

RADIO TEST REPORT

FCC ID : XHG-RG1100
Equipment : Mobile Hotspot
Model Name : RG1100
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 May 27, 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

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



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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: Sandy Chuang



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

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	

Note 1

Ant.	Port	Antenna Gain (dBi)			Cable Loss (dB)			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	-2.620	0.596	0.156

Note 2: The above information was declared by manufacturer.

For 2.4GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.



1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.995	0.02	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.995	0.02	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW80	0.995	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 power adapter / Host system / Li-ion Battery		
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	QRCT (Version 4.0.00189.0)		

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	TH02-CB	Paul Chen	24-25.6 / 64-69	Jun. 07, 2021~ Jun. 08, 2021
Radiated <Above 1GHz>	03CH01-CB	Ken Yeh	24.2-24.7 / 62-68	May 27, 2021~ Jul. 17, 2021
	03CH03-CB		24-24.5 / 62-66	
Radiated <Below 1GHz>	03CH05-CB	Ken Yeh	24.5-24.7 / 65-68	May 27, 2021~ Jul. 17, 2021
Radiated <Co-location>	03CH05-CB	Ken Yeh	24.2-25 °C / 62-65%	May 27, 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	13
5200MHz	13
5240MHz	13
5745MHz	15
5785MHz	15.5
5825MHz	15
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	13
5230MHz	13
5755MHz	15
5795MHz	15
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	12.5
5775MHz	15

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: WiFi 2.4GHz – Powered from adapter
2	EUT: WiFi 2.4GHz – Powered from host system
Mode 1 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT: WiFi 5GHz – Powered from adapter
For operating mode 1 is the worst case and it was record in this test report.	

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



The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
The EUT was performed at X axis, Y axis and Z axis position. 2.4GHz: EUT X axis and 5GHz: EUT Y axis has been evaluated to be the worst case at Unwanted Emissions <Above 1GHz> ; thus, the measurement will follow this same test configuration.	
1	EUT in X axis: WiFi 2.4GHz – Powered from Li-ion Battery
2	EUT in X axis: WiFi 2.4GHz – Powered from adapter
3	EUT in X axis: WiFi 2.4GHz – Powered from host system
Mode 3 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 in Y axis: WiFi 5GHz – Powered from host system
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. The worst case was found at Y axis, thus the measurement will follow this same test configuration.	

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. EUT X axis has been evaluated to be the worst case at Radiated measurement <Above 1GHz> ; thus, the measurement will follow this same test configuration.	
1	EUT in X axis: WiFi 2.4GHz + WiFi 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	V105555P	3.8V, 4000mAh, 15.2Wh
Other			
Equipment Name	Brand Name	Model Name	Remark
USB 3.0 Type-C cable	Franklin Wireless	1575-017	Shielded, 1.2m

2.5 Support Equipment

For AC Conduction: N/A

For Radiated<Below 1GHz>:

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

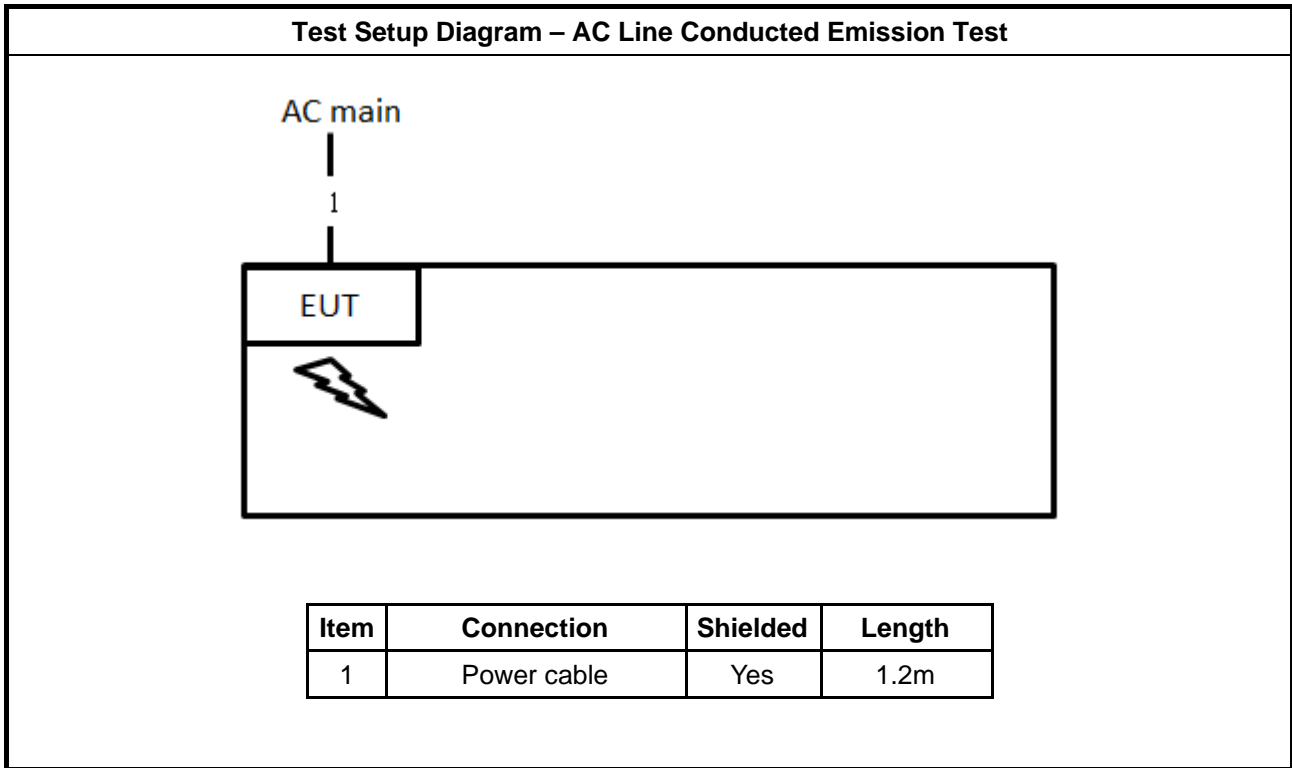
For Radiated<Above 1GHz>:

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

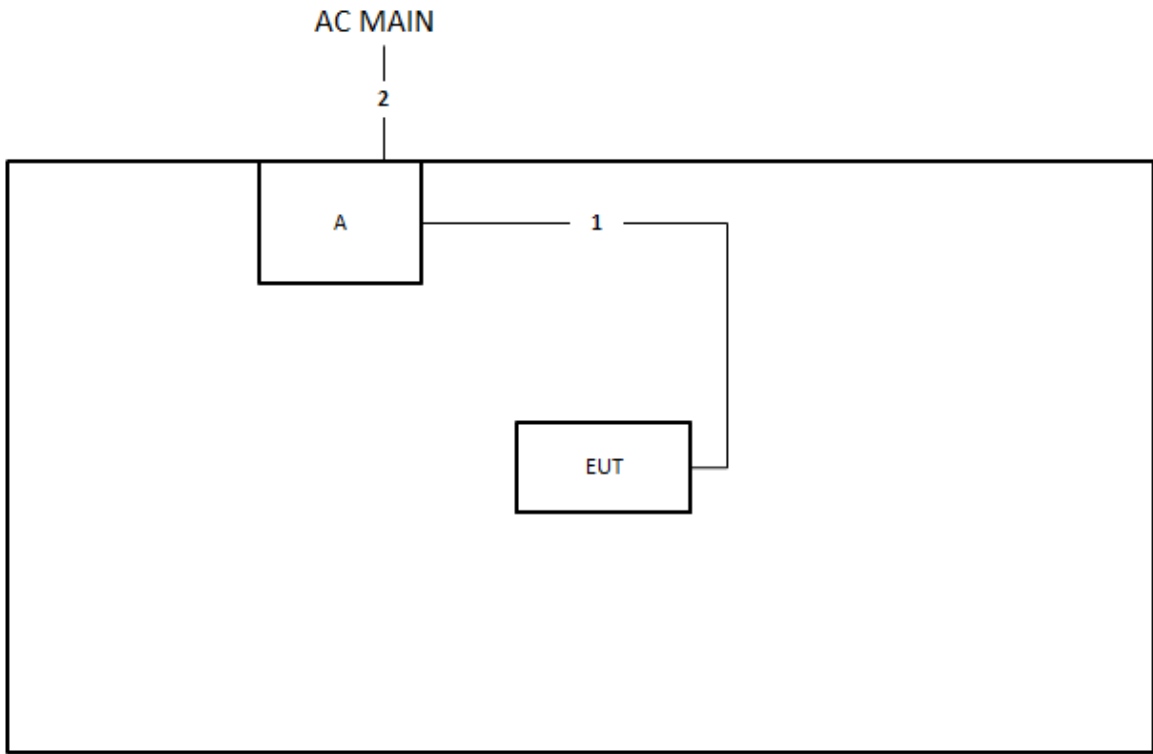
For RF Conducted:

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

2.6 Test Setup Diagram

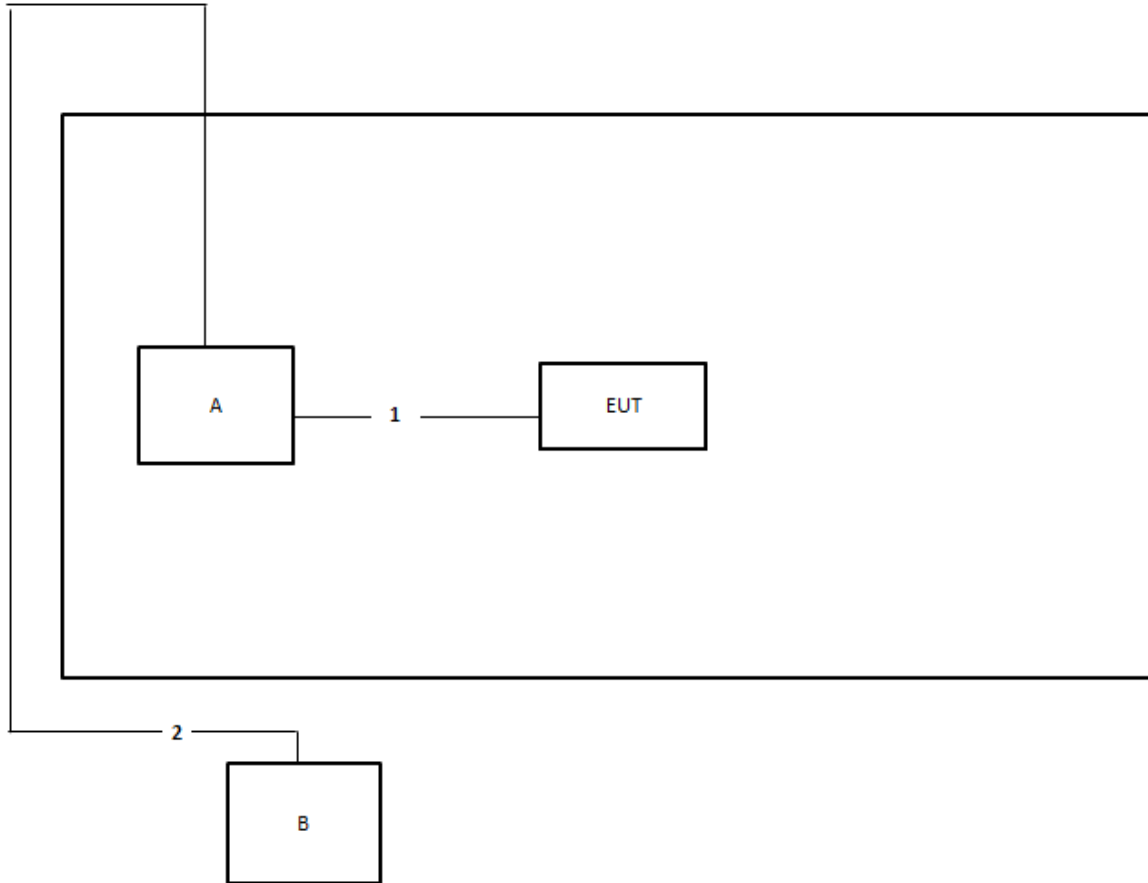


Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	USB 3.0 Type-C cable	Yes	1.2m
2	Power cable	No	2.6m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	USB 3.0 Type-C cable	Yes	1.2m
2	RJ-45 cable	No	10m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

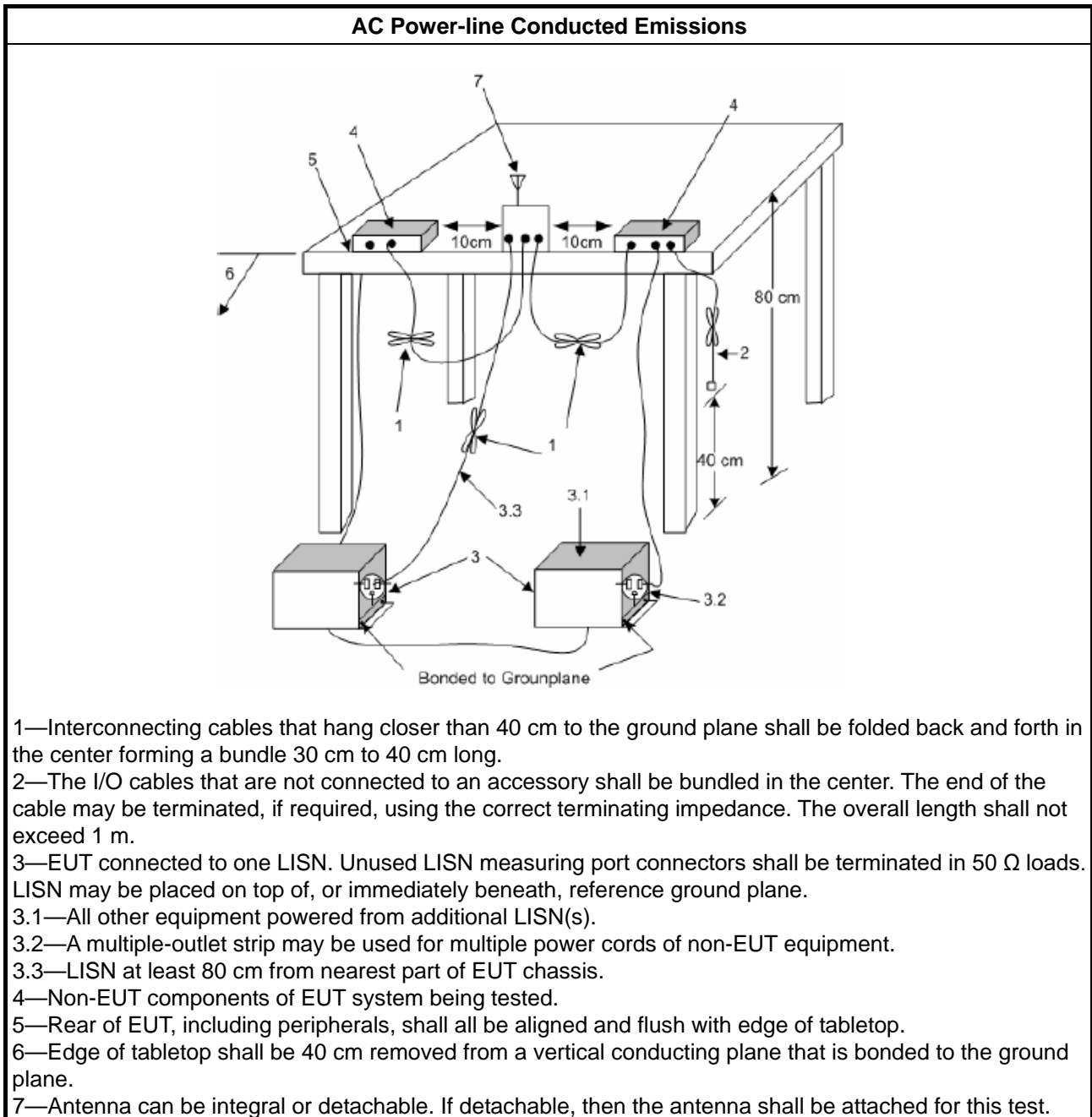
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<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.

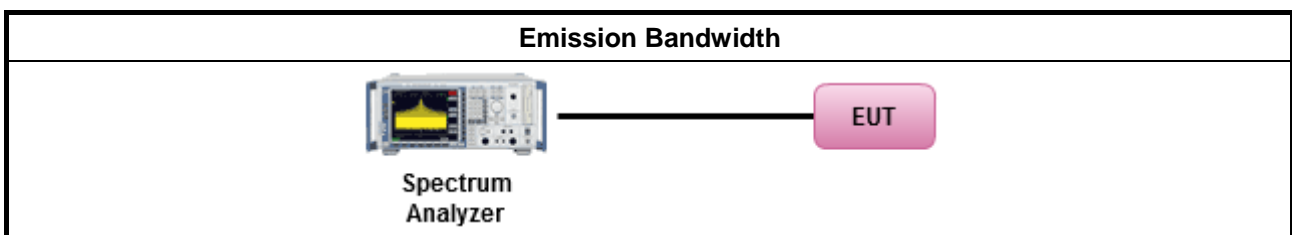
3.2.2 Measuring Instruments

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: 	
<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 $\leq 125mW$ [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.

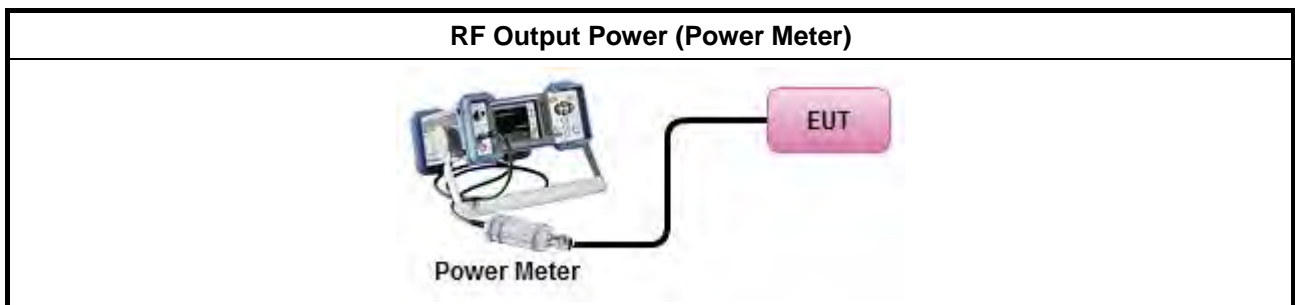
3.3.2 Measuring Instruments

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 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 (θ-40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
<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.

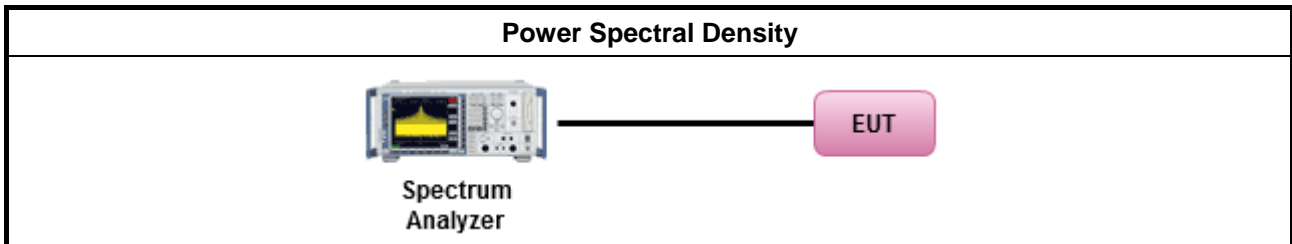
3.4.2 Measuring Instruments

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: <ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands. ▪ Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;"><input type="checkbox"/></td> <td>Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>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 style="text-align: center;"><input type="checkbox"/></td> <td>Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>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.
<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).												
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<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.												
	<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. ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. </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. ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. 										
	<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. ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. 												
	<ul style="list-style-type: none"> ▪ The any unwanted emissions level shall not exceed the fundamental emission level. 												

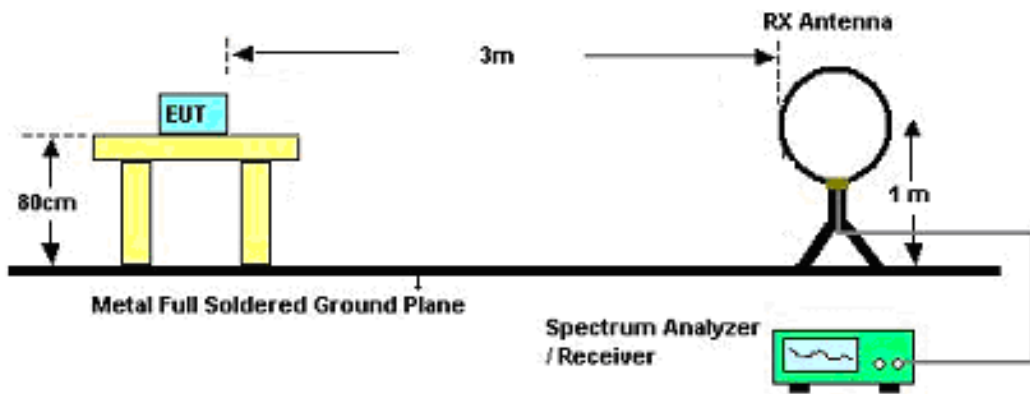
Test Method

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

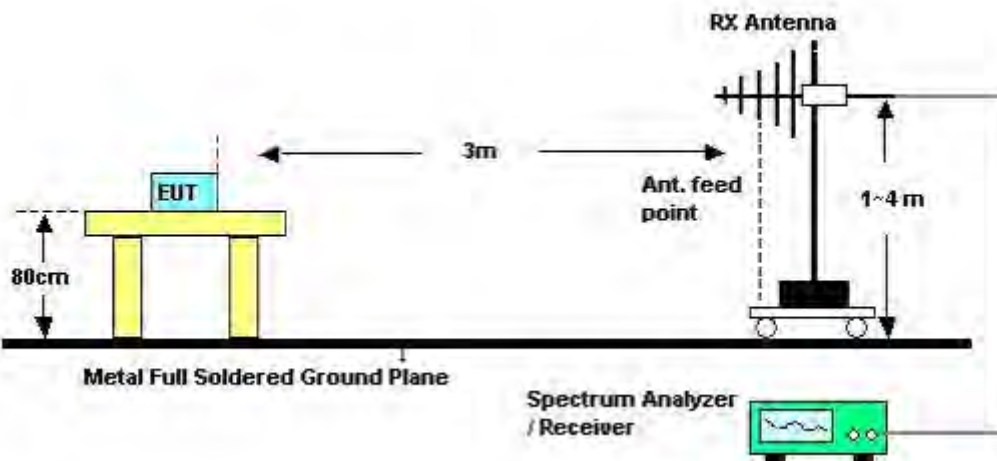
3.5.4 Test Setup

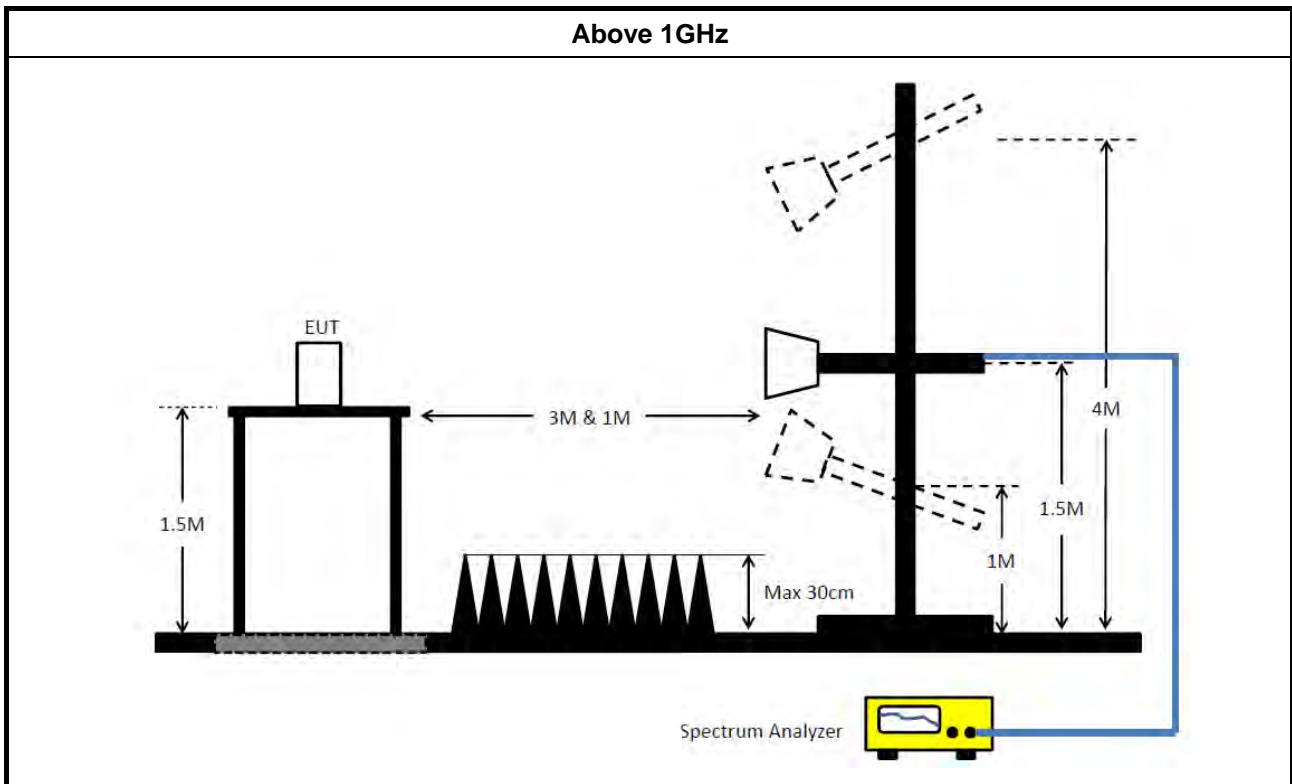
Transmitter Radiated Unwanted Emissions

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)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 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+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)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 06, 2021	May 05, 2022	Radiation (03CH03-CB)
Horn Antenna	ETS · Lindgren	3115	6821	750MHz~18GHz	Jan. 26, 2021	Jan. 25, 2022	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH03-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 04, 2021	Jun. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 27, 2020	Jul. 26, 2021	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 17, 2020	Sep. 16, 2021	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 17, 2020	Sep. 16, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

NCR means Non-Calibration required.

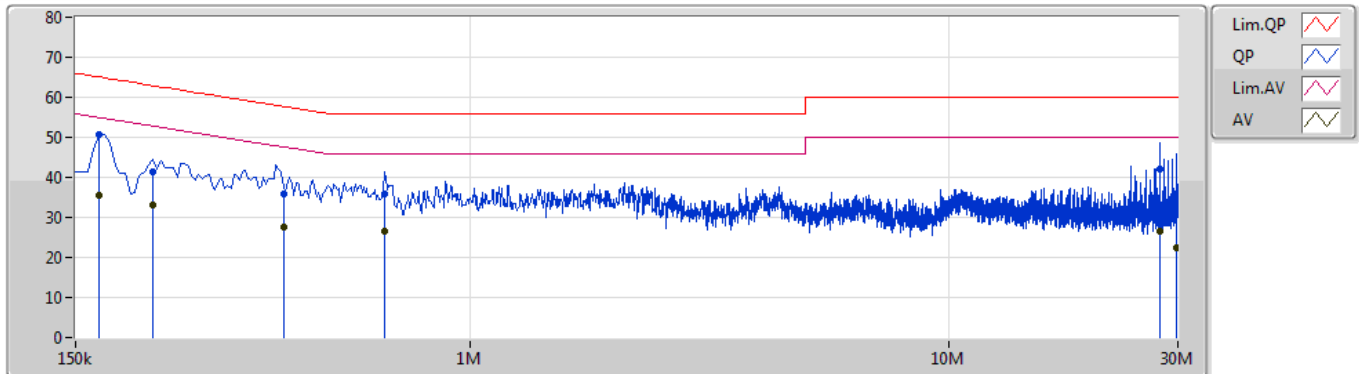


Summary

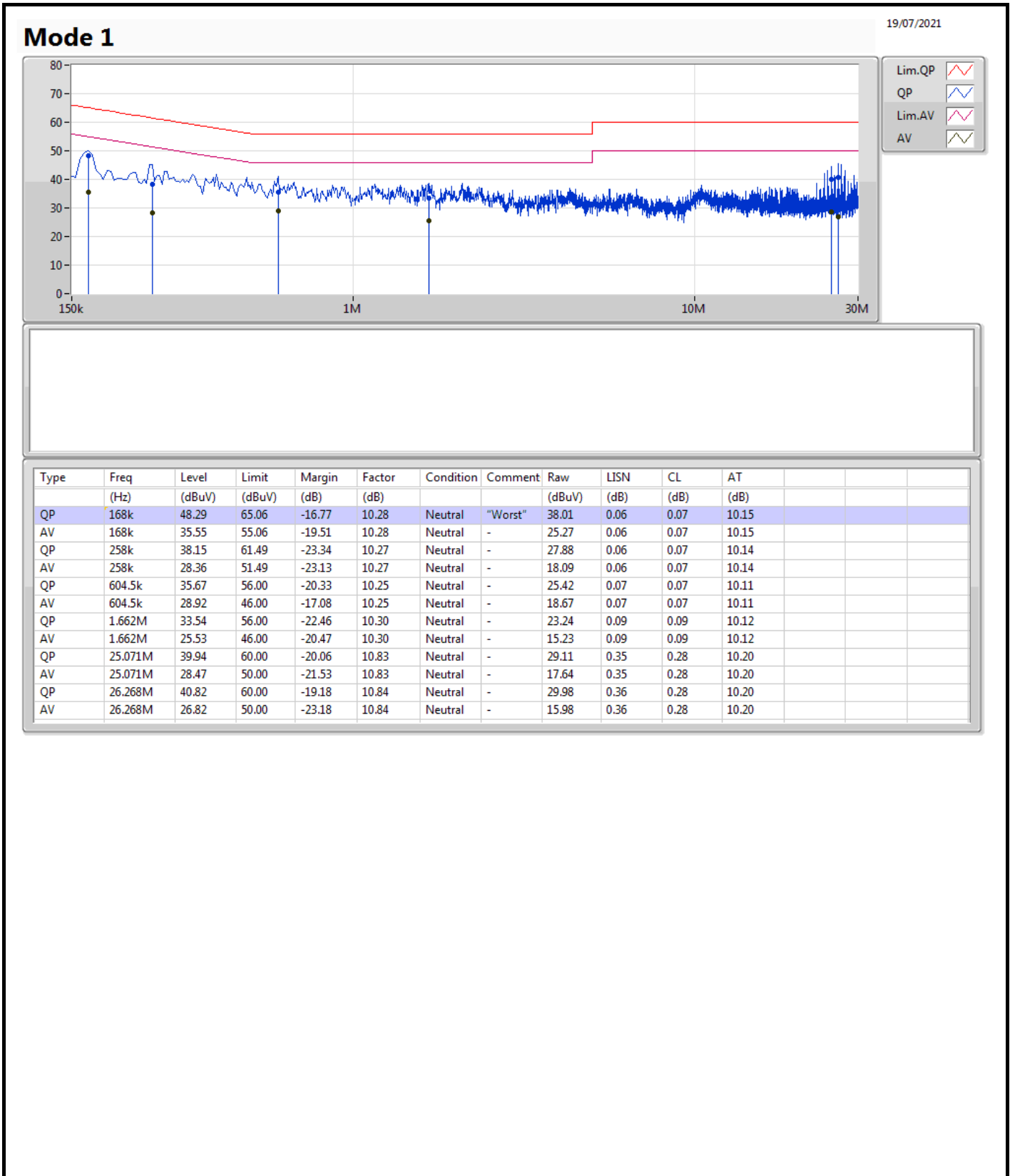
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	168.36k	50.84	65.04	-14.20	Line

Mode 1

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	168.36k	50.84	65.04	-14.20	10.30	Line	"Worst"	40.54	0.07	0.07	10.16
AV	168.36k	35.68	55.04	-19.36	10.30	Line	-	25.38	0.07	0.07	10.16
QP	217.59k	41.32	62.90	-21.58	10.29	Line	-	31.03	0.07	0.07	10.15
AV	217.59k	33.03	52.90	-19.87	10.29	Line	-	22.74	0.07	0.07	10.15
QP	408.55k	35.80	57.68	-21.88	10.25	Line	-	25.55	0.08	0.06	10.11
AV	408.55k	27.67	47.68	-20.01	10.25	Line	-	17.42	0.08	0.06	10.11
QP	663.1k	35.75	56.00	-20.25	10.26	Line	-	25.49	0.09	0.07	10.10
AV	663.1k	26.63	46.00	-19.37	10.26	Line	-	16.37	0.09	0.07	10.10
QP	27.483M	42.07	60.00	-17.93	11.07	Line	-	31.00	0.59	0.29	10.19
AV	27.483M	26.52	50.00	-23.48	11.07	Line	-	15.45	0.59	0.29	10.19
QP	29.823M	35.92	60.00	-24.08	11.12	Line	-	24.80	0.64	0.29	10.19
AV	29.823M	22.48	50.00	-27.52	11.12	Line	-	11.36	0.64	0.29	10.19



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	20.82M	18.891M	18M9D1D	20.55M	18.861M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.62M	37.721M	37M7D1D	40.26M	37.661M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.56M	77.001M	77M0D1D	82.2M	77.001M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	18.72M	18.891M	18M9D1D	17.91M	18.861M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.56M	37.721M	37M7D1D	36.42M	37.601M
802.11ax HEW80_Nss1,(MCS0)_2TX	76.8M	77.241M	77M2D1D	76.2M	77.121M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.55M	18.861M	20.7M	18.861M
5200MHz	Pass	Inf	20.67M	18.891M	20.76M	18.891M
5240MHz	Pass	Inf	20.61M	18.861M	20.82M	18.891M
5745MHz	Pass	500k	18.72M	18.861M	18.54M	18.861M
5785MHz	Pass	500k	18.51M	18.861M	18.54M	18.861M
5825MHz	Pass	500k	18.66M	18.861M	17.91M	18.891M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.62M	37.661M	40.38M	37.661M
5230MHz	Pass	Inf	40.26M	37.661M	40.44M	37.721M
5755MHz	Pass	500k	36.42M	37.721M	37.56M	37.661M
5795MHz	Pass	500k	37.2M	37.601M	37.08M	37.661M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.2M	77.001M	82.56M	77.001M
5775MHz	Pass	500k	76.2M	77.241M	76.8M	77.121M

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

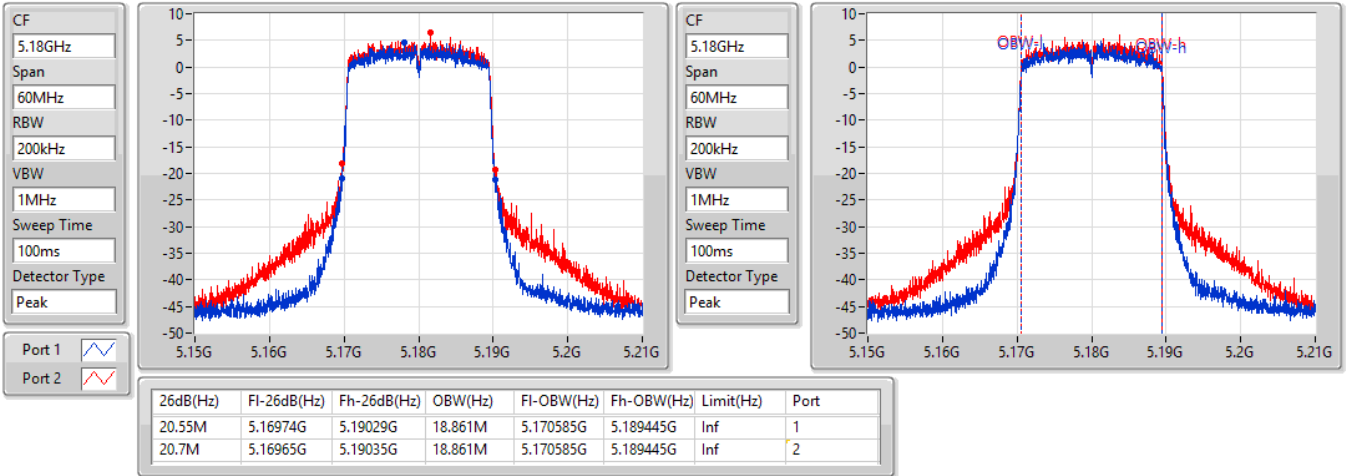
Port X-OBW = Port X 99% occupied bandwidth;

802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5180MHz

08/06/2021

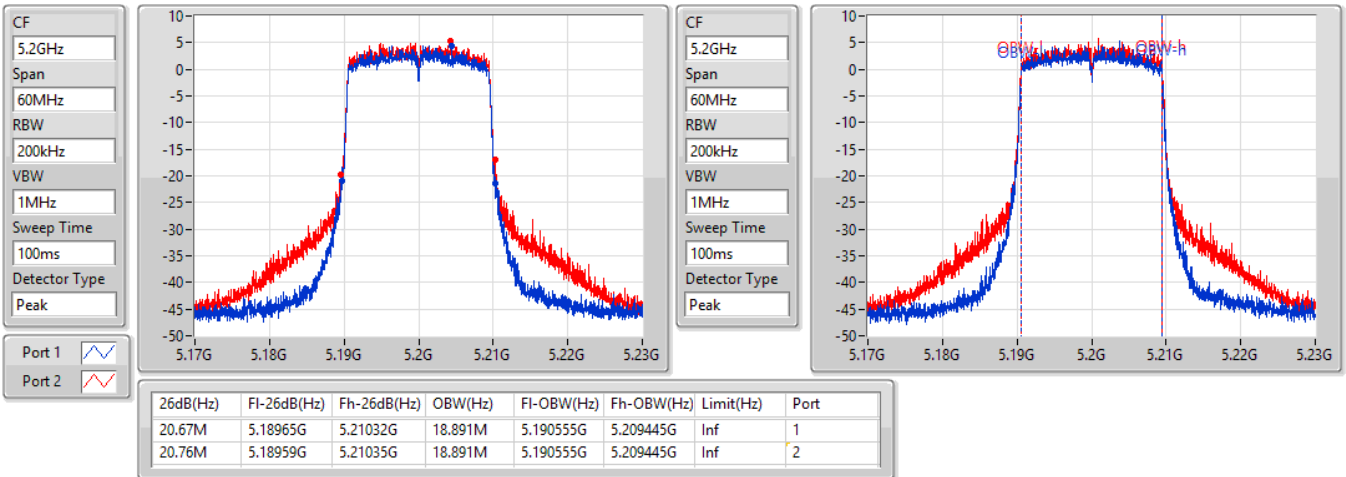


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5200MHz

08/06/2021



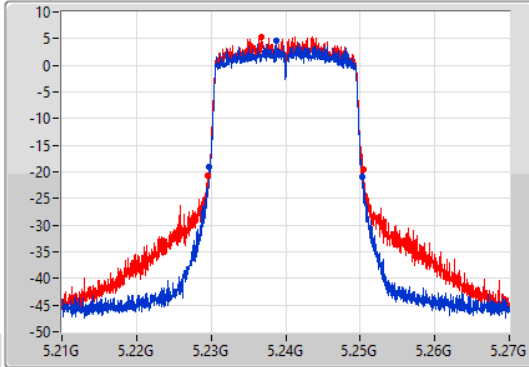
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

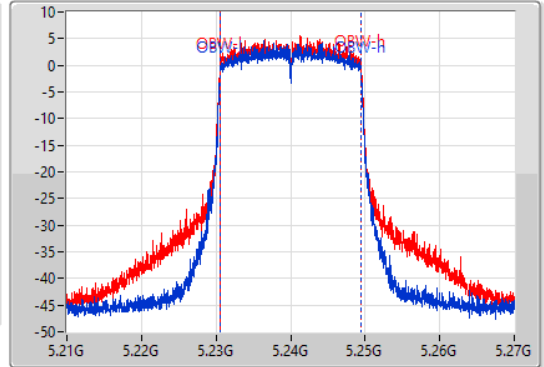
5240MHz

08/06/2021

CF
5.24GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.24GHz
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
20.61M	5.22971G	5.25032G	18.861M	5.230585G	5.249445G	Inf	1
20.82M	5.22959G	5.25041G	18.891M	5.230555G	5.249445G	Inf	2

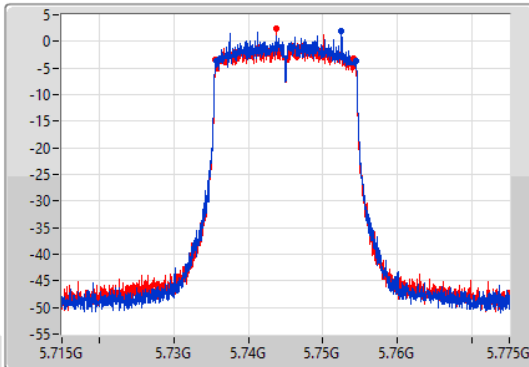
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

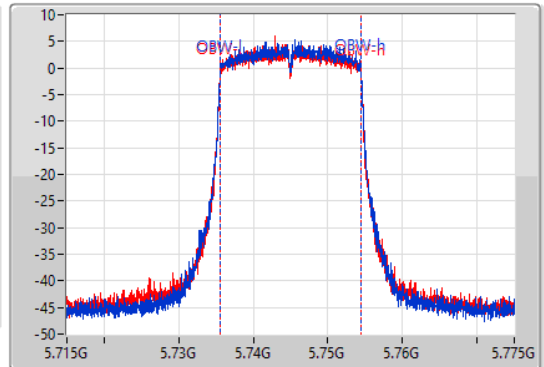
5745MHz

08/06/2021

CF
5.745GHz
Span
60MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.745GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
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
18.72M	5.73567G	5.75439G	18.861M	5.735585G	5.754445G	500k	1
18.54M	5.73561G	5.75415G	18.861M	5.735585G	5.754445G	500k	2

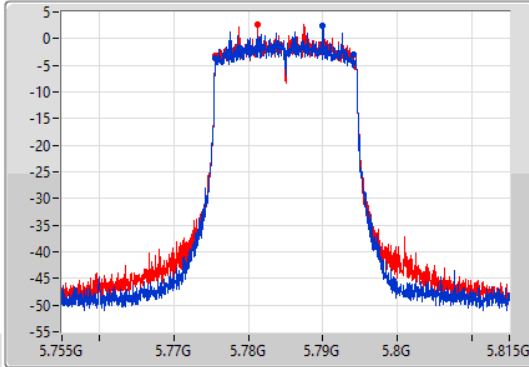
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

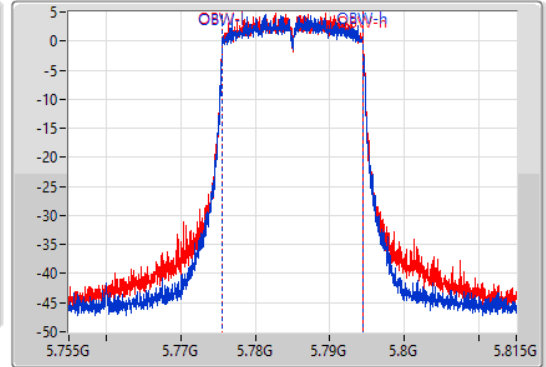
5785MHz

08/06/2021

CF
5.785GHz
Span
60MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.785GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
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
18.51M	5.77558G	5.79409G	18.861M	5.775585G	5.794445G	500k	1
18.54M	5.77564G	5.79418G	18.861M	5.775585G	5.794445G	500k	2

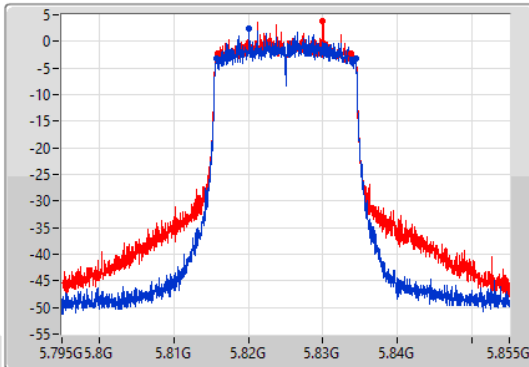
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

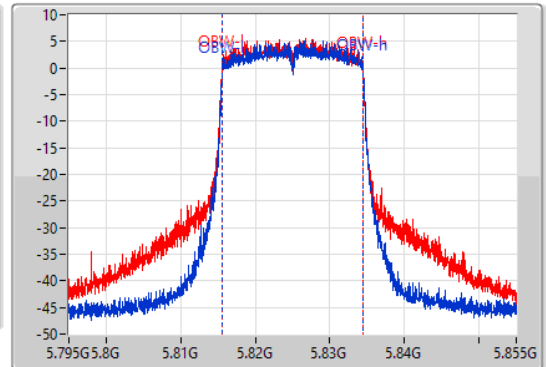
5825MHz

08/06/2021

CF
5.825GHz
Span
60MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.825GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
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
18.66M	5.8157G	5.83436G	18.861M	5.815585G	5.834445G	500k	1
17.91M	5.81594G	5.83385G	18.891M	5.815555G	5.834445G	500k	2

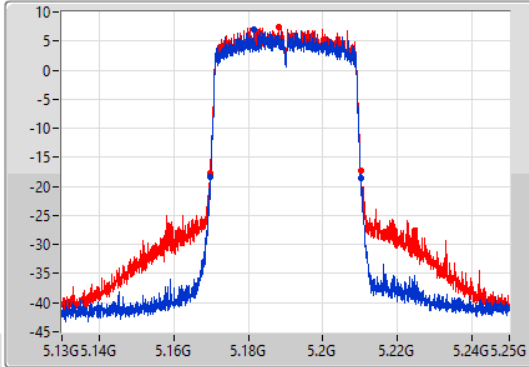
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

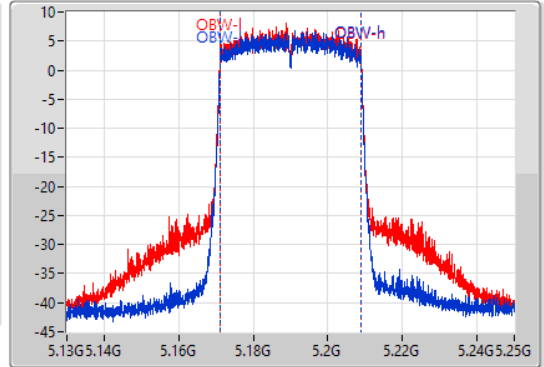
5190MHz

08/06/2021

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
40.62M	5.16972G	5.21034G	37.661M	5.171169G	5.208831G	Inf	1
40.38M	5.16978G	5.21016G	37.661M	5.171169G	5.208831G	Inf	2

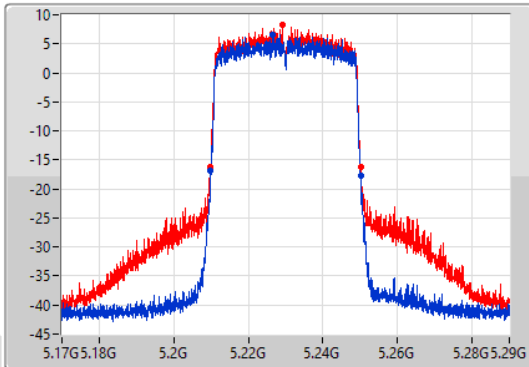
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

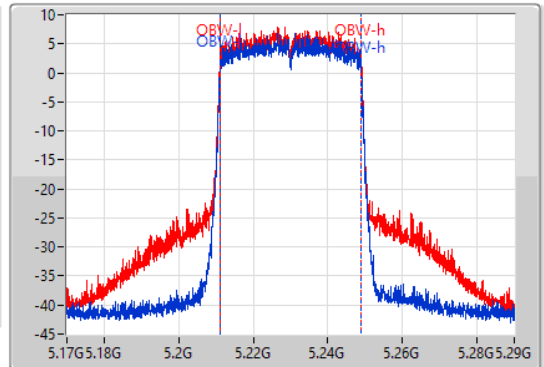
5230MHz

08/06/2021

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



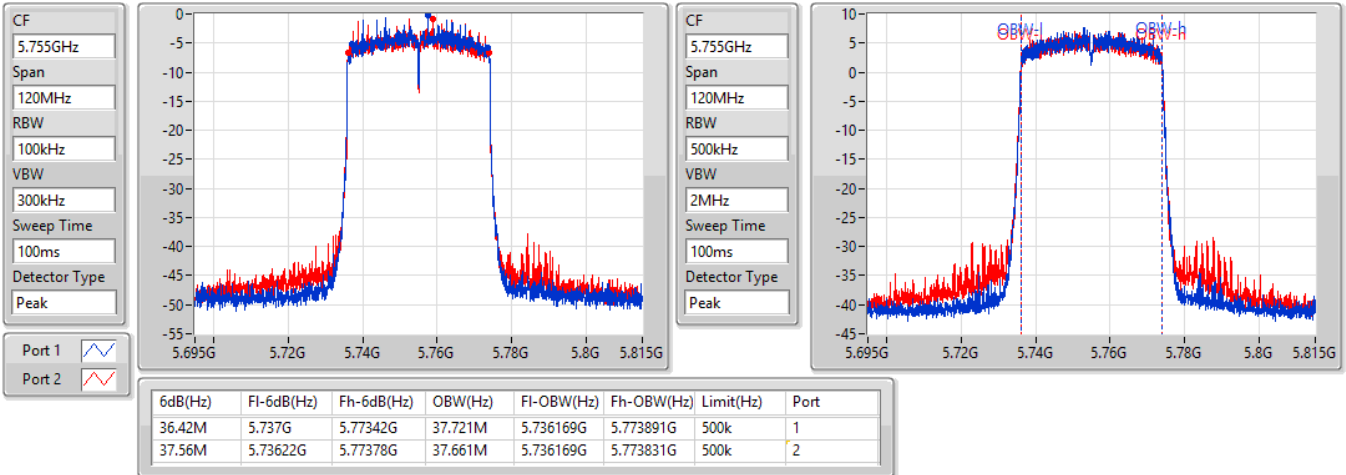
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.26M	5.20984G	5.2501G	37.661M	5.211169G	5.248831G	Inf	1
40.44M	5.20984G	5.25028G	37.721M	5.211109G	5.248831G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

08/06/2021

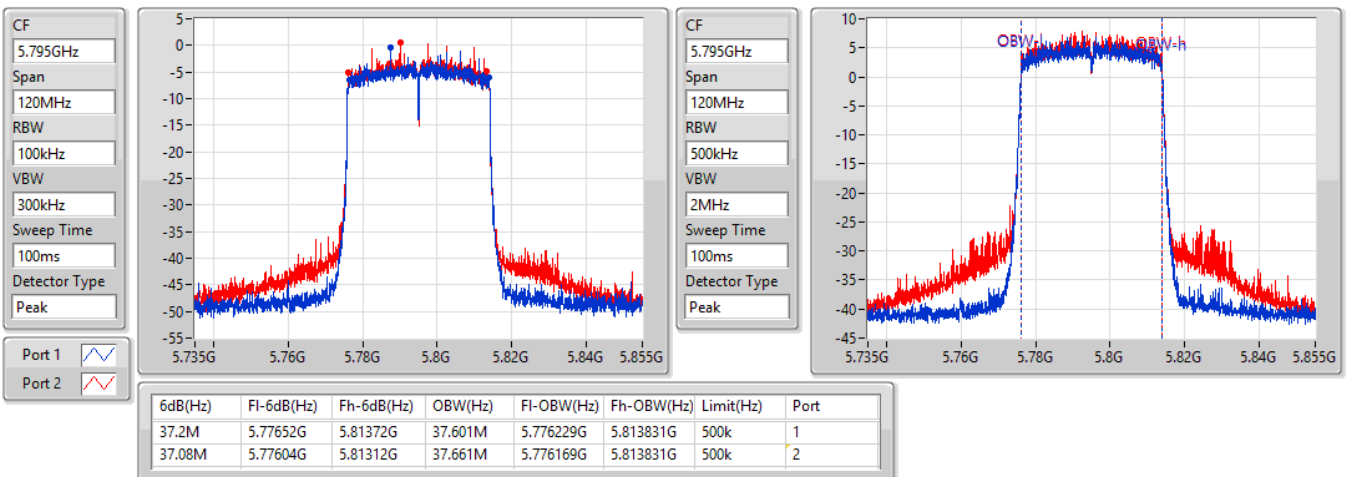


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

08/06/2021



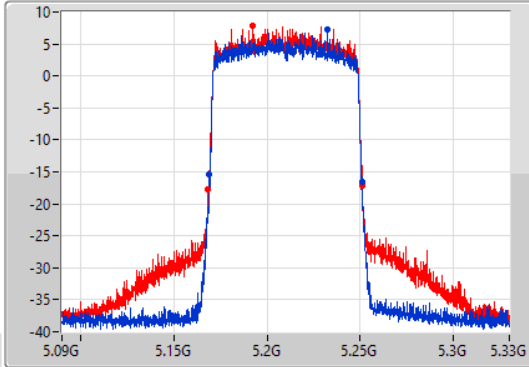
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

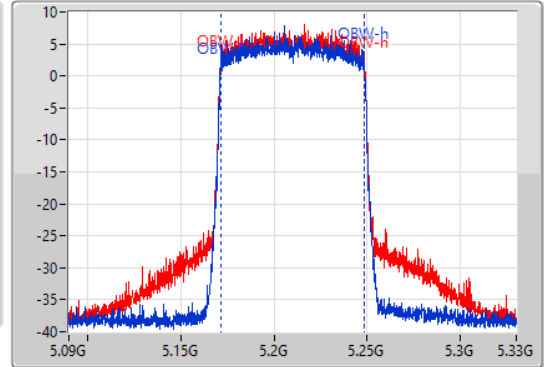
5210MHz

08/06/2021

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
82.2M	5.16908G	5.25128G	77.001M	5.171499G	5.248501G	Inf	1
82.56M	5.16848G	5.25104G	77.001M	5.171499G	5.248501G	Inf	2

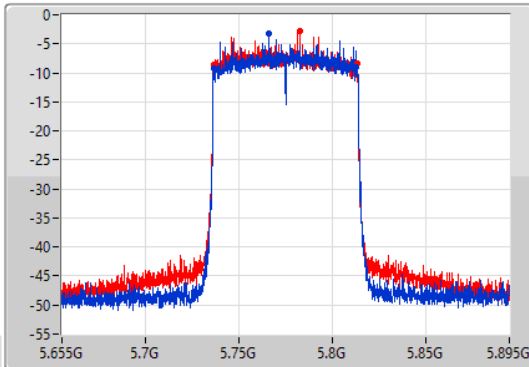
802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

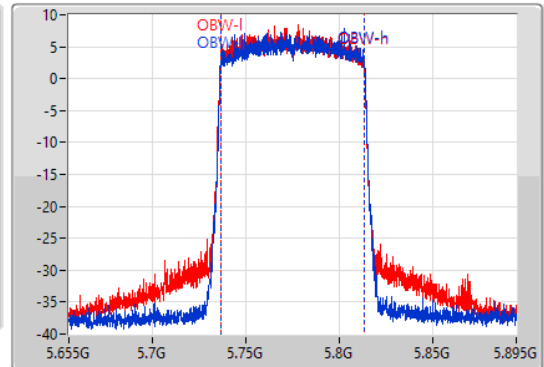
5775MHz

08/06/2021

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
76.2M	5.73672G	5.81292G	77.241M	5.736379G	5.813621G	500k	1
76.8M	5.73684G	5.81364G	77.121M	5.736379G	5.813501G	500k	2



Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	16.54	0.04508
802.11ax HEW40_Nss1,(MCS0)_2TX	16.59	0.04560
802.11ax HEW80_Nss1,(MCS0)_2TX	16.13	0.04102
5.725-5.85GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	16.87	0.04864
802.11ax HEW40_Nss1,(MCS0)_2TX	16.59	0.04560
802.11ax HEW80_Nss1,(MCS0)_2TX	16.73	0.04710



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	13.09	13.92	16.54	30.00
5200MHz	Pass	0.596	13.07	13.73	16.42	30.00
5240MHz	Pass	0.596	12.56	13.57	16.10	30.00
5745MHz	Pass	0.156	13.53	12.91	16.24	30.00
5785MHz	Pass	0.156	13.83	13.88	16.87	30.00
5825MHz	Pass	0.156	13.18	13.68	16.45	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	0.596	13.27	13.87	16.59	30.00
5230MHz	Pass	0.596	12.98	13.99	16.52	30.00
5755MHz	Pass	0.156	13.69	13.35	16.53	30.00
5795MHz	Pass	0.156	13.35	13.79	16.59	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	0.596	12.65	13.54	16.13	30.00
5775MHz	Pass	0.156	13.55	13.89	16.73	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	3.75
802.11ax HEW40_Nss1,(MCS0)_2TX	0.95
802.11ax HEW80_Nss1,(MCS0)_2TX	-2.55
5.725-5.85GHz	-
802.11ax HEW20_Nss1,(MCS0)_2TX	2.51
802.11ax HEW40_Nss1,(MCS0)_2TX	-0.61
802.11ax HEW80_Nss1,(MCS0)_2TX	-3.72

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	0.35	1.14	3.75	17.00
5200MHz	Pass	3.186	0.25	0.94	3.60	17.00
5240MHz	Pass	3.186	0.02	0.97	3.49	17.00
5745MHz	Pass	2.746	-0.67	-1.32	1.97	30.00
5785MHz	Pass	2.746	-0.53	-0.32	2.51	30.00
5825MHz	Pass	2.746	-1.28	-0.68	1.98	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	3.186	-2.35	-1.75	0.95	17.00
5230MHz	Pass	3.186	-2.64	-1.52	0.94	17.00
5755MHz	Pass	2.746	-3.41	-3.72	-0.61	30.00
5795MHz	Pass	2.746	-3.99	-3.43	-0.70	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	3.186	-6.06	-5.12	-2.55	17.00
5775MHz	Pass	2.746	-6.72	-6.63	-3.72	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;

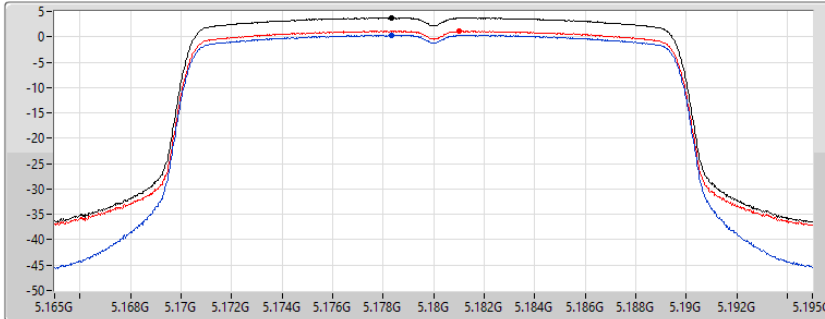
802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5180MHz

08/06/2021

CF
5.18GHz
Span
30MHz
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)
3.75	3.75	0.35	1.14

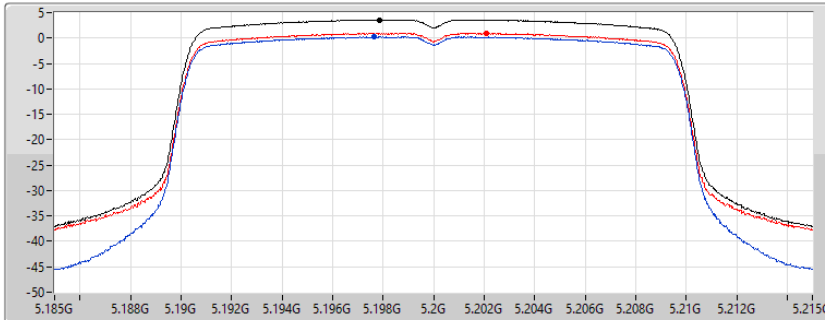
802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5200MHz

08/06/2021

CF
5.2GHz
Span
30MHz
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)
3.60	3.60	0.25	0.94

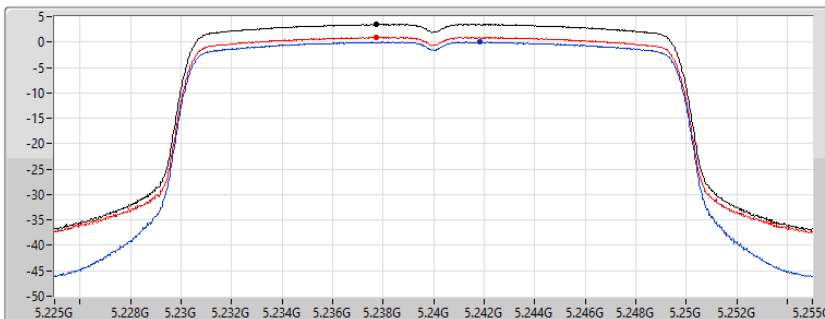
802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5240MHz

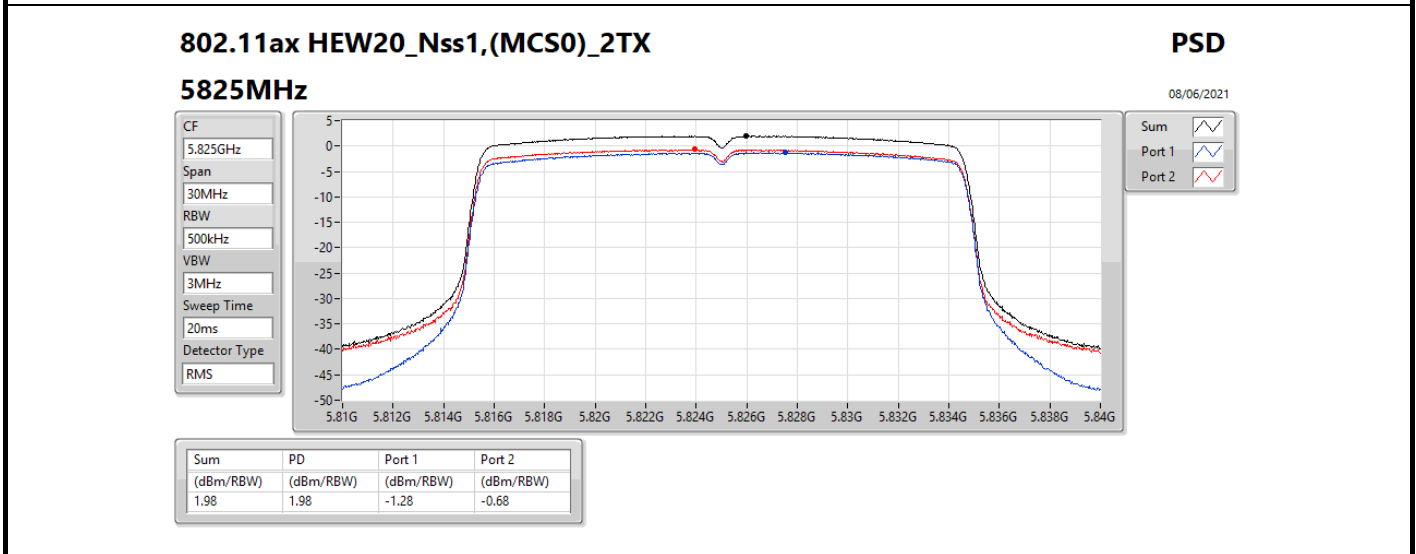
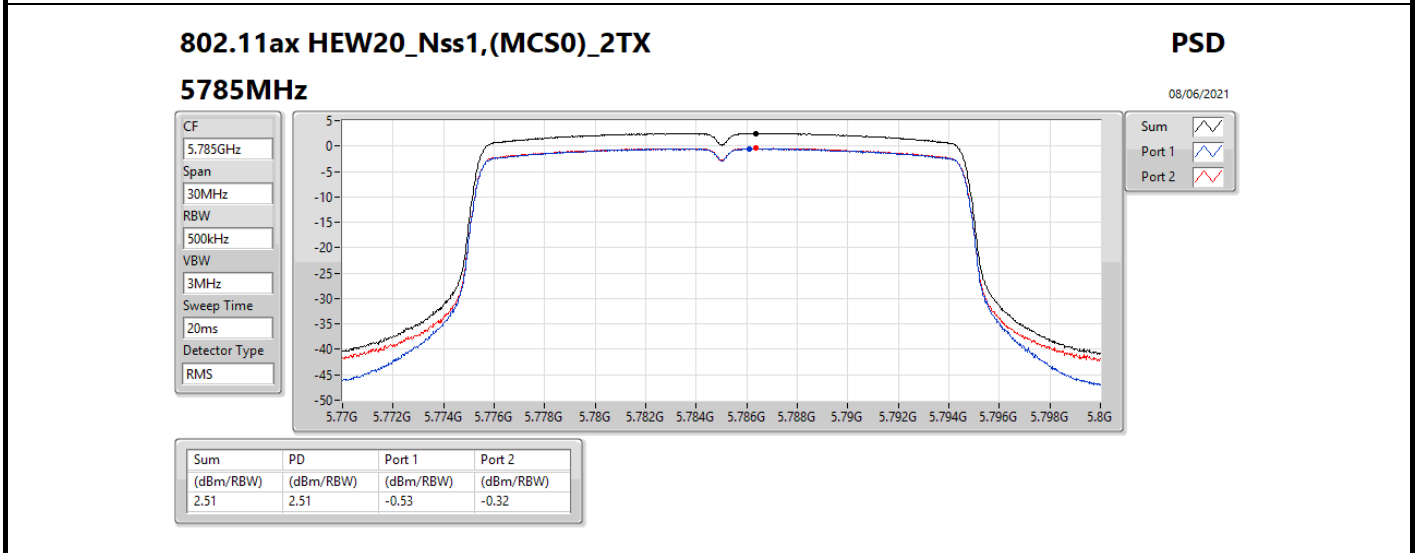
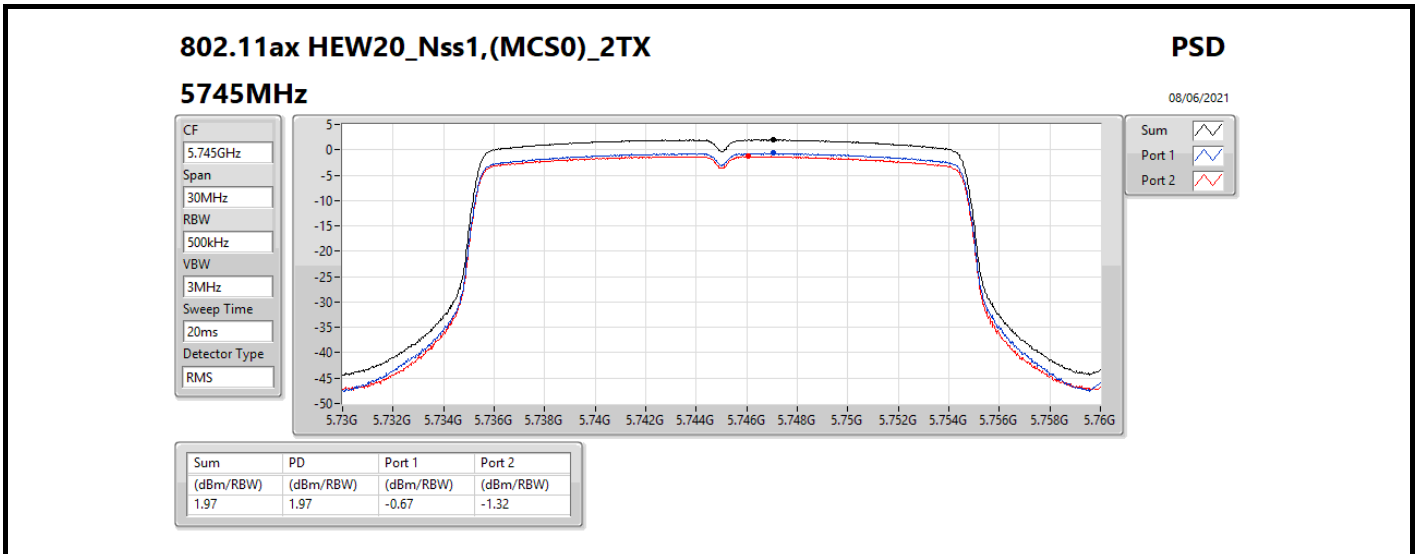
08/06/2021

CF
5.24GHz
Span
30MHz
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)
3.49	3.49	0.02	0.97



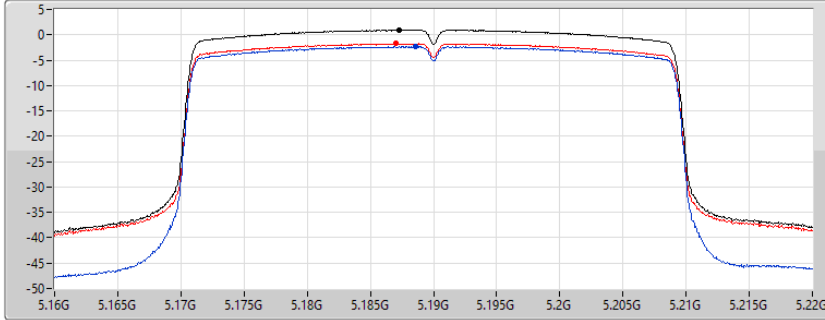
802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5190MHz

08/06/2021

CF
5.19GHz
Span
60MHz
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)
0.95	0.95	-2.35	-1.75

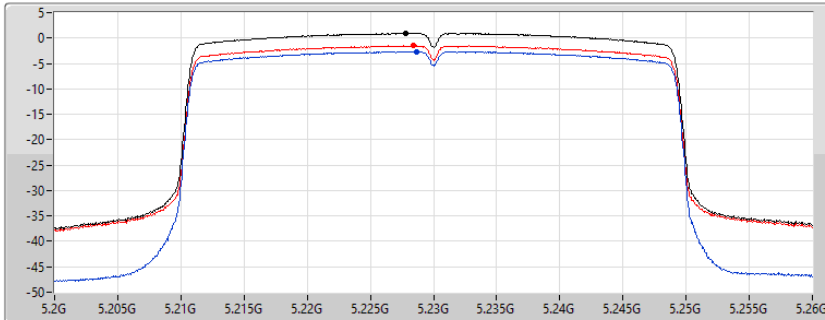
802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5230MHz

08/06/2021

CF
5.23GHz
Span
60MHz
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)
0.94	0.94	-2.64	-1.52

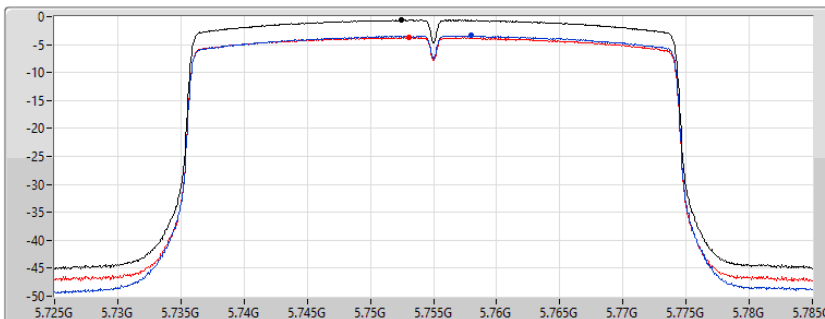
802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5755MHz

08/06/2021

CF
5.755GHz
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)
-0.61	-0.61	-3.41	-3.72

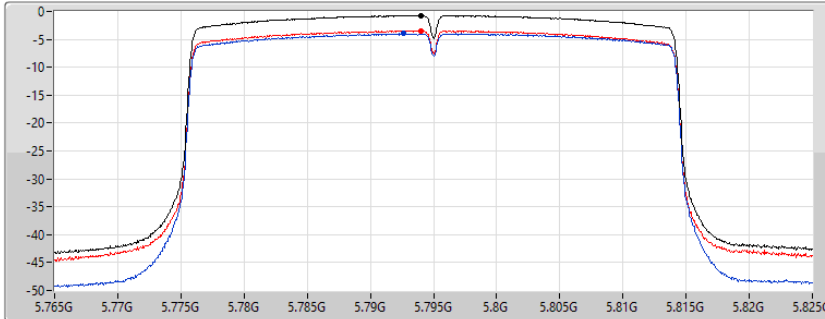
802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5795MHz

08/06/2021

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)
-0.70	-0.70	-3.99	-3.43

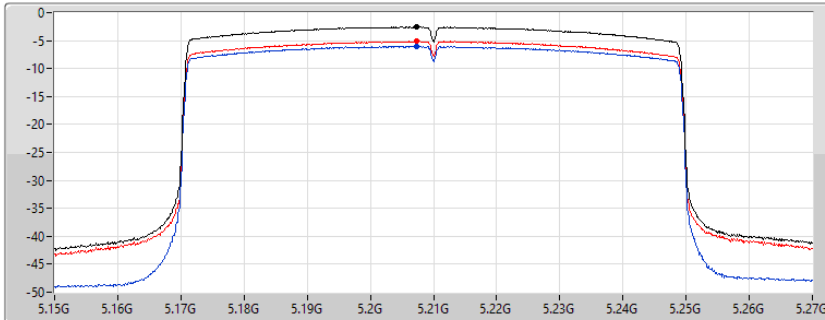
802.11ax HEW80_Nss1,(MCS0)_2TX

PSD

5210MHz

08/06/2021

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)
-2.55	-2.55	-6.06	-5.12

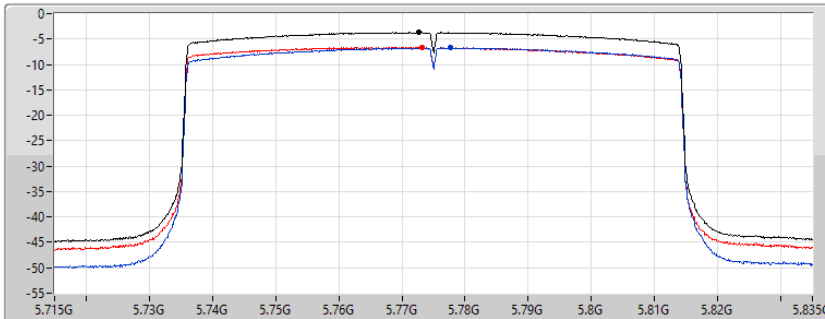
802.11ax HEW80_Nss1,(MCS0)_2TX

PSD

5775MHz

08/06/2021

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



Sum
Port 1
Port 2

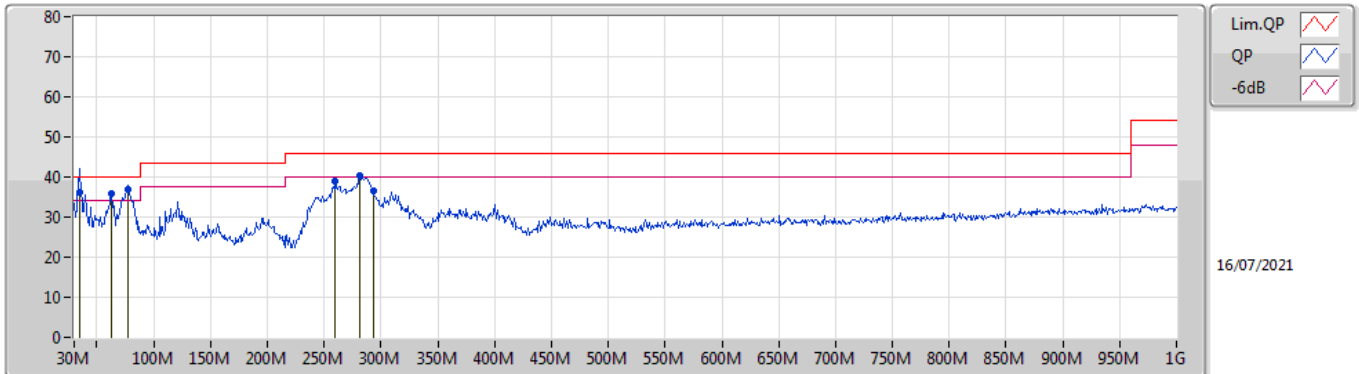
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.72	-3.72	-6.72	-6.63



Summary

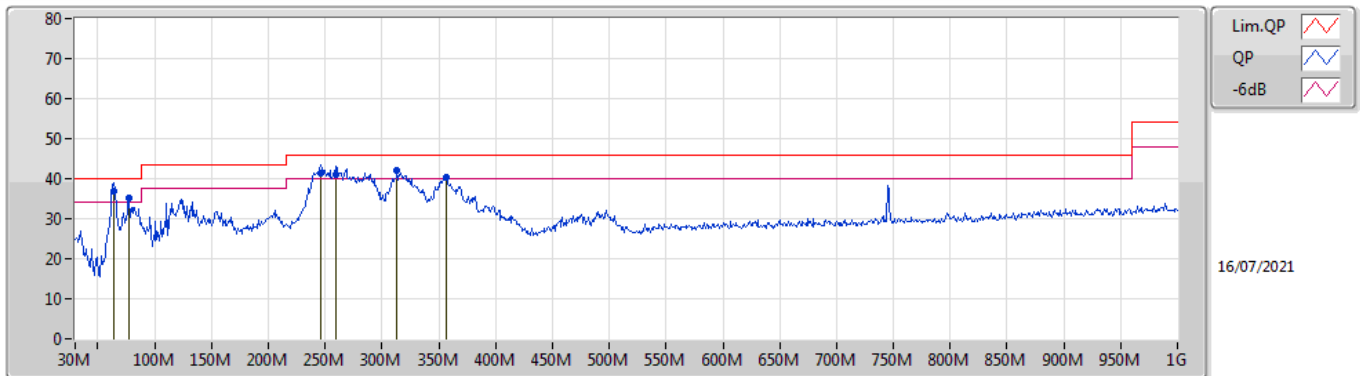
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 4	Pass	QP	63.95M	36.82	40.00	-3.18	Horizontal

Mode 4



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)
QP	34.85M	36.23	40.00	-3.77	-9.58	3	Vertical	240	1.00	"	45.81	21.51	0.50	31.59
PK	62.98M	35.94	40.00	-4.06	-18.93	3	Vertical	240	1.00	-	54.87	12.13	0.80	31.86
QP	77.53M	36.75	40.00	-3.25	-18.55	3	Vertical	194	1.50	"Worst"	55.30	12.46	0.90	31.91
PK	259.89M	39.07	46.00	-6.93	-10.53	3	Vertical	219	1.50	-	49.60	19.53	1.96	32.02
PK	281.23M	40.29	46.00	-5.71	-11.28	3	Vertical	251	2.00	-	51.57	18.68	2.09	32.05
PK	292.87M	36.51	46.00	-9.49	-11.09	3	Vertical	226	1.00	-	47.60	18.82	2.16	32.07

Mode 4



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)
QP	63.95M	36.82	40.00	-3.18	-18.96	3	Horizontal	126	3.00	"Worst"	55.78	12.10	0.80	31.86
PK	77.53M	35.09	40.00	-4.91	-18.55	3	Horizontal	306	2.00	-	53.64	12.46	0.90	31.91
QP	246.31M	41.30	46.00	-4.70	-12.40	3	Horizontal	225	1.00	-	53.70	17.72	1.89	32.01
QP	258.92M	41.19	46.00	-4.81	-10.68	3	Horizontal	212	1.00	-	51.87	19.39	1.95	32.02
PK	313.24M	42.14	46.00	-3.86	-10.47	3	Horizontal	324	1.00	-	52.61	19.37	2.25	32.09
PK	356.89M	40.39	46.00	-5.61	-9.11	3	Horizontal	140	1.00	-	49.50	20.58	2.43	32.12



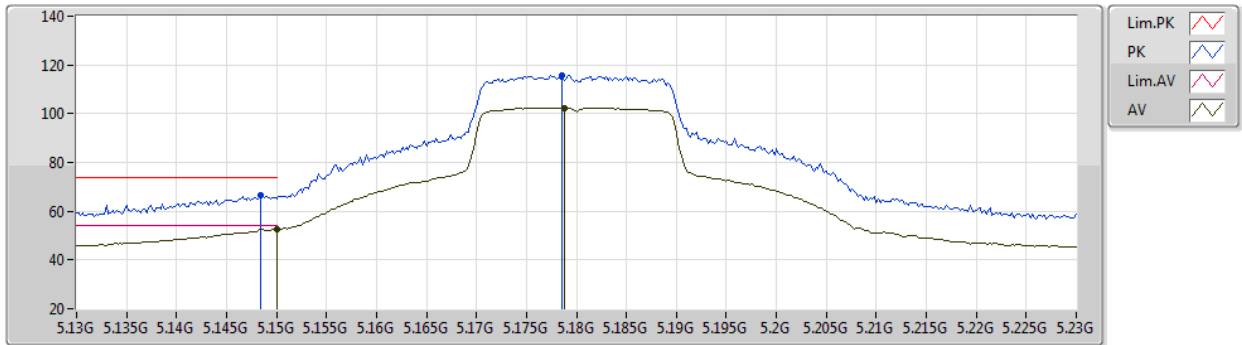
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_Nss1,(MCS0)_2TX	Pass	PK	17.33G	68.07	68.20	-0.13	3	Horizontal	225	2.95	-

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5180MHz_TX



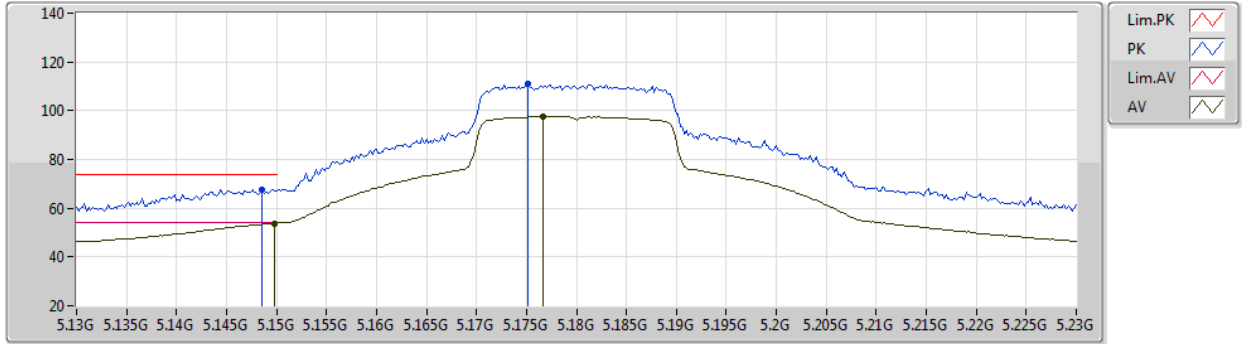
EUT Y_2TX
Setting 20
01-A-J-7-10

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	66.67	74.00	-7.33	61.84	3	Vertical	210	1.96	-	32.60	5.17	32.94
AV	5.15G	52.83	54.00	-1.17	48.00	3	Vertical	210	1.96	-	32.60	5.17	32.94
PK	5.1786G	115.55	Inf	-Inf	110.64	3	Vertical	210	1.96	-	32.66	5.19	32.94
AV	5.1788G	102.45	Inf	-Inf	97.54	3	Vertical	210	1.96	-	32.66	5.19	32.94

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5180MHz_TX



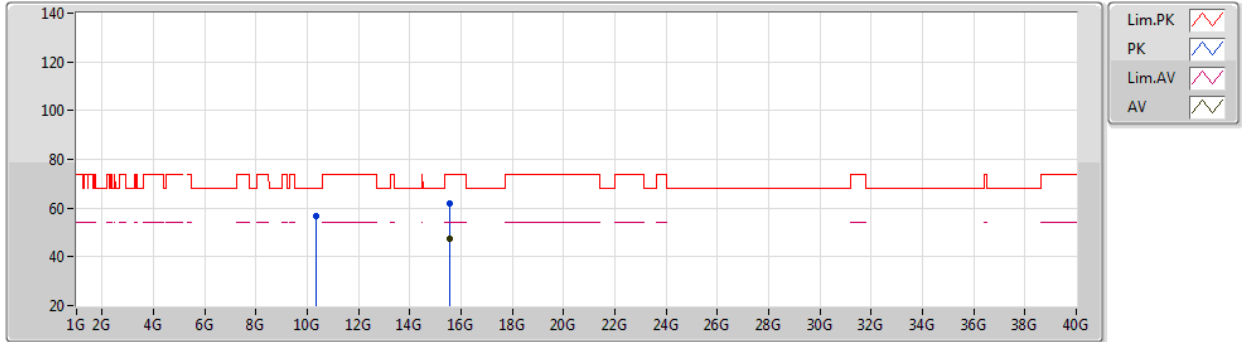
EUT Y_2TX
Setting 20
01-A-J-7-10

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	5.1486G	67.65	74.00	-6.35	62.82	3	Horizontal	73	1.90	-	32.60	5.17	32.94
AV	5.1498G	53.84	54.00	-0.16	49.01	3	Horizontal	73	1.90	-	32.60	5.17	32.94
PK	5.1752G	110.95	Inf	-Inf	106.05	3	Horizontal	73	1.90	-	32.65	5.19	32.94
AV	5.1766G	97.54	Inf	-Inf	92.64	3	Horizontal	73	1.90	-	32.65	5.19	32.94

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5180MHz_TX



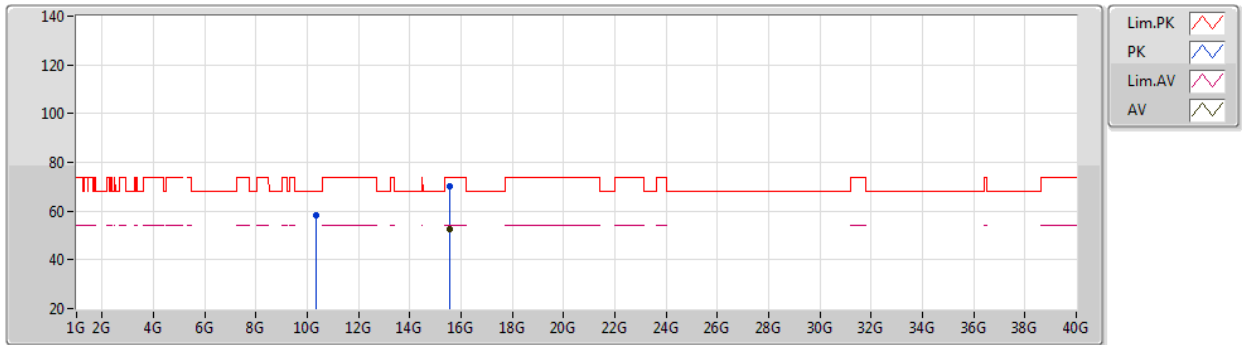
EUT Y_2TX
Setting 20
01-A-J-7

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	10.3627G	56.62	68.20	-11.58	44.15	3	Vertical	68	1.78	-	38.16	7.43	33.12
PK	15.5447G	62.08	74.00	-11.92	47.49	3	Vertical	254	1.83	-	38.19	9.21	32.81
AV	15.5404G	47.31	54.00	-6.69	32.73	3	Vertical	254	1.83	-	38.18	9.21	32.81

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5180MHz_TX



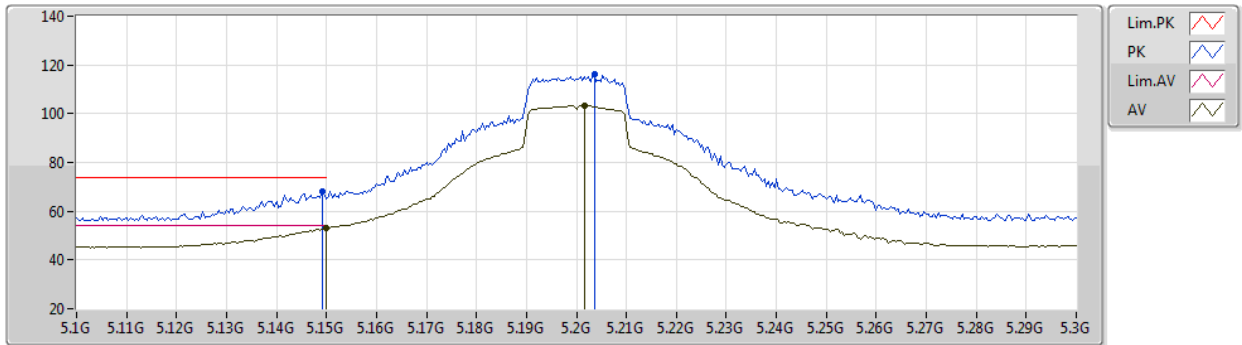
EUT Y_2TX
Setting 20
01-A-J-7

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	10.3615G	58.31	68.20	-9.89	45.84	3	Horizontal	255	1.89	-	38.16	7.43	33.12
PK	15.5372G	70.13	74.00	-3.87	55.56	3	Horizontal	231	1.59	-	38.17	9.21	32.81
AV	15.5401G	52.39	54.00	-1.61	37.81	3	Horizontal	231	1.59	-	38.18	9.21	32.81

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5200MHz_TX



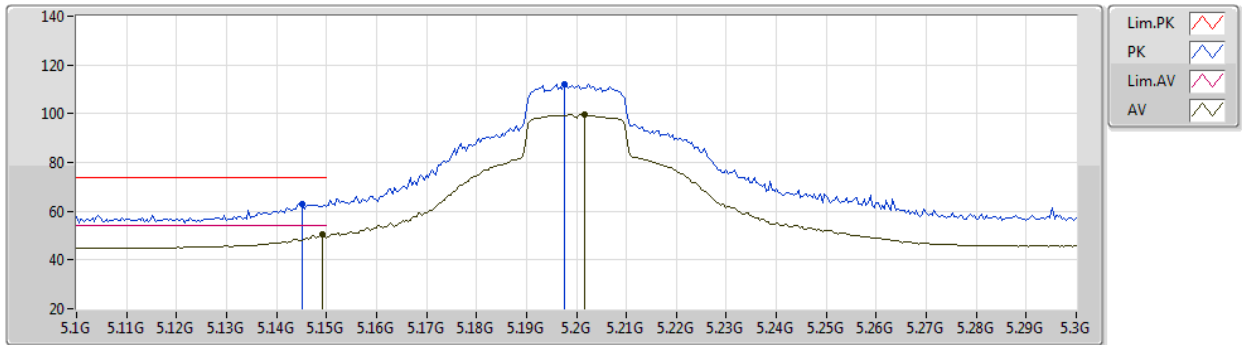
EUT Y_2TX
Setting 25
03-E-K-5-10

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	5.1492G	68.01	74.00	-5.99	62.81	3	Vertical	217	1.90	-	34.10	6.43	35.33
AV	5.15G	53.16	54.00	-0.84	47.96	3	Vertical	217	1.90	-	34.10	6.43	35.33
PK	5.2036G	116.01	Inf	-Inf	110.87	3	Vertical	217	1.90	-	34.01	6.40	35.27
AV	5.2016G	103.28	Inf	-Inf	98.14	3	Vertical	217	1.90	-	34.01	6.40	35.27

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5200MHz_TX



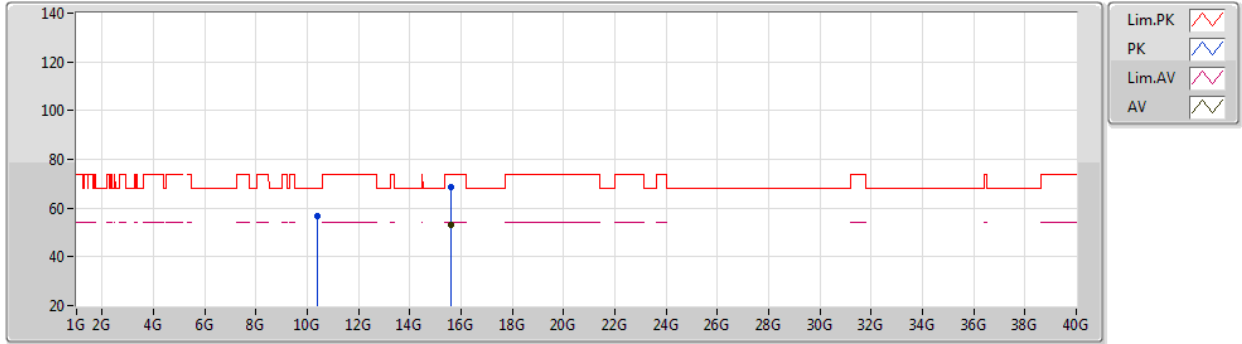
EUT Y_2TX
Setting 25
03-E-K-5-10

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	5.1452G	63.12	74.00	-10.88	57.94	3	Horizontal	121	2.11	-	34.08	6.43	35.33
AV	5.1492G	50.30	54.00	-3.70	45.10	3	Horizontal	121	2.11	-	34.10	6.43	35.33
PK	5.1976G	112.09	Inf	-Inf	106.97	3	Horizontal	121	2.11	-	34.00	6.40	35.28
AV	5.2016G	99.59	Inf	-Inf	94.45	3	Horizontal	121	2.11	-	34.01	6.40	35.27

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5200MHz_TX



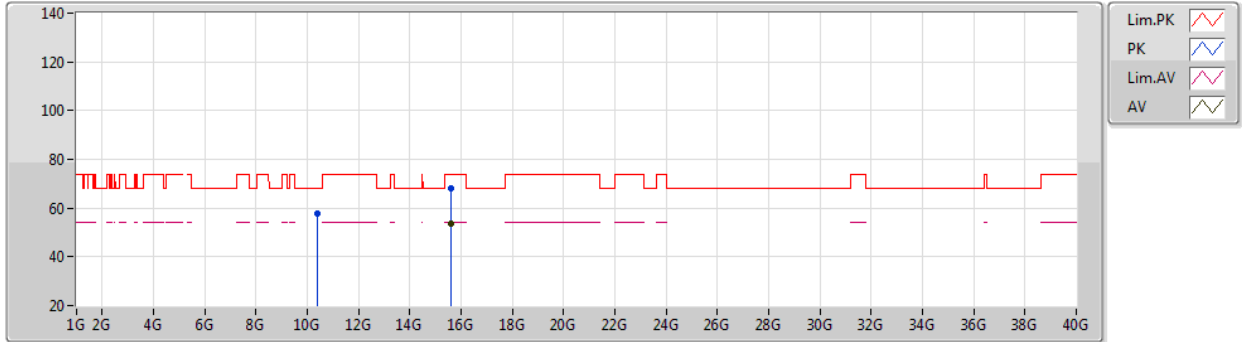
EUT Y_2TX
Setting 25
03-E-K-5

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	10.4016G	56.68	68.20	-11.52	43.62	3	Vertical	64	2.13	-	38.30	9.68	34.92
PK	15.6028G	68.85	74.00	-5.15	54.31	3	Vertical	147	1.39	-	37.81	11.80	35.07
AV	15.6021G	53.10	54.00	-0.90	38.57	3	Vertical	147	1.39	-	37.80	11.80	35.07

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5200MHz_TX



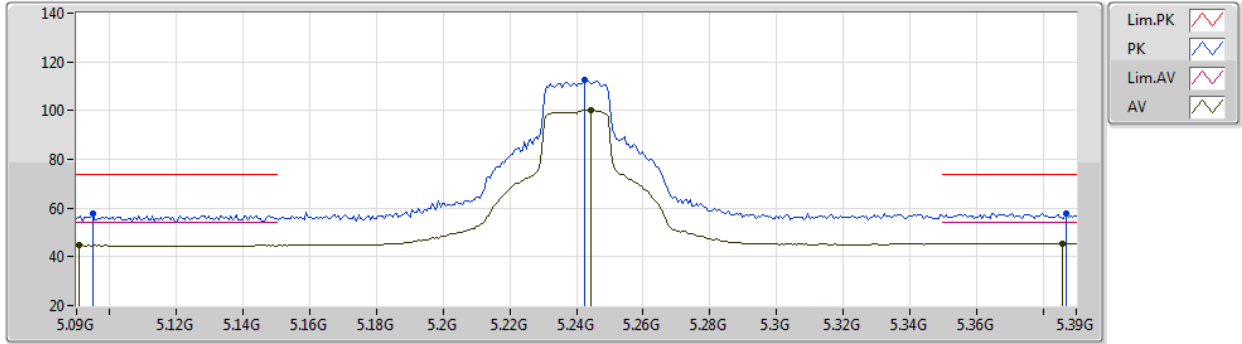
EUT Y_2TX
Setting 25
03-E-K-5

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	10.40066G	57.67	68.20	-10.53	44.61	3	Horizontal	183	1.80	-	38.30	9.68	34.92
PK	15.5934G	68.11	74.00	-5.89	53.51	3	Horizontal	182	2.54	-	37.86	11.80	35.06
AV	15.6019G	53.54	54.00	-0.46	39.01	3	Horizontal	182	2.54	-	37.80	11.80	35.07

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5240MHz_TX



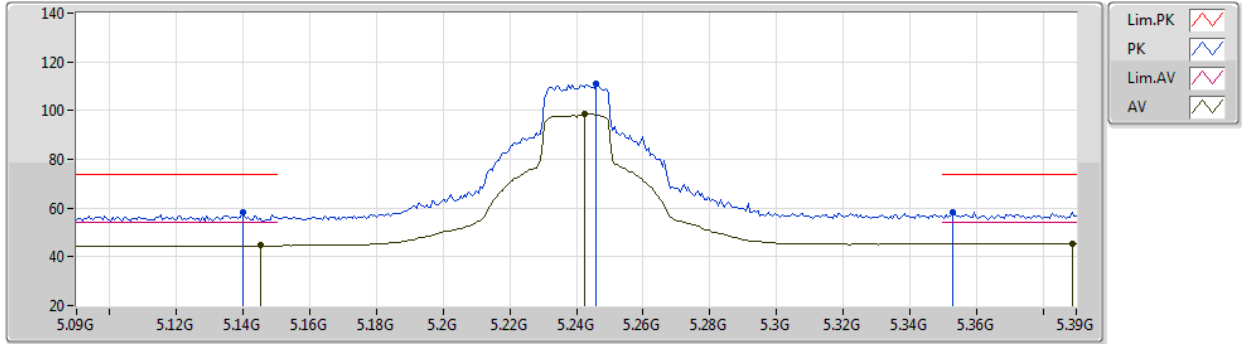
EUT Y_2TX
Setting 21
03-E-K-5-10

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	5.0948G	57.58	74.00	-16.42	52.62	3	Vertical	205	2.00	-	33.90	6.45	35.39
AV	5.0906G	44.66	54.00	-9.34	39.70	3	Vertical	205	2.00	-	33.90	6.45	35.39
PK	5.2424G	112.46	Inf	-Inf	107.10	3	Vertical	205	2.00	-	34.17	6.42	35.23
AV	5.2442G	100.35	Inf	-Inf	94.98	3	Vertical	205	2.00	-	34.18	6.42	35.23
PK	5.387G	57.72	74.00	-16.28	51.77	3	Vertical	205	2.00	-	34.53	6.49	35.07
AV	5.3858G	45.53	54.00	-8.47	39.58	3	Vertical	205	2.00	-	34.53	6.49	35.07

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5240MHz_TX



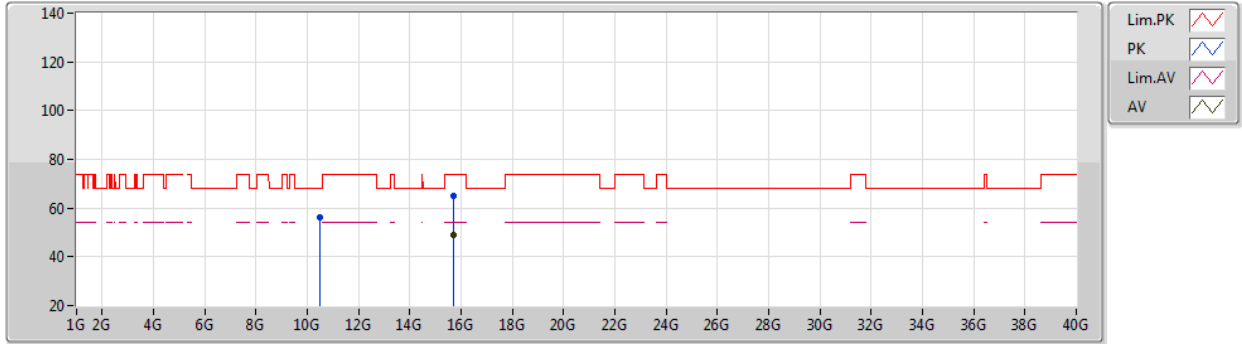
EUT Y_2TX
Setting 21
03-E-K-5-10

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	5.1398G	58.03	74.00	-15.97	52.88	3	Horizontal	120	1.84	-	34.06	6.43	35.34
AV	5.1452G	44.59	54.00	-9.41	39.41	3	Horizontal	120	1.84	-	34.08	6.43	35.33
PK	5.246G	111.04	Inf	-Inf	105.66	3	Horizontal	120	1.84	-	34.18	6.42	35.22
AV	5.2424G	98.63	Inf	-Inf	93.27	3	Horizontal	120	1.84	-	34.17	6.42	35.23
PK	5.3528G	58.34	74.00	-15.66	52.38	3	Horizontal	120	1.84	-	34.59	6.48	35.11
AV	5.3888G	45.52	54.00	-8.48	39.58	3	Horizontal	120	1.84	-	34.52	6.49	35.07

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5240MHz_TX



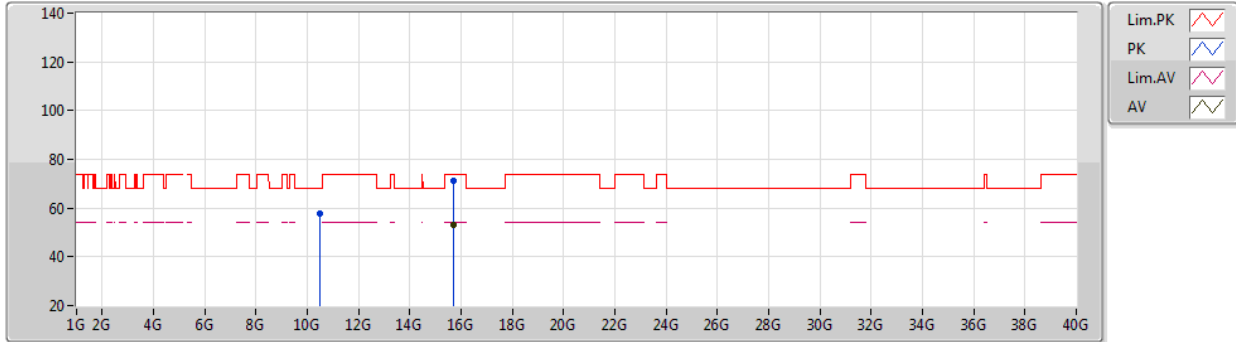
EUT Y_2TX
Setting 21
03-E-K-5

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	10.47862G	56.25	68.20	-11.95	43.04	3	Vertical	182	1.70	-	38.38	9.70	34.87
PK	15.7125G	64.95	74.00	-9.05	50.24	3	Vertical	149	1.35	-	37.99	11.86	35.14
AV	15.71928G	48.74	54.00	-5.26	34.04	3	Vertical	149	1.35	-	37.98	11.86	35.14

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5240MHz_TX



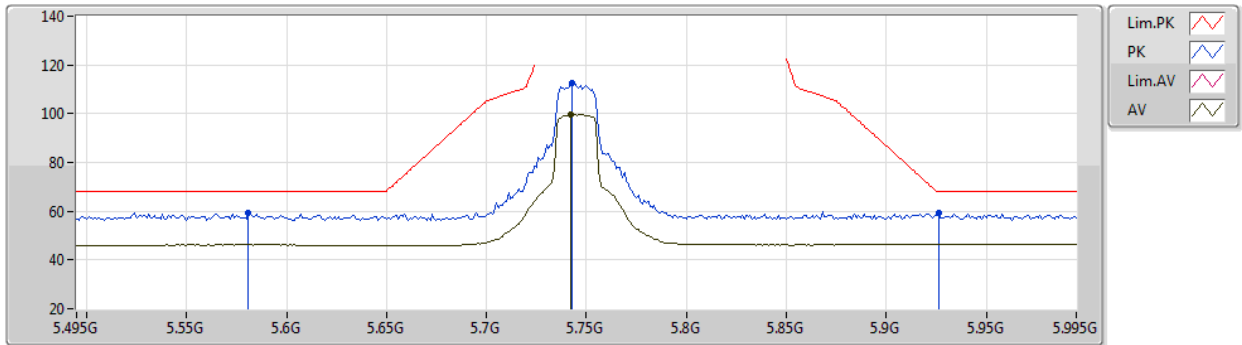
EUT Y_2TX
Setting 21
03-E-K-5

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	10.48444G	57.83	68.20	-10.37	44.61	3	Horizontal	181	1.53	-	38.38	9.70	34.86
PK	15.72324G	70.97	74.00	-3.03	56.27	3	Horizontal	224	1.91	-	37.98	11.86	35.14
AV	15.71922G	53.24	54.00	-0.76	38.54	3	Horizontal	224	1.91	-	37.98	11.86	35.14

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5745MHz_TX



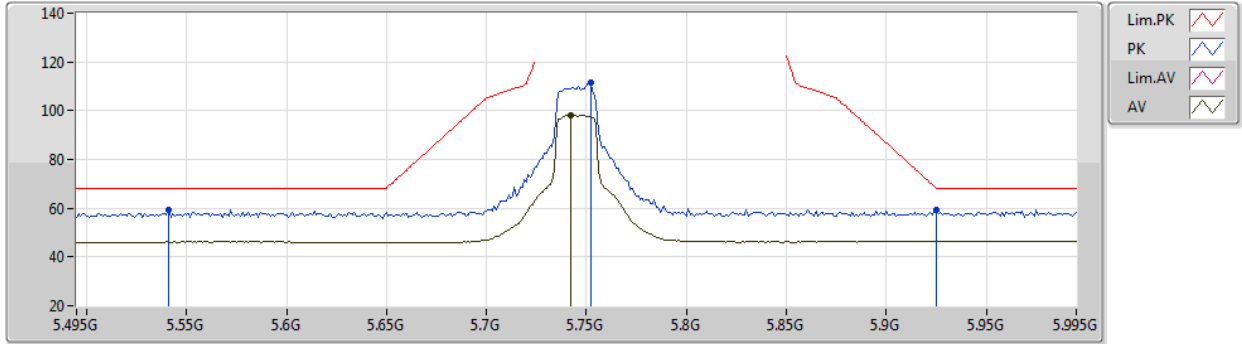
EUT Y_2TX
Setting 18.5
03-E-K-5-10

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	5.581G	59.17	68.20	-9.03	52.87	3	Vertical	140	1.93	-	34.48	6.77	34.95
PK	5.743G	112.57	Inf	-Inf	106.24	3	Vertical	140	1.93	-	34.40	6.87	34.94
AV	5.742G	99.62	Inf	-Inf	93.29	3	Vertical	140	1.93	-	34.40	6.87	34.94
PK	5.926G	59.17	68.20	-9.03	52.48	3	Vertical	140	1.93	-	34.65	6.96	34.92

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5745MHz_TX



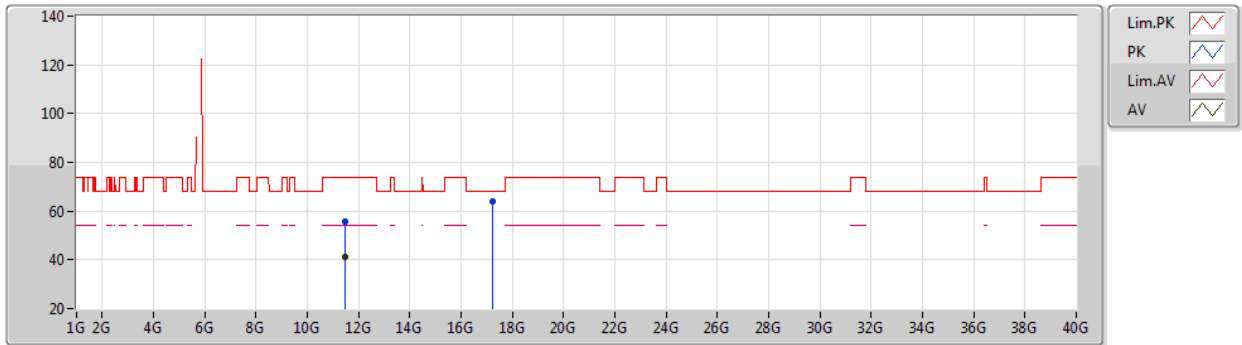
EUT Y_2TX
Setting 18.5
03-E-K-5-10

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	5.541G	59.33	68.20	-8.87	52.97	3	Horizontal	145	1.95	-	34.60	6.71	34.95
PK	5.752G	111.65	Inf	-Inf	105.30	3	Horizontal	145	1.95	-	34.40	6.88	34.93
AV	5.742G	98.21	Inf	-Inf	91.88	3	Horizontal	145	1.95	-	34.40	6.87	34.94
PK	5.925G	59.16	68.20	-9.04	52.47	3	Horizontal	145	1.95	-	34.65	6.96	34.92

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5745MHz_TX



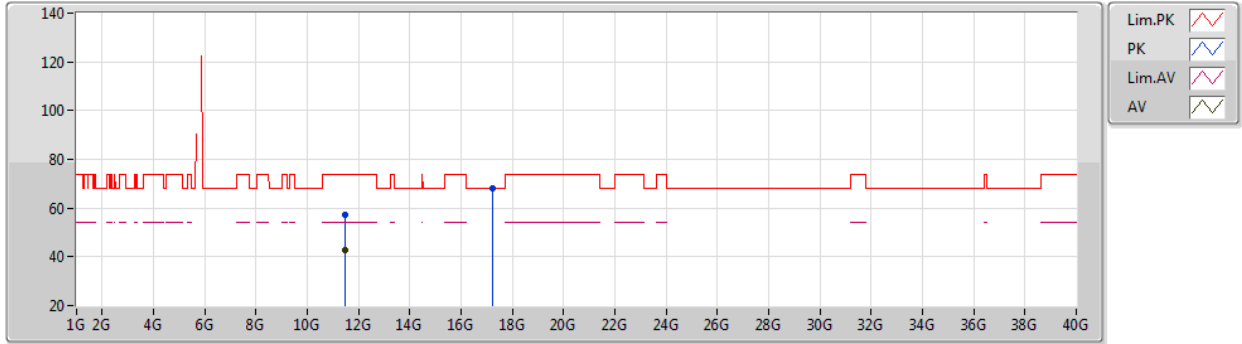
EUT Y_2TX
Setting 18.5
03-E-K-5

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	11.4951G	55.52	74.00	-18.48	41.08	3	Vertical	67	2.02	-	39.19	9.90	34.65
AV	11.4897G	41.35	54.00	-12.65	26.92	3	Vertical	67	2.02	-	39.18	9.90	34.65
PK	17.24616G	64.22	68.20	-3.98	45.52	3	Vertical	209	2.58	-	40.84	12.44	34.58

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5745MHz_TX



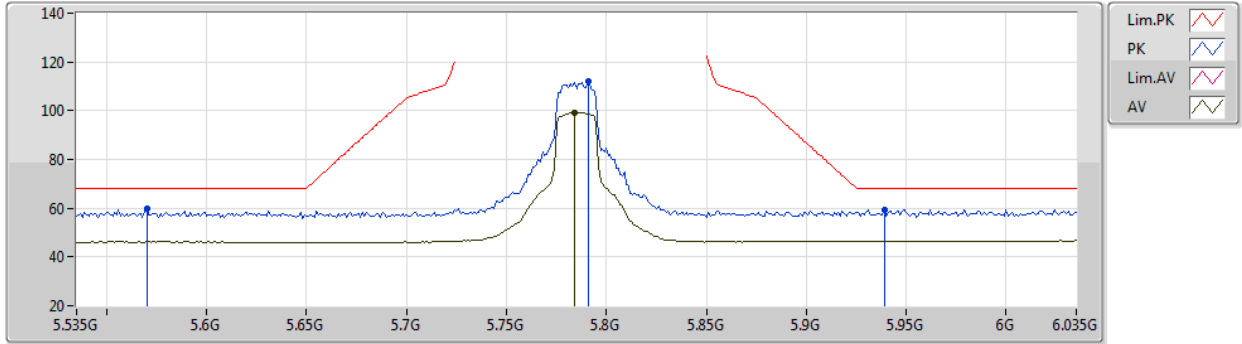
EUT Y_2TX
Setting 18.5
03-E-K-5

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	11.4855G	57.01	74.00	-16.99	42.59	3	Horizontal	175	1.74	-	39.17	9.90	34.65
AV	11.49024G	43.01	54.00	-10.99	28.58	3	Horizontal	175	1.74	-	39.18	9.90	34.65
PK	17.23578G	67.89	68.20	-0.31	49.23	3	Horizontal	224	2.45	-	40.81	12.43	34.58

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5785MHz_TX



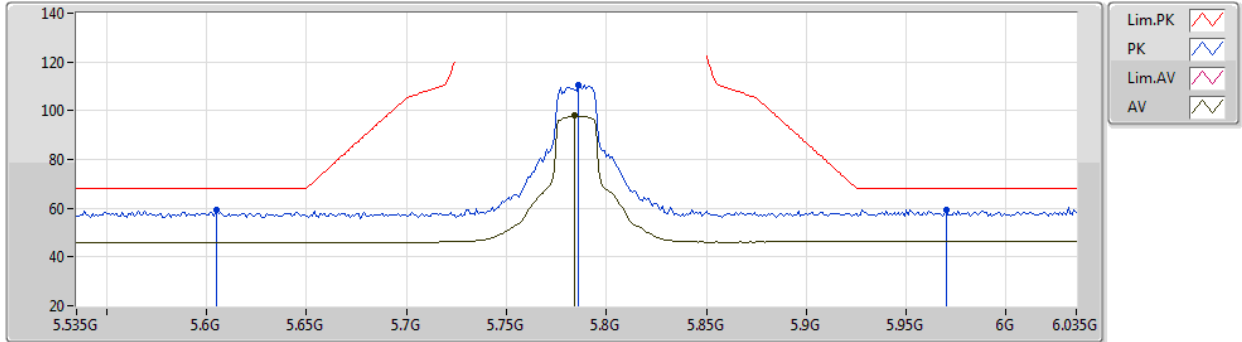
EUT Y_2TX
Setting 18
03-E-K-5-10

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	59.68	68.20	-8.52	53.36	3	Vertical	140	1.91	-	34.52	6.75	34.95
PK	5.791G	112.15	Inf	-Inf	105.78	3	Vertical	140	1.91	-	34.40	6.90	34.93
AV	5.784G	99.17	Inf	-Inf	92.81	3	Vertical	140	1.91	-	34.40	6.89	34.93
PK	5.939G	59.56	68.20	-8.64	52.89	3	Vertical	140	1.91	-	34.62	6.97	34.92

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5785MHz_TX



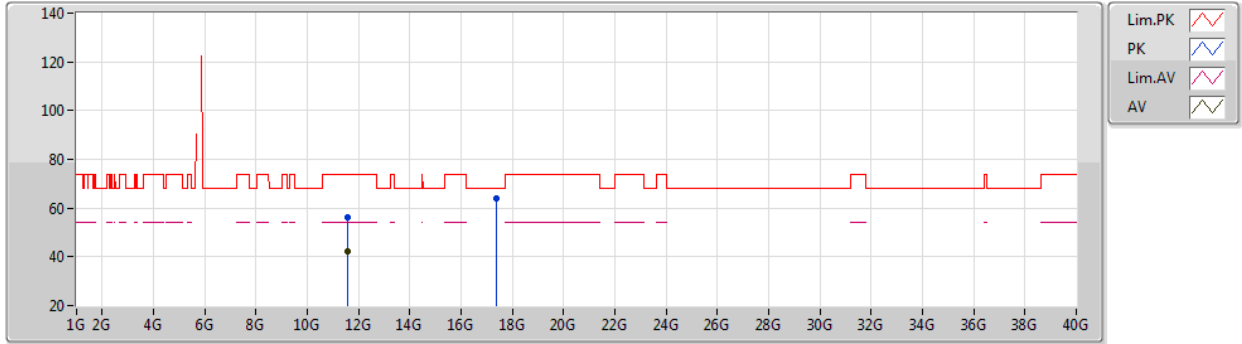
EUT Y_2TX
Setting 18
03-E-K-5-10

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	5.605G	59.26	68.20	-8.94	53.00	3	Horizontal	144	1.99	-	34.40	6.80	34.94
PK	5.786G	110.75	Inf	-Inf	104.39	3	Horizontal	144	1.99	-	34.40	6.89	34.93
AV	5.784G	97.93	Inf	-Inf	91.57	3	Horizontal	144	1.99	-	34.40	6.89	34.93
PK	5.97G	59.44	68.20	-8.76	52.73	3	Horizontal	144	1.99	-	34.64	6.99	34.92

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5785MHz_TX



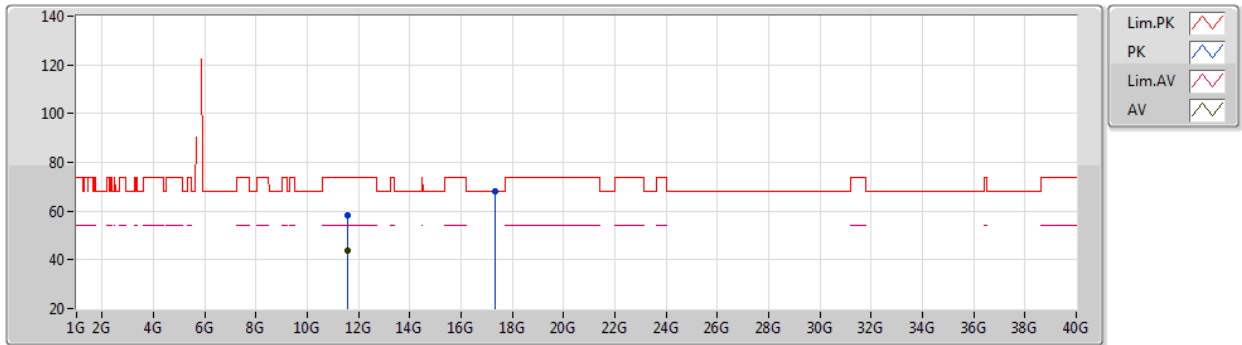
EUT Y_2TX
Setting 18
03-E-K-5

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	11.56532G	56.19	74.00	-17.81	41.49	3	Vertical	62	1.79	-	39.46	9.91	34.67
AV	11.56916G	42.16	54.00	-11.84	27.44	3	Vertical	62	1.79	-	39.48	9.91	34.67
PK	17.3619G	63.77	68.20	-4.43	44.35	3	Vertical	81	1.80	-	41.50	12.48	34.56

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5785MHz_TX



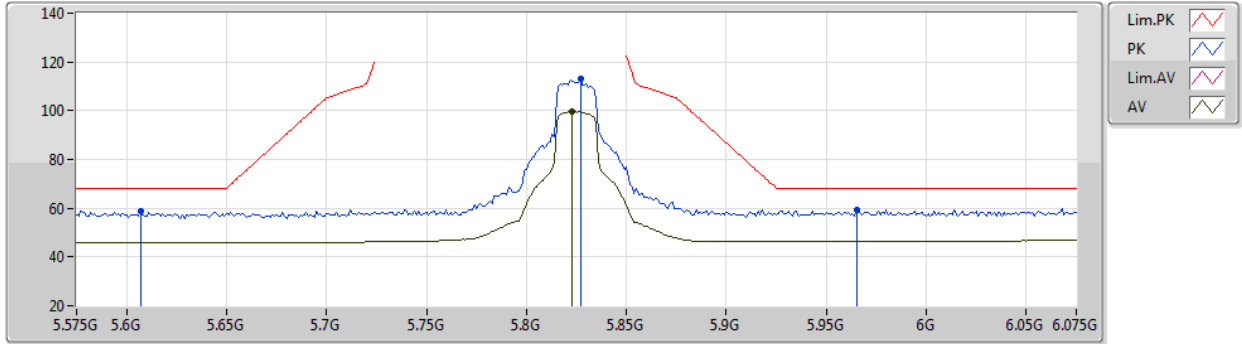
EUT Y_2TX
Setting 18
03-E-K-5

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	11.5679G	58.19	74.00	-15.81	43.48	3	Horizontal	173	2.13	-	39.47	9.91	34.67
AV	11.57G	43.89	54.00	-10.11	29.17	3	Horizontal	173	2.13	-	39.48	9.91	34.67
PK	17.34588G	67.92	68.20	-0.28	48.65	3	Horizontal	221	2.97	-	41.37	12.47	34.57

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5825MHz_TX



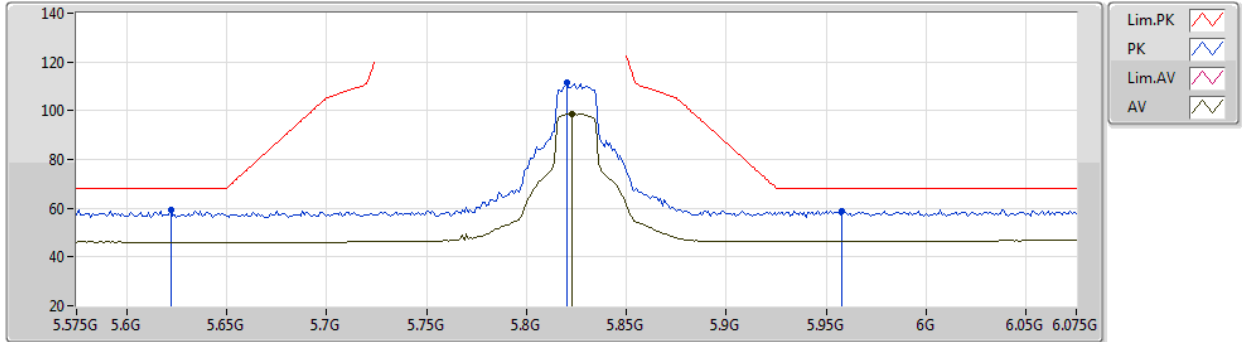
EUT Y_2TX
Setting 19
03-E-K-5-10

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	5.607G	59.02	68.20	-9.18	52.76	3	Vertical	139	1.86	-	34.40	6.80	34.94
PK	5.827G	113.03	Inf	-Inf	106.65	3	Vertical	139	1.86	-	34.40	6.91	34.93
AV	5.823G	99.84	Inf	-Inf	93.46	3	Vertical	139	1.86	-	34.40	6.91	34.93
PK	5.965G	59.53	68.20	-8.67	52.84	3	Vertical	139	1.86	-	34.63	6.98	34.92

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5825MHz_TX



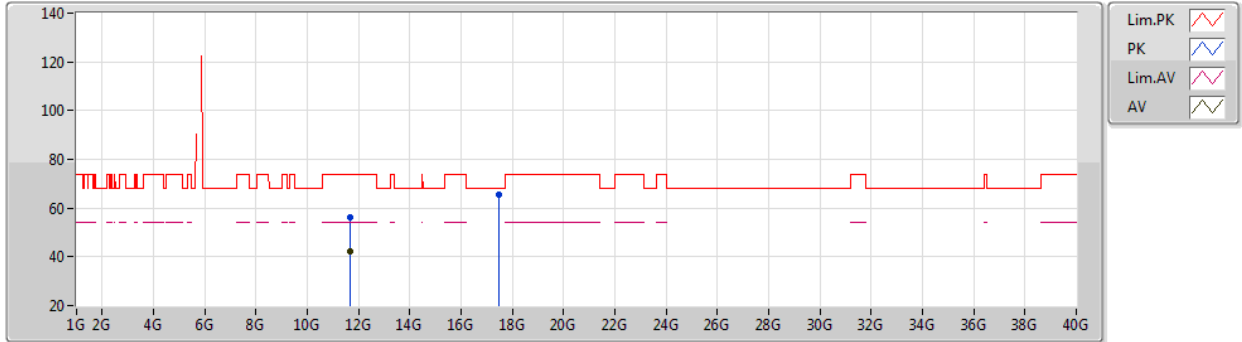
EUT Y_2TX
Setting 19
03-E-K-5-10

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	5.622G	59.12	68.20	-9.08	52.85	3	Horizontal	144	2.03	-	34.40	6.81	34.94
PK	5.82G	111.76	Inf	-Inf	105.38	3	Horizontal	144	2.03	-	34.40	6.91	34.93
AV	5.823G	98.82	Inf	-Inf	92.44	3	Horizontal	144	2.03	-	34.40	6.91	34.93
PK	5.958G	58.96	68.20	-9.24	52.28	3	Horizontal	144	2.03	-	34.62	6.98	34.92

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5825MHz_TX



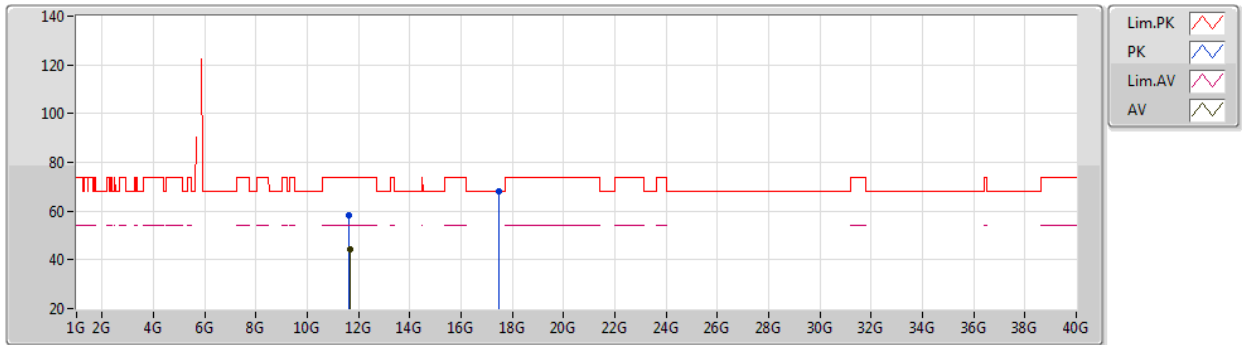
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Setting 19
03-E-K-5

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	11.66104G	56.00	74.00	-18.00	41.16	3	Vertical	75	2.03	-	39.60	9.93	34.69
AV	11.65048G	42.45	54.00	-11.55	27.61	3	Vertical	75	2.03	-	39.60	9.93	34.69
PK	17.4762G	65.61	68.20	-2.59	45.38	3	Vertical	209	2.60	-	42.26	12.52	34.55

802.11ax HEW20_Nss1,(MCS0)_2TX

04/06/2021

5825MHz_TX



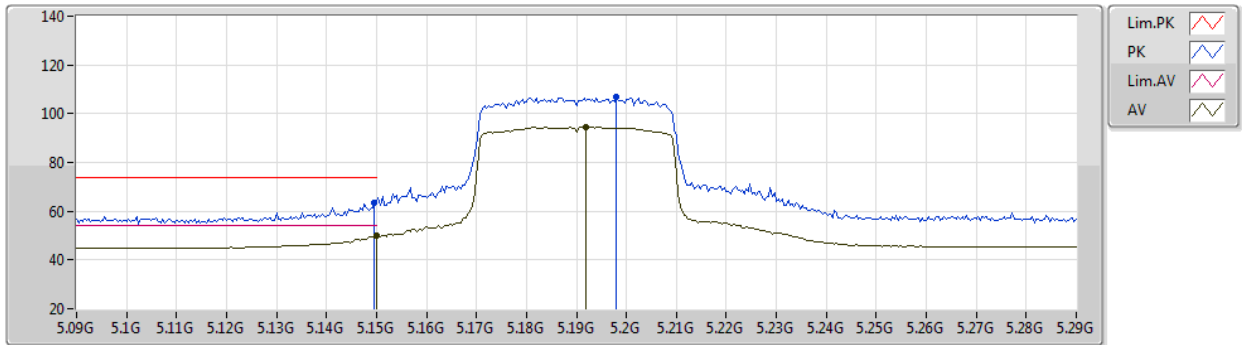
EUT Y_2TX
Setting 19
03-E-K-5

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	11.64142G	58.30	74.00	-15.70	43.45	3	Horizontal	172	2.11	-	39.60	9.93	34.68
AV	11.65018G	44.42	54.00	-9.58	29.58	3	Horizontal	172	2.11	-	39.60	9.93	34.69
PK	17.47074G	68.05	68.20	-0.15	47.87	3	Horizontal	226	1.83	-	42.22	12.51	34.55

802.11ax HEW40_Nss1,(MCS0)_2TX

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5190MHz_TX



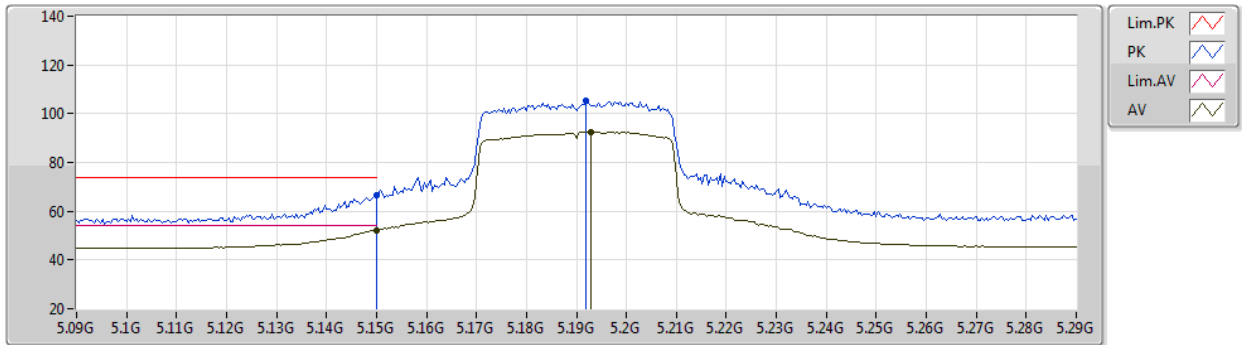
EUT Y_2TX
Setting 16.5
03-E-K-5-10

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	63.25	74.00	-10.75	58.05	3	Vertical	206	2.01	-	34.10	6.43	35.33
AV	5.15G	49.83	54.00	-4.17	44.63	3	Vertical	206	2.01	-	34.10	6.43	35.33
PK	5.198G	106.68	Inf	-Inf	101.56	3	Vertical	206	2.01	-	34.00	6.40	35.28
AV	5.192G	94.54	Inf	-Inf	89.40	3	Vertical	206	2.01	-	34.02	6.40	35.28

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5190MHz_TX



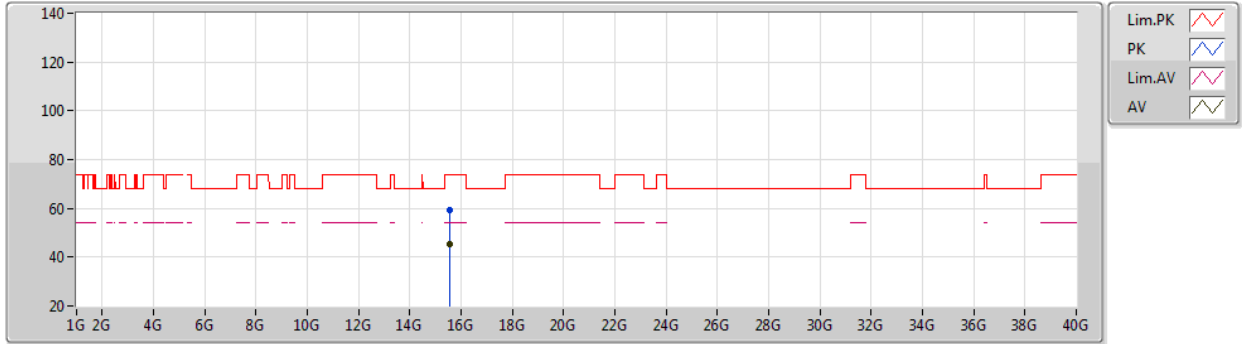
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Setting 16.5
03-E-K-5-10

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	66.76	74.00	-7.24	61.56	3	Horizontal	120	2.11	-	34.10	6.43	35.33
AV	5.15G	52.04	54.00	-1.96	46.84	3	Horizontal	120	2.11	-	34.10	6.43	35.33
PK	5.192G	105.15	Inf	-Inf	100.01	3	Horizontal	120	2.11	-	34.02	6.40	35.28
AV	5.1928G	92.41	Inf	-Inf	87.28	3	Horizontal	120	2.11	-	34.01	6.40	35.28

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5190MHz_TX



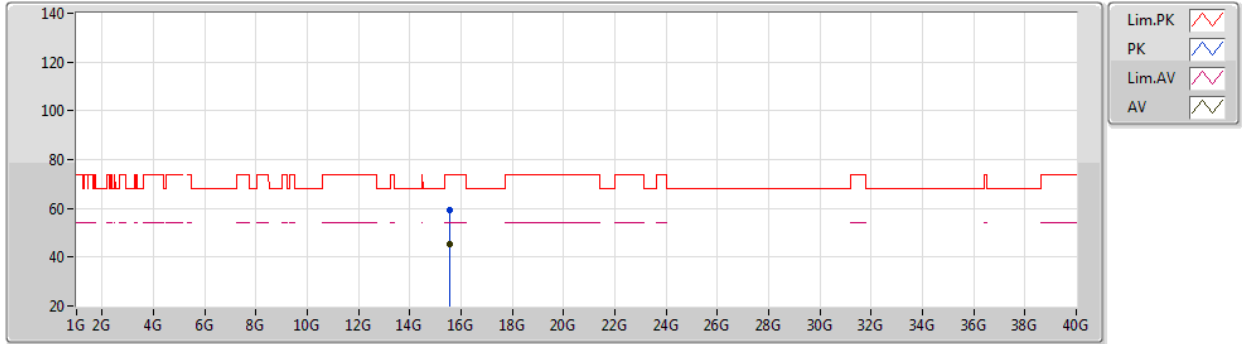
EUT Y_2TX
Setting 16.5
03-E-K-5

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	15.57032G	59.43	74.00	-14.57	44.62	3	Vertical	311	1.81	-	38.07	11.79	35.05
AV	15.57896G	45.16	54.00	-8.84	30.43	3	Vertical	311	1.81	-	37.99	11.79	35.05

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5190MHz_TX



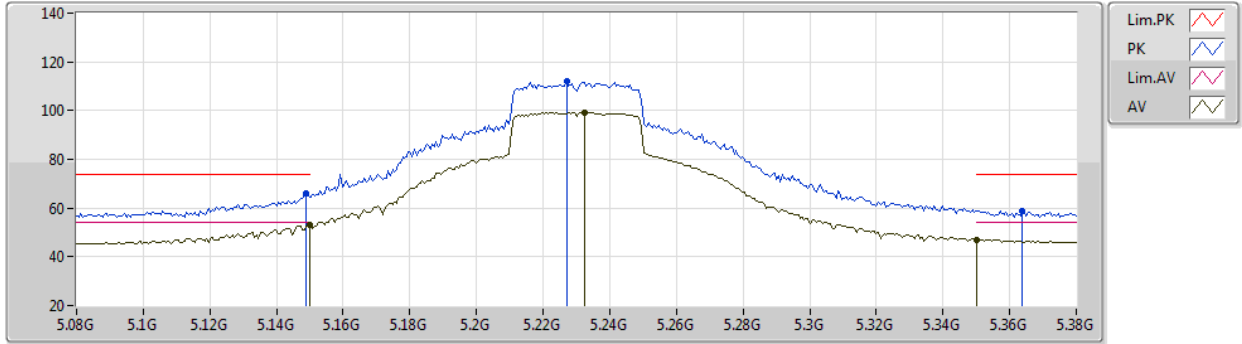
EUT Y_2TX
Setting 16.5
03-E-K-5

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	15.57148G	59.51	74.00	-14.49	44.71	3	Horizontal	296	1.80	-	38.06	11.79	35.05
AV	15.5738G	45.19	54.00	-8.81	30.41	3	Horizontal	296	1.80	-	38.04	11.79	35.05

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5230MHz_TX



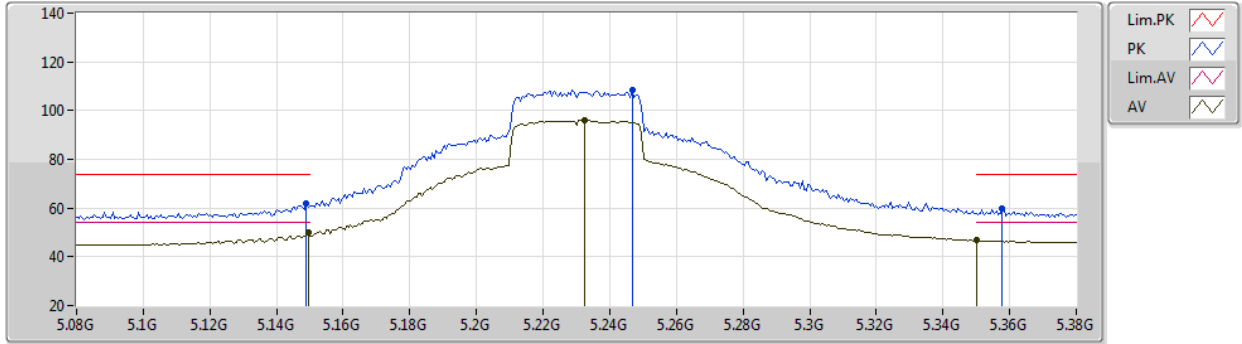
EUT Y_2TX
Setting 25
03-E-K-5-10

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	5.149G	65.80	74.00	-8.20	60.60	3	Vertical	206	1.90	-	34.10	6.43	35.33
AV	5.15G	53.24	54.00	-0.76	48.04	3	Vertical	206	1.90	-	34.10	6.43	35.33
PK	5.227G	111.89	Inf	-Inf	106.61	3	Vertical	206	1.90	-	34.11	6.41	35.24
AV	5.2324G	99.31	Inf	-Inf	94.00	3	Vertical	206	1.90	-	34.13	6.42	35.24
PK	5.3638G	58.96	74.00	-15.04	53.01	3	Vertical	206	1.90	-	34.57	6.48	35.10
AV	5.35G	47.03	54.00	-6.97	41.06	3	Vertical	206	1.90	-	34.60	6.48	35.11

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5230MHz_TX



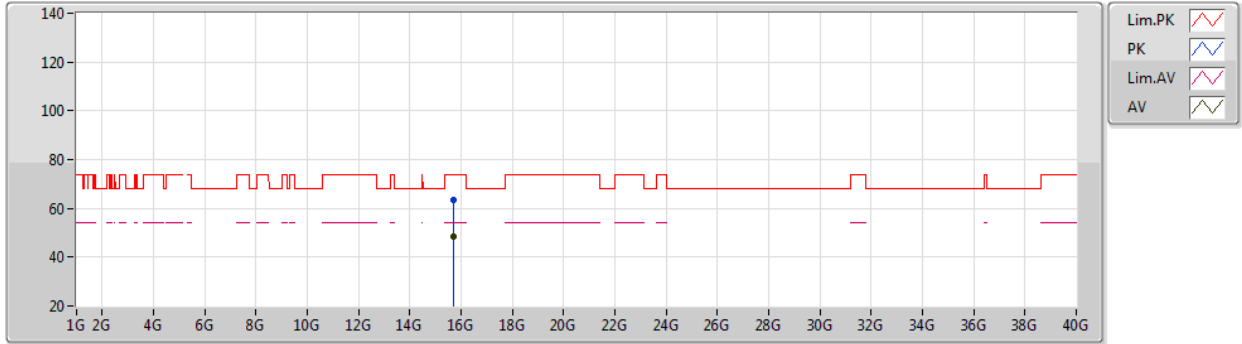
EUT Y_2TX
Setting 25
03-E-K-5-10

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	5.149G	61.81	74.00	-12.19	56.61	3	Horizontal	121	1.79	-	34.10	6.43	35.33
AV	5.1496G	49.89	54.00	-4.11	44.69	3	Horizontal	121	1.79	-	34.10	6.43	35.33
PK	5.2468G	108.48	Inf	-Inf	103.09	3	Horizontal	121	1.79	-	34.19	6.42	35.22
AV	5.2324G	96.10	Inf	-Inf	90.79	3	Horizontal	121	1.79	-	34.13	6.42	35.24
PK	5.3578G	59.59	74.00	-14.41	53.63	3	Horizontal	121	1.79	-	34.58	6.48	35.10
AV	5.35G	46.69	54.00	-7.31	40.72	3	Horizontal	121	1.79	-	34.60	6.48	35.11

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5230MHz_TX



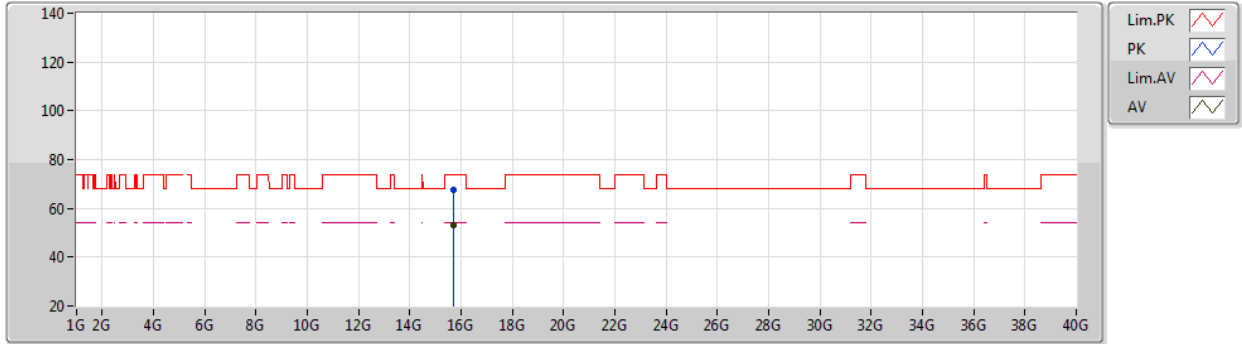
EUT Y_2TX
Setting 25
03-E-K-5

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	15.7008G	63.32	74.00	-10.68	48.60	3	Vertical	146	1.43	-	38.00	11.85	35.13
AV	15.6871G	48.69	54.00	-5.31	34.00	3	Vertical	146	1.43	-	37.97	11.84	35.12

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5230MHz_TX



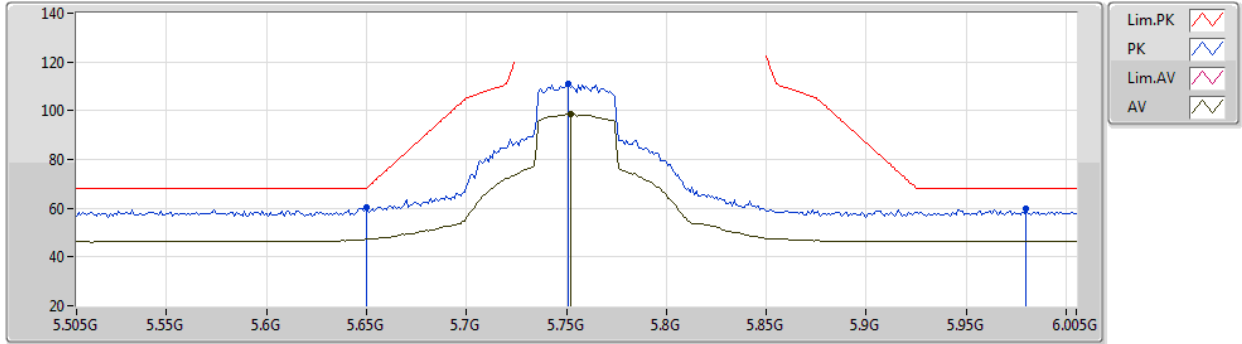
EUT Y_2TX
Setting 25
03-E-K-5

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	15.7065G	67.77	74.00	-6.23	53.06	3	Horizontal	222	1.91	-	37.99	11.85	35.13
AV	15.6895G	52.90	54.00	-1.10	38.20	3	Horizontal	222	1.91	-	37.98	11.84	35.12

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5755MHz_TX



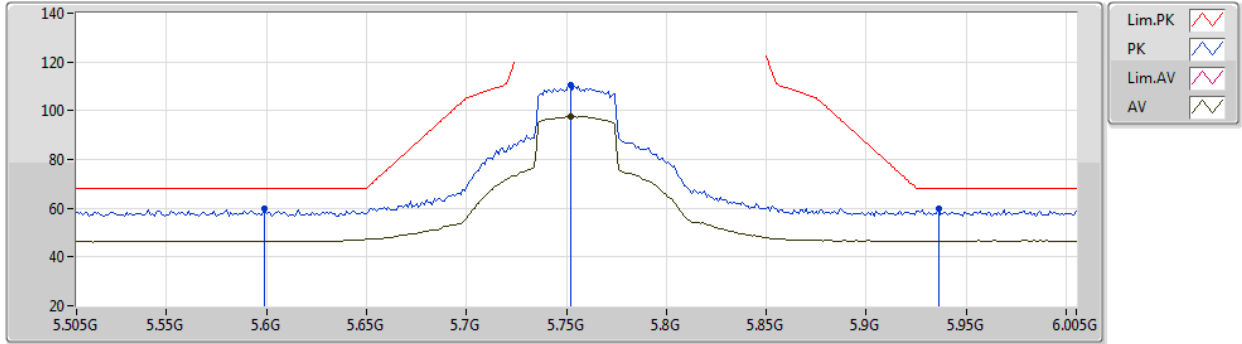
EUT Y_2TX
Setting 19.5
03-E-K-5-10

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	5.65G	60.41	68.20	-7.79	54.12	3	Vertical	140	1.79	-	34.40	6.83	34.94
PK	5.751G	111.20	Inf	-Inf	104.85	3	Vertical	140	1.79	-	34.40	6.88	34.93
AV	5.752G	98.70	Inf	-Inf	92.35	3	Vertical	140	1.79	-	34.40	6.88	34.93
PK	5.98G	59.88	68.20	-8.32	53.15	3	Vertical	140	1.79	-	34.66	6.99	34.92

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5755MHz_TX



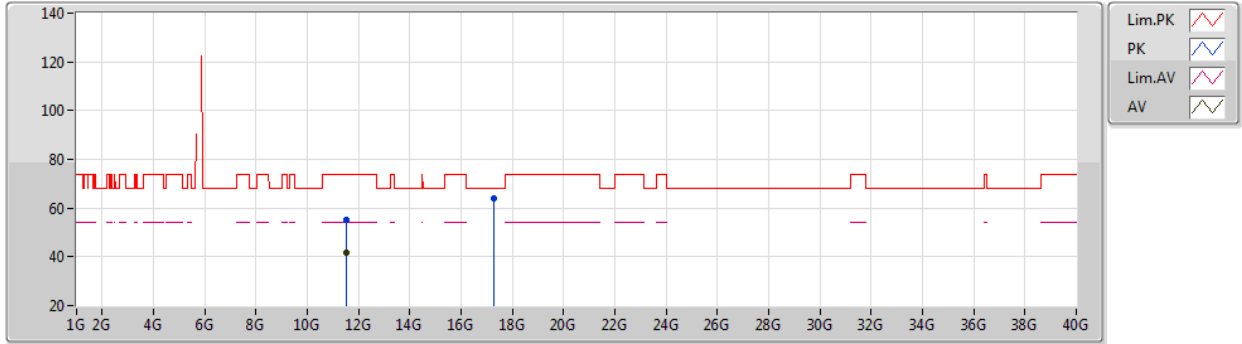
EUT Y_2TX
Setting 19.5
03-E-K-5-10

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	59.71	68.20	-8.49	53.45	3	Horizontal	144	1.94	-	34.40	6.80	34.94
PK	5.752G	110.63	Inf	-Inf	104.28	3	Horizontal	144	1.94	-	34.40	6.88	34.93
AV	5.752G	97.69	Inf	-Inf	91.34	3	Horizontal	144	1.94	-	34.40	6.88	34.93
PK	5.936G	59.70	68.20	-8.50	53.02	3	Horizontal	144	1.94	-	34.63	6.97	34.92

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5755MHz_TX



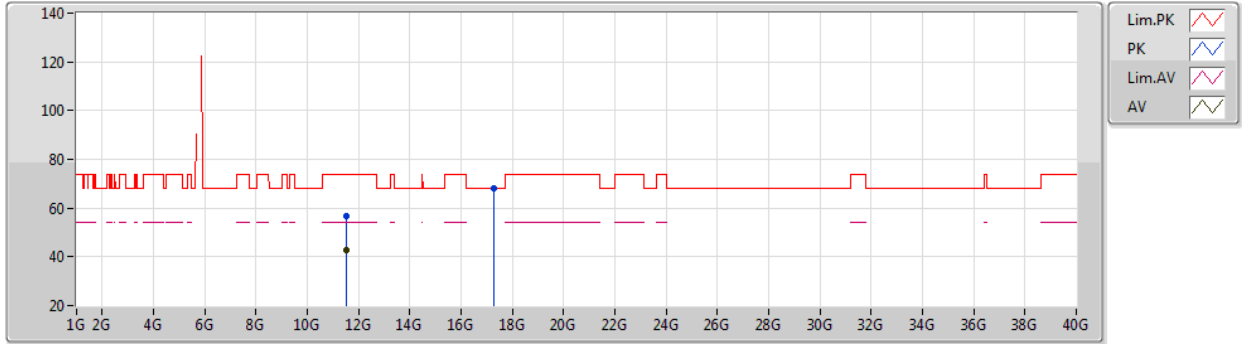
EUT Y_2TX
Setting 19.5
03-E-K-5

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	11.5245G	54.96	74.00	-19.04	40.42	3	Vertical	86	1.80	-	39.30	9.90	34.66
AV	11.5338G	41.55	54.00	-12.45	26.96	3	Vertical	86	1.80	-	39.34	9.91	34.66
PK	17.2703G	64.09	68.20	-4.11	45.31	3	Vertical	160	1.81	-	40.91	12.44	34.57

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5755MHz_TX



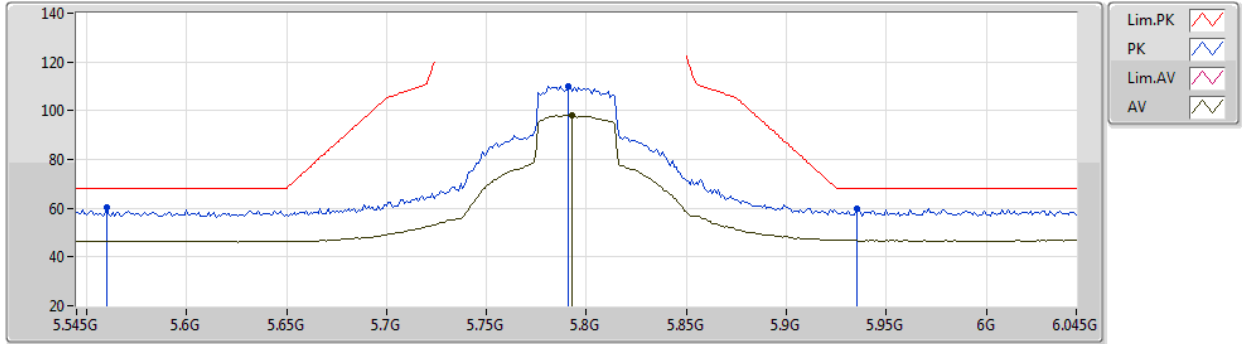
EUT Y_2TX
Setting 19.5
03-E-K-5

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	11.5247G	56.74	74.00	-17.26	42.20	3	Horizontal	175	1.75	-	39.30	9.90	34.66
AV	11.5163G	43.01	54.00	-10.99	28.49	3	Horizontal	175	1.75	-	39.27	9.90	34.65
PK	17.2554G	67.89	68.20	-0.31	49.15	3	Horizontal	226	2.42	-	40.87	12.44	34.57

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5795MHz_TX



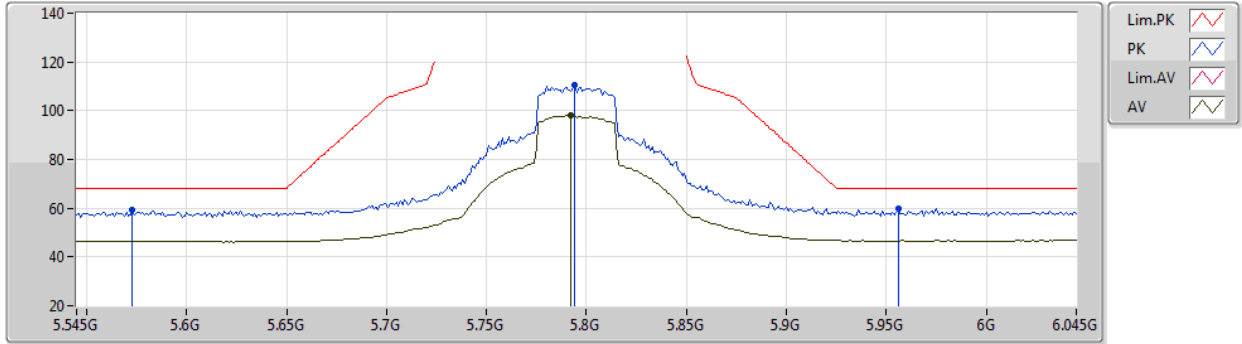
EUT Y_2TX
Setting 19.5
03-E-K-5-10

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	5.56G	60.25	68.20	-7.95	53.90	3	Vertical	140	1.80	-	34.56	6.74	34.95
PK	5.791G	110.11	Inf	-Inf	103.74	3	Vertical	140	1.80	-	34.40	6.90	34.93
AV	5.793G	98.13	Inf	-Inf	91.76	3	Vertical	140	1.80	-	34.40	6.90	34.93
PK	5.935G	59.87	68.20	-8.33	53.19	3	Vertical	140	1.80	-	34.63	6.97	34.92

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5795MHz_TX



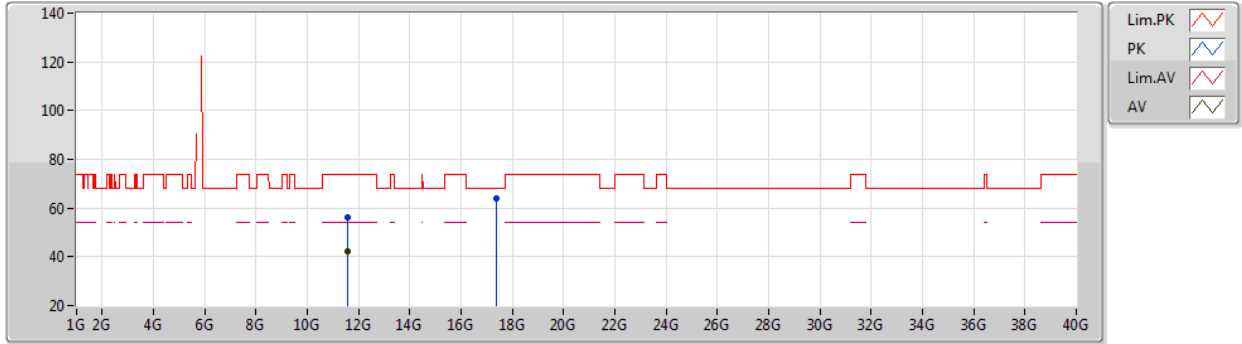
EUT Y_2TX
Setting 19.5
03-E-K-5-10

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	5.573G	59.34	68.20	-8.86	53.02	3	Horizontal	145	2.02	-	34.51	6.76	34.95
PK	5.794G	110.38	Inf	-Inf	104.01	3	Horizontal	145	2.02	-	34.40	6.90	34.93
AV	5.792G	97.98	Inf	-Inf	91.61	3	Horizontal	145	2.02	-	34.40	6.90	34.93
PK	5.956G	59.65	68.20	-8.55	52.98	3	Horizontal	145	2.02	-	34.61	6.98	34.92

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5795MHz_TX



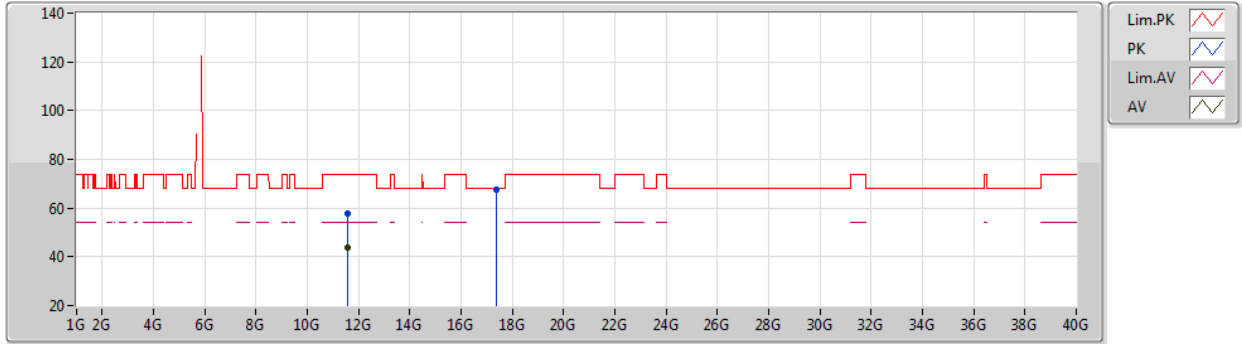
EUT Y_2TX
Setting 19.5
03-E-K-5

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	11.5817G	56.06	74.00	-17.94	41.28	3	Vertical	57	1.48	-	39.53	9.92	34.67
AV	11.5938G	42.36	54.00	-11.64	27.53	3	Vertical	57	1.48	-	39.58	9.92	34.67
PK	17.3735G	63.80	68.20	-4.40	44.29	3	Vertical	51	1.77	-	41.59	12.48	34.56

802.11ax HEW40_Nss1,(MCS0)_2TX

04/06/2021

5795MHz_TX



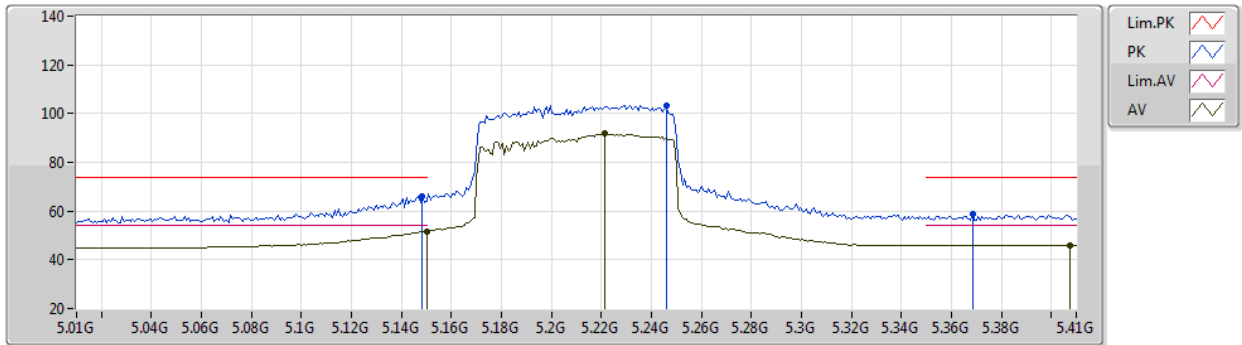
EUT Y_2TX
Setting 19.5
03-E-K-5

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	11.5857G	57.71	74.00	-16.29	42.92	3	Horizontal	172	1.72	-	39.54	9.92	34.67
AV	11.5907G	43.96	54.00	-10.04	29.15	3	Horizontal	172	1.72	-	39.56	9.92	34.67
PK	17.3854G	67.74	68.20	-0.46	48.14	3	Horizontal	224	2.45	-	41.68	12.48	34.56

802.11ax HEW80_Nss1,(MCS0)_2TX

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5210MHz_TX



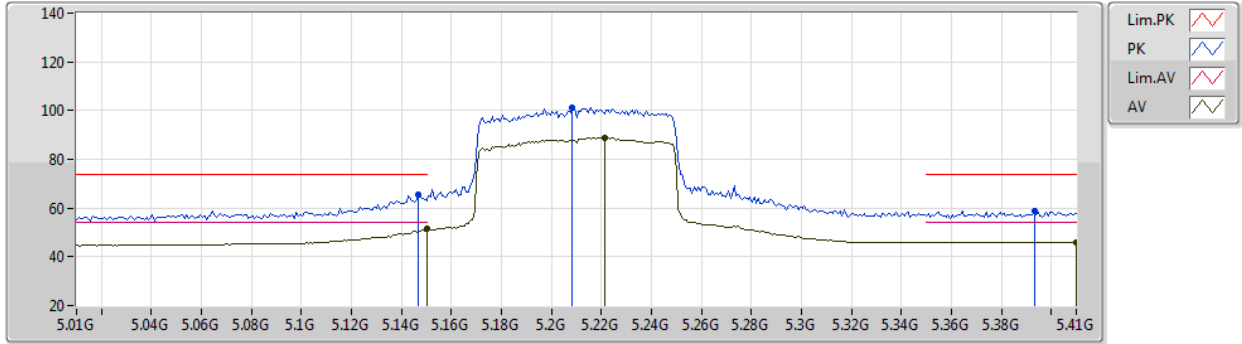
EUT Y_2TX
Setting 15.5
03-E-K-5-10

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	66.19	74.00	-7.81	61.00	3	Vertical	139	1.98	-	34.09	6.43	35.33
AV	5.15G	51.64	54.00	-2.36	46.44	3	Vertical	139	1.98	-	34.10	6.43	35.33
PK	5.246G	103.50	Inf	-Inf	98.12	3	Vertical	139	1.98	-	34.18	6.42	35.22
AV	5.2212G	91.67	Inf	-Inf	86.43	3	Vertical	139	1.98	-	34.08	6.41	35.25
PK	5.3684G	58.58	74.00	-15.42	52.63	3	Vertical	139	1.98	-	34.56	6.48	35.09
AV	5.4076G	46.10	54.00	-7.90	40.11	3	Vertical	139	1.98	-	34.53	6.51	35.05

802.11ax HEW80_Nss1,(MCS0)_2TX

04/06/2021

5210MHz_TX



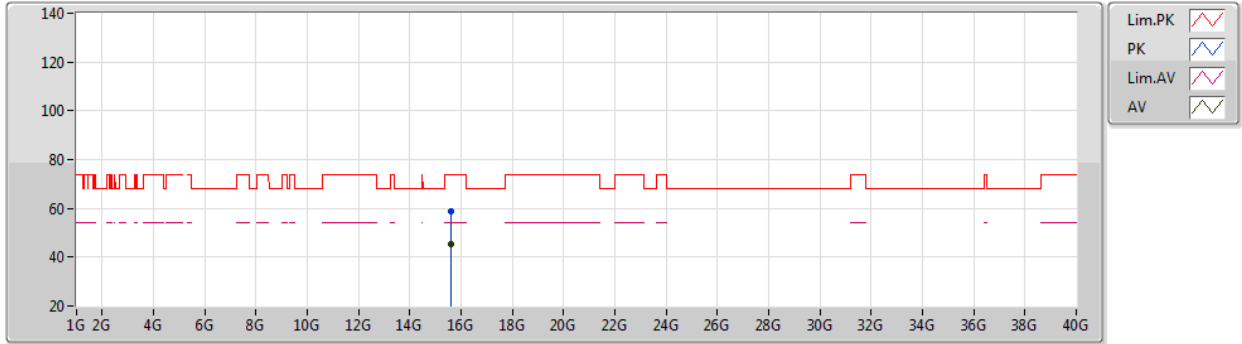
EUT Y_2TX
Setting 15.5
03-E-K-5-10

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	5.1468G	65.55	74.00	-8.45	60.36	3	Horizontal	121	2.10	-	34.09	6.43	35.33
AV	5.15G	51.42	54.00	-2.58	46.22	3	Horizontal	121	2.10	-	34.10	6.43	35.33
PK	5.2084G	101.31	Inf	-Inf	96.14	3	Horizontal	121	2.10	-	34.03	6.40	35.26
AV	5.2212G	88.99	Inf	-Inf	83.75	3	Horizontal	121	2.10	-	34.08	6.41	35.25
PK	5.3932G	58.76	74.00	-15.24	52.82	3	Horizontal	121	2.10	-	34.51	6.50	35.07
AV	5.41G	46.00	54.00	-8.00	39.99	3	Horizontal	121	2.10	-	34.54	6.52	35.05

802.11ax HEW80_Nss1,(MCS0)_2TX

04/06/2021

5210MHz_TX



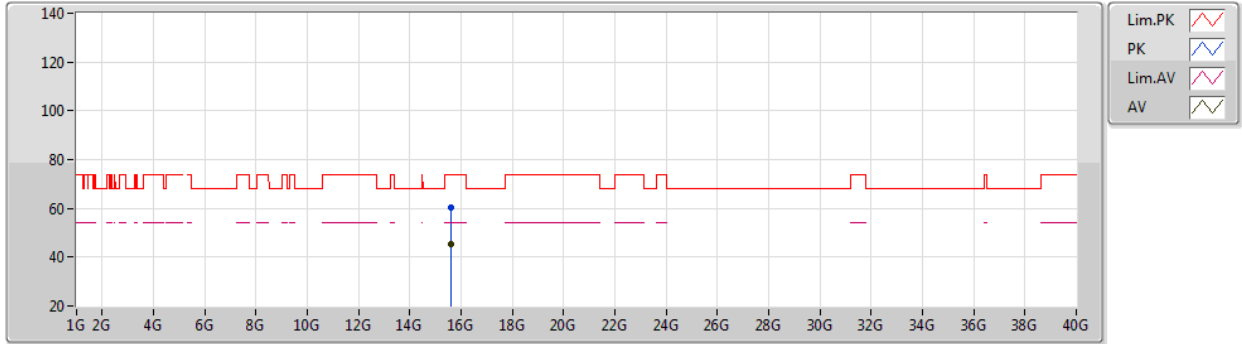
EUT Y_2TX
Setting 15.5
03-E-K-5

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	15.6085G	58.98	74.00	-15.02	44.43	3	Vertical	20	1.14	-	37.82	11.80	35.07
AV	15.6086G	45.40	54.00	-8.60	30.85	3	Vertical	20	1.14	-	37.82	11.80	35.07

802.11ax HEW80_Nss1,(MCS0)_2TX

04/06/2021

5210MHz_TX



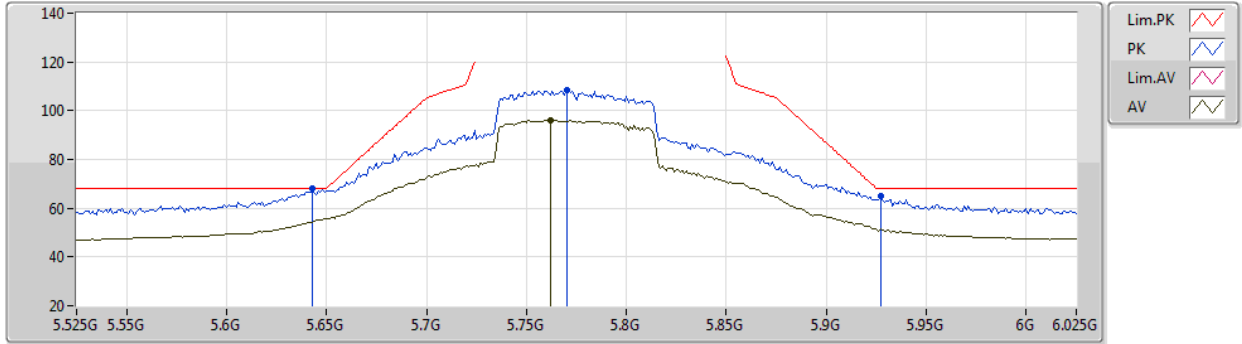
EUT Y_2TX
Setting 15.5
03-E-K-5

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	15.607G	60.47	74.00	-13.53	45.93	3	Horizontal	174	1.80	-	37.81	11.80	35.07
AV	15.6084G	45.41	54.00	-8.59	30.86	3	Horizontal	174	1.80	-	37.82	11.80	35.07

802.11ax HEW80_Nss1,(MCS0)_2TX

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5775MHz_TX



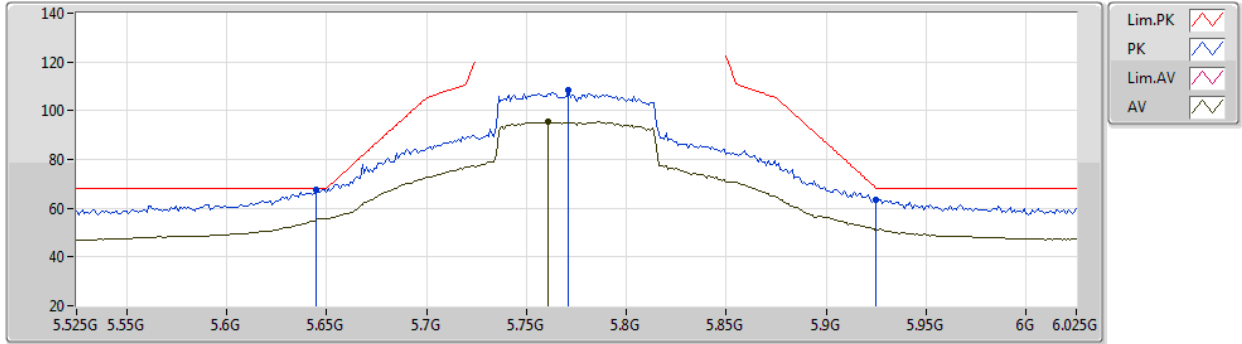
EUT Y_2TX
Setting 20.5
03-E-K-5-10

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	5.643G	67.96	68.20	-0.24	61.68	3	Vertical	139	1.80	-	34.40	6.82	34.94
PK	5.77G	108.21	Inf	-Inf	101.85	3	Vertical	139	1.80	-	34.40	6.89	34.93
AV	5.762G	96.04	Inf	-Inf	89.69	3	Vertical	139	1.80	-	34.40	6.88	34.93
PK	5.927G	64.96	68.20	-3.24	58.27	3	Vertical	139	1.80	-	34.65	6.96	34.92

802.11ax HEW80_Nss1,(MCS0)_2TX

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5775MHz_TX



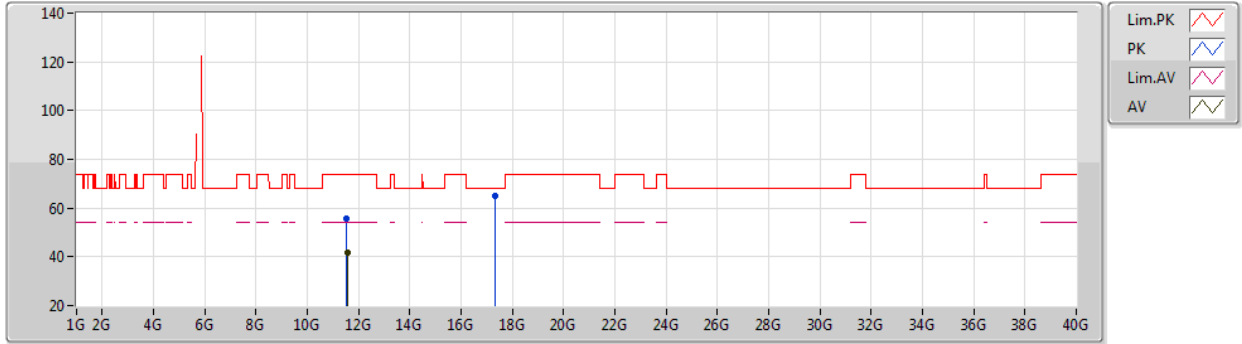
EUT Y_2TX
Setting 20.5
03-E-K-5-10

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	67.84	68.20	-0.36	61.56	3	Horizontal	144	2.05	-	34.40	6.82	34.94
PK	5.771G	108.36	Inf	-Inf	102.00	3	Horizontal	144	2.05	-	34.40	6.89	34.93
AV	5.761G	95.30	Inf	-Inf	88.95	3	Horizontal	144	2.05	-	34.40	6.88	34.93
PK	5.925G	63.68	68.20	-4.52	56.99	3	Horizontal	144	2.05	-	34.65	6.96	34.92

802.11ax HEW80_Nss1,(MCS0)_2TX

04/06/2021

5775MHz_TX



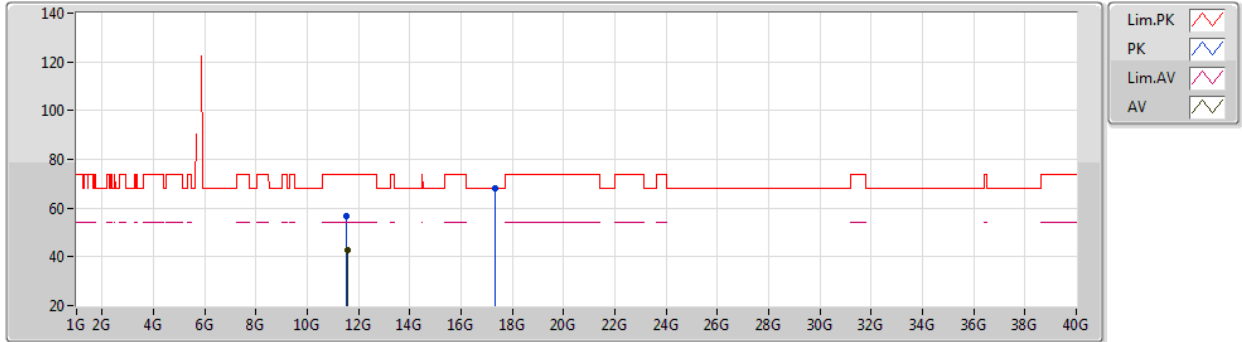
EUT Y_2TX
Setting 20.5
03-E-K-5

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	11.54572G	55.44	74.00	-18.56	40.81	3	Vertical	89	1.80	-	39.38	9.91	34.66
AV	11.5564G	41.89	54.00	-12.11	27.21	3	Vertical	89	1.80	-	39.43	9.91	34.66
PK	17.3367G	64.75	68.20	-3.45	45.56	3	Vertical	210	2.59	-	41.29	12.47	34.57

802.11ax HEW80_Nss1,(MCS0)_2TX

04/06/2021

5775MHz_TX



EUT Y_2TX
Setting 20.5
03-E-K-5

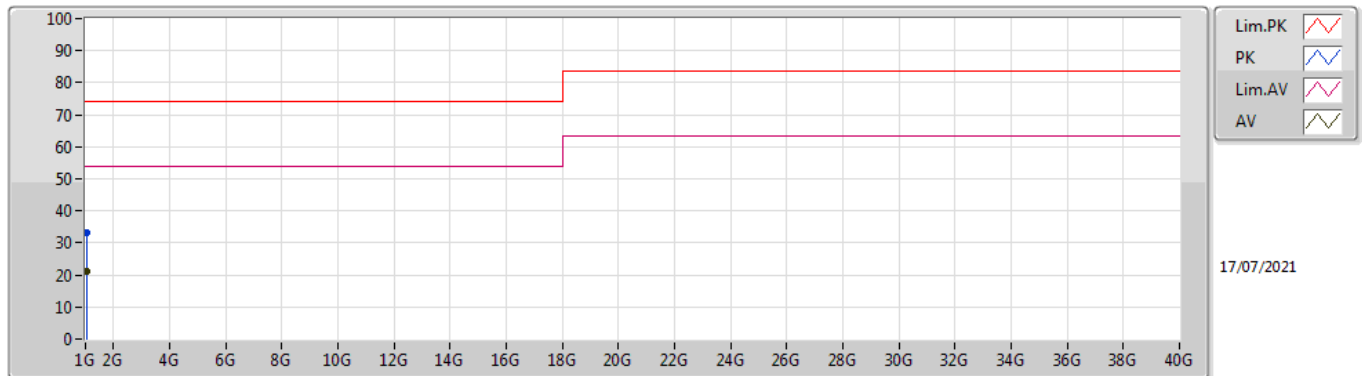
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.5368G	56.90	74.00	-17.10	42.30	3	Horizontal	168	2.09	-	39.35	9.91	34.66
AV	11.5671G	43.01	54.00	-10.99	28.30	3	Horizontal	168	2.09	-	39.47	9.91	34.67
PK	17.33G	68.07	68.20	-0.13	48.93	3	Horizontal	225	2.95	-	41.24	12.47	34.57



Summary

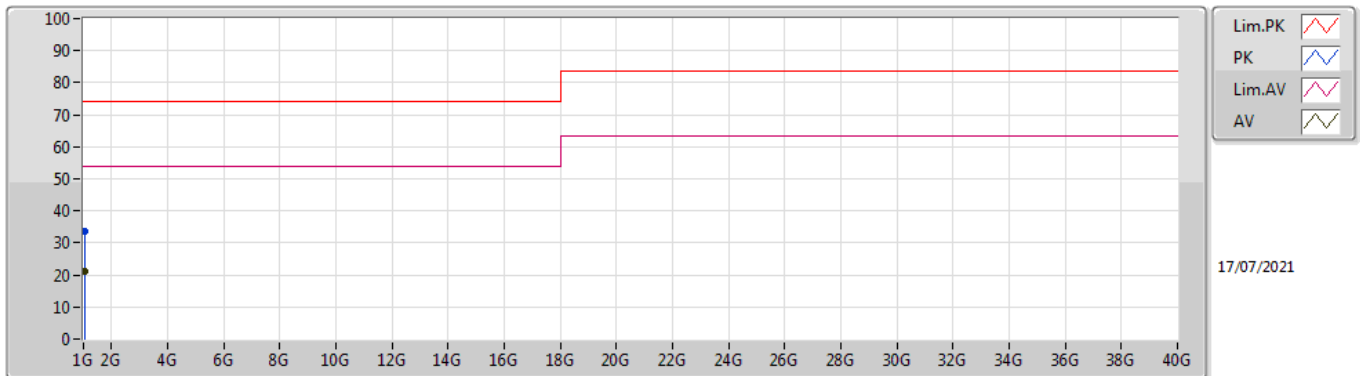
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.04788G	21.22	54.00	-32.78	Vertical

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	1.04836G	33.09	74.00	-40.91	-10.19	3	Vertical	57	1.00	-	43.28	24.50	2.57	37.26
AV	1.04788G	21.22	54.00	-32.78	-10.19	3	Vertical	57	1.00	"Worst"	31.41	24.50	2.57	37.26

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	1.04992G	33.70	74.00	-40.30	-10.19	3	Horizontal	150	1.00	-	43.89	24.50	2.57	37.26
AV	1.0478G	21.12	54.00	-32.88	-10.19	3	Horizontal	150	1.00	"Worst"	31.31	24.50	2.57	37.26