FCC RADIO TEST REPORT

Report No. : FR970322AB



FCC RADIO TEST REPORT

FCC ID	:	NDD9574791906
Equipment	1	AX1800 Dual-Band Ceiling Mount PoE AP
Brand Name		EDIMAX
Model Name		EW-7479CAX, CAX1800
Applicant	:	Edimax Technology Co., Ltd No.278, Xinhu 1st Rd., Neihu Dist., Taipei City, Taiwan
Manufacturer	;	Edimax Technology Co., Ltd No.278, Xinhu 1st Rd., Neihu Dist., Taipei City, Taiwan
Standard	:	47 CFR FCC Part 15.407

The product was received on Sep. 12, 2019, and testing was started from Oct. 19, 2019 and completed on Oct. 25, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Cliff Chang

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

TEL : 886-3-656-9065 FAX : 886-3-656-9085 Report Template No.: CB-A12\_1 Ver1.0 Page Number: 1 of 31Issued Date: Dec. 05, 2019Report Version: 01



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Photographs of EUT v01



# History of this test report

Report No.	Version	Description	Issued Date
FR970322AB	01	Initial issue of report	Dec. 05, 2019



# 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 Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

#### **Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

#### **Comments and Explanations:**

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.

2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

#### Reviewed by: Sam Chen Report Producer: Sandy Chuang



# **1** General Description

# 1.1 Information

### 1.1.1 **RF General Information**

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	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 modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.
- The product can only be ceiling mounted.

#### 1.1.2 Antenna Information

Ant.	Po	rt	Brand Model Name		Antenna	Connector	Gain (dBi)	
	2.4GHz	5GHz	Dianu	woder Name	Туре	Connector	2.4GHz	5GHz
1	2	1	LYNwave	ALX19P-222AA4-00	PIFA Antenna	I-PEX	2.2	2.9
2	1	2	LYNwave	ALX19P-222AA5-00	PIFA Antenna	I-PEX	2.1	2.6

Note: The above information was declared by manufacturer.

#### For 2.4GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

#### For 5GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.



### 1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.941	0.26	1.978m	1k
802.11ac VHT20	0.961	0.17	5.43m	300
802.11ac VHT40	0.897	0.47	5.433m	300
802.11ac VHT80	0.934	0.3	5.43m	300
802.11ax HEW20	0.968	0.14	5.448m	300
802.11ax HEW40	0.952	0.21	5.448m	300
802.11ax HEW80	0.942	0.26	5.448m	300

Note:

• DC is Duty Cycle.

• DCF is Duty Cycle Factor.

### 1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter or PoE					
	With beamfo	orming	Without beamforming			
Beamforming Function	The product has beamforming function for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz					
Function	Outdoor P2N	Λ	Indoor P2M			
Function	Fixed P2P		Client			
Test Software Version	QRCT : v4.0.00074					

Note: The above information was declared by manufacturer.

#### 1.1.5 Table for Multiple Listing

The EUT has two model names which are identical to each other in all aspects except for the following table:

Model Name	Description	
EW-7479CAX		
CAX1800	All the models are identical; different models serve as marketing strategy.	

From the above models, model: CAX1800 was selected as representative model for the test and its data was recorded in this report.



## **1.2 Applicable Standards**

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

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v02r01
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

# **1.3 Testing Location Information**

	Testing Location						
	HWA YA	ADD	:	. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)			
		TEL	:	886-3-327-3456 FAX : 886-3-327-0973			
$\boxtimes$	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.			
		TEL	:	886-3-656-9065 FAX : 886-3-656-9085			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Eddie Weng	24-25.8°C / 57-59%	Oct. 21, 2019~ Oct. 22, 2019
Radiated (Below 1GHz)	03CH06-CB	Paul Chen	23.8-24.4°C / 54-58%	Oct. 23, 2019
Radiated (Above 1GHz)	03CH06-CB	Eason Chen	23.6-25.2°C / 56-58%	Oct. 19, 2019~ Oct. 22, 2019
AC Conduction	CO01-CB	Rick Yeh	25~26°C / 45~47%	Oct. 25, 2019

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

### 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 (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



# 2 Test Configuration of EUT

# 2.1 Test Channel Mode

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	18
5200MHz	21
5240MHz	19.5
5745MHz	23
5785MHz	23
5825MHz	21
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	17.5
5200MHz	19
5240MHz	20.5
5745MHz	23
5785MHz	23
5825MHz	21.5
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	15
5230MHz	20
5755MHz	21.5
5795MHz	23
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	14
5775MHz	21.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	17.5
5200MHz	19
5240MHz	20.5
5745MHz	23
5785MHz	23
5825MHz	21.5
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	15
5230MHz	20
5755MHz	21.5
5795MHz	23
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	14

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Mode	PowerSetting
5775MHz	21.5

Note:

- VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40. There are two modes of EUT, one is beamforming mode, and the other is Non-beamforming mode for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz. For Manufacturer requirement: Only Non-beamforming mode was tested and recorded in this report. The power setting will be 3dB lower than non-beamforming for beamforming mode by manufacturer dedication.
- declaration.



# 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	
Operating Mode Normal Link		
1	Normal Link: RJ-45 cable (color: yellow) + Adapter 1	
2	Normal Link: RJ-45 cable (color: yellow) + Adapter 2	
3	Normal Link: RJ-45 cable (color: yellow) + PoE	
Mode 2 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.		
4 Normal Link: RJ-45 cable (color: gray) + Adapter 2		
For operating mode 2 is the worst case and it was record in this test report.		

The Worst Case Mode for Following Conformance Tests

	5		
	Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density	
Т	est Condition	Conducted measurement at transmit chains	

Th	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	Normal Link: RJ-45 cable (color: yellow) + Adapter 1			
2	Normal Link: RJ-45 cable (color: yellow) + Adapter 2			
3	Normal Link: RJ-45 cable (color: yellow) + PoE			
Mode 2 has been evaluate this same test mode.	Mode 2 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.			
4	Normal Link: RJ-45 cable (color: gray) + Adapter 2			
For operating mode 2 is th	e worst case and it was record in this test report.			
Operating Mode > 1GHz CTX				



The Worst Case Mode for Following Conformance Tests		
Tests Item         Simultaneous Transmission Analysis - Radiated Emission Co-location		
Test Condition Radiated measurement		
Operating Mode Normal Link		
1 WLAN 2.4GHz+WLAN 5GHz		
Refer to Appendix F for Radiated Emission Co-location.		

The Worst Case Mode for Following Conformance Tests		
Tests Item         Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation		
Operating Mode		
1 WLAN 2.4GHz+WLAN 5GHz		
Refer to Sporton Test Report No.: FA970322 for Co-location RF Exposure Evaluation.		

Note 1: The EUT can only be used in Z-axis position.

Note 2: The PoE below is for measurement only, would not be marketed.

The PoE information as below: Adapter

Support Unit	Brand	Model Number
PoE	BullotPoE	BPI100-GH



# 2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

### 2.4 Accessories

Accessories				
Equipment Name	Brand Name	Model Name	Rating	
Adapter 1	DVE	DSA-12PF09-12 FUS 120100	Input: 100-240V~50/60Hz 0.5A Output: +12V, 1A	
Adapter 2	APD	WB-12G12R	Input: 100-240V~, 50-60Hz 0.3A Max. Output: 12V, 1A	
		Other		
Plug*1 (use for Adapter 2)				
RJ-45 cable*1: Non-Shielded, 1.8m (color: yellow)				
RJ-45 cable*1: Non-Shielded, 1.0m (color: gray)				
Ceiling Mount Bracket*1				



# 2.5 Support Equipment

#### For AC Conduction:

	Support Equipment					
No.	No. Equipment Brand Name Model Name FCC ID					
А	5G NB	DELL	E6430	N/A		
В	LAN NB	DELL	E6430	N/A		
С	2.4G NB	DELL	E6430	N/A		

#### For Radiated (below 1GHz):

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

#### For Radiated (above 1GHz):

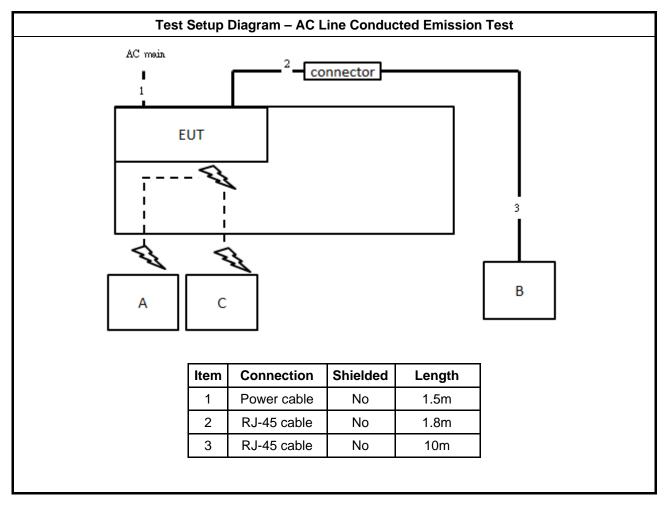
	Support Equipment					
No.	No. Equipment Brand Name Model Name FCC ID					
А	NB	DELL	E4300	N/A		

#### For RF Conducted:

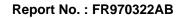
Support Equipment					
No. Equipment Brand Name Model Name FCC ID					
А	NB	DELL	E4300	N/A	

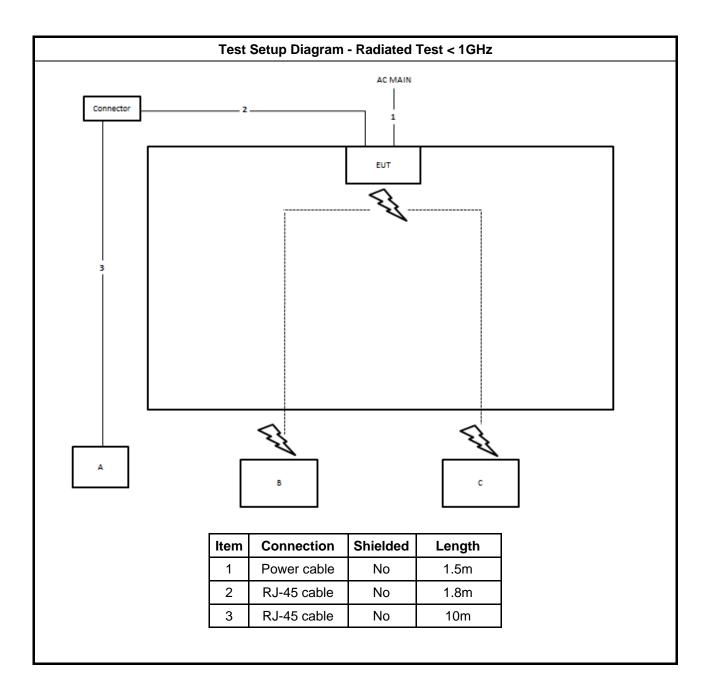


# 2.6 Test Setup Diagram

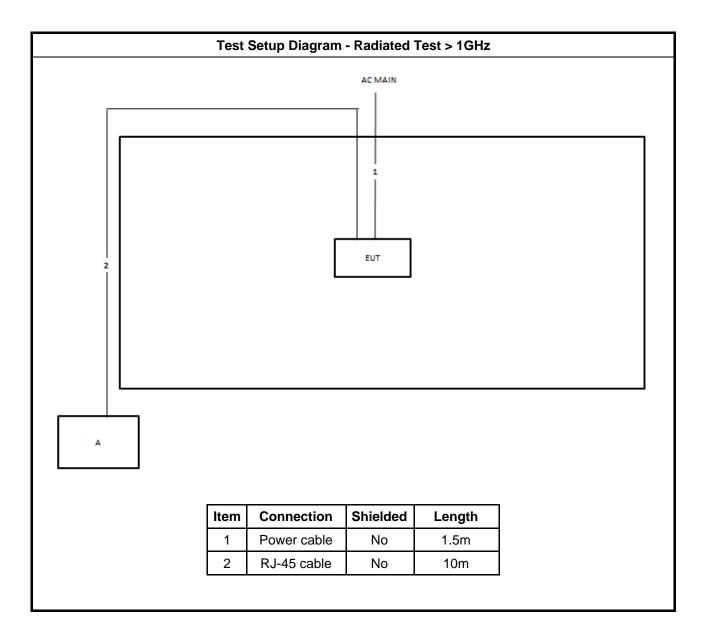














# 3 Transmitter Test Result

# 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.				

### 3.1.2 Measuring Instruments

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

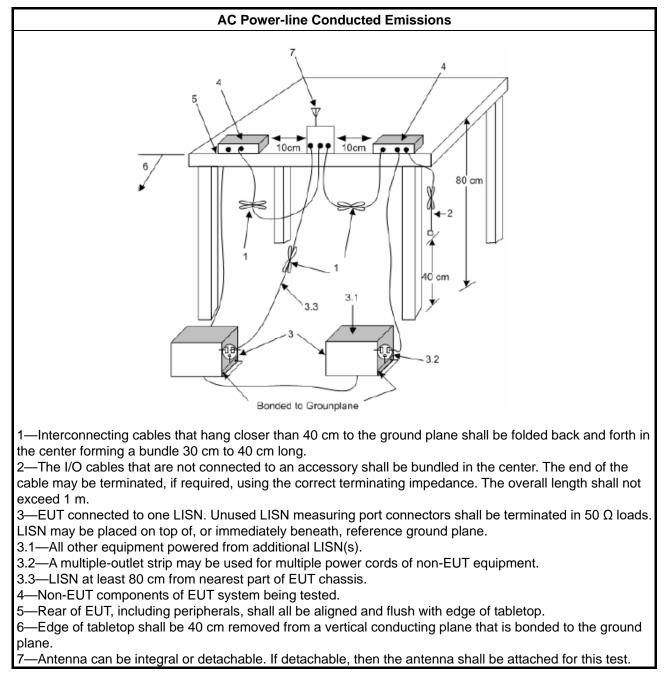
### 3.1.3 Test Procedures

**Test Method** 

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



#### 3.1.4 Test Setup



### 3.1.5 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	I 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.			
$\boxtimes$	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.			
LE-I	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.			
	2.2.2. Mecouring Instruments			

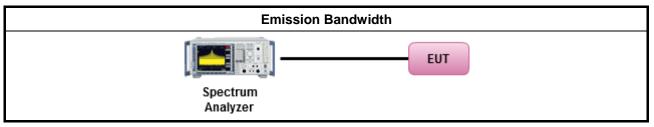
### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

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

### 3.2.4 Test Setup



#### 3.2.5 Test Result of Emission Bandwidth

#### Refer as Appendix B



# 3.3 Maximum Conducted Output Power

## 3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit					
UNII Devices					
$\boxtimes$	For the 5.15-5.25 GHz band:				
	<ul> <li>Outdoor AP: the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W. If G<sub>TX</sub> &gt; 6 dBi, then P<sub>Out</sub> = 30 - (G<sub>TX</sub> - 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]</li> </ul>				
	• Indoor AP: the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$				
	<ul> <li>Point-to-point AP: the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W If G<sub>TX</sub> &gt; 23 dBi, then P<sub>Out</sub> = 30 - (G<sub>TX</sub> - 23).</li> </ul>				
	<ul> <li>Mobile or Portable Client: the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 250 mW. If G<sub>TX</sub> &gt; 6 dBi, then P<sub>Out</sub> = 24 - (G<sub>TX</sub> - 6).</li> </ul>				
	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:				
	<ul> <li>Point-to-multipoint systems (P2M): the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W. If G<sub>TX</sub> &gt; 6 dBi, then P<sub>Out</sub> = 30 - (G<sub>TX</sub> - 6).</li> </ul>				
	<ul> <li>Point-to-point systems (P2P): the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W.</li> </ul>				
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:				
	<ul> <li>Point-to-multipoint systems (P2M): the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W. If G<sub>TX</sub> &gt; 6 dBi, then P<sub>Out</sub> = 30 - (G<sub>TX</sub> - 6).</li> </ul>				
	<ul> <li>Point-to-point systems (P2P): the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W.</li> </ul>				
	$t_{t}$ = maximum conducted output power in dBm, = the maximum transmitting antenna directional gain in dBi.				



### 3.3.2 Measuring Instruments

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

#### 3.3.3 Test Procedures

	Test Method				
•	Maximum Conducted Output Power				
	Average over on/off periods with duty factor				
	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).				
	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)				
	Wideband RF power meter and average over on/off periods with duty factor				
	Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).				
•	For conducted measurement.				
	<ul> <li>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.</li> </ul>				
	<ul> <li>If multiple transmit chains, EIRP calculation could be following as methods: P<sub>total</sub> = P<sub>1</sub> + P<sub>2</sub> + + P<sub>n</sub> (calculated in linear unit [mW] and transfer to log unit [dBm]) EIRP<sub>total</sub> = P<sub>total</sub> + DG     </li> </ul>				

### 3.3.4 Test Setup

RF Output Power (Power Meter)				
Power Meter				

### 3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



# 3.4 Peak Power Spectral Density

## 3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit					
UNI	UNII 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 $P_{Out} = 17 - (G_{TX} - 6)$ .				
	<ul> <li>Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G<sub>TX</sub> &gt; 23 dBi, then P<sub>Out</sub> = 17 – (G<sub>TX</sub> – 23).</li> </ul>				
	<ul> <li>Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G<sub>TX</sub> &gt; 6 dBi, then PPSD= 11 – (G<sub>TX</sub> – 6)</li> </ul>				
	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq$ 11 dBm/MHz. If G <sub>TX</sub> > 6 dBi, then PPSD= 11 – (G <sub>TX</sub> – 6).				
	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) $\leq$ 11 dBm/MHz. If G <sub>TX</sub> > 6 dBi, then PPSD= 11 – (G <sub>TX</sub> – 6).				
$\boxtimes$	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 - ( $G_{TX} - 6$ ).				
	<ul> <li>Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.</li> </ul>				
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.				
	<ul> <li>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:</li> <li>-13 dBW/MHz for 0° ≤ θ &lt; 8°; -13 - 0.716 (θ-8) dBW/MHz for 8° ≤ θ &lt; 40°</li> <li>-35.9 - 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45°; -42 dBW/MHz for θ &gt; 45°</li> </ul>				
	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.				
pow	<b>PPSD</b> = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz $G_{TX}$ = the maximum transmitting antenna directional gain in dBi.				



### 3.4.2 Measuring Instruments

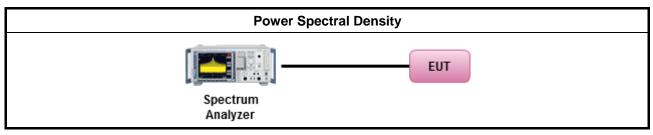
Refer a test equipment and calibration data table in this test report.

### 3.4.3 Test Procedures

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



### 3.4.4 Test Setup



### 3.4.5 Test Result of Peak 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							
<b>Operating Band</b>	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.						
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							



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linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

#### 3.5.2 **Measuring Instruments**

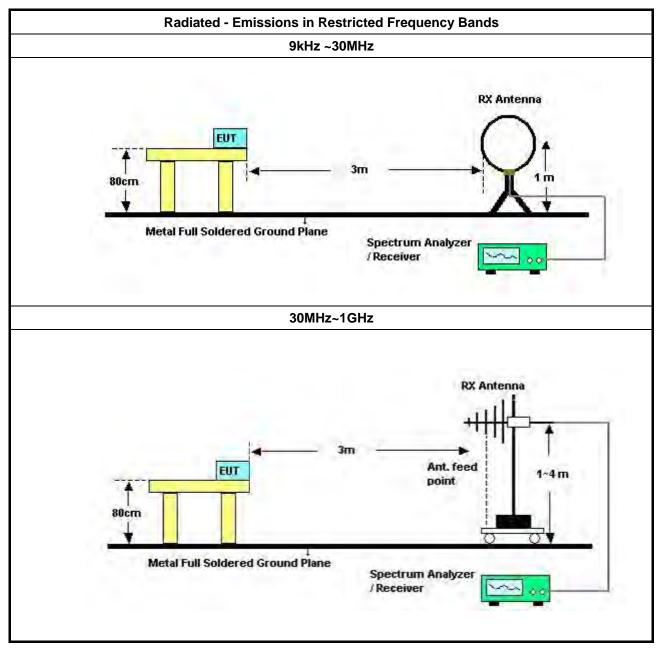
Refer a test equipment and calibration data table in this test report.

#### 3.5.3 **Test Procedures**

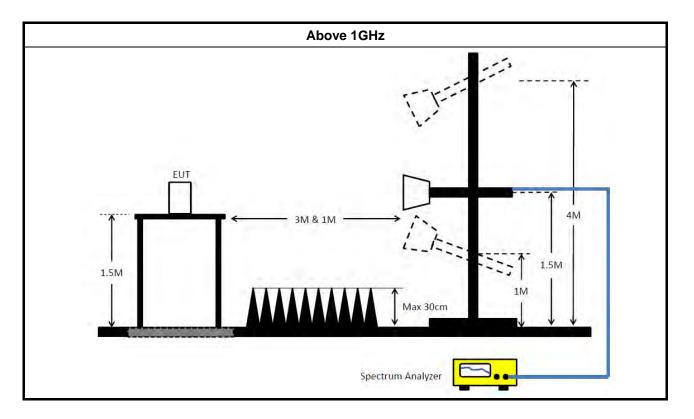
	Test Method								
•	Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies 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:								
	<ul> <li>Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.</li> </ul>								
	<ul> <li>Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.</li> </ul>								
	Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).								
	Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).								
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.								
	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.								
	Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.								
	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.								
•	For radiated measurement.								
	• Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.								
	<ul> <li>Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.</li> </ul>								
	<ul> <li>Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>								
•	The any unwanted emissions level shall not exceed the fundamental emission level.								
•	All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value 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 + Čable Loss + Read Level - Preamp Factor = Level.

#### 3.5.6 Emissions in Restricted Frequency Bands (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 10 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	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 28, 2019	Jan. 29, 2020	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50- 16-2	04083	150kHz ~ 100MHz	Dec. 24, 2018	Dec. 23, 2019	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Jan. 11, 2019 Jan. 10, 2020		Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019 May 20, 2020		Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Aug. 03, 2019	Aug. 02, 2020	Radiation (03CH06-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBE CK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	310N	187290	0.1MHz ~ 1GHz	May 07, 2019	May 06, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 08, 2019	May 07, 2020	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH06-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Jan. 31, 2019	Jan. 30, 2020	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH06-CB)
RF Cable-low	HUBER+SUH NER	RG402	Low Cable-05+24	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUH NER	RG402	High Cable-05	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUH NER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)

: Dec. 05, 2019

Issued Date Report Version : 01



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz Oct. 07, 2019		Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)

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

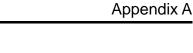
NCR means Non-Calibration required.

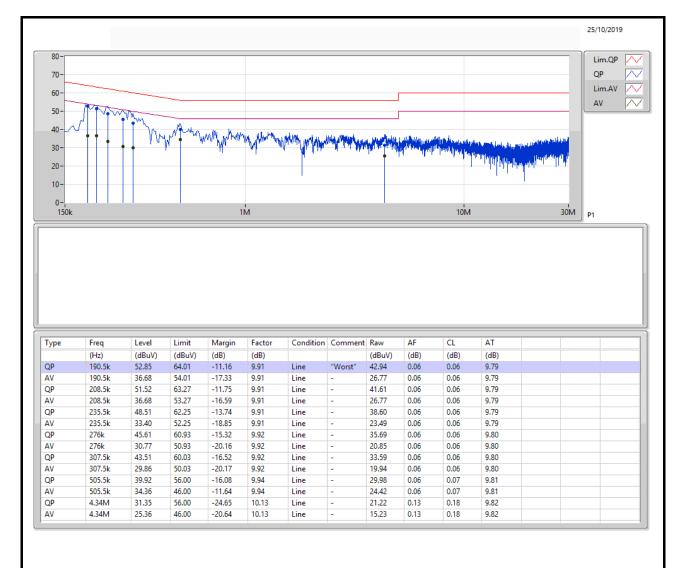


Summary
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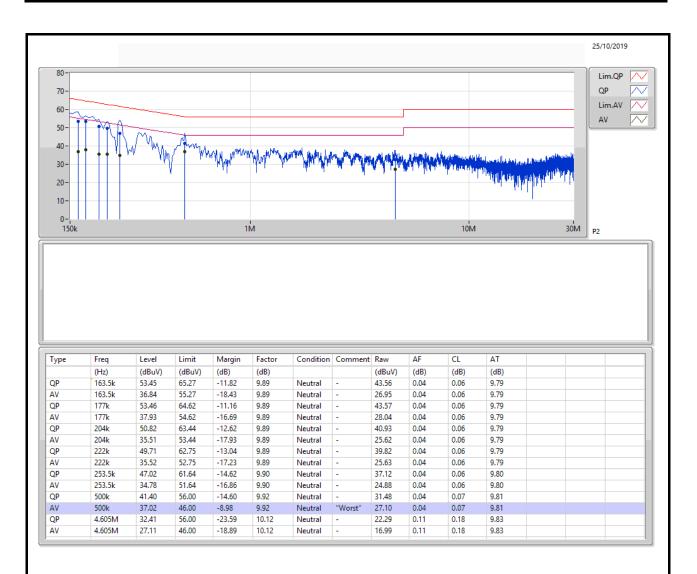
2	Sammary									
I	Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Condition	
				(Hz)	(dBuV)	(dBuV)	(dB)	(dB)		
I	Mode 2	Pass	AV	500k	37.02	46.00	-8.98	9.92	Neutral	













#### 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	39.375M	19.54M	19M5D1D	19.275M	16.392M
802.11ac VHT20_Nss1,(MCS0)_2TX	39.35M	18.016M	18M0D1D	20.65M	17.591M
802.11ac VHT40_Nss1,(MCS0)_2TX	88.65M	37.081M	37M1D1D	40.35M	36.082M
802.11ac VHT80_Nss1,(MCS0)_2TX	82.1M	75.362M	75M4D1D	81.6M	75.262M
802.11ax HEW20_Nss1,(MCS0)_2TX	38.225M	19.19M	19M2D1D	21.05M	18.891M
802.11ax HEW40_Nss1,(MCS0)_2TX	85.85M	38.431M	38M4D1D	40.95M	37.681M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.1M	77.061M	77M1D1D	82.1M	76.862M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.3M	30.685M	30M7D1D	15M	17.991M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.6M	31.809M	31M8D1D	16.55M	21.064M
802.11ac VHT40_Nss1,(MCS0)_2TX	36.3M	62.119M	62M1D1D	35.25M	39.58M
802.11ac VHT80_Nss1,(MCS0)_2TX	75.1M	99.25M	99M2D1D	61.2M	80.26M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.95M	32.034M	32M0D1D	18.6M	19.79M
802.11ax HEW40_Nss1,(MCS0)_2TX	38.35M	63.068M	63M1D1D	37.3M	38.931M
802.11ax HEW80_Nss1,(MCS0)_2TX	77.6M	99.65M	99M6D1D	75.8M	80.46M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band; Max-OBW = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band; 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	21.075M	16.492M	19.275M	16.392M
5200MHz	Pass	Inf	39.375M	19.54M	31.1M	16.517M
5240MHz	Pass	Inf	34.075M	16.617M	20.7M	16.442M
5745MHz	Pass	500k	16.3M	30.685M	15.3M	20.765M
5785MHz	Pass	500k	15M	28.461M	16.275M	21.864M
5825MHz	Pass	500k	15.375M	18.166M	16M	17.991M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	22.25M	17.616M	20.65M	17.616M
5200MHz	Pass	Inf	29.775M	17.741M	21.275M	17.591M
5240MHz	Pass	Inf	39.35M	18.016M	24.35M	17.666M
5745MHz	Pass	500k	17.575M	31.809M	17.6M	21.389M
5785MHz	Pass	500k	16.65M	29.36M	16.55M	21.414M
5825MHz	Pass	500k	17.55M	21.539M	17.525M	21.064M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.95M	36.082M	40.35M	36.132M
5230MHz	Pass	Inf	88.65M	37.081M	47.1M	36.232M
5755MHz	Pass	500k	36.3M	56.972M	36.3M	39.58M
5795MHz	Pass	500k	36.25M	62.119M	35.25M	41.679M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.1M	75.362M	81.6M	75.262M
5775MHz	Pass	500k	75.1M	99.25M	61.2M	80.26M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.85M	18.941M	21.05M	18.966M
5200MHz	Pass	Inf	30.425M	18.991M	21.525M	18.891M
5240MHz	Pass	Inf	38.225M	19.19M	26.375M	18.966M
5745MHz	Pass	500k	18.925M	32.034M	18.625M	19.79M
5785MHz	Pass	500k	18.95M	29.985M	18.6M	20.065M
5825MHz	Pass	500k	18.725M	20.69M	18.6M	20.315M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.95M	37.731M	41M	37.681M
5230MHz	Pass	Inf	85.85M	38.431M	49.75M	37.831M
5755MHz	Pass	500k	37.95M	58.271M	37.3M	38.931M
5795MHz	Pass	500k	38.15M	63.068M	38.35M	40.23M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.1M	77.061M	82.1M	76.862M
5775MHz	Pass	500k	75.8M	99.65M	77.6M	80.46M

**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;

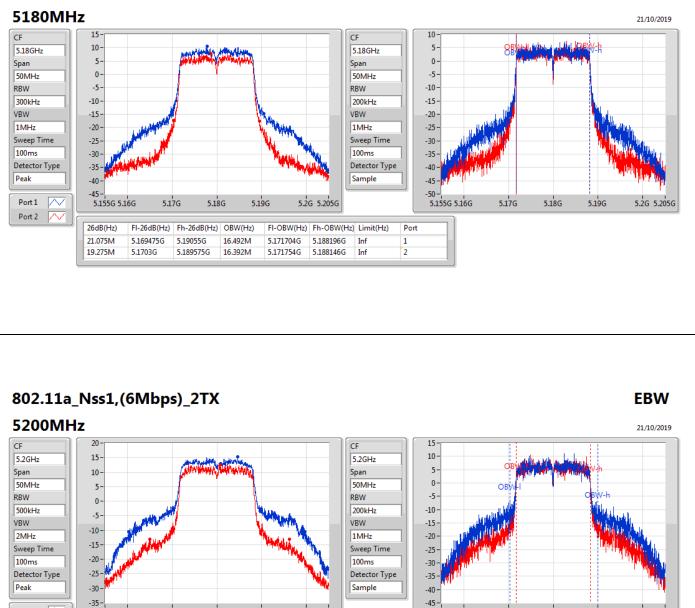


Port 1

Port 2

 $\sim$ 

### 802.11a\_Nss1,(6Mbps)\_2TX



	5.175G 5.1	18G 5.1	9G 5.2	G 5.21	IG 5.22	G 5.225G			5.175G 5.18G
ļ	26dB(Hz)	FI-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	FI-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port	
	39.375M	5.180275G	5.21965G	19.54M	5.19038G	5.20992G	Inf	1	
	31.1M	5.185075G	5.216175G	16.517M	5.191704G	5.208221G	Inf	2	

#### SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory.

5.19G

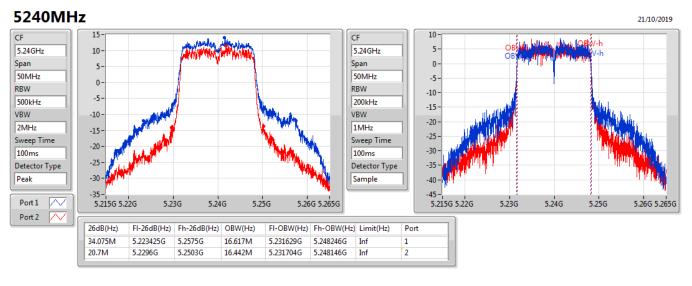
5.2G

5.21G

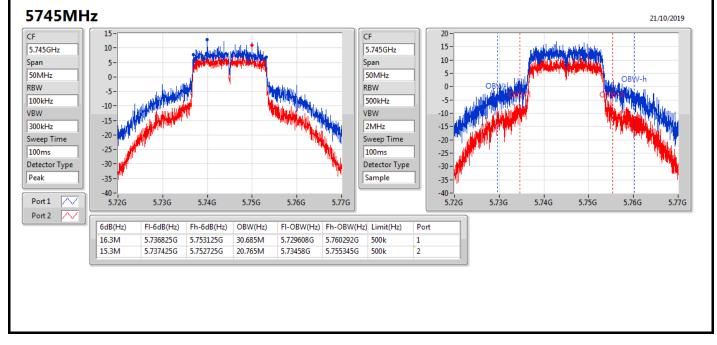
5.22G 5.225G



### 802.11a\_Nss1,(6Mbps)\_2TX

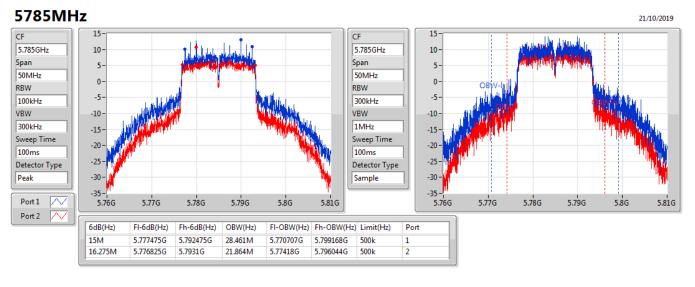


### 802.11a\_Nss1,(6Mbps)\_2TX

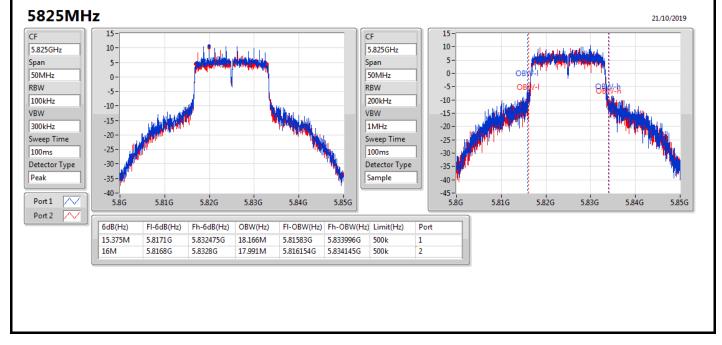




### 802.11a\_Nss1,(6Mbps)\_2TX

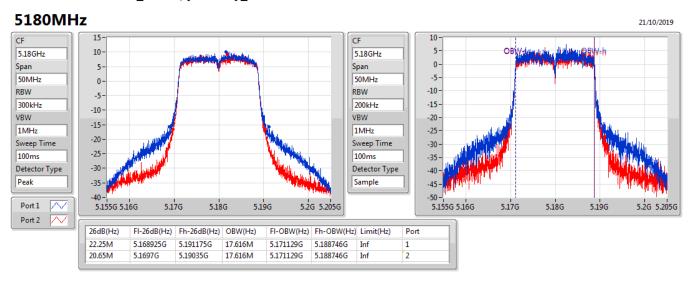


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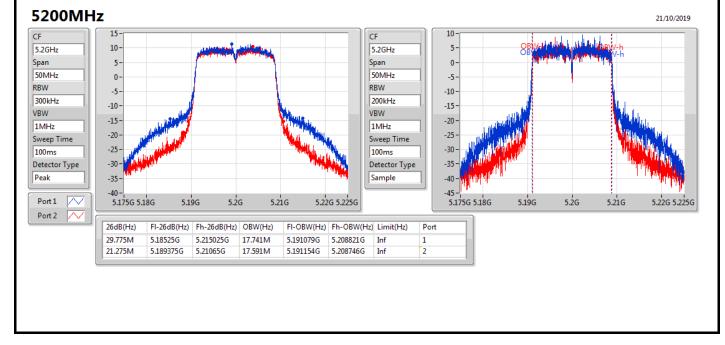




### 802.11ac VHT20\_Nss1,(MCS0)\_2TX

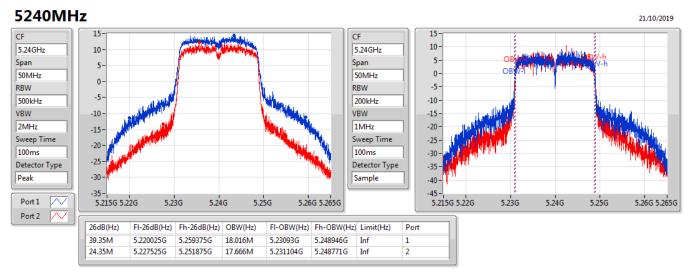


### 802.11ac VHT20\_Nss1,(MCS0)\_2TX

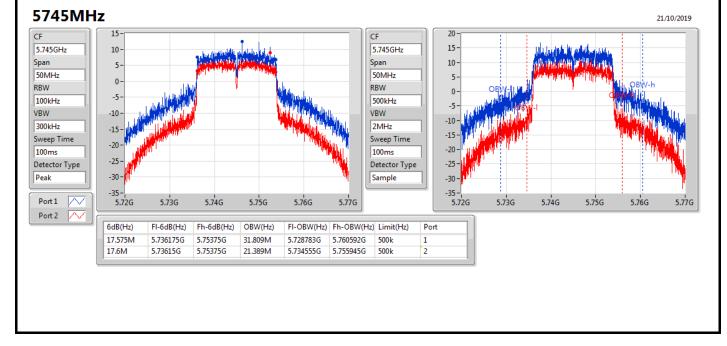




### 802.11ac VHT20\_Nss1,(MCS0)\_2TX

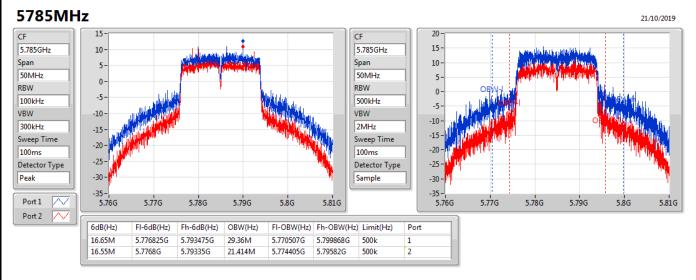


### 802.11ac VHT20\_Nss1,(MCS0)\_2TX

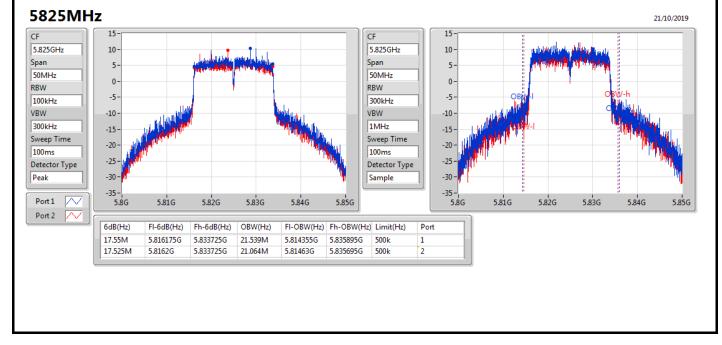




### 802.11ac VHT20\_Nss1,(MCS0)\_2TX



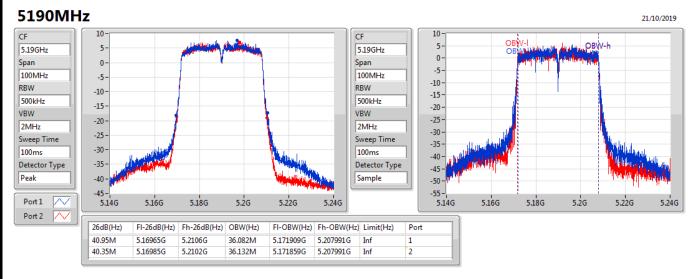
### 802.11ac VHT20\_Nss1,(MCS0)\_2TX



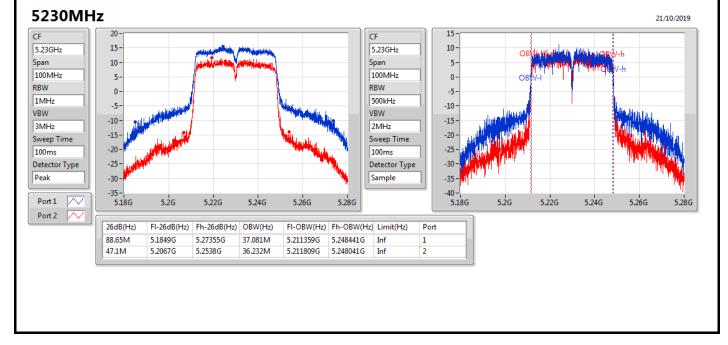


#### EBW

### 802.11ac VHT40\_Nss1,(MCS0)\_2TX

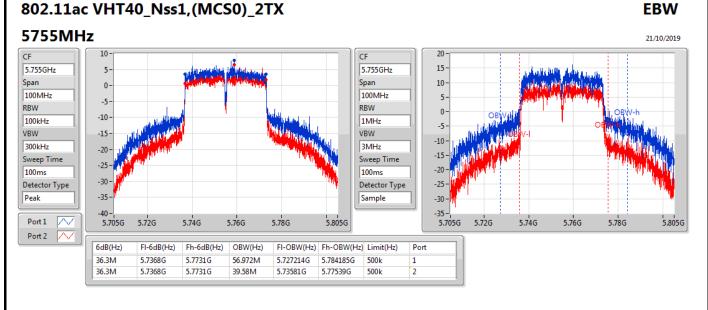


### 802.11ac VHT40\_Nss1,(MCS0)\_2TX



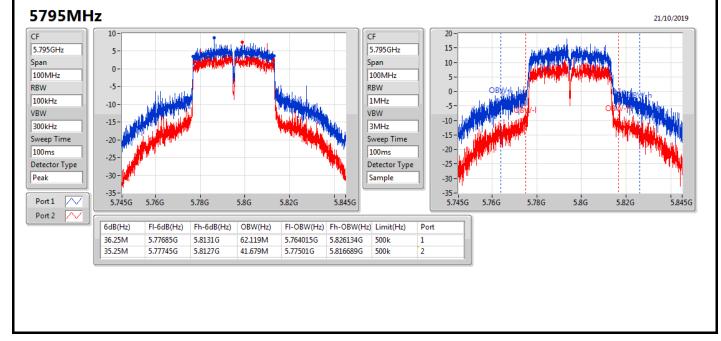


# 802.11ac VHT40\_Nss1,(MCS0)\_2TX



### 802.11ac VHT40\_Nss1,(MCS0)\_2TX

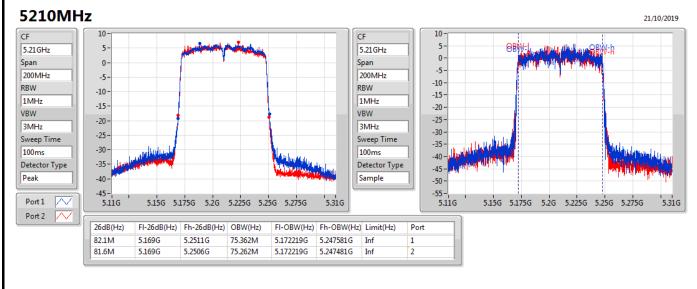




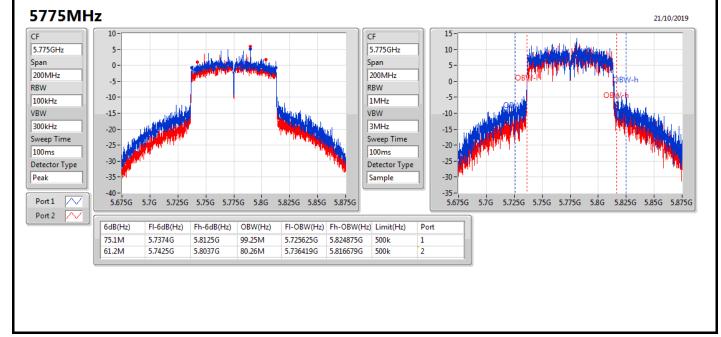


#### EBW

#### 802.11ac VHT80\_Nss1,(MCS0)\_2TX

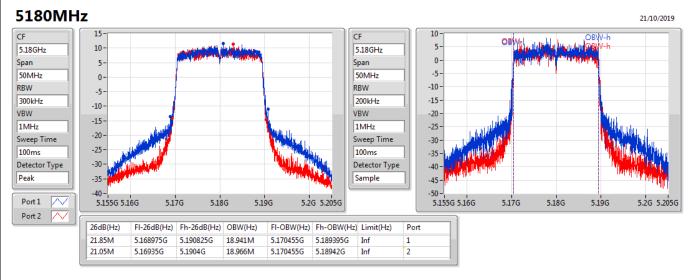


### 802.11ac VHT80\_Nss1,(MCS0)\_2TX

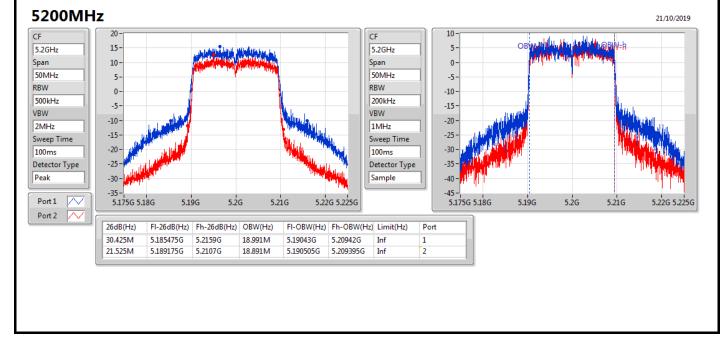




### 802.11ax HEW20\_Nss1,(MCS0)\_2TX

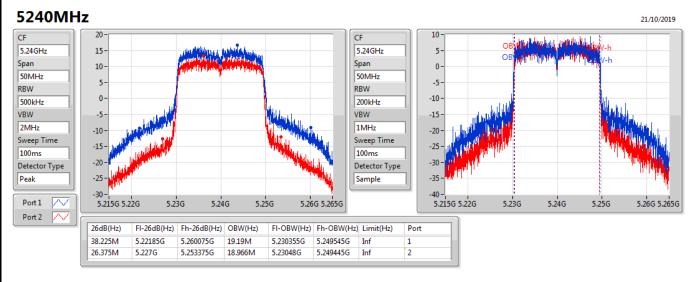


### 802.11ax HEW20\_Nss1,(MCS0)\_2TX

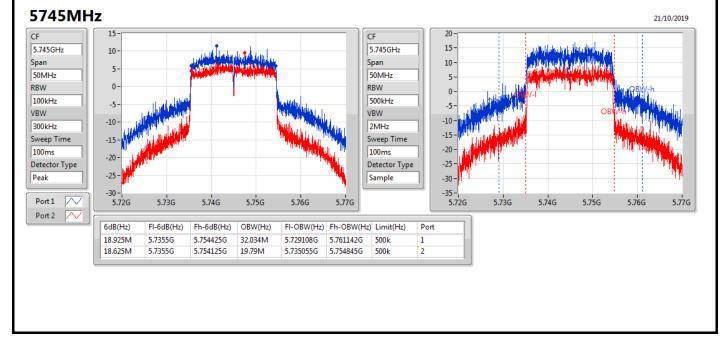




### 802.11ax HEW20\_Nss1,(MCS0)\_2TX



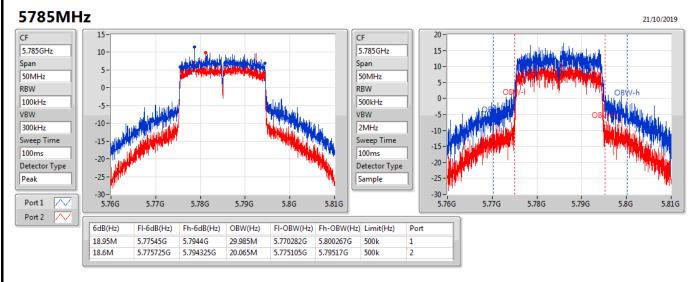
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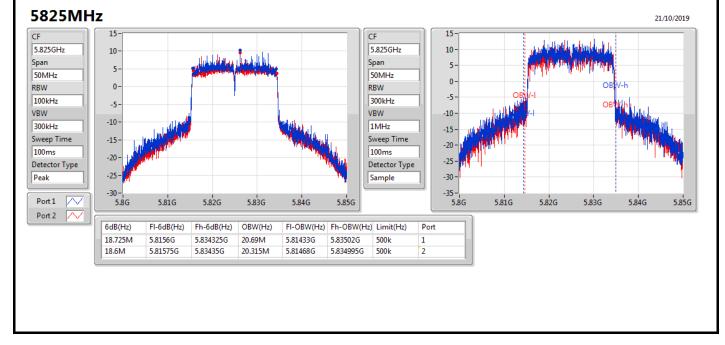


#### EBW

### 802.11ax HEW20\_Nss1,(MCS0)\_2TX



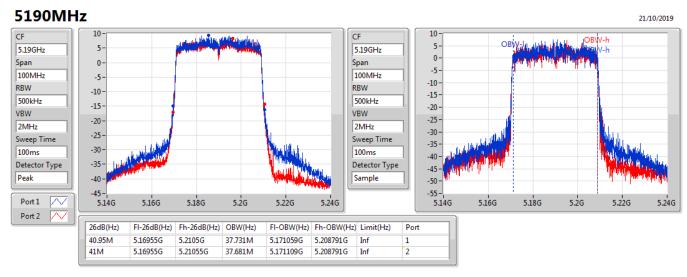
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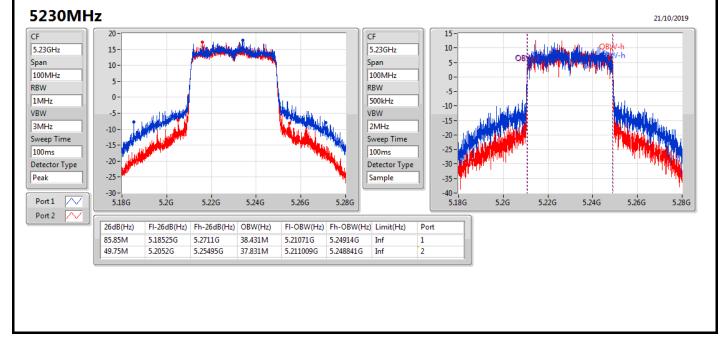


#### EBW

### 802.11ax HEW40\_Nss1,(MCS0)\_2TX



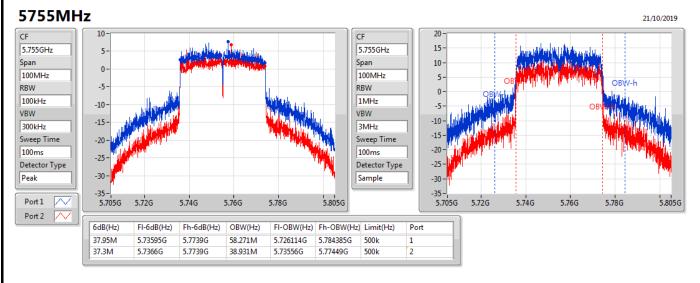
### 802.11ax HEW40\_Nss1,(MCS0)\_2TX



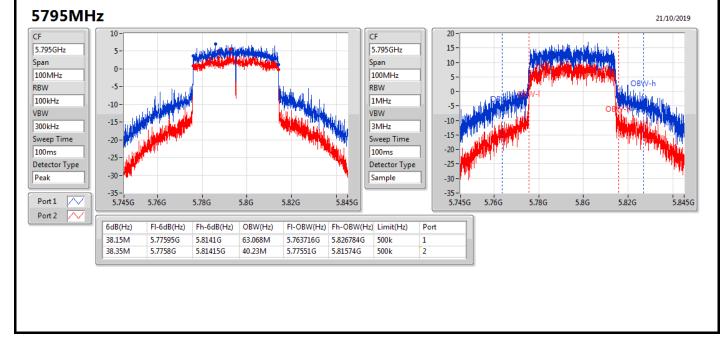


#### EBW

### 802.11ax HEW40\_Nss1,(MCS0)\_2TX

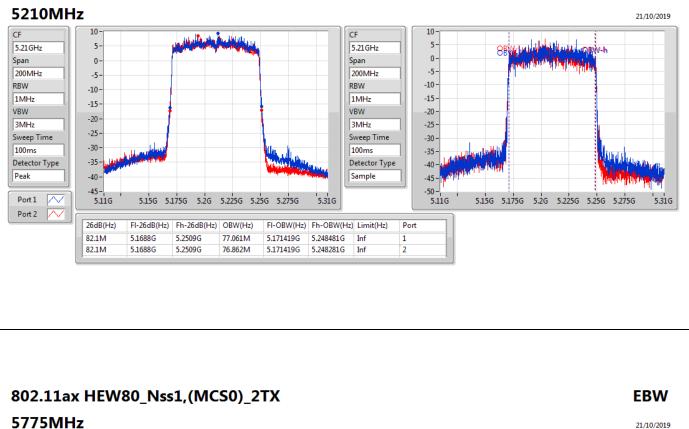


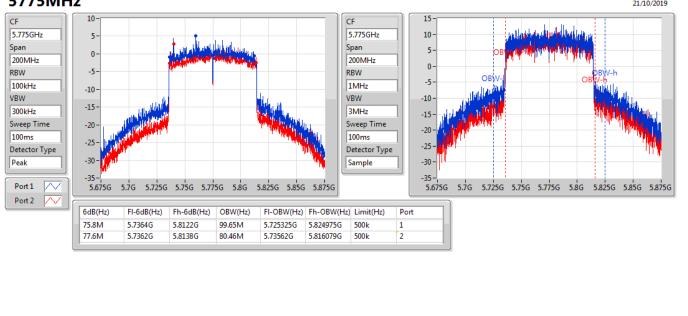
### 802.11ax HEW40\_Nss1,(MCS0)\_2TX





#### 802.11ax HEW80\_Nss1,(MCS0)\_2TX







#### Summary

Mode	Total Power	Total Power
	(dBm)	(W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	23.86	0.24322
802.11ac VHT20_Nss1,(MCS0)_2TX	23.29	0.21330
802.11ac VHT40_Nss1,(MCS0)_2TX	23.34	0.21577
802.11ac VHT80_Nss1,(MCS0)_2TX	17.61	0.05768
802.11ax HEW20_Nss1,(MCS0)_2TX	23.46	0.22182
802.11ax HEW40_Nss1,(MCS0)_2TX	23.60	0.22909
802.11ax HEW80_Nss1,(MCS0)_2TX	17.80	0.06026
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	25.36	0.34356
802.11ac VHT20_Nss1,(MCS0)_2TX	25.33	0.34119
802.11ac VHT40_Nss1,(MCS0)_2TX	25.31	0.33963
802.11ac VHT80_Nss1,(MCS0)_2TX	24.48	0.28054
802.11ax HEW20_Nss1,(MCS0)_2TX	25.27	0.33651
802.11ax HEW40_Nss1,(MCS0)_2TX	25.27	0.33651
802.11ax HEW80_Nss1,(MCS0)_2TX	24.58	0.28708



#### Result

Mode	Result	DG	Port 1	Port 2	Total Power	Power Lir
		(dBi)	(dBm)	(dBm)	(dBm)	(dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	2.90	18.55	18.01	21.30	30.00
5200MHz	Pass	2.90	20.98	20.71	23.86	30.00
5240MHz	Pass	2.90	19.58	19.31	22.46	30.00
5745MHz	Pass	2.90	23.35	21.04	25.36	30.00
5785MHz	Pass	2.90	22.86	21.13	25.09	30.00
5825MHz	Pass	2.90	21.09	20.50	23.82	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX		-	-	-	-	-
5180MHz	Pass	2.90	18.02	17.54	20.80	30.00
5200MHz	Pass	2.90	18.49	18.81	21.66	30.00
5240MHz	Pass	2.90	20.33	20.23	23.29	30.00
5745MHz	Pass	2.90	23.33	21.00	25.33	30.00
5785MHz	Pass	2.90	22.86	21.02	25.05	30.00
5825MHz	Pass	2.90	21.55	20.92	24.26	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	2.90	15.91	15.61	18.77	30.00
5230MHz	Pass	2.90	20.57	20.08	23.34	30.00
5755MHz	Pass	2.90	22.61	21.09	24.93	30.00
5795MHz	Pass	2.90	23.30	21.00	25.31	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	2.90	14.85	14.33	17.61	30.00
5775MHz	Pass	2.90	22.02	20.85	24.48	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	2.90	18.21	17.60	20.93	30.00
5200MHz	Pass	2.90	19.44	19.05	22.26	30.00
5240MHz	Pass	2.90	20.47	20.43	23.46	30.00
5745MHz	Pass	2.90	23.33	20.85	25.27	30.00
5785MHz	Pass	2.90	22.92	20.97	25.06	30.00
5825MHz	Pass	2.90	21.64	21.02	24.35	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	2.90	16.10	15.57	18.85	30.00
5230MHz	Pass	2.90	20.86	20.30	23.60	30.00
5755MHz	Pass	2.90	22.73	20.89	24.92	30.00
5795MHz	Pass	2.90	23.27	20.93	25.27	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	2.90	15.04	14.53	17.80	30.00
5775MHz	Pass	2.90	22.13	20.92	24.58	30.00

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



#### Summary

Mode	PD
	(dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	11.29
802.11ac VHT20_Nss1,(MCS0)_2TX	10.44
802.11ac VHT40_Nss1,(MCS0)_2TX	7.85
802.11ac VHT80_Nss1,(MCS0)_2TX	-1.03
802.11ax HEW20_Nss1,(MCS0)_2TX	10.30
802.11ax HEW40_Nss1,(MCS0)_2TX	7.62
802.11ax HEW80_Nss1,(MCS0)_2TX	-0.90
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	11.04
802.11ac VHT20_Nss1,(MCS0)_2TX	10.69
802.11ac VHT40_Nss1,(MCS0)_2TX	8.04
802.11ac VHT80_Nss1,(MCS0)_2TX	4.04
802.11ax HEW20_Nss1,(MCS0)_2TX	10.25
802.11ax HEW40_Nss1,(MCS0)_2TX	7.62
802.11ax HEW80_Nss1,(MCS0)_2TX	4.06

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

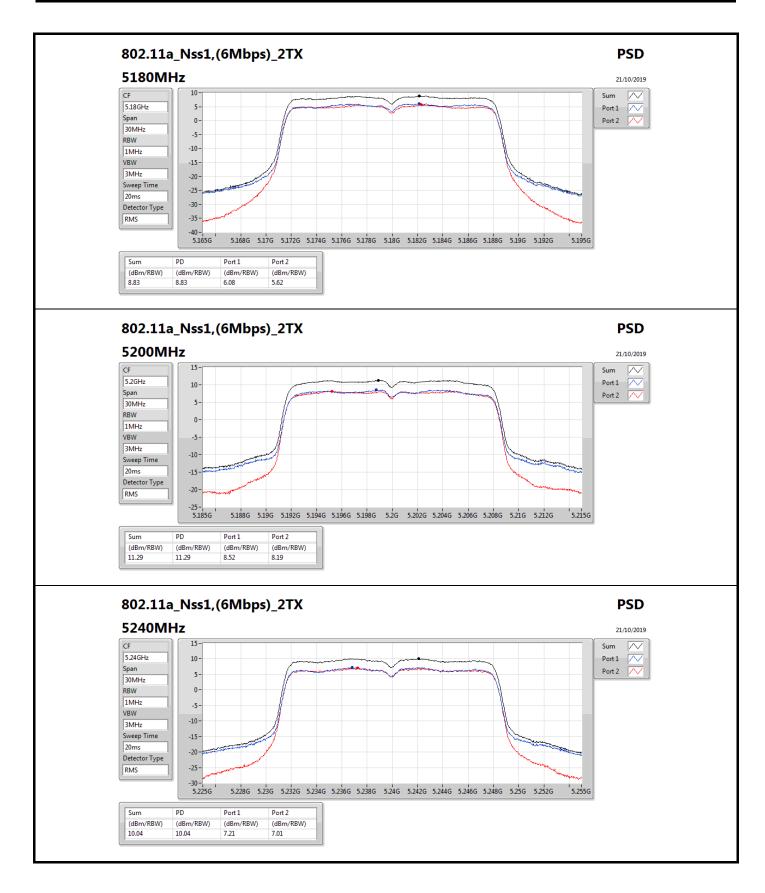


#### Result

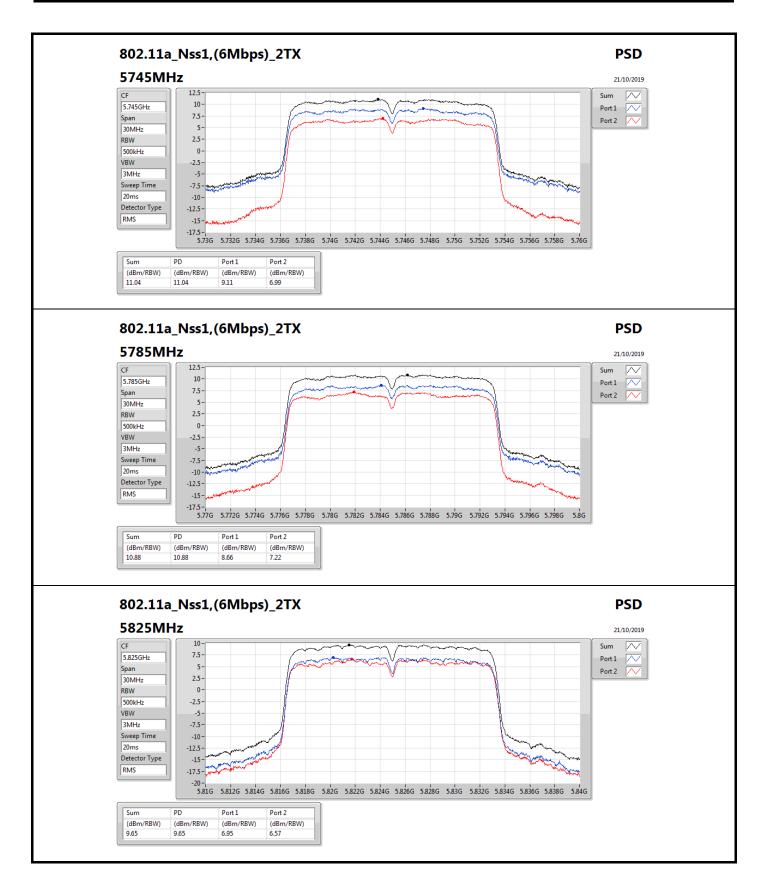
Mode	Result	DG	Port 1	Port 2	PD	PD Limi
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBV
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.76	6.08	5.62	8.83	17.00
5200MHz	Pass	5.76	8.52	8.19	11.29	17.00
5240MHz	Pass	5.76	7.21	7.01	10.04	17.00
5745MHz	Pass	5.76	9.11	6.99	11.04	30.00
5785MHz	Pass	5.76	8.66	7.22	10.88	30.00
5825MHz	Pass	5.76	6.95	6.57	9.65	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.76	5.50	4.69	8.00	17.00
5200MHz	Pass	5.76	6.70	6.05	9.34	17.00
5240MHz	Pass	5.76	7.65	7.30	10.44	17.00
5745MHz	Pass	5.76	8.80	6.55	10.69	30.00
5785MHz	Pass	5.76	8.31	6.78	10.45	30.00
5825MHz	Pass	5.76	7.21	6.75	9.78	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	5.76	0.54	-0.24	3.11	17.00
5230MHz	Pass	5.76	5.14	4.57	7.85	17.00
5755MHz	Pass	5.76	5.20	3.76	7.43	30.00
5795MHz	Pass	5.76	5.98	4.09	8.04	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	5.76	-3.71	-4.30	-1.03	17.00
5775MHz	Pass	5.76	1.47	0.79	4.04	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.76	5.26	4.53	7.81	17.00
5200MHz	Pass	5.76	6.55	5.96	9.12	17.00
5240MHz	Pass	5.76	7.49	7.11	10.30	17.00
5745MHz	Pass	5.76	8.30	6.10	10.19	30.00
5785MHz	Pass	5.76	8.02	6.36	10.25	30.00
5825MHz	Pass	5.76	6.72	6.40	9.47	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	5.76	0.43	-0.34	2.96	17.00
5230MHz	Pass	5.76	5.00	4.43	7.62	17.00
5755MHz	Pass	5.76	5.02	3.54	7.13	30.00
5795MHz	Pass	5.76	5.76	3.62	7.62	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	5.76	-3.48	-4.09	-0.90	17.00
5775MHz	Pass	5.76	1.55	0.68	4.06	30.00

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

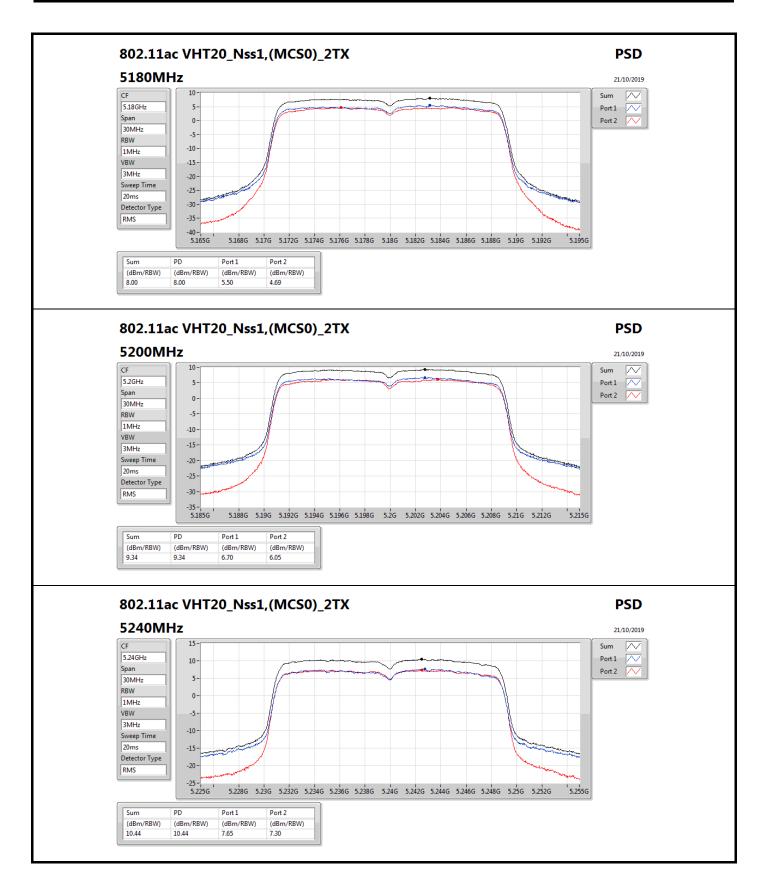




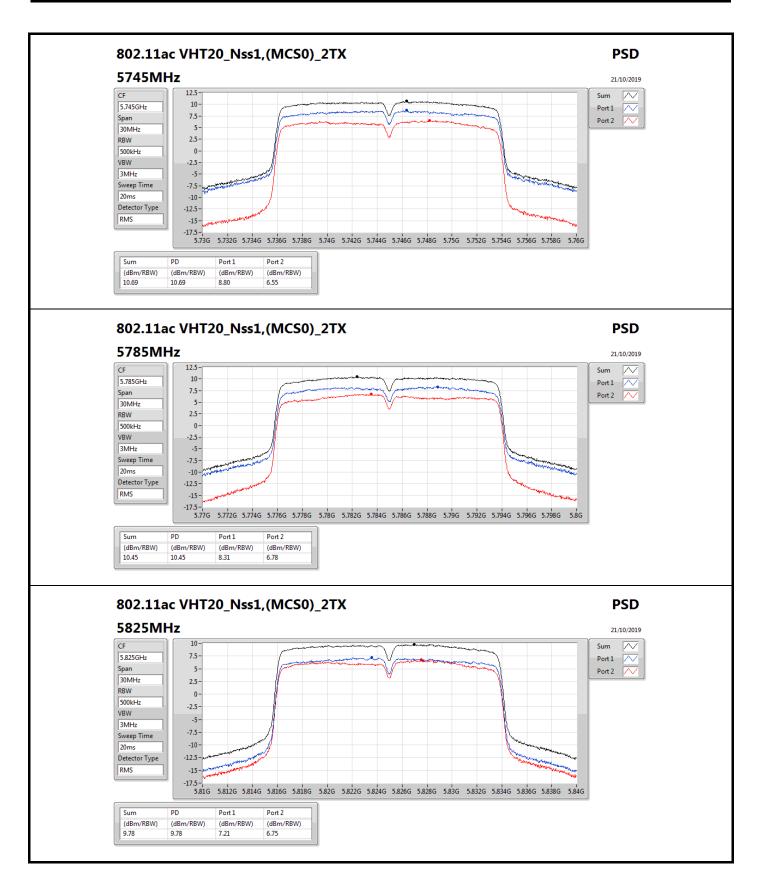




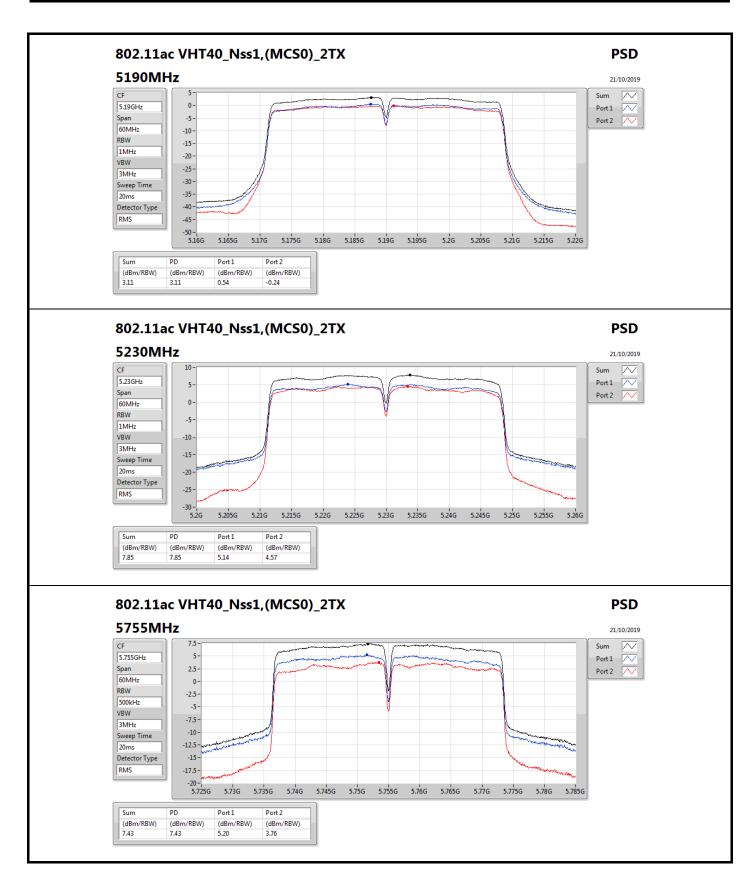




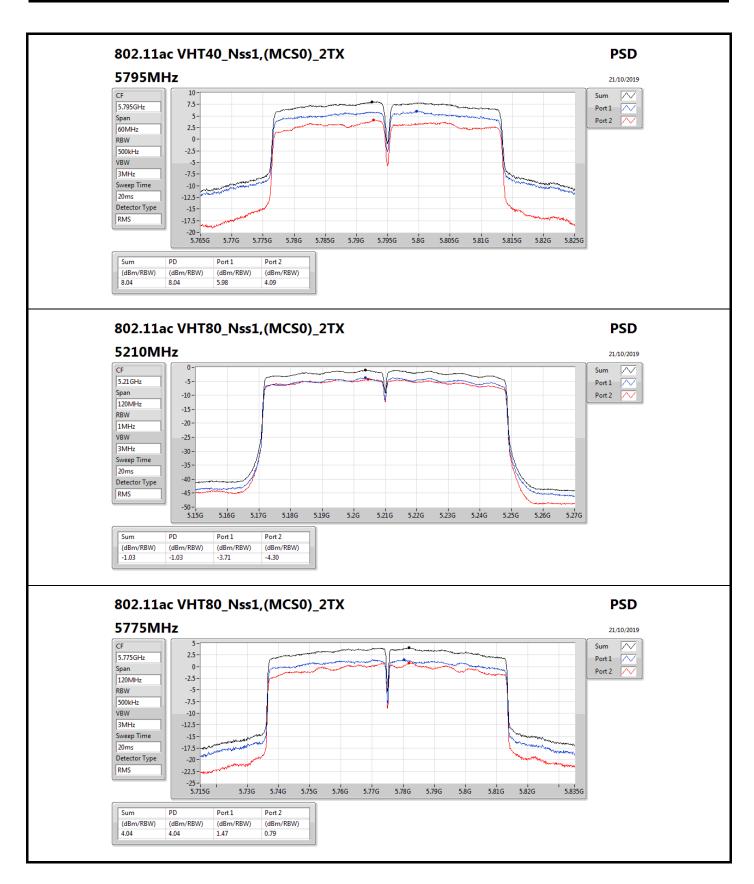




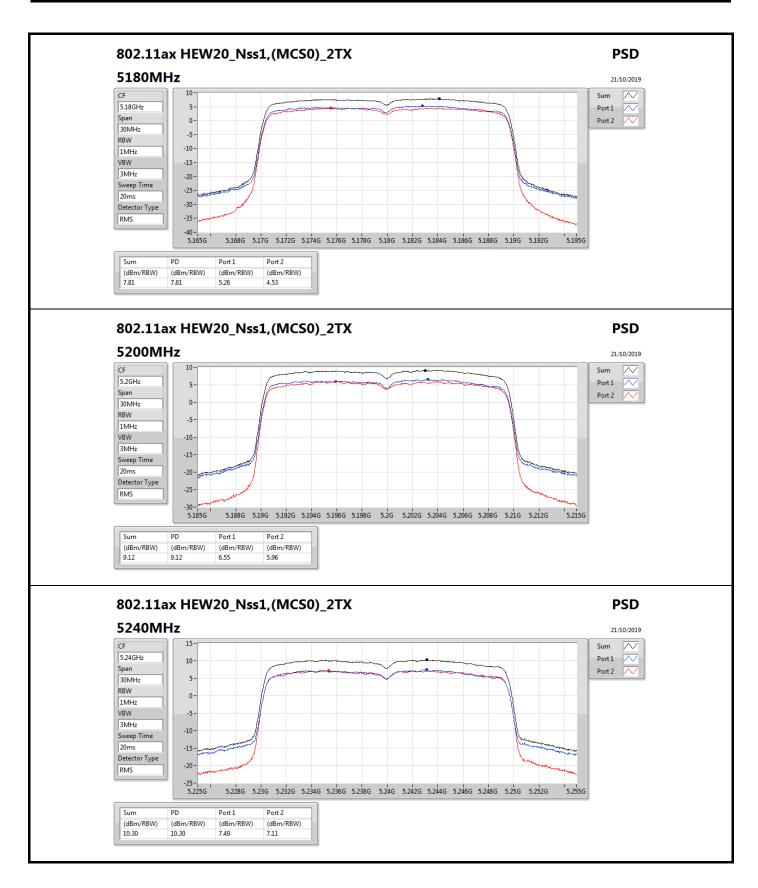




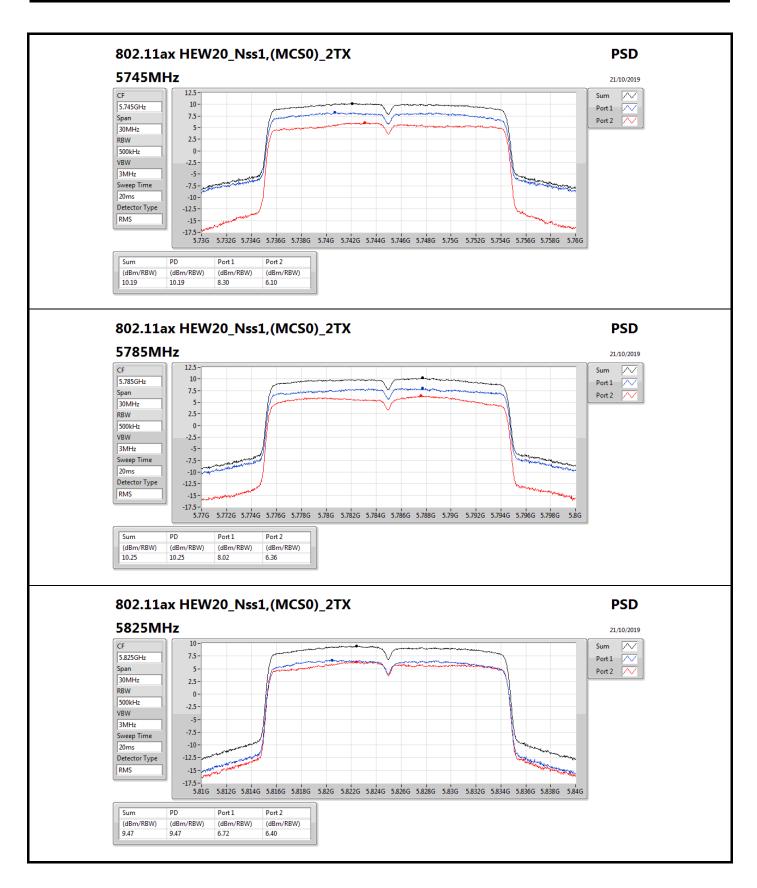




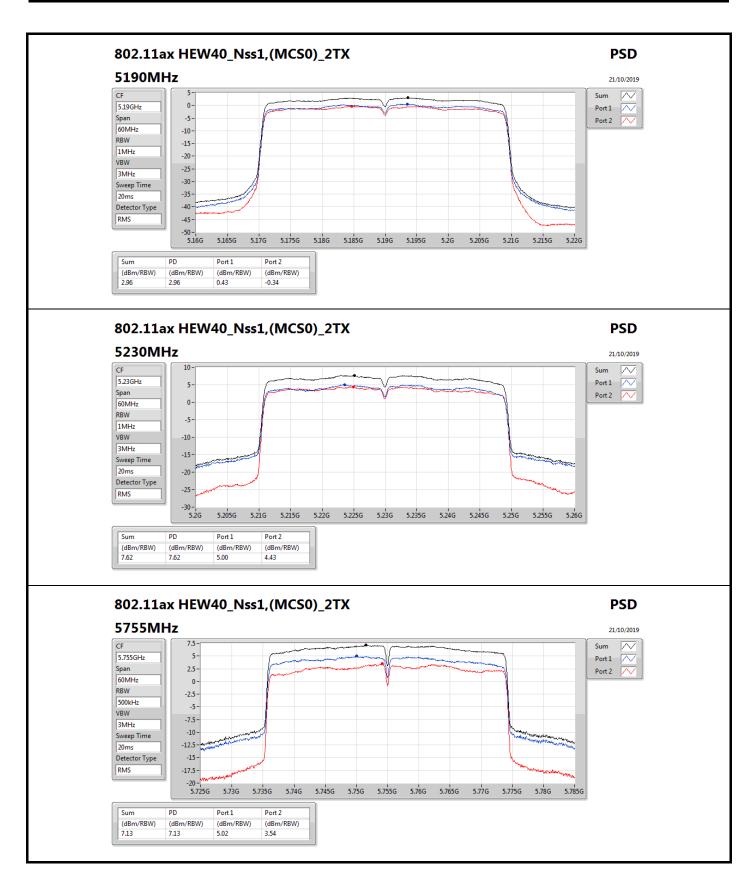




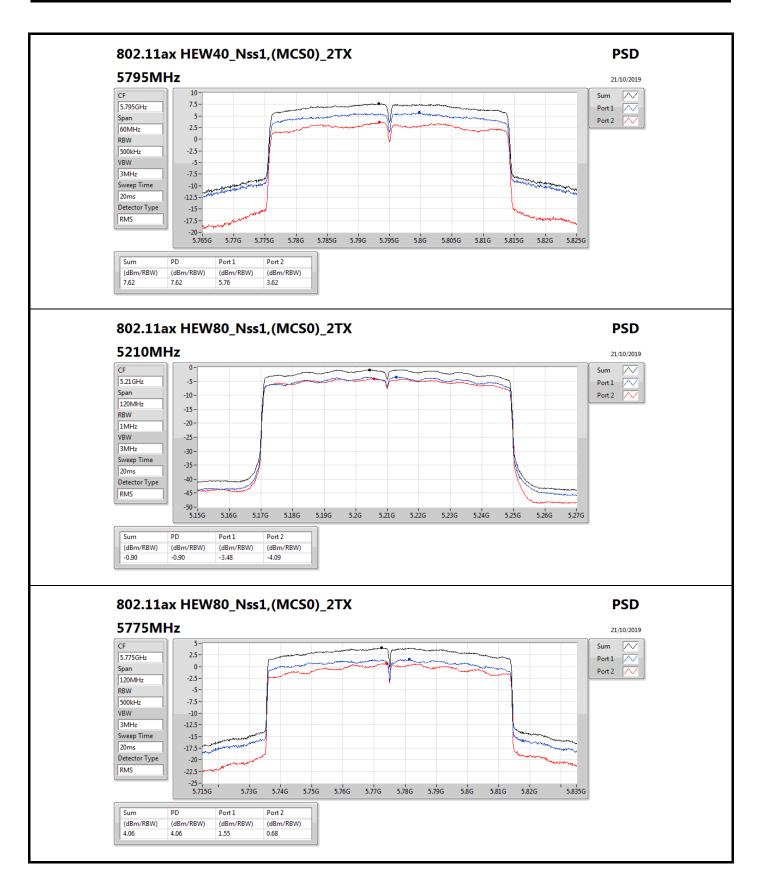




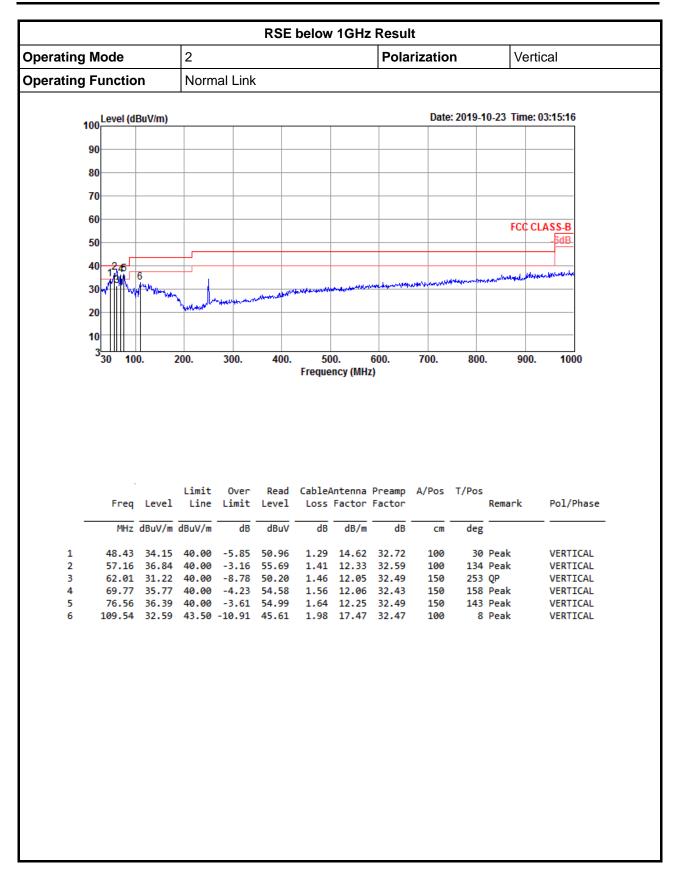














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-	3 30 100 Freq		Limit Line	Over	Read	CableA	ncy (MHz	) Preamp						
-	330 100 Freq MHz 111.48	Level dBuV/m 29.10	Limit Line dBuV/m 43.50	Over Limit dB -14.40	Read Level dBuV 41.97	CableA Loss dB 1.99	ncy (MHz Antenna Factor dB/m 17.63	Preamp Factor dB 32.49	A/Pos 	T/Pos deg 278	Remar  Peak		Pol/F	Phase
- 1 2 3	3 30 100 Freq MHz 111.48 250.19 750.71	Level dBuV/m 29.10 33.58 36.24	Limit Line dBuV/m 43.50 46.00 46.00	Over Limit dB -14.40 -12.42 -9.76	Read Level dBuV 41.97 44.61 37.46	CableA Loss dB 1.99 3.04 5.47	ncy (MH2 Antenna Factor dB/m 17.63 18.30 25.37	Preamp Factor dB 32.49 32.37 32.06	A/Pos cm 125 150 300	T/Pos deg 278 280 342	Remar  Peak Peak Peak		HORIZ HORIZ HORIZ	Phase ZONTAL ZONTAL ZONTAL
- 1 2	3 30 100 Freq MHz 111.48 250.19	Level dBuV/m 29.10 33.58 36.24 36.48 36.68	Limit Line dBuV/m 43.50 46.00 46.00 46.00	Over Limit -14.40 -12.42 -9.76 -9.52 -9.32	Read Level dBuV 41.97 44.61 37.46 36.58 35.93	CableA Loss dB 1.99 3.04 5.47 5.80 6.09	ncy (MH2 Antenna Factor dB/m 17.63 18.30 25.37	Preamp Factor dB 32.49 32.37 32.06 31.85 31.63	A/Pos 	T/Pos deg 278 280 342 0 360	Remar Peak Peak		HORIZ HORIZ HORIZ HORIZ HORIZ	Phase ZONTAL ZONTAL



## Appendix E.2

#### Summary

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	AV	5.15G	53.92	54.00	-0.08	5.50	3	Vertical	265	1.22	-



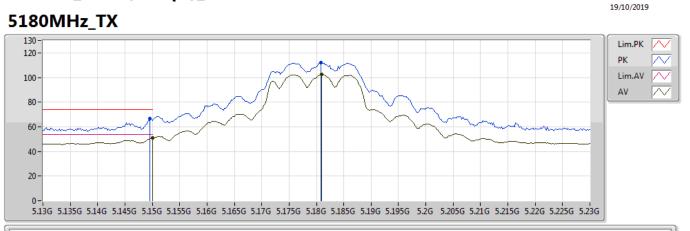
#### Appendix E.2

#### 802.11a\_Nss1,(6Mbps)\_2TX 19/10/2019 5180MHz\_TX 130-Lim.PK 120-РК Lim.AV $\sim$ 100 -AV $\square$ 80 -60 -40-20 -0-5.13G 5.135G 5.14G 5.145G 5.15G 5.15G 5.16G 5.165G 5.17G 5.175G 5.18G 5.185G 5.19G 5.195G 5.2G 5.205G 5.21G 5.215G 5.225G 5.225G 5.23G EUT Z\_2TX Setting 18 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.1494G	70.01	74.00	-3.99	5.50	3	Vertical	266	1.15	-	64.51		
AV	5.1498G	53.57	54.00	-0.43	5.50	3	Vertical	266	1.15	-	48.07		
PK	5.1852G	114.66	Inf	-Inf	5.60	3	Vertical	266	1.15	-	109.06		
AV	5.1852G	105.07	Inf	-Inf	5.60	3	Vertical	266	1.15	-	99.47		



### 802.11a\_Nss1,(6Mbps)\_2TX

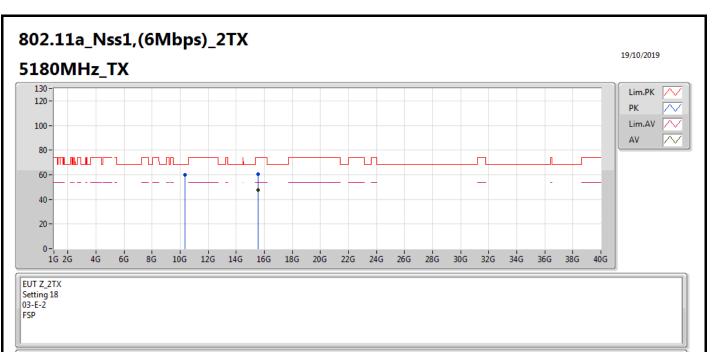


EUT Z\_2TX Setting 18 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.1496G	66.60	74.00	-7.40	5.50	3	Horizontal	277	2.86	-	61.10		
AV	5.15G	50.93	54.00	-3.07	5.50	3	Horizontal	277	2.86	-	45.43		
РК	5.1808G	111.91	Inf	-Inf	5.58	3	Horizontal	277	2.86	-	106.33		
AV	5.181G	102.51	Inf	-Inf	5.58	3	Horizontal	277	2.86	-	96.93		



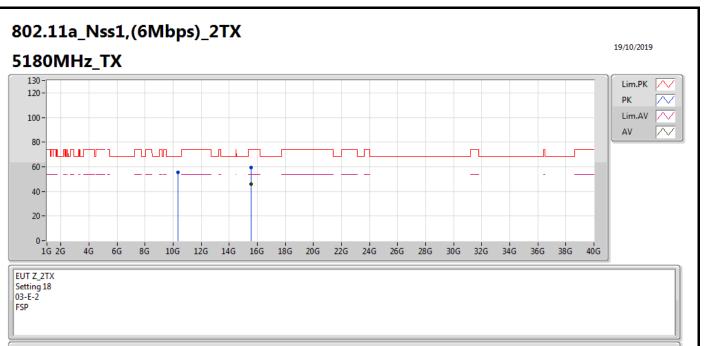
#### Appendix E.2



Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	10.36G	59.70	68.20	-8.50	12.18	3	Vertical	254	1.24	-	47.52		
PK	15.54244G	60.72	74.00	-13.28	14.39	3	Vertical	175	2.46	-	46.33		
AV	15.5366G	47.40	54.00	-6.60	14.41	3	Vertical	175	2.46	-	32.99		

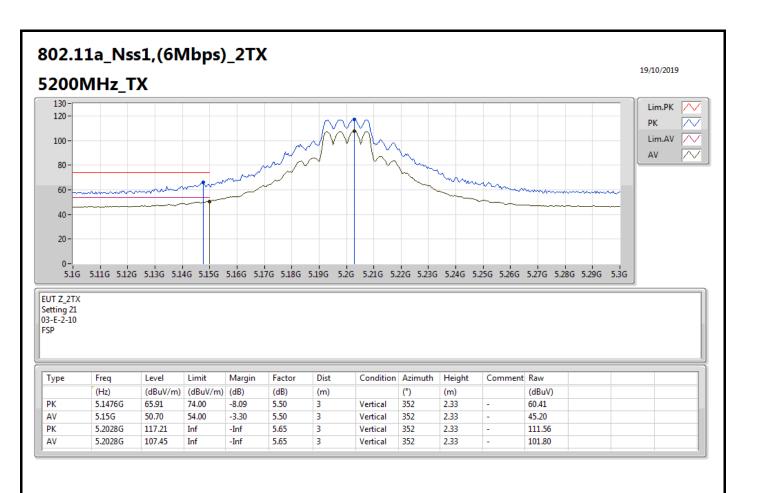


#### Appendix E.2

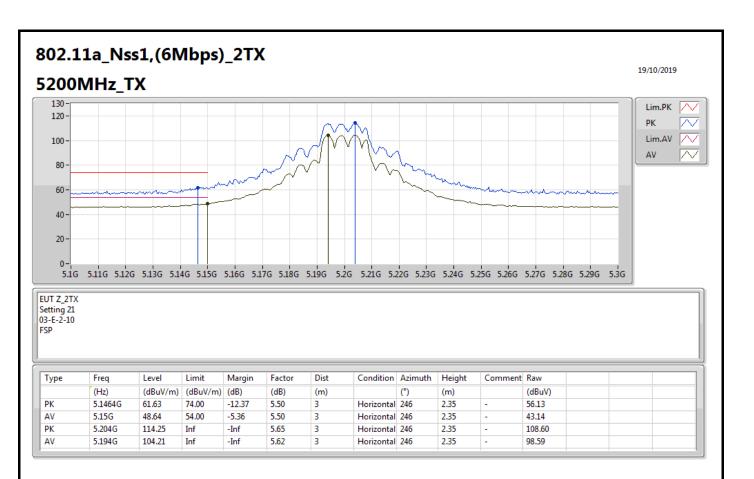


Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	10.35982G	55.37	68.20	-12.83	12.18	3	Horizontal	57	1.49	-	43.19		
РК	15.535G	59.38	74.00	-14.62	14.43	3	Horizontal	110	1.48	-	44.95		
AV	15.53728G	45.92	54.00	-8.08	14.41	3	Horizontal	110	1.48	-	31.51		

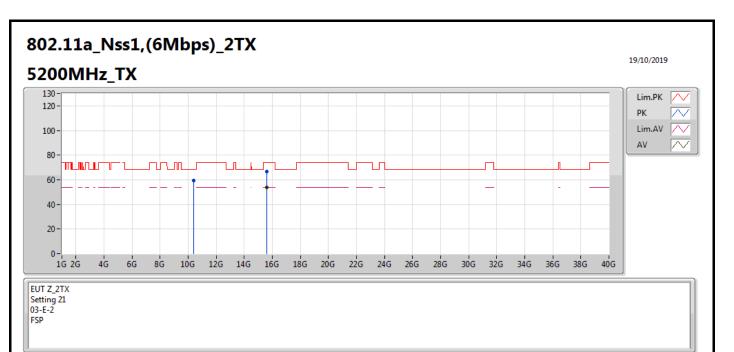






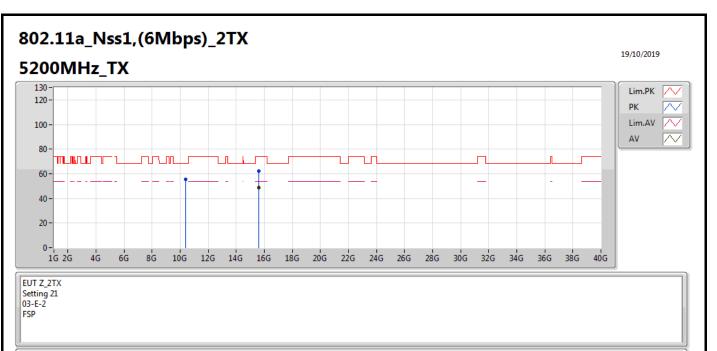






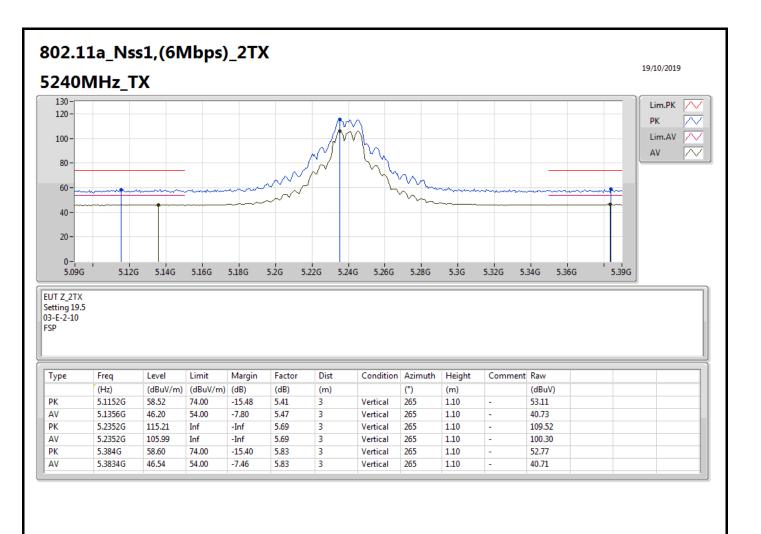
Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	10.39996G	59.13	68.20	-9.07	12.22	3	Vertical	254	1.23	-	46.91		
РК	15.59176G	66.55	74.00	-7.45	14.21	3	Vertical	173	2.52	-	52.34		
AV	15.59716G	53.57	54.00	-0.43	14.19	3	Vertical	173	2.52	-	39.38		



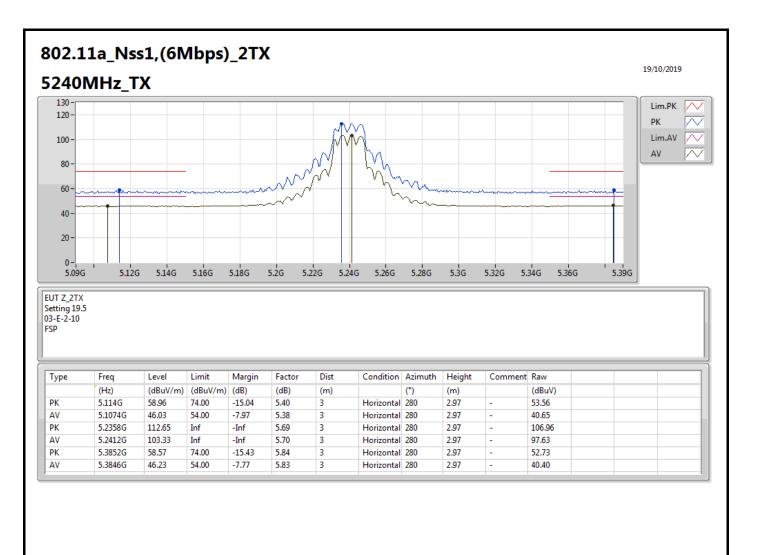


Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	10.4001G	55.49	68.20	-12.71	12.22	3	Horizontal	57	1.46	-	43.27		
РК	15.602G	62.28	74.00	-11.72	14.17	3	Horizontal	110	1.42	-	48.11		
AV	15.59698G	48.74	54.00	-5.26	14.19	3	Horizontal	110	1.42	-	34.55		

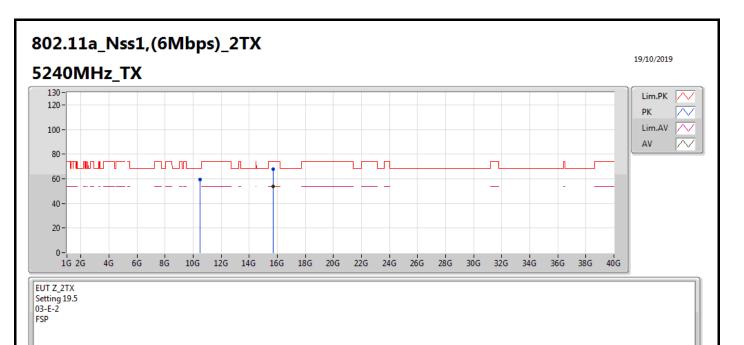






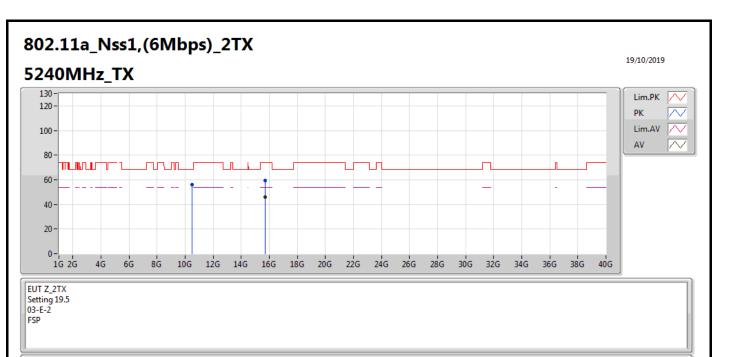






Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	10.47987G	59.38	68.20	-8.82	12.30	3	Vertical	263	1.30	-	47.08		
PK	15.72286G	67.74	74.00	-6.26	13.74	3	Vertical	247	1.18	-	54.00		
AV	15.71714G	53.63	54.00	-0.37	13.76	3	Vertical	247	1.18	-	39.87		

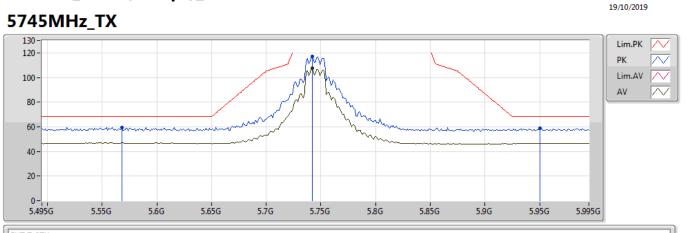




Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	10.47996G	55.82	68.20	-12.38	12.30	3	Horizontal	57	1.49	-	43.52		
РК	15.71708G	59.42	74.00	-14.58	13.76	3	Horizontal	347	1.50	-	45.66		
AV	15.71918G	45.69	54.00	-8.31	13.75	3	Horizontal	347	1.50	-	31.94		



# 802.11a\_Nss1,(6Mbps)\_2TX

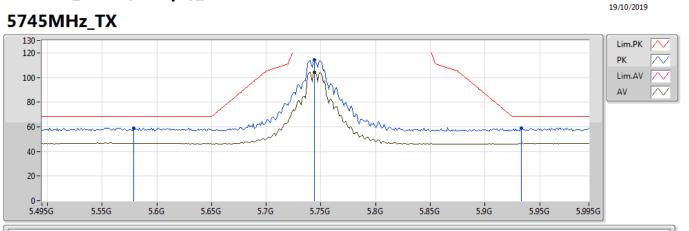


EUT Z\_2TX Setting 23 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.568G	59.49	68.20	-8.71	6.15	3	Vertical	250	1.42	-	53.34		
PK	5.742G	117.23	Inf	-Inf	5.87	3	Vertical	250	1.42	-	111.36		
AV	5.742G	107.69	Inf	-Inf	5.87	3	Vertical	250	1.42	-	101.82		
РК	5.95G	58.95	68.20	-9.25	6.23	3	Vertical	250	1.42	-	52.72		



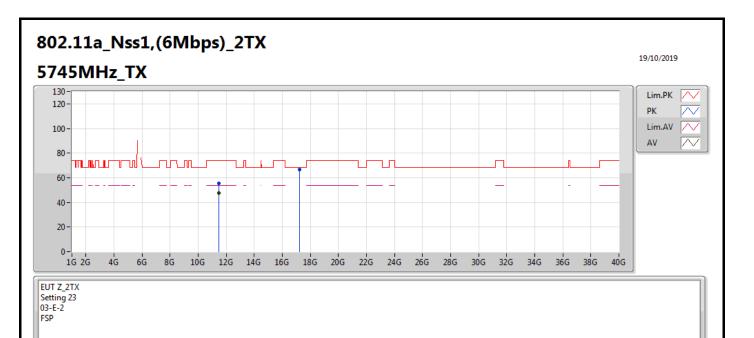
# 802.11a\_Nss1,(6Mbps)\_2TX



EUT Z\_2TX Setting 23 03-E-2-10 FSP

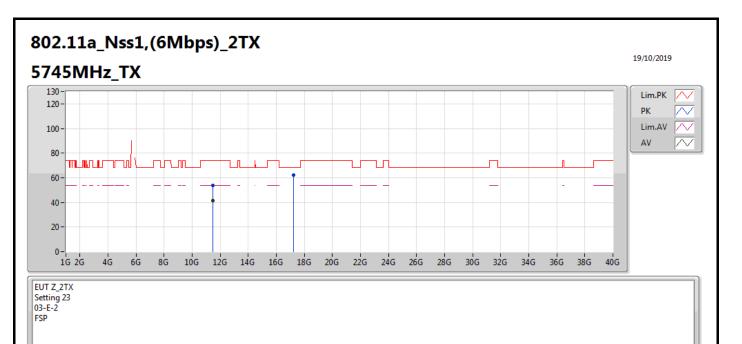
Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.579G	59.01	68.20	-9.19	6.16	3	Horizontal	275	2.51	-	52.85		
PK	5.744G	114.28	Inf	-Inf	5.86	3	Horizontal	275	2.51	-	108.42		
AV	5.744G	104.26	Inf	-Inf	5.86	3	Horizontal	275	2.51	-	98.40		
РК	5.933G	59.08	68.20	-9.12	6.18	3	Horizontal	275	2.51	-	52.90		





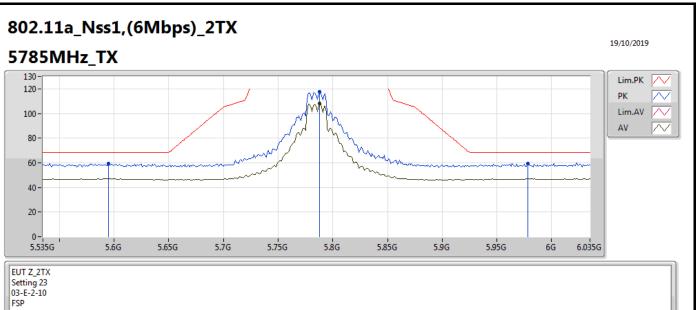
Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	11.48988G	55.51	74.00	-18.49	13.00	3	Vertical	263	1.11	-	42.51		
AV	11.49G	47.79	54.00	-6.21	13.00	3	Vertical	263	1.11	-	34.79		
PK	17.23634G	66.58	68.20	-1.62	17.34	3	Vertical	68	2.06	-	49.24		





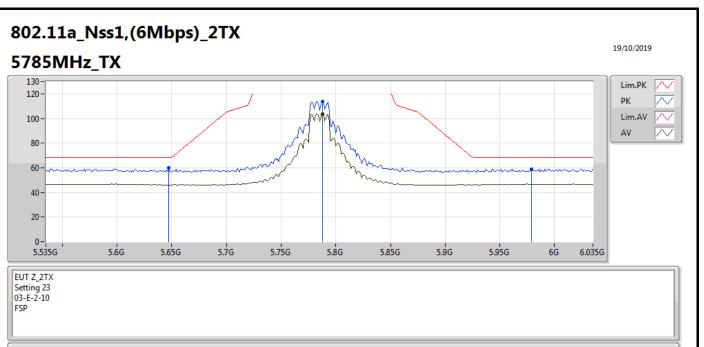
Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	11.4899G	53.99	74.00	-20.01	13.00	3	Horizontal	350	2.23	-	40.99		
AV	11.49004G	41.20	54.00	-12.80	13.00	3	Horizontal	350	2.23	-	28.20		
PK	17.23886G	62.35	68.20	-5.85	17.35	3	Horizontal	169	2.57	-	45.00		





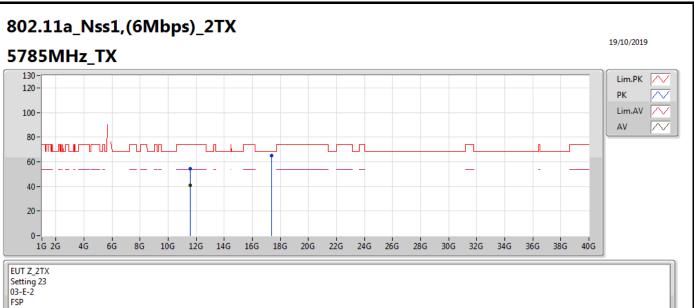
Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	
РК	5.595G	59.24	68.20	-8.96	6.17	3	Vertical	138	1.75	-	53.07	
PK	5.788G	117.86	Inf	-Inf	5.80	3	Vertical	138	1.75	-	112.06	
AV	5.788G	108.10	Inf	-Inf	5.80	3	Vertical	138	1.75	-	102.30	
PK	5.978G	59.51	68.20	-8.69	6.33	3	Vertical	138	1.75	-	53.18	





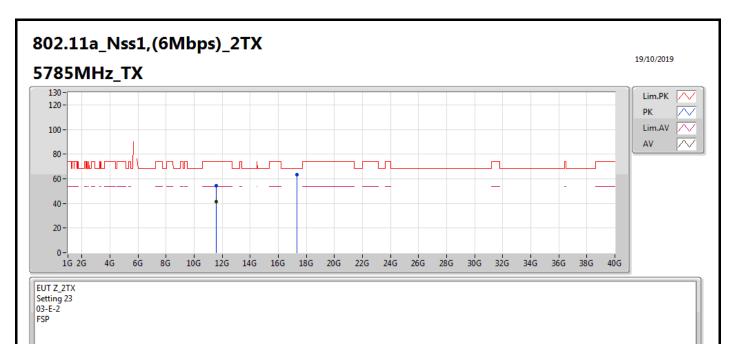
Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.647G	59.95	68.20	-8.25	6.06	3	Horizontal	282	2.33	-	53.89		
PK	5.788G	113.86	Inf	-Inf	5.80	3	Horizontal	282	2.33	-	108.06		
AV	5.788G	103.94	Inf	-Inf	5.80	3	Horizontal	282	2.33	-	98.14		
PK	5.979G	59.09	68.20	-9.11	6.34	3	Horizontal	282	2.33	-	52.75		





Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	11.56948G	54.26	74.00	-19.74	13.04	3	Vertical	241	2.25	-	41.22		
AV	11.57004G	41.07	54.00	-12.93	13.04	3	Vertical	241	2.25	-	28.03		
РК	17.3571G	65.12	68.20	-3.08	17.96	3	Vertical	192	1.41	-	47.16		

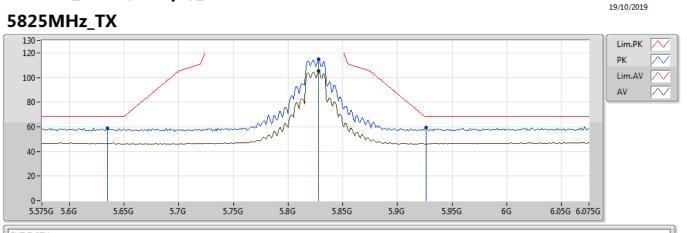




Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	11.56972G	54.53	74.00	-19.47	13.04	3	Horizontal	238	1.50	-	41.49		
AV	11.57006G	41.23	54.00	-12.77	13.04	3	Horizontal	238	1.50	-	28.19		
PK	17.35134G	63.42	68.20	-4.78	17.93	3	Horizontal	129	2.55	-	45.49		



## 802.11a\_Nss1,(6Mbps)\_2TX

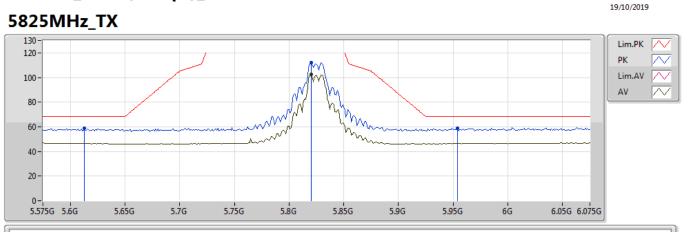


EUT Z\_2TX Setting 21 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.635G	58.97	68.20	-9.23	6.08	3	Vertical	257	1.01	-	52.89		
PK	5.828G	114.88	Inf	-Inf	5.86	3	Vertical	257	1.01	-	109.02		
AV	5.828G	105.20	Inf	-Inf	5.86	3	Vertical	257	1.01	-	99.34		
РК	5.926G	59.14	68.20	-9.06	6.15	3	Vertical	257	1.01	-	52.99		



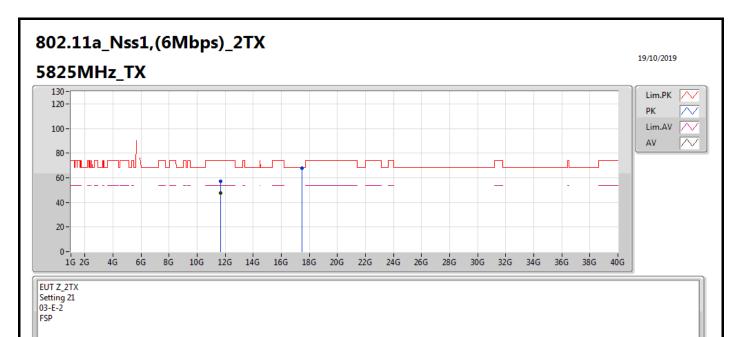
## 802.11a\_Nss1,(6Mbps)\_2TX



EUT Z\_2TX Setting 21 03-E-2-10 FSP

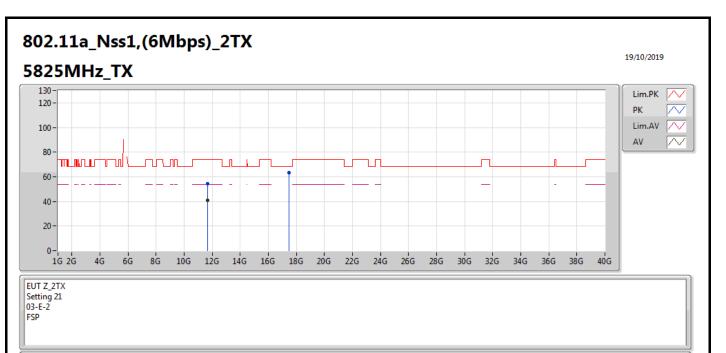
Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	5.613G	58.84	68.20	-9.36	6.14	3	Horizontal	279	2.88	-	52.70		
PK	5.82G	112.17	Inf	-Inf	5.84	3	Horizontal	279	2.88	-	106.33		
AV	5.82G	102.59	Inf	-Inf	5.84	3	Horizontal	279	2.88	-	96.75		
РК	5.954G	59.01	68.20	-9.19	6.24	3	Horizontal	279	2.88	-	52.77		





Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	11.65006G	57.15	74.00	-16.85	13.09	3	Vertical	284	1.16	-	44.06		
AV	11.64994G	47.58	54.00	-6.42	13.08	3	Vertical	284	1.16	-	34.50		
РК	17.4764G	67.84	68.20	-0.36	18.57	3	Vertical	178	1.24	-	49.27		

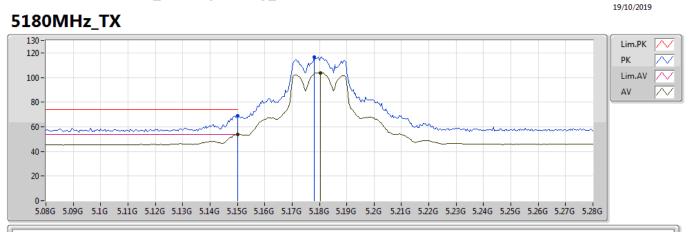




Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	11.65066G	54.21	74.00	-19.79	13.09	3	Horizontal	190	1.41	-	41.12		
AV	11.65244G	41.09	54.00	-12.91	13.09	3	Horizontal	190	1.41	-	28.00		
PK	17.47654G	63.09	68.20	-5.11	18.57	3	Horizontal	236	1.62	-	44.52		



## 802.11ax HEW20\_Nss1,(MCS0)\_2TX



EUT Z\_2TX Setting 17.5 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	5.15G	69.19	74.00	-4.81	5.50	3	Vertical	265	1.22	-	63.69		
AV	5.15G	53.92	54.00	-0.08	5.50	3	Vertical	265	1.22	-	48.42		
РК	5.178G	116.71	Inf	-Inf	5.58	3	Vertical	265	1.22	-	111.13		
AV	5.1804G	103.75	Inf	-Inf	5.58	3	Vertical	265	1.22	-	98.17		



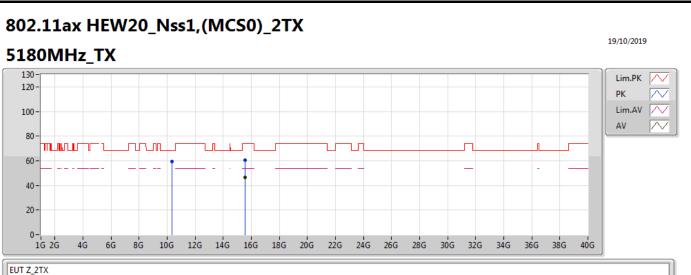
## 802.11ax HEW20\_Nss1,(MCS0)\_2TX



EUT Z\_2TX Setting 17.5 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.15G	65.52	74.00	-8.48	5.50	3	Horizontal	281	2.57	-	60.02		
AV	5.15G	50.82	54.00	-3.18	5.50	3	Horizontal	281	2.57	-	45.32		
PK	5.1824G	113.40	Inf	-Inf	5.59	3	Horizontal	281	2.57	-	107.81		
AV	5.1828G	101.13	Inf	-Inf	5.59	3	Horizontal	281	2.57	-	95.54		

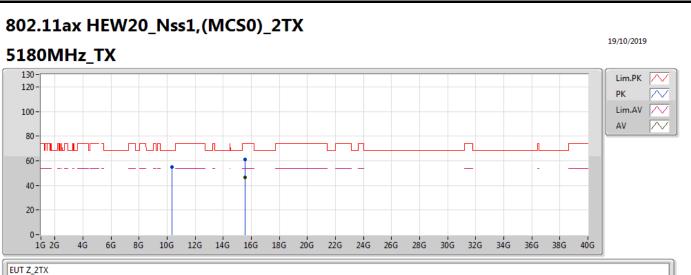




Setting 17.5 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	10.36G	59.36	68.20	-8.84	12.18	3	Vertical	257	1.21	-	47.18		
PK	15.54166G	60.30	74.00	-13.70	14.40	3	Vertical	166	1.89	-	45.90		
AV	15.54184G	46.23	54.00	-7.77	14.39	3	Vertical	166	1.89	-	31.84		





EUT Z\_2TX Setting 17.5 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	10.3599G	55.16	68.20	-13.04	12.18	3	Horizontal	56	1.48	-	42.98		
PK	15.5444G	61.15	74.00	-12.85	14.39	3	Horizontal	355	1.22	-	46.76		
AV	15.53664G	46.48	54.00	-7.52	14.41	3	Horizontal	355	1.22	-	32.07		



### 802.11ax HEW20\_Nss1,(MCS0)\_2TX

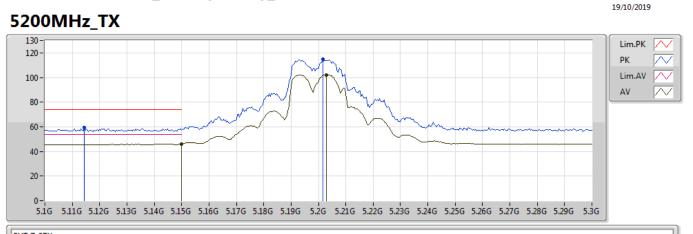


EUT Z\_2TX Setting 19 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	5.15G	62.19	74.00	-11.81	5.50	3	Vertical	266	1.33	-	56.69		
AV	5.15G	47.57	54.00	-6.43	5.50	3	Vertical	266	1.33	-	42.07		
PK	5.2016G	117.01	Inf	-Inf	5.64	3	Vertical	266	1.33	-	111.37		
AV	5.2008G	104.84	Inf	-Inf	5.64	3	Vertical	266	1.33	-	99.20		



## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

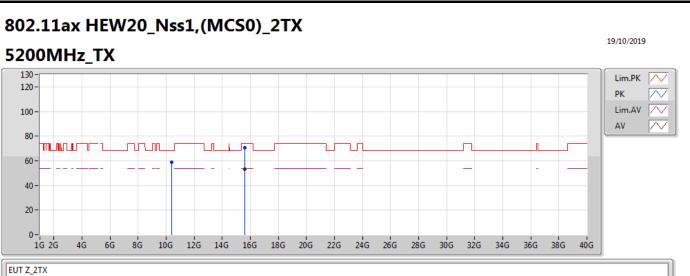


EUT Z\_2TX Setting 19 03-E-2-10 FSP

·E-2-10

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.1144G	59.14	74.00	-14.86	5.40	3	Horizontal	279	2.49	-	53.74		
AV	5.15G	46.15	54.00	-7.85	5.50	3	Horizontal	279	2.49	-	40.65		
PK	5.2016G	114.81	Inf	-Inf	5.64	3	Horizontal	279	2.49	-	109.17		
AV	5.2028G	102.25	Inf	-Inf	5.65	3	Horizontal	279	2.49	-	96.60		

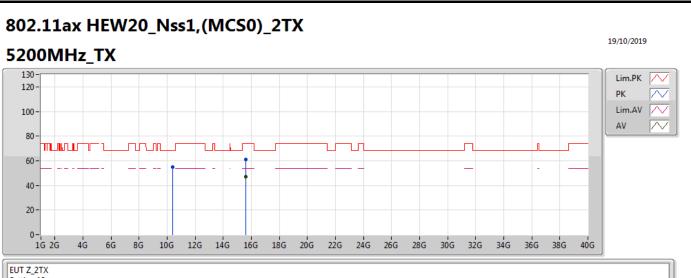




EUT Z\_2TX Setting 19 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	10.40002G	58.79	68.20	-9.41	12.22	3	Vertical	254	1.21	-	46.57		
PK	15.59552G	70.44	74.00	-3.56	14.19	3	Vertical	248	1.17	-	56.25		
AV	15.59584G	52.96	54.00	-1.04	14.19	3	Vertical	248	1.17	-	38.77		

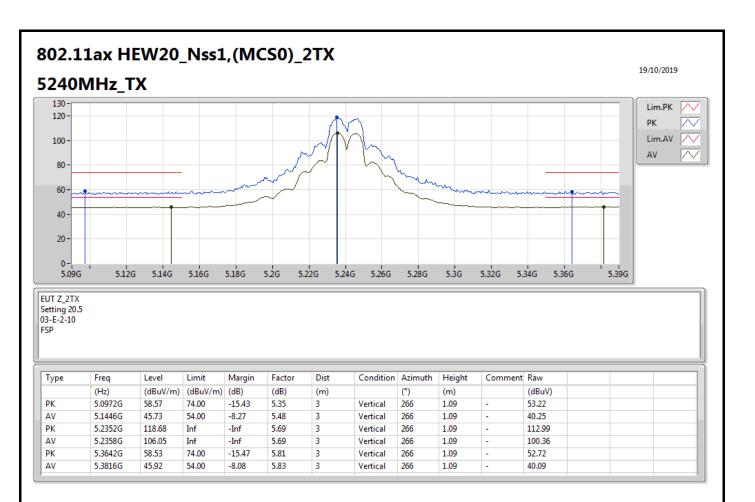




Setting 19 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	10.40404G	55.19	68.20	-13.01	12.22	3	Horizontal	56	1.56	-	42.97		
PK	15.60148G	60.95	74.00	-13.05	14.18	3	Horizontal	185	1.29	-	46.77		
AV	15.60196G	46.83	54.00	-7.17	14.17	3	Horizontal	185	1.29	-	32.66		







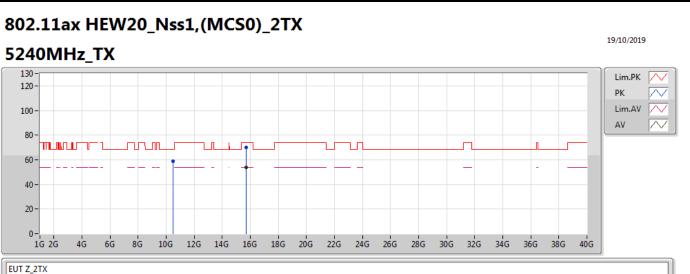
## 802.11ax HEW20\_Nss1,(MCS0)\_2TX



EUT Z\_2TX Setting 20.5 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	
PK	5.09G	58.50	74.00	-15.50	5.33	3	Horizontal	275	2.96	-	53.17	
AV	5.138G	45.72	54.00	-8.28	5.47	3	Horizontal	275	2.96	-	40.25	
PK	5.2478G	115.19	Inf	-Inf	5.72	3	Horizontal	275	2.96	-	109.47	
AV	5.2364G	103.33	Inf	-Inf	5.69	3	Horizontal	275	2.96	-	97.64	
PK	5.354G	58.94	74.00	-15.06	5.81	3	Horizontal	275	2.96	-	53.13	
AV	5.3786G	45.86	54.00	-8.14	5.83	3	Horizontal	275	2.96	-	40.03	

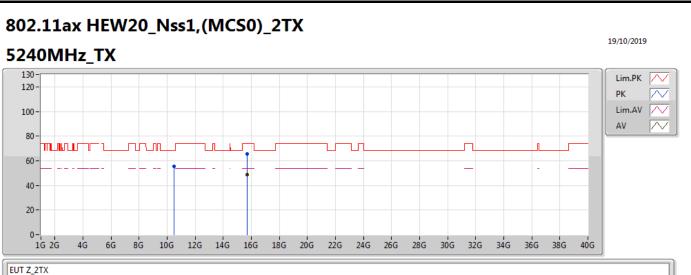




Setting 20.5 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	10.4799G	58.79	68.20	-9.41	12.30	3	Vertical	264	1.20	-	46.49		
PK	15.72304G	70.24	74.00	-3.76	13.74	3	Vertical	248	1.27	-	56.50		
AV	15.7228G	53.57	54.00	-0.43	13.74	3	Vertical	248	1.27	-	39.83		



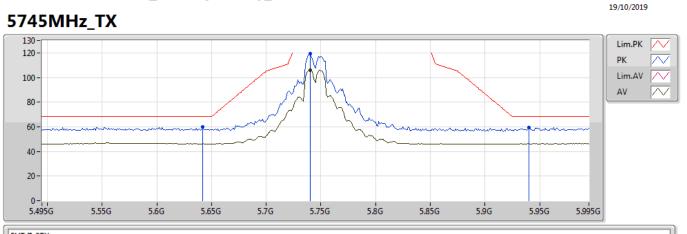


EUT Z\_2TX Setting 20.5 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	10.4798G	55.21	68.20	-12.99	12.30	3	Horizontal	56	1.50	-	42.91		
PK	15.72314G	65.30	74.00	-8.70	13.74	3	Horizontal	350	1.24	-	51.56		
AV	15.7164G	48.98	54.00	-5.02	13.76	3	Horizontal	350	1.24	-	35.22		



## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

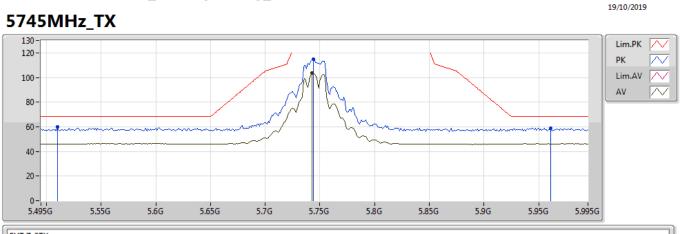


EUT Z\_2TX Setting 23 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.642G	59.82	68.20	-8.38	6.08	3	Vertical	256	1.31	-	53.74		
PK	5.74G	119.31	Inf	-Inf	5.87	3	Vertical	256	1.31	-	113.44		
AV	5.74G	105.96	Inf	-Inf	5.87	3	Vertical	256	1.31	-	100.09		
РК	5.94G	59.57	68.20	-8.63	6.20	3	Vertical	256	1.31	-	53.37		



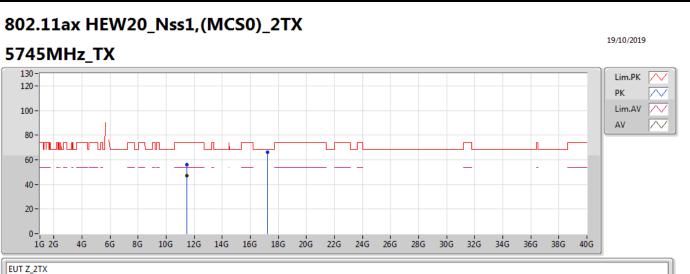
## 802.11ax HEW20\_Nss1,(MCS0)\_2TX



EUT Z\_2TX Setting 23 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.51G	59.98	68.20	-8.22	6.13	3	Horizontal	275	2.55	-	53.85		
PK	5.744G	115.14	Inf	-Inf	5.86	3	Horizontal	275	2.55	-	109.28		
AV	5.743G	103.56	Inf	-Inf	5.86	3	Horizontal	275	2.55	-	97.70		
PK	5.961G	59.10	68.20	-9.10	6.27	3	Horizontal	275	2.55	-	52.83		

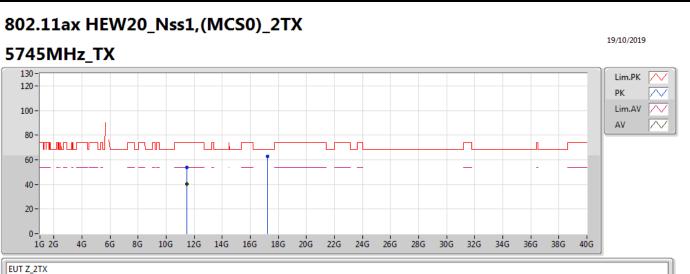




Setting 23 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	11.48986G	55.82	74.00	-18.18	13.00	3	Vertical	262	1.10	-	42.82		
AV	11.48996G	47.10	54.00	-6.90	13.00	3	Vertical	262	1.10	-	34.10		
PK	17.231G	65.96	68.20	-2.24	17.32	3	Vertical	178	1.98	-	48.64		

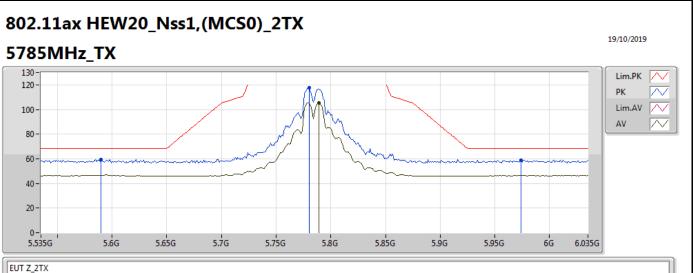




Setting 23 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	11.48962G	53.66	74.00	-20.34	13.00	3	Horizontal	180	2.10	-	40.66		
AV	11.48988G	40.20	54.00	-13.80	13.00	3	Horizontal	180	2.10	-	27.20		
PK	17.23012G	62.67	68.20	-5.53	17.31	3	Horizontal	114	2.73	-	45.36		

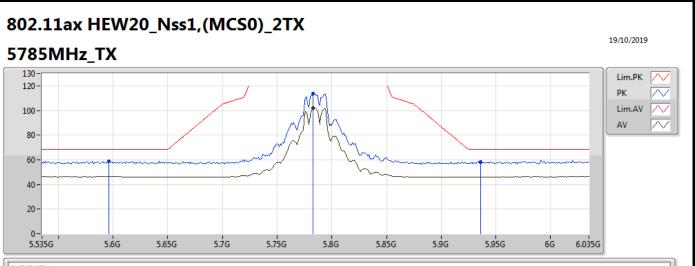




EUT Z\_2TX Setting 23 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.59G	59.65	68.20	-8.55	6.16	3	Vertical	249	1.42	-	53.49		
PK	5.78G	117.60	Inf	-Inf	5.81	3	Vertical	249	1.42	-	111.79		
AV	5.789G	105.26	Inf	-Inf	5.79	3	Vertical	249	1.42	-	99.47		
PK	5.974G	58.62	68.20	-9.58	6.32	3	Vertical	249	1.42	-	52.30		

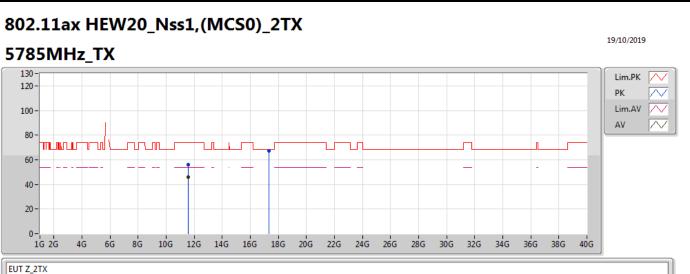




EUT Z\_2TX Setting 23 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.596G	59.02	68.20	-9.18	6.16	3	Horizontal	282	2.99	-	52.86		
PK	5.783G	113.86	Inf	-Inf	5.80	3	Horizontal	282	2.99	-	108.06		
AV	5.783G	102.22	Inf	-Inf	5.80	3	Horizontal	282	2.99	-	96.42		
PK	5.936G	58.52	68.20	-9.68	6.19	3	Horizontal	282	2.99	-	52.33		

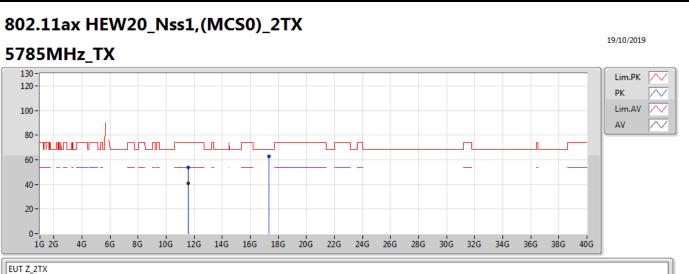




EUT Z\_2TX Setting 23 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	11.5699G	56.23	74.00	-17.77	13.04	3	Vertical	248	1.25	-	43.19		
٩V	11.56998G	45.77	54.00	-8.23	13.04	3	Vertical	248	1.25	-	32.73		
РК	17.35144G	67.38	68.20	-0.82	17.93	3	Vertical	179	1.29	-	49.45		





Setting 23 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	11.56948G	53.65	74.00	-20.35	13.04	3	Horizontal	176	2.13	-	40.61		
AV	11.56994G	40.68	54.00	-13.32	13.04	3	Horizontal	176	2.13	-	27.64		
РК	17.35006G	62.89	68.20	-5.31	17.93	3	Horizontal	117	1.27	-	44.96		



## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

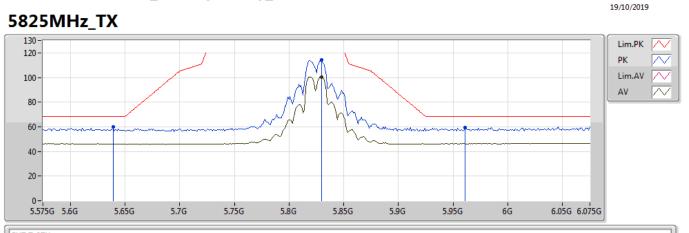


EUT Z\_2TX Setting 21.5 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	
РК	5.624G	59.16	68.20	-9.04	6.12	3	Vertical	268	1.20	-	53.04	
РК	5.828G	116.13	Inf	-Inf	5.86	3	Vertical	268	1.20	-	110.27	
AV	5.828G	104.17	Inf	-Inf	5.86	3	Vertical	268	1.20	-	98.31	
РК	5.938G	59.53	68.20	-8.67	6.19	3	Vertical	268	1.20	-	53.34	



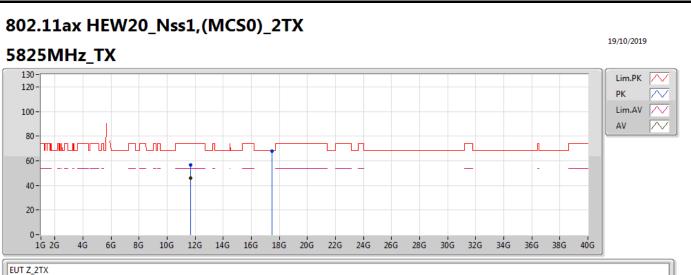
## 802.11ax HEW20\_Nss1,(MCS0)\_2TX



EUT Z\_2TX Setting 21.5 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.639G	59.69	68.20	-8.51	6.08	3	Horizontal	278	2.99	-	53.61		
PK	5.83G	114.50	Inf	-Inf	5.86	3	Horizontal	278	2.99	-	108.64		
AV	5.83G	100.56	Inf	-Inf	5.86	3	Horizontal	278	2.99	-	94.70		
PK	5.961G	59.54	68.20	-8.66	6.27	3	Horizontal	278	2.99	-	53.27		

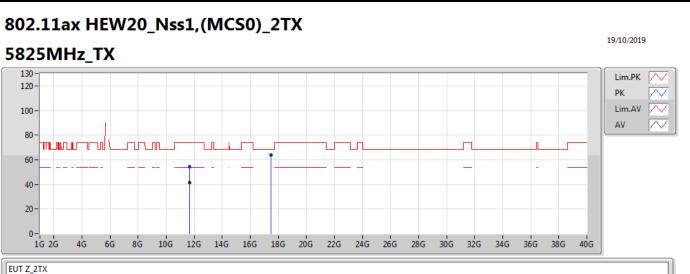




EUT Z\_2TX Setting 21.5 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	11.64988G	56.33	74.00	-17.67	13.08	3	Vertical	247	1.18	-	43.25		
۹V	11.64998G	45.92	54.00	-8.08	13.08	3	Vertical	247	1.18	-	32.84		
РК	17.47392G	67.92	68.20	-0.28	18.56	3	Vertical	177	1.25	-	49.36		



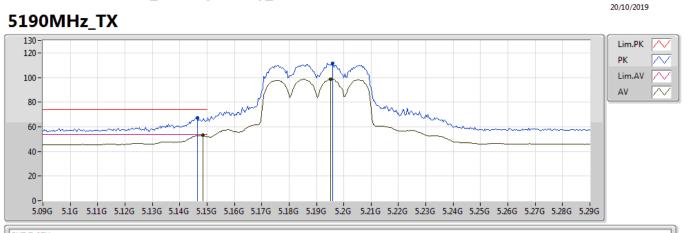


EUT Z\_2TX Setting 21.5 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	
РК	11.65236G	54.48	74.00	-19.52	13.09	3	Horizontal	167	1.10	-	41.39	
AV	11.64992G	41.70	54.00	-12.30	13.08	3	Horizontal	167	1.10	-	28.62	
РК	17.47258G	63.95	68.20	-4.25	18.55	3	Horizontal	171	2.33	-	45.40	



#### 802.11ax HEW40\_Nss1,(MCS0)\_2TX

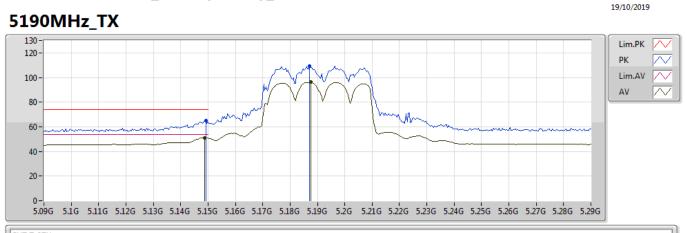


EUT Z\_2TX Setting 15 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.1464G	66.98	74.00	-7.02	5.50	3	Vertical	266	1.36	-	61.48		
AV	5.1484G	52.99	54.00	-1.01	5.50	3	Vertical	266	1.36	-	47.49		
PK	5.196G	111.62	Inf	-Inf	5.63	3	Vertical	266	1.36	-	105.99		
AV	5.1952G	98.55	Inf	-Inf	5.63	3	Vertical	266	1.36	-	92.92		



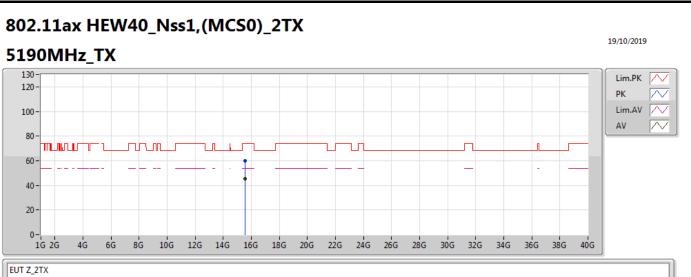
#### 802.11ax HEW40\_Nss1,(MCS0)\_2TX



EUT Z\_2TX Setting 15 03-E-2-10 FSP

Гуре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	5.1492G	64.72	74.00	-9.28	5.50	3	Horizontal	280	2.87	-	59.22		
V	5.1488G	51.14	54.00	-2.86	5.50	3	Horizontal	280	2.87	-	45.64		
к	5.1872G	109.32	Inf	-Inf	5.61	3	Horizontal	280	2.87	-	103.71		
٩V	5.1876G	96.13	Inf	-Inf	5.61	3	Horizontal	280	2.87	-	90.52		



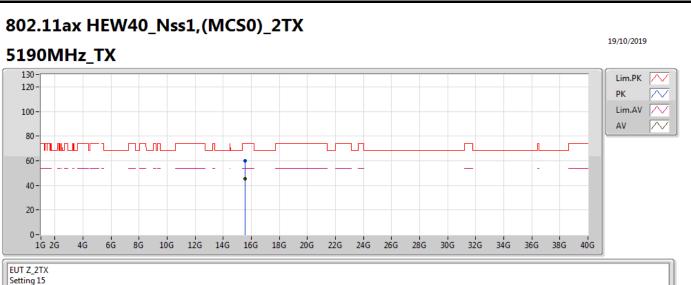


Setting 15 03-E-2 FSP

FJF

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	15.5697G	60.01	74.00	-13.99	14.29	3	Vertical	1	1.50	-	45.72		
AV	15.57284G	45.27	54.00	-8.73	14.28	3	Vertical	1	1.50	-	30.99		

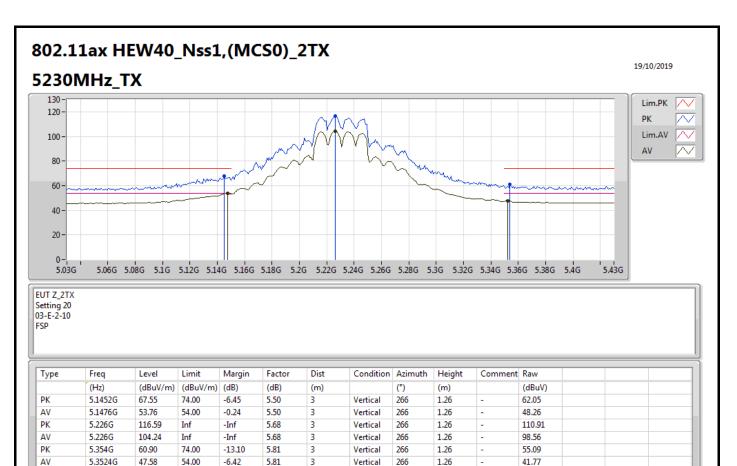




Setting 15 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	15.57114G	59.89	74.00	-14.11	14.29	3	Horizontal	46	1.50	-	45.60		
AV	15.5735G	45.29	54.00	-8.71	14.28	3	Horizontal	46	1.50	-	31.01		

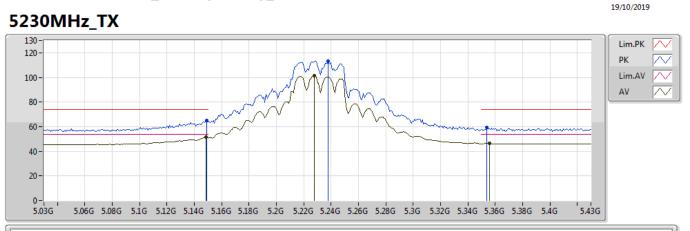




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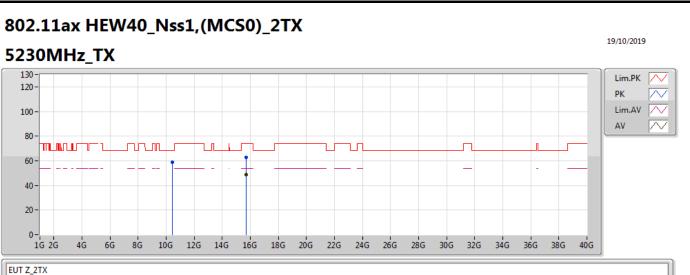
# 802.11ax HEW40\_Nss1,(MCS0)\_2TX



EUT Z\_2TX Setting 20 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	
РК	5.1492G	64.72	74.00	-9.28	5.50	3	Horizontal	281	2.99	-	59.22	
AV	5.1484G	51.39	54.00	-2.61	5.50	3	Horizontal	281	2.99	-	45.89	
PK	5.238G	113.14	Inf	-Inf	5.70	3	Horizontal	281	2.99	-	107.44	
AV	5.2276G	101.15	Inf	-Inf	5.69	3	Horizontal	281	2.99	-	95.46	
PK	5.354G	59.39	74.00	-14.61	5.81	3	Horizontal	281	2.99	-	53.58	
AV	5.3556G	46.47	54.00	-7.53	5.82	3	Horizontal	281	2.99	-	40.65	

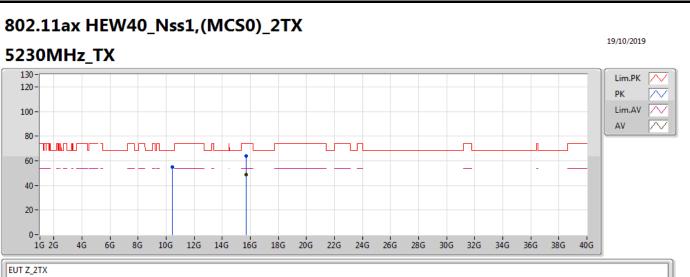




Setting 20 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	10.45994G	58.63	68.20	-9.57	12.27	3	Vertical	261	1.24	-	46.36		
РК	15.68796G	62.85	74.00	-11.15	13.87	3	Vertical	176	2.36	-	48.98		
AV	15.68828G	48.80	54.00	-5.20	13.87	3	Vertical	176	2.36	-	34.93		



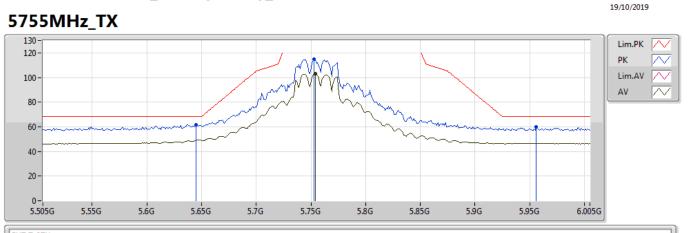


Setting 20 03-E-2 FSP

Гуре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	10.45994G	54.95	68.20	-13.25	12.27	3	Horizontal	56	1.49	-	42.68		
РК	15.68852G	63.84	74.00	-10.16	13.86	3	Horizontal	355	1.22	-	49.98		
AV	15.6886G	48.86	54.00	-5.14	13.86	3	Horizontal	355	1.22	-	35.00		



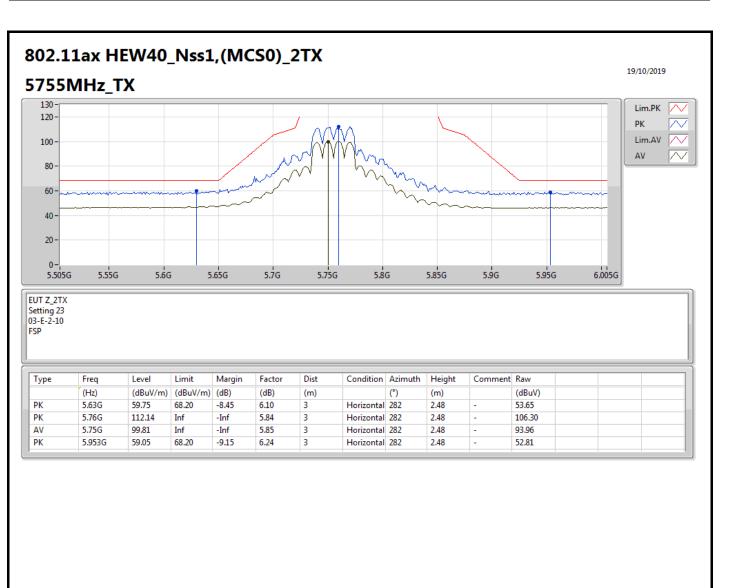
# 802.11ax HEW40\_Nss1,(MCS0)\_2TX



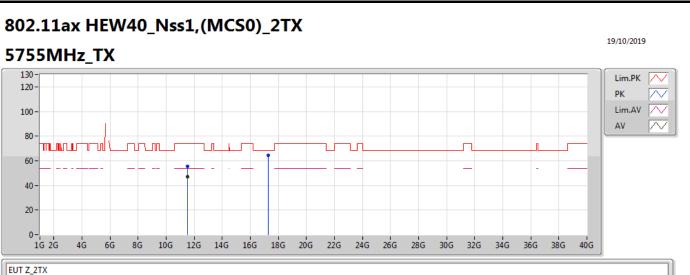
EUT Z\_2TX Setting 23 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	
PK	5.645G	61.88	68.20	-6.32	6.06	3	Vertical	249	1.31	-	55.82	
PK	5.753G	115.10	Inf	-Inf	5.85	3	Vertical	249	1.31	-	109.25	
AV	5.754G	103.03	Inf	-Inf	5.85	3	Vertical	249	1.31	-	97.18	
PK	5.956G	59.81	68.20	-8.39	6.25	3	Vertical	249	1.31	-	53.56	





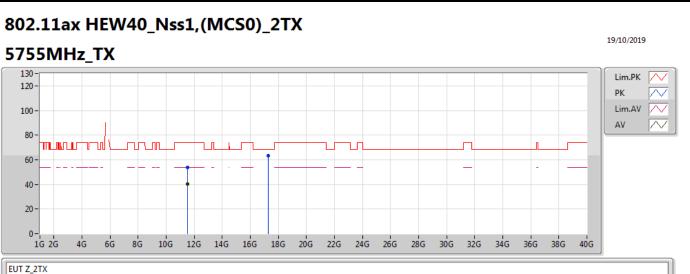




Setting 23 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	11.50986G	55.47	74.00	-18.53	13.01	3	Vertical	264	1.10	-	42.46		
AV	11.50998G	46.80	54.00	-7.20	13.01	3	Vertical	264	1.10	-	33.79		
PK	17.26238G	64.51	68.20	-3.69	17.47	3	Vertical	181	1.20	-	47.04		

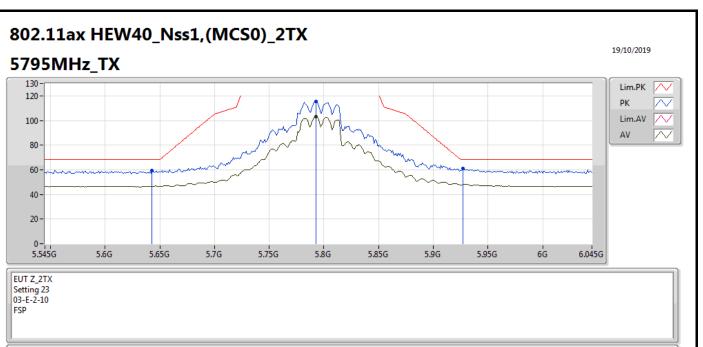




Setting 23 03-E-2 FSP

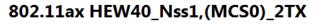
Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	11.50984G	53.74	74.00	-20.26	13.01	3	Horizontal	178	2.06	-	40.73		
AV	11.51003G	40.34	54.00	-13.66	13.01	3	Horizontal	178	2.06	-	27.33		
PK	17.26584G	63.28	68.20	-4.92	17.50	3	Horizontal	129	2.52	-	45.78		

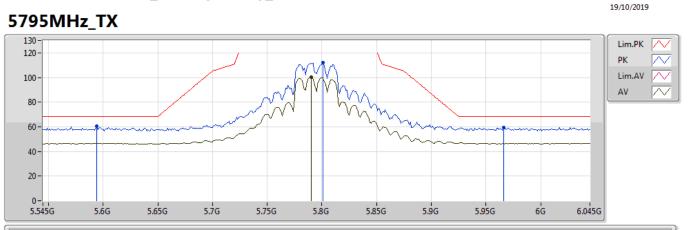




Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	5.643G	59.66	68.20	-8.54	6.07	3	Vertical	14	1.28	-	53.59		
PK	5.793G	115.24	Inf	-Inf	5.79	3	Vertical	14	1.28	-	109.45		
AV	5.793G	103.22	Inf	-Inf	5.79	3	Vertical	14	1.28	-	97.43		
РК	5.927G	61.07	68.20	-7.13	6.15	3	Vertical	14	1.28	-	54.92		



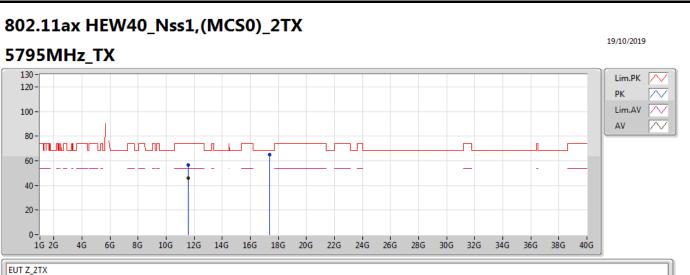




EUT Z\_2TX Setting 23 03-E-2-10 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	5.594G	60.73	68.20	-7.47	6.17	3	Horizontal	277	2.54	-	54.56		
PK	5.801G	111.90	Inf	-Inf	5.78	3	Horizontal	277	2.54	-	106.12		
AV	5.79G	100.17	Inf	-Inf	5.79	3	Horizontal	277	2.54	-	94.38		
РК	5.966G	59.60	68.20	-8.60	6.29	3	Horizontal	277	2.54	-	53.31		

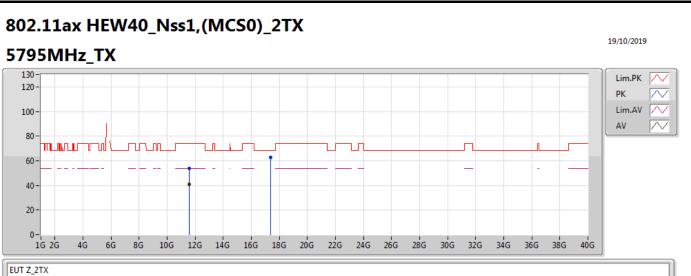




Setting 23 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	11.59004G	56.76	74.00	-17.24	13.05	3	Vertical	248	1.25	-	43.71		
AV	11.59G	46.16	54.00	-7.84	13.05	3	Vertical	248	1.25	-	33.11		
PK	17.38236G	64.94	68.20	-3.26	18.09	3	Vertical	177	1.23	-	46.85		

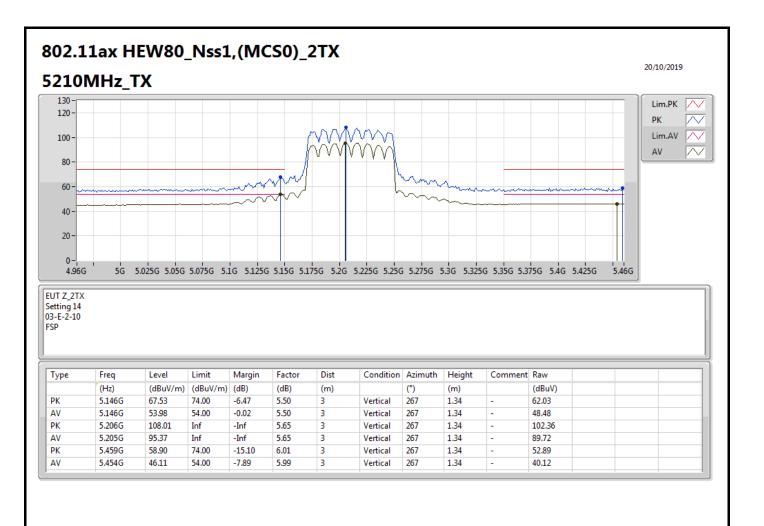




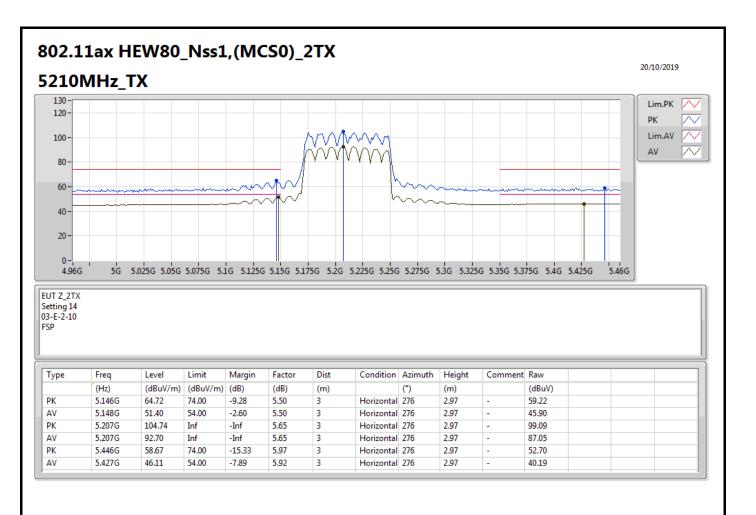
EUT Z\_2TX Setting 23 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	11.59388G	54.06	74.00	-19.94	13.05	3	Horizontal	242	1.38	-	41.01		
AV	11.59006G	41.01	54.00	-12.99	13.05	3	Horizontal	242	1.38	-	27.96		
РК	17.38432G	63.01	68.20	-5.19	18.10	3	Horizontal	115	2.58	-	44.91		

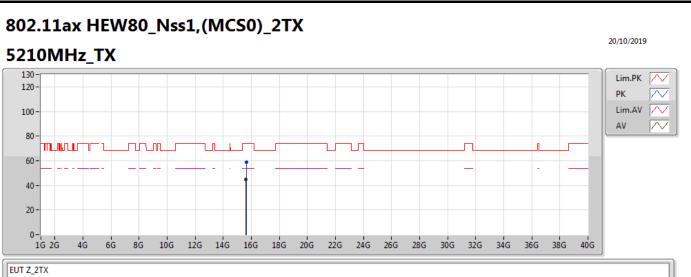








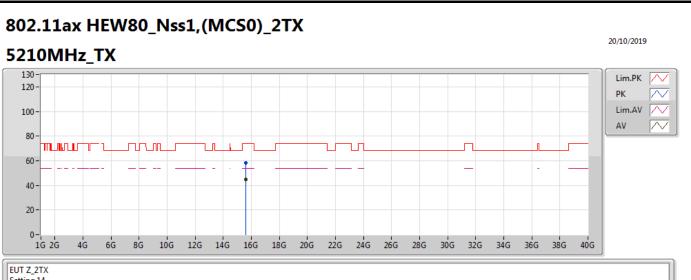




Setting 14 03-E-2 FSP

ype	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	15.63364G	58.75	74.00	-15.25	14.07	3	Vertical	359	1.77	-	44.68		
AV	15.63012G	44.84	54.00	-9.16	14.08	3	Vertical	359	1.77	-	30.76		

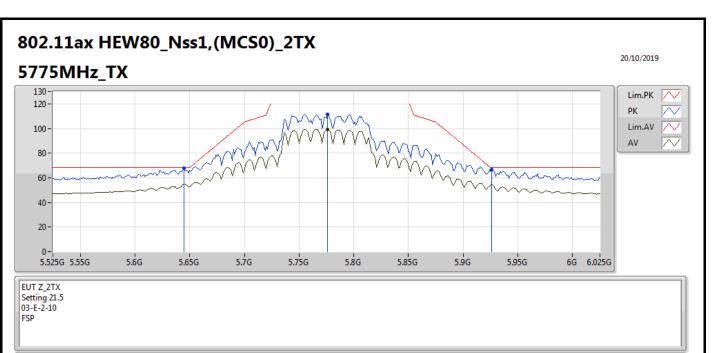




Setting 14 03-E-2 FSP

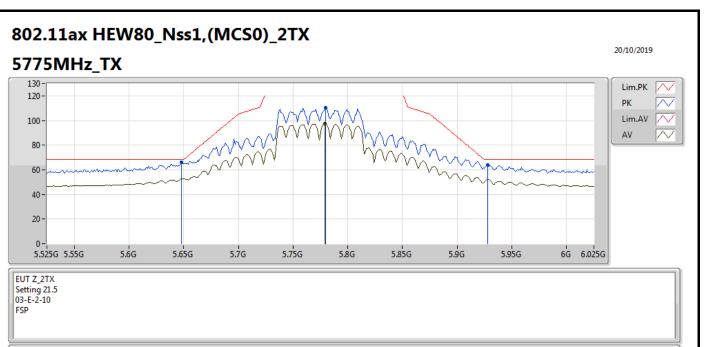
Гуре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	15.6293G	58.50	74.00	-15.50	14.08	3	Horizontal	75	1.66	-	44.42		
AV	15.62746G	44.93	54.00	-9.07	14.08	3	Horizontal	75	1.66	-	30.85		





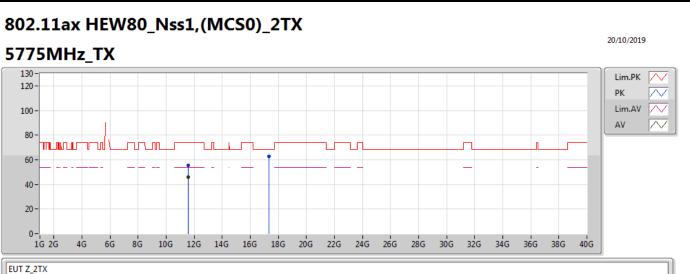
Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.645G	68.06	68.20	-0.14	6.06	3	Vertical	258	1.48	-	62.00		
РК	5.776G	111.58	Inf	-Inf	5.81	3	Vertical	258	1.48	-	105.77		
AV	5.776G	99.26	Inf	-Inf	5.81	3	Vertical	258	1.48	-	93.45		
РК	5.926G	66.64	68.20	-1.56	6.15	3	Vertical	258	1.48	-	60.49		





Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
PK	5.648G	66.20	68.20	-2.00	6.06	3	Horizontal	281	2.99	-	60.14		
PK	5.78G	110.38	Inf	-Inf	5.81	3	Horizontal	281	2.99	-	104.57		
AV	5.779G	97.35	Inf	-Inf	5.81	3	Horizontal	281	2.99	-	91.54		
РК	5.928G	63.80	68.20	-4.40	6.15	3	Horizontal	281	2.99	-	57.65		

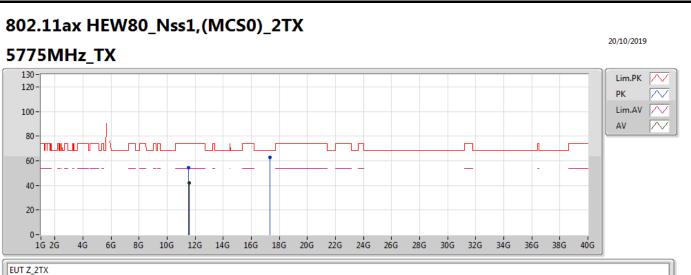




Setting 21.5 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)		
РК	11.55002G	55.72	74.00	-18.28	13.03	3	Vertical	260	1.17	-	42.69		
AV	11.55002G	46.11	54.00	-7.89	13.03	3	Vertical	260	1.17	-	33.08		
РК	17.32832G	63.03	68.20	-5.17	17.81	3	Vertical	182	2.32	-	45.22		





EUT Z\_2TX Setting 21.5 03-E-2 FSP

Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	
PK	11.54672G	54.35	74.00	-19.65	13.02	3	Horizontal	166	1.07	-	41.33	
AV	11.54996G	42.02	54.00	-11.98	13.02	3	Horizontal	166	1.07	-	29.00	
PK	17.32952G	62.66	68.20	-5.54	17.82	3	Horizontal	51	1.50	-	44.84	



