FCC RADIO TEST REPORT

FCC ID	:	Z8H89FT0051
Equipment	:	cnPilot e510 Outdoor
Brand Name	:	Cambium Networks
Model Name	:	REG-PL-E510
Applicant	:	Cambium Networks Inc. 3800 Golf Road, Suite 360 Rolling Meadows, IL 60008, USA
Manufacturer	:	Cambium Networks, Ltd. Ashburton, TQ13 7UP, UK
Standard	:	47 CFR FCC Part 15.407

The product was received on Nov. 01, 2018, and testing was started from Nov. 01, 2018 and completed on Feb. 14, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Cliff Chang

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FR870416-03AB	01	Initial issue of report	Nov. 28, 2018
FR870416-03AB	02	1. Changing Equipment and Model Name to “REG-PL-E510” from “cnPilot Outdoor E510” 2. Changing photograpsh of EUT version to “v02” from “v01”	Dec. 06, 2018
FR870416-03AB	03	Changing Equipment Name to “cnPilot e510 Outdoor” from “REG-PL-E510”	Dec. 18, 2018
FR870416-03AB	04	1. Changing Manufacturer Name to “Cambium Networks, Ltd.” from “Cambium Networks Inc.” 2. Changing Manufacturer address to “Ashburton, TQ13 7UP, UK” from “3800 Golf Road, Suite 360 Rolling Meadows, IL 60008, USA” 3. Adding the Unwanted Emissions results for 802.11 ac VHT20/Ch. 5180MHz and 802.11 ac VHT80/Ch. 5775MHz, the specification of test configurations and test modes were based on manufacturer's request.	Feb. 28, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:
The judgment of conformity in the report is based on the measurement results excluding the measurement uncertainty.
Comments and Explanations:
1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer. 2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Wendy Pan

1 General Description

1.1 Information

1.1.1 RF General Information

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

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2TX
5.15-5.25GHz	802.11n HT20	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11n HT40	40	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11a	20	2TX
5.725-5.85GHz	802.11n HT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11n HT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX

Note:
- 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.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	Accton	120G00000194A	PCB Antenna	I-PEX	8.4
2	2	Accton	120G00000195A	PCB Antenna	I-PEX	8.4
3	3	Accton	120G00000196A	PCB Antenna	I-PEX	8.9
4	4	Accton	120G00000197A	PCB Antenna	I-PEX	8.9

Note: The EUT has four antennas.
For 2.4GHz function:
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
For 5GHz function:
Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 3 and Port 4 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.963	0.164	2.066m	1k
802.11ac VHT20	0.983	0.074	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.96	0.177	2.43m	1k
802.11ac VHT80	0.916	0.381	1.142m	1k

1.1.4 EUT Operational Condition

EUT Power Type	From PoE			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Outdoor P2M	☐	Indoor P2M
	☐	Fixed P2P	☐	Client
Test Software Version	QRCT: 3.0.187.0			

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 v02r01
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location			
☐	HWA YA	ADD :	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)
		TEL :	886-3-327-3456 FAX : 886-3-327-0973
☒	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	Serway Li	25°C / 60%	Nov. 02, 2018 ~ Feb. 14, 2019
Radiated Above 1GHz For Cabinet test	03CH01-CB	Eason Chen	25°C / 60%	Nov. 12, 2018
Radiated Above 1GHz For Others test	03CH01-CB	Eason Chen	25 ~ 26°C / 60~62%	Feb. 14, 2019
Radiated Below 1GHz	03CH01-CB	Jay Luo	25°C / 60%	Nov. 01, 2018
AC Conduction	CO01-CB	Howard Liu	22°C / 55%	Nov. 08, 2018

Test site Designation No. TW0006 with FCC
Test site registered number IC 4086B 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)	2.0 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%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74×10^{-8}	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Based on conducted spurious emission test:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	14.5
5200MHz	14.5
5240MHz	14.5
5745MHz	23.5
5785MHz	24
5825MHz	24
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	14.5
5200MHz	14.5
5240MHz	14.5
5745MHz	23.5
5785MHz	24
5825MHz	24
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	13.5
5230MHz	14
5755MHz	23.5
5795MHz	23.5
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	13
5775MHz	20

Based For radiated spurious emission:

Mode	PowerSetting
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	18.5
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5775MHz	21

Note: 1. VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.
2. For the test result is for manufacturer's reference only and is not applicable to certificated.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	EUT with PoE

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density Unwanted Emissions (Above 1GHz)
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	EUT with PoE
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA870416-03 for Co-location RF Exposure Evaluation.	

Note 1: The EUT can only be used in Y axis positon.
Note 2: PoE information as below:

The EUT was powered by PoE, and the PoE was for measurement only, would not be marked.

Support Unit	Brand Name	Model Name
PoE	Cambium Networks	NET-P15-56IN

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

N/A

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	LAN NB	DELL	E6430	N/A
B	PoE	Cambium Networks	NET-P15-56IN	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G NB	DELL	E6430	N/A

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

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	2.4G NB	DELL	E4300	N/A
B	5G NB	DELL	E4300	N/A
C	LAN NB	DELL	E4300	N/A
D	PoE	Cambium Networks	NET-P15-56IN	N/A

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

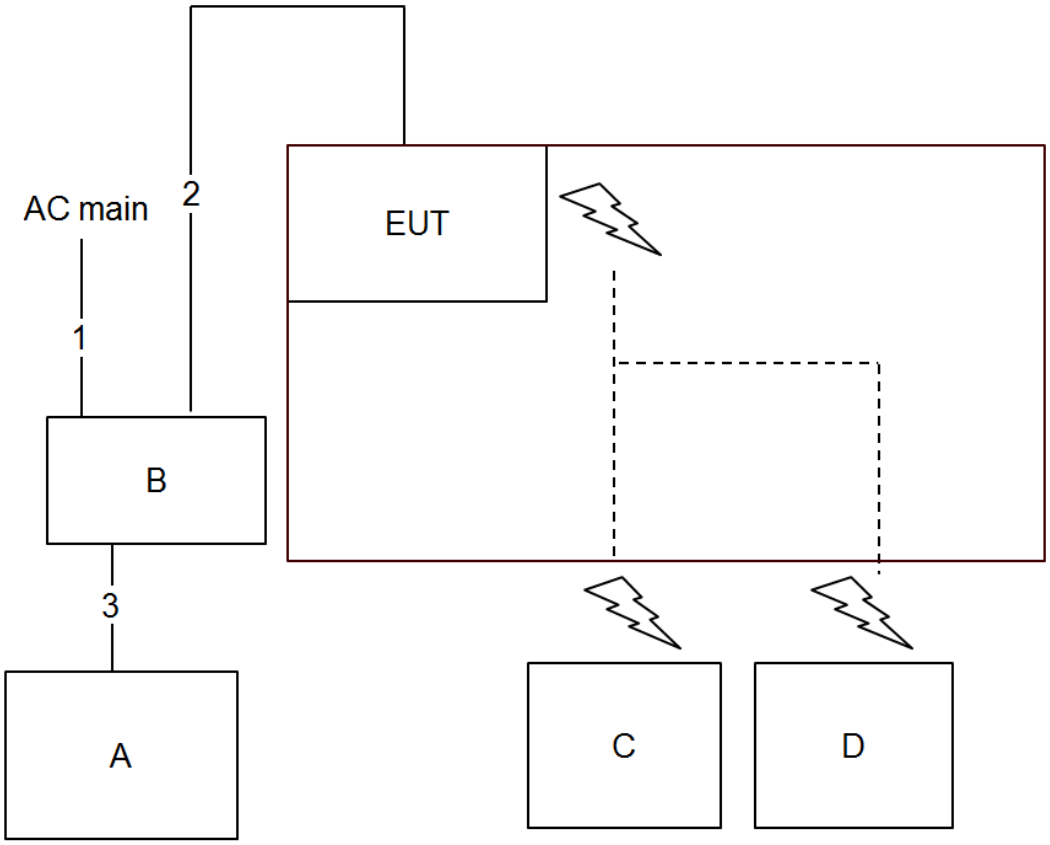
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	PoE	Cambium Networks	NET-P15-56IN	N/A

For Test Site No: TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	PoE	Cambium Networks	NET-P15-56IN	N/A

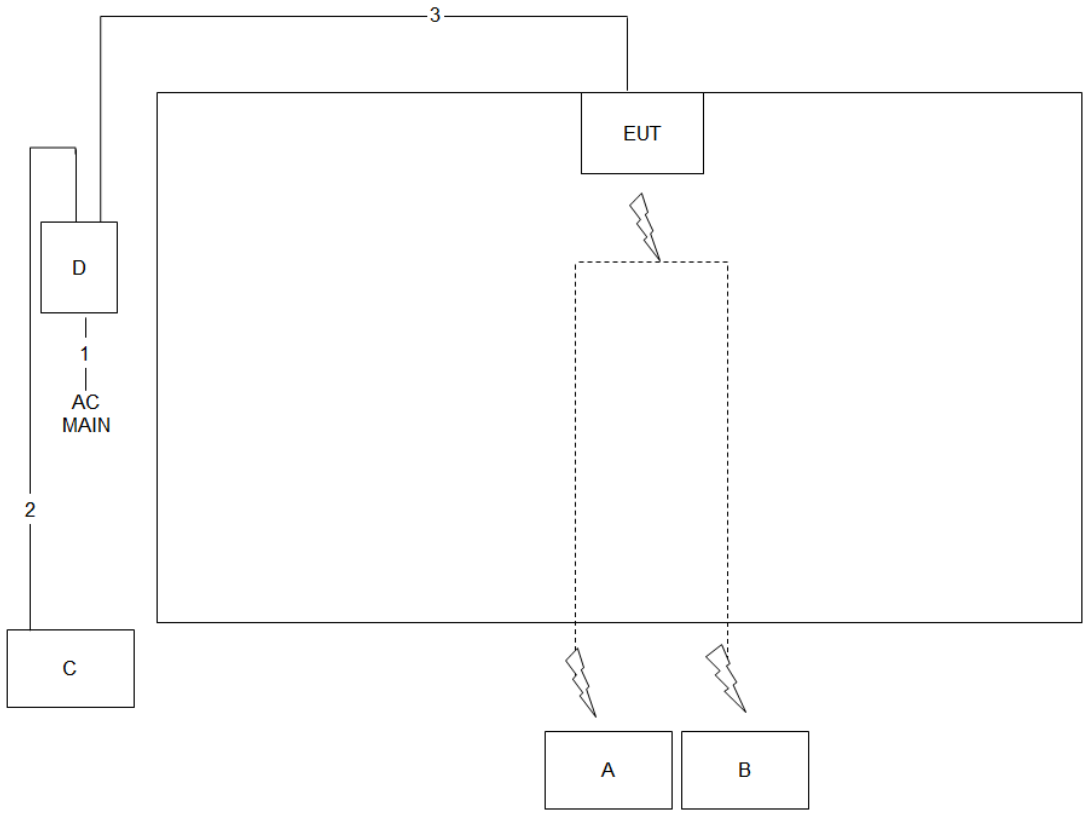
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



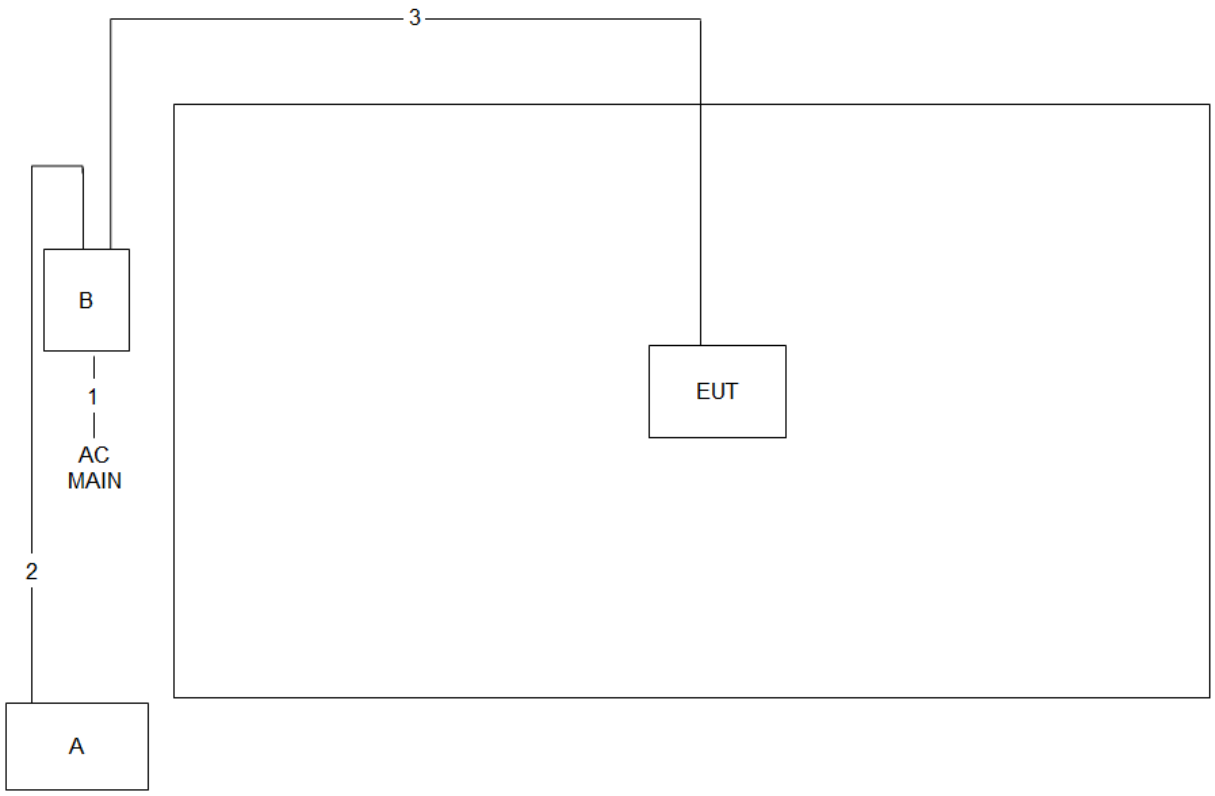
Item	Connection	Shielded	Length
1	Power cable	No	0.9m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	0.9m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	0.9m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

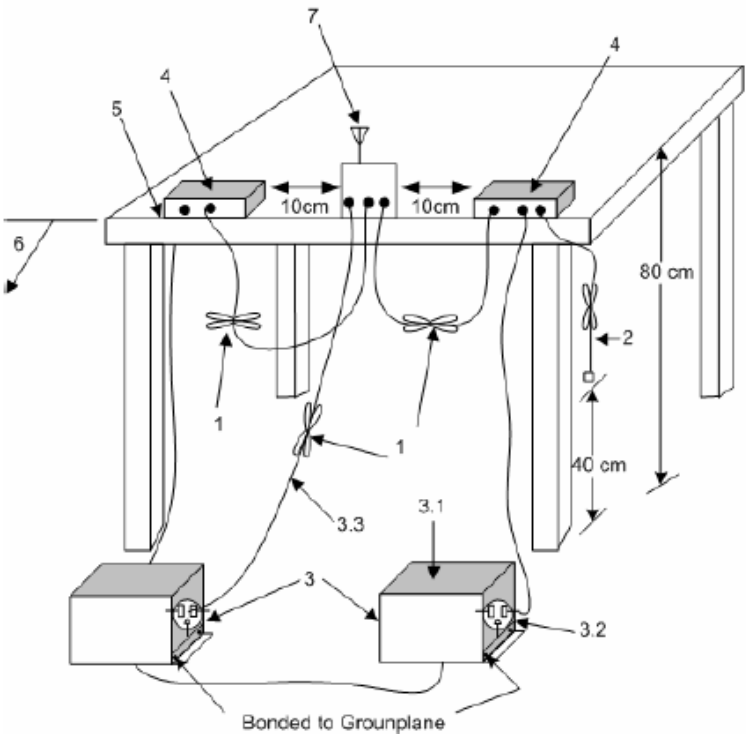
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

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.

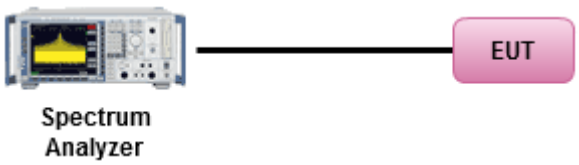
3.2.2 Measuring Instruments

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, 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	
	Average over on/off periods with duty factor
	☐ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☒ Refer as FCC KDB 789033, 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 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.
	▪ 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.
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

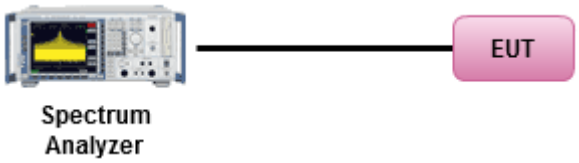
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method		
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:		
	☐ Refer as FCC KDB 789033, 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, clause E Method SA-1 (spectral trace averaging).	
	☐ Refer as FCC KDB 789033, 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, clause E Method SA-2 (spectral trace averaging).	
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
▪ For conducted measurement.		
	▪ If the EUT supports multiple transmit chains using options given below:	
		☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
	▪	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
☒ 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☐ 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☐ 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.725 - 5.85 GHz	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, clause H)2) for unwanted emissions into non-restricted bands.	
	▪ Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.	
		☐ Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).
		☒ Refer as FCC KDB 789033, 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, 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.		

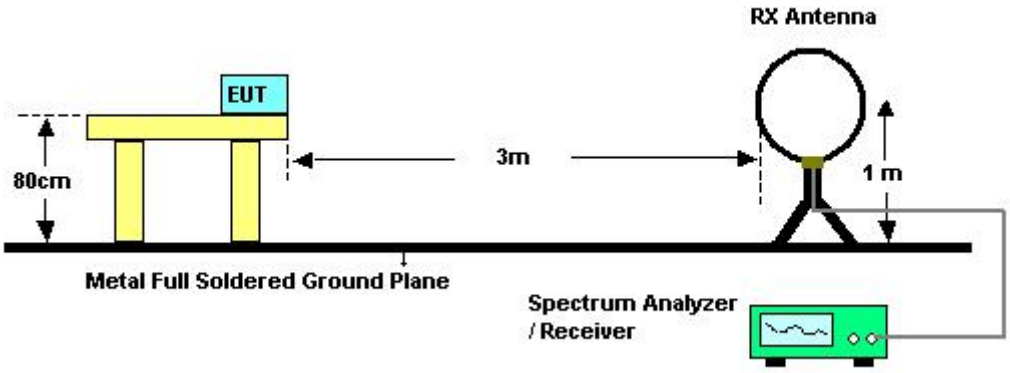
Test Method	
	▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
▪ The any unwanted emissions 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.	

Test Method	
▪ For conducted and cabinet radiation measurement, refer as FCC KDB 789033, clause H)3).	
	▪ For conducted unwanted emissions into non-restricted bands (relative emission limits). Devices with multiple transmit chains: Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding 10 log(N) if the measurements are made relative to the in-band emissions on the individual outputs.
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

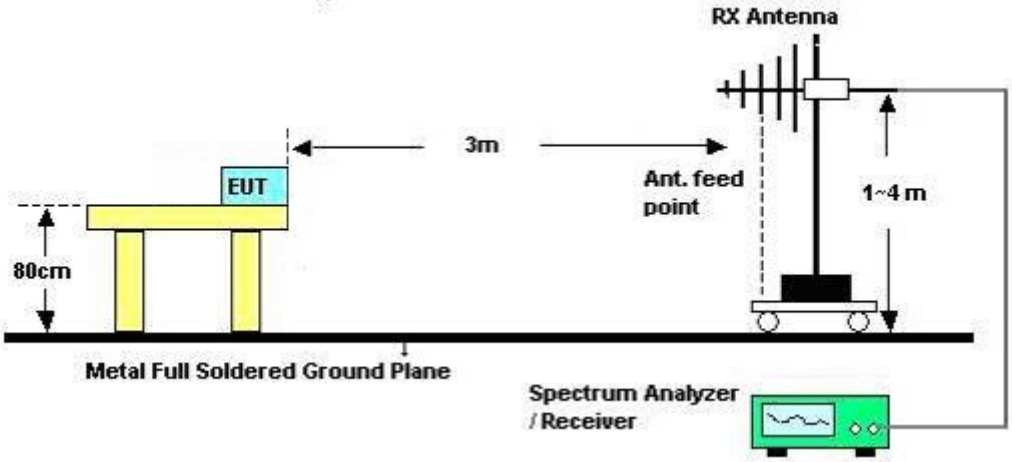
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

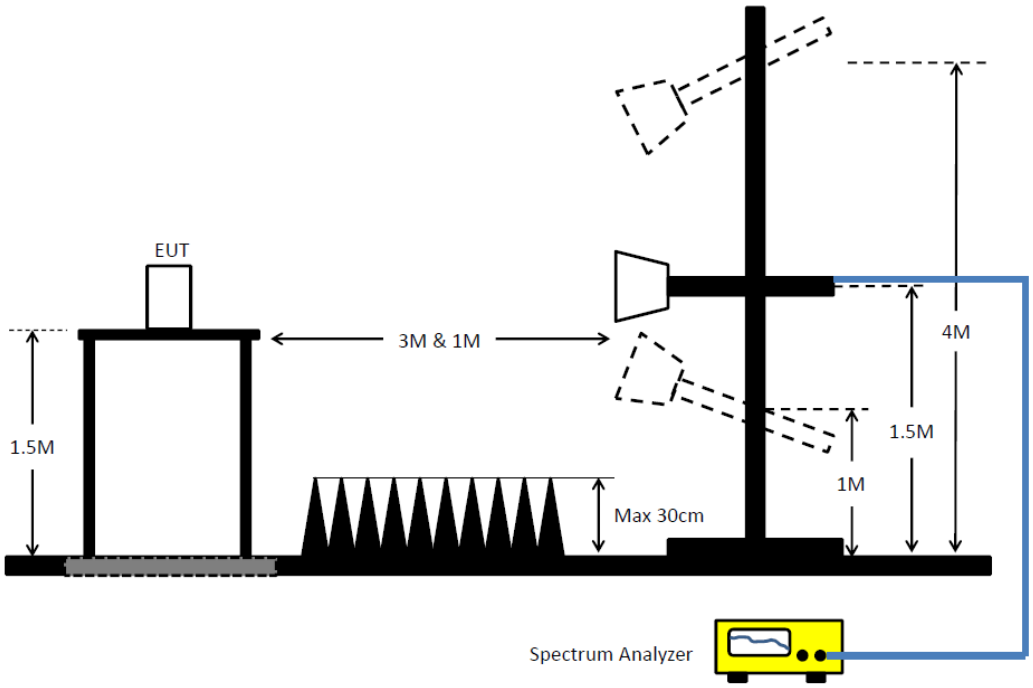
9kHz ~30MHz



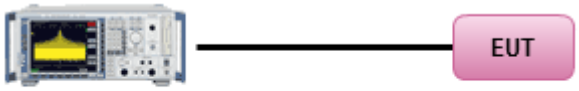
30MHz~1GHz



Above 1GHz



Transmitter Conducted Unwanted Emissions



Spectrum Analyzer

3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 31, 2018	Jan. 30, 2019	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 20, 2017	Dec. 19, 2018	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 29, 2017	Dec. 28, 2018	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	150kHz ~ 30MHz	May 22, 2018	May 21, 2019	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 27, 2018	Aug. 26, 2019	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2018	Mar. 15, 2019	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 20, 2017	Nov. 19, 2018	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 13, 2018	Nov. 12, 2019	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 28, 2018	Jun. 27, 2019	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2018	May 01, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 09, 2018	Jan. 08, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2019	Jan. 07, 2020	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 23, 2017	Nov. 22, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Jan. 31, 2019	Jan. 30, 2020	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100354	9kHz ~ 2.75GHz	Dec. 08, 2017	Dec. 07, 2018	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	100359	9kHz ~ 2.75GHz	Jul. 03, 2018	Jul. 02, 2019	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 21, 2017	Dec. 20, 2018	Conducted (TH01-CB)
Spectrum Analyzer	R&S	FSP-40	100019	9kHz ~ 40GHz	Apr. 25, 2018	Apr. 24, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY54320014	50MHz~18GHz	Apr. 17, 2018	Apr. 16, 2019	Conducted (TH01-CB)

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

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

Summary

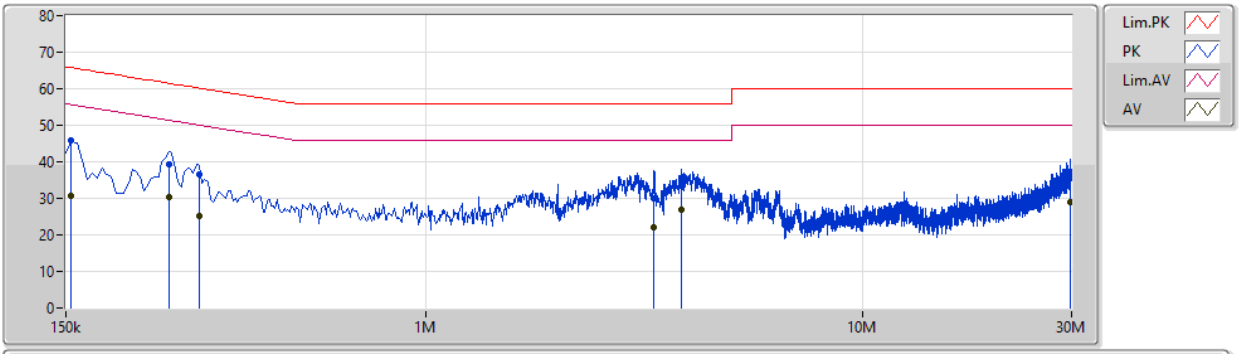
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 1	Pass	AV	3.971M	27.14	46.00	-18.86	10.11	Neutral

Mode Configure

Mode	Configure
Mode 1	EUT with PoE

Mode 1

08/11/2018

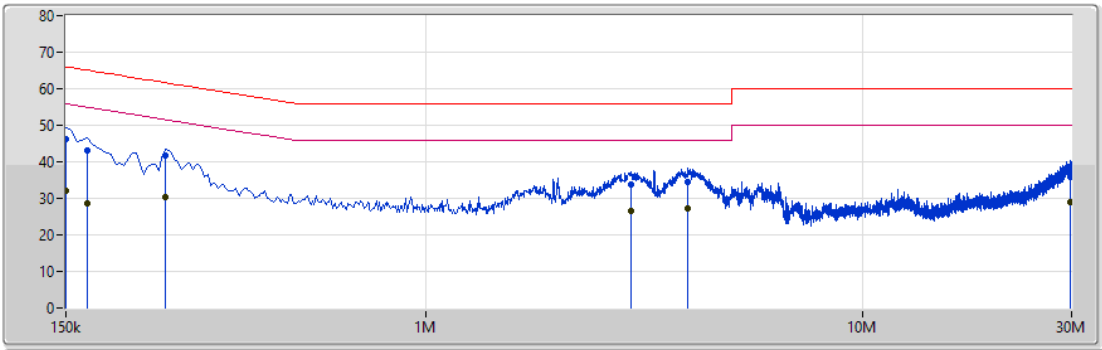


NO : H
EUT : cnPilot Outdoor E510
Power : 120V
Mode : normal+POE
Memo :

Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	45.88	65.75	-19.87	10.07	Line	-	35.81	9.91	0.16	-
AV	154.5k	30.70	55.75	-25.05	10.07	Line	-	20.63	9.91	0.16	-
QP	258k	39.33	61.49	-22.16	10.04	Line	-	29.29	9.91	0.13	-
AV	258k	30.29	51.49	-21.20	10.04	Line	-	20.25	9.91	0.13	-
QP	303k	36.67	60.17	-23.50	10.04	Line	-	26.63	9.91	0.13	-
AV	303k	25.34	50.17	-24.83	10.04	Line	-	15.30	9.91	0.13	-
QP	3.327M	30.10	56.00	-25.90	10.13	Line	-	19.97	9.97	0.16	-
AV	3.327M	21.90	46.00	-24.10	10.13	Line	-	11.77	9.97	0.16	-
QP	3.84M	34.16	56.00	-21.84	10.12	Line	-	24.04	9.98	0.14	-
AV	3.84M	26.86	46.00	-19.14	10.12	Line	"Worst"	16.74	9.98	0.14	-
QP	29.747M	35.62	60.00	-24.38	10.94	Line	-	24.68	10.65	0.29	-
AV	29.747M	28.87	50.00	-21.13	10.94	Line	-	17.93	10.65	0.29	-

Mode 1

08/11/2018



NO : H
EUT : cnPilot Outdoor E510
Power : 120V
Mode : normal+POE
Memo :

Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	46.35	66.00	-19.65	10.08	Neutral	-	36.27	9.92	0.16	-
AV	150k	31.99	56.00	-24.01	10.08	Neutral	-	21.91	9.92	0.16	-
QP	168k	43.14	65.06	-21.92	10.07	Neutral	-	33.07	9.92	0.15	-
AV	168k	28.72	55.06	-26.34	10.07	Neutral	-	18.65	9.92	0.15	-
QP	253.5k	41.82	61.64	-19.82	10.05	Neutral	-	31.77	9.92	0.13	-
AV	253.5k	30.43	51.64	-21.21	10.05	Neutral	-	20.38	9.92	0.13	-
QP	2.954M	33.82	56.00	-22.18	10.14	Neutral	-	23.68	9.97	0.17	-
AV	2.954M	26.59	46.00	-19.41	10.14	Neutral	-	16.45	9.97	0.17	-
QP	3.971M	34.49	56.00	-21.51	10.11	Neutral	-	24.38	9.98	0.13	-
AV	3.971M	27.14	46.00	-18.86	10.11	Neutral	"Worst"	17.03	9.98	0.13	-
QP	29.747M	35.71	60.00	-24.29	10.74	Neutral	-	24.97	10.45	0.29	-
AV	29.747M	28.87	50.00	-21.13	10.74	Neutral	-	18.13	10.45	0.29	-

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.075M	16.417M	16M4D1D	18.9M	16.392M
802.11ac VHT20_Nss1,(MCS0)_2TX	20M	17.616M	17M6D1D	19.8M	17.566M
802.11ac VHT40_Nss1,(MCS0)_2TX	39.55M	36.032M	36M0D1D	39.45M	35.982M
802.11ac VHT80_Nss1,(MCS0)_2TX	83.7M	75.862M	75M9D1D	83.3M	75.662M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.35M	16.442M	16M4D1D	16.325M	16.442M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.6M	17.641M	17M6D1D	17.55M	17.616M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.55M	36.132M	36M1D1D	34.45M	35.982M
802.11ac VHT80_Nss1,(MCS0)_2TX	76.4M	75.962M	76M0D1D	76.4M	75.862M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

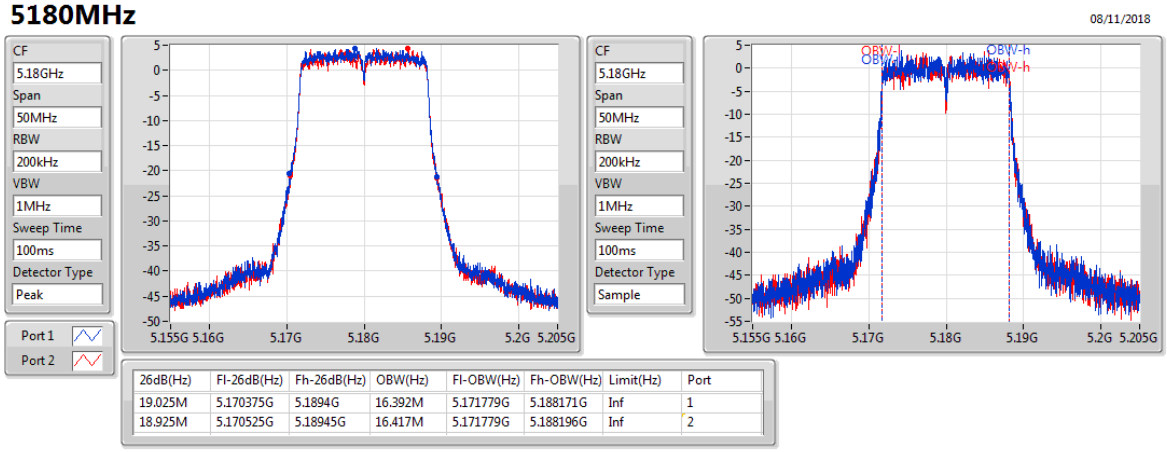
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.025M	16.392M	18.925M	16.417M
5200MHz	Pass	Inf	19.075M	16.392M	18.925M	16.392M
5240MHz	Pass	Inf	19.075M	16.392M	18.9M	16.417M
5745MHz	Pass	500k	16.35M	16.442M	16.325M	16.442M
5785MHz	Pass	500k	16.325M	16.442M	16.325M	16.442M
5825MHz	Pass	500k	16.325M	16.442M	16.325M	16.442M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.975M	17.616M	19.925M	17.591M
5200MHz	Pass	Inf	19.975M	17.566M	19.8M	17.591M
5240MHz	Pass	Inf	20M	17.591M	19.85M	17.591M
5745MHz	Pass	500k	17.575M	17.616M	17.6M	17.616M
5785MHz	Pass	500k	17.575M	17.616M	17.6M	17.616M
5825MHz	Pass	500k	17.55M	17.641M	17.55M	17.616M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.5M	35.982M	39.45M	35.982M
5230MHz	Pass	Inf	39.55M	35.982M	39.45M	36.032M
5755MHz	Pass	500k	35.05M	36.032M	35.55M	36.132M
5795MHz	Pass	500k	35.3M	35.982M	34.45M	36.032M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	83.7M	75.862M	83.3M	75.662M
5775MHz	Pass	500k	76.4M	75.962M	76.4M	75.862M

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

802.11a_Nss1,(6Mbps)_2TX **EBW**

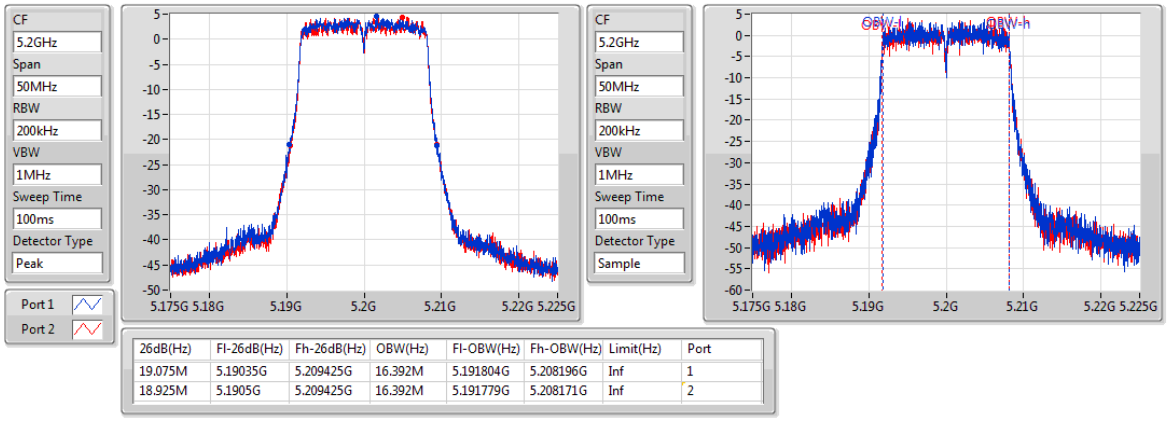
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.025M	5.170375G	5.1894G	16.392M	5.171779G	5.188171G	Inf	1
18.925M	5.170525G	5.18945G	16.417M	5.171779G	5.188196G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

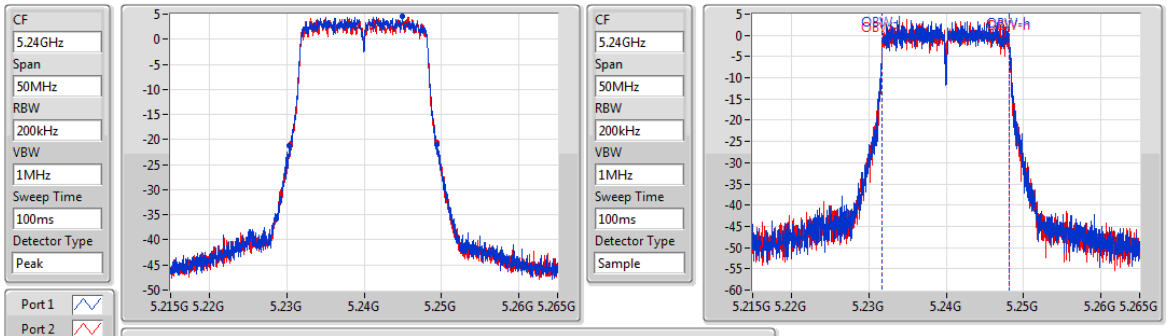
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.075M	5.19035G	5.209425G	16.392M	5.191804G	5.208196G	Inf	1
18.925M	5.1905G	5.209425G	16.392M	5.191779G	5.208171G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

5240MHz

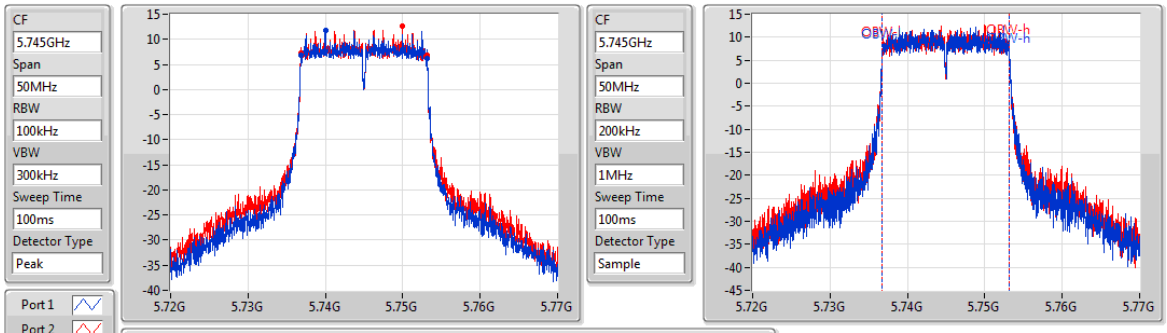


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.075M	5.230325G	5.2494G	16.392M	5.231779G	5.248171G	Inf	1
18.9M	5.2305G	5.2494G	16.417M	5.231779G	5.248196G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

5745MHz

08/11/2018

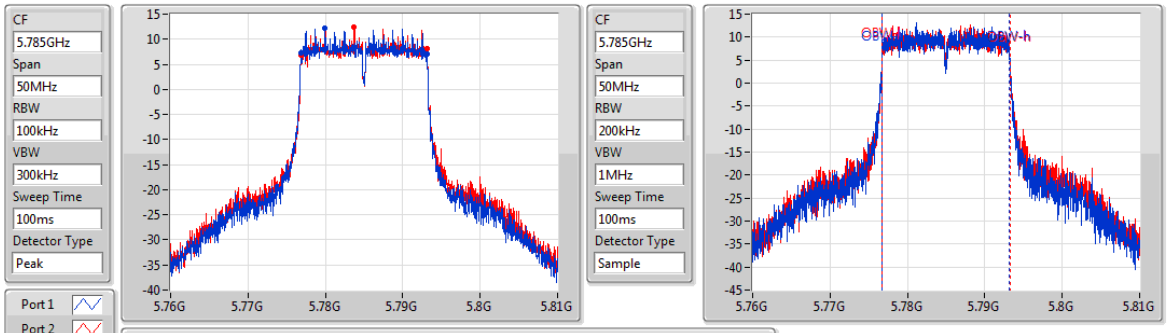


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	5.736825G	5.753175G	16.442M	5.736754G	5.753196G	500k	1
16.325M	5.736825G	5.75315G	16.442M	5.736754G	5.753196G	500k	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

5785MHz

08/11/2018

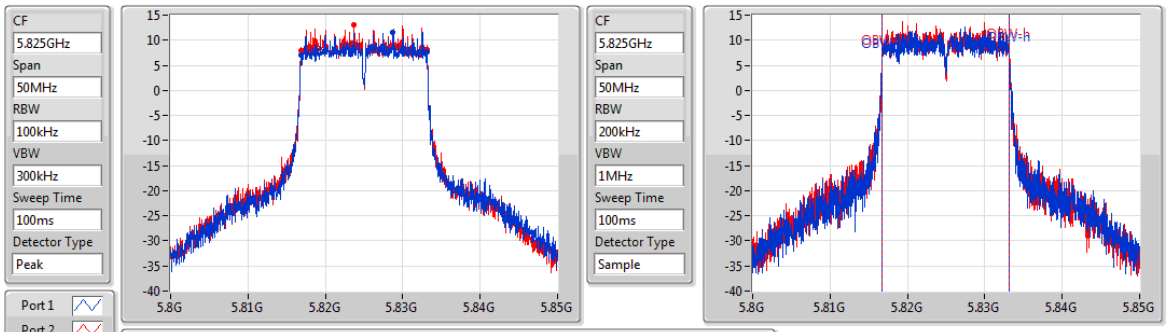


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.776825G	5.79315G	16.442M	5.776754G	5.793196G	500k	1
16.325M	5.776825G	5.79315G	16.442M	5.776779G	5.793221G	500k	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

5825MHz

08/11/2018

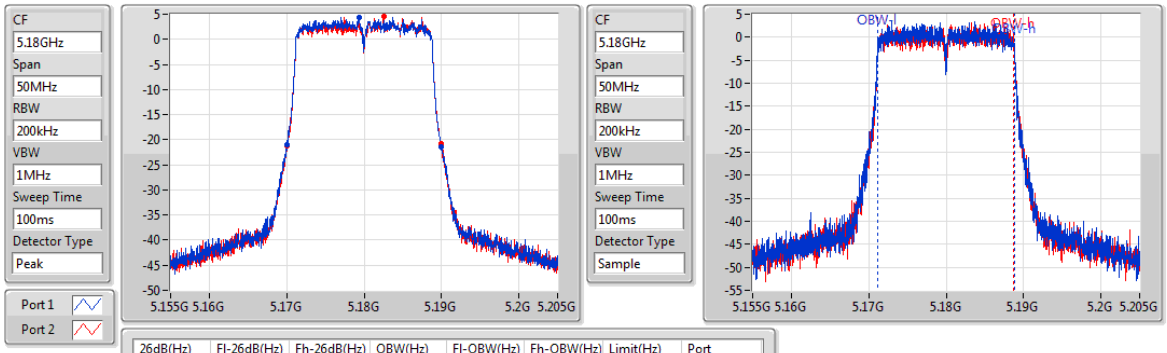


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.816825G	5.83315G	16.442M	5.816754G	5.833196G	500k	1
16.325M	5.816825G	5.83315G	16.442M	5.816754G	5.833196G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5180MHz

08/11/2018

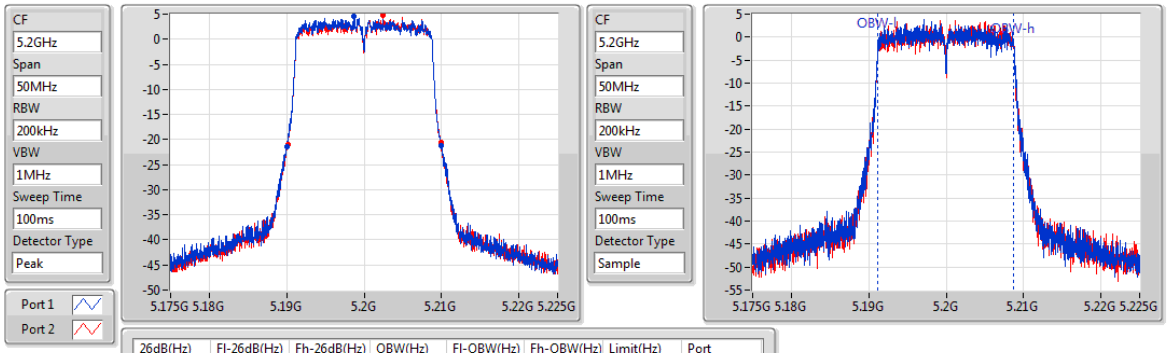


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.975M	5.170025G	5.19G	17.616M	5.171179G	5.188796G	Inf	1
19.925M	5.17005G	5.189975G	17.591M	5.171179G	5.188771G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5200MHz

08/11/2018

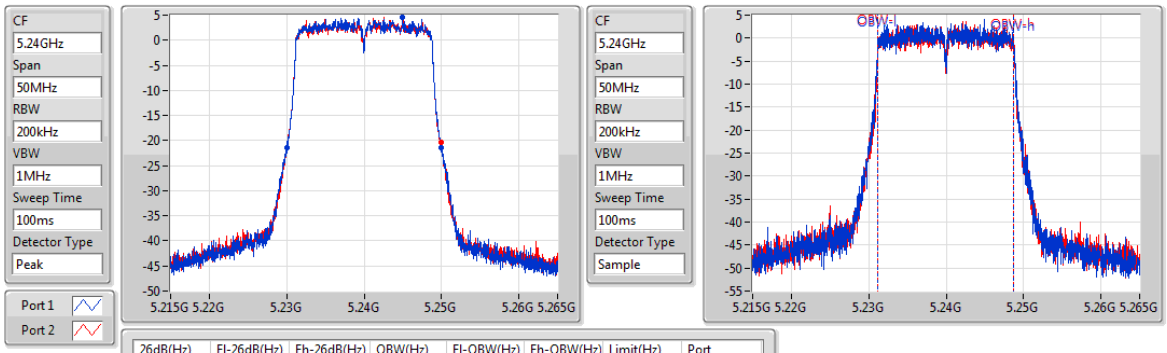


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.975M	5.189975G	5.20995G	17.566M	5.191204G	5.208771G	Inf	1
19.8M	5.190125G	5.209925G	17.591M	5.191179G	5.208771G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5240MHz

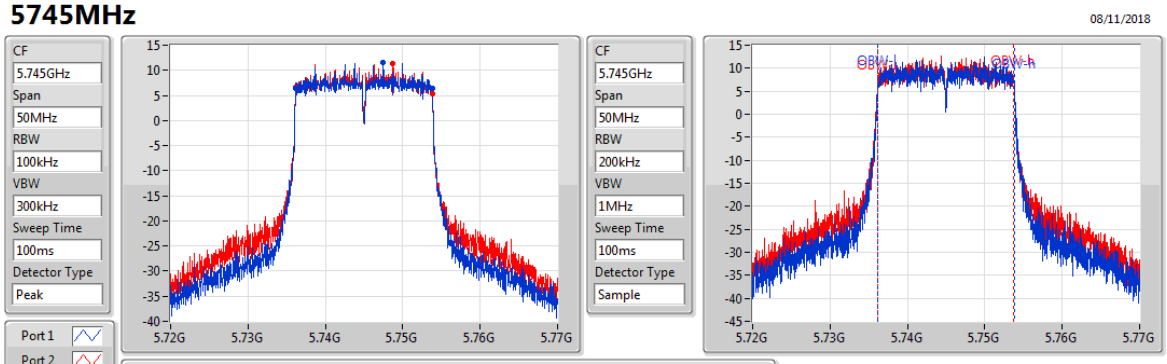
08/11/2018



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.23G	5.25G	17.591M	5.231179G	5.248771G	Inf	1
19.85M	5.230075G	5.249925G	17.591M	5.231179G	5.248771G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

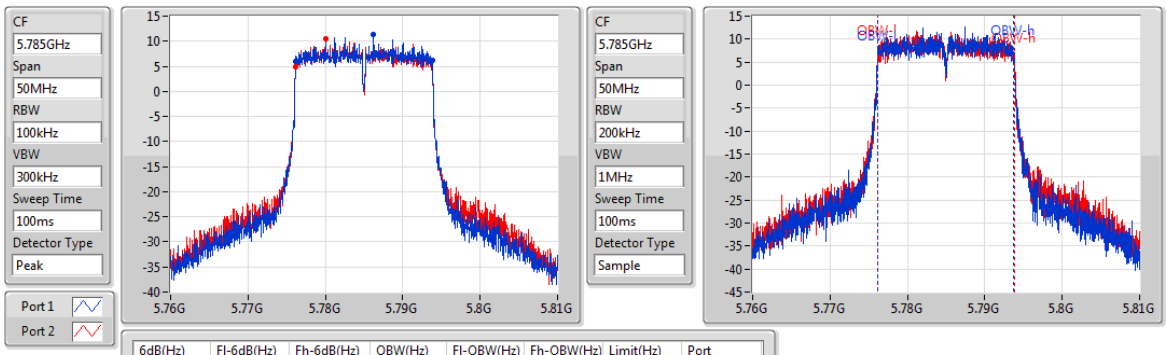
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	5.7362G	5.753775G	17.616M	5.736179G	5.753796G	500k	1
17.6M	5.7362G	5.7538G	17.616M	5.736154G	5.753771G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

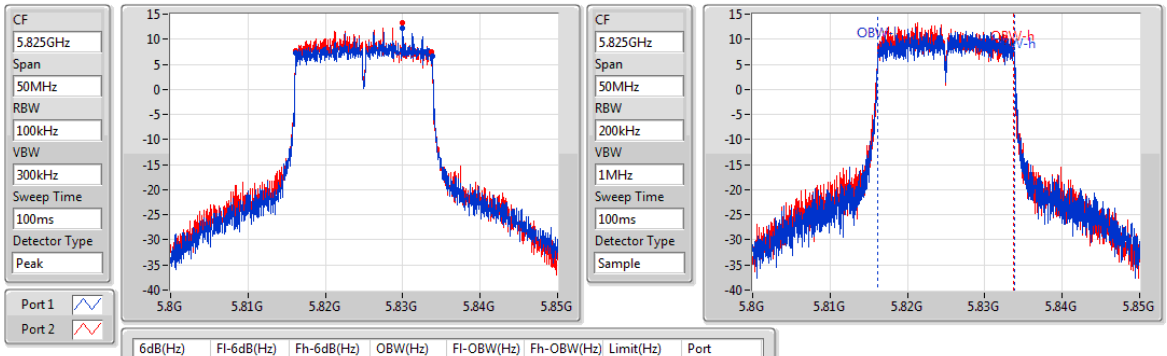
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	5.7762G	5.793775G	17.616M	5.776154G	5.793771G	500k	1
17.6M	5.776175G	5.793775G	17.616M	5.776179G	5.793796G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5825MHz

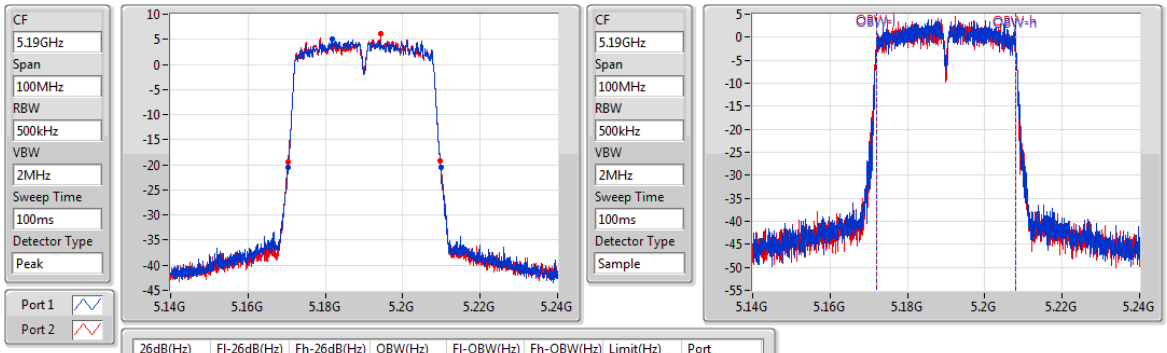


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.816225G	5.833775G	17.641M	5.816179G	5.833821G	500k	1
17.55M	5.8162G	5.83375G	17.616M	5.816154G	5.833771G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5190MHz

08/11/2018

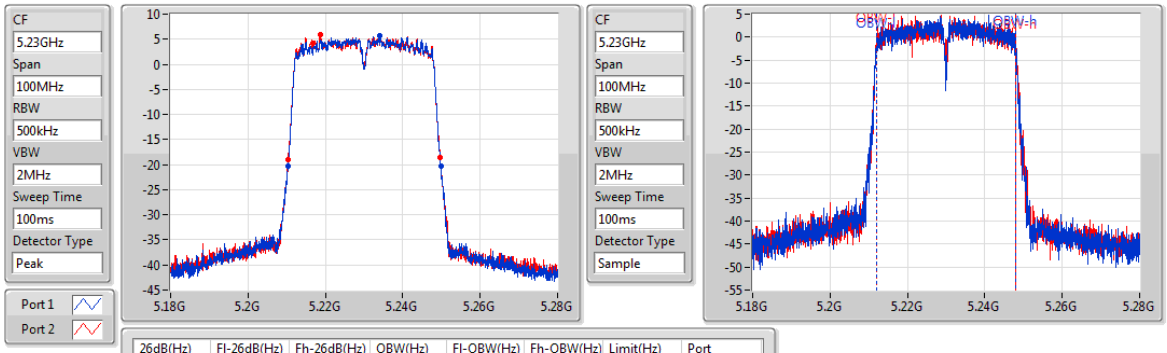


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.5M	5.17035G	5.20985G	35.982M	5.172009G	5.207991G	Inf	1
39.45M	5.17025G	5.2097G	35.982M	5.171959G	5.207941G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5230MHz

08/11/2018

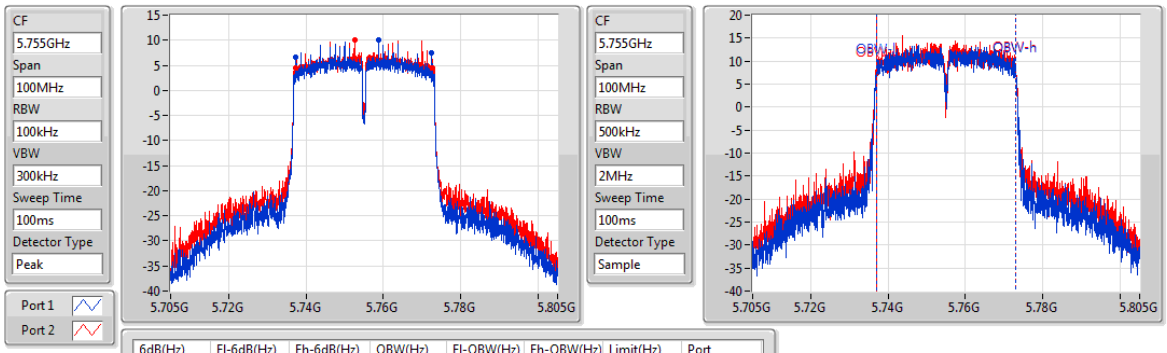


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.55M	5.2103G	5.24985G	35.982M	5.212009G	5.247991G	Inf	1
39.45M	5.2103G	5.24975G	36.032M	5.211959G	5.247991G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5755MHz

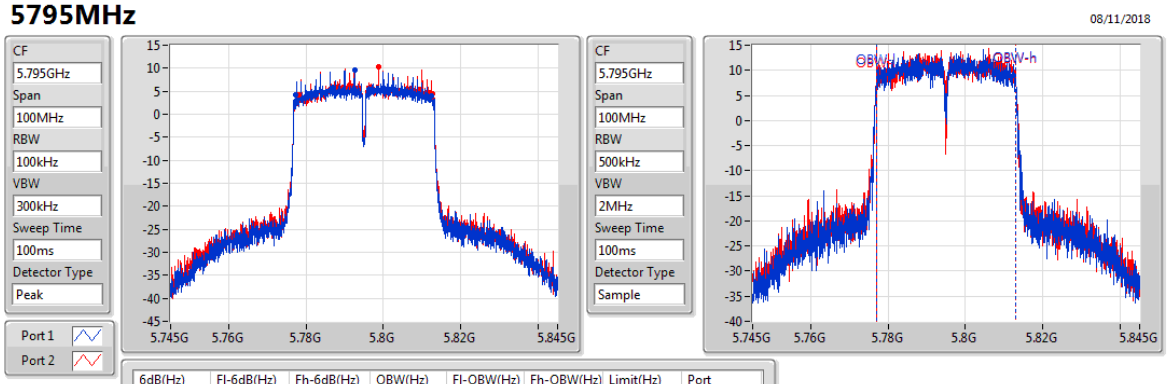
08/11/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.05M	5.73745G	5.7725G	36.032M	5.736959G	5.772991G	500k	1
35.55M	5.7372G	5.77275G	36.132M	5.736909G	5.773041G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

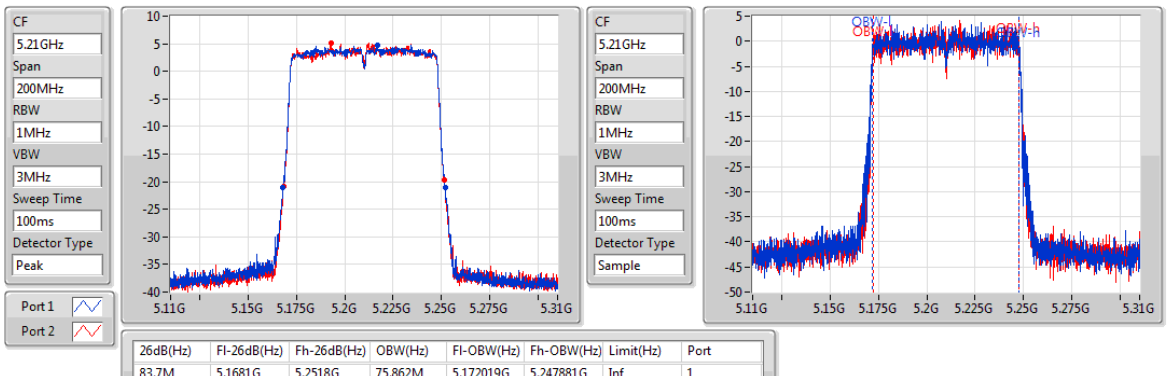
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.3M	5.7772G	5.8125G	35.982M	5.777009G	5.812991G	500k	1
34.45M	5.7781G	5.81255G	36.032M	5.777009G	5.813041G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

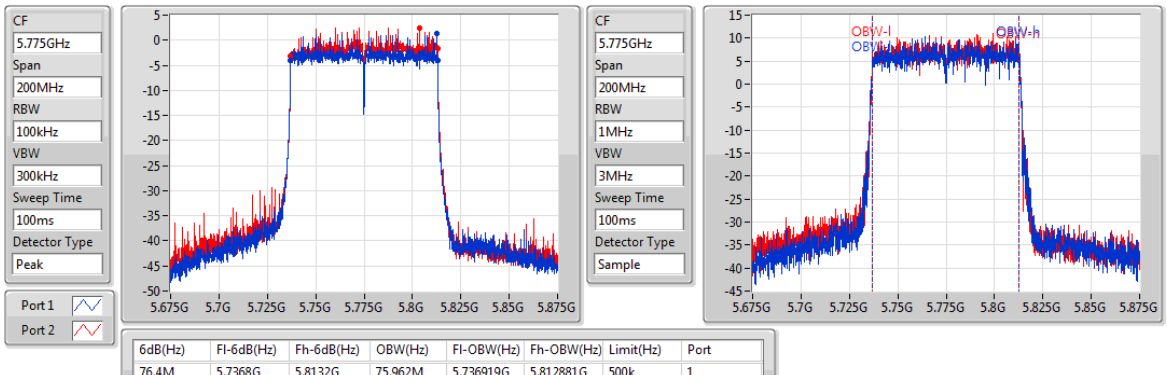
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.7M	5.1681G	5.2518G	75.862M	5.172019G	5.247881G	Inf	1
83.3M	5.1683G	5.2516G	75.662M	5.172219G	5.247881G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.4M	5.7368G	5.8132G	75.962M	5.736919G	5.812881G	500k	1
76.4M	5.7368G	5.8132G	75.862M	5.737019G	5.812881G	500k	2

Based on conducted spurious emission
Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP /EIRP-Elevation 30° (dBm)	EIRP /EIRP-Elevation 30° (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	18.33	0.06808	27.23/16.10	0.52845/0.04074
802.11ac VHT20_Nss1,(MCS0)_2TX	18.42	0.06950	27.32/16.19	0.53951/0.04159
802.11ac VHT40_Nss1,(MCS0)_2TX	18.02	0.06339	26.92/15.79	0.49204/0.03793
802.11ac VHT80_Nss1,(MCS0)_2TX	16.67	0.04645	25.57/14.44	0.36058/0.02780

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP /EIRP-Elevation 30° (dBm)	EIRP Limit / EIRP Limit-Elevation 30° (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	8.90	15.13	15.04	18.10	27.10	27.00/15.87	36.00/21.00
5200MHz	Pass	8.90	15.30	15.24	18.28	27.10	27.18/16.05	36.00/21.00
5240MHz	Pass	8.90	15.42	15.22	18.33	27.10	27.23/16.10	36.00/21.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-		
5180MHz	Pass	8.90	15.45	15.19	18.33	27.10	27.23/16.10	36.00/21.00
5200MHz	Pass	8.90	15.42	15.38	18.41	27.10	27.31/16.18	36.00/21.00
5240MHz	Pass	8.90	15.51	15.31	18.42	27.10	27.32/16.19	36.00/21.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-		
5190MHz	Pass	8.90	14.64	14.32	17.49	27.10	26.39/15.26	36.00/21.00
5230MHz	Pass	8.90	15.06	14.96	18.02	27.10	26.92/15.79	36.00/21.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-		
5210MHz	Pass	8.90	13.75	13.56	16.67	27.10	25.57/14.44	36.00/21.00

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

Based on conducted spurious emission
Summary

Mode	Total Power (dBm)	Total Power (W)
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	27.00	0.50119
802.11ac VHT20_Nss1,(MCS0)_2TX	27.03	0.50466
802.11ac VHT40_Nss1,(MCS0)_2TX	27.04	0.50582
802.11ac VHT80_Nss1,(MCS0)_2TX	23.34	0.21577

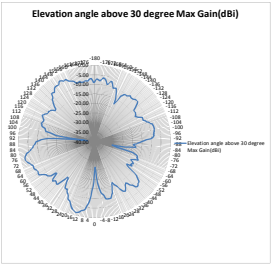
Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5745MHz	Pass	8.90	23.81	24.06	26.95	27.10
5785MHz	Pass	8.90	23.87	23.84	26.87	27.10
5825MHz	Pass	8.90	23.63	24.32	27.00	27.10
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	8.90	23.69	24.07	26.89	27.10
5785MHz	Pass	8.90	23.87	23.85	26.87	27.10
5825MHz	Pass	8.90	23.67	24.34	27.03	27.10
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	8.90	23.83	24.19	27.02	27.10
5795MHz	Pass	8.90	23.88	24.18	27.04	27.10
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	8.90	20.22	20.43	23.34	27.10

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

Elevation angle above 30 degree Max Gain

Elevation angle above 30 degree Max Gain(dBi)		-2.23
Freq. (MHz)	5200	Elevation Angle Define
H-Plan angle(Degree)	Gain(dBm)	
-180	-8.73	
-179	-7.53	
-178	-7.02	
-177	-7.33	
-176	-7.66	
-175	-7.97	
-174	-7.36	
-173	-6.79	
-172	-6.23	
-171	-6.44	
-170	-6.99	
-169	-7.81	
-168	-9.19	
-167	-9.15	
-166	-8.21	
-165	-7.28	
-164	-7.13	
-163	-8.13	
-162	-9.26	
-161	-10.34	
-160	-10.19	
-159	-9.90	
-158	-9.86	
-157	-10.80	
-156	-11.92	
-155	-13.34	
-154	-14.93	
-153	-17.72	
-152	-16.56	
-151	-15.12	
-150	-12.52	
-149	-11.79	
-148	-10.83	
-147	-10.58	
-146	-10.57	
-145	-10.63	
-144	-10.25	
-143	-9.80	
-142	-9.51	
-141	-9.90	
-140	-10.12	
-139	-10.03	
-138	-10.03	
-137	-9.56	
-136	-9.25	
-135	-9.08	
-134	-9.11	
-133	-9.09	
-132	-9.74	
-131	-10.84	
-130	-12.07	
-129	-13.21	
-128	-13.93	
-127	-13.82	
-126	-13.64	
-125	-13.72	
-124	-14.15	
-123	-14.31	
-122	-14.94	
-121	-14.62	
-120	-14.12	
-119	-13.76	
-118	-12.87	
-117	-11.96	
-116	-12.09	
-115	-12.10	
-114	-12.15	
-113	-11.62	
-112	-11.05	
-111	-10.81	
-110	-10.01	
-109	-9.50	
-108	-9.23	
-107	-8.22	
-106	-8.21	
-105	-7.98	
-104	-7.95	
-103	-7.96	
-102	-7.96	
-101	-8.18	
-100	-8.04	
-99	-8.48	
-98	-8.52	Above 30 degree
-97	-8.83	
-96	-8.68	
-95	-8.97	
-94	-9.41	
-93	-10.46	
-92	-12.82	
-91	-14.01	
-90	-15.39	
-89	-16.02	
-88	-17.56	
-87	-17.80	
-86	-19.27	
-85	-19.62	
-84	-18.80	
-83	-18.22	
-82	-18.23	
-81	-21.14	
-80	-23.86	
-79	-29.28	
-78	-30.64	
-77	-28.26	
-76	-28.30	
-75	-24.44	
-74	-19.10	
-73	-18.13	
-72	-16.84	
-71	-16.19	
-70	-16.00	
-69	-16.25	
-68	-15.56	
-67	-15.17	
-66	-16.61	
-65	-17.67	
-64	-18.35	
-63	-18.73	
-62	-17.69	
-61	-17.02	
-60	-16.58	
-59	-17.51	
-58	-17.57	
-57	-16.63	
-56	-17.57	
-55	-19.39	
-54	-18.84	
-53	-17.26	
-52	-13.32	
-51	-11.79	
-50	-10.87	
-49	-9.77	
-48	-8.71	
-47	-8.34	
-46	-8.41	
-45	-7.71	
-44	-7.38	
-43	-7.53	
-42	-7.97	
-41	-8.62	
-40	-10.01	
-39	-10.68	
-38	-12.25	
-37	-12.70	
-36	-12.29	
-35	-11.97	
-34	-10.92	
-33	-10.22	
-32	-9.49	
-31	-9.52	
-30	-9.84	
-29	-10.77	
-28	-11.84	
-27	-13.37	
-26	-14.18	
-25	-14.78	
-24	-15.74	
-23	-16.65	
-22	-15.90	
-21	-14.30	
-20	-13.01	
-19	-11.38	
-18	-10.85	
-17	-9.96	
-16	-9.01	
-15	-9.02	
-14	-9.11	0° ~ 30°
-13	-9.14	
-12	-9.20	
-11	-9.52	
-10	-11.06	
-9	-11.81	
-8	-12.28	
-7	-13.03	
-6	-14.82	
-5	-16.11	
-4	-18.42	
-3	-21.69	
-2	-24.54	
-1	-26.44	
0	-23.94	
1	-18.76	
2	-16.55	
3	-14.08	
4	-11.36	
5	-8.36	
6	-6.99	
7	-5.86	
8	-4.12	
9	-3.55	
10	-3.22	
11	-2.94	
12	-2.33	
13	-1.82	
14	-1.60	



Elevation angle above 30 degree Max Gain

15	-1.43	0° reference angle
16	-1.84	
17	-2.21	
18	-2.48	
19	-3.10	
20	-3.85	
21	-4.80	
22	-5.71	
23	-6.31	
24	-6.42	
25	-6.88	
26	-8.41	
27	-9.01	
28	-9.53	
29	-9.98	
30	-11.16	0° ~ 30°
31	-10.97	
32	-11.00	
33	-11.33	
34	-13.02	
35	-14.77	
36	-16.30	
37	-16.53	
38	-14.98	
39	-13.49	
40	-12.17	
41	-10.32	
42	-10.06	
43	-10.46	
44	-10.79	
45	-10.85	
46	-10.23	
47	-9.67	
48	-10.56	
49	-12.35	
50	-14.04	
51	-13.81	
52	-10.82	
53	-10.06	
54	-9.47	
55	-9.21	
56	-9.08	
57	-8.17	
58	-7.28	
59	-5.90	
60	-5.87	
61	-6.06	
62	-6.35	
63	-6.18	
64	-5.96	
65	-5.51	
66	-5.08	
67	-5.28	
68	-5.20	
69	-5.14	
70	-4.53	
71	-4.17	
72	-3.73	
73	-2.91	
74	-2.66	
75	-2.33	
76	-2.23	
77	-2.51	
78	-2.78	
79	-3.18	
80	-3.68	
81	-5.06	
82	-5.75	
83	-6.32	
84	-7.05	
85	-7.42	
86	-7.78	
87	-8.20	
88	-8.83	
89	-8.96	
90	-9.33	
91	-10.85	
92	-11.86	
93	-13.33	
94	-15.72	
95	-22.49	
96	-29.09	
97	-36.16	
98	-26.86	
99	-19.53	
100	-18.11	
101	-16.45	
102	-13.86	
103	-13.57	
104	-13.26	
105	-13.13	
106	-11.46	
107	-10.86	
108	-10.90	
109	-10.33	
110	-10.51	
111	-10.83	
112	-11.01	Above 30 degree
113	-10.98	
114	-10.52	
115	-10.01	
116	-9.47	
117	-9.23	
118	-9.78	
119	-10.16	
120	-10.86	
121	-11.15	
122	-11.30	
123	-11.04	
124	-11.44	
125	-11.53	
126	-11.86	
127	-12.79	
128	-13.65	
129	-13.54	
130	-13.35	
131	-12.10	
132	-11.21	
133	-10.28	
134	-9.49	
135	-8.57	
136	-8.30	
137	-7.58	
138	-6.11	
139	-6.05	
140	-6.34	
141	-6.59	
142	-5.60	
143	-4.96	
144	-4.56	
145	-4.59	
146	-4.55	
147	-4.66	
148	-4.52	
149	-3.51	
150	-3.21	
151	-3.47	
152	-3.88	
153	-4.34	
154	-4.15	
155	-3.97	
156	-4.91	
157	-5.52	
158	-5.72	
159	-5.88	
160	-6.13	
161	-6.63	
162	-7.33	
163	-7.99	
164	-7.88	
165	-7.58	
166	-7.39	
167	-8.09	
168	-8.13	
169	-8.06	
170	-8.07	
171	-7.57	
172	-7.78	
173	-8.03	
174	-7.86	
175	-7.29	
176	-6.75	
177	-6.79	
178	-7.89	
179	-8.88	

Based on radiated spurious emission
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	21.43	0.13900
5.725-5.85GHz	-	-
802.11ac VHT80_Nss1,(MCS0)_2TX	23.99	0.25061

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	8.90	18.65	18.18	21.43	27.10
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	8.90	20.84	21.12	23.99	27.10

Note : 1. DG = Directional Gain;Port X = Port X output power
2. For the test result is for manufacturer's reference only and is not applicable to certificated.

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	5.50
802.11ac VHT20_Nss1,(MCS0)_2TX	5.46
802.11ac VHT40_Nss1,(MCS0)_2TX	2.42
802.11ac VHT80_Nss1,(MCS0)_2TX	-2.46
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	13.11
802.11ac VHT20_Nss1,(MCS0)_2TX	12.80
802.11ac VHT40_Nss1,(MCS0)_2TX	10.26
802.11ac VHT80_Nss1,(MCS0)_2TX	2.34

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

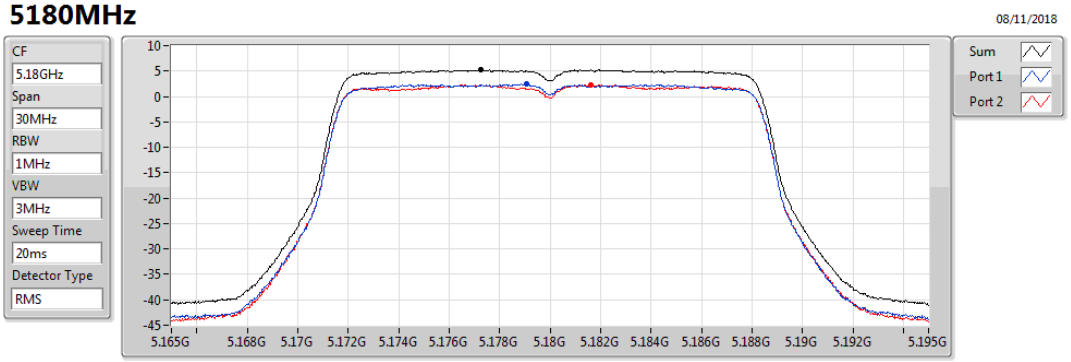
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	8.90	2.41	2.29	5.23	14.10
5200MHz	Pass	8.90	2.58	2.51	5.35	14.10
5240MHz	Pass	8.90	2.63	2.60	5.50	14.10
5745MHz	Pass	8.90	9.44	9.84	12.56	27.10
5785MHz	Pass	8.90	9.70	10.05	12.83	27.10
5825MHz	Pass	8.90	9.76	10.74	13.11	27.10
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	8.90	2.40	2.12	5.15	14.10
5200MHz	Pass	8.90	2.35	2.40	5.33	14.10
5240MHz	Pass	8.90	2.53	2.44	5.46	14.10
5745MHz	Pass	8.90	9.16	9.85	12.53	27.10
5785MHz	Pass	8.90	9.31	9.70	12.44	27.10
5825MHz	Pass	8.90	9.40	10.47	12.80	27.10
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	8.90	-1.06	-1.27	1.70	14.10
5230MHz	Pass	8.90	-0.49	-0.64	2.42	14.10
5755MHz	Pass	8.90	7.28	7.46	10.26	27.10
5795MHz	Pass	8.90	6.80	7.39	9.92	27.10
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	8.90	-5.25	-5.39	-2.46	14.10
5775MHz	Pass	8.90	-0.37	-0.42	2.34	27.10

DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

802.11a_Nss1,(6Mbps)_2TX PSD

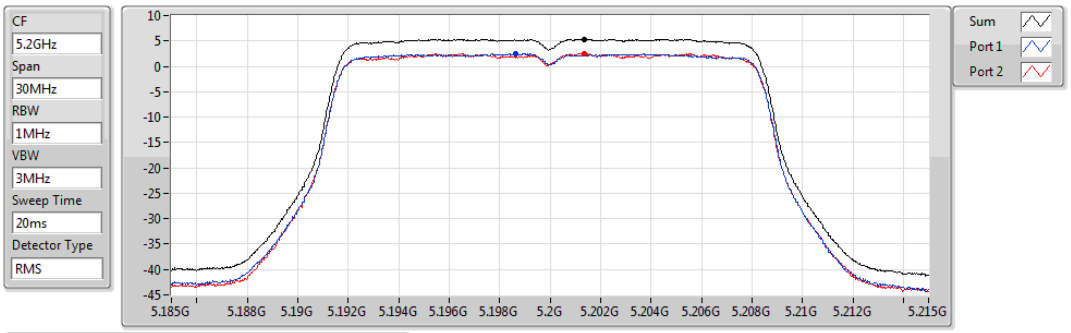
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.23	5.23	2.41	2.29

802.11a_Nss1,(6Mbps)_2TX PSD

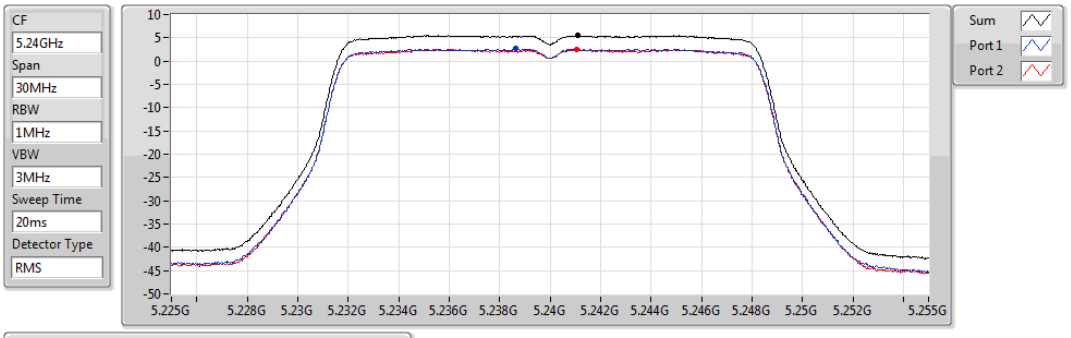
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.35	5.35	2.58	2.51

802.11a_Nss1,(6Mbps)_2TX PSD

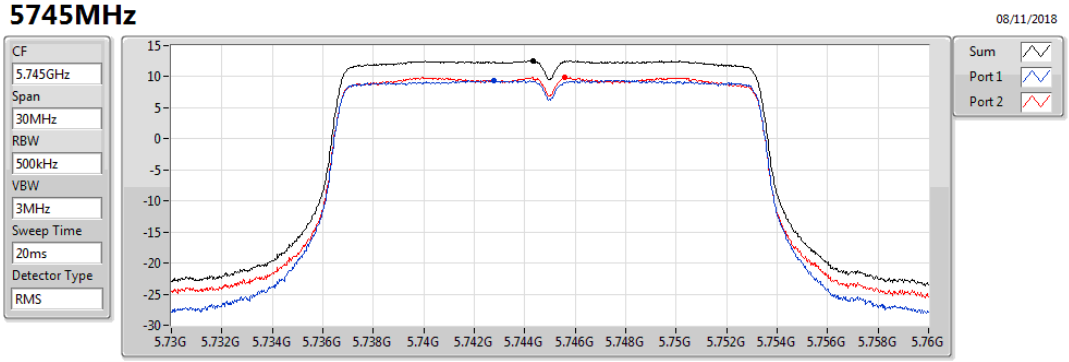
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.50	5.50	2.63	2.60

802.11a_Nss1,(6Mbps)_2TX PSD

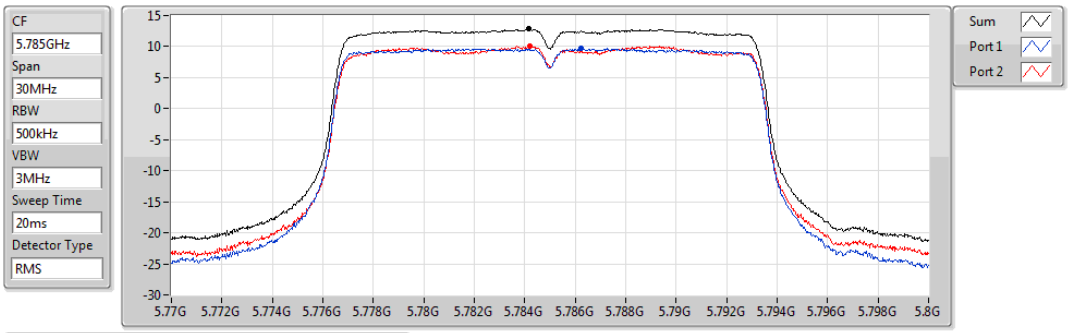
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.56	12.56	9.44	9.84

802.11a_Nss1,(6Mbps)_2TX PSD

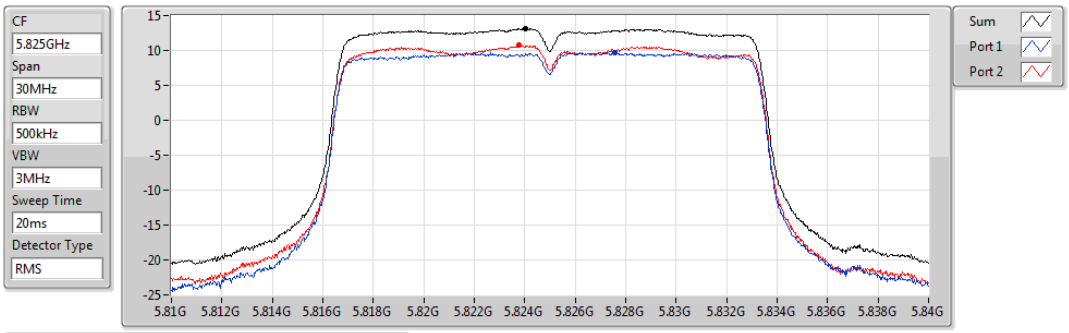
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.83	12.83	9.70	10.05

802.11a_Nss1,(6Mbps)_2TX PSD

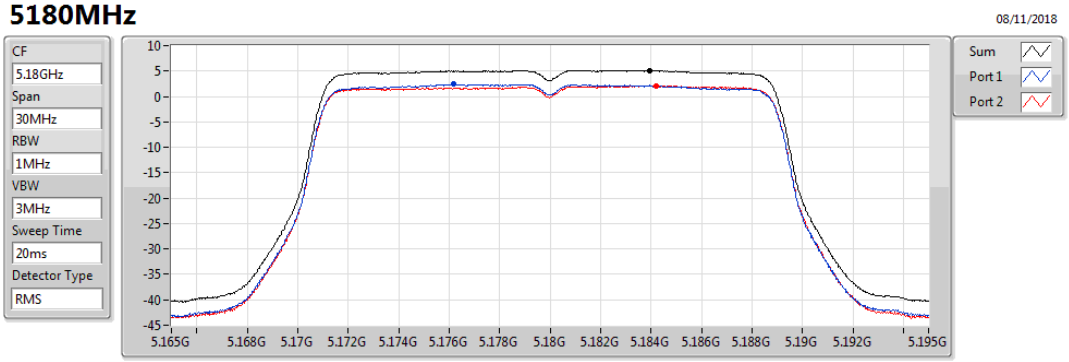
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.11	13.11	9.76	10.74

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

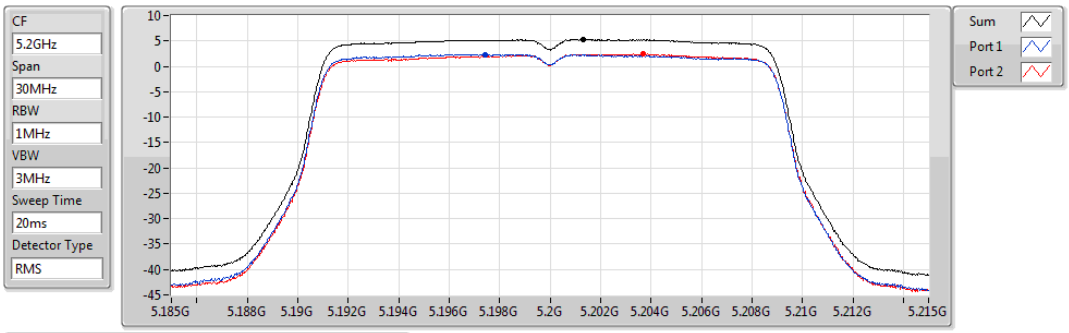
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.15	5.15	2.40	2.12

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

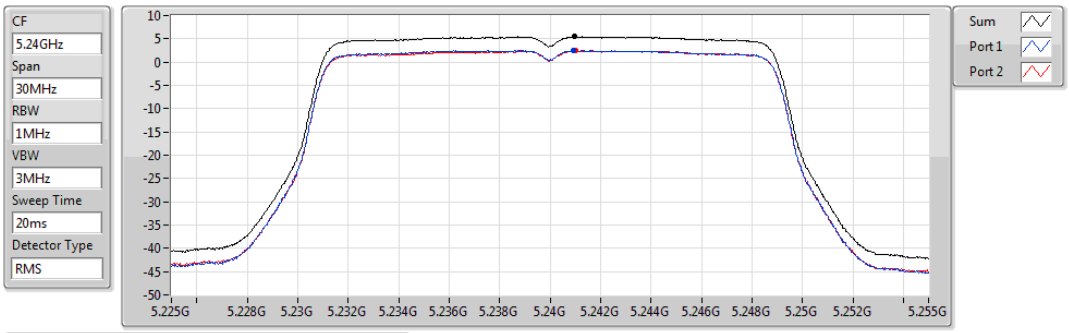
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.33	5.33	2.35	2.40

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

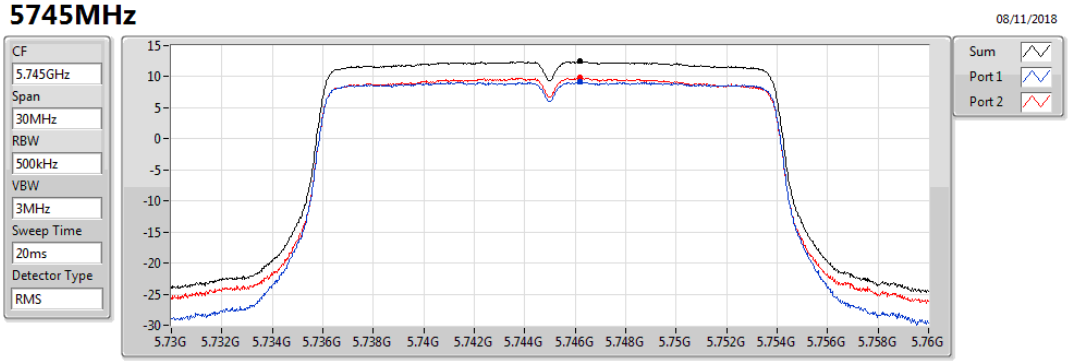
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.46	5.46	2.53	2.44

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

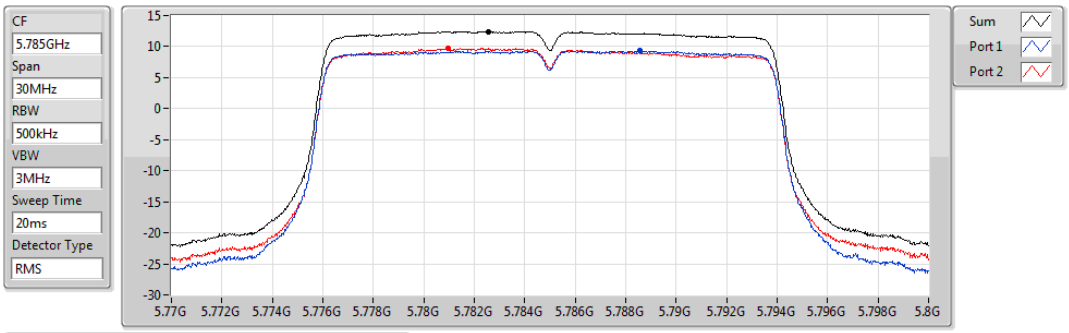
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.53	12.53	9.16	9.85

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

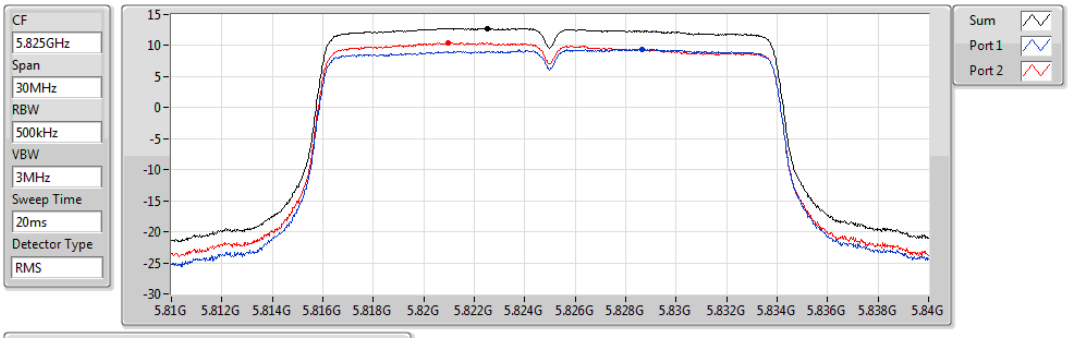
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.44	12.44	9.31	9.70

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

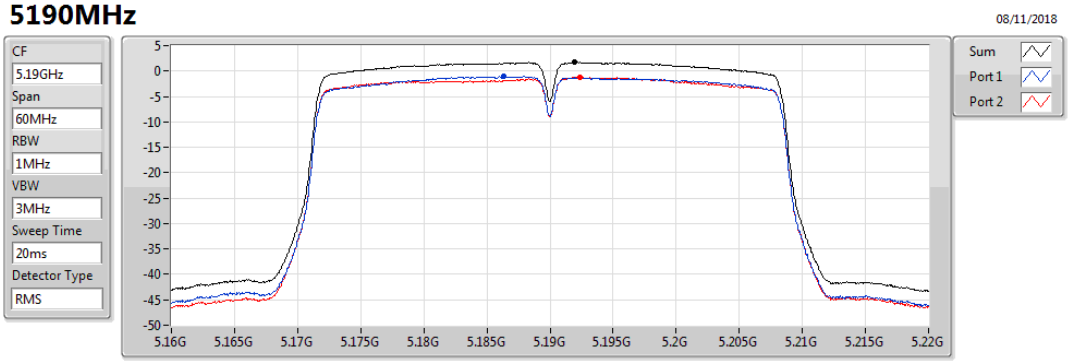
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.80	12.80	9.40	10.47

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

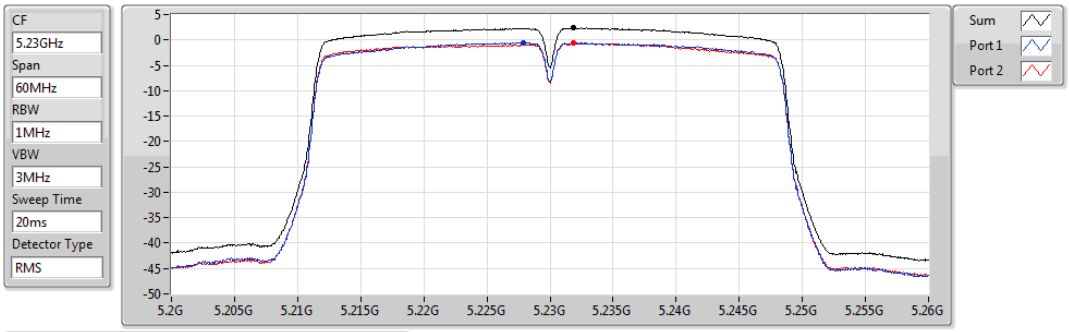
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.70	1.70	-1.06	-1.27

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

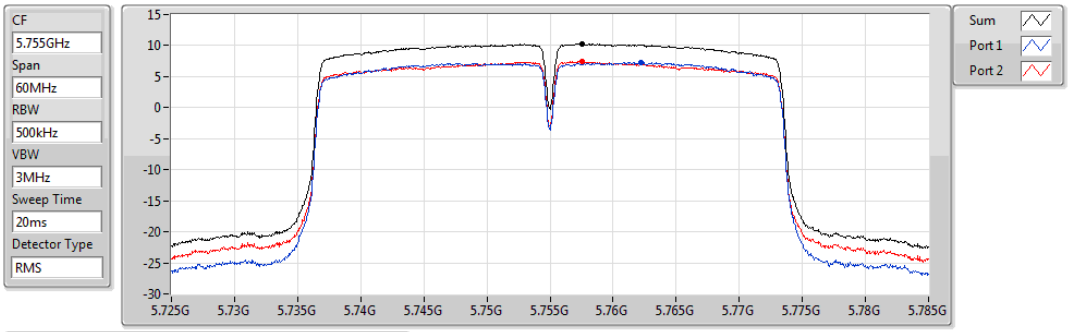
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.42	2.42	-0.49	-0.64

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

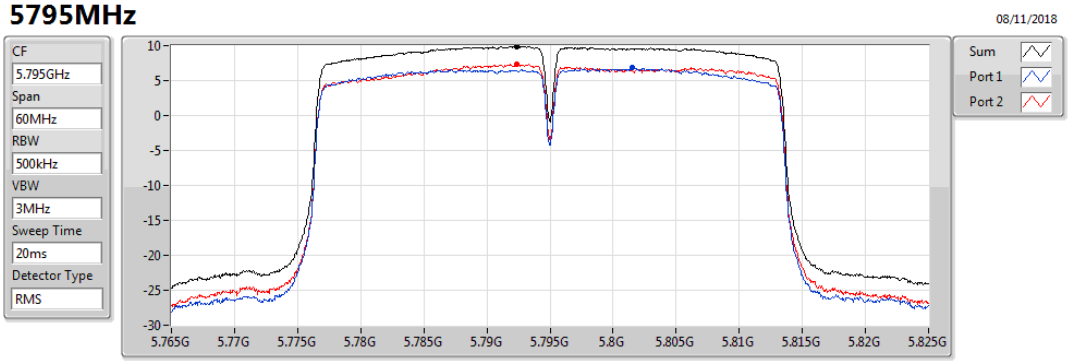
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.26	10.26	7.28	7.46

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

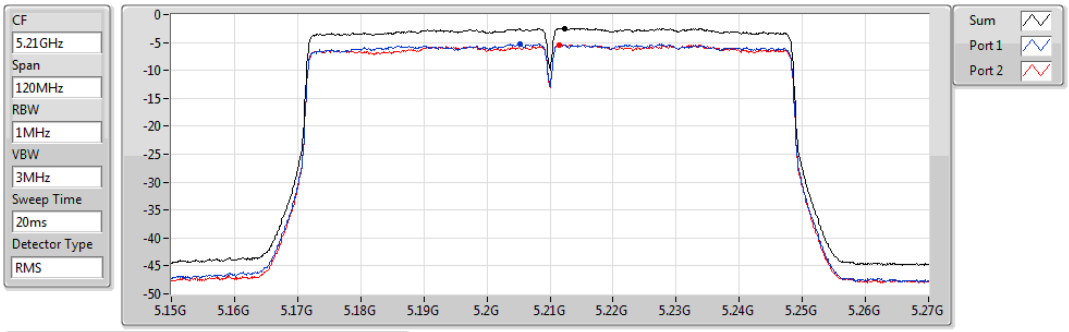
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.92	9.92	6.80	7.39

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

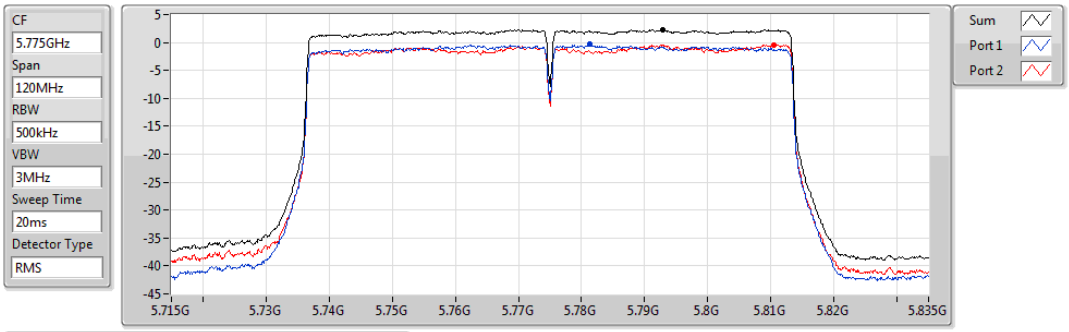
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.46	-2.46	-5.25	-5.39

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

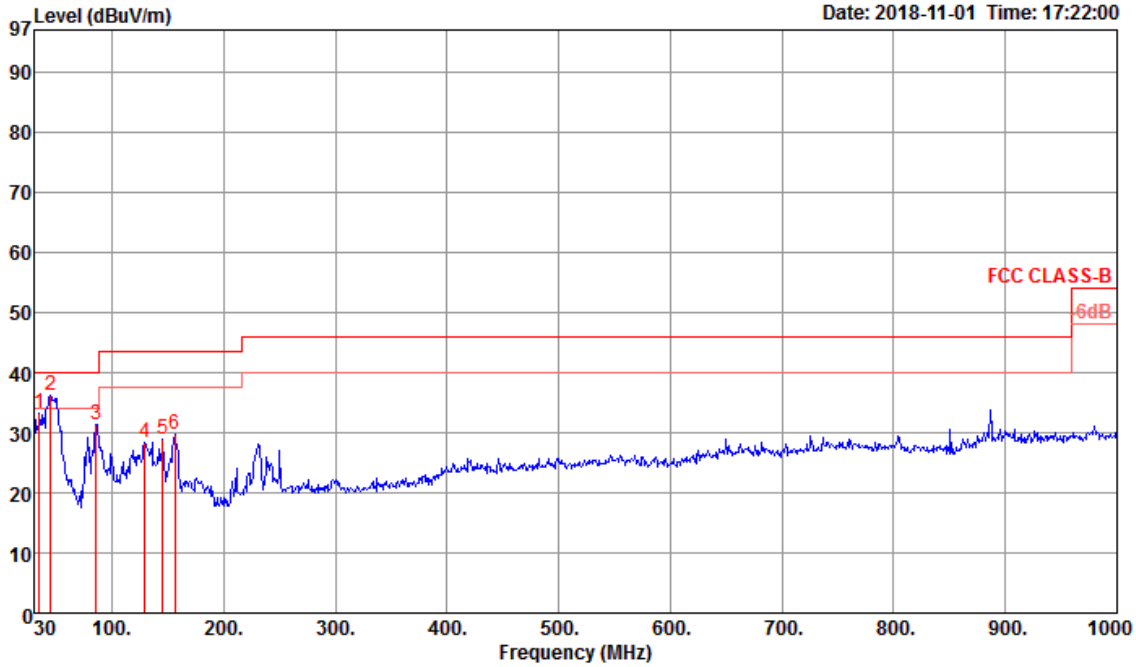
5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.34	2.34	-0.37	-0.42

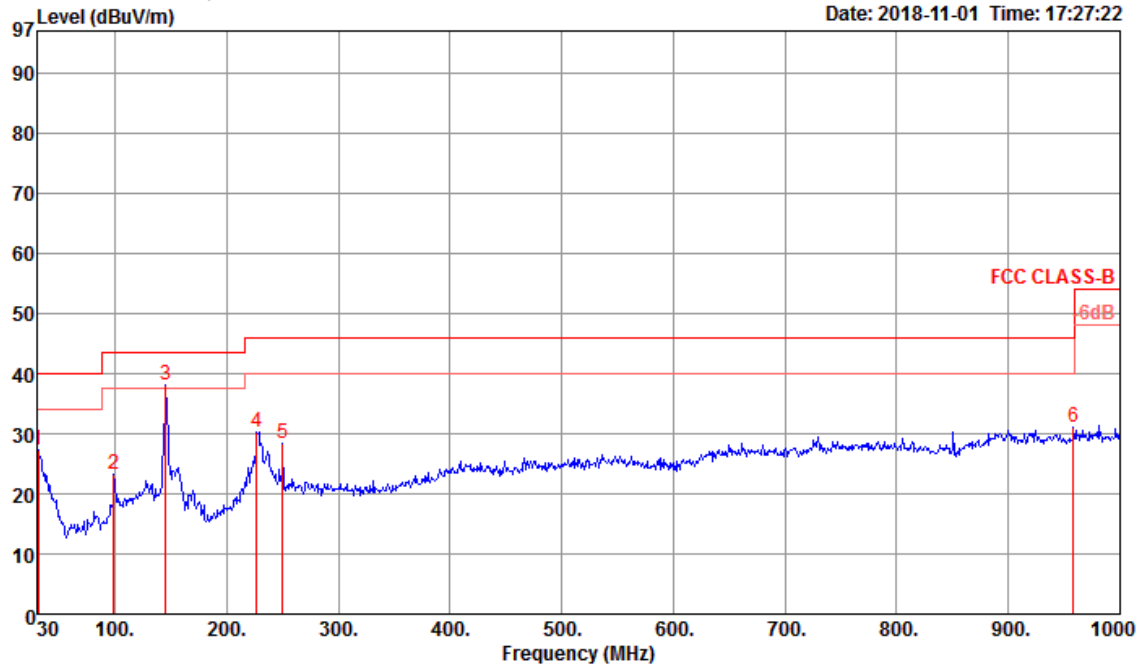
Test Mode	Mode 1	Frequency Range	30 MHz to 1,000 MHz

Vertical 30 MHz to 1,000 MHz



	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	34.85	33.13	40.00	-6.87	40.51	1.01	23.06	31.45	300	0	Peak	VERTICAL
2	44.55	36.17	40.00	-3.83	48.85	1.36	17.54	31.58	300	0	Peak	VERTICAL
3	85.29	31.34	40.00	-8.66	48.13	0.76	14.17	31.72	300	0	Peak	VERTICAL
4	128.94	28.38	43.50	-15.12	40.26	1.15	18.70	31.73	300	0	Peak	VERTICAL
5	145.43	28.81	43.50	-14.69	42.09	1.12	17.35	31.75	300	0	Peak	VERTICAL
6	156.10	29.80	43.50	-13.70	43.73	1.03	16.80	31.76	300	0	Peak	VERTICAL

Horizontal 30 MHz to 1,000 MHz



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.97	27.28	40.00	-12.72	32.22	0.98	25.40	31.32	100	360	Peak	HORIZONTAL
2	98.87	23.10	43.50	-20.40	36.87	0.83	17.10	31.70	100	360	Peak	HORIZONTAL
3	145.43	38.08	43.50	-5.42	51.36	1.12	17.35	31.75	100	360	Peak	HORIZONTAL
4	226.91	30.28	46.00	-15.72	43.16	2.19	16.73	31.80	100	360	Peak	HORIZONTAL
5	250.19	28.50	46.00	-17.50	39.24	2.38	18.70	31.82	100	360	Peak	HORIZONTAL
6	958.29	30.97	46.00	-15.03	31.51	3.95	27.70	32.19	100	360	Peak	HORIZONTAL

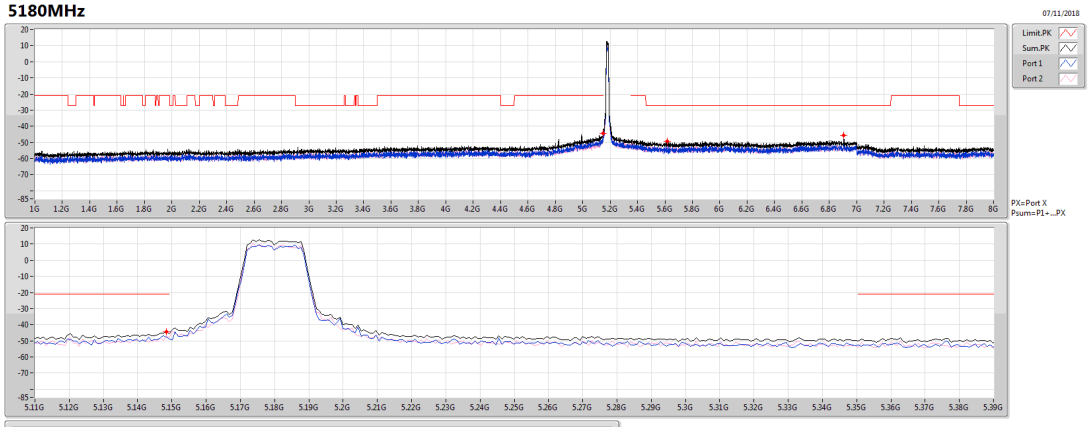
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	Type	Freq (Hz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	DG (dBi)	Refl (dB)	Psum (dBm)	P1 (dBm)	P2 (dBm)
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	1G	5.15G	1M	AV	5.14896G	-41.23	-41.20	-0.03	8.90	0.00	-50.13	-52.54	-53.84

DG = Directional Gain;
PX=Port X; **Psum**=P1+.P2+..PX

802.11a_Nss1,(6Mbps)_2TX CSE-PK

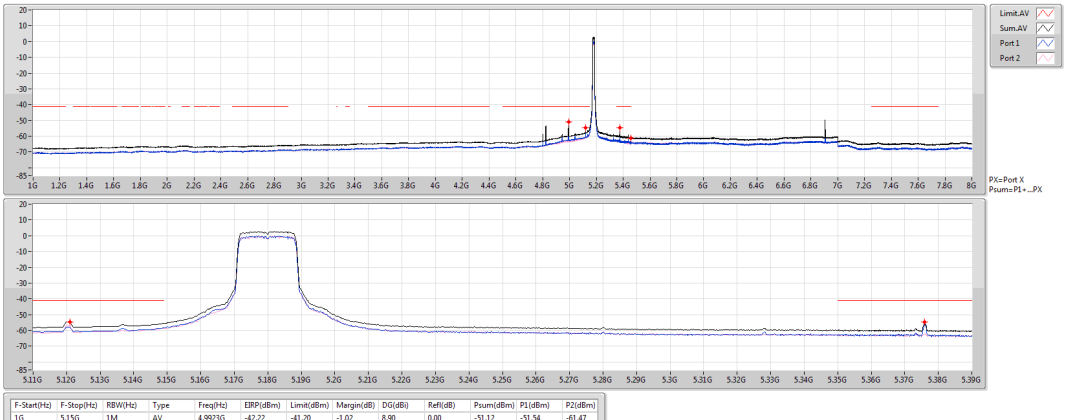
5180MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.14838G	-35.64	-21.20	-14.44	8.90	0.00	-44.54	-47.86	-47.26
1G	8G	1M	PK	5.61563G	-40.42	-27.00	-13.42	8.90	0.00	-49.32	-55.41	-50.55
1G	8G	1M	PK	6.90713G	-36.64	-27.00	-9.64	8.90	0.00	-45.54	-48.75	-48.35

802.11a_Nss1,(6Mbps)_2TX CSE-AV

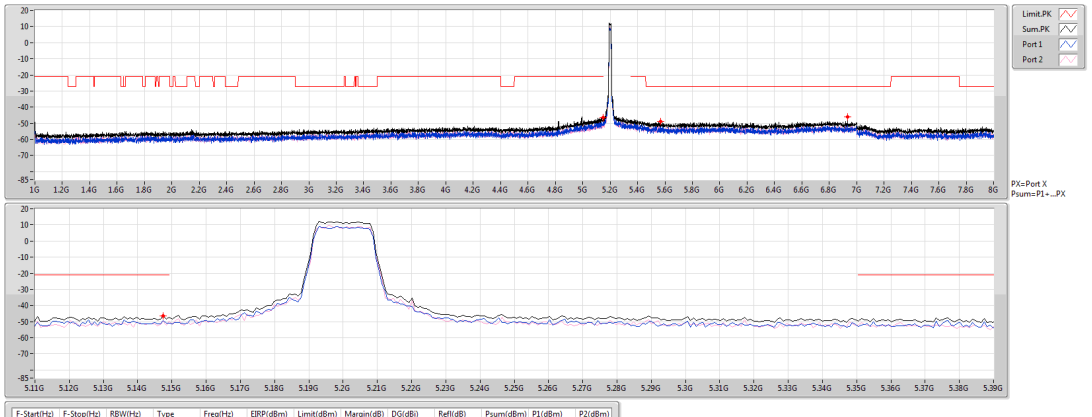
5180MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.9923G	-42.22	-41.20	-1.02	8.90	0.00	-51.12	-51.54	-61.47
1G	5.15G	1M	AV	5.12095G	-45.66	-41.20	-4.46	8.90	0.00	-54.56	-58.03	-57.15
5.35G	5.46G	1M	AV	5.37596G	-45.78	-41.20	-4.58	8.90	0.00	-54.68	-55.54	-62.12
5.46G	8G	1M	AV	5.46G	-52.45	-41.20	-11.25	8.90	0.00	-61.35	-64.04	-64.71

802.11a_Nss1,(6Mbps)_2TX CSE-PK

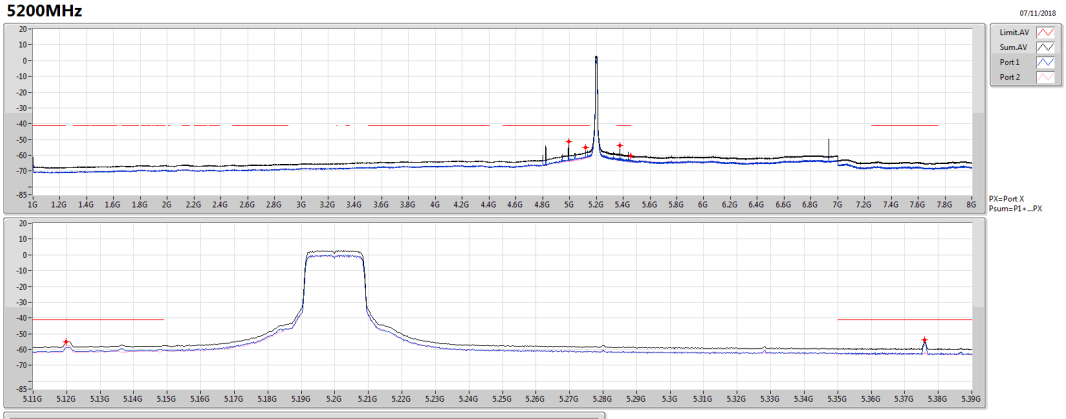
5200MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.1475G	-37.46	-21.20	-16.26	8.90	0.00	-46.36	-49.12	-49.63
1G	8G	1M	PK	5.5675G	-40.07	-27.00	-13.07	8.90	0.00	-48.97	-52.55	-51.47
1G	8G	1M	PK	6.93338G	-37.26	-27.00	-10.26	8.90	0.00	-46.16	-50.18	-48.35

802.11a_Nss1,(6Mbps)_2TX CSE-AV

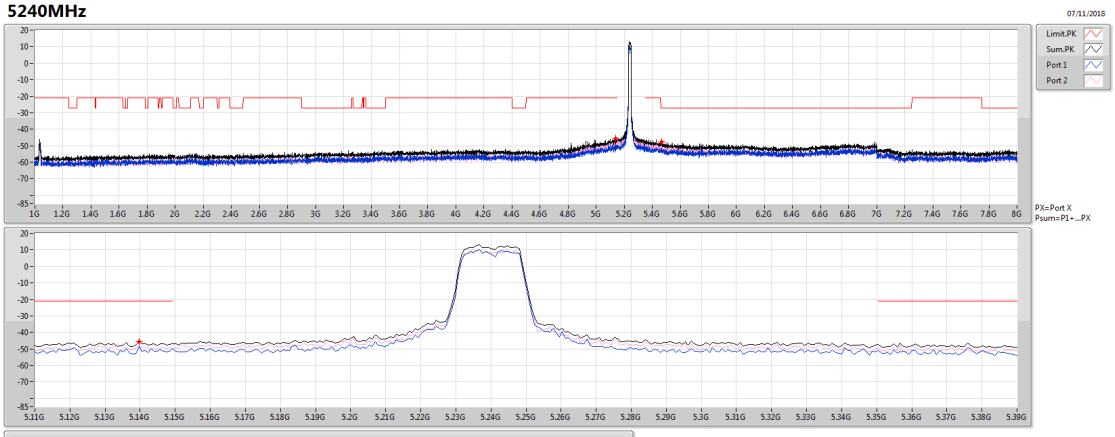
5200MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.9923G	-42.63	-41.20	-1.43	8.90	0.00	-51.53	-51.93	-62.08
1G	5.15G	1M	AV	5.11991G	-46.09	-41.20	-4.89	8.90	0.00	-54.99	-58.74	-57.37
5.35G	5.46G	1M	AV	5.37596G	-45.09	-41.20	-3.89	8.90	0.00	-53.99	-54.74	-61.96
5.46G	8G	1M	AV	5.46G	-51.59	-41.20	-10.39	8.90	0.00	-60.49	-63.32	-63.69

802.11a_Nss1,(6Mbps)_2TX CSE-PK

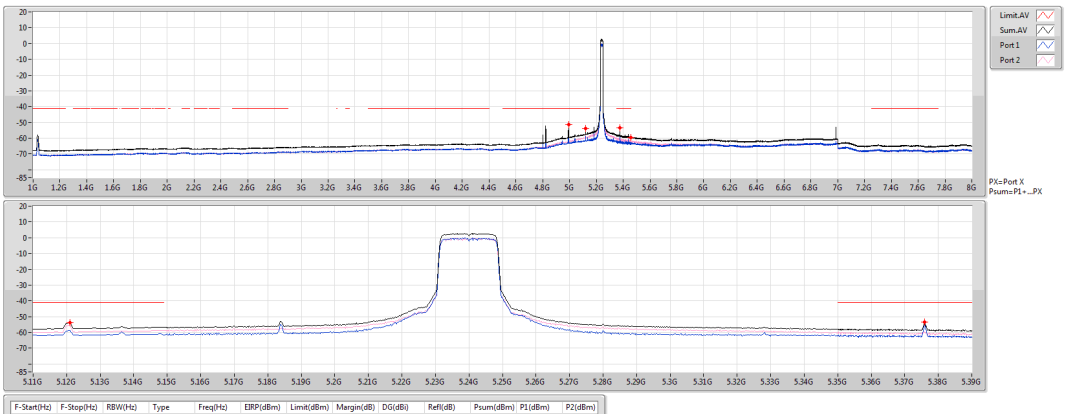
5240MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.13963G	-36.61	-21.20	-15.41	8.90	0.00	-45.51	-48.41	-48.63
1G	8G	1M	PK	5.466G	-38.73	-27.00	-11.73	8.90	0.00	-47.63	-52.14	-49.52

802.11a_Nss1,(6Mbps)_2TX CSE-AV

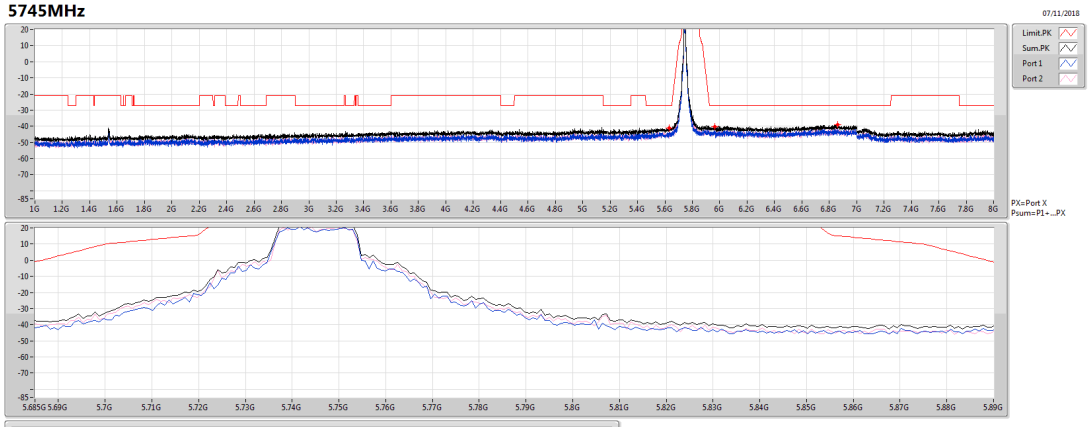
5240MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.9923G	-42.52	-41.20	-1.32	8.90	0.00	-51.42	-52.23	-59.13
1G	5.15G	1M	AV	5.12095G	-45.02	-41.20	-3.82	8.90	0.00	-53.92	-58.81	-55.62
5.35G	5.46G	1M	AV	5.37596G	-44.67	-41.20	-3.47	8.90	0.00	-53.57	-54.76	-59.77
5.46G	8G	1M	AV	5.46G	-50.65	-41.20	-9.45	8.90	0.00	-59.55	-63.19	-62.01

802.11a_Nss1,(6Mbps)_2TX CSE-PK

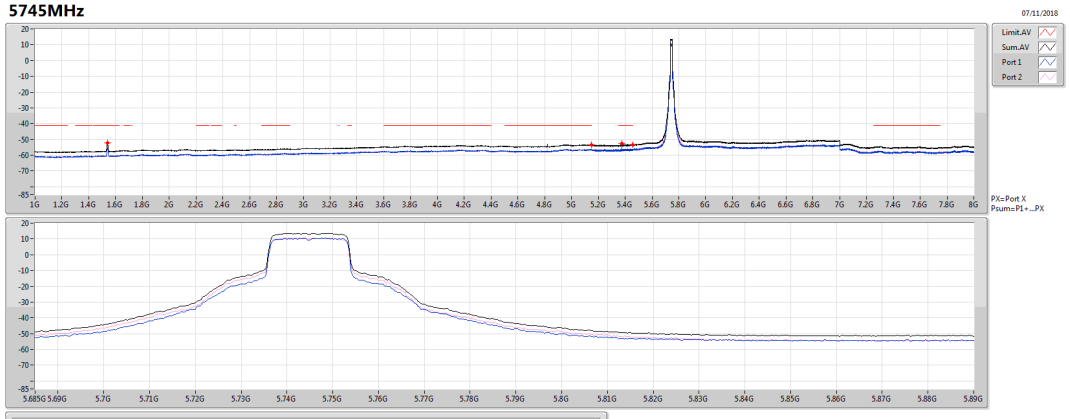
5745MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.62963G	-32.23	-27.00	-5.23	8.90	0.00	-41.13	-43.71	-44.61
1G	8G	1M	PK	5.963G	-31.59	-27.00	-4.59	8.90	0.00	-40.49	-42.64	-44.57
1G	8G	1M	PK	6.86338G	-30.17	-27.00	-3.17	8.90	0.00	-39.07	-40.80	-43.90

802.11a_Nss1,(6Mbps)_2TX CSE-AV

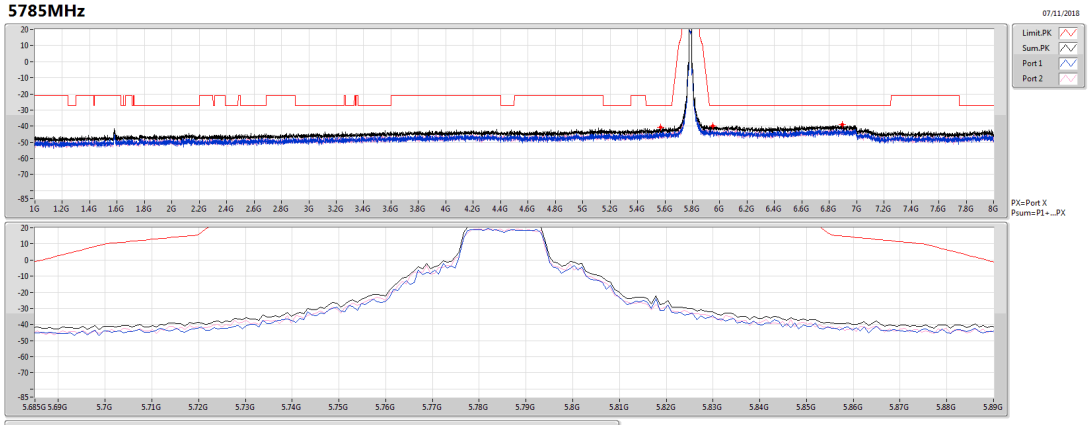
5745MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	1.5395G	-43.26	-41.20	-2.06	8.90	0.00	-52.16	-55.39	-54.96
5.15G	5.35G	1M	AV	5.15G	-44.61	-41.20	-3.41	8.90	0.00	-53.51	-56.30	-56.76
5.35G	5.46G	1M	AV	5.37585G	-43.74	-41.20	-2.54	8.90	0.00	-52.64	-54.72	-56.84
5.46G	8G	1M	AV	5.46G	-44.57	-41.20	-3.37	8.90	0.00	-53.47	-56.26	-56.71

802.11a_Nss1,(6Mbps)_2TX CSE-PK

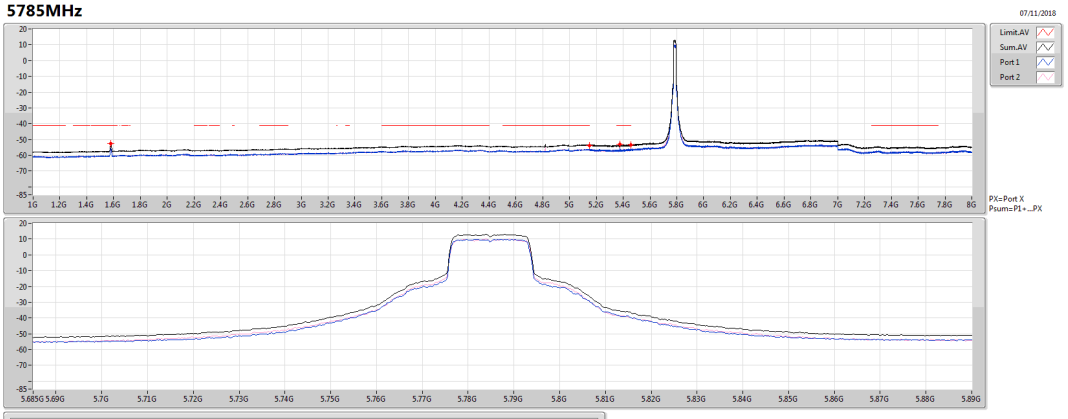
5785MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.56838G	-31.69	-27.00	-4.69	8.90	0.00	-40.59	-41.79	-46.75
1G	8G	1M	PK	5.949G	-31.08	-27.00	-4.08	8.90	0.00	-39.98	-42.82	-43.16
1G	8G	1M	PK	6.89663G	-30.08	-27.00	-3.08	8.90	0.00	-38.98	-42.61	-41.44

802.11a_Nss1,(6Mbps)_2TX CSE-AV

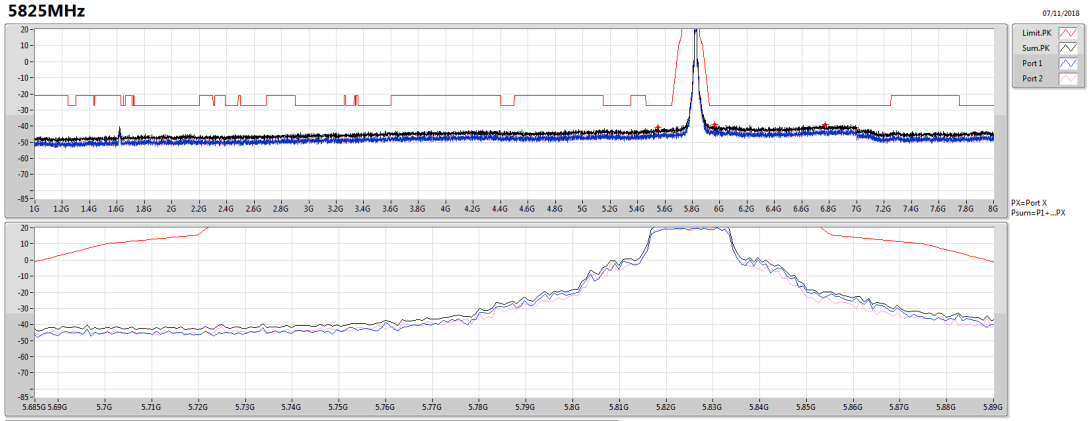
5785MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	1.57996G	-43.75	-41.20	-2.55	8.90	0.00	-52.65	-55.47	-55.86
5.15G	5.35G	1M	AV	5.15G	-44.92	-41.20	-3.72	8.90	0.00	-53.82	-56.76	-56.91
5.35G	5.46G	1M	AV	5.37574G	-43.99	-41.20	-2.79	8.90	0.00	-52.89	-55.00	-57.05
5.46G	8G	1M	AV	5.46G	-44.52	-41.20	-3.32	8.90	0.00	-53.42	-56.65	-56.23

802.11a_Nss1,(6Mbps)_2TX CSE-PK

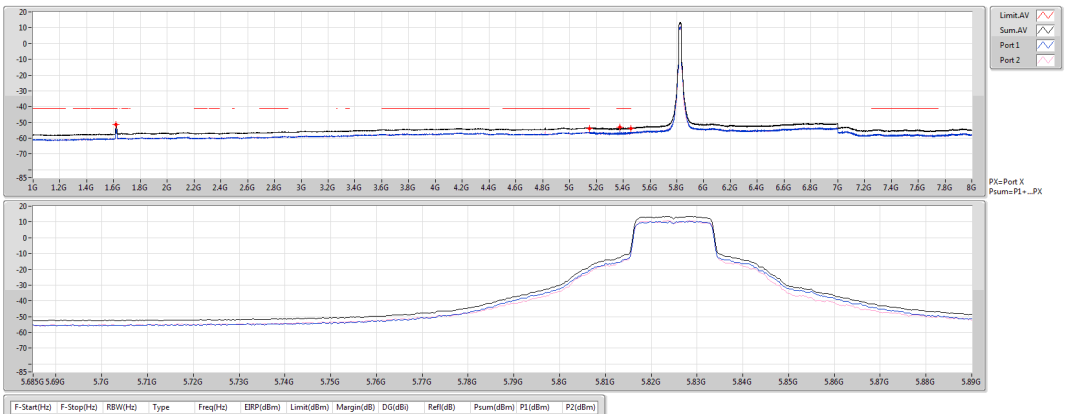
5825MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.55G	-31.95	-27.00	-4.95	8.90	0.00	-40.85	-43.85	-43.88
1G	8G	1M	PK	5.963G	-30.23	-27.00	-3.23	8.90	0.00	-39.13	-40.92	-43.83
1G	8G	1M	PK	6.76888G	-30.10	-27.00	-3.10	8.90	0.00	-39.00	-44.22	-40.55

802.11a_Nss1,(6Mbps)_2TX CSE-AV

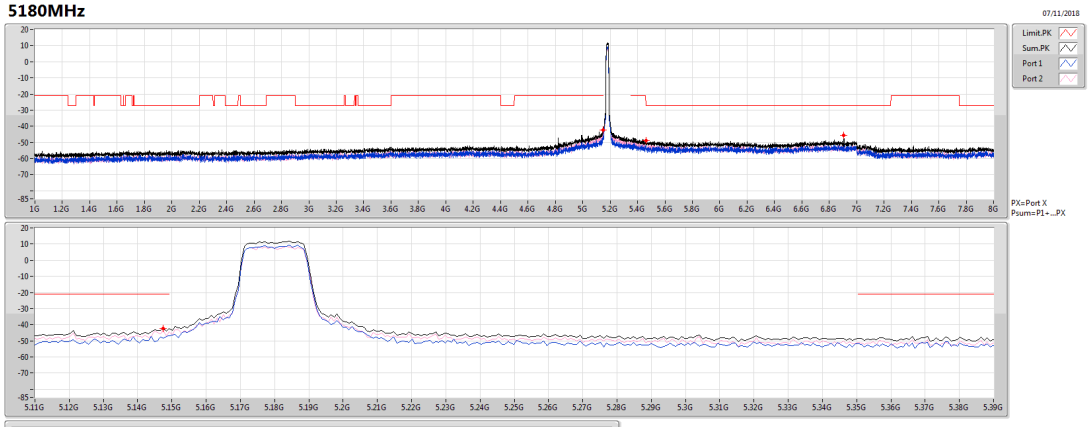
5825MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	1.61939G	-42.37	-41.20	-1.17	8.90	0.00	-51.27	-54.39	-54.18
5.15G	5.35G	1M	AV	5.15G	-44.98	-41.20	-3.78	8.90	0.00	-53.88	-56.83	-56.95
5.35G	5.46G	1M	AV	5.37596G	-44.21	-41.20	-3.01	8.90	0.00	-53.11	-55.63	-56.68
5.46G	8G	1M	AV	5.46G	-44.93	-41.20	-3.73	8.90	0.00	-53.83	-56.78	-56.91

802.11ac VHT20_Nss1,(MCS0)_2TX CSE-PK

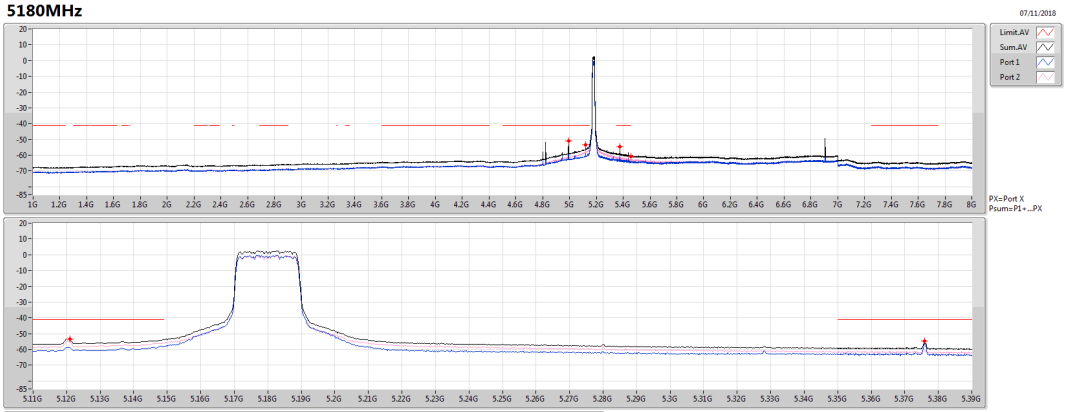
5180MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.1475G	-33.40	-21.20	-12.20	8.90	0.00	-42.30	-48.38	-43.53
1G	8G	1M	PK	5.46163G	-40.20	-27.00	-13.20	8.90	0.00	-49.10	-51.76	-52.50
1G	8G	1M	PK	6.90713G	-36.52	-27.00	-9.52	8.90	0.00	-45.42	-49.45	-47.61

802.11ac VHT20_Nss1,(MCS0)_2TX CSE-AV

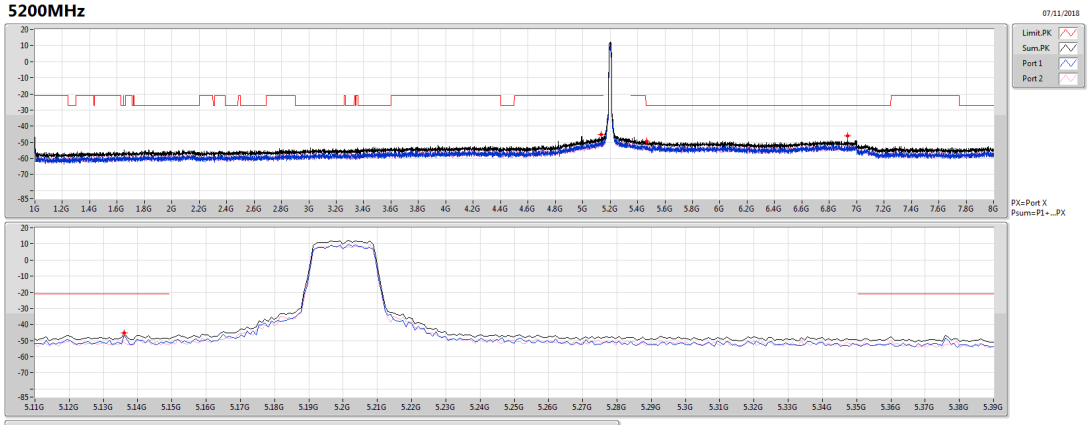
5180MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.9923G	-42.00	-41.20	-0.80	8.90	0.00	-50.90	-51.91	-57.74
1G	5.15G	1M	AV	5.12095G	-44.33	-41.20	-3.13	8.90	0.00	-53.23	-58.56	-54.73
5.35G	5.46G	1M	AV	5.37596G	-45.66	-41.20	-4.46	8.90	0.00	-54.56	-55.74	-60.78
5.46G	8G	1M	AV	5.46G	-51.84	-41.20	-10.64	8.90	0.00	-60.74	-64.03	-63.48

802.11ac VHT20_Nss1,(MCS0)_2TX CSE-PK

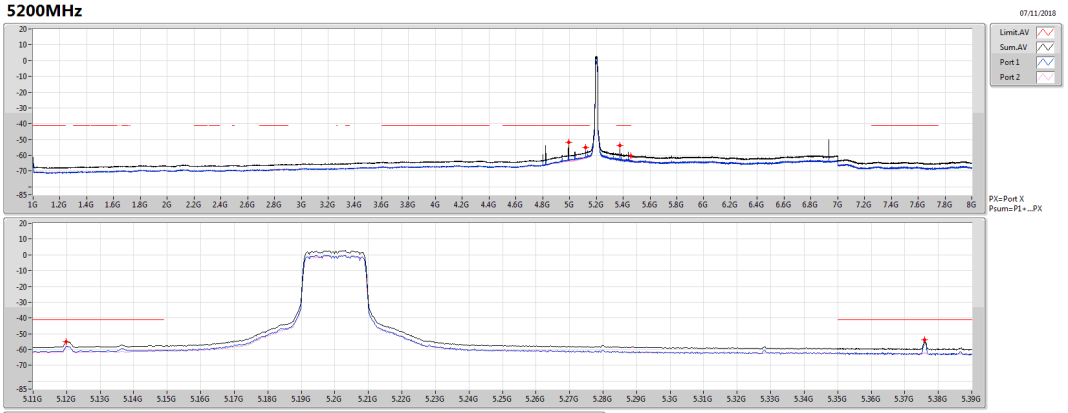
5200MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.13613G	-36.29	-21.20	-15.09	8.90	0.00	-45.19	-46.49	-51.06
1G	8G	1M	PK	5.46775G	-40.45	-27.00	-13.45	8.90	0.00	-49.35	-52.21	-52.51
1G	8G	1M	PK	6.93338G	-37.11	-27.00	-10.11	8.90	0.00	-46.01	-49.98	-48.24

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-AV**

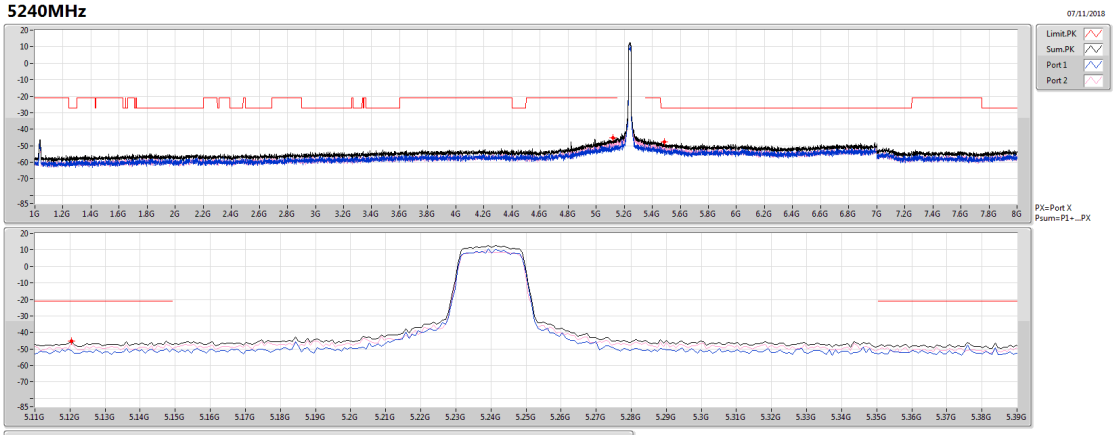
5200MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.9923G	-42.76	-41.20	-1.56	8.90	0.00	-51.66	-52.04	-62.38
1G	5.15G	1M	AV	5.11991G	-46.21	-41.20	-5.01	8.90	0.00	-55.11	-57.90	-58.36
5.35G	5.46G	1M	AV	5.37596G	-45.13	-41.20	-3.93	8.90	0.00	-54.03	-54.82	-61.83
5.46G	8G	1M	AV	5.46G	-51.63	-41.20	-10.43	8.90	0.00	-60.53	-63.16	-63.95

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-PK**

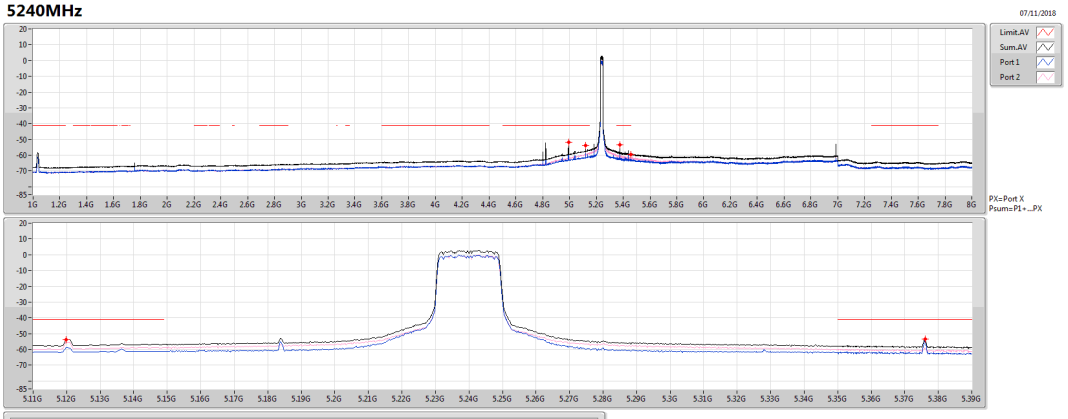
5240MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.12038G	-36.39	-21.20	-15.19	8.90	0.00	-45.29	-51.12	-46.61
1G	8G	1M	PK	5.48788G	-38.90	-27.00	-11.90	8.90	0.00	-47.80	-51.60	-50.15

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-AV**

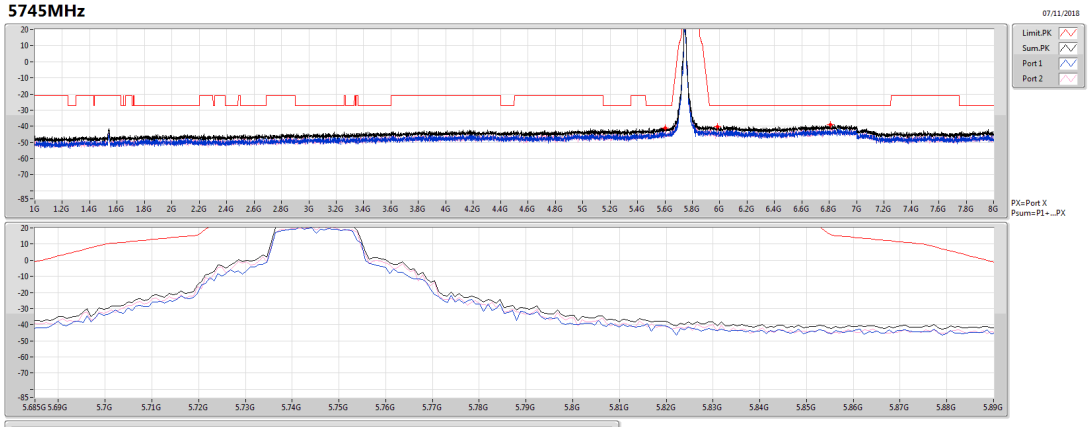
5240MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.9923G	-42.70	-41.20	-1.50	8.90	0.00	-51.60	-52.55	-58.66
1G	5.15G	1M	AV	5.11991G	-44.74	-41.20	-3.54	8.90	0.00	-53.64	-58.70	-55.27
5.35G	5.46G	1M	AV	5.37607G	-44.50	-41.20	-3.30	8.90	0.00	-53.40	-54.76	-59.09
5.46G	8G	1M	AV	5.46G	-50.59	-41.20	-9.39	8.90	0.00	-59.49	-62.94	-62.11

802.11ac VHT20_Nss1,(MCS0)_2TX CSE-PK

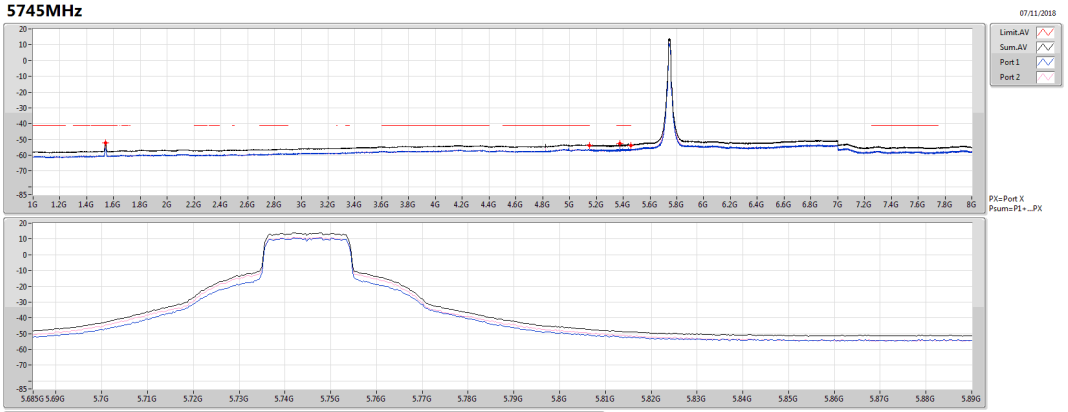
5745MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.60075G	-32.04	-27.00	-5.04	8.90	0.00	-40.94	-43.53	-44.42
1G	8G	1M	PK	5.98138G	-31.23	-27.00	-4.23	8.90	0.00	-40.13	-44.78	-41.96
1G	8G	1M	PK	6.8065G	-30.13	-27.00	-3.13	8.90	0.00	-39.03	-43.33	-41.04

802.11ac VHT20_Nss1,(MCS0)_2TX CSE-AV

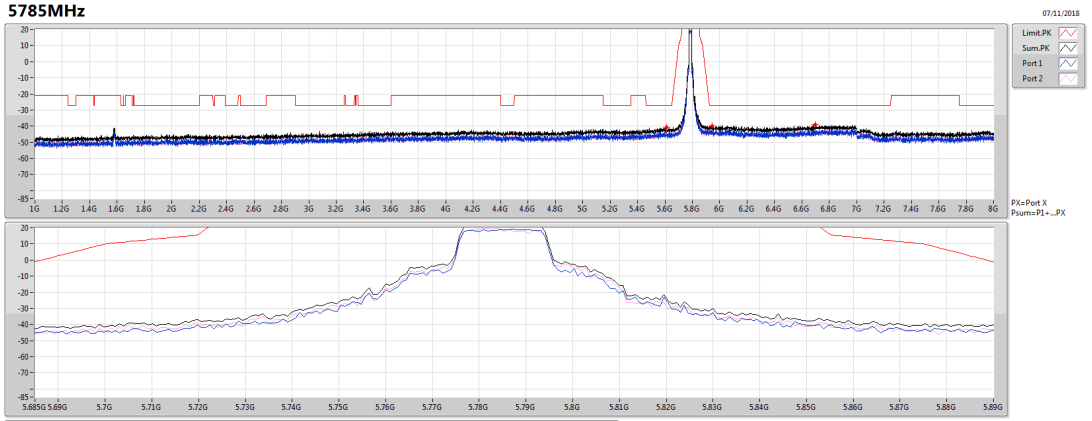
5745MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	1.5395G	-43.33	-41.20	-2.13	8.90	0.00	-52.23	-55.51	-54.99
5.15G	5.35G	1M	AV	5.15G	-44.86	-41.20	-3.66	8.90	0.00	-53.76	-56.72	-56.82
5.35G	5.46G	1M	AV	5.37596G	-43.53	-41.20	-2.33	8.90	0.00	-52.43	-54.43	-56.77
5.46G	8G	1M	AV	5.46G	-44.78	-41.20	-3.58	8.90	0.00	-53.68	-56.61	-56.77

802.11ac VHT20_Nss1,(MCS0)_2TX CSE-PK

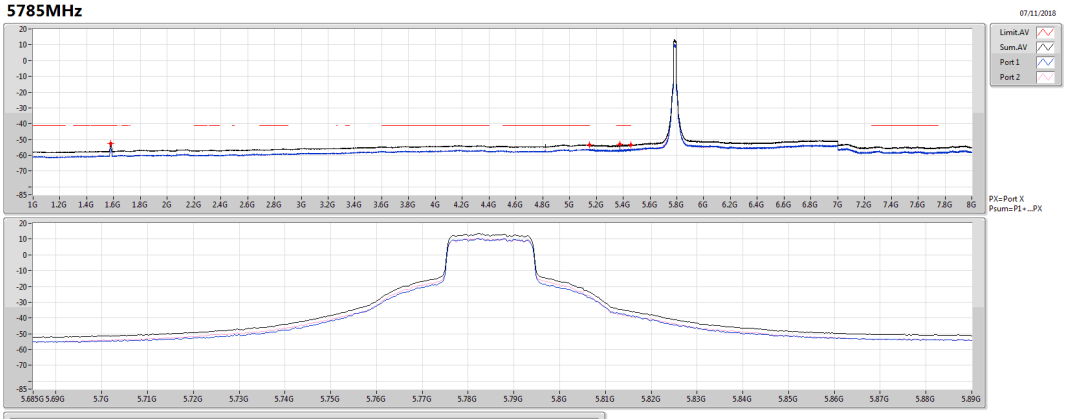
5785MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.61125G	-31.72	-27.00	-4.72	8.90	0.00	-40.62	-43.68	-43.59
1G	8G	1M	PK	5.94725G	-30.90	-27.00	-3.90	8.90	0.00	-39.80	-42.79	-42.83
1G	8G	1M	PK	6.698G	-30.32	-27.00	-3.32	8.90	0.00	-39.22	-41.69	-42.84

802.11ac VHT20_Nss1,(MCS0)_2TX CSE-AV

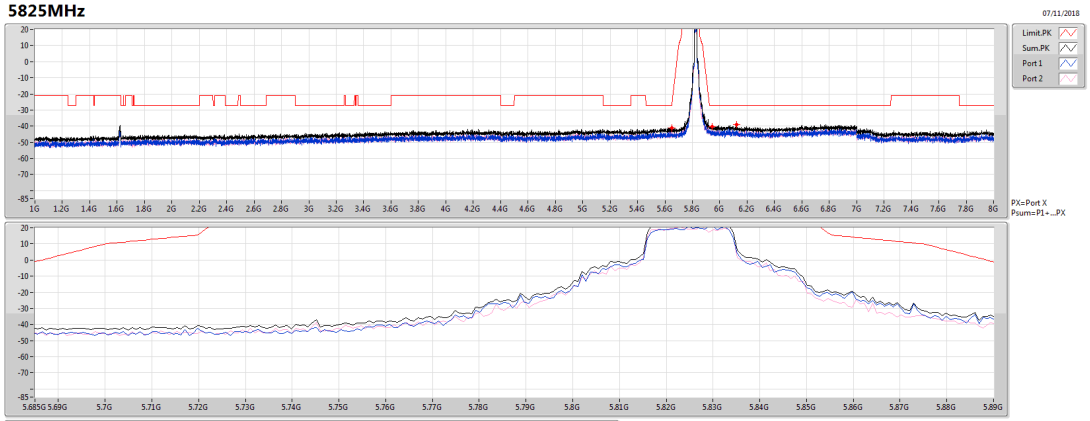
5785MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	1.57893G	-43.78	-41.20	-2.58	8.90	0.00	-52.68	-55.59	-55.79
5.15G	5.35G	1M	AV	5.15G	-44.57	-41.20	-3.37	8.90	0.00	-53.47	-56.29	-56.68
5.35G	5.46G	1M	AV	5.37596G	-43.94	-41.20	-2.74	8.90	0.00	-52.84	-55.00	-56.91
5.46G	8G	1M	AV	5.46G	-44.52	-41.20	-3.32	8.90	0.00	-53.42	-56.56	-56.31

802.11ac VHT20_Nss1,(MCS0)_2TX CSE-PK

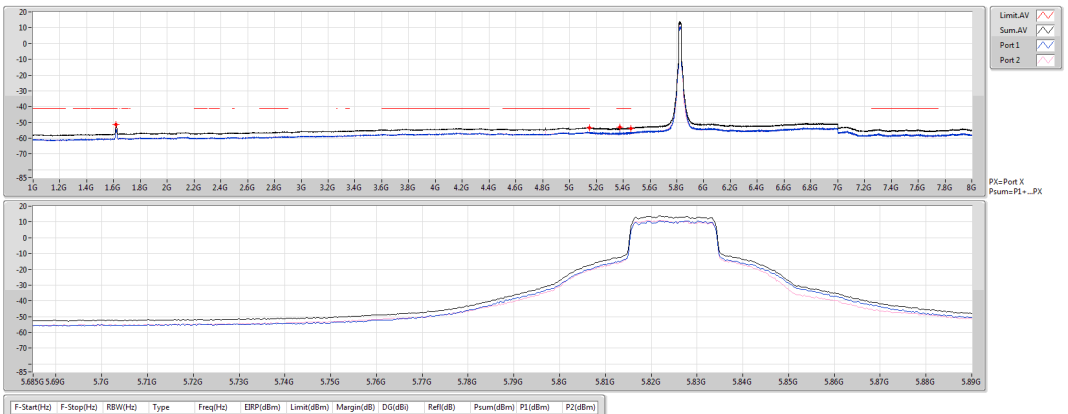
5825MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.64888G	-32.13	-27.00	-5.13	8.90	0.00	-41.03	-44.92	-43.31
1G	8G	1M	PK	5.9455G	-31.25	-27.00	-4.25	8.90	0.00	-40.15	-42.48	-43.97
1G	8G	1M	PK	6.12488G	-30.28	-27.00	-3.28	8.90	0.00	-39.18	-42.67	-41.75

802.11ac VHT20_Nss1,(MCS0)_2TX CSE-AV

5825MHz

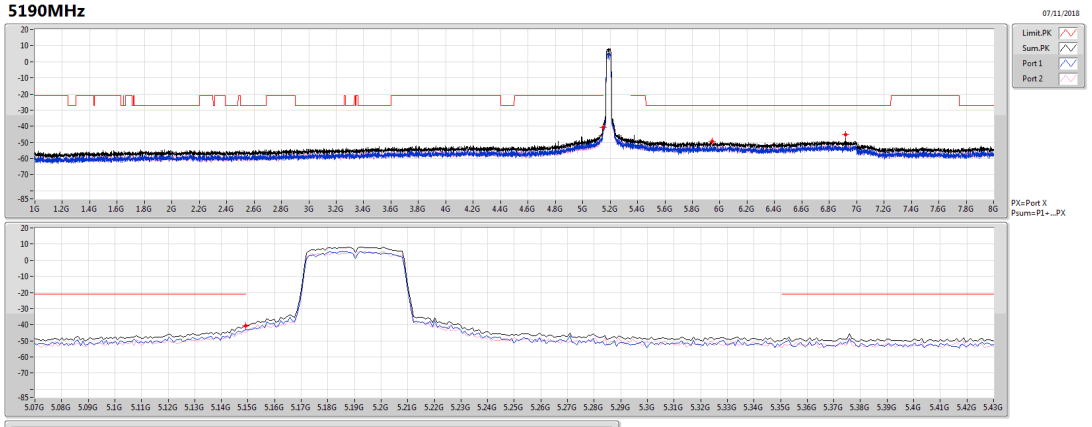


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	1.61939G	-42.38	-41.20	-1.18	8.90	0.00	-51.28	-54.46	-54.13
5.15G	5.35G	1M	AV	5.15G	-44.69	-41.20	-3.49	8.90	0.00	-53.59	-56.11	-57.15
5.35G	5.46G	1M	AV	5.37596G	-44.02	-41.20	-2.82	8.90	0.00	-52.92	-55.16	-56.86
5.46G	8G	1M	AV	5.46G	-44.74	-41.20	-3.54	8.90	0.00	-53.64	-56.63	-56.68

802.11ac VHT40_Nss1,(MCS0)_2TX

CSE-PK

5190MHz

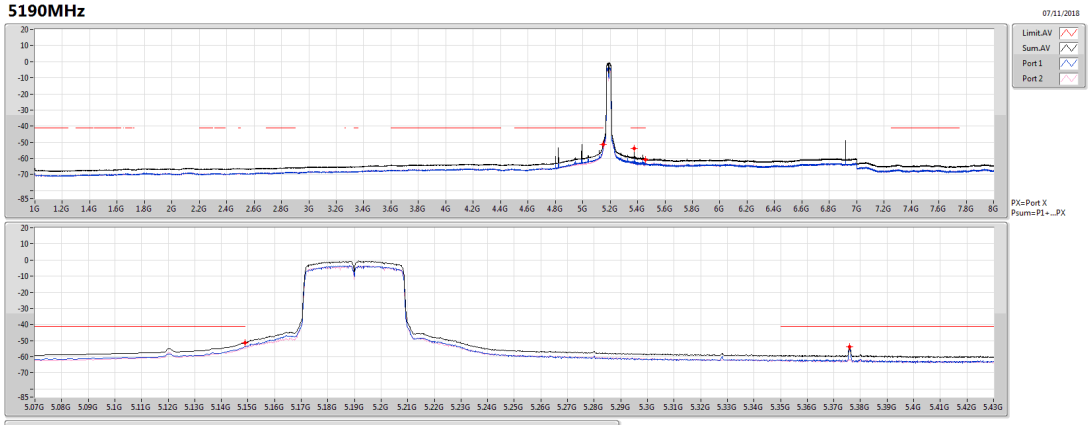


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.14925G	-31.83	-21.20	-10.63	8.90	0.00	-40.73	-43.01	-44.63
1G	8G	1M	PK	5.94288G	-40.24	-27.00	-13.24	8.90	0.00	-49.14	-51.30	-53.21
1G	8G	1M	PK	6.92025G	-36.29	-27.00	-9.29	8.90	0.00	-45.19	-48.26	-48.15

802.11ac VHT40_Nss1,(MCS0)_2TX

CSE-AV

5190MHz

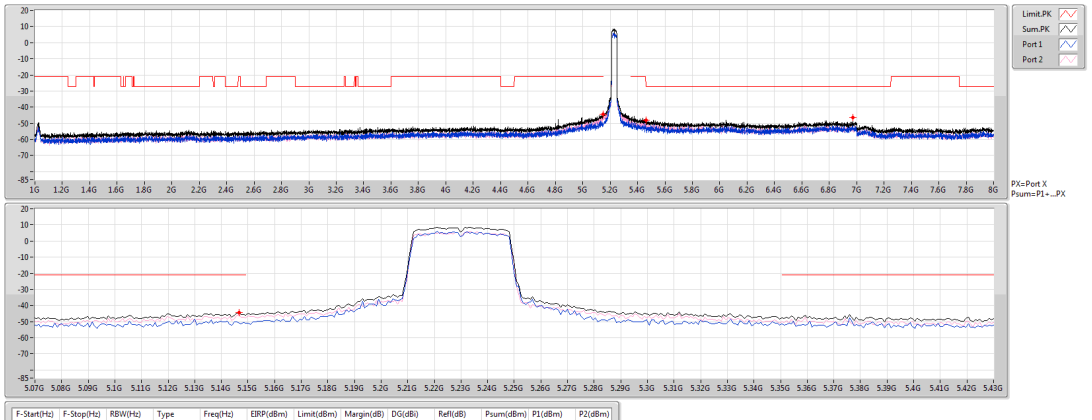


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	5.14896G	-42.48	-41.20	-1.28	8.90	0.00	-51.38	-53.96	-54.86
5.35G	5.46G	1M	AV	5.37596G	-45.04	-41.20	-3.84	8.90	0.00	-53.94	-54.72	-61.76
5.46G	8G	1M	AV	5.46G	-51.86	-41.20	-10.66	8.90	0.00	-60.76	-63.57	-63.99

802.11ac VHT40_Nss1,(MCS0)_2TX

CSE-PK

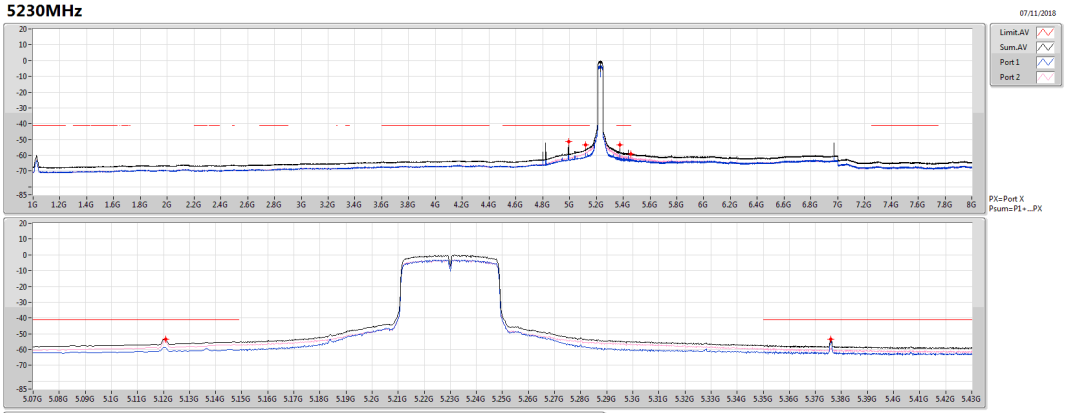
5230MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.14663G	-35.59	-21.20	-14.39	8.90	0.00	-44.49	-50.93	-45.61
1G	8G	1M	PK	5.46338G	-39.25	-27.00	-12.25	8.90	0.00	-48.15	-53.04	-49.86
1G	8G	1M	PK	6.97363G	-37.62	-27.00	-10.62	8.90	0.00	-46.52	-50.49	-48.74

802.11ac VHT40_Nss1,(MCS0)_2TX CSE-AV

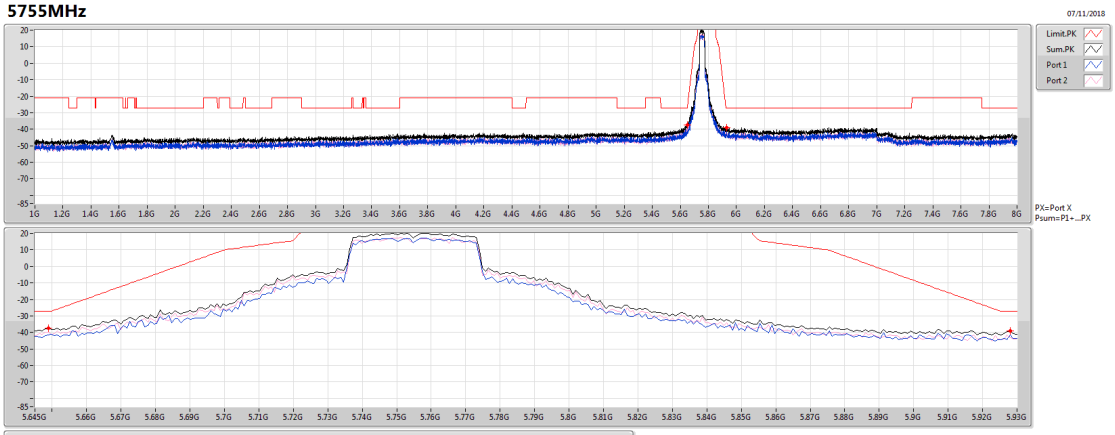
5230MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.9923G	-42.33	-41.20	-1.13	8.90	0.00	-51.23	-52.16	-58.39
1G	5.15G	1M	AV	5.12095G	-44.35	-41.20	-3.15	8.90	0.00	-53.25	-58.78	-54.67
5.35G	5.46G	1M	AV	5.37596G	-44.46	-41.20	-3.26	8.90	0.00	-53.36	-54.68	-59.19
5.46G	8G	1M	AV	5.46G	-50.28	-41.20	-9.08	8.90	0.00	-59.18	-62.63	-61.80

802.11ac VHT40_Nss1,(MCS0)_2TX CSE-PK

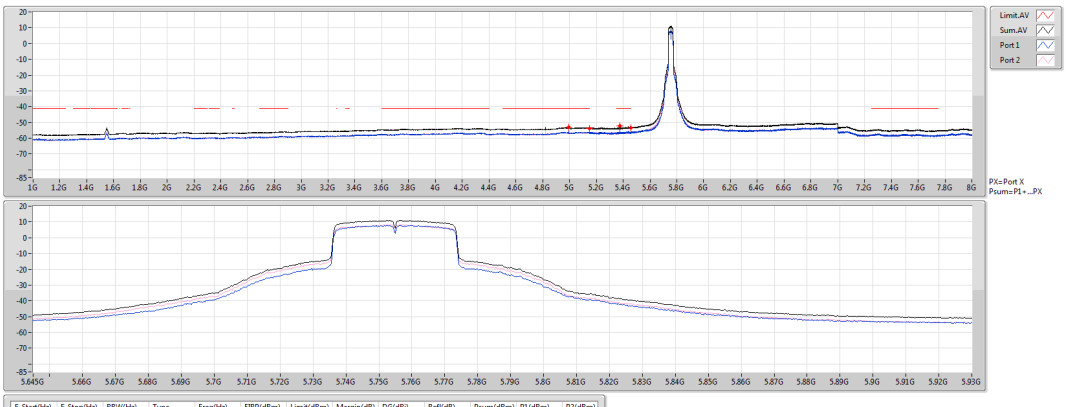
5755MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.64888G	-28.65	-27.00	-1.65	8.90	0.00	-37.55	-41.60	-39.72
1G	8G	1M	PK	5.928G	-30.28	-27.00	-3.28	8.90	0.00	-39.18	-41.50	-43.02

802.11ac VHT40_Nss1,(MCS0)_2TX CSE-AV

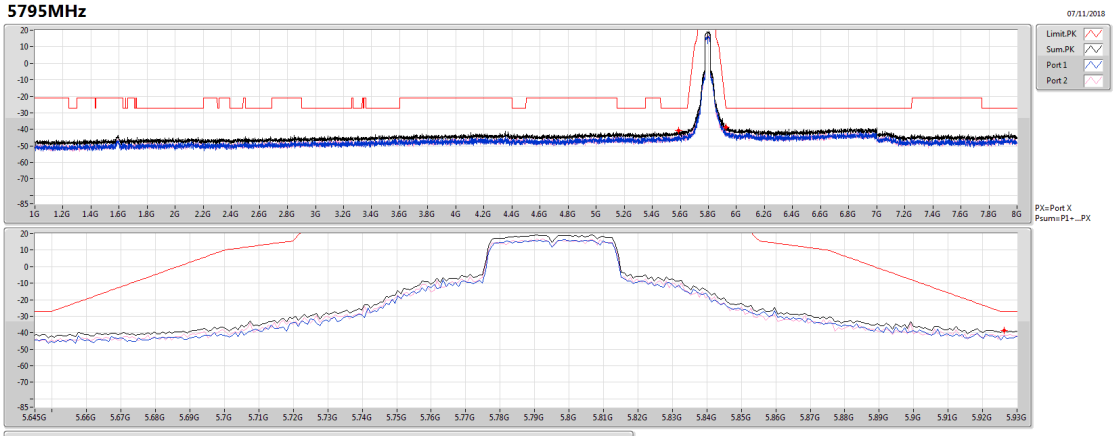
5755MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.9923G	-44.16	-41.20	-2.96	8.90	0.00	-53.06	-55.43	-56.82
5.15G	5.35G	1M	AV	5.15G	-44.92	-41.20	-3.72	8.90	0.00	-53.82	-56.92	-56.74
5.35G	5.46G	1M	AV	5.37618G	-43.37	-41.20	-2.17	8.90	0.00	-52.27	-54.26	-56.62
5.46G	8G	1M	AV	5.46G	-44.36	-41.20	-3.16	8.90	0.00	-53.26	-56.20	-56.35

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-PK**

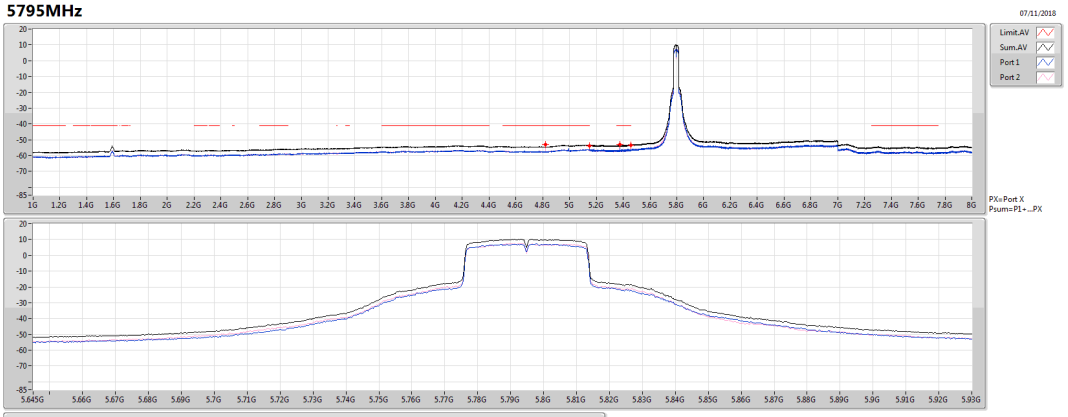
5795MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.5885G	-31.85	-27.00	-4.85	8.90	0.00	-40.75	-43.24	-44.36
1G	8G	1M	PK	5.92625G	-29.81	-27.00	-2.81	8.90	0.00	-38.71	-41.73	-41.72

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-AV**

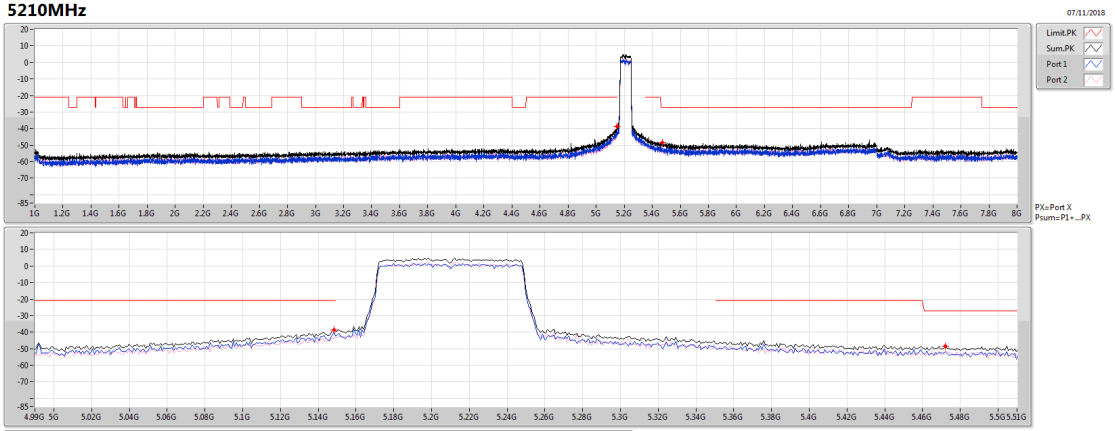
5795MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.82111G	-44.28	-41.20	-3.08	8.90	0.00	-53.18	-57.36	-55.27
5.15G	5.35G	1M	AV	5.15G	-44.82	-41.20	-3.62	8.90	0.00	-53.72	-56.86	-56.60
5.35G	5.46G	1M	AV	5.37585G	-44.08	-41.20	-2.88	8.90	0.00	-52.98	-55.20	-56.96
5.46G	8G	1M	AV	5.46G	-44.55	-41.20	-3.35	8.90	0.00	-53.45	-56.51	-56.41

802.11ac VHT80_Nss1,(MCS0)_2TX **CSE-PK**

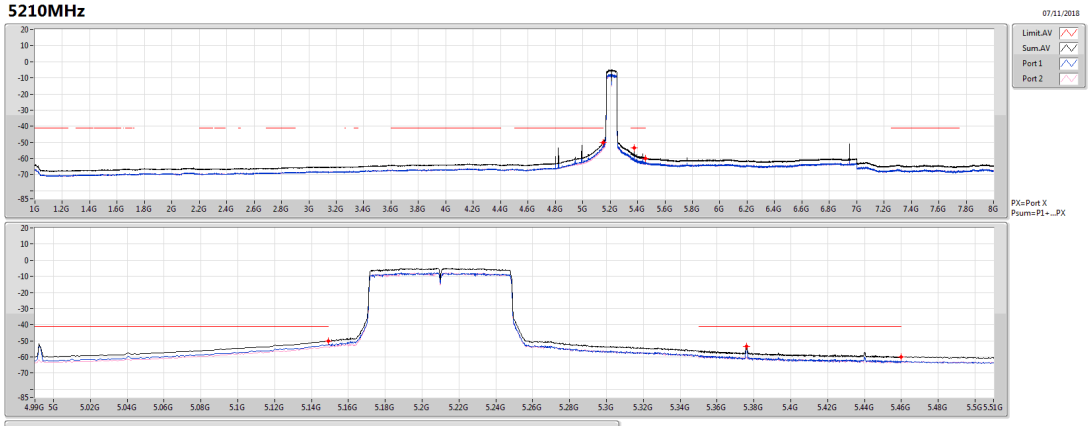
5210MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.14838G	-29.62	-21.20	-8.42	8.90	0.00	-38.52	-40.05	-43.78
1G	8G	1M	PK	5.47213G	-39.68	-27.00	-12.68	8.90	0.00	-48.58	-51.81	-51.39

802.11ac VHT80_Nss1,(MCS0)_2TX **CSE-AV**

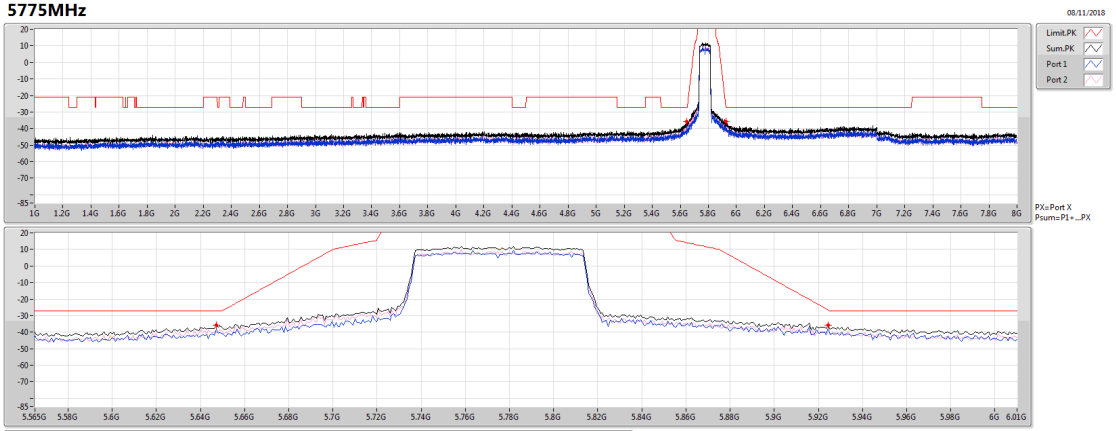
5210MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	5.14896G	-41.23	-41.20	-0.03	8.90	0.00	-50.13	-52.54	-53.84
5.35G	5.46G	1M	AV	5.37596G	-44.72	-41.20	-3.52	8.90	0.00	-53.62	-54.76	-60.00
5.46G	8G	1M	AV	5.46G	-51.03	-41.20	-9.83	8.90	0.00	-59.93	-62.61	-63.30

802.11ac VHT80_Nss1,(MCS0)_2TX **CSE-PK**

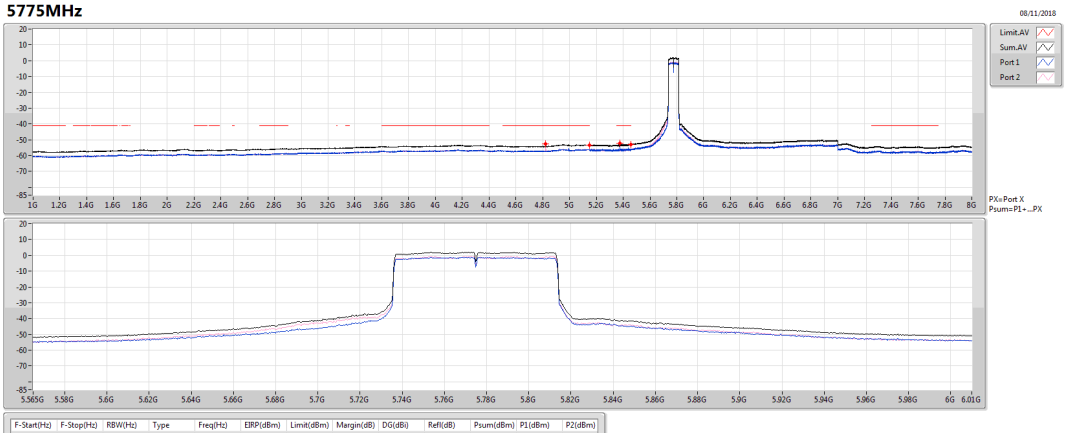
5775MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	8G	1M	PK	5.64713G	-27.05	-27.00	-0.05	8.90	0.00	-35.95	-38.04	-40.14
1G	8G	1M	PK	5.9245G	-26.73	-26.63	-0.10	8.90	0.00	-35.63	-37.62	-39.99

802.11ac VHT80_Nss1,(MCS0)_2TX **CSE-AV**

5775MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.15G	1M	AV	4.82319G	-43.60	-41.20	-2.40	8.90	0.00	-52.50	-57.08	-54.36
5.15G	5.35G	1M	AV	5.15G	-44.49	-41.20	-3.29	8.90	0.00	-53.39	-56.88	-55.97
5.35G	5.46G	1M	AV	5.37607G	-43.31	-41.20	-2.11	8.90	0.00	-52.21	-54.11	-56.71
5.46G	8G	1M	AV	5.46G	-44.29	-41.20	-3.09	8.90	0.00	-53.19	-56.11	-56.29

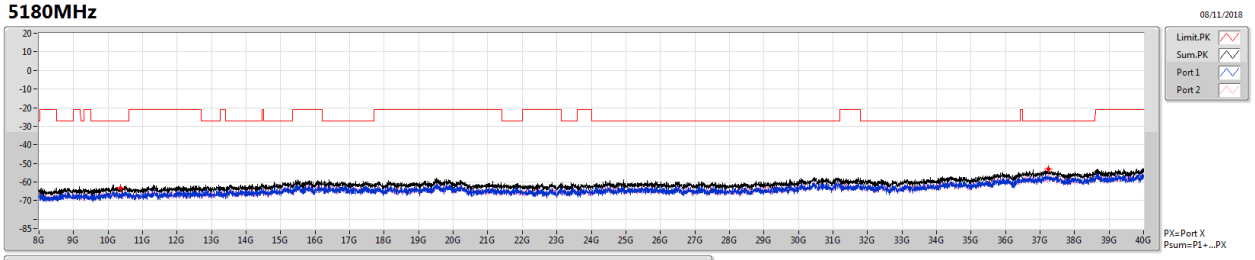
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	Type	Freq (Hz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	DG (dBi)	Refl (dB)	Psum (dBm)	P1 (dBm)	P2 (dBm)
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	8G	40G	1M	AV	39.994G	-54.33	-41.20	-13.13	8.90	0.00	-63.23	-66.05	-66.44

DG = Directional Gain;
PX=Port X; **Psum**=P1+.P2+..PX

802.11a_Nss1,(6Mbps)_2TX **CSE-PK**

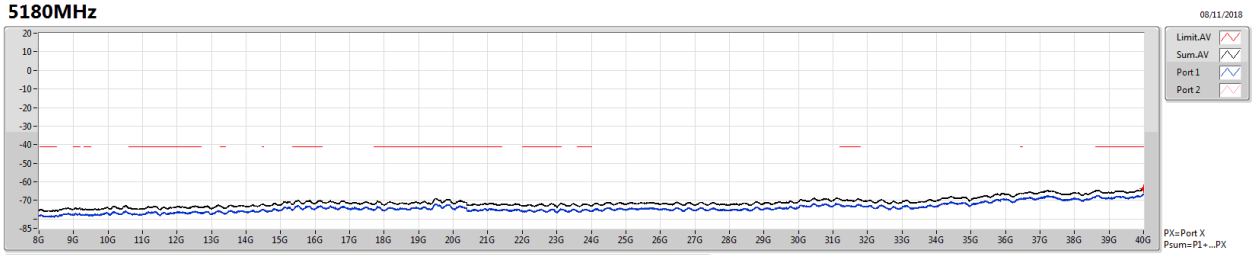
5180MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	10.356G	-54.51	-27.00	-27.51	8.90	0.00	-63.41	-66.34	-66.50
8G	40G	1M	PK	37.24G	-44.29	-27.00	-17.29	8.90	0.00	-53.19	-57.37	-55.28

802.11a_Nss1,(6Mbps)_2TX **CSE-AV**

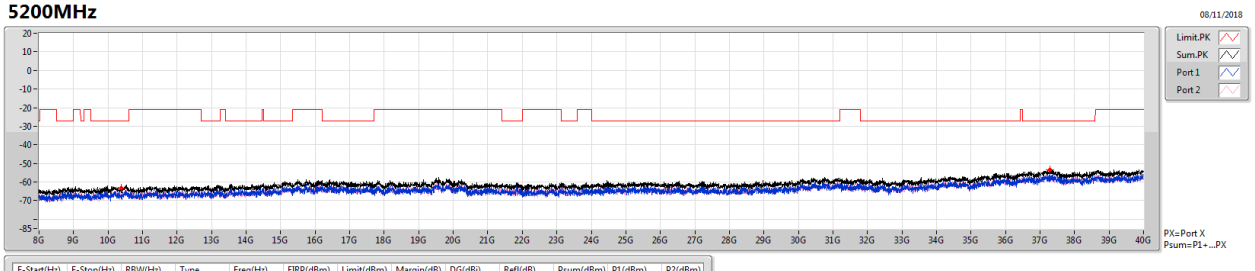
5180MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	39.998G	-54.70	-41.20	-13.50	8.90	0.00	-63.60	-66.66	-66.56

802.11a_Nss1,(6Mbps)_2TX **CSE-PK**

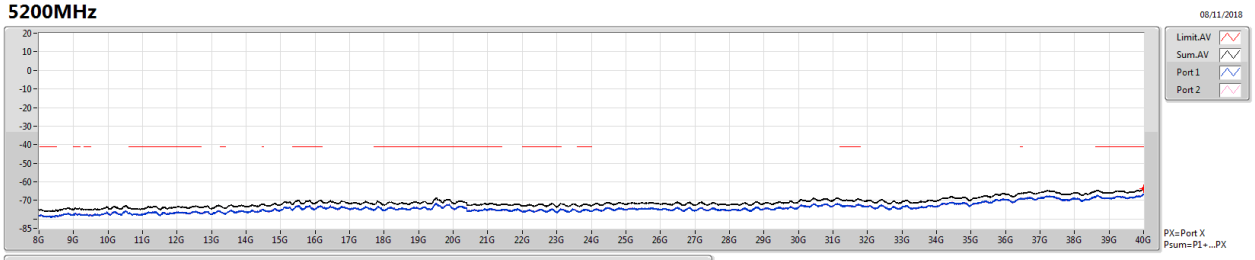
5200MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	10.392G	-54.53	-27.00	-27.53	8.90	0.00	-63.43	-66.64	-66.25
8G	40G	1M	PK	37.28G	-44.42	-27.00	-17.42	8.90	0.00	-53.32	-55.17	-57.93

802.11a_Nss1,(6Mbps)_2TX **CSE-AV**

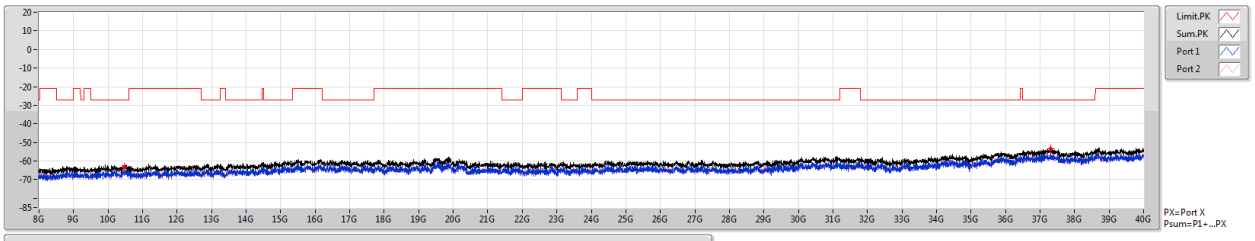
5200MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	39.998G	-54.68	-41.20	-13.48	8.90	0.00	-63.58	-66.61	-66.58

802.11a_Nss1,(6Mbps)_2TX **CSE-PK**

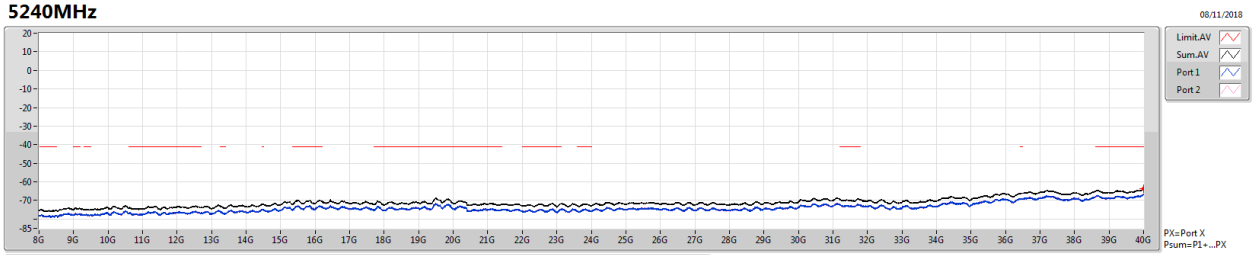
5240MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	10.476G	-54.38	-27.00	-27.38	8.90	0.00	-63.28	-66.04	-66.55
8G	40G	1M	PK	37.316G	-44.32	-27.00	-17.32	8.90	0.00	-53.22	-55.71	-56.83

802.11a_Nss1,(6Mbps)_2TX **CSE-AV**

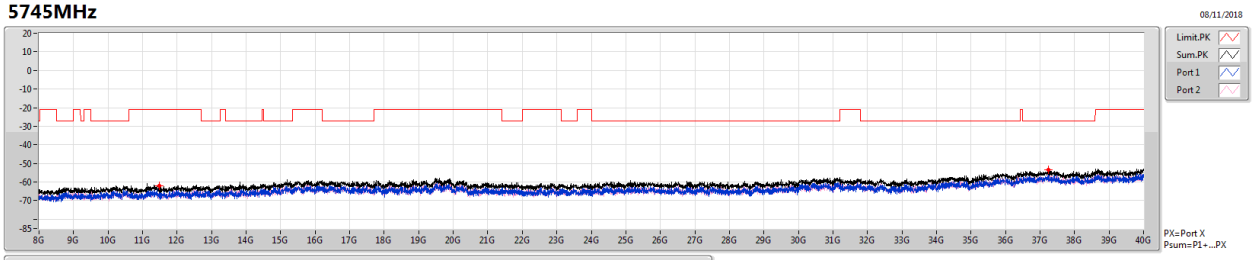
5240MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	39.994G	-54.71	-41.20	-13.51	8.90	0.00	-63.61	-66.42	-66.82

802.11a_Nss1,(6Mbps)_2TX **CSE-PK**

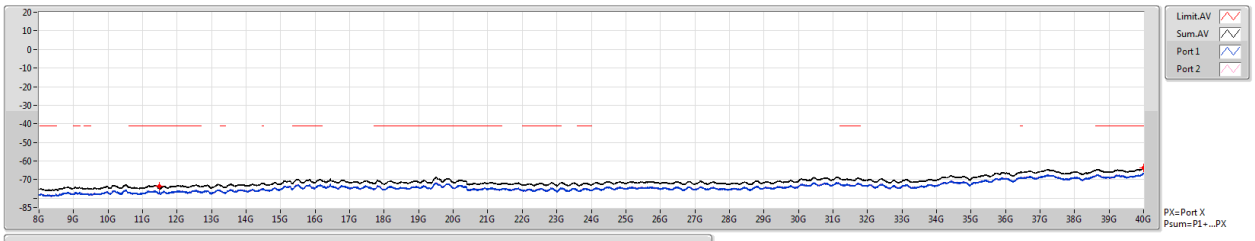
5745MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	11.492G	-53.17	-21.20	-31.97	8.90	0.00	-62.07	-64.22	-66.15
8G	40G	1M	PK	37.24G	-44.58	-27.00	-17.58	8.90	0.00	-53.48	-56.33	-56.65

802.11a_Nss1,(6Mbps)_2TX **CSE-AV**

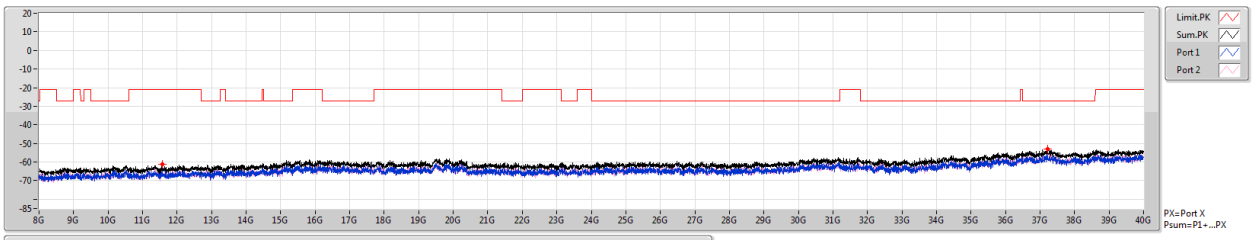
5745MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	11.491G	-64.52	-41.20	-23.32	8.90	0.00	-73.42	-76.08	-76.81
8G	40G	1M	AV	39.996G	-54.70	-41.20	-13.50	8.90	0.00	-63.60	-66.62	-66.61

802.11a_Nss1,(6Mbps)_2TX **CSE-PK**

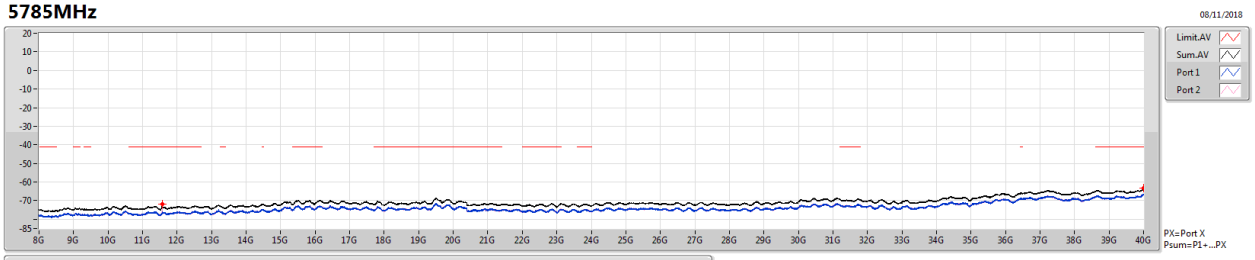
5785MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	11.564G	-52.48	-21.20	-31.28	8.90	0.00	-61.38	-64.36	-64.43
8G	40G	1M	PK	37.212G	-44.08	-27.00	-17.08	8.90	0.00	-52.98	-55.51	-56.54

802.11a_Nss1,(6Mbps)_2TX **CSE-AV**

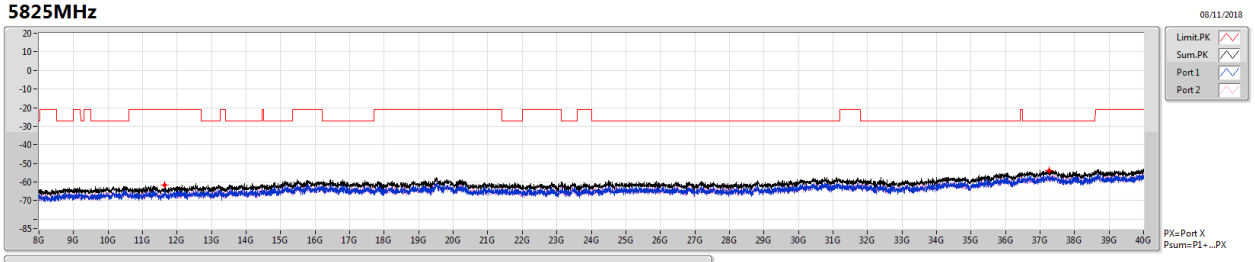
5785MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	11.57G	-63.18	-41.20	-21.98	8.90	0.00	-72.08	-76.09	-74.27
8G	40G	1M	AV	39.998G	-54.46	-41.20	-13.26	8.90	0.00	-63.36	-66.40	-66.34

802.11a_Nss1,(6Mbps)_2TX **CSE-PK**

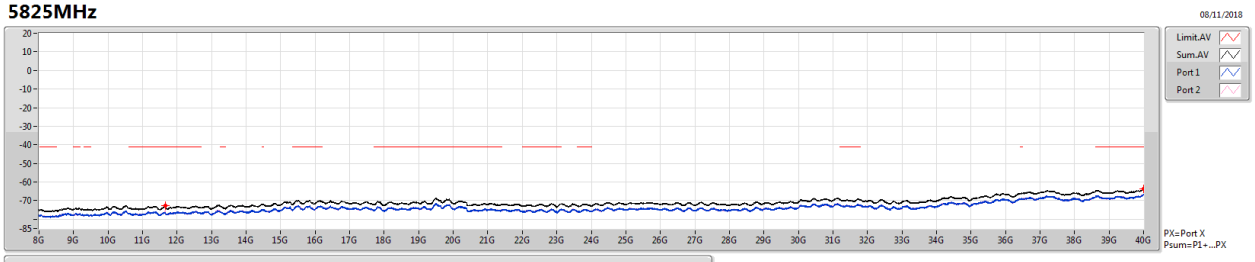
5825MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	11.648G	-52.55	-21.20	-31.35	8.90	0.00	-61.45	-63.62	-65.50
8G	40G	1M	PK	37.256G	-44.77	-27.00	-17.77	8.90	0.00	-53.67	-56.94	-56.44

802.11a_Nss1,(6Mbps)_2TX **CSE-AV**

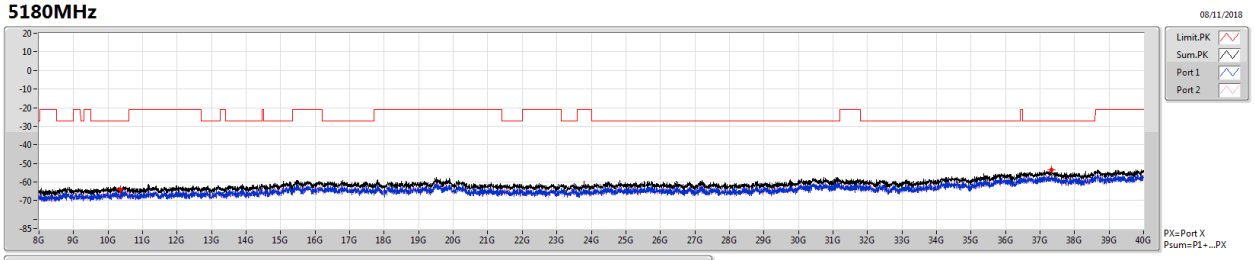
5825MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	11.65G	-63.95	-41.20	-22.75	8.90	0.00	-72.85	-76.34	-75.42
8G	40G	1M	AV	39.996G	-54.69	-41.20	-13.49	8.90	0.00	-63.59	-66.78	-66.43

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-PK**

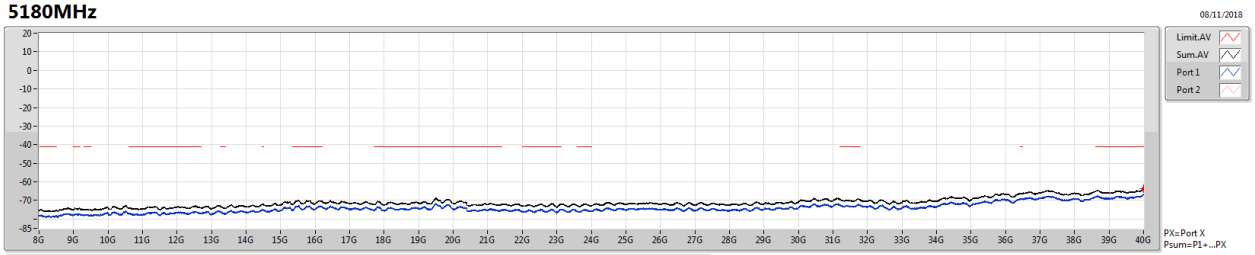
5180MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	10.368G	-55.04	-27.00	-28.04	8.90	0.00	-63.94	-65.63	-68.87
8G	40G	1M	PK	37.34G	-44.66	-27.00	-17.66	8.90	0.00	-53.56	-55.64	-57.76

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-AV**

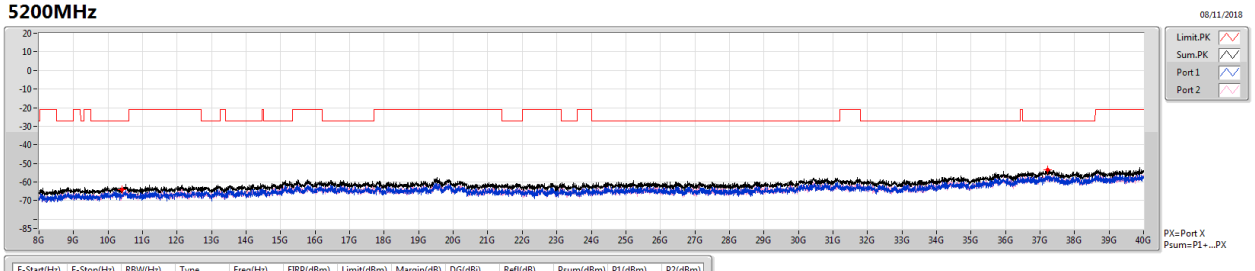
5180MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	40G	-54.83	-41.20	-13.63	8.90	0.00	-63.73	-66.50	-66.99

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-PK**

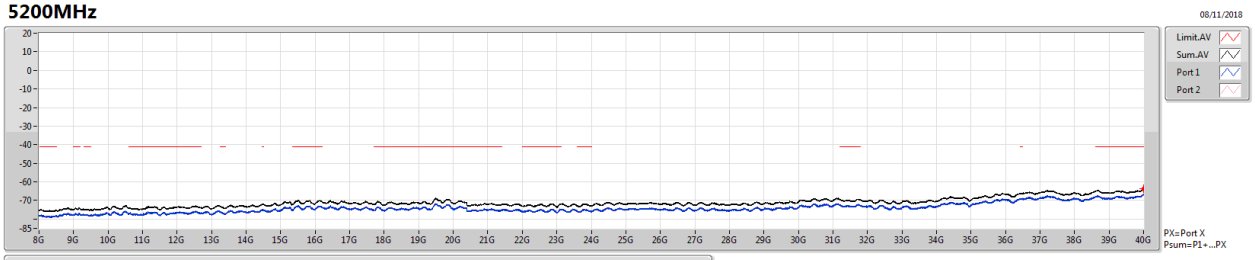
5200MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	10.396G	-55.20	-27.00	-28.20	8.90	0.00	-64.10	-66.47	-67.85
8G	40G	1M	PK	37.22G	-44.57	-27.00	-17.57	8.90	0.00	-53.47	-56.84	-56.14

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-AV**

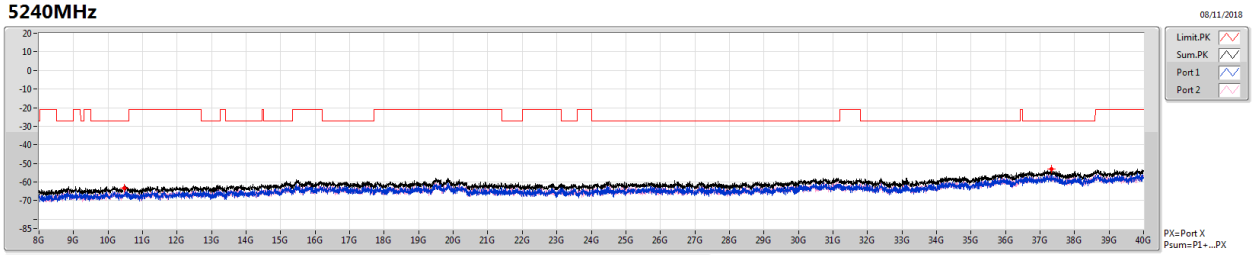
5200MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	39.997G	-54.74	-41.20	-13.54	8.90	0.00	-63.64	-66.40	-66.92

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-PK**

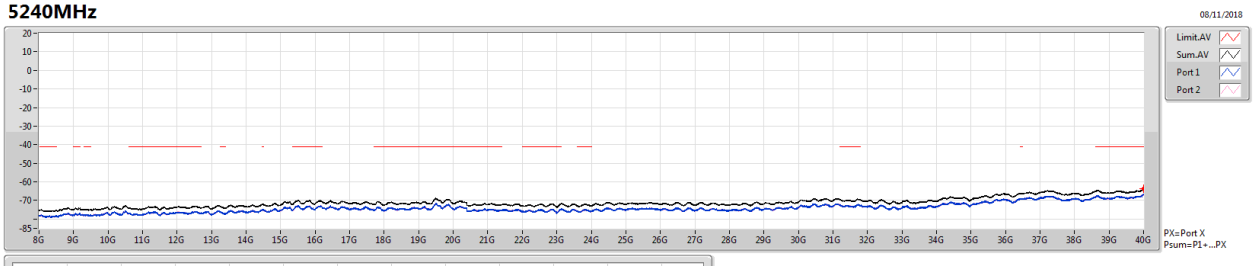
5240MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	10.472G	-54.48	-27.00	-27.48	8.90	0.00	-63.38	-66.87	-65.96
8G	40G	1M	PK	37.324G	-44.12	-27.00	-17.12	8.90	0.00	-53.02	-57.55	-54.90

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-AV**

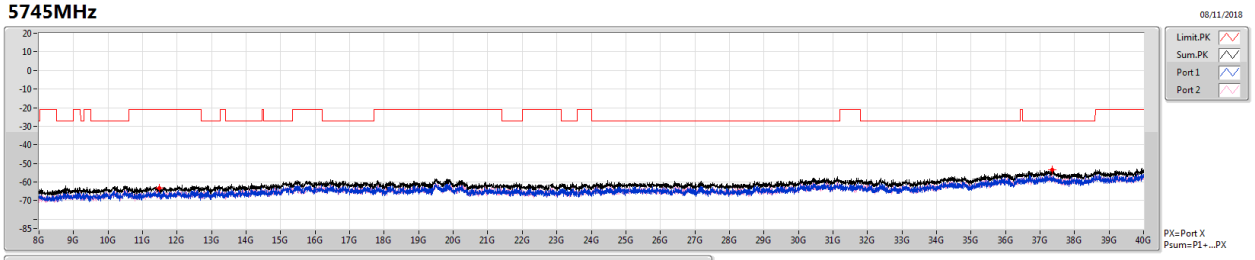
5240MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	39.999G	-54.70	-41.20	-13.50	8.90	0.00	-63.60	-66.63	-66.60

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-PK**

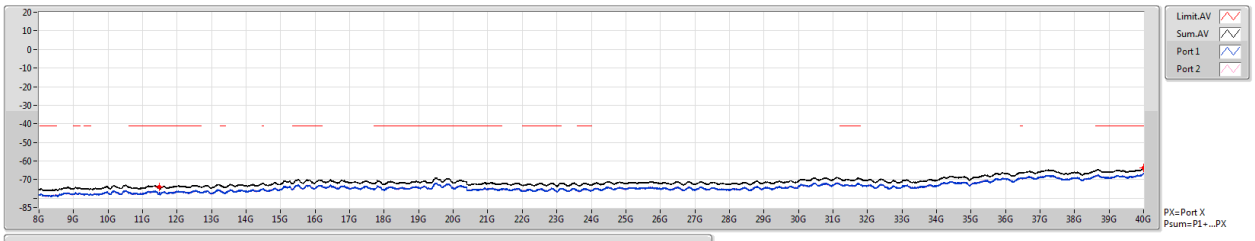
5745MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	11.484G	-54.30	-21.20	-33.10	8.90	0.00	-63.20	-64.57	-68.89
8G	40G	1M	PK	37.344G	-44.52	-27.00	-17.52	8.90	0.00	-53.42	-58.24	-55.15

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-AV**

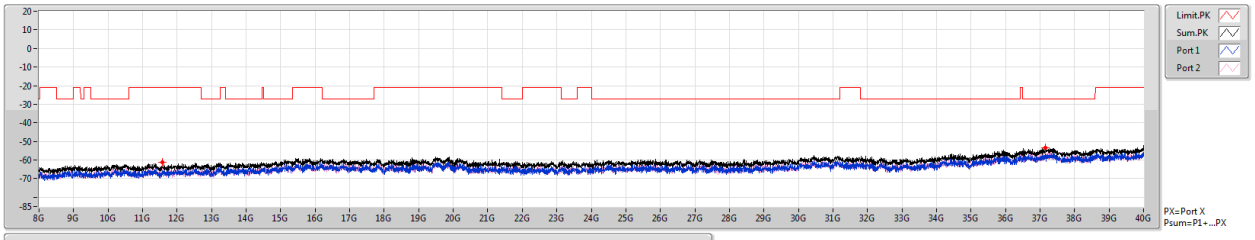
5745MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	11.495G	-65.04	-41.20	-23.84	8.90	0.00	-73.94	-76.82	-77.08
8G	40G	1M	AV	39.995G	-54.75	-41.20	-13.55	8.90	0.00	-63.65	-66.69	-66.64

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-PK**

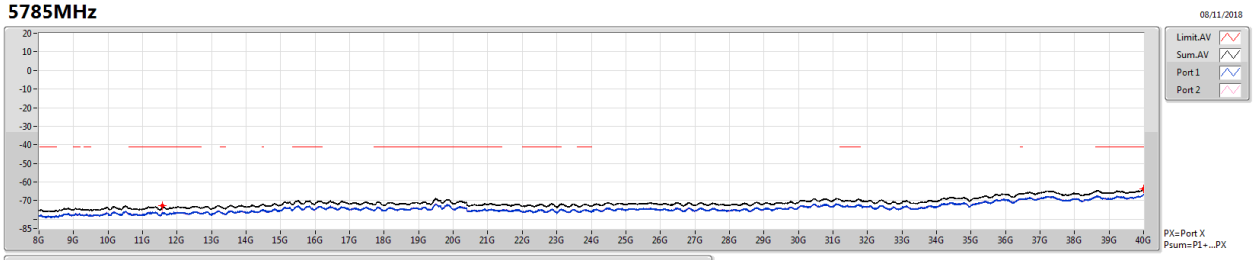
5785MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	11.572G	-52.45	-21.20	-31.25	8.90	0.00	-61.35	-65.90	-63.22
8G	40G	1M	PK	37.152G	-44.43	-27.00	-17.43	8.90	0.00	-53.33	-57.62	-55.35

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-AV**

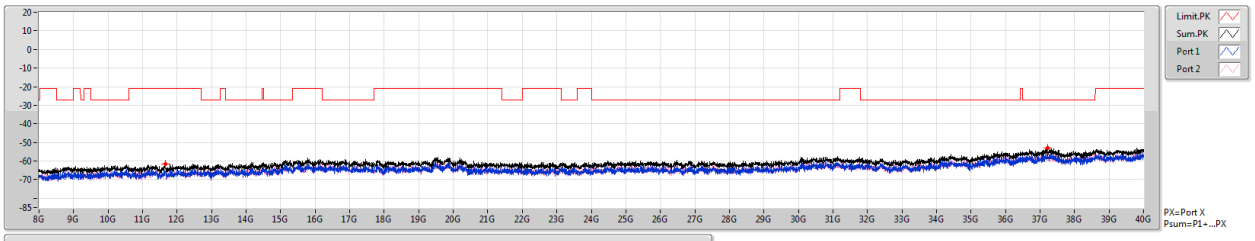
5785MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	11.57G	-63.64	-41.20	-22.44	8.90	0.00	-72.54	-76.20	-74.99
8G	40G	1M	AV	39.999G	-54.73	-41.20	-13.53	8.90	0.00	-63.63	-66.75	-66.54

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-PK**

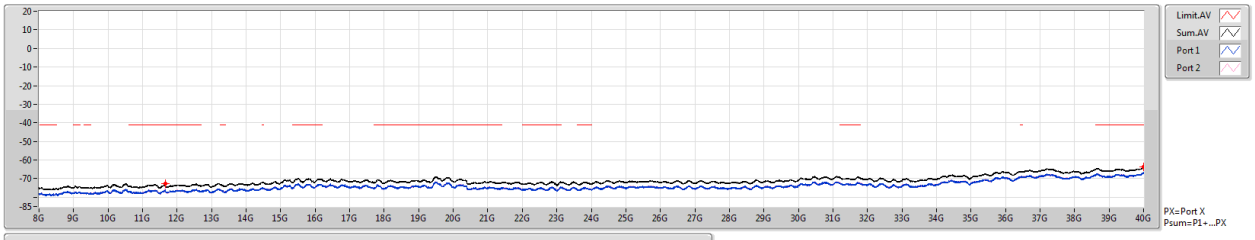
5825MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	11.652G	-52.89	-21.20	-31.69	8.90	0.00	-61.79	-65.67	-64.07
8G	40G	1M	PK	37.216G	-44.29	-27.00	-17.29	8.90	0.00	-53.19	-54.97	-57.92

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE-AV**

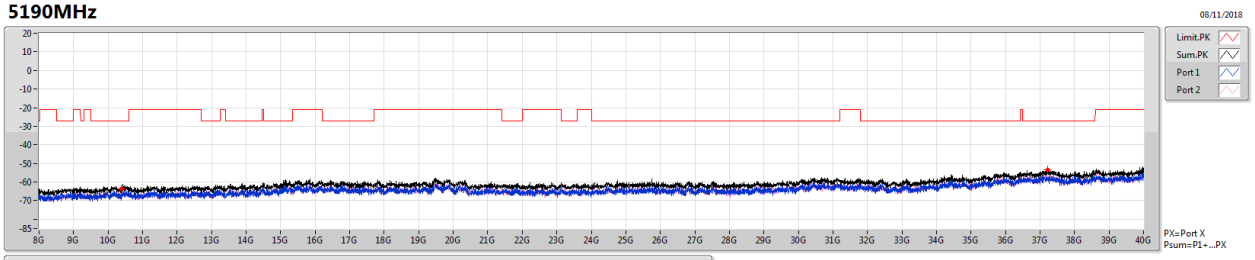
5825MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	11.652G	-63.88	-41.20	-22.68	8.90	0.00	-72.78	-76.30	-75.33
8G	40G	1M	AV	39.997G	-54.64	-41.20	-13.44	8.90	0.00	-63.54	-66.55	-66.56

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-PK**

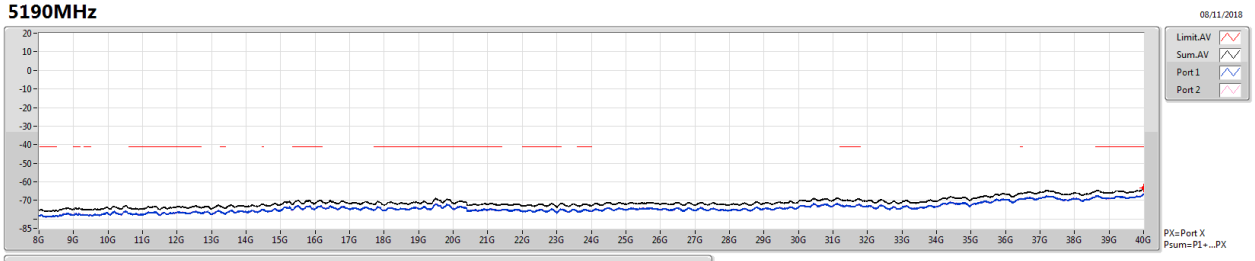
5190MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	10.372G	-54.77	-27.00	-27.77	8.90	0.00	-63.67	-66.71	-66.65
8G	40G	1M	PK	37.216G	-44.59	-27.00	-17.59	8.90	0.00	-53.49	-58.17	-55.30

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-AV**

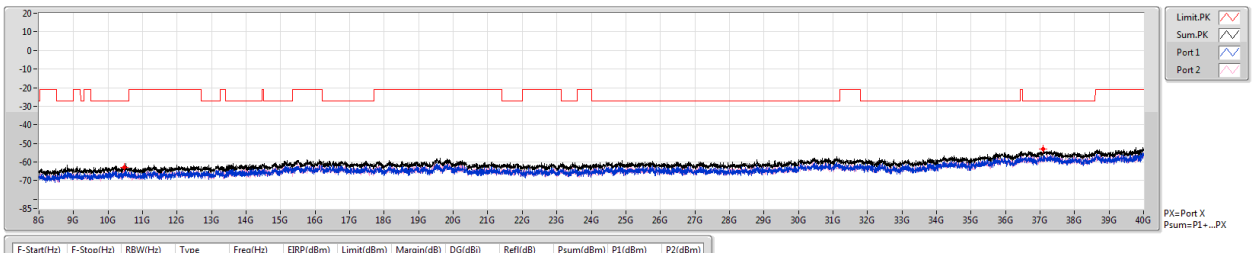
5190MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	40G	-54.56	-41.20	-13.36	8.90	0.00	-63.46	-66.67	-66.28

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-PK**

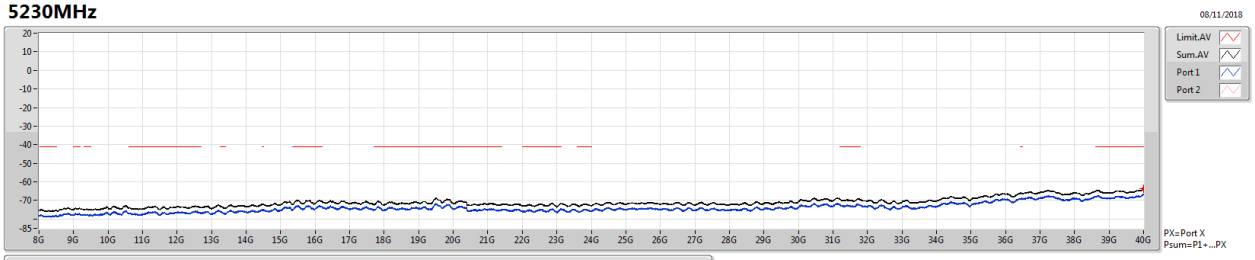
5230MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	10.468G	-53.98	-27.00	-26.98	8.90	0.00	-62.88	-66.37	-65.45
8G	40G	1M	PK	37.096G	-44.31	-27.00	-17.31	8.90	0.00	-53.21	-54.78	-58.38

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-AV**

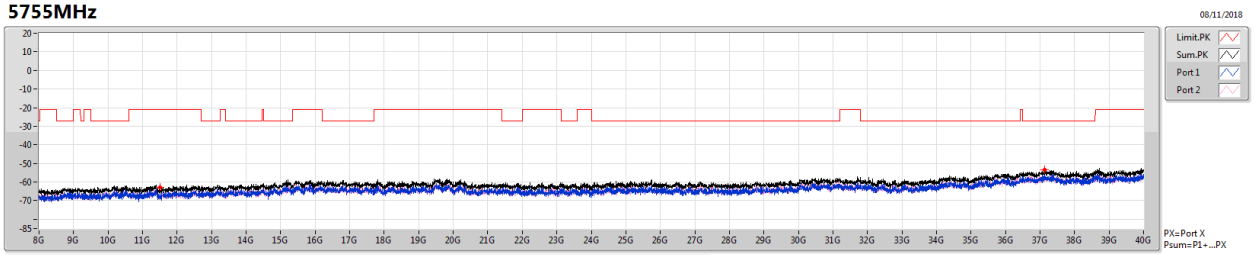
5230MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	39.997G	-54.67	-41.20	-13.47	8.90	0.00	-63.57	-66.45	-66.71

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-PK**

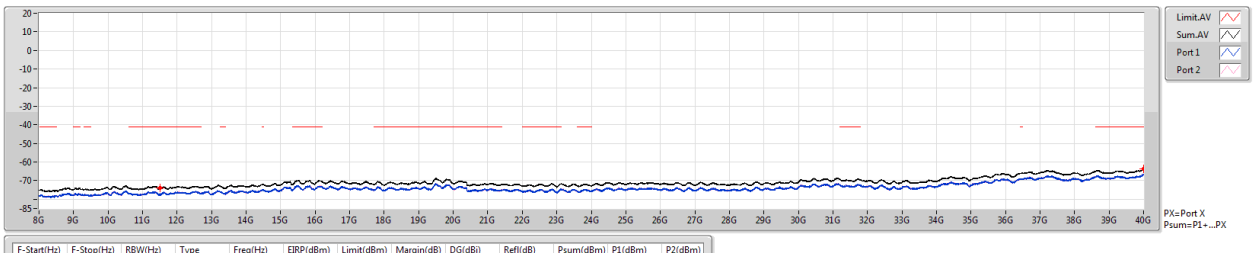
5755MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	11.508G	-53.90	-21.20	-32.70	8.90	0.00	-62.80	-65.24	-66.47
8G	40G	1M	PK	37.14G	-44.56	-27.00	-17.56	8.90	0.00	-53.46	-56.38	-56.56

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-AV**

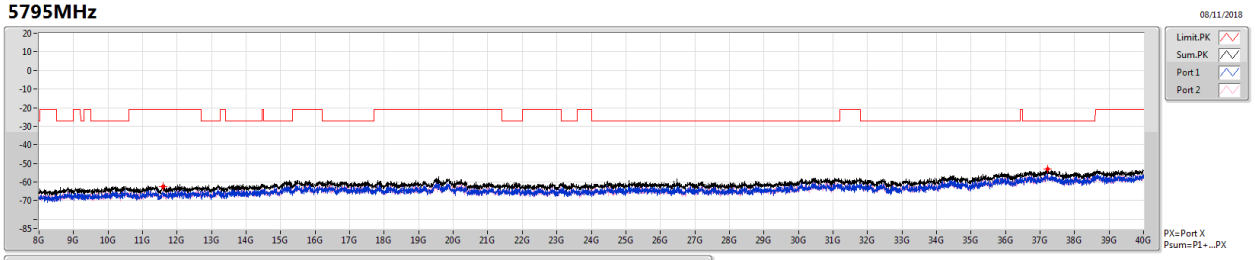
5755MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	11.516G	-65.02	-41.20	-23.82	8.90	0.00	-73.92	-77.09	-76.78
8G	40G	1M	AV	39.996G	-54.64	-41.20	-13.44	8.90	0.00	-63.54	-66.43	-66.68

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-PK**

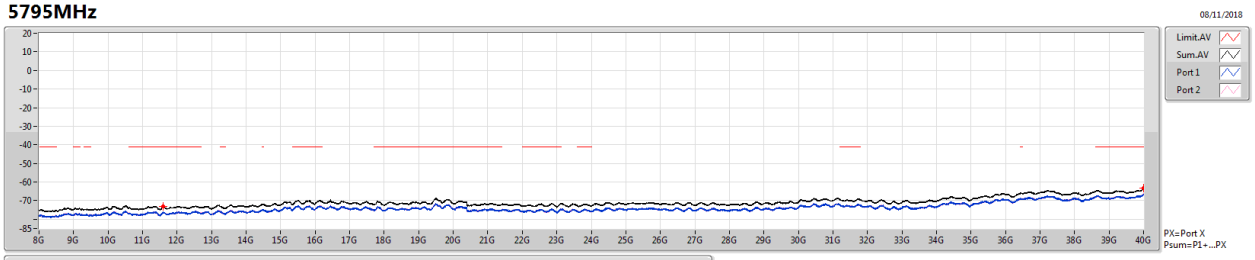
5795MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	11.588G	-53.45	-21.20	-32.25	8.90	0.00	-62.35	-64.49	-66.46
8G	40G	1M	PK	37.212G	-44.31	-27.00	-17.31	8.90	0.00	-53.21	-55.94	-56.51

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE-AV**

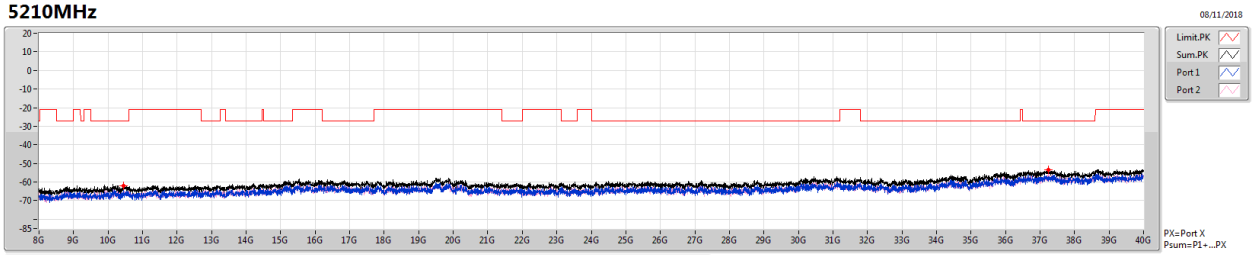
5795MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	11.59G	-64.26	-41.20	-23.06	8.90	0.00	-73.16	-76.12	-76.23
8G	40G	1M	AV	39.999G	-54.45	-41.20	-13.25	8.90	0.00	-63.35	-66.49	-66.23

802.11ac VHT80_Nss1,(MCS0)_2TX **CSE-PK**

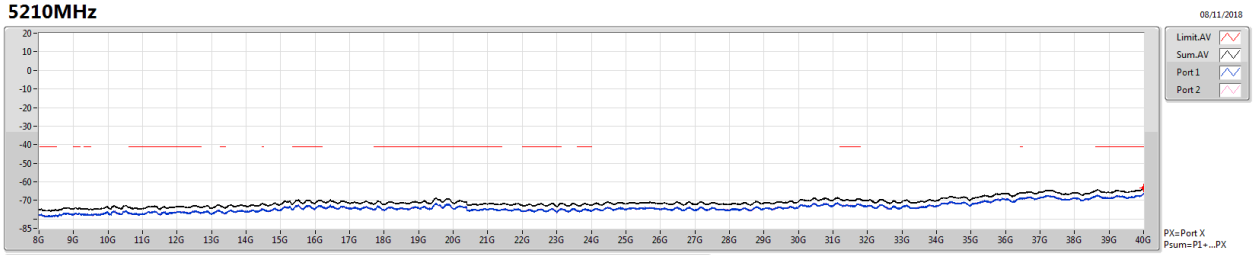
5210MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	10.452G	-53.15	-27.00	-26.15	8.90	0.00	-62.05	-63.81	-66.81
8G	40G	1M	PK	37.236G	-44.33	-27.00	-17.33	8.90	0.00	-53.23	-58.06	-54.96

802.11ac VHT80_Nss1,(MCS0)_2TX **CSE-AV**

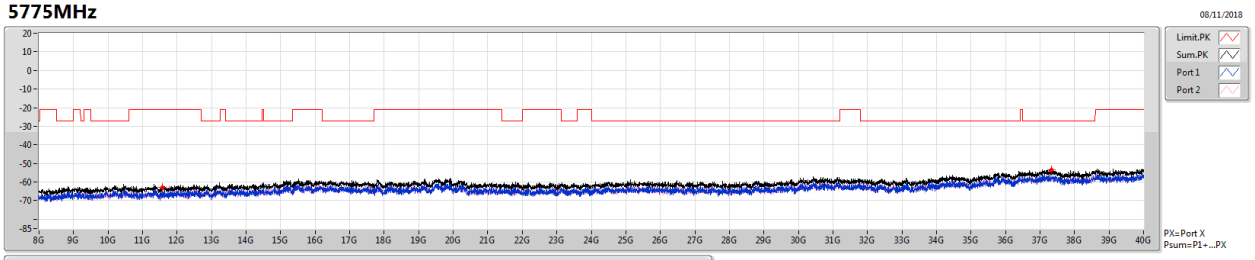
5210MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	39.993G	-54.44	-41.20	-13.24	8.90	0.00	-63.34	-66.16	-66.55

802.11ac VHT80_Nss1,(MCS0)_2TX **CSE-PK**

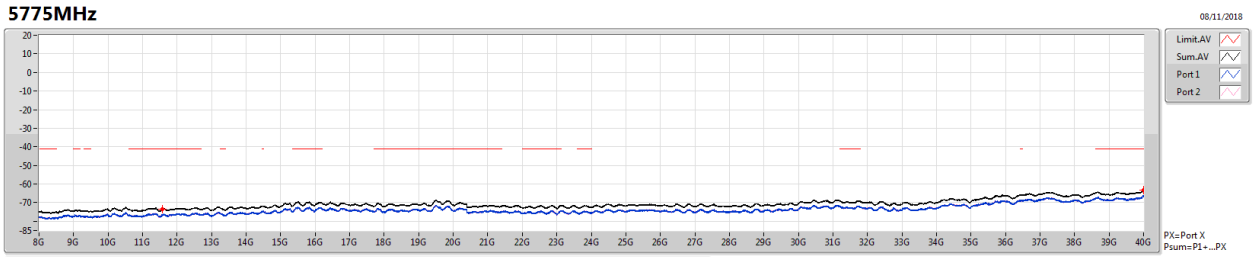
5775MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	PK	11.564G	-54.12	-21.20	-32.92	8.90	0.00	-63.02	-65.18	-67.10
8G	40G	1M	PK	37.328G	-44.59	-27.00	-17.59	8.90	0.00	-53.49	-57.48	-55.70

802.11ac VHT80_Nss1,(MCS0)_2TX **CSE-AV**

5775MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Refl(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	40G	1M	AV	11.563G	-64.67	-41.20	-23.47	8.90	0.00	-73.57	-76.62	-76.55
8G	40G	1M	AV	39.994G	-54.33	-41.20	-13.13	8.90	0.00	-63.23	-66.05	-66.44

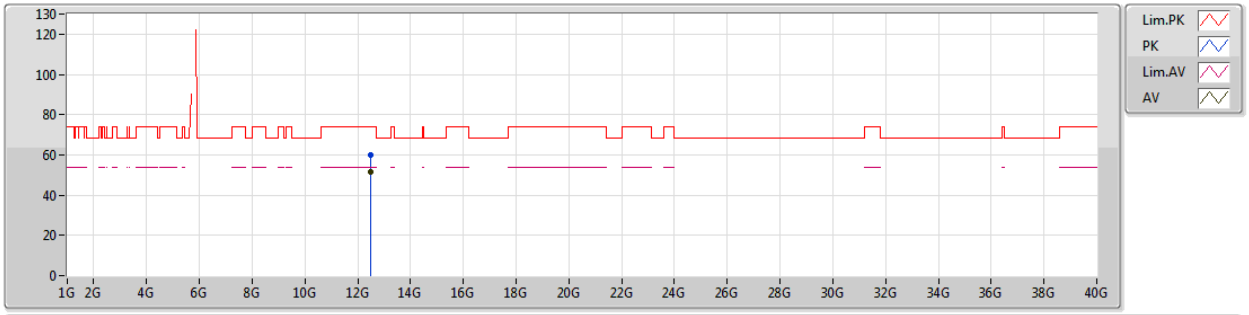
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	12.49996G	52.26	54.00	-1.74	15.57	3	Horizontal	83	1.20	-

802.11ac VHT40_Nss1,(MCS0)_2TX

12/11/2018

5795MHz_TX



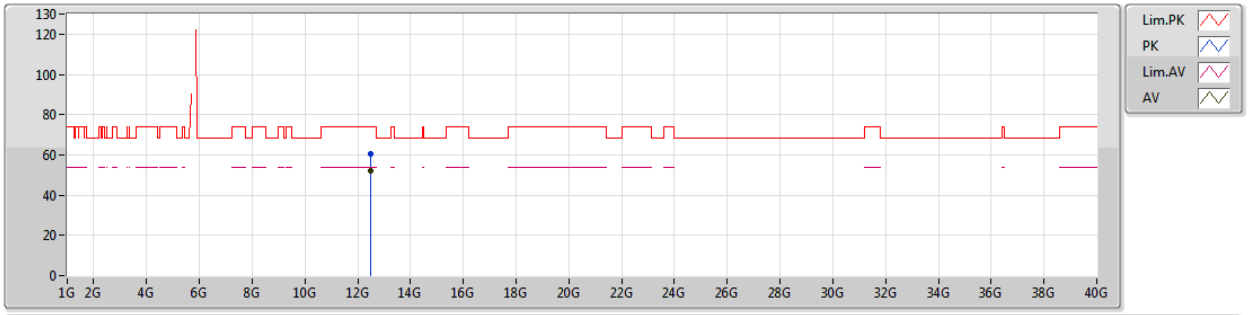
EUT Y_2TX
Setting 23.5
04-E-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
PK	12.50019G	60.16	74.00	-13.84	15.58	3	Vertical	185	1.63	-
AV	12.49994G	51.58	54.00	-2.42	15.57	3	Vertical	185	1.63	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5795MHz_TX

12/11/2018



EUT Y_2TX
Setting 23.5
04-E-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
PK	12.49992G	60.30	74.00	-13.70	15.57	3	Horizontal	83	1.20	-
AV	12.49996G	52.26	54.00	-1.74	15.57	3	Horizontal	83	1.20	-

Summary

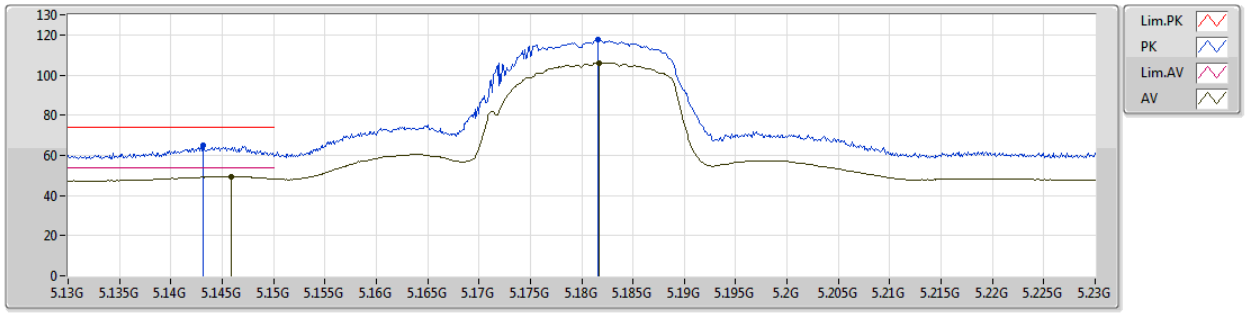
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	AV	5.1499G	53.87	54.00	-0.13	7.85	3	Horizontal	359	1.88	-

Note : For the test result is for manufacturer's reference only and is not applicable to certificated.

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

14/02/2019



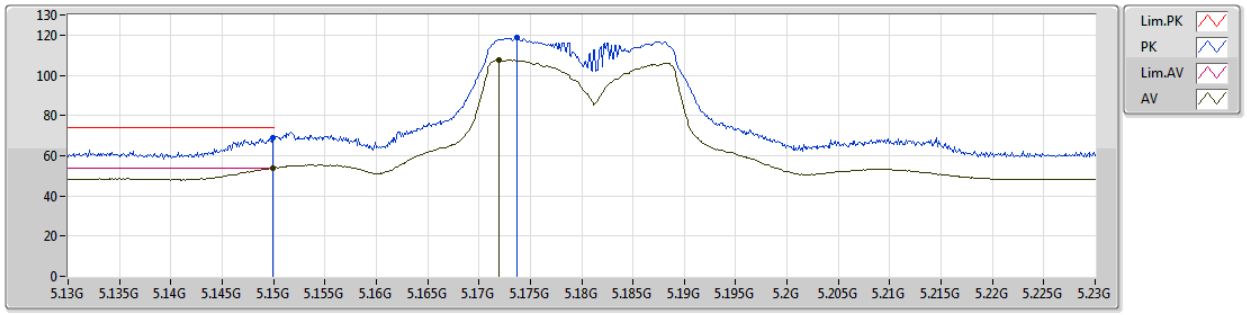
EUT Y_2TX
Setting 18.5
04-R-4-10
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1431G	64.73	74.00	-9.27	7.84	3	Vertical	33	1.75	-
AV	5.1459G	49.47	54.00	-4.53	7.85	3	Vertical	33	1.75	-
PK	5.1816G	117.71	Inf	-Inf	7.90	3	Vertical	33	1.75	-
AV	5.1817G	106.06	Inf	-Inf	7.90	3	Vertical	33	1.75	-

802.11ac VHT20_Nss1,(MCS0)_2TX

14/02/2019

5180MHz_TX



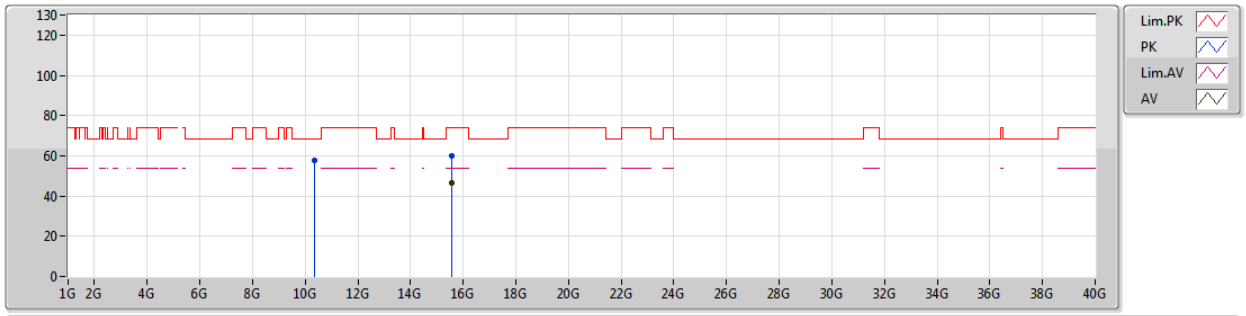
EUT Y_2TX
Setting 18.5
04-R-4-10
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.1499G	69.12	74.00	-4.88	7.85	3	Horizontal	359	1.88	-
AV	5.1499G	53.87	54.00	-0.13	7.85	3	Horizontal	359	1.88	-
PK	5.1737G	118.59	Inf	-Inf	7.89	3	Horizontal	359	1.88	-
AV	5.172G	107.82	Inf	-Inf	7.89	3	Horizontal	359	1.88	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

14/02/2019



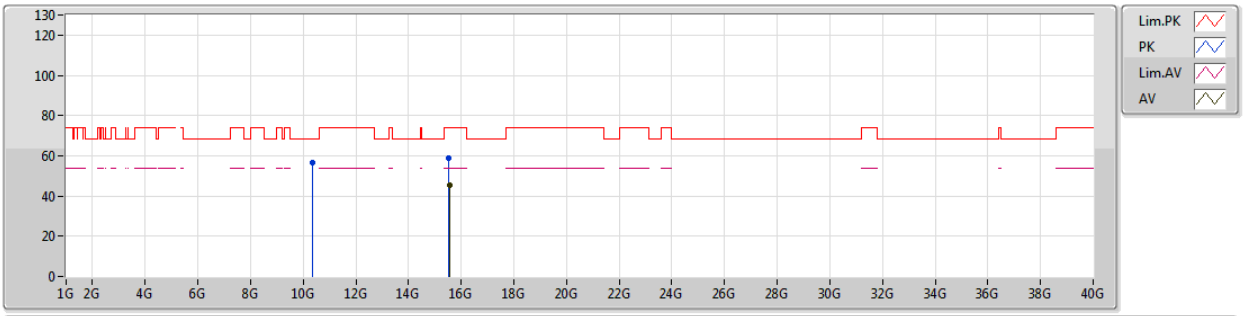
EUT Y_2TX
Setting 18.5
04-R-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.37075G	57.47	68.20	-10.73	15.11	3	Vertical	252	1.50	-
PK	15.5619G	60.00	74.00	-14.00	16.00	3	Vertical	23	1.50	-
AV	15.5605G	46.31	54.00	-7.69	16.00	3	Vertical	23	1.50	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5180MHz_TX

14/02/2019



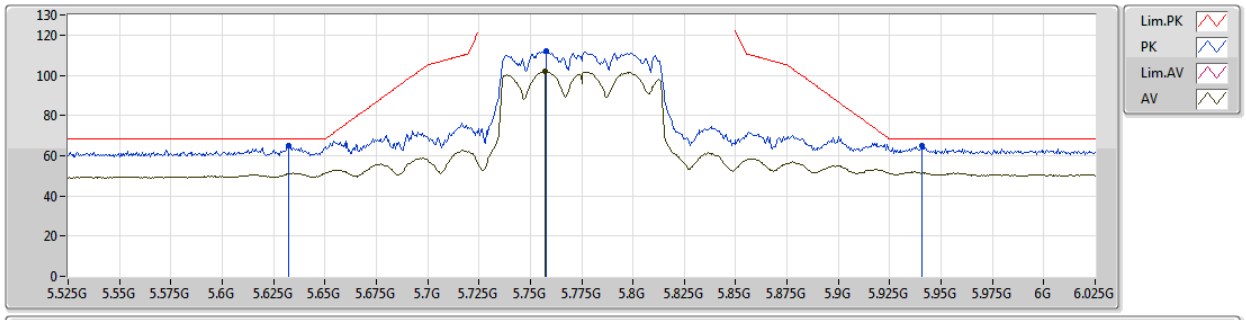
EUT Y_2TX
Setting 18.5
04-R-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.37565G	56.68	68.20	-11.52	15.12	3	Horizontal	220	1.50	-
PK	15.54025G	59.05	74.00	-14.95	16.02	3	Horizontal	295	1.50	-
AV	15.5605G	45.13	54.00	-8.87	16.00	3	Horizontal	295	1.50	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

14/02/2019



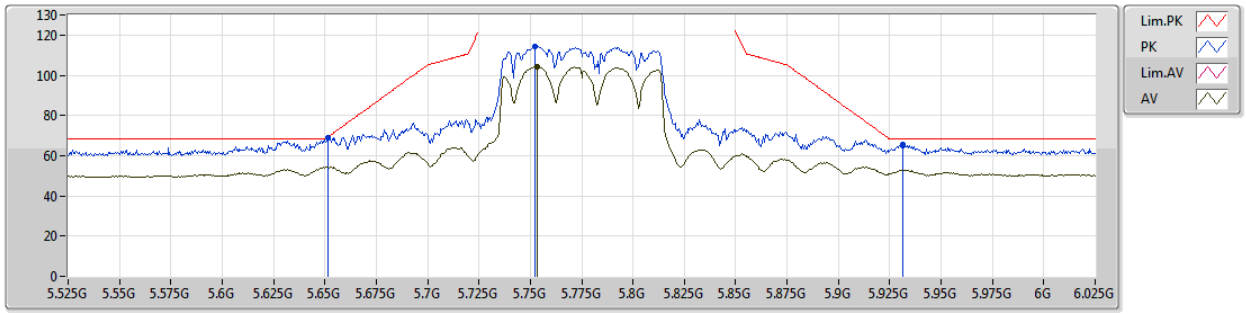
EUT Y_2TX
Setting 21
04-R-4-10
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.6325G	65.03	68.20	-3.17	9.32	3	Vertical	353	1.83	-
PK	5.758G	112.01	Inf	-Inf	9.38	3	Vertical	353	1.83	-
AV	5.757G	102.04	Inf	-Inf	9.37	3	Vertical	353	1.83	-
PK	5.9405G	64.95	68.20	-3.25	10.29	3	Vertical	353	1.83	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

14/02/2019



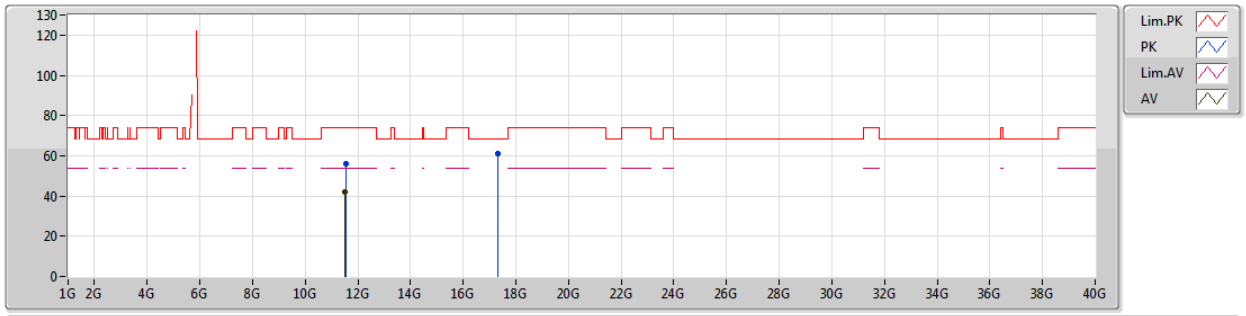
EUT Y_2TX
Setting 21
04-R-4-10
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	5.6515G	69.07	69.31	-0.24	9.32	3	Horizontal	17	1.68	-
PK	5.7525G	114.18	Inf	-Inf	9.36	3	Horizontal	17	1.68	-
AV	5.7535G	104.39	Inf	-Inf	9.37	3	Horizontal	17	1.68	-
PK	5.9315G	65.59	68.20	-2.61	10.24	3	Horizontal	17	1.68	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

14/02/2019



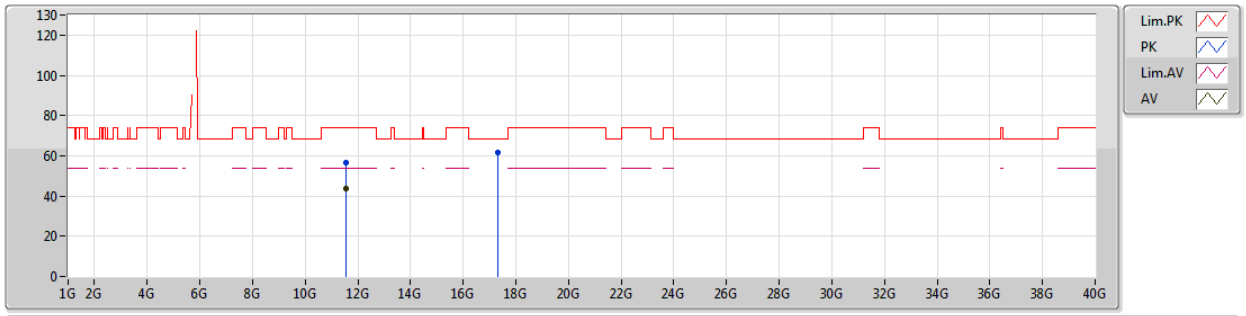
EUT Y_2TX
Setting 21
04-R-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.5482G	55.91	74.00	-18.09	15.19	3	Vertical	340	1.50	-
AV	11.5259G	42.27	54.00	-11.73	15.20	3	Vertical	340	1.50	-
PK	17.3362G	61.20	68.20	-7.00	18.31	3	Vertical	359	1.50	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_TX

14/02/2019



EUT Y_2TX
Setting 21
04-R-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	11.54076G	56.59	74.00	-17.41	15.19	3	Horizontal	22	2.17	-
AV	11.54994G	43.76	54.00	-10.24	15.19	3	Horizontal	22	2.17	-
PK	17.31219G	61.37	68.20	-6.83	18.27	3	Horizontal	89	1.50	-