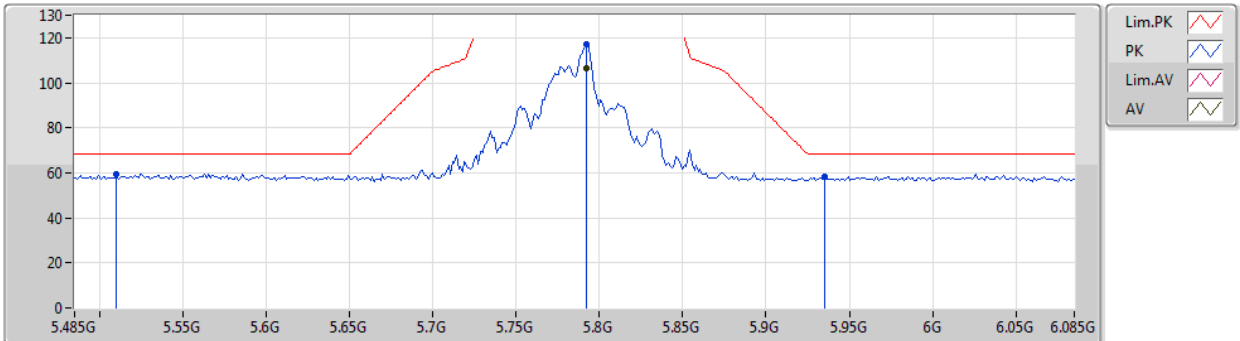


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.49168G	51.45	54.00	-2.55	15.04	3	Horizontal	156	1.58	-				
AV	17.2308G	53.65	54.00	-0.35	19.97	3	Horizontal	40	1.79	-				
PK	11.49282G	65.05	74.00	-8.95	15.04	3	Horizontal	156	1.58	-				
PK	17.23056G	66.73	74.00	-7.27	19.97	3	Horizontal	40	1.79	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5785MHz_TX

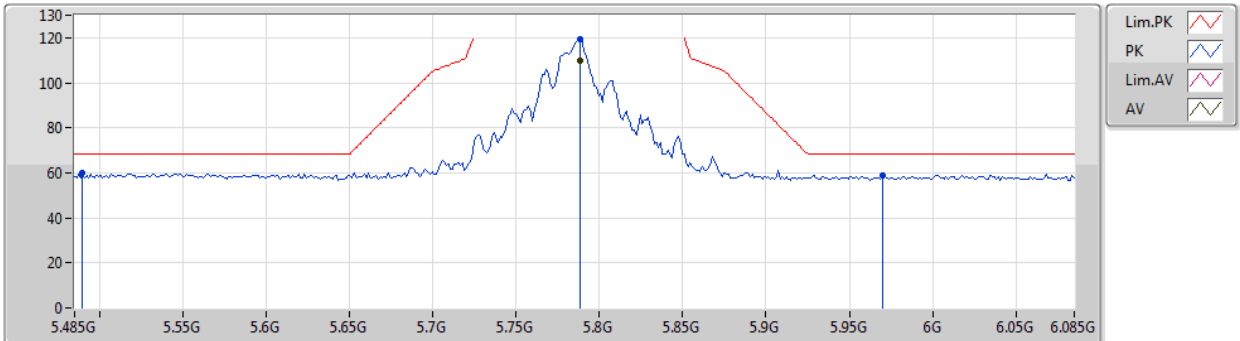


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7922G	106.47	Inf	-Inf	5.24	3	Vertical	326	1.50	-
PK	5.5102G	59.46	68.20	-8.74	4.60	3	Vertical	326	1.50	-
PK	5.7922G	117.21	Inf	-Inf	5.24	3	Vertical	326	1.50	-
PK	5.935G	58.33	68.20	-9.87	5.39	3	Vertical	326	1.50	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5785MHz_TX

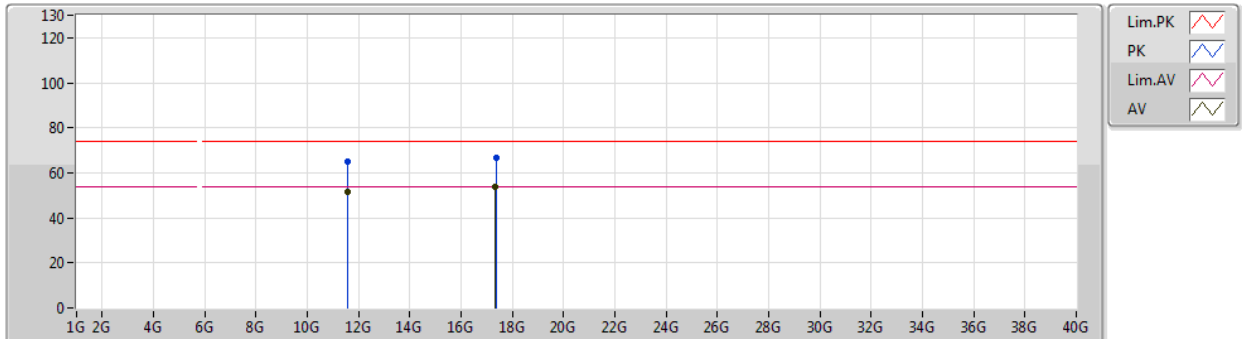


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7886G	110.08	Inf	-Inf	5.23	3	Horizontal	326	1.49	-
PK	5.4898G	60.20	68.20	-8.00	4.56	3	Horizontal	326	1.49	-
PK	5.7886G	119.58	Inf	-Inf	5.23	3	Horizontal	326	1.49	-
PK	5.9698G	58.93	68.20	-9.27	5.44	3	Horizontal	326	1.49	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5785MHz_TX

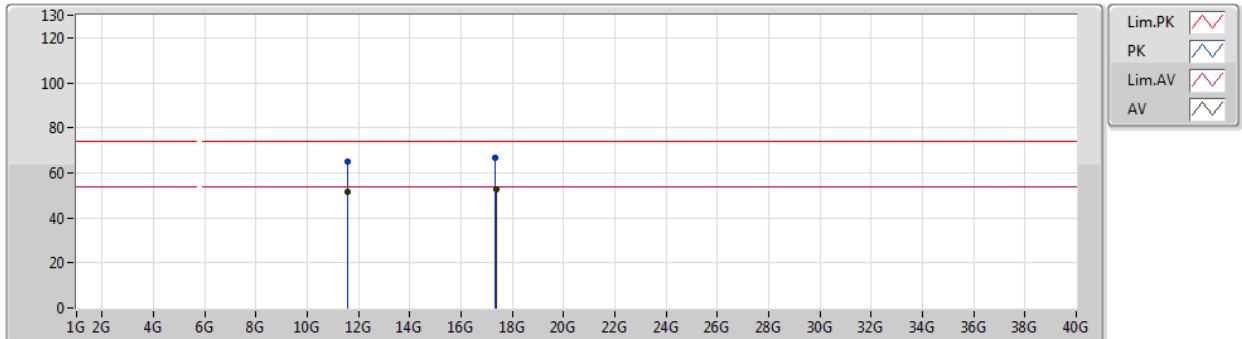


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.57126G	51.60	54.00	-2.40	14.95	3	Vertical	0	1.35	-				
AV	17.35044G	53.78	54.00	-0.22	20.87	3	Vertical	45	1.82	-				
PK	11.57072G	65.07	74.00	-8.93	14.96	3	Vertical	0	1.35	-				
PK	17.36328G	66.79	74.00	-7.21	20.97	3	Vertical	45	1.82	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

5785MHz_TX

06/02/2019

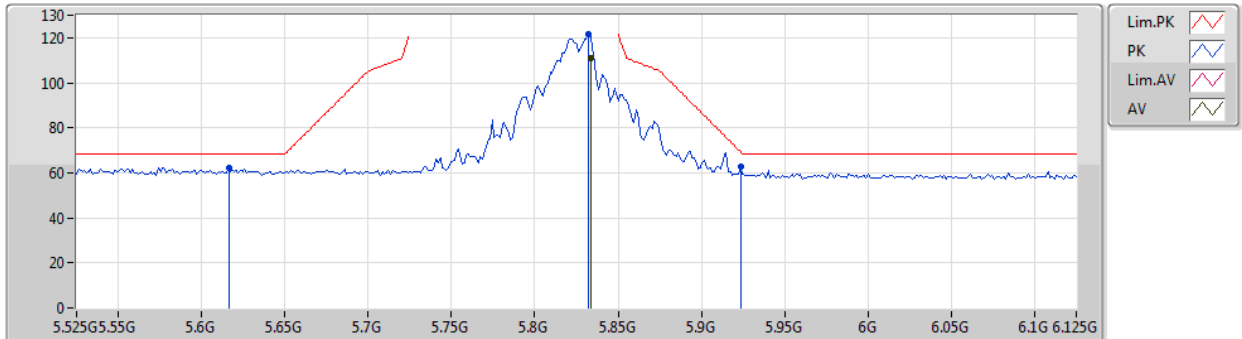


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.57222G	51.83	54.00	-2.17	14.95	3	Horizontal	155	1.60	-
AV	17.36172G	52.91	54.00	-1.09	20.96	3	Horizontal	150	1.51	-
PK	11.57216G	64.86	74.00	-9.14	14.95	3	Horizontal	155	1.60	-
PK	17.34156G	66.64	74.00	-7.36	20.80	3	Horizontal	150	1.51	-

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5825MHz_TX

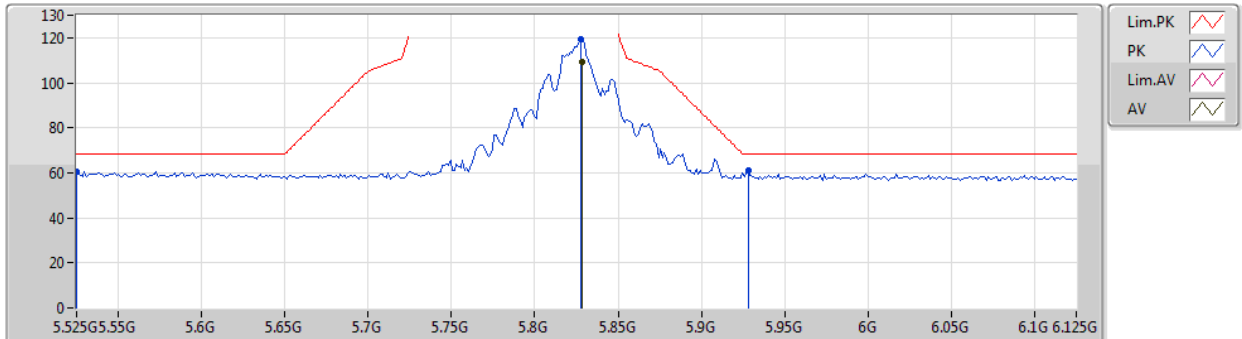


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.8334G	111.15	Inf	-Inf	5.29	3	Vertical	278	2.99	-				
PK	5.6162G	62.37	68.20	-5.83	4.81	3	Vertical	278	2.99	-				
PK	5.8322G	121.82	Inf	-Inf	5.29	3	Vertical	278	2.99	-				
PK	5.9234G	62.64	69.38	-6.74	5.39	3	Vertical	278	2.99	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5825MHz_TX

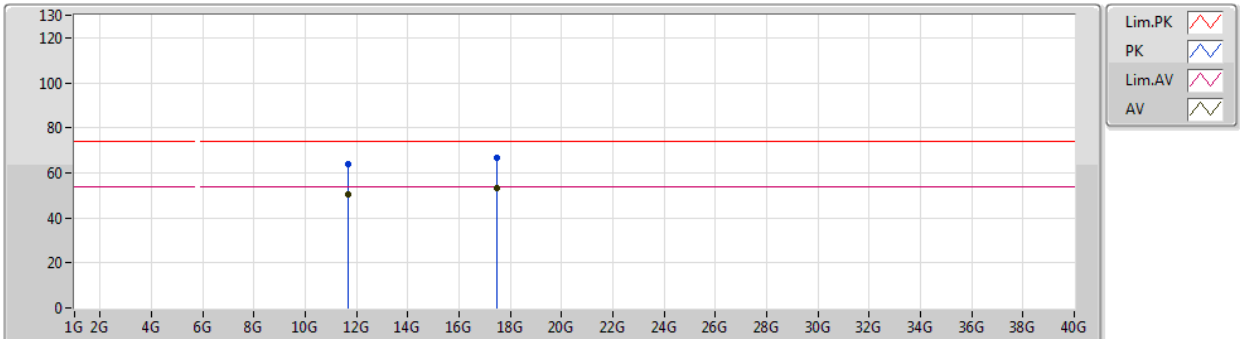


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.8286G	109.43	Inf	-Inf	5.28	3	Horizontal	326	1.50	-				
PK	5.525G	60.49	68.20	-7.71	4.64	3	Horizontal	326	1.50	-				
PK	5.8274G	119.29	Inf	-Inf	5.28	3	Horizontal	326	1.50	-				
PK	5.9282G	61.25	68.20	-6.95	5.38	3	Horizontal	326	1.50	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5825MHz_TX

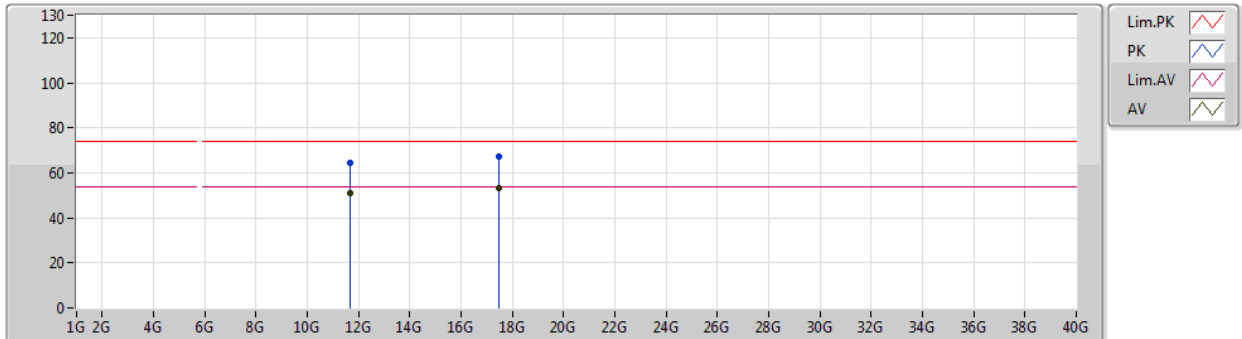


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	11.64922G	50.16	54.00	-3.84	14.85	3	Vertical	340	1.01	-				
AV	17.4702G	53.30	54.00	-0.70	21.78	3	Vertical	62	1.50	-				
PK	11.64934G	63.64	74.00	-10.36	14.85	3	Vertical	340	1.01	-				
PK	17.46876G	66.53	74.00	-7.47	21.77	3	Vertical	62	1.50	-				

802.11ac VHT20_Nss4,(MCS0)_4TX

06/02/2019

5825MHz_TX

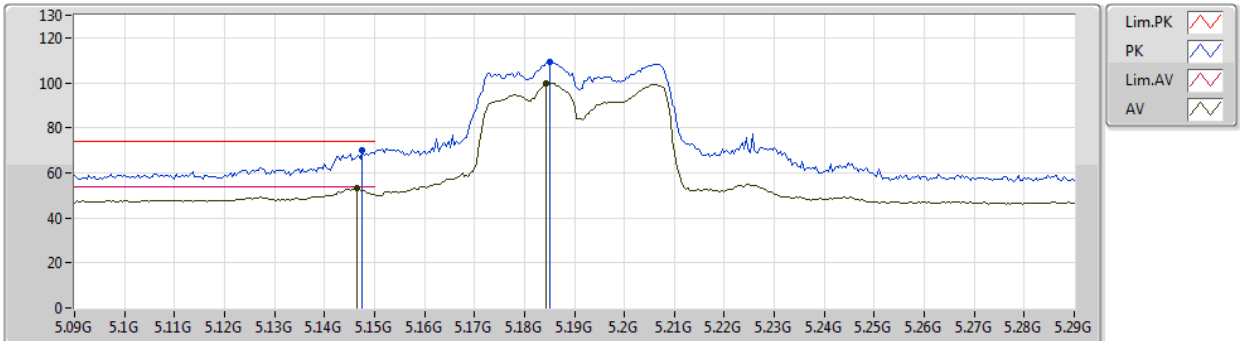


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.65192G	50.76	54.00	-3.24	14.85	3	Horizontal	156	1.59	-
AV	17.47902G	53.46	54.00	-0.54	21.85	3	Horizontal	47	2.72	-
PK	11.65258G	64.70	74.00	-9.30	14.85	3	Horizontal	156	1.59	-
PK	17.48886G	66.99	74.00	-7.01	21.92	3	Horizontal	47	2.72	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5190MHz_TX

06/02/2019

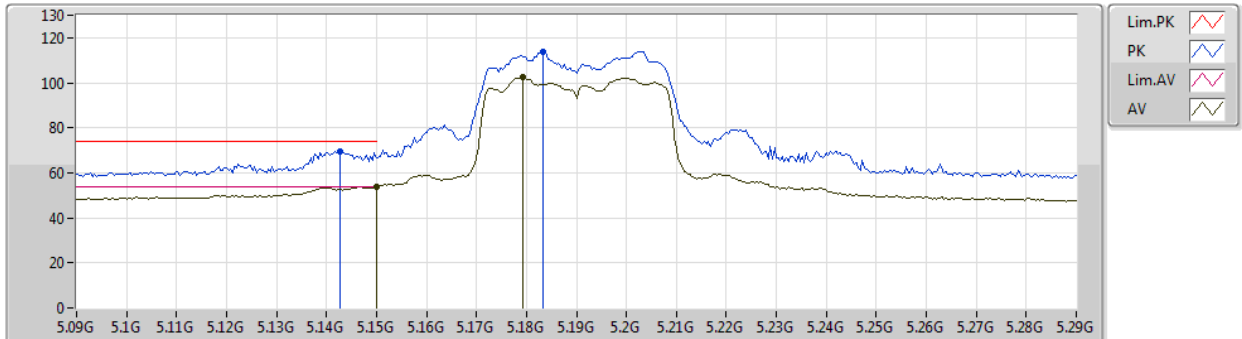


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.1464G	53.15	54.00	-0.85	4.13	3	Vertical	351	2.99	-
AV	5.1844G	99.89	Inf	-Inf	4.19	3	Vertical	351	2.99	-
PK	5.1476G	70.24	74.00	-3.76	4.13	3	Vertical	351	2.99	-
PK	5.1852G	109.20	Inf	-Inf	4.19	3	Vertical	351	2.99	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5190MHz_TX

06/02/2019

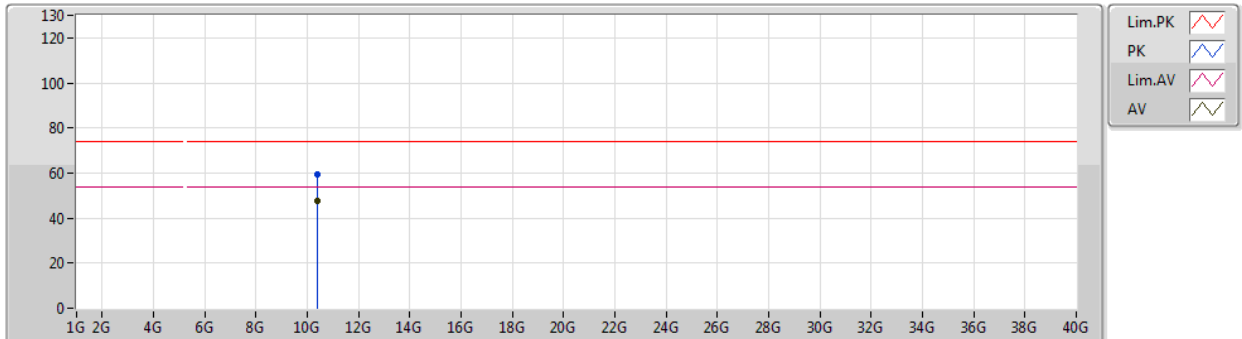


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.15G	53.81	54.00	-0.19	4.13	3	Horizontal	327	2.99	-				
AV	5.1792G	102.74	Inf	-Inf	4.18	3	Horizontal	327	2.99	-				
PK	5.1428G	69.57	74.00	-4.43	4.13	3	Horizontal	327	2.99	-				
PK	5.1832G	113.96	Inf	-Inf	4.19	3	Horizontal	327	2.99	-				

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5190MHz_TX

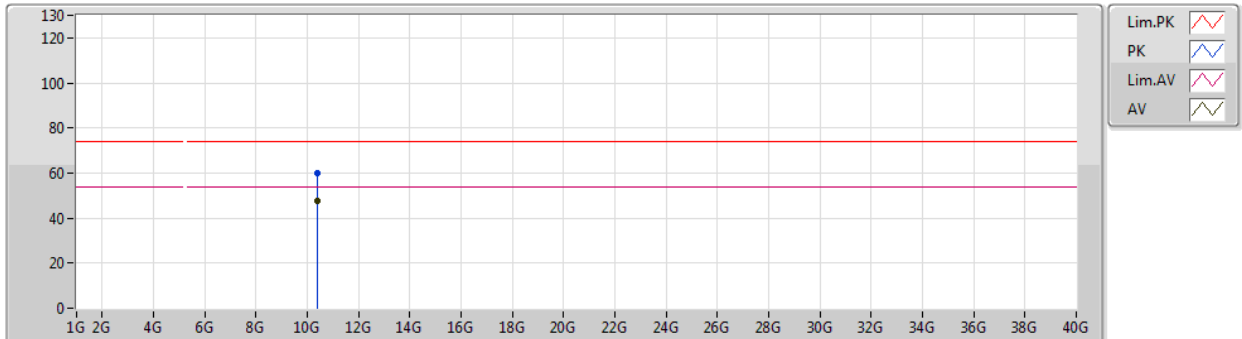


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.38G	47.57	54.00	-6.43	14.17	3	Vertical	2	1.01	-
PK	10.38036G	59.26	74.00	-14.74	14.17	3	Vertical	2	1.01	-

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5190MHz_TX

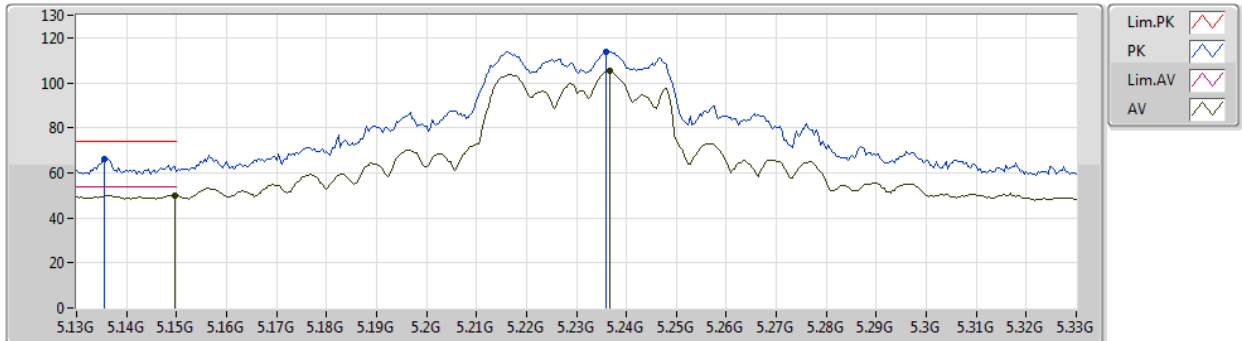


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.38174G	47.80	54.00	-6.20	14.17	3	Horizontal	274	1.93	-
PK	10.38138G	60.12	74.00	-13.88	14.17	3	Horizontal	274	1.93	-

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5230MHz_TX

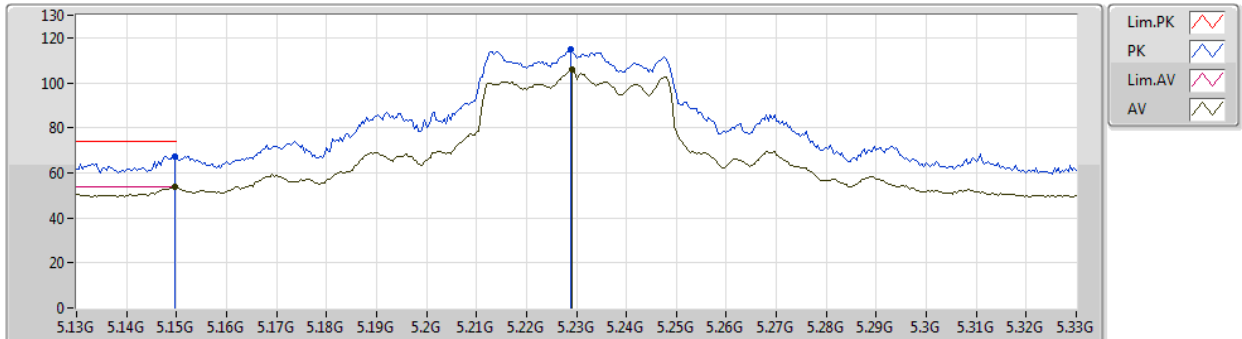


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.1496G	50.04	54.00	-3.96	4.13	3	Vertical	280	2.99	-				
AV	5.2368G	105.14	Inf	-Inf	4.25	3	Vertical	280	2.99	-				
PK	5.1356G	66.10	74.00	-7.90	4.11	3	Vertical	280	2.99	-				
PK	5.236G	113.82	Inf	-Inf	4.25	3	Vertical	280	2.99	-				

802.11ac VHT40_Nss4,(MCS0)_4TX

5230MHz_TX

06/02/2019

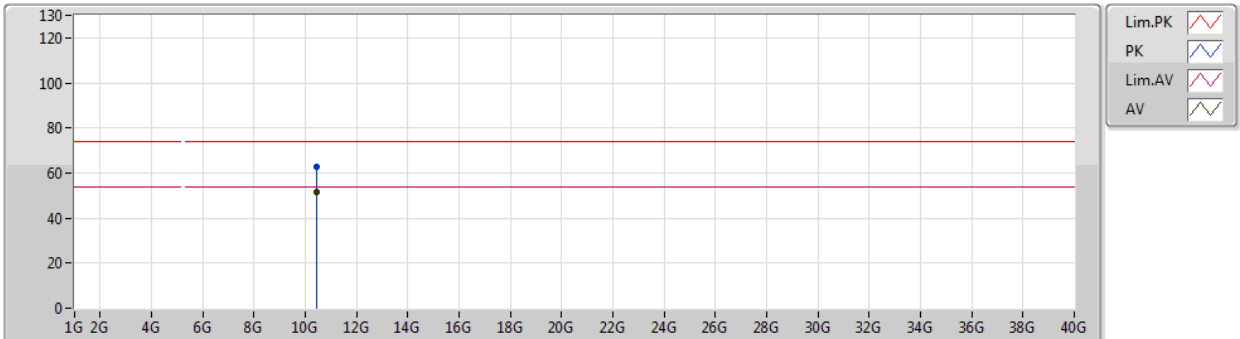


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.1496G	53.55	54.00	-0.45	4.13	3	Horizontal	315	2.99	-				
AV	5.2292G	105.80	Inf	-Inf	4.25	3	Horizontal	315	2.99	-				
PK	5.1496G	67.39	74.00	-6.61	4.13	3	Horizontal	315	2.99	-				
PK	5.2288G	115.03	Inf	-Inf	4.25	3	Horizontal	315	2.99	-				

802.11ac VHT40_Nss4,(MCS0)_4TX

5230MHz_TX

06/02/2019

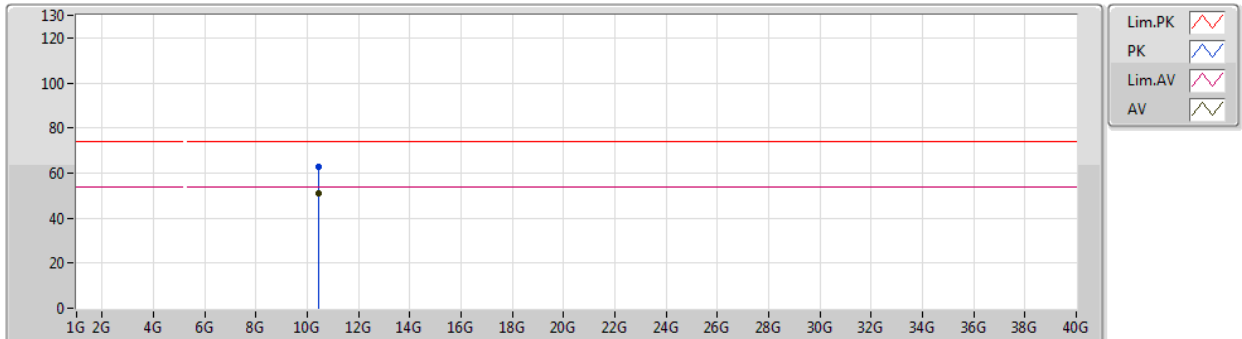


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.45994G	51.64	54.00	-2.36	14.34	3	Vertical	2	1.01	-
PK	10.45928G	62.97	74.00	-11.03	14.34	3	Vertical	2	1.01	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5230MHz_TX

06/02/2019

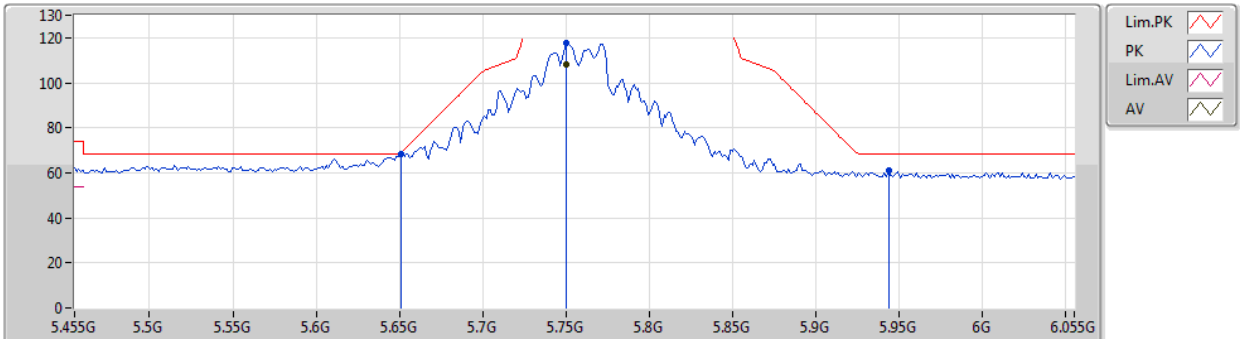


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.46042G	51.08	54.00	-2.92	14.34	3	Horizontal	276	1.70	-
PK	10.45958G	62.80	74.00	-11.20	14.34	3	Horizontal	276	1.70	-

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5755MHz_TX

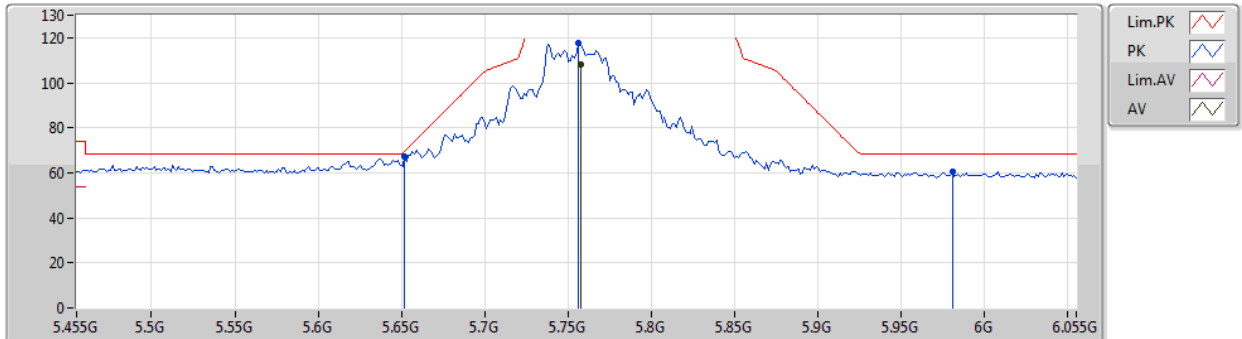


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7502G	108.26	Inf	-Inf	5.14	3	Vertical	279	2.99	-
PK	5.6506G	68.26	68.64	-0.38	4.90	3	Vertical	279	2.99	-
PK	5.7502G	117.68	Inf	-Inf	5.14	3	Vertical	279	2.99	-
PK	5.9434G	61.24	68.20	-6.96	5.40	3	Vertical	279	2.99	-

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5755MHz_TX

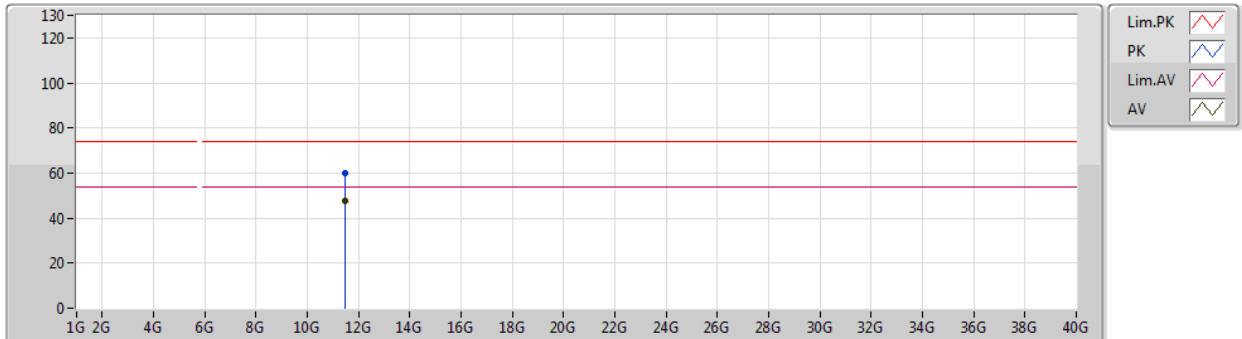


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7574G	108.29	Inf	-Inf	5.15	3	Horizontal	333	2.97	-
PK	5.6518G	67.44	69.53	-2.09	4.90	3	Horizontal	333	2.97	-
PK	5.7562G	117.53	Inf	-Inf	5.15	3	Horizontal	333	2.97	-
PK	5.9806G	60.64	68.20	-7.56	5.43	3	Horizontal	333	2.97	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5755MHz_TX

06/02/2019

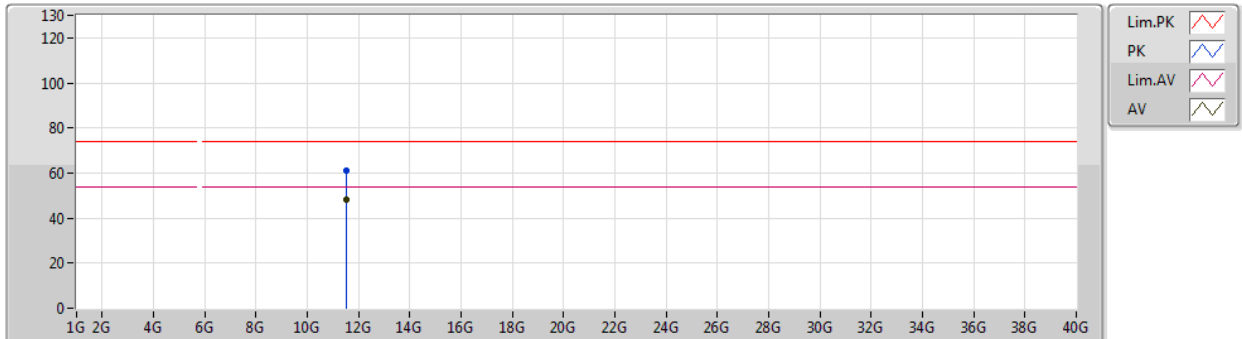


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.49902G	47.67	54.00	-6.33	15.03	3	Vertical	16	1.50	-
PK	11.49854G	60.22	74.00	-13.78	15.03	3	Vertical	16	1.50	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5755MHz_TX

06/02/2019

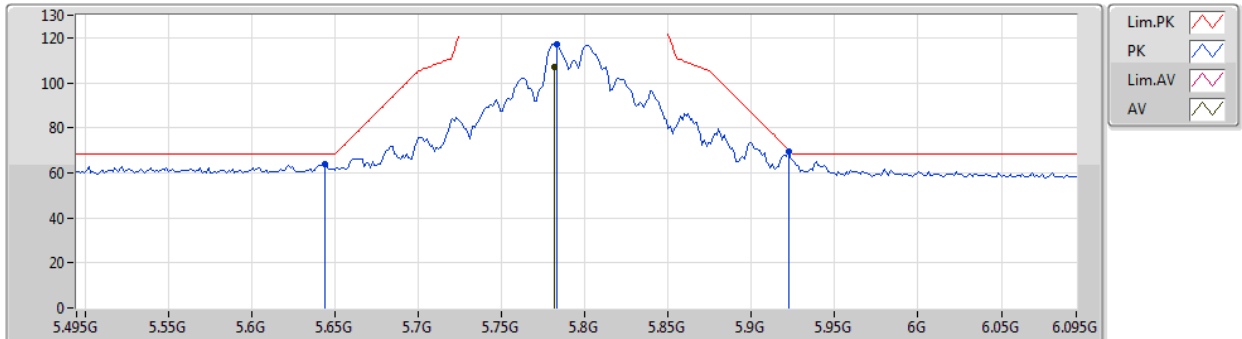


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.51354G	48.31	54.00	-5.69	15.01	3	Horizontal	154	1.60	-
PK	11.51144G	60.83	74.00	-13.17	15.02	3	Horizontal	154	1.60	-

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5795MHz_TX

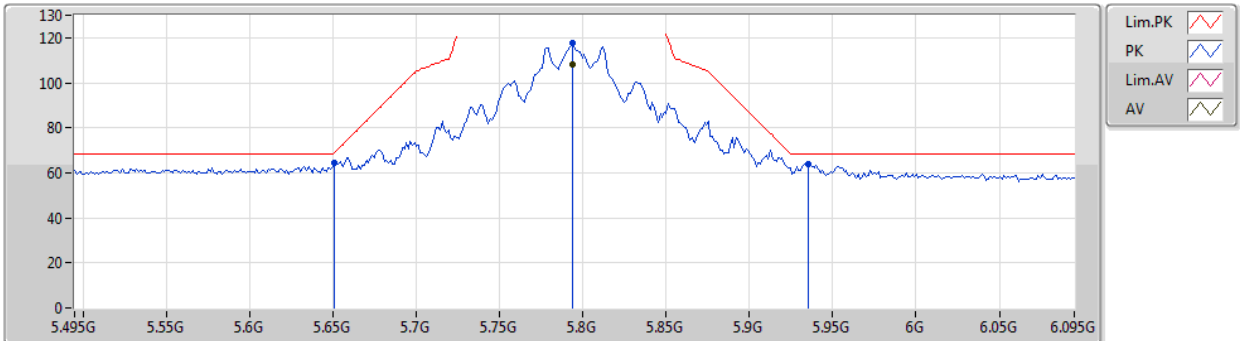


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7818G	107.14	Inf	-Inf	5.22	3	Vertical	14	1.50	-
PK	5.6438G	64.08	68.20	-4.12	4.88	3	Vertical	14	1.50	-
PK	5.783G	117.13	Inf	-Inf	5.23	3	Vertical	14	1.50	-
PK	5.9222G	69.54	70.27	-0.73	5.39	3	Vertical	14	1.50	-

802.11ac VHT40_Nss4,(MCS0)_4TX

06/02/2019

5795MHz_TX

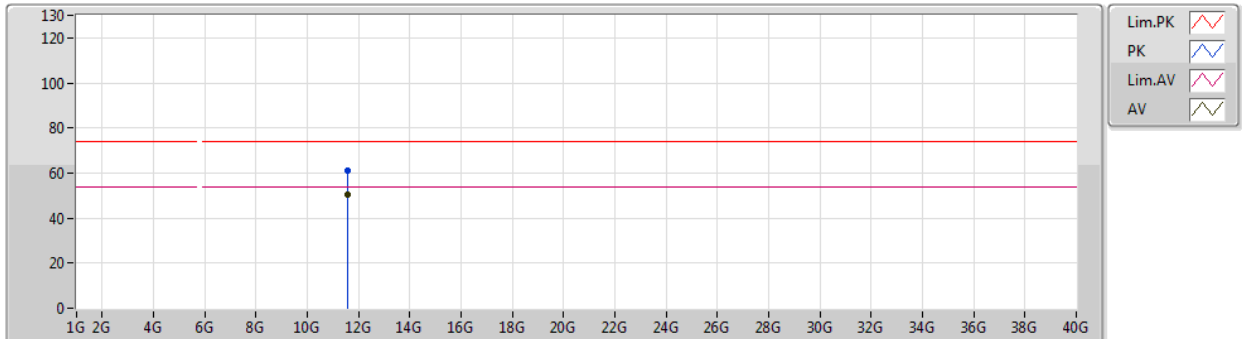


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7938G	107.96	Inf	-Inf	5.24	3	Horizontal	304	1.50	-
PK	5.651G	64.55	68.94	-4.39	4.90	3	Horizontal	304	1.50	-
PK	5.7938G	117.60	Inf	-Inf	5.24	3	Horizontal	304	1.50	-
PK	5.9354G	64.06	68.20	-4.14	5.39	3	Horizontal	304	1.50	-

802.11ac VHT40_Nss4,(MCS0)_4TX

5795MHz_TX

06/02/2019

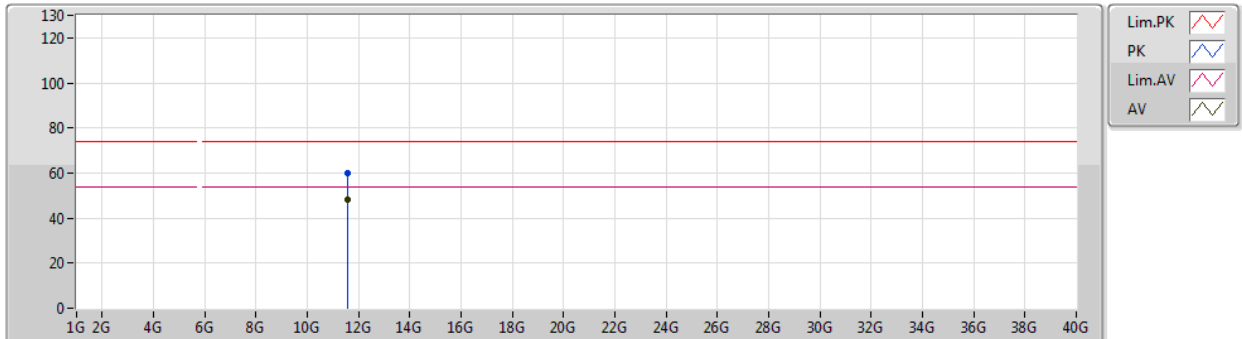


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	11.5902G	50.16	54.00	-3.84	14.92	3	Vertical	338	1.02	-				
PK	11.5689G	61.31	74.00	-12.69	14.96	3	Vertical	338	1.02	-				

802.11ac VHT40_Nss4,(MCS0)_4TX

5795MHz_TX

06/02/2019

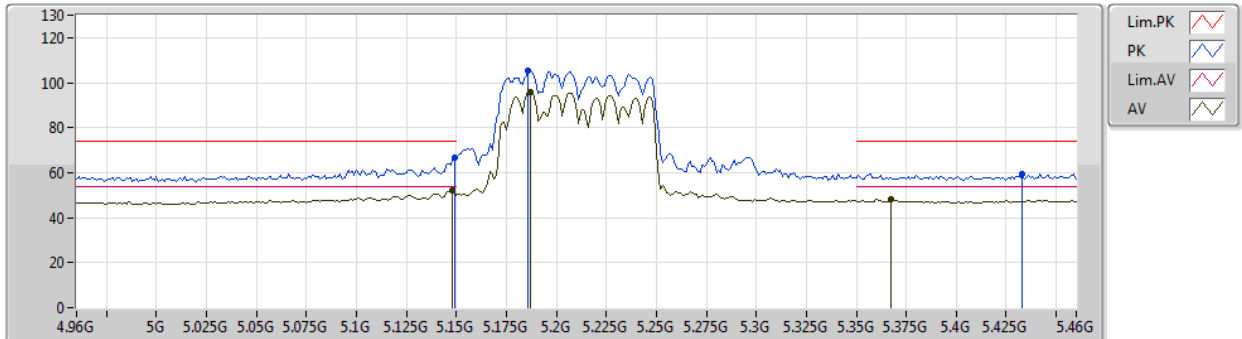


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.5902G	48.41	54.00	-5.59	14.92	3	Horizontal	195	1.50	-
PK	11.5913G	60.07	74.00	-13.93	14.92	3	Horizontal	195	1.50	-

802.11ac VHT80_Nss4,(MCS0)_4TX

5210MHz_TX

06/02/2019

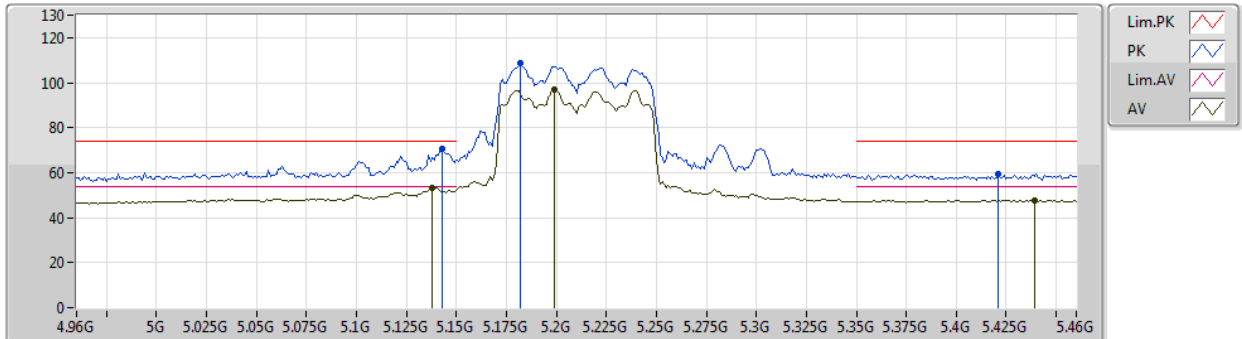


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.148G	52.04	54.00	-1.96	4.13	3	Vertical	278	3.07	-				
AV	5.187G	95.89	Inf	-Inf	4.19	3	Vertical	278	3.07	-				
AV	5.367G	48.13	54.00	-5.87	4.41	3	Vertical	278	3.07	-				
PK	5.149G	66.47	74.00	-7.53	4.13	3	Vertical	278	3.07	-				
PK	5.186G	105.24	Inf	-Inf	4.19	3	Vertical	278	3.07	-				
PK	5.433G	59.57	74.00	-14.43	4.49	3	Vertical	278	3.07	-				

802.11ac VHT80_Nss4,(MCS0)_4TX

5210MHz_TX

06/02/2019

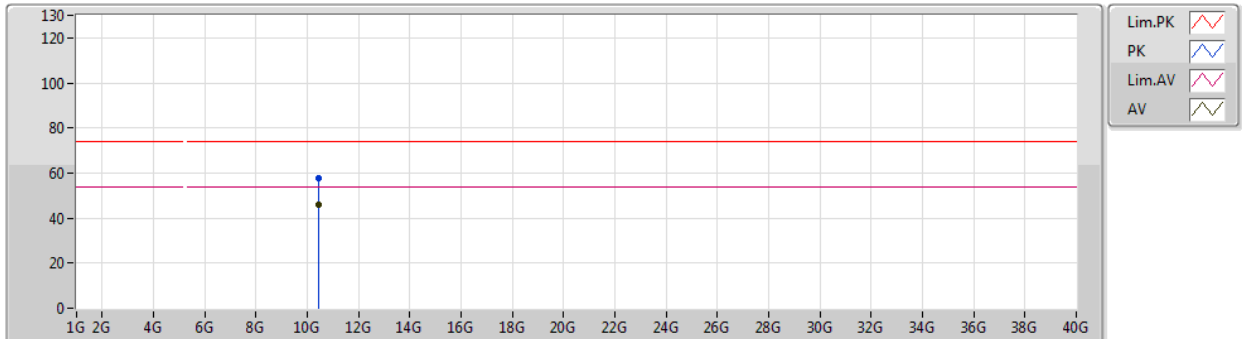


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment				
AV	5.138G	53.49	54.00	-0.51	4.11	3	Horizontal	316	3.06	-				
AV	5.199G	97.12	Inf	-Inf	4.21	3	Horizontal	316	3.06	-				
AV	5.439G	47.86	54.00	-6.14	4.50	3	Horizontal	316	3.06	-				
PK	5.143G	70.63	74.00	-3.37	4.13	3	Horizontal	316	3.06	-				
PK	5.182G	108.45	Inf	-Inf	4.19	3	Horizontal	316	3.06	-				
PK	5.421G	59.61	74.00	-14.39	4.47	3	Horizontal	316	3.06	-				

802.11ac VHT80_Nss4,(MCS0)_4TX

06/02/2019

5210MHz_TX

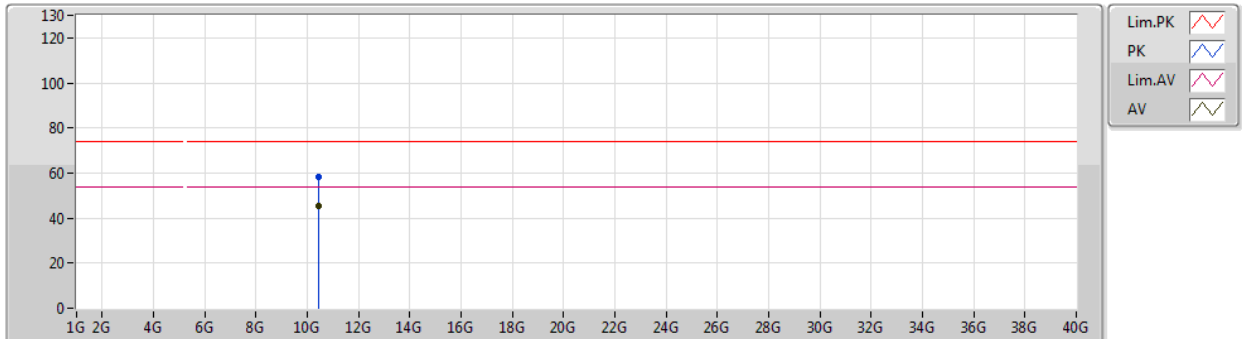


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4257G	45.90	54.00	-8.10	14.26	3	Vertical	0	1.82	-
PK	10.4248G	57.71	74.00	-16.29	14.26	3	Vertical	0	1.82	-

802.11ac VHT80_Nss4,(MCS0)_4TX

5210MHz_TX

06/02/2019

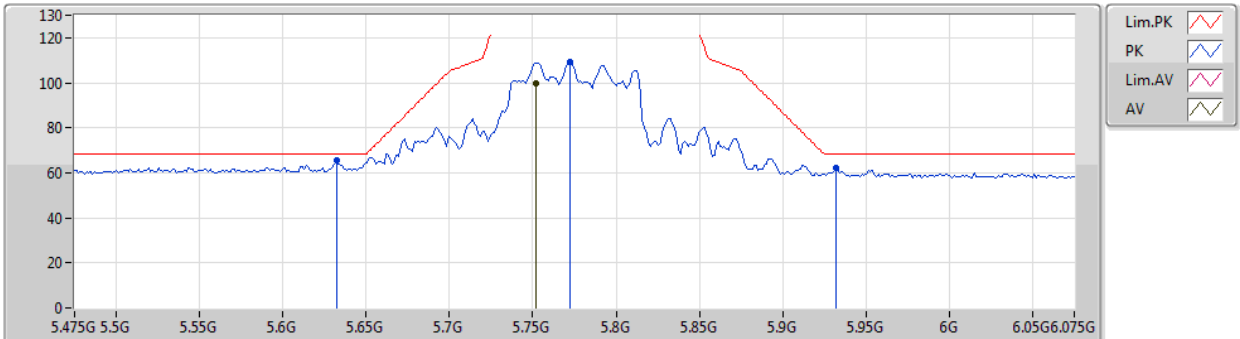


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	10.4349G	45.13	54.00	-8.87	14.28	3	Horizontal	176	1.84	-
PK	10.4384G	58.14	74.00	-15.86	14.30	3	Horizontal	176	1.84	-

802.11ac VHT80_Nss4,(MCS0)_4TX

06/02/2019

5775MHz_TX

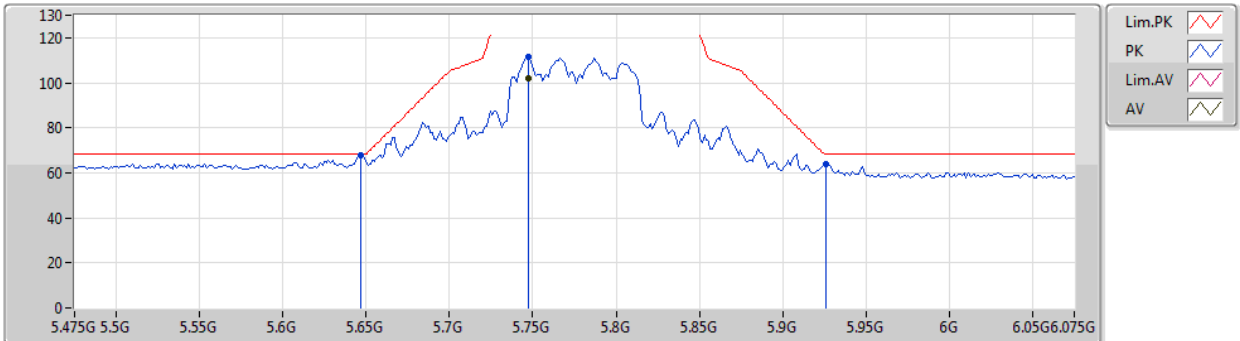


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7522G	99.64	Inf	-Inf	5.14	3	Vertical	16	2.68	-
PK	5.6322G	65.40	68.20	-2.80	4.85	3	Vertical	16	2.68	-
PK	5.7726G	109.22	Inf	-Inf	5.19	3	Vertical	16	2.68	-
PK	5.9322G	62.15	68.20	-6.05	5.39	3	Vertical	16	2.68	-

802.11ac VHT80_Nss4,(MCS0)_4TX

06/02/2019

5775MHz_TX

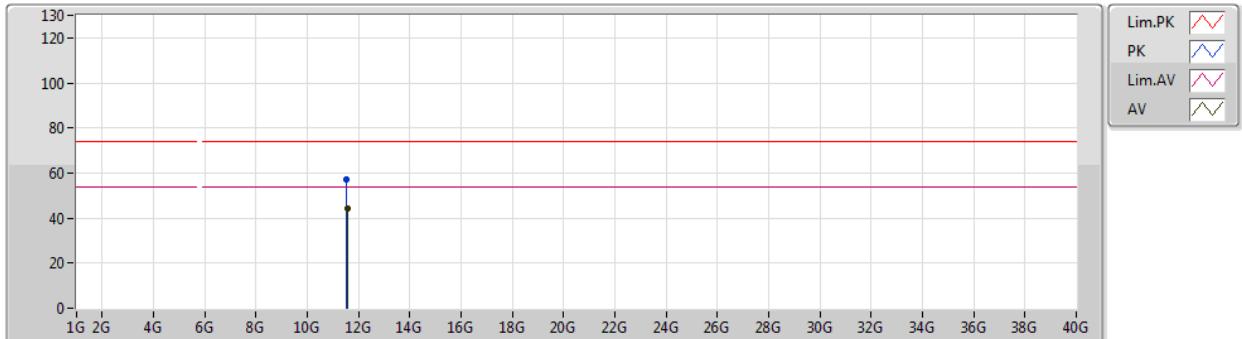


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	5.7474G	101.76	Inf	-Inf	5.14	3	Horizontal	320	3.01	-
PK	5.6466G	67.93	68.20	-0.27	4.89	3	Horizontal	320	3.01	-
PK	5.7474G	111.24	Inf	-Inf	5.14	3	Horizontal	320	3.01	-
PK	5.9262G	63.78	68.20	-4.42	5.38	3	Horizontal	320	3.01	-

802.11ac VHT80_Nss4,(MCS0)_4TX

5775MHz_TX

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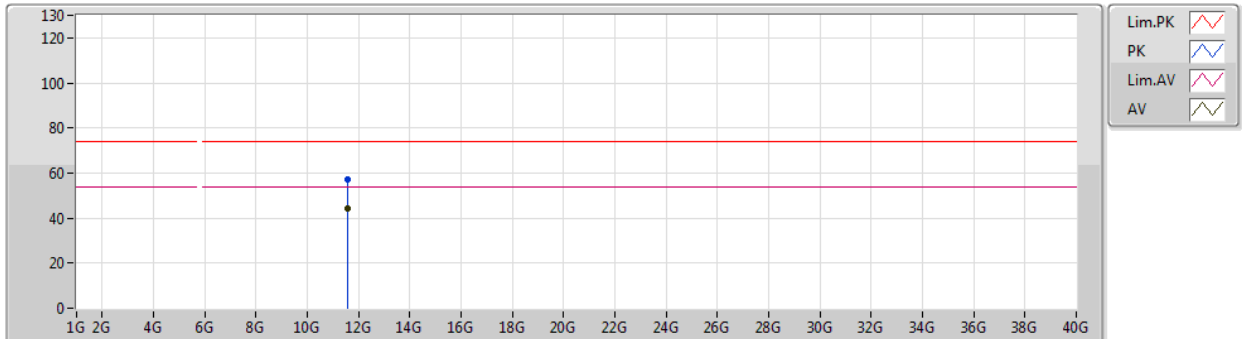


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.5521G	44.47	54.00	-9.53	14.97	3	Vertical	356	1.41	-
PK	11.5422G	57.17	74.00	-16.83	14.98	3	Vertical	356	1.41	-

802.11ac VHT80_Nss4,(MCS0)_4TX

5775MHz_TX

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Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	11.55156G	44.36	54.00	-9.64	14.97	3	Horizontal	156	1.50	-
PK	11.56494G	56.88	74.00	-17.12	14.96	3	Horizontal	156	1.50	-