RADIO TEST REPORT

FCC ID	:	MSQ-RTAX5600
Equipment	:	ROG Rapture GT-AX6000 Dual Band Gaming Router
Brand Name	:	ASUS
Model Name	:	GT-AX6000
Applicant	:	ASUSTeK COMPUTER INC. 1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan
Manufacturer (1)	:	Datamax Electronics (DongGuan) Co., Ltd. Niu Shan Foreign Economic Industrial Park, Dong Cheng District, Dong Guan City, Guang Dong, China
Manufacturer (2)	:	Compal Networking (KunShan) Co., LTD. No. 520, Nabbang Rd., Economic & Technical Development Zone Kunshan, Jiangsu Province China
Manufacturer (3)	:	Lih Rong Electronic Enterprise Co.,Ltd. No. 486, Sec. 1, Wanshou Road, Guishan District, , Taoyuan City, Taiwan
Standard	:	47 CFR FCC Part 15.407

The product was received on Aug. 04, 2021, and testing was started from Sep. 02, 2021 and completed on Oct. 16, 2021. 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.)

Table of Contents

History of this test report **3**

Summary of Test Result **4**

1 General Description **5**

1.1 Information 5
1.2 Applicable Standards 9
1.3 Testing Location Information 9
1.4 Measurement Uncertainty 10

2 Test Configuration of EUT **11**

2.1 Test Channel Mode 11
2.2 The Worst Case Measurement Configuration 12
2.3 EUT Operation during Test 13
2.4 Accessories 14
2.5 Support Equipment 14
2.6 Test Setup Diagram 16

3 Transmitter Test Result **20**

3.1 AC Power-line Conducted Emissions 20
3.2 Emission Bandwidth 22
3.3 Maximum Output Power 23
3.4 Power Spectral Density 25
3.5 Unwanted Emissions 28

4 Test Equipment and Calibration Data **33**

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

Appendix B. Test Results of Emission Bandwidth

Appendix C. Test Results of Maximum Output Power

Appendix D. Test Results of Power Spectral Density

Appendix E. Test Results of Unwanted Emissions

Appendix F. Test Results of Radiated Emission Co-location

Appendix G. Test Photos

Photographs of EUT v02

History of this test report

Report No.	Version	Description	Issued Date
FR162902AB	01	Initial issue of report	Oct. 28, 2021
FR162902AB	02	Changing the Adapter 2 information	Nov. 02, 2021

Summary of Test Result

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

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Viola Huang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	11a	20	4
5.15-5.25GHz	802.11n HT20	20	4
5.15-5.25GHz	802.11n HT20-BF	20	4
5.15-5.25GHz	802.11ac VHT20	20	4
5.15-5.25GHz	802.11ac VHT20-BF	20	4
5.15-5.25GHz	802.11ax HEW20	20	4
5.15-5.25GHz	802.11ax HEW20-BF	20	4
5.15-5.25GHz	802.11n HT40	40	4
5.15-5.25GHz	802.11n HT40-BF	40	4
5.15-5.25GHz	802.11ac VHT40	40	4
5.15-5.25GHz	802.11ac VHT40-BF	40	4
5.15-5.25GHz	802.11ax HEW40	40	4
5.15-5.25GHz	802.11ax HEW40-BF	40	4
5.15-5.25GHz	802.11ac VHT80	80	4
5.15-5.25GHz	802.11ac VHT80-BF	80	4
5.15-5.25GHz	802.11ax HEW80	80	4
5.15-5.25GHz	802.11ax HEW80-BF	80	4
5.725-5.85GHz	11a	20	4
5.725-5.85GHz	802.11n HT20	20	4
5.725-5.85GHz	802.11n HT20-BF	20	4
5.725-5.85GHz	802.11ac VHT20	20	4
5.725-5.85GHz	802.11ac VHT20-BF	20	4

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ax HEW20	20	4
5.725-5.85GHz	802.11ax HEW20-BF	20	4
5.725-5.85GHz	802.11n HT40	40	4
5.725-5.85GHz	802.11n HT40-BF	40	4
5.725-5.85GHz	802.11ac VHT40	40	4
5.725-5.85GHz	802.11ac VHT40-BF	40	4
5.725-5.85GHz	802.11ax HEW40	40	4
5.725-5.85GHz	802.11ax HEW40-BF	40	4
5.725-5.85GHz	802.11ac VHT80	80	4
5.725-5.85GHz	802.11ac VHT80-BF	80	4
5.725-5.85GHz	802.11ax HEW80	80	4
5.725-5.85GHz	802.11ax HEW80-BF	80	4

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

1.1.2 Antenna Information

Ant.	2.4GHz Port	5GHz Port	Brand Name	Model Name	Antenna Type	Connector	Gain (dBi)
1	4	4	WHA YU	C660-510557-A	Dipole	Reversed-SMA	Note 1
2	3	3	WHA YU	C660-510557-A	Dipole	Reversed-SMA	
3	2	2	WHA YU	C660-510557-A	Dipole	Reversed-SMA	
4	1	1	WHA YU	C660-510557-A	Dipole	Reversed-SMA	
5	-	-	WHA YU	C660-510558-A	Dipole	Reversed-SMA	

Note 1:

Ant.	Gain (dBi)				
	2.4GHz	UNII 1	UNII 2A	UNII 2C	UNII 3
1	2.59	2.99	3.1	1.39	2.02
2	2.43	2.57	3.34	1.86	1.5
3	2.77	2.16	2.47	1.46	2.17
4	2.23	3.14	3.47	1.71	2.98
5	-	5.45	5.45	5.45	5.45
Max Gain (dBi)	2.77	3.14	3.47	1.86	2.98
DG (4T1S) (dBi)	5.54	4.78	4.65	4.52	3.92
DG (4T2S) (dBi)	2.77	3.14	3.47	1.86	2.98
DG (4T4S) (dBi)	1.36	1.63	2.02	0.09	0.43

Note 2: The above information was declared by manufacturer.

Note 3: The directional gain is measured which follows the procedure of KDB 662911 D03. The antenna report is provided in the operational description for this application.

Note 4: The EUT has five antennas, ant 5 has only receiving function. The EUT enables 2.4GHz and 5GHz UNII 1, UNII 3.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax mode (4TX/4RX)

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11a/n/ac/ax mode (4TX/4RX)

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

For 4T1S
Non beamforming mode

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.948	0.23	2.066m	1k

Beamforming mode

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF	0.953	0.21	2.928m	1k
802.11ax HEW40-BF	0.96	0.18	4.36m	300
802.11ax HEW80-BF	0.981	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)

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 11n/VHT/ax in 2.4GHz and 11n/ac/ax in 5GHz.			
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
Test Software Version	Mtool V 3.2.1.4 DOC V6.1.7601			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT supports function

Function	Supports type
AP Router	Master
Bridge	Slave without radar detection
Repeater	Master
Mesh	Master

Note: The AP Router (Master) mode has been tested and recorded in this test report.

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 D03 v01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Owen Hsu	23.1~24.2 / 56~57	Oct. 02, 2021
Radiated below 1GHz	03CH05-CB	Simmon Cheng	23.5~24.6 / 55~59	Sep. 02, 2021~Oct. 16, 2021
Radiated above 1GHz (For co-location)				
Radiated above 1GHz (For others test)	03CH02-CB	For 4T1S non beamforming mode (band edge and Harmonic): Simmon Cheng	24.4~25.5 / 55~58	Sep. 02, 2021~Oct. 16, 2021
	03CH02-CB	For 4T1S beamforming mode (band edge): Simmon Cheng	24.4~25.5 / 55~58	
	03CH06-CB		24.5~25.6 / 56~59	
	03CH02-CB	For 4T1S beamforming mode (Harmonic): Simmon Cheng	24.4~25.5 / 55~58	
AC Conduction	CO02-CB	Zack Kuo	22~23 / 60~62	Sep. 15, 2021

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

For 4T1S
non beamforming mode

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	94
5200MHz	92
5240MHz	92
5745MHz	93
5785MHz	92
5825MHz	97

beamforming mode

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	93
5200MHz	90
5240MHz	90
5745MHz	92
5785MHz	90
5825MHz	94
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	90
5230MHz	91
5755MHz	93
5795MHz	91
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	93
5775MHz	93

Note:
- Evaluated HEW20/HEW40/HEW80 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80 mode are the same or lower than HEW20/HEW40/HEW80.
- There are two modes of EUT, one is beamforming mode, and the other is Non-beamforming mode for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz. Only beamforming mode was tested and recorded in this report.

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 or CTX
1	AP Router_EUT + Adapter 1
2	AP Router_EUT + Adapter 2
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 Output Power 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
	The EUT was performed at X axis, Y axis and Z axis position for Unwanted Emissions test, and the worst case was found at Z axis. So the measurement will follow this same test configuration.
1	EUT in Z axis_2.4GHz + Adapter 1
2	EUT in Z axis_2.4GHz + Adapter 2
Mode 1 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT in Z axis_5GHz + Adapter 1
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Z axis. So the measurement will follow this same test configuration.
1	EUT in Z axis_5GHz

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	EUT 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
Refer to Sporton Test Report No.: FA162902 for Co-location RF Exposure Evaluation.	

Note: The EUT can only be used at Z axis position.

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated 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 telnet.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by Router 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**	**Remark**
Adapter 1	DELTA	ADP-45FE F	INPUT: 100-240V~1.2A, 50-60Hz OUTPUT: 19.0V, 2.37A, 45.0W	DC power cable, non shieled, 1.5m
Adapter 2	AcBel	ADH011	INPUT: 100-240V~1.4A, 50-60Hz OUTPUT: 19.5V, 2.31A, 45.0W MAX.	DC power cable, non shieled, 1.5m
Others				
US power cord*2, non shieled, 0.9m				
RJ-45 cable*1, shielded, 1.5m				

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	2.5G LAN PC	DELL	T3400	N/A
B	2.5G WAN PC	DELL	T3400	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G NB	DELL	E6430	N/A
E	Flash disk3.0	Transcend	JetFlash-700	N/A
F	Flash disk3.0	Transcend	JetFlash-700	N/A
G	WAN NB	DELL	E6430	N/A
H	LAN1 NB	DELL	E6430	N/A
I	LAN8 NB	DELL	E6430	N/A

For Radiated (below 1GHz) and Radiated (above 1GHz) for non beamforming mode:

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

For Radiated (above 1GHz):
For beamforming mode

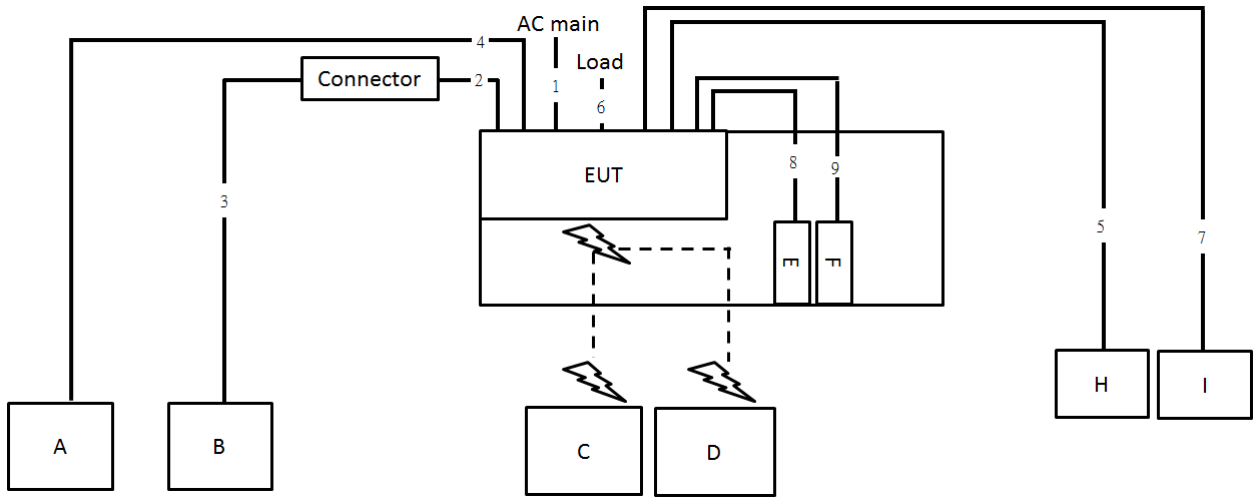
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	Router	ASUS	ET12	N/A

For RF Conducted:

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

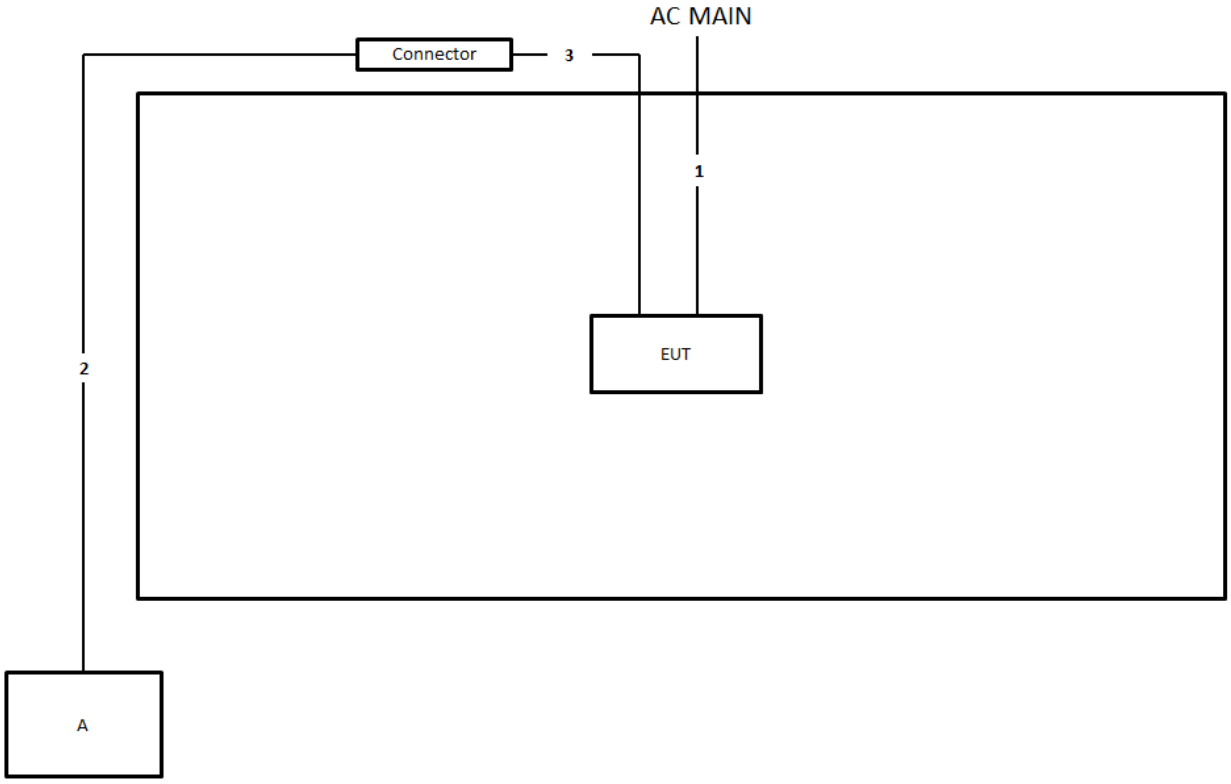
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



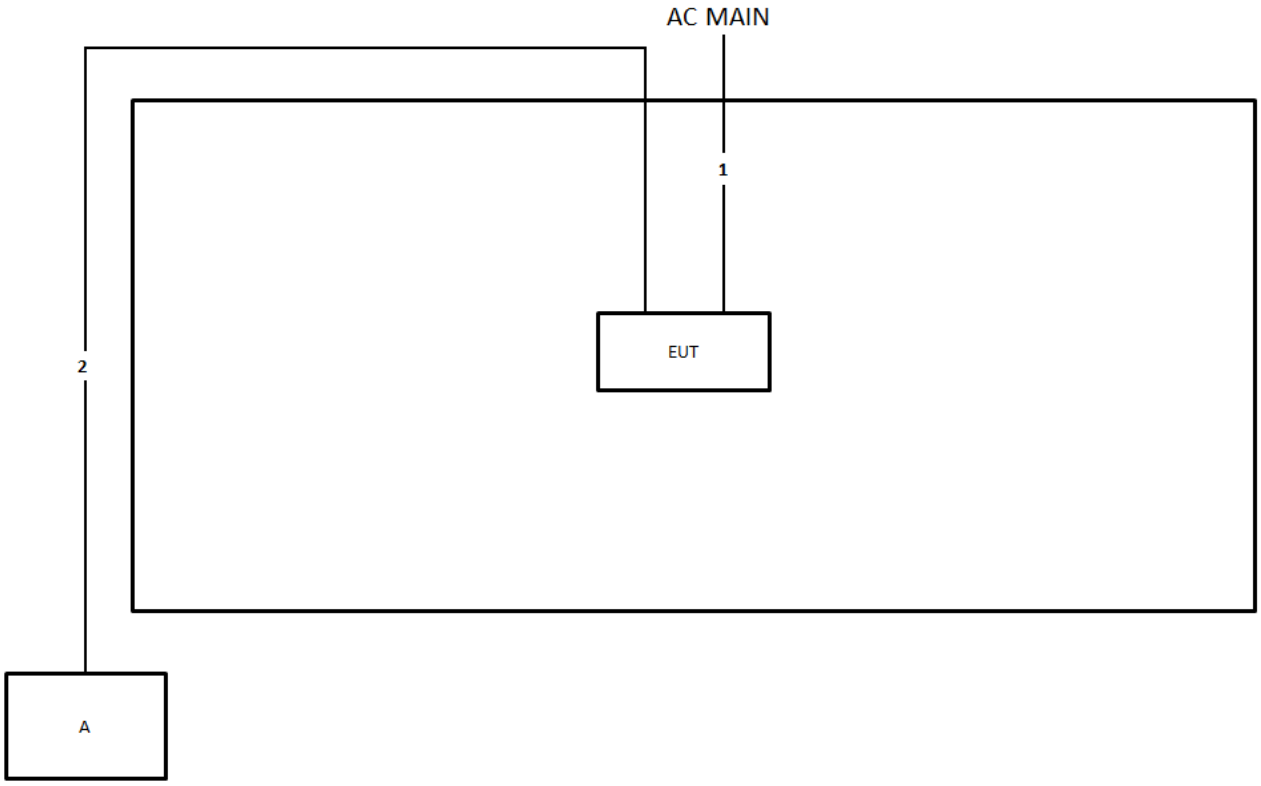
Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	Yes	1.5m
3	RJ-45 cable	Yes	10m
4	RJ-45 cable	No	10m
5	RJ-45 cable	No	10m
6	RJ-45 cable*2	No	1.5m
7	RJ-45 cable	No	10m
8	USB cable	Yes	1.8m
9	USB cable	Yes	1.8m

Test Setup Diagram - Radiated Test < 1GHz



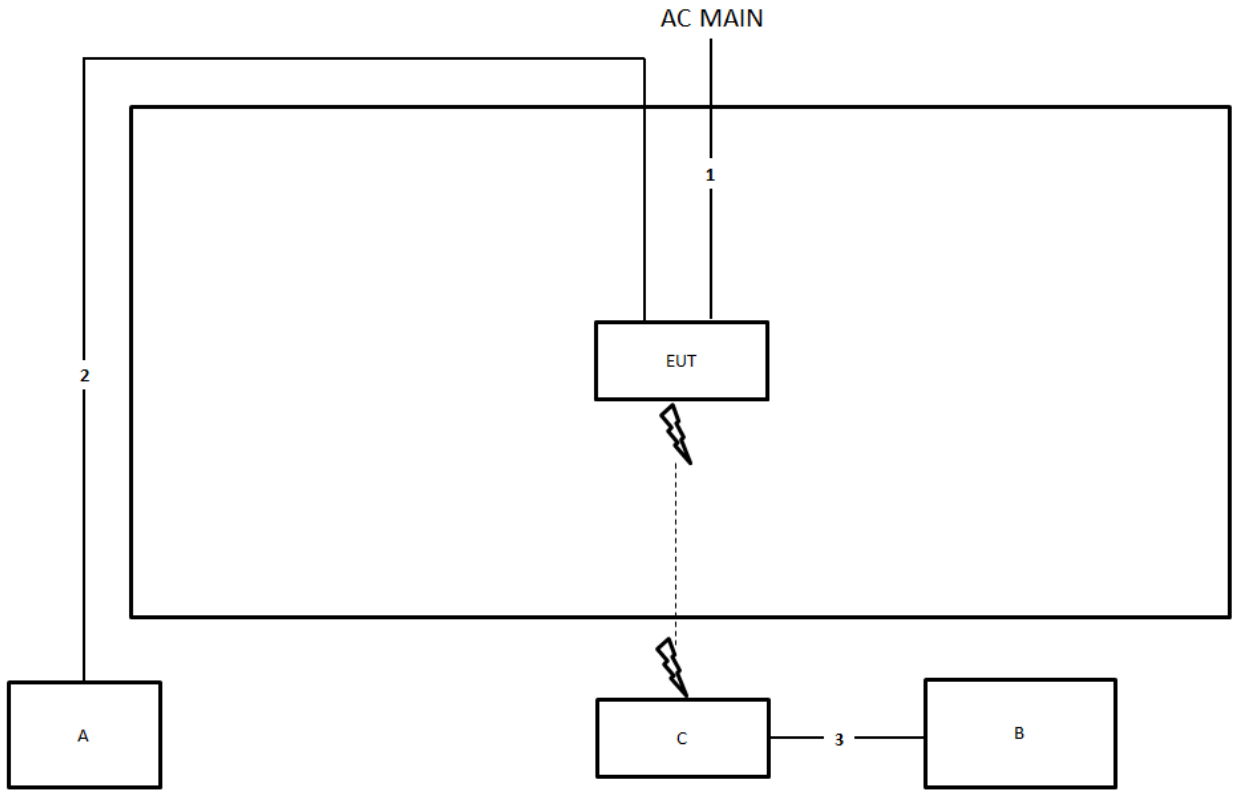
Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	Yes	10m
3	RJ-45 cable	Yes	1.5m

Test Setup Diagram - Radiated Test > 1GHz / for non beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz / for beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

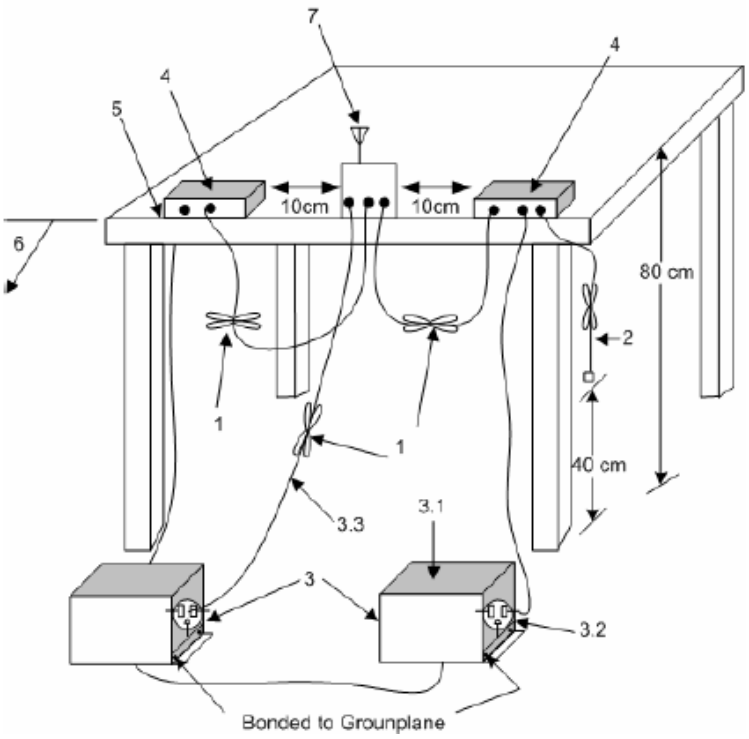
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



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

3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

b. Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☐	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.
☐	For the 5.85-5.895 GHz band, 6 dB emission bandwidth ≥ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

3.2.2 Measuring Instruments

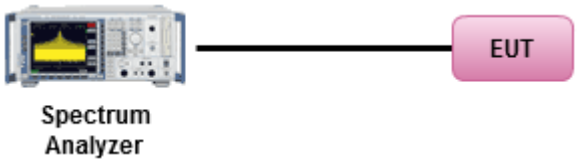
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

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

3.2.4 Test Setup

Emission Bandwidth



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Output Power

3.3.1 Limit

Maximum Output Power Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]
	▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)
	▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If G_{TX} > 23 dBi, then P_{Out} = 30 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
Maximum EIRP Limit	
☐	For the 5.85-5.895 GHz band:
	▪ Indoor AP & subordinate device < 36 dBm
	▪ Client device < 30 dBm
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.

P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	
	Average over on/off periods with duty factor
	☐ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☒ Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)

3.3.5 Test Result of Maximum Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 23 dBi, then P_{Out} = 17 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6)..
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
EIRP Power Spectral Density Limit	
☐	For the 5.85-5.895 GHz band:
	▪ Indoor AP & subordinate device < 20dBm/MHz
	▪ Client device < 14dBm/MHz
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
	▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for 0° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40° -35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45°
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output	

power shall be used to determine the power spectral density. And power spectral density in dBm/MHz **G_{TX}** = the maximum transmitting antenna directional gain in dBi.

3.4.2 Measuring Instruments

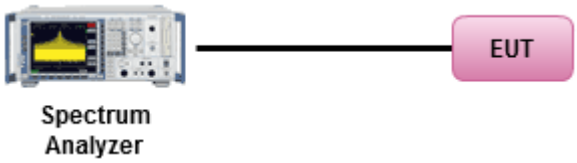
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method			
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:			
	☐ Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth		
	[duty cycle ≥ 98% or external video / power trigger]		
	☒ Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).		
	☐ Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)		
	duty cycle < 98% and average over on/off periods with duty factor		
	☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).		
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)		
▪ For conducted measurement.			
	▪ If the EUT supports multiple transmit chains using options given below:		
		☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	
		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.	
	▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$		

3.4.4 Test Setup

Power Spectral Density



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
☒ 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☐ 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☐ 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
☐ 5.85 - 5.895 GHz	(i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of - 7 dBm/MHz at or above 5.925 GHz. (ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an

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

3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

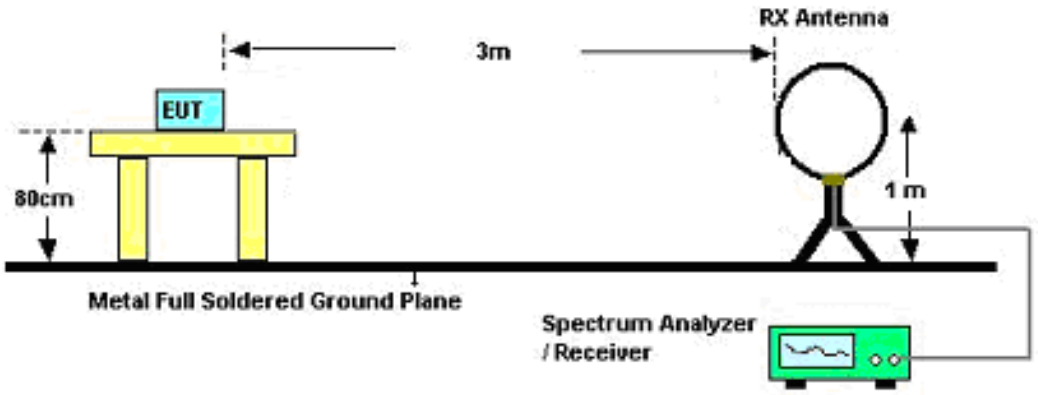
Test Method			
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ For the transmitter unwanted emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.		
	▪ Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.		
		☐	Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
		☒	Refer as FCC KDB 789033, 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, 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.			

Test Method
▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

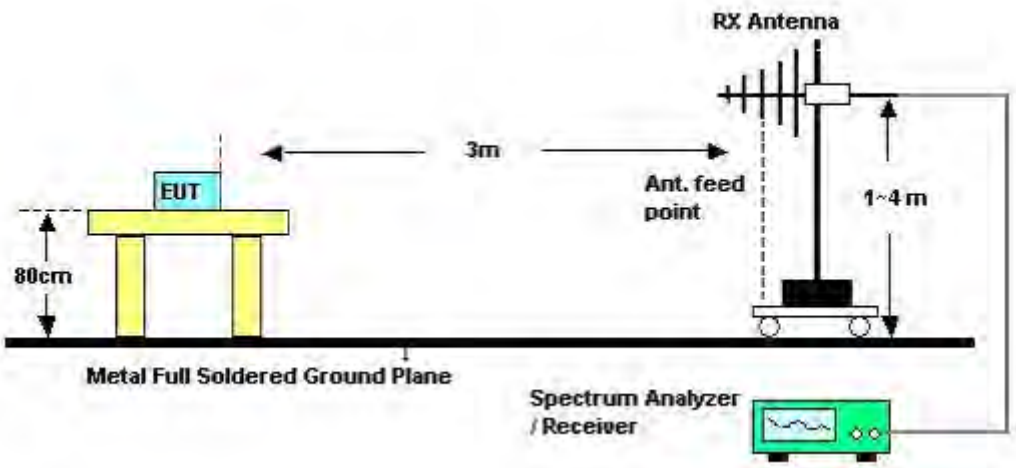
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

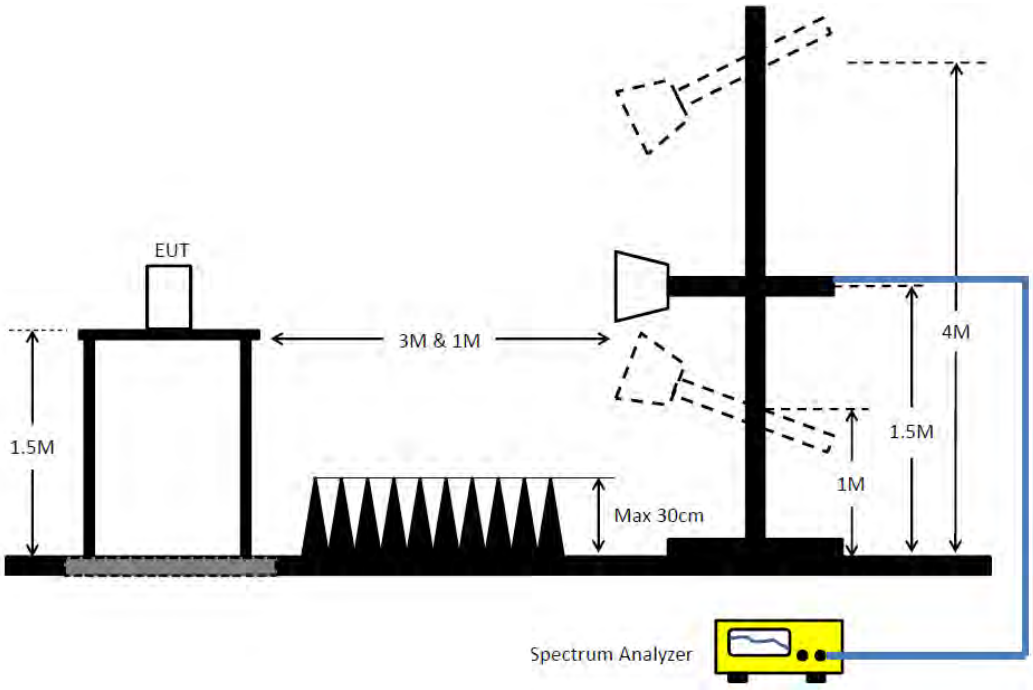
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.5.5 Measurement Results Calculation

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

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Dec. 04, 2020	Dec. 03, 2021	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 20, 2020	Nov. 19, 2021	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	May 05, 2021	May 04, 2022	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 20, 2020	Oct. 19, 2021	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Mar. 18, 2021	Mar. 17, 2022	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 08, 2020	Nov. 07, 2021	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Sep. 29, 2020	Sep. 28, 2021	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Sep. 14, 2021	Sep. 13, 2022	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Nov. 10, 2020	Nov. 09, 2021	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	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. 04, 2021	Oct. 03, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz 3m	Mar. 27, 2021	Mar. 26, 2022	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	May 04, 2021	May 03, 2022	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Oct. 15, 2020	Oct. 14, 2021	Radiation (03CH02-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 02, 2020	Oct. 01, 2021	Radiation (03CH06-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 07, 2021	May 06, 2022	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 04, 2021	Aug. 03, 2022	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 06, 2021	May 05, 2022	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 15, 2020	Dec. 14, 2021	Radiation (03CH06-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-05	1GHz~18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+24	1GHz~18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+24	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 31, 2020	Dec. 30, 2021	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

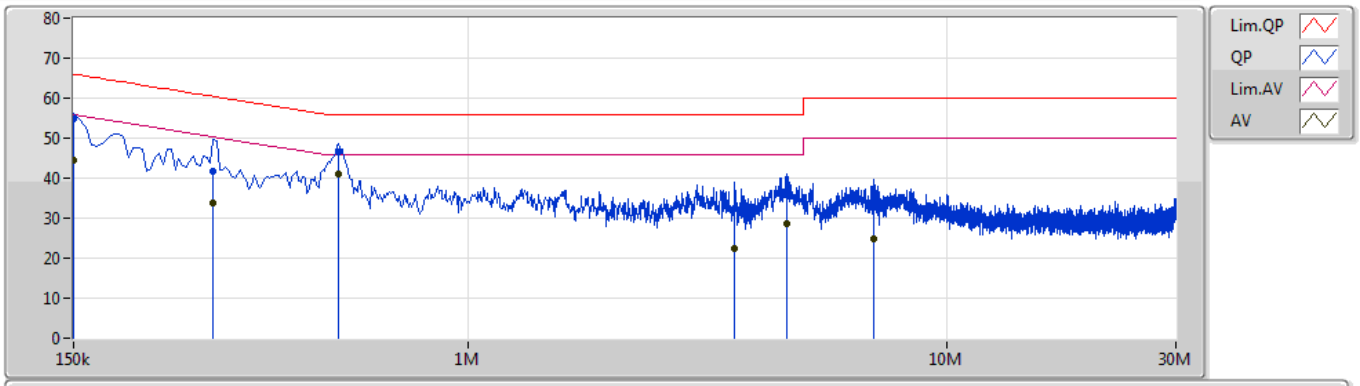
N.C.R. means Non-Calibration required.

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	AV	537k	41.00	46.00	-5.00	Line

Mode 2

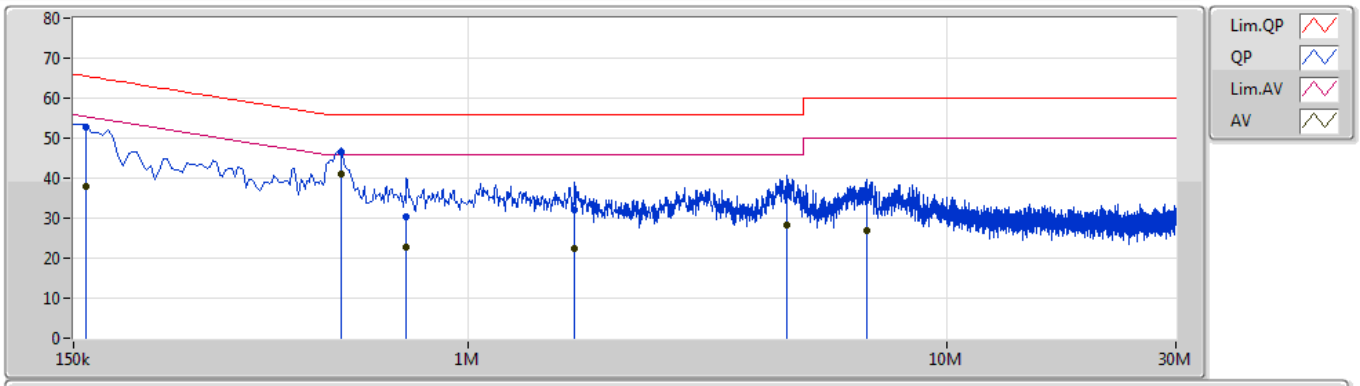
15/09/2021



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	54.67	66.00	-11.33	10.29	Line	-	44.38	0.07	0.07	10.15
AV	150k	44.48	56.00	-11.52	10.29	Line	-	34.19	0.07	0.07	10.15
QP	294k	41.89	60.42	-18.53	10.27	Line	-	31.62	0.08	0.06	10.13
AV	294k	33.92	50.42	-16.50	10.27	Line	-	23.65	0.08	0.06	10.13
QP	537k	46.51	56.00	-9.49	10.26	Line	-	36.25	0.08	0.07	10.11
AV	537k	41.00	46.00	-5.00	10.26	Line	"Worst"	30.74	0.08	0.07	10.11
QP	3.602M	32.45	56.00	-23.55	10.37	Line	-	22.08	0.14	0.13	10.10
AV	3.602M	22.25	46.00	-23.75	10.37	Line	-	11.88	0.14	0.13	10.10
QP	4.637M	36.00	56.00	-20.00	10.41	Line	-	25.59	0.16	0.15	10.10
AV	4.637M	28.56	46.00	-17.44	10.41	Line	-	18.15	0.16	0.15	10.10
QP	7.008M	32.83	60.00	-27.17	10.52	Line	-	22.31	0.22	0.19	10.11
AV	7.008M	24.74	50.00	-25.26	10.52	Line	-	14.22	0.22	0.19	10.11

Mode 2

15/09/2021



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	159k	52.78	65.52	-12.74	10.28	Neutral	-	42.50	0.06	0.07	10.15
AV	159k	38.05	55.52	-17.47	10.28	Neutral	-	27.77	0.06	0.07	10.15
QP	541.5k	46.43	56.00	-9.57	10.25	Neutral	-	36.18	0.07	0.07	10.11
AV	541.5k	41.00	46.00	-5.00	10.25	Neutral	"Worst"	30.75	0.07	0.07	10.11
QP	744k	30.23	56.00	-25.77	10.24	Neutral	-	19.99	0.07	0.07	10.10
AV	744k	22.91	46.00	-23.09	10.24	Neutral	-	12.67	0.07	0.07	10.10
QP	1.667M	31.91	56.00	-24.09	10.30	Neutral	-	21.61	0.09	0.09	10.12
AV	1.667M	22.43	46.00	-23.57	10.30	Neutral	-	12.13	0.09	0.09	10.12
QP	4.619M	35.86	56.00	-20.14	10.39	Neutral	-	25.47	0.14	0.15	10.10
AV	4.619M	28.26	46.00	-17.74	10.39	Neutral	-	17.87	0.14	0.15	10.10
QP	6.774M	34.97	60.00	-25.03	10.48	Neutral	-	24.49	0.18	0.19	10.11
AV	6.774M	26.85	50.00	-23.15	10.48	Neutral	-	16.37	0.18	0.19	10.11

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	26.67M	17.301M	17M3D1D	21.57M	17.031M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.56M	18.861M	18M9D1D	16.26M	17.241M

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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	22.89M	17.301M	22.83M	17.271M	23.01M	17.241M	22.86M	17.271M
5200MHz	Pass	Inf	21.57M	17.151M	22.02M	17.121M	22.5M	17.031M	25.71M	17.091M
5240MHz	Pass	Inf	21.75M	17.151M	23.7M	17.151M	23.7M	17.061M	26.67M	17.151M
5745MHz	Pass	500k	16.56M	17.451M	16.35M	17.481M	16.26M	17.361M	16.29M	17.301M
5785MHz	Pass	500k	16.29M	17.541M	16.38M	17.661M	16.35M	17.361M	16.53M	17.241M
5825MHz	Pass	500k	16.29M	18.861M	16.29M	17.541M	16.29M	17.901M	16.35M	17.301M

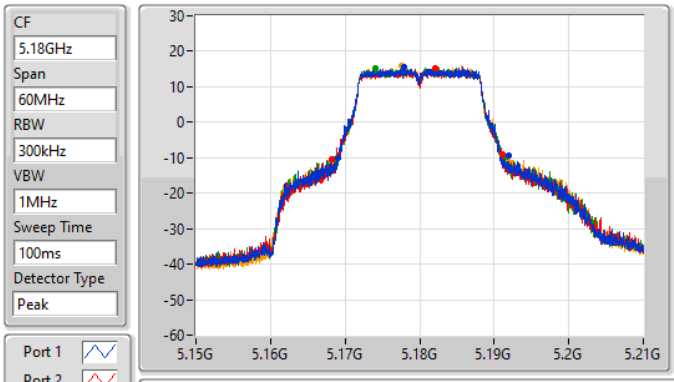
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

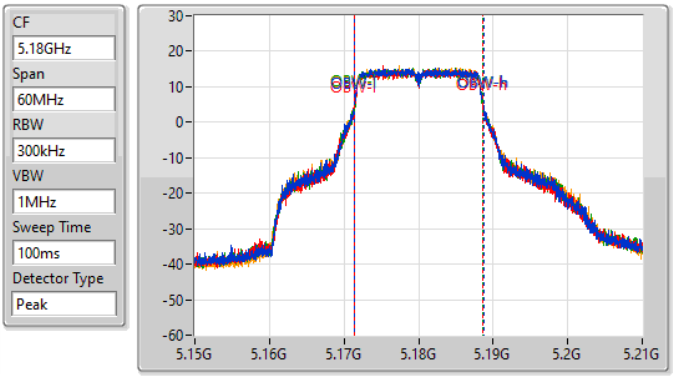
802.11a_Nss1,(6Mbps)_4TX

EBW

5180MHz

02/10/2021





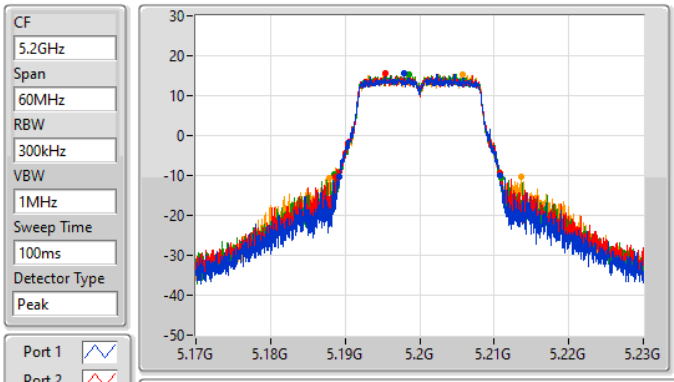
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.89M	5.16902G	5.19191G	17.301M	5.171394G	5.188696G	Inf	1
22.83M	5.168227G	5.1911G	17.271M	5.171394G	5.188666G	Inf	2
23.01M	5.16863G	5.19164G	17.241M	5.171424G	5.188666G	Inf	3
22.86M	5.1689G	5.19176G	17.271M	5.171424G	5.188696G	Inf	4

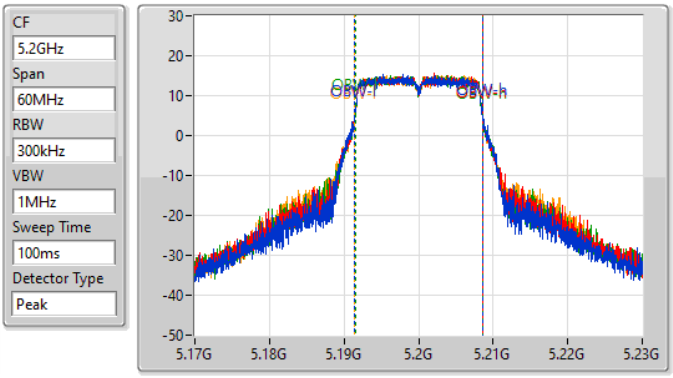
802.11a_Nss1,(6Mbps)_4TX

EBW

5200MHz

02/10/2021





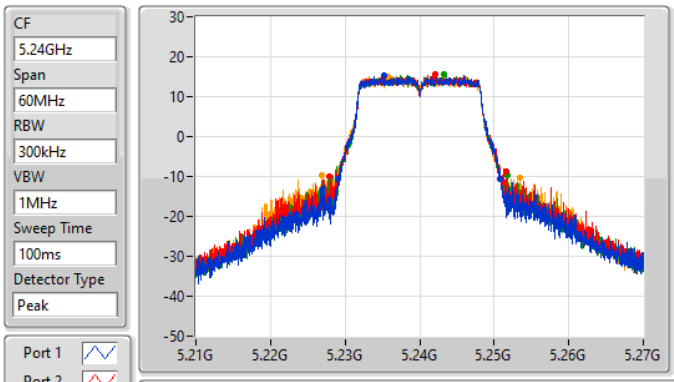
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.57M	5.1892G	5.21077G	17.151M	5.191424G	5.208576G	Inf	1
22.02M	5.18878G	5.2108G	17.121M	5.191454G	5.208576G	Inf	2
22.5M	5.18851G	5.21101G	17.031M	5.191514G	5.208546G	Inf	3
25.71M	5.18794G	5.21365G	17.091M	5.191454G	5.208546G	Inf	4

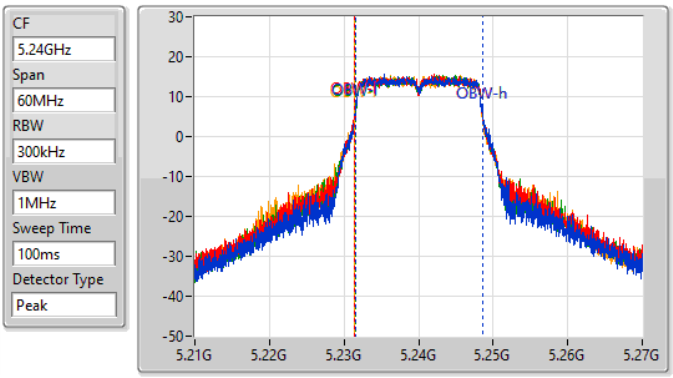
802.11a_Nss1,(6Mbps)_4TX

EBW

5240MHz

02/10/2021





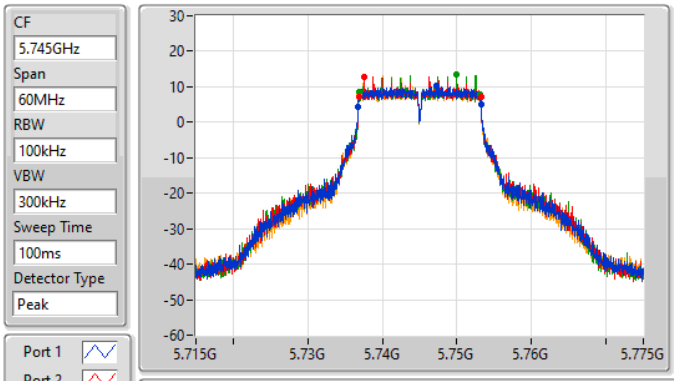
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.75M	5.22911G	5.25086G	17.151M	5.231484G	5.248636G	Inf	1
23.7M	5.22794G	5.25164G	17.151M	5.231454G	5.248606G	Inf	2
23.7M	5.22809G	5.25179G	17.061M	5.231514G	5.248576G	Inf	3
26.67M	5.22686G	5.25353G	17.151M	5.231394G	5.248546G	Inf	4

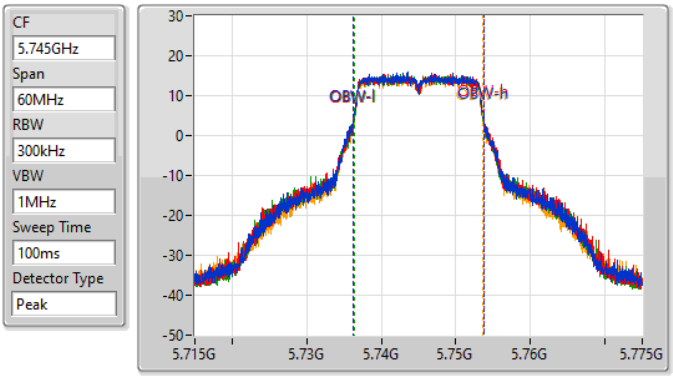
802.11a_Nss1,(6Mbps)_4TX

EBW

5745MHz

02/10/2021





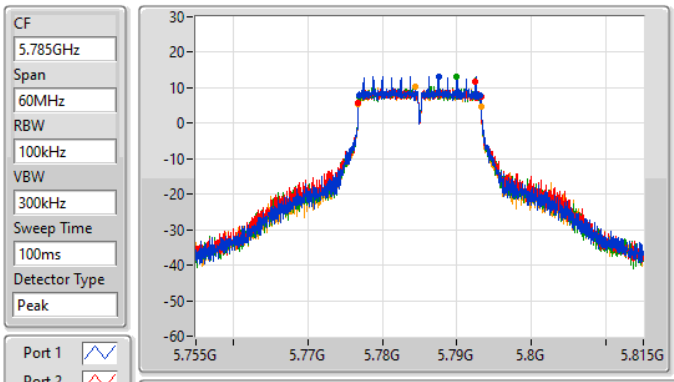
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.56M	5.73672G	5.75328G	17.451M	5.736274G	5.753726G	500k	1
16.35M	5.73684G	5.75319G	17.481M	5.736274G	5.753756G	500k	2
16.26M	5.73687G	5.75313G	17.361M	5.736334G	5.753696G	500k	3
16.29M	5.73687G	5.75316G	17.301M	5.736364G	5.753666G	500k	4

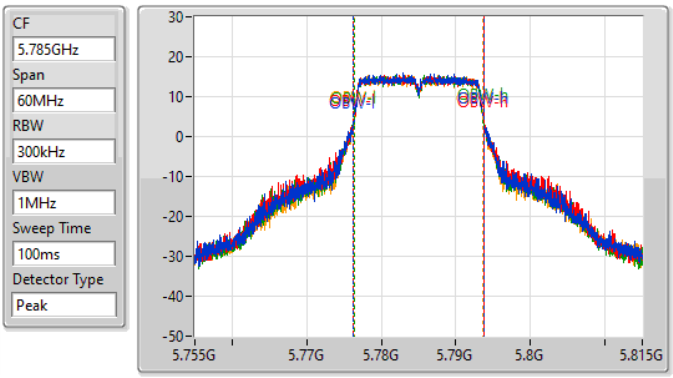
802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

02/10/2021





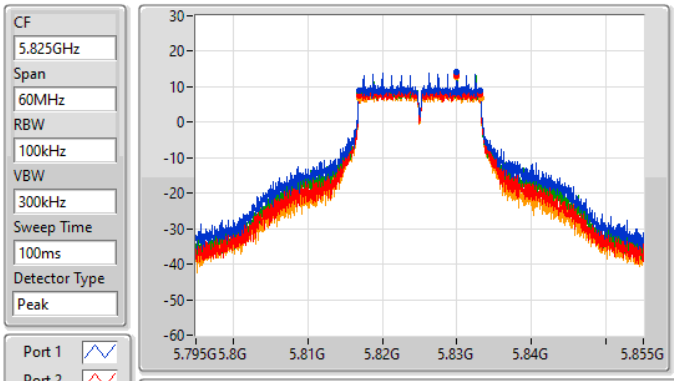
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.29M	5.77687G	5.79316G	17.541M	5.776214G	5.793756G	500k	1
16.38M	5.77681G	5.79319G	17.661M	5.776154G	5.793816G	500k	2
16.35M	5.77684G	5.79319G	17.361M	5.776364G	5.793726G	500k	3
16.53M	5.77675G	5.79328G	17.241M	5.776394G	5.793636G	500k	4

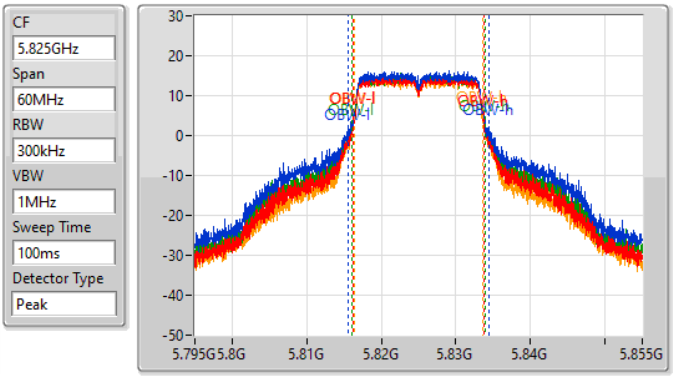
802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

02/10/2021





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.29M	5.81687G	5.83316G	18.861M	5.815585G	5.834445G	500k	1
16.29M	5.81687G	5.83316G	17.541M	5.816244G	5.833786G	500k	2
16.29M	5.81687G	5.83316G	17.901M	5.816034G	5.833936G	500k	3
16.35M	5.81684G	5.83319G	17.301M	5.816334G	5.833636G	500k	4

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	26.1M	19.28M	19M3D1D	21.69M	19.1M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	45.12M	38.201M	38M2D1D	40.32M	37.961M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	86.76M	77.841M	77M8D1D	82.68M	77.841M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	18.96M	19.43M	19M4D1D	18.6M	19.19M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.86M	38.321M	38M3D1D	37.14M	38.141M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	77.16M	78.081M	78M1D1D	75.48M	77.961M

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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	24.9M	19.25M	25.02M	19.25M	22.56M	19.19M	26.1M	19.28M
5200MHz	Pass	Inf	21.69M	19.19M	21.69M	19.13M	21.69M	19.1M	21.78M	19.25M
5240MHz	Pass	Inf	22.35M	19.19M	21.75M	19.13M	21.75M	19.13M	21.84M	19.19M
5745MHz	Pass	500k	18.93M	19.28M	18.78M	19.25M	18.96M	19.22M	18.6M	19.22M
5785MHz	Pass	500k	18.93M	19.28M	18.93M	19.22M	18.9M	19.19M	18.96M	19.25M
5825MHz	Pass	500k	18.87M	19.43M	18.78M	19.28M	18.96M	19.4M	18.93M	19.22M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	42.9M	38.081M	45.12M	38.141M	42.66M	38.201M	45M	38.141M
5230MHz	Pass	Inf	40.68M	38.081M	40.8M	37.961M	40.32M	38.081M	40.92M	38.021M
5755MHz	Pass	500k	37.5M	38.141M	37.62M	38.141M	37.44M	38.141M	37.32M	38.141M
5795MHz	Pass	500k	37.86M	38.261M	37.14M	38.321M	37.14M	38.261M	37.5M	38.201M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	83.52M	77.841M	82.68M	77.841M	83.4M	77.841M	86.76M	77.841M
5775MHz	Pass	500k	75.96M	78.081M	76.56M	78.081M	75.48M	77.961M	77.16M	77.961M

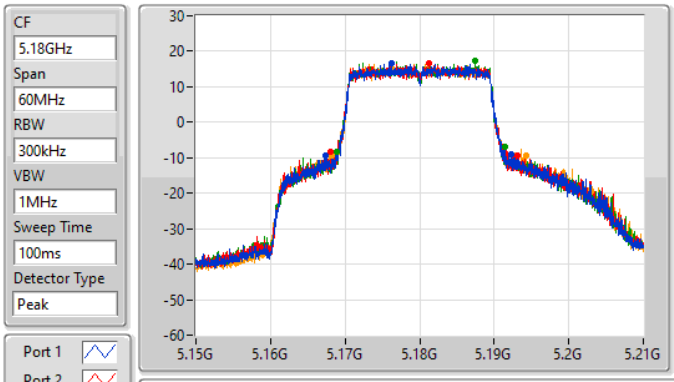
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

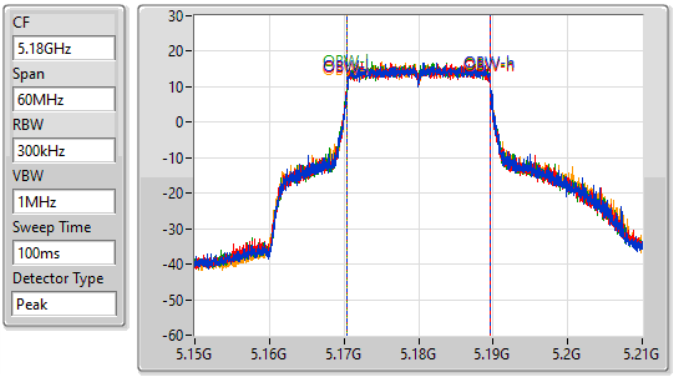
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

5180MHz

02/10/2021





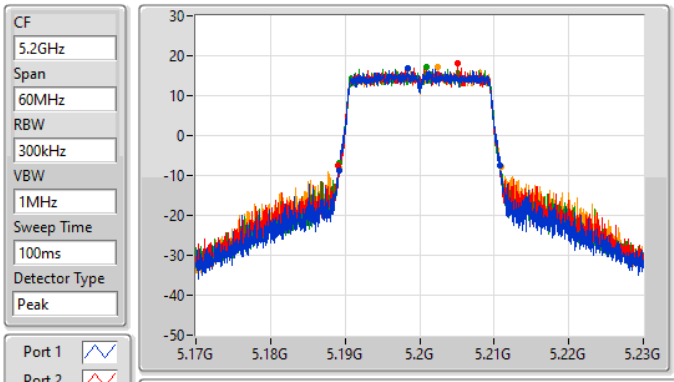
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.9M	5.16737G	5.19227G	19.25M	5.170435G	5.189685G	Inf	1
25.02M	5.16803G	5.19305G	19.25M	5.170405G	5.189655G	Inf	2
22.56M	5.1689G	5.19146G	19.19M	5.170435G	5.189625G	Inf	3
26.1M	5.16824G	5.19434G	19.28M	5.170405G	5.189685G	Inf	4

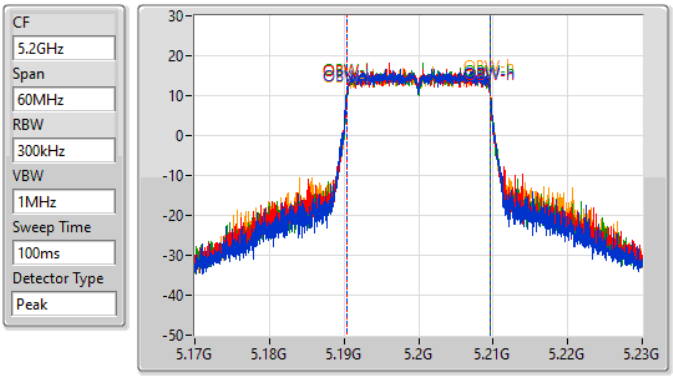
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

5200MHz

02/10/2021



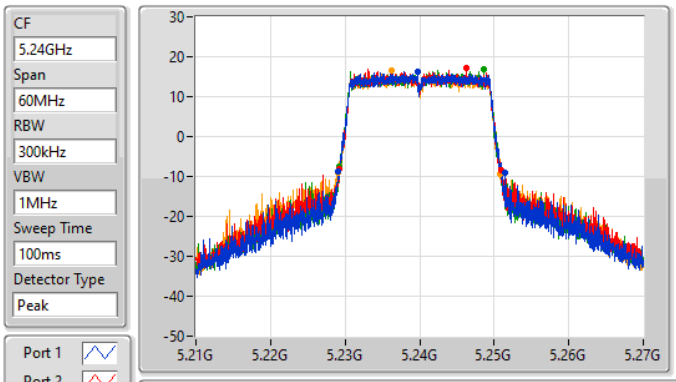


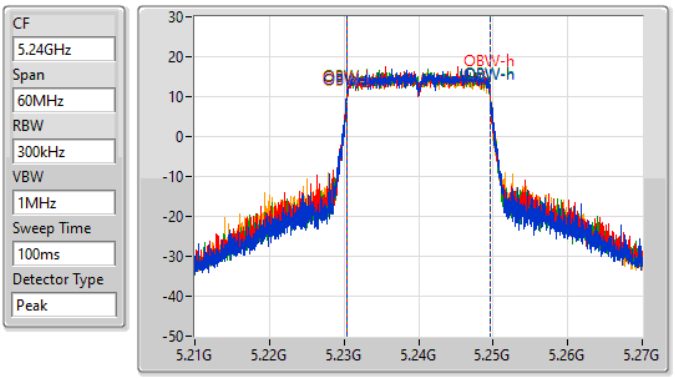
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.69M	5.18914G	5.21083G	19.19M	5.190405G	5.209595G	Inf	1
21.69M	5.18911G	5.2108G	19.13M	5.190465G	5.209595G	Inf	2
21.69M	5.18914G	5.21083G	19.1M	5.190465G	5.209565G	Inf	3
21.78M	5.18914G	5.21092G	19.25M	5.190405G	5.209655G	Inf	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

5240MHz

02/10/2021



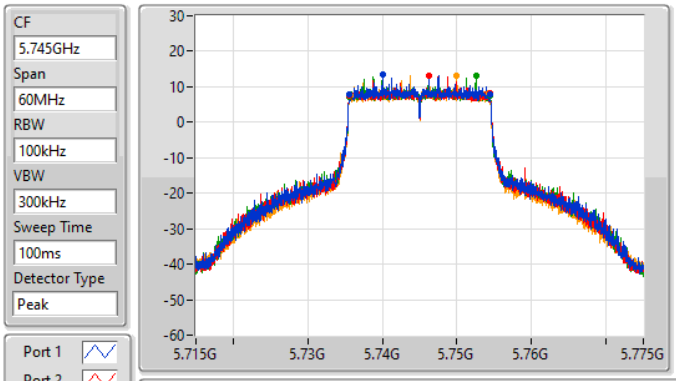


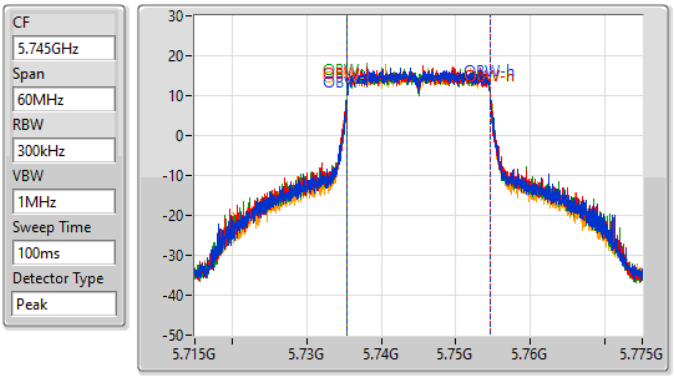
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.35M	5.22908G	5.25143G	19.19M	5.230405G	5.249595G	Inf	1
21.75M	5.22917G	5.25092G	19.13M	5.230435G	5.249565G	Inf	2
21.75M	5.2292G	5.25095G	19.13M	5.230465G	5.249595G	Inf	3
21.84M	5.22899G	5.25083G	19.19M	5.230405G	5.249595G	Inf	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

5745MHz

02/10/2021



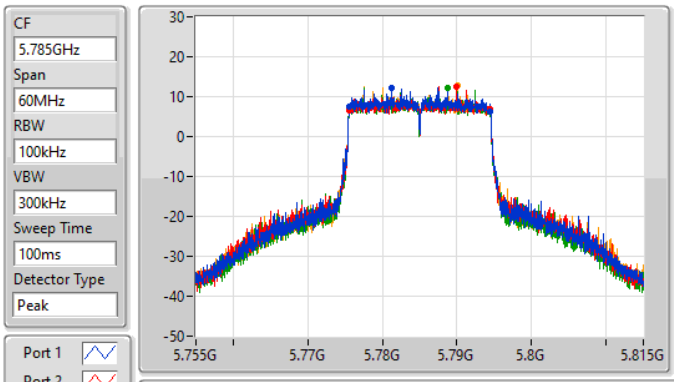


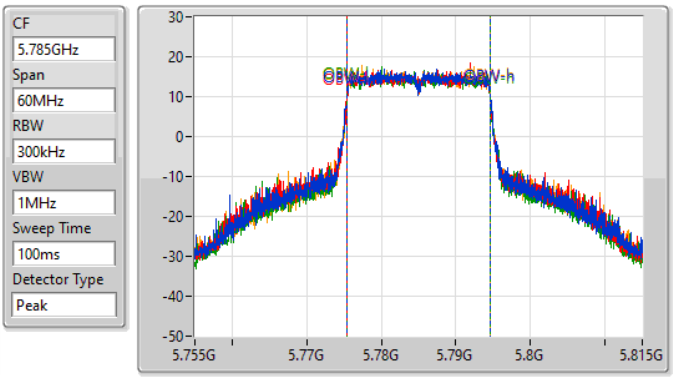
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.93M	5.73555G	5.75448G	19.28M	5.735375G	5.754655G	500k	1
18.78M	5.73564G	5.75442G	19.25M	5.735375G	5.754625G	500k	2
18.96M	5.73555G	5.75451G	19.22M	5.735405G	5.754625G	500k	3
18.6M	5.73567G	5.75427G	19.22M	5.735405G	5.754625G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

5785MHz

02/10/2021



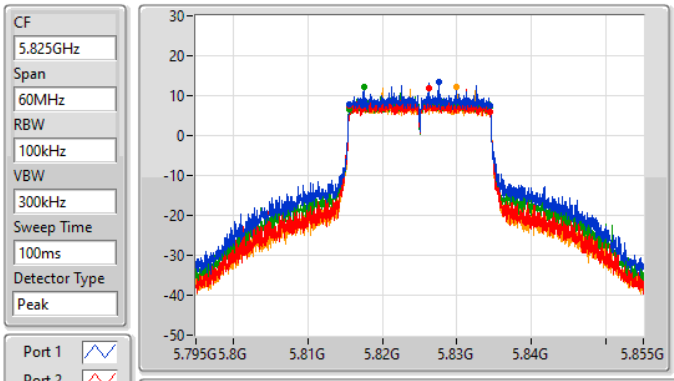


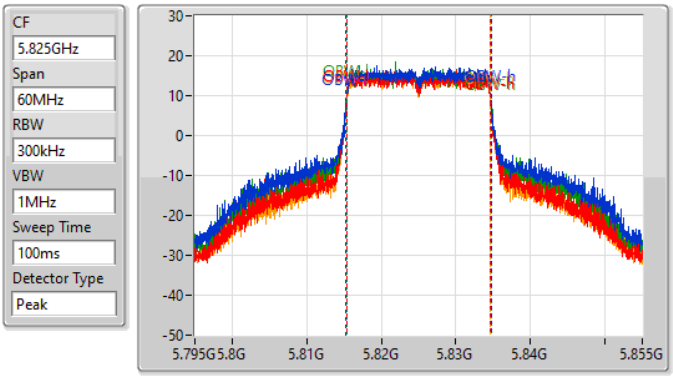
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.93M	5.77558G	5.79451G	19.28M	5.775375G	5.794655G	500k	1
18.93M	5.77555G	5.79448G	19.22M	5.775405G	5.794625G	500k	2
18.9M	5.77555G	5.79445G	19.19M	5.775405G	5.794595G	500k	3
18.96M	5.77552G	5.79448G	19.25M	5.775405G	5.794655G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

5825MHz

02/10/2021



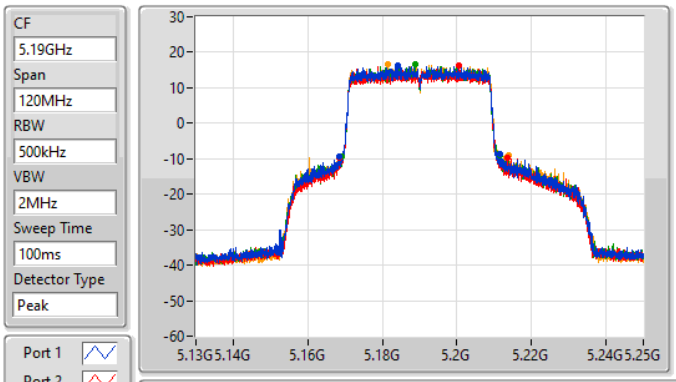


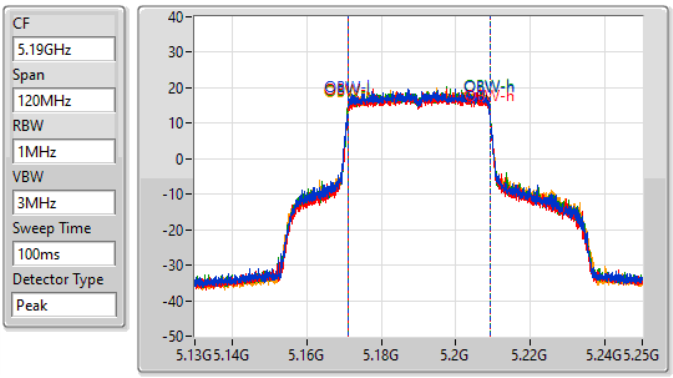
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.87M	5.81564G	5.83451G	19.43M	5.815285G	5.834715G	500k	1
18.78M	5.81564G	5.83442G	19.28M	5.815375G	5.834655G	500k	2
18.96M	5.81552G	5.83448G	19.4M	5.815315G	5.834715G	500k	3
18.93M	5.81555G	5.83448G	19.22M	5.815405G	5.834625G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

5190MHz

02/10/2021



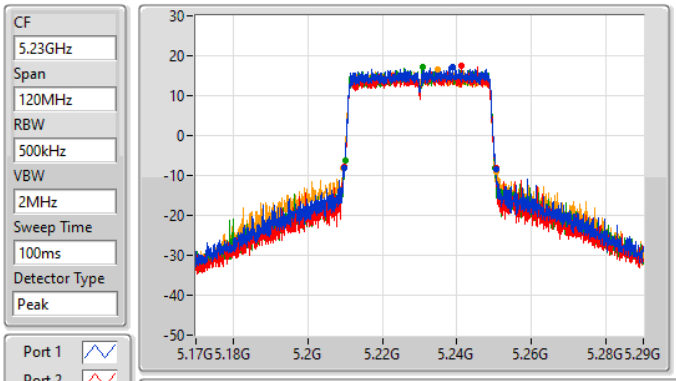


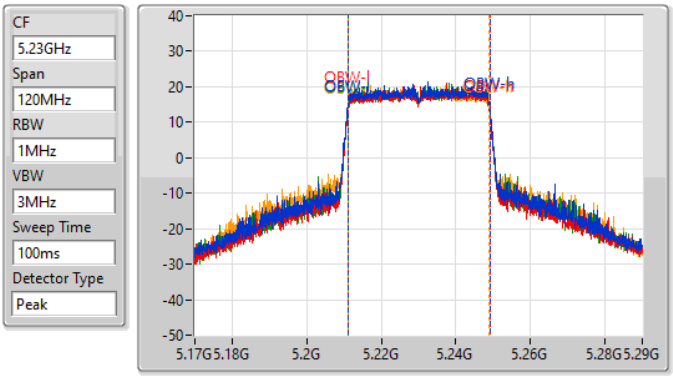
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.9M	5.16852G	5.21142G	38.081M	5.17099G	5.20907G	Inf	1
45.12M	5.16834G	5.21346G	38.141M	5.17099G	5.20913G	Inf	2
42.66M	5.169G	5.21166G	38.201M	5.17099G	5.20919G	Inf	3
45M	5.16906G	5.21406G	38.141M	5.17099G	5.20913G	Inf	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

5230MHz

02/10/2021



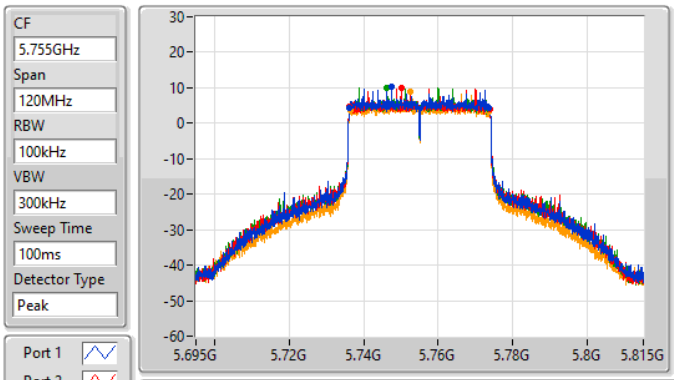


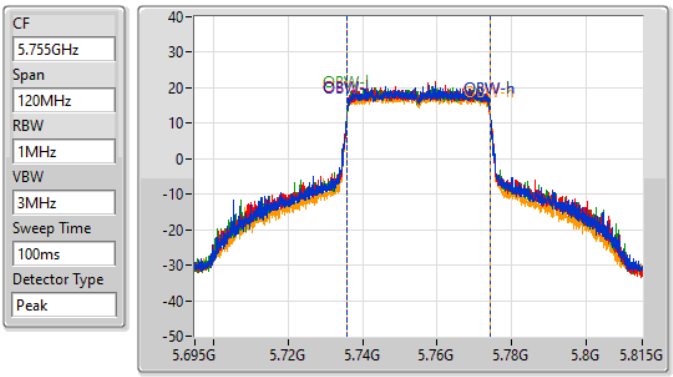
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.68M	5.20978G	5.25046G	38.081M	5.21099G	5.24907G	Inf	1
40.8M	5.20978G	5.25058G	37.961M	5.211109G	5.24907G	Inf	2
40.32M	5.20996G	5.25028G	38.081M	5.211049G	5.24913G	Inf	3
40.92M	5.20948G	5.2504G	38.021M	5.21099G	5.24901G	Inf	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

5755MHz

02/10/2021



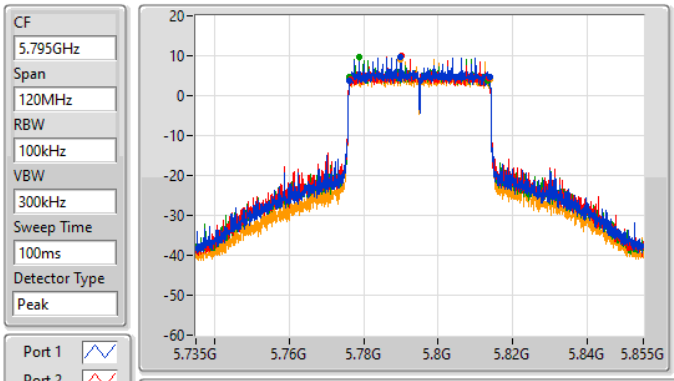


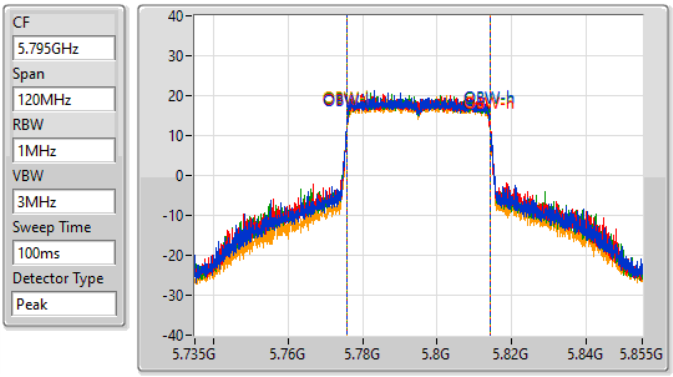
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	5.73616G	5.77366G	38.141M	5.73593G	5.77407G	500k	1
37.62M	5.73628G	5.7739G	38.141M	5.73593G	5.77407G	500k	2
37.44M	5.73622G	5.77366G	38.141M	5.73593G	5.77407G	500k	3
37.32M	5.73634G	5.77366G	38.141M	5.73593G	5.77407G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

5795MHz

02/10/2021



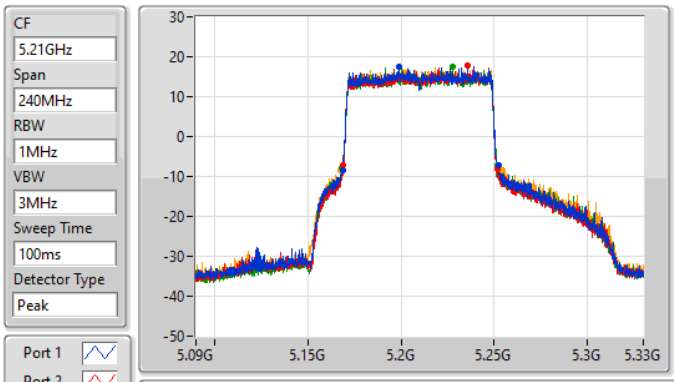


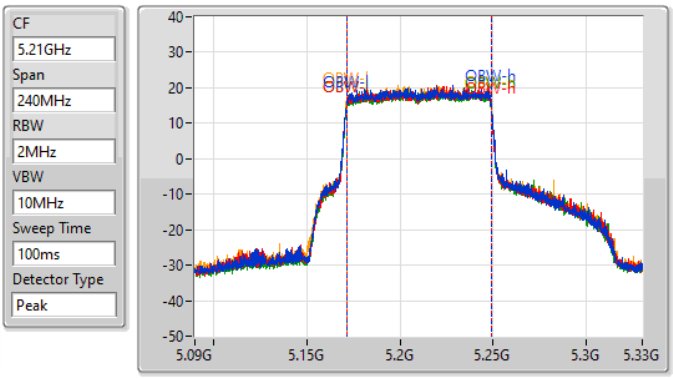
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.86M	5.7761G	5.81396G	38.261M	5.77587G	5.81413G	500k	1
37.14M	5.77652G	5.81366G	38.321M	5.77587G	5.81419G	500k	2
37.14M	5.77622G	5.81336G	38.261M	5.77587G	5.81413G	500k	3
37.5M	5.77628G	5.81378G	38.201M	5.77587G	5.81407G	500k	4

802.11ax HEW80-BF_Nss1,(MCS0)_4TX EBW

5210MHz

02/10/2021



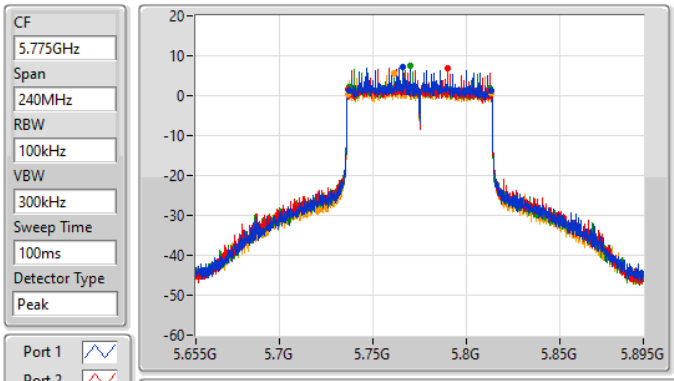


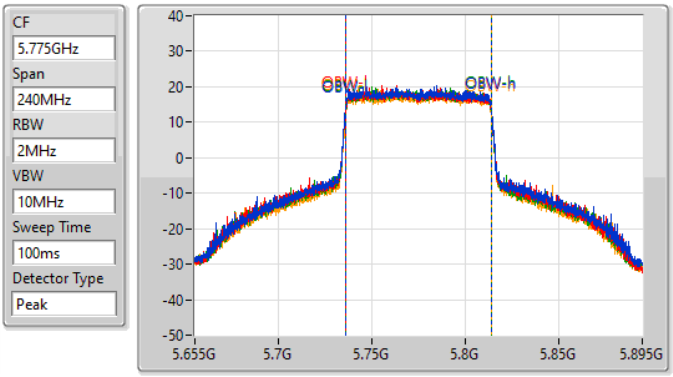
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.52M	5.16872G	5.25224G	77.841M	5.171259G	5.2491G	Inf	1
82.68M	5.1692G	5.25188G	77.841M	5.171259G	5.2491G	Inf	2
83.4M	5.16848G	5.25188G	77.841M	5.171259G	5.2491G	Inf	3
86.76M	5.16764G	5.2544G	77.841M	5.171259G	5.2491G	Inf	4

802.11ax HEW80-BF_Nss1,(MCS0)_4TX EBW

5775MHz

02/10/2021





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.96M	5.7372G	5.81316G	78.081M	5.7359G	5.813981G	500k	1
76.56M	5.73636G	5.81292G	78.081M	5.73578G	5.813861G	500k	2
75.48M	5.73696G	5.81244G	77.961M	5.7359G	5.813861G	500k	3
77.16M	5.73648G	5.81364G	77.961M	5.736019G	5.813981G	500k	4

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.87	0.97051
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.96	0.99083

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.14	23.78	23.81	23.88	23.94	29.87	30.00
5200MHz	Pass	3.14	23.64	23.76	23.89	23.86	29.81	30.00
5240MHz	Pass	3.14	23.79	23.95	23.81	23.62	29.81	30.00
5745MHz	Pass	2.98	23.73	23.92	23.68	23.56	29.75	30.00
5785MHz	Pass	2.98	23.95	23.97	23.80	23.78	29.90	30.00
5825MHz	Pass	2.98	24.72	23.64	23.93	23.33	29.96	30.00

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

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	29.91	0.97949
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	29.94	0.98628
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	29.89	0.97499
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	29.97	0.99312
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	29.84	0.96383
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	29.89	0.97499

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.78	23.77	23.88	24.01	23.91	29.91	30.00
5200MHz	Pass	4.78	23.73	23.89	23.86	23.79	29.84	30.00
5240MHz	Pass	4.78	23.78	23.87	23.79	23.61	29.78	30.00
5745MHz	Pass	3.92	24.17	23.94	23.82	23.73	29.94	30.00
5785MHz	Pass	3.92	24.12	24.00	23.71	23.97	29.97	30.00
5825MHz	Pass	3.92	24.61	23.47	23.90	23.24	29.86	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.78	23.49	22.65	23.05	23.23	29.14	30.00
5230MHz	Pass	4.78	24.40	23.66	23.80	23.77	29.94	30.00
5755MHz	Pass	3.92	24.18	23.83	24.04	23.18	29.84	30.00
5795MHz	Pass	3.92	23.93	23.90	23.91	23.24	29.78	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.78	24.07	23.84	23.49	24.06	29.89	30.00
5775MHz	Pass	3.92	24.30	23.86	23.85	23.42	29.89	30.00

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

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_4TX	16.86
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_4TX	15.39

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)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.78	10.97	10.91	11.02	10.89	16.86	17.00
5200MHz	Pass	4.78	10.66	10.88	10.69	10.73	16.62	17.00
5240MHz	Pass	4.78	10.53	10.68	10.68	10.56	16.52	17.00
5745MHz	Pass	3.92	9.66	9.46	9.40	9.13	15.28	30.00
5785MHz	Pass	3.92	9.53	9.30	9.35	9.29	15.27	30.00
5825MHz	Pass	3.92	10.24	9.22	9.55	8.79	15.39	30.00

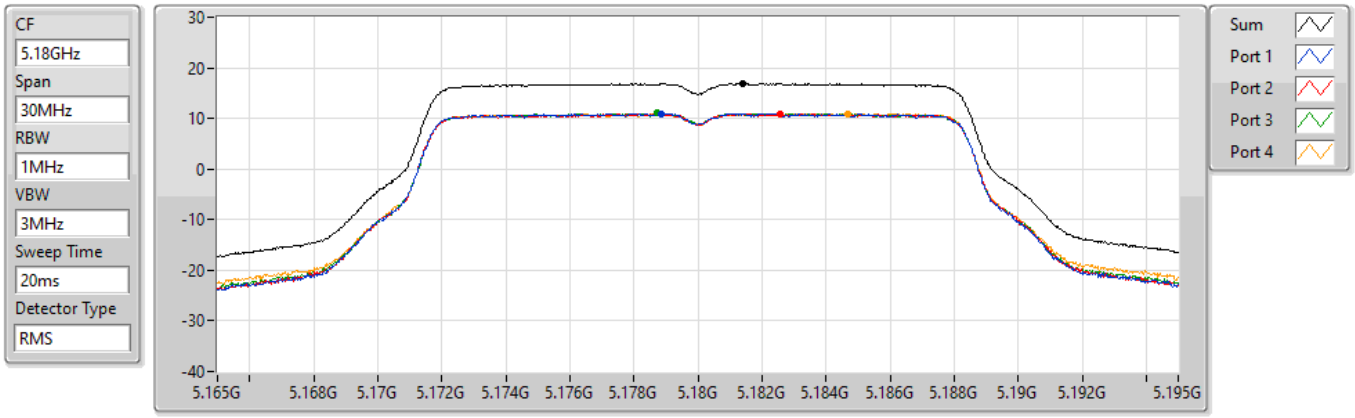
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11a_Nss1,(6Mbps)_4TX

PSD

5180MHz

02/10/2021



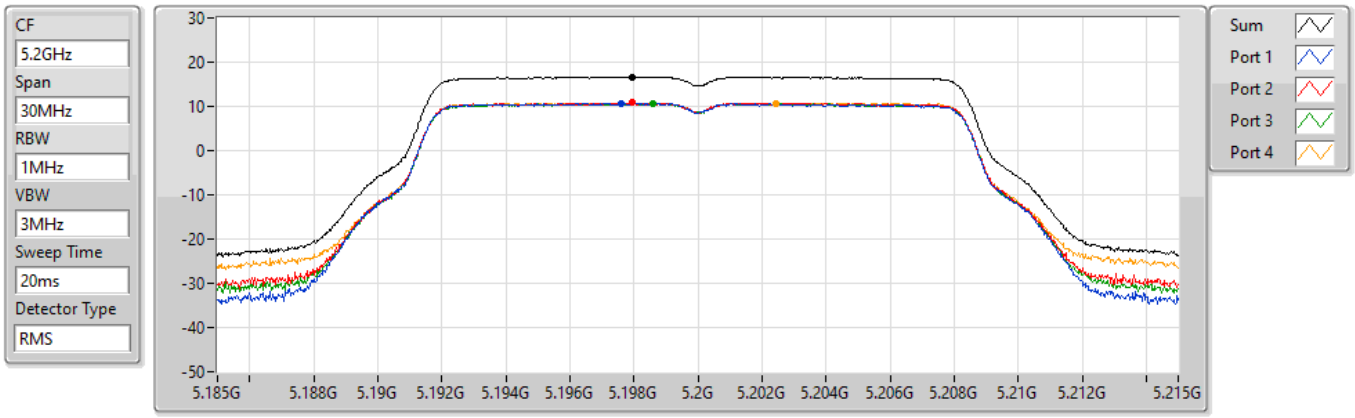
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.86	16.86	10.97	10.91	11.02	10.89

802.11a_Nss1,(6Mbps)_4TX

PSD

5200MHz

02/10/2021



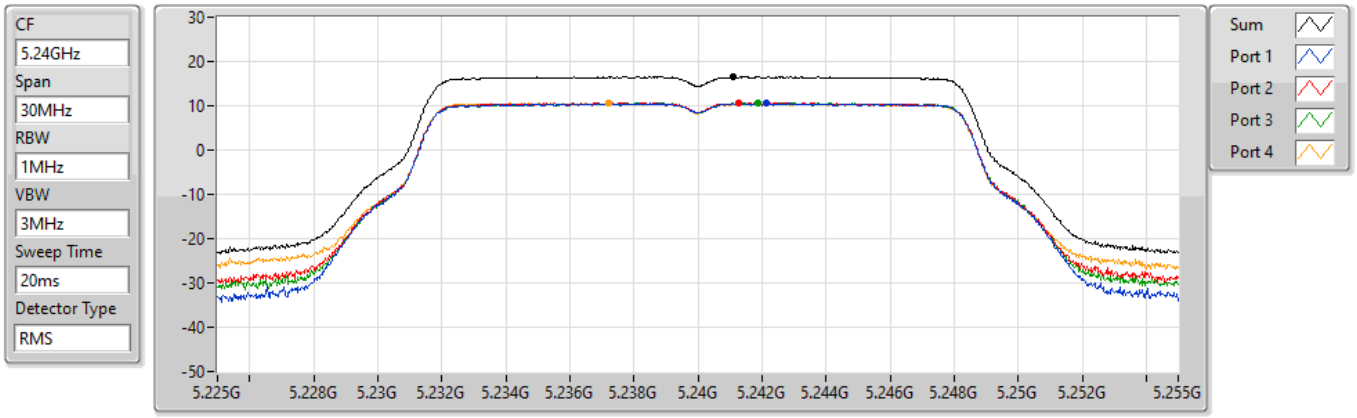
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.62	16.62	10.66	10.88	10.69	10.73

802.11a_Nss1,(6Mbps)_4TX

PSD

5240MHz

02/10/2021



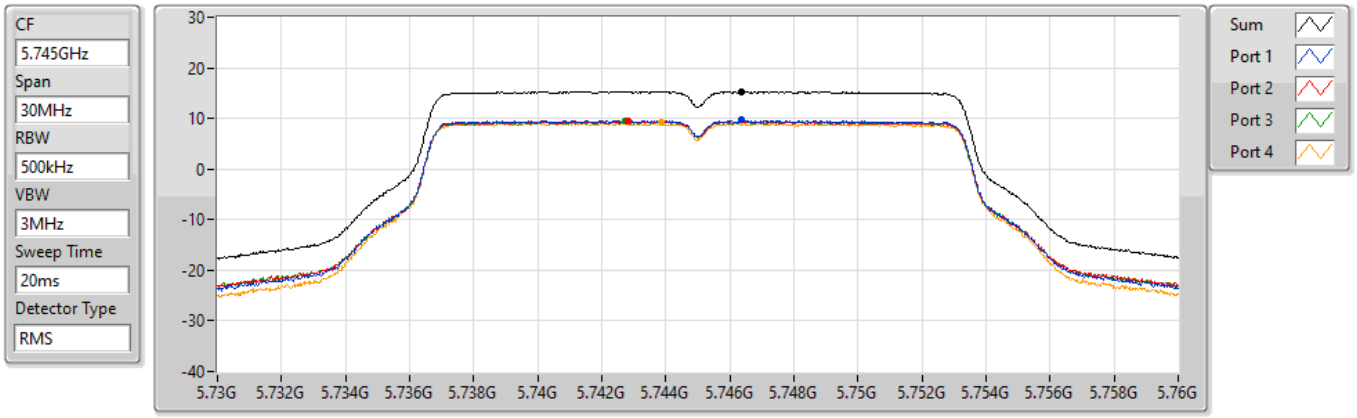
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.52	16.52	10.53	10.68	10.68	10.56

802.11a_Nss1,(6Mbps)_4TX

PSD

5745MHz

02/10/2021



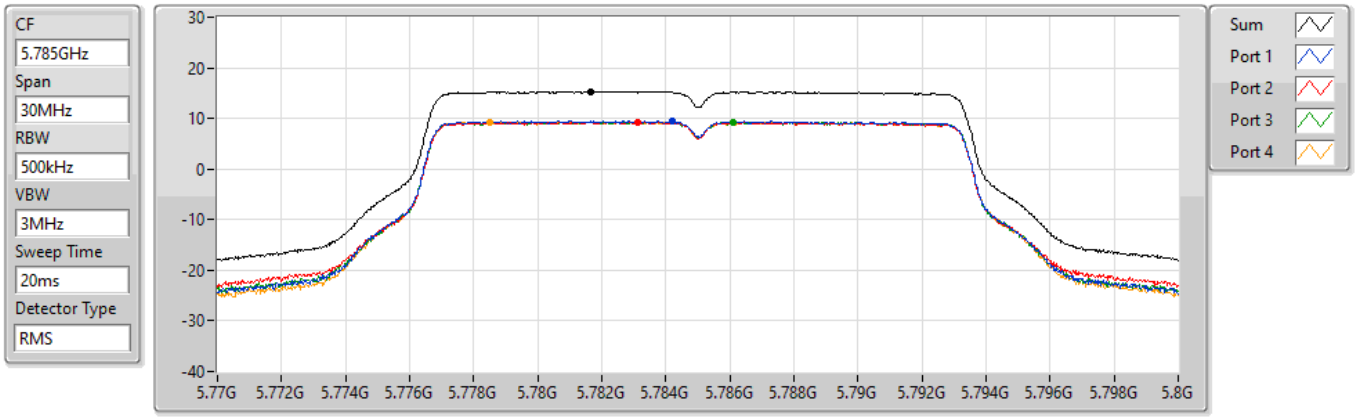
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.28	15.28	9.66	9.46	9.40	9.13

802.11a_Nss1,(6Mbps)_4TX

PSD

5785MHz

02/10/2021



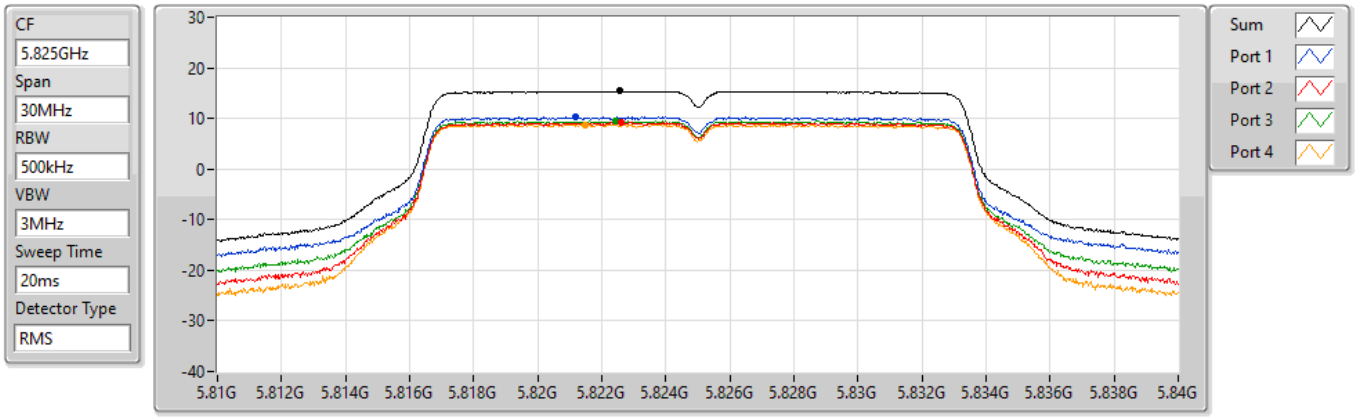
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.27	15.27	9.53	9.30	9.35	9.29

802.11a_Nss1,(6Mbps)_4TX

PSD

5825MHz

02/10/2021



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.39	15.39	10.24	9.22	9.55	8.79

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	16.32
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	13.51
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	10.34
5.725-5.85GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	14.85
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	11.91
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	9.04

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

Result

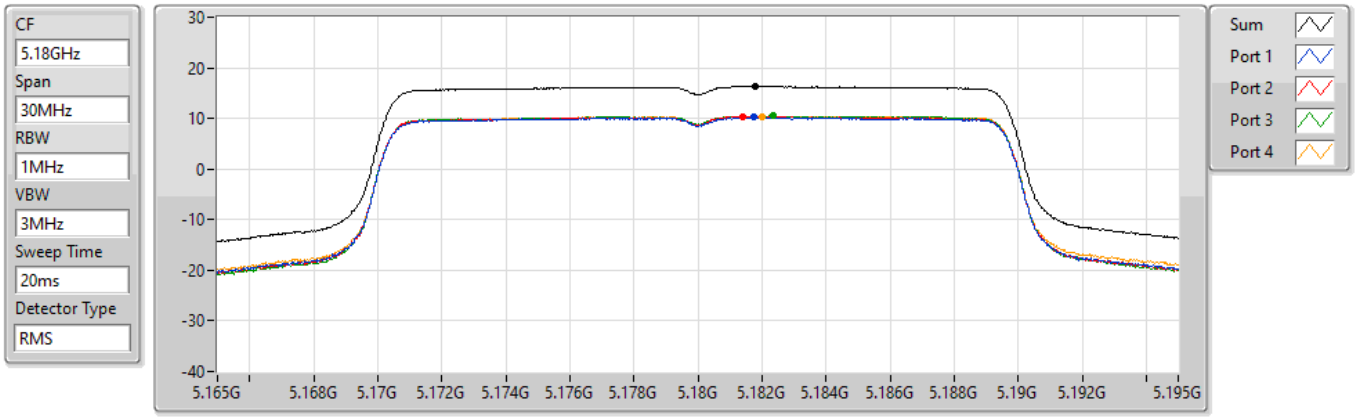
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.78	10.19	10.29	10.48	10.44	16.32	17.00
5200MHz	Pass	4.78	10.22	10.34	10.36	10.22	16.24	17.00
5240MHz	Pass	4.78	10.22	10.28	10.26	9.93	16.11	17.00
5745MHz	Pass	3.92	9.10	9.07	8.77	8.71	14.85	30.00
5785MHz	Pass	3.92	9.00	8.92	8.64	8.85	14.81	30.00
5825MHz	Pass	3.92	9.44	8.43	8.80	8.13	14.67	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.78	7.05	6.30	6.63	7.02	12.72	17.00
5230MHz	Pass	4.78	7.97	7.28	7.47	7.42	13.51	17.00
5755MHz	Pass	3.92	6.23	6.07	6.12	5.21	11.91	30.00
5795MHz	Pass	3.92	6.00	5.93	5.93	5.27	11.74	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.78	4.36	4.28	4.01	4.82	10.34	17.00
5775MHz	Pass	3.92	3.52	3.17	3.07	2.46	9.04	30.00

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;

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5180MHz

02/10/2021

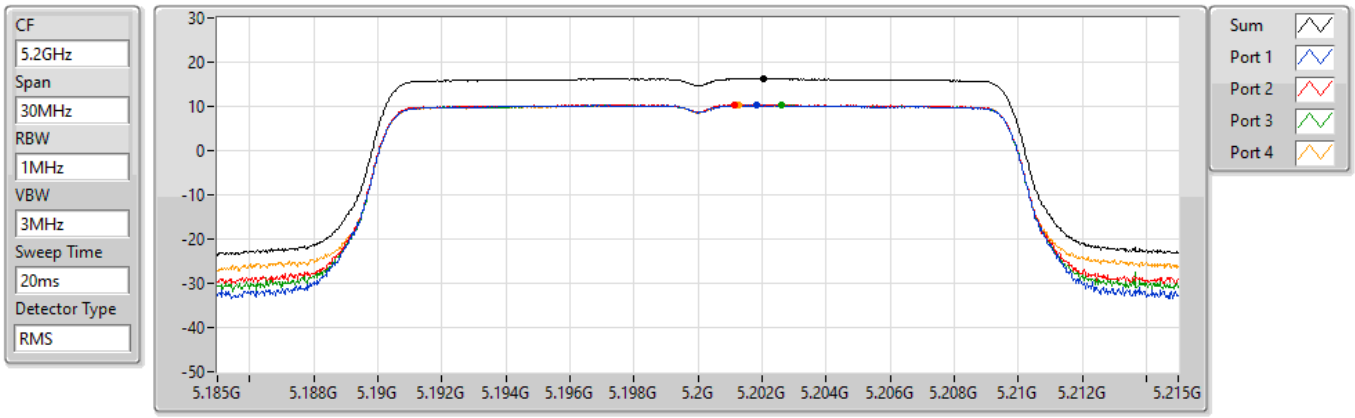


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.32	16.32	10.19	10.29	10.48	10.44

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5200MHz

02/10/2021

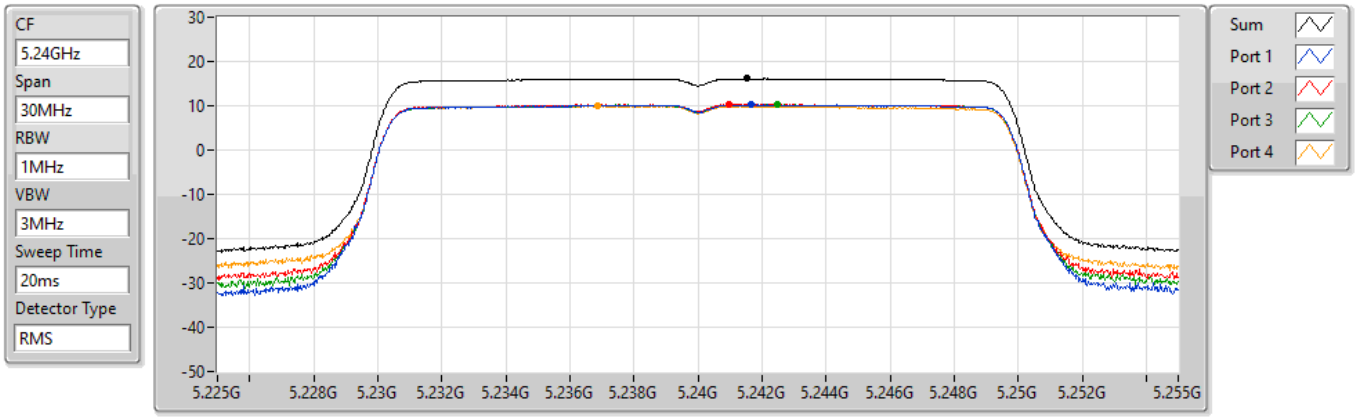


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.24	16.24	10.22	10.34	10.36	10.22

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5240MHz

02/10/2021

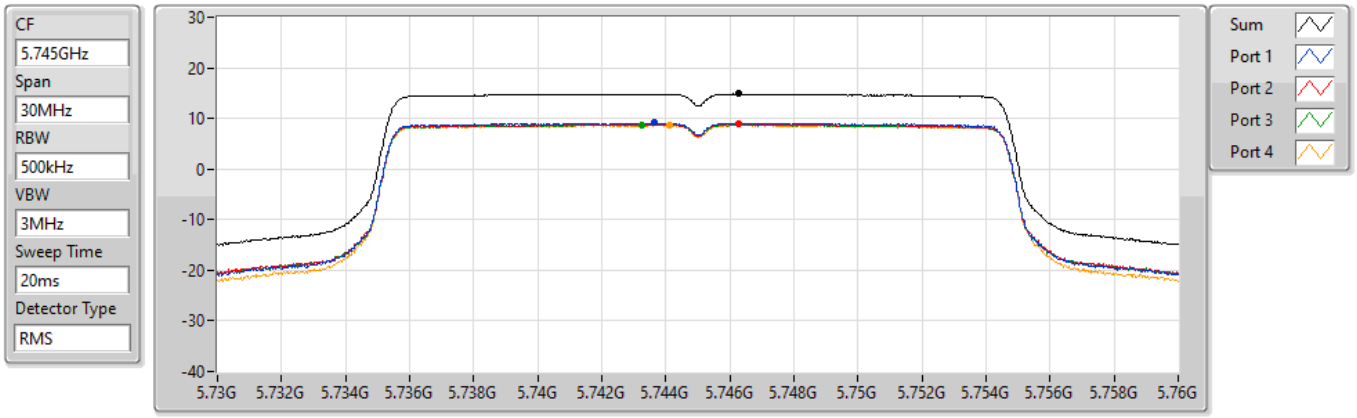


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.11	16.11	10.22	10.28	10.26	9.93

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5745MHz

02/10/2021

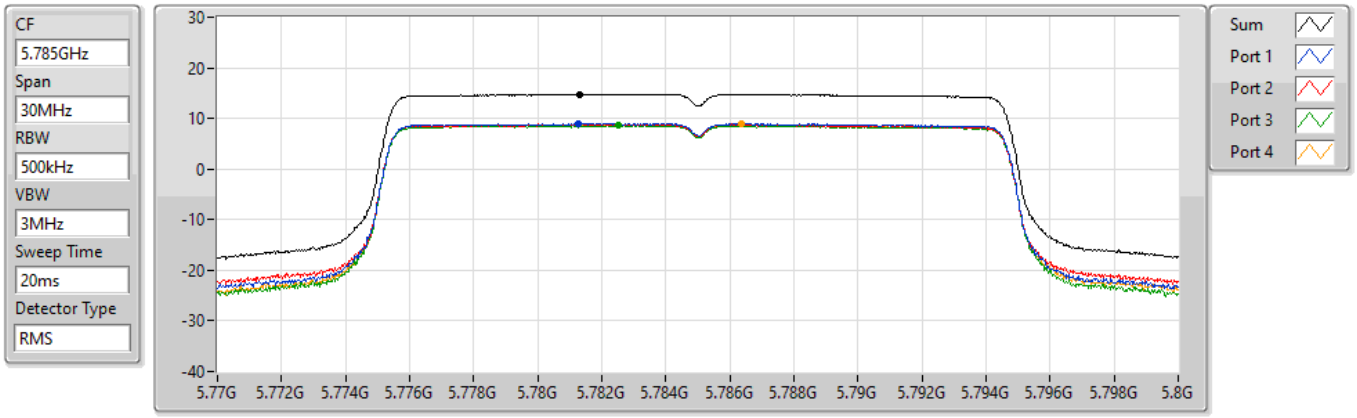


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.85	14.85	9.10	9.07	8.77	8.71

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5785MHz

02/10/2021

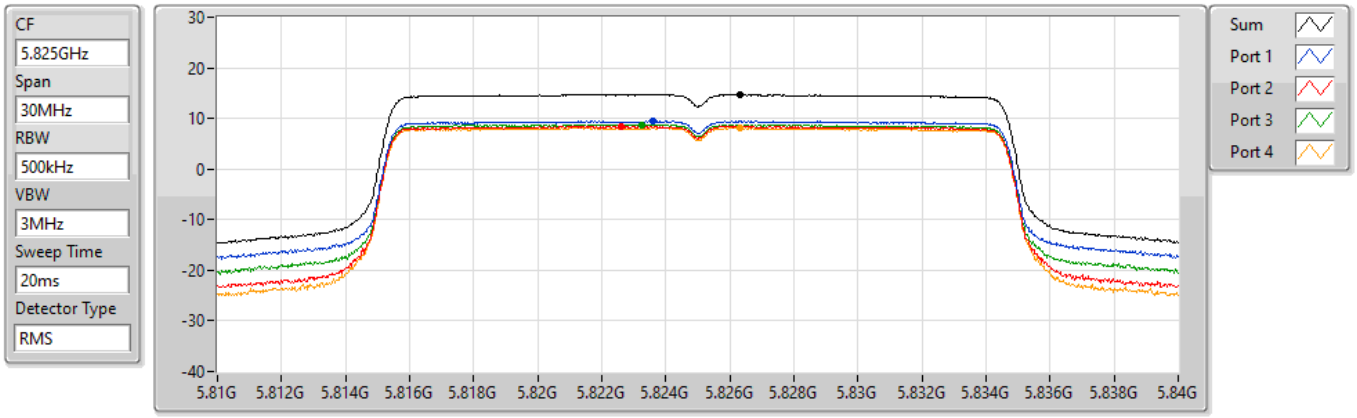


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.81	14.81	9.00	8.92	8.64	8.85

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

5825MHz

02/10/2021

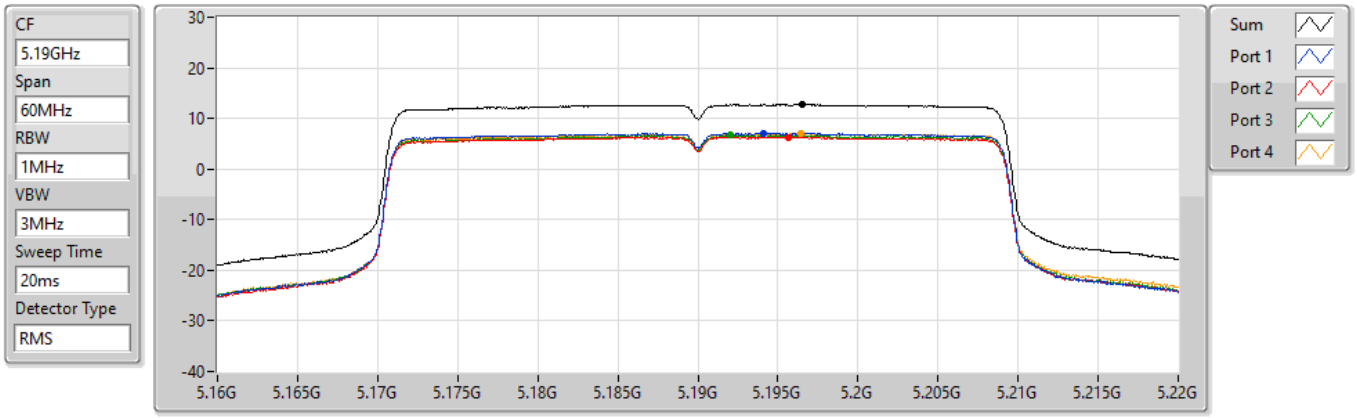


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.67	14.67	9.44	8.43	8.80	8.13

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5190MHz

02/10/2021

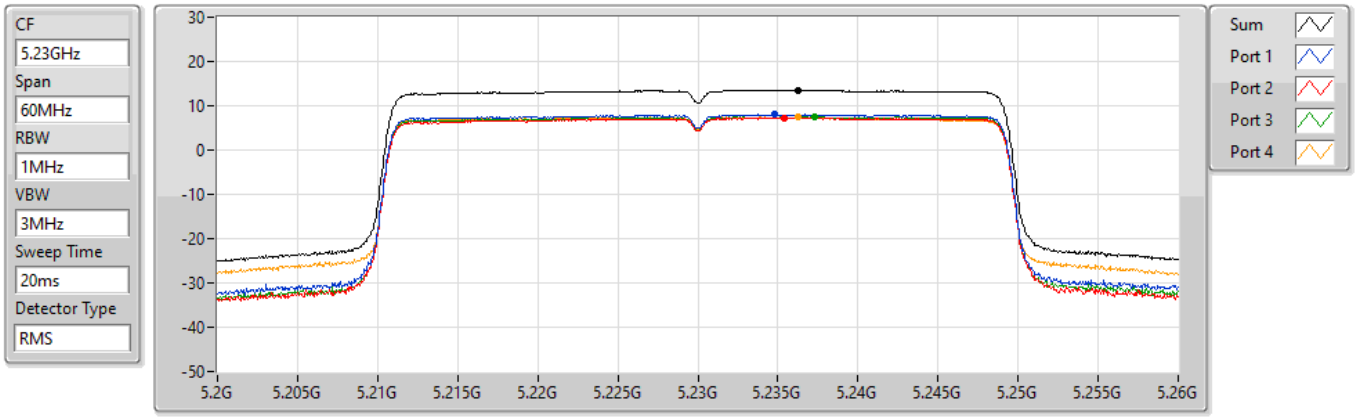


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.72	12.72	7.05	6.30	6.63	7.02

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5230MHz

02/10/2021

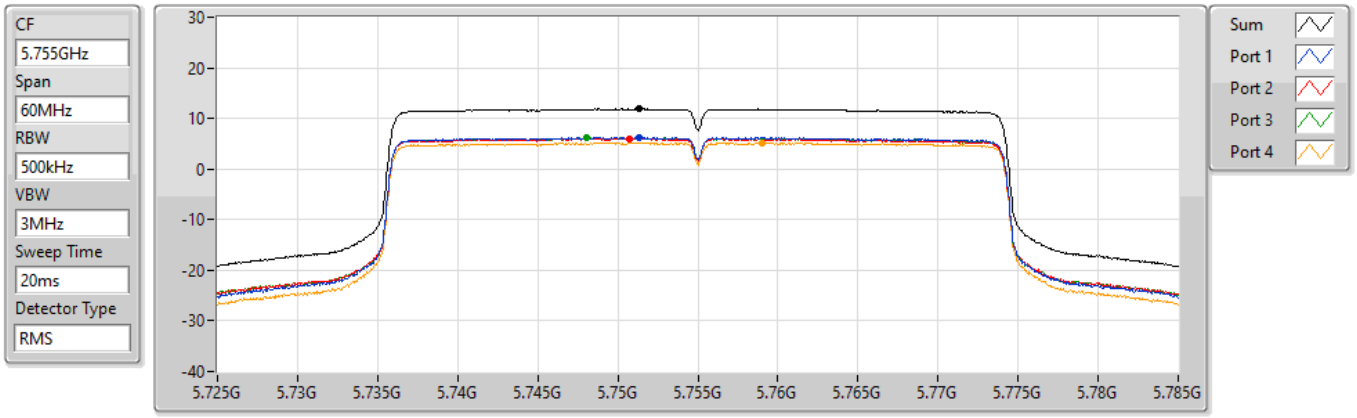


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.51	13.51	7.97	7.28	7.47	7.42

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5755MHz

02/10/2021

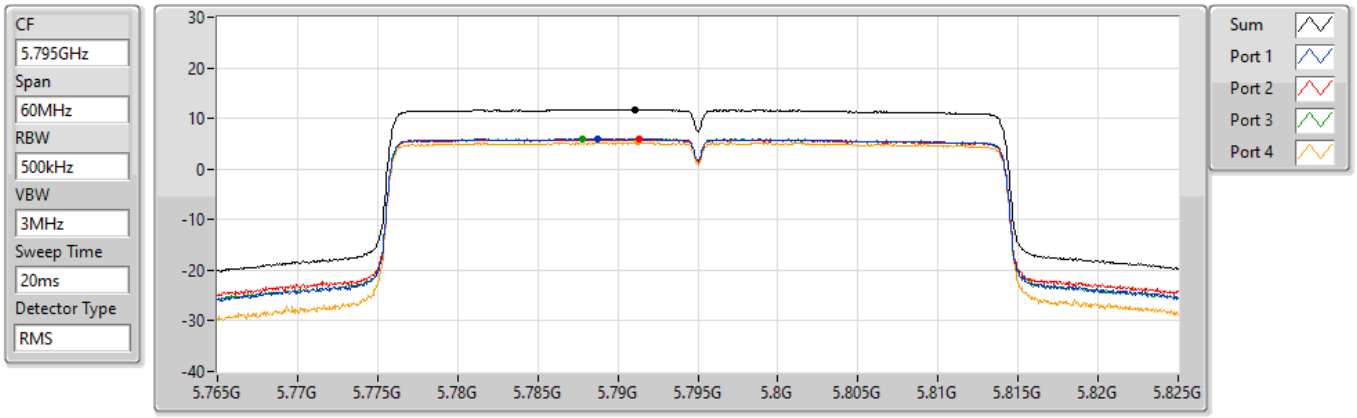


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.91	11.91	6.23	6.07	6.12	5.21

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

5795MHz

02/10/2021

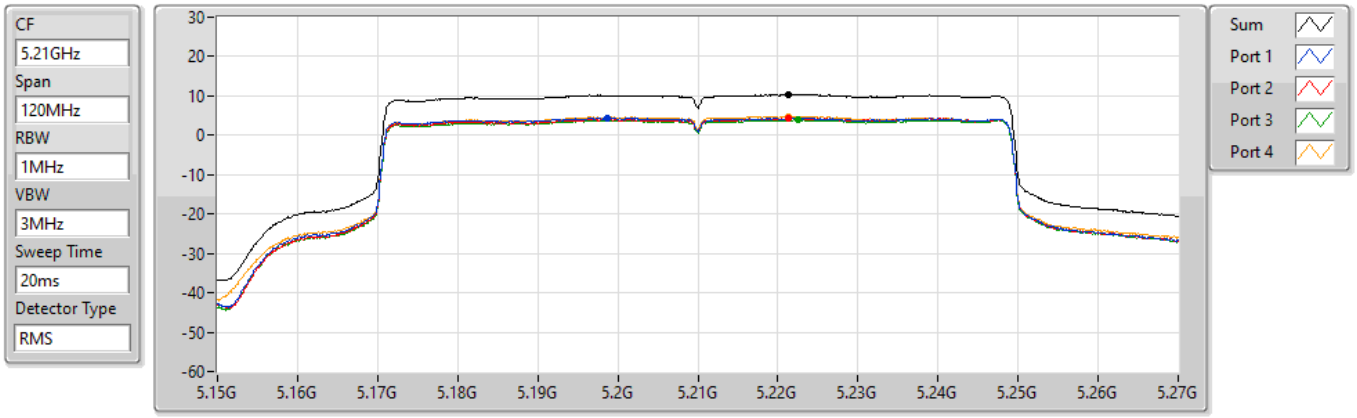


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.74	11.74	6.00	5.93	5.93	5.27

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5210MHz

02/10/2021

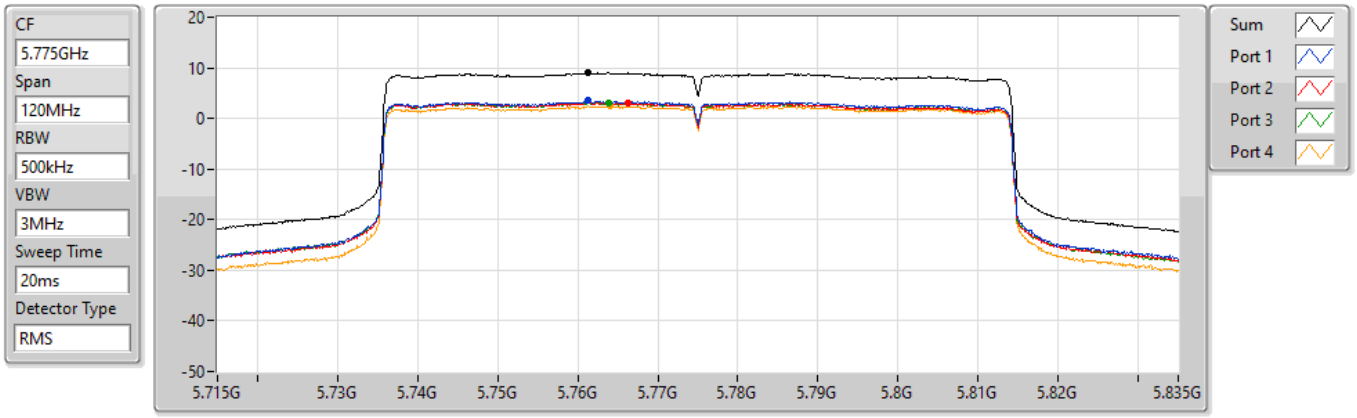


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.34	10.34	4.36	4.28	4.01	4.82

802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

5775MHz

02/10/2021

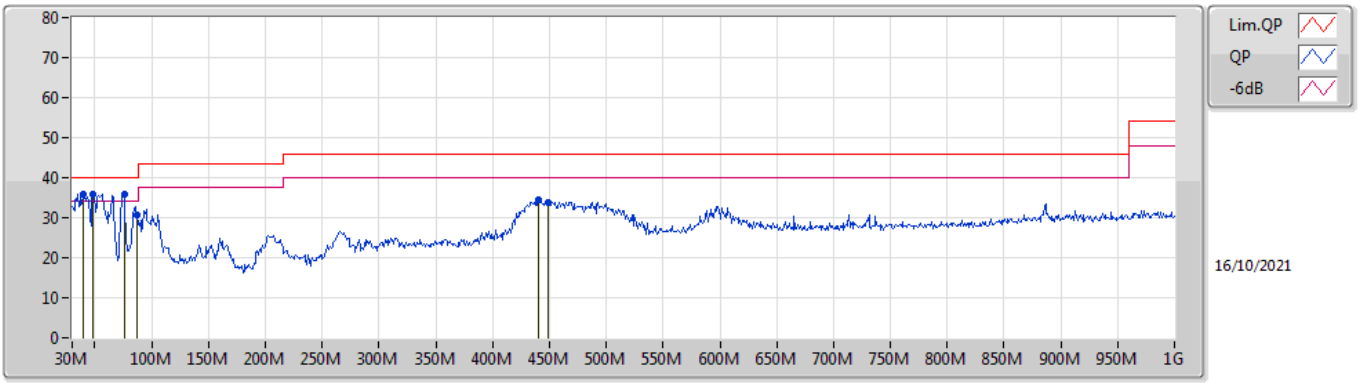


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.04	9.04	3.52	3.17	3.07	2.46

Summary

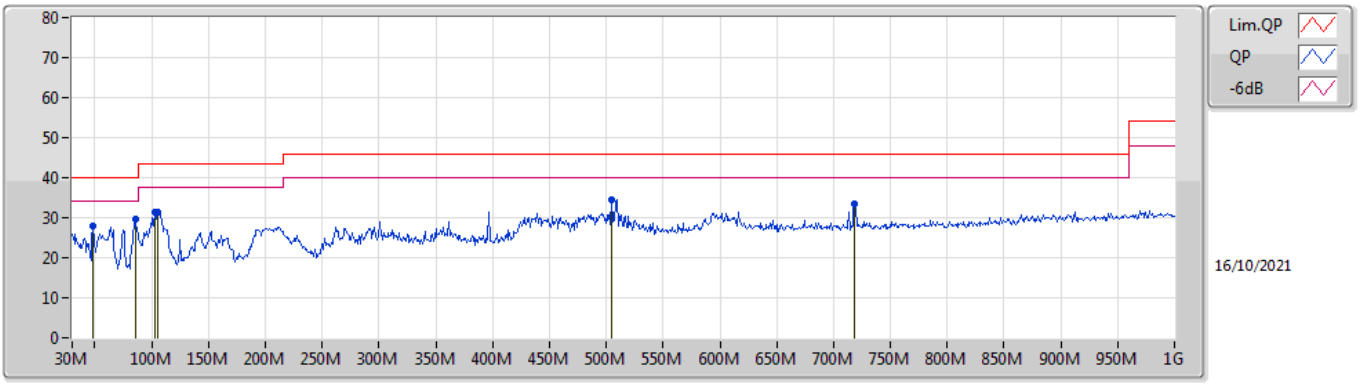
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	75.59M	35.98	40.00	-4.02	Vertical

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	39.7M	35.96	40.00	-4.04	-11.86	3	Vertical	107	1.00	-	47.82	18.90	0.90	31.66
PK	48.43M	35.82	40.00	-4.18	-16.22	3	Vertical	123	1.50	-	52.04	14.53	1.00	31.75
PK	75.59M	35.98	40.00	-4.02	-18.28	3	Vertical	194	1.50	"Worst"	54.26	12.32	1.30	31.90
PK	87.23M	30.53	40.00	-9.47	-16.46	3	Vertical	236	2.00	-	46.99	14.05	1.40	31.91
PK	440.31M	34.48	46.00	-11.52	-6.47	3	Vertical	358	1.25	-	40.95	22.53	3.26	32.26
PK	449.04M	33.90	46.00	-12.10	-6.34	3	Vertical	0	1.25	-	40.24	22.64	3.30	32.28

Mode 1



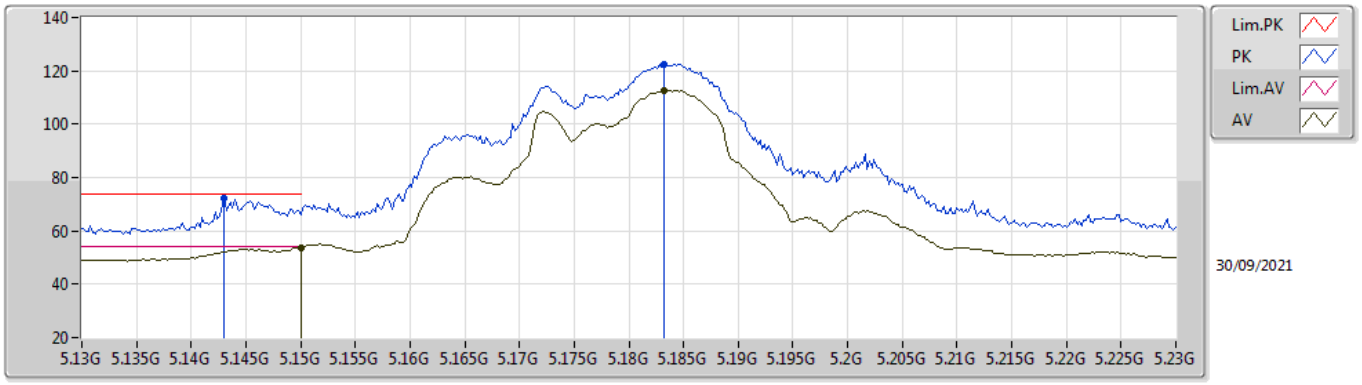
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	48.43M	27.78	40.00	-12.22	-16.22	3	Horizontal	26	1.50	-	44.00	14.53	1.00	31.75
PK	85.29M	29.56	40.00	-10.44	-16.96	3	Horizontal	97	2.00	"Worst"	46.52	13.56	1.40	31.92
PK	102.75M	31.47	43.50	-12.03	-13.34	3	Horizontal	290	2.00	-	44.81	17.03	1.51	31.88
PK	105.66M	31.39	43.50	-12.11	-13.12	3	Horizontal	273	2.00	-	44.51	17.24	1.53	31.89
PK	504.33M	34.47	46.00	-11.53	-5.65	3	Horizontal	312	2.00	-	40.12	23.17	3.52	32.34
PK	718.7M	33.37	46.00	-12.63	-3.74	3	Horizontal	186	1.00	-	37.11	24.69	4.24	32.67

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	AV	5.15G	53.66	54.00	-0.34	3	Vertical	113	1.68	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TnomVnom

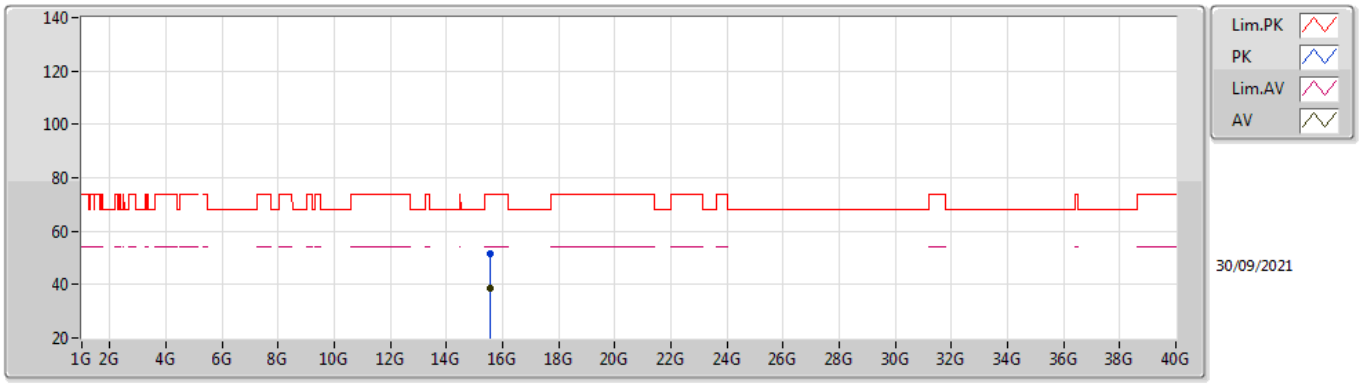


EUT Z_4TX
Setting 101
02-B-S-8-10

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	5.143G	72.45	74.00	-1.55	66.11	3	Vertical	113	1.68	-	33.50	4.99	32.15
AV	5.15G	53.66	54.00	-0.34	47.31	3	Vertical	113	1.68	-	33.50	5.00	32.15
PK	5.1832G	122.39	Inf	-Inf	115.97	3	Vertical	113	1.68	-	33.50	5.07	32.15
AV	5.1832G	112.79	Inf	-Inf	106.37	3	Vertical	113	1.68	-	33.50	5.07	32.15

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TnomVnom

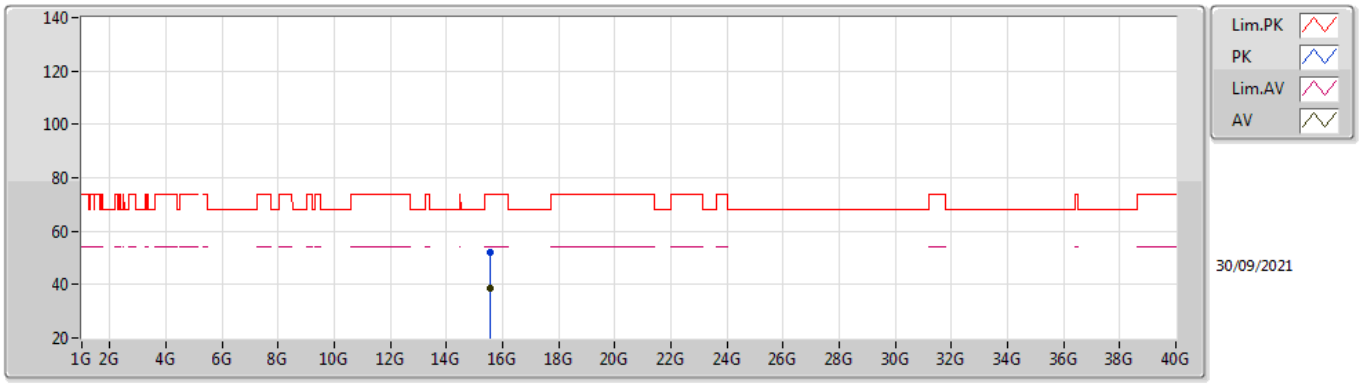


EUT Z_4TX
Setting 101
02-B-S-8

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	15.53654G	51.52	74.00	-22.48	37.88	3	Vertical	356	1.18	-	37.79	9.04	33.19
AV	15.5366G	38.53	54.00	-15.47	24.89	3	Vertical	356	1.18	-	37.79	9.04	33.19

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TnomVnom

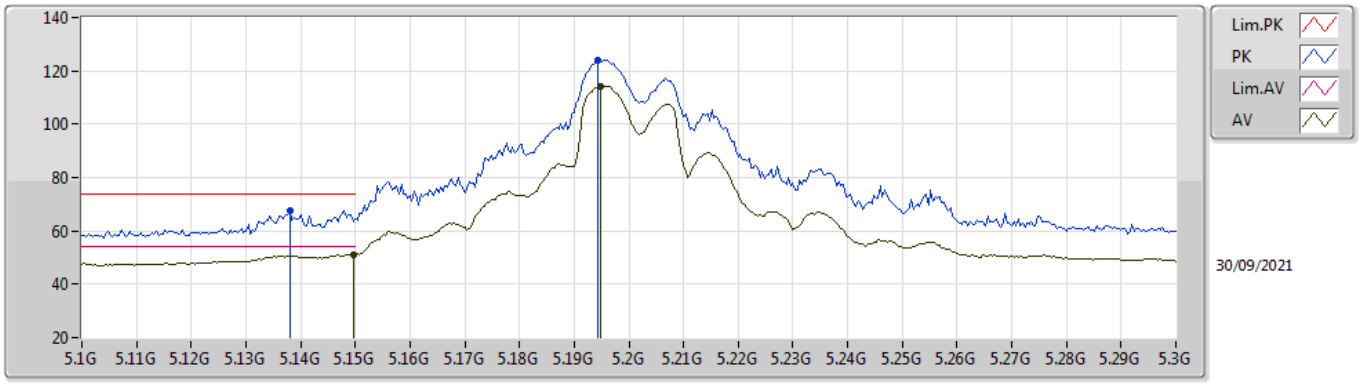


EUT Z_4TX
Setting 101
02-B-S-8

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	15.54136G	51.98	74.00	-22.02	38.36	3	Horizontal	126	2.20	-	37.78	9.04	33.20
AV	15.54246G	38.65	54.00	-15.35	25.04	3	Horizontal	126	2.20	-	37.77	9.04	33.20

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TnomVnom

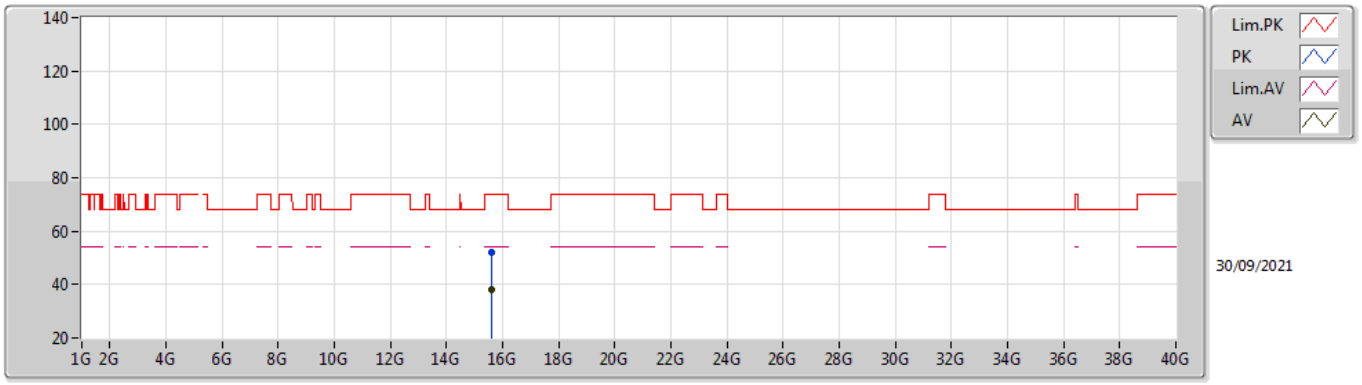


EUT Z_4TX
Setting 108
02-B-S-8-10

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	5.138G	67.45	74.00	-6.55	61.12	3	Vertical	88	1.80	-	33.50	4.98	32.15
AV	5.1496G	50.96	54.00	-3.04	44.61	3	Vertical	88	1.80	-	33.50	5.00	32.15
PK	5.1944G	123.79	Inf	-Inf	117.35	3	Vertical	88	1.80	-	33.50	5.09	32.15
AV	5.1948G	114.31	Inf	-Inf	107.87	3	Vertical	88	1.80	-	33.50	5.09	32.15

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TnomVnom

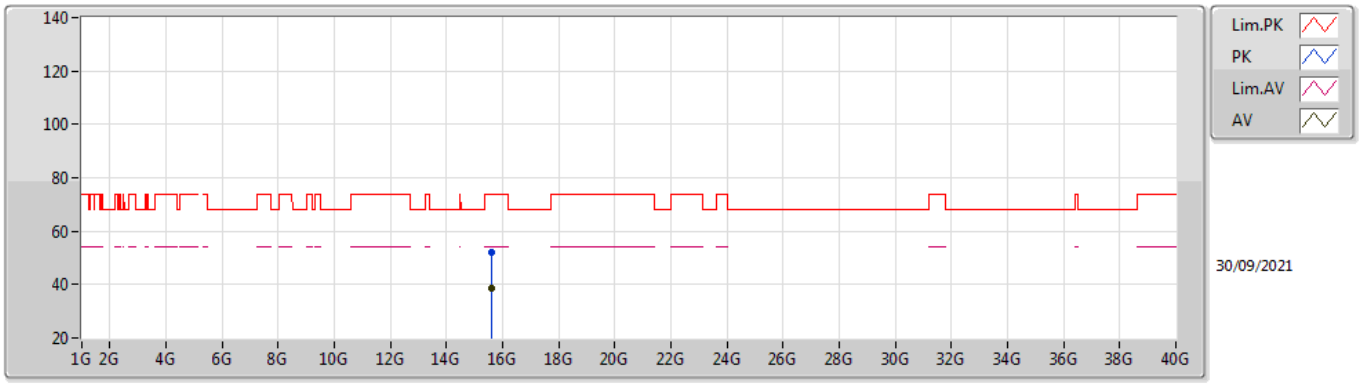


EUT Z_4TX
Setting 108
02-B-S-8

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	15.59908G	52.16	74.00	-21.84	38.77	3	Vertical	261	2.96	-	37.60	9.06	33.27
AV	15.59794G	38.34	54.00	-15.66	24.94	3	Vertical	261	2.96	-	37.61	9.06	33.27

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TnomVnom

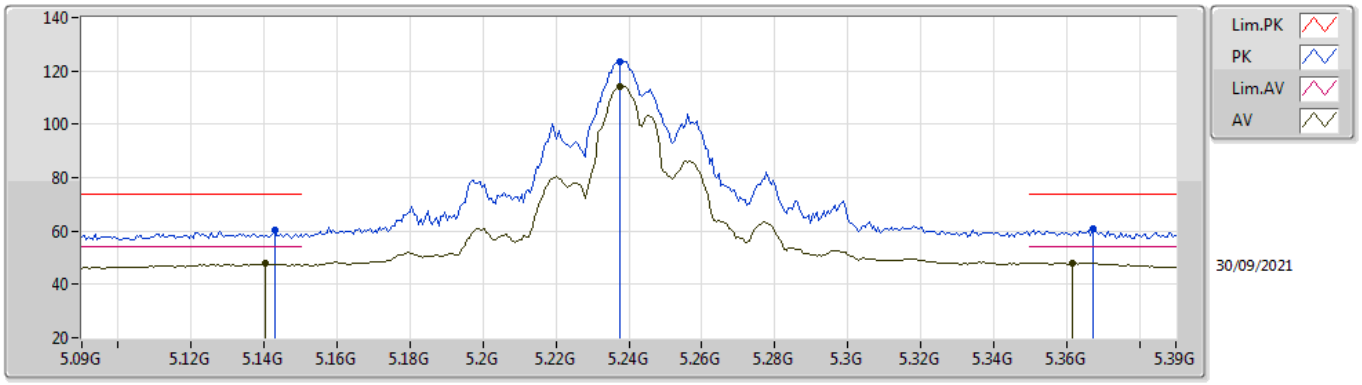


EUT Z_4TX
Setting 108
02-B-S-8

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	15.60118G	52.31	74.00	-21.69	38.92	3	Horizontal	221	1.28	-	37.60	9.06	33.27
AV	15.59734G	38.56	54.00	-15.44	25.15	3	Horizontal	221	1.28	-	37.61	9.06	33.26

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TnomVnom

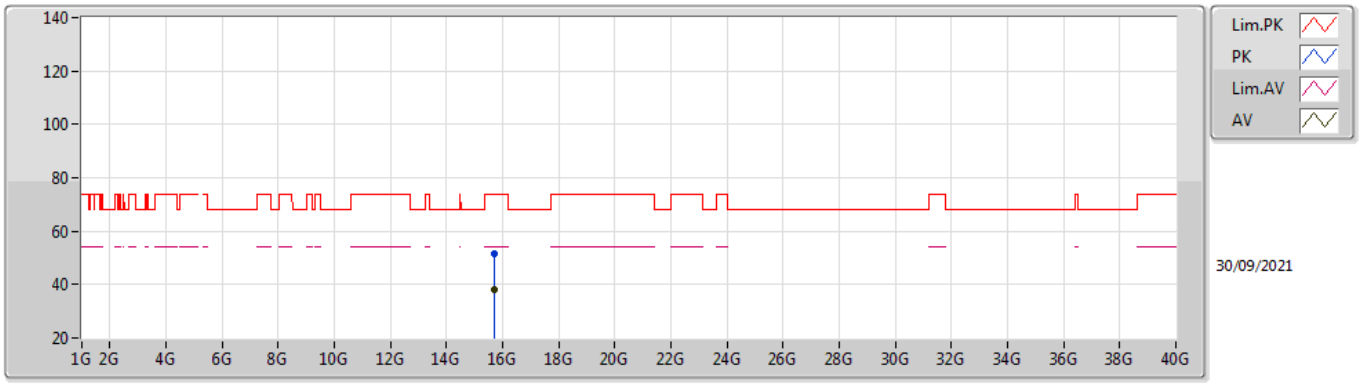


EUT Z_4TX
Setting 108
02-B-S-8-10

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	5.1428G	60.19	74.00	-13.81	53.85	3	Vertical	42	1.80	-	33.50	4.99	32.15
AV	5.1404G	47.68	54.00	-6.32	41.35	3	Vertical	42	1.80	-	33.50	4.98	32.15
PK	5.2376G	123.53	Inf	-Inf	117.02	3	Vertical	42	1.80	-	33.58	5.08	32.15
AV	5.2376G	114.39	Inf	-Inf	107.88	3	Vertical	42	1.80	-	33.58	5.08	32.15
PK	5.3672G	60.78	74.00	-13.22	54.17	3	Vertical	42	1.80	-	33.73	5.02	32.14
AV	5.3618G	48.09	54.00	-5.91	41.49	3	Vertical	42	1.80	-	33.72	5.02	32.14

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TnomVnom

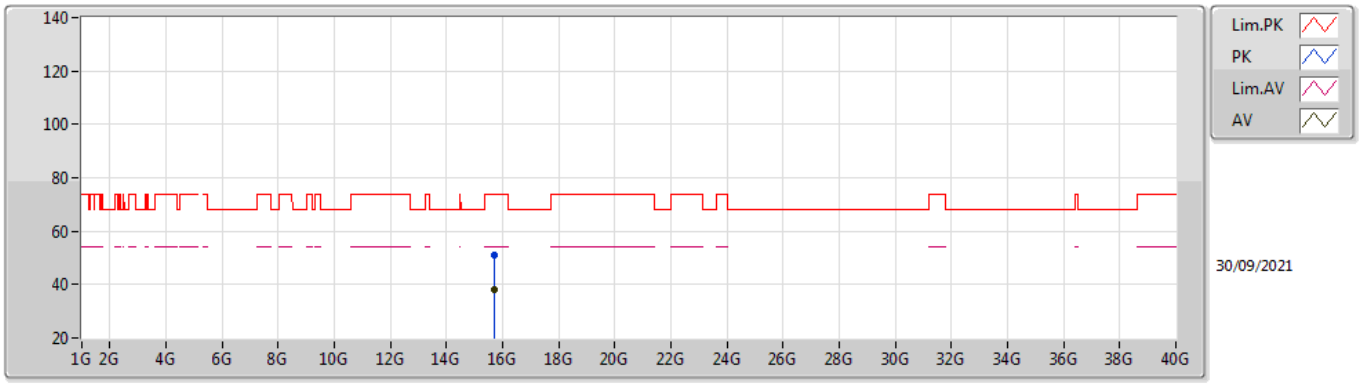


EUT Z_4TX
Setting 108
02-B-S-8

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	15.71606G	51.33	74.00	-22.67	38.23	3	Vertical	333	2.96	-	37.40	9.10	33.40
AV	15.7216G	38.20	54.00	-15.80	25.11	3	Vertical	333	2.96	-	37.40	9.10	33.41

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TnomVnom

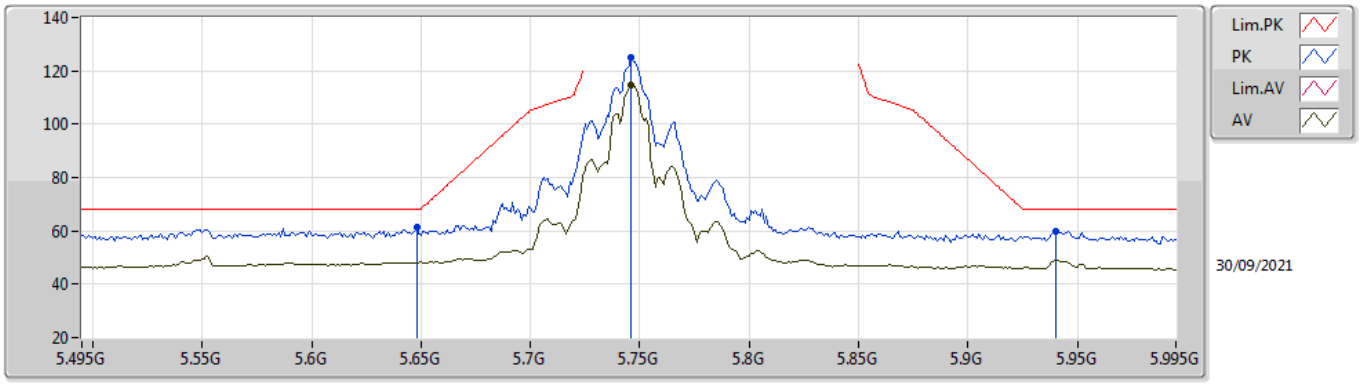


EUT Z_4TX
Setting 108
02-B-S-8

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	15.72442G	51.08	74.00	-22.92	37.99	3	Horizontal	123	1.98	-	37.40	9.10	33.41
AV	15.72042G	38.32	54.00	-15.68	25.23	3	Horizontal	123	1.98	-	37.40	9.10	33.41

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TnomVnom

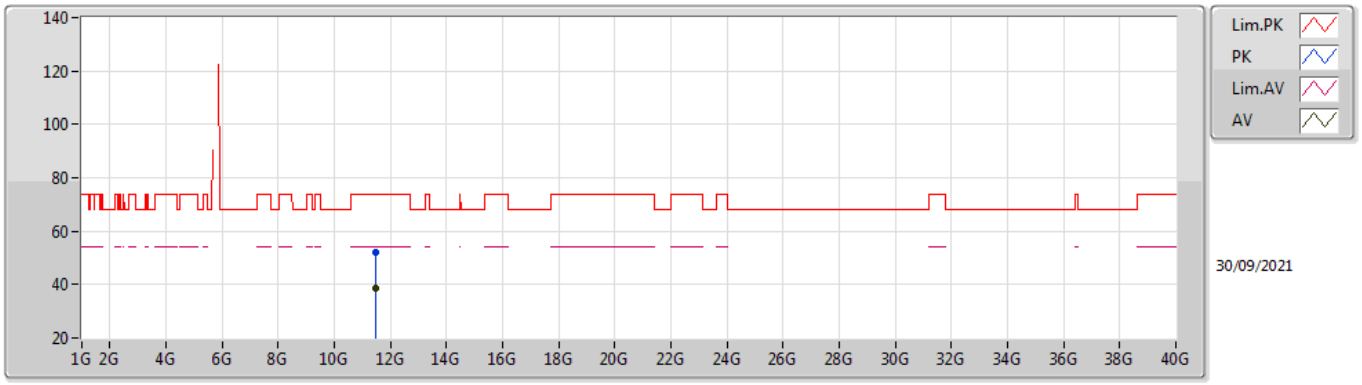


EUT Z_4TX
Setting 108
02-B-S-8-10

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	61.25	68.20	-6.95	54.44	3	Vertical	294	1.77	-	33.80	5.15	32.14
PK	5.746G	124.83	Inf	-Inf	118.13	3	Vertical	294	1.77	-	33.79	5.05	32.14
AV	5.746G	114.77	Inf	-Inf	108.07	3	Vertical	294	1.77	-	33.79	5.05	32.14
PK	5.94G	60.08	68.20	-8.12	52.74	3	Vertical	294	1.77	-	34.08	5.42	32.16

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TnomVnom

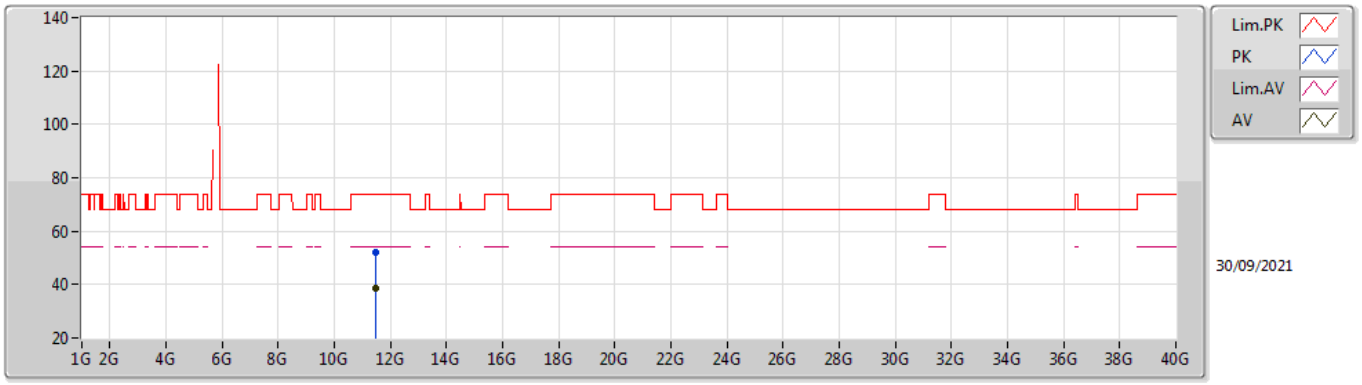


EUT Z_4TX
Setting 108
02-B-S-8

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	11.4924G	52.09	74.00	-21.91	38.71	3	Vertical	299	2.89	-	38.98	7.62	33.22
AV	11.48506G	38.56	54.00	-15.44	25.19	3	Vertical	299	2.89	-	38.97	7.62	33.22

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TnomVnom

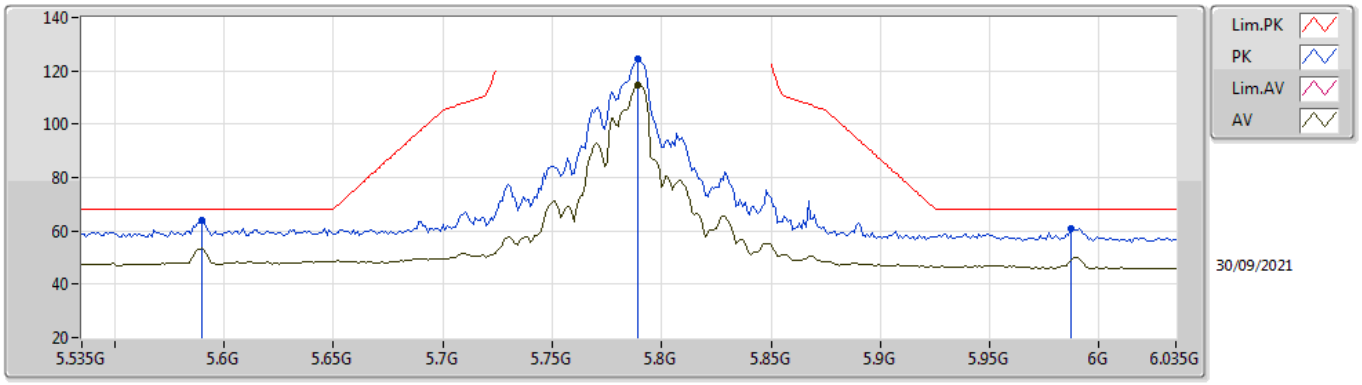


EUT Z_4TX
Setting 108
02-B-S-8

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	11.49004G	52.14	74.00	-21.86	38.76	3	Horizontal	20	1.07	-	38.98	7.62	33.22
AV	11.49262G	38.55	54.00	-15.45	25.16	3	Horizontal	20	1.07	-	38.99	7.62	33.22

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TnomVnom

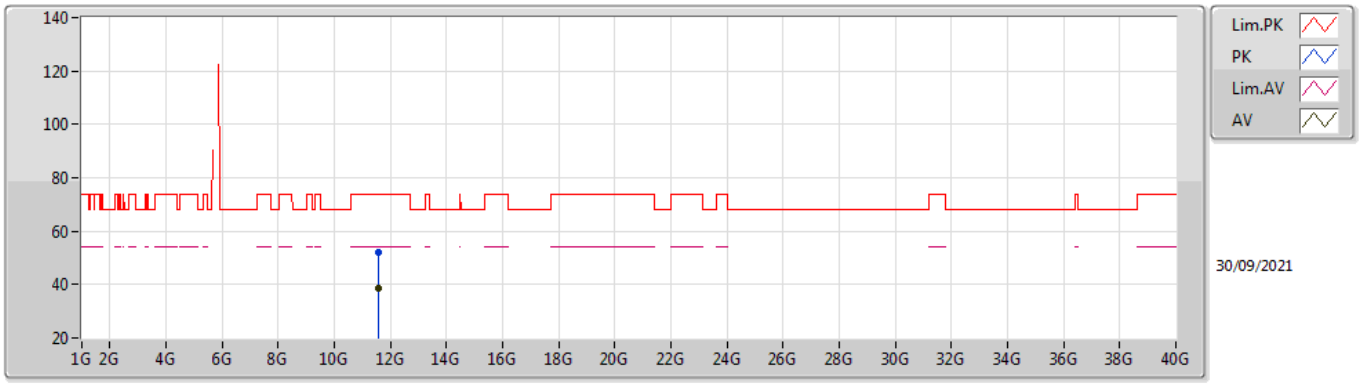


EUT Z_4TX
Setting 108
02-B-S-8-10

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	5.59G	63.76	68.20	-4.44	56.81	3	Vertical	115	1.67	-	33.90	5.19	32.14
PK	5.789G	124.34	Inf	-Inf	117.76	3	Vertical	115	1.67	-	33.72	5.01	32.15
AV	5.789G	114.64	Inf	-Inf	108.06	3	Vertical	115	1.67	-	33.72	5.01	32.15
PK	5.987G	60.77	68.20	-7.43	53.27	3	Vertical	115	1.67	-	34.10	5.56	32.16

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TnomVnom

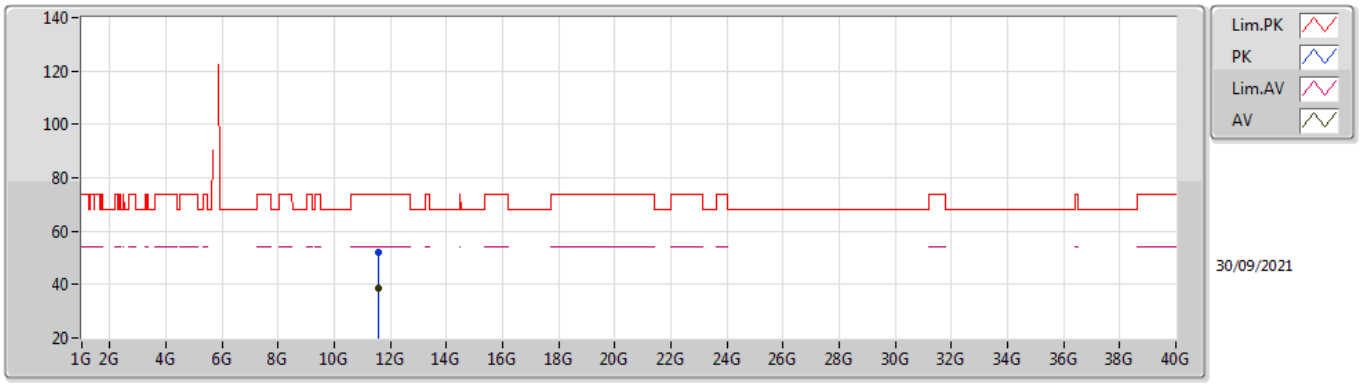


EUT Z_4TX
Setting 108
02-B-S-8

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	11.57356G	52.15	74.00	-21.85	38.52	3	Vertical	180	2.42	-	39.22	7.65	33.24
AV	11.5742G	38.64	54.00	-15.36	25.01	3	Vertical	180	2.42	-	39.22	7.65	33.24

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TnomVnom

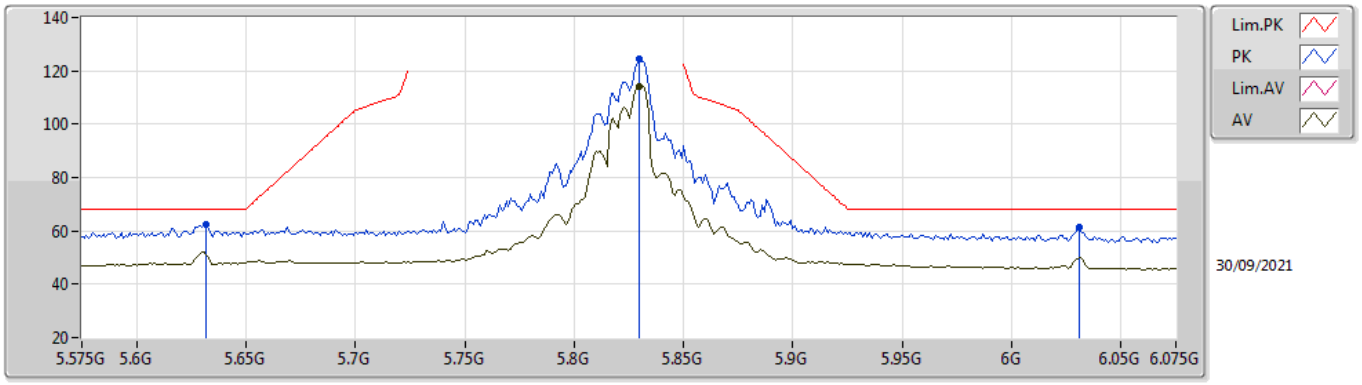


EUT Z_4TX
Setting 108
02-B-S-8

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	11.56626G	51.89	74.00	-22.11	38.28	3	Horizontal	279	2.26	-	39.20	7.65	33.24
AV	11.5722G	38.69	54.00	-15.31	25.06	3	Horizontal	279	2.26	-	39.22	7.65	33.24

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TnomVnom

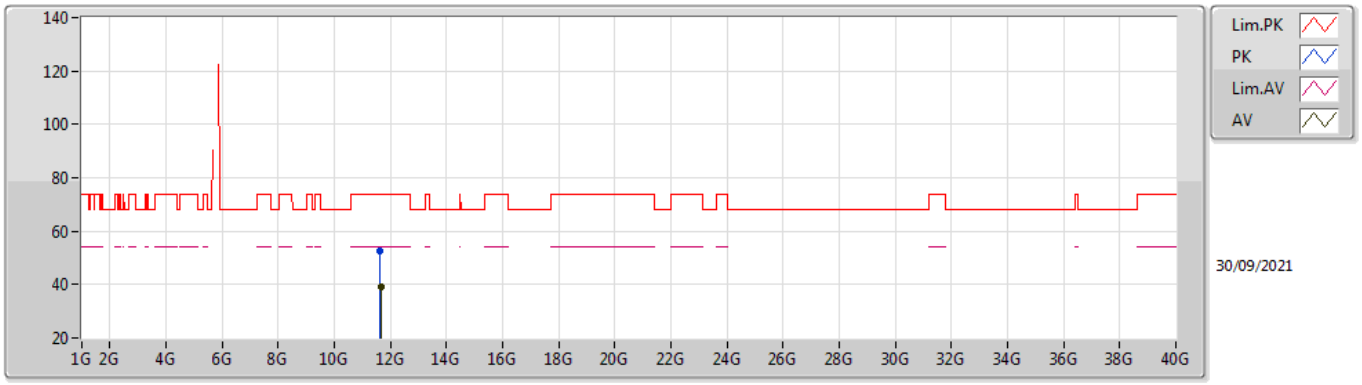


EUT Z_4TX
Setting 108
02-B-S-8-10

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	62.35	68.20	-5.85	55.48	3	Vertical	117	1.79	-	33.84	5.17	32.14
PK	5.83G	124.42	Inf	-Inf	117.72	3	Vertical	117	1.79	-	33.76	5.09	32.15
AV	5.83G	114.32	Inf	-Inf	107.62	3	Vertical	117	1.79	-	33.76	5.09	32.15
PK	6.031G	61.13	68.20	-7.07	53.52	3	Vertical	117	1.79	-	34.22	5.55	32.16

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TnomVnom

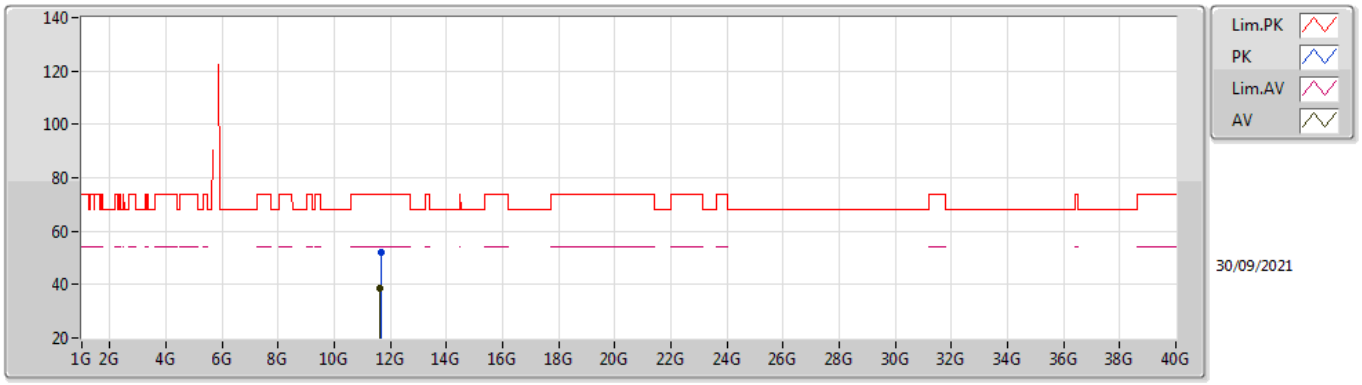


EUT Z_4TX
Setting 108
02-B-S-8

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	11.64516G	52.40	74.00	-21.60	38.63	3	Vertical	35	1.07	-	39.35	7.68	33.26
AV	11.64904G	38.93	54.00	-15.07	25.16	3	Vertical	35	1.07	-	39.35	7.68	33.26

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TnomVnom



EUT Z_4TX
Setting 108
02-B-S-8

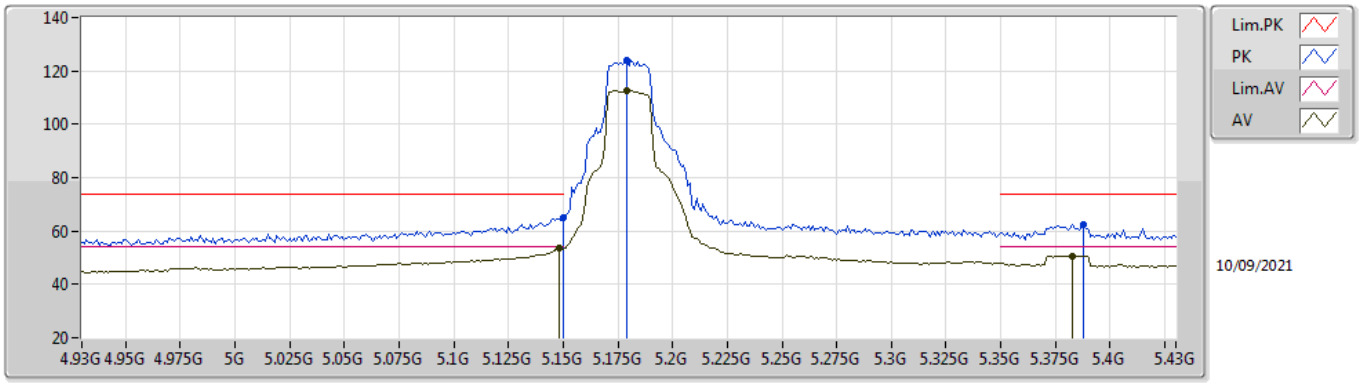
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.64956G	52.18	74.00	-21.82	38.41	3	Horizontal	314	2.74	-	39.35	7.68	33.26
AV	11.64628G	38.86	54.00	-15.14	25.09	3	Horizontal	314	2.74	-	39.35	7.68	33.26

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	Pass	AV	5.148G	53.78	54.00	-0.22	3	Vertical	182.3	1.80	-

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5180MHz_TnomVnom

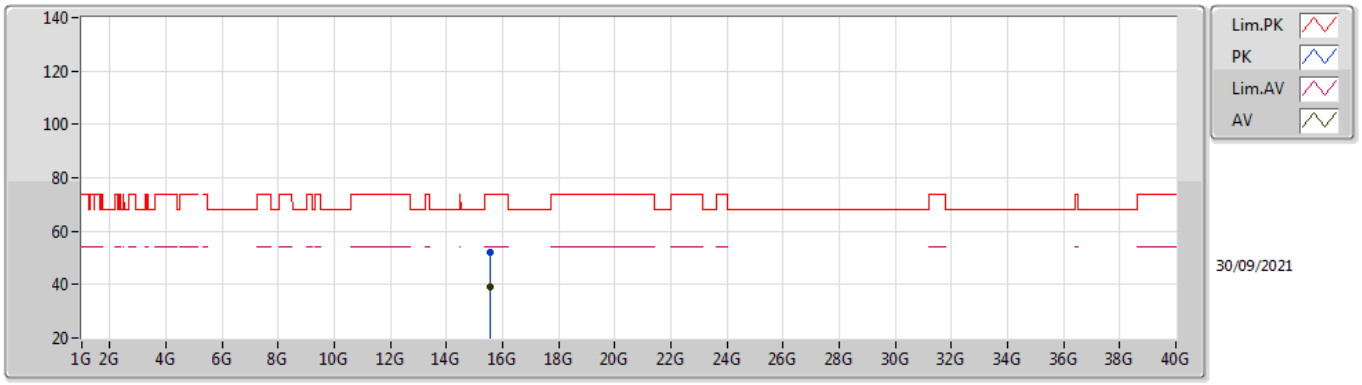


EUT Z_4TX
Setting 99
06-F-S-5-10

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	5.15G	64.79	74.00	-9.21	60.07	3	Vertical	182.3	1.80	-	31.70	5.00	31.98
AV	5.148G	53.78	54.00	-0.22	49.05	3	Vertical	182.3	1.80	-	31.71	5.00	31.98
PK	5.179G	124.15	Inf	-Inf	119.61	3	Vertical	182.3	1.80	-	31.53	5.00	31.99
AV	5.179G	112.56	Inf	-Inf	108.02	3	Vertical	182.3	1.80	-	31.53	5.00	31.99
PK	5.388G	62.45	74.00	-11.55	58.20	3	Vertical	182.3	1.80	-	31.33	5.00	32.08
AV	5.383G	50.67	54.00	-3.33	46.45	3	Vertical	182.3	1.80	-	31.30	5.00	32.08

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5180MHz_TnomVnom

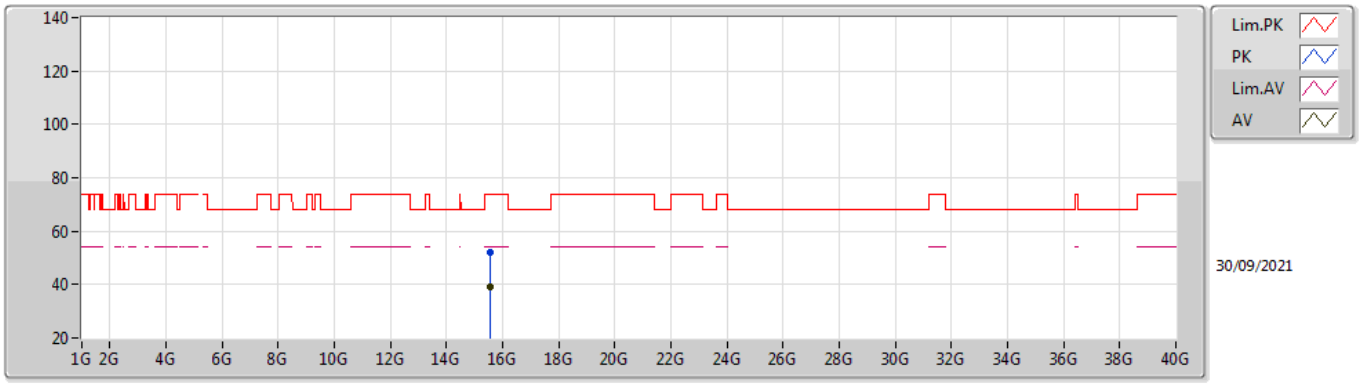


EUT Z_4TX
Setting 99
02-B-S-8

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	15.54402G	52.31	74.00	-21.69	38.70	3	Vertical	298	3.00	-	37.77	9.04	33.20
AV	15.54476G	39.00	54.00	-15.00	25.39	3	Vertical	298	3.00	-	37.77	9.04	33.20

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5180MHz_TnomVnom

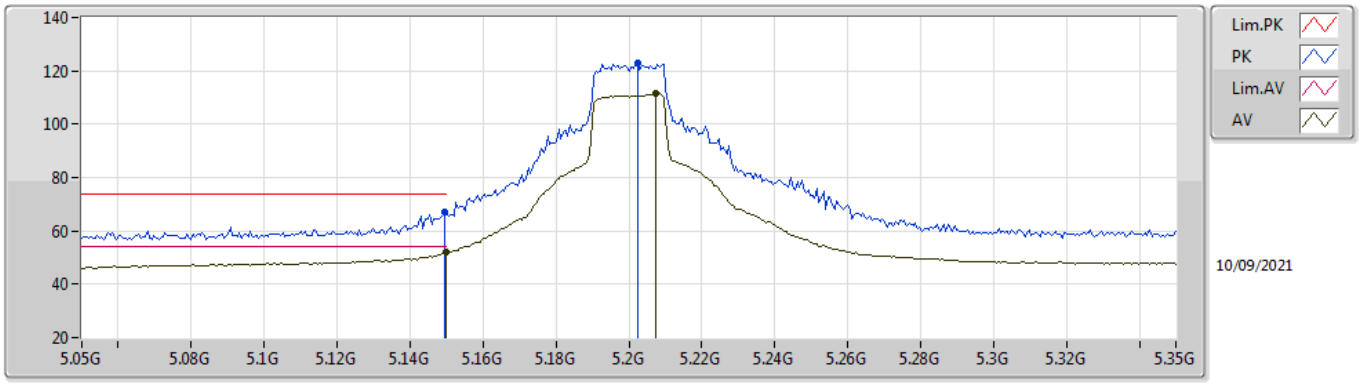


EUT Z_4TX
Setting 99
02-B-S-8

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	15.53944G	52.14	74.00	-21.86	38.52	3	Horizontal	63	2.56	-	37.78	9.04	33.20
AV	15.537G	39.11	54.00	-14.89	25.47	3	Horizontal	63	2.56	-	37.79	9.04	33.19

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5200MHz_TnomVnom

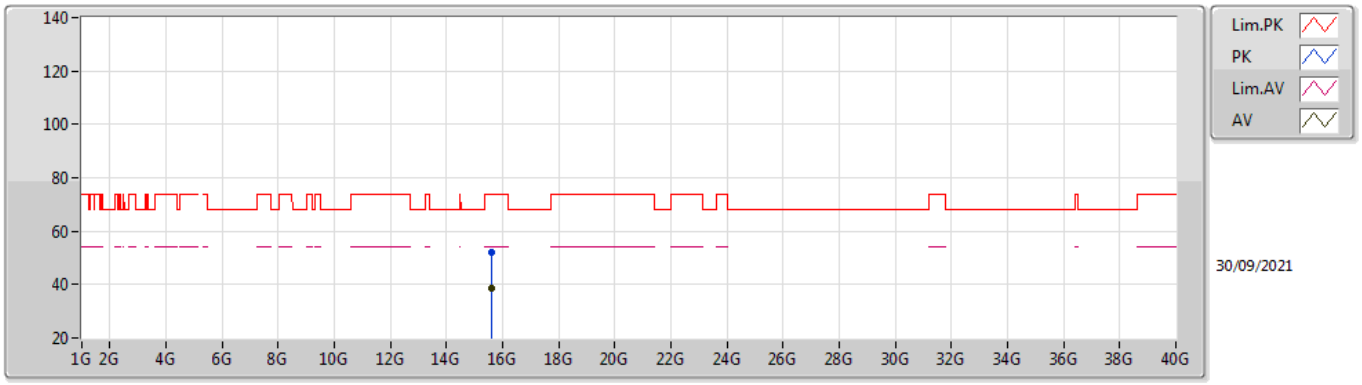


EUT Z_4TX
Setting 100
06-F-S-5-10

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	5.1496G	67.10	74.00	-6.90	62.38	3	Vertical	173.9	1.80	-	31.70	5.00	31.98
AV	5.15G	51.91	54.00	-2.09	47.19	3	Vertical	173.9	1.80	-	31.70	5.00	31.98
PK	5.2024G	123.10	Inf	-Inf	118.71	3	Vertical	173.9	1.80	-	31.39	5.00	32.00
AV	5.2072G	111.42	Inf	-Inf	107.06	3	Vertical	173.9	1.80	-	31.36	5.00	32.00

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5200MHz_TnomVnom

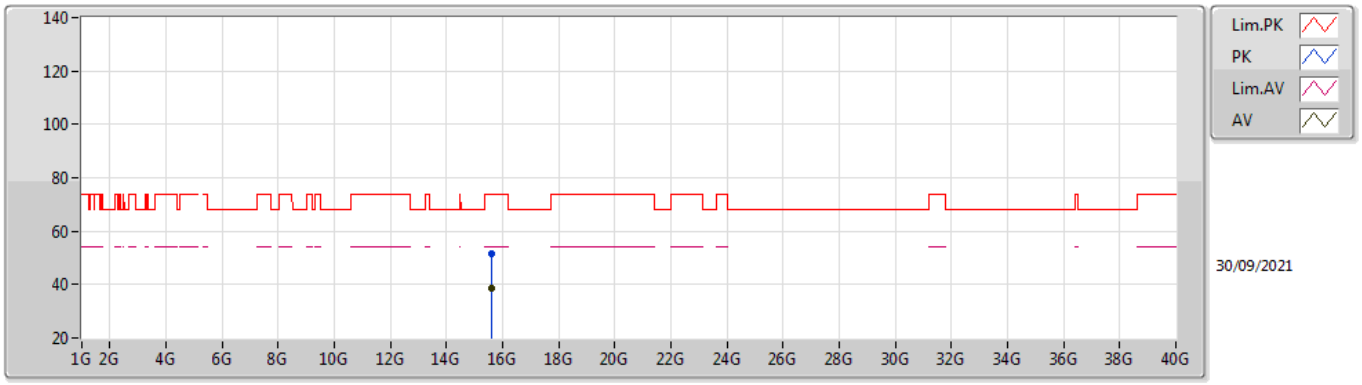


EUT Z_4TX
Setting 100
02-B-S-8

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	15.60454G	52.01	74.00	-21.99	38.63	3	Vertical	74	2.09	-	37.59	9.06	33.27
AV	15.60092G	38.65	54.00	-15.35	25.26	3	Vertical	74	2.09	-	37.60	9.06	33.27

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5200MHz_TnomVnom

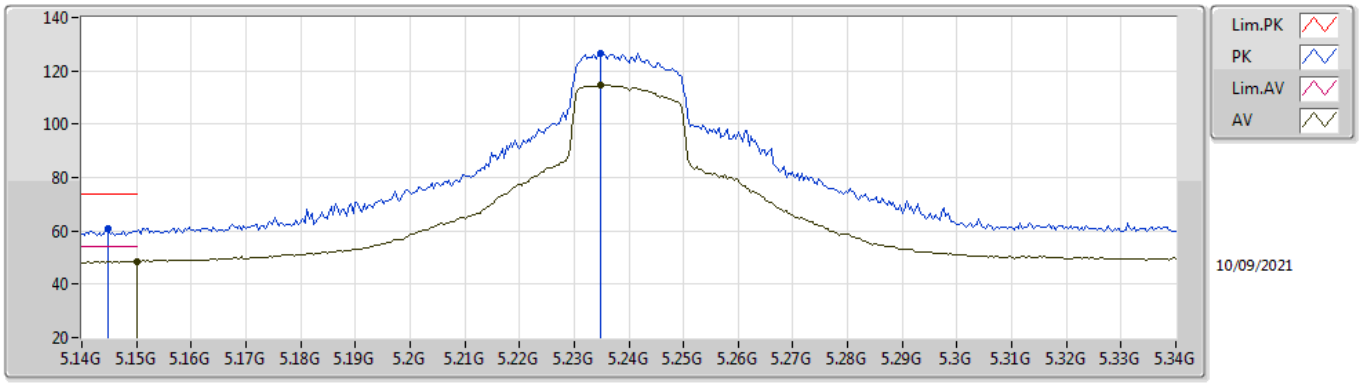


EUT Z_4TX
Setting 100
02-B-S-8

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	15.59948G	51.68	74.00	-22.32	38.29	3	Horizontal	73	2.73	-	37.60	9.06	33.27
AV	15.6029G	38.68	54.00	-15.32	25.30	3	Horizontal	73	2.73	-	37.59	9.06	33.27

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5240MHz_TnomVnom

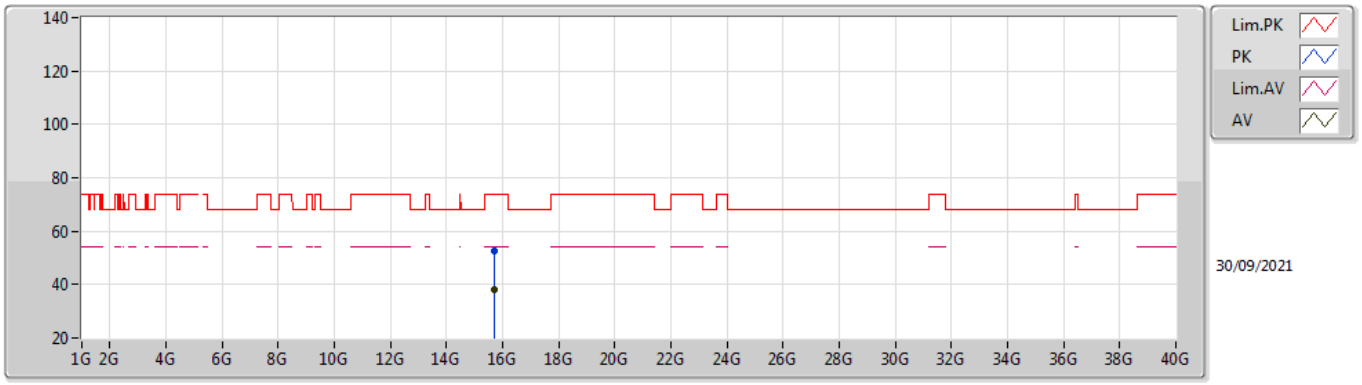


EUT Z_4TX
Setting 100
06-F-S-5-10

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	5.1448G	60.82	74.00	-13.18	56.06	3	Vertical	270	1.69	-	31.73	5.00	31.97
AV	5.15G	48.58	54.00	-5.42	43.86	3	Vertical	270	1.69	-	31.70	5.00	31.98
PK	5.2348G	126.50	Inf	-Inf	122.32	3	Vertical	270	1.69	-	31.19	5.00	32.01
AV	5.2348G	114.65	Inf	-Inf	110.47	3	Vertical	270	1.69	-	31.19	5.00	32.01

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5240MHz_TnomVnom

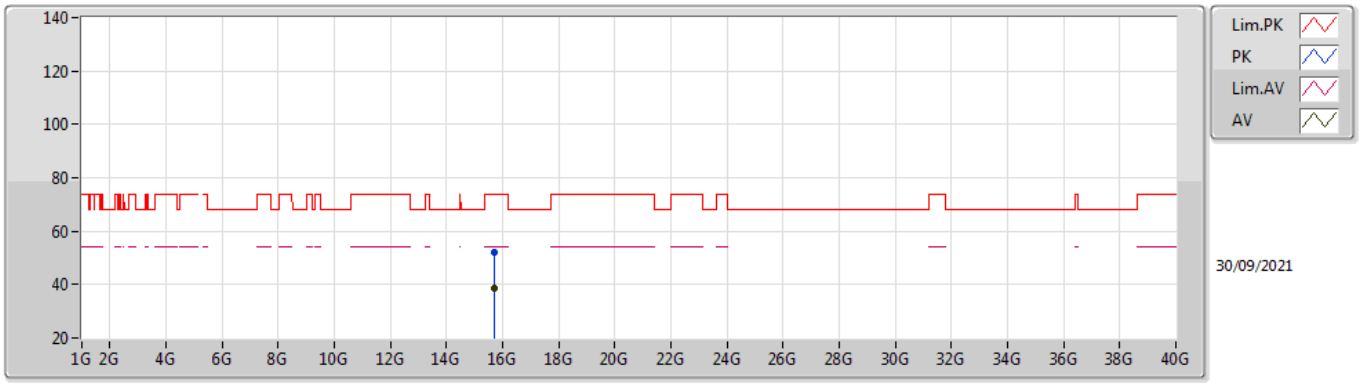


EUT Z_4TX
Setting 100
02-B-S-8

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	15.7202G	52.35	74.00	-21.65	39.26	3	Vertical	196	2.63	-	37.40	9.10	33.41
AV	15.72322G	38.34	54.00	-15.66	25.25	3	Vertical	196	2.63	-	37.40	9.10	33.41

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5240MHz_TnomVnom

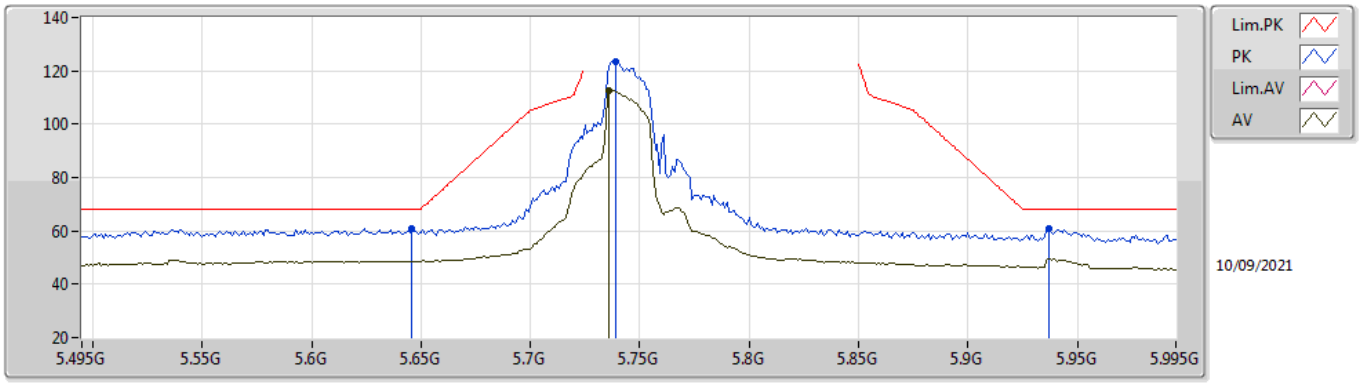


EUT Z_4TX
Setting 100
02-B-S-8

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	15.72136G	51.82	74.00	-22.18	38.73	3	Horizontal	212	2.49	-	37.40	9.10	33.41
AV	15.71968G	38.42	54.00	-15.58	25.33	3	Horizontal	212	2.49	-	37.40	9.10	33.41

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5745MHz_TnomVnom

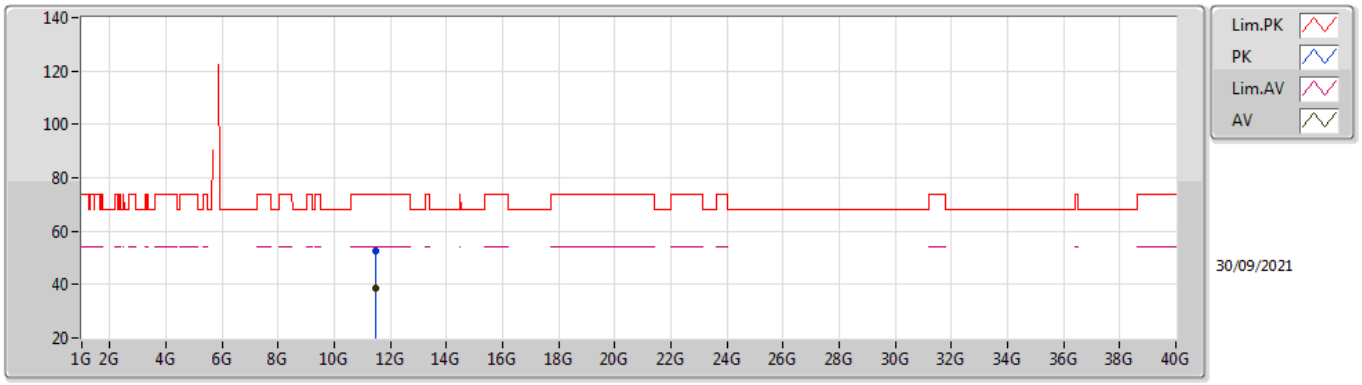


EUT Z_4TX
Setting 100
06-F-S-5-10

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	5.646G	60.81	68.20	-7.39	56.21	3	Vertical	173	1.58	-	31.60	5.22	32.22
PK	5.739G	123.54	Inf	-Inf	118.58	3	Vertical	173	1.58	-	31.96	5.27	32.27
AV	5.736G	112.46	Inf	-Inf	107.52	3	Vertical	173	1.58	-	31.94	5.27	32.27
PK	5.937G	60.62	68.20	-7.58	55.40	3	Vertical	173	1.58	-	32.17	5.44	32.39

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5745MHz_TnomVnom

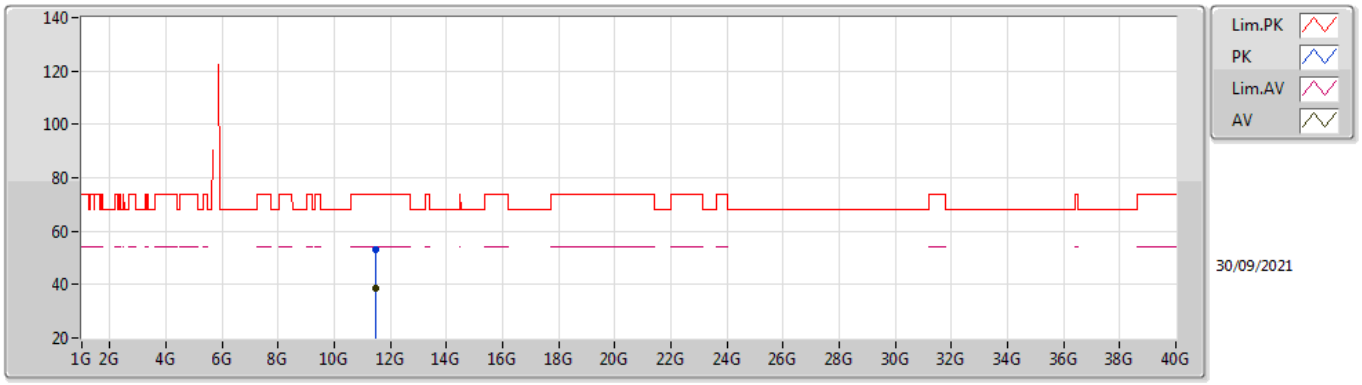


EUT Z_4TX
Setting 100
02-B-S-8

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	11.48584G	52.50	74.00	-21.50	39.13	3	Vertical	353	1.01	-	38.97	7.62	33.22
AV	11.49118G	38.53	54.00	-15.47	25.15	3	Vertical	353	1.01	-	38.98	7.62	33.22

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5745MHz_TnomVnom

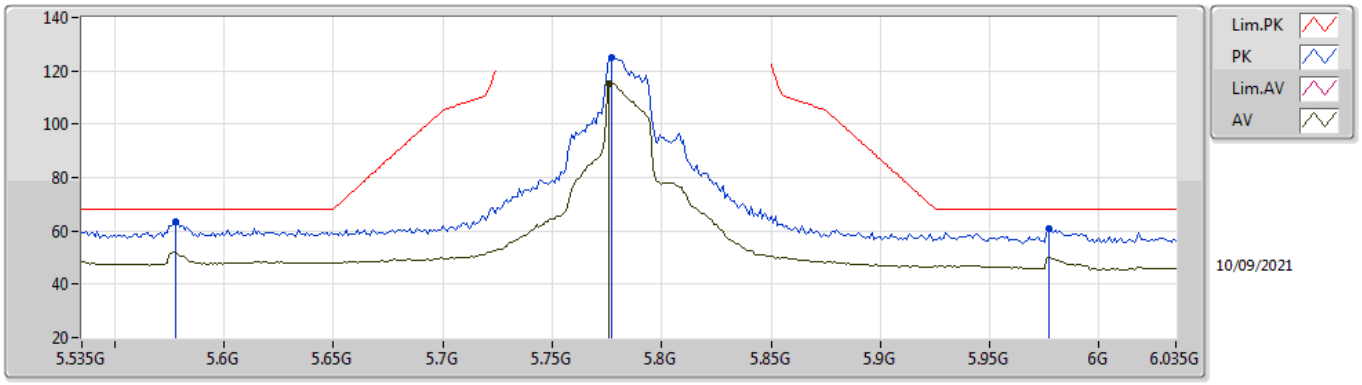


EUT Z_4TX
Setting 100
02-B-S-8

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	11.49046G	52.93	74.00	-21.07	39.55	3	Horizontal	129	2.11	-	38.98	7.62	33.22
AV	11.48636G	38.48	54.00	-15.52	25.11	3	Horizontal	129	2.11	-	38.97	7.62	33.22

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5785MHz_TnomVnom

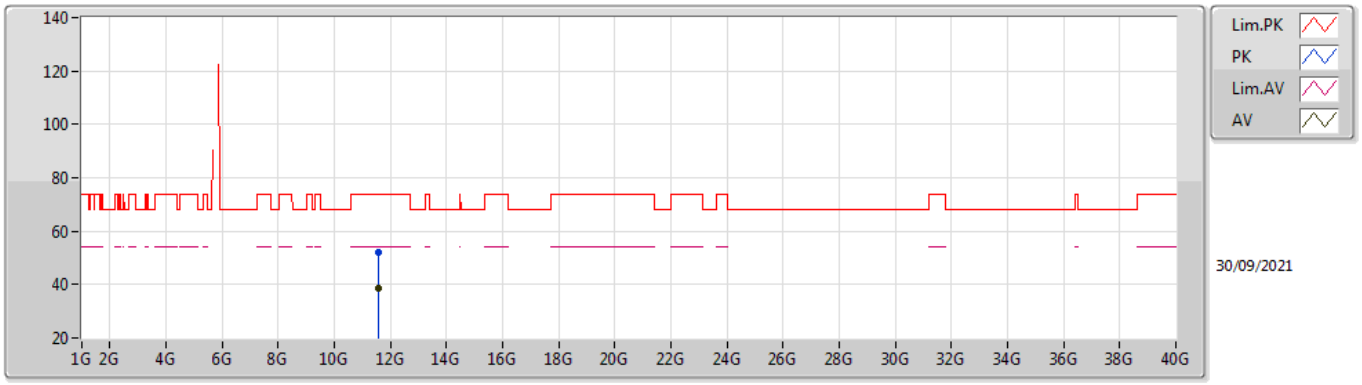


EUT Z_4TX
Setting 100
06-F-S-5-10

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	5.578G	63.50	68.20	-4.70	58.94	3	Vertical	174	1.79	-	31.56	5.18	32.18
PK	5.777G	125.15	Inf	-Inf	120.16	3	Vertical	174	1.79	-	32.00	5.29	32.30
AV	5.776G	115.00	Inf	-Inf	110.01	3	Vertical	174	1.79	-	32.00	5.29	32.30
PK	5.977G	60.65	68.20	-7.55	55.39	3	Vertical	174	1.79	-	32.20	5.48	32.42

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5785MHz_TnomVnom

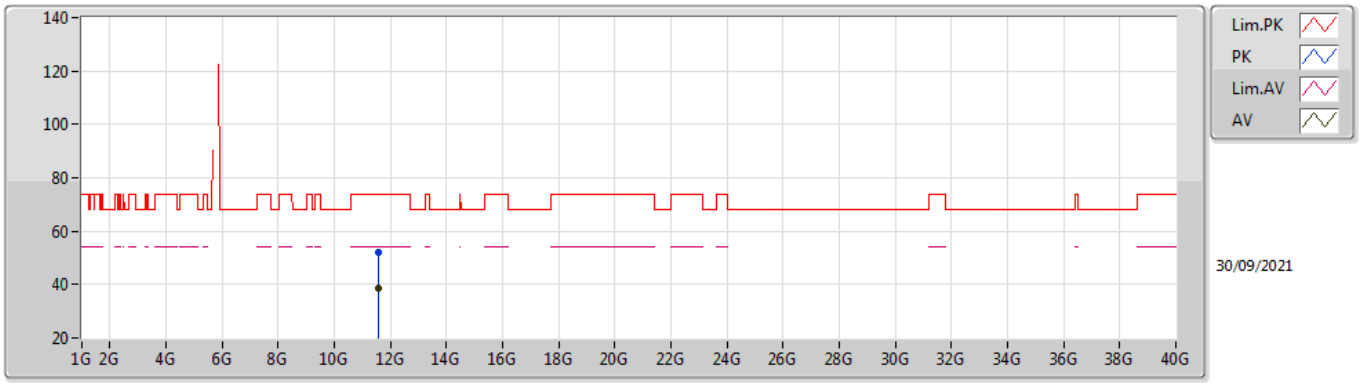


EUT Z_4TX
Setting 100
02-B-S-8

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	11.56894G	51.91	74.00	-22.09	38.29	3	Vertical	259	1.50	-	39.21	7.65	33.24
AV	11.56684G	38.79	54.00	-15.21	25.18	3	Vertical	259	1.50	-	39.20	7.65	33.24

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5785MHz_TnomVnom

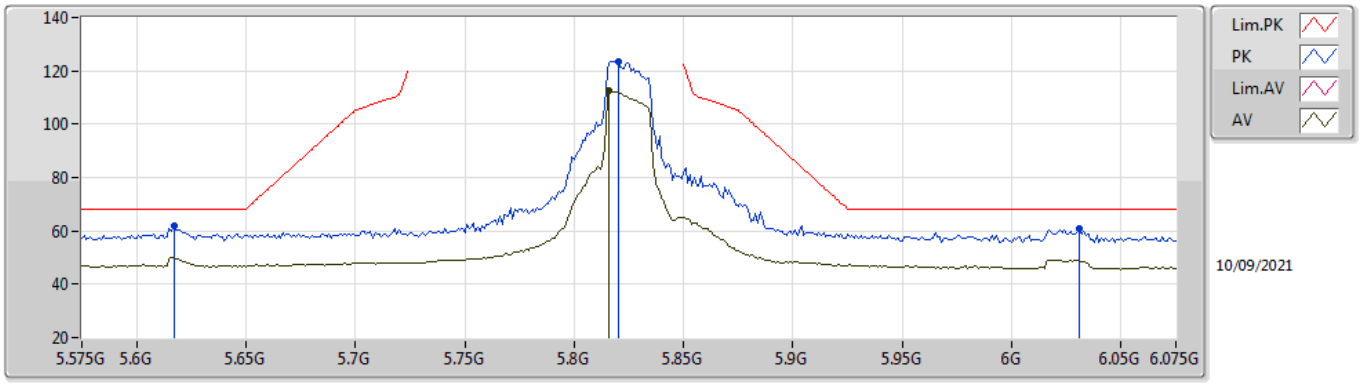


EUT Z_4TX
Setting 100
02-B-S-8

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	11.57164G	52.04	74.00	-21.96	38.42	3	Horizontal	187	2.92	-	39.21	7.65	33.24
AV	11.5711G	38.63	54.00	-15.37	25.01	3	Horizontal	187	2.92	-	39.21	7.65	33.24

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5825MHz_TnomVnom

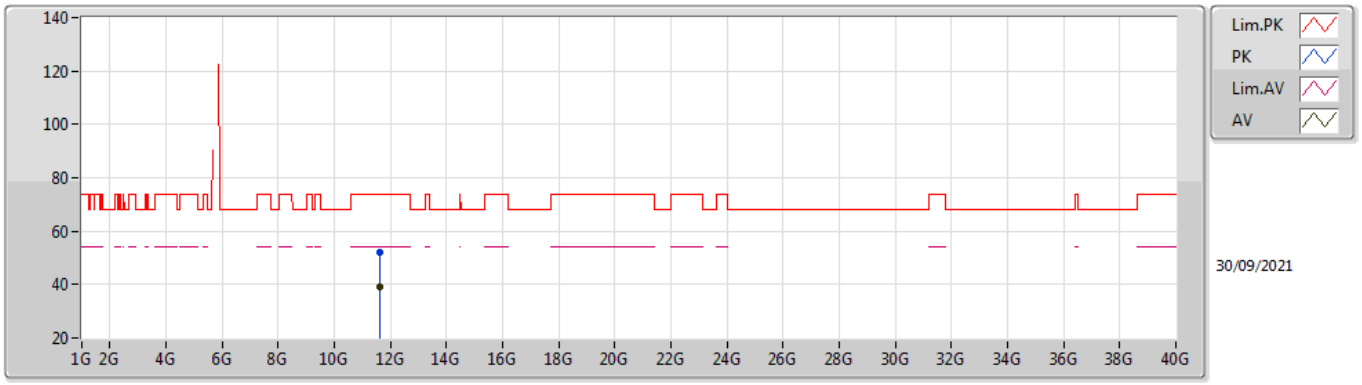


EUT Z_4TX
Setting 100
06-F-S-5-10

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	5.617G	62.06	68.20	-6.14	57.45	3	Vertical	194	2.20	-	31.60	5.21	32.20
PK	5.82G	123.51	Inf	-Inf	118.51	3	Vertical	194	2.20	-	32.00	5.32	32.32
AV	5.816G	112.39	Inf	-Inf	107.39	3	Vertical	194	2.20	-	32.00	5.32	32.32
PK	6.031G	60.84	68.20	-7.36	55.39	3	Vertical	194	2.20	-	32.39	5.50	32.44

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5825MHz_TnomVnom

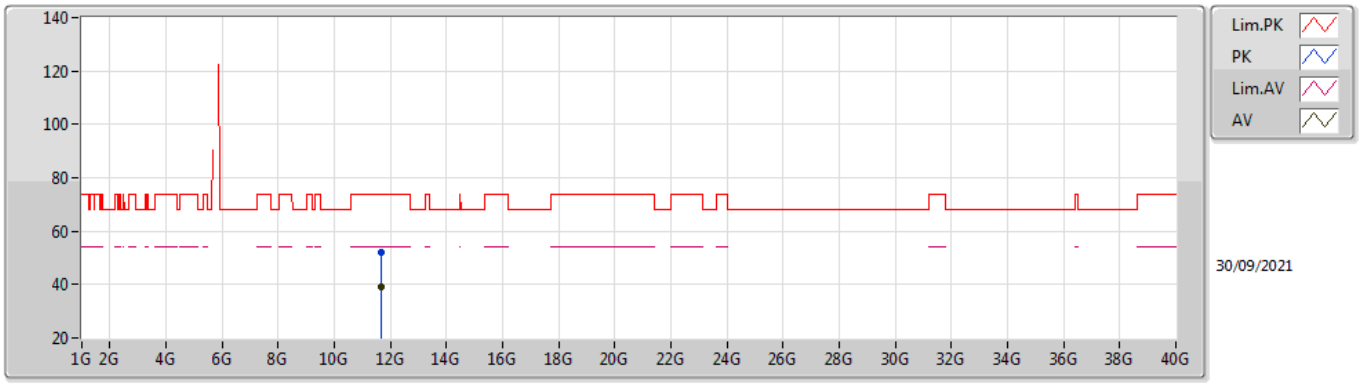


EUT Z_4TX
Setting 100
02-B-S-8

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	11.6455G	52.26	74.00	-21.74	38.49	3	Vertical	19	2.63	-	39.35	7.68	33.26
AV	11.6474G	38.90	54.00	-15.10	25.13	3	Vertical	19	2.63	-	39.35	7.68	33.26

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

5825MHz_TnomVnom

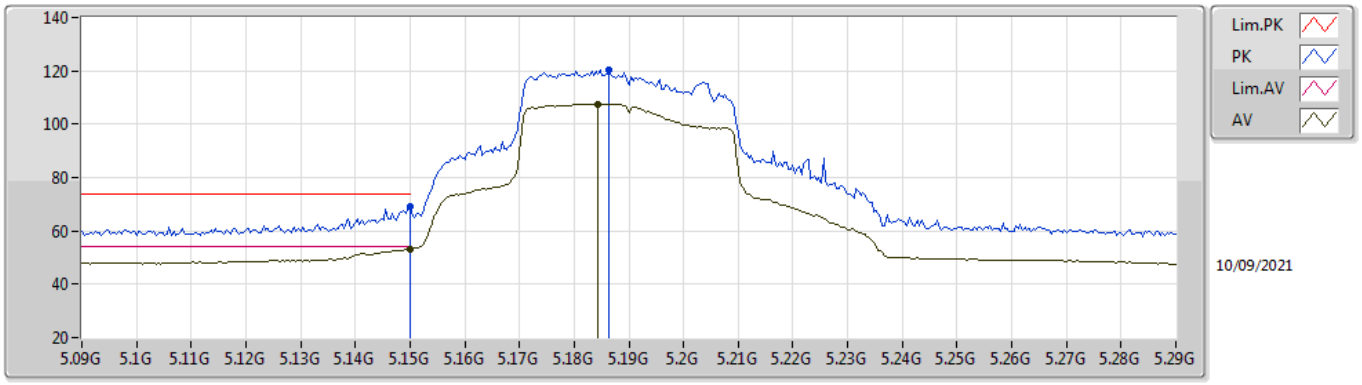


EUT Z_4TX
Setting 100
02-B-S-8

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	11.65106G	51.83	74.00	-22.17	38.06	3	Horizontal	89	2.48	-	39.35	7.68	33.26
AV	11.65486G	38.90	54.00	-15.10	25.13	3	Horizontal	89	2.48	-	39.35	7.68	33.26

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5190MHz_TnomVnom

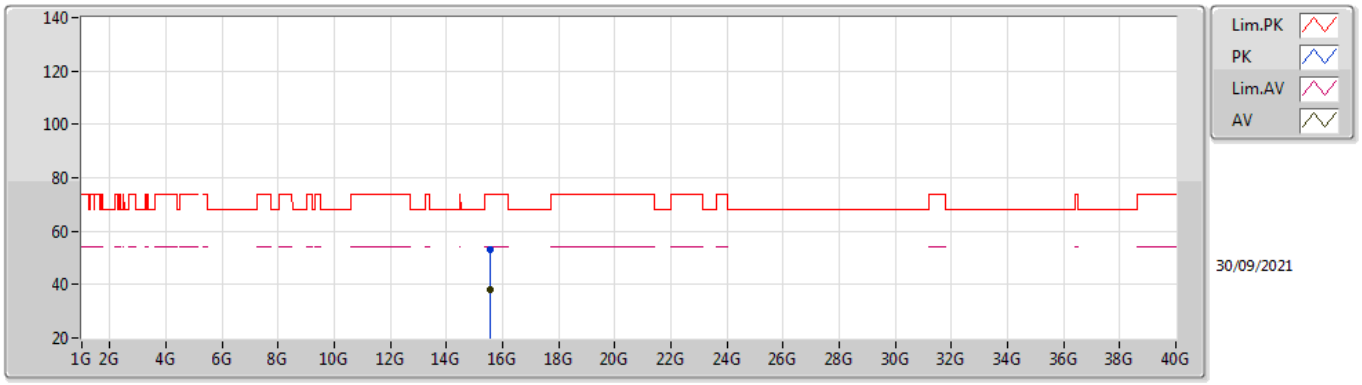


EUT Z_4TX
Setting 90
06-F-S-5-10

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	5.15G	69.08	74.00	-4.92	64.36	3	Vertical	349.1	1.10	-	31.70	5.00	31.98
AV	5.15G	53.23	54.00	-0.77	48.51	3	Vertical	349.1	1.10	-	31.70	5.00	31.98
PK	5.1864G	120.50	Inf	-Inf	116.01	3	Vertical	349.1	1.10	-	31.48	5.00	31.99
AV	5.1844G	107.62	Inf	-Inf	103.12	3	Vertical	349.1	1.10	-	31.49	5.00	31.99

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5190MHz_TnomVnom

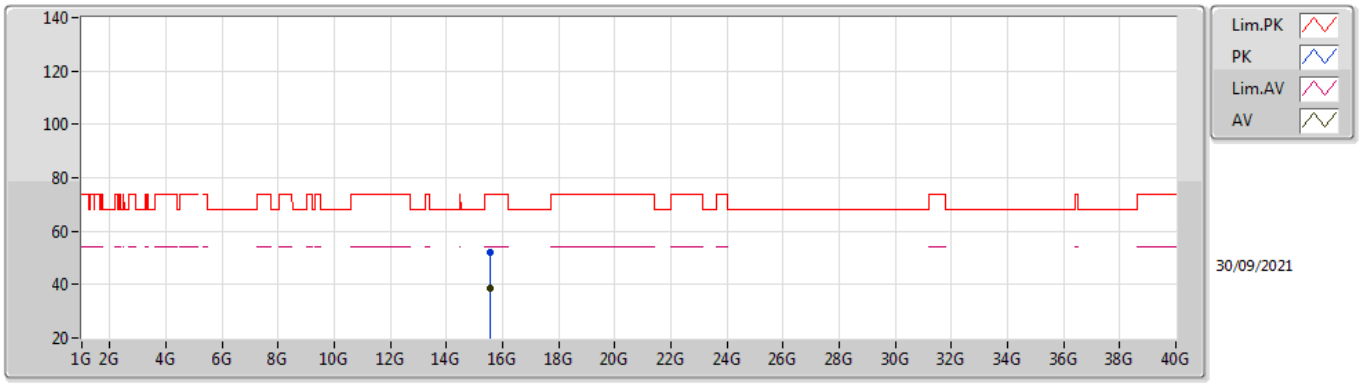


EUT Z_4TX
Setting 90
02-B-S-8

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	15.56928G	53.22	74.00	-20.78	39.71	3	Vertical	326	1.96	-	37.69	9.05	33.23
AV	15.57186G	38.35	54.00	-15.65	24.85	3	Vertical	326	1.96	-	37.68	9.05	33.23

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5190MHz_TnomVnom

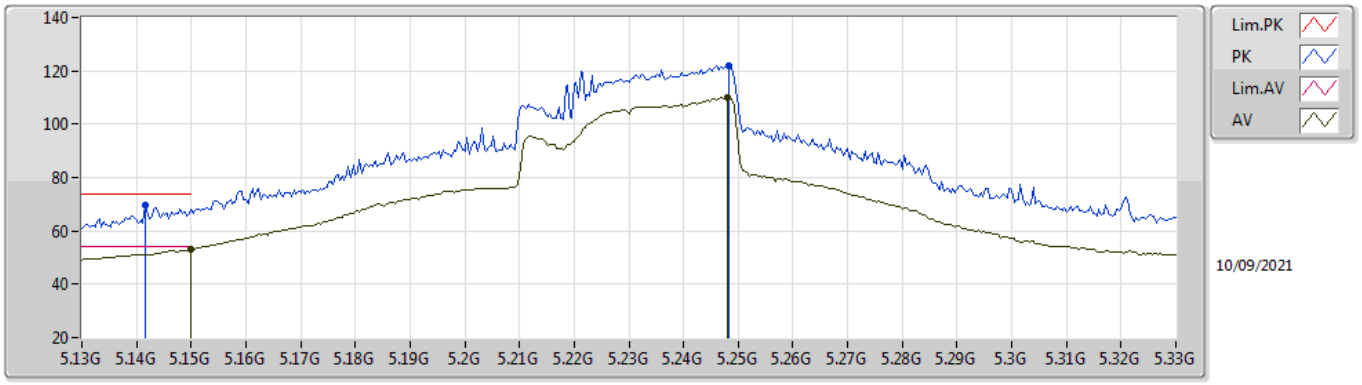


EUT Z_4TX
Setting 90
02-B-S-8

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	15.56584G	52.24	74.00	-21.76	38.72	3	Horizontal	121	2.89	-	37.70	9.05	33.23
AV	15.57004G	38.39	54.00	-15.61	24.88	3	Horizontal	121	2.89	-	37.69	9.05	33.23

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5230MHz_TnomVnom

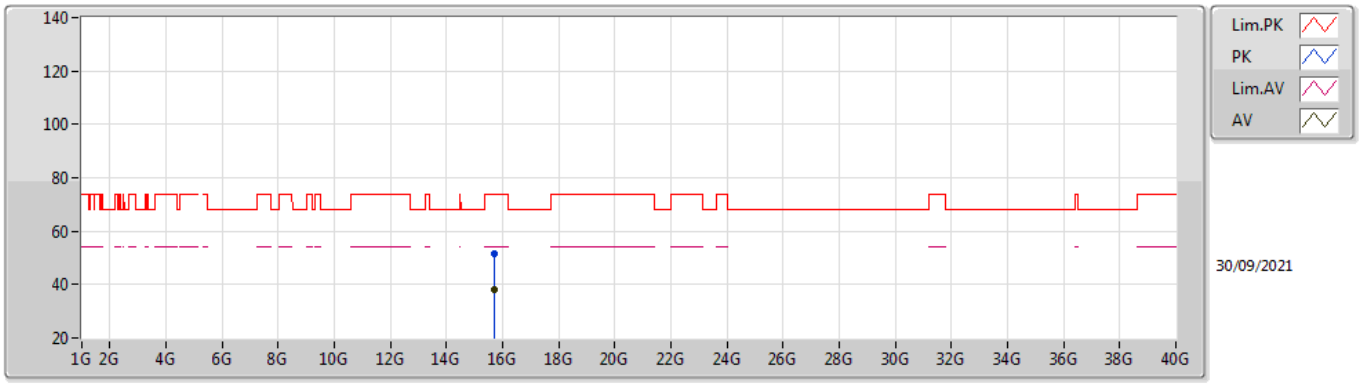


EUT Z_4TX
Setting 100
06-F-S-5-10

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	5.1416G	69.69	74.00	-4.31	64.91	3	Vertical	82	1.00	-	31.75	5.00	31.97
AV	5.15G	53.27	54.00	-0.73	48.55	3	Vertical	82	1.00	-	31.70	5.00	31.98
PK	5.2484G	122.05	Inf	-Inf	117.96	3	Vertical	82	1.00	-	31.11	5.00	32.02
AV	5.248G	110.18	Inf	-Inf	106.09	3	Vertical	82	1.00	-	31.11	5.00	32.02

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5230MHz_TnomVnom

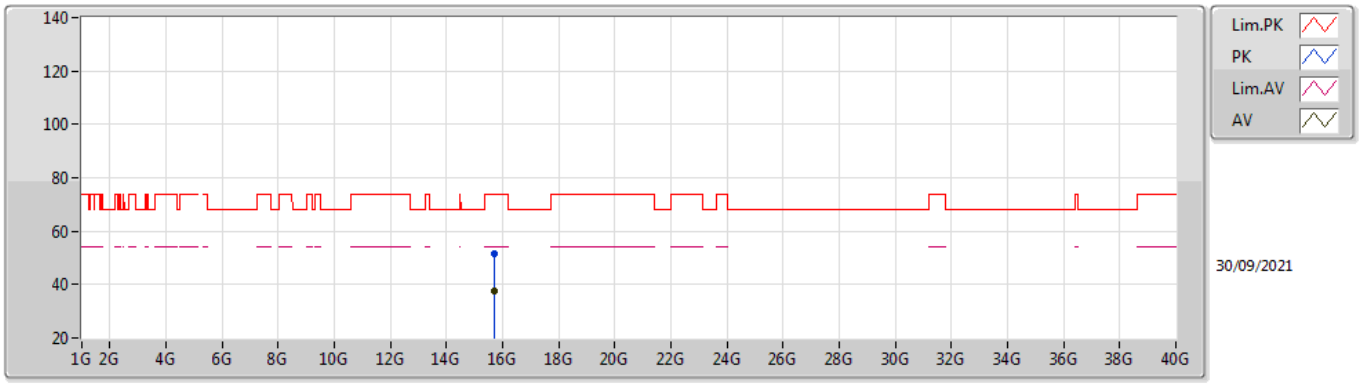


EUT Z_4TX
Setting 100
02-B-S-8

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	15.68826G	51.34	74.00	-22.66	38.20	3	Vertical	100	2.93	-	37.42	9.09	33.37
AV	15.68666G	37.85	54.00	-16.15	24.70	3	Vertical	100	2.93	-	37.43	9.09	33.37

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5230MHz_TnomVnom

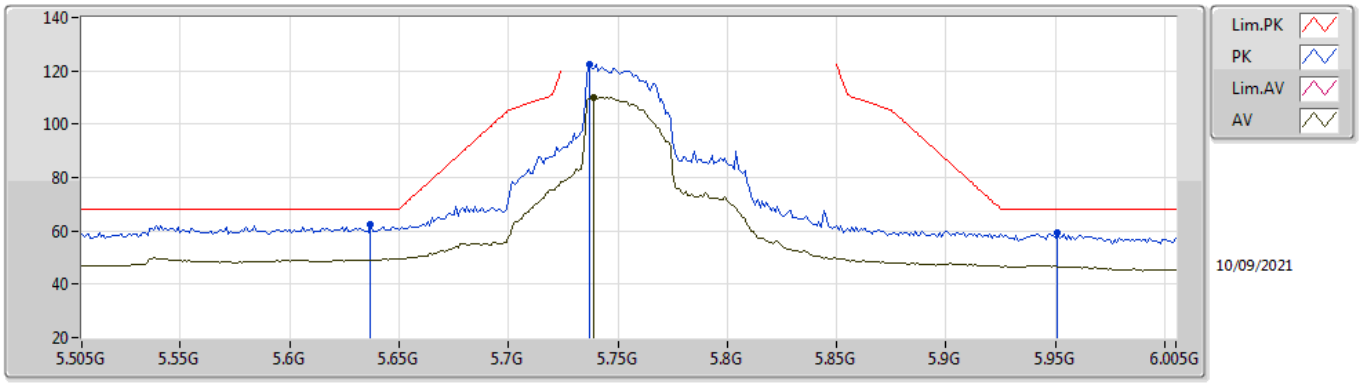


EUT Z_4TX
Setting 100
02-B-S-8

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	15.69012G	51.37	74.00	-22.63	38.23	3	Horizontal	213	1.37	-	37.42	9.09	33.37
AV	15.68716G	37.84	54.00	-16.16	24.69	3	Horizontal	213	1.37	-	37.43	9.09	33.37

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5755MHz_TnomVnom

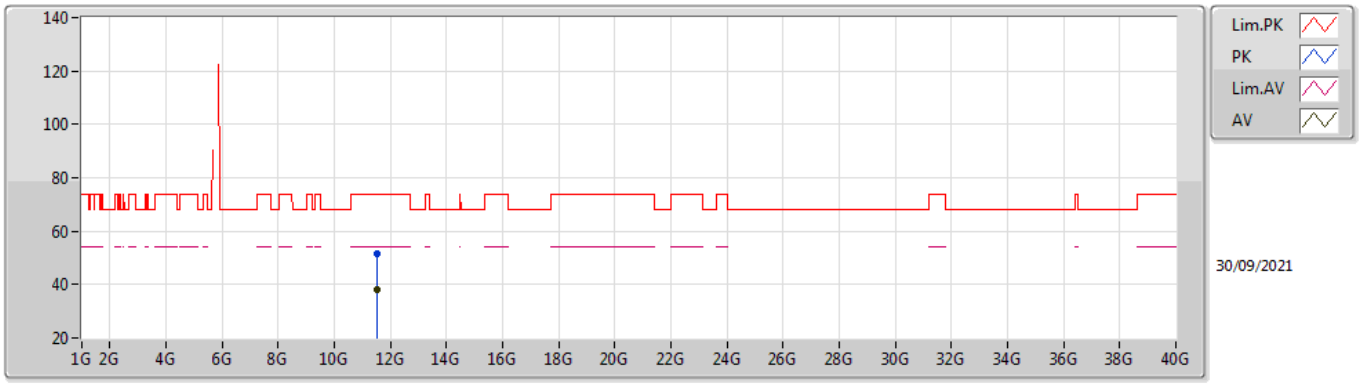


EUT Z_4TX
Setting 100
06-F-S-5-10

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	62.24	68.20	-5.96	57.63	3	Vertical	351.5	1.80	-	31.60	5.22	32.21
PK	5.737G	122.57	Inf	-Inf	117.62	3	Vertical	351.5	1.80	-	31.95	5.27	32.27
AV	5.739G	110.06	Inf	-Inf	105.10	3	Vertical	351.5	1.80	-	31.96	5.27	32.27
PK	5.951G	59.38	68.20	-8.82	54.13	3	Vertical	351.5	1.80	-	32.20	5.45	32.40

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5755MHz_TnomVnom

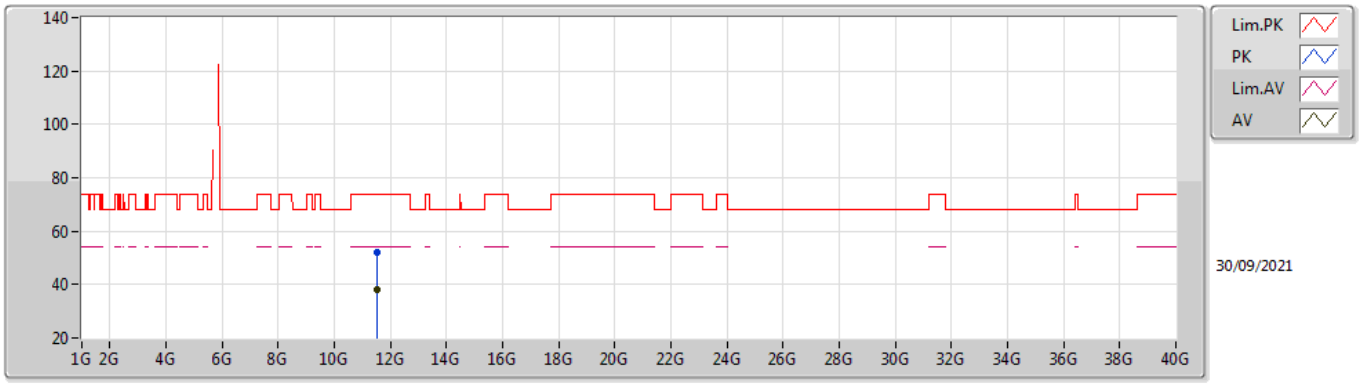


EUT Z_4TX
Setting 100
02-B-S-8

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	11.51386G	51.67	74.00	-22.33	38.22	3	Vertical	234	2.36	-	39.04	7.63	33.22
AV	11.51456G	38.03	54.00	-15.97	24.58	3	Vertical	234	2.36	-	39.04	7.63	33.22

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5755MHz_TnomVnom

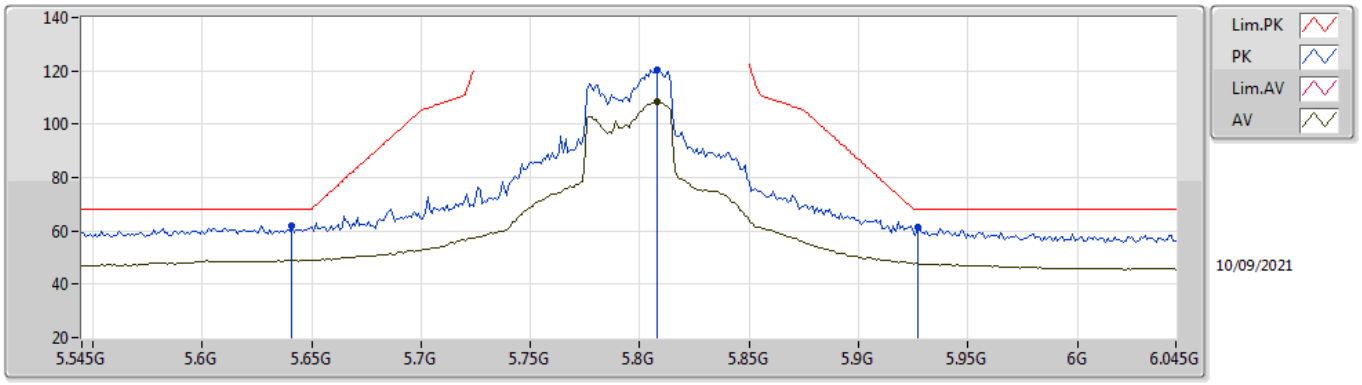


EUT Z_4TX
Setting 100
02-B-S-8

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	11.51436G	52.23	74.00	-21.77	38.78	3	Horizontal	124	2.45	-	39.04	7.63	33.22
AV	11.50702G	38.06	54.00	-15.94	24.63	3	Horizontal	124	2.45	-	39.02	7.63	33.22

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5795MHz_TnomVnom

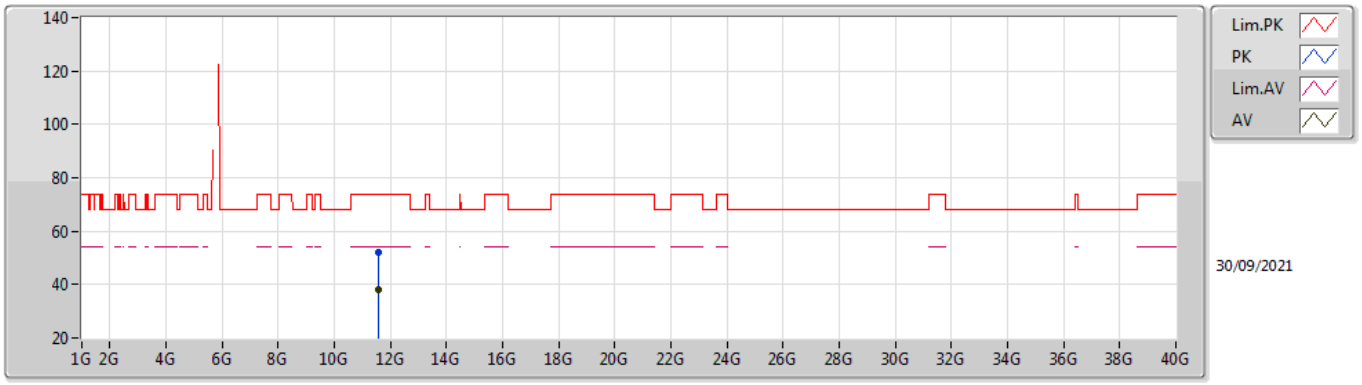


EUT Z_4TX
Setting 100
06-F-S-5-10

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	5.641G	61.75	68.20	-6.45	57.14	3	Vertical	272.5	1.79	-	31.60	5.22	32.21
PK	5.808G	120.54	Inf	-Inf	115.54	3	Vertical	272.5	1.79	-	32.00	5.31	32.31
AV	5.808G	108.46	Inf	-Inf	103.46	3	Vertical	272.5	1.79	-	32.00	5.31	32.31
PK	5.927G	61.26	68.20	-6.94	56.07	3	Vertical	272.5	1.79	-	32.15	5.43	32.39

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5795MHz_TnomVnom

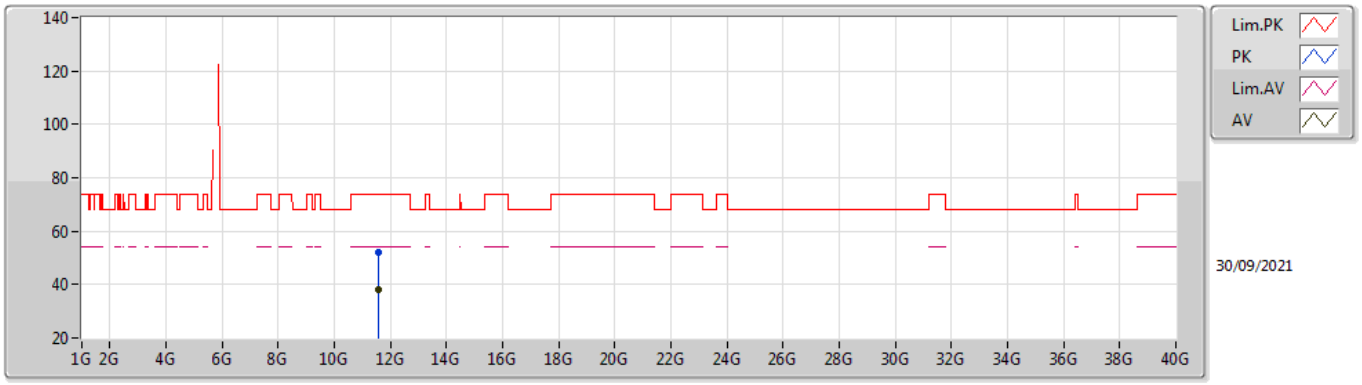


EUT Z_4TX
Setting 100
02-B-S-8

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	11.59136G	52.02	74.00	-21.98	38.33	3	Vertical	267	1.72	-	39.27	7.66	33.24
AV	11.58864G	38.30	54.00	-15.70	24.61	3	Vertical	267	1.72	-	39.27	7.66	33.24

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

5795MHz_TnomVnom

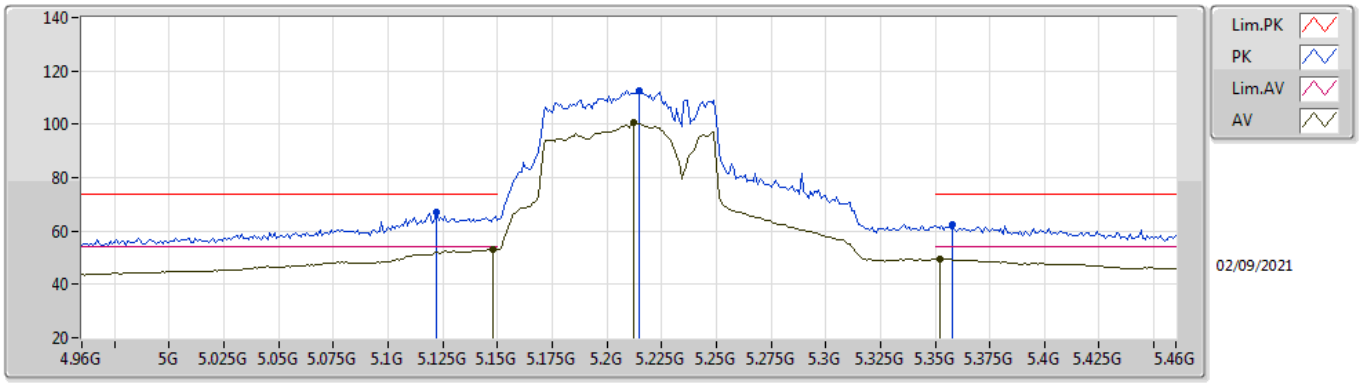


EUT Z_4TX
Setting 100
02-B-S-8

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	11.58602G	51.98	74.00	-22.02	38.30	3	Horizontal	187	2.34	-	39.26	7.66	33.24
AV	11.585G	38.32	54.00	-15.68	24.66	3	Horizontal	187	2.34	-	39.25	7.65	33.24

802.11ax HEW80-BF_Nss1,(MCS0)_4TX

5210MHz_TnomVnom

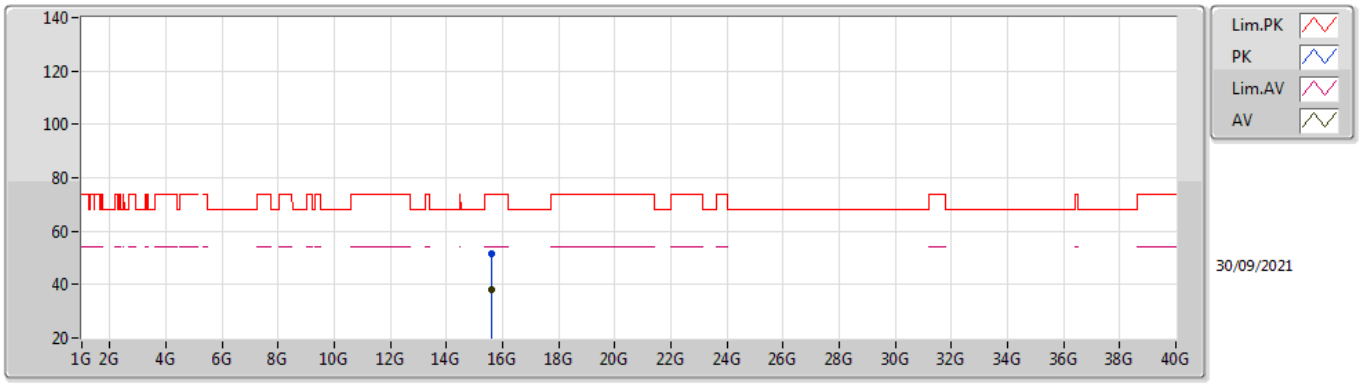


EUT Z_4TX
Setting 93
02-B-S-8-10

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	5.122G	67.28	74.00	-6.72	60.99	3	Vertical	360	1.80	-	33.50	4.94	32.15
AV	5.148G	53.24	54.00	-0.76	46.89	3	Vertical	360	1.80	-	33.50	5.00	32.15
PK	5.215G	112.68	Inf	-Inf	106.21	3	Vertical	360	1.80	-	33.53	5.09	32.15
AV	5.212G	100.60	Inf	-Inf	94.14	3	Vertical	360	1.80	-	33.52	5.09	32.15
PK	5.358G	62.53	74.00	-11.47	55.93	3	Vertical	360	1.80	-	33.72	5.02	32.14
AV	5.352G	49.53	54.00	-4.47	42.95	3	Vertical	360	1.80	-	33.70	5.02	32.14

802.11ax HEW80-BF_Nss1,(MCS0)_4TX

5210MHz_TnomVnom

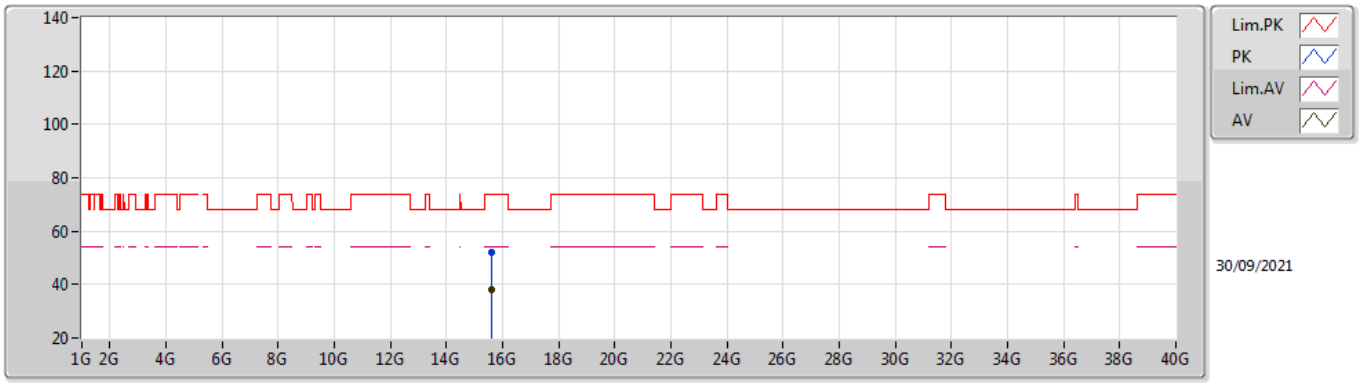


EUT Z_4TX
Setting 93
02-B-S-8

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	15.63024G	51.70	74.00	-22.30	38.39	3	Vertical	53	2.83	-	37.54	9.07	33.30
AV	15.62808G	37.99	54.00	-16.01	24.68	3	Vertical	53	2.83	-	37.54	9.07	33.30

802.11ax HEW80-BF_Nss1,(MCS0)_4TX

5210MHz_TnomVnom

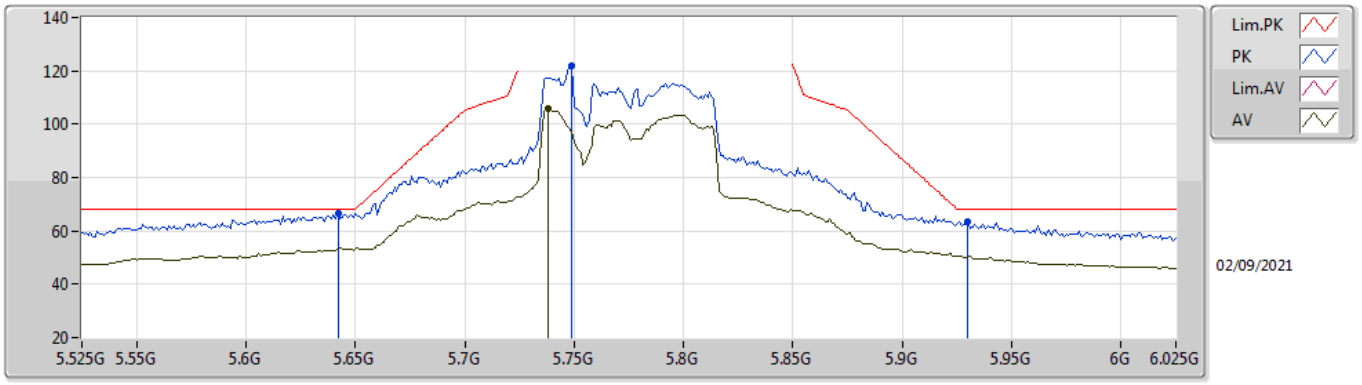


EUT Z_4TX
Setting 93
02-B-S-8

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)
AV	15.62732G	37.97	54.00	-16.03	24.65	3	Horizontal	103	2.39	-	37.55	9.07	33.30
PK	15.62936G	52.01	74.00	-21.99	38.70	3	Horizontal	103	2.39	-	37.54	9.07	33.30

802.11ax HEW80-BF_Nss1,(MCS0)_4TX

5775MHz_TnomVnom

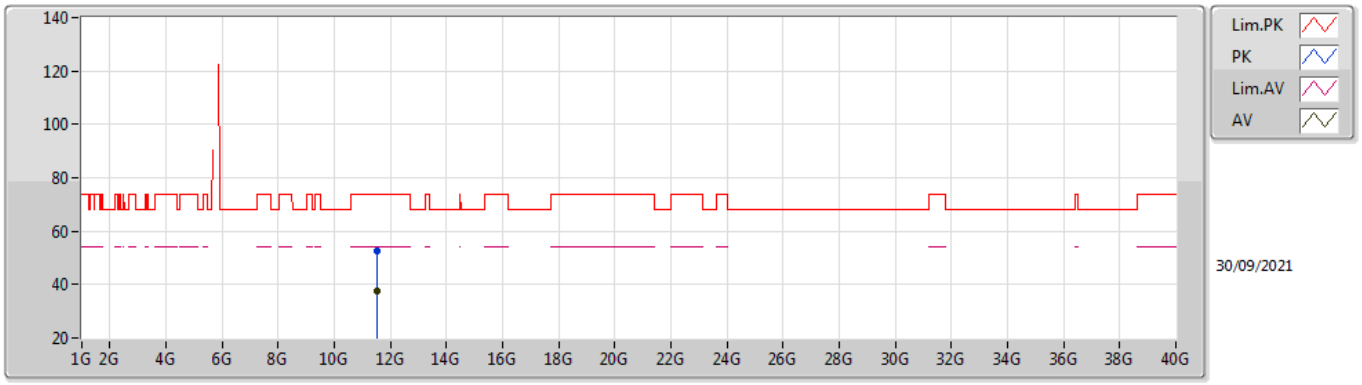


EUT Z_4TX
Setting 98
02-B-S-8-10

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	5.642G	66.72	68.20	-1.48	59.88	3	Vertical	317	2.17	-	33.82	5.16	32.14
PK	5.749G	121.92	Inf	-Inf	115.21	3	Vertical	317	2.17	-	33.80	5.05	32.14
AV	5.738G	105.89	Inf	-Inf	99.19	3	Vertical	317	2.17	-	33.78	5.06	32.14
PK	5.93G	63.31	68.20	-4.89	56.02	3	Vertical	317	2.17	-	34.06	5.39	32.16

802.11ax HEW80-BF_Nss1,(MCS0)_4TX

5775MHz_TnomVnom

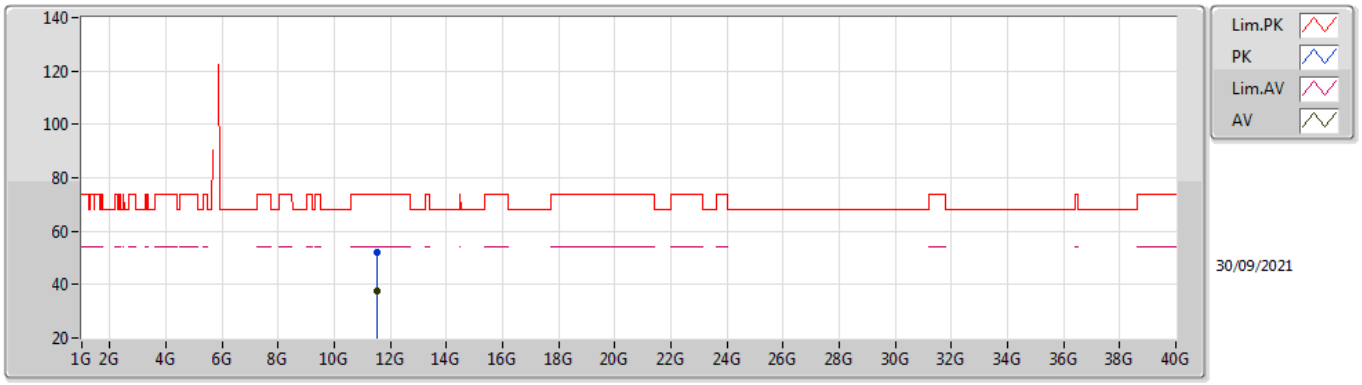


EUT Z_4TX
Setting 98
02-B-S-8

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	11.54884G	52.60	74.00	-21.40	39.04	3	Vertical	274	2.49	-	39.15	7.64	33.23
AV	11.54804G	37.76	54.00	-16.24	24.21	3	Vertical	274	2.49	-	39.14	7.64	33.23

802.11ax HEW80-BF_Nss1,(MCS0)_4TX

5775MHz_TnomVnom



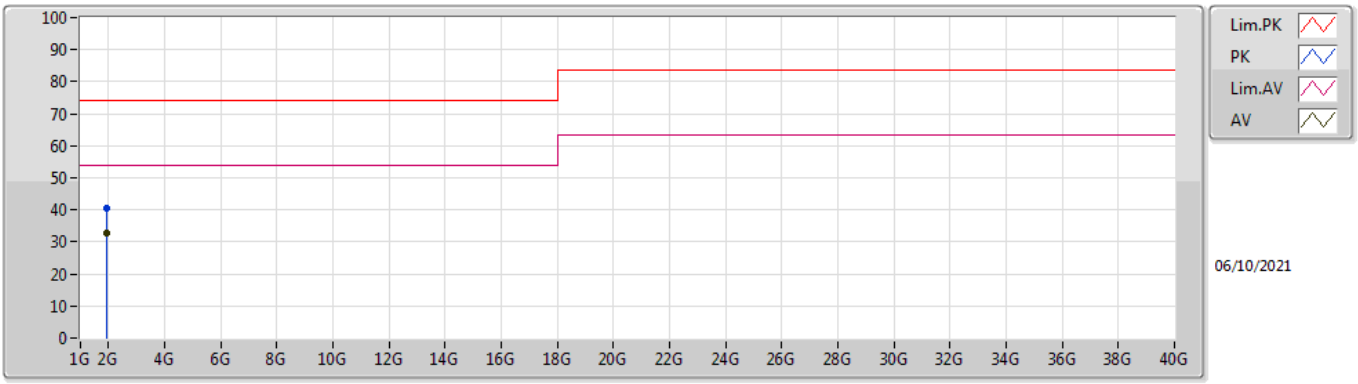
EUT Z_4TX
Setting 98
02-B-S-8

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	11.54662G	51.91	74.00	-22.09	38.36	3	Horizontal	238	2.45	-	39.14	7.64	33.23
AV	11.54808G	37.74	54.00	-16.26	24.19	3	Horizontal	238	2.45	-	39.14	7.64	33.23

Summary

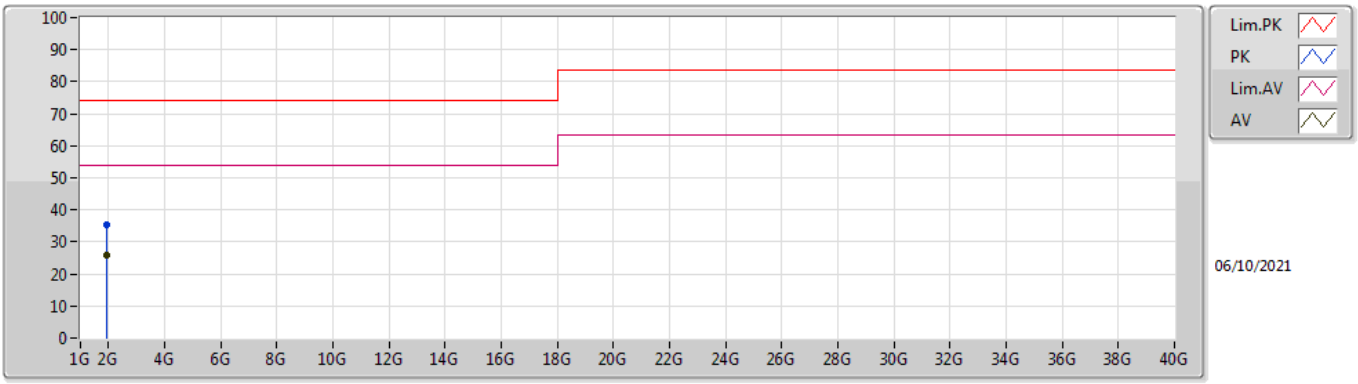
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.92521G	32.95	54.00	-21.05	Vertical

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	1.92366G	40.55	74.00	-33.45	-7.49	3	Vertical	150	1.22	-	48.04	25.99	3.72	37.20
AV	1.92521G	32.95	54.00	-21.05	-7.47	3	Vertical	150	1.22	"Worst"	40.42	26.00	3.73	37.20

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	1.92421G	35.15	74.00	-38.85	-7.48	3	Horizontal	100	1.21	-	42.63	26.00	3.72	37.20
AV	1.925221G	25.88	54.00	-28.12	-7.47	3	Horizontal	100	1.21	"Worst"	33.35	26.00	3.73	37.20