

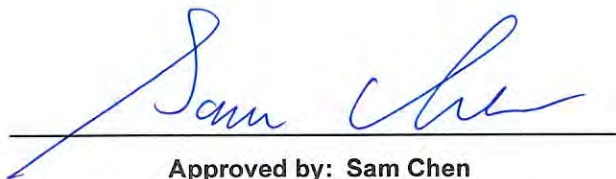


RADIO TEST REPORT

FCC ID : LDK-RUSS9105AXW
Equipment : Catalyst 9105AX 802.11ax Access Point
Brand Name : Cisco
Model Name : C9105AXW-B, C9105AXW-C, C9105AXW-D,
C9105AXW-F, C9105AXW-N, C9105AXW-S,
C9105AXW-K, C9105AXW-x
(Refer to section 1.1.5 for more details)
Applicant : Cisco Systems, Inc.
125 West Tasman Drive, San Jose, California,
United States, 95134-1706
Manufacturer : Cisco Systems, Inc.
125 West Tasman Drive, San Jose, California,
United States, 95134-1706
Standard : 47 CFR FCC Part 15.407

The product was received on Feb. 27, 2020, and testing was started from Mar. 05, 2020 and completed on Jul. 08, 2022. We, Sporton International Inc. Hsinchu 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 test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.4

Page Number : 3 of 38
Issued Date : Jul. 19, 2022
Report Version : 01



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 Output Power	PASS	-
3.4	15.407(a)	Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

Note: Reference to Sporton Project No.: FR992017-02

Declaration of Conformity:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "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: Jessie Wei



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5725-5850	a20, n (HT20), ac (VHT20), ax (HEW20)	5745-5825	149-165 [5]
5725-5850	a40,n (HT40), ac (VHT40), ax (HEW40)	5755-5795	151-159 [2]
5725-5850	a80, ac (VHT80), ax (HEW80)	5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11a20	20	1TX, 2TX
5.725-5.85GHz	802.11a20-BF	20	2TX
5.725-5.85GHz	802.11n HT20	20	1TX, 2TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	1TX, 2TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	1TX, 2TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX
5.725-5.85GHz	802.11a40	40	1TX, 2TX
5.725-5.85GHz	802.11a40-BF	40	2TX
5.725-5.85GHz	802.11n HT40	40	1TX, 2TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	1TX, 2TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	1TX, 2TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX
5.725-5.85GHz	802.11a80	80	1TX, 2TX
5.725-5.85GHz	802.11a80-BF	80	2TX
5.725-5.85GHz	802.11n HT80	80	1TX, 2TX
5.725-5.85GHz	802.11n HT80-BF	80	2TX
5.725-5.85GHz	802.11ac VHT80	80	1TX, 2TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	1TX, 2TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX



Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	PEGATRON	WIFI_1 ant	PIFA	I-PEX	Note 1
2	2	PEGATRON	WIFI_2 ant	PIFA	I-PEX	
3	1	PEGATRON	BLE ant	PIFA	I-PEX	

Note 1:

Ant.	Port	WLAN 2.4GHz Gain (dBi)							
		2400 MHz	2412 MHz	2437 MHz	2442 MHz	2450 MHz	2462 MHz	2472 MHz	2500 MHz
1	1	2.02	1.81	2.25	2.37	2.51	2.48	2.20	2.14
2	2	1.55	1.63	2.10	2.23	2.20	2.07	1.75	1.99

Ant.	Port	WLAN 5GHz Gain (dBi)							
		5150 MHz	5250 MHz	5350 MHz	5470 MHz	5500 MHz	5600 MHz	5725 MHz	5850 MHz
1	1	4.91	4.97	4.88	4.93	4.82	4.73	4.78	4.93
2	2	4.58	4.76	4.60	4.41	4.35	4.25	4.40	4.56

Ant.	Port	BT Gain (dBi)							
		2400 MHz	2412 MHz	2437 MHz	2442 MHz	2450 MHz	2462 MHz	2472 MHz	2500 MHz
3	1	2.47	2.45	2.55	2.70	2.69	2.64	2.58	2.62

Note 2: The above information was declared by manufacturer.

Note 3: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left(\sum_{k=1}^{N_{ANT}} g_{j,k} \right)^2}{N_{ANT}} \right]$
BF	$Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left(\sum_{k=1}^{N_{ANT}} g_{j,k} \right)^2}{N_{ANT}} \right]$	$Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left(\sum_{k=1}^{N_{ANT}} g_{j,k} \right)^2}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left(\sum_{k=1}^{N_{ANT}} g_{j,k} \right)^2}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ;$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2))$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) / N_{ANT})] \Rightarrow 10 \log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$$

Where ;

$$G1 = 10 ; G2 = 10 ; G3 = 10 ; G4 = 10 ;$$

**2.4G**

2412MHz G1 = 1.81dBi ; G2 = 1.63dBi ;2T1S DG=4.73 dBi 2T2S DG=1.72 dBi
2437MHz G1 = 2.25dBi ; G2 = 2.1dBi ;2T1S DG=5.19 dBi 2T2S DG=2.18 dBi
2462MHz G1 = 2.48dBi ; G2 = 2.07dBi ;2T1S DG=5.29 dBi 2T2S DG=2.28 dBi

5G

5180MHz G1 = 4.91dBi ; G2 = 4.58dBi ;2T1S DG=7.76 dBi 2T2S DG=4.75 dBi
5200MHz G1 = 4.97dBi ; G2 = 4.76dBi ;2T1S DG=7.88 dBi 2T2S DG=4.87 dBi
5240MHz G1 = 4.97dBi ; G2 = 4.76dBi ;2T1S DG=7.88 dBi 2T2S DG=4.87 dBi
5260MHz G1 = 4.97dBi ; G2 = 4.76dBi ;2T1S DG=7.88 dBi 2T2S DG=4.87 dBi
5300MHz G1 = 4.97dBi ; G2 = 4.76dBi ;2T1S DG=7.88 dBi 2T2S DG=4.87 dBi
5320MHz G1 = 4.88dBi ; G2 = 4.6dBi ;2T1S DG=7.75 dBi 2T2S DG=4.74 dBi
5500MHz G1 = 4.82dBi ; G2 = 4.35dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5580MHz G1 = 4.73dBi ; G2 = 4.25dBi ;2T1S DG=7.5 dBi 2T2S DG=4.5 dBi
5700MHz G1 = 4.78dBi ; G2 = 4.4dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5720MHz G1 = 4.78dBi ; G2 = 4.4dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5745MHz G1 = 4.78dBi ; G2 = 4.56dBi ;2T1S DG=7.6 dBi 2T2S DG=4.67 dBi
5785MHz G1 = 4.78dBi ; G2 = 4.56dBi ;2T1S DG=7.6 dBi 2T2S DG=4.67 dBi
5825MHz G1 = 4.93dBi ; G2 = 4.56dBi ;2T1S DG=7.76 dBi 2T2S DG=4.75 dBi
5190MHz G1 = 4.91dBi ; G2 = 4.58dBi ;2T1S DG=7.76 dBi 2T2S DG=4.75 dBi
5230MHz G1 = 4.97dBi ; G2 = 4.76dBi ;2T1S DG=7.88 dBi 2T2S DG=4.87 dBi
5270MHz G1 = 4.97dBi ; G2 = 4.76dBi ;2T1S DG=7.88 dBi 2T2S DG=4.87 dBi
5310MHz G1 = 4.88dBi ; G2 = 4.6dBi ;2T1S DG=7.75 dBi 2T2S DG=4.74 dBi
5510MHz G1 = 4.82dBi ; G2 = 4.35dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5550MHz G1 = 4.82dBi ; G2 = 4.35dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5670MHz G1 = 4.78dBi ; G2 = 4.4dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5710MHz G1 = 4.78dBi ; G2 = 4.4dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5755MHz G1 = 4.78dBi ; G2 = 4.4dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5795MHz G1 = 4.93dBi ; G2 = 4.56dBi ;2T1S DG=7.76 dBi 2T2S DG=4.75 dBi
5210MHz G1 = 4.97dBi ; G2 = 4.76dBi ;2T1S DG=7.88 dBi 2T2S DG=4.87 dBi
5290MHz G1 = 4.97dBi ; G2 = 4.76dBi ;2T1S DG=7.88 dBi 2T2S DG=4.87 dBi
5530MHz G1 = 4.82dBi ; G2 = 4.35dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5610MHz G1 = 4.73dBi ; G2 = 4.25dBi ;2T1S DG=7.5 dBi 2T2S DG=4.5 dBi
5690MHz G1 = 4.78dBi ; G2 = 4.4dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi
5775MHz G1 = 4.78dBi ; G2 = 4.4dBi ;2T1S DG=7.6 dBi 2T2S DG=4.59 dBi

Note 4:**For 2.4GHz function:****For IEEE 802.11 b/g/n/ax (1TX/1RX):**

Only Port 1 can be used as transmitting/receiving antenna.

For IEEE 802.11 b/g/n/ax (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:**For IEEE 802.11a/n/ac/ax (1TX/1RX):**

Only Port 1 can be used as transmitting/receiving antenna.

For IEEE 802.11a/n/ac/ax (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

For Bluetooth function:

Only Port 1 can be used as transmitting/receiving antenna.

1.1.3 Mode Test Duty Cycle

<2T1S>

Non-beamforming mode

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
11a20_Nss1,(6Mbps)_2TX	0.99	0.04	2.384m	10
11a40_Nss1,(6Mbps)_2TX	0.99	0.04	2.384m	10
11a80_Nss1,(6Mbps)_2TX	0.99	0.04	2.384m	10
802.11ac VHT20_Nss1,(MCS0)_2TX	0.987	0.06	2.224m	10
802.11ac VHT40_Nss1,(MCS0)_2TX	0.979	0.09	1.093m	1k
802.11ac VHT80_Nss1,(MCS0)_2TX	0.954	0.2	528.438u	3k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.984	0.07	1.711m	10
802.11ax HEW40_Nss1,(MCS0)_2TX	0.974	0.11	885u	3k
802.11ax HEW80_Nss1,(MCS0)_2TX	0.945	0.25	453.75u	3k

beamforming mode

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
11a20-BF_Nss1,(6Mbps)_2TX	0.99	0.04	2.384m	10
11a40-BF_Nss1,(6Mbps)_2TX	0.99	0.04	2.384m	10
11a80-BF_Nss1,(6Mbps)_2TX	0.99	0.04	2.384m	10
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	0.987	0.06	2.224m	10
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	0.977	0.1	1.093m	1k
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	0.954	0.2	528.438u	3k
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.984	0.07	1.711m	10
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.974	0.11	885u	3k
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	0.945	0.25	453.75u	3k

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

**1.1.4 EUT Operational Condition**

EUT Power Type	From PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/ax in 2.4GHz and a/n/ac/ax in 5GHz.			
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	17.18.2 (r782430 WLTEST) 、TeraTerm V4.75			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Description
C9105AXW-B	All the models are identical, the difference model for difference marketing strategy.
C9105AXW-C	
C9105AXW-D	
C9105AXW-F	
C9105AXW-N	
C9105AXW-S	
C9105AXW-K	
C9105AXW-x (x can be A-Z, regional country code)	

Note 1: From the above models, model: C9105AXW-B was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable 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

The following reference test guidance is not within the scope of accreditation of TAF.

- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISCED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted (other test items)	TH01-CB	Owen Hsu	20.5~22 / 49~53	Mar. 05, 2020~ Mar. 27, 2020
RF Conducted (2T1S-802.11ax-5785MHz)	TH03-CB	Owen Hsu	20.6~21.8 / 62~67	Jun. 22, 2022~ Jun. 28, 2022
Radiated (Cabinet-Above 1GHz)	03CH06-CB	Chris Li	25.1~25.8 / 67~68	Jun. 22, 2022~ Jul. 08, 2022
Radiated (Below 1GHz)	03CH05-CB	Chris Li	24.4~25.5 / 55~58	Jun. 22, 2022~ Jul. 08, 2022
Radiated (Radiated Emission Co-location)	03CH05-CB	Stim Sun	21.3~23.2 / 55~58	May 20, 2020
AC Conduction (Mode 1~2)	CO01-CB	GN Hou	23~24 / 63~65	May 11, 2020
AC Conduction (Mode 3)	CO01-CB	Dean Chang	22~23 / 53~54	Jul. 07, 2022

Note: The tested sample of the test item (Radiated below 1GHz, Radiated Cabinet above 1GHz, AC power-line conducted emissions-Mode 3, Unwanted Emissions (Above 1GHz)-Bandedge/Harmonic-2T1S-802.11ax-5785MHz) was received on Jun. 13, 2022.

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))

For AC Conduction(Mode 1~2), RF Conducted(other test items), Radiated(Radiated Emission Co-location)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%

For others test:

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

<2T1S>

Non-beamforming mode

Mode	Power Setting
11a20_Nss1,(6Mbps)_2TX	-
5745MHz	17
5785MHz	17
5825MHz	17
11a40_Nss1,(6Mbps)_2TX	-
5755MHz	17
5795MHz	17
11a80_Nss1,(6Mbps)_2TX	-
5775MHz	17
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5745MHz	17
5785MHz	17
5825MHz	17
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5755MHz	17
5795MHz	17
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5775MHz	17
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5775MHz	17

**beamforming mode**

Mode	Power Setting
11a20,BF_Nss1,(6Mbps)_2TX	-
5745MHz	17
5785MHz	17
5825MHz	17
11a40,BF_Nss1,(6Mbps)_2TX	-
5755MHz	17
5795MHz	17
11a80,BF_Nss1,(6Mbps)_2TX	-
5775MHz	17
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5745MHz	17
5785MHz	17
5825MHz	17
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5755MHz	17
5795MHz	17
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5775MHz	17
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5775MHz	17

Note:

- ♦ VHT20/VHT40/VHT80 covers HT20/HT40/HT80, due to same modulation. The power setting for 802.11n HT20, HT40 and HT 80 are the same or lower than 802.11ac VHT20, VHT40 and VHT80.
- ♦ There are two modes of EUT, one is beamforming mode, and the other is non-beamforming mode for 11n/11ax in 2.4GHz and 11a/11n/11ac/11ax in 5GHz. Both modes have been tested and recorded in this test report.
- ♦ The STBC mode covered by 2T2S mode.
- ♦ The beamforming mode only evaluated power and power density.
- ♦ This function has 1TX/2TX, and only 2TX was test and record in the test report was declared by the manufacturer.

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 Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	EUT+ PoE_2.4GHz
2	EUT+ PoE_5GHz
3	EUT+ PoE_Bluetooth LE
For operating mode 3 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Output Power 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	CTX
The EUT was performed at X axis, Y axis and Z axis position for Unwanted Emissions above 1GHz test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.	
1	EUT in Y axis + PoE_Bluetooth LE
2	EUT in Y axis + PoE_2.4GHz
3	EUT in Y axis + PoE_5GHz
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX (Cabinet)
The EUT was performed at X axis, Y axis and Z axis position. The worst case was found at Y axis, thus the measurement will follow this same test configuration.	
1	EUT in Y axis_5GHz



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
The EUT was performed at X axis, Y axis and Z axis position for Unwanted Emissions above 1GHz test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.	
1	EUT in Y axis_WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix F for Radiated Emission Co-location.	

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 + Bluetooth LE
Refer to Sporton Test Report No.: FA992017-11 for Co-location RF Exposure Evaluation.	

Note: The EUT was powered by PoE, and the PoE was for measurement only, it would not be marketed.

<For Conducted emissions, Radiated and RF Conducted (2T1S-802.11ax-5785MHz)>

Equipment	Brand Name	Model Name	FCC ID
PoE	PHIHONG	POE29U-1AT(PL)	N/A

<For other tests>

Equipment	Brand Name	Model Name	FCC ID
PoE	CERIO	POE-G30	N/A

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.



2.4 Accessories

Optional				
No.	Equipment Name	Brand Name	Model Name	Remark
1	Mounting bracket*1	PEGATRON	13BK-30N1601	-
2	Jumper cable*1	Tung-Li	1402-00WF000	Non-Shielded, 0.07m
3	Back cover*1	PEGATRON	13BK-30B0901	-
4	Spacer box*1	PEGATRON	13BK-30Q0701	-
5	RJ-45 cable*1	CISCO	72-101204-01	Non-Shielded, 1.5m

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	PHIHONG	POE29U-1AT(PL)	N/A
B	Flash disk3.0	Transcend	JetFlash-700	N/A

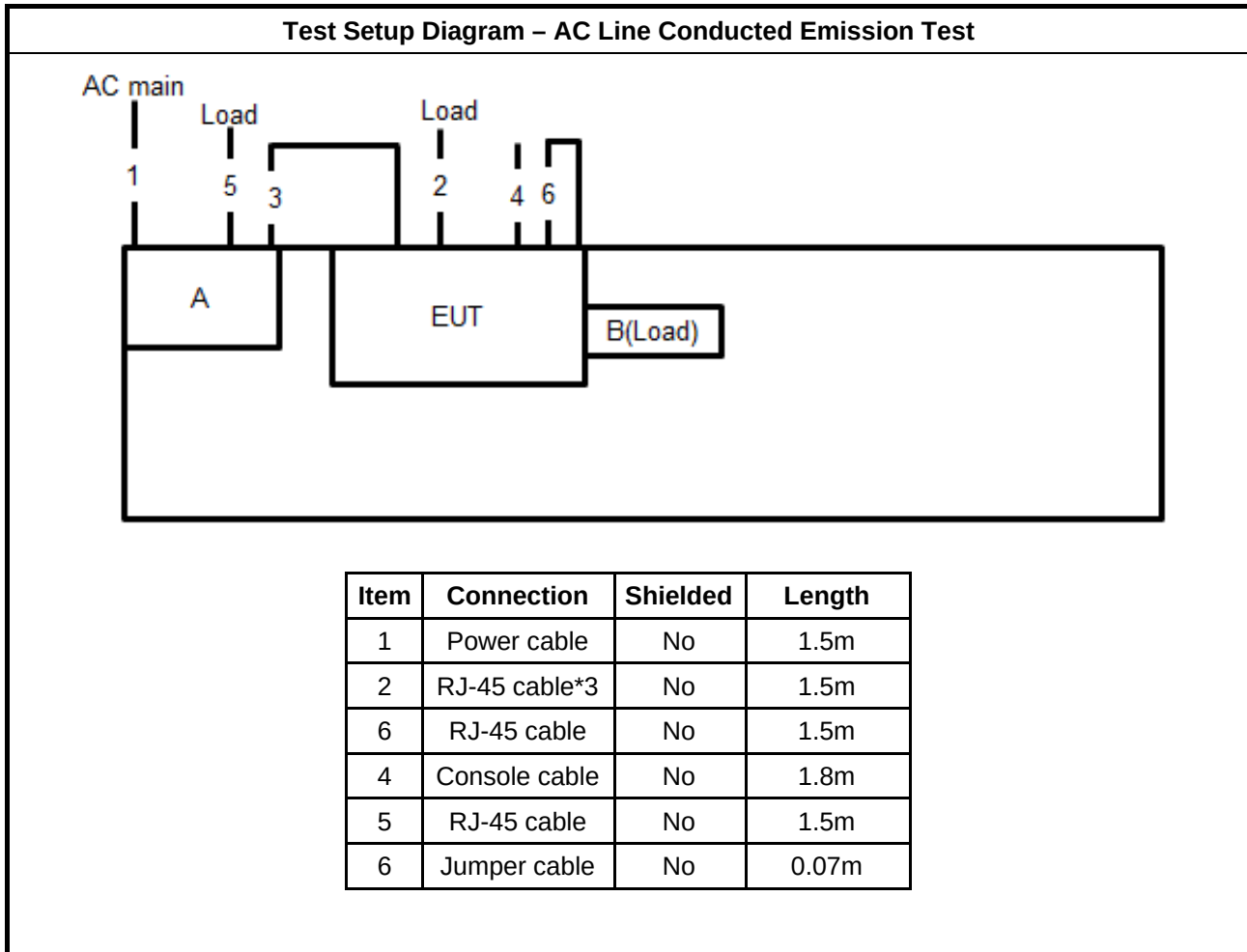
For Radiated and RF Conducted (2T1S-802.11ax-5785MHz):

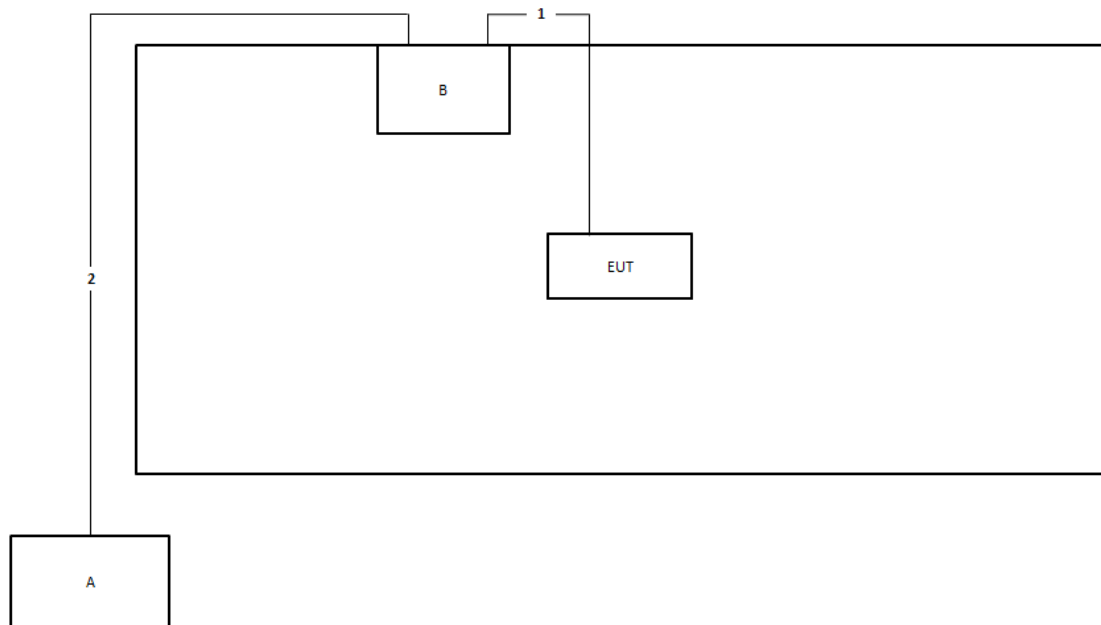
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	PP13S	N/A
B	PoE	PHIHONG	POE29U-1AT(PL)	N/A

For RF Conducted (other test items):

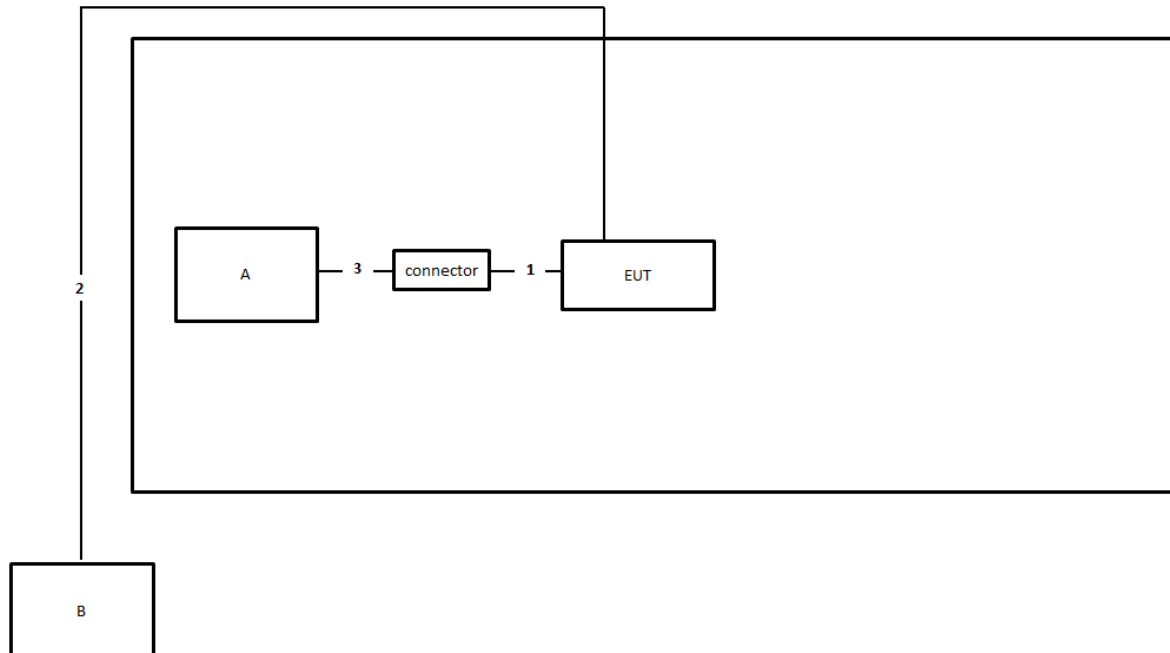
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	CERIO	POE-G30	N/A
B	Notebook	DELL	E4300	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


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

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	Console cable (RS232 to RJ45)	No	1.6m
2	RJ-45 cable	No	10m
3	Console cable (RS232 to USB)	No	1.6m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

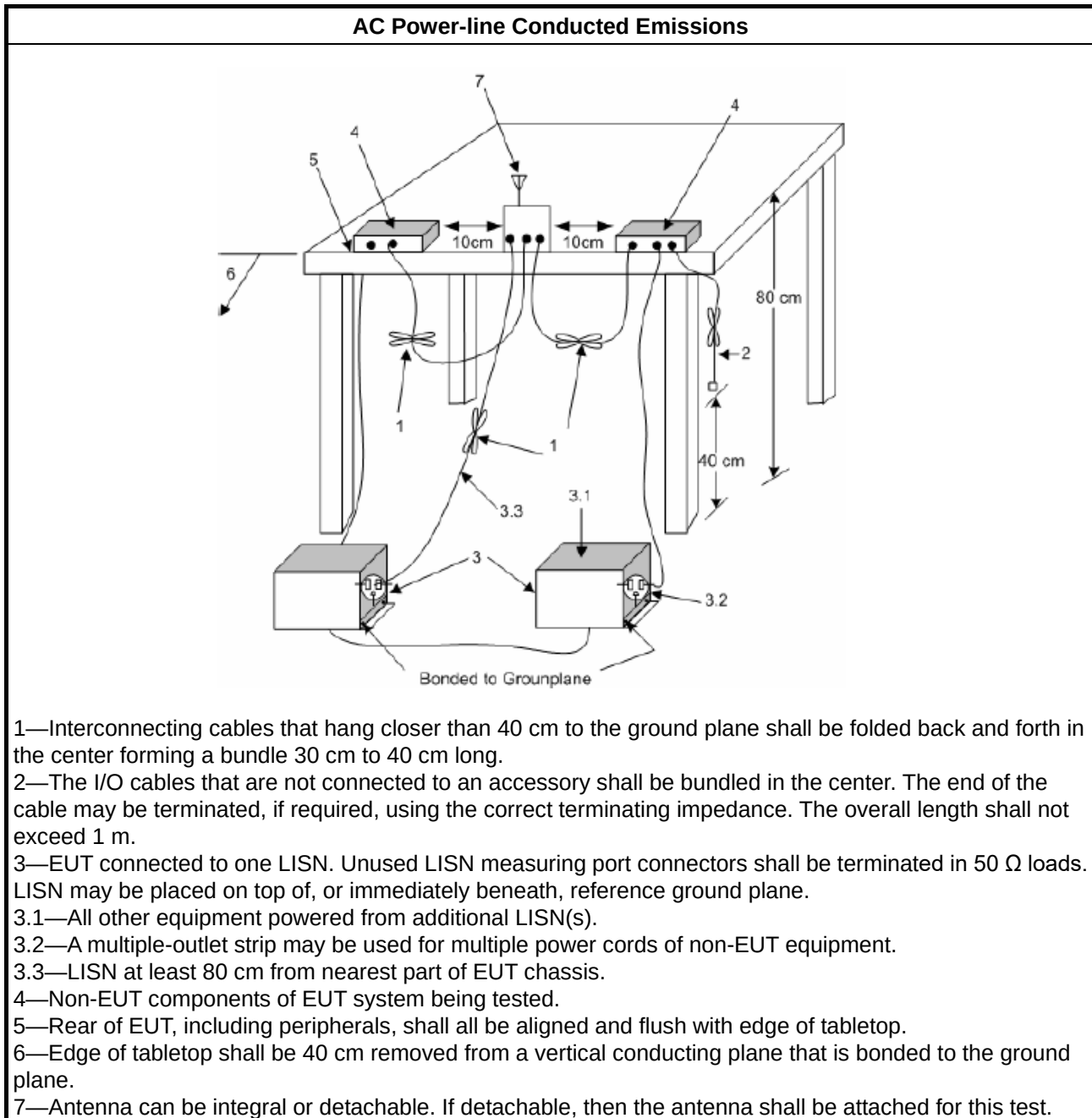
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

3.1.6 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 $11 \text{ dBm} + 10 \log B$, 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 $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth $\geq 500\text{kHz}$.
☐	For the 5.85-5.895 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth $\geq 500\text{kHz}$.
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 $\geq 500\text{kHz}$.

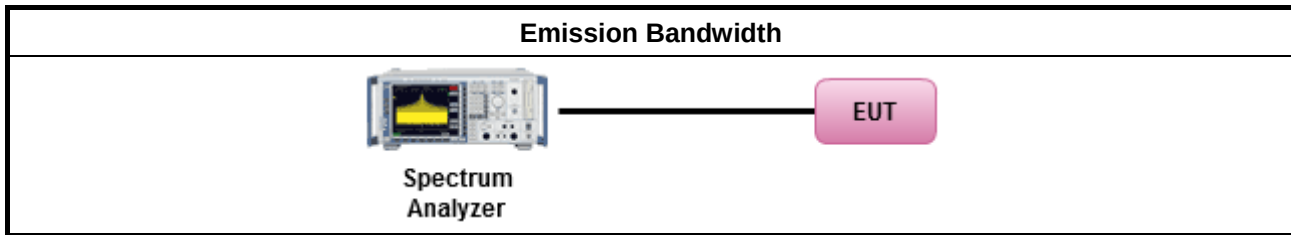
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 789033 D02, 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



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Output Power

3.3.1 Limit

Maximum 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.
Maximum EIRP Limit	
☐ For the 5.85-5.895 GHz band:	
☐	- Indoor AP & subordinate device < 36 dBm - Client device < 30 dBm
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.

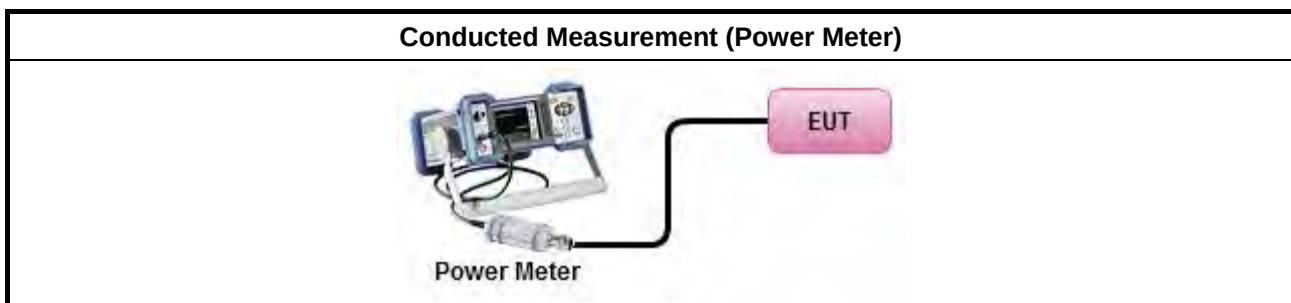
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
	Average over on/off periods with duty factor
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033 D02, 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: $P_{\text{total}} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$
☐	For radiated measurement.
	- Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing" - Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. - Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.3.4 Test Setup



3.3.5 Test Result of Maximum Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 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.
EIRP Power Spectral Density Limit	
☐ For the 5.85-5.895 GHz band:	
☐	- Indoor AP & subordinate device < 20dBm/MHz - Client device < 14dBm/MHz
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 $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 (θ-40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
☐ 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

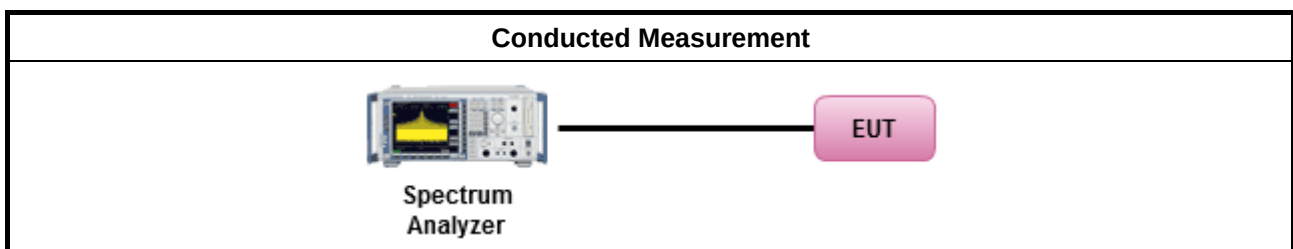
Refer a test equipment and calibration data table in this test report.

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 D02, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty cycle ≥ 98% or external video / power trigger]	
☒	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
☒	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, 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: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm])	

Test Method	
	$EIRP_{total} = PPSD_{total} + DG$
☐	For radiated measurement.
	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter 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.
☐ 5.85 - 5.895 GHz	(i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of - 7 dBm/MHz at or above 5.925 GHz. (ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz. (iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/ MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	

3.5.2 Measuring Instruments

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



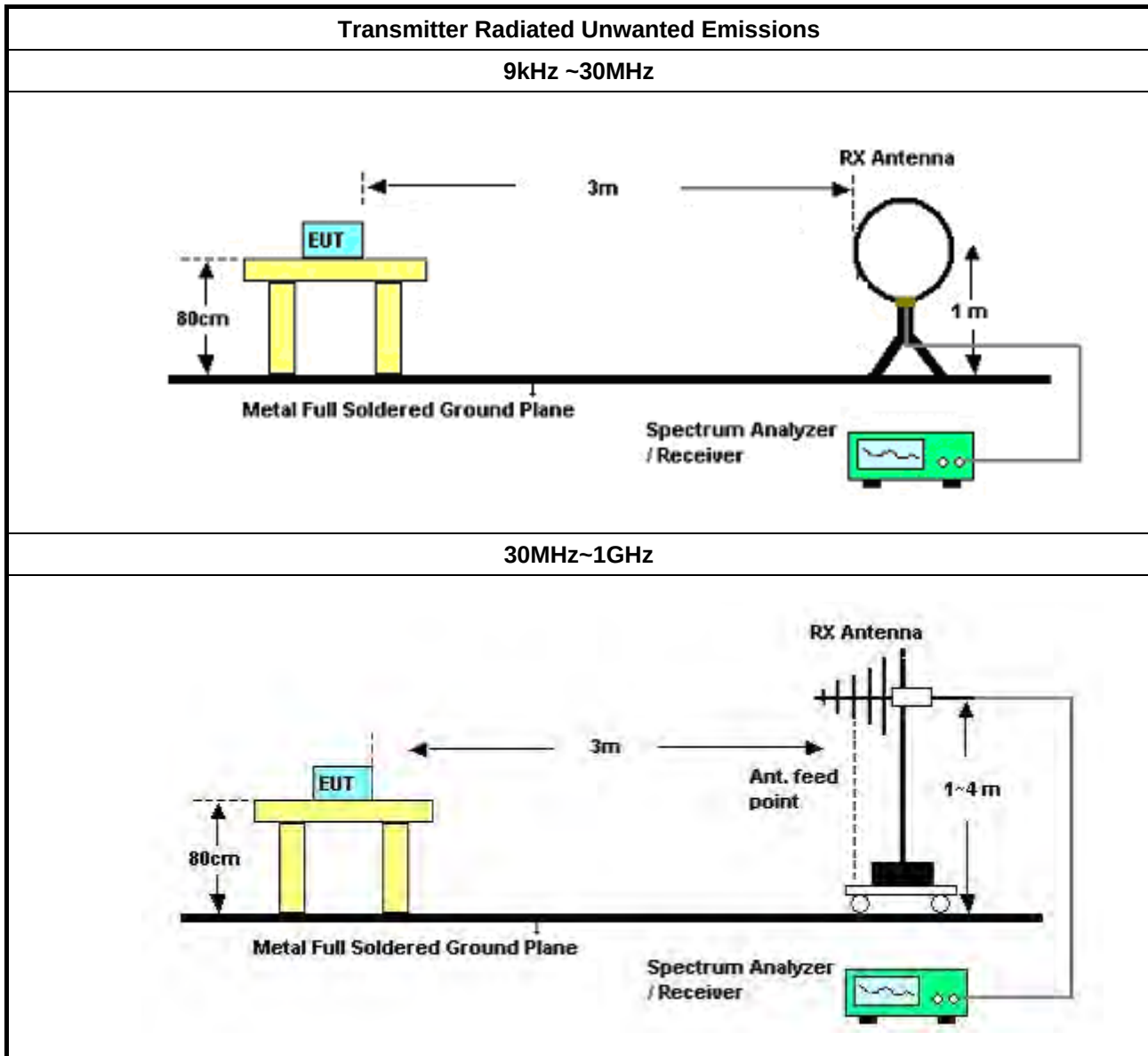
3.5.3 Test Procedures

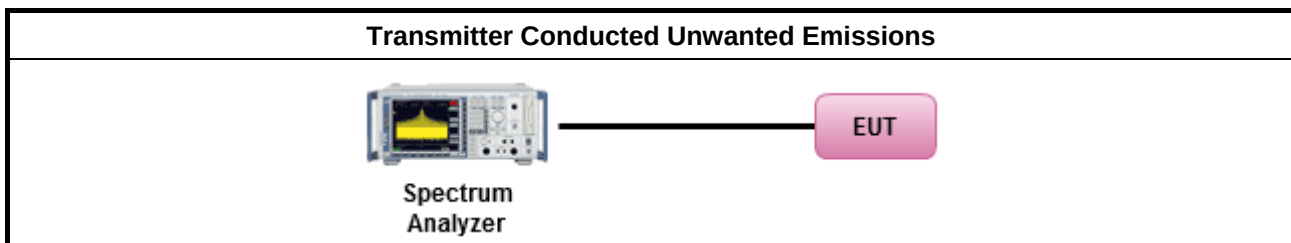
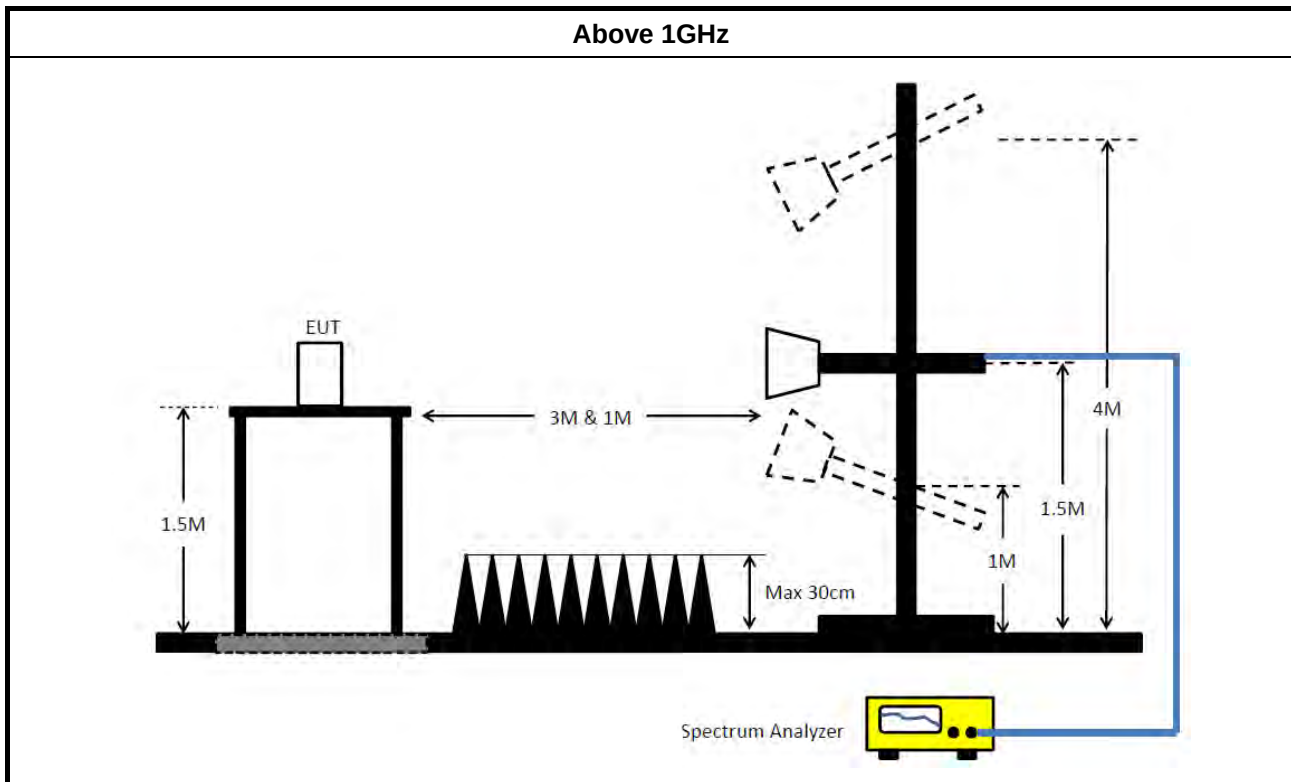
Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).
	☒ Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.
	☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	



Test Method	
▪ For conducted and cabinet radiation measurement, refer as FCC KDB 789033 D02, clause G)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





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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 10th harmonic or 40 GHz, whichever is appropriate.

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-1 6-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-1 6-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 31, 2020	Jan. 30, 2021	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019	May 20, 2020	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 18, 2022	May 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 09, 2019	Nov. 08, 2020	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 25, 2022	Mar. 24, 2023	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1291	1GHz~18GHz	Oct. 05, 2019	Oct. 04, 2020	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz ~ 26.5GHz	Apr. 15, 2020	Apr. 14, 2021	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH05-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Mar. 14, 2022	Mar. 13, 2023	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH05-CB)
Test Software	Audix	E3	6.120210m	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 01, 2021	Sep. 30, 2022	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 04, 2021	Aug. 03, 2022	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	SGH5265	20211115-1	1GHz ~ 26.5GHz	Jan. 19, 2022	Jan. 18, 2023	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 24, 2021	Dec. 23, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-67	1GHz~18GHz	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+67	1GHz~18GHz	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 02, 2019	Jul. 01, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 18, 2019	Nov. 17, 2020	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 07, 2020	Feb. 06, 2021	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 07, 2020	Feb. 06, 2021	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Jan. 07, 2022	Jan. 06, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P1	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P2	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P3	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P4	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P5	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

NCR means Non-Calibration required.



Conducted Emissions at Powerline

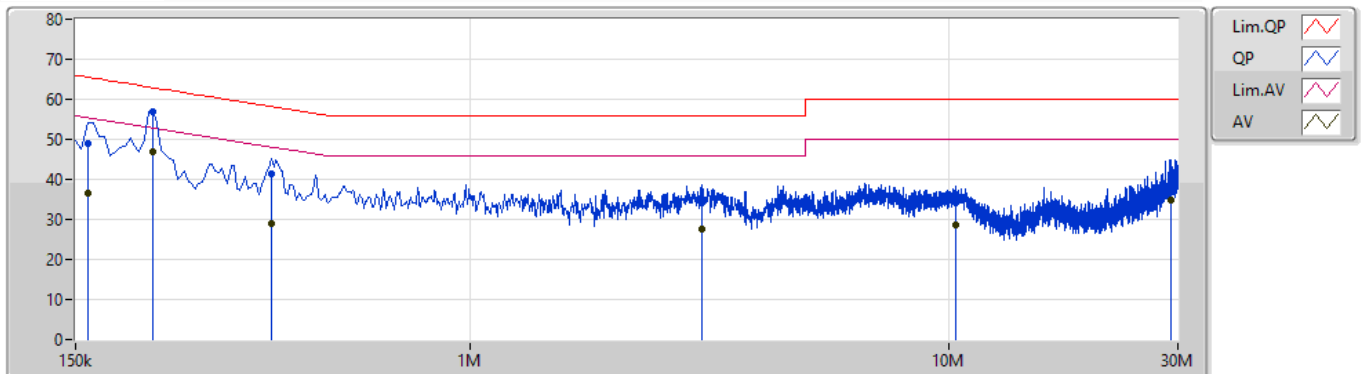
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 3	Pass	QP	217.5k	56.88	62.92	-6.04	Line

Mode 3

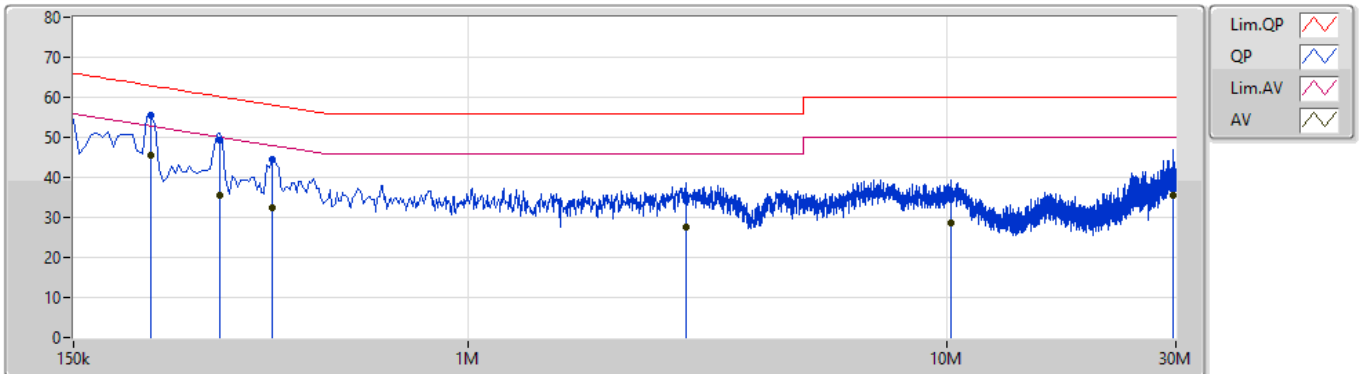
07/07/2022



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	159k	49.03	65.52	-16.49	9.99	Line	-	39.04	0.06	0.04	9.89			
AV	159k	36.49	55.52	-19.03	9.99	Line	-	26.50	0.06	0.04	9.89			
QP	217.5k	56.88	62.92	-6.04	9.99	Line	"Worst"	46.89	0.06	0.04	9.89			
AV	217.5k	46.75	52.92	-6.17	9.99	Line	-	36.76	0.06	0.04	9.89			
QP	384k	41.42	58.20	-16.78	10.01	Line	-	31.41	0.06	0.06	9.89			
AV	384k	29.04	48.20	-19.16	10.01	Line	-	19.03	0.06	0.06	9.89			
QP	3.039M	34.31	56.00	-21.69	10.10	Line	-	24.21	0.11	0.10	9.89			
AV	3.039M	27.63	46.00	-18.37	10.10	Line	-	17.53	0.11	0.10	9.89			
QP	10.325M	34.21	60.00	-25.79	10.29	Line	-	23.92	0.22	0.16	9.91			
AV	10.325M	28.50	50.00	-21.50	10.29	Line	-	18.21	0.22	0.16	9.91			
QP	29.058M	41.30	60.00	-18.70	10.73	Line	-	30.57	0.39	0.33	10.01			
AV	29.058M	34.97	50.00	-15.03	10.73	Line	-	24.24	0.39	0.33	10.01			

Mode 3

07/07/2022



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	217.5k	55.65	62.92	-7.27	10.00	Neutral	"Worst"	45.65	0.07	0.04	9.89			
AV	217.5k	45.36	52.92	-7.56	10.00	Neutral	-	35.36	0.07	0.04	9.89			
QP	303k	49.46	60.17	-10.71	10.01	Neutral	-	39.45	0.07	0.05	9.89			
AV	303k	35.62	50.17	-14.55	10.01	Neutral	-	25.61	0.07	0.05	9.89			
QP	388.5k	44.33	58.10	-13.77	10.02	Neutral	-	34.31	0.07	0.06	9.89			
AV	388.5k	32.36	48.10	-15.74	10.02	Neutral	-	22.34	0.07	0.06	9.89			
QP	2.841M	34.05	56.00	-21.95	10.11	Neutral	-	23.94	0.12	0.10	9.89			
AV	2.841M	27.42	46.00	-18.58	10.11	Neutral	-	17.31	0.12	0.10	9.89			
QP	10.212M	34.50	60.00	-25.50	10.31	Neutral	-	24.19	0.24	0.16	9.91			
AV	10.212M	28.70	50.00	-21.30	10.31	Neutral	-	18.39	0.24	0.16	9.91			
QP	29.54M	41.84	60.00	-18.16	10.66	Neutral	-	31.18	0.31	0.33	10.02			
AV	29.54M	35.56	50.00	-14.44	10.66	Neutral	-	24.90	0.31	0.33	10.02			

<2T1S>
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_2TX	16.38M	16.792M	16M8D1D	16.32M	16.702M
11a40_Nss1,(6Mbps)_2TX	36.42M	36.462M	36M5D1D	36.3M	36.342M
11a80_Nss1,(6Mbps)_2TX	76.32M	76.162M	76M2D1D	76.32M	75.922M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.61M	18.021M	18M0D1D	17.58M	17.931M
802.11ac VHT40_Nss1,(MCS0)_2TX	36.3M	36.402M	36M4D1D	36.3M	36.282M
802.11ac VHT80_Nss1,(MCS0)_2TX	76.08M	76.042M	76M0D1D	75.96M	75.682M
802.11ax HEW20_Nss1,(MCS0)_2TX	19.02M	19.04M	19M0D1D	18.9M	19.01M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.56M	37.661M	37M7D1D	37.56M	37.601M
802.11ax HEW80_Nss1,(MCS0)_2TX	77.04M	77.121M	77M1D1D	76.56M	77.121M

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

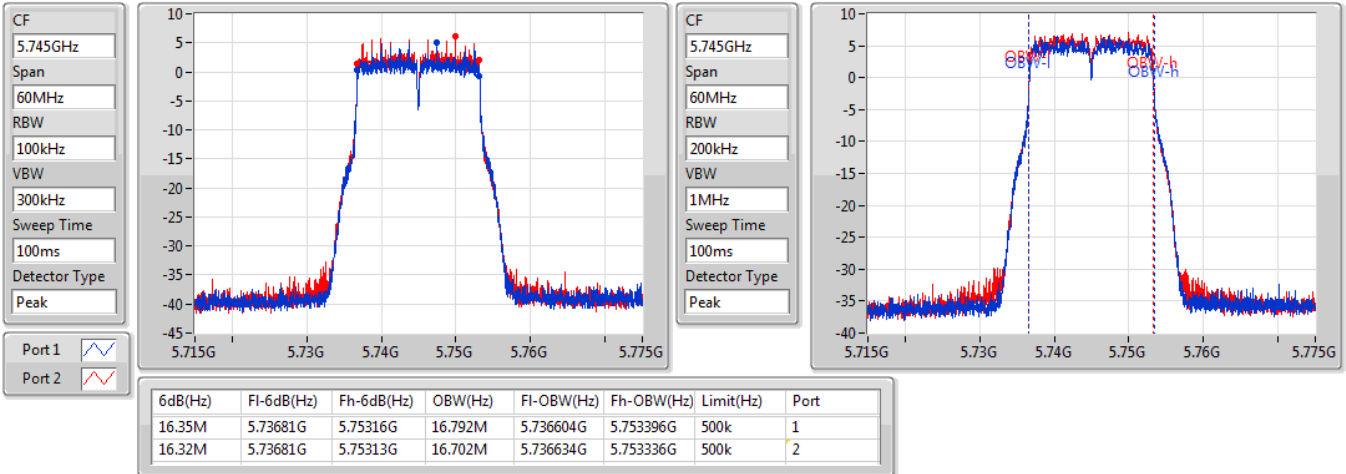
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
11a20_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5745MHz	Pass	500k	16.35M	16.792M	16.32M	16.702M
5785MHz	Pass	500k	16.35M	16.792M	16.38M	16.702M
5825MHz	Pass	500k	16.35M	16.792M	16.35M	16.702M
11a40_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5755MHz	Pass	500k	36.36M	36.402M	36.3M	36.342M
5795MHz	Pass	500k	36.36M	36.462M	36.42M	36.402M
11a80_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5775MHz	Pass	500k	76.32M	75.922M	76.32M	76.162M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	500k	17.58M	18.021M	17.61M	17.961M
5785MHz	Pass	500k	17.58M	17.991M	17.58M	17.931M
5825MHz	Pass	500k	17.58M	17.961M	17.61M	17.931M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	500k	36.3M	36.402M	36.3M	36.282M
5795MHz	Pass	500k	36.3M	36.402M	36.3M	36.282M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	500k	76.08M	76.042M	75.96M	75.682M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	500k	18.9M	19.04M	18.96M	19.04M
5785MHz	Pass	500k	19.02M	19.04M	18.96M	19.01M
5825MHz	Pass	500k	18.99M	19.04M	18.9M	19.04M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	500k	37.56M	37.601M	37.56M	37.661M
5795MHz	Pass	500k	37.56M	37.661M	37.56M	37.661M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	500k	77.04M	77.121M	76.56M	77.121M

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

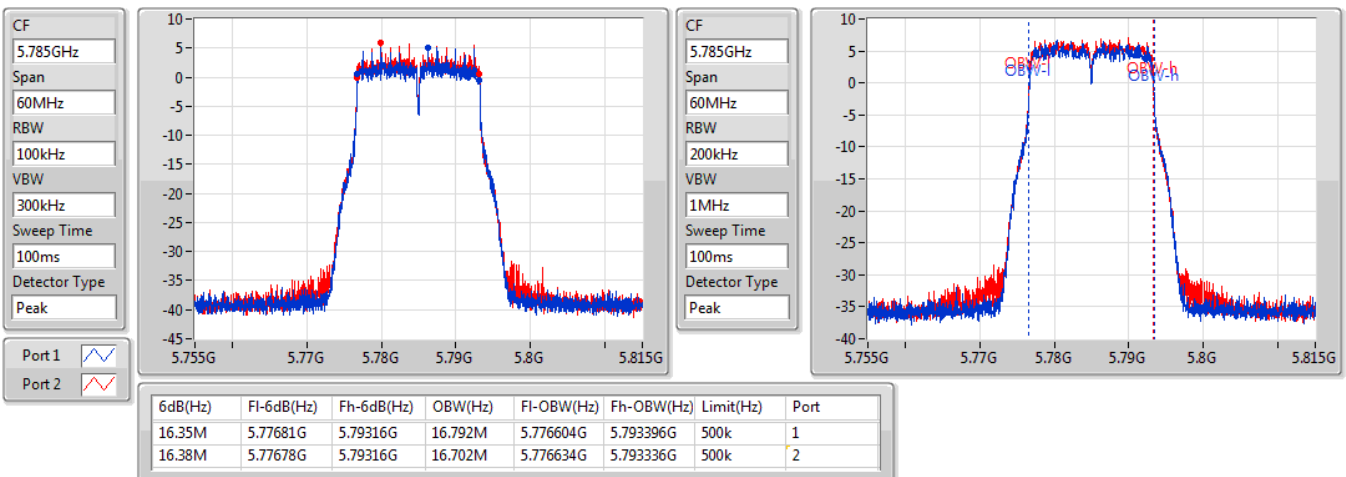
Port X-OBW = Port X 99% occupied bandwidth;

11a20_Nss1,(6Mbps)_2TX
EBW
5745MHz

07/03/2020

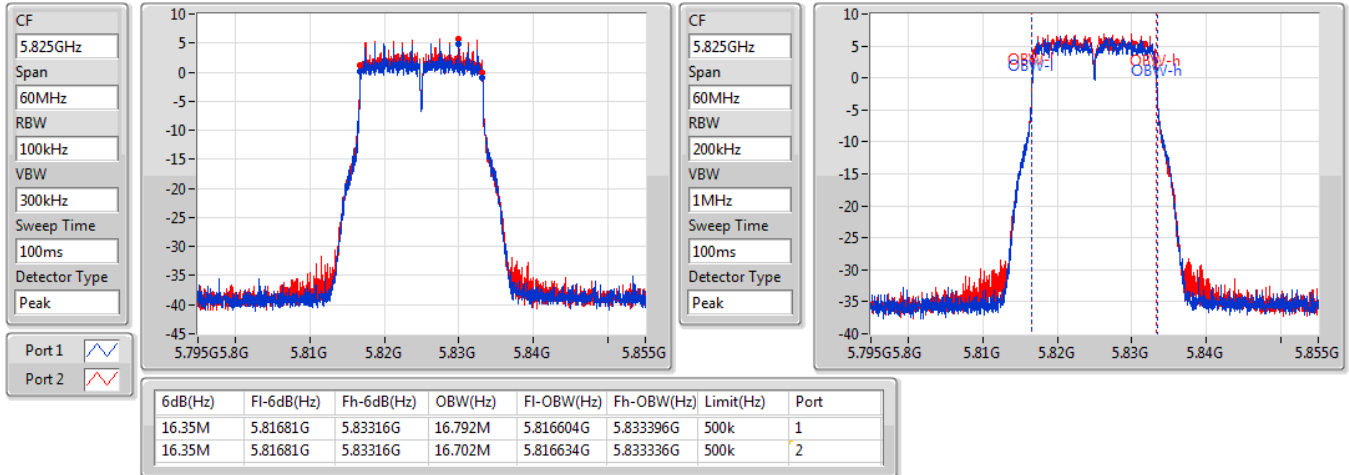

11a20_Nss1,(6Mbps)_2TX
EBW
5785MHz

07/03/2020

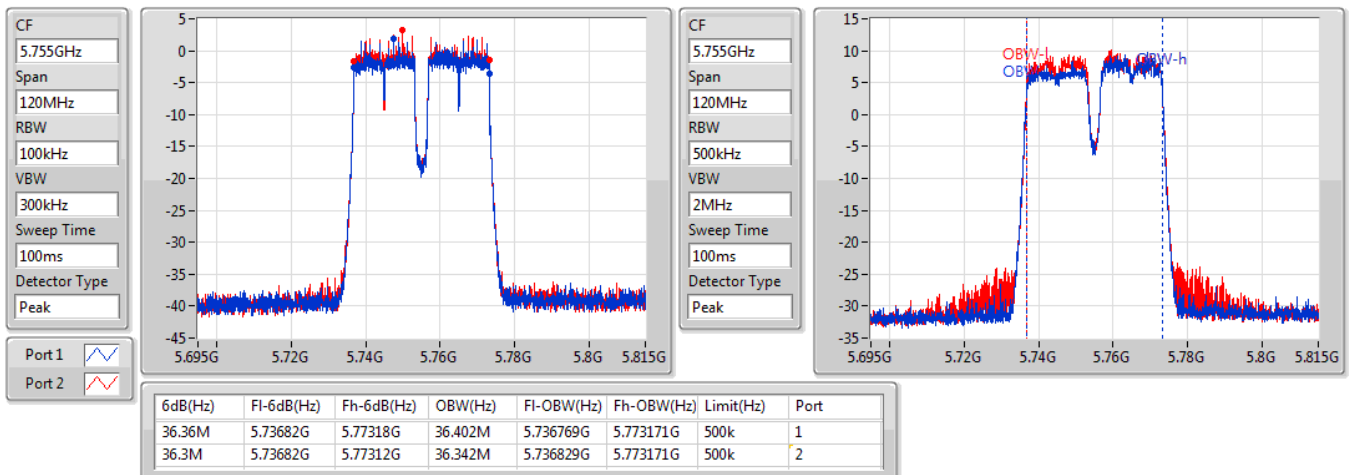


11a20_Nss1,(6Mbps)_2TX
EBW
5825MHz

07/03/2020

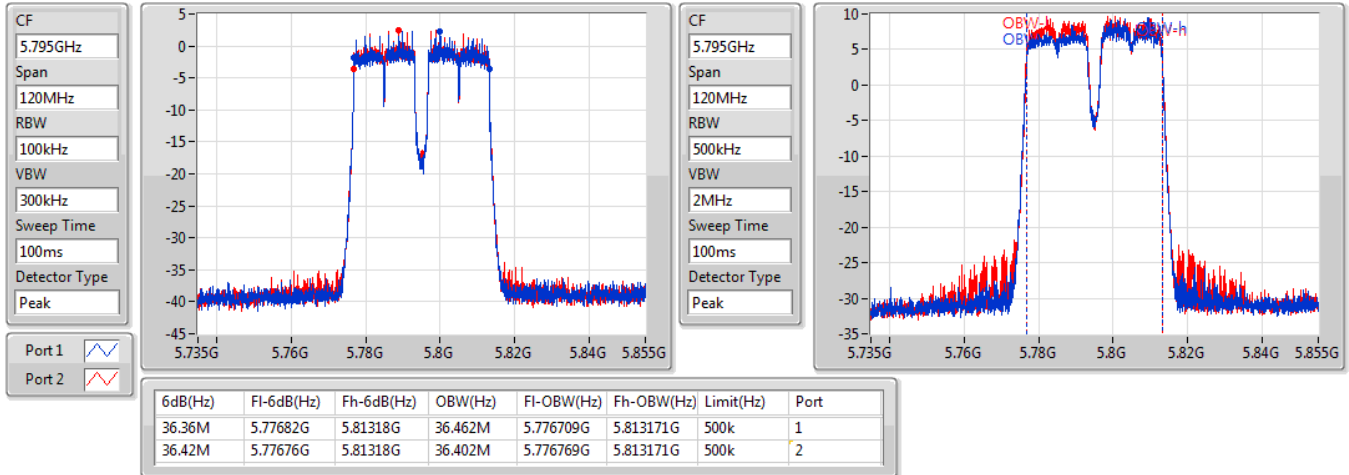

11a40_Nss1,(6Mbps)_2TX
EBW
5755MHz

07/03/2020

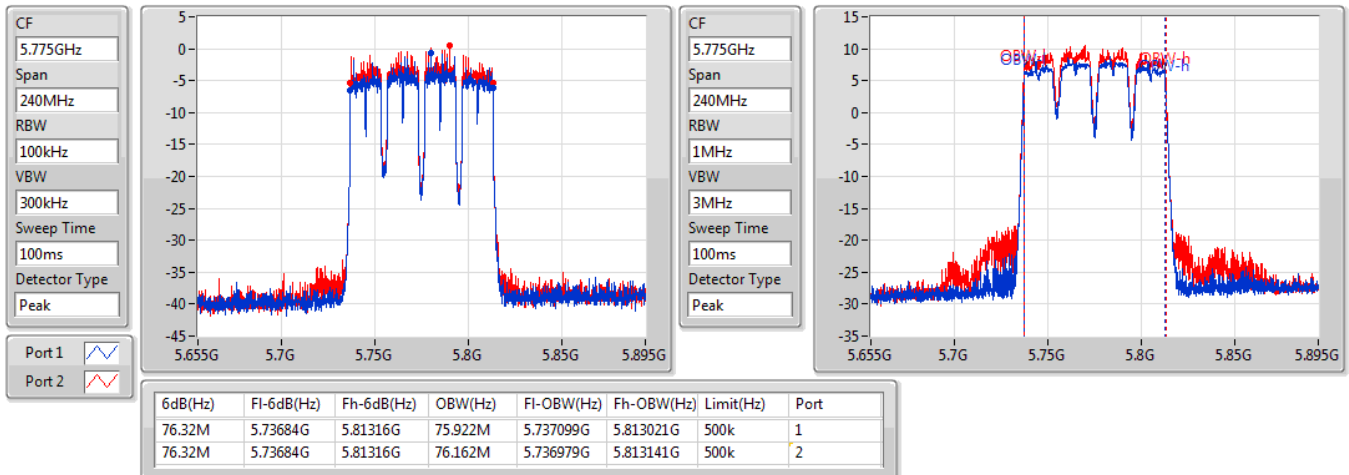


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EBW
5795MHz

07/03/2020

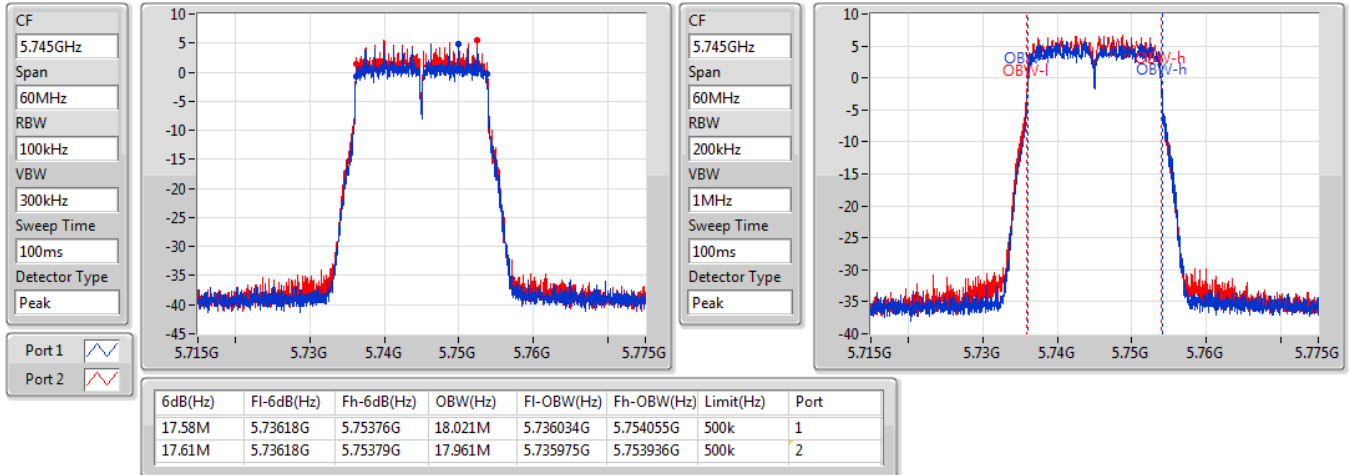

11a80_Nss1,(6Mbps)_2TX
EBW
5775MHz

07/03/2020

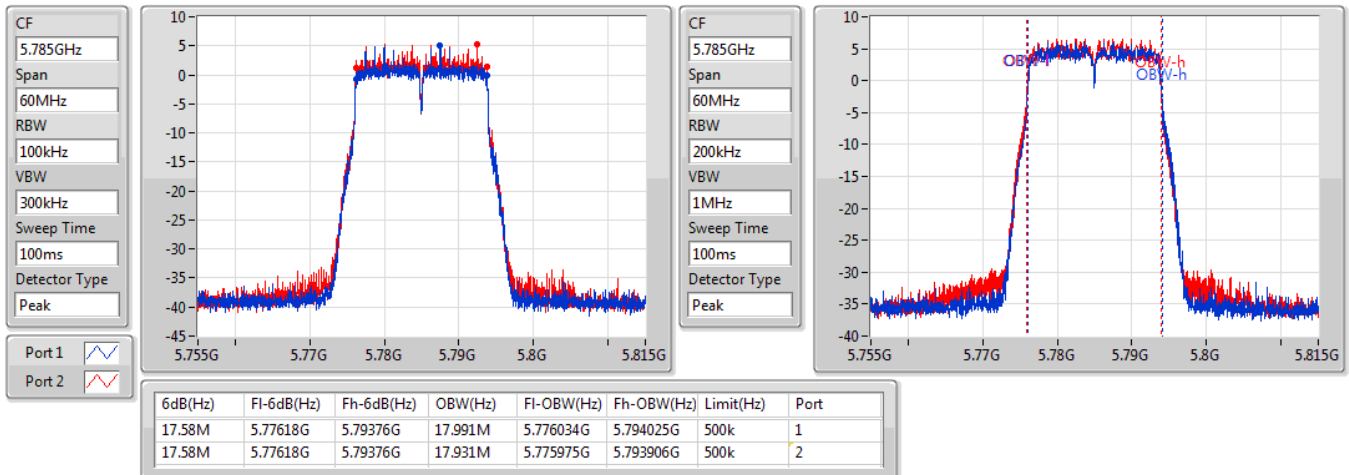


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5745MHz

25/03/2020

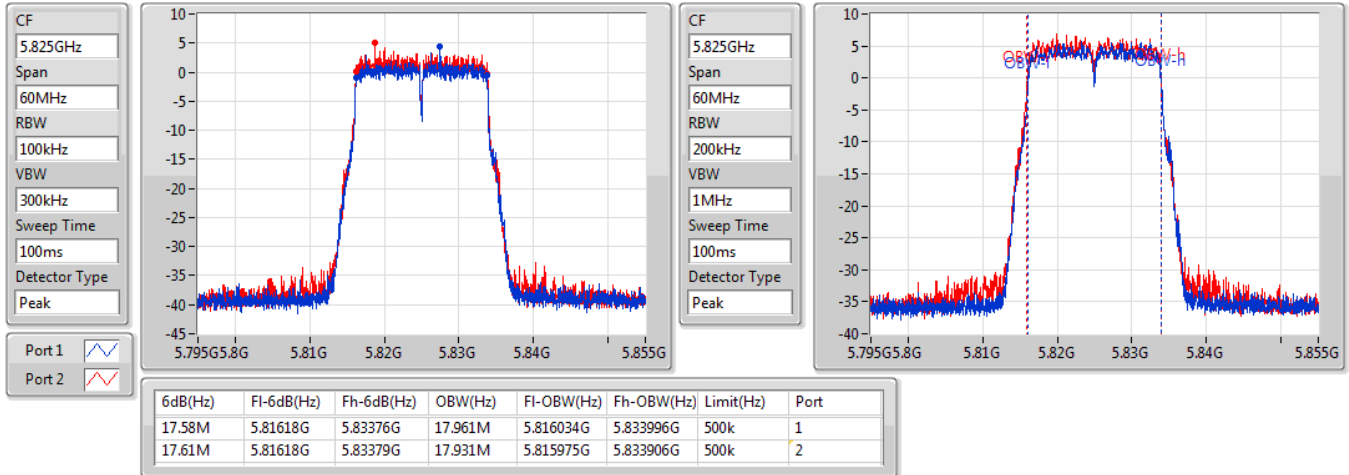

802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5785MHz

25/03/2020

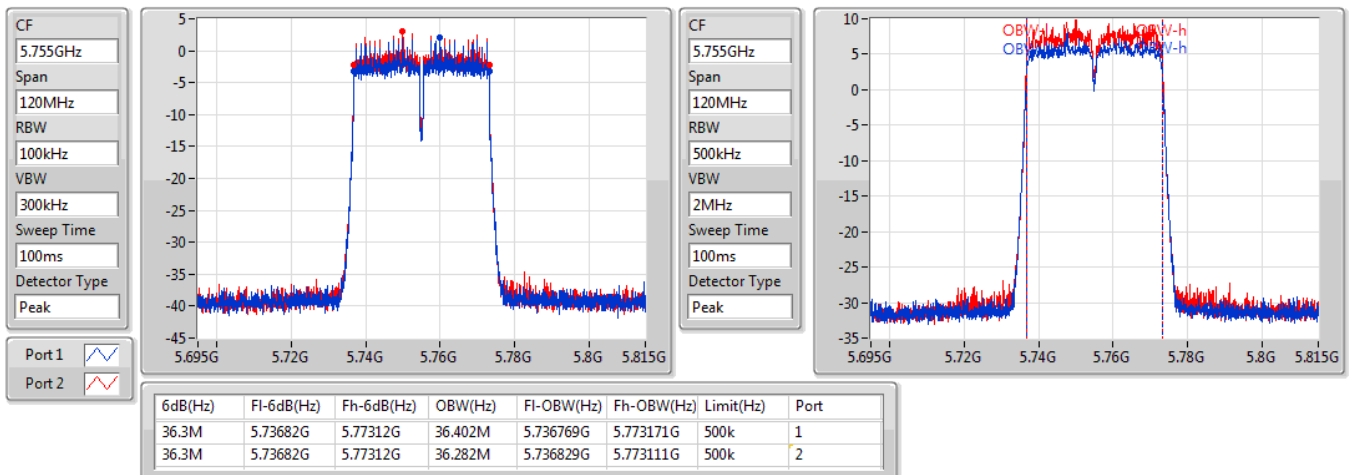


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5825MHz

25/03/2020

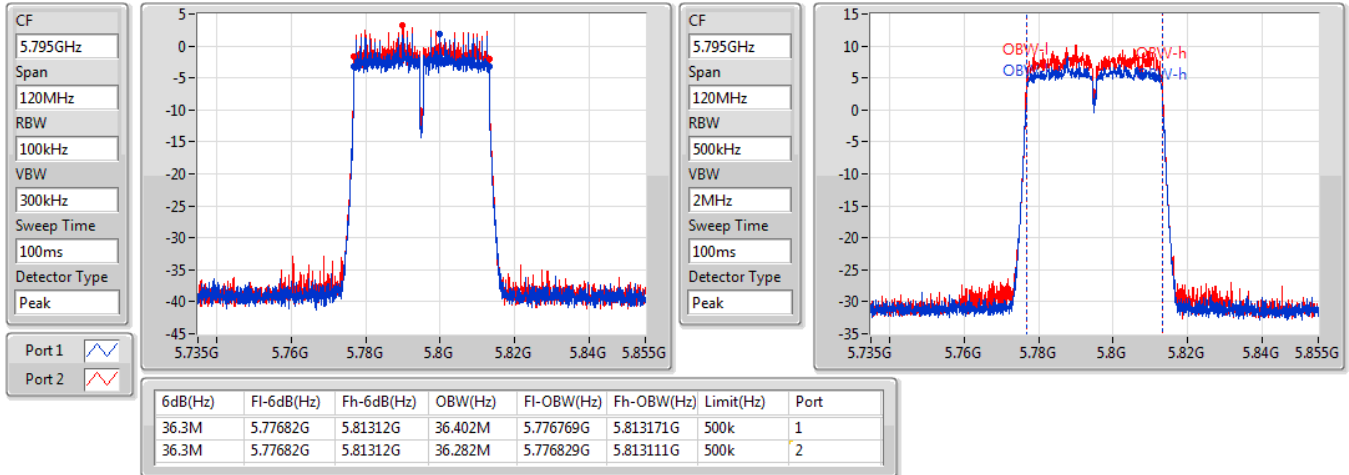

802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
5755MHz

25/03/2020

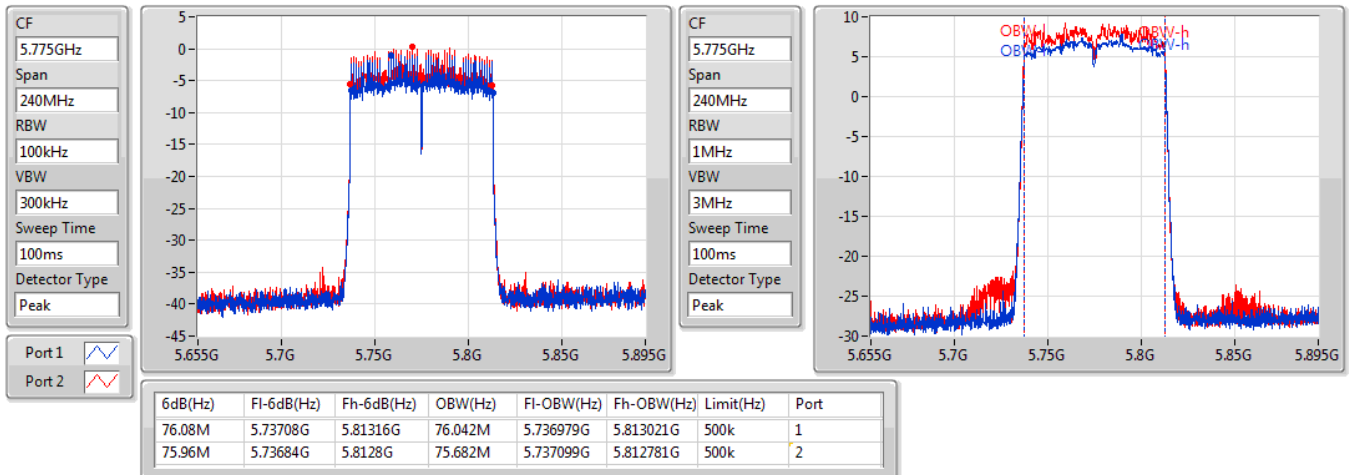


802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
5795MHz

25/03/2020

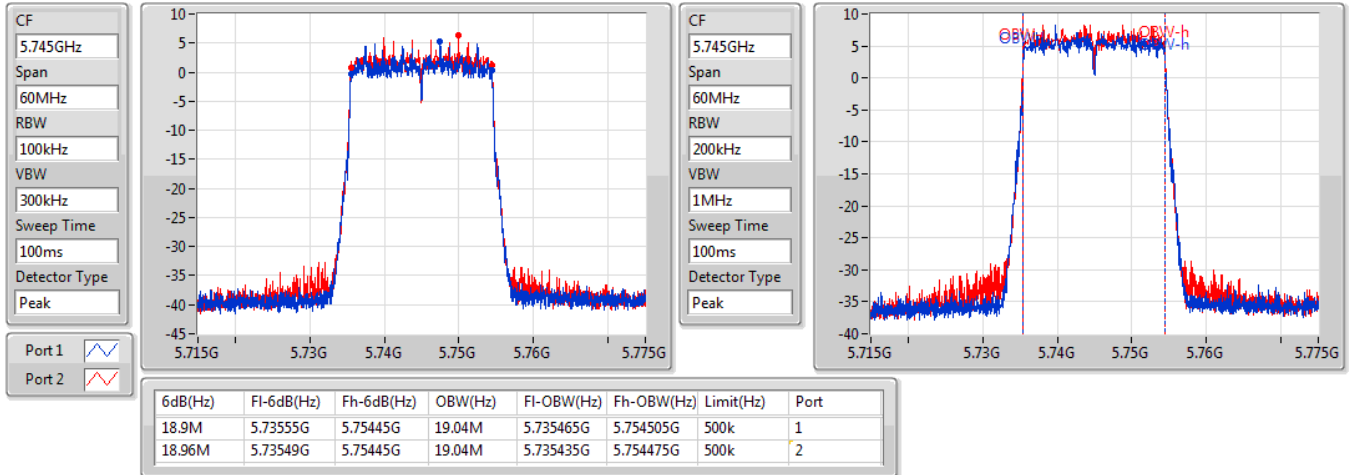

802.11ac VHT80_Nss1,(MCS0)_2TX
EBW
5775MHz

25/03/2020

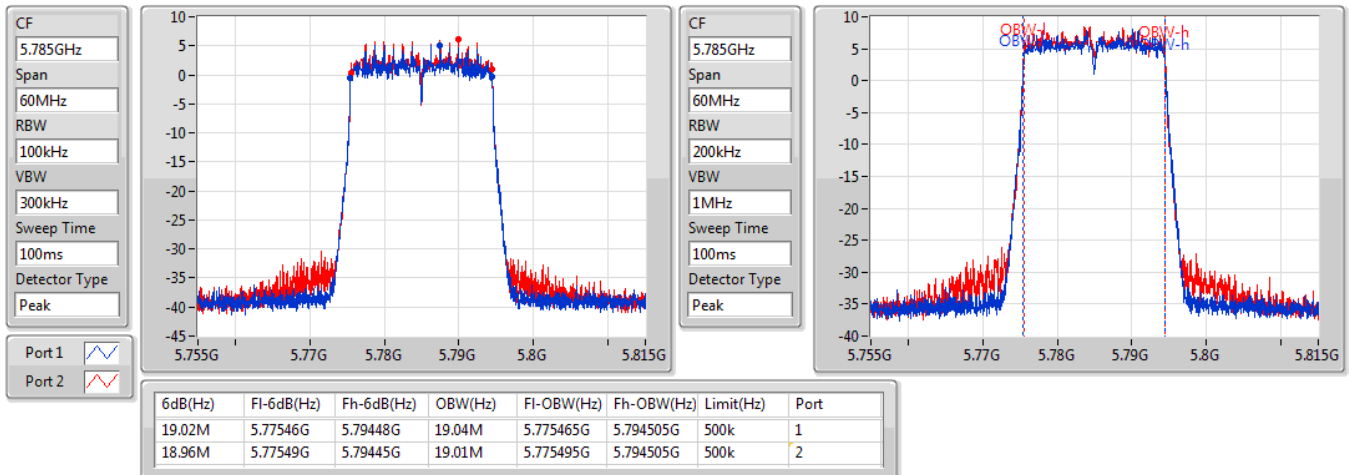


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5745MHz

07/03/2020

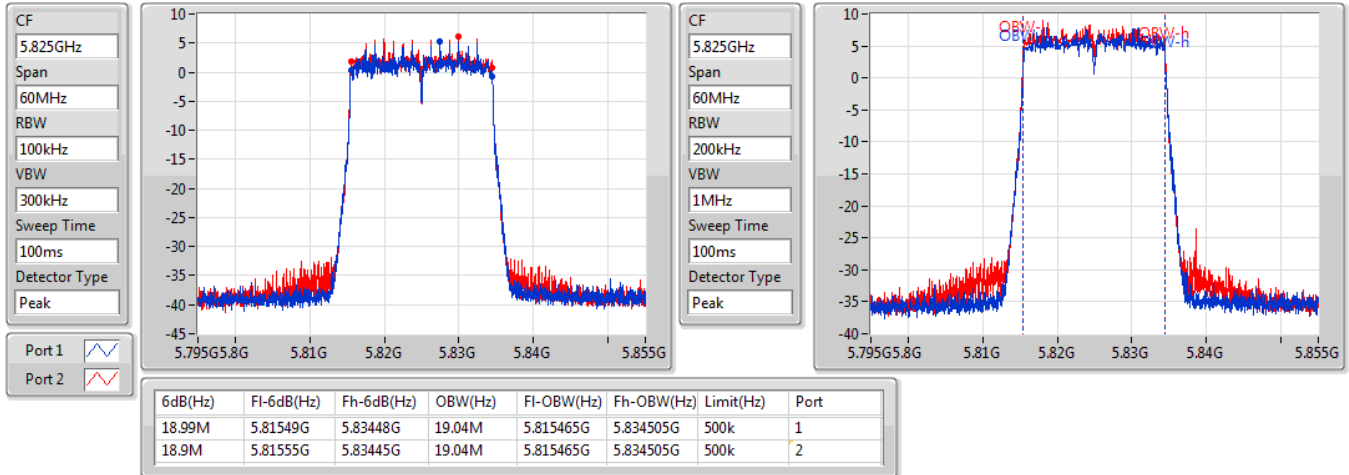

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5785MHz

07/03/2020

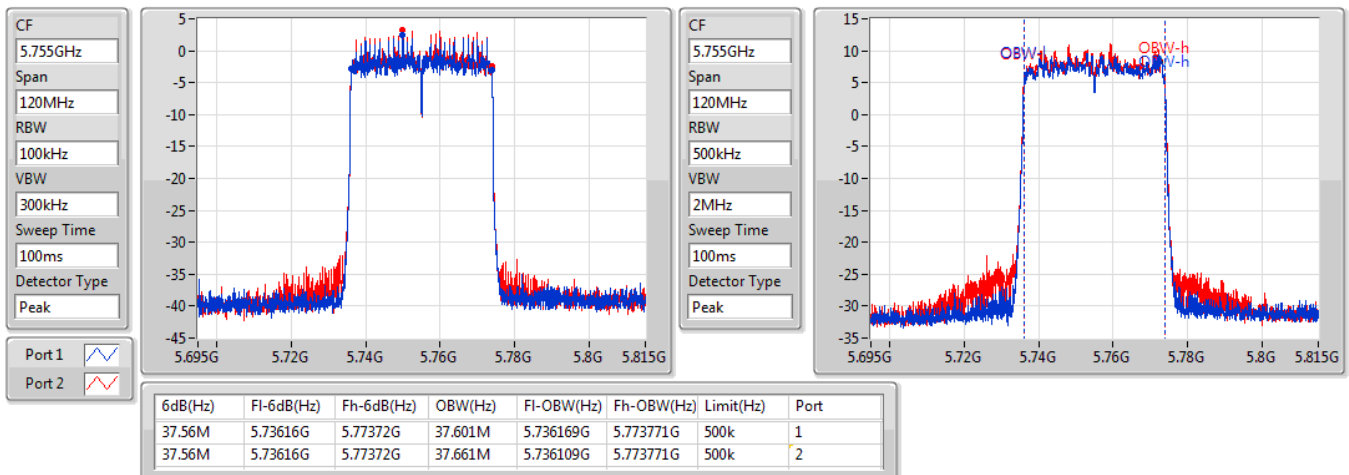


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5825MHz

07/03/2020

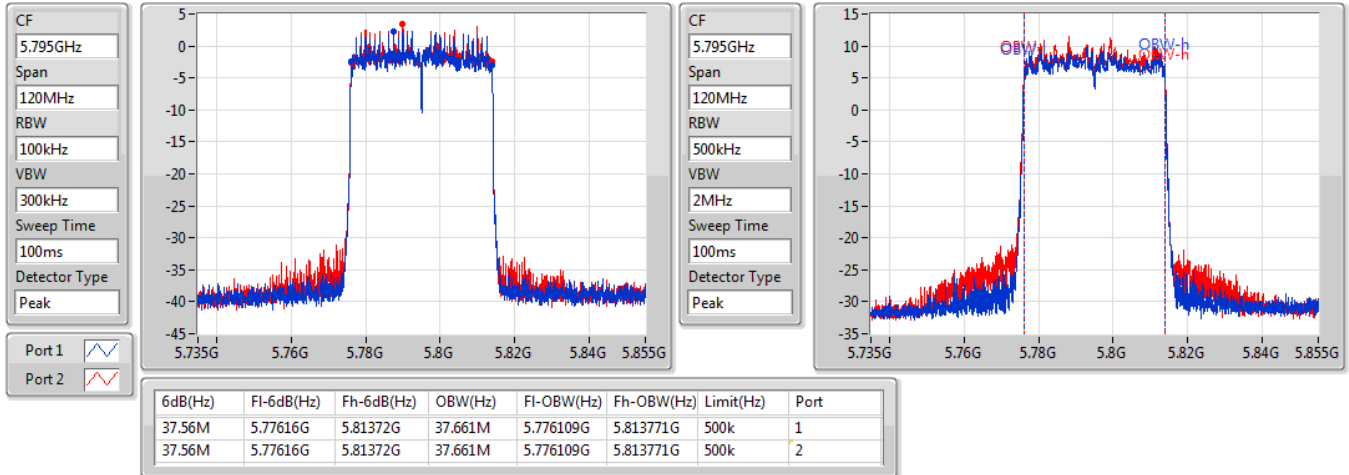

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5755MHz

07/03/2020

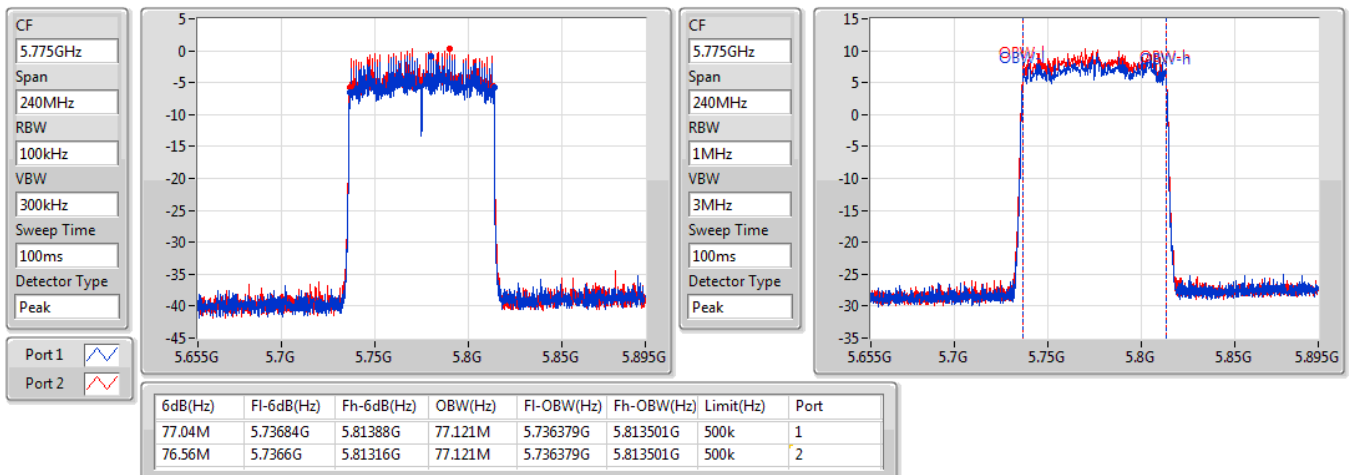


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5795MHz

07/03/2020


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5775MHz

07/03/2020



<2T1S>

Non-beamforming mode**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.725-5.85GHz	-	-	-	-
11a20_Nss1,(6Mbps)_2TX	20.32	0.10765	25.13	0.32584
11a40_Nss1,(6Mbps)_2TX	20.13	0.10304	25.06	0.32063
11a80_Nss1,(6Mbps)_2TX	19.96	0.09908	24.74	0.29785
802.11ac VHT20_Nss1,(MCS0)_2TX	20.36	0.10864	25.14	0.32659
802.11ac VHT40_Nss1,(MCS0)_2TX	20.18	0.10423	25.09	0.32285
802.11ac VHT80_Nss1,(MCS0)_2TX	19.95	0.09886	24.73	0.29717
802.11ax HEW20_Nss1,(MCS0)_2TX	20.61	0.11508	25.39	0.34594
802.11ax HEW40_Nss1,(MCS0)_2TX	20.30	0.10715	25.23	0.33343
802.11ax HEW80_Nss1,(MCS0)_2TX	20.08	0.10186	24.86	0.30620

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)
11a20_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
5745MHz	Pass	4.78	16.84	17.47	20.18	30.00	24.96
5785MHz	Pass	4.78	17.04	17.56	20.32	30.00	25.10
5825MHz	Pass	4.93	16.85	17.51	20.20	30.00	25.13
11a40_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
5755MHz	Pass	4.78	16.84	17.29	20.08	30.00	24.86
5795MHz	Pass	4.93	16.89	17.33	20.13	30.00	25.06
11a80_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
5775MHz	Pass	4.78	16.65	17.23	19.96	30.00	24.74
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5745MHz	Pass	4.78	16.76	17.54	20.18	30.00	24.96
5785MHz	Pass	4.78	17.07	17.62	20.36	30.00	25.14
5825MHz	Pass	4.93	16.74	17.39	20.09	30.00	25.02
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5755MHz	Pass	4.78	16.79	17.51	20.18	30.00	24.96
5795MHz	Pass	4.93	16.81	17.47	20.16	30.00	25.09
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5775MHz	Pass	4.78	16.52	17.32	19.95	30.00	24.73
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5745MHz	Pass	4.78	17.18	17.79	20.51	30.00	25.29
5785MHz	Pass	4.78	17.26	17.92	20.61	30.00	25.39
5825MHz	Pass	4.93	17.15	17.73	20.46	30.00	25.39
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5755MHz	Pass	4.78	16.93	17.54	20.26	30.00	25.04
5795MHz	Pass	4.93	17.02	17.54	20.30	30.00	25.23
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5775MHz	Pass	4.78	16.75	17.37	20.08	30.00	24.86

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

<2T1S>

beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.725-5.85GHz	-	-	-	-
11a20,BF_Nss1,(6Mbps)_2TX	20.32	0.10765	27.96	0.62517
11a40,BF_Nss1,(6Mbps)_2TX	20.13	0.10304	27.89	0.61518
11a80,BF_Nss1,(6Mbps)_2TX	19.96	0.09908	27.56	0.57016
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.36	0.10864	27.96	0.62517
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	20.18	0.10423	27.92	0.61944
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	19.95	0.09886	27.55	0.56885
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.61	0.11508	28.22	0.66374
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	20.30	0.10715	28.06	0.63973
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	20.08	0.10186	27.68	0.58614

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)
11a20,BF_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
5745MHz	Pass	7.60	16.84	17.47	20.18	28.40	27.78
5785MHz	Pass	7.60	17.04	17.56	20.32	28.40	27.92
5825MHz	Pass	7.76	16.85	17.51	20.20	28.24	27.96
11a40,BF_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
5755MHz	Pass	7.60	16.84	17.29	20.08	28.40	27.68
5795MHz	Pass	7.76	16.89	17.33	20.13	28.24	27.89
11a80,BF_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
5775MHz	Pass	7.60	16.65	17.23	19.96	28.40	27.56
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5745MHz	Pass	7.60	16.76	17.54	20.18	28.40	27.78
5785MHz	Pass	7.60	17.07	17.62	20.36	28.40	27.96
5825MHz	Pass	7.76	16.74	17.39	20.09	28.24	27.85
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5755MHz	Pass	7.60	16.79	17.51	20.18	28.40	27.78
5795MHz	Pass	7.76	16.81	17.47	20.16	28.24	27.92
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5775MHz	Pass	7.60	16.52	17.32	19.95	28.40	27.55
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5745MHz	Pass	7.60	17.18	17.79	20.51	28.40	28.11
5785MHz	Pass	7.60	17.26	17.92	20.61	28.40	28.21
5825MHz	Pass	7.76	17.15	17.73	20.46	28.24	28.22
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5755MHz	Pass	7.60	16.93	17.54	20.26	28.40	27.86
5795MHz	Pass	7.76	17.02	17.54	20.30	28.24	28.06
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5775MHz	Pass	7.60	16.75	17.37	20.08	28.40	27.68

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

<2T1S>

Non-beamforming mode

Summary

Mode	PD (dBm/RBW)
5.725-5.85GHz	-
11a20_Nss1,(6Mbps)_2TX	5.87
11a40_Nss1,(6Mbps)_2TX	2.97
11a80_Nss1,(6Mbps)_2TX	-0.02
802.11ac VHT20_Nss1,(MCS0)_2TX	5.24
802.11ac VHT40_Nss1,(MCS0)_2TX	2.30
802.11ac VHT80_Nss1,(MCS0)_2TX	-0.48
802.11ax HEW20_Nss1,(MCS0)_2TX	5.55
802.11ax HEW40_Nss1,(MCS0)_2TX	2.66
802.11ax HEW80_Nss1,(MCS0)_2TX	-0.29

RBW = 500 kHz 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)
11a20_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5745MHz	Pass	7.60	2.46	3.22	5.83	28.40
5785MHz	Pass	7.60	2.48	3.23	5.87	28.40
5825MHz	Pass	7.76	2.54	3.22	5.83	28.24
11a40_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5755MHz	Pass	7.60	-0.38	0.28	2.97	28.40
5795MHz	Pass	7.76	-0.30	0.34	2.96	28.24
11a80_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5775MHz	Pass	7.60	-3.44	-2.51	-0.02	28.40
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	7.60	1.84	2.53	5.17	28.40
5785MHz	Pass	7.60	1.87	2.66	5.24	28.40
5825MHz	Pass	7.76	1.75	2.56	5.15	28.24
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	7.60	-1.06	-0.35	2.28	28.40
5795MHz	Pass	7.76	-0.96	-0.23	2.30	28.24
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	7.60	-4.06	-2.91	-0.48	28.40
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	7.60	2.19	2.91	5.53	28.40
5785MHz	Pass	7.60	2.17	3.02	5.55	28.40
5825MHz	Pass	7.76	2.13	2.84	5.47	28.24
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	7.60	-0.70	-0.16	2.57	28.40
5795MHz	Pass	7.76	-0.63	0.04	2.66	28.24
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	7.60	-3.66	-2.82	-0.29	28.40

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

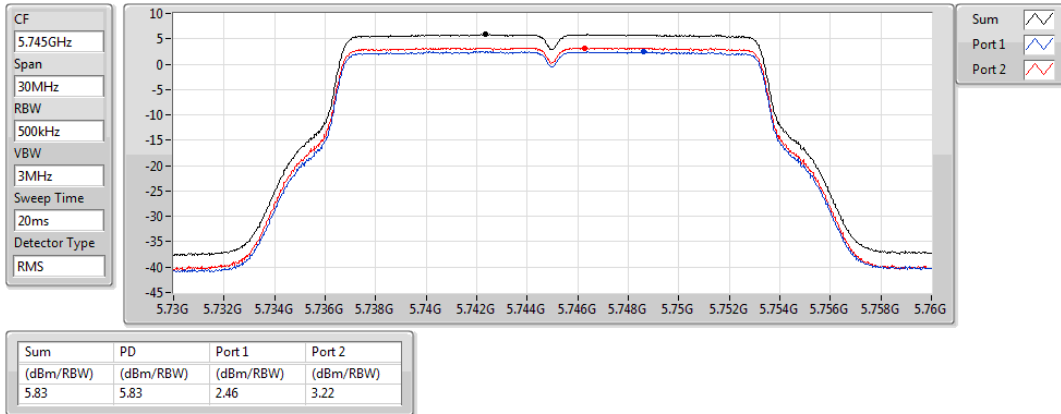
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

11a20_Nss1,(6Mbps)_2TX

PSD

5745MHz

07/03/2020

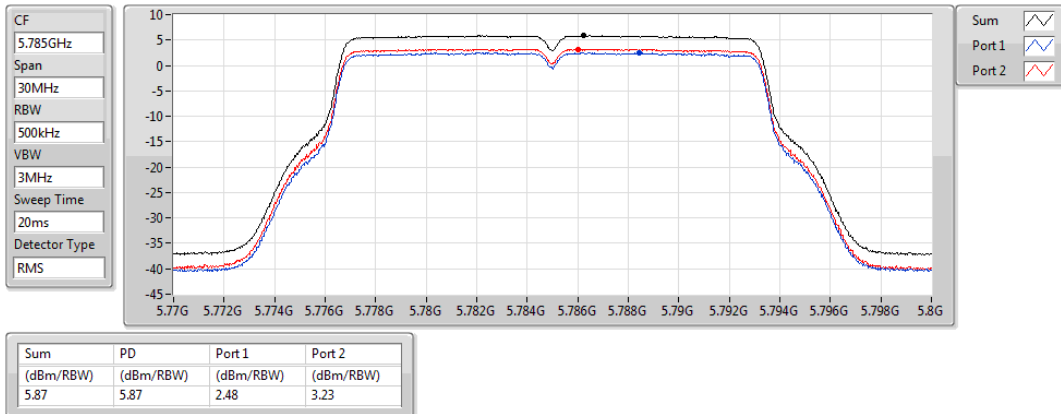


11a20_Nss1,(6Mbps)_2TX

PSD

5785MHz

07/03/2020

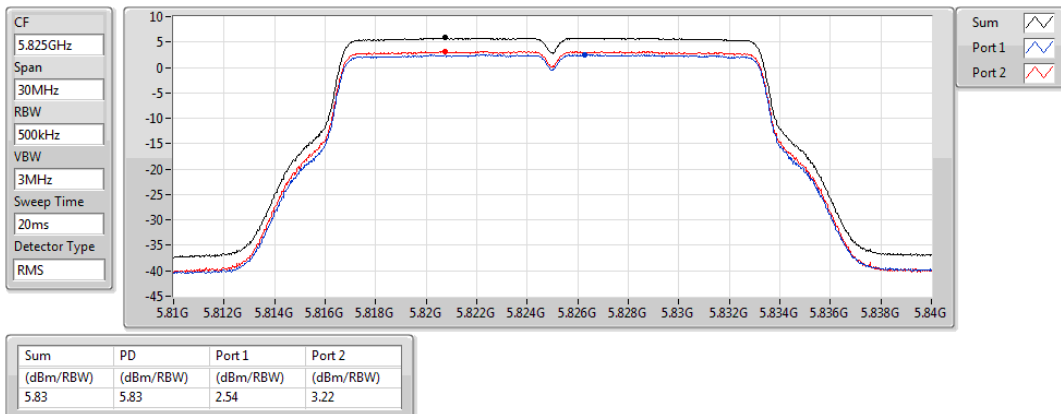


11a20_Nss1,(6Mbps)_2TX

PSD

5825MHz

07/03/2020

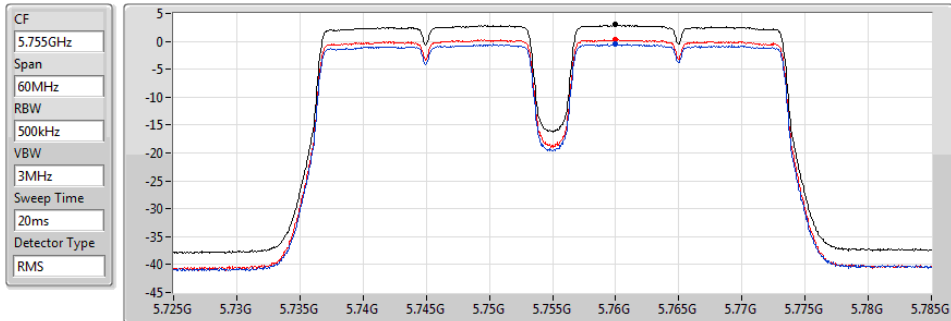


11a40_Nss1,(6Mbps)_2TX

PSD

5755MHz

07/03/2020



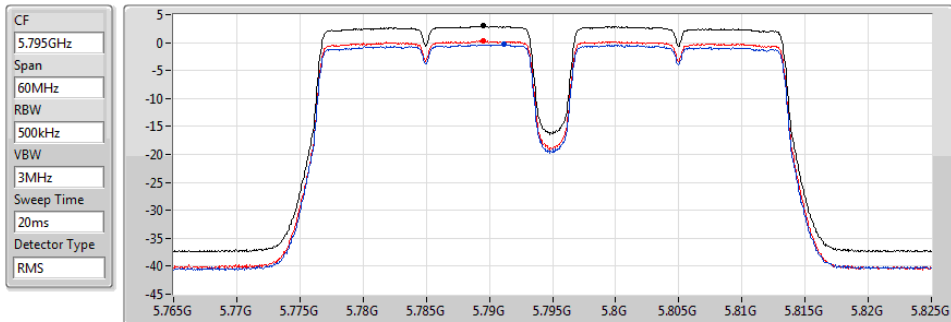
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.97	2.97	-0.38	0.28

11a40_Nss1,(6Mbps)_2TX

PSD

5795MHz

07/03/2020



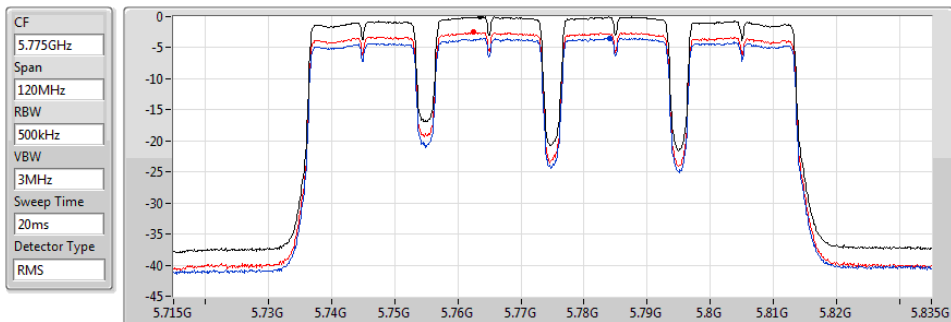
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.96	2.96	-0.30	0.34

11a80_Nss1,(6Mbps)_2TX

PSD

5775MHz

07/03/2020



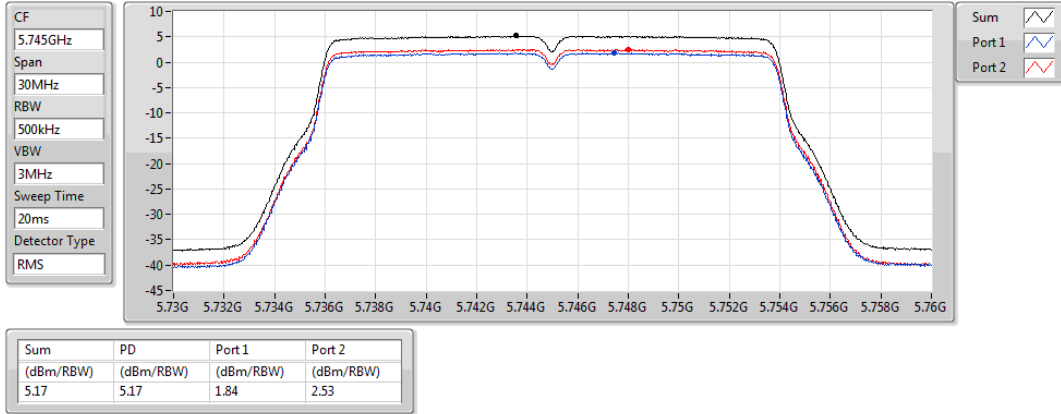
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.02	-0.02	-3.44	-2.51

802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5745MHz

25/03/2020

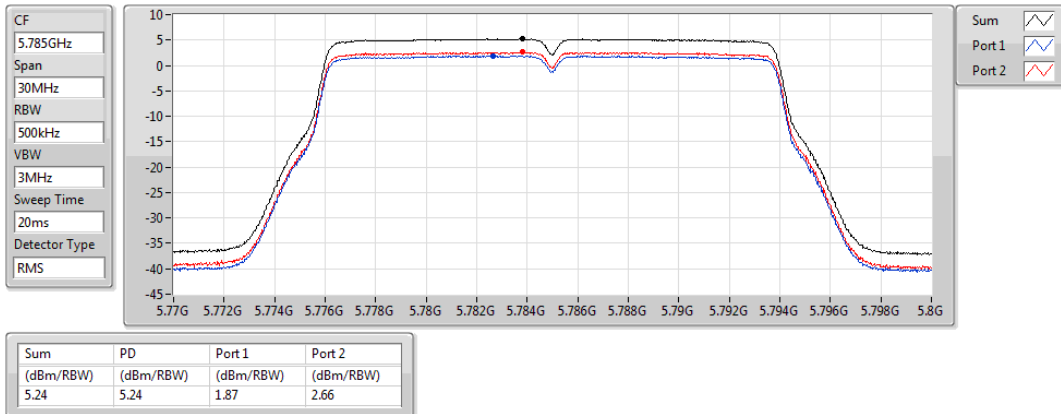


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5785MHz

25/03/2020

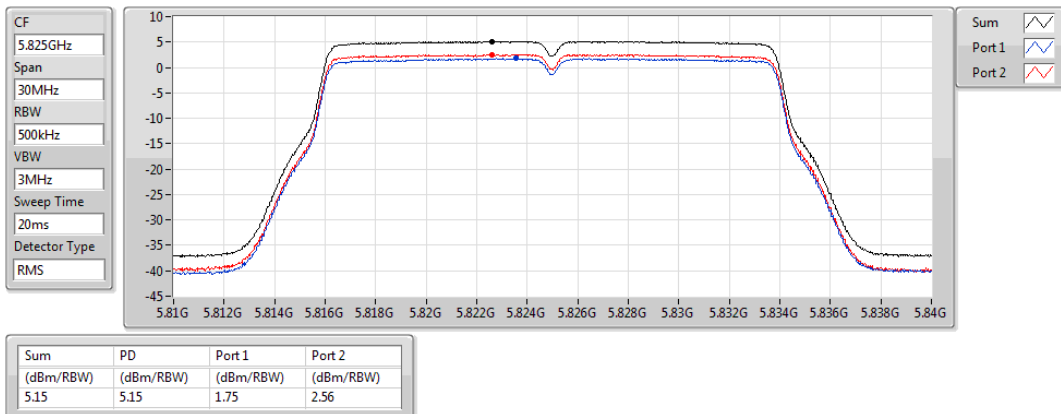


802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5825MHz

25/03/2020

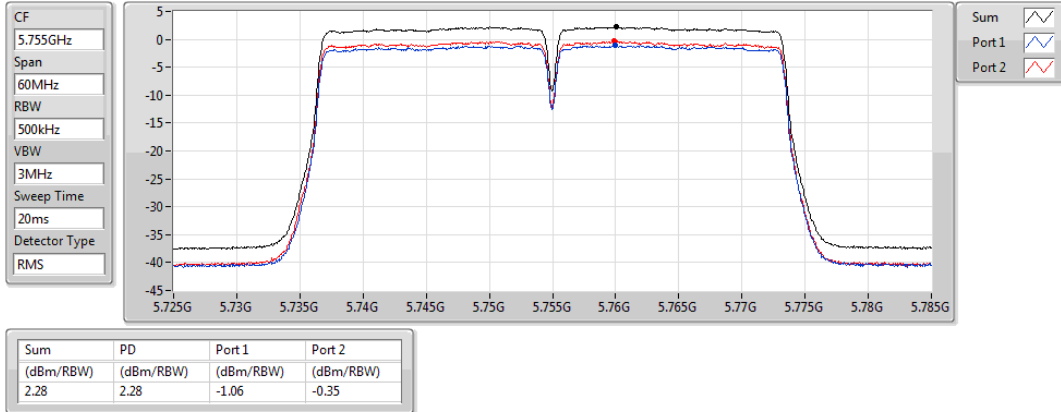


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5755MHz

25/03/2020

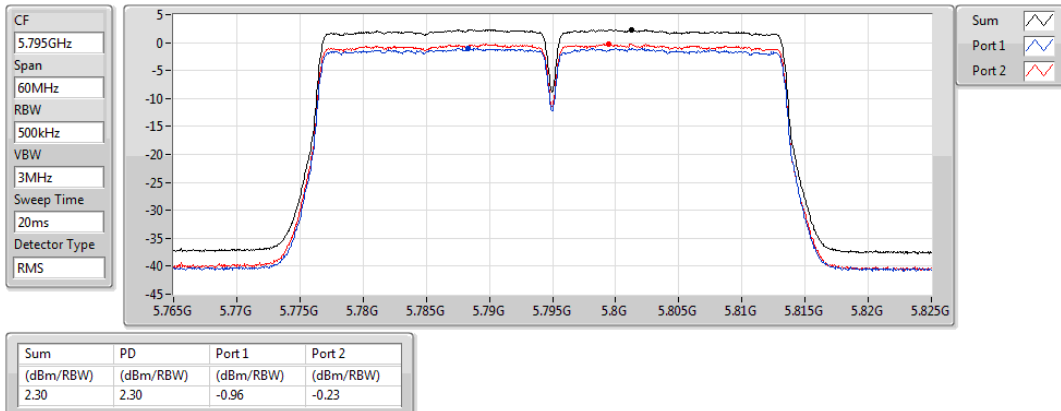


802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5795MHz

25/03/2020

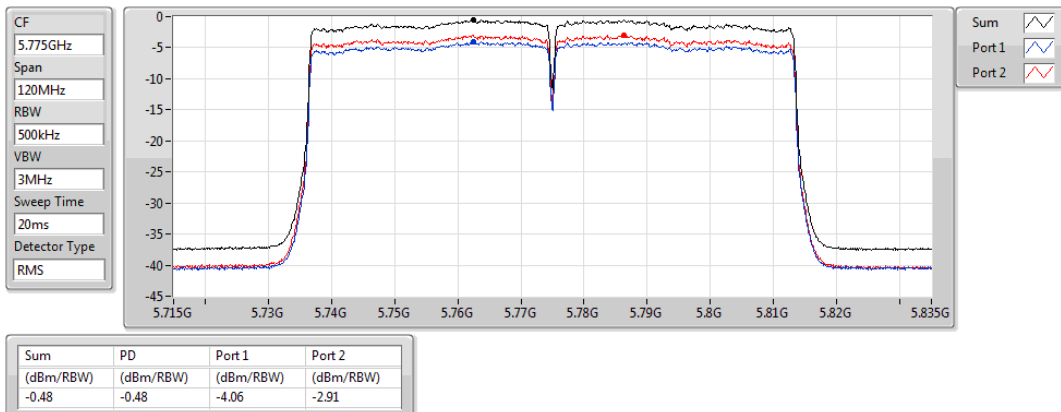


802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5775MHz

25/03/2020

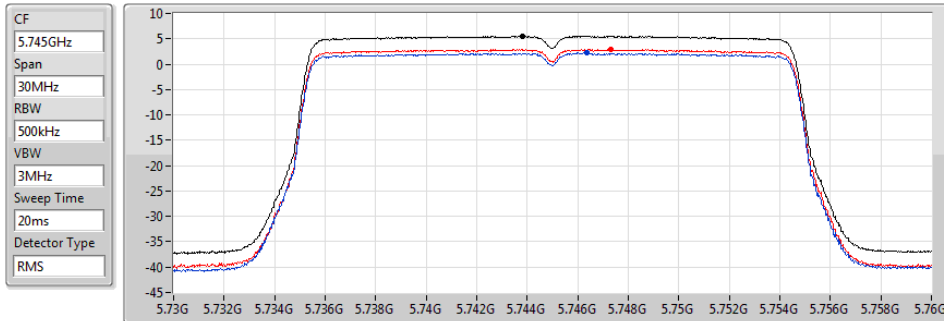


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5745MHz

07/03/2020



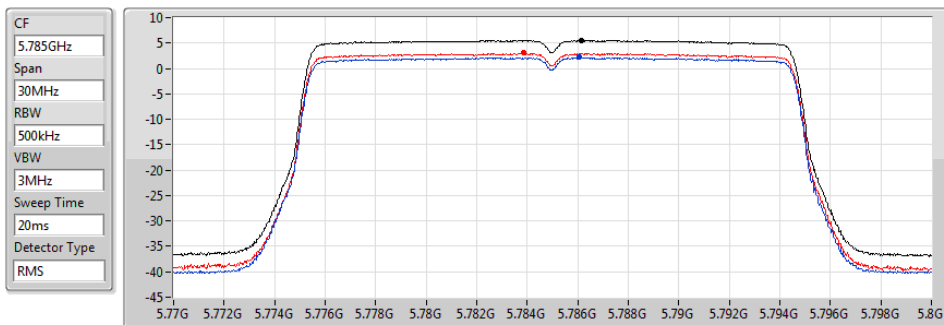
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.53	5.53	2.19	2.91

802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5785MHz

07/03/2020



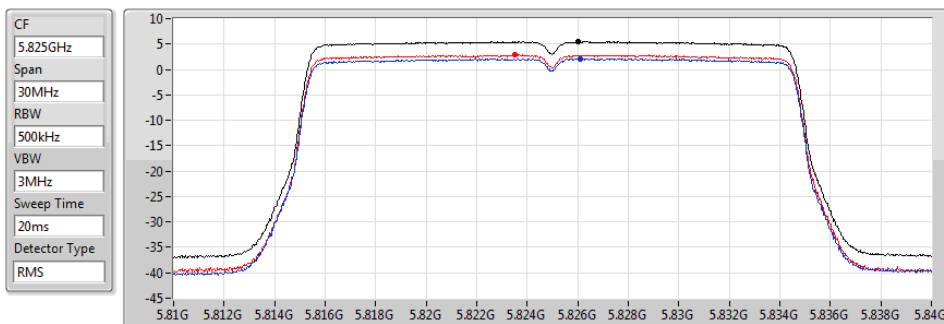
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.55	5.55	2.17	3.02

802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5825MHz

07/03/2020



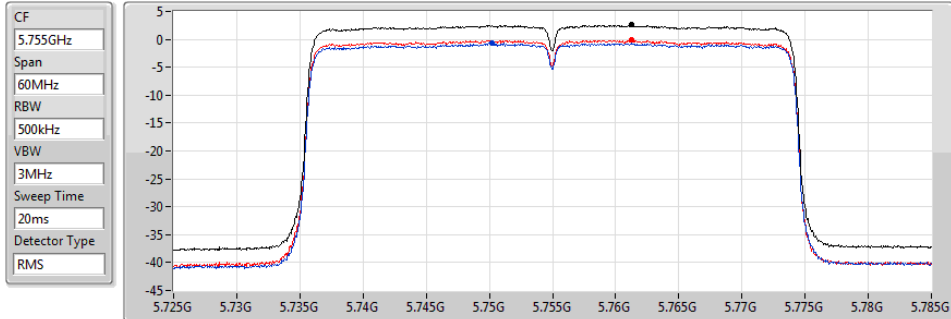
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.47	5.47	2.13	2.84

802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5755MHz

07/03/2020



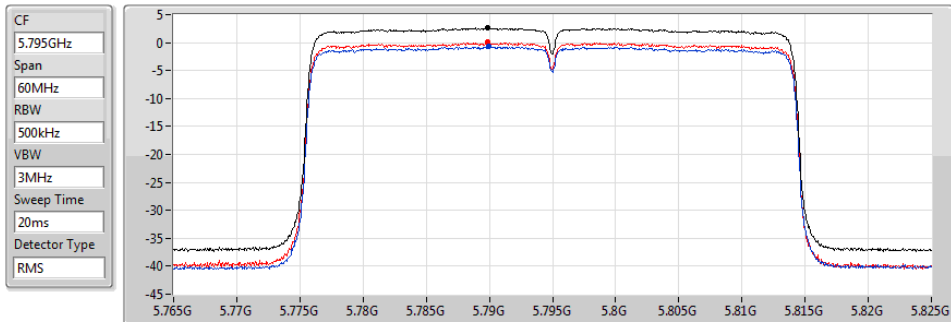
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.57	2.57	-0.70	-0.16

802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5795MHz

07/03/2020



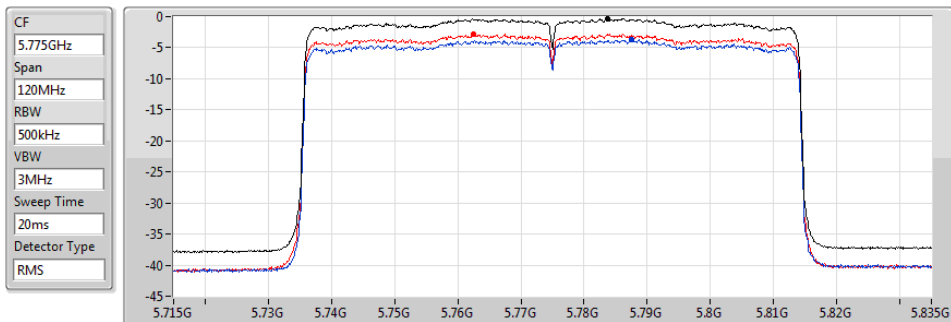
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.66	2.66	-0.63	0.04

802.11ax HEW80_Nss1,(MCS0)_2TX

PSD

5775MHz

07/03/2020



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.29	-0.29	-3.66	-2.82

<2T1S>

beamforming mode

Summary

Mode	PD (dBm/RBW)
5.725-5.85GHz	-
11a20,BF_Nss1,(6Mbps)_2TX	5.87
11a40,BF_Nss1,(6Mbps)_2TX	2.97
11a80,BF_Nss1,(6Mbps)_2TX	-0.02
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	5.24
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	2.3
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-0.48
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	5.55
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	2.66
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-0.29

RBW = 500 kHz 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)
11a20,BF_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5745MHz	Pass	7.60	2.46	3.22	5.83	28.40
5785MHz	Pass	7.60	2.48	3.23	5.87	28.40
5825MHz	Pass	7.76	2.54	3.22	5.83	28.24
11a40,BF_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5755MHz	Pass	7.60	-0.38	0.28	2.97	28.40
5795MHz	Pass	7.76	-0.3	0.34	2.96	28.24
11a80,BF_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5775MHz	Pass	7.60	-3.44	-2.51	-0.02	28.40
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	7.60	1.84	2.53	5.17	28.40
5785MHz	Pass	7.60	1.87	2.66	5.24	28.40
5825MHz	Pass	7.76	1.75	2.56	5.15	28.24
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	7.60	-1.06	-0.35	2.28	28.40
5795MHz	Pass	7.76	-0.96	-0.23	2.30	28.24
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	7.60	-4.06	-2.91	-0.48	28.40
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	7.60	2.19	2.91	5.53	28.40
5785MHz	Pass	7.60	2.17	3.02	5.55	28.40
5825MHz	Pass	7.76	2.13	2.84	5.47	28.24
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	7.60	-0.7	-0.16	2.57	28.40
5795MHz	Pass	7.76	-0.63	0.04	2.66	28.24
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	7.60	-3.66	-2.82	-0.29	28.40

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

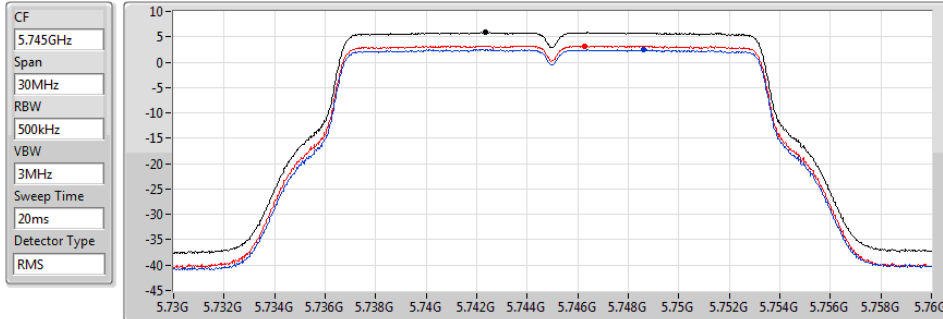
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

11a20,BF_Nss1,(6Mbps)_2TX

PSD

5745MHz

07/03/2020



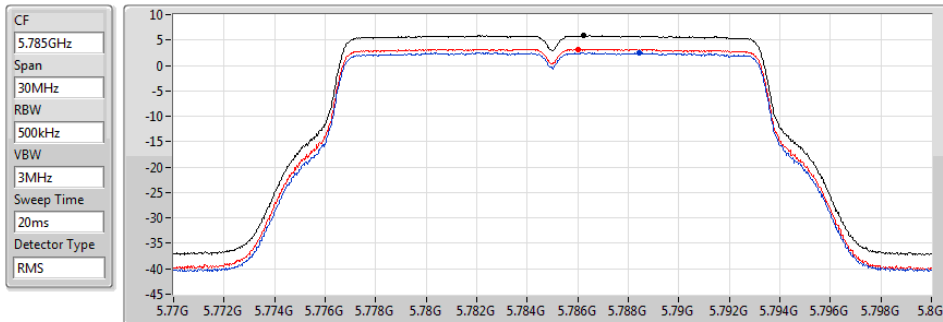
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.83	5.83	2.46	3.22

11a20,BF_Nss1,(6Mbps)_2TX

PSD

5785MHz

07/03/2020



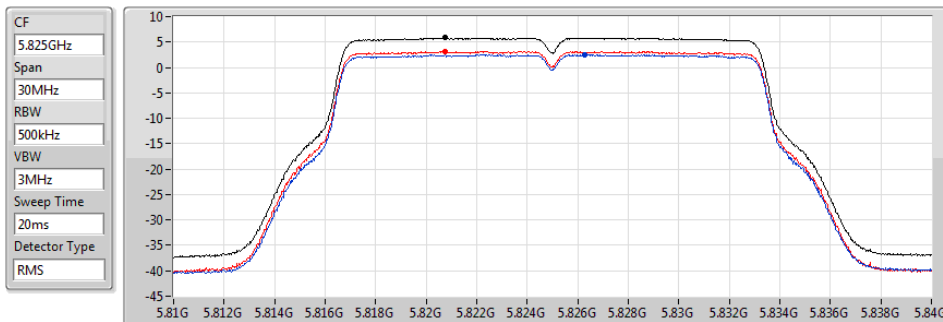
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.87	5.87	2.48	3.23

11a20,BF_Nss1,(6Mbps)_2TX

PSD

5825MHz

07/03/2020



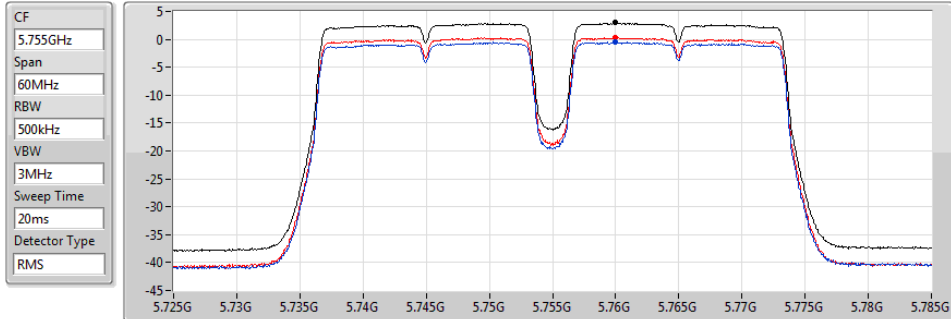
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.83	5.83	2.54	3.22

11a40,BF_Nss1,(6Mbps)_2TX

PSD

5755MHz

07/03/2020



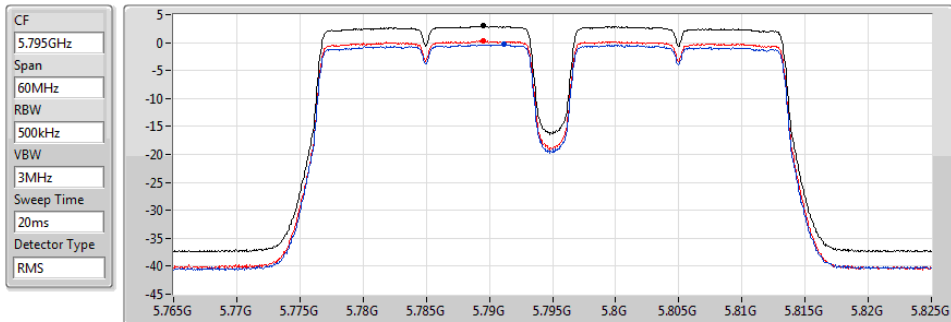
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.97	2.97	-0.38	0.28

11a40,BF_Nss1,(6Mbps)_2TX

PSD

5795MHz

07/03/2020



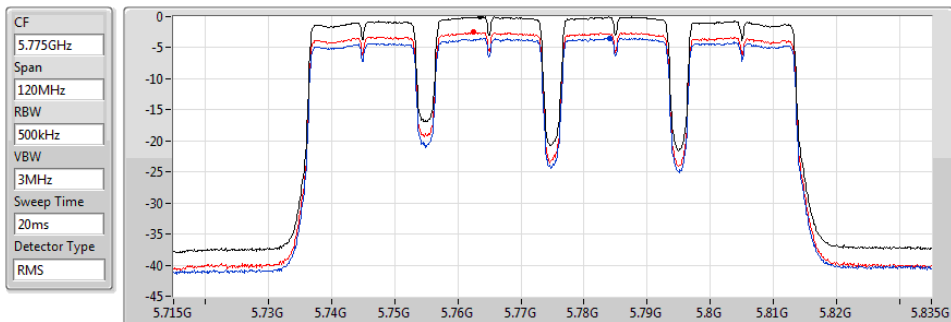
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.96	2.96	-0.30	0.34

11a80,BF_Nss1,(6Mbps)_2TX

PSD

5775MHz

07/03/2020



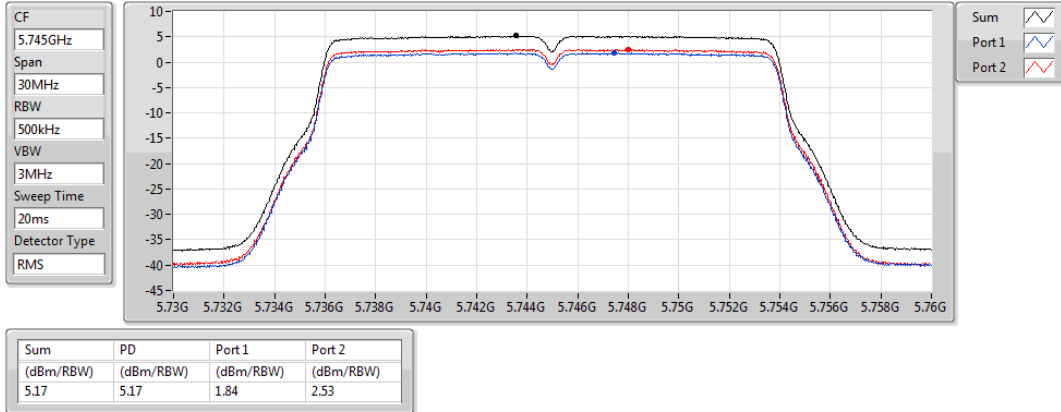
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.02	-0.02	-3.44	-2.51

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

PSD

5745MHz

25/03/2020

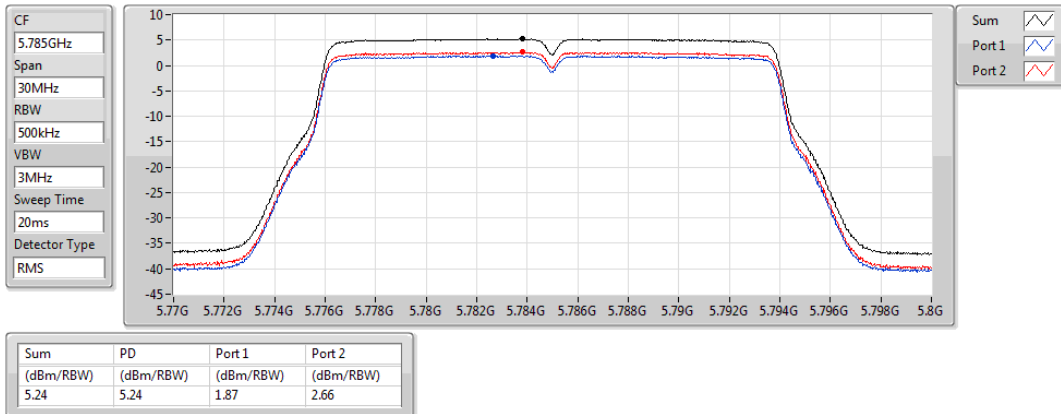


802.11ac VHT20-BF_Nss1,(MCS0)_2TX

PSD

5785MHz

25/03/2020

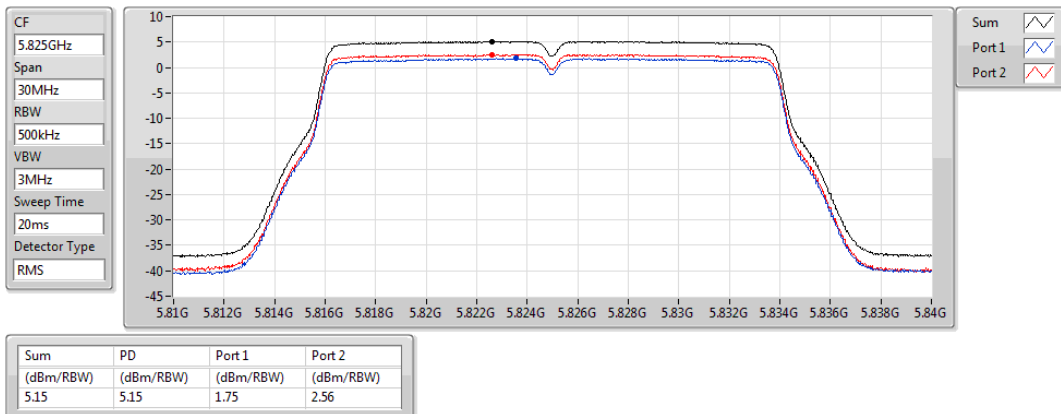


802.11ac VHT20-BF_Nss1,(MCS0)_2TX

PSD

5825MHz

25/03/2020

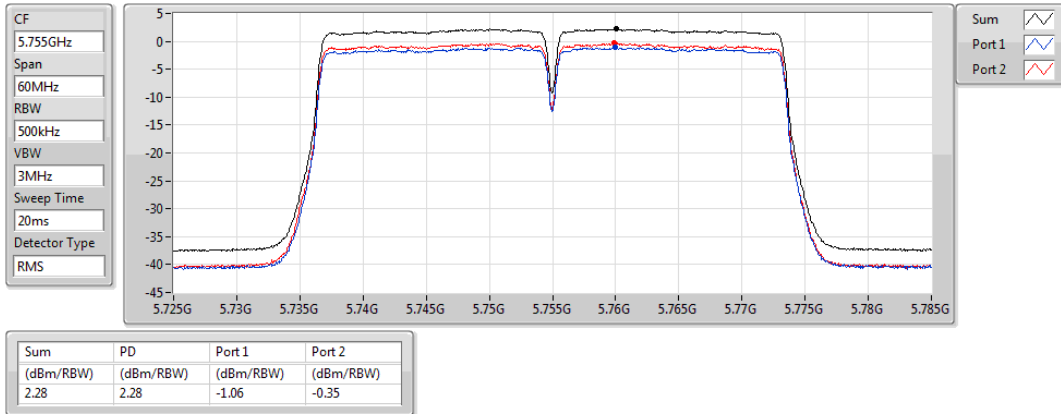


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

PSD

5755MHz

25/03/2020

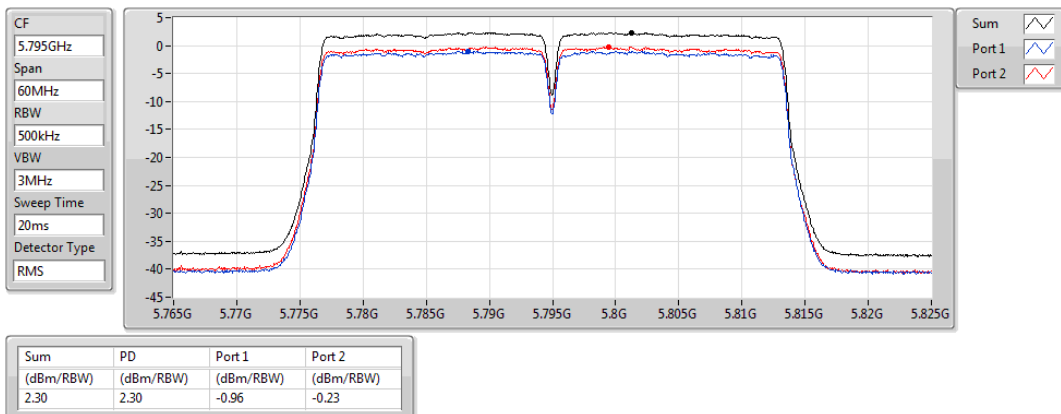


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

PSD

5795MHz

25/03/2020

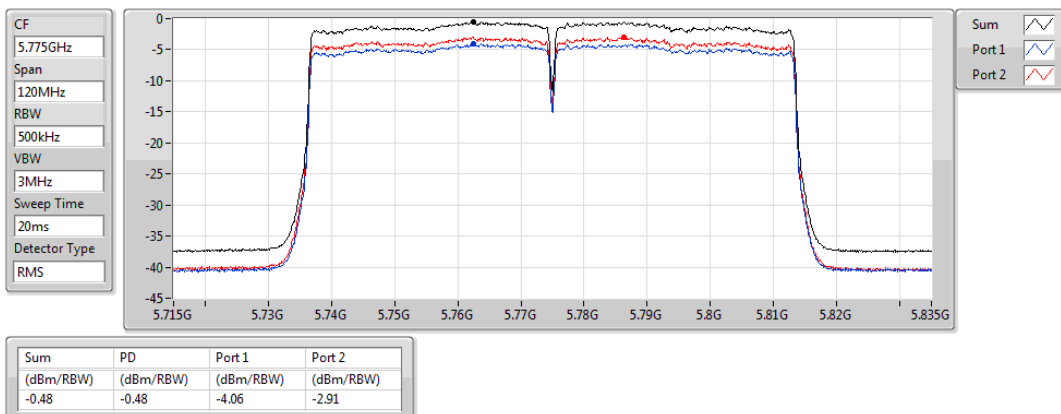


802.11ac VHT80-BF_Nss1,(MCS0)_2TX

PSD

5775MHz

25/03/2020

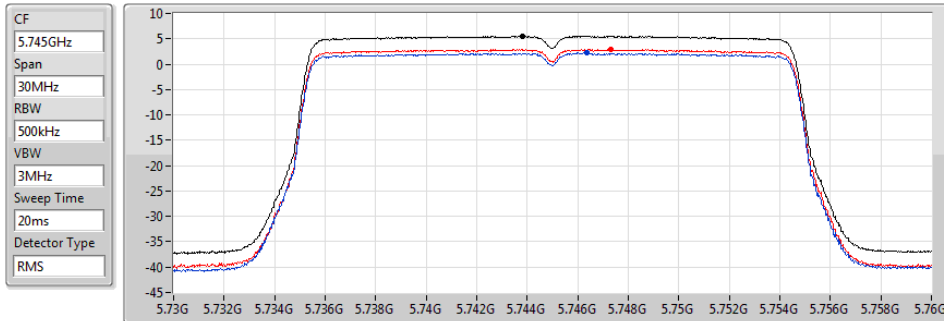


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

5745MHz

07/03/2020



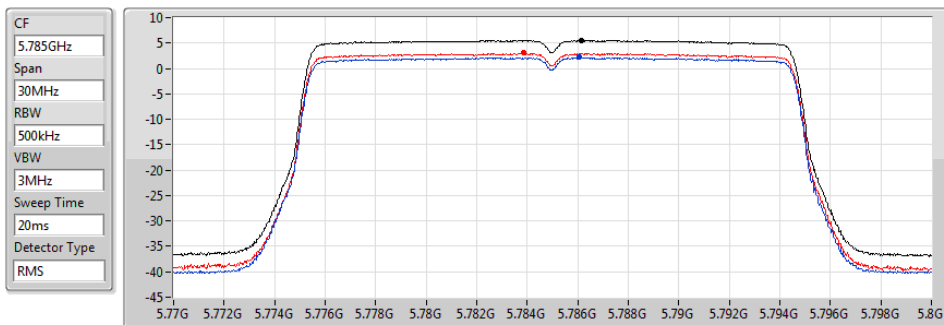
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.53	5.53	2.19	2.91

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

5785MHz

07/03/2020



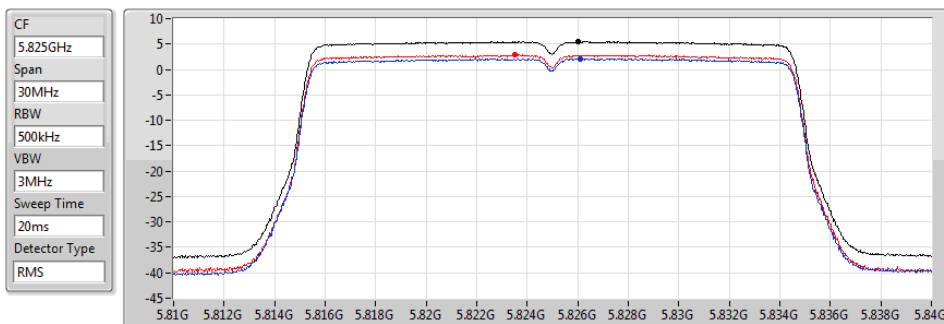
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.55	5.55	2.17	3.02

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

5825MHz

07/03/2020



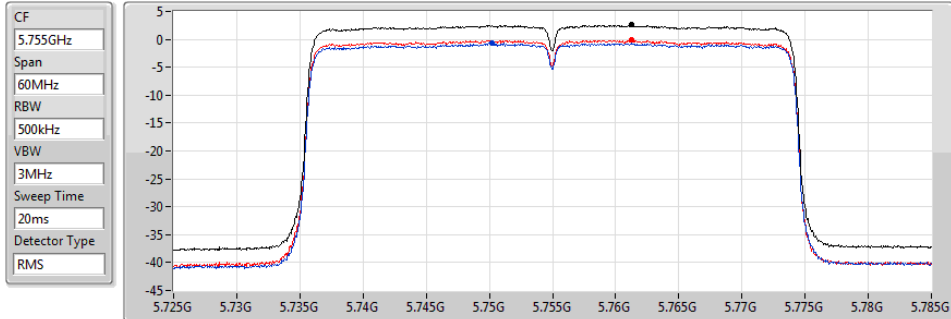
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.47	5.47	2.13	2.84

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

5755MHz

07/03/2020



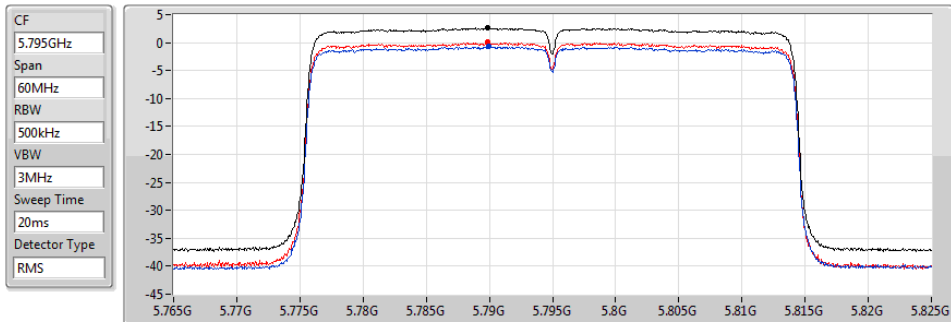
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.57	2.57	-0.70	-0.16

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

5795MHz

07/03/2020



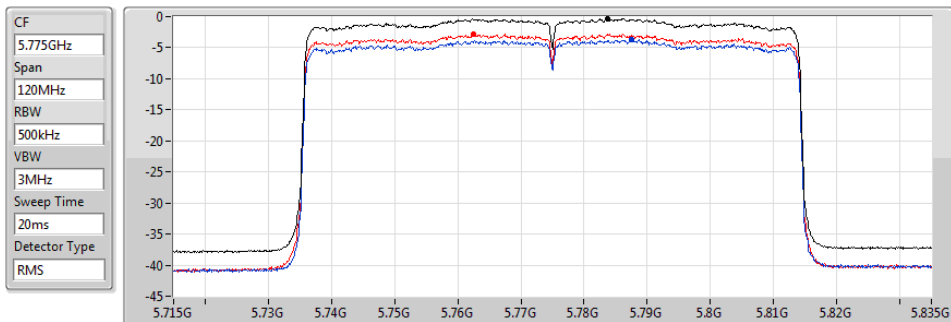
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.66	2.66	-0.63	0.04

802.11ax HEW80-BF_Nss1,(MCS0)_2TX

PSD

5775MHz

07/03/2020



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.29	-0.29	-3.66	-2.82



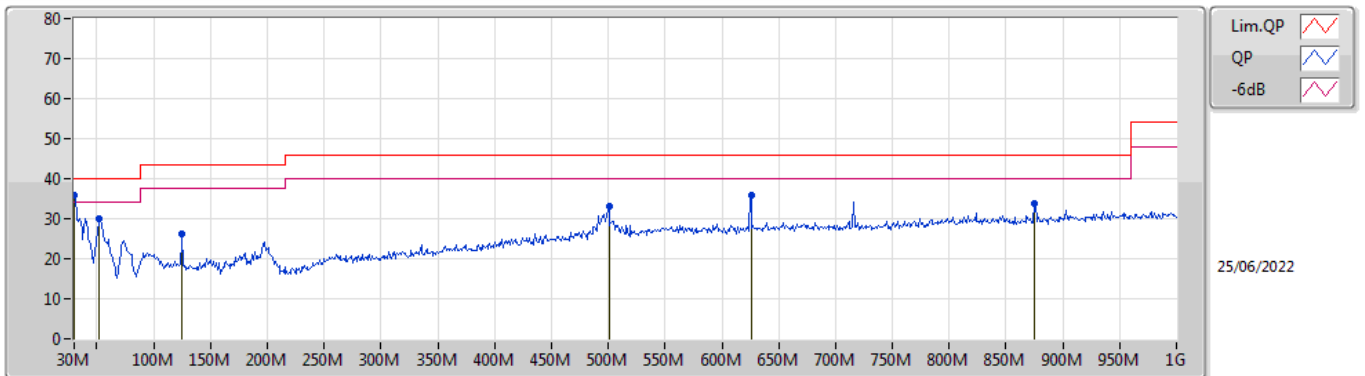
Radiated Emissions below 1GHz

Appendix E.1

Summary

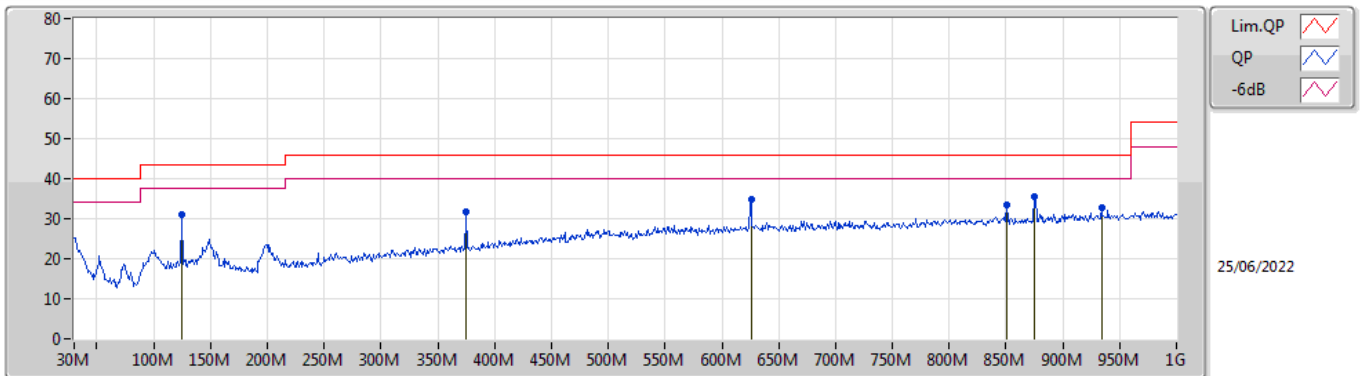
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	30M	35.72	40.00	-4.28	Vertical

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	30M	35.72	40.00	-4.28	-6.76	3	Vertical	192	1.00	"Worst"	42.48	23.99	0.80	31.55
PK	52.31M	29.92	40.00	-10.08	-17.61	3	Vertical	360	1.00	-	47.53	13.16	1.10	31.87
PK	125.06M	26.23	43.50	-17.27	-12.44	3	Vertical	151	2.00	-	38.67	17.89	1.65	31.98
PK	500.45M	33.14	46.00	-12.86	-5.60	3	Vertical	360	1.00	-	38.74	23.20	3.60	32.40
PK	625.58M	35.86	46.00	-10.14	-3.89	3	Vertical	248	1.00	-	39.75	24.53	4.10	32.52
PK	874.87M	33.64	46.00	-12.36	-1.26	3	Vertical	175	1.50	-	34.90	26.03	5.20	32.49

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	125.06M	31.02	43.50	-12.48	-12.44	3	Horizontal	203	1.50	-	43.46	17.89	1.65	31.98
PK	375.32M	31.62	46.00	-14.38	-8.24	3	Horizontal	258	1.00	-	39.86	20.83	3.10	32.17
PK	625.58M	34.77	46.00	-11.23	-3.89	3	Horizontal	173	1.50	-	38.66	24.53	4.10	32.52
PK	850.62M	33.54	46.00	-12.46	-1.51	3	Horizontal	113	1.00	-	35.05	25.88	5.10	32.49
PK	874.87M	35.36	46.00	-10.64	-1.26	3	Horizontal	254	1.00	"Worst"	36.62	26.03	5.20	32.49
PK	934.04M	32.65	46.00	-13.35	-0.67	3	Horizontal	184	1.00	-	33.32	26.31	5.50	32.48



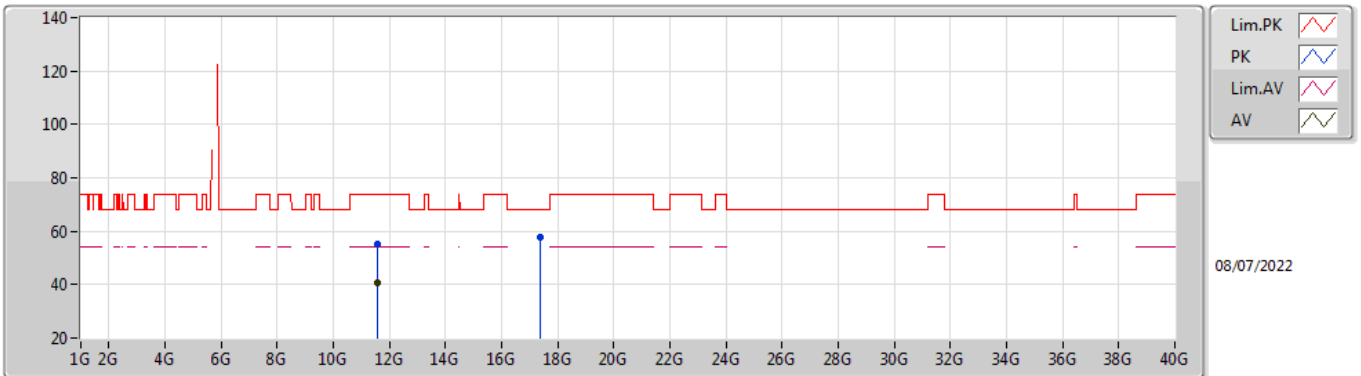
For Radiated Cabinet:

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	PK	17.34774G	58.92	68.20	-9.28	3	Horizontal	75	2.57	-

802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz_TnomVnom

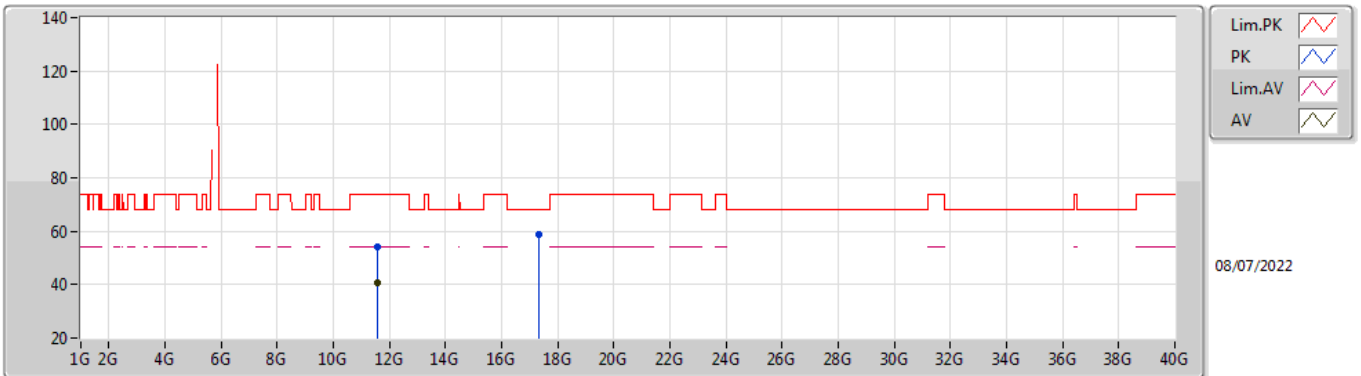


EUT V_2TX
Setting 17
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.5712G	55.09	74.00	-18.91	49.37	3	Vertical	295	1.80	-	39.53	8.92	42.73
AV	11.56244G	40.78	54.00	-13.22	35.06	3	Vertical	295	1.80	-	39.54	8.91	42.73
PK	17.36436G	57.84	68.20	-10.36	47.31	3	Vertical	6	2.61	-	41.94	10.45	41.86

802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz_TnomVnom



EUT_V_2TX
Setting 17
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	11.56964G	53.96	74.00	-20.04	48.25	3	Horizontal	341	1.50	-	39.53	8.91	42.73	
AV	11.56214G	40.70	54.00	-13.30	34.98	3	Horizontal	341	1.50	-	39.54	8.91	42.73	
PK	17.34774G	58.92	68.20	-9.28	48.56	3	Horizontal	75	2.57	-	41.78	10.44	41.86	

<2T1S>

For Conducted Harmonic (1~8GHz):

Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
11a20_Nss1.(6Mbps)_2TX	Pass	1G	5.685G	AV	5.44314G	7.60	-60.47	-60.96	-57.70	-50.10	-41.20	-8.90
11a40_Nss1.(6Mbps)_2TX	Pass	1G	5.645G	AV	5.43249G	7.76	-60.08	-60.91	-57.46	-49.70	-41.20	-8.50
11a80_Nss1.(6Mbps)_2TX	Pass	5.565G	5.725G	PK	5.6338G	7.60	-45.18	-40.41	-39.16	-31.56	-27.00	-4.56
802.11ax HEW20_Nss1.(MCS0)_2TX	Pass	1G	5.685G	AV	5.44372G	7.60	-59.89	-58.59	-56.18	-48.58	-41.20	-7.38
802.11ax HEW40_Nss1.(MCS0)_2TX	Pass	1G	5.645G	AV	5.44991G	7.76	-60.76	-60.08	-57.40	-49.64	-41.20	-8.44
802.11ax HEW80_Nss1.(MCS0)_2TX	Pass	5.565G	5.725G	PK	5.64948G	7.60	-45.46	-43.02	-41.06	-33.46	-27.00	-6.46

DG = Directional Gain;

PX=Port X; Psum=P1+.P2+...PX

Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
11a20_Nss1.(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	1G	5.685G	AV	5.45309G	7.60	-60.16	-61.55	-57.79	-50.19	-41.20	-8.99
5745MHz	Pass	5.89G	8G	AV	7.49017G	7.60	-71.60	-71.46	-68.52	-60.92	-41.20	-19.72
5745MHz	Pass	1G	5.685G	PK	5.65045G	7.60	-47.57	-49.04	-45.23	-37.63	-26.67	-10.96
5745MHz	Pass	5.685G	5.725G	PK	5.68532G	7.60	-49.69	-46.65	-44.90	-37.30	-0.86	-36.44
5745MHz	Pass	5.725G	5.85G	PK	5.85G	7.60	-59.36	-58.81	-56.07	-48.47	27.00	-75.47
5745MHz	Pass	5.85G	5.89G	PK	5.88872G	7.60	-50.87	-48.59	-46.57	-38.97	-0.15	-38.82
5745MHz	Pass	5.89G	8G	PK	5.95014G	7.60	-49.34	-51.18	-47.15	-39.55	-27.00	-12.55
5785MHz	Pass	1G	5.685G	AV	5.44314G	7.60	-60.47	-60.96	-57.70	-50.10	-41.20	-8.90
5785MHz	Pass	5.89G	8G	AV	7.4849G	7.60	-71.57	-70.95	-68.24	-60.64	-41.20	-19.44
5785MHz	Pass	1G	5.685G	PK	5.55148G	7.60	-52.24	-49.81	-47.85	-40.25	-27.00	-13.25
5785MHz	Pass	5.685G	5.725G	PK	5.6858G	7.60	-48.91	-47.11	-44.91	-37.31	-0.51	-36.80
5785MHz	Pass	5.725G	5.85G	PK	5.85G	7.60	-59.45	-58.88	-56.15	-48.55	27.00	-75.55
5785MHz	Pass	5.85G	5.89G	PK	5.88992G	7.60	-48.72	-47.58	-45.10	-37.50	-1.04	-36.46
5785MHz	Pass	5.89G	8G	PK	6.03111G	7.60	-49.88	-50.45	-47.15	-39.55	-27.00	-12.55
5825MHz	Pass	1G	5.685G	AV	5.44841G	7.76	-60.48	-61.43	-57.92	-50.16	-41.20	-8.96
5825MHz	Pass	5.89G	8G	AV	7.30344G	7.76	-71.23	-71.54	-68.37	-60.61	-41.20	-19.41
5825MHz	Pass	1G	5.685G	PK	5.53508G	7.76	-54.44	-48.55	-47.55	-39.79	-27.00	-12.79
5825MHz	Pass	5.685G	5.725G	PK	5.685G	7.76	-51.93	-49.35	-47.44	-39.68	-1.10	-38.58
5825MHz	Pass	5.725G	5.85G	PK	5.85G	7.76	-59.48	-60.39	-56.90	-49.14	27.00	-76.14
5825MHz	Pass	5.85G	5.89G	PK	5.88984G	7.76	-49.11	-48.30	-45.68	-37.92	-0.98	-36.94
5825MHz	Pass	5.89G	8G	PK	5.92772G	7.76	-46.87	-48.18	-44.47	-36.71	-27.00	-9.71
11a40_Nss1.(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	1G	5.645G	AV	5.44062G	7.60	-60.00	-60.88	-57.41	-49.81	-41.20	-8.61
5755MHz	Pass	5.93G	8G	AV	7.29465G	7.60	-72.39	-70.88	-68.56	-60.96	-41.20	-19.76
5755MHz	Pass	1G	5.645G	PK	5.63803G	7.60	-50.71	-47.91	-46.08	-38.48	-27.00	-11.48
5755MHz	Pass	5.645G	5.725G	PK	5.64996G	7.60	-48.44	-44.89	-43.30	-35.70	-27.00	-8.70
5755MHz	Pass	5.725G	5.85G	PK	5.85G	7.60	-59.40	-60.41	-56.87	-49.27	27.00	-76.27
5755MHz	Pass	5.85G	5.93G	PK	5.92872G	7.60	-48.73	-48.62	-45.66	-38.06	-27.00	-11.06
5755MHz	Pass	5.93G	8G	PK	5.93207G	7.60	-50.84	-48.81	-46.70	-39.10	-27.00	-12.10
5795MHz	Pass	1G	5.645G	AV	5.43249G	7.76	-60.08	-60.91	-57.46	-49.70	-41.20	-8.50
5795MHz	Pass	5.93G	8G	AV	7.59868G	7.76	-72.21	-70.69	-68.37	-60.61	-41.20	-19.41
5795MHz	Pass	1G	5.645G	PK	5.64036G	7.76	-51.79	-49.41	-47.43	-39.67	-27.00	-12.67
5795MHz	Pass	5.645G	5.725G	PK	5.64564G	7.76	-49.92	-47.48	-45.52	-37.76	-27.00	-10.76
5795MHz	Pass	5.725G	5.85G	PK	5.85G	7.76	-59.22	-60.24	-56.69	-48.93	27.00	-75.93
5795MHz	Pass	5.85G	5.93G	PK	5.92712G	7.76	-47.34	-48.45	-44.85	-37.09	-27.00	-10.09
5795MHz	Pass	5.93G	8G	PK	5.9582G	7.76	-49.19	-48.28	-45.70	-37.94	-27.00	-10.94
11a80_Nss1.(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	1G	5.565G	AV	5.43262G	7.60	-60.04	-61.24	-57.59	-49.99	-41.20	-8.79
5775MHz	Pass	6.01G	8G	AV	7.30524G	7.60	-71.51	-71.27	-68.38	-60.78	-41.20	-19.58
5775MHz	Pass	1G	5.565G	PK	5.56044G	7.60	-50.62	-47.97	-46.09	-38.49	-27.00	-11.49
5775MHz	Pass	5.565G	5.725G	PK	5.6338G	7.60	-45.18	-40.41	-39.16	-31.56	-27.00	-4.56
5775MHz	Pass	5.725G	5.85G	PK	5.85G	7.60	-57.97	-59.16	-55.51	-47.91	27.00	-74.91
5775MHz	Pass	5.85G	6.01G	PK	5.93288G	7.60	-44.00	-42.68	-40.28	-32.68	-27.00	-5.68
5775MHz	Pass	6.01G	8G	PK	6.01473G	7.60	-51.10	-49.07	-46.96	-39.36	-27.00	-12.36
802.11ax HEW20_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	1G	5.685G	AV	5.44021G	7.60	-60.94	-60.91	-57.91	-50.31	-41.20	-9.11
5745MHz	Pass	5.89G	8G	AV	7.29552G	7.60	-70.66	-72.25	-68.37	-60.77	-41.20	-19.57
5745MHz	Pass	1G	5.685G	PK	5.64635G	7.60	-51.65	-47.33	-45.96	-38.36	-27.00	-11.36
5745MHz	Pass	5.685G	5.725G	PK	5.68516G	7.60	-49.49	-47.41	-45.32	-37.72	-0.98	-36.74
5745MHz	Pass	5.725G	5.85G	PK	5.85G	7.60	-60.00	-59.56	-56.76	-49.16	27.00	-76.16
5745MHz	Pass	5.85G	5.89G	PK	5.89G	7.60	-50.75	-51.46	-48.08	-40.48	-1.10	-39.38
5745MHz	Pass	5.89G	8G	PK	5.95884G	7.60	-50.31	-49.02	-46.61	-39.01	-27.00	-12.01

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5785MHz	Pass	1G	5.685G	AV	5.44372G	7.60	-59.89	-58.59	-56.18	-48.58	-41.20	-7.38
5785MHz	Pass	5.89G	8G	AV	7.58301G	7.60	-70.71	-69.87	-67.26	-59.66	-41.20	-18.46
5785MHz	Pass	1G	5.685G	PK	5.57959G	7.60	-47.75	-50.28	-45.82	-38.22	-27.00	-11.22
5785MHz	Pass	5.685G	5.725G	PK	5.68524G	7.60	-48.55	-47.18	-44.80	-37.20	-0.92	-36.28
5785MHz	Pass	5.725G	5.85G	PK	5.85G	7.60	-58.12	-57.61	-54.85	-47.25	27.00	-74.25
5785MHz	Pass	5.85G	5.89G	PK	5.88976G	7.60	-48.29	-47.10	-44.64	-37.04	-0.92	-36.12
5785MHz	Pass	5.89G	8G	PK	6.07172G	7.60	-47.78	-52.00	-46.39	-38.79	-27.00	-11.79
5825MHz	Pass	1G	5.685G	AV	5.44431G	7.76	-60.75	-61.15	-57.94	-50.18	-41.20	-8.98
5825MHz	Pass	5.89G	8G	AV	7.5089G	7.76	-71.85	-71.35	-68.58	-60.82	-41.20	-19.62
5825MHz	Pass	1G	5.685G	PK	5.579G	7.76	-49.83	-50.53	-47.16	-39.40	-27.00	-12.40
5825MHz	Pass	5.685G	5.725G	PK	5.685G	7.76	-51.23	-50.64	-47.91	-40.15	-1.10	-39.05
5825MHz	Pass	5.725G	5.85G	PK	5.85G	7.76	-59.44	-59.28	-56.35	-48.59	27.00	-75.59
5825MHz	Pass	5.85G	5.89G	PK	5.89G	7.76	-49.60	-47.20	-45.23	-37.47	-1.10	-36.37
5825MHz	Pass	5.89G	8G	PK	5.92561G	7.76	-47.65	-46.26	-43.89	-36.13	-27.00	-9.13
802.11ax HEW40_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	1G	5.645G	AV	5.44701G	7.60	-59.85	-61.25	-57.48	-49.88	-41.20	-8.68
5755MHz	Pass	5.93G	8G	AV	7.56556G	7.60	-71.25	-72.06	-68.63	-61.03	-41.20	-19.83
5755MHz	Pass	1G	5.645G	PK	5.63861G	7.60	-48.88	-48.22	-45.53	-37.93	-27.00	-10.93
5755MHz	Pass	5.645G	5.725G	PK	5.65076G	7.60	-46.67	-45.29	-42.92	-35.32	-26.44	-8.88
5755MHz	Pass	5.725G	5.85G	PK	5.85G	7.60	-60.09	-58.91	-56.45	-48.85	27.00	-75.85
5755MHz	Pass	5.85G	5.93G	PK	5.9284G	7.60	-49.41	-48.07	-45.68	-38.08	-27.00	-11.08
5755MHz	Pass	5.93G	8G	PK	5.95536G	7.60	-48.86	-50.03	-46.40	-38.80	-27.00	-11.80
5795MHz	Pass	1G	5.645G	AV	5.44991G	7.76	-60.76	-60.08	-57.40	-49.64	-41.20	-8.44
5795MHz	Pass	5.93G	8G	AV	7.48147G	7.76	-71.22	-71.47	-68.33	-60.57	-41.20	-19.37
5795MHz	Pass	1G	5.645G	PK	5.52597G	7.76	-51.11	-50.09	-47.56	-39.80	-27.00	-12.80
5795MHz	Pass	5.645G	5.725G	PK	5.64644G	7.76	-50.04	-47.64	-45.67	-37.91	-27.00	-10.91
5795MHz	Pass	5.725G	5.85G	PK	5.85G	7.76	-59.62	-59.18	-56.38	-48.62	27.00	-75.62
5795MHz	Pass	5.85G	5.93G	PK	5.92728G	7.76	-48.16	-47.35	-44.73	-36.97	-27.00	-9.97
5795MHz	Pass	5.93G	8G	PK	5.94604G	7.76	-49.51	-47.90	-45.62	-37.86	-27.00	-10.86
802.11ax HEW80_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	1G	5.565G	AV	5.42406G	7.60	-60.22	-60.96	-57.56	-49.96	-41.20	-8.76
5775MHz	Pass	6.01G	8G	AV	7.27688G	7.60	-71.51	-71.56	-68.52	-60.92	-41.20	-19.72
5775MHz	Pass	1G	5.565G	PK	5.55815G	7.60	-49.95	-48.97	-46.42	-38.82	-27.00	-11.82
5775MHz	Pass	5.565G	5.725G	PK	5.64948G	7.60	-45.46	-43.02	-41.06	-33.46	-27.00	-6.46
5775MHz	Pass	5.725G	5.85G	PK	5.85G	7.60	-58.87	-59.67	-56.24	-48.64	27.00	-75.64
5775MHz	Pass	5.85G	6.01G	PK	5.92552G	7.60	-44.88	-43.52	-41.14	-33.54	-27.00	-6.54
5775MHz	Pass	6.01G	8G	PK	6.0105G	7.60	-48.43	-51.82	-46.79	-39.19	-27.00	-12.19

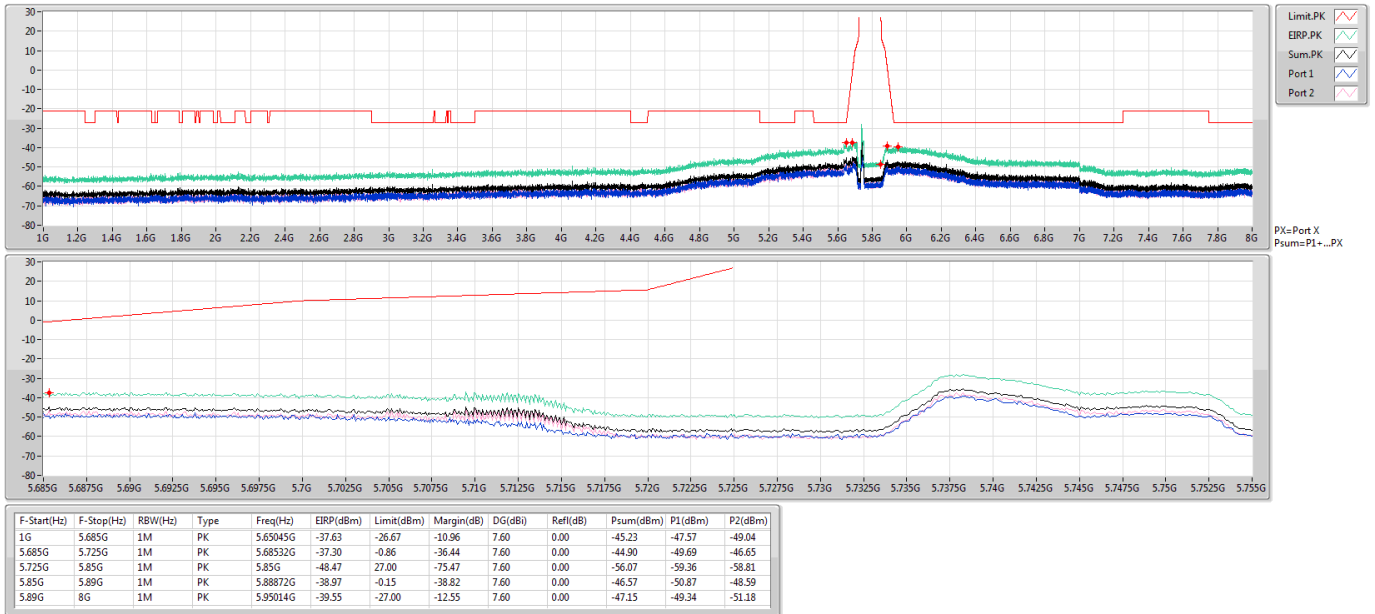
DG = Directional Gain;
PX=Port X; Psum=P1+.P2+...PX

11a20_Nss1,(6Mbps)_2TX

5745MHz

CSE-PK

07/03/2020

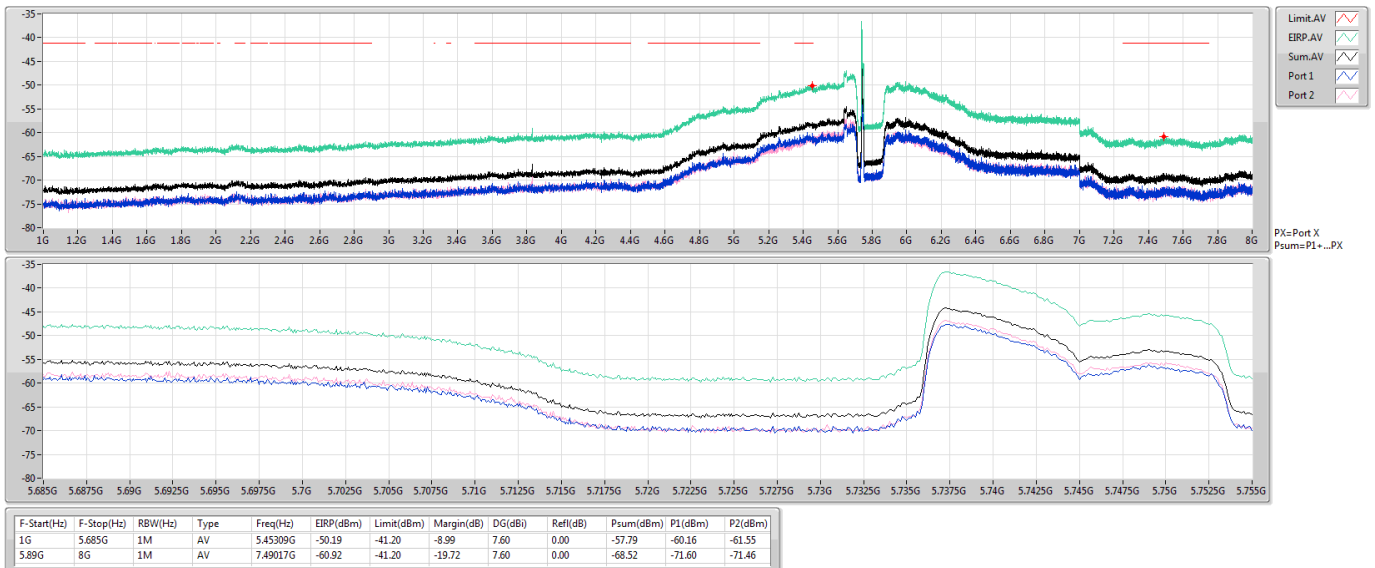


11a20_Nss1,(6Mbps)_2TX

5745MHz

CSE-AV

07/03/2020

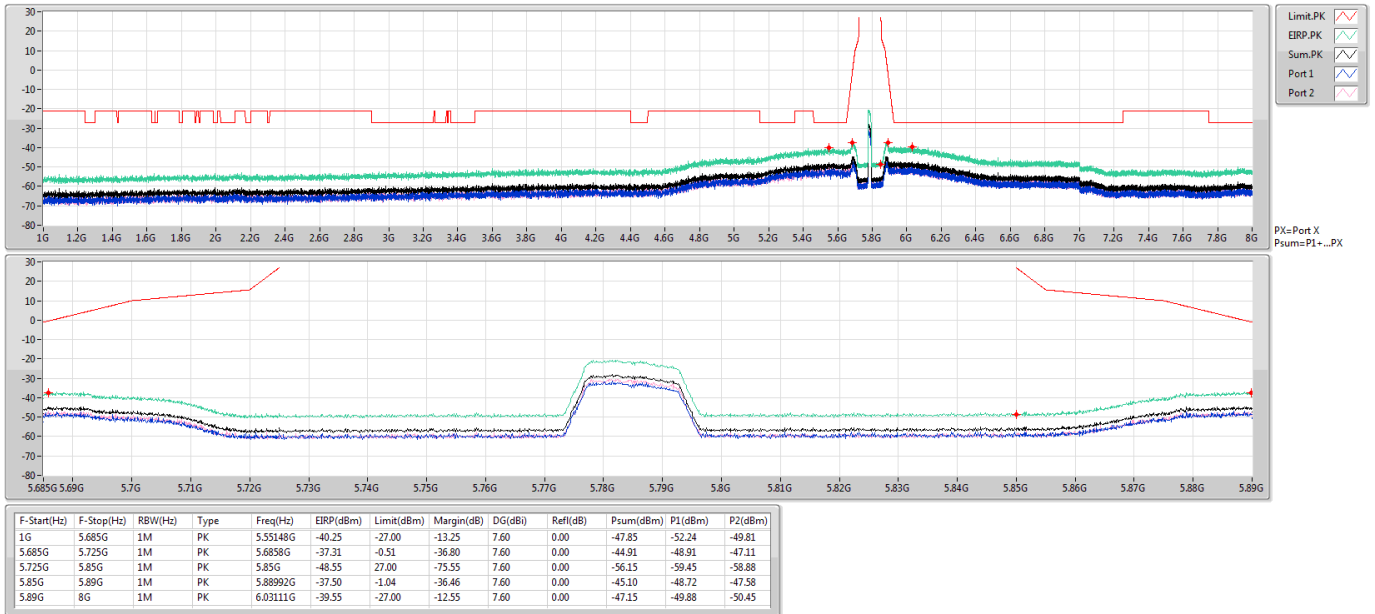


11a20_Nss1,(6Mbps)_2TX

5785MHz

CSE-PK

07/03/2020

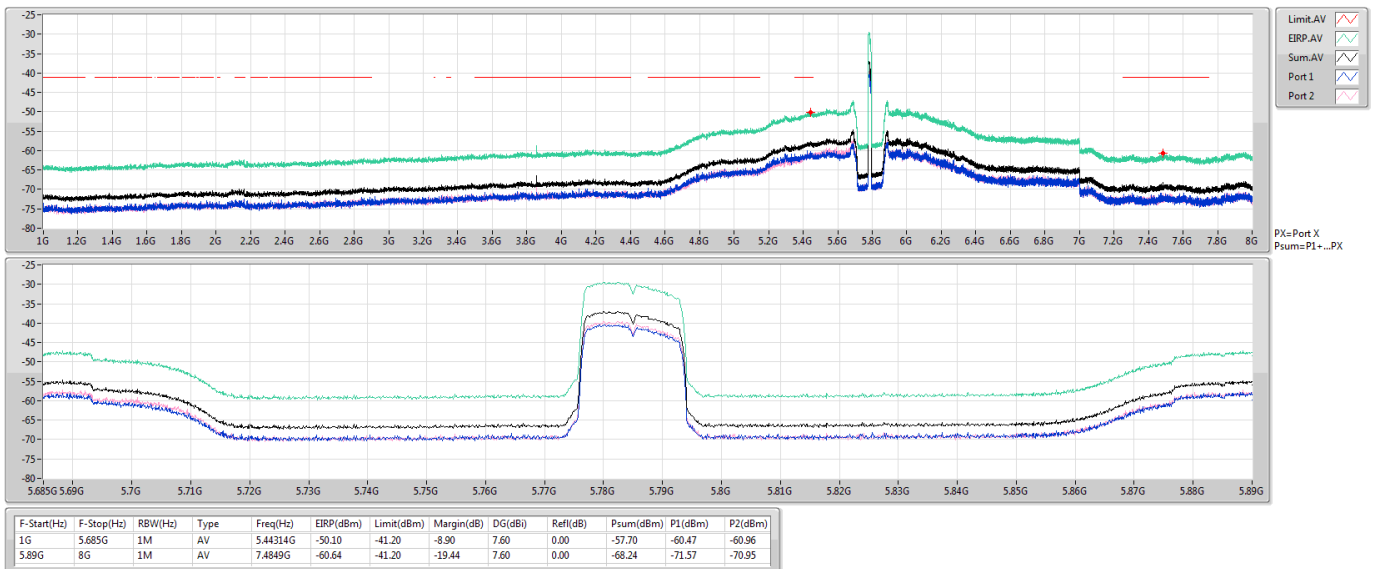


11a20_Nss1,(6Mbps)_2TX

5785MHz

CSE-AV

07/03/2020

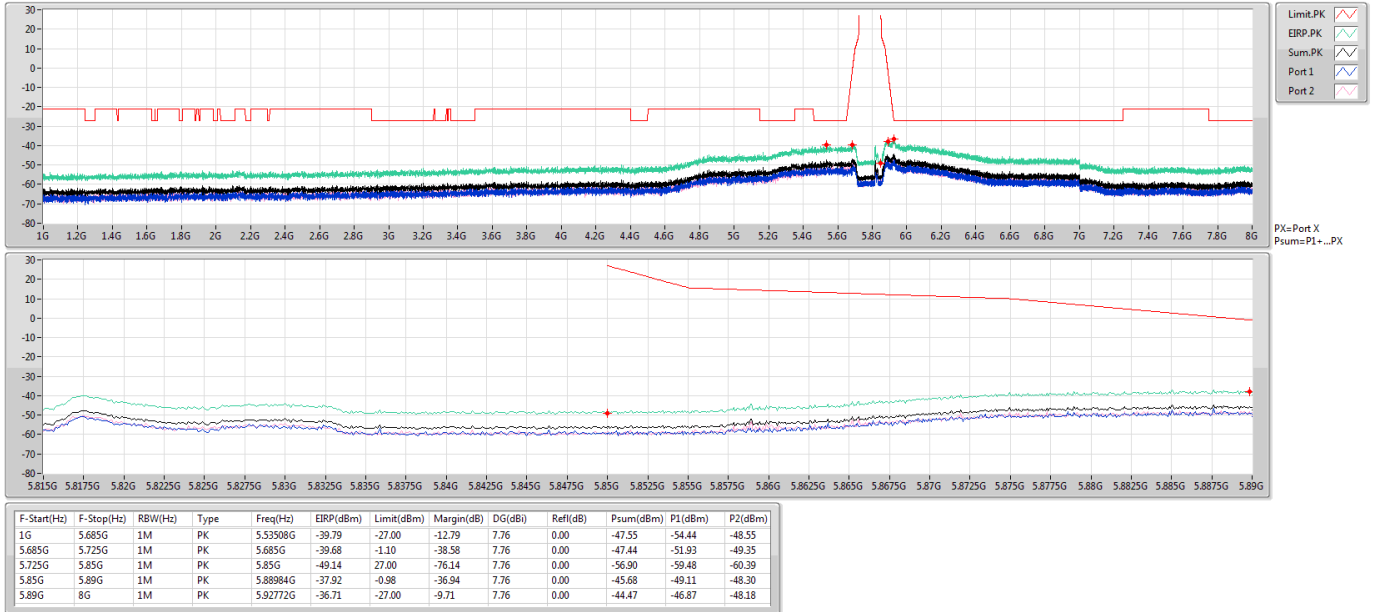


11a20_Nss1,(6Mbps)_2TX

5825MHz

CSE-PK

07/03/2020

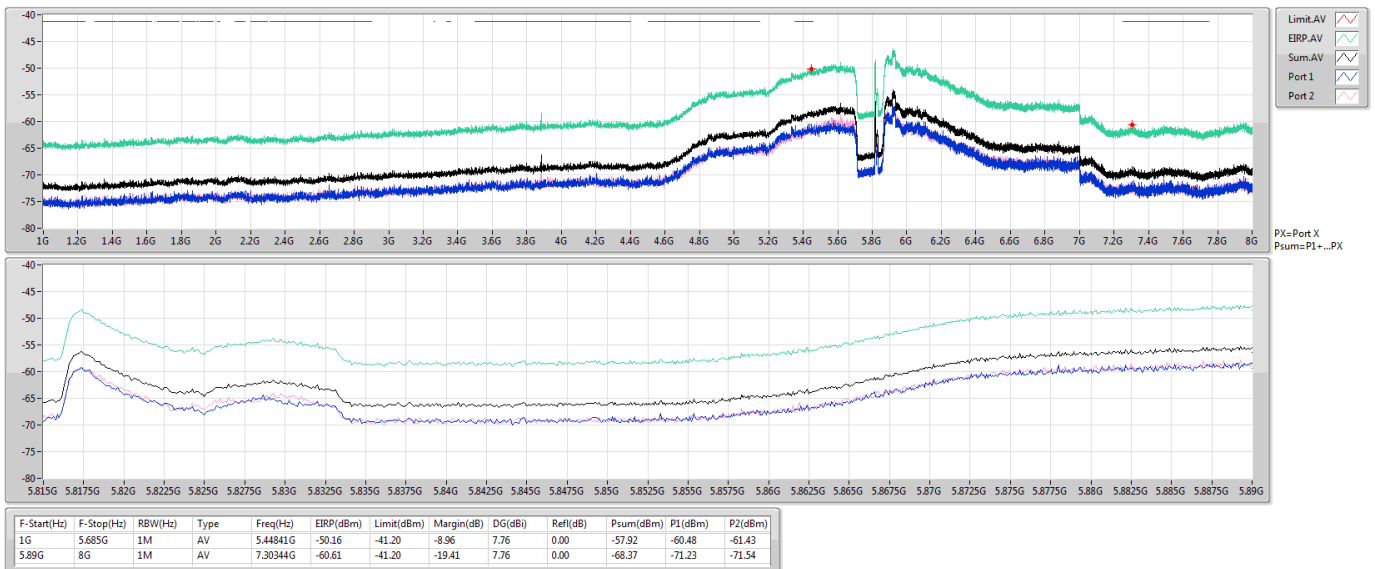


11a20_Nss1,(6Mbps)_2TX

5825MHz

CSE-AV

07/03/2020

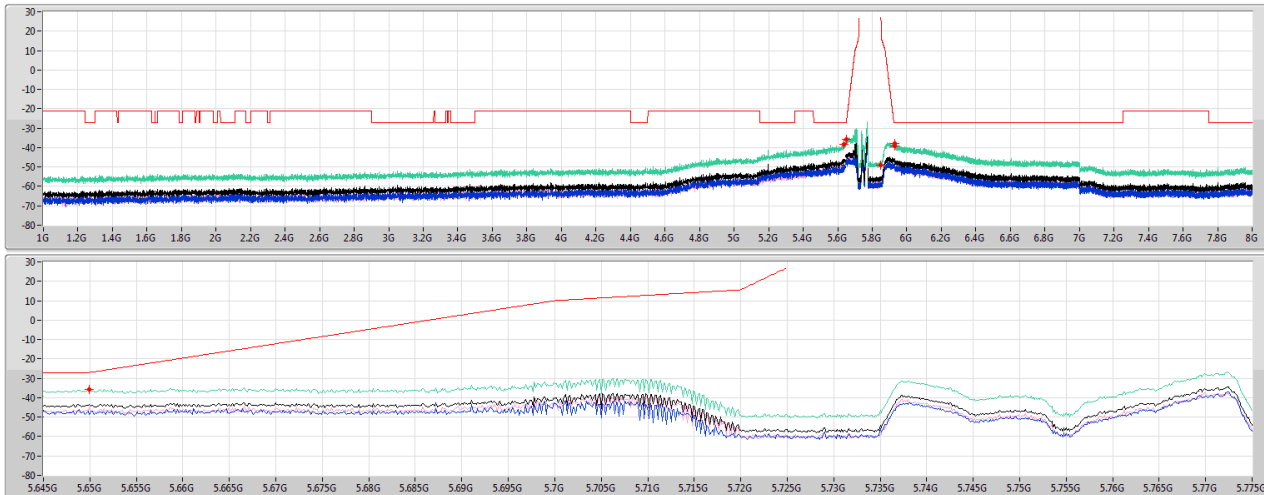


11a40_Nss1,(6Mbps)_2TX

5755MHz

CSE-PK

07/03/2020



Limit:PK
ERP:PK
Sum:PK
Port 1
Port 2

PX=Port X
Psum=P1+...PX

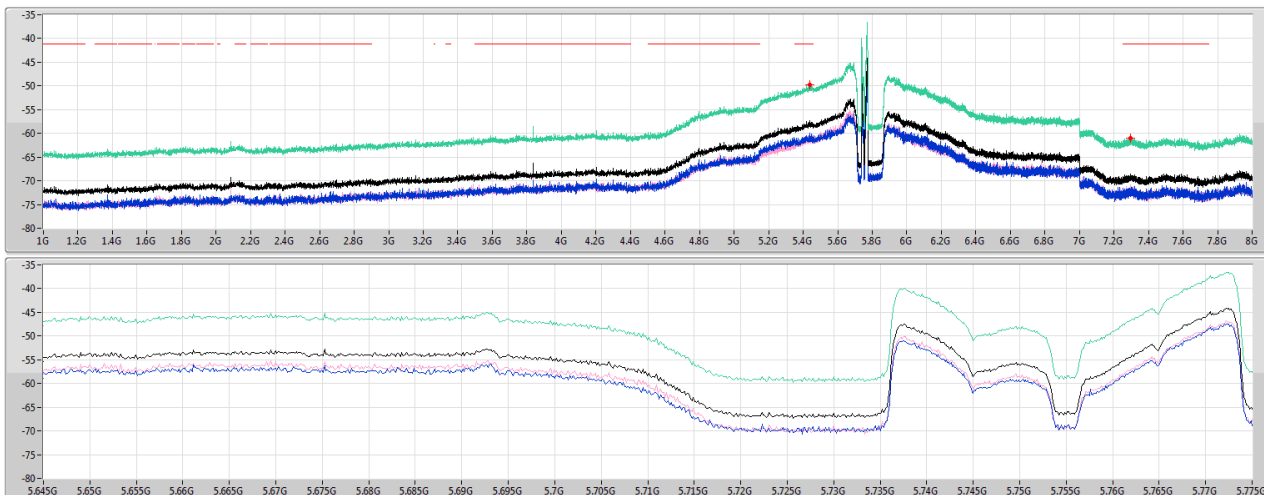
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	ERP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.645G	1M	PK	5.63803G	-38.48	-27.00	-11.48	7.60	0.00	-46.08	-50.71	-47.91
5.645G	5.725G	1M	PK	5.64996G	-35.70	-27.00	-8.70	7.60	0.00	-43.30	-48.44	-44.89
5.725G	5.85G	1M	PK	5.85G	-49.27	27.00	-76.27	7.60	0.00	-56.87	-59.40	-60.41
5.85G	5.93G	1M	PK	5.92872G	-38.06	-27.00	-11.06	7.60	0.00	-45.66	-48.73	-48.62
5.93G	8G	1M	PK	5.93207G	-39.10	-27.00	-12.10	7.60	0.00	-46.70	-50.84	-48.81

11a40_Nss1,(6Mbps)_2TX

5755MHz

CSE-AV

07/03/2020



Limit:AV
ERP:AV
Sum:AV
Port 1
Port 2

PX=Port X
Psum=P1+...PX

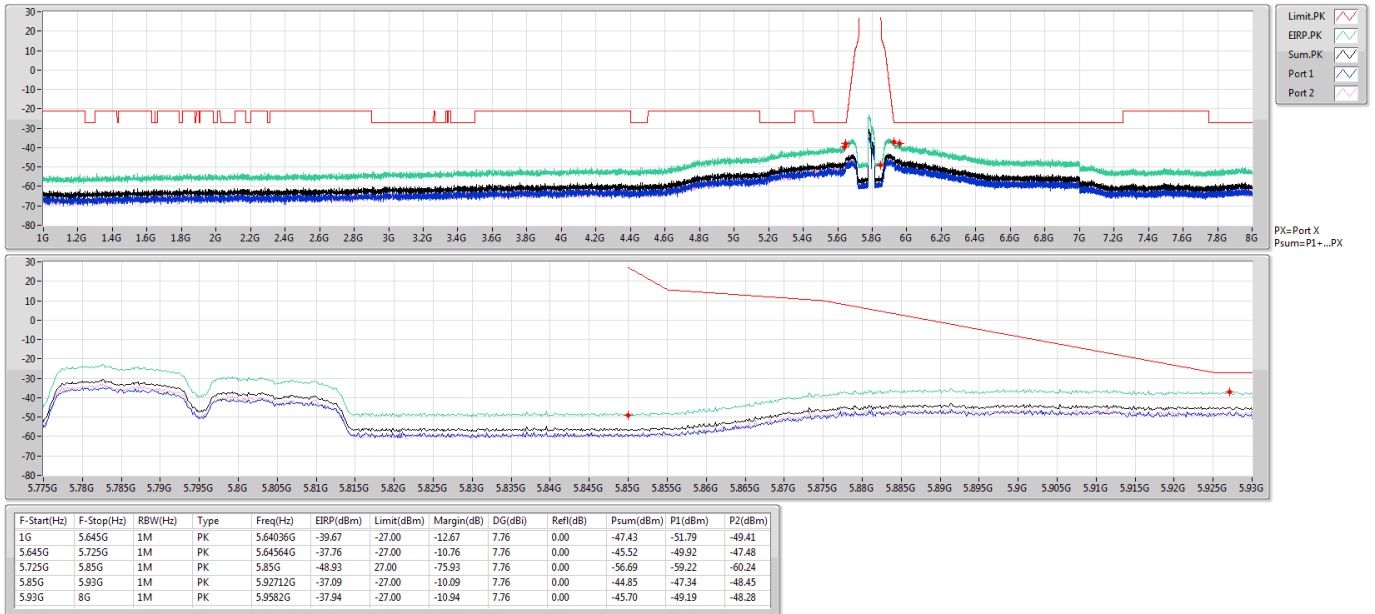
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	ERP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
1G	5.645G	1M	AV	5.44062G	-49.81	-41.20	-8.61	7.60	0.00	-57.41	-60.00	-60.88
5.93G	8G	1M	AV	7.29465G	-60.96	-41.20	-19.76	7.60	0.00	-68.56	-72.39	-70.88

11a40_Nss1,(6Mbps)_2TX

5795MHz

CSE-PK

07/03/2020

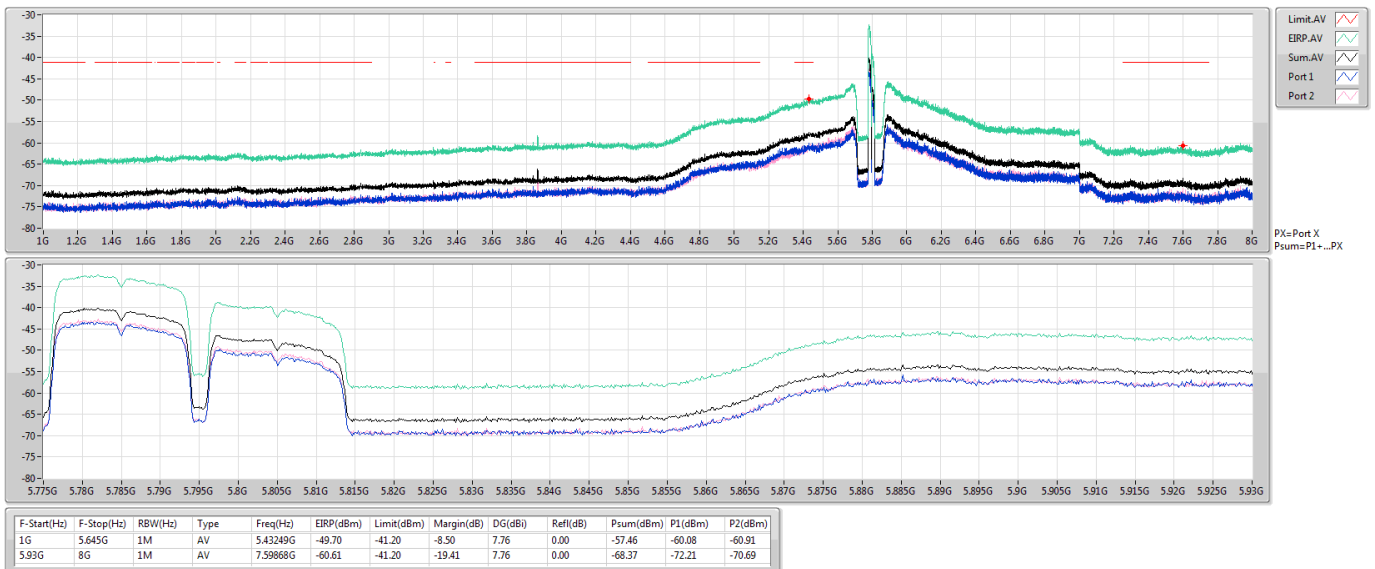


11a40_Nss1,(6Mbps)_2TX

5795MHz

CSE-AV

07/03/2020

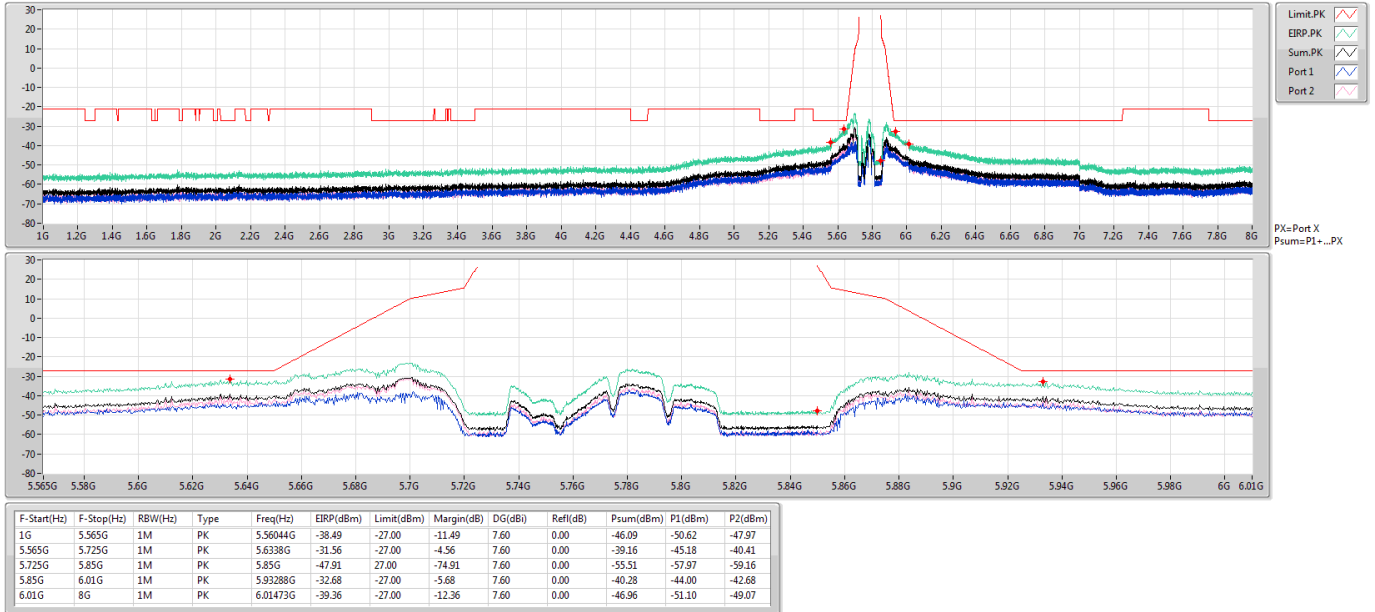


11a80_Nss1,(6Mbps)_2TX

5775MHz

CSE-PK

07/03/2020

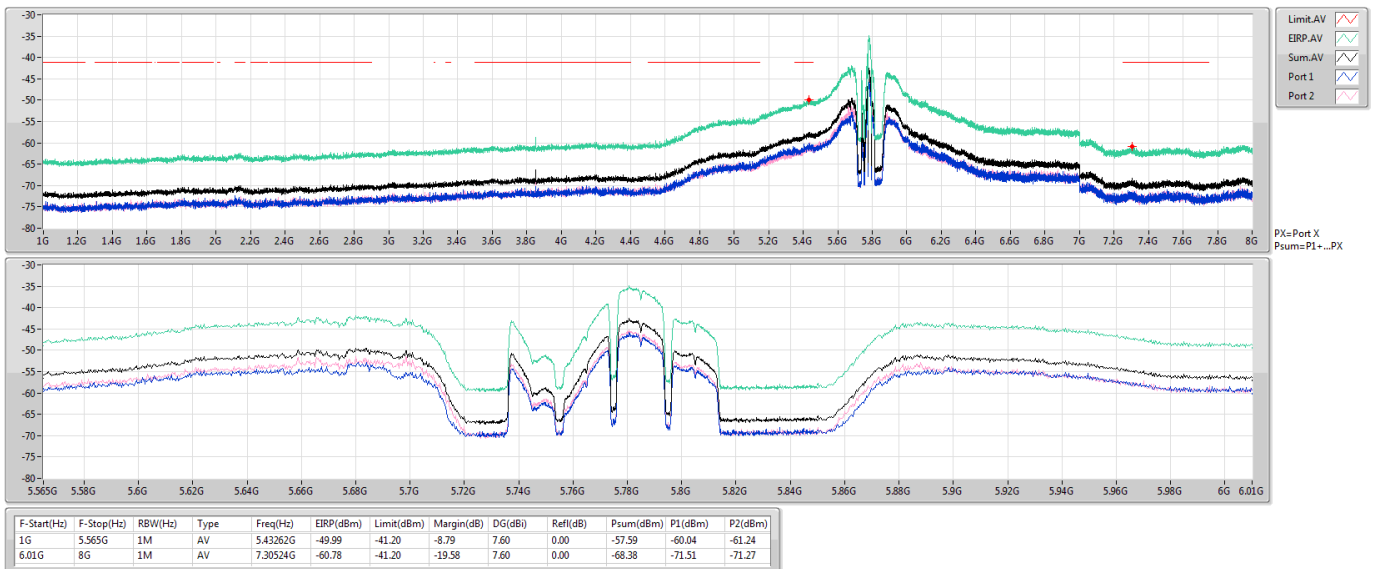


11a80_Nss1,(6Mbps)_2TX

5775MHz

CSE-AV

07/03/2020

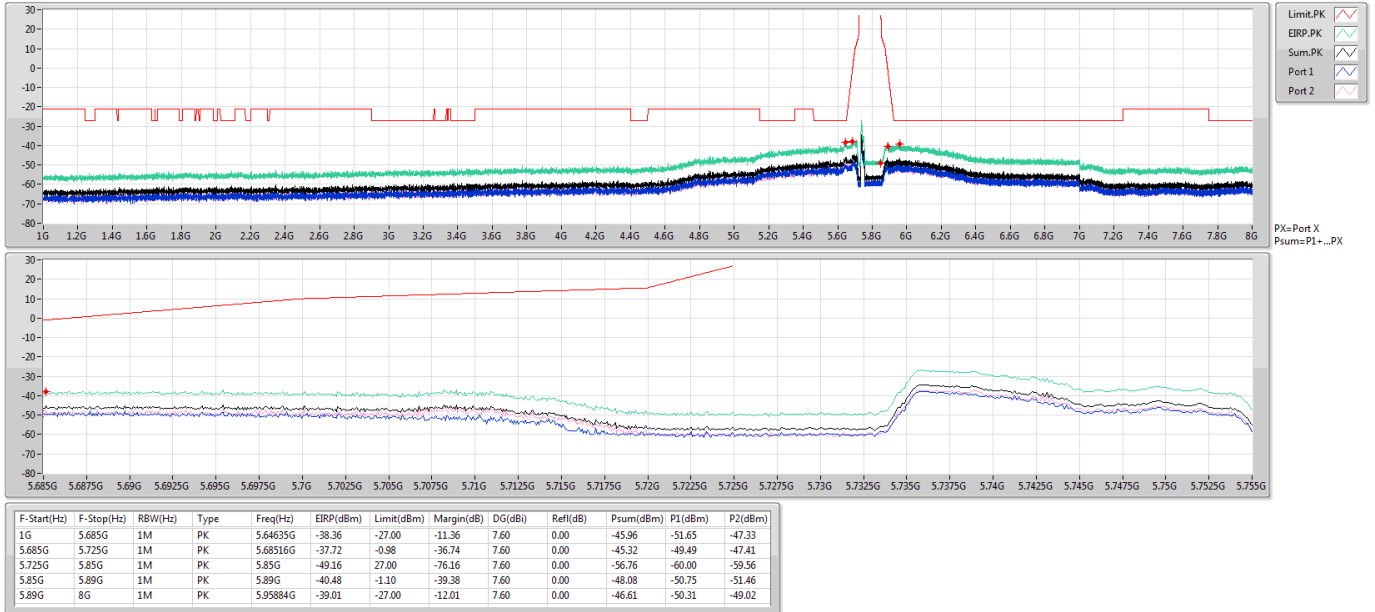


802.11ax HEW20_Nss1,(MCS0)_2TX

5745MHz

CSE-PK

07/03/2020

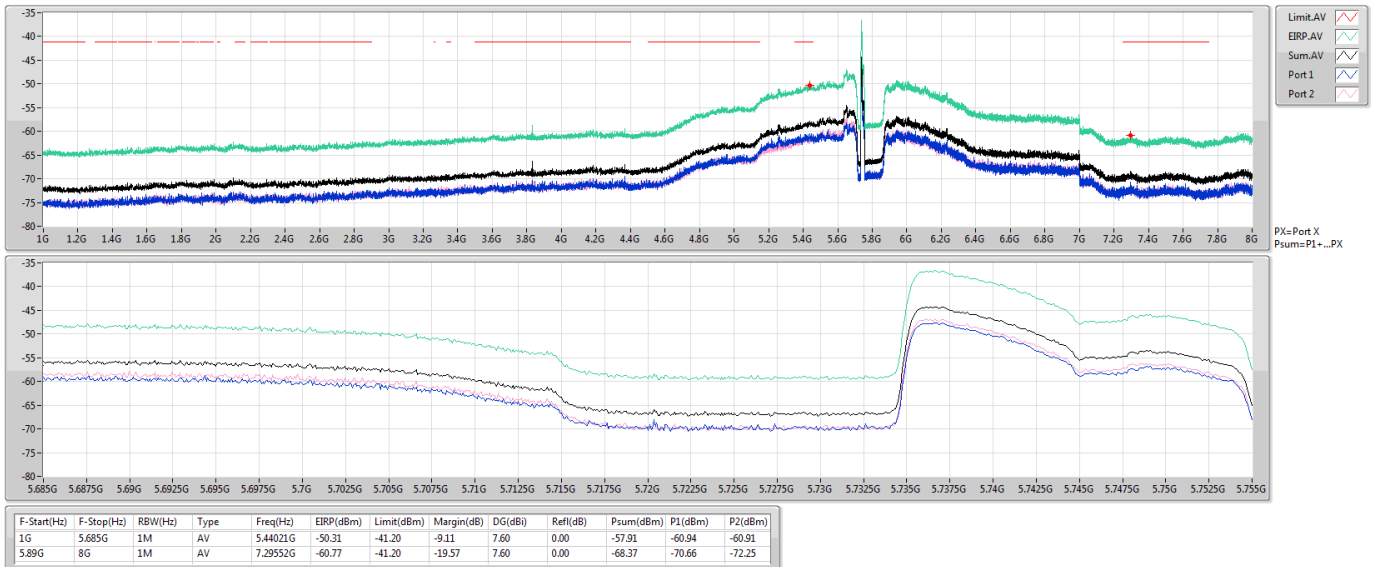


802.11ax HEW20_Nss1,(MCS0)_2TX

5745MHz

CSE-AV

07/03/2020

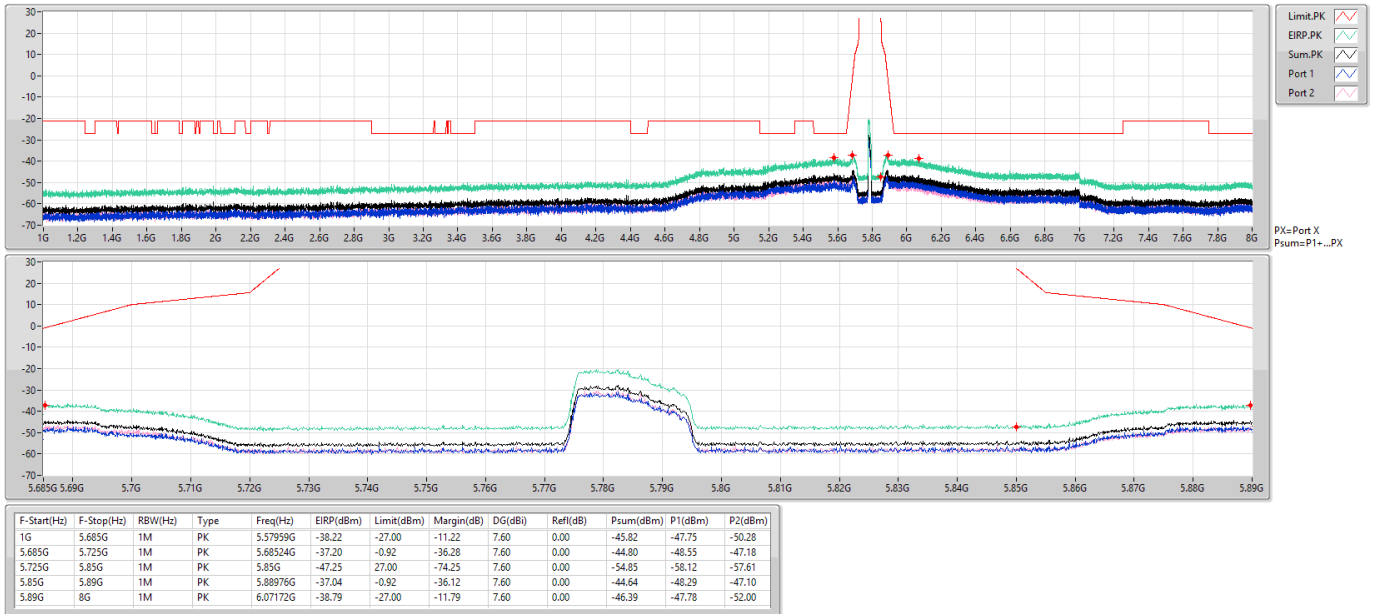


802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz

CSE-PK

28/06/2022

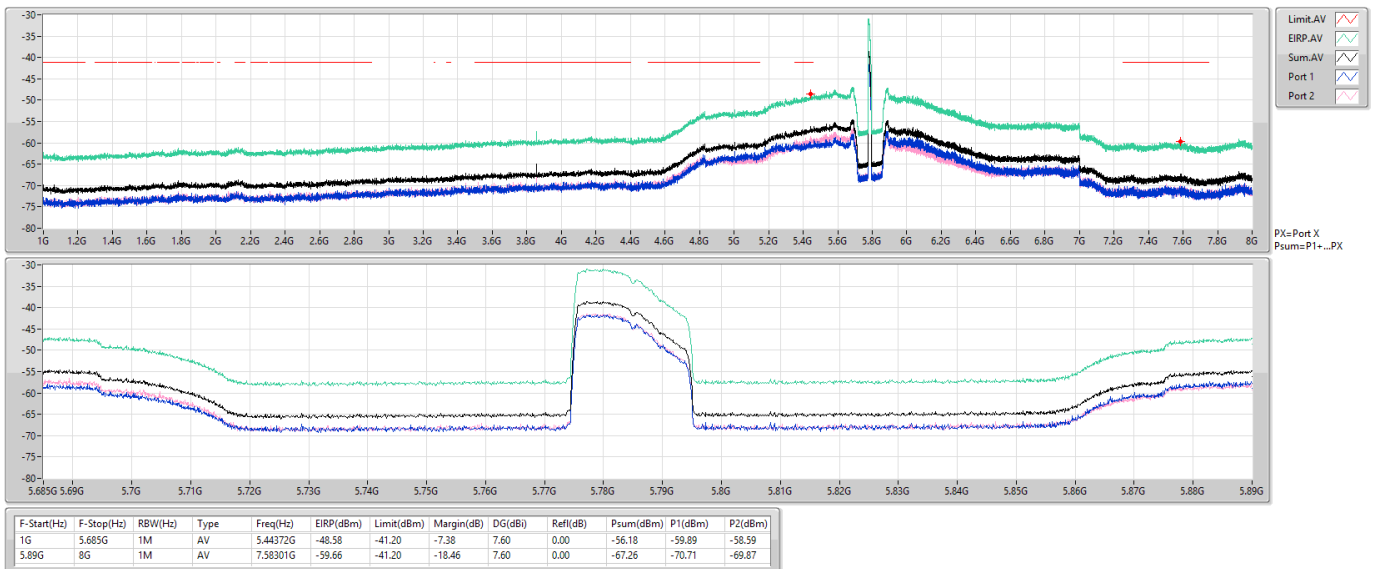


802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz

CSE-AV

28/06/2022

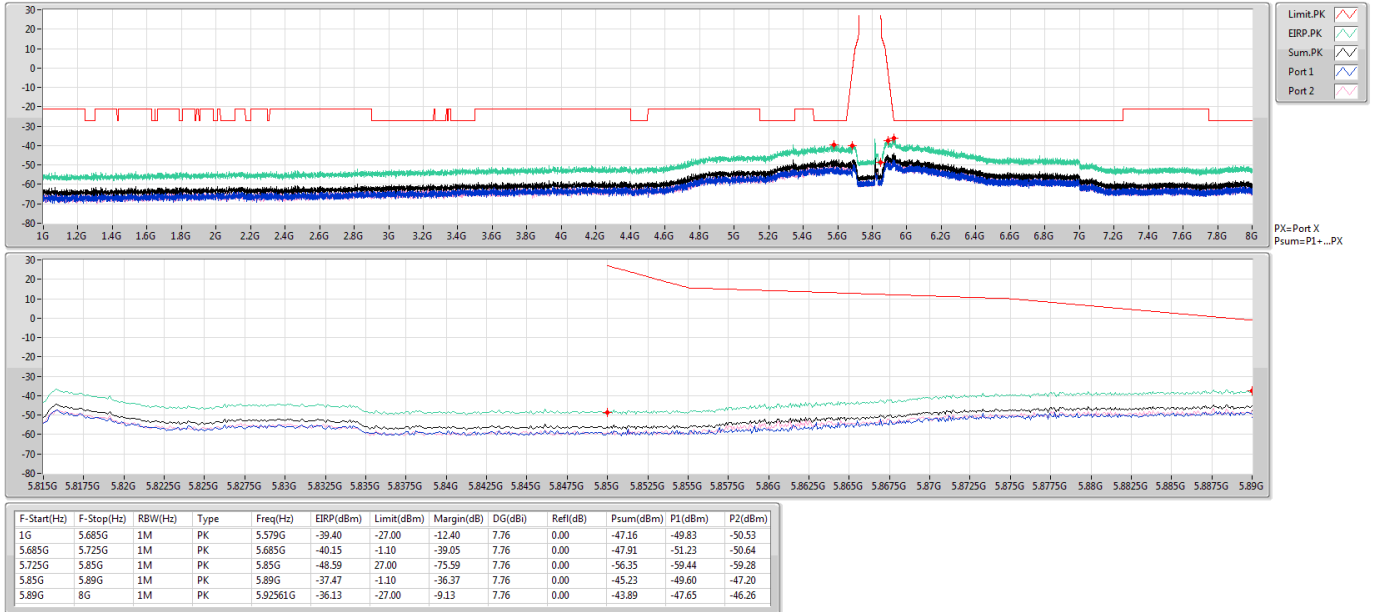


802.11ax HEW20_Nss1,(MCS0)_2TX

5825MHz

CSE-PK

07/03/2020

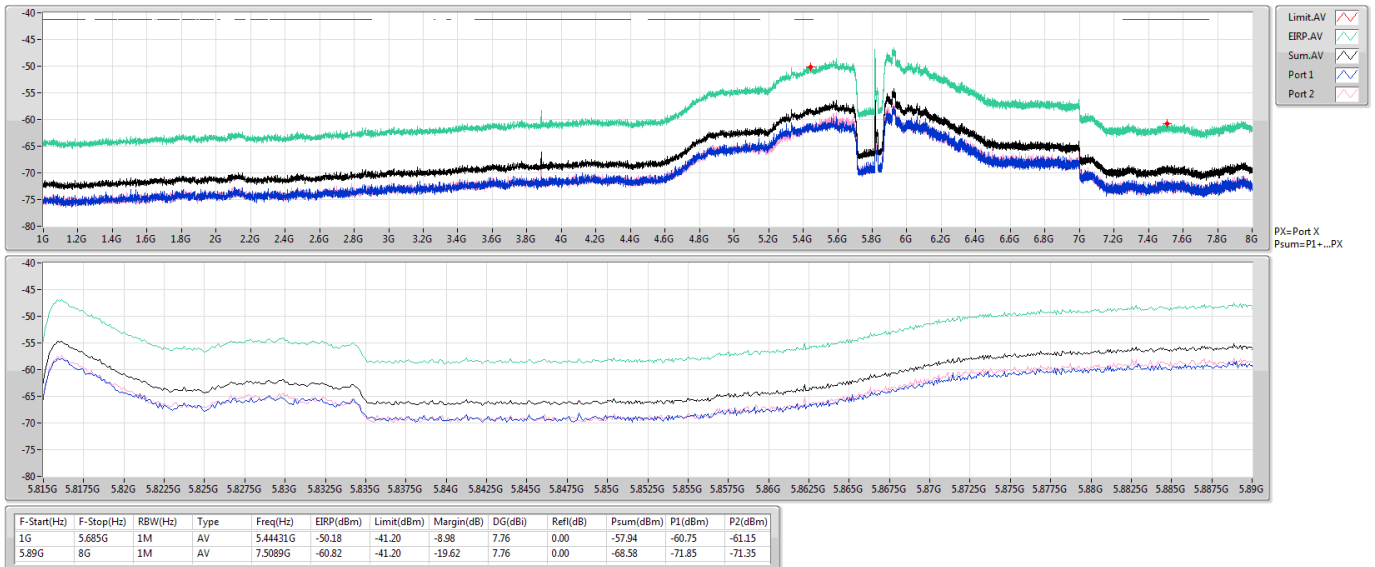


802.11ax HEW20_Nss1,(MCS0)_2TX

5825MHz

CSE-AV

07/03/2020

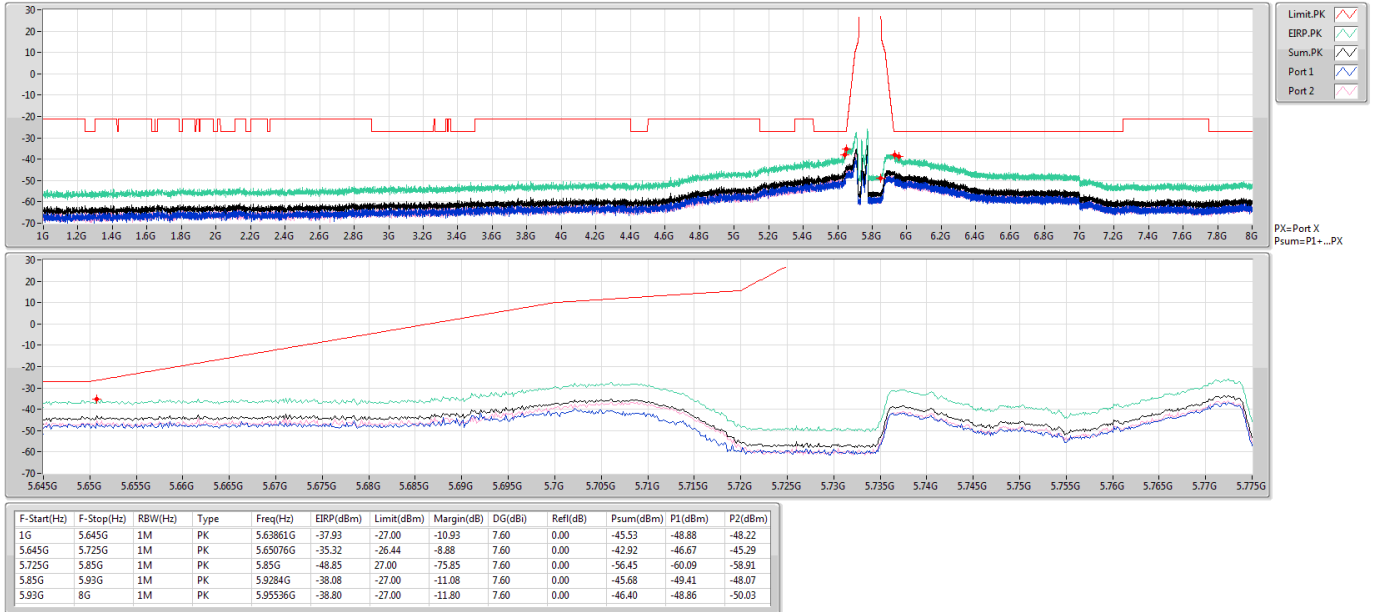


802.11ax HEW40_Nss1,(MCS0)_2TX

5755MHz

CSE-PK

07/03/2020

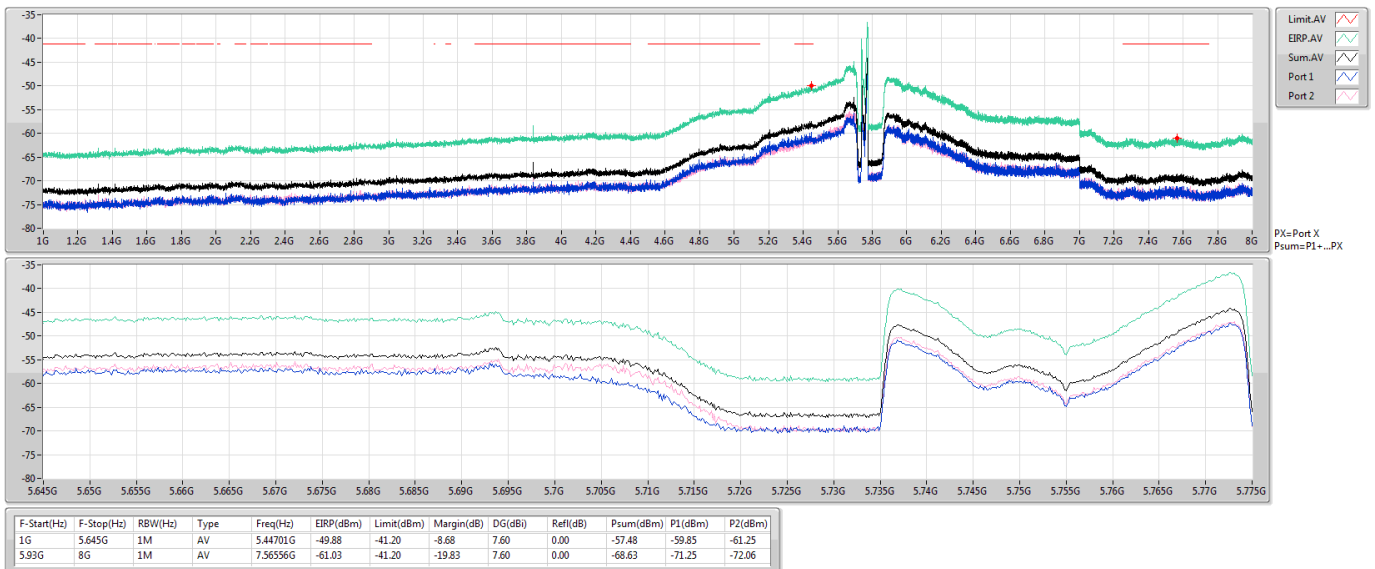


802.11ax HEW40_Nss1,(MCS0)_2TX

5755MHz

CSE-AV

07/03/2020

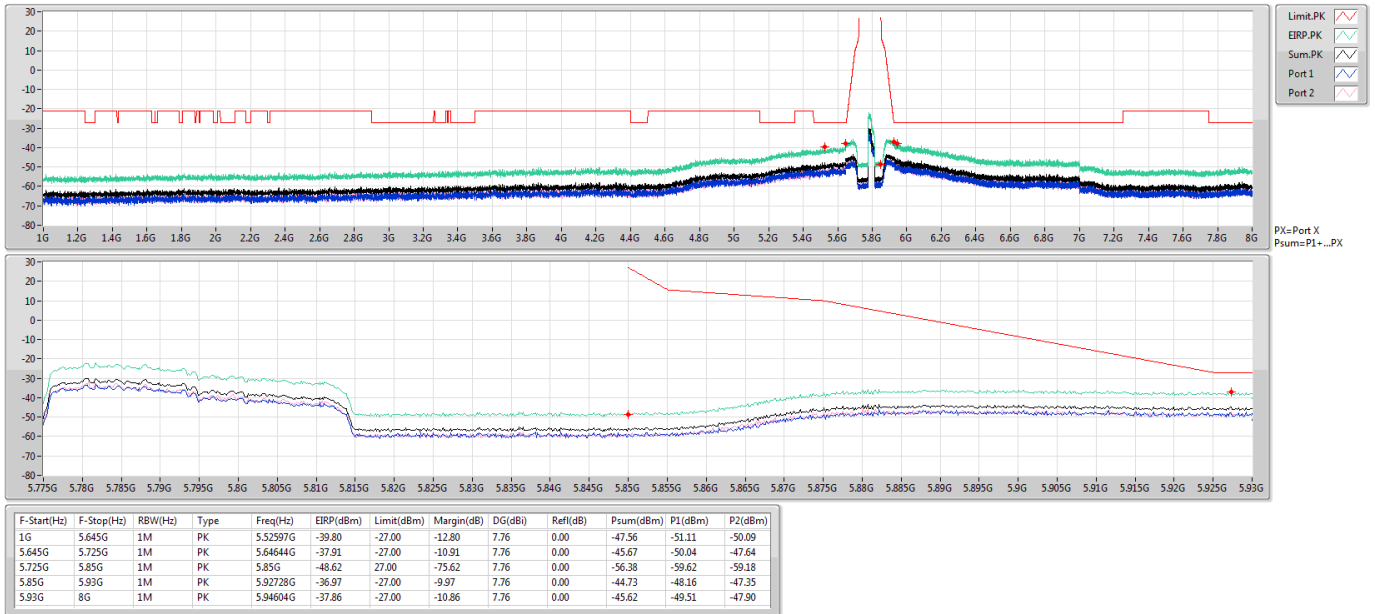


802.11ax HEW40_Nss1,(MCS0)_2TX

5795MHz

CSE-PK

07/03/2020

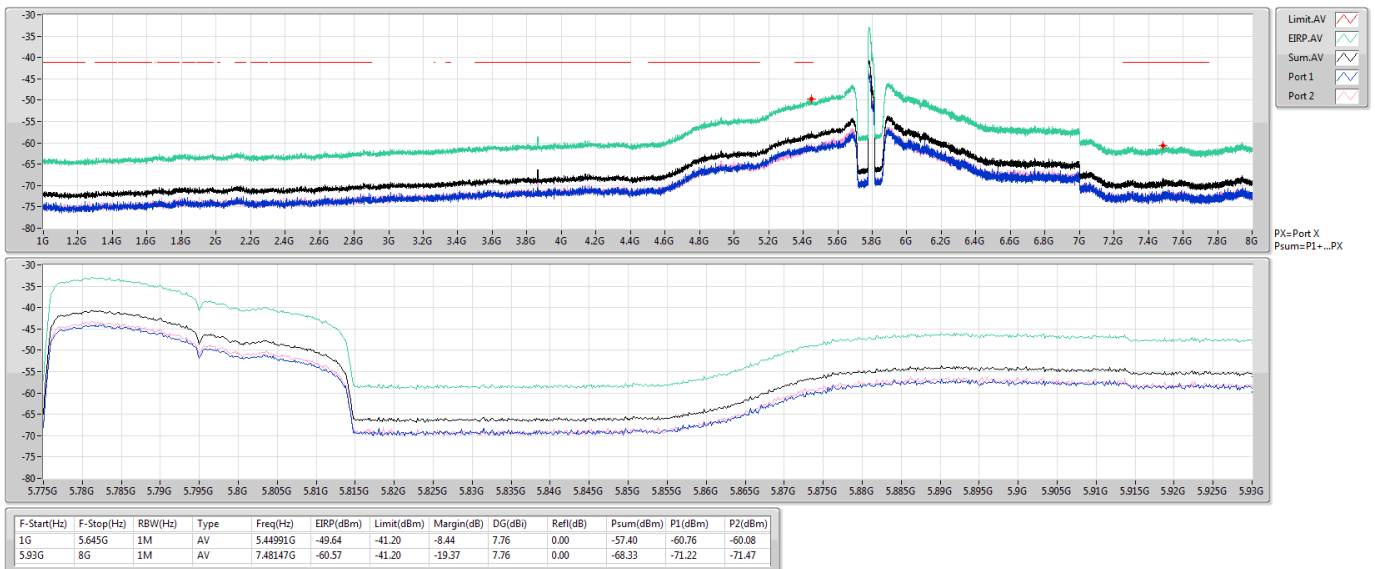


802.11ax HEW40_Nss1,(MCS0)_2TX

5795MHz

CSE-AV

07/03/2020

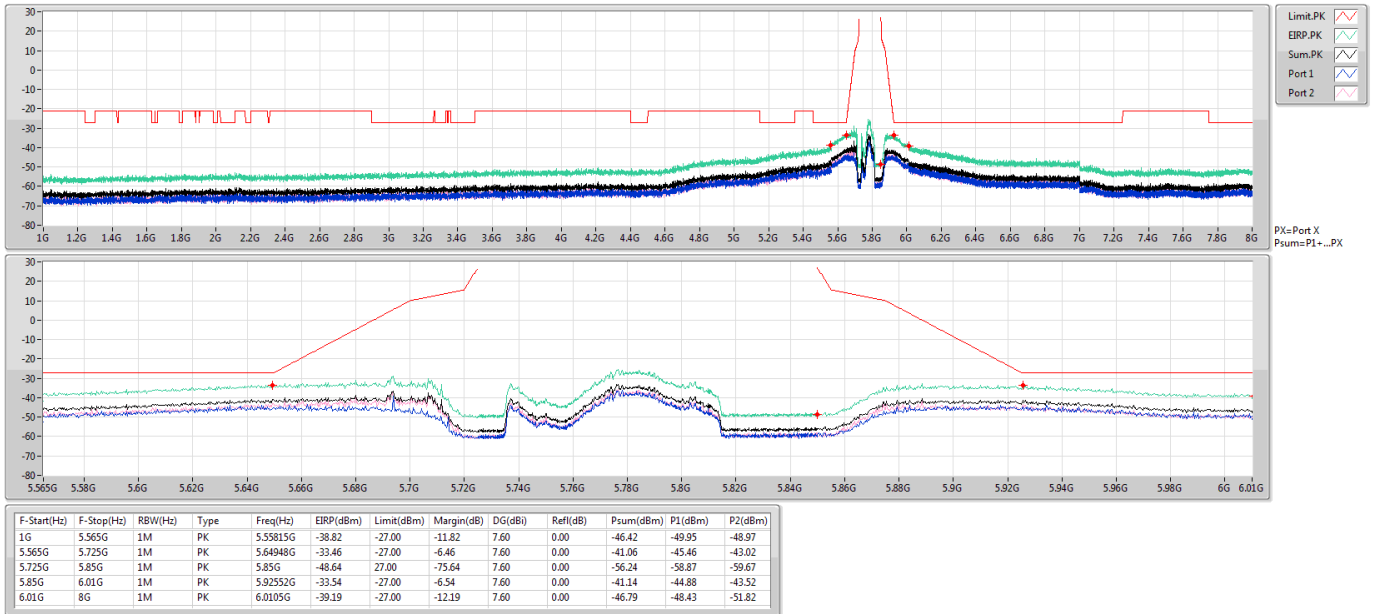


802.11ax HEW80_Nss1,(MCS0)_2TX

5775MHz

CSE-PK

07/03/2020

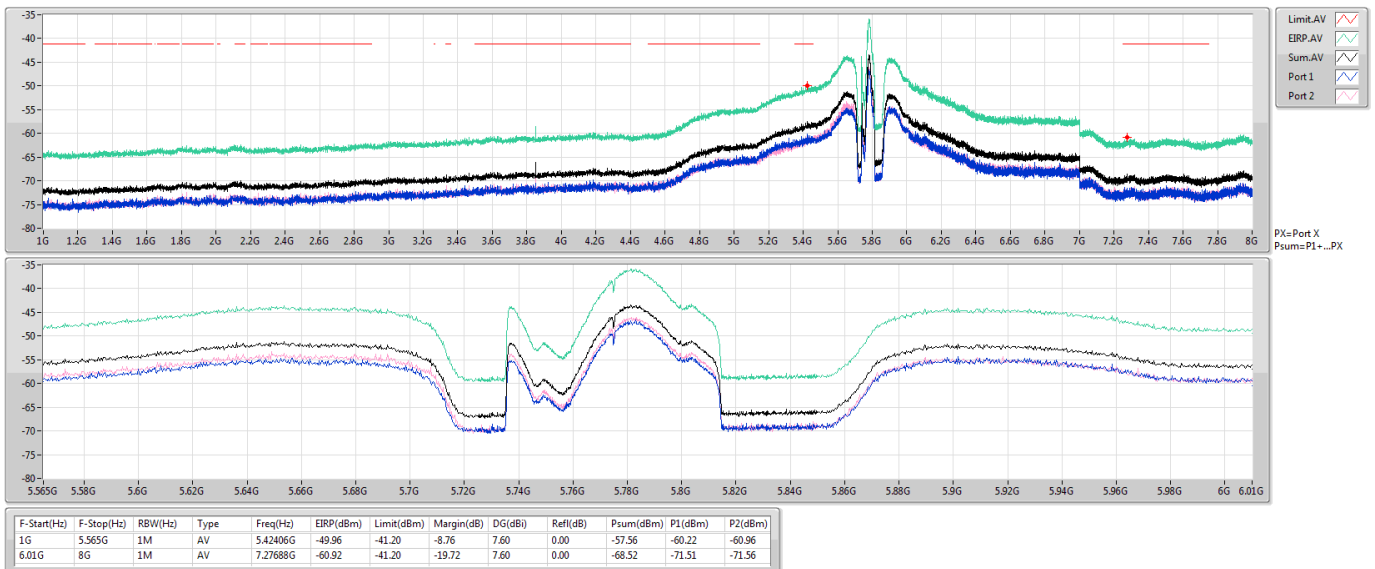


802.11ax HEW80_Nss1,(MCS0)_2TX

5775MHz

CSE-AV

07/03/2020



<2T1S>

For Conducted Harmonic (8~40GHz):

Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
11a20_Nss1.(6Mbps)_2TX	Pass	8G	12G	AV	11.65G	7.76	-70.40	-65.40	-64.21	-56.45	-41.20	-15.25
11a40_Nss1.(6Mbps)_2TX	Pass	8G	12G	AV	11.59G	7.76	-73.22	-70.32	-68.52	-60.76	-41.20	-19.56
11a80_Nss1.(6Mbps)_2TX	Pass	12G	40G	AV	40G	7.60	-74.04	-74.06	-71.04	-63.44	-41.20	-22.24
802.11ax HEW20_Nss1.(MCS0)_2TX	Pass	8G	12G	AV	11.651G	7.76	-70.68	-65.22	-64.13	-56.37	-41.20	-15.17
802.11ax HEW40_Nss1.(MCS0)_2TX	Pass	8G	12G	AV	11.5835G	7.76	-72.98	-71.51	-69.17	-61.41	-41.20	-20.21
802.11ax HEW80_Nss1.(MCS0)_2TX	Pass	8G	12G	AV	11.5455G	7.60	-68.72	-73.96	-67.58	-59.98	-41.20	-18.78

DG = Directional Gain;

PX=Port X; Psum=P1+.P2+...PX

Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
11a20_Nss1(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	8G	12G	AV	11.4905G	7.60	-69.58	-69.53	-66.54	-58.94	-41.20	-17.74
5745MHz	Pass	12G	40G	AV	39.993G	7.60	-73.61	-73.99	-70.79	-63.19	-41.20	-21.99
5745MHz	Pass	8G	12G	PK	11.4855G	7.60	-62.86	-57.92	-56.71	-49.11	-21.20	-27.91
5745MHz	Pass	12G	40G	PK	37.1475G	7.60	-64.41	-70.29	-63.41	-55.81	-27.00	-28.81
5785MHz	Pass	8G	12G	AV	11.5695G	7.60	-69.51	-65.93	-64.35	-56.75	-41.20	-15.55
5785MHz	Pass	12G	40G	AV	39.9965G	7.60	-73.79	-74.12	-70.94	-63.34	-41.20	-22.14
5785MHz	Pass	8G	12G	PK	11.571G	7.60	-61.99	-55.90	-54.94	-47.34	-21.20	-26.14
5785MHz	Pass	12G	40G	PK	37.361G	7.60	-65.60	-64.56	-62.04	-54.44	-27.00	-27.44
5825MHz	Pass	8G	12G	AV	11.65G	7.76	-70.40	-65.40	-64.21	-56.45	-41.20	-15.25
5825MHz	Pass	12G	40G	AV	39.9965G	7.76	-74.38	-74.01	-71.18	-63.42	-41.20	-22.22
5825MHz	Pass	8G	12G	PK	11.6565G	7.76	-62.35	-56.50	-55.50	-47.74	-21.20	-26.54
5825MHz	Pass	12G	40G	PK	37.228G	7.76	-65.67	-66.20	-62.92	-55.16	-27.00	-28.16
11a40_Nss1(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	8G	12G	AV	11.51G	7.60	-73.73	-71.57	-69.51	-61.91	-41.20	-20.71
5755MHz	Pass	12G	40G	AV	39.9825G	7.60	-73.67	-74.45	-71.03	-63.43	-41.20	-22.23
5755MHz	Pass	8G	12G	PK	11.5075G	7.60	-62.74	-62.91	-59.81	-52.21	-21.20	-31.01
5755MHz	Pass	12G	40G	PK	36.6155G	7.60	-64.50	-67.24	-62.65	-55.05	-27.00	-28.05
5795MHz	Pass	8G	12G	AV	11.59G	7.76	-73.22	-70.32	-68.52	-60.76	-41.20	-19.56
5795MHz	Pass	12G	40G	AV	39.9965G	7.76	-73.64	-73.38	-70.50	-62.74	-41.20	-21.54
5795MHz	Pass	8G	12G	PK	11.587G	7.76	-65.69	-59.99	-58.95	-51.19	-21.20	-29.99
5795MHz	Pass	12G	40G	PK	36.6785G	7.76	-66.13	-66.06	-63.08	-55.32	-27.00	-28.32
11a80_Nss1(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	8G	12G	AV	11.559G	7.60	-76.77	-72.73	-71.29	-63.69	-41.20	-22.49
5775MHz	Pass	12G	40G	AV	40G	7.60	-74.04	-74.06	-71.04	-63.44	-41.20	-22.24
5775MHz	Pass	8G	12G	PK	11.563G	7.60	-66.15	-64.19	-62.05	-54.45	-21.20	-33.25
5775MHz	Pass	12G	40G	PK	36.6855G	7.60	-66.91	-65.60	-63.20	-55.60	-27.00	-28.60
802.11ax HEW20_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	8G	12G	AV	11.4905G	7.60	-70.39	-68.57	-66.38	-58.78	-41.20	-17.58
5745MHz	Pass	12G	40G	AV	40G	7.60	-73.56	-73.68	-70.61	-63.01	-41.20	-21.81
5745MHz	Pass	8G	12G	PK	11.4885G	7.60	-64.22	-59.13	-57.96	-50.36	-21.20	-29.16
5745MHz	Pass	12G	40G	PK	37.2035G	7.60	-65.34	-68.21	-63.53	-55.93	-27.00	-28.93
5785MHz	Pass	8G	12G	AV	11.57G	7.60	-79.78	-71.99	-71.32	-63.72	-41.20	-22.52
5785MHz	Pass	12G	40G	AV	40G	7.60	-72.61	-73.01	-69.80	-62.20	-41.20	-21.00
5785MHz	Pass	8G	12G	PK	11.572G	7.60	-74.05	-61.34	-61.11	-53.51	-21.20	-32.31
5785MHz	Pass	12G	40G	PK	17.3445G	7.60	-59.57	-62.31	-57.72	-50.12	-27.00	-23.12
5825MHz	Pass	8G	12G	AV	11.651G	7.76	-70.68	-65.22	-64.13	-56.37	-41.20	-15.17
5825MHz	Pass	12G	40G	AV	40G	7.76	-74.20	-73.44	-70.79	-63.03	-41.20	-21.83
5825MHz	Pass	8G	12G	PK	11.654G	7.76	-61.46	-57.51	-56.04	-48.28	-21.20	-27.08
5825MHz	Pass	12G	40G	PK	37.221G	7.76	-66.48	-66.19	-63.32	-55.56	-27.00	-28.56
802.11ax HEW40_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	8G	12G	AV	11.51G	7.60	-73.08	-72.03	-69.51	-61.91	-41.20	-20.71
5755MHz	Pass	12G	40G	AV	40G	7.60	-73.47	-74.27	-70.84	-63.24	-41.20	-22.04
5755MHz	Pass	8G	12G	PK	11.511G	7.60	-65.14	-62.16	-60.39	-52.79	-21.20	-31.59
5755MHz	Pass	12G	40G	PK	37.123G	7.60	-68.87	-64.81	-63.37	-55.77	-27.00	-28.77
5795MHz	Pass	8G	12G	AV	11.5835G	7.76	-72.98	-71.51	-69.17	-61.41	-41.20	-20.21
5795MHz	Pass	12G	40G	AV	39.9965G	7.76	-73.81	-73.80	-70.79	-63.03	-41.20	-21.83
5795MHz	Pass	8G	12G	PK	11.589G	7.76	-66.23	-61.06	-59.91	-52.15	-21.20	-30.95
5795MHz	Pass	12G	40G	PK	38.306G	7.76	-67.14	-65.27	-63.09	-55.33	-27.00	-28.33
802.11ax HEW80_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	8G	12G	AV	11.5455G	7.60	-68.72	-73.96	-67.58	-59.98	-41.20	-18.78
5775MHz	Pass	12G	40G	AV	39.993G	7.60	-74.72	-73.47	-71.04	-63.44	-41.20	-22.24
5775MHz	Pass	8G	12G	PK	11.5775G	7.60	-58.57	-69.24	-58.21	-50.61	-21.20	-29.41



Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5775MHz	Pass	12G	40G	PK	37.1755G	7.60	-65.61	-65.07	-62.32	-54.72	-27.00	-27.72

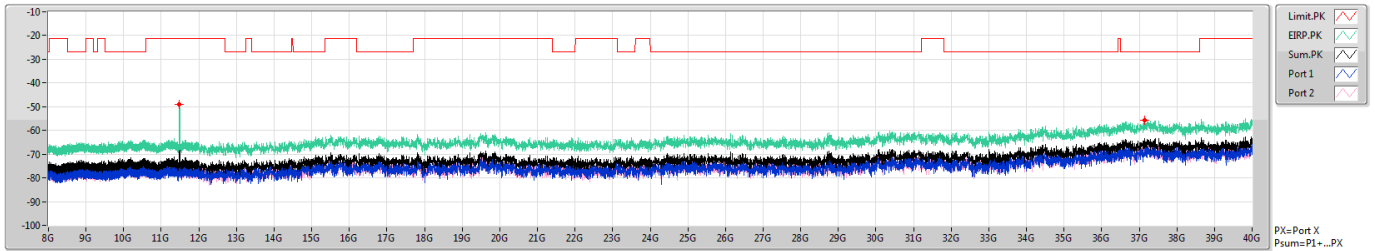
DG = Directional Gain;
PX=Port X; Psum=P1+.P2+...PX

11a20_Nss1,(6Mbps)_2TX

5745MHz

CSE-PK

07/03/2020



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	RefI(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.4855G	-49.11	-21.20	-27.91	7.60	0.00	-56.71	-62.86	-57.92
12G	40G	1M	PK	37.1475G	-55.81	-27.00	-28.81	7.60	0.00	-63.41	-64.41	-70.29

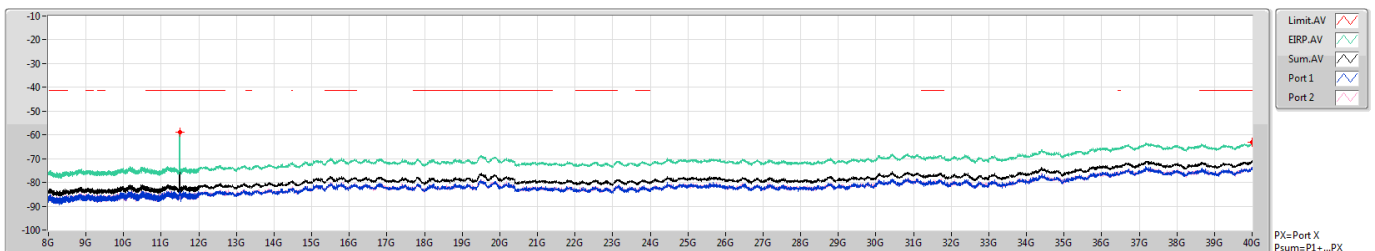
PX=Port X
Psum=P1+...PX

11a20_Nss1,(6Mbps)_2TX

5745MHz

CSE-AV

07/03/2020



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	RefI(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.4905G	-58.94	-41.20	-17.74	7.60	0.00	-66.54	-69.58	-69.53
12G	40G	1M	AV	39.993G	-63.19	-41.20	-21.99	7.60	0.00	-70.79	-73.61	-73.99

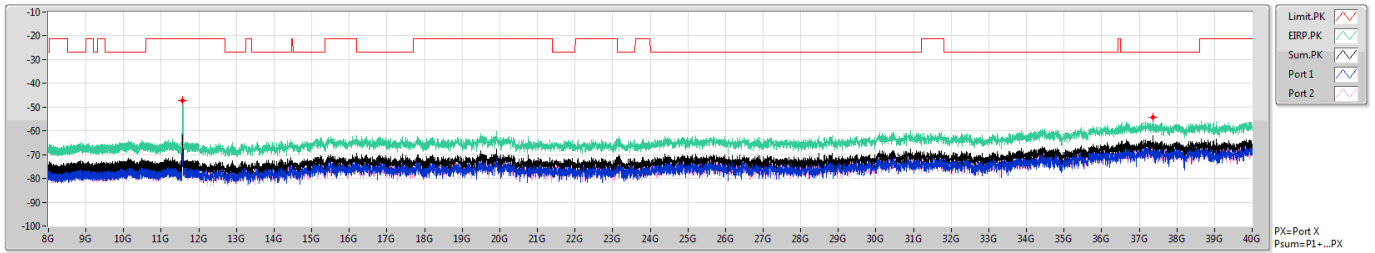
PX=Port X
Psum=P1+...PX

11a20_Nss1,(6Mbps)_2TX

5785MHz

CSE-PK

07/03/2020



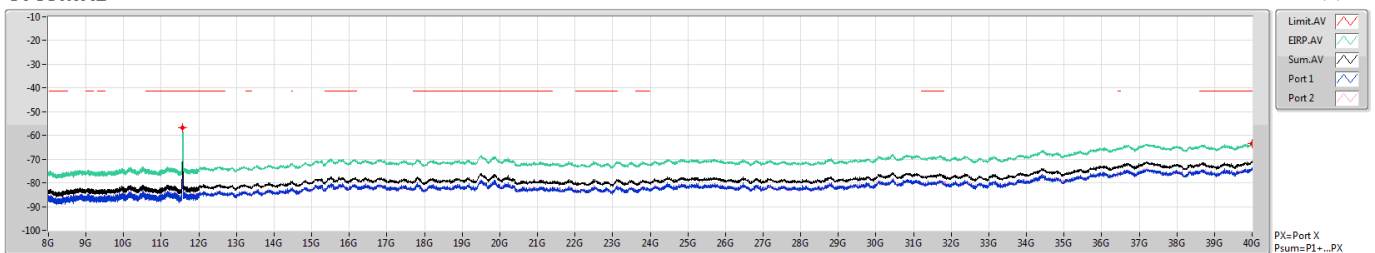
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.571G	-47.34	-21.20	-26.14	7.60	0.00	-54.94	-61.99	-55.90
12G	40G	1M	PK	37.361G	-54.44	-27.00	-27.44	7.60	0.00	-62.04	-65.60	-64.56

11a20_Nss1,(6Mbps)_2TX

5785MHz

CSE-AV

07/03/2020



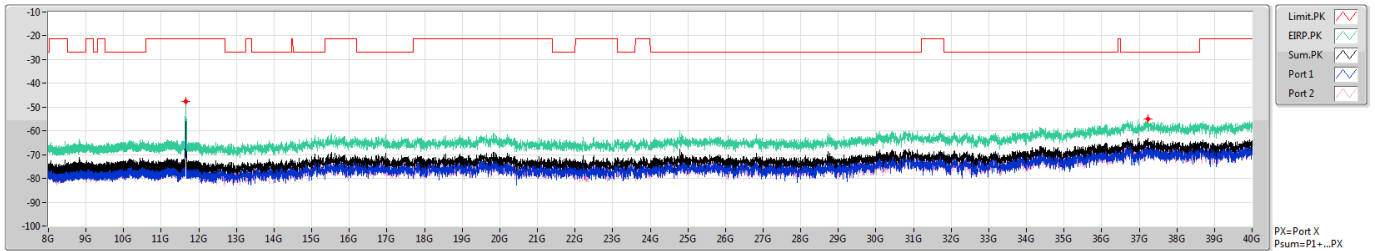
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.5695G	-56.75	-41.20	-15.55	7.60	0.00	-64.35	-69.51	-65.93
12G	40G	1M	AV	39.9965G	-63.34	-41.20	-22.14	7.60	0.00	-70.94	-73.79	-74.12

11a20_Nss1,(6Mbps)_2TX

5825MHz

CSE-PK

07/03/2020



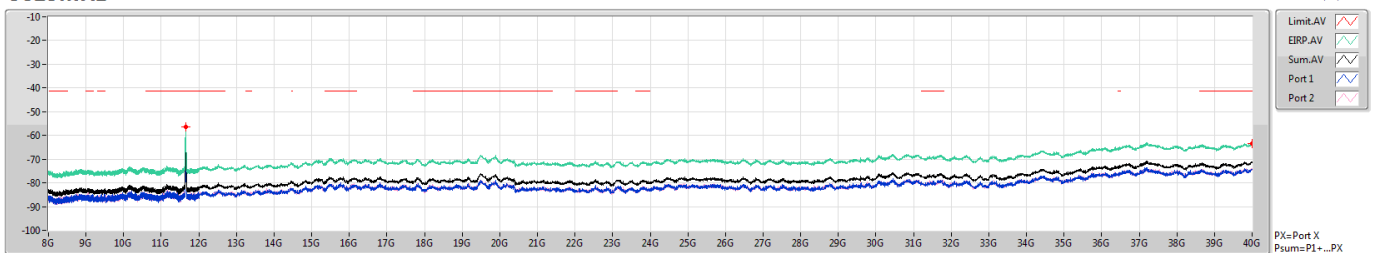
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.6565G	-47.74	-21.20	-26.54	7.76	0.00	-55.50	-62.35	-56.50
12G	40G	1M	PK	37.228G	-55.16	-27.00	-28.16	7.76	0.00	-62.92	-65.67	-66.20

11a20_Nss1,(6Mbps)_2TX

5825MHz

CSE-AV

07/03/2020



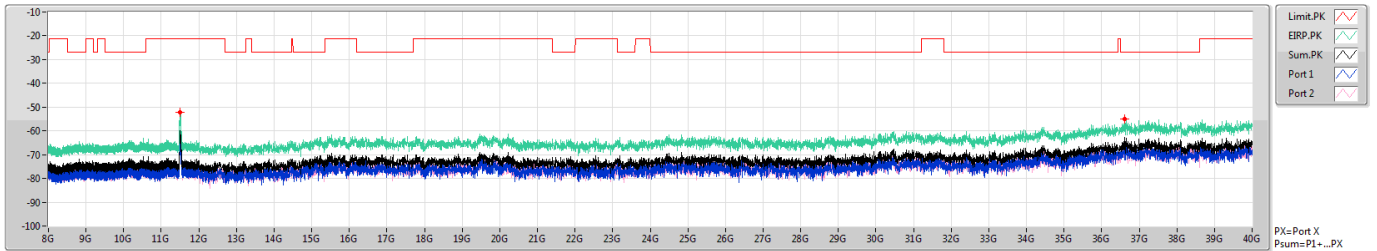
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.65G	-56.45	-41.20	-15.25	7.76	0.00	-64.21	-70.40	-65.40
12G	40G	1M	AV	39.9965G	-63.42	-41.20	-22.22	7.76	0.00	-71.18	-74.38	-74.01

11a40_Nss1,(6Mbps)_2TX

5755MHz

CSE-PK

07/03/2020



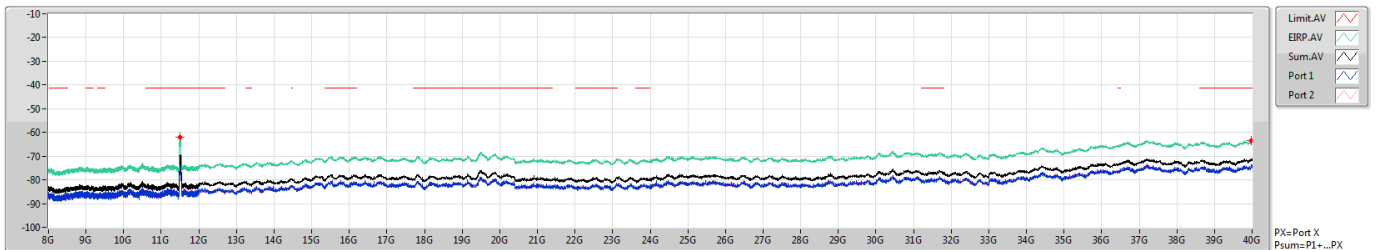
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.5075G	-52.21	-21.20	-31.01	7.60	0.00	-59.81	-62.74	-62.91
12G	40G	1M	PK	36.6155G	-55.05	-27.00	-28.05	7.60	0.00	-62.65	-64.50	-67.24

11a40_Nss1,(6Mbps)_2TX

5755MHz

CSE-AV

07/03/2020



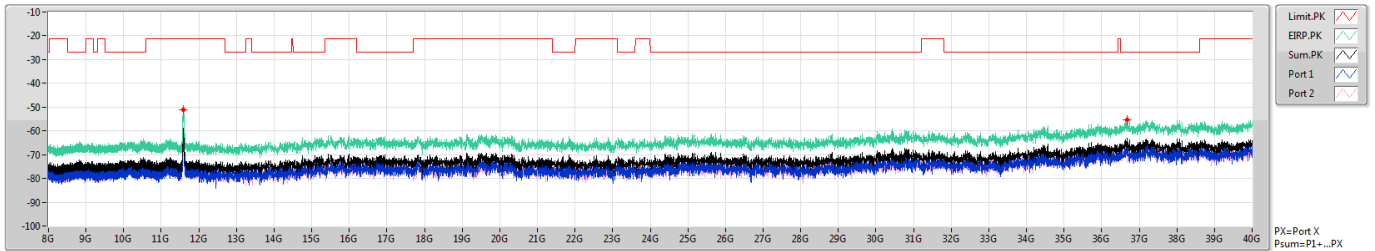
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.51G	-61.91	-41.20	-20.71	7.60	0.00	-69.51	-73.73	-71.57
12G	40G	1M	AV	39.9825G	-63.43	-41.20	-22.23	7.60	0.00	-71.03	-73.67	-74.45

11a40_Nss1,(6Mbps)_2TX

5795MHz

CSE-PK

07/03/2020



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.587G	-51.19	-21.20	-29.99	7.76	0.00	-58.95	-65.69	-59.99
12G	40G	1M	PK	36.6785G	-55.32	-27.00	-28.32	7.76	0.00	-63.08	-66.13	-66.06

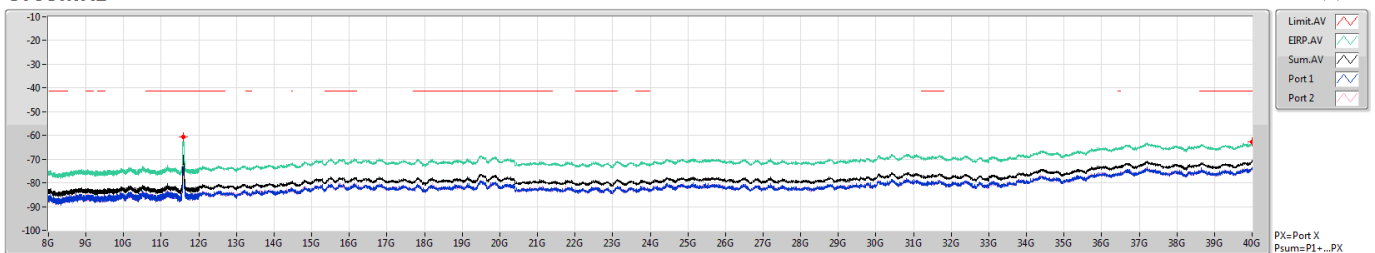
PX=Port X
Psum=P1+...PX

11a40_Nss1,(6Mbps)_2TX

5795MHz

CSE-AV

07/03/2020



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dBi)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.59G	-60.76	-41.20	-19.56	7.76	0.00	-68.52	-73.22	-70.32
12G	40G	1M	AV	39.9965G	-62.74	-41.20	-21.54	7.76	0.00	-70.50	-73.64	-73.38

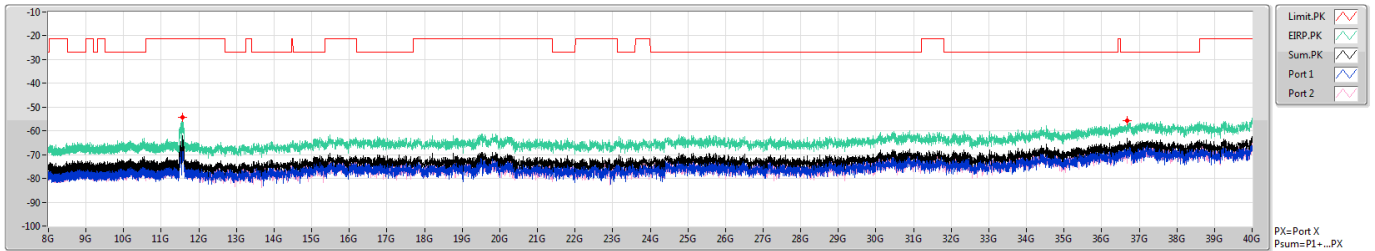
PX=Port X
Psum=P1+...PX

11a80_Nss1,(6Mbps)_2TX

5775MHz

CSE-PK

07/03/2020



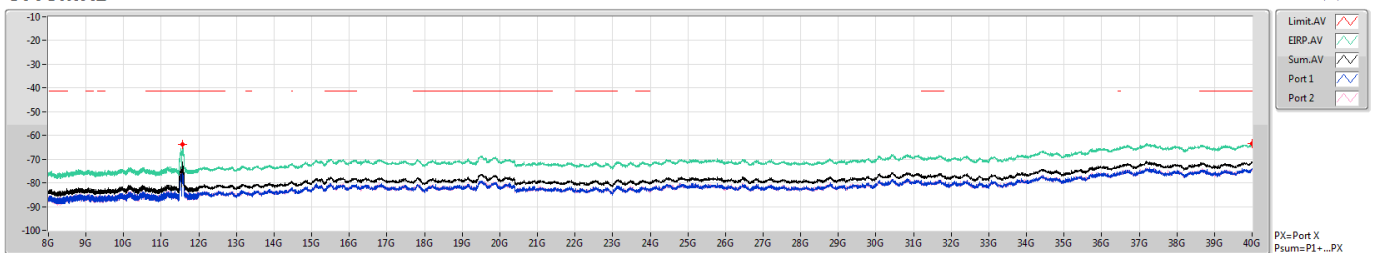
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.563G	-54.45	-21.20	-33.25	7.60	0.00	-62.05	-66.15	-64.19
12G	40G	1M	PK	36.6855G	-55.60	-27.00	-28.60	7.60	0.00	-63.20	-66.91	-65.60

11a80_Nss1,(6Mbps)_2TX

5775MHz

CSE-AV

07/03/2020



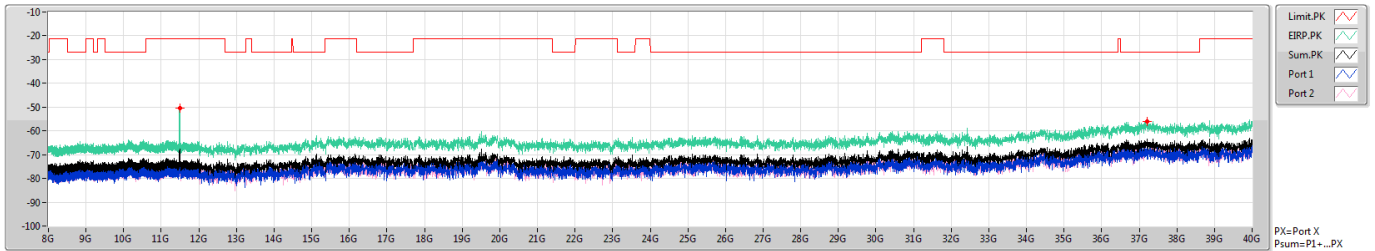
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.559G	-63.69	-41.20	-22.49	7.60	0.00	-71.29	-76.77	-72.73
12G	40G	1M	AV	40G	-63.44	-41.20	-22.24	7.60	0.00	-71.04	-74.04	-74.06

802.11ax HEW20_Nss1,(MCS0)_2TX

CSE-PK

5745MHz

07/03/2020



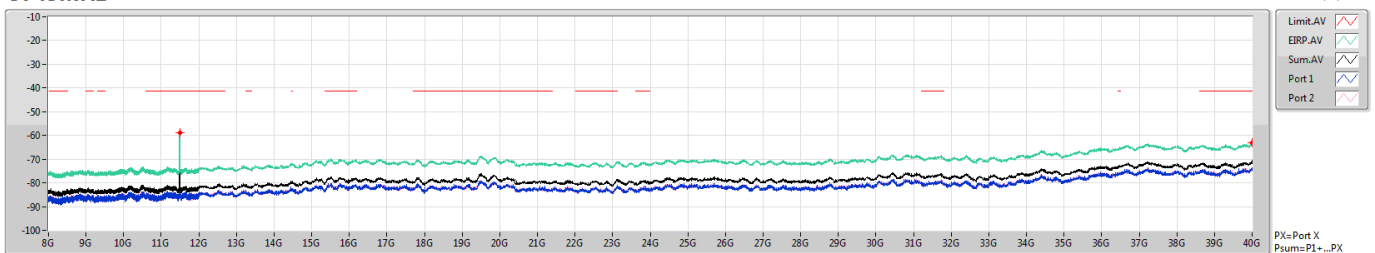
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.4885G	-50.36	-21.20	-29.16	7.60	0.00	-57.96	-64.22	-59.13
12G	40G	1M	PK	37.2035G	-55.93	-27.00	-28.93	7.60	0.00	-63.53	-65.34	-68.21

802.11ax HEW20_Nss1,(MCS0)_2TX

CSE-AV

5745MHz

07/03/2020



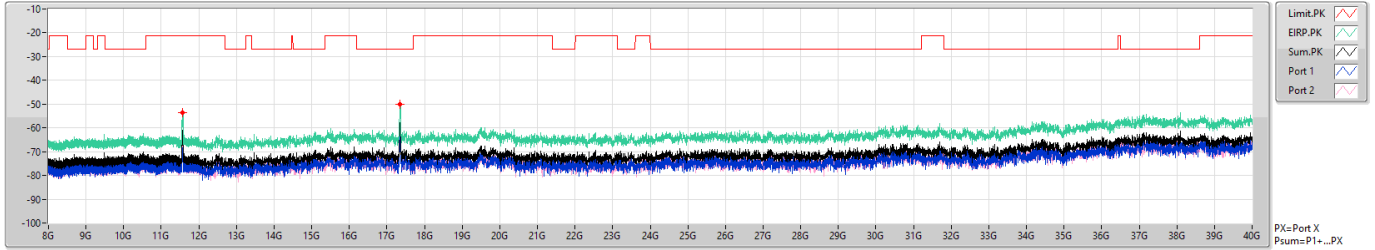
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.4885G	-58.78	-41.20	-17.58	7.60	0.00	-66.38	-70.39	-68.57
12G	40G	1M	AV	40G	-63.01	-41.20	-21.81	7.60	0.00	-70.61	-73.56	-73.68

802.11ax HEW20_Nss1,(MCS0)_2TX

CSE-PK

5785MHz

28/06/2022



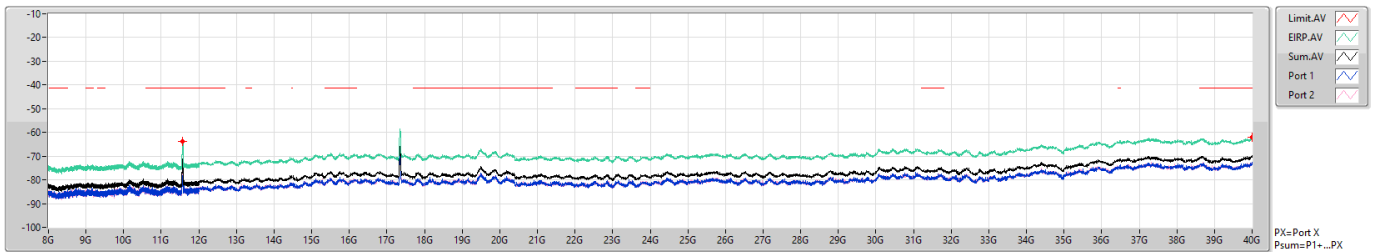
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.572G	-53.51	-21.20	-32.31	7.60	0.00	-61.11	-74.05	-61.34
12G	40G	1M	PK	17.3445G	-50.12	-27.00	-23.12	7.60	0.00	-57.72	-59.57	-62.31

802.11ax HEW20_Nss1,(MCS0)_2TX

CSE-AV

5785MHz

28/06/2022



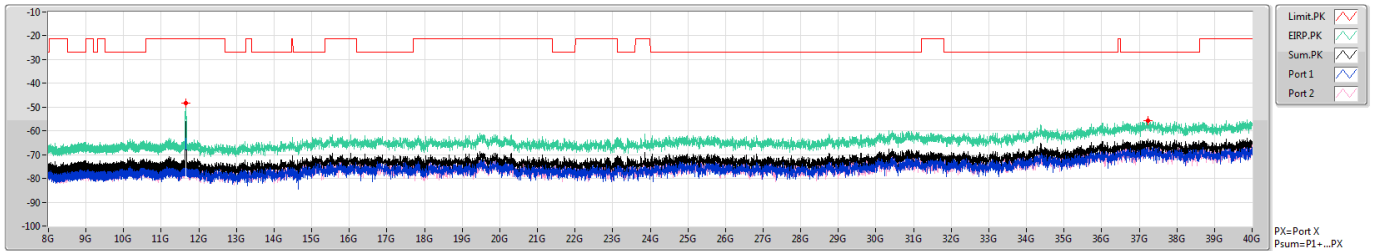
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.57G	-63.72	-41.20	-22.52	7.60	0.00	-71.32	-79.78	-71.99
12G	40G	1M	AV	40G	-62.20	-41.20	-21.00	7.60	0.00	-69.80	-72.61	-73.01

802.11ax HEW20_Nss1,(MCS0)_2TX

CSE-PK

5825MHz

07/03/2020



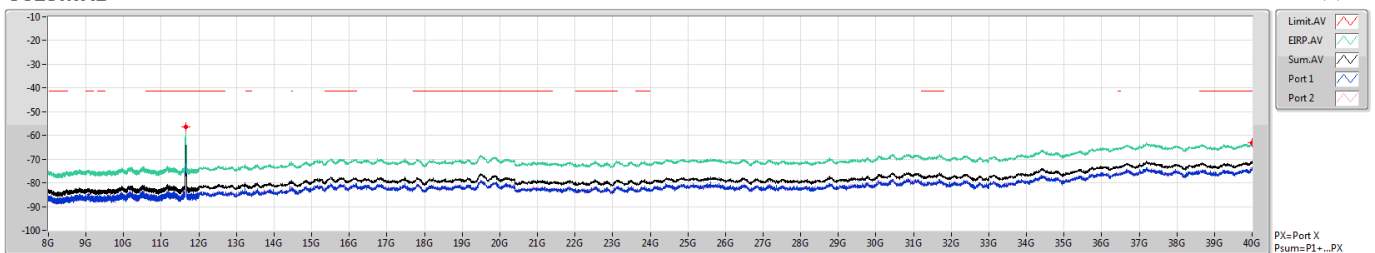
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.654G	-48.28	-21.20	-27.08	7.76	0.00	-56.04	-61.46	-57.51
12G	40G	1M	PK	37.221G	-55.56	-27.00	-28.56	7.76	0.00	-63.32	-66.48	-66.19

802.11ax HEW20_Nss1,(MCS0)_2TX

CSE-AV

5825MHz

07/03/2020



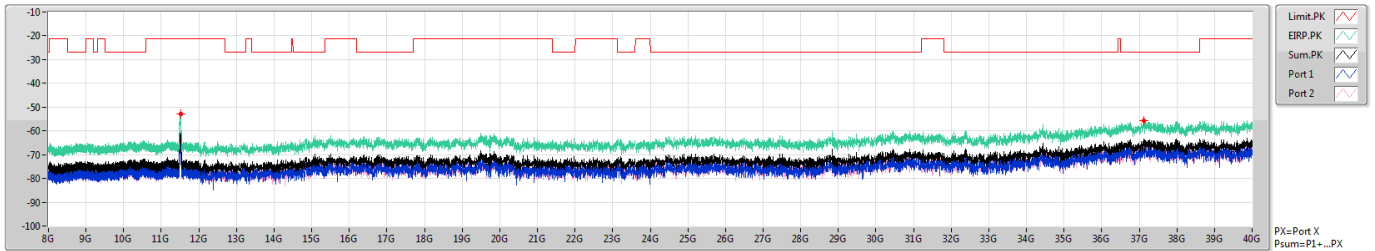
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.651G	-56.37	-41.20	-15.17	7.76	0.00	-64.13	-70.68	-65.22
12G	40G	1M	AV	40G	-63.03	-41.20	-21.83	7.76	0.00	-70.79	-74.20	-73.44

802.11ax HEW40_Nss1,(MCS0)_2TX

CSE-PK

5755MHz

07/03/2020

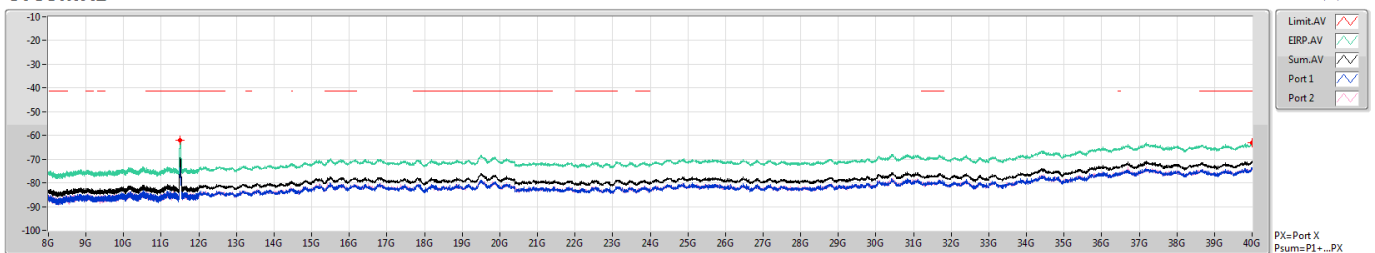
PX=Port X
Psum=P1+...PX

802.11ax HEW40_Nss1,(MCS0)_2TX

CSE-AV

5755MHz

07/03/2020

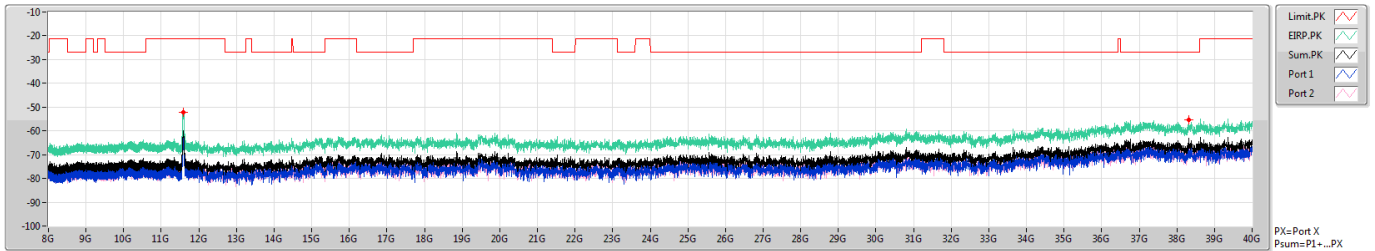
PX=Port X
Psum=P1+...PX

802.11ax HEW40_Nss1,(MCS0)_2TX

CSE-PK

5795MHz

07/03/2020



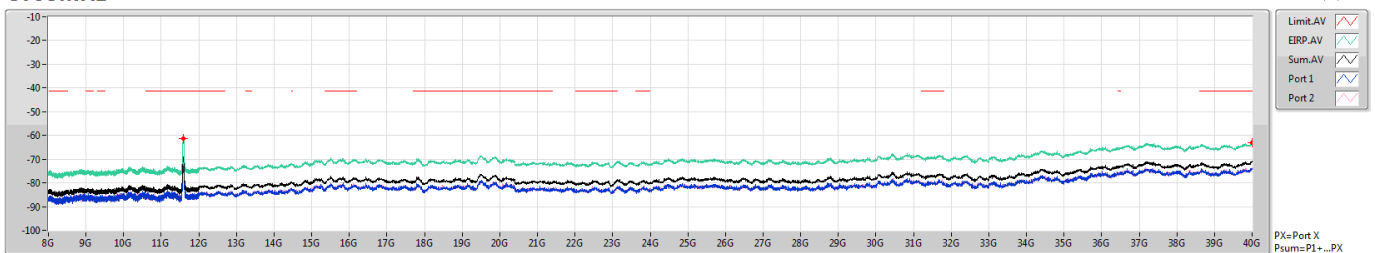
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.589G	-52.15	-21.20	-30.95	7.76	0.00	-59.91	-66.23	-61.06
12G	40G	1M	PK	38.306G	-55.33	-27.00	-28.33	7.76	0.00	-63.09	-67.14	-65.27

802.11ax HEW40_Nss1,(MCS0)_2TX

CSE-AV

5795MHz

07/03/2020



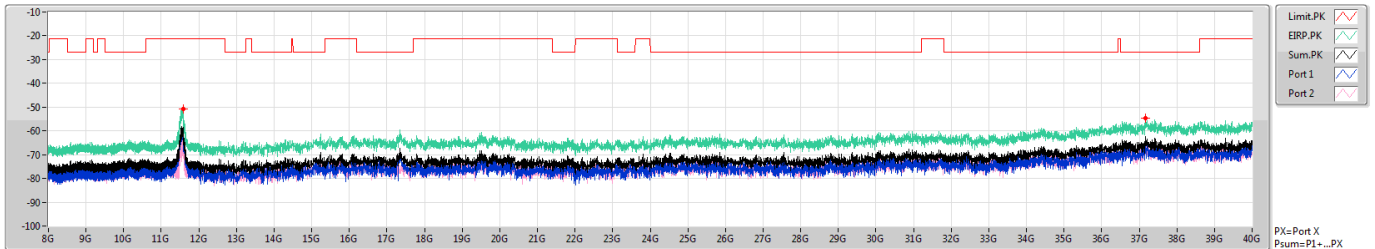
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.5835G	-61.41	-41.20	-20.21	7.76	0.00	-69.17	-72.98	-71.51
12G	40G	1M	AV	39.9965G	-63.03	-41.20	-21.83	7.76	0.00	-70.79	-73.81	-73.80

802.11ax HEW80_Nss1,(MCS0)_2TX

CSE-PK

5775MHz

07/03/2020



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	PK	11.5775G	-50.61	-21.20	-29.41	7.60	0.00	-58.21	-58.57	-69.24
12G	40G	1M	PK	37.1755G	-54.72	-27.00	-27.72	7.60	0.00	-62.32	-65.61	-65.07

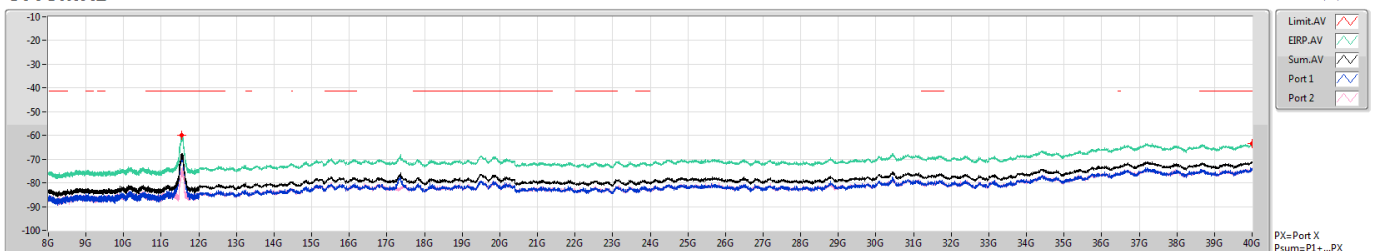
PX=Port X
Psum=P1+...PX

802.11ax HEW80_Nss1,(MCS0)_2TX

CSE-AV

5775MHz

07/03/2020



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Margin(dB)	DG(dB)	Ref(dB)	Psum(dBm)	P1(dBm)	P2(dBm)
8G	12G	1M	AV	11.5455G	-59.98	-41.20	-18.78	7.60	0.00	-67.58	-68.72	-73.96
12G	40G	1M	AV	39.993G	-63.44	-41.20	-22.24	7.60	0.00	-71.04	-74.72	-73.47

PX=Port X
Psum=P1+...PX

<2T1S>

For Conducted Bandedge:

Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
11a20_Nss1.(6Mbps)_2TX	Pass	4.9G	5.685G	AV	5.45038G	7.60	-57.05	-57.62	-54.32	-46.72	-41.20	-5.52
11a40_Nss1.(6Mbps)_2TX	Pass	4.9G	5.645G	AV	5.42821G	7.60	-57.15	-57.37	-54.25	-46.65	-41.20	-5.45
11a80_Nss1.(6Mbps)_2TX	Pass	5.565G	5.725G	PK	5.63188G	7.60	-43.55	-39.15	-37.80	-30.20	-27.00	-3.20
802.11ax HEW20_Nss1.(MCS0)_2TX	Pass	4.9G	5.685G	AV	5.41996G	7.60	-57.55	-56.88	-54.19	-46.59	-41.20	-5.39
802.11ax HEW40_Nss1.(MCS0)_2TX	Pass	4.9G	5.645G	AV	5.45288G	7.76	-58.05	-57.07	-54.52	-46.76	-41.20	-5.56
802.11ax HEW80_Nss1.(MCS0)_2TX	Pass	5.565G	5.725G	PK	5.64884G	7.60	-43.25	-39.72	-38.13	-30.53	-27.00	-3.53

DG = Directional Gain;

PX=Port X; Psum=P1+.P2+...PX

Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
11a20_Nss1(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	4.9G	5.685G	AV	5.44283G	7.60	-57.33	-57.51	-54.41	-46.81	-41.20	-5.61
5745MHz	Pass	4.9G	5.685G	PK	5.64183G	7.60	-46.84	-45.81	-43.28	-35.68	-27.00	-8.68
5745MHz	Pass	5.685G	5.725G	PK	5.68508G	7.60	-45.39	-44.66	-42.00	-34.40	-1.04	-33.36
5745MHz	Pass	5.85G	5.89G	PK	5.88968G	7.60	-44.42	-45.76	-42.03	-34.43	-0.86	-33.57
5745MHz	Pass	5.89G	6.5G	PK	5.94002G	7.60	-45.68	-44.42	-41.99	-34.39	-27.00	-7.39
5785MHz	Pass	4.9G	5.685G	AV	5.45038G	7.60	-57.05	-57.62	-54.32	-46.72	-41.20	-5.52
5785MHz	Pass	4.9G	5.685G	PK	5.60778G	7.60	-49.03	-44.92	-43.50	-35.90	-27.00	-8.90
5785MHz	Pass	5.685G	5.725G	PK	5.68556G	7.60	-45.22	-44.25	-41.70	-34.10	-0.69	-33.41
5785MHz	Pass	5.85G	5.89G	PK	5.88968G	7.60	-43.03	-44.58	-40.73	-33.13	-0.86	-32.27
5785MHz	Pass	5.89G	6.5G	PK	6.05279G	7.60	-44.79	-46.31	-42.47	-34.87	-27.00	-7.87
5825MHz	Pass	4.9G	5.685G	AV	5.44253G	7.76	-57.40	-57.77	-54.57	-46.81	-41.20	-5.61
5825MHz	Pass	4.9G	5.685G	PK	5.61926G	7.76	-46.09	-46.57	-43.31	-35.55	-27.00	-8.55
5825MHz	Pass	5.685G	5.725G	PK	5.68516G	7.76	-46.58	-45.82	-43.17	-35.41	-0.98	-34.43
5825MHz	Pass	5.85G	5.89G	PK	5.88976G	7.76	-43.60	-43.61	-40.59	-32.83	-0.92	-31.91
5825MHz	Pass	5.89G	6.5G	PK	5.92706G	7.76	-45.28	-43.84	-41.49	-33.73	-27.00	-6.73
11a40_Nss1(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	4.9G	5.645G	AV	5.42821G	7.60	-57.15	-57.37	-54.25	-46.65	-41.20	-5.45
5755MHz	Pass	4.9G	5.645G	PK	5.64267G	7.60	-47.90	-43.78	-42.36	-34.76	-27.00	-7.76
5755MHz	Pass	5.645G	5.725G	PK	5.6474G	7.60	-46.26	-42.61	-41.05	-33.45	-27.00	-6.45
5755MHz	Pass	5.85G	5.93G	PK	5.92664G	7.60	-44.04	-44.52	-41.26	-33.66	-27.00	-6.66
5755MHz	Pass	5.93G	6.5G	PK	5.94454G	7.60	-46.71	-44.27	-42.31	-34.71	-27.00	-7.71
5795MHz	Pass	4.9G	5.645G	AV	5.44739G	7.76	-56.44	-58.90	-54.49	-46.73	-41.20	-5.53
5795MHz	Pass	4.9G	5.645G	PK	5.58009G	7.76	-46.11	-45.60	-42.84	-35.08	-27.00	-8.08
5795MHz	Pass	5.645G	5.725G	PK	5.649G	7.76	-45.26	-45.03	-42.13	-34.37	-27.00	-7.37
5795MHz	Pass	5.85G	5.93G	PK	5.92472G	7.76	-43.59	-44.32	-40.93	-33.17	-26.79	-6.38
5795MHz	Pass	5.93G	6.5G	PK	5.93791G	7.76	-44.56	-45.16	-41.84	-34.08	-27.00	-7.08
11a80_Nss1(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	4.9G	5.565G	AV	5.45278G	7.60	-56.93	-57.86	-54.36	-46.76	-41.20	-5.56
5775MHz	Pass	4.9G	5.565G	PK	5.56226G	7.60	-49.25	-42.81	-41.92	-34.32	-27.00	-7.32
5775MHz	Pass	5.565G	5.725G	PK	5.63188G	7.60	-43.55	-39.15	-37.80	-30.20	-27.00	-3.20
5775MHz	Pass	5.85G	6.01G	PK	5.93608G	7.60	-43.49	-39.61	-38.12	-30.52	-27.00	-3.52
5775MHz	Pass	6.01G	6.5G	PK	6.02868G	7.60	-44.74	-45.56	-42.12	-34.52	-27.00	-7.52
802.11ax HEW20_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	4.9G	5.685G	AV	5.45951G	7.60	-58.02	-57.35	-54.66	-47.06	-41.20	-5.86
5745MHz	Pass	4.9G	5.685G	PK	5.64349G	7.60	-48.30	-43.95	-42.59	-34.99	-27.00	-7.99
5745MHz	Pass	5.685G	5.725G	PK	5.68588G	7.60	-43.91	-45.08	-41.45	-33.85	-0.45	-33.40
5745MHz	Pass	5.85G	5.89G	PK	5.89G	7.60	-47.31	-45.01	-43.00	-35.40	-1.10	-34.30
5745MHz	Pass	5.89G	6.5G	PK	6.03442G	7.60	-47.09	-43.57	-41.97	-34.37	-27.00	-7.37
5785MHz	Pass	4.9G	5.685G	AV	5.41996G	7.60	-57.55	-56.88	-54.19	-46.59	-41.20	-5.39
5785MHz	Pass	4.9G	5.685G	PK	5.59031G	7.60	-46.29	-45.96	-43.11	-35.51	-27.00	-8.51
5785MHz	Pass	5.685G	5.725G	PK	5.68588G	7.60	-44.34	-44.69	-41.50	-33.90	-0.45	-33.45
5785MHz	Pass	5.725G	5.85G	PK	5.85G	7.60	-46.27	-45.29	-42.74	-35.14	27.00	-62.14
5785MHz	Pass	5.85G	5.89G	PK	5.89G	7.60	-43.84	-44.90	-41.33	-33.73	-1.10	-32.63
5785MHz	Pass	5.89G	6.5G	PK	5.93552G	7.60	-46.17	-44.52	-42.26	-34.66	-27.00	-7.66
5825MHz	Pass	4.9G	5.685G	AV	5.42889G	7.76	-57.16	-58.30	-54.68	-46.92	-41.20	-5.72
5825MHz	Pass	4.9G	5.685G	PK	5.57275G	7.76	-46.32	-46.20	-43.25	-35.49	-27.00	-8.49
5825MHz	Pass	5.685G	5.725G	PK	5.685G	7.76	-46.05	-46.76	-43.38	-35.62	-1.10	-34.52
5825MHz	Pass	5.85G	5.89G	PK	5.88976G	7.76	-44.85	-44.40	-41.61	-33.85	-0.92	-32.93
5825MHz	Pass	5.89G	6.5G	PK	5.93049G	7.76	-43.45	-44.14	-40.77	-33.01	-27.00	-6.01
802.11ax HEW40_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5755MHz	Pass	4.9G	5.645G	AV	5.41247G	7.60	-57.61	-57.45	-54.52	-46.92	-41.20	-5.72
5755MHz	Pass	4.9G	5.645G	PK	5.63951G	7.60	-45.41	-44.80	-42.08	-34.48	-27.00	-7.48

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	P2 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
5755MHz	Pass	5.645G	5.725G	PK	5.6474G	7.60	-45.08	-43.21	-41.03	-33.43	-27.00	-6.43
5755MHz	Pass	5.85G	5.93G	PK	5.92984G	7.60	-44.46	-45.33	-41.86	-34.26	-27.00	-7.26
5755MHz	Pass	5.93G	6.5G	PK	5.96969G	7.60	-46.43	-44.64	-42.43	-34.83	-27.00	-7.83
5795MHz	Pass	4.9G	5.645G	AV	5.45288G	7.76	-58.05	-57.07	-54.52	-46.76	-41.20	-5.56
5795MHz	Pass	4.9G	5.645G	PK	5.64444G	7.76	-44.77	-48.02	-43.09	-35.33	-27.00	-8.33
5795MHz	Pass	5.645G	5.725G	PK	5.64548G	7.76	-45.86	-44.79	-42.28	-34.52	-27.00	-7.52
5795MHz	Pass	5.85G	5.93G	PK	5.92776G	7.76	-43.23	-45.21	-41.10	-33.34	-27.00	-6.34
5795MHz	Pass	5.93G	6.5G	PK	5.93143G	7.76	-47.01	-43.36	-41.80	-34.04	-27.00	-7.04
802.11ax HEW80_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	4.9G	5.565G	AV	5.41878G	7.60	-56.72	-58.40	-54.47	-46.87	-41.20	-5.67
5775MHz	Pass	4.9G	5.565G	PK	5.52485G	7.60	-47.95	-45.37	-43.46	-35.86	-27.00	-8.86
5775MHz	Pass	5.565G	5.725G	PK	5.64884G	7.60	-43.25	-39.72	-38.13	-30.53	-27.00	-3.53
5775MHz	Pass	5.85G	6.01G	PK	5.92936G	7.60	-42.15	-42.05	-39.09	-31.49	-27.00	-4.49
5775MHz	Pass	6.01G	6.5G	PK	6.13109G	7.60	-43.59	-48.76	-42.44	-34.84	-27.00	-7.84

DG = Directional Gain;

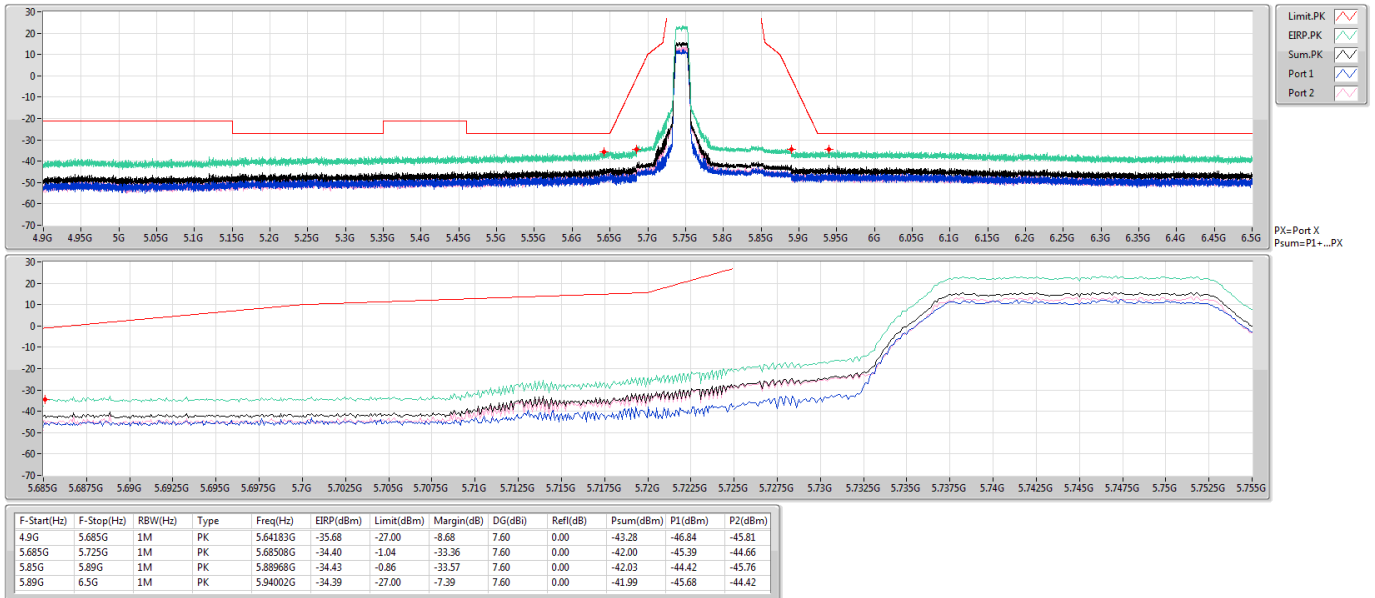
PX=Port X; Psum=P1+.P2+...PX

11a20_Nss1,(6Mbps)_2TX

5745MHz

CSE-PK

06/03/2020

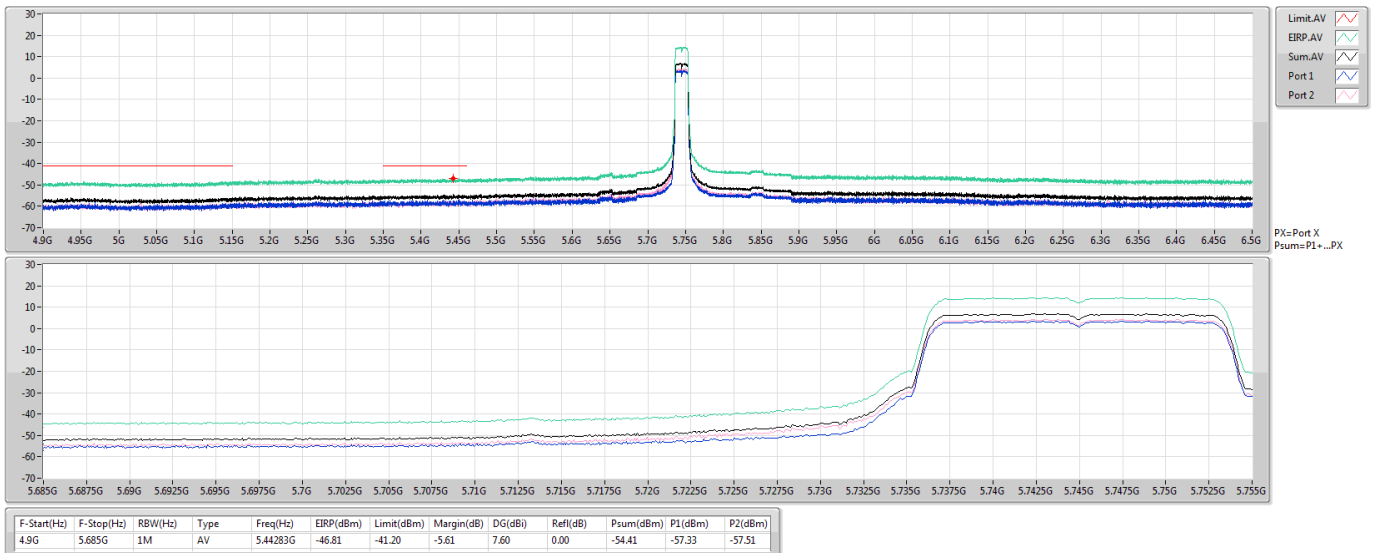


11a20_Nss1,(6Mbps)_2TX

5745MHz

CSE-AV

06/03/2020

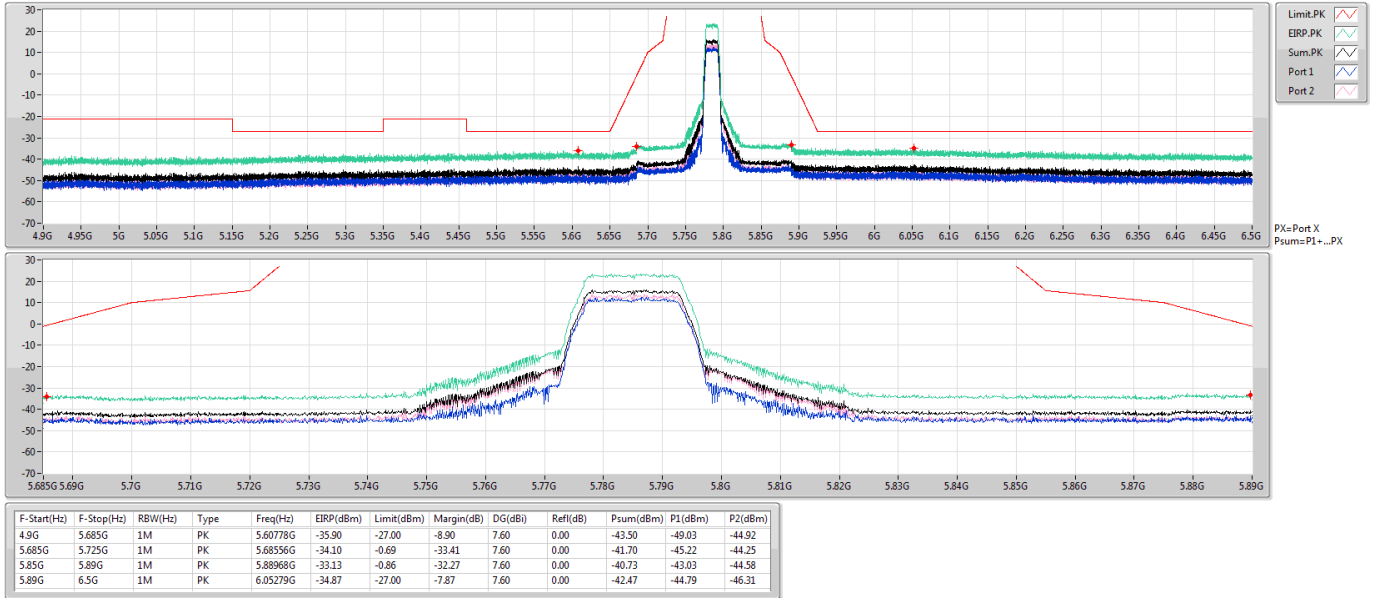


11a20_Nss1,(6Mbps)_2TX

5785MHz

CSE-PK

06/03/2020

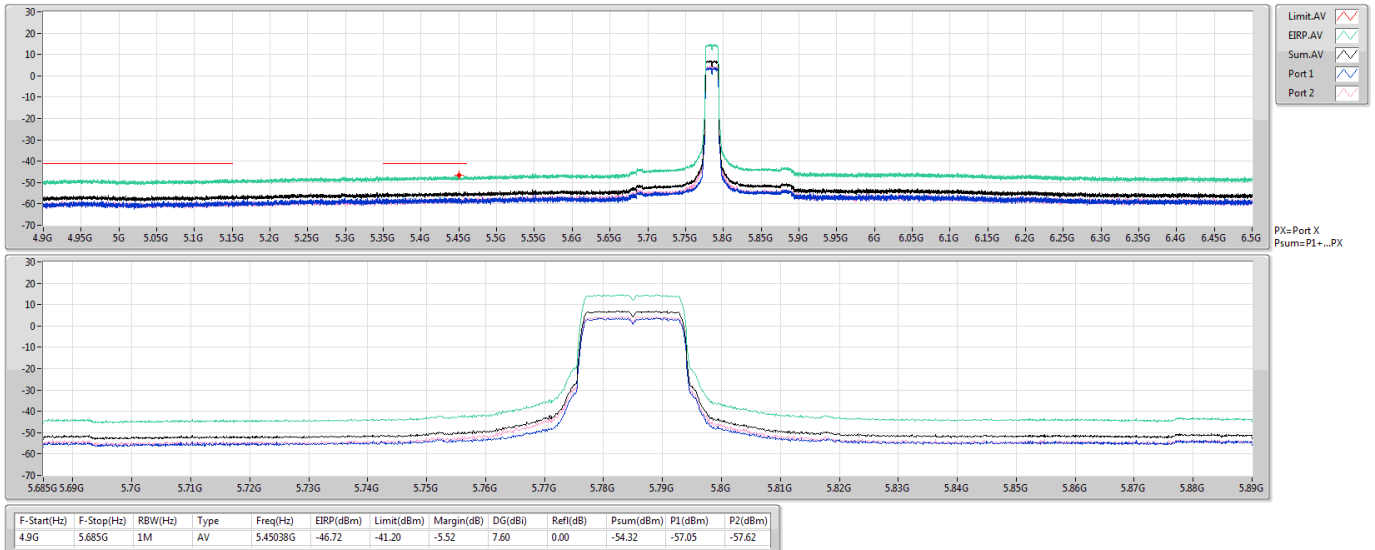


11a20_Nss1,(6Mbps)_2TX

5785MHz

CSE-AV

06/03/2020

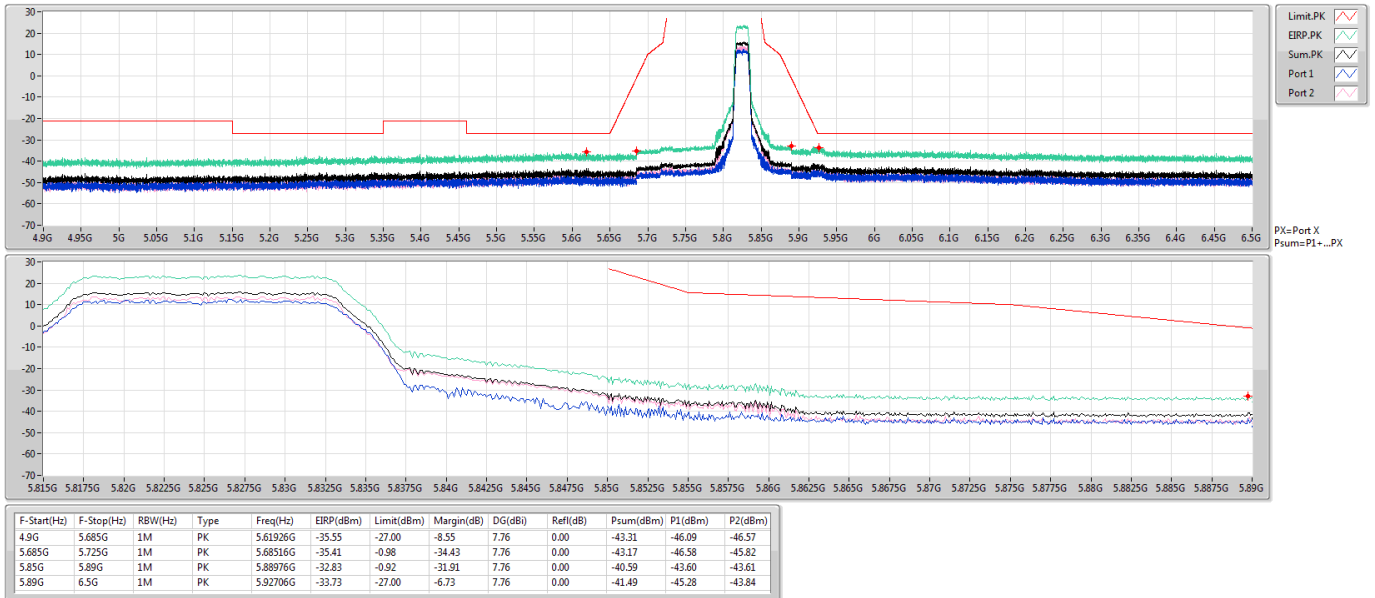


11a20_Nss1,(6Mbps)_2TX

5825MHz

CSE-PK

06/03/2020

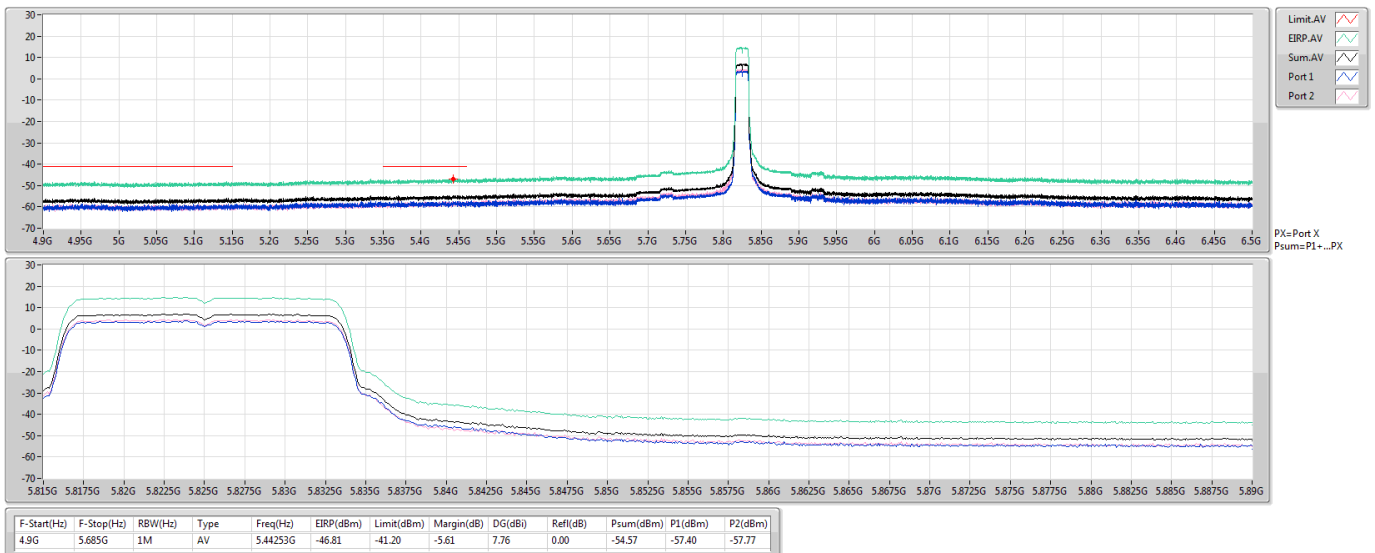


11a20_Nss1,(6Mbps)_2TX

5825MHz

CSE-AV

06/03/2020

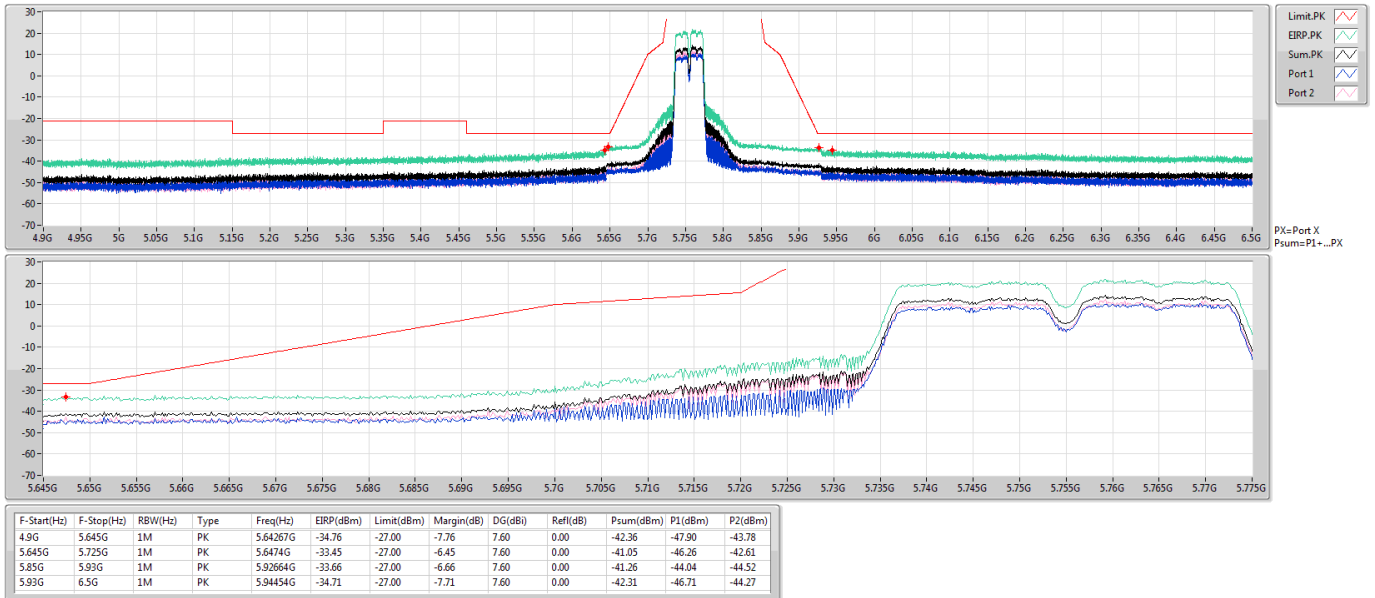


11a40_Nss1,(6Mbps)_2TX

5755MHz

CSE-PK

06/03/2020

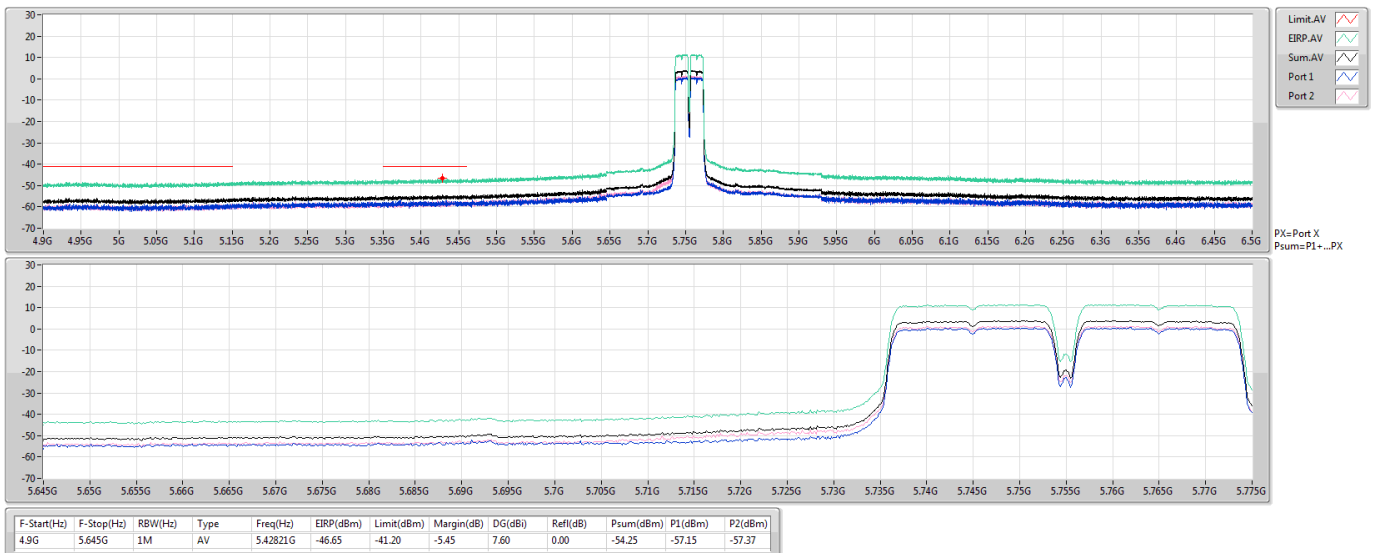


11a40_Nss1,(6Mbps)_2TX

5755MHz

CSE-AV

06/03/2020

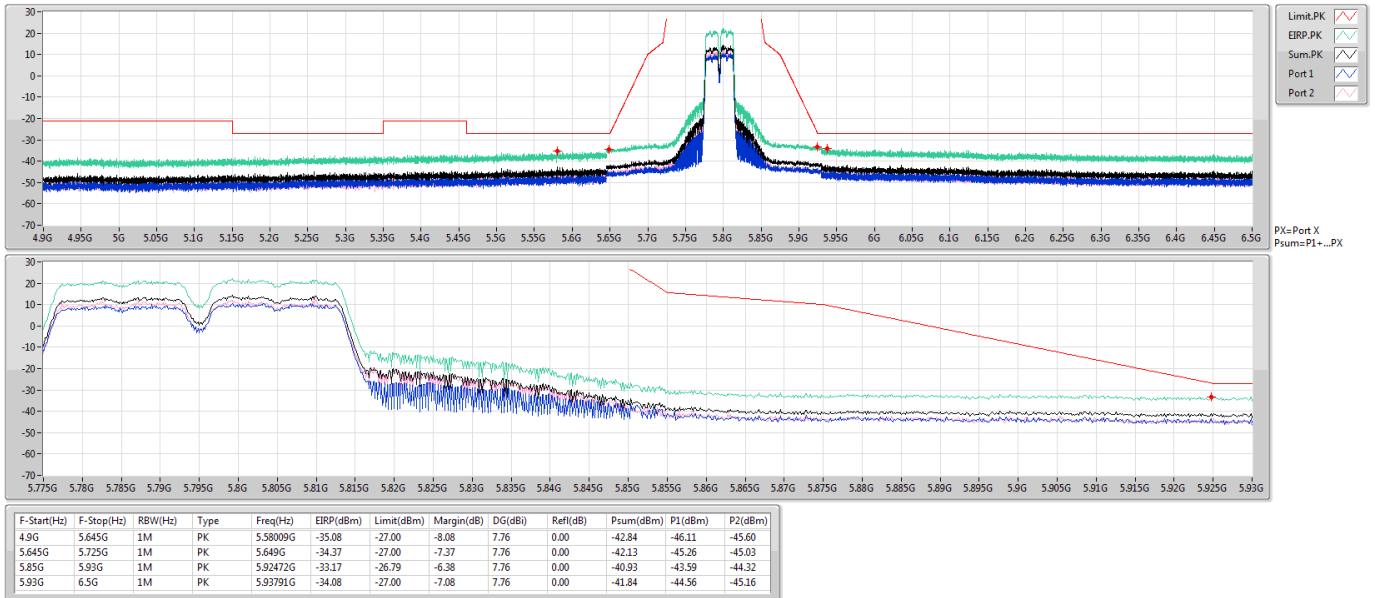


11a40_Nss1,(6Mbps)_2TX

5795MHz

CSE-PK

06/03/2020

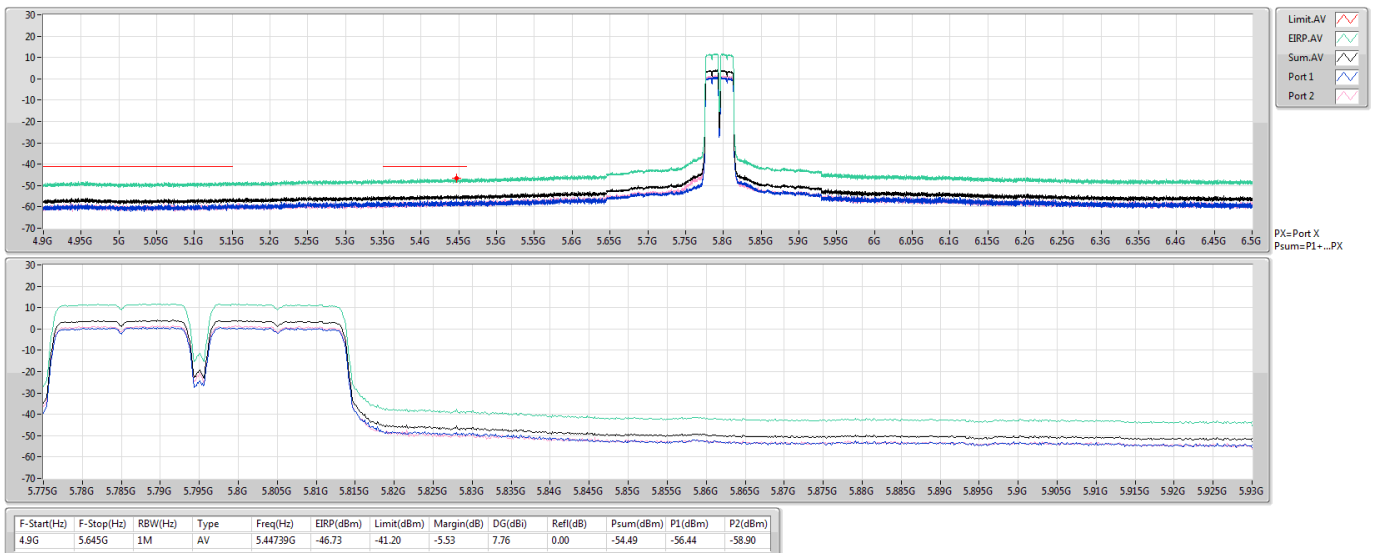


11a40_Nss1,(6Mbps)_2TX

5795MHz

CSE-AV

06/03/2020

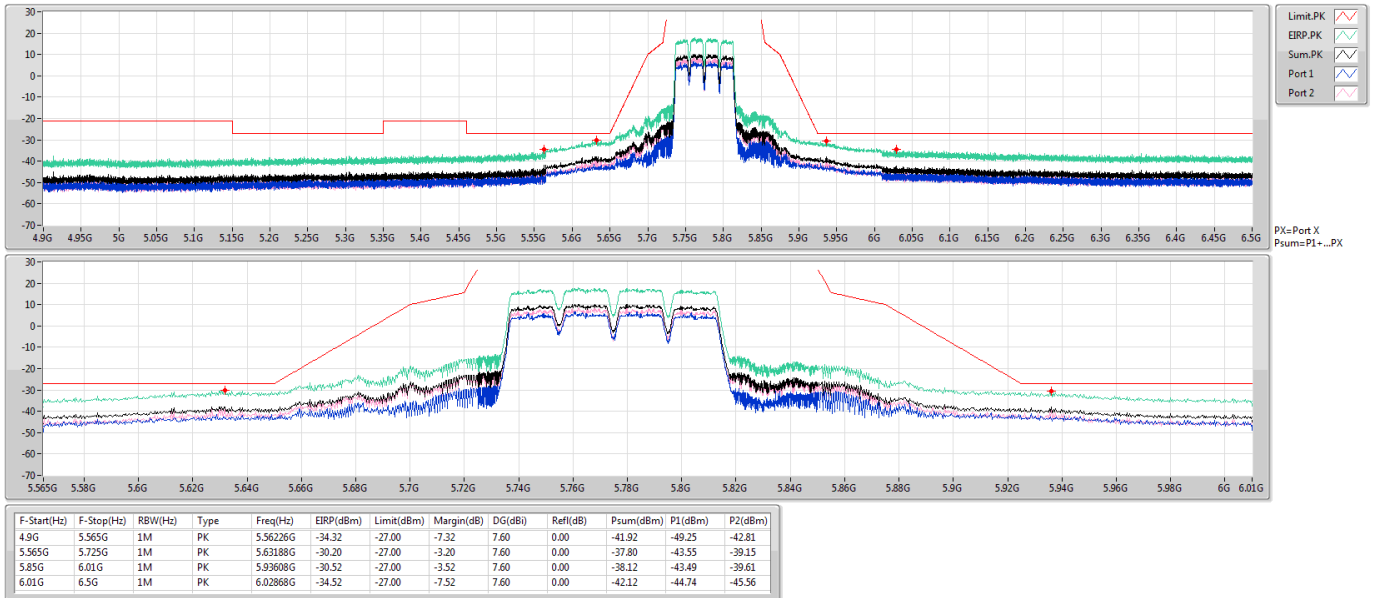


11a80_Nss1,(6Mbps)_2TX

5775MHz

CSE-PK

06/03/2020

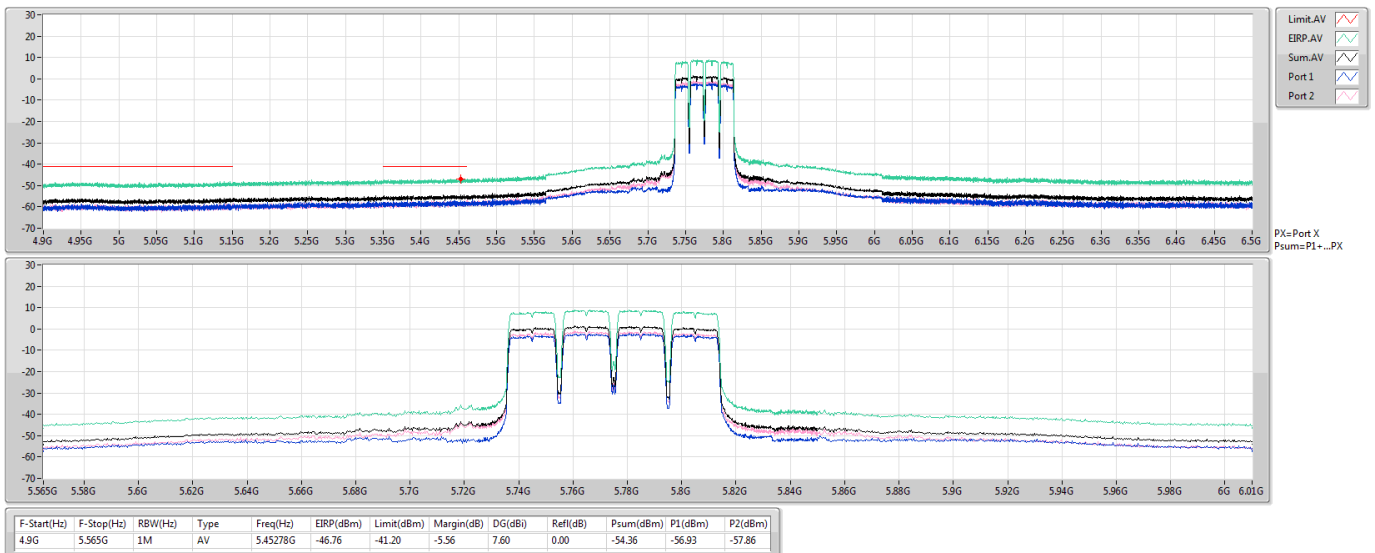


11a80_Nss1,(6Mbps)_2TX

5775MHz

CSE-AV

06/03/2020

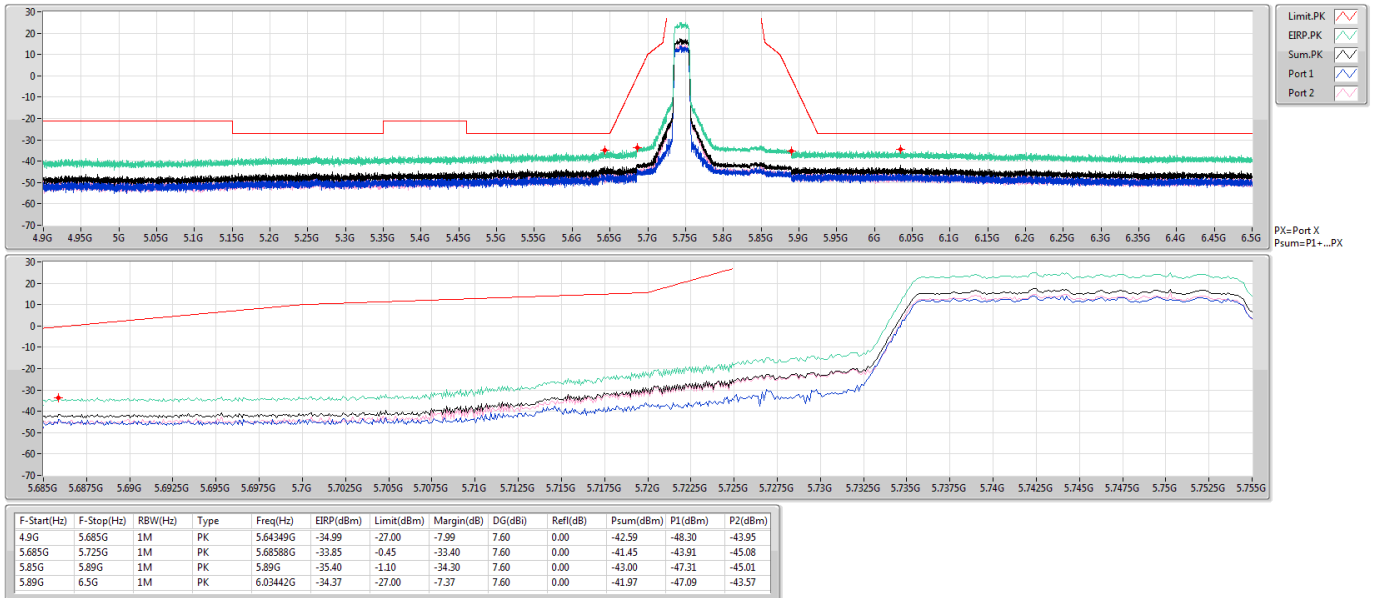


802.11ax HEW20_Nss1,(MCS0)_2TX

5745MHz

CSE-PK

06/03/2020

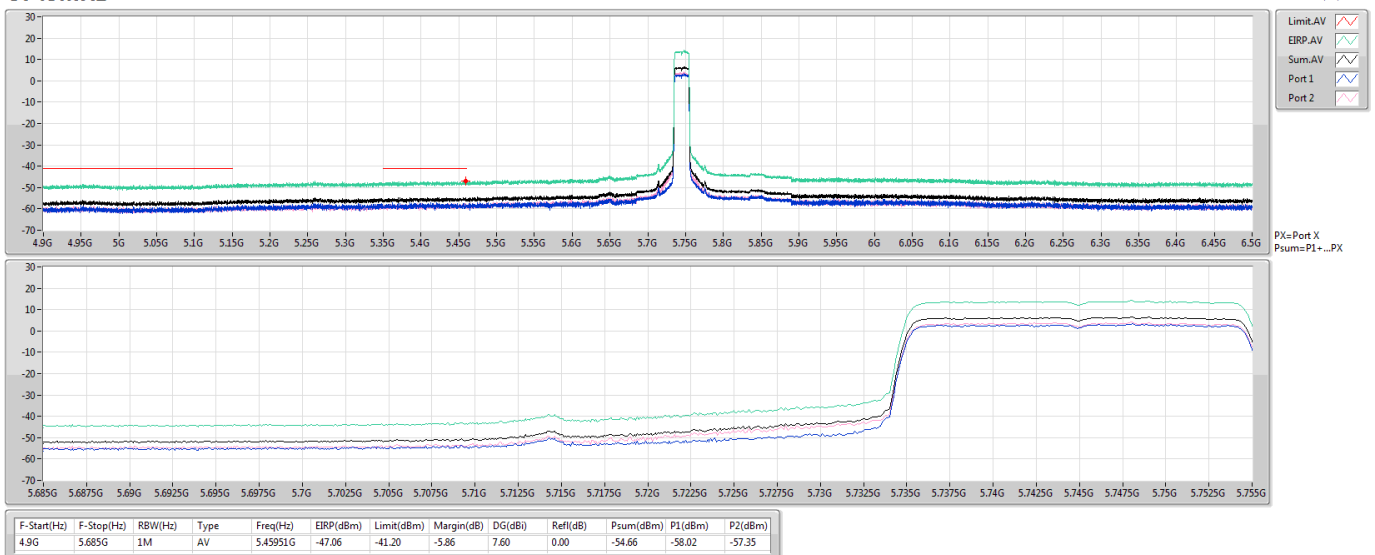


802.11ax HEW20_Nss1,(MCS0)_2TX

5745MHz

CSE-AV

06/03/2020

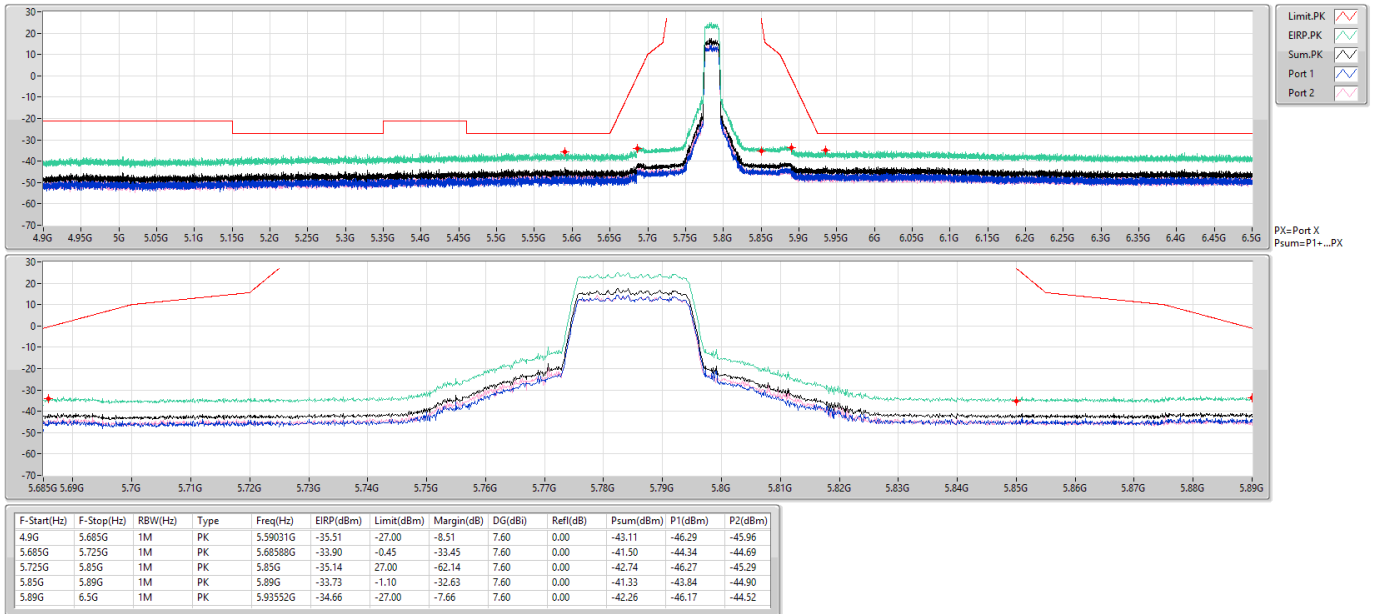


802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz

CSE-PK

28/06/2022

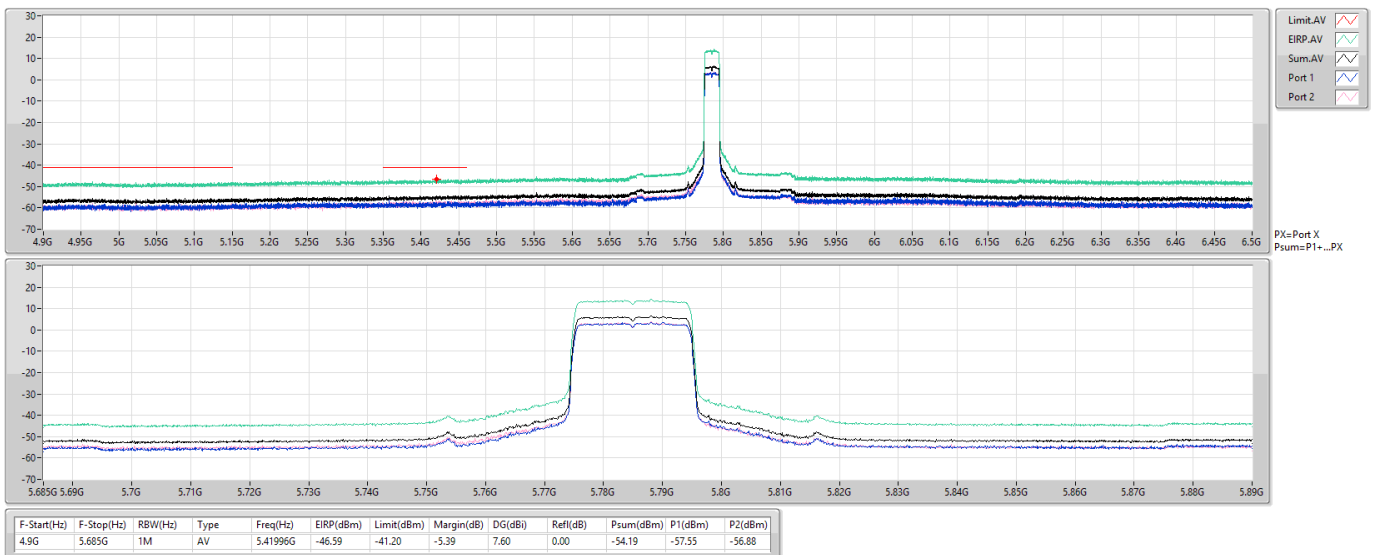


802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz

CSE-AV

28/06/2022

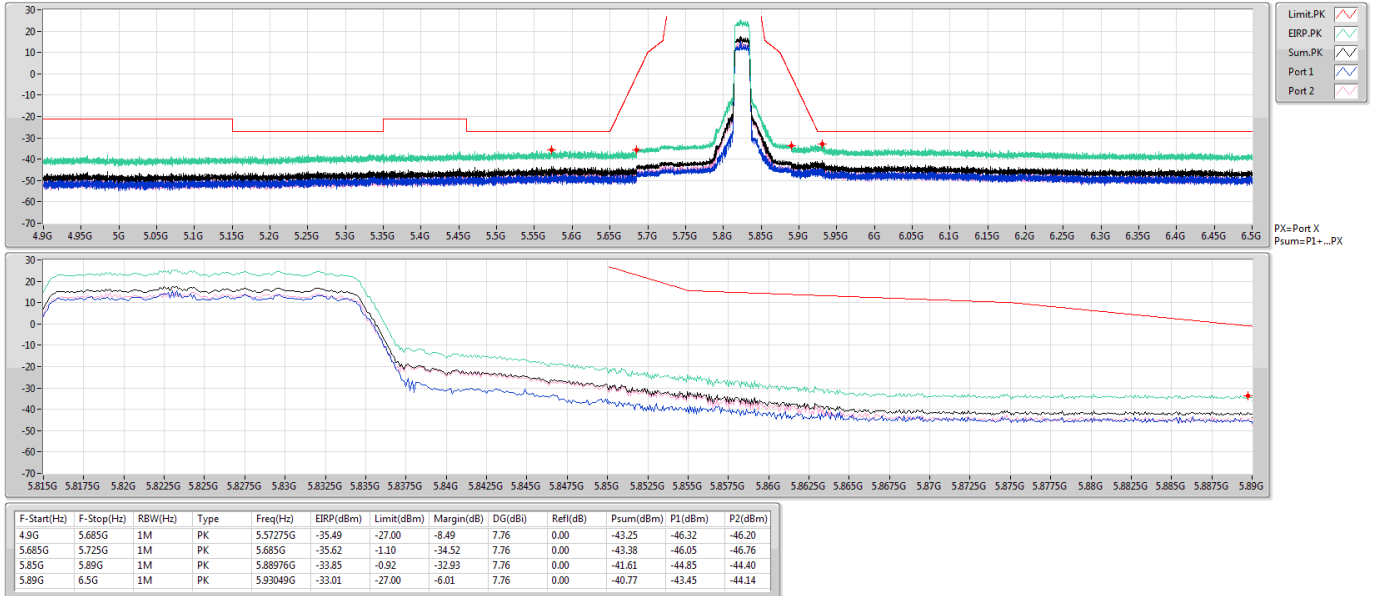


802.11ax HEW20_Nss1,(MCS0)_2TX

5825MHz

CSE-PK

06/03/2020

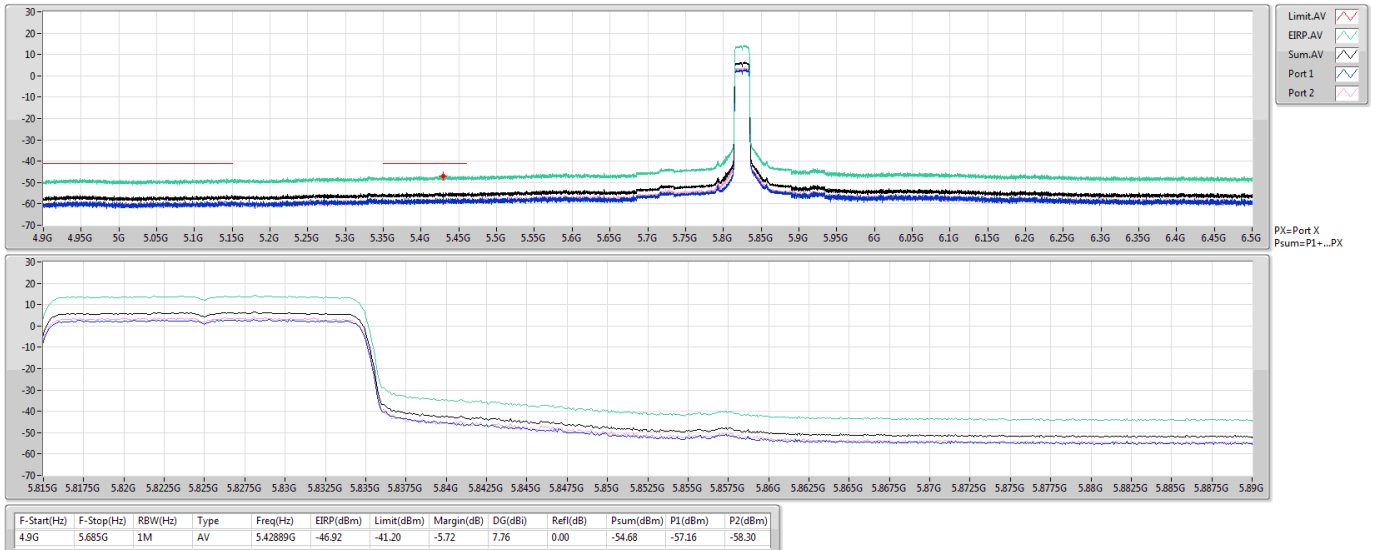


802.11ax HEW20_Nss1,(MCS0)_2TX

5825MHz

CSE-AV

06/03/2020

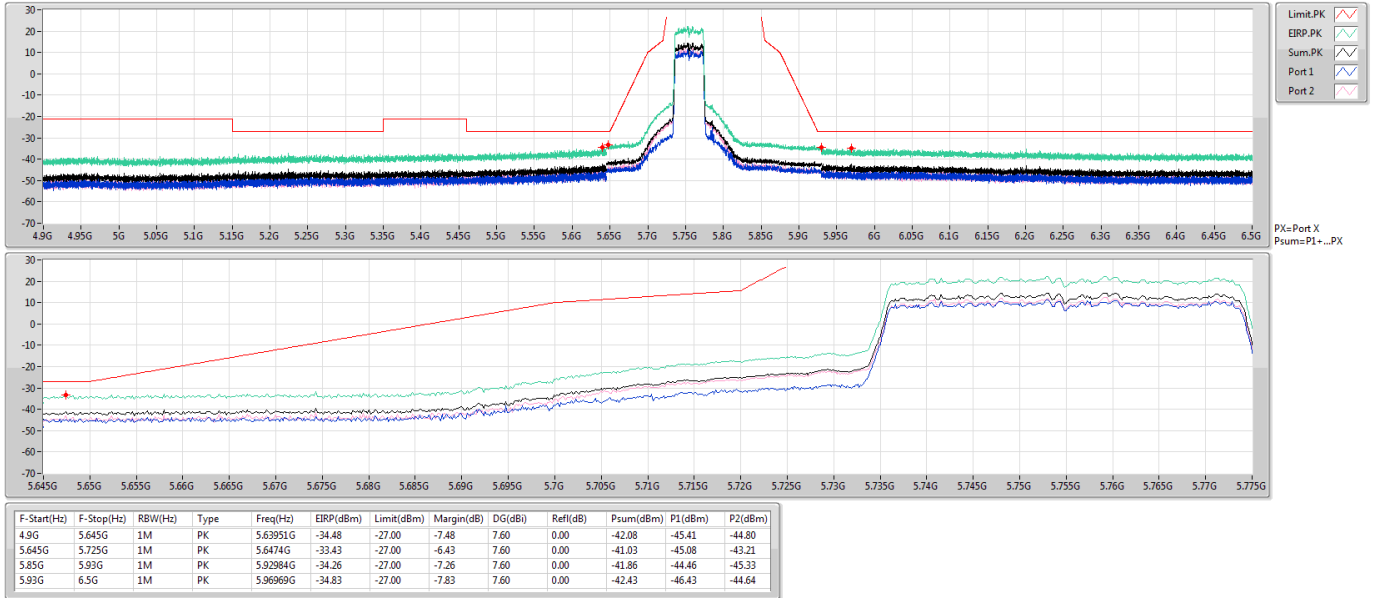


802.11ax HEW40_Nss1,(MCS0)_2TX

5755MHz

CSE-PK

06/03/2020

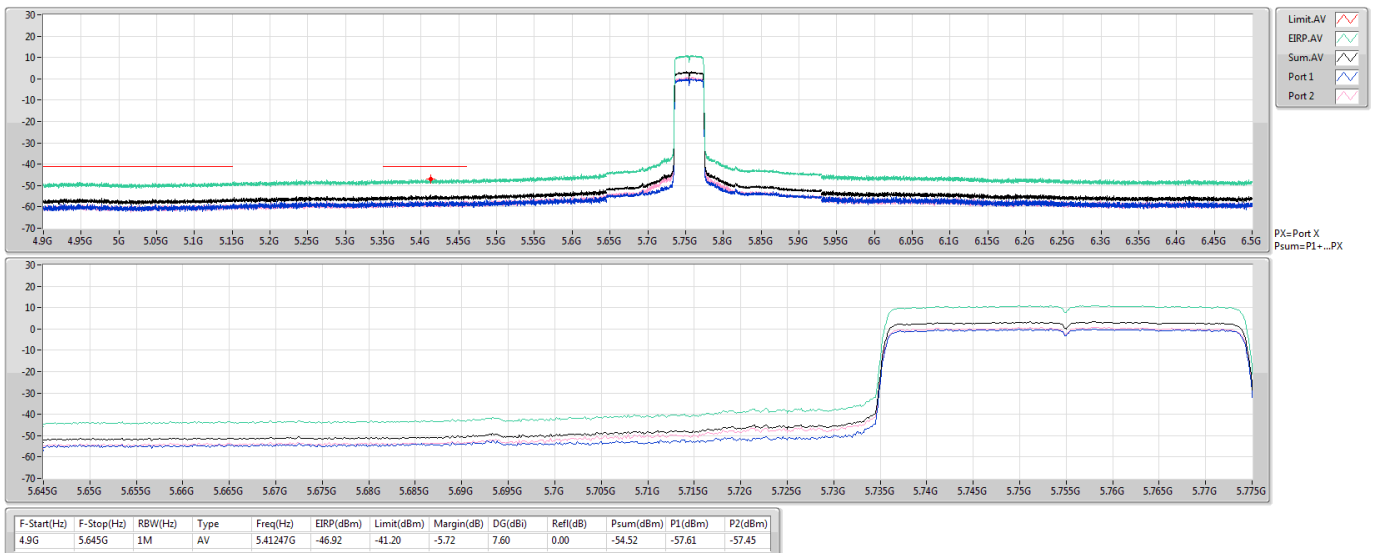


802.11ax HEW40_Nss1,(MCS0)_2TX

5755MHz

CSE-AV

06/03/2020

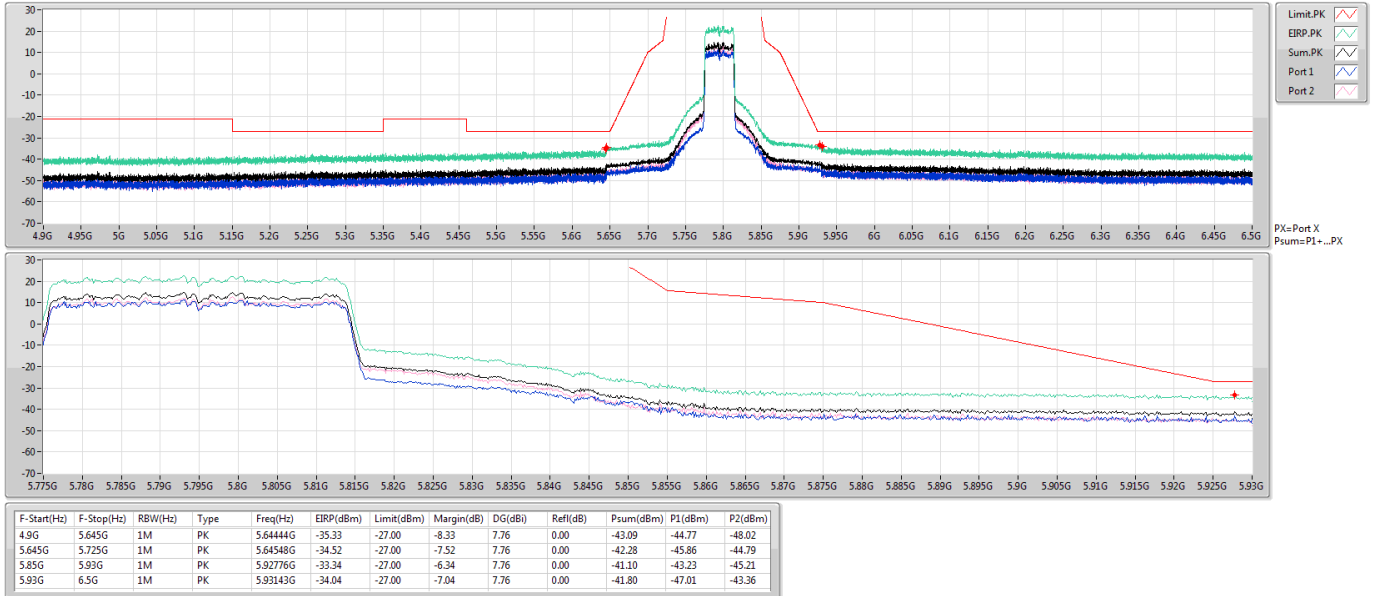


802.11ax HEW40_Nss1,(MCS0)_2TX

CSE-PK

5795MHz

06/03/2020

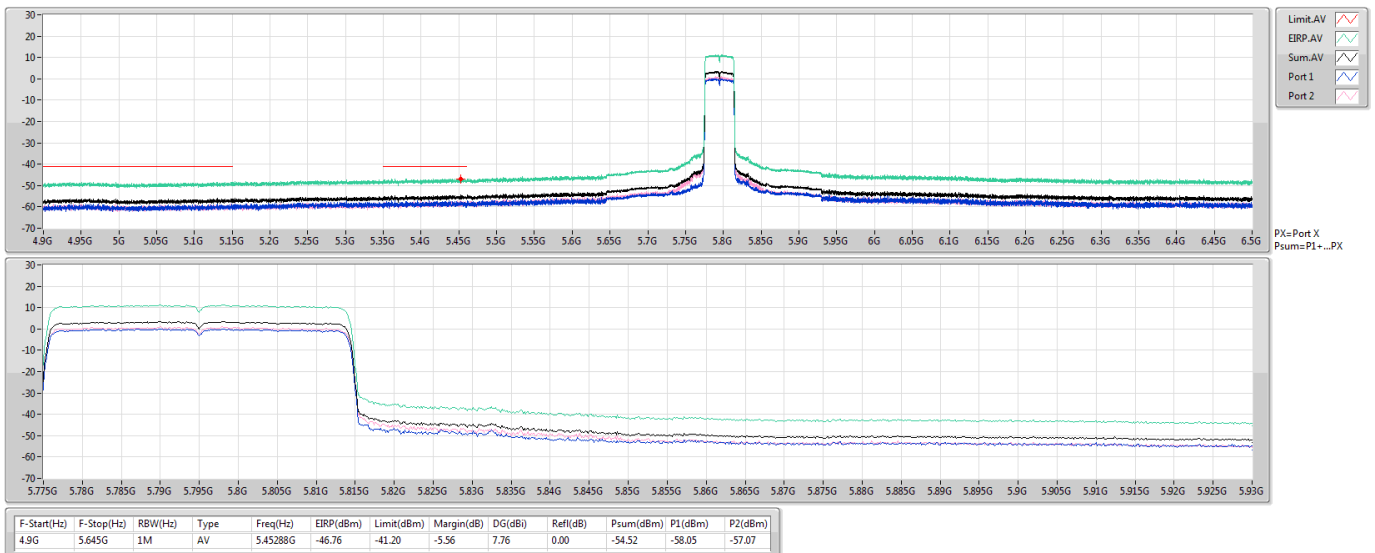


802.11ax HEW40_Nss1,(MCS0)_2TX

CSE-AV

5795MHz

06/03/2020

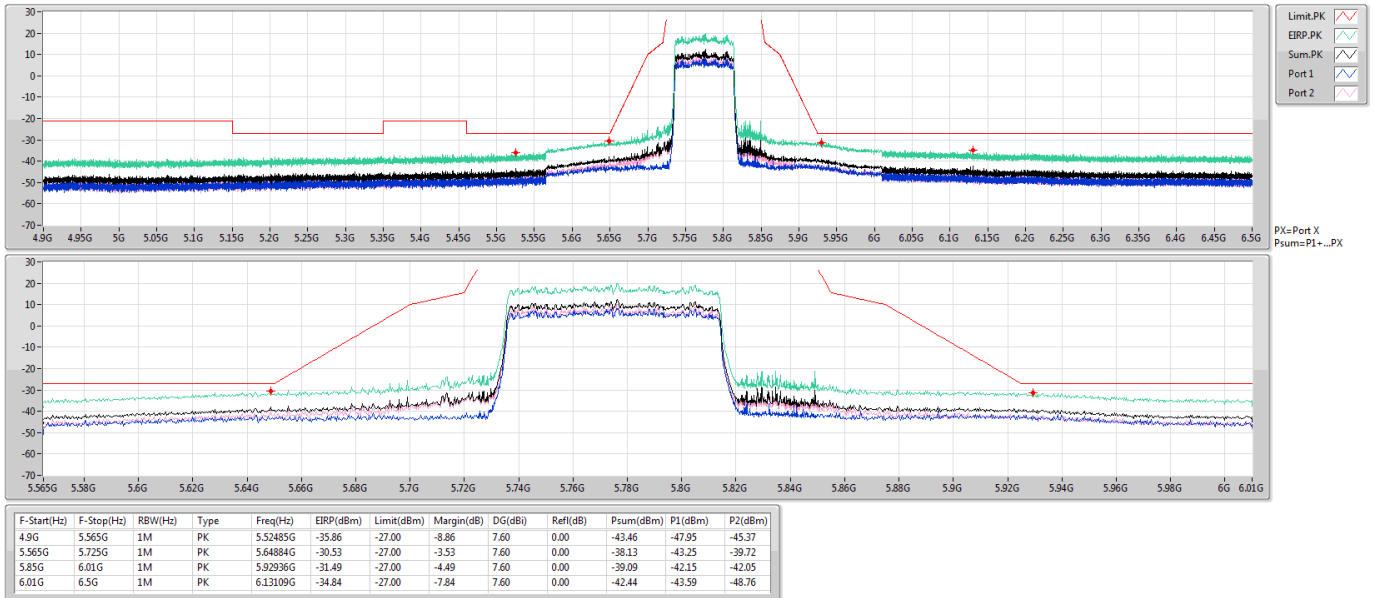


802.11ax HEW80_Nss1,(MCS0)_2TX

5775MHz

CSE-PK

06/03/2020



802.11ax HEW80_Nss1,(MCS0)_2TX

5775MHz

CSE-AV

06/03/2020

