Testing Laboratory 3787

RADIO TEST REPORT

FCC ID	:	2AYRA-08449
Equipment	:	Linksys Velop Micro-Mesh 6
Brand Name	:	Linksys
Model Name	:	LN1200 v2, LN1210 v2, LN1215 v2
Applicant	:	Linksys USA, Inc. 121 Theory, Irvine, CA. 92617, USA
Standard	:	47 CFR FCC Part 15.407

The product was received on Jan. 02, 2024, and testing was started from Jan. 02, 2024 and completed on Feb. 22, 2024. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

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

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History of this test report

Report No.	Version	Description	Issued Date
FR3D2301AC	01	Initial issue of report	Mar. 27, 2024
FR3D2301AC	02	Adding Subordinate for Device Type in section 1.1.4.	Apr. 02, 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 EIRP Output Power	PASS	-
3.4	15.407(a)	EIRP 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: Cathy Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5725-5895	a, n (HT20), ac (VHT20), ax (HEW20)	5845-5885	169-177 [3]
5725-5895	n (HT40), ac (VHT40), ax (HEW40)	5835-5875	167-175 [2]
5725-5895	ac (VHT80), ax (HEW80)	5855	171 [1]
5725-5895	ac (VHT160), ax (HEW160)	5815	163 [1]

Band	Mode	BWch (MHz)	Nant
5.725-5.895GHz	802.11a	20	2TX
5.725-5.895GHz	802.11n HT20	20	2TX
5.725-5.895GHz	802.11n HT20-BF	20	2TX
5.725-5.895GHz	802.11ac VHT20	20	2TX
5.725-5.895GHz	802.11ac VHT20-BF	20	2TX
5.725-5.895GHz	802.11ax HEW20	20	2TX
5.725-5.895GHz	802.11ax HEW20-BF	20	2TX
5.725-5.895GHz	802.11n HT40	40	2TX
5.725-5.895GHz	802.11n HT40-BF	40	2TX
5.725-5.895GHz	802.11ac VHT40	40	2TX
5.725-5.895GHz	802.11ac VHT40-BF	40	2TX
5.725-5.895GHz	802.11ax HEW40	40	2TX
5.725-5.895GHz	802.11ax HEW40-BF	40	2TX
5.725-5.895GHz	802.11ac VHT80	80	2TX
5.725-5.895GHz	802.11ac VHT80-BF	80	2TX
5.725-5.895GHz	802.11ax HEW80	80	2TX
5.725-5.895GHz	802.11ax HEW80-BF	80	2TX
5.725-5.895GHz	802.11ac VHT160	160	2TX
5.725-5.895GHz	802.11ac VHT160-BF	160	2TX
5.725-5.895GHz	802.11ax HEW160	160	2TX
5.725-5.895GHz	802.11ax HEW160-BF	160	2TX

Note:
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	2.4GHz	5GHz	Bluetooth					
1	1	1	-	GALTRONICS	02102140-08042C	PCB Antenna	U.FL	Note1
2	2	-	-	GALTRONICS	02036073-07315	Embedded Antenna	N/A	
3	-	2	-	GALTRONICS	02102142-08042C	PCB Antenna	U.FL	
4	-	-	1	GALTRONICS	02036073-07315	Embedded Antenna	N/A	

Note1:

Ant.	Antenna Gain (dBi)						
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 5GHz UNII 4	Bluetooth
1	1.91	2.88	2.97	3.29	3.29	3.29	-
2	2.50	-	-	-	-	-	-
3	-	3.63	3.63	3.12	3.44	3.44	-
4	-	-	-	-	-	-	3.53

Note 2: The above information was declared by manufacturer.

Note 3: Directional gain information

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

Ex.

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

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 ;

2.4G G1= 1.91 dBi ;G2= 2.50 dBi ;

5G UNII-1 G1 = 2.88 dBi; G2 = 3.63 dBi;

5G UNII-2A G1 = 2.97 dBi; G2 = 3.63 dBi;

5G UNII-2C G1 = 3.29 dBi; G2 = 3.12 dBi;

5G UNII-3 G1 = 3.29 dBi; G2 = 3.44 dBi;

5G UNII-4 G1 = 3.29 dBi; G2 = 3.44 dBi;

2.4G DG = 5.22 dBi

5G UNII-1 DG = 6.27 dBi

5G UNII-2A DG = 6.32 dBi

5G UNII-2C DG = 6.22 dB

5G UNII-3 DG = 6.38 dBi

5G UNII-4 DG = 6.38 dBi

<For 2.4GHz function>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

<For 5GHz function>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

<For Bluetooth function> (1TX/1RX):

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

Port 1 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a_Nss 1,(6D)	0.991	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20-BF_Nss 1,(M0)	0.917	0.38	1.78m	1k
802.11ax HEW40-BF_Nss 1,(M0)	0.921	0.36	1.78m	1k
802.11ax HEW80-BF_Nss 1,(M0)	0.944	0.25	1.952m	1k
802.11ax HEW160-BF_Nss 1,(M0)	0.931	0.31	1.904m	1k

Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Device Type	☒	Indoor Access Point	☒	Subordinate
	☐	Indoor Client		
Channel Puncturing Function	☐	Supported	☒	Unsupported
Support RU	☒	Full RU	☐	Partial RU
Test Software Version	For Non-beamforming mode: QRCT V4.0.00192.0 For Beamforming mode: DOS[6.1.7601]			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

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

Model Name	Description
LN1200 v2	For retail
LN1210 v2	For e-commerce
LN1215 v2	For Warehouse

Note 1: From the above models, model: LN1200 v2 was selected as representative model for the test and its data was recorded in this report.
Note 2: The above information was declared by manufacturer.

1.1.6 Table for EUT Information

EUT	Description
EUT 1	With Conductive Fabric
EUT 2	Without Conductive Fabric

Note 1: From the above EUTs, EUT 1 was selected as representative EUT for the test and its data was recorded in this report.
Note 2: The above information was declared by manufacturer.

1.1.7 Table for EUT Supports Function

Function
AP
Mesh

Note 1: For above table list, only AP mode was tested and recorded in this test.
Note 2: The above information was declared by manufacturer.

1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v02r01

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

- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01
- FCC KDB 291074 D02 v01

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	TH03-CB	Owen Hsu	21.5~22.9 / 65~68	Jan. 11, 2024~ Jan. 29, 2024
Radiated (Below 1GHz)	03CH04-CB	Mark Hsu	22.7-23.8 / 56-59	Feb. 21, 2024
Radiated (Above 1GHz)	03CH03-CB	Mark Hsu	21.4-22.5 / 55-58	Jan. 02, 2024~ Jan. 27, 2024
	03CH05-CB	Mark Hsu	21.9-22.4 / 55-58	Jan. 02, 2024~ Jan. 27, 2024
Radiated (Co-location)	03CH04-CB	Mark Hsu	22.7-23.8 / 56-59	Feb. 22, 2024
AC Conduction	CO01-CB	Summer Li	22~23 / 50~51	Jan. 23, 2024

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

Mode
802.11a_Nss1,(6Mbps)_2TX
5845MHz
5865MHz
5885MHz
802.11ax HEW20-BF_Nss1,(MCS0)_2TX
5845MHz
5865MHz
5885MHz
802.11ax HEW40-BF_Nss1,(MCS0)_2TX
5835MHz
5875MHz
802.11ax HEW80-BF_Nss1,(MCS0)_2TX
5855MHz
802.11ax HEW160-BF_Nss1,(MCS0)_2TX
5815MHz

Note:
- Evaluated HEW20/HEW 40/HEW80/HEW160 mode only. Due to similar modulation, the power setting of HT20/HT40/VHT20/VHT40/VHT80/VHT160 mode are the same or lower than HEW20/HEW40/ HEW80/HEW160.
- The EUT supports non-beamforming and beamforming mode, only beamforming mode has been selected to test.

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	Normal Link
1	EUT 1 + Adapter 1
2	EUT 1 + Adapter 2
3	EUT 1 + Adapter 3 + US Plug
For operating mode 2 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum EIRP Output Power EIRP Power Spectral Density
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
After evaluating, and the worst case was found at Z axis, so it was selected to perform test and its test result was written in the report.	
1	EUT 1 in Z axis + WLAN 2.4GHz + Adapter 1
2	EUT 1 in Z axis + WLAN 2.4GHz + Adapter 2
3	EUT 1 in Z axis + WLAN 2.4GHz + Adapter 3 + US Plug
Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 ~ 5 will follow this same test mode.	
4	EUT 1 in Z axis + WLAN 5GHz + Adapter 1
5	EUT 1 in Z axis + Bluetooth + Adapter 1
For operating mode 4 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
After evaluating, and the worst case was found at Z axis, so it was selected to perform test and its test result was written in the report.	
1	EUT 1 in Z axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
After evaluating, the worst case was found at Z axis from Radiated Emission test Above 1GHz, so the measurement will follow this same test configuration.	
1	EUT 1 in Z axis_WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix F for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz + Bluetooth
Refer to Sporton Test Report No.: FA3D2301 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 7 were executed.
The program was executed as follows:
1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by Client and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter 1	Ktec	KSA-18W-050300VU	INPUT: 100-240V~50/60Hz, 0.5A OUTPUT: 5.0V, 3.0A
Adapter 2	MOSO	MSA-C3000IC5.0-18P-US	INPUT: 100-240V~50/60Hz, 0.7A max. OUTPUT: 5.0V, 3A
Adapter 3	Ktec	KSA-18W-050300D5	INPUT: 100-240V ~ 50/60Hz, 0.5A OUTPUT: 5.0V, 3.0A
Other			
US Plug*1 (Equip with Adapter 3 use only)			

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	2.4G NB	DELL	E6220	N/A
B	5G NB	DELL	E6220	N/A
C	Smart phone	Samsung	Galaxy J2	N/A

For Radiated (below 1GHz), Radiated (above 1GHz) / Non-beamforming mode and RF Conducted / Non-beamforming mode:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A

For Radiated (above 1GHz) / Beamforming mode:

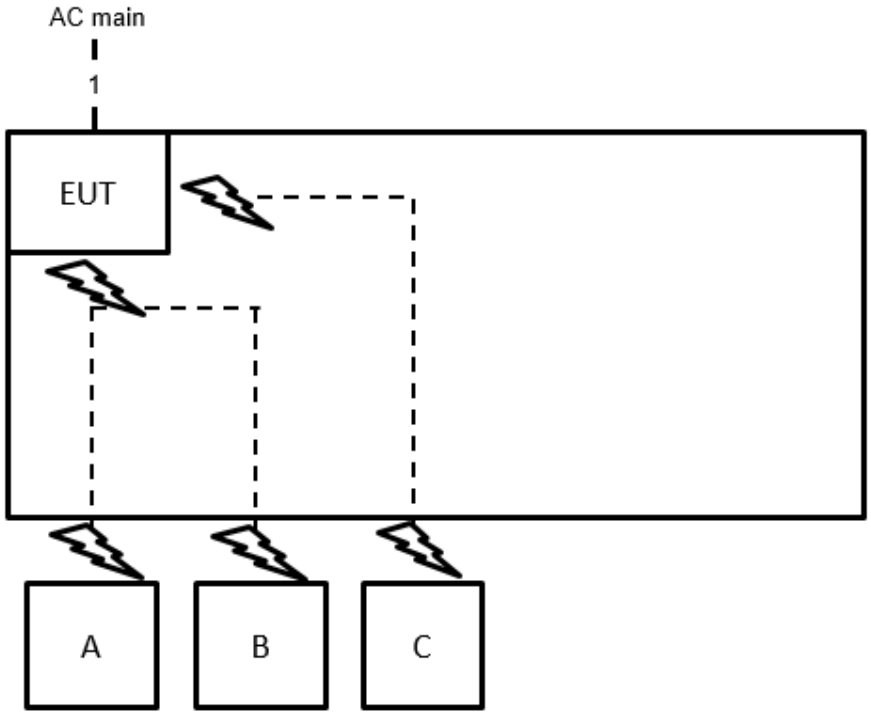
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4301	N/A
C	Client	Linksys	LN1200 v2	N/A

For RF Conducted / Beamforming mode:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	Client	Linksys	LN1200 v2	N/A

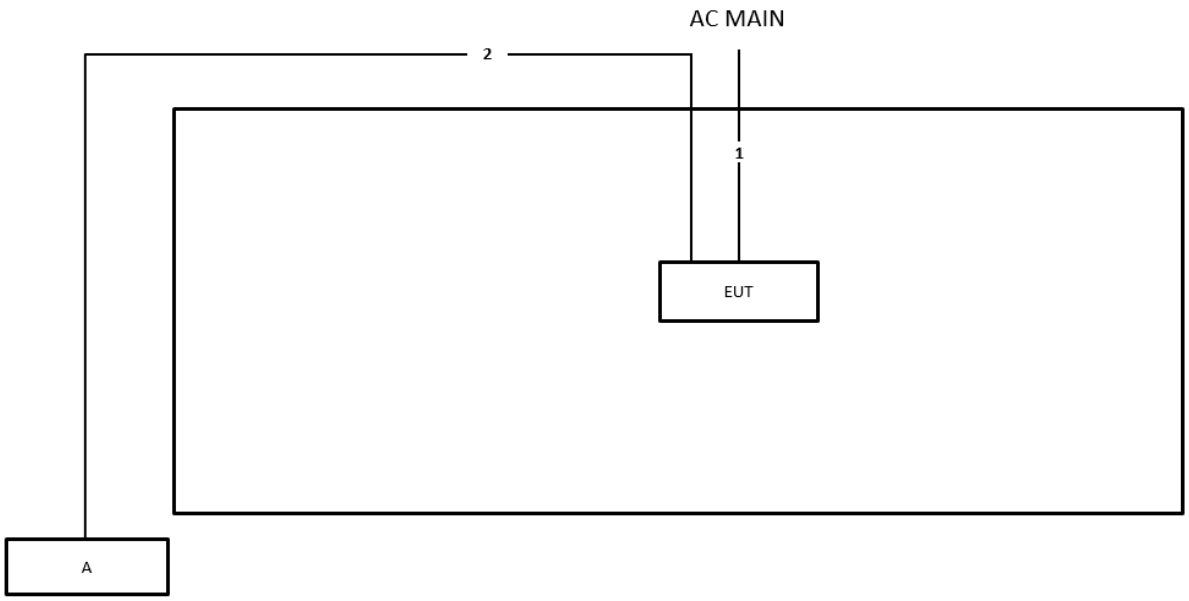
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



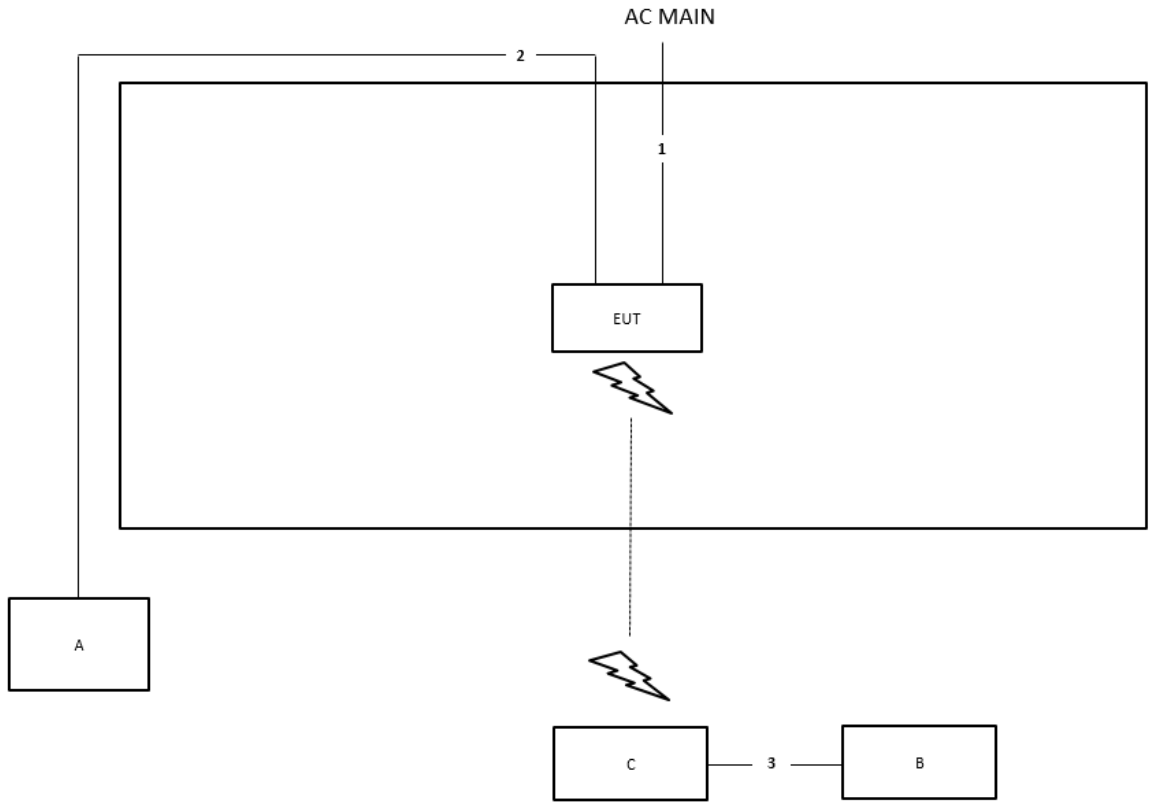
Item	Connection	Shielded	Length
1	Power cable	No	1.6m

Test Setup Diagram - Radiated Test < 1GHz and Radiated Test > 1GHz / For Non-beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	1.6m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz / For Beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	1.6m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

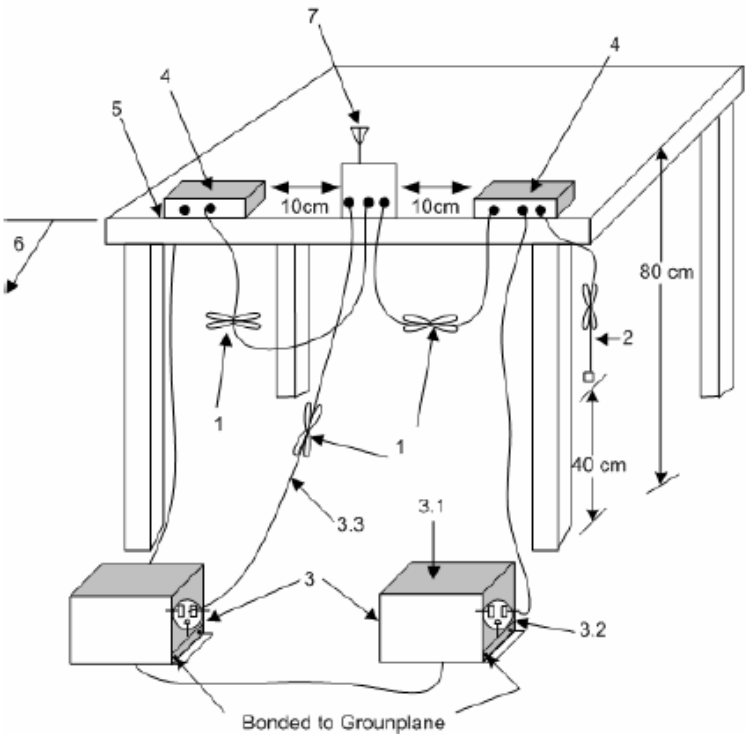
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



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

3.1.5 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 5.85-5.895 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth ≥ 500kHz.
LE-LAN Devices
☐ For the 5.85-5.895 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth ≥ 500kHz.

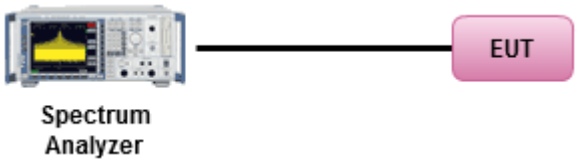
3.2.2 Measuring Instruments

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 EIRP Output Power

3.3.1 Limit

Maximum EIRP Output Power Limit	
UNII Devices	
☒ For the 5.85-5.895 GHz band:	
	▪ Indoor AP & subordinate device < 36 dBm
	▪ Client device < 30 dBm
LE-LAN Devices	
☐ For the 5.85-5.895 GHz band:	
	▪ Indoor AP & subordinate device < 36 dBm
	▪ Indoor client device < 30 dBm
	▪ Fixed outdoor AP device < 36 dBm
	▪ Fixed outdoor client device < 30 dBm

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 EIRP Output Power

Refer as Appendix C

3.4 EIRP Power Spectral Density

3.4.1 Limit

EIRP Power Spectral Density Limit	
UNII Devices	
☒ For the 5.85-5.895 GHz band:	
	▪ Indoor AP & subordinate device < 20dBm/MHz
	▪ Client device < 14dBm/MHz
LE-LAN Devices	
☐ For the 5.85-5.895 GHz band:	
	▪ Indoor AP & subordinate device < 20 dBm/MHz
	▪ Indoor client device < 14 dBm/MHz
	▪ Fixed outdoor AP device < 23 dBm/MHz
	▪ Fixed outdoor client device < 17 dBm/MHz

3.4.2 Measuring Instruments

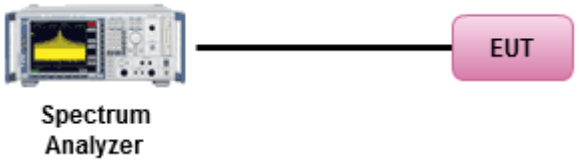
Refer a test equipment and calibration data table in this test report.

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 EIRP 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**
☒ UNII Devices 5.85 - 5.895 GHz	(i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of - 7 dBm/MHz at or above 5.925 GHz. (ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz. (iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/ MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.
☐ LE-LAN Devices 5.85 - 5.895 GHz	(i) Fixed outdoor access points and fixed outdoor client devices shall not exceed -27 dBm/MHz e.i.r.p. spectral density at or above the 5895 MHz band edge. (ii) Indoor access points or indoor subordinate devices shall not exceed 15

	dBm/MHz e.i.r.p. spectral density at the 5895 MHz band edge and shall decrease linearly to not exceed -7 dBm/MHz e.i.r.p. spectral density at or above 5925 MHz. (iii) Client devices shall not exceed -5 dBm/MHz e.i.r.p. spectral density at the 5895 MHz band edge and shall decrease linearly to not exceed -27 dBm/MHz e.i.r.p. spectral density at or above 5925 MHz.
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

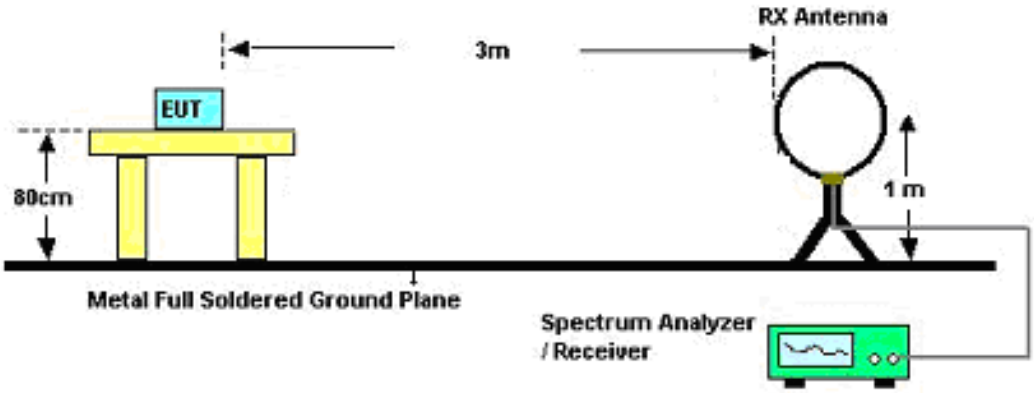
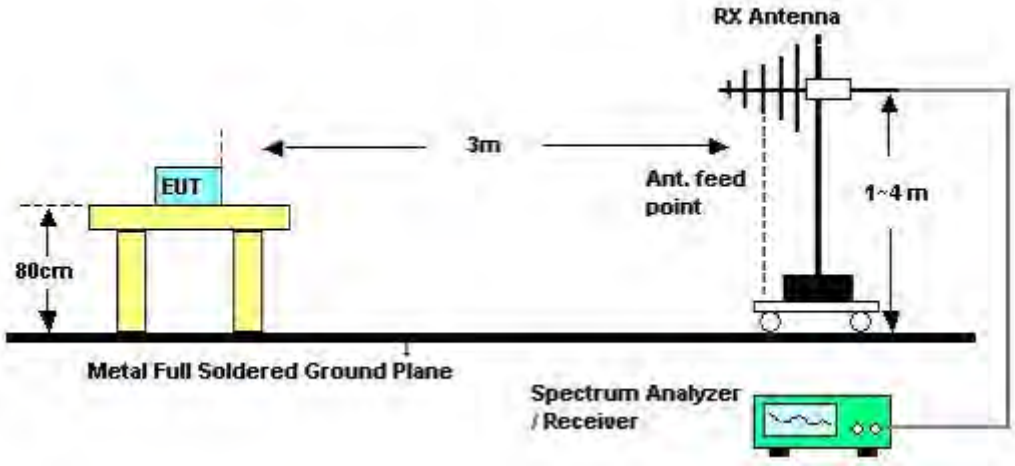
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

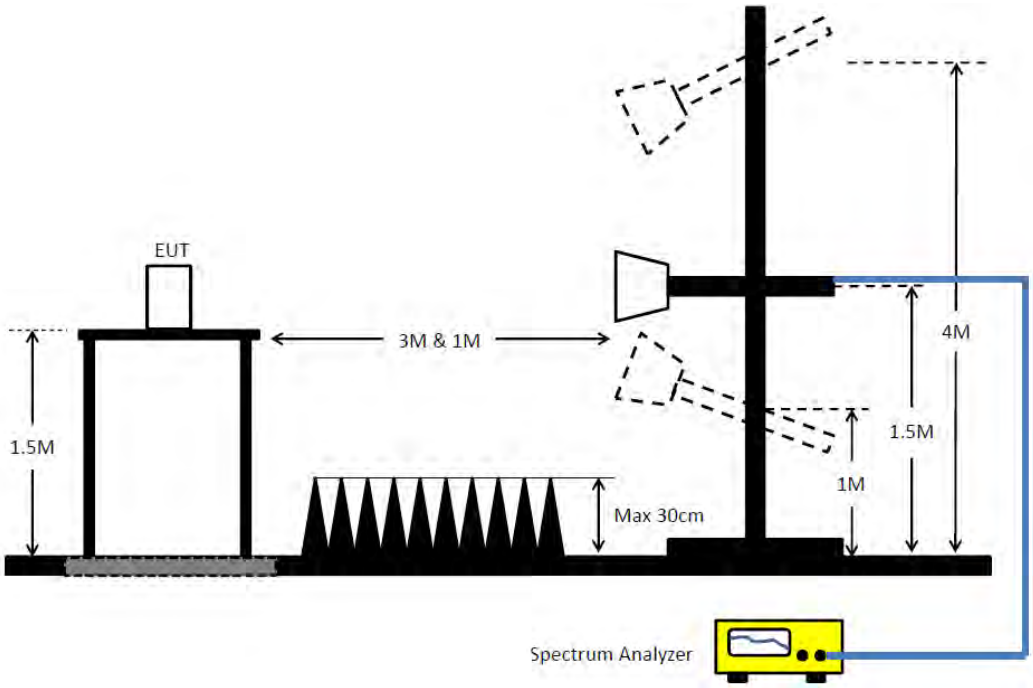
Test Method		
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies 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		

Test Method
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 (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 23, 2023	Feb. 22, 2024	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N0607	30MHz ~ 1GHz	Oct. 07, 2023	Oct. 06, 2024	Radiation (03CH04-CB)
Horn Antenna	ETS・Lindgren	3115	00143147	750MHz~18GHz	Oct. 04, 2023	Oct. 03, 2024	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH04-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	May 23, 2023	May 22, 2024	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH04-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz – 1GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-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. 24, 2023	Nov. 23, 2024	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 12, 2023	Jun. 11, 2024	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Nov. 07, 2023	Nov. 06, 2024	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Nov. 07, 2023	Nov. 06, 2024	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 06, 2023	Dec. 05, 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)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Sep. 29, 2023	Sep. 28, 2024	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120 D	BBHA 9120 D-1291	1GHz~18GHz	Jun. 08, 2023	Jun. 07, 2024	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630 SE	980287	1GHz – 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH05-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)

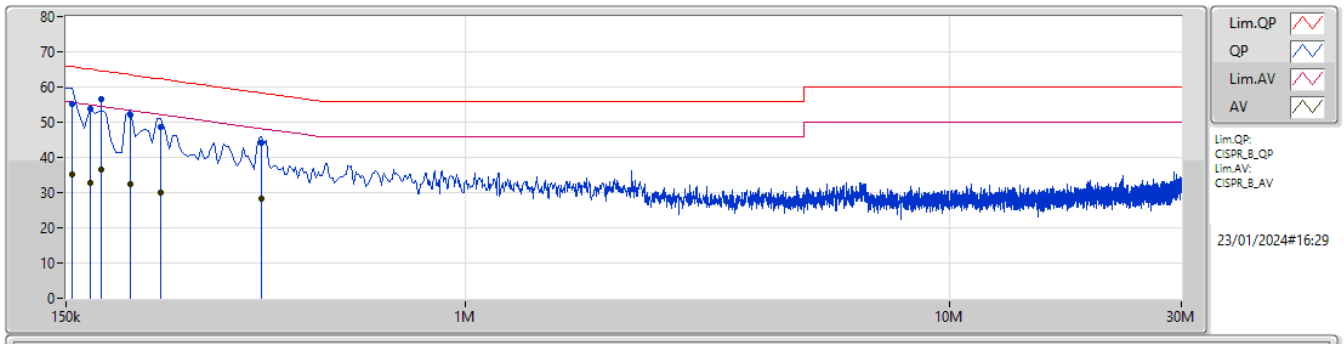
Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 06, 2023	Dec. 05, 2024	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 22, 2023	Dec. 21, 2024	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-11	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-12	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-13	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 ~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.

Summary

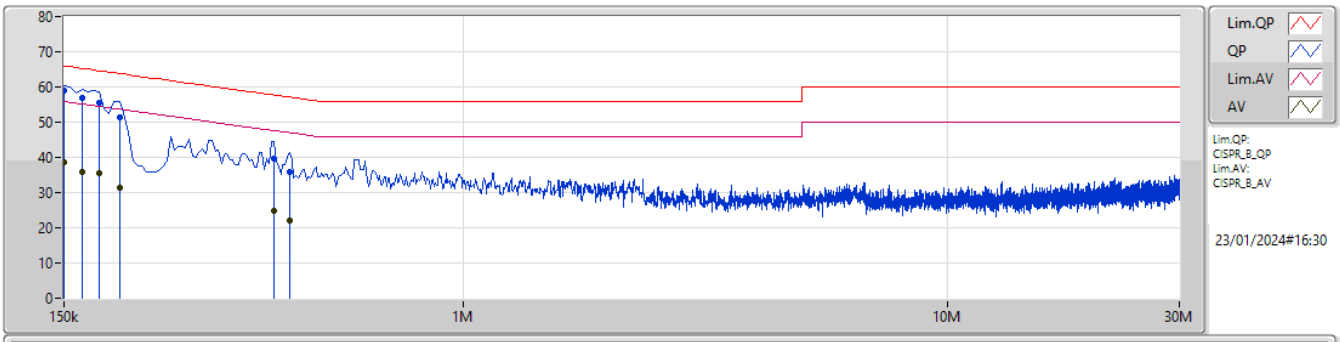
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	QP	150k	59.04	66.00	-6.96	Neutral

Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	55.34	65.75	-10.41	9.98	Line	-	45.36	0.09	0.02	9.87
AV	154.5k	35.07	55.75	-20.68	9.98	Line	-	25.09	0.09	0.02	9.87
QP	168k	53.88	65.06	-11.18	9.98	Line	-	43.90	0.09	0.02	9.87
AV	168k	32.77	55.06	-22.29	9.98	Line	-	22.79	0.09	0.02	9.87
QP	177k	56.48	64.62	-8.14	9.97	Line	"Worst"	46.51	0.08	0.02	9.87
AV	177k	36.40	54.62	-18.22	9.97	Line	-	26.43	0.08	0.02	9.87
QP	204k	52.03	63.44	-11.41	9.96	Line	-	42.07	0.08	0.02	9.86
AV	204k	32.38	53.44	-21.06	9.96	Line	-	22.42	0.08	0.02	9.86
QP	235.5k	48.72	62.25	-13.53	9.97	Line	-	38.75	0.08	0.02	9.87
AV	235.5k	30.12	52.25	-22.13	9.97	Line	-	20.15	0.08	0.02	9.87
QP	379.5k	44.28	58.29	-14.01	10.01	Line	-	34.27	0.09	0.02	9.90
AV	379.5k	28.37	48.29	-19.92	10.01	Line	-	18.36	0.09	0.02	9.90

Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	59.04	66.00	-6.96	9.96	Neutral	"Worst"	49.08	0.07	0.02	9.87
AV	150k	38.53	56.00	-17.47	9.96	Neutral	-	28.57	0.07	0.02	9.87
QP	163.5k	57.02	65.27	-8.25	9.96	Neutral	-	47.06	0.07	0.02	9.87
AV	163.5k	35.72	55.27	-19.55	9.96	Neutral	-	25.76	0.07	0.02	9.87
QP	177k	55.36	64.62	-9.26	9.96	Neutral	-	45.40	0.07	0.02	9.87
AV	177k	35.48	54.62	-19.14	9.96	Neutral	-	25.52	0.07	0.02	9.87
QP	195k	51.29	63.82	-12.53	9.95	Neutral	-	41.34	0.07	0.02	9.86
AV	195k	31.22	53.82	-22.60	9.95	Neutral	-	21.27	0.07	0.02	9.86
QP	406.5k	39.74	57.72	-17.98	9.99	Neutral	-	29.75	0.07	0.02	9.90
AV	406.5k	24.89	47.72	-22.83	9.99	Neutral	-	14.90	0.07	0.02	9.90
QP	438k	35.85	57.11	-21.26	9.99	Neutral	-	25.86	0.07	0.02	9.90
AV	438k	22.16	47.11	-24.95	9.99	Neutral	-	12.17	0.07	0.02	9.90

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.895GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.335M	27.548M	27M5D1D	16.005M	16.288M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.92M	34.174M	34M2D1D	15.895M	18.81M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.18M	65.272M	65M3D1D	25.85M	37.583M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	57.42M	77.332M	77M3D1D	41.14M	76.689M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	113.08M	156.412M	156MD1D	101.2M	155.018M

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

Result

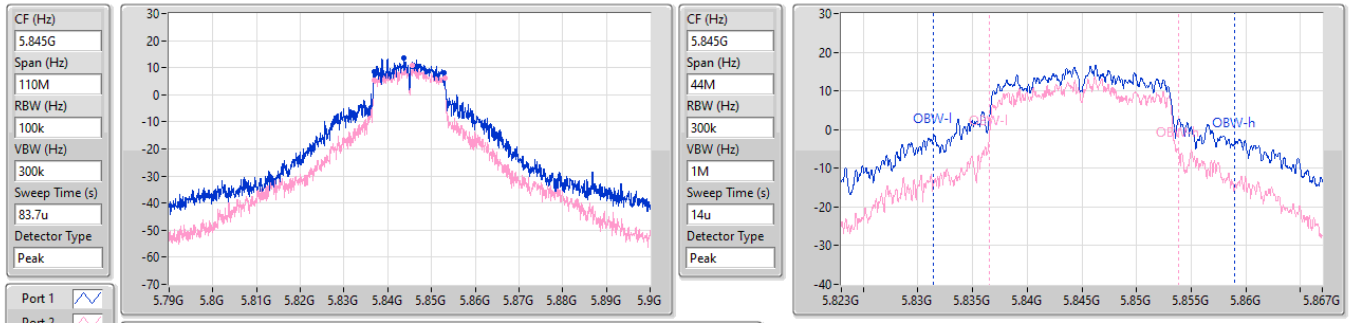
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5845MHz	Pass	500k	16.005M	27.548M	16.28M	17.343M
5865MHz	Pass	500k	16.335M	16.318M	16.28M	16.309M
5885MHz	Pass	500k	16.28M	16.375M	16.28M	16.288M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5845MHz	Pass	500k	18.315M	34.174M	18.865M	20.602M
5865MHz	Pass	500k	18.315M	18.88M	15.895M	18.81M
5885MHz	Pass	500k	18.92M	18.925M	18.81M	18.869M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5835MHz	Pass	500k	37.18M	65.272M	36.96M	60.016M
5875MHz	Pass	500k	36.85M	38.442M	25.85M	37.583M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5855MHz	Pass	500k	41.14M	77.332M	57.42M	76.689M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5815MHz	Pass	500k	101.2M	155.018M	113.08M	156.412M

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

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

5845MHz

11/01/2024

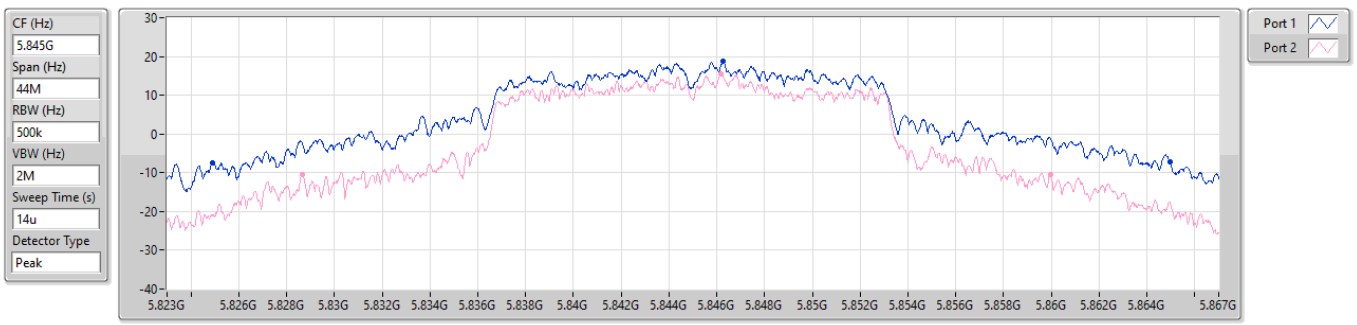


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.005M	5.836805G	5.85281G	27.548M	5.831399G	5.858947G	500k	1
16.28M	5.836805G	5.853085G	17.343M	5.836519G	5.853862G	500k	2

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

5845MHz

11/01/2024

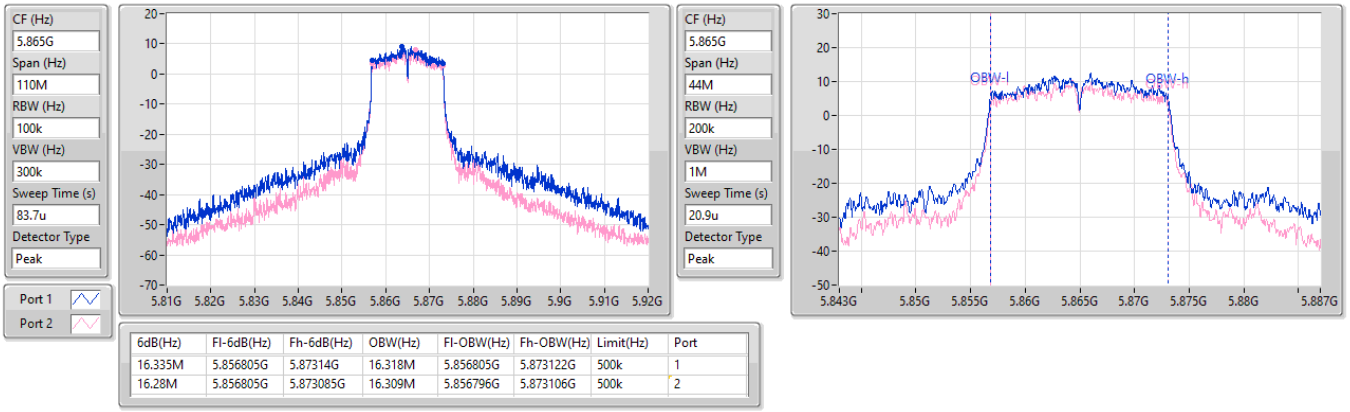


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
40.062M	5.824892G	5.864954G	Inf	1
31.306M	5.828676G	5.859982G	Inf	2

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

5865MHz

11/01/2024

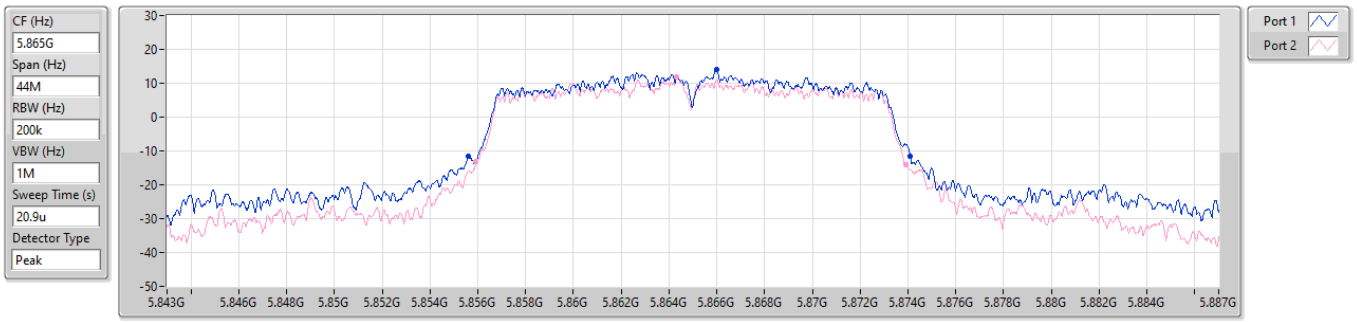


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.335M	5.856805G	5.87314G	16.318M	5.856805G	5.873122G	500k	1
16.28M	5.856805G	5.873085G	16.309M	5.856796G	5.873106G	500k	2

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

5865MHz

11/01/2024

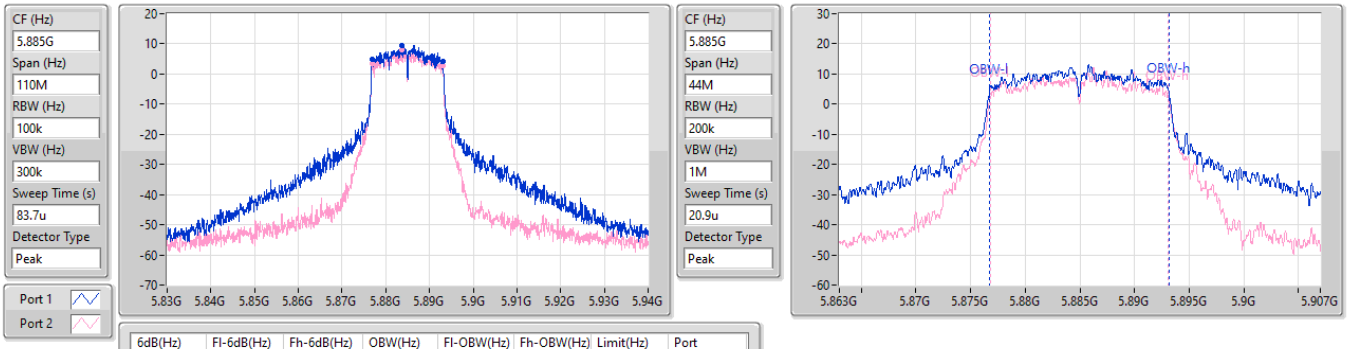


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
18.524M	5.855584G	5.874108G	Inf	1
17.996M	5.855914G	5.87391G	Inf	2

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

5885MHz

11/01/2024

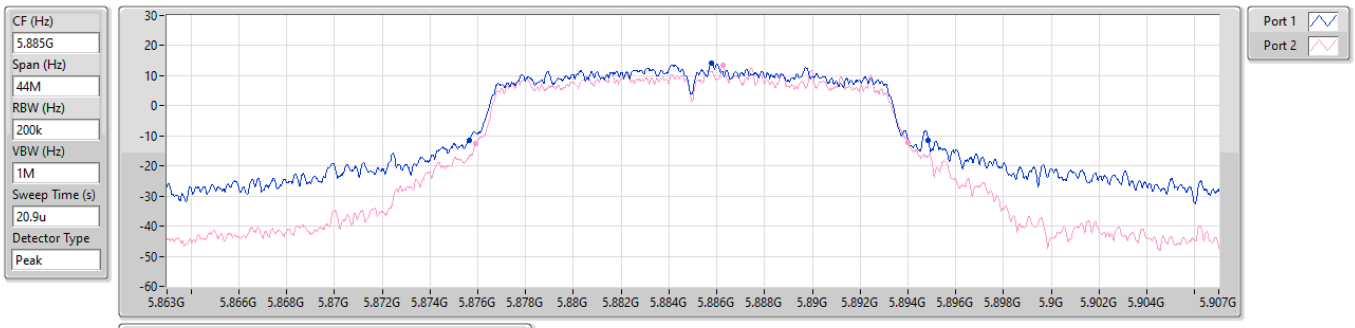


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.28M	5.876805G	5.893085G	16.375M	5.876748G	5.893124G	500k	1
16.28M	5.876805G	5.893085G	16.288M	5.876816G	5.893104G	500k	2

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

5885MHz

11/01/2024

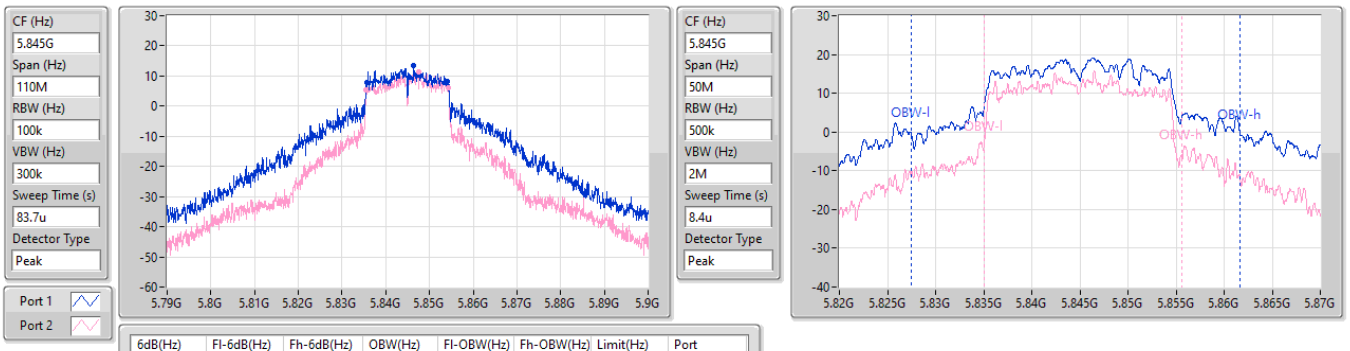


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
19.206M	5.87565G	5.894856G	Inf	1
18.128M	5.875892G	5.89402G	Inf	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **EBW**

5845MHz

11/01/2024

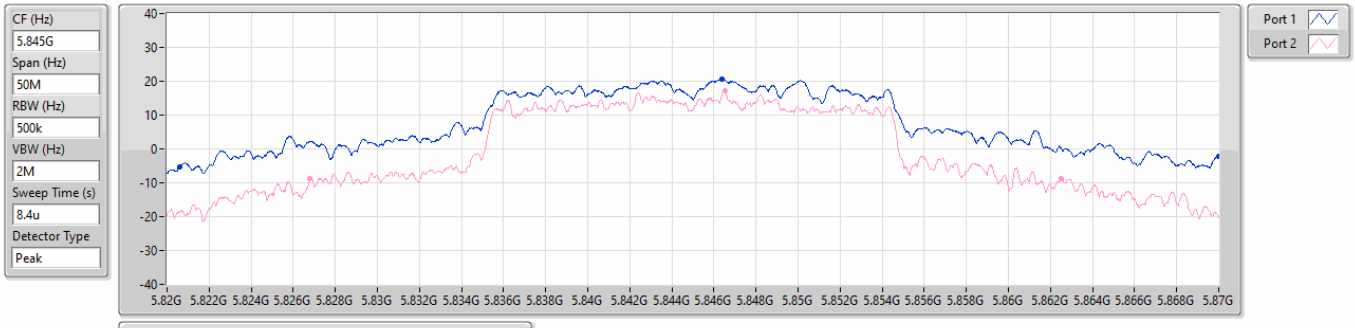


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.315M	5.83576G	5.854075G	34.174M	5.827465G	5.861639G	500k	1
18.865M	5.835485G	5.85435G	20.602M	5.835015G	5.855617G	500k	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **EBW**

5845MHz

11/01/2024

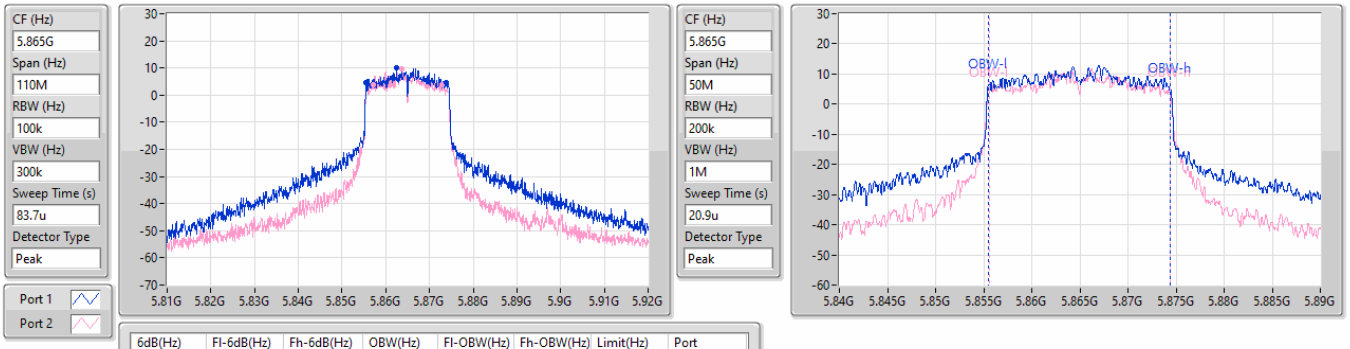


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
49.4M	5.8206G	5.87G	Inf	1
35.725M	5.8268G	5.862525G	Inf	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **EBW**

5865MHz

11/01/2024

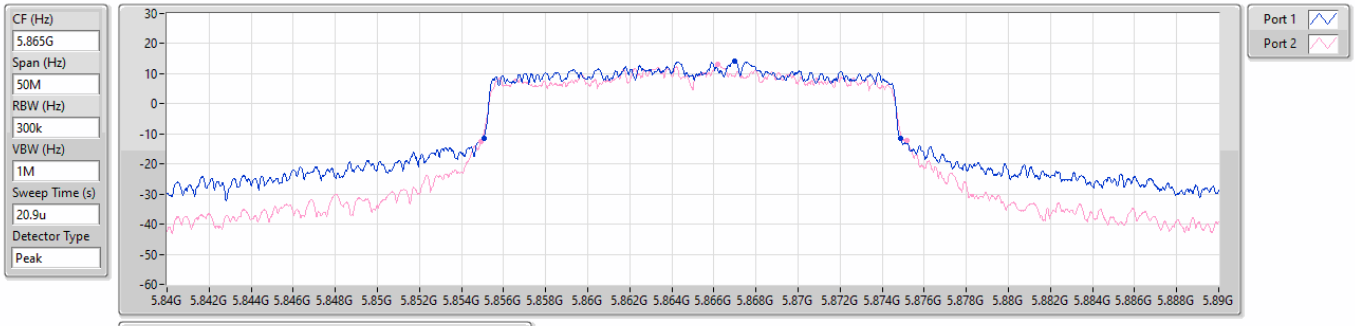


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.315M	5.85554G	5.873855G	18.88M	5.855502G	5.874382G	500k	1
15.895M	5.857025G	5.87292G	18.81M	5.855555G	5.874365G	500k	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **EBW**

5865MHz

11/01/2024

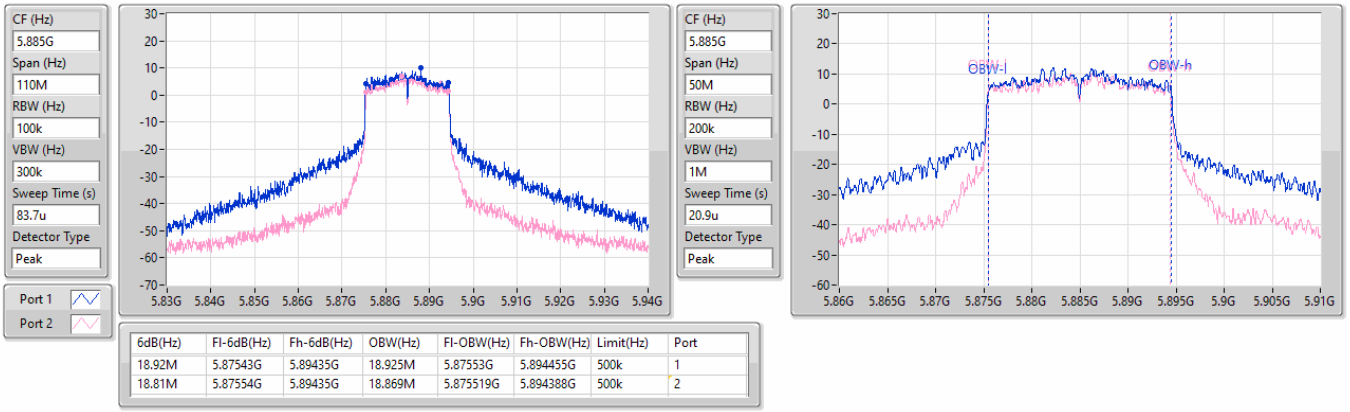


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
19.775M	5.855075G	5.87485G	Inf	1
20.25M	5.854925G	5.875175G	Inf	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **EBW**

5885MHz

11/01/2024

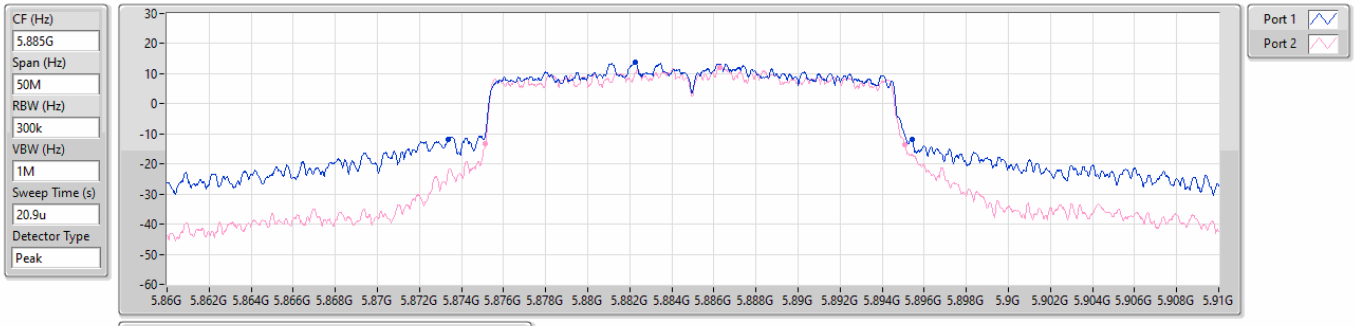


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.92M	5.87543G	5.89435G	18.925M	5.87553G	5.894455G	500k	1
18.81M	5.87554G	5.89435G	18.869M	5.875519G	5.894388G	500k	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **EBW**

5885MHz

11/01/2024

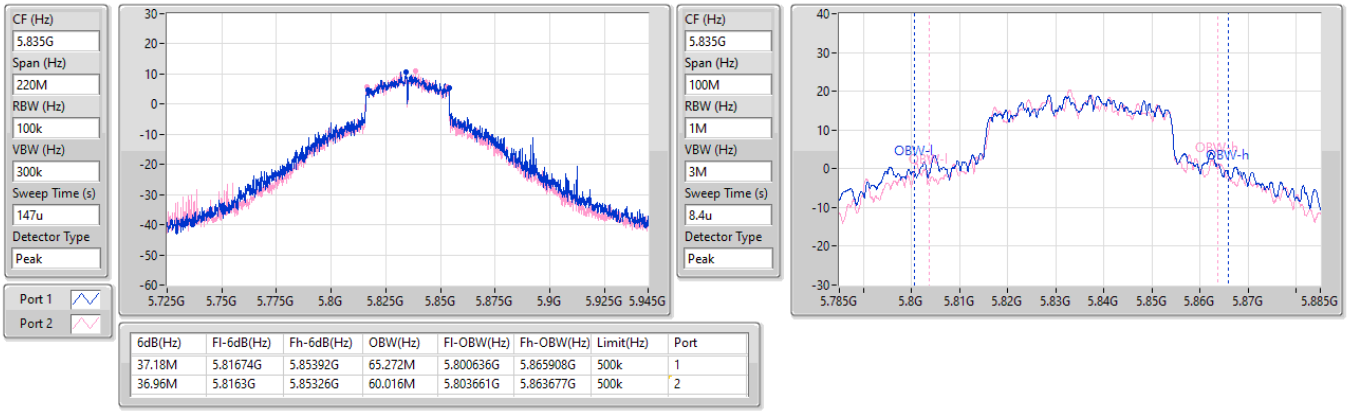


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
22.05M	5.873375G	5.895425G	Inf	1
19.95M	5.87515G	5.8951G	Inf	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **EBW**

5835MHz

11/01/2024

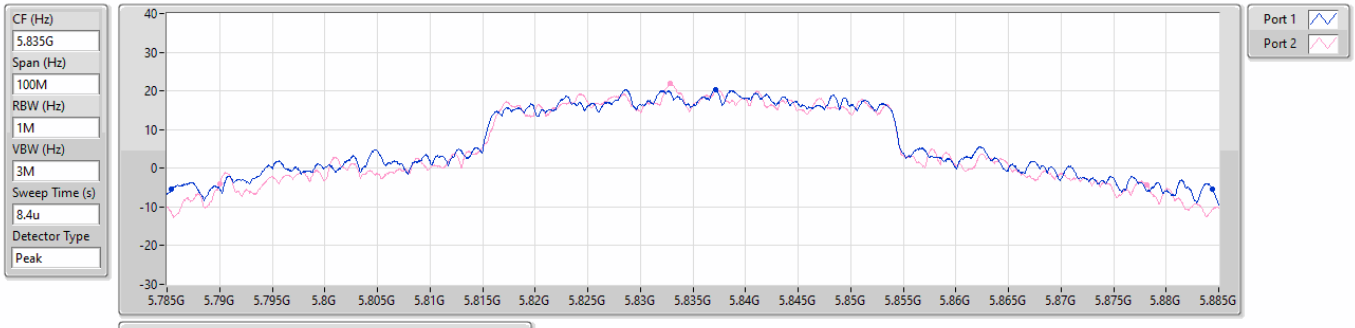


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.18M	5.81674G	5.85392G	65.272M	5.800636G	5.865908G	500k	1
36.96M	5.8163G	5.85326G	60.016M	5.803661G	5.863677G	500k	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **EBW**

5835MHz

11/01/2024

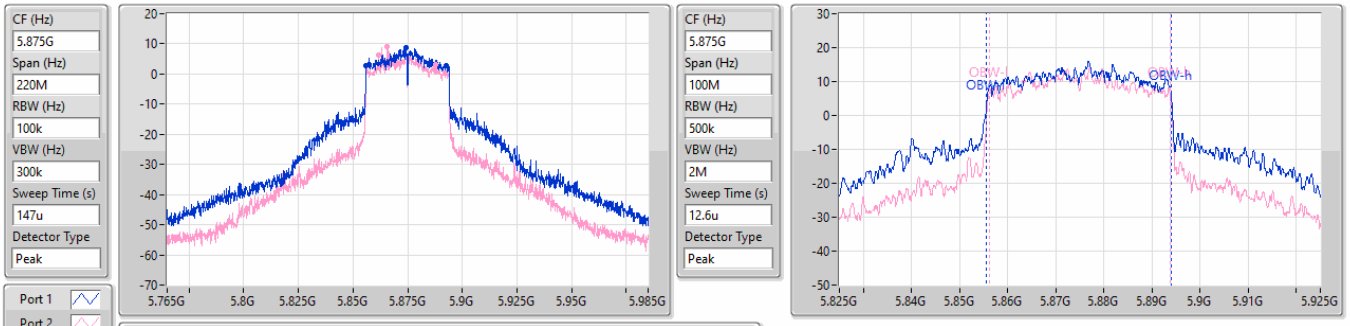


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
98.9M	5.78545G	5.88435G	Inf	1
88.15M	5.79G	5.87815G	Inf	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **EBW**

5875MHz

11/01/2024

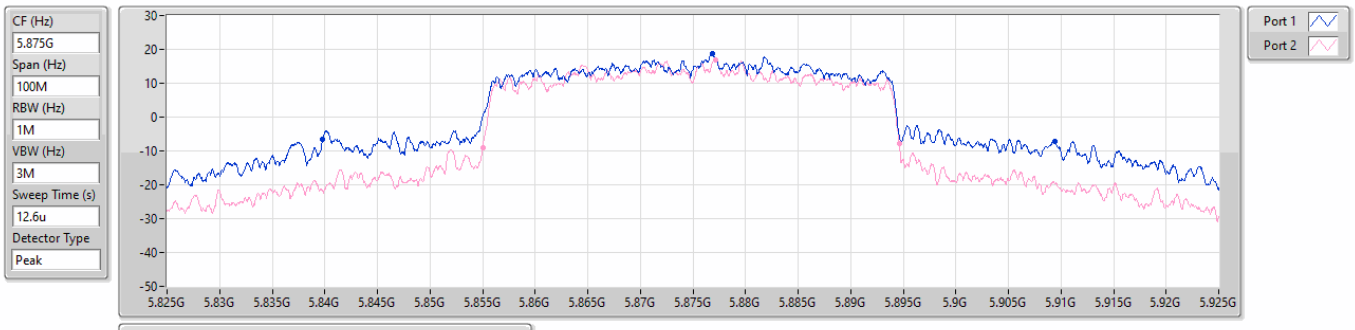


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.85M	5.85597G	5.89282G	38.442M	5.855614G	5.894056G	500k	1
25.85M	5.8618G	5.88765G	37.583M	5.85611G	5.893694G	500k	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **EBW**

5875MHz

11/01/2024

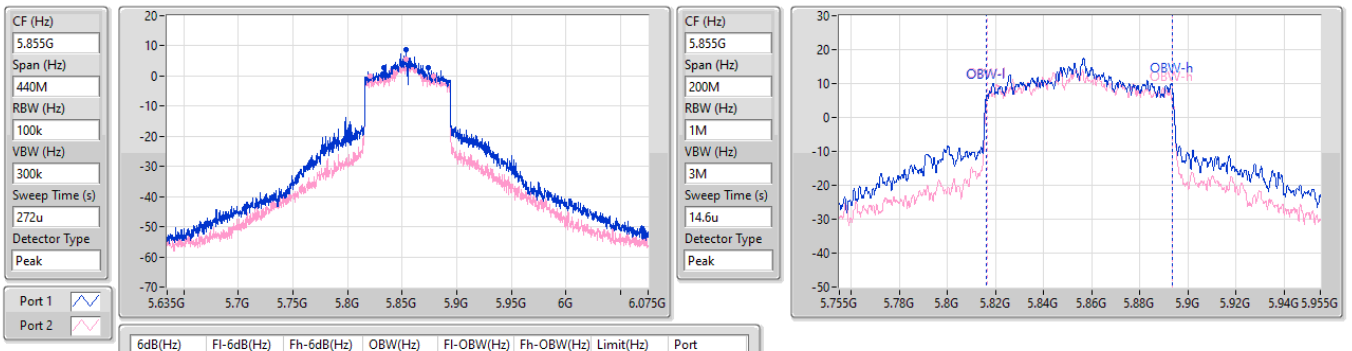


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
69.65M	5.8398G	5.90945G	Inf	1
39.6M	5.855G	5.8946G	Inf	2

802.11ax HEW80-BF_Nss1,(MCS0)_2TX **EBW**

5855MHz

11/01/2024

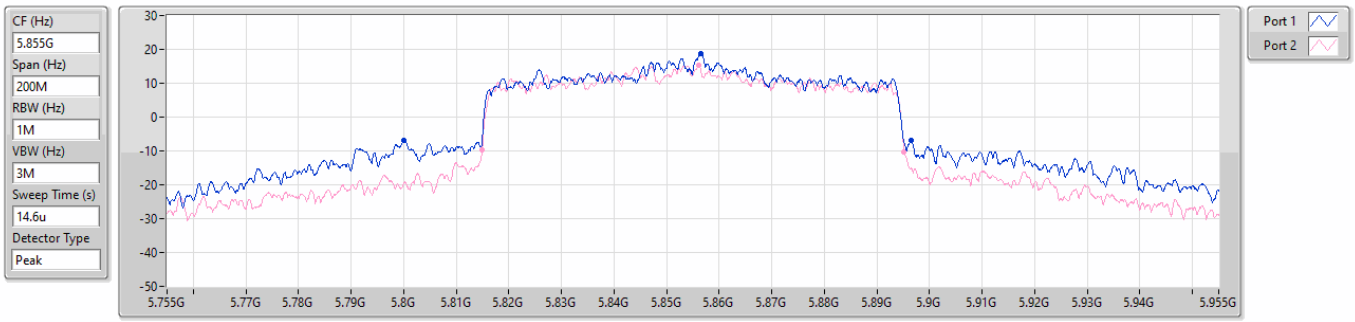


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.14M	5.83278G	5.87392G	77.332M	5.816187G	5.893519G	500k	1
57.42M	5.8209G	5.87832G	76.689M	5.816686G	5.893375G	500k	2

802.11ax HEW80-BF_Nss1,(MCS0)_2TX **EBW**

5855MHz

11/01/2024

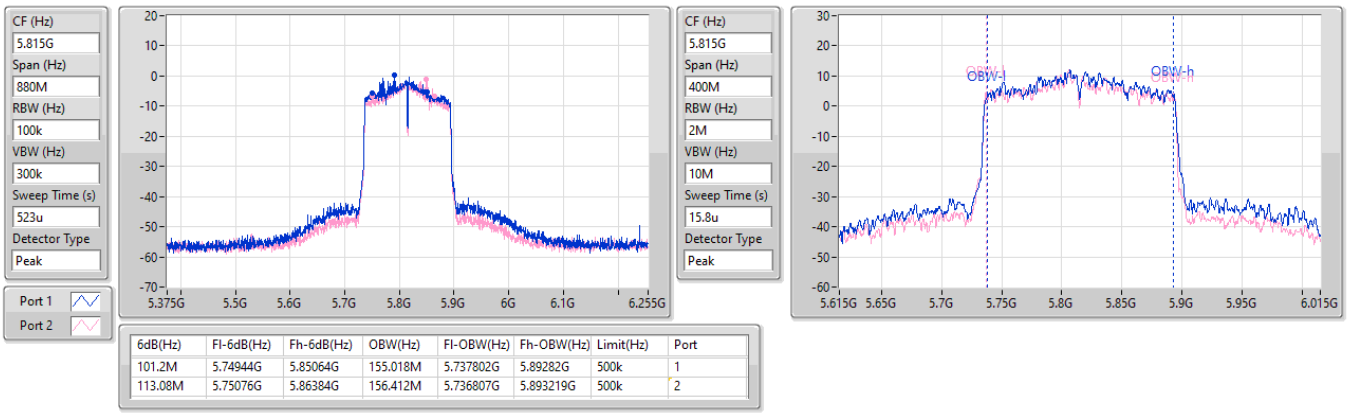


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
96.5M	5.8001G	5.8966G	Inf	1
80.3M	5.8149G	5.8952G	Inf	2

802.11ax HEW160-BF_Nss1,(MCS0)_2TX **EBW**

5815MHz

11/01/2024

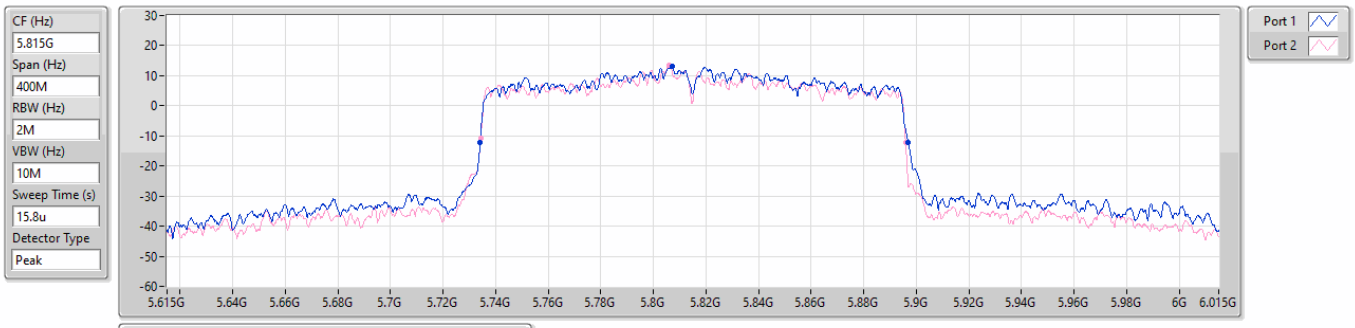


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
101.2M	5.74944G	5.85064G	155.018M	5.737802G	5.89282G	500k	1
113.08M	5.75076G	5.86384G	156.412M	5.736807G	5.893219G	500k	2

802.11ax HEW160-BF_Nss1,(MCS0)_2TX **EBW**

5815MHz

11/01/2024



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
163M	5.734G	5.897G	Inf	1
161.8M	5.7342G	5.896G	Inf	2

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.725-5.895GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	27.57	0.57148	31.01	1.26183
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	28.59	0.72277	34.97	3.14051
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	28.78	0.75509	35.16	3.28095
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	26.12	0.40926	32.50	1.77828
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	22.38	0.17298	28.76	0.75162

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5845MHz	Pass	3.44	24.97	24.10	27.57	30.00	31.01	36.00
5865MHz	Pass	3.44	22.13	21.22	24.71	Inf	28.15	36.00
5885MHz	Pass	3.44	22.50	21.41	25.00	Inf	28.44	36.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5845MHz	Pass	6.38	26.35	24.64	28.59	30.00	34.97	36.00
5865MHz	Pass	6.38	22.47	21.37	24.97	Inf	31.35	36.00
5885MHz	Pass	6.38	22.33	21.19	24.81	Inf	31.19	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5835MHz	Pass	6.38	25.97	25.56	28.78	30.00	35.16	36.00
5875MHz	Pass	6.38	23.89	22.45	26.24	Inf	32.62	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5855MHz	Pass	6.38	23.57	22.59	26.12	30.00	32.50	36.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5815MHz	Pass	6.38	19.88	18.78	22.38	30.00	28.76	36.00

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

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.725-5.895GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	13.50	19.88
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	13.56	19.94
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	11.74	18.12
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	9.16	15.54
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-1.20	5.18

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

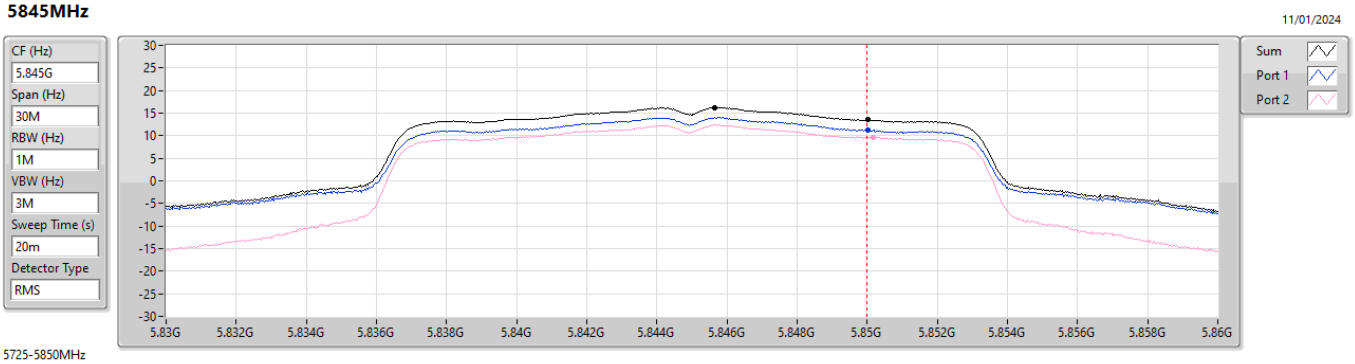
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5845MHz	Pass	6.38	11.26	9.65	13.50	Inf	19.88	20.00
5865MHz	Pass	6.38	11.11	9.78	13.46	Inf	19.84	20.00
5885MHz	Pass	6.38	10.87	9.88	13.41	Inf	19.79	20.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5845MHz	Pass	6.38	11.30	9.78	13.56	Inf	19.94	20.00
5865MHz	Pass	6.38	10.43	9.31	12.88	Inf	19.26	20.00
5885MHz	Pass	6.38	10.21	9.12	12.65	Inf	19.03	20.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5835MHz	Pass	6.38	7.83	7.25	10.45	Inf	16.83	20.00
5875MHz	Pass	6.38	9.76	8.00	11.74	Inf	18.12	20.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5855MHz	Pass	6.38	6.79	5.44	9.16	Inf	15.54	20.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5815MHz	Pass	6.38	-3.59	-4.94	-1.20	Inf	5.18	20.00

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;

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

5845MHz



5725-5850MHz

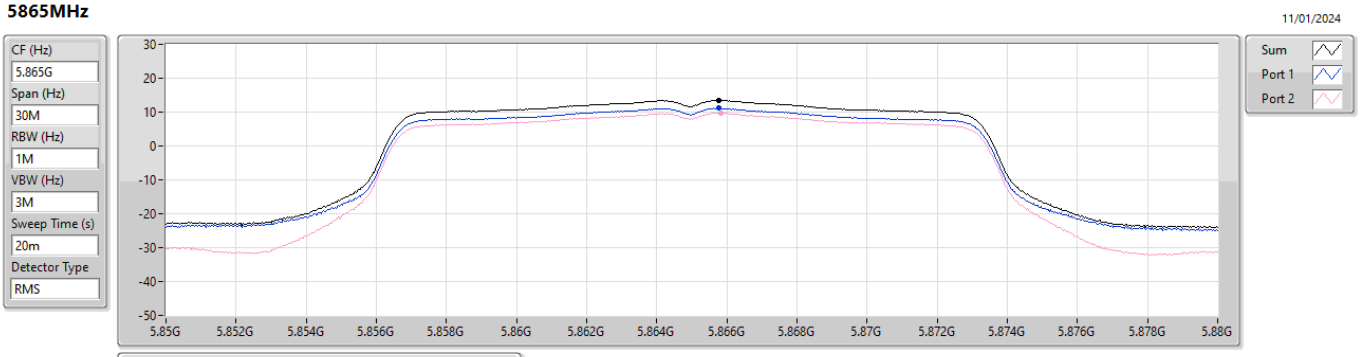
Sum	PD	Limit RBW	BWCF
(dBm)	(dBm)	(Hz)	(dB)
16.25	13.24	500k	-3.01

5850~5895MHz

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.50	13.50	11.26	9.65

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

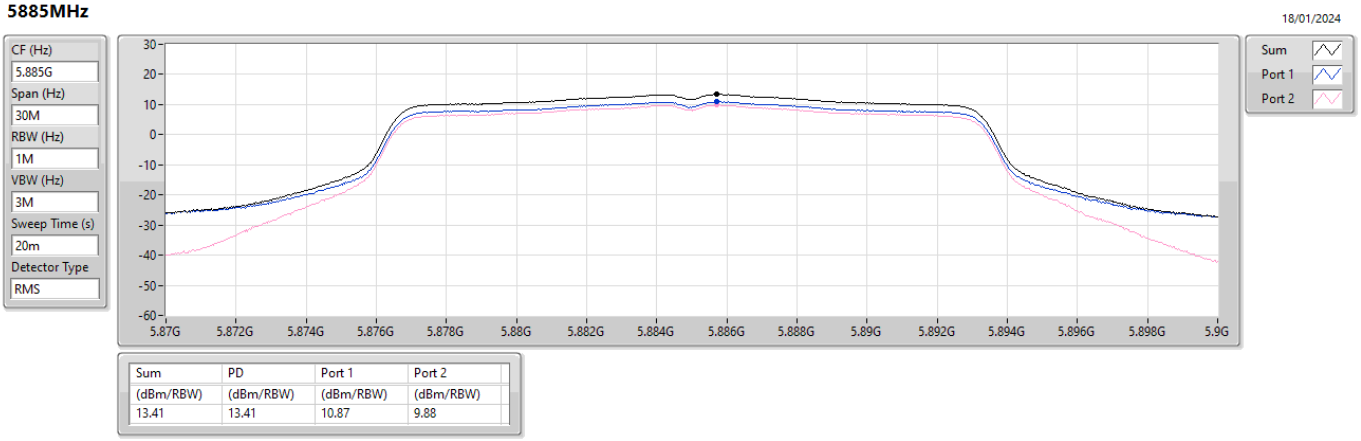
5865MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.46	13.46	11.11	9.78

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

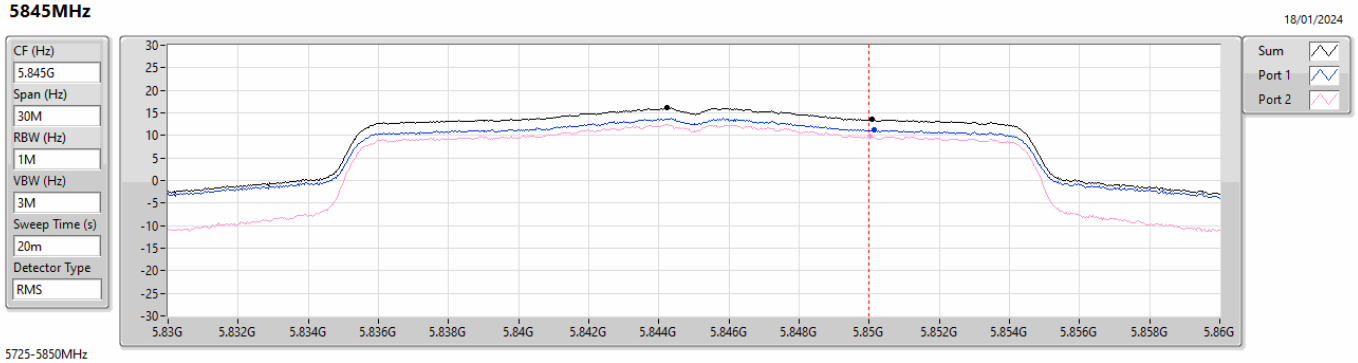
5885MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.41	13.41	10.87	9.88

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **PSD**

5845MHz



5725-5850MHz

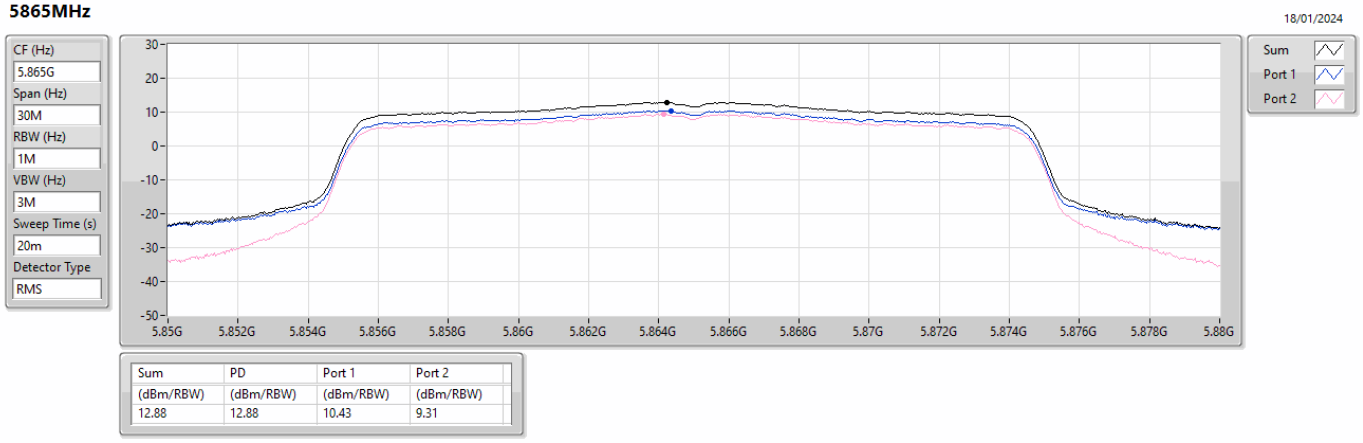
Sum	PD	Limit RBW	BWCF
(dBm)	(dBm)	(Hz)	(dB)
16.09	13.08	500k	-3.01

5850~5895MHz

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.56	13.56	11.30	9.78

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **PSD**

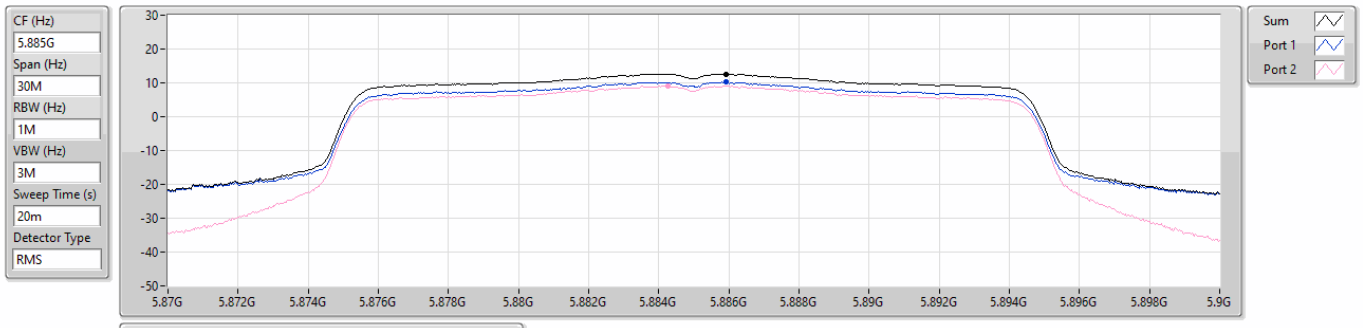
5865MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.88	12.88	10.43	9.31

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **PSD**

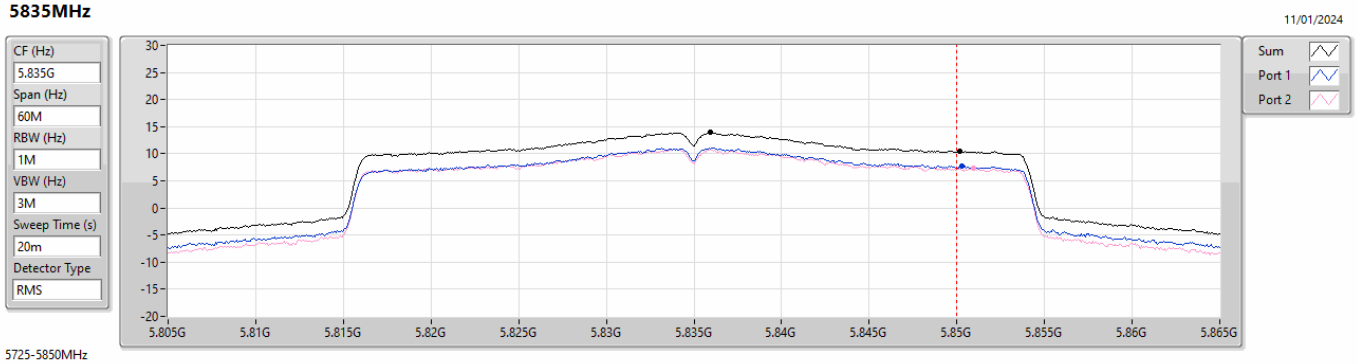
5885MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.65	12.65	10.21	9.12

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **PSD**

5835MHz



5725-5850MHz

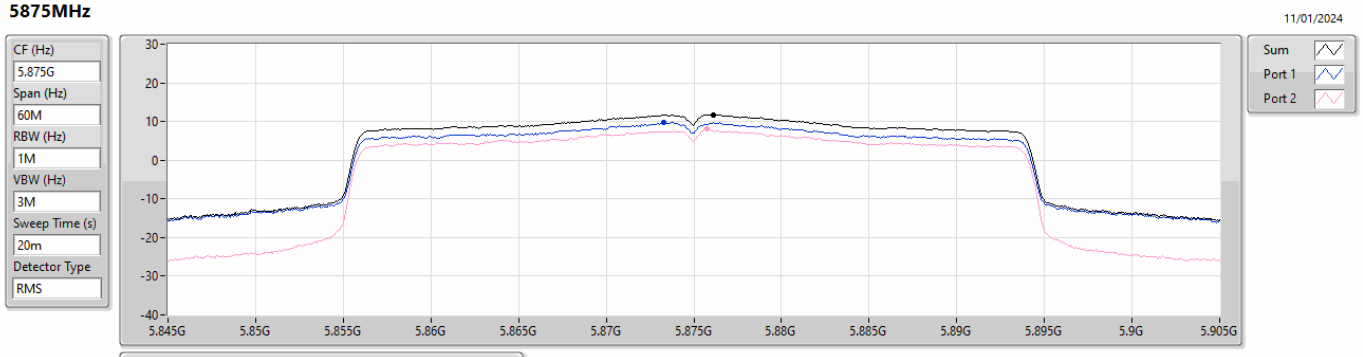
Sum	PD	Limit RBW	BWCF
(dBm)	(dBm)	(Hz)	(dB)
13.90	10.89	500k	-3.01

5850~5895MHz

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.45	10.45	7.83	7.25

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **PSD**

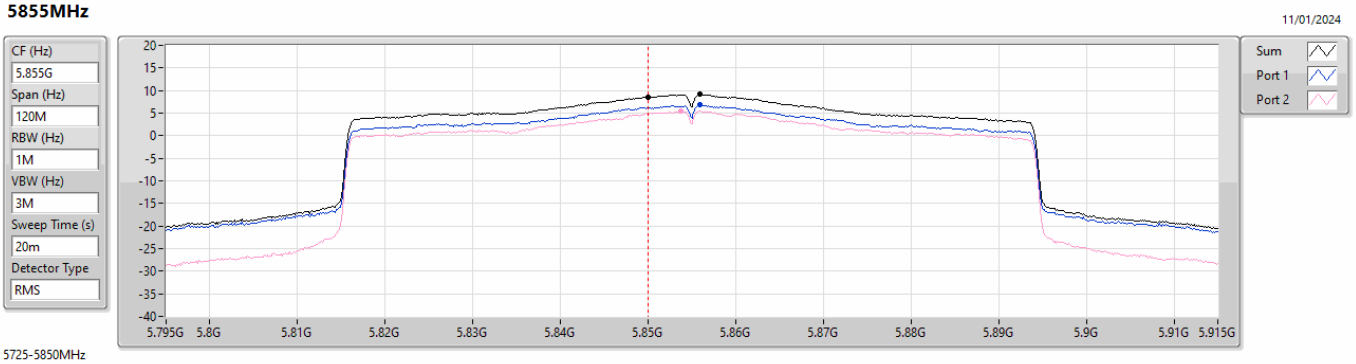
5875MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.74	11.74	9.76	8.00

802.11ax HEW80-BF_Nss1,(MCS0)_2TX **PSD**

5855MHz



5725-5850MHz

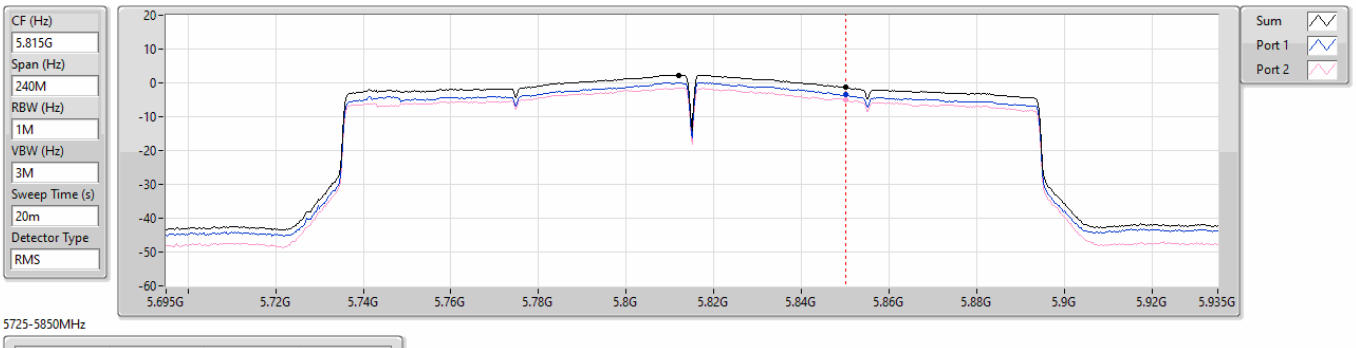
Sum	PD	Limit RBW	BWCF
(dBm)	(dBm)	(Hz)	(dB)
8.62	5.61	500k	-3.01

5850~5895MHz

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.16	9.16	6.79	5.44

802.11ax HEW160-BF_Nss1,(MCS0)_2TX **PSD**

5815MHz



5725-5850MHz

Sum	PD	Limit RBW	BWCF
(dBm)	(dBm)	(Hz)	(dB)
2.31	-0.70	500k	-3.01

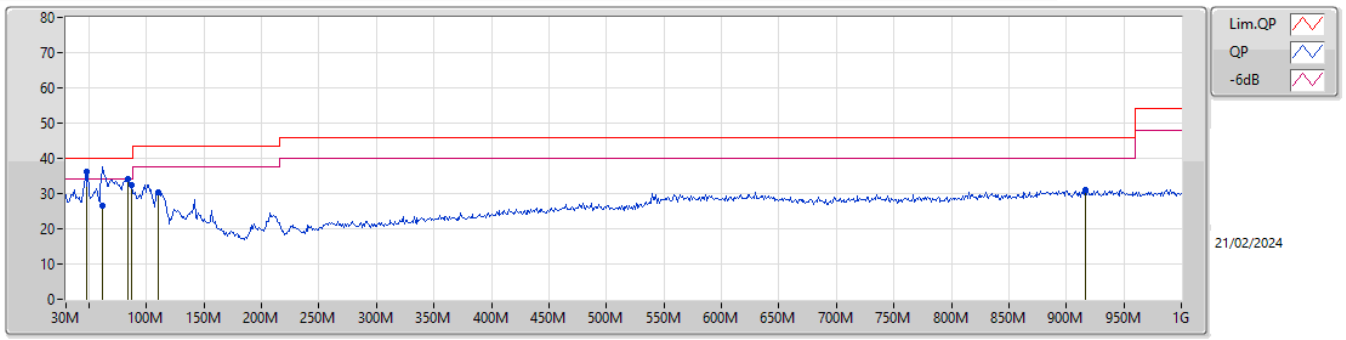
5850~5895MHz

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.20	-1.20	-3.59	-4.94

Summary

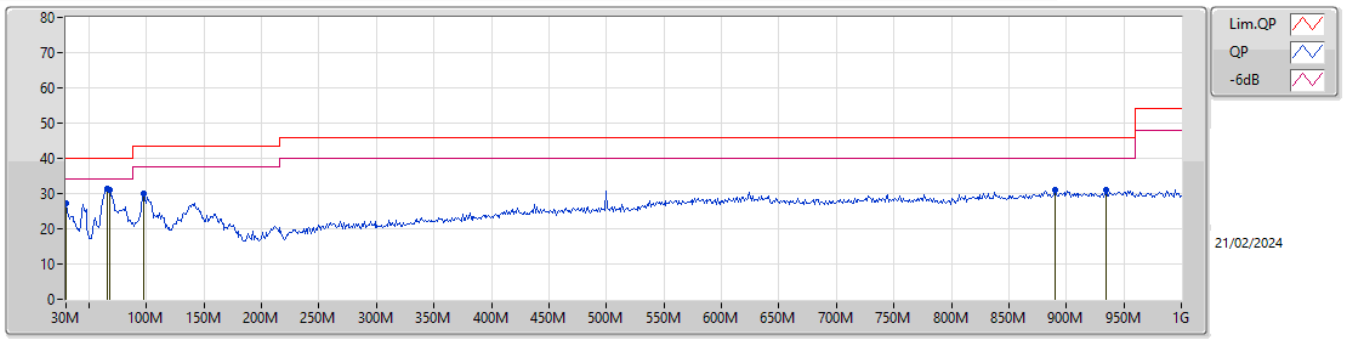
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 4	Pass	PK	47.46M	36.29	40.00	-3.71	Vertical

Mode 4



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	47.46M	36.29	40.00	-3.71	-16.16	3	Vertical	0	3.00	-	52.45	14.86	0.50	31.52
QP	62.01M	26.70	40.00	-13.30	-18.62	3	Vertical	0	3.00	"Worst"	45.32	12.53	0.60	31.75
PK	84.32M	34.01	40.00	-5.99	-17.04	3	Vertical	228	1.25	-	51.05	13.91	0.76	31.71
PK	87.23M	32.58	40.00	-7.42	-16.29	3	Vertical	284	1.00	-	48.87	14.62	0.78	31.69
PK	110.51M	30.30	43.50	-13.20	-12.60	3	Vertical	170	1.00	-	42.90	18.11	0.88	31.59
PK	916.58M	31.03	46.00	-14.97	-2.31	3	Vertical	0	3.00	-	33.34	26.79	3.12	32.22

Mode 4



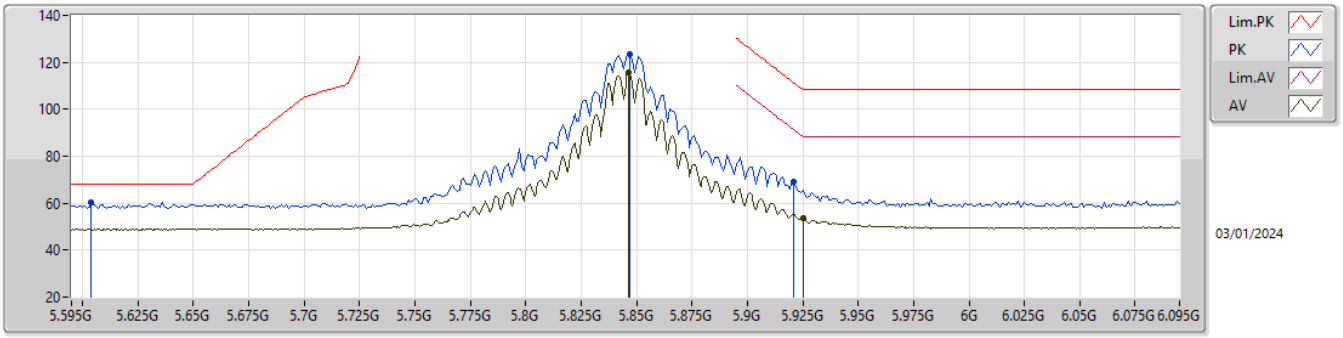
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	30M	27.16	40.00	-12.84	-7.26	3	Horizontal	360	1.00	-	34.42	23.56	0.33	31.15
PK	65.89M	31.23	40.00	-8.77	-18.78	3	Horizontal	0	2.00	"Worst"	50.01	12.34	0.63	31.75
PK	67.83M	30.93	40.00	-9.07	-18.72	3	Horizontal	0	2.00	-	49.65	12.38	0.64	31.74
PK	97.9M	29.86	43.50	-13.64	-14.01	3	Horizontal	285	2.00	-	43.87	16.75	0.81	31.57
PK	890.39M	30.99	46.00	-15.01	-2.57	3	Horizontal	41	1.00	-	33.56	26.61	3.04	32.22
PK	935.01M	30.89	46.00	-15.11	-2.45	3	Horizontal	144	1.50	-	33.34	26.64	3.17	32.26

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.895GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	Pass	PK	5.649G	65.41	68.20	-2.79	3	Vertical	126	1.87	-

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5845MHz_TX

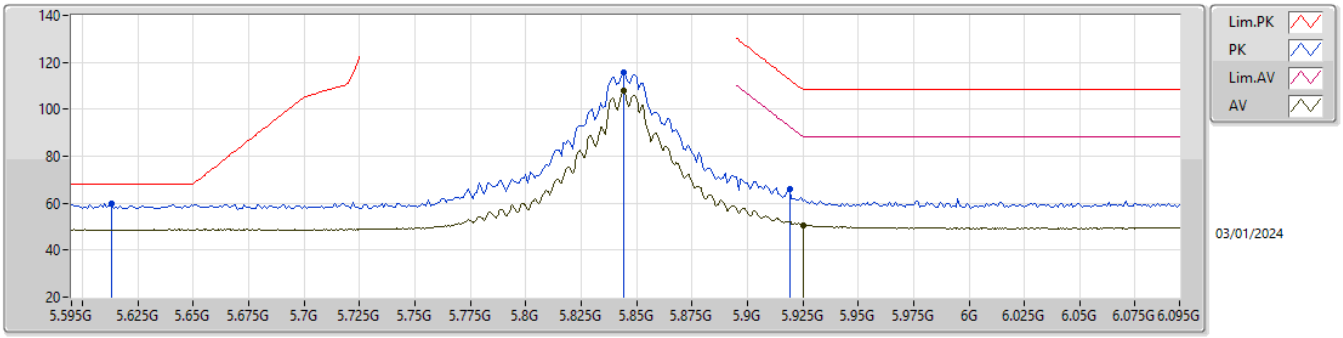


EUT Z_2TX
Setting 26
03-R-M-2-10

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	5.604G	60.27	68.20	-7.93	53.91	3	Vertical	149	1.90	-	34.40	6.91	34.95
PK	5.847G	123.50	Inf	-Inf	117.32	3	Vertical	149	1.90	-	34.30	6.95	35.07
AV	5.8465G	115.57	Inf	-Inf	109.39	3	Vertical	149	1.90	-	34.30	6.95	35.07
PK	5.921G	68.89	111.13	-42.24	62.49	3	Vertical	149	1.90	-	34.54	6.96	35.10
AV	5.9255G	53.53	88.20	-34.67	47.11	3	Vertical	149	1.90	-	34.55	6.97	35.10

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5845MHz_TX

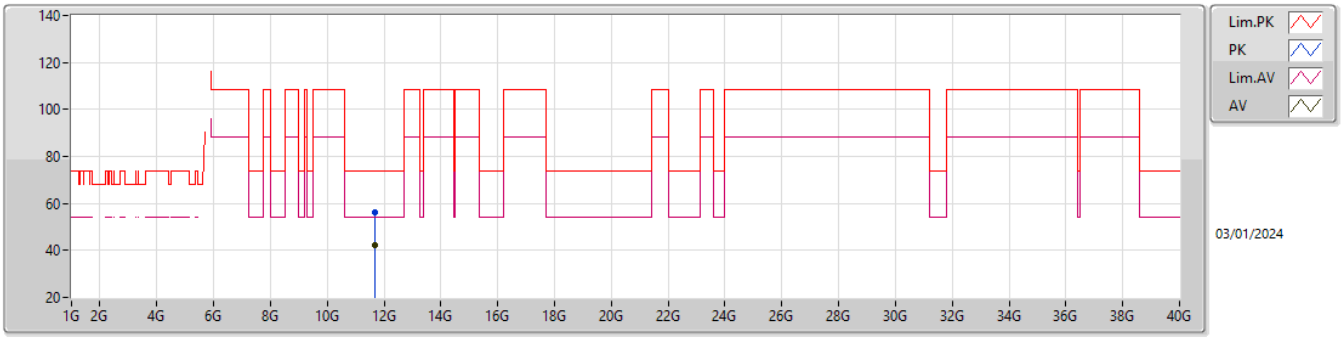


EUT Z_2TX
Setting 26
03-R-M-2-10

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	5.613G	59.91	68.20	-8.29	53.55	3	Horizontal	147	1.90	-	34.40	6.91	34.95
PK	5.844G	115.68	Inf	-Inf	109.50	3	Horizontal	147	1.90	-	34.30	6.95	35.07
AV	5.844G	107.84	Inf	-Inf	101.66	3	Horizontal	147	1.90	-	34.30	6.95	35.07
PK	5.919G	66.21	112.60	-46.39	59.81	3	Horizontal	147	1.90	-	34.54	6.96	35.10
AV	5.925G	50.64	88.20	-37.56	44.22	3	Horizontal	147	1.90	-	34.55	6.97	35.10

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5845MHz_TX

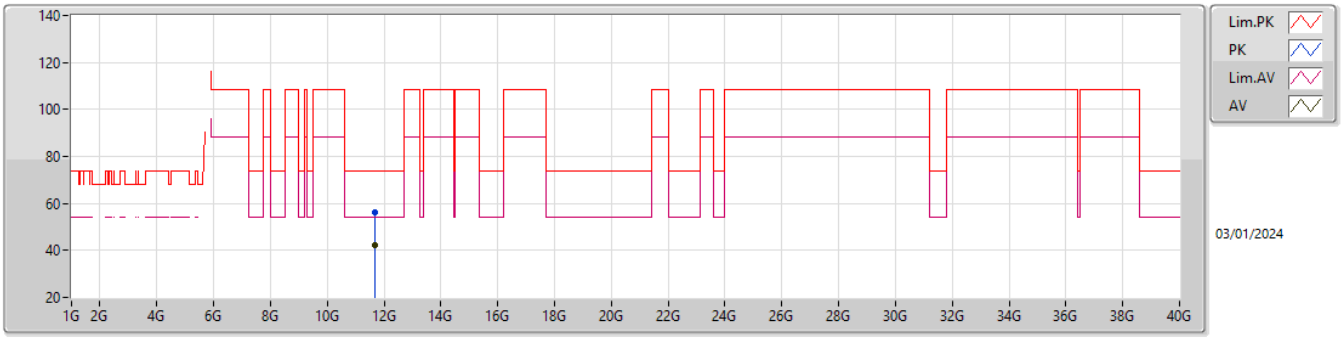


EUT Z_2TX
Setting 26
05-C-S-5

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	11.68732G	56.06	74.00	-17.94	39.83	3	Vertical	185	2.99	-	38.47	10.93	33.17
AV	11.6996G	42.18	54.00	-11.82	25.93	3	Vertical	185	2.99	-	38.50	10.94	33.19

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5845MHz_TX

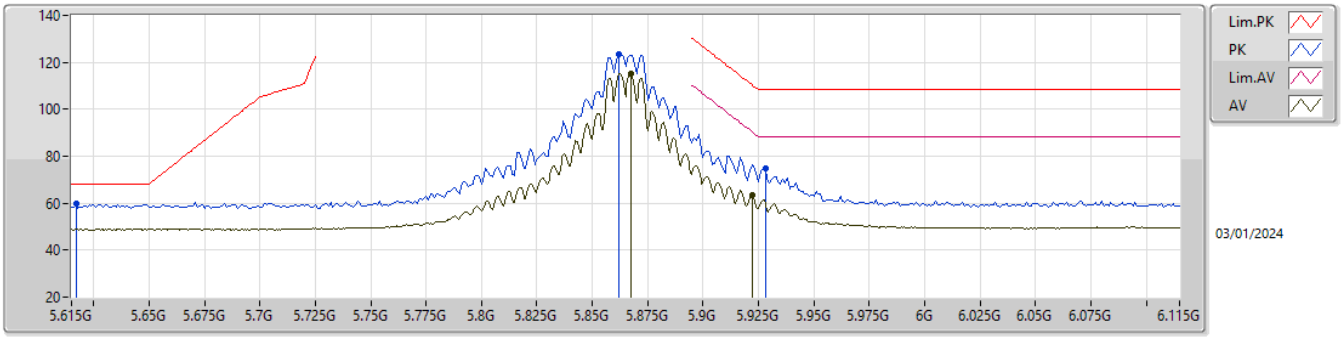


EUT Z_2TX
Setting 26
05-C-S-5

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	11.6856G	56.25	74.00	-17.75	40.02	3	Horizontal	62	1.78	-	38.47	10.93	33.17
AV	11.69992G	42.15	54.00	-11.85	25.90	3	Horizontal	62	1.78	-	38.50	10.94	33.19

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5865MHz_TX

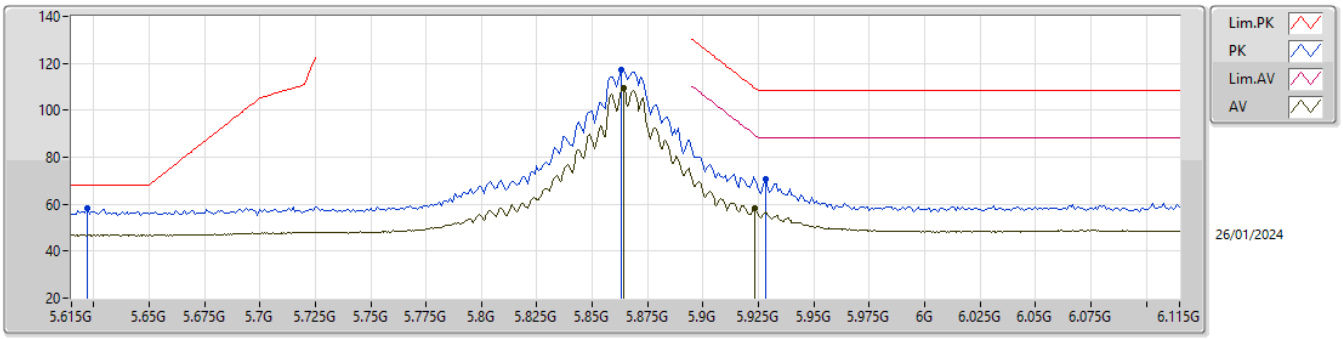


EUT Z_2TX
Setting 26
03-R-M-2-10

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	5.617G	59.82	68.20	-8.38	53.47	3	Vertical	133	1.80	-	34.40	6.91	34.96
PK	5.862G	123.20	Inf	-Inf	116.97	3	Vertical	133	1.80	-	34.35	6.95	35.07
AV	5.8675G	115.19	Inf	-Inf	108.95	3	Vertical	133	1.80	-	34.37	6.95	35.08
PK	5.928G	74.70	108.20	-33.50	68.28	3	Vertical	133	1.80	-	34.56	6.97	35.11
AV	5.922G	63.69	90.40	-26.71	57.29	3	Vertical	133	1.80	-	34.54	6.96	35.10

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5865MHz_TX

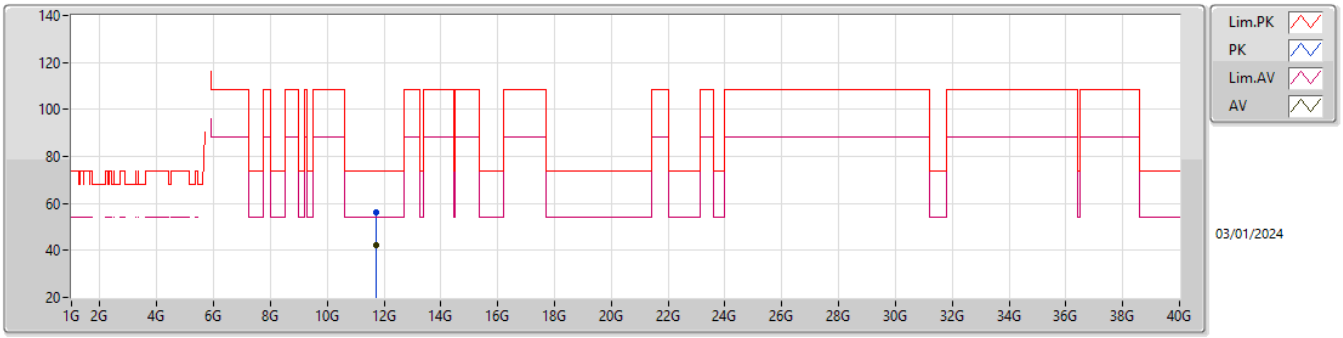


EUT Z_2TX
Setting 26
05-C-S-5-10

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	5.622G	58.15	68.20	-10.05	53.03	3	Horizontal	144	3.00	-	32.84	7.75	35.47
PK	5.863G	117.45	Inf	-Inf	110.89	3	Horizontal	144	3.00	-	34.05	8.07	35.56
AV	5.864G	109.49	Inf	-Inf	102.92	3	Horizontal	144	3.00	-	34.06	8.07	35.56
PK	5.928G	70.84	108.20	-37.36	64.11	3	Horizontal	144	3.00	-	34.20	8.11	35.58
AV	5.9235G	58.08	89.30	-31.22	51.35	3	Horizontal	144	3.00	-	34.20	8.11	35.58

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5865MHz_TX

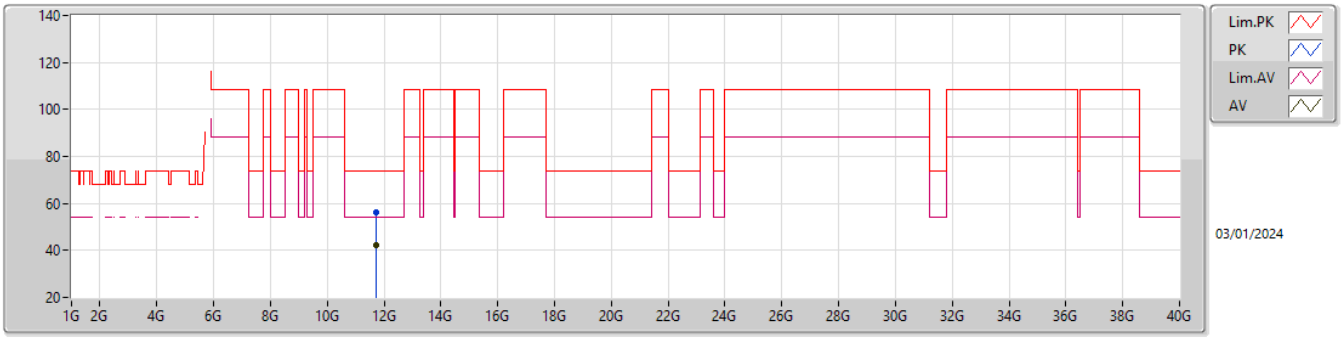


EUT Z_2TX
Setting 26
05-C-S-5

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	11.73884G	56.24	74.00	-17.76	40.00	3	Vertical	273	1.01	-	38.50	10.96	33.22
AV	11.73908G	42.36	54.00	-11.64	26.12	3	Vertical	273	1.01	-	38.50	10.96	33.22

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5865MHz_TX

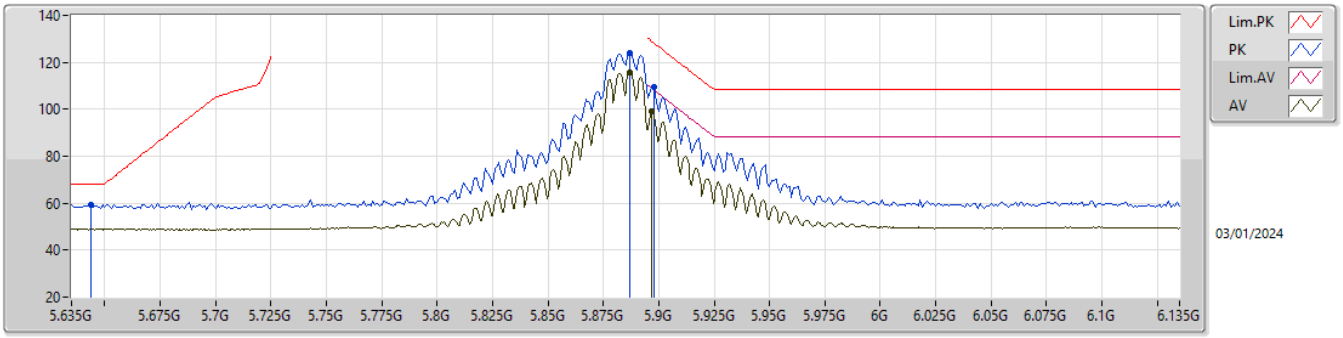


EUT Z_2TX
Setting 26
05-C-S-5

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	11.73236G	56.03	74.00	-17.97	39.79	3	Horizontal	83	1.04	-	38.50	10.95	33.21
AV	11.72476G	42.28	54.00	-11.72	26.04	3	Horizontal	83	1.04	-	38.50	10.95	33.21

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5885MHz_TX

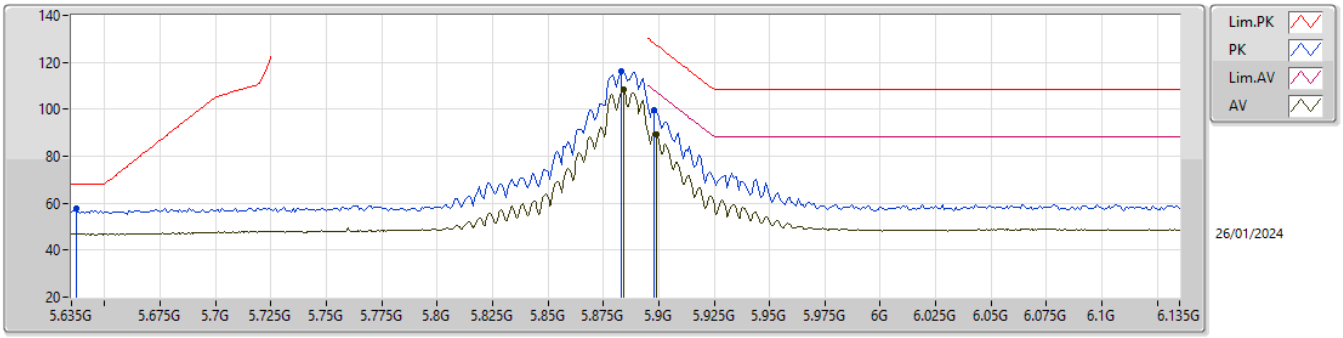


EUT Z_2TX
Setting 26
03-R-M-2-10

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	5.644G	59.29	68.20	-8.91	52.94	3	Vertical	134	1.90	-	34.40	6.92	34.97
PK	5.887G	123.71	Inf	-Inf	117.39	3	Vertical	134	1.90	-	34.45	6.96	35.09
AV	5.887G	115.77	Inf	-Inf	109.45	3	Vertical	134	1.90	-	34.45	6.96	35.09
PK	5.898G	109.38	128.00	-18.62	103.02	3	Vertical	134	1.90	-	34.49	6.96	35.09
AV	5.897G	99.05	108.73	-9.68	92.69	3	Vertical	134	1.90	-	34.49	6.96	35.09

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5885MHz_TX

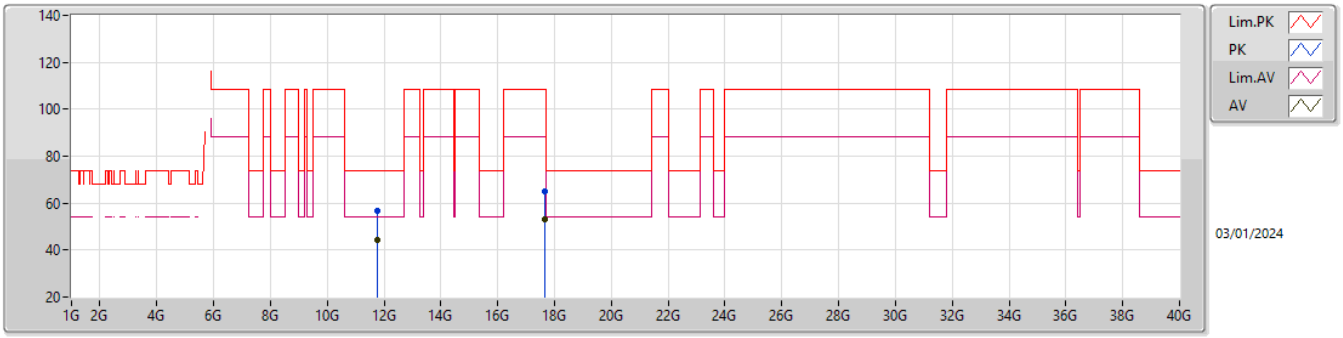


EUT Z_2TX
Setting 26
05-C-S-5-10

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	5.637G	57.95	68.20	-10.25	52.78	3	Horizontal	148	1.80	-	32.87	7.77	35.47
PK	5.883G	116.44	Inf	-Inf	109.80	3	Horizontal	148	1.80	-	34.13	8.08	35.57
AV	5.884G	108.24	Inf	-Inf	101.59	3	Horizontal	148	1.80	-	34.14	8.08	35.57
PK	5.898G	99.84	128.00	-28.16	93.13	3	Horizontal	148	1.80	-	34.19	8.09	35.57
AV	5.899G	89.35	107.27	-17.92	82.63	3	Horizontal	148	1.80	-	34.20	8.09	35.57

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5885MHz_TX

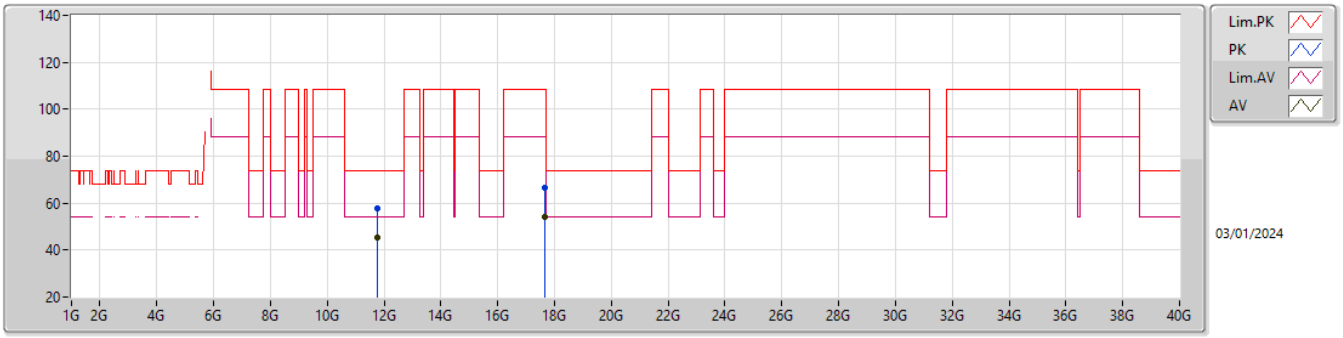


EUT Z_2TX
Setting 26
03-R-M-2

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	11.7644G	56.73	74.00	-17.27	49.90	3	Vertical	346	1.78	-	39.50	10.59	43.26
AV	11.774G	44.53	54.00	-9.47	37.70	3	Vertical	346	1.78	-	39.50	10.59	43.26
PK	17.66988G	64.97	108.20	-43.23	47.90	3	Vertical	43	1.80	-	43.96	14.81	41.70
AV	17.65996G	52.85	88.20	-35.35	35.89	3	Vertical	43	1.80	-	43.88	14.80	41.72

5.725-5.895GHz_802.11a_Nss1,(6Mbps)_2TX

5885MHz_TX

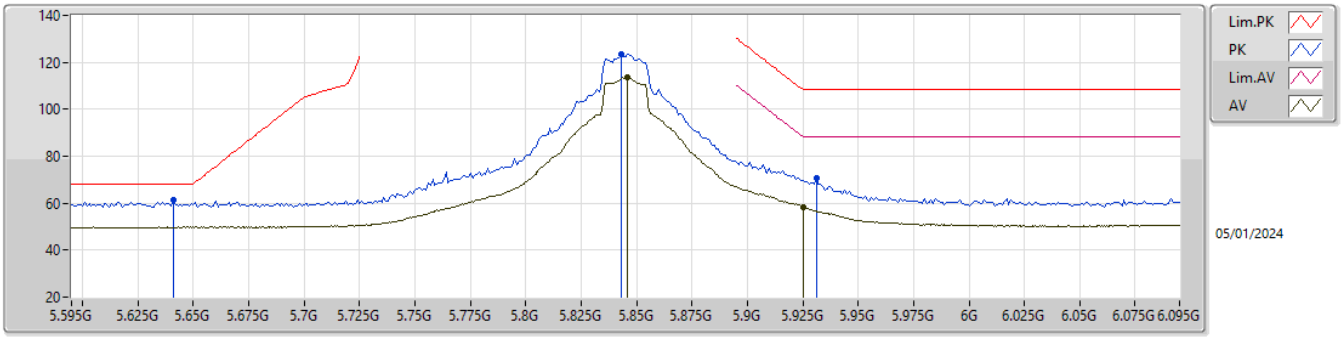


EUT Z_2TX
Setting 26
03-R-M-2

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	11.77304G	57.70	74.00	-16.30	50.87	3	Horizontal	239	1.80	-	39.50	10.59	43.26
AV	11.77208G	45.28	54.00	-8.72	38.45	3	Horizontal	239	1.80	-	39.50	10.59	43.26
PK	17.6494G	66.45	108.20	-41.75	49.61	3	Horizontal	209	1.67	-	43.79	14.79	41.74
AV	17.65372G	54.02	88.20	-34.18	37.12	3	Horizontal	209	1.67	-	43.83	14.80	41.73

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5845MHz_TX

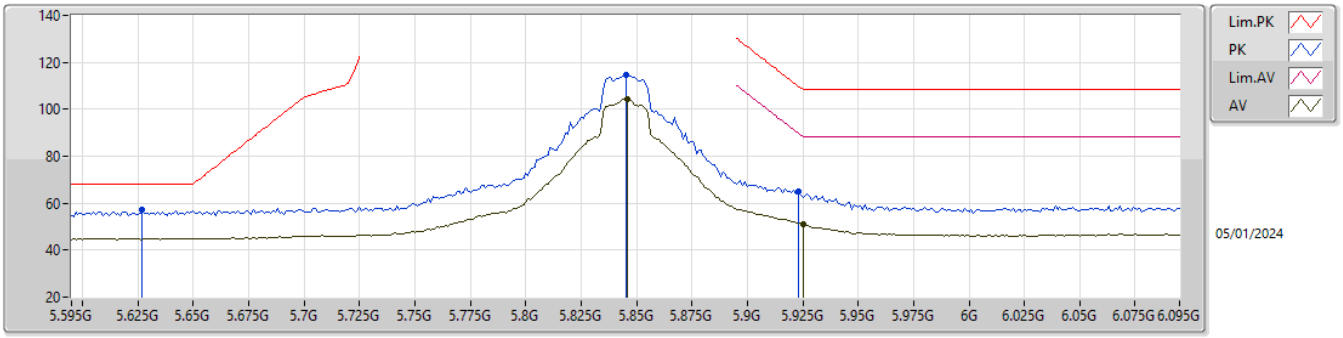


EUT Z_2TX
Setting 29
03-R-M-2-10

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	5.641G	61.27	68.20	-6.93	54.92	3	Vertical	135	1.80	-	34.40	6.92	34.97
PK	5.843G	123.54	Inf	-Inf	117.35	3	Vertical	135	1.80	-	34.30	6.95	35.06
AV	5.846G	113.65	Inf	-Inf	107.47	3	Vertical	135	1.80	-	34.30	6.95	35.07
PK	5.931G	70.56	108.20	-37.64	64.14	3	Vertical	135	1.80	-	34.56	6.97	35.11
AV	5.9255G	58.51	88.20	-29.69	52.09	3	Vertical	135	1.80	-	34.55	6.97	35.10

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5845MHz_TX

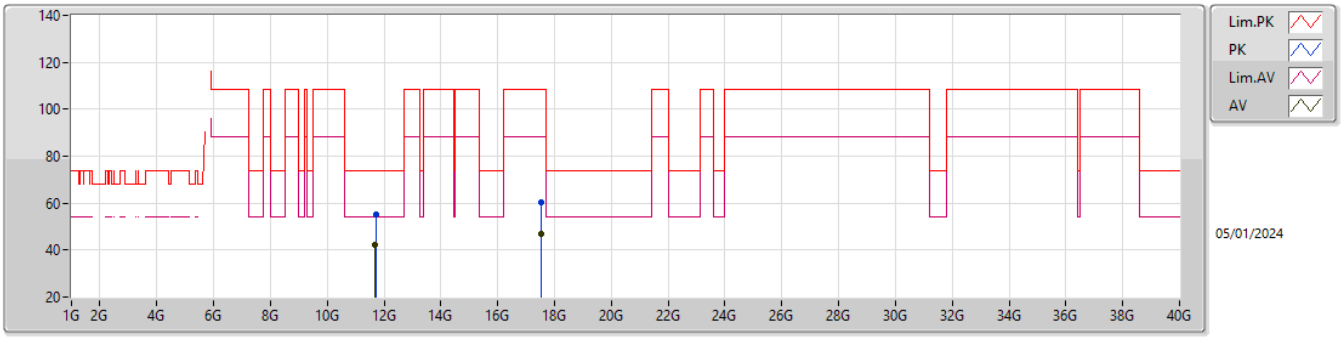


EUT Z_2TX
Setting 29
05-E-G-4-10

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	5.627G	57.43	68.20	-10.77	52.30	3	Horizontal	140	3.00	-	32.85	7.75	35.47
PK	5.845G	114.66	Inf	-Inf	108.16	3	Horizontal	140	3.00	-	33.99	8.06	35.55
AV	5.846G	104.52	Inf	-Inf	98.02	3	Horizontal	140	3.00	-	33.99	8.06	35.55
PK	5.923G	65.21	109.67	-44.46	58.48	3	Horizontal	140	3.00	-	34.20	8.11	35.58
AV	5.925G	50.97	88.20	-37.23	44.24	3	Horizontal	140	3.00	-	34.20	8.11	35.58

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5845MHz_TX

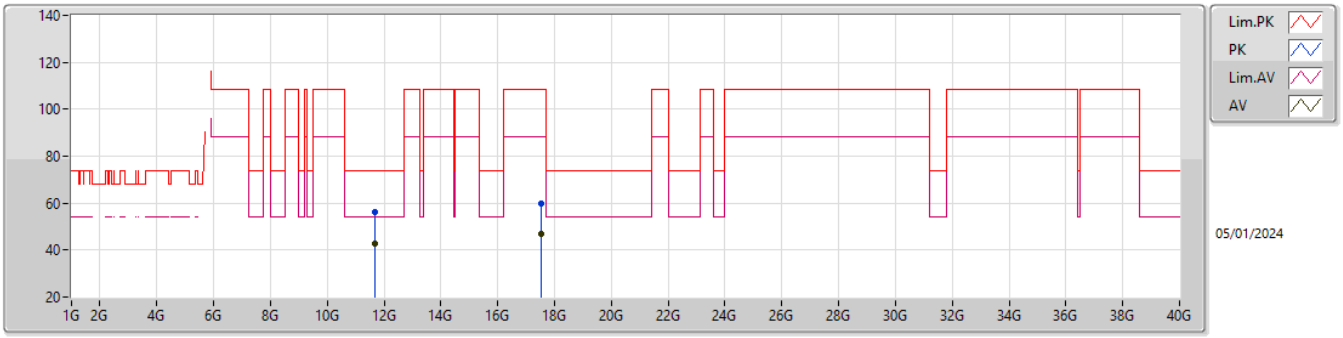


EUT Z_2TX
Setting 29
05-E-G-4

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	11.70272G	55.01	74.00	-18.99	38.76	3	Vertical	341	1.80	-	38.50	10.94	33.19
AV	11.6978G	42.30	54.00	-11.70	26.04	3	Vertical	341	1.80	-	38.50	10.94	33.18
PK	17.53728G	60.19	108.20	-48.01	40.97	3	Vertical	231	1.80	-	39.37	13.14	33.29
AV	17.54958G	47.14	88.20	-41.06	27.79	3	Vertical	231	1.80	-	39.50	13.15	33.30

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5845MHz_TX

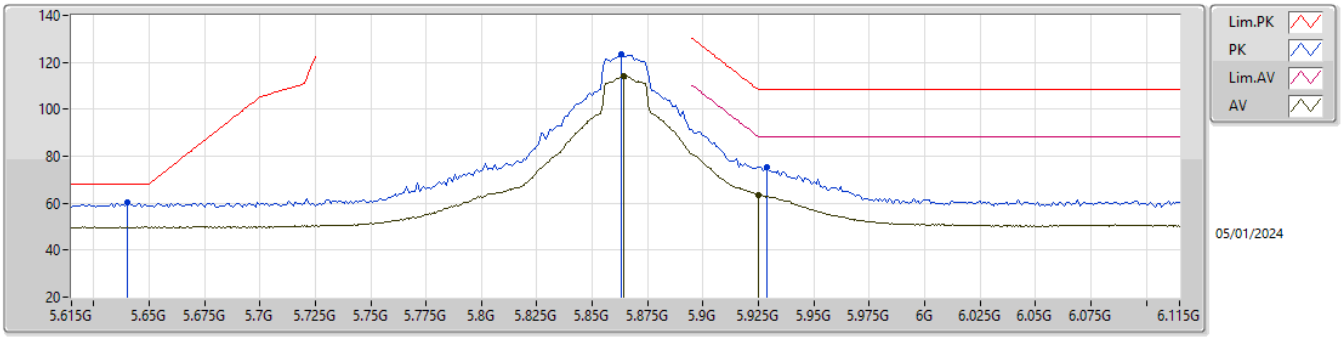


EUT Z_2TX
Setting 29
05-E-G-4

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	11.68874G	56.15	74.00	-17.85	39.92	3	Horizontal	242	1.80	-	38.48	10.93	33.18
AV	11.68538G	42.91	54.00	-11.09	26.68	3	Horizontal	242	1.80	-	38.47	10.93	33.17
PK	17.53086G	59.71	108.20	-48.49	40.54	3	Horizontal	190	1.80	-	39.31	13.14	33.28
AV	17.54334G	46.72	88.20	-41.48	27.43	3	Horizontal	190	1.80	-	39.43	13.15	33.29

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5865MHz_TX

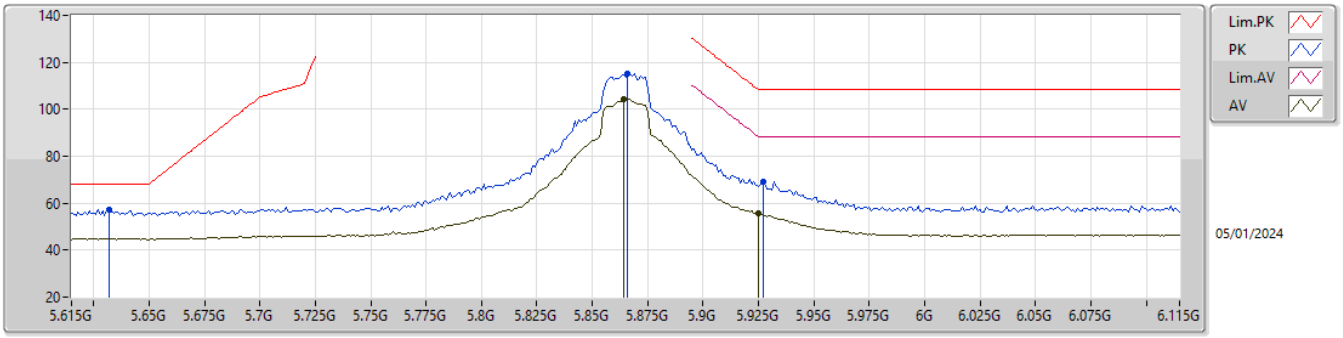


EUT Z_2TX
Setting 29
03-R-M-2-10

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	5.64G	60.35	68.20	-7.85	54.00	3	Vertical	127	1.89	-	34.40	6.92	34.97
PK	5.863G	123.42	Inf	-Inf	117.19	3	Vertical	127	1.89	-	34.35	6.95	35.07
AV	5.864G	114.08	Inf	-Inf	107.84	3	Vertical	127	1.89	-	34.36	6.95	35.07
PK	5.929G	75.46	108.20	-32.74	69.04	3	Vertical	127	1.89	-	34.56	6.97	35.11
AV	5.925G	63.70	88.20	-24.50	57.28	3	Vertical	127	1.89	-	34.55	6.97	35.10

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5865MHz_TX

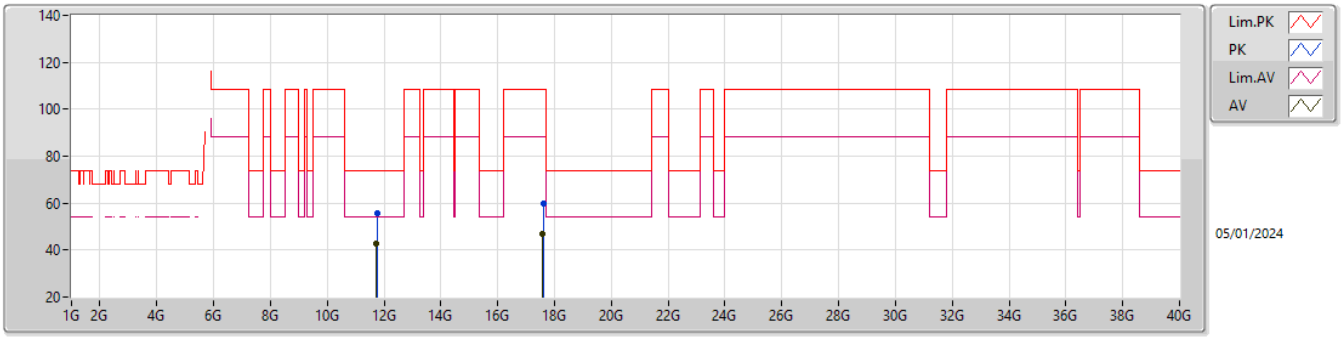


EUT Z_2TX
Setting 29
05-E-G-4-10

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	5.632G	57.23	68.20	-10.97	52.08	3	Horizontal	142	3.00	-	32.86	7.76	35.47
PK	5.866G	115.18	Inf	-Inf	108.61	3	Horizontal	142	3.00	-	34.06	8.07	35.56
AV	5.864G	104.29	Inf	-Inf	97.72	3	Horizontal	142	3.00	-	34.06	8.07	35.56
PK	5.927G	69.17	108.20	-39.03	62.44	3	Horizontal	142	3.00	-	34.20	8.11	35.58
AV	5.925G	55.64	88.20	-32.56	48.91	3	Horizontal	142	3.00	-	34.20	8.11	35.58

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5865MHz_TX

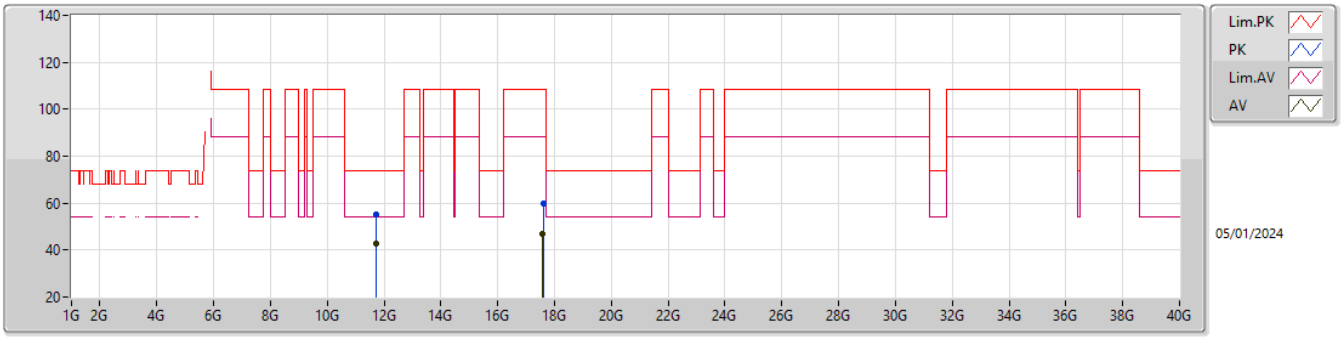


EUT Z_2TX
Setting 29
05-E-G-4

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	11.74464G	55.81	74.00	-18.19	39.58	3	Vertical	253	1.88	-	38.50	10.96	33.23
AV	11.74188G	42.76	54.00	-11.24	26.52	3	Vertical	253	1.88	-	38.50	10.96	33.22
PK	17.60064G	59.80	108.20	-48.40	40.46	3	Vertical	124	1.25	-	39.50	13.17	33.33
AV	17.58036G	46.83	88.20	-41.37	27.49	3	Vertical	124	1.25	-	39.50	13.16	33.32

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5865MHz_TX

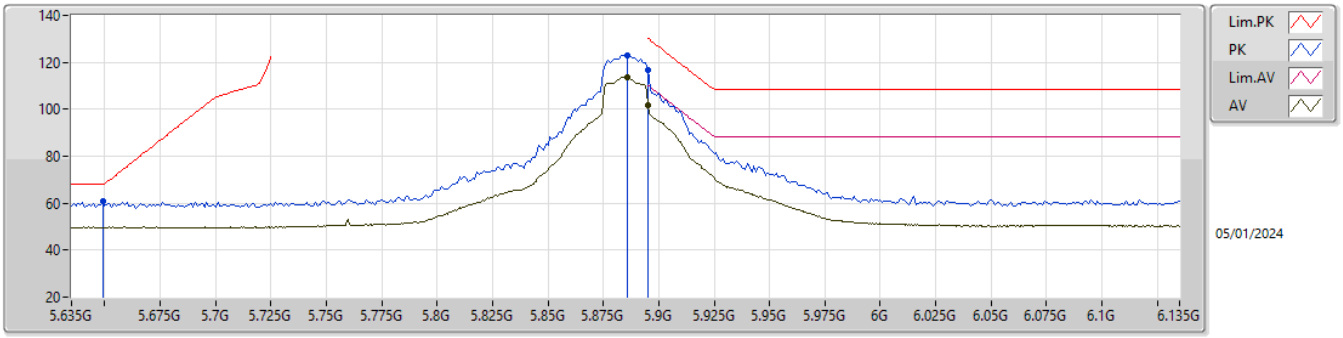


EUT Z_2TX
Setting 29
05-E-G-4

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	11.72136G	55.24	74.00	-18.76	38.99	3	Horizontal	224	1.83	-	38.50	10.95	33.20
AV	11.73864G	42.82	54.00	-11.18	26.58	3	Horizontal	224	1.83	-	38.50	10.96	33.22
PK	17.60772G	59.83	108.20	-48.37	40.47	3	Horizontal	200	2.87	-	39.52	13.18	33.34
AV	17.58072G	46.85	88.20	-41.35	27.50	3	Horizontal	200	2.87	-	39.50	13.17	33.32

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5885MHz_TX

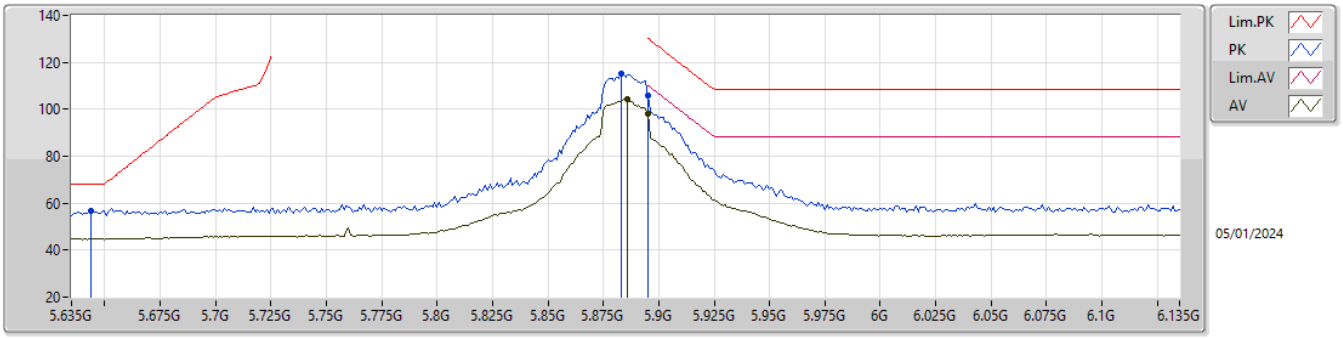


EUT Z_2TX
Setting 29
03-R-M-2-10

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	5.649G	60.97	68.20	-7.23	54.62	3	Vertical	138	1.80	-	34.40	6.92	34.97
PK	5.886G	123.11	Inf	-Inf	116.80	3	Vertical	138	1.80	-	34.44	6.96	35.09
AV	5.886G	113.73	Inf	-Inf	107.42	3	Vertical	138	1.80	-	34.44	6.96	35.09
PK	5.895G	116.51	130.20	-13.69	110.16	3	Vertical	138	1.80	-	34.48	6.96	35.09
AV	5.895G	101.89	110.20	-8.31	95.54	3	Vertical	138	1.80	-	34.48	6.96	35.09

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5885MHz_TX

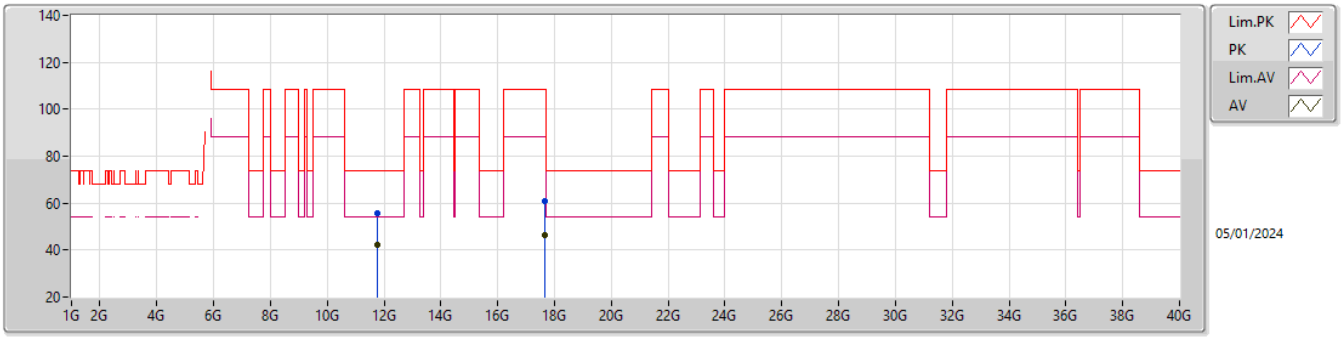


EUT Z_2TX
Setting 29
05-E-G-4-10

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	5.644G	56.91	68.20	-11.29	51.71	3	Horizontal	139	3.00	-	32.89	7.78	35.47
PK	5.883G	115.18	Inf	-Inf	108.54	3	Horizontal	139	3.00	-	34.13	8.08	35.57
AV	5.886G	104.14	Inf	-Inf	97.48	3	Horizontal	139	3.00	-	34.14	8.09	35.57
PK	5.895G	106.07	130.20	-24.13	99.37	3	Horizontal	139	3.00	-	34.18	8.09	35.57
AV	5.895G	97.88	110.20	-12.32	91.18	3	Horizontal	139	3.00	-	34.18	8.09	35.57

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5885MHz_TX

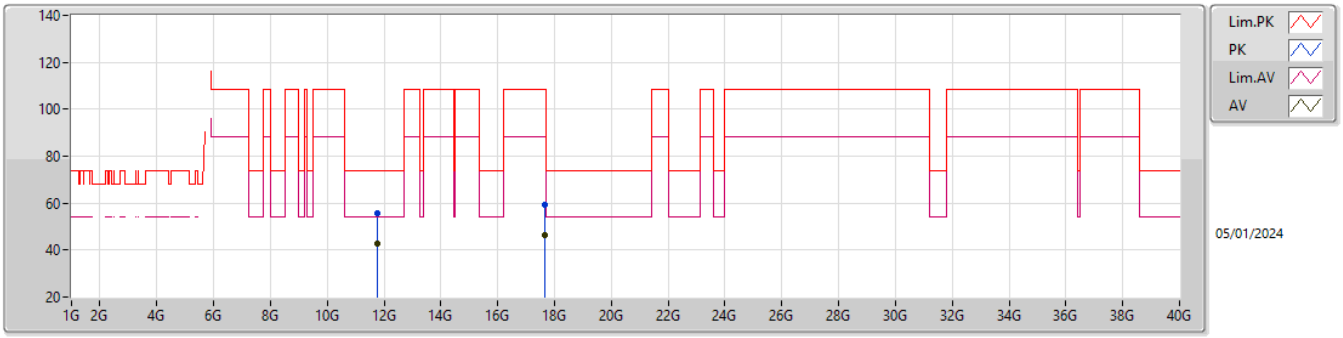


EUT Z_2TX
Setting 29
05-E-G-4

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	11.75968G	55.83	74.00	-18.17	39.63	3	Vertical	205	1.56	-	38.48	10.96	33.24
AV	11.76292G	42.50	54.00	-11.50	26.30	3	Vertical	205	1.56	-	38.47	10.97	33.24
PK	17.65074G	60.70	108.20	-47.50	41.26	3	Vertical	265	2.93	-	39.61	13.20	33.37
AV	17.64G	46.63	88.20	-41.57	27.22	3	Vertical	265	2.93	-	39.58	13.19	33.36

5.725-5.895GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5885MHz_TX

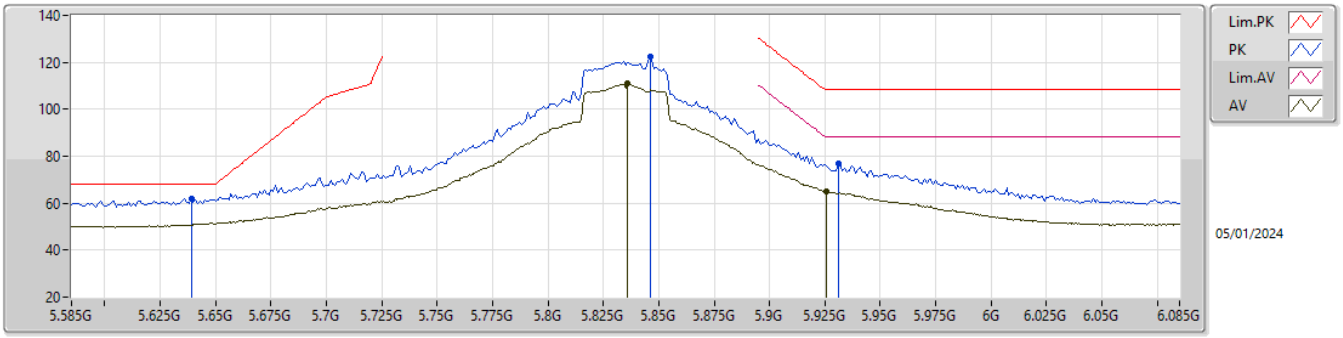


EUT Z_2TX
Setting 29
05-E-G-4

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	11.764G	55.67	74.00	-18.33	39.47	3	Horizontal	288	2.87	-	38.47	10.97	33.24
AV	11.75968G	42.70	54.00	-11.30	26.50	3	Horizontal	288	2.87	-	38.48	10.96	33.24
PK	17.65932G	59.51	108.20	-48.69	39.98	3	Horizontal	315	1.28	-	39.71	13.20	33.38
AV	17.6631G	46.45	88.20	-41.75	26.87	3	Horizontal	315	1.28	-	39.76	13.20	33.38

5.725-5.895GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5835MHz_TX

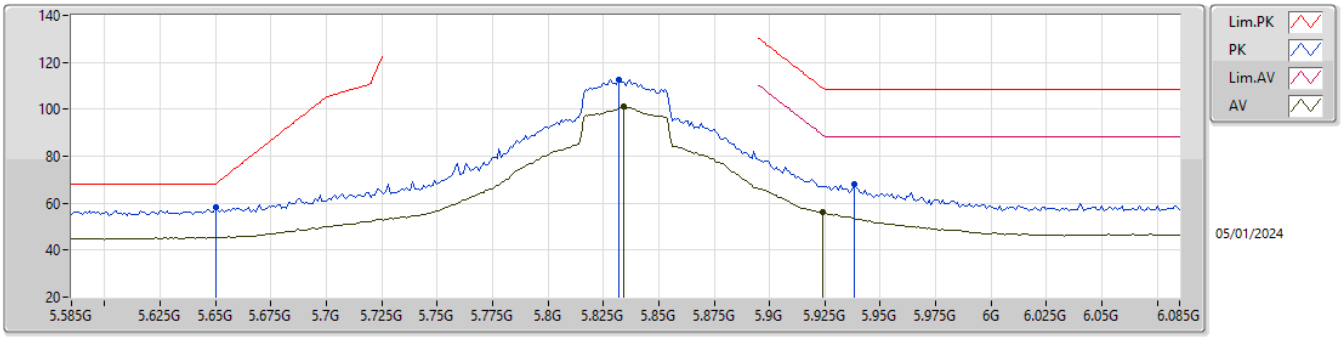


EUT Z_2TX
Setting 29
03-R-M-2-10

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	62.09	68.20	-6.11	55.74	3	Vertical	140	1.80	-	34.40	6.92	34.97
PK	5.846G	122.35	Inf	-Inf	116.17	3	Vertical	140	1.80	-	34.30	6.95	35.07
AV	5.836G	111.07	Inf	-Inf	104.88	3	Vertical	140	1.80	-	34.30	6.95	35.06
PK	5.931G	76.96	108.20	-31.24	70.54	3	Vertical	140	1.80	-	34.56	6.97	35.11
AV	5.9255G	65.06	88.20	-23.14	58.64	3	Vertical	140	1.80	-	34.55	6.97	35.10

5.725-5.895GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5835MHz_TX

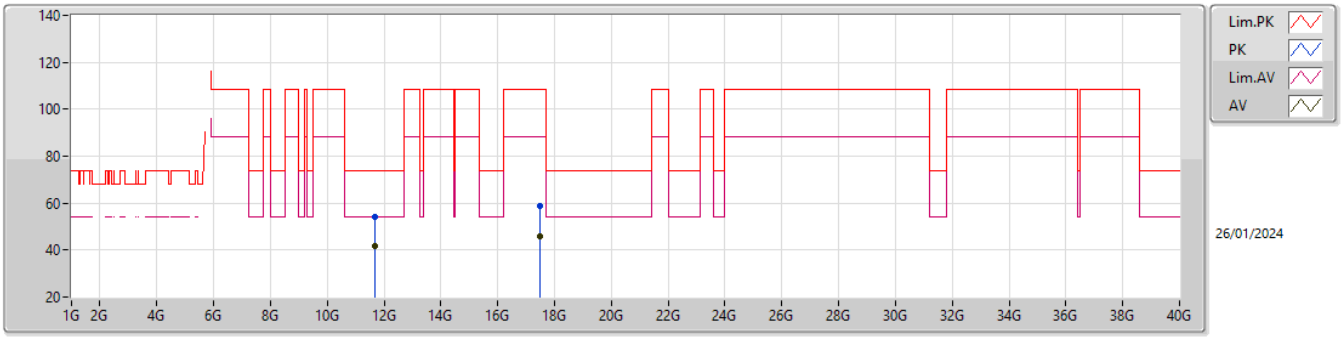


EUT Z_2TX
Setting 29
05-E-G-4-10

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	58.06	68.20	-10.14	52.85	3	Horizontal	148	1.80	-	32.90	7.79	35.48
PK	5.832G	112.59	Inf	-Inf	106.13	3	Horizontal	148	1.80	-	33.96	8.05	35.55
AV	5.834G	101.11	Inf	-Inf	94.64	3	Horizontal	148	1.80	-	33.97	8.05	35.55
PK	5.938G	68.34	108.20	-39.86	61.61	3	Horizontal	148	1.80	-	34.20	8.12	35.59
AV	5.924G	56.21	88.93	-32.72	49.48	3	Horizontal	148	1.80	-	34.20	8.11	35.58

5.725-5.895GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5835MHz_TX

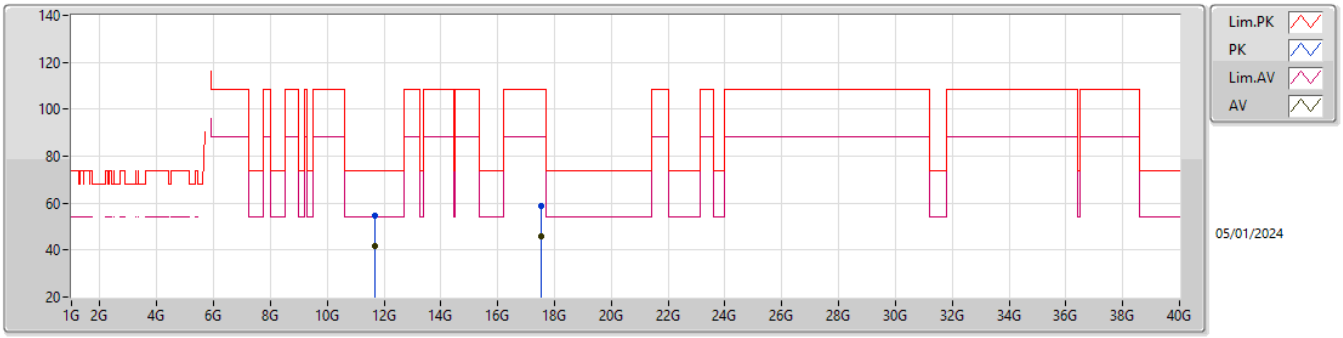


EUT Z_2TX
Setting 29
05-E-G-4

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	11.67702G	53.91	74.00	-20.09	37.70	3	Vertical	84	1.60	-	38.45	10.93	33.17
AV	11.68152G	41.48	54.00	-12.52	25.26	3	Vertical	84	1.60	-	38.46	10.93	33.17
PK	17.49864G	58.98	108.20	-49.22	40.11	3	Vertical	321	1.84	-	39.00	13.13	33.26
AV	17.50376G	45.76	88.20	-42.44	26.85	3	Vertical	321	1.84	-	39.04	13.13	33.26

5.725-5.895GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5835MHz_TX

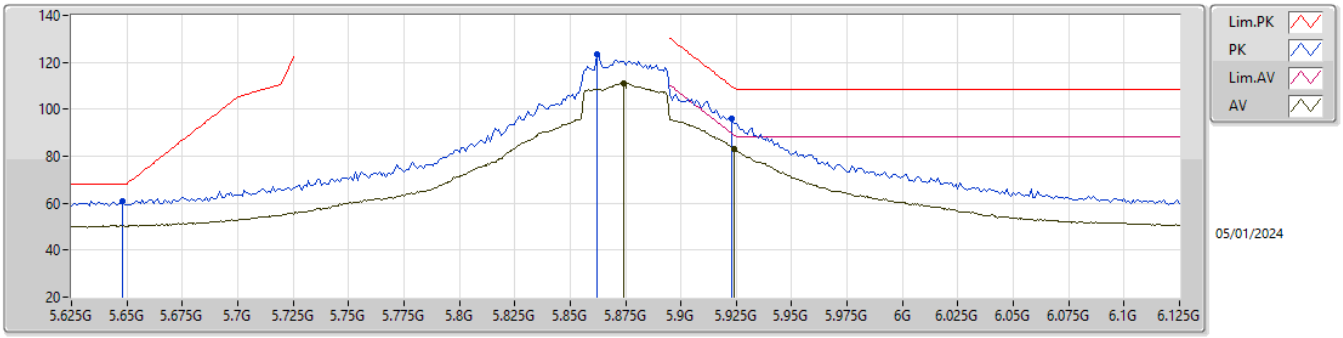


EUT Z_2TX
Setting 29
05-E-G-4

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	11.68362G	54.42	74.00	-19.58	38.19	3	Horizontal	92	1.69	-	38.47	10.93	33.17
AV	11.68206G	41.77	54.00	-12.23	25.55	3	Horizontal	92	1.69	-	38.46	10.93	33.17
PK	17.51112G	58.58	108.20	-49.62	39.61	3	Horizontal	344	1.37	-	39.11	13.13	33.27
AV	17.514G	45.65	88.20	-42.55	26.65	3	Horizontal	344	1.37	-	39.14	13.13	33.27

5.725-5.895GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5875MHz_TX

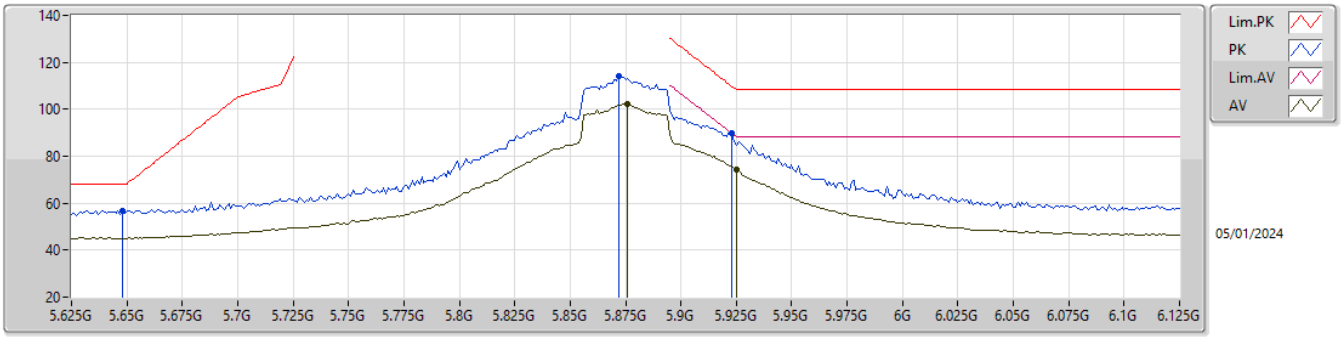


EUT Z_2TX
Setting 29
03-R-M-2-10

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	5.648G	60.68	68.20	-7.52	54.33	3	Vertical	134	1.93	-	34.40	6.92	34.97
PK	5.862G	123.25	Inf	-Inf	117.02	3	Vertical	134	1.93	-	34.35	6.95	35.07
AV	5.874G	111.25	Inf	-Inf	104.98	3	Vertical	134	1.93	-	34.40	6.95	35.08
PK	5.923G	95.86	109.67	-13.81	89.45	3	Vertical	134	1.93	-	34.55	6.96	35.10
AV	5.924G	83.10	88.93	-5.83	76.69	3	Vertical	134	1.93	-	34.55	6.96	35.10

5.725-5.895GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5875MHz_TX

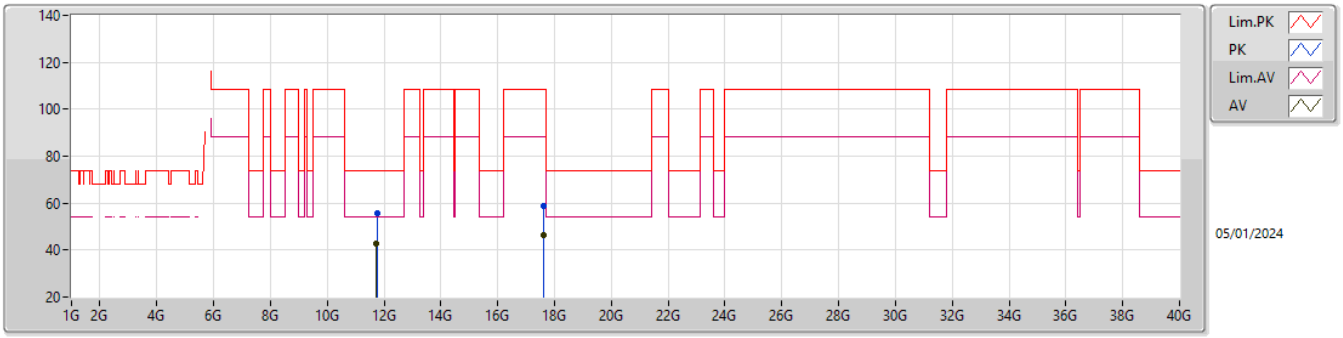


EUT Z_2TX
Setting 29
05-E-G-4-10

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	5.648G	56.90	68.20	-11.30	51.69	3	Horizontal	148	3.00	-	32.90	7.79	35.48
PK	5.872G	114.15	Inf	-Inf	107.54	3	Horizontal	148	3.00	-	34.09	8.08	35.56
AV	5.876G	102.23	Inf	-Inf	95.61	3	Horizontal	148	3.00	-	34.10	8.08	35.56
PK	5.923G	89.74	109.67	-19.93	83.01	3	Horizontal	148	3.00	-	34.20	8.11	35.58
AV	5.925G	74.12	88.20	-14.08	67.39	3	Horizontal	148	3.00	-	34.20	8.11	35.58

5.725-5.895GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5875MHz_TX

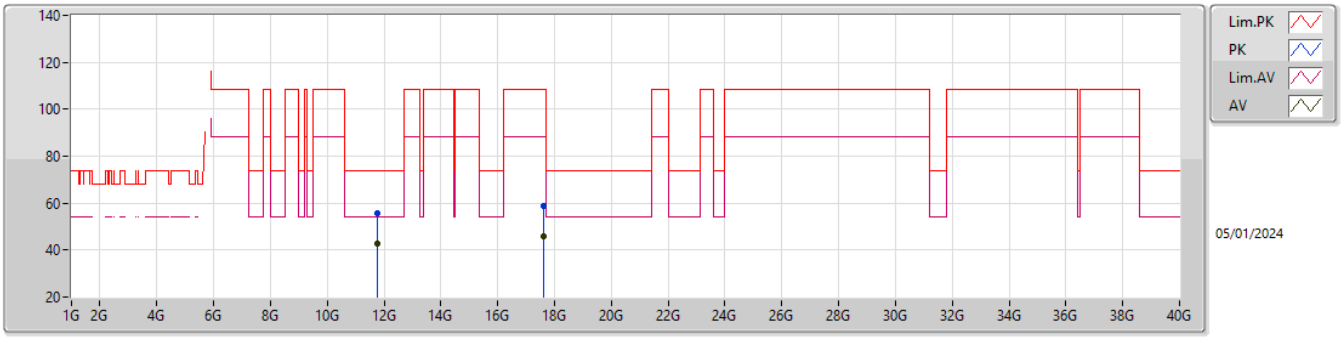


EUT Z_2TX
Setting 29
05-E-G-4

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	11.74508G	55.49	74.00	-18.51	39.26	3	Vertical	295	1.98	-	38.50	10.96	33.23
AV	11.74208G	42.85	54.00	-11.15	26.61	3	Vertical	295	1.98	-	38.50	10.96	33.22
PK	17.61192G	58.89	108.20	-49.31	39.53	3	Vertical	91	1.36	-	39.52	13.18	33.34
AV	17.62596G	46.39	88.20	-41.81	27.00	3	Vertical	91	1.36	-	39.55	13.19	33.35

5.725-5.895GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5875MHz_TX

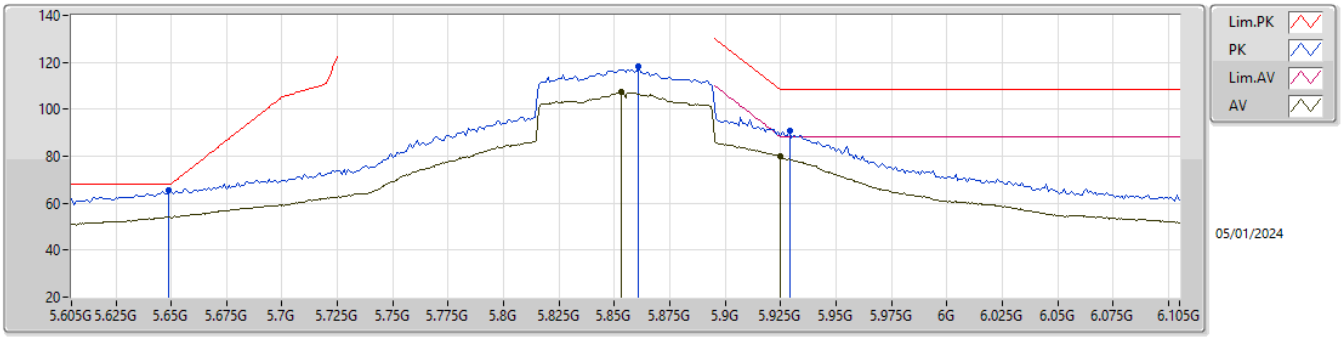


EUT Z_2TX
Setting 29
05-E-G-4

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	11.7542G	55.58	74.00	-18.42	39.36	3	Horizontal	107	1.15	-	38.49	10.96	33.23
AV	11.74652G	42.85	54.00	-11.15	26.62	3	Horizontal	107	1.15	-	38.50	10.96	33.23
PK	17.61612G	58.75	108.20	-49.45	39.39	3	Horizontal	210	1.17	-	39.53	13.18	33.35
AV	17.61888G	46.12	88.20	-42.08	26.75	3	Horizontal	210	1.17	-	39.54	13.18	33.35

5.725-5.895GHz_802.11ax HEW80-BF_Nss1,(MCS0)_2TX

5855MHz_TX

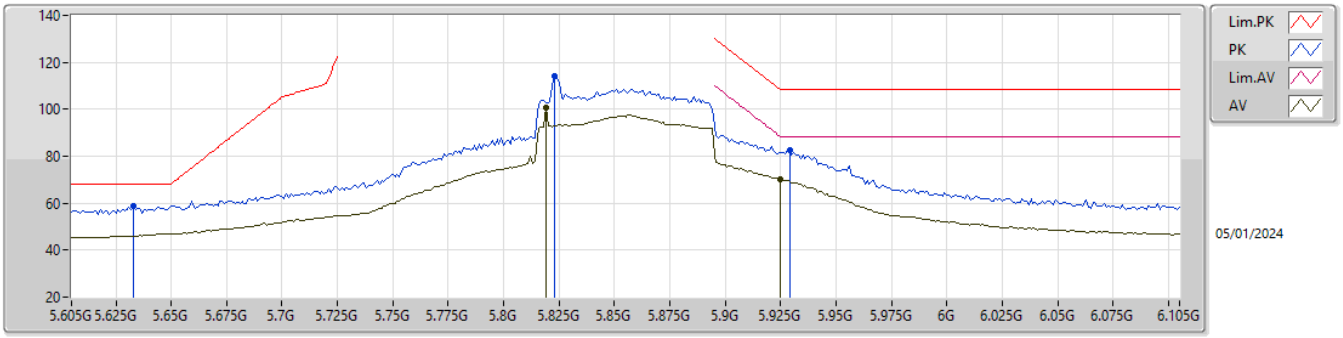


EUT Z_2TX
Setting 26
03-R-M-2-10

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	5.649G	65.41	68.20	-2.79	59.06	3	Vertical	126	1.87	-	34.40	6.92	34.97
PK	5.861G	118.05	Inf	-Inf	111.83	3	Vertical	126	1.87	-	34.34	6.95	35.07
AV	5.853G	107.22	Inf	-Inf	101.03	3	Vertical	126	1.87	-	34.31	6.95	35.07
PK	5.929G	90.61	108.20	-17.59	84.19	3	Vertical	126	1.87	-	34.56	6.97	35.11
AV	5.925G	79.78	88.20	-8.42	73.36	3	Vertical	126	1.87	-	34.55	6.97	35.10

5.725-5.895GHz_802.11ax HEW80-BF_Nss1,(MCS0)_2TX

5855MHz_TX

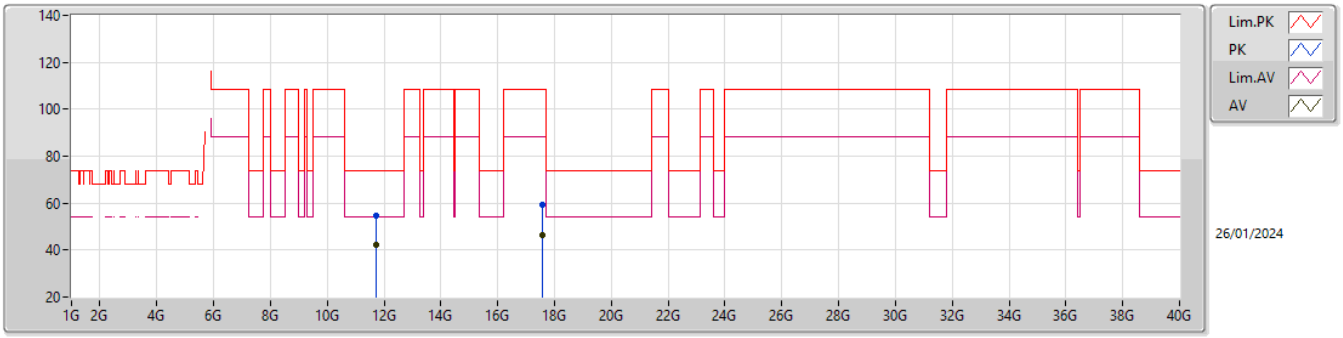


EUT Z_2TX
Setting 26
05-E-G-4-10

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	5.633G	58.70	68.20	-9.50	53.54	3	Horizontal	141.9	1.80	-	32.87	7.76	35.47
PK	5.823G	114.17	Inf	-Inf	107.72	3	Horizontal	141.9	1.80	-	33.95	8.04	35.54
AV	5.819G	100.71	Inf	-Inf	94.27	3	Horizontal	141.9	1.80	-	33.94	8.04	35.54
PK	5.929G	82.78	108.20	-25.42	76.05	3	Horizontal	141.9	1.80	-	34.20	8.11	35.58
AV	5.925G	70.26	88.20	-17.94	63.53	3	Horizontal	141.9	1.80	-	34.20	8.11	35.58

5.725-5.895GHz_802.11ax HEW80-BF_Nss1,(MCS0)_2TX

5855MHz_TX

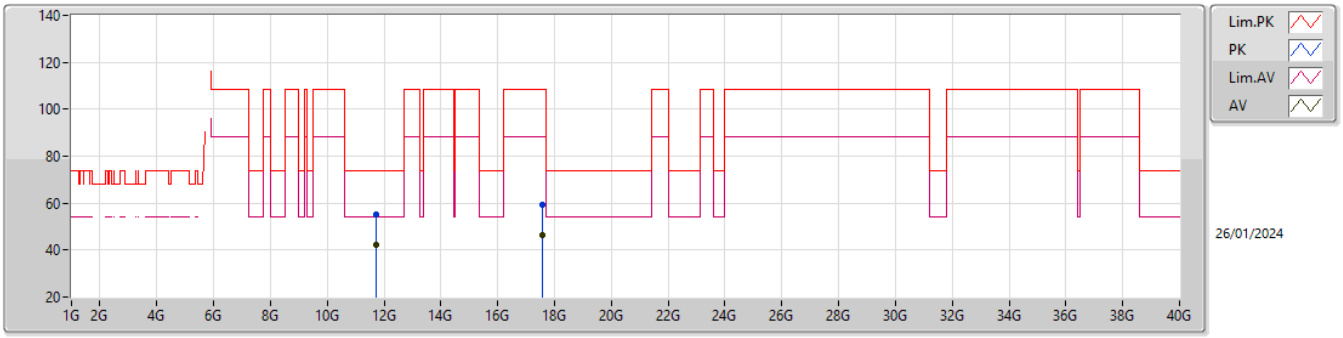


EUT Z_2TX
Setting 26
05-E-G-4

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	11.70634G	54.89	74.00	-19.11	38.64	3	Vertical	240	1.08	-	38.50	10.94	33.19
AV	11.71362G	42.25	54.00	-11.75	26.01	3	Vertical	240	1.08	-	38.50	10.94	33.20
PK	17.55696G	59.18	108.20	-49.02	39.83	3	Vertical	112	1.23	-	39.50	13.15	33.30
AV	17.56272G	46.58	88.20	-41.62	27.23	3	Vertical	112	1.23	-	39.50	13.16	33.31

5.725-5.895GHz_802.11ax HEW80-BF_Nss1,(MCS0)_2TX

5855MHz_TX

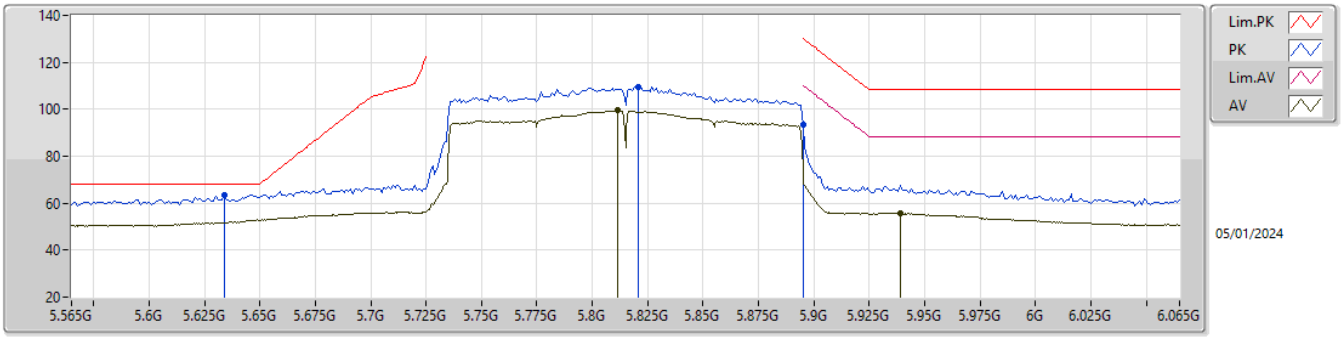


EUT Z_2TX
Setting 26
05-E-G-4

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	11.71666G	55.01	74.00	-18.99	38.76	3	Horizontal	134	1.53	-	38.50	10.95	33.20
AV	11.71482G	42.45	54.00	-11.55	26.21	3	Horizontal	134	1.53	-	38.50	10.94	33.20
PK	17.55426G	59.47	108.20	-48.73	40.12	3	Horizontal	24	1.10	-	39.50	13.15	33.30
AV	17.55936G	46.52	88.20	-41.68	27.16	3	Horizontal	24	1.10	-	39.50	13.16	33.30

5.725-5.895GHz_802.11ax HEW160-BF_Nss1,(MCS0)_2TX

5815MHz_TX

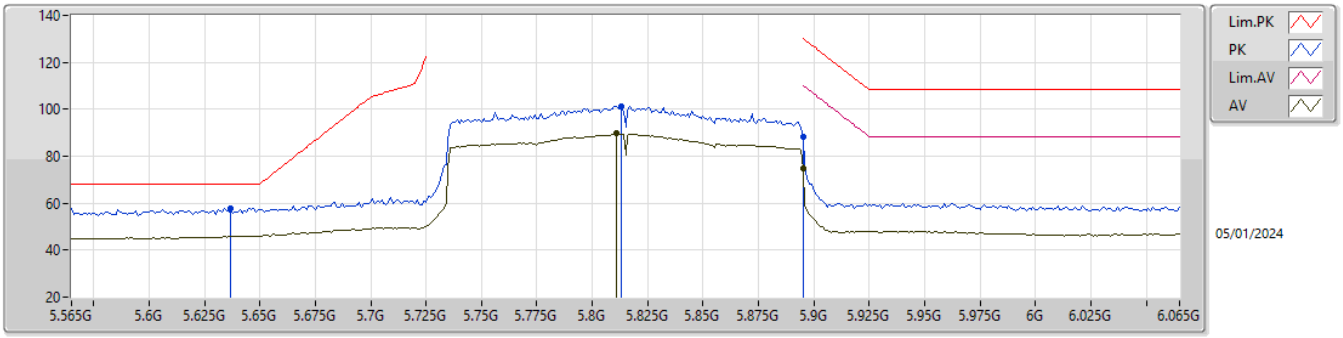


EUT Z_2TX
Setting 21
03-R-M-2-10

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	5.634G	63.50	68.20	-4.70	57.14	3	Vertical	121	1.79	-	34.40	6.92	34.96
PK	5.821G	109.49	Inf	-Inf	103.30	3	Vertical	121	1.79	-	34.30	6.94	35.05
AV	5.8115G	99.58	Inf	-Inf	93.39	3	Vertical	121	1.79	-	34.30	6.94	35.05
PK	5.895G	93.29	130.20	-36.91	86.94	3	Vertical	121	1.79	-	34.48	6.96	35.09
AV	5.939G	55.89	88.20	-32.31	49.45	3	Vertical	121	1.79	-	34.58	6.97	35.11

5.725-5.895GHz_802.11ax HEW160-BF_Nss1,(MCS0)_2TX

5815MHz_TX

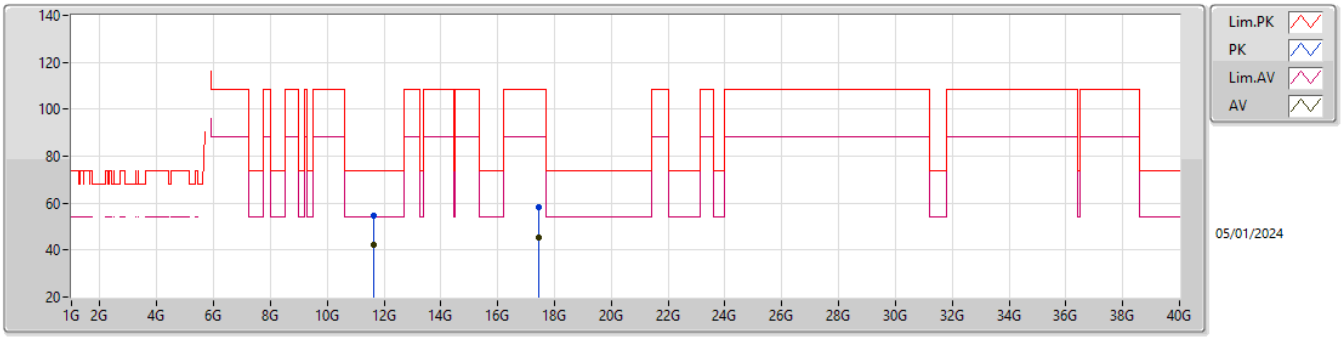


EUT Z_2TX
Setting 21
05-E-G-4-10

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	5.637G	57.95	68.20	-10.25	52.78	3	Horizontal	141	1.80	-	32.87	7.77	35.47
PK	5.813G	101.46	Inf	-Inf	95.03	3	Horizontal	141	1.80	-	33.93	8.04	35.54
AV	5.811G	89.61	Inf	-Inf	83.19	3	Horizontal	141	1.80	-	33.92	8.04	35.54
PK	5.895G	88.25	130.20	-41.95	81.55	3	Horizontal	141	1.80	-	34.18	8.09	35.57
AV	5.895G	75.02	110.20	-35.18	68.32	3	Horizontal	141	1.80	-	34.18	8.09	35.57

5.725-5.895GHz_802.11ax HEW160-BF_Nss1,(MCS0)_2TX

5815MHz_TX

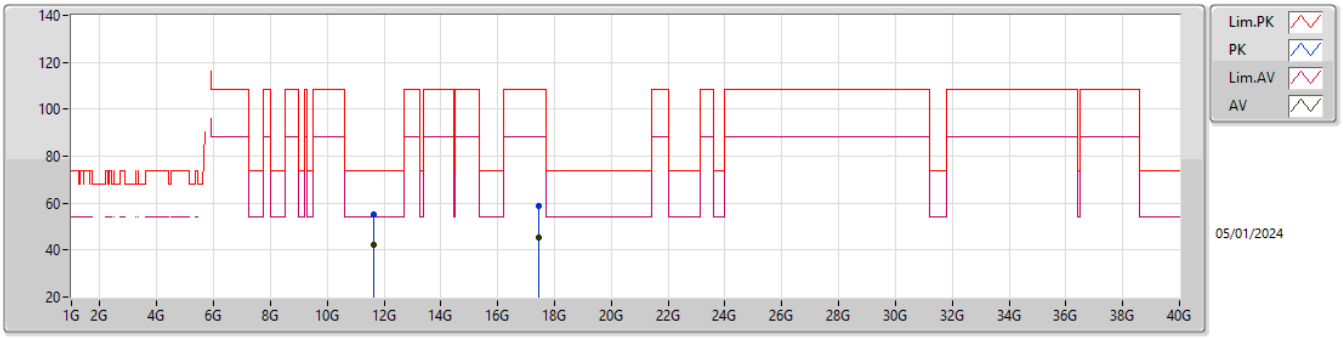


EUT Z_2TX
Setting 21
05-E-G-4

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	11.62706G	54.87	74.00	-19.13	38.54	3	Vertical	45	2.10	-	38.54	10.91	33.12
AV	11.62376G	42.21	54.00	-11.79	25.87	3	Vertical	45	2.10	-	38.56	10.90	33.12
PK	17.45184G	58.28	108.20	-49.92	39.48	3	Vertical	248	2.61	-	38.90	13.11	33.21
AV	17.45574G	45.47	88.20	-42.73	26.66	3	Vertical	248	2.61	-	38.91	13.11	33.21

5.725-5.895GHz_802.11ax HEW160-BF_Nss1,(MCS0)_2TX

5815MHz_TX



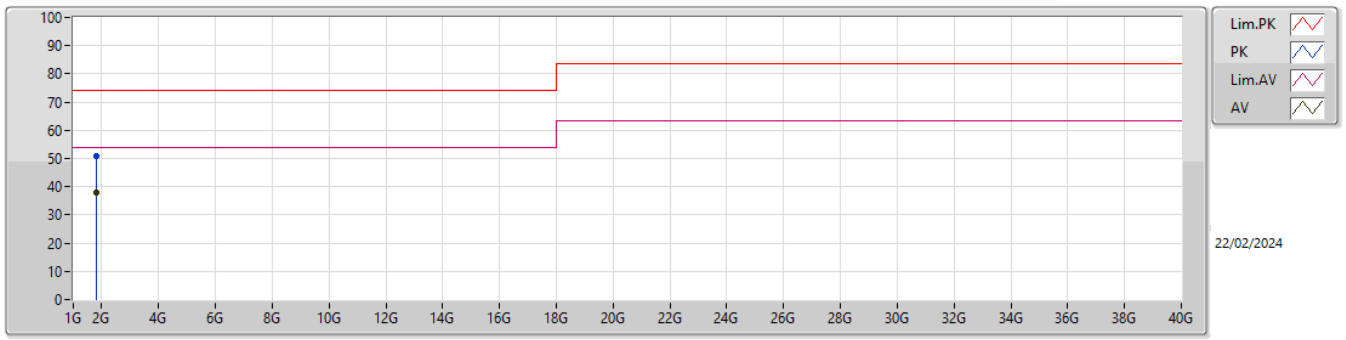
EUT Z_2TX
Setting 21
05-E-G-4

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	11.62238G	55.13	74.00	-18.87	38.78	3	Horizontal	167	1.89	-	38.57	10.90	33.12
AV	11.62646G	42.26	54.00	-11.74	25.93	3	Horizontal	167	1.89	-	38.54	10.91	33.12
PK	17.44506G	58.70	108.20	-49.50	39.91	3	Horizontal	242	2.09	-	38.89	13.10	33.20
AV	17.43006G	45.31	88.20	-42.89	26.55	3	Horizontal	242	2.09	-	38.86	13.09	33.19

Summary

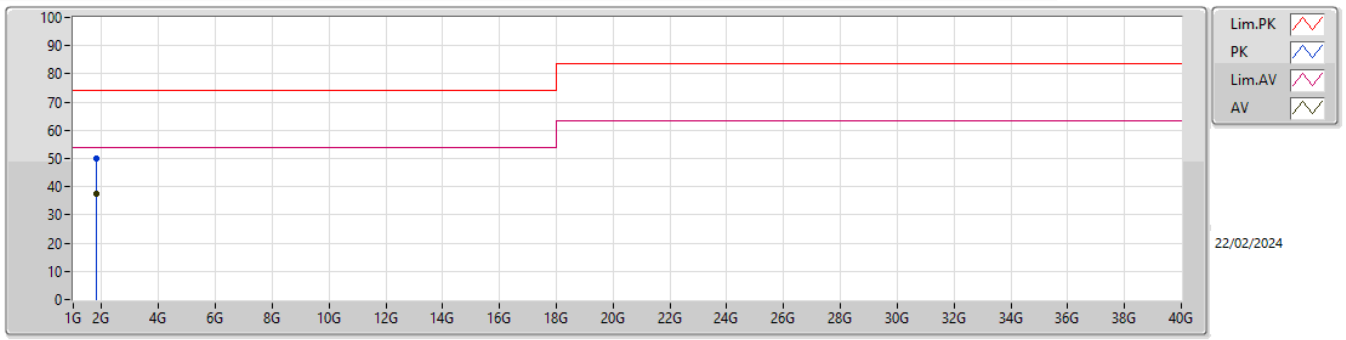
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.81727G	38.13	54.00	-15.87	Vertical

Mode 1



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	1.817019G	50.66	74.00	-23.34	-6.68	3	Vertical	92	1.67	-	57.34	25.57	3.43	35.68
AV	1.81727G	38.13	54.00	-15.87	-6.68	3	Vertical	92	1.67	-	44.81	25.57	3.43	35.68

Mode 1



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	1.82546G	50.19	74.00	-23.81	-6.58	3	Horizontal	251	1.57	-	56.77	25.65	3.44	35.67
AV	1.82447G	37.44	54.00	-16.56	-6.59	3	Horizontal	251	1.57	-	44.03	25.64	3.44	35.67