

FCC Test Report

Equipment : WiFi 5G Module
Brand Name : UBIQUITI
Model No. : 4x4-5GL
FCC ID : SWX-M445GL
Standard : 47 CFR FCC Part 15.407
Operating Band : 5150 MHz – 5250 MHz
5250 MHz – 5350 MHz
Applicant : Ubiquiti Networks, Inc.
685 Third Avenue, 27th Floor New York,
New York 10017 USA
Manufacturer : Ubiquiti Networks, Inc.
685 Third Avenue, 27th Floor New York,
New York 10017 USA
Function : ☐ Outdoor; ☐ Indoor; ☐ Fixed P2P
☒ Client
TPC Function : TPC

This report was evaluated for permissive change. The product sample received on Dec. 05, 2017 and completely tested on Dec. 27, 2017. We, SPORTON, 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.


Phoenix Chen / Assistant Manager





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Summary of Test Result

Conformance Test Specifications			
Report Clause	Ref. Std. Clause	Description	Result
1.1.3	15.203	Antenna Requirement	Complied
3.1	15.207	AC Power-line Conducted Emissions	Complied
3.2	15.407(a)	Emission Bandwidth	Complied
3.3	15.407(a)	Maximum Conducted Output Power	Complied
3.4	15.407(a)	Peak Power Spectral Density	Complied
3.5	15.407(b)	Unwanted Emissions	Complied
3.6	15.407(g)	Frequency Stability	Complied



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FCC ID: SWX-M445GL

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]
5250-5350		5260-5320	52-64 [4]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5250-5350		5290	58 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	4TX
5.25-5.35GHz	802.11a	20	4TX
5.15-5.25GHz	802.11ac VHT20	20	4TX
5.25-5.35GHz	802.11ac VHT20	20	4TX
5.15-5.25GHz	802.11ac VHT40	40	4TX
5.25-5.35GHz	802.11ac VHT40	40	4TX
5.15-5.25GHz	802.11ac VHT80	80	4TX
5.25-5.35GHz	802.11ac VHT80	80	4TX
5.15-5.25GHz	802.11ac VHT80+80	80	4TX(Port 1/2)
5.25-5.35GHz	802.11ac VHT80+80	80	4TX(Port 3/4)

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 Table for 80+80 MHz Mode

Type	Channel No.	Frequency
13	42+58	5210+5290 MHz

1.1.3 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	-	-	Internal Antenna	I-PEX	10
						15
2	2	-	-	Internal Antenna	I-PEX	10
						15
3	3	-	-	Internal Antenna	I-PEX	10
						15
4	4	-	-	Internal Antenna	I-PEX	10
						15

Note: 1: 802.11an/ac used four antennas are for signal transmitting and receiving.(4T4R Spatial Multiplexing MIMO configuration)

1.1.4 EUT Information

Operational Condition	
EUT Power Type	From Host System
RF Chip	QCA9994
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:

1.1.5 Mode Test Duty Cycle

<Antenna Gain 10 dBi>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.972	0.123	2.069m	1k
802.11ac VHT20	0.988	0.052	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40	0.977	0.101	2.441m	1k
802.11ac VHT80	0.951	0.218	1.153m	1k
802.11ac VHT80+80	0.963	0.164	2.23m	1k

<Antenna Gain 15 dBi>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.967	0.146	2.066m	1k
802.11ac VHT20	0.982	0.079	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40	0.969	0.137	2.437m	1k
802.11ac VHT80	0.932	0.306	1.143m	1k
802.11ac VHT80+80	0.963	0.164	2.23m	1k

1.1.6 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR661623-15

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

Modifications	Performance Checking
Adding two new type antennas	All

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
RF Conducted	TH01-HY	Tim	22.8°C / 65%	27/Dec/2017
Radiated	03CH09-HY	Eric	25.8°C / 55%	20/Dec/2017
AC Conduction	CO04-HY	Thor	23.2°C / 50%	01/Dec/2017

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)	3.6 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.0 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%

2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V
Freq. Stability	Abbreviation	Remark
-10°C	-	-
0°C	-	-
10°C	-	-
20°C	-	-
30°C	-	-
40°C	-	-
50°C	-	-
60°C	-	-
70°C	-	-
138V	-	-
120V	-	-
102V	-	-

2.2 Test Channel Mode

Test Software Version	QDART 00037.27
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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	PoE Mode

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

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

2.4 Support Equipment

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	PoE	UBIQUITI	GP-C500-120G	N/A
4	Adapter for PoE	D-Link	DSA-0421S-50	N/A
5	AC Source	GW	APS-9102	N/A
6	Test Fixture	N/A	N/A	N/A

Note: Support equipment No.6 was provided by customer.

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Test Fixture	N/A	N/A	N/A
2	PoE (Remote Workstation)	UBIQUITI	GP-C500-120G	N/A
3	Adapter for PoE	D-Link	DSA-0421S-50	N/A

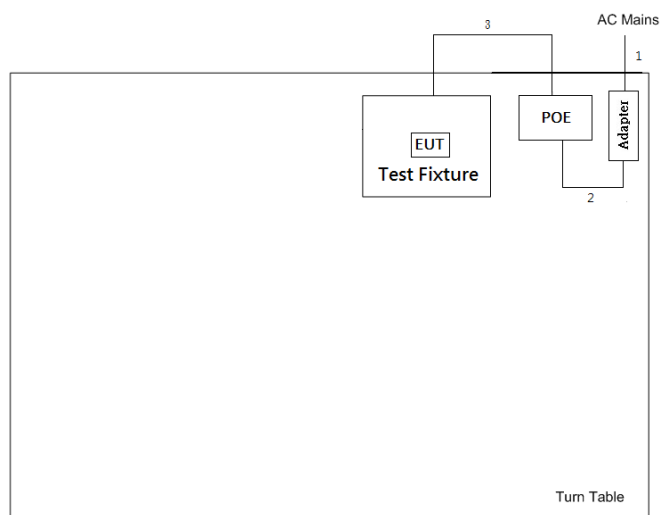
Note: Support equipment No.1 was provided by customer.

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Fixture	N/A	N/A	N/A
2	PoE	UBIQUITI	GP-C500-120G	N/A
3	Adapter for PoE	D-Link	DSA-0421S-50	N/A

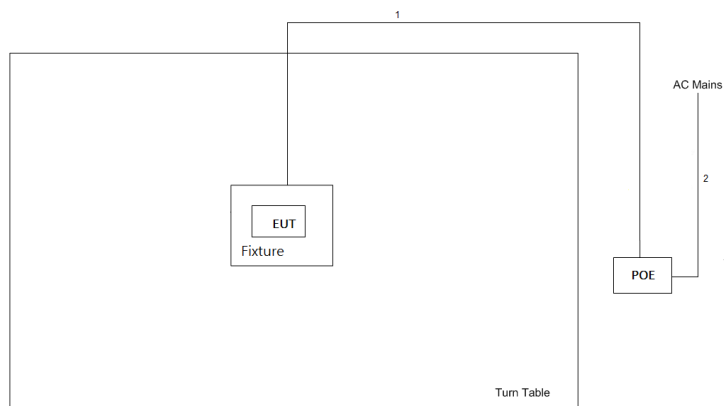
Note: Support equipment No.1 was provided by customer.

2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC power line	No	1.0	-
2	DC power line	No	1.5	-
3	RJ-45 cable	No	1.0	-

Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length(m)	Remark
1	RJ45 Cable	No	10.0	-
2	AC power line	No	1.0	-

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.

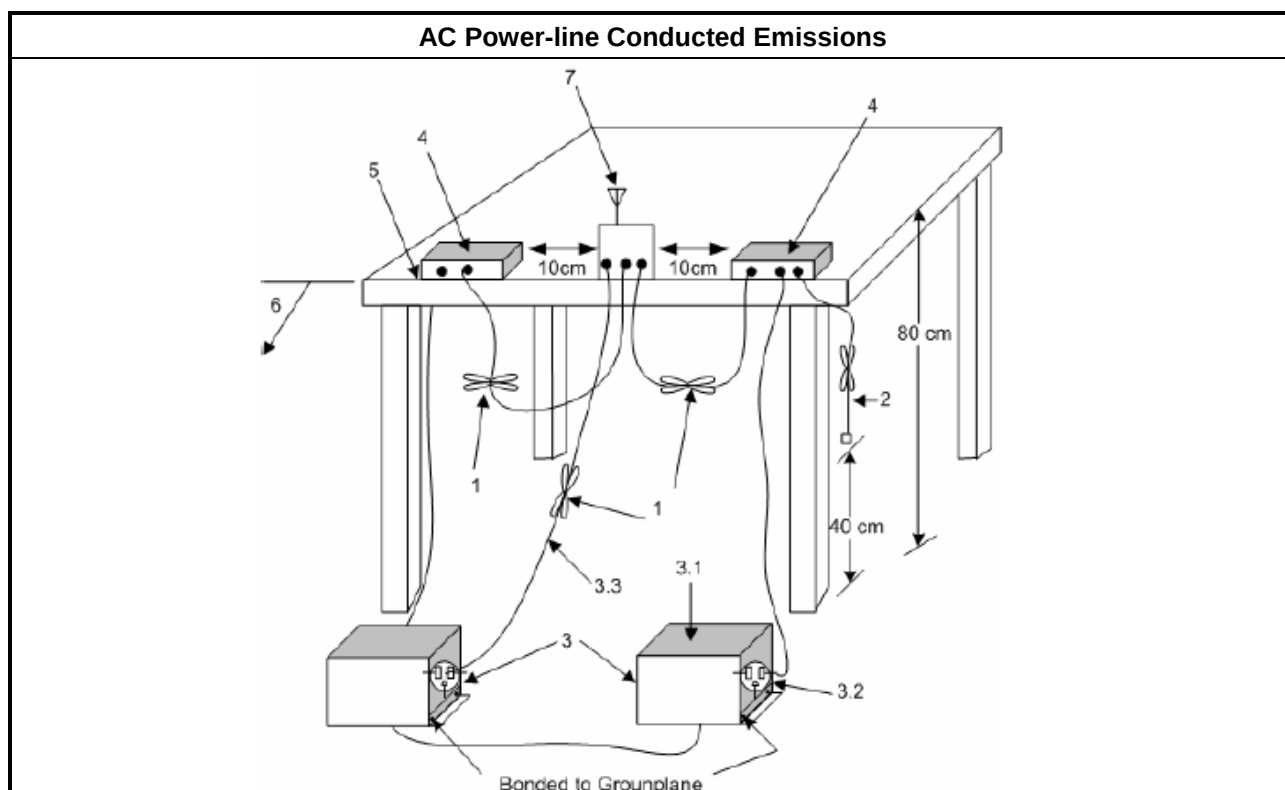
3.1.2 Measuring Instruments

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, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

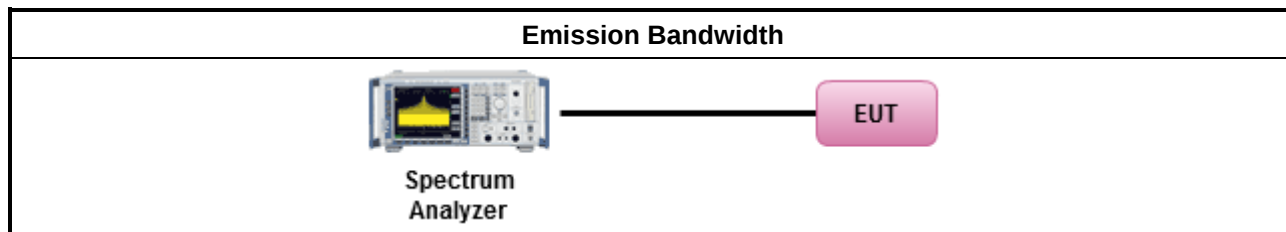
3.2.2 Measuring Instruments

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 6.6 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

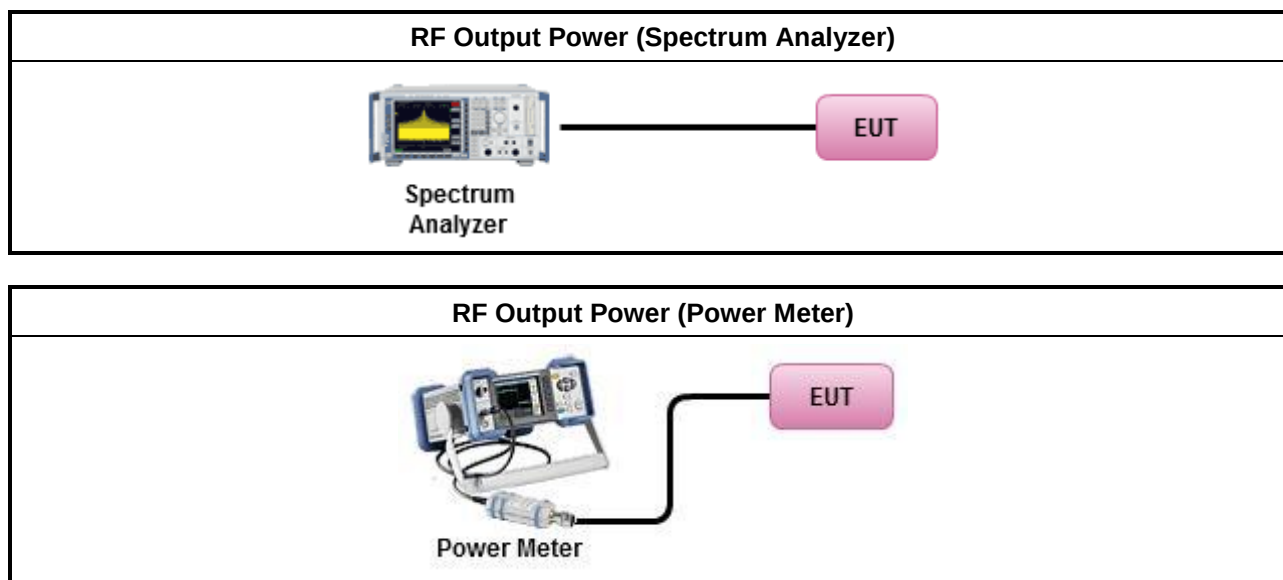
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Conducted Output Power	
	Duty cycle $\geq 98\%$
☒	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle $< 98\%$
☒	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as KDB 789033, clause E Method PM (using an RF average power meter).
For conducted measurement.	
	If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
	Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
	Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
	Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.
	Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☐ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☐ For the 5.725-5.85 GHz band:	
	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$.
	Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	

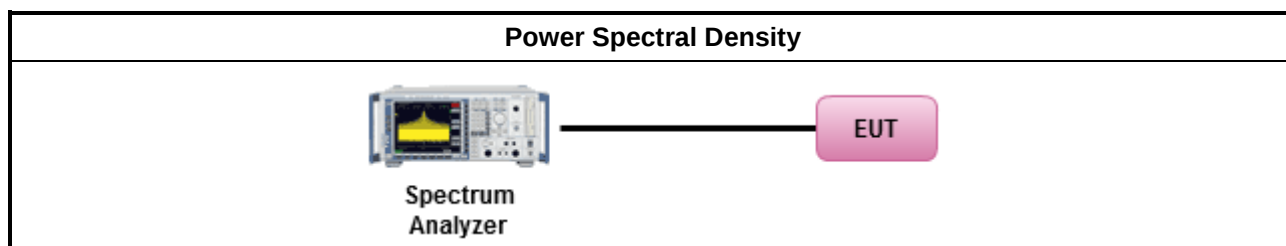
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐ Refer as KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth	
Duty cycle ≥ 98%	
☐ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).	
Duty cycle < 98%	
☐ Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	

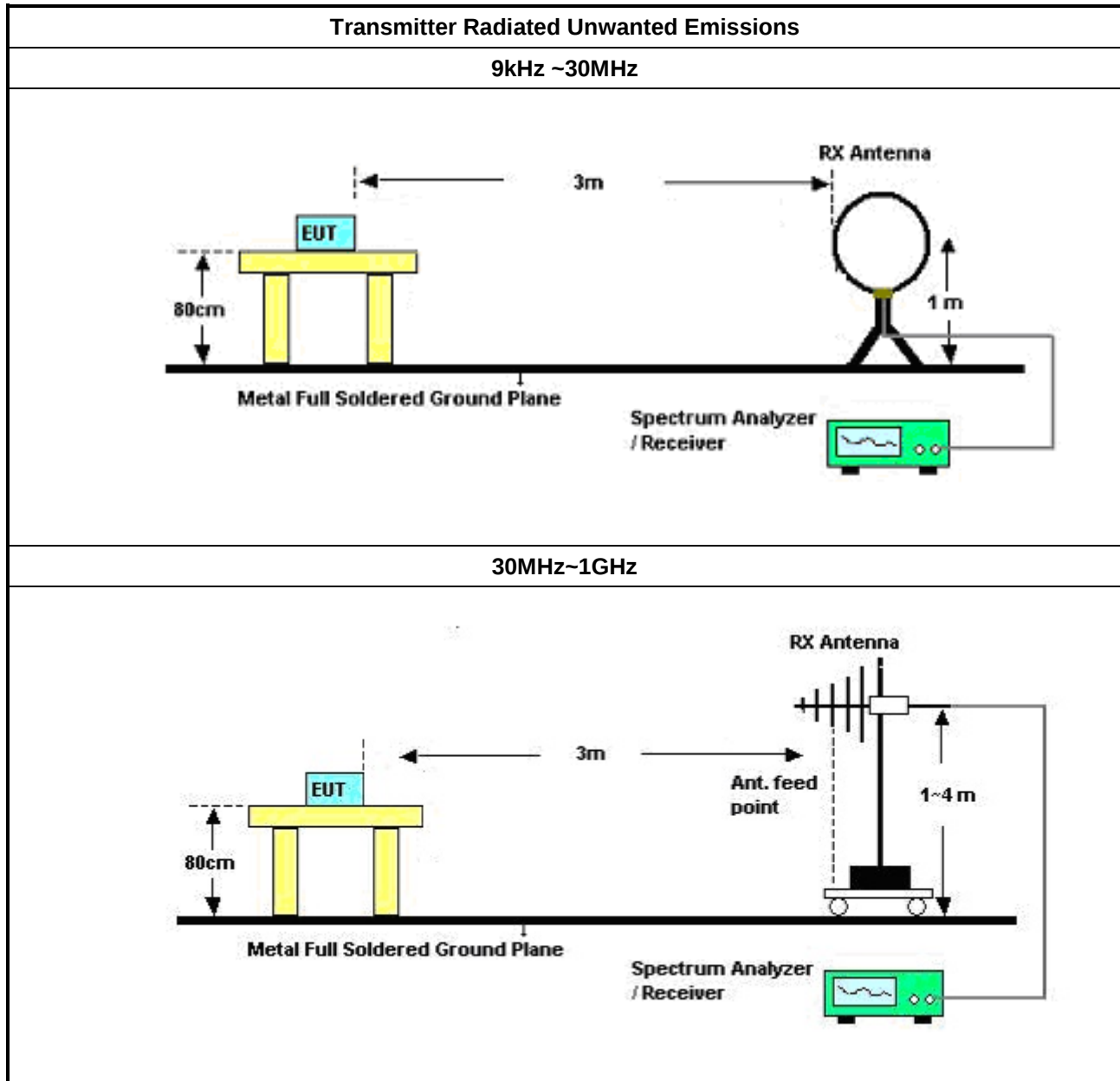
3.5.2 Measuring Instruments

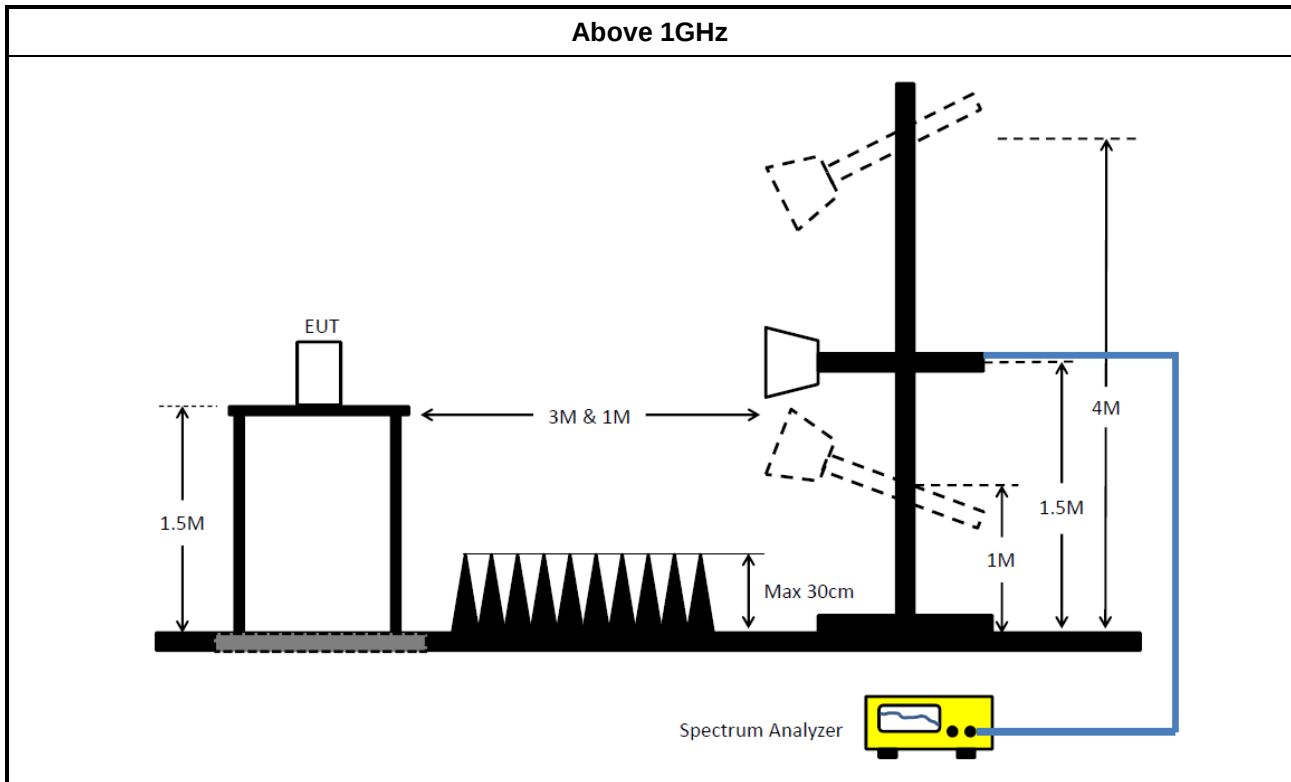
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☒ Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.
	☒ Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup





3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Frequency Stability

3.6.1 Frequency Stability Limit

Frequency Stability Limit	
UNII Devices	
In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.	
IEEE Std. 802.11	
The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band.	

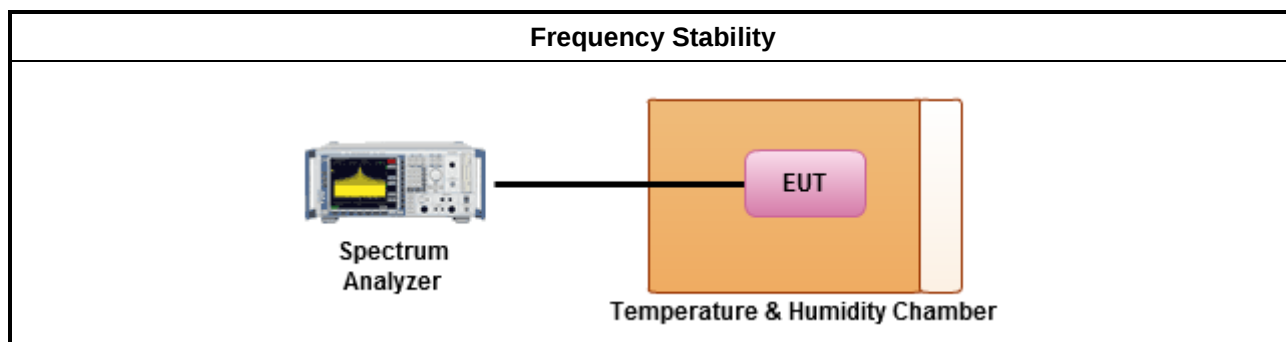
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
Refer as ANSI C63.10, clause 6.8 for frequency stability tests	
	Frequency stability with respect to ambient temperature
	Frequency stability when varying supply voltage

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	06/Oct/2017	05/Oct/2018
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/2017	11/Oct/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	17/Nov/2017	16/Nov/2018

NCR : Non-Calibration Require

Instrument for Radiated Test

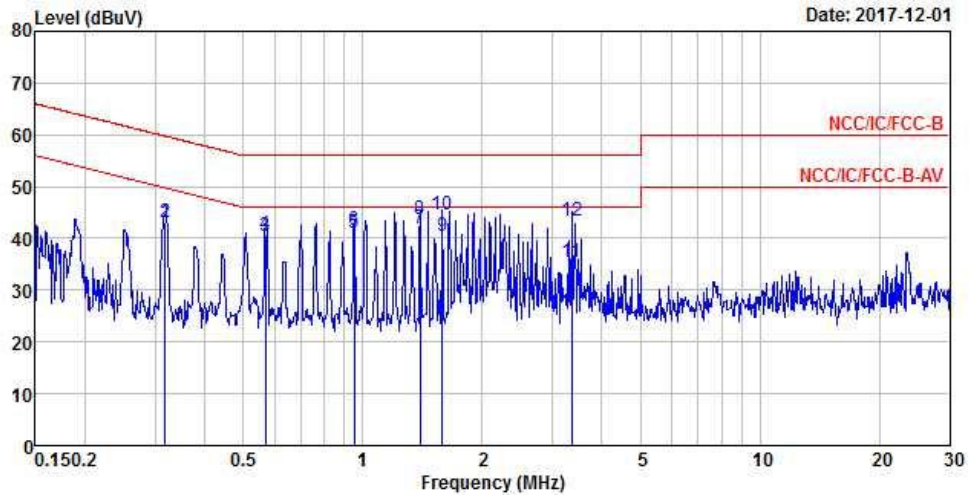
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	25/Apr/2017	24/Apr/2018
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	21/Jun/2017	20/Jun/2018
Amplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	25/Apr/2017	24/Apr/2018
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	25/Apr/2017	24/Apr/2018
Spectrum Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	20/Jul/2017	19/Jul/2018
Bilog Antenna	TESEQ	CBL 6111D	35418	30MHz~1GHz	09/Sep/2017	08/Sep/2018
Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA9120D 1534	1GHz~18GHz	28/Apr/2017	27/Apr/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170614	18GHz ~ 40GHz	06/Feb/2017	05/Feb/2018
Amplifier	MITEQ	JS44-18004000 -33-8P	1840917	18GHz ~ 40GHz	06/Feb/2017	05/Feb/2018
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	02/Feb/2017	01/Feb/2018
RF Cable-high	Jye Bao	RG142	03CH09-HY	1GHz ~ 40GHz	02/Feb/2017	01/Feb/2018
Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018

**Instrument for Conducted Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
Temp. and Humidity Chamber	Giant Force	GTH-225-40-CP-AR	MAA1611-005	-40 ~ 100℃	21/Nov/2016	20/Nov/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY677/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY678/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10717/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	PoE Mode		

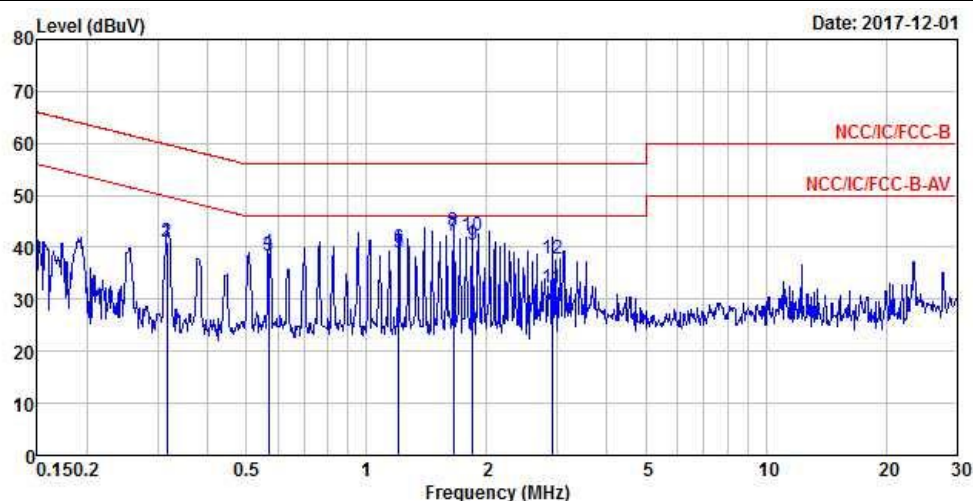


	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.3183	43.05	-6.70	49.75	33.37	9.61	0.07	Average
2	0.3183	43.04	-16.71	59.75	33.36	9.61	0.07	QP
3	0.5701	40.54	-5.46	46.00	30.87	9.61	0.06	Average
4	0.5701	40.85	-15.15	56.00	31.18	9.61	0.06	QP
5	0.9531	41.10	-4.90	46.00	31.48	9.61	0.01	Average
6	0.9531	41.54	-14.46	56.00	31.92	9.61	0.01	QP
7 MAX	1.3958	41.97	-4.03	46.00	32.36	9.61	0.00	Average
8	1.3958	43.73	-12.27	56.00	34.12	9.61	0.00	QP
9	1.5851	40.43	-5.57	46.00	30.81	9.62	0.00	Average
10	1.5851	44.53	-11.47	56.00	34.91	9.62	0.00	QP
11	3.3635	35.29	-10.71	46.00	25.60	9.63	0.06	Average
12	3.3635	43.37	-12.63	56.00	33.68	9.63	0.06	QP

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

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE Mode		



	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.3166	41.05	-8.75	49.80	31.37	9.61	0.07	Average
2	0.3166	41.01	-18.79	59.80	31.33	9.61	0.07	QP
3	0.5701	38.33	-7.67	46.00	28.66	9.61	0.06	Average
4	0.5701	39.05	-16.95	56.00	29.38	9.61	0.06	QP
5	1.2034	39.11	-6.89	46.00	29.49	9.62	0.00	Average
6	1.2034	39.88	-16.12	56.00	30.26	9.62	0.00	QP
7 MAX	1.6500	42.21	-3.79	46.00	32.58	9.63	0.00	Average
8	1.6500	43.01	-12.99	56.00	33.38	9.63	0.00	QP
9	1.8411	40.39	-5.61	46.00	30.76	9.63	0.00	Average
10	1.8411	42.31	-13.69	56.00	32.68	9.63	0.00	QP
11	2.9182	32.29	-13.71	46.00	22.60	9.64	0.05	Average
12	2.9182	37.93	-18.07	56.00	28.24	9.64	0.05	QP

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

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	19.825M	16.467M	16M5D1D	19.125M	16.367M
802.11ac VHT20_Nss1,(MCS0)_4TX	20.65M	17.616M	17M6D1D	19.875M	17.566M
802.11ac VHT40_Nss1,(MCS0)_4TX	39.9M	35.932M	35M9D1D	39.2M	35.882M
802.11ac VHT80_Nss1,(MCS0)_4TX	83.4M	75.762M	75M8D1D	82.3M	75.562M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.775M	16.417M	16M4D1D	19.125M	16.367M
802.11ac VHT20_Nss1,(MCS0)_4TX	20.7M	17.641M	17M6D1D	20.25M	17.591M
802.11ac VHT40_Nss1,(MCS0)_4TX	39.8M	35.982M	36M0D1D	39.1M	35.882M
802.11ac VHT80_Nss1,(MCS0)_4TX	83.6M	75.762M	75M8D1D	82.4M	75.462M
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	84.3M	75.862M	75M9D1D	83.9M	75.662M

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

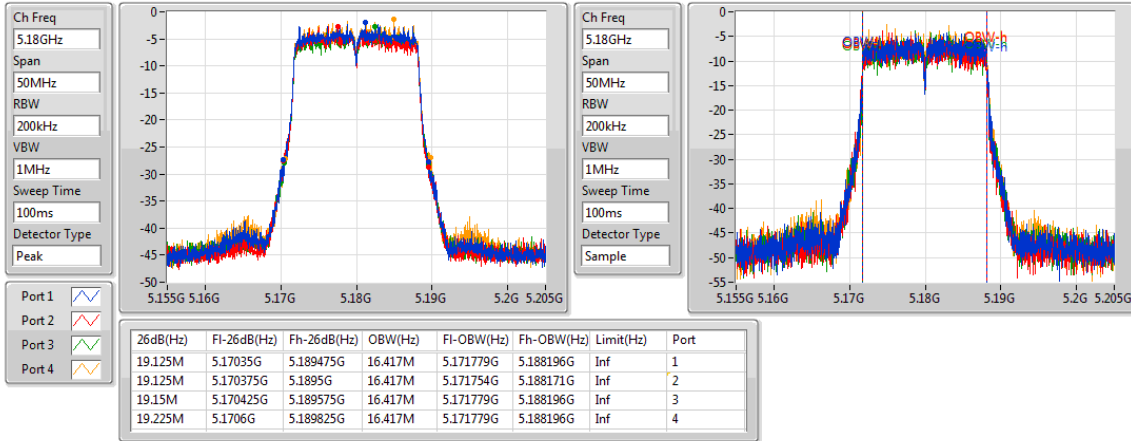
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	19.125M	16.417M	19.125M	16.417M	19.15M	16.417M	19.225M	16.417M
5200MHz_TnomVnom	Pass	Inf	19.425M	16.392M	19.475M	16.417M	19.4M	16.367M	19.275M	16.367M
5240MHz_TnomVnom	Pass	Inf	19.575M	16.417M	19.3M	16.467M	19.475M	16.442M	19.825M	16.417M
5260MHz_TnomVnom	Pass	Inf	19.15M	16.417M	19.2M	16.392M	19.125M	16.392M	19.775M	16.417M
5300MHz_TnomVnom	Pass	Inf	19.3M	16.392M	19.425M	16.417M	19.225M	16.392M	19.4M	16.392M
5320MHz_TnomVnom	Pass	Inf	19.4M	16.392M	19.65M	16.417M	19.525M	16.417M	19.475M	16.367M
802.11ac_VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	19.875M	17.616M	20.375M	17.591M	20.4M	17.616M	20.275M	17.591M
5200MHz_TnomVnom	Pass	Inf	20.3M	17.591M	20.575M	17.591M	20.475M	17.591M	20.35M	17.566M
5240MHz_TnomVnom	Pass	Inf	20.475M	17.616M	20.525M	17.616M	20.65M	17.591M	20.35M	17.591M
5260MHz_TnomVnom	Pass	Inf	20.5M	17.641M	20.375M	17.616M	20.6M	17.591M	20.275M	17.616M
5300MHz_TnomVnom	Pass	Inf	20.25M	17.616M	20.5M	17.641M	20.45M	17.591M	20.25M	17.591M
5320MHz_TnomVnom	Pass	Inf	20.7M	17.616M	20.625M	17.641M	20.45M	17.616M	20.3M	17.616M
802.11ac_VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf	39.8M	35.932M	39.55M	35.882M	39.5M	35.882M	39.25M	35.932M
5230MHz_TnomVnom	Pass	Inf	39.75M	35.932M	39.9M	35.932M	39.25M	35.882M	39.2M	35.932M
5270MHz_TnomVnom	Pass	Inf	39.8M	35.932M	39.55M	35.932M	39.6M	35.982M	39.3M	35.982M
5310MHz_TnomVnom	Pass	Inf	39.75M	35.882M	39.7M	35.882M	39.45M	35.932M	39.1M	35.882M
802.11ac_VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf	83.4M	75.662M	83M	75.562M	83.1M	75.762M	82.3M	75.562M
5290MHz_TnomVnom	Pass	Inf	82.7M	75.762M	83.6M	75.462M	83.4M	75.762M	82.4M	75.762M
802.11ac_VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz_TnomVnom	Pass	Inf	84.1M	75.762M	84.5M	75.862M				
802.11ac_VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	-	-	-	-	-	-	-	-	-	-
5210MHz,#5290MHz_TnomVnom	Pass	Inf					84.3M	75.662M	83.9M	75.862M

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

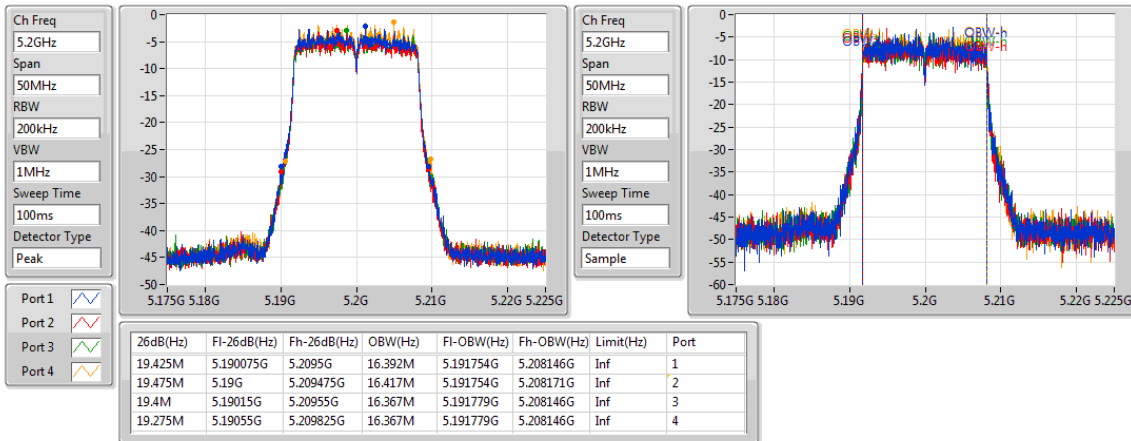
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX
EBW
5180MHz

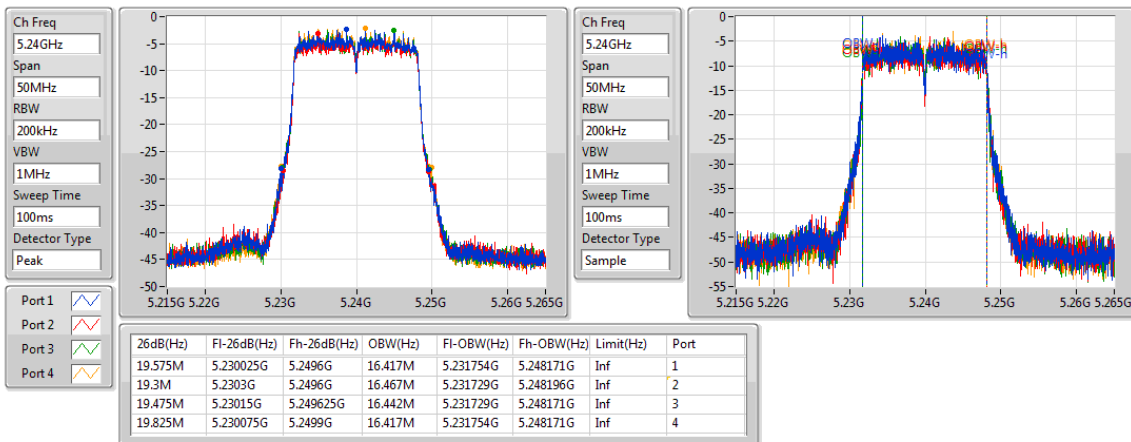
26/12/2017


802.11a_Nss1,(6Mbps)_4TX
EBW
5200MHz

26/12/2017

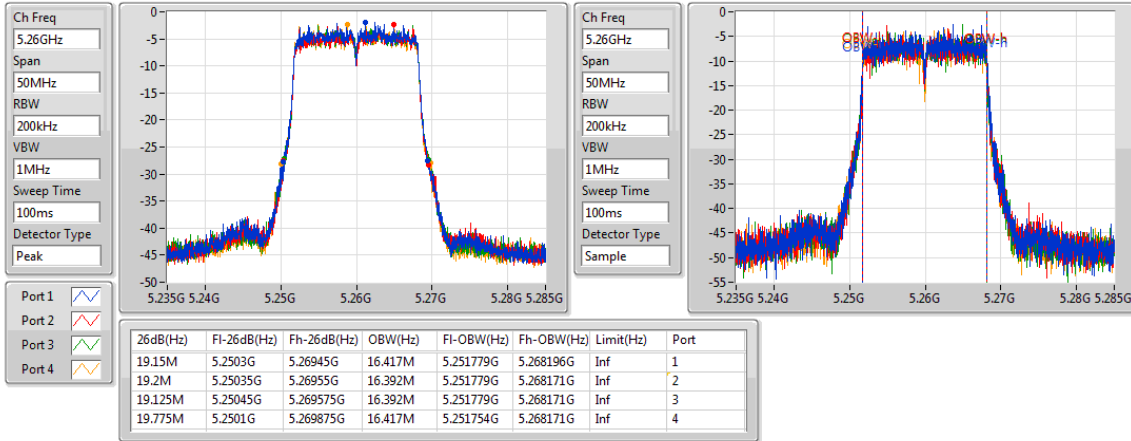

802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz

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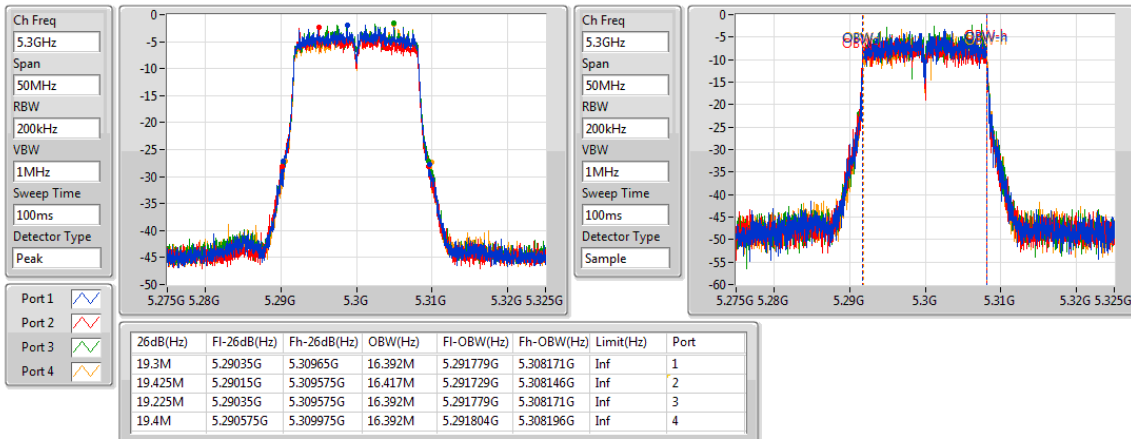


802.11a_Nss1,(6Mbps)_4TX
EBW
5260MHz

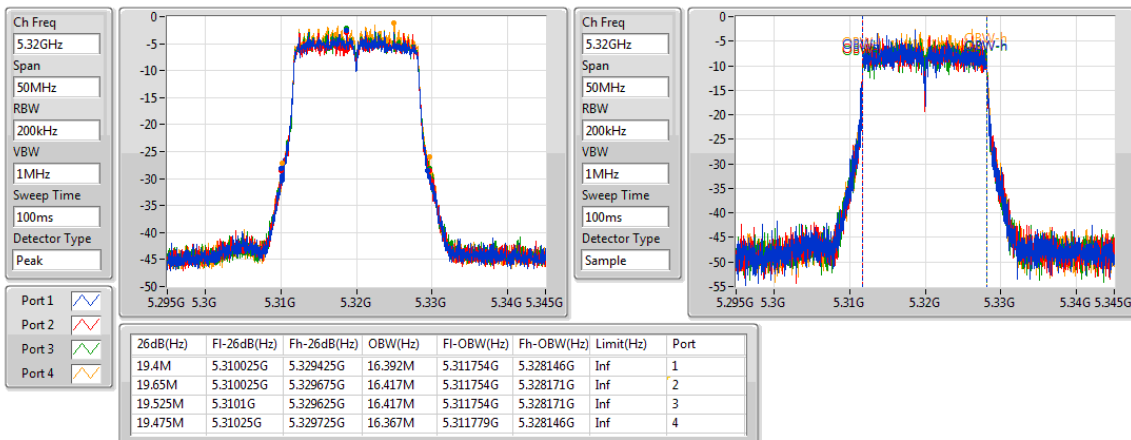
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802.11a_Nss1,(6Mbps)_4TX
EBW
5300MHz

26/12/2017

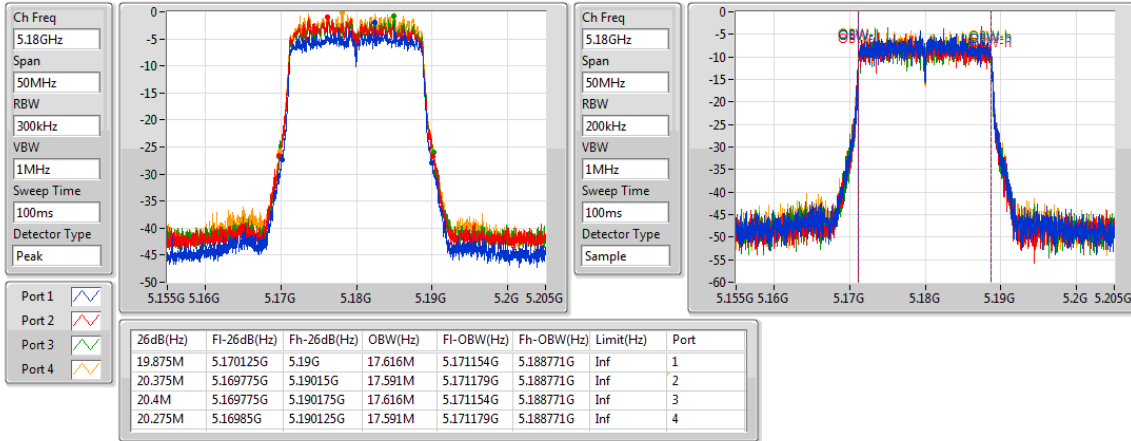

802.11a_Nss1,(6Mbps)_4TX
EBW
5320MHz

26/12/2017

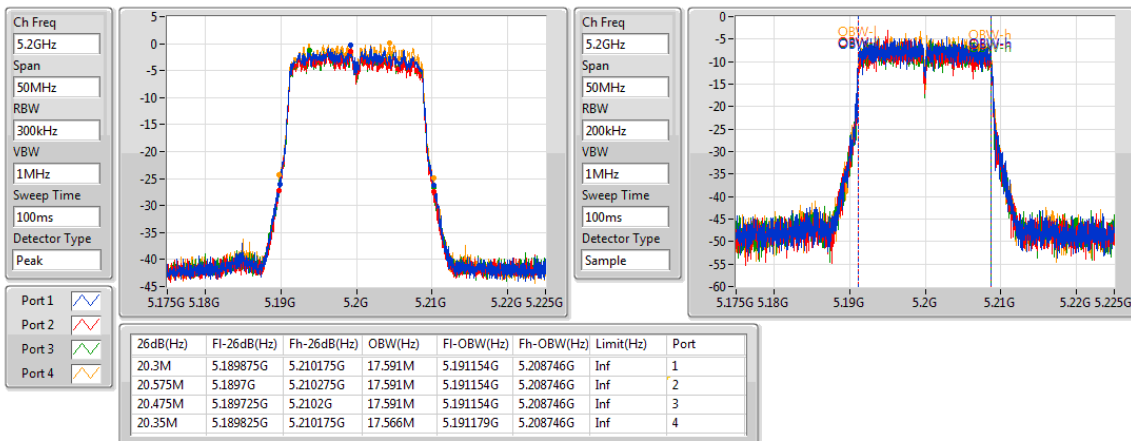


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5180MHz

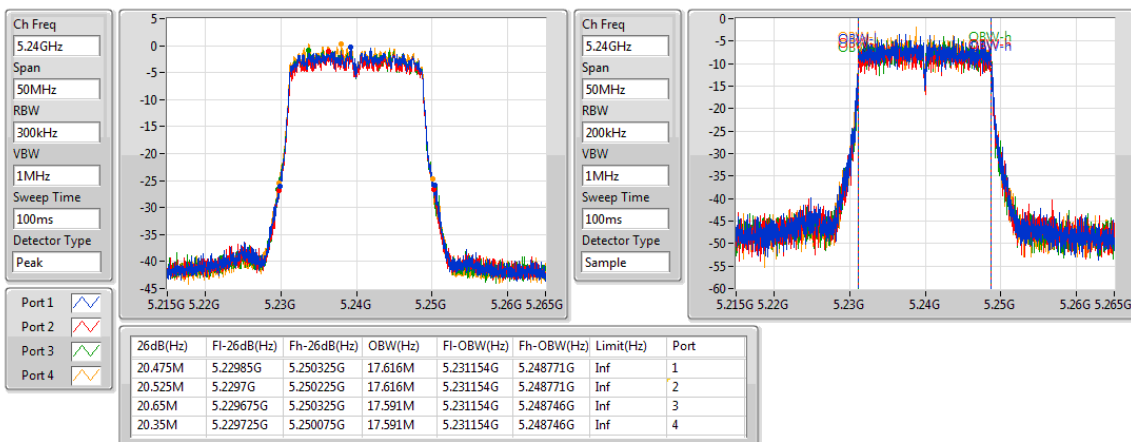
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802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5200MHz

26/12/2017

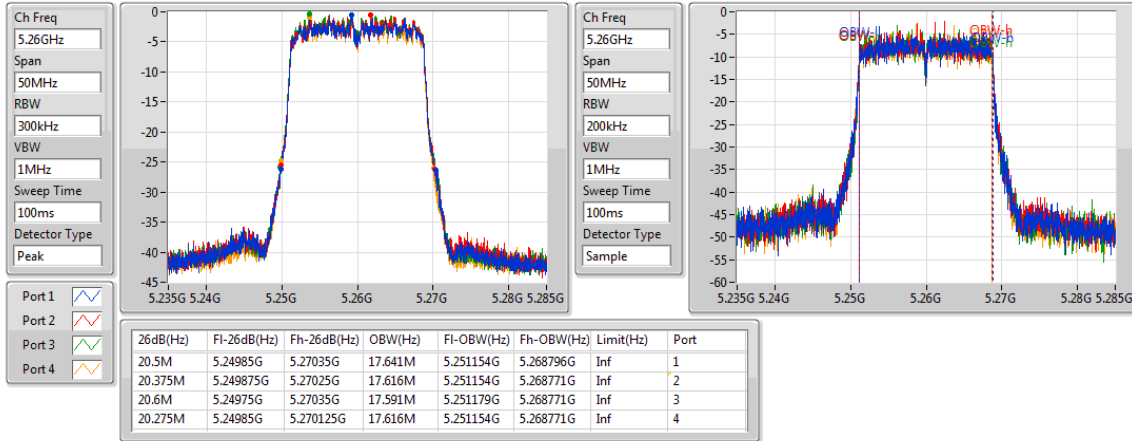

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5240MHz

26/12/2017

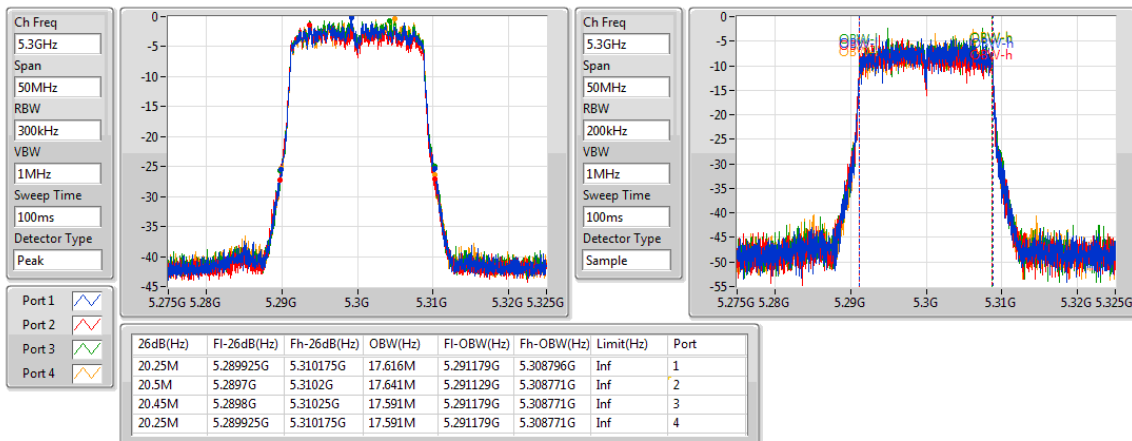


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5260MHz

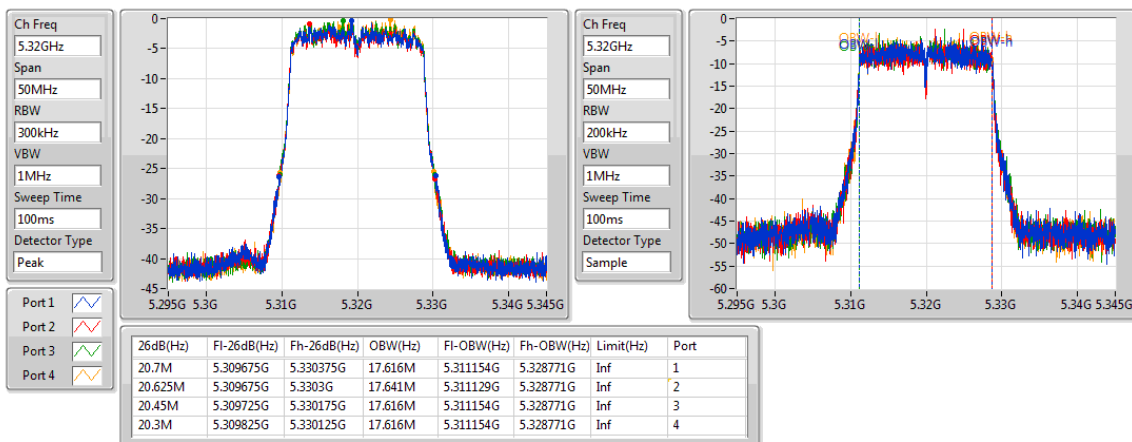
26/12/2017


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5300MHz

26/12/2017

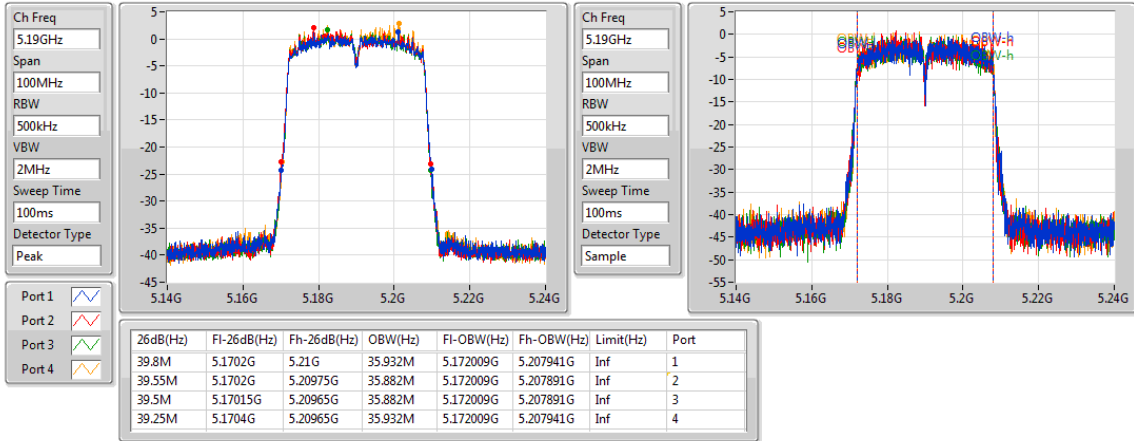

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5320MHz

26/12/2017

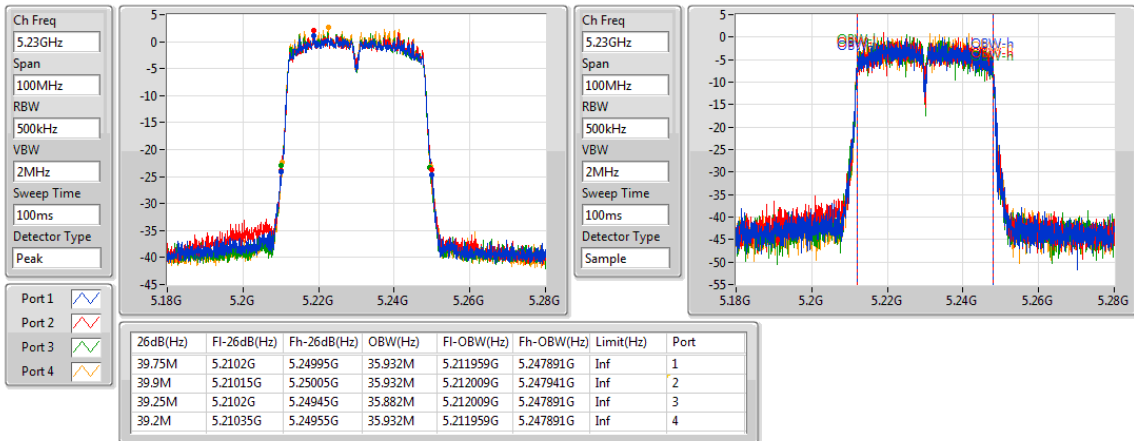


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5190MHz

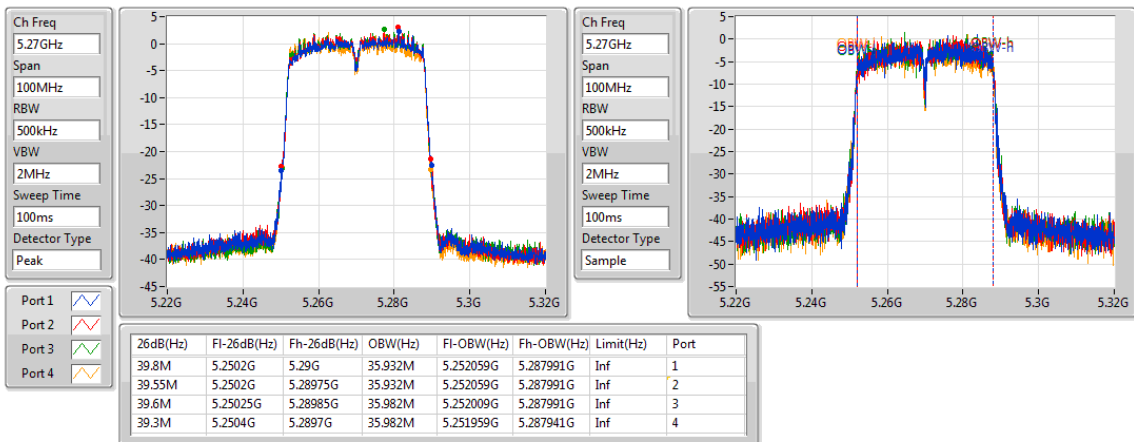
27/12/2017


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5230MHz

27/12/2017

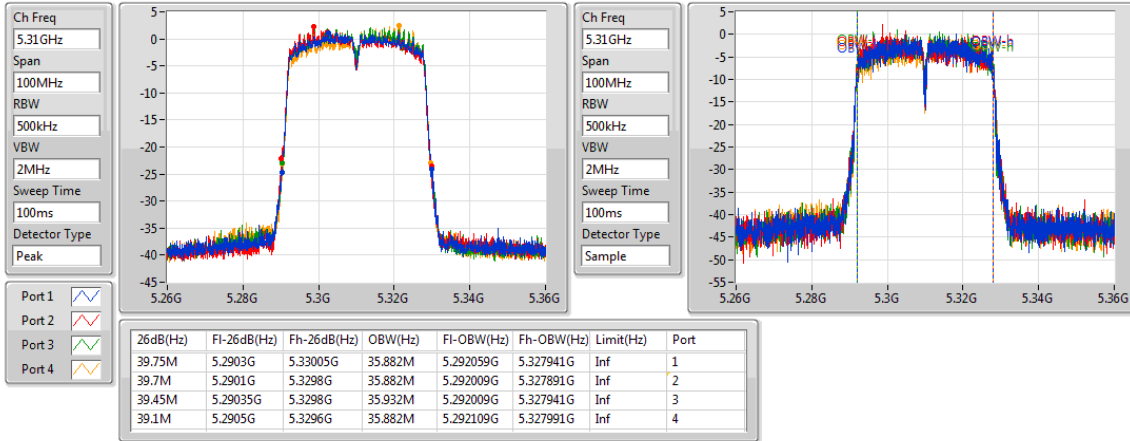

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5270MHz

27/12/2017

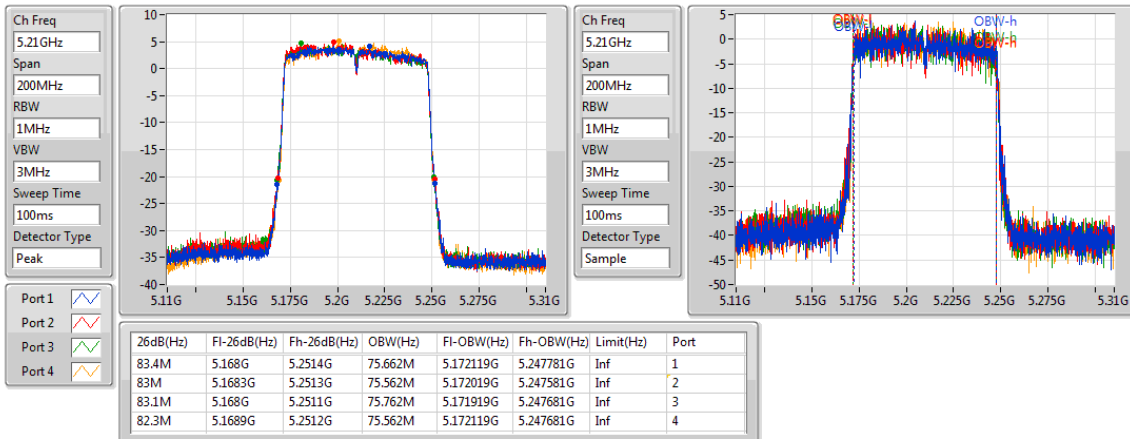


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5310MHz

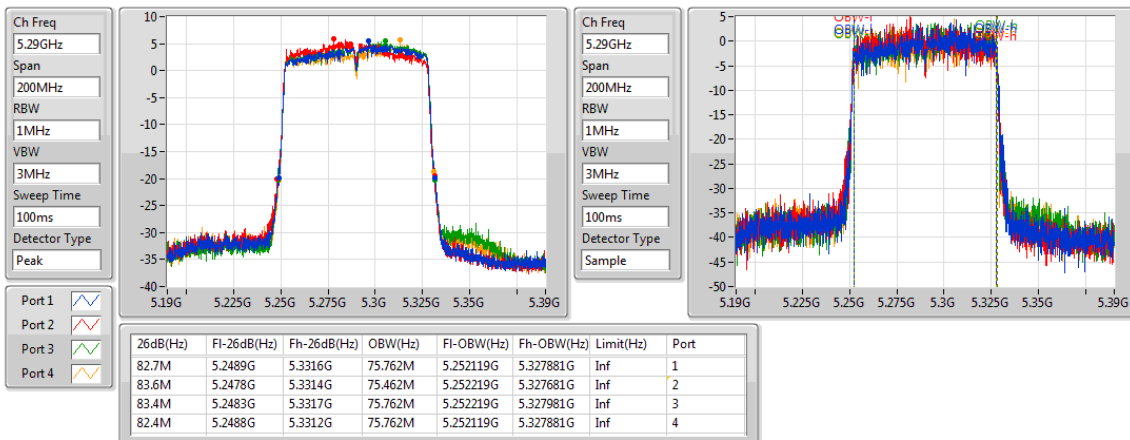
27/12/2017


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5210MHz

27/12/2017


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5290MHz

27/12/2017

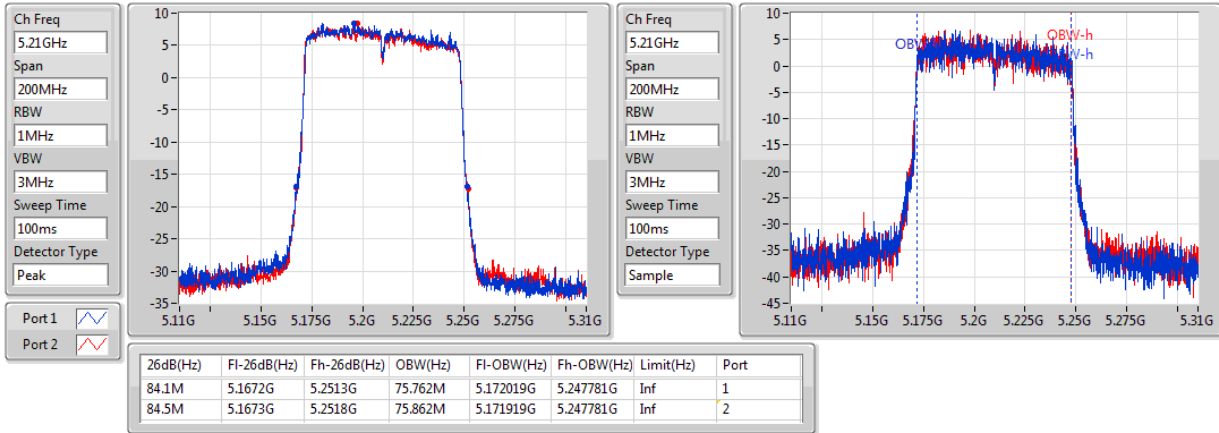


802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)

EBW

#5210MHz,5290MHz

26/12/2017

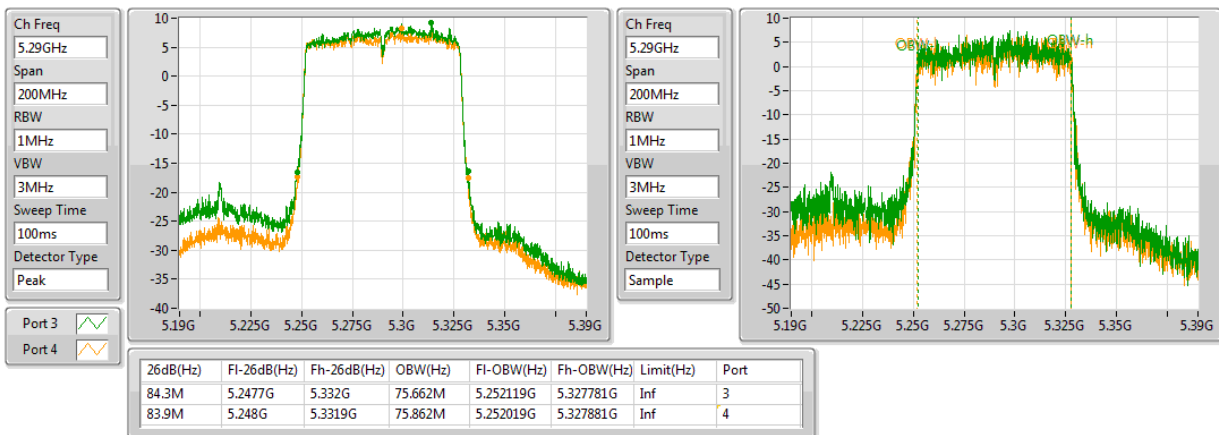


802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)

EBW

5210MHz,#5290MHz

26/12/2017



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	19.675M	16.442M	16M4D1D	19.075M	16.392M
802.11ac VHT20_Nss1,(MCS0)_4TX	20.625M	17.641M	17M6D1D	20.275M	17.591M
802.11ac VHT40_Nss1,(MCS0)_4TX	39.9M	35.982M	36M0D1D	39.2M	35.882M
802.11ac VHT80_Nss1,(MCS0)_4TX	83M	75.662M	75M7D1D	82.1M	75.362M
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	83.4M	75.862M	75M9D1D	83.1M	75.562M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.875M	16.442M	16M4D1D	19.125M	16.392M
802.11ac VHT20_Nss1,(MCS0)_4TX	21M	17.641M	17M6D1D	20.45M	17.591M
802.11ac VHT40_Nss1,(MCS0)_4TX	40.05M	36.032M	36M0D1D	39.25M	35.932M
802.11ac VHT80_Nss1,(MCS0)_4TX	84M	75.962M	76M0D1D	82.5M	75.362M
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	84.8M	75.562M	75M6D1D	83.2M	75.562M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth;

Result

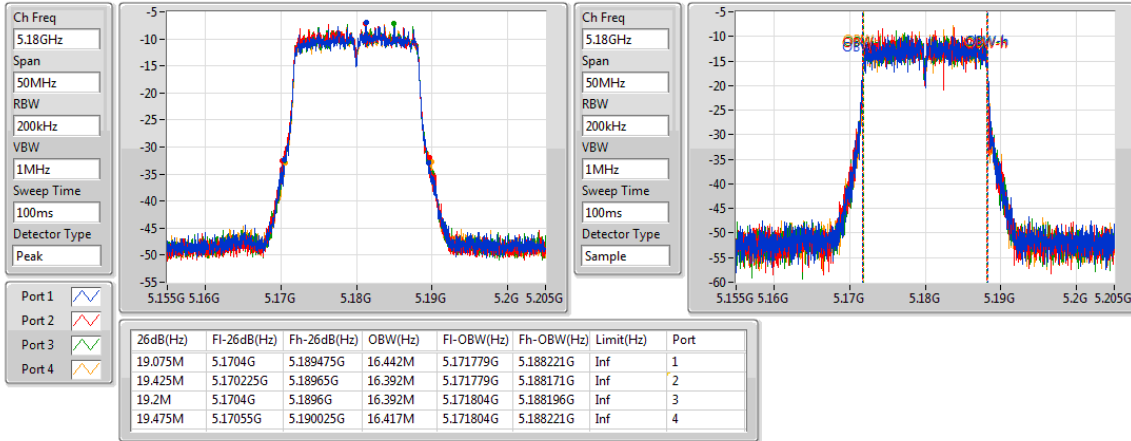
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.075M	16.442M	19.425M	16.392M	19.2M	16.392M	19.475M	16.417M
5200MHz	Pass	Inf	19.525M	16.392M	19.575M	16.392M	19.45M	16.417M	19.3M	16.392M
5240MHz	Pass	Inf	19.5M	16.392M	19.6M	16.417M	19.35M	16.417M	19.675M	16.417M
5260MHz	Pass	Inf	19.5M	16.442M	19.7M	16.442M	19.375M	16.442M	19.875M	16.442M
5300MHz	Pass	Inf	19.625M	16.442M	19.35M	16.392M	19.125M	16.417M	19.6M	16.442M
5320MHz	Pass	Inf	19.525M	16.442M	19.675M	16.417M	19.4M	16.417M	19.825M	16.417M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.525M	17.616M	20.55M	17.591M	20.525M	17.616M	20.275M	17.616M
5200MHz	Pass	Inf	20.475M	17.616M	20.5M	17.616M	20.625M	17.591M	20.4M	17.591M
5240MHz	Pass	Inf	20.525M	17.641M	20.4M	17.616M	20.525M	17.641M	20.275M	17.616M
5260MHz	Pass	Inf	20.75M	17.641M	20.875M	17.641M	20.6M	17.641M	20.5M	17.616M
5300MHz	Pass	Inf	20.6M	17.591M	21M	17.641M	20.575M	17.616M	20.5M	17.616M
5320MHz	Pass	Inf	20.9M	17.641M	20.85M	17.641M	20.8M	17.616M	20.45M	17.616M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	39.6M	35.882M	39.4M	35.882M	39.3M	35.932M	39.2M	35.932M
5230MHz	Pass	Inf	39.9M	35.932M	39.85M	35.982M	39.6M	35.932M	39.35M	35.982M
5270MHz	Pass	Inf	39.8M	35.982M	40M	35.982M	39.4M	35.982M	39.25M	36.032M
5310MHz	Pass	Inf	40.05M	35.932M	39.95M	35.982M	39.65M	35.982M	39.4M	35.982M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	83M	75.562M	83M	75.662M	83M	75.662M	82.1M	75.362M
5290MHz	Pass	Inf	83.7M	75.962M	84M	75.662M	83.1M	75.362M	82.5M	75.662M
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	Inf	83.1M	75.562M	83.4M	75.862M				
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	-	-	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	Inf					84.8M	75.562M	83.2M	75.562M

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

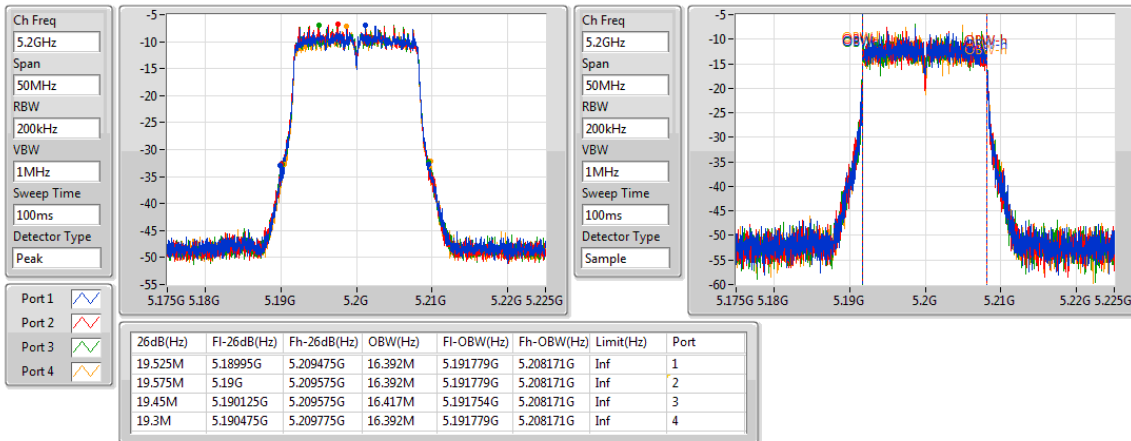
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX
EBW
5180MHz

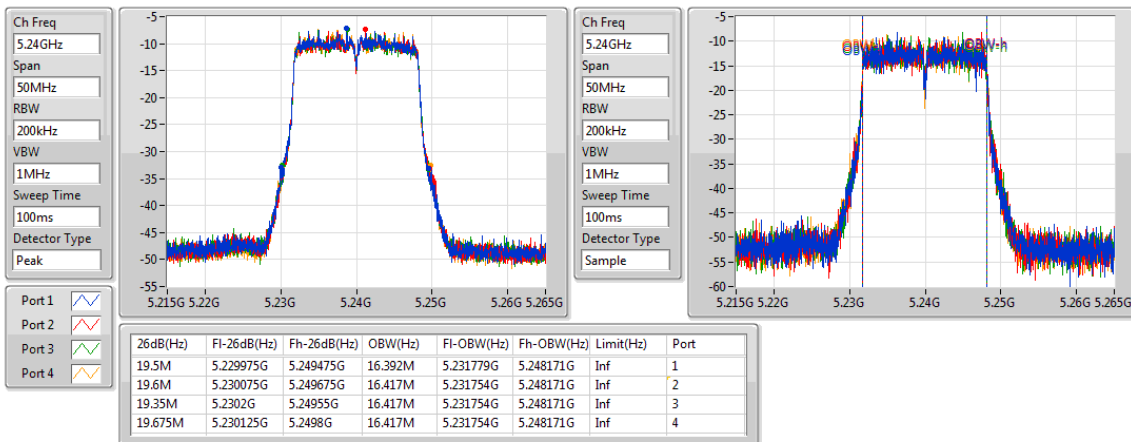
15/12/2017


802.11a_Nss1,(6Mbps)_4TX
EBW
5200MHz

15/12/2017

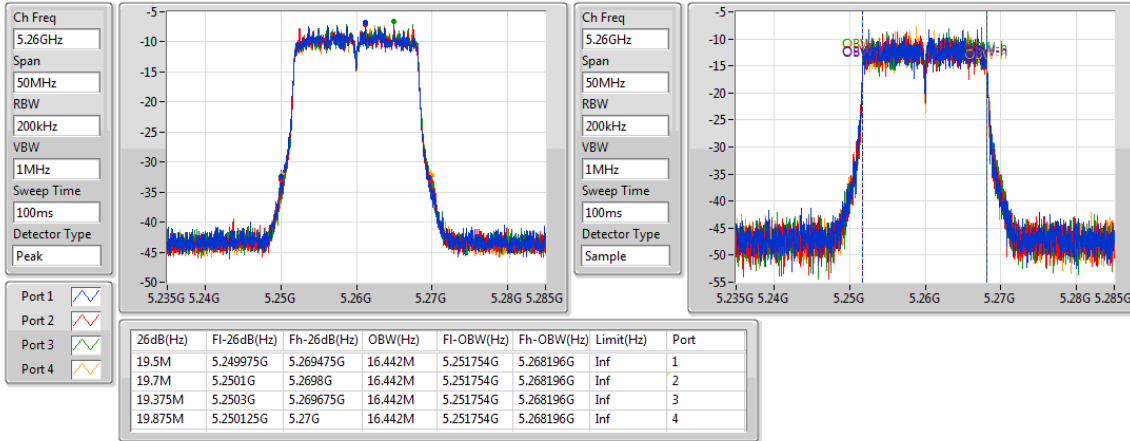

802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz

15/12/2017

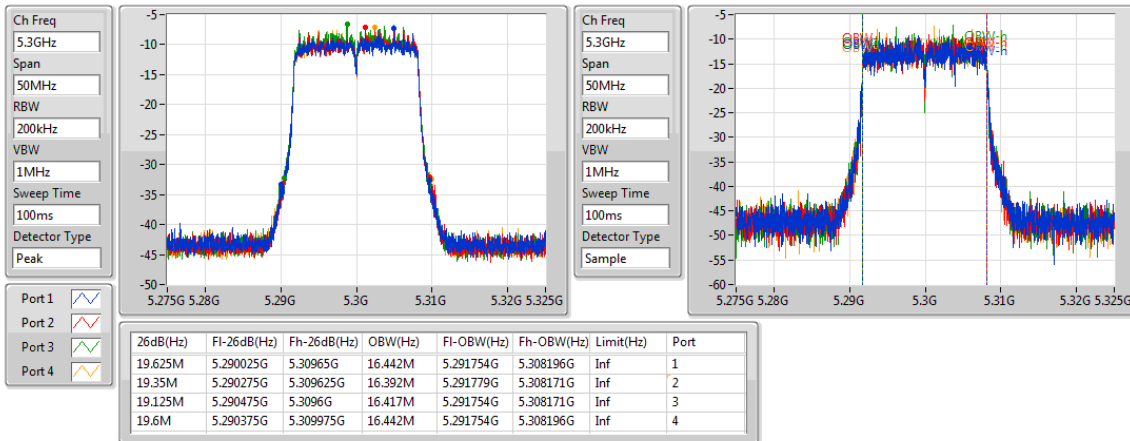


802.11a_Nss1,(6Mbps)_4TX
EBW
5260MHz

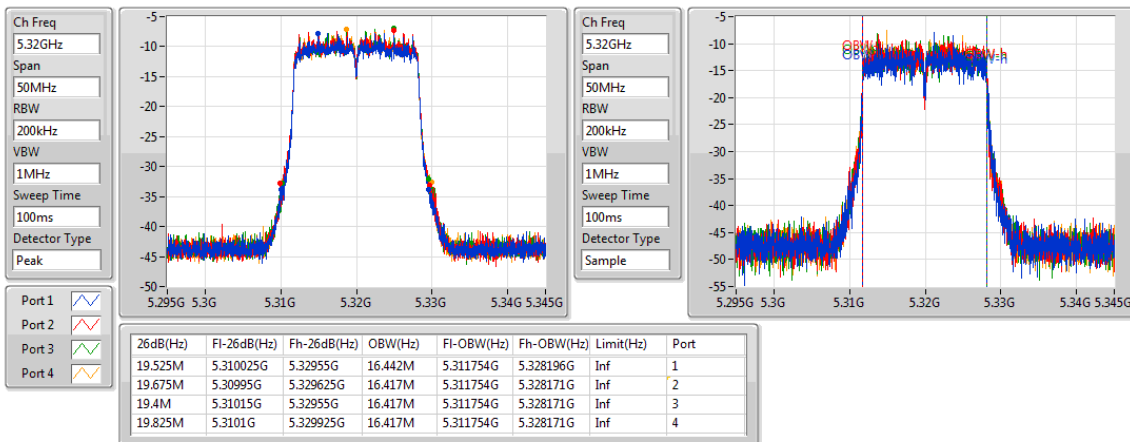
08/12/2017


802.11a_Nss1,(6Mbps)_4TX
EBW
5300MHz

08/12/2017


802.11a_Nss1,(6Mbps)_4TX
EBW
5320MHz

08/12/2017



802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5180MHz

15/12/2017

Ch Freq
5.18GHz

Span
50MHz

RBW
300kHz

VBW
1MHz

Sweep Time
100ms

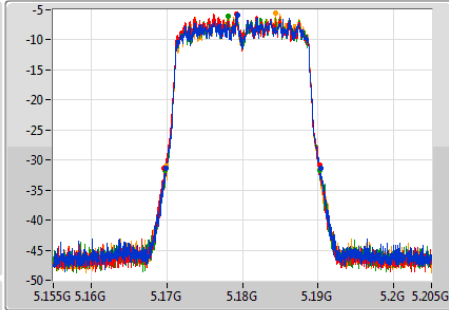
Detector Type
Peak

Port 1 

Port 2 

Port 3 

Port 4 



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.525M	5.16985G	5.190375G	17.616M	5.171179G	5.188796G	Inf	1
20.55M	5.16965G	5.1902G	17.591M	5.171179G	5.188771G	Inf	2
20.525M	5.16975G	5.190275G	17.616M	5.171179G	5.188796G	Inf	3
20.275M	5.1699G	5.190175G	17.616M	5.171179G	5.188796G	Inf	4

Ch Freq
5.18GHz

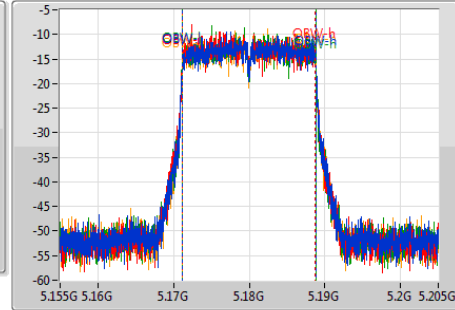
Span
50MHz

RBW
200kHz

VBW
1MHz

Sweep Time
100ms

Detector Type
Sample


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5200MHz

15/12/2017

Ch Freq
5.2GHz

Span
50MHz

RBW
300kHz

VBW
1MHz

Sweep Time
100ms

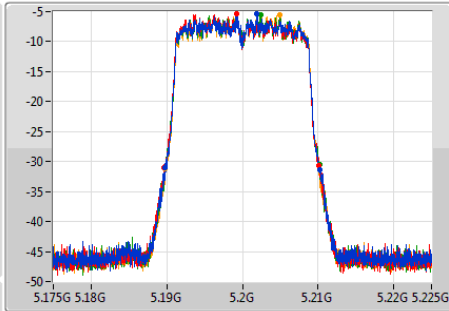
Detector Type
Peak

Port 1 

Port 2 

Port 3 

Port 4 



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.475M	5.189825G	5.2103G	17.616M	5.191154G	5.208771G	Inf	1
20.5M	5.18965G	5.21015G	17.616M	5.191154G	5.208771G	Inf	2
20.625M	5.189625G	5.21025G	17.591M	5.191179G	5.208771G	Inf	3
20.4M	5.1898G	5.2102G	17.591M	5.191179G	5.208771G	Inf	4

Ch Freq
5.2GHz

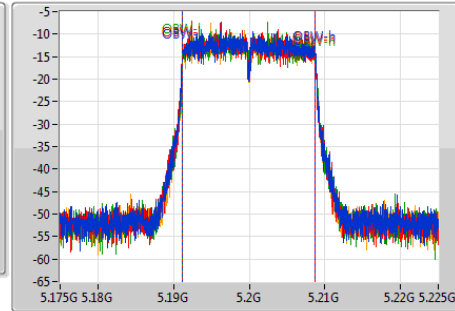
Span
50MHz

RBW
200kHz

VBW
1MHz

Sweep Time
100ms

Detector Type
Sample


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5240MHz

15/12/2017

Ch Freq
5.24GHz

Span
50MHz

RBW
300kHz

VBW
1MHz

Sweep Time
100ms

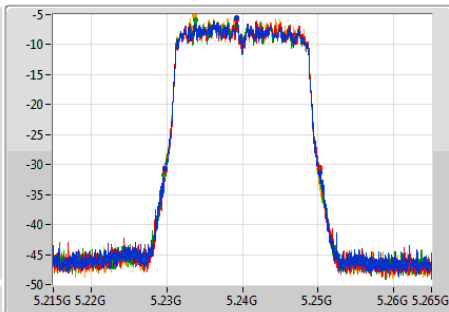
Detector Type
Peak

Port 1 

Port 2 

Port 3 

Port 4 



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.525M	5.22975G	5.250275G	17.641M	5.231129G	5.248771G	Inf	1
20.4M	5.229825G	5.250225G	17.616M	5.231179G	5.248796G	Inf	2
20.525M	5.229675G	5.2502G	17.641M	5.231154G	5.248796G	Inf	3
20.275M	5.2298G	5.250075G	17.616M	5.231154G	5.248771G	Inf	4

Ch Freq
5.24GHz

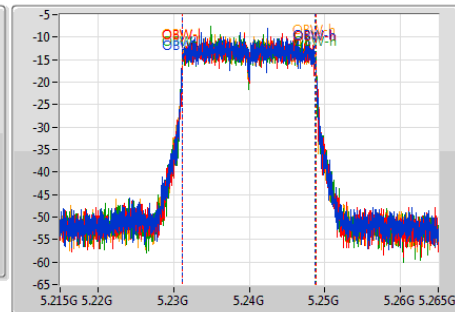
Span
50MHz

RBW
200kHz

VBW
1MHz

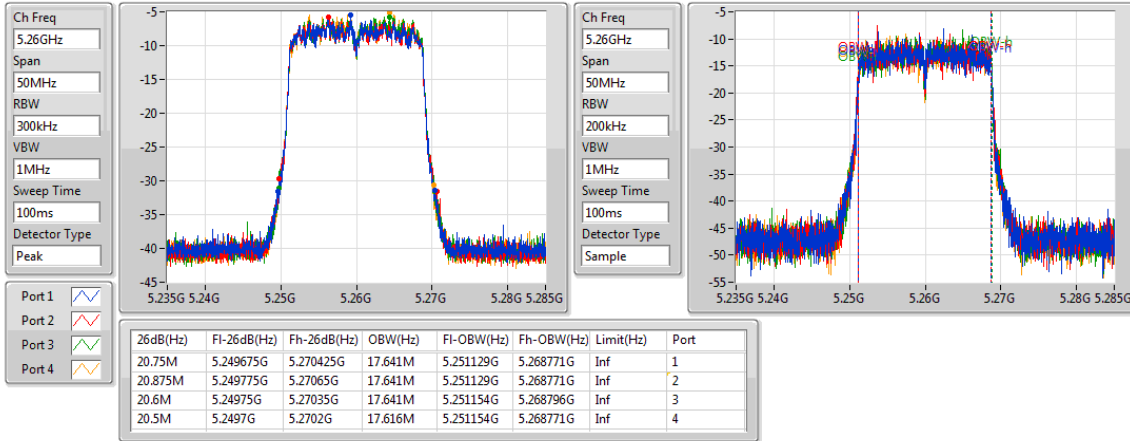
Sweep Time
100ms

Detector Type
Sample

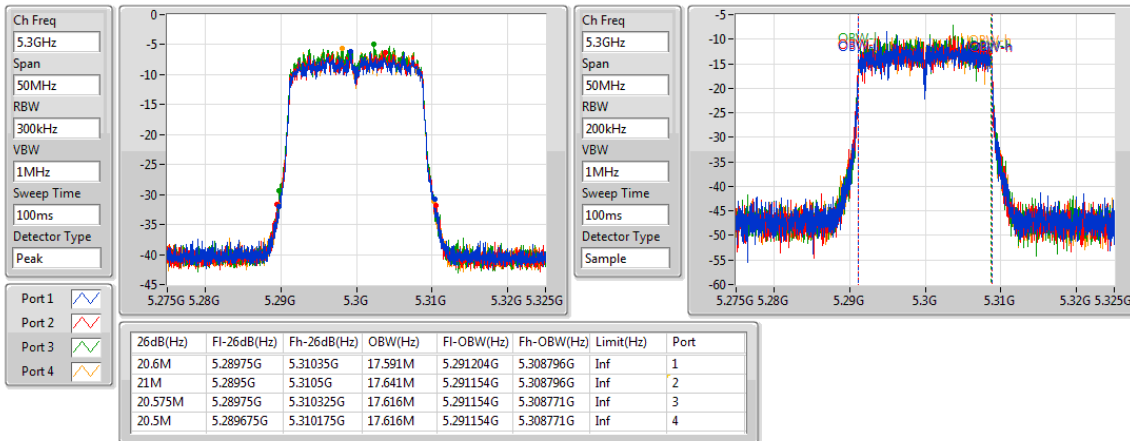


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5260MHz

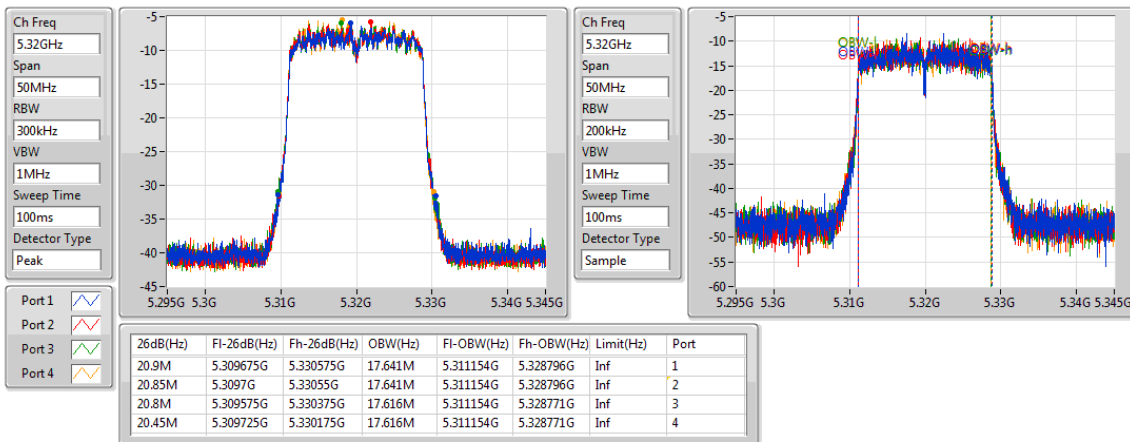
08/12/2017


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5300MHz

08/12/2017

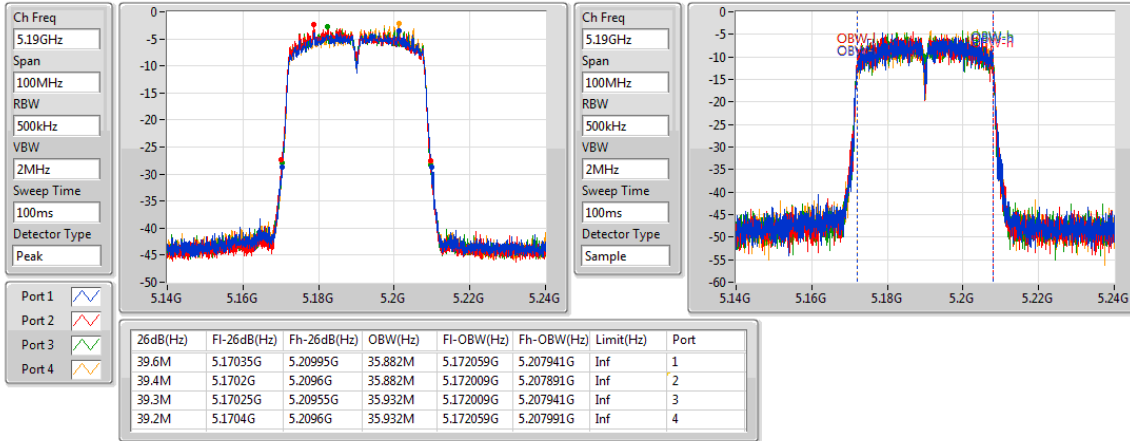

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5320MHz

08/12/2017

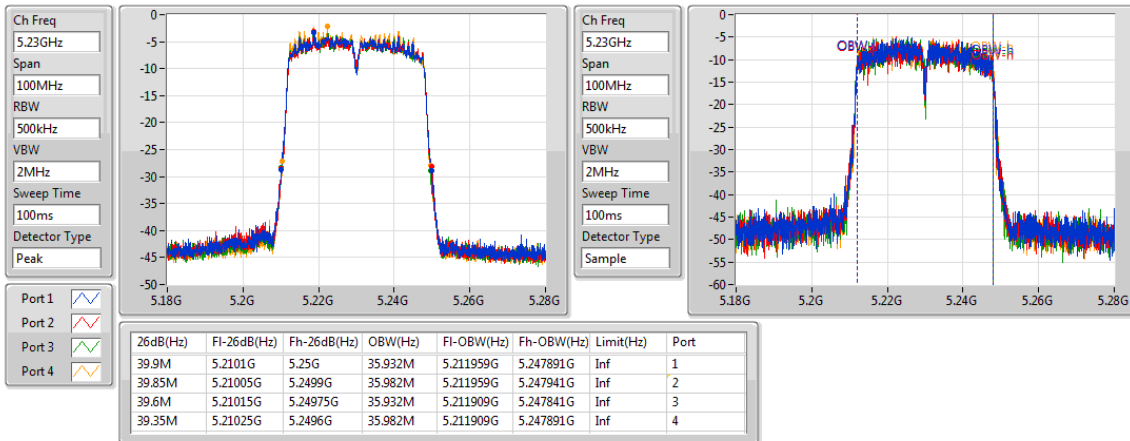


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5190MHz

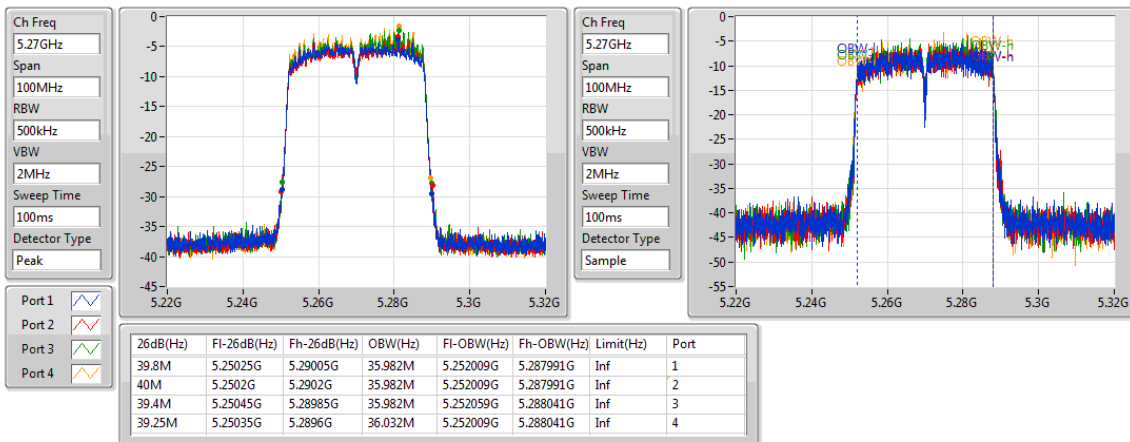
15/12/2017


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5230MHz

15/12/2017

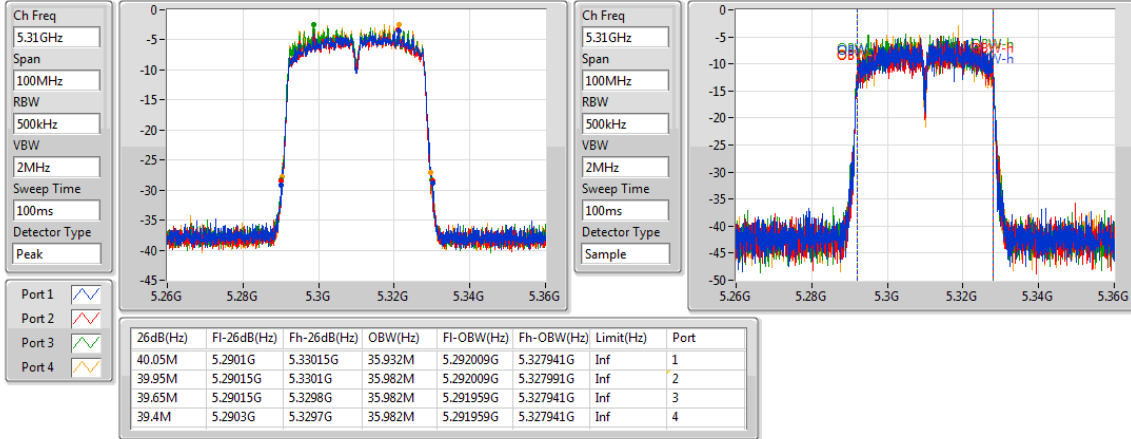

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5270MHz

08/12/2017

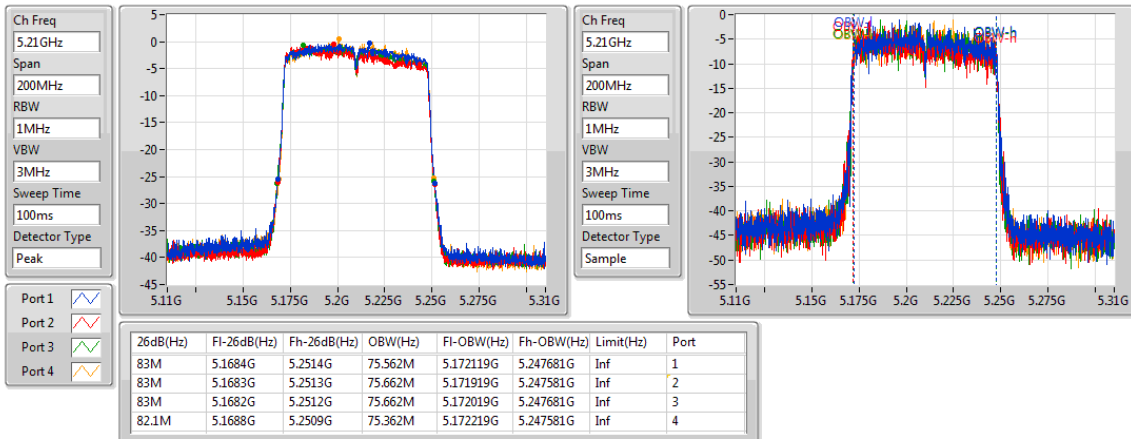


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5310MHz

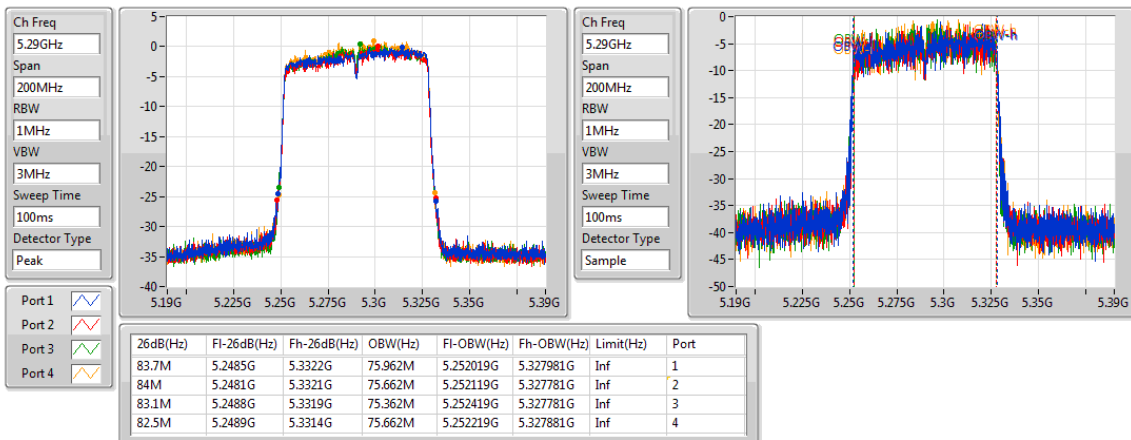
08/12/2017


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5210MHz

15/12/2017


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5290MHz

08/12/2017

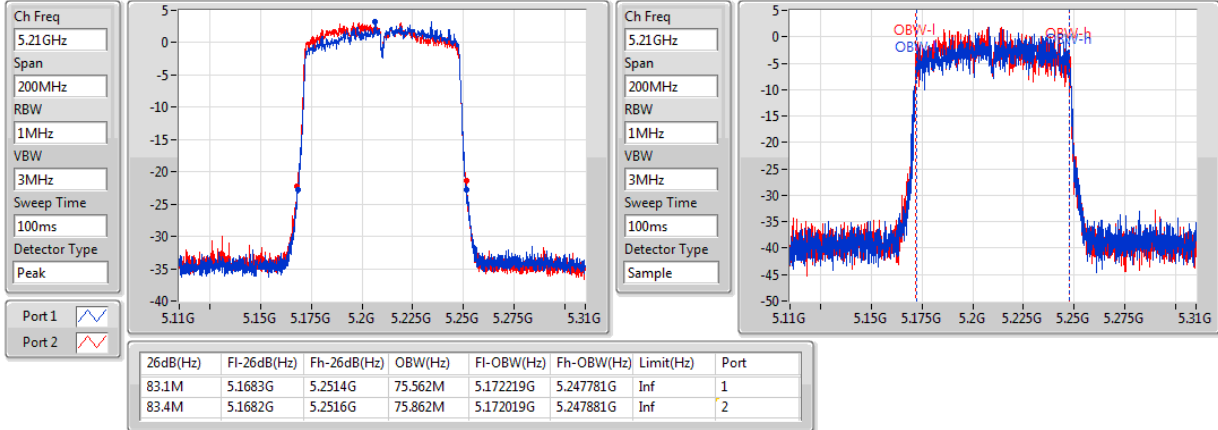


802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)

EBW

#5210MHz,5290MHz

08/12/2017

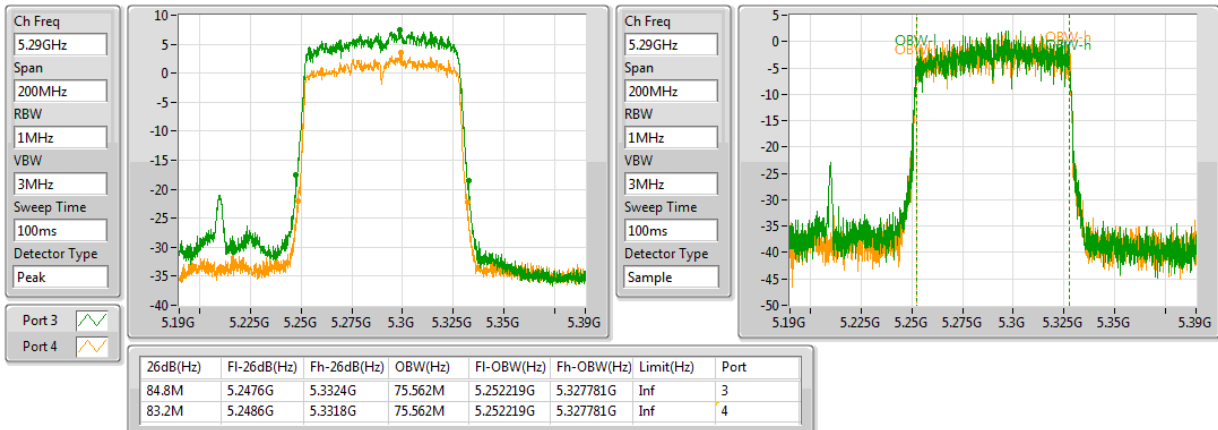


802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)

EBW

5210MHz,#5290MHz

08/12/2017



Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	13.57	0.02275	23.57	0.22751
802.11ac VHT20_Nss1,(MCS0)_4TX	13.84	0.02421	23.84	0.24210
802.11ac VHT40_Nss1,(MCS0)_4TX	16.68	0.04656	26.68	0.46559
802.11ac VHT80_Nss1,(MCS0)_4TX	19.32	0.08551	29.32	0.85507
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	19.74	0.09419	29.74	0.94189
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	13.71	0.02350	23.71	0.23496
802.11ac VHT20_Nss1,(MCS0)_4TX	13.74	0.02366	23.74	0.23659
802.11ac VHT40_Nss1,(MCS0)_4TX	16.84	0.04831	26.84	0.48306
802.11ac VHT80_Nss1,(MCS0)_4TX	19.62	0.09162	29.62	0.91622
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	19.89	0.09750	29.89	0.97499

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_TnomVnom	Pass	10.00	7.83	7.22	7.09	8.00	13.57	20.00	23.57	30.00
5200MHz_TnomVnom	Pass	10.00	7.38	6.63	6.84	7.95	13.25	20.00	23.25	30.00
5240MHz_TnomVnom	Pass	10.00	7.30	7.03	7.33	7.72	13.37	20.00	23.37	30.00
5260MHz_TnomVnom	Pass	10.00	7.89	7.50	7.73	7.64	13.71	19.82	23.71	30.00
5300MHz_TnomVnom	Pass	10.00	7.90	7.20	7.98	7.48	13.67	19.84	23.67	30.00
5320MHz_TnomVnom	Pass	10.00	7.13	7.06	7.45	8.29	13.53	19.88	23.53	30.00
802.11ac_VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	10.00	7.54	7.05	7.00	7.85	13.40	20.00	23.40	30.00
5200MHz_TnomVnom	Pass	10.00	7.68	7.03	7.08	8.34	13.59	20.00	23.59	30.00
5240MHz_TnomVnom	Pass	10.00	8.05	7.27	7.65	8.23	13.84	20.00	23.84	30.00
5260MHz_TnomVnom	Pass	10.00	7.61	7.85	8.06	7.33	13.74	20.00	23.74	30.00
5300MHz_TnomVnom	Pass	10.00	7.70	6.90	7.76	7.51	13.50	20.00	23.50	30.00
5320MHz_TnomVnom	Pass	10.00	7.62	7.25	7.82	7.86	13.66	20.00	23.66	30.00
802.11ac_VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	10.00	10.43	10.73	10.55	10.76	16.64	20.00	26.64	30.00
5230MHz_TnomVnom	Pass	10.00	10.58	10.68	10.58	10.78	16.68	20.00	26.68	30.00
5270MHz_TnomVnom	Pass	10.00	10.82	11.18	11.04	10.15	16.84	20.00	26.84	30.00
5310MHz_TnomVnom	Pass	10.00	10.63	10.63	10.93	10.16	16.62	20.00	26.62	30.00
802.11ac_VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	10.00	13.25	13.37	13.15	13.41	19.32	20.00	29.32	30.00
5290MHz_TnomVnom	Pass	10.00	13.58	13.87	13.83	13.07	19.62	20.00	29.62	30.00
802.11ac_VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz_TnomVnom	Pass	10.00	16.85	16.61			19.74	20.00	29.74	30.00
802.11ac_VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	-	-	-	-	-	-	-	-	-	-
5210MHz,#5290MHz_TnomVnom	Pass	10.00			17.26	16.47	19.89	20.00	29.89	30.00

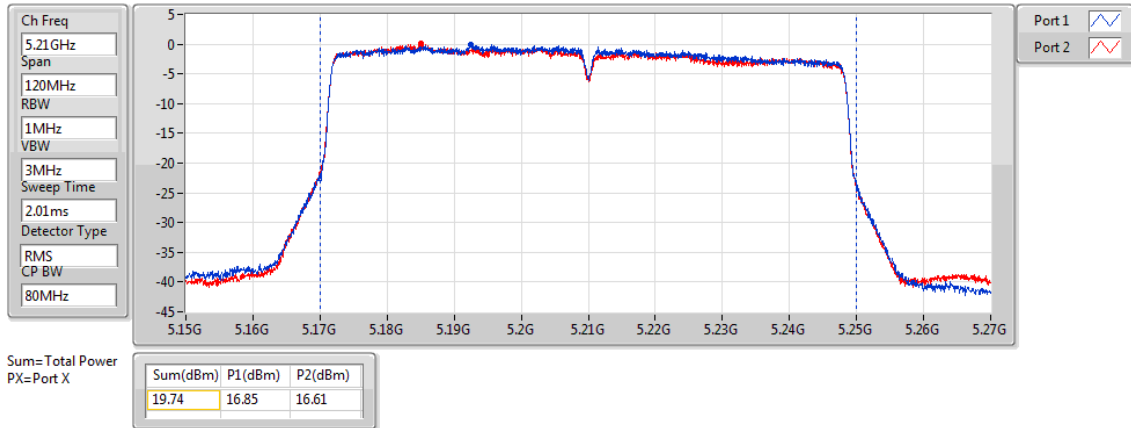
DG = Directional Gain; **Port X** = Port X output power

802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)

AV Power

#5210MHz,5290MHz

26/12/2017



802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)

AV Power

5210MHz,#5290MHz

26/12/2017



Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	9.15	0.00822	24.15	0.26002
802.11ac VHT20_Nss1,(MCS0)_4TX	8.88	0.00773	23.88	0.24434
802.11ac VHT40_Nss1,(MCS0)_4TX	12.18	0.01652	27.18	0.52240
802.11ac VHT80_Nss1,(MCS0)_4TX	14.62	0.02897	29.62	0.91622
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	14.44	0.02780	29.44	0.87902
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	8.79	0.00757	23.79	0.23933
802.11ac VHT20_Nss1,(MCS0)_4TX	8.56	0.00718	23.56	0.22699
802.11ac VHT40_Nss1,(MCS0)_4TX	11.57	0.01435	26.57	0.45394
802.11ac VHT80_Nss1,(MCS0)_4TX	14.89	0.03083	29.89	0.97499
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	14.68	0.02938	29.68	0.92897

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	15.00	2.30	2.89	2.85	2.85	8.75	15.00	23.75	30.00
5200MHz	Pass	15.00	2.92	3.32	3.26	3.02	9.15	15.00	24.15	30.00
5240MHz	Pass	15.00	2.11	2.30	2.35	2.37	8.30	15.00	23.30	30.00
5260MHz	Pass	15.00	2.72	2.64	2.91	2.80	8.79	14.87	23.79	30.00
5300MHz	Pass	15.00	2.36	2.21	3.12	2.62	8.61	14.82	23.61	30.00
5320MHz	Pass	15.00	2.31	2.47	2.66	2.43	8.49	14.88	23.49	30.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	15.00	2.07	2.76	2.60	2.34	8.47	15.00	23.47	30.00
5200MHz	Pass	15.00	3.16	2.54	3.10	2.59	8.88	15.00	23.88	30.00
5240MHz	Pass	15.00	2.67	2.79	2.90	2.77	8.80	15.00	23.80	30.00
5260MHz	Pass	15.00	2.23	2.44	2.78	2.70	8.56	15.00	23.56	30.00
5300MHz	Pass	15.00	1.98	2.14	2.75	2.29	8.32	15.00	23.32	30.00
5320MHz	Pass	15.00	2.28	2.31	2.59	2.22	8.37	15.00	23.37	30.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	15.00	6.13	6.35	6.16	6.01	12.18	15.00	27.18	30.00
5230MHz	Pass	15.00	5.70	5.56	5.49	5.64	11.62	15.00	26.62	30.00
5270MHz	Pass	15.00	5.02	4.98	5.65	5.61	11.35	15.00	26.35	30.00
5310MHz	Pass	15.00	5.61	5.19	5.88	5.47	11.57	15.00	26.57	30.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	15.00	8.99	8.14	8.48	8.73	14.62	15.00	29.62	30.00
5290MHz	Pass	15.00	8.85	8.49	8.82	9.29	14.89	15.00	29.89	30.00
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	15.00	11.29	11.56			14.44	15.00	29.44	30.00
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	-	-	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	15.00			11.79	11.55	14.68	15.00	29.68	30.00

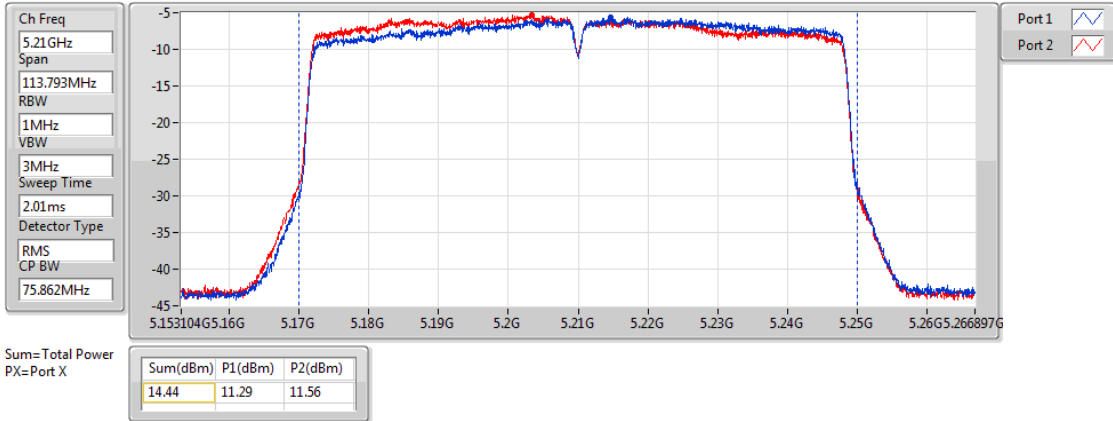
DG = Directional Gain;**Port X** = Port X output power

802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)

AV Power

#5210MHz,5290MHz

08/12/2017



802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)

AV Power

5210MHz,#5290MHz

08/12/2017



**Summary**

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	0.68	16.70
802.11ac VHT20_Nss1,(MCS0)_4TX	0.93	16.95
802.11ac VHT40_Nss1,(MCS0)_4TX	0.69	16.71
802.11ac VHT80_Nss1,(MCS0)_4TX	0.10	16.12
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	1.00	14.01
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	0.95	16.97
802.11ac VHT20_Nss1,(MCS0)_4TX	0.81	16.83
802.11ac VHT40_Nss1,(MCS0)_4TX	0.95	16.97
802.11ac VHT80_Nss1,(MCS0)_4TX	0.64	16.66
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	0.84	13.85

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_TnomVnom	Pass	16.02	-4.99	-5.56	-5.69	-4.61	0.68	0.98	16.70	17.00
5200MHz_TnomVnom	Pass	16.02	-5.39	-6.00	-6.04	-4.70	0.45	0.98	16.47	17.00
5240MHz_TnomVnom	Pass	16.02	-5.41	-5.91	-5.52	-5.06	0.52	0.98	16.54	17.00
5260MHz_TnomVnom	Pass	16.02	-4.86	-5.36	-5.14	-5.31	0.80	0.98	16.82	17.00
5300MHz_TnomVnom	Pass	16.02	-4.77	-5.53	-4.59	-4.95	0.95	0.98	16.97	17.00
5320MHz_TnomVnom	Pass	16.02	-5.60	-5.82	-5.30	-4.38	0.72	0.98	16.74	17.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	16.02	-4.99	-5.20	-5.38	-4.39	0.51	0.98	16.53	17.00
5200MHz_TnomVnom	Pass	16.02	-4.87	-5.30	-5.56	-4.13	0.67	0.98	16.69	17.00
5240MHz_TnomVnom	Pass	16.02	-4.58	-5.23	-4.53	-4.32	0.93	0.98	16.95	17.00
5260MHz_TnomVnom	Pass	16.02	-4.99	-4.89	-4.46	-5.18	0.80	0.98	16.82	17.00
5300MHz_TnomVnom	Pass	16.02	-4.44	-5.52	-4.73	-4.86	0.66	0.98	16.68	17.00
5320MHz_TnomVnom	Pass	16.02	-4.74	-4.97	-4.60	-4.44	0.81	0.98	16.83	17.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	16.02	-5.59	-5.05	-5.47	-5.26	0.55	0.98	16.57	17.00
5230MHz_TnomVnom	Pass	16.02	-5.38	-5.22	-5.42	-5.21	0.69	0.98	16.71	17.00
5270MHz_TnomVnom	Pass	16.02	-5.02	-4.49	-4.79	-5.90	0.95	0.98	16.97	17.00
5310MHz_TnomVnom	Pass	16.02	-5.21	-4.88	-4.98	-5.45	0.62	0.98	16.64	17.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	16.02	-5.85	-5.45	-5.84	-5.62	0.10	0.98	16.12	17.00
5290MHz_TnomVnom	Pass	16.02	-5.16	-4.78	-4.95	-5.78	0.64	0.98	16.66	17.00
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz_TnomVnom	Pass	13.01	-1.97	-1.88			1.00	3.99	14.01	17.00
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	-	-	-	-	-	-	-	-	-	-
5210MHz,#5290MHz_TnomVnom	Pass	13.01			-1.64	-2.75	0.84	3.99	13.85	17.00

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

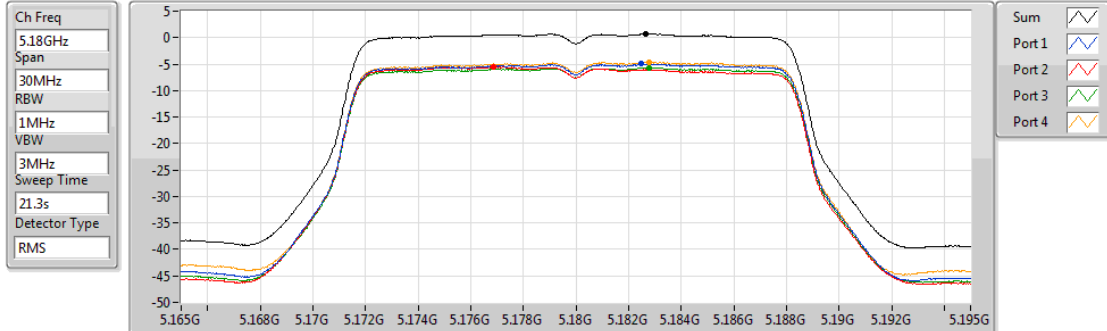
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

802.11a_Nss1,(6Mbps)_4TX

PSD

5180MHz

26/12/2017



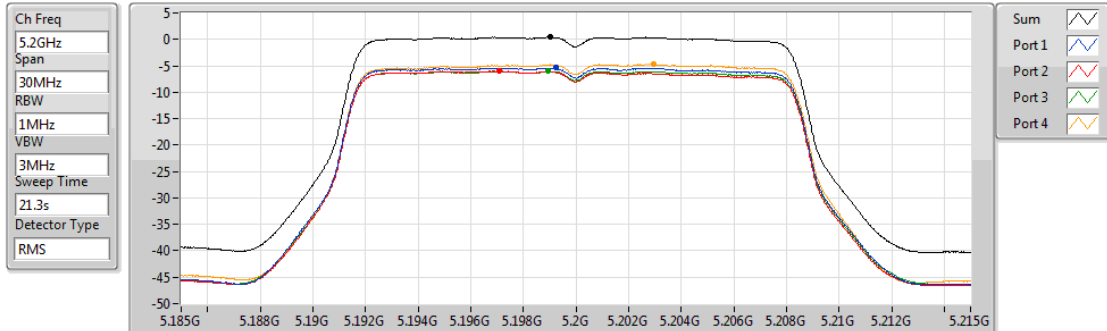
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
0.68	0.68	-4.99	-5.56	-5.69	-4.61

802.11a_Nss1,(6Mbps)_4TX

PSD

5200MHz

26/12/2017



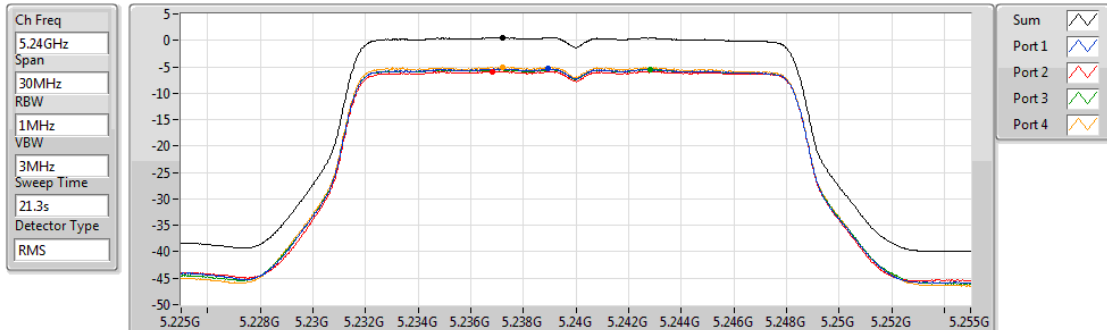
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
0.45	0.45	-5.39	-6.00	-6.04	-4.70

802.11a_Nss1,(6Mbps)_4TX

PSD

5240MHz

26/12/2017



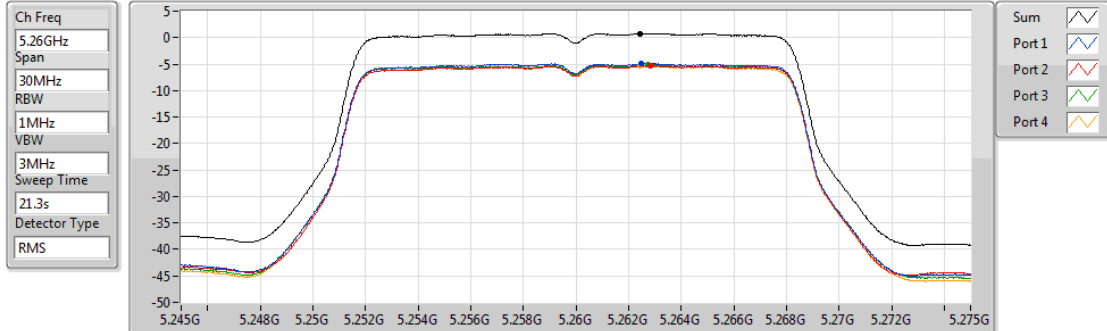
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
0.52	0.52	-5.41	-5.91	-5.52	-5.06

802.11a_Nss1,(6Mbps)_4TX

PSD

5260MHz

26/12/2017



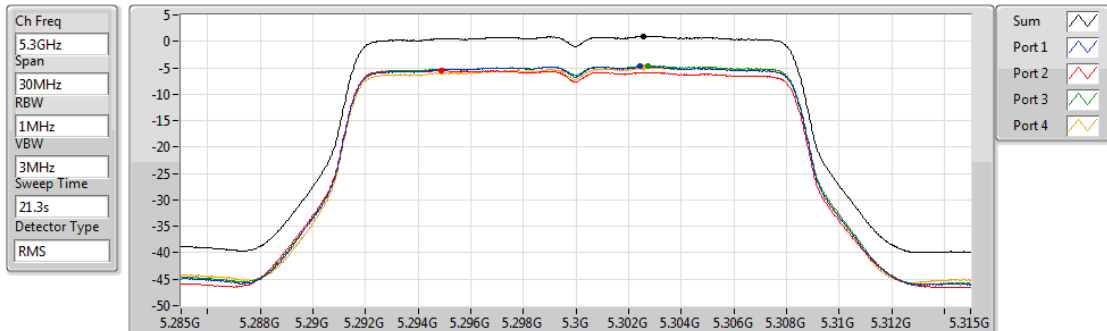
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.80	0.80	-4.86	-5.36	-5.14	-5.31

802.11a_Nss1,(6Mbps)_4TX

PSD

5300MHz

26/12/2017



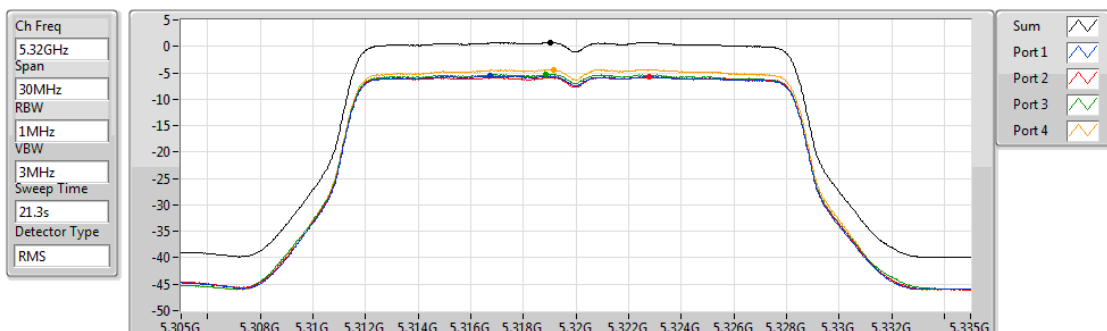
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.95	0.95	-4.77	-5.53	-4.59	-4.95

802.11a_Nss1,(6Mbps)_4TX

PSD

5320MHz

26/12/2017



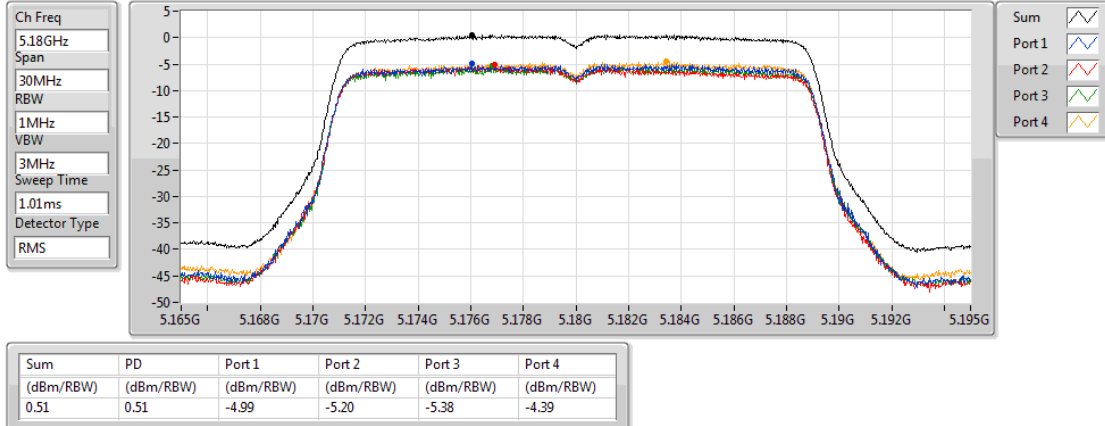
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.72	0.72	-5.60	-5.82	-5.30	-4.38

802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5180MHz

26/12/2017

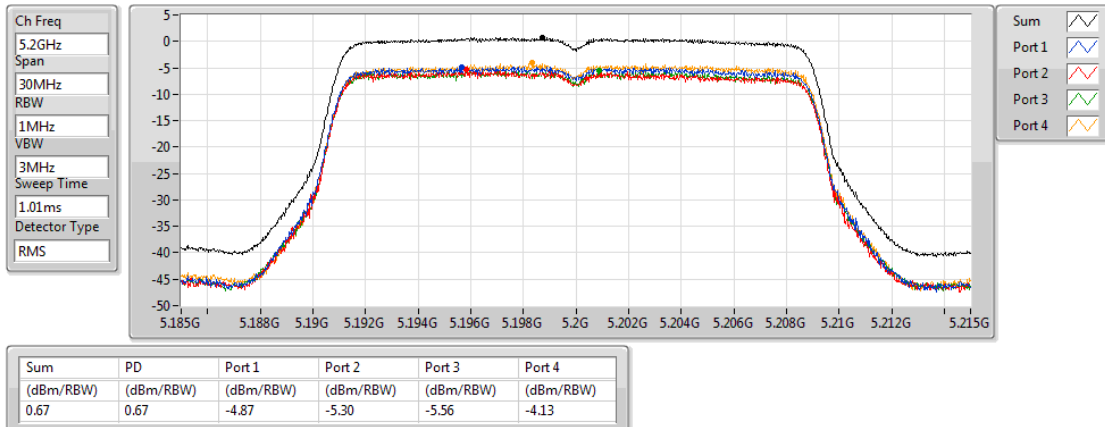


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5200MHz

26/12/2017

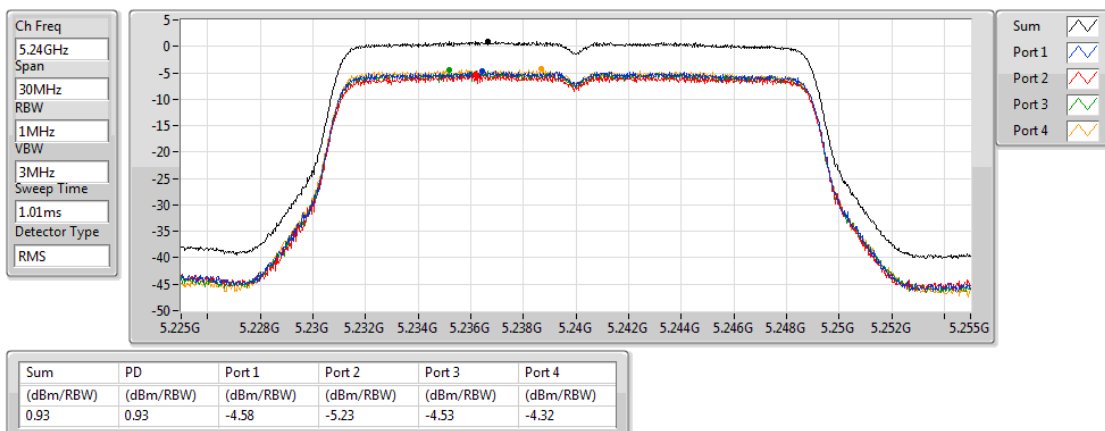


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5240MHz

26/12/2017

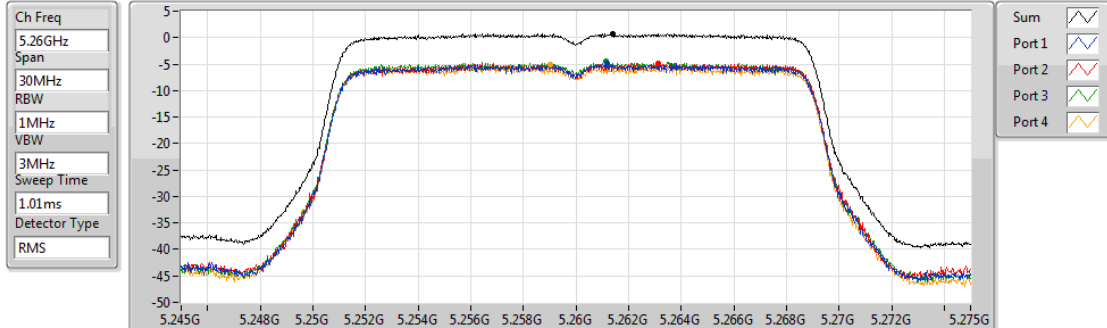


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5260MHz

26/12/2017



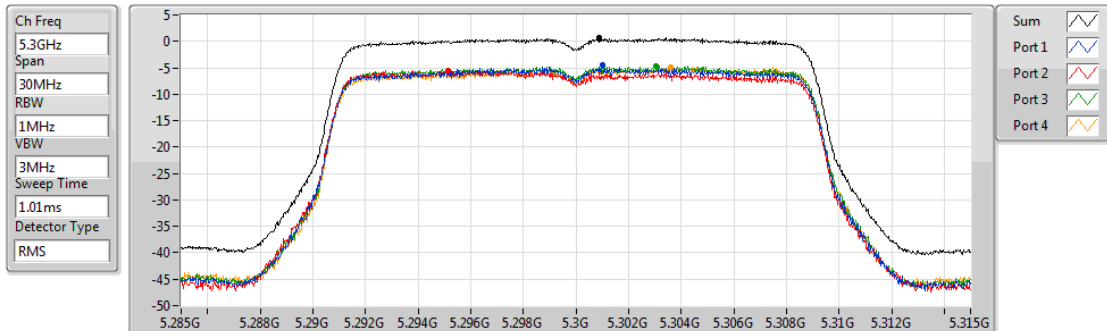
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.80	0.80	-4.99	-4.89	-4.46	-5.18

802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5300MHz

26/12/2017



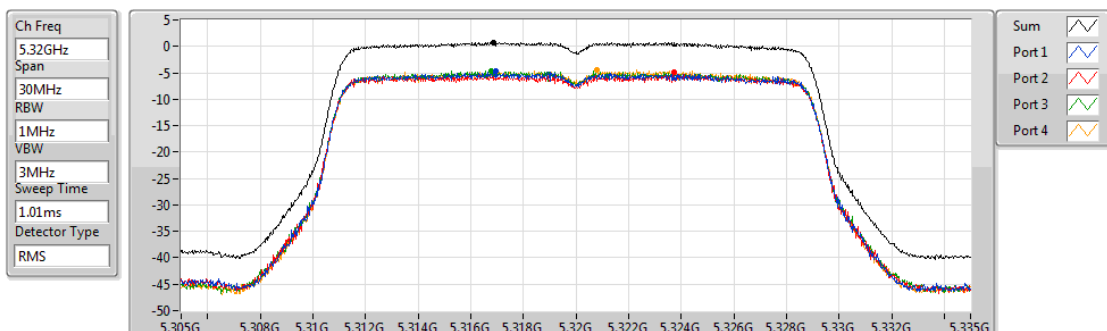
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.66	0.66	-4.44	-5.52	-4.73	-4.86

802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5320MHz

26/12/2017



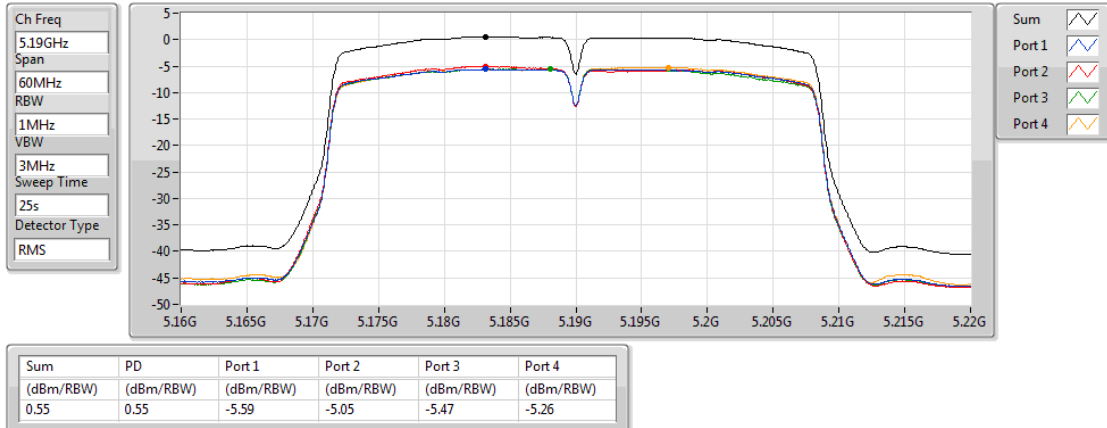
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.81	0.81	-4.74	-4.97	-4.60	-4.44

802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5190MHz

27/12/2017

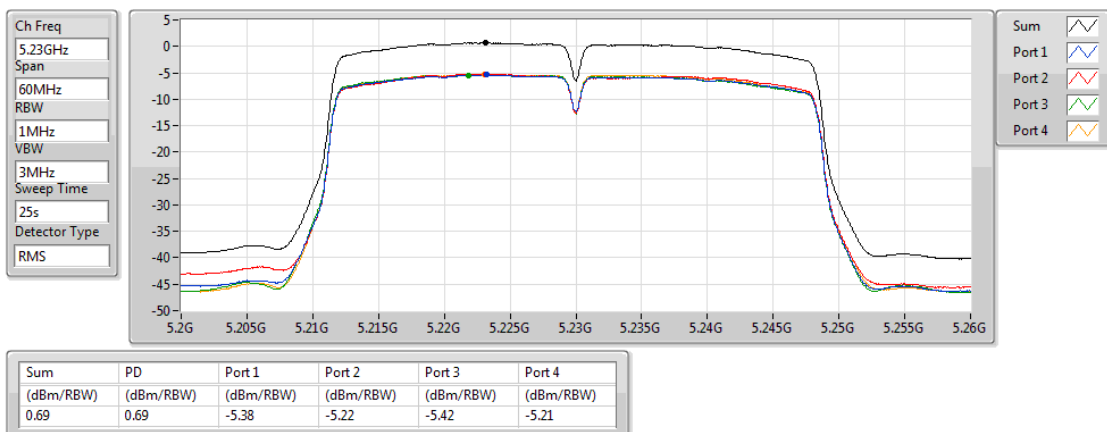


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5230MHz

27/12/2017

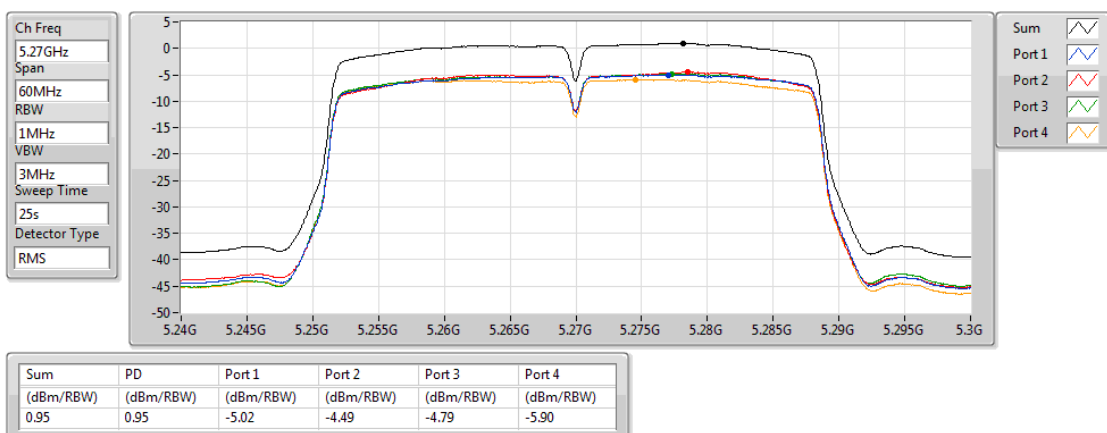


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5270MHz

27/12/2017

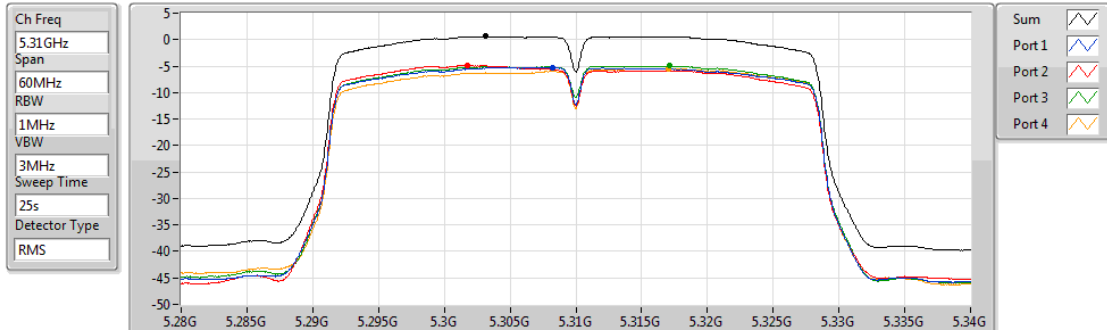


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5310MHz

27/12/2017



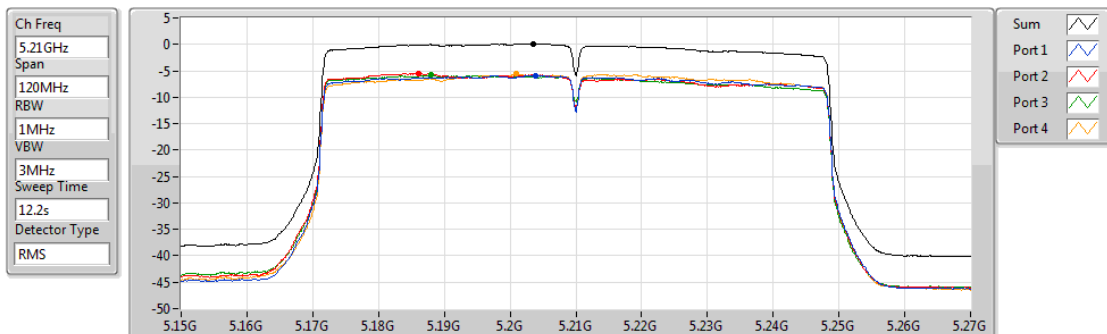
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.62	0.62	-5.21	-4.88	-4.98	-5.45

802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5210MHz

27/12/2017



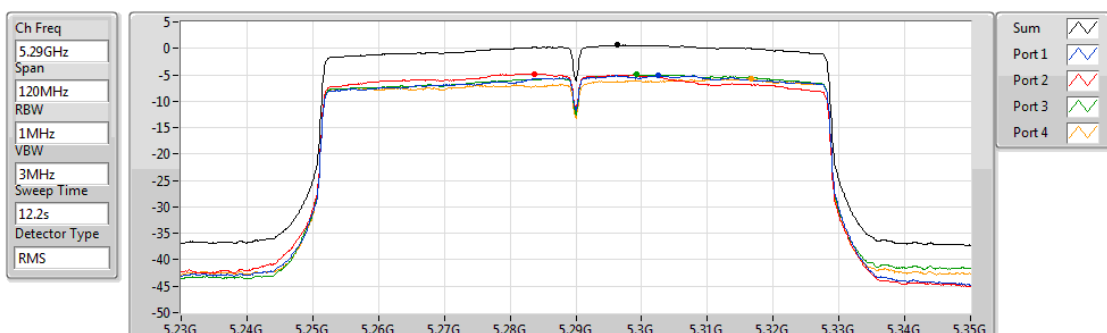
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.10	0.10	-5.85	-5.45	-5.84	-5.62

802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5290MHz

27/12/2017



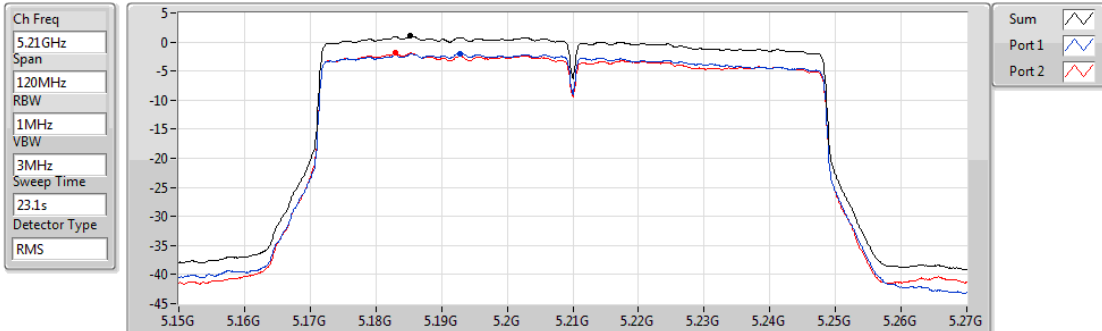
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.64	0.64	-5.16	-4.78	-4.95	-5.78

802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)

PSD

#5210MHz,5290MHz

26/12/2017



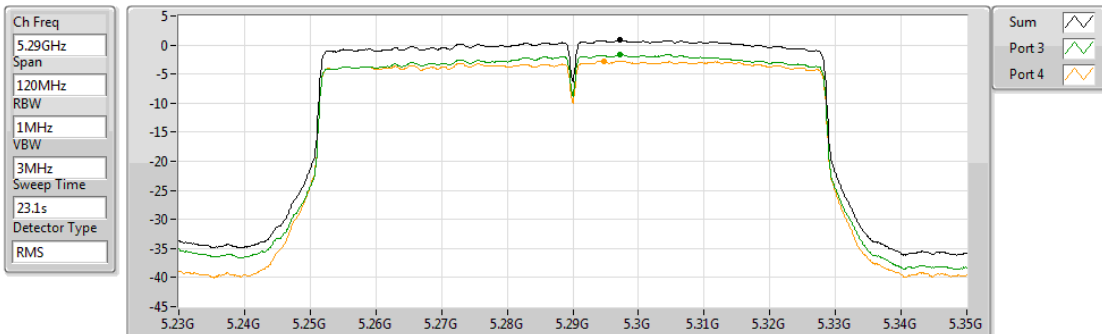
Sum	PD	Port 1	Port 2
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
1.00	1.00	-1.97	-1.88

802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)

PSD

5210MHz,#5290MHz

26/12/2017



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
0.84	0.84			-1.64	-2.75

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	-4.06	16.96
802.11ac VHT20_Nss1,(MCS0)_4TX	-4.18	16.84
802.11ac VHT40_Nss1,(MCS0)_4TX	-4.15	16.87
802.11ac VHT80_Nss1,(MCS0)_4TX	-4.76	16.26
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	-4.41	13.60
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	-4.10	16.92
802.11ac VHT20_Nss1,(MCS0)_4TX	-4.17	16.85
802.11ac VHT40_Nss1,(MCS0)_4TX	-4.24	16.78
802.11ac VHT80_Nss1,(MCS0)_4TX	-4.08	16.94
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	-4.22	13.79

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	21.02	-10.50	-10.30	-10.14	-10.30	-4.40	-4.02	16.62	17.00
5200MHz	Pass	21.02	-9.92	-9.86	-9.95	-10.09	-4.06	-4.02	16.96	17.00
5240MHz	Pass	21.02	-10.39	-10.55	-10.50	-10.34	-4.48	-4.02	16.54	17.00
5260MHz	Pass	21.02	-10.18	-10.16	-9.70	-9.85	-4.10	-4.02	16.92	17.00
5300MHz	Pass	21.02	-10.89	-10.20	-9.57	-9.84	-4.18	-4.02	16.84	17.00
5320MHz	Pass	21.02	-10.75	-10.09	-10.16	-10.19	-4.35	-4.02	16.67	17.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	21.02	-10.29	-9.75	-10.10	-9.97	-4.45	-4.02	16.57	17.00
5200MHz	Pass	21.02	-9.90	-9.57	-9.72	-9.95	-4.18	-4.02	16.84	17.00
5240MHz	Pass	21.02	-10.20	-10.21	-9.89	-9.96	-4.28	-4.02	16.74	17.00
5260MHz	Pass	21.02	-10.13	-10.03	-9.72	-9.52	-4.22	-4.02	16.80	17.00
5300MHz	Pass	21.02	-10.33	-9.97	-9.62	-9.44	-4.17	-4.02	16.85	17.00
5320MHz	Pass	21.02	-10.22	-10.14	-9.96	-10.13	-4.52	-4.02	16.50	17.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	21.02	-10.05	-9.65	-10.09	-10.10	-4.15	-4.02	16.87	17.00
5230MHz	Pass	21.02	-10.18	-10.59	-10.50	-10.37	-4.44	-4.02	16.58	17.00
5270MHz	Pass	21.02	-10.69	-10.73	-9.78	-9.89	-4.30	-4.02	16.72	17.00
5310MHz	Pass	21.02	-10.16	-10.32	-9.88	-10.14	-4.24	-4.02	16.78	17.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	21.02	-10.29	-10.84	-10.70	-10.47	-4.76	-4.02	16.26	17.00
5290MHz	Pass	21.02	-10.06	-10.25	-9.91	-9.42	-4.08	-4.02	16.94	17.00
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	18.01	-7.61	-7.05			-4.41	-1.01	13.60	17.00
802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)	-	-	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	18.01			-7.09	-7.36	-4.22	-1.01	13.79	17.00

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

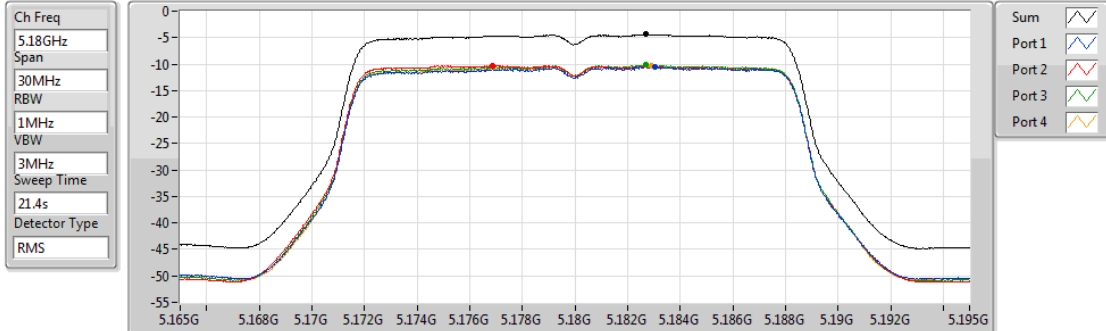
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

802.11a_Nss1,(6Mbps)_4TX

PSD

5180MHz

15/12/2017



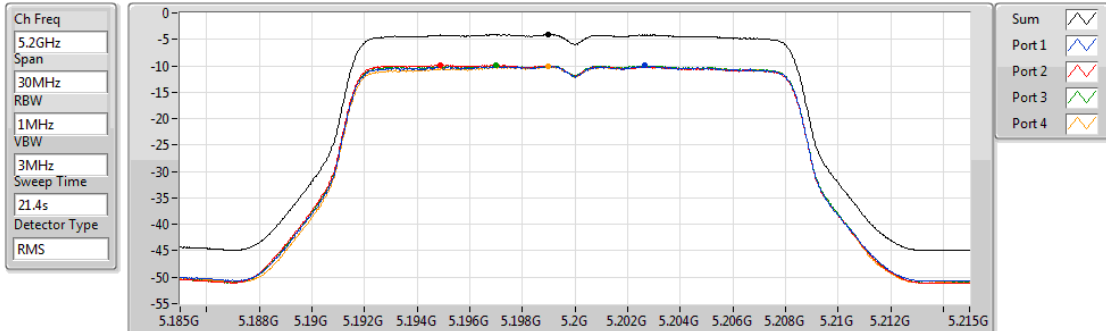
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.40	-4.40	-10.50	-10.30	-10.14	-10.30

802.11a_Nss1,(6Mbps)_4TX

PSD

5200MHz

15/12/2017



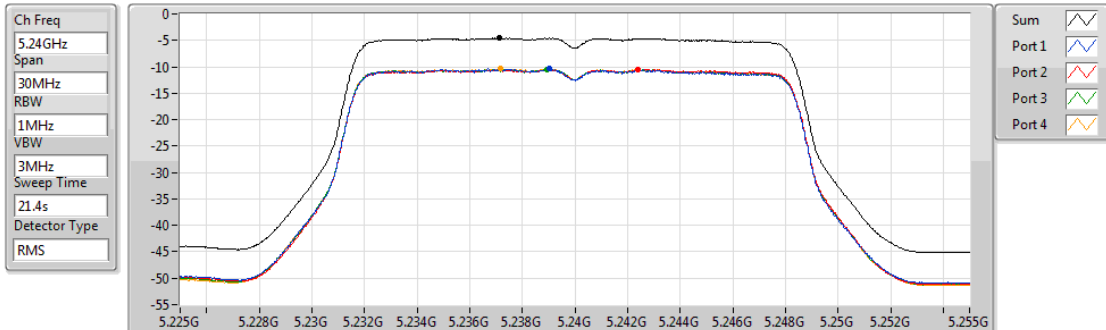
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.06	-4.06	-9.92	-9.86	-9.95	-10.09

802.11a_Nss1,(6Mbps)_4TX

PSD

5240MHz

15/12/2017



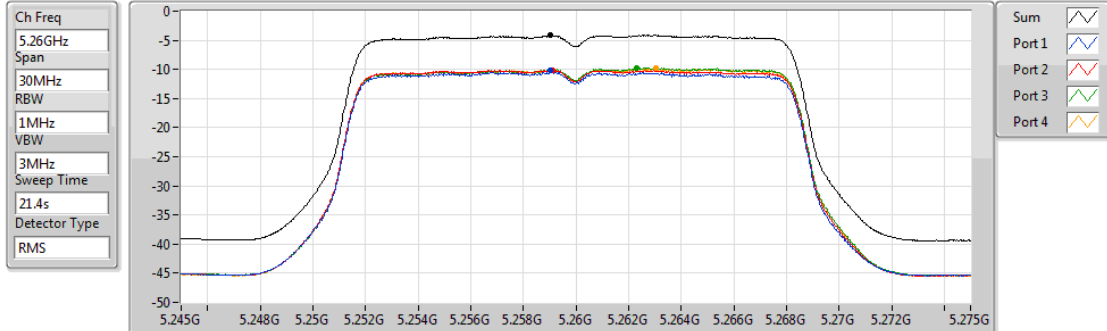
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.48	-4.48	-10.39	-10.55	-10.50	-10.34

802.11a_Nss1,(6Mbps)_4TX

PSD

5260MHz

08/12/2017



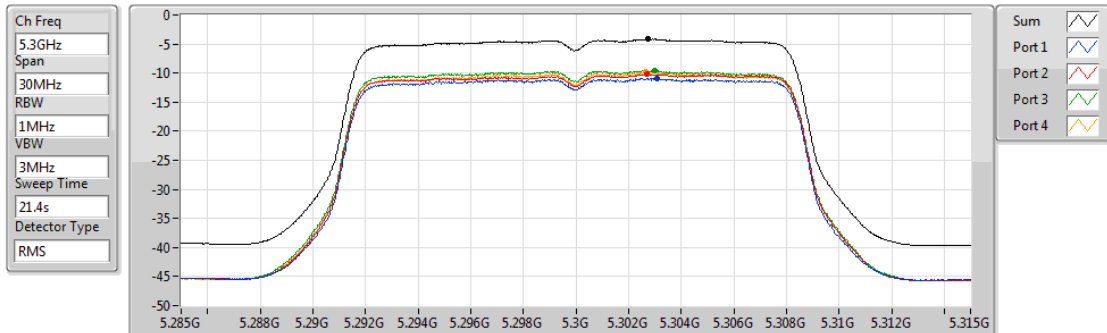
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.10	-4.10	-10.18	-10.16	-9.70	-9.85

802.11a_Nss1,(6Mbps)_4TX

PSD

5300MHz

08/12/2017



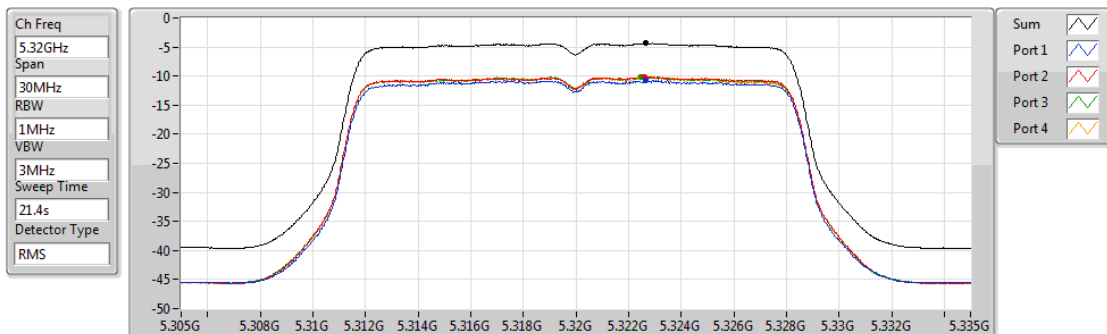
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.18	-4.18	-10.89	-10.20	-9.57	-9.84

802.11a_Nss1,(6Mbps)_4TX

PSD

5320MHz

08/12/2017



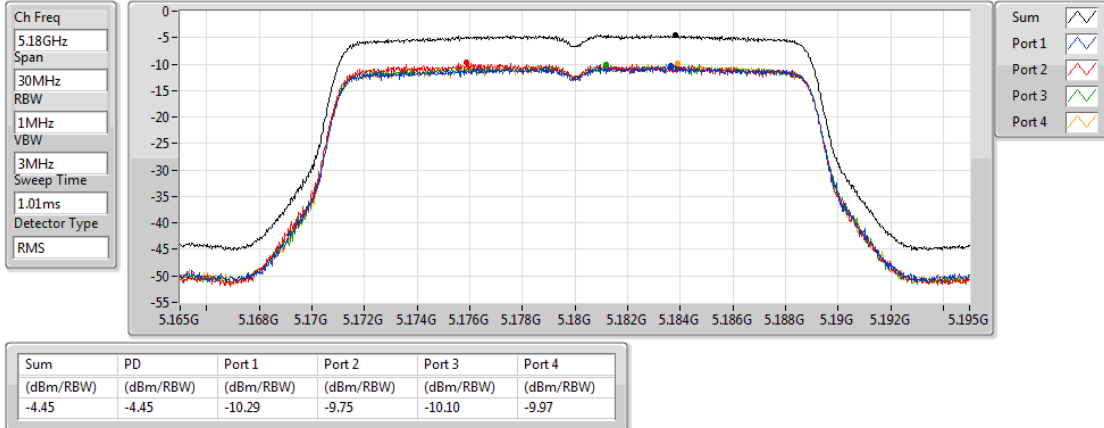
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.35	-4.35	-10.75	-10.09	-10.16	-10.19

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz

PSD

15/12/2017

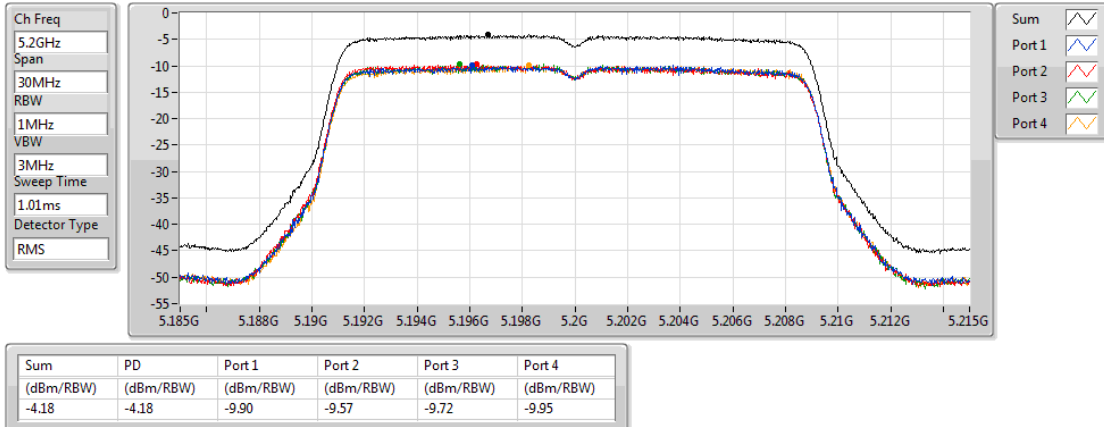


802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz

PSD

15/12/2017

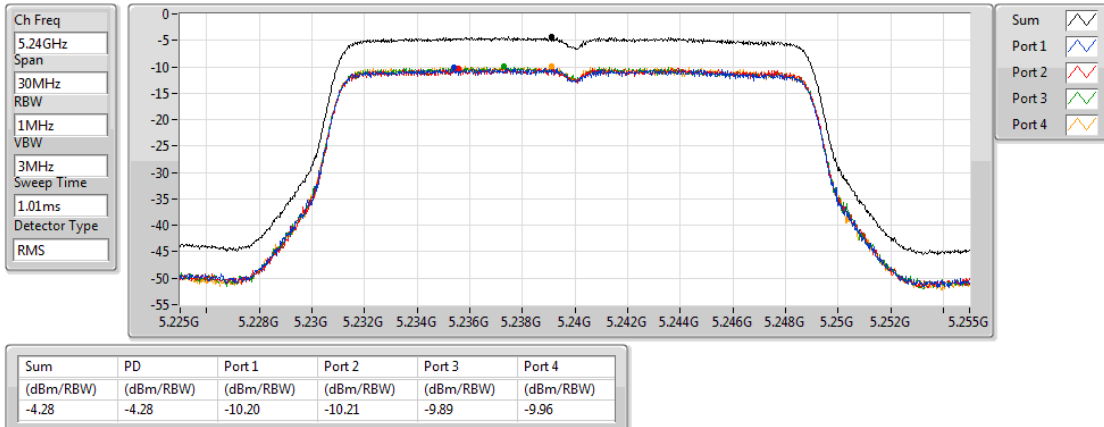


802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz

PSD

15/12/2017

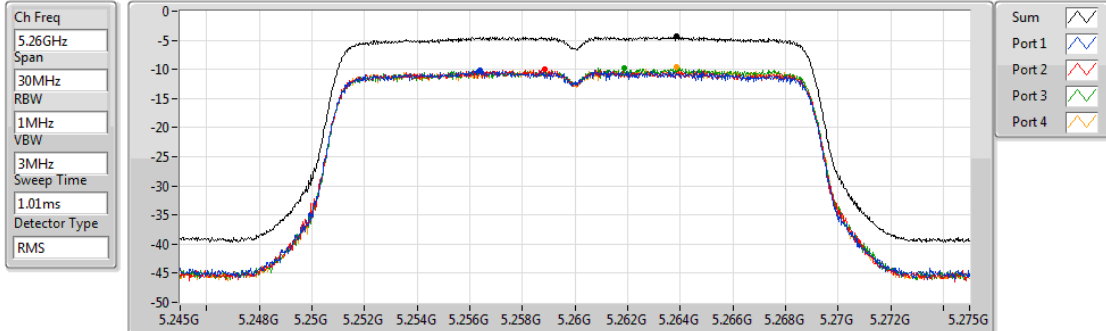


802.11ac VHT20_Nss1,(MCS0)_4TX

5260MHz

PSD

08/12/2017



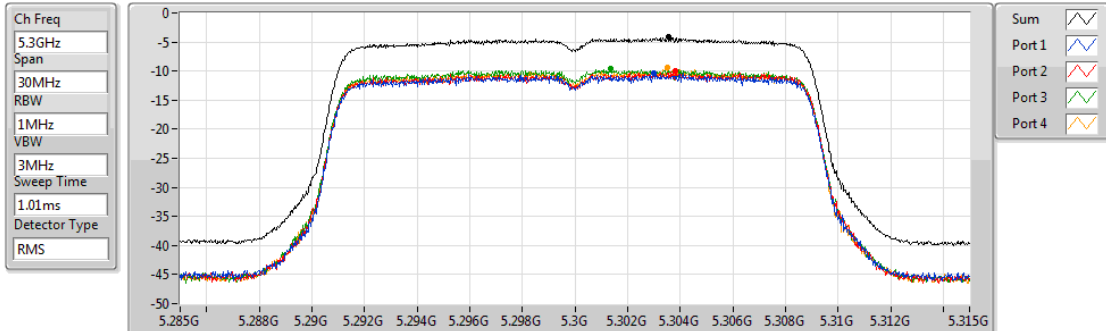
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.22	-4.22	-10.13	-10.03	-9.72	-9.52

802.11ac VHT20_Nss1,(MCS0)_4TX

5300MHz

PSD

08/12/2017



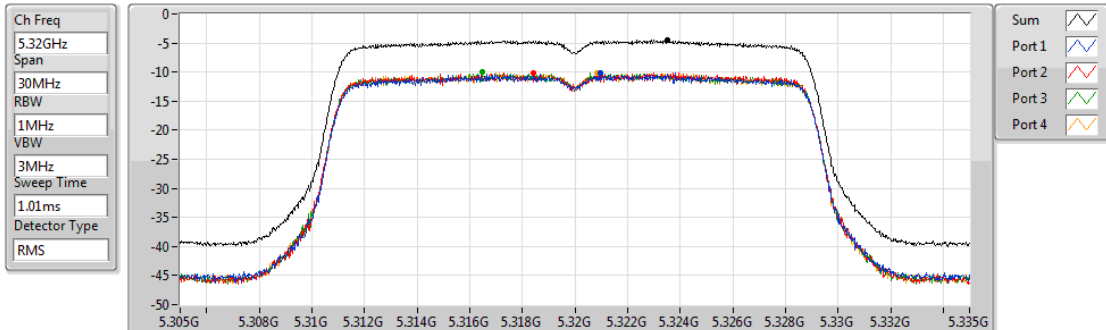
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.17	-4.17	-10.33	-9.97	-9.62	-9.44

802.11ac VHT20_Nss1,(MCS0)_4TX

5320MHz

PSD

08/12/2017



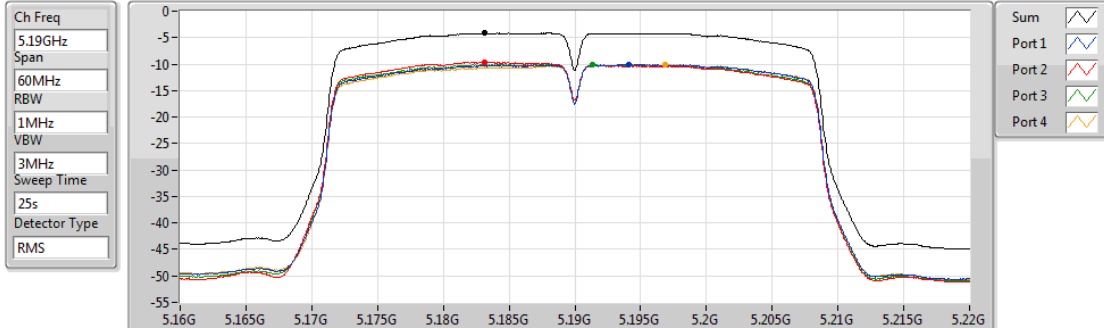
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.52	-4.52	-10.22	-10.14	-9.96	-10.13

802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5190MHz

15/12/2017



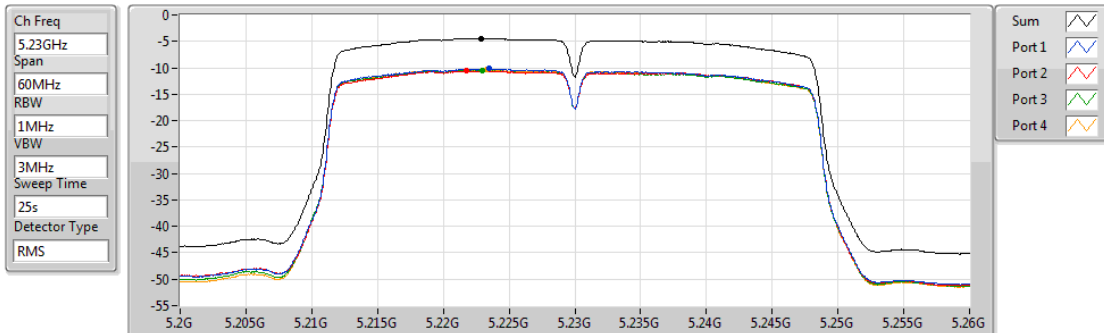
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.15	-4.15	-10.05	-9.65	-10.09	-10.10

802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5230MHz

15/12/2017



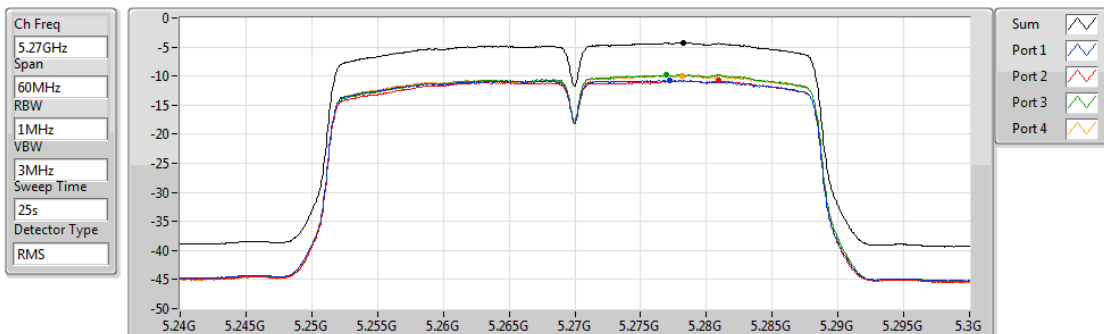
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.44	-4.44	-10.18	-10.59	-10.50	-10.37

802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5270MHz

08/12/2017



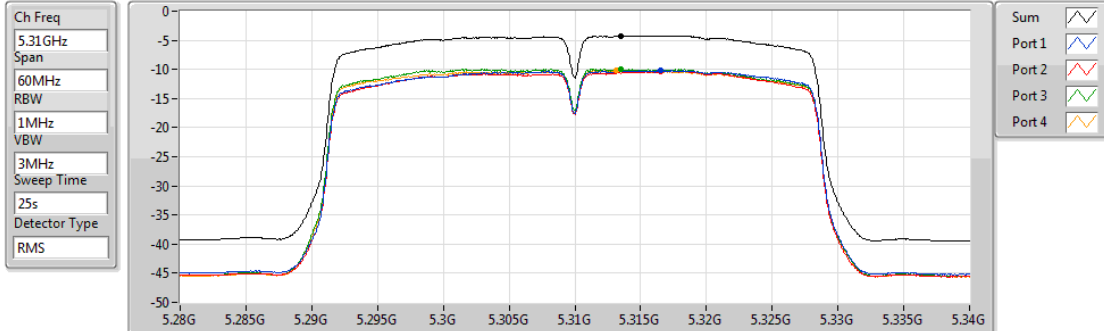
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.30	-4.30	-10.69	-10.73	-9.78	-9.89

802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5310MHz

08/12/2017



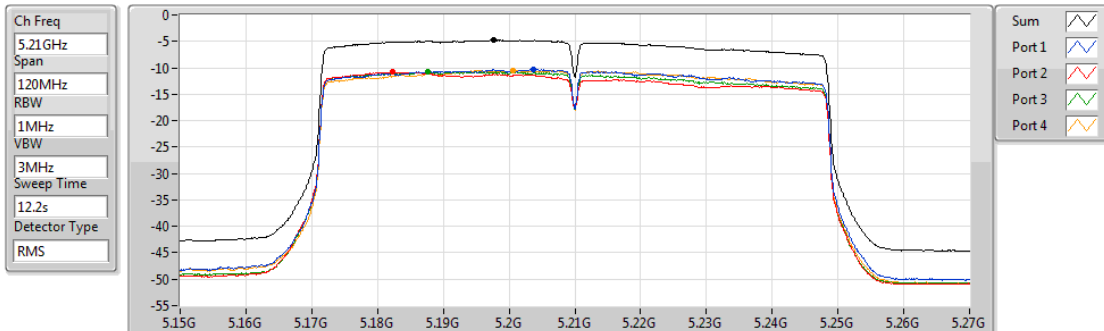
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.24	-4.24	-10.16	-10.32	-9.88	-10.14

802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5210MHz

15/12/2017



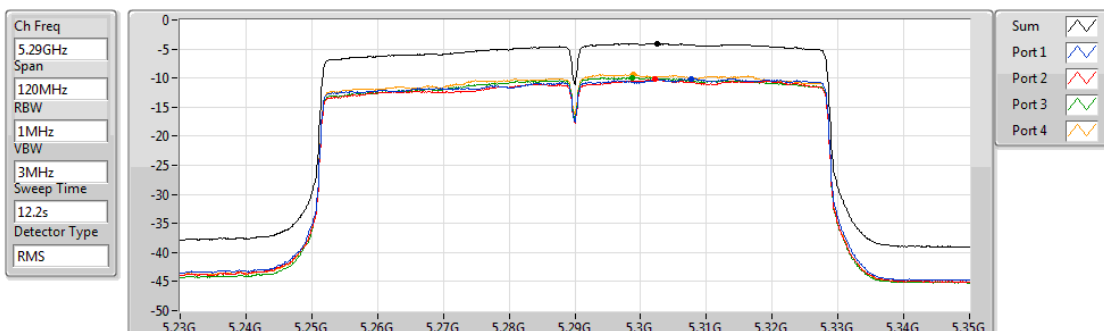
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.76	-4.76	-10.29	-10.84	-10.70	-10.47

802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5290MHz

08/12/2017



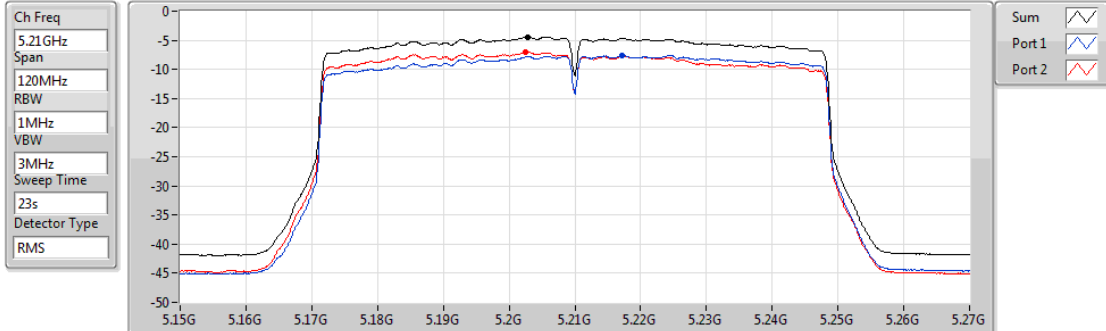
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.08	-4.08	-10.06	-10.25	-9.91	-9.42

802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port1&Port2)

PSD

#5210MHz,5290MHz

08/12/2017



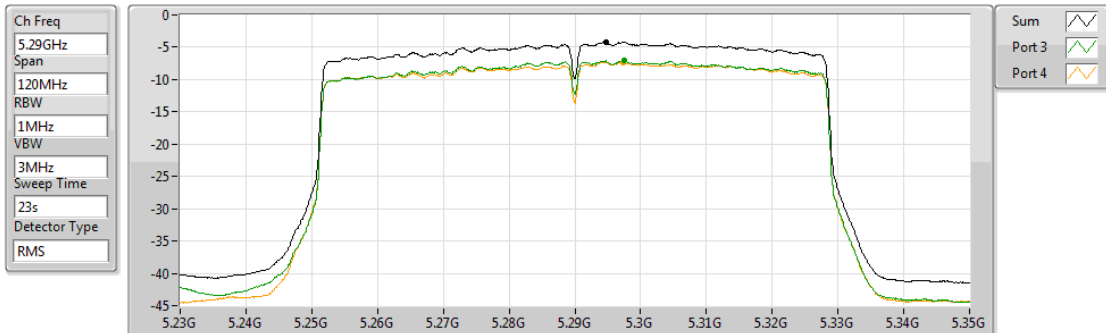
Sum	PD	Port 1	Port 2
(dBm/100MHz)	(dBm/100MHz)	(dBm/100MHz)	(dBm/100MHz)
-4.41	-4.41	-7.61	-7.05

802.11ac VHT80+80_Nss2,(MCS0)_4TX(Port3&Port4)

PSD

5210MHz,#5290MHz

08/12/2017



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100MHz)	(dBm/100MHz)	(dBm/100MHz)	(dBm/100MHz)	(dBm/100MHz)	(dBm/100MHz)
-4.22	-4.22			-7.09	-7.36



RSE TX below 1GHz Result (Antenna Gain 10 dBi)

Appendix E.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80+80_Nss2,(MCS0)_4TX	Pass	QP	41.64M	38.57	40.00	-1.43	-18.52	3	Vertical	328	1.00	-

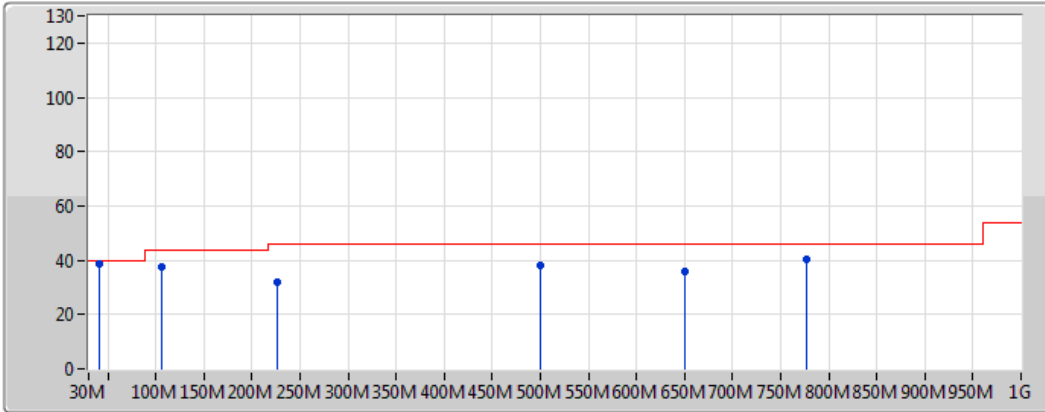
Result

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+80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
#5210#5290MHz	Pass	PK	220.12M	40.72	46.00	-5.28	-19.70	3	Horizontal	360	1.00	-
#5210#5290MHz	Pass	PK	291.9M	42.75	46.00	-3.25	-15.28	3	Horizontal	360	1.00	-
#5210#5290MHz	Pass	PK	410.24M	33.21	46.00	-12.79	-11.76	3	Horizontal	360	1.00	-
#5210#5290MHz	Pass	PK	499.48M	33.74	46.00	-12.26	-9.76	3	Horizontal	360	1.00	-
#5210#5290MHz	Pass	PK	579.02M	33.21	46.00	-12.79	-8.50	3	Horizontal	360	1.00	-
#5210#5290MHz	Pass	QP	105.66M	39.81	43.50	-3.69	-19.40	3	Horizontal	125	1.24	-
#5210#5290MHz	Pass	PK	105.66M	37.47	43.50	-6.03	-19.40	3	Vertical	0	1.00	-
#5210#5290MHz	Pass	PK	225.94M	31.73	46.00	-14.27	-19.01	3	Vertical	0	1.00	-
#5210#5290MHz	Pass	PK	499.48M	38.11	46.00	-7.89	-9.76	3	Vertical	0	1.00	-
#5210#5290MHz	Pass	PK	650.8M	36.08	46.00	-9.92	-7.26	3	Vertical	0	1.00	-
#5210#5290MHz	Pass	PK	776.9M	40.57	46.00	-5.43	-5.33	3	Vertical	0	1.00	-
#5210#5290MHz	Pass	QP	41.64M	38.57	40.00	-1.43	-18.52	3	Vertical	328	1.00	-

802.11ac VHT80+80_Nss2,(MCS0)_4TX

#5210#5290MHz_PoE

20/12/2017



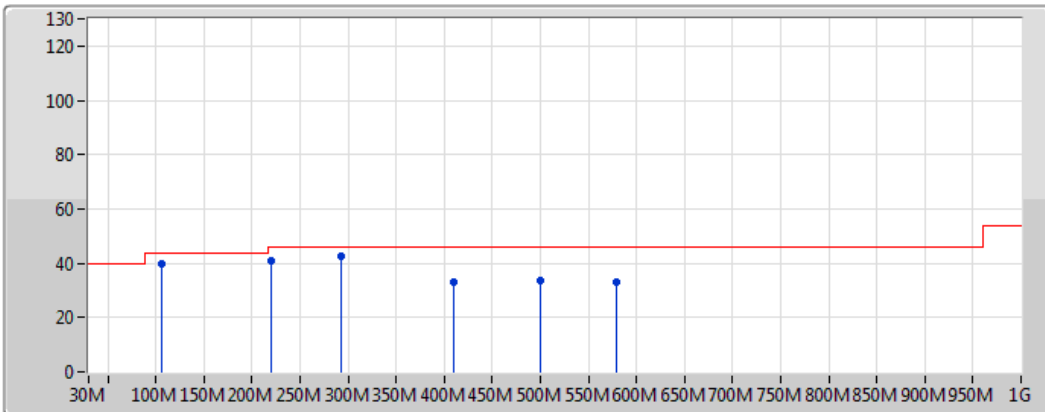
Lim.PK
PK

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	105.66M	37.47	43.50	-6.03	-19.40	3	Vertical	0	1.00	-	56.87	15.72	1.66	36.78
PK	225.94M	31.73	46.00	-14.27	-19.01	3	Vertical	0	1.00	-	50.74	14.95	2.44	36.40
PK	499.48M	38.11	46.00	-7.89	-9.76	3	Vertical	0	1.00	-	47.87	23.22	3.94	36.92
PK	650.8M	36.08	46.00	-9.92	-7.26	3	Vertical	0	1.00	-	43.34	25.59	4.42	37.27
PK	776.9M	40.57	46.00	-5.43	-5.33	3	Vertical	0	1.00	-	45.90	27.36	4.76	37.45
QP	41.64M	38.57	40.00	-1.43	-18.52	3	Vertical	328	1.00	-	57.09	17.63	1.08	37.22

802.11ac VHT80+80_Nss2,(MCS0)_4TX

#5210#5290MHz_PoE

20/12/2017



Lim.PK
PK

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	220.12M	40.72	46.00	-5.28	-19.70	3	Horizontal	360	1.00	-	60.42	14.29	2.40	36.39
PK	291.9M	42.75	46.00	-3.25	-15.28	3	Horizontal	360	1.00	-	58.03	18.23	2.92	36.43
PK	410.24M	33.21	46.00	-12.79	-11.76	3	Horizontal	360	1.00	-	44.97	21.52	3.36	36.64
PK	499.48M	33.74	46.00	-12.26	-9.76	3	Horizontal	360	1.00	-	43.50	23.22	3.94	36.92
PK	579.02M	33.21	46.00	-12.79	-8.50	3	Horizontal	360	1.00	-	41.71	24.54	4.09	37.14
QP	105.66M	39.81	43.50	-3.69	-19.40	3	Horizontal	125	1.24	-	59.21	15.72	1.66	36.78

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	5.1452G	53.83	54.00	-0.17	2.73	3	Vertical	0	2.07	-
802.11ac VHT20_Nss1,(MCS0)_4TX	Pass	AV	5.149995G	53.85	54.00	-0.15	2.73	3	Vertical	0	1.70	-
802.11ac VHT40_Nss1,(MCS0)_4TX	Pass	AV	5.1492G	53.76	54.00	-0.24	2.73	3	Vertical	356	2.18	-
802.11ac VHT80_Nss1,(MCS0)_4TX	Pass	AV	5.145G	53.50	54.00	-0.50	2.73	3	Vertical	23	1.35	-
802.11ac VHT80+80_Nss2,(MCS0)_4TX	Pass	AV	5.350005G	53.29	54.00	-0.71	2.85	3	Horizontal	13	1.64	-
5.25-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	AV	5.350005G	53.87	54.00	-0.13	2.85	3	Vertical	2	1.62	-
802.11ac VHT20_Nss1,(MCS0)_4TX	Pass	AV	5.350005G	53.85	54.00	-0.15	2.85	3	Vertical	0	1.63	-
802.11ac VHT40_Nss1,(MCS0)_4TX	Pass	AV	5.3536G	53.90	54.00	-0.10	2.85	3	Vertical	358	1.78	-
802.11ac VHT80_Nss1,(MCS0)_4TX	Pass	AV	5.353G	53.52	54.00	-0.48	2.85	3	Vertical	21	1.52	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.1484G	45.52	54.00	-8.48	2.73	3	Horizontal	6	1.19	-
5180MHz	Pass	AV	5.1792G	102.25	Inf	-Inf	2.75	3	Horizontal	6	1.19	-
5180MHz	Pass	PK	5.1392G	57.94	74.00	-16.06	2.72	3	Horizontal	6	1.19	-
5180MHz	Pass	PK	5.1792G	112.38	Inf	-Inf	2.75	3	Horizontal	6	1.19	-
5180MHz	Pass	AV	5.149995G	53.82	54.00	-0.18	2.73	3	Vertical	359	1.82	-
5180MHz	Pass	AV	5.185G	104.60	Inf	-Inf	2.75	3	Vertical	359	1.82	-
5180MHz	Pass	PK	5.1494G	65.39	74.00	-8.61	2.73	3	Vertical	359	1.82	-
5180MHz	Pass	PK	5.1856G	114.56	Inf	-Inf	2.75	3	Vertical	359	1.82	-
5180MHz	Pass	AV	15.5349G	48.75	54.00	-5.25	14.12	3	Horizontal	13	2.41	-
5180MHz	Pass	PK	15.53106G	60.56	74.00	-13.44	14.14	3	Horizontal	13	2.41	-
5180MHz	Pass	AV	15.53604G	49.95	54.00	-4.05	14.12	3	Vertical	194	1.68	-
5180MHz	Pass	PK	15.53682G	60.66	74.00	-13.34	14.12	3	Vertical	194	1.68	-
5200MHz	Pass	AV	5.149995G	48.42	54.00	-5.58	2.73	3	Horizontal	13	1.73	-
5200MHz	Pass	AV	5.2032G	104.81	Inf	-Inf	2.76	3	Horizontal	13	1.73	-
5200MHz	Pass	PK	5.1492G	60.86	74.00	-13.14	2.73	3	Horizontal	13	1.73	-
5200MHz	Pass	PK	5.2032G	115.16	Inf	-Inf	2.76	3	Horizontal	13	1.73	-
5200MHz	Pass	AV	5.1464G	53.58	54.00	-0.42	2.73	3	Vertical	0	1.74	-
5200MHz	Pass	AV	5.2052G	107.13	Inf	-Inf	2.76	3	Vertical	0	1.74	-
5200MHz	Pass	PK	5.1476G	67.50	74.00	-6.50	2.73	3	Vertical	0	1.74	-
5200MHz	Pass	PK	5.2044G	117.27	Inf	-Inf	2.76	3	Vertical	0	1.74	-
5200MHz	Pass	AV	10.3979G	45.12	54.00	-8.88	12.43	3	Horizontal	175	1.22	-
5200MHz	Pass	AV	15.5991G	48.74	54.00	-5.26	13.82	3	Horizontal	321	1.65	-
5200MHz	Pass	PK	10.3962G	55.46	74.00	-18.54	12.43	3	Horizontal	175	1.22	-
5200MHz	Pass	PK	15.5969G	61.34	74.00	-12.66	13.83	3	Horizontal	321	1.65	-
5200MHz	Pass	AV	10.3963G	49.90	54.00	-4.10	12.43	3	Vertical	17	2.37	-
5200MHz	Pass	AV	15.5978G	52.04	54.00	-1.96	13.83	3	Vertical	88	1.39	-
5200MHz	Pass	PK	10.3979G	61.90	74.00	-12.10	12.43	3	Vertical	17	2.37	-
5200MHz	Pass	PK	15.5969G	64.37	74.00	-9.63	13.83	3	Vertical	88	1.39	-
5240MHz	Pass	AV	5.149995G	46.67	54.00	-7.33	2.73	3	Horizontal	356	1.04	-
5240MHz	Pass	AV	5.2406G	107.47	Inf	-Inf	2.78	3	Horizontal	356	1.04	-
5240MHz	Pass	AV	5.350005G	43.26	54.00	-10.74	2.85	3	Horizontal	356	1.04	-
5240MHz	Pass	PK	5.1488G	59.55	74.00	-14.45	2.73	3	Horizontal	356	1.04	-
5240MHz	Pass	PK	5.2418G	118.02	Inf	-Inf	2.79	3	Horizontal	356	1.04	-
5240MHz	Pass	PK	5.3792G	56.03	74.00	-17.97	2.87	3	Horizontal	356	1.04	-
5240MHz	Pass	AV	5.1452G	53.83	54.00	-0.17	2.73	3	Vertical	0	2.07	-
5240MHz	Pass	AV	5.2466G	108.35	Inf	-Inf	2.79	3	Vertical	0	2.07	-
5240MHz	Pass	AV	5.354G	47.38	54.00	-6.62	2.85	3	Vertical	0	2.07	-
5240MHz	Pass	PK	5.1458G	68.20	74.00	-5.80	2.73	3	Vertical	0	2.07	-
5240MHz	Pass	PK	5.2472G	119.98	Inf	-Inf	2.79	3	Vertical	0	2.07	-
5240MHz	Pass	PK	5.3612G	60.86	74.00	-13.14	2.86	3	Vertical	0	2.07	-
5240MHz	Pass	AV	10.4779G	45.41	54.00	-8.59	12.65	3	Horizontal	169	1.12	-
5240MHz	Pass	AV	15.6964G	47.23	54.00	-6.77	13.36	3	Horizontal	179	2.09	-
5240MHz	Pass	PK	10.4761G	58.13	74.00	-15.87	12.64	3	Horizontal	169	1.12	-
5240MHz	Pass	PK	15.7031G	59.29	74.00	-14.71	13.33	3	Horizontal	179	2.09	-
5240MHz	Pass	AV	10.4777G	53.01	54.00	-0.99	12.65	3	Vertical	15	2.34	-
5240MHz	Pass	AV	15.7199G	50.85	54.00	-3.15	13.25	3	Vertical	314	1.11	-
5240MHz	Pass	PK	10.4779G	65.21	74.00	-8.79	12.65	3	Vertical	15	2.34	-



RSE TX above 1GHz Result (Antenna Gain 10 dBi)

Appendix E.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5240MHz	Pass	PK	15.7187G	63.60	74.00	-10.40	13.25	3	Vertical	314	1.11	-
5260MHz	Pass	AV	5.143G	46.21	54.00	-7.79	2.73	3	Horizontal	9	1.52	-
5260MHz	Pass	AV	5.263G	109.45	Inf	-Inf	2.80	3	Horizontal	9	1.52	-
5260MHz	Pass	AV	5.350005G	45.46	54.00	-8.54	2.85	3	Horizontal	9	1.52	-
5260MHz	Pass	PK	5.1424G	58.90	74.00	-15.10	2.73	3	Horizontal	9	1.52	-
5260MHz	Pass	PK	5.263G	120.18	Inf	-Inf	2.80	3	Horizontal	9	1.52	-
5260MHz	Pass	PK	5.350005G	56.49	74.00	-17.51	2.85	3	Horizontal	9	1.52	-
5260MHz	Pass	AV	5.149995G	49.01	54.00	-4.99	2.73	3	Vertical	357	1.65	-
5260MHz	Pass	AV	5.2648G	109.30	Inf	-Inf	2.80	3	Vertical	357	1.65	-
5260MHz	Pass	AV	5.353G	52.39	54.00	-1.61	2.85	3	Vertical	357	1.65	-
5260MHz	Pass	PK	5.149995G	62.53	74.00	-11.47	2.73	3	Vertical	357	1.65	-
5260MHz	Pass	PK	5.2648G	119.75	Inf	-Inf	2.80	3	Vertical	357	1.65	-
5260MHz	Pass	PK	5.3524G	67.68	74.00	-6.32	2.85	3	Vertical	357	1.65	-
5260MHz	Pass	AV	10.5178G	44.08	54.00	-9.92	12.75	3	Horizontal	21	1.02	-
5260MHz	Pass	AV	15.7552G	45.97	54.00	-8.03	13.08	3	Horizontal	38	1.38	-
5260MHz	Pass	PK	10.5175G	57.57	74.00	-16.43	12.75	3	Horizontal	21	1.02	-
5260MHz	Pass	PK	15.7847G	56.77	74.00	-17.23	12.94	3	Horizontal	38	1.38	-
5260MHz	Pass	AV	10.5179G	48.16	54.00	-5.84	12.75	3	Vertical	5	1.75	-
5260MHz	Pass	AV	15.7816G	53.68	54.00	-0.32	12.96	3	Vertical	293	1.51	-
5260MHz	Pass	PK	10.5179G	60.69	74.00	-13.31	12.75	3	Vertical	5	1.75	-
5260MHz	Pass	PK	15.78G	67.23	74.00	-6.77	12.96	3	Vertical	293	1.51	-
5300MHz	Pass	AV	5.3012G	105.55	Inf	-Inf	2.82	3	Horizontal	11	1.59	-
5300MHz	Pass	AV	5.350005G	44.50	54.00	-9.50	2.85	3	Horizontal	11	1.59	-
5300MHz	Pass	PK	5.3016G	115.44	Inf	-Inf	2.82	3	Horizontal	11	1.59	-
5300MHz	Pass	PK	5.3532G	56.34	74.00	-17.66	2.85	3	Horizontal	11	1.59	-
5300MHz	Pass	AV	5.3032G	107.49	Inf	-Inf	2.82	3	Vertical	3	1.73	-
5300MHz	Pass	AV	5.350005G	51.77	54.00	-2.23	2.85	3	Vertical	3	1.73	-
5300MHz	Pass	PK	5.2968G	117.67	Inf	-Inf	2.82	3	Vertical	3	1.73	-
5300MHz	Pass	PK	5.350005G	63.33	74.00	-10.67	2.85	3	Vertical	3	1.73	-
5300MHz	Pass	AV	15.9057G	45.71	54.00	-8.29	12.37	3	Horizontal	209	1.35	-
5300MHz	Pass	PK	15.9072G	59.02	74.00	-14.98	12.36	3	Horizontal	209	1.35	-
5300MHz	Pass	AV	10.5977G	44.36	54.00	-9.64	12.96	3	Vertical	80	2.20	-
5300MHz	Pass	AV	15.907G	52.18	54.00	-1.82	12.36	3	Vertical	86	1.63	-
5300MHz	Pass	PK	10.5971G	56.86	74.00	-17.14	12.96	3	Vertical	80	2.20	-
5300MHz	Pass	PK	15.8946G	65.32	74.00	-8.68	12.42	3	Vertical	86	1.63	-
5320MHz	Pass	AV	5.3208G	103.66	Inf	-Inf	2.83	3	Horizontal	351	1.44	-
5320MHz	Pass	AV	5.3512G	44.90	54.00	-9.10	2.85	3	Horizontal	351	1.44	-
5320MHz	Pass	PK	5.3212G	113.92	Inf	-Inf	2.83	3	Horizontal	351	1.44	-
5320MHz	Pass	PK	5.3508G	58.69	74.00	-15.31	2.85	3	Horizontal	351	1.44	-
5320MHz	Pass	AV	5.3232G	104.65	Inf	-Inf	2.83	3	Vertical	2	1.62	-
5320MHz	Pass	AV	5.350005G	53.87	54.00	-0.13	2.85	3	Vertical	2	1.62	-
5320MHz	Pass	PK	5.3232G	115.50	Inf	-Inf	2.83	3	Vertical	2	1.62	-
5320MHz	Pass	PK	5.3508G	68.94	74.00	-5.06	2.85	3	Vertical	2	1.62	-
5320MHz	Pass	AV	15.9708G	45.67	54.00	-8.33	12.06	3	Horizontal	162	1.87	-
5320MHz	Pass	PK	15.9825G	59.06	74.00	-14.94	12.00	3	Horizontal	162	1.87	-
5320MHz	Pass	AV	15.9609G	50.15	54.00	-3.85	12.11	3	Vertical	176	1.62	-
5320MHz	Pass	PK	15.9614G	63.50	74.00	-10.50	12.10	3	Vertical	176	1.62	-
802.11ac VHT20_Nss1(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.1448G	45.48	54.00	-8.52	2.73	3	Horizontal	8	1.61	-



RSE TX above 1GHz Result (Antenna Gain 10 dBi)

Appendix E.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5180MHz	Pass	AV	5.182G	100.93	Inf	-Inf	2.75	3	Horizontal	8	1.61	-
5180MHz	Pass	PK	5.147G	58.90	74.00	-15.10	2.73	3	Horizontal	8	1.61	-
5180MHz	Pass	PK	5.1816G	113.13	Inf	-Inf	2.75	3	Horizontal	8	1.61	-
5180MHz	Pass	AV	5.149995G	53.60	54.00	-0.40	2.73	3	Vertical	0	1.88	-
5180MHz	Pass	AV	5.185G	103.34	Inf	-Inf	2.75	3	Vertical	0	1.88	-
5180MHz	Pass	PK	5.1496G	68.08	74.00	-5.92	2.73	3	Vertical	0	1.88	-
5180MHz	Pass	PK	5.185G	115.36	Inf	-Inf	2.75	3	Vertical	0	1.88	-
5180MHz	Pass	AV	10.3381G	41.80	54.00	-12.20	12.28	3	Horizontal	199	1.72	-
5180MHz	Pass	PK	10.3556G	55.12	74.00	-18.88	12.32	3	Horizontal	199	1.72	-
5180MHz	Pass	AV	10.3686G	41.87	54.00	-12.13	12.36	3	Vertical	117	1.20	-
5180MHz	Pass	PK	10.3557G	54.93	74.00	-19.07	12.32	3	Vertical	117	1.20	-
5200MHz	Pass	AV	5.149995G	46.29	54.00	-7.71	2.73	3	Horizontal	8	1.74	-
5200MHz	Pass	AV	5.2028G	103.39	Inf	-Inf	2.76	3	Horizontal	8	1.74	-
5200MHz	Pass	PK	5.1488G	60.65	74.00	-13.35	2.73	3	Horizontal	8	1.74	-
5200MHz	Pass	PK	5.2028G	115.49	Inf	-Inf	2.76	3	Horizontal	8	1.74	-
5200MHz	Pass	AV	5.1476G	51.61	54.00	-2.39	2.73	3	Vertical	0	1.73	-
5200MHz	Pass	AV	5.2052G	105.68	Inf	-Inf	2.76	3	Vertical	0	1.73	-
5200MHz	Pass	PK	5.1468G	65.87	74.00	-8.13	2.73	3	Vertical	0	1.73	-
5200MHz	Pass	PK	5.2048G	116.96	Inf	-Inf	2.76	3	Vertical	0	1.73	-
5200MHz	Pass	AV	10.4023G	41.76	54.00	-12.24	12.45	3	Horizontal	165	1.11	-
5200MHz	Pass	PK	10.4154G	54.44	74.00	-19.56	12.48	3	Horizontal	165	1.11	-
5200MHz	Pass	AV	10.3974G	48.51	54.00	-5.49	12.43	3	Vertical	83	2.42	-
5200MHz	Pass	AV	15.598G	49.54	54.00	-4.46	13.83	3	Vertical	170	1.22	-
5200MHz	Pass	PK	10.3975G	61.98	74.00	-12.02	12.43	3	Vertical	83	2.42	-
5200MHz	Pass	PK	15.5979G	61.94	74.00	-12.06	13.83	3	Vertical	170	1.22	-
5240MHz	Pass	AV	5.149995G	46.20	54.00	-7.80	2.73	3	Horizontal	5	1.49	-
5240MHz	Pass	AV	5.2424G	105.99	Inf	-Inf	2.79	3	Horizontal	5	1.49	-
5240MHz	Pass	AV	5.350005G	43.15	54.00	-10.85	2.85	3	Horizontal	5	1.49	-
5240MHz	Pass	PK	5.1482G	59.83	74.00	-14.17	2.73	3	Horizontal	5	1.49	-
5240MHz	Pass	PK	5.2412G	117.83	Inf	-Inf	2.78	3	Horizontal	5	1.49	-
5240MHz	Pass	PK	5.3528G	55.59	74.00	-18.41	2.85	3	Horizontal	5	1.49	-
5240MHz	Pass	AV	5.149995G	53.85	54.00	-0.15	2.73	3	Vertical	0	1.70	-
5240MHz	Pass	AV	5.2454G	107.29	Inf	-Inf	2.79	3	Vertical	0	1.70	-
5240MHz	Pass	AV	5.3534G	46.74	54.00	-7.26	2.85	3	Vertical	0	1.70	-
5240MHz	Pass	PK	5.1446G	67.59	74.00	-6.41	2.73	3	Vertical	0	1.70	-
5240MHz	Pass	PK	5.2454G	118.74	Inf	-Inf	2.79	3	Vertical	0	1.70	-
5240MHz	Pass	PK	5.3528G	61.01	74.00	-12.99	2.85	3	Vertical	0	1.70	-
5240MHz	Pass	AV	15.7217G	45.50	54.00	-8.50	13.24	3	Horizontal	201	2.19	-
5240MHz	Pass	PK	15.7243G	57.98	74.00	-16.02	13.23	3	Horizontal	201	2.19	-
5240MHz	Pass	AV	15.7201G	53.21	54.00	-0.79	13.25	3	Vertical	343	1.25	-
5240MHz	Pass	PK	15.7198G	67.16	74.00	-6.84	13.25	3	Vertical	343	1.25	-
5260MHz	Pass	AV	5.1406G	45.58	54.00	-8.42	2.72	3	Horizontal	7	1.52	-
5260MHz	Pass	AV	5.263G	107.65	Inf	-Inf	2.80	3	Horizontal	7	1.52	-
5260MHz	Pass	AV	5.350005G	45.33	54.00	-8.67	2.85	3	Horizontal	7	1.52	-
5260MHz	Pass	PK	5.1418G	60.09	74.00	-13.91	2.73	3	Horizontal	7	1.52	-
5260MHz	Pass	PK	5.2624G	119.27	Inf	-Inf	2.80	3	Horizontal	7	1.52	-
5260MHz	Pass	PK	5.350005G	57.64	74.00	-16.36	2.85	3	Horizontal	7	1.52	-
5260MHz	Pass	AV	5.149995G	48.24	54.00	-5.76	2.73	3	Vertical	359	1.81	-
5260MHz	Pass	AV	5.2648G	108.03	Inf	-Inf	2.80	3	Vertical	359	1.81	-



RSE TX above 1GHz Result (Antenna Gain 10 dBi)

Appendix E.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5260MHz	Pass	AV	5.353G	50.50	54.00	-3.50	2.85	3	Vertical	359	1.81	-
5260MHz	Pass	PK	5.149995G	60.26	74.00	-13.74	2.73	3	Vertical	359	1.81	-
5260MHz	Pass	PK	5.266G	120.58	Inf	-Inf	2.80	3	Vertical	359	1.81	-
5260MHz	Pass	PK	5.3542G	67.27	74.00	-6.73	2.85	3	Vertical	359	1.81	-
5260MHz	Pass	AV	10.529G	48.13	54.00	-5.87	15.54	3	Horizontal	318	1.58	-
5260MHz	Pass	AV	15.7779G	53.15	54.00	-0.85	16.33	3	Horizontal	44	1.50	-
5260MHz	Pass	PK	10.53044G	60.43	74.00	-13.57	15.54	3	Horizontal	318	1.58	-
5260MHz	Pass	PK	15.7793G	63.97	74.00	-10.03	16.32	3	Horizontal	44	1.50	-
5260MHz	Pass	AV	10.52864G	47.60	54.00	-6.40	15.54	3	Vertical	24	1.50	-
5260MHz	Pass	AV	15.7802G	53.81	54.00	-0.19	16.32	3	Vertical	53	1.46	-
5260MHz	Pass	PK	10.52894G	58.85	74.00	-15.15	15.54	3	Vertical	24	1.50	-
5260MHz	Pass	PK	15.7749G	64.91	74.00	-9.09	16.34	3	Vertical	53	1.46	-
5300MHz	Pass	AV	5.3032G	104.12	Inf	-Inf	2.82	3	Horizontal	8	1.98	-
5300MHz	Pass	AV	5.350005G	43.45	54.00	-10.55	2.85	3	Horizontal	8	1.98	-
5300MHz	Pass	PK	5.3032G	115.81	Inf	-Inf	2.82	3	Horizontal	8	1.98	-
5300MHz	Pass	PK	5.3512G	56.74	74.00	-17.26	2.85	3	Horizontal	8	1.98	-
5300MHz	Pass	AV	5.3048G	105.35	Inf	-Inf	2.82	3	Vertical	0	2.08	-
5300MHz	Pass	AV	5.350005G	50.99	54.00	-3.01	2.85	3	Vertical	0	2.08	-
5300MHz	Pass	PK	5.3048G	117.59	Inf	-Inf	2.82	3	Vertical	0	2.08	-
5300MHz	Pass	PK	5.350005G	64.86	74.00	-9.14	2.85	3	Vertical	0	2.08	-
5300MHz	Pass	AV	10.5994G	49.35	54.00	-4.65	15.69	3	Horizontal	322	1.41	-
5300MHz	Pass	AV	15.8999G	51.50	54.00	-2.50	15.91	3	Horizontal	45	1.68	-
5300MHz	Pass	PK	10.59844G	60.43	74.00	-13.57	15.69	3	Horizontal	322	1.41	-
5300MHz	Pass	PK	15.9059G	62.49	74.00	-11.51	15.89	3	Horizontal	45	1.68	-
5300MHz	Pass	AV	10.59844G	49.01	54.00	-4.99	15.69	3	Vertical	24	1.61	-
5300MHz	Pass	AV	15.89406G	52.54	54.00	-1.46	15.93	3	Vertical	54	1.44	-
5300MHz	Pass	PK	10.59322G	59.22	74.00	-14.78	15.68	3	Vertical	24	1.61	-
5300MHz	Pass	PK	15.8946G	64.25	74.00	-9.75	15.92	3	Vertical	54	1.44	-
5320MHz	Pass	AV	5.3214G	102.59	Inf	-Inf	2.83	3	Horizontal	9	1.64	-
5320MHz	Pass	AV	5.3516G	44.10	54.00	-9.90	2.85	3	Horizontal	9	1.64	-
5320MHz	Pass	PK	5.3216G	114.44	Inf	-Inf	2.83	3	Horizontal	9	1.64	-
5320MHz	Pass	PK	5.351G	57.52	74.00	-16.48	2.85	3	Horizontal	9	1.64	-
5320MHz	Pass	AV	5.3232G	103.79	Inf	-Inf	2.83	3	Vertical	0	1.63	-
5320MHz	Pass	AV	5.350005G	53.85	54.00	-0.15	2.85	3	Vertical	0	1.63	-
5320MHz	Pass	PK	5.3226G	115.34	Inf	-Inf	2.83	3	Vertical	0	1.63	-
5320MHz	Pass	PK	5.350005G	68.97	74.00	-5.03	2.85	3	Vertical	0	1.63	-
5320MHz	Pass	AV	15.96072G	50.10	54.00	-3.90	15.70	3	Horizontal	45	1.50	-
5320MHz	Pass	PK	15.96594G	60.75	74.00	-13.25	15.68	3	Horizontal	45	1.50	-
5320MHz	Pass	AV	15.9661G	52.57	54.00	-1.43	15.68	3	Vertical	342	1.05	-
5320MHz	Pass	PK	15.9661G	64.69	74.00	-9.31	15.68	3	Vertical	342	1.05	-
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	AV	5.1488G	51.19	54.00	-2.81	2.73	3	Horizontal	9	1.10	-
5190MHz	Pass	AV	5.1876G	97.79	Inf	-Inf	2.75	3	Horizontal	9	1.10	-
5190MHz	Pass	PK	5.1496G	65.12	74.00	-8.88	2.73	3	Horizontal	9	1.10	-
5190MHz	Pass	PK	5.1884G	107.36	Inf	-Inf	2.75	3	Horizontal	9	1.10	-
5190MHz	Pass	AV	5.1476G	53.38	54.00	-0.62	2.73	3	Vertical	356	1.78	-
5190MHz	Pass	AV	5.1944G	100.67	Inf	-Inf	2.76	3	Vertical	356	1.78	-
5190MHz	Pass	PK	5.142G	66.52	74.00	-7.48	2.73	3	Vertical	356	1.78	-
5190MHz	Pass	PK	5.1812G	110.26	Inf	-Inf	2.75	3	Vertical	356	1.78	-



RSE TX above 1GHz Result (Antenna Gain 10 dBi)

Appendix E.2

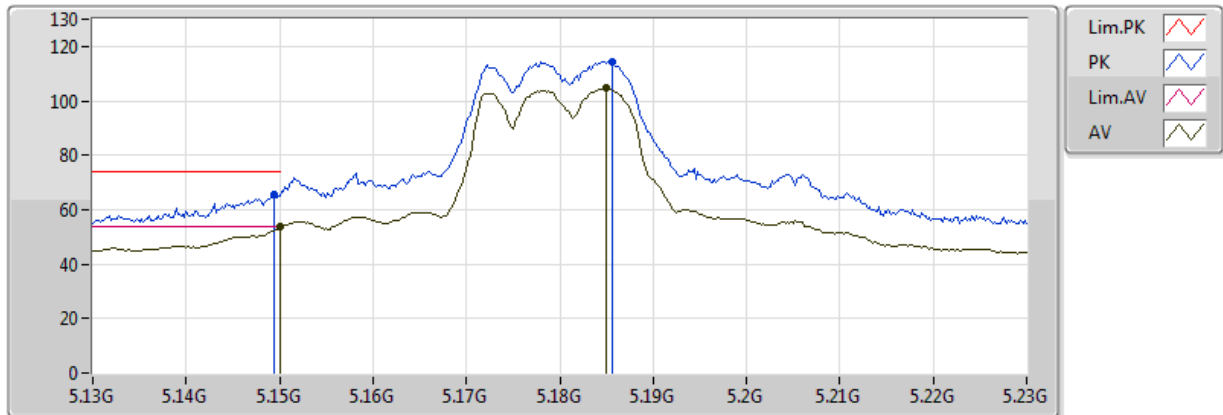
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5190MHz	Pass	AV	15.57708G	49.33	54.00	-4.67	17.02	3	Horizontal	308	1.00	-
5190MHz	Pass	PK	15.55884G	59.11	74.00	-14.89	17.09	3	Horizontal	308	1.00	-
5190MHz	Pass	AV	15.57582G	49.25	54.00	-4.75	17.03	3	Vertical	51	1.50	-
5190MHz	Pass	PK	15.5631G	59.08	74.00	-14.92	17.07	3	Vertical	51	1.50	-
5230MHz	Pass	AV	5.149995G	46.38	54.00	-7.62	2.73	3	Horizontal	9	1.50	-
5230MHz	Pass	AV	5.232G	99.80	Inf	-Inf	2.78	3	Horizontal	9	1.50	-
5230MHz	Pass	PK	5.149995G	57.35	74.00	-16.65	2.73	3	Horizontal	9	1.50	-
5230MHz	Pass	PK	5.2312G	109.63	Inf	-Inf	2.78	3	Horizontal	9	1.50	-
5230MHz	Pass	AV	5.1492G	53.76	54.00	-0.24	2.73	3	Vertical	356	2.18	-
5230MHz	Pass	AV	5.2228G	102.61	Inf	-Inf	2.77	3	Vertical	356	2.18	-
5230MHz	Pass	PK	5.1484G	67.37	74.00	-6.63	2.73	3	Vertical	356	2.18	-
5230MHz	Pass	PK	5.2224G	112.57	Inf	-Inf	2.77	3	Vertical	356	2.18	-
5230MHz	Pass	AV	10.4675G	48.67	54.00	-5.33	15.40	3	Horizontal	323	1.34	-
5230MHz	Pass	AV	15.68772G	52.01	54.00	-1.99	16.64	3	Horizontal	46	1.50	-
5230MHz	Pass	PK	10.46762G	58.99	74.00	-15.01	15.40	3	Horizontal	323	1.34	-
5230MHz	Pass	PK	15.69246G	61.65	74.00	-12.35	16.62	3	Horizontal	46	1.50	-
5230MHz	Pass	AV	10.45952G	48.68	54.00	-5.32	15.39	3	Vertical	37	1.47	-
5230MHz	Pass	AV	15.68988G	52.60	54.00	-1.40	16.63	3	Vertical	343	1.49	-
5230MHz	Pass	PK	10.45592G	58.48	74.00	-15.52	15.38	3	Vertical	37	1.47	-
5230MHz	Pass	PK	15.684G	62.44	74.00	-11.56	16.65	3	Vertical	343	1.49	-
5270MHz	Pass	AV	5.2716G	101.51	Inf	-Inf	2.80	3	Horizontal	9	1.50	-
5270MHz	Pass	AV	5.352G	44.96	54.00	-9.04	2.85	3	Horizontal	9	1.50	-
5270MHz	Pass	PK	5.2712G	112.24	Inf	-Inf	2.80	3	Horizontal	9	1.50	-
5270MHz	Pass	PK	5.3512G	58.21	74.00	-15.79	2.85	3	Horizontal	9	1.50	-
5270MHz	Pass	AV	5.2756G	104.30	Inf	-Inf	2.81	3	Vertical	2	1.95	-
5270MHz	Pass	AV	5.350005G	53.10	54.00	-0.90	2.85	3	Vertical	2	1.95	-
5270MHz	Pass	PK	5.276G	113.80	Inf	-Inf	2.81	3	Vertical	2	1.95	-
5270MHz	Pass	PK	5.350005G	66.56	74.00	-7.44	2.85	3	Vertical	2	1.95	-
5270MHz	Pass	AV	15.80946G	52.06	54.00	-1.94	16.22	3	Horizontal	47	1.47	-
5270MHz	Pass	PK	15.8163G	62.24	74.00	-11.76	16.20	3	Horizontal	47	1.47	-
5270MHz	Pass	AV	15.80868G	53.22	54.00	-0.78	16.22	3	Vertical	341	1.01	-
5270MHz	Pass	PK	15.80844G	63.03	74.00	-10.97	16.22	3	Vertical	341	1.01	-
5310MHz	Pass	AV	5.3116G	99.18	Inf	-Inf	2.83	3	Horizontal	353	1.50	-
5310MHz	Pass	AV	5.350005G	46.45	54.00	-7.55	2.85	3	Horizontal	353	1.50	-
5310MHz	Pass	PK	5.3112G	108.85	Inf	-Inf	2.83	3	Horizontal	353	1.50	-
5310MHz	Pass	PK	5.350005G	60.17	74.00	-13.83	2.85	3	Horizontal	353	1.50	-
5310MHz	Pass	AV	5.3004G	100.94	Inf	-Inf	2.82	3	Vertical	358	1.78	-
5310MHz	Pass	AV	5.3536G	53.90	54.00	-0.10	2.85	3	Vertical	358	1.78	-
5310MHz	Pass	PK	5.3008G	110.94	Inf	-Inf	2.82	3	Vertical	358	1.78	-
5310MHz	Pass	PK	5.3536G	68.90	74.00	-5.10	2.85	3	Vertical	358	1.78	-
5310MHz	Pass	AV	15.9294G	48.55	54.00	-5.45	15.80	3	Horizontal	59	1.50	-
5310MHz	Pass	PK	15.93558G	58.55	74.00	-15.45	15.78	3	Horizontal	59	1.50	-
5310MHz	Pass	AV	15.92622G	49.73	54.00	-4.27	15.82	3	Vertical	77	1.50	-
5310MHz	Pass	PK	15.92622G	59.88	74.00	-14.12	15.82	3	Vertical	77	1.50	-
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	AV	5.148G	52.16	54.00	-1.84	2.73	3	Horizontal	24	1.69	-
5210MHz	Pass	AV	5.188G	89.73	Inf	-Inf	2.75	3	Horizontal	24	1.69	-
5210MHz	Pass	AV	5.457G	43.33	54.00	-10.67	2.91	3	Horizontal	24	1.69	-
5210MHz	Pass	PK	5.128G	63.27	74.00	-10.73	2.72	3	Horizontal	24	1.69	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5210MHz	Pass	PK	5.188G	98.72	Inf	-Inf	2.75	3	Horizontal	24	1.69	-
5210MHz	Pass	PK	5.447G	56.17	74.00	-17.83	2.90	3	Horizontal	24	1.69	-
5210MHz	Pass	AV	5.145G	53.50	54.00	-0.50	2.73	3	Vertical	23	1.35	-
5210MHz	Pass	AV	5.198G	91.24	Inf	-Inf	2.76	3	Vertical	23	1.35	-
5210MHz	Pass	AV	5.438G	43.46	54.00	-10.54	2.90	3	Vertical	23	1.35	-
5210MHz	Pass	PK	5.146G	66.32	74.00	-7.68	2.73	3	Vertical	23	1.35	-
5210MHz	Pass	PK	5.197G	101.29	Inf	-Inf	2.76	3	Vertical	23	1.35	-
5210MHz	Pass	PK	5.445G	55.36	74.00	-18.64	2.90	3	Vertical	23	1.35	-
5210MHz	Pass	AV	10.43458G	41.52	54.00	-12.48	12.53	3	Horizontal	90	1.73	-
5210MHz	Pass	PK	10.42024G	54.08	74.00	-19.92	12.49	3	Horizontal	90	1.73	-
5210MHz	Pass	AV	10.42042G	41.63	54.00	-12.37	12.49	3	Vertical	24	2.10	-
5210MHz	Pass	PK	10.42882G	54.43	74.00	-19.57	12.52	3	Vertical	24	2.10	-
5290MHz	Pass	AV	5.147G	52.35	54.00	-1.65	2.73	3	Horizontal	14	1.31	-
5290MHz	Pass	AV	5.287G	91.71	Inf	-Inf	2.81	3	Horizontal	14	1.31	-
5290MHz	Pass	AV	5.350005G	53.43	54.00	-0.57	2.85	3	Horizontal	14	1.31	-
5290MHz	Pass	PK	5.145G	68.78	74.00	-5.22	2.73	3	Horizontal	14	1.31	-
5290MHz	Pass	PK	5.287G	101.30	Inf	-Inf	2.81	3	Horizontal	14	1.31	-
5290MHz	Pass	PK	5.352G	63.92	74.00	-10.08	2.85	3	Horizontal	14	1.31	-
5290MHz	Pass	PK	5.489G	55.77	68.20	-12.43	2.92	3	Horizontal	14	1.31	-
5290MHz	Pass	AV	5.138G	47.54	54.00	-6.46	2.72	3	Vertical	21	1.52	-
5290MHz	Pass	AV	5.299G	94.21	Inf	-Inf	2.82	3	Vertical	21	1.52	-
5290MHz	Pass	AV	5.353G	53.52	54.00	-0.48	2.85	3	Vertical	21	1.52	-
5290MHz	Pass	PK	5.149G	62.35	74.00	-11.65	2.73	3	Vertical	21	1.52	-
5290MHz	Pass	PK	5.299G	103.78	Inf	-Inf	2.82	3	Vertical	21	1.52	-
5290MHz	Pass	PK	5.353G	66.17	74.00	-7.83	2.85	3	Vertical	21	1.52	-
5290MHz	Pass	PK	5.48G	55.39	68.20	-12.81	2.92	3	Vertical	21	1.52	-
5290MHz	Pass	AV	10.57712G	41.70	54.00	-12.30	12.91	3	Horizontal	348	1.76	-
5290MHz	Pass	PK	10.5728G	54.72	74.00	-19.28	12.90	3	Horizontal	348	1.76	-
5290MHz	Pass	AV	10.5941G	41.83	54.00	-12.17	12.95	3	Vertical	228	1.19	-
5290MHz	Pass	PK	10.58144G	54.98	74.00	-19.02	12.92	3	Vertical	228	1.19	-
802.11ac VHT80+80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
#5210#5290MHz	Pass	AV	5.149995G	51.85	54.00	-2.15	2.73	3	Horizontal	13	1.64	-
#5210#5290MHz	Pass	AV	5.285G	90.74	Inf	-Inf	2.81	3	Horizontal	13	1.64	-
#5210#5290MHz	Pass	AV	5.350005G	53.29	54.00	-0.71	2.85	3	Horizontal	13	1.64	-
#5210#5290MHz	Pass	PK	5.149G	64.64	74.00	-9.36	2.73	3	Horizontal	13	1.64	-
#5210#5290MHz	Pass	PK	5.287G	100.38	Inf	-Inf	2.81	3	Horizontal	13	1.64	-
#5210#5290MHz	Pass	PK	5.353G	65.12	74.00	-8.88	2.85	3	Horizontal	13	1.64	-
#5210#5290MHz	Pass	PK	5.464G	55.40	68.20	-12.80	2.91	3	Horizontal	13	1.64	-
#5210#5290MHz	Pass	AV	5.149G	50.67	54.00	-3.33	2.73	3	Vertical	22	1.26	-
#5210#5290MHz	Pass	AV	5.302G	90.02	Inf	-Inf	2.82	3	Vertical	22	1.26	-
#5210#5290MHz	Pass	AV	5.350005G	49.54	54.00	-4.46	2.85	3	Vertical	22	1.26	-
#5210#5290MHz	Pass	PK	5.149G	63.54	74.00	-10.46	2.73	3	Vertical	22	1.26	-
#5210#5290MHz	Pass	PK	5.303G	99.73	Inf	-Inf	2.82	3	Vertical	22	1.26	-
#5210#5290MHz	Pass	PK	5.352G	61.66	74.00	-12.34	2.85	3	Vertical	22	1.26	-
#5210#5290MHz	Pass	PK	5.488G	55.32	68.20	-12.88	2.92	3	Vertical	22	1.26	-
#5210#5290MHz	Pass	AV	10.51266G	41.21	54.00	-12.79	12.74	3	Horizontal	0	1.50	-
#5210#5290MHz	Pass	PK	10.5108G	53.95	74.00	-20.05	12.73	3	Horizontal	0	1.50	-
#5210#5290MHz	Pass	AV	10.51422G	41.01	54.00	-12.99	12.74	3	Vertical	360	1.50	-
#5210#5290MHz	Pass	PK	10.50876G	53.93	74.00	-20.07	12.73	3	Vertical	360	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

19/12/2017

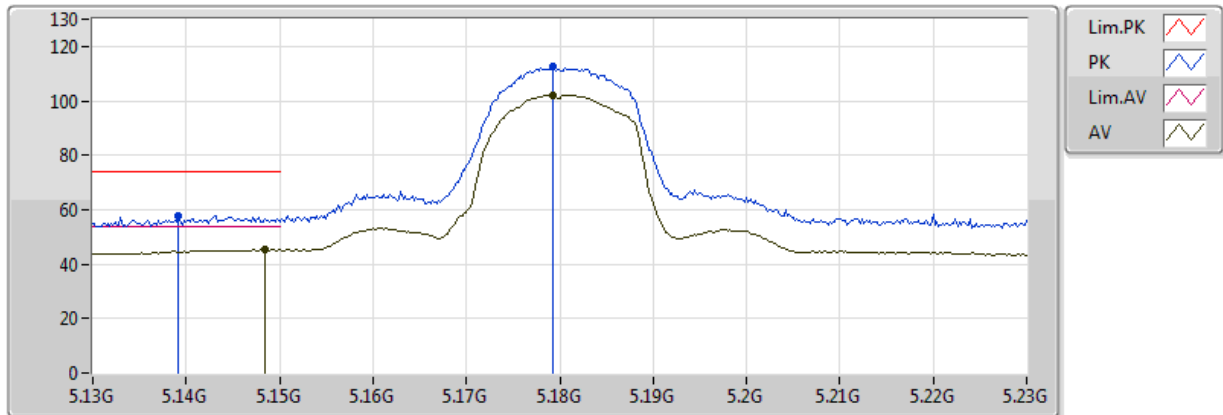


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.149995G	53.82	54.00	-0.18	2.73	3	Vertical	359	1.82	-	51.09	31.66	5.62	34.55
AV	5.185G	104.60	Inf	-Inf	2.75	3	Vertical	359	1.82	-	101.85	31.67	5.63	34.55
PK	5.1494G	65.39	74.00	-8.61	2.73	3	Vertical	359	1.82	-	62.66	31.66	5.62	34.55
PK	5.1856G	114.56	Inf	-Inf	2.75	3	Vertical	359	1.82	-	111.81	31.67	5.63	34.55

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

19/12/2017

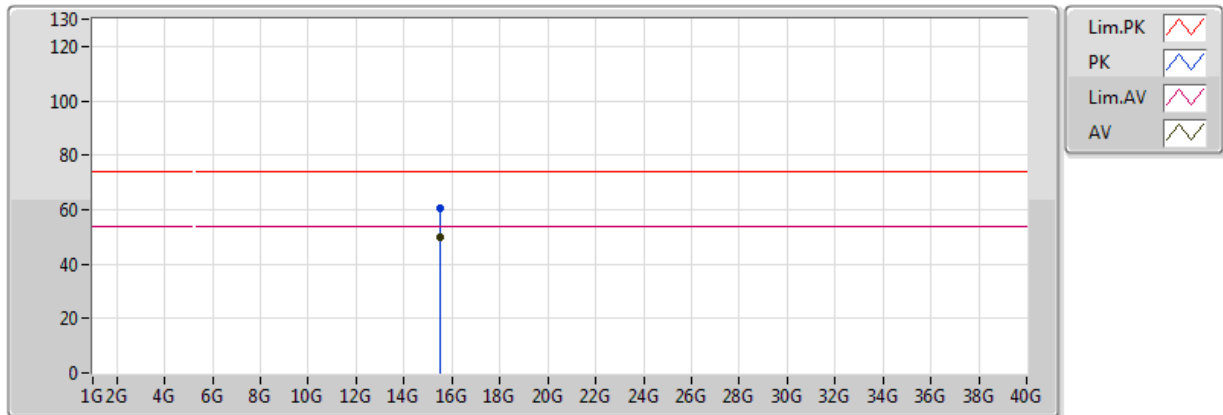


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.1484G	45.52	54.00	-8.48	2.73	3	Horizontal	6	1.19	-	42.79	31.66	5.62	34.55
AV	5.1792G	102.25	Inf	-Inf	2.75	3	Horizontal	6	1.19	-	99.50	31.67	5.63	34.55
PK	5.1392G	57.94	74.00	-16.06	2.72	3	Horizontal	6	1.19	-	55.22	31.66	5.62	34.55
PK	5.1792G	112.38	Inf	-Inf	2.75	3	Horizontal	6	1.19	-	109.63	31.67	5.63	34.55

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

20/12/2017

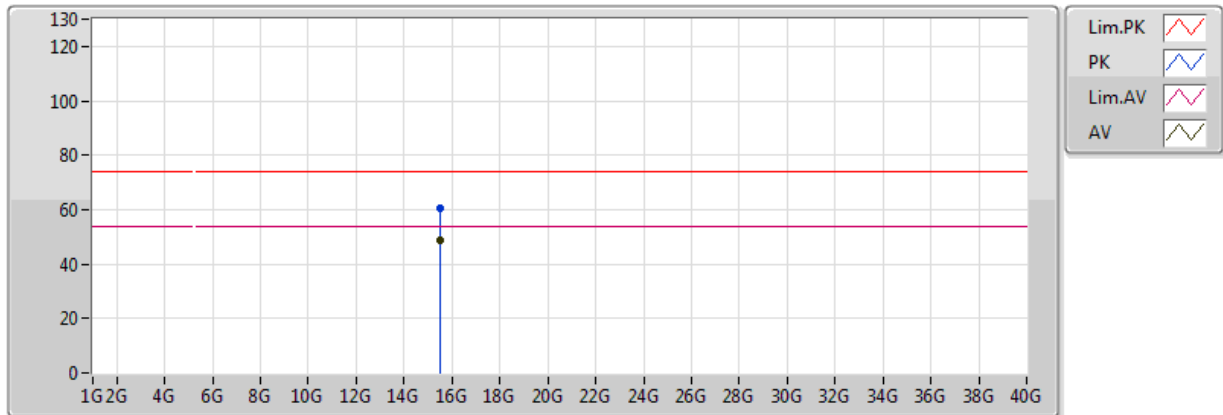


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	15.53604G	49.95	54.00	-4.05	14.12	3	Vertical	194	1.68	-	35.83	38.86	9.95	34.70
PK	15.53682G	60.66	74.00	-13.34	14.12	3	Vertical	194	1.68	-	46.54	38.86	9.95	34.70

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

20/12/2017

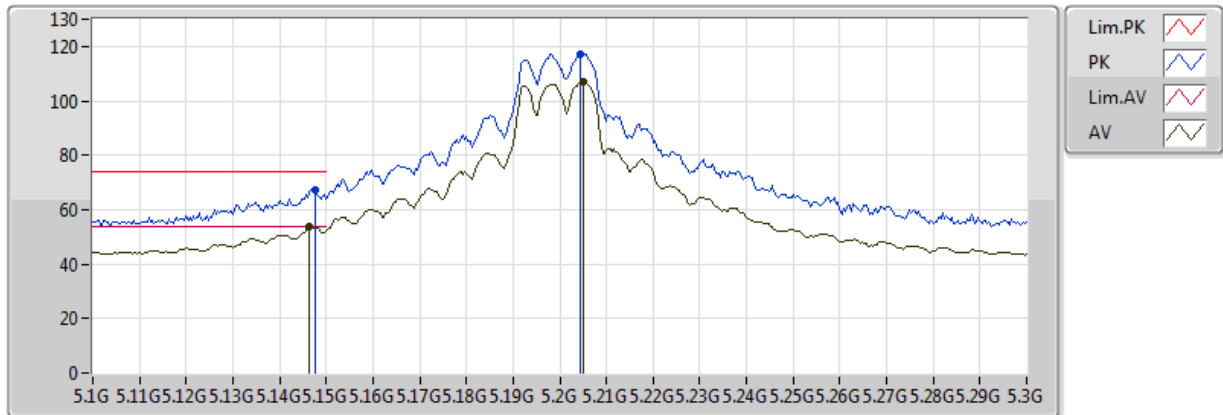


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	15.5349G	48.75	54.00	-5.25	14.12	3	Horizontal	13	2.41	-	34.63	38.87	9.95	34.70
PK	15.53106G	60.56	74.00	-13.44	14.14	3	Horizontal	13	2.41	-	46.41	38.88	9.95	34.69

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

19/12/2017

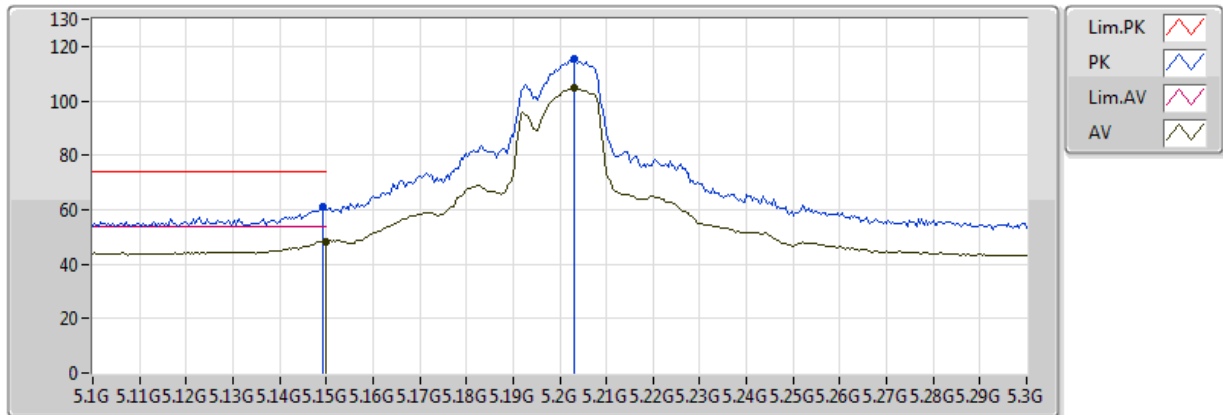


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.1464G	53.58	54.00	-0.42	2.73	3	Vertical	0	1.74	-	50.86	31.66	5.62	34.55
AV	5.2052G	107.13	Inf	-Inf	2.76	3	Vertical	0	1.74	-	104.37	31.68	5.63	34.55
PK	5.1476G	67.50	74.00	-6.50	2.73	3	Vertical	0	1.74	-	64.78	31.66	5.62	34.55
PK	5.2044G	117.27	Inf	-Inf	2.76	3	Vertical	0	1.74	-	114.50	31.68	5.63	34.55

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

19/12/2017

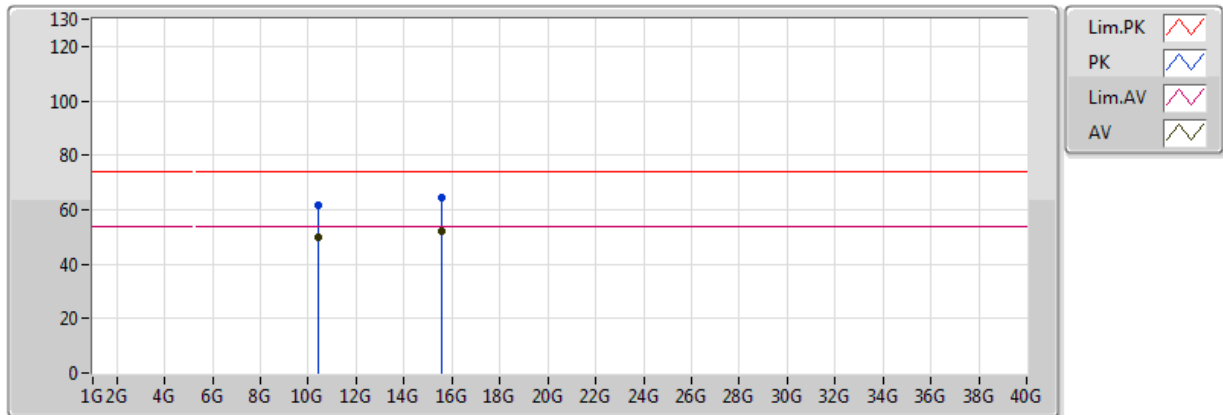


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.149995G	48.42	54.00	-5.58	2.73	3	Horizontal	13	1.73	-	45.69	31.66	5.62	34.55
AV	5.2032G	104.81	Inf	-Inf	2.76	3	Horizontal	13	1.73	-	102.05	31.68	5.63	34.55
PK	5.1492G	60.86	74.00	-13.14	2.73	3	Horizontal	13	1.73	-	58.13	31.66	5.62	34.55
PK	5.2032G	115.16	Inf	-Inf	2.76	3	Horizontal	13	1.73	-	112.39	31.68	5.63	34.55

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

20/12/2017

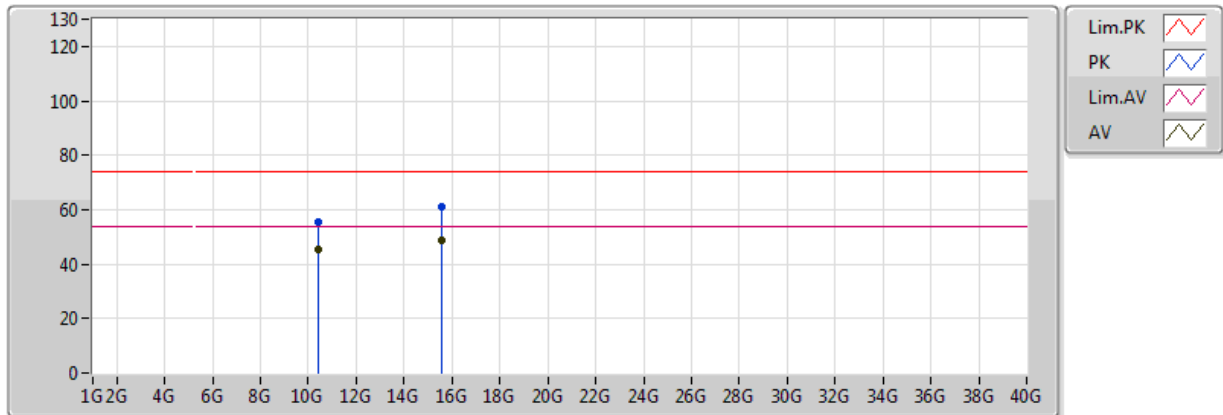


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	10.3963G	49.90	54.00	-4.10	12.43	3	Vertical	17	2.37	-	37.47	39.55	7.95	35.07
AV	15.5978G	52.04	54.00	-1.96	13.83	3	Vertical	88	1.39	-	38.21	38.63	9.97	34.77
PK	10.3979G	61.90	74.00	-12.10	12.43	3	Vertical	17	2.37	-	49.47	39.56	7.95	35.07
PK	15.5969G	64.37	74.00	-9.63	13.83	3	Vertical	88	1.39	-	50.54	38.63	9.97	34.77

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

20/12/2017

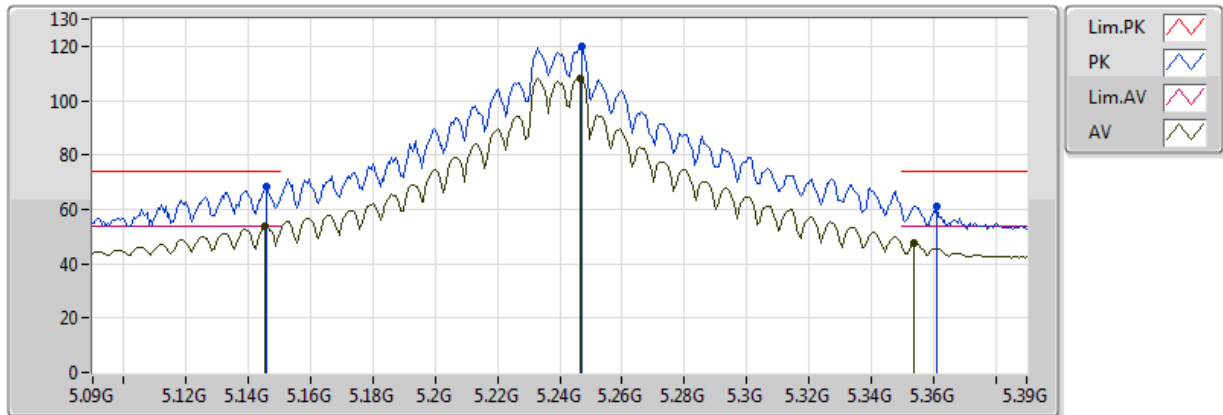


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	10.3979G	45.12	54.00	-8.88	12.43	3	Horizontal	175	1.22	-	32.69	39.56	7.95	35.07
AV	15.5991G	48.74	54.00	-5.26	13.82	3	Horizontal	321	1.65	-	34.92	38.62	9.97	34.77
PK	10.3962G	55.46	74.00	-18.54	12.43	3	Horizontal	175	1.22	-	43.03	39.55	7.95	35.07
PK	15.5969G	61.34	74.00	-12.66	13.83	3	Horizontal	321	1.65	-	47.51	38.63	9.97	34.77

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

19/12/2017

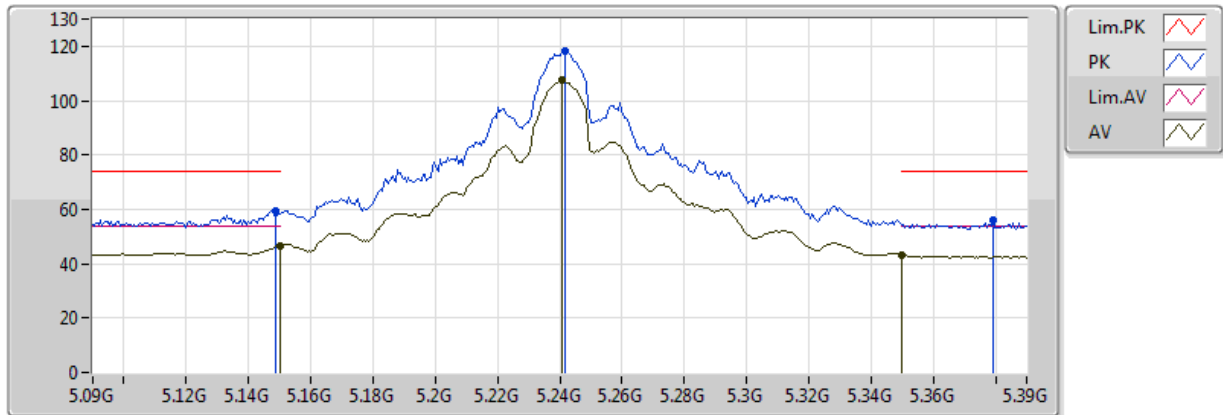


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.1452G	53.83	54.00	-0.17	2.73	3	Vertical	0	2.07	-	51.10	31.66	5.62	34.55
AV	5.2466G	108.35	Inf	-Inf	2.79	3	Vertical	0	2.07	-	105.56	31.70	5.63	34.55
AV	5.354G	47.38	54.00	-6.62	2.85	3	Vertical	0	2.07	-	44.53	31.74	5.65	34.54
PK	5.1458G	68.20	74.00	-5.80	2.73	3	Vertical	0	2.07	-	65.48	31.66	5.62	34.55
PK	5.2472G	119.98	Inf	-Inf	2.79	3	Vertical	0	2.07	-	117.19	31.70	5.63	34.55
PK	5.3612G	60.86	74.00	-13.14	2.86	3	Vertical	0	2.07	-	58.00	31.74	5.65	34.54

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

19/12/2017

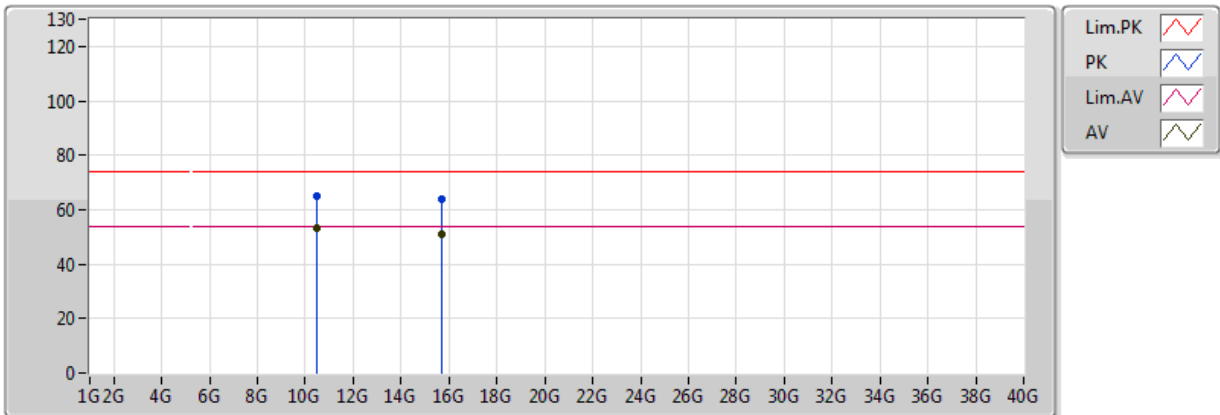


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.149995G	46.67	54.00	-7.33	2.73	3	Horizontal	356	1.04	-	43.94	31.66	5.62	34.55
AV	5.2406G	107.47	Inf	-Inf	2.78	3	Horizontal	356	1.04	-	104.69	31.70	5.63	34.55
AV	5.350005G	43.26	54.00	-10.74	2.85	3	Horizontal	356	1.04	-	40.41	31.74	5.65	34.54
PK	5.1488G	59.55	74.00	-14.45	2.73	3	Horizontal	356	1.04	-	56.82	31.66	5.62	34.55
PK	5.2418G	118.02	Inf	-Inf	2.79	3	Horizontal	356	1.04	-	115.24	31.70	5.63	34.55
PK	5.3792G	56.03	74.00	-17.97	2.87	3	Horizontal	356	1.04	-	53.16	31.75	5.66	34.54

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

20/12/2017

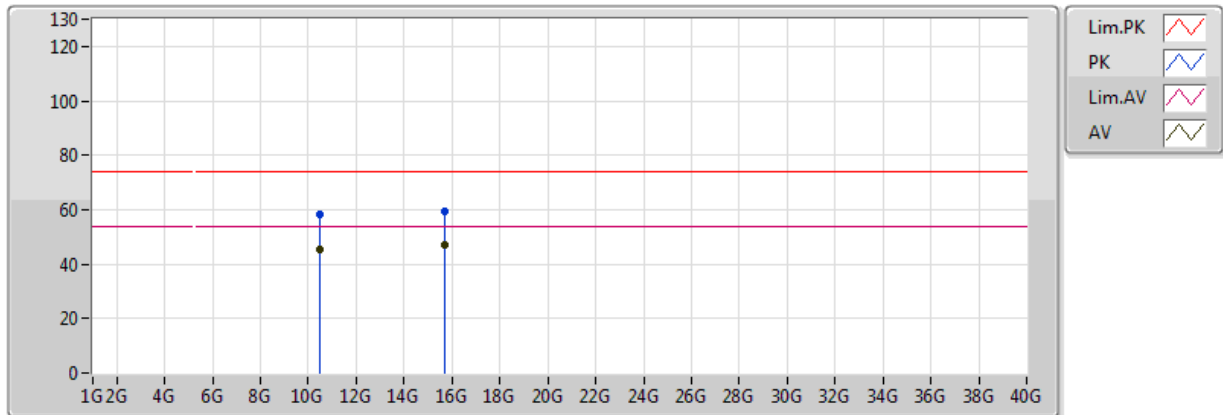


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	10.4777G	53.01	54.00	-0.99	12.65	3	Vertical	15	2.34	-	40.36	39.67	7.98	35.01
AV	15.7199G	50.85	54.00	-3.15	13.25	3	Vertical	314	1.11	-	37.60	38.16	10.00	34.92
PK	10.4779G	65.21	74.00	-8.79	12.65	3	Vertical	15	2.34	-	52.56	39.67	7.99	35.01
PK	15.7187G	63.60	74.00	-10.40	13.25	3	Vertical	314	1.11	-	50.35	38.17	10.00	34.92

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

20/12/2017

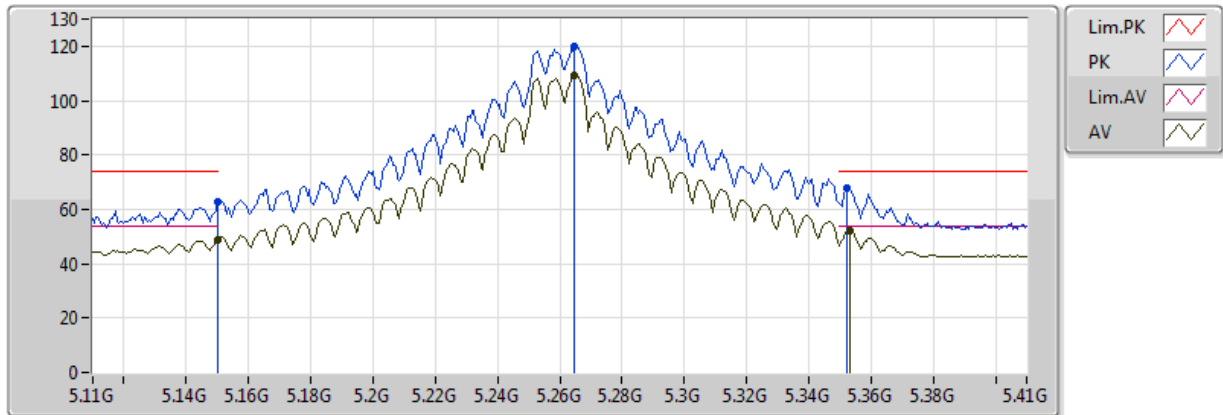


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	10.4779G	45.41	54.00	-8.59	12.65	3	Horizontal	169	1.12	-	32.76	39.67	7.99	35.01
AV	15.6964G	47.23	54.00	-6.77	13.36	3	Horizontal	179	2.09	-	33.87	38.25	9.99	34.89
PK	10.4761G	58.13	74.00	-15.87	12.64	3	Horizontal	169	1.12	-	45.49	39.67	7.98	35.01
PK	15.7031G	59.29	74.00	-14.71	13.33	3	Horizontal	179	2.09	-	45.96	38.23	10.00	34.90

802.11a_Nss1,(6Mbps)_4TX

5260MHz_TX

19/12/2017

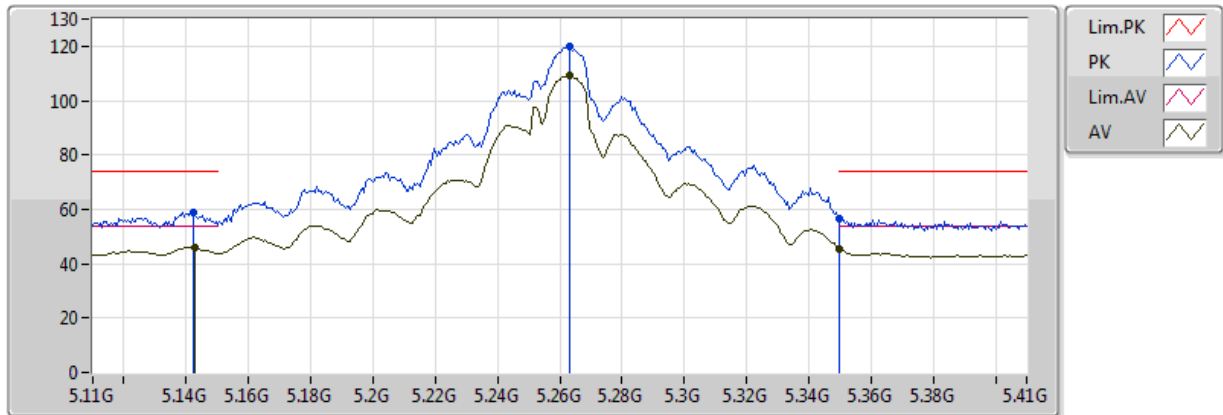


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.149995G	49.01	54.00	-4.99	2.73	3	Vertical	357	1.65	-	46.28	31.66	5.62	34.55
AV	5.2648G	109.30	Inf	-Inf	2.80	3	Vertical	357	1.65	-	106.50	31.71	5.64	34.54
AV	5.353G	52.39	54.00	-1.61	2.85	3	Vertical	357	1.65	-	49.54	31.74	5.65	34.54
PK	5.149995G	62.53	74.00	-11.47	2.73	3	Vertical	357	1.65	-	59.80	31.66	5.62	34.55
PK	5.2648G	119.75	Inf	-Inf	2.80	3	Vertical	357	1.65	-	116.95	31.71	5.64	34.54
PK	5.3524G	67.68	74.00	-6.32	2.85	3	Vertical	357	1.65	-	64.83	31.74	5.65	34.54

802.11a_Nss1,(6Mbps)_4TX

5260MHz_TX

19/12/2017

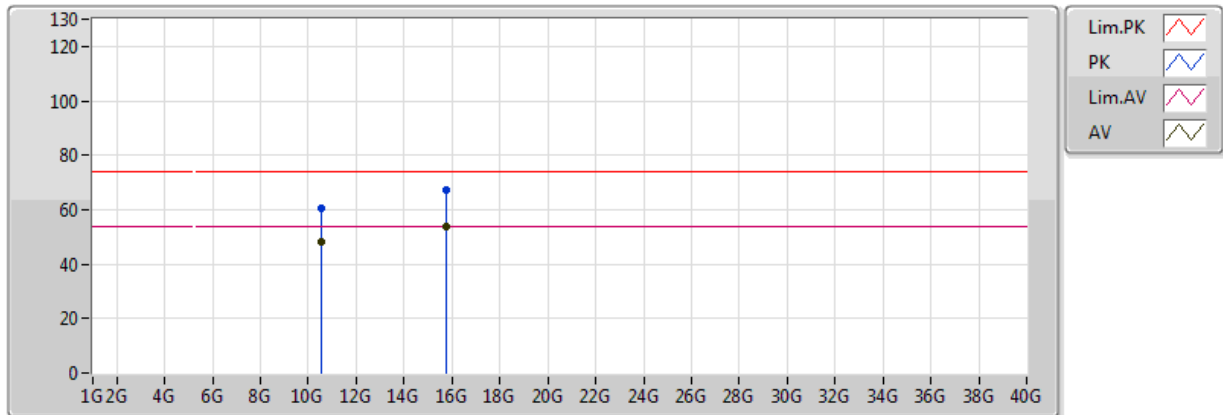


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.143G	46.21	54.00	-7.79	2.73	3	Horizontal	9	1.52	-	43.48	31.66	5.62	34.55
AV	5.263G	109.45	Inf	-Inf	2.80	3	Horizontal	9	1.52	-	106.65	31.71	5.64	34.54
AV	5.350005G	45.46	54.00	-8.54	2.85	3	Horizontal	9	1.52	-	42.61	31.74	5.65	34.54
PK	5.1424G	58.90	74.00	-15.10	2.73	3	Horizontal	9	1.52	-	56.17	31.66	5.62	34.55
PK	5.263G	120.18	Inf	-Inf	2.80	3	Horizontal	9	1.52	-	117.38	31.71	5.64	34.54
PK	5.350005G	56.49	74.00	-17.51	2.85	3	Horizontal	9	1.52	-	53.64	31.74	5.65	34.54

802.11a_Nss1,(6Mbps)_4TX

5260MHz_TX

20/12/2017

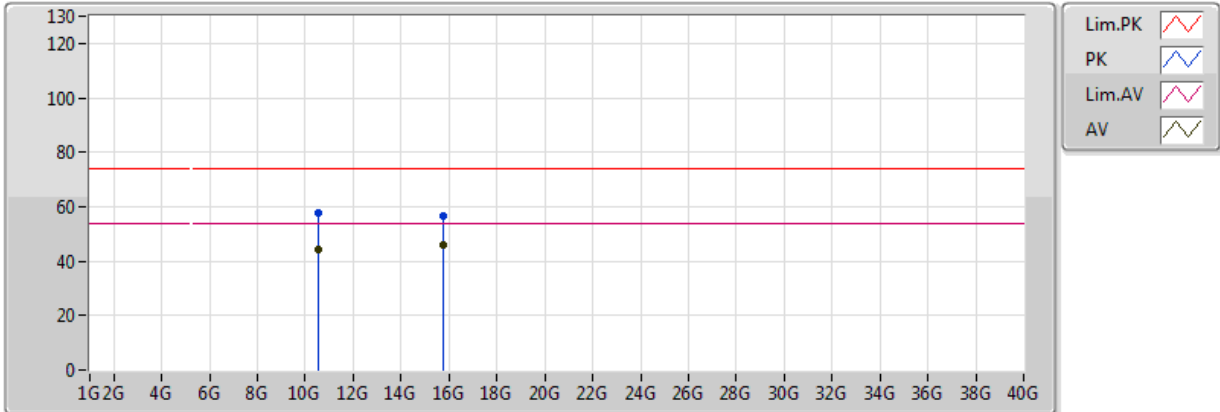


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	10.5179G	48.16	54.00	-5.84	12.75	3	Vertical	5	1.75	-	35.40	39.73	8.00	34.98
AV	15.7816G	53.68	54.00	-0.32	12.96	3	Vertical	293	1.51	-	40.73	37.93	10.02	34.99
PK	10.5179G	60.69	74.00	-13.31	12.75	3	Vertical	5	1.75	-	47.94	39.73	8.00	34.98
PK	15.78G	67.23	74.00	-6.77	12.96	3	Vertical	293	1.51	-	54.27	37.94	10.02	34.99

802.11a_Nss1,(6Mbps)_4TX

5260MHz_TX

20/12/2017

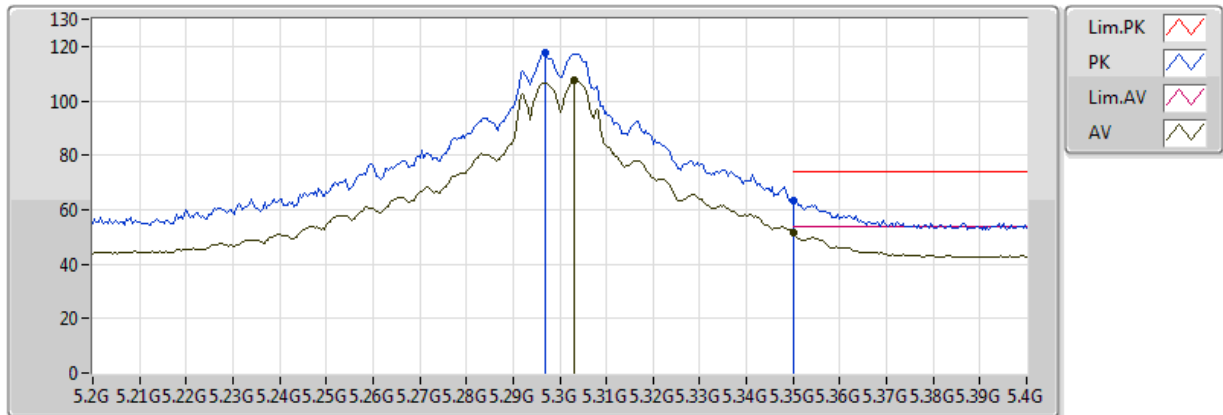


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	10.5178G	44.08	54.00	-9.92	12.75	3	Horizontal	21	1.02	-	31.33	39.72	8.00	34.98
AV	15.7552G	45.97	54.00	-8.03	13.08	3	Horizontal	38	1.38	-	32.89	38.03	10.01	34.96
PK	10.5175G	57.57	74.00	-16.43	12.75	3	Horizontal	21	1.02	-	44.82	39.72	8.00	34.98
PK	15.7847G	56.77	74.00	-17.23	12.94	3	Horizontal	38	1.38	-	43.83	37.92	10.02	34.99

802.11a_Nss1,(6Mbps)_4TX

5300MHz_TX

19/12/2017

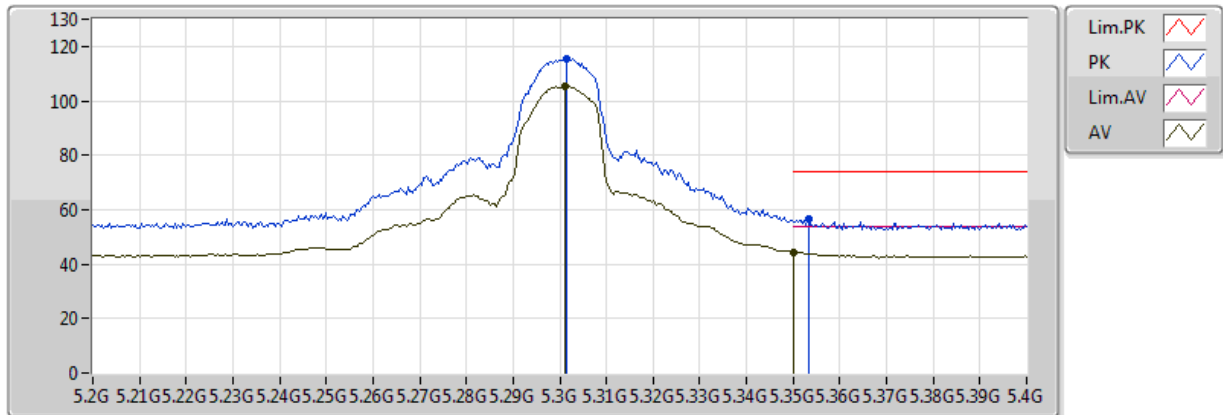


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.3032G	107.49	Inf	-Inf	2.82	3	Vertical	3	1.73	-	104.67	31.72	5.64	34.54
AV	5.350005G	51.77	54.00	-2.23	2.85	3	Vertical	3	1.73	-	48.92	31.74	5.65	34.54
PK	5.2968G	117.67	Inf	-Inf	2.82	3	Vertical	3	1.73	-	114.85	31.72	5.64	34.54
PK	5.350005G	63.33	74.00	-10.67	2.85	3	Vertical	3	1.73	-	60.48	31.74	5.65	34.54

802.11a_Nss1,(6Mbps)_4TX

5300MHz_TX

19/12/2017

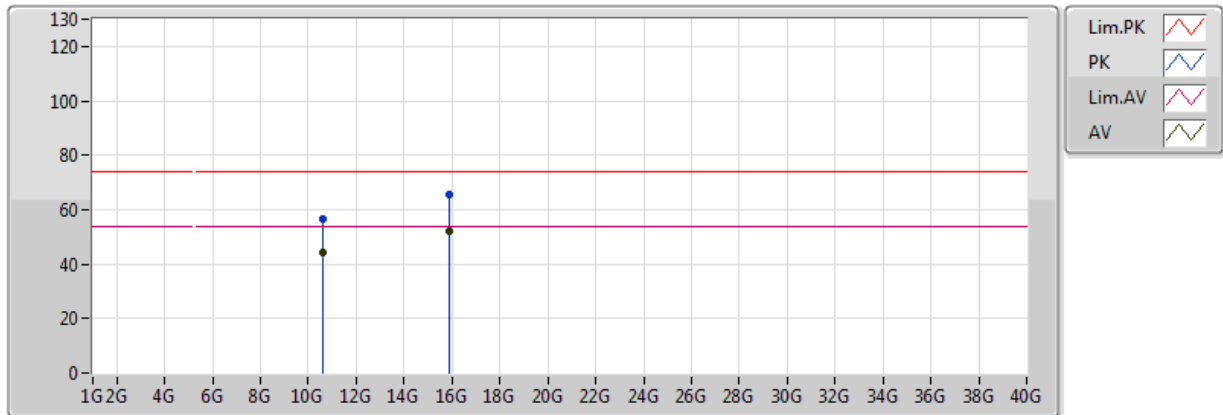


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.3012G	105.55	Inf	-Inf	2.82	3	Horizontal	11	1.59	-	102.73	31.72	5.64	34.54
AV	5.350005G	44.50	54.00	-9.50	2.85	3	Horizontal	11	1.59	-	41.65	31.74	5.65	34.54
PK	5.3016G	115.44	Inf	-Inf	2.82	3	Horizontal	11	1.59	-	112.62	31.72	5.64	34.54
PK	5.3532G	56.34	74.00	-17.66	2.85	3	Horizontal	11	1.59	-	53.49	31.74	5.65	34.54

802.11a_Nss1,(6Mbps)_4TX

5300MHz_TX

20/12/2017

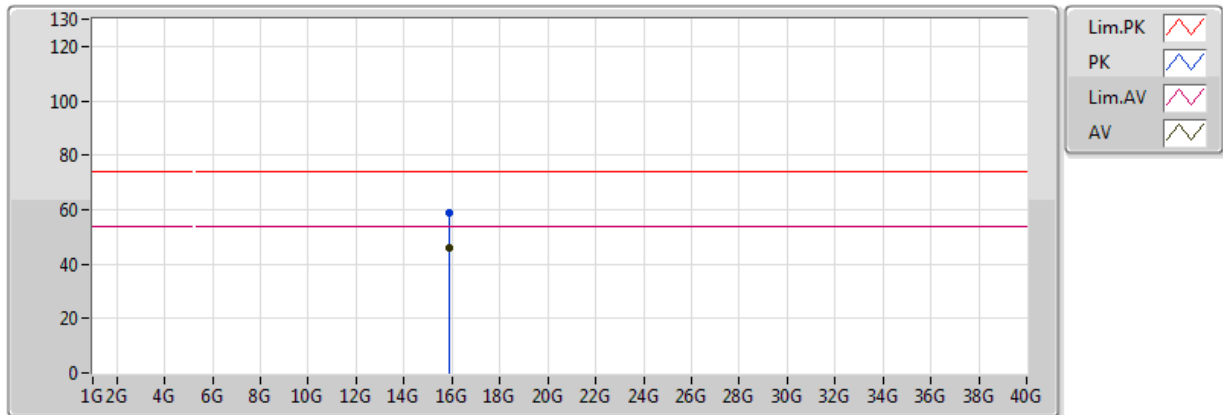


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	10.5977G	44.36	54.00	-9.64	12.96	3	Vertical	80	2.20	-	31.39	39.84	8.04	34.91
AV	15.9071G	52.18	54.00	-1.82	12.36	3	Vertical	86	1.63	-	39.82	37.45	10.05	35.14
PK	10.5971G	56.86	74.00	-17.14	12.96	3	Vertical	80	2.20	-	43.90	39.84	8.04	34.91
PK	15.8946G	65.32	74.00	-8.68	12.42	3	Vertical	86	1.63	-	52.91	37.50	10.04	35.12

802.11a_Nss1,(6Mbps)_4TX

5300MHz_TX

20/12/2017

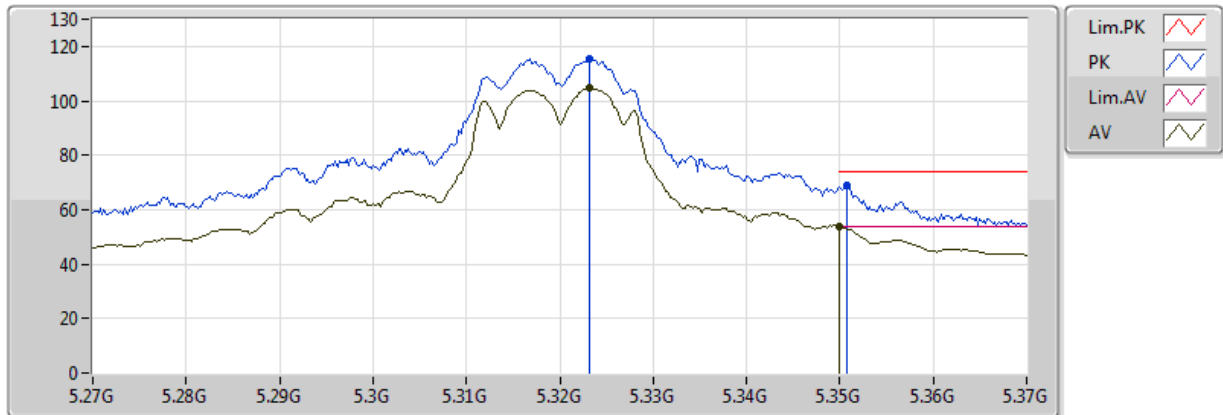


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	15.9057G	45.71	54.00	-8.29	12.37	3	Horizontal	209	1.35	-	33.35	37.46	10.05	35.14
PK	15.9072G	59.02	74.00	-14.98	12.36	3	Horizontal	209	1.35	-	46.66	37.45	10.05	35.14

802.11a_Nss1,(6Mbps)_4TX

5320MHz_TX

19/12/2017

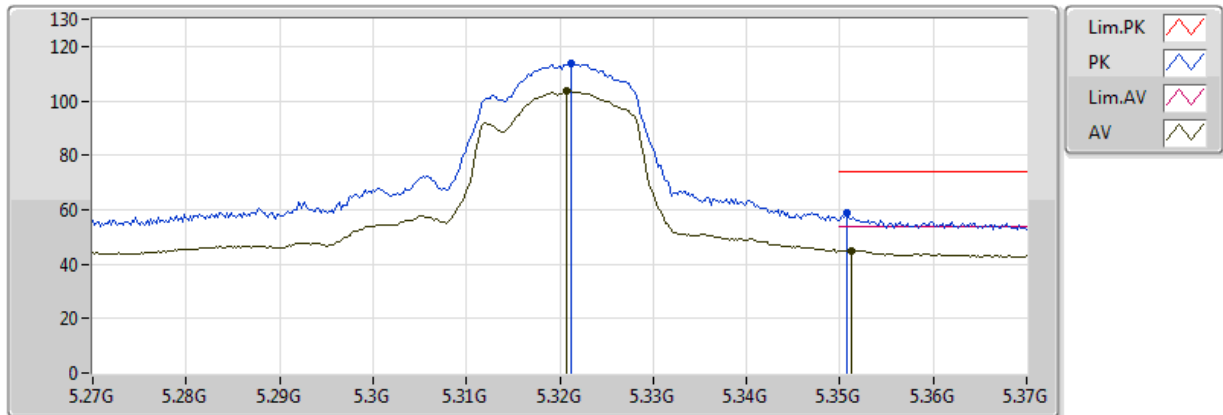


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.3232G	104.65	Inf	-Inf	2.83	3	Vertical	2	1.62	-	101.81	31.73	5.64	34.54
AV	5.35005G	53.87	54.00	-0.13	2.85	3	Vertical	2	1.62	-	51.02	31.74	5.65	34.54
PK	5.3232G	115.50	Inf	-Inf	2.83	3	Vertical	2	1.62	-	112.67	31.73	5.64	34.54
PK	5.3508G	68.94	74.00	-5.06	2.85	3	Vertical	2	1.62	-	66.09	31.74	5.65	34.54

802.11a_Nss1,(6Mbps)_4TX

5320MHz_TX

19/12/2017

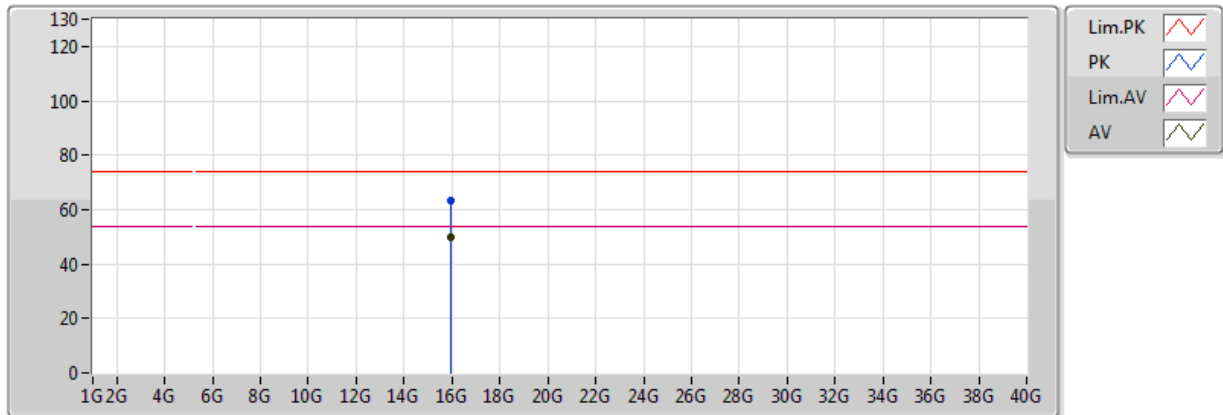


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.3208G	103.66	Inf	-Inf	2.83	3	Horizontal	351	1.44	-	100.82	31.73	5.64	34.54
AV	5.3512G	44.90	54.00	-9.10	2.85	3	Horizontal	351	1.44	-	42.05	31.74	5.65	34.54
PK	5.3212G	113.92	Inf	-Inf	2.83	3	Horizontal	351	1.44	-	111.09	31.73	5.64	34.54
PK	5.3508G	58.69	74.00	-15.31	2.85	3	Horizontal	351	1.44	-	55.84	31.74	5.65	34.54

802.11a_Nss1,(6Mbps)_4TX

5320MHz_TX

20/12/2017

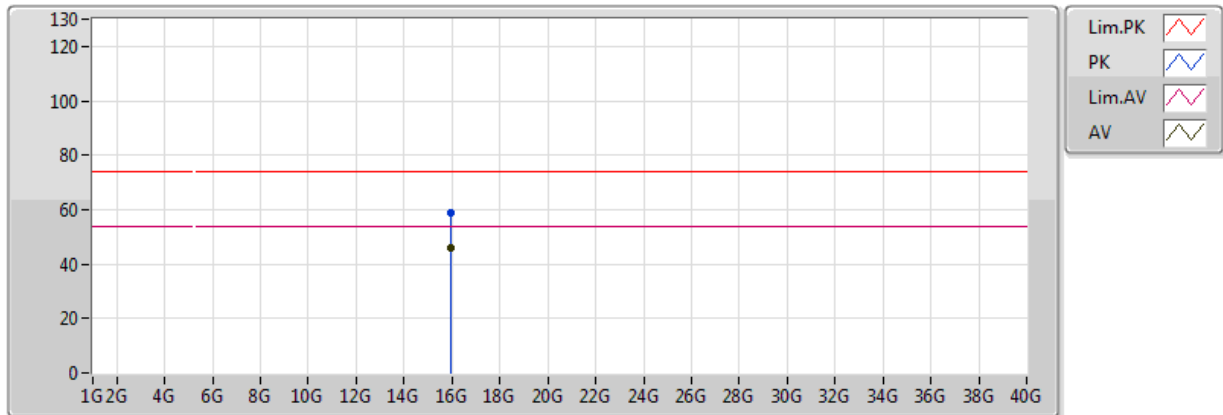


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	15.9609G	50.15	54.00	-3.85	12.11	3	Vertical	176	1.62	-	38.05	37.25	10.06	35.20
PK	15.9614G	63.50	74.00	-10.50	12.10	3	Vertical	176	1.62	-	51.40	37.25	10.06	35.20

802.11a_Nss1,(6Mbps)_4TX

5320MHz_TX

20/12/2017

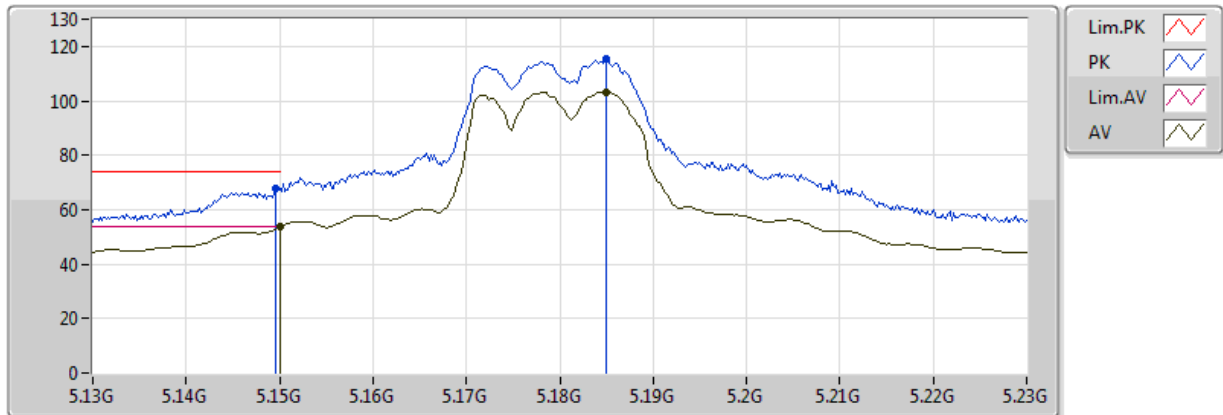


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	15.9708G	45.67	54.00	-8.33	12.06	3	Horizontal	162	1.87	-	33.61	37.21	10.06	35.22
PK	15.9825G	59.06	74.00	-14.94	12.00	3	Horizontal	162	1.87	-	47.06	37.17	10.07	35.23

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

19/12/2017

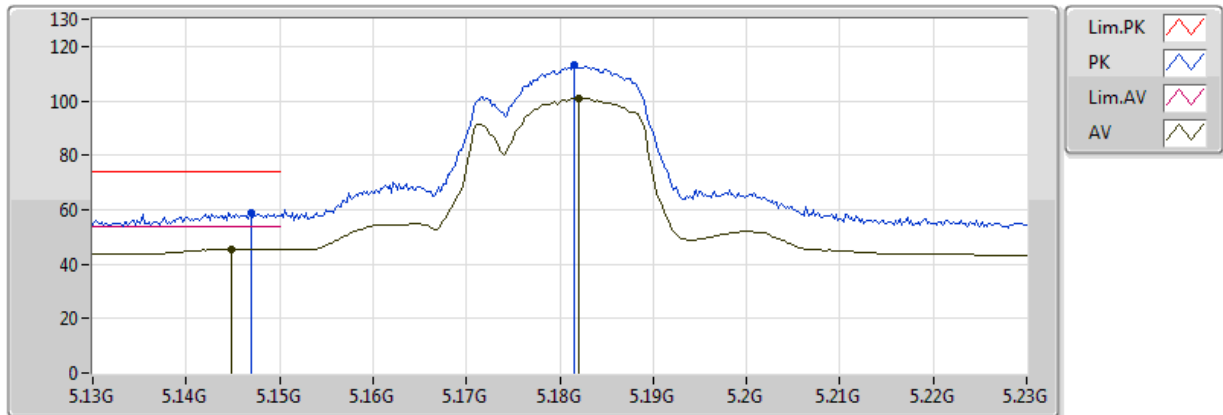


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.149995G	53.60	54.00	-0.40	2.73	3	Vertical	0	1.88	-	50.87	31.66	5.62	34.55
AV	5.185G	103.34	Inf	-Inf	2.75	3	Vertical	0	1.88	-	100.59	31.67	5.63	34.55
PK	5.1496G	68.08	74.00	-5.92	2.73	3	Vertical	0	1.88	-	65.35	31.66	5.62	34.55
PK	5.185G	115.36	Inf	-Inf	2.75	3	Vertical	0	1.88	-	112.61	31.67	5.63	34.55

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

19/12/2017

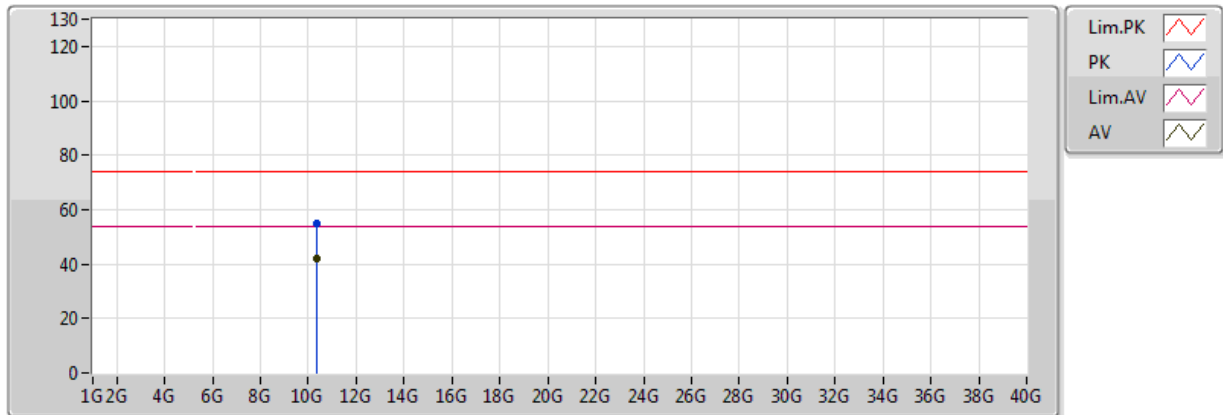


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.1448G	45.48	54.00	-8.52	2.73	3	Horizontal	8	1.61	-	42.76	31.66	5.62	34.55
AV	5.182G	100.93	Inf	-Inf	2.75	3	Horizontal	8	1.61	-	98.18	31.67	5.63	34.55
PK	5.147G	58.90	74.00	-15.10	2.73	3	Horizontal	8	1.61	-	56.17	31.66	5.62	34.55
PK	5.1816G	113.13	Inf	-Inf	2.75	3	Horizontal	8	1.61	-	110.38	31.67	5.63	34.55

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

20/12/2017

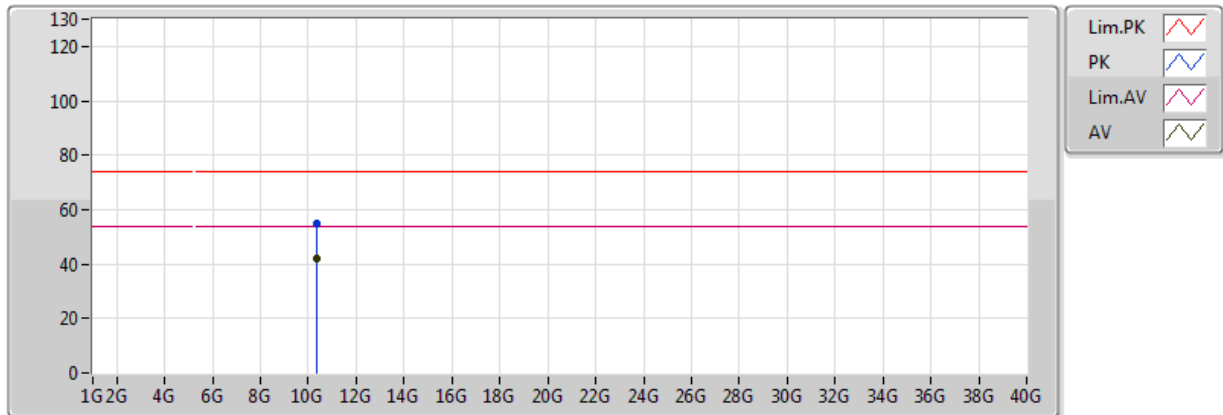


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	10.3686G	41.87	54.00	-12.13	12.36	3	Vertical	117	1.20	-	29.51	39.52	7.94	35.10
PK	10.3557G	54.93	74.00	-19.07	12.32	3	Vertical	117	1.20	-	42.61	39.50	7.93	35.11

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

20/12/2017



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	10.3381G	41.80	54.00	-12.20	12.28	3	Horizontal	199	1.72	-	29.52	39.47	7.92	35.12
PK	10.3556G	55.12	74.00	-18.88	12.32	3	Horizontal	199	1.72	-	42.80	39.50	7.93	35.11