FCC Test Report

Equipment	:	R610 Access Point
Brand Name	:	Ruckus
Model No.	:	R610
FCC ID	:	S9GR610
Standard	:	47 CFR FCC Part 15.407
Operating Band	:	5150 MHz – 5250 MHz 5725 MHz – 5850 MHz
Applicant	:	Ruckus Wireless, Inc. 350 West Java Drive Sunnyvale, California 94089 U.S.A
Manufacturer	:	Ruckus Wireless, Inc. 350 West Java Drive Sunnyvale, California 94089 U.S.A
Function	:	☐ Outdoor; ☒ Indoor; ☐ Fixed P2P ☐ Client

The product sample received on Jul. 25, 2016 and completely tested on Aug. 23, 2016. 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.

Sam Chen
SPORTON INTERNATIONAL INC.

Testing Laboratory
1190

Table of Contents

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

Revision History

Report No.	Version	Description	Issued Date
FR672501AB	Rev. 01	Initial issue of report	Sep. 01, 2016

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.2G	11a	20	3
5.8G	11a	20	3
5.2G	HT20	20	3
5.8G	HT20	20	3
5.2G	HT20,BF	20	3
5.8G	HT20,BF	20	3
5.2G	VHT20	20	3
5.8G	VHT20	20	3
5.2G	VHT20,BF	20	3
5.8G	VHT20,BF	20	3
5.2G	HT40	40	3
5.8G	HT40	40	3
5.2G	HT40,BF	40	3
5.8G	HT40,BF	40	3
5.2G	VHT40	40	3
5.8G	VHT40	40	3
5.2G	VHT40,BF	40	3
5.8G	VHT40,BF	40	3
5.2G	VHT80	80	3
5.8G	VHT80	80	3
5.2G	VHT80,BF	80	3
5.8G	VHT80,BF	80	3
5.2G	VHT80+80	80	1(3)

Band	Mode	BWch (MHz)	Nant
5.8G	VHT80+80	80	1(1)

Note:
- 5.2G/5.2G-I(IC) is the 5.2GHz Band (5.15-5.25GHz).
- 5.8G/5.8G-I(IC) is the 5.8GHz Band (5.725-5.850GHz).
- 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.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Table for 80+80 MHz Mode

Type	Channel No.	Frequency
1	42+155	5210+5775 MHz

1.1.3 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	Ruckus	R610	PIFA Antenna	I-PEX	1	3
2	Ruckus	R610	PIFA Antenna	I-PEX	1	3
3	Ruckus	R610	PIFA Antenna	I-PEX	1	3

Note: 1. The EUT has three antennas.

2. The EUT is with 3 antennas. Two of the antennas' polarity is vertical and the other antenna's polarity is Horizontal which is 3T2S, the array gain is 1.76dBi.

The 80+80MHz mode which is 2T2S(Chain 1 + Chain 3), the array gain is 0 dBi.

The non-beamforming 80+80MHz mode=beamforming 80+80MHz mode.

<For 2.4GHz Band>

For IEEE 802.11b/g/n/ac mode <3TX/3RX>:

Chain 1, Chain 2 and Chain 3 will transmit/receive the same signal simultaneously.

Chain 1, Chain 2 and Chain 3 can be used as transmitting/receiving antennas.

<For 5GHz Band>

For IEEE 802.11a/n/ac mode <3TX/3RX>:

Chain 1, Chain 2 and Chain 3 will transmit/receive the same signal simultaneously.

Chain 1, Chain 2 and Chain 3 can be used as transmitting/receiving antennas.

For IEEE 802.11ac 80+80MHz <2TX/2RX>:

Chain 1 and Chain 3 will transmit/receive the same signal simultaneously.

Chain 1 and Chain 3 can be used as transmitting/receiving antennas.

1.1.4 Mode Test Duty Cycle

Mode	DC	T(s)	VBW(Hz) ≥ 1/T
11a	0.973	2.029m	1k
VHT20	0.988	n/a (DC>=0.98)	n/a (DC>=0.98)
VHT20,BF	0.988	n/a (DC>=0.98)	n/a (DC>=0.98)
VHT40	0.974	2.417m	1k
VHT40,BF	0.975	2.429m	1k
VHT80	0.948	1.137m	1k
VHT80,BF	0.951	1.153m	1k
VHT80+80	0.948	1.145m	1k

1.1.5 EUT Operational Condition

EUT Power Type	From Power Adapter and PoE			
Beamforming Function	☒	With beamforming for 802.11n/ac in 2.4GHz/5GHz	☐	Without beamforming

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
- FCC KDB 789033 D02 v01r03
- FCC KDB 644545 D03 v01
- FCC KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location			
☐	HWA YA	ADD :	No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
		TEL :	886-3-327-3456 FAX : 886-3-318-0055
☒	JHUBEI	ADD :	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.
		TEL :	886-3-656-9065 FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Gary Chu	25°C / 60%	Aug. 06, 2016~Aug. 23, 2016
Radiated	03CH01-CB	Steven Liang	22°C / 54%	Aug. 06, 2016~Aug. 23, 2016
AC Conduction	CO01-CB	Ryo Fan	24°C / 65%	Aug. 11, 2016

Test site Designation No. TW0006 with FCC.
Test site registered number IC 4086D with Industry Canada.

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)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Power Setting
5.2G	11a	20	1	3	5180	L	19.5
5.2G	11a	20	1	3	5200	M	22.5
5.2G	11a	20	1	3	5240	H	23
5.8G	11a	20	1	3	5745	L	19.5
5.8G	11a	20	1	3	5785	M	20.5
5.8G	11a	20	1	3	5825	H	22
5.2G	VHT20	20	1,(M0)	3	5180	L	20
5.2G	VHT20	20	1,(M0)	3	5200	M	23
5.2G	VHT20	20	1,(M0)	3	5240	H	22.5
5.8G	VHT20	20	1,(M0)	3	5745	L	23.5
5.8G	VHT20	20	1,(M0)	3	5785	M	22.5
5.8G	VHT20	20	1,(M0)	3	5825	H	22.5
5.2G	VHT20,BF	20	1,(M0)	3	5180	L	25
5.2G	VHT20,BF	20	1,(M0)	3	5200	M	28
5.2G	VHT20,BF	20	1,(M0)	3	5240	H	28
5.8G	VHT20,BF	20	1,(M0)	3	5745	L	28
5.8G	VHT20,BF	20	1,(M0)	3	5785	M	25
5.8G	VHT20,BF	20	1,(M0)	3	5825	H	26
5.2G	VHT40	40	1,(M0)	3	5190	L	17
5.2G	VHT40	40	1,(M0)	3	5230	H	21
5.8G	VHT40	40	1,(M0)	3	5755	L	22.5
5.8G	VHT40	40	1,(M0)	3	5795	H	23.5
5.2G	VHT40,BF	40	1,(M0)	3	5190	L	22
5.2G	VHT40,BF	40	1,(M0)	3	5230	H	28
5.8G	VHT40,BF	40	1,(M0)	3	5755	L	28
5.8G	VHT40,BF	40	1,(M0)	3	5795	H	28
5.2G	VHT80	80	1,(M0)	3	5210	S	13.5
5.8G	VHT80	80	1,(M0)	3	5775	S	20
5.2G	VHT80,BF	80	1,(M0)	3	5210	S	20.5
5.8G	VHT80,BF	80	1,(M0)	3	5775	S	25
5.2G	VHT80+80	80	1,(M0)	1(3)	5210,5775	S	17.5
5.8G	VHT80+80	80	1,(M0)	1(1)	5210,5775	S	17.5

Note 1: VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

Note 2: There are two modes of EUT, one is beamforming mode, and the other is non-beamforming mode for 802.11n/ac in 2.4GHz/5GHz, Beamforming mode and non-beamforming mode has been test and record in this test report.

2.2 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	Normal Link
1	EUT with Adapter
2	EUT with PoE
For operating mode 2 is the worst case and it was record in this test report.	

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	Normal Link
1	Place EUT in Y axis with Adapter
2	Place EUT in Z axis with Adapter
Mode 1 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	Place EUT in Y axis with PoE
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
1	Place EUT in Y axis
2	Place EUT in Z axis
Mode 2 has been evaluated to be the worst case after evaluating. Consequently, measurement will follow this same test mode.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	Place EUT in Y axis (2.4GHz+5GHz)
2	Place EUT in Z axis (2.4GHz+5GHz)
Mode 2 has been evaluated to be the worst case after evaluating. Consequently, measurement will follow this same test mode.	
Refer to Sporton Test Report No.: FA672501 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.3 EUT Operation during Test

<For Non-Beamforming Mode>

The EUT was programmed to be in continuously transmitting/receiving mode.

<For Beamforming Mode>

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN XP were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet.
3. Executed "Lantest.exe " to link with the remote workstation to receive and transmit packet by RX Device and transmit duty cycle no less 98%

2.4 Accessories

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter	Ruckus	WGF-1200200T3	Input: 100-240V~, 50/60Hz, 0.6A Output: 12.0V, 2.0A
PoE	Ruckus	740-64214-001	Input: 100-240V~50/60Hz 0.75A MAX Output: 48V, 0.5A
Other			
Wall-mounted rack*1			

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*4	DELL	E6430	DoC
2	Flash disk	Silicon	I-Series	DoC

For Test Site No: 03CH01-CB (below 1GHz)

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*4	DELL	E4300	DoC
2	Flash Disk3.0	Transcend	JetFlash-700	DoC

<For Non-Beamforming Mode>
For Test Site No: 03CH01-CB (above 1GHz)

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

<For Beamforming Mode>
For Test Site No: 03CH01-CB (above 1GHz)

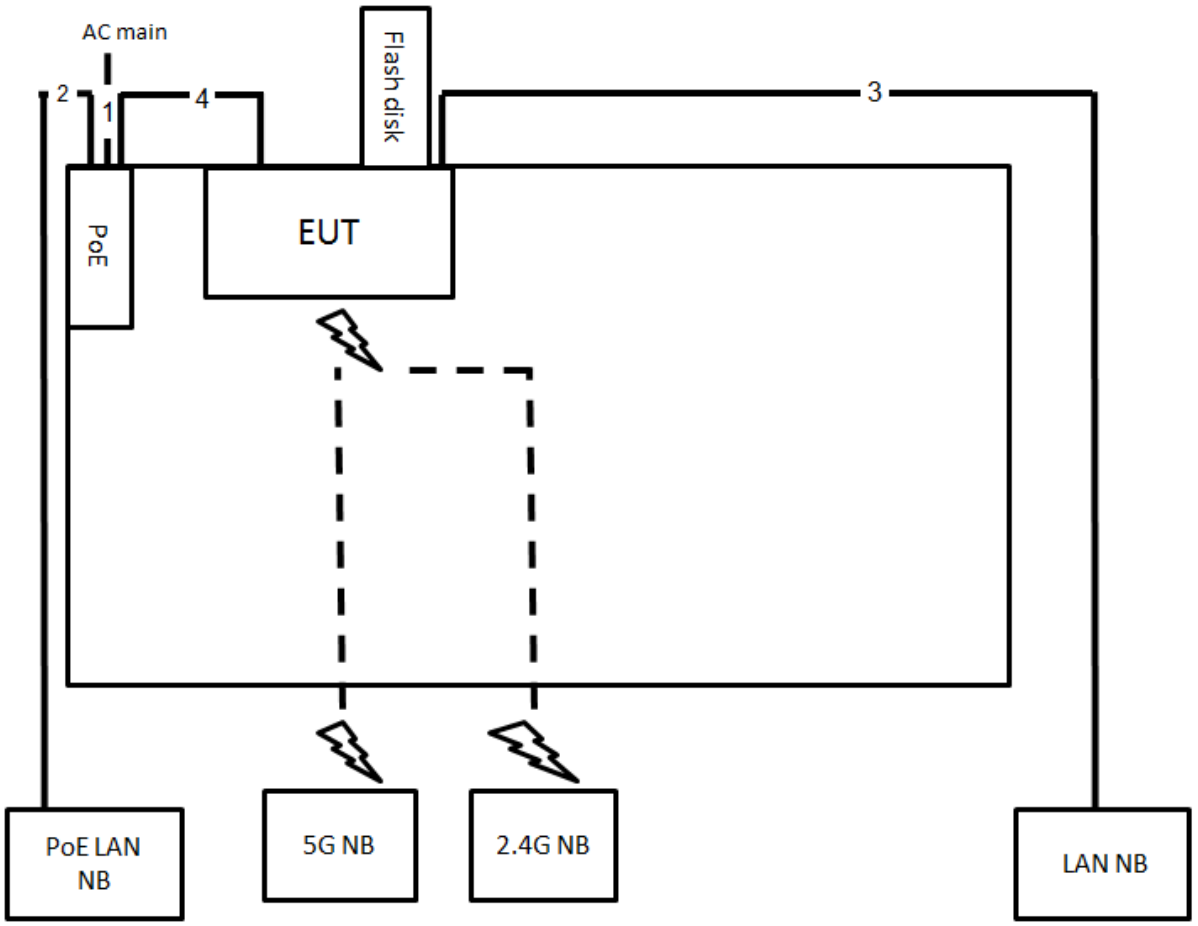
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*2	DELL	E4300	DoC
2	RX Device	Ruckus	R610	S9GR610

For Test Site No: TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E4300	DoC

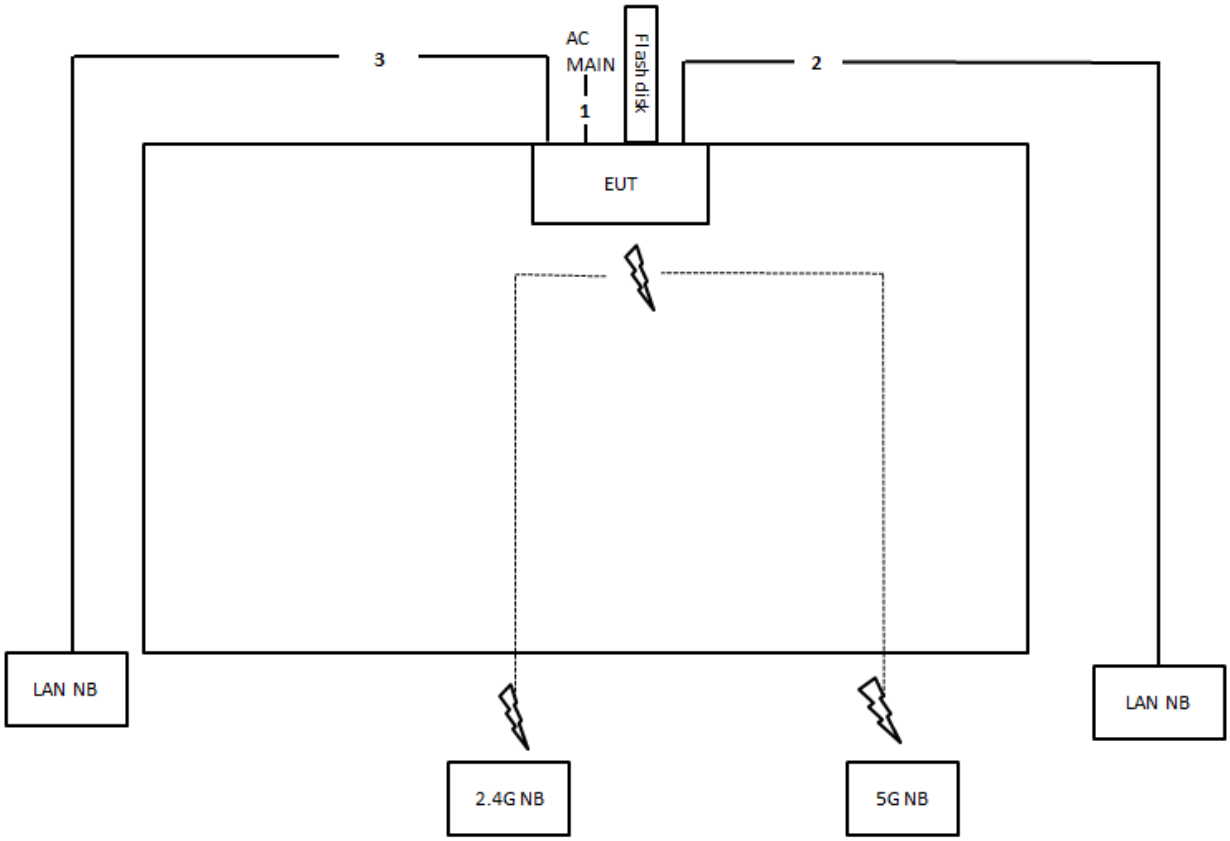
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Power cable	No	0.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable	No	1m

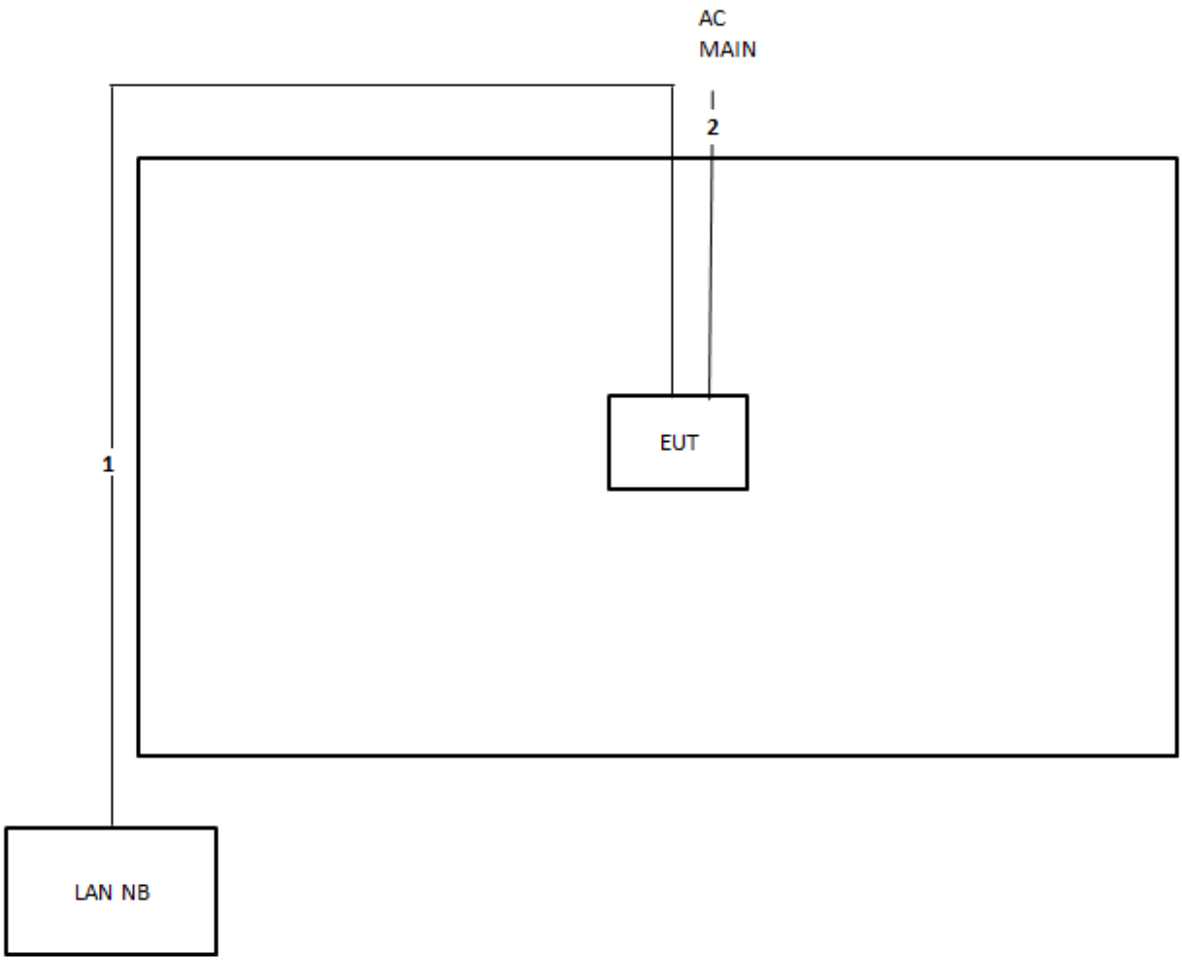
Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	3.4m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m

<For Non-Beamforming Mode>

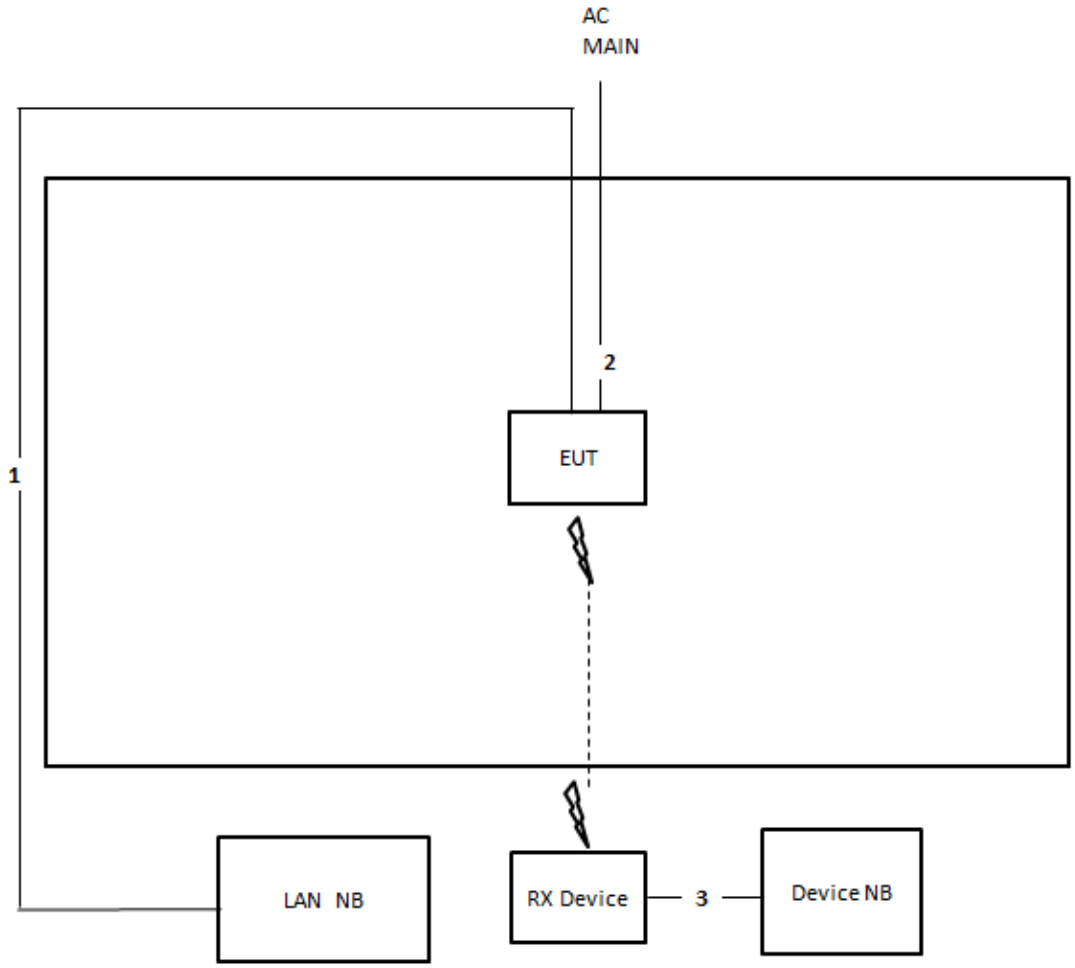
Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	3.4m

<For Beamforming Mode>

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	3.4m
3	RJ-45 cable	No	10m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

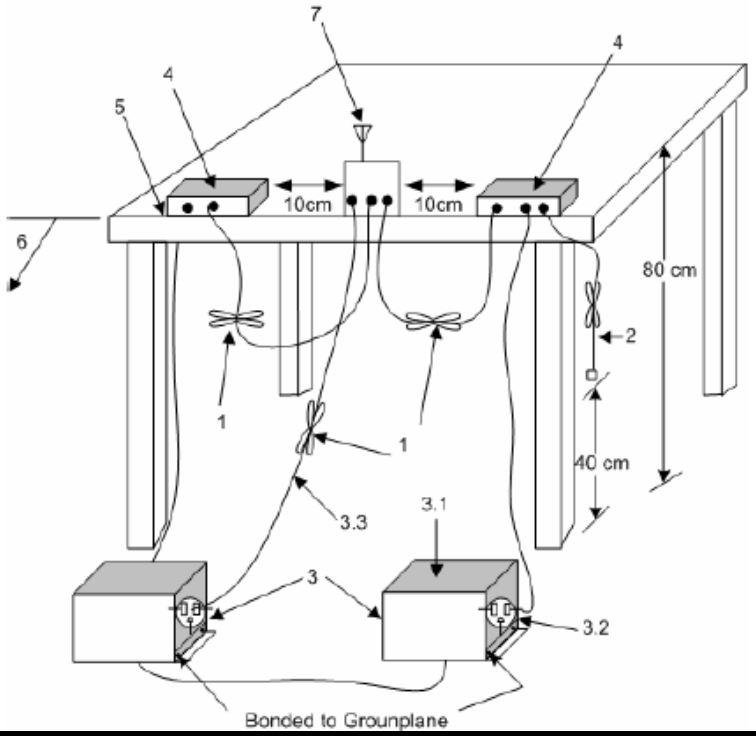
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup

AC Power-line Conducted Emissions



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 ≥ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

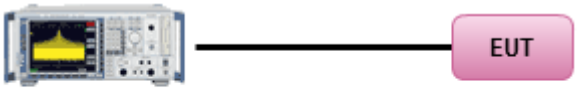
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method		
▪	For the emission bandwidth shall be measured using one of the options below:	
	☒	Refer as FCC KDB 789033 D02 v01r03, clause C for EBW and clause D for OBW measurement.
	☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
	☒	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth
 Spectrum Analyzer

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.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 789033 D02 v01r03, clause E Method SA-1 (spectral trace averaging).
	☐ Refer as FCC KDB 789033 D02 v01r03, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty cycle < 98% and average over on/off periods with duty factor
	☐ Refer as FCC KDB 789033 D02 v01r03, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033 D02 v01r03, 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 FCC KDB 789033 D02 v01r03, clause E Method PM-G (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 23 dBi, then P_{Out} = 17 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6)..
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the peak power spectral density (PPSD) ≤ 4 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 17 dBm/MHz.
	▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for 0° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40° -35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45°
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 17 dBm/MHz.
☐	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.	

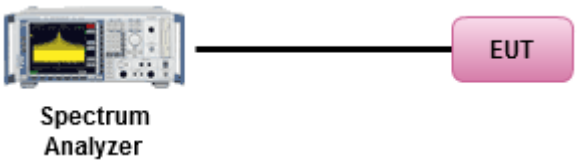
3.4.2 Measuring Instruments

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 FCC KDB 789033 D02 v01r03, 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% or external video / power trigger]
	☒ Refer as FCC KDB 789033 D02 v01r03, clause E Method SA-1 (spectral trace averaging).
	☐ Refer as FCC KDB 789033 D02 v01r03, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty cycle < 98% and average over on/off periods with duty factor
	☒ Refer as FCC KDB 789033 D02 v01r03, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033 D02 v01r03, 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:
	☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC 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.
	☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
	☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
	▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.4.4 Test Setup

Power Spectral Density
 Spectrum Analyzer

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.

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	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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

3.5.2 Measuring Instruments

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

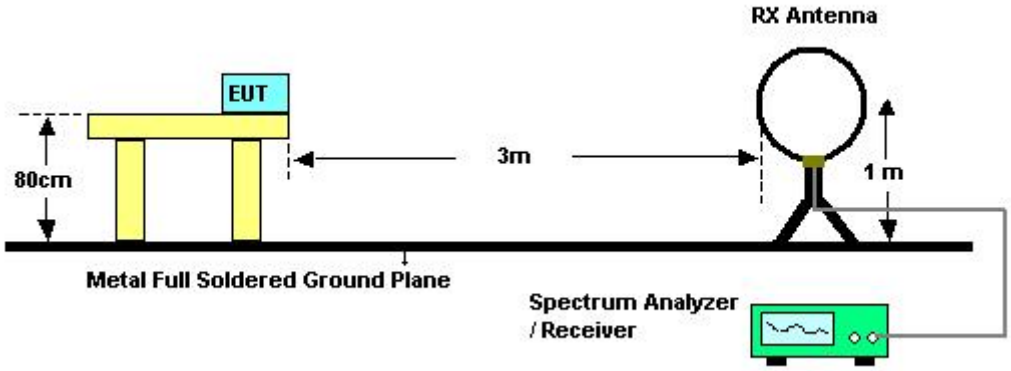
3.5.3 Test Procedures

Test Method		
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
▪ For the transmitter unwanted emissions shall be measured using following options below:		
	▪ Refer as FCC KDB 789033 D02 v01r03, clause H)2) for unwanted emissions into non-restricted bands.	
	▪ Refer as FCC KDB 789033 D02 v01r03, clause H)1) for unwanted emissions into restricted bands.	
		☐ Refer as FCC KDB 789033 D02 v01r03, H)6) Method AD (Trace Averaging).
		☒ Refer as FCC KDB 789033 D02 v01r03, H)6) Method VB (Reduced VBW).
		☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒ Refer as FCC KDB 789033 D02 v01r03, clause H)5) measurement procedure peak limit.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
▪ For radiated measurement.		
	▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.	
	▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.	
	▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
▪ The any unwanted emissions level shall not exceed the fundamental emission level.		
▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.		

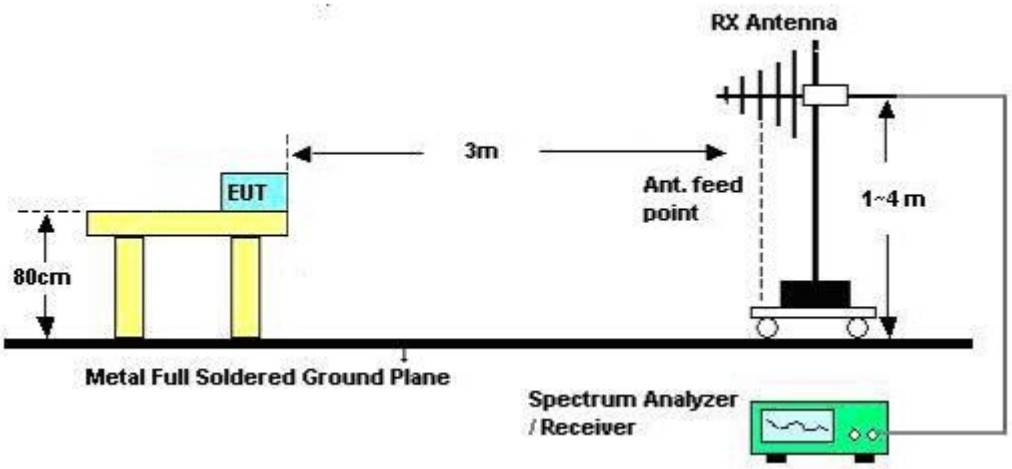
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

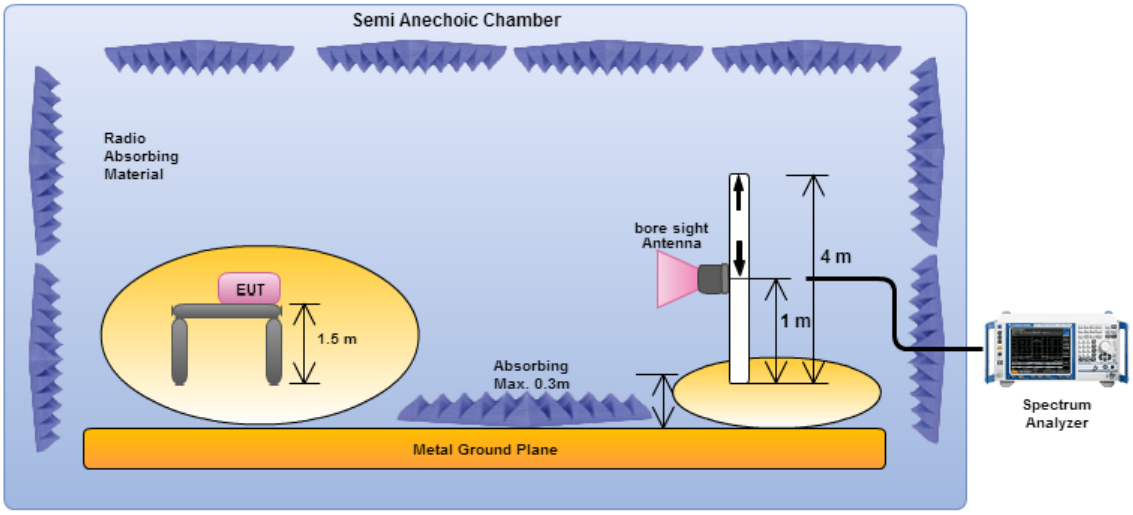
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.6 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.
LE-LAN Devices
▪ N/A
IEEE Std. 802.11
▪ The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25 ppm maximum for the 2.4 GHz band.

3.6.2 Measuring Instruments

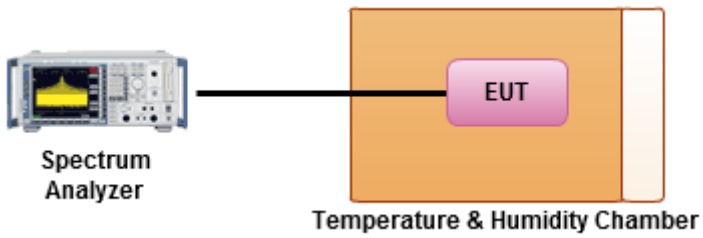
Refer a test equipment and calibration data table in this test report.

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
	▪ Extreme temperature is -30°C~50°C.

3.6.4 Test Setup

Frequency Stability



3.6.5 Test Result of Frequency Stability

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 27, 2016	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 08, 2015	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 23, 2015	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA	TESEQ	CBL6112D	37880	20MHz ~ 2GHz	Sep. 03, 2015	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 22, 2015	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 15, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 2016	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Nov. 13, 2015	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Oct. 27, 2015	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 16, 2016	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz ~ 1 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-17	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-l0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 09, 2015	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 03, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)

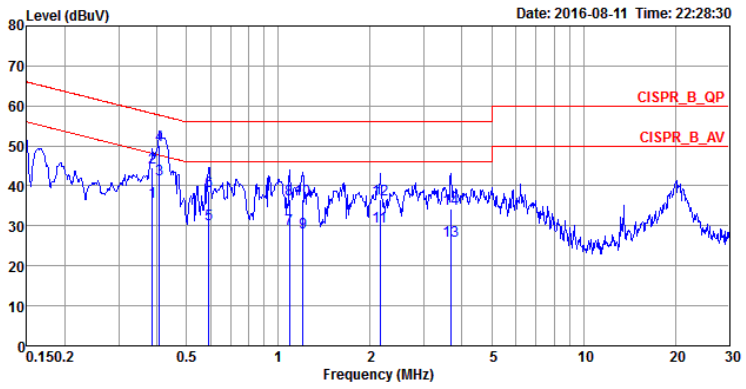
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-8	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 02, 2015	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

"*" Calibration Interval of instruments listed above is two years.

N.C.R. means Non-Calibration required.

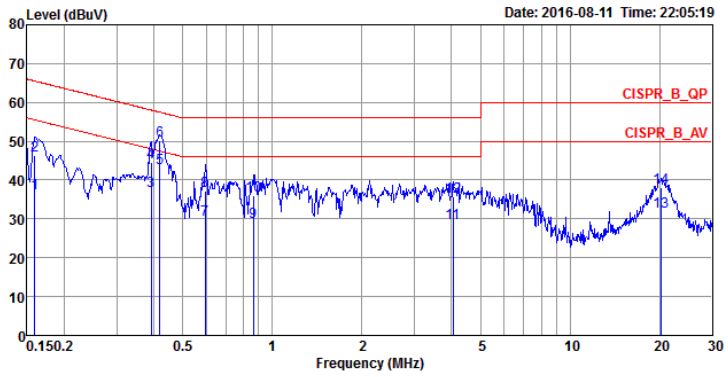
AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Neutral
Operating Function	EUT with PoE		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.3872	36.12	-12.00	48.12	26.18	9.92	0.02	NEUTRAL	Average
2	0.3872	44.53	-13.59	58.12	34.59	9.92	0.02	NEUTRAL	QP
3	0.4083	41.49	-6.19	47.68	31.55	9.92	0.02	NEUTRAL	Average
4	0.4083	50.17	-7.51	57.68	40.23	9.92	0.02	NEUTRAL	QP
5	0.5916	30.35	-15.65	46.00	20.10	9.93	0.32	NEUTRAL	Average
6	0.5916	38.64	-17.36	56.00	28.39	9.93	0.32	NEUTRAL	QP
7	1.0881	29.11	-16.89	46.00	18.51	9.94	0.66	NEUTRAL	Average
8	1.0881	36.51	-19.49	56.00	25.91	9.94	0.66	NEUTRAL	QP
9	1.2034	28.47	-17.53	46.00	17.97	9.94	0.56	NEUTRAL	Average
10	1.2034	36.52	-19.48	56.00	26.02	9.94	0.56	NEUTRAL	QP
11	2.1553	29.83	-16.17	46.00	19.81	9.96	0.06	NEUTRAL	Average
12	2.1553	36.73	-19.27	56.00	26.71	9.96	0.06	NEUTRAL	QP
13	3.6806	26.27	-19.73	46.00	16.19	9.99	0.09	NEUTRAL	Average
14	3.6806	34.36	-21.64	56.00	24.28	9.99	0.09	NEUTRAL	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	2	**Power Phase**	Line
Operating Function	EUT with PoE		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1590	36.49	-19.03	55.52	26.30	10.02	0.17	LINE	Average
2	0.1590	46.48	-19.04	65.52	36.29	10.02	0.17	LINE	QP
3	0.3914	37.21	-10.82	48.03	27.27	9.92	0.02	LINE	Average
4	0.3914	44.54	-13.49	58.03	34.60	9.92	0.02	LINE	QP
5	0.4193	42.99	-4.47	47.46	33.02	9.92	0.05	LINE	Average
6	0.4193	50.24	-7.22	57.46	40.27	9.92	0.05	LINE	QP
7	0.5948	29.84	-16.16	46.00	19.58	9.93	0.33	LINE	Average
8	0.5948	37.29	-18.71	56.00	27.03	9.93	0.33	LINE	QP
9	0.8618	29.17	-16.83	46.00	18.62	9.93	0.62	LINE	Average
10	0.8618	36.11	-19.89	56.00	25.56	9.93	0.62	LINE	QP
11	4.0489	28.98	-17.02	46.00	18.90	9.99	0.09	LINE	Average
12	4.0489	35.67	-20.33	56.00	25.59	9.99	0.09	LINE	QP
13	20.2696	31.75	-18.25	50.00	21.19	10.32	0.24	LINE	Average
14	20.2696	38.02	-21.98	60.00	27.46	10.32	0.24	LINE	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.)

<For 802.11a, VHT20, VHT40, VHT80 Mode>

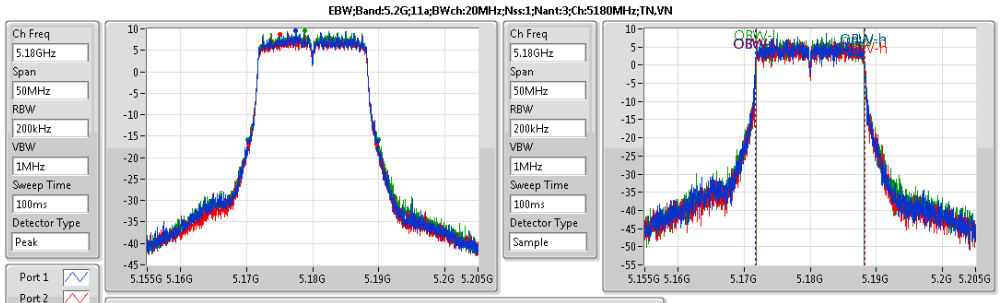
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.2G;11a;Nss1;Ntx3	39.35M	18.866M	18M9D1D	19.325M	16.392M
5.8G;11a;Nss1;Ntx3	16.325M	16.617M	16M6D1D	16.3M	16.417M
5.2G;VHT20;Nss1,(M0);Ntx3	40.3M	19.69M	19M7D1D	20.525M	17.616M
5.8G;VHT20;Nss1,(M0);Ntx3	17.55M	18.441M	18M4D1D	17.5M	17.791M
5.2G;VHT40;Nss1,(M0);Ntx3	51.55M	36.332M	36M3D1D	39.6M	36.132M
5.8G;VHT40;Nss1,(M0);Ntx3	36.35M	67.166M	67M2D1D	36M	37.181M
5.2G;VHT80;Nss1,(M0);Ntx3	80.2M	75.762M	75M8D1D	80M	75.662M
5.8G;VHT80;Nss1,(M0);Ntx3	76.3M	75.962M	76M0D1D	74M	75.862M
5.2G;VHT20,BF;Nss1,(M0);Ntx3	49.425M	28.961M	29M0D1D	38.3M	17.841M
5.8G;VHT20,BF;Nss1,(M0);Ntx3	17.65M	23.363M	23M4D1D	17.575M	17.741M
5.2G;VHT40,BF;Nss1,(M0);Ntx3	98.25M	46.577M	46M6D1D	44.15M	36.182M
5.8G;VHT40,BF;Nss1,(M0);Ntx3	36.35M	47.076M	47M1D1D	36.3M	40.53M
5.2G;VHT80,BF;Nss1,(M0);Ntx3	90.1M	76.162M	76M2D1D	87.5M	75.762M
5.8G;VHT80,BF;Nss1,(M0);Ntx3	75.1M	156.322M	156MD1D	74.4M	144.628M

Result

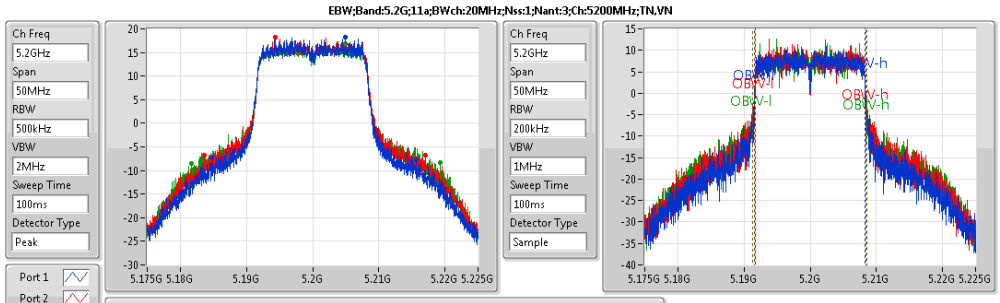
Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)	P3-N dB (Hz)	P3-OBW (Hz)
5.2G;11a;Nss1;Ntx3;5180;TN,VN	Pass	Inf	19.45M	16.417M	19.325M	16.417M	19.775M	16.392M
5.2G;11a;Nss1;Ntx3;5200;TN,VN	Pass	Inf	30.825M	16.617M	33.375M	16.817M	37.65M	17.191M
5.2G;11a;Nss1;Ntx3;5240;TN,VN	Pass	Inf	33.775M	16.817M	36.8M	18.041M	39.35M	18.866M
5.8G;11a;Nss1;Ntx3;5745;TN,VN	Pass	500k	16.325M	16.442M	16.3M	16.442M	16.3M	16.417M
5.8G;11a;Nss1;Ntx3;5785;TN,VN	Pass	500k	16.325M	16.467M	16.3M	16.442M	16.3M	16.467M
5.8G;11a;Nss1;Ntx3;5825;TN,VN	Pass	500k	16.3M	16.567M	16.3M	16.567M	16.325M	16.617M
5.2G;VHT20;Nss1,(M0);Ntx3;5180;TN,VN	Pass	Inf	20.525M	17.641M	20.65M	17.616M	21.25M	17.666M
5.2G;VHT20;Nss1,(M0);Ntx3;5200;TN,VN	Pass	Inf	34.875M	17.866M	37.9M	18.491M	40.3M	19.69M
5.2G;VHT20;Nss1,(M0);Ntx3;5240;TN,VN	Pass	Inf	27.175M	17.791M	33.525M	17.841M	35.525M	17.891M
5.8G;VHT20;Nss1,(M0);Ntx3;5745;TN,VN	Pass	500k	17.55M	17.816M	17.525M	17.841M	17.525M	18.441M
5.8G;VHT20;Nss1,(M0);Ntx3;5785;TN,VN	Pass	500k	17.55M	17.816M	17.5M	17.891M	17.55M	18.341M
5.8G;VHT20;Nss1,(M0);Ntx3;5825;TN,VN	Pass	500k	17.525M	17.791M	17.525M	17.866M	17.55M	17.916M
5.2G;VHT40;Nss1,(M0);Ntx3;5190;TN,VN	Pass	Inf	39.6M	36.132M	40M	36.132M	40.2M	36.182M
5.2G;VHT40;Nss1,(M0);Ntx3;5230;TN,VN	Pass	Inf	40.6M	36.232M	44.4M	36.332M	51.55M	36.232M
5.8G;VHT40;Nss1,(M0);Ntx3;5755;TN,VN	Pass	500k	36.3M	37.181M	36.3M	42.429M	36.35M	49.875M
5.8G;VHT40;Nss1,(M0);Ntx3;5795;TN,VN	Pass	500k	36M	56.572M	36.25M	60.87M	36.3M	67.166M
5.2G;VHT80;Nss1,(M0);Ntx3;5210;TN,VN	Pass	Inf	80M	75.762M	80.1M	75.662M	80.2M	75.662M
5.8G;VHT80;Nss1,(M0);Ntx3;5775;TN,VN	Pass	500k	76.3M	75.962M	74M	75.862M	76M	75.862M
5.2G;VHT20,BF;Nss1,(M0);Ntx3;5180;TN,VN	Pass	Inf	38.3M	17.841M	40.525M	17.891M	40.25M	17.891M
5.2G;VHT20,BF;Nss1,(M0);Ntx3;5200;TN,VN	Pass	Inf	46.9M	25.862M	48.025M	28.511M	49.425M	28.961M
5.2G;VHT20,BF;Nss1,(M0);Ntx3;5240;TN,VN	Pass	Inf	44.075M	19.965M	45.85M	22.339M	46.25M	21.589M
5.8G;VHT20,BF;Nss1,(M0);Ntx3;5745;TN,VN	Pass	500k	17.575M	20.54M	17.575M	22.139M	17.575M	23.363M
5.8G;VHT20,BF;Nss1,(M0);Ntx3;5785;TN,VN	Pass	500k	17.625M	17.791M	17.6M	17.816M	17.575M	17.741M
5.8G;VHT20,BF;Nss1,(M0);Ntx3;5825;TN,VN	Pass	500k	17.65M	17.841M	17.6M	17.941M	17.575M	17.941M
5.2G;VHT40,BF;Nss1,(M0);Ntx3;5190;TN,VN	Pass	Inf	44.2M	36.332M	44.15M	36.282M	45.3M	36.182M
5.2G;VHT40,BF;Nss1,(M0);Ntx3;5230;TN,VN	Pass	Inf	96.45M	38.331M	95.65M	46.577M	98.25M	44.928M
5.8G;VHT40,BF;Nss1,(M0);Ntx3;5755;TN,VN	Pass	500k	36.3M	41.879M	36.35M	43.028M	36.3M	47.076M
5.8G;VHT40,BF;Nss1,(M0);Ntx3;5795;TN,VN	Pass	500k	36.3M	40.53M	36.3M	42.629M	36.35M	46.477M
5.2G;VHT80,BF;Nss1,(M0);Ntx3;5210;TN,VN	Pass	Inf	87.5M	75.962M	89.3M	75.762M	90.1M	76.162M
5.8G;VHT80,BF;Nss1,(M0);Ntx3;5775;TN,VN	Pass	500k	74.4M	144.628M	74.4M	150.125M	75.1M	156.322M

EBW;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5180MHz;TN,VN



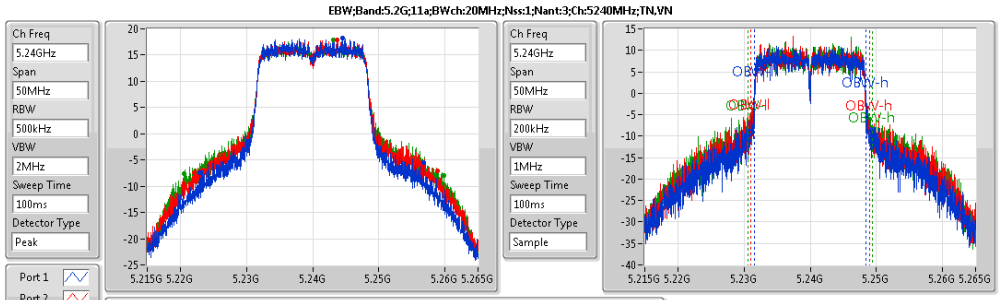
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.45M	5.170375G	5.189825G	16.417M	5.171779G	5.188196G	Inf	1
19.325M	5.1703G	5.189625G	16.417M	5.171804G	5.188221G	Inf	2
19.775M	5.17025G	5.190025G	16.392M	5.171804G	5.188196G	Inf	3

EBW;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5200MHz;TN,VN



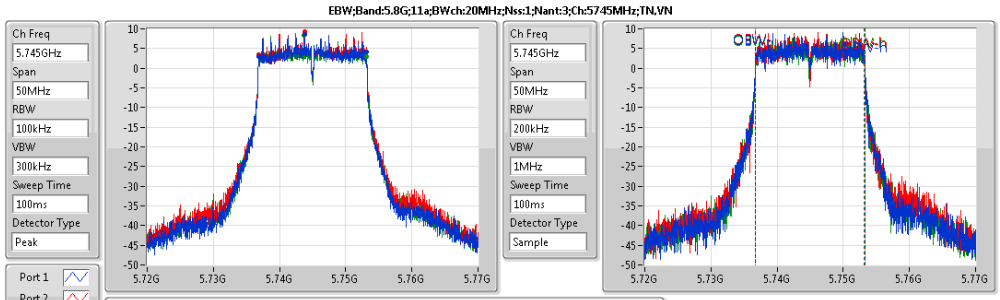
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30.825M	5.1848G	5.215625G	16.617M	5.191679G	5.208296G	Inf	1
33.375M	5.18365G	5.217025G	16.817M	5.191604G	5.208421G	Inf	2
37.65M	5.1817G	5.21935G	17.191M	5.191354G	5.208546G	Inf	3

EBW;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5240MHz;TN,VN



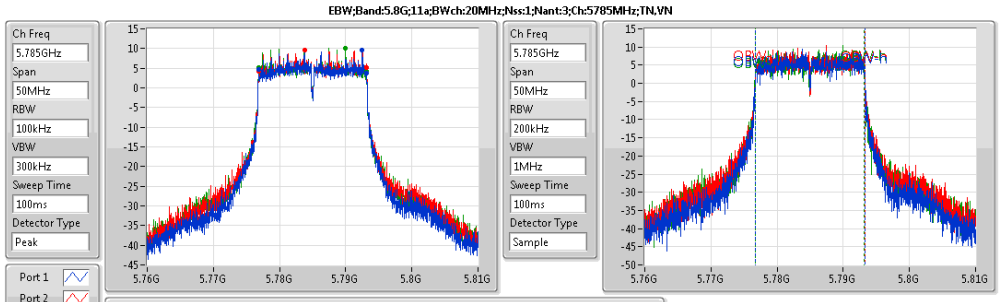
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.775M	5.223G	5.256775G	16.817M	5.231604G	5.248421G	Inf	1
36.8M	5.222125G	5.258925G	18.041M	5.230955G	5.248996G	Inf	2
39.35M	5.220525G	5.259875G	18.866M	5.23053G	5.249395G	Inf	3

EBW;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5745MHz;TN,VN



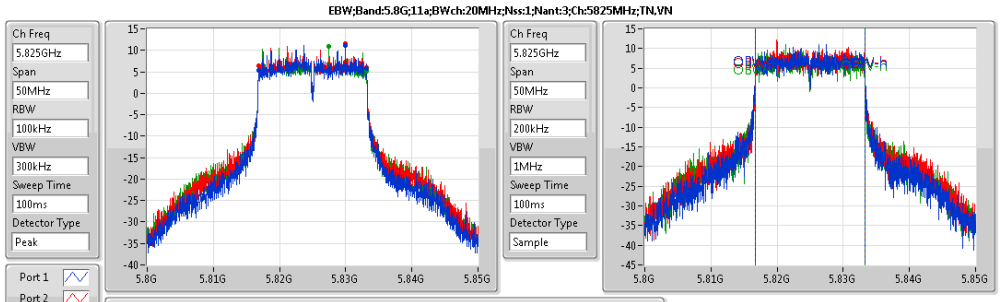
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.736825G	5.75315G	16.442M	5.736779G	5.753221G	500k	1
16.3M	5.73685G	5.75315G	16.442M	5.736779G	5.753221G	500k	2
16.3M	5.73685G	5.75315G	16.417M	5.736779G	5.753196G	500k	3

EBW;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5785MHz;TN,VN



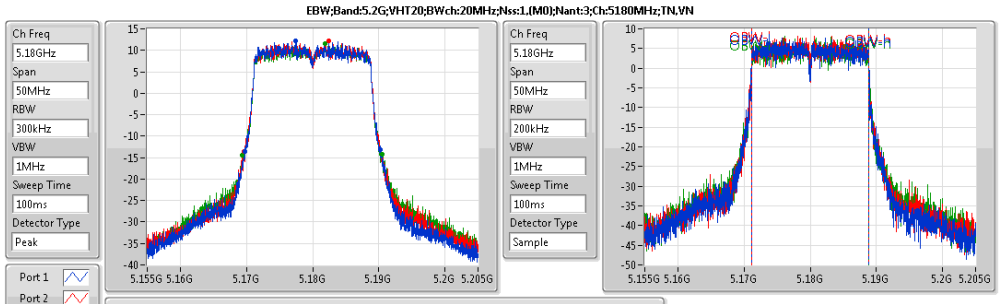
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.77685G	5.793175G	16.467M	5.776754G	5.793221G	500k	1
16.3M	5.77685G	5.79315G	16.442M	5.776779G	5.793221G	500k	2
16.3M	5.77685G	5.79315G	16.467M	5.776729G	5.793196G	500k	3

EBW;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5825MHz;TN,VN



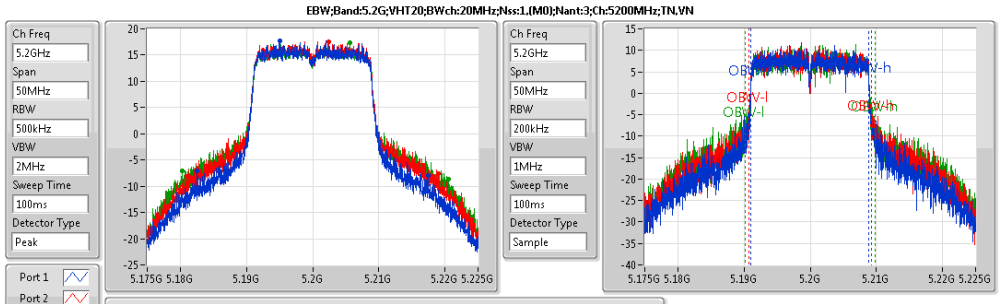
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	5.81685G	5.83315G	16.567M	5.816704G	5.833271G	500k	1
16.3M	5.81685G	5.83315G	16.567M	5.816704G	5.833271G	500k	2
16.325M	5.816825G	5.83315G	16.617M	5.816679G	5.833296G	500k	3

EBW;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5180MHz;TN,VN



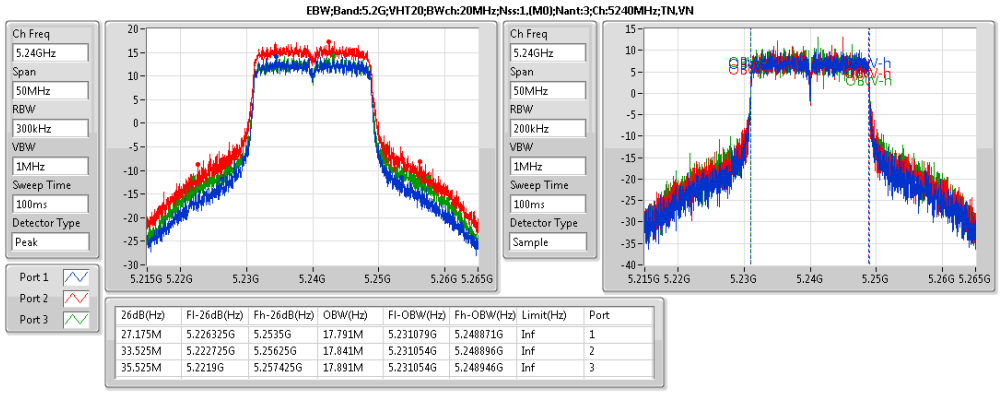
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.525M	5.169725G	5.19025G	17.641M	5.171154G	5.188796G	Inf	1
20.65M	5.1696G	5.19025G	17.616M	5.171179G	5.188796G	Inf	2
21.25M	5.1693G	5.19055G	17.666M	5.171154G	5.188821G	Inf	3

EBW;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5200MHz;TN,VN



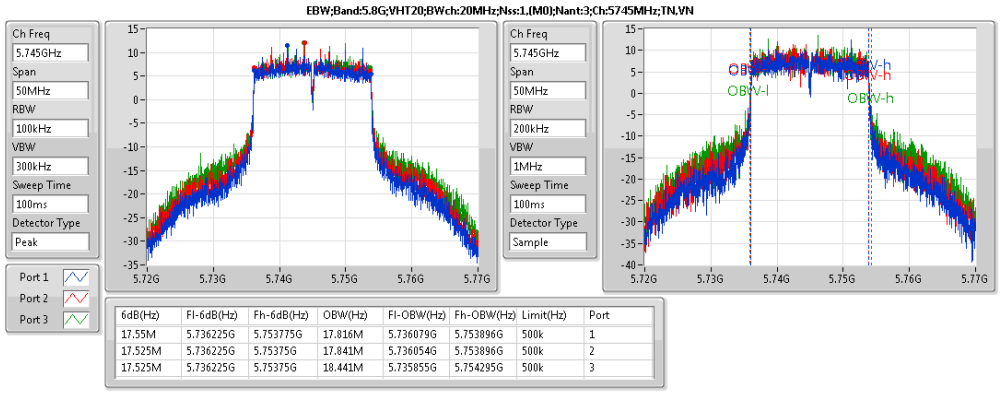
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.875M	5.182575G	5.21745G	17.866M	5.191029G	5.208896G	Inf	1
37.9M	5.18105G	5.21895G	18.491M	5.190805G	5.209295G	Inf	2
40.3M	5.180225G	5.220525G	19.69M	5.19013G	5.20982G	Inf	3

EBW;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5240MHz;TN,VN



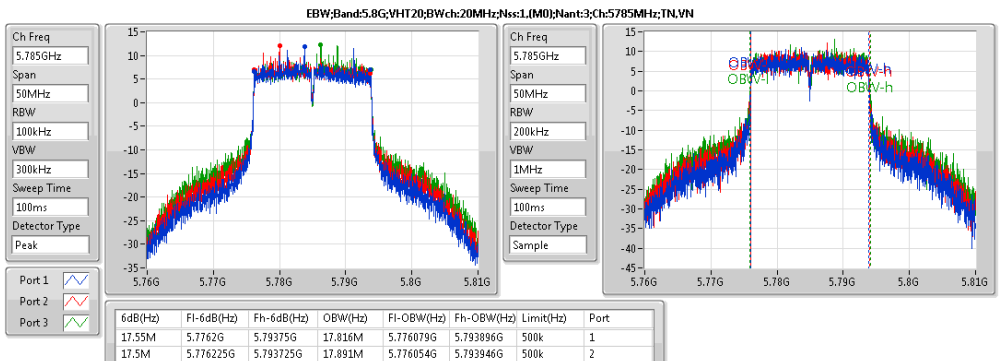
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
27.175M	5.226325G	5.2535G	17.791M	5.231079G	5.248871G	Inf	1
33.525M	5.222725G	5.25625G	17.841M	5.231054G	5.248896G	Inf	2
35.525M	5.2219G	5.257425G	17.891M	5.231054G	5.248946G	Inf	3

EBW;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5745MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.736225G	5.753775G	17.816M	5.736079G	5.753896G	500k	1
17.525M	5.736225G	5.75375G	17.841M	5.736054G	5.753896G	500k	2
17.525M	5.736225G	5.75375G	18.441M	5.735855G	5.754295G	500k	3

EBW;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5785MHz;TN,VN

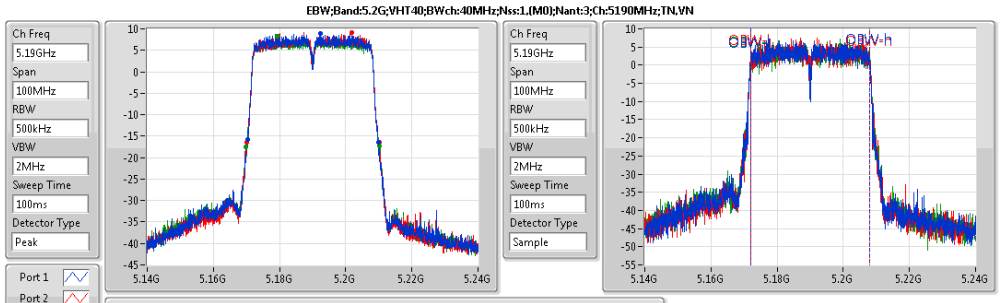


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.7762G	5.79375G	17.816M	5.776079G	5.793896G	500k	1
17.5M	5.776225G	5.793725G	17.891M	5.776054G	5.793946G	500k	2
17.55M	5.776225G	5.793775G	18.341M	5.77583G	5.79417G	500k	3

EBW;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5825MHz;TN,VN

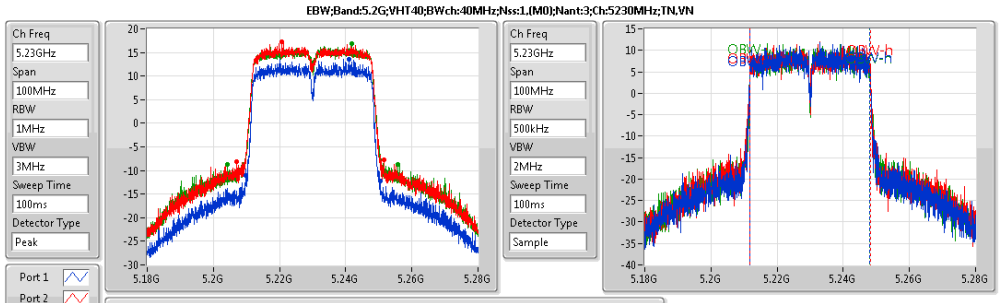
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.525M	5.8162G	5.833725G	17.791M	5.816079G	5.833871G	500k	1
17.525M	5.81625G	5.833775G	17.866M	5.816029G	5.833896G	500k	2
17.55M	5.816225G	5.833775G	17.916M	5.816004G	5.833921G	500k	3

EBW;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5190MHz;TN,VN



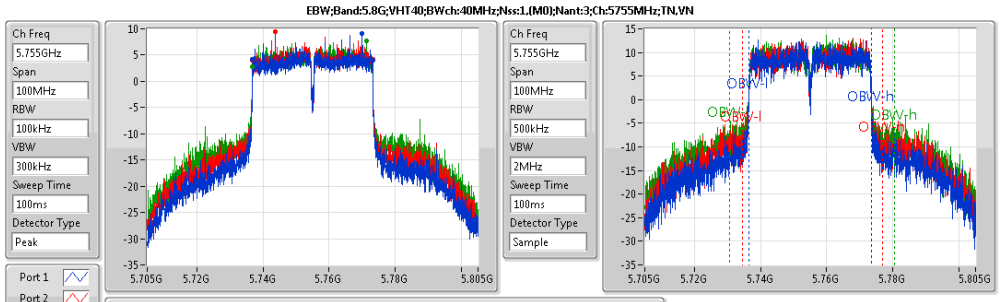
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.6M	5.17025G	5.20985G	36.132M	5.171909G	5.208041G	Inf	1
40M	5.1701G	5.2101G	36.132M	5.171959G	5.208091G	Inf	2
40.2M	5.1699G	5.2101G	36.182M	5.171909G	5.208091G	Inf	3

EBW;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5230MHz;TN,VN



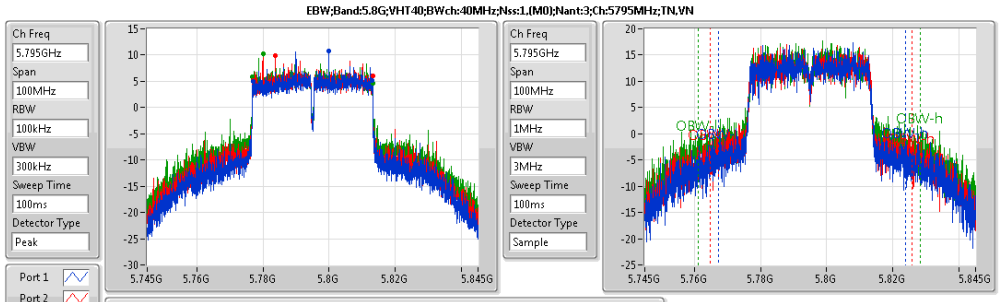
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.6M	5.20975G	5.25035G	36.232M	5.211859G	5.248091G	Inf	1
44.4M	5.20705G	5.25145G	36.332M	5.211809G	5.248141G	Inf	2
51.55M	5.20425G	5.2558G	36.232M	5.211859G	5.248091G	Inf	3

EBW;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5755MHz;TN,VN



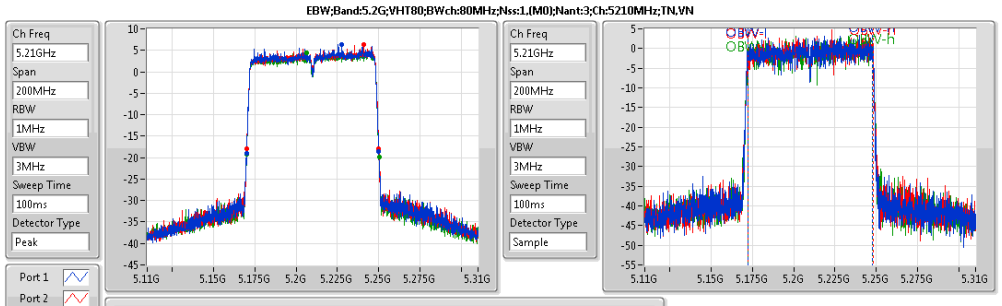
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	5.73685G	5.77315G	37.181M	5.736459G	5.773641G	500k	1
36.3M	5.73685G	5.77315G	42.429M	5.73446G	5.776889G	500k	2
36.35M	5.7368G	5.77315G	49.875M	5.730712G	5.780587G	500k	3

EBW;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5795MHz;TN,VN



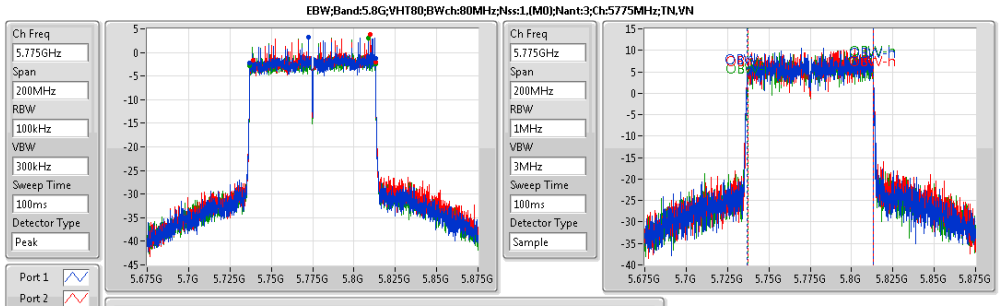
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36M	5.7771G	5.8131G	56.572M	5.767264G	5.823836G	500k	1
36.25M	5.7769G	5.81315G	60.87M	5.764815G	5.825685G	500k	2
36.3M	5.77685G	5.81315G	67.166M	5.761217G	5.828383G	500k	3

EBW;Band:5.2G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:3;Ch:5210MHz;TN,VN



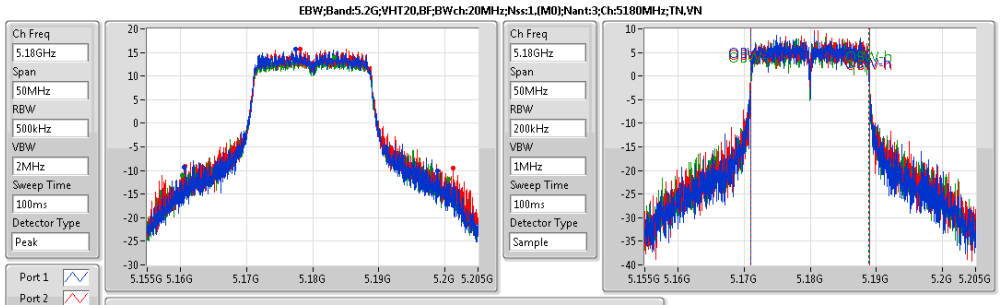
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80M	5.1701G	5.2501G	75.762M	5.172119G	5.247881G	Inf	1
80.1M	5.17G	5.2501G	75.662M	5.172319G	5.247981G	Inf	2
80.2M	5.17G	5.2502G	75.662M	5.172219G	5.247881G	Inf	3

EBW;Band:5.8G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:3;Ch:5775MHz;TN,VN



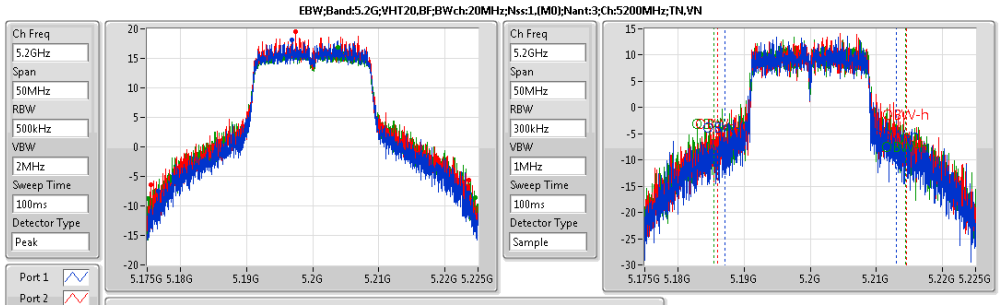
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.3M	5.7368G	5.8131G	75.962M	5.737019G	5.812981G	500k	1
74M	5.7391G	5.8131G	75.862M	5.737119G	5.812981G	500k	2
76M	5.7371G	5.8131G	75.862M	5.737119G	5.812901G	500k	3

EBW;Band:5.2G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5180MHz;TN,VN



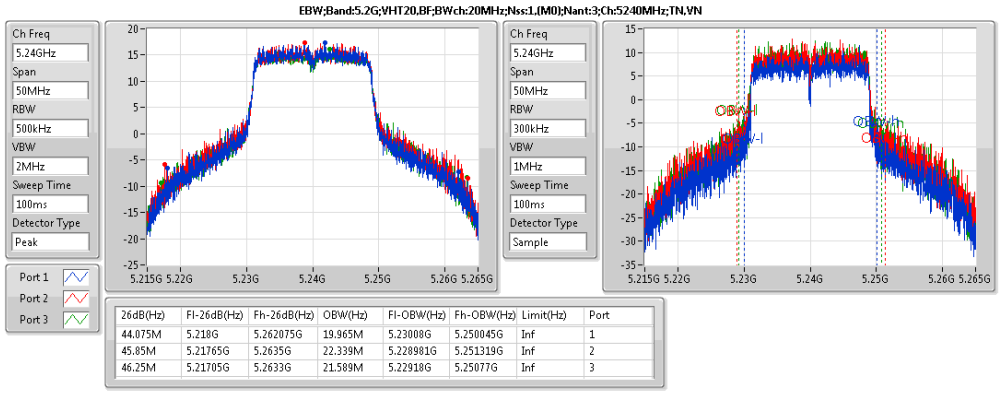
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.3M	5.160625G	5.198925G	17.841M	5.171054G	5.188896G	Inf	1
40.525M	5.160775G	5.2013G	17.891M	5.171029G	5.188921G	Inf	2
40.25M	5.1603G	5.20055G	17.891M	5.171029G	5.188921G	Inf	3

EBW;Band:5.2G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5200MHz;TN,VN



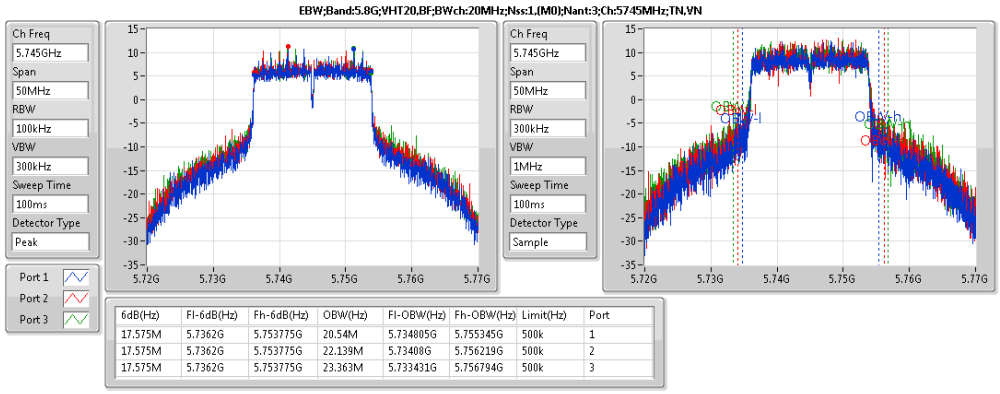
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
46.9M	5.17665G	5.22355G	25.862M	5.187156G	5.213018G	Inf	1
48.025M	5.175575G	5.2236G	28.511M	5.186032G	5.214543G	Inf	2
49.425M	5.1752G	5.224625G	28.961M	5.185507G	5.214468G	Inf	3

EBW;Band:5.2G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5240MHz;TN,VN



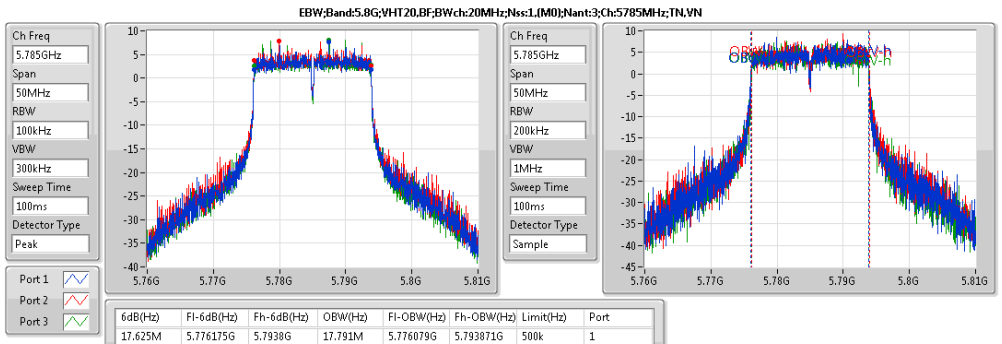
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.075M	5.218G	5.262075G	19.965M	5.23008G	5.250045G	Inf	1
45.85M	5.21765G	5.2635G	22.339M	5.228981G	5.251319G	Inf	2
46.25M	5.21705G	5.2633G	21.589M	5.22918G	5.25077G	Inf	3

EBW;Band:5.8G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5745MHz;TN,VN



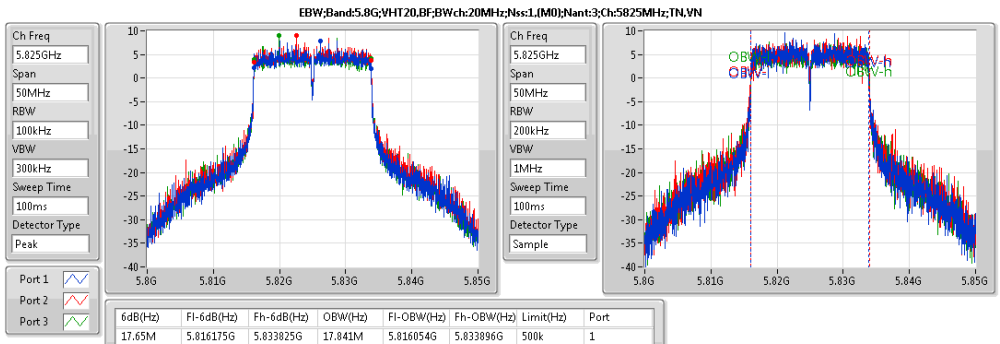
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	5.7362G	5.753775G	20.54M	5.734805G	5.755345G	500k	1
17.575M	5.7362G	5.753775G	22.139M	5.73408G	5.756219G	500k	2
17.575M	5.7362G	5.753775G	23.363M	5.733431G	5.756794G	500k	3

EBW;Band:5.8G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5785MHz;TN,VN



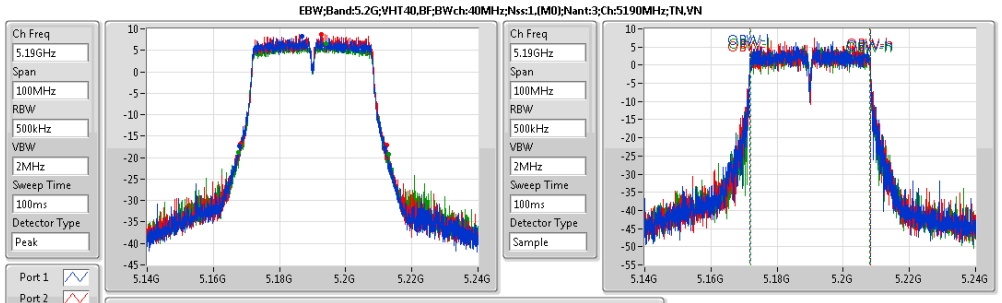
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.625M	5.776175G	5.7938G	17.791M	5.776079G	5.793871G	500k	1
17.6M	5.7762G	5.7938G	17.816M	5.776104G	5.793921G	500k	2
17.575M	5.7762G	5.793775G	17.741M	5.776129G	5.793871G	500k	3

EBW;Band:5.8G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5825MHz;TN,VN



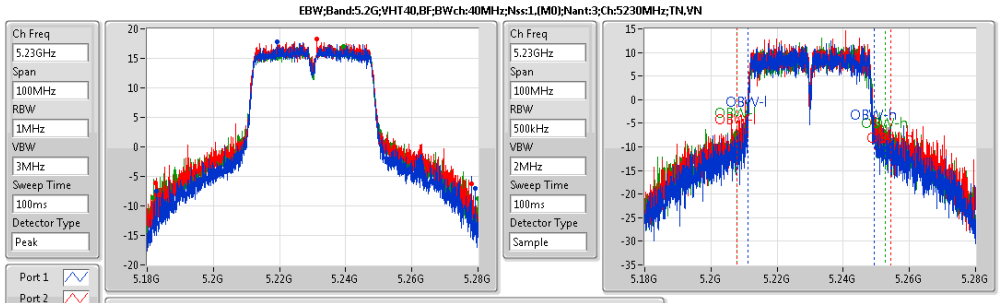
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.65M	5.816175G	5.833825G	17.841M	5.816054G	5.833896G	500k	1
17.6M	5.8162G	5.8338G	17.941M	5.816004G	5.833946G	500k	2
17.575M	5.8162G	5.833775G	17.941M	5.816004G	5.833946G	500k	3

EBW;Band:5.2G;VHT40,BF;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5190MHz;TN,VN



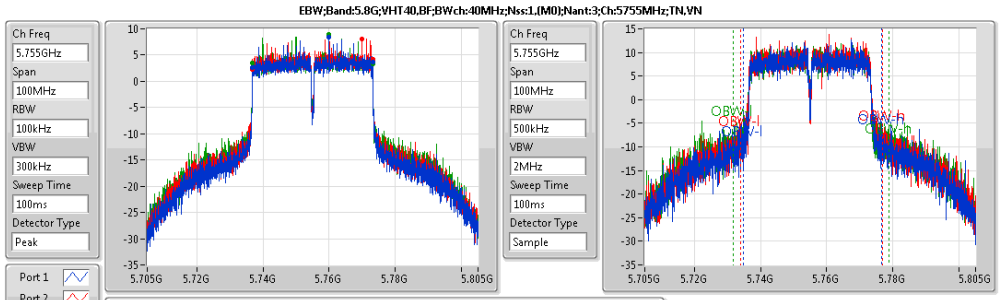
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.2M	5.1678G	5.212G	36.332M	5.171809G	5.208141G	Inf	1
44.15M	5.16815G	5.2123G	36.282M	5.171859G	5.208141G	Inf	2
45.3M	5.1677G	5.213G	36.182M	5.171909G	5.208091G	Inf	3

EBW;Band:5.2G;VHT40,BF;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5230MHz;TN,VN



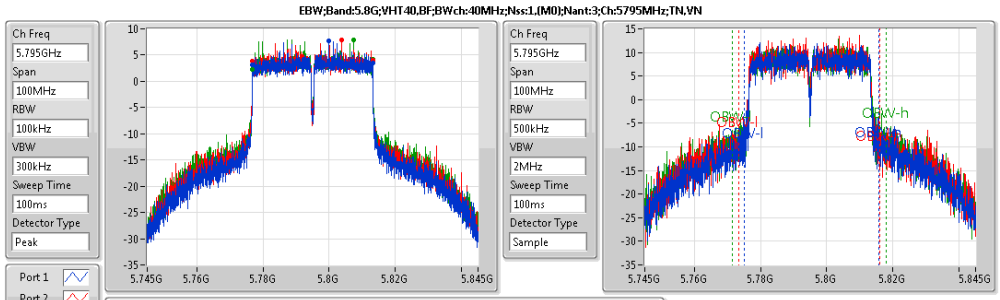
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
96.45M	5.18275G	5.2792G	38.331M	5.211059G	5.24939G	Inf	1
95.65M	5.1824G	5.27805G	46.577M	5.207761G	5.254338G	Inf	2
98.25M	5.18175G	5.28G	44.928M	5.207911G	5.252839G	Inf	3

EBW;Band:5.8G;VHT40,BF;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5755MHz;TN,VN



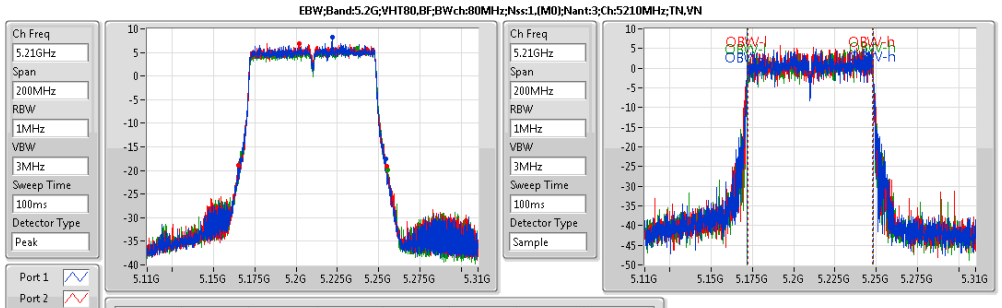
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	5.73685G	5.77315G	41.879M	5.73471G	5.776589G	500k	1
36.35M	5.7368G	5.77315G	43.028M	5.733961G	5.776989G	500k	2
36.3M	5.73685G	5.77315G	47.076M	5.731612G	5.778688G	500k	3

EBW;Band:5.8G;VHT40,BF;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5795MHz;TN,VN



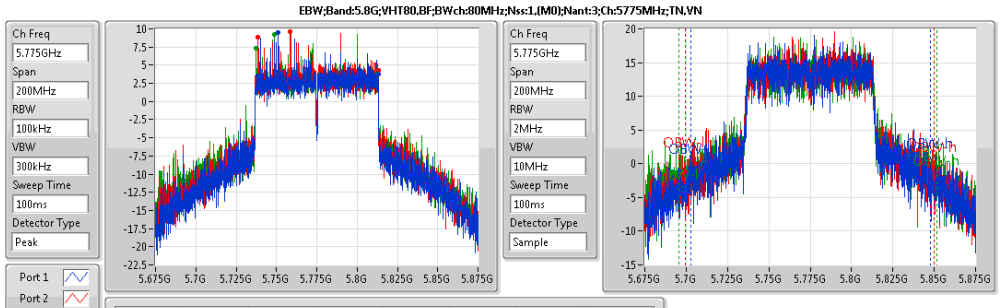
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	5.77605G	5.81315G	40.53M	5.77516G	5.81569G	500k	1
36.3M	5.77685G	5.81315G	42.629M	5.773511G	5.816139G	500k	2
36.35M	5.7768G	5.81315G	46.477M	5.771512G	5.817989G	500k	3

EBW;Band:5.2G;VHT80,BF;BWch:80MHz;Nss:1,(M0);Nant:3;Ch:5210MHz;TN,VN



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
87.5M	5.1668G	5.2543G	75.962M	5.172019G	5.247981G	Inf	1
89.3M	5.1653G	5.2546G	75.762M	5.172119G	5.247881G	Inf	2
90.1M	5.1652G	5.2553G	76.162M	5.171919G	5.248081G	Inf	3

EBW;Band:5.8G;VHT80,BF;BWch:80MHz;Nss:1,(M0);Nant:3;Ch:5775MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
74.4M	5.7387G	5.8131G	144.628M	5.702936G	5.847564G	500k	1
74.4M	5.7387G	5.8131G	150.125M	5.699638G	5.849763G	500k	2
75.1M	5.7374G	5.8125G	156.322M	5.69534G	5.851662G	500k	3

<For VHT80+80 Mode>

Summary

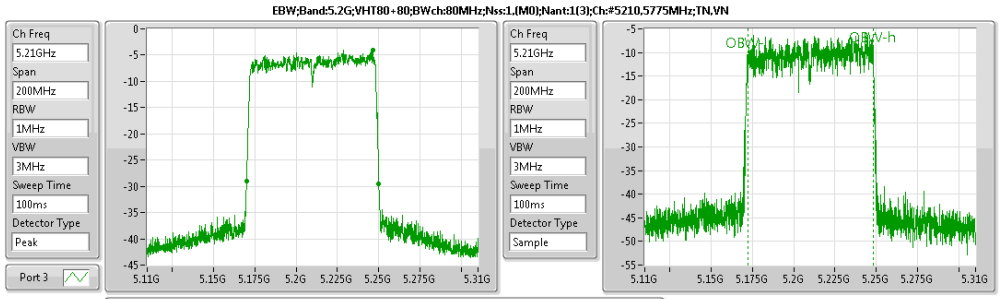
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.2G;VHT80+80;Nss1,(M0);Ntx1(3)	80.1M	75.862M	75M9D1D	80.1M	75.862M
5.8G;VHT80+80;Nss1,(M0);Ntx1(1)	75.5M	75.762M	75M8D1D	75.5M	75.762M

Note: The test result of Non-Beamforming mode and Beamforming mode for Bandwidth 80+80MHz are the same.

Result

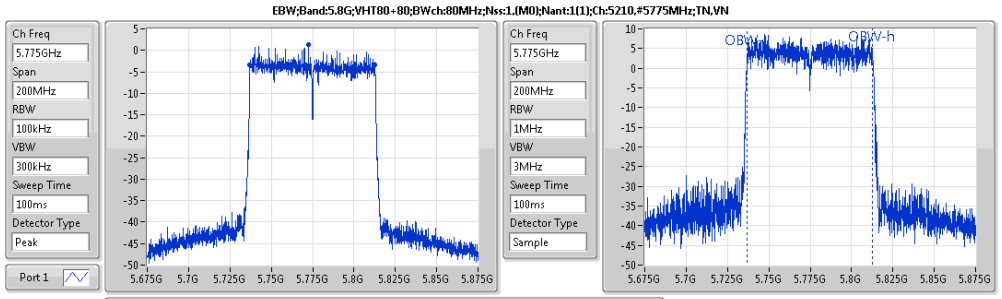
Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)	P3-N dB (Hz)	P3-OBW (Hz)
5.2G;VHT80+80;Nss1,(M0);Ntx1(3);#5210,5775;TN,VN	Pass	Inf					80.1M	75.862M
5.8G;VHT80+80;Nss1,(M0);Ntx1(1);5210,#5775;TN,VN	Pass	500k	75.5M	75.762M				

EBW;Band:5.2G;VHT80+80;BWch:80MHz;Nss:1,(M0);Nant:1(3);Ch:#5210.5775MHz;TN,VN



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.1M	5.17G	5.2501G	75.862M	5.172119G	5.247981G	Inf	3

EBW;Band:5.8G;VHT80+80;BWch:80MHz;Nss:1,(M0);Nant:1(1);Ch:5210,#5775MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.5M	5.7371G	5.8126G	75.762M	5.737019G	5.812781G	500k	1

<For 802.11a, VHT20, VHT40, VHT80 Mode>

Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
5.2G;11a;20;1;3	27.24	0.52966	30.24	1.05682
5.8G;11a;20;1;3	26.43	0.43954	29.43	0.877
5.2G;VHT20;20;1,(M0);3	27.09	0.51168	30.09	1.02094
5.8G;VHT20;20;1,(M0);3	28.09	0.64417	31.09	1.28529
5.2G;VHT40;40;1,(M0);3	25.65	0.36728	28.65	0.73282
5.8G;VHT40;40;1,(M0);3	28.82	0.76208	31.82	1.52055
5.2G;VHT80;80;1,(M0);3	17.82	0.06053	20.82	0.12078
5.8G;VHT80;80;1,(M0);3	24.57	0.28642	27.57	0.57148
5.2G;VHT20,BF;20;1,(M0);3	27.04	0.50582	31.80	1.51356
5.8G;VHT20,BF;20;1,(M0);3	27.27	0.53333	32.03	1.59588
5.2G;VHT40,BF;40;1,(M0);3	27.49	0.56105	32.25	1.6788
5.8G;VHT40,BF;40;1,(M0);3	27.43	0.55335	32.19	1.65577
5.2G;VHT80,BF;80;1,(M0);3	19.98	0.09954	24.74	0.29785
5.8G;VHT80,BF;80;1,(M0);3	25.36	0.34356	30.12	1.02802

Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)	P3 (dBm)
5.2G;11a;20;1;3;5180;L;TN,VN	Pass	3.00	27.01	36.00	24.01	30.00	19.32	19.23	19.18
5.2G;11a;20;1;3;5200;M;TN,VN	Pass	3.00	30.01	36.00	27.01	30.00	22.27	22.21	22.24
5.2G;11a;20;1;3;5240;H;TN,VN	Pass	3.00	30.24	36.00	27.24	30.00	22.45	22.45	22.52
5.8G;11a;20;1;3;5745;L;TN,VN	Pass	3.00	27.37	36.00	24.37	30.00	19.86	19.69	19.22
5.8G;11a;20;1;3;5785;M;TN,VN	Pass	3.00	28.46	36.00	25.46	30.00	20.71	20.92	20.43
5.8G;11a;20;1;3;5825;H;TN,VN	Pass	3.00	29.43	36.00	26.43	30.00	21.58	21.79	21.61
5.2G;VHT20;20;1,(M0);3;5180;L;TN,VN	Pass	3.00	27.25	36.00	24.25	30.00	19.52	19.49	19.42
5.2G;VHT20;20;1,(M0);3;5200;M;TN,VN	Pass	3.00	30.09	36.00	27.09	30.00	22.18	22.35	22.42
5.2G;VHT20;20;1,(M0);3;5240;H;TN,VN	Pass	3.00	29.58	36.00	26.58	30.00	21.88	21.62	21.91
5.8G;VHT20;20;1,(M0);3;5745;L;TN,VN	Pass	3.00	31.09	36.00	28.09	30.00	23.28	23.12	23.55
5.8G;VHT20;20;1,(M0);3;5785;M;TN,VN	Pass	3.00	30.29	36.00	27.29	30.00	22.49	22.35	22.71
5.8G;VHT20;20;1,(M0);3;5825;H;TN,VN	Pass	3.00	29.74	36.00	26.74	30.00	21.92	21.85	22.13
5.2G;VHT20,BF;20;1,(M0);3;5180;L;TN,VN	Pass	4.76	30.08	36.00	25.32	30.00	20.63	20.68	20.32
5.2G;VHT20,BF;20;1,(M0);3;5200;M;TN,VN	Pass	4.76	31.80	36.00	27.04	30.00	22.72	21.67	22.36
5.2G;VHT20,BF;20;1,(M0);3;5240;H;TN,VN	Pass	4.76	31.77	36.00	27.01	30.00	22.59	21.82	22.28
5.8G;VHT20,BF;20;1,(M0);3;5745;L;TN,VN	Pass	4.76	32.03	36.00	27.27	30.00	22.83	22.05	22.57
5.8G;VHT20,BF;20;1,(M0);3;5785;M;TN,VN	Pass	4.76	30.09	36.00	25.33	30.00	20.72	20.54	20.42
5.8G;VHT20,BF;20;1,(M0);3;5825;H;TN,VN	Pass	4.76	30.70	36.00	25.94	30.00	21.69	20.73	21.03
5.2G;VHT40;40;1,(M0);3;5190;L;TN,VN	Pass	3.00	24.54	36.00	21.54	30.00	16.68	16.83	16.79
5.2G;VHT40;40;1,(M0);3;5230;H;TN,VN	Pass	3.00	28.65	36.00	25.65	30.00	20.78	20.83	21.03
5.8G;VHT40;40;1,(M0);3;5755;L;TN,VN	Pass	3.00	30.81	36.00	27.81	30.00	22.77	22.88	23.45
5.8G;VHT40;40;1,(M0);3;5795;H;TN,VN	Pass	3.00	31.82	36.00	28.82	30.00	23.96	23.82	24.36
5.2G;VHT40,BF;40;1,(M0);3;5190;L;TN,VN	Pass	4.76	27.26	36.00	22.50	30.00	18.06	17.64	17.45
5.2G;VHT40,BF;40;1,(M0);3;5230;H;TN,VN	Pass	4.76	32.25	36.00	27.49	30.00	22.58	22.73	22.84
5.8G;VHT40,BF;40;1,(M0);3;5755;L;TN,VN	Pass	4.76	32.18	36.00	27.42	30.00	22.63	22.58	22.73
5.8G;VHT40,BF;40;1,(M0);3;5795;H;TN,VN	Pass	4.76	32.19	36.00	27.43	30.00	22.54	22.64	22.78
5.2G;VHT80;80;1,(M0);3;5210;S;TN,VN	Pass	3.00	20.82	36.00	17.82	30.00	13.04	13.16	12.95
5.8G;VHT80;80;1,(M0);3;5775;S;TN,VN	Pass	3.00	27.57	36.00	24.57	30.00	20.02	19.72	19.66
5.2G;VHT80,BF;80;1,(M0);3;5210;S;TN,VN	Pass	4.76	24.74	36.00	19.98	30.00	15.52	15.69	14.29
5.8G;VHT80,BF;80;1,(M0);3;5775;S;TN,VN	Pass	4.76	30.12	36.00	25.36	30.00	20.73	20.82	20.18

<For VHT80+80 Mode>

Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
5.2G;VHT80+80;Nss1,(M0);Ntx1(3)	17.29	0.05358	20.29	0.10691
5.8G;VHT80+80;Nss1,(M0);Ntx1(1)	18.14	0.06516	21.14	0.13002

Note: The test result of Non-Beamforming mode and Beamforming mode for Bandwidth 80+80MHz are the same.

Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2	P3
5.2G;VHT80+80;Nss1,(M0);Ntx1(3);#5210,5775;TN,VN	Pass	3.00	20.29	36.00	17.29	30.00			17.29
5.8G;VHT80+80;Nss1,(M0);Ntx1(1);5210,#5775;TN,VN	Pass	3.00	21.14	36.00	18.14	30.00	18.14		

<For 802.11a, VHT20, VHT40, VHT80 Mode>

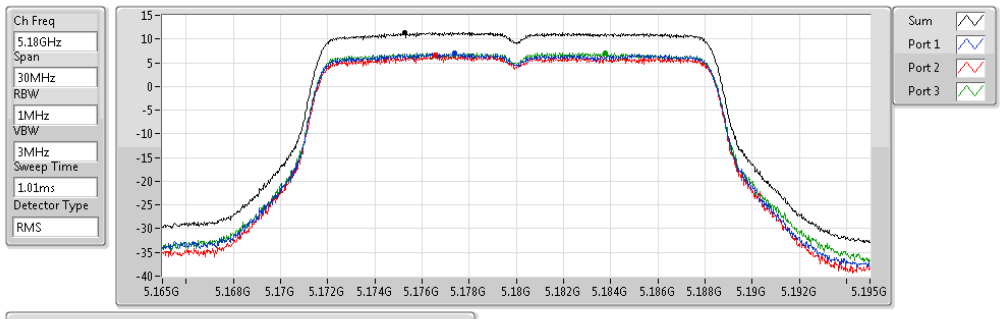
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
5.2G;11a;Nss1;Ntx3	15.14	19.90
5.8G;11a;Nss1;Ntx3	12.74	17.50
5.2G;VHT20;Nss1,(M0);Ntx3	14.76	19.52
5.8G;VHT20;Nss1,(M0);Ntx3	13.16	17.92
5.2G;VHT40;Nss1,(M0);Ntx3	10.42	15.18
5.8G;VHT40;Nss1,(M0);Ntx3	11.33	16.09
5.2G;VHT80;Nss1,(M0);Ntx3	-0.45	4.31
5.8G;VHT80;Nss1,(M0);Ntx3	4.73	9.49
5.2G;VHT20,BF;Nss1,(M0);Ntx3	14.86	19.62
5.8G;VHT20,BF;Nss1,(M0);Ntx3	12.69	17.45
5.2G;VHT40,BF;Nss1,(M0);Ntx3	11.45	16.21
5.8G;VHT40,BF;Nss1,(M0);Ntx3	9.88	14.64
5.2G;VHT80,BF;Nss1,(M0);Ntx3	0.38	5.14
5.8G;VHT80,BF;Nss1,(M0);Ntx3	7.29	12.05

Result

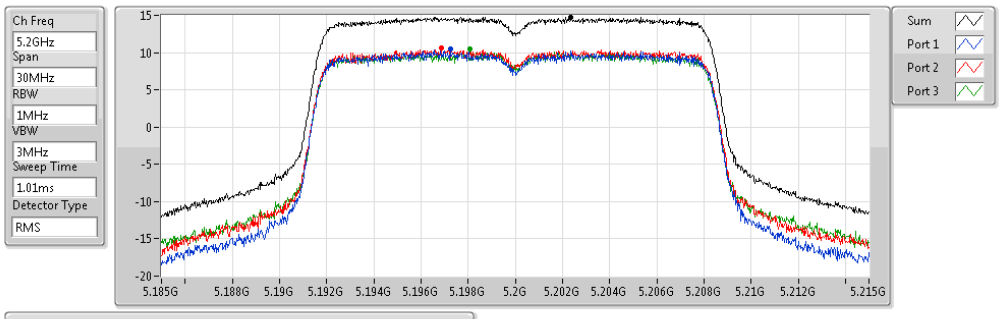
Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	Sum.Max (dBm/RBW)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Lim (dBm/RBW)	P1 (dBm/RBW)	P2 (dBm/RBW)	P3 (dBm/RBW)
5.2G;11a;Nss1;Ntx3;5180;TN,VN	Pass	1M	1M	0.00	4.76	11.44	11.44	17.00	16.20	Inf	7.06	6.67	7.14
5.2G;11a;Nss1;Ntx3;5200;TN,VN	Pass	1M	1M	0.00	4.76	14.76	14.76	17.00	19.52	Inf	10.52	10.67	10.43
5.2G;11a;Nss1;Ntx3;5240;TN,VN	Pass	1M	1M	0.00	4.76	15.14	15.14	17.00	19.90	Inf	10.72	10.97	10.94
5.8G;11a;Nss1;Ntx3;5745;TN,VN	Pass	500k	500k	0.00	4.76	10.82	10.82	30.00	15.58	36.00	6.13	6.85	5.87
5.8G;11a;Nss1;Ntx3;5785;TN,VN	Pass	500k	500k	0.00	4.76	11.53	11.53	30.00	16.29	36.00	7.11	7.37	7.08
5.8G;11a;Nss1;Ntx3;5825;TN,VN	Pass	500k	500k	0.00	4.76	12.74	12.74	30.00	17.50	36.00	8.13	8.68	8.18
5.2G;VHT20;Nss1,(M0);Ntx3;5180;TN,VN	Pass	1M	1M	0.00	4.76	11.85	11.85	17.00	16.61	Inf	7.63	7.67	7.12
5.2G;VHT20;Nss1,(M0);Ntx3;5200;TN,VN	Pass	1M	1M	0.00	4.76	14.76	14.76	17.00	19.52	Inf	10.07	10.50	10.24
5.2G;VHT20;Nss1,(M0);Ntx3;5240;TN,VN	Pass	1M	1M	0.00	4.76	14.42	14.42	17.00	19.18	Inf	9.73	9.91	10.14
5.8G;VHT20;Nss1,(M0);Ntx3;5745;TN,VN	Pass	500k	500k	0.00	4.76	13.16	13.16	30.00	17.92	36.00	8.53	8.95	8.93
5.8G;VHT20;Nss1,(M0);Ntx3;5785;TN,VN	Pass	500k	500k	0.00	4.76	12.95	12.95	30.00	17.71	36.00	8.37	8.78	8.81
5.8G;VHT20;Nss1,(M0);Ntx3;5825;TN,VN	Pass	500k	500k	0.00	4.76	12.64	12.64	30.00	17.40	36.00	8.32	8.66	7.91
5.2G;VHT40;Nss1,(M0);Ntx3;5190;TN,VN	Pass	1M	1M	0.00	4.76	6.29	6.29	17.00	11.05	Inf	1.96	2.07	1.49
5.2G;VHT40;Nss1,(M0);Ntx3;5230;TN,VN	Pass	1M	1M	0.00	4.76	10.42	10.42	17.00	15.18	Inf	6.01	6.04	6.07
5.8G;VHT40;Nss1,(M0);Ntx3;5755;TN,VN	Pass	500k	500k	0.00	4.76	10.73	10.73	30.00	15.49	36.00	6.02	6.76	6.74
5.8G;VHT40;Nss1,(M0);Ntx3;5795;TN,VN	Pass	500k	500k	0.00	4.76	11.33	11.33	30.00	16.09	36.00	6.65	6.92	6.97
5.2G;VHT80;Nss1,(M0);Ntx3;5210;TN,VN	Pass	1M	1M	0.00	4.76	-0.45	-0.45	17.00	4.31	Inf	-4.97	-4.80	-5.00
5.8G;VHT80;Nss1,(M0);Ntx3;5775;TN,VN	Pass	500k	500k	0.00	4.76	4.73	4.73	30.00	9.49	36.00	0.21	0.76	0.03
5.2G;VHT20,BF;Nss1,(M0);Ntx3;5180;TN,VN	Pass	1M	1M	0.00	4.76	12.33	12.33	17.00	17.09	Inf	8.02	8.18	7.61
5.2G;VHT20,BF;Nss1,(M0);Ntx3;5200;TN,VN	Pass	1M	1M	0.00	4.76	14.86	14.86	17.00	19.62	Inf	10.41	10.64	10.29
5.2G;VHT20,BF;Nss1,(M0);Ntx3;5240;TN,VN	Pass	1M	1M	0.00	4.76	14.16	14.16	17.00	18.92	Inf	9.77	9.74	9.72
5.8G;VHT20,BF;Nss1,(M0);Ntx3;5745;TN,VN	Pass	500k	500k	0.00	4.76	12.69	12.69	30.00	17.45	36.00	8.00	8.40	8.45
5.8G;VHT20,BF;Nss1,(M0);Ntx3;5785;TN,VN	Pass	500k	500k	0.00	4.76	11.04	11.04	30.00	15.80	36.00	6.33	6.73	6.39
5.8G;VHT20,BF;Nss1,(M0);Ntx3;5825;TN,VN	Pass	500k	500k	0.00	4.76	10.78	10.78	30.00	15.54	36.00	6.21	6.70	6.09
5.2G;VHT40,BF;Nss1,(M0);Ntx3;5190;TN,VN	Pass	1M	1M	0.00	4.76	5.44	5.44	17.00	10.20	Inf	0.74	0.90	0.64
5.2G;VHT40,BF;Nss1,(M0);Ntx3;5230;TN,VN	Pass	1M	1M	0.00	4.76	11.45	11.45	17.00	16.21	Inf	6.78	7.18	7.31
5.8G;VHT40,BF;Nss1,(M0);Ntx3;5755;TN,VN	Pass	500k	500k	0.00	4.76	9.88	9.88	30.00	14.64	36.00	5.21	5.53	5.52
5.8G;VHT40,BF;Nss1,(M0);Ntx3;5795;TN,VN	Pass	500k	500k	0.00	4.76	9.77	9.77	30.00	14.53	36.00	5.24	5.33	5.48
5.2G;VHT80,BF;Nss1,(M0);Ntx3;5210;TN,VN	Pass	1M	1M	0.00	4.76	0.38	0.38	17.00	5.14	Inf	-4.16	-3.71	-4.00
5.8G;VHT80,BF;Nss1,(M0);Ntx3;5775;TN,VN	Pass	500k	500k	0.00	4.76	7.29	7.29	30.00	12.05	36.00	2.89	3.03	3.04

PSD;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5180MHz;TN,VN



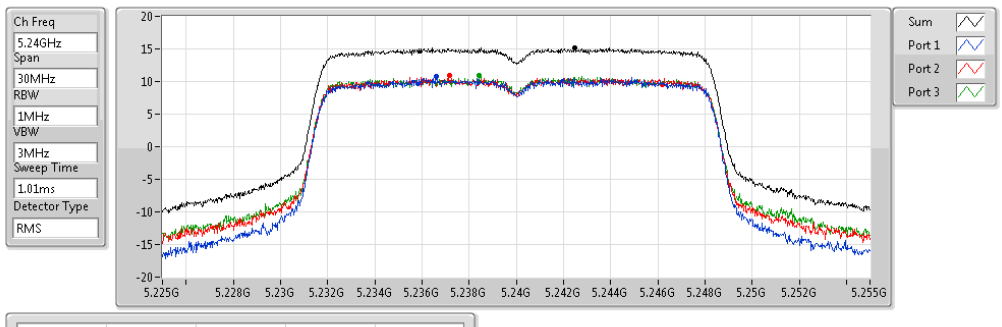
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.44	11.44	7.06	6.67	7.14

PSD;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5200MHz;TN,VN



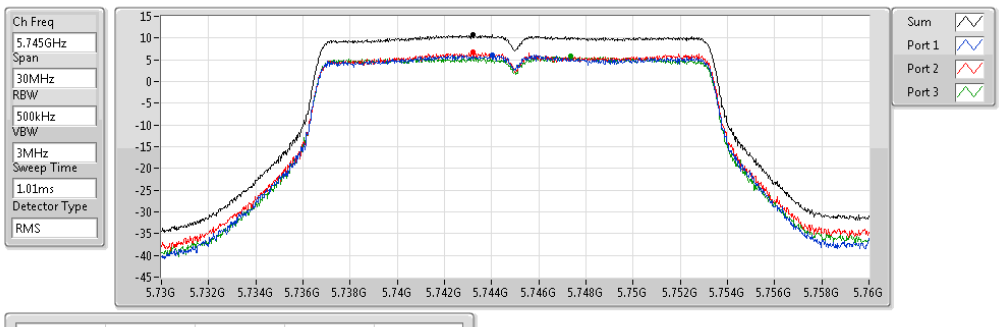
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.76	14.76	10.52	10.67	10.43

PSD;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5240MHz;TN,VN



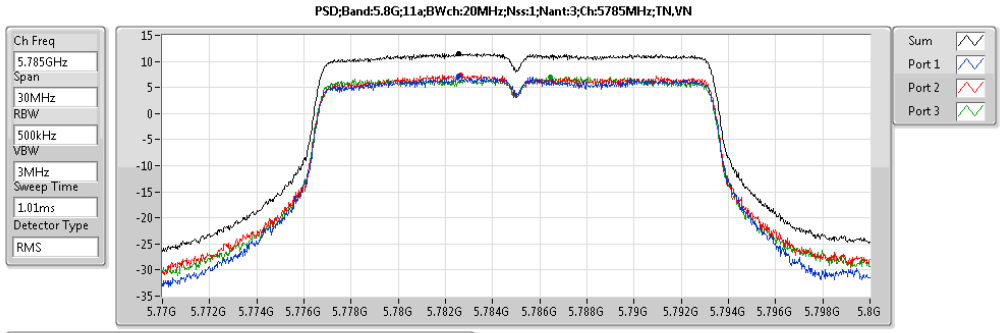
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.14	15.14	10.72	10.97	10.94

PSD;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5745MHz;TN,VN



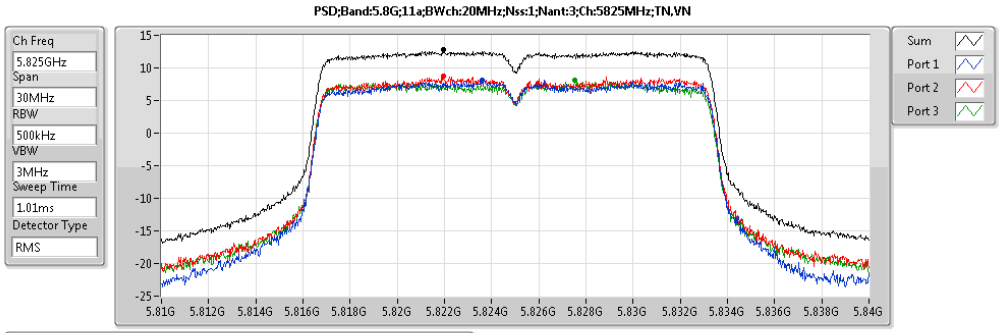
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.82	10.82	6.13	6.85	5.87

PSD;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5785MHz;TN,VN



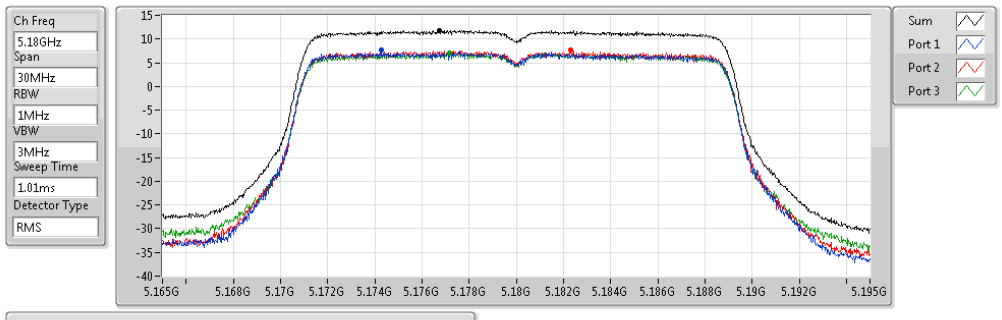
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.53	11.53	7.11	7.37	7.08

PSD;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:3;Ch:5825MHz;TN,VN



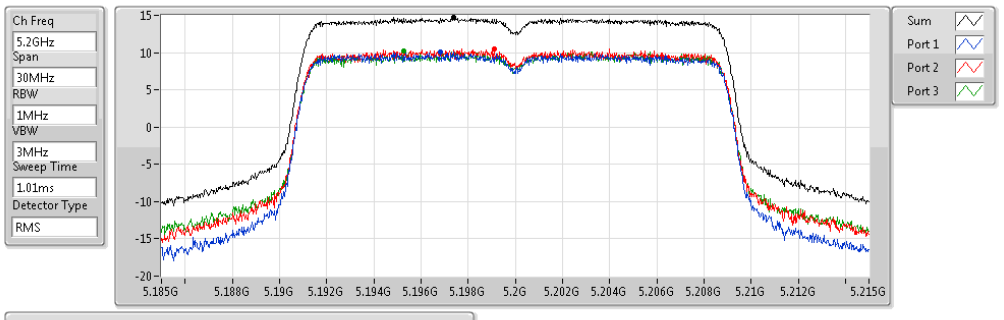
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.74	12.74	8.13	8.68	8.18

PSD;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5180MHz;TN,VN



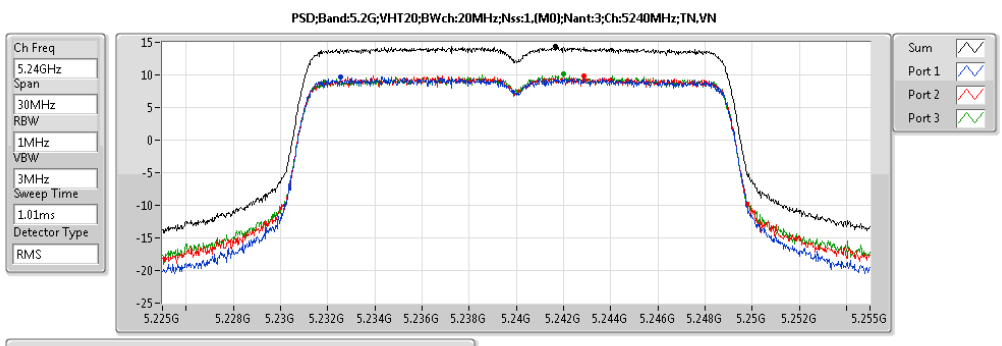
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.85	11.85	7.63	7.67	7.12

PSD;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5200MHz;TN,VN



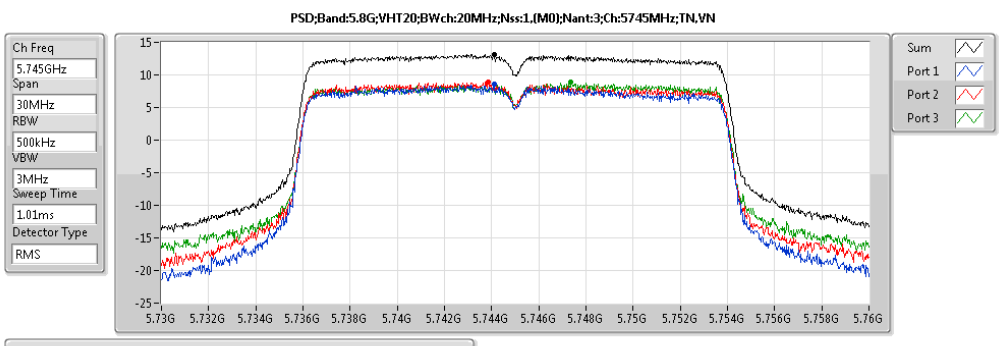
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.76	14.76	10.07	10.50	10.24

PSD;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5240MHz;TN,VN



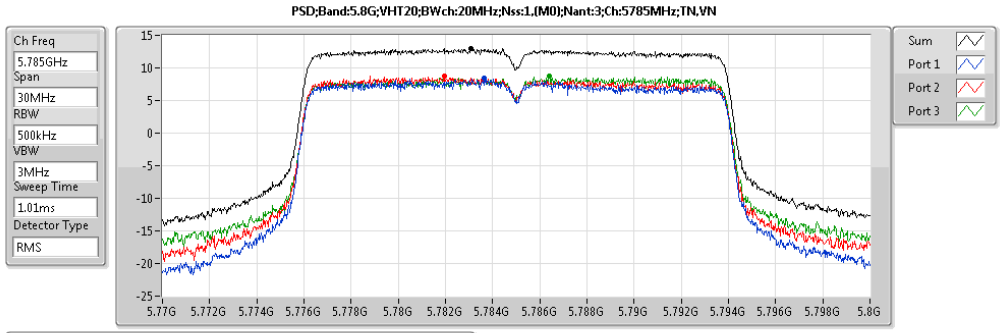
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.42	14.42	9.73	9.91	10.14

PSD;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5745MHz;TN,VN



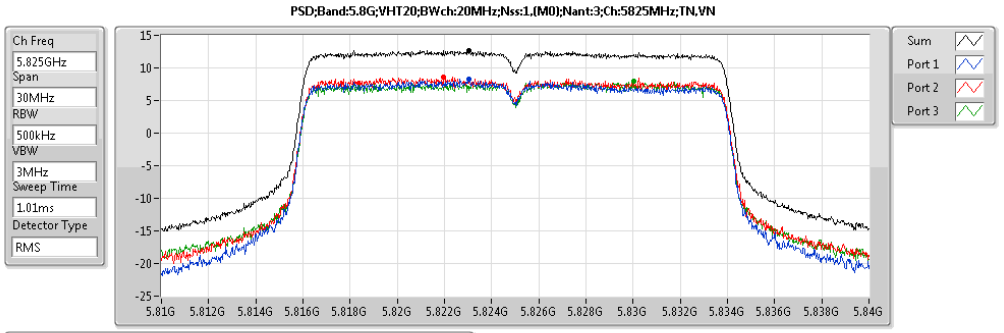
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.16	13.16	8.53	8.95	8.93

PSD;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5785MHz;TN,VN



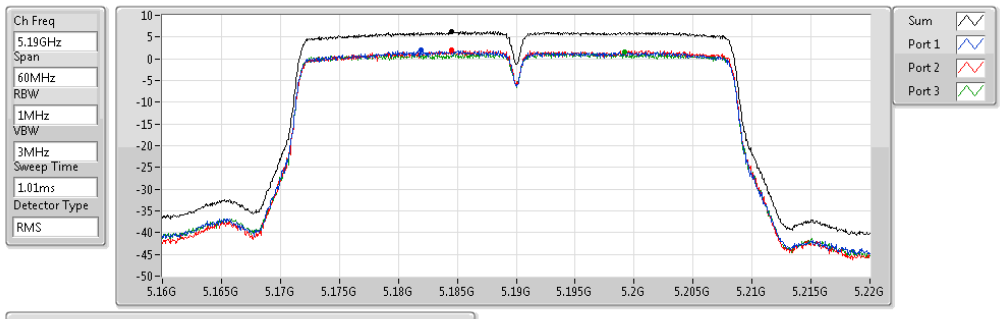
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.95	12.95	8.37	8.78	8.81

PSD;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5825MHz;TN,VN



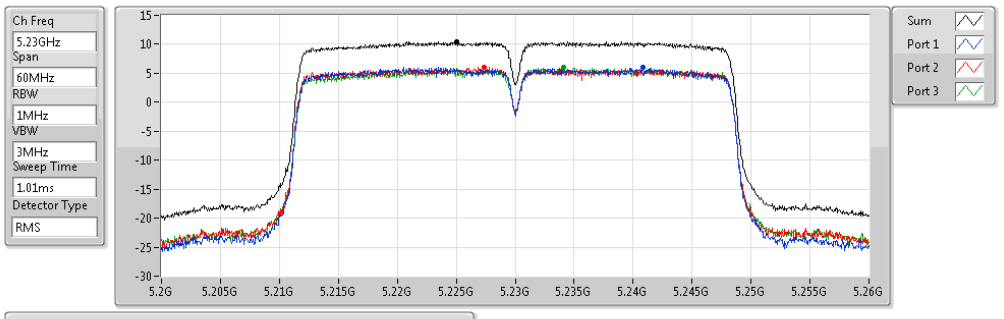
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.64	12.64	8.32	8.66	7.91

PSD;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5190MHz;TN,VN



Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.29	6.29	1.96	2.07	1.49

PSD;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5230MHz;TN,VN



Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.42	10.42	6.01	6.04	6.07

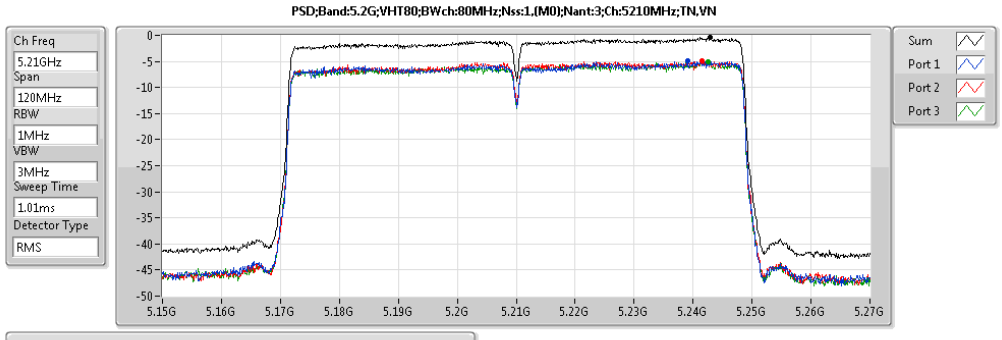
PSD;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5755MHz;TN,VN

Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.73	10.73	6.02	6.76	6.74

PSD;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5795MHz;TN,VN

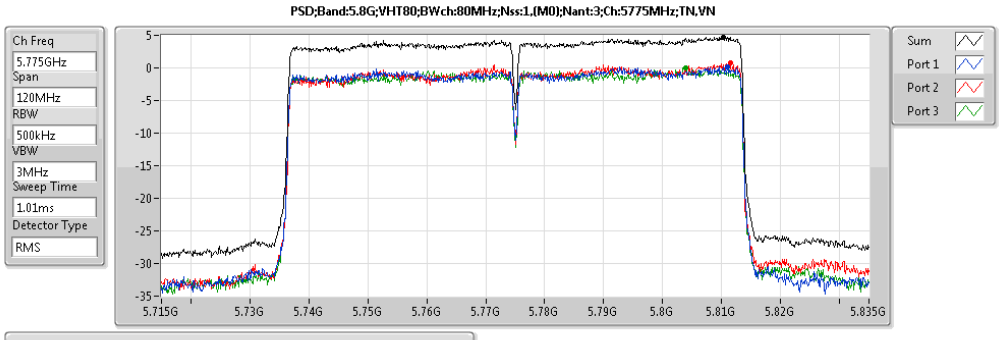
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.33	11.33	6.65	6.92	6.97

PSD;Band:5.2G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:3;Ch:5210MHz;TN,VN



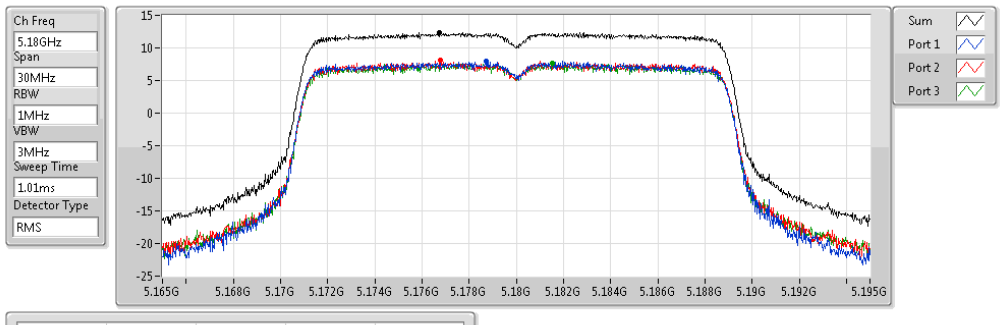
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.45	-0.45	-4.97	-4.80	-5.00

PSD;Band:5.8G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:3;Ch:5775MHz;TN,VN



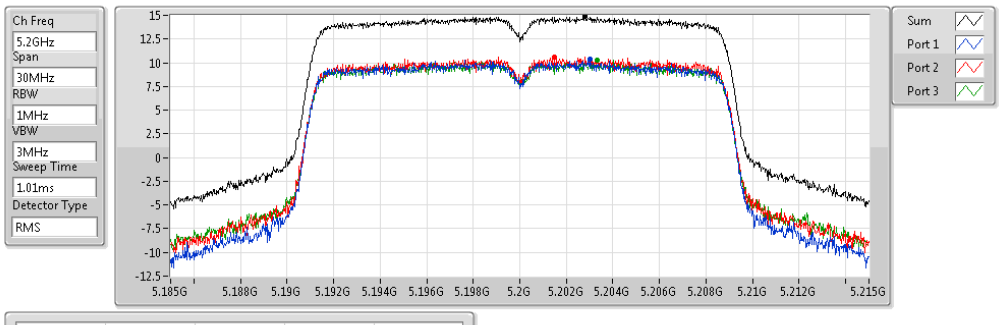
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.73	4.73	0.21	0.76	0.03

PSD;Band:5.2G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5180MHz;TN,VN



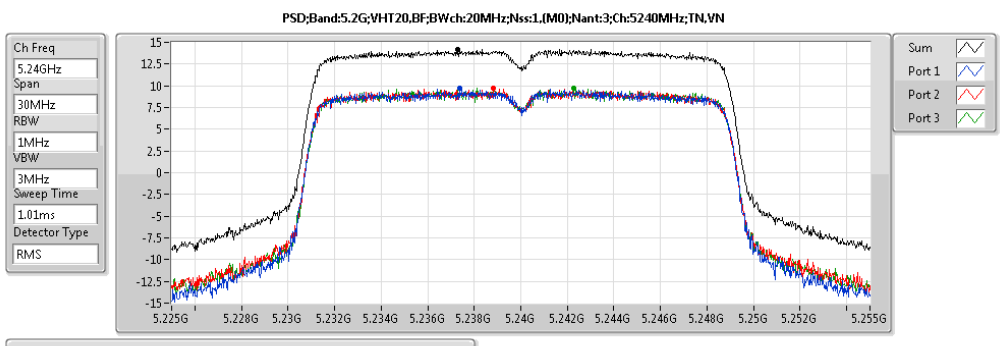
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.33	12.33	8.02	8.18	7.61

PSD;Band:5.2G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5200MHz;TN,VN



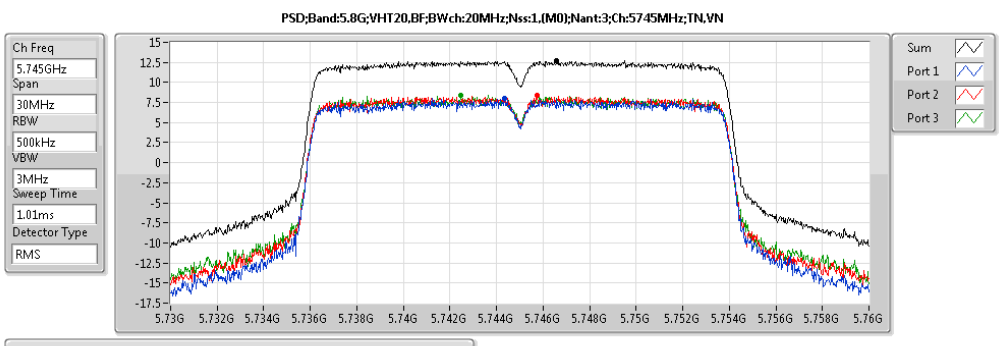
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.86	14.86	10.41	10.64	10.29

PSD;Band:5.2G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5240MHz;TN,VN



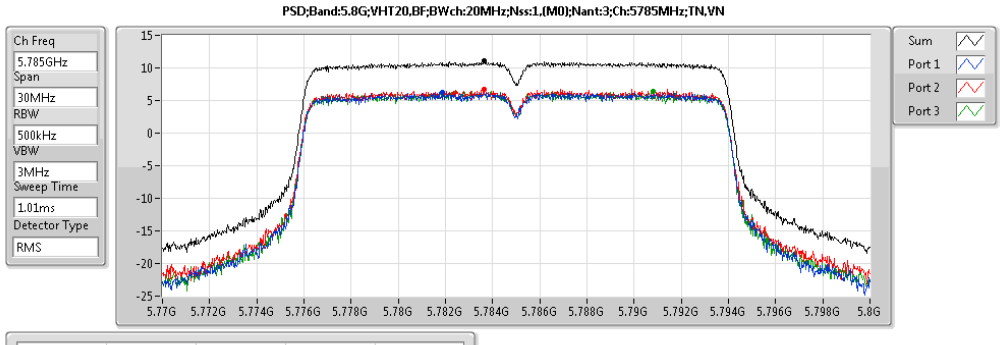
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.16	14.16	9.77	9.74	9.72

PSD;Band:5.8G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5745MHz;TN,VN



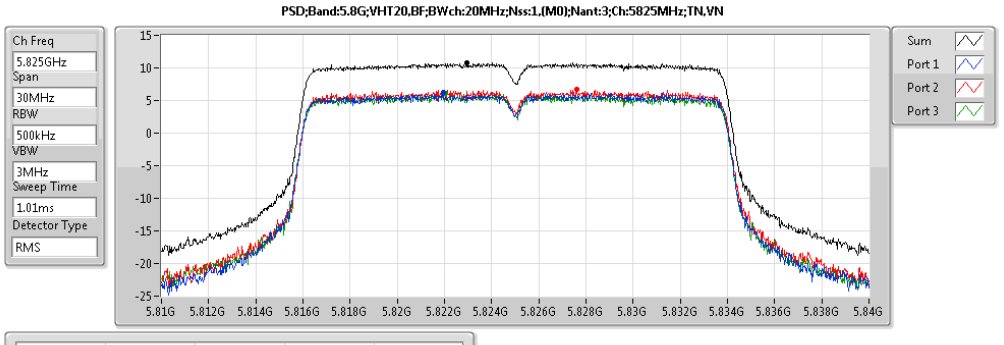
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.69	12.69	8.00	8.40	8.45

PSD;Band:5.8G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5785MHz;TN,VN



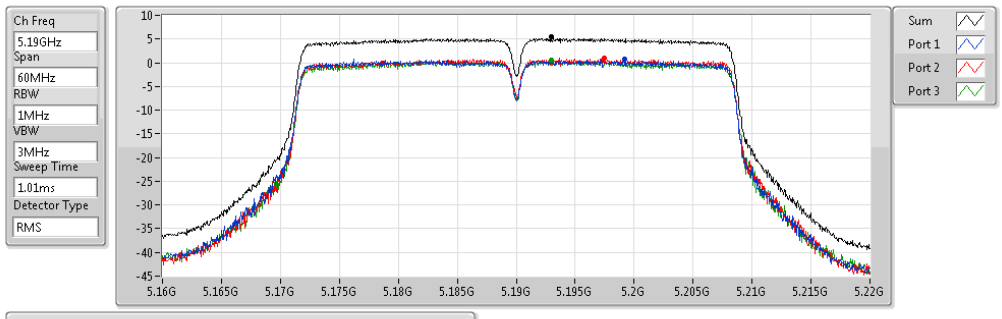
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.04	11.04	6.33	6.73	6.39

PSD;Band:5.8G;VHT20,BF;BWch:20MHz;Nss:1,(M0);Nant:3;Ch:5825MHz;TN,VN



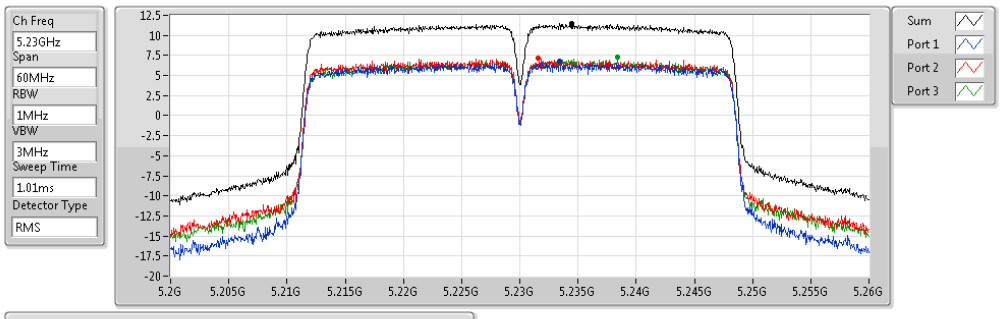
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.78	10.78	6.21	6.70	6.09

PSD;Band:5.2G;VHT40,BF;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5190MHz;TN,VN



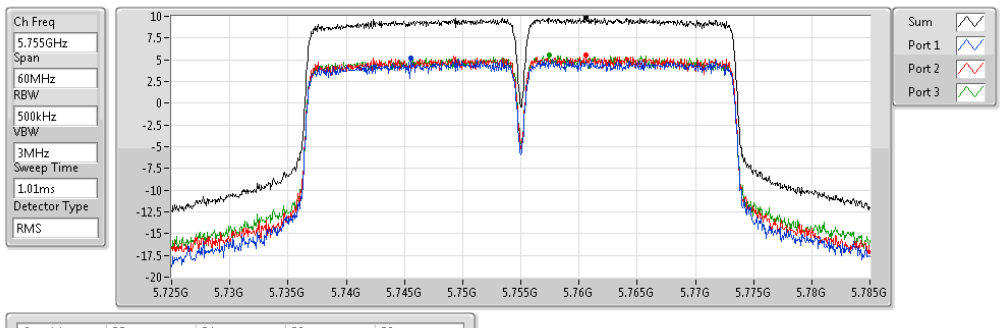
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.44	5.44	0.74	0.90	0.64

PSD;Band:5.2G;VHT40,BF;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5230MHz;TN,VN



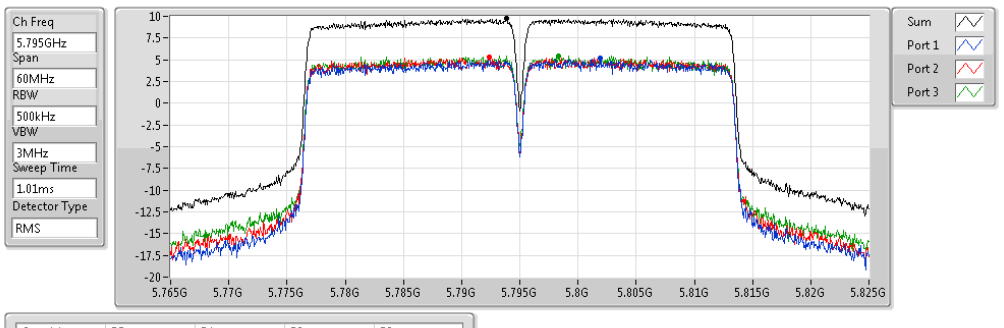
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.45	11.45	6.78	7.18	7.31

PSD;Band:5.8G;VHT40,BF;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5755MHz;TN,VN



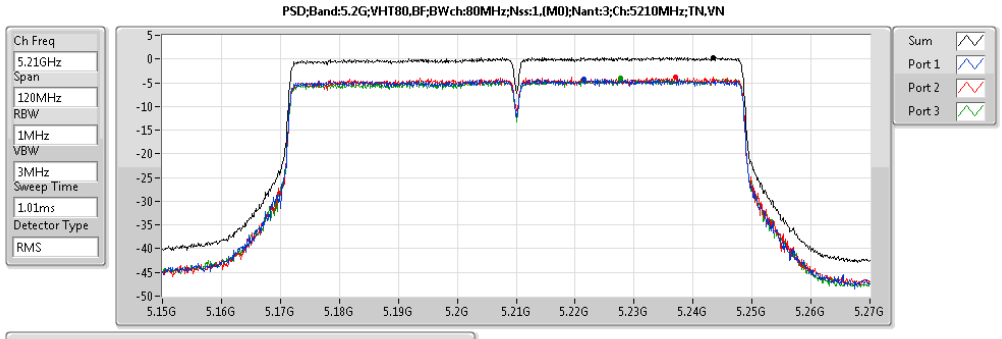
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.88	9.88	5.21	5.53	5.52

PSD;Band:5.8G;VHT40,BF;BWch:40MHz;Nss:1,(M0);Nant:3;Ch:5795MHz;TN,VN



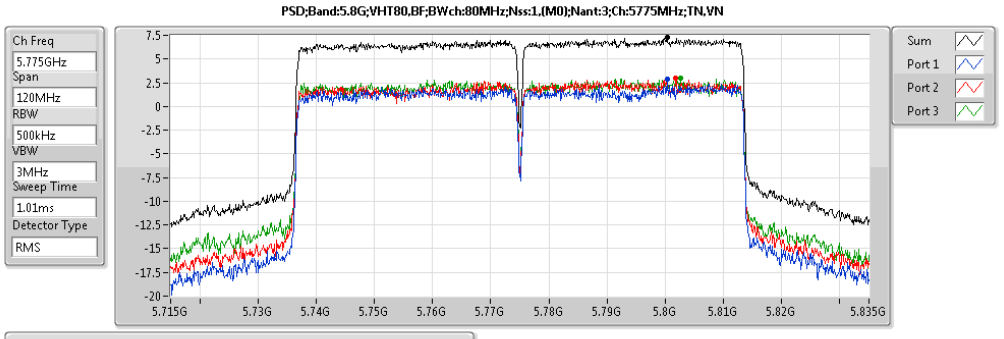
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.77	9.77	5.24	5.33	5.48

PSD;Band:5.2G;VHT80,BF;BWch:80MHz;Nss:1,(M0);Nant:3;Ch:5210MHz;TN,VN



Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.38	0.38	-4.16	-3.71	-4.00

PSD;Band:5.8G;VHT80,BF;BWch:80MHz;Nss:1,(M0);Nant:3;Ch:5775MHz;TN,VN



Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.29	7.29	2.89	3.03	3.04

<For VHT80+80 Mode>

Summary

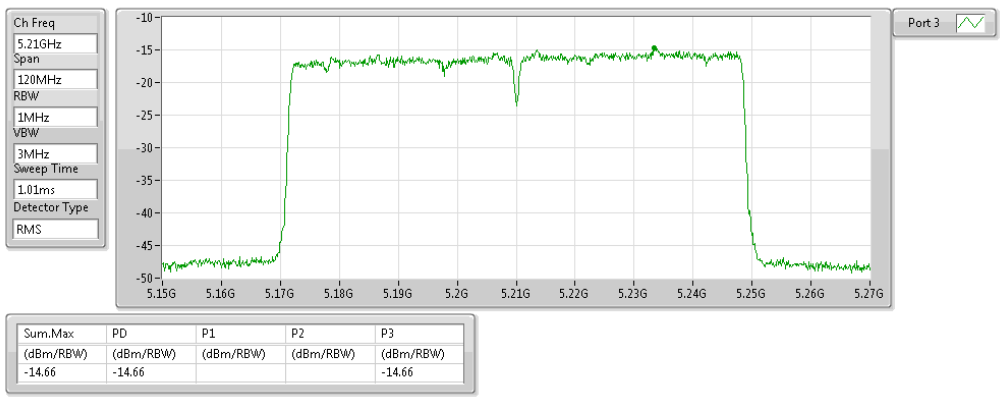
Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
5.2G;VHT80+80;Nss1,(M0);Ntx1(3)	-14.66	-11.66
5.8G;VHT80+80;Nss1,(M0);Ntx1(1)	-1.14	1.86

Note: The test result of Non-Beamforming mode and Beamforming mode for Bandwidth 80+80MHz are the same.

Result

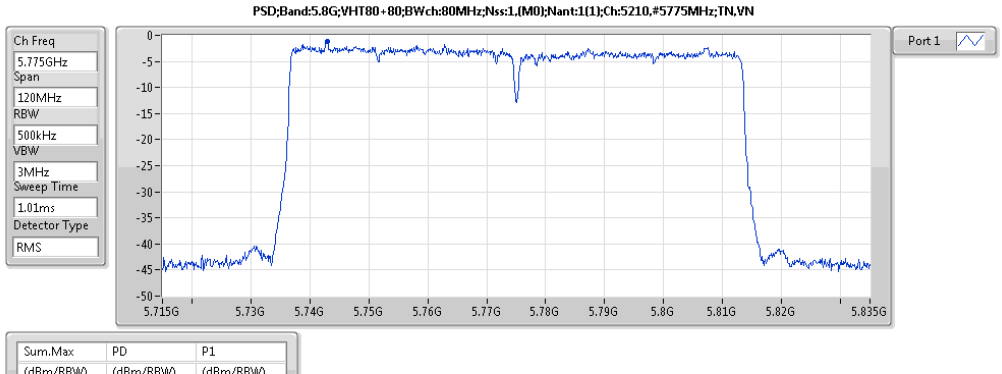
Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	Sum.Max (dBm/RBW)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Lim (dBm/RBW)	P1 (dBm/RBW)	P2	P3
5.2G;VHT80+80;Nss1,(M0);Ntx1(3);#5210,5775;TN,VN	Pass	1M	1M	0.00	3.00	-14.66	-14.66	17.00	-11.66	Inf			-14.66
5.8G;VHT80+80;Nss1,(M0);Ntx1(1);5210,#5775;TN,VN	Pass	500k	500k	0.00	3.00	-1.14	-1.14	30.00	1.86	36.00	-1.14		

PSD;Band:5.2G;VHT80+80;BWch:80MHz;Nss:1,(M0);Nant:1(3);Ch:#5210,5775MHz;TN,VN



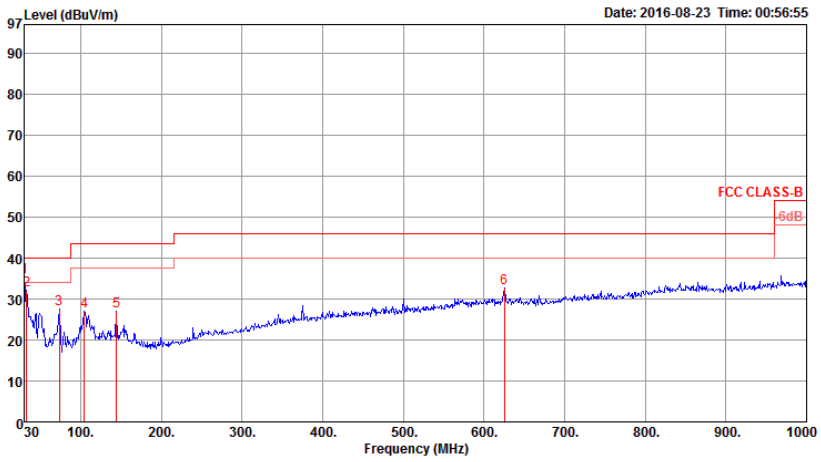
Sum.Max	PD	P1	P2	P3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.66	-14.66			-14.66

PSD;Band:5.8G;VHT80+80;BWch:80MHz;Nss:1,(M0);Nant:1(1);Ch:5210,#5775MHz;TN,VN



Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.14	-1.14	-1.14

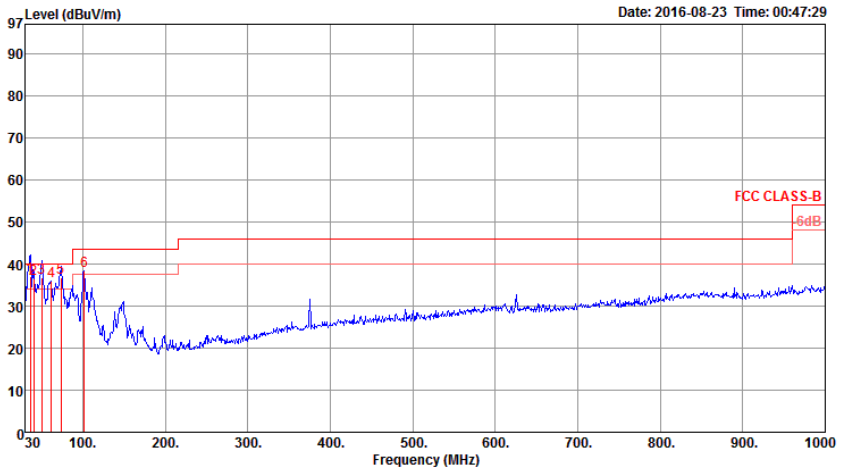
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Place EUT in Y axis with Adapter		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.00	35.31	40.00	-4.69	39.21	0.20	25.50	29.60	220	143	QP	HORIZONTAL
2	32.91	32.06	40.00	-7.94	37.71	0.21	23.73	29.59	193	207	Peak	HORIZONTAL
3	73.65	27.55	40.00	-12.45	43.95	0.53	12.53	29.46	146	203	Peak	HORIZONTAL
4	104.69	27.11	43.50	-16.39	38.31	0.72	17.41	29.33	239	111	Peak	HORIZONTAL
5	144.46	26.93	43.50	-16.57	37.92	0.90	17.24	29.13	198	259	Peak	HORIZONTAL
6	625.58	32.77	46.00	-13.23	34.35	2.35	25.21	29.14	114	182	Peak	HORIZONTAL

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.)

RSE below 1GHz Result			
Operating Mode	1	**Power Phase**	Vertical
Operating Function	Place EUT in Y axis with Adapter		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	36.79	36.89	40.00	-3.11	44.83	0.25	21.39	29.58	144	201	Peak	VERTICAL
2	40.67	36.44	40.00	-3.56	46.62	0.29	19.09	29.56	159	235	QP	VERTICAL
3	50.37	36.75	40.00	-3.25	51.49	0.38	14.42	29.54	125	306	QP	VERTICAL
4	62.01	35.92	40.00	-4.08	52.67	0.46	12.28	29.49	223	193	Peak	VERTICAL
5	73.65	36.83	40.00	-3.17	53.23	0.53	12.53	29.46	215	332	QP	VERTICAL
6	101.78	38.42	43.50	-5.08	49.97	0.70	17.10	29.35	115	229	Peak	VERTICAL

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.)

<For Non-Beamforming Mode>
Radiated Emissions (1GHz~40GHz)

Configurations	IEEE 802.11a CH 36 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15536.80	60.92	74.00	-13.08	45.02	13.56	38.39	36.05	138	225	Peak	HORIZONTAL
2	15537.40	48.31	54.00	-5.69	32.41	13.56	38.39	36.05	138	225	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15542.60	48.01	54.00	-5.99	32.11	13.56	38.39	36.05	156	305	Average	VERTICAL
2	15544.50	62.40	74.00	-11.60	46.50	13.56	38.39	36.05	156	305	Peak	VERTICAL

Configurations	IEEE 802.11a CH 40 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10400.80	63.76	74.00	-10.24	49.21	11.84	38.78	36.07	186	145	Peak	HORIZONTAL
2	10401.10	51.90	54.00	-2.10	37.35	11.84	38.78	36.07	186	145	Average	HORIZONTAL
3	15601.10	60.74	74.00	-13.26	44.82	13.59	38.37	36.04	164	183	Peak	HORIZONTAL
4	15604.40	48.05	54.00	-5.95	32.13	13.59	38.37	36.04	164	183	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10399.10	63.22	74.00	-10.78	48.67	11.84	38.78	36.07	255	196	Peak	VERTICAL
2	10399.30	52.24	54.00	-1.76	37.69	11.84	38.78	36.07	255	196	Average	VERTICAL
3	15600.76	60.61	74.00	-13.39	44.69	13.59	38.37	36.04	203	322	Peak	VERTICAL
4	15602.70	48.02	54.00	-5.98	32.10	13.59	38.37	36.04	203	322	Average	VERTICAL

Configurations	IEEE 802.11a CH 48 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10475.20	51.45	54.00	-2.55	36.80	11.88	38.87	36.10	217	190	Average	HORIZONTAL
2	10475.50	65.01	74.00	-8.99	50.36	11.88	38.87	36.10	217	190	Peak	HORIZONTAL
3	15697.20	60.06	74.00	-13.94	44.10	13.62	38.35	36.01	187	114	Peak	HORIZONTAL
4	15702.30	47.97	54.00	-6.03	32.01	13.62	38.35	36.01	187	114	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10475.10	49.12	54.00	-4.88	34.47	11.88	38.87	36.10	194	340	Average	VERTICAL
2	10476.80	60.24	74.00	-13.76	45.59	11.88	38.87	36.10	194	340	Peak	VERTICAL
3	15717.14	60.06	74.00	-13.94	44.09	13.62	38.35	36.00	176	84	Peak	VERTICAL
4	15720.12	47.41	54.00	-6.59	31.44	13.62	38.35	36.00	176	84	Average	VERTICAL

Configurations	IEEE 802.11a CH 149 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11485.20	63.99	74.00	-10.01	48.45	12.33	39.20	35.99	208	25	Peak	HORIZONTAL
2	11485.40	51.57	54.00	-2.43	36.03	12.33	39.20	35.99	208	25	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11484.70	66.72	74.00	-7.28	51.18	12.33	39.20	35.99	103	312	Peak	VERTICAL
2	11485.50	53.84	54.00	-0.16	38.30	12.33	39.20	35.99	103	312	Average	VERTICAL

Configurations	IEEE 802.11a CH 157 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11569.30	53.66	54.00	-0.34	38.16	12.36	39.15	36.01	207	25	Average	HORIZONTAL
2	11570.50	65.19	74.00	-8.81	49.69	12.36	39.15	36.01	207	25	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11575.20	52.63	54.00	-1.37	37.13	12.36	39.15	36.01	101	186	Average	VERTICAL
2	11575.20	63.93	74.00	-10.07	48.43	12.36	39.15	36.01	101	186	Peak	VERTICAL

Configurations	IEEE 802.11a CH 165 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11650.60	53.63	54.00	-0.37	38.17	12.39	39.09	36.02	210	29	Average	HORIZONTAL
2	11651.60	66.21	74.00	-7.79	50.76	12.40	39.07	36.02	210	29	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11653.00	53.69	54.00	-0.31	38.24	12.40	39.07	36.02	249	93	Average	VERTICAL
2	11653.70	64.65	74.00	-9.35	49.20	12.40	39.07	36.02	249	93	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15556.40	48.27	54.00	-5.73	32.37	13.57	38.38	36.05	133	280	Average	HORIZONTAL
2	15559.00	60.39	74.00	-13.61	44.48	13.57	38.38	36.04	133	280	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15540.10	60.73	74.00	-13.27	44.83	13.56	38.39	36.05	165	189	Peak	VERTICAL
2	15543.00	48.05	54.00	-5.95	32.15	13.56	38.39	36.05	165	189	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 40 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10401.50	51.58	54.00	-2.42	37.03	11.84	38.78	36.07	201	187	Average	HORIZONTAL
2	10404.10	63.59	74.00	-10.41	49.04	11.84	38.78	36.07	201	187	Peak	HORIZONTAL
3	15602.90	48.20	54.00	-5.80	32.28	13.59	38.37	36.04	153	112	Average	HORIZONTAL
4	15604.70	60.15	74.00	-13.85	44.23	13.59	38.37	36.04	153	112	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10402.10	58.90	74.00	-15.10	44.35	11.84	38.78	36.07	116	264	Peak	VERTICAL
2	10403.50	48.66	54.00	-5.34	34.11	11.84	38.78	36.07	116	264	Average	VERTICAL
3	15602.90	48.22	54.00	-5.78	32.30	13.59	38.37	36.04	169	279	Average	VERTICAL
4	15608.30	60.15	74.00	-13.85	44.23	13.59	38.37	36.04	169	279	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 48 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10475.80	49.78	54.00	-4.22	35.13	11.88	38.87	36.10	189	165	Average	HORIZONTAL
2	10483.70	62.12	74.00	-11.88	47.47	11.88	38.87	36.10	189	165	Peak	HORIZONTAL
3	15723.06	60.05	74.00	-13.95	44.08	13.62	38.35	36.00	154	207	Peak	HORIZONTAL
4	15724.68	47.30	54.00	-6.70	31.33	13.62	38.35	36.00	154	207	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10477.20	62.08	74.00	-11.92	47.43	11.88	38.87	36.10	108	101	Peak	VERTICAL
2	10478.10	49.70	54.00	-4.30	35.05	11.88	38.87	36.10	108	101	Average	VERTICAL
3	15718.38	47.57	54.00	-6.43	31.60	13.62	38.35	36.00	140	130	Average	VERTICAL
4	15722.86	59.70	74.00	-14.30	43.73	13.62	38.35	36.00	140	130	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11482.90	64.84	74.00	-9.16	49.30	12.32	39.21	35.99	101	155	Peak	HORIZONTAL
2	11483.20	52.28	54.00	-1.72	36.74	12.32	39.21	35.99	101	155	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11490.60	61.24	74.00	-12.76	45.70	12.33	39.20	35.99	218	90	Peak	VERTICAL
2	11490.80	50.73	54.00	-3.27	35.19	12.33	39.20	35.99	218	90	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 157 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11570.60	65.50	74.00	-8.50	50.00	12.36	39.15	36.01	208	32	Peak	HORIZONTAL
2	11570.70	53.92	54.00	-0.08	38.42	12.36	39.15	36.01	208	32	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11559.70	63.15	74.00	-10.85	47.65	12.36	39.15	36.01	113	83	Peak	VERTICAL
2	11560.20	51.18	54.00	-2.82	35.68	12.36	39.15	36.01	113	83	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 165 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11648.20	53.55	54.00	-0.45	38.09	12.39	39.09	36.02	206	36	Average	HORIZONTAL
2	11657.80	66.03	74.00	-7.97	50.58	12.40	39.07	36.02	206	36	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11640.50	63.15	74.00	-10.85	47.69	12.39	39.09	36.02	125	83	Peak	VERTICAL
2	11659.90	51.94	54.00	-2.06	36.49	12.40	39.07	36.02	125	83	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15566.94	60.95	74.00	-13.05	45.04	13.57	38.38	36.04	180	72	Peak	HORIZONTAL
2	15569.06	47.36	54.00	-6.64	31.45	13.57	38.38	36.04	180	72	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15573.70	47.65	54.00	-6.35	31.74	13.57	38.38	36.04	161	307	Average	VERTICAL
2	15574.02	60.25	74.00	-13.75	44.34	13.57	38.38	36.04	161	307	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 46 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15687.42	47.85	54.00	-6.15	31.90	13.60	38.36	36.01	188	148	Average	HORIZONTAL
2	15693.62	60.39	74.00	-13.61	44.43	13.62	38.35	36.01	188	148	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15686.20	47.46	54.00	-6.54	31.51	13.60	38.36	36.01	159	305	Average	VERTICAL
2	15686.90	60.84	74.00	-13.16	44.89	13.60	38.36	36.01	159	305	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11501.50	53.69	54.00	-0.31	38.15	12.33	39.20	35.99	100	315	Average	HORIZONTAL
2	11501.70	65.12	74.00	-8.88	49.58	12.33	39.20	35.99	100	315	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11505.90	49.76	54.00	-4.24	34.22	12.33	39.20	35.99	101	159	Average	VERTICAL
2	11524.80	60.92	74.00	-13.08	45.41	12.34	39.17	36.00	101	159	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 159 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11587.80	53.06	54.00	-0.94	37.59	12.37	39.12	36.02	204	32	Average	HORIZONTAL
2	11594.40	65.17	74.00	-8.83	49.70	12.37	39.12	36.02	204	32	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11580.00	51.68	54.00	-2.32	36.18	12.36	39.15	36.01	103	85	Average	VERTICAL
2	11583.80	62.78	74.00	-11.22	47.30	12.37	39.12	36.01	103	85	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15603.44	47.75	54.00	-6.25	31.83	13.59	38.37	36.04	218	117	Average	HORIZONTAL
2	15652.08	60.43	74.00	-13.57	44.49	13.60	38.36	36.02	218	117	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15611.76	59.71	74.00	-14.29	43.77	13.59	38.37	36.02	245	56	Peak	VERTICAL
2	15664.56	47.69	54.00	-6.31	31.74	13.60	38.36	36.01	245	56	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11405.60	57.29	74.00	-16.71	41.79	12.29	39.22	36.01	266	105	Peak	HORIZONTAL
2	11421.76	44.95	54.00	-9.05	29.45	12.30	39.21	36.01	266	105	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11409.12	44.67	54.00	-9.33	29.17	12.29	39.22	36.01	271	55	Average	VERTICAL
2	11421.28	57.11	74.00	-16.89	41.61	12.30	39.21	36.01	271	55	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT80+80 CH 42 + CH 155 / Type 1 / Chain 1 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11554.00	45.39	54.00	-8.61	29.01	11.26	39.77	34.65	236	155	Average	HORIZONTAL
2	11555.88	58.83	74.00	-15.17	42.45	11.26	39.77	34.65	236	155	Peak	HORIZONTAL
3	15621.24	48.56	54.00	-5.44	31.45	13.84	38.15	34.88	248	3	Average	HORIZONTAL
4	15637.44	61.00	74.00	-13.00	43.89	13.84	38.15	34.88	248	3	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11550.76	58.06	74.00	-15.94	41.68	11.26	39.77	34.65	279	218	Peak	VERTICAL
2	11559.48	45.46	54.00	-8.54	29.08	11.26	39.77	34.65	279	218	Average	VERTICAL
3	15629.56	48.38	54.00	-5.62	31.27	13.84	38.15	34.88	257	132	Average	VERTICAL
4	15636.40	61.67	74.00	-12.33	44.56	13.84	38.15	34.88	257	132	Peak	VERTICAL

Note:

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

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Beamforming Mode>

Radiated Emissions (1GHz~40GHz)

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15539.36	60.61	74.00	-13.39	44.71	13.56	38.39	36.05	195	130	Peak	HORIZONTAL
2	15543.80	47.63	54.00	-6.37	31.73	13.56	38.39	36.05	195	130	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15534.32	47.68	54.00	-6.32	31.78	13.56	38.39	36.05	231	307	Average	VERTICAL
2	15544.68	59.86	74.00	-14.14	43.96	13.56	38.39	36.05	231	307	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 40 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15590.04	60.45	74.00	-13.55	44.54	13.57	38.38	36.04	150	252	Peak	HORIZONTAL
2	15607.44	47.97	54.00	-6.03	32.05	13.59	38.37	36.04	150	252	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15600.52	61.24	74.00	-12.76	45.32	13.59	38.37	36.04	195	144	Peak	VERTICAL
2	15606.40	47.93	54.00	-6.07	32.01	13.59	38.37	36.04	195	144	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 48 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15714.80	47.48	54.00	-6.52	31.51	13.62	38.35	36.00	172	82	Average	HORIZONTAL
2	15722.88	60.20	74.00	-13.80	44.23	13.62	38.35	36.00	172	82	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15715.44	47.40	54.00	-6.60	31.43	13.62	38.35	36.00	209	178	Average	VERTICAL
2	15716.80	60.31	74.00	-13.69	44.34	13.62	38.35	36.00	209	178	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11488.88	52.80	54.00	-1.20	37.26	12.33	39.20	35.99	187	26	Average	HORIZONTAL
2	11490.24	67.19	74.00	-6.81	51.65	12.33	39.20	35.99	187	26	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11490.92	50.65	54.00	-3.35	35.11	12.33	39.20	35.99	188	195	Average	VERTICAL
2	11492.36	63.25	74.00	-10.75	47.71	12.33	39.20	35.99	188	195	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 157 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11567.04	53.85	54.00	-0.15	38.35	12.36	39.15	36.01	204	23	Average	HORIZONTAL
2	11568.56	68.17	74.00	-5.83	52.67	12.36	39.15	36.01	204	23	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11573.12	65.25	74.00	-8.75	49.75	12.36	39.15	36.01	214	104	Peak	VERTICAL
2	11573.92	51.69	54.00	-2.31	36.19	12.36	39.15	36.01	214	104	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 165 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11646.70	68.81	74.00	-5.19	53.35	12.39	39.09	36.02	201	26	Peak	HORIZONTAL
2	11648.42	53.77	54.00	-0.23	38.31	12.39	39.09	36.02	201	26	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11650.20	65.47	74.00	-8.53	50.01	12.39	39.09	36.02	206	155	Peak	VERTICAL
2	11650.30	51.69	54.00	-2.31	36.23	12.39	39.09	36.02	206	155	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15566.54	48.20	54.00	-5.80	32.29	13.57	38.38	36.04	186	144	Average	HORIZONTAL
2	15568.88	61.48	74.00	-12.52	45.57	13.57	38.38	36.04	186	144	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15565.56	61.07	74.00	-12.93	45.16	13.57	38.38	36.04	151	161	Peak	VERTICAL
2	15566.96	48.17	54.00	-5.83	32.26	13.57	38.38	36.04	151	161	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 46 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15689.78	48.21	54.00	-5.79	32.26	13.60	38.36	36.01	217	167	Average	HORIZONTAL
2	15690.48	61.25	74.00	-12.75	45.30	13.60	38.36	36.01	217	167	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15686.54	48.26	54.00	-5.74	32.31	13.60	38.36	36.01	117	350	Average	VERTICAL
2	15694.44	61.63	74.00	-12.37	45.67	13.62	38.35	36.01	117	350	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11510.54	68.69	74.00	-5.31	53.16	12.33	39.20	36.00	196	18	Peak	HORIZONTAL
2	11513.40	53.29	54.00	-0.71	37.76	12.33	39.20	36.00	196	18	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11505.24	63.09	74.00	-10.91	47.55	12.33	39.20	35.99	194	93	Peak	VERTICAL
2	11513.20	50.37	54.00	-3.63	34.84	12.33	39.20	36.00	194	93	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 159 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11589.20	52.88	54.00	-1.12	37.41	12.37	39.12	36.02	203	35	Average	HORIZONTAL
2	11591.42	68.10	74.00	-5.90	52.63	12.37	39.12	36.02	203	35	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11585.40	50.49	54.00	-3.51	35.02	12.37	39.12	36.02	212	104	Average	VERTICAL
2	11585.48	66.16	74.00	-7.84	50.69	12.37	39.12	36.02	212	104	Peak	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15626.86	48.17	54.00	-5.83	32.23	13.59	38.37	36.02	156	142	Average	HORIZONTAL
2	15630.10	61.23	74.00	-12.77	45.29	13.59	38.37	36.02	156	142	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15625.32	61.24	74.00	-12.76	45.30	13.59	38.37	36.02	182	273	Peak	VERTICAL
2	15628.40	48.25	54.00	-5.75	32.31	13.59	38.37	36.02	182	273	Average	VERTICAL

Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Chain 1 + Chain 2 + Chain 3

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11545.06	45.47	54.00	-8.53	29.96	12.34	39.17	36.00	215	297	Average	HORIZONTAL
2	11546.02	57.65	74.00	-16.35	42.14	12.34	39.17	36.00	215	297	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11546.52	59.68	74.00	-14.32	44.17	12.34	39.17	36.00	176	29	Peak	VERTICAL
2	11554.34	46.64	54.00	-7.36	31.14	12.36	39.15	36.01	176	29	Average	VERTICAL

Note:

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

Emission level (dBuV/m) = 20 log Emission level (uV/m).

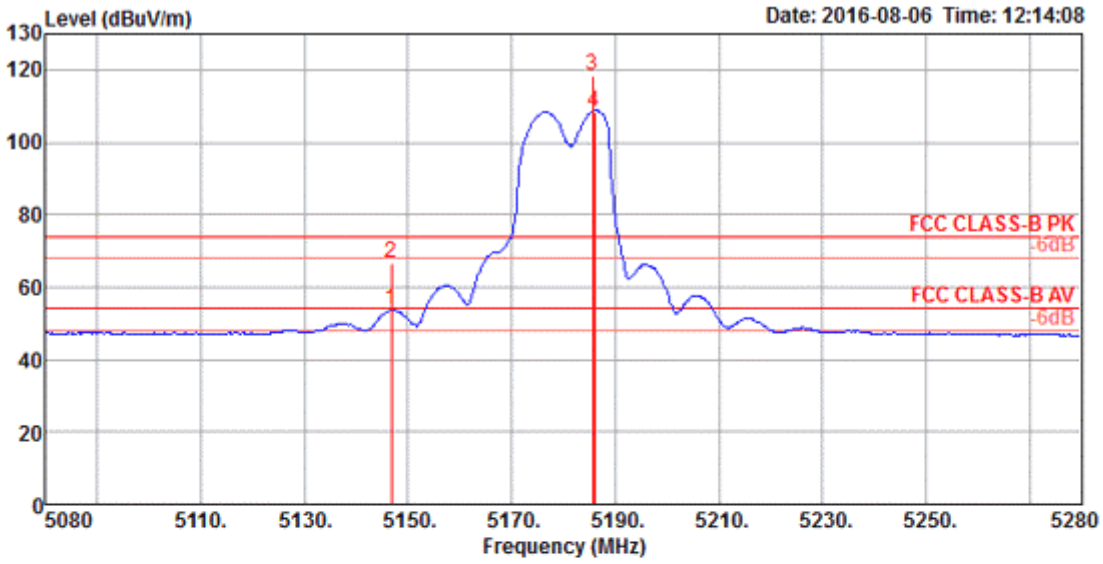
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

<For Non-Beamforming Mode>

Band Edge Emissions

Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3

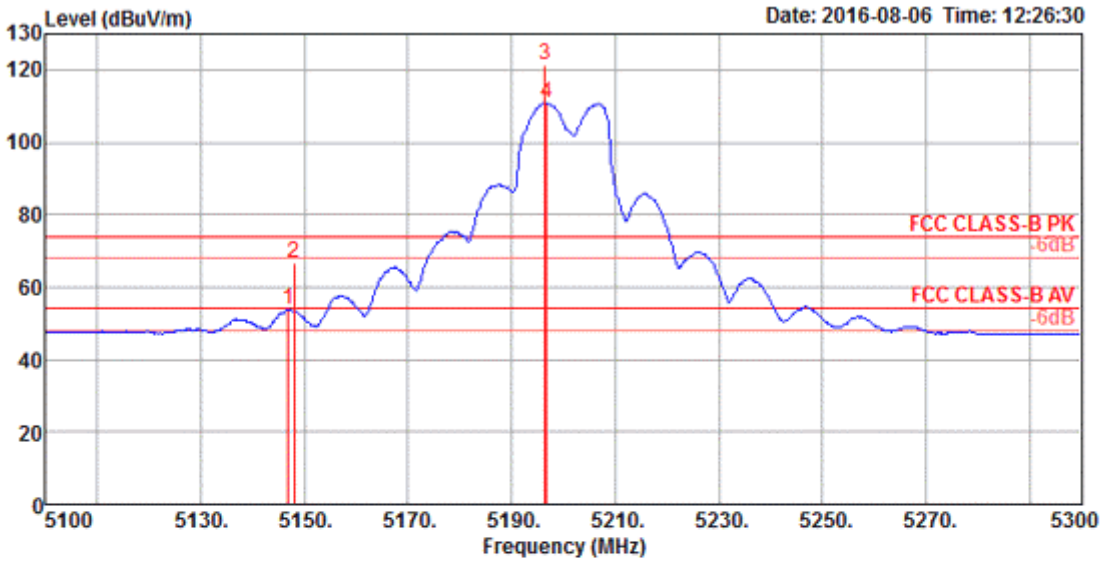
Channel 36



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5146.80	53.80	54.00	-0.20	47.75	9.50	33.17	36.62	320	226	Average	VERTICAL
2	5146.80	66.48	74.00	-7.52	60.43	9.50	33.17	36.62	320	226	Peak	VERTICAL
3	5185.60	118.40			112.24	9.55	33.23	36.62	320	226	Peak	VERTICAL
4	5186.00	108.63			102.47	9.55	33.23	36.62	320	226	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

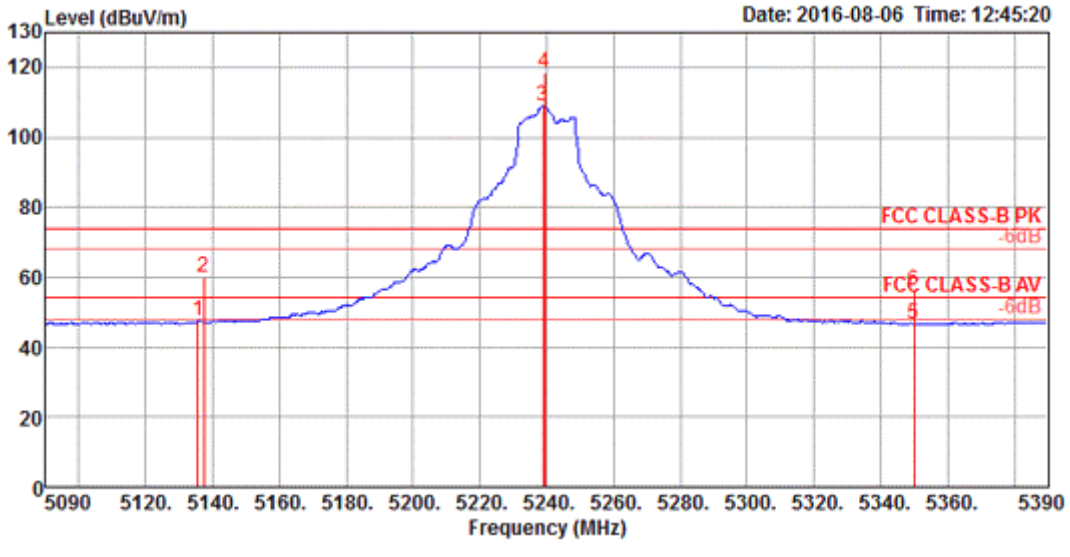
Channel 40



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5146.80	53.64	54.00	-0.36	47.59	9.50	33.17	36.62	320	225	Average	VERTICAL
2	5148.00	66.82	74.00	-7.18	60.77	9.50	33.17	36.62	320	225	Peak	VERTICAL
3	5196.40	121.21			115.00	9.58	33.25	36.62	320	225	Peak	VERTICAL
4	5196.80	110.75			104.54	9.58	33.25	36.62	320	225	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

Channel 48

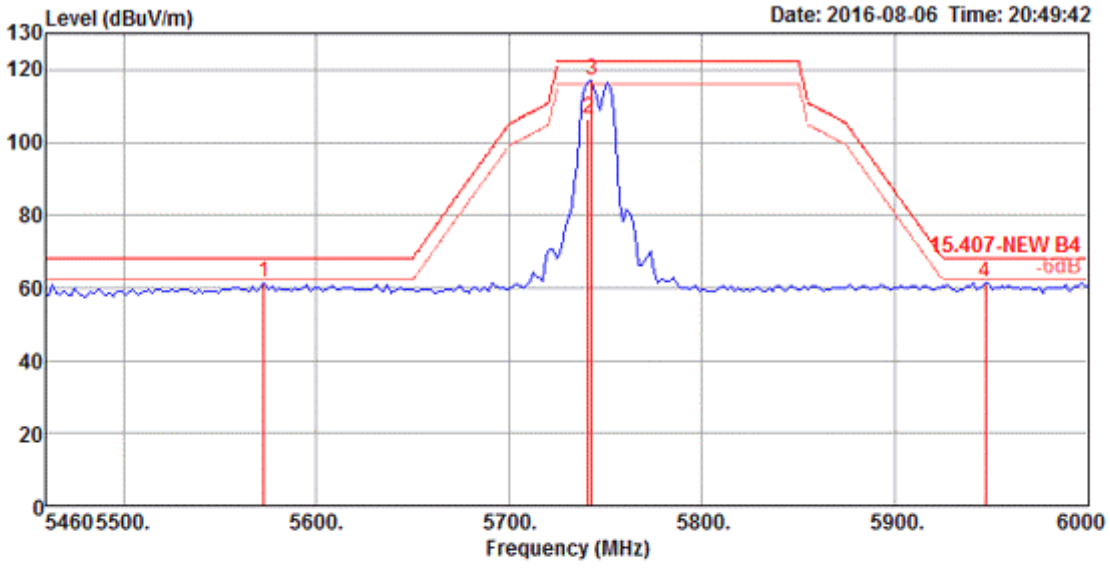


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5135.60	47.64	54.00	-6.36	41.64	9.48	33.15	36.63	282	273	Average	HORIZONTAL
2	5137.40	59.90	74.00	-14.10	53.90	9.48	33.15	36.63	282	273	Peak	HORIZONTAL
3	5238.80	108.94			102.60	9.62	33.34	36.62	282	273	Average	HORIZONTAL
4	5239.40	118.47			112.13	9.62	33.34	36.62	282	273	Peak	HORIZONTAL
5	5350.00	46.57	54.00	-7.43	39.91	9.73	33.53	36.60	282	273	Average	HORIZONTAL
6	5350.00	56.23	74.00	-17.77	49.57	9.73	33.53	36.60	282	273	Peak	HORIZONTAL

Item 2, 3 are the fundamental frequency at 5240 MHz.

Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3

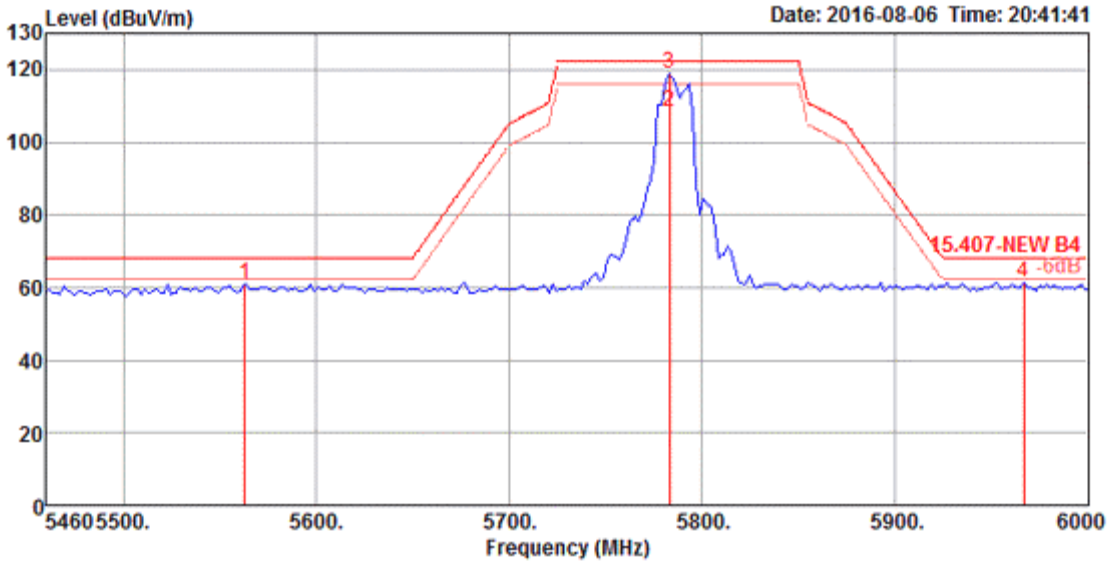
Channel 149



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5573.00	61.24	68.20	-6.96	54.03	9.79	33.99	36.57	320	227	Peak	VERTICAL
2	5741.00	106.41			98.48	9.94	34.50	36.51	320	227	Average	VERTICAL
3	5743.00	117.14			109.21	9.94	34.50	36.51	320	227	Peak	VERTICAL
4	5947.00	61.58	68.20	-6.62	52.94	10.03	35.06	36.45	320	227	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5745 MHz.

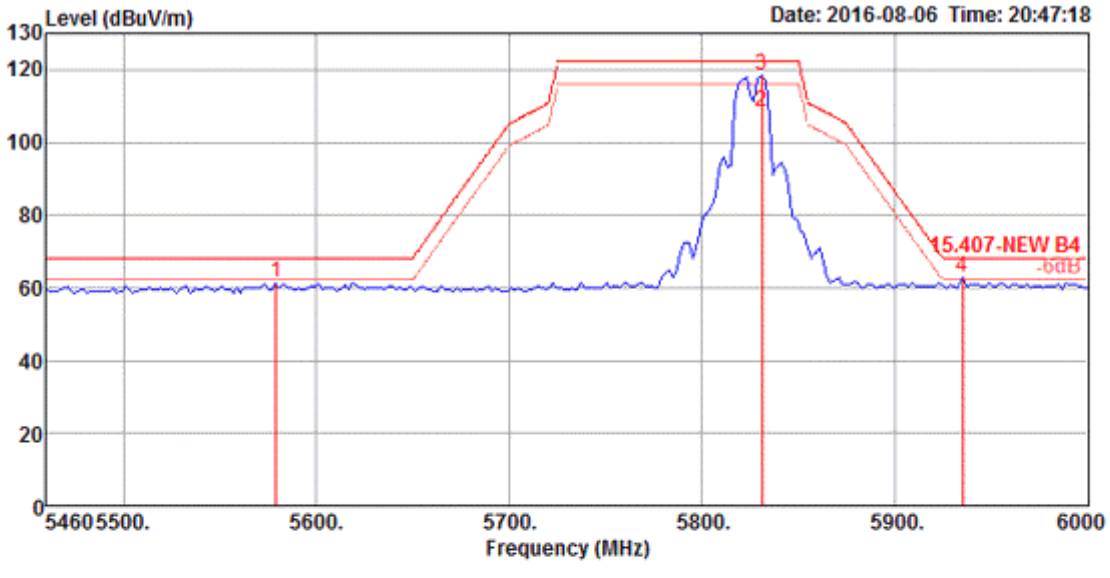
Channel 157



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5563.00	60.97	68.20	-7.23	53.76	9.79	33.99	36.57	239	228	Peak	VERTICAL
2	5783.00	108.59			100.53	9.97	34.59	36.50	239	228	Average	VERTICAL
3	5783.00	118.77			110.71	9.97	34.59	36.50	239	228	Peak	VERTICAL
4	5967.00	61.44	68.20	-6.76	52.73	10.04	35.11	36.44	239	228	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5785 MHz.

Channel 165

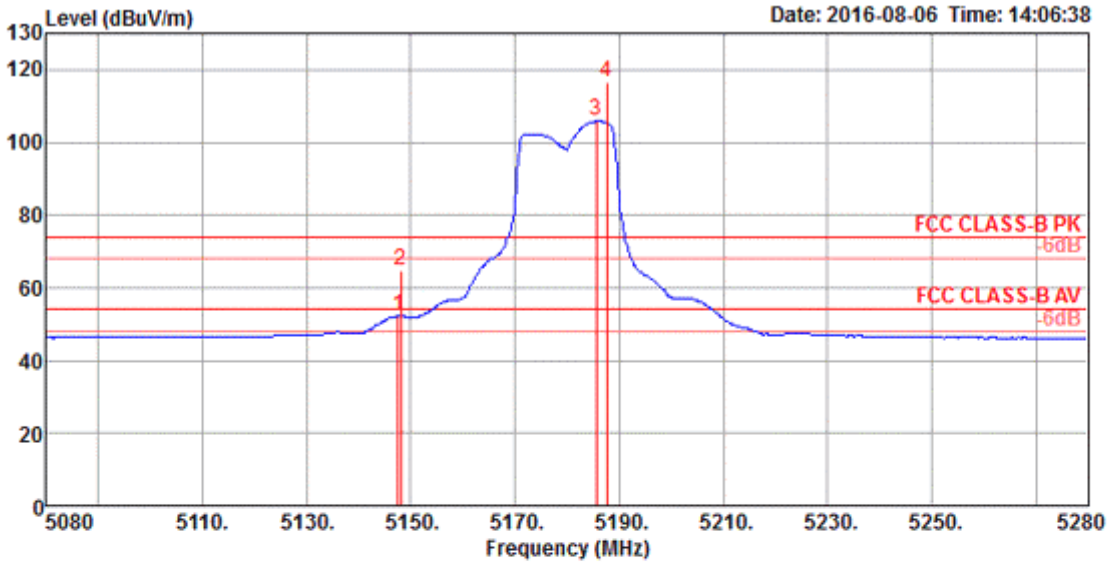


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5579.00	61.20	68.20	-7.00	53.94	9.79	34.03	36.56	320	176	Peak	VERTICAL
2	5831.00	108.22			99.97	10.00	34.73	36.48	320	176	Average	VERTICAL
3	5831.00	118.37			110.12	10.00	34.73	36.48	320	176	Peak	VERTICAL
4	5935.00	62.90	68.20	-5.30	54.31	10.03	35.01	36.45	320	176	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5825 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3

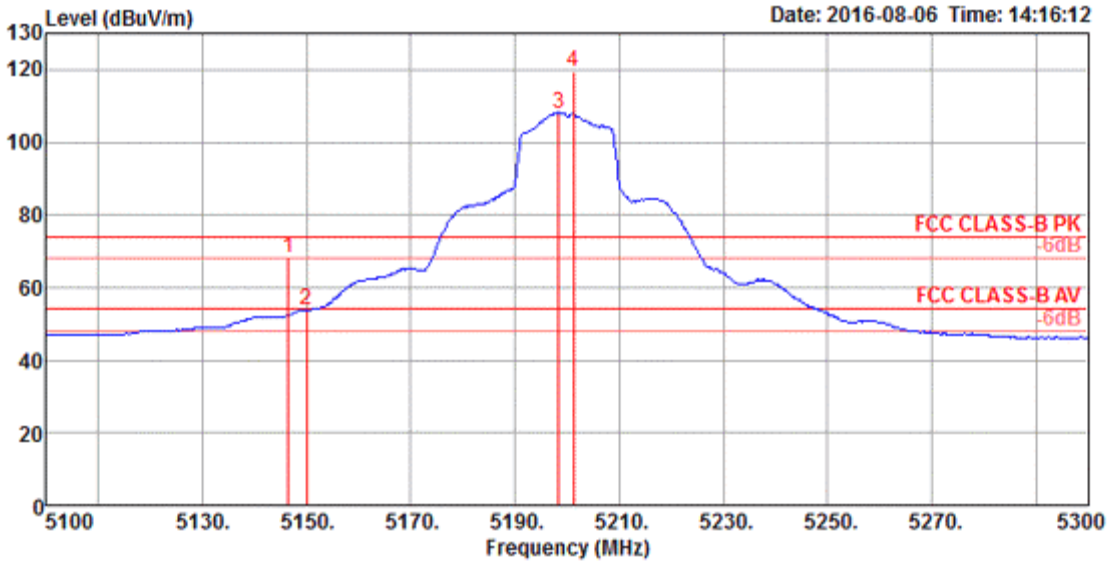
Channel 36



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.60	52.17	54.00	-1.83	46.12	9.50	33.17	36.62	267	290	Average	HORIZONTAL
2	5148.00	64.93	74.00	-9.07	58.88	9.50	33.17	36.62	267	290	Peak	HORIZONTAL
3	5185.60	105.87			99.71	9.55	33.23	36.62	267	290	Average	HORIZONTAL
4	5187.60	116.62			110.41	9.58	33.25	36.62	267	290	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

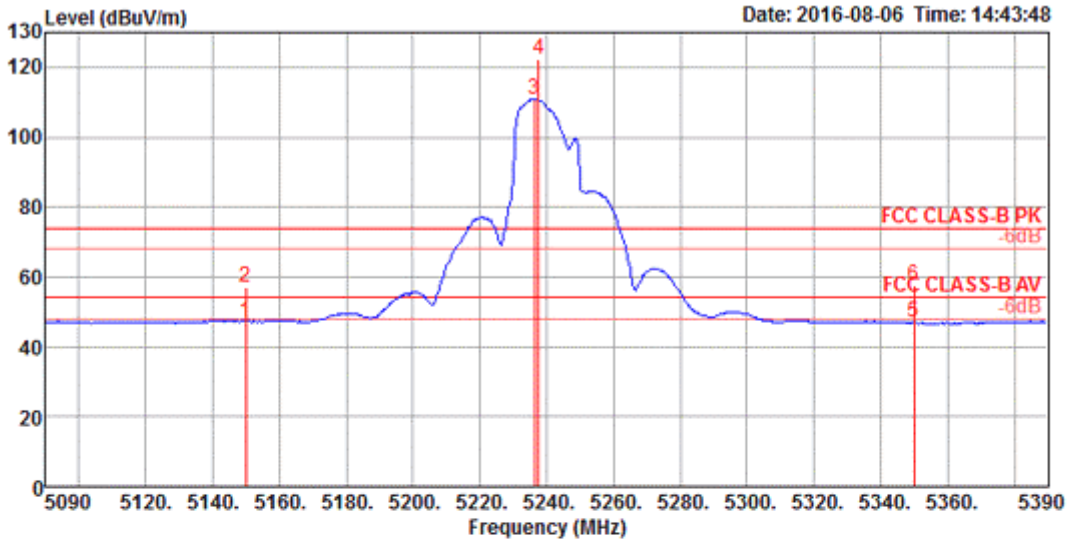
Channel 40



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5146.40	68.10	74.00	-5.90	62.05	9.50	33.17	36.62	261	275	Peak	HORIZONTAL
2	5150.00	53.74	54.00	-0.26	47.69	9.50	33.17	36.62	261	275	Average	HORIZONTAL
3	5198.40	108.09			101.88	9.58	33.25	36.62	261	275	Average	HORIZONTAL
4	5201.20	119.28			113.07	9.58	33.25	36.62	261	275	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

Channel 48

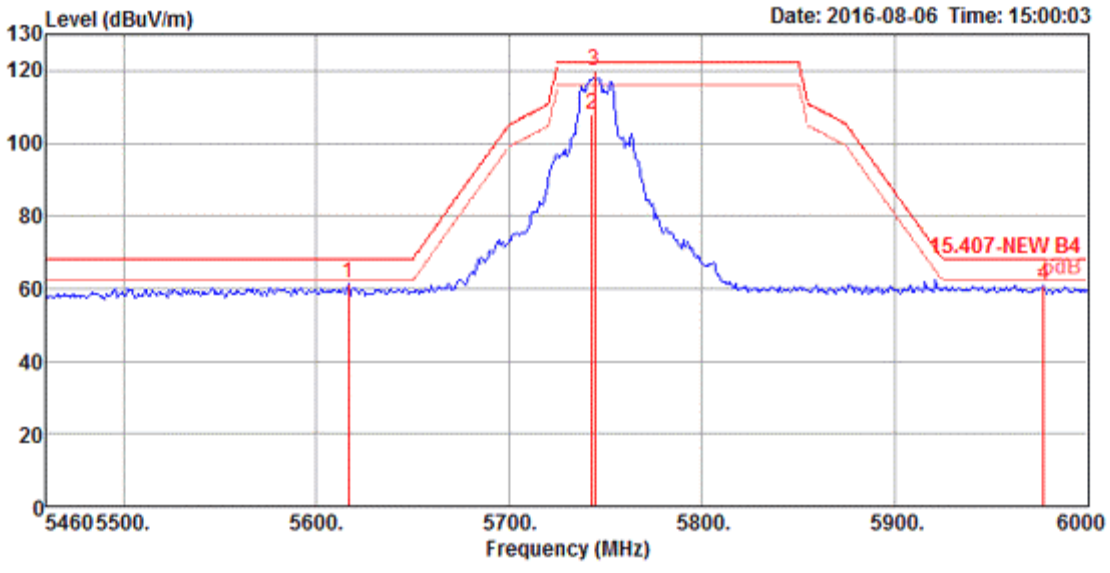


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5150.00	47.05	54.00	-6.95	41.00	9.50	33.17	36.62	240	224	Average	VERTICAL
2	5150.00	57.16	74.00	-16.84	51.11	9.50	33.17	36.62	240	224	Peak	VERTICAL
3	5236.40	110.69			104.35	9.62	33.34	36.62	240	224	Average	VERTICAL
4	5237.60	122.21			115.87	9.62	33.34	36.62	240	224	Peak	VERTICAL
5	5350.00	46.93	54.00	-7.07	40.27	9.73	33.53	36.60	240	224	Average	VERTICAL
6	5350.00	57.60	74.00	-16.40	50.94	9.73	33.53	36.60	240	224	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3

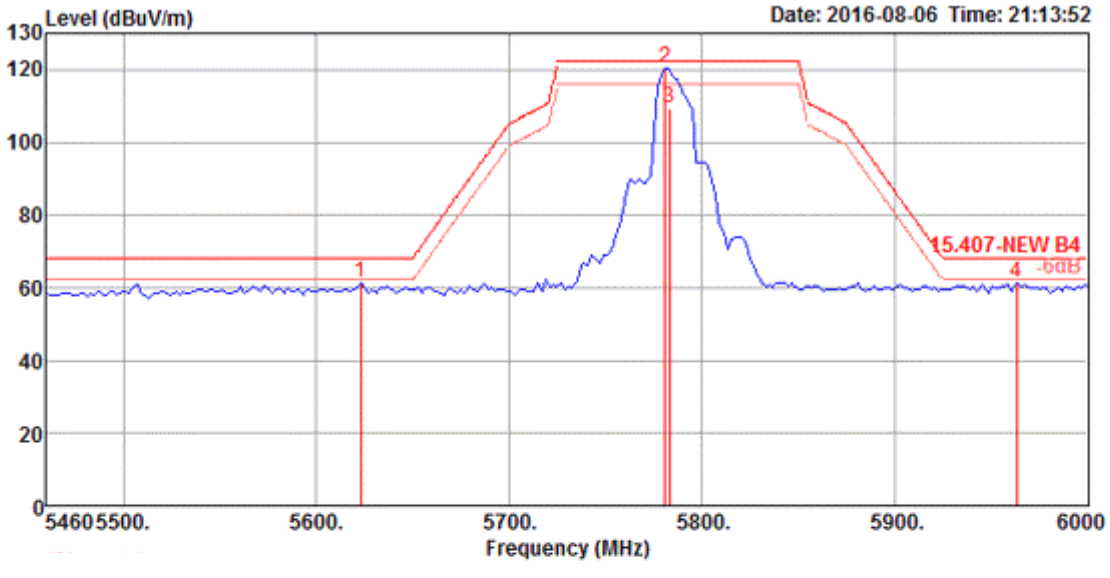
Channel 149



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5616.60	61.54	68.20	-6.66	54.15	9.81	34.13	36.55	283	182	Peak	HORIZONTAL
2	5742.96	108.07			100.14	9.94	34.50	36.51	283	182	Average	HORIZONTAL
3	5744.04	120.05			112.12	9.94	34.50	36.51	283	182	Peak	HORIZONTAL
4	5977.32	60.98	68.20	-7.22	52.22	10.05	35.15	36.44	283	182	Peak	HORIZONTAL

Item 2, 3 are the fundamental frequency at 5745 MHz.

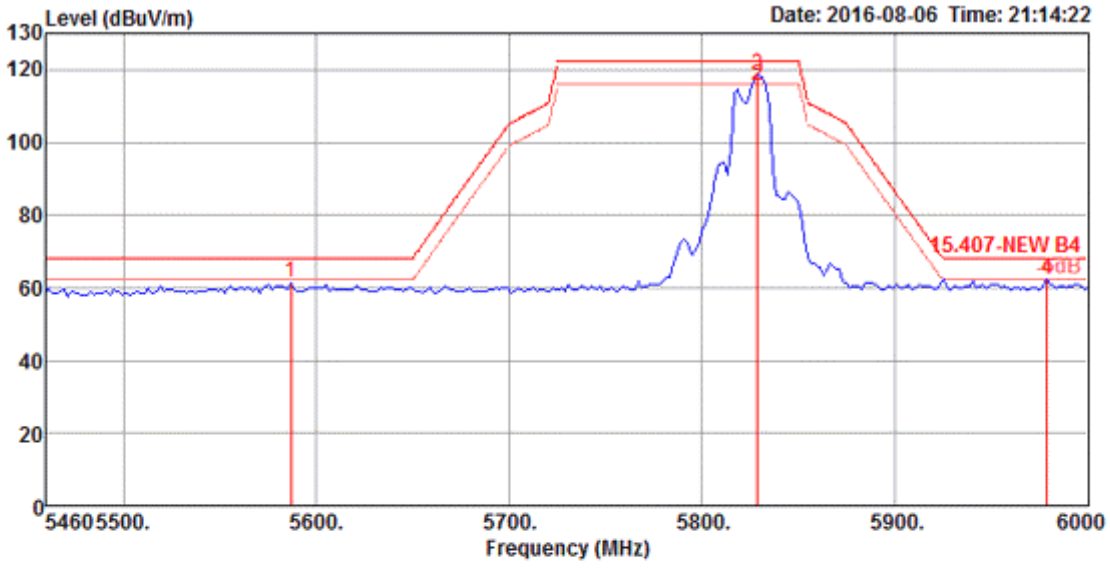
Channel 157



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5623.00	61.50	68.20	-6.70	54.11	9.81	34.13	36.55	258	227	Peak	VERTICAL
2	5781.00	120.45			112.39	9.97	34.59	36.50	258	227	Peak	VERTICAL
3	5783.00	109.48			101.42	9.97	34.59	36.50	258	227	Average	VERTICAL
4	5963.00	61.44	68.20	-6.76	52.73	10.04	35.11	36.44	258	227	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5785 MHz.

Channel 165

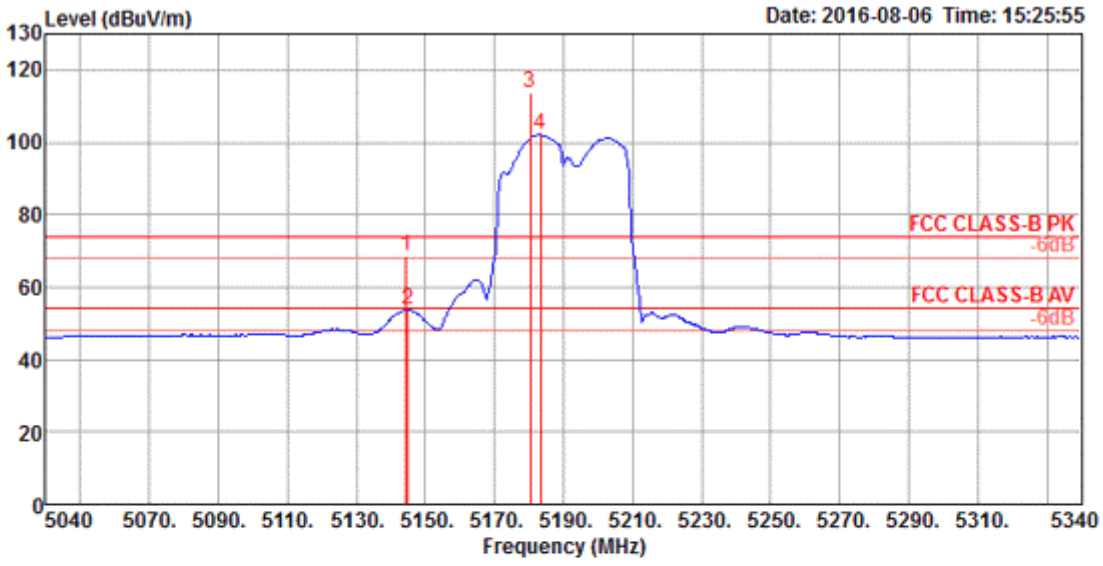


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5587.00	61.30	68.20	-6.90	54.04	9.79	34.03	36.56	320	30	Peak	VERTICAL
2	5829.00	115.58			107.33	10.00	34.73	36.48	320	30	Average	VERTICAL
3	5829.00	118.37			110.12	10.00	34.73	36.48	320	30	Peak	VERTICAL
4	5979.00	62.32	68.20	-5.88	53.56	10.05	35.15	36.44	320	30	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5825 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3

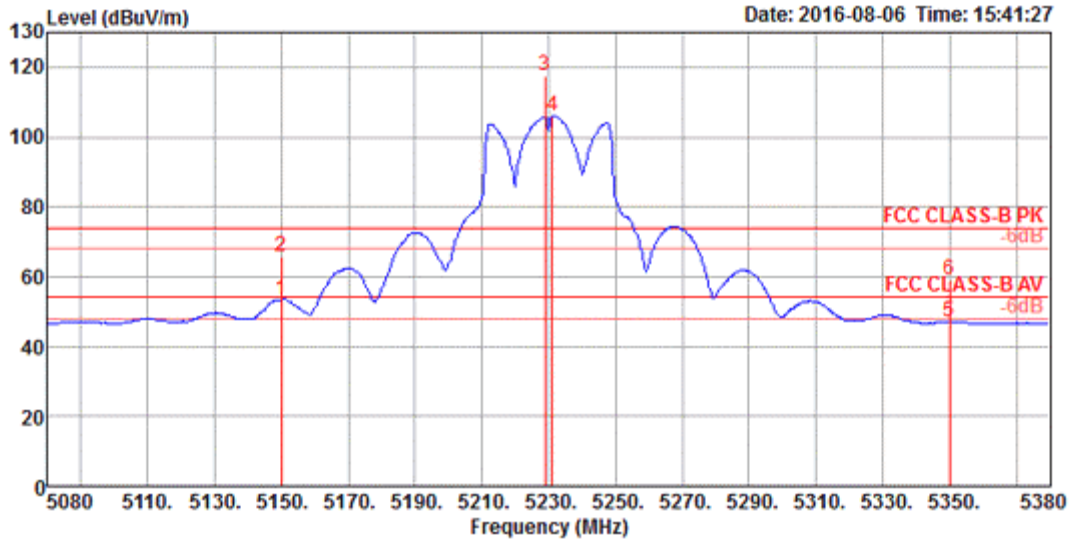
Channel 38



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5144.40	68.52	74.00	-5.48	62.47	9.50	33.17	36.62	320	225	Peak	VERTICAL
2	5145.00	53.59	54.00	-0.41	47.54	9.50	33.17	36.62	320	225	Average	VERTICAL
3	5180.40	113.84			107.68	9.55	33.23	36.62	320	225	Peak	VERTICAL
4	5183.40	102.14			95.98	9.55	33.23	36.62	320	225	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

Channel 46

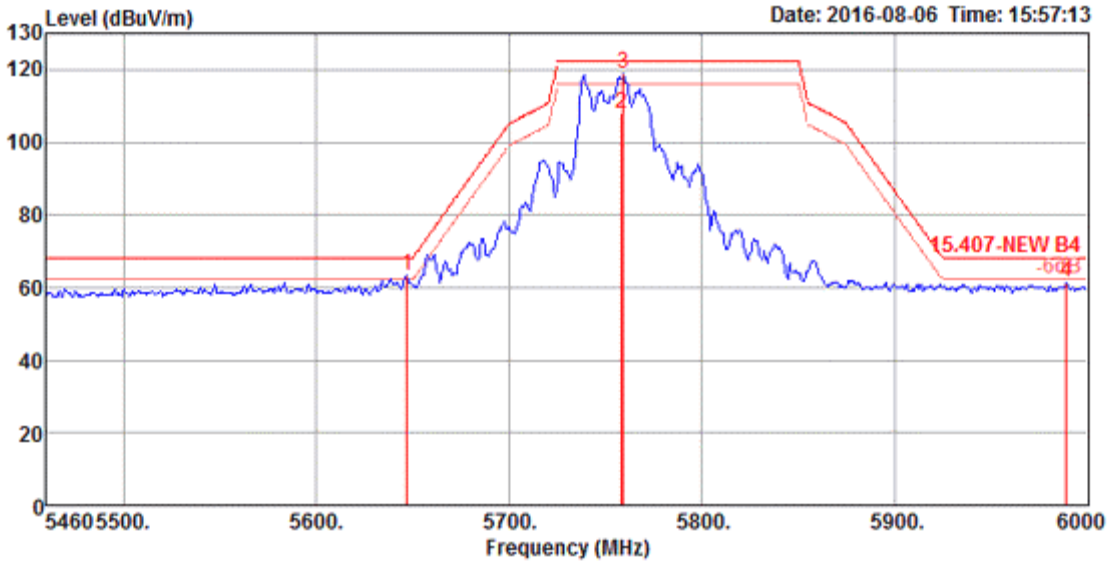


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5150.00	53.40	54.00	-0.60	47.35	9.50	33.17	36.62	306	211	Average	VERTICAL
2	5150.00	65.64	74.00	-8.36	59.59	9.50	33.17	36.62	306	211	Peak	VERTICAL
3	5228.80	117.72			111.42	9.61	33.31	36.62	306	211	Peak	VERTICAL
4	5231.20	105.85			99.55	9.61	33.31	36.62	306	211	Average	VERTICAL
5	5350.00	46.99	54.00	-7.01	40.33	9.73	33.53	36.60	306	211	Average	VERTICAL
6	5350.00	58.91	74.00	-15.09	52.25	9.73	33.53	36.60	306	211	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3

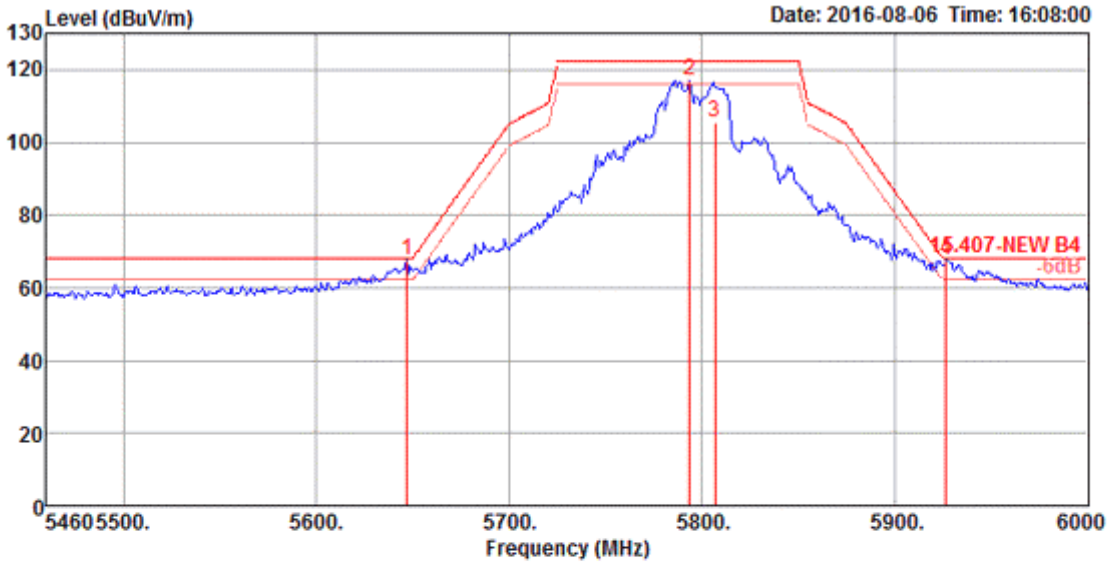
Channel 151



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5646.84	63.46	68.20	-4.74	55.94	9.84	34.22	36.54	320	30	Peak	VERTICAL
2	5758.08	108.11			100.11	9.96	34.55	36.51	320	30	Average	VERTICAL
3	5759.16	118.82			110.82	9.96	34.55	36.51	320	30	Peak	VERTICAL
4	5989.20	61.59	68.20	-6.61	52.83	10.05	35.15	36.44	320	30	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5755 MHz.

Channel 159

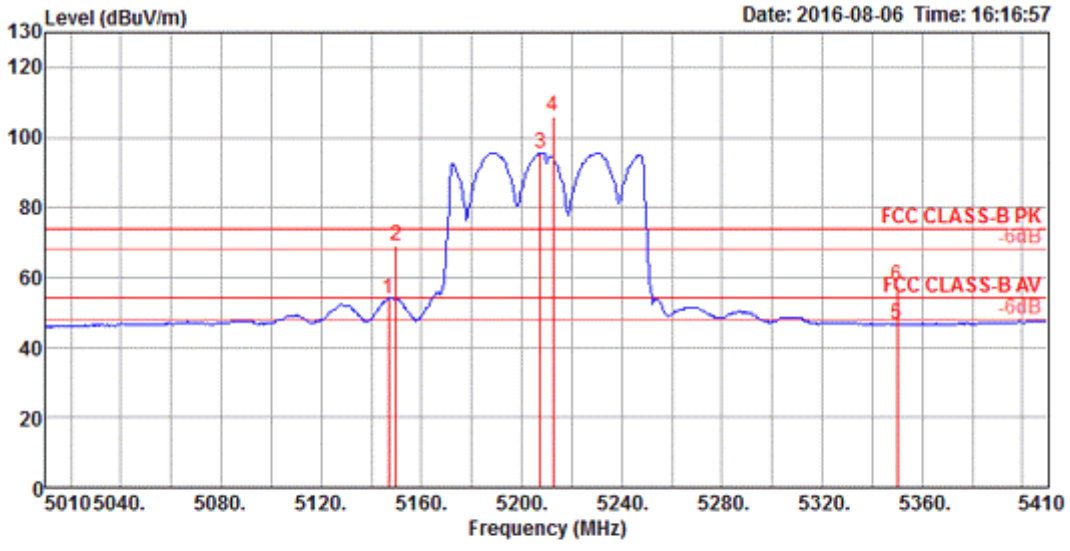


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5646.84	67.48	68.20	-0.72	59.96	9.84	34.22	36.54	251	288	Peak	HORIZONTAL
2	5793.72	116.93			108.80	9.99	34.64	36.50	251	288	Peak	HORIZONTAL
3	5806.68	105.42			97.23	9.99	34.69	36.49	251	288	Average	HORIZONTAL
4	5926.56	67.69	68.20	-0.51	59.10	10.03	35.01	36.45	251	288	Peak	HORIZONTAL

Item 2, 3 are the fundamental frequency at 5795 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, CH 155 / Chain 1 + Chain 2 + Chain 3

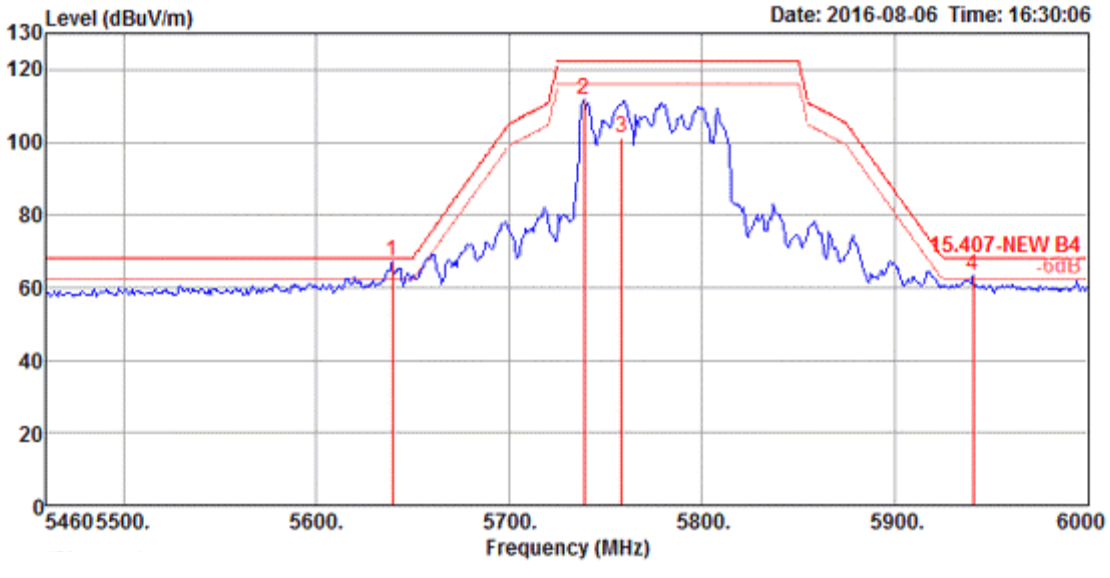
Channel 42



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5146.80	53.77	54.00	-0.23	47.72	9.50	33.17	36.62	320	214	Average	VERTICAL
2	5150.00	69.10	74.00	-4.90	63.05	9.50	33.17	36.62	320	214	Peak	VERTICAL
3	5207.60	95.61			89.36	9.59	33.28	36.62	320	214	Average	VERTICAL
4	5212.40	106.04			99.79	9.59	33.28	36.62	320	214	Peak	VERTICAL
5	5350.00	46.69	54.00	-7.31	40.03	9.73	33.53	36.60	320	214	Average	VERTICAL
6	5350.00	57.40	74.00	-16.60	50.74	9.73	33.53	36.60	320	214	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5210 MHz.

Channel 155

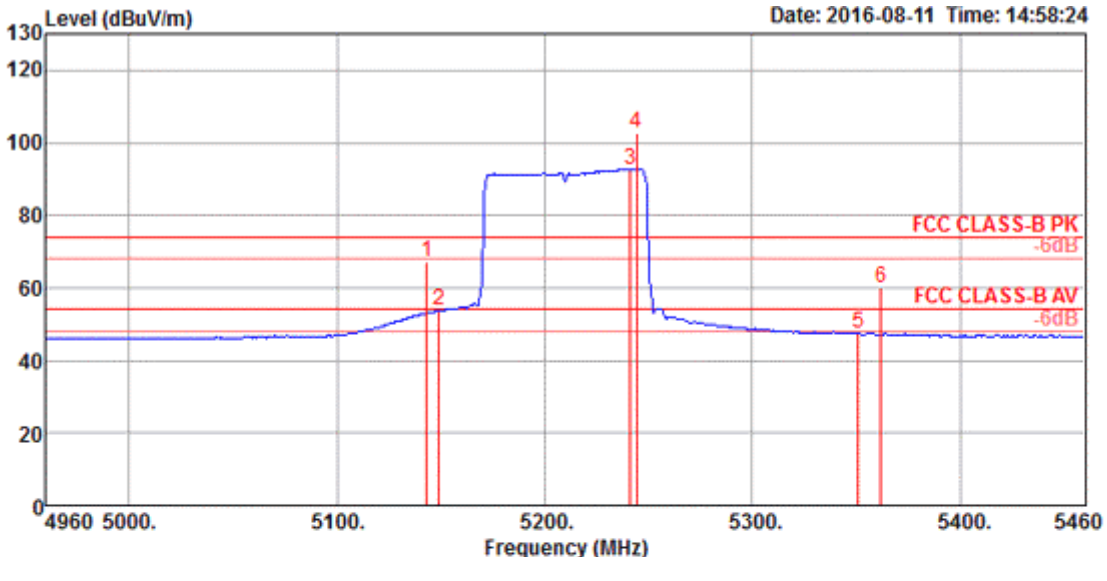


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5639.28	67.32	68.20	-0.88	59.87	9.82	34.17	36.54	320	30	Peak	VERTICAL
2	5738.64	111.66			103.80	9.92	34.45	36.51	320	30	Peak	VERTICAL
3	5758.08	101.17			93.17	9.96	34.55	36.51	320	30	Average	VERTICAL
4	5940.60	63.48	68.20	-4.72	54.89	10.03	35.01	36.45	320	30	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5775 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT80+80 CH 42, CH 155 / Type 1 / Chain 1 + Chain 3

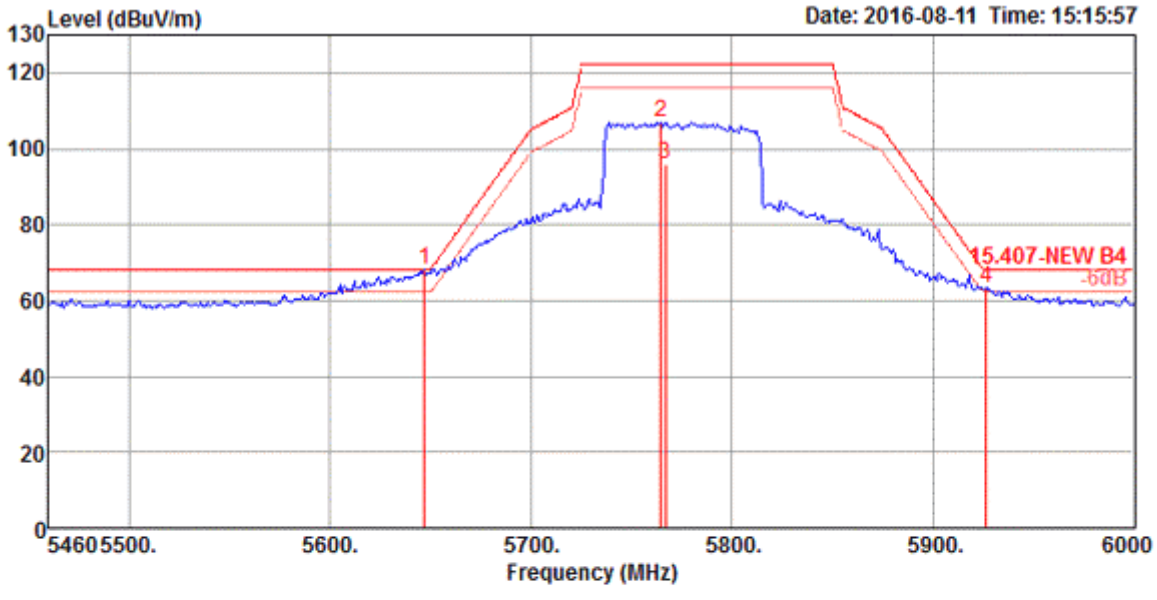
Channel 42



		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1		5143.00	67.03	74.00	-6.97	60.30	8.22	31.45	32.94	270	280	Peak	HORIZONTAL
2		5149.00	53.87	54.00	-0.13	47.14	8.22	31.45	32.94	270	280	Average	HORIZONTAL
3	0	5241.00	92.77			85.89	8.26	31.54	32.92	270	280	Average	HORIZONTAL
4	0	5244.00	102.52			95.64	8.26	31.54	32.92	270	280	Peak	HORIZONTAL
5		5351.00	47.44	54.00	-6.56	40.37	8.32	31.65	32.90	270	280	Average	HORIZONTAL
6		5362.00	59.74	74.00	-14.26	52.65	8.33	31.66	32.90	270	280	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5210 MHz.

Channel 155



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5646.84	68.13	68.20	-0.07	60.50	8.53	31.98	32.88	300	38	Peak	VERTICAL
2	5764.56	107.18			98.92	9.04	32.12	32.90	300	38	Peak	VERTICAL
3	5766.72	96.14			87.88	9.04	32.12	32.90	300	38	Average	VERTICAL
4	5926.56	63.24	68.20	-4.96	55.19	8.64	32.32	32.91	300	38	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5775 MHz.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m)

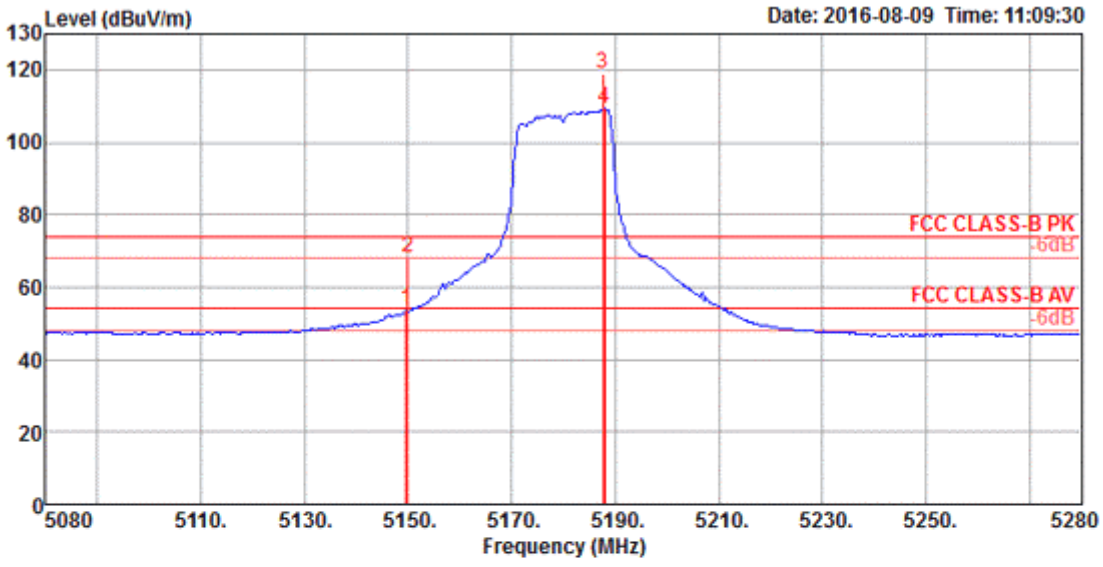
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

<For Beamforming Mode>

Band Edge Emissions

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3

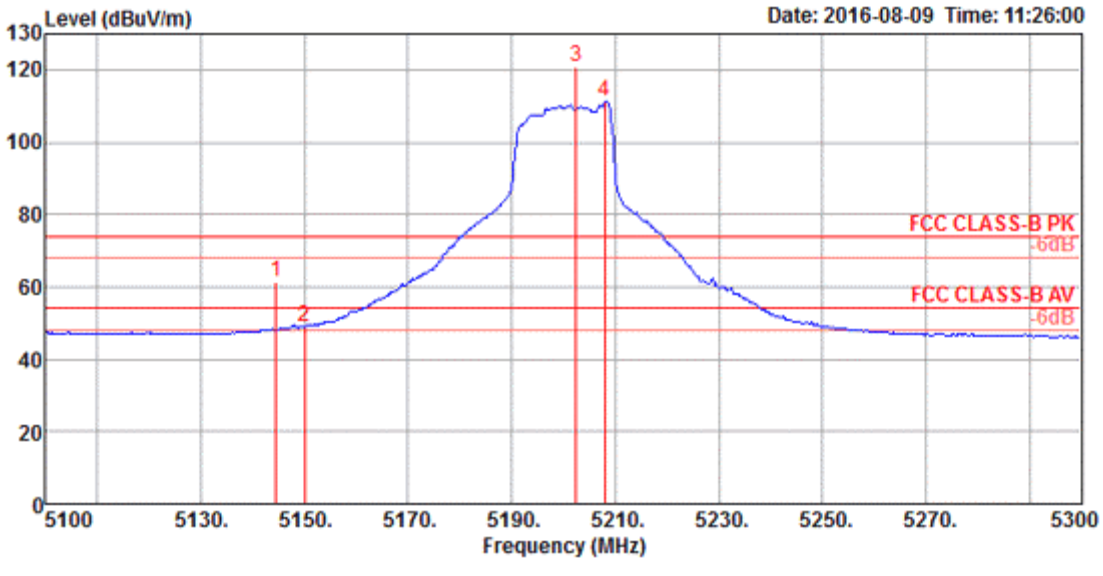
Channel 36



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.60	53.65	54.00	-0.35	47.60	9.50	33.17	36.62	315	225	Average	VERTICAL
2	5150.00	67.96	74.00	-6.04	61.91	9.50	33.17	36.62	315	225	Peak	VERTICAL
3	5187.60	119.04			112.83	9.58	33.25	36.62	315	225	Peak	VERTICAL
4	5188.00	109.18			102.97	9.58	33.25	36.62	315	225	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

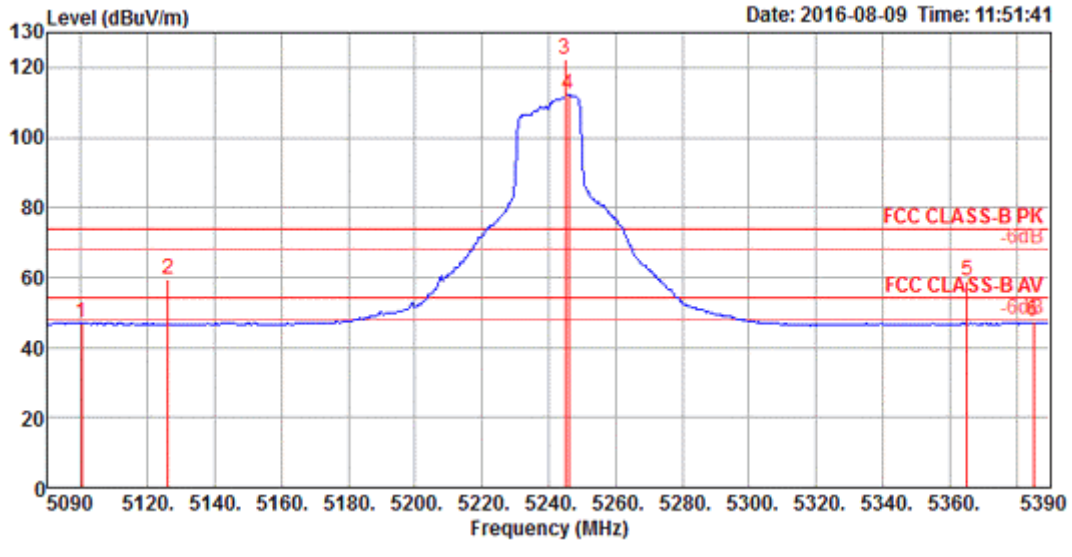
Channel 40



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5144.40	61.19	74.00	-12.81	55.14	9.50	33.17	36.62	312	98	Peak	VERTICAL
2	5150.00	49.12	54.00	-4.88	43.07	9.50	33.17	36.62	312	98	Average	VERTICAL
3	5202.40	120.86			114.61	9.59	33.28	36.62	312	98	Peak	VERTICAL
4	5208.00	111.12			104.87	9.59	33.28	36.62	312	98	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

Channel 48

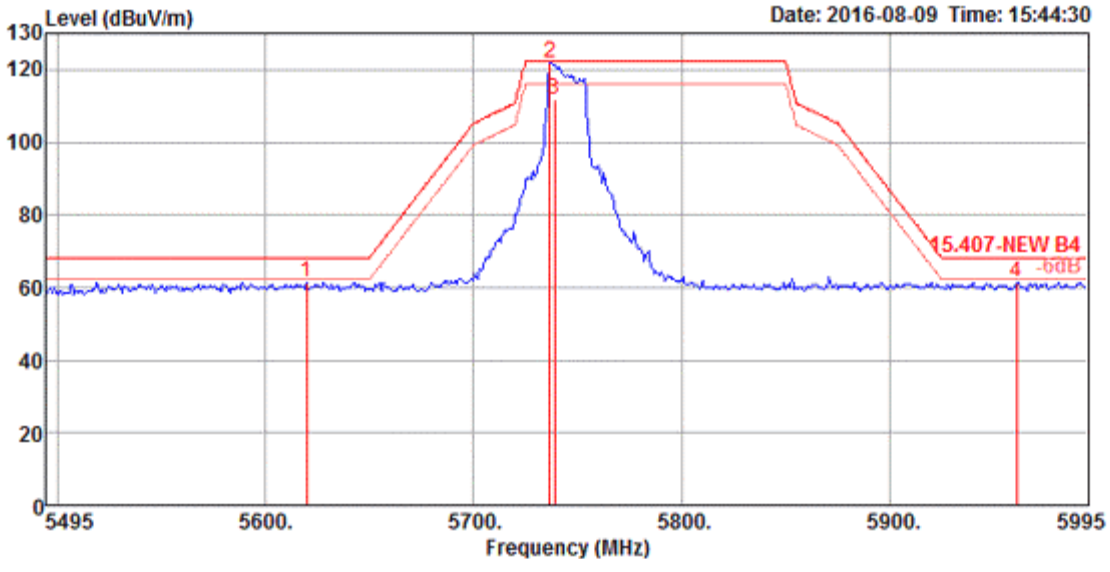


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5100.20	47.13	54.00	-6.87	41.25	9.42	33.09	36.63	234	225	Average	VERTICAL
2	5126.00	59.71	74.00	-14.29	53.77	9.45	33.12	36.63	234	225	Peak	VERTICAL
3	5244.80	122.26			115.91	9.62	33.34	36.61	234	225	Peak	VERTICAL
4	5246.00	112.42			106.07	9.62	33.34	36.61	234	225	Average	VERTICAL
5	5365.40	59.23	74.00	-14.77	52.54	9.74	33.55	36.60	234	225	Peak	VERTICAL
6	5385.20	47.30	54.00	-6.70	40.52	9.77	33.61	36.60	234	225	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3

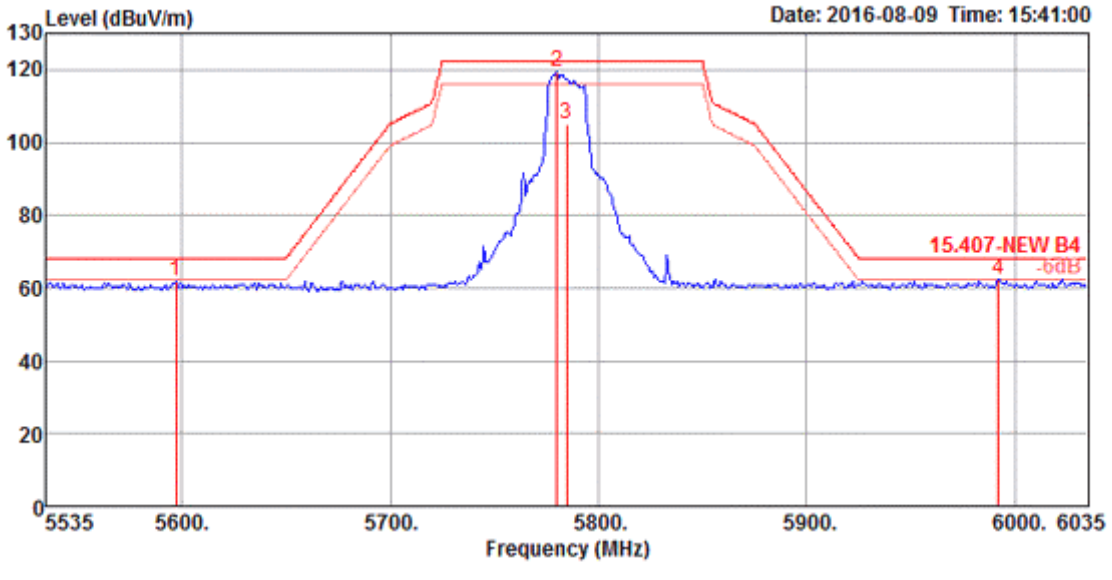
Channel 149



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5620.00	61.24	68.20	-6.96	53.85	9.81	34.13	36.55	245	209	Peak	VERTICAL
2	5737.00	122.04			114.18	9.92	34.45	36.51	245	209	Peak	VERTICAL
3	5739.00	111.63			103.70	9.94	34.50	36.51	245	209	Average	VERTICAL
4	5961.00	61.46	68.20	-6.74	52.75	10.04	35.11	36.44	245	209	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5745 MHz.

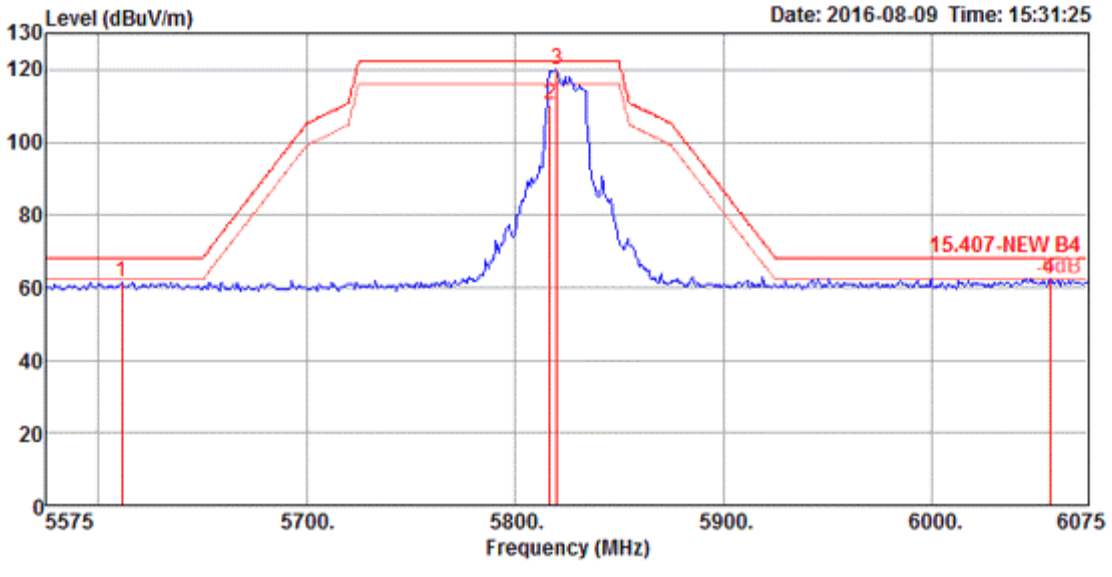
Channel 157



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5597.00	61.86	68.20	-6.34	54.54	9.79	34.08	36.55	245	296	Peak	HORIZONTAL
2	5780.00	119.24			111.18	9.97	34.59	36.50	245	296	Peak	HORIZONTAL
3	5785.00	104.86			96.80	9.97	34.59	36.50	245	296	Average	HORIZONTAL
4	5992.00	62.33	68.20	-5.87	53.57	10.05	35.15	36.44	245	296	Peak	HORIZONTAL

Item 2, 3 are the fundamental frequency at 5785 MHz.

Channel 165

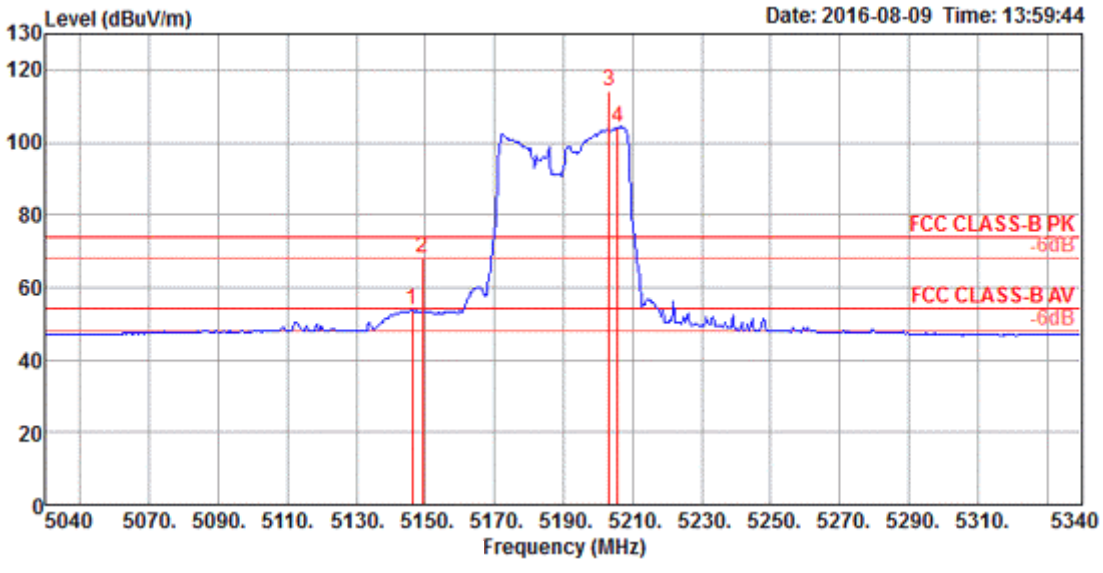


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5611.00	61.26	68.20	-6.94	53.87	9.81	34.13	36.55	285	213	Peak	VERTICAL
2	5817.00	110.14			101.95	9.99	34.69	36.49	285	213	Average	VERTICAL
3	5820.00	120.10			111.91	9.99	34.69	36.49	285	213	Peak	VERTICAL
4	6057.00	62.52	68.20	-5.68	53.58	10.10	35.26	36.42	285	213	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5825 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3

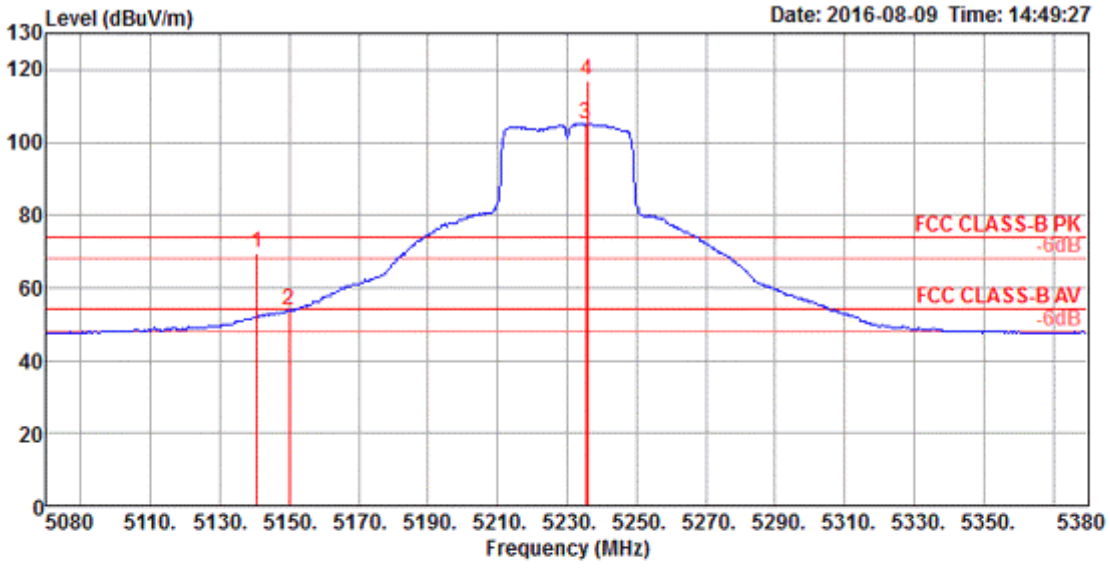
Channel 38



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5146.20	53.69	54.00	-0.31	47.64	9.50	33.17	36.62	316	95	Average	VERTICAL
2	5149.20	68.07	74.00	-5.93	62.02	9.50	33.17	36.62	316	95	Peak	VERTICAL
3	5203.20	114.33			108.08	9.59	33.28	36.62	316	95	Peak	VERTICAL
4	5205.60	104.17			97.92	9.59	33.28	36.62	316	95	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

Channel 46

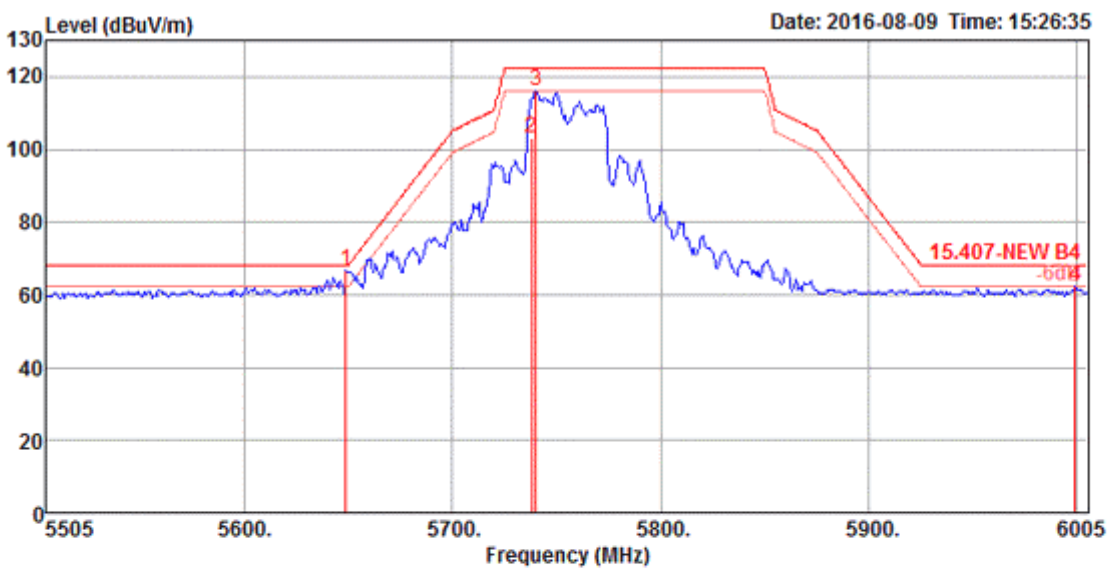


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5140.60	69.80	74.00	-4.20	63.79	9.48	33.15	36.62	273	347	Peak	HORIZONTAL
2	5150.00	53.50	54.00	-0.50	47.45	9.50	33.17	36.62	273	347	Average	HORIZONTAL
3	5235.40	105.24			98.90	9.62	33.34	36.62	273	347	Average	HORIZONTAL
4	5236.00	117.10			110.76	9.62	33.34	36.62	273	347	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3

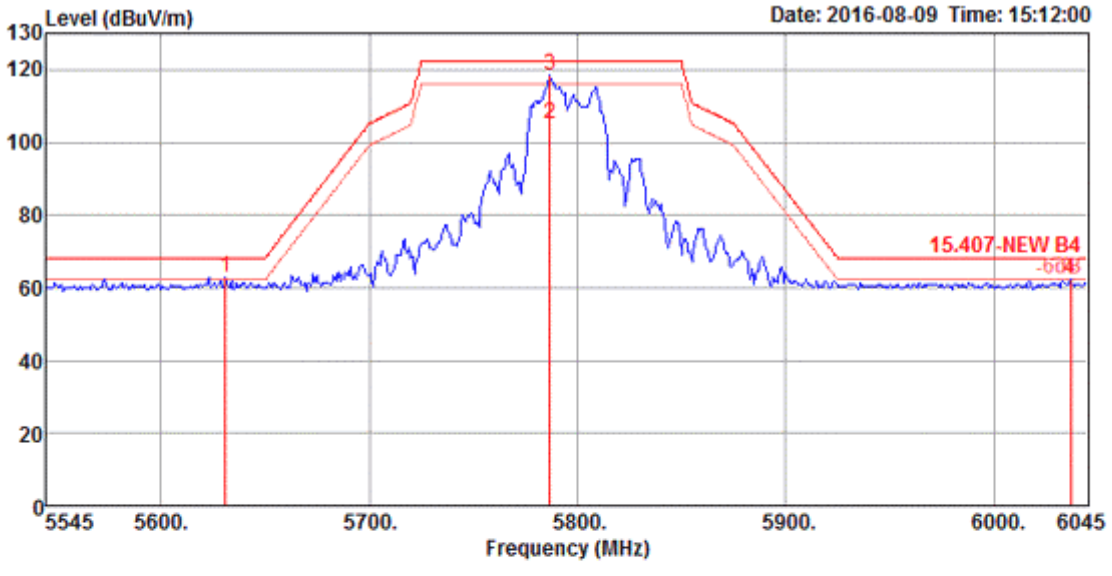
Channel 151



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5649.00	66.49	68.20	-1.71	58.97	9.84	34.22	36.54	250	284	Peak	HORIZONTAL
2	5738.00	103.10			95.24	9.92	34.45	36.51	250	284	Average	HORIZONTAL
3	5740.00	115.92			107.99	9.94	34.50	36.51	250	284	Peak	HORIZONTAL
4	5999.00	62.56	68.20	-5.64	53.74	10.05	35.20	36.43	250	284	Peak	HORIZONTAL

Item 2, 3 are the fundamental frequency at 5755 MHz.

Channel 159

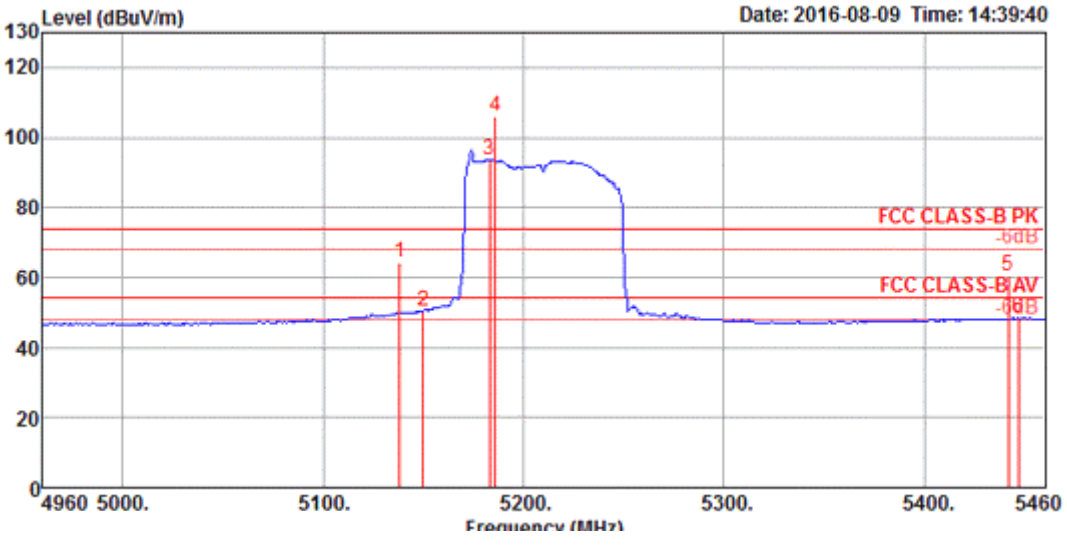


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5631.00	62.89	68.20	-5.31	55.45	9.82	34.17	36.55	189	207	Peak	VERTICAL
2	5787.00	105.03			96.97	9.97	34.59	36.50	189	207	Average	VERTICAL
3	5787.00	118.29			110.23	9.97	34.59	36.50	189	207	Peak	VERTICAL
4	6037.00	62.39	68.20	-5.81	53.49	10.08	35.24	36.42	189	207	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5795 MHz.

Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, CH 155 / Chain 1 + Chain 2 + Chain 3

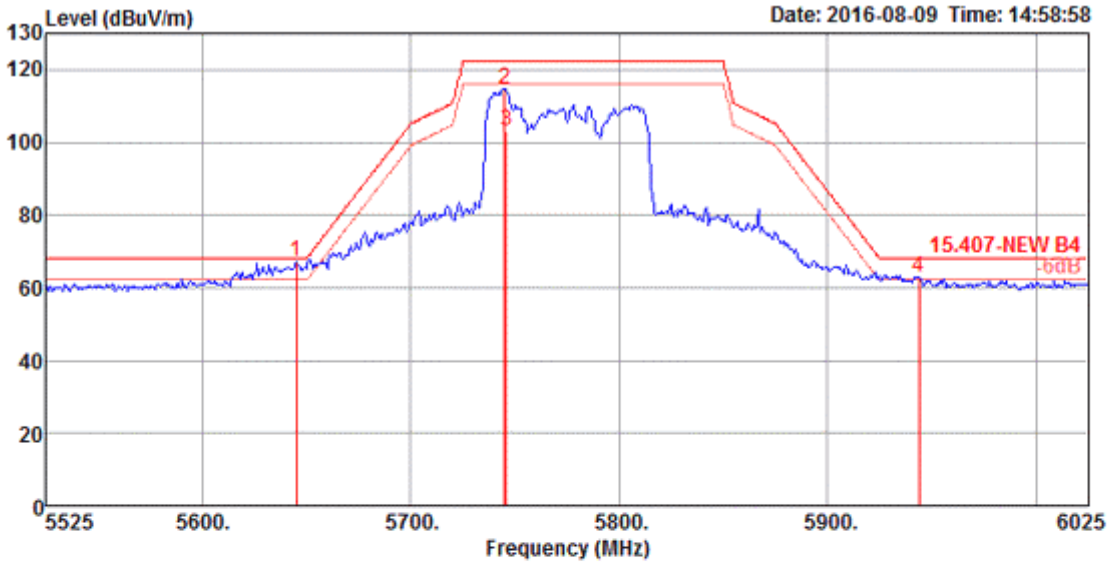
Channel 42



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5138.00	64.18	74.00	-9.82	58.18	9.48	33.15	36.63	279	265	Peak	HORIZONTAL
2	5150.00	50.43	54.00	-3.57	44.38	9.50	33.17	36.62	279	265	Average	HORIZONTAL
3	5183.00	93.48			87.32	9.55	33.23	36.62	279	265	Average	HORIZONTAL
4	5186.00	106.06			99.90	9.55	33.23	36.62	279	265	Peak	HORIZONTAL
5	5442.00	60.56	74.00	-13.44	53.70	9.77	33.69	36.60	279	265	Peak	HORIZONTAL
6	5447.00	48.48	54.00	-5.52	41.62	9.77	33.69	36.60	279	265	Average	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5210 MHz.

Channel 155



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5645.00	67.09	68.20	-1.11	59.57	9.84	34.22	36.54	311	63	Peak	VERTICAL
2	5745.00	114.87			106.94	9.94	34.50	36.51	311	63	Peak	VERTICAL
3	5746.00	103.23			95.30	9.94	34.50	36.51	311	63	Average	VERTICAL
4	5944.00	63.04	68.20	-5.16	54.40	10.03	35.06	36.45	311	63	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5775 MHz.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m)

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

Mode: 20 MHz / Chain 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9990	5199.9985	5199.9980	5199.9975
110.00	5199.9987	5199.9977	5199.9968	5199.9963
93.50	5199.9985	5199.9979	5199.9971	5199.9969
Max. Deviation (MHz)	0.0015	0.0023	0.0032	0.0037
Max. Deviation (ppm)	0.29	0.44	0.62	0.71
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5200.0014	5200.0013	5200.0013	5200.0016
-20	5200.0011	5200.0012	5200.0013	5200.0016
-10	5200.0014	5200.0014	5200.0013	5200.0011
0	5199.9963	5199.9957	5199.9951	5199.9944
10	5199.9969	5199.9964	5199.9954	5199.9945
20	5199.9987	5199.9984	5199.9983	5199.9973
30	5200.0017	5200.0016	5200.0013	5200.0004
40	5200.0035	5200.0030	5200.0025	5200.0018
50	5200.0015	5200.0047	5200.0014	5200.0002
Max. Deviation (MHz)	0.0037	0.0047	0.0049	0.0056
Max. Deviation (ppm)	0.71	0.90	0.94	1.08
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9988	5784.9983	5784.9978	5784.9971
110.00	5784.9987	5784.9984	5784.9979	5784.9972
93.50	5784.9980	5784.9975	5784.9968	5784.9967
Max. Deviation (MHz)	0.0020	0.0025	0.0032	0.0033
Max. Deviation (ppm)	0.35	0.43	0.55	0.57
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5785.0014	5785.0011	5785.0014	5785.0011
-20	5785.0012	5785.0014	5785.0011	5785.0013
-10	5785.0013	5785.0011	5785.0014	5785.0014
0	5784.9967	5784.9957	5784.9948	5784.9946
10	5784.9980	5784.9979	5784.9978	5784.9969
20	5784.9987	5784.9981	5784.9977	5784.9969
30	5785.0017	5785.0009	5785.0002	5784.9997
40	5785.0032	5785.0028	5785.0026	5785.0020
50	5785.0002	5785.0011	5785.0015	5785.0001
Max. Deviation (MHz)	0.0033	0.0043	0.0052	0.0054
Max. Deviation (ppm)	0.57	0.74	0.90	0.93
Result	Pass			

Mode: 40 MHz / Chain 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9994	5189.9992	5189.9983	5189.9977
110.00	5189.9987	5189.9984	5189.9982	5189.9979
93.50	5189.9979	5189.9977	5189.9971	5189.9968
Max. Deviation (MHz)	0.0021	0.0023	0.0029	0.0032
Max. Deviation (ppm)	0.40	0.44	0.56	0.62
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5190.0014	5190.0011	5190.0012	5190.0012
-20	5190.0011	5190.0012	5190.0010	5190.0011
-10	5190.0015	5190.0012	5190.0010	5190.0009
0	5189.9971	5189.9962	5189.9955	5189.9952
10	5189.9979	5189.9975	5189.9972	5189.9962
20	5189.9987	5189.9985	5189.9976	5189.9975
30	5190.0017	5190.0010	5190.0009	5190.0008
40	5190.0018	5190.0016	5190.0006	5190.0005
50	5190.0014	5190.0014	5190.0011	5190.0023
Max. Deviation (MHz)	0.0029	0.0038	0.0045	0.0048
Max. Deviation (ppm)	0.56	0.73	0.87	0.92
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9993	5754.9992	5754.9984	5754.9983
110.00	5754.9987	5754.9983	5754.9979	5754.9974
93.50	5754.9981	5754.9973	5754.9965	5754.9959
Max. Deviation (MHz)	0.0019	0.0027	0.0035	0.0041
Max. Deviation (ppm)	0.33	0.47	0.61	0.71
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5755.0011	5755.0011	5755.0015	5755.0013
-20	5755.0012	5755.0012	5755.0014	5755.0013
-10	5755.0013	5755.0013	5755.0016	5755.0012
0	5754.9969	5754.9962	5754.9952	5754.9942
10	5754.9979	5754.9977	5754.9968	5754.9959
20	5754.9987	5754.9984	5754.9981	5754.9980
30	5755.0017	5755.0009	5755.0004	5754.9998
40	5755.0032	5755.0026	5755.0019	5755.0009
50	5755.0014	5755.0012	5755.0011	5755.0012
Max. Deviation (MHz)	0.0032	0.0038	0.0048	0.0058
Max. Deviation (ppm)	0.56	0.66	0.83	1.01
Result	Pass			

Mode: 80 MHz / Chain 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9995	5209.9993	5209.9986	5209.9982
110.00	5209.9987	5209.9986	5209.9980	5209.9971
93.50	5209.9980	5209.9978	5209.9977	5209.9967
Max. Deviation (MHz)	0.0020	0.0022	0.0023	0.0033
Max. Deviation (ppm)	0.38	0.42	0.44	0.63
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5210.0011	5210.0012	5210.0011	5210.0014
-20	5210.0013	5210.0013	5210.0014	5210.0013
-10	5210.0015	5210.0011	5210.0012	5210.0011
0	5209.9966	5209.9959	5209.9955	5209.9949
10	5209.9968	5209.9959	5209.9949	5209.9942
20	5209.9987	5209.9981	5209.9972	5209.9969
30	5210.0017	5210.0013	5210.0009	5210.0002
40	5210.0025	5210.0024	5210.0016	5210.0010
50	5210.0014	5210.0011	5210.0014	5210.0012
Max. Deviation (MHz)	0.0034	0.0041	0.0051	0.0058
Max. Deviation (ppm)	0.65	0.79	0.98	1.11
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9989	5774.9983	5774.9981	5774.9979
110.00	5774.9987	5774.9983	5774.9973	5774.9965
93.50	5774.9977	5774.9967	5774.9961	5774.9956
Max. Deviation (MHz)	0.0023	0.0033	0.0039	0.0044
Max. Deviation (ppm)	0.40	0.57	0.68	0.76
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5775.0014	5775.0012	5775.0012	5775.0011
-20	5775.0013	5775.0011	5775.0013	5775.0019
-10	5775.0012	5775.0011	5775.0014	5775.0012
0	5774.9961	5774.9952	5774.9946	5774.9941
10	5774.9970	5774.9966	5774.9959	5774.9956
20	5774.9987	5774.9980	5774.9975	5774.9971
30	5775.0017	5775.0008	5775.0005	5774.9995
40	5775.0030	5775.0026	5775.0023	5775.0022
50	5775.0011	5775.0014	5775.0014	5775.0011
Max. Deviation (MHz)	0.0039	0.0048	0.0054	0.0059
Max. Deviation (ppm)	0.68	0.83	0.94	1.02
Result	Pass			