FCC Test Report

Equipment	:	Linksys Smart Wi-Fi Router AC1200
Brand Name	:	LINKSYS
Model No.	:	EA6350 V3
FCC ID	:	Q87-EA6350V3
Standard	:	47 CFR FCC Part 15.407
Operating Band	:	5150 MHz – 5250 MHz 5725 MHz – 5850 MHz
Applicant	:	Linksys LLC 121 Theory Drive, Irvine, CA 92617, USA
Manufacturer	:	Linksys LLC 121 Theory Drive, Irvine, CA 92617, USA
Function	:	☐ Outdoor; ☒ Indoor; ☐ Fixed P2P ☐ Portable Client

The product sample received on Jul. 14, 2016 and completely tested on Aug. 09, 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

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Summary of Test Result

Conformance Test Specifications			
Report Clause	**Ref. Std. Clause**	**Description**	**Result**
1.1.2	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
FR671111AB	Rev. 01	Initial issue of report	Aug. 19, 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	1
5.8G	11a	20	1
5.2G	HT20	20	2
5.8G	HT20	20	2
5.2G	VHT20	20	2
5.8G	VHT20	20	2
5.2G	HT40	40	2
5.8G	HT40	40	2
5.2G	VHT40	40	2
5.8G	VHT40	40	2
5.2G	VHT80	80	2
5.8G	VHT80	80	2

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 and 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 Antenna Information

Ant.	Brand Holder	Part No.	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	ARISTOTLE ENTERPRISES	RFA-25-F70-70B-230	PIFA Antenna	I-PEX	1.7	4.0
2	ARISTOTLE ENTERPRISES	RFA-25-F70-70-115	Dipole Antenna	I-PEX	2.0	5.0

Note: The EUT has two antennas.

<For 2.4GHz Band>

For IEEE 802.11b/g mode<1TX/1RX>:

Only Chain 1 can be used as transmitting antenna and receiving antenna.

For IEEE 802.11n/ac mode<2TX/2RX>:

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

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

<For 5GHz Band>

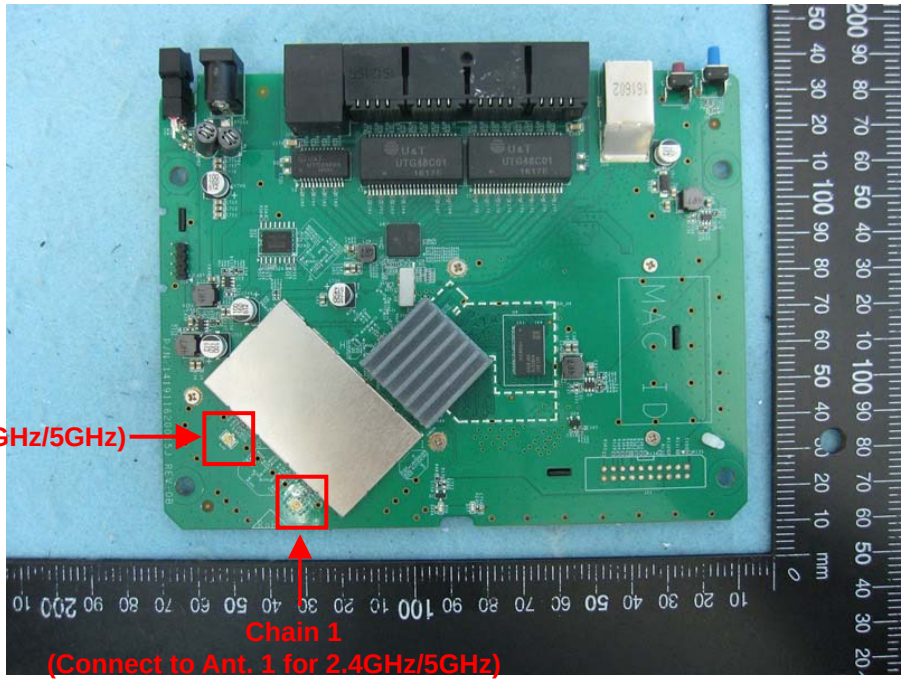
For IEEE 802.11a mode <1TX/1RX>:

Only Chain 1 can be used as transmitting antenna and receiving antenna.

For IEEE 802.11n/ac mode <2TX/2RX>:

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

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



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 v01r02
- FCC KDB 644545 D03 v01 KDB644545
- 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	24°C / 54%	Aug. 09, 2016
Radiated	03CH01-CB	Peter wu	22°C / 59%	Jul. 19, 2016~Aug. 01, 2016
AC Conduction	CO01-CB	Hank Yang	23°C / 57%	Jul. 18, 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	1	5180	L	23.5
5.2G	11a	20	1	1	5200	M	25
5.2G	11a	20	1	1	5240	H	25
5.2G	VHT20	20	1,(M0)	2	5180	L	23.5
5.2G	VHT20	20	1,(M0)	2	5200	M	25
5.2G	VHT20	20	1,(M0)	2	5240	H	25
5.2G	VHT40	40	1,(M0)	2	5190	L	20.5
5.2G	VHT40	40	1,(M0)	2	5230	H	24
5.2G	VHT80	80	1,(M0)	2	5210	S	16.5
5.8G	11a	20	1	1	5745	L	25
5.8G	11a	20	1	1	5785	M	25
5.8G	11a	20	1	1	5825	H	25
5.8G	VHT20	20	1,(M0)	2	5745	L	22
5.8G	VHT20	20	1,(M0)	2	5785	M	23
5.8G	VHT20	20	1,(M0)	2	5825	H	23.5
5.8G	VHT40	40	1,(M0)	2	5755	L	23.5
5.8G	VHT40	40	1,(M0)	2	5795	H	23.5
5.8G	VHT80	80	1,(M0)	2	5775	S	22

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 Normal Link

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 Z axis
Operating Mode > 1GHz	CTX
1	Place EUT in Z axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA671111 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

Note 1: The EUT can only use Z axis position.

Note 2: 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.

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter	APD	WA-24Q12FU	Input: 100-240V~50-60Hz 0.7A Max. Output: 12V, 2A

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 Disk3.0	Transcend	JetFlash-700	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 Test Site No: 03CH01-CB (above 1GHz)

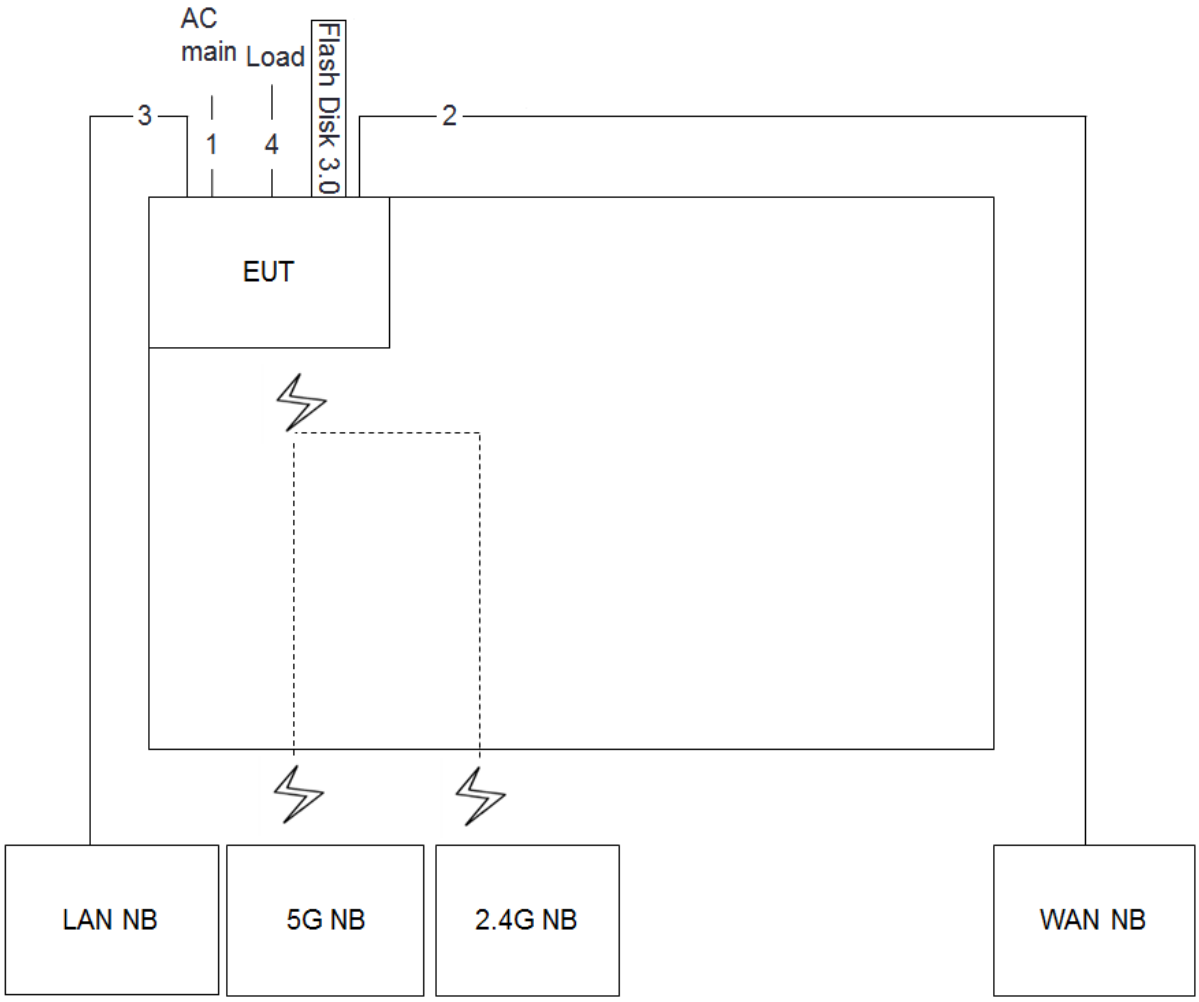
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

For Test Site No: TH01-CB

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

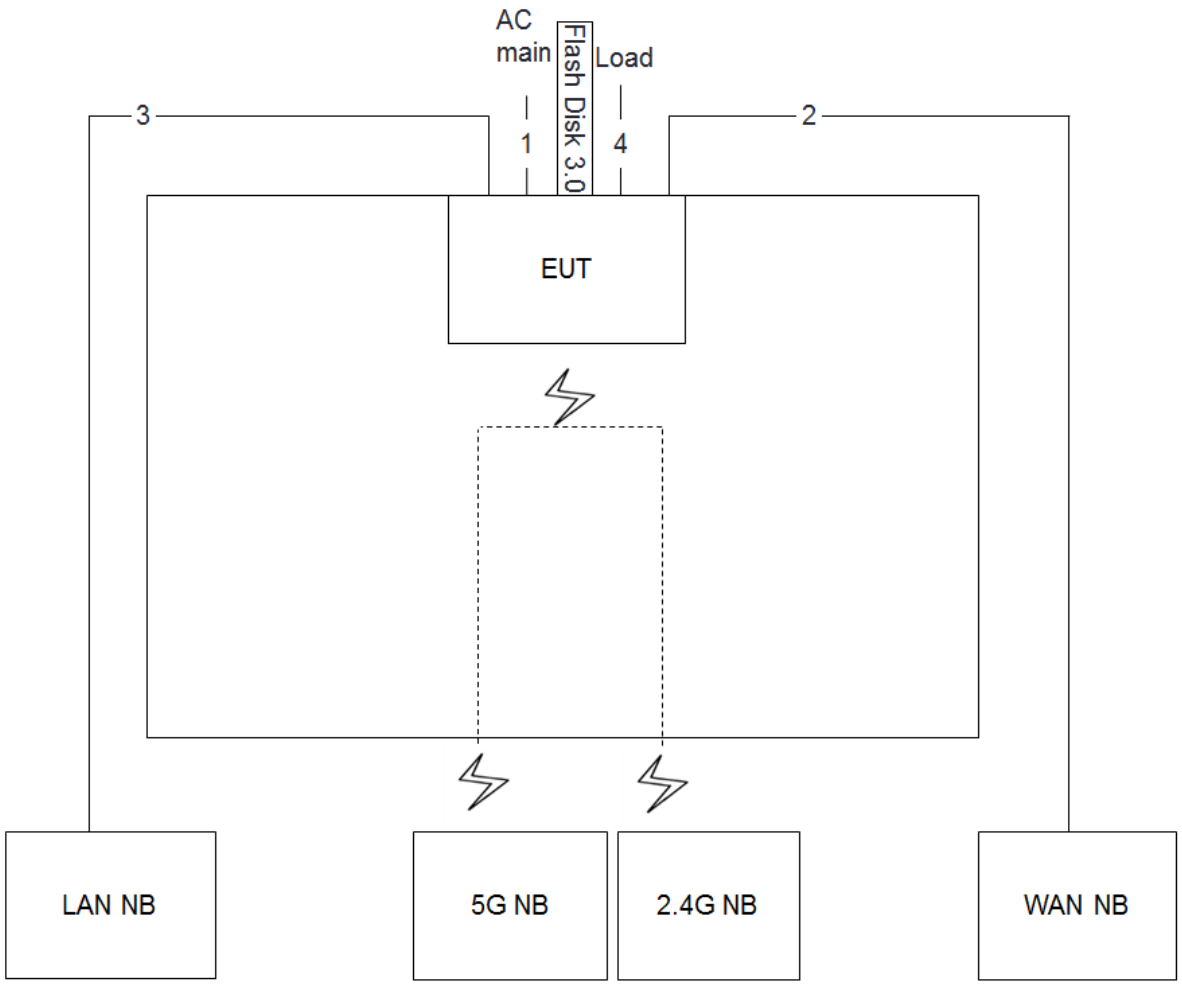
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



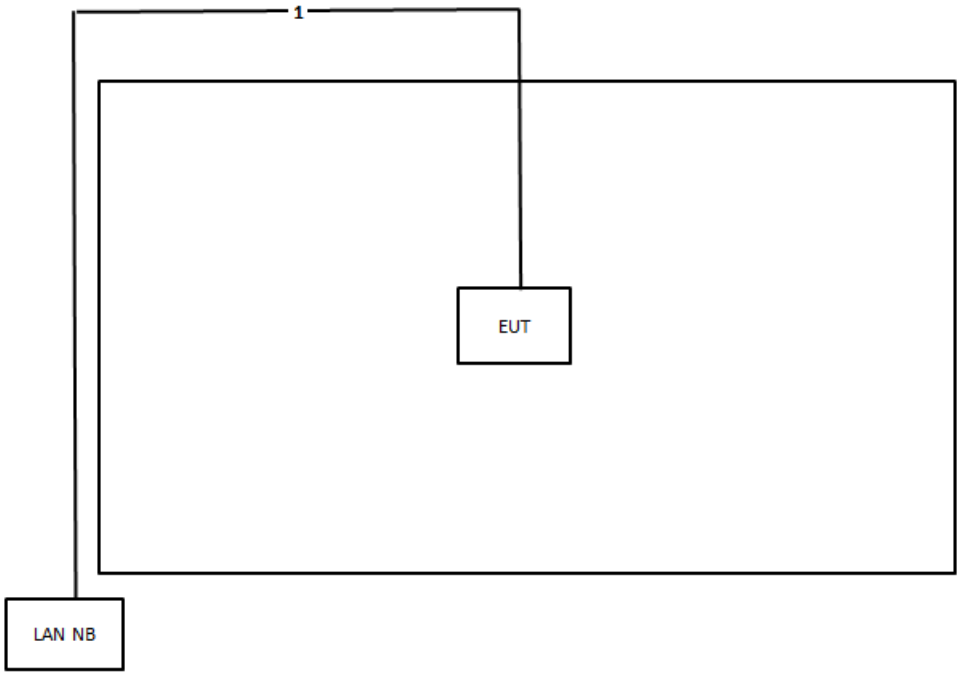
Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable*3	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable*3	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	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

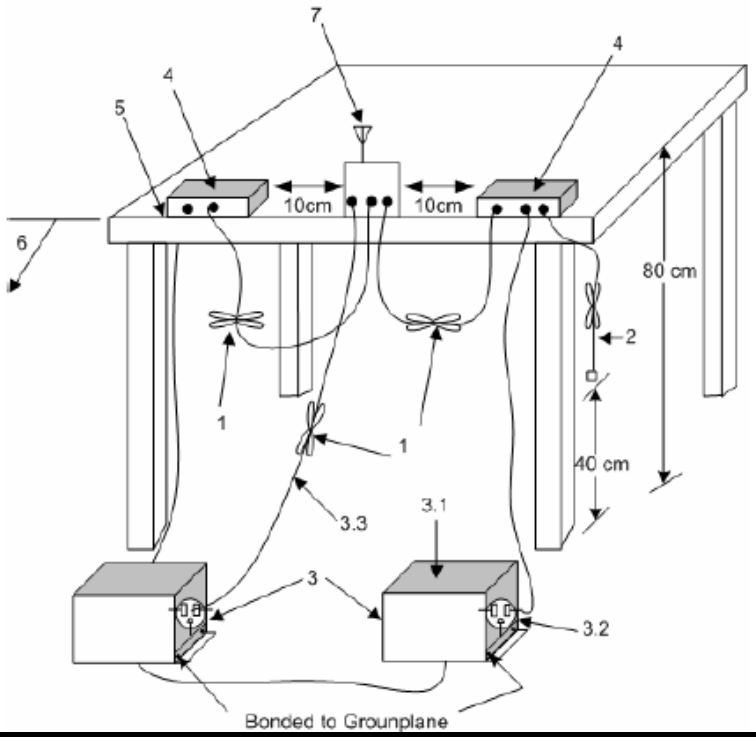
Refer a test equipment and calibration data table in this test report.

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.

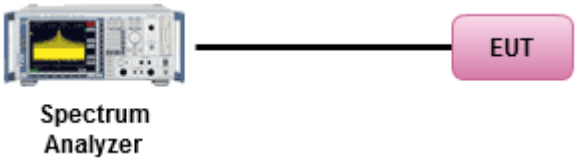
3.2.2 Measuring Instruments

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 v01r02, 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


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.	

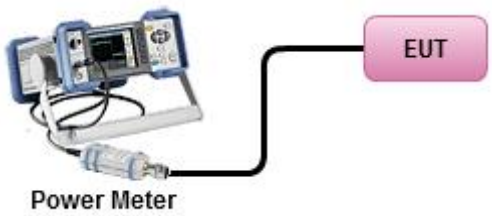
3.3.2 Measuring Instruments

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 v01r02, clause E Method SA-1 (spectral trace averaging).
	☐ Refer as FCC KDB 789033 D02 v01r02, 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 v01r02, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033 D02 v01r02, 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 v01r02, 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.	

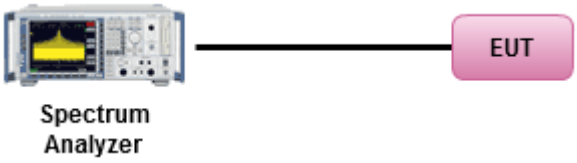
3.4.2 Measuring Instruments

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

3.4.2 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 v01r02, 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 v01r02, clause E Method SA-1 (spectral trace averaging).	
	☐ Refer as FCC KDB 789033 D02 v01r02, 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 v01r02, clause E Method SA-2 (spectral trace averaging).	
	☐ Refer as FCC KDB 789033 D02 v01r02, 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]) $EIRP_{total} = PPSD_{total} + DG$

3.4.3 Test Setup

Power Spectral Density


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.

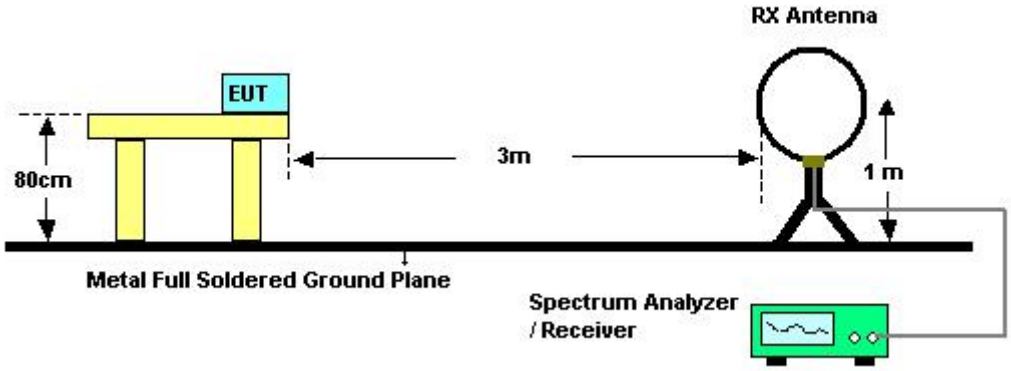
3.5.3 Test Procedures

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 v01r02, clause H)2) for unwanted emissions into non-restricted bands.	
	▪ Refer as FCC KDB 789033 D02 v01r02, clause H)1) for unwanted emissions into restricted bands.	
		☐ Refer as FCC KDB 789033 D02 v01r02, H)6) Method AD (Trace Averaging).
		☒ Refer as FCC KDB 789033 D02 v01r02, 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 v01r02, 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.		

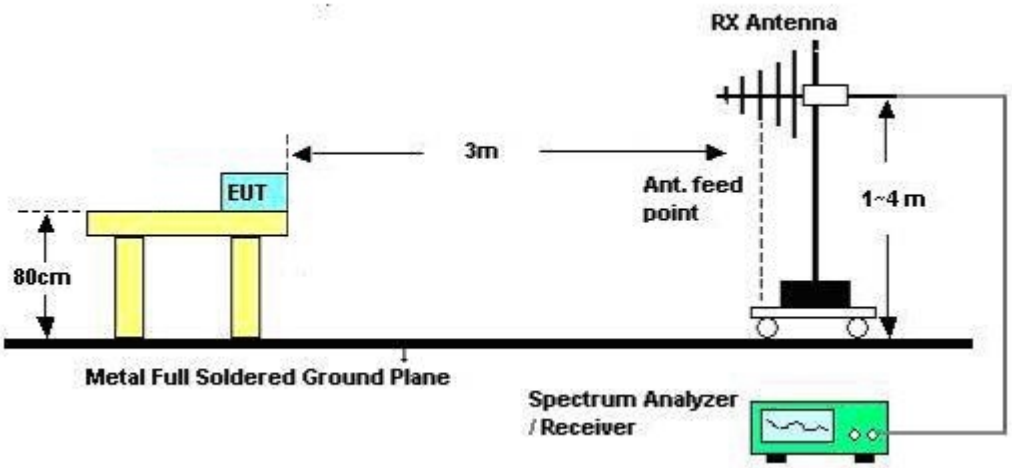
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

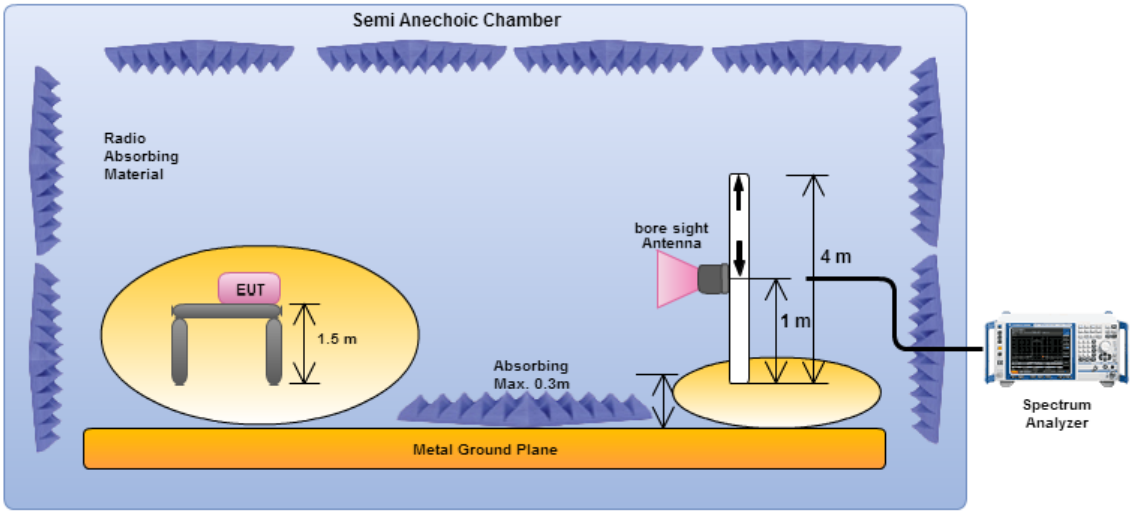
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.5.6 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.

3.5.7 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

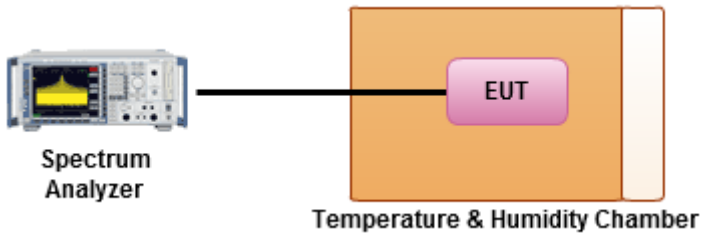
Refer a test equipment and calibration data table in this test report.

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. 21, 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)

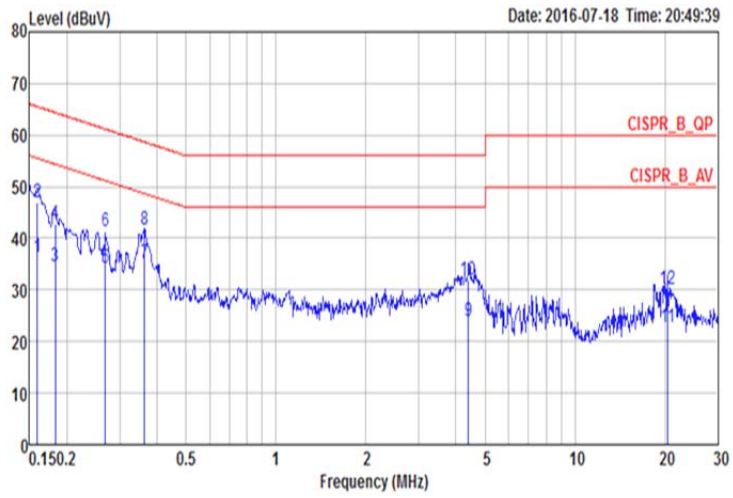
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	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.

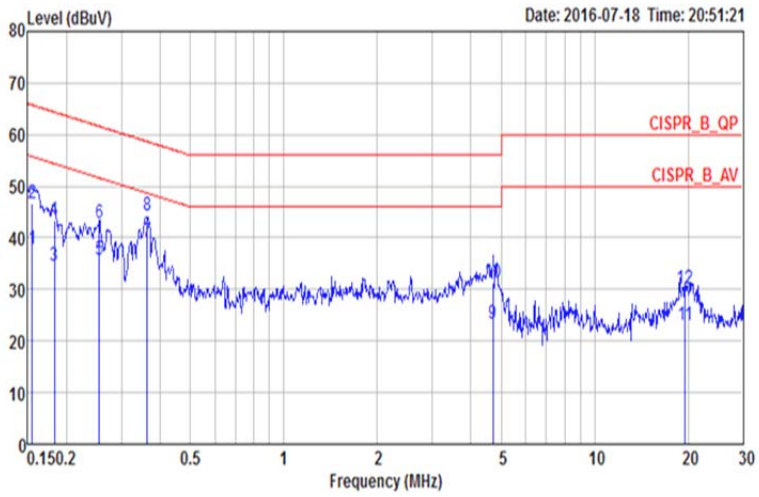
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Normal Link		



	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	36.35	-19.17	55.52	26.40	9.78	0.17	NEUTRAL	Average
2	0.1590	46.99	-18.53	65.52	37.04	9.78	0.17	NEUTRAL	QP
3	0.1825	34.46	-19.91	54.37	24.49	9.79	0.18	NEUTRAL	Average
4	0.1825	42.78	-21.59	64.37	32.81	9.79	0.18	NEUTRAL	QP
5	0.2687	34.31	-16.85	51.16	24.41	9.79	0.11	NEUTRAL	Average
6	0.2687	41.30	-19.86	61.16	31.40	9.79	0.11	NEUTRAL	QP
7	0.3634	35.02	-13.63	48.65	25.19	9.79	0.04	NEUTRAL	Average
8	0.3634	41.69	-16.96	58.65	31.86	9.79	0.04	NEUTRAL	QP
9	4.4071	23.77	-22.23	46.00	13.79	9.88	0.10	NEUTRAL	Average
10	4.4071	31.74	-24.26	56.00	21.76	9.88	0.10	NEUTRAL	QP
11	20.4855	22.80	-27.20	50.00	12.37	10.19	0.24	NEUTRAL	Average
12	20.4855	30.05	-29.95	60.00	19.62	10.19	0.24	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	1	**Power Phase**	Line
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1548	37.73	-18.01	55.74	27.64	9.93	0.16	LINE	Average
2	0.1548	46.67	-19.07	65.74	36.58	9.93	0.16	LINE	QP
3	0.1825	34.45	-19.92	54.37	24.34	9.93	0.18	LINE	Average
4	0.1825	43.44	-20.93	64.37	33.33	9.93	0.18	LINE	QP
5	0.2548	35.73	-15.87	51.60	25.67	9.93	0.13	LINE	Average
6	0.2548	42.72	-18.88	61.60	32.66	9.93	0.13	LINE	QP
7	0.3634	39.34	-9.31	48.65	29.37	9.93	0.04	LINE	Average
8	0.3634	44.22	-14.43	58.65	34.25	9.93	0.04	LINE	QP
9	4.6964	23.41	-22.59	46.00	13.26	10.05	0.10	LINE	Average
10	4.6964	31.15	-24.85	56.00	21.00	10.05	0.10	LINE	QP
11	19.5316	23.08	-26.92	50.00	12.41	10.43	0.24	LINE	Average
12	19.5316	30.19	-29.81	60.00	19.52	10.43	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.)

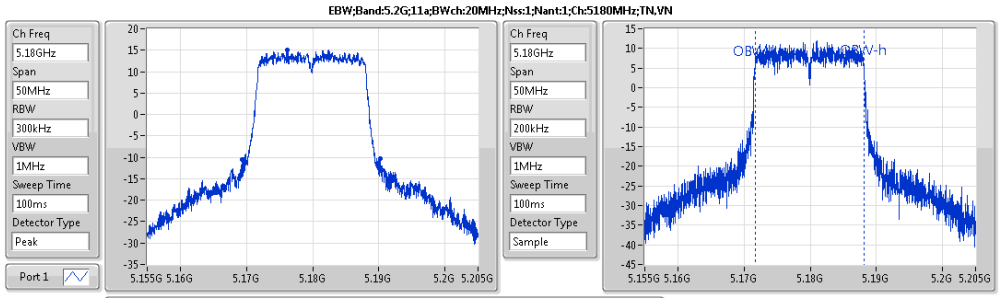
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.2G;11a;Nss1;Ntx1	25.375M	16.467M	16M5D1D	20.825M	16.442M
5.8G;11a;Nss1;Ntx1	16.325M	18.791M	18M8D1D	16.275M	16.667M
5.2G;VHT20;Nss1,(M0);Ntx2	29.725M	17.741M	17M7D1D	20M	17.616M
5.8G;VHT20;Nss1,(M0);Ntx2	17.575M	17.716M	17M7D1D	17.4M	17.616M
5.2G;VHT40;Nss1,(M0);Ntx2	72.45M	36.332M	36M3D1D	39.5M	35.982M
5.8G;VHT40;Nss1,(M0);Ntx2	34.75M	36.232M	36M2D1D	33.25M	36.082M
5.2G;VHT80;Nss1,(M0);Ntx2	83.3M	75.662M	75M7D1D	83M	75.662M
5.8G;VHT80;Nss1,(M0);Ntx2	75.3M	75.862M	75M9D1D	75.3M	75.662M

Result

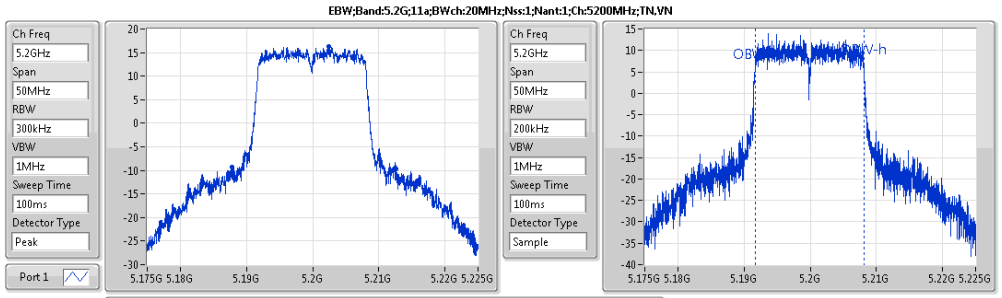
Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)
5.2G;11a;Nss1;Ntx1;5180;TN,VN	Pass	Inf	20.825M	16.442M		
5.2G;11a;Nss1;Ntx1;5200;TN,VN	Pass	Inf	24.9M	16.442M		
5.2G;11a;Nss1;Ntx1;5240;TN,VN	Pass	Inf	25.375M	16.467M		
5.8G;11a;Nss1;Ntx1;5745;TN,VN	Pass	500k	16.275M	16.667M		
5.8G;11a;Nss1;Ntx1;5785;TN,VN	Pass	500k	16.325M	17.066M		
5.8G;11a;Nss1;Ntx1;5825;TN,VN	Pass	500k	16.3M	18.791M		
5.2G;VHT20;Nss1,(M0);Ntx2;5180;TN,VN	Pass	Inf	20.625M	17.616M	20M	17.666M
5.2G;VHT20;Nss1,(M0);Ntx2;5200;TN,VN	Pass	Inf	22.925M	17.666M	21.95M	17.691M
5.2G;VHT20;Nss1,(M0);Ntx2;5240;TN,VN	Pass	Inf	23.475M	17.691M	29.725M	17.741M
5.8G;VHT20;Nss1,(M0);Ntx2;5745;TN,VN	Pass	500k	17.525M	17.616M	17.575M	17.641M
5.8G;VHT20;Nss1,(M0);Ntx2;5785;TN,VN	Pass	500k	17.4M	17.666M	17.575M	17.666M
5.8G;VHT20;Nss1,(M0);Ntx2;5825;TN,VN	Pass	500k	17.55M	17.691M	17.55M	17.716M
5.2G;VHT40;Nss1,(M0);Ntx2;5190;TN,VN	Pass	Inf	71.9M	36.332M	72.45M	36.332M
5.2G;VHT40;Nss1,(M0);Ntx2;5230;TN,VN	Pass	Inf	39.5M	35.982M	56.35M	35.982M
5.8G;VHT40;Nss1,(M0);Ntx2;5755;TN,VN	Pass	500k	34.75M	36.082M	33.25M	36.182M
5.8G;VHT40;Nss1,(M0);Ntx2;5795;TN,VN	Pass	500k	33.8M	36.232M	33.65M	36.182M
5.2G;VHT80;Nss1,(M0);Ntx2;5210;TN,VN	Pass	Inf	83M	75.662M	83.3M	75.662M
5.8G;VHT80;Nss1,(M0);Ntx2;5775;TN,VN	Pass	500k	75.3M	75.862M	75.3M	75.662M

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



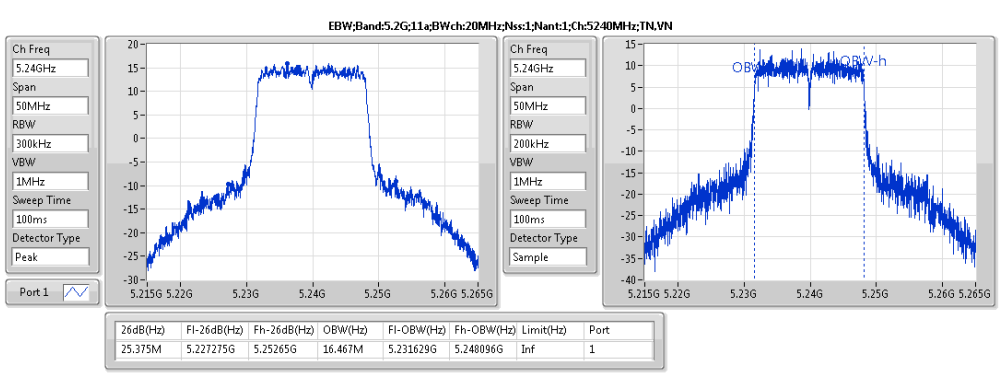
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.825M	5.169375G	5.1902G	16.442M	5.171654G	5.188096G	Inf	1

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



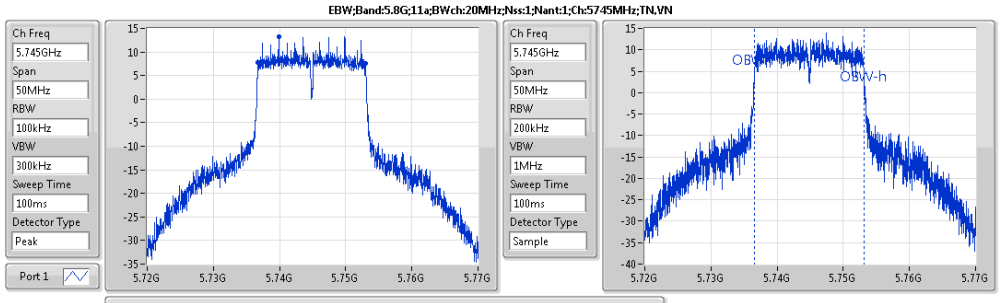
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.9M	5.18775G	5.21265G	16.442M	5.191654G	5.208096G	Inf	1

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



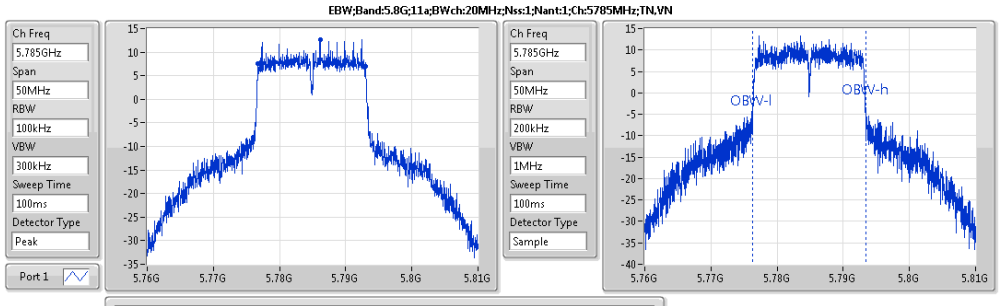
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.375M	5.227275G	5.25265G	16.467M	5.231629G	5.248096G	Inf	1

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



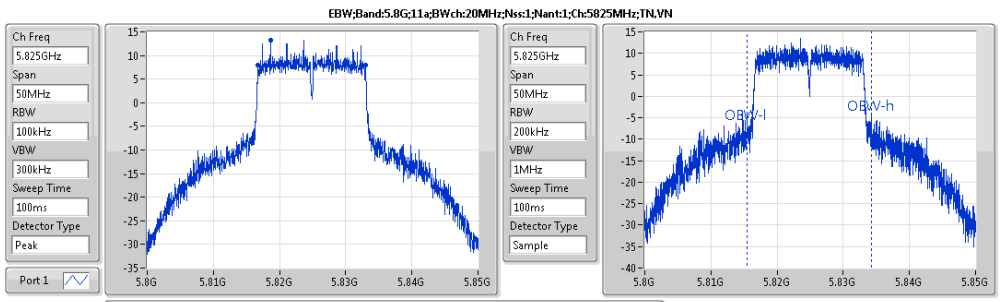
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	5.736725G	5.753G	16.667M	5.736529G	5.753196G	500k	1

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



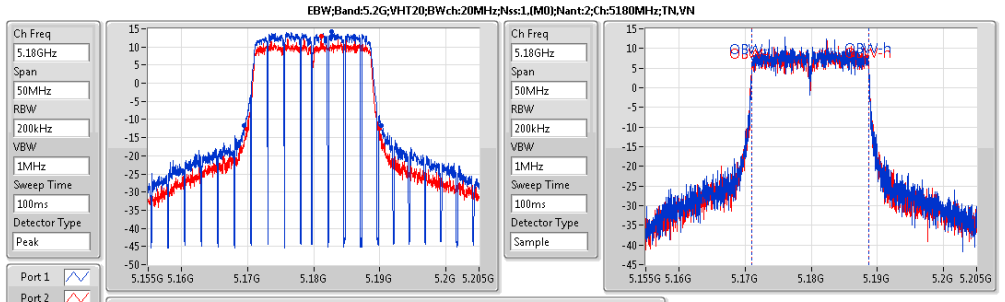
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.776725G	5.79305G	17.066M	5.776329G	5.793396G	500k	1

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



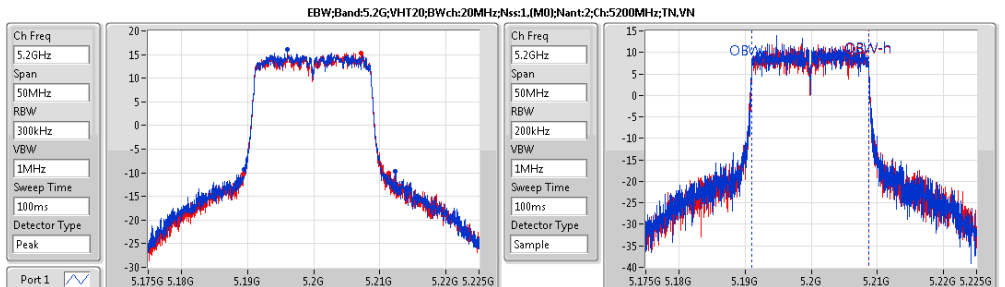
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	5.816725G	5.833025G	18.791M	5.815405G	5.834195G	500k	1

EBW;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5180MHz;TN,VN



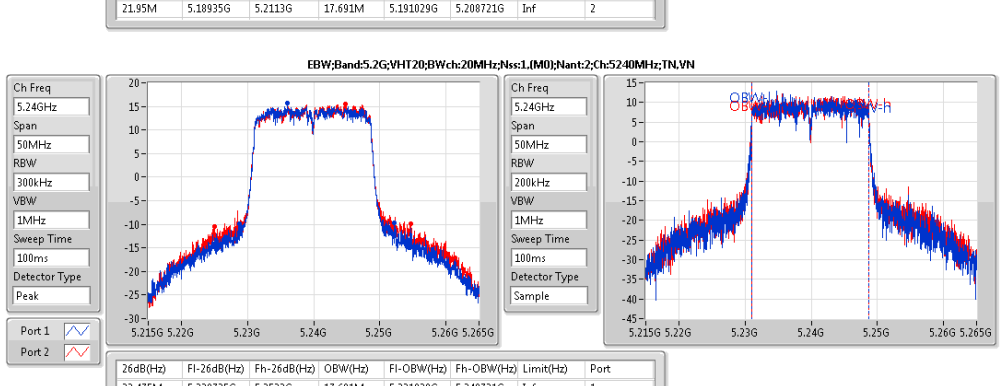
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.625M	5.16955G	5.190175G	17.616M	5.171054G	5.188671G	Inf	1
20M	5.1699G	5.1899G	17.666M	5.171029G	5.188696G	Inf	2

EBW;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5200MHz;TN,VN



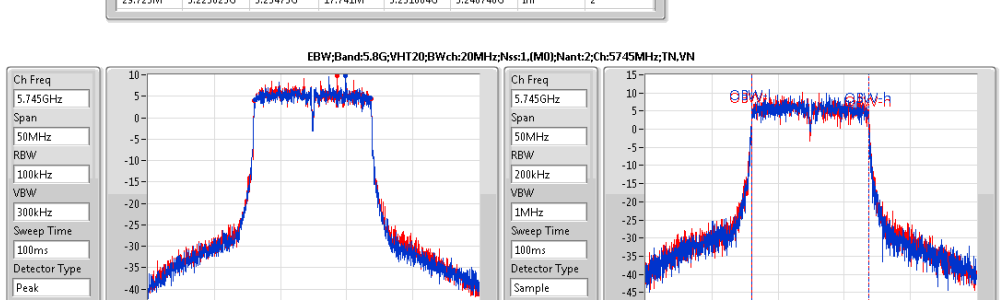
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.925M	5.18945G	5.212375G	17.666M	5.191029G	5.208696G	Inf	1
21.95M	5.18935G	5.2113G	17.691M	5.191029G	5.208721G	Inf	2

EBW;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5240MHz;TN,VN



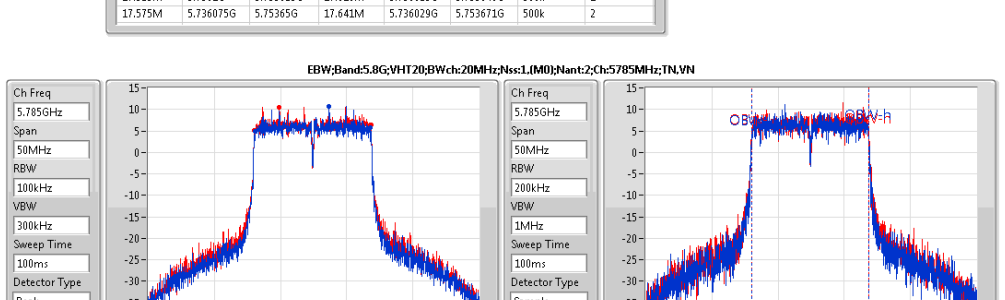
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.475M	5.228725G	5.2522G	17.691M	5.231029G	5.248721G	Inf	1
29.725M	5.225025G	5.25475G	17.741M	5.231004G	5.248746G	Inf	2

EBW;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5745MHz;TN,VN



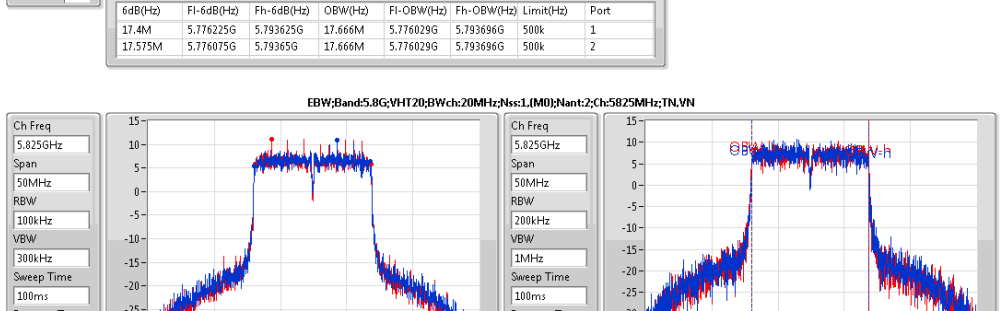
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.525M	5.7361G	5.753625G	17.616M	5.736029G	5.753646G	500k	1
17.575M	5.736075G	5.75365G	17.641M	5.736029G	5.753671G	500k	2

EBW;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5785MHz;TN,VN



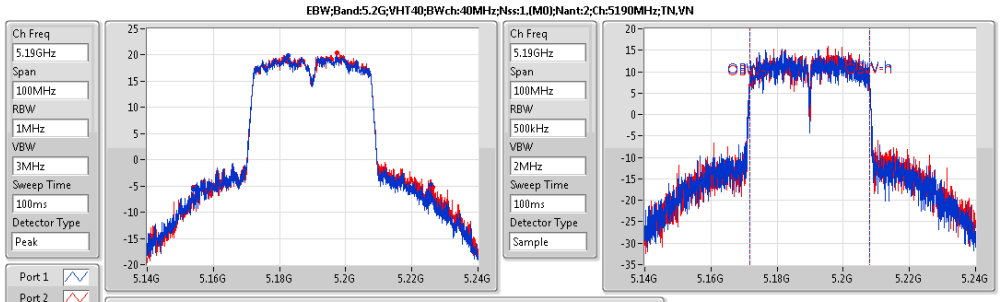
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.4M	5.776225G	5.793625G	17.666M	5.776029G	5.793696G	500k	1
17.575M	5.776075G	5.79365G	17.666M	5.776029G	5.793696G	500k	2

EBW;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5825MHz;TN,VN



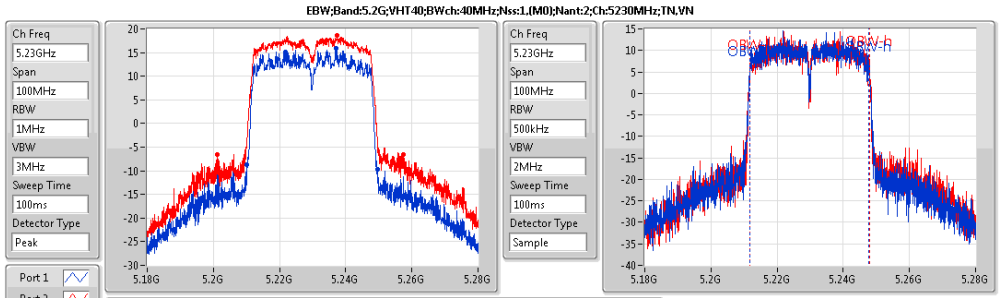
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.816075G	5.833625G	17.691M	5.816004G	5.833696G	500k	1
17.55M	5.8161G	5.83365G	17.716M	5.81598G	5.833696G	500k	2

EBW;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5190MHz;TN,VN



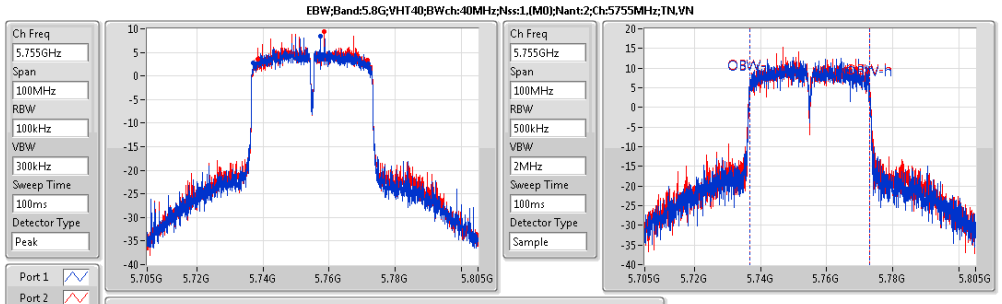
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
71.9M	5.15385G	5.22575G	36.332M	5.171659G	5.207991G	Inf	1
72.45M	5.154G	5.22645G	36.332M	5.171709G	5.208041G	Inf	2

EBW;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5230MHz;TN,VN



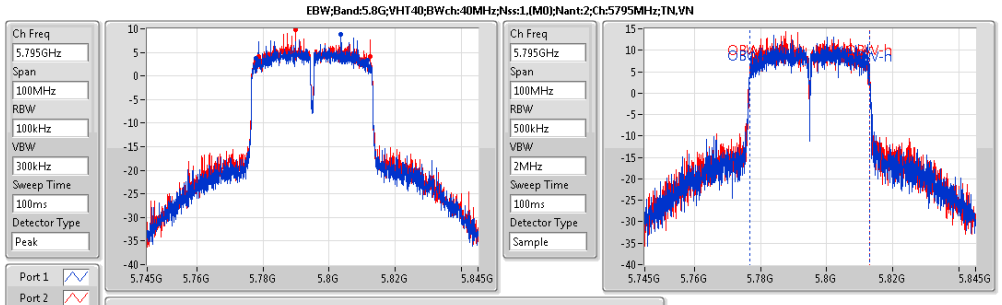
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.5M	5.2101G	5.2496G	35.982M	5.211809G	5.247791G	Inf	1
56.35M	5.20115G	5.2575G	35.982M	5.211859G	5.247841G	Inf	2

EBW;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5755MHz;TN,VN



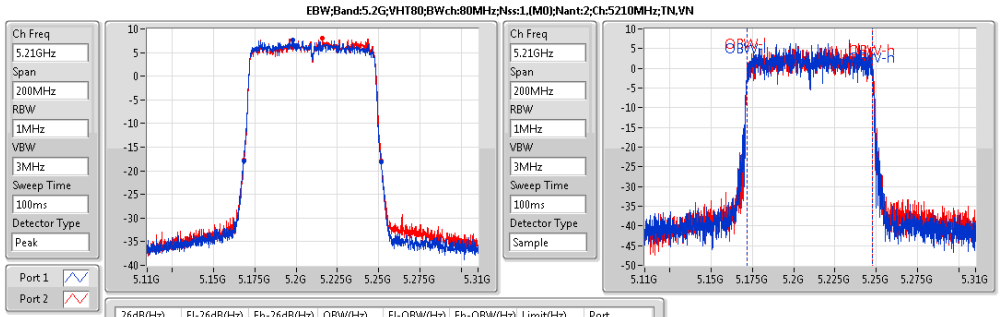
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.75M	5.7371G	5.77185G	36.082M	5.736759G	5.772841G	500k	1
33.25M	5.7383G	5.77155G	36.182M	5.736759G	5.772941G	500k	2

EBW;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5795MHz;TN,VN



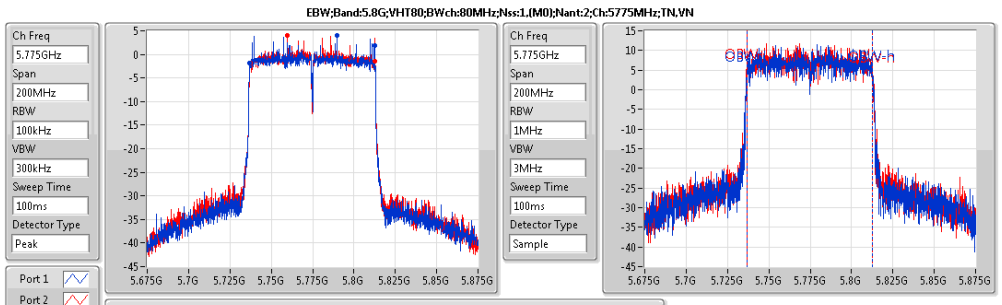
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.8M	5.7779G	5.8117G	36.232M	5.776759G	5.812991G	500k	1
33.65M	5.77875G	5.8124G	36.182M	5.776759G	5.812941G	500k	2

EBW;Band:5.2G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5210MHz;TN,VN



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83M	5.1683G	5.2513G	75.662M	5.172019G	5.247681G	Inf	1
83.3M	5.1683G	5.2516G	75.662M	5.172019G	5.247681G	Inf	2

EBW;Band:5.8G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5775MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.3M	5.7371G	5.8124G	75.862M	5.736819G	5.812681G	500k	1
75.3M	5.7372G	5.8125G	75.662M	5.736919G	5.812581G	500k	2

Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
5.2G;11a;Nss1;Ntx1	25.68	0.36983	29.68	0.92897
5.8G;11a;Nss1;Ntx1	25.63	0.36559	29.63	0.91833
5.2G;VHT20;Nss1,(M0);Ntx2	28.46	0.70146	33.46	2.2182
5.8G;VHT20;Nss1,(M0);Ntx2	27.22	0.52723	32.22	1.66725
5.2G;VHT40;Nss1,(M0);Ntx2	27.89	0.61518	32.89	1.94536
5.8G;VHT40;Nss1,(M0);Ntx2	27.62	0.5781	32.62	1.8281
5.2G;VHT80;Nss1,(M0);Ntx2	20.33	0.10789	25.33	0.34119
5.8G;VHT80;Nss1,(M0);Ntx2	25.71	0.37239	30.71	1.17761

Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)
5.2G;11a;Nss1;Ntx1;5180;TN,VN	Pass	4.00	28.46	36.00	24.46	30.00	24.46	
5.2G;11a;Nss1;Ntx1;5200;TN,VN	Pass	4.00	29.68	36.00	25.68	30.00	25.68	
5.2G;11a;Nss1;Ntx1;5240;TN,VN	Pass	4.00	29.53	36.00	25.53	30.00	25.53	
5.8G;11a;Nss1;Ntx1;5745;TN,VN	Pass	4.00	29.63	36.00	25.63	30.00	25.63	
5.8G;11a;Nss1;Ntx1;5785;TN,VN	Pass	4.00	29.55	36.00	25.55	30.00	25.55	
5.8G;11a;Nss1;Ntx1;5825;TN,VN	Pass	4.00	29.57	36.00	25.57	30.00	25.57	
5.2G;VHT20;Nss1,(M0);Ntx2;5180;TN,VN	Pass	5.00	32.21	36.00	27.21	30.00	24.38	24.02
5.2G;VHT20;Nss1,(M0);Ntx2;5200;TN,VN	Pass	5.00	33.46	36.00	28.46	30.00	25.61	25.29
5.2G;VHT20;Nss1,(M0);Ntx2;5240;TN,VN	Pass	5.00	33.45	36.00	28.45	30.00	25.47	25.41
5.8G;VHT20;Nss1,(M0);Ntx2;5745;TN,VN	Pass	5.00	30.78	36.00	25.78	30.00	22.76	22.77
5.8G;VHT20;Nss1,(M0);Ntx2;5785;TN,VN	Pass	5.00	31.72	36.00	26.72	30.00	23.64	23.77
5.8G;VHT20;Nss1,(M0);Ntx2;5825;TN,VN	Pass	5.00	32.22	36.00	27.22	30.00	24.24	24.17
5.2G;VHT40;Nss1,(M0);Ntx2;5190;TN,VN	Pass	5.00	29.49	36.00	24.49	30.00	21.53	21.43
5.2G;VHT40;Nss1,(M0);Ntx2;5230;TN,VN	Pass	5.00	32.89	36.00	27.89	30.00	24.95	24.81
5.8G;VHT40;Nss1,(M0);Ntx2;5755;TN,VN	Pass	5.00	32.50	36.00	27.5	30.00	24.44	24.53
5.8G;VHT40;Nss1,(M0);Ntx2;5795;TN,VN	Pass	5.00	32.62	36.00	27.62	30.00	24.47	24.75
5.2G;VHT80;Nss1,(M0);Ntx2;5210;TN,VN	Pass	5.00	25.33	36.00	20.33	30.00	17.35	17.28
5.8G;VHT80;Nss1,(M0);Ntx2;5775;TN,VN	Pass	5.00	30.71	36.00	25.71	30.00	22.67	22.73

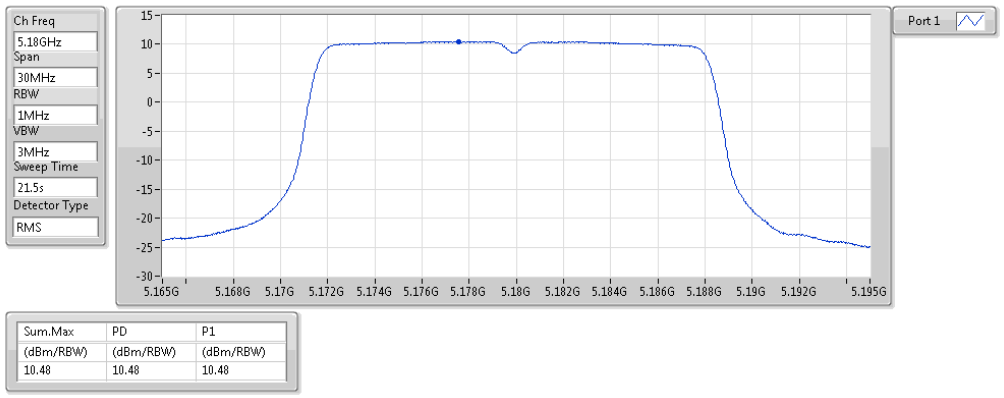
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
5.2G;11a;Nss1;Ntx1	11.76	15.76
5.8G;11a;Nss1;Ntx1	9.76	13.76
5.2G;VHT20;Nss1,(M0);Ntx2	14.46	21.98
5.8G;VHT20;Nss1,(M0);Ntx2	11.16	18.68
5.2G;VHT40;Nss1,(M0);Ntx2	11.26	18.78
5.8G;VHT40;Nss1,(M0);Ntx2	9.03	16.55
5.2G;VHT80;Nss1,(M0);Ntx2	-0.59	6.93
5.8G;VHT80;Nss1,(M0);Ntx2	3.06	10.58

Result

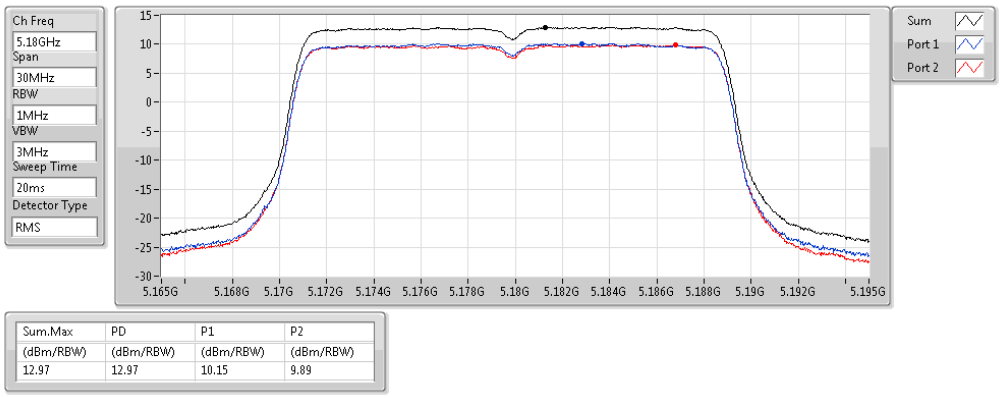
Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	Sum.Max (dBm/RBW)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Lim (dBm/RBW)	P1 (dBm/RBW)	P2 (dBm/RBW)
5.2G;11a;Nss1;Ntx1;5180;TN,VN	Pass	1M	1M	0.00	4.00	10.48	10.48	17.00	14.48	Inf	10.48	
5.2G;11a;Nss1;Ntx1;5200;TN,VN	Pass	1M	1M	0.00	4.00	11.76	11.76	17.00	15.76	Inf	11.76	
5.2G;11a;Nss1;Ntx1;5240;TN,VN	Pass	1M	1M	0.00	4.00	11.48	11.48	17.00	15.48	Inf	11.48	
5.8G;11a;Nss1;Ntx1;5745;TN,VN	Pass	500k	500k	0.00	4.00	9.76	9.76	30.00	13.76	36.00	9.76	
5.8G;11a;Nss1;Ntx1;5785;TN,VN	Pass	500k	500k	0.00	4.00	9.50	9.50	30.00	13.50	36.00	9.50	
5.8G;11a;Nss1;Ntx1;5825;TN,VN	Pass	500k	500k	0.00	4.00	9.70	9.70	30.00	13.70	36.00	9.70	
5.2G;VHT20;Nss1,(M0);Ntx2;5180;TN,VN	Pass	1M	1M	0.00	7.52	12.97	12.97	15.48	20.49	Inf	10.15	9.89
5.2G;VHT20;Nss1,(M0);Ntx2;5200;TN,VN	Pass	1M	1M	0.00	7.52	14.32	14.32	15.48	21.84	Inf	11.51	11.35
5.2G;VHT20;Nss1,(M0);Ntx2;5240;TN,VN	Pass	1M	1M	0.00	7.52	14.46	14.46	15.48	21.98	Inf	11.32	11.62
5.8G;VHT20;Nss1,(M0);Ntx2;5745;TN,VN	Pass	500k	500k	0.00	7.52	10.06	10.06	28.48	17.58	34.48	7.08	7.29
5.8G;VHT20;Nss1,(M0);Ntx2;5785;TN,VN	Pass	500k	500k	0.00	7.52	10.66	10.66	28.48	18.18	34.48	7.52	8.12
5.8G;VHT20;Nss1,(M0);Ntx2;5825;TN,VN	Pass	500k	500k	0.00	7.52	11.16	11.16	28.48	18.68	34.48	8.37	8.17
5.2G;VHT40;Nss1,(M0);Ntx2;5190;TN,VN	Pass	1M	1M	0.00	7.52	7.73	7.73	15.48	15.25	Inf	4.76	4.92
5.2G;VHT40;Nss1,(M0);Ntx2;5230;TN,VN	Pass	1M	1M	0.00	7.52	11.26	11.26	15.48	18.78	Inf	8.16	8.56
5.8G;VHT40;Nss1,(M0);Ntx2;5755;TN,VN	Pass	500k	500k	0.00	7.52	8.93	8.93	28.48	16.45	34.48	5.76	6.23
5.8G;VHT40;Nss1,(M0);Ntx2;5795;TN,VN	Pass	500k	500k	0.00	7.52	9.03	9.03	28.48	16.55	34.48	5.74	6.46
5.2G;VHT80;Nss1,(M0);Ntx2;5210;TN,VN	Pass	1M	1M	0.00	7.52	-0.59	-0.59	15.48	6.93	Inf	-3.71	-3.37
5.8G;VHT80;Nss1,(M0);Ntx2;5775;TN,VN	Pass	500k	500k	0.00	7.52	3.06	3.06	28.48	10.58	34.48	-0.14	0.55

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



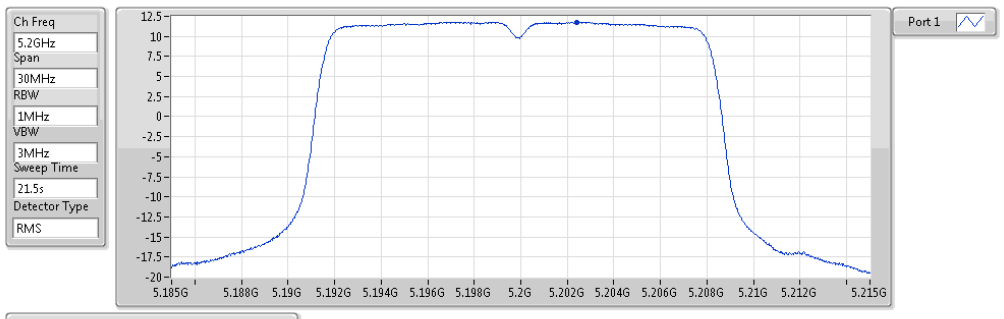
Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.48	10.48	10.48

PSD;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5180MHz;TN,VN



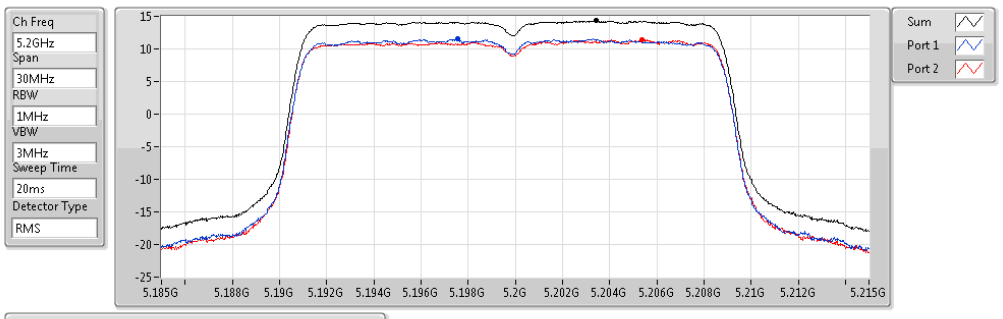
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.97	12.97	10.15	9.89

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



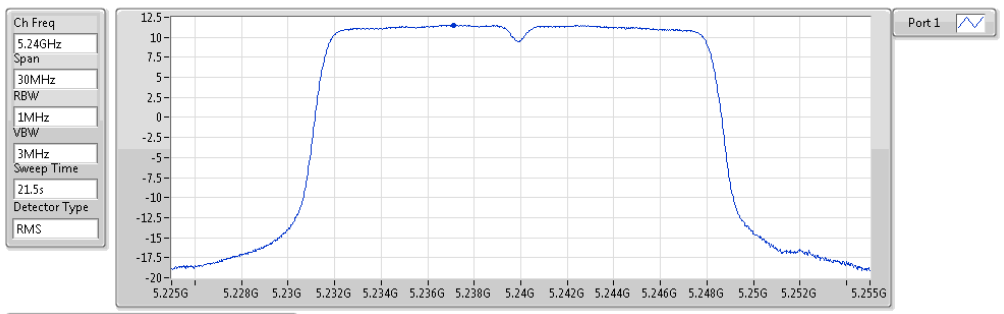
Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.76	11.76	11.76

PSD;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5200MHz;TN,VN



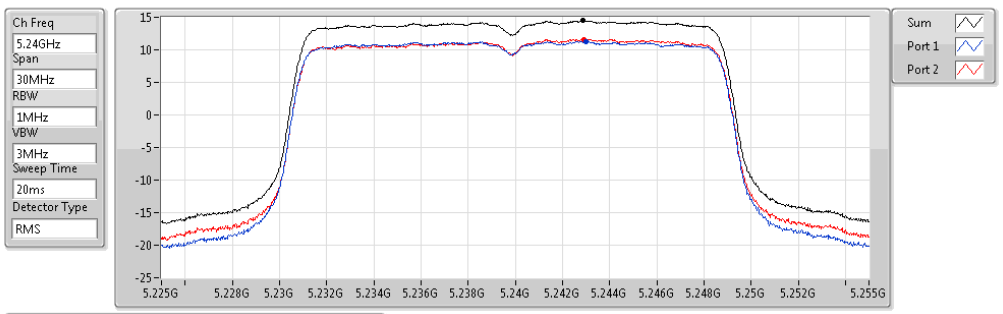
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.32	14.32	11.51	11.35

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



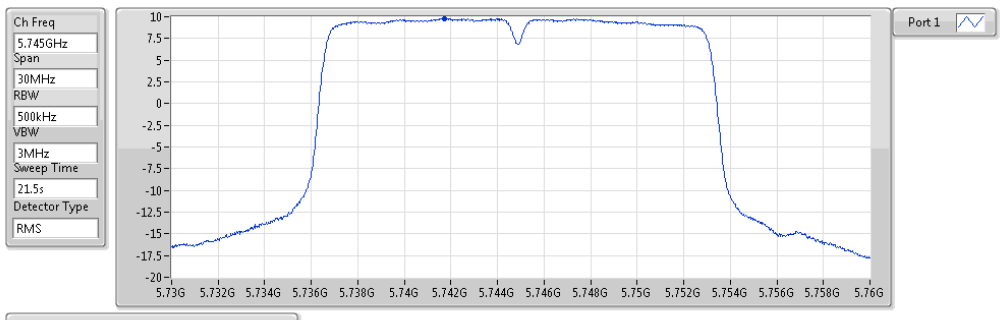
Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.48	11.48	11.48

PSD;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5240MHz;TN,VN



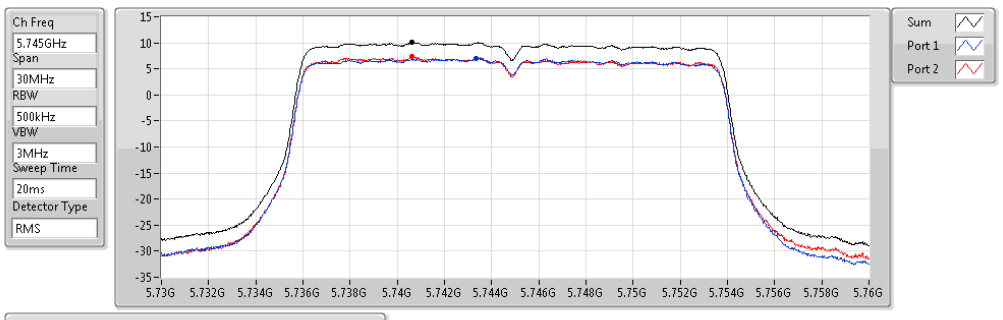
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.46	14.46	11.32	11.62

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



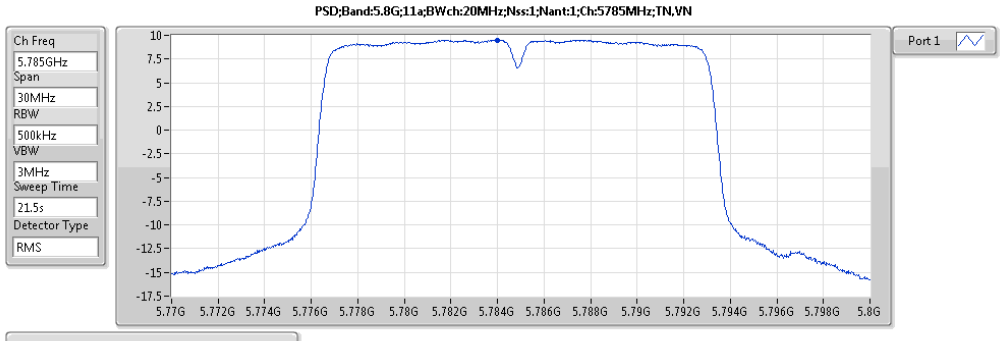
Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.76	9.76	9.76

PSD;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5745MHz;TN,VN



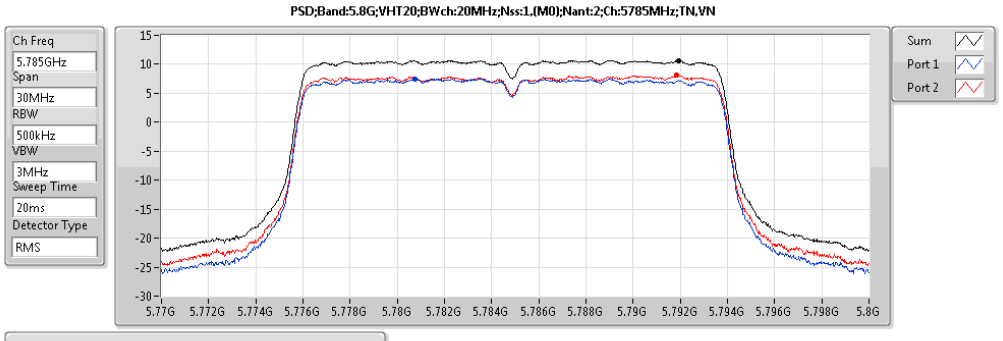
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.06	10.06	7.08	7.29

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



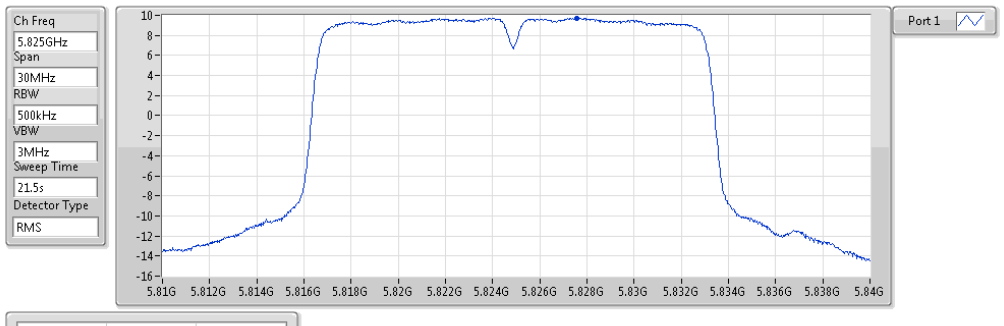
Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.50	9.50	9.50

PSD;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5785MHz;TN,VN



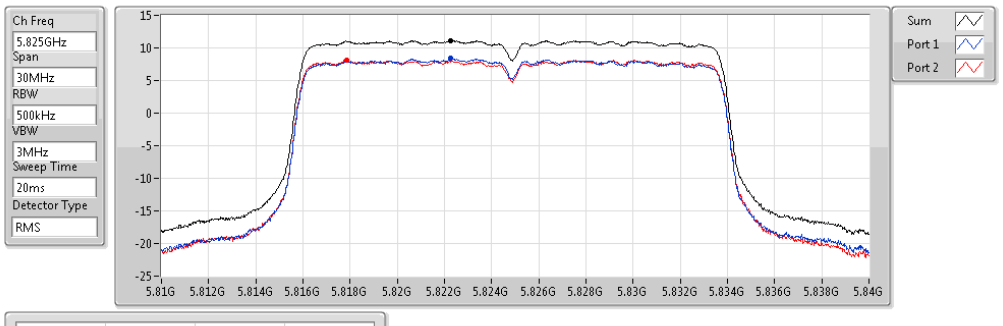
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.66	10.66	7.52	8.12

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



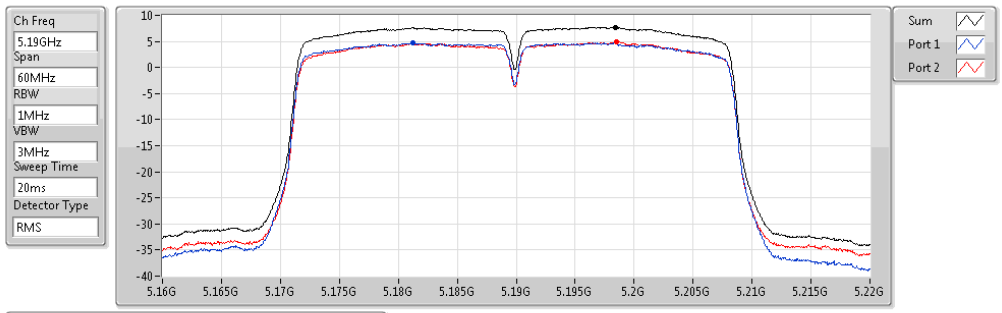
Sum.Max	PD	P1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.70	9.70	9.70

PSD;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5825MHz;TN,VN



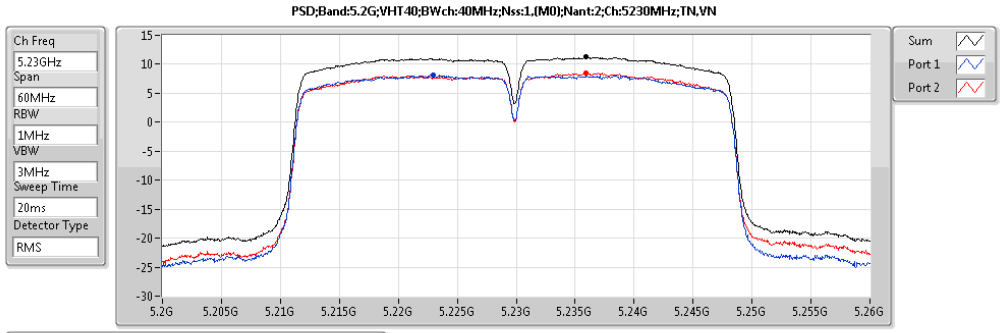
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.16	11.16	8.37	8.17

PSD;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5190MHz;TN,VN



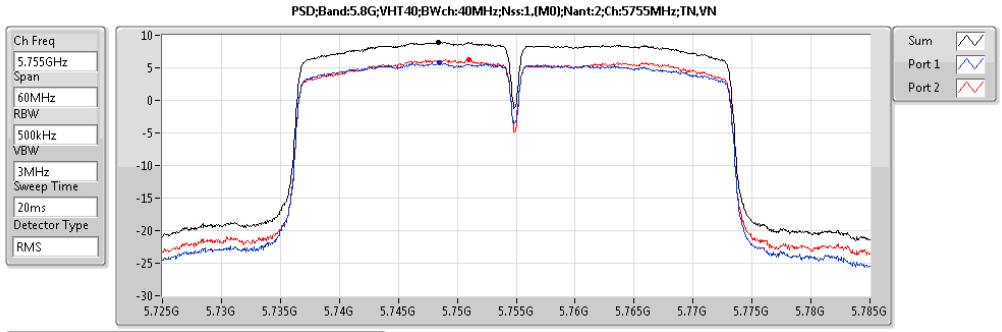
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.73	7.73	4.76	4.92

PSD;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5230MHz;TN,VN



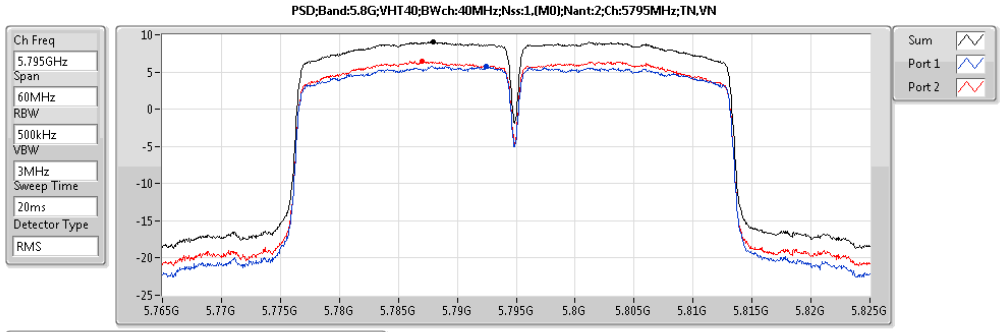
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.26	11.26	8.16	8.56

PSD;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5755MHz;TN,VN



Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.93	8.93	5.76	6.23

PSD;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5795MHz;TN,VN

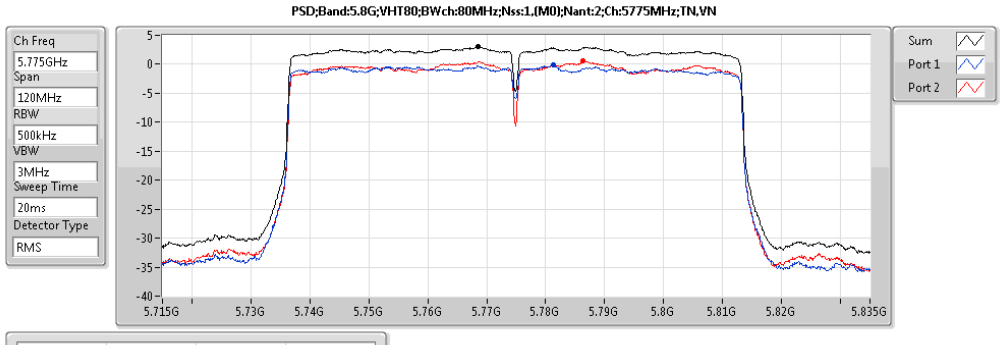


Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.03	9.03	5.74	6.46

PSD;Band:5.2G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5210MHz;TN,VN

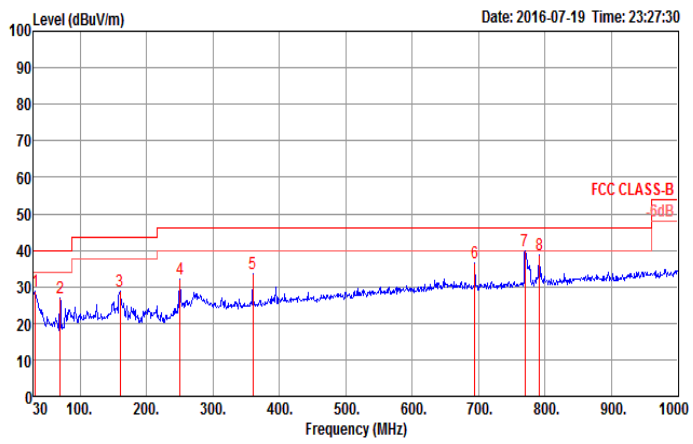
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.59	-0.59	-3.71	-3.37

PSD;Band:5.8G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5775MHz;TN,VN



Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.06	3.06	-0.14	0.55

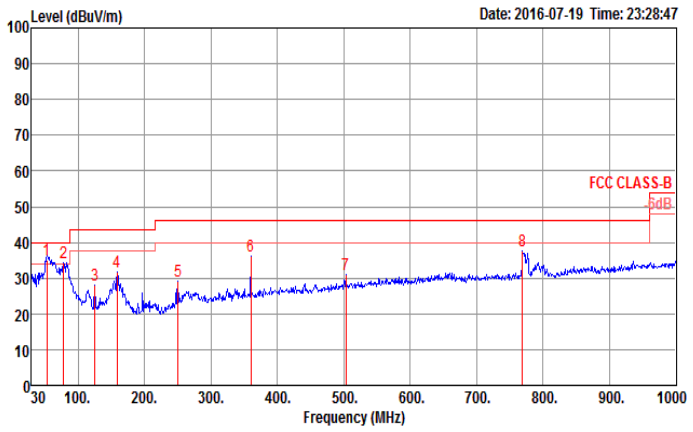
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



	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	32.91	28.71	40.00	-11.29	36.36	0.51	24.24	32.40	150	169	Peak	HORIZONTAL
2	69.77	26.91	40.00	-13.09	45.67	0.72	12.92	32.40	125	354	Peak	HORIZONTAL
3	159.98	28.71	43.50	-14.79	43.08	1.08	16.90	32.35	125	90	Peak	HORIZONTAL
4	250.19	31.99	46.00	-14.01	43.85	1.34	19.10	32.30	200	359	Peak	HORIZONTAL
5	359.80	33.57	46.00	-12.43	42.61	1.63	21.64	32.31	300	290	Peak	HORIZONTAL
6	694.45	36.53	46.00	-9.47	40.71	2.26	25.92	32.36	125	358	Peak	HORIZONTAL
7	770.11	39.68	46.00	-6.32	42.97	2.41	26.58	32.28	125	250	Peak	HORIZONTAL
8	791.45	38.85	46.00	-7.15	41.93	2.44	26.73	32.25	125	119	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	Normal Link		



	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	53.28	34.94	40.00	-5.06	52.23	0.64	14.48	32.41	100	248	QP	VERTICAL
2	78.50	34.45	40.00	-5.55	52.59	0.77	13.49	32.40	150	140	Peak	VERTICAL
3	125.06	27.89	43.50	-15.61	40.35	0.97	18.94	32.37	125	176	Peak	VERTICAL
4	159.01	31.83	43.50	-11.67	46.18	1.08	16.92	32.35	200	155	Peak	VERTICAL
5	250.19	29.14	46.00	-16.86	41.00	1.34	19.10	32.30	100	178	Peak	VERTICAL
6	359.80	36.09	46.00	-9.91	45.13	1.63	21.64	32.31	200	360	Peak	VERTICAL
7	503.36	31.09	46.00	-14.91	37.43	1.95	24.06	32.35	150	158	Peak	VERTICAL
8	769.14	37.46	46.00	-8.54	40.78	2.40	26.56	32.28	150	358	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.)

Radiated Emissions (1GHz~40GHz)

Configurations	IEEE 802.11a CH 36 / Chain 1

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	15538.35	44.47	54.00	-9.53	27.77	12.06	38.13	33.49	158	332	Average	HORIZONTAL
2	15538.56	58.33	74.00	-15.67	41.63	12.06	38.13	33.49	158	332	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	15540.38	44.75	54.00	-9.25	28.05	12.06	38.13	33.49	192	273	Average	VERTICAL
2	15540.83	58.08	74.00	-15.92	41.38	12.06	38.13	33.49	192	273	Peak	VERTICAL

Configurations	IEEE 802.11a CH 40 / Chain 1

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	15599.86	46.45	54.00	-7.55	29.84	12.09	38.05	33.53	154	109	Average	HORIZONTAL
2	15600.35	58.46	74.00	-15.54	41.85	12.09	38.05	33.53	188	109	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	15599.91	47.12	54.00	-6.88	30.51	12.09	38.05	33.53	118	24	Average	VERTICAL
2	15600.82	61.04	74.00	-12.96	44.48	12.11	37.98	33.53	118	24	Peak	VERTICAL

Configurations	IEEE 802.11a CH 48 / Chain 1

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	15719.14	59.04	74.00	-14.96	42.72	12.15	37.84	33.67	158	265	Peak	HORIZONTAL
2	15719.21	46.62	54.00	-7.38	30.30	12.15	37.84	33.67	158	265	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	15719.40	60.80	74.00	-13.20	44.48	12.15	37.84	33.67	122	26	Peak	VERTICAL
2	15720.10	46.84	54.00	-7.16	30.52	12.15	37.84	33.67	122	26	Average	VERTICAL

Configurations	IEEE 802.11a CH 149 / Chain 1

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	11489.96	47.76	54.00	-6.24	31.64	10.10	39.20	33.18	104	233	Average	HORIZONTAL
2	11490.21	61.05	74.00	-12.95	44.93	10.10	39.20	33.18	104	233	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	11489.31	62.12	74.00	-11.88	46.00	10.10	39.20	33.18	116	313	Peak	VERTICAL
2	11489.94	49.26	54.00	-4.74	33.14	10.10	39.20	33.18	116	313	Average	VERTICAL

Configurations	IEEE 802.11a CH 157 / Chain 1

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	11569.81	46.97	54.00	-7.03	30.84	10.13	39.20	33.20	116	234	Average	HORIZONTAL
2	11570.19	60.13	74.00	-13.87	44.00	10.13	39.20	33.20	116	234	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	11569.71	48.39	54.00	-5.61	32.26	10.13	39.20	33.20	114	314	Average	VERTICAL
2	11570.49	61.93	74.00	-12.07	45.80	10.13	39.20	33.20	114	314	Peak	VERTICAL

Configurations	IEEE 802.11a CH 165 / Chain 1

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	11647.24	58.17	74.00	-15.83	42.03	10.16	39.20	33.22	121	108	Peak	HORIZONTAL
2	11649.81	45.84	54.00	-8.16	29.70	10.16	39.20	33.22	121	108	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	11649.20	61.42	74.00	-12.58	45.28	10.16	39.20	33.22	108	316	Peak	VERTICAL
2	11649.81	48.11	54.00	-5.89	31.97	10.16	39.20	33.22	108	316	Average	VERTICAL

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

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	15539.42	58.17	74.00	-15.83	41.47	12.06	38.13	33.49	189	143	Peak	HORIZONTAL
2	15540.86	44.37	54.00	-9.63	27.67	12.06	38.13	33.49	189	143	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	15539.68	44.86	54.00	-9.14	28.16	12.06	38.13	33.49	156	243	Average	VERTICAL
2	15540.52	58.28	74.00	-15.72	41.58	12.06	38.13	33.49	156	243	Peak	VERTICAL

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

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	15600.38	58.41	74.00	-15.59	41.80	12.09	38.05	33.53	172	314	Peak	HORIZONTAL
2	15600.56	44.36	54.00	-9.64	27.80	12.11	37.98	33.53	172	314	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	15599.29	45.52	54.00	-8.48	28.91	12.09	38.05	33.53	211	223	Average	VERTICAL
2	15600.04	58.73	74.00	-15.27	42.12	12.09	38.05	33.53	211	223	Peak	VERTICAL

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

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	15719.90	58.20	74.00	-15.80	41.88	12.15	37.84	33.67	138	241	Peak	HORIZONTAL
2	15721.03	45.70	54.00	-8.30	29.38	12.15	37.84	33.67	138	241	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	15719.09	59.64	74.00	-14.36	43.32	12.15	37.84	33.67	300	260	Peak	VERTICAL
2	15720.58	46.40	54.00	-7.60	30.08	12.15	37.84	33.67	300	260	Average	VERTICAL

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

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	11489.26	62.14	74.00	-11.86	46.02	10.10	39.20	33.18	110	233	Peak	HORIZONTAL
2	11489.58	48.29	54.00	-5.71	32.17	10.10	39.20	33.18	110	233	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	11490.30	50.74	54.00	-3.26	34.62	10.10	39.20	33.18	113	314	Average	VERTICAL
2	11492.45	66.60	74.00	-7.40	50.48	10.10	39.20	33.18	113	314	Peak	VERTICAL

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

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	11566.71	47.42	54.00	-6.58	31.29	10.13	39.20	33.20	104	235	Average	HORIZONTAL
2	11569.41	61.87	74.00	-12.13	45.74	10.13	39.20	33.20	104	235	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	11569.20	64.82	74.00	-9.18	48.69	10.13	39.20	33.20	101	318	Peak	VERTICAL

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

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	11649.52	47.14	54.00	-6.86	31.00	10.16	39.20	33.22	107	234	Average	HORIZONTAL
2	11649.79	60.92	74.00	-13.08	44.78	10.16	39.20	33.22	107	234	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	11649.31	65.02	74.00	-8.98	48.88	10.16	39.20	33.22	100	315	Peak	VERTICAL
2	11650.02	50.75	54.00	-3.25	34.61	10.16	39.20	33.22	100	315	Average	VERTICAL

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

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	15569.62	58.29	74.00	-15.71	41.68	12.09	38.05	33.53	161	139	Peak	HORIZONTAL
2	15570.10	44.64	54.00	-9.36	28.03	12.09	38.05	33.53	161	139	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	15569.39	44.86	54.00	-9.14	28.25	12.09	38.05	33.53	188	265	Average	VERTICAL
2	15569.61	57.64	74.00	-16.36	41.03	12.09	38.05	33.53	188	265	Peak	VERTICAL

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

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	15690.00	45.27	54.00	-8.73	28.85	12.13	37.91	33.62	183	114	Average	HORIZONTAL
2	15690.74	58.71	74.00	-15.29	42.29	12.13	37.91	33.62	183	114	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	15689.58	58.68	74.00	-15.32	42.26	12.13	37.91	33.62	149	218	Peak	VERTICAL
2	15690.41	44.91	54.00	-9.09	28.49	12.13	37.91	33.62	149	218	Average	VERTICAL

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

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	11509.74	59.67	74.00	-14.33	43.56	10.10	39.20	33.19	269	234	Peak	HORIZONTAL
2	11509.97	46.79	54.00	-7.21	30.68	10.10	39.20	33.19	269	234	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	11510.96	64.27	74.00	-9.73	48.16	10.10	39.20	33.19	108	315	Peak	VERTICAL
2	11513.62	50.84	54.00	-3.16	34.73	10.10	39.20	33.19	108	315	Average	VERTICAL

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

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	11589.17	61.06	74.00	-12.94	44.92	10.15	39.20	33.21	107	233	Peak	HORIZONTAL
2	11589.21	47.63	54.00	-6.37	31.49	10.15	39.20	33.21	107	233	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	11589.04	63.89	74.00	-10.11	47.75	10.15	39.20	33.21	108	315	Peak	VERTICAL
2	11589.94	50.79	54.00	-3.21	34.65	10.15	39.20	33.21	108	315	Average	VERTICAL

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

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	15629.98	57.84	74.00	-16.16	41.33	12.11	37.98	33.58	162	289	Peak	HORIZONTAL
2	15630.83	44.96	54.00	-9.04	28.45	12.11	37.98	33.58	162	289	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	15630.14	57.88	74.00	-16.12	41.37	12.11	37.98	33.58	177	352	Peak	VERTICAL
2	15630.27	44.67	54.00	-9.33	28.16	12.11	37.98	33.58	177	352	Average	VERTICAL

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

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	11549.26	45.20	54.00	-8.80	29.08	10.12	39.20	33.20	116	233	Average	HORIZONTAL
2	11550.07	58.28	74.00	-15.72	42.16	10.12	39.20	33.20	116	233	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	11548.64	61.50	74.00	-12.50	45.38	10.12	39.20	33.20	100	313	Peak	VERTICAL
2	11549.89	48.05	54.00	-5.95	31.93	10.12	39.20	33.20	100	313	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.

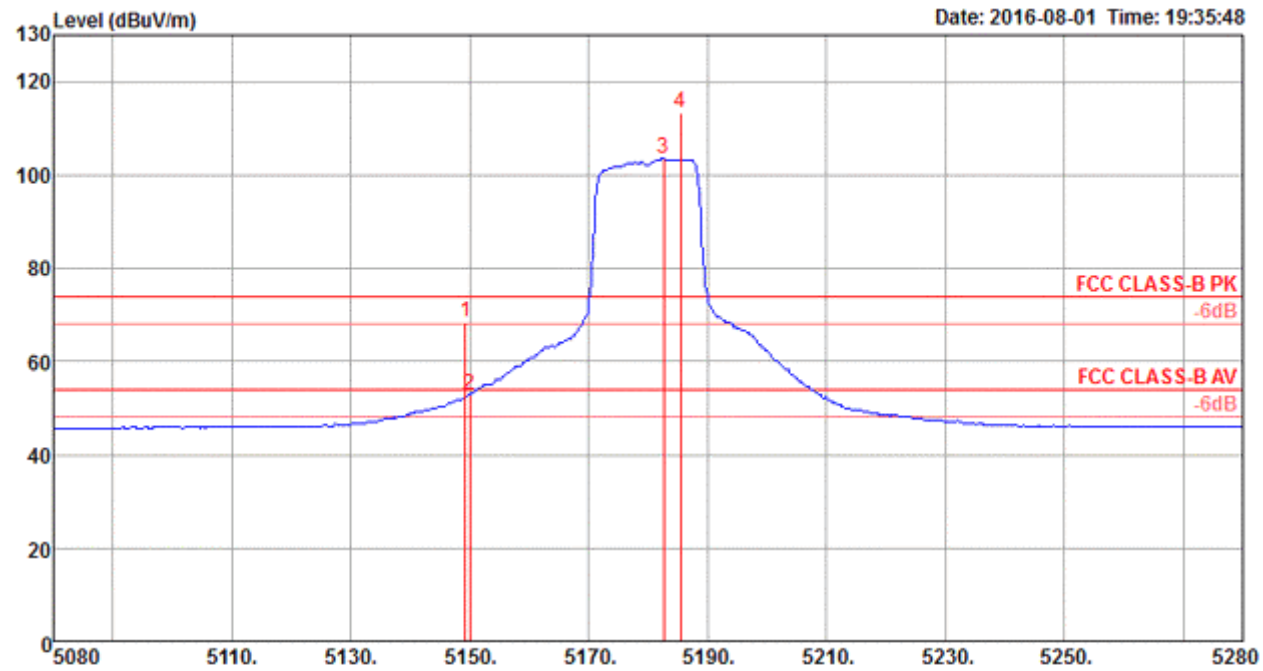
Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

Band Edge Emissions

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

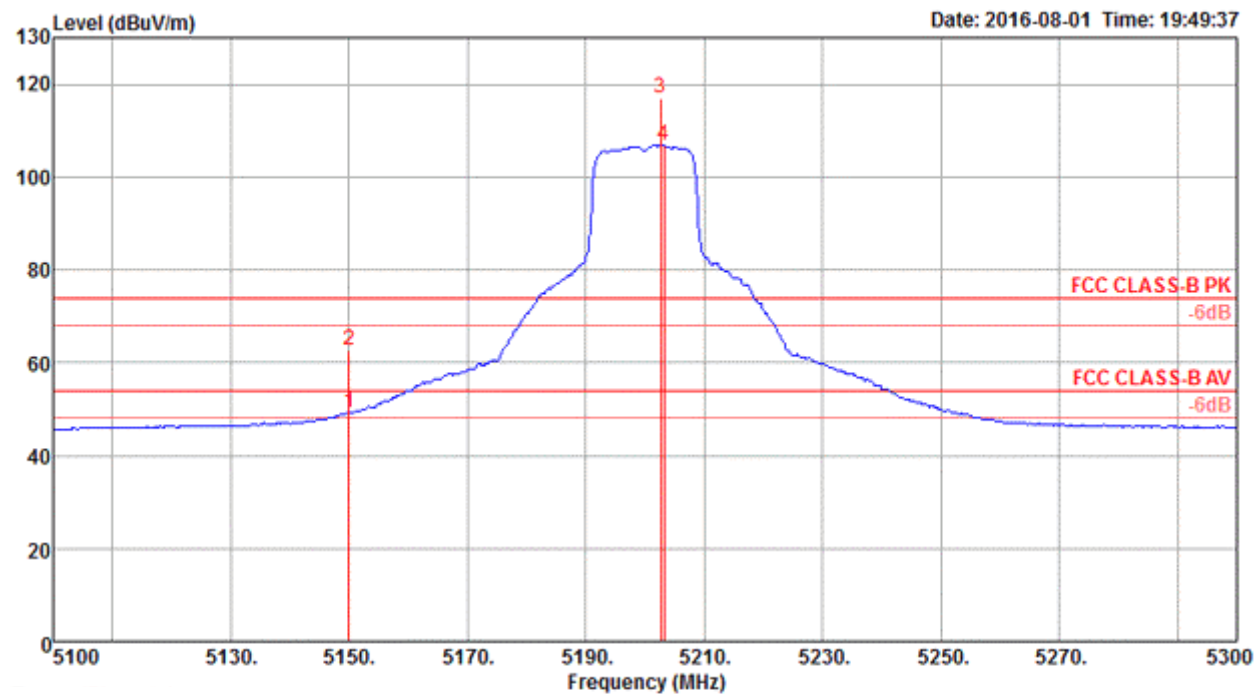
Channel 36



	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	5149.23	68.54	74.00	-5.46	61.28	6.44	33.74	32.92	200	224	Peak	VERTICAL
2	5150.00	52.89	54.00	-1.11	45.63	6.44	33.74	32.92	200	224	Average	VERTICAL
3	5182.56	103.46			96.12	6.47	33.79	32.92	200	224	Average	VERTICAL
4	5185.45	113.44			106.10	6.47	33.79	32.92	200	224	Peak	VERTICAL

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

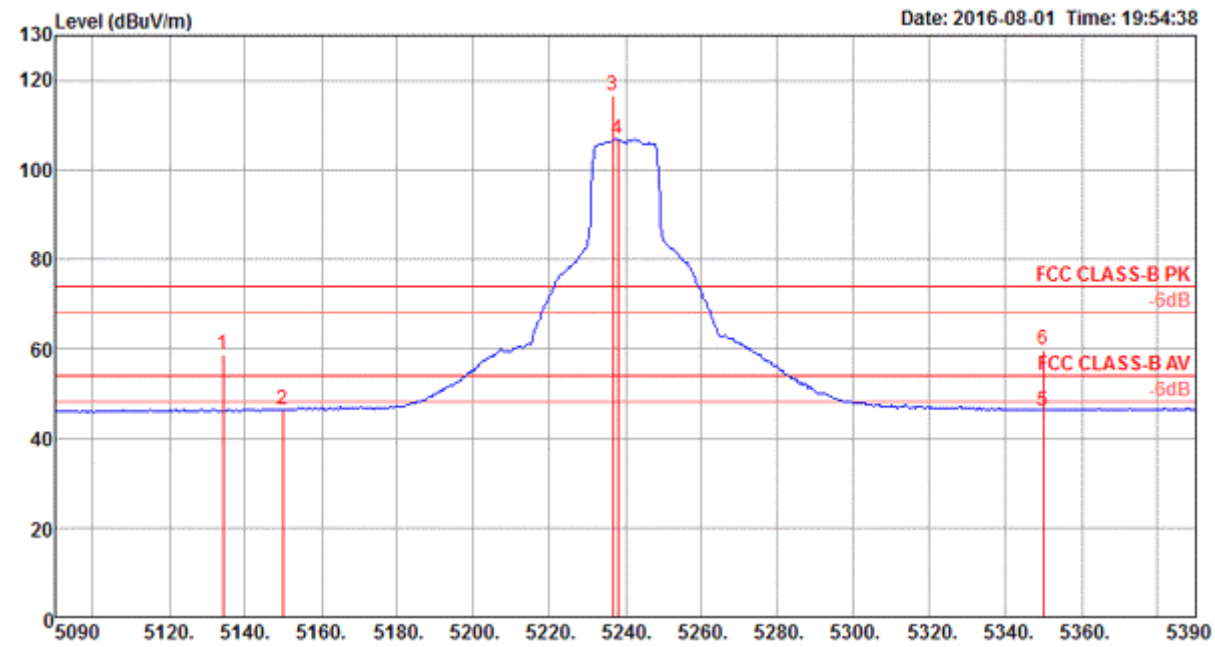
Channel 40



	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	5150.00	49.15	54.00	-4.85	41.89	6.44	33.74	32.92	200	230	Average	VERTICAL
2	5150.00	62.71	74.00	-11.29	55.45	6.44	33.74	32.92	200	230	Peak	VERTICAL
3	5202.56	116.98			109.57	6.49	33.84	32.92	200	230	Peak	VERTICAL
4	5203.21	106.74			99.33	6.49	33.84	32.92	200	230	Average	VERTICAL

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

Channel 48

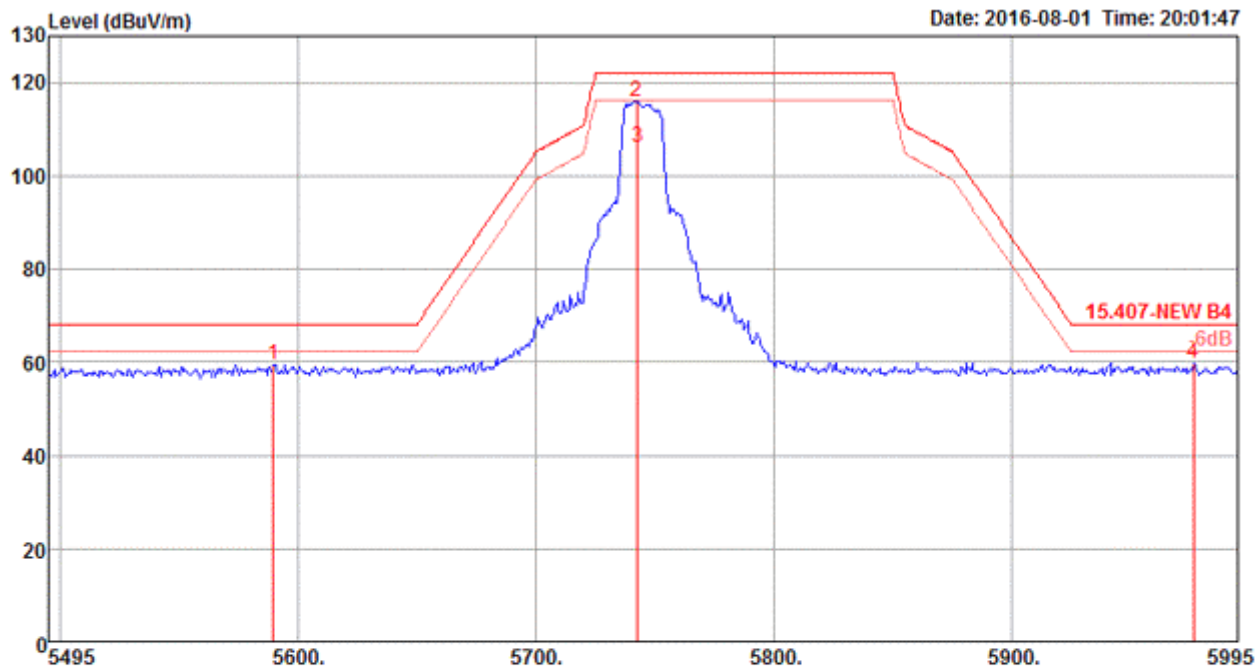


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5134.23	58.83	74.00	-15.17	51.60	6.43	33.72	32.92	198	72	Peak	VERTICAL
2	5150.00	46.36	54.00	-7.64	39.10	6.44	33.74	32.92	198	72	Average	VERTICAL
3	5236.64	116.48			108.99	6.52	33.89	32.92	198	72	Peak	VERTICAL
4	5238.08	106.74			99.25	6.52	33.89	32.92	198	72	Average	VERTICAL
5	5350.00	46.08	54.00	-7.92	38.33	6.61	34.06	32.92	198	72	Average	VERTICAL
6	5350.00	59.90	74.00	-14.10	52.15	6.61	34.06	32.92	198	72	Peak	VERTICAL

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

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

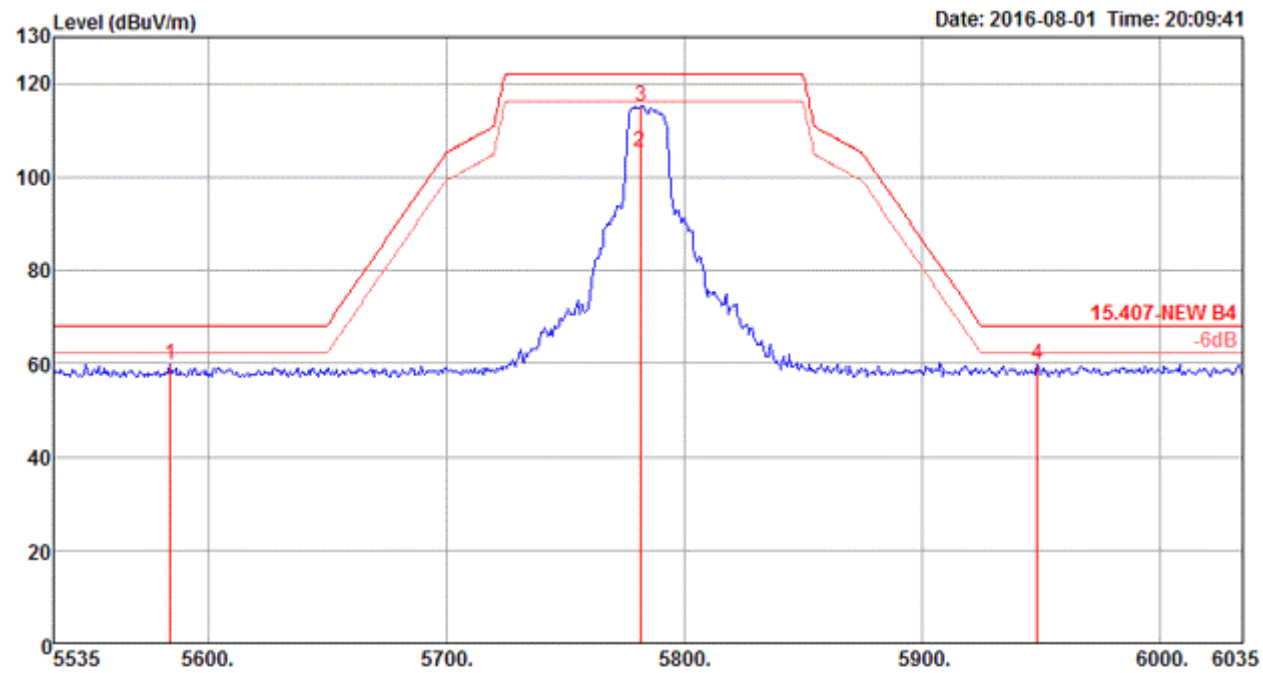
Channel 149



	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	5589.50	59.31	68.20	-8.89	51.17	6.74	34.35	32.95	157	24	Peak	VERTICAL
2	5742.50	115.79			107.43	6.90	34.45	32.99	157	24	Peak	VERTICAL
3	5742.60	106.10			97.74	6.90	34.45	32.99	157	24	Average	VERTICAL
4	5976.50	59.76	68.20	-8.44	51.23	7.00	34.59	33.06	157	24	Peak	VERTICAL

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

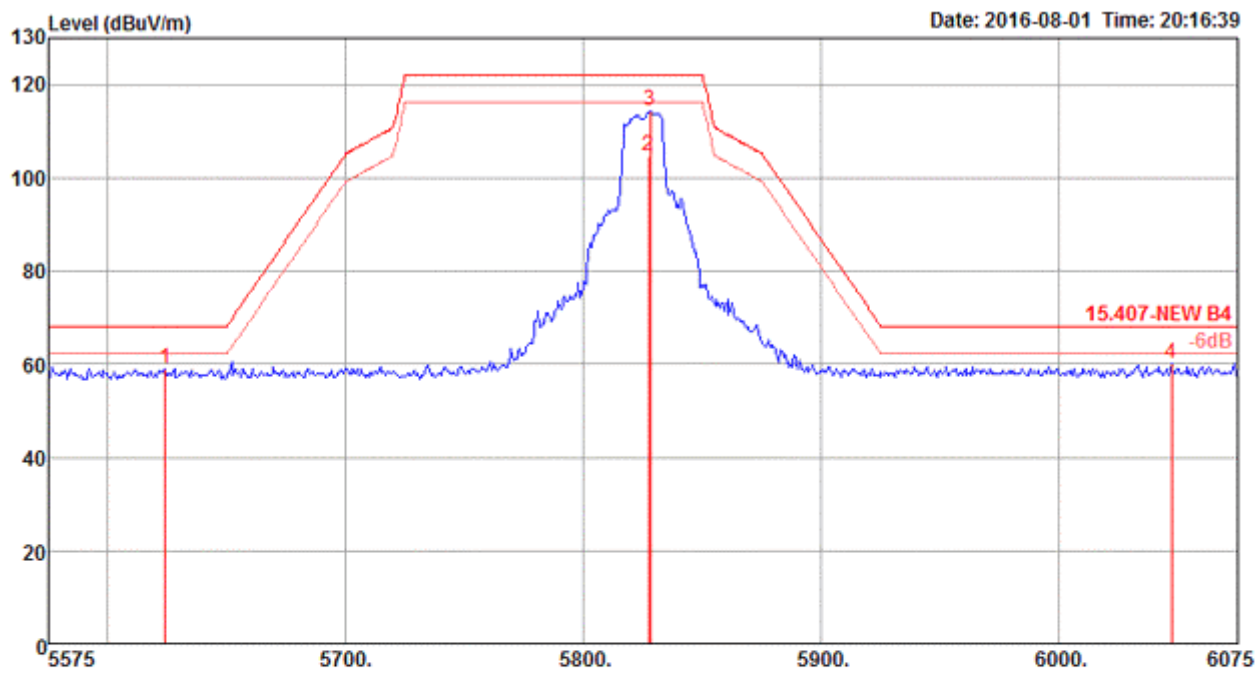
Channel 157



	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	5584.00	59.68	68.20	-8.52	51.54	6.74	34.35	32.95	177	109	Peak	VERTICAL
2	5781.80	105.44			97.04	6.93	34.47	33.00	177	109	Average	VERTICAL
3	5782.00	115.11			106.71	6.93	34.47	33.00	177	109	Peak	VERTICAL
4	5948.50	59.68	68.20	-8.52	51.17	6.99	34.57	33.05	177	109	Peak	VERTICAL

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

Channel 165

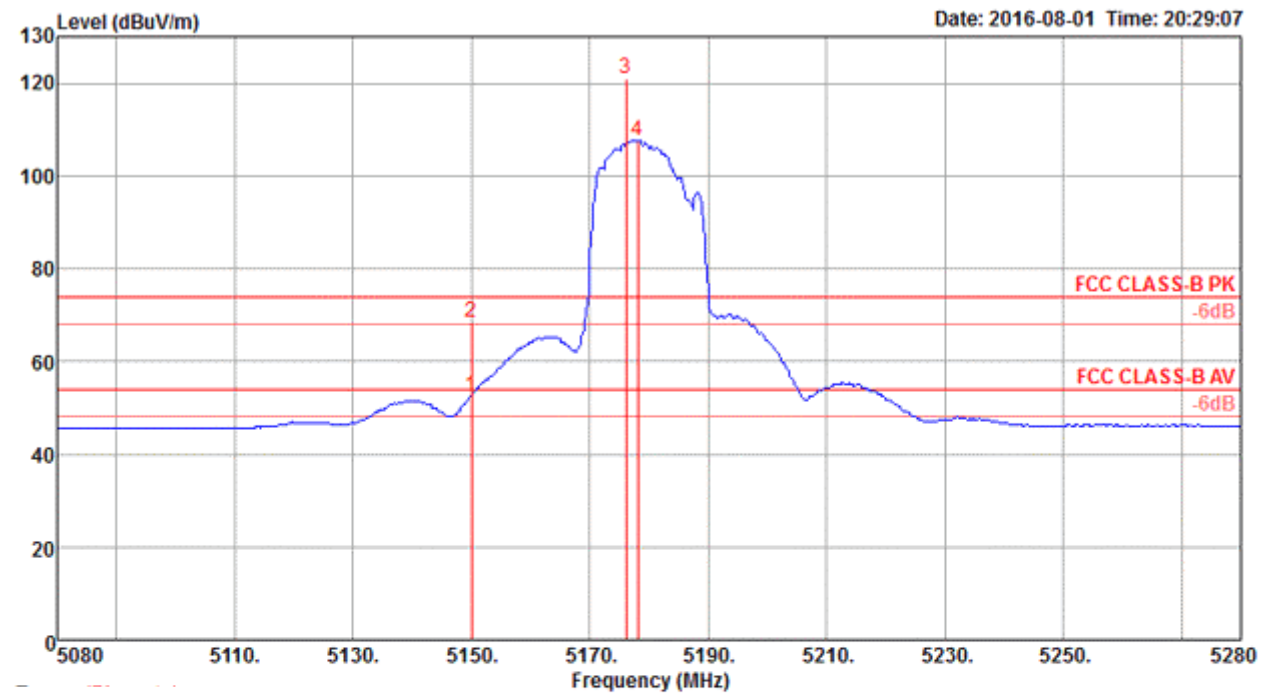


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5624.00	59.01	68.20	-9.19	50.81	6.78	34.38	32.96	114	148	Peak	VERTICAL
2	5827.40	104.61			96.17	6.96	34.50	33.02	114	148	Average	VERTICAL
3	5828.00	114.43			105.99	6.96	34.50	33.02	114	148	Peak	VERTICAL
4	6047.00	59.98	68.20	-8.22	51.38	7.05	34.61	33.06	114	148	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

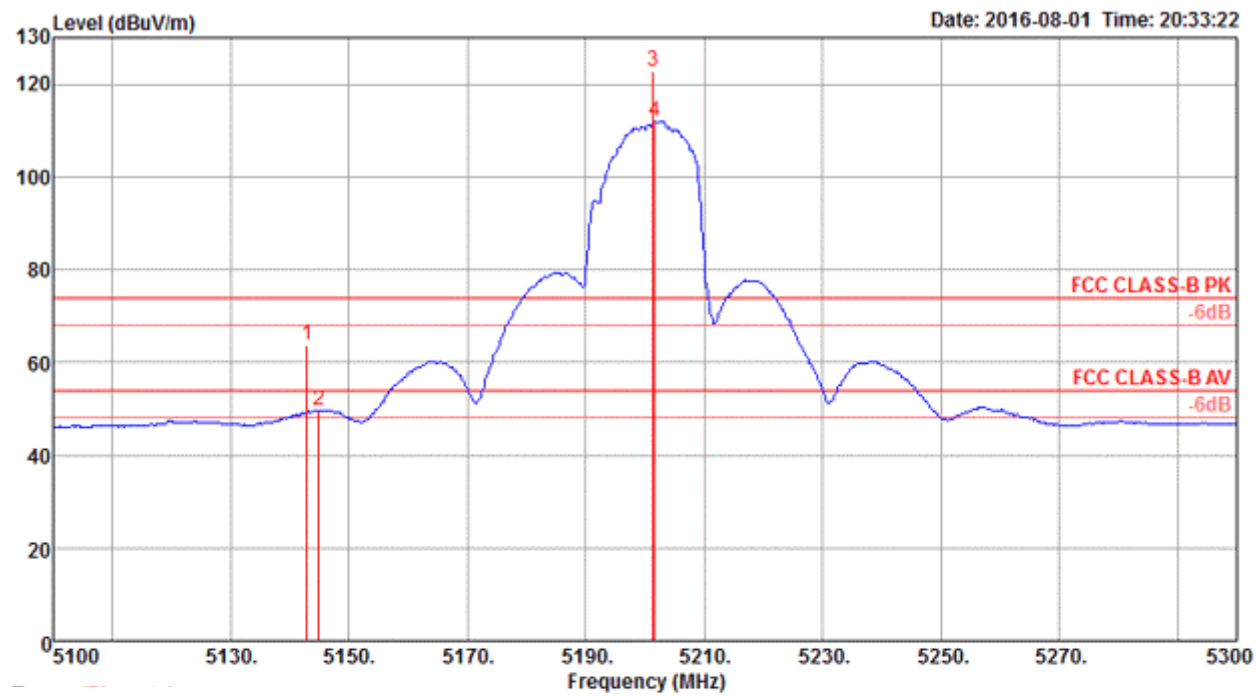
Channel 36



	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	5150.00	52.54	54.00	-1.46	45.28	6.44	33.74	32.92	196	332	Average	VERTICAL
2	5150.00	68.26	74.00	-5.74	61.00	6.44	33.74	32.92	196	332	Peak	VERTICAL
3	5176.15	120.95			113.61	6.47	33.79	32.92	196	332	Peak	VERTICAL
4	5178.08	107.57			100.23	6.47	33.79	32.92	196	332	Average	VERTICAL

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

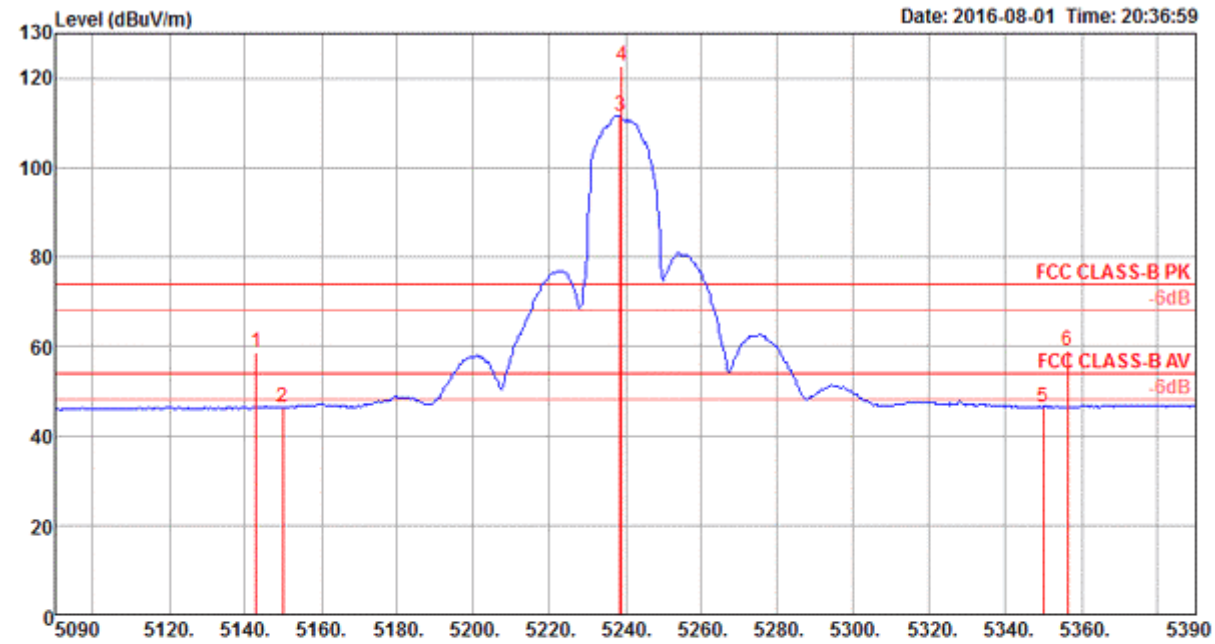
Channel 40



	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	5142.95	63.86	74.00	-10.14	56.60	6.44	33.74	32.92	121	13	Peak	VERTICAL
2	5144.87	49.56	54.00	-4.44	42.30	6.44	33.74	32.92	121	13	Average	VERTICAL
3	5201.28	122.77			115.39	6.48	33.82	32.92	121	13	Peak	VERTICAL
4	5201.60	111.76			104.35	6.49	33.84	32.92	121	13	Average	VERTICAL

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

Channel 48

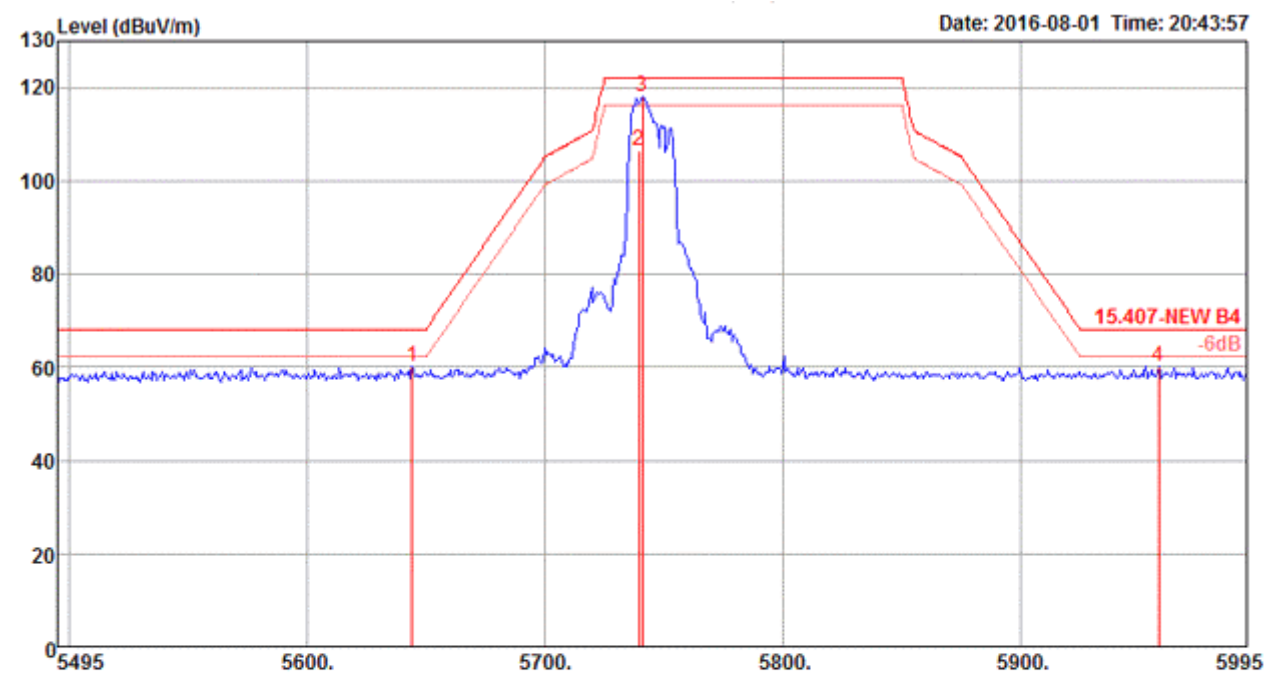


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5142.79	58.53	74.00	-15.47	51.27	6.44	33.74	32.92	106	186	Peak	VERTICAL
2	5150.00	46.27	54.00	-7.73	39.01	6.44	33.74	32.92	106	186	Average	VERTICAL
3	5238.56	111.55			104.06	6.52	33.89	32.92	106	186	Average	VERTICAL
4	5239.04	122.78			115.29	6.52	33.89	32.92	106	186	Peak	VERTICAL
5	5350.00	46.38	54.00	-7.62	38.63	6.61	34.06	32.92	106	186	Average	VERTICAL
6	5356.25	58.99	74.00	-15.01	51.21	6.62	34.08	32.92	106	186	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

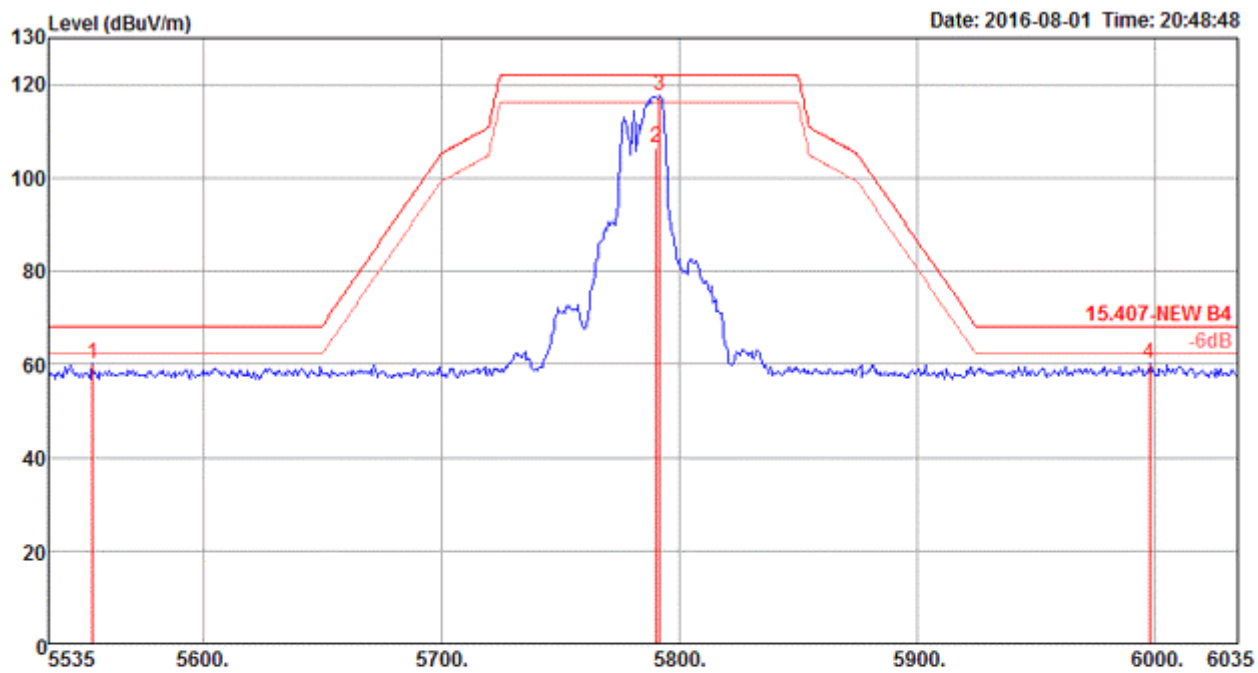
Channel 149



	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	5644.00	60.22	68.20	-7.98	52.00	6.80	34.39	32.97	197	60	Peak	VERTICAL
2	5739.39	106.56			98.20	6.90	34.45	32.99	197	60	Average	VERTICAL
3	5741.00	117.99			109.63	6.90	34.45	32.99	197	60	Peak	VERTICAL
4	5958.00	60.24	68.20	-7.96	51.73	6.99	34.57	33.05	197	60	Peak	VERTICAL

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

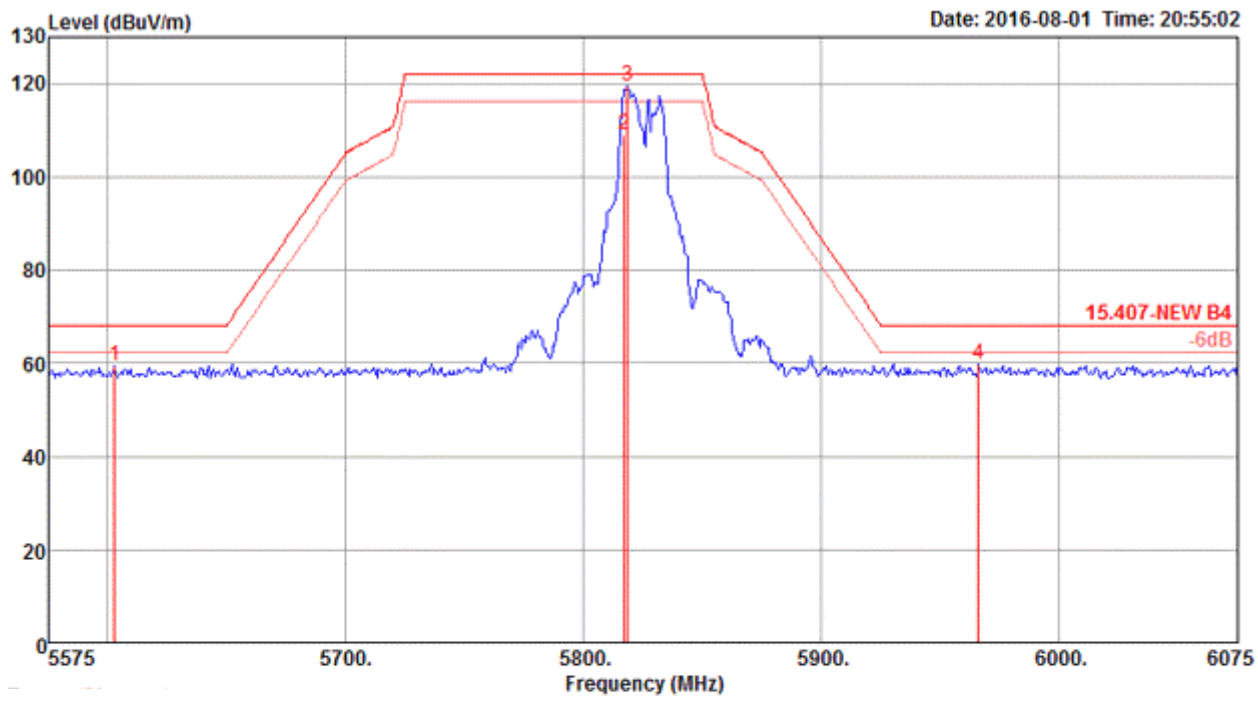
Channel 157



	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	5553.50	60.04	68.20	-8.16	51.92	6.73	34.33	32.94	197	140	Peak	VERTICAL
2	5790.61	106.35			97.93	6.95	34.48	33.01	197	140	Average	VERTICAL
3	5792.00	117.69			109.27	6.95	34.48	33.01	197	140	Peak	VERTICAL
4	5998.00	59.93	68.20	-8.27	51.39	7.00	34.60	33.06	197	140	Peak	VERTICAL

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

Channel 165

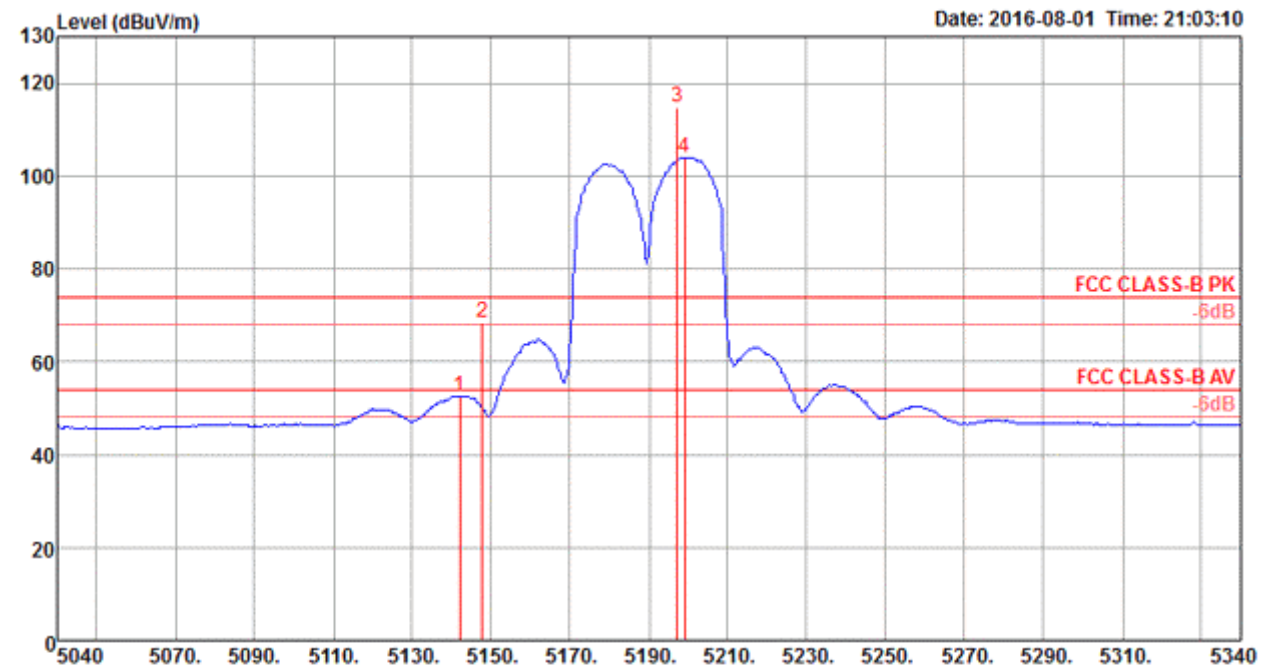


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5603.00	59.35	68.20	-8.85	51.20	6.75	34.36	32.96	123	54	Peak	VERTICAL
2	5816.99	108.82			100.39	6.95	34.49	33.01	123	54	Average	VERTICAL
3	5818.50	119.57			111.14	6.95	34.49	33.01	123	54	Peak	VERTICAL
4	5966.00	59.62	68.20	-8.58	51.10	6.99	34.58	33.05	123	54	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

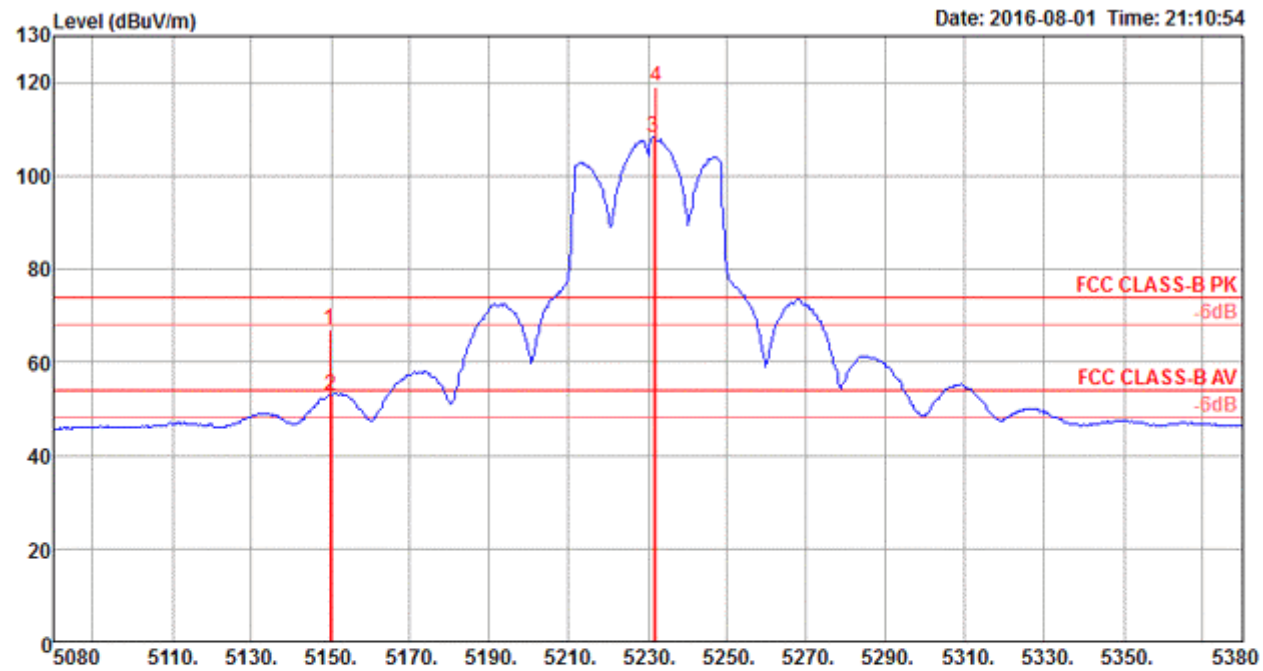
Channel 38



	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	5141.92	52.64	54.00	-1.36	45.38	6.44	33.74	32.92	145	1	Average	VERTICAL
2	5147.69	68.36	74.00	-5.64	61.10	6.44	33.74	32.92	145	1	Peak	VERTICAL
3	5197.21	114.92			107.54	6.48	33.82	32.92	145	1	Peak	VERTICAL
4	5199.14	104.06			96.68	6.48	33.82	32.92	145	1	Average	VERTICAL

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

Channel 46

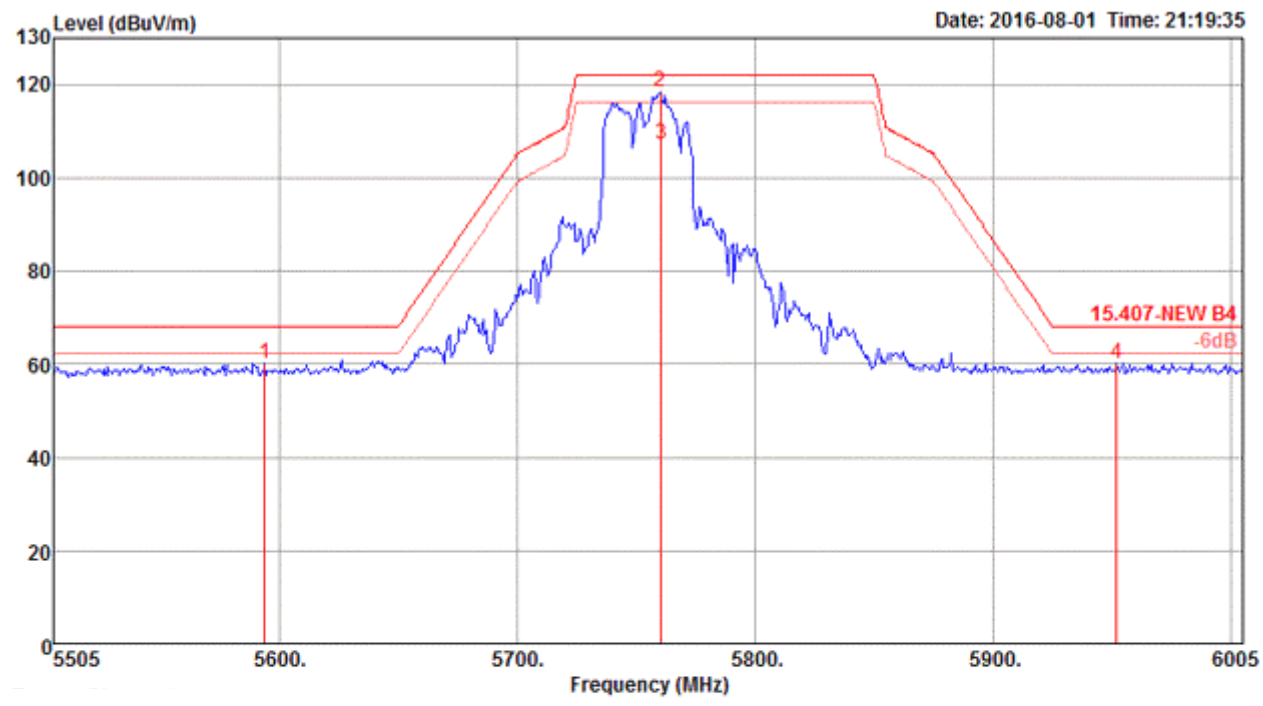


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.71	67.05	74.00	-6.95	59.79	6.44	33.74	32.92	121	184	Peak	VERTICAL
3	5231.44	108.15			100.70	6.51	33.86	32.92	121	184	Average	VERTICAL
4	5231.92	119.15			111.66	6.52	33.89	32.92	121	184	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

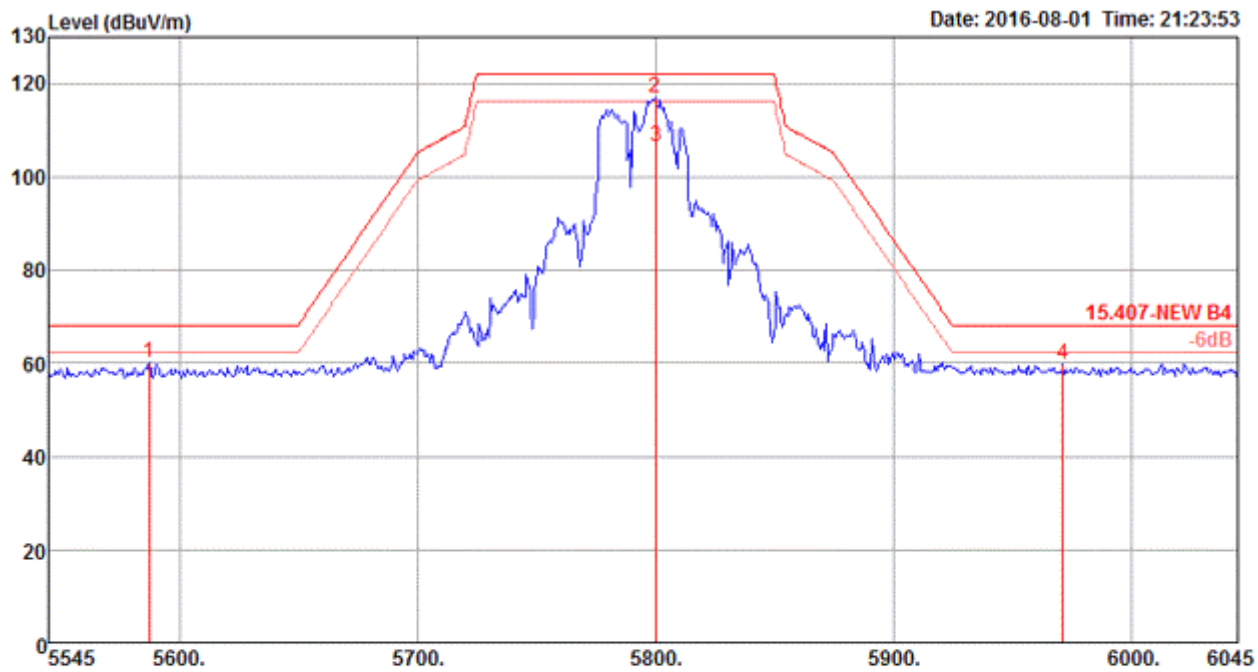
Channel 151



	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	5594.00	60.18	68.20	-8.02	52.02	6.75	34.36	32.95	116	7	Peak	VERTICAL
2	5760.00	118.35			109.97	6.92	34.46	33.00	116	7	Peak	VERTICAL
3	5760.61	107.18			98.80	6.92	34.46	33.00	116	7	Average	VERTICAL
4	5952.00	60.17	68.20	-8.03	51.66	6.99	34.57	33.05	116	7	Peak	VERTICAL

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

Channel 159

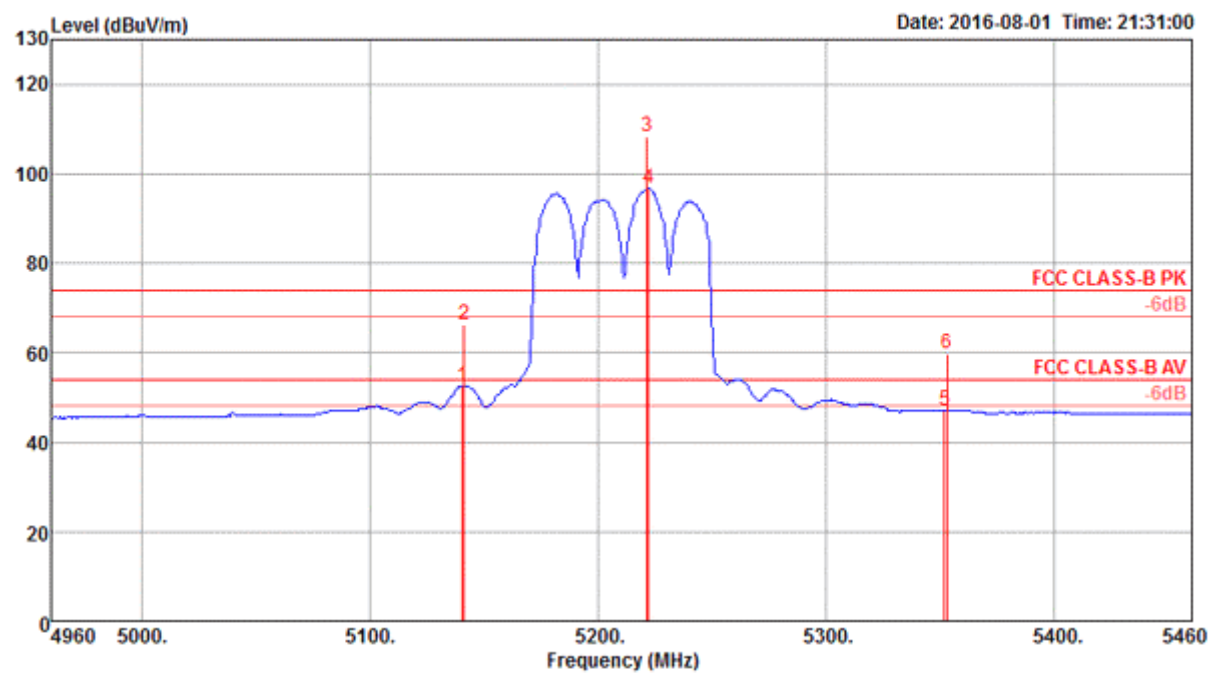


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5587.50	60.00	68.20	-8.20	51.86	6.74	34.35	32.95	197	104	Peak	VERTICAL
2	5800.00	116.86			108.44	6.95	34.48	33.01	197	104	Peak	VERTICAL
3	5800.61	106.40			97.98	6.95	34.48	33.01	197	104	Average	VERTICAL
4	5971.50	59.88	68.20	-8.32	51.36	6.99	34.58	33.05	197	104	Peak	VERTICAL

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

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

Channel 42

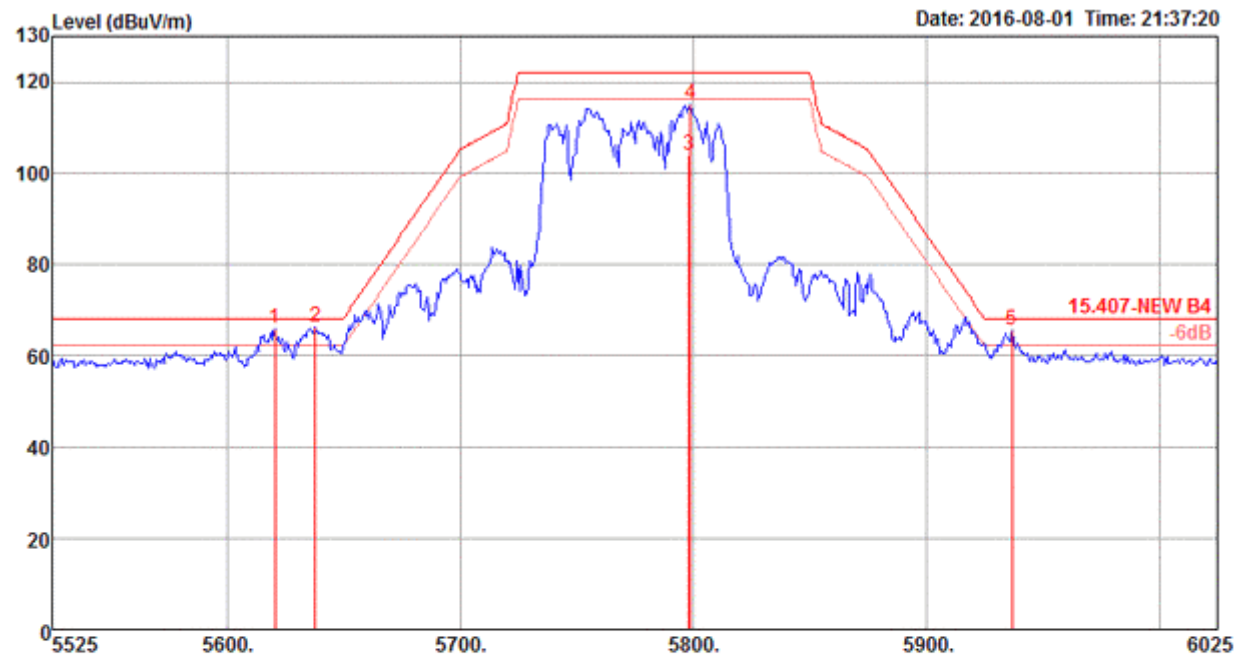


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5140.29	52.54	54.00	-1.46	45.31	6.43	33.72	32.92	122	7	Average	VERTICAL
2	5141.09	66.26	74.00	-7.74	59.03	6.43	33.72	32.92	122	7	Peak	VERTICAL
3	5221.22	108.17			100.72	6.51	33.86	32.92	122	7	Peak	VERTICAL
4	5222.02	96.73			89.28	6.51	33.86	32.92	122	7	Average	VERTICAL
5	5351.83	47.06	54.00	-6.94	39.31	6.61	34.06	32.92	122	7	Average	VERTICAL
6	5352.63	59.88	74.00	-14.12	52.13	6.61	34.06	32.92	122	7	Peak	VERTICAL

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

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

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	5620.50	65.90	68.20	-2.30	57.72	6.77	34.37	32.96	126	7	Peak	VERTICAL
2	5638.00	66.36	68.20	-1.84	58.17	6.78	34.38	32.97	126	7	Peak	VERTICAL
3	5798.24	103.92			95.50	6.95	34.48	33.01	126	7	Average	VERTICAL
4	5799.00	114.99			106.57	6.95	34.48	33.01	126	7	Peak	VERTICAL
5	5937.00	65.43	68.20	-2.77	56.94	6.98	34.56	33.05	126	7	Peak	VERTICAL

Item 3, 4 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	5199.9884	5199.9876	5199.9870	5199.9864
110.00	5199.9879	5199.9873	5199.9871	5199.9870
93.50	5199.9872	5199.9862	5199.9852	5199.9848
Max. Deviation (MHz)	0.0128	0.0138	0.0148	0.0152
Max. Deviation (ppm)	2.46	2.65	2.85	2.92
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5199.9925	5199.9917	5199.9914	5199.9911
-20	5199.9907	5199.9900	5199.9899	5199.9889
-10	5199.9897	5199.9894	5199.9884	5199.9881
0	5199.9892	5199.9887	5199.9885	5199.9881
10	5199.9887	5199.9881	5199.9875	5199.9865
20	5199.9879	5199.9878	5199.9868	5199.9859
30	5199.9877	5199.9873	5199.9872	5199.9868
40	5199.9861	5199.9853	5199.9845	5199.9838
50	5199.9849	5199.9843	5199.9838	5199.9833
Max. Deviation (MHz)	0.0151	0.0157	0.0162	0.0167
Max. Deviation (ppm)	2.90	3.02	3.12	3.21
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9884	5784.9878	5784.9871	5784.9864
110.00	5784.9879	5784.9873	5784.9872	5784.9862
93.50	5784.9877	5784.9873	5784.9868	5784.9861
Max. Deviation (MHz)	0.0123	0.0127	0.0132	0.0139
Max. Deviation (ppm)	2.13	2.20	2.28	2.40
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5784.9903	5784.9901	5784.9895	5784.9893
-20	5784.9897	5784.9893	5784.9888	5784.9878
-10	5784.9890	5784.9888	5784.9881	5784.9872
0	5784.9889	5784.9886	5784.9885	5784.9878
10	5784.9882	5784.9879	5784.9874	5784.9871
20	5784.9879	5784.9873	5784.9864	5784.9857
30	5784.9877	5784.9873	5784.9867	5784.9864
40	5784.9871	5784.9866	5784.9861	5784.9856
50	5784.9855	5784.9847	5784.9838	5784.9828
Max. Deviation (MHz)	0.0145	0.0153	0.0162	0.0172
Max. Deviation (ppm)	2.51	2.64	2.80	2.97
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	5189.9886	5189.9880	5189.9879	5189.9876
110.00	5189.9879	5189.9870	5189.9864	5189.9860
93.50	5189.9878	5189.9876	5189.9874	5189.9869
Max. Deviation (MHz)	0.0122	0.0130	0.0136	0.0140
Max. Deviation (ppm)	2.35	2.50	2.62	2.70
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5189.9939	5189.9931	5189.9929	5189.9924
-20	5189.9931	5189.9921	5189.9918	5189.9914
-10	5189.9921	5189.9918	5189.9909	5189.9903
0	5189.9907	5189.9898	5189.9896	5189.9894
10	5189.9894	5189.9887	5189.9880	5189.9870
20	5189.9879	5189.9878	5189.9871	5189.9870
30	5189.9877	5189.9873	5189.9867	5189.9861
40	5189.9868	5189.9866	5189.9858	5189.9857
50	5189.9864	5189.9862	5189.9859	5189.9851
Max. Deviation (MHz)	0.0136	0.0138	0.0142	0.0149
Max. Deviation (ppm)	2.62	2.66	2.74	2.87
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9884	5754.9876	5754.9873	5754.9864
110.00	5754.9879	5754.9878	5754.9873	5754.9869
93.50	5754.9874	5754.9865	5754.9864	5754.9858
Max. Deviation (MHz)	0.0126	0.0135	0.0136	0.0142
Max. Deviation (ppm)	2.19	2.35	2.36	2.47
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5754.9927	5754.9924	5754.9915	5754.9912
-20	5754.9918	5754.9913	5754.9907	5754.9900
-10	5754.9917	5754.9908	5754.9904	5754.9900
0	5754.9903	5754.9901	5754.9895	5754.9889
10	5754.9883	5754.9880	5754.9876	5754.9869
20	5754.9879	5754.9878	5754.9868	5754.9863
30	5754.9877	5754.9875	5754.9869	5754.9862
40	5754.9869	5754.9865	5754.9857	5754.9848
50	5754.9860	5754.9854	5754.9851	5754.9843
Max. Deviation (MHz)	0.0140	0.0146	0.0149	0.0157
Max. Deviation (ppm)	2.43	2.54	2.59	2.73
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	5209.9887	5209.9881	5209.9875	5209.9866
110.00	5209.9879	5209.9877	5209.9872	5209.9868
93.50	5209.9871	5209.9865	5209.9859	5209.9850
Max. Deviation (MHz)	0.0129	0.0135	0.0141	0.0150
Max. Deviation (ppm)	2.48	2.59	2.71	2.88
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5209.9922	5209.9913	5209.9908	5209.9901
-20	5209.9907	5209.9906	5209.9898	5209.9891
-10	5209.9904	5209.9902	5209.9899	5209.9889
0	5209.9900	5209.9891	5209.9886	5209.9879
10	5209.9896	5209.9886	5209.9876	5209.9868
20	5209.9879	5209.9873	5209.9870	5209.9860
30	5209.9877	5209.9869	5209.9859	5209.9855
40	5209.9859	5209.9849	5209.9839	5209.9835
50	5209.9854	5209.9845	5209.9837	5209.9828
Max. Deviation (MHz)	0.0146	0.0155	0.0163	0.0172
Max. Deviation (ppm)	2.80	2.98	3.13	3.30
Result	Pass			

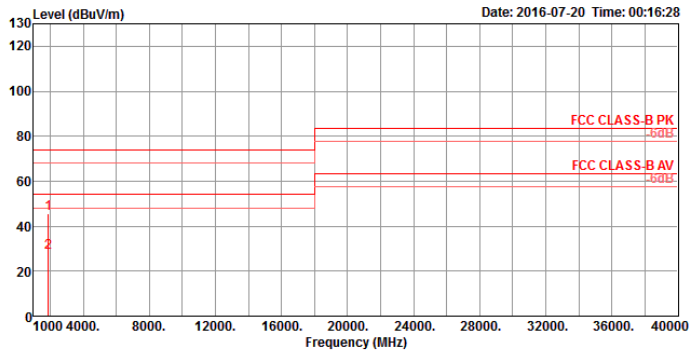
Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9884	5774.9882	5774.9876	5774.9873
110.00	5774.9879	5774.9876	5774.9872	5774.9868
93.50	5774.9870	5774.9861	5774.9858	5774.9853
Max. Deviation (MHz)	0.0130	0.0139	0.0142	0.0147
Max. Deviation (ppm)	2.25	2.41	2.46	2.55
Result	Pass			

Temperature vs. Frequency Stability

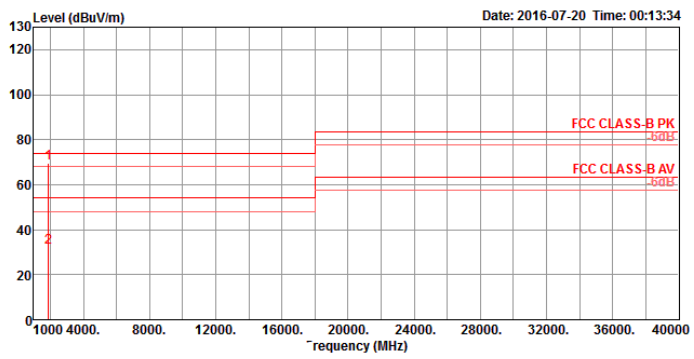
Temperature	Measurement Frequency (MHz)			
(℃)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5774.9920	5774.9914	5774.9910	5774.9907
-20	5774.9912	5774.9910	5774.9909	5774.9907
-10	5774.9900	5774.9899	5774.9894	5774.9884
0	5774.9897	5774.9893	5774.9883	5774.9877
10	5774.9885	5774.9878	5774.9870	5774.9860
20	5774.9879	5774.9878	5774.9868	5774.9863
30	5774.9877	5774.9872	5774.9866	5774.9865
40	5774.9857	5774.9851	5774.9846	5774.9841
50	5774.9842	5774.9836	5774.9835	5774.9826
Max. Deviation (MHz)	0.0158	0.0164	0.0165	0.0174
Max. Deviation (ppm)	2.74	2.84	2.86	3.01
Result	Pass			

RSE Co-location Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



	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	1878.92	45.75	74.00	-28.25	47.39	5.07	26.02	32.73	100	320	Peak	HORIZONTAL
2	1880.04	28.35	54.00	-25.65	29.99	5.07	26.02	32.73	100	320	Average	HORIZONTAL

RSE Co-location Result			
Operating Mode	1	**Power Phase**	Vertical
Operating Function	Normal Link		



	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	1880.76	69.74	74.00	-4.26	71.36	5.08	26.03	32.73	100	132	Peak	VERTICAL
2	1882.76	32.10	54.00	-21.90	33.72	5.08	26.03	32.73	100	132	Average	VERTICAL