SPORTON LAS. RADIO TEST REPORT

Report No. : FR2N1823AB



# **RADIO TEST REPORT**

FCC ID	1	2AHKM-CHITA31	
Equipment		DOCSIS 3.1 Wireless eMTA Gateway	
Brand Name	;	Hitron	
Model Name	:	CHITA3.1	
Applicant	:	Hitron Technologies Inc.	
		No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park, Hsinchu 30078, Taiwan	
Manufacturer	:	Hitron Technologies Inc.	
		No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park, Hsinchu 30078, Taiwan	
Standard	:	47 CFR FCC Part 15.407	

The product was received on Nov. 18, 2022, and testing was started from Nov. 29, 2022 and completed on Feb. 01, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

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

TEL : 886-3-656-9065 FAX : 886-3-656-9085 Report Template No.: CB-A12\_1 Ver1.4 Page Number: 1 of 33Issued Date: Mar. 24, 2023Report Version: 01



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Photographs of EUT v01



# History of this test report

Report No.	Version	Description	Issued Date
FR2N1823AB	01	Initial issue of report	Mar. 24, 2023



# Summary of Test Result

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

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

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

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

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

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

#### Reviewed by: Sam Chen Report Producer: Vicky Huang



# **1** General Description

### 1.1 Information

#### 1.1.1 **RF General Information**

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

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

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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.
- BWch is the nominal channel bandwidth.



#### 1.1.2 Antenna Information

Ant	Port	Brond	Medel Neme	Antonno Tuno	Connector	Gain	(dBi)	
Ant.	2.4GHz	5GHz	Brand	Model Name	Antenna Type	Connector	2.4GHz	5GHz
1	1	1	WIESON	GY196HC112-018	PCB Antenna	I-PEX	1.99	1.97
2	2	2	WIESON	GY196HC112-019	PCB Antenna	I-PEX	1.58	1.87
3	3	3	WIESON	GY196HC112-020	PCB Antenna	I-PEX	1.96	1.96
4	-	4	WIESON	GY196HC112-021	PCB Antenna	I-PEX	-	1.76

Note1: The above information was declared by manufacturer. Note2:

#### For WLAN 2.4GHz function:

#### For IEEE 802.11b/g/n/VHT mode (3TX/3RX):

Port 1, Port 2 and Port 3 can be use as transmitting/receiving antenna. Port 1, Port 2 and Port 3 could transmit/receive simultaneously.

#### For WLAN 5GHz function:

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

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

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

Note3: Directional gain information

Туре	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT $\leq$ 4	$Directional Gain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{BT}} \left( \sum_{k=1}^{N_{BT}} \mathcal{Z}_{j,k} \right)^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{gas}} \left\{ \sum_{k=1}^{N_{gas}} \overline{\overline{S}}_{j,k} \right\}^2}{N_{sNT}} \right]$	$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{th}} \left[ \sum_{k=1}^{N_{th}} \mathcal{Z}_{j,k} \right]^2}{N_{shT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \frac{\sum_{j=1}^{N_{abc}} \left[\sum_{k=1}^{N_{abc}} g_{j,k}\right]^{2}}{N_{_{AbT}}}$$

NSS1(g1,1) =  $10^{G_{1/20}}$ ; NSS1(g1,2)=  $10^{G_{2/20}}$ ; NSS1(g1,2)=  $10^{G_{3/20}}$ ; NSS1(g1,2)=  $10^{G_{4/20}}$ 

gj,k =(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4) )<sup>2</sup>

DG = 10 log[(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4))<sup>2</sup> / N<sub>ANT</sub>] => 10

 $\log[(10^{\text{G1/20}} + 10^{\text{G2/20}} + 10^{\text{G3/20}} + 10^{\text{G4/20}})^2 / N_{\text{ANT}}]$ 

Where ;

2.4G G1= 1.99 dBi ;2.4G G2= 1.58 dBi ;2.4G G3= 1.96 dBi ;DG= 6.62dBi 5G G1= 1.97 dBi ;5G G2= 1.87 dBi ;5G G3= 1.96 dBi ;5G G4= 1.76 dBi ;DG= 7.91dBi



### 1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.971	0.13	2.07m	1k
802.11ac VHT20	0.989	0.05	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.973	0.12	2.437m	1k
802.11ac VHT80	0.943	0.25	1.148m	1k

Note:

• DC is Duty Cycle.

DCF is Duty Cycle Factor.

#### 1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter					
	$\boxtimes$	With beamforming		Without beamforming		
Beamforming Function	The product has beamforming function for VHT in 2.4GHz and n/ac in 5GHz.					
		Outdoor P2M	$\boxtimes$	Indoor P2M		
Function		Fixed P2P		Client		
	$\boxtimes$	Point-to-multipoint		Point-to-point		
Test Software Version	QRO	CT V3.0.295.0				

Note: The above information was declared by manufacturer.



# 1.2 Applicable Standards

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

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

### **1.3 Testing Location Information**

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Owen Hsu	22.4-23.1 / 62-68	Jan. 18, 2023~ Jan. 19, 2023
Radiated (Below 1GHz)	03CH05-CB	Stim Sung	24.4-25.5 / 55-58	Dec. 08, 2022~ Feb. 01, 2023
Radiated (Above 1GHz)	03CH03-CB	Stim Sung	24.4-25.5 / 55-58	Jan. 16, 2023~ Jan. 17, 2023
Radiated (Co-location)	03CH05-CB	Stim Sung	23.8-24.9 / 55-58	Feb. 01, 2023
AC Conduction	CO01-CB	Tim Chen	24~25 / 58~59	Nov. 29, 2022



### **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)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.2 dB	Confidence levels of 95%
Bandwidth Measurement	2.0 %	Confidence levels of 95%



# 2 Test Configuration of EUT

# 2.1 Test Channel Mode

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	24.5
5200MHz	25
5240MHz	24.5
5745MHz	26
5785MHz	26
5825MHz	26
802.11ac VHT20_Nss1,(MCS0)_4TX	-
5180MHz	24.5
5200MHz	25
5240MHz	24.5
5745MHz	26
5785MHz	26
5825MHz	26
802.11ac VHT40_Nss1,(MCS0)_4TX	-
5190MHz	19.5
5230MHz	24.5
5755MHz	26
5795MHz	26
802.11ac VHT80_Nss1,(MCS0)_4TX	-
5210MHz	18
5775MHz	22.5
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-
5180MHz	24.5
5200MHz	24.5
5240MHz	24
5745MHz	24.5
5785MHz	24.5
5825MHz	24.5
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-
5190MHz	19.5
5230MHz	24
5755MHz	24.5
5795MHz	24.5
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-
5210MHz	18
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Mode	Power Setting	
5775MHz	22.5	

Note:

- The EUT supports non-beamforming and beamforming modes, after evaluating, the non-beamforming mode has been selected to execute all tests. The beamforming mode evaluates the output power only.
- Evaluated VHT20/VHT40 mode only, due to similar modulation. The power setting of HT20/HT40 mode are the same or lower than VHT20/VHT40.



# 2.2 The Worst Case Measurement Configuration

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

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

Th	The Worst Case Mode for Following Conformance Tests			
Tests Item	Unwanted Emissions			
Test ConditionRadiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in regardless of spatial multiplexing MIMO configuration), the radiated test sl be performed with highest antenna gain of each antenna type.				
Operating Mode < 1GHz Normal Link				
After evaluating, and the worst case was found at Y axis, so it was selected to perform test and its test rest was written in the report.				
1 EUT in Y axis + Adapter				
Operating Mode > 1GHz CTX				
After evaluating, and the worst case was found at Y axis, so it was selected to perform test and its test resul was written in the report.				
1	EUT in Y axis			

The Worst Case Mode for Following Conformance Tests			
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location		
Test Condition	Radiated measurement		
Operating Mode	Operating Mode Normal Link		
After evaluating, and the worst case was found at Y axis, so it was selected to perform test and its test result was written in the report.			
1	EUT in Y-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.: FA2N1823 for Co-location RF Exposure Evaluation.			

# 2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.

### 2.4 Accessories

Accessories			
Equipment Brand Model Name Name Name		Rating	
Adapter	MOSO	MSS-V3500WR120-042A0-US	Input: 100-240V~50/60Hz, 1.2A max. Output: 12.0V, 3.5A
Other			
RJ-45 cable*1, non-shielded, 1.5m			

# 2.5 Support Equipment

For AC Conduction:

	Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID	
А	Phone 1	PHILIPS	M20	N/A	
В	Phone 2	PHILIPS	M20	N/A	
С	2.4G NB	DELL	E6430	N/A	
D	5G NB	DELL	E6430	N/A	
Е	LAN NB	DELL	E6430	N/A	
F	Terminal system	hitron	RAC-500	N/A	
G	Flash disk3.0	Transcend	639205 7755	N/A	



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

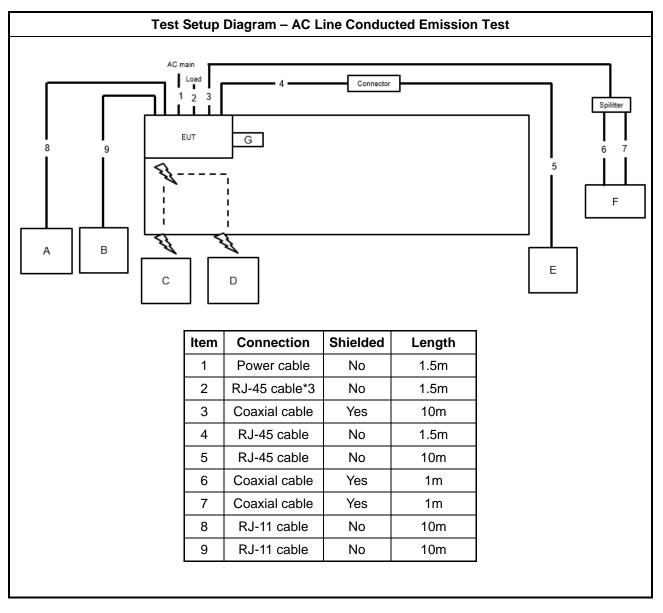
	Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID	
А	LAN NB	DELL	E4300	N/A	
В	Terminal system	Jinghong	JH-HE3416B	N/A	
С	2.4G NB	DELL	E4300	N/A	
D	5G NB	DELL	E4300	N/A	
Е	Flash disk3.0	Transcend	JetFlash-700	N/A	
F	Phone	H-T-T	F-689	N/A	
G	Phone	H-T-T	F-689	N/A	

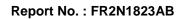
#### For Radiated (above 1GHz) and RF Conducted:

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

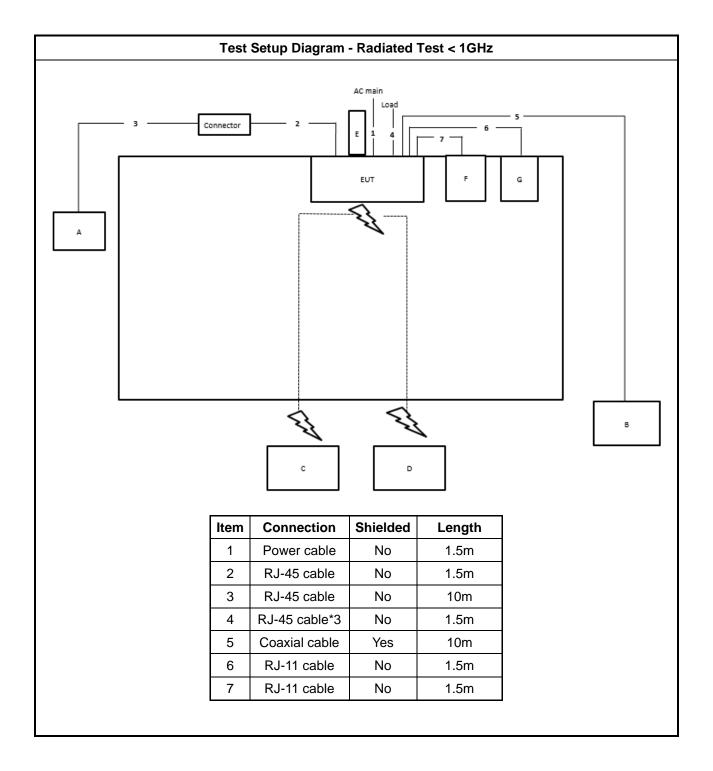


# 2.6 Test Setup Diagram

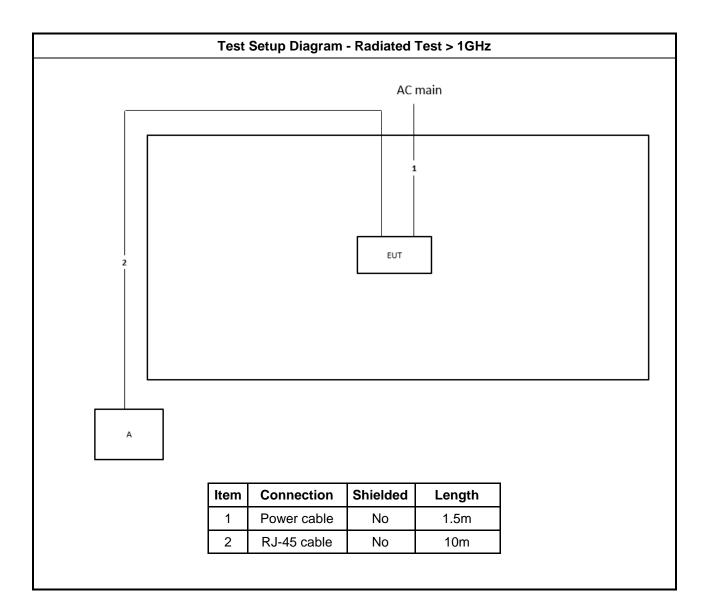














# 3 Transmitter Test Result

### 3.1 AC Power-line Conducted Emissions

#### 3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		_imit
Frequency Emission (MHz) Quasi-Peak Average		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.

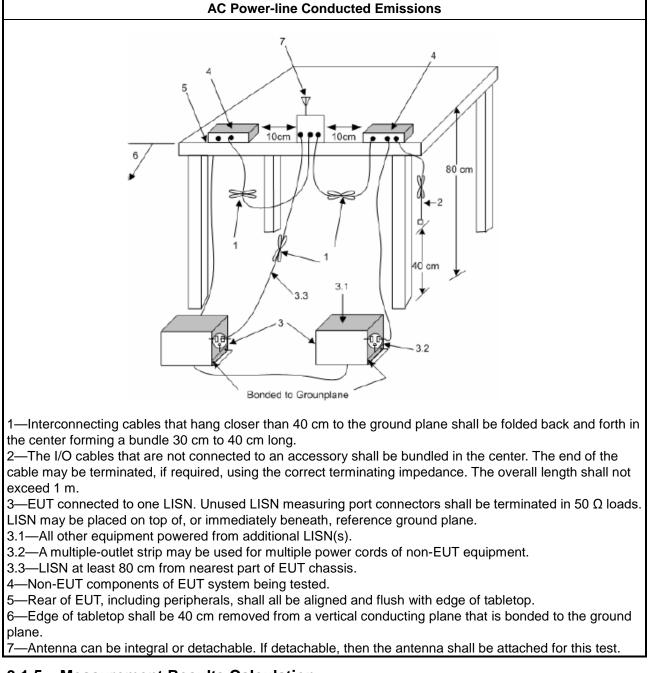
#### 3.1.3 Test Procedures

**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 Measurement Results Calculation

The measured Level is calculated using:

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

b. Margin = -Limit + Level

#### 3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A



### 3.2 Emission Bandwidth

#### 3.2.1 Emission Bandwidth Limit

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

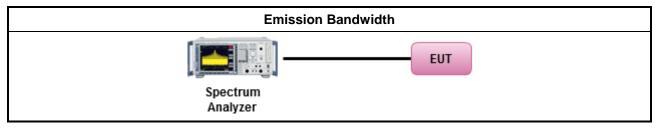
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

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

#### 3.2.4 Test Setup



#### 3.2.5 Test Result of Emission Bandwidth

#### Refer as Appendix B



# 3.3 Maximum Output Power

### 3.3.1 Limit

	Maximum Output Power Limit
UNI	I Devices
$\boxtimes$	For the 5.15-5.25 GHz band:
	<ul> <li>Outdoor AP: the maximum conducted output power (Pout) shall not exceed the lesser of 1 W. If G<sub>TX</sub> &gt; 6 dBi, then Pout = 30 - (G<sub>TX</sub> - 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]</li> </ul>
	<ul> <li>Indoor 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)</li> </ul>
	<ul> <li>Point-to-point AP: the maximum conducted output power (Pout) shall not exceed the lesser of 1 W If G<sub>TX</sub> &gt; 23 dBi, then Pout = 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 (Pout) shall not exceed the lesser of 1 W. If G<sub>TX</sub> &gt; 6 dBi, then Pout = 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>
	e = 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		
	Average over on/off periods with duty factor		
		Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).	
		Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
	Wid	eband RF power meter and average over on/off periods with duty factor	
	$\boxtimes$	Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).	
$\boxtimes$	For	conducted measurement.	
	•	If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
	•	If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) EIRP <sub>total</sub> = P <sub>total</sub> + DG	
	For	radiated measurement.	
		Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"	
		Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
	•	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.	
L	1		

### 3.3.4 Test Setup

Conducted Measurement (Power Meter)	
Power Meter	

#### 3.3.5 Test Result of Maximum Output Power

Refer as Appendix C

# 3.4 Power Spectral Density

### 3.4.1 Limit

	Peak Power Spectral Density Limit	
UNII Devices		
$\boxtimes$	For the 5.15-5.25 GHz band:	
	• Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$ .	
	• Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$ .	
	• Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$ .	
	<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:	
	<ul> <li>Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G<sub>TX</sub> &gt; 6 dBi, then PPSD= 30 - (G<sub>TX</sub> - 6).</li> </ul>	
	<ul> <li>Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.</li> </ul>	
pow	<b>SD</b> = peak power spectral density that he same method as used to determine the conducted output ver shall be used to determine the power spectral density. And power spectral density in dBm/MHz = 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.

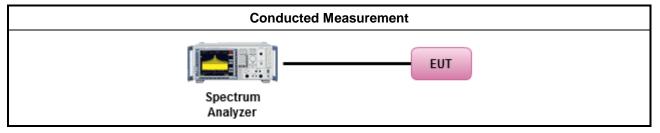
### 3.4.3 Test Procedures

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



Test Method
<ul> <li>Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>
Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

### 3.4.4 Test Setup



#### 3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



### 3.5 Unwanted Emissions

#### 3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit		
Operating Band	Limit	
🔀 5.15 - 5.25 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]	
🔲 5.25 - 5.35 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]	
🗌 5.47 - 5.725 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]	
⊠ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.	
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of		



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

#### 3.5.2 Measuring Instruments

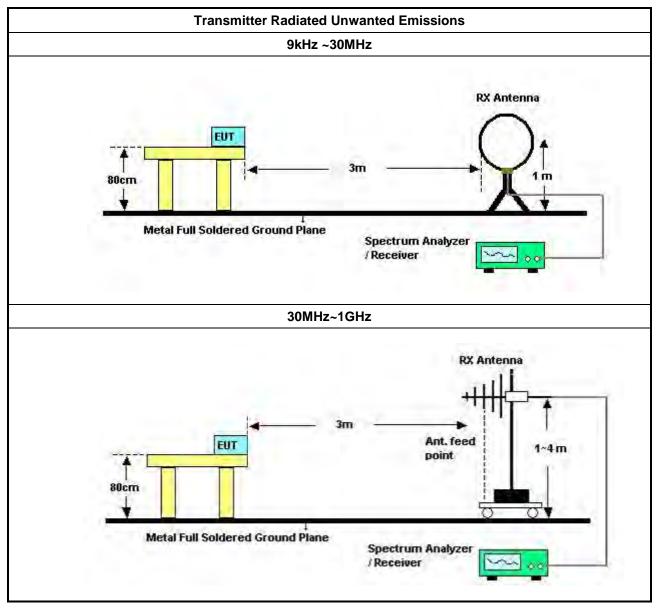
Refer a test equipment and calibration data table in this test report.

#### 3.5.3 Test Procedures

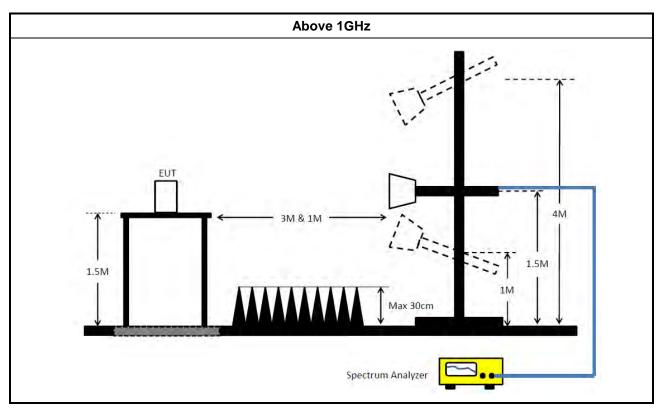
			Test Method		
•	Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies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



### 3.5.4 Test Setup







#### 3.5.5 Measurement Results Calculation

The measured Level is calculated using:

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

#### 3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

#### 3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



#### **Test Equipment and Calibration Data** 4

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50- 16-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde& Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 03, 2022	Aug. 02, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m Nov. 06, 2022		Nov. 05, 2023	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz May 14, 2022		May 13, 2023	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz Mar. 25, 2022		Mar. 24, 2023	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBE CK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Jun. 23, 2022	Jun. 22, 2023	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH05-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz Nov. 16, 2		Nov. 15, 2023	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Mar. 14, 2022	Mar. 13, 2023	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)

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Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 05, 2022	May 04, 2023	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Jun. 23, 2022	Jun. 22, 2023	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH03-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 10, 2022	Jun. 09, 2023	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 30, 2022	Dec. 29, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Sep. 04, 2022	Sep. 03, 2023	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Sep. 04, 2022	Sep. 03, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)



Switch	SPTCB	SP-SWI	SWI-03	1 GHz –26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

NCR means Non-Calibration required.



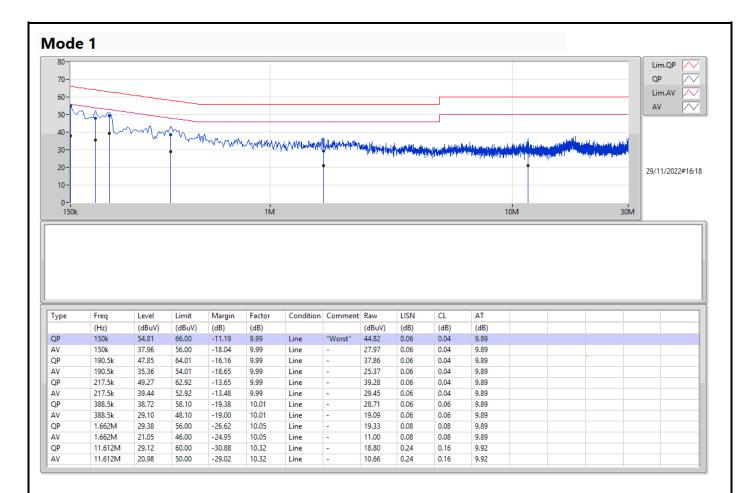
### **Conducted Emissions at Powerline**

# Appendix A

Summary							
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition
			(Hz)	(dBuV)	(dBuV)	(dB)	
Mode 1	Pass	QP	150k	54.81	66.00	-11.19	Line

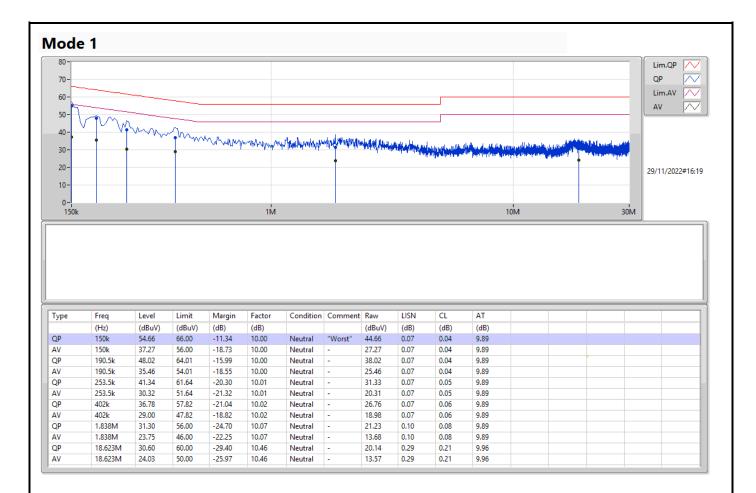














#### Summary

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)_4TX	35.34M	17.947M	17M9D1D	22.47M	16.477M	
802.11ac VHT20_Nss1,(MCS0)_4TX	34.77M	18.093M	18M1D1D	22.14M	17.628M	
802.11ac VHT40_Nss1,(MCS0)_4TX	76.8M	37.175M	37M2D1D	39.36M	35.758M	
802.11ac VHT80_Nss1,(MCS0)_4TX	83.88M	75.871M	75M9D1D	83.4M	75.796M	
5.725-5.85GHz	-	-	-	-	-	
802.11a_Nss1,(6Mbps)_4TX	16.35M	24.132M	24M1D1D	15.42M	16.904M	
802.11ac VHT20_Nss1,(MCS0)_4TX	17.61M	22.851M	22M9D1D	15.99M	18.051M	
802.11ac VHT40_Nss1,(MCS0)_4TX	36.36M	42.445M	42M4D1D	33.36M	36.628M	
802.11ac VHT80_Nss1,(MCS0)_4TX	75.96M	76.164M	76M2D1D	75.24M	75.888M	

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band; Max-OBW = Maximum 99% occupied bandwidth; Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band; Min-OBW = Minimum 99% occupied bandwidth



#### Result

Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW	Port 3-N dB	Port 3-OBW	Port 4-N dB	Port 4-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	22.5M	16.608M	22.71M	16.571M	22.53M	16.477M	27.39M	16.675M
5200MHz	Pass	Inf	31.29M	16.951M	28.56M	16.791M	25.14M	16.601M	35.34M	17.947M
5240MHz	Pass	Inf	27.57M	16.791M	26.61M	16.615M	22.47M	16.49M	34.14M	17.264M
5745MHz	Pass	500k	16.29M	19.751M	15.42M	16.904M	16.32M	21.879M	16.35M	23.291M
5785MHz	Pass	500k	16.32M	21.391M	16.32M	17.489M	16.32M	24.132M	16.32M	23.678M
5825MHz	Pass	500k	16.29M	21.477M	16.29M	17.974M	15.99M	23.389M	16.29M	22.499M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	27.42M	17.824M	27.54M	17.746M	22.38M	17.655M	27.75M	17.823M
5200MHz	Pass	Inf	28.86M	17.898M	28.65M	17.793M	22.41M	17.683M	34.77M	18.093M
5240MHz	Pass	Inf	28.17M	17.826M	23.25M	17.71M	22.14M	17.628M	32.67M	17.954M
5745MHz	Pass	500k	17.61M	20.958M	15.99M	18.051M	17.52M	22.851M	17.55M	22.142M
5785MHz	Pass	500k	17.58M	21.735M	16.02M	18.301M	17.55M	22.364M	17.55M	21.947M
5825MHz	Pass	500k	17.58M	21.337M	16.89M	18.513M	17.55M	21.671M	17.58M	20.961M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	39.36M	35.758M	39.72M	35.813M	40.14M	35.897M	40.2M	35.881M
5230MHz	Pass	Inf	54.78M	36.197M	55.68M	36.108M	55.92M	36.221M	76.8M	37.175M
5755MHz	Pass	500k	33.36M	36.831M	36.36M	36.628M	34.44M	37.986M	35.34M	37.532M
5795MHz	Pass	500k	33.78M	39.622M	35.28M	36.946M	34.68M	42.214M	35.04M	42.445M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	83.4M	75.802M	83.64M	75.871M	83.88M	75.796M	83.64M	75.824M
5775MHz	Pass	500k	75.24M	75.888M	75.48M	76.017M	75.6M	76.148M	75.96M	76.164M

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

**EBW** 



#### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX

5180MHz

CF

Span

RBW

VBW

1MH<sub>7</sub>

100ms

Peak

Port 1

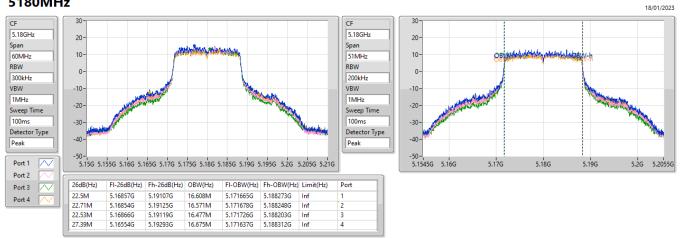
Port 2

Port 3

Port 4

60MHz

300kHz



### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5200MHz

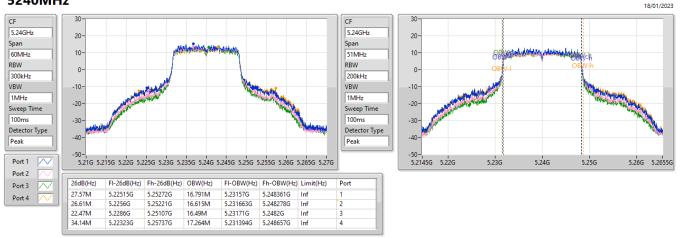
#### 18/01/2023 30 30 CF 5.2GHz 5.2GHz 20-20-Span and an and a state of the state 10-51MHz 10-RBW 0-0-200kHz -10-VBW -10-\* 1MH<sub>7</sub> -20 -20 Sweep Time Sweep Time -30 100ms -30 Detector Type Detector Type -40 -40 Peak -50-5.17G 5.175G 5.18G 5.185G 5.19G 5.195G 5.2G 5.205G 5.21G 5.215G 5.22G 5.225G 5.23G -50-5.1745G 5.18G 5.2G 5.21G 5.22G 5.2255G 5.19G 26dB(Hz) FI-26dB(Hz) Fh-26dB(Hz) OBW(Hz) FI-OBW(Hz) Fh-OBW(Hz) Limit(Hz) Port 31.29M 5.185G 5.21629G 16.951M 5.191474G 5.208426G Inf 28.56M 5.18506G 5.21362G 16.791M 5.191571G 5.208362G Inf 25.14M 5.18722G 5.21236G 16.601M 5.191651G 5.208252G Inf 35.34M 5.18209G 5.21743G 17.947M 5.190934G 5.208881G Inf л

**EBW** 

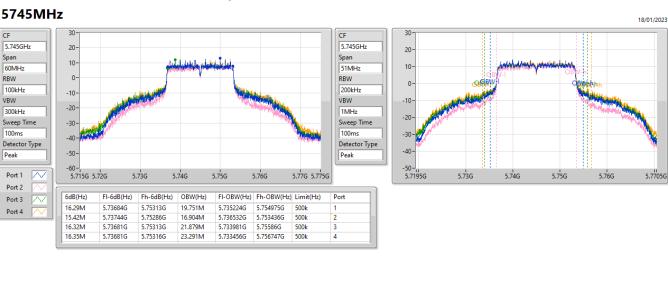


#### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX

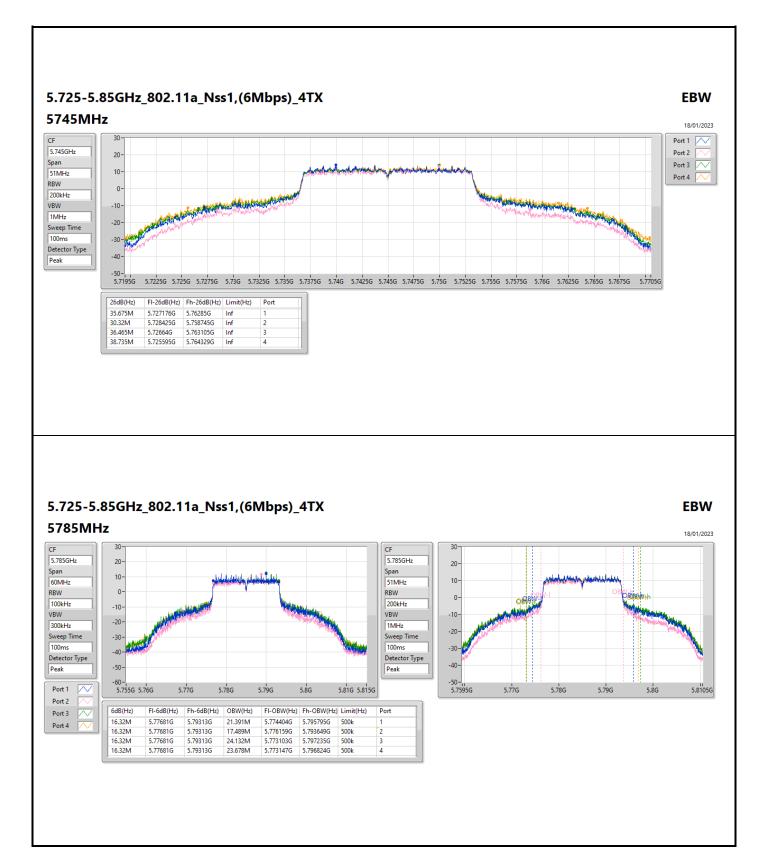
5240MHz



# 5.725-5.85GHz\_802.11a\_Nss1,(6Mbps)\_4TX

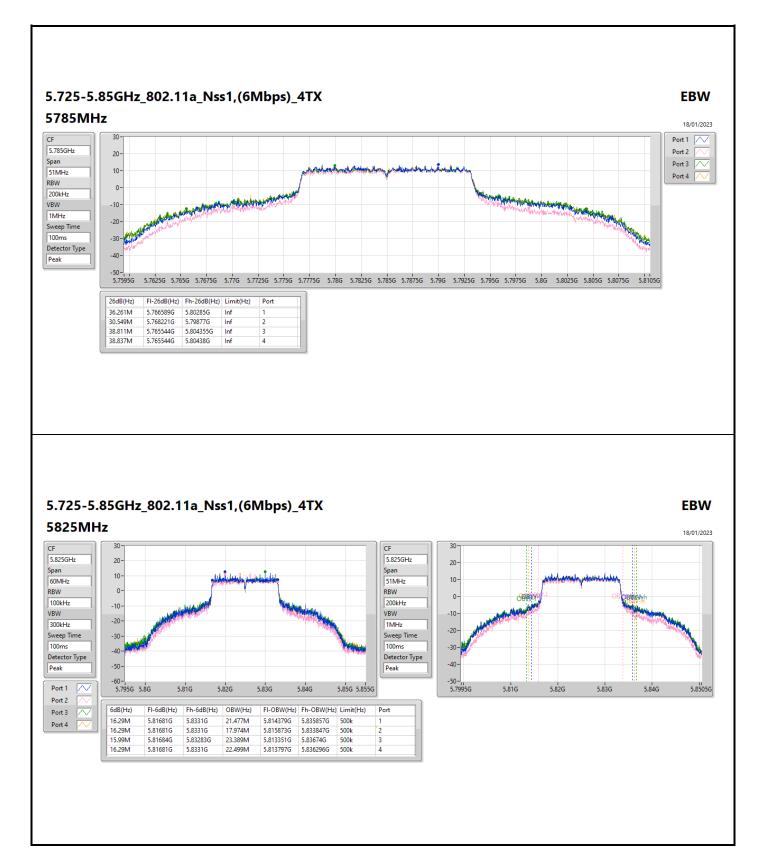






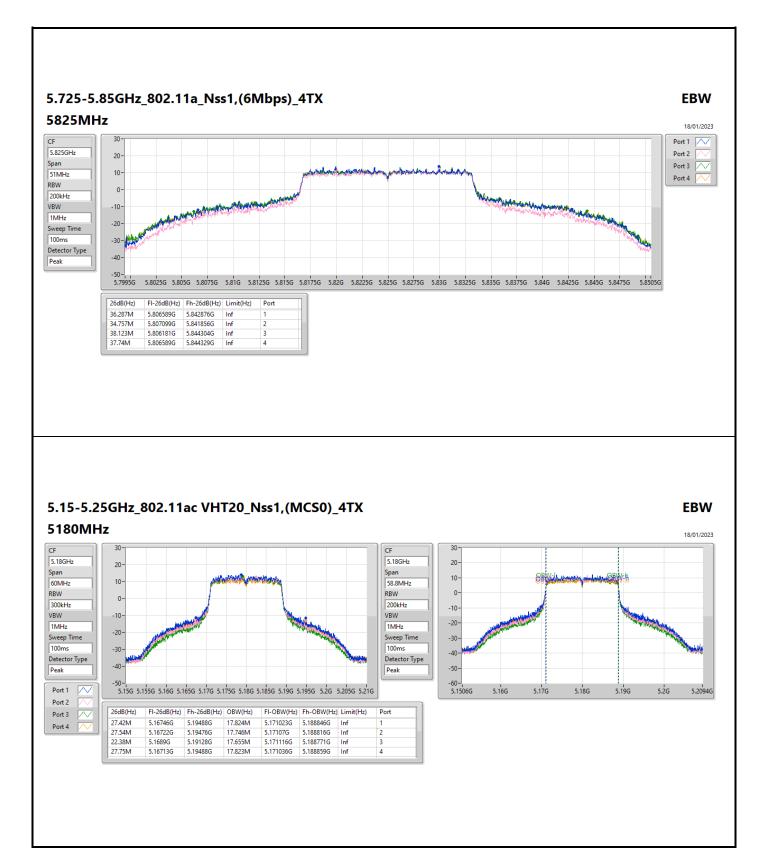










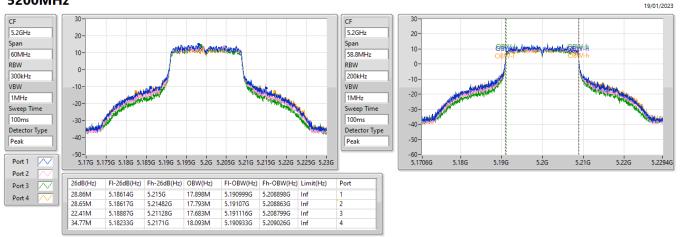




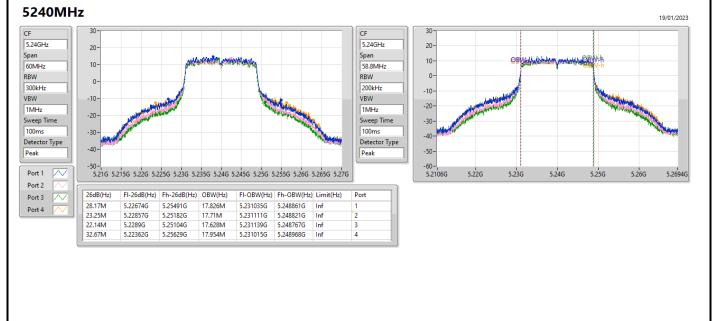
## EBW

#### 5.15-5.25GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX

5200MHz



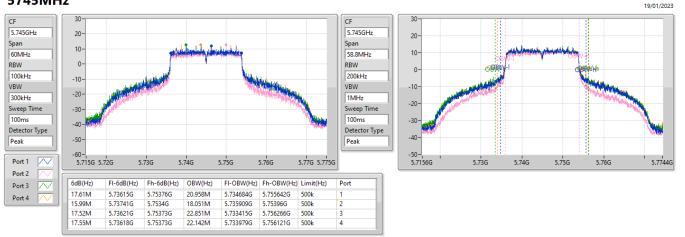
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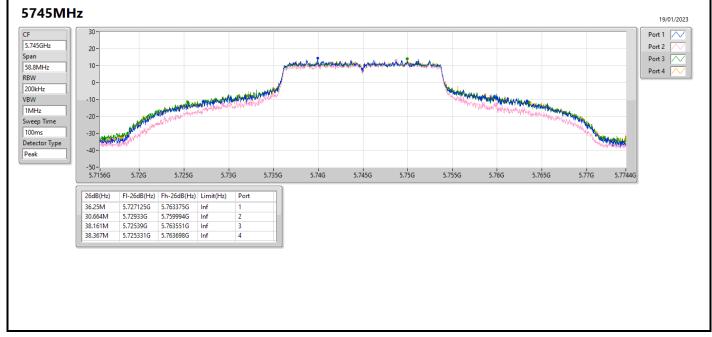


### 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX

5745MHz



### 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX

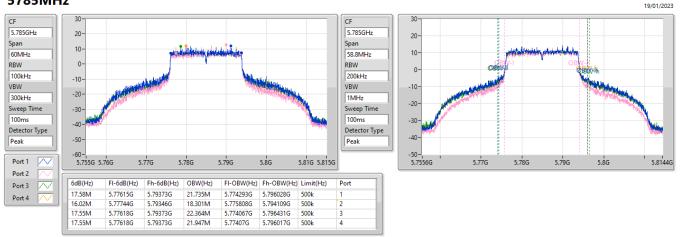




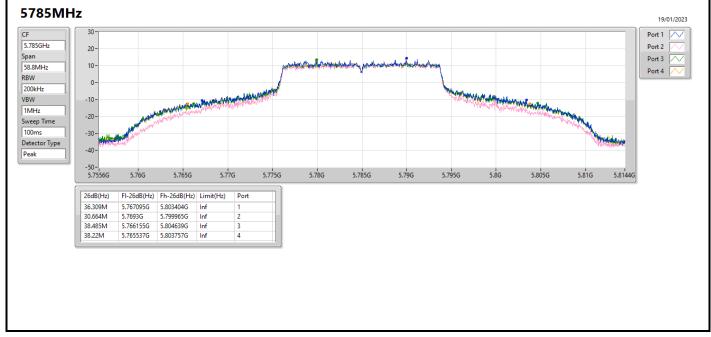
## EBW

#### 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX

5785MHz



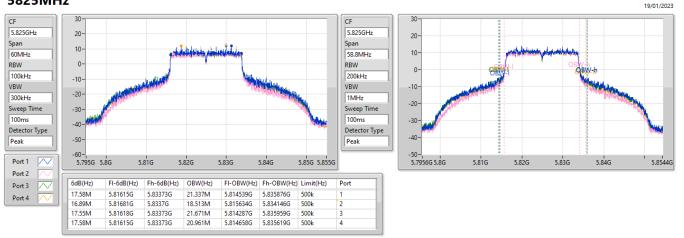
### 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX





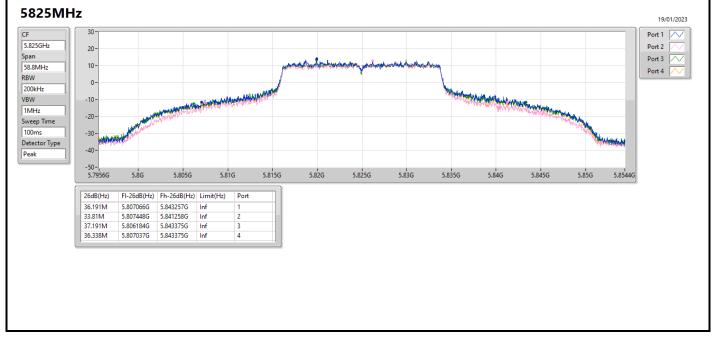
### 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX

5825MHz



### 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX

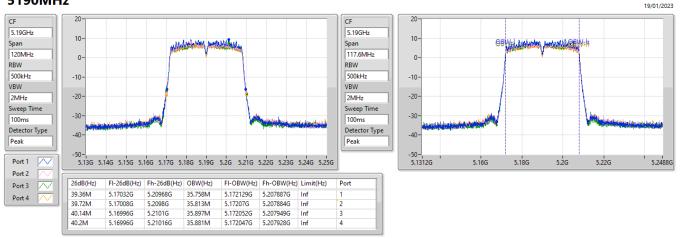




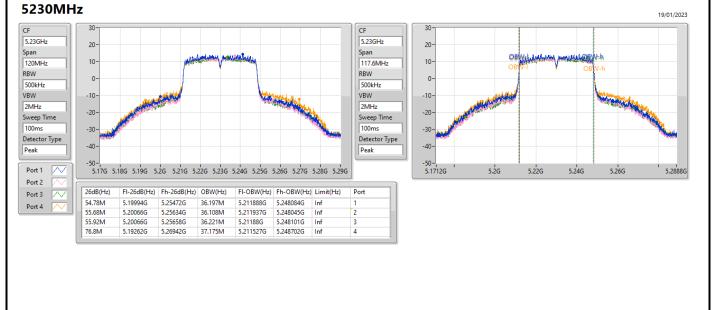


#### 5.15-5.25GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX

5190MHz



# 5.15-5.25GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX

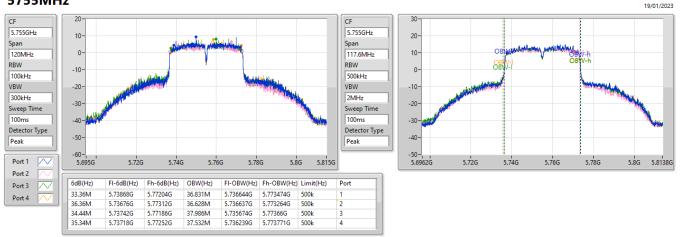




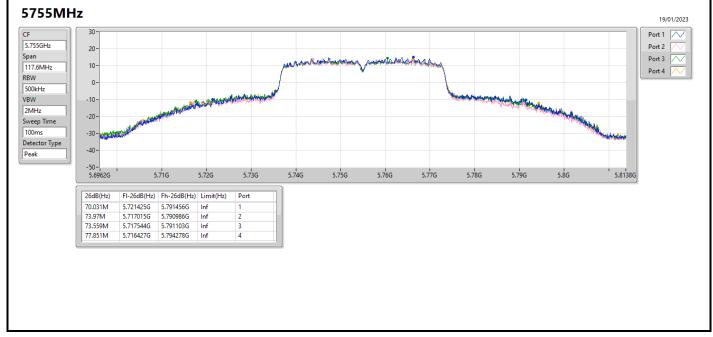
## EBW

### 5.725-5.85GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX

5755MHz



### 5.725-5.85GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX

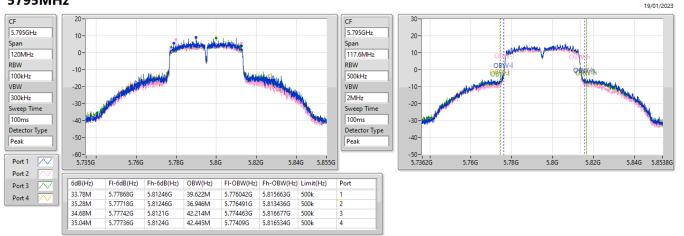




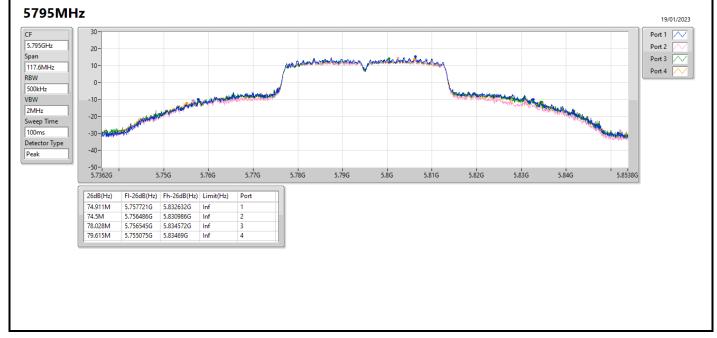
## EBW

### 5.725-5.85GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX

5795MHz



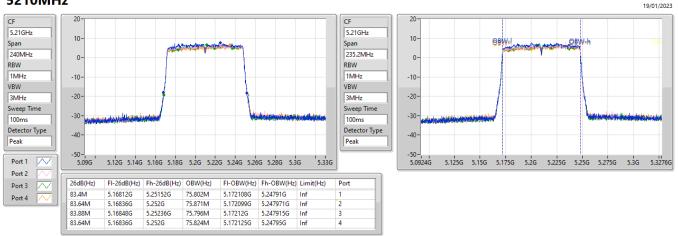
### 5.725-5.85GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX



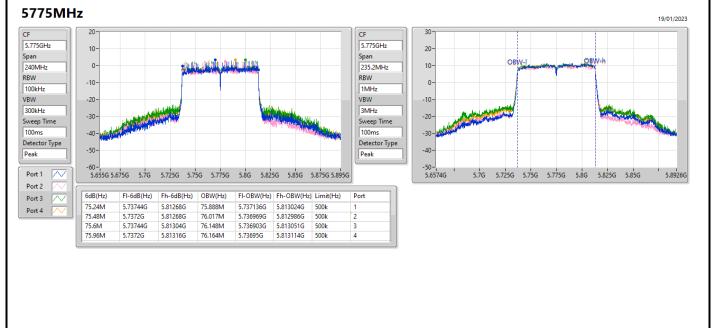


#### 5.15-5.25GHz\_802.11ac VHT80\_Nss1,(MCS0)\_4TX

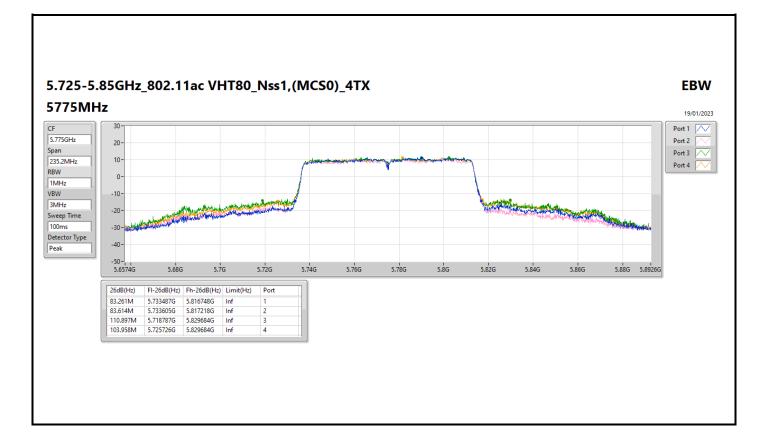
5210MHz



### 5.725-5.85GHz\_802.11ac VHT80\_Nss1,(MCS0)\_4TX









# Average Power

# Appendix C

#### Summary

Mode	Total Power	Total Power
	(dBm)	(W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	28.49	0.70632
802.11ac VHT20_Nss1,(MCS0)_4TX	28.35	0.68391
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	27.93	0.62087
802.11ac VHT40_Nss1,(MCS0)_4TX	28.31	0.67764
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	27.85	0.60954
802.11ac VHT80_Nss1,(MCS0)_4TX	21.65	0.14622
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	21.65	0.14622
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.57	0.90573
802.11ac VHT20_Nss1,(MCS0)_4TX	29.38	0.86696
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	27.87	0.61235
802.11ac VHT40_Nss1,(MCS0)_4TX	28.79	0.75683
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	28.05	0.63826
802.11ac VHT80_Nss1,(MCS0)_4TX	25.96	0.39446
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	25.96	0.39446



# Average Power

# Appendix C

#### Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Lim (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	1.97	22.77	22.13	21.89	21.18	28.05	30.00
5200MHz	Pass	1.97	23.19	22.49	22.20	21.87	28.49	30.00
5240MHz	Pass	1.97	23.16	22.34	21.90	21.99	28.40	30.00
5745MHz	Pass	1.97	23.79	22.78	23.51	24.03	29.57	30.00
5785MHz	Pass	1.97	23.90	22.69	23.24	23.46	29.36	30.00
5825MHz	Pass	1.97	23.20	22.45	22.68	22.69	28.78	30.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	1.97	22.76	21.93	21.74	21.02	27.93	30.00
5200MHz	Pass	1.97	23.11	22.35	22.10	21.63	28.35	30.00
5240MHz	Pass	1.97	23.12	22.27	21.75	22.03	28.34	30.00
5745MHz	Pass	1.97	23.80	22.69	23.32	23.54	29.38	30.00
5785MHz	Pass	1.97	23.54	21.94	22.88	23.07	28.92	30.00
5825MHz	Pass	1.97	23.27	22.51	22.76	22.87	28.88	30.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	1.97	17.73	17.01	16.86	16.44	23.06	30.00
5230MHz	Pass	1.97	22.82	22.23	22.00	22.05	28.31	30.00
5755MHz	Pass	1.97	22.95	22.32	22.46	22.54	28.59	30.00
5795MHz	Pass	1.97	23.16	22.52	22.62	22.74	28.79	30.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	1.97	16.47	15.04	15.55	15.34	21.65	30.00
5775MHz	Pass	1.97	19.89	19.48	20.15	20.20	25.96	30.00
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.91	22.76	21.93	21.74	21.02	27.93	28.09
5200MHz	Pass	7.91	22.73	21.94	21.60	21.23	27.93	28.09
5240MHz	Pass	7.91	22.62	21.74	21.14	21.36	27.77	28.09
5745MHz	Pass	7.91	22.07	21.15	21.82	22.24	27.86	28.09
5785MHz	Pass	7.91	22.01	21.12	21.92	22.25	27.87	28.09
5825MHz	Pass	7.91	21.78	21.13	22.18	22.23	27.87	28.09
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	7.91	17.73	17.01	16.86	16.44	23.06	28.09
5230MHz	Pass	7.91	22.36	21.79	21.45	21.66	27.85	28.09
5755MHz	Pass	7.91	22.16	21.38	22.29	22.20	28.04	28.09
5795MHz	Pass	7.91	21.97	21.41	22.36	22.32	28.05	28.09
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	7.91	16.47	15.04	15.55	15.34	21.65	28.09
5775MHz	Pass	7.91	19.89	19.48	20.15	20.20	25.96	28.09

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



#### Summary

Mode	PD (ID (DDM)	EIRP PD
	(dBm/RBW)	(dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	15.04	22.95
802.11ac VHT20_Nss1,(MCS0)_4TX	14.82	22.73
802.11ac VHT40_Nss1,(MCS0)_4TX	12.20	20.11
802.11ac VHT80_Nss1,(MCS0)_4TX	2.31	10.22
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	14.48	22.39
802.11ac VHT20_Nss1,(MCS0)_4TX	14.25	22.16
802.11ac VHT40_Nss1,(MCS0)_4TX	11.22	19.13
802.11ac VHT80_Nss1,(MCS0)_4TX	5.01	12.92

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

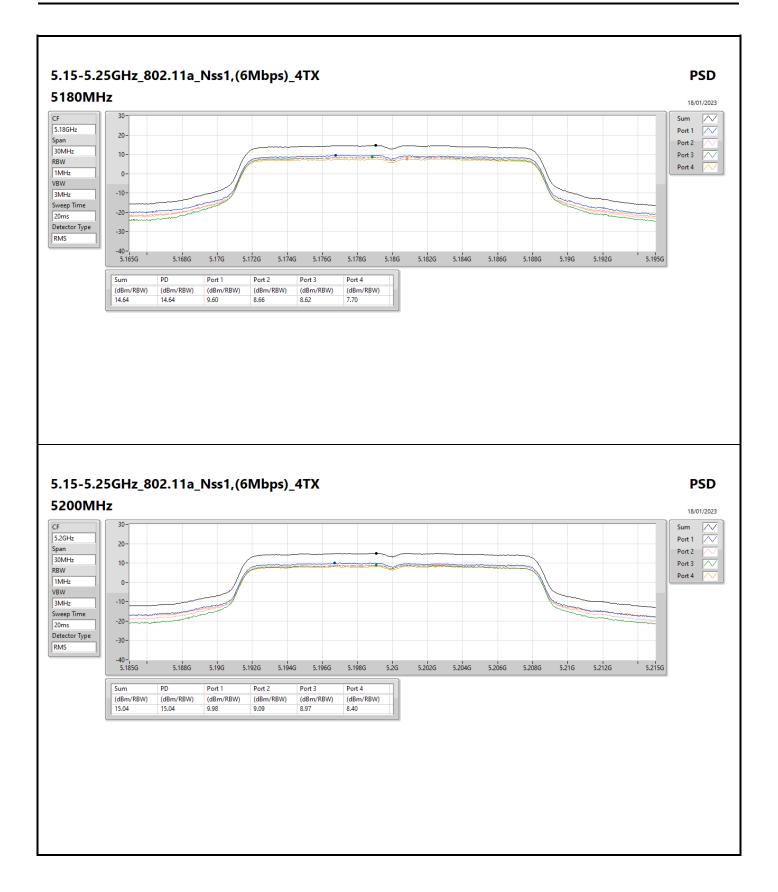


#### Result

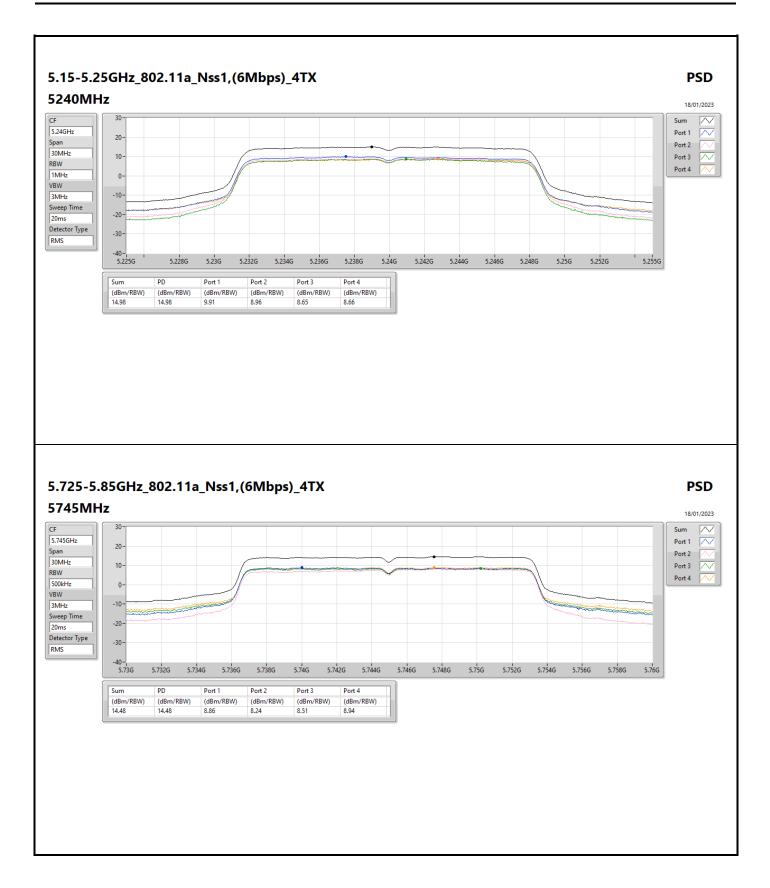
Mode	Result	DG	Port 1	Port 2	Port 3	Port 4	PD	PD Limit	EIRP PD	EIRP PD Limit
		(dBi)	(dBm/RBW)							
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	7.91	9.60	8.66	8.62	7.70	14.64	15.09	22.55	23.00
5200MHz	Pass	7.91	9.98	9.09	8.97	8.40	15.04	15.09	22.95	23.00
5240MHz	Pass	7.91	9.91	8.96	8.65	8.66	14.98	15.09	22.89	23.00
5745MHz	Pass	7.91	8.86	8.24	8.51	8.94	14.48	28.09	22.39	36.00
5785MHz	Pass	7.91	8.75	8.16	8.23	8.24	14.16	28.09	22.07	36.00
5825MHz	Pass	7.91	8.53	7.87	7.99	8.05	13.94	28.09	21.85	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	7.91	9.19	8.14	8.04	7.20	14.12	15.09	22.03	23.00
5200MHz	Pass	7.91	9.68	8.62	8.49	7.84	14.63	15.09	22.54	23.00
5240MHz	Pass	7.91	9.79	8.77	8.48	8.55	14.82	15.09	22.73	23.00
5745MHz	Pass	7.91	8.88	8.10	8.21	8.40	14.25	28.09	22.16	36.00
5785MHz	Pass	7.91	8.46	8.00	7.80	7.82	13.85	28.09	21.76	36.00
5825MHz	Pass	7.91	8.44	7.82	7.66	7.77	13.74	28.09	21.65	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	7.91	1.91	0.69	0.90	0.31	6.93	15.09	14.84	23.00
5230MHz	Pass	7.91	6.95	6.10	6.17	6.12	12.20	15.09	20.11	23.00
5755MHz	Pass	7.91	5.35	5.00	4.94	5.11	11.04	28.09	18.95	36.00
5795MHz	Pass	7.91	5.61	5.18	5.40	5.21	11.22	28.09	19.13	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	7.91	-2.81	-3.90	-3.63	-4.11	2.31	15.09	10.22	23.00
5775MHz	Pass	7.91	-0.74	-1.26	-0.49	-0.55	5.01	28.09	12.92	36.00

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

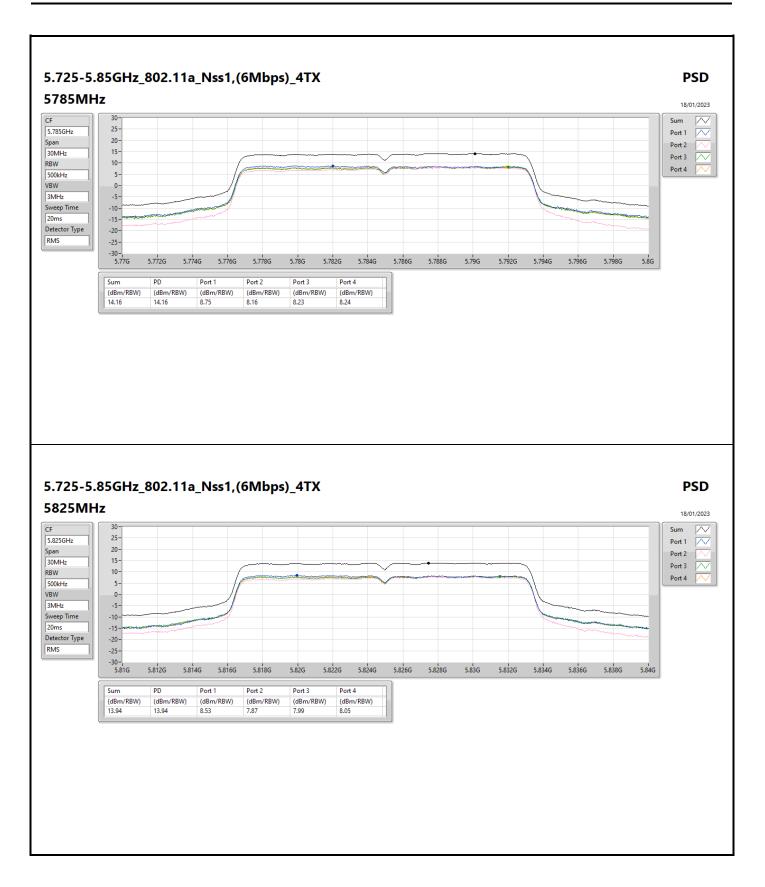




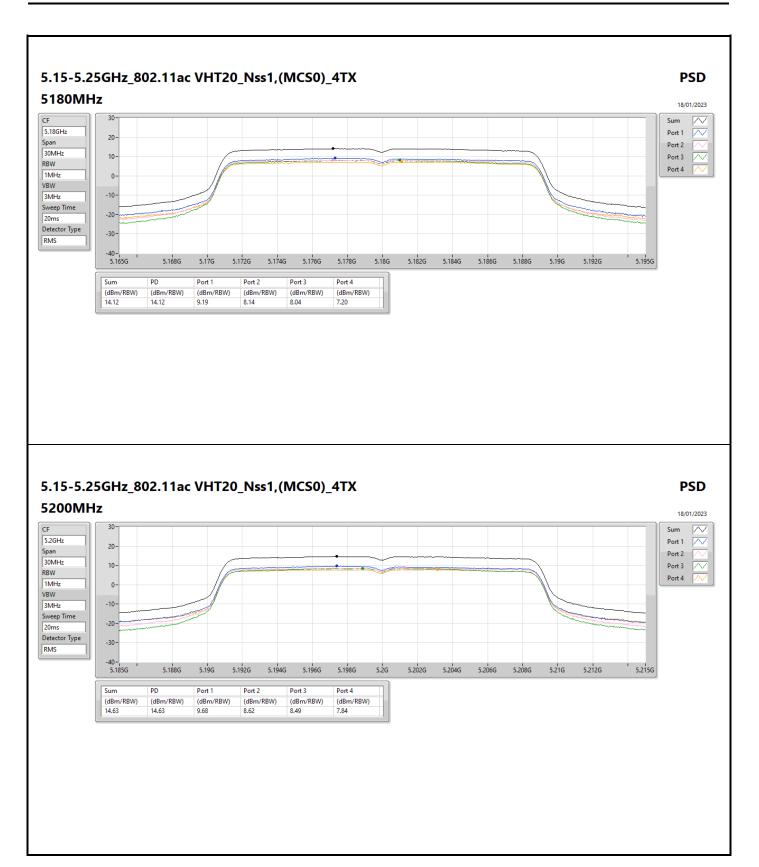




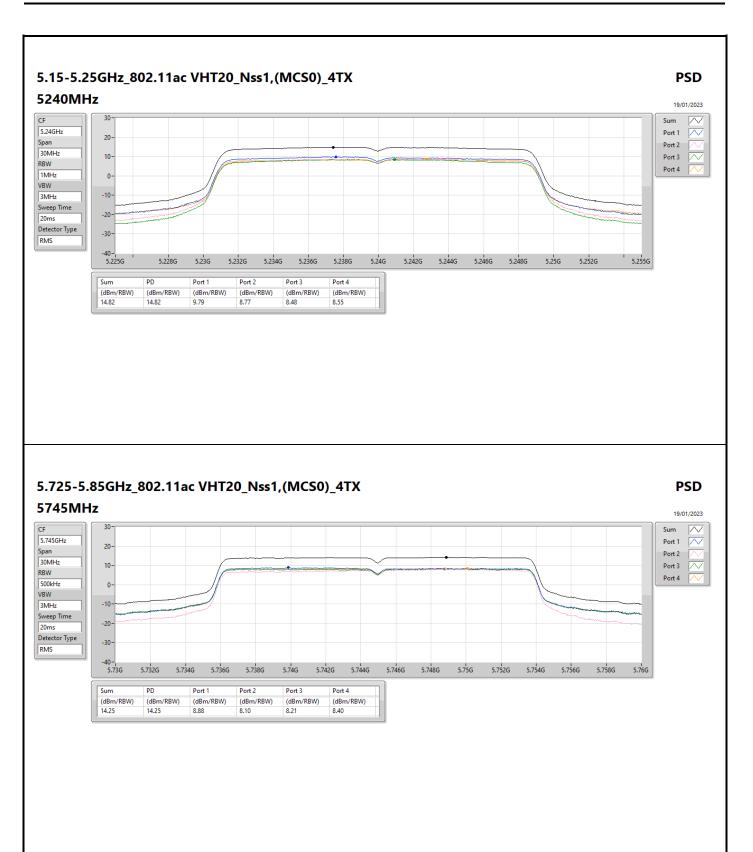




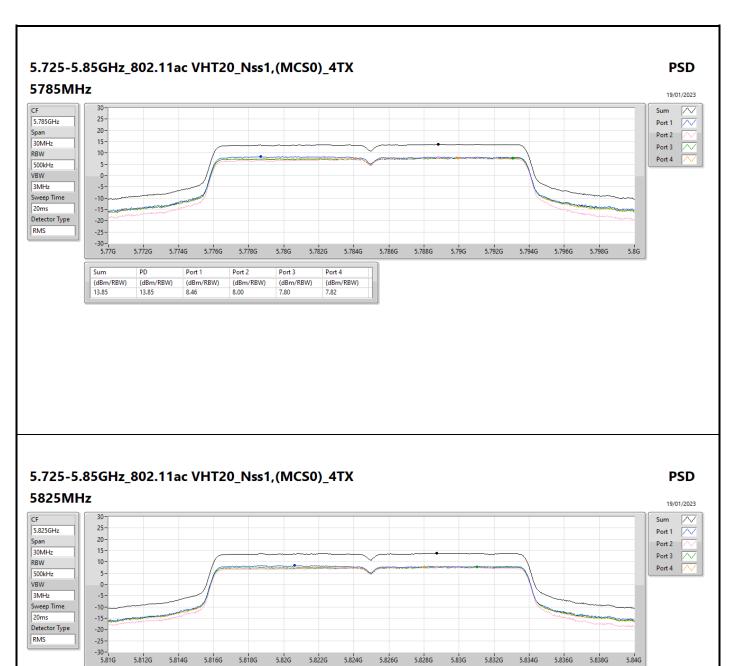


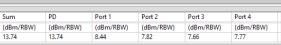




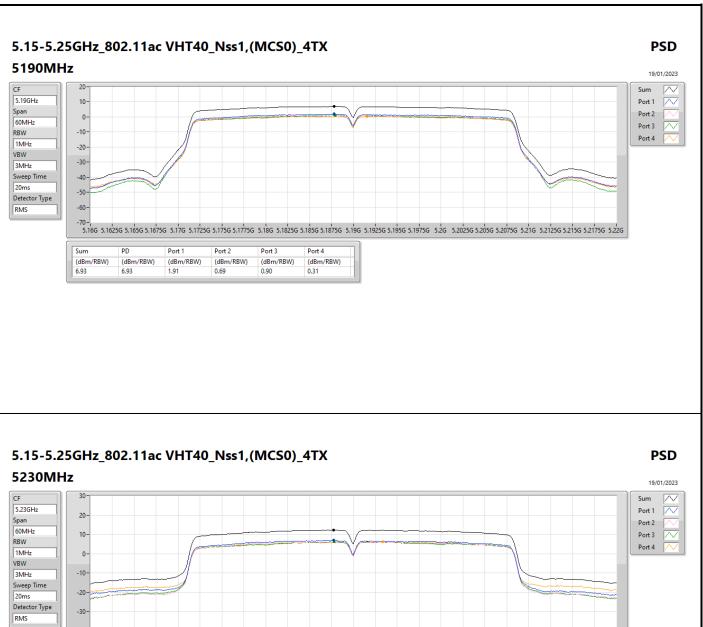


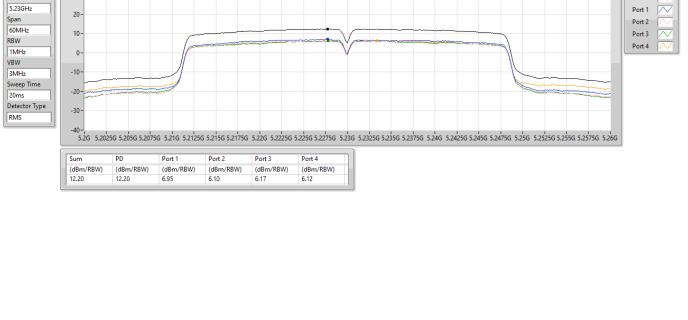




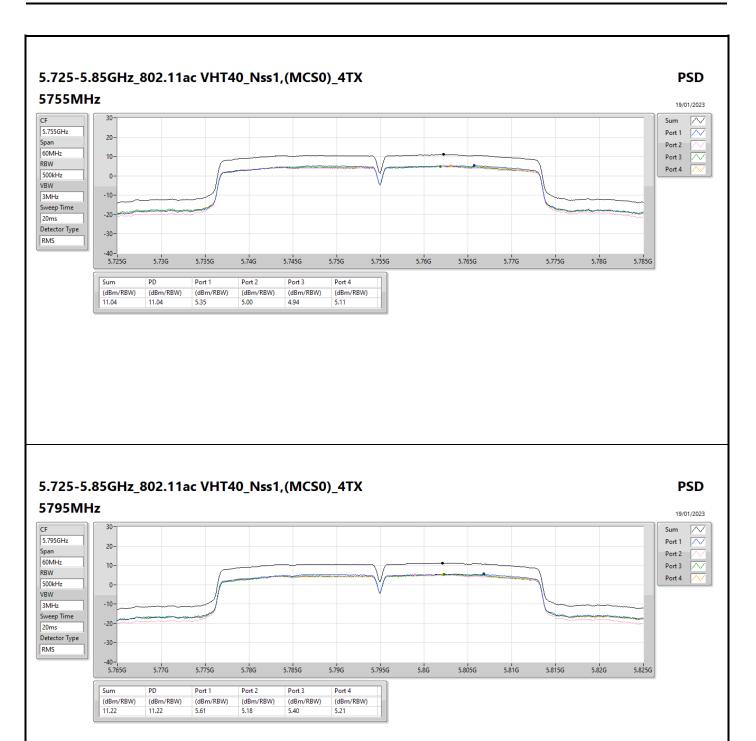




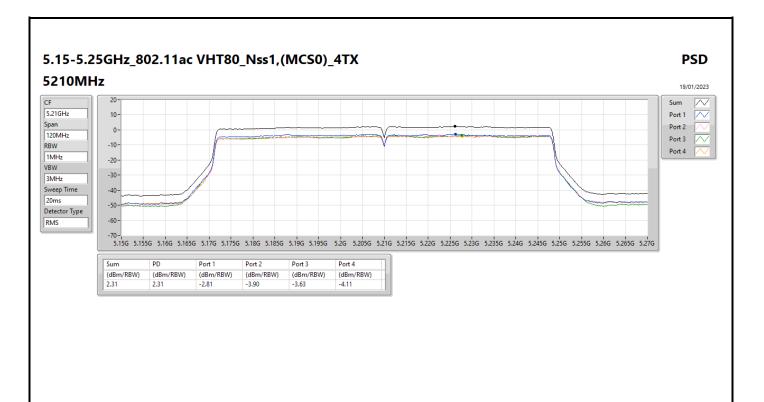








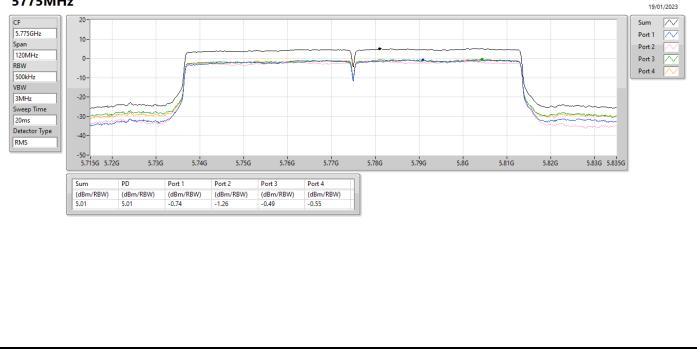




#### 5.725-5.85GHz\_802.11ac VHT80\_Nss1,(MCS0)\_4TX

#### PSD

#### 5775MHz





# Radiated Emissions below 1GHz

Summary										
Mode	Result	Туре	Freq	Level	Limit	Margin	Condition			
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)				
Mode 1	Pass	PK	35.82M	36.13	40.00	-3.87	Vertical			

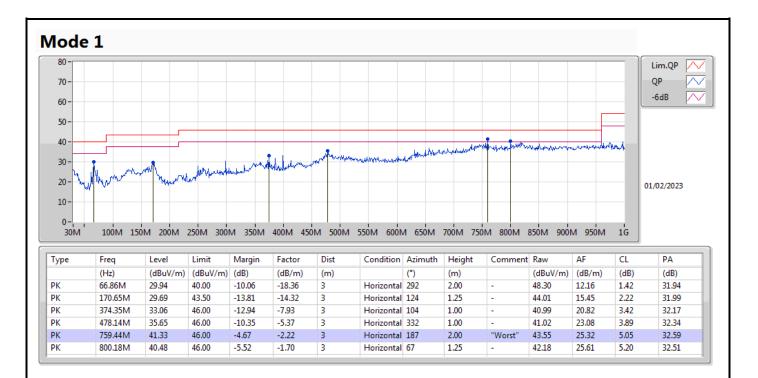


# Radiated Emissions below 1GHz





# Radiated Emissions below 1GHz





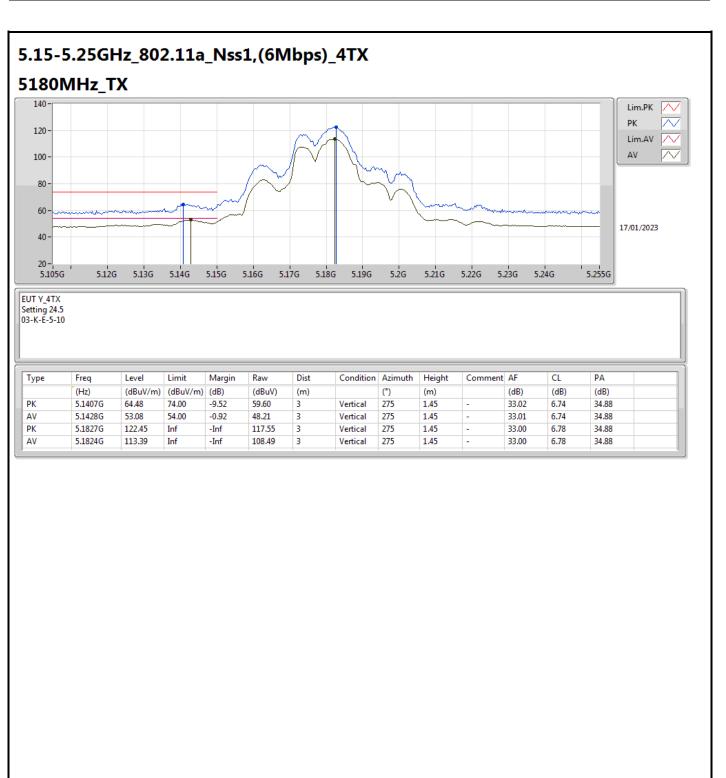
# RSE TX above 1GHz

# Appendix E.2

#### Summary

Mode	Result	Туре	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-			-	-	-	-	-
802.11ac VHT80_Nss1,(MCS0)_4TX	Pass	AV	5.133G	53.62	54.00	-0.38	3	Vertical	278	1.80	-







#### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5180MHz\_TX 140 -Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20 5.105G 5.12G 5.13G 5.14G 5.19G 5.2G 5.21G 5.22G 5.23G 5.24G 5.255G 5.15G 5.16G 5.17G 5.18G EUT Y\_4TX Setting 24.5 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (dB) (°) (m) PK 5.147G 6.75 34.88 65.37 74.00 -8.63 60.49 3 Horizontal 311 1.80 33.01 AV 5.1497G 52.84 54.00 -1.16 47.97 3 Horizontal 311 1.80 33.00 6.75 34.88 РК 5.1782G Horizontal 311 33.00 6.78 34.88 121.38 -Inf 116.48 3 1.80 Inf -AV 5.1779G Horizontal 311 34.88 112.22 Inf -Inf 107.32 3 1.80 \_ 33.00 6.78



#### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5180MHz\_TX 140-Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\square$ AV 100 -80-าเ Г л ¥. 60-17/01/2023 40 -20-1G 2G 4Ġ 6G 8G 10G 12G 14G 18G 24G 28G 30G 32G 34G 36G 38G 40G 16G 20G 22G 26G EUT Y\_4TX Setting 24.5 03-K-E-5 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (°) (m) (dB) PK 10.35854G 2.64 12.20 33.66 60.42 68.20 -7.78 43.12 3 Vertical 21 38.76 РК 15.5405G 64.23 74.00 -9.77 44.57 3 Vertical 337 2.40 37.94 16.24 34.52 -AV 15.53648G 51.14 54.00 -2.86 31.46 3 337 2.40 37.95 16.24 34.51 Vertical -

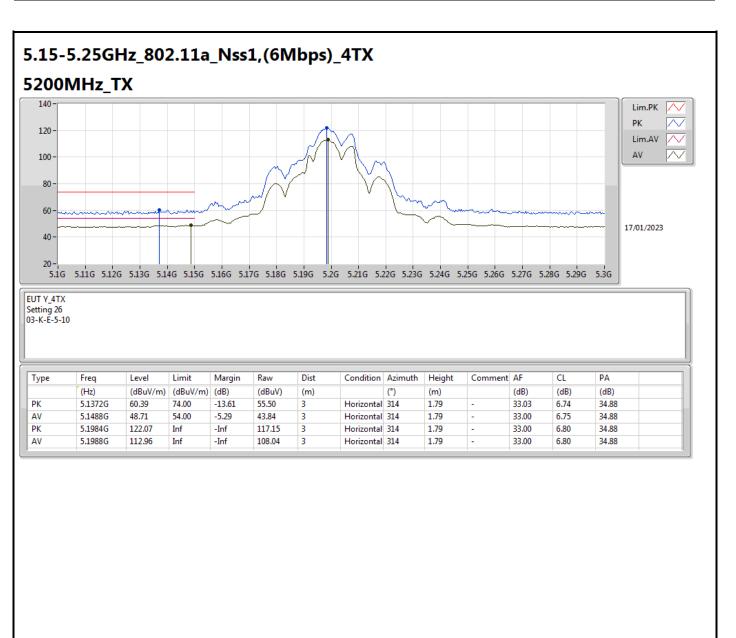


#### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5180MHz\_TX 140 Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-UL Л 1 60-17/01/2023 40 -20-1G 2G 4Ġ 8G 10G 12G 14G 18G 24G 28G 30G 32G 34G 36G 38G 40G 6Ġ 16G 20G 22G 26G EUT Y\_4TX Setting 24.5 03-K-E-5 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (°) (m) (dB) PK 10.35536G 12.20 33.68 60.06 68.20 -8.14 42.78 3 Horizontal 98 1.42 38.76 РК 15.54148G 63.38 74.00 -10.62 43.73 3 Horizontal 297 2.27 37.93 16.24 34.52 -AV 15.5428G 51.18 54.00 -2.82 31.53 3 Horizontal 297 2.27 37.93 16.24 34.52 -

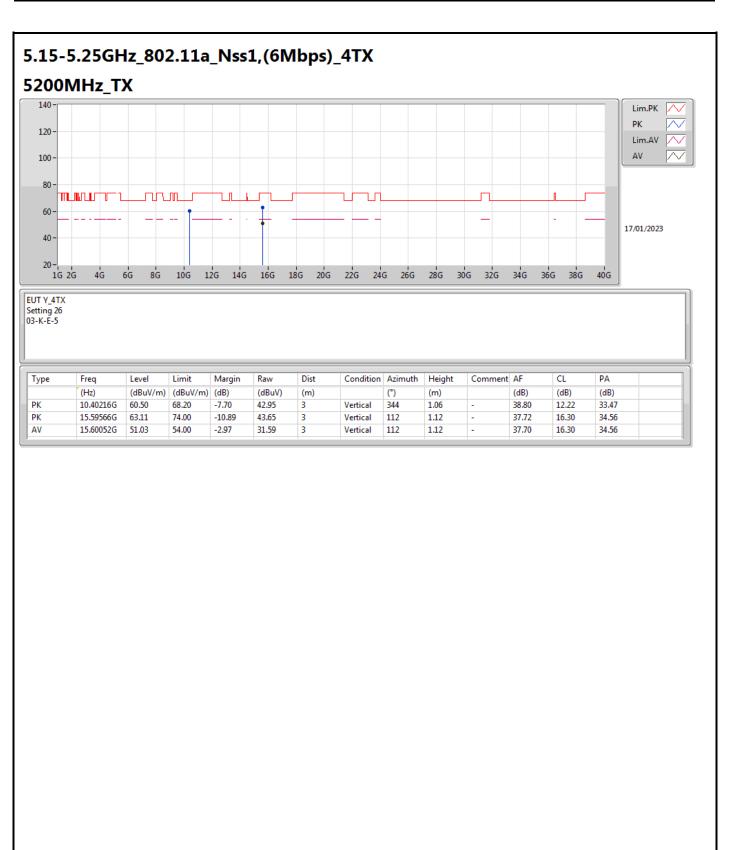


#### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5200MHz\_TX 140 -Lim.PK $\wedge$ РК $\sim$ 120 $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40 -20s.ig s.iig s.i2g s.i3g s.i4g s.i5g s.i6g s.i7g s.i8g s.i9g s.2g s.2ig s.22g s.23g s.24g s.25g s.26g s.27g s.28g s.29g s.3g EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (°) (dB) (m) PK 5.1408G 34,88 61.31 74.00 -12.69 56.43 3 Vertical 273 1.48 33.02 6.74 AV 5.1412G 49.42 54.00 -4.58 44.54 3 Vertical 273 1.48 33.02 6.74 34.88 РК 5.2012G 117.28 273 1.48 33.00 6.80 34.88 122.20 -Inf 3 Inf Vertical -AV 5.2012G 273 34.88 113.92 Inf -Inf 109.00 3 Vertical 1.48 \_ 33.00 6.80





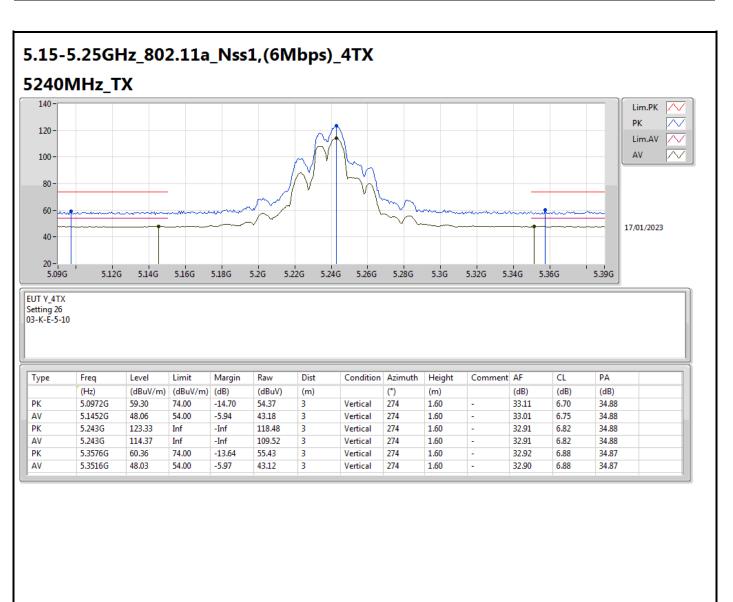






#### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5200MHz\_TX 140 Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-UL Г ப 1 60-17/01/2023 40 -20-1G 2G 4Ġ 6G 8G 12G 14G 18G 24G 28G 30G 32G 34G 36G 38G 40G 10G 16G 20G 22G 26G EUT Y\_4TX Setting 26 03-K-E-5 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (dB) (Hz) (m) (m) (°) PK 10.39638G 43.50 2.34 12.22 33.50 61.02 68.20 -7.18 3 Horizontal 40 38.80 РК 15.59528G 63.12 74.00 -10.88 43.65 3 Horizontal 107 2.07 37.72 16.30 34.55 -AV 15.59562G 50.91 54.00 -3.09 31.45 3 Horizontal 107 2.07 37.72 16.30 34.56 -





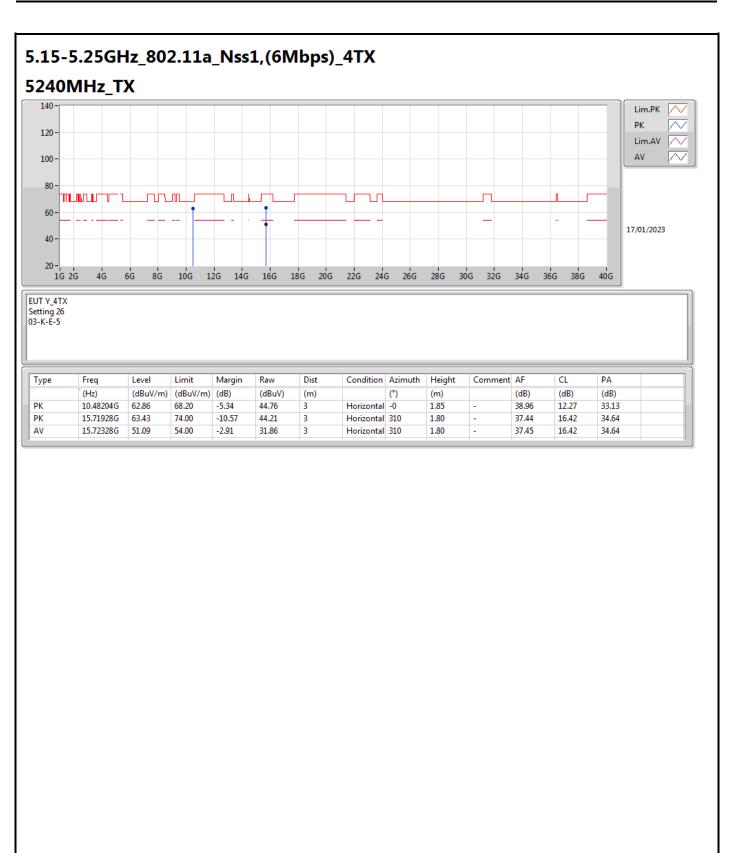


#### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5240MHz\_TX 140 Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-60 -17/01/2023 40 -20 -5.12G 5.39G 5.09G 5.14G 5.16G 5.18G 5.2G 5.22G 5.26G 5.28G 5.3G 5.32G 5.34G 5.36G 5.24G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) РΚ 5.1308G 54.23 Horizontal 311 1.76 33.04 6.73 34.88 59.12 74.00 -14.88 3 AV 5.1002G 47.84 54.00 -6.16 42.92 3 Horizontal 311 1.76 33.10 6.70 34.88 РК 5.2382G 122.01 117.15 Horizontal 311 1.76 32.92 6.82 34.88 Inf -Inf 3 AV 5.2394G 113.25 108.39 Horizontal 311 32.92 6.82 34.88 Inf -Inf 3 1.76 PK 5.351G 59.23 74.00 -14.77 54.32 3 Horizontal 311 1.76 32.90 6.88 34.87 -AV 5.3792G 47.88 54.00 -6.12 42.90 3 Horizontal 311 1.76 32.96 6.89 34.87



#### 5.15-5.25GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5240MHz\_TX 140-Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-UL Г л 60-17/01/2023 40 -20-1G 2G 4Ġ 6G 8G 10G 12G 14G 16G 18G 24G 26G 28G 30G 32G 34G 36G 38G 40G 20G 22G EUT Y\_4TX Setting 26 03-K-E-5 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (dB) (Hz) (m) (°) (m) PK 10.47784G 12.26 33.15 61.43 68.20 -6.77 43.36 3 Vertical 45 1.79 38.96 РК 15.72092G 63.16 74.00 -10.84 43.94 3 Vertical 301 1.82 37.44 16.42 34.64 -AV 15.72232G 51.14 54.00 -2.86 31.92 3 301 1.82 37.44 16.42 34.64 Vertical -





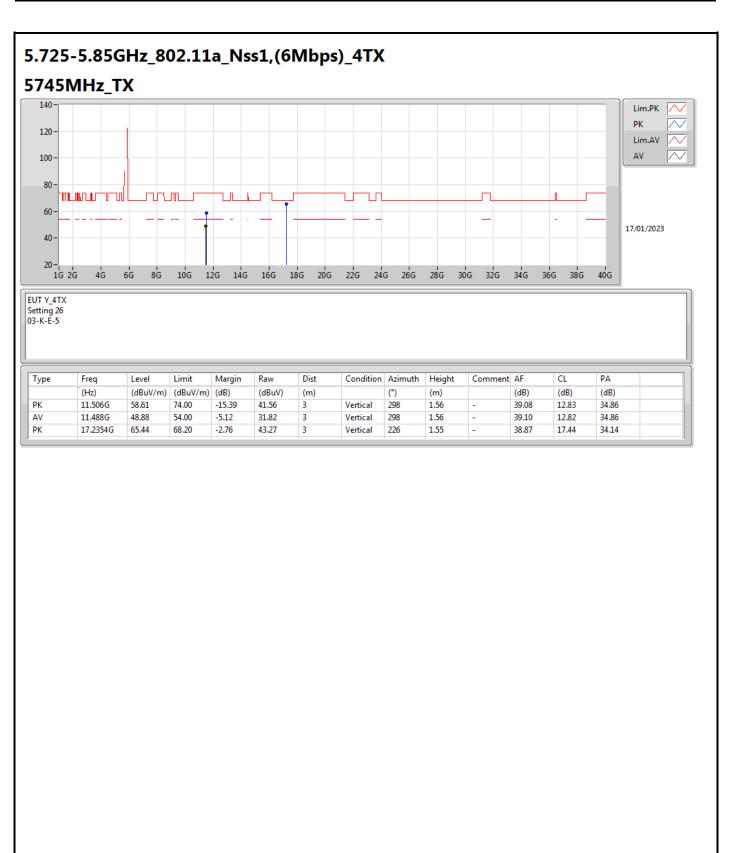


#### 5.725-5.85GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5745MHz\_TX 140-Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20-5.6G 5.495G 5.55G 5.65G 5.7G 5.8G 5.85G 5.9G 5.95G 5.995G 5.75G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) PK 5.625G 32.80 34.89 59.57 68.20 -8.63 54.55 3 Vertical 259 1.18 7.11 РК 5.749G 121.47 Inf -Inf 115.52 3 Vertical 259 1.18 33.69 7.17 34.91 AV 5.75G 259 33.70 7.17 34.91 112.36 Inf -Inf 106.40 3 1.18 Vertical -РК 5.945G 68.20 -7.27 54.51 3 259 34.11 7.27 34.96 60.93 Vertical 1.18 .

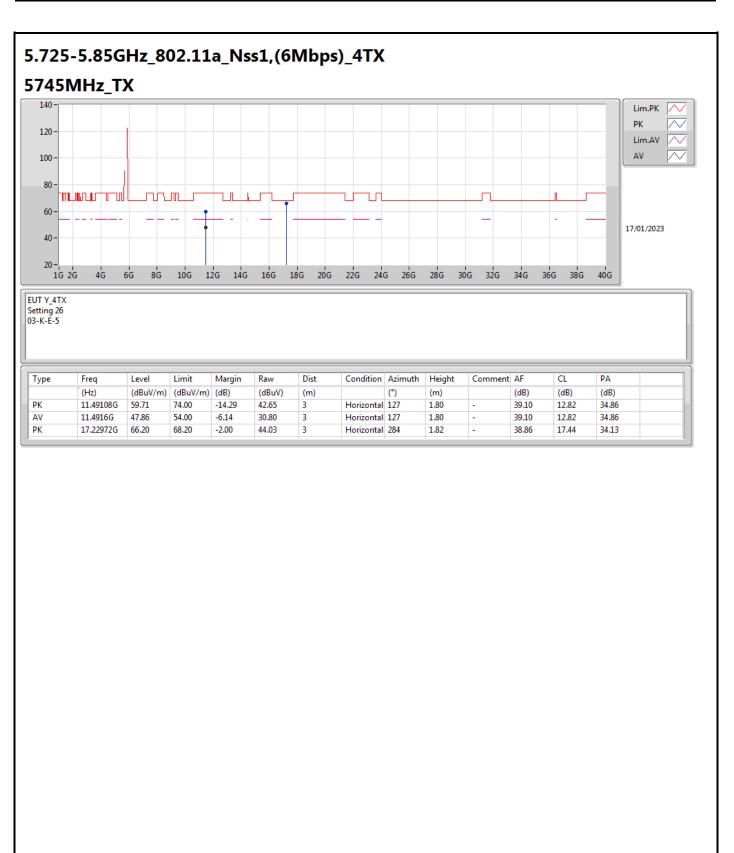


#### 5.725-5.85GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5745MHz\_TX 140-Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20-5.495G 5.55G 5.6G 5.65G 5.7G 5.8G 5.85G 5.9G 5.95G 5.995G 5.75G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) PK 5.591G 7.09 34.88 59.77 68.20 -8.43 54.78 3 Horizontal 339 2.41 32.78 РК 5.751G 121.42 Inf -Inf 115.46 3 Horizontal 339 2.41 33.70 7.18 34.92 AV 5.75G 106.75 Horizontal 339 33.70 7.17 34.91 112.71 Inf -Inf 3 2.41 -РК 5.987G 68.20 54.84 3 Horizontal 339 2.41 34.10 7.29 34.97 61.26 -6.94 \_









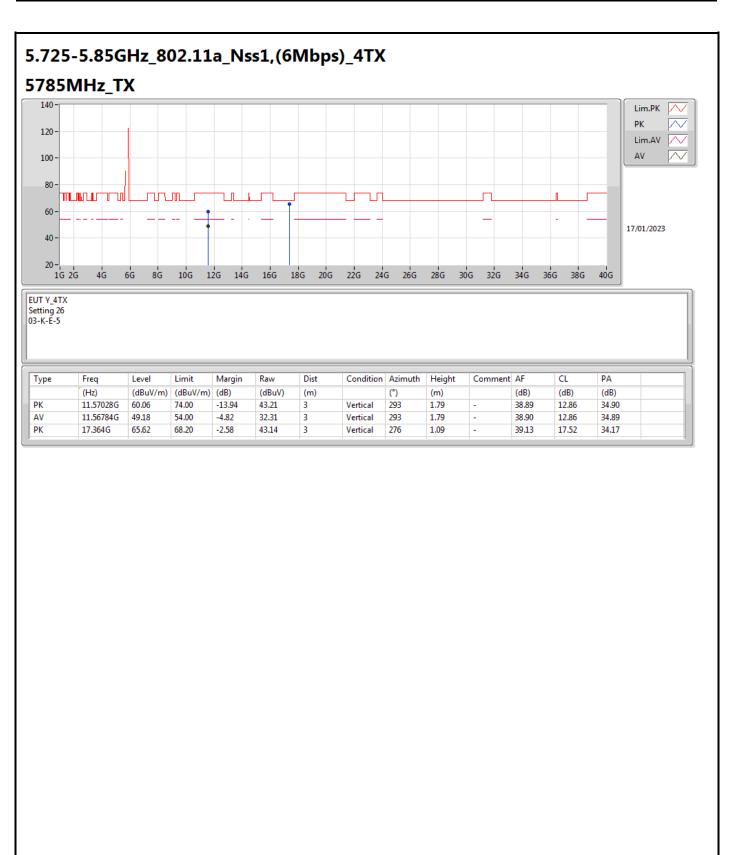


#### 5.725-5.85GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5785MHz\_TX 140 -Lim.PK $\wedge$ РК $\sim$ 120 - $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20 5.535G 5.65G 5.7G 5.75G 5.8G 5.85G 5.9G 5.95G 6G 6.035G 5.6G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) PK 5.603G 53.95 32.80 34.88 58.97 68.20 -9.23 3 Vertical 324 1.79 7.10 РК 5.777G 120.56 Inf -Inf 114.48 3 Vertical 324 1.79 33.81 7.19 34.92 AV 5.778G 324 1.79 33.81 7.19 34.92 111.89 Inf -Inf 105.81 3 Vertical -РК 5.934G 68.20 -5.98 55.78 3 324 34.13 7.27 34.96 62.22 Vertical 1.79 .

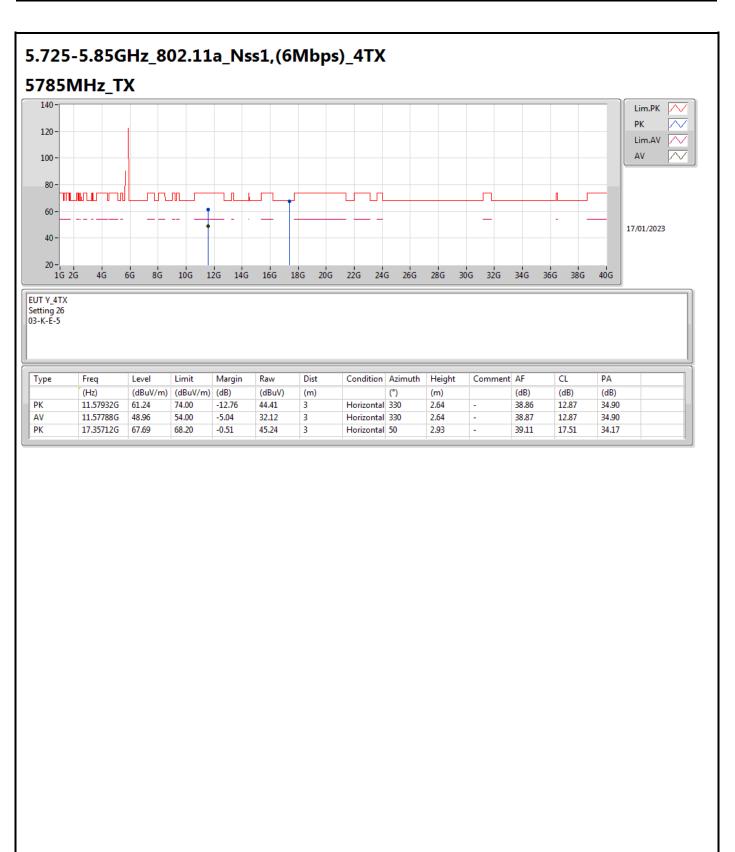


#### 5.725-5.85GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5785MHz\_TX 140 -Lim.PK $\wedge$ РК $\sim$ 120 - $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40 -20 5.6G 5.65G 5.7G 5.75G 5.8G 5.85G 5.9G 5.95G 6G 6.035G 5.535G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) PK 5.543G 7.04 34.87 59.12 68.20 -9.08 54.24 3 Horizontal 328 2.30 32.71 РК 5.778G 120.50 Inf -Inf 114.42 3 Horizontal 328 2.30 33.81 7.19 34.92 AV 5.778G Horizontal 328 33.81 7.19 34.92 112.37 Inf -Inf 106.29 3 2.30 -РК 5.968G 68.20 -7.00 54.78 3 Horizontal 328 34.10 7.28 34.96 61.20 2.30 \_





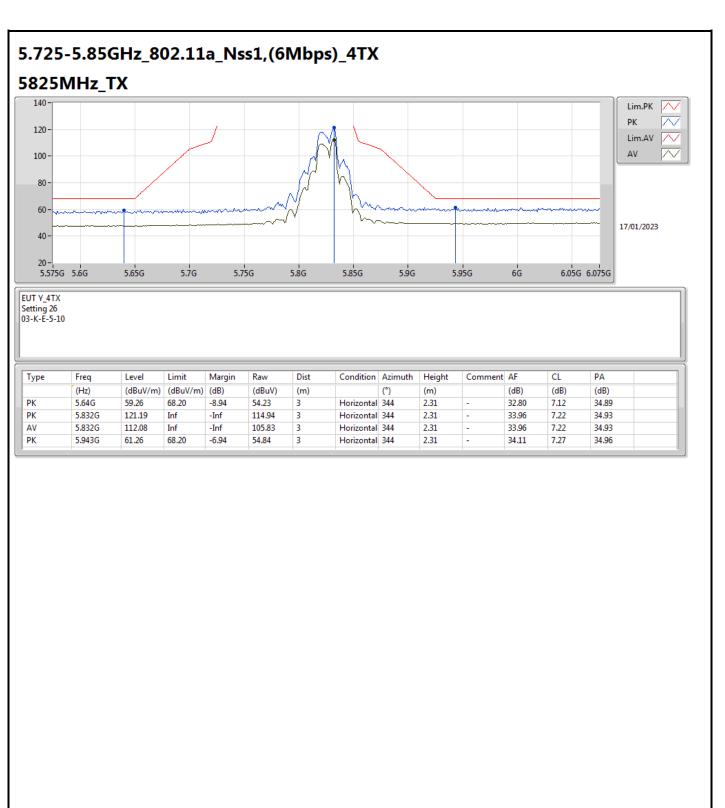




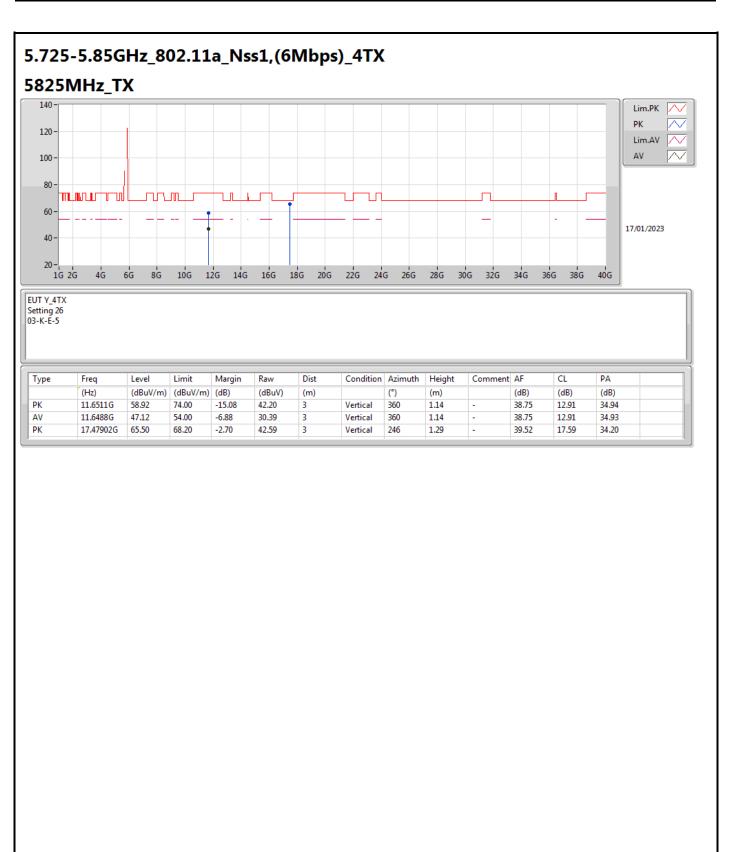


#### 5.725-5.85GHz\_802.11a\_Nss1,(6Mbps)\_4TX 5825MHz\_TX 140 -Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20 5.7G 6G 5.575G 5.6G 5.65G 5.75G 5.8G 5.85G 5.9G 5.95G 6.05G 6.075G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) PK 5.63G 54.06 2.04 32.80 34.89 59.08 68.20 -9.12 3 Vertical 327 7.11 РК 5.819G 121.67 Inf -Inf 115.45 3 Vertical 327 2.04 33.94 7.21 34.93 AV 5.818G 327 2.04 33.94 7.21 34.93 112.17 Inf -Inf 105.95 3 Vertical -РК 6.017G 68.20 -6.58 55.13 3 327 2.04 34.13 7.33 34.97 61.62 Vertical \_

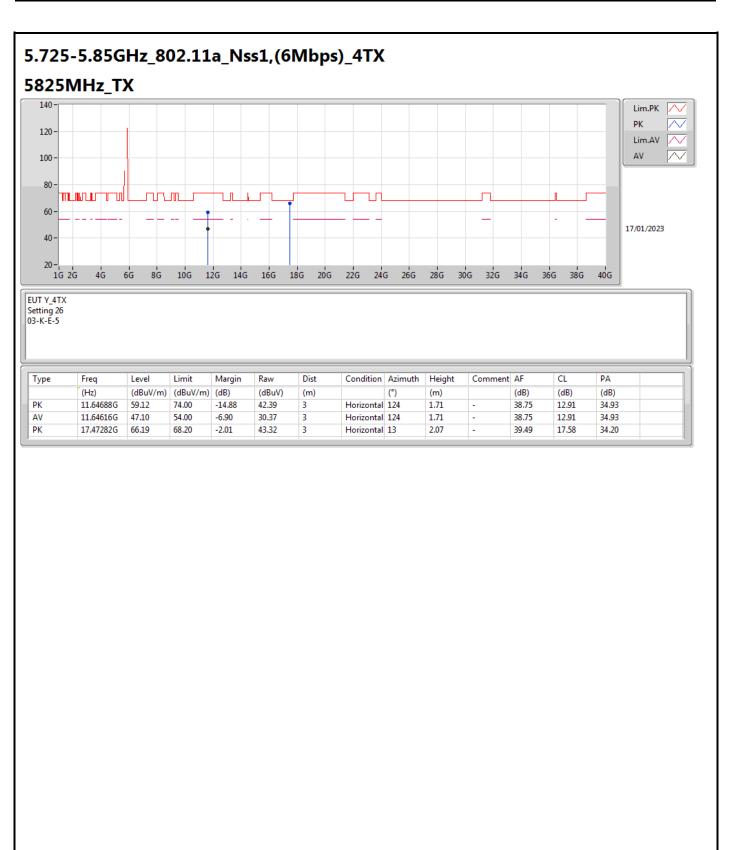










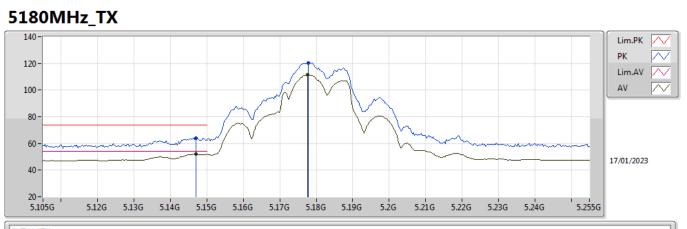




#### 5.15-5.25GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX 5180MHz\_TX 140 Lim.PK $\wedge$ РК $\sim$ 120 $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20 5.105G 5.12G 5.13G 5.15G 5.16G 5.18G 5.19G 5.2G 5.21G 5.22G 5.23G 5.24G 5.255G 5.14G 5.17G EUT Y\_4TX Setting 24.5 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (°) (m) (dB) PK 5.1425G 6.74 34,88 63.84 74.00 -10.16 58.96 3 Vertical 274 1.44 33.02 AV 5.1419G 52.10 54.00 -1.90 47.22 3 Vertical 274 1.44 33.02 6.74 34.88 РК 117.36 274 33.00 6.78 34.88 5.1818G 122.26 -Inf 3 1.44 Inf Vertical -AV 5.1815G 274 1.44 34.88 112.39 Inf -Inf 107.49 3 Vertical . 33.00 6.78



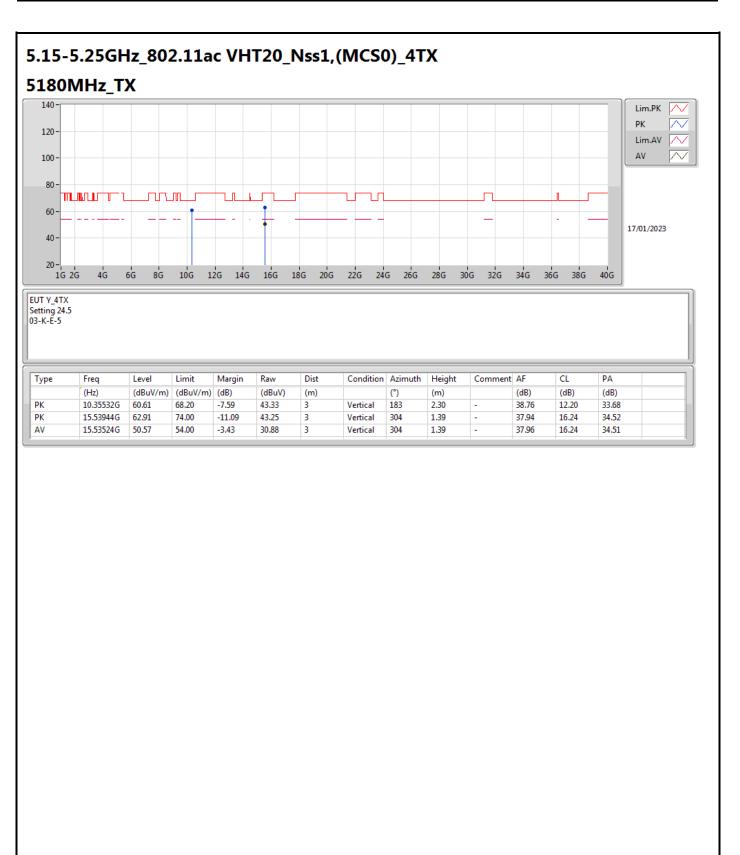
# 5.15-5.25GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX



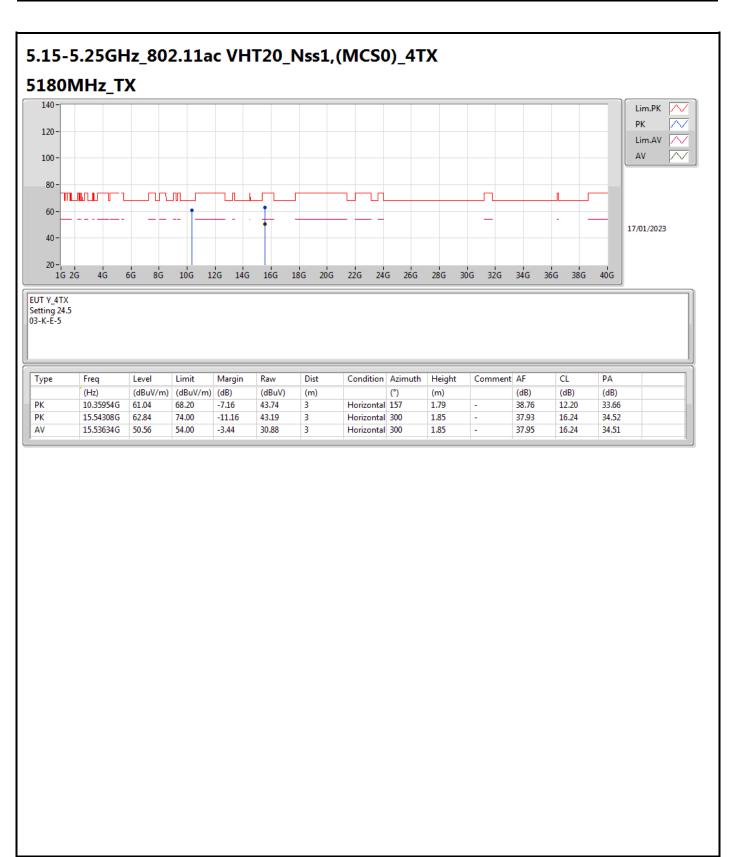
EUT Y\_4TX Setting 24.5 03-K-E-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.147G	63.92	74.00	-10.08	59.04	3	Horizontal	312	1.80	-	33.01	6.75	34.88
AV	5.147G	52.02	54.00	-1.98	47.14	3	Horizontal	312	1.80	-	33.01	6.75	34.88
РК	5.1779G	120.41	Inf	-Inf	115.51	3	Horizontal	312	1.80	-	33.00	6.78	34.88
AV	5.1776G	111.31	Inf	-Inf	106.41	3	Horizontal	312	1.80	-	33.00	6.78	34.88









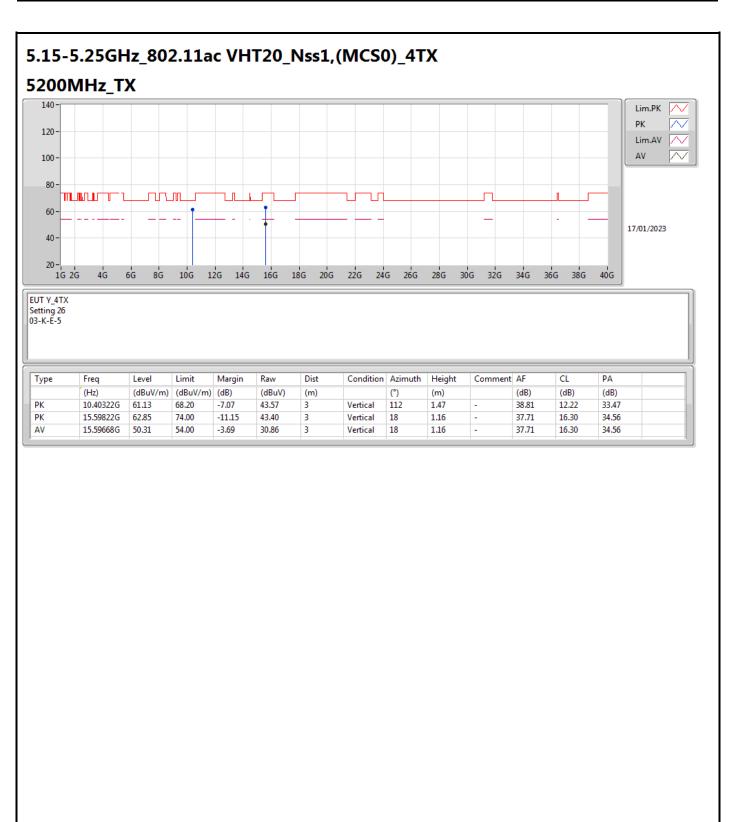


#### 5.15-5.25GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX 5200MHz\_TX 140 Lim.PK $\wedge$ РК $\sim$ 120 $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40 -20s.ig s.iig s.i2g s.i3g s.i4g s.i5g s.i6g s.i7g s.i8g s.i9g s.2g s.2ig s.22g s.23g s.24g s.25g s.26g s.27g s.28g s.29g s.3g EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (°) (m) (dB) PK 5.1436G 34,88 61.67 74.00 -12.33 56.80 3 Vertical 277 1.45 33.01 6.74 AV 5.1424G 49.13 54.00 -4.87 44.25 3 Vertical 277 1.45 33.02 6.74 34.88 РК 5.2036G 277 32.99 6.80 34.88 122.69 -Inf 117.78 3 1.45 Inf Vertical -AV 5.2032G 34.88 113.23 Inf -Inf 108.32 3 Vertical 277 1.45 \_ 32.99 6.80

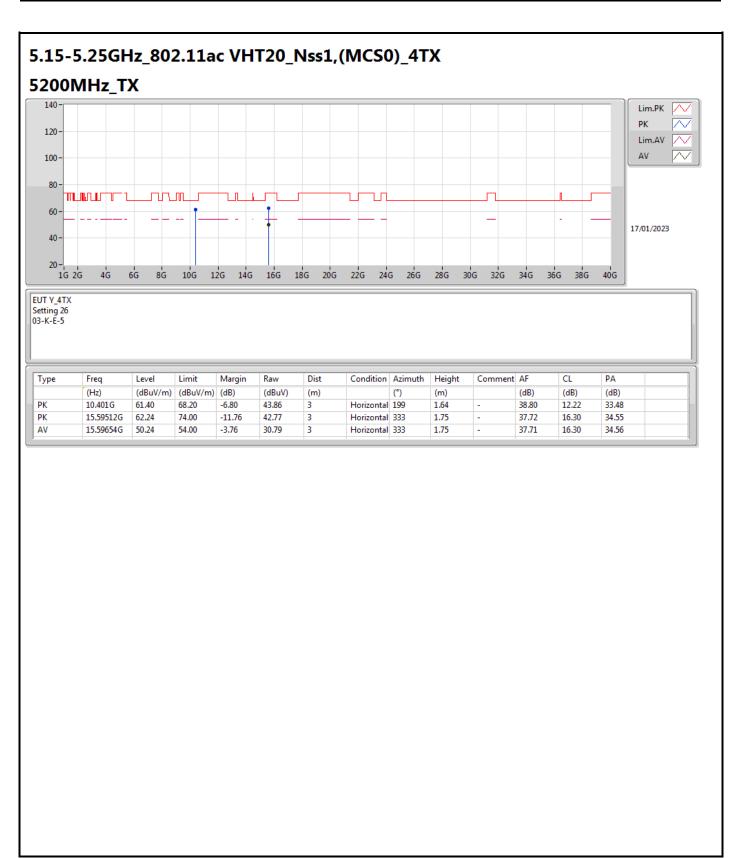


#### 5.15-5.25GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX 5200MHz\_TX 140 -Lim.PK $\wedge$ РК $\sim$ 120 $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40 -20s.ig s.iig s.i2g s.i3g s.i4g s.i5g s.i6g s.i7g s.i8g s.i9g s.2g s.2ig s.22g s.23g s.24g s.25g s.26g s.27g s.28g s.29g s.3g EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (°) (dB) (m) PK 5.136G 34,88 60.66 74.00 -13.34 55.77 3 Horizontal 308 1.80 33.03 6.74 AV 5.1464G 48.23 54.00 -5.77 43.35 3 Horizontal 308 1.80 33.01 6.75 34.88 РК 5.198G Horizontal 308 33.00 6.80 34.88 121.21 -Inf 116.29 3 1.80 Inf -AV 5.1976G Horizontal 308 34.88 111.92 Inf -Inf 107.00 3 1.80 33.00 6.80





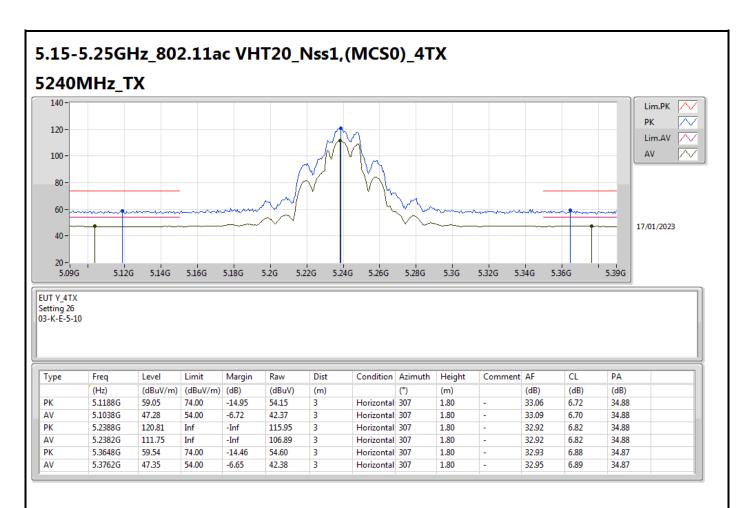




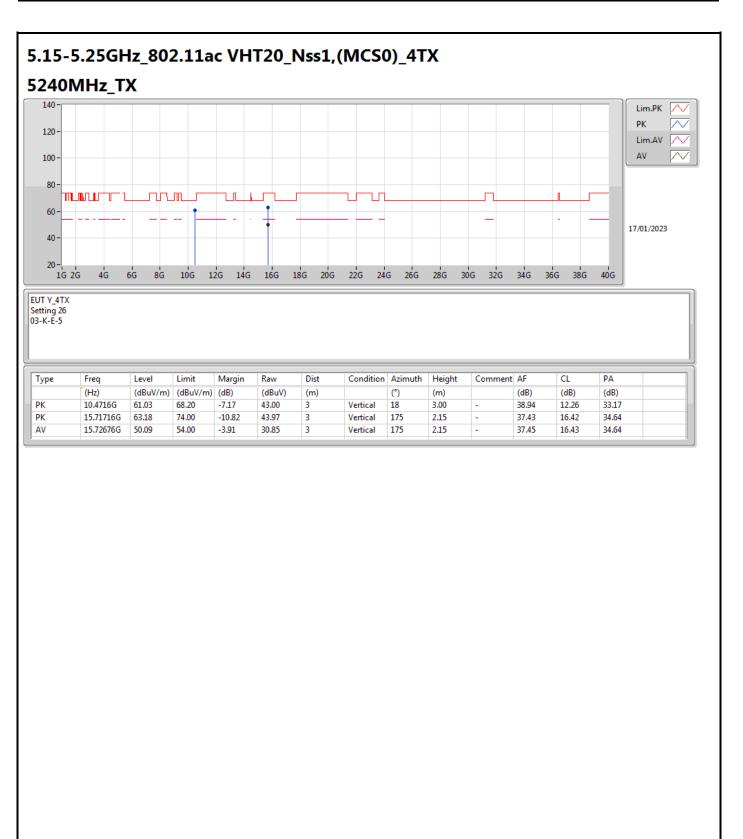


#### 5.15-5.25GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX 5240MHz\_TX 140 Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-60 -17/01/2023 40-20 -5.39G 5.09G 5.12G 5.14G 5.16G 5.18G 5.2G 5.22G 5.26G 5.28G 5.3G 5.32G 5.34G 5.36G 5.24G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (dB) (m) (m) (°) РΚ 275 5.1458G 54.31 Vertical 1.60 33.01 6.75 34.88 59.19 74.00 -14.81 3 AV 5.1464G 47.37 54.00 -6.63 42.49 3 Vertical 275 1.60 33.01 6.75 34.88 PK 5.2442G 122.65 117.80 275 1.60 32.91 6.82 34.88 Inf -Inf 3 Vertical AV 5.243G 113.34 108.49 275 32.91 6.82 34.88 Inf -Inf 3 Vertical 1.60 PK 5.3678G 59.17 74.00 -14.83 54.22 3 Vertical 275 1.60 32.94 6.88 34.87 -AV 5.3576G 47.36 54.00 -6.64 42.43 3 Vertical 275 1.60 32.92 6.88 34.87

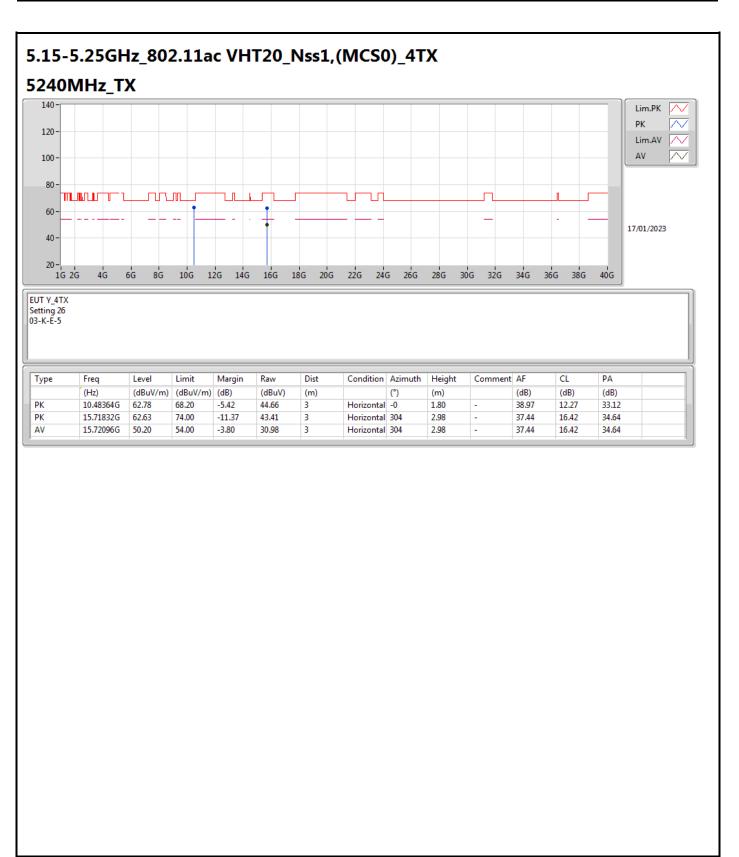












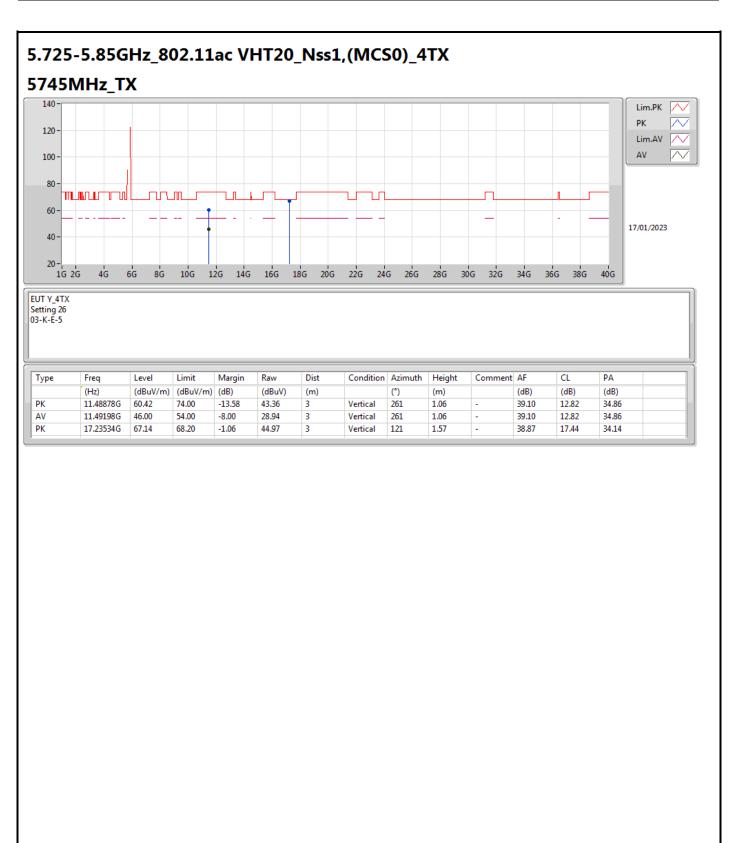


#### 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX 5745MHz\_TX 140-Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20-5.495G 5.55G 5.6G 5.65G 5.7G 5.8G 5.85G 5.9G 5.95G 5.995G 5.75G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (Hz) (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (m) (m) (dB) (°) PK 5.6G 32.80 34.88 59.50 68.20 -8.70 54.48 3 Vertical 258 1.11 7.10 РК 5.749G 121.38 Inf -Inf 115.43 3 Vertical 258 1.11 33.69 7.17 34.91 AV 5.749G 258 33.69 7.17 34.91 112.26 Inf -Inf 106.31 3 1.11 Vertical -РК 5.957G 68.20 -7.39 54.39 3 258 34.10 7.28 34.96 60.81 Vertical 1.11 .

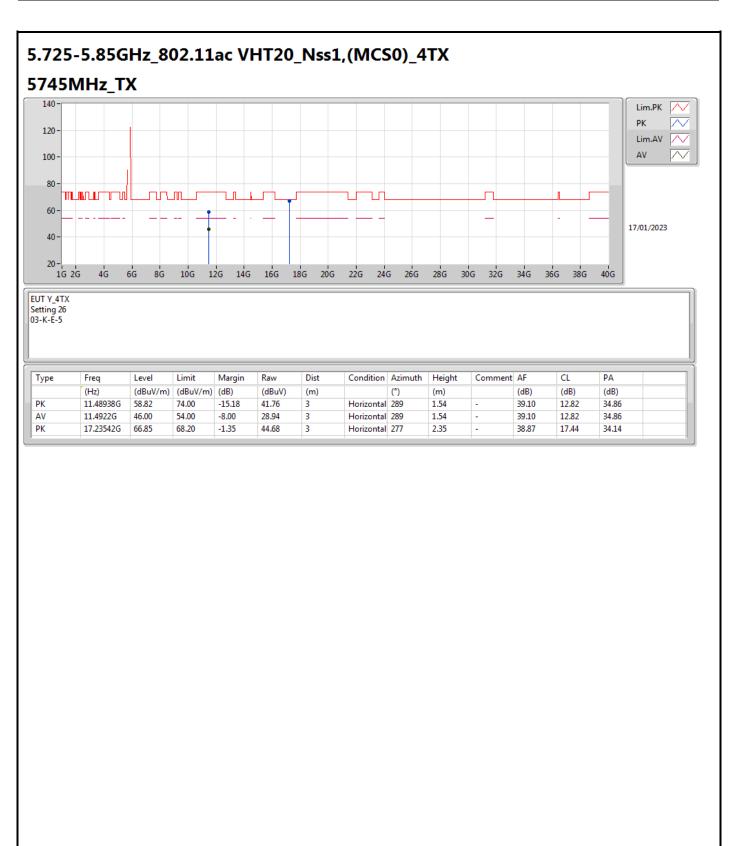


#### 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX 5745MHz\_TX 140-Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100-80-60-17/01/2023 40-20-5.495G 5.55G 5.6G 5.65G 5.7G 5.8G 5.85G 5.9G 5.95G 5.995G 5.75G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) PK 5.649G 7.12 34.89 59.43 68.20 -8.77 54.40 3 Horizontal 344 2.29 32.80 РК 5.75G 121.52 Inf -Inf 115.56 3 Horizontal 344 2.29 33.70 7.17 34.91 AV 5.751G 106.33 Horizontal 344 33.70 34.92 112.29 Inf -Inf 3 2.29 7.18 -РК 5.961G 68.20 -7.25 54.53 3 Horizontal 344 34.10 7.28 34.96 60.95 2.29 \_





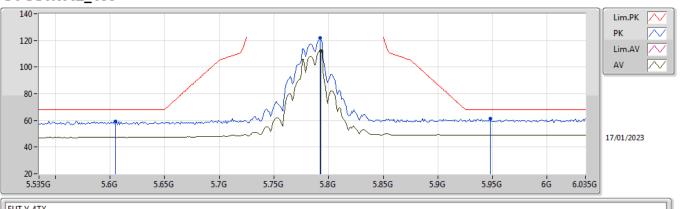






## 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX

#### 5785MHz\_TX



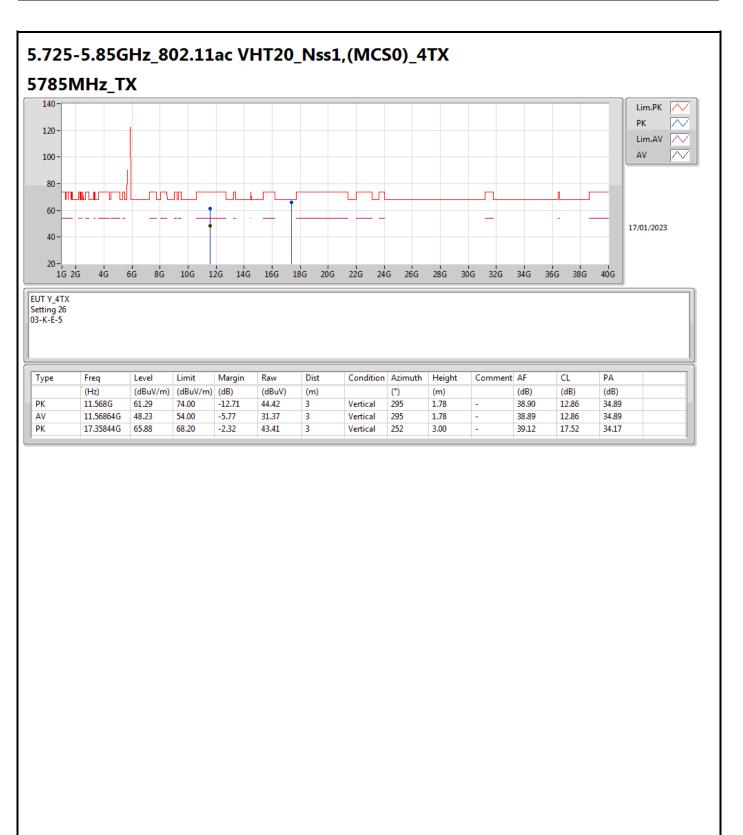
EUT Y\_4TX Setting 26 03-K-E-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
РК	5.605G	59.54	68.20	-8.66	54.52	3	Vertical	281	1.23	-	32.80	7.10	34.88
РК	5.792G	122.07	Inf	-Inf	115.92	3	Vertical	281	1.23	-	33.87	7.20	34.92
AV	5.793G	112.21	Inf	-Inf	106.06	3	Vertical	281	1.23	-	33.87	7.20	34.92
РК	5.948G	61.59	68.20	-6.61	55.18	3	Vertical	281	1.23	-	34.10	7.27	34.96

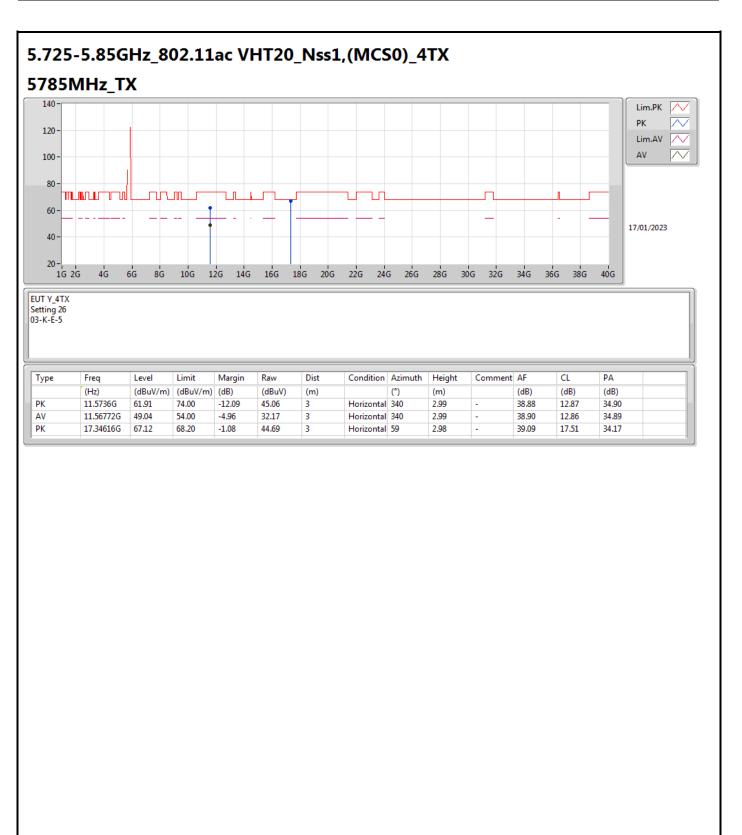


#### 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX 5785MHz\_TX 140 -Lim.PK $\wedge$ РК $\sim$ 120 $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20 5.535G 5.6G 5.7G 5.75G 5.8G 5.85G 5.9G 5.95G 6G 6.035G 5.65G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) PK 5.65G 32.80 7.12 34.89 60.30 68.20 -7.90 55.27 3 Horizontal 331 1.80 РК 5.779G 119.59 Inf -Inf 113.50 3 Horizontal 331 1.80 33.82 7.19 34.92 AV 5.778G Horizontal 331 33.81 7.19 34.92 110.32 Inf -Inf 104.24 3 1.80 -РК 6.027G 68.20 54.70 Horizontal 331 34.15 7.34 34.97 61.22 -6.98 3 1.80 \_





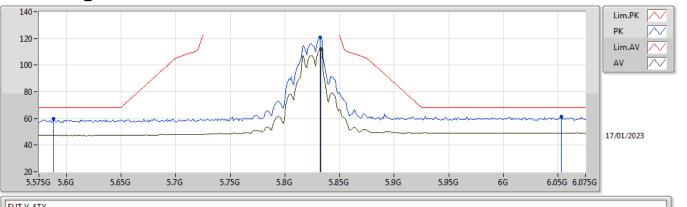






## 5.725-5.85GHz\_802.11ac VHT20\_Nss1,(MCS0)\_4TX

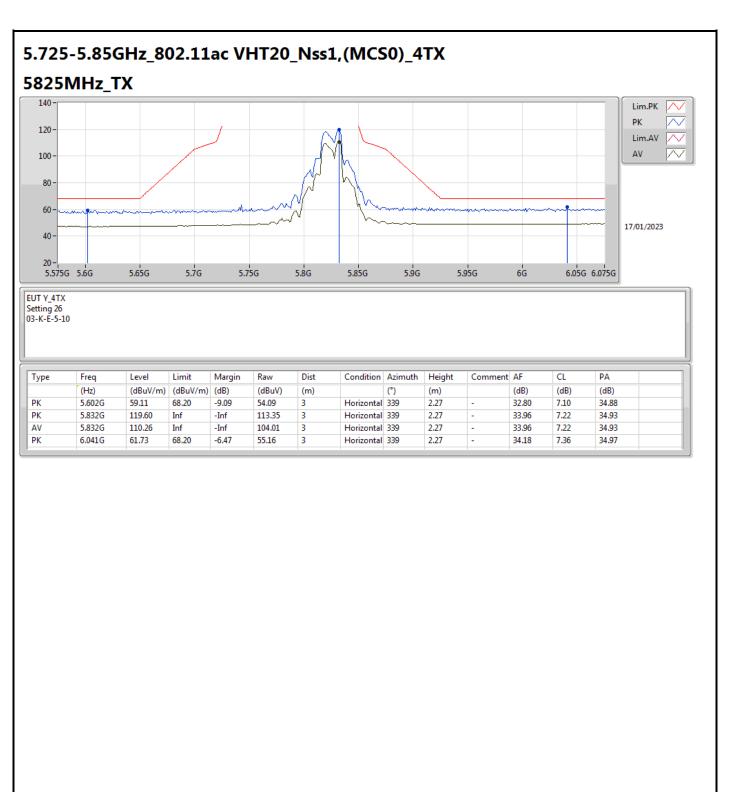
#### 5825MHz\_TX



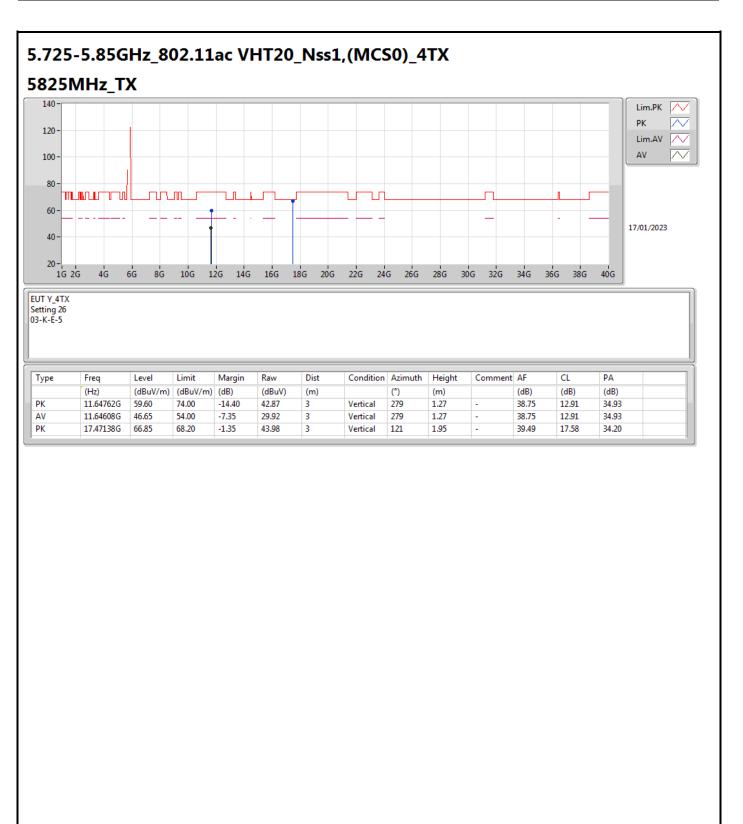
EUT Y\_4TX Setting 26 03-K-E-5-10

Туре	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	5.588G	59.81	68.20	-8.39	54.82	3	Vertical	281	1.24	-	32.78	7.09	34.88
PK	5.832G	120.81	Inf	-Inf	114.56	3	Vertical	281	1.24	-	33.96	7.22	34.93
AV	5.833G	112.02	Inf	-Inf	105.76	3	Vertical	281	1.24	-	33.97	7.22	34.93
РК	6.053G	61.45	68.20	-6.75	54.86	3	Vertical	281	1.24	-	34.19	7.38	34.98

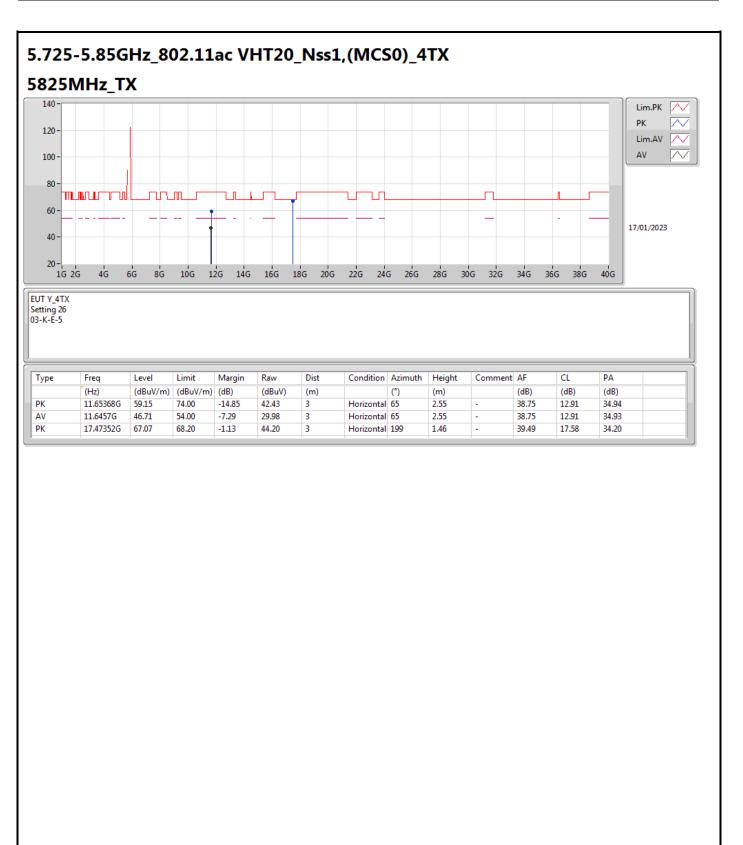












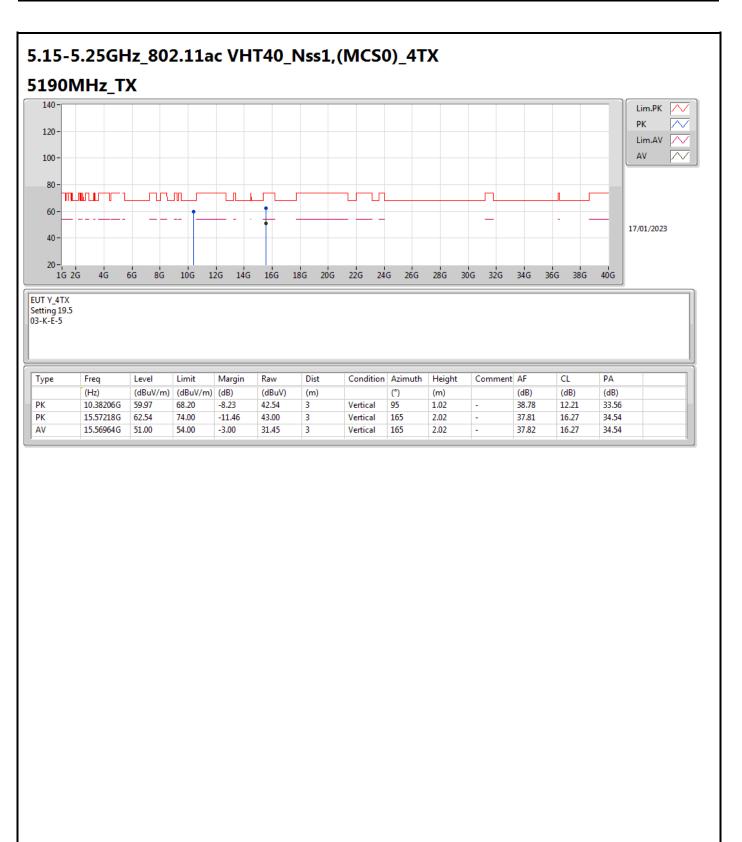


#### 5.15-5.25GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX 5190MHz\_TX 140 -Lim.PK $\wedge$ РК $\sim$ 120 $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40 -20 5.09G 5.1G 5.11G 5.12G 5.13G 5.14G 5.15G 5.16G 5.17G 5.18G 5.19G 5.2G 5.21G 5.22G 5.23G 5.24G 5.25G 5.26G 5.27G 5.28G 5.29G EUT Y\_4TX Setting 19.5 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (Hz) (dB) (m) (°) (m) (dB) PK 5.1472G 34,88 64.90 74.00 -9.10 60.02 3 Vertical 306 1.38 33.01 6.75 AV 5.1476G 52.16 54.00 -1.84 47.29 3 Vertical 306 1.38 33.00 6.75 34.88 РК 5.1872G 108.15 306 1.38 33.00 6.79 34.88 113.06 -Inf 3 Inf Vertical -AV 5.1876G 34.88 104.90 Inf -Inf 99.99 3 Vertical 306 1.38 \_ 33.00 6.79

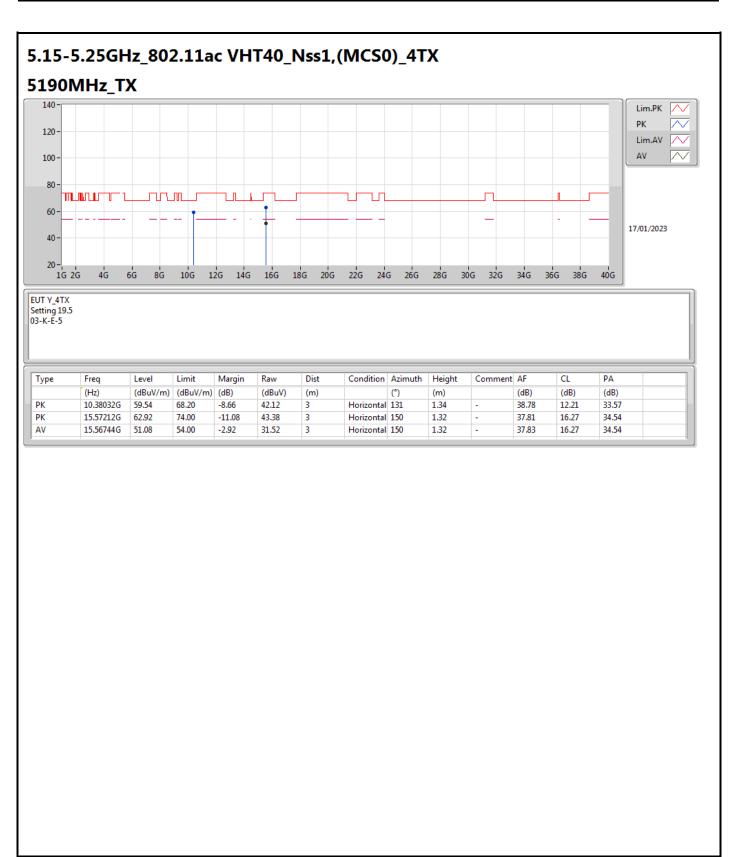


#### 5.15-5.25GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX 5190MHz\_TX 140 -Lim.PK $\sim$ РК $\sim$ 120 $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40 -20 5.09G 5.1G 5.11G 5.12G 5.13G 5.14G 5.15G 5.16G 5.17G 5.18G 5.19G 5.2G 5.21G 5.22G 5.23G 5.24G 5.25G 5.26G 5.27G 5.28G 5.29G EUT Y\_4TX Setting 19.5 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (Hz) (dB) (m) (dB) (°) (m) PK 5.148G 34,88 65.04 74.00 -8.96 60.17 3 Horizontal 310 2.06 33.00 6.75 AV 5.1488G 52.97 54.00 -1.03 48.10 3 Horizontal 310 2.06 33.00 6.75 34.88 РК 5.1888G Horizontal 310 2.06 6.79 34.88 113.01 -Inf 108.10 3 33.00 Inf AV 5.188G Horizontal 310 34.88 104.61 Inf -Inf 99.70 3 2.06 33.00 6.79





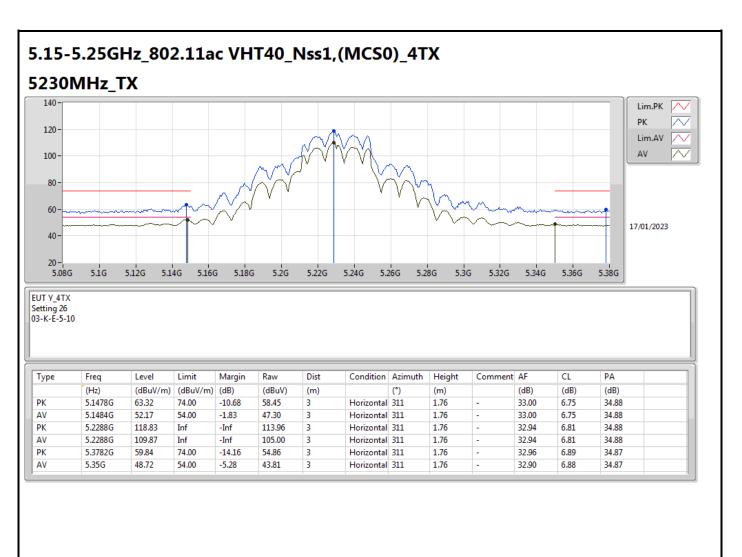




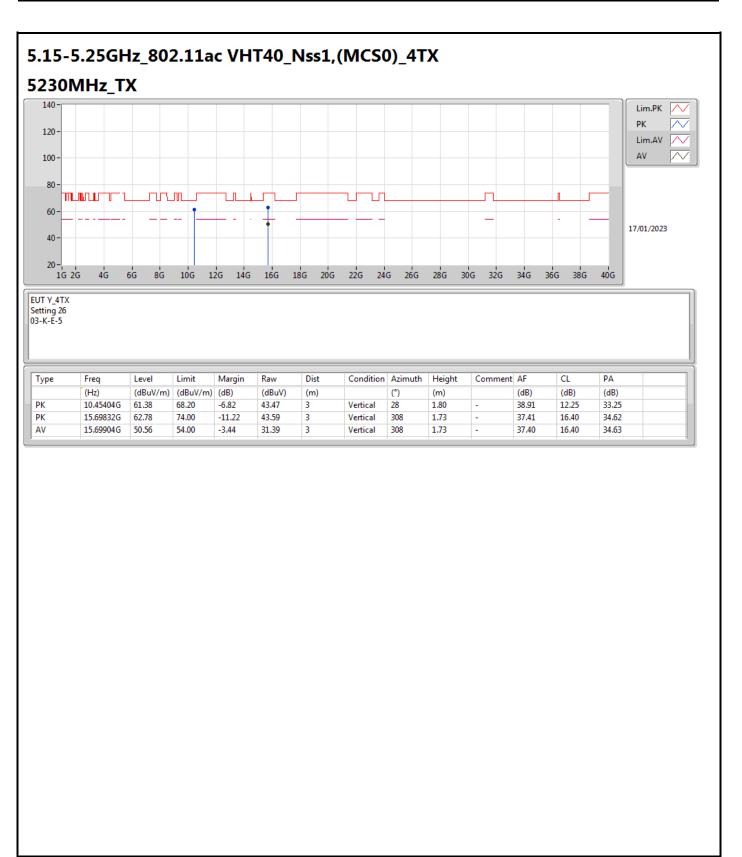


#### 5.15-5.25GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX 5230MHz\_TX 140 Lim.PK $\wedge$ РК $\sim$ 120 $\sim$ Lim.AV $\sim$ AV 100-80-60 -17/01/2023 40-20-5.08G 5.1G 5.12G 5.14G 5.16G 5.18G 5.2G 5.22G 5.24G 5.26G 5.28G 5.3G 5.32G 5.34G 5.36G 5.38G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) РΚ 5.15G 57.77 Vertical 275 1.54 33.00 6.75 34.88 62.64 74.00 -11.36 3 AV 5.15G 52.98 54.00 -1.02 48.11 3 Vertical 275 1.54 33.00 6.75 34.88 PK 5.233G 119.32 114.45 275 1.54 32.93 6.82 34.88 Inf -Inf 3 Vertical AV 5.233G 110.50 -Inf 105.63 275 1.54 32.93 6.82 34.88 Inf 3 Vertical PK 5.3728G 59.45 74.00 -14.55 54.48 3 Vertical 275 1.54 32.95 6.89 34.87 -AV 5.3554G 48.59 54.00 -5.41 43.67 3 Vertical 275 1.54 32.91 6.88 34.87

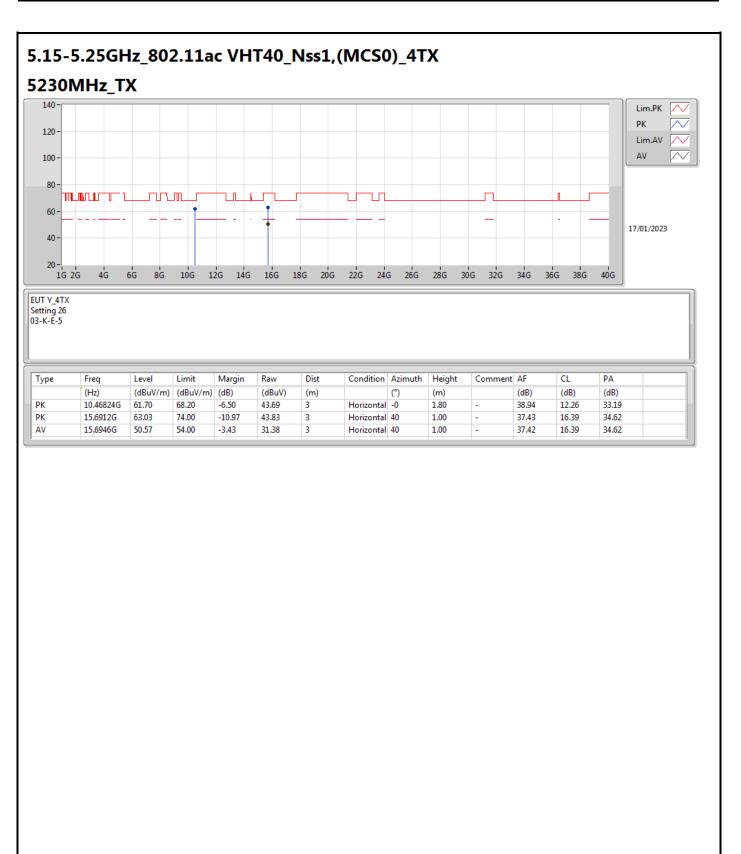












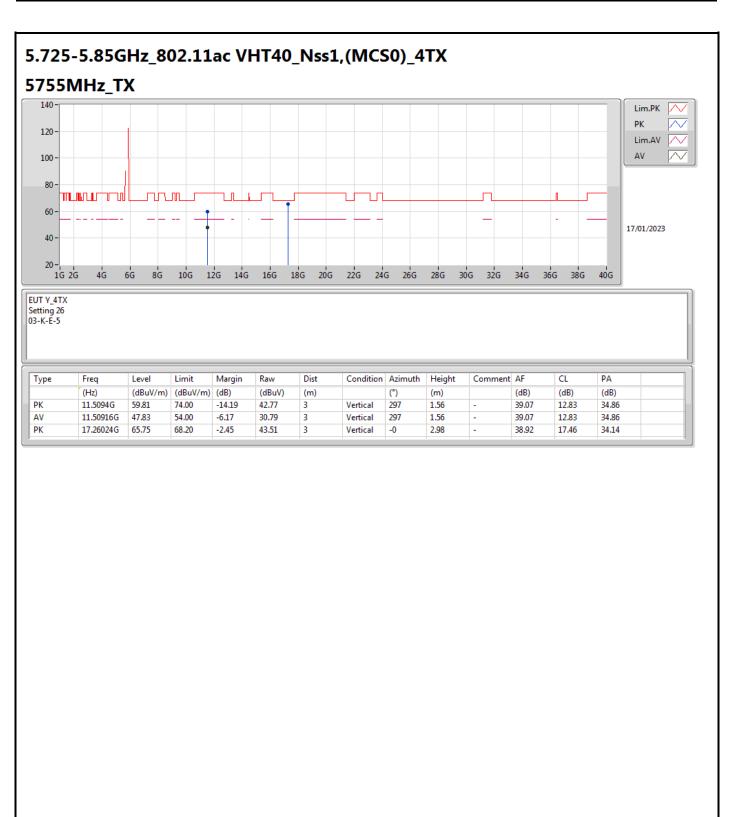


#### 5.725-5.85GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX 5755MHz\_TX 140-Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20 6.005G 5.55G 5.6G 5.65G 5.7G 5.75G 5.8G 5.85G 5.9G 5.95G 5.505G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) PK 5.638G 32.80 7.12 34.89 60.15 68.20 -8.05 55.12 3 Vertical 279 1.23 РК 5.762G 117.93 Inf -Inf 111.92 3 Vertical 279 1.23 33.75 7.18 34.92 AV 5.761G 279 1.23 33.74 7.18 34.92 109.41 Inf -Inf 103.41 3 Vertical -РК 5.939G 68.20 -7.35 54.42 3 279 34.12 7.27 34.96 60.85 Vertical 1.23 .

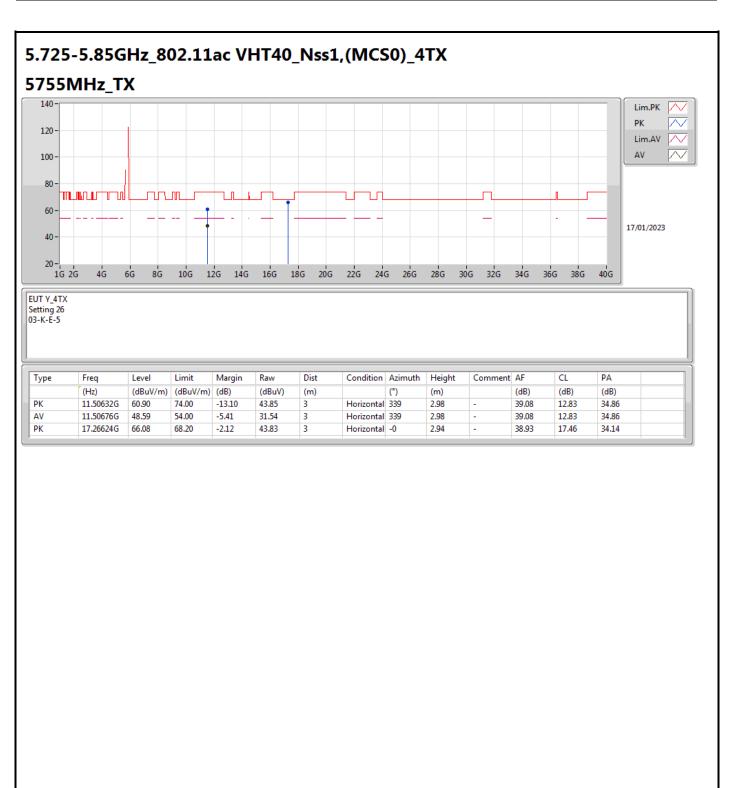


#### 5.725-5.85GHz\_802.11ac VHT40\_Nss1,(MCS0)\_4TX 5755MHz\_TX 140-Lim.PK $\wedge$ РК $\sim$ 120- $\sim$ Lim.AV $\sim$ AV 100 -80-60-17/01/2023 40-20 6.005G 5.55G 5.6G 5.65G 5.7G 5.75G 5.8G 5.85G 5.9G 5.95G 5.505G EUT Y\_4TX Setting 26 03-K-E-5-10 Туре Freq Level Limit Margin Raw Dist Condition Azimuth Height Comment AF CL PA (dBuV/m) (dBuV/m) (dB) (dBuV) (dB) (dB) (Hz) (m) (m) (dB) (°) PK 5.65G 55.35 Horizontal 340 32.80 7.12 34.89 60.38 68.20 -7.82 3 2.42 РК 5.76G 117.14 Inf -Inf 111.14 3 Horizontal 340 2.42 33.74 7.18 34.92 AV 5.761G Horizontal 340 33.74 7.18 34.92 108.40 Inf -Inf 102.40 3 2.42 -РК 5.931G 68.20 55.49 3 Horizontal 340 2.42 34.14 7.27 34.95 61.95 -6.25 \_

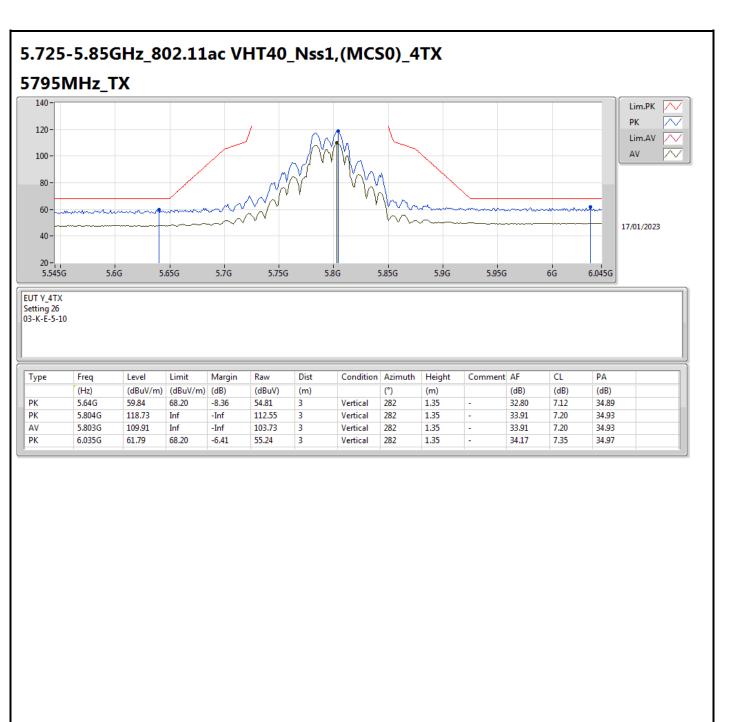




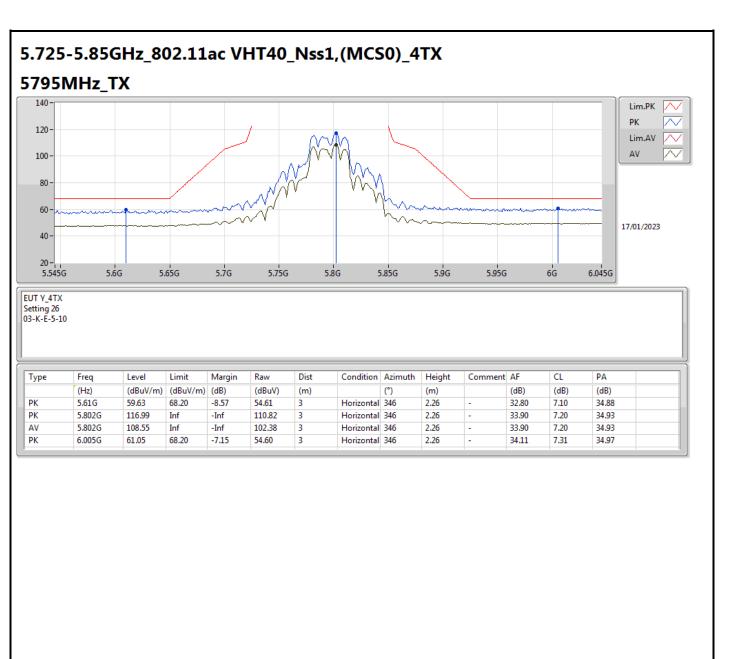




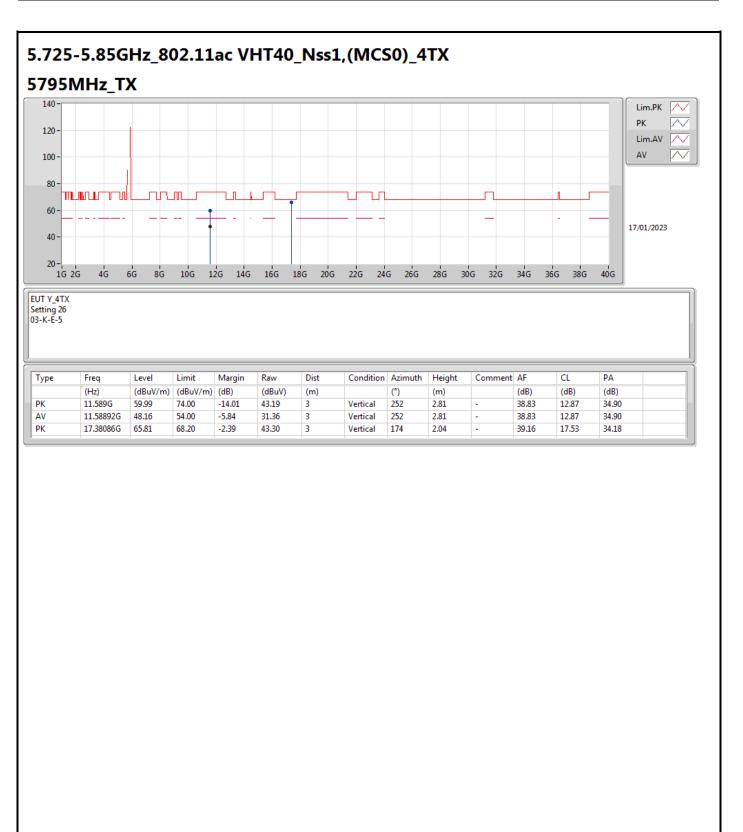




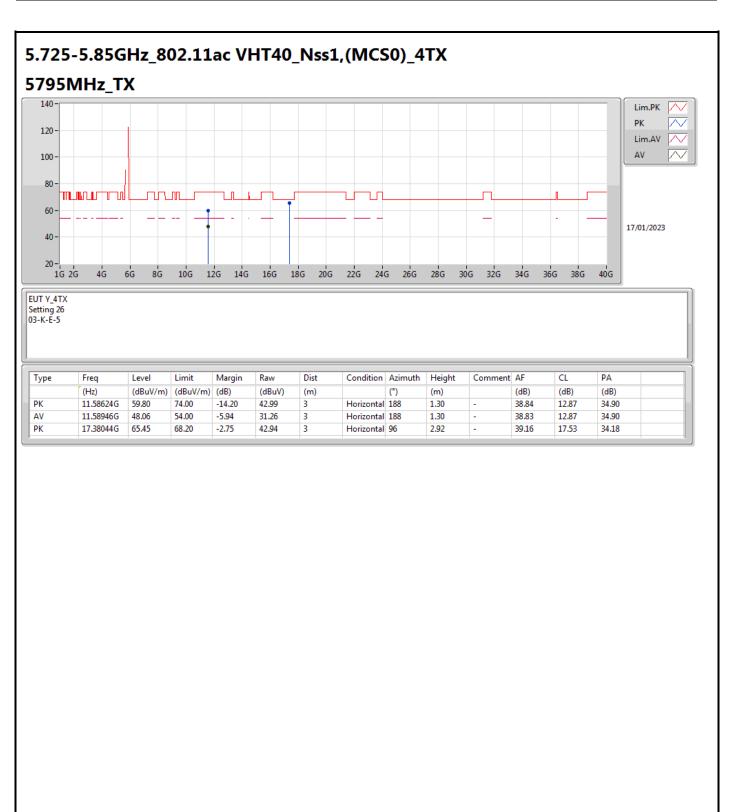




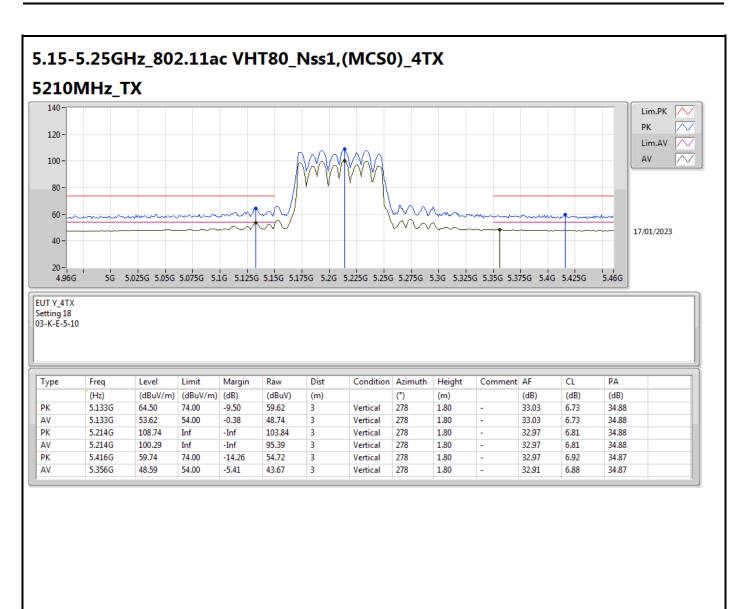




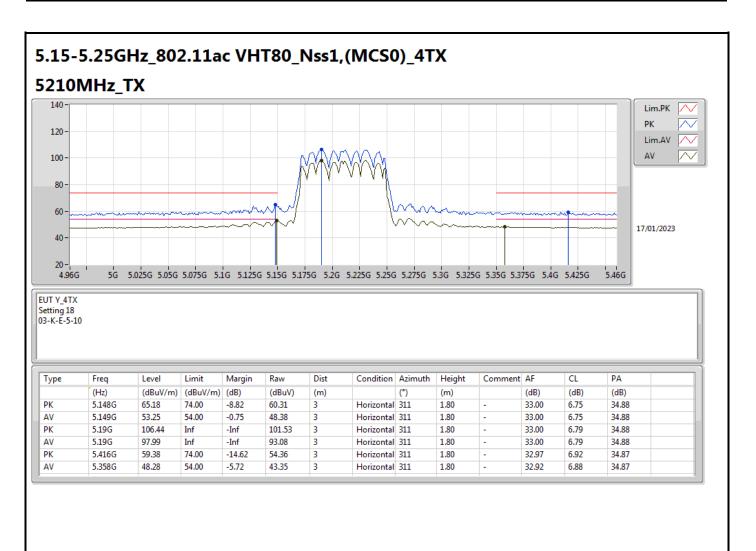




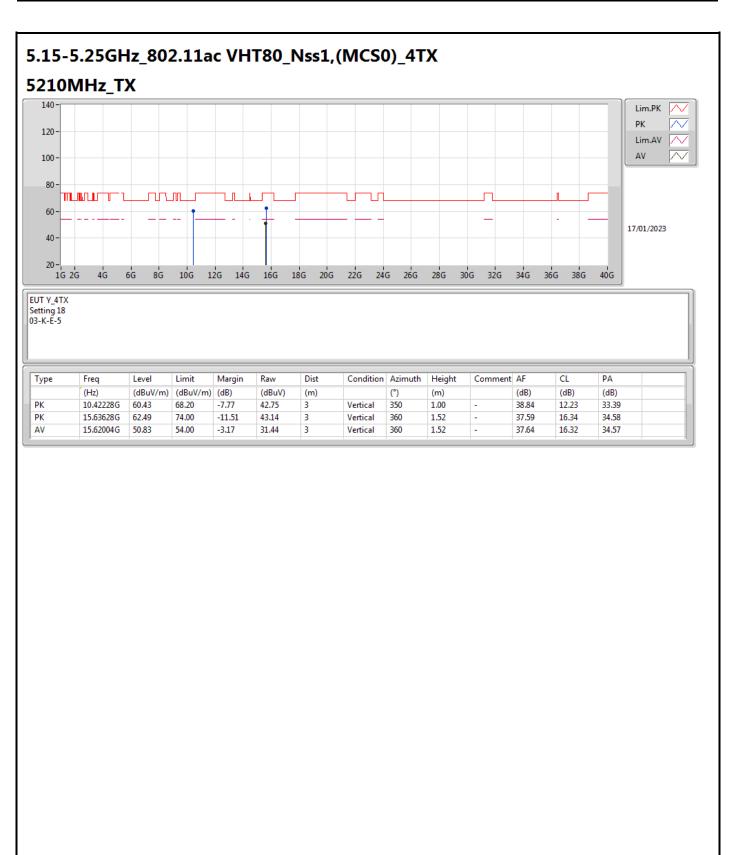




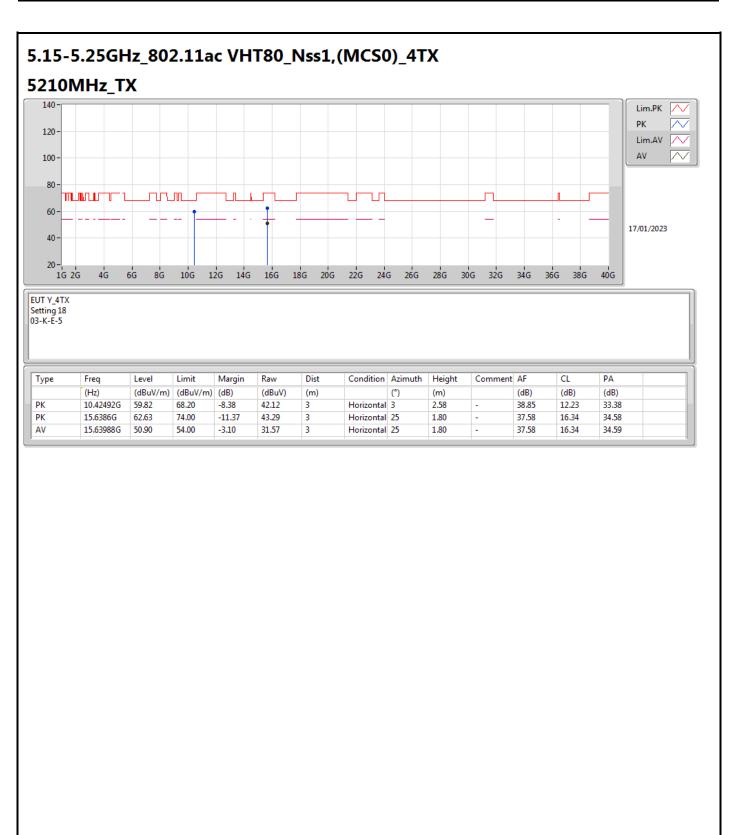




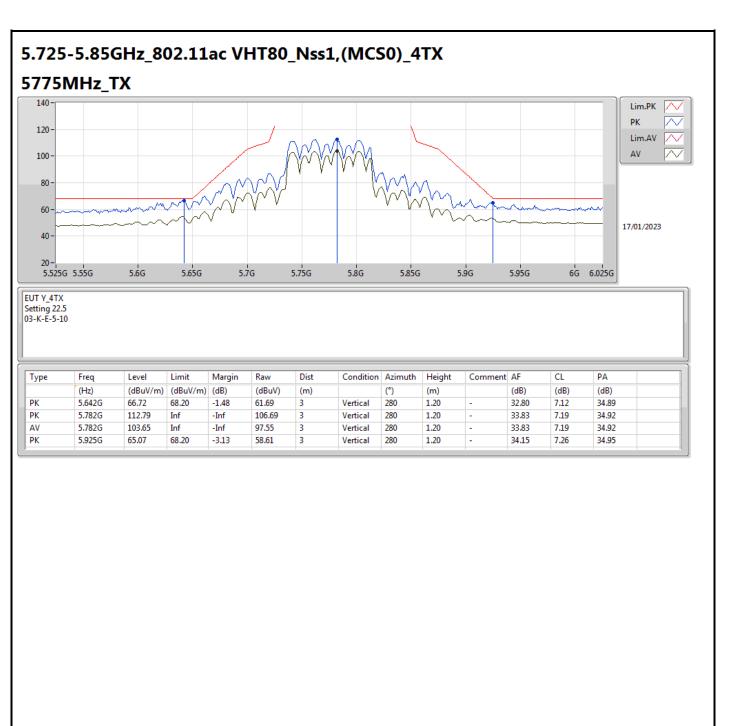




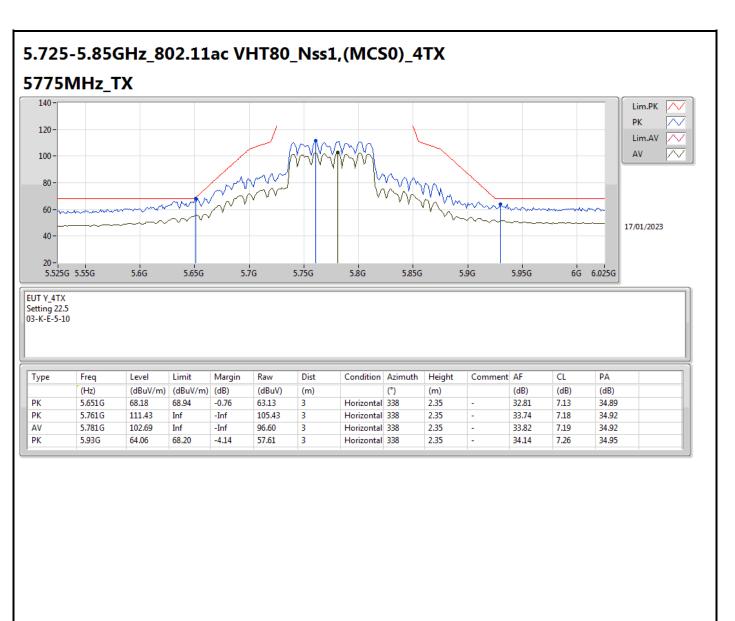




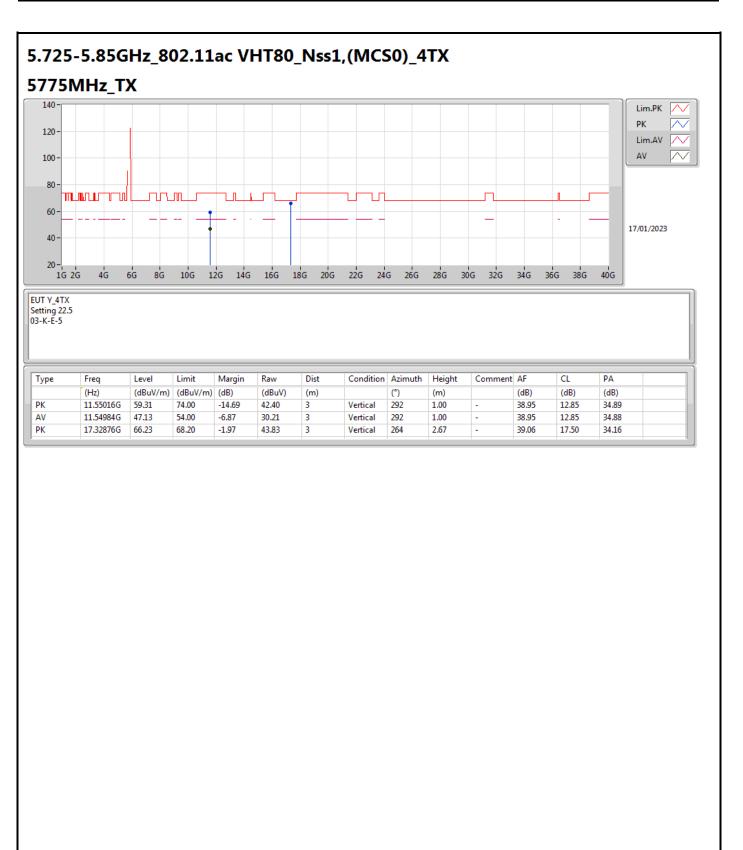




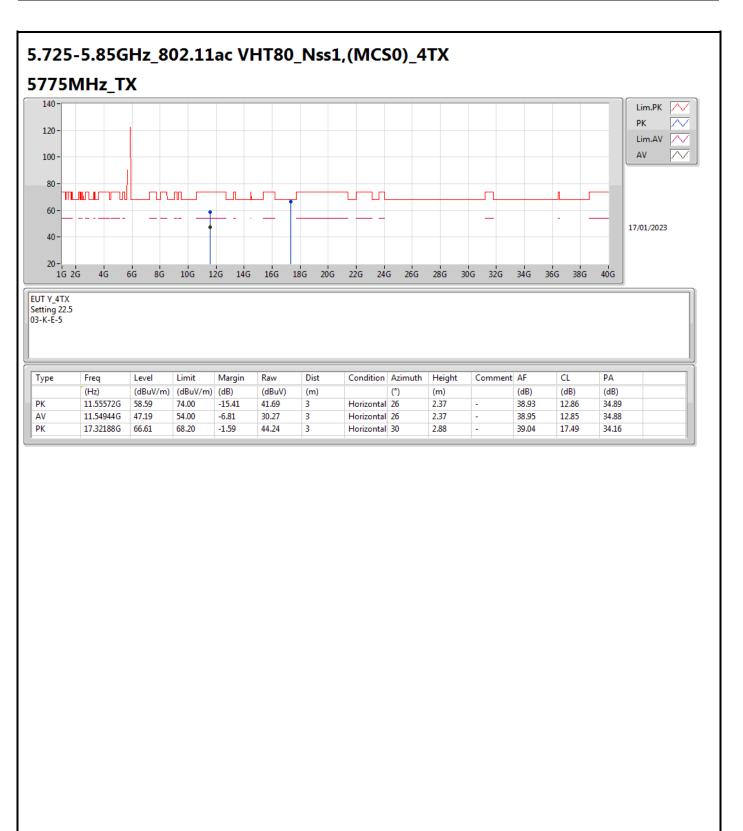














## Radiated Emissions Co-location

# Appendix F

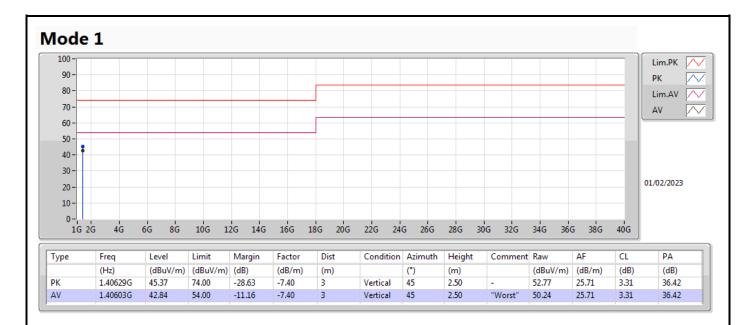
#### Summary

Mode	Result	Туре	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.40603G	42.84	54.00	-11.16	Vertical



#### **Radiated Emissions Co-location**

## Appendix F





#### **Radiated Emissions Co-location**

## Appendix F

