Report No. : FR470407-01AA





RADIO TEST REPORT

FCC ID : Z8H89FT0083

Equipment : 6092HH

Brand Name : Cambium Networks

Model Name : 6092HH

Applicant : Cambium Networks Inc.

3800 Golf Road, Suite 360 Rolling Meadows, IL

60008, USA

Manufacturer : Cambium Networks, Ltd.

Ashburton, TQ13 7UP, UK

Standard: 47 CFR FCC Part 15.407

The product was received on Jul. 29, 2024, and testing was started from Jul. 29, 2024 and completed on Oct. 09, 2024. 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 variant 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

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Issued Date : Oct. 21, 2024

Report Version : 01

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Appendix E. Test Photos

Photographs of EUT v01

Appendix D. Test Results of Unwanted Emissions

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History of this test report

Report No. : FR470407-01AA

Report No.	Version	Description	Issued Date
FR470407-01AA	01	Initial issue of report	Oct. 21, 2024

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Summary of Test Result

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Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.3	15.203	Antenna Requirement	PASS	-
3.1	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Output Power	PASS	-
3.3	15.407(a)	Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-

Conformity Assessment Condition:

- 1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- 2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen

Report Producer: Sophia Shiung

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1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Ch. Bandwidth (MHz)	Ch. Frequency (MHz)	Ch. Space (MHz)
5150-5250	5	5166.5-5247.5	1
5150-5250	10	5169-5245	1
5150-5250	15	5171.5-5242.5	1
5150-5250	20	5174-5240	1
5150-5250	30	5179-5235	1
5150-5250	40	5184-5230	1

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Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	QPSK5	5	2TX
5.15-5.25GHz	QPSK10	10	2TX
5.15-5.25GHz	QPSK15	15	2TX
5.15-5.25GHz	QPSK20	20	2TX
5.15-5.25GHz	QPSK30	30	2TX
5.15-5.25GHz	QPSK40	40	2TX

Note:

- The 5GHz function uses QPSK modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Table for Frequency Combination Mode

Type Mode		Frequency (MHz)
1	QPSK40+40_80MHz	5187+5227
2	QPSK40+40_80MHz	5184+5230

Note: The above information was declared by manufacturer.

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1.1.3 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1 2	Cambium	Canopy 2x2 SM Extender Dish	Dish	N/A	26

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Note 1: The above information was declared by manufacturer.

Note 2: Directional gain information

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

Ex.

Where:

Directional Gain (NSS1) formula:

$$\begin{split} & \text{NSS1}(\text{g1,1}) = \ 10^{\text{G1/20}} \ ; \text{NSS1}(\text{g1,2}) = \ 10^{\text{G2/20}} \ ; \text{NSS1}(\text{g1,2}) = \ 10^{\text{G3/20}}; \text{NSS1}(\text{g1,2}) = \ 10^{\text{G4/20}}; \\ & \text{gj,k} = & (\text{Nss1}(\text{g1,1}) \ + \ \text{Nss1}(\text{g1,2}) \ + \ \text{Nss1}(\text{g1,3}) \ + \ \text{Nss1}(\text{g1,4}) \)^2 \\ & \text{DG} = & 10 \ \log[(\text{Nss1}(\text{g1,1}) \ + \ \text{Nss1}(\text{g1,2}) \ + \ \text{Nss1}(\text{g1,3}) \ + \ \text{Nss1}(\text{g1,4}))^2 \ / \ N_{\text{ANT}}/\textit{Nss}] \Rightarrow 10 \\ & \log[(10^{\text{G1/20}} \ + \ 10^{\text{G2/20}} \ + \ 10^{\text{G3/20}} \ + \ 10^{\text{G4/20}} \)^2 \ / \ N_{\text{ANT}}] \end{split}$$

Cross-Polarized Antenna

5G UNII-1 G1 = 26.00 dBi; G2 = 26.00 dBi;

5G UNII-3 G1 = 26.00 dBi; G2 = 26.00 dBi;

6G UNII-5 G1 = 26.00 dBi; G2 = 26.00 dBi;

6G UNII-7 G1 = 26.00 dBi; G2 = 26.00 dBi;

5G UNII-1 DG = 26.00 dBi

5G UNII-3 DG = 26.00 dBi

6G UNII-5 DG = 26.00 dBi

6G UNII-7 DG = 26.00 dBi

Note 3: For 5GHz function (2TX/2RX):

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

Port 1~2 could transmit/receive simultaneously.

For 6GHz function (2TX/2RX):

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

Port 1~2 could transmit/receive simultaneously.

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1.1.4 Mode Test Duty Cycle

For other modes:

Mode	DC	DCF	Т	VBW
		(dB)	(s)	(Hz)_1/T
5.15-5.25GHz_QPSK5_5MHz_Nss1_2TX	0.894	0.49	4.471m	300
5.15-5.25GHz_QPSK10_10MHz_Nss1_2TX	0.875	0.58	4.373m	300
5.15-5.25GHz_QPSK15_15MHz_Nss1_2TX	0.868	0.61	4.34m	300
5.15-5.25GHz_QPSK20_20MHz_Nss1_2TX	0.86	0.66	4.299m	300
5.15-5.25GHz_QPSK30_30MHz_Nss1_2TX	0.858	0.67	4.291m	300
5.15-5.25GHz_QPSK40_40MHz_Nss1_2TX	0.855	0.68	4.275m	300

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For frequency combination modes:

Mode	DC	DCF	Т	VBW
		(dB)	(s)	(Hz)_1/T
QPSK40+40 _Nss 1	0.474	3.24	2.368m	1k

١I	-+-	

- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

1.1.5 EUT Operational Condition

EUT Power Type		From PoE				
Beamforming Function	☐ With beamforming ☐ Without beamforming			Without beamforming		
		Outdoor P2M		Indoor P2M		
Function	\boxtimes	Fixed P2P		Client		
		Point-to-multipoint	\boxtimes	Point-to-point		
Test Software Version		DOS [ver 6.1.7601]				

Note: The above information was declared by manufacturer.

1.1.6 Table for EUT Supports Function

Function	Support Band
AP	5GHz UNII 1 and UNII 3 / 6GHz UNII 5 and UNII 7
Client without radar detection	6GHz UNII 5 and UNII 7

Note 1: The AP mode was tested and recorded in this test report.

Note 2: The above information was declared by manufacturer.

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1.1.7 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR470407.

Below is the table for the change of the product with respect to the original one.

	Modifications	Performance Checking
1.	Enable 6GHz UNII 5 and UNII 7 for Standard	
	Power Access Point (6SD) and Fixed Client	After evaluation, this test report was not affected.
	(6FC) modes through SW change.	
		For 5GHz UNII 1:
	Enable 5GHz UNII 1 for Access Point mode through SW change.	1. Emission Bandwidth
		2. Maximum Output Power
		3. Power Spectral Density
		4. Unwanted Emissions > 1GHz

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1.2 Applicable Standards

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

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- 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

1.3 Testing Location Information

Testing	Location	Information
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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	TH01-CB	Ken Yeh	22.3~24.1 / 60~63	Aug. 27, 2024~ Oct. 09, 2024
Radiated < 1GHz	03CH05-CB	Stim Sung	21.6~22.7 / 56~59	Jul. 29, 2024~ Oct. 09, 2024
Radiated > 1GHz	03CH03-CB	Stim Sung	22.7~23.8 / 56~59	Jul. 29, 2024~
Naulaled > 1GHZ	03CH05-CB	Sum Sung	21.6~22.7 / 56~59	Oct. 09, 2024

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)

Parameter	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.0 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.1 %	Confidence levels of 95%

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2 Test Configuration of EUT

2.1 Test Channel Mode

For other modes:

Mode	
QPSK5_5MHz_Nss1_2TX	
5166.5MHz	
5207MHz	
5247.5MHz	
QPSK10_10MHz_Nss1_2TX	
5169MHz	
5207MHz	
5245MHz	
QPSK15_15MHz_Nss1_2TX	
5171.5MHz	
5207MHz	
5242.5MHz	
QPSK20_20MHz_Nss1_2TX	
5174MHz	
5207MHz	
5240MHz	
QPSK30_30MHz_Nss1_2TX	
5179MHz	
5207MHz	
5235MHz	
QPSK40_40MHz_Nss1_2TX	
5184MHz	
5207MHz	
 5230MHz	

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For frequency combination modes:

· · · · · · · · · · · · · · · · · · ·
Mode
QPSK40+40 _80MHz_Nss1_2TX
#5184MHz,#5230MHz
#5187MHz,#5227MHz

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2.2 The Worst Case Measurement Configuration

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	

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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.	
	CTX	
Operating Mode > 1GHz	After evaluating, EUT in Y axis was the worst case, so the measurement will follow this same test configuration.	
1	EUT in Y axis	

Note: The PoE was for measurement only and would not be marketed. Its information is shown as below:

Equipment	Brand Name	Model Name
PoE	Cambium Networks	NET-P30-56IN

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A

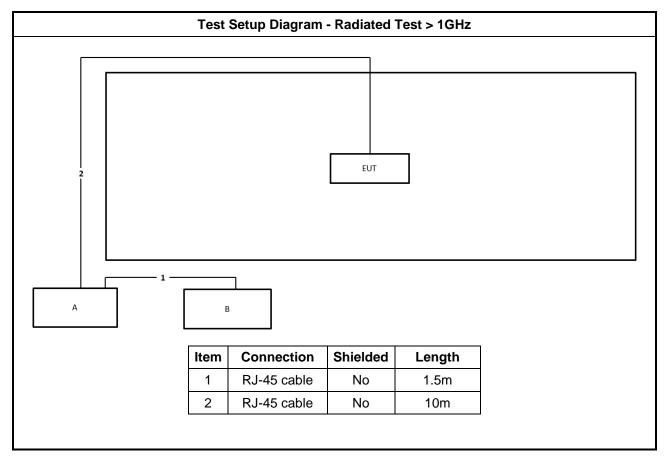
2.5 Support Equipment

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
Α	PoE	Cambium Networks	NET-P30-56-IN	N/A
В	Notebook	DELL	E4300	N/A

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2.6 Test Setup Diagram



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3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 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.
	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 ≥ 500kHz.

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3.1.2 Measuring Instruments

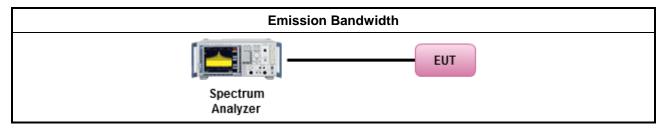
Refer a test equipment and calibration data table in this test report.

3.1.3 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.				

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3.1.4 Test Setup



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3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

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3.2 Maximum Output Power

3.2.1 Limit

		Maximum Output Power Limit
UNI	I De	vices
\boxtimes	For	the 5.15-5.25 GHz band:
	•	Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees \leq 125mW [21dBm]
	•	Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)
	•	Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$.
	•	Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
	250	the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then = $24 - (G_{TX} - 6)$.
	of 2	the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser 50 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then = 24 - (G_{TX} - 6).
	For	the 5.725-5.85 GHz band:
	•	Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$.
	•	Point-to-point systems (P2P): the maximum conducted output power (Pout) shall not exceed the lesser of 1 W.
LE-	LAN	Devices
	For	the 5.15-5.25 GHz band:
	•	For other devices: 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.
	•	Vehicles devices: The maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
	For	the 5.25-5.35 GHz band:
	•	For other devices: The maximum conducted output power shall not exceed 250 mW or 11 + 10 log 10 B, dBm, and 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
	•	Vehicles devices: The maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
	exc	the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum conducted output power shall not eed 250 mW or 11 + 10 log 10 B, dBm, and the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

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For the 5.725-5.85 GHz band:
 Point-to-multipoint systems (P2M): the maximum conducted output power (Pout) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then Pout = 30 − (G_{TX} − 6).
 Point-to-point systems (P2P): the maximum conducted output power (Pout) shall not exceed the lesser of 1 W.

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

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

3.2.2 Measuring Instruments

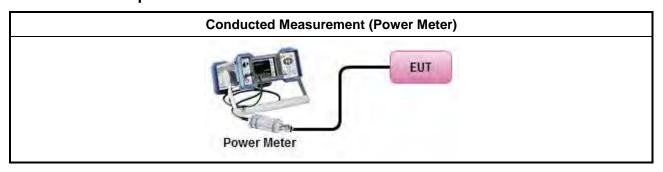
Refer a test equipment and calibration data table in this test report.

3.2.3 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)
	Wideband RF power meter and average over on/off periods with duty factor
	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: Ptotal = P1 + P2 + + Pn (calculated in linear unit [mW] and transfer to log unit [dBm]) EIRPtotal = Ptotal + 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.

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3.2.4 Test Setup



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3.2.5 Test Result of Maximum Output Power

Refer as Appendix B

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3.3 Power Spectral Density

3.3.1 Limit

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

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3.3.2 Measuring Instruments

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

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3.3.3 Test Procedures

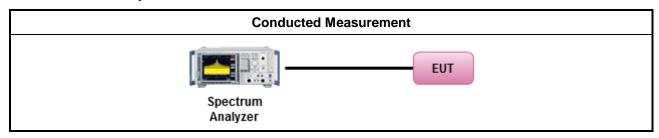
		Test Method
•	outp func	c power spectral density procedures that the same method as used to determine the conducted ut power shall be used to determine the peak power spectral density and use the peak search tion on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density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

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3.3.4 Test Setup



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3.3.5 Test Result of Power Spectral Density

Refer as Appendix C

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3.4 Unwanted Emissions

3.4.1 Transmitter Unwanted Emissions Limit

Unwanted emiss	sions below 1 GHz and re	stricted band emissions a	bove 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

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- 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 ELIT
- 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.

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	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.						

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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).

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

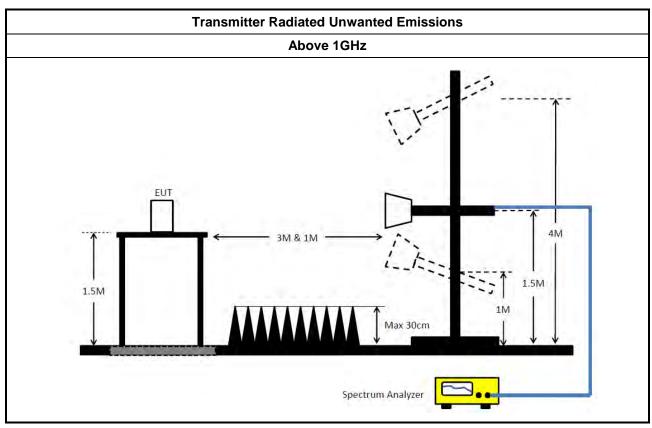
Test Method Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 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 ≥ 98 or duty factor]. For the transmitter unwanted emissions shall be measured using following options below: Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands. Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands. Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW). Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions. Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit. Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.

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- For radiated measurement.
 - Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
 - Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
 - Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
- The any unwanted emissions level shall not exceed the fundamental emission level.
- All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.4.4 Test Setup



3.4.5 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.

3.4.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D

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4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 03, 2024	May 02, 2025	Radiation (03CH03-CB)
Horn Antenna	ETS · Lindgren	3115	6821	750MHz~ 18GHz	Jan. 24, 2024	Jan. 23, 2025	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jul. 09, 2024	Jul. 08, 2025	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jun. 29, 2024	Jun. 28, 2025	Radiation (03CH03-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 11, 2024	Jun. 10, 2025	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Feb. 29, 2024	Feb. 28, 2025	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Feb. 29, 2024	Feb. 28, 2025	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE-15407 _NII	V5.11.19	5.15GHz- 7.115GHz	N.C.R.	N.C.R.	Radiation (03CH03-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30MHz ~ 1GHz	Aug. 01, 2024	Jul. 31, 2025	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Sep. 29, 2023	Sep. 28, 2024	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Sep. 28, 2024	Sep. 27, 2025	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Jun. 20, 2024	Jun. 19, 2025	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jul. 09, 2024	Jul. 08, 2025	Radiation (03CH05-CB)
Pre-Amplifier	Pre-Amplifier EMCI EMC12630SE 980287 1GHz – 26.5GHz		1GHz – 26.5GHz	Jun. 29, 2024	Jun. 28, 2025	Radiation (03CH05-CB)	
Pre-Amplifier SGH SGH184 20221107-3 18GHz ~ 40		18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH05-CB)		
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 17, 2024	Apr. 16, 2025	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)

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Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 01, 2024	Sep. 30, 2025	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 01, 2024	Sep. 30, 2025	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+6 1GHz ~ 40GHz Ja		Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE-15407 _NII	V5.11.19	V5.11.19 5.15GHz- 7.115GHz		N.C.R.	Radiation (03CH05-CB)
Spectrum analyzer	R&S	FSV40	100979	100979 9kHz~40GHz M		May 26, 2025	Conducted (TH01-CB)
Band Rejector	MTJ	6G Band Rejector	6G-BRJ-01	6G-BRJ-01 1 ~ 18GHz Oc		Oct. 02, 2024	Conducted (TH01-CB)
Band Rejector	MTJ	6G Band Rejector	BRJ-01	BRJ-01 1 ~ 18GHz C		Oct. 01, 2025	Conducted (TH01-CB)
Band Rejector	MTJ	6G Band Rejector	6G-BRJ-02 1~ 18GHz		Oct. 03, 2023	Oct. 02, 2024	Conducted (TH01-CB)
Band Rejector	MTJ	6G Band Rejector	BRJ-02 1~ 18GHz		Oct. 02, 2024	Oct. 01, 2025	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1~26.5GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1~18GHz	Oct. 02, 2024	Oct. 01, 2025	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1GHz – 18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1GHz – 18GHz	Oct. 01, 2024	Sep. 30, 2025	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1GHz – 18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1GHz – 18GHz	Oct. 01, 2024	Sep. 30, 2025	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1GHz – 18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1GHz – 18GHz	Oct. 01, 2024	Sep. 30, 2025	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1GHz – 18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1GHz – 18GHz	Oct. 01, 2024	Sep. 30, 2025	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1GHz – 18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1GHz – 18GHz	Oct. 01, 2024	Sep. 30, 2025	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1GHz – 18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)

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Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Cable 9k-18G	Woken	RG402	Cable-95	9 kHz –18 GHz	Oct. 01, 2024	Sep. 30, 2025	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Mar. 01, 2024	Feb. 28, 2025	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	MY45100745	50MHz~18GHz	Jul. 12, 2024	Jul. 11, 2025	Conducted (TH01-CB)
Test Software	SPORTON	SENSE-15407 _NII	V5.11.19	5.15GHz-7.115 GHz	N.C.R.	N.C.R.	Conducted (TH01-CB)

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

NCR means Non-Calibration required.

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EBW_Other modes

Appendix A.1

Summary

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.15-5.25GHz	-	-	-	-	-
QPSK5_5MHz_Nss1_2TX	5.06M	4.607M	4M61G7D	4.758M	4.575M
QPSK10_10MHz_Nss1_2TX	9.983M	9.228M	9M23G7D	9.79M	9.184M
QPSK15_15MHz_Nss1_2TX	15.51M	13.832M	13M8G7D	14.479M	13.764M
QPSK20_20MHz_Nss1_2TX	20.075M	18.525M	18M5G7D	19.085M	18.372M
QPSK30_30MHz_Nss1_2TX	30.608M	27.715M	27M7G7D	28.463M	27.591M
QPSK40_40MHz_Nss1_2TX	39.16M	37.051M	37M1G7D	38.61M	36.777M

 $\label{eq:max-NdB} Max - N \ dB = Maximum \ 6dB \ down \ bandwidth \ for \ 5.725-5.85 \ GHz \ band \ / \ Maximum \ 26dB \ down \ bandwidth \ for \ other \ band; \\ Max - OBW = Maximum \ 99\% \ occupied \ bandwidth; \\ Min - N \ dB = Minimum \ 6dB \ down \ bandwidth \ for \ 5.725-5.85 \ GHz \ band \ / \ Maximum \ 26dB \ down \ bandwidth \ for \ other \ band; \\ Min - OBW = Minimum \ 99\% \ occupied \ bandwidth \ for \ other \ band; \\ Min - OBW = Minimum \ 99\% \ occupied \ bandwidth \ for \ other \ band; \\ Min - OBW = Minimum \ 99\% \ occupied \ bandwidth \ for \ other \ band; \\ Min - OBW = Minimum \ 99\% \ occupied \ bandwidth \ for \ other \ band; \\ Min - OBW = Minimum \ 99\% \ occupied \ bandwidth \ for \ other \ ba$

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EBW_Other modes Appendix A.1

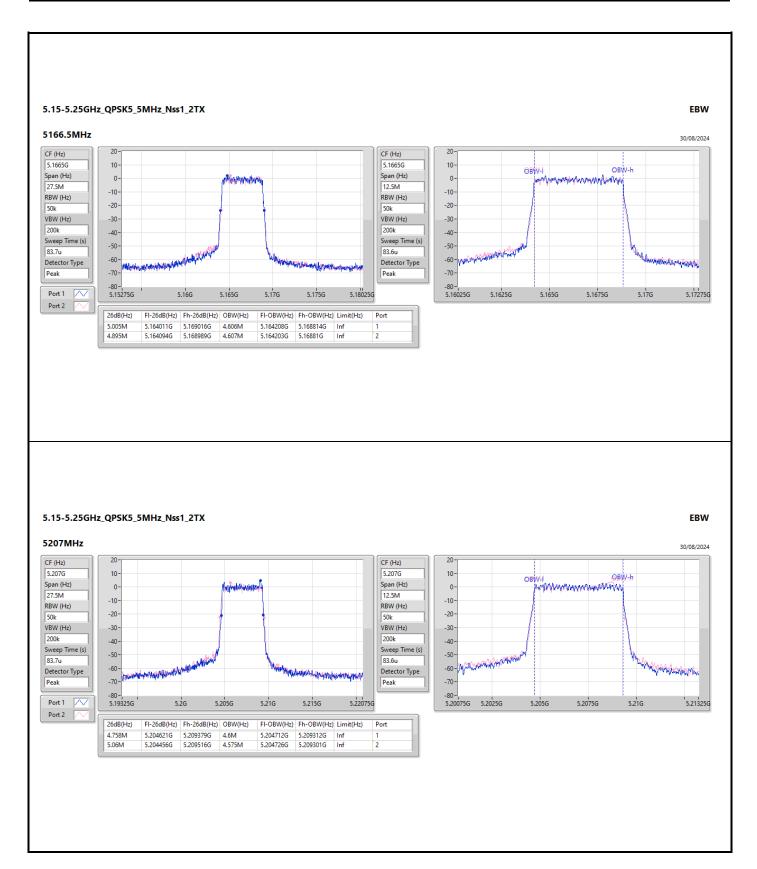
Result

Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
QPSK5_5MHz_Nss1_2TX	-	-	-	-	-	-
5166.5MHz	Pass	Inf	5.005M	4.606M	4.895M	4.607M
5207MHz	Pass	Inf	4.758M	4.6M	5.06M	4.575M
5247.5MHz	Pass	Inf	4.854M	4.593M	4.881M	4.593M
QPSK10_10MHz_Nss1_2TX	-	-	-	-	-	-
5169MHz	Pass	Inf	9.9M	9.228M	9.983M	9.184M
5207MHz	Pass	Inf	9.79M	9.213M	9.928M	9.203M
5245MHz	Pass	Inf	9.983M	9.206M	9.845M	9.208M
QPSK15_15MHz_Nss1_2TX	-	-	-	-	-	-
5171.5MHz	Pass	Inf	15.263M	13.832M	15.51M	13.832M
5207MHz	Pass	Inf	14.52M	13.815M	14.561M	13.815M
5242.5MHz	Pass	Inf	14.479M	13.764M	14.561M	13.772M
QPSK20_20MHz_Nss1_2TX	-	-	-	-	=	-
5174MHz	Pass	Inf	20.075M	18.385M	19.8M	18.458M
5207MHz	Pass	Inf	19.085M	18.506M	19.47M	18.525M
5240MHz	Pass	Inf	19.745M	18.478M	19.8M	18.372M
QPSK30_30MHz_Nss1_2TX	-	-	-	-	=	-
5179MHz	Pass	Inf	30.608M	27.66M	29.7M	27.715M
5207MHz	Pass	Inf	29.865M	27.643M	30.36M	27.666M
5235MHz	Pass	Inf	28.463M	27.616M	29.948M	27.591M
QPSK40_40MHz_Nss1_2TX	-	-	-	-	-	-
5184MHz	Pass	Inf	38.94M	37.051M	39.16M	36.864M
5207MHz	Pass	Inf	38.61M	36.799M	39.05M	36.777M
5230MHz	Pass	Inf	38.83M	36.829M	39.05M	36.877M

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

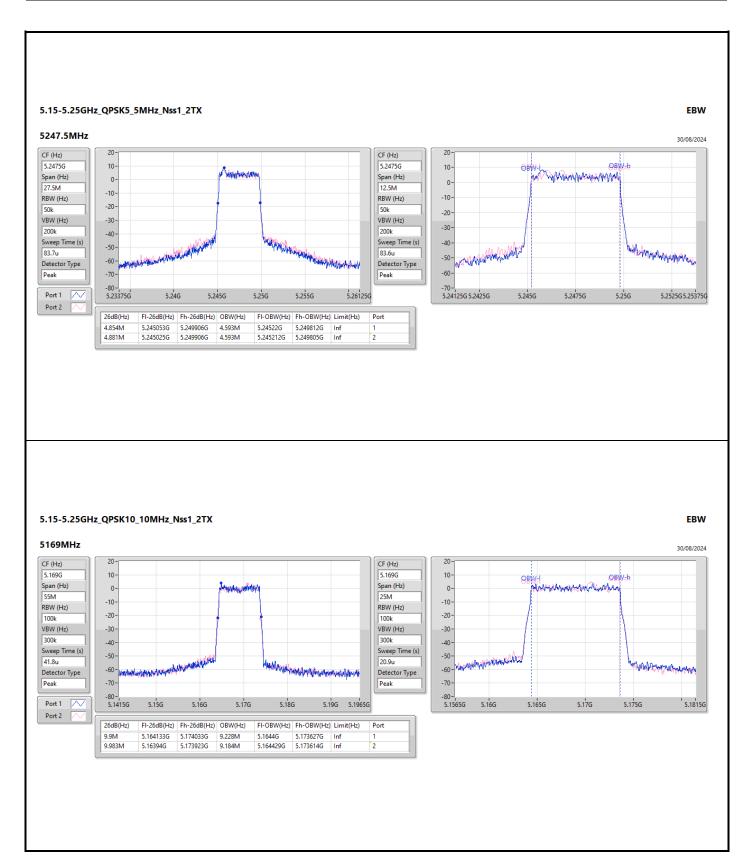
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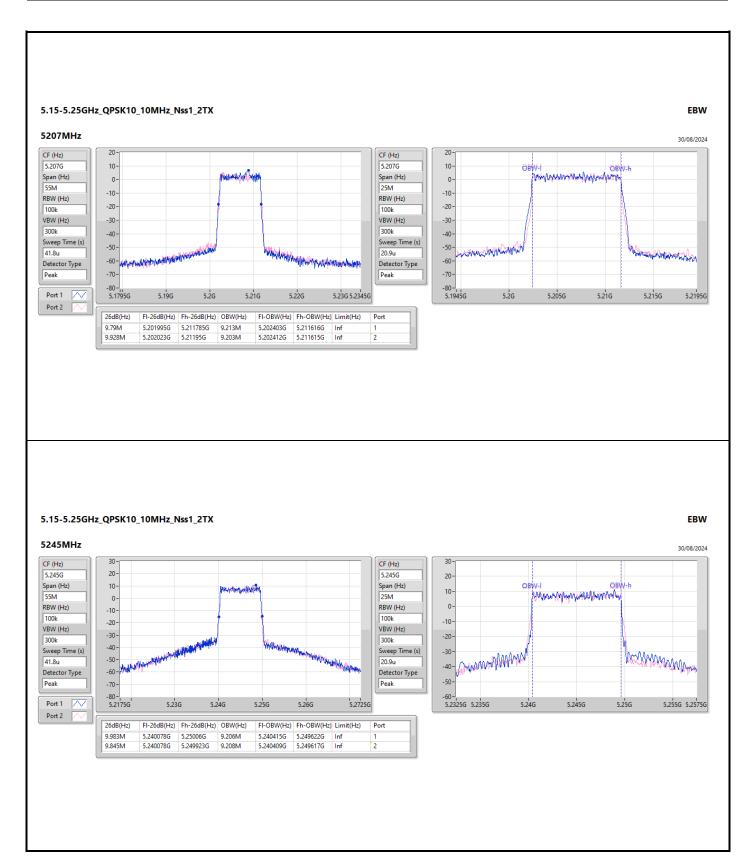
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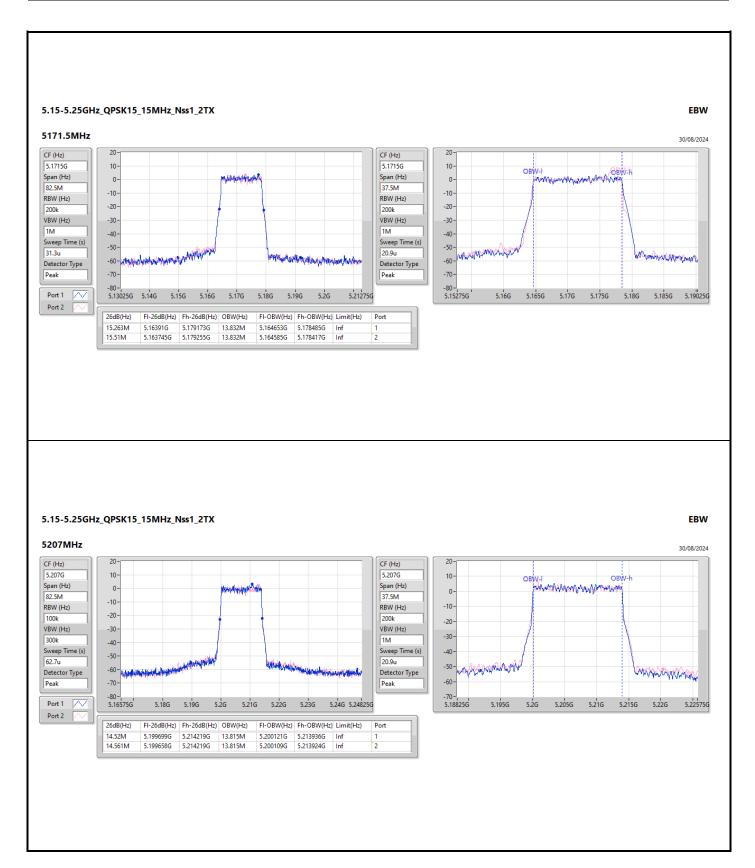
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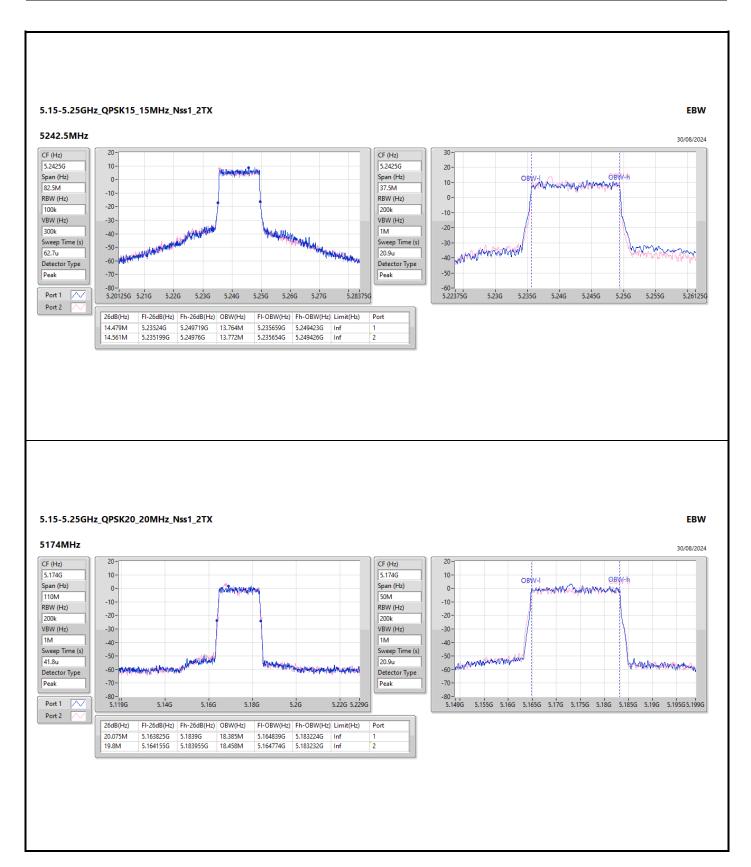
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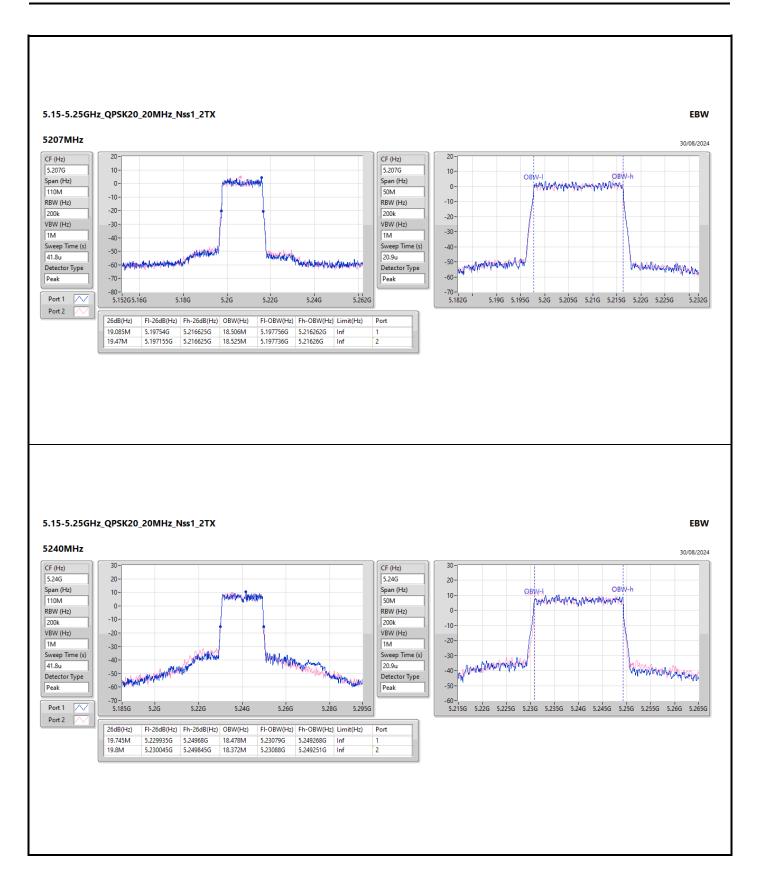


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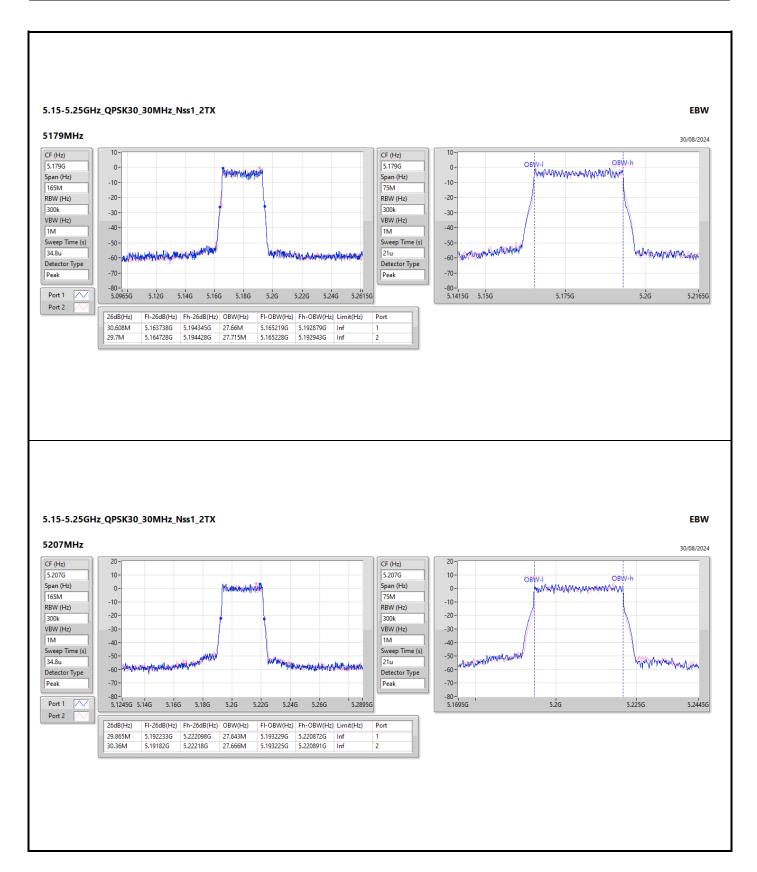


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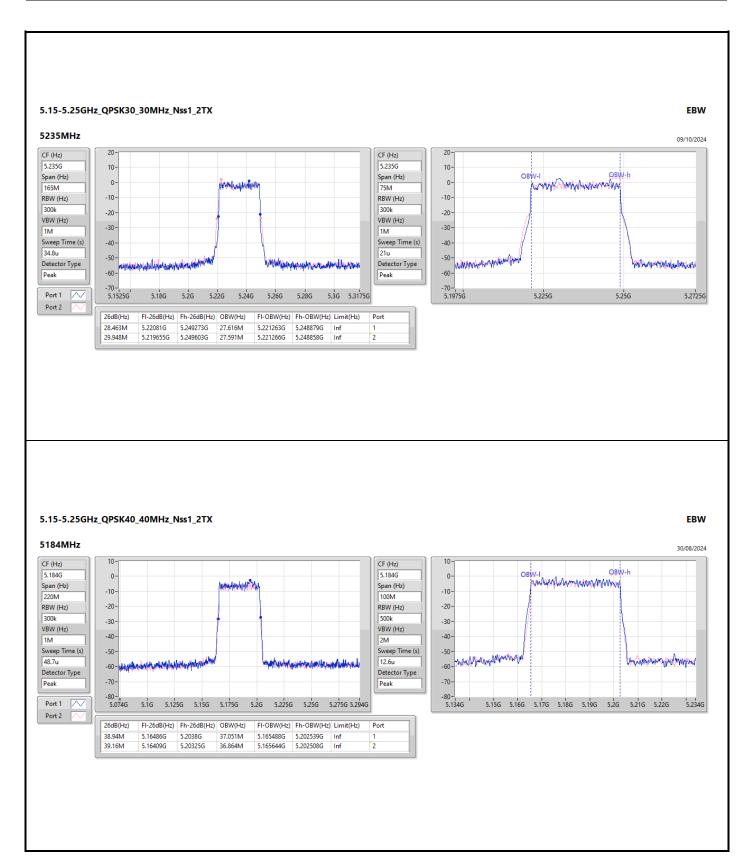
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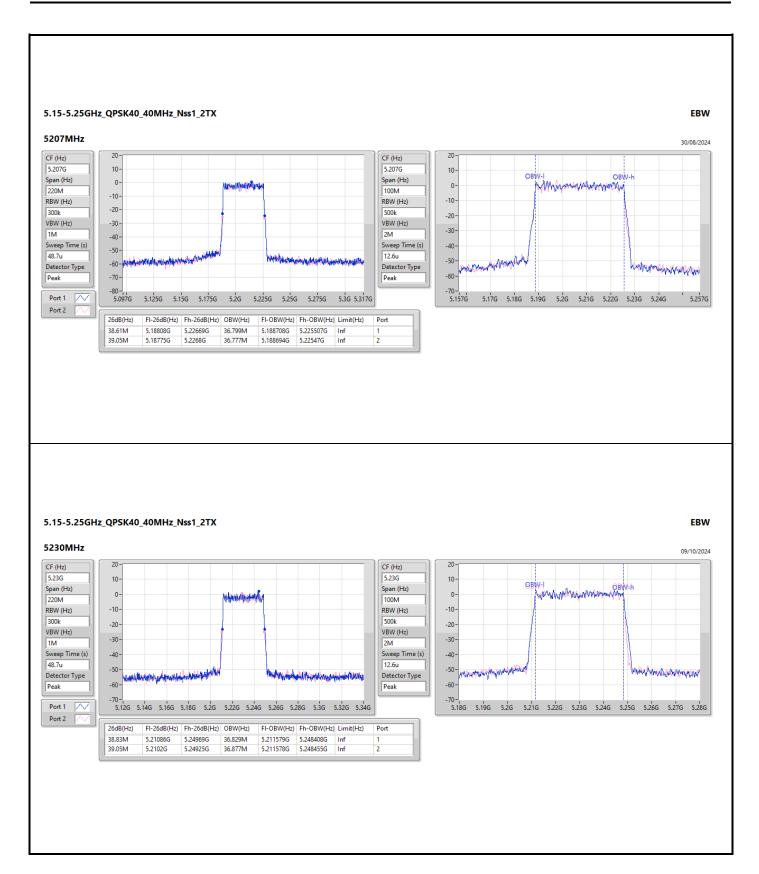


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EBW_Frequency combination modes

Appendix A.2

Summary

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.15-5.25GHz	-	-	-	=	-
QPSK40+40 _80MHz_Nss1_2TX	85.36M	82.635M	82M6G7D	79.42M	76.633M

 $\label{eq:max-NdB} \mbox{ Asximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;} \\ \mbox{ Max-OBW = Maximum 99% occupied bandwidth;} \\ \mbox{ Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;} \\ \mbox{ Min-OBW = Minimum 99% occupied bandwidth}$

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EBW_Frequency combination modes

Appendix A.2

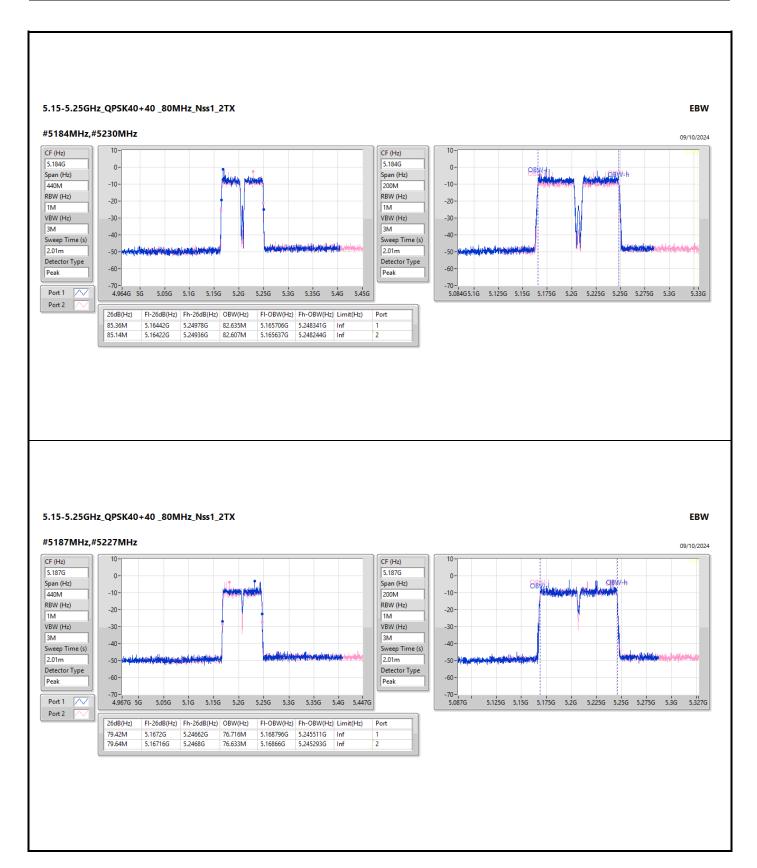
Result

Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
QPSK40+40 _80MHz_Nss1_2TX	-	-	-	-	-	-
#5184MHz,#5230MHz	Pass	Inf	85.36M	82.635M	85.14M	82.607M
#5187MHz,#5227MHz	Pass	Inf	79.42M	76.716M	79.64M	76.633M

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

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Average Power_Other modes

Appendix B.1

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
QPSK5_5MHz_Nss1_2TX	21.10	0.12882
QPSK10_10MHz_Nss1_2TX	24.07	0.25527
QPSK15_15MHz_Nss1_2TX	24.22	0.26424
QPSK20_20MHz_Nss1_2TX	23.81	0.24044
QPSK30_30MHz_Nss1_2TX	17.04	0.05058
QPSK40_40MHz_Nss1_2TX	16.65	0.04624

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Average Power_Other modes

Appendix B.1

Result

Mode	Result	DG	Port 1	Port 2	Total Power	Power Limit	
		(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	
QPSK5_5MHz_Nss1_2TX	-	-	-	-	-	-	
5166.5MHz	Pass	26.00	17.43	17.21	20.33	27.00	
5207MHz	Pass	26.00	18.12	18.05	21.10	27.00	
5247.5MHz	Pass	26.00	18.33	17.70	21.04	27.00	
QPSK10_10MHz_Nss1_2TX	-	-	-	-	-	=	
5169MHz	Pass	26.00	13.85	14.15	17.01	27.00	
5207MHz	Pass	26.00	16.01	15.94	18.99	27.00	
5245MHz	Pass	26.00	21.22	20.89	24.07	27.00	
QPSK15_15MHz_Nss1_2TX	-	-	-	-	-	-	
5171.5MHz	Pass	26.00	13.12	13.09	16.12	27.00	
5207MHz	Pass	26.00	15.06	15.00	18.04	27.00	
5242.5MHz	Pass	26.00	21.41	20.99	24.22	27.00	
QPSK20_20MHz_Nss1_2TX	-	-	-	-	-	=	
5174MHz	Pass	26.00	12.90	12.71	15.82	27.00	
5207MHz	Pass	26.00	14.79	14.60	17.71	27.00	
5240MHz	Pass	26.00	20.91	20.68	23.81	27.00	
QPSK30_30MHz_Nss1_2TX	-	-	-	-	-	=	
5179MHz	Pass	26.00	9.33	9.97	12.67	27.00	
5207MHz	Pass	26.00	14.08	13.97	17.04	27.00	
5235MHz	Pass	26.00	12.68	12.53	15.62	27.00	
QPSK40_40MHz_Nss1_2TX	-	-	-	-	-	-	
5184MHz	Pass	26.00	9.00	8.75	11.89	27.00	
5207MHz	Pass	26.00	12.90	12.61	15.77	27.00	
5230MHz	Pass	26.00	13.79	13.49	16.65	27.00	

DG = Directional Gain; Port X = Port X output power Inf = There's no restriction for the limit.

Page No.



Average Power_Frequency combination modes

Appendix B.2

Summary

Mode	Total Power (dBm)	Total Power (W)		
5.15-5.25GHz	=	-		
QPSK40+40 _80MHz_Nss1_2TX	7.07	0.00509		

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Average Power_Frequency combination modes

Appendix B.2

Result

Mode	Result	DG	Port 1	Port 2	Total Power	Power Limit
		(dBi)	(dBm)	(dBm)	(dBm)	(dBm)
QPSK40+40 _80MHz_Nss1_2TX	-	-	-	-	-	-
#5184MHz,#5230MHz	Pass	26.00	4.45	3.62	7.07	27.00
#5187MHz,#5227MHz	Pass	26.00	3.42	2.68	6.08	27.00

DG = Directional Gain; Port X = Port X output power Inf = There's no restriction for the limit.



Summary

Mode	PD (dBm/RBW)
	(UDIII/RDW)
5.15-5.25GHz	•
QPSK5_5MHz_Nss1_2TX	13.50
QPSK10_10MHz_Nss1_2TX	13.81
QPSK15_15MHz_Nss1_2TX	12.40
QPSK20_20MHz_Nss1_2TX	10.68
QPSK30_30MHz_Nss1_2TX	2.48
QPSK40_40MHz_Nss1_2TX	1.01

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

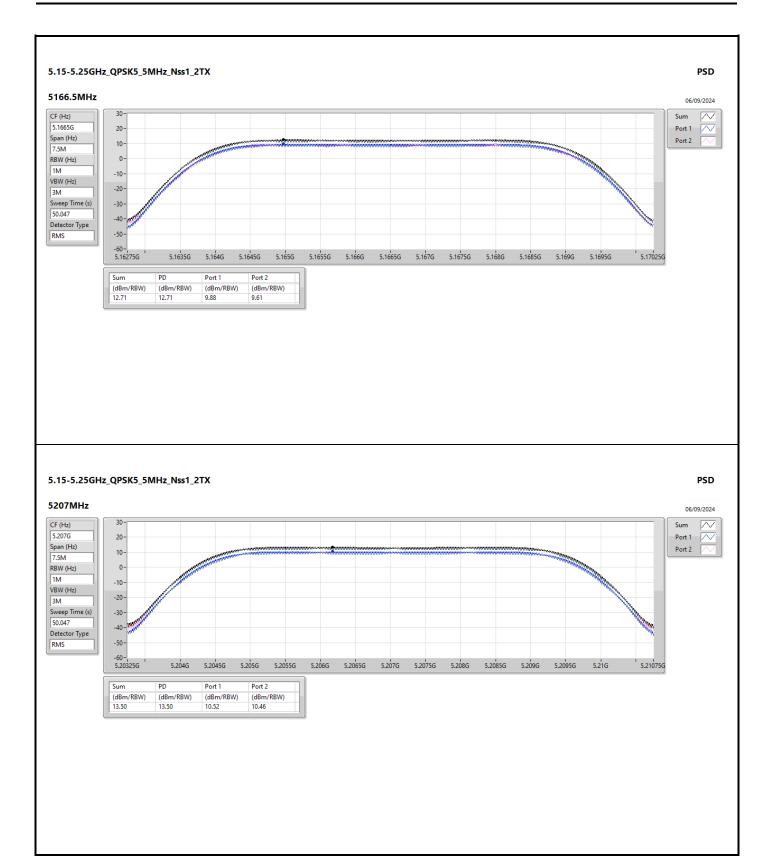
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Result

Mode	Result	DG	Port 1	Port 2	PD	PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
QPSK5_5MHz_Nss1_2TX	-	-	-	-	-	-
5166.5MHz	Pass	26.00	9.88	9.61	12.71	14.00
5207MHz	Pass	26.00	10.52	10.46	13.50	14.00
5247.5MHz	Pass	26.00	10.74	10.27	13.47	14.00
QPSK10_10MHz_Nss1_2TX	-	-	-	-	-	-
5169MHz	Pass	26.00	4.14	3.82	6.95	14.00
5207MHz	Pass	26.00	5.81	5.67	8.73	14.00
5245MHz	Pass	26.00	11.02	10.60	13.81	14.00
QPSK15_15MHz_Nss1_2TX	-	-	-	-	-	-
5171.5MHz	Pass	26.00	1.73	1.36	4.55	14.00
5207MHz	Pass	26.00	3.49	3.32	6.41	14.00
5242.5MHz	Pass	26.00	9.67	9.24	12.40	14.00
QPSK20_20MHz_Nss1_2TX	-	-	-	-	-	-
5174MHz	Pass	26.00	-0.02	-0.42	2.71	14.00
5207MHz	Pass	26.00	1.78	1.57	4.64	14.00
5240MHz	Pass	26.00	7.89	7.62	10.68	14.00
QPSK30_30MHz_Nss1_2TX	-	-	-	-	-	-
5179MHz	Pass	26.00	-3.89	-4.22	-1.20	14.00
5207MHz	Pass	26.00	-0.12	-0.39	2.48	14.00
5235MHz	Pass	26.00	-1.84	-1.89	1.02	14.00
QPSK40_40MHz_Nss1_2TX	-	-	-	-	-	-
5184MHz	Pass	26.00	-6.11	-6.68	-3.44	14.00
5207MHz	Pass	26.00	-2.31	-2.75	0.49	14.00
5230MHz	Pass	26.00	-1.84	-2.00	1.01	14.00

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;
Inf = There's no restriction for the limit.



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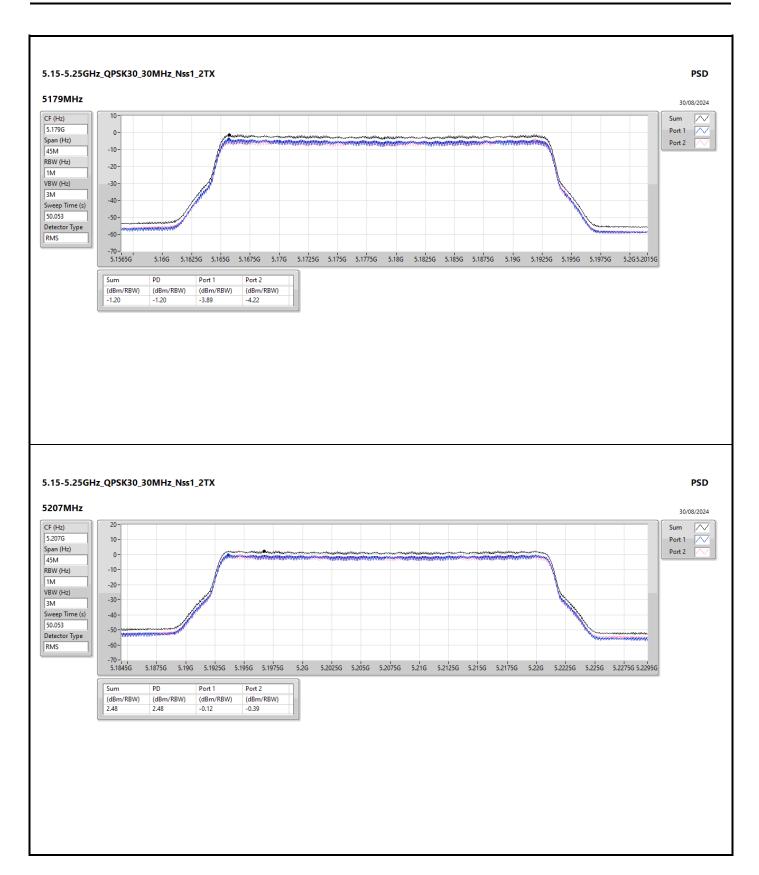
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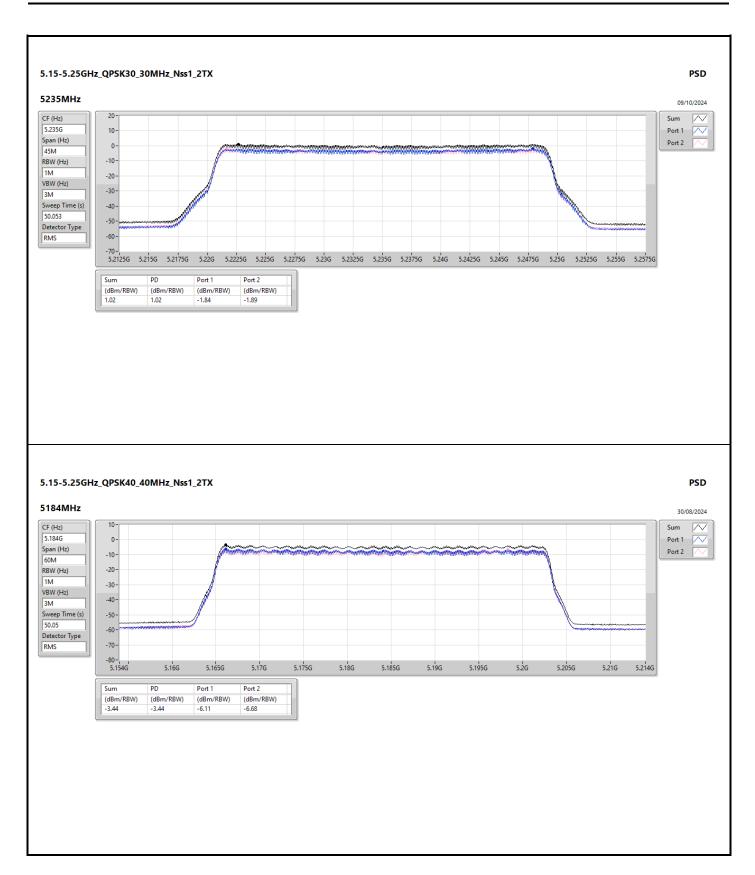
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PSD_Frequency combination modes

Appendix C.2

Summary

Mode	PD
	(dBm/RBW)
5.15-5.25GHz	-
QPSK40+40 _80MHz_Nss1_2TX	-12.71

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

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PSD_Frequency combination modes

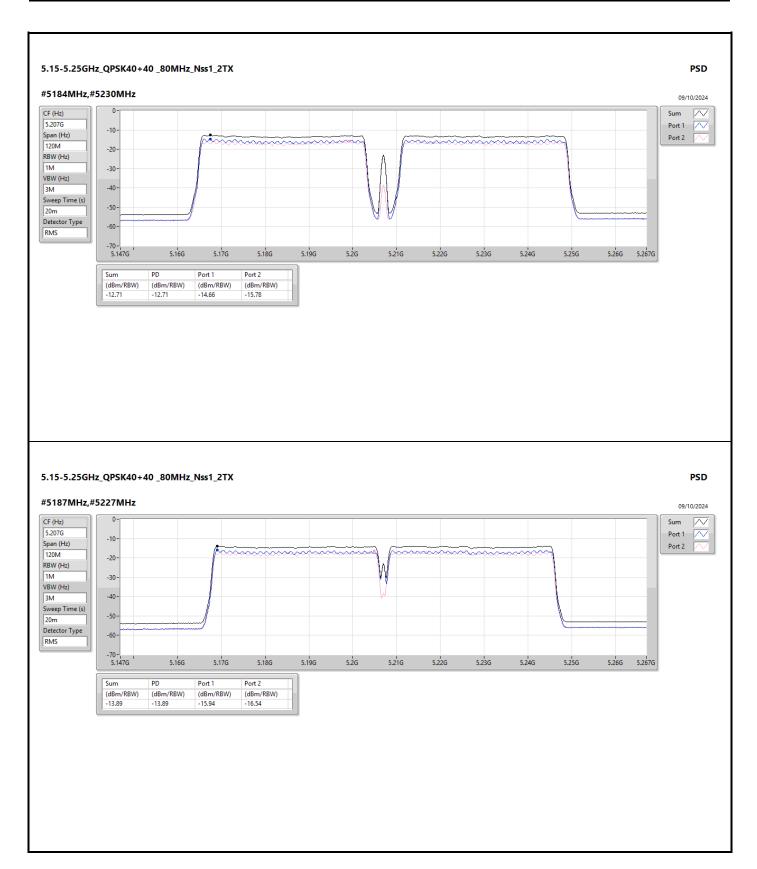
Appendix C.2

Result

Mode	Result	DG	Port 1	Port 2	PD	PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
QPSK40+40 _80MHz_Nss1_2TX	=	÷	-	ī	ī	-
#5184MHz,#5230MHz	Pass	26.00	-14.66	-15.78	-12.71	14.00
#5187MHz,#5227MHz	Pass	26.00	-15.94	-16.54	-13.89	14.00

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; Inf = There's no restriction for the limit.





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RSE TX above 1GHz_Other modes

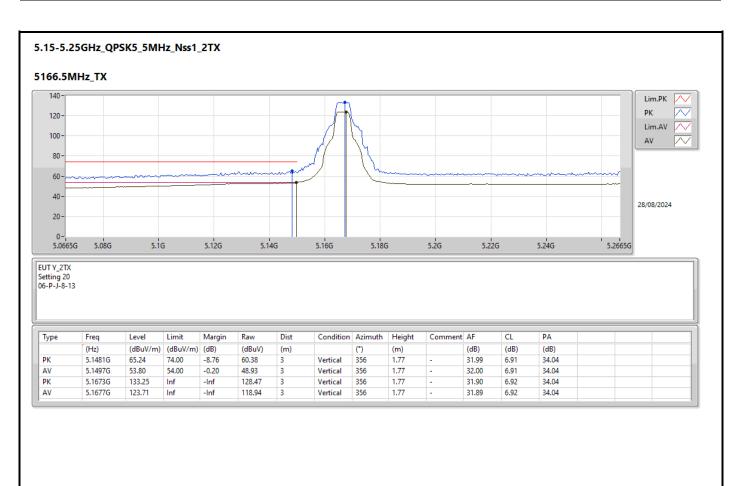
Appendix D.1

Summary

Mode	Result	Туре	Freq	Level	Limit	Margin	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(m)		(°)	(m)	
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
QPSK10_10MHz_Nss1_2TX	Pass	AV	5.149G	53.94	54.00	-0.06	3	Horizontal	356	1.80	-

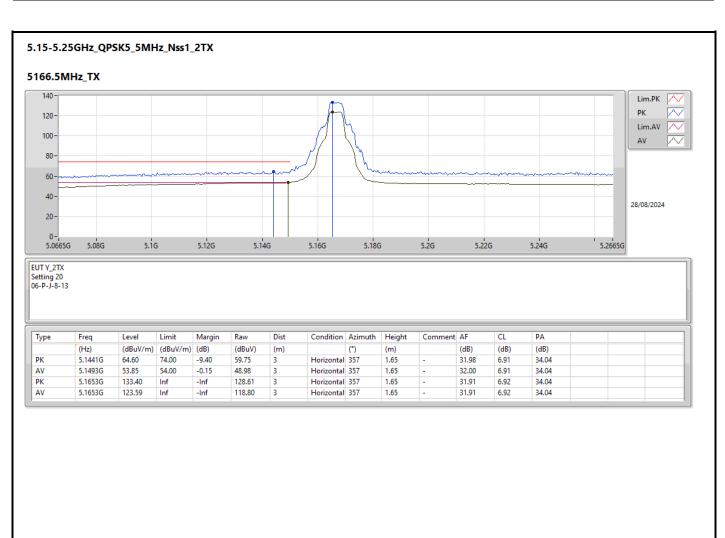
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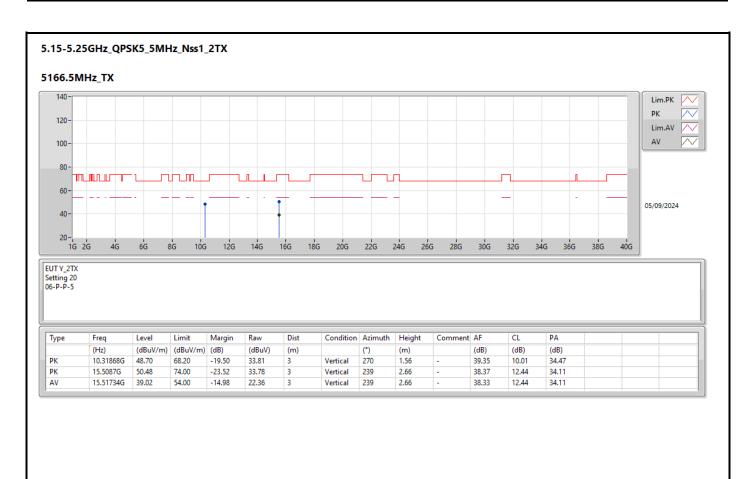
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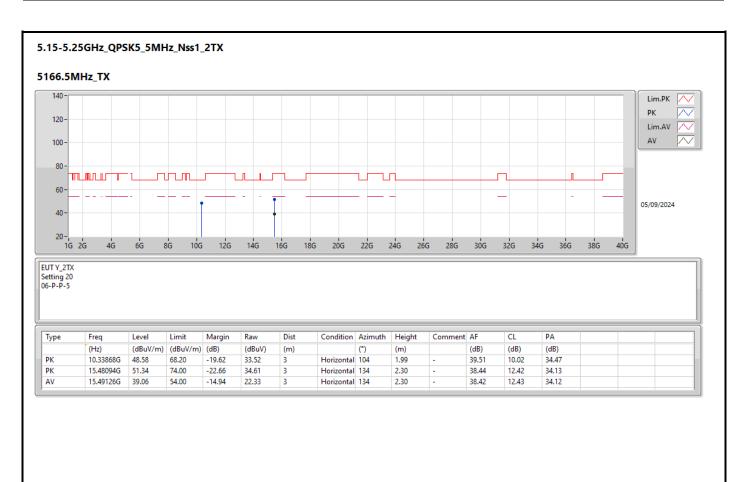
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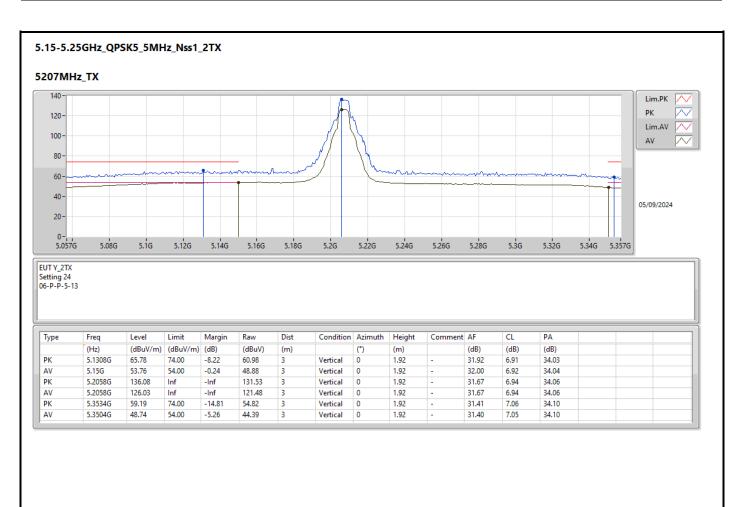
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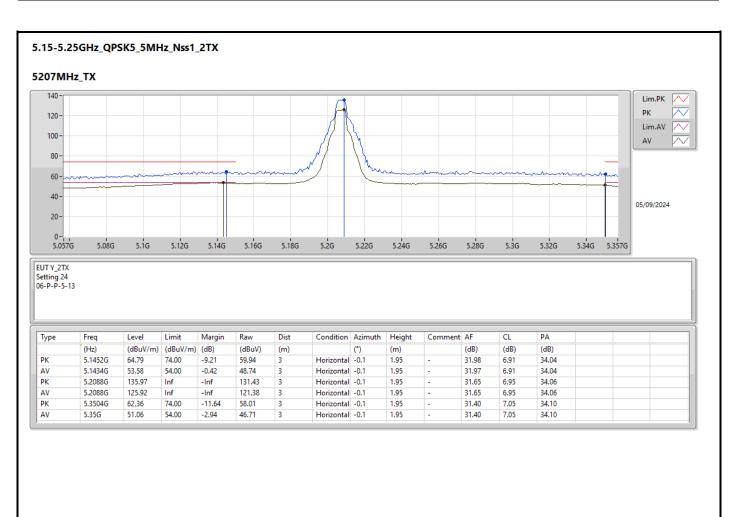
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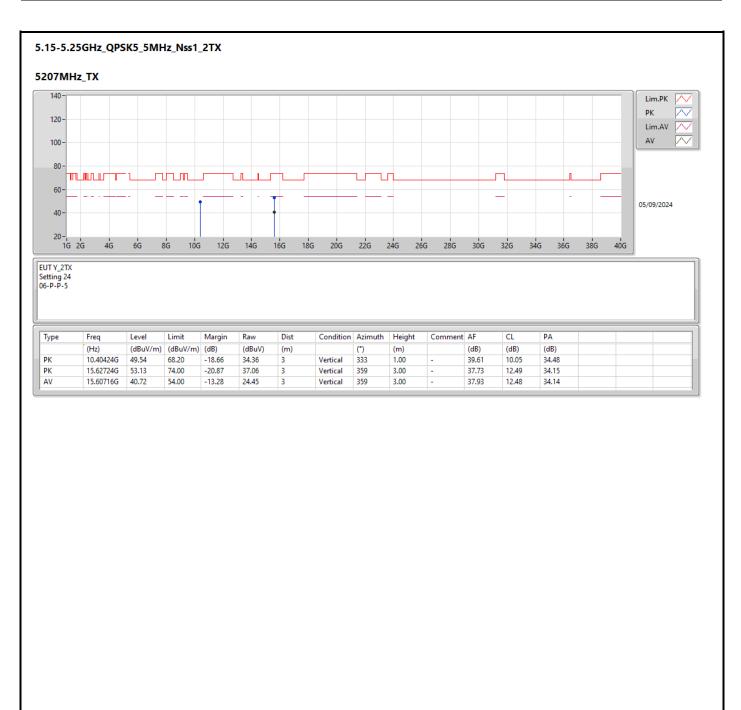
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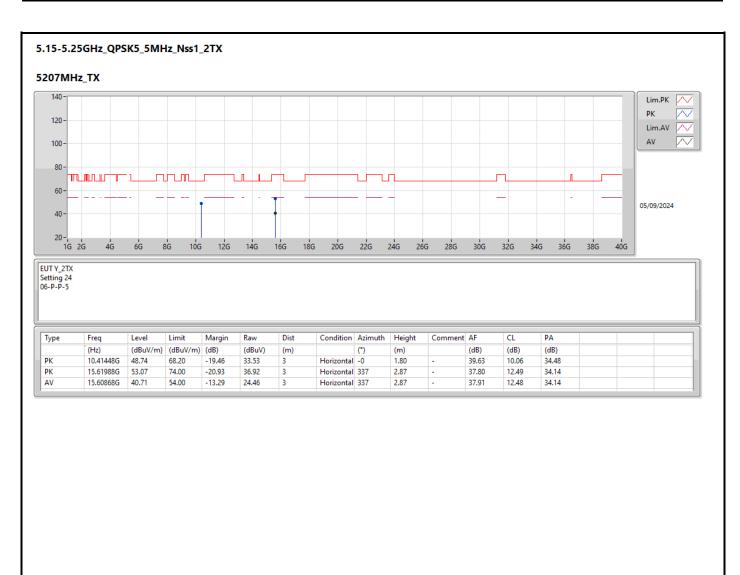
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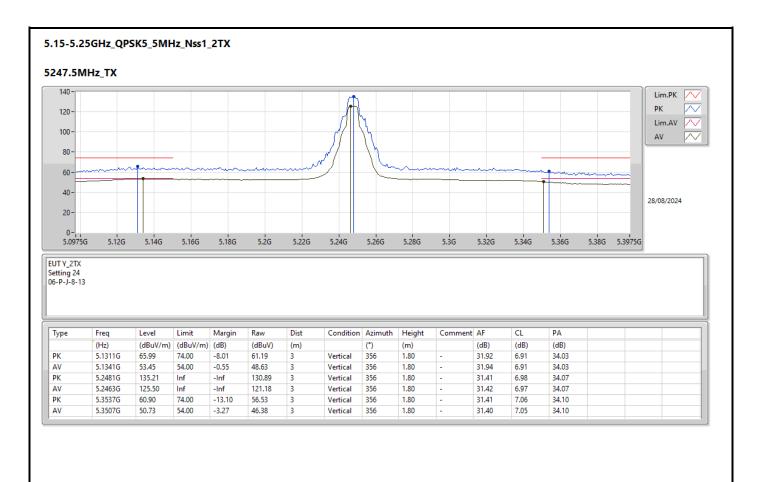
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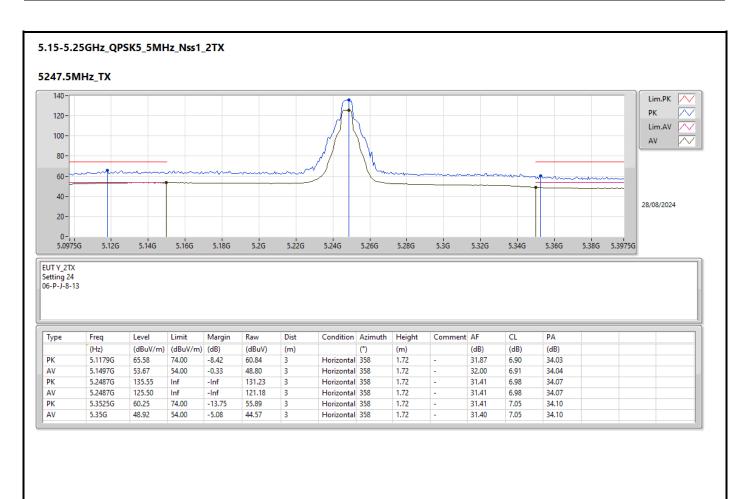
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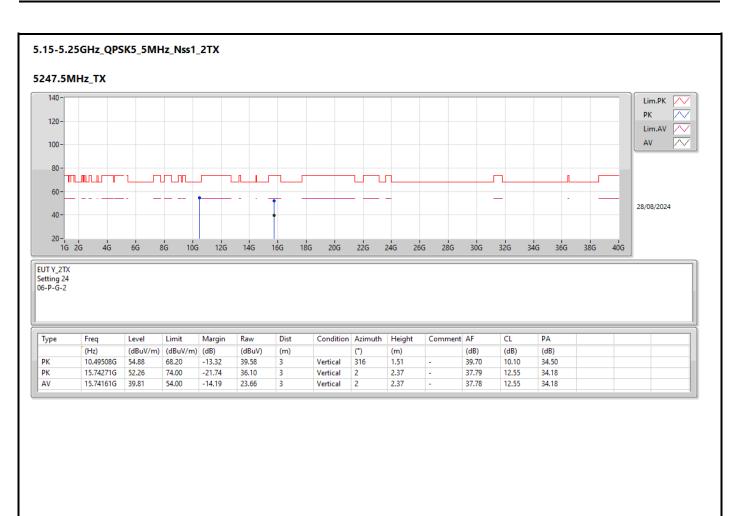
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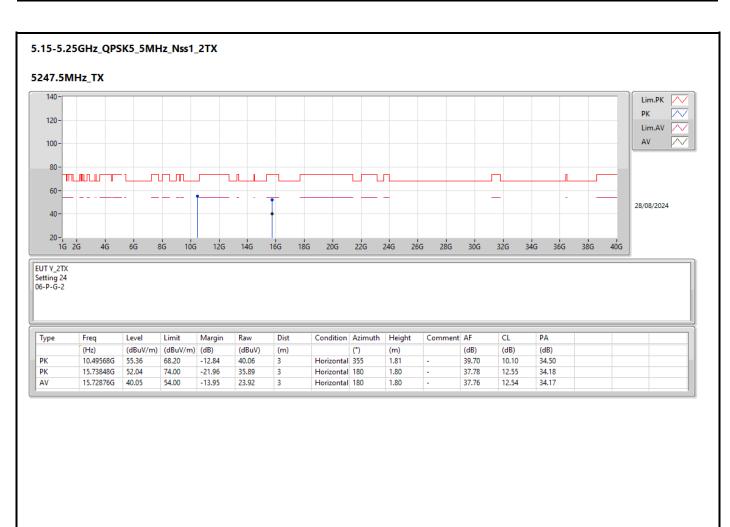
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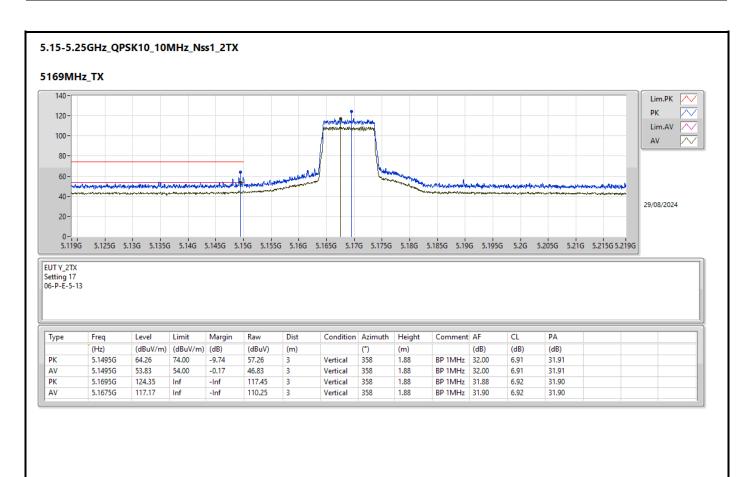
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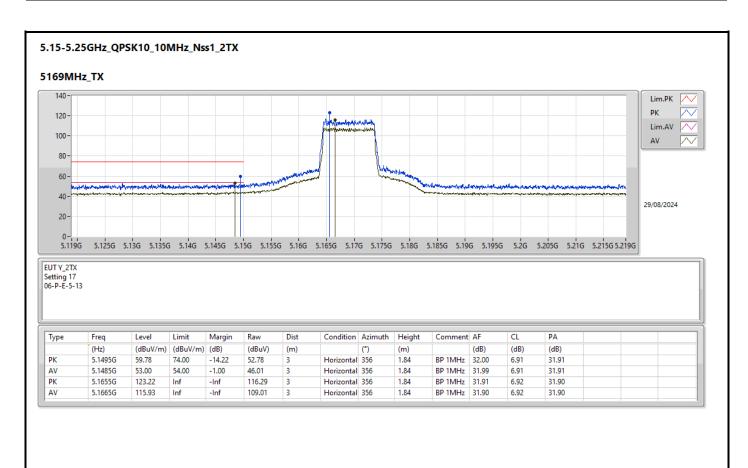
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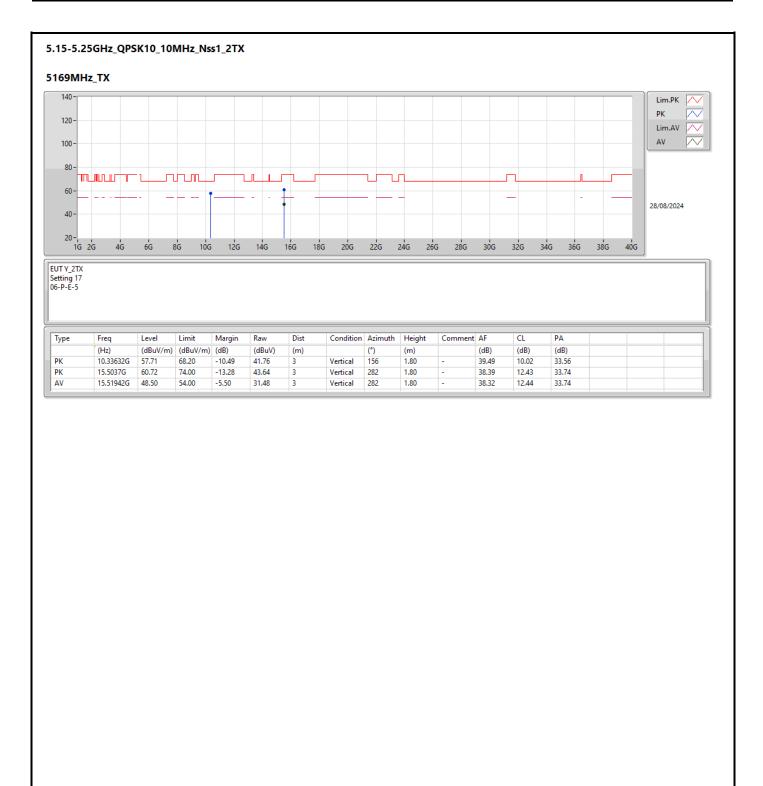
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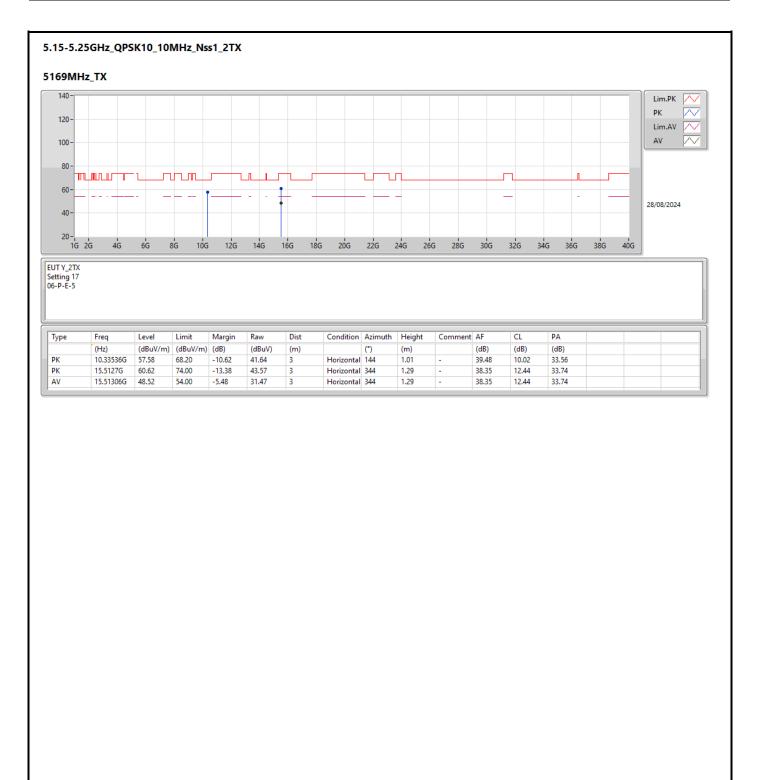
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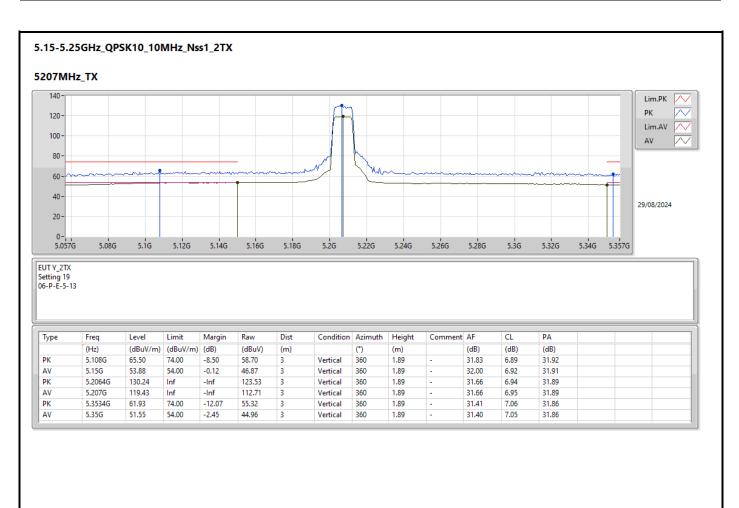
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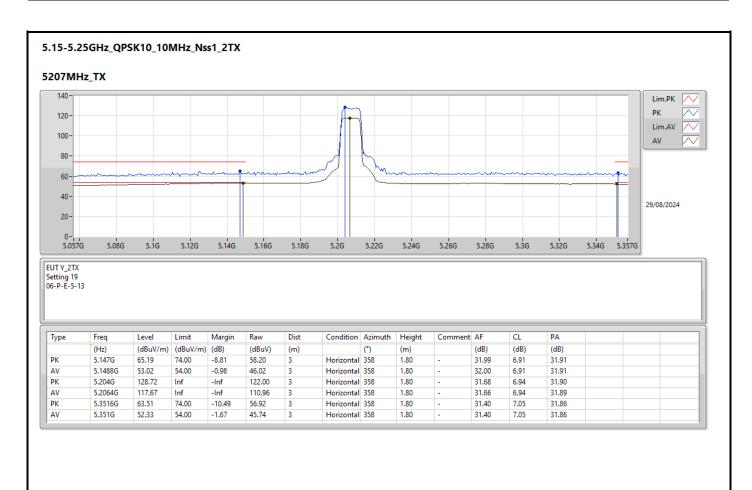
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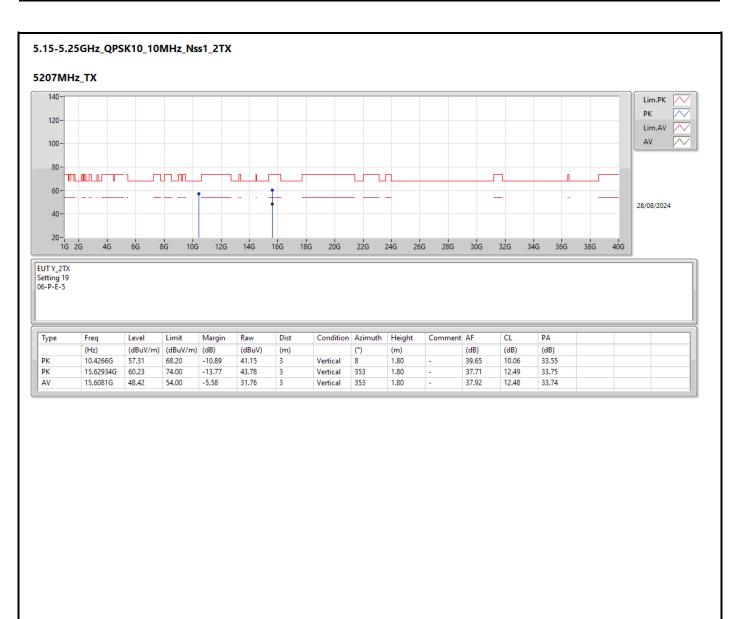
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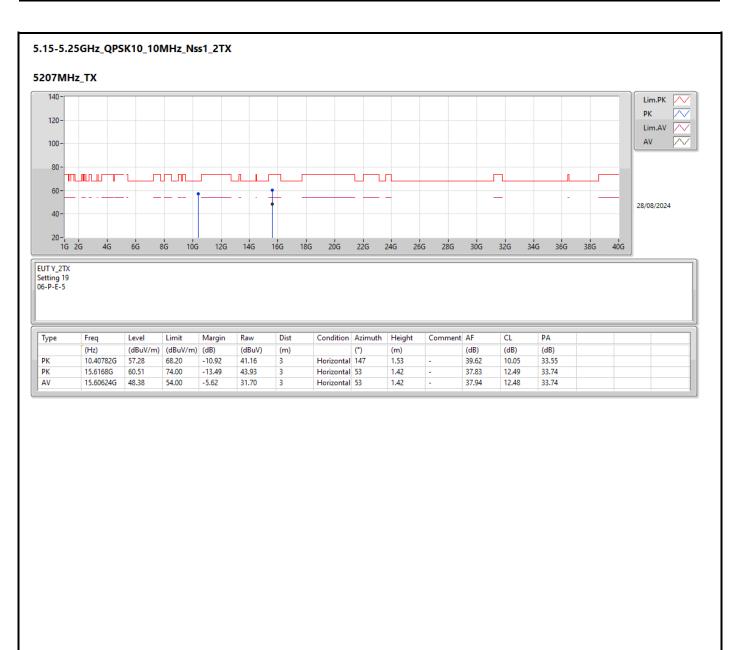
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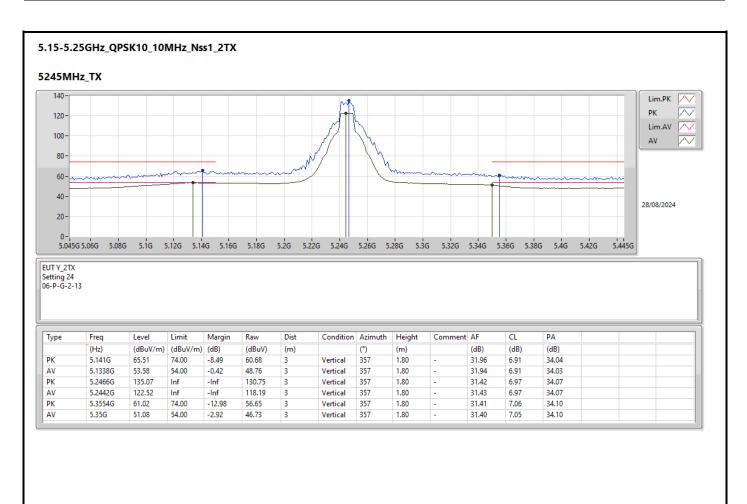
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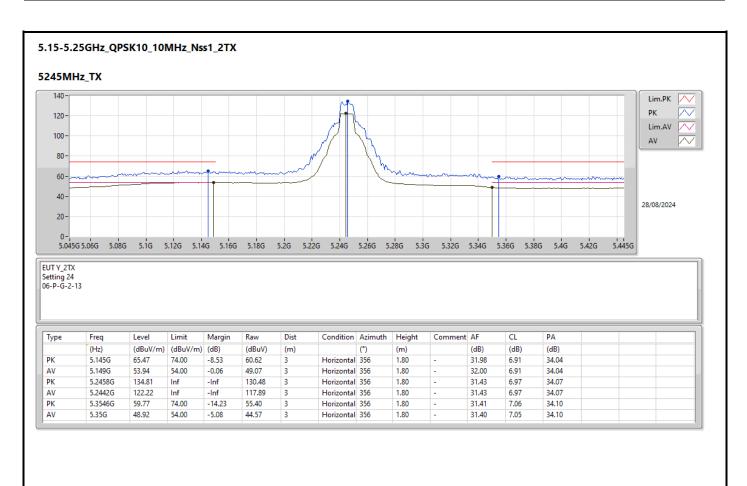
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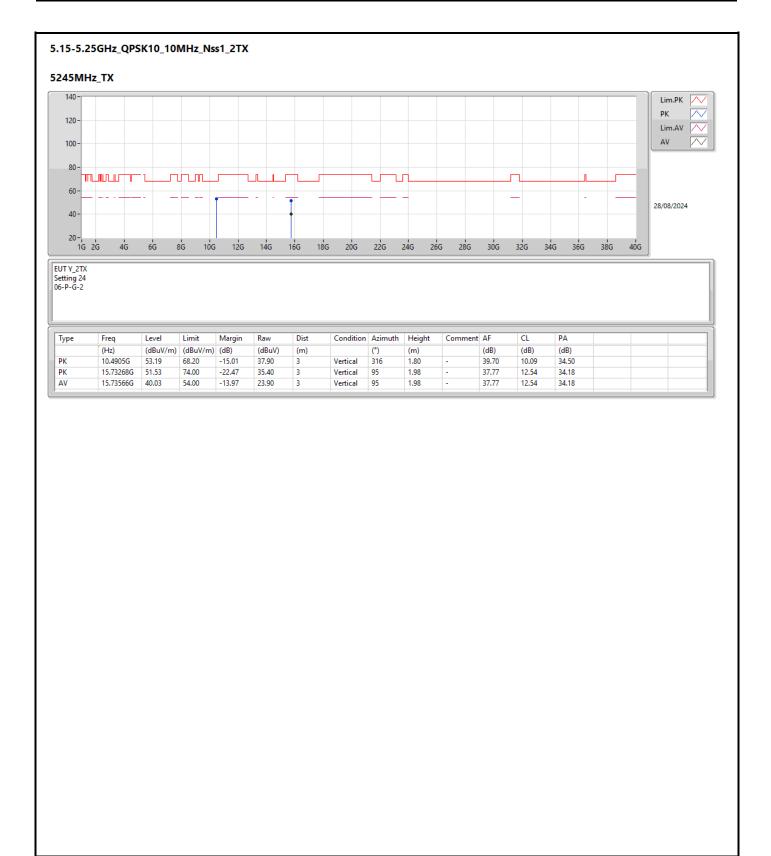
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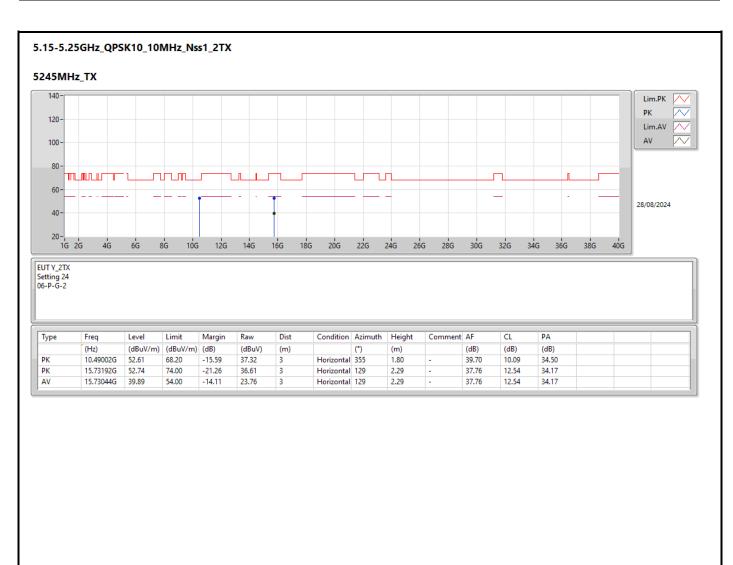
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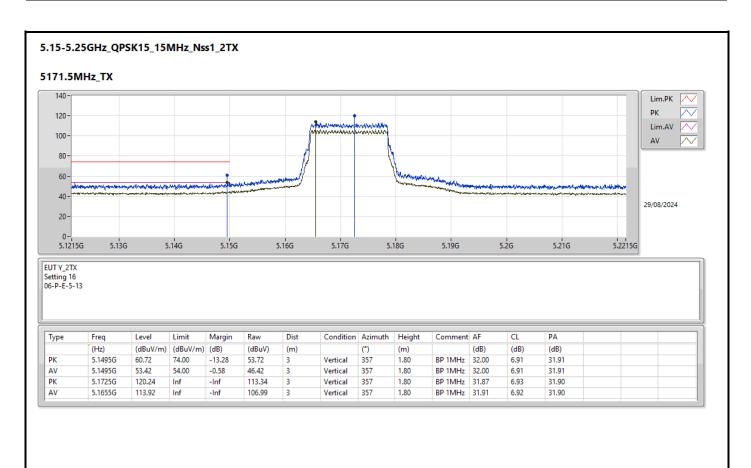
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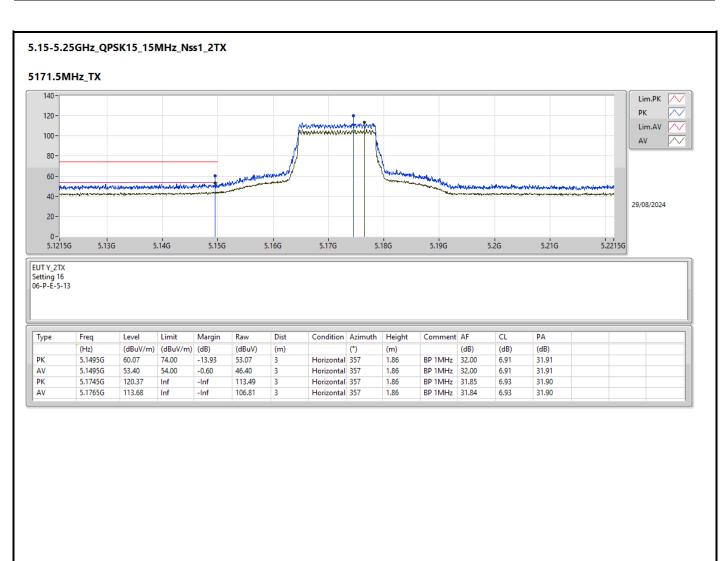
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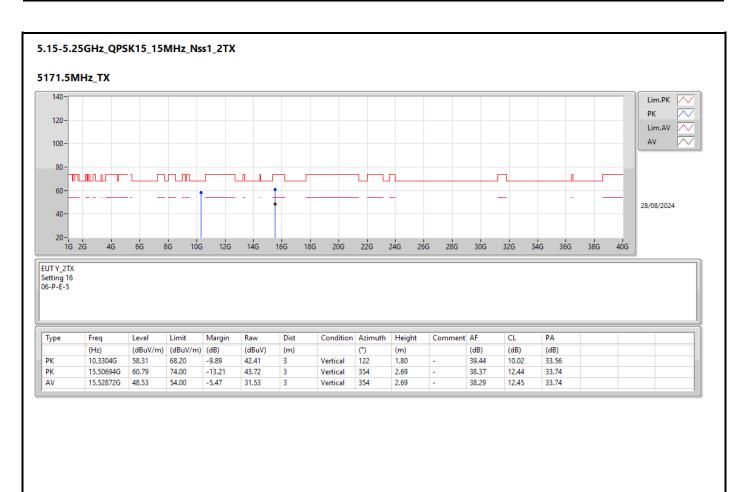
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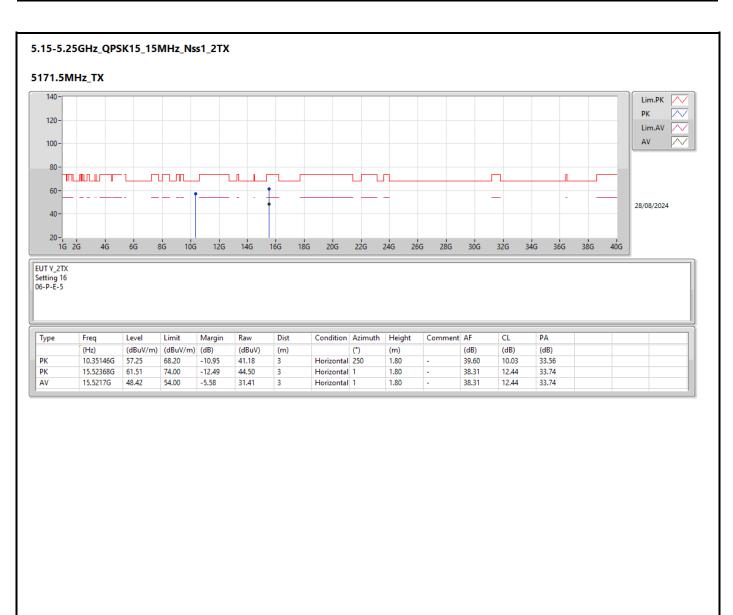
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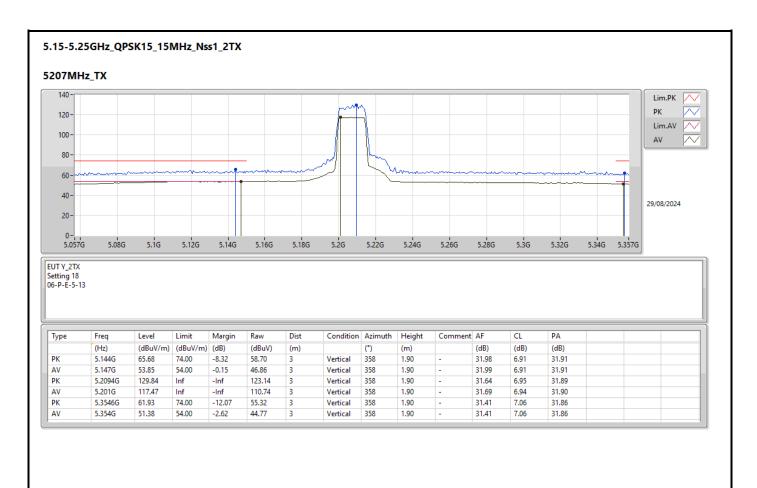
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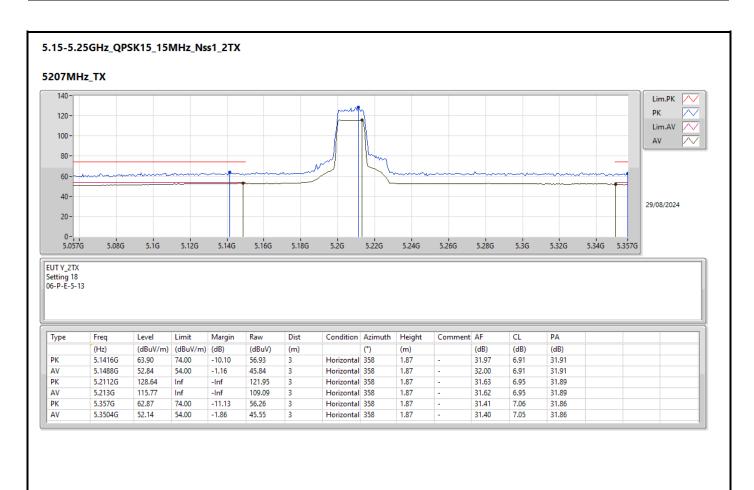
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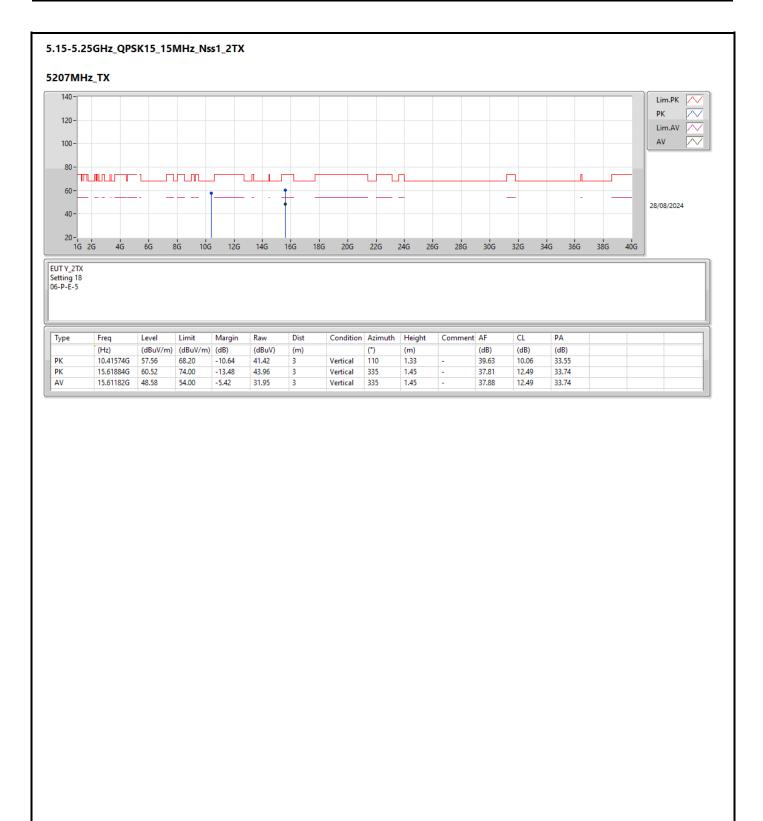
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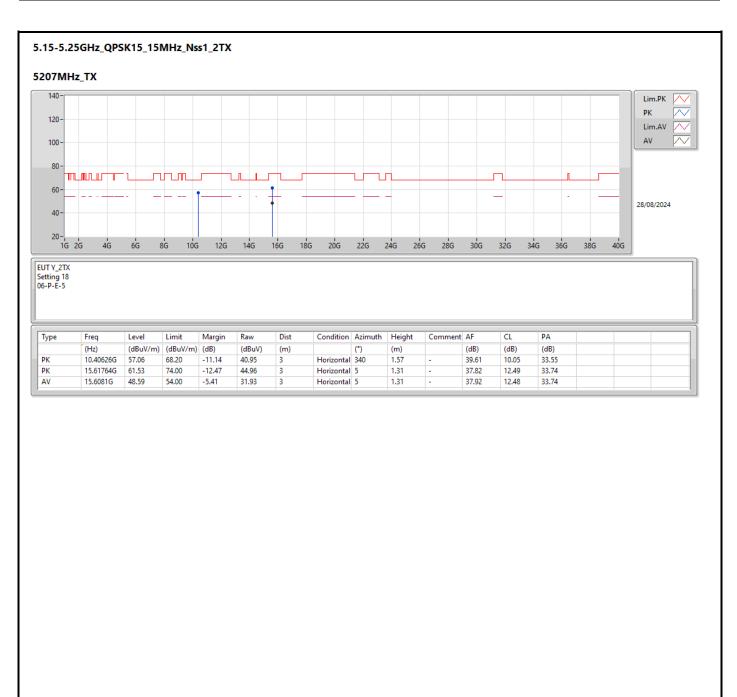
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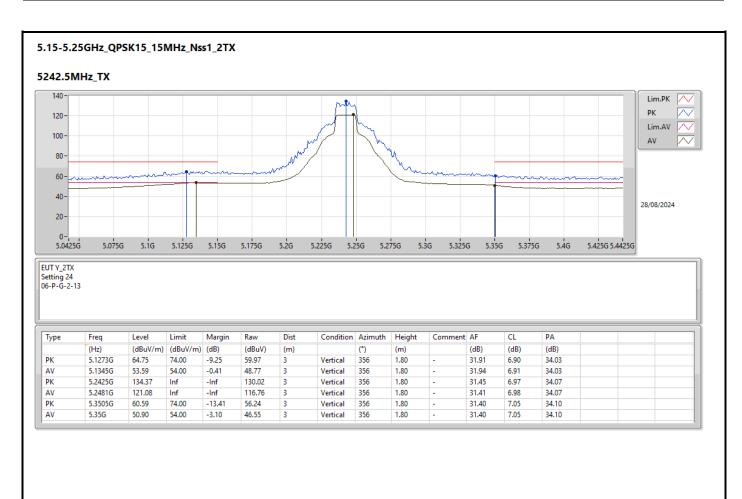
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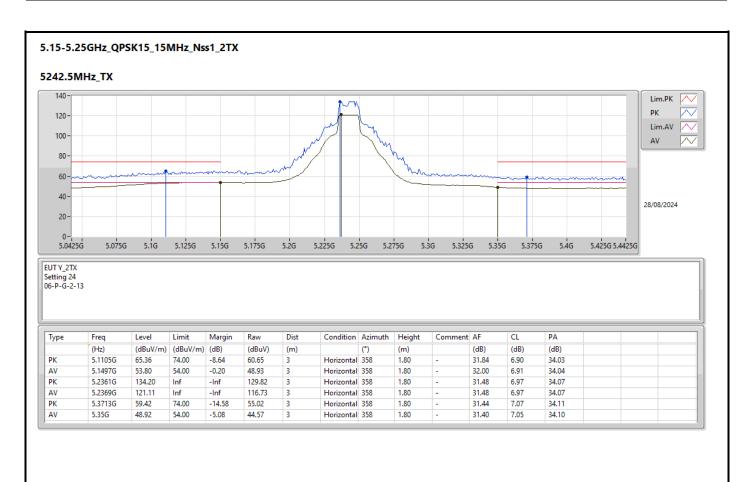
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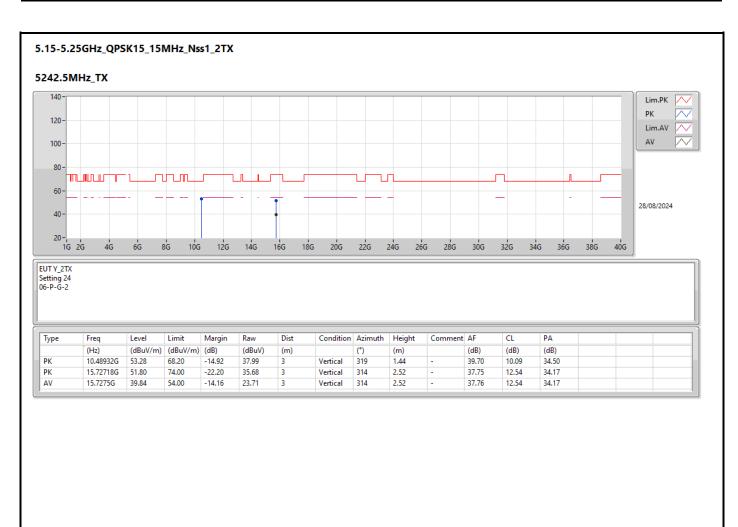
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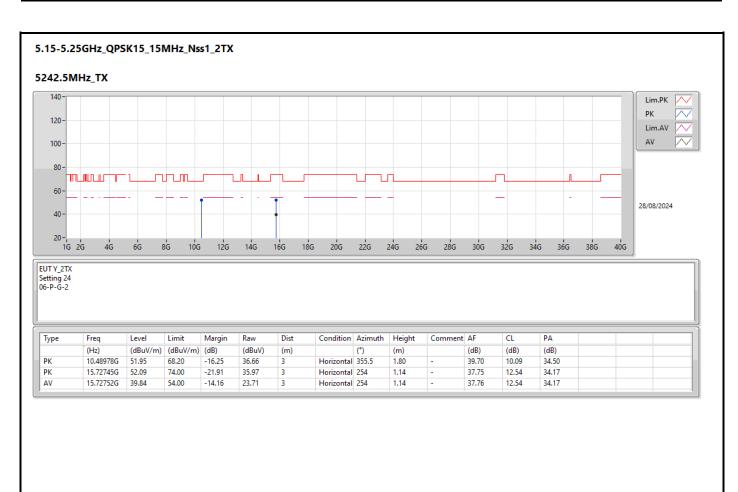
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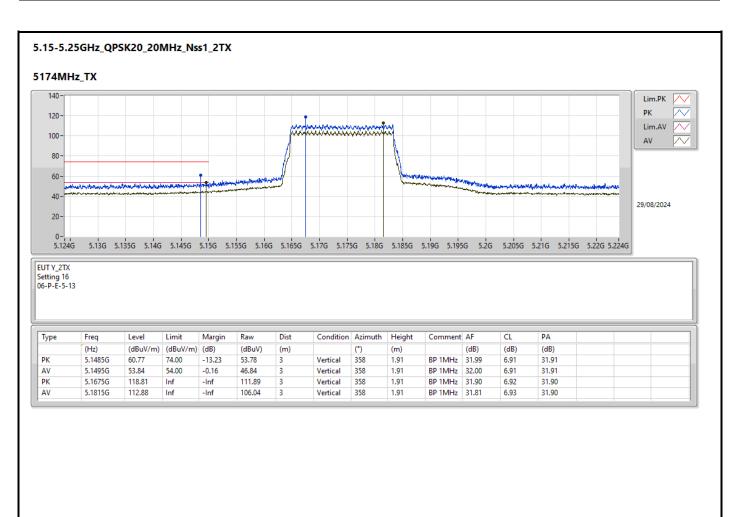
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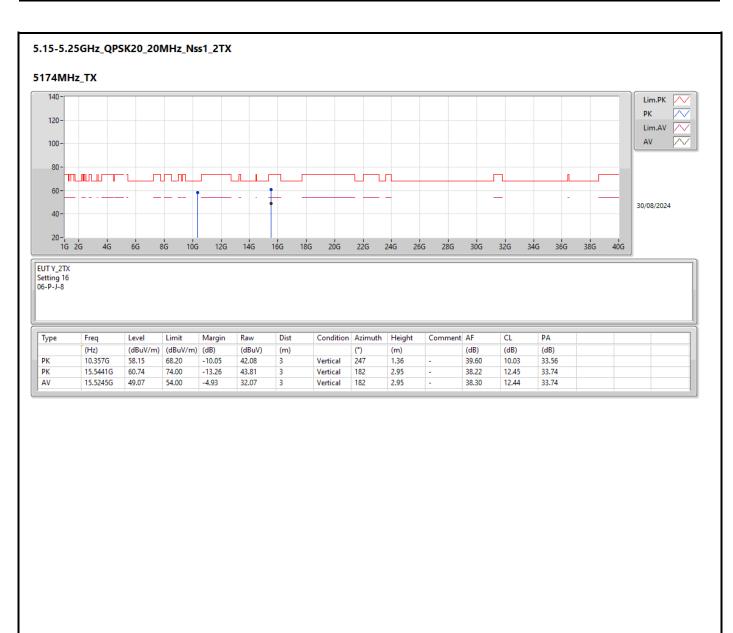
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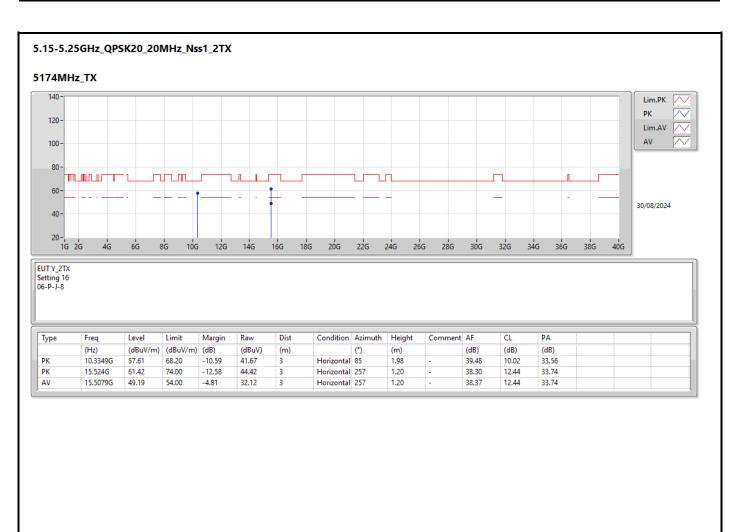
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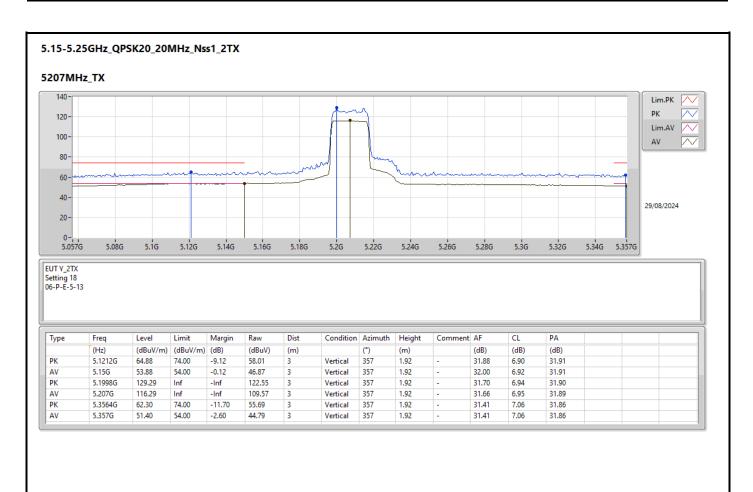
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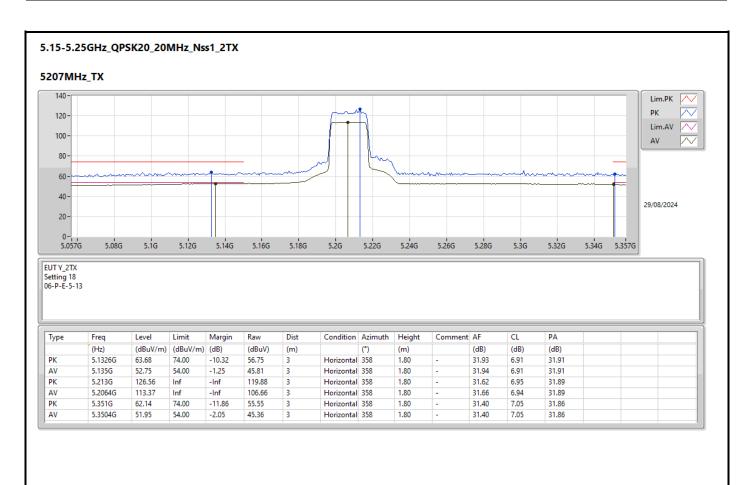
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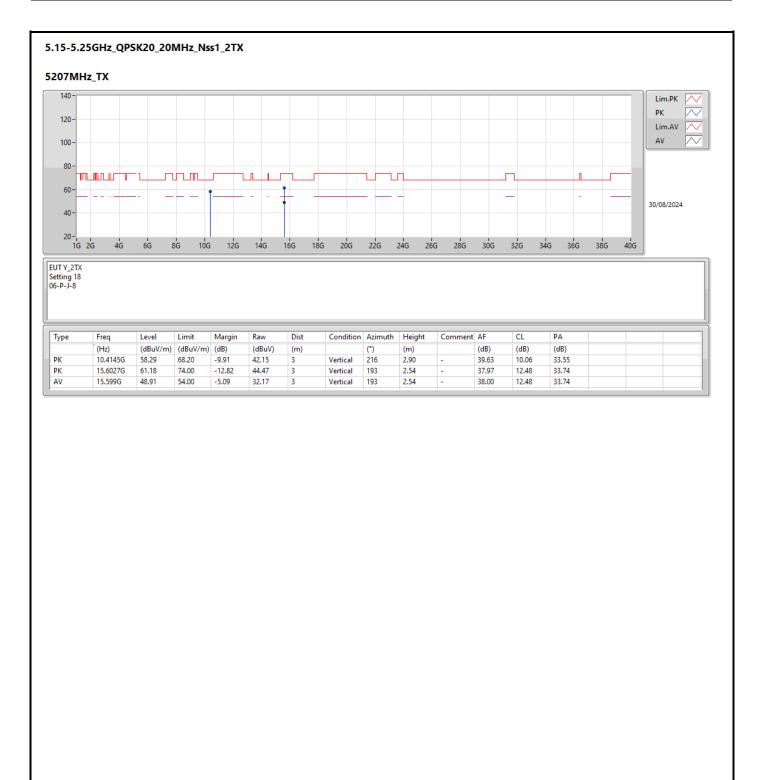
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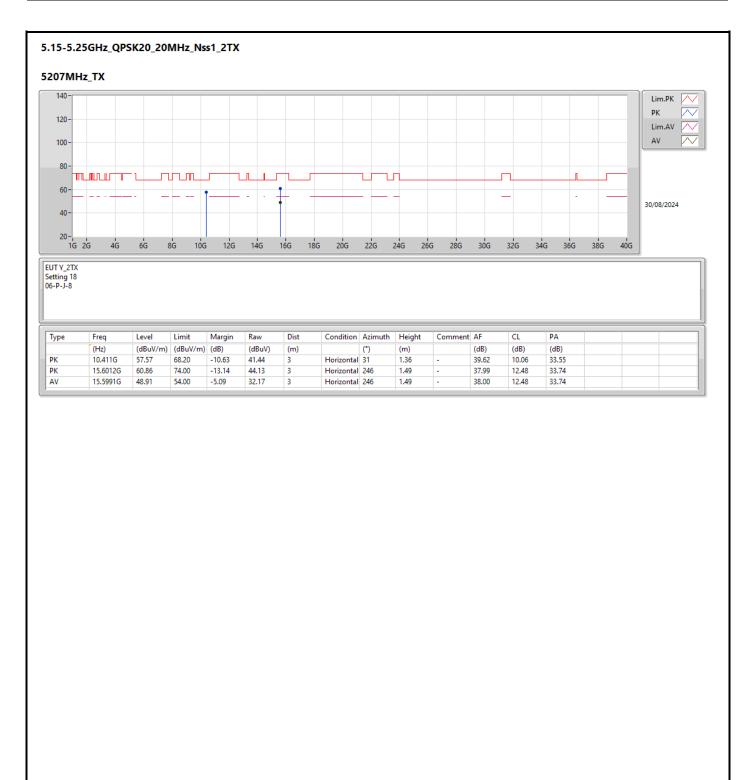
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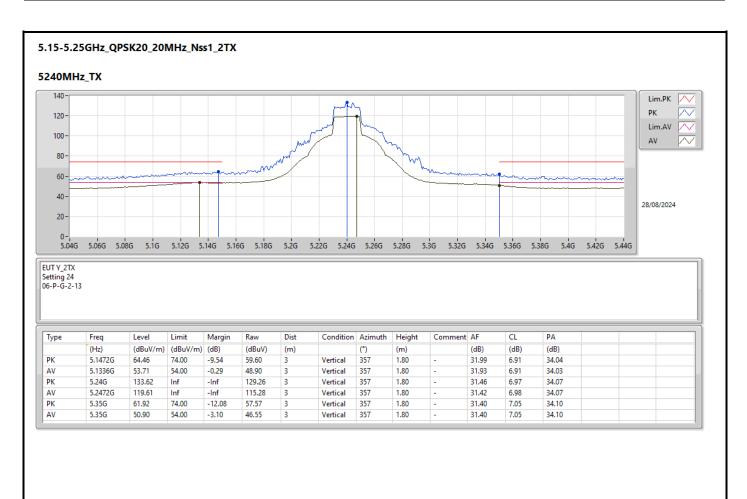
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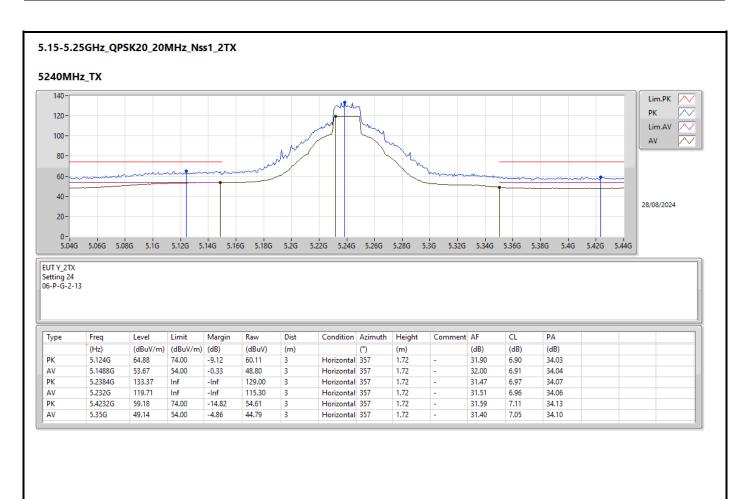
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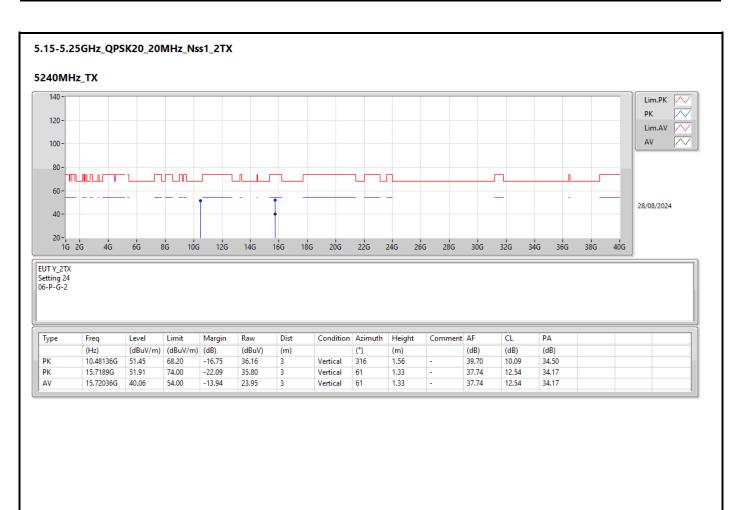
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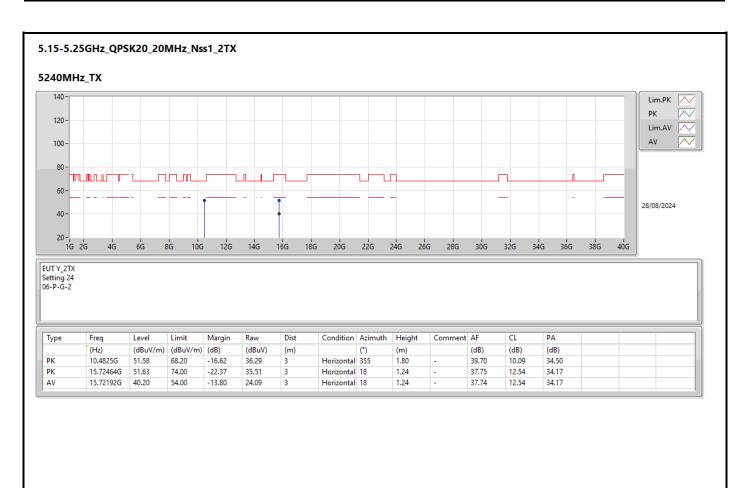
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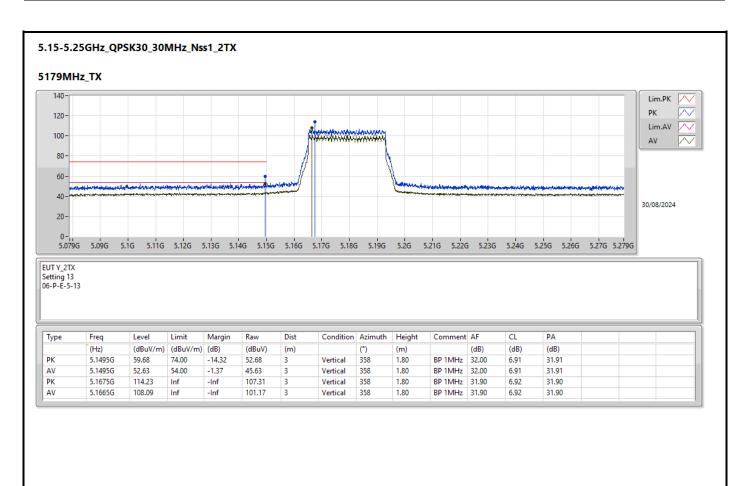
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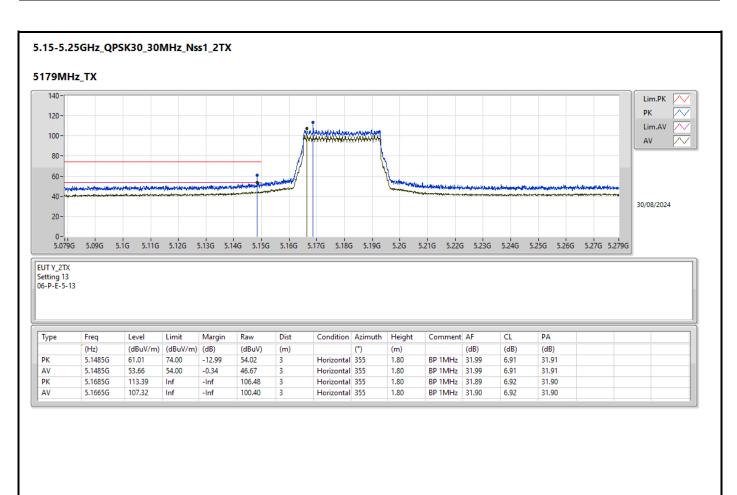
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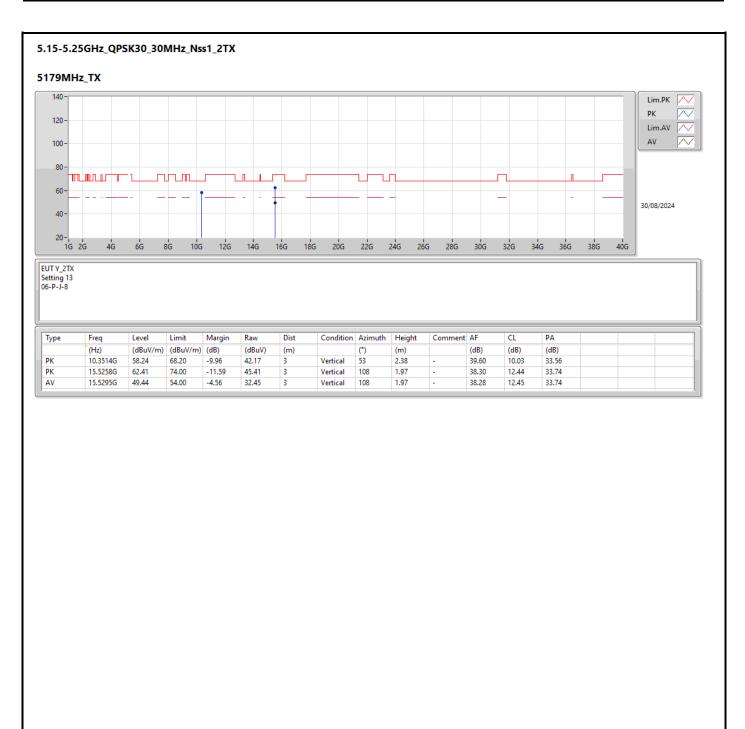
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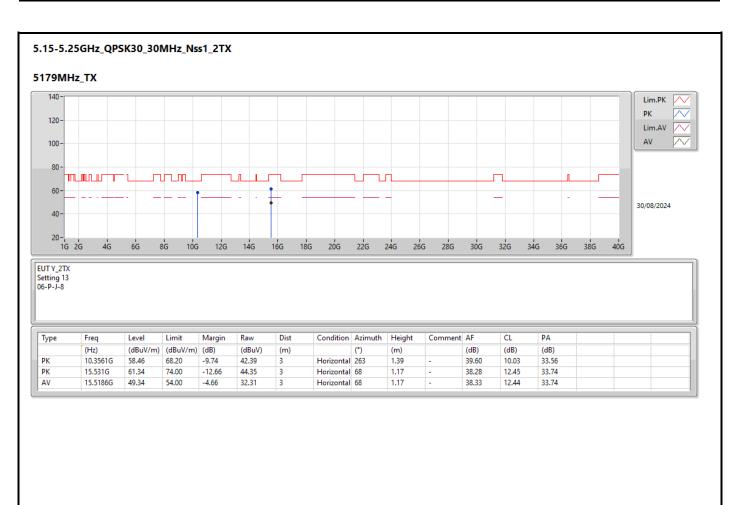
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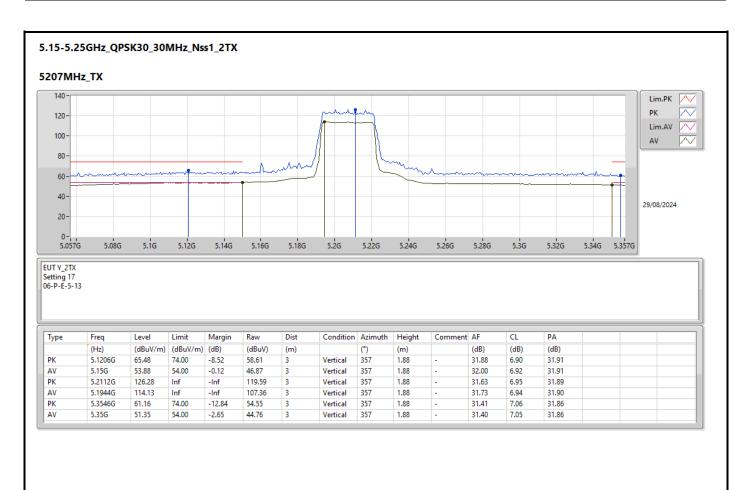
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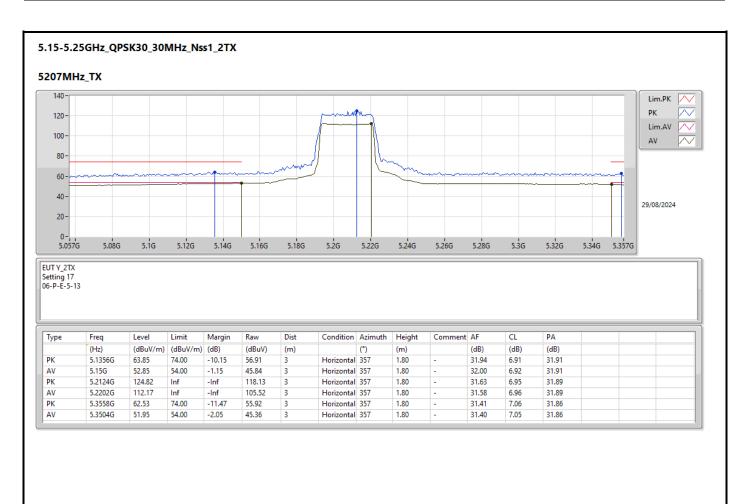
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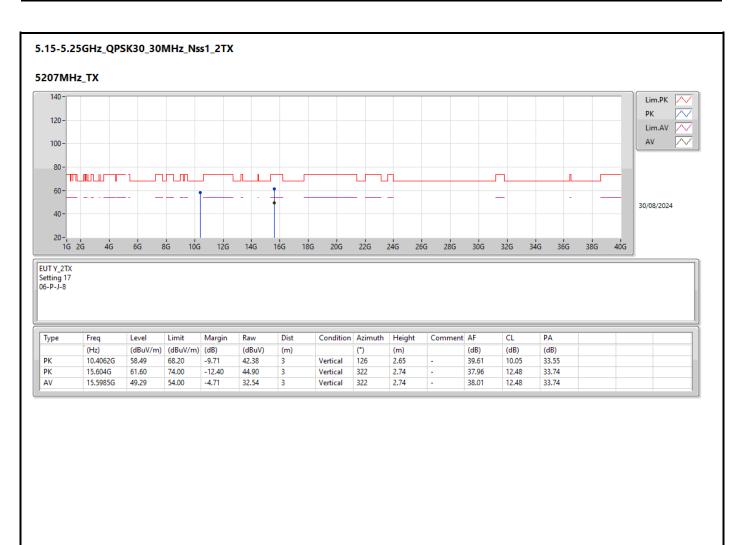
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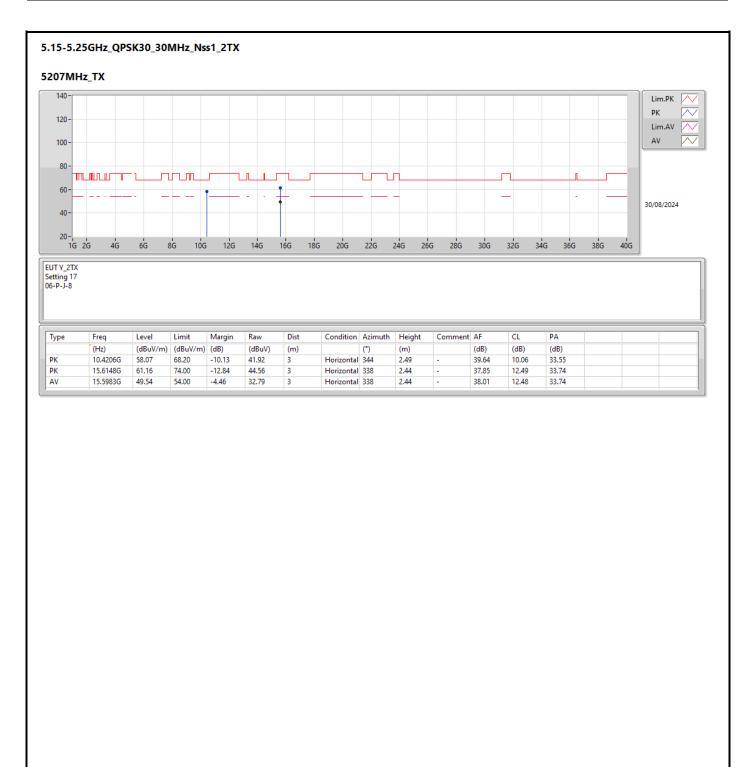
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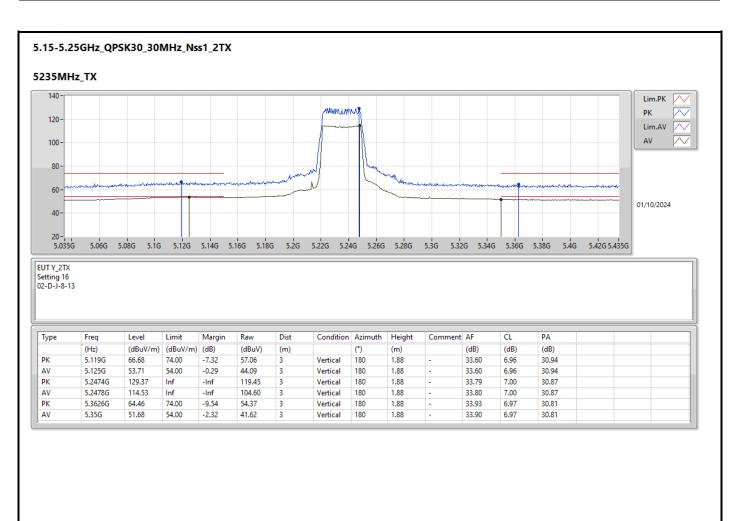
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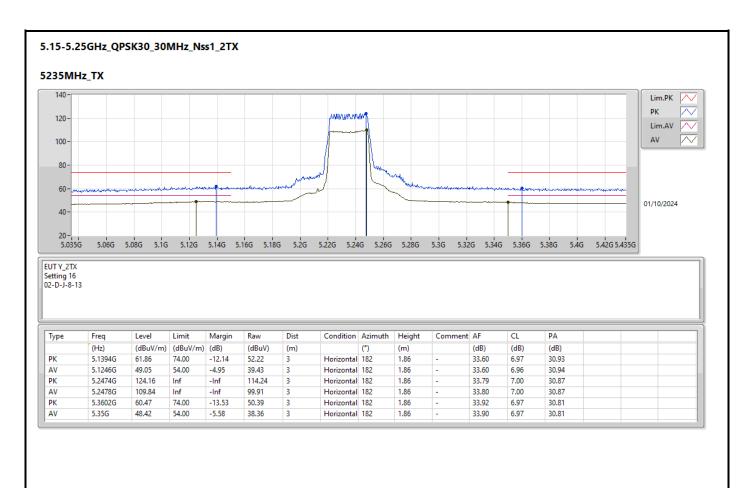
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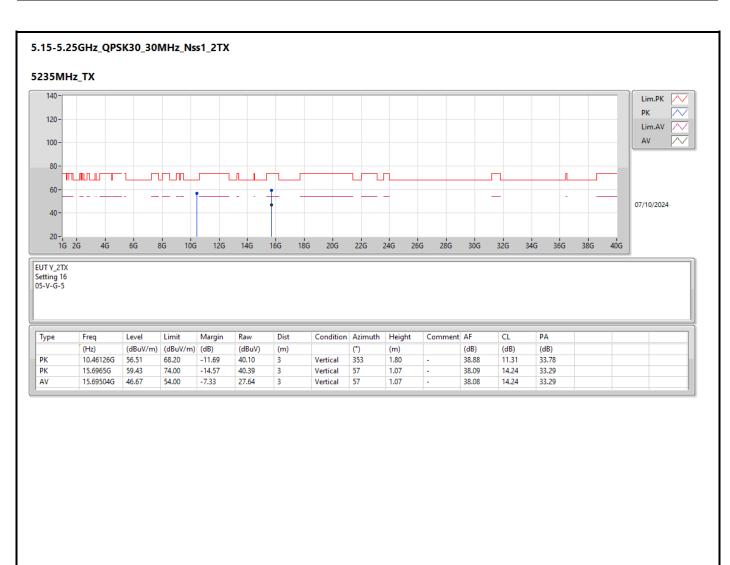
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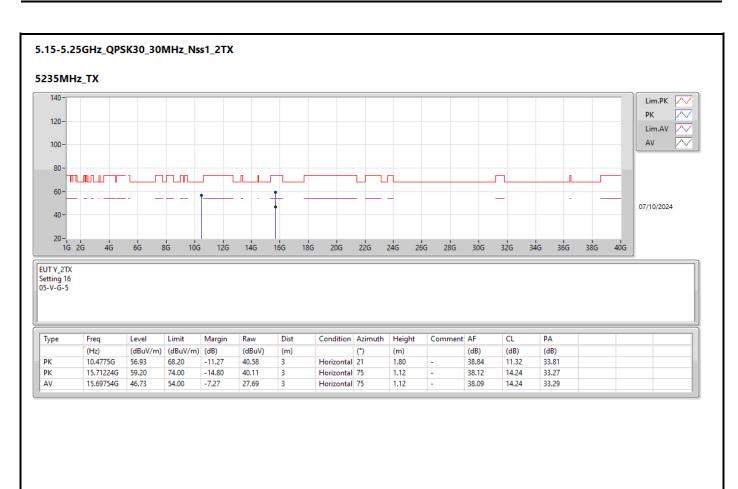
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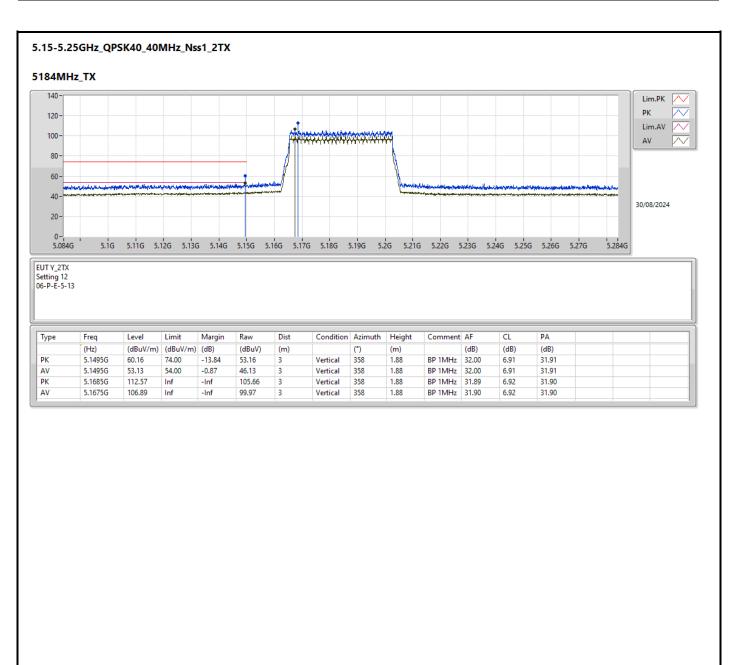
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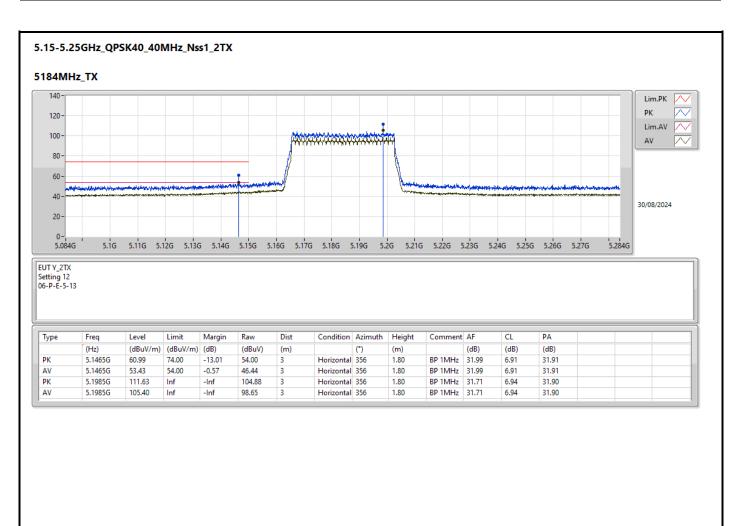
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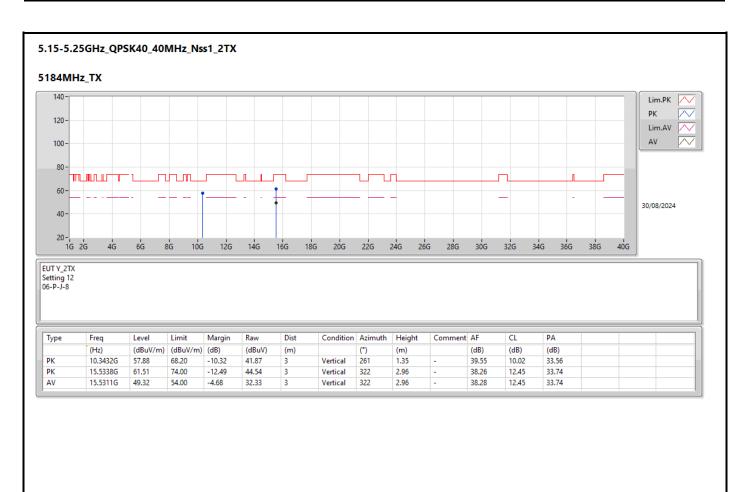
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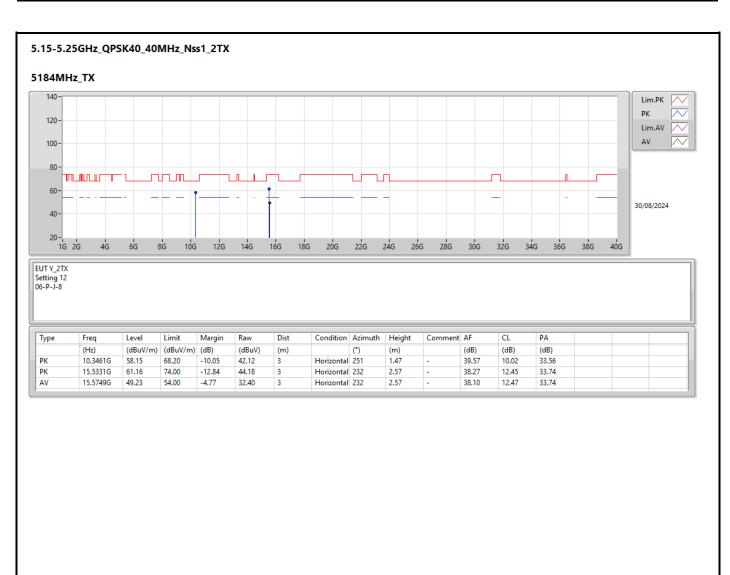
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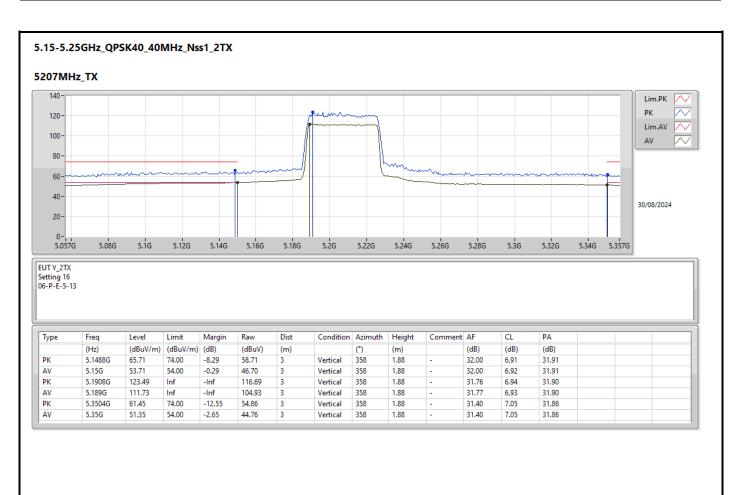
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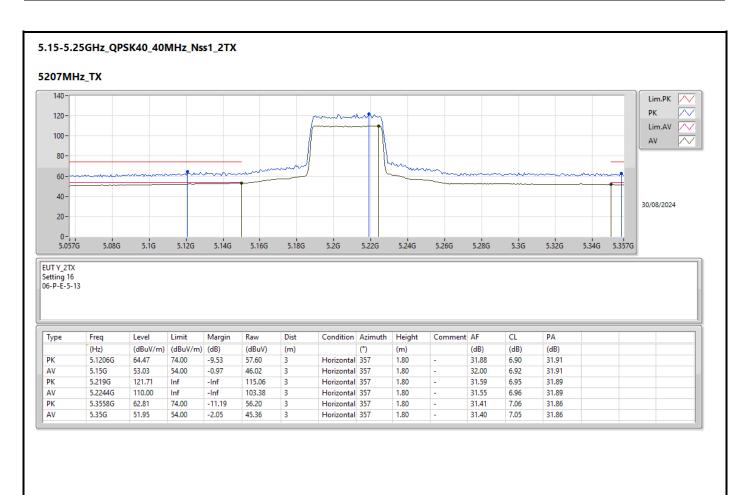
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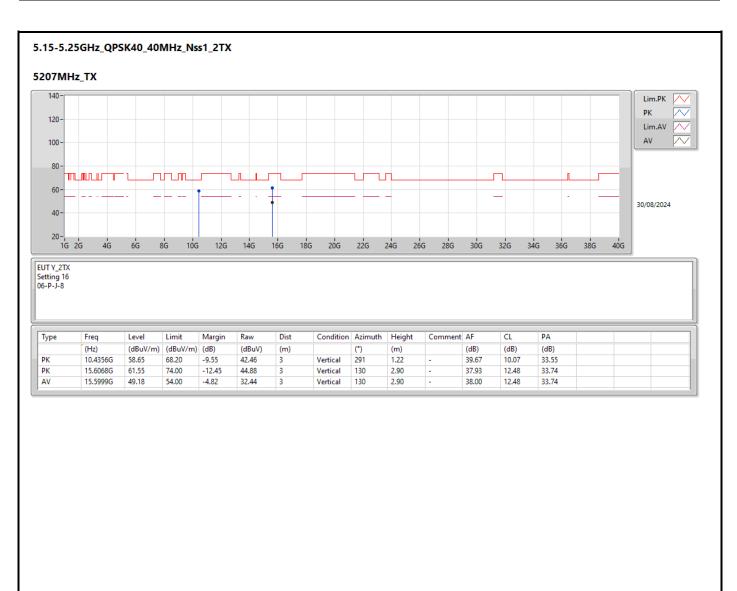
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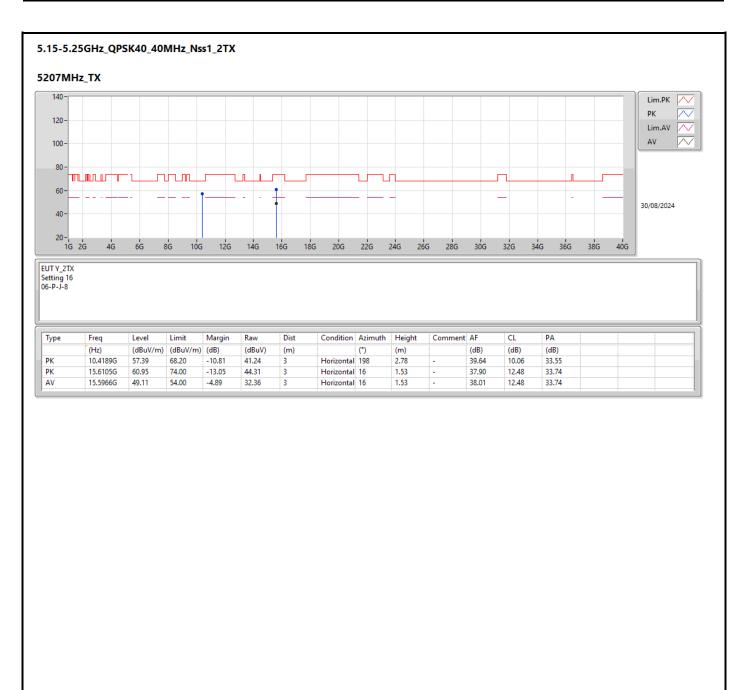
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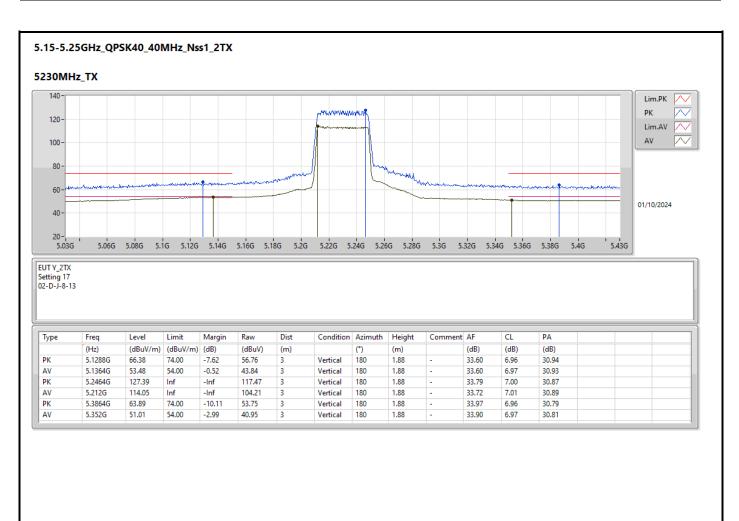
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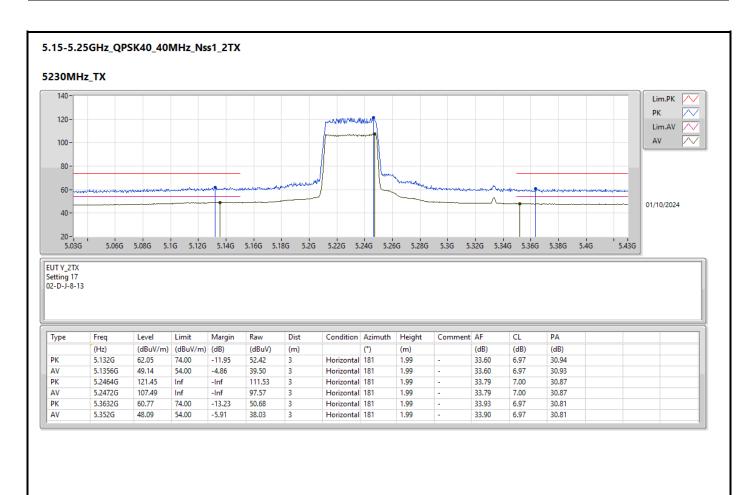
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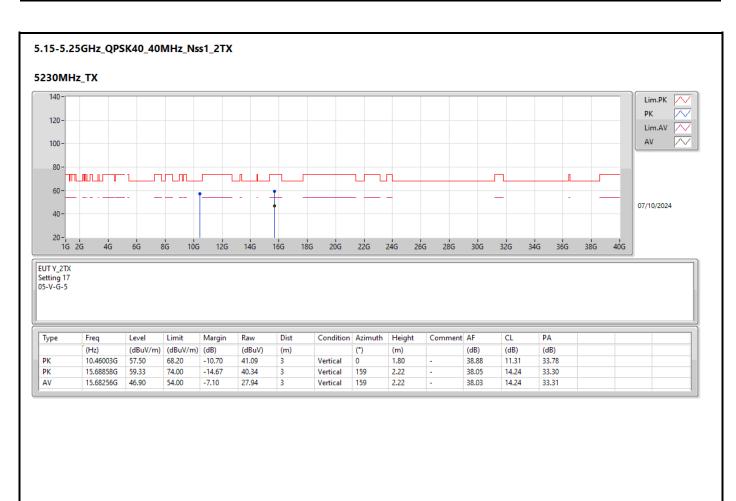
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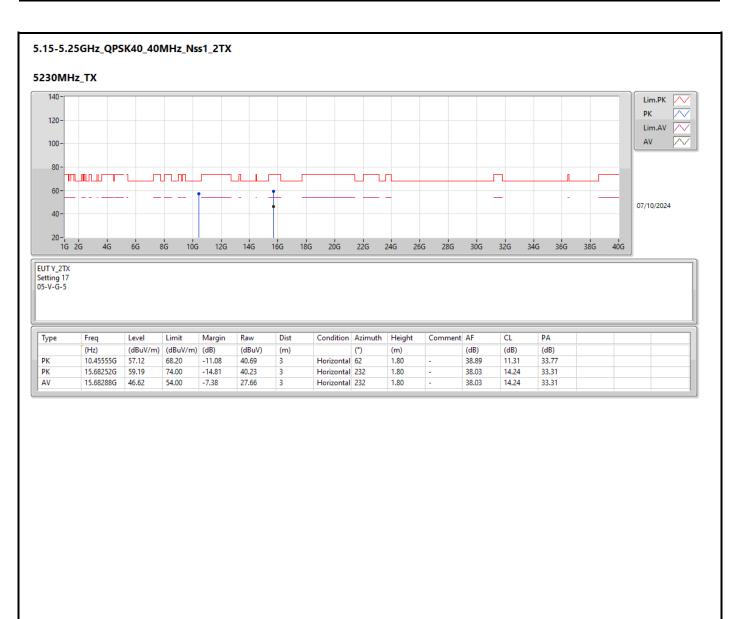
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RSE TX above 1GHz_Frequency combination modes

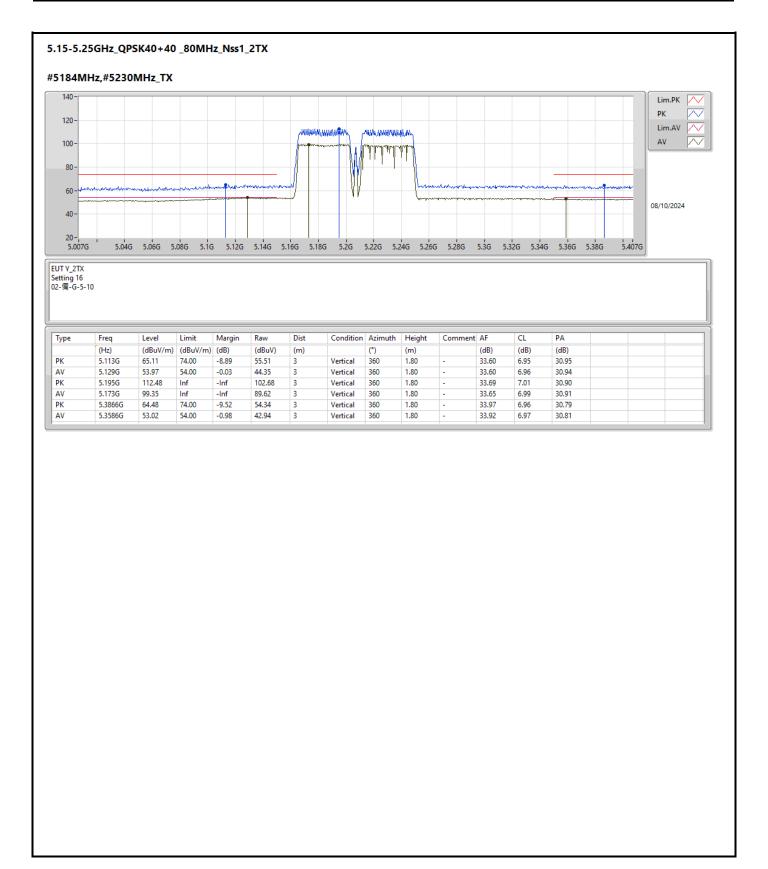
Appendix D.2

Summary

Mode	Result	Type	Freq	Level	Limit	Margin	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(m)		(°)	(m)	
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
QPSK40+40 _80MHz_Nss1_2TX	Pass	AV	5.129G	53.97	54.00	-0.03	3	Vertical	360	1.80	-

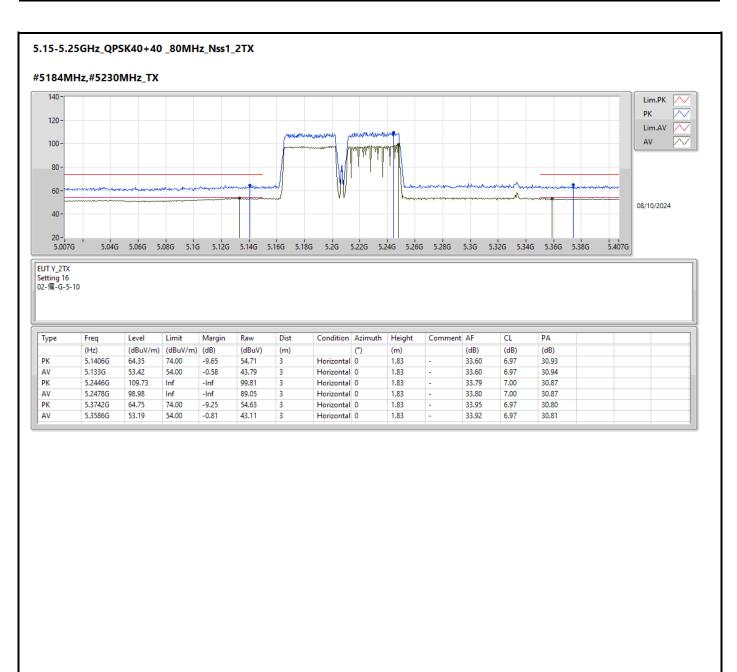
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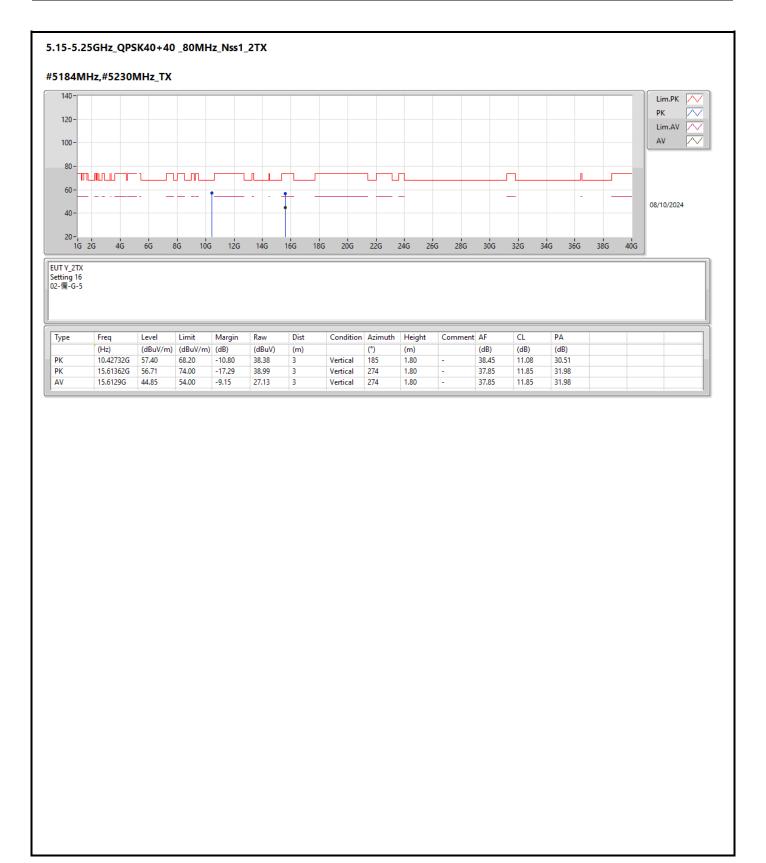
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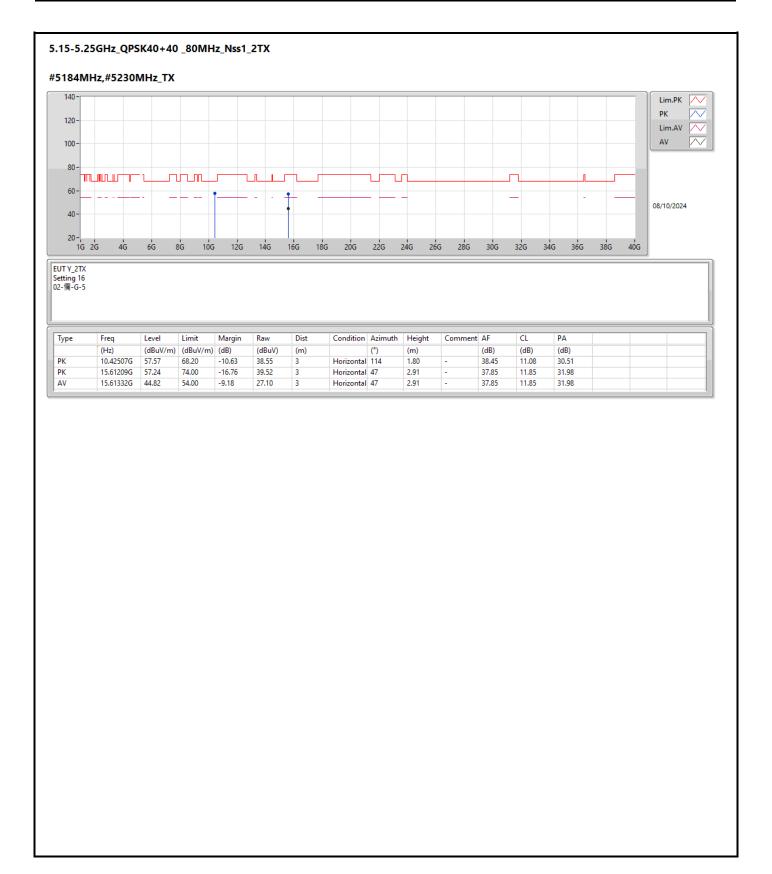
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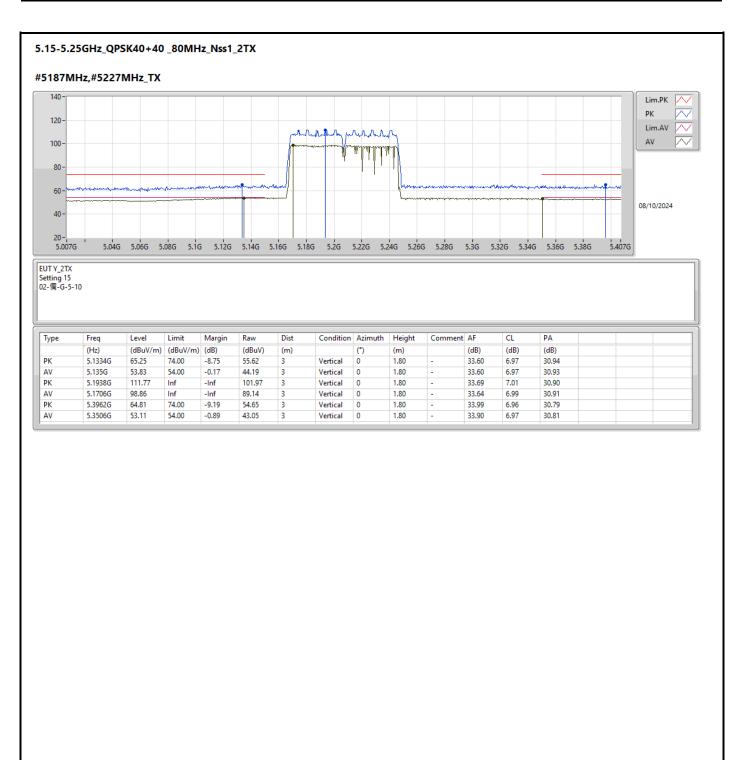
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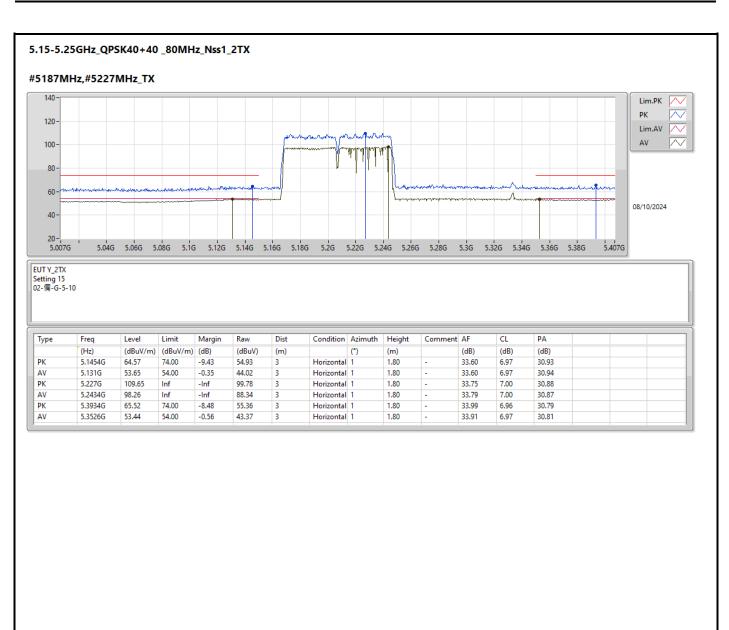
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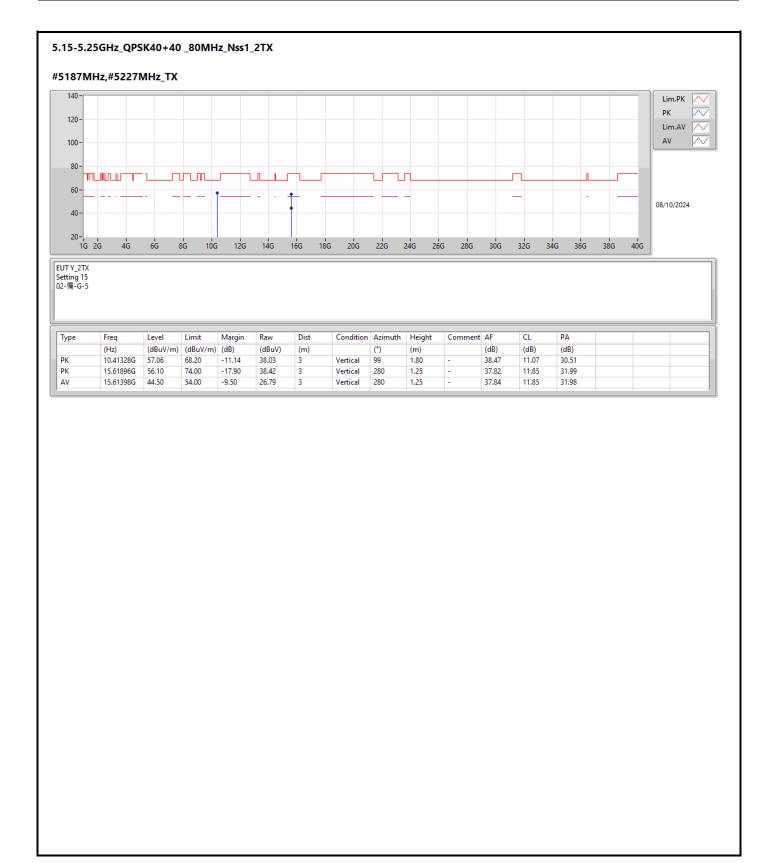
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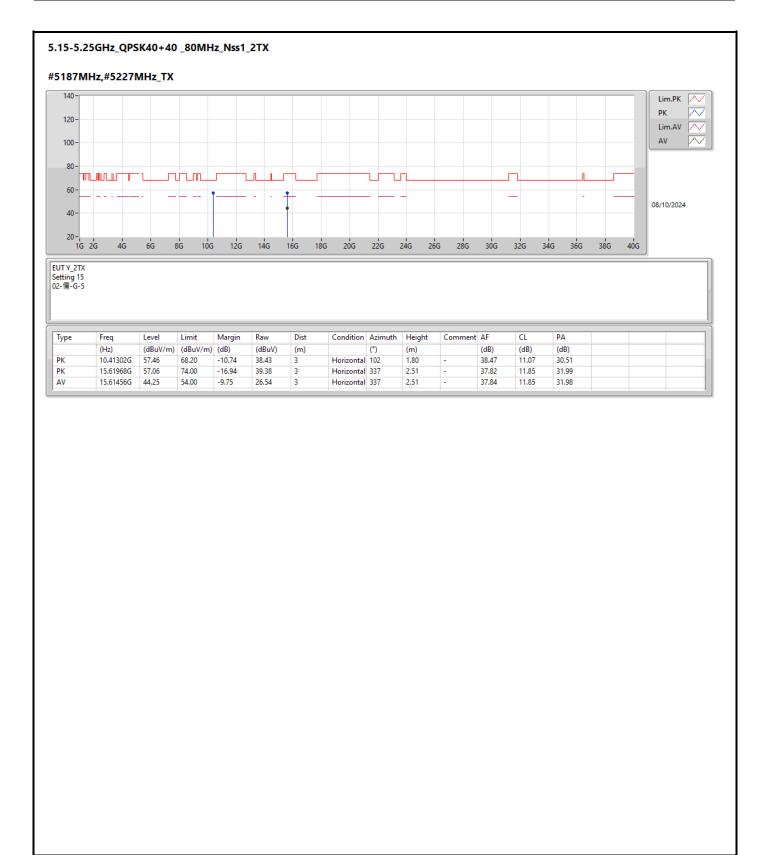
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