



RADIO TEST REPORT

FCC ID : XHG-RG1000
Equipment : Mobile Hotspot
Model Name : RG1000
Applicant : Franklin Technology Inc.
906 JEI Platz, 186, Gasan digital 1-ro,
Gumcheon-Gu, Seoul, South Korea, 08502
Manufacturer : Franklin Technology Inc.
906 JEI Platz, 186, Gasan digital 1-ro,
Gumcheon-Gu, Seoul, South Korea, 08502
Standard : 47 CFR FCC Part 15.407

The product was received on May 07, 2021, and testing was started from Jun. 09, 2021 and completed on Jul. 19, 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

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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: Vicky 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	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	802.11n (HT20)	20	2
5.15-5.25GHz	802.11ac (VHT20)	20	2
5.15-5.25GHz	802.11ax HEW20	20	2
5.15-5.25GHz	802.11n (HT40)	40	2
5.15-5.25GHz	802.11ac (VHT40)	40	2
5.15-5.25GHz	802.11ax HEW40	40	2
5.15-5.25GHz	802.11ac (VHT80)	80	2
5.15-5.25GHz	802.11ax HEW80	80	2
5.725-5.85GHz	802.11n (HT20)	20	2
5.725-5.85GHz	802.11ac (VHT20)	20	2
5.725-5.85GHz	802.11ax HEW20	20	2
5.725-5.85GHz	802.11n (HT40)	40	2
5.725-5.85GHz	802.11ac (VHT40)	40	2
5.725-5.85GHz	802.11ax HEW40	40	2
5.725-5.85GHz	802.11ac (VHT80)	80	2
5.725-5.85GHz	802.11ax HEW80	80	2

Note:

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



1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	Hutec	HIA-ASM0053B-IR	PIFA Antenna	Murata	Note 1
2	2	Hutec	HIA-ASM0053B-IR	PIFA Antenna	Murata	

Note1:

Ant.	Port	Gain (dBi)			Cable loss			True Gain (dBi)		
		2.4GHz	5GHz Band 1	5GHz Band 4	2.4GHz	5GHz Band 1	5GHz Band 4	2.4GHz	5GHz Band 1	5GHz Band 4
1	1	4.131	3.275	3.275	-1.18	-3.54	-3.98	2.951	-0.265	-0.705
2	2	-1.44	4.136	4.136	-1.18	-3.54	-3.98	-2.62	0.596	0.156

Note2: The above information was declared by manufacturer

Note3:

<For 2.4GHz Function>

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

Ant. 1(Port 1) and Ant. 2(Port 2) can be used as transmitting/receiving antenna.
 Ant. 1(Port 1) and Ant. 2(Port 2) could transmit/receive simultaneously.

<For 5GHz Function>

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

Ant. 1(Port 1) and Ant. 2(Port 2) can be used as transmitting/receiving antenna.
 Ant. 1(Port 1) and Ant. 2(Port 2) could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.996	0.02	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.996	0.02	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW80	0.996	0.02	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 battery, Adapter, host system			
Beamforming Function	<input type="checkbox"/>	With beamforming	<input checked="" type="checkbox"/>	Without beamforming
Function	<input type="checkbox"/>	Outdoor P2M	<input checked="" type="checkbox"/>	Indoor P2M
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/>	Client
Test Software Version	QCRT V4.0.00189.0			

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	Owen Hsu	23.7-25.2 / 63-64	Jun. 11, 2021~ Jun. 18, 2021
Radiated (below 1GHz)	03CH05-CB	Eason Chen	25.3~27.7 / 64~68	Jun. 09, 2021~ Jul. 17, 2021
Radiated (Co-location)	03CH05-CB	Eason Chen	25.3~27.7 / 64~68	Jun. 09, 2021~ Jul. 17, 2021
Radiated (above 1GHz)	03CH01-CB	Eason Chen	25.9~27 / 64~68	Jun. 09, 2021~ Jul. 17, 2021
AC Conduction	CO02-CB	Ryo Fan	23~24 / 61~62	Jul. 19, 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

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	14.5
5200MHz	15
5240MHz	15.5
5745MHz	18
5785MHz	17.5
5825MHz	17.5
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	15
5230MHz	15
5755MHz	17.5
5795MHz	16.5
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	15
5775MHz	17.5

Note:

- ♦ Evaluated HEW20/HEW40/HEW80 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80 mode are the same or lower than HEW20/HEW40/HEW80.



2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	EUT-WLAN 2.4GHz-powered by adapter
2	EUT-WLAN 2.4GHz-powered by host system
Mode 2 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT-WLAN 5GHz-powered by host system
For operating mode 3 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Output Power Power Spectral Density
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
For WLAN 2.4GHz: The EUT was performed at X axis, Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at X axis. So the measurement will follow this same test configuration.	
For WLAN 5GHz: The EUT was performed at X axis, Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at Z axis. So the measurement will follow this same test configuration.	
1	EUT at X-axis-WLAN 2.4GHz-powered by battery
2	EUT at X-axis-WLAN 2.4GHz-powered by adapter
3	EUT at X-axis-WLAN 2.4GHz-powered by host system
Mode 2 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT at Z-axis-WLAN 5GHz-powered by adapter
For operating mode 4 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 at Z-axis

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

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter	Franklin Wireless	APS-KP018W-G	INPUT: 100-240V~50/60Hz, 0.5A Max. OUTPUT: 5V, 3.0A, 9V, 2.0A, 12V, 1.5A
Li-ion battery	Franklin Wireless	ICQ037NA	3.8V, 5000mAh, 19.00Wh
Other			
USB cable*1, Shielded, 1.2m			



2.5 Support Equipment

For AC Conduction:

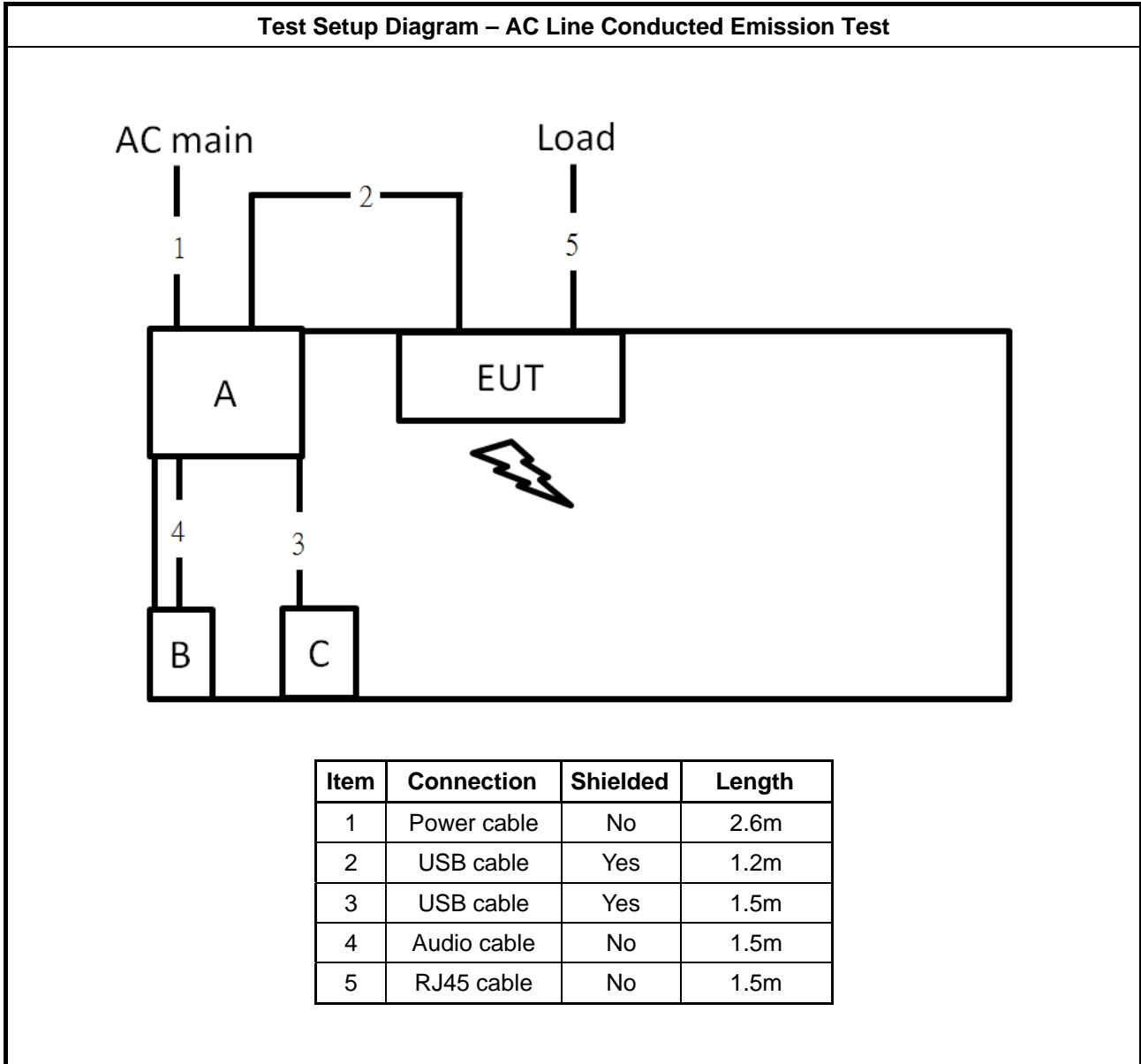
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E6430	N/A
B	Mouse	HP	FM100	N/A
C	Earphone	SHYARO CHI	MIC-04	N/A

For Radiated (below 1GHz): N/A

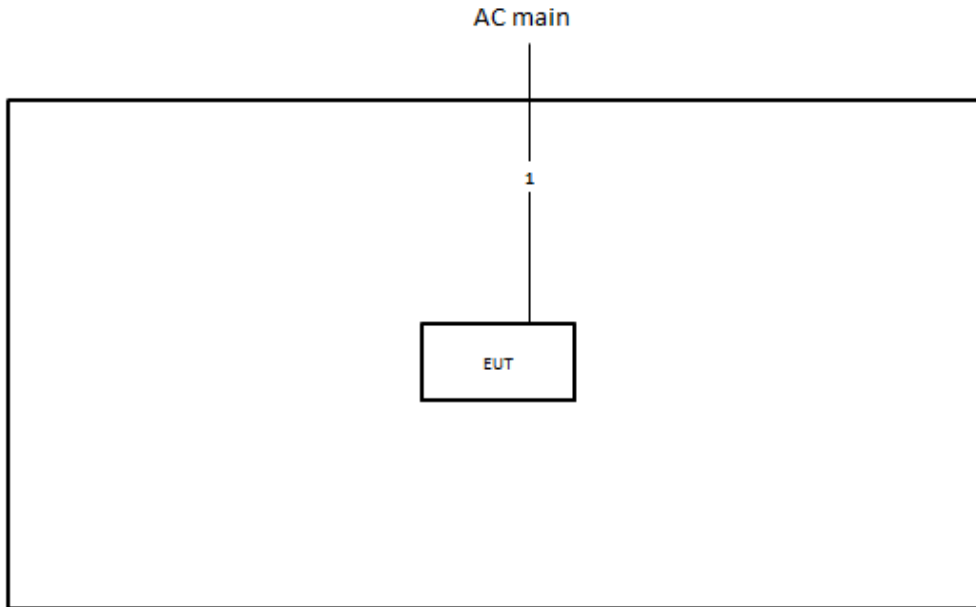
For Radiated (above 1GHz) and RF Conducted:

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

2.6 Test Setup Diagram

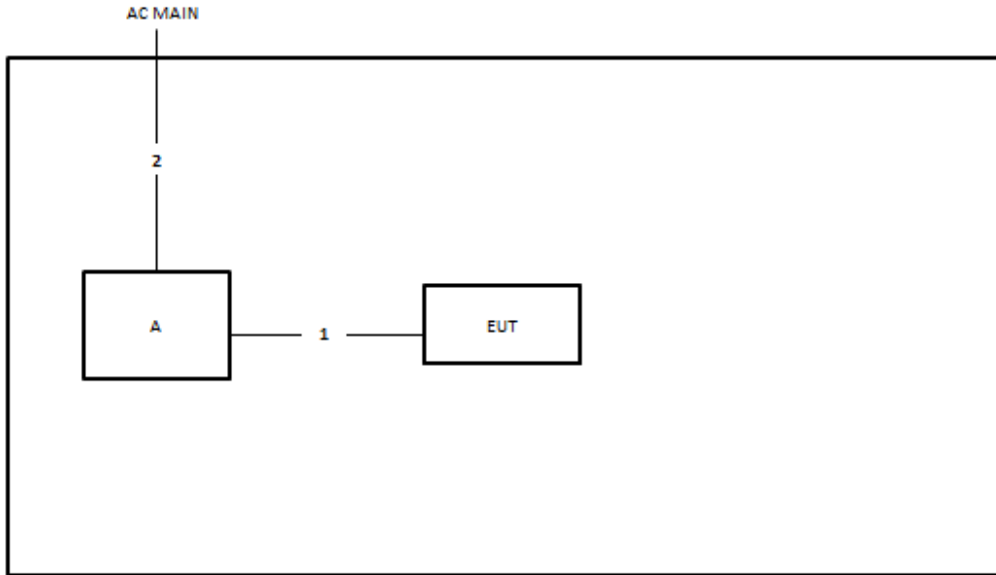


Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	USB cable	Yes	1.2m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	USB cable	Yes	1.2m
2	Power cable	No	2.6m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

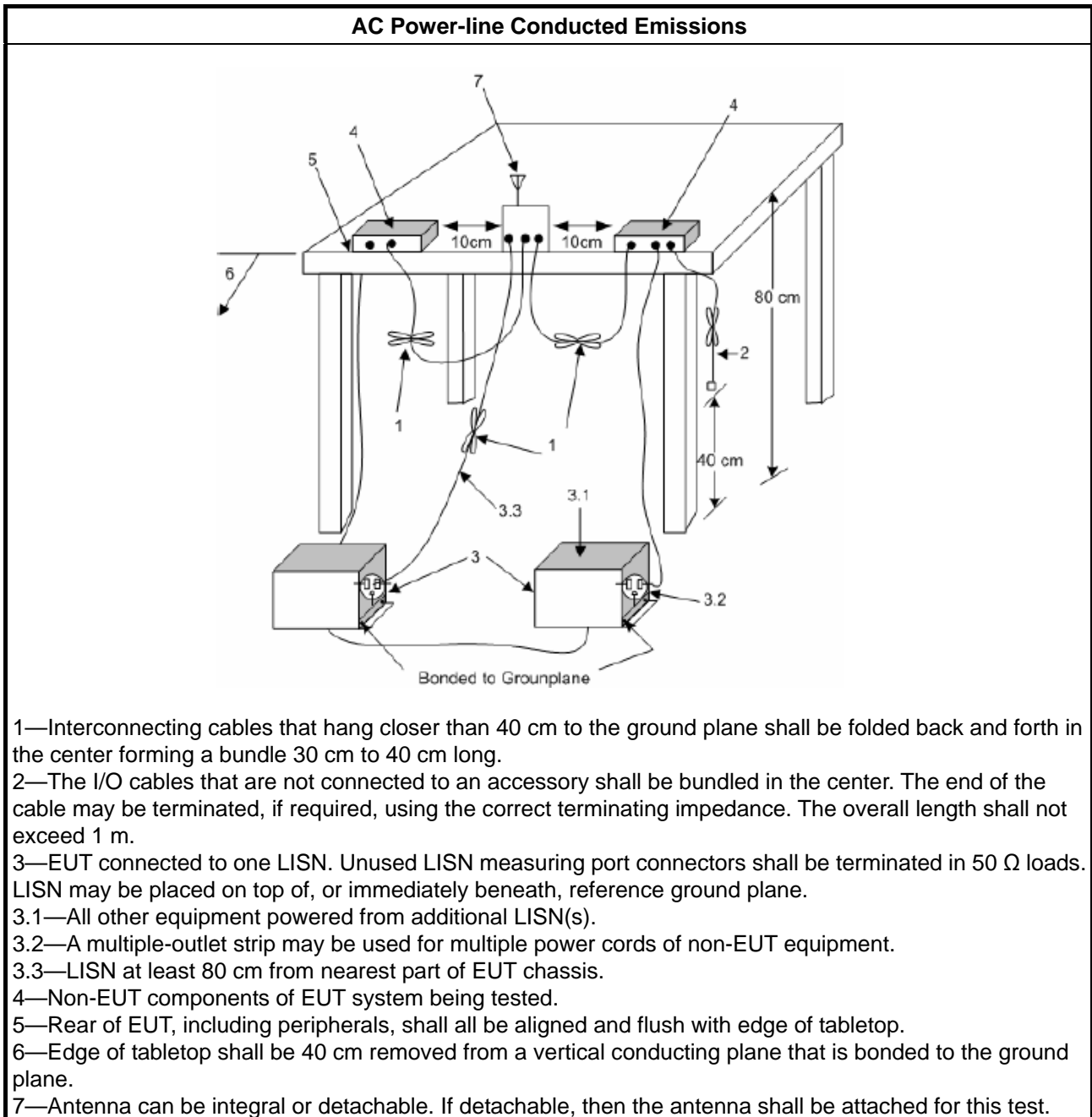
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- 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	
<input checked="" type="checkbox"/>	For the 5.15-5.25 GHz band, N/A
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.
<input type="checkbox"/>	For the 5.85-5.895 GHz band, 6 dB emission bandwidth \geq 500kHz.
LE-LAN Devices	
<input type="checkbox"/>	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.
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.

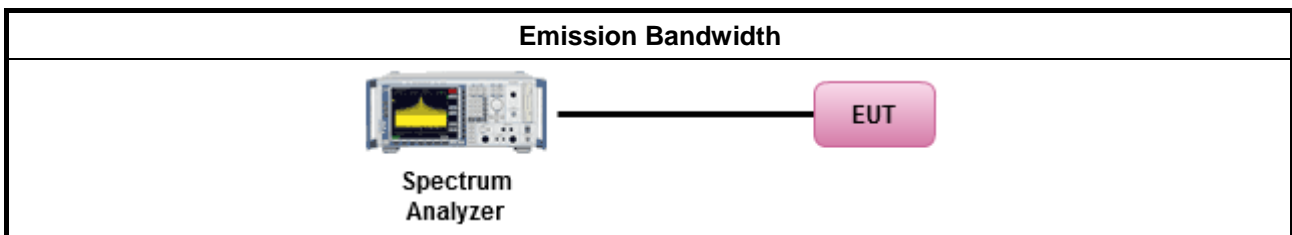
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method							
<ul style="list-style-type: none"> For the emission bandwidth shall be measured using one of the options below: <table border="1" data-bbox="188 1440 1428 1579"> <tr> <td><input checked="" type="checkbox"/></td> <td>Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.</td> </tr> </table> 		<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.	<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.	<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.						
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.						
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.						

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Output Power

3.3.1 Limit

Maximum Output Power Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
	<ul style="list-style-type: none"> ▪ 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 $P_{Out} = 24 - (G_{TX} - 6)$.
<input type="checkbox"/> 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 $P_{Out} = 24 - (G_{TX} - 6)$.	
<input type="checkbox"/> 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 $P_{Out} = 24 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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	
<input type="checkbox"/> For the 5.85-5.895 GHz band:	
	<ul style="list-style-type: none"> ▪ Indoor AP & subordinate device < 36 dBm ▪ Client device < 30 dBm
LE-LAN Devices	
<input type="checkbox"/> 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.	
<input type="checkbox"/> 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	
<input type="checkbox"/> 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	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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.

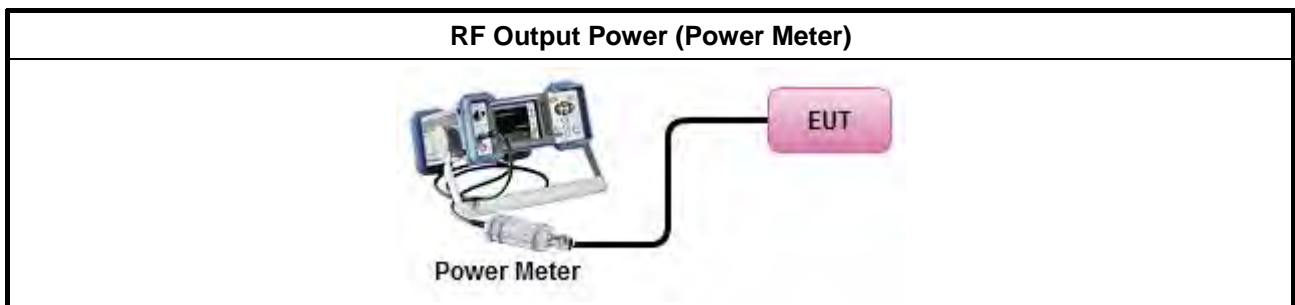
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Maximum Conducted Output Power 	
Average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	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	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> 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. 	
<ul style="list-style-type: none"> If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Limit

Peak Power Spectral Density Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
	<ul style="list-style-type: none"> ▪ 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 $PPSD = 11 - (G_{TX} - 6)$.
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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	
<input type="checkbox"/> For the 5.85-5.895 GHz band:	
	<ul style="list-style-type: none"> ▪ Indoor AP & subordinate device < 20dBm/MHz ▪ Client device < 14dBm/MHz
LE-LAN Devices	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
	<ul style="list-style-type: none"> ▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 ($\theta-8$) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 ($\theta-40$) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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.

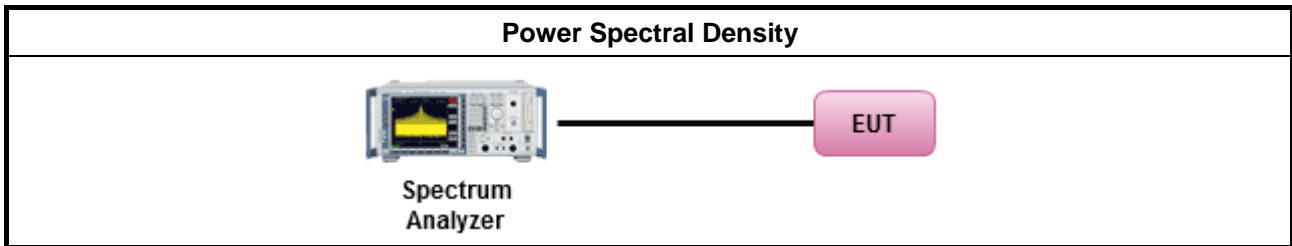
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> ▪ 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:
	<input type="checkbox"/> 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]
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
	<input type="checkbox"/> 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
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	<ul style="list-style-type: none"> ▪ For conducted measurement.
	<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below:
	<input checked="" type="checkbox"/> 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.
	<input type="checkbox"/> 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,
	<input type="checkbox"/> 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.
	<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
<input checked="" type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 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.
<input type="checkbox"/> 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



	<p>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.</p> <p>(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.</p>
<p>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).</p>	

3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method																	
	<ul style="list-style-type: none"> ▪ 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). 																
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. 																
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td> <ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands. </td> </tr> <tr> <td></td> <td> <ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td> <input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging). </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW). </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions. </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit. </td> </tr> </table> </td></tr></table> 		<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands. 		<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td> <input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging). </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW). </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions. </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit. </td> </tr> </table> 		<input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).		<input checked="" type="checkbox"/> Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).		<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.		<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.		<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.		<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
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	<input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).																
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	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.																
	<ul style="list-style-type: none"> ▪ For radiated measurement. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td> <ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. </td> </tr> <tr> <td></td> <td> <ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. </td> </tr> <tr> <td></td> <td> <ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. </td> </tr> </table> 		<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. 		<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. 		<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. 										
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. 																
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. 																
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. 																
	<ul style="list-style-type: none"> ▪ The any unwanted emissions level shall not exceed the fundamental emission level. 																

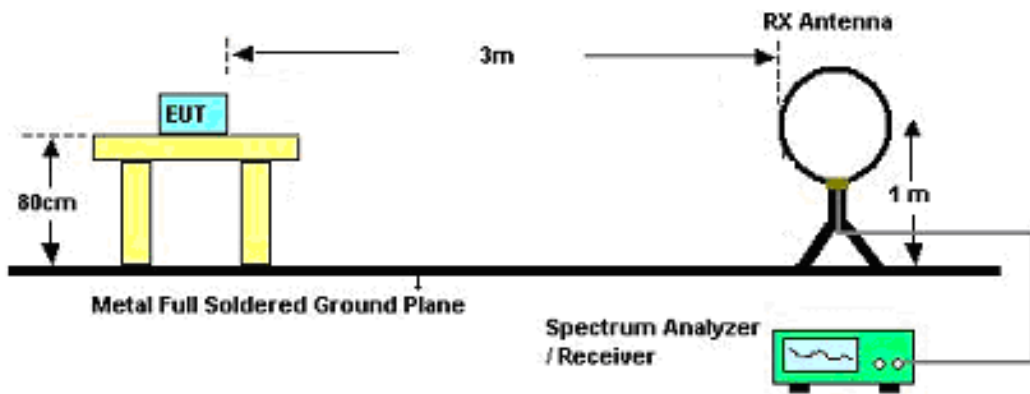
Test Method

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

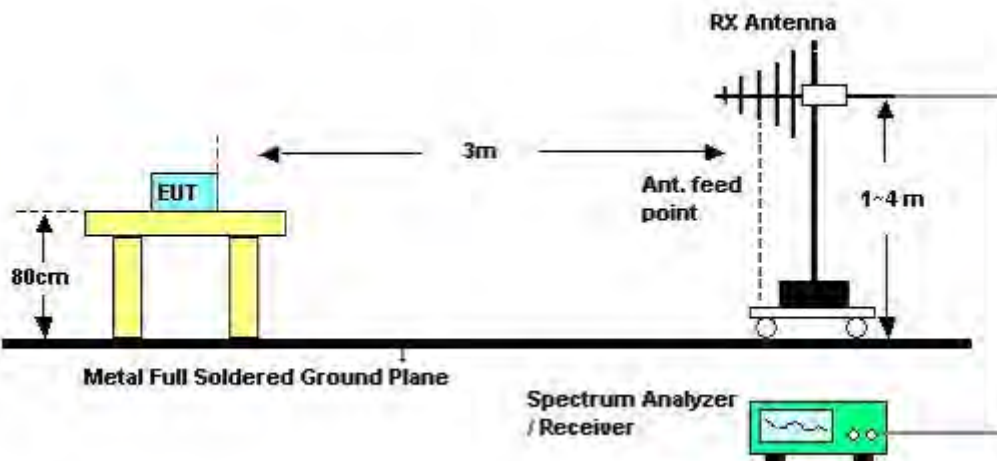
3.5.4 Test Setup

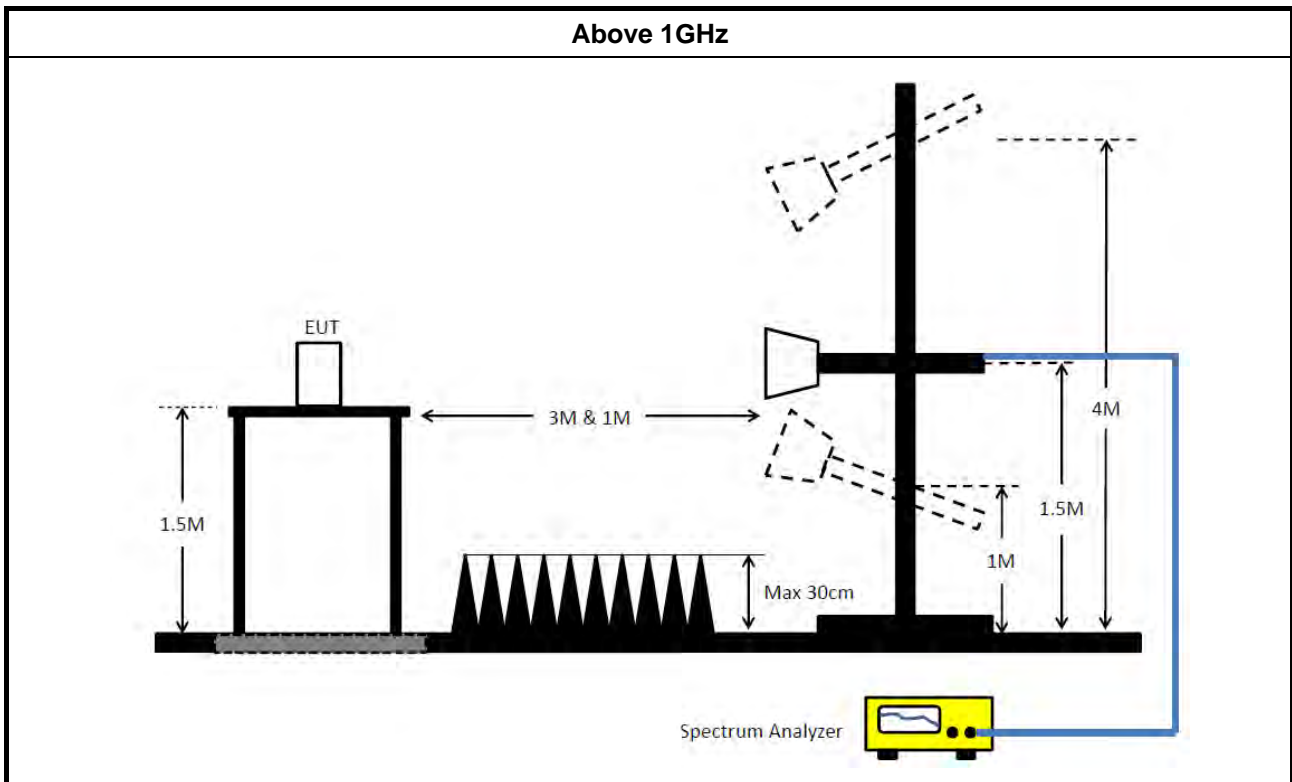
Transmitter Radiated Unwanted Emissions

9kHz ~30MHz



30MHz~1GHz





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)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 10, 2020	Aug. 09, 2021	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)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Sep. 05, 2020	Sep. 04, 2021	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	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. 03, 2020	Jul. 02, 2021	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-H G	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH05-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun.15, 2021	Jun. 14, 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	ESR7	102171	9kHz ~ 26GHz	Jul. 01, 2020	Jun. 30, 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-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	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. 16, 2020	Jul. 15, 2021	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	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 07, 2021	May 06, 2022	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 06, 2020	Nov. 05, 2021	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 20, 2021	May 19, 2022	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH01-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun.15, 2021	Jun. 14, 2022	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 03, 2021	May 02, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)



Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 21, 2021	May 20, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
Cable	Woken	RG402	low Cable-30	9 kHz –1 GHz	Apr. 06, 2021	Apr. 05, 2022	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

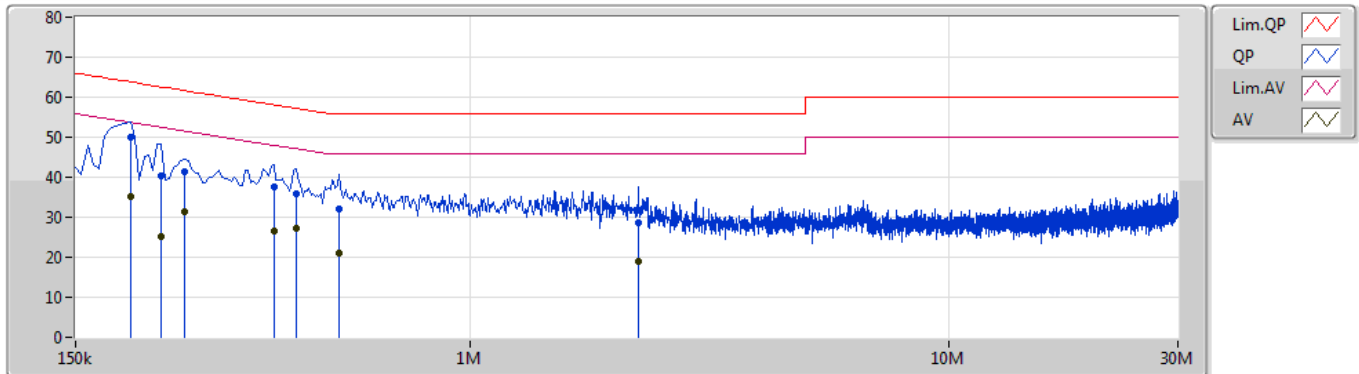
Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.



Summary

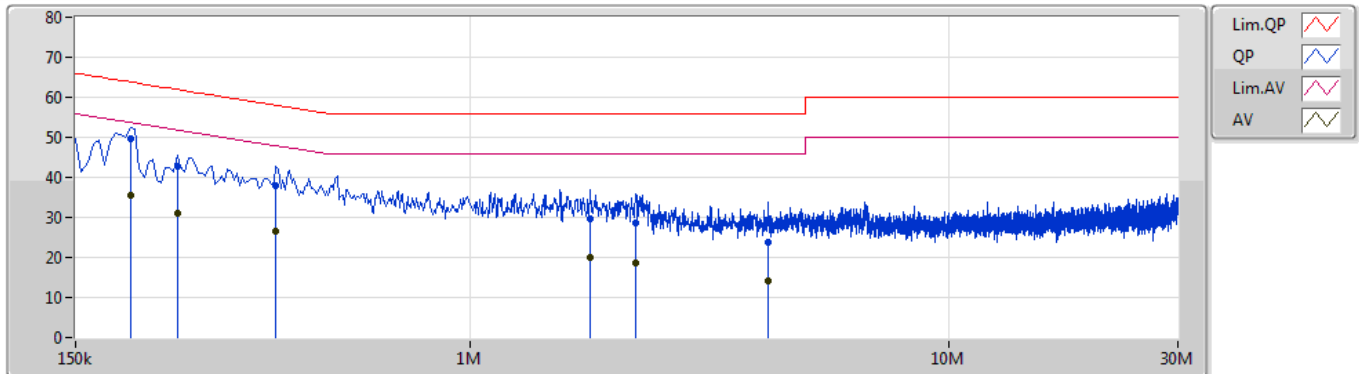
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 3	Pass	QP	195k	50.18	63.82	-13.64	Line

19/07/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	195k	50.07	63.82	-13.75	10.30	Line	"Worst"	39.77	0.07	0.07	10.16
AV	195k	35.18	53.82	-18.64	10.30	Line	-	24.88	0.07	0.07	10.16
QP	226.5k	40.31	62.58	-22.27	10.29	Line	-	30.02	0.07	0.07	10.15
AV	226.5k	25.04	52.58	-27.54	10.29	Line	-	14.75	0.07	0.07	10.15
QP	253.5k	41.33	61.64	-20.31	10.28	Line	-	31.05	0.07	0.07	10.14
AV	253.5k	31.41	51.64	-20.23	10.28	Line	-	21.13	0.07	0.07	10.14
QP	388.5k	37.63	58.10	-20.47	10.25	Line	-	27.38	0.08	0.06	10.11
AV	388.5k	26.42	48.10	-21.68	10.25	Line	-	16.17	0.08	0.06	10.11
QP	433.5k	35.73	57.19	-21.46	10.25	Line	-	25.48	0.08	0.06	10.11
AV	433.5k	27.14	47.19	-20.05	10.25	Line	-	16.89	0.08	0.06	10.11
QP	532.5k	32.02	56.00	-23.98	10.26	Line	-	21.76	0.08	0.07	10.11
AV	532.5k	20.97	46.00	-25.03	10.26	Line	-	10.71	0.08	0.07	10.11
QP	2.247M	28.74	56.00	-27.26	10.35	Line	-	18.39	0.12	0.11	10.12
AV	2.247M	18.95	46.00	-27.05	10.35	Line	-	8.60	0.12	0.11	10.12

19/07/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	195k	49.53	63.82	-14.29	10.29	Neutral	"Worst"	39.24	0.06	0.07	10.16
AV	195k	35.54	53.82	-18.28	10.29	Neutral	-	25.25	0.06	0.07	10.16
QP	244.5k	42.73	61.95	-19.22	10.28	Neutral	-	32.45	0.06	0.07	10.15
AV	244.5k	30.92	51.95	-21.03	10.28	Neutral	-	20.64	0.06	0.07	10.15
QP	393k	37.79	58.01	-20.22	10.23	Neutral	-	27.56	0.06	0.06	10.11
AV	393k	26.41	48.01	-21.60	10.23	Neutral	-	16.18	0.06	0.06	10.11
QP	1.779M	29.75	56.00	-26.25	10.31	Neutral	-	19.44	0.09	0.10	10.12
AV	1.779M	20.00	46.00	-26.00	10.31	Neutral	-	9.69	0.09	0.10	10.12
QP	2.22M	28.54	56.00	-27.46	10.33	Neutral	-	18.21	0.09	0.11	10.13
AV	2.22M	18.68	46.00	-27.32	10.33	Neutral	-	8.35	0.09	0.11	10.13
QP	4.178M	23.66	56.00	-32.34	10.36	Neutral	-	13.30	0.12	0.14	10.10
AV	4.178M	14.12	46.00	-31.88	10.36	Neutral	-	3.76	0.12	0.14	10.10

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_Nss1,(MCS0)_2TX	20.76M	18.891M	18M9D1D	20.64M	18.861M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.56M	37.721M	37M7D1D	40.26M	37.601M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.8M	77.241M	77M2D1D	82.32M	77.121M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	18.9M	20.42M	20M4D1D	17.94M	18.951M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.26M	41.799M	41M8D1D	36.3M	37.901M
802.11ax HEW80_Nss1,(MCS0)_2TX	77.28M	78.801M	78M8D1D	76.68M	77.481M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.76M	18.891M	20.7M	18.891M
5200MHz	Pass	Inf	20.76M	18.891M	20.67M	18.861M
5240MHz	Pass	Inf	20.64M	18.861M	20.64M	18.861M
5745MHz	Pass	500k	18.18M	18.981M	17.94M	19.13M
5785MHz	Pass	500k	18.06M	18.981M	18.6M	19.37M
5825MHz	Pass	500k	18.9M	18.951M	18.78M	20.42M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.26M	37.601M	40.26M	37.721M
5230MHz	Pass	Inf	40.32M	37.601M	40.56M	37.661M
5755MHz	Pass	500k	36.3M	37.901M	37.26M	38.441M
5795MHz	Pass	500k	37.02M	37.901M	37.02M	41.799M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.32M	77.121M	82.8M	77.241M
5775MHz	Pass	500k	77.28M	77.481M	76.68M	78.801M

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_Nss1,(MCS0)_2TX

EBW

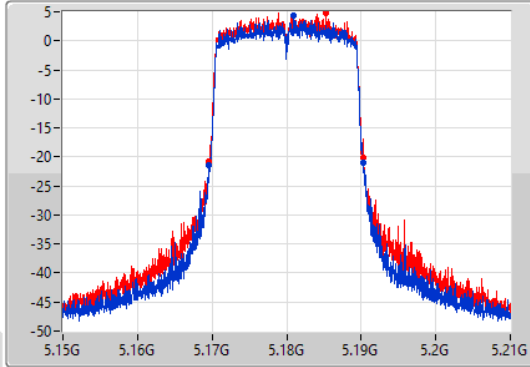
5180MHz

12/06/2021

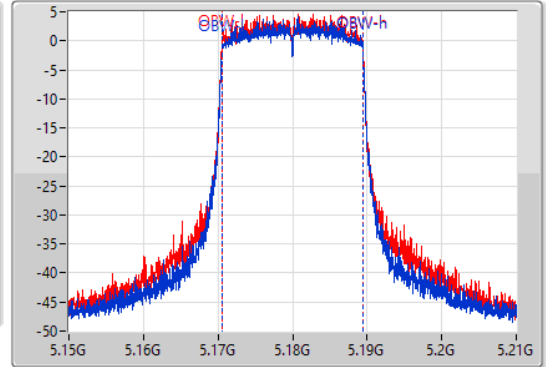
CF
5.18GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

Port 1

Port 2



CF
5.18GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.76M	5.16959G	5.19035G	18.891M	5.170525G	5.189415G	Inf	1
20.7M	5.16956G	5.19026G	18.891M	5.170525G	5.189415G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

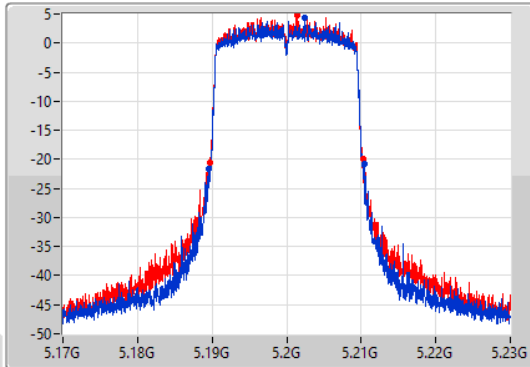
5200MHz

12/06/2021

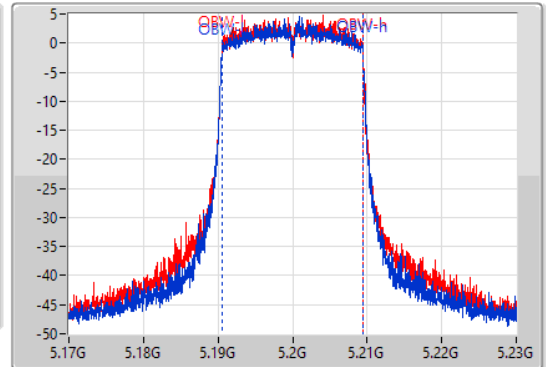
CF
5.2GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

Port 1

Port 2



CF
5.2GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



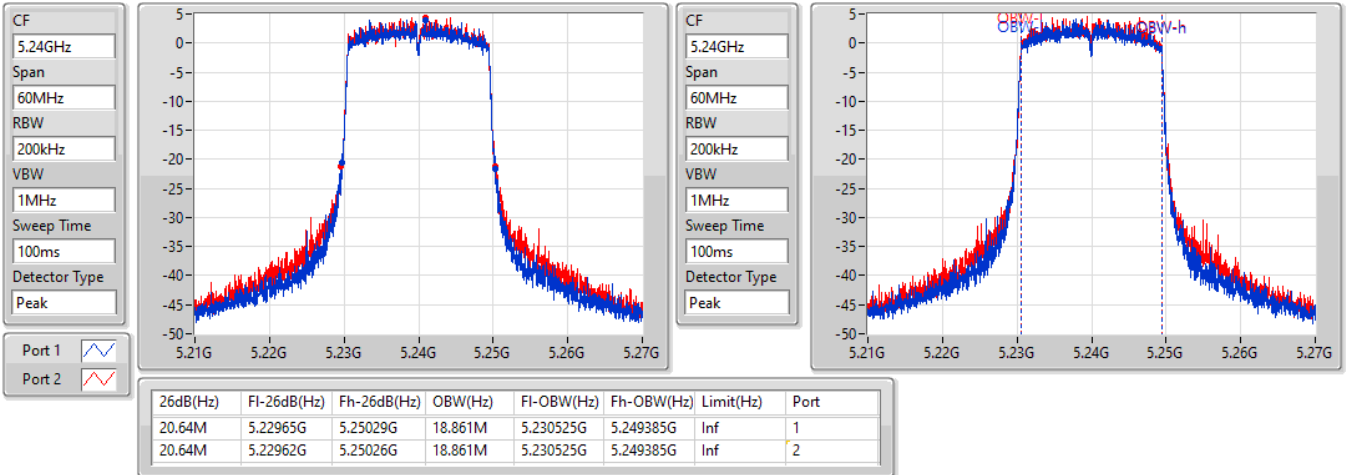
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.76M	5.18962G	5.21038G	18.891M	5.190525G	5.209415G	Inf	1
20.67M	5.18965G	5.21032G	18.861M	5.190525G	5.209385G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5240MHz

12/06/2021

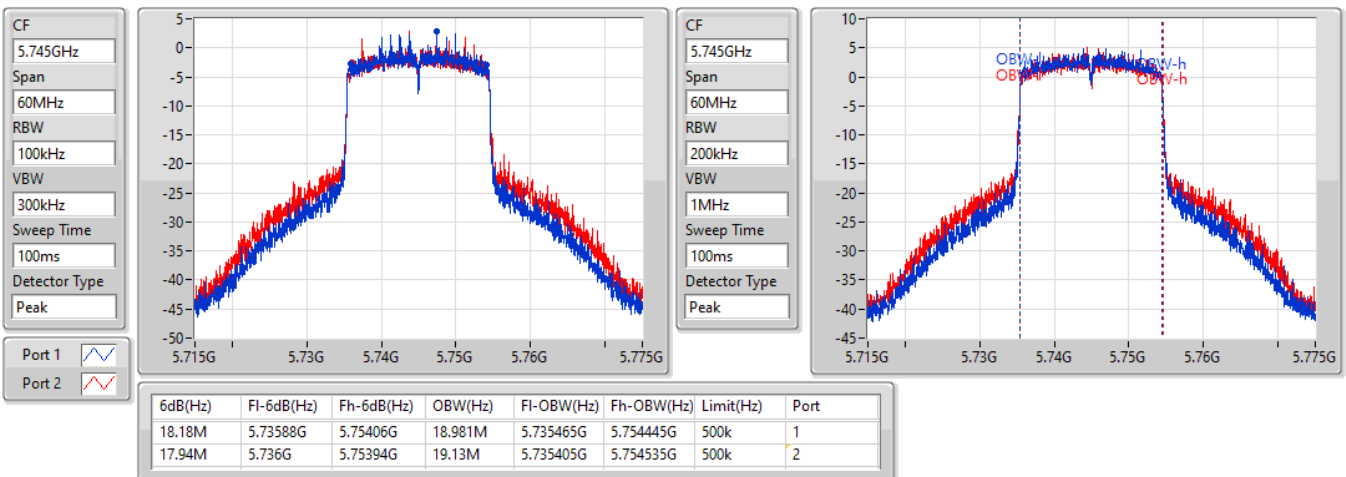


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

12/06/2021

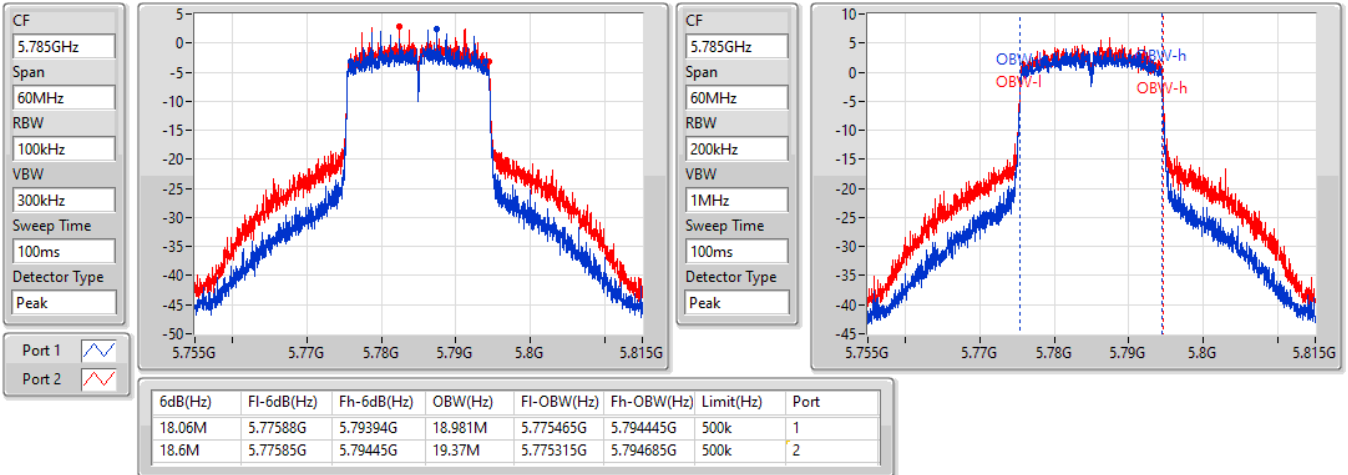


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

12/06/2021

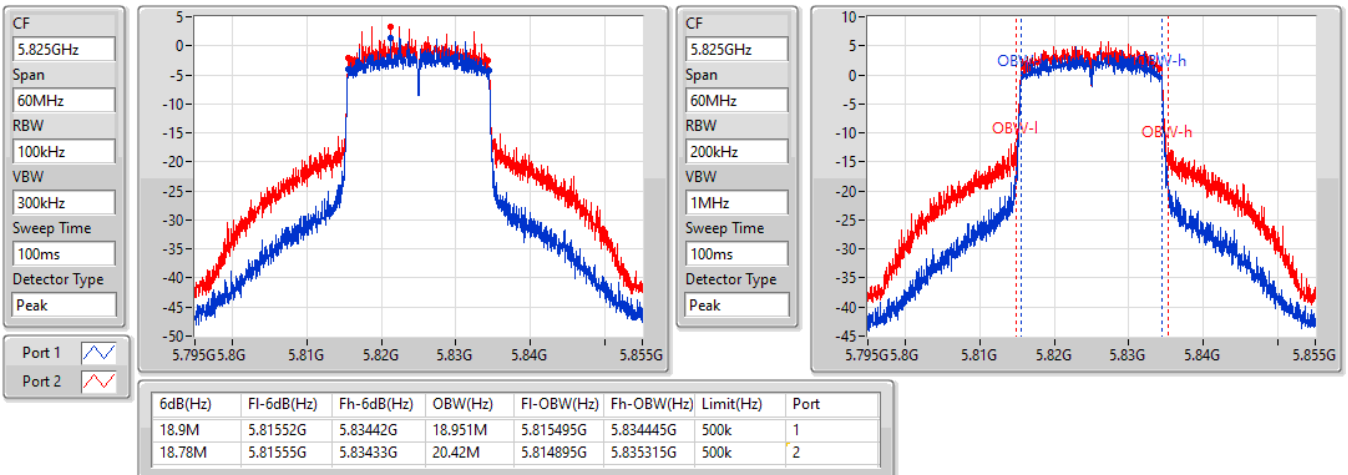


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

12/06/2021



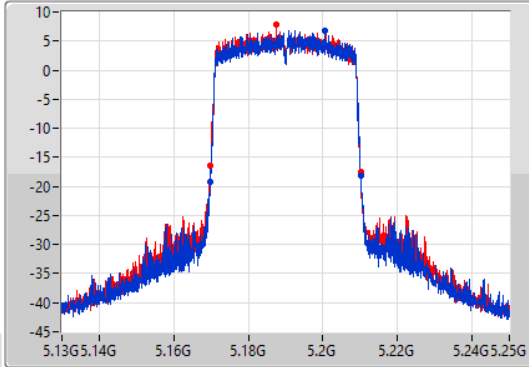
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

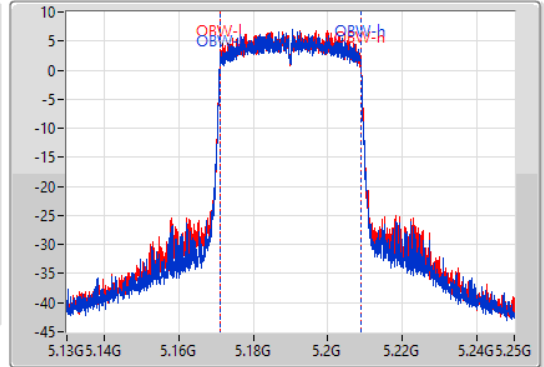
5190MHz

12/06/2021

CF
5.19GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.19GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.26M	5.16984G	5.2101G	37.601M	5.171169G	5.208771G	Inf	1
40.26M	5.16984G	5.2101G	37.721M	5.171109G	5.208831G	Inf	2

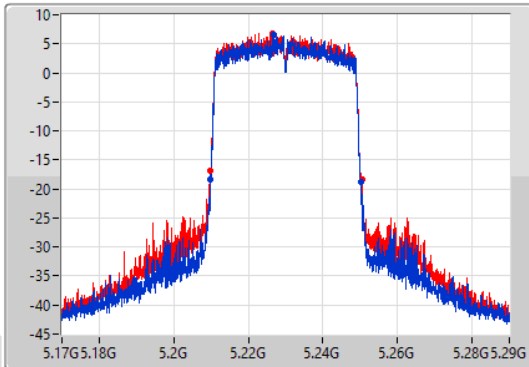
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

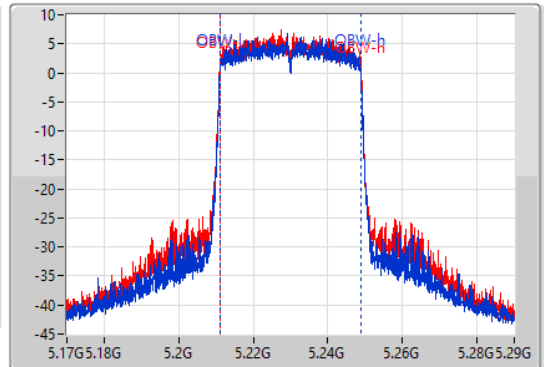
5230MHz

12/06/2021

CF
5.23GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.23GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.32M	5.20978G	5.2501G	37.601M	5.211169G	5.248771G	Inf	1
40.56M	5.20984G	5.2504G	37.661M	5.211109G	5.248771G	Inf	2

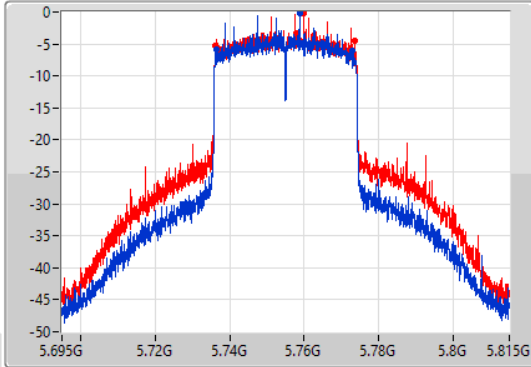
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

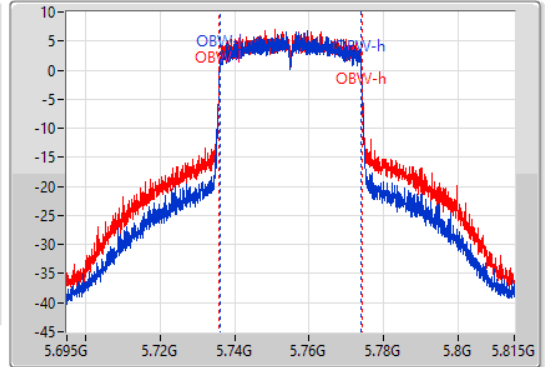
5755MHz

12/06/2021

CF
5.755GHz
Span
120MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.755GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	5.73646G	5.77276G	37.901M	5.73599G	5.773891G	500k	1
37.26M	5.73628G	5.77354G	38.441M	5.73581G	5.77425G	500k	2

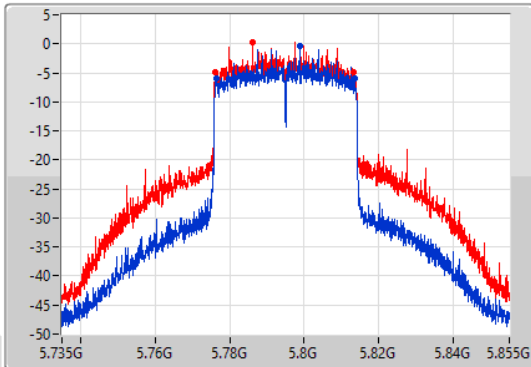
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

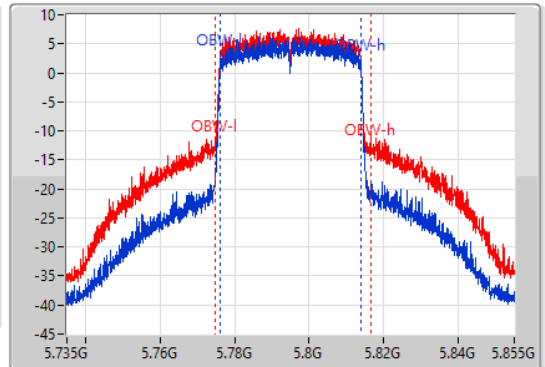
5795MHz

12/06/2021

CF
5.795GHz
Span
120MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.795GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.02M	5.7764G	5.81342G	37.901M	5.776049G	5.813951G	500k	1
37.02M	5.77622G	5.81324G	41.799M	5.77479G	5.816589G	500k	2

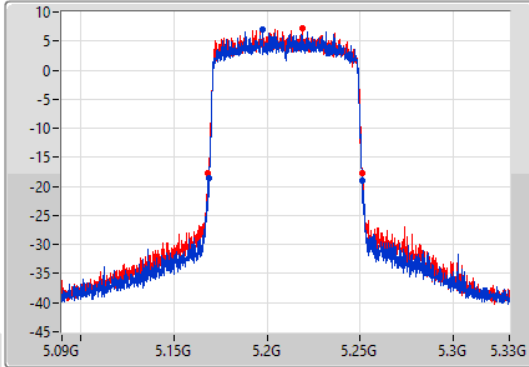
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

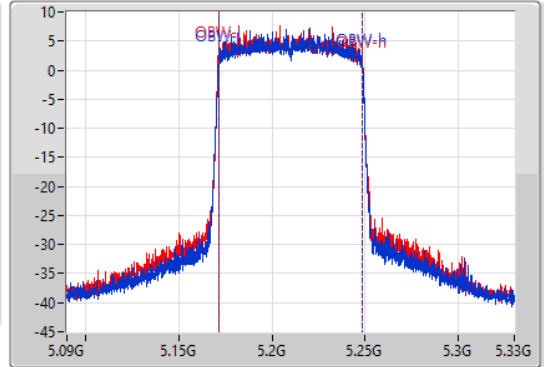
5210MHz

12/06/2021

CF
5.21GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.21GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.32M	5.16884G	5.25116G	77.121M	5.171379G	5.248501G	Inf	1
82.8M	5.16848G	5.25128G	77.241M	5.171259G	5.248501G	Inf	2

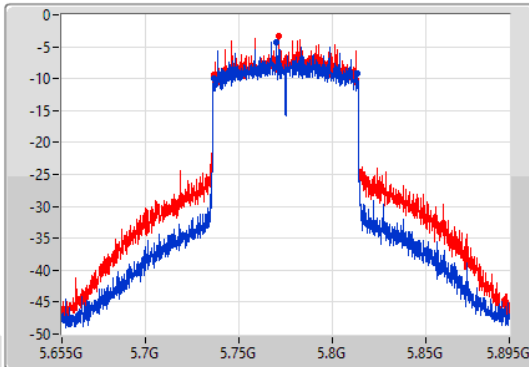
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

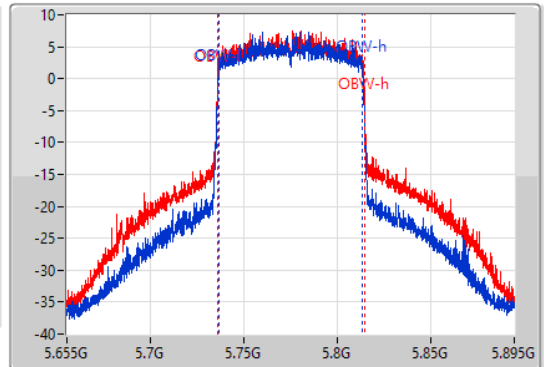
5775MHz

12/06/2021

CF
5.775GHz
Span
240MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.775GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.28M	5.73648G	5.81376G	77.481M	5.736259G	5.813741G	500k	1
76.68M	5.73684G	5.81352G	78.801M	5.73578G	5.81458G	500k	2



Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	16.52	0.04487
802.11ax HEW40_Nss1,(MCS0)_2TX	16.58	0.04550
802.11ax HEW80_Nss1,(MCS0)_2TX	16.64	0.04613
5.725-5.85GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	16.49	0.04457
802.11ax HEW40_Nss1,(MCS0)_2TX	16.60	0.04571
802.11ax HEW80_Nss1,(MCS0)_2TX	16.62	0.04592



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	0.596	12.89	13.66	16.30	30.00
5200MHz	Pass	0.596	13.25	13.75	16.52	30.00
5240MHz	Pass	0.596	13.26	13.55	16.42	30.00
5745MHz	Pass	0.156	13.52	13.43	16.49	30.00
5785MHz	Pass	0.156	12.89	13.68	16.31	30.00
5825MHz	Pass	0.156	12.81	13.96	16.43	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	0.596	13.42	13.71	16.58	30.00
5230MHz	Pass	0.596	13.03	13.60	16.33	30.00
5755MHz	Pass	0.156	13.43	13.74	16.60	30.00
5795MHz	Pass	0.156	12.35	13.61	16.04	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	0.596	13.31	13.92	16.64	30.00
5775MHz	Pass	0.156	13.21	13.97	16.62	30.00

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

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ax HEW20_Nss1,(MCS0)_2TX	3.35
802.11ax HEW40_Nss1,(MCS0)_2TX	0.56
802.11ax HEW80_Nss1,(MCS0)_2TX	-2.66
5.725-5.85GHz	-
802.11ax HEW20_Nss1,(MCS0)_2TX	1.75
802.11ax HEW40_Nss1,(MCS0)_2TX	-1.02
802.11ax HEW80_Nss1,(MCS0)_2TX	-4.18

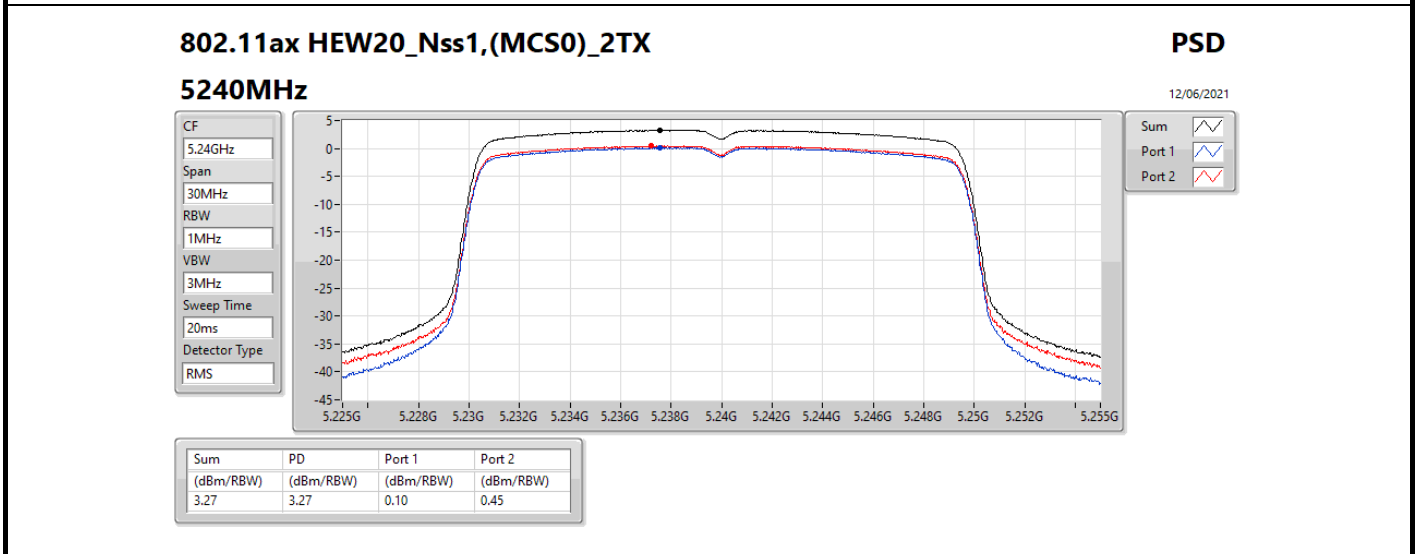
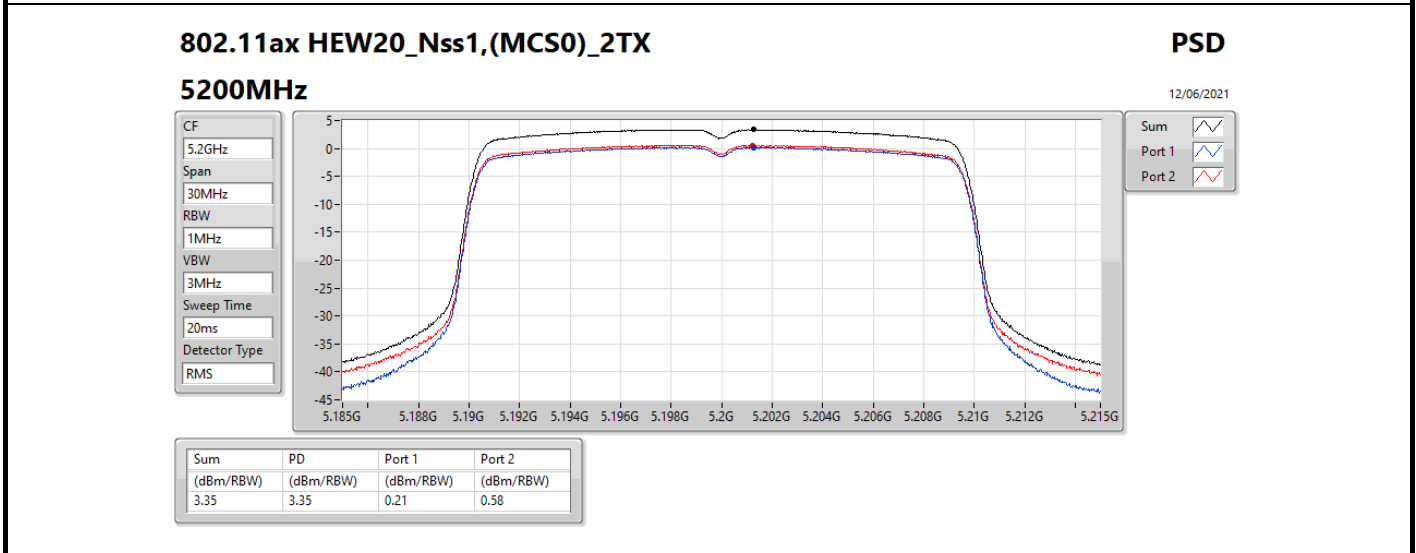
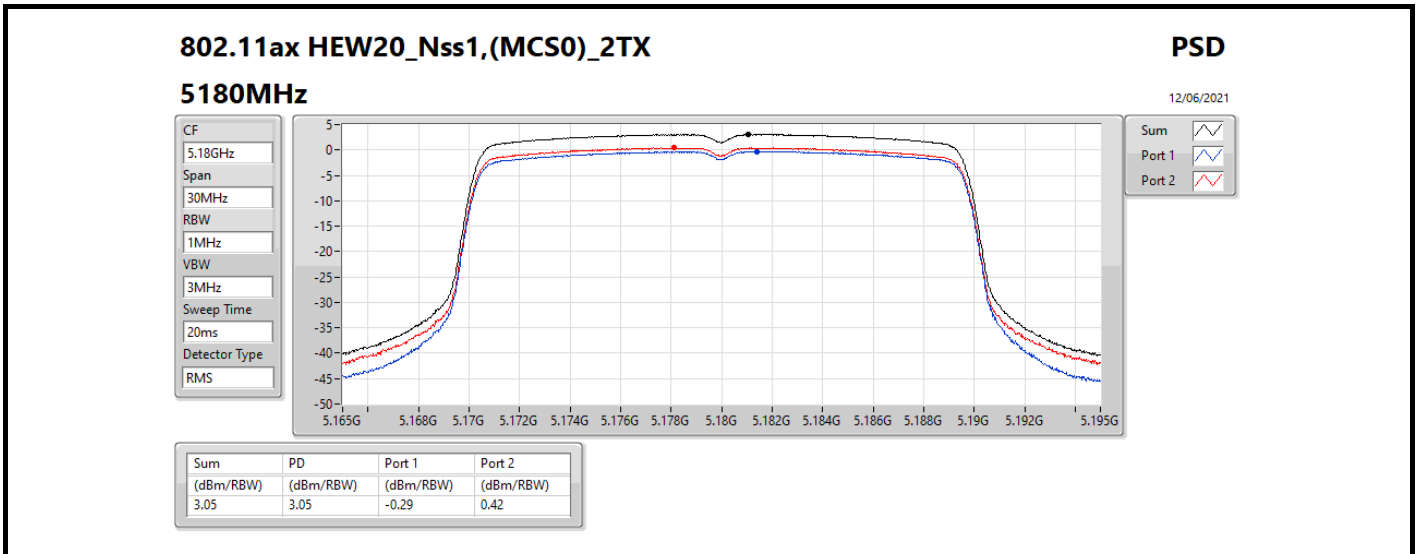
RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	3.186	-0.29	0.42	3.05	17.00
5200MHz	Pass	3.186	0.21	0.58	3.35	17.00
5240MHz	Pass	3.186	0.10	0.45	3.27	17.00
5745MHz	Pass	2.746	-1.12	-1.23	1.75	30.00
5785MHz	Pass	2.746	-1.79	-1.01	1.57	30.00
5825MHz	Pass	2.746	-1.83	-0.71	1.74	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	3.186	-2.55	-2.28	0.56	17.00
5230MHz	Pass	3.186	-2.92	-2.40	0.35	17.00
5755MHz	Pass	2.746	-4.06	-3.90	-1.02	30.00
5795MHz	Pass	2.746	-5.26	-3.96	-1.59	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	3.186	-5.99	-5.31	-2.66	17.00
5775MHz	Pass	2.746	-7.56	-6.75	-4.18	30.00

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

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



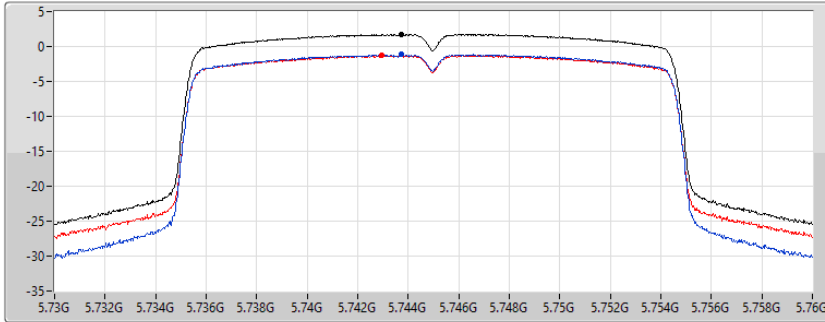
802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5745MHz

12/06/2021

CF
5.745GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.75	1.75	-1.12	-1.23

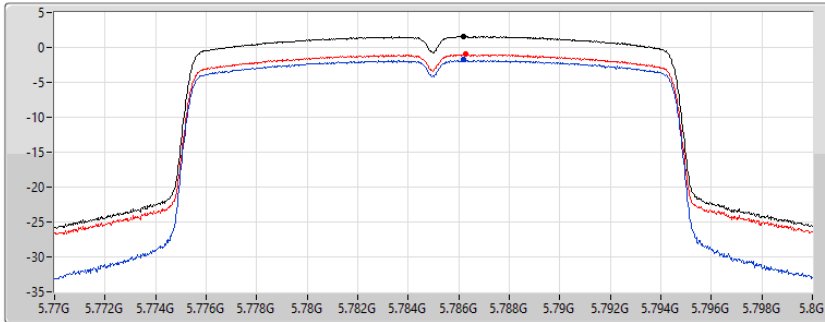
802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5785MHz

12/06/2021

CF
5.785GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.57	1.57	-1.79	-1.01

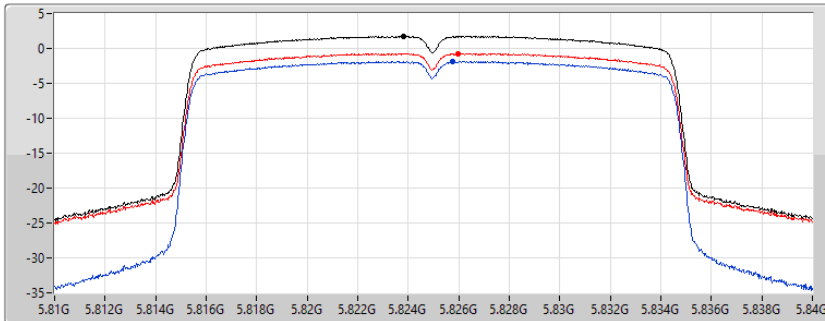
802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5825MHz

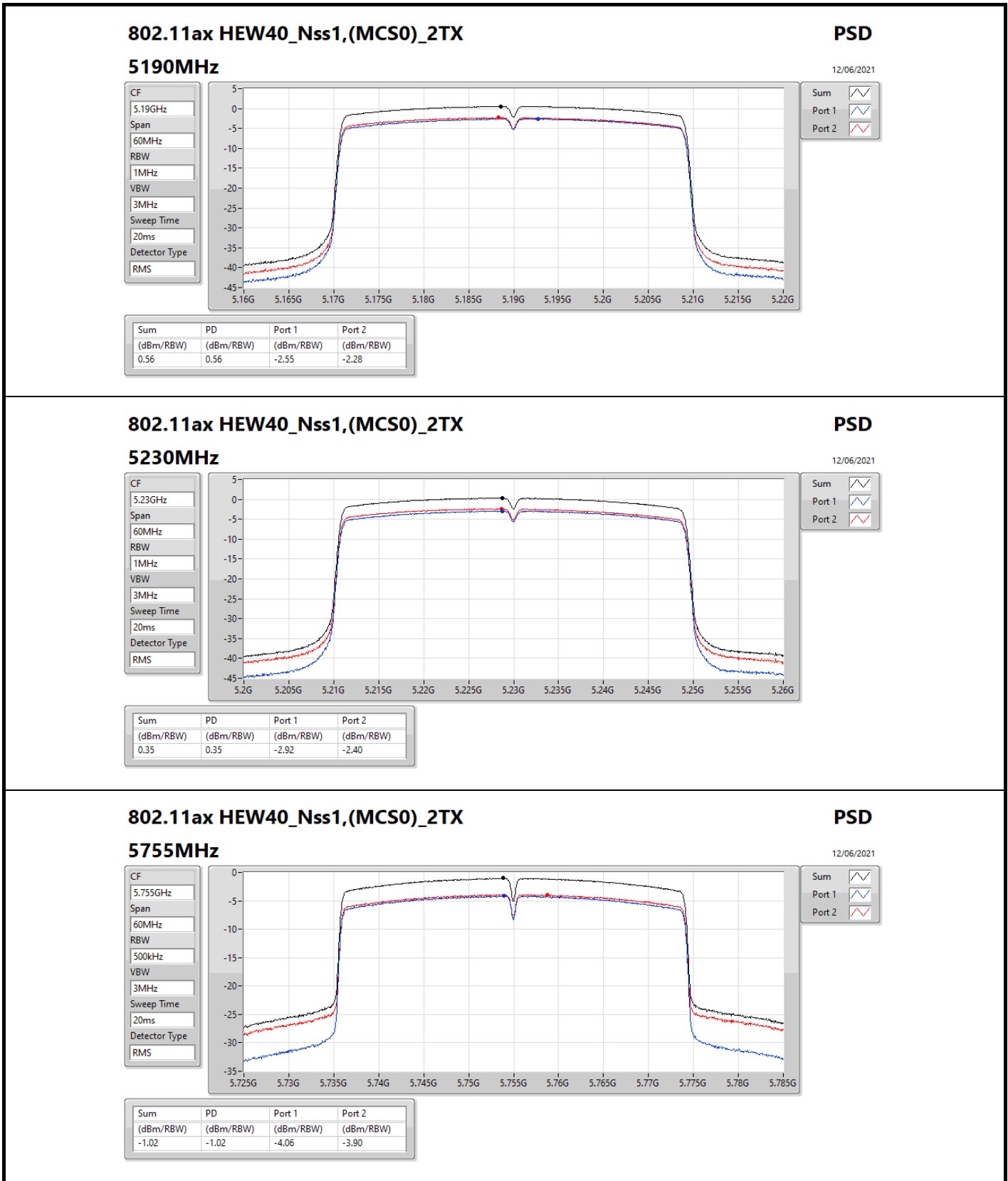
12/06/2021

CF
5.825GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.74	1.74	-1.83	-0.71



802.11ax HEW40_Nss1,(MCS0)_2TX

5755MHz

PSD

12/06/2021

CF

5.755GHz

Span

60MHz

RBW

500kHz

VBW

3MHz

Sweep Time

20ms

Detector Type

RMS



Sum

Port 1

Port 2

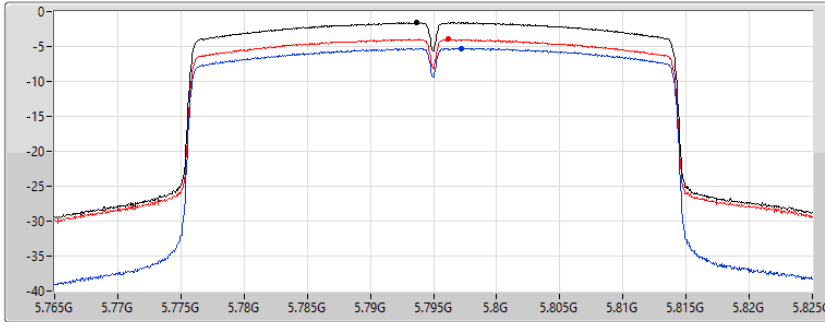
802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5795MHz

12/06/2021

CF
5.795GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.59	-1.59	-5.26	-3.96

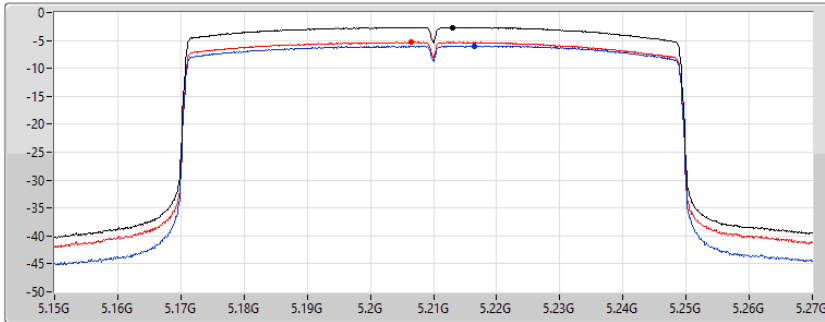
802.11ax HEW80_Nss1,(MCS0)_2TX

PSD

5210MHz

12/06/2021

CF
5.21GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.66	-2.66	-5.99	-5.31

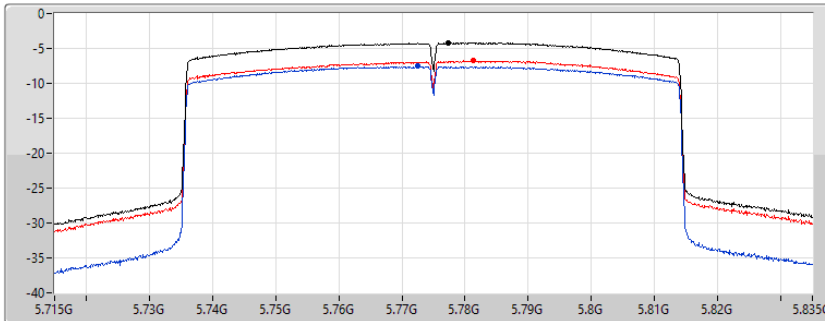
802.11ax HEW80_Nss1,(MCS0)_2TX

PSD

5775MHz

12/06/2021

CF
5.775GHz
Span
120MHz
RBW
500kHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS



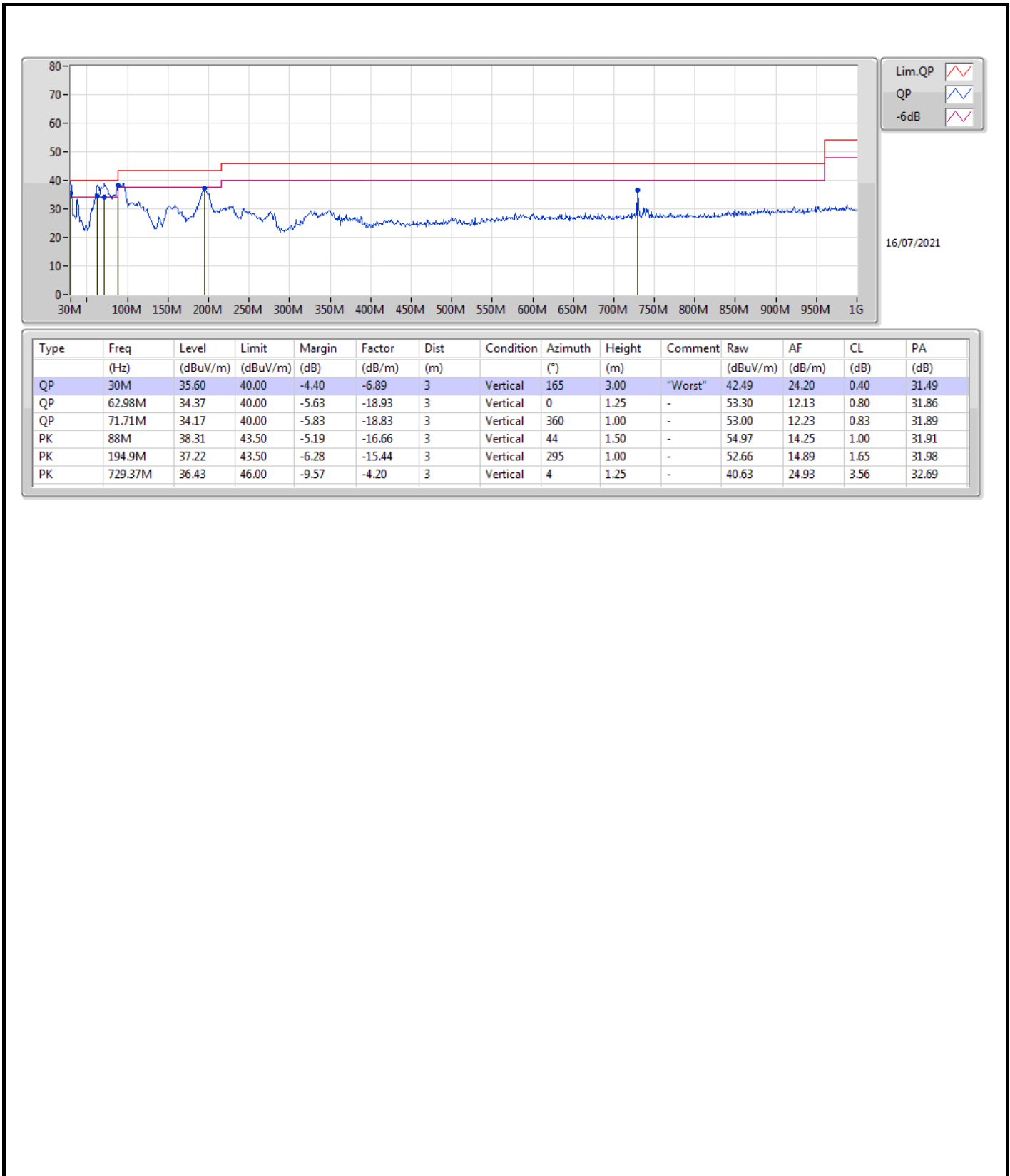
Sum
Port 1
Port 2

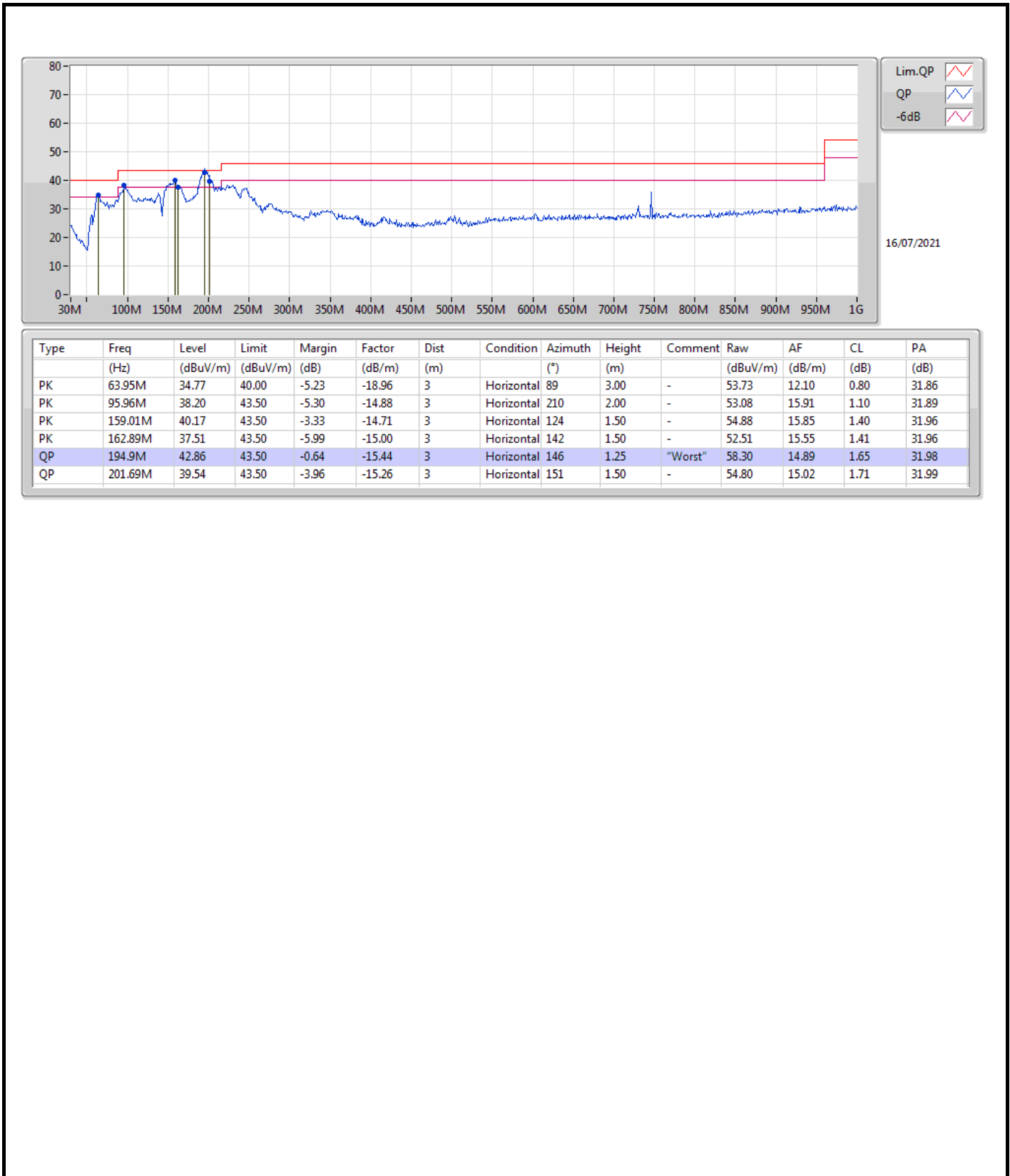
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.18	-4.18	-7.56	-6.75



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 4	Pass	QP	194.9M	42.86	43.50	-0.64	Horizontal







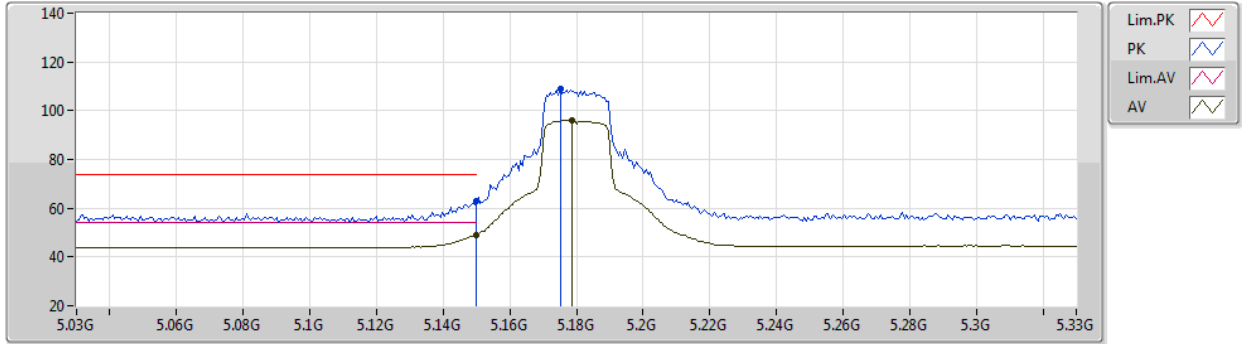
Summary

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_Nss1,(MCS0)_2TX	Pass	AV	5.15G	53.88	54.00	-0.12	3	Horizontal	4	1.01	-

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5180MHz_TX



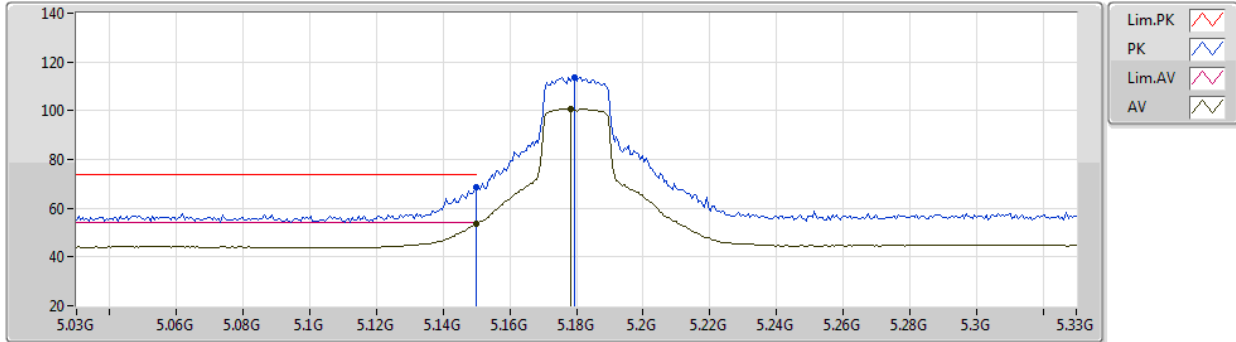
EUT_Z_2TX
Setting 18
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	62.97	74.00	-11.03	58.14	3	Vertical	18	2.97	-	32.60	5.17	32.94
AV	5.15G	49.21	54.00	-4.79	44.38	3	Vertical	18	2.97	-	32.60	5.17	32.94
PK	5.1752G	108.79	Inf	-Inf	103.89	3	Vertical	18	2.97	-	32.65	5.19	32.94
AV	5.1788G	95.98	Inf	-Inf	91.07	3	Vertical	18	2.97	-	32.66	5.19	32.94

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5180MHz_TX



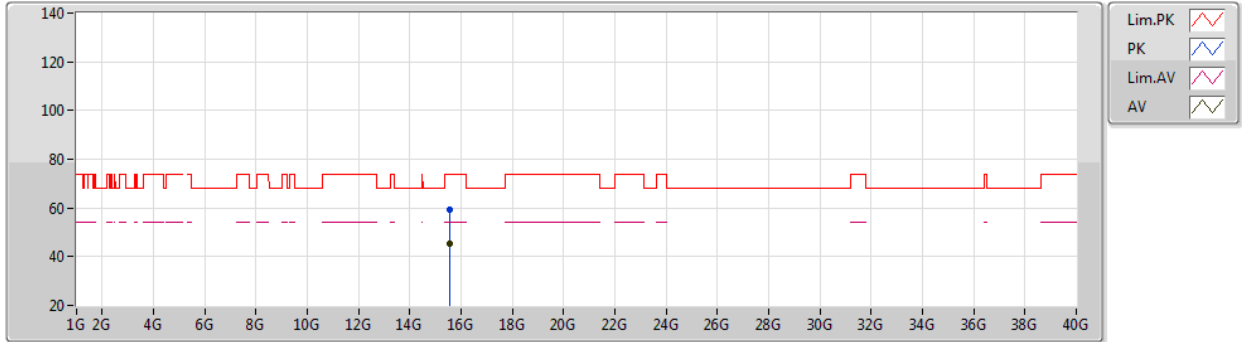
EUT_Z_2TX
Setting 18
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	68.45	74.00	-5.55	63.62	3	Horizontal	3	1.00	-	32.60	5.17	32.94
AV	5.15G	53.62	54.00	-0.38	48.79	3	Horizontal	3	1.00	-	32.60	5.17	32.94
PK	5.1794G	113.65	Inf	-Inf	108.74	3	Horizontal	3	1.00	-	32.66	5.19	32.94
AV	5.1782G	100.72	Inf	-Inf	95.81	3	Horizontal	3	1.00	-	32.66	5.19	32.94

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5180MHz_TX



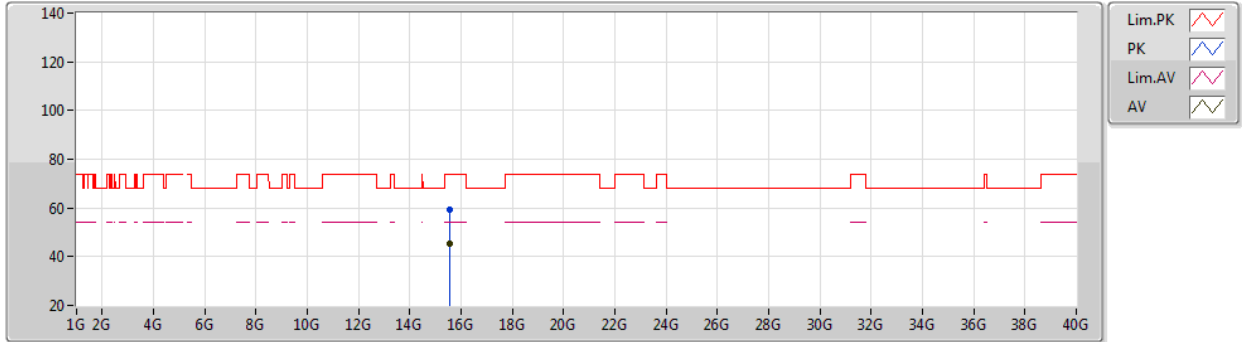
EUT Z_2TX
Setting 18
01-A-5-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.53392G	59.41	74.00	-14.59	44.84	3	Vertical	167	1.74	-	38.17	9.21	32.81
AV	15.53584G	45.36	54.00	-8.64	30.79	3	Vertical	167	1.74	-	38.17	9.21	32.81

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5180MHz_TX



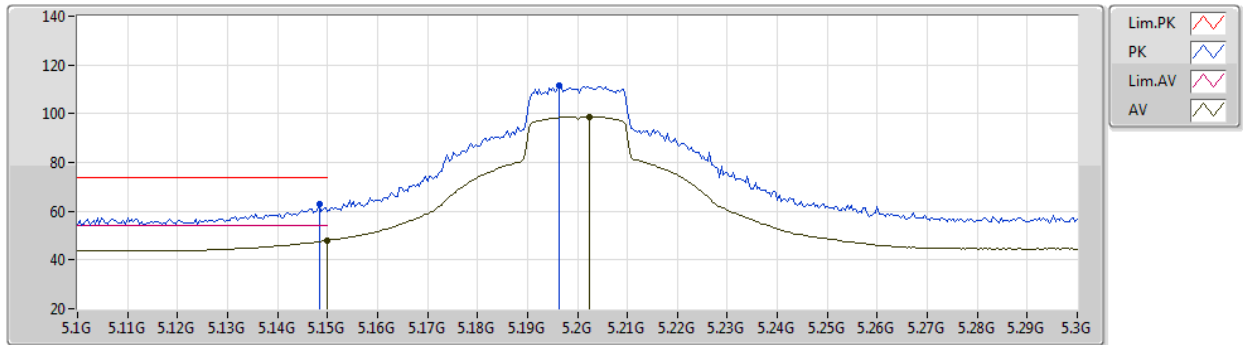
EUT_Z_2TX
Setting 18
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.53584G	59.36	74.00	-14.64	44.79	3	Horizontal	193	1.56	-	38.17	9.21	32.81
AV	15.53436G	45.41	54.00	-8.59	30.84	3	Horizontal	193	1.56	-	38.17	9.21	32.81

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5200MHz_TX



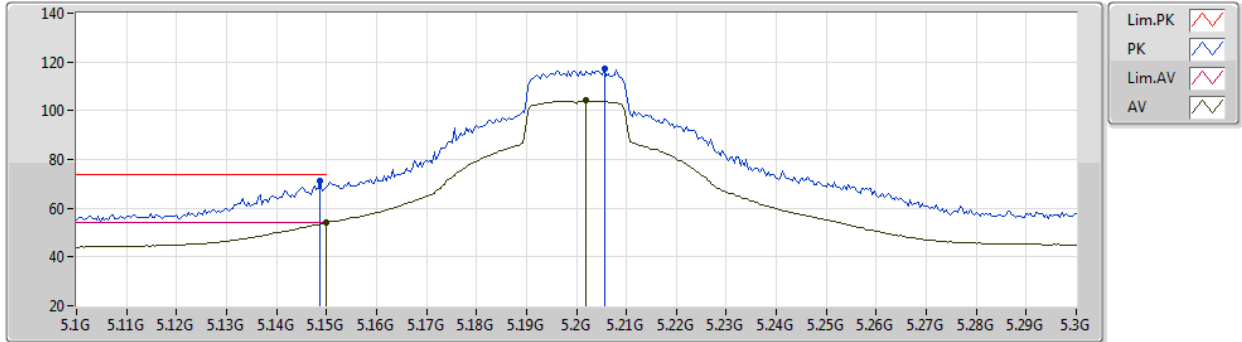
EUT Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1484G	62.88	74.00	-11.12	58.05	3	Vertical	21	2.96	-	32.60	5.17	32.94
AV	5.15G	48.11	54.00	-5.89	43.28	3	Vertical	21	2.96	-	32.60	5.17	32.94
PK	5.1964G	111.39	Inf	-Inf	106.44	3	Vertical	21	2.96	-	32.69	5.20	32.94
AV	5.2024G	98.86	Inf	-Inf	93.90	3	Vertical	21	2.96	-	32.70	5.20	32.94

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5200MHz_TX



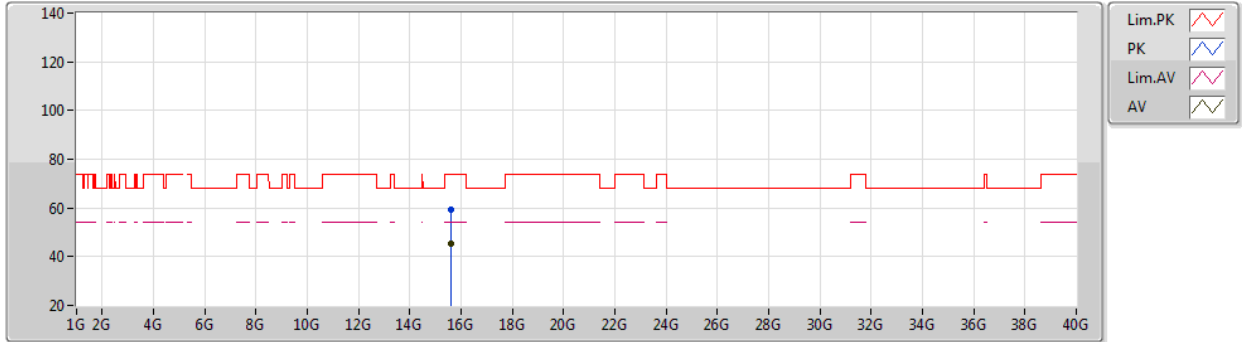
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1488G	71.03	74.00	-2.97	66.20	3	Horizontal	4	1.01	-	32.60	5.17	32.94
AV	5.15G	53.88	54.00	-0.12	49.05	3	Horizontal	4	1.01	-	32.60	5.17	32.94
PK	5.2056G	117.21	Inf	-Inf	112.23	3	Horizontal	4	1.01	-	32.71	5.21	32.94
AV	5.202G	104.14	Inf	-Inf	99.18	3	Horizontal	4	1.01	-	32.70	5.20	32.94

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5200MHz_TX



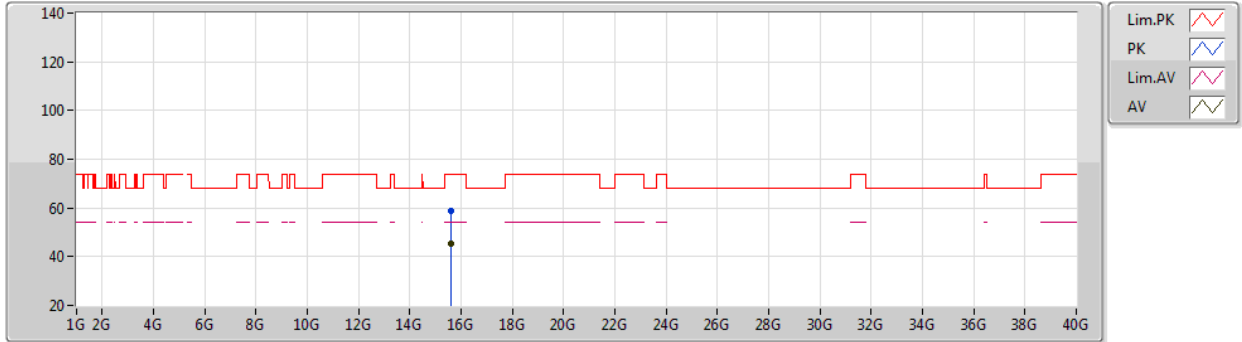
EUT Z_2TX
Setting 22
01-A-5-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.59276G	59.18	74.00	-14.82	44.48	3	Vertical	190	1.75	-	38.29	9.22	32.81
AV	15.60196G	45.20	54.00	-8.80	30.48	3	Vertical	190	1.75	-	38.30	9.22	32.80

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5200MHz_TX



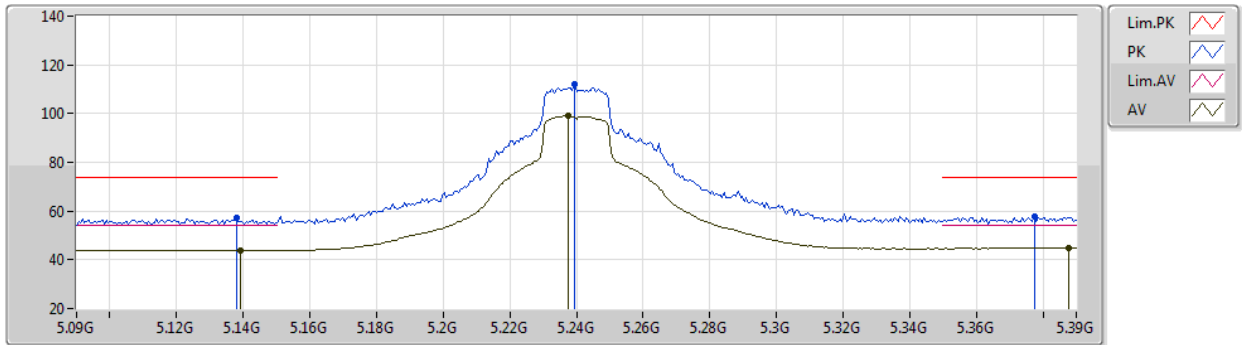
EUT Z_2TX
Setting 22
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.59568G	58.65	74.00	-15.35	43.94	3	Horizontal	261	1.28	-	38.29	9.22	32.80
AV	15.60692G	45.22	54.00	-8.78	30.49	3	Horizontal	261	1.28	-	38.31	9.22	32.80

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5240MHz_TX



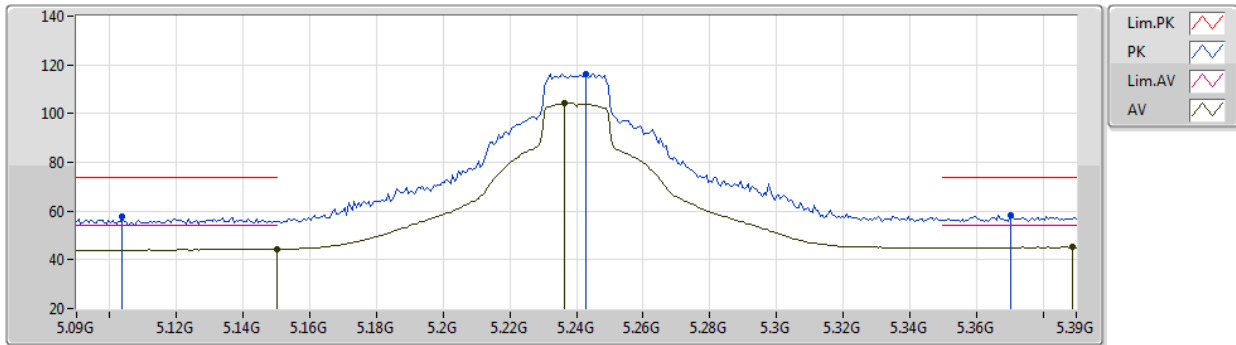
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.138G	57.04	74.00	-16.96	52.21	3	Vertical	23	1.01	-	32.60	5.17	32.94
AV	5.1392G	43.93	54.00	-10.07	39.10	3	Vertical	23	1.01	-	32.60	5.17	32.94
PK	5.2394G	111.99	Inf	-Inf	106.90	3	Vertical	23	1.01	-	32.78	5.24	32.93
AV	5.2376G	98.97	Inf	-Inf	93.88	3	Vertical	23	1.01	-	32.78	5.24	32.93
PK	5.3774G	57.80	74.00	-16.20	52.27	3	Vertical	23	1.01	-	33.06	5.38	32.91
AV	5.3876G	45.04	54.00	-8.96	39.43	3	Vertical	23	1.01	-	33.13	5.39	32.91

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5240MHz_TX



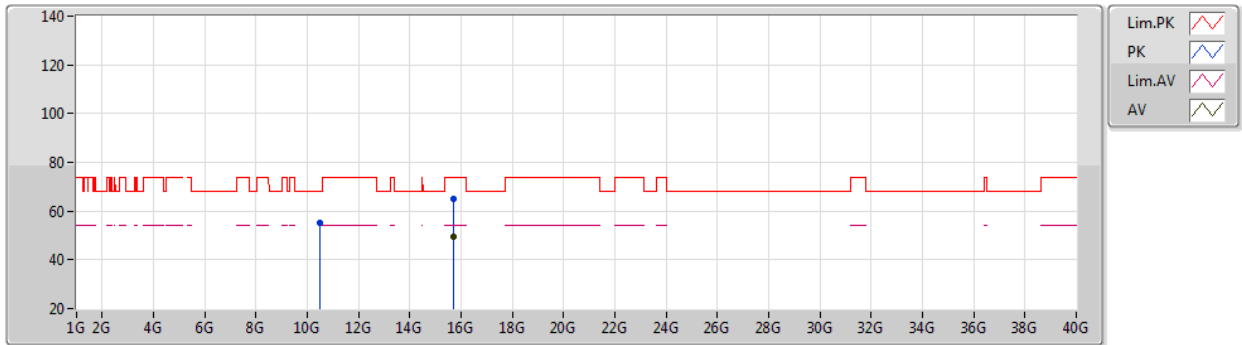
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1038G	57.59	74.00	-16.41	52.79	3	Horizontal	0	1.07	-	32.60	5.15	32.95
AV	5.15G	44.37	54.00	-9.63	39.54	3	Horizontal	0	1.07	-	32.60	5.17	32.94
PK	5.243G	116.22	Inf	-Inf	111.12	3	Horizontal	0	1.07	-	32.79	5.24	32.93
AV	5.2364G	104.29	Inf	-Inf	99.21	3	Horizontal	0	1.07	-	32.77	5.24	32.93
PK	5.3702G	58.28	74.00	-15.72	52.81	3	Horizontal	0	1.07	-	33.02	5.37	32.92
AV	5.3888G	45.22	54.00	-8.78	39.61	3	Horizontal	0	1.07	-	33.13	5.39	32.91

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5240MHz_TX



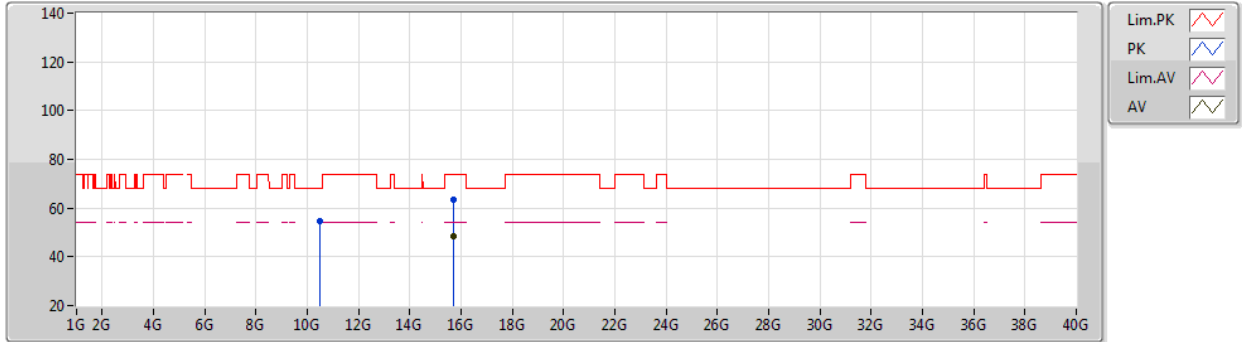
EUT Z_2TX
Setting 22
01-A-K-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.48484G	55.14	68.20	-13.06	42.32	3	Vertical	189	1.00	-	38.37	7.47	33.02
PK	15.7154G	64.85	74.00	-9.15	50.00	3	Vertical	124	2.35	-	38.40	9.24	32.79
AV	15.7194G	49.43	54.00	-4.57	34.57	3	Vertical	124	2.35	-	38.40	9.24	32.78

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5240MHz_TX



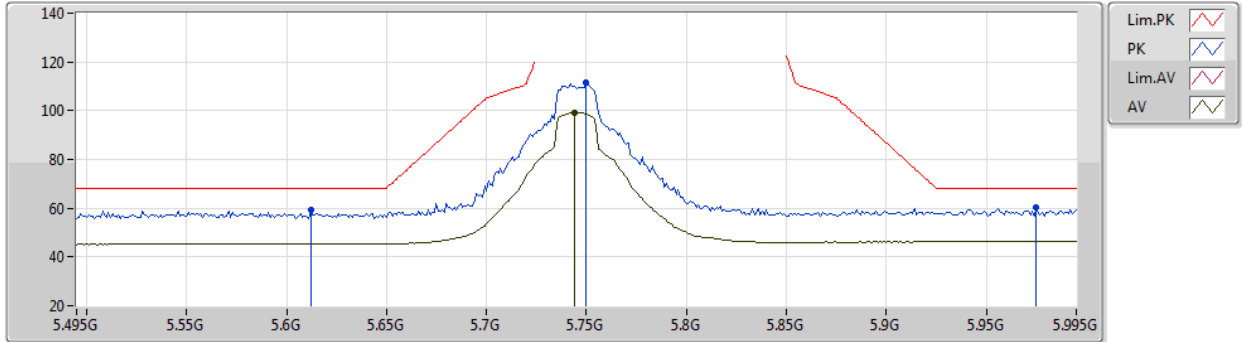
EUT Z_2TX
Setting 22
01-A-K-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.47868G	54.55	68.20	-13.65	41.75	3	Horizontal	172	1.07	-	38.36	7.47	33.03
PK	15.72292G	63.56	74.00	-10.44	48.70	3	Horizontal	343	2.00	-	38.40	9.24	32.78
AV	15.7222G	48.41	54.00	-5.59	33.55	3	Horizontal	343	2.00	-	38.40	9.24	32.78

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5745MHz_TX



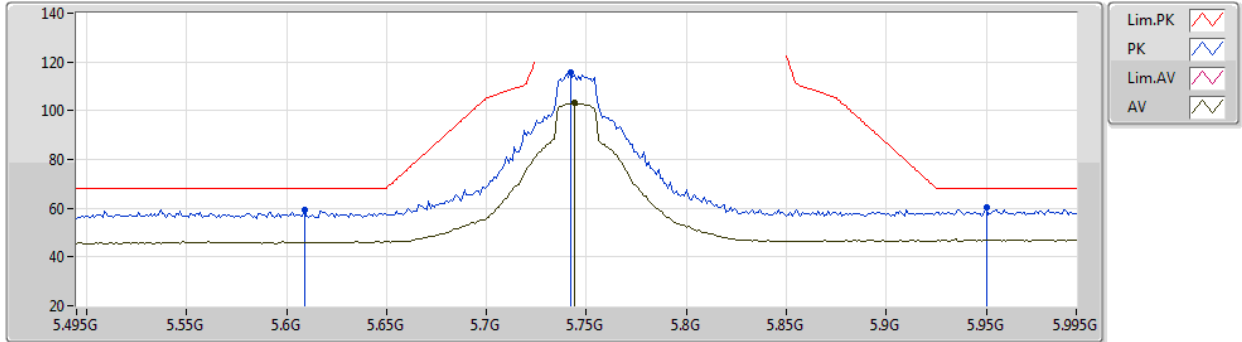
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.612G	59.21	68.20	-8.99	52.89	3	Vertical	218	2.83	-	33.82	5.41	32.91
PK	5.75G	111.42	Inf	-Inf	104.77	3	Vertical	218	2.83	-	34.10	5.47	32.92
AV	5.744G	99.14	Inf	-Inf	92.51	3	Vertical	218	2.83	-	34.08	5.47	32.92
PK	5.975G	60.27	68.20	-7.93	52.62	3	Vertical	218	2.83	-	35.10	5.50	32.95

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5745MHz_TX



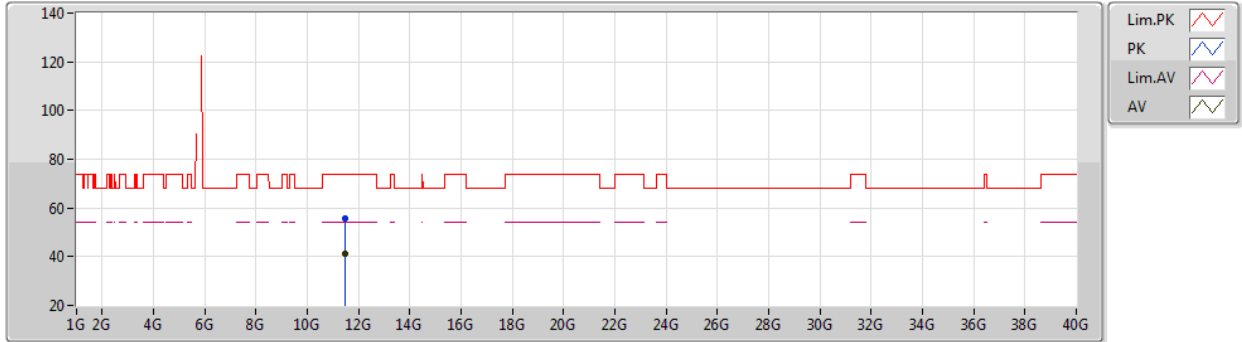
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.609G	59.22	68.20	-8.98	52.91	3	Horizontal	360	1.07	-	33.82	5.40	32.91
PK	5.742G	115.47	Inf	-Inf	108.85	3	Horizontal	360	1.07	-	34.07	5.47	32.92
AV	5.744G	103.10	Inf	-Inf	96.47	3	Horizontal	360	1.07	-	34.08	5.47	32.92
PK	5.95G	60.21	68.20	-7.99	52.66	3	Horizontal	360	1.07	-	35.00	5.50	32.95

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5745MHz_TX



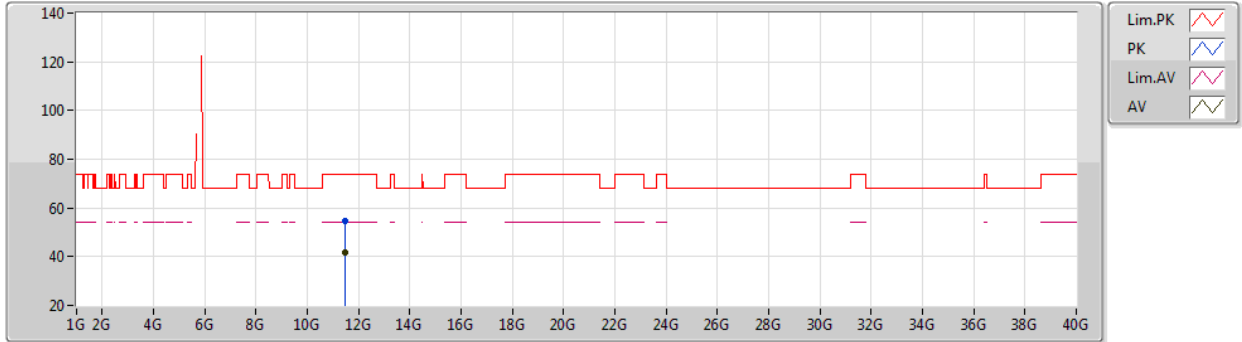
EUT Z_2TX
Setting 22
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.494G	55.47	74.00	-18.53	42.06	3	Vertical	2	2.42	-	38.40	7.82	32.81
AV	11.48644G	41.37	54.00	-12.63	27.96	3	Vertical	2	2.42	-	38.40	7.82	32.81

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5745MHz_TX



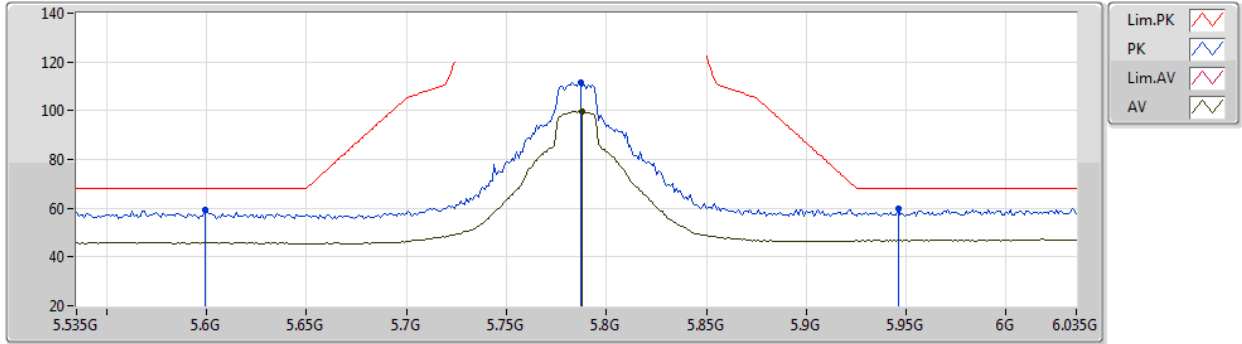
EUT Z_2TX
Setting 22
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.49104G	54.85	74.00	-19.15	41.44	3	Horizontal	251	2.49	-	38.40	7.82	32.81
AV	11.49992G	41.54	54.00	-12.46	28.13	3	Horizontal	251	2.49	-	38.40	7.82	32.81

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5785MHz_TX



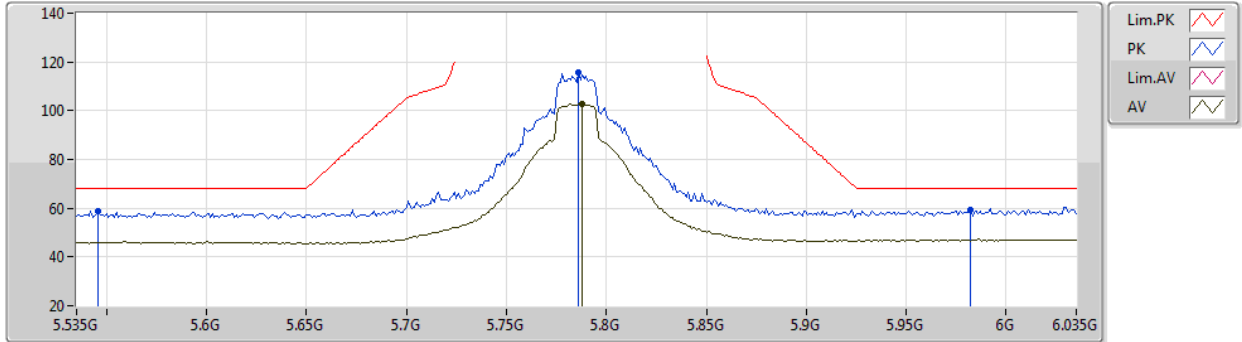
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.599G	59.15	68.20	-9.05	52.86	3	Vertical	218	2.63	-	33.80	5.40	32.91
PK	5.787G	111.53	Inf	-Inf	104.72	3	Vertical	218	2.63	-	34.25	5.49	32.93
AV	5.788G	99.77	Inf	-Inf	92.96	3	Vertical	218	2.63	-	34.25	5.49	32.93
PK	5.946G	59.59	68.20	-8.61	52.05	3	Vertical	218	2.63	-	34.98	5.50	32.94

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5785MHz_TX



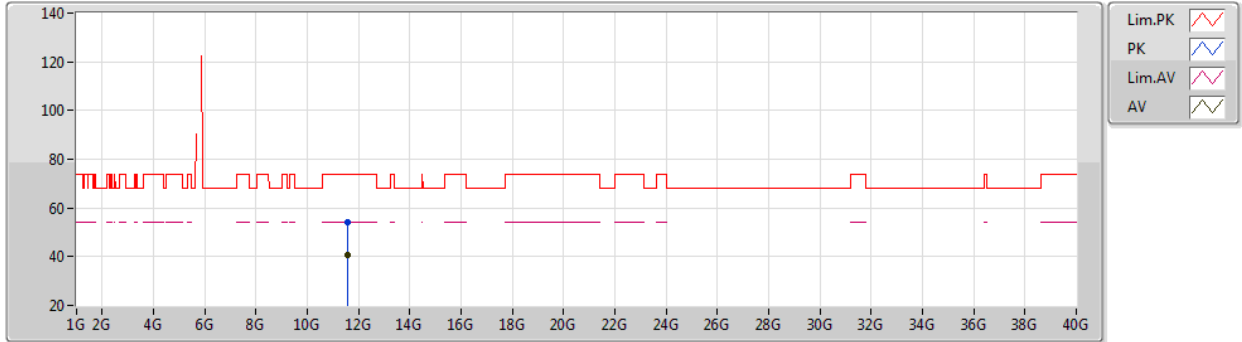
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.546G	58.86	68.20	-9.34	52.68	3	Horizontal	360	1.00	-	33.68	5.40	32.90
PK	5.786G	115.64	Inf	-Inf	108.84	3	Horizontal	360	1.00	-	34.24	5.49	32.93
AV	5.788G	102.91	Inf	-Inf	96.10	3	Horizontal	360	1.00	-	34.25	5.49	32.93
PK	5.982G	59.27	68.20	-8.93	51.59	3	Horizontal	360	1.00	-	35.13	5.50	32.95

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5785MHz_TX



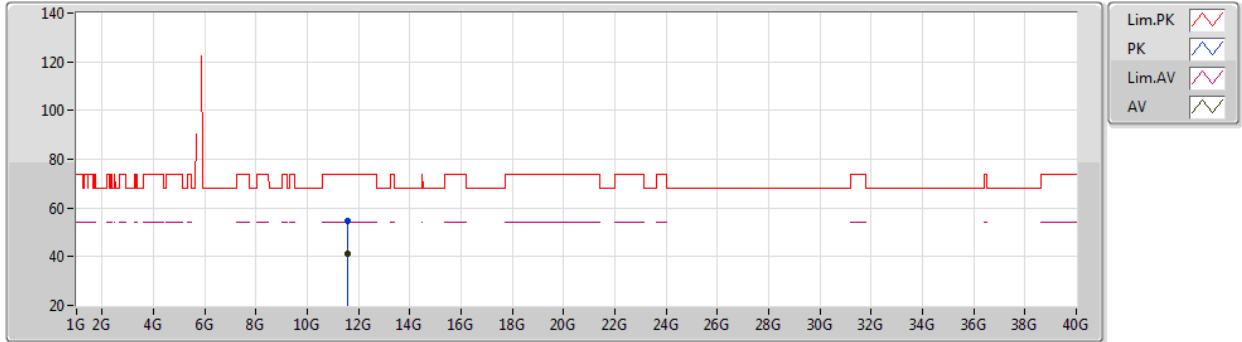
EUT Z_2TX
Setting 22
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.5622G	54.38	74.00	-19.62	40.95	3	Vertical	176	2.30	-	38.40	7.85	32.82
AV	11.5624G	40.84	54.00	-13.16	27.41	3	Vertical	176	2.30	-	38.40	7.85	32.82

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5785MHz_TX



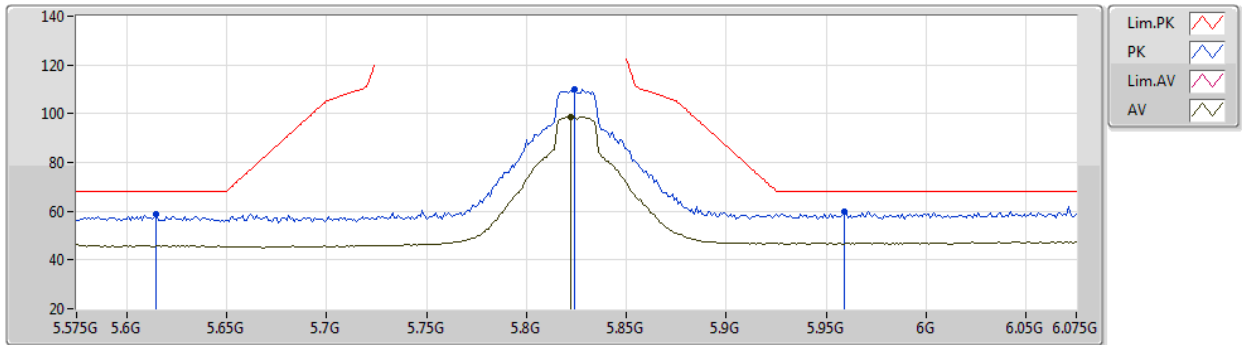
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Setting 22
01-A-5-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.569G	54.45	74.00	-19.55	41.02	3	Horizontal	208	1.52	-	38.40	7.85	32.82
AV	11.57348G	41.00	54.00	-13.00	27.57	3	Horizontal	208	1.52	-	38.40	7.85	32.82

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5825MHz_TX



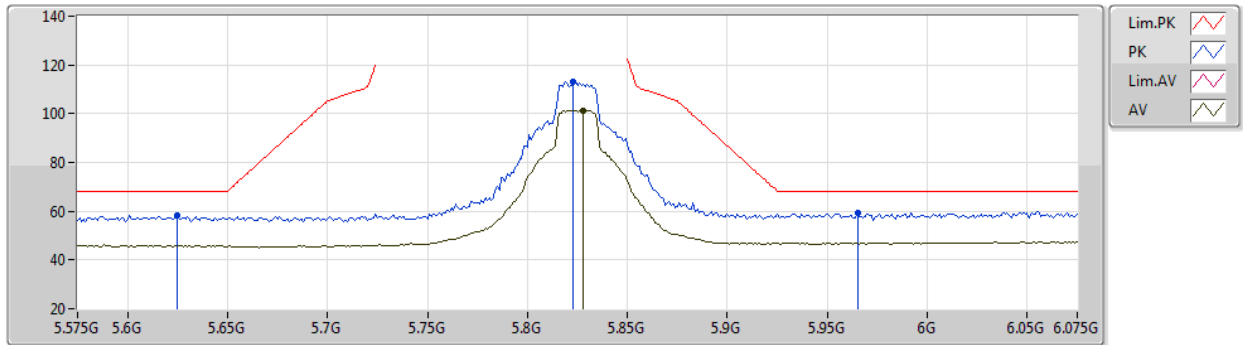
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.615G	58.93	68.20	-9.27	52.60	3	Vertical	218	2.87	-	33.83	5.41	32.91
PK	5.824G	110.14	Inf	-Inf	103.17	3	Vertical	218	2.87	-	34.40	5.50	32.93
AV	5.822G	98.64	Inf	-Inf	91.68	3	Vertical	218	2.87	-	34.39	5.50	32.93
PK	5.959G	59.80	68.20	-8.40	52.21	3	Vertical	218	2.87	-	35.04	5.50	32.95

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5825MHz_TX



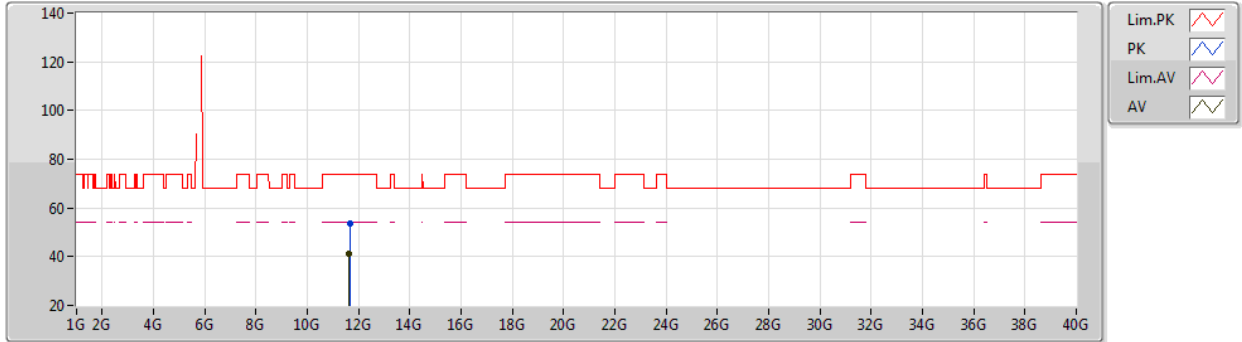
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.625G	58.28	68.20	-9.92	51.93	3	Horizontal	2	1.00	-	33.85	5.41	32.91
PK	5.823G	113.12	Inf	-Inf	106.16	3	Horizontal	2	1.00	-	34.39	5.50	32.93
AV	5.828G	101.40	Inf	-Inf	94.42	3	Horizontal	2	1.00	-	34.41	5.50	32.93
PK	5.965G	59.56	68.20	-8.64	51.95	3	Horizontal	2	1.00	-	35.06	5.50	32.95

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5825MHz_TX



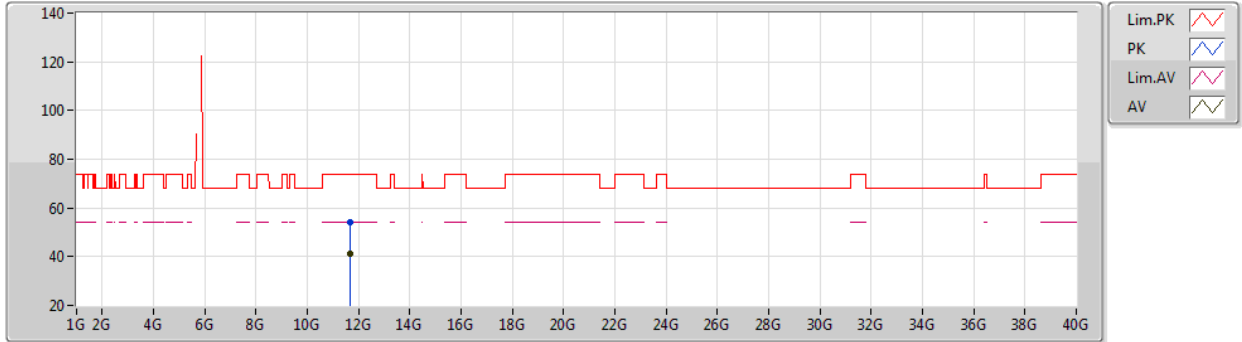
EUT Z_2TX
Setting 22
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.64892G	53.87	74.00	-20.13	40.37	3	Vertical	100	1.44	-	38.45	7.88	32.83
AV	11.64324G	41.07	54.00	-12.93	27.58	3	Vertical	100	1.44	-	38.44	7.88	32.83

802.11ax HEW20_Nss1,(MCS0)_2TX

10/06/2021

5825MHz_TX



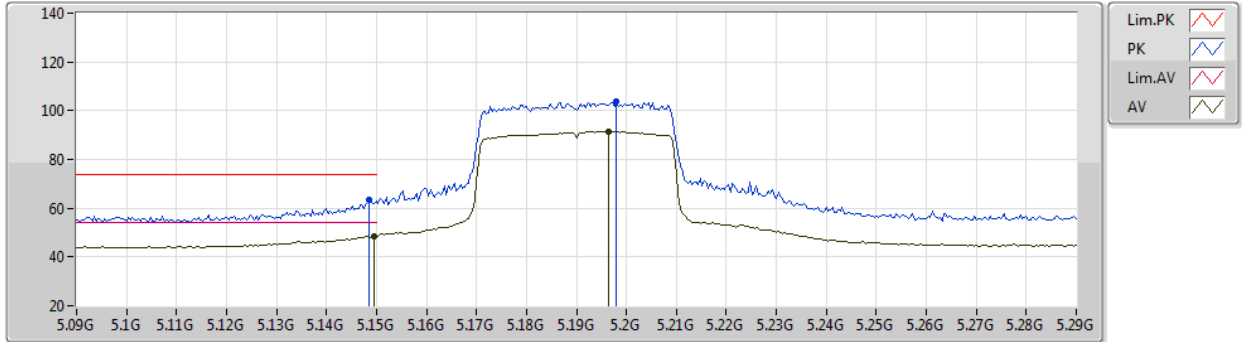
EUT Z_2TX
Setting 22
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.65408G	54.11	74.00	-19.89	40.61	3	Horizontal	86	2.64	-	38.45	7.88	32.83
AV	11.64904G	41.10	54.00	-12.90	27.60	3	Horizontal	86	2.64	-	38.45	7.88	32.83

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5190MHz_TX



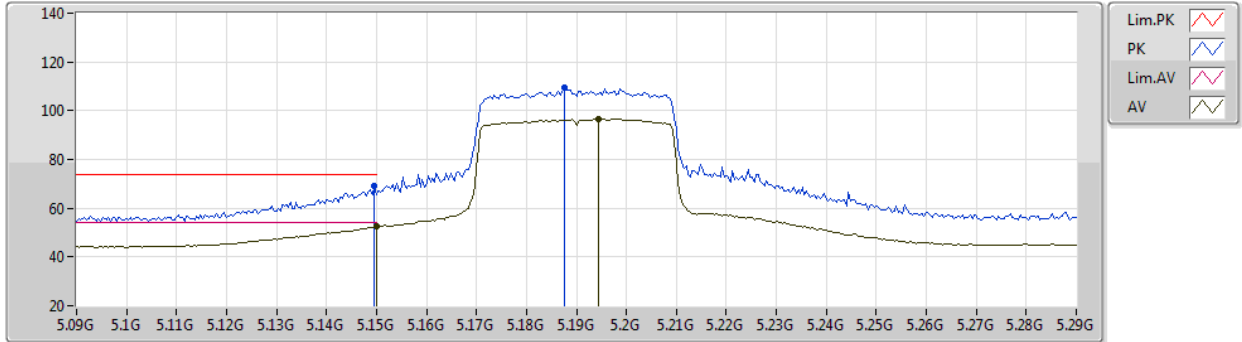
EUT_Z_2TX
Setting 15.5
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1484G	63.23	74.00	-10.77	58.40	3	Vertical	17	2.67	-	32.60	5.17	32.94
AV	5.1496G	48.68	54.00	-5.32	43.85	3	Vertical	17	2.67	-	32.60	5.17	32.94
PK	5.198G	103.86	Inf	-Inf	98.90	3	Vertical	17	2.67	-	32.70	5.20	32.94
AV	5.1964G	91.37	Inf	-Inf	86.42	3	Vertical	17	2.67	-	32.69	5.20	32.94

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5190MHz_TX



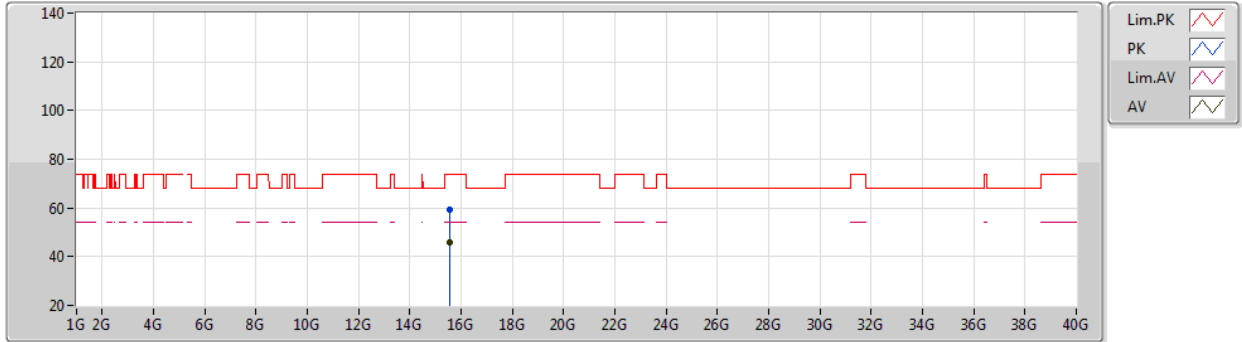
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Setting 15.5
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1496G	69.11	74.00	-4.89	64.28	3	Horizontal	5	1.04	-	32.60	5.17	32.94
AV	5.15G	52.75	54.00	-1.25	47.92	3	Horizontal	5	1.04	-	32.60	5.17	32.94
PK	5.1876G	109.51	Inf	-Inf	104.58	3	Horizontal	5	1.04	-	32.68	5.19	32.94
AV	5.1944G	96.43	Inf	-Inf	91.48	3	Horizontal	5	1.04	-	32.69	5.20	32.94

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5190MHz_TX



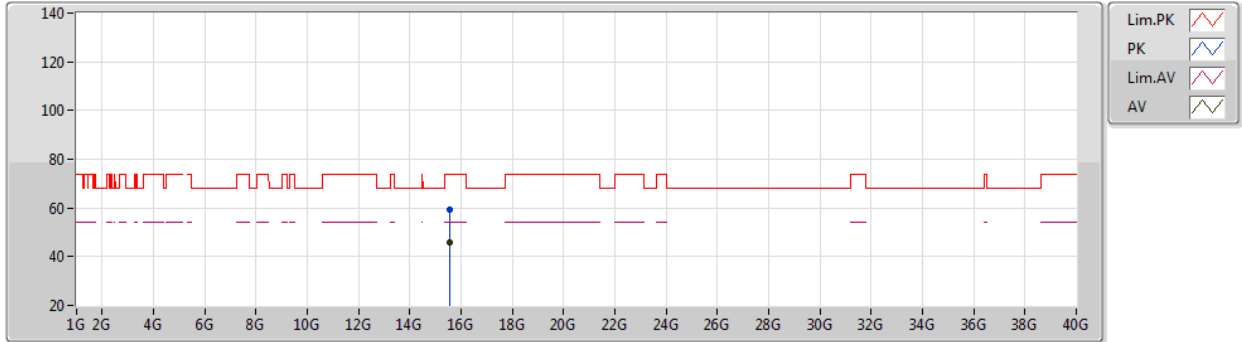
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Setting 15.5
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.57352G	59.08	74.00	-14.92	44.43	3	Vertical	93	1.41	-	38.25	9.21	32.81
AV	15.56936G	46.06	54.00	-7.94	31.42	3	Vertical	93	1.41	-	38.24	9.21	32.81

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5190MHz_TX



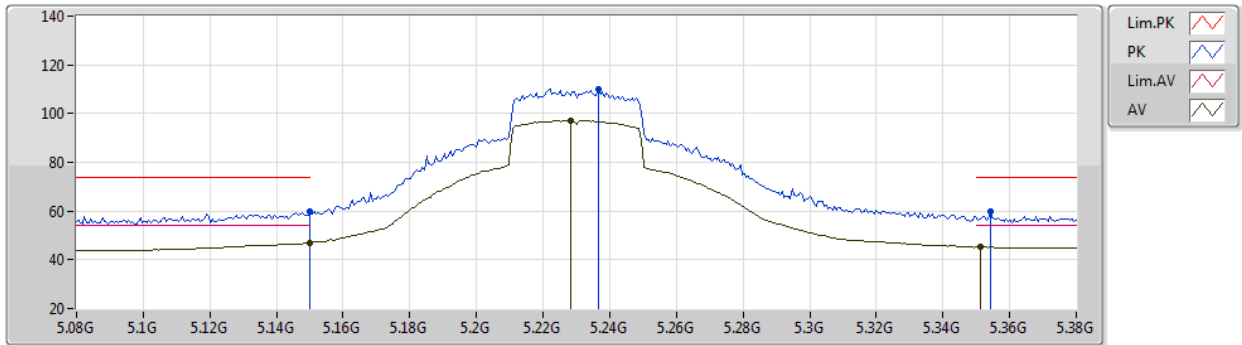
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Setting 15.5
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.57272G	59.27	74.00	-14.73	44.62	3	Horizontal	133	2.66	-	38.25	9.21	32.81
AV	15.57352G	45.81	54.00	-8.19	31.16	3	Horizontal	133	2.66	-	38.25	9.21	32.81

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5230MHz_TX



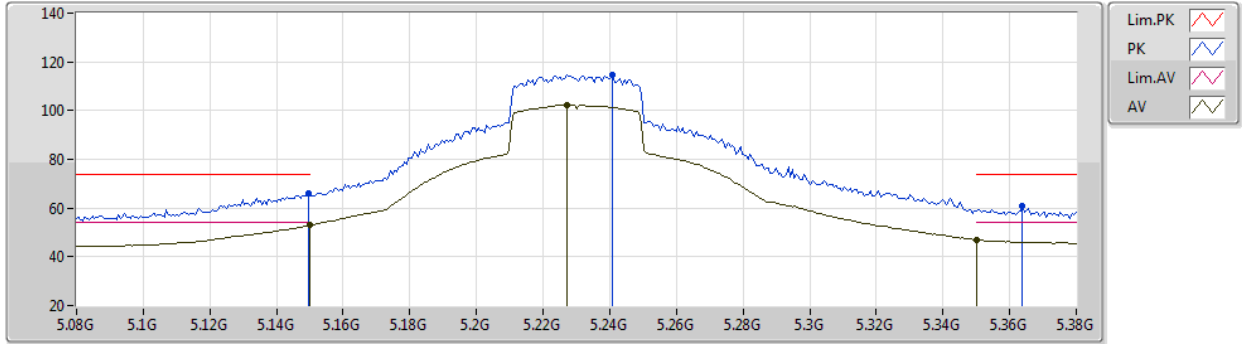
EUT_Z_2TX
Setting 20.5
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	60.06	74.00	-13.94	55.23	3	Vertical	21	2.93	-	32.60	5.17	32.94
AV	5.15G	46.83	54.00	-7.17	42.00	3	Vertical	21	2.93	-	32.60	5.17	32.94
PK	5.2366G	110.13	Inf	-Inf	105.05	3	Vertical	21	2.93	-	32.77	5.24	32.93
AV	5.2282G	96.99	Inf	-Inf	91.93	3	Vertical	21	2.93	-	32.76	5.23	32.93
PK	5.3542G	59.66	74.00	-14.34	54.30	3	Vertical	21	2.93	-	32.93	5.35	32.92
AV	5.3512G	45.32	54.00	-8.68	39.98	3	Vertical	21	2.93	-	32.91	5.35	32.92

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5230MHz_TX



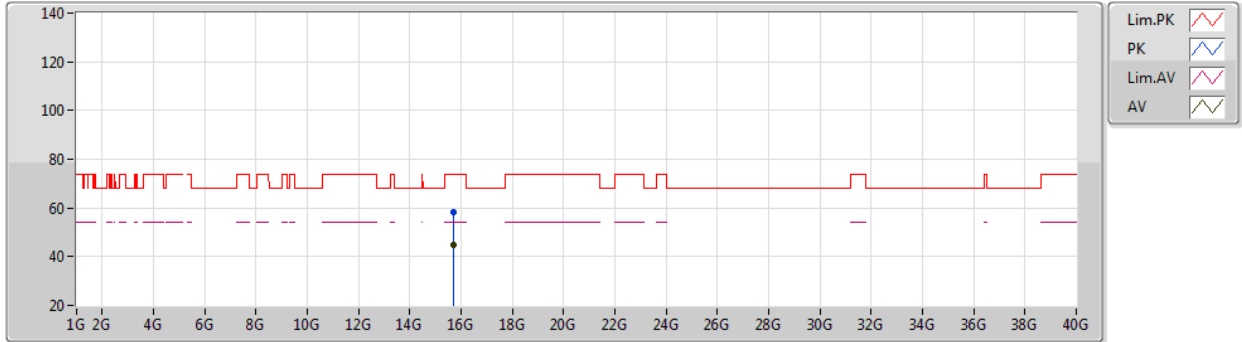
EUT_Z_2TX
Setting 20.5
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1496G	66.00	74.00	-8.00	61.17	3	Horizontal	3	1.08	-	32.60	5.17	32.94
AV	5.15G	52.92	54.00	-1.08	48.09	3	Horizontal	3	1.08	-	32.60	5.17	32.94
PK	5.2408G	114.59	Inf	-Inf	109.50	3	Horizontal	3	1.08	-	32.78	5.24	32.93
AV	5.227G	102.37	Inf	-Inf	97.32	3	Horizontal	3	1.08	-	32.75	5.23	32.93
PK	5.3638G	61.10	74.00	-12.90	55.68	3	Horizontal	3	1.08	-	32.98	5.36	32.92
AV	5.35G	46.91	54.00	-7.09	41.58	3	Horizontal	3	1.08	-	32.90	5.35	32.92

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5230MHz_TX



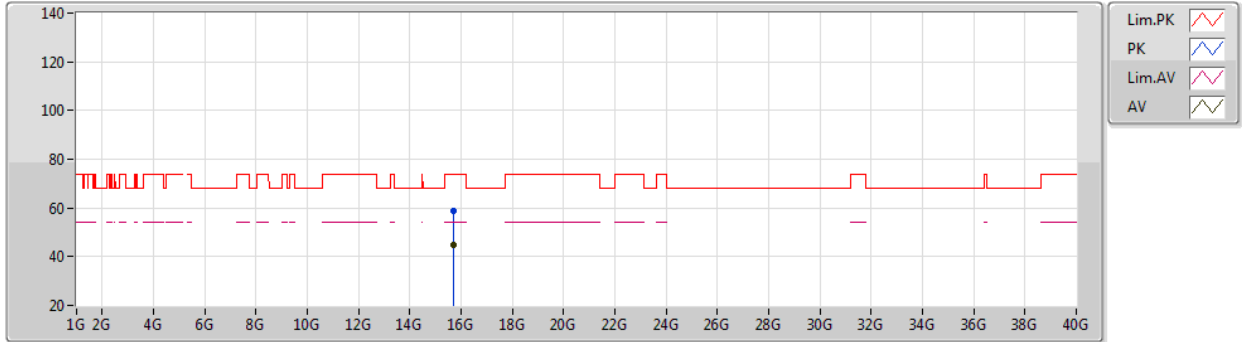
EUT Z_2TX
Setting 20.5
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.69576G	58.45	74.00	-15.55	43.60	3	Vertical	280	2.26	-	38.40	9.24	32.79
AV	15.68284G	44.85	54.00	-9.15	30.02	3	Vertical	280	2.26	-	38.38	9.24	32.79

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5230MHz_TX



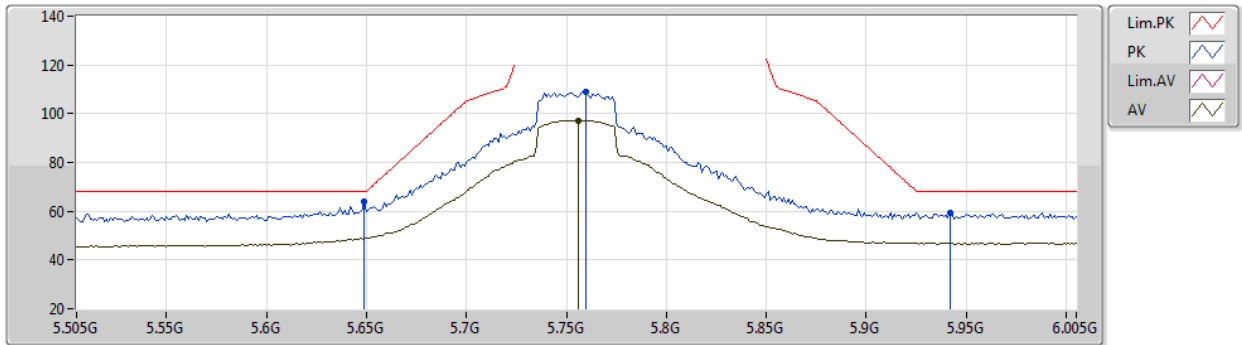
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Setting 20.5
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.68088G	58.69	74.00	-15.31	43.86	3	Horizontal	129	2.90	-	38.38	9.24	32.79
AV	15.68124G	44.82	54.00	-9.18	29.99	3	Horizontal	129	2.90	-	38.38	9.24	32.79

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5755MHz_TX



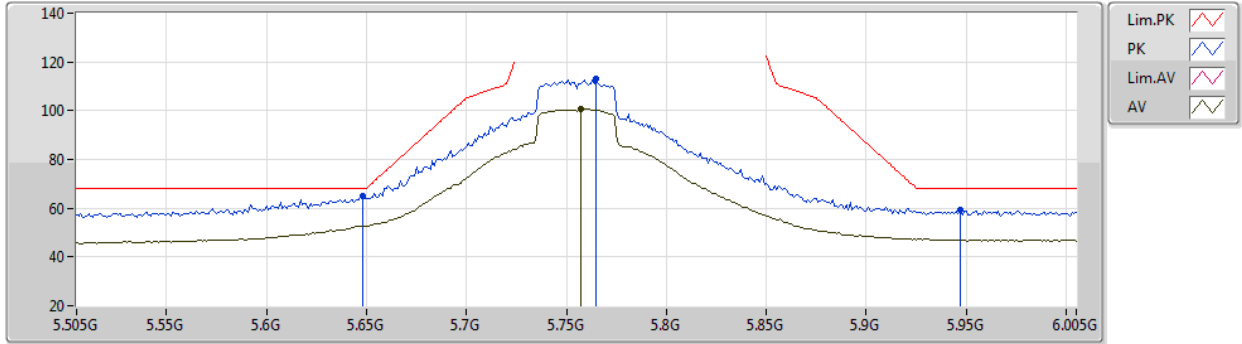
EUT Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.649G	64.09	68.20	-4.11	57.68	3	Vertical	228	1.23	-	33.90	5.42	32.91
PK	5.76G	108.86	Inf	-Inf	102.17	3	Vertical	228	1.23	-	34.14	5.48	32.93
AV	5.756G	97.13	Inf	-Inf	90.46	3	Vertical	228	1.23	-	34.12	5.48	32.93
PK	5.942G	59.29	68.20	-8.91	51.76	3	Vertical	228	1.23	-	34.97	5.50	32.94

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5755MHz_TX



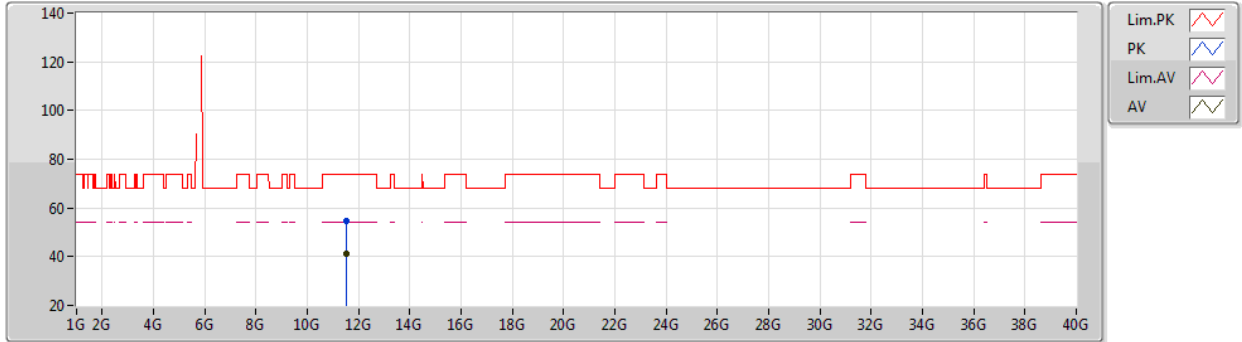
EUT_Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.648G	64.95	68.20	-3.25	58.54	3	Horizontal	360	1.00	-	33.90	5.42	32.91
PK	5.765G	113.32	Inf	-Inf	106.61	3	Horizontal	360	1.00	-	34.16	5.48	32.93
AV	5.757G	100.62	Inf	-Inf	93.94	3	Horizontal	360	1.00	-	34.13	5.48	32.93
PK	5.947G	59.13	68.20	-9.07	51.58	3	Horizontal	360	1.00	-	34.99	5.50	32.94

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5755MHz_TX



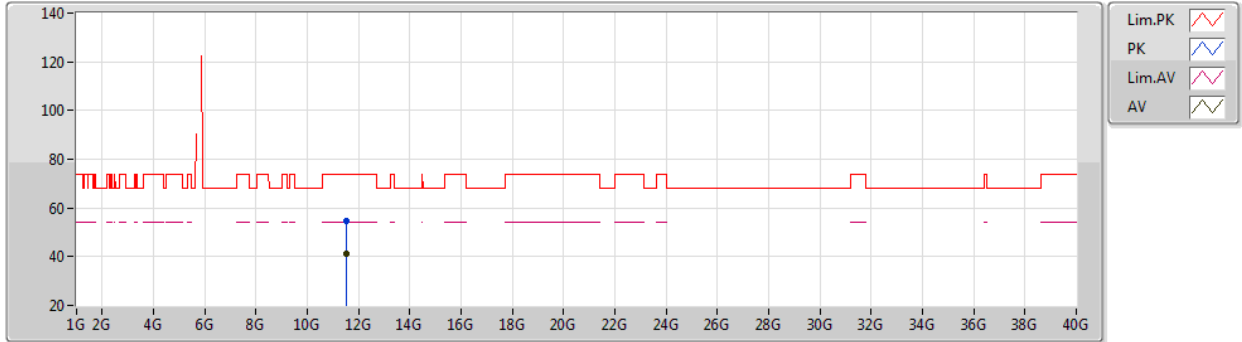
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Setting 22
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.508G	54.54	74.00	-19.46	41.12	3	Vertical	203	2.93	-	38.40	7.83	32.81
AV	11.50048G	41.08	54.00	-12.92	27.66	3	Vertical	203	2.93	-	38.40	7.83	32.81

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5755MHz_TX



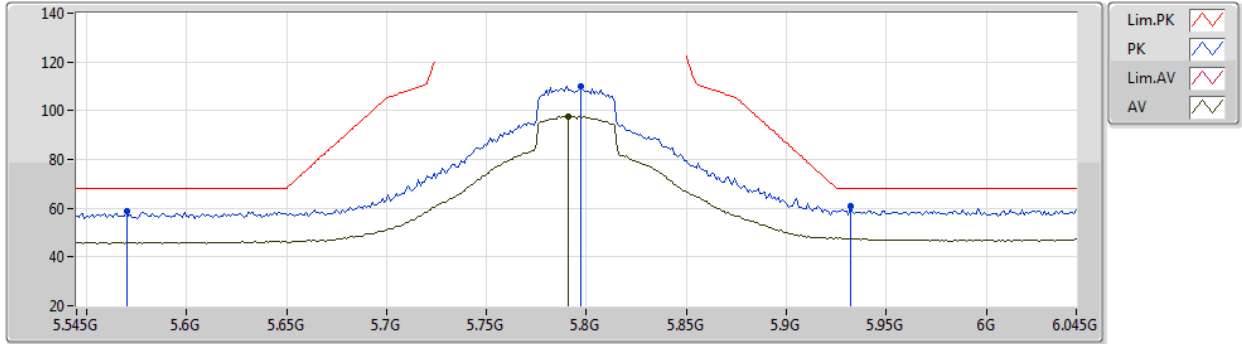
EUT Z_2TX
Setting 22
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.504G	54.76	74.00	-19.24	41.34	3	Horizontal	330	1.63	-	38.40	7.83	32.81
AV	11.50336G	41.25	54.00	-12.75	27.83	3	Horizontal	330	1.63	-	38.40	7.83	32.81

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5795MHz_TX



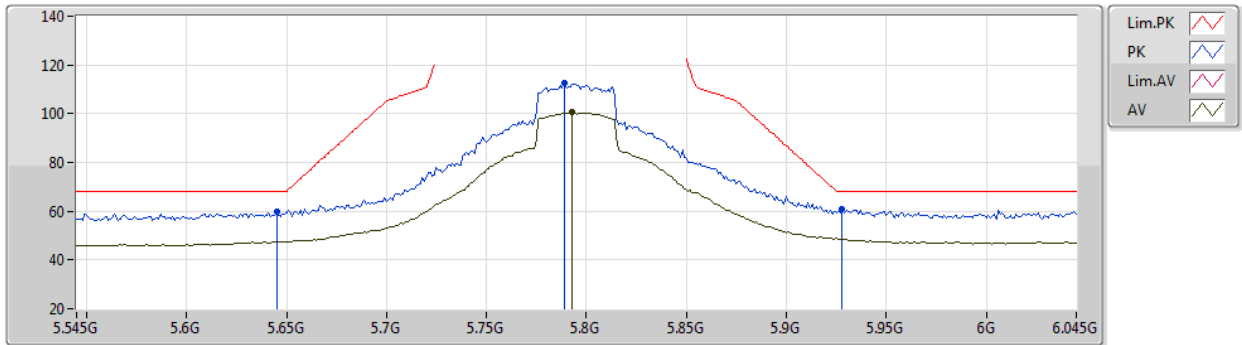
EUT Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.57G	58.77	68.20	-9.43	52.54	3	Vertical	219	2.64	-	33.74	5.40	32.91
PK	5.797G	110.18	Inf	-Inf	103.32	3	Vertical	219	2.64	-	34.29	5.50	32.93
AV	5.791G	97.79	Inf	-Inf	90.96	3	Vertical	219	2.64	-	34.26	5.50	32.93
PK	5.932G	60.99	68.20	-7.21	53.50	3	Vertical	219	2.64	-	34.93	5.50	32.94

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5795MHz_TX



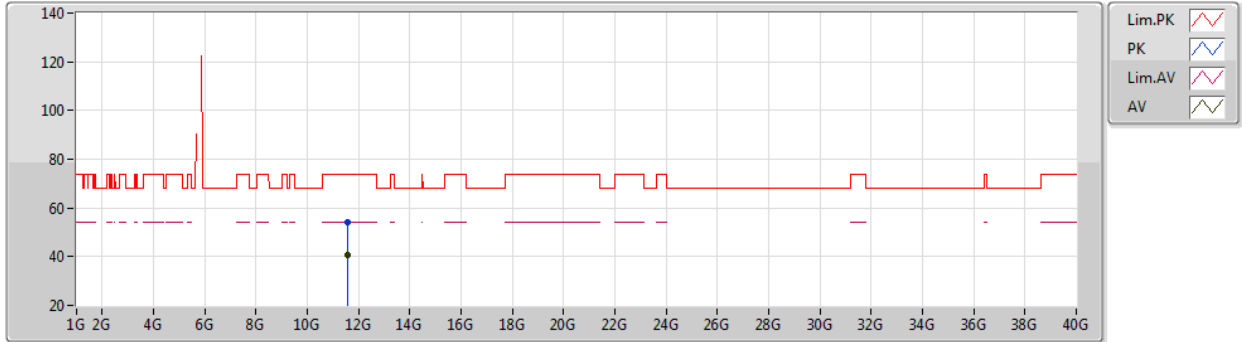
EUT Z_2TX
Setting 22
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.645G	59.69	68.20	-8.51	53.29	3	Horizontal	359	1.04	-	33.89	5.42	32.91
PK	5.789G	112.81	Inf	-Inf	105.99	3	Horizontal	359	1.04	-	34.26	5.49	32.93
AV	5.793G	100.51	Inf	-Inf	93.67	3	Horizontal	359	1.04	-	34.27	5.50	32.93
PK	5.928G	60.94	68.20	-7.26	53.47	3	Horizontal	359	1.04	-	34.91	5.50	32.94

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5795MHz_TX



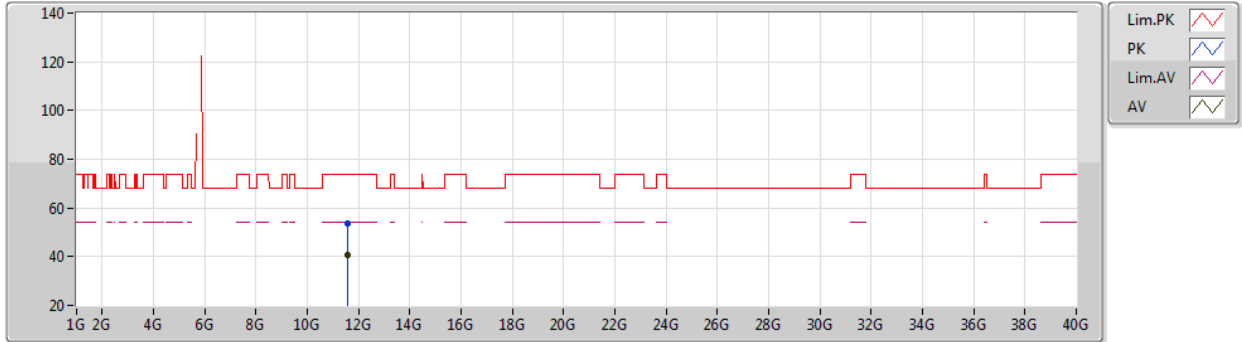
EUT Z_2TX
Setting 22
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.5866G	54.00	74.00	-20.00	40.56	3	Vertical	274	2.62	-	38.40	7.86	32.82
AV	11.5814G	40.93	54.00	-13.07	27.50	3	Vertical	274	2.62	-	38.40	7.85	32.82

802.11ax HEW40_Nss1,(MCS0)_2TX

10/06/2021

5795MHz_TX



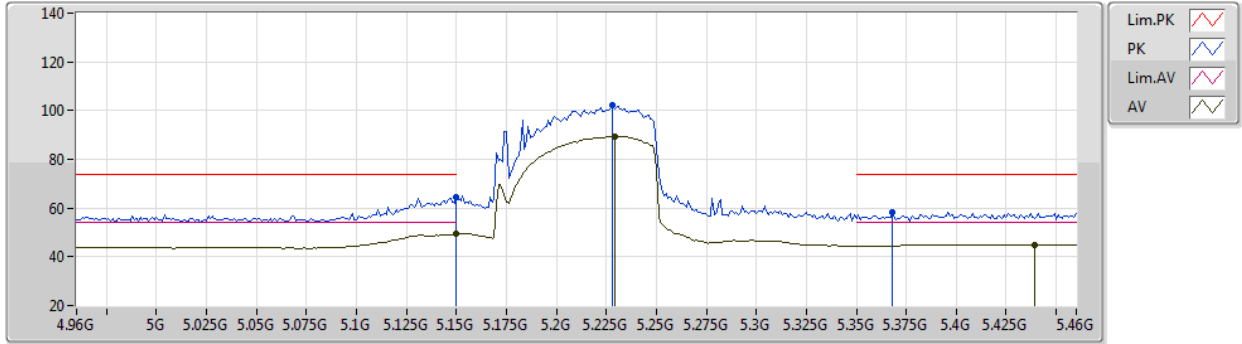
EUT Z_2TX
Setting 22
01-A-5-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.59772G	53.63	74.00	-20.37	40.19	3	Horizontal	60	1.80	-	38.40	7.86	32.82
AV	11.5926G	40.87	54.00	-13.13	27.43	3	Horizontal	60	1.80	-	38.40	7.86	32.82

802.11ax HEW80_Nss1,(MCS0)_2TX

10/06/2021

5210MHz_TX



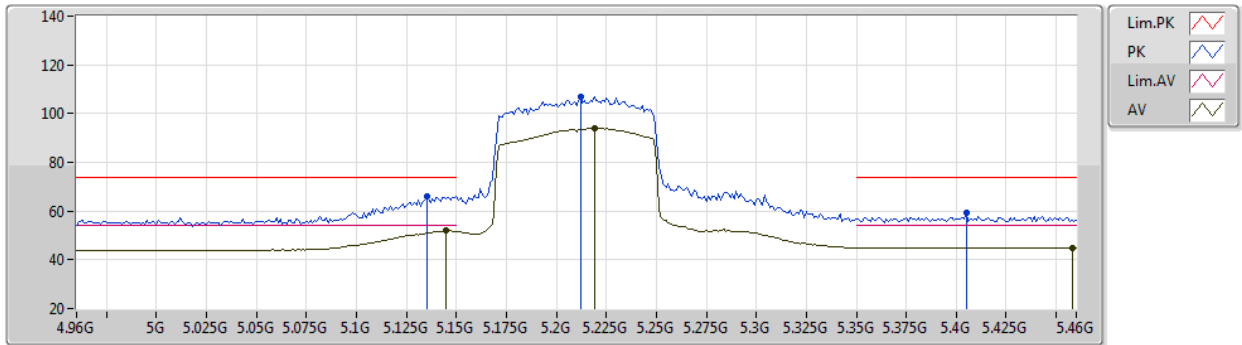
EUT_Z_2TX
Setting 16
01-A-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	64.31	74.00	-9.69	59.48	3	Vertical	23	1.00	-	32.60	5.17	32.94
AV	5.15G	49.45	54.00	-4.55	44.62	3	Vertical	23	1.00	-	32.60	5.17	32.94
PK	5.228G	102.13	Inf	-Inf	97.07	3	Vertical	23	1.00	-	32.76	5.23	32.93
AV	5.229G	89.45	Inf	-Inf	84.39	3	Vertical	23	1.00	-	32.76	5.23	32.93
PK	5.368G	58.43	74.00	-15.57	52.97	3	Vertical	23	1.00	-	33.01	5.37	32.92
AV	5.439G	44.99	54.00	-9.01	39.14	3	Vertical	23	1.00	-	33.36	5.40	32.91

802.11ax HEW80_Nss1,(MCS0)_2TX

10/06/2021

5210MHz_TX



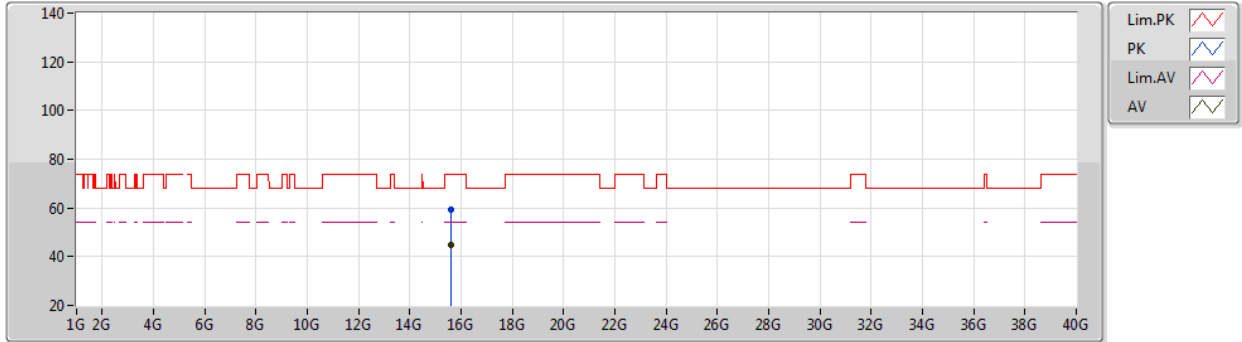
EUT_Z_2TX
Setting 16
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.135G	66.10	74.00	-7.90	61.27	3	Horizontal	0	1.08	-	32.60	5.17	32.94
AV	5.145G	51.99	54.00	-2.01	47.16	3	Horizontal	0	1.08	-	32.60	5.17	32.94
PK	5.212G	107.11	Inf	-Inf	102.11	3	Horizontal	0	1.08	-	32.72	5.21	32.93
AV	5.219G	93.80	Inf	-Inf	88.77	3	Horizontal	0	1.08	-	32.74	5.22	32.93
PK	5.405G	59.37	74.00	-14.63	53.66	3	Horizontal	0	1.08	-	33.22	5.40	32.91
AV	5.458G	45.08	54.00	-8.92	39.17	3	Horizontal	0	1.08	-	33.42	5.40	32.91

802.11ax HEW80_Nss1,(MCS0)_2TX

10/06/2021

5210MHz_TX



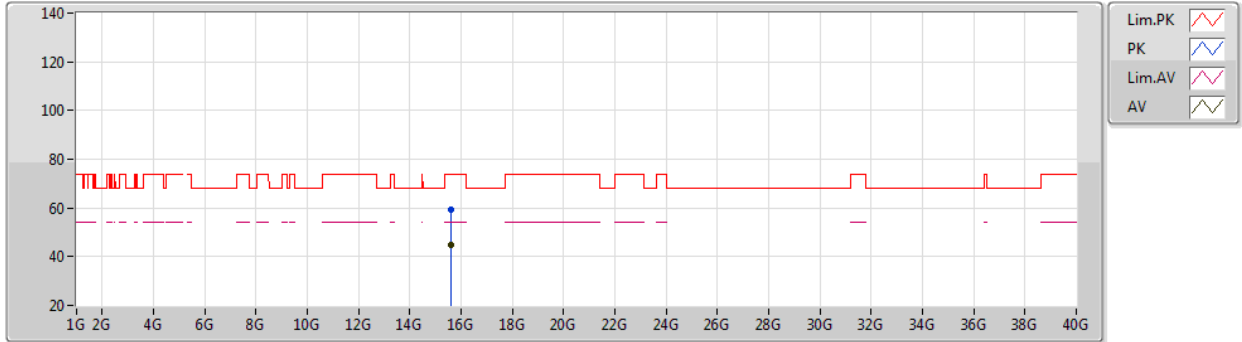
EUT_Z_2TX
Setting 16
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.63076G	59.22	74.00	-14.78	44.46	3	Vertical	354	2.96	-	38.33	9.23	32.80
AV	15.62664G	45.08	54.00	-8.92	30.32	3	Vertical	354	2.96	-	38.33	9.23	32.80

802.11ax HEW80_Nss1,(MCS0)_2TX

10/06/2021

5210MHz_TX



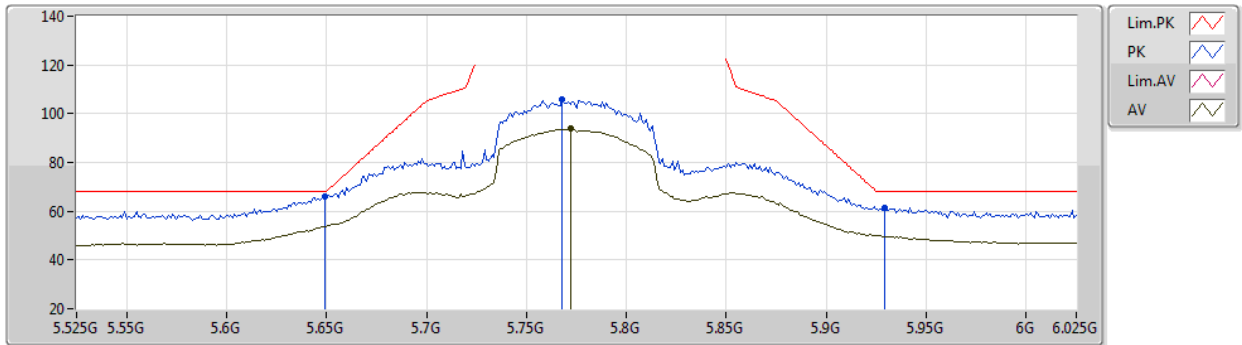
EUT Z_2TX
Setting 16
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.62908G	59.24	74.00	-14.76	44.48	3	Horizontal	177	1.45	-	38.33	9.23	32.80
AV	15.62088G	45.08	54.00	-8.92	30.34	3	Horizontal	177	1.45	-	38.32	9.22	32.80

802.11ax HEW80_Nss1,(MCS0)_2TX

10/06/2021

5775MHz_TX



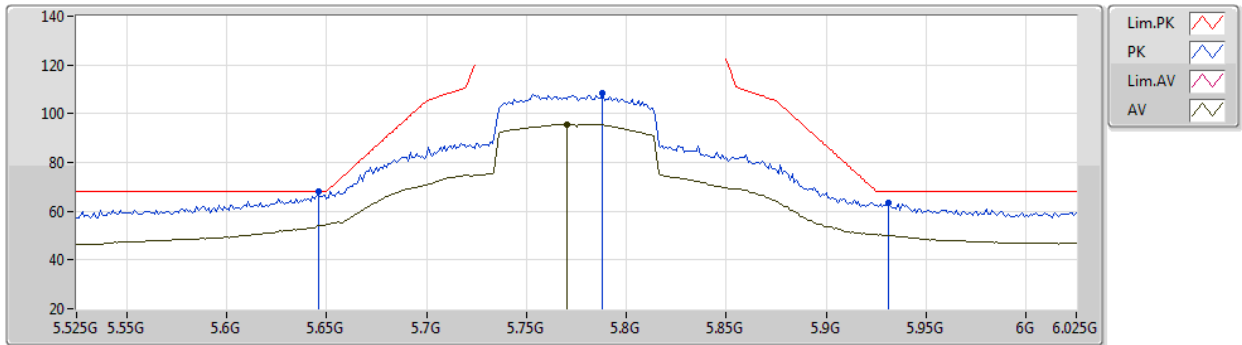
EUT_Z_2TX
Setting 21
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.649G	66.04	68.20	-2.16	59.63	3	Vertical	220	2.66	-	33.90	5.42	32.91
PK	5.768G	105.62	Inf	-Inf	98.90	3	Vertical	220	2.66	-	34.17	5.48	32.93
AV	5.772G	93.77	Inf	-Inf	87.02	3	Vertical	220	2.66	-	34.19	5.49	32.93
PK	5.929G	61.34	68.20	-6.86	53.86	3	Vertical	220	2.66	-	34.92	5.50	32.94

802.11ax HEW80_Nss1,(MCS0)_2TX

10/06/2021

5775MHz_TX



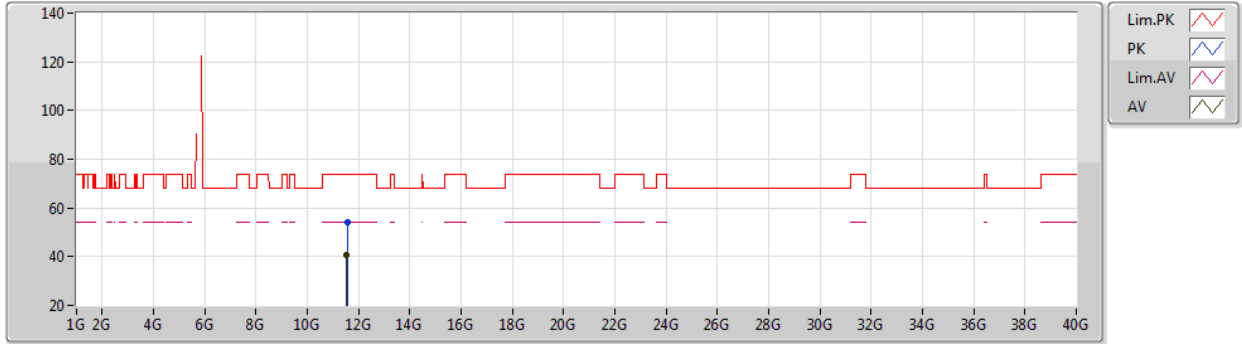
EUT_Z_2TX
Setting 21
01-A-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.646G	68.00	68.20	-0.20	61.60	3	Horizontal	0	1.07	-	33.89	5.42	32.91
PK	5.788G	108.69	Inf	-Inf	101.88	3	Horizontal	0	1.07	-	34.25	5.49	32.93
AV	5.77G	95.50	Inf	-Inf	88.76	3	Horizontal	0	1.07	-	34.18	5.49	32.93
PK	5.931G	63.68	68.20	-4.52	56.20	3	Horizontal	0	1.07	-	34.92	5.50	32.94

802.11ax HEW80_Nss1,(MCS0)_2TX

10/06/2021

5775MHz_TX



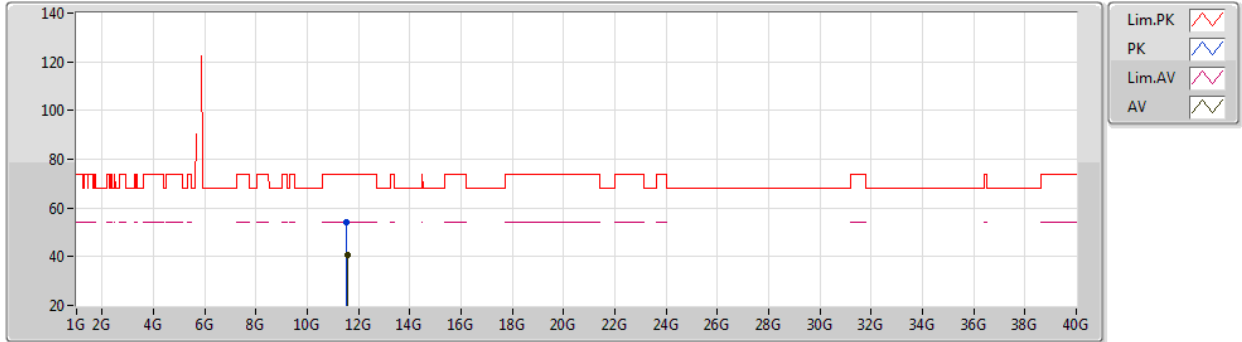
EUT Z_2TX
Setting 21
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.5526G	54.32	74.00	-19.68	40.90	3	Vertical	116	2.51	-	38.40	7.84	32.82
AV	11.5406G	40.82	54.00	-13.18	27.40	3	Vertical	116	2.51	-	38.40	7.84	32.82

802.11ax HEW80_Nss1,(MCS0)_2TX

10/06/2021

5775MHz_TX



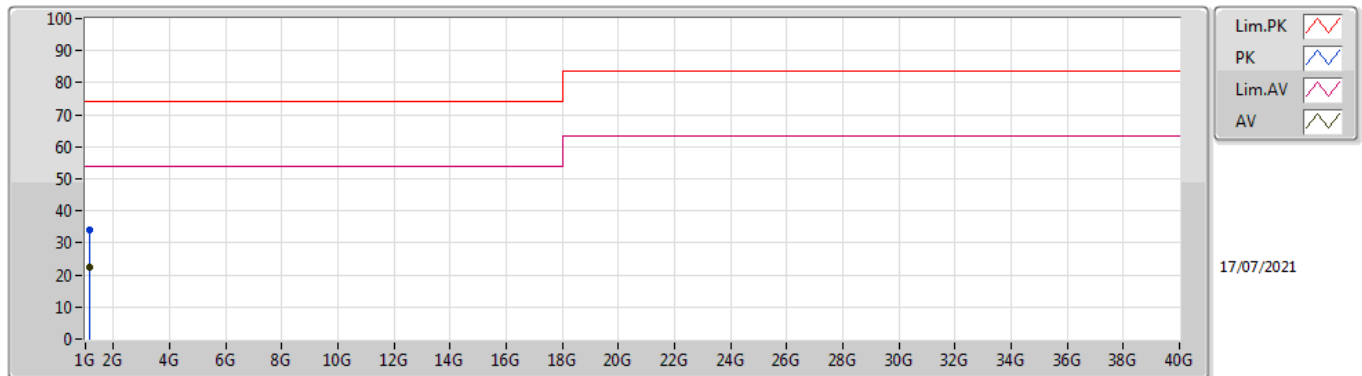
EUT Z_2TX
Setting 21
01-A-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.54252G	54.29	74.00	-19.71	40.87	3	Horizontal	304	2.37	-	38.40	7.84	32.82
AV	11.5582G	40.88	54.00	-13.12	27.45	3	Horizontal	304	2.37	-	38.40	7.85	32.82



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.16598G	22.32	54.00	-31.68	Vertical



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	1.16478G	33.84	74.00	-40.16	-9.38	3	Vertical	58	1.00	-	43.22	25.17	2.75	37.30
AV	1.16598G	22.32	54.00	-31.68	-9.38	3	Vertical	58	1.00	"Worst"	31.70	25.17	2.75	37.30

