RADIO TEST REPORT

FCC ID	:	UDX-600191010
Equipment	:	Catalyst Wireless 9163E Series Wi-Fi 6E Access Point
Brand Name	:	CISCO
Model Name	:	CW9163E-B, CW9163E-MR
Applicant	:	Cisco Systems, Inc. 170 West Tasman Drive, San Jose, CA 95134 USA
Manufacturer	:	Cisco Systems, Inc. 170 West Tasman Drive, San Jose, CA 95134 USA
Standard	:	47 CFR FCC Part 15.407

The product was received on Oct. 12, 2023, and testing was started from Oct. 17, 2023 and completed on Nov. 23, 2023. 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 variant 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.)

Table of Contents

History of this test report **3**

Summary of Test Result **4**

1 General Description **5**

1.1 Information 5
1.2 Applicable Standards 14
1.3 Testing Location Information 14
1.4 Measurement Uncertainty 14

2 Test Configuration of EUT **15**

2.1 Test Channel Mode 15
2.2 The Worst Case Measurement Configuration 17
2.3 EUT Operation during Test 20
2.4 Accessories 20
2.5 Support Equipment 20
2.6 Test Setup Diagram 21

3 Transmitter Test Result **24**

3.1 AC Power-line Conducted Emissions 24
3.2 Emission Bandwidth 26
3.3 Maximum Output Power 27
3.4 Power Spectral Density 29
3.5 Unwanted Emissions 32

4 Test Equipment and Calibration Data **36**

Appendix A. Test Results of AC Power-line Conducted Emissions

Appendix B. Test Results of Emission Bandwidth

Appendix C. Test Results of Maximum Output Power

Appendix D. Test Results of Power Spectral Density

Appendix E. Test Results of Unwanted Emissions

Appendix F. Test Photos

Photographs of EUT v01

History of this test report

Report No.	Version	Description	Issued Date
FR340101-03AE	01	Initial issue of report	Mar. 12, 2024

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	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen
Report Producer: Wendy Pan

1 General Description

1.1 Information

1.1.1 RF General Information

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

For Radio 1

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11a	20	1TX/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	802.11n 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	802.11ac 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

For Scanning Radio 2

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11a	20	1TX
5.725-5.85GHz	802.11n HT20	20	1TX
5.725-5.85GHz	802.11ac VHT20	20	1TX
5.725-5.85GHz	802.11ax HEW20	20	1TX
5.725-5.85GHz	802.11n HT40	40	1TX
5.725-5.85GHz	802.11ac VHT40	40	1TX
5.725-5.85GHz	802.11ax HEW40	40	1TX
5.725-5.85GHz	802.11ac VHT80	80	1TX
5.725-5.85GHz	802.11ax HEW80	80	1TX

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

Set	Ant.	2.4GHz Port	5GHz Port	6GHz Port	Bluetooth/ Zigbee	GPS	Brand	Model Name	Antenna Type	Connector	Remark	Gain (dBi)
1	1	2	2	-	-	-	CISCO	CW-ANT-O1-NS-00	Dipole	N-Type	External Antenna	Note 1
	2	1	1	-	-	-	CISCO	CW-ANT-O1-NS-00	Dipole	N-Type	External Antenna	
	3	-	-	1	-	-	CISCO	CW-ANT-O1-NS-00	Dipole	N-Type	External Antenna	
	4	-	-	2	-	-	CISCO	CW-ANT-O1-NS-00	Dipole	N-Type	External Antenna	
2	5	1	1	1	-	-	AWAN	A8M6P-100005	PIFA	N-Type	Internal Antenna	
3	6	-	-	-	1	-	AWAN	A8M6P-100003	PIFA	N-Type	Internal Antenna	
4	7	-	-	-	-	1	AWAN	A8M6P-100004	PIFA	N-Type	Internal Antenna	
5	8	-	-	-	-	2	CISCO	CW-ANT-GPS2-S-00	Patch	SMA	External Antenna	
6	9	2	2	-	-	-	CISCO	CW-ANT-D1-NS-00	Patch	N-Type	External Antenna	
	10	1	1	-	-	-	CISCO	CW-ANT-D1-NS-00	Patch	N-Type	External Antenna	
	11	-	-	1	-	-	CISCO	CW-ANT-D1-NS-00	Patch	N-Type	External Antenna	
	12	-	-	2	-	-	CISCO	CW-ANT-D1-NS-00	Patch	N-Type	External Antenna	

Note1:

Ant.	Gain (dBi)								
	2.4GHz	5GHz UNII 1	5GHz UNII 2A	5GHz UNII 2C	5GHz UNII 3	6GHz UNII 5	6GHz UNII 7	Bluetooth / Zigbee	GPS
1	4	8	8	8	8	-	-	-	-
2	4	8	8	8	8	-	-	-	-
3	-	-	-	-	-	8	8	-	-
4	-	-	-	-	-	8	8	-	-
5	4.9	3	3	3.1	3	2.8	3.2	-	-
6	-	-	-	-	-	-	-	5.7	-
7	-	-	-	-	-	-	-	-	3.7
8	-	-	-	-	-	-	-	-	3.18
9	8	9	9	9	9	-	-	-	-
10	8	9	9	9	9	-	-	-	-
11	-	-	-	-	-	9	9	-	-
12	-	-	-	-	-	9	9	-	-

Note2: The above information was declared by manufacturer.
Note3: The antenna 9~ 10 is the cross-polarized antenna; it doesn't need to evaluate array gain.
Note4: For radio 1: The EUT can be equipped with antenna set 1 or set 6 for radio 1.

Note5: 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	$Directional Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$
BF	$Directional Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$	$Directional Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$

Ex.

Directional Gain (NSS1) formula : $Directional Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$

NSS1(g1,1) = $10^{G1/20}$; NSS1(g1,2)= $10^{G2/20}$; NSS1(g1,2)= $10^{G3/20}$; NSS1(g1,2)= $10^{G4/20}$

gj,k =(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4))^2

DG = 10 log[(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4))^2 / N_{ANT}] => 10 log[($10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$)^2 / N_{ANT}]

Where ;

Set 1 Ant. Dipole

2.4G G1= 4 dBi ; G2= 4 dBi ;DG= 7.01dBi

5G G1= 8 dBi ; G2= 8 dBi ;DG= 11.01dBi

6G G1= 8 dBi ; G2= 8 dBi ;DG= 11.01dBi

Set 6 Ant. Patch Patch (Cross-Polarized Antenna)

2.4G G1= 8.00 dBi ;G2= 8.00 dBi ;

5G UNII-1 G1 = 9.00 dBi; G2 = 9.00 dBi;

5G UNII-2A G1 = 9.00 dBi; G2 = 9.00 dBi;

5G UNII-2C G1 = 9.00 dBi; G2 = 9.00 dBi;

5G UNII-3 G1 = 9.00 dBi; G2 = 9.00 dBi;

2.4G DG = 8.00 dBi

5G UNII-1 DG = 9.00 dBi

5G UNII-2A DG = 9.00 dBi

5G UNII-2C DG = 9.00 dBi

5G UNII-3 DG = 9.00 dBi

Set 6 Ant. Patch

6G G1= 9 dBi ; G2= 9 dBi ;DG= 12.01dBi

<For Radio 1 (2.4GHz/5GHz/6GHz Functions)>
IEEE 802.11a/b/g/n/VHT/ax
For 1TX/2RX:
The EUT supports the antenna with TX diversity functions.
Both Port 1 and Port 2 support transmit and receive functions, but only one of them will be used to transmit at one time.
For 2TX/2RX:
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
<For Scanning Radio 2 (2.4GHz/5GHz/6GHz Functions)>
IEEE 802.11a/b/g/n/VHT/ax
For 1TX/1RX:
Only Port 1 can be use as transmitting/receiving antenna.
<For Radio 3 / Bluetooth/Zigbee Functions>
For 1TX/1RX:
Only Port 1 can be use as transmitting/receiving antenna.
<For Radio 4 / GPS Functions>
For 1RX:
The EUT supports the antenna with RX diversity functions.
Both Port 1 and Port 2 support receive functions, but only one of them will be used to receive at one time.

1.1.3 Mode Test Duty Cycle

For Radio 1 + Set 6 Ant.

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.942	0.26	1.977m	1k
802.11ax HEW20	0.801	0.96	5.453m	300
802.11ax HEW20-BF	0.801	0.96	5.452m	300
802.11ax HEW40	0.799	0.97	5.453m	300
802.11ax HEW40-BF	0.802	0.96	5.453m	300
802.11ax HEW80	0.801	0.96	5.452m	300
802.11ax HEW80-BF	0.799	0.97	5.453m	300

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 11n/VHT/11ax in 2.4GHz and 11n/11ac/11ax in 5GHz.			
Function	☒	Outdoor P2M	☐	Indoor P2M
	☐	Fixed P2P	☐	Client
	☒	Point-to-multipoint	☐	Point-to-point
Channel Puncturing Function	☐	Supported	☒	Unsupported
Support RU	☒	Full RU	☐	Partial RU
Test Software Version	QSPR Version 5.0-00202			

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	SW
CW9163E-B	Cisco
CW9163E-MR	Meraki

Note1: From the above models, model: CW9163E-B was selected as representative model for the test and its data was recorded in this report.
Note2: The above information was declared by manufacturer.

1.1.6 Table of Serial Number

Test items	Serial Number
1. AC Power-line Conducted Emissions 2. Radiated Emission Co-location (As below for Non Beamforming mode) 3. Emission Bandwidth 4. Maximum Output Power 5. Power Spectral Density 6. Unwanted Emissions below 1GHz 7. Unwanted Emissions above 1GHz	DSM2711000W
(As below for Beamforming mode) 8. Maximum Output Power	DSM2711001S

Note: The above information was declared by manufacturer.

1.1.7 Table for Radio Function

Radio	Support Band
1	2.4GHz / 5GHz UNII 1~UNII 3 / 6GHz UNII5 , UNII 7
2	Scanning 2.4GHz / 5GHz UNII 1~UNII 3 / 6GHz UNII5 , UNII 7
3	Bluetooth / Zigbee
4	GPS

Note1: The above information was declared by manufacturer.
Note2: The Radio 1 and Radio 2 can't be operated simultaneously.

1.1.8 Table for EUT Information

EUT	RJ-45 Connector	Console Connector
1	Brand Name: UDE Model Name: R66-MK-3001	Brand Name: UDE Model Name: R66-MK-2001
2	Brand Name: ODS Model Name: CMK-RJ45-CAP	Brand Name: ODS Model Name: CMK-RJ45-CG

Note1: From the above EUTs, EUT 1 was selected as representative EUT for all the tests and its data was recorded in this report.
Note2: The above information was declared by manufacturer.

1.1.9 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR340101AE

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

Modifications	Performance Checking
1. Adding one set antenna (antenna set 6) with different antenna type and higher gain for Radio 1 use only.	All test items (Except Radiated Emission Co-location)
2. Adding a bracket of antenna and used for antenna set 6. 3. Revise the typo in antenna model names to “CW-ANT-O1-NS-00” from “CW-ANT-O1-NS” and to “CW-ANT-GPS2-S-00” from “CW-ANT-GPS2”.	After evaluating, it is not necessary to re-test all test items.

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 ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	Ken Yeh	20.5~21.3 / 63~67	Oct. 17, 2023~Oct. 31, 2023
Radiated below 1GHz	03CH01-CB	Jackson Peng	21.2-22.3 / 56-59	Oct. 17, 2023~Nov.17, 2023
Radiated above 1GHz	03CH03-CB	Jackson Peng	22.7-23.8 / 56-59	Oct. 17, 2023~Nov.17, 2023
AC Conduction	CO01-CB	Joe Chu	22~23 / 54~55	Nov. 23, 2023

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.2%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

For Radio 1 + Set 6 Ant.

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5745MHz	26
5785MHz	26
5825MHz	26
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5745MHz	26
5785MHz	26
5825MHz	26
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5755MHz	25
5795MHz	26
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5775MHz	22.5
802.11a_Nss1,(6Mbps)_1TX	-
5745MHz	27
5785MHz	27
5825MHz	27
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5745MHz	27
5785MHz	27
5825MHz	27
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5755MHz	26.5
5795MHz	27
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5775MHz	23
802.11a_Nss1,(6Mbps)_2TX	-
5745MHz	23.5
5785MHz	23.5
5825MHz	24
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5745MHz	24
5785MHz	24
5825MHz	24.5
802.11ax HEW40_Nss1,(MCS0)_2TX	-

Mode	Power Setting
5755MHz	23.5
5795MHz	23.5
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5775MHz	20.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5745MHz	24
5785MHz	24
5825MHz	24.5
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5755MHz	23.5
5795MHz	23.5
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5775MHz	20.5

Note:
- Evaluated HEW20/HEW40/HEW80 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80 mode are the same or lower than HEW20/HEW40/HEW80.
- The EUT supports beamforming and CDD modes, and the CDD mode is the worst case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluates the output power.

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. The EUT powered by PoE 1~5, and “PoE 3” has been evaluated to be the worst case. Thus, the measurement will follow this same test mode. 2. There are EUT 1 and EUT 2, and “EUT 1” has been evaluated to be the worst case. Thus, the measurement will follow this same test mode.	
1	EUT 1 + Radio 1 (2.4GHz) + PoE 3 + Set 6 Ant.
2	EUT 1 + Radio 1 (5GHz) + PoE 3 + Set 6 Ant.
3	EUT 1 + Radio 1 (6GHz) + PoE 3 + Set 6 Ant.
For operating mode 1 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
Test Condition	Conducted measurement at transmit chains
1	EUT 1 + Radio 1 + Set 6 Ant.

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1. After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration. 2. The EUT powered by PoE 1~5, and "PoE 5" has been evaluated to be the worst case. Thus, the measurement will follow this same test mode. 3. There are EUT 1 and EUT 2, and "EUT 1" has been evaluated to be the worst case. Thus, the measurement will follow this same test mode.	
1	EUT 1 in Y axis + Radio 1 (2.4GHz) + PoE 5 + Set 6 Ant.
2	EUT 1 in Y axis + Radio 1 (5GHz) + PoE 5 + Set 6 Ant.
3	EUT 1 in Y axis + Radio 1 (6GHz) + PoE 5 + Set 6 Ant.
For operating mode 3 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
	After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT 1 in Y axis + Radio 1 + Set 6 Ant.

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 2.4GHz) + Radio 3 (Bluetooth) + Set 3 Ant.
2	Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 5GHz) + Radio 3 (Bluetooth) + Set 3 Ant.
3	Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 6Hz) + Radio 3 (Bluetooth) + Set 3 Ant.
4	Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 2.4GHz) + Radio 3 (Zigbee) + Set 3 Ant.
5	Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 5GHz) + Radio 3 (Zigbee) + Set 3 Ant.
6	Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 6Hz) + Radio 3 (Zigbee) + Set 3 Ant.
7	Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 2.4GHz) + Radio 3 (Bluetooth) + Set 3 Ant.
8	Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 5GHz) + Radio 3 (Bluetooth) + Set 3 Ant.
9	Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 6Hz) + Radio 3 (Bluetooth) + Set 3 Ant.
10	Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 2.4GHz) + Radio 3 (Zigbee) + Set 3 Ant.
11	Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 5GHz) + Radio 3 (Zigbee) + Set 3 Ant.
12	Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 6Hz) + Radio 3 (Zigbee) + Set 3 Ant.
Refer to Sporton Test Report No.: FA340101-03 for Co-location RF Exposure Evaluation.	

Note: The PoEs are for measurement only, would not be marketed.

PoE information as below:

Power	Brand Name	Model Name
PoE 1	PHIHONG	POEA33U-1ATE
PoE 2	PHIHONG	POE60U-1BT-X
PoE 3	PHIHONG	POE29U-1AT(PL)
PoE 4	Delta	ADH-65AR B
PoE 5	Cisco	POEO75U-1BT

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Equipment	Brand Name	Model Name	Remark
Mount bracket 1*1	Meraki	MA-MNT-MR-16	Used for CW9163E-MR
Mount bracket 2*1	Cisco	AIR-MNT-VERT1	Used for CW9163E-B
Waterproof Covering (Cap) 1*1	UDE	R66-MK-3001	Used for EUT 1
Waterproof Covering (Cap) 2*1	ODS	CMK-RJ45-CAP	Used for EUT 2
Waterproof Covering (Cable Gland) 1*1	UDE	R66-MK-2001	Used for EUT 1
Waterproof Covering (Cable Gland) 2*1	ODS	CMK-RJ45-CG	Used for EUT 2
Bracket of antenna	Cisco	CW-WNT-ART2	Used for Ant.9~12

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	LAN NB	DELL	E6430	N/A
B	PoE 3	PHIHONG	POE29U-1AT(PL)	N/A

For Radiated:

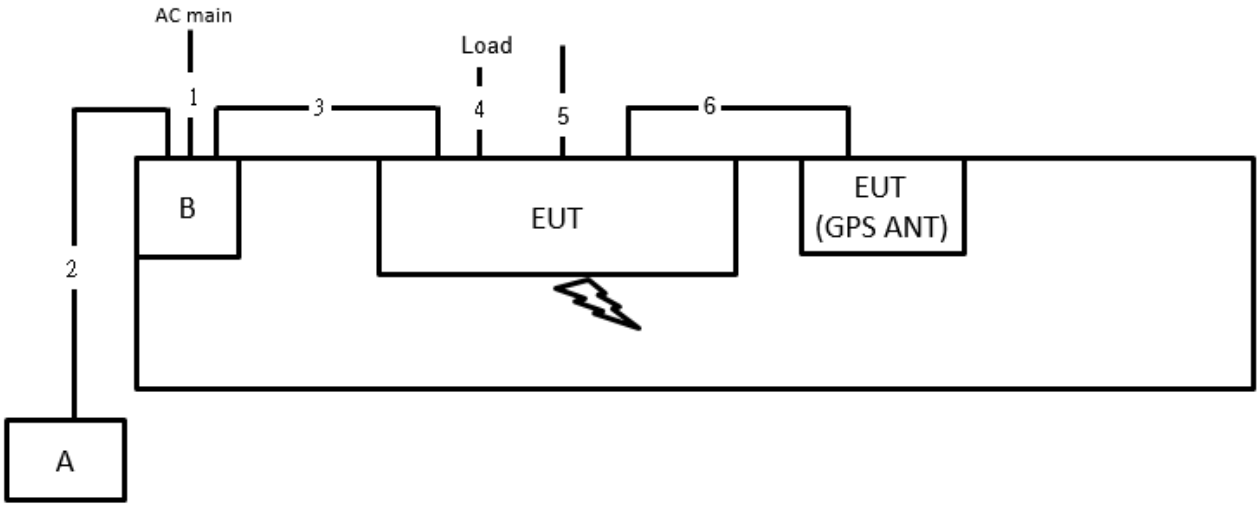
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	PoE 5	Cisco	POEO75U-1BT	N/A
B	Notebook	DELL	E6430	N/A

For RF Conducted:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A
B	PoE 4	Delta	ADH-65AR B	N/A

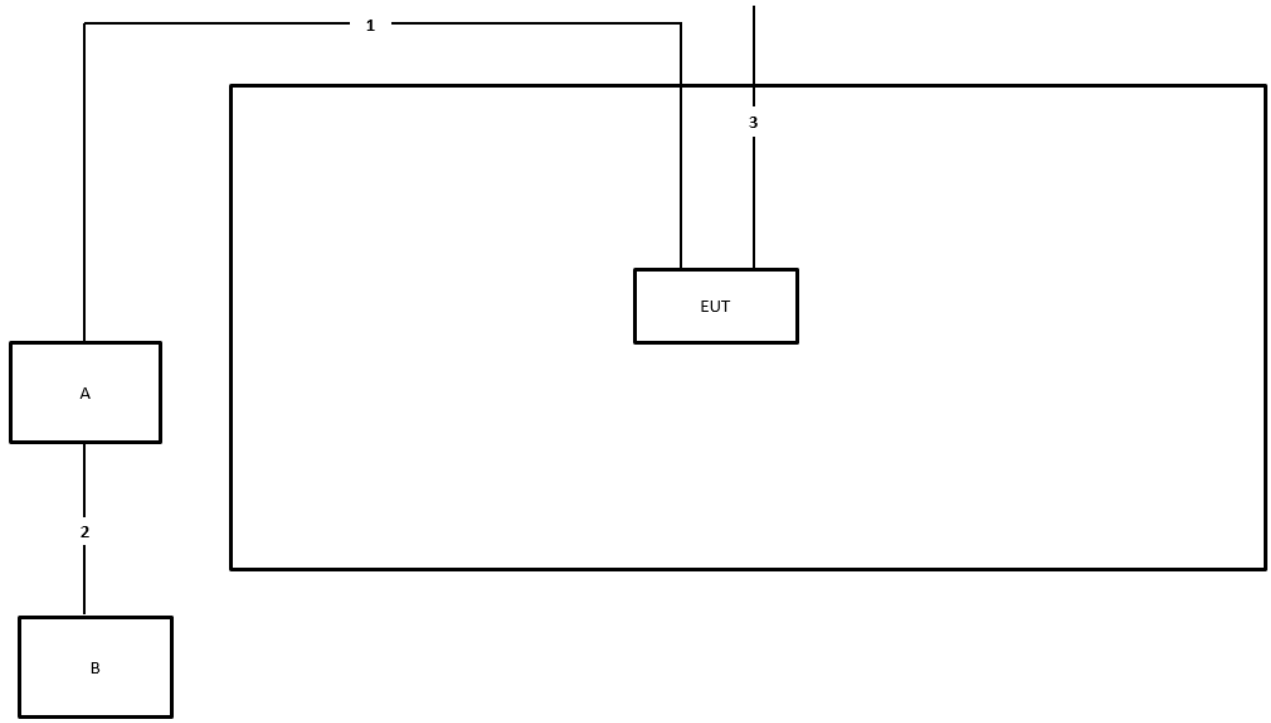
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



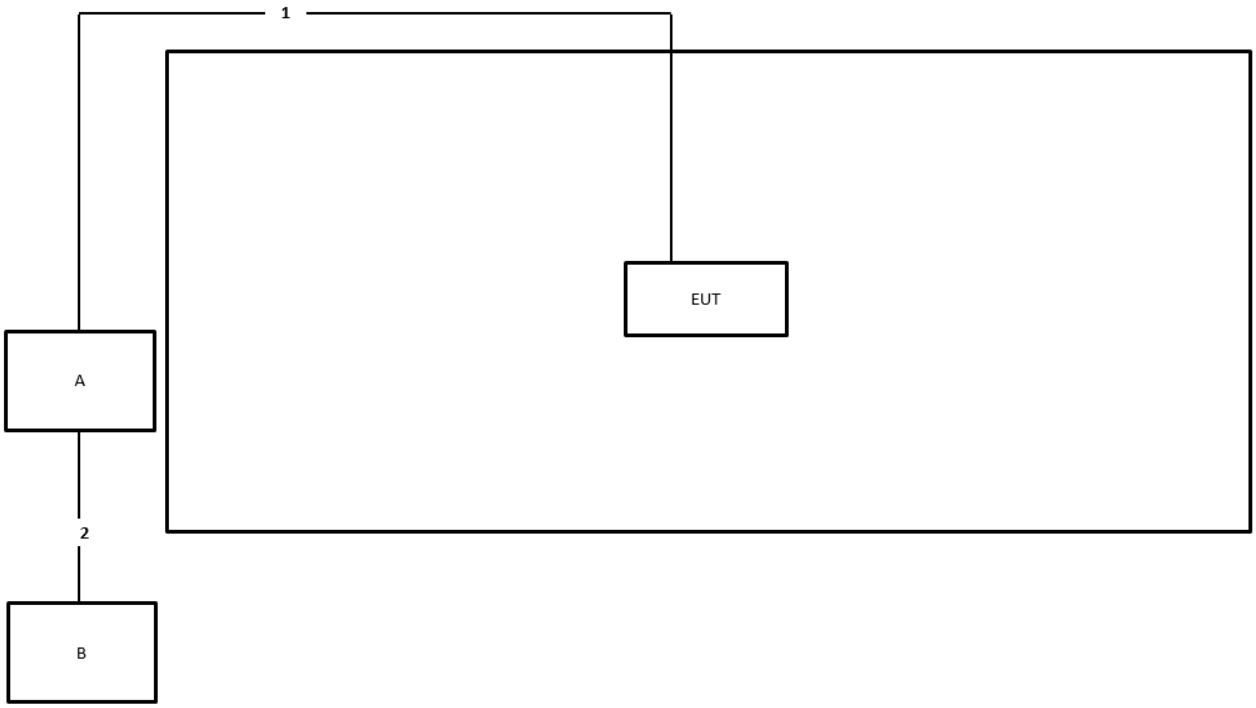
Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1m
4	Console cable	No	1.8m
5	GND cable	No	1.5m
6	Ant cable	No	3m

Test Setup Diagram - Radiated Test < 1GHz



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

Test Setup Diagram - Radiated Test > 1GHz



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

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

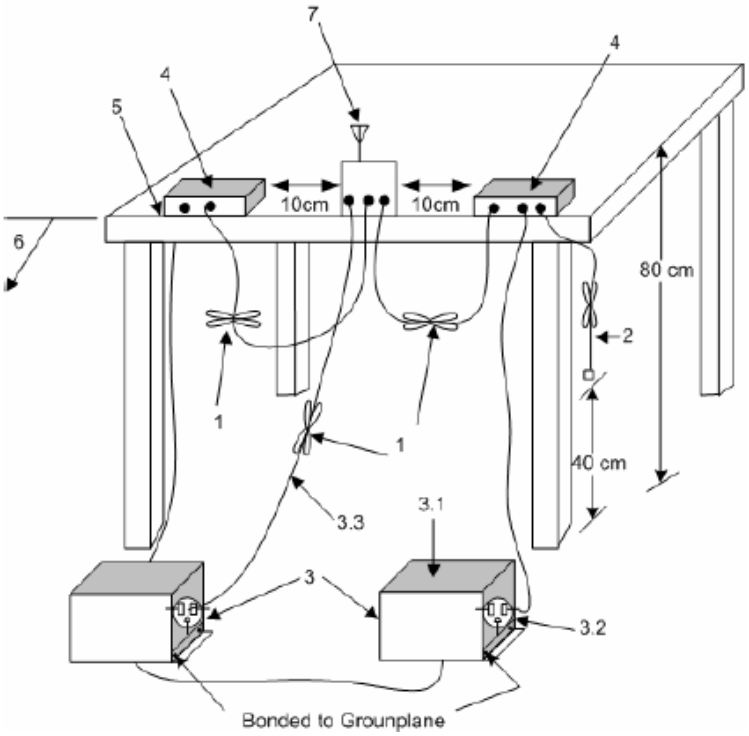
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



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

3.1.5 Measurement Results Calculation

The measured Level is calculated using:

a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level

b. 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 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☐ For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒ For the 5.725-5.85 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth ≥ 500kHz.
LE-LAN Devices
☐ For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐ For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐ For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

3.2.2 Measuring Instruments

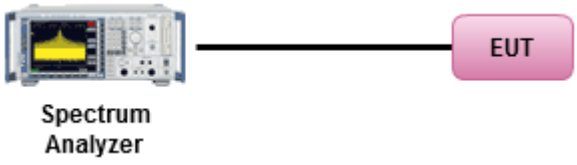
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

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

3.2.4 Test Setup

Emission Bandwidth



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum 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.
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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$
☐	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.

3.3.4 Test Setup

Conducted Measurement (Power Meter)


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.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
	▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for 0° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40° -35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45°
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

3.4.2 Measuring Instruments

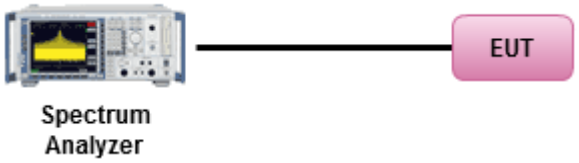
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method		
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:		
	☐	Refer as FCC KDB 789033 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: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$
☐	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.

Test Method	
	▪ Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.4.4 Test Setup

Conducted Measurement


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.

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

linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.5.2 Measuring Instruments

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

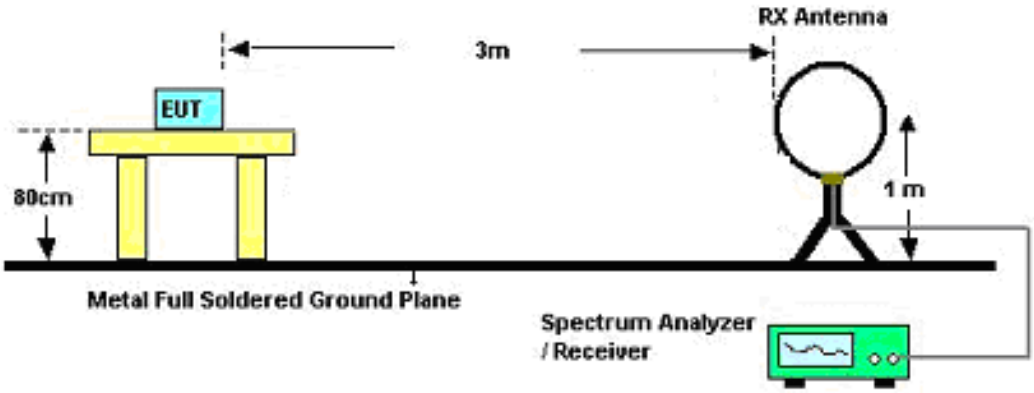
3.5.3 Test Procedures

Test Method		
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
▪ For the transmitter unwanted emissions shall be measured using following options below:		
	▪ Refer as FCC KDB 789033 D02, 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 ≥ 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.		

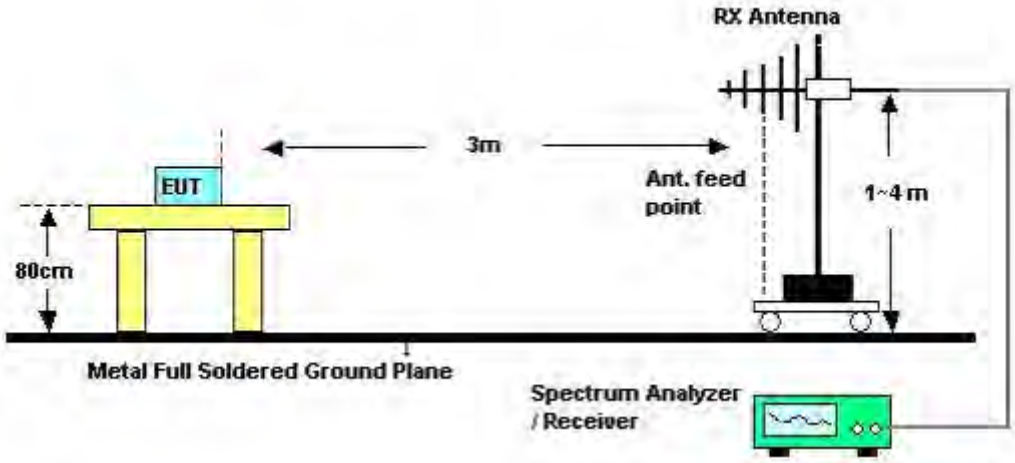
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

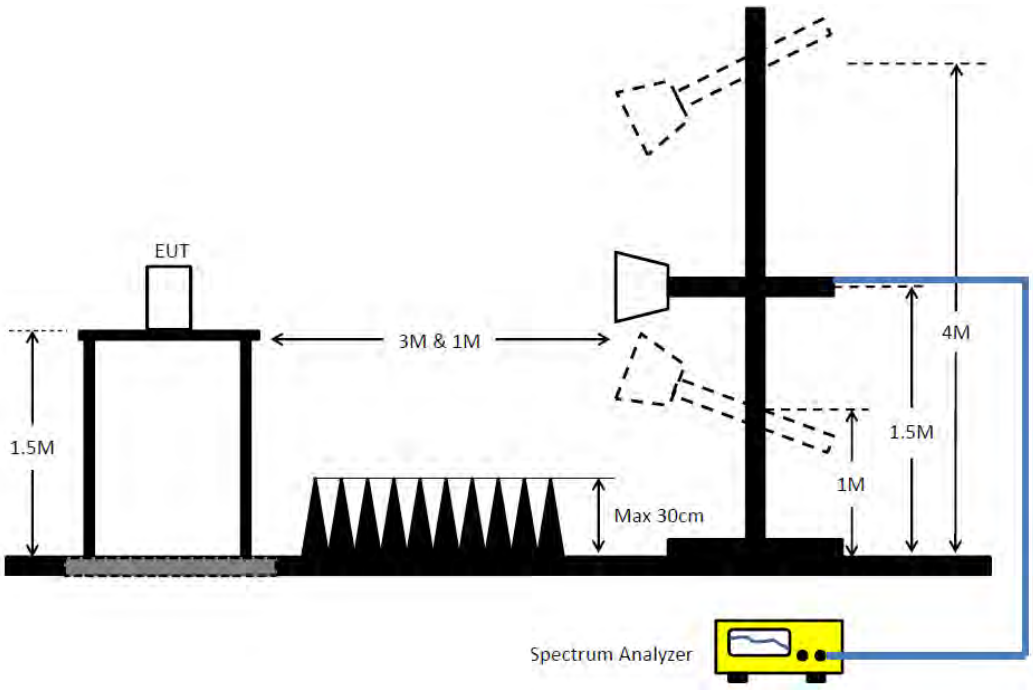
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



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 ~ 8.4GHz	Feb. 20, 2023	Feb. 19, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 16, 2023	Feb. 15, 2024	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 17, 2023	Oct. 16, 2024	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30 MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (03CH01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH01-CB	30 MHz ~ 1 GHz	Jan. 16, 2023	Jan. 15, 2024	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Feb. 19, 2023	Feb. 18, 2024	Radiation (03CH01-CB)
Pre-Amplifier	SGH	SGH0301	20230109-2	10M~1GHz	Jun. 23, 2023	Jun. 22, 2024	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV3044	101437	10kHz ~ 44GHz	Nov. 29, 2022	Nov. 29, 2023	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH01-CB)
RF Cable-low	Woken	RG402	Low Cable-16+17	30 MHz ~ 1 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH01-CB)
RF Cable-low	Woken	RG402	Low Cable-31+32	30 MHz ~ 1 GHz	Nov. 06, 2023	Nov. 05, 2024	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 04, 2023	May 03, 2024	Radiation (03CH03-CB)
Horn Antenna	ETS·Lindgren	3115	6821	750MHz~18GHz	Feb. 03, 2023	Feb. 02, 2024	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH03-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH03-CB)
Pre-Amplifier	SGH	SGH184	20230109-3	18~40GHz	Jan. 13, 2023	Jan. 12, 2024	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 12, 2023	Jun. 11, 2024	Radiation (03CH03-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 21, 2023	Apr. 20, 2024	Conducted (TH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 29, 2023	May 28, 2024	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 22, 2023	Feb. 21, 2024	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 22, 2023	Feb. 21, 2024	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

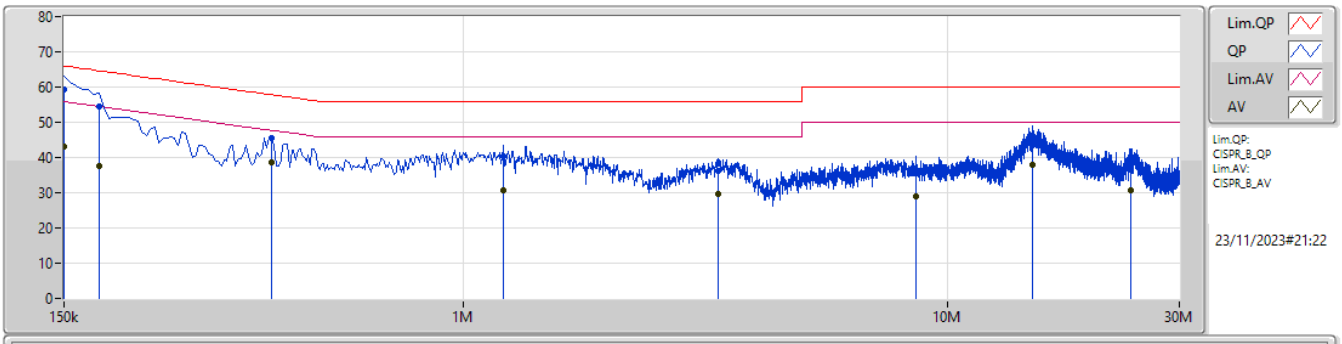
Note: Calibration Interval of instruments listed above is one year.

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

Summary

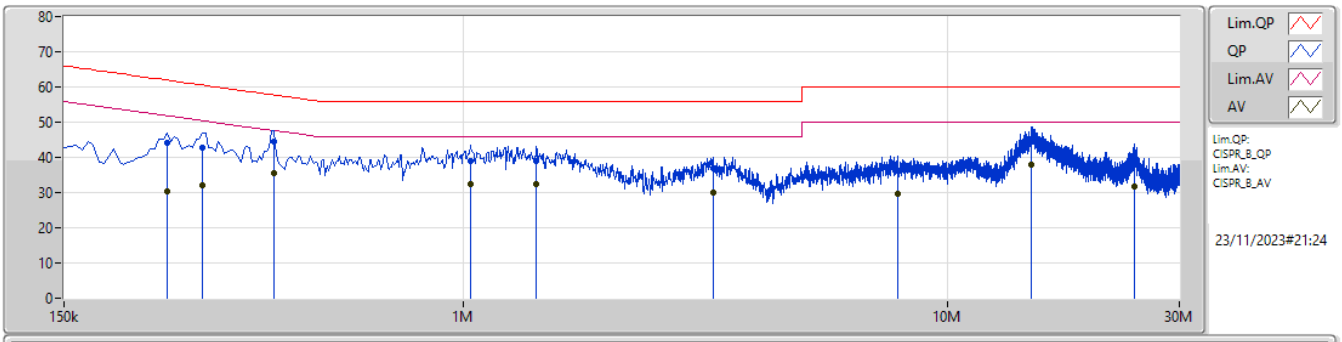
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150k	59.21	66.00	-6.79	Line

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	59.21	66.00	-6.79	9.98	Line	"Worst"	49.23	0.09	0.02	9.87
AV	150k	43.24	56.00	-12.76	9.98	Line	-	33.26	0.09	0.02	9.87
QP	177k	54.36	64.62	-10.26	9.97	Line	-	44.39	0.08	0.02	9.87
AV	177k	37.60	54.62	-17.02	9.97	Line	-	27.63	0.08	0.02	9.87
QP	402k	45.36	57.82	-12.46	10.01	Line	-	35.35	0.09	0.02	9.90
AV	402k	38.56	47.82	-9.26	10.01	Line	-	28.55	0.09	0.02	9.90
QP	1.208M	40.40	56.00	-15.60	10.05	Line	-	30.35	0.12	0.03	9.90
AV	1.208M	30.82	46.00	-15.18	10.05	Line	-	20.77	0.12	0.03	9.90
QP	3.363M	36.25	56.00	-19.75	10.19	Line	-	26.06	0.16	0.12	9.91
AV	3.363M	29.73	46.00	-16.27	10.19	Line	-	19.54	0.16	0.12	9.91
QP	8.61M	35.40	60.00	-24.60	10.32	Line	-	25.08	0.24	0.14	9.94
AV	8.61M	28.86	50.00	-21.14	10.32	Line	-	18.54	0.24	0.14	9.94
QP	14.951M	44.85	60.00	-15.15	10.44	Line	-	34.41	0.28	0.18	9.98
AV	14.951M	38.09	50.00	-11.91	10.44	Line	-	27.65	0.28	0.18	9.98
QP	23.888M	37.51	60.00	-22.49	10.59	Line	-	26.92	0.31	0.24	10.04
AV	23.888M	30.82	50.00	-19.18	10.59	Line	-	20.23	0.31	0.24	10.04

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	244.5k	44.25	61.95	-17.70	9.96	Neutral	-	34.29	0.07	0.02	9.87
AV	244.5k	30.29	51.95	-21.66	9.96	Neutral	-	20.33	0.07	0.02	9.87
QP	289.5k	42.69	60.53	-17.84	9.97	Neutral	-	32.72	0.07	0.02	9.88
AV	289.5k	31.98	50.53	-18.55	9.97	Neutral	-	22.01	0.07	0.02	9.88
QP	406.5k	44.46	57.72	-13.26	9.99	Neutral	-	34.47	0.07	0.02	9.90
AV	406.5k	35.66	47.72	-12.06	9.99	Neutral	"Worst"	25.67	0.07	0.02	9.90
QP	1.032M	38.88	56.00	-17.12	9.99	Neutral	-	28.89	0.08	0.01	9.90
AV	1.032M	32.39	46.00	-13.61	9.99	Neutral	-	22.40	0.08	0.01	9.90
QP	1.415M	38.86	56.00	-17.14	10.03	Neutral	-	28.83	0.09	0.04	9.90
AV	1.415M	32.55	46.00	-13.45	10.03	Neutral	-	22.52	0.09	0.04	9.90
QP	3.273M	36.93	56.00	-19.07	10.15	Neutral	-	26.78	0.12	0.12	9.91
AV	3.273M	29.89	46.00	-16.11	10.15	Neutral	-	19.74	0.12	0.12	9.91
QP	7.881M	36.15	60.00	-23.85	10.27	Neutral	-	25.88	0.20	0.14	9.93
AV	7.881M	29.82	50.00	-20.18	10.27	Neutral	-	19.55	0.20	0.14	9.93
QP	14.838M	44.70	60.00	-15.30	10.42	Neutral	-	34.28	0.26	0.18	9.98
AV	14.838M	37.93	50.00	-12.07	10.42	Neutral	-	27.51	0.26	0.18	9.98
QP	24.212M	38.43	60.00	-21.57	10.62	Neutral	-	27.81	0.34	0.24	10.04
AV	24.212M	31.61	50.00	-18.39	10.62	Neutral	-	20.99	0.34	0.24	10.04

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.445M	27.862M	27M9D1D	14.465M	22.97M
802.11a_Nss1,(6Mbps)_1TX	16.39M	25.827M	25M8D1D	16.28M	20.802M
802.11a_Nss1,(6Mbps)_2TX	16.39M	16.619M	16M6D1D	16.28M	16.405M
802.11ax HEW20_Nss1,(MCS0)_1TX	19.195M	24.498M	24M5D1D	19.085M	19.287M
802.11ax HEW20_Nss1,(MCS0)_1TX	19.03M	22.971M	23M0D1D	15.345M	19.392M
802.11ax HEW20_Nss1,(MCS0)_2TX	19.03M	19.044M	19M0D1D	19.03M	18.892M
802.11ax HEW40_Nss1,(MCS0)_1TX	38.06M	43.373M	43M4D1D	31.9M	40.473M
802.11ax HEW40_Nss1,(MCS0)_1TX	38.17M	55.711M	55M7D1D	38.06M	40.807M
802.11ax HEW40_Nss1,(MCS0)_2TX	38.06M	37.749M	37M7D1D	31.46M	37.52M
802.11ax HEW80_Nss1,(MCS0)_1TX	77.88M	77.444M	77M4D1D	77.88M	77.444M
802.11ax HEW80_Nss1,(MCS0)_1TX	77.44M	77.206M	77M2D1D	77.44M	77.206M
802.11ax HEW80_Nss1,(MCS0)_2TX	77.88M	76.922M	76M9D1D	77.22M	76.912M

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

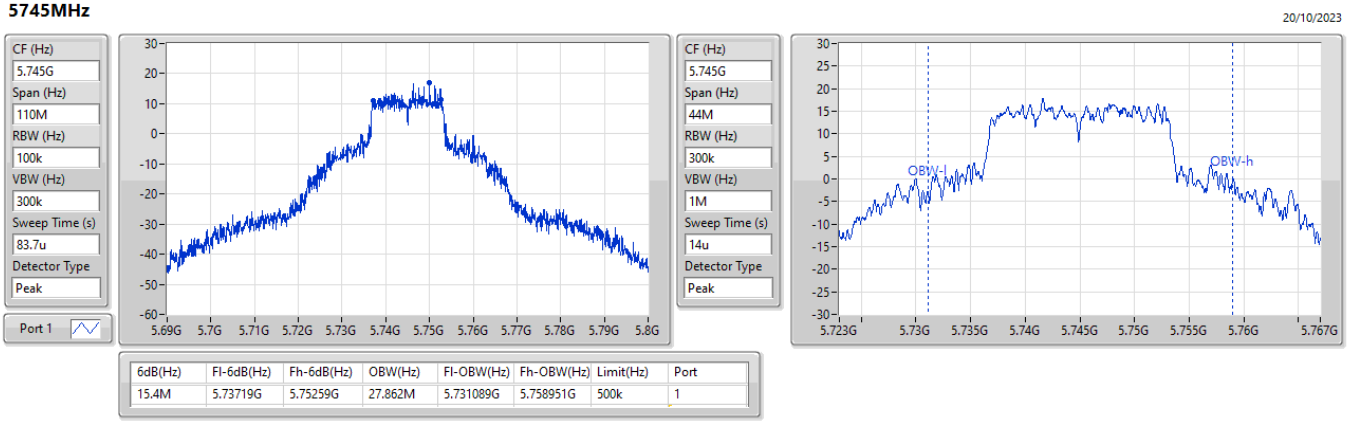
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
5745MHz	Pass	500k	15.4M	27.862M	-	-
5785MHz	Pass	500k	16.445M	22.97M	-	-
5825MHz	Pass	500k	14.465M	25.196M	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5745MHz	Pass	500k	19.14M	24.498M	-	-
5785MHz	Pass	500k	19.085M	19.287M	-	-
5825MHz	Pass	500k	19.195M	20.343M	-	-
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5755MHz	Pass	500k	31.9M	40.473M	-	-
5795MHz	Pass	500k	38.06M	43.373M	-	-
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5775MHz	Pass	500k	77.88M	77.444M	-	-
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
5745MHz	Pass	500k	-	-	16.39M	20.802M
5785MHz	Pass	500k	-	-	16.28M	25.827M
5825MHz	Pass	500k	-	-	16.39M	24.914M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5745MHz	Pass	500k	-	-	19.03M	19.392M
5785MHz	Pass	500k	-	-	15.345M	22.971M
5825MHz	Pass	500k	-	-	19.03M	22.932M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5755MHz	Pass	500k	-	-	38.17M	40.807M
5795MHz	Pass	500k	-	-	38.06M	55.711M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5775MHz	Pass	500k	-	-	77.44M	77.206M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5745MHz	Pass	500k	16.28M	16.469M	16.39M	16.405M
5785MHz	Pass	500k	16.39M	16.516M	16.39M	16.425M
5825MHz	Pass	500k	16.28M	16.619M	16.335M	16.505M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	500k	19.03M	18.977M	19.03M	18.904M
5785MHz	Pass	500k	19.03M	18.892M	19.03M	18.926M
5825MHz	Pass	500k	19.03M	19.044M	19.03M	18.902M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	500k	36.08M	37.727M	38.06M	37.52M
5795MHz	Pass	500k	38.06M	37.664M	31.46M	37.749M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	500k	77.22M	76.922M	77.88M	76.912M

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

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

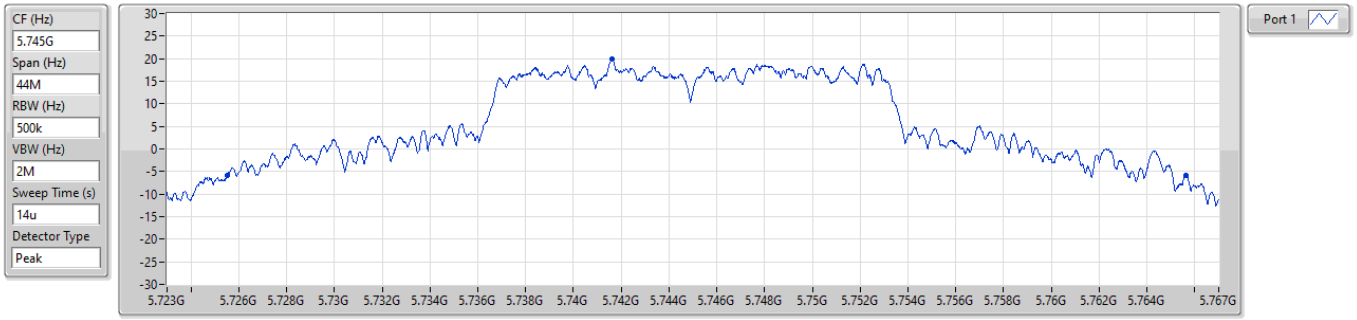
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.4M	5.73719G	5.75259G	27.862M	5.731089G	5.758951G	500k	1

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

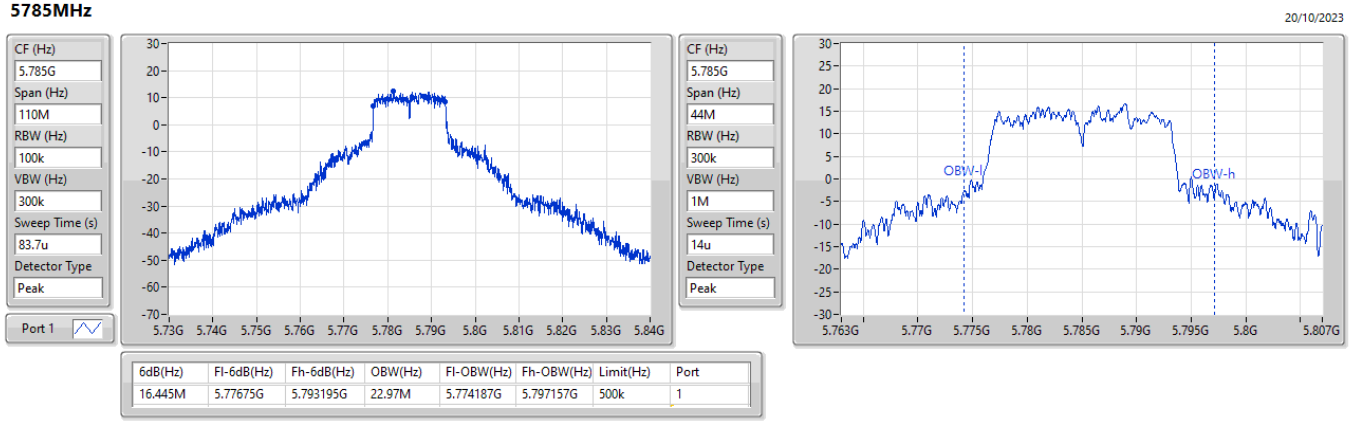
5745MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
40.128M	5.725508G	5.765636G	Inf	1

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

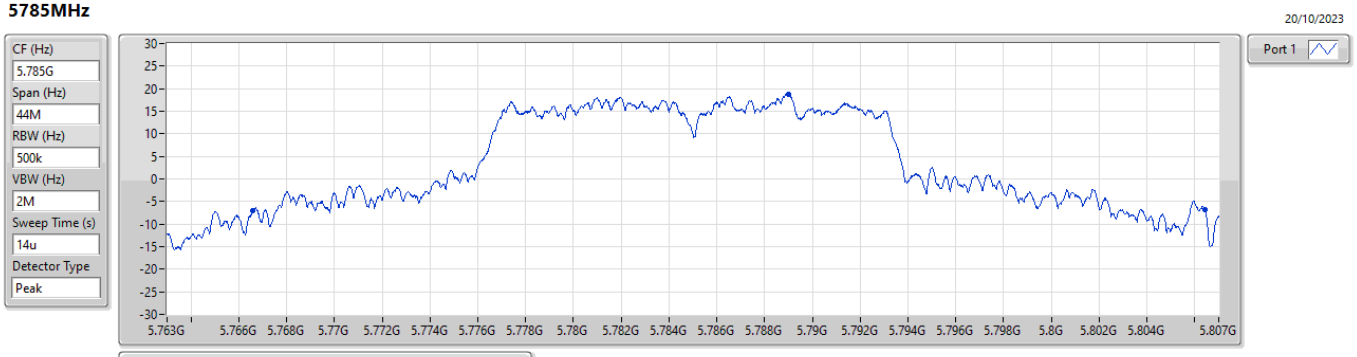
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.445M	5.77675G	5.793195G	22.97M	5.774187G	5.797157G	500k	1

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

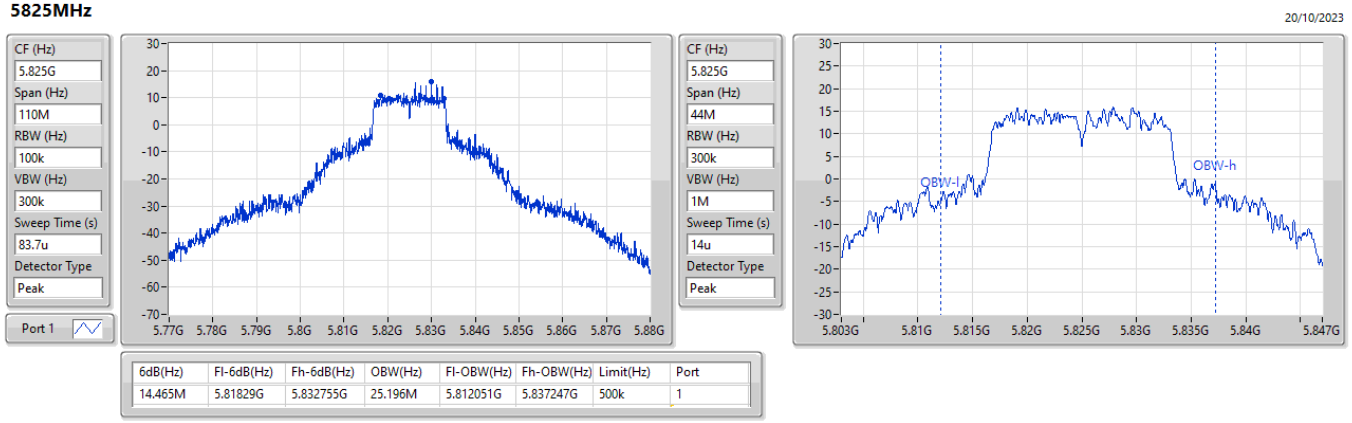
5785MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
39.82M	5.766586G	5.806406G	Inf	1

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

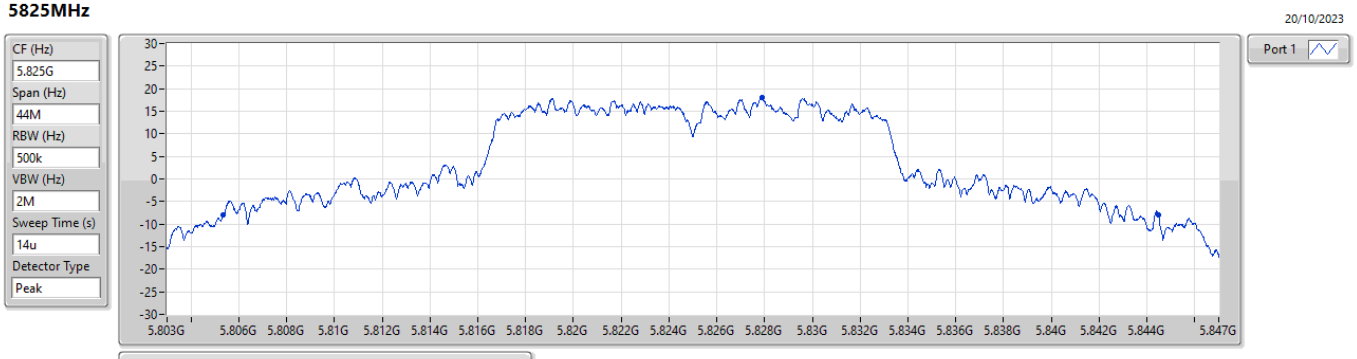
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.465M	5.81829G	5.832755G	25.196M	5.812051G	5.837247G	500k	1

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

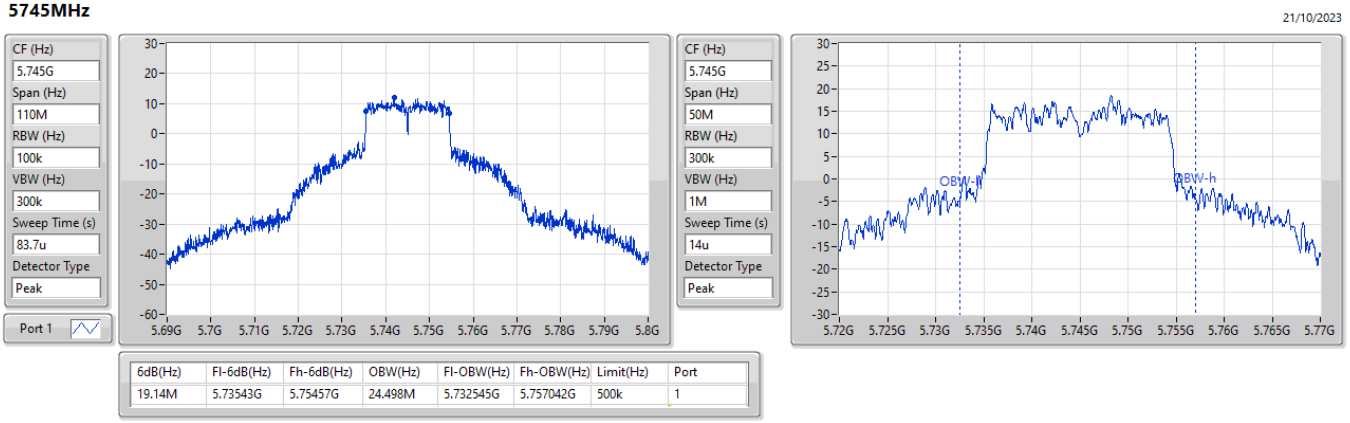
5825MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
39.116M	5.805354G	5.84447G	Inf	1

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

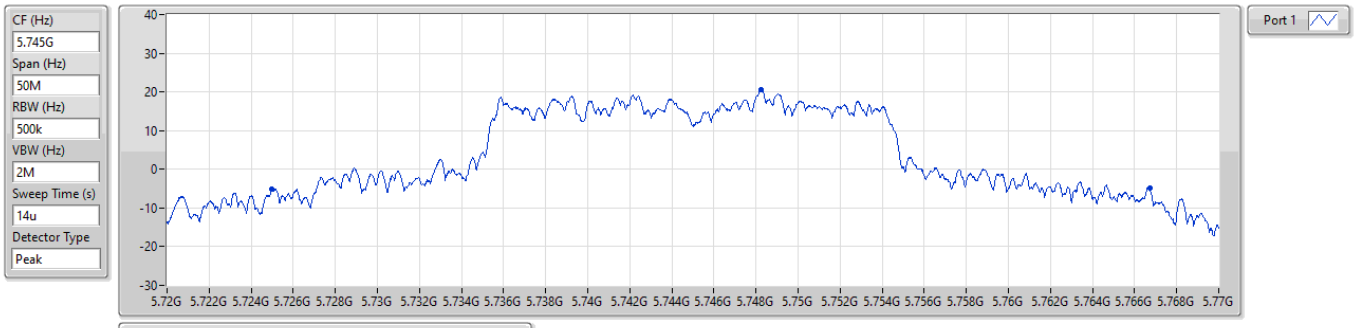
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.14M	5.73543G	5.75457G	24.498M	5.732545G	5.757042G	500k	1

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

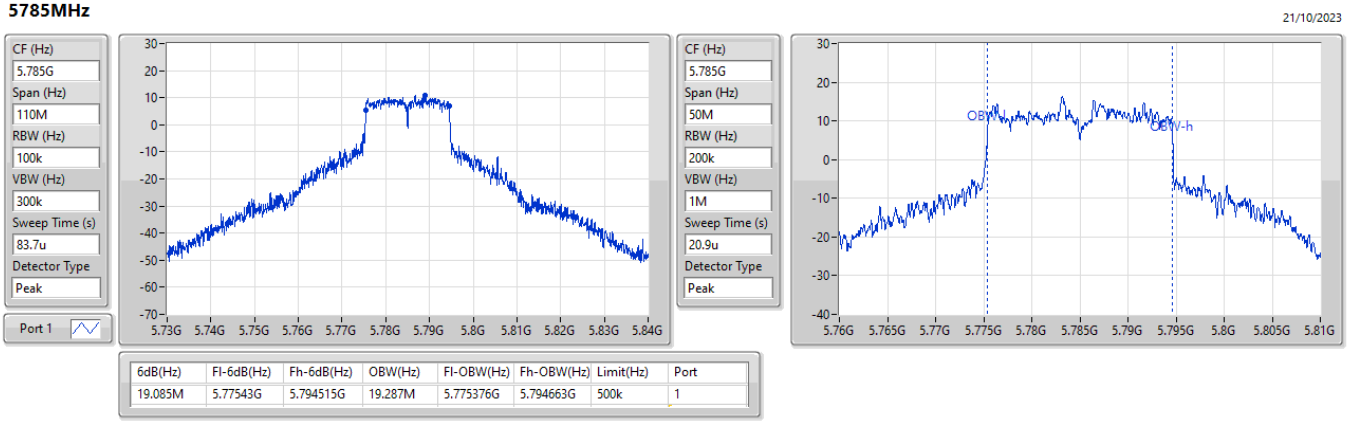
5745MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
41.75M	5.724975G	5.766725G	Inf	1

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

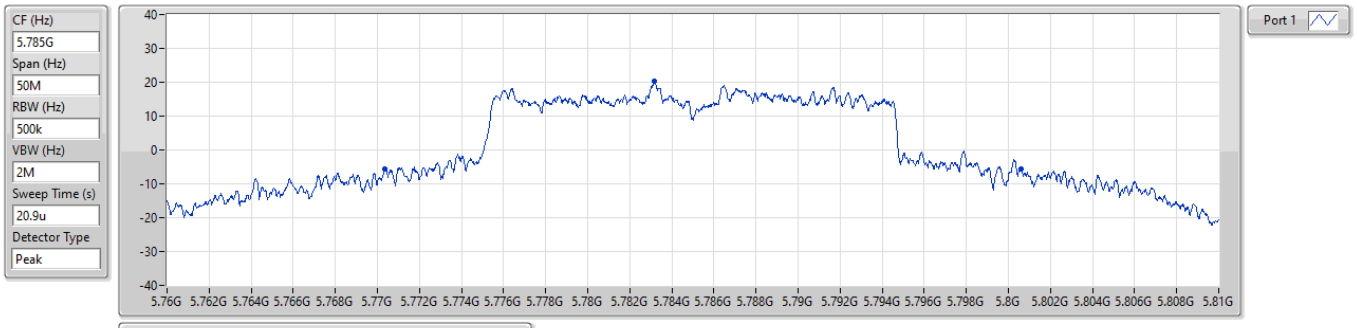
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.085M	5.77543G	5.794515G	19.287M	5.775376G	5.794663G	500k	1

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

5785MHz

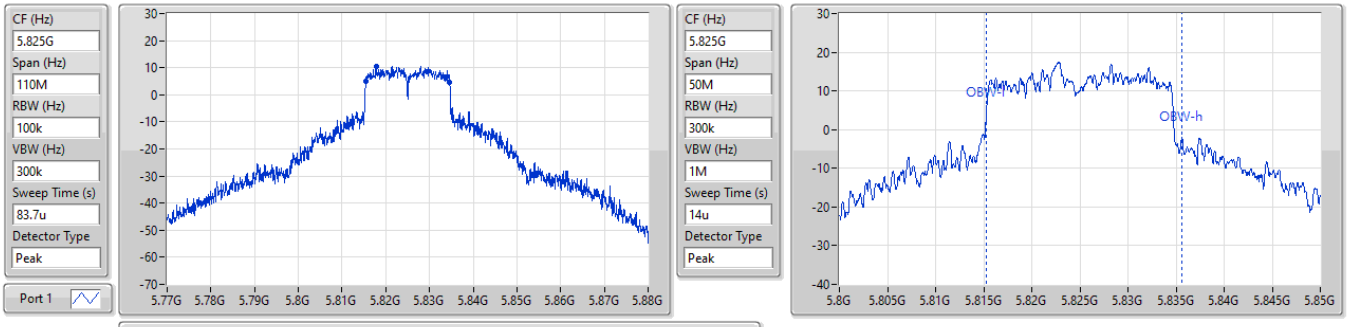


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
30.275M	5.77035G	5.800625G	Inf	1

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

5825MHz

21/10/2023

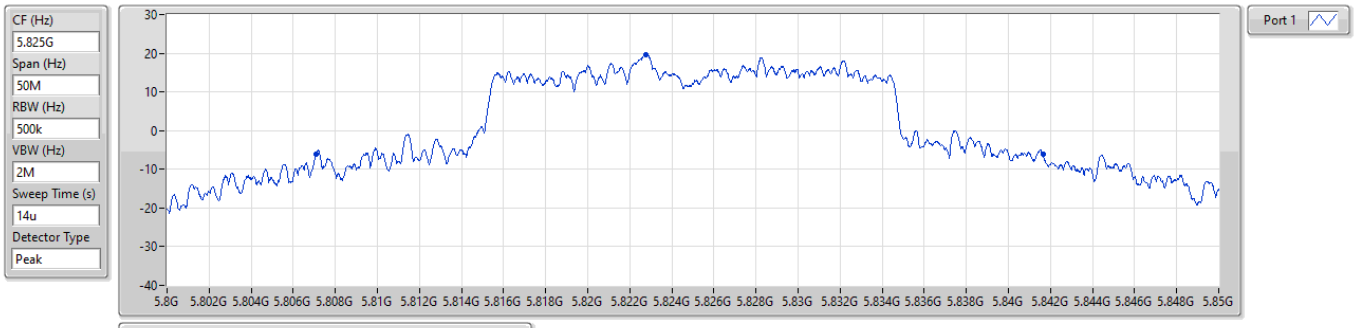


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.195M	5.81543G	5.834625G	20.343M	5.815268G	5.835611G	500k	1

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

5825MHz

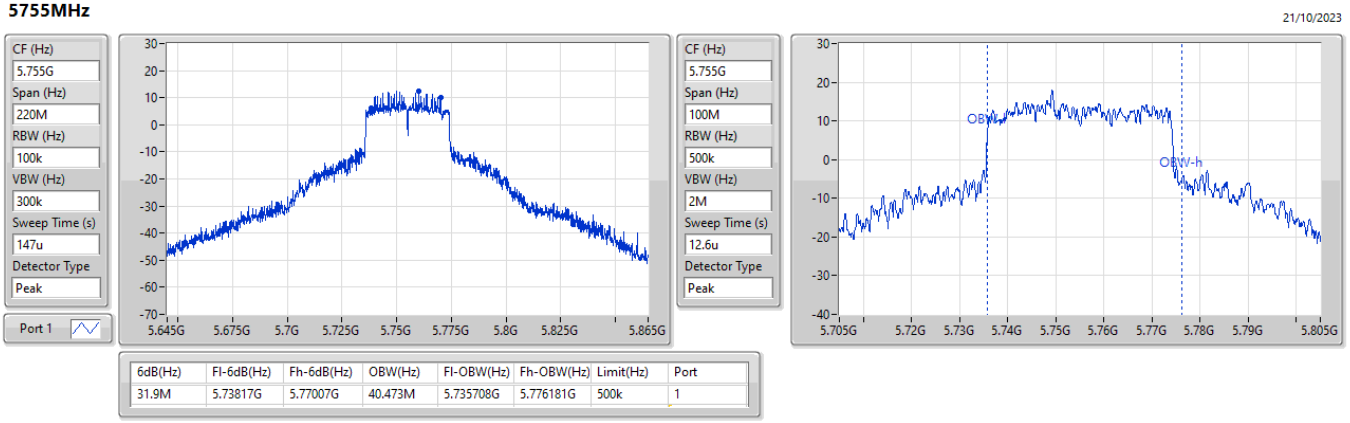
21/10/2023



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
34.575M	5.807075G	5.84165G	Inf	1

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **EBW**

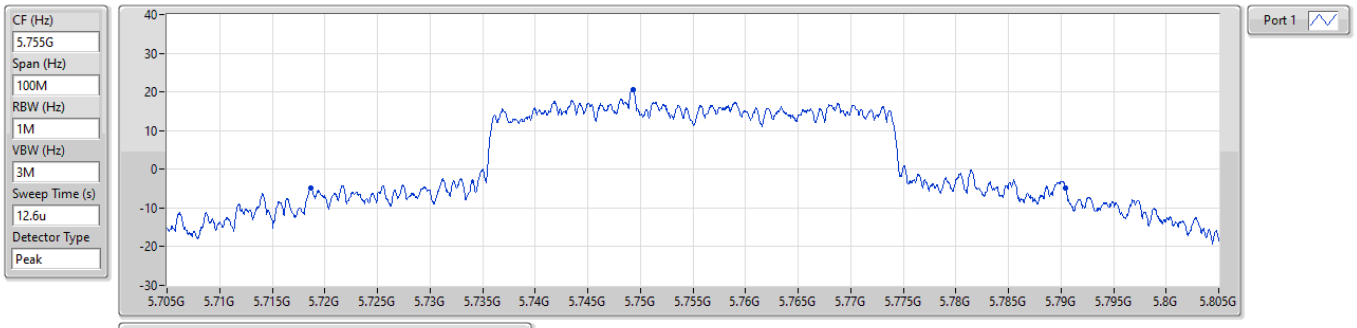
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
31.9M	5.73817G	5.77007G	40.473M	5.735708G	5.776181G	500k	1

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **EBW**

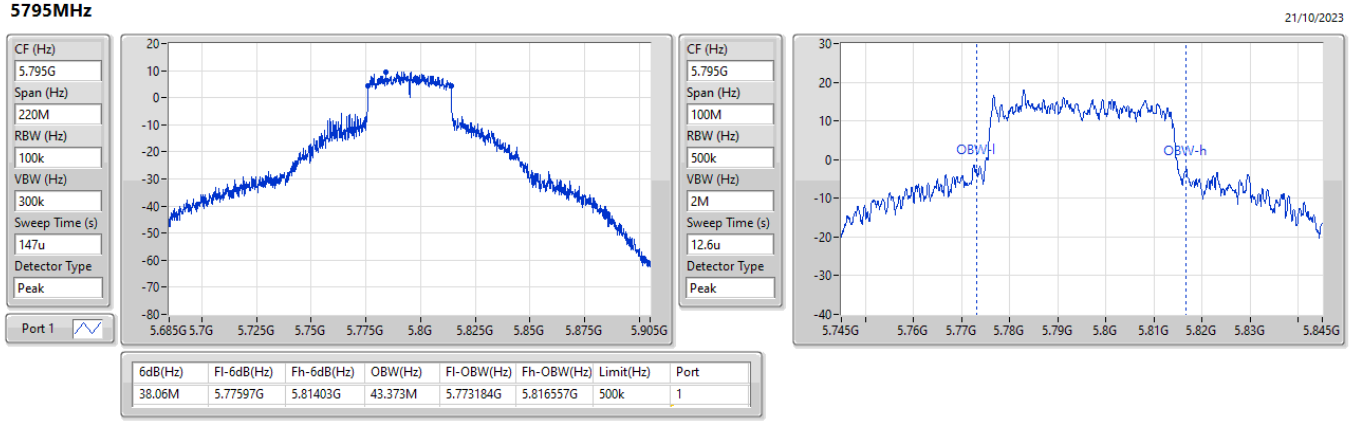
5755MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
71.8M	5.71865G	5.79045G	Inf	1

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **EBW**

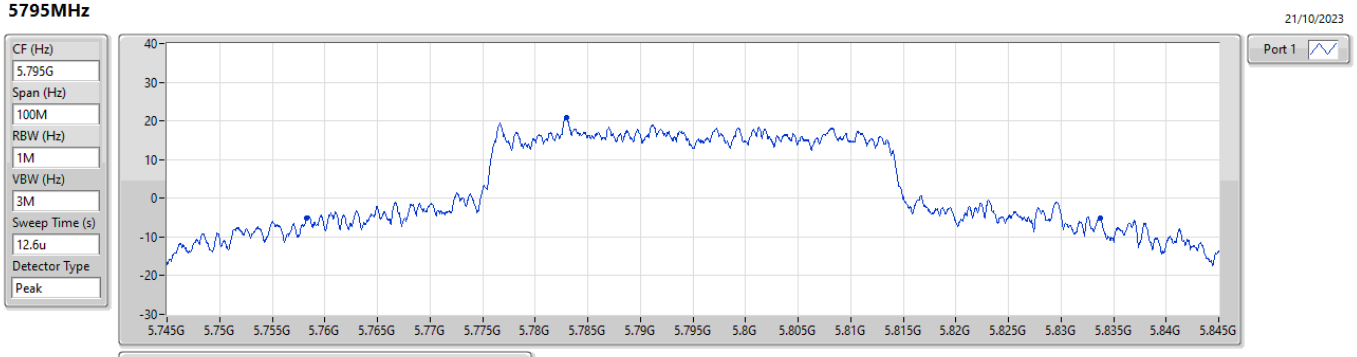
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.06M	5.77597G	5.81403G	43.373M	5.773184G	5.816557G	500k	1

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **EBW**

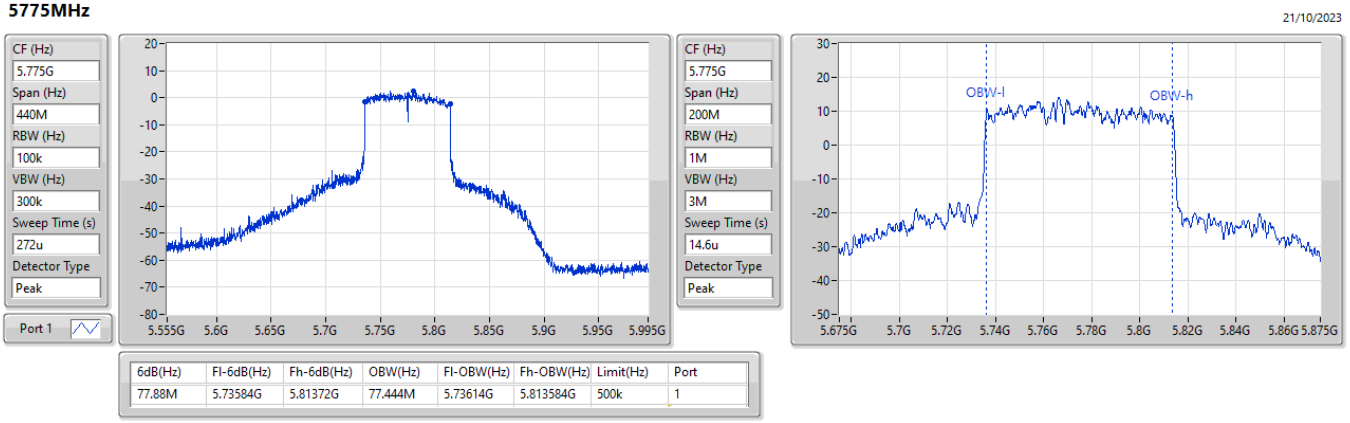
5795MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
75.45M	5.7583G	5.83375G	Inf	1

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX **EBW**

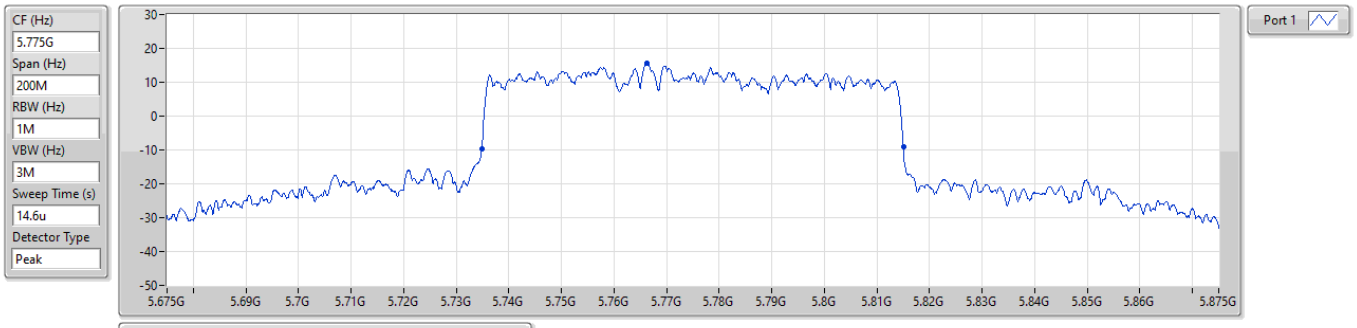
5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.88M	5.73584G	5.81372G	77.444M	5.73614G	5.813584G	500k	1

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX **EBW**

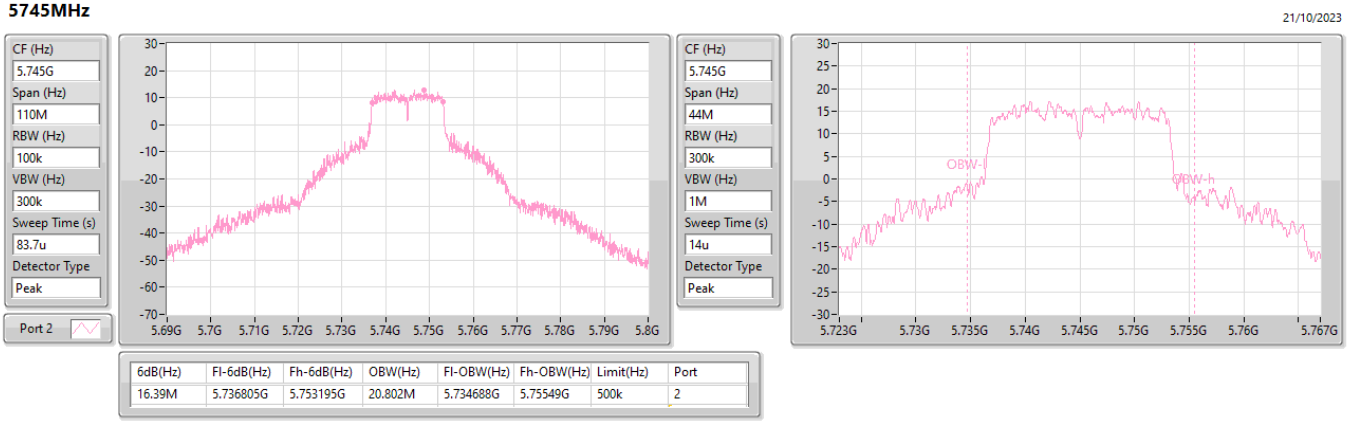
5775MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
80.2M	5.7348G	5.815G	Inf	1

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

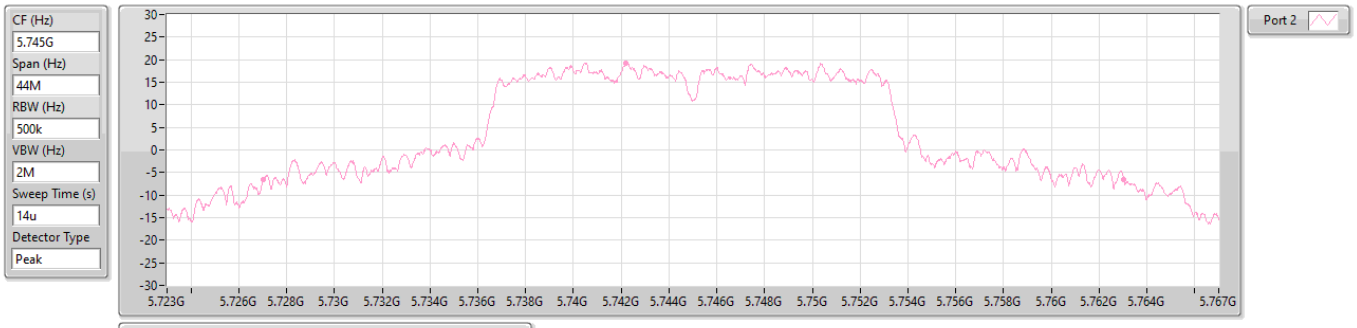
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.39M	5.736805G	5.753195G	20.802M	5.734688G	5.75549G	500k	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

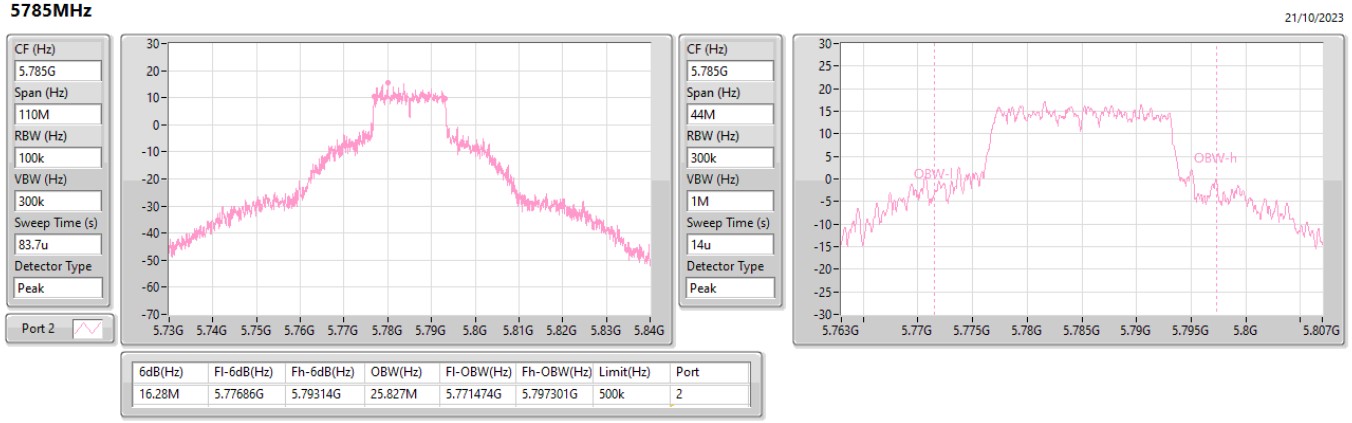
5745MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
36.014M	5.727026G	5.76304G	Inf	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

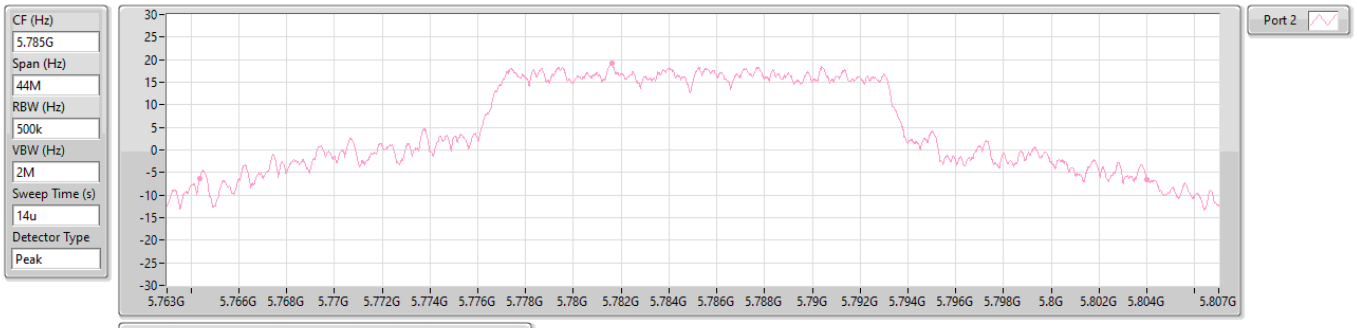
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.28M	5.77686G	5.79314G	25.827M	5.771474G	5.797301G	500k	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

5785MHz

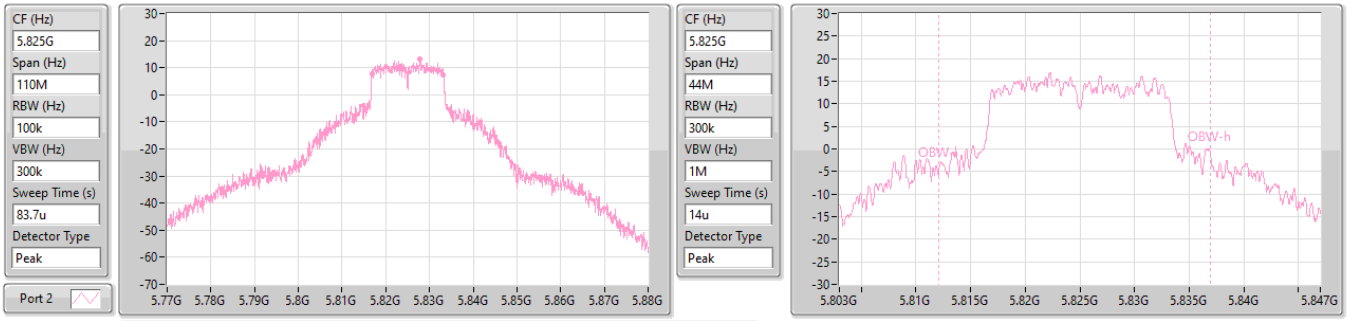


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
39.622M	5.764364G	5.803986G	Inf	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

5825MHz

21/10/2023

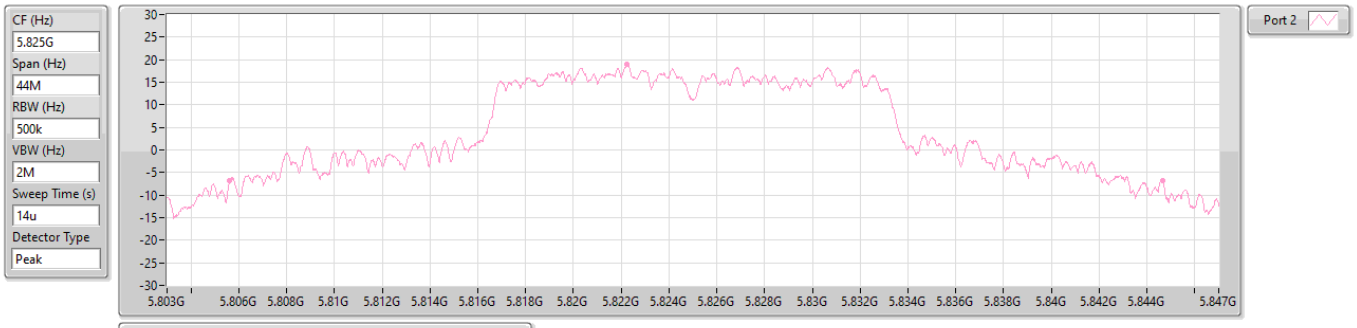


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.39M	5.816805G	5.833195G	24.914M	5.812069G	5.836982G	500k	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **EBW**

5825MHz

21/10/2023

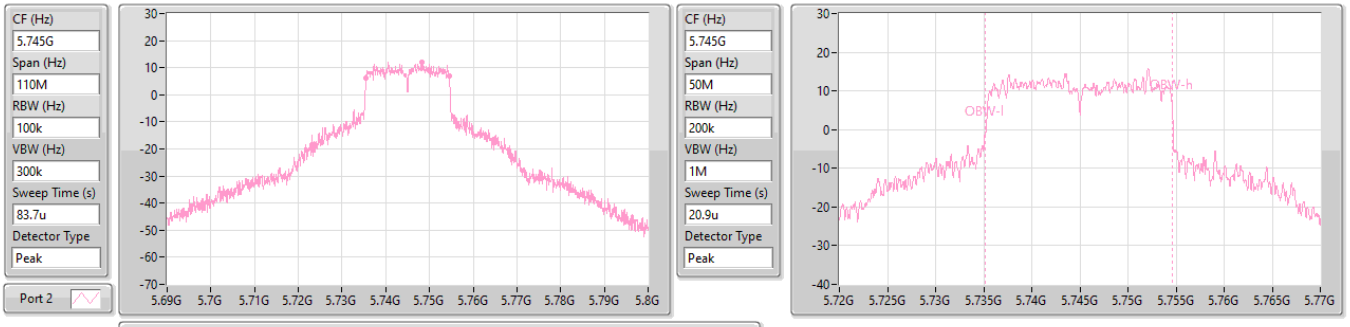


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
39.028M	5.805618G	5.844646G	Inf	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

5745MHz

21/10/2023

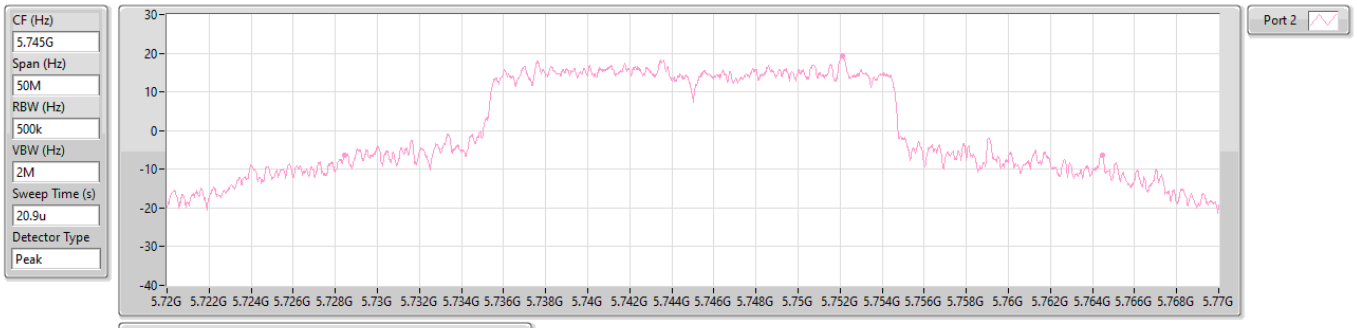


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.03M	5.735485G	5.754515G	19.392M	5.735202G	5.754594G	500k	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

5745MHz

21/10/2023

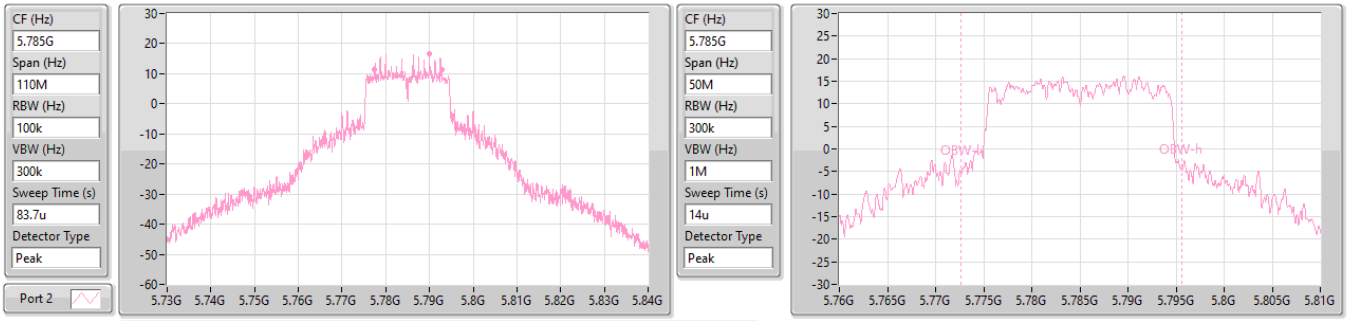


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
36.05M	5.728425G	5.764475G	Inf	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

5785MHz

21/10/2023

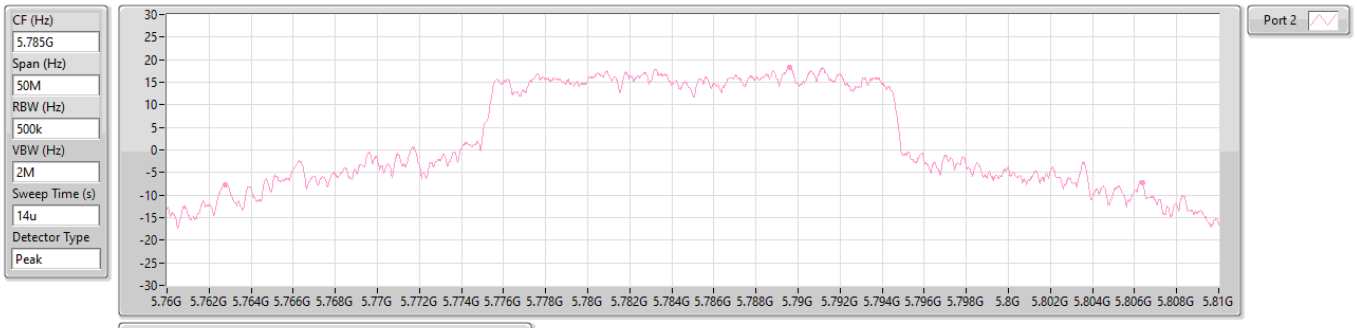


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.345M	5.777465G	5.79281G	22.971M	5.772601G	5.795572G	500k	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

5785MHz

21/10/2023

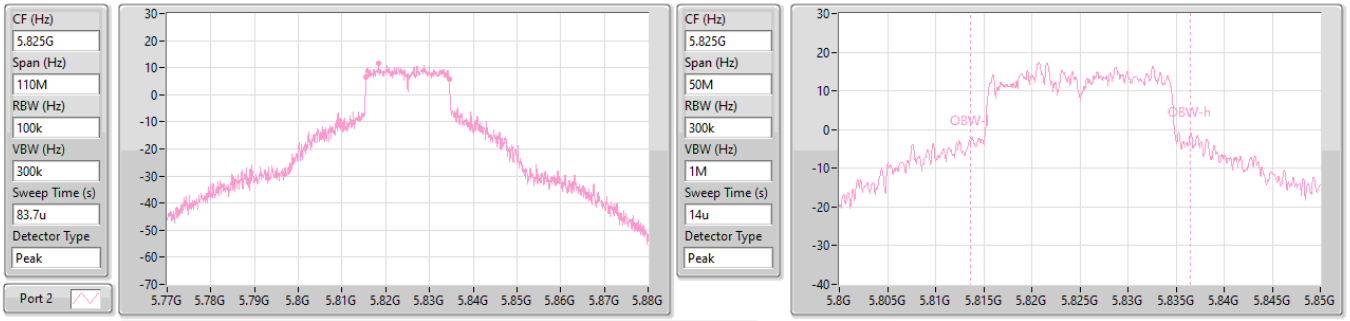


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
43.625M	5.76275G	5.806375G	Inf	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

5825MHz

21/10/2023

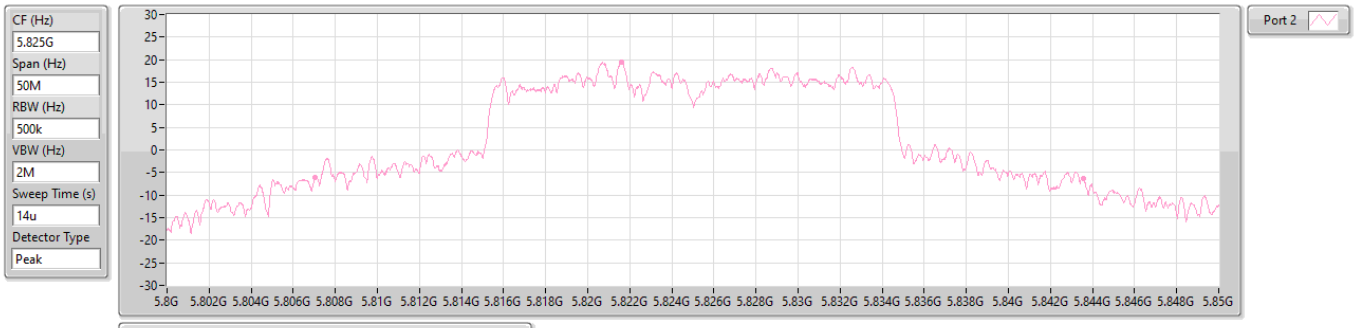


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.03M	5.81543G	5.83446G	22.932M	5.813593G	5.836525G	500k	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

5825MHz

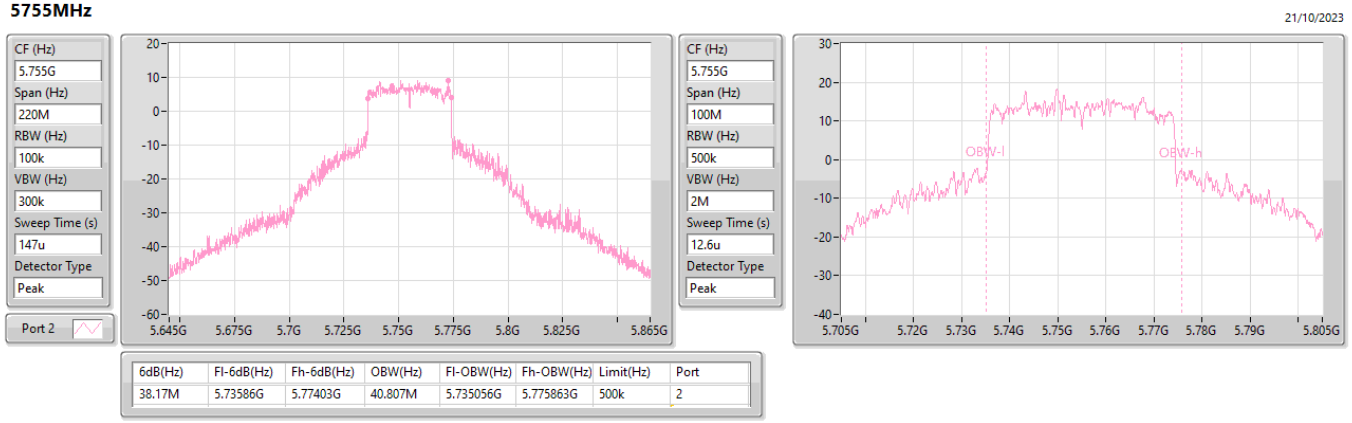
21/10/2023



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
36.5M	5.80705G	5.84355G	Inf	2

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **EBW**

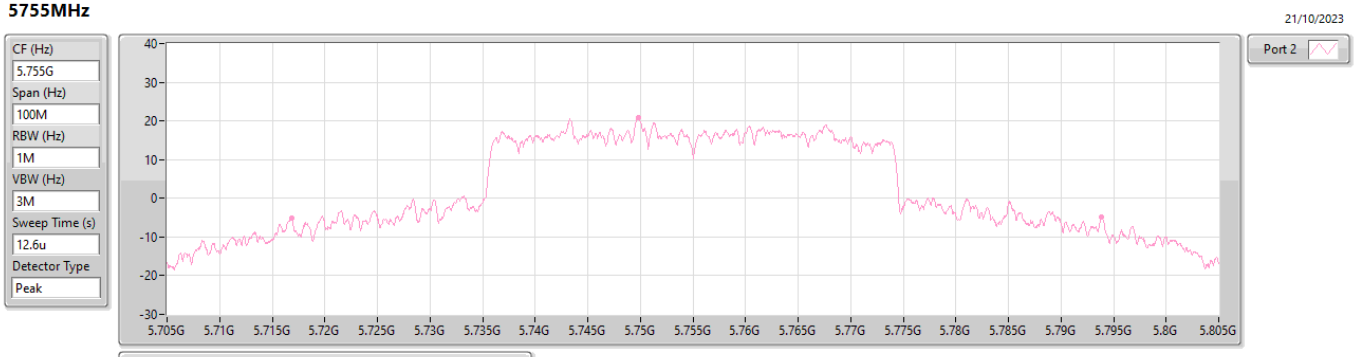
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.17M	5.73586G	5.77403G	40.807M	5.735056G	5.775863G	500k	2

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **EBW**

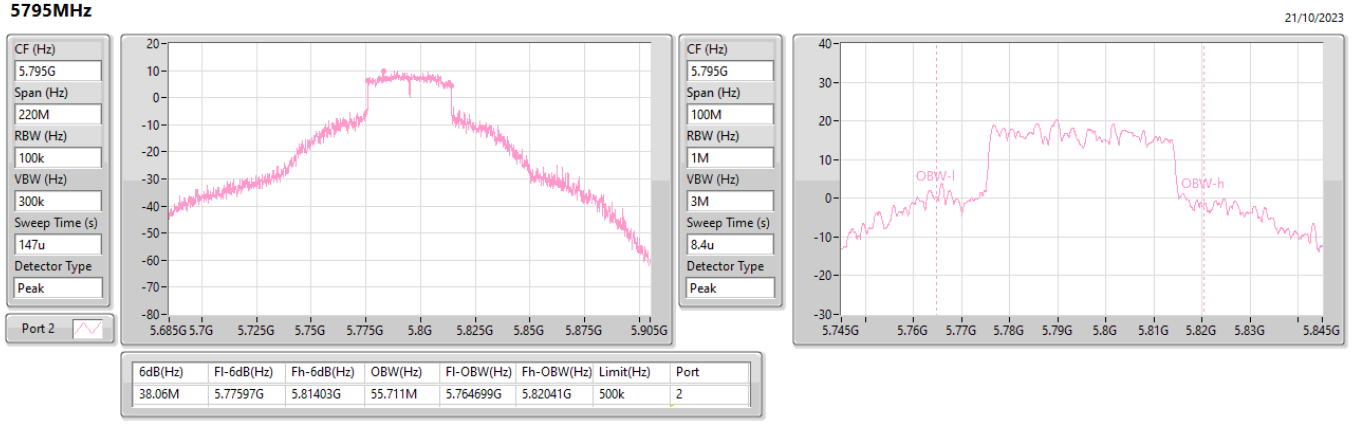
5755MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
77M	5.71685G	5.79385G	Inf	2

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **EBW**

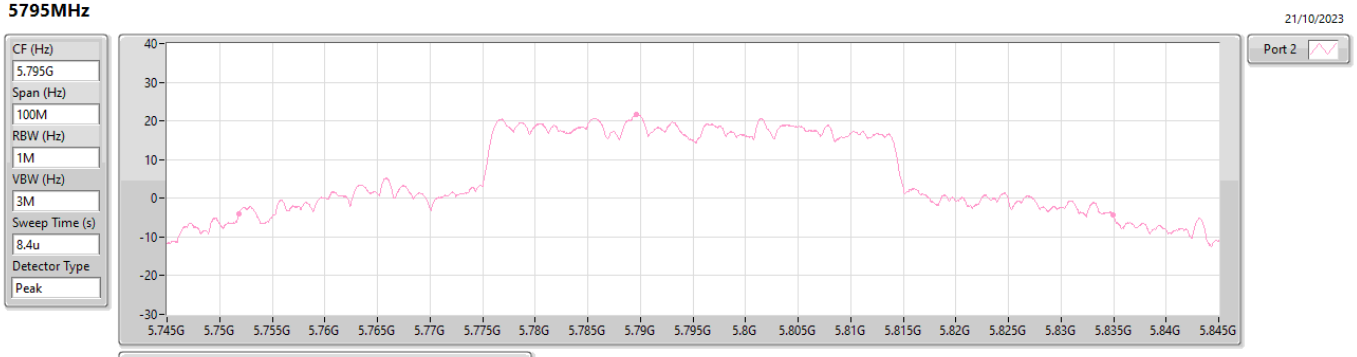
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.06M	5.77597G	5.81403G	55.711M	5.764699G	5.82041G	500k	2

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **EBW**

5795MHz

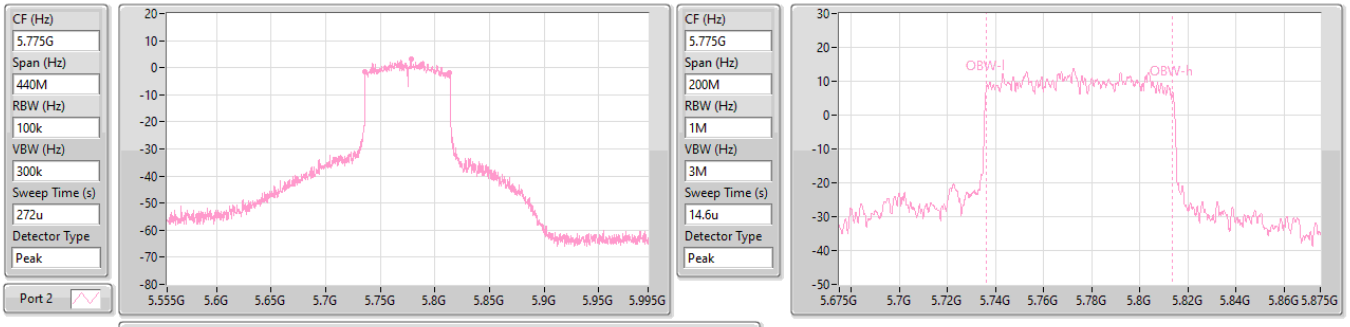


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
83.1M	5.75185G	5.83495G	Inf	2

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX **EBW**

5775MHz

21/10/2023

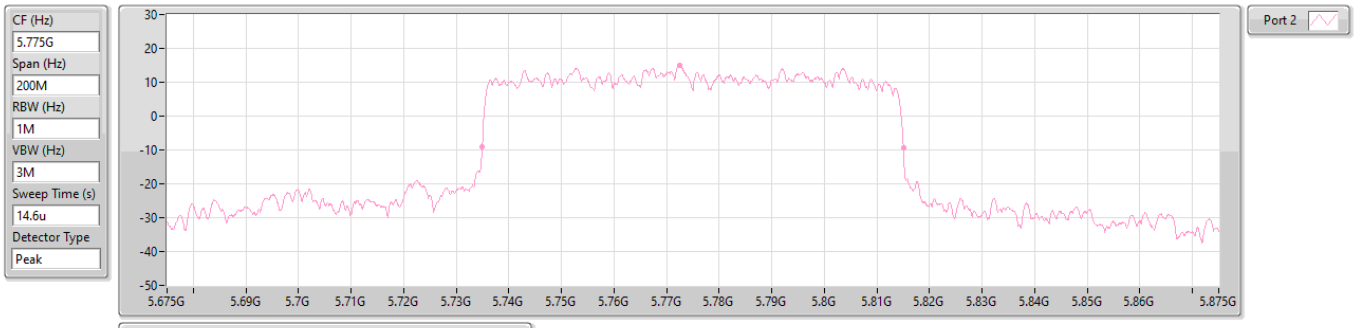


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.44M	5.73606G	5.8135G	77.206M	5.736228G	5.813434G	500k	2

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX **EBW**

5775MHz

21/10/2023

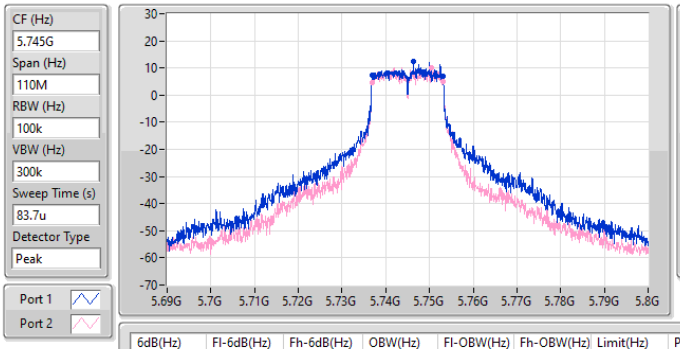


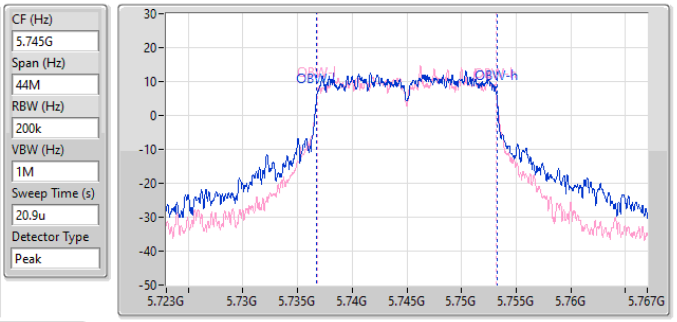
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
80.1M	5.7349G	5.815G	Inf	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX **EBW**

5745MHz

23/10/2023



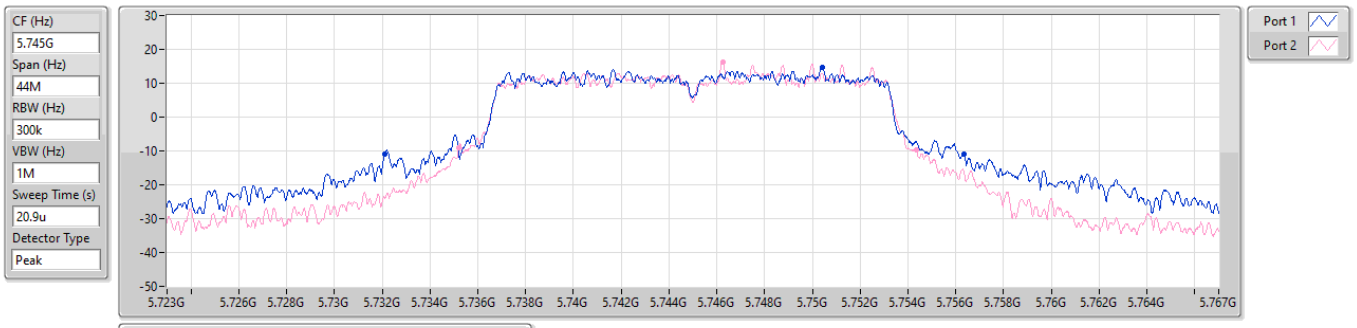


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.28M	5.73686G	5.75314G	16.469M	5.736761G	5.75323G	500k	1
16.39M	5.736805G	5.753195G	16.405M	5.736793G	5.753198G	500k	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX **EBW**

5745MHz

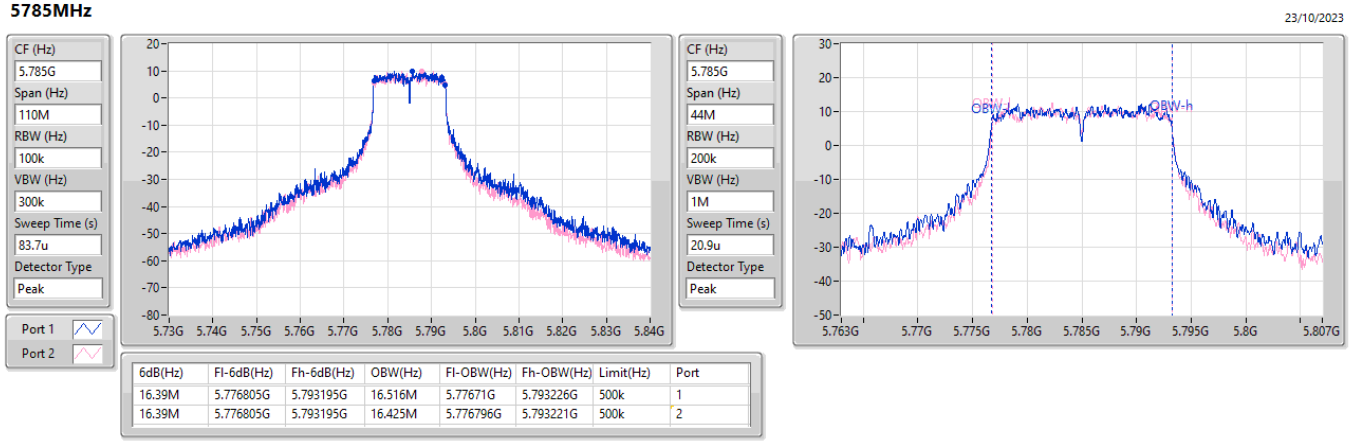
23/10/2023



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
24.244M	5.732108G	5.756352G	Inf	1
19.162M	5.735188G	5.75435G	Inf	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX **EBW**

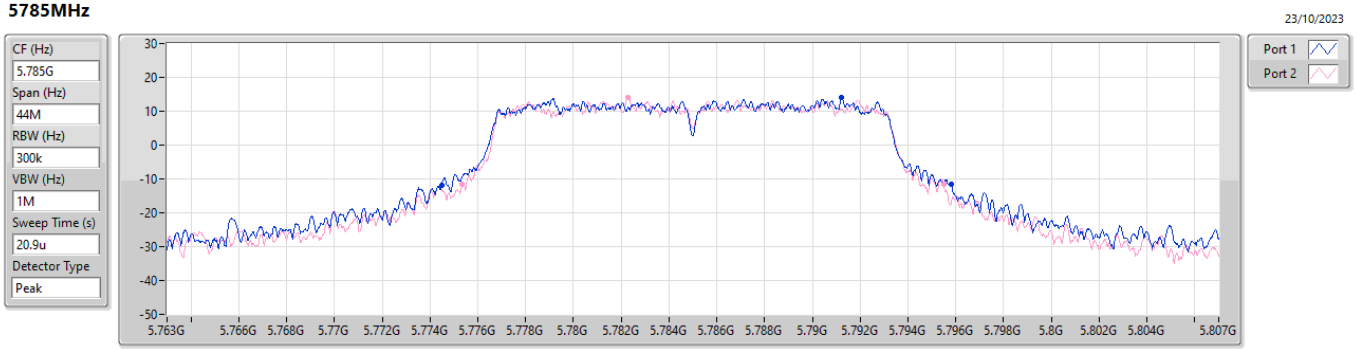
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.39M	5.776805G	5.793195G	16.516M	5.77671G	5.793226G	500k	1
16.39M	5.776805G	5.793195G	16.425M	5.776796G	5.793221G	500k	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX **EBW**

5785MHz

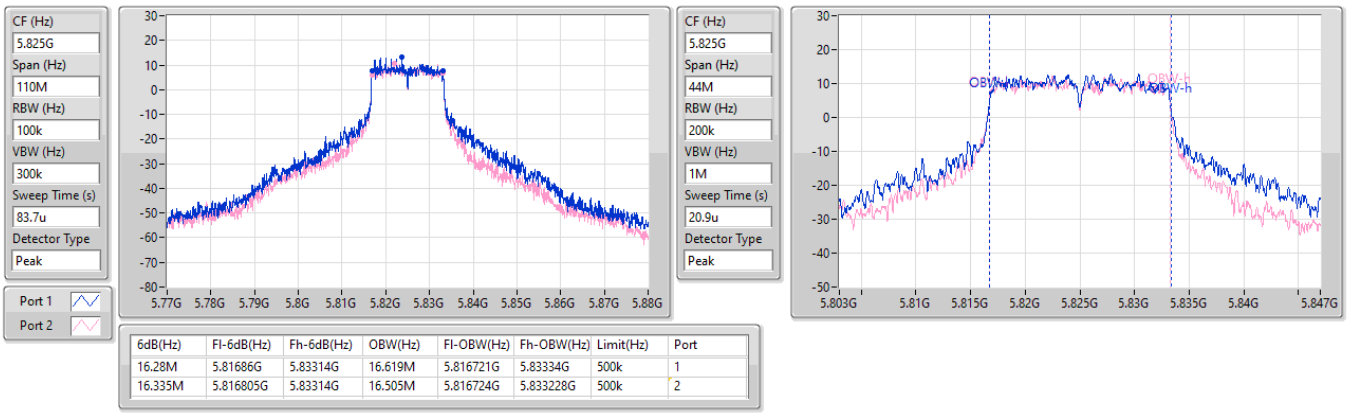


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
21.318M	5.774484G	5.795802G	Inf	1
20.152M	5.775342G	5.795494G	Inf	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX **EBW**

5825MHz

23/10/2023

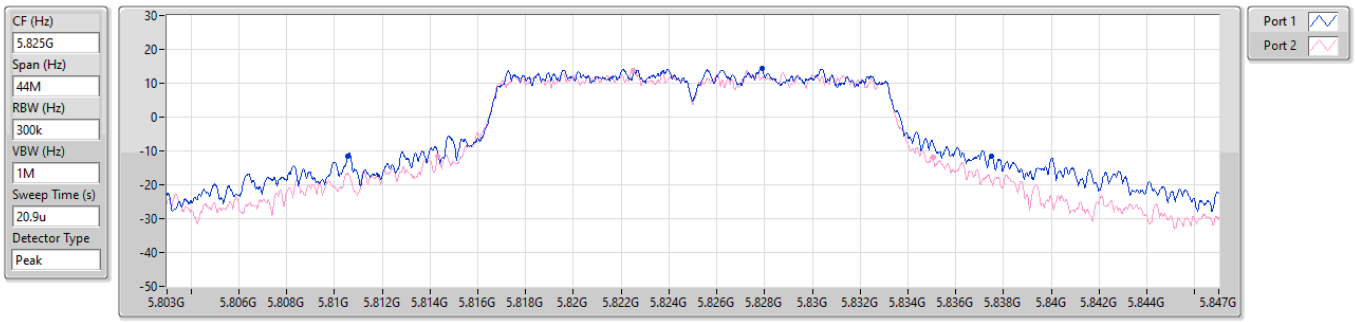


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.28M	5.81686G	5.83314G	16.619M	5.816721G	5.83334G	500k	1
16.335M	5.816805G	5.83314G	16.505M	5.816724G	5.833228G	500k	2

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX **EBW**

5825MHz

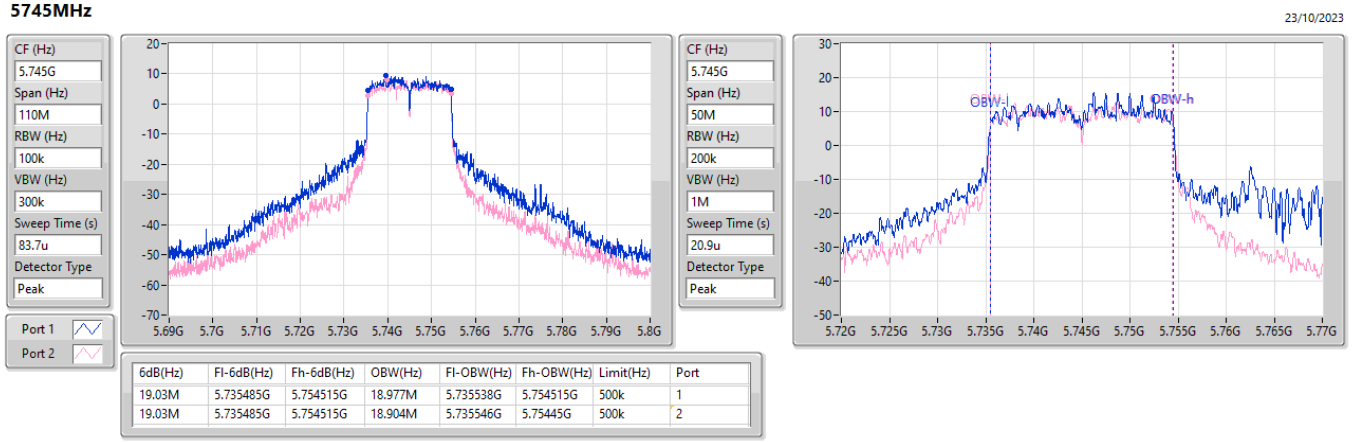
23/10/2023



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
26.95M	5.810546G	5.837496G	Inf	1
20.746M	5.814308G	5.835054G	Inf	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

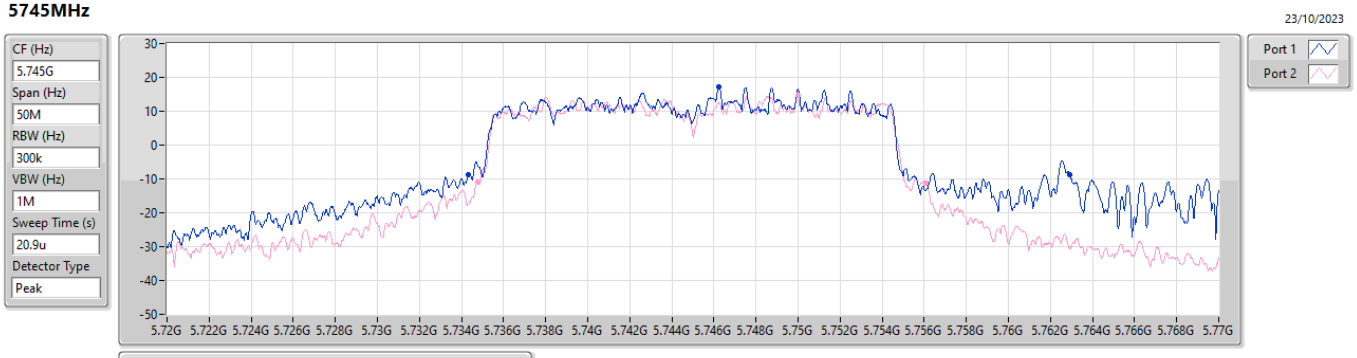
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.03M	5.735485G	5.754515G	18.977M	5.735538G	5.754515G	500k	1
19.03M	5.735485G	5.754515G	18.904M	5.735546G	5.75445G	500k	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

5745MHz

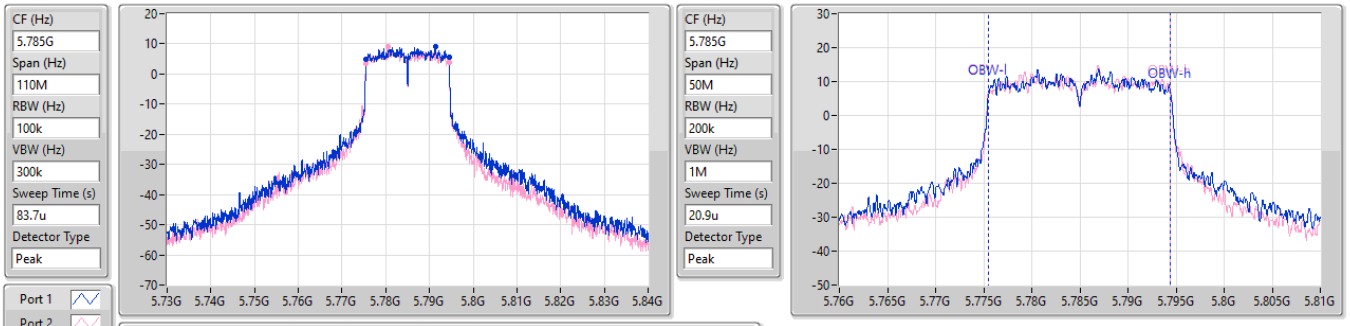


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
28.6M	5.734325G	5.762925G	Inf	1
21.325M	5.734775G	5.7561G	Inf	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

5785MHz

23/10/2023

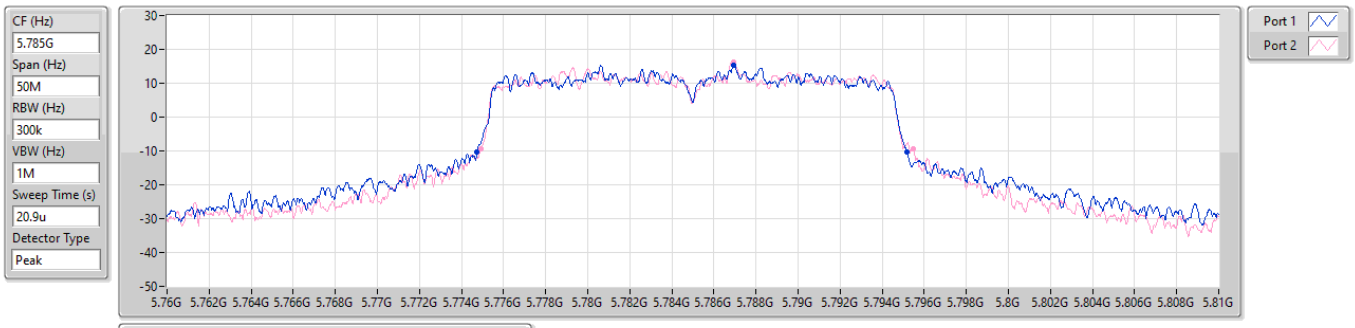


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.03M	5.775485G	5.794515G	18.892M	5.775535G	5.794427G	500k	1
19.03M	5.775485G	5.794515G	18.926M	5.775518G	5.794444G	500k	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

5785MHz

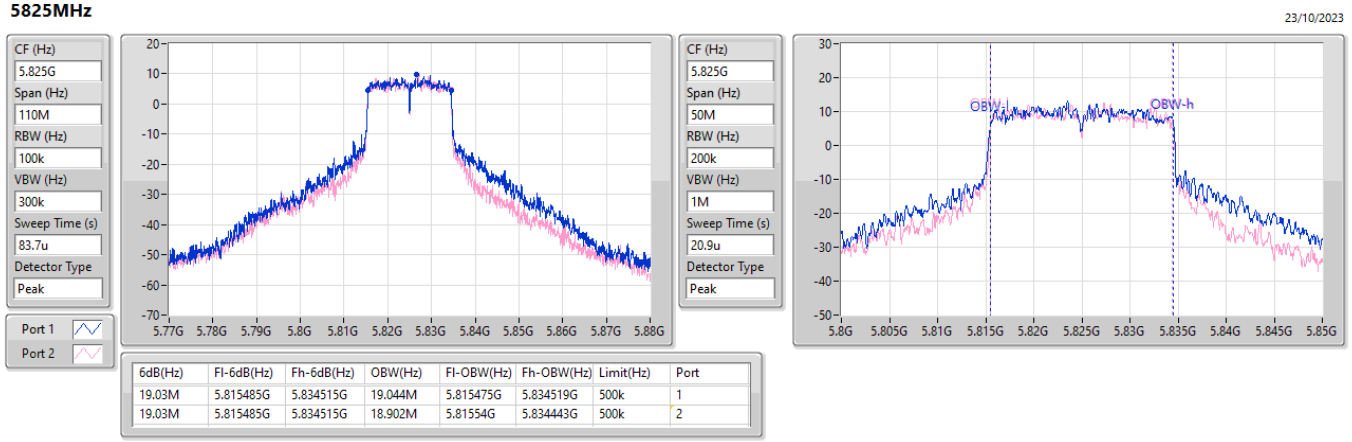
23/10/2023



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
20.475M	5.774725G	5.7952G	Inf	1
20.575M	5.774925G	5.7955G	Inf	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

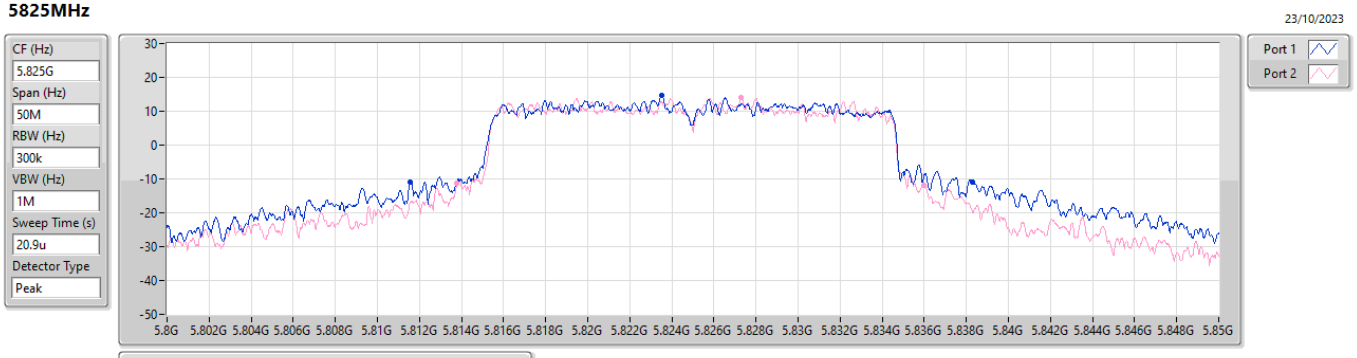
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.03M	5.815485G	5.834515G	19.044M	5.815475G	5.834519G	500k	1
19.03M	5.815485G	5.834515G	18.902M	5.81554G	5.834443G	500k	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

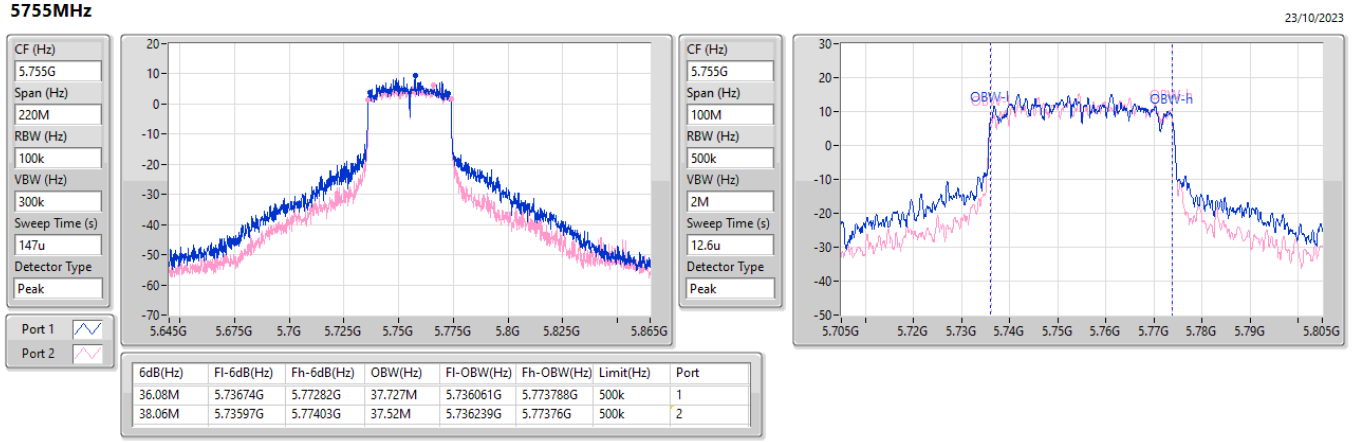
5825MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
26.7M	5.811575G	5.838275G	Inf	1
22.225M	5.813775G	5.836G	Inf	2

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **EBW**

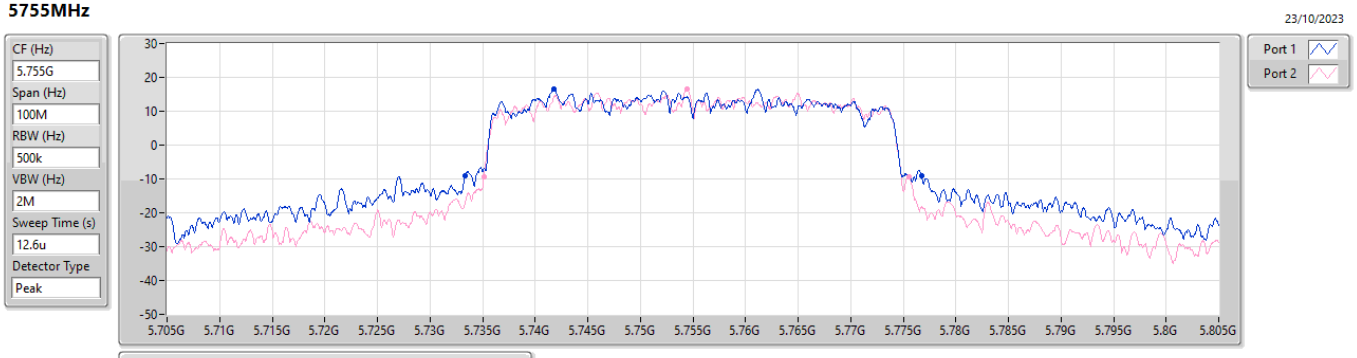
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.08M	5.73674G	5.77282G	37.727M	5.736061G	5.773788G	500k	1
38.06M	5.73597G	5.77403G	37.52M	5.736239G	5.77376G	500k	2

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **EBW**

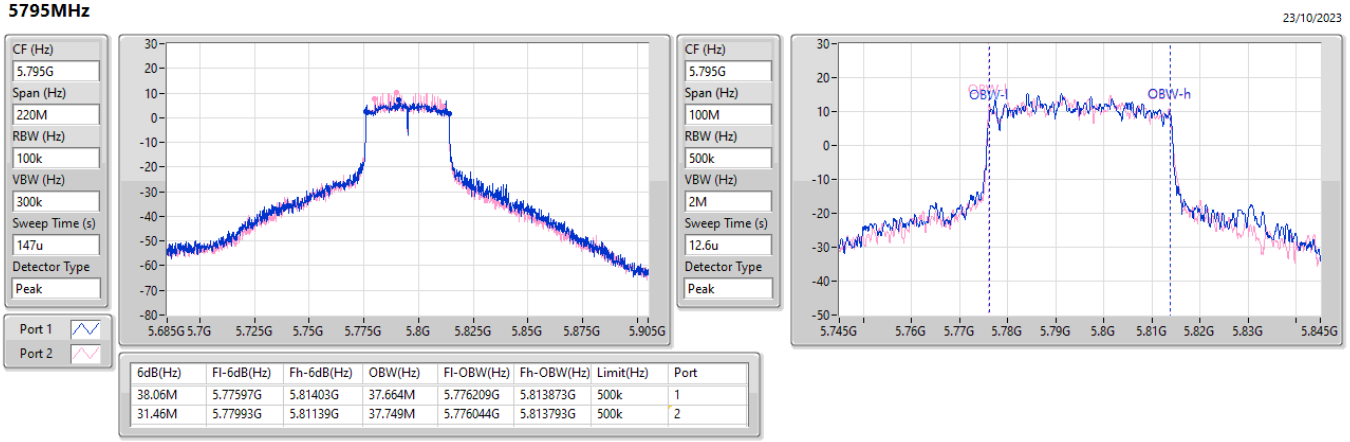
5755MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
43.45M	5.7333G	5.77675G	Inf	1
40.45M	5.73515G	5.7756G	Inf	2

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **EBW**

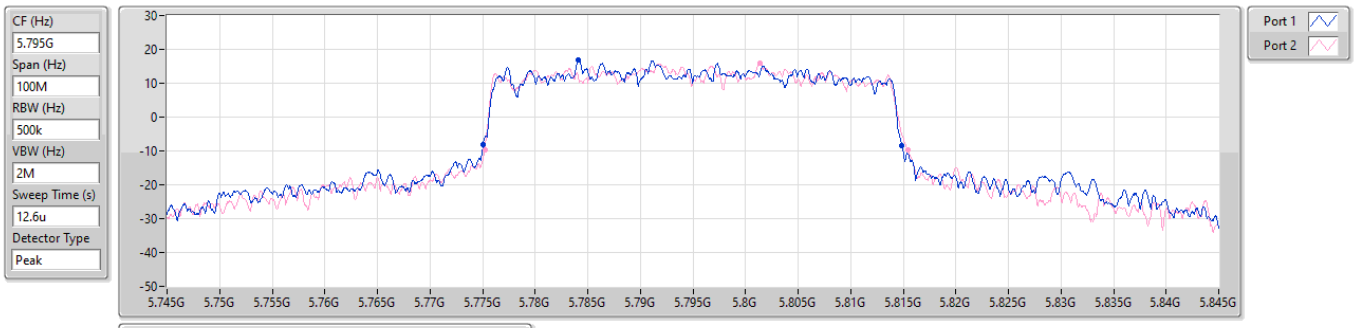
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.06M	5.77597G	5.81403G	37.664M	5.776209G	5.813873G	500k	1
31.46M	5.77993G	5.81139G	37.749M	5.776044G	5.813793G	500k	2

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **EBW**

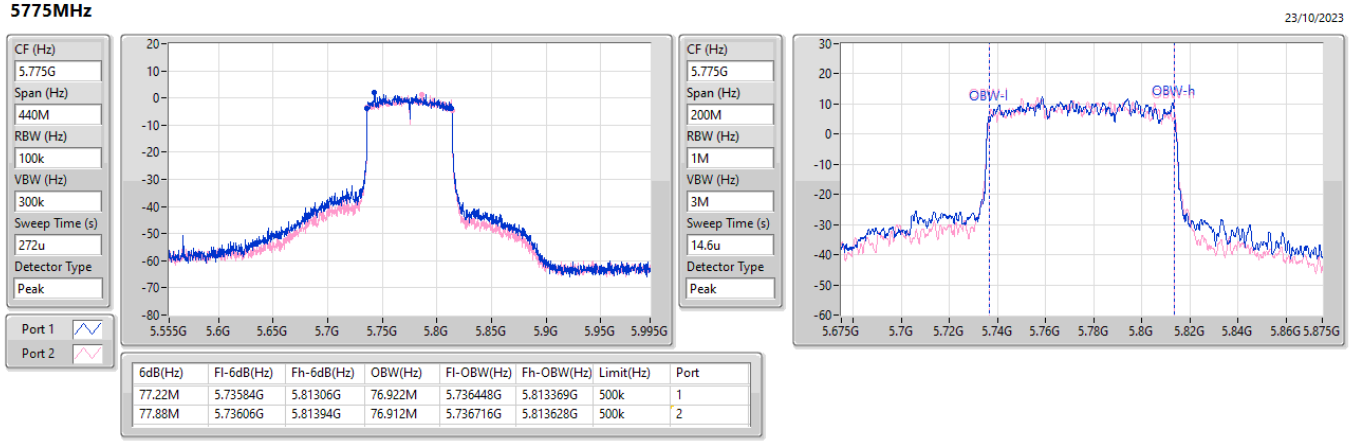
5795MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
39.8M	5.77505G	5.81485G	Inf	1
40.2M	5.77525G	5.81545G	Inf	2

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX **EBW**

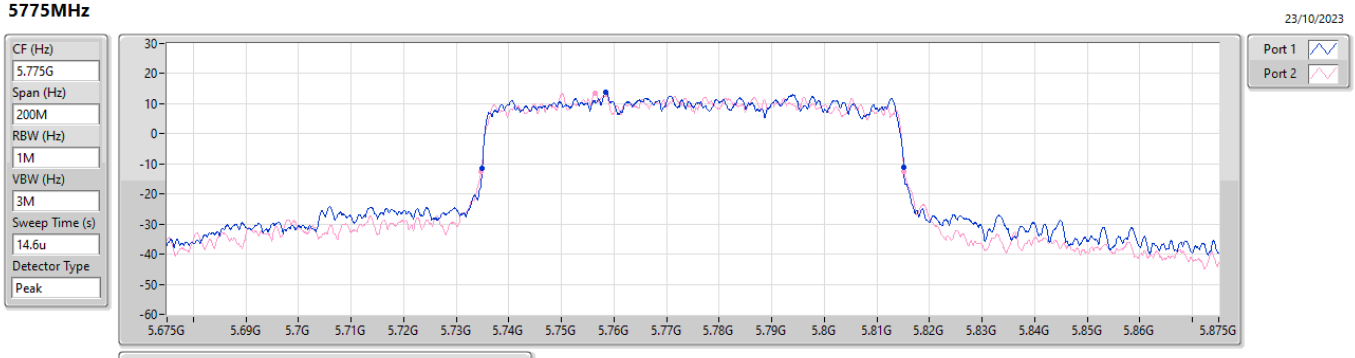
5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.22M	5.73584G	5.81306G	76.922M	5.736448G	5.813369G	500k	1
77.88M	5.73606G	5.81394G	76.912M	5.736716G	5.813628G	500k	2

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX **EBW**

5775MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
80.2M	5.7349G	5.8151G	Inf	1
80.5M	5.7347G	5.8152G	Inf	2

Summary

Mode	Total Power (dBm)	Total Power (W)
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	26.96	0.49659
802.11a_Nss1,(6Mbps)_1TX	26.90	0.48978
802.11a_Nss1,(6Mbps)_2TX	26.82	0.48084
802.11ax HEW20_Nss1,(MCS0)_1TX	26.51	0.44771
802.11ax HEW20_Nss1,(MCS0)_1TX	26.44	0.44055
802.11ax HEW20_Nss1,(MCS0)_2TX	26.89	0.48865
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	26.89	0.48865
802.11ax HEW40_Nss1,(MCS0)_1TX	26.53	0.44978
802.11ax HEW40_Nss1,(MCS0)_1TX	26.94	0.49431
802.11ax HEW40_Nss1,(MCS0)_2TX	26.93	0.49317
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	26.93	0.49317
802.11ax HEW80_Nss1,(MCS0)_1TX	23.10	0.20417
802.11ax HEW80_Nss1,(MCS0)_1TX	22.96	0.19770
802.11ax HEW80_Nss1,(MCS0)_2TX	23.95	0.24831
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.95	0.24831

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
5745MHz	Pass	9.00	26.96	-	26.96	27.00
5785MHz	Pass	9.00	26.40	-	26.40	27.00
5825MHz	Pass	9.00	25.82	-	25.82	27.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5745MHz	Pass	9.00	26.51	-	26.51	27.00
5785MHz	Pass	9.00	26.10	-	26.10	27.00
5825MHz	Pass	9.00	25.60	-	25.60	27.00
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5755MHz	Pass	9.00	26.03	-	26.03	27.00
5795MHz	Pass	9.00	26.53	-	26.53	27.00
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5775MHz	Pass	9.00	23.10		23.10	27.00
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
5745MHz	Pass	9.00	-	26.64	26.64	27.00
5785MHz	Pass	9.00	-	26.90	26.90	27.00
5825MHz	Pass	9.00	-	26.08	26.08	27.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5745MHz	Pass	9.00	-	26.41	26.41	27.00
5785MHz	Pass	9.00	-	26.44	26.44	27.00
5825MHz	Pass	9.00	-	26.06	26.06	27.00
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5755MHz	Pass	9.00	-	26.78	26.78	27.00
5795MHz	Pass	9.00	-	26.94	26.94	27.00
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5775MHz	Pass	9.00	-	22.96	22.96	27.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5745MHz	Pass	9.00	24.05	23.35	26.72	27.00
5785MHz	Pass	9.00	23.98	23.63	26.82	27.00
5825MHz	Pass	9.00	24.00	23.45	26.74	27.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	9.00	24.33	23.25	26.83	27.00
5785MHz	Pass	9.00	23.73	23.66	26.71	27.00
5825MHz	Pass	9.00	24.11	23.64	26.89	27.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	9.00	24.31	23.50	26.93	27.00
5795MHz	Pass	9.00	23.90	23.92	26.92	27.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	9.00	21.13	20.74	23.95	27.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	9.00	24.33	23.25	26.83	27.00
5785MHz	Pass	9.00	23.73	23.66	26.71	27.00
5825MHz	Pass	9.00	24.11	23.64	26.89	27.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	9.00	24.31	23.50	26.93	27.00
5795MHz	Pass	9.00	23.90	23.92	26.92	27.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	9.00	21.13	20.74	23.95	27.00

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

Summary

Mode	PD (dBm/RBW)
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_1TX	12.10
802.11a_Nss1,(6Mbps)_1TX	12.08
802.11a_Nss1,(6Mbps)_2TX	12.79
802.11ax HEW20_Nss1,(MCS0)_1TX	11.40
802.11ax HEW20_Nss1,(MCS0)_1TX	11.28
802.11ax HEW20_Nss1,(MCS0)_2TX	12.11
802.11ax HEW40_Nss1,(MCS0)_1TX	8.36
802.11ax HEW40_Nss1,(MCS0)_1TX	8.91
802.11ax HEW40_Nss1,(MCS0)_2TX	9.30
802.11ax HEW80_Nss1,(MCS0)_1TX	2.31
802.11ax HEW80_Nss1,(MCS0)_1TX	2.27
802.11ax HEW80_Nss1,(MCS0)_2TX	3.73

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

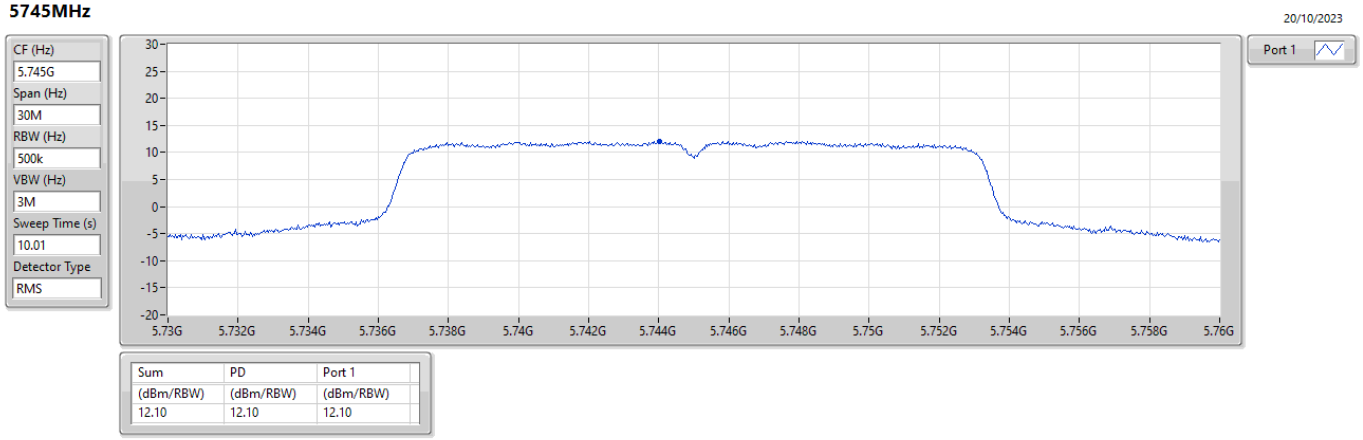
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
5745MHz	Pass	9.00	12.10	-	12.10	27.00
5785MHz	Pass	9.00	11.54	-	11.54	27.00
5825MHz	Pass	9.00	11.23	-	11.23	27.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5745MHz	Pass	9.00	11.40	-	11.40	27.00
5785MHz	Pass	9.00	10.91	-	10.91	27.00
5825MHz	Pass	9.00	10.51	-	10.51	27.00
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5755MHz	Pass	9.00	7.95	-	7.95	27.00
5795MHz	Pass	9.00	8.36	-	8.36	27.00
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5775MHz	Pass	9.00	2.31	-	2.31	27.00
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
5745MHz	Pass	9.00	-	12.08	12.08	27.00
5785MHz	Pass	9.00	-	12.04	12.04	27.00
5825MHz	Pass	9.00	-	11.51	11.51	27.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5745MHz	Pass	9.00	-	11.28	11.28	27.00
5785MHz	Pass	9.00	-	11.19	11.19	27.00
5825MHz	Pass	9.00	-	10.85	10.85	27.00
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5755MHz	Pass	9.00	-	8.65	8.65	27.00
5795MHz	Pass	9.00	-	8.91	8.91	27.00
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-
5775MHz	Pass	9.00	-	2.27	2.27	27.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5745MHz	Pass	9.00	9.99	9.44	12.66	27.00
5785MHz	Pass	9.00	9.84	9.52	12.58	27.00
5825MHz	Pass	9.00	10.12	9.56	12.79	27.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5745MHz	Pass	9.00	9.53	8.83	12.11	27.00
5785MHz	Pass	9.00	9.16	8.86	12.02	27.00
5825MHz	Pass	9.00	9.26	8.87	12.00	27.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5755MHz	Pass	9.00	6.80	5.92	9.30	27.00
5795MHz	Pass	9.00	6.16	6.24	9.19	27.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5775MHz	Pass	9.00	0.90	0.64	3.73	27.00

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

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **PSD**

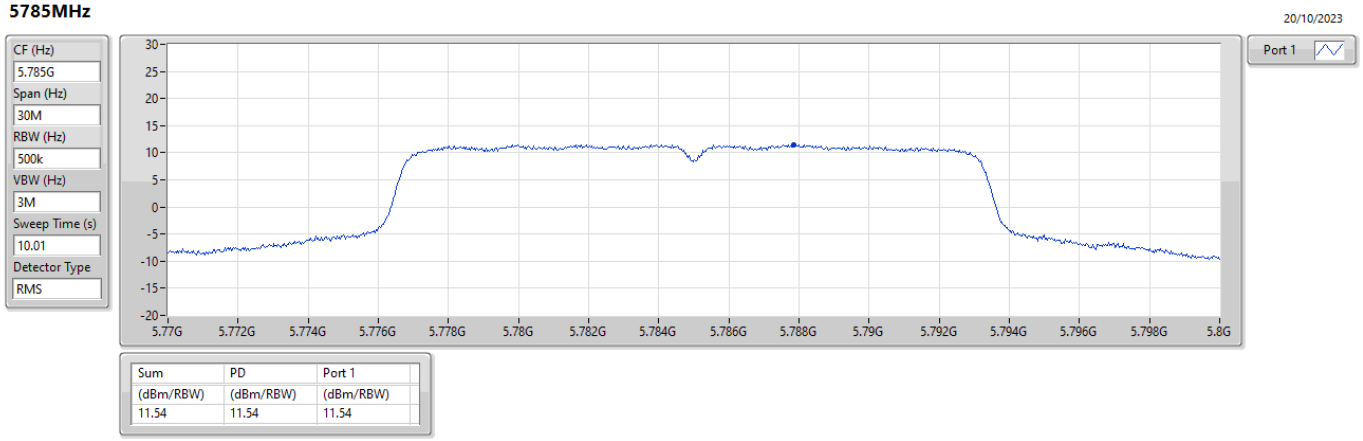
5745MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.10	12.10	12.10

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **PSD**

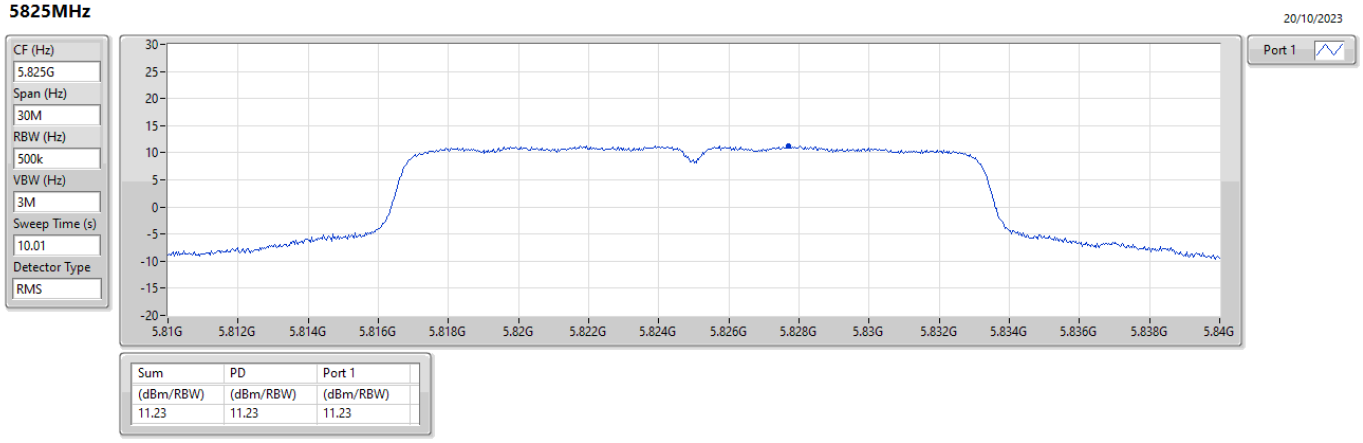
5785MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.54	11.54	11.54

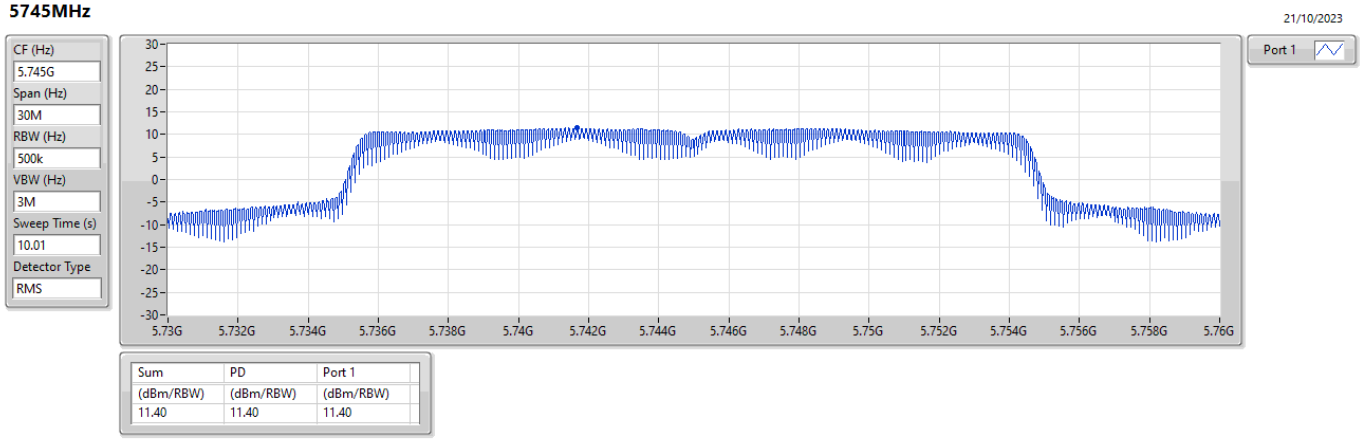
5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **PSD**

5825MHz



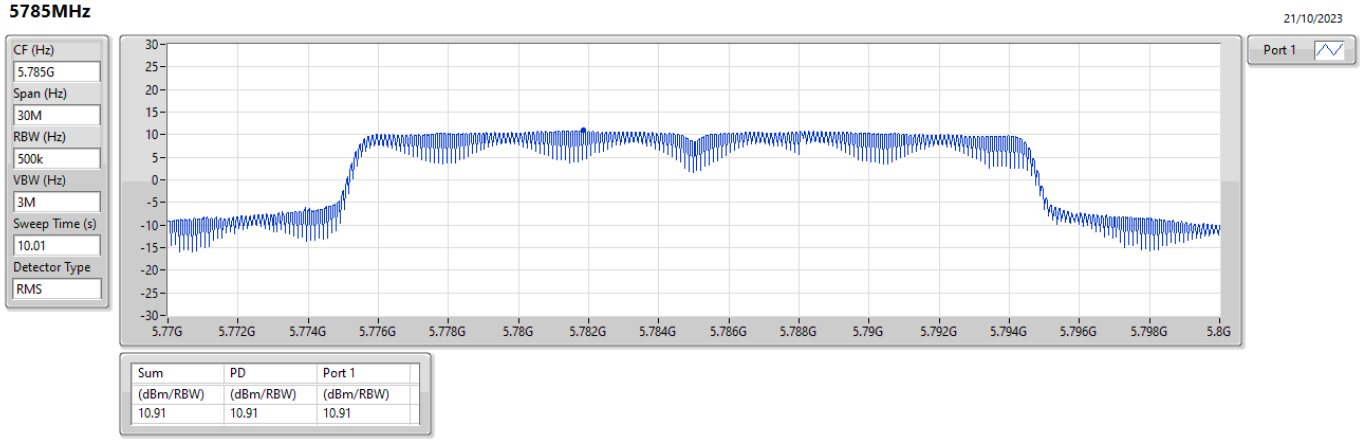
5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **PSD**

5745MHz



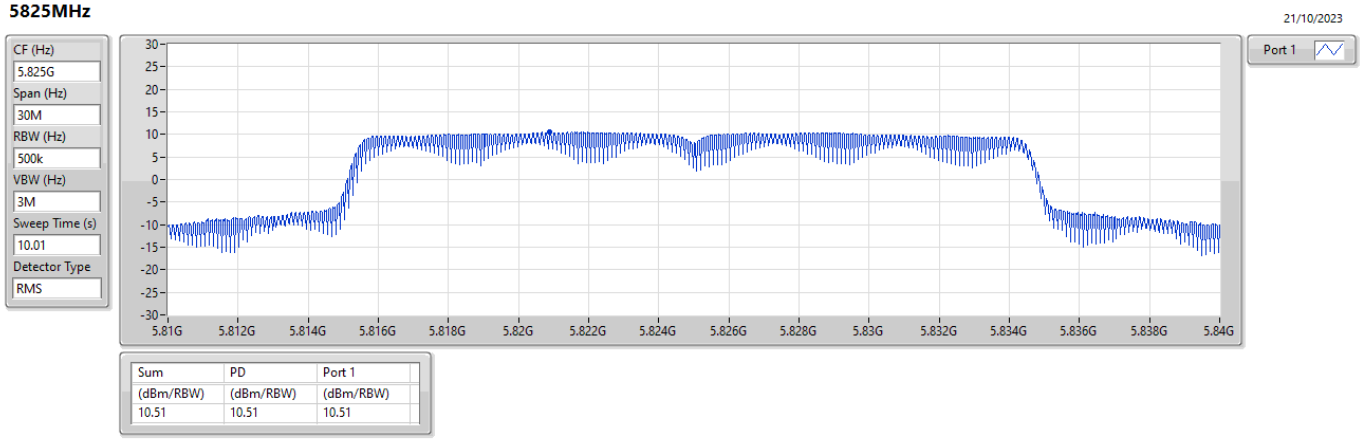
5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **PSD**

5785MHz



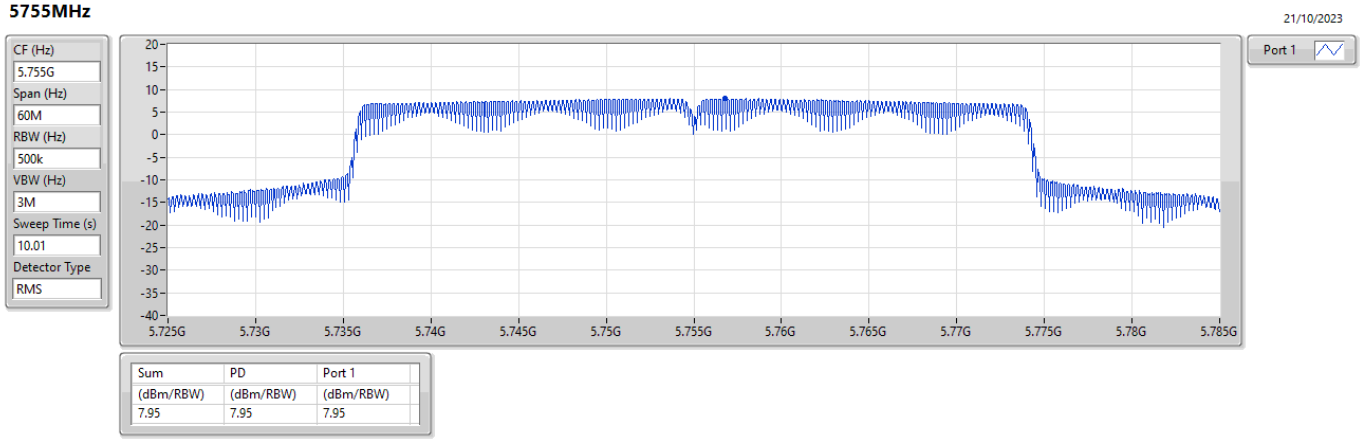
5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **PSD**

5825MHz



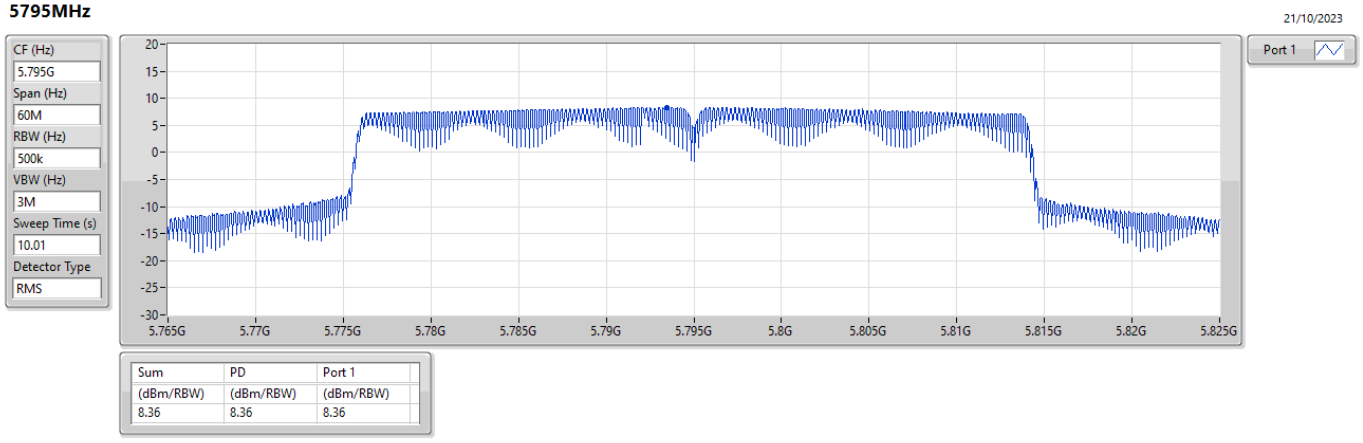
5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **PSD**

5755MHz



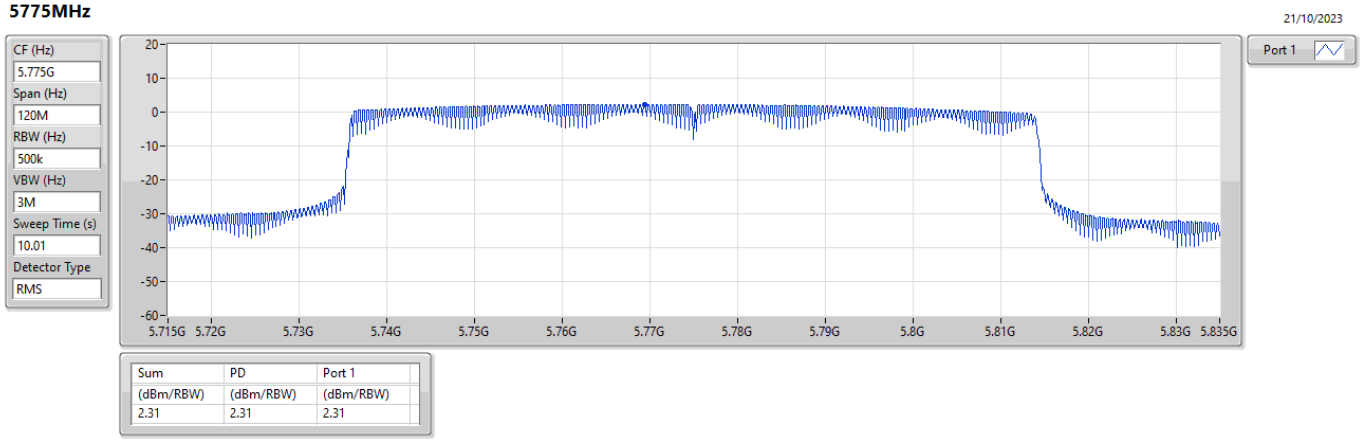
5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **PSD**

5795MHz



5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX **PSD**

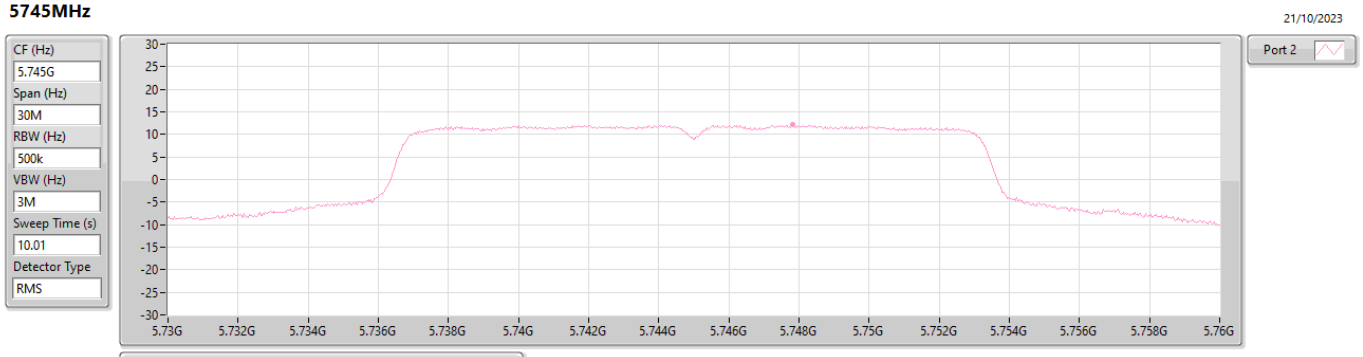
5775MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.31	2.31	2.31

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **PSD**

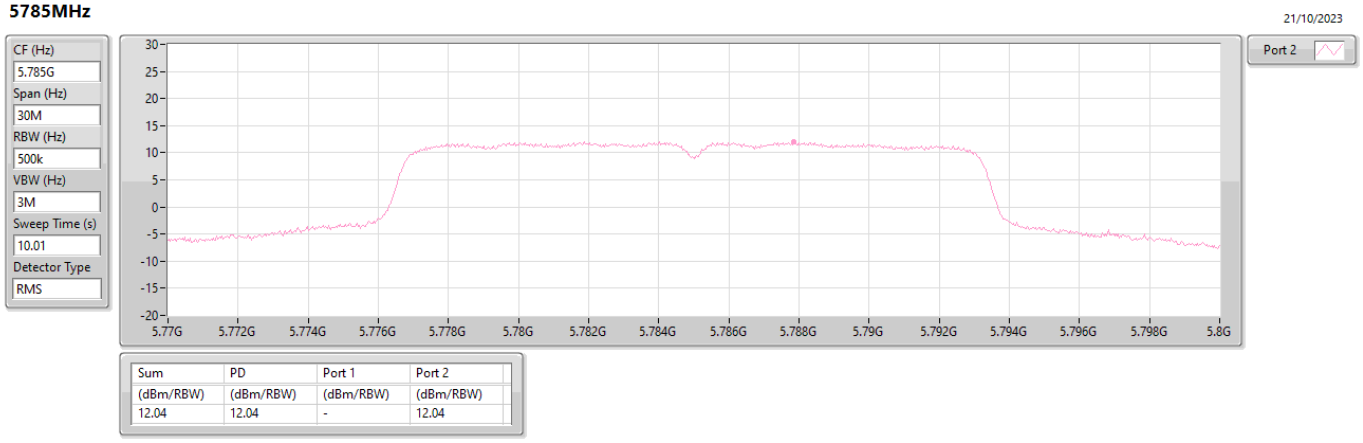
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.08	12.08	-	12.08

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **PSD**

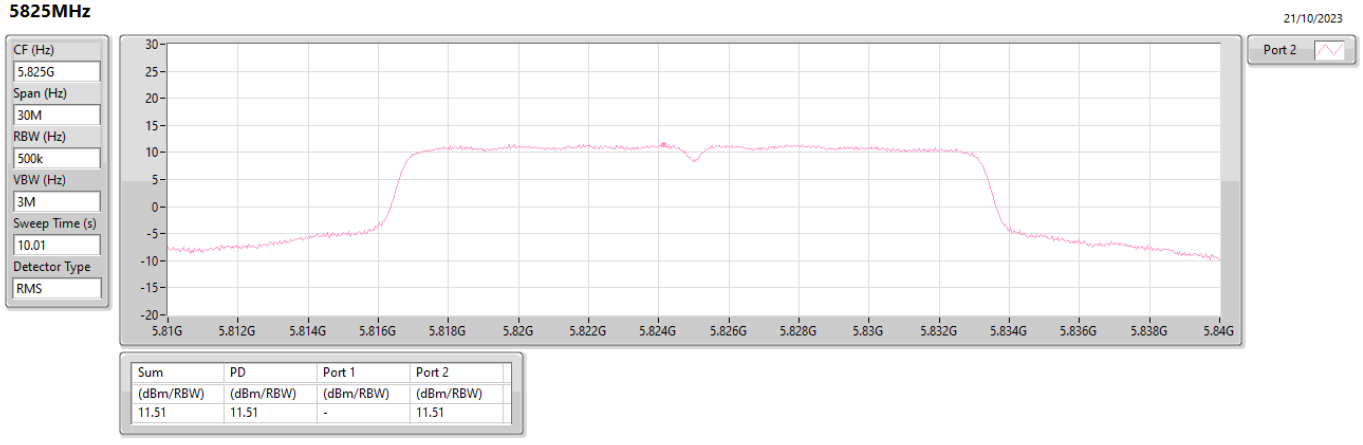
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.04	12.04	-	12.04

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX **PSD**

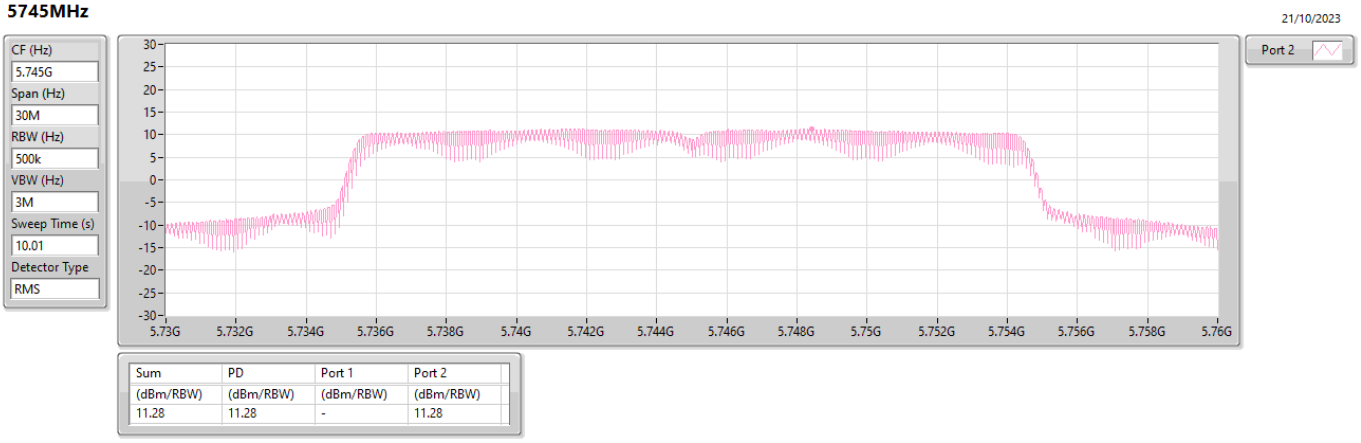
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.51	11.51	-	11.51

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **PSD**

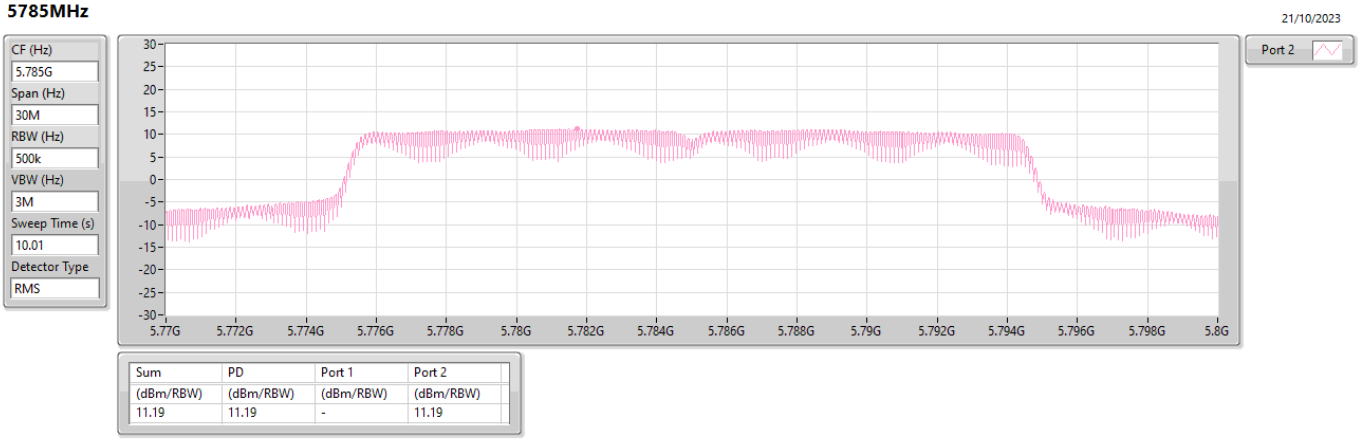
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.28	11.28	-	11.28

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **PSD**

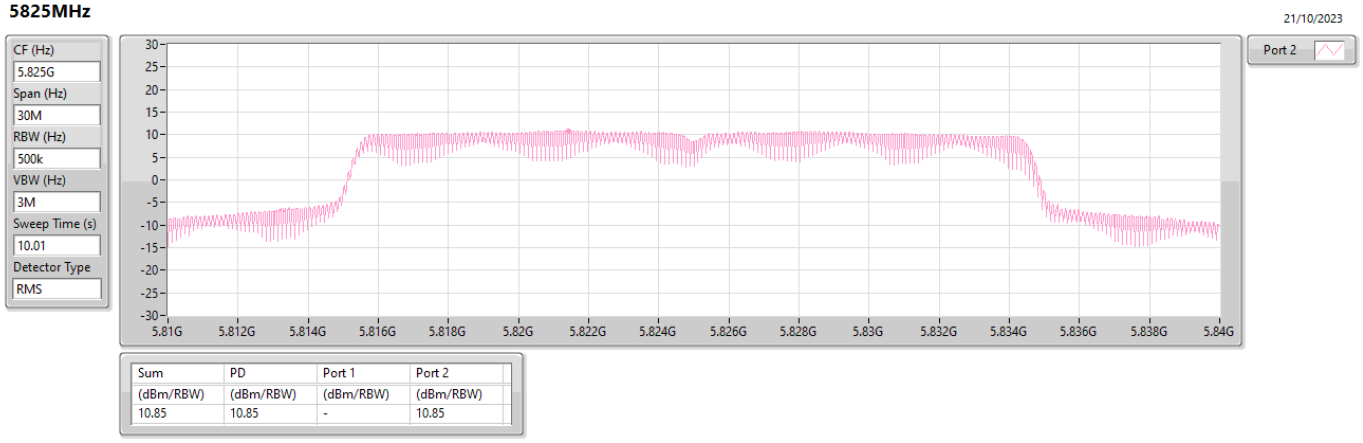
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.19	11.19	-	11.19

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX **PSD**

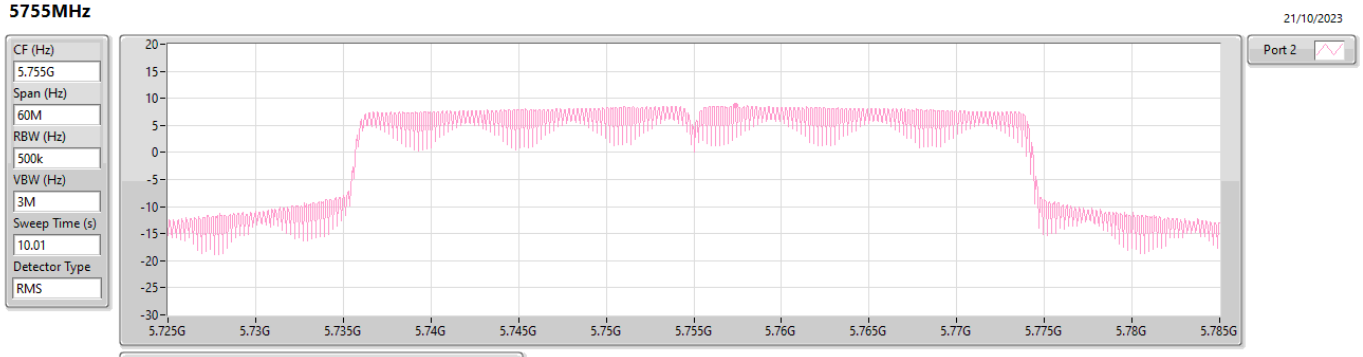
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.85	10.85	-	10.85

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **PSD**

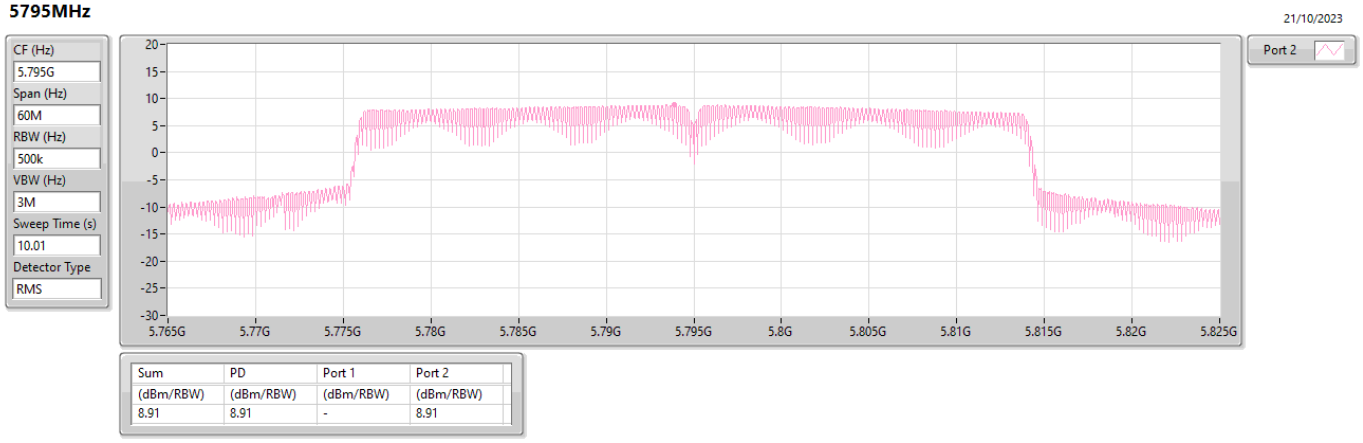
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.65	8.65	-	8.65

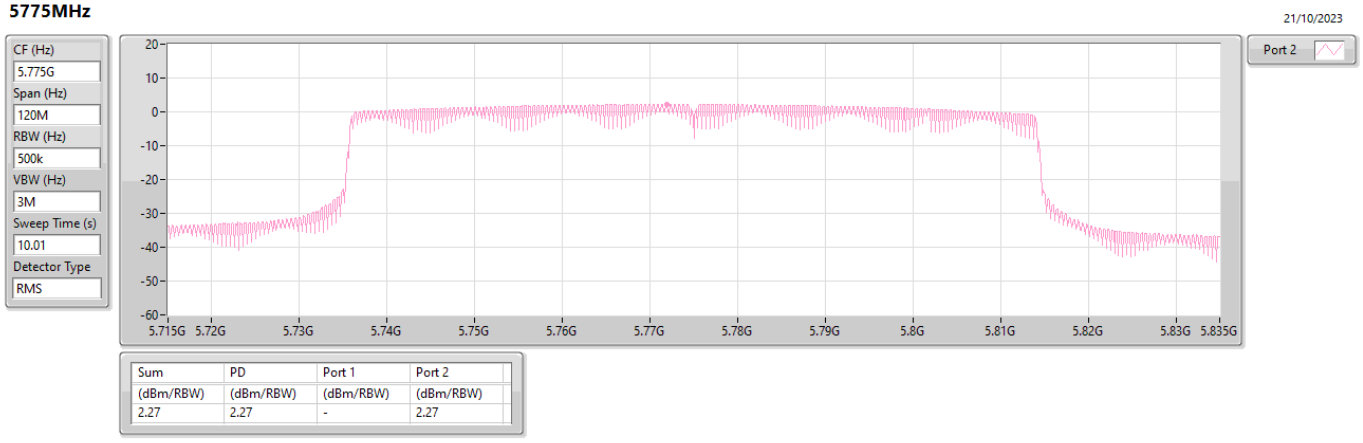
5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX **PSD**

5795MHz



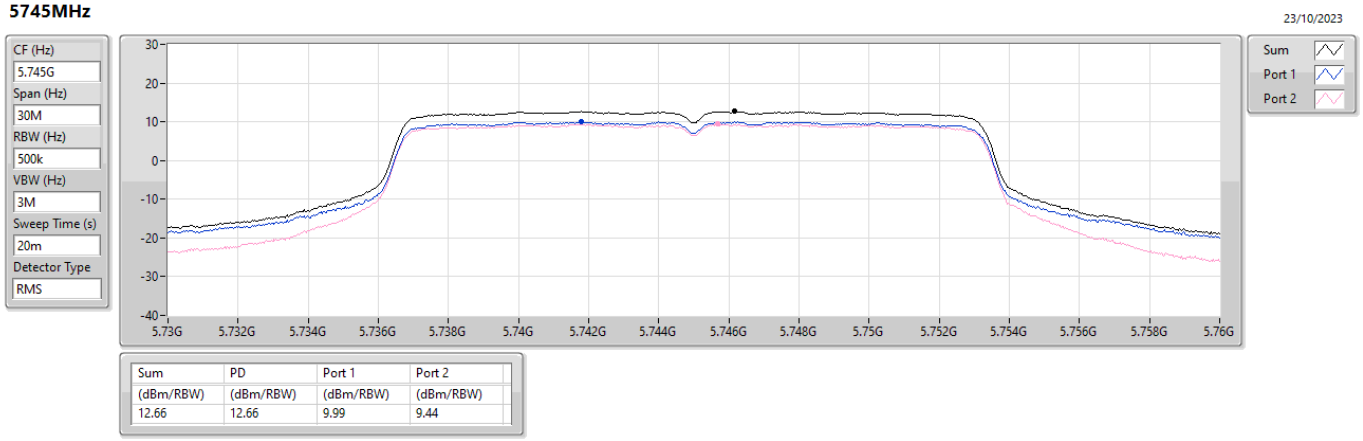
5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX **PSD**

5775MHz



5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX **PSD**

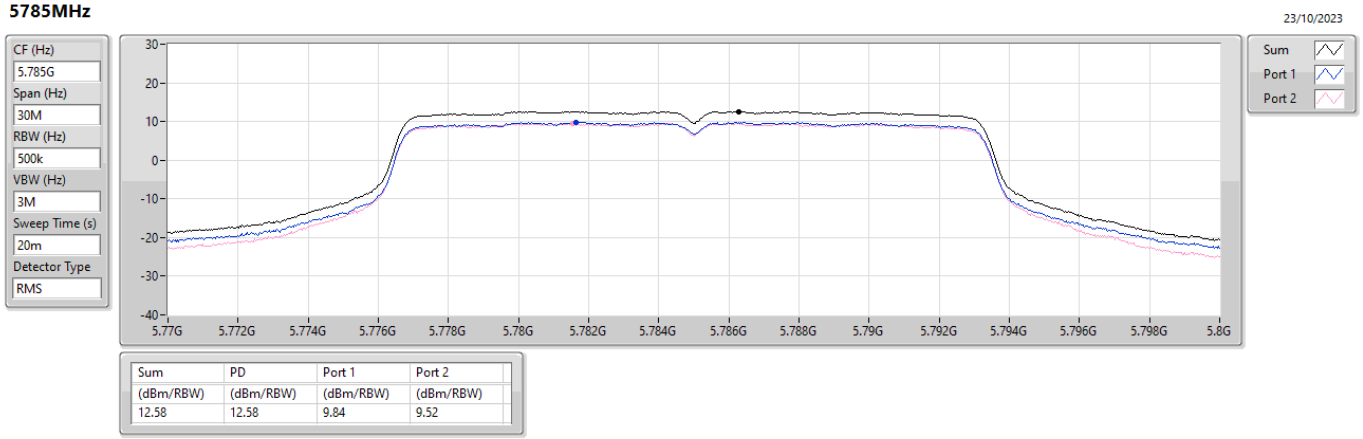
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.66	12.66	9.99	9.44

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX **PSD**

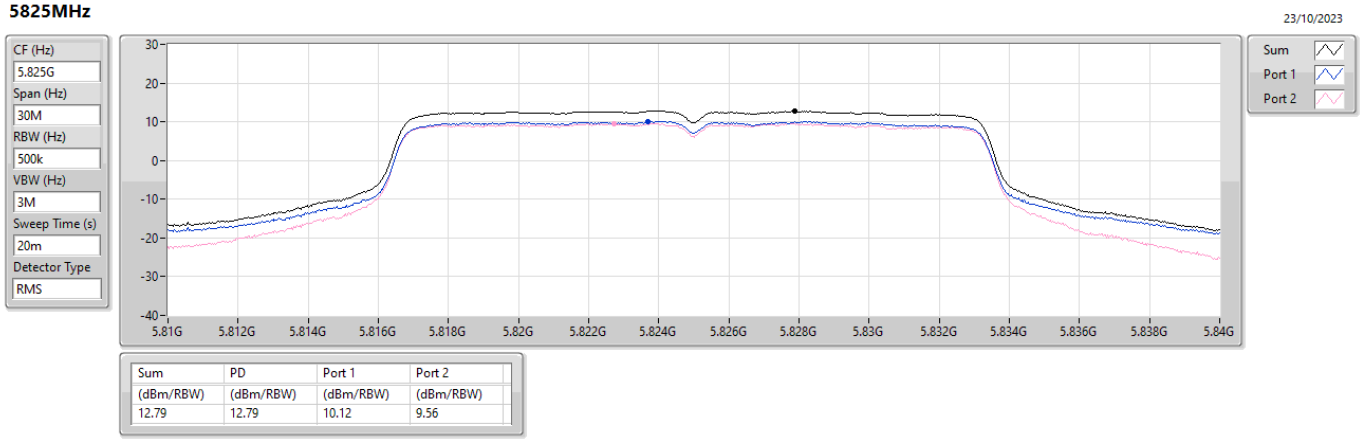
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.58	12.58	9.84	9.52

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX **PSD**

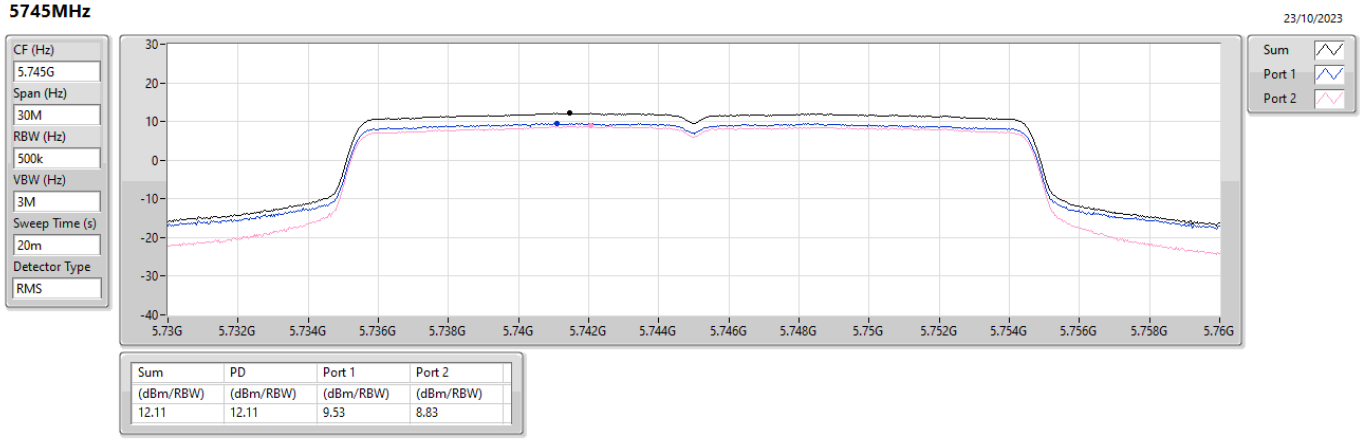
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.79	12.79	10.12	9.56

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **PSD**

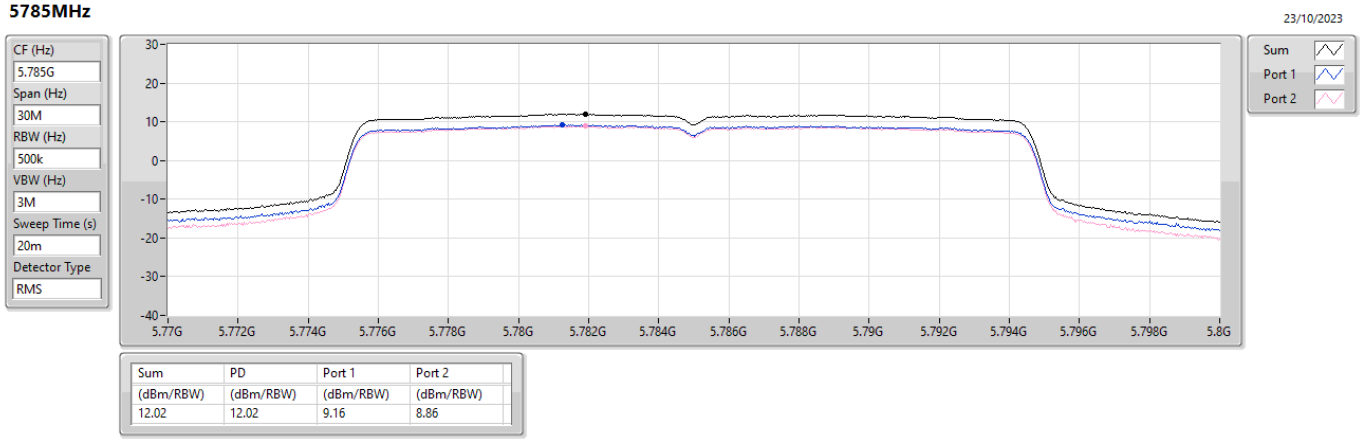
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.11	12.11	9.53	8.83

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **PSD**

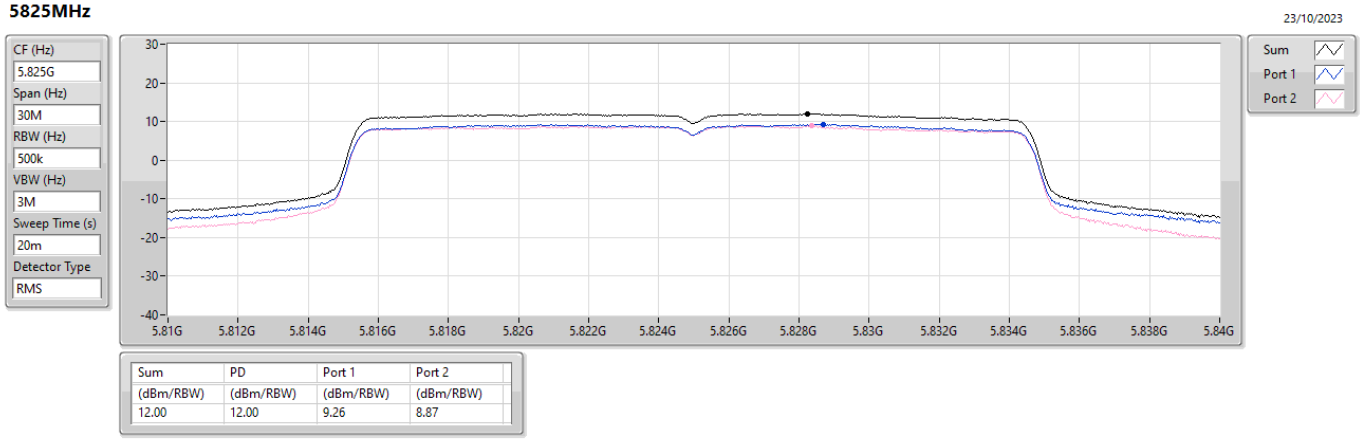
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.02	12.02	9.16	8.86

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **PSD**

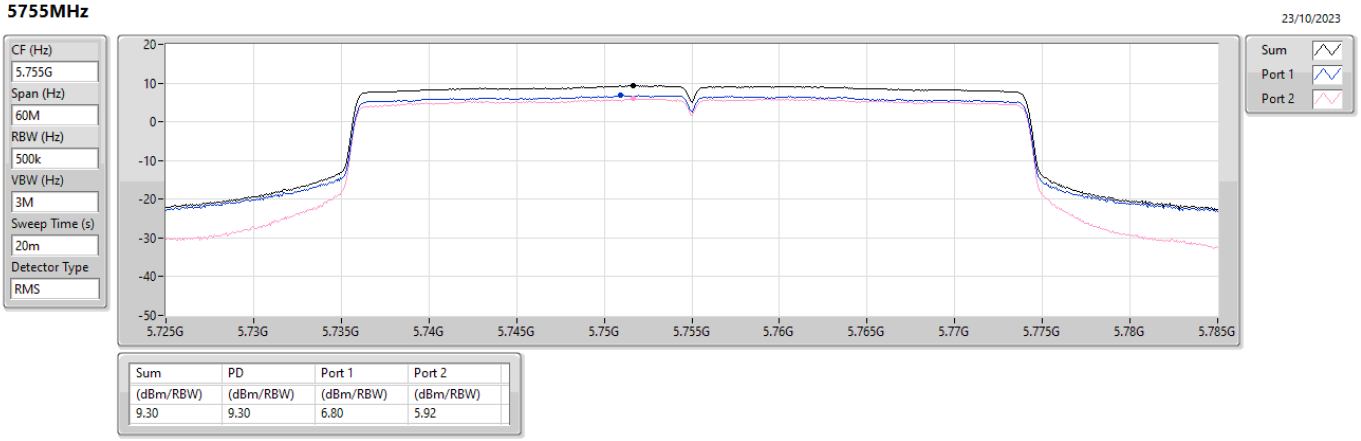
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.00	12.00	9.26	8.87

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **PSD**

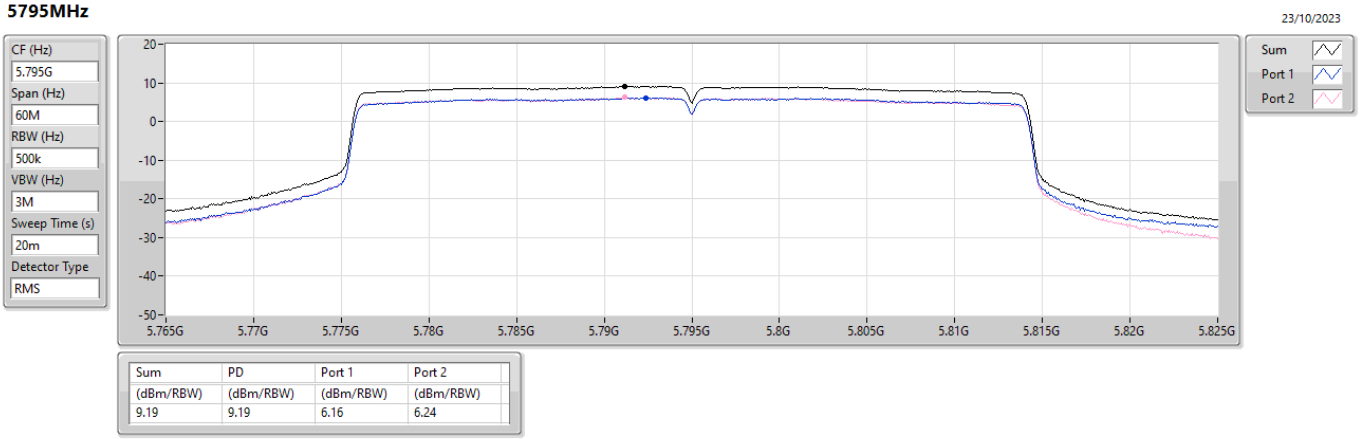
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.30	9.30	6.80	5.92

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **PSD**

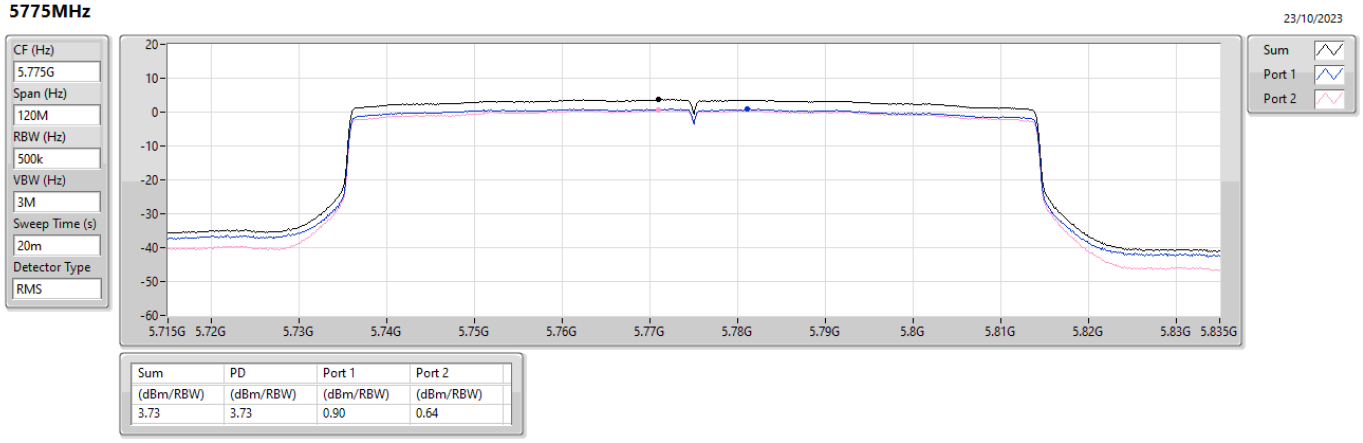
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.19	9.19	6.16	6.24

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX **PSD**

5775MHz

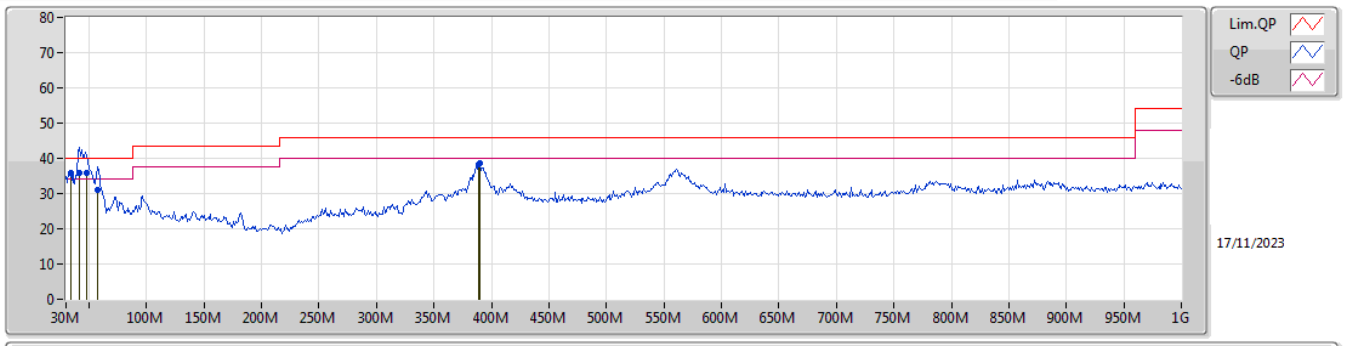


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.73	3.73	0.90	0.64

Summary

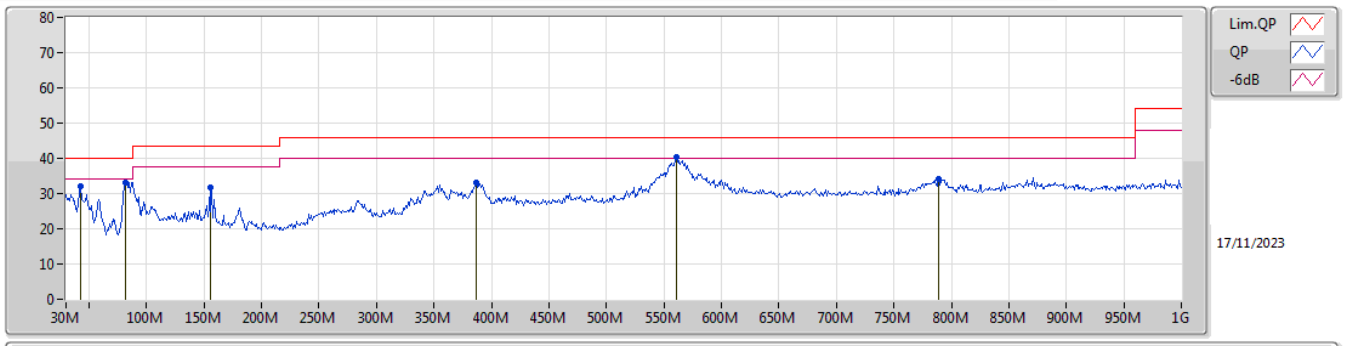
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 3	Pass	QP	41.64M	35.99	40.00	-4.01	Vertical

Mode 3



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	33.88M	35.92	40.00	-4.08	-21.86	3	Vertical	124	1.00	-	57.78	21.76	0.70	44.32
QP	41.64M	35.99	40.00	-4.01	-26.19	3	Vertical	354	1.00	"Worst"	62.18	17.40	0.78	44.37
QP	48.43M	35.95	40.00	-4.05	-29.85	3	Vertical	360	1.00	-	65.80	13.88	0.84	44.57
QP	57.16M	31.09	40.00	-8.91	-31.91	3	Vertical	0	2.00	-	63.00	11.80	0.91	44.62
PK	388.9M	38.41	46.00	-7.59	-21.61	3	Vertical	360	1.50	-	60.02	20.35	2.19	44.15
PK	389.87M	38.62	46.00	-7.38	-21.56	3	Vertical	357	1.50	-	60.18	20.39	2.19	44.14

Mode 3



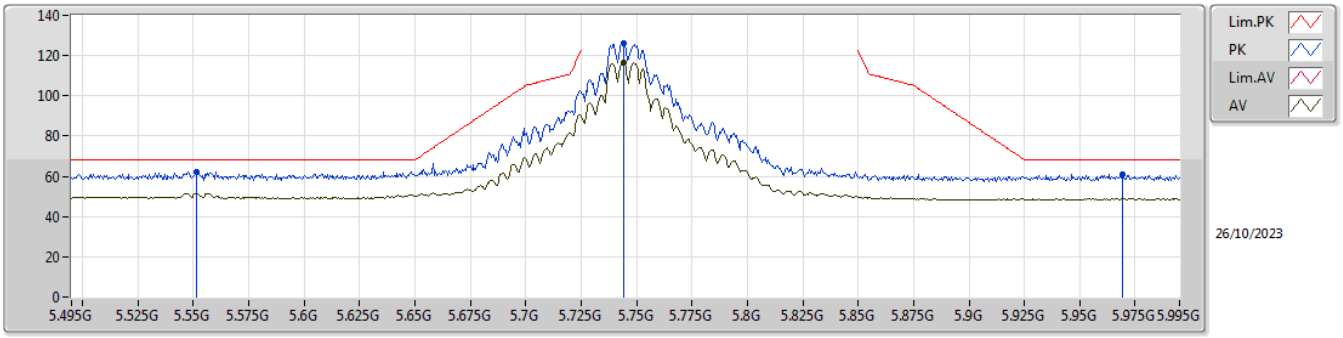
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	42.61M	32.03	40.00	-7.97	-26.73	3	Horizontal	89	2.00	-	58.76	16.87	0.80	44.40
PK	81.41M	33.12	40.00	-6.88	-31.23	3	Horizontal	353	3.00	-	64.35	12.35	1.01	44.59
PK	155.13M	31.84	43.50	-11.66	-27.93	3	Horizontal	23	1.50	-	59.77	15.25	1.37	44.55
PK	386.96M	33.08	46.00	-12.92	-21.71	3	Horizontal	204	1.00	-	54.79	20.26	2.18	44.15
PK	560.59M	40.45	46.00	-5.55	-17.45	3	Horizontal	86	1.25	"Worst"	57.90	23.81	2.57	43.83
PK	788.54M	34.03	46.00	-11.97	-15.57	3	Horizontal	228	1.00	-	49.60	24.93	3.02	43.52

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 HEW80_Nss1,(MCS0)_2TX	Pass	PK	5.652G	69.67	69.68	-0.01	3	Horizontal	7	1.78	22

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

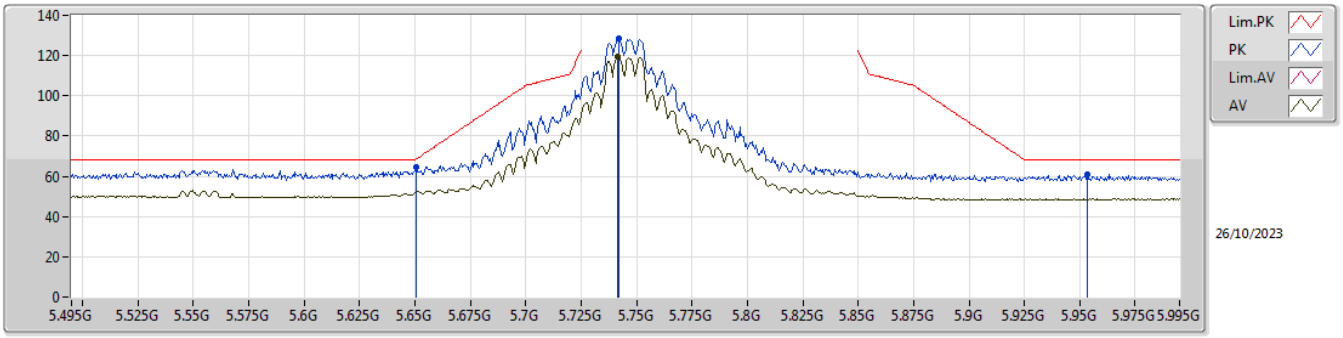


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.5515G	62.41	68.20	-5.79	54.11	3	Vertical	16	1.61	-	34.59	8.63	34.92
PK	5.744G	125.83	Inf	-Inf	117.98	3	Vertical	16	1.61	-	34.20	8.67	35.02
AV	5.744G	116.65	Inf	-Inf	108.80	3	Vertical	16	1.61	-	34.20	8.67	35.02
PK	5.969G	61.01	68.20	-7.19	52.70	3	Vertical	16	1.61	-	34.64	8.80	35.13

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

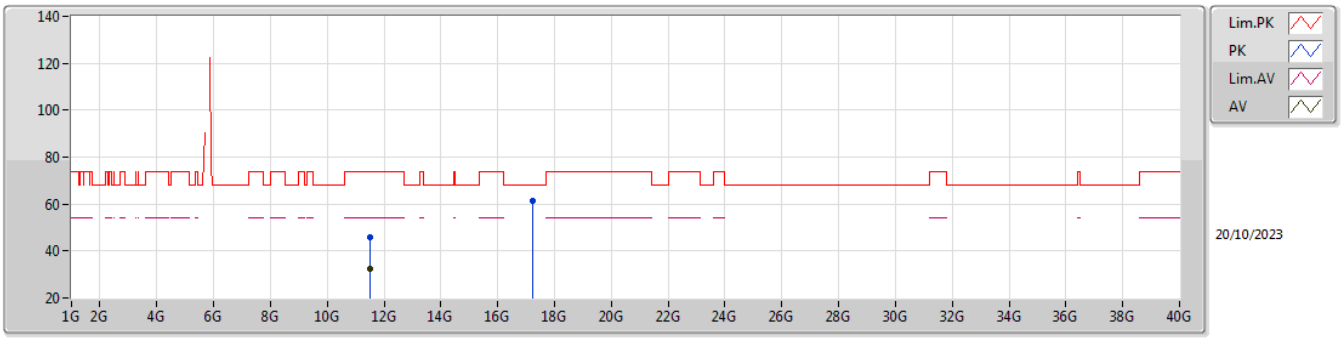


EUT Y_2TX
SET 25
15\21\24\25
6.76\6.08\4.94\4.08

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.6505G	64.49	68.57	-4.08	56.39	3	Horizontal	6	1.79	-	34.40	8.67	34.97
PK	5.742G	128.62	Inf	-Inf	120.77	3	Horizontal	6	1.79	-	34.20	8.67	35.02
AV	5.7415G	119.37	Inf	-Inf	111.52	3	Horizontal	6	1.79	-	34.20	8.67	35.02
PK	5.9535G	61.16	68.20	-7.04	52.88	3	Horizontal	6	1.79	-	34.61	8.79	35.12

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

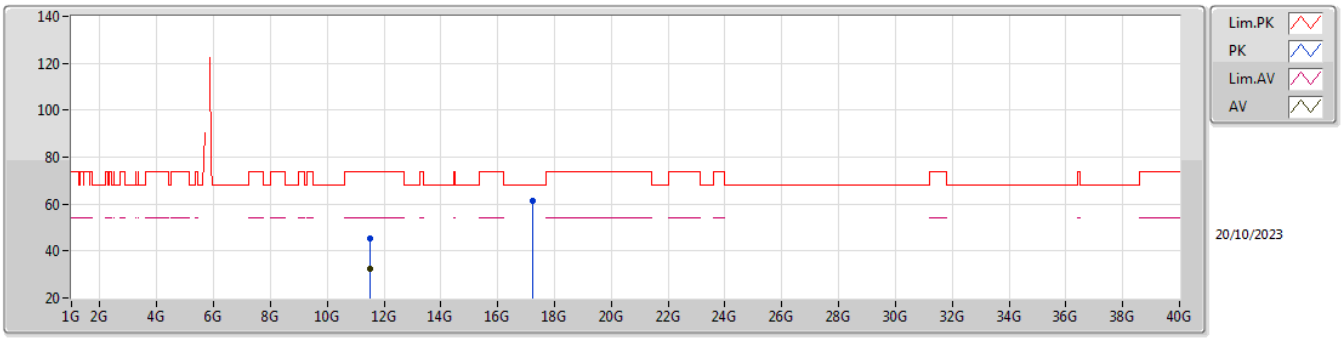


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.48778G	46.10	74.00	-27.90	37.20	3	Vertical	11	1.64	-	38.96	13.24	43.30
AV	11.49324G	32.24	54.00	-21.76	23.31	3	Vertical	11	1.64	-	38.98	13.25	43.30
PK	17.22336G	61.33	68.20	-6.87	39.70	3	Vertical	27	1.37	-	40.62	23.05	42.04

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5745MHz_TX

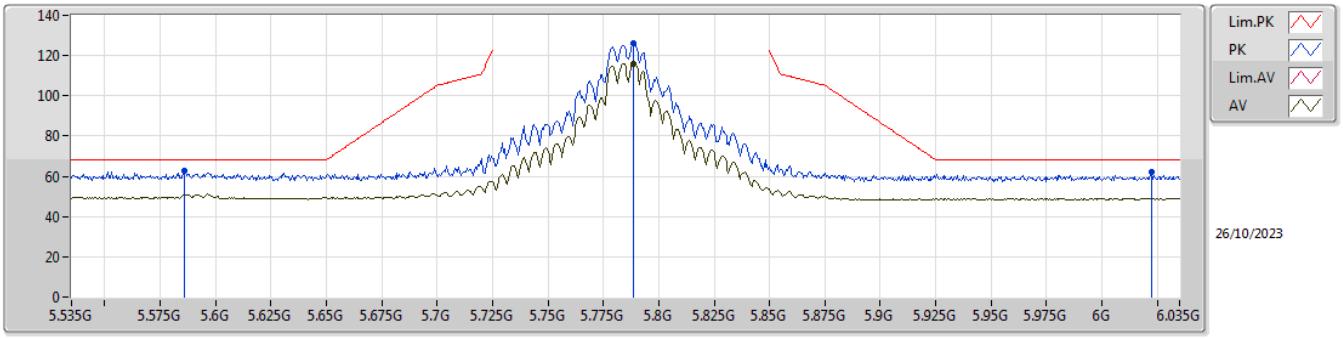


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.49374G	45.54	74.00	-28.46	36.61	3	Horizontal	273	1.01	-	38.98	13.25	43.30
AV	11.49402G	32.26	54.00	-21.74	23.33	3	Horizontal	273	1.01	-	38.98	13.25	43.30
PK	17.24262G	61.59	68.20	-6.61	39.83	3	Horizontal	135	1.99	-	40.71	23.08	42.03

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

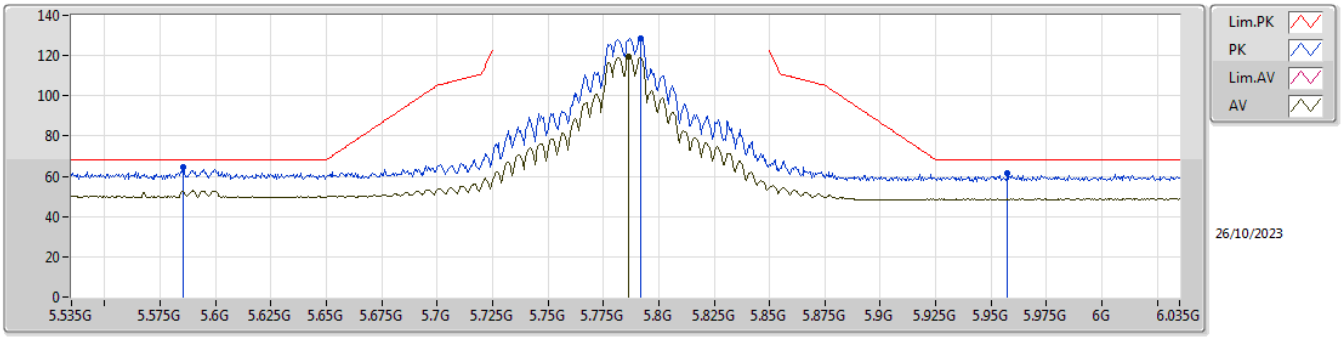


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.586G	62.66	68.20	-5.54	54.49	3	Vertical	360	1.80	-	34.46	8.65	34.94
PK	5.7885G	126.06	Inf	-Inf	118.14	3	Vertical	360	1.80	-	34.28	8.68	35.04
AV	5.7885G	116.03	Inf	-Inf	108.11	3	Vertical	360	1.80	-	34.28	8.68	35.04
PK	6.0225G	62.42	68.20	-5.78	53.96	3	Vertical	360	1.80	-	34.74	8.85	35.13

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

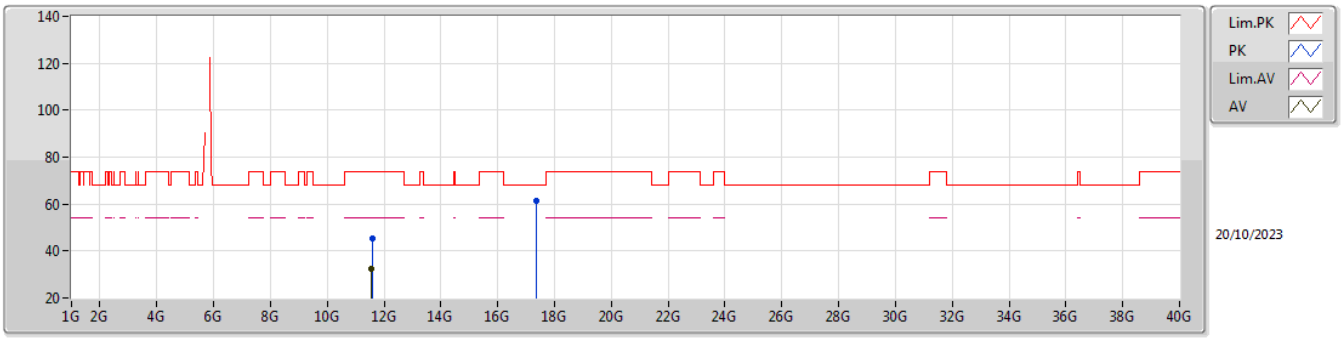


EUT Y_2TX
SET 25
15\21\24\25
6.36\6.75\6.01\3.62

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.5855G	64.58	68.20	-3.62	56.41	3	Horizontal	8	1.60	-	34.46	8.65	34.94
PK	5.792G	128.83	Inf	-Inf	120.91	3	Horizontal	8	1.60	-	34.28	8.68	35.04
AV	5.7865G	119.26	Inf	-Inf	111.35	3	Horizontal	8	1.60	-	34.27	8.68	35.04
PK	5.9575G	61.37	68.20	-6.83	53.08	3	Horizontal	8	1.60	-	34.62	8.79	35.12

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

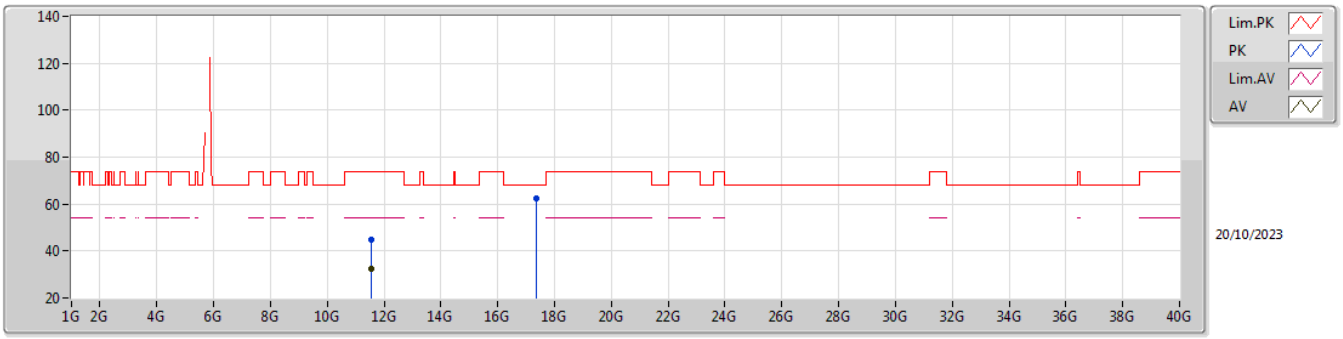


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.58002G	45.38	74.00	-28.62	36.12	3	Vertical	104	2.42	-	39.24	13.31	43.29
AV	11.57024G	32.28	54.00	-21.72	23.05	3	Vertical	104	2.42	-	39.21	13.31	43.29
PK	17.34258G	61.44	68.20	-6.76	38.89	3	Vertical	199	2.35	-	41.30	23.26	42.01

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5785MHz_TX

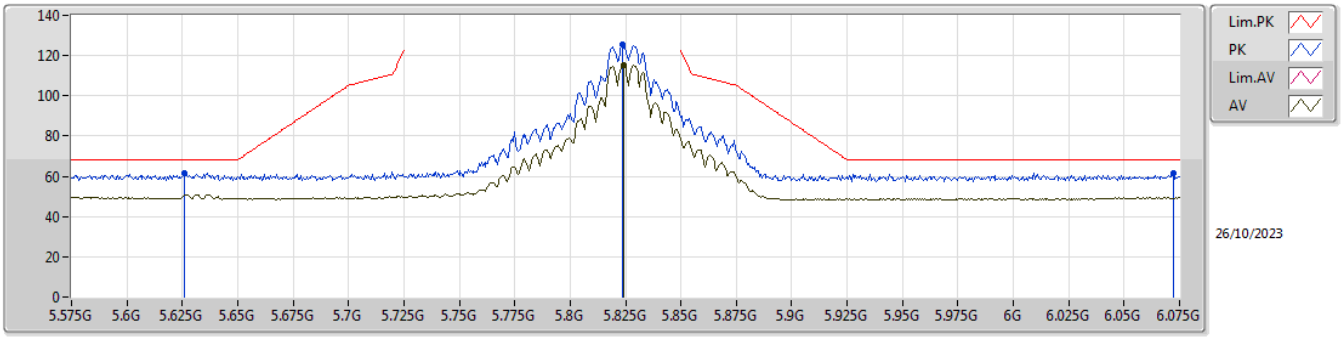


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5565G	44.75	74.00	-29.25	35.57	3	Horizontal	120	2.89	-	39.17	13.30	43.29
AV	11.5598G	32.34	54.00	-21.66	23.15	3	Horizontal	120	2.89	-	39.18	13.30	43.29
PK	17.3427G	62.44	68.20	-5.76	39.89	3	Horizontal	308	2.16	-	41.30	23.26	42.01

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

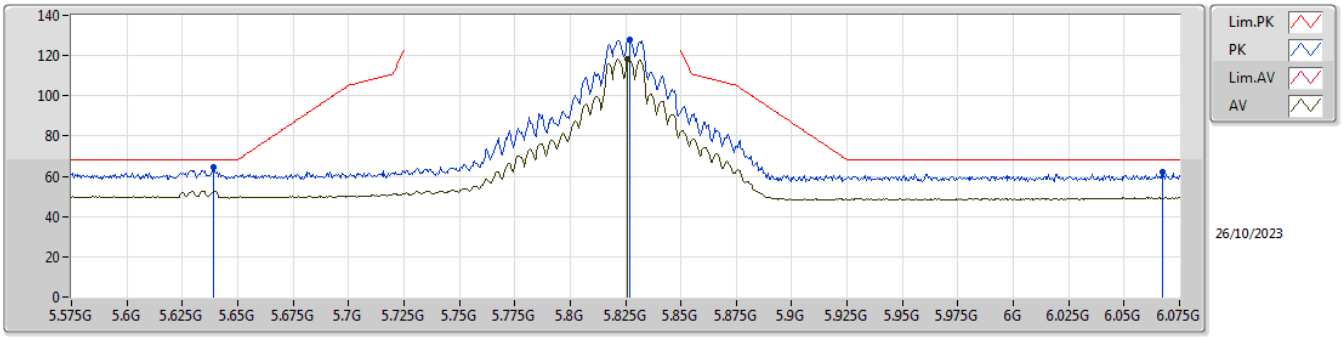


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.626G	61.49	68.20	-6.71	53.39	3	Vertical	6	1.80	-	34.40	8.66	34.96
PK	5.8235G	125.34	Inf	-Inf	117.40	3	Vertical	6	1.80	-	34.30	8.70	35.06
AV	5.824G	115.51	Inf	-Inf	107.57	3	Vertical	6	1.80	-	34.30	8.70	35.06
PK	6.0725G	61.76	68.20	-6.44	53.05	3	Vertical	6	1.80	-	34.89	8.93	35.11

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

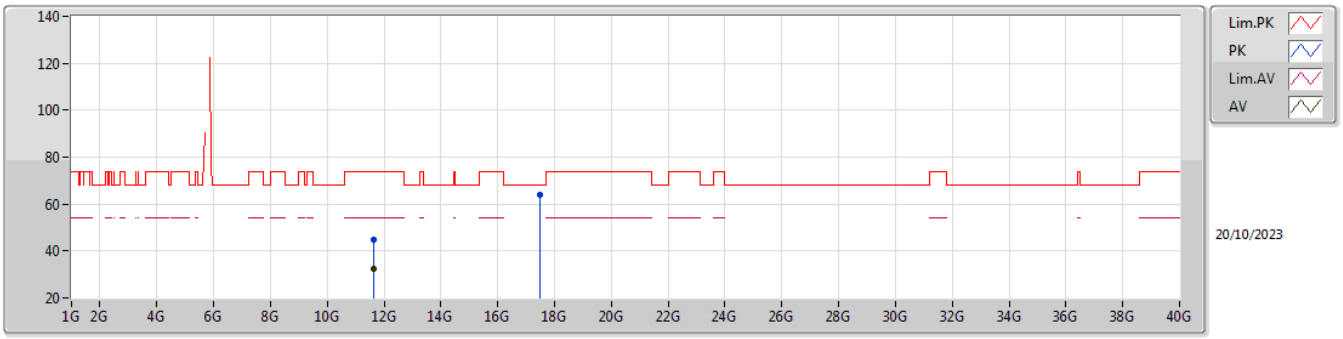


EUT Y_2TX
SET 25
15\21\24\25
6.97\5.43\5.03\3.84

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.639G	64.36	68.20	-3.84	56.27	3	Horizontal	9	1.61	-	34.40	8.66	34.97
PK	5.827G	127.91	Inf	-Inf	119.97	3	Horizontal	9	1.61	-	34.30	8.70	35.06
AV	5.826G	118.08	Inf	-Inf	110.14	3	Horizontal	9	1.61	-	34.30	8.70	35.06
PK	6.0675G	62.03	68.20	-6.17	53.35	3	Horizontal	9	1.61	-	34.87	8.92	35.11

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

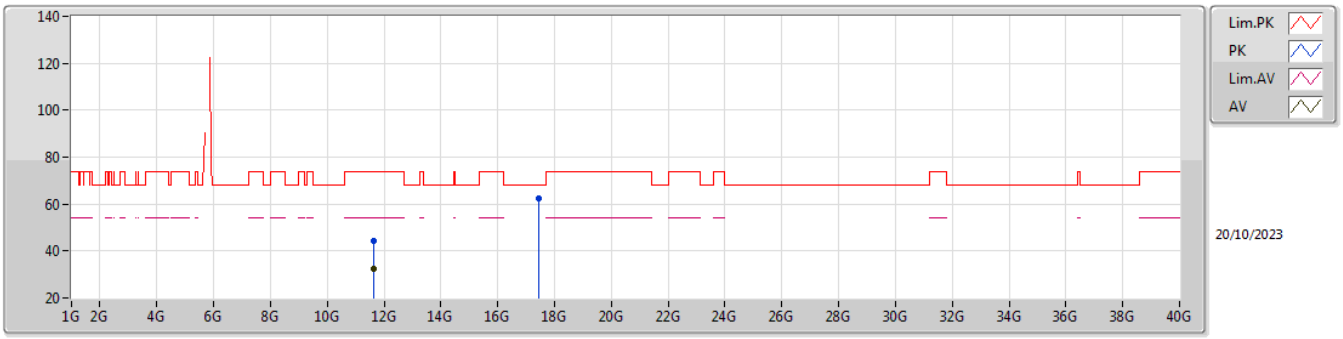


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.6434G	44.61	74.00	-29.39	35.19	3	Vertical	324	1.00	-	39.34	13.36	43.28
AV	11.65456G	32.21	54.00	-21.79	22.77	3	Vertical	324	1.00	-	39.35	13.37	43.28
PK	17.48628G	63.96	68.20	-4.24	40.12	3	Vertical	306	2.94	-	42.30	23.51	41.97

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

5825MHz_TX

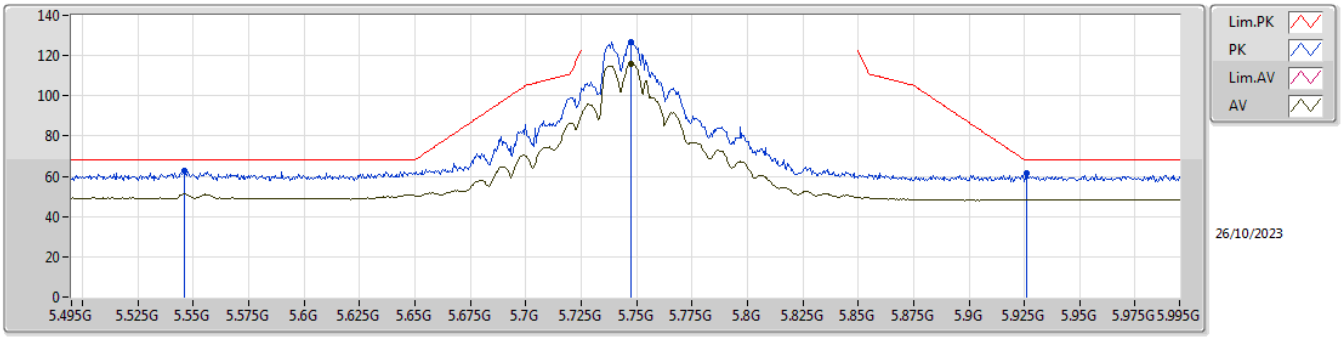


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.64532G	44.56	74.00	-29.44	35.12	3	Horizontal	349	2.70	-	39.35	13.37	43.28
AV	11.64268G	32.19	54.00	-21.81	22.77	3	Horizontal	349	2.70	-	39.34	13.36	43.28
PK	17.46216G	62.42	68.20	-5.78	38.79	3	Horizontal	270	2.76	-	42.14	23.47	41.98

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5745MHz_TX

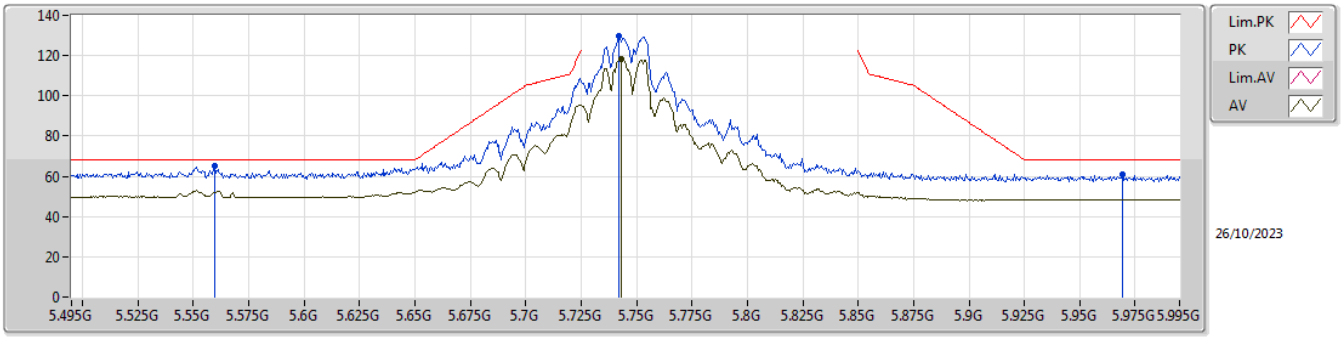


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.546G	62.95	68.20	-5.25	54.65	3	Vertical	15	1.57	-	34.60	8.62	34.92
PK	5.7475G	126.68	Inf	-Inf	118.83	3	Vertical	15	1.57	-	34.20	8.67	35.02
AV	5.7475G	115.90	Inf	-Inf	108.05	3	Vertical	15	1.57	-	34.20	8.67	35.02
PK	5.926G	61.51	68.20	-6.69	53.29	3	Vertical	15	1.57	-	34.55	8.77	35.10

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5745MHz_TX

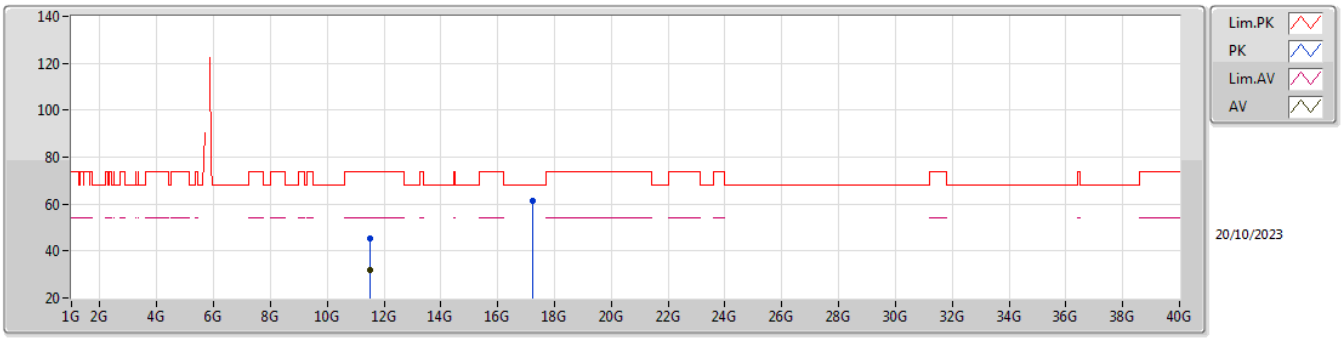


EUT Y_2TX
SET 25
15\21\24\25
5.73\5.41\5.65\3.31

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.5595G	64.89	68.20	-3.31	56.63	3	Horizontal	4	1.47	-	34.56	8.63	34.93
PK	5.742G	129.67	Inf	-Inf	121.82	3	Horizontal	4	1.47	-	34.20	8.67	35.02
AV	5.743G	118.39	Inf	-Inf	110.54	3	Horizontal	4	1.47	-	34.20	8.67	35.02
PK	5.9695G	61.06	68.20	-7.14	52.75	3	Horizontal	4	1.47	-	34.64	8.80	35.13

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5745MHz_TX

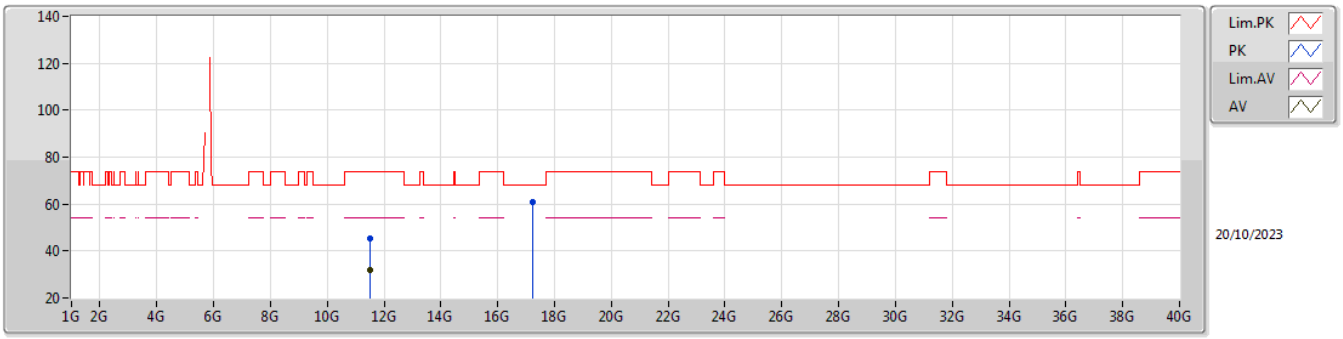


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.48908G	45.48	74.00	-28.52	36.57	3	Vertical	208	2.74	-	38.97	13.24	43.30
AV	11.49018G	31.91	54.00	-22.09	23.00	3	Vertical	208	2.74	-	38.97	13.24	43.30
PK	17.2416G	61.28	68.20	-6.92	39.52	3	Vertical	37	2.06	-	40.71	23.08	42.03

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5745MHz_TX

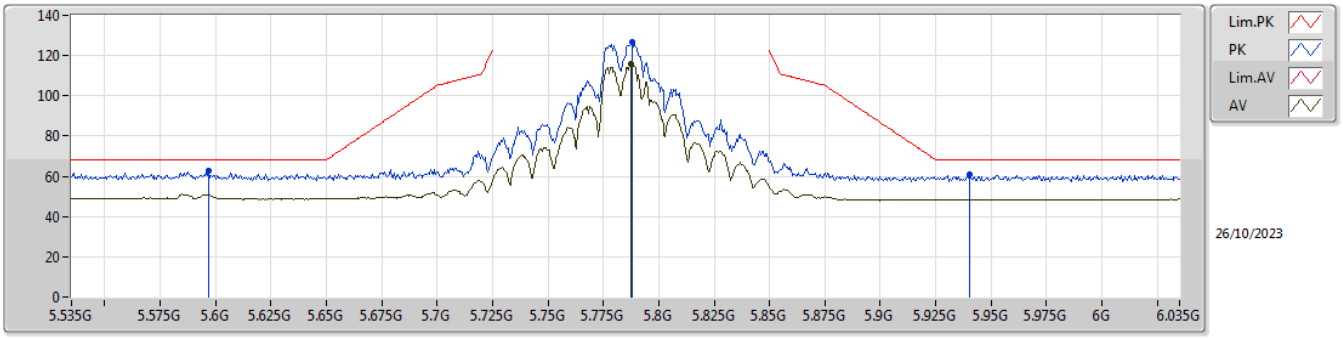


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.49176G	45.40	74.00	-28.60	36.47	3	Horizontal	351	1.56	-	38.98	13.25	43.30
AV	11.4894G	31.93	54.00	-22.07	23.02	3	Horizontal	351	1.56	-	38.97	13.24	43.30
PK	17.22366G	60.73	68.20	-7.47	39.10	3	Horizontal	233	1.01	-	40.62	23.05	42.04

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz_TX

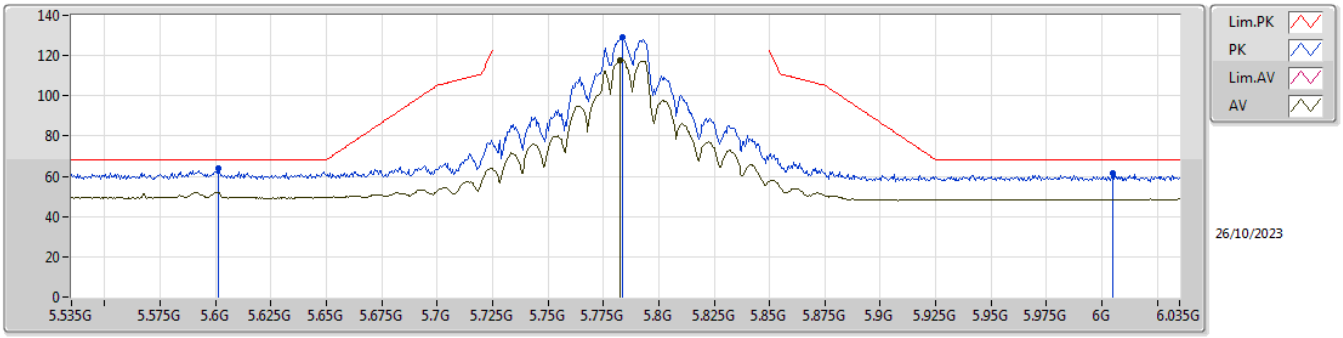


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.597G	62.51	68.20	-5.69	54.39	3	Vertical	359	1.68	-	34.41	8.66	34.95
PK	5.788G	126.59	Inf	-Inf	118.67	3	Vertical	359	1.68	-	34.28	8.68	35.04
AV	5.7875G	115.75	Inf	-Inf	107.84	3	Vertical	359	1.68	-	34.27	8.68	35.04
PK	5.94G	60.87	68.20	-7.33	52.62	3	Vertical	359	1.68	-	34.58	8.78	35.11

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz_TX

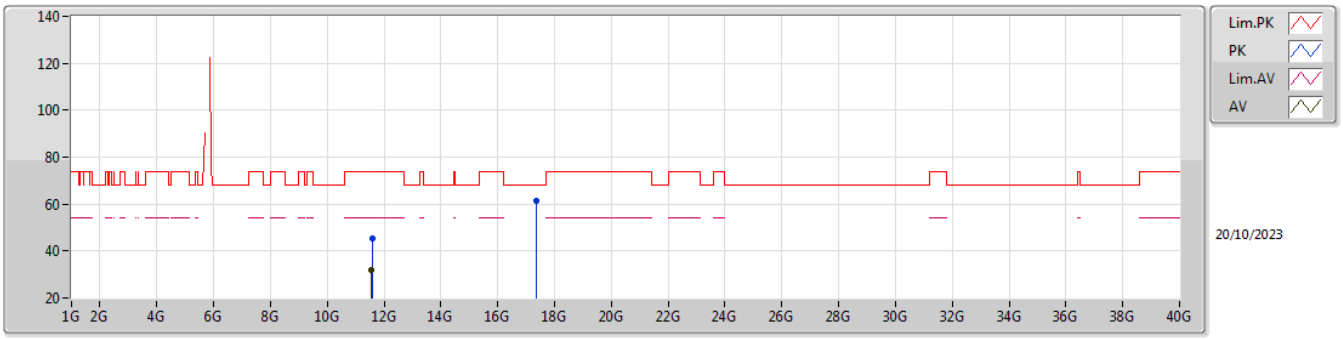


EUT Y_2TX
SET 25
15\21\24\25
7.41\6.06\5.32\4.07

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.601G	64.13	68.20	-4.07	56.02	3	Horizontal	360	1.64	-	34.40	8.66	34.95
PK	5.7835G	129.27	Inf	-Inf	121.36	3	Horizontal	360	1.64	-	34.27	8.68	35.04
AV	5.7825G	117.96	Inf	-Inf	110.05	3	Horizontal	360	1.64	-	34.27	8.68	35.04
PK	6.005G	61.39	68.20	-6.81	52.99	3	Horizontal	360	1.64	-	34.71	8.83	35.14

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz_TX

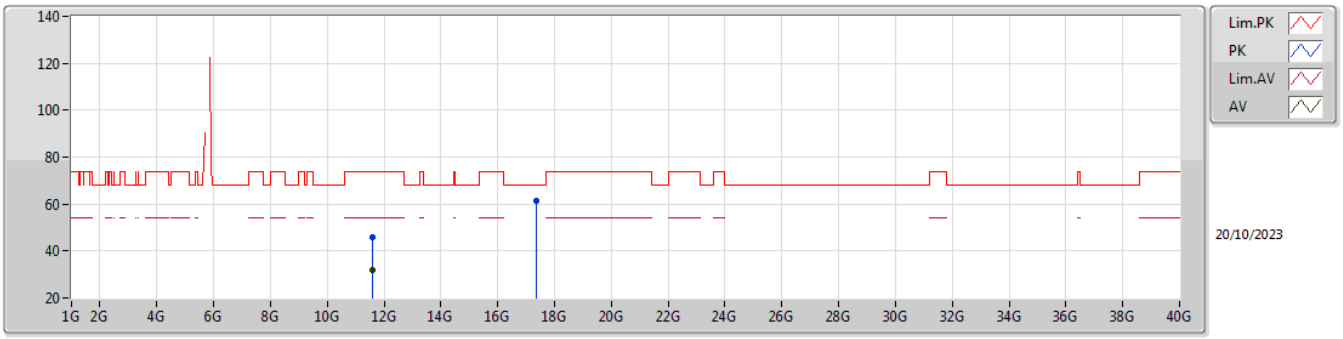


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.57344G	45.50	74.00	-28.50	36.26	3	Vertical	267	2.21	-	39.22	13.31	43.29
AV	11.56664G	31.82	54.00	-22.18	22.61	3	Vertical	267	2.21	-	39.20	13.30	43.29
PK	17.3442G	61.29	68.20	-6.91	38.73	3	Vertical	247	1.52	-	41.31	23.26	42.01

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5785MHz_TX

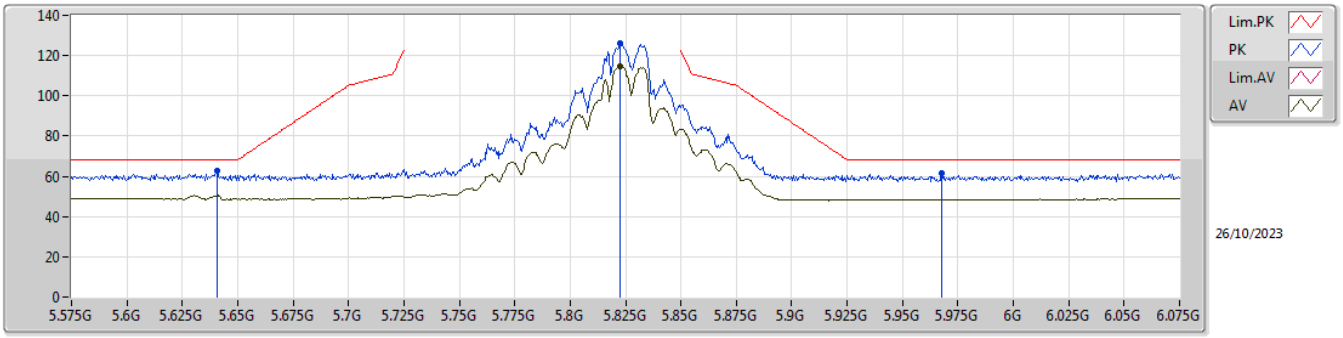


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.57352G	45.65	74.00	-28.35	36.41	3	Horizontal	342	1.68	-	39.22	13.31	43.29
AV	11.57286G	31.78	54.00	-22.22	22.54	3	Horizontal	342	1.68	-	39.22	13.31	43.29
PK	17.36484G	61.26	68.20	-6.94	38.51	3	Horizontal	113	1.87	-	41.45	23.30	42.00

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5825MHz_TX

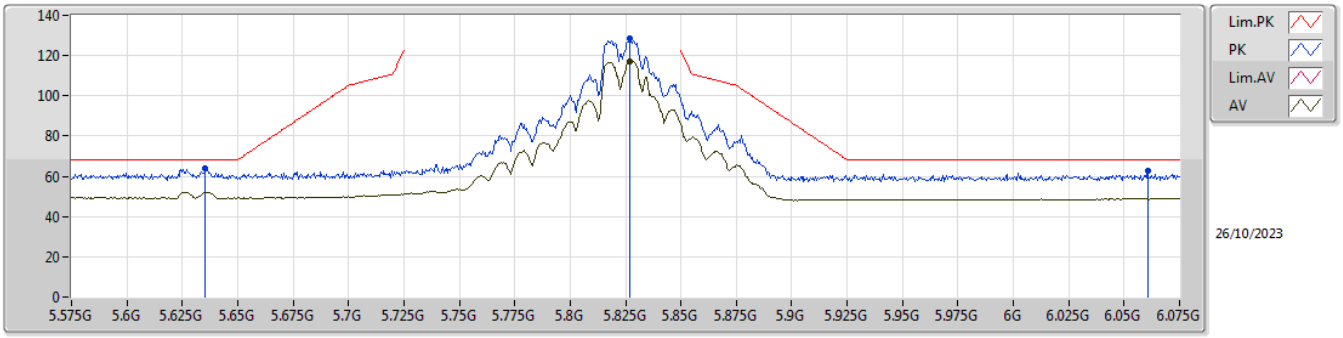


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.6405G	62.76	68.20	-5.44	54.67	3	Vertical	359	1.80	-	34.40	8.66	34.97
PK	5.8225G	126.01	Inf	-Inf	118.06	3	Vertical	359	1.80	-	34.30	8.70	35.05
AV	5.8225G	114.78	Inf	-Inf	106.83	3	Vertical	359	1.80	-	34.30	8.70	35.05
PK	5.9675G	61.72	68.20	-6.48	53.41	3	Vertical	359	1.80	-	34.63	8.80	35.12

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5825MHz_TX

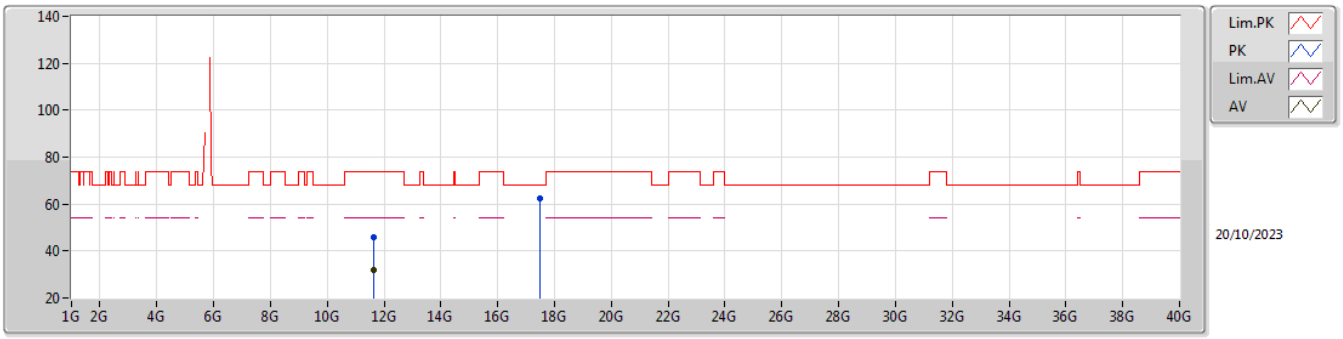


EUT Y_2TX
SET 25
15\21\24\25
6.40\6.36\5.37\4.40

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.6355G	63.80	68.20	-4.40	55.71	3	Horizontal	359	1.76	-	34.40	8.66	34.97
PK	5.827G	128.57	Inf	-Inf	120.63	3	Horizontal	359	1.76	-	34.30	8.70	35.06
AV	5.827G	117.28	Inf	-Inf	109.34	3	Horizontal	359	1.76	-	34.30	8.70	35.06
PK	6.0605G	62.92	68.20	-5.28	54.29	3	Horizontal	359	1.76	-	34.84	8.91	35.12

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5825MHz_TX

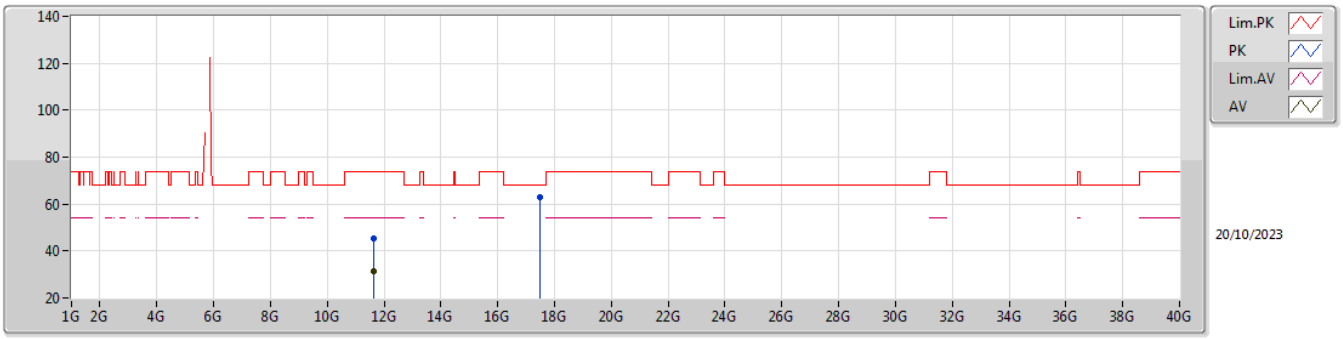


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.65334G	45.66	74.00	-28.34	36.22	3	Vertical	154	1.72	-	39.35	13.37	43.28
AV	11.64572G	31.71	54.00	-22.29	22.27	3	Vertical	154	1.72	-	39.35	13.37	43.28
PK	17.47296G	62.31	68.20	-5.89	38.59	3	Vertical	339	2.65	-	42.21	23.49	41.98

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

5825MHz_TX

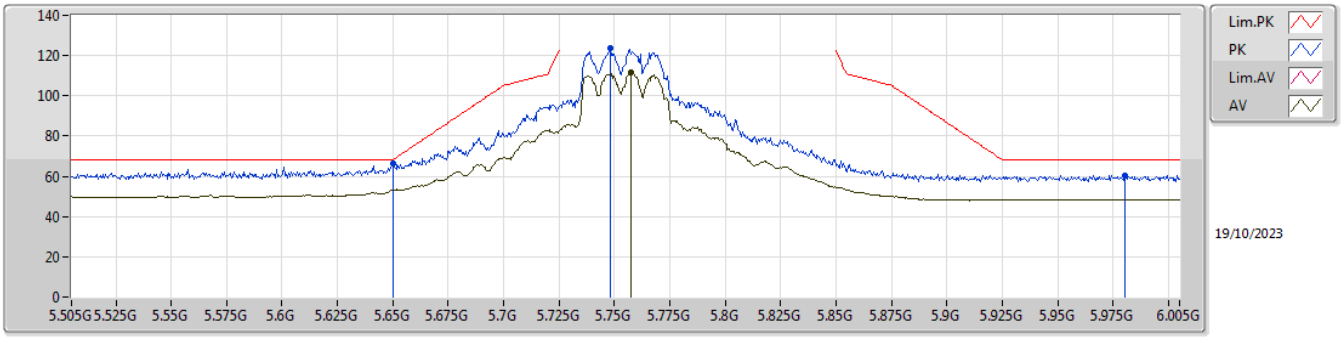


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.6531G	45.17	74.00	-28.83	35.73	3	Horizontal	66	1.51	-	39.35	13.37	43.28
AV	11.65492G	31.63	54.00	-22.37	22.19	3	Horizontal	66	1.51	-	39.35	13.37	43.28
PK	17.47632G	63.05	68.20	-5.15	39.31	3	Horizontal	144	2.36	-	42.23	23.49	41.98

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

5755MHz_TX

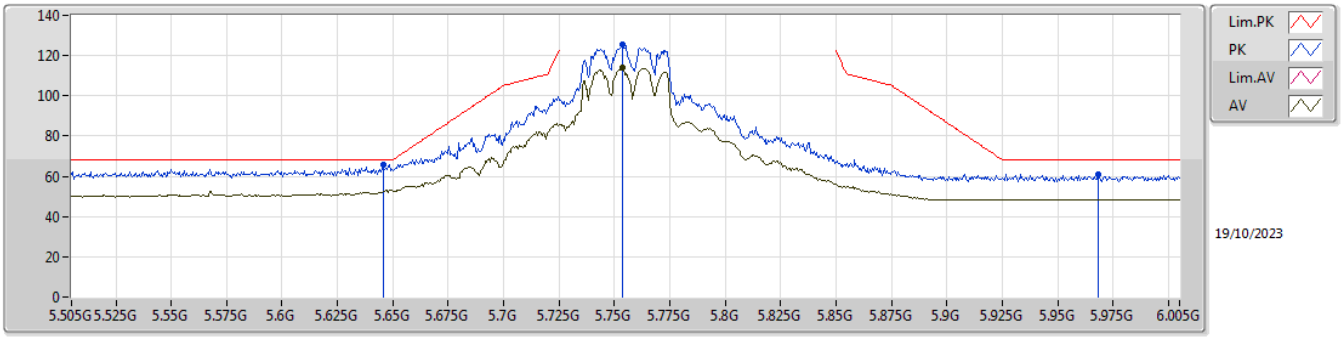


EUT Y_2TX
SET 24.5
24.5
1.94

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.65G	66.26	68.20	-1.94	58.17	3	Vertical	16	1.50	24.5	34.40	8.66	34.97
PK	5.748G	123.77	Inf	-Inf	115.92	3	Vertical	16	1.50	24.5	34.20	8.67	35.02
AV	5.7575G	111.35	Inf	-Inf	103.47	3	Vertical	16	1.50	24.5	34.22	8.68	35.02
PK	5.9805G	60.50	68.20	-7.70	52.16	3	Vertical	16	1.50	24.5	34.66	8.81	35.13

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

5755MHz_TX

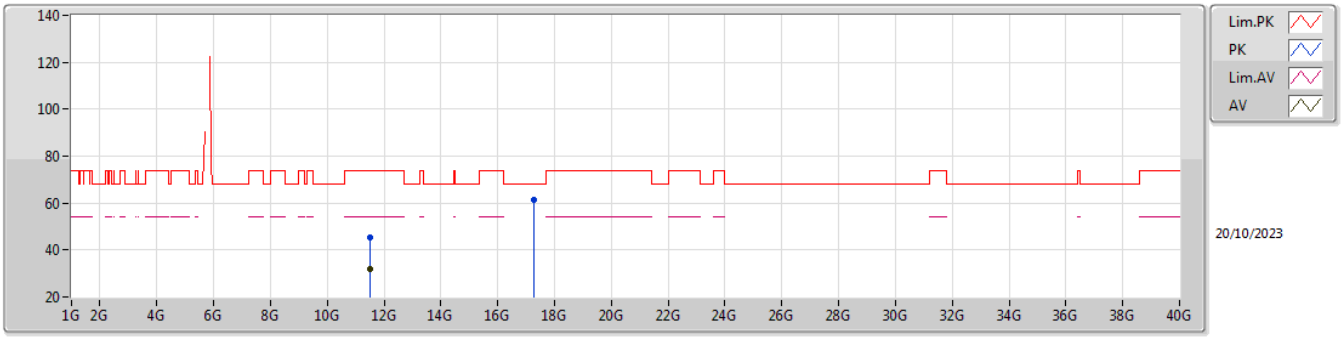


EUT Y_2TX
SET 24.5
15\21\24\25.5\25\24.5
6.52\6.60\4.57\-5.50\-0.51\2.19

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.6455G	66.01	68.20	-2.19	57.92	3	Horizontal	7	1.80	24.5	34.40	8.66	34.97
PK	5.7535G	125.61	Inf	-Inf	117.74	3	Horizontal	7	1.80	24.5	34.21	8.68	35.02
AV	5.7535G	113.77	Inf	-Inf	105.90	3	Horizontal	7	1.80	24.5	34.21	8.68	35.02
PK	5.9685G	61.03	68.20	-7.17	52.71	3	Horizontal	7	1.80	24.5	34.64	8.80	35.12

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

5755MHz_TX

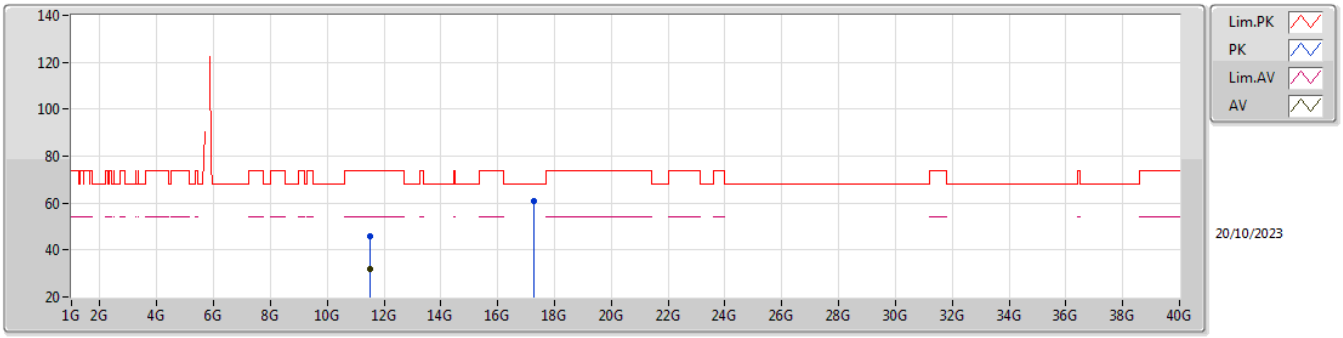


EUT Y_2TX
SET 24.5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.50736G	45.59	74.00	-28.41	36.61	3	Vertical	54	1.39	-	39.02	13.26	43.30
AV	11.50622G	31.92	54.00	-22.08	22.94	3	Vertical	54	1.39	-	39.02	13.26	43.30
PK	17.27832G	61.24	68.20	-6.96	39.23	3	Vertical	221	2.14	-	40.89	23.14	42.02

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

5755MHz_TX

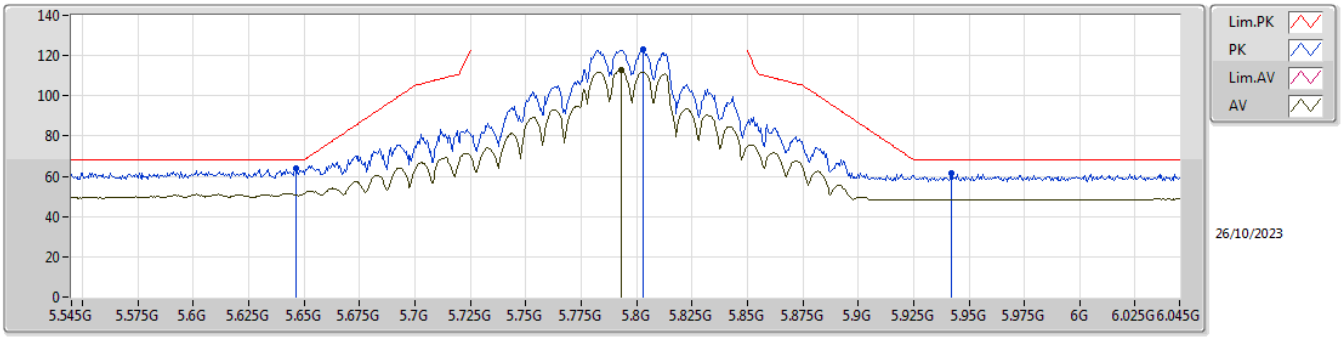


EUT Y_2TX
SET 24.5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5086G	45.62	74.00	-28.38	36.63	3	Horizontal	120	1.71	-	39.03	13.26	43.30
AV	11.5092G	31.93	54.00	-22.07	22.94	3	Horizontal	120	1.71	-	39.03	13.26	43.30
PK	17.25954G	60.97	68.20	-7.23	39.09	3	Horizontal	140	2.66	-	40.80	23.11	42.03

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

5795MHz_TX

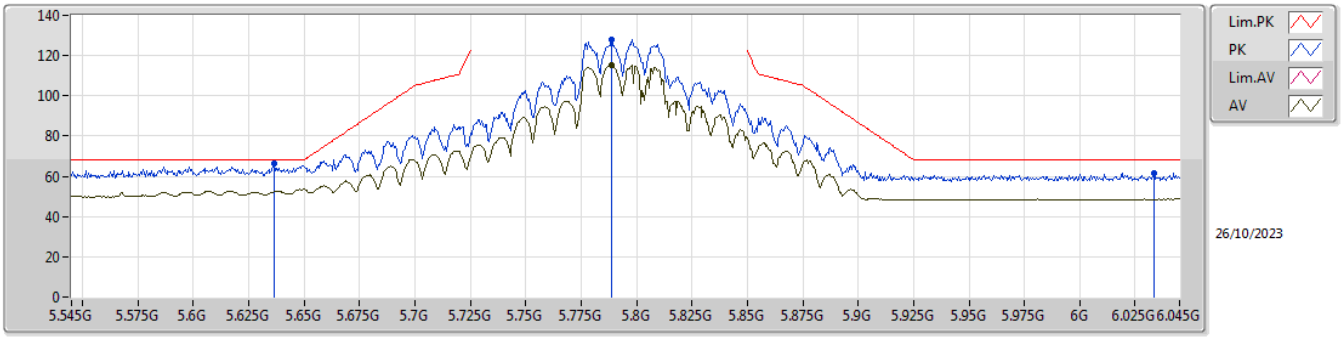


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.6465G	64.22	68.20	-3.98	56.13	3	Vertical	1	1.77	-	34.40	8.66	34.97
PK	5.803G	122.96	Inf	-Inf	115.03	3	Vertical	1	1.77	-	34.30	8.68	35.05
AV	5.793G	112.68	Inf	-Inf	104.75	3	Vertical	1	1.77	-	34.29	8.68	35.04
PK	5.942G	61.68	68.20	-6.52	53.43	3	Vertical	1	1.77	-	34.58	8.78	35.11

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

5795MHz_TX

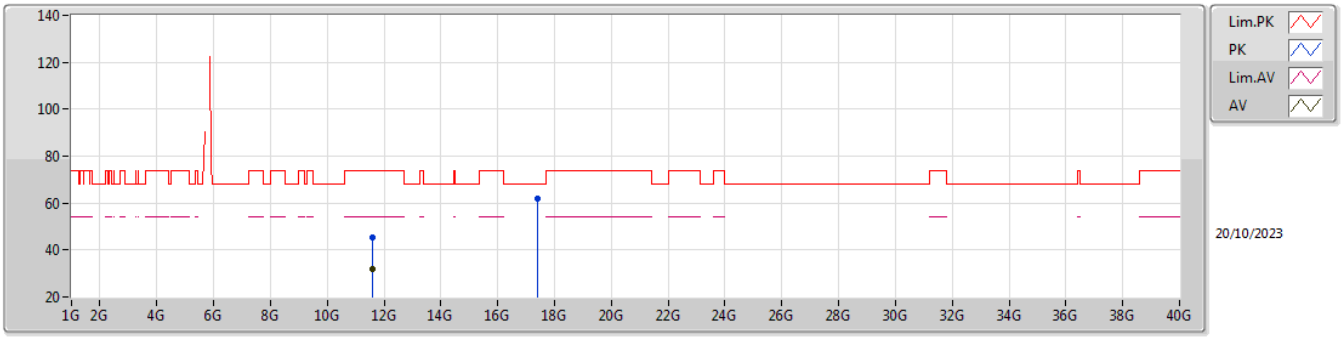


EUT Y_2TX
SET 25
15\21\24\25
6.90\5.93\3.98\1.75

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.6365G	66.45	68.20	-1.75	58.36	3	Horizontal	9	1.72	-	34.40	8.66	34.97
PK	5.7885G	127.72	Inf	-Inf	119.80	3	Horizontal	9	1.72	-	34.28	8.68	35.04
AV	5.7885G	115.34	Inf	-Inf	107.42	3	Horizontal	9	1.72	-	34.28	8.68	35.04
PK	6.0335G	61.61	68.20	-6.59	53.10	3	Horizontal	9	1.72	-	34.77	8.87	35.13

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

5795MHz_TX

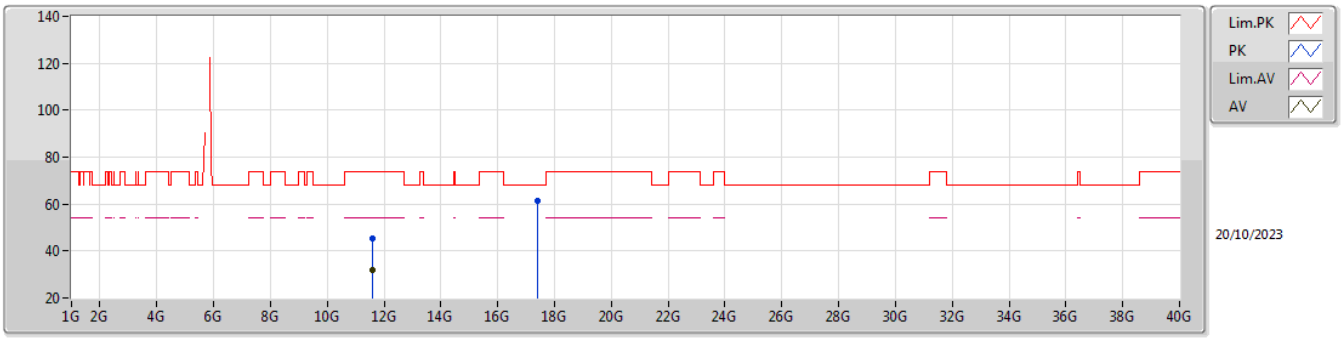


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5911G	45.19	74.00	-28.81	35.89	3	Vertical	11	1.97	-	39.27	13.32	43.29
AV	11.58868G	31.67	54.00	-22.33	22.37	3	Vertical	11	1.97	-	39.27	13.32	43.29
PK	17.39682G	61.77	68.20	-6.43	38.73	3	Vertical	309	1.86	-	41.68	23.35	41.99

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

5795MHz_TX

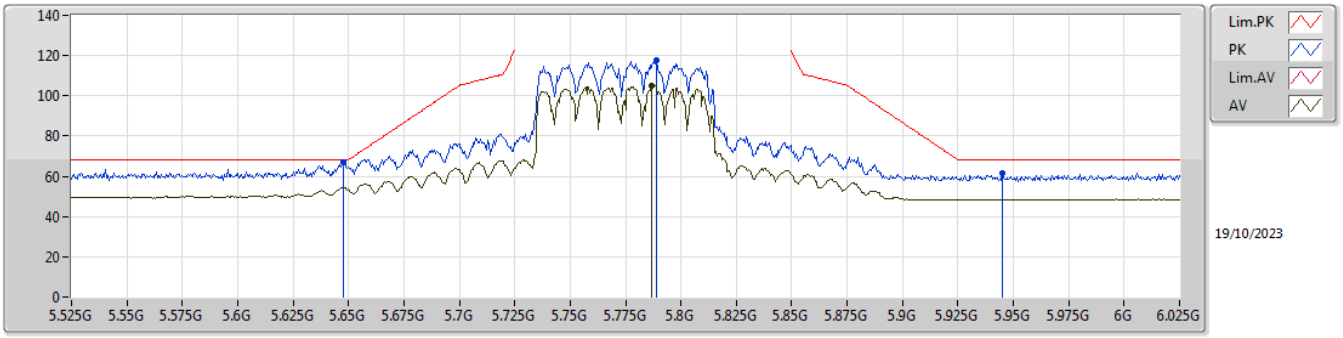


EUT Y_2TX
SET 25

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.59202G	45.13	74.00	-28.87	35.82	3	Horizontal	243	2.12	-	39.28	13.32	43.29
AV	11.59456G	31.78	54.00	-22.22	22.45	3	Horizontal	243	2.12	-	39.28	13.33	43.28
PK	17.39184G	61.61	68.20	-6.59	38.63	3	Horizontal	52	2.48	-	41.64	23.34	42.00

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

5775MHz_TX

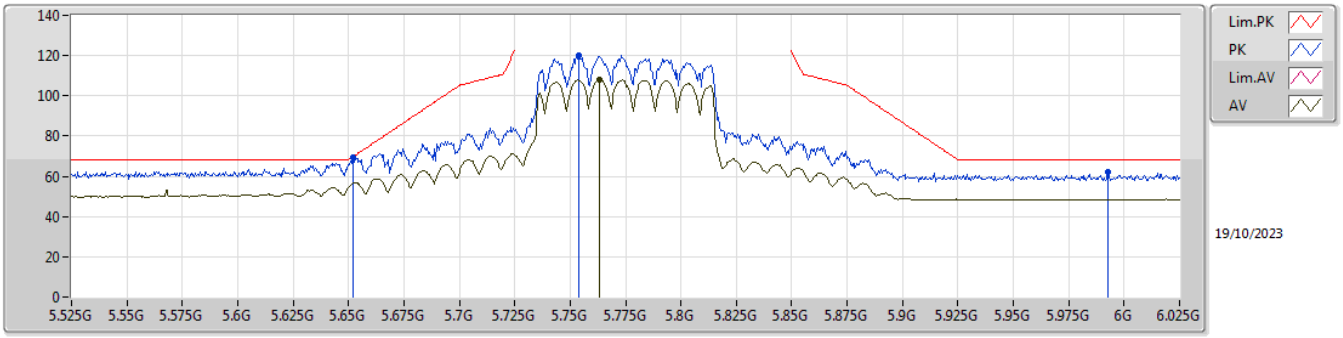


EUT Y_2TX
SET 22
22
1.00

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.6475G	67.20	68.20	-1.00	59.11	3	Vertical	2	1.79	22	34.40	8.66	34.97
PK	5.789G	117.66	Inf	-Inf	109.74	3	Vertical	2	1.79	22	34.28	8.68	35.04
AV	5.787G	104.96	Inf	-Inf	97.05	3	Vertical	2	1.79	22	34.27	8.68	35.04
PK	5.945G	61.68	68.20	-6.52	53.42	3	Vertical	2	1.79	22	34.59	8.78	35.11

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

5775MHz_TX

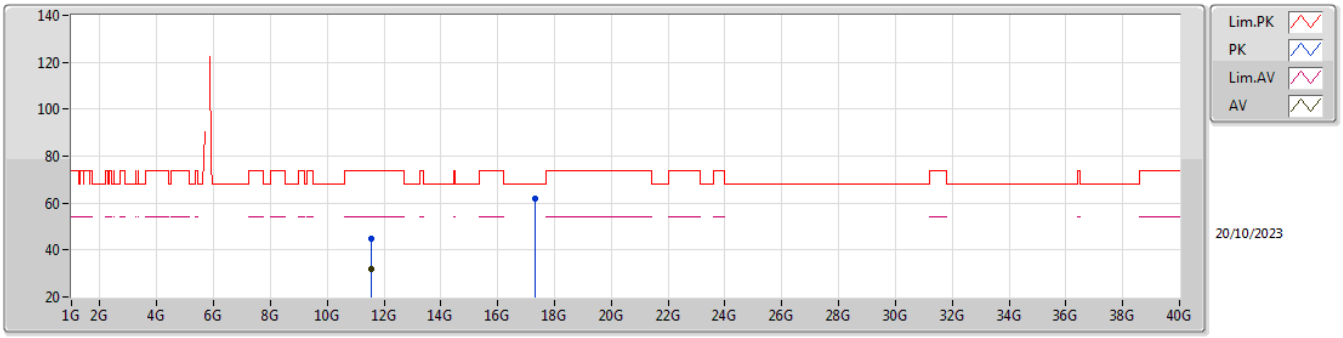


EUT Y_2TX
SET 22
15\21\24\22.5\22
6.80\3.46\-5.43\-0.35\0.01

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.652G	69.67	69.68	-0.01	61.58	3	Horizontal	7	1.78	22	34.39	8.67	34.97
PK	5.754G	120.09	Inf	-Inf	112.22	3	Horizontal	7	1.78	22	34.21	8.68	35.02
AV	5.763G	108.18	Inf	-Inf	100.30	3	Horizontal	7	1.78	22	34.23	8.68	35.03
PK	5.9925G	61.86	68.20	-6.34	53.50	3	Horizontal	7	1.78	22	34.69	8.81	35.14

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

5775MHz_TX

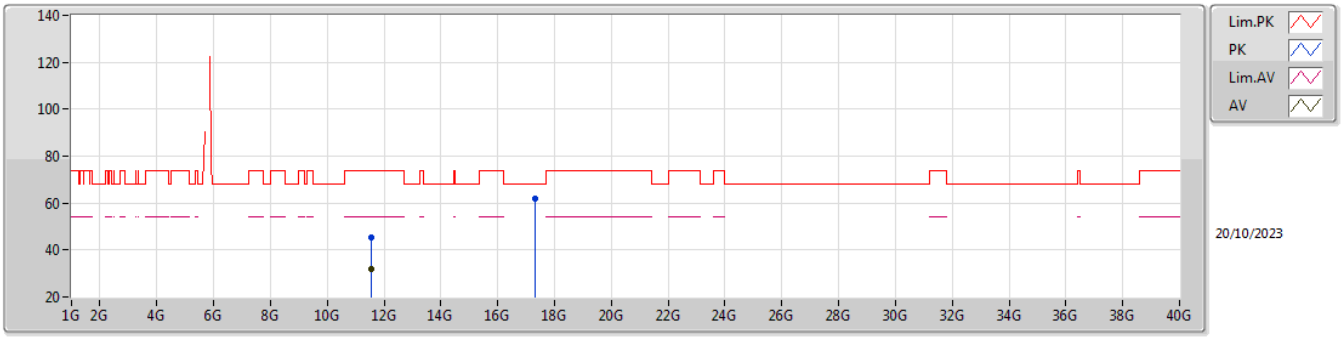


EUT Y_2TX
SET 22

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.54896G	44.98	74.00	-29.02	35.83	3	Vertical	17	2.25	-	39.15	13.29	43.29
AV	11.5453G	31.80	54.00	-22.20	22.66	3	Vertical	17	2.25	-	39.14	13.29	43.29
PK	17.33196G	61.68	68.20	-6.52	39.23	3	Vertical	293	2.97	-	41.22	23.24	42.01

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

5775MHz_TX



EUT Y_2TX
SET 22

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.5487G	45.51	74.00	-28.49	36.36	3	Horizontal	231	2.21	-	39.15	13.29	43.29
AV	11.54866G	31.93	54.00	-22.07	22.78	3	Horizontal	231	2.21	-	39.15	13.29	43.29
PK	17.3292G	61.69	68.20	-6.51	39.27	3	Horizontal	313	2.08	-	41.20	23.23	42.01