

Report No. : FR101539AB



RADIO TEST REPORT

FCC ID	: 2ABLK-GM2037
Equipment	: GigaSpire Mesh BLAST u6me
Brand Name	: Calix
Model Name	: u6me
Applicant	: Calix Inc. 1035 N. McDowell Blvd. Petaluma, CA94954 U.S.A.
Manufacturer	: Calix Inc. 1035 N. McDowell Bivd. Petaluma, CA94954 U.S.A.
Standard	: 47 CFR FCC Part 15.407

The product was received on Oct. 14, 2021, and testing was started from Oct. 14, 2021 and completed on Jan. 20, 2022. 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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Appendix G. Test Photos

Photographs of EUT v01



History of this test report

Report No.	Version	Description	Issued Date
FR101539AB	01	Initial issue of report	Jan. 27, 2022



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:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.

2. The measurement uncertainty please refer to report "Measurement Uncertainty".

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: Penny Kao



1 General Description

1.1 Information

1.1.1 RF General Information

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

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2TX
5.15-5.25GHz	802.11n HT20	20	2TX
5.15-5.25GHz	802.11n HT20-BF	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX
5.15-5.25GHz	802.11ax HEW20	20	2TX
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX
5.15-5.25GHz	802.11n HT40	40	2TX
5.15-5.25GHz	802.11n HT40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX
5.15-5.25GHz	802.11ax HEW40	40	2TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX
5.15-5.25GHz	802.11ax HEW80	80	2TX
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX
5.725-5.85GHz	802.11a	20	2TX
5.725-5.85GHz	802.11n HT20	20	2TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX
5.725-5.85GHz	802.11n HT40	40	2TX

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Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11n HT40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	2TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	2TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX

Note:

• 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

• VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, modulation.

• HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.

BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

		Port		Brand Model Name		Antenna		Gain
Ant.	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz			Туре	Connector	(dBi)
1	1	1	-	GALTRONICS	02102140-07461-2	Dipole	U.FL	
2	2	2	-	GALTRONICS	02102140-07461-1	Dipole	U.FL	Nata1
3	-	-	1	GALTRONICS	02102475-07461-2	Dipole	U.FL	Note1
4	-	-	2	GALTRONICS	02102475-07461-1	Dipole	U.FL	

Note 1:

		Port			Antenna Gain (dBi)					
Ant.	WLAN	WLAN	WLAN	WLAN	WLAN	5GHz		WLAN	6GHz	
	2.4GHz	5GHz	6GHz	2.4GHz	UNII 1	UNII 3	UNII 5	UNII 6	UNII 7	UNII 8
1	1	1	-	2.617	3.761	3.221	-	-	-	-
2	2	2	-	2.626	3.600	3.333	-	-	-	-
3	-	-	1	-	-	-	2.558	2.781	3.076	2.982
4	-	-	2	-	-	-	3.076	3.246	3.429	3.347

Note 2: The above information was declared by manufacturer.

Note 3: Directional gain information

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

Ex.

Directional Gain (NSS1) formula :

Directiona lGain = 10 · log
$$\frac{\sum_{j=1}^{N_{at}} \left\{ \sum_{k=1}^{N_{atr}} g_{j,k} \right\}}{N_{aNT}}$$

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

$$g_{j,k} = (Nss1(g_{1,1}) + Nss1(g_{1,2}))^2$$

 $\mathsf{DG} = \mathsf{10} \, \mathsf{log}[(\mathsf{Nss1}(\mathsf{g1,1}) \ + \ \mathsf{Nss1}(\mathsf{g1,2}) \ / \ \mathsf{N_{ANT}}] \Longrightarrow \mathsf{10} \, \mathsf{log}[(10^{\mathsf{G1/20}} \ + \ 10^{\mathsf{G2/20}} \)^2 \ / \ \mathsf{N_{ANT}}]$

Where;

G1 = Ant 1 Gain ; G2 = Ant 2 Gain

2.4GHz DG = 5.632 dBi 5 GHz U-NII-1 DG = 6.691 dBi 5 GHz U-NII-3 DG = 6.287 dBi



The EUT has four antennas.

For 2.4GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

For 6GHz function:

For IEEE 802.11ax mode (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
802.11a	0.976	0.11	1.977m	1k
802.11ax HEW20-BF	0.92	0.36	1.765m	1k
802.11ax HEW40-BF	0.899	0.46	1.765m	1k
802.11ax HEW80-BF	0.905	0.43	1.689m	1k

Note:

• DC is Duty Cycle.

DCF is Duty Cycle Factor.



1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
	With beamforming Without beamforming			
Beamforming Function	The product has beamforming function for 11n/VHT/ax in 2.4GHz, 11n/ac/ax in 5GHz and ax in 6GHz.			
Function	Outdoor P2M Indoor P2M			
Function	Fixed P2P Client			
Test Software Version	For non-beamforming: QRCT V 4.0.00192.0 For beamforming: DOS V6.1.7601			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT supports functions

Function
AP Router
Extender

Note 1: After evaluating, AP Router was selected to test and record in the report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v02r01
- The following reference test guidance is not within the scope of accreditation of TAF.
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Owen Hsu	19.1~20.4 / 51~53	Nov. 17, 2021~ Jan. 20, 2022
Radiated (Below 1 GHz)	03CH04-CB	Paul Chen	19.1~20 / 62~66	Nov. 24, 2021
Radiated	03CH03-CB	Simmon Chong	23.5-24.6 / 55-59	Oct. 14, 2021~
(Above 1GHz)	03CH06-CB	Simmon Cheng	24.5-25.6 / 56-59	Jan. 08, 2022
AC Conduction	CO01-CB	Peter Wu	22~24 / 55~57	Nov. 29, 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
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	21.5
5200MHz	25
5240MHz	25
5745MHz	26
5785MHz	25.5
5825MHz	25.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	25
5200MHz	27
5240MHz	29
5745MHz	29
5785MHz	29
5825MHz	29
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	24
5230MHz	25
5755MHz	27
5795MHz	27
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	24
5775MHz	24

Note:

Evaluated HEW20/HEW40/HEW80 mode only due to the similar modulation. The power setting of

HT20/HT40/VHT20/VHT40/VHT80 mode are the same or lower than HEW20/HEW40/HEW80.
 The EUT supports non-beamforming and beamforming modes for 11n/VHT/ax in 2.4GHz, 11n/ac/ax in

5GHz and ax in 6GHz, after evaluating, the beamforming mode has been selected to test.



2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests			
Tests Item AC power-line conducted emissions			
Condition AC power-line conducted measurement for line and neutral Test Voltage: 120V / 60Hz			
Operating Mode	Normal Link		
1 EUT + Adapter			

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 Normal Link				
1	EUT in Z axis + Adapter			
2	EUT in Y axis + Adapter			
3 EUT in X axis + Adapter				
For operating mode 1 is th	e worst case and it was record in this test report.			
	СТХ			
Operating Mode > 1GHz	The EUT was performed at X axis, Y axis and Z axis position, and the worst case as below:			
1 EUT in Z axis + Adapter				



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

The Worst Case Mode for Following Conformance Tests				
Tests Item Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation				
Operating Mode				
1 WLAN 2.4GHz + WLAN 5GHz + WLAN 6GHz				
Refer to Sporton Test Report No.: FA1O1539 for Co-location RF Exposure Evaluation.				

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

- 1. During the test, the EUT operation to normal function.
- 2. Executed command fixed test channel under DOS.
- 3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by WLAN AP and

transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

	Accessories					
No. Equipment Brand Model Rating				Rating		
1	Adapter	apter Ktec KSA-24W-120200HU INPUT: 100-240V~50/60Hz, 0.6A OUTPUT: 12V, 2.0A				



2.5 Support Equipment

For AC Conduction:

Support Equipment					
No.	Equipment	FCC ID			
А	2.4G NB	DELL	E6430	N/A	
В	5G NB	DELL	E6430	N/A	
С	6G NB	DELL	E6430	N/A	
D	LAN NB	DELL	E6430	N/A	
E	WAN NB	DELL	E6430	N/A	

For Radiated below 1GHz:

	Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID	
Α	NB	DELL	E4300	N/A	
В	NB	DELL	E4300	N/A	
С	NB	DELL	E4300	N/A	
D	NB	DELL	E4300	N/A	
Е	NB	DELL	E4300	N/A	
F	WLAN module	Intel	AX210NGW	N/A	

For Radiated above 1GHz and RF Conducted: Non-beamforming mode

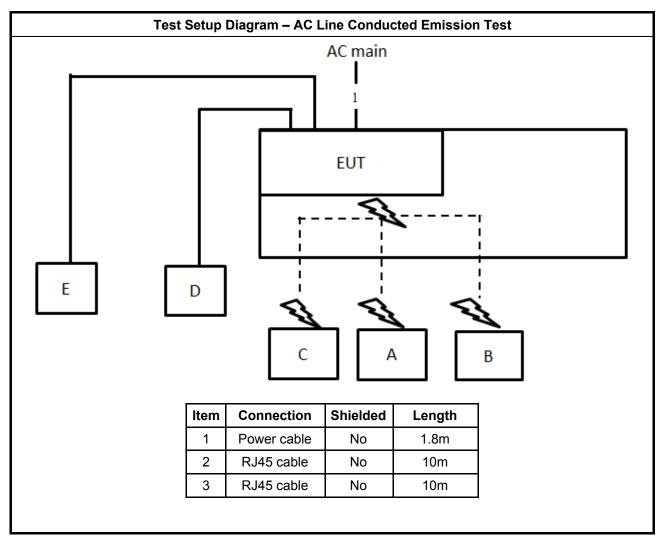
	Support Equipment			
No.	Equipment	Brand Name	Model Name	FCC ID
А	NB	DELL	E4300	N/A

Beamforming mode

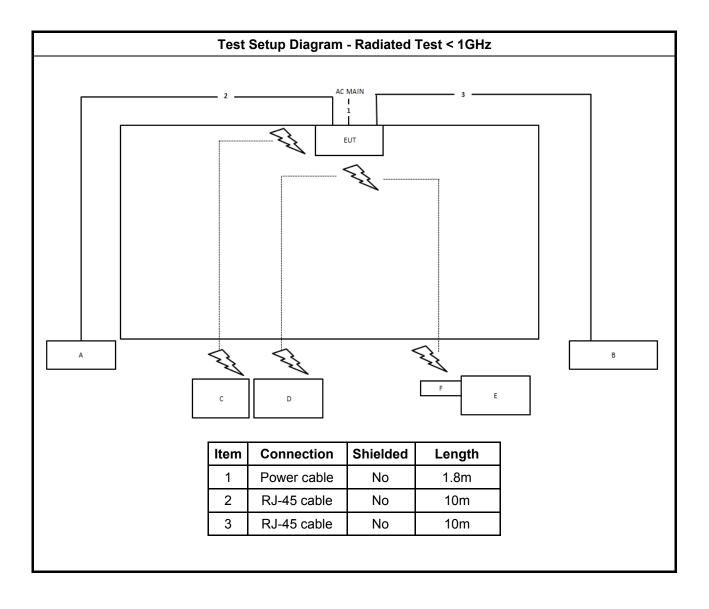
	Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID	
А	NB	DELL	E4300	N/A	
В	WLAN AP	CyberTAN	MT1V116	N/A	
С	NB	DELL	E4300	N/A	



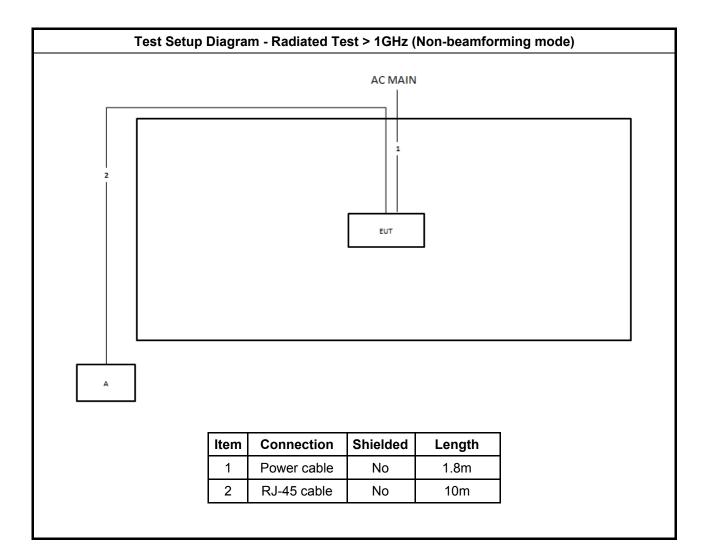
2.6 Test Setup Diagram



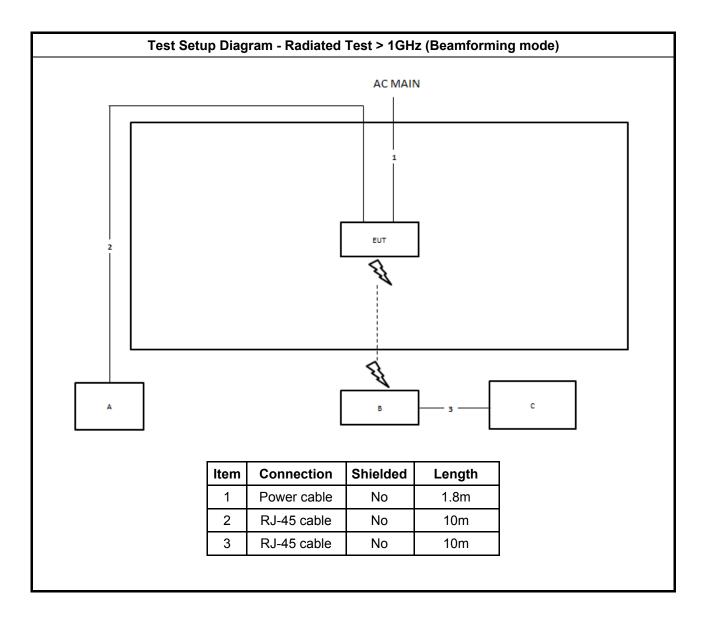














3 Transmitter Test Result

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.			

5

3.1.2 Measuring Instruments

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

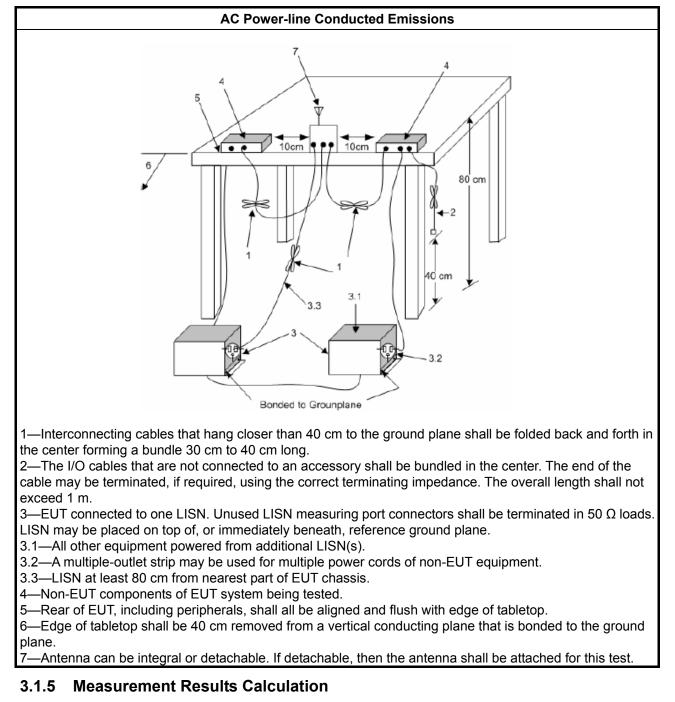
3.1.3 Test Procedures

Test Method

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



3.1.4 Test Setup



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

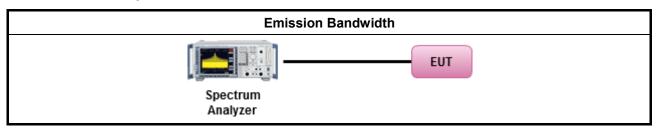
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup





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

P_{out} = maximum conducted output power in dBm,

 G_{TX} = the maximum transmitting antenna directional gain in dBi.

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

		Test Method	
	Average over on/off periods with duty factor		
		Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).	
		Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
	Wid	eband RF power meter and average over on/off periods with duty factor	
	\boxtimes	Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).	
\boxtimes	For	conducted measurement.	
	•	If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
	•	If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) EIRP _{total} = P _{total} + DG	
	For	radiated measurement.	
	•	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"	
	•	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
		Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.	

3.3.4 Test Setup

Conducted Measurement (Power Meter)	
EUT Power Meter	

3.3.5 Test Result of Maximum Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Limit

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

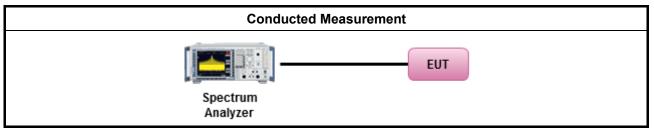
3.4.3 **Test Procedures**

		Test Method
•	outp func	k power spectral density procedures that the same method as used to determine the conducted out power shall be used to determine the peak power spectral density and use the peak search tion on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density I be measured using below options:
		Refer as FCC KDB 789033 D02, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
	[duty	y cycle ≥ 98% or external video / power trigger]
	\square	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
		Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty	cycle < 98% and average over on/off periods with duty factor
	\square	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
		Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
\boxtimes	For	conducted measurement.
	•	If the EUT supports multiple transmit chains using options given below:
		Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
		Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
		Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
		If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm])



Test Method			
	EIRP _{total} = PPSD _{total} + DG		
For	radiated measurement.		
•	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"		
-	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.		
	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.		

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						
🔀 5.15 - 5.25 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]						
🔲 5.25 - 5.35 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]						
🔲 5.47 - 5.725 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]						
⊠ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.						
☐ 5.85 - 5.895 GHz	 (i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of - 7 dBm/MHz at or above 5.925 GHz. (ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an 						

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e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz.

(iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/ MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.

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

3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

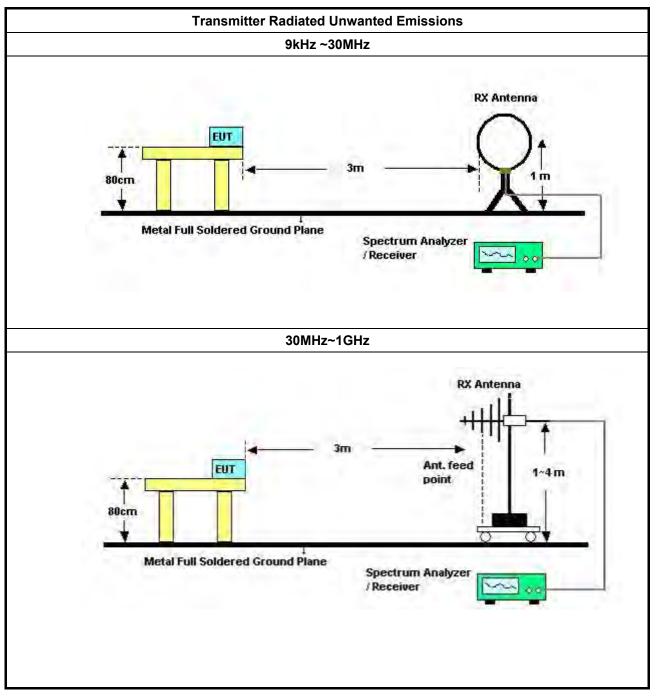
	Test Method						
•	Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).						
•	The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].						
•	For the transmitter unwanted emissions shall be measured using following options below:						
	 Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands. 						
	 Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands. 						
	Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).						
	Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).						
	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.						
	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.						
	Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.						
	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.						
	For radiated measurement.						
	 Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. 						
	• Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.						
	 Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. 						
	The any unwanted emissions level shall not exceed the fundamental emission level.						



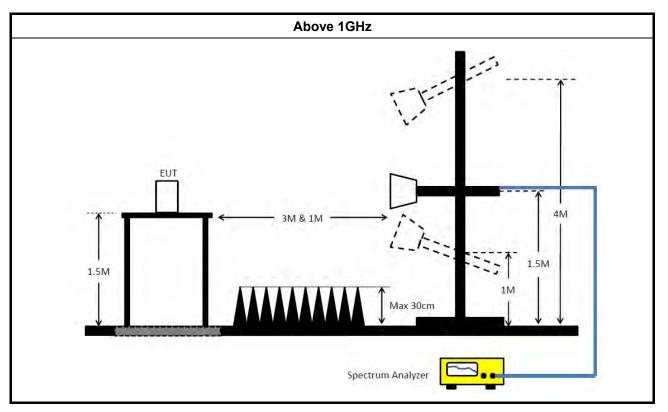
Test Method

 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







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



Test Equipment and Calibration Data 4

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-1 6-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwar z	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-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	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	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. 04, 20		Oct. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	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. 15, 2021	Jul. 14, 2022	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 08, 2021	Aug. 07, 2022	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 09, 2021	Oct. 08, 2022	Radiation (03CH04-CB)

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Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	Agilent	310N	187291	0.1MHz ~ 1GHz	Dec. 17, 2020	Dec. 16, 2021	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Feb. 19, 2021	Feb. 18, 2022	Radiation (03CH04-CB
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz – 1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 01, 2021	Sep. 30, 2022	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBE CK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 04, 2021	Aug. 03, 2022	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 06, 2021	May 05, 2022	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH06-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+24	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 15, 2021	Apr. 14, 2022	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)

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Instrument	Brand	Model No.	Serial No. Characteristics		Calibration Date	Calibration Due Date	Remark	
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)	
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)	
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)	

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

NCR means Non-Calibration required.



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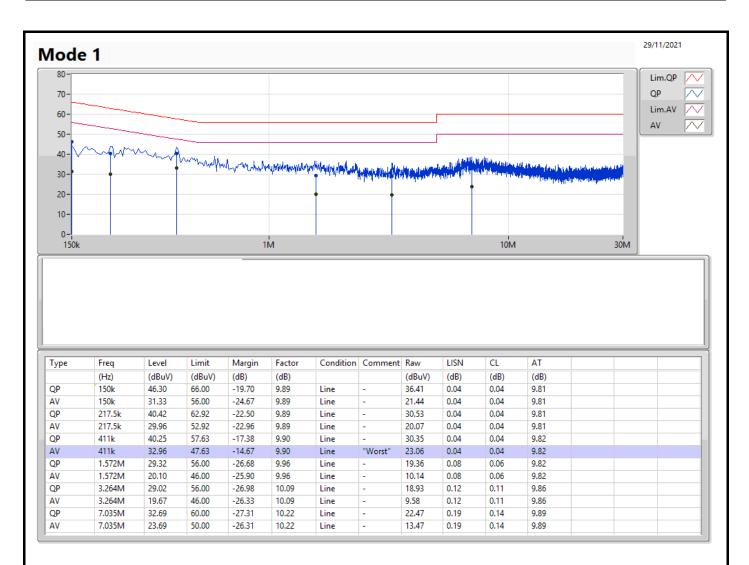
Conducted Emissions at Powerline

Appendix A

Summary							
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition
			(Hz)	(dBuV)	(dBuV)	(dB)	
Mode 1	Pass	AV	411k	32.96	47.63	-14.67	Line



Appendix A





Appendix A





Summary

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	34.11M	17.961M	18M0D1D	20.64M	16.432M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	37.62M	19.85M	19M8D1D	21.66M	18.951M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	41.28M	38.021M	38M0D1D	40.98M	37.961M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	82.44M	77.241M	77M2D1D	82.32M	77.241M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.38M	38.741M	38M7D1D	15.87M	28.696M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.96M	40.66M	40M7D1D	18.15M	20.27M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.92M	60.69M	60M7D1D	37.2M	39.58M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	76.68M	77.481M	77M5D1D	73.44M	77.361M

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

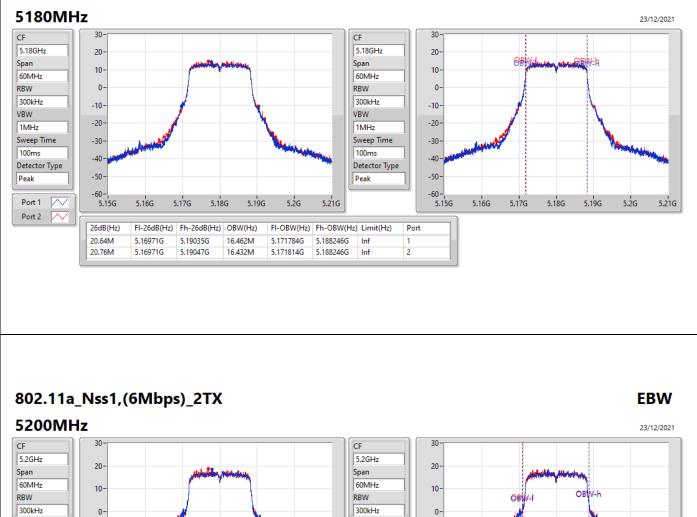
Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.64M	16.462M	20.76M	16.432M
5200MHz	Pass	Inf	33.6M	17.931M	34.11M	17.841M
5240MHz	Pass	Inf	33.6M	17.601M	34.08M	17.961M
5745MHz	Pass	500k	16.29M	28.696M	15.87M	29.055M
5785MHz	Pass	500k	16.32M	29.625M	16.32M	35.142M
5825MHz	Pass	500k	16.26M	31.634M	16.38M	38.741M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.66M	18.981M	21.93M	18.951M
5200MHz	Pass	Inf	24.15M	19.04M	26.94M	19.04M
5240MHz	Pass	Inf	36.06M	19.52M	37.62M	19.85M
5745MHz	Pass	500k	18.33M	20.27M	18.15M	21.979M
5785MHz	Pass	500k	18.93M	37.901M	18.96M	40.54M
5825MHz	Pass	500k	18.45M	30.855M	18.96M	40.66M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	41.16M	37.961M	41.28M	38.021M
5230MHz	Pass	Inf	40.98M	37.961M	41.28M	37.961M
5755MHz	Pass	500k	37.86M	39.58M	37.92M	42.279M
5795MHz	Pass	500k	37.2M	44.678M	37.68M	60.69M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.44M	77.241M	82.32M	77.241M
5775MHz	Pass	500k	76.68M	77.361M	73.44M	77.481M

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



EBW

802.11a_Nss1,(6Mbps)_2TX



VBW

1MHz

100ms Detector Type

Peak

Inf

Inf

5.23G

FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz)

5.208846G

5.208846G

Sweep Time

-10-

-20

-30

-40

Port

2

5.17G

5.19G

5.2G

5.21G

5.22G

5.23G

5.18G

-10-

-20

-30

-40

5.17G

26dB(Hz)

33.6M

34.11M

5.18G

5.18383G

5.18326G

5.19G

FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz)

5.21743G

5.21737G

5.2G

5.21G

17.931M

17.841M

5.22G

5.190915G

5.191004G

VBW

1MHz

100ms

Peak

Port 1

Port 2

Sweep Time

Detector Type

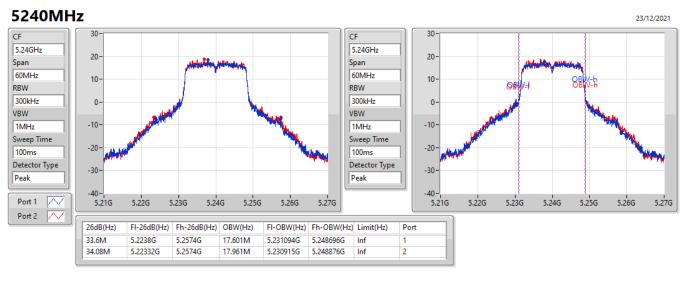
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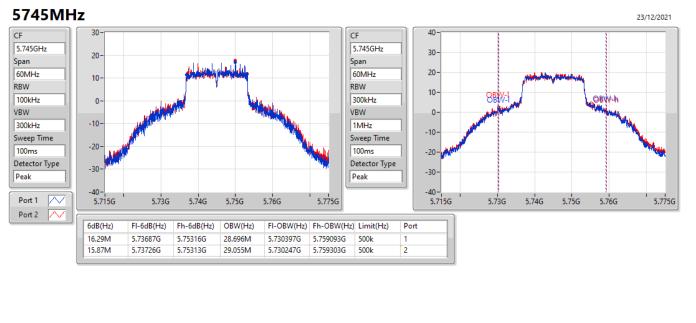
EBW



802.11a_Nss1,(6Mbps)_2TX



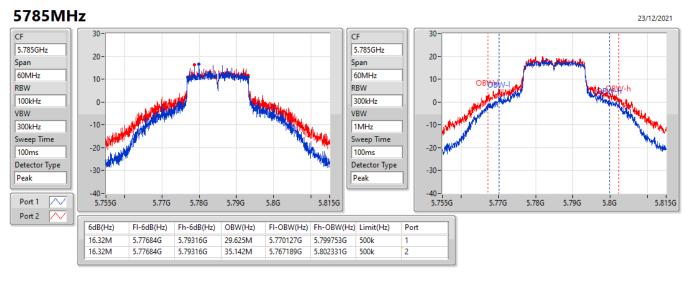
802.11a_Nss1,(6Mbps)_2TX



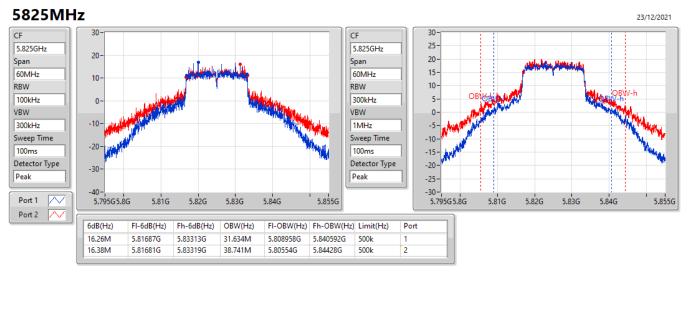
EBW



802.11a_Nss1,(6Mbps)_2TX



802.11a_Nss1,(6Mbps)_2TX



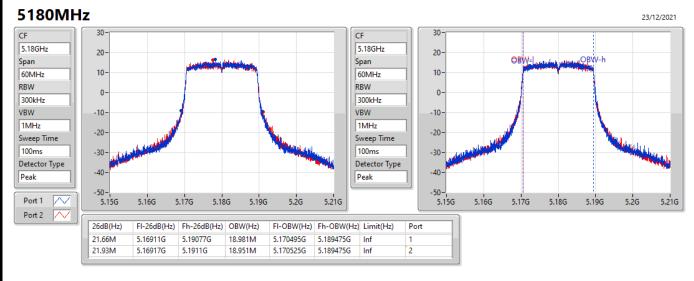
Sporton International Inc. Hsinchu Laboratory

EBW





802.11ax HEW20-BF_Nss1,(MCS0)_2TX



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

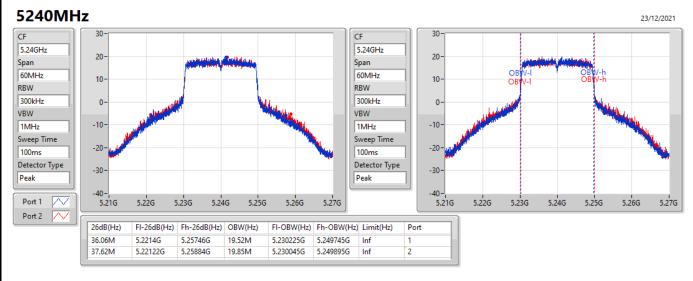
5200MHz 23/12/2021 30 30 CF CF 5.2GHz 5.2GHz 20-20 Span Span O 60MHz 60MHz 10-10-RBW RBW 300kHz 300kHz 0-0-VBW VBW -10--10-1MHz 1MHz Sweep Time Sweep Time -20 -20 100ms 100ms Detector Type Detector Type -30 -30 Peak Peak -40 -40 Port 1 5.18G 5.2G 5.21G 5.22G 5.18G 5.19G 5.2G 5.21G 5.22G 5.23G 5.17G 5.19G 5.23G 5.17G Port 2 26dB(Hz) FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz) FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz) Port 24.15M 5.18833G 5.21248G 19.04M 5.190495G 5.209535G Inf 2 26.94M 5.18578G 5.21272G 19.04M 5.190465G 5.209505G Inf

EBW





802.11ax HEW20-BF_Nss1,(MCS0)_2TX

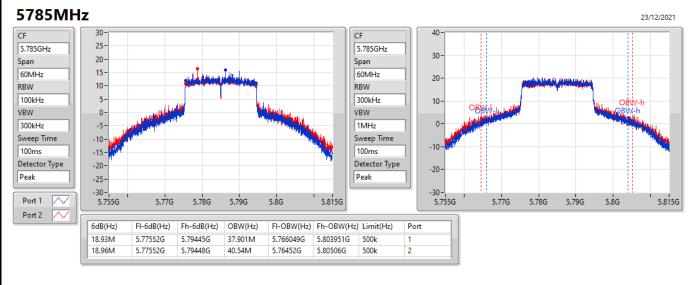


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5745MHz 23/12/2021 30 30 CF CF 5.745GHz 5.745GHz 20-20-Span Span 10-60MHz 60MHz 10-RBW RBW **A** 0. 100kHz 300kHz 0-VBW VBW -10--10-300kHz 1MHz -20-Sweep Time Sweep Time -20 100ms -30-100ms Detector Type Detector Type -30 -40-Peak Peak -50-5.715G -40 5.73G Port 1 5.73G 5.74G 5.75G 5.76G 5.775G 5.715G 5.74G 5.75G 5.76G 5.775G Port 2 6dB(Hz) FI-6dB(Hz) Fh-6dB(Hz) OBW(Hz) FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz) Port 5.734835G 18.33M 5.73576G 5.75409G 20.27M 5.755105G 500k 18.15M 5.73582G 5.75397G 21.979M 5.734055G 5.756034G 500k 2

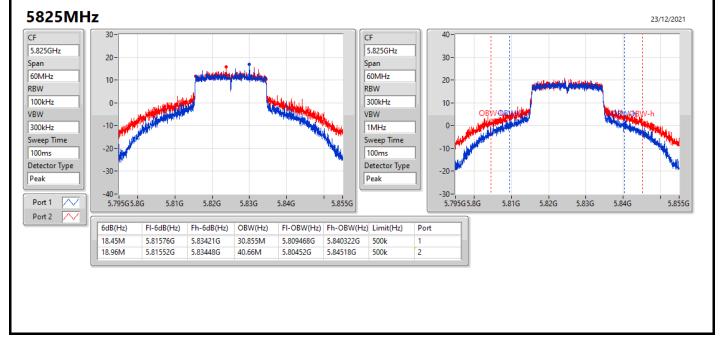


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

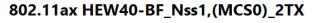


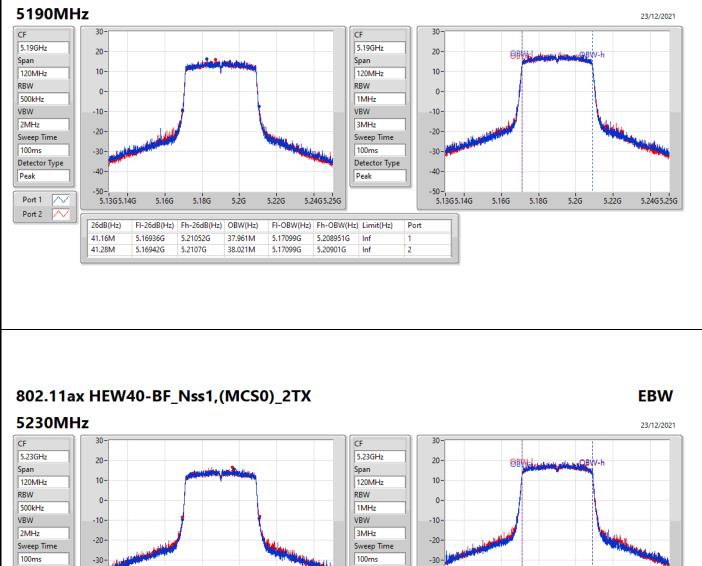
802.11ax HEW20-BF_Nss1,(MCS0)_2TX











Detector Type

Peak

Inf

Inf

5.28G 5.29G

FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz)

5.24901G

5.24901G

-40

-50

Port

2

5.17G5.18G

5.2G

Detector Type

Peak

Port 1

Port 2

-40-

-50-5.17G 5.18G

26dB(Hz)

40.98M

41.28M

5.2G

5.20948G

5.2096G

5.22G

FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz)

5.25046G

5.25088G

5.24G

37.961M

37.961M

5.26G

5.211049G

5.211049G

5.24G

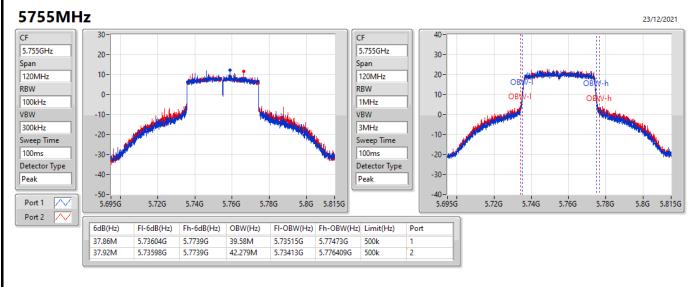
5.26G

5.28G 5.29G

5.22G

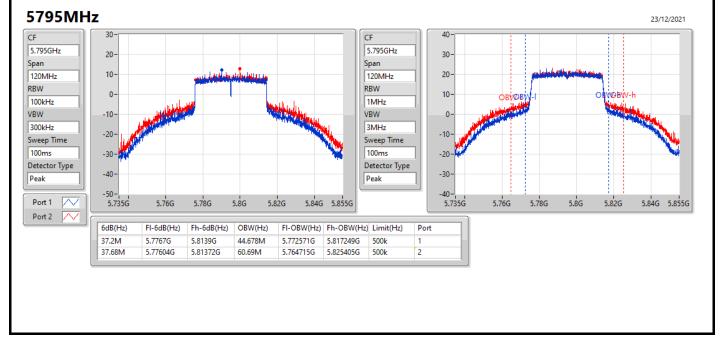


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

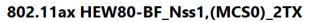


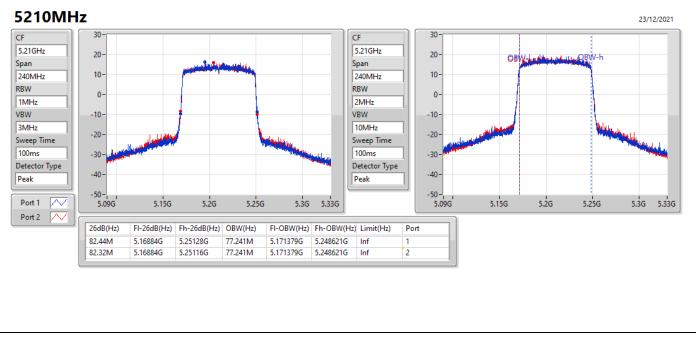
802.11ax HEW40-BF_Nss1,(MCS0)_2TX





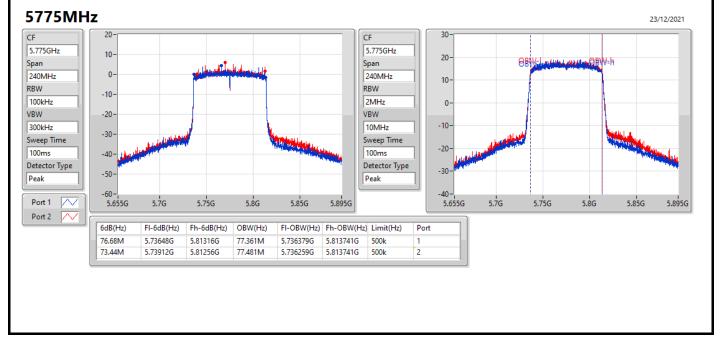






802.11ax HEW80-BF_Nss1,(MCS0)_2TX







Average Power

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	28.53	0.71285
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	29.29	0.84918
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	25.61	0.36392
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	24.43	0.27733
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	29.91	0.97949
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	29.69	0.93111
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	28.26	0.66988
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	24.78	0.30061



Average Power

Appendix C

Result

Mode	Result	DG	Port 1	Port 2	Total Power	Power Limit
		(dBi)	(dBm)	(dBm)	(dBm)	(dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	3.761	21.75	21.91	24.84	30.00
5200MHz	Pass	3.761	25.43	25.59	28.52	30.00
5240MHz	Pass	3.761	25.51	25.52	28.53	30.00
5745MHz	Pass	3.333	26.86	26.93	29.91	30.00
5785MHz	Pass	3.333	26.34	26.90	29.64	30.00
5825MHz	Pass	3.333	26.93	26.83	29.89	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	6.691	22.57	22.42	25.51	29.31
5200MHz	Pass	6.691	24.54	24.33	27.45	29.31
5240MHz	Pass	6.691	26.04	26.50	29.29	29.31
5745MHz	Pass	6.287	26.60	26.59	29.61	29.71
5785MHz	Pass	6.287	26.92	26.42	29.69	29.71
5825MHz	Pass	6.287	26.76	26.52	29.65	29.71
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	6.691	22.07	21.63	24.87	29.31
5230MHz	Pass	6.691	22.73	22.47	25.61	29.31
5755MHz	Pass	6.287	25.20	24.90	28.06	29.71
5795MHz	Pass	6.287	25.45	25.03	28.26	29.71
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	6.691	21.48	21.35	24.43	29.31
5775MHz	Pass	6.287	21.95	21.59	24.78	29.71

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



Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	16.20
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	16.09
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	9.83
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	5.55
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	15.85
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	14.91
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	11.44
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	4.36

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



Result

Mode	Result	DG	Port 1	Port 2	PD	PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	6.691	9.55	9.64	12.50	16.31
5200MHz	Pass	6.691	13.12	13.23	16.09	16.31
5240MHz	Pass	6.691	13.15	13.38	16.20	16.31
5745MHz	Pass	6.287	12.85	12.89	15.85	29.71
5785MHz	Pass	6.287	12.40	12.76	15.54	29.71
5825MHz	Pass	6.287	12.45	12.76	15.48	29.71
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	6.691	9.43	9.54	12.45	16.31
5200MHz	Pass	6.691	11.57	11.75	14.51	16.31
5240MHz	Pass	6.691	13.12	13.17	16.09	16.31
5745MHz	Pass	6.287	11.73	11.64	14.60	29.71
5785MHz	Pass	6.287	11.64	11.99	14.77	29.71
5825MHz	Pass	6.287	11.80	12.18	14.91	29.71
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	6.691	6.15	6.24	9.18	16.31
5230MHz	Pass	6.691	6.85	6.89	9.83	16.31
5755MHz	Pass	6.287	8.55	8.56	11.44	29.71
5795MHz	Pass	6.287	8.29	8.74	11.43	29.71
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	6.691	2.50	2.63	5.55	16.31
5775MHz	Pass	6.287	1.22	1.66	4.36	29.71

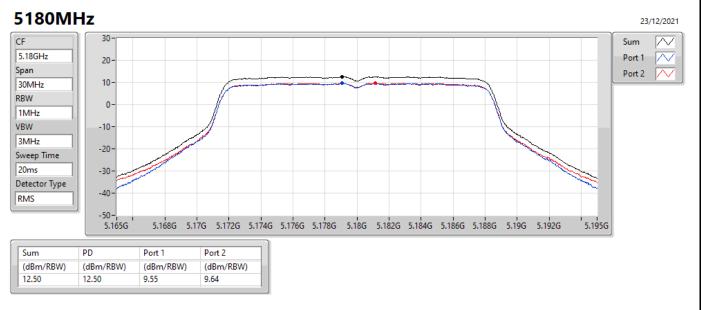
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band; PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

PSD



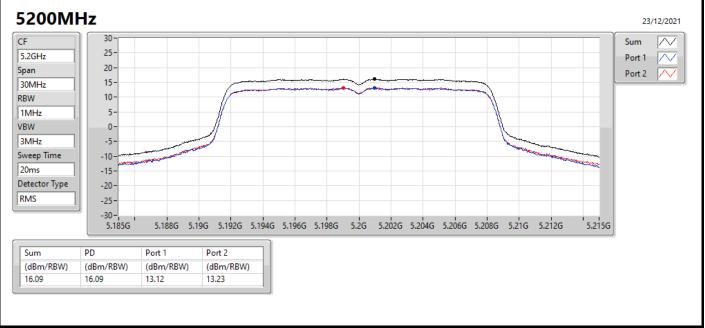
PSD

802.11a_Nss1,(6Mbps)_2TX

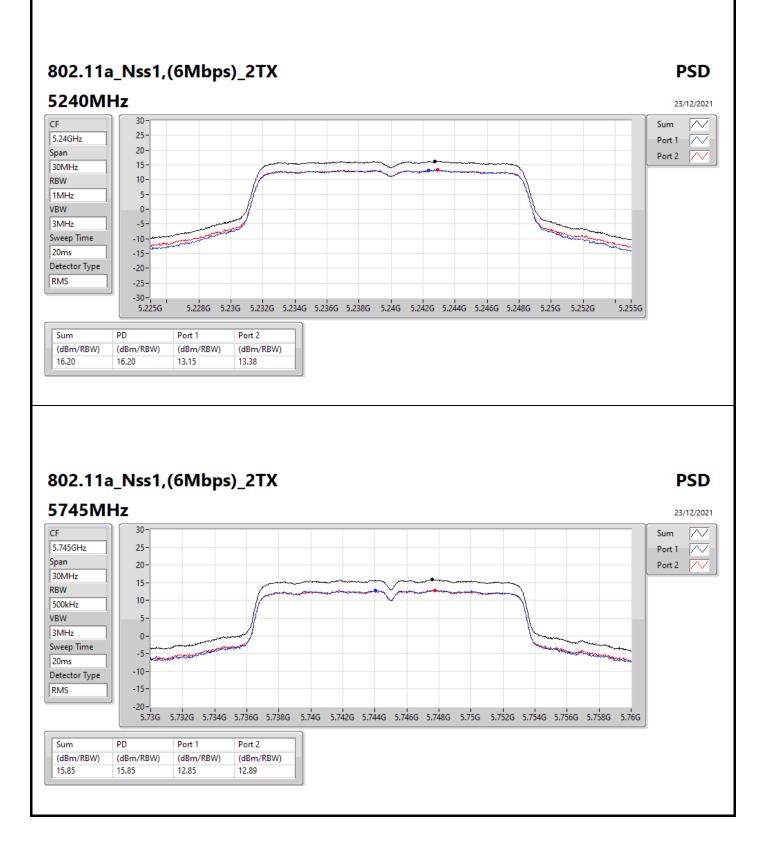


802.11a_Nss1,(6Mbps)_2TX

PSD

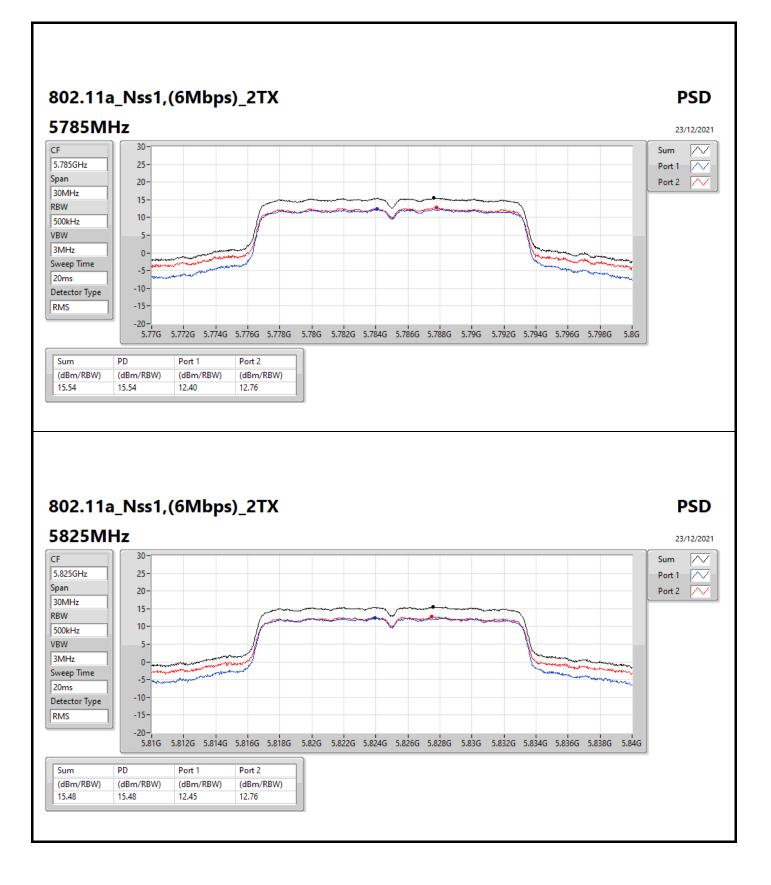






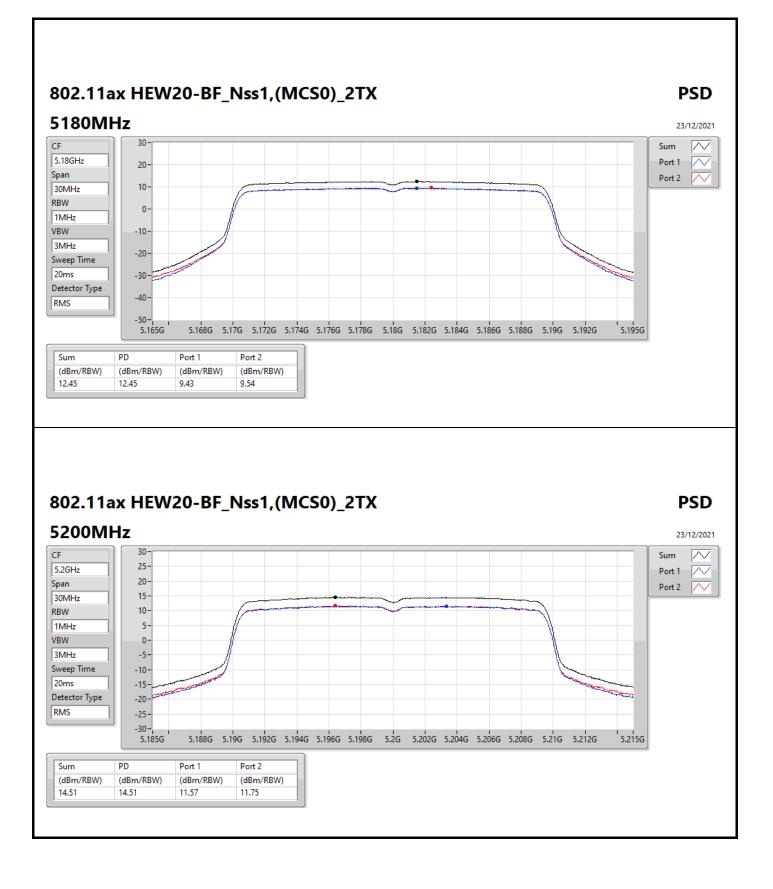






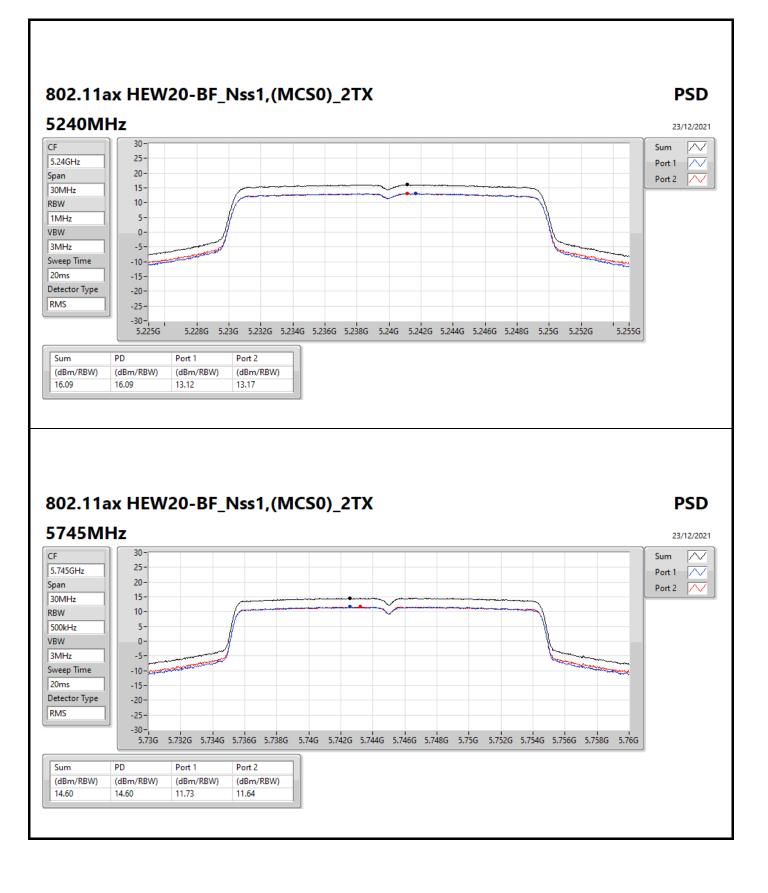






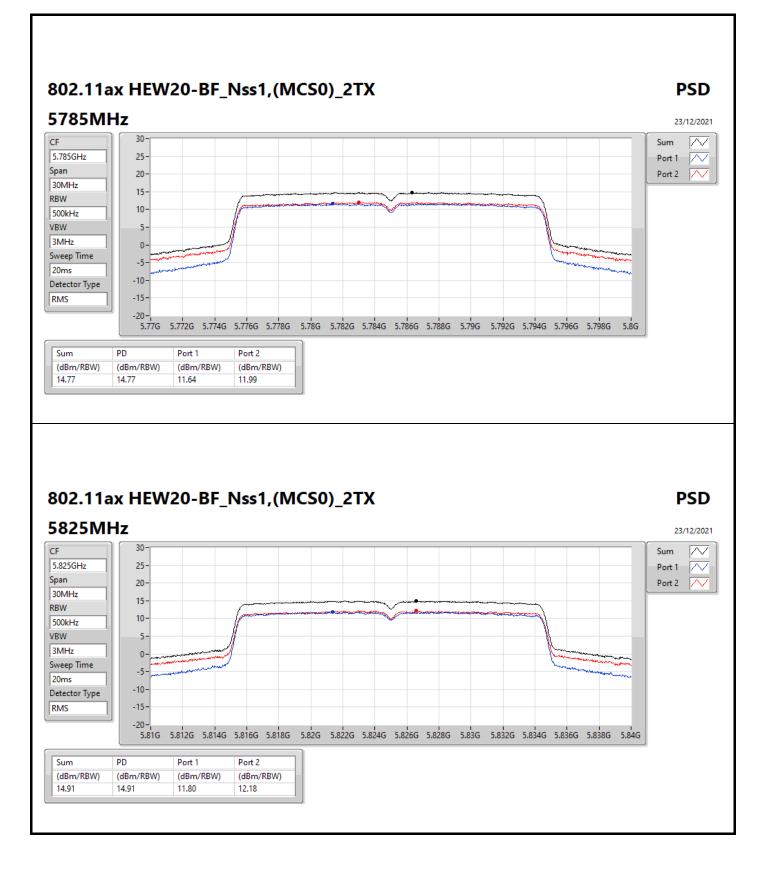












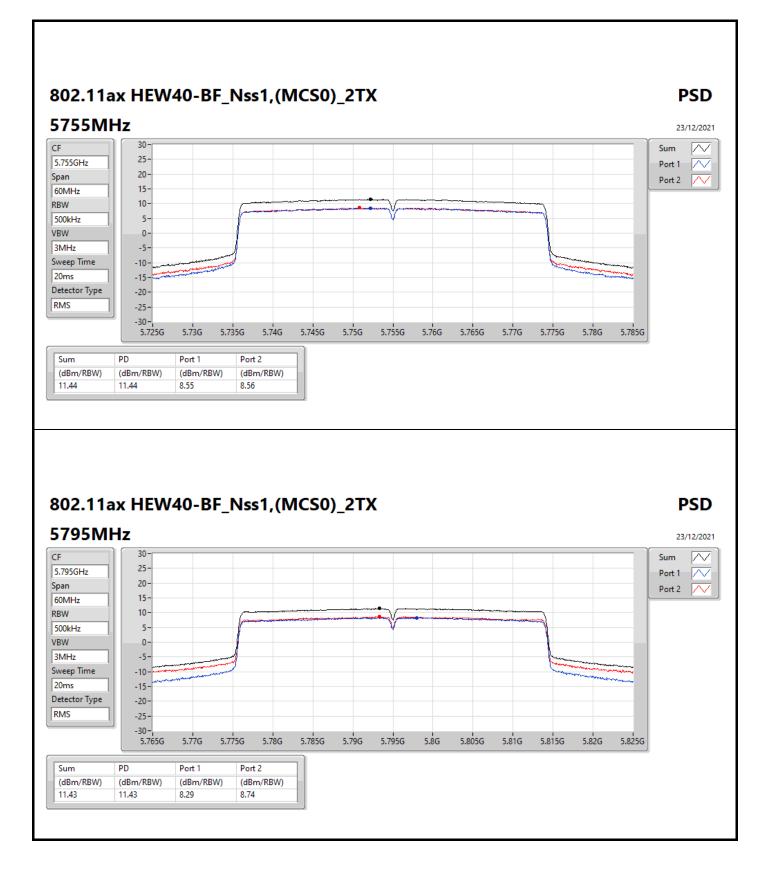






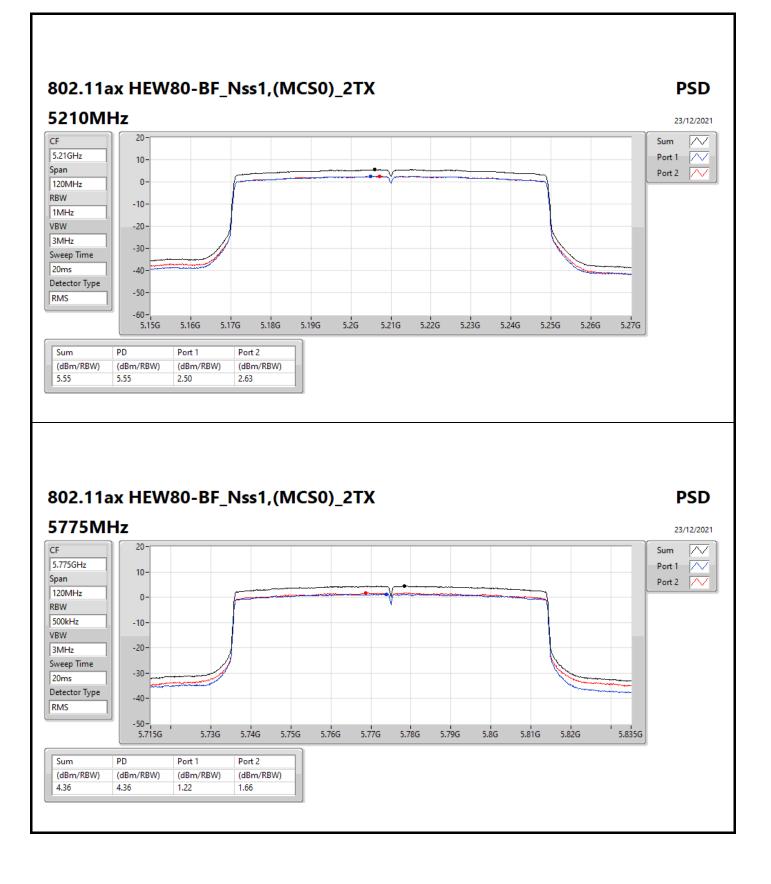












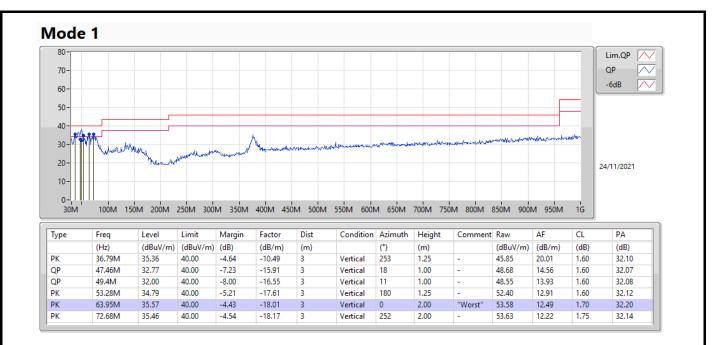


Radiated Emissions below 1GHz

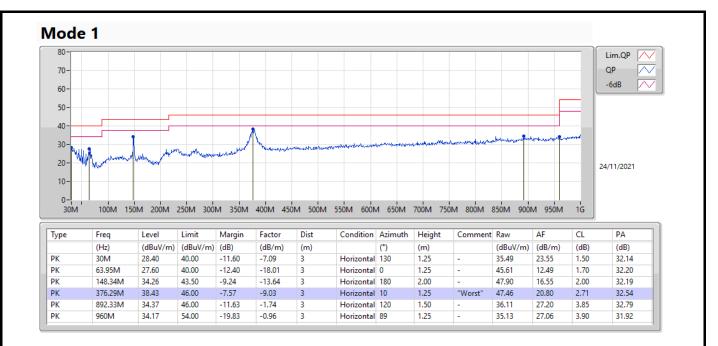
Appendix E.1

Summary							
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	
Mode 1	Pass	PK	63.95M	35.57	40.00	-4.43	Vertical











RSE TX above 1GHz

Appendix E.2

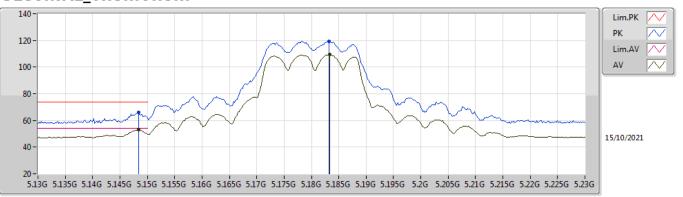
Summary

Mode	Result	Туре	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-			-	-		-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	AV	5.1496G	53.49	54.00	-0.51	3	Vertical	86	2.13	-



802.11a_Nss1,(6Mbps)_2TX

5180MHz_TnomVnom



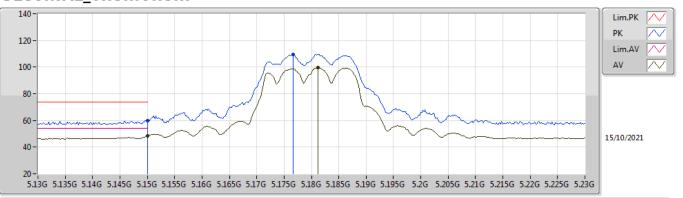
EUT Z_2TX Setting 21.5 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
РК	5.1484G	65.86	74.00	-8.14	59.89	3	Vertical	174	1.12	-	34.09	7.22	35.34	
AV	5.1484G	52.99	54.00	-1.01	47.02	3	Vertical	174	1.12	-	34.09	7.22	35.34	
PK	5.1832G	119.24	Inf	-Inf	113.28	3	Vertical	174	1.12	-	34.03	7.27	35.34	
AV	5.1834G	109.59	Inf	-Inf	103.62	3	Vertical	174	1.12	-	34.03	7.28	35.34	



802.11a_Nss1,(6Mbps)_2TX

5180MHz_TnomVnom

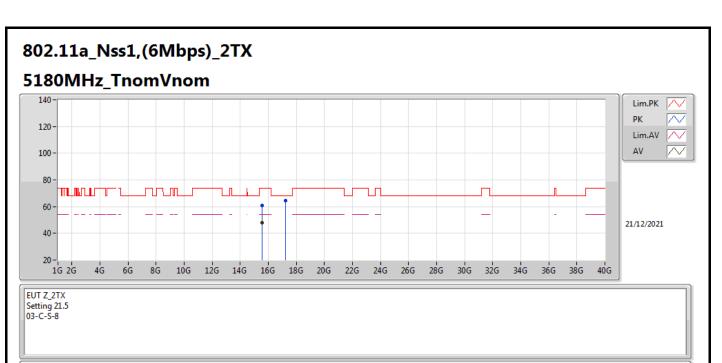


EUT Z_2TX Setting 21.5 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	59.71	74.00	-14.29	53.73	3	Horizontal	266	2.20	-	34.10	7.22	35.34
AV	5.15G	48.34	54.00	-5.66	42.36	3	Horizontal	266	2.20	-	34.10	7.22	35.34
РК	5.1766G	109.41	Inf	-Inf	103.44	3	Horizontal	266	2.20	-	34.05	7.26	35.34
AV	5.1812G	99.62	Inf	-Inf	93.65	3	Horizontal	266	2.20	-	34.04	7.27	35.34



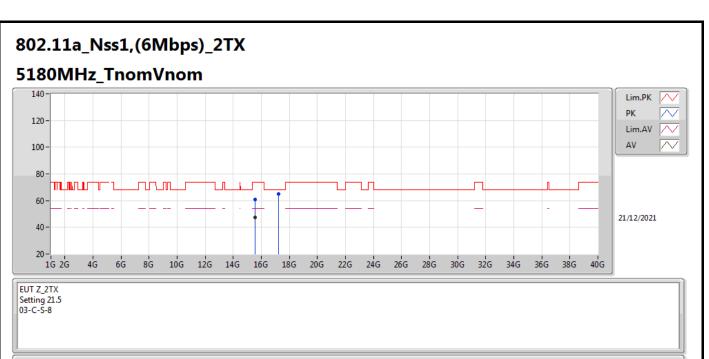
Appendix E.2



Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.53812G	60.63	74.00	-13.37	44.50	3	Vertical	329	1.14	-	38.36	13.17	35.40
AV	15.53788G	47.68	54.00	-6.32	31.55	3	Vertical	329	1.14	-	38.36	13.17	35.40
РК	17.23452G	64.40	68.20	-3.80	44.22	3	Vertical	19	1.17	-	40.80	14.26	34.88



Appendix E.2



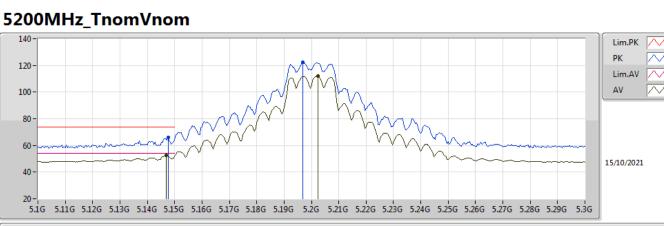
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.54004G	60.73	74.00	-13.27	44.62	3	Horizontal	130	2.96	-	38.34	13.17	35.40
AV	15.53548G	47.55	54.00	-6.45	31.40	3	Horizontal	130	2.96	-	38.38	13.17	35.40
PK	17.23746G	64.85	68.20	-3.35	44.65	3	Horizontal	349	1.02	-	40.81	14.27	34.88



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802.11a_Nss1,(6Mbps)_2TX

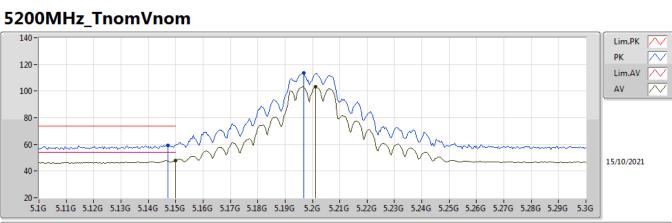


EUT Z_2TX Setting 25 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	5.1476G	65.81	74.00	-8.19	59.84	3	Vertical	196	2.28	-	34.09	7.22	35.34
AV	5.1468G	52.39	54.00	-1.61	46.42	3	Vertical	196	2.28	-	34.09	7.22	35.34
PK	5.1968G	122.65	Inf	-Inf	116.68	3	Vertical	196	2.28	-	34.01	7.30	35.34
AV	5.2024G	111.83	Inf	-Inf	105.86	3	Vertical	196	2.28	-	34.01	7.30	35.34



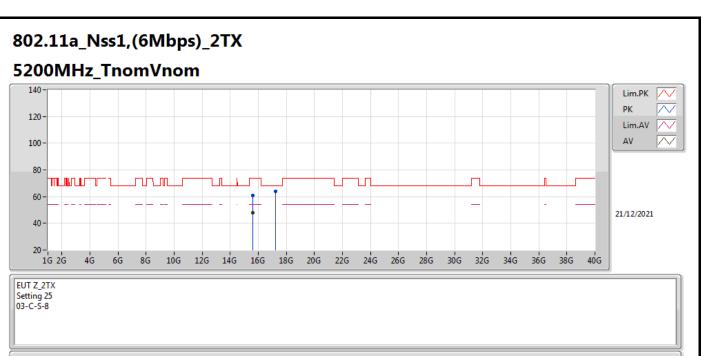
802.11a_Nss1,(6Mbps)_2TX



Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	5.1472G	59.32	74.00	-14.68	53.35	3	Horizontal	266	2.20	-	34.09	7.22	35.34	
AV	5.15G	48.15	54.00	-5.85	42.17	3	Horizontal	266	2.20	-	34.10	7.22	35.34	
PK	5.1968G	113.67	Inf	-Inf	107.70	3	Horizontal	266	2.20	-	34.01	7.30	35.34	
AV	5.2012G	103.37	Inf	-Inf	97.41	3	Horizontal	266	2.20	-	34.00	7.30	35.34	

EUT Z_2TX Setting 25 03-D-C-5-10





Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.5986G	61.04	74.00	-12.96	45.48	3	Vertical	254	1.47	-	37.81	13.20	35.45
AV	15.60156G	48.00	54.00	-6.00	32.46	3	Vertical	254	1.47	-	37.80	13.20	35.46
PK	17.223G	63.89	68.20	-4.31	43.74	3	Vertical	192	1.03	-	40.77	14.26	34.88



РК

17.22072G

64.58

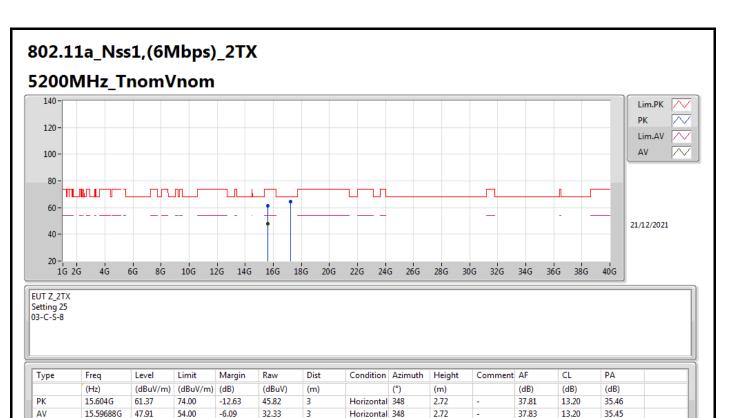
-3.62

68.20

44.45

3

Appendix E.2



Horizontal 161

2.45

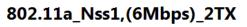
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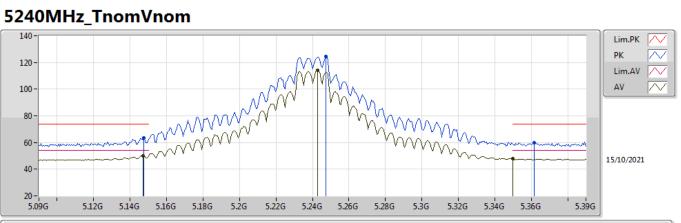
40.76

14.25

34.88





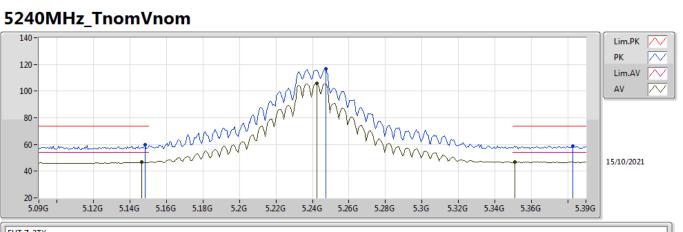


EUT Z_2TX Setting 27 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	5.1476G	63.25	74.00	-10.75	57.28	3	Vertical	88	2.21	-	34.09	7.22	35.34	
AV	5.147G	50.16	54.00	-3.84	44.19	3	Vertical	88	2.21	-	34.09	7.22	35.34	
PK	5.2472G	124.47	Inf	-Inf	118.34	3	Vertical	88	2.21	-	34.19	7.28	35.34	
AV	5.243G	114.00	Inf	-Inf	107.89	3	Vertical	88	2.21	-	34.17	7.28	35.34	
PK	5.3618G	59.92	74.00	-14.08	53.46	3	Vertical	88	2.21	-	34.58	7.22	35.34	
AV	5.35G	47.70	54.00	-6.30	41.22	3	Vertical	88	2.21	-	34.60	7.22	35.34	



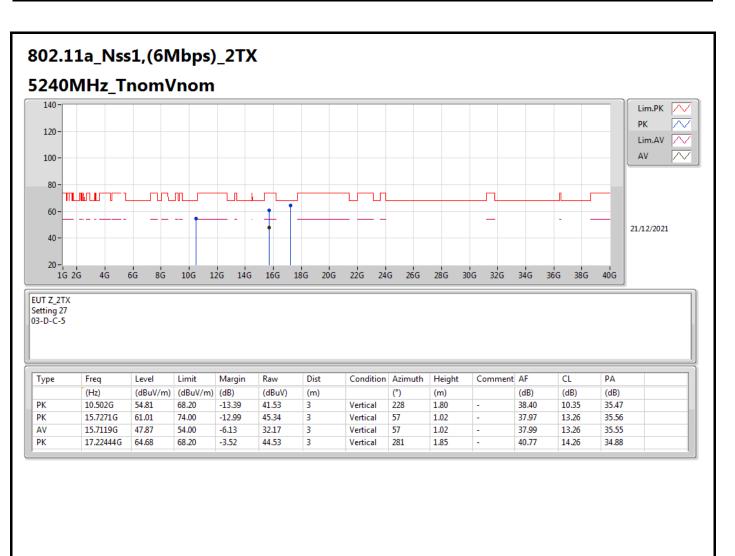
802.11a_Nss1,(6Mbps)_2TX



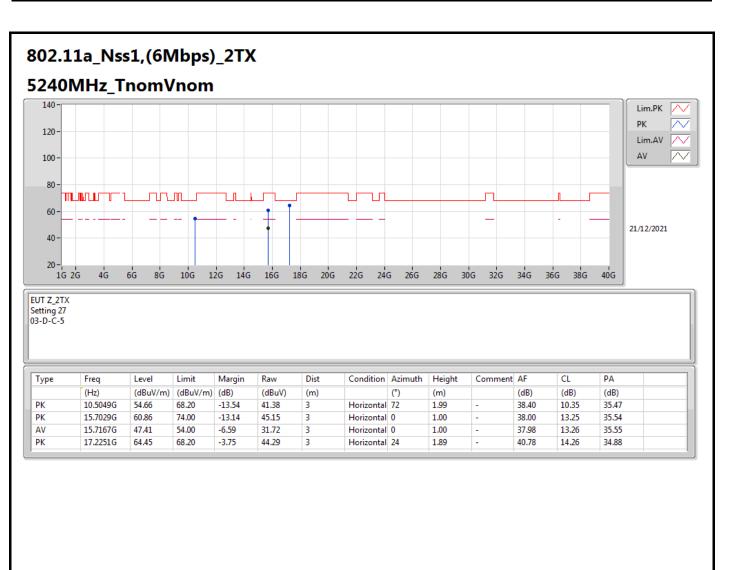
EUT Z_2TX Setting 27 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	5.1482G	59.67	74.00	-14.33	53.70	3	Horizontal	263	2.28	-	34.09	7.22	35.34	
AV	5.1464G	46.76	54.00	-7.24	40.79	3	Horizontal	263	2.28	-	34.09	7.22	35.34	
PK	5.2472G	116.97	Inf	-Inf	110.84	3	Horizontal	263	2.28	-	34.19	7.28	35.34	
AV	5.2424G	105.89	Inf	-Inf	99.78	3	Horizontal	263	2.28	-	34.17	7.28	35.34	
PK	5.3828G	58.85	74.00	-15.15	52.46	3	Horizontal	263	2.28	-	34.53	7.21	35.35	
AV	5.351G	46.99	54.00	-7.01	40.51	3	Horizontal	263	2.28	-	34.60	7.22	35.34	



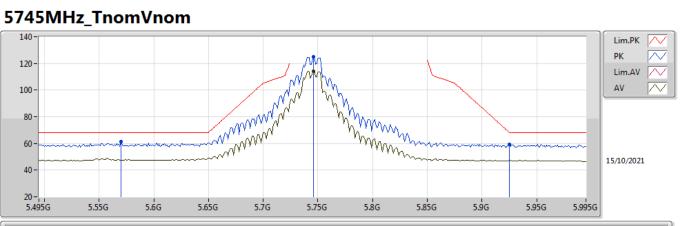








802.11a_Nss1,(6Mbps)_2TX



EUT Z_2TX Setting 27

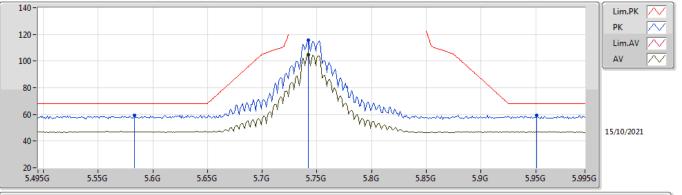
03-	D-	C-	5-1	LO

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	5.57G	61.25	68.20	-6.95	54.58	3	Vertical	58	1.00	-	34.52	7.54	35.39	
PK	5.746G	124.87	Inf	-Inf	118.49	3	Vertical	58	1.00	-	34.40	7.45	35.47	
AV	5.746G	114.16	Inf	-Inf	107.78	3	Vertical	58	1.00	-	34.40	7.45	35.47	
РК	5.925G	59.37	68.20	-8.83	52.75	3	Vertical	58	1.00	-	34.65	7.53	35.56	



802.11a_Nss1,(6Mbps)_2TX

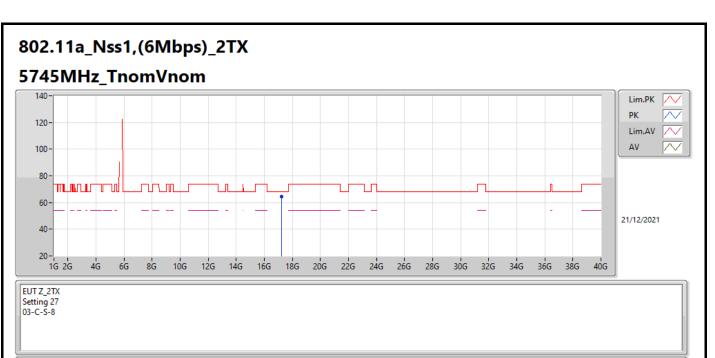
5745MHz_TnomVnom



EUT Z_2TX Setting 27 03-D-C-5-10

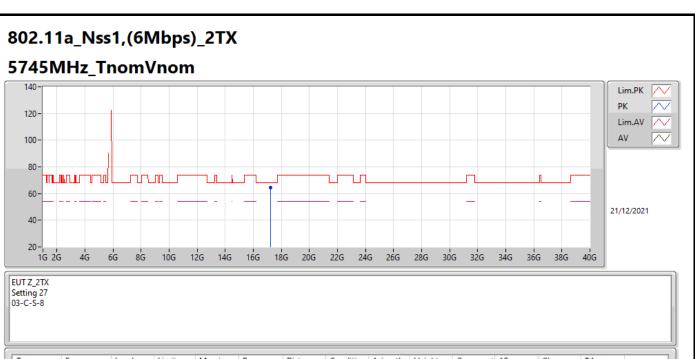
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
РК	5.583G	59.35	68.20	-8.85	52.70	3	Horizontal	288	2.02	-	34.47	7.57	35.39	
PK	5.742G	115.52	Inf	-Inf	109.13	3	Horizontal	288	2.02	-	34.40	7.46	35.47	
AV	5.742G	104.72	Inf	-Inf	98.33	3	Horizontal	288	2.02	-	34.40	7.46	35.47	
РК	5.951G	59.18	68.20	-9.02	52.61	3	Horizontal	288	2.02	-	34.60	7.55	35.58	





Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	17.22792G	64.32	68.20	-3.88	44.16	3	Vertical	233	1.80	-	40.78	14.26	34.88





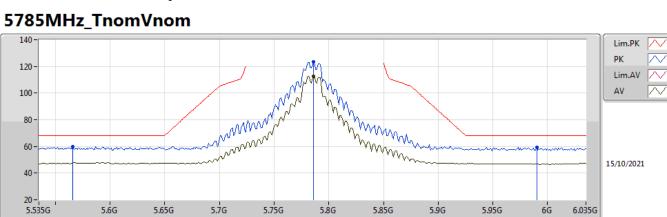
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	17.23352G	64.69	68.20	-3.51	44.51	3	Horizontal	79	1.78	-	40.80	14.26	34.88



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802.11a_Nss1,(6Mbps)_2TX



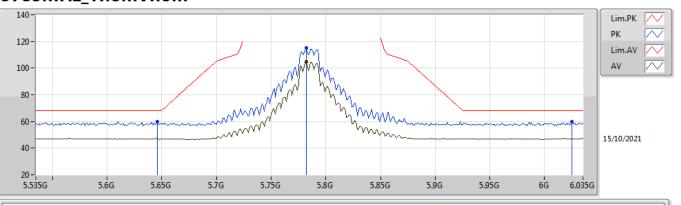
EUT Z_2TX Setting 27 03-D-C-5-10

Гуре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.566G	59.83	68.20	-8.37	53.14	3	Vertical	246	2.25	-	34.54	7.53	35.38
PK	5.786G	123.30	Inf	-Inf	116.98	3	Vertical	246	2.25	-	34.40	7.41	35.49
AV	5.786G	112.83	Inf	-Inf	106.51	3	Vertical	246	2.25	-	34.40	7.41	35.49
РК	5.99G	59.43	68.20	-8.77	52.75	3	Vertical	246	2.25	-	34.68	7.59	35.59



802.11a_Nss1,(6Mbps)_2TX

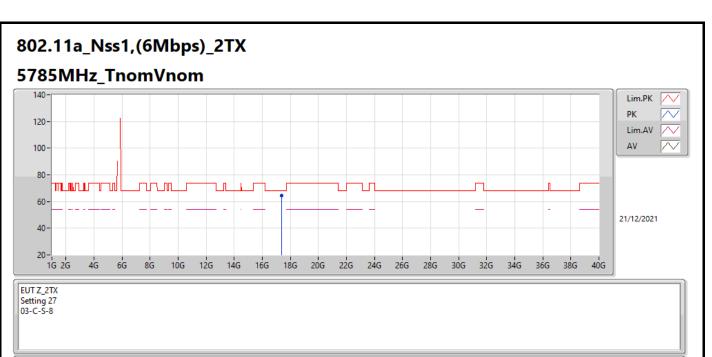
5785MHz_TnomVnom



EUT Z_2TX Setting 27 03-D-C-5-10

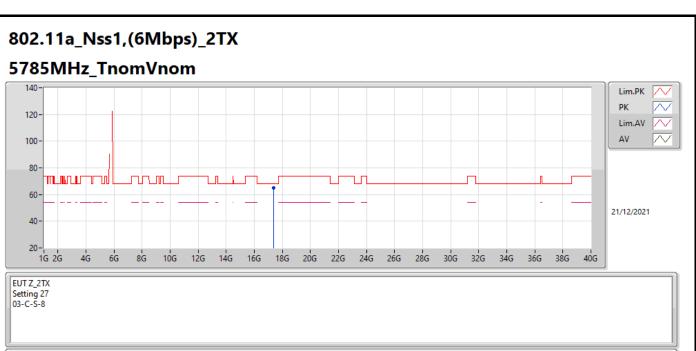
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	5.646G	59.82	68.20	-8.38	53.29	3	Horizontal	285	2.07	-	34.40	7.55	35.42	
PK	5.782G	115.27	Inf	-Inf	108.94	3	Horizontal	285	2.07	-	34.40	7.42	35.49	
AV	5.782G	104.74	Inf	-Inf	98.41	3	Horizontal	285	2.07	-	34.40	7.42	35.49	
РК	6.025G	59.57	68.20	-8.63	52.77	3	Horizontal	285	2.07	-	34.75	7.64	35.59	





Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	17.35594G	64.24	68.20	-3.96	43.34	3	Vertical	184	1.80	-	41.45	14.35	34.90	



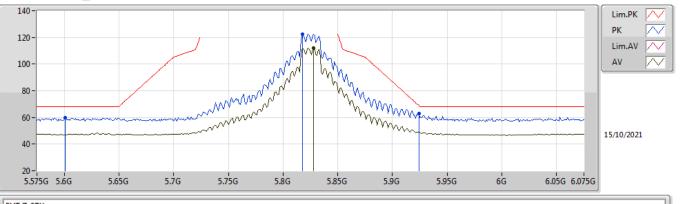


Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	17.35256G	64.79	68.20	-3.41	43.92	3	Horizontal	193	2.08	-	41.42	14.35	34.90



802.11a_Nss1,(6Mbps)_2TX

5825MHz_TnomVnom



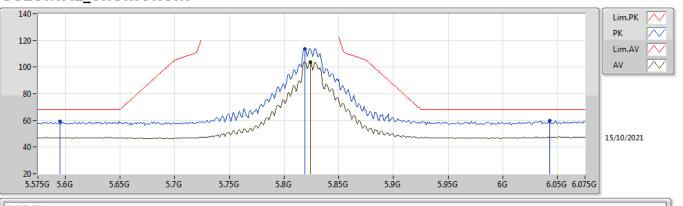
EUT Z_2TX Setting 27 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.601G	59.82	68.20	-8.38	53.22	3	Vertical	249	2.31	-	34.40	7.60	35.40
PK	5.818G	122.64	Inf	-Inf	116.33	3	Vertical	249	2.31	-	34.40	7.42	35.51
AV	5.828G	112.26	Inf	-Inf	105.94	3	Vertical	249	2.31	-	34.40	7.43	35.51
PK	5.924G	63.00	68.94	-5.94	56.39	3	Vertical	249	2.31	-	34.65	7.52	35.56



802.11a_Nss1,(6Mbps)_2TX

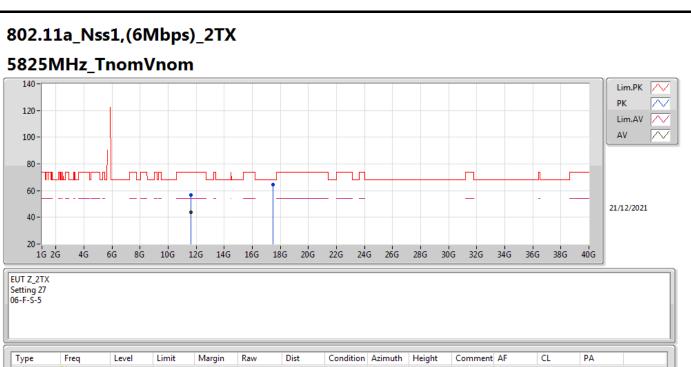
5825MHz_TnomVnom



EUT Z_2TX Setting 27 03-D-C-5-10

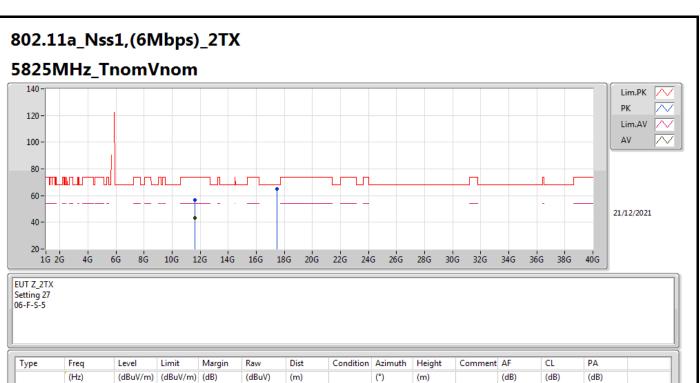
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.595G	59.17	68.20	-9.03	52.56	3	Horizontal	287	1.75	-	34.42	7.59	35.40
РК	5.819G	113.73	Inf	-Inf	107.42	3	Horizontal	287	1.75	-	34.40	7.42	35.51
AV	5.824G	103.69	Inf	-Inf	97.38	3	Horizontal	287	1.75	-	34.40	7.42	35.51
РК	6.043G	59.76	68.20	-8.44	52.89	3	Horizontal	287	1.75	-	34.79	7.66	35.58





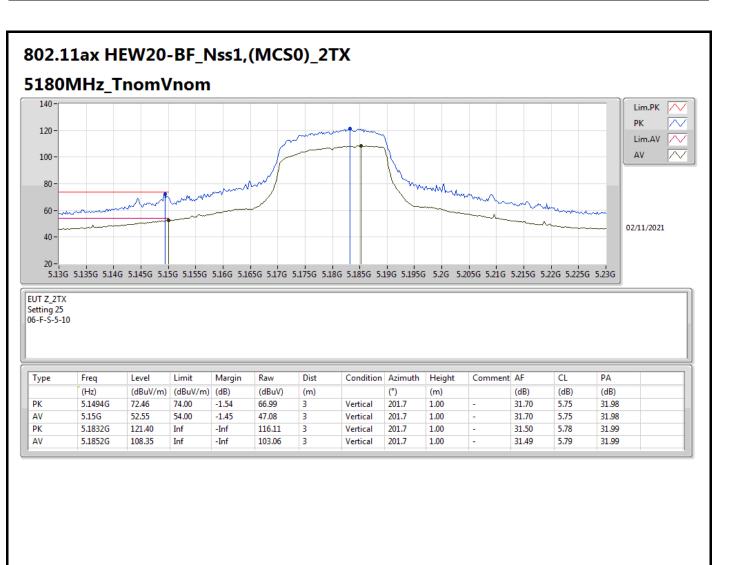
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.64728G	56.60	74.00	-17.40	41.93	3	Vertical	37	1.06	-	39.36	9.59	34.28
AV	11.64732G	43.69	54.00	-10.31	29.02	3	Vertical	37	1.06	-	39.36	9.59	34.28
PK	17.47696G	64.47	68.20	-3.73	41.95	3	Vertical	1	1.80	-	42.92	14.30	34.70
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d	PK	11.64384G	56.56	74.00	-17.44	41.88	3	Horizontal	224	1.00	-	39.37	9.59	34.28	
	AV	11.64148G	43.07	54.00	-10.93	28.39	3	Horizontal	224	1.00	-	39.38	9.58	34.28	
	PK	17.47868G	64.83	68.20	-3.37	42.30	3	Horizontal	33	1.80	-	42.93	14.30	34.70	
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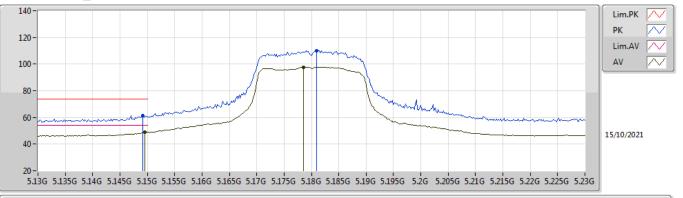






802.11ax HEW20-BF_Nss1,(MCS0)_2TX

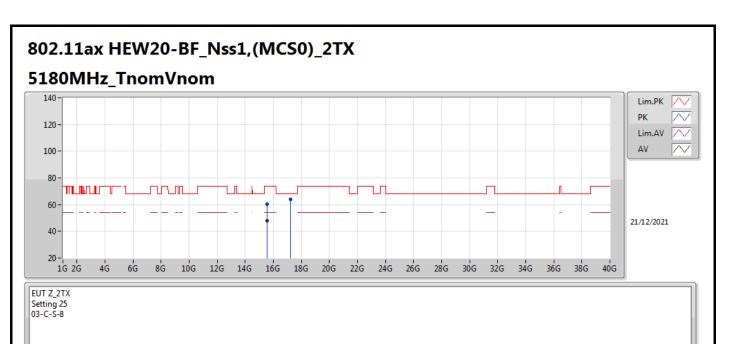
5180MHz_TnomVnom



EUT Z_2TX Setting 25 03-D-C-5-10

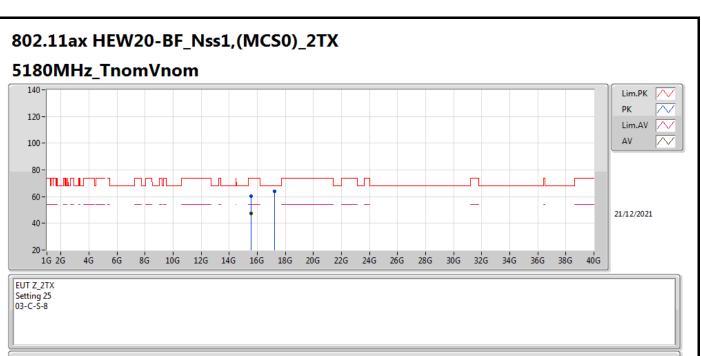
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.1492G	61.61	74.00	-12.39	55.63	3	Horizontal	313	2.17	-	34.10	7.22	35.34
AV	5.1496G	48.86	54.00	-5.14	42.88	3	Horizontal	313	2.17	-	34.10	7.22	35.34
PK	5.181G	110.24	Inf	-Inf	104.27	3	Horizontal	313	2.17	-	34.04	7.27	35.34
AV	5.1786G	97.78	Inf	-Inf	91.81	3	Horizontal	313	2.17	-	34.04	7.27	35.34





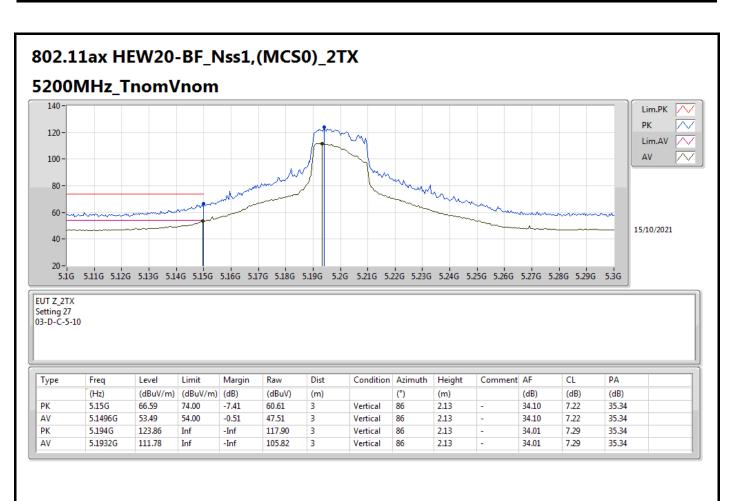
уре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.54488G	60.23	74.00	-13.77	44.17	3	Vertical	192	1.41	-	38.30	13.17	35.41
AV	15.53804G	47.75	54.00	-6.25	31.62	3	Vertical	192	1.41	-	38.36	13.17	35.40
PK	17.22594G	63.83	68.20	-4.37	43.67	3	Vertical	340	3.00	-	40.78	14.26	34.88



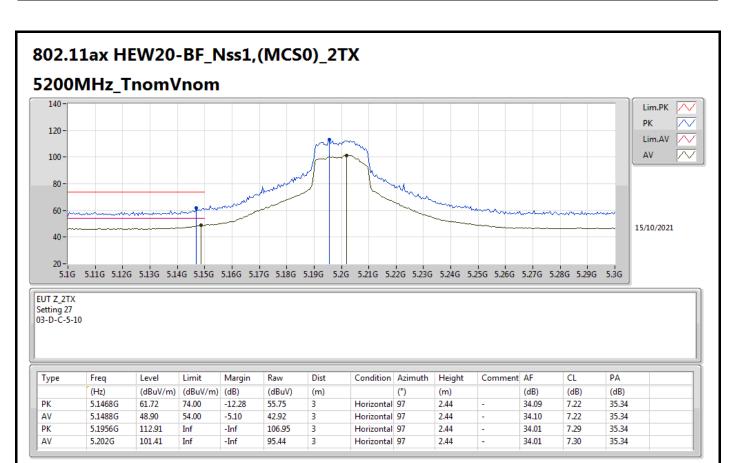


Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.54136G	60.57	74.00	-13.43	44.47	3	Horizontal	39	2.26	-	38.33	13.17	35.40
AV	15.53662G	47.61	54.00	-6.39	31.47	3	Horizontal	39	2.26	-	38.37	13.17	35.40
РК	17.23608G	63.86	68.20	-4.34	43.66	3	Horizontal	323	1.57	-	40.81	14.27	34.88

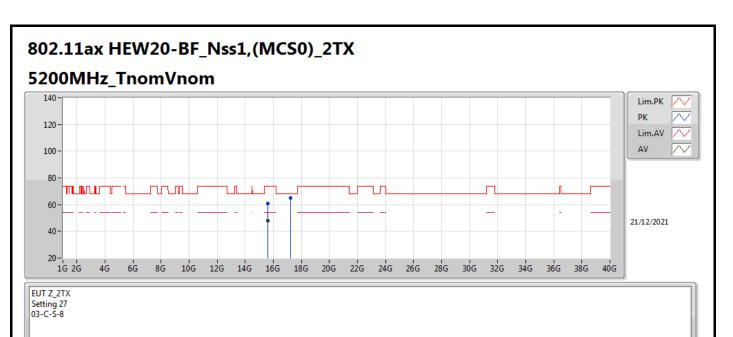






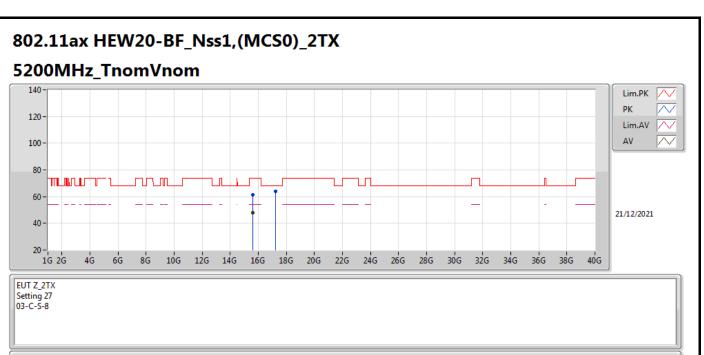






Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	15.5999G	60.62	74.00	-13.38	45.07	3	Vertical	74	2.35	-	37.80	13.20	35.45	
AV	15.60316G	47.89	54.00	-6.11	32.34	3	Vertical	74	2.35	-	37.81	13.20	35.46	
PK	17.22276G	64.76	68.20	-3.44	44.61	3	Vertical	213	1.93	-	40.77	14.26	34.88	



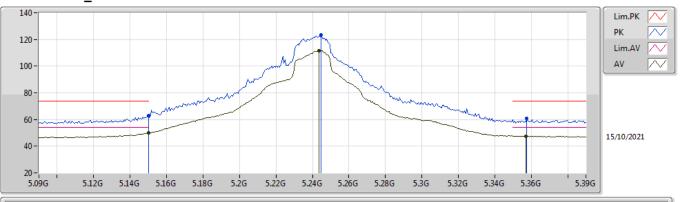


Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	15.60334G	61.51	74.00	-12.49	45.96	3	Horizontal	69	1.81	-	37.81	13.20	35.46
AV	15.60084G	47.85	54.00	-6.15	32.30	3	Horizontal	69	1.81	-	37.80	13.20	35.45
PK	17.229G	63.93	68.20	-4.27	43.76	3	Horizontal	59	2.13	-	40.79	14.26	34.88



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

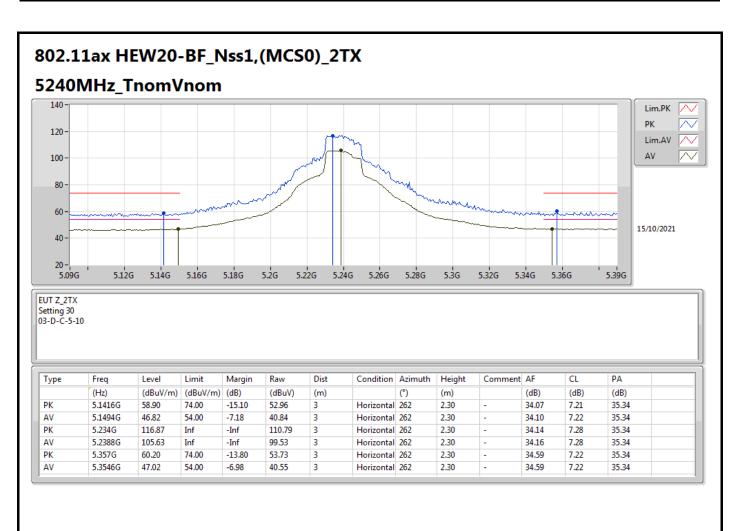
5240MHz_TnomVnom



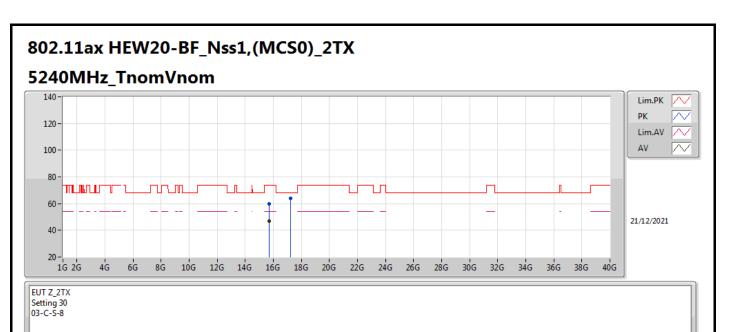
EUT Z_2TX Setting 30 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.15G	62.79	74.00	-11.21	56.81	3	Vertical	84	1.80	-	34.10	7.22	35.34
AV	5.15G	49.88	54.00	-4.12	43.90	3	Vertical	84	1.80	-	34.10	7.22	35.34
PK	5.2448G	123.23	Inf	-Inf	117.11	3	Vertical	84	1.80	-	34.18	7.28	35.34
AV	5.2436G	111.65	Inf	-Inf	105.54	3	Vertical	84	1.80	-	34.17	7.28	35.34
PK	5.3576G	60.90	74.00	-13.10	54.44	3	Vertical	84	1.80	-	34.58	7.22	35.34
AV	5.357G	47.52	54.00	-6.48	41.05	3	Vertical	84	1.80	-	34.59	7.22	35.34



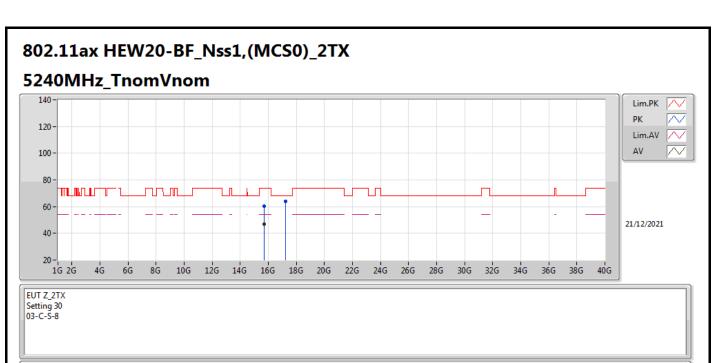






уре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
РК	15.71872G	59.93	74.00	-14.07	44.24	3	Vertical	271	1.19	-	37.98	13.26	35.55	
AV	15.72032G	46.94	54.00	-7.06	31.26	3	Vertical	271	1.19	-	37.98	13.26	35.56	
РК	17.23398G	64.07	68.20	-4.13	43.89	3	Vertical	306	2.49	-	40.80	14.26	34.88	



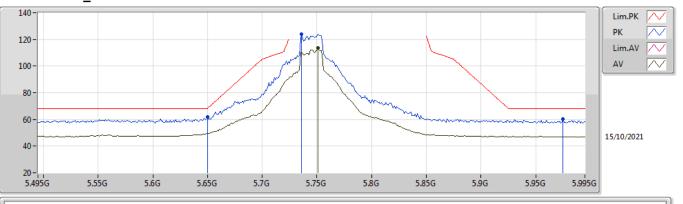


Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.71872G	60.19	74.00	-13.81	44.50	3	Horizontal	326	1.99	-	37.98	13.26	35.55
AV	15.72482G	47.14	54.00	-6.86	31.46	3	Horizontal	326	1.99	-	37.98	13.26	35.56
РК	17.23416G	63.88	68.20	-4.32	43.70	3	Horizontal	258	2.12	-	40.80	14.26	34.88



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5745MHz_TnomVnom



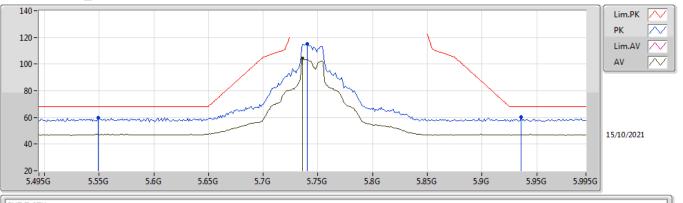
EUT Z_2TX Setting 30 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.65G	61.68	68.20	-6.52	55.16	3	Vertical	359	1.04	-	34.40	7.55	35.43
PK	5.736G	124.07	Inf	-Inf	117.68	3	Vertical	359	1.04	-	34.40	7.46	35.47
AV	5.751G	113.52	Inf	-Inf	107.15	3	Vertical	359	1.04	-	34.40	7.45	35.48
РК	5.975G	60.37	68.20	-7.83	53.74	3	Vertical	359	1.04	-	34.65	7.57	35.59



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

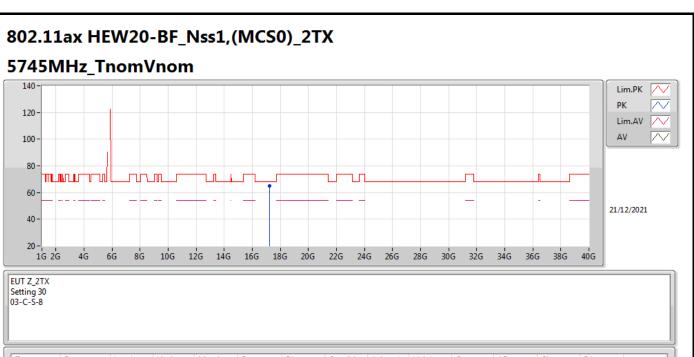
5745MHz_TnomVnom



EUT Z_2TX Setting 30 03-D-C-5-10

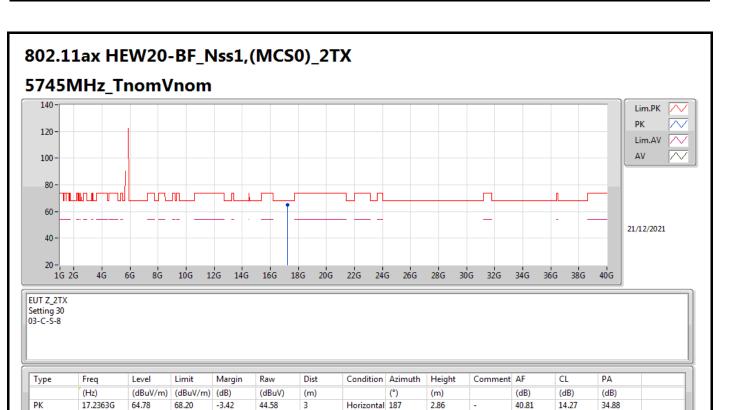
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.549G	59.98	68.20	-8.22	53.25	3	Horizontal	282	1.56	-	34.60	7.50	35.37
PK	5.74G	115.42	Inf	-Inf	109.03	3	Horizontal	282	1.56	-	34.40	7.46	35.47
AV	5.736G	104.40	Inf	-Inf	98.01	3	Horizontal	282	1.56	-	34.40	7.46	35.47
РК	5.936G	60.43	68.20	-7.77	53.83	3	Horizontal	282	1.56	-	34.63	7.54	35.57





Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
РК	17.23646G	64.75	68.20	-3.45	44.55	3	Vertical	0	1.95	-	40.81	14.27	34.88	

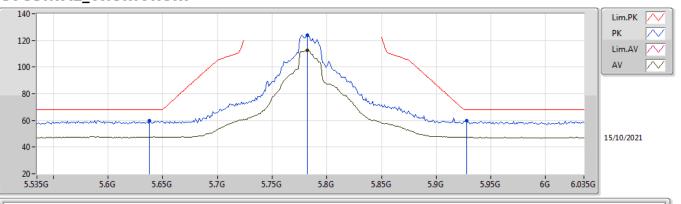






802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5785MHz_TnomVnom



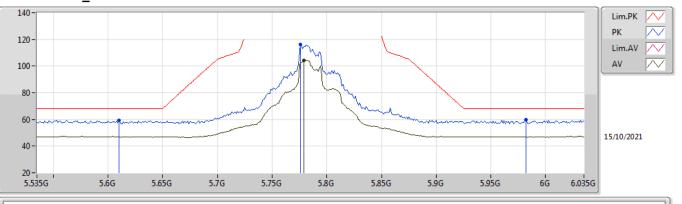
EUT Z_2TX Setting 30 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.638G	59.89	68.20	-8.31	53.35	3	Vertical	360	2.25	-	34.40	7.56	35.42
PK	5.782G	124.14	Inf	-Inf	117.81	3	Vertical	360	2.25	-	34.40	7.42	35.49
AV	5.782G	112.71	Inf	-Inf	106.38	3	Vertical	360	2.25	-	34.40	7.42	35.49
РК	5.928G	59.63	68.20	-8.57	53.02	3	Vertical	360	2.25	-	34.64	7.53	35.56



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

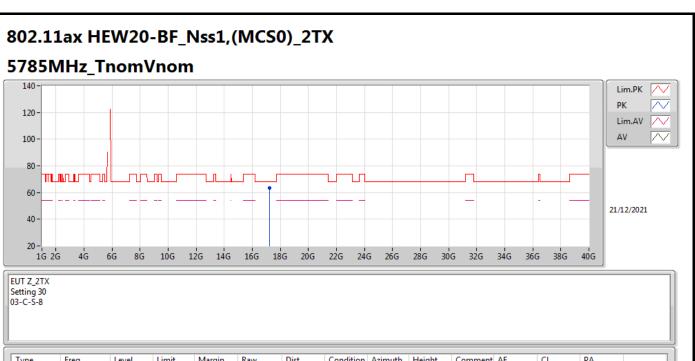
5785MHz_TnomVnom



EUT Z_2TX Setting 30 03-D-C-5-10

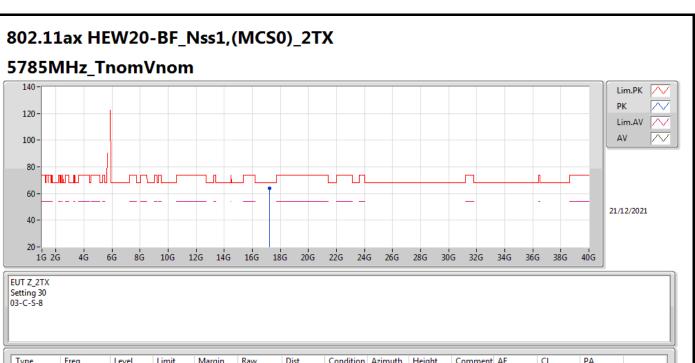
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	5.61G	59.34	68.20	-8.86	52.76	3	Horizontal	280	1.62	-	34.40	7.59	35.41
PK	5.776G	116.21	Inf	-Inf	109.88	3	Horizontal	280	1.62	-	34.40	7.42	35.49
AV	5.779G	104.40	Inf	-Inf	98.07	3	Horizontal	280	1.62	-	34.40	7.42	35.49
PK	5.982G	59.96	68.20	-8.24	53.31	3	Horizontal	280	1.62	-	34.66	7.58	35.59





Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	17.2335G	63.55	68.20	-4.65	43.37	3	Vertical	281	2.52	-	40.80	14.26	34.88



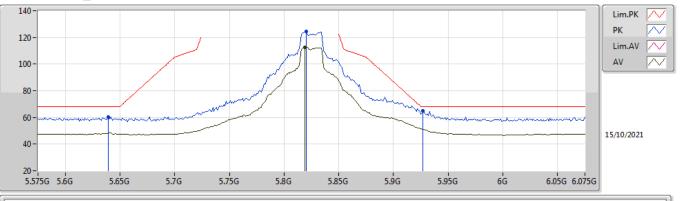


Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	17.23896G	63.97	68.20	-4.23	43.76	3	Horizontal	114	2.91	-	40.82	14.27	34.88



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5825MHz_TnomVnom



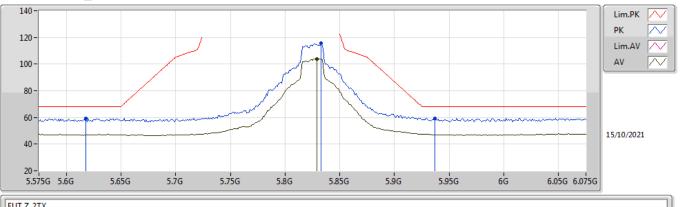
EUT Z_2TX Setting 30 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.639G	60.25	68.20	-7.95	53.71	3	Vertical	72.2	1.00	-	34.40	7.56	35.42
PK	5.82G	124.67	Inf	-Inf	118.36	3	Vertical	72.2	1.00	-	34.40	7.42	35.51
AV	5.819G	112.38	Inf	-Inf	106.07	3	Vertical	72.2	1.00	-	34.40	7.42	35.51
РК	5.927G	65.08	68.20	-3.12	58.46	3	Vertical	72.2	1.00	-	34.65	7.53	35.56



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

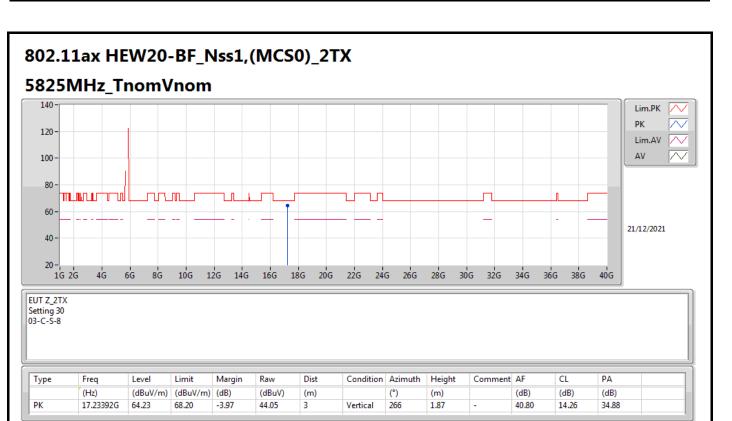
5825MHz_TnomVnom



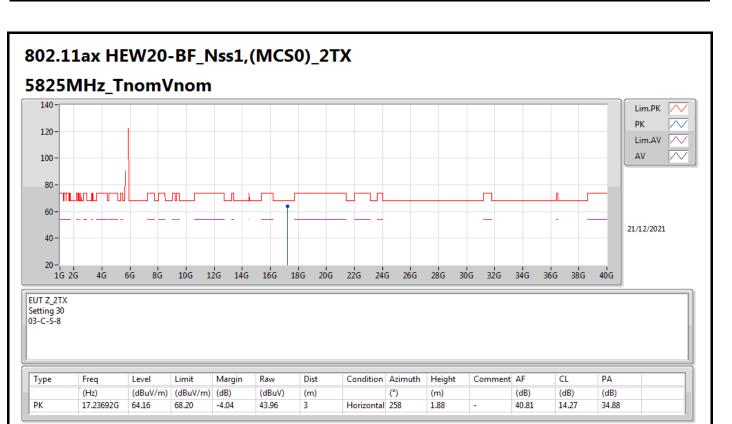
EUT Z_2TX Setting 30 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.618G	59.22	68.20	-8.98	52.65	3	Horizontal	286	2.04	-	34.40	7.58	35.41
РК	5.833G	115.92	Inf	-Inf	109.61	3	Horizontal	286	2.04	-	34.40	7.43	35.52
AV	5.829G	104.01	Inf	-Inf	97.69	3	Horizontal	286	2.04	-	34.40	7.43	35.51
PK	5.937G	59.34	68.20	-8.86	52.74	3	Horizontal	286	2.04	-	34.63	7.54	35.57

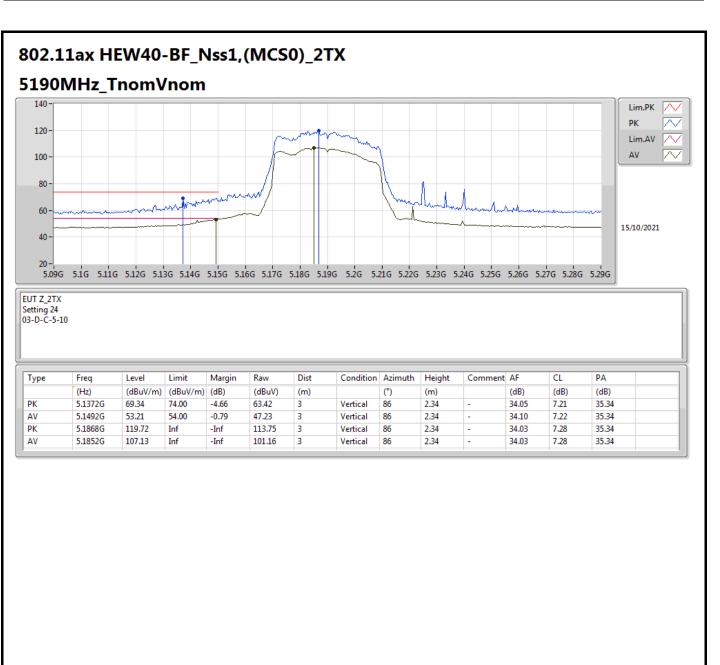




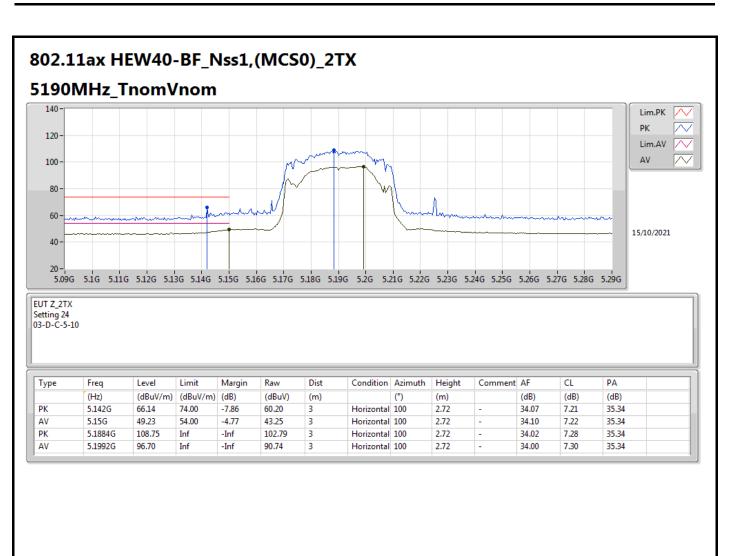




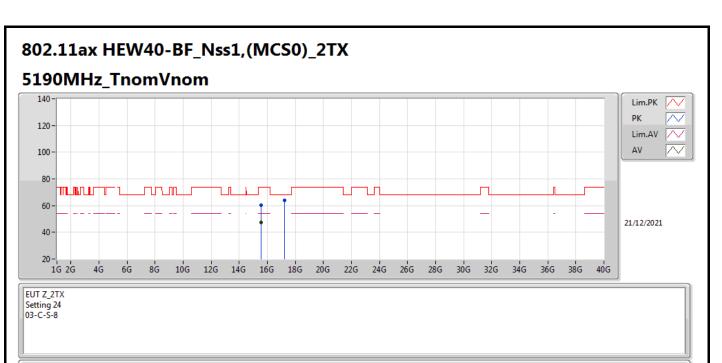






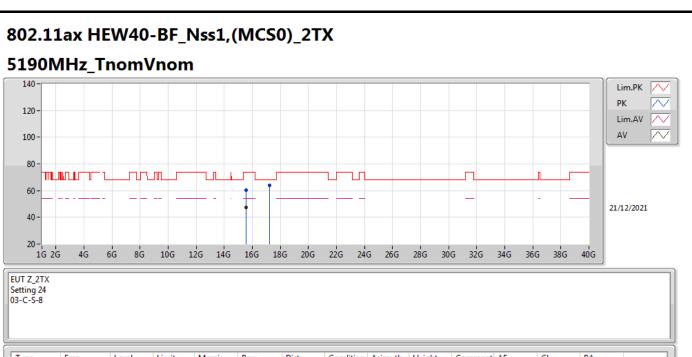






Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.57476G	60.34	74.00	-13.66	44.55	3	Vertical	307	2.54	-	38.03	13.19	35.43
AV	15.5725G	47.39	54.00	-6.61	31.58	3	Vertical	307	2.54	-	38.05	13.19	35.43
PK	17.229G	64.06	68.20	-4.14	43.89	3	Vertical	36	2.20	-	40.79	14.26	34.88



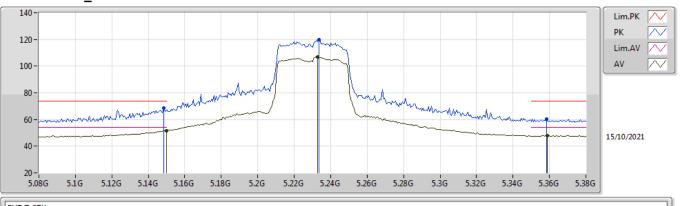


Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
15.57022G	60.52	74.00	-13.48	44.69	3	Horizontal	343	1.74	-	38.07	13.19	35.43
15.56594G	47.32	54.00	-6.68	31.46	3	Horizontal	343	1.74	-	38.11	13.18	35.43
17.22822G	64.06	68.20	-4.14	43.90	3	Horizontal	182	2.12	-	40.78	14.26	34.88
	(Hz) 15.57022G 15.56594G	(Hz) (dBuV/m) 15.57022G 60.52 15.56594G 47.32	(Hz) (dBuV/m) (dBuV/m) 15.57022G 60.52 74.00 15.56594G 47.32 54.00	(Hz) (dBuV/m) (dBuV/m) (dB) 15.57022G 60.52 74.00 -13.48 15.56594G 47.32 54.00 -6.68	(Hz) (dBuV/m) (dBuV/m) (dB) (dBuV) 15.57022G 60.52 74.00 -13.48 44.69 15.56594G 47.32 54.00 -6.68 31.46	(Hz) (dBuV/m) (dBuV/m) (dB) (dBuV) (m) 15.57022G 60.52 74.00 -13.48 44.69 3 15.56594G 47.32 54.00 -6.68 31.46 3	(Hz) (dBuV/m) (dBuV/m) (dB) (dBuV) (m) 15.57022G 60.52 74.00 -13.48 44.69 3 Horizontal 15.56594G 47.32 54.00 -6.68 31.46 3 Horizontal	(Hz) (dBuV/m) (dBuV/m) (dB) (dBuV) (m) (°) 15.57022G 60.52 74.00 -13.48 44.69 3 Horizontal 343 15.56594G 47.32 54.00 -6.68 31.46 3 Horizontal 343	(Hz) (dBuV/m) (dBuV/m) (dB) (dBuV) (m) (°) (m) 15.57022G 60.52 74.00 -13.48 44.69 3 Horizontal 343 1.74 15.56594G 47.32 54.00 -6.68 31.46 3 Horizontal 343 1.74	(Hz) (dBuV/m) (dBu (dBuV) (m) (°) (m) 15.57022G 60.52 74.00 -13.48 44.69 3 Horizontal 343 1.74 - 15.56594G 47.32 54.00 -6.68 31.46 3 Horizontal 343 1.74 -	(Hz) (dBuV/m) (dBuV/m) (dB) (dBuV) (m) (°) (m) (dB) 15.57022G 60.52 74.00 -13.48 44.69 3 Horizontal 343 1.74 - 38.07 15.56594G 47.32 54.00 -6.68 31.46 3 Horizontal 343 1.74 - 38.11	(Hz) (dBuV/m) (dB) (dBuV) (m) (°) (m) (dB) (dB) 15.57022G 60.52 74.00 -13.48 44.69 3 Horizontal 343 1.74 - 38.07 13.19 15.56594G 47.32 54.00 -6.68 31.46 3 Horizontal 343 1.74 - 38.11 13.18



802.11ax HEW40-BF_Nss1,(MCS0)_2TX

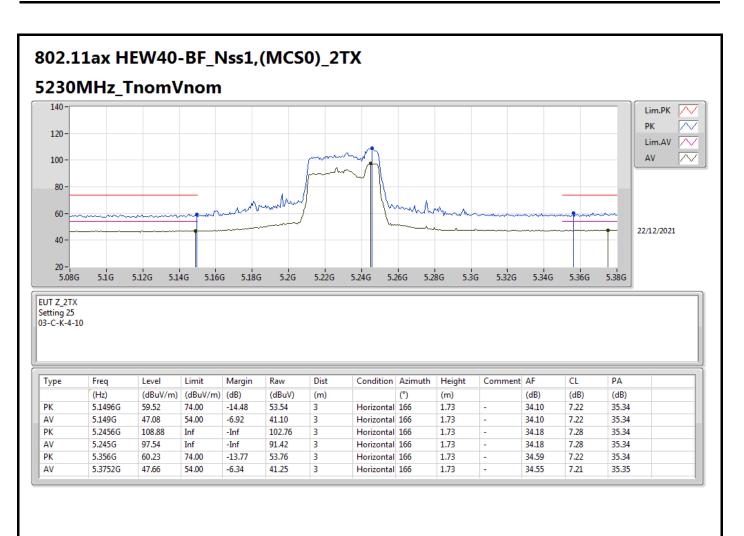
5230MHz_TnomVnom



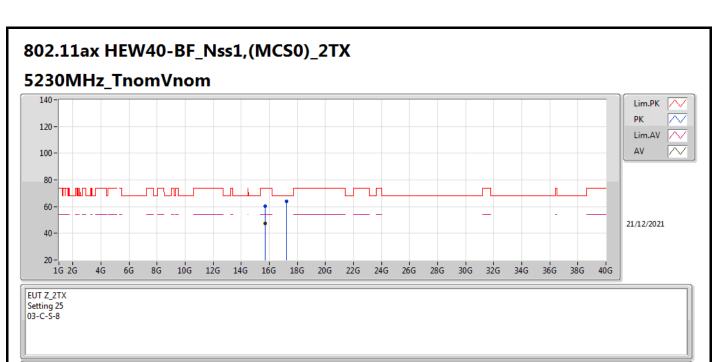
EUT Z_2TX Setting 25 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	5.1484G	68.77	74.00	-5.23	62.80	3	Vertical	7	1.09	-	34.09	7.22	35.34
AV	5.15G	51.64	54.00	-2.36	45.66	3	Vertical	7	1.09	-	34.10	7.22	35.34
PK	5.2336G	119.61	Inf	-Inf	113.54	3	Vertical	7	1.09	-	34.13	7.28	35.34
AV	5.233G	106.86	Inf	-Inf	100.79	3	Vertical	7	1.09	-	34.13	7.28	35.34
PK	5.3584G	60.21	74.00	-13.79	53.75	3	Vertical	7	1.09	-	34.58	7.22	35.34
AV	5.359G	48.02	54.00	-5.98	41.56	3	Vertical	7	1.09	-	34.58	7.22	35.34



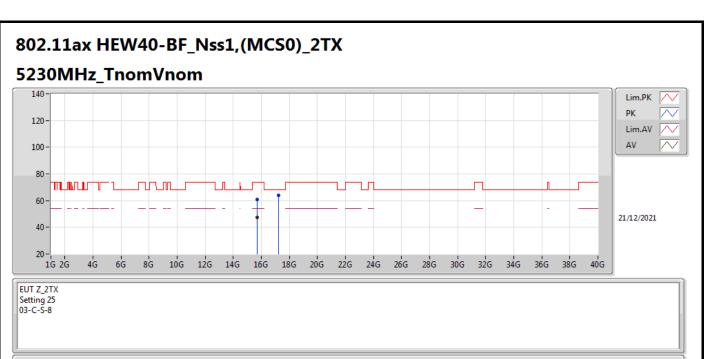






Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.69064G	60.55	74.00	-13.45	44.85	3	Vertical	337	2.67	-	37.98	13.25	35.53
AV	15.69482G	47.30	54.00	-6.70	31.59	3	Vertical	337	2.67	-	37.99	13.25	35.53
РК	17.235G	64.20	68.20	-4.00	44.02	3	Vertical	117	2.65	-	40.80	14.26	34.88



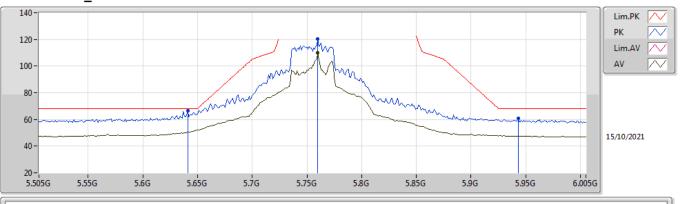


Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.69392G	61.07	74.00	-12.93	45.36	3	Horizontal	217	2.15	-	37.99	13.25	35.53
AV	15.69346G	47.31	54.00	-6.69	31.60	3	Horizontal	217	2.15	-	37.99	13.25	35.53
PK	17.2356G	63.94	68.20	-4.26	43.75	3	Horizontal	74	2.95	-	40.81	14.26	34.88



802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5755MHz_TnomVnom



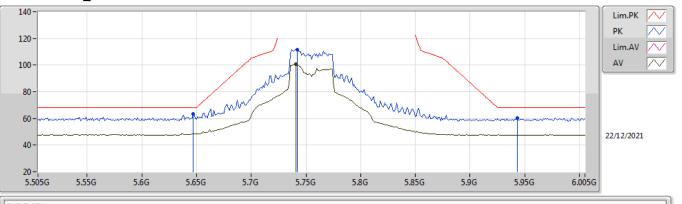
EUT Z_2TX Setting 27 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.641G	66.72	68.20	-1.48	60.18	3	Vertical	1.8	1.83	-	34.40	7.56	35.42
РК	5.76G	120.09	Inf	-Inf	113.73	3	Vertical	1.8	1.83	-	34.40	7.44	35.48
AV	5.76G	109.93	Inf	-Inf	103.57	3	Vertical	1.8	1.83	-	34.40	7.44	35.48
PK	5.943G	60.93	68.20	-7.27	54.35	3	Vertical	1.8	1.83	-	34.61	7.54	35.57



802.11ax HEW40-BF_Nss1,(MCS0)_2TX

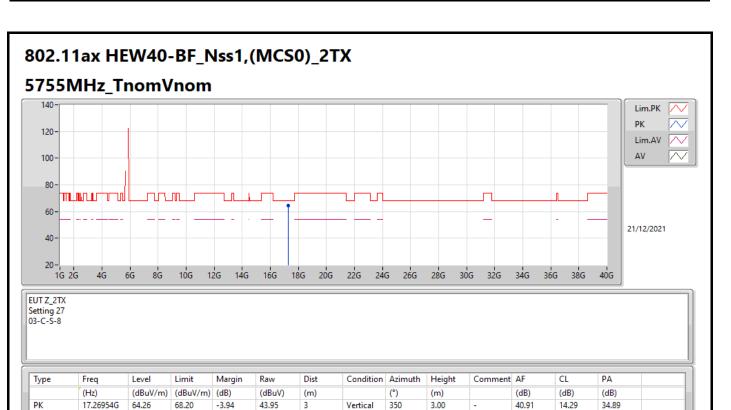
5755MHz_TnomVnom



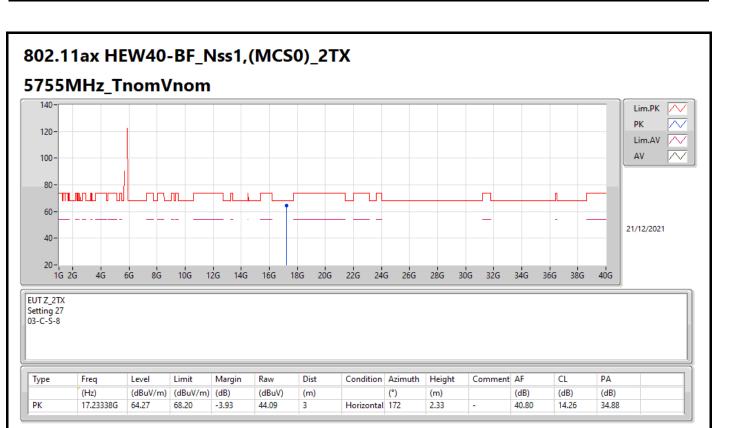
EUT Z_2TX Setting 27 03-C-K-4-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.647G	63.45	68.20	-4.75	56.92	3	Horizontal	82.2	2.30	-	34.40	7.55	35.42
PK	5.742G	111.69	Inf	-Inf	105.30	3	Horizontal	82.2	2.30	-	34.40	7.46	35.47
AV	5.741G	100.74	Inf	-Inf	94.35	3	Horizontal	82.2	2.30	-	34.40	7.46	35.47
PK	5.943G	60.25	68.20	-7.95	53.67	3	Horizontal	82.2	2.30	-	34.61	7.54	35.57





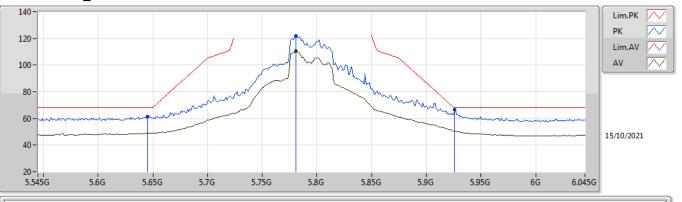






802.11ax HEW40-BF_Nss1,(MCS0)_2TX

5795MHz_TnomVnom



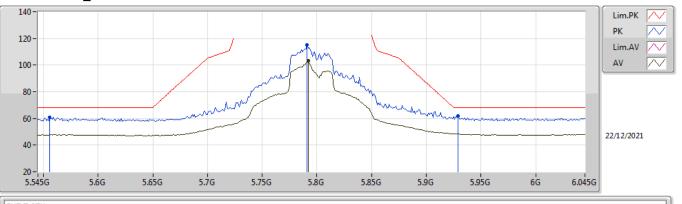
EUT Z_2TX Setting 27 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.645G	61.41	68.20	-6.79	54.88	3	Vertical	0	2.25	-	34.40	7.55	35.42
РК	5.781G	121.89	Inf	-Inf	115.56	3	Vertical	0	2.25	-	34.40	7.42	35.49
AV	5.781G	110.56	Inf	-Inf	104.23	3	Vertical	0	2.25	-	34.40	7.42	35.49
PK	5.926G	66.44	68.20	-1.76	59.82	3	Vertical	0	2.25	-	34.65	7.53	35.56



802.11ax HEW40-BF_Nss1,(MCS0)_2TX

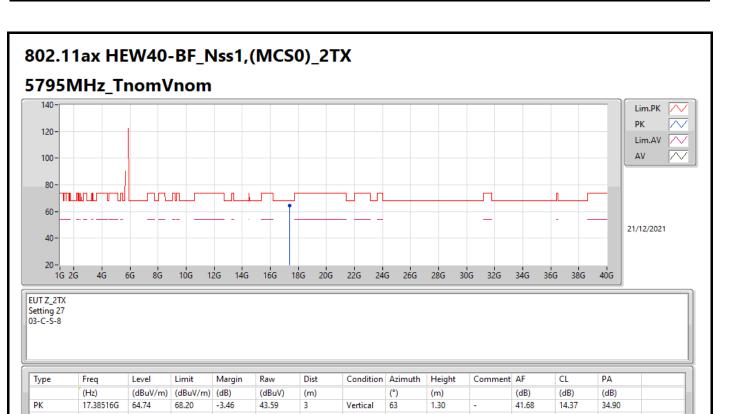
5795MHz_TnomVnom



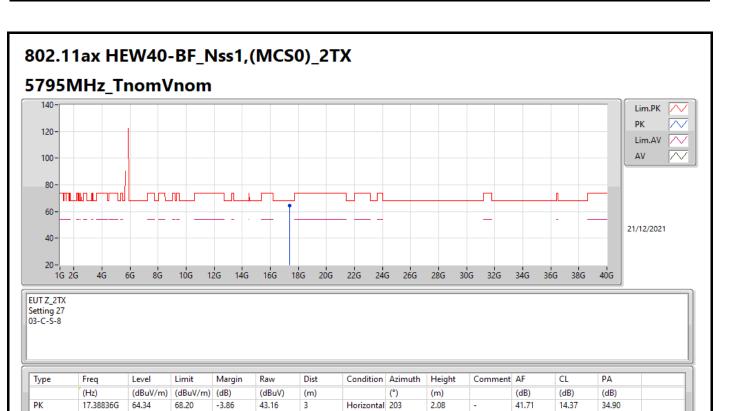
EUT Z_2TX Setting 27 03-C-K-4-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	5.556G	61.02	68.20	-7.18	54.31	3	Horizontal	252.3	2.13	-	34.58	7.51	35.38	
PK	5.791G	114.93	Inf	-Inf	108.62	3	Horizontal	252.3	2.13	-	34.40	7.41	35.50	
AV	5.792G	103.06	Inf	-Inf	96.75	3	Horizontal	252.3	2.13	-	34.40	7.41	35.50	
PK	5.929G	61.64	68.20	-6.56	55.03	3	Horizontal	252.3	2.13	-	34.64	7.53	35.56	











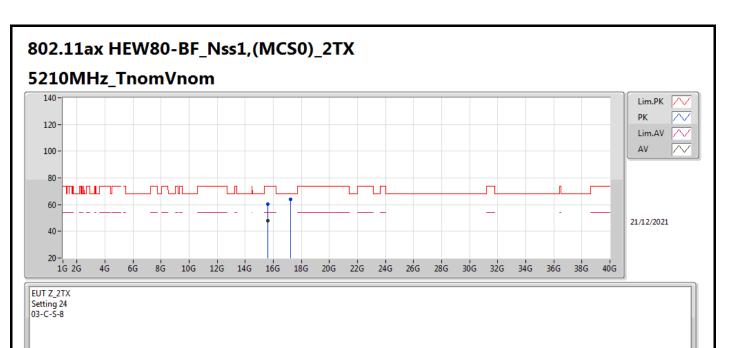
802.11ax HEW80-BF_Nss1,(MCS0)_2TX 5210MHz_TnomVnom 140-Lim.PK \wedge РК \sim 120-Lim.AV ٩N AV \sim 100-80 -60 -15/10/2021 40-20 -5.01G 5.04G 5.06G 5.08G 5.1G 5.12G 5.14G 5.16G 5.18G 5.2G 5.22G 5.24G 5.26G 5.28G 5.32G 5.32G 5.32G 5.34G 5.36G 5.38G 5.41G EUT Z_2TX Setting 24 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	5.1492G	68.37	74.00	-5.63	62.39	3	Vertical	350.5	1.80	-	34.10	7.22	35.34	
AV	5.1404G	52.49	54.00	-1.51	46.56	3	Vertical	350.5	1.80	-	34.06	7.21	35.34	
PK	5.2404G	111.80	Inf	-Inf	105.70	3	Vertical	350.5	1.80	-	34.16	7.28	35.34	
AV	5.19G	98.90	Inf	-Inf	92.94	3	Vertical	350.5	1.80	-	34.02	7.28	35.34	
PK	5.3524G	60.49	74.00	-13.51	54.01	3	Vertical	350.5	1.80	-	34.60	7.22	35.34	
AV	5.35G	47.52	54.00	-6.48	41.04	3	Vertical	350.5	1.80	-	34.60	7.22	35.34	



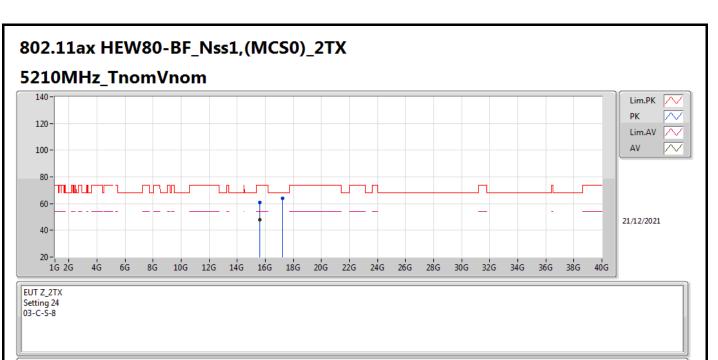
802.11ax HEW80-BF_Nss1,(MCS0)_2TX 5210MHz_TnomVnom 140-Lim.PK \wedge РК \sim 120- \sim Lim.AV AV \sim 100-80 -60 -22/12/2021 40-20 5.04G 5.06G 5.08G 5.1G 5.12G 5.14G 5.16G 5.18G 5.2G 5.22G 5.24G 5.26G 5.28G 5.3G 5.32G 5.34G 5.36G 5.38G 5.41G 5.01G EUT Z_2TX Setting 24 03-C-K-4-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dB) (dB) (Hz) (dBuV) (m) (°) (dB) (m) PK 5.1428G 64.61 74.00 -9.39 58.67 3 Horizontal 314 2.22 34.07 7.21 35.34 AV 5.1428G 49.58 54.00 -4.42 43.64 3 Horizontal 314 2.22 34.07 7.21 35.34 Horizontal 314 РК 5.2204G 104.72 -Inf 98.69 2.22 34.08 7.29 35.34 Inf 3 Horizontal 314 AV 5.2188G 93.63 Inf -Inf 87.60 3 2.22 34.08 7.29 35.34 . PK 5.3836G 60.50 74.00 -13.50 54.11 3 Horizontal 314 2.22 34.53 7.21 35.35 -AV 5.3788G 47.60 54.00 -6.40 41.20 3 Horizontal 314 2.22 34.54 7.21 35.35 .





Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.62594G	60.59	74.00	-13.41	45.01	3	Vertical	202	1.71	-	37.85	13.21	35.48
AV	15.6257G	47.80	54.00	-6.20	32.22	3	Vertical	202	1.71	-	37.85	13.21	35.48
PK	17.24184G	64.02	68.20	-4.18	43.80	3	Vertical	166	1.25	-	40.83	14.27	34.88



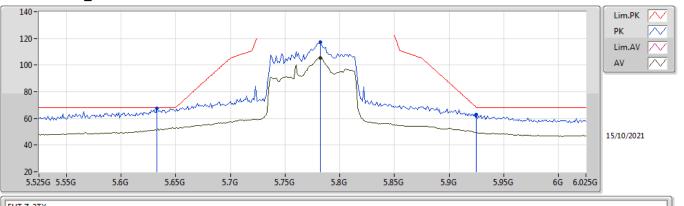


Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	15.62772G	60.83	74.00	-13.17	45.24	3	Horizontal	222	2.33	-	37.86	13.21	35.48
AV	15.6265G	47.70	54.00	-6.30	32.12	3	Horizontal	222	2.33	-	37.85	13.21	35.48
РК	17.2404G	63.97	68.20	-4.23	43.76	3	Horizontal	119	2.96	-	40.82	14.27	34.88



802.11ax HEW80-BF_Nss1,(MCS0)_2TX

5775MHz_TnomVnom



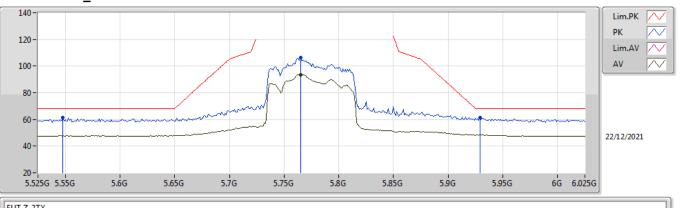
EUT Z_2TX Setting 24 03-D-C-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.633G	67.59	68.20	-0.61	61.04	3	Vertical	3	1.80	-	34.40	7.57	35.42
PK	5.782G	117.47	Inf	-Inf	111.14	3	Vertical	3	1.80	-	34.40	7.42	35.49
AV	5.782G	105.44	Inf	-Inf	99.11	3	Vertical	3	1.80	-	34.40	7.42	35.49
PK	5.925G	62.74	68.20	-5.46	56.12	3	Vertical	3	1.80	-	34.65	7.53	35.56



802.11ax HEW80-BF_Nss1,(MCS0)_2TX

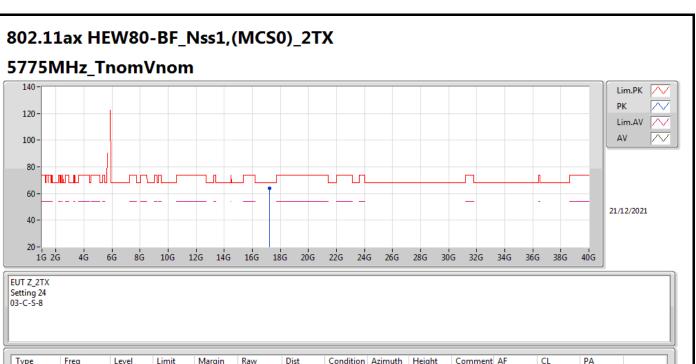
5775MHz_TnomVnom



EUT Z_2TX Setting 24 03-C-K-4-10

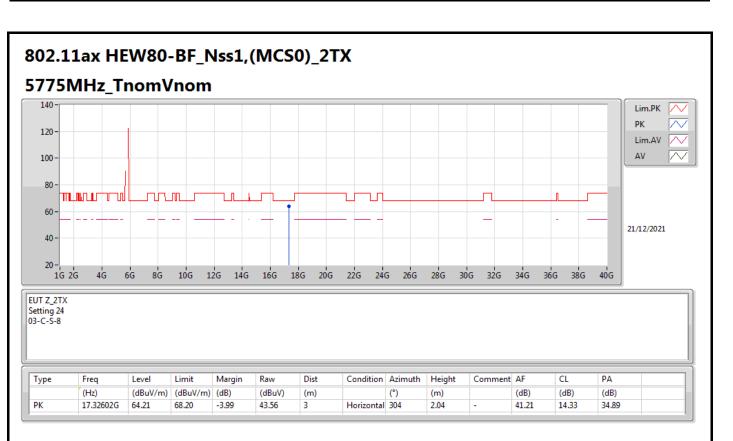
Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.548G	61.29	68.20	-6.91	54.56	3	Horizontal	64	2.24	-	34.60	7.50	35.37
PK	5.765G	106.49	Inf	-Inf	100.13	3	Horizontal	64	2.24	-	34.40	7.44	35.48
AV	5.765G	93.59	Inf	-Inf	87.23	3	Horizontal	64	2.24	-	34.40	7.44	35.48
PK	5.929G	61.29	68.20	-6.91	54.68	3	Horizontal	64	2.24	-	34.64	7.53	35.56





Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	17.22984G	64.08	68.20	-4.12	43.91	3	Vertical	89	1.77	-	40.79	14.26	34.88



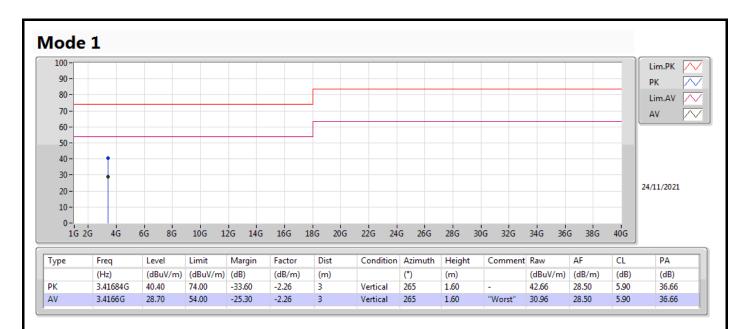




Summary							
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	
Mode 1	Pass	AV	3.4166G	28.70	54.00	-25.30	Vertical



Appendix F





Appendix F

