

TEST REPORT

FCC Sub6 n41 Test for SM-F761B
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2505-FC041-R1

DATE OF ISSUE
May 27, 2025

Tested by
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TEST REPORT

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Applicant

SAMSUNG Electronics Co., Ltd.

129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea

Product Name

Mobile Phone

Model Name

SM-F761B

Date of Test

February 26, 2025 ~ May 27, 2025

FCC ID

A3LSMF761B

Location of Test

☒ Permanent Testing Lab ☐ On Site Testing

(Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)

FCC Classification:

PCS Licensed Transmitter Held to Ear (PCE)

Test Standard Used

FCC Rule Part: § 27

Test Results

PASS

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	May 8, 2025	Initial Release
1	May 27, 2025	Revised the C.S.E Plot & data. (pages 55 & 224)

Notice

Content

The measurements shown in this report were made in accordance with the procedures specified in CFR47 section § 2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S. C. 853(a)

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

The laboratory is not accredited for the test results marked *.

Information provided by the applicant Bs marked **.

Test results provided by external providers are marked ***.

When confirmation of authenticity of this test report is required, please contact www.hct.co.kr

The test results in this test report are not associated with the ((KS Q) ISO/IEC 17025) accreditation by KOLAS (Korea Laboratory Accreditation Scheme) / A2LA (American Association for Laboratory Accreditation) that are under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA).

CONTENTS

1. GENERAL INFORMATION	5
1.1. MAXIMUM OUTPUT POWER	6
2. INTRODUCTION	8
2.1. DESCRIPTION OF EUT	8
2.2. MEASURING INSTRUMENT CALIBRATION	8
2.3. TEST FACILITY	8
3. DESCRIPTION OF TESTS	9
3.1 TEST PROCEDURE	9
3.2 RADIATED POWER	10
3.3 RADIATED SPURIOUS EMISSIONS	11
3.4 PEAK- TO- AVERAGE RATIO	12
3.5 OCCUPIED BANDWIDTH.	14
3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL	15
3.7 CHANNEL EDGE	16
3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE	18
3.9 WORST CASE(RADIATED TEST)	19
3.10 WORST CASE(CONDUCTED TEST)	20
4. LIST OF TEST EQUIPMENT	22
5. MEASUREMENT UNCERTAINTY	23
6. SUMMARY OF TEST RESULTS	24
7. SAMPLE CALCULATION	25
8. TEST DATA	27
8.1 EQUIVALENT ISOTROPIC RADIATED POWER	27
8.2 RADIATED SPURIOUS EMISSIONS	39
8.3 PEAK-TO-AVERAGE RATIO	51
8.4 OCCUPIED BANDWIDTH	53
8.5 CONDUCTED SPURIOUS EMISSIONS	55
8.6 CHANNEL EDGE	57
8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE	60
9. TEST PLOTS	72
10.ANNEX A_ TEST SETUP PHOTO	352

MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name:	SAMSUNG Electronics Co., Ltd.
Address:	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
FCC ID:	A3LSMF761B
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§ 27
EUT Type:	Mobile Phone
Model(s):	SM-F761B
SCS(kHz):	30
Bandwidth(MHz):	Sub6 n41 : 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
Waveform:	CP-OFDM, DFT-S-OFDM
Modulation:	DFT-S-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
Tx Frequency:	2501.010 – 2685.000 : 10 MHz(Sub6 n41) 2503.500 – 2682.480 : 15 MHz(Sub6 n41) 2506.020 – 2679.990 : 20 MHz(Sub6 n41) 2508.510 – 2677.500 : 25 MHz(Sub6 n41) 2511.000 – 2674.980 : 30 MHz(Sub6 n41) 2516.010 – 2670.000 : 40 MHz(Sub6 n41) 2521.020 – 2664.990 : 50 MHz(Sub6 n41) 2526.000 – 2659.980 : 60 MHz(Sub6 n41) 2531.010 – 2655.000 : 70 MHz(Sub6 n41) 2536.020 – 2649.990 : 80 MHz(Sub6 n41) 2541.000 – 2644.980 : 90 MHz(Sub6 n41) 2546.010 – 2640.000 : 100 MHz(Sub6 n41)
Date(s) of Tests:	February 26, 2025 ~ May 27, 2025
Serial number:	Radiated : R3CY30RGRNV Conducted : R3CY30RGXPR
Antenna Information	Please refer to the Antenna Specification document.

1.1. MAXIMUM OUTPUT POWER

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n41 (10)	2501.010 – 2685.000	8M67G7D	PI/2 BPSK	0.279	24.46
		8M70G7D	QPSK	0.277	24.43
		8M71W7D	16QAM	0.217	23.36
		8M74W7D	64QAM	0.157	21.97
		8M66W7D	256QAM	0.104	20.17
Sub6 n41 (15)	2503.500 – 2682.480	12M9G7D	PI/2 BPSK	0.283	24.52
		13M0G7D	QPSK	0.279	24.46
		13M0W7D	16QAM	0.228	23.58
		13M0W7D	64QAM	0.157	21.95
		13M0W7D	256QAM	0.101	20.06
Sub6 n41 (20)	2506.020 – 2679.990	18M0G7D	PI/2 BPSK	0.272	24.34
		18M0G7D	QPSK	0.265	24.24
		18M0W7D	16QAM	0.211	23.25
		17M9W7D	64QAM	0.149	21.74
		17M9W7D	256QAM	0.097	19.89
Sub6 n41 (25)	2508.510 – 2677.500	23M0G7D	PI/2 BPSK	0.282	24.50
		23M1G7D	QPSK	0.277	24.43
		23M0W7D	16QAM	0.218	23.38
		23M0W7D	64QAM	0.154	21.88
		23M0W7D	256QAM	0.098	19.93
Sub6 n41 (30)	2511.000 – 2674.980	27M1G7D	PI/2 BPSK	0.284	24.54
		27M0G7D	QPSK	0.279	24.45
		27M0W7D	16QAM	0.218	23.39
		27M0W7D	64QAM	0.153	21.86
		26M9W7D	256QAM	0.100	20.02
Sub6 n41 (40)	2516.010 – 2670.000	36M0G7D	PI/2 BPSK	0.271	24.33
		36M0G7D	QPSK	0.269	24.30
		35M9W7D	16QAM	0.209	23.21
		36M0W7D	64QAM	0.151	21.78
		35M9W7D	256QAM	0.095	19.76
Sub6 n41 (50)	2521.020 – 2664.990	46M0G7D	PI/2 BPSK	0.272	24.35
		46M0G7D	QPSK	0.268	24.28
		46M0W7D	16QAM	0.216	23.34
		45M9W7D	64QAM	0.154	21.87
		46M2W7D	256QAM	0.096	19.82

Sub6 n41 (60)	2526.000 – 2659.980	58M2G7D	PI/2 BPSK	0.289	24.61
		58M4G7D	QPSK	0.287	24.58
		58M2W7D	16QAM	0.231	23.63
		58M0W7D	64QAM	0.158	22.00
		58M2W7D	256QAM	0.100	20.01
Sub6 n41 (70)	2531.010 – 2655.000	64M7G7D	PI/2 BPSK	0.279	24.46
		64M8G7D	QPSK	0.274	24.37
		64M9W7D	16QAM	0.212	23.27
		64M7W7D	64QAM	0.155	21.90
		64M8W7D	256QAM	0.096	19.82
Sub6 n41 (80)	2536.020 – 2649.990	77M6G7D	PI/2 BPSK	0.286	24.56
		77M5G7D	QPSK	0.285	24.55
		77M6W7D	16QAM	0.231	23.64
		77M7W7D	64QAM	0.160	22.04
		77M5W7D	256QAM	0.101	20.04
Sub6 n41 (90)	2541.000 – 2644.980	87M3G7D	PI/2 BPSK	0.299	24.76
		87M3G7D	QPSK	0.297	24.73
		87M0W7D	16QAM	0.248	23.94
		87M0W7D	64QAM	0.166	22.20
		87M2W7D	256QAM	0.106	20.25
Sub6 n41 (100)	2546.010 – 2640.000	96M8G7D	PI/2 BPSK	0.318	25.03
		96M7G7D	QPSK	0.318	25.02
		96M6W7D	16QAM	0.259	24.14
		96M9W7D	64QAM	0.176	22.46
		97M1W7D	256QAM	0.115	20.60

2. INTRODUCTION

2.1. DESCRIPTION OF EUT

Please refer to the [2G3G] Test Report.

2.2. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

2.3. TEST FACILITY

The Fully-anechoic chamber and conducted measurement facility used to collect the radiated data are located at the **74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea.**

3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
Occupied Bandwidth	- KDB 971168 D01 v03r01 – Section 4.3 - ANSI C63.26-2015 – Section 5.4.4
Channel Edge	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Spurious and Harmonic Emissions at Antenna Terminal	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Conducted Output Power	- N/A (See SAR Report)
Peak- to- Average Ratio	- KDB 971168 D01 v03r01 – Section 5.7 - ANSI C63.26-2015 – Section 5.2.3.4
Frequency stability	- ANSI C63.26-2015 – Section 5.6
Radiated Power	- ANSI C63.26-2015 – Section 5.2.4.4 - KDB 971168 D01 v03r01 – Section 5.8
Radiated Spurious and Harmonic Emissions	- ANSI C63.26-2015 – Section 5.5.3 - KDB 971168 D01 v03r01 – Section 5.8

3.2 RADIATED POWER

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

The equipment under test is placed on a non-conductive table 3-meters away from the receive antenna.

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 – 5 % of the expected OBW, not to exceed 1 MHz
3. VBW $\geq$ 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points > 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto".
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize

Test Note

1. The turntable is rotated through 360 degrees, and the receiving antenna scans in order to determine the level of the maximized emission.
2. A half wave dipole is then substituted in place of the EUT. For emissions above 1 GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

The power is calculated by the following formula;

$$P_d \text{ (dBm)} = P_g \text{ (dBm)} - \text{cable loss (dB)} + \text{antenna gain (dB)}$$

Where: P_d is the dipole equivalent power and P_g is the generator output power into the substitution antenna.

3. The maximum value is calculated by adding the forward power to the calibrated source plus its appropriate gain value.

These steps are repeated with the receiving antenna in both vertical and horizontal polarization. the difference between the gain of the horn and an isotropic antenna are taken into consideration

4. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
5. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

3.3 RADIATED SPURIOUS EMISSIONS

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

Radiated Spurious Emission Measurements at 3 meters by Substitution Method.

Test Settings

1. RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz
2. VBW $\geq$ 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $>$ 2 x span / RBW
5. Detector = Peak
6. Trace mode = Max Hold
7. The trace was allowed to stabilize
8. Test channel : Low/ Middle/ High
9. Frequency range : We are performed all frequency to 10th harmonics from 9 kHz.

Test Note

1. Measurements value show only up to 3 maximum emissions noted, or would be lesser
if no specific emissions from the EUT are recorded (ie: margin $>$ 20 dB from the applicable limit)
and considered that's already beyond the background noise floor.
2. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets,
and channel bandwidth configurations shown in the test data
3. For spurious emissions above 1 GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is
driven by a signal generator and the previously recorded signal was duplicated.
The spurious emissions is calculated by the following formula;

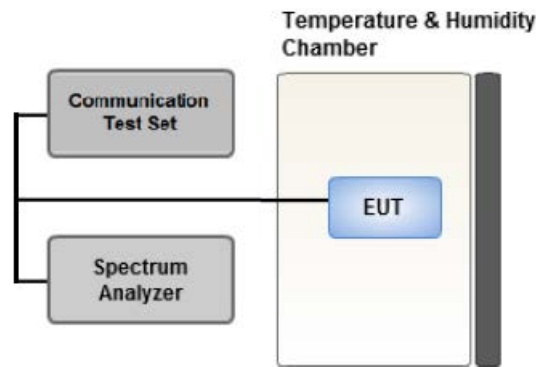
$$\text{Result}_{(\text{dBm})} = P_g_{(\text{dBm})} - \text{cable loss}_{(\text{dB})} + \text{antenna gain}_{(\text{dBi})}$$

Where: P_g is the generator output power into the substitution antenna.

If the fundamental frequency is below 1 GHz, RF output power has been converted to EIRP.

$$\text{EIRP}_{(\text{dBm})} = \text{ERP}_{(\text{dBm})} + 2.15$$

3.4 PEAK- TO- AVERAGE RATIO



Test setup

① CCDF Procedure for PAPR

Test Settings

1. Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Set the measurement interval as follows:
 - .- for continuous transmissions, set to 1 ms,
 - .- or burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
4. Record the maximum PAPR level associated with a probability of 0.1 %.

② Alternate Procedure for PAPR

Use one of the procedures presented in 5.2(ANSI C63.26-2015) to measure the total peak power and record as P_{Pk} .
 Use one of the applicable procedures presented 5.2(ANSI C63.26-2015) to measure the total average power and record as P_{Avg} . Determine the P.A.R. from:

$$P.A.R_{(dB)} = P_{Pk_{(dBm)}} - P_{Avg_{(dBm)}} \quad (P_{Avg} = \text{Average Power} + \text{Duty cycle Factor})$$

Test Settings(Peak Power)

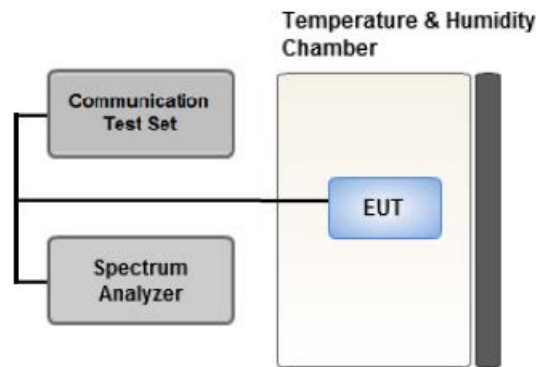
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

1. Set the RBW $\geq$ OBW.
2. Set VBW $\geq 3 \times$ RBW.
3. Set span $\geq 2 \times$ OBW.
4. Sweep time $\geq 10 \times$ (number of points in sweep) $\times$ (transmission symbol period).
5. Detector = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the peak amplitude level.

Test Settings(Average Power)

1. Set span to $2 \times$ to $3 \times$ the OBW.
2. Set RBW $\geq$ OBW.
3. Set VBW $\geq 3 \times$ RBW.
4. Set number of measurement points in sweep $\geq 2 \times$ span / RBW.
5. Sweep time:
Set $\geq [10 \times (\text{number of points in sweep}) \times (\text{transmission period})]$ for single sweep (automation-compatible) measurement. The transmission period is the (on + off) time.
6. Detector = power averaging (rms).
7. Set sweep trigger to "free run."
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. (To accurately determine the average power over the on and off period of the transmitter, it can be necessary to increase the number of traces to be averaged above 100 or, if using a manually configured sweep time, increase the sweep time.)
9. Use the peak marker function to determine the maximum amplitude level.
10. Add $[10 \log (1/\text{duty cycle})]$ to the measured maximum power level to compute the average power during continuous transmission. For example, add $[10 \log (1/0.25)] = 6 \text{ dB}$ if the duty cycle is a constant 25 %.

3.5 OCCUPIED BANDWIDTH.



Test setup

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

The EUT makes a call to the communication simulator.

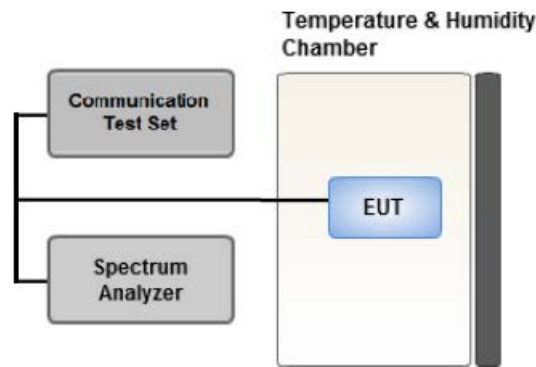
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth

Test Settings

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99 % occupied bandwidth and the 26 dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5 % of the expected OBW
3. VBW $\geq$ 3 x RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5 % of the 99 % occupied bandwidth observed in Step 7

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

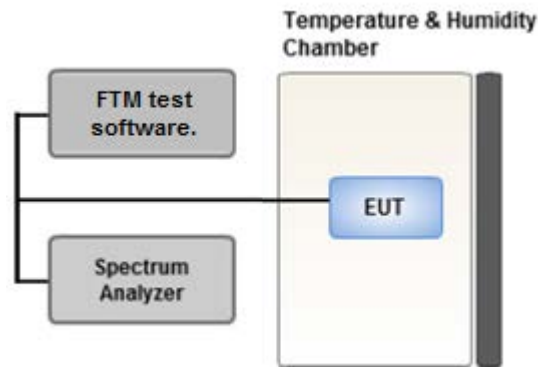
Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

Test Settings

1. RBW = 1 MHz
2. VBW $\geq$ 3 MHz
3. Detector = Peak
4. Trace Mode = Max Hold
5. Sweep time = auto
6. Number of points in sweep $\geq$ 2 x Span / RBW

3.7 CHANNEL EDGE



Test setup

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum power and at the appropriate frequencies.

All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

Test Settings

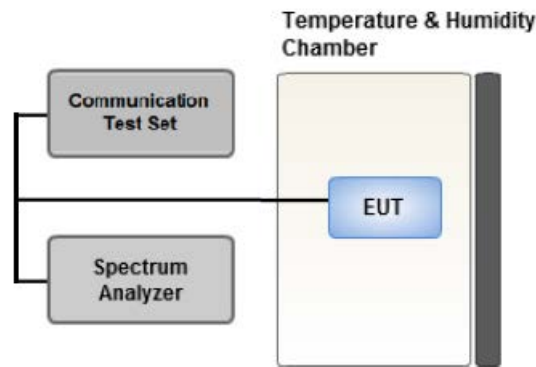
1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. Within 1 MHz of the channel edge the RBW should be 2 % of EBW, then 1 MHz after that.
4. VBW > 3 x RBW
5. Detector = RMS
6. Number of sweep points $\geq 2 \times \text{Span/RBW}$
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Notes

1. The attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge,
2. $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge.
3. $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge.
4. The attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz.
5. $55 + 10 \log (P)$ dB at or below 2490.5 MHz.
6. X is the greater of 6MHz or the actual emission bandwidth
7. The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer

Where Margin < 1 dB the emission level is either corrected by $10 \log(1 \text{ MHz/ RB})$ or the emission is integrated over a 1 MHz bandwidth to determine the final result. When using the integration method the integration window is either centered on the emission or, for emissions at the band edge, centered by an offset of 500 kHz from the block edge so that the integration window is the 1 MHz adjacent to the block edge.

3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



Test setup

Test Overview

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015.

The frequency stability of the transmitter is measured by:

1. Temperature:

The temperature is varied from -30 °C to +50 °C in 10 °C increments using an environmental chamber.

2. Primary Supply Voltage:

- .- Unless otherwise specified, vary primary supply voltage from 85 % to 115 % of the nominal value for other than hand carried battery equipment.
- .- For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20 °C to provide a reference).
2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter.
Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10 °C intervals ranging from -30 °C to +50 °C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

3.9 WORST CASE(RADIATED TEST)

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported.
(Worst case: DFT-S-OFDM)
- The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: NSA, SA, SRS
Worst case: SA
Mode : Stand alone, Stand alone + External accessories (Earphone, AC adapter, etc)
Worst case : Stand alone
- The EUT was tested in three modes(Open, Half-open, Closed), the worst case configuration results are reported.
(Worst case: Open mode)
- All simultaneous transmission scenarios of operation were investigated, and the test results showed no additional significant emissions relative to the least restrictive limit were observed.
Therefore, only the worst case(stand-alone) results were reported.
- All power classes were tested, and the results were reported for the worst case PC3. (PC3 Only)
- Radiated Spurious emissions are measured while operating in EN-DC mode with Sub 6 NR carrier as well as an LTE carrier (anchor).
All EN-DC mode of operation (=anchor) were investigated and the test results were measured No Peak Found.
The test results which are attenuated more than 20 dB below the permissible value, so it was not reported.
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
Please refer to the table below.

[Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	See Section 8.1		X
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 8.2		Y

3.10 WORST CASE(CONDUCTED TEST)

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported.
(Worst case: DFT-S-OFDM)
- Modulation : All Modulation of operation were investigated and the worst case configuration results are reported.
(Worst case: PI/2 BPSK)
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: NSA, SA, SRS
Worst case: SA
- All power classes were tested, and the results were reported for the worst case PC3. (PC3 Only)
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
Please refer to the table below.

[Worst case]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth, Peak-To-Average Ratio	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Channel Edge	PI/2 BPSK	10	Low	1	0
			High	1	23
		15	Low	1	0
			High	1	37
		20	Low	1	0
			High	1	50
		25	Low	1	0
			High	1	64
		30	Low	1	0
			High	1	77
		40	Low	1	0
			High	1	105
		50	Low	1	0
			High	1	132
		60	Low	1	0
			High	1	161
		70	Low	1	0
			High	1	188
		80	Low	1	0
			High	1	216
		90	Low	1	0
			High	1	244
		100	Low	1	0
			High	1	272
		10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Low, Mid, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Low, Mid, High	1	1

4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacture	Serial No.	Due to Calibration	Calibration Interval
Precision Dipole Antenna	UHAP	Schwarzbeck	01273	03/10/2026	Biennial
Precision Dipole Antenna	UHAP	Schwarzbeck	01274	03/10/2026	Biennial
Horn Antenna(1~18 GHz)	BBHA 9120D	Schwarzbeck	02289	02/14/2026	Biennial
Horn Antenna(1~18 GHz)	BBHA 9120D	Schwarzbeck	9120D-1299	04/17/2027	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/20/2026	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170124	03/23/2027	Biennial
Loop Antenna(9 kHz~30 MHz)	FMZB1513	Rohde & Schwarz	1513-175	01/06/2027	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/05/2027	Biennial
Hybrid Antenna	VULB9160	Schwarzbeck	760	02/17/2027	Biennial
RF Switching System	FBSR-06B (1G HPF + LNA)	T&M SYSTEM	F3L1	05/14/2025	Annual
RF Switching System	FBSR-06B (3G HPF + LNA)	T&M SYSTEM	F3L2	05/14/2025	Annual
RF Switching System	FBSR-06B (6G HPF + LNA)	T&M SYSTEM	F3L3	05/14/2025	Annual
RF Switching System	FBSR-06B (LNA)	T&M SYSTEM	F3L4	05/14/2025	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/07/2025	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/19/2026	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	08/22/2025	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	02/04/2026	Annual
Chamber	SU-642	ESPEC	93008124	02/11/2026	Annual
Signal Analyzer(10 Hz~26.5 GHz)	N9020A	Agilent	MY51110063	03/21/2026	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/10/2026	Annual
Spectrum Analyzer (10 Hz~40 GHz)	FSV40	REOHDE & SCHWARZ	101436	02/04/2026	Annual
Signal & Spectrum Analyzer (2 Hz~67 GHz)	FSW67	REOHDE & SCHWARZ	101736	05/23/2025	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/05/2025	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/16/2025	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/14/2025	Annual
UXM 5G Wireless Test Platform	E7515B	KEYSIGHT	MY60101126	02/10/2026	Annual
Signal Analyzer(5 Hz~40.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/17/2025	Annual
4-Way Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/10/2025	Annual
SIGNAL GENERATOR (100 kHz ~ 40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	07/26/2025	Annual
FCC LTE Mobile Conducted RF Automation Test Software	-	HCT CO., LTD.,	-	-	-

Note:

- Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
- Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2017).

5. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4:2014.

All measurement uncertainty values are shown with a coverage factor of $k=2$ to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty ($\pm$ kHz)
Occupied Bandwidth	95 (Confidence level about 95 %, $k=2$)
Frequency stability	28 (Confidence level about 95 %, $k=2$)

Parameter	Expanded Uncertainty ($\pm$ dB)
Block Edge	0.70 (Confidence level about 95 %, $k=2$)
Conducted Spurious Emissions	1.18 (Confidence level about 95 %, $k=2$)
Peak- to- Average Ratio	0.68 (Confidence level about 95 %, $k=2$)
Radiated Power	4.74 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.36 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.68 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.75 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.82 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (Above 40 GHz)	5.58 (Confidence level about 95 %, $k=2$)

6. SUMMARY OF TEST RESULTS

Note. The decision rule applies ‘simple acceptance’

6.1 Test Condition: Conducted Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Occupied Bandwidth	§ 2.1049	N/A	PASS
Band Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§ 2.1051, § 27.53(m)(4)	■ $< 40 + 10\log_{10} (P[\text{Watts}])$ at Channel edges ■ $< 43 + 10\log_{10} (P[\text{Watts}])$ between 5 and X MHz from Channel edges ■ $< 55 + 10\log_{10} (P[\text{Watts}])$ beyond X MHz beyond from Channel edges ■ $< 43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz	PASS
Conducted Output Power	§ 2.1046	N/A	<u>See Note1</u>
Frequency stability / variation of ambient temperature	§ 2.1055, § 27.54	Emission must remain in band	PASS

Note:

1. See SAR Report
2. All conducted tests were tested using 5G Wireless Tester.

6.2 Test Condition: Radiated Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Equivalent Isotropic Radiated Power	§ 27.50(h)(2)	< 2 Watts max. EIRP	PASS
Radiated Spurious and Harmonic Emissions	§ 2.1053, § 27.53(m)(4)	$< 55 + 10\log_{10} (P[\text{Watts}])$	PASS

Note:

1. Radiated tests were tested using 5G Wireless Tester.

7. SAMPLE CALCULATION

7.1 ERP Sample Calculation

Ch./ Freq.		Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol.	ERP	
channel	Freq.(MHz)						W	dBm
128	824.20	-21.37	38.40	-10.61	0.95	H	0.483	26.84

$$\text{ERP} = \text{Substitute LEVEL(dBm)} + \text{Ant. Gain} - \text{CL(Cable Loss)}$$

- 1) The EUT mounted on a non-conductive turntable is 2.5 meter above test site ground level.
- 2) During the test, the turn table is rotated until the maximum signal is found.
- 3) Record the field strength meter's level.
- 4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item (3).
- 6) The signal generator output level with Ant. Gain and cable loss are the rating of effective radiated power.

7.2 EIRP Sample Calculation

Ch./ Freq.		Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	EIRP	
channel	Freq.(MHz)						W	dBm
20175	1,732.50	-15.75	18.45	9.90	1.76	H	0.456	26.59

$$\text{EIRP} = \text{Substitute LEVEL(dBm)} + \text{Ant. Gain} - \text{CL(Cable Loss)}$$

- 1) The EUT mounted on a non-conductive turntable is 2.5 meter above test site ground level.
- 2) During the test, the turn table is rotated until the maximum signal is found.
- 3) Record the field strength meter's level.
- 4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item (3).
- 6) The signal generator output level with Ant. Gain and cable loss are the rating of equivalent isotropic radiated power.

7.3. Emission Designator

GSM Emission Designator

Emission Designator = 249KGXW

GSM BW = 249 kHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W

GSM BW = 249 kHz

G = Phase Modulation

7 = Quantized/Digital Info

W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W

WCDMA BW = 4.17 MHz

F = Frequency Modulation

9 = Composite Digital Info

W = Combination (Audio/Data)

QPSK Modulation

Emission Designator = 4M48G7D

LTE BW = 4.48 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

QAM Modulation

Emission Designator = 4M48W7D

LTE BW = 4.48 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

8. TEST DATA

8.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2501.010	Sub6 n41 / 10 MHz [30 kHz]	PI/2 BPSK	-22.35	14.45	10.61	2.50	H	< 2.00	0.180	22.56	1	12
		QPSK	-22.46	14.34	10.61	2.50	H		0.176	22.45		
		16-QAM	-23.35	13.45	10.61	2.50	H		0.143	21.56		
		64-QAM	-24.99	11.81	10.61	2.50	H		0.098	19.92		
		256-QAM	-26.65	10.15	10.61	2.50	H		0.067	18.26		
2592.990		PI/2 BPSK	-20.70	16.01	11.00	2.55	H		0.279	24.46	1	1
		QPSK	-20.73	15.98	11.00	2.55	H		0.277	24.43		
		16-QAM	-21.80	14.91	11.00	2.55	H		0.217	23.36		
		64-QAM	-23.19	13.52	11.00	2.55	H		0.157	21.97		
		256-QAM	-24.99	11.72	11.00	2.55	H		0.104	20.17		
2685.000		PI/2 BPSK	-23.45	14.11	10.82	2.61	H	0.171	22.32	1	12	
		QPSK	-23.57	13.99	10.82	2.61	H	0.166	22.20			
		16-QAM	-24.39	13.17	10.82	2.61	H	0.137	21.38			
		64-QAM	-26.01	11.55	10.82	2.61	H	0.095	19.76			
		256-QAM	-27.96	9.60	10.82	2.61	H	0.060	17.81			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2503.500	Sub6 n41 / 15 MHz [30 kHz]	PI/2 BPSK	-22.53	14.33	10.58	2.51	H		0.174	22.40	1	1
		QPSK	-22.56	14.30	10.58	2.51	H		0.173	22.37		
		16-QAM	-23.58	13.28	10.58	2.51	H		0.137	21.35		
		64-QAM	-25.06	11.80	10.58	2.51	H		0.097	19.87		
		256-QAM	-27.03	9.83	10.58	2.51	H		0.062	17.90		
2592.990		PI/2 BPSK	-20.64	16.07	11.00	2.55	H	< 2.00	0.283	24.52	1	1
		QPSK	-20.70	16.01	11.00	2.55	H		0.279	24.46		
		16-QAM	-21.58	15.13	11.00	2.55	H		0.228	23.58		
		64-QAM	-23.21	13.50	11.00	2.55	H		0.157	21.95		
		256-QAM	-25.10	11.61	11.00	2.55	H		0.101	20.06		
2682.480		PI/2 BPSK	-23.76	13.91	10.84	2.61	H		0.164	22.14	1	1
		QPSK	-23.77	13.90	10.84	2.61	H		0.163	22.13		
		16-QAM	-24.84	12.83	10.84	2.61	H		0.128	21.06		
		64-QAM	-26.22	11.45	10.84	2.61	H		0.093	19.68		
		256-QAM	-28.11	9.56	10.84	2.61	H		0.060	17.79		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2506.020	Sub6 n41 / 20 MHz [30 kHz]	PI/2 BPSK	-22.45	14.41	10.58	2.51	H		0.177	22.48	1	25
		QPSK	-22.56	14.30	10.58	2.51	H		0.173	22.37		
		16-QAM	-23.55	13.31	10.58	2.51	H		0.137	21.38		
		64-QAM	-25.14	11.72	10.58	2.51	H		0.095	19.79		
		256-QAM	-27.12	9.74	10.58	2.51	H		0.060	17.81		
2592.990		PI/2 BPSK	-20.82	15.89	11.00	2.55	H	< 2.00	0.272	24.34	1	25
		QPSK	-20.92	15.79	11.00	2.55	H		0.266	24.24		
		16-QAM	-21.91	14.80	11.00	2.55	H		0.211	23.25		
		64-QAM	-23.42	13.29	11.00	2.55	H		0.149	21.74		
		256-QAM	-25.27	11.44	11.00	2.55	H		0.098	19.89		
2679.990		PI/2 BPSK	-23.56	14.11	10.84	2.61	H		0.171	22.34	1	1
		QPSK	-23.58	14.09	10.84	2.61	H		0.171	22.32		
		16-QAM	-24.65	13.02	10.84	2.61	H		0.133	21.25		
		64-QAM	-26.18	11.49	10.84	2.61	H		0.094	19.72		
		256-QAM	-27.99	9.68	10.84	2.61	H		0.062	17.91		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2508.510	Sub6 n41 / 25 MHz [30 kHz]	PI/2 BPSK	-22.18	14.74	10.55	2.51	H		0.190	22.78	1	63
		QPSK	-22.23	14.69	10.55	2.51	H		0.188	22.73		
		16-QAM	-23.12	13.80	10.55	2.51	H		0.153	21.84		
		64-QAM	-24.51	12.41	10.55	2.51	H		0.111	20.45		
		256-QAM	-26.79	10.13	10.55	2.51	H		0.066	18.17		
2592.990		PI/2 BPSK	-20.66	16.05	11.00	2.55	H	< 2.00	0.282	24.50	1	1
		QPSK	-20.73	15.98	11.00	2.55	H		0.277	24.43		
		16-QAM	-21.78	14.93	11.00	2.55	H		0.218	23.38		
		64-QAM	-23.28	13.43	11.00	2.55	H		0.154	21.88		
		256-QAM	-25.23	11.48	11.00	2.55	H		0.098	19.93		
2677.500		PI/2 BPSK	-23.49	14.18	10.84	2.61	H		0.174	22.41	1	1
		QPSK	-23.50	14.17	10.84	2.61	H		0.174	22.40		
		16-QAM	-24.58	13.09	10.84	2.61	H		0.136	21.32		
		64-QAM	-26.15	11.52	10.84	2.61	H		0.094	19.75		
		256-QAM	-28.04	9.63	10.84	2.61	H		0.061	17.86		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2511.000	Sub6 n41 / 30 MHz [30 kHz]	PI/2 BPSK	-21.87	15.05	10.55	2.51	H		0.204	23.09	1	76
		QPSK	-21.90	15.02	10.55	2.51	H		0.202	23.06		
		16-QAM	-22.91	14.01	10.55	2.51	H		0.160	22.05		
		64-QAM	-24.44	12.48	10.55	2.51	H		0.113	20.52		
		256-QAM	-26.32	10.60	10.55	2.51	H		0.073	18.64		
2592.990		PI/2 BPSK	-20.62	16.09	11.00	2.55	H	< 2.00	0.284	24.54	1	1
		QPSK	-20.71	16.00	11.00	2.55	H		0.279	24.45		
		16-QAM	-21.77	14.94	11.00	2.55	H		0.218	23.39		
		64-QAM	-23.30	13.41	11.00	2.55	H		0.154	21.86		
		256-QAM	-25.14	11.57	11.00	2.55	H		0.101	20.02		
2674.980		PI/2 BPSK	-23.30	13.99	10.85	2.62	H		0.167	22.22	1	1
		QPSK	-23.32	13.97	10.85	2.62	H		0.166	22.20		
		16-QAM	-24.36	12.93	10.85	2.62	H		0.131	21.16		
		64-QAM	-25.88	11.41	10.85	2.62	H		0.092	19.64		
		256-QAM	-27.80	9.49	10.85	2.62	H		0.059	17.72		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2516.010	Sub6 n41 / 40 MHz [30 kHz]	PI/2 BPSK	-21.32	15.61	10.52	2.53	H		0.229	23.60	1	104
		QPSK	-21.33	15.60	10.52	2.53	H		0.229	23.59		
		16-QAM	-22.36	14.57	10.52	2.53	H		0.180	22.56		
		64-QAM	-23.87	13.06	10.52	2.53	H		0.127	21.05		
		256-QAM	-25.87	11.06	10.52	2.53	H		0.080	19.05		
2592.990		-20.43	-20.83	15.88	11.00	2.55	H	< 2.00	0.271	24.33	1	1
		-20.50	-20.86	15.85	11.00	2.55	H		0.269	24.30		
		-21.70	-21.95	14.76	11.00	2.55	H		0.209	23.21		
		-22.96	-23.38	13.33	11.00	2.55	H		0.151	21.78		
		-25.24	-25.40	11.31	11.00	2.55	H		0.095	19.76		
2670.000		PI/2 BPSK	-22.98	13.92	10.87	2.62	H		0.165	22.17	1	1
		QPSK	-22.99	13.91	10.87	2.62	H		0.164	22.16		
		16-QAM	-24.07	12.83	10.87	2.62	H		0.128	21.08		
		64-QAM	-25.52	11.38	10.87	2.62	H		0.092	19.63		
		256-QAM	-27.38	9.52	10.87	2.62	H		0.060	17.77		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2521.020		PI/2 BPSK	-21.06	15.87	10.49	2.54	H	< 2.00	0.241	23.82	1	131
		QPSK	-21.12	15.81	10.49	2.54	H		0.238	23.76		
		16-QAM	-22.15	14.78	10.49	2.54	H		0.188	22.73		
		64-QAM	-23.55	13.38	10.49	2.54	H		0.136	21.33		
		256-QAM	-25.56	11.37	10.49	2.54	H		0.086	19.32		
2592.990	Sub6 n41 / 50 MHz [30 kHz]	-20.43	-20.81	15.90	11.00	2.55	H	< 2.00	0.272	24.35	1	66
		-20.50	-20.88	15.83	11.00	2.55	H		0.268	24.28		
		-21.70	-21.82	14.89	11.00	2.55	H		0.216	23.34		
		-22.96	-23.29	13.42	11.00	2.55	H		0.154	21.87		
		-25.24	-25.34	11.37	11.00	2.55	H		0.096	19.82		
2664.990		PI/2 BPSK	-22.70	14.25	10.88	2.64	H	< 2.00	0.177	22.49	1	1
		QPSK	-22.72	14.23	10.88	2.64	H		0.177	22.47		
		16-QAM	-23.74	13.21	10.88	2.64	H		0.140	21.45		
		64-QAM	-25.30	11.65	10.88	2.64	H		0.098	19.89		
		256-QAM	-27.14	9.81	10.88	2.64	H		0.064	18.05		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2526.000	Sub6 41/ 60 MHz [30 kHz]	PI/2 BPSK	-21.12	15.51	10.52	2.54	H		0.223	23.49	1	160
		QPSK	-21.13	15.50	10.52	2.54	H		0.223	23.48		
		16-QAM	-22.18	14.45	10.52	2.54	H		0.175	22.43		
		64-QAM	-23.57	13.06	10.52	2.54	H		0.127	21.04		
		256-QAM	-25.45	11.18	10.52	2.54	H		0.082	19.16		
2592.990		PI/2 BPSK	-20.55	16.16	11.00	2.55	H	< 2.00	0.289	24.61	1	1
		QPSK	-20.58	16.13	11.00	2.55	H		0.287	24.58		
		16-QAM	-21.53	15.18	11.00	2.55	H		0.231	23.63		
		64-QAM	-23.16	13.55	11.00	2.55	H		0.159	22.00		
		256-QAM	-25.15	11.56	11.00	2.55	H		0.100	20.01		
2659.980		PI/2 BPSK	-22.15	14.86	10.90	2.67	H		0.204	23.09	1	1
		QPSK	-22.16	14.85	10.90	2.67	H		0.203	23.08		
		16-QAM	-23.15	13.86	10.90	2.67	H		0.162	22.09		
		64-QAM	-24.74	12.27	10.90	2.67	H		0.112	20.50		
		256-QAM	-26.54	10.47	10.90	2.67	H		0.074	18.70		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2531.010	Sub6 41/ 70 MHz [30 kHz]	PI/2 BPSK	-20.56	15.77	10.56	2.54	H		0.239	23.79	1	187
		QPSK	-20.62	15.71	10.56	2.54	H		0.236	23.73		
		16-QAM	-21.59	14.74	10.56	2.54	H		0.189	22.76		
		64-QAM	-23.23	13.10	10.56	2.54	H		0.129	21.12		
		256-QAM	-25.02	11.31	10.56	2.54	H		0.086	19.33		
2592.990		PI/2 BPSK	-20.70	16.01	11.00	2.55	H	< 2.00	0.279	24.46	1	94
		QPSK	-20.79	15.92	11.00	2.55	H		0.274	24.37		
		16-QAM	-21.89	14.82	11.00	2.55	H		0.212	23.27		
		64-QAM	-23.26	13.45	11.00	2.55	H		0.155	21.90		
		256-QAM	-25.34	11.37	11.00	2.55	H		0.096	19.82		
2655.000		PI/2 BPSK	-21.41	15.50	10.91	2.68	H		0.236	23.73	1	1
		QPSK	-21.46	15.45	10.91	2.68	H		0.233	23.68		
		16-QAM	-22.42	14.49	10.91	2.68	H		0.187	22.72		
		64-QAM	-23.94	12.97	10.91	2.68	H		0.132	21.20		
		256-QAM	-26.00	10.91	10.91	2.68	H		0.082	19.14		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2536.020	Sub6 41/ 80 MHz [30 kHz]	PI/2 BPSK	-21.14	15.32	10.59	2.54	H		0.217	23.37	1	108
		QPSK	-21.19	15.27	10.59	2.54	H		0.215	23.32		
		16-QAM	-21.82	14.64	10.59	2.54	H		0.186	22.69		
		64-QAM	-23.64	12.82	10.59	2.54	H		0.122	20.87		
		256-QAM	-25.49	10.97	10.59	2.54	H		0.080	19.02		
2592.990		PI/2 BPSK	-20.60	16.11	11.00	2.55	H	< 2.00	0.286	24.56	1	108
		QPSK	-20.61	16.10	11.00	2.55	H		0.285	24.55		
		16-QAM	-21.52	15.19	11.00	2.55	H		0.231	23.64		
		64-QAM	-23.12	13.59	11.00	2.55	H		0.160	22.04		
		256-QAM	-25.12	11.59	11.00	2.55	H		0.101	20.04		
2649.990		PI/2 BPSK	-21.39	15.40	10.93	2.69	H		0.231	23.64	1	1
		QPSK	-21.40	15.39	10.93	2.69	H		0.231	23.63		
		16-QAM	-22.24	14.55	10.93	2.69	H		0.190	22.79		
		64-QAM	-23.94	12.85	10.93	2.69	H		0.129	21.09		
		256-QAM	-25.93	10.86	10.93	2.69	H		0.081	19.10		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2541.000	Sub6 41/ 90 MHz [30 kHz]	PI/2 BPSK	-20.76	15.82	10.62	2.53	H		0.246	23.91	1	122
		QPSK	-20.83	15.75	10.62	2.53	H		0.242	23.84		
		16-QAM	-21.74	14.84	10.62	2.53	H		0.196	22.93		
		64-QAM	-23.29	13.29	10.62	2.53	H		0.137	21.38		
		256-QAM	-25.30	11.28	10.62	2.53	H		0.087	19.37		
2592.990		PI/2 BPSK	-20.40	16.31	11.00	2.55	H	< 2.00	0.299	24.76	1	1
		QPSK	-20.43	16.28	11.00	2.55	H		0.297	24.73		
		16-QAM	-21.22	15.49	11.00	2.55	H		0.248	23.94		
		64-QAM	-22.96	13.75	11.00	2.55	H		0.166	22.20		
		256-QAM	-24.91	11.80	11.00	2.55	H		0.106	20.25		
2644.980		PI/2 BPSK	-21.00	16.11	10.95	2.68	H		0.274	24.38	1	1
		QPSK	-21.02	16.09	10.95	2.68	H		0.273	24.36		
		16-QAM	-21.76	15.35	10.95	2.68	H		0.230	23.62		
		64-QAM	-23.42	13.69	10.95	2.68	H		0.157	21.96		
		256-QAM	-25.30	11.81	10.95	2.68	H		0.102	20.08		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2546.010	Sub6 41/ 100 MHz [30 kHz]	PI/2 BPSK	-20.85	15.70	10.66	2.53	H		0.242	23.83	1	271
		QPSK	-20.86	15.69	10.66	2.53	H		0.241	23.82		
		16-QAM	-21.71	14.84	10.66	2.53	H		0.198	22.97		
		64-QAM	-23.26	13.29	10.66	2.53	H		0.139	21.42		
		256-QAM	-25.28	11.27	10.66	2.53	H		0.087	19.40		
2592.990		PI/2 BPSK	-20.43	16.28	11.00	2.55	H	< 2.00	0.297	24.73	1	1
		QPSK	-20.46	16.25	11.00	2.55	H		0.295	24.70		
		16-QAM	-21.40	15.31	11.00	2.55	H		0.238	23.76		
		64-QAM	-22.96	13.75	11.00	2.55	H		0.166	22.20		
		256-QAM	-24.86	11.85	11.00	2.55	H		0.107	20.30		
2640.000		PI/2 BPSK	-20.69	16.75	10.96	2.68	H		0.318	25.03	1	1
		QPSK	-20.70	16.74	10.96	2.68	H		0.318	25.02		
		16-QAM	-21.58	15.86	10.96	2.68	H		0.259	24.14		
		64-QAM	-23.26	14.18	10.96	2.68	H		0.176	22.46		
		256-QAM	-25.12	12.32	10.96	2.68	H		0.115	20.60		

8.2 RADIATED SPURIOUS EMISSIONS

NR Band:	<u>n41</u>
Bandwidth:	<u>10 MHz</u>
Modulation:	<u>PI/2 BPSK</u>
Distance:	<u>1 meter</u>
SCS:	<u>30 kHz</u>

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
500202 (2501.010)	5 002.02	-61.73	11.22	-63.44	3.71	V	-55.93	-25.00	1	12
	7 503.03	-53.74	11.54	-46.31	4.60	H	-39.37	-25.00		
	10 004.04	-61.95	11.47	-52.55	5.47	V	-46.55	-25.00		
518598 (2592.990)	5 185.98	-62.02	11.61	-63.19	3.80	V	-55.38	-25.00	1	1
	7 778.97	-53.55	11.26	-46.48	4.70	H	-39.92	-25.00		
	10 371.96	-63.46	11.68	-52.37	5.55	V	-46.24	-25.00		
537000 (2685.000)	5 370.00	-61.35	11.96	-62.98	3.92	V	-54.94	-25.00	1	12
	8 055.00	-57.03	11.24	-49.75	4.81	V	-43.32	-25.00		
	10 740.00	-62.63	11.55	-50.61	5.64	V	-44.70	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 15 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
500700 (2503.500)	5 007.00	-61.54	11.20	-62.97	3.71	H	-55.48	-25.00	1	1
	7 510.50	-51.44	11.55	-43.90	4.60	H	-36.95	-25.00		
	10 014.00	-62.46	11.46	-53.07	5.47	H	-47.08	-25.00		
518598 (2592.990)	5 185.98	-62.78	11.61	-63.95	3.80	H	-56.14	-25.00	1	1
	7 778.97	-54.27	11.26	-47.20	4.70	H	-40.64	-25.00		
	10 371.96	-63.88	11.68	-52.79	5.55	H	-46.66	-25.00		
536496 (2682.480)	5 364.96	-61.01	11.95	-62.53	3.91	H	-54.49	-25.00	1	1
	8 047.44	-56.62	11.23	-49.40	4.81	H	-42.98	-25.00		
	10 729.92	-63.00	11.56	-50.93	5.65	H	-45.02	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 20 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
501204 (2506.020)	5 012.04	-60.56	11.18	-61.70	3.72	H	-54.24	-25.00	1	25
	7 518.06	-56.22	11.56	-48.58	4.61	H	-41.63	-25.00		
	10 024.08	-62.37	11.46	-53.02	5.47	H	-47.03	-25.00		
518598 (2592.990)	5 185.98	-61.70	11.61	-62.87	3.80	H	-55.06	-25.00	1	25
	7 778.97	-53.69	11.26	-46.62	4.70	H	-40.06	-25.00		
	10 371.96	-64.17	11.68	-53.08	5.55	H	-46.95	-25.00		
535998 (2679.990)	5 359.98	-61.11	11.95	-62.54	3.90	H	-54.49	-25.00	1	1
	8 039.97	-58.18	11.22	-50.87	4.80	H	-44.45	-25.00		
	10 719.96	-62.62	11.56	-50.97	5.64	H	-45.05	-25.00		

☐ NR Band: n41
☐ Bandwidth: 25 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meter
☐ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
501702 (2508.510)	5 017.02	-60.64	11.17	-61.56	3.70	H	-54.09	-25.00	1	63
	7 525.53	-54.25	11.57	-46.60	4.61	H	-39.64	-25.00		
	10 034.04	-63.43	11.45	-54.19	5.48	H	-48.22	-25.00		
518598 (2592.990)	5 185.98	-60.79	11.61	-61.96	3.80	H	-54.15	-25.00	1	1
	7 778.97	-52.58	11.26	-45.51	4.70	H	-38.95	-25.00		
	10 371.96	-62.90	11.68	-51.81	5.55	H	-45.68	-25.00		
535500 (2677.500)	5 355.00	-60.28	11.94	-61.83	3.88	H	-53.77	-25.00	1	1
	8 032.50	-56.97	11.21	-49.68	4.80	H	-43.27	-25.00		
	10 710.00	-61.84	11.57	-50.12	5.65	H	-44.20	-25.00		

☐ NR Band: n41
☐ Bandwidth: 30 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meter
☐ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
502200 (2511.000)	5 022.00	-61.31	11.17	-62.01	3.69	H	-54.53	-25.00	1	76
	7 533.00	-54.59	11.57	-46.99	4.61	H	-40.03	-25.00		
	10 044.00	-61.43	11.44	-52.11	5.48	H	-46.15	-25.00		
518598 (2592.990)	5 185.98	-61.40	11.61	-62.57	3.80	H	-54.76	-25.00	1	1
	7 778.97	-53.09	11.26	-46.02	4.70	H	-39.46	-25.00		
	10 371.96	-64.08	11.68	-52.99	5.55	H	-46.86	-25.00		
534996 (2674.980)	5 349.96	-60.86	11.94	-62.55	3.85	H	-54.46	-25.00	1	1
	8 024.94	-58.28	11.20	-51.03	4.79	H	-44.62	-25.00		
	10 699.92	-62.45	11.57	-50.45	5.67	H	-44.55	-25.00		

☐ NR Band: n41
☐ Bandwidth: 40 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meter
☐ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
503202 (2516.010)	5 032.02	-60.32	11.19	-61.16	3.67	H	-53.64	-25.00	1	104
	7 548.03	-52.50	11.59	-45.13	4.63	H	-38.17	-25.00		
	10 064.04	-62.70	11.42	-53.48	5.47	H	-47.53	-25.00		
518598 (2592.990)	5 185.98	-61.38	11.61	-62.55	3.80	H	-54.74	-25.00	1	1
	7 778.97	-51.81	11.26	-44.74	4.70	H	-38.18	-25.00		
	10 371.96	-63.00	11.68	-51.91	5.55	H	-45.78	-25.00		
534000 (2670.000)	5 340.00	-61.11	11.93	-63.09	3.80	H	-54.96	-25.00	1	1
	8 010.00	-56.00	11.17	-48.68	4.77	H	-42.28	-25.00		
	10 680.00	-63.80	11.57	-51.22	5.71	H	-45.36	-25.00		

- NR Band: n41
- Bandwidth: 50 MHz
- Modulation: PI/2 BPSK
- Distance: 1 meter
- SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
504204 (2521.020)	5 042.04	-61.54	11.20	-62.58	3.68	H	-55.06	-25.00	1	131
	7 563.06	-52.95	11.60	-45.42	4.64	H	-38.46	-25.00		
	10 084.08	-62.18	11.40	-52.95	5.46	H	-47.01	-25.00		
518598 (2592.990)	5 185.98	-62.13	11.61	-63.30	3.80	H	-55.49	-25.00	1	66
	7 778.97	-51.07	11.26	-44.00	4.70	H	-37.44	-25.00		
	10 371.96	-63.50	11.68	-52.41	5.55	H	-46.28	-25.00		
532998 (2664.990)	5 329.98	-61.88	11.92	-63.61	3.77	H	-55.46	-25.00	1	1
	7 994.97	-55.63	11.13	-48.08	4.77	H	-41.72	-25.00		
	10 659.96	-62.37	11.58	-49.97	5.67	H	-44.06	-25.00		

☐ NR Band: n41
☐ Bandwidth: 60 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meter
☐ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
505200 (2526.000)	5 052.00	-60.84	11.22	-62.31	3.73	H	-54.82	-25.00	1	160
	7 578.00	-52.65	11.61	-44.99	4.65	H	-38.03	-25.00		
	10 104.00	-62.69	11.39	-53.13	5.46	H	-47.20	-25.00		
518598 (2592.990)	5 185.98	-62.87	11.61	-64.04	3.80	H	-56.23	-25.00	1	1
	7 778.97	-51.06	11.26	-43.99	4.70	H	-37.43	-25.00		
	10 371.96	-63.95	11.68	-52.86	5.55	H	-46.73	-25.00		
531996 (2659.980)	5 319.96	-61.49	11.91	-63.04	3.79	H	-54.92	-25.00	1	1
	7 979.94	-55.21	11.10	-47.51	4.79	H	-41.20	-25.00		
	10 639.92	-63.84	11.58	-51.46	5.61	H	-45.49	-25.00		

☐ NR Band: n41
☐ Bandwidth: 70 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meter
☐ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
506202 (2531.010)	5 062.02	-62.40	11.24	-63.77	3.78	H	-56.31	-25.00	1	187
	7 593.03	-53.08	11.62	-45.80	4.64	H	-38.82	-25.00		
	10 124.04	-62.16	11.37	-52.47	5.47	H	-46.57	-25.00		
518598 (2592.990)	5 185.98	-61.44	11.61	-62.61	3.80	H	-54.80	-25.00	1	94
	7 778.97	-51.42	11.26	-44.35	4.70	H	-37.79	-25.00		
	10 371.96	-62.78	11.68	-51.69	5.55	H	-45.56	-25.00		
531000 (2655.000)	5 310.00	-60.58	11.91	-61.69	3.82	H	-53.60	-25.00	1	1
	7 965.00	-55.81	11.07	-47.99	4.80	H	-41.72	-25.00		
	10 620.00	-63.05	11.58	-51.01	5.65	H	-45.08	-25.00		

☐ NR Band: n41
☐ Bandwidth: 80 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meter
☐ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
507204 (2536.020)	5 072.04	-62.51	11.25	-63.67	3.80	H	-56.22	-25.00	1	108
	7 608.06	-53.81	11.60	-46.93	4.64	H	-39.97	-25.00		
	10 144.08	-62.40	11.36	-52.79	5.48	H	-46.91	-25.00		
518598 (2592.990)	5 185.98	-62.55	11.61	-63.72	3.80	H	-55.91	-25.00	1	108
	7 778.97	-52.34	11.26	-45.27	4.70	H	-38.71	-25.00		
	10 371.96	-61.84	11.68	-50.75	5.55	H	-44.62	-25.00		
529998 (2649.990)	5 299.98	-60.67	11.90	-62.17	3.83	H	-54.10	-25.00	1	1
	7 949.97	-54.70	11.03	-47.05	4.78	H	-40.80	-25.00		
	10 599.96	-61.78	11.58	-50.49	5.67	H	-44.58	-25.00		

☐ NR Band: n41
☐ Bandwidth: 90 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meter
☐ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
508200 (2541.000)	5 082.00	-60.99	11.27	-61.79	3.81	H	-54.33	-25.00	1	122
	7 623.00	-53.18	11.57	-46.24	4.65	H	-39.32	-25.00		
	10 164.00	-61.38	11.34	-51.52	5.50	H	-45.68	-25.00		
518598 (2592.990)	5 185.98	-62.22	11.61	-63.39	3.80	H	-55.58	-25.00	1	1
	7 778.97	-52.51	11.26	-45.44	4.70	H	-38.88	-25.00		
	10 371.96	-63.94	11.68	-52.85	5.55	H	-46.72	-25.00		
528996 (2644.980)	5 289.96	-61.54	11.89	-63.12	3.83	H	-55.06	-25.00	1	1
	7 934.94	-54.55	11.01	-47.17	4.77	H	-40.93	-25.00		
	10 579.92	-63.50	11.62	-52.35	5.65	H	-46.38	-25.00		

■ NR Band: n41
 ■ Bandwidth: 100 MHz
 ■ Modulation: PI/2 BPSK
 ■ Distance: 1 meter
 ■ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
509202 (2546.010)	5 092.02	-62.06	11.29	-62.94	3.78	V	-55.43	-25.00	1	271
	7 638.03	-54.43	11.54	-47.46	4.68	H	-40.60	-25.00		
	10 184.04	-61.31	11.35	-51.27	5.52	V	-45.44	-25.00		
518598 (2592.990)	5 185.98	-62.47	11.61	-63.64	3.80	V	-55.83	-25.00	1	1
	7 778.97	-53.93	11.26	-46.86	4.70	H	-40.30	-25.00		
	10 371.96	-63.11	11.68	-52.02	5.55	V	-45.89	-25.00		
528000 (2640.000)	5 280.00	-61.97	11.88	-64.00	3.80	V	-55.92	-25.00	1	1
	7 920.00	-54.95	11.02	-47.53	4.77	H	-41.28	-25.00		
	10 560.00	-63.31	11.65	-52.37	5.63	V	-46.35	-25.00		

8.3 PEAK-TO-AVERAGE RATIO

Band / BandWidth	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41 / 10 MHz	2592.990	BPSK	24	0	4.33
		QPSK			5.23
		16-QAM			5.98
		64-QAM			6.32
		256-QAM			7.01
Sub6 n41 / 15 MHz		BPSK	36		4.24
		QPSK			5.23
		16-QAM			6.03
		64-QAM			6.32
		256-QAM			6.94
Sub6 n41 / 20 MHz		BPSK	50		4.27
		QPSK			5.28
		16-QAM			6.08
		64-QAM			6.31
		256-QAM			7.13
Sub6 n41 / 25 MHz		BPSK	64		5.32
		QPSK			5.57
		16-QAM			6.30
		64-QAM			6.45
		256-QAM			7.04
Sub6 n41 / 30 MHz		BPSK	75		5.06
		QPSK			5.57
		16-QAM			6.28
		64-QAM			6.47
		256-QAM			6.93
Sub6 n41 / 40 MHz	BPSK	100	4.55		
	QPSK		5.66		
	16-QAM		6.36		
	64-QAM		6.41		
	256-QAM		7.01		

Sub6 n41 / 50 MHz	BPSK	128	4.31
	QPSK		5.44
	16-QAM		6.16
	64-QAM		6.27
	256-QAM		6.85
Sub6 n41 / 60 MHz	BPSK	162	5.50
	QPSK		5.62
	16-QAM		6.15
	64-QAM		6.33
	256-QAM		6.91
Sub6 n41 / 70 MHz	BPSK	180	4.32
	QPSK		5.43
	16-QAM		6.11
	64-QAM		6.20
	256-QAM		6.90
Sub6 n41 / 80 MHz	BPSK	216	4.24
	QPSK		5.35
	16-QAM		6.16
	64-QAM		6.24
	256-QAM		6.91
Sub6 n41 / 90 MHz	BPSK	243	4.24
	QPSK		5.41
	16-QAM		6.21
	64-QAM		6.23
	256-QAM		6.91
Sub6 n41 / 100 MHz	BPSK	270	4.23
	QPSK		5.34
	16-QAM		6.12
	64-QAM		6.17
	256-QAM		6.98

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 73 ~ 132.

8.4 OCCUPIED BANDWIDTH

Band / BandWidth	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41 / 10 MHz	2592.990	BPSK	24	0	8.6687
		QPSK			8.6978
		16-QAM			8.7118
		64-QAM			8.7388
		256-QAM			8.6561
Sub6 n41 / 15 MHz		BPSK	36		12.927
		QPSK			12.951
		16-QAM			12.980
		64-QAM			12.995
		256-QAM			12.953
Sub6 n41 / 20 MHz		BPSK	50		17.973
		QPSK			17.996
		16-QAM			17.954
		64-QAM			17.944
		256-QAM			17.901
Sub6 n41 / 25 MHz		BPSK	64		22.994
		QPSK			23.140
		16-QAM			23.033
		64-QAM			23.007
		256-QAM			22.975
Sub6 n41 / 30 MHz	BPSK	75	27.064		
	QPSK		27.018		
	16-QAM		26.962		
	64-QAM		27.027		
	256-QAM		26.906		
Sub6 n41 / 40 MHz	BPSK	100	35.986		
	QPSK		36.025		
	16-QAM		35.873		
	64-QAM		36.016		
	256-QAM		35.896		

Sub6 n41 / 50 MHz	BPSK	128	46.028
	QPSK		46.018
	16-QAM		46.042
	64-QAM		45.878
	256-QAM		46.169
Sub6 n41 / 60 MHz	BPSK	162	58.199
	QPSK		58.362
	16-QAM		58.180
	64-QAM		58.040
	256-QAM		58.170
Sub6 n41 / 70 MHz	BPSK	180	64.653
	QPSK		64.790
	16-QAM		64.857
	64-QAM		64.722
	256-QAM		64.775
Sub6 n41 / 80 MHz	BPSK	216	77.604
	QPSK		77.539
	16-QAM		77.604
	64-QAM		77.655
	256-QAM		77.463
Sub6 n41 / 90 MHz	BPSK	243	87.259
	QPSK		87.314
	16-QAM		86.959
	64-QAM		86.983
	256-QAM		87.232
Sub6 n41 / 100 MHz	BPSK	270	96.774
	QPSK		96.740
	16-QAM		96.546
	64-QAM		96.881
	256-QAM		97.059

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 133 ~ 192.

8.5 CONDUCTED SPURIOUS EMISSIONS

Band / Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub 6 n41 / 10	2501.010	4.7558	29.722	-63.206	-33.484	-25.00
	2592.990	4.9951	29.722	-63.737	-34.015	
	2685.000	8.1655	29.722	-62.725	-33.003	
Sub 6 n41 / 15	2503.500	3.6691	29.722	-62.792	-33.070	
	2592.990	3.9482	29.722	-61.898	-32.176	
	2682.480	8.8235	30.315	-63.707	-33.392	
Sub 6 n41 / 20	2506.020	3.8884	29.722	-62.708	-32.986	
	2592.990	4.7857	29.722	-64.297	-34.575	
	2679.990	4.8056	29.722	-63.128	-33.406	
Sub 6 n41 / 25	2508.510	4.5763	29.722	-63.419	-33.697	
	2592.990	3.9482	29.722	-63.432	-33.710	
	2677.500	3.9881	29.722	-62.462	-32.740	
Sub 6 n41 / 30	2511.000	4.8355	29.722	-63.534	-33.812	
	2592.990	4.9951	29.722	-63.265	-33.543	
	2674.980	3.7089	29.722	-63.349	-33.627	
Sub 6 n41 / 40	2516.010	3.2403	29.722	-63.490	-33.768	
	2592.990	9.9402	30.315	-63.270	-32.955	
	2670.000	5.0349	30.315	-63.202	-32.887	
Sub 6 n41 / 50	2521.020	9.0130	30.315	-62.383	-32.068	
	2592.990	4.5664	29.722	-61.466	-31.744	
	2664.990	2.7319	29.722	-58.867	-29.145	
Sub 6 n41 / 60	2526.000	8.1655	30.315	-62.918	-32.603	
	2592.990	4.7757	29.722	-62.660	-32.938	
	2659.980	2.7418	29.722	-58.940	-29.218	
Sub 6 n41 / 70	2531.010	3.7089	29.722	-62.692	-32.970	
	2592.990	3.9682	29.722	-63.485	-33.763	
	2655.000	4.9851	29.722	-62.447	-32.725	
Sub 6 n41 / 80	2536.020	3.7289	29.722	-62.944	-33.222	
	2592.990	4.9751	29.722	-62.513	-32.791	
	2649.990	3.9183	29.722	-64.068	-34.346	
Sub 6 n41 / 90	2541.000	6.1117	30.315	-61.781	-31.466	
	2592.990	4.7857	29.722	-63.530	-33.808	
	2644.980	3.6990	29.722	-63.680	-33.958	
Sub 6 n41 / 100	2546.010	4.9751	30.315	-63.541	-33.226	
	2592.990	2.7418	29.722	-60.921	-31.199	
	2640.000	3.7588	29.722	-62.956	-33.234	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 193 ~ 264.
2. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
3. Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.012
1 – 5	29.722
5 – 10	30.315
10 – 15	30.840
15 – 20	31.213
Above 20	31.855

8.6 CHANNEL EDGE

BW (MHz)	Frequency (MHz)	Mod	RB (Size/ Offset)	2 495 MHz ~ 2 496 MHz	C.E ~ (C.E +1MHz)	2 490.5 MHz ~ 2 495 MHz	(C.E + 1 MHz) ~ (C.E + 5 MHz)	Below 2 490.5 MHz	(C.E + 5 MHz) ~ (C.E + X MHz)	Above (C.E + X MHz)
				Lower	Upper	Lower	Upper	Lower	Upper	Upper
10	2501.010	BPSK	Full RB	-21.67	-21.30	-21.37	-21.77	-26.01	-24.62	-36.09
15	2503.500	BPSK	Full RB	-21.58	-26.38	-23.53	-25.48	-26.18	-24.19	-39.33
20	2506.020	BPSK	Full RB	-21.70	-24.10	-23.35	-25.25	-28.90	-25.35	-41.65
25	2508.510	BPSK	Full RB	-24.74	-25.35	-24.88	-24.67	-32.65	-24.68	-38.57
30	2511.000	BPSK	Full RB	-23.82	-27.06	-24.83	-24.87	-28.02	-25.24	-38.10
40	2516.010	BPSK	Full RB	-22.30	-25.47	-24.18	-24.44	-26.05	-25.35	-42.31
50	2521.020	BPSK	Full RB	-22.68	-28.71	-26.19	-30.33	-30.27	-32.37	-41.54
60	2526.000	BPSK	Full RB	-16.97	-18.20	-25.40	-24.76	-29.44	-27.64	-41.24
70	2531.010	BPSK	Full RB	-21.52	-27.84	-25.76	-27.94	-29.66	-27.76	-42.48
80	2536.020	BPSK	Full RB	-22.04	-23.03	-26.02	-25.29	-29.60	-26.89	-43.63
90	2541.000	BPSK	Full RB	-20.16	-22.80	-25.62	-24.56	-27.88	-25.62	-45.95
100	2546.010	BPSK	Full RB	-20.17	-25.00	-25.35	-26.28	-26.72	-27.95	-47.01
Limit (dBm)				-13.0	-10.0	-13.0	-10.0	-25.0	-13.0	-25.0

Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	C.E ~ (C.E $\pm$ 1 MHz)		(C.E $\pm$ 1 MHz) ~ (C.E $\pm$ 5 MHz)	
					Lower	Upper	Lower	Upper
10 MHz	2592.990	BPSK	Full RB	0	-21.78	-21.22	-25.68	-24.81
	2685.000	BPSK	Full RB	0	-21.80	-21.24	-22.75	-23.23
15 MHz	2592.990	BPSK	Full RB	0	-22.73	-31.33	-27.62	-31.49
	2682.480	BPSK	Full RB	0	-21.18	-28.17	-22.86	-24.91
20 MHz	2592.990	BPSK	Full RB	0	-24.57	-28.90	-29.79	-32.07
	2679.990	BPSK	Full RB	0	-23.15	-27.24	-23.81	-25.47
25 MHz	2592.990	BPSK	Full RB	0	-24.62	-28.42	-32.32	-33.43
	2677.500	BPSK	Full RB	0	-22.47	-28.19	-27.80	-30.78
30 MHz	2592.990	BPSK	Full RB	0	-24.96	-35.72	-32.01	-35.54
	2674.980	BPSK	Full RB	0	-24.17	-33.33	-27.85	-32.20
40 MHz	2592.990	BPSK	Full RB	0	-22.82	-36.66	-31.00	-35.43
	2670.000	BPSK	Full RB	0	-24.10	-33.27	-29.48	-33.26
50 MHz	2592.990	BPSK	Full RB	0	-22.39	-31.28	-29.24	-33.61
	2664.990	BPSK	Full RB	0	-21.84	-32.16	-27.73	-34.79
60 MHz	2592.990	BPSK	Full RB	0	-17.08	-16.87	-25.47	-24.58
	2659.980	BPSK	Full RB	0	-16.07	-18.64	-24.61	-27.13
70 MHz	2592.990	BPSK	Full RB	0	-21.66	-31.92	-26.65	-33.44
	2655.000	BPSK	Full RB	0	-19.31	-32.22	-24.19	-34.20
80 MHz	2592.990	BPSK	Full RB	0	-20.76	-24.97	-26.42	-28.39
	2649.990	BPSK	Full RB	0	-20.98	-25.13	-26.55	-29.07
90 MHz	2592.990	BPSK	Full RB	0	-20.77	-26.35	-26.91	-29.73
	2644.980	BPSK	Full RB	0	-19.70	-27.26	-26.78	-30.56
100 MHz	2592.990	BPSK	Full RB	0	-19.61	-27.66	-27.71	-30.28
	2640.000	BPSK	Full RB	0	-19.97	-29.11	-28.41	-31.97
Limit (dBm)					-10.0		-10.0	

Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	(C.E $\pm$ 5 MHz) ~ (C.E $\pm$ X MHz)		Above (C.E $\pm$ X MHz)	
					Lower	Upper	Lower	Upper
10 MHz	2592.990	BPSK	Full RB	0	-29.95	-31.27	-34.98	-34.85
	2685.000	BPSK	Full RB	0	-25.49	-26.65	-35.61	-37.04
15 MHz	2592.990	BPSK	Full RB	0	-34.47	-33.63	-38.08	-37.26
	2682.480	BPSK	Full RB	0	-25.08	-26.09	-39.02	-39.17
20 MHz	2592.990	BPSK	Full RB	0	-35.25	-34.88	-39.38	-38.95
	2679.990	BPSK	Full RB	0	-26.61	-28.14	-39.11	-39.57
25 MHz	2592.990	BPSK	Full RB	0	-36.09	-37.56	-38.47	-37.67
	2677.500	BPSK	Full RB	0	-30.35	-34.08	-37.80	-40.69
30 MHz	2592.990	BPSK	Full RB	0	-35.17	-36.72	-39.09	-38.31
	2674.980	BPSK	Full RB	0	-29.25	-33.55	-38.78	-40.22
40 MHz	2592.990	BPSK	Full RB	0	-31.97	-31.57	-38.75	-39.08
	2670.000	BPSK	Full RB	0	-30.14	-35.50	-41.51	-43.54
50 MHz	2592.990	BPSK	Full RB	0	-36.49	-36.09	-41.04	-43.35
	2664.990	BPSK	Full RB	0	-31.63	-36.09	-41.66	-48.36
60 MHz	2592.990	BPSK	Full RB	0	-32.83	-33.48	-40.57	-42.58
	2659.980	BPSK	Full RB	0	-31.29	-34.44	-41.84	-52.89
70 MHz	2592.990	BPSK	Full RB	0	-33.71	-34.82	-42.15	-43.85
	2655.000	BPSK	Full RB	0	-31.87	-35.44	-41.16	-53.90
80 MHz	2592.990	BPSK	Full RB	0	-32.46	-33.20	-47.05	-45.29
	2649.990	BPSK	Full RB	0	-32.05	-35.76	-41.76	-53.98
90 MHz	2592.990	BPSK	Full RB	0	-34.54	-34.43	-54.38	-48.82
	2644.980	BPSK	Full RB	0	-33.05	-33.99	-41.76	-54.07
100 MHz	2592.990	BPSK	Full RB	0	-34.27	-32.86	-54.47	-50.80
	2640.000	BPSK	Full RB	0	-33.56	-36.61	-43.71	-54.08
Limit (dBm)					-13.0		-25.0	

Note:

1. C.E = Channel Edge
2. X = X is the greater of 6 MHz or the actual emission bandwidth
3. Duty Cycle factor already applied on the factor.
 - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
 - Result(dBm) = Reading + Factor
 - Duty Cycle Factor(dB) = 6.99
4. Plots of the EUT's Channel Edge are shown Page 265 ~ 352. (1RB & Full RB)

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

BandWidth:	10 MHz
Voltage(100 %):	3.880 VDC
Batt. Endpoint:	3.300 VDC
LIMIT:	Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2501.010	100 %	+20(Ref)	2501 009 998	0.0	0.000 000	0.000
	100 %	-30	2501 009 999	0.6	0.000 000	0.000
	100 %	-20	2501 009 996	-2.1	0.000 000	-0.001
	100 %	-10	2501 009 993	-4.7	0.000 000	-0.002
	100 %	0	2501 009 995	-3.4	0.000 000	-0.001
	100 %	+10	2501 009 996	-1.9	0.000 000	-0.001
	100 %	+30	2501 009 994	-4.1	0.000 000	-0.002
	100 %	+40	2501 009 995	-2.8	0.000 000	-0.001
	100 %	+50	2501 009 998	0.5	0.000 000	0.000
	Batt. Endpoint	+20	2501 009 994	-3.6	0.000 000	-0.001
2685.000	100 %	+20(Ref)	2684 999 994	0.0	0.000 000	0.000
	100 %	-30	2684 999 991	-3.2	0.000 000	-0.001
	100 %	-20	2684 999 983	-11.2	0.000 000	-0.004
	100 %	-10	2684 999 980	-13.9	-0.000 001	-0.005
	100 %	0	2684 999 987	-6.9	0.000 000	-0.003
	100 %	+10	2684 999 986	-8.2	0.000 000	-0.003
	100 %	+30	2684 999 985	-8.7	0.000 000	-0.003
	100 %	+40	2684 999 983	-11.0	0.000 000	-0.004
	100 %	+50	2684 999 985	-8.8	0.000 000	-0.003
	Batt. Endpoint	+20	2684 999 989	-4.9	0.000 000	-0.002

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2503.500	100 %	+20(Ref)	2503 500 000	0.0	0.000 000	0.000
	100 %	-30	2503 500 000	0.1	0.000 000	0.000
	100 %	-20	2503 499 998	-2.1	0.000 000	-0.001
	100 %	-10	2503 499 997	-2.9	0.000 000	-0.001
	100 %	0	2503 500 001	0.3	0.000 000	0.000
	100 %	+10	2503 500 000	-0.5	0.000 000	0.000
	100 %	+30	2503 499 999	-1.4	0.000 000	-0.001
	100 %	+40	2503 499 999	-0.9	0.000 000	0.000
	100 %	+50	2503 499 998	-2.1	0.000 000	-0.001
	Batt. Endpoint	+20	2503 499 996	-3.8	0.000 000	-0.002
2682.480	100 %	+20(Ref)	2682 479 997	0.0	0.000 000	0.000
	100 %	-30	2682 479 996	-1.1	0.000 000	0.000
	100 %	-20	2682 479 995	-2.7	0.000 000	-0.001
	100 %	-10	2682 479 990	-7.4	0.000 000	-0.003
	100 %	0	2682 479 991	-6.5	0.000 000	-0.002
	100 %	+10	2682 479 996	-1.5	0.000 000	-0.001
	100 %	+30	2682 479 992	-5.9	0.000 000	-0.002
	100 %	+40	2682 479 998	0.6	0.000 000	0.000
	100 %	+50	2682 479 998	0.6	0.000 000	0.000
	Batt. Endpoint	+20	2682 479 994	-3.2	0.000 000	-0.001

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2506.020	100 %	+20(Ref)	2506 020 000	0.0	0.000 000	0.000
	100 %	-30	2506 019 997	-2.8	0.000 000	-0.001
	100 %	-20	2506 019 999	-0.8	0.000 000	0.000
	100 %	-10	2506 019 996	-3.4	0.000 000	-0.001
	100 %	0	2506 019 995	-4.8	0.000 000	-0.002
	100 %	+10	2506 019 995	-4.8	0.000 000	-0.002
	100 %	+30	2506 019 998	-1.1	0.000 000	0.000
	100 %	+40	2506 019 995	-4.5	0.000 000	-0.002
	100 %	+50	2506 019 998	-1.8	0.000 000	-0.001
	Batt. Endpoint	+20	2506 020 001	1.3	0.000 000	0.000
2679.990	100 %	+20(Ref)	2679 989 995	0.0	0.000 000	0.000
	100 %	-30	2679 989 991	-4.0	0.000 000	-0.001
	100 %	-20	2679 989 988	-7.0	0.000 000	-0.003
	100 %	-10	2679 989 990	-4.9	0.000 000	-0.002
	100 %	0	2679 989 986	-8.5	0.000 000	-0.003
	100 %	+10	2679 989 990	-4.8	0.000 000	-0.002
	100 %	+30	2679 989 989	-5.9	0.000 000	-0.002
	100 %	+40	2679 989 990	-4.1	0.000 000	-0.002
	100 %	+50	2679 989 990	-5.0	0.000 000	-0.002
	Batt. Endpoint	+20	2679 989 994	-0.1	0.000 000	0.000

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2508.510	100 %	+20(Ref)	2508 509 994	0.0	0.000 000	0.000
	100 %	-30	2508 509 987	-7.3	0.000 000	-0.003
	100 %	-20	2508 509 987	-7.1	0.000 000	-0.003
	100 %	-10	2508 509 985	-9.4	0.000 000	-0.004
	100 %	0	2508 509 987	-7.1	0.000 000	-0.003
	100 %	+10	2508 509 989	-5.4	0.000 000	-0.002
	100 %	+30	2508 509 988	-5.7	0.000 000	-0.002
	100 %	+40	2508 509 983	-10.9	0.000 000	-0.004
	100 %	+50	2508 509 987	-6.6	0.000 000	-0.003
	Batt. Endpoint	+20	2508 509 985	-9.1	0.000 000	-0.004
2677.500	100 %	+20(Ref)	2677 499 996	0.0	0.000 000	0.000
	100 %	-30	2677 499 985	-11.6	0.000 000	-0.004
	100 %	-20	2677 499 989	-7.5	0.000 000	-0.003
	100 %	-10	2677 499 987	-9.8	0.000 000	-0.004
	100 %	0	2677 499 988	-8.5	0.000 000	-0.003
	100 %	+10	2677 499 992	-4.8	0.000 000	-0.002
	100 %	+30	2677 499 988	-8.4	0.000 000	-0.003
	100 %	+40	2677 499 987	-9.3	0.000 000	-0.003
	100 %	+50	2677 499 987	-8.9	0.000 000	-0.003
	Batt. Endpoint	+20	2677 499 985	-11.0	0.000 000	-0.004

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2511.000	100 %	+20(Ref)	2510 999 995	0.0	0.000 000	0.000
	100 %	-30	2510 999 994	-1.2	0.000 000	0.000
	100 %	-20	2510 999 992	-3.5	0.000 000	-0.001
	100 %	-10	2510 999 989	-6.5	0.000 000	-0.003
	100 %	0	2510 999 991	-3.7	0.000 000	-0.001
	100 %	+10	2510 999 993	-1.8	0.000 000	-0.001
	100 %	+30	2510 999 991	-4.0	0.000 000	-0.002
	100 %	+40	2510 999 989	-6.4	0.000 000	-0.003
	100 %	+50	2510 999 988	-7.5	0.000 000	-0.003
	Batt. Endpoint	+20	2510 999 990	-4.9	0.000 000	-0.002
2674.980	100 %	+20(Ref)	2674 980 003	0.0	0.000 000	0.000
	100 %	-30	2674 980 004	0.7	0.000 000	0.000
	100 %	-20	2674 980 004	1.3	0.000 000	0.000
	100 %	-10	2674 980 003	-0.4	0.000 000	0.000
	100 %	0	2674 980 000	-3.2	0.000 000	-0.001
	100 %	+10	2674 980 004	0.5	0.000 000	0.000
	100 %	+30	2674 980 006	2.8	0.000 000	0.001
	100 %	+40	2674 980 005	1.7	0.000 000	0.001
	100 %	+50	2674 980 007	3.6	0.000 000	0.001
	Batt. Endpoint	+20	2674 980 003	-0.3	0.000 000	0.000

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2516.010	100 %	+20(Ref)	2516 009 997	0.0	0.000 000	0.000
	100 %	-30	2516 009 996	-1.5	0.000 000	-0.001
	100 %	-20	2516 009 994	-2.9	0.000 000	-0.001
	100 %	-10	2516 009 996	-1.7	0.000 000	-0.001
	100 %	0	2516 009 995	-2.5	0.000 000	-0.001
	100 %	+10	2516 009 996	-1.7	0.000 000	-0.001
	100 %	+30	2516 009 991	-6.5	0.000 000	-0.003
	100 %	+40	2516 009 995	-2.4	0.000 000	-0.001
	100 %	+50	2516 009 995	-2.6	0.000 000	-0.001
	Batt. Endpoint	+20	2516 009 993	-4.0	0.000 000	-0.002
2670.000	100 %	+20(Ref)	2670 000 001	0.0	0.000 000	0.000
	100 %	-30	2670 000 001	0.2	0.000 000	0.000
	100 %	-20	2670 000 004	3.4	0.000 000	0.001
	100 %	-10	2670 000 001	0.3	0.000 000	0.000
	100 %	0	2670 000 008	7.2	0.000 000	0.003
	100 %	+10	2669 999 999	-2.3	0.000 000	-0.001
	100 %	+30	2669 999 999	-2.4	0.000 000	-0.001
	100 %	+40	2670 000 003	1.6	0.000 000	0.001
	100 %	+50	2670 000 005	4.3	0.000 000	0.002
	Batt. Endpoint	+20	2670 000 003	1.9	0.000 000	0.001

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2521.020	100 %	+20(Ref)	2521 019 991	0.0	0.000 000	0.000
	100 %	-30	2521 019 986	-5.2	0.000 000	-0.002
	100 %	-20	2521 019 983	-7.4	0.000 000	-0.003
	100 %	-10	2521 019 984	-6.9	0.000 000	-0.003
	100 %	0	2521 019 983	-7.5	0.000 000	-0.003
	100 %	+10	2521 019 984	-6.4	0.000 000	-0.003
	100 %	+30	2521 019 983	-8.2	0.000 000	-0.003
	100 %	+40	2521 019 983	-8.0	0.000 000	-0.003
	100 %	+50	2521 019 987	-3.3	0.000 000	-0.001
	Batt. Endpoint	+20	2521 019 984	-7.0	0.000 000	-0.003
2664.990	100 %	+20(Ref)	2664 989 997	0.0	0.000 000	0.000
	100 %	-30	2664 989 996	-1.0	0.000 000	0.000
	100 %	-20	2664 989 999	2.0	0.000 000	0.001
	100 %	-10	2664 990 001	4.0	0.000 000	0.001
	100 %	0	2664 989 995	-1.7	0.000 000	-0.001
	100 %	+10	2664 989 998	0.7	0.000 000	0.000
	100 %	+30	2664 989 994	-3.5	0.000 000	-0.001
	100 %	+40	2664 989 992	-5.2	0.000 000	-0.002
	100 %	+50	2664 989 997	-0.1	0.000 000	0.000
	Batt. Endpoint	+20	2664 989 997	0.1	0.000 000	0.000

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2526.000	100 %	+20(Ref)	2526 000 001	0.0	0.000 000	0.000
	100 %	-30	2526 000 000	-0.8	0.000 000	0.000
	100 %	-20	2526 000 001	0.0	0.000 000	0.000
	100 %	-10	2526 000 000	-1.0	0.000 000	0.000
	100 %	0	2526 000 003	2.1	0.000 000	0.001
	100 %	+10	2526 000 003	1.9	0.000 000	0.001
	100 %	+30	2525 999 997	-3.7	0.000 000	-0.001
	100 %	+40	2525 999 999	-2.0	0.000 000	-0.001
	100 %	+50	2526 000 005	4.0	0.000 000	0.002
	Batt. Endpoint	+20	2526 000 003	1.9	0.000 000	0.001
2659.980	100 %	+20(Ref)	2659 980 000	0.0	0.000 000	0.000
	100 %	-30	2659 979 999	-0.5	0.000 000	0.000
	100 %	-20	2659 979 998	-1.7	0.000 000	-0.001
	100 %	-10	2659 980 000	-0.2	0.000 000	0.000
	100 %	0	2659 980 001	1.1	0.000 000	0.000
	100 %	+10	2659 979 995	-5.3	0.000 000	-0.002
	100 %	+30	2659 979 999	-1.1	0.000 000	0.000
	100 %	+40	2659 979 999	-0.6	0.000 000	0.000
	100 %	+50	2659 980 001	0.8	0.000 000	0.000
	Batt. Endpoint	+20	2659 980 001	0.9	0.000 000	0.000

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2531.010	100 %	+20(Ref)	2531 010 000	0.0	0.000 000	0.000
	100 %	-30	2531 009 995	-5.2	0.000 000	-0.002
	100 %	-20	2531 010 002	1.5	0.000 000	0.001
	100 %	-10	2531 009 998	-2.5	0.000 000	-0.001
	100 %	0	2531 010 001	0.6	0.000 000	0.000
	100 %	+10	2531 009 999	-0.9	0.000 000	0.000
	100 %	+30	2531 009 999	-1.5	0.000 000	-0.001
	100 %	+40	2531 009 996	-4.3	0.000 000	-0.002
	100 %	+50	2531 009 992	-7.8	0.000 000	-0.003
	Batt. Endpoint	+20	2531 009 996	-4.2	0.000 000	-0.002
2655.000	100 %	+20(Ref)	2655 000 003	0.0	0.000 000	0.000
	100 %	-30	2655 000 005	2.4	0.000 000	0.001
	100 %	-20	2655 000 007	3.7	0.000 000	0.001
	100 %	-10	2655 000 002	-0.9	0.000 000	0.000
	100 %	0	2655 000 003	-0.3	0.000 000	0.000
	100 %	+10	2655 000 002	-0.5	0.000 000	0.000
	100 %	+30	2655 000 004	1.2	0.000 000	0.000
	100 %	+40	2655 000 003	0.0	0.000 000	0.000
	100 %	+50	2655 000 002	-0.9	0.000 000	0.000
	Batt. Endpoint	+20	2655 000 004	1.4	0.000 000	0.001

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2536.020	100 %	+20(Ref)	2536 020 006	0.0	0.000 000	0.000
	100 %	-30	2536 020 008	2.0	0.000 000	0.001
	100 %	-20	2536 020 006	-0.6	0.000 000	0.000
	100 %	-10	2536 020 009	3.0	0.000 000	0.001
	100 %	0	2536 020 009	2.8	0.000 000	0.001
	100 %	+10	2536 020 010	3.2	0.000 000	0.001
	100 %	+30	2536 020 006	-0.4	0.000 000	0.000
	100 %	+40	2536 020 013	6.3	0.000 000	0.002
	100 %	+50	2536 020 004	-2.8	0.000 000	-0.001
	Batt. Endpoint	+20	2536 020 010	3.7	0.000 000	0.001
2649.990	100 %	+20(Ref)	2649 989 998	0.0	0.000 000	0.000
	100 %	-30	2649 989 997	-1.6	0.000 000	-0.001
	100 %	-20	2649 990 001	2.9	0.000 000	0.001
	100 %	-10	2649 990 000	1.4	0.000 000	0.001
	100 %	0	2649 990 000	1.7	0.000 000	0.001
	100 %	+10	2649 990 000	1.2	0.000 000	0.000
	100 %	+30	2649 990 000	1.2	0.000 000	0.000
	100 %	+40	2649 990 002	3.2	0.000 000	0.001
	100 %	+50	2649 990 003	4.5	0.000 000	0.002
	Batt. Endpoint	+20	2649 990 000	1.6	0.000 000	0.001

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

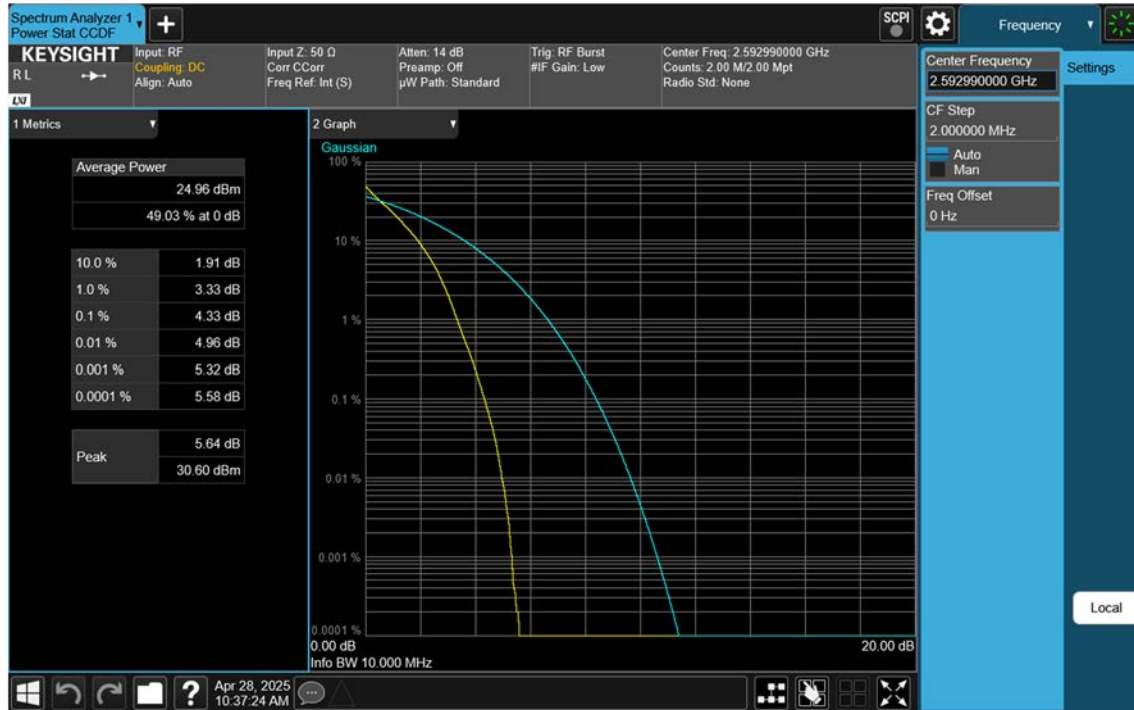
Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2541.000	100 %	+20(Ref)	2540 999 996	0.0	0.000 000	0.000
	100 %	-30	2540 999 996	-0.7	0.000 000	0.000
	100 %	-20	2540 999 993	-3.1	0.000 000	-0.001
	100 %	-10	2540 999 988	-7.8	0.000 000	-0.003
	100 %	0	2540 999 991	-5.6	0.000 000	-0.002
	100 %	+10	2540 999 991	-5.5	0.000 000	-0.002
	100 %	+30	2540 999 992	-4.7	0.000 000	-0.002
	100 %	+40	2540 999 998	1.6	0.000 000	0.001
	100 %	+50	2540 999 991	-5.6	0.000 000	-0.002
	Batt. Endpoint	+20	2540 999 994	-2.0	0.000 000	-0.001
2644.980	100 %	+20(Ref)	2644 980 004	0.0	0.000 000	0.000
	100 %	-30	2644 980 007	3.4	0.000 000	0.001
	100 %	-20	2644 980 007	3.1	0.000 000	0.001
	100 %	-10	2644 980 009	4.4	0.000 000	0.002
	100 %	0	2644 980 006	2.3	0.000 000	0.001
	100 %	+10	2644 980 010	5.4	0.000 000	0.002
	100 %	+30	2644 980 007	2.7	0.000 000	0.001
	100 %	+40	2644 980 008	3.7	0.000 000	0.001
	100 %	+50	2644 980 009	5.4	0.000 000	0.002
	Batt. Endpoint	+20	2644 980 003	-1.5	0.000 000	-0.001

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

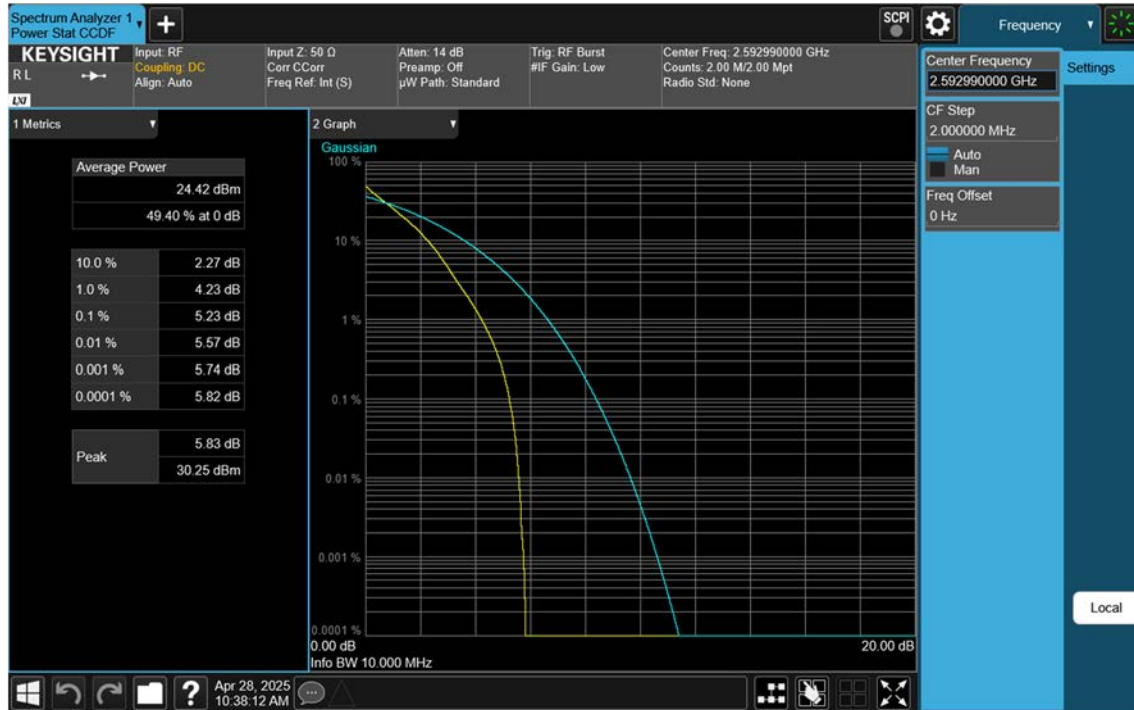
Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2546.010	100 %	+20(Ref)	2546 010 002	0.0	0.000 000	0.000
	100 %	-30	2546 010 005	3.1	0.000 000	0.001
	100 %	-20	2546 010 003	0.7	0.000 000	0.000
	100 %	-10	2546 010 001	-1.5	0.000 000	-0.001
	100 %	0	2546 010 003	0.2	0.000 000	0.000
	100 %	+10	2546 010 002	-0.2	0.000 000	0.000
	100 %	+30	2546 010 001	-1.3	0.000 000	0.000
	100 %	+40	2546 010 004	2.1	0.000 000	0.001
	100 %	+50	2546 010 009	7.1	0.000 000	0.003
	Batt. Endpoint	+20	2546 010 003	1.0	0.000 000	0.000
2640.000	100 %	+20(Ref)	2640 000 006	0.0	0.000 000	0.000
	100 %	-30	2640 000 011	5.1	0.000 000	0.002
	100 %	-20	2640 000 006	-0.4	0.000 000	0.000
	100 %	-10	2640 000 004	-1.7	0.000 000	-0.001
	100 %	0	2640 000 007	0.6	0.000 000	0.000
	100 %	+10	2640 000 013	7.2	0.000 000	0.003
	100 %	+30	2640 000 009	2.7	0.000 000	0.001
	100 %	+40	2640 000 007	1.2	0.000 000	0.000
	100 %	+50	2640 000 011	4.9	0.000 000	0.002
	Batt. Endpoint	+20	2640 000 012	5.9	0.000 000	0.002

9. TEST PLOTS

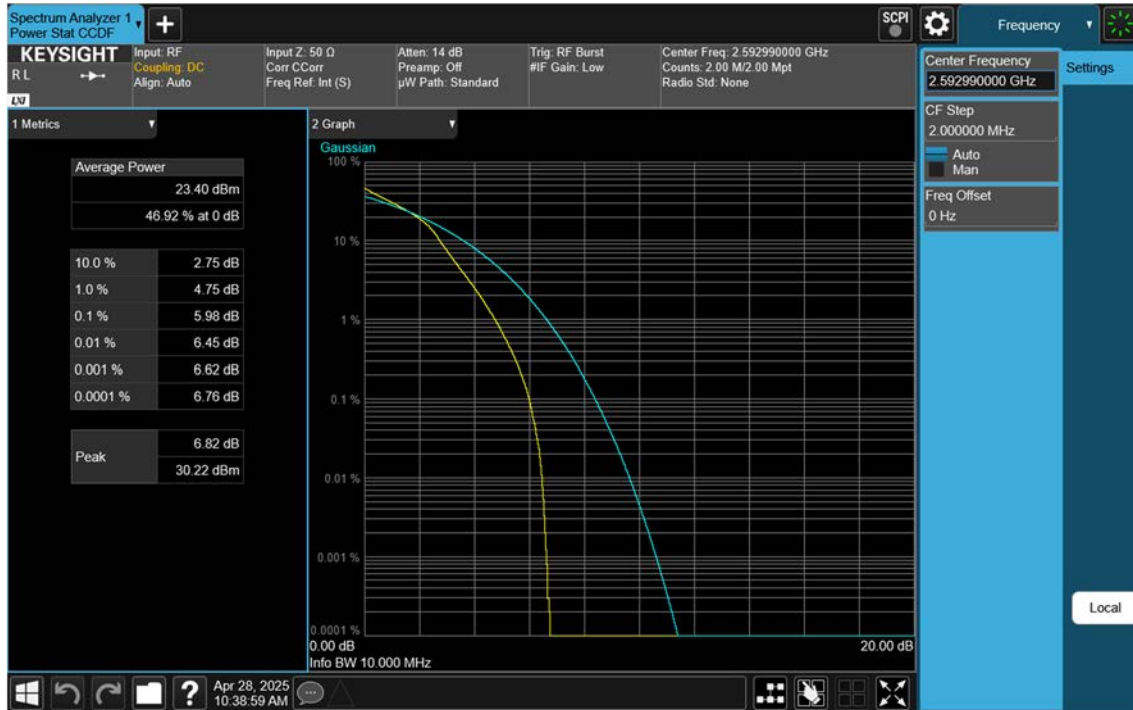
NR41_10 M_PAR_Mid_BPSK_FullRB



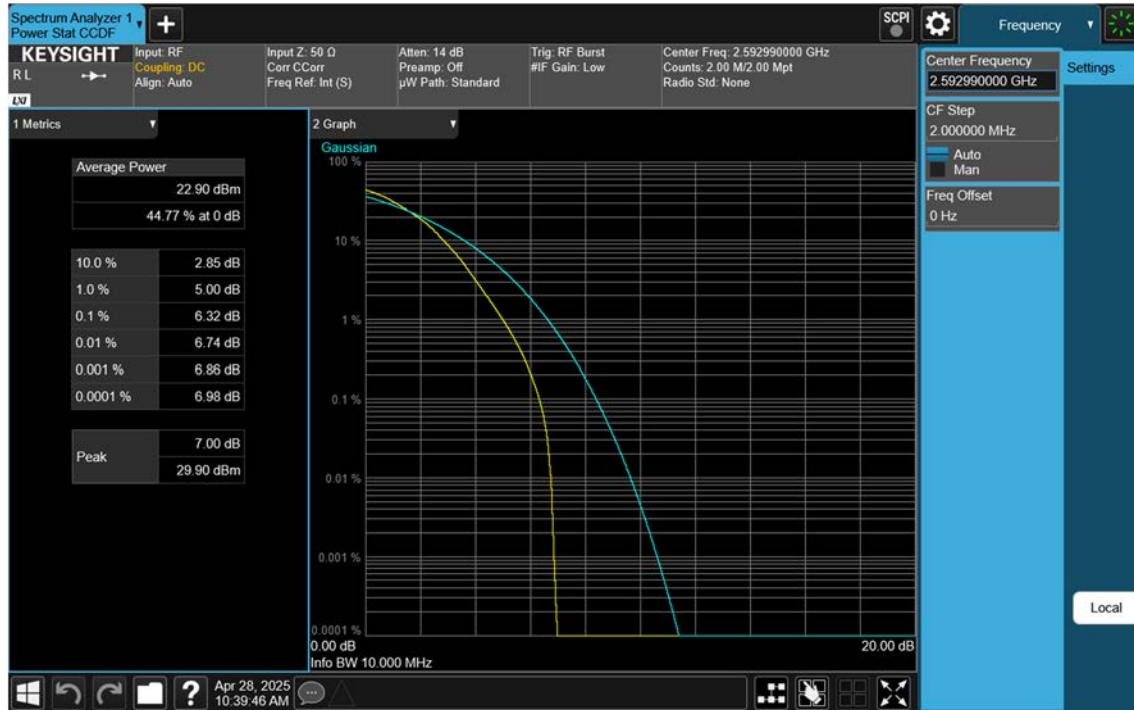
NR41_10 M_PAR_Mid_QPSK_FullRB



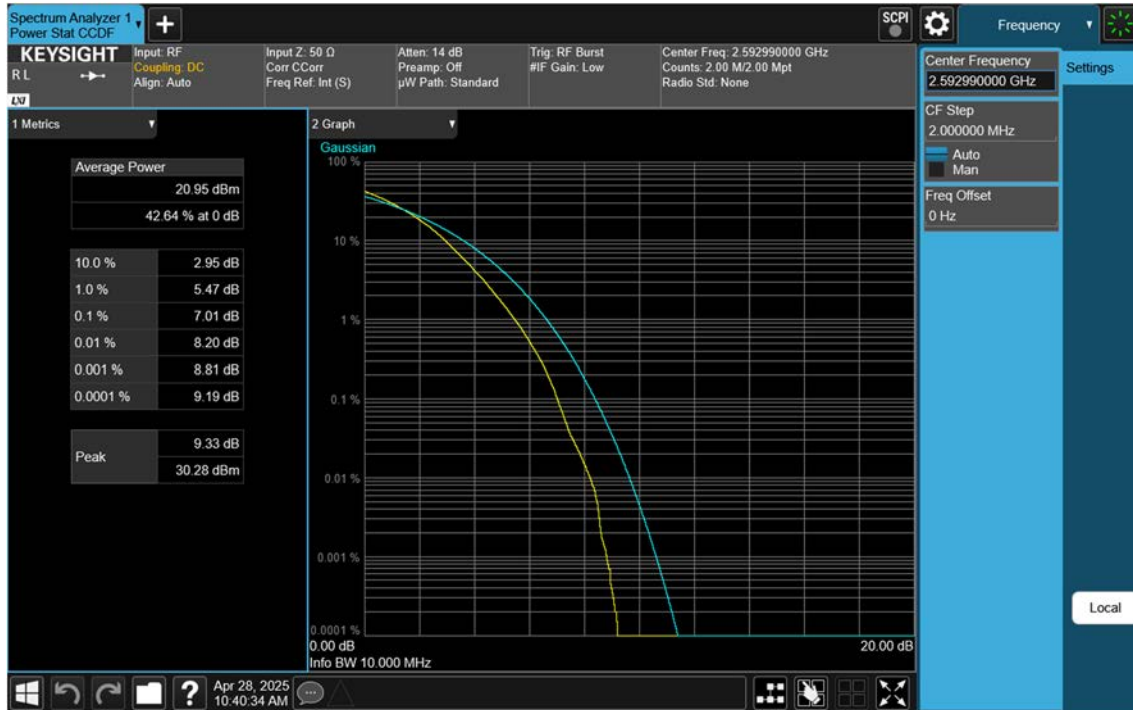
NR41_10 M_PAR_Mid_16QAM_FullRB



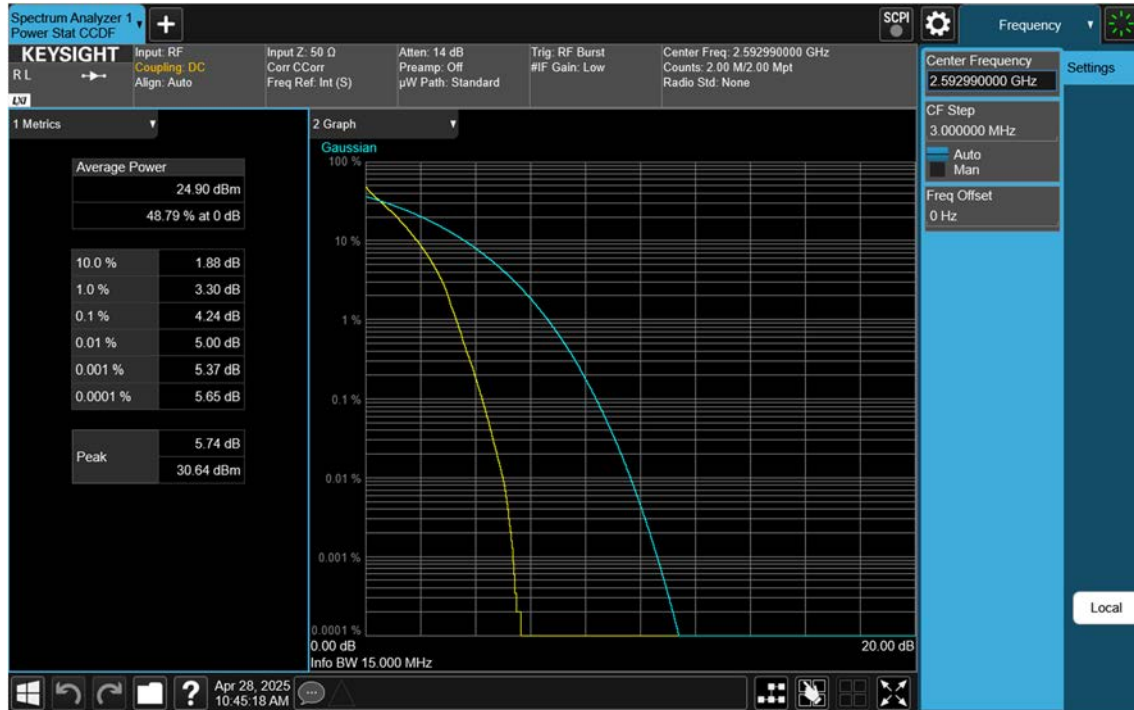
NR41_10 M_PAR_Mid_64QAM_FullRB



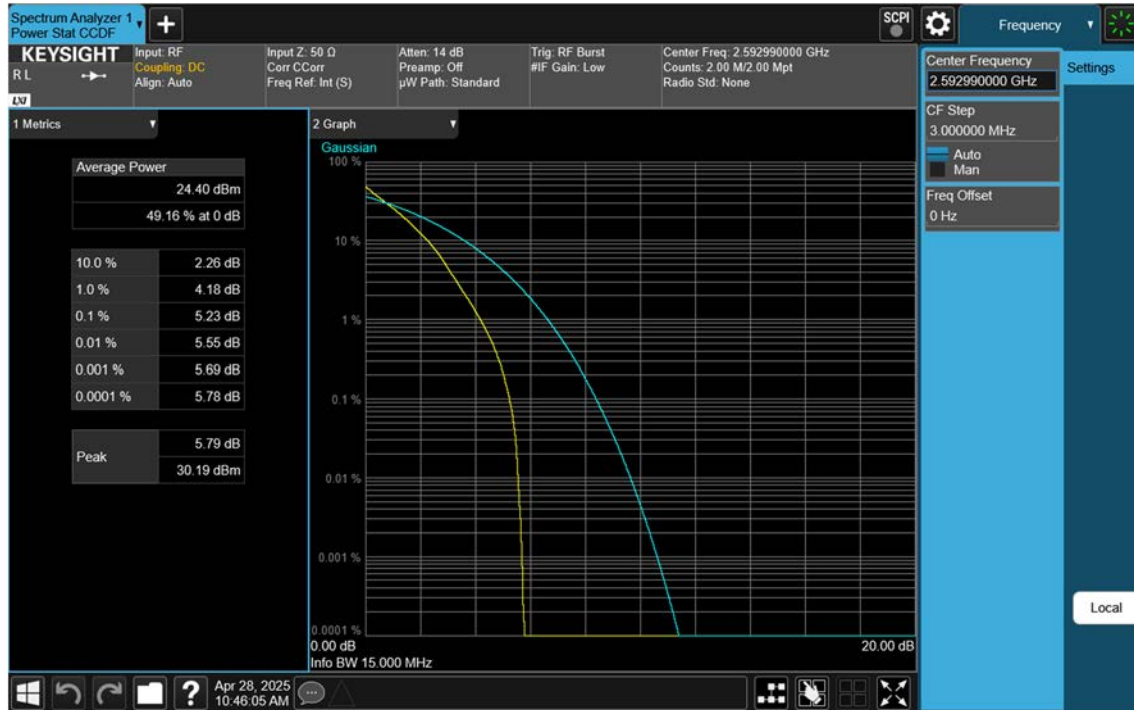
NR41_10 M_PAR_Mid_256QAM_FullRB



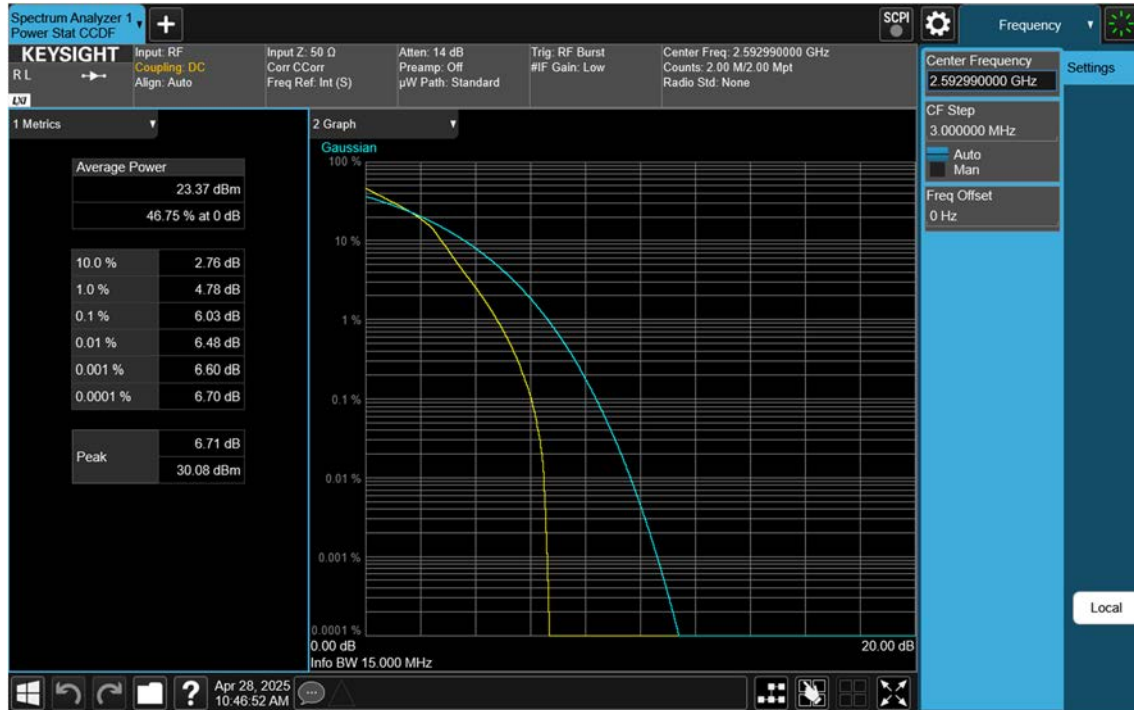
NR41_15 M_PAR_Mid_BPSK_FullRB



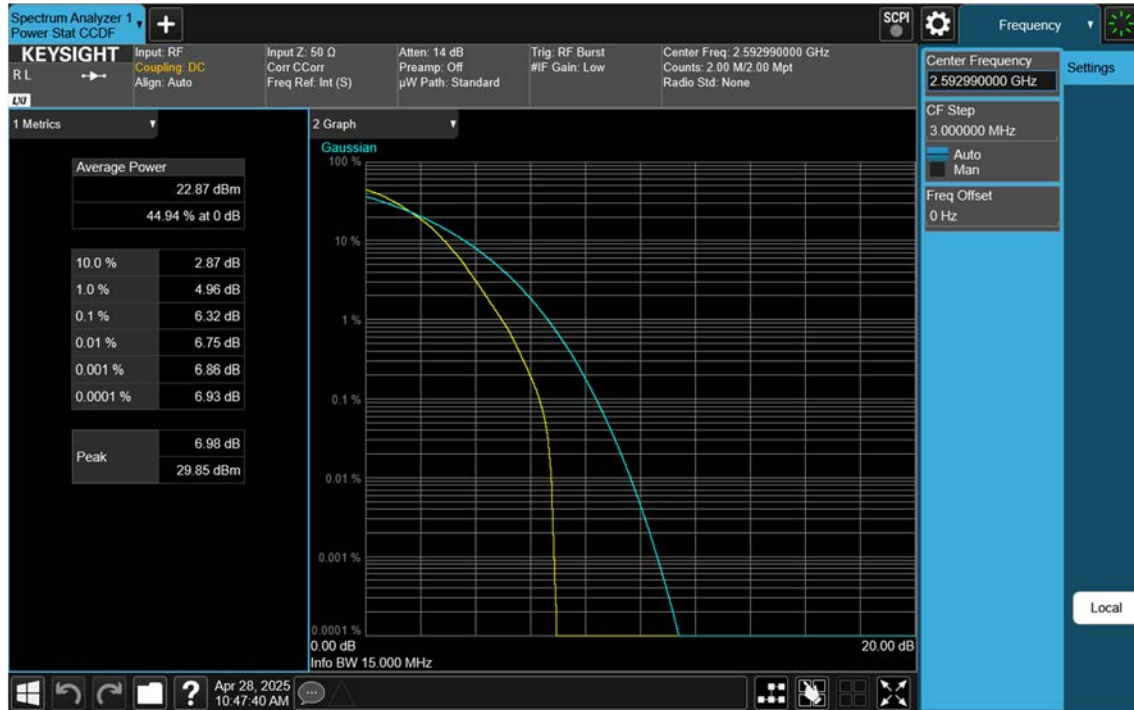
NR41_15 M_PAR_Mid_QPSK_FullRB



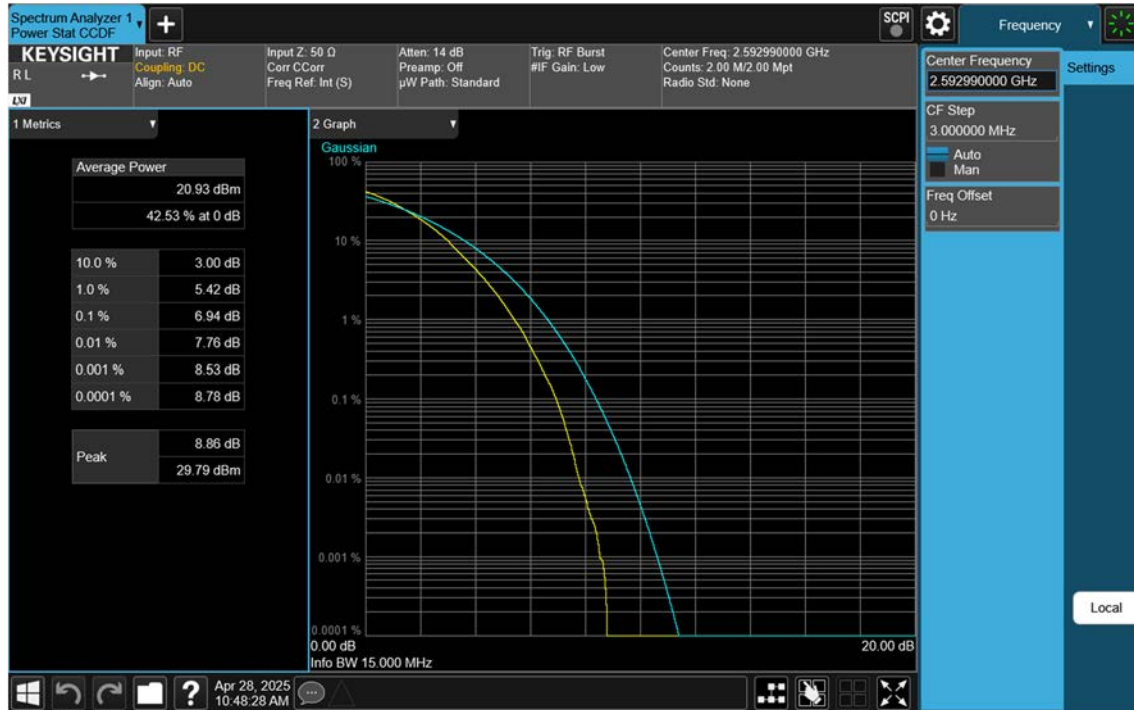
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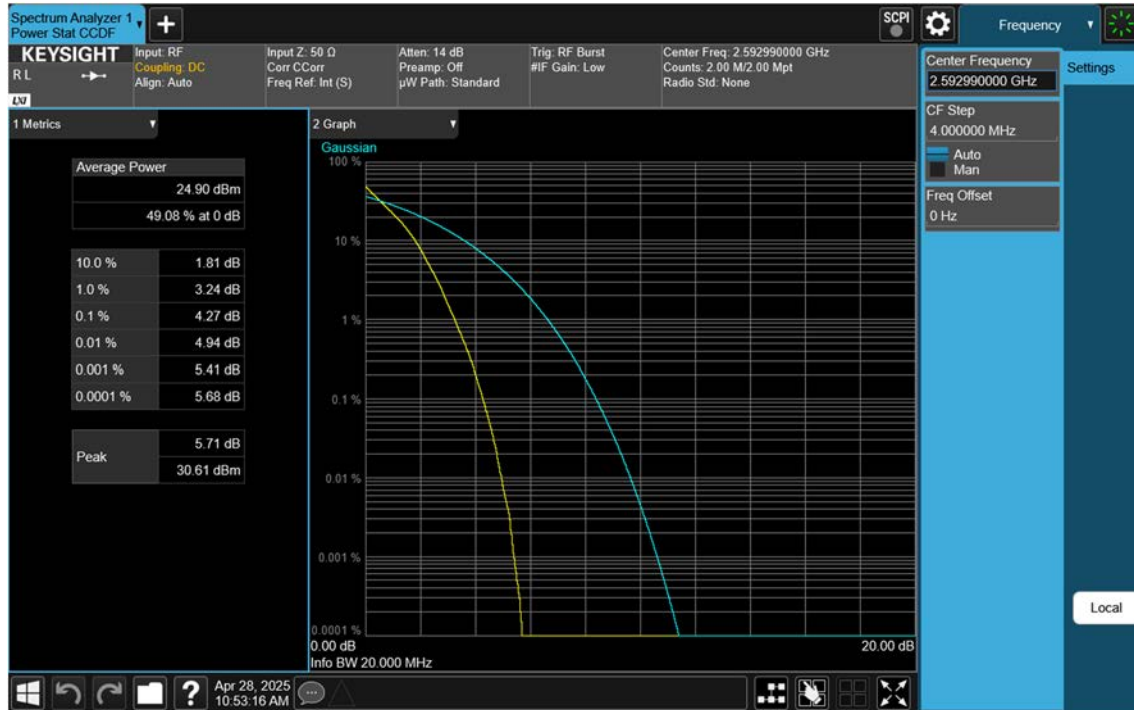
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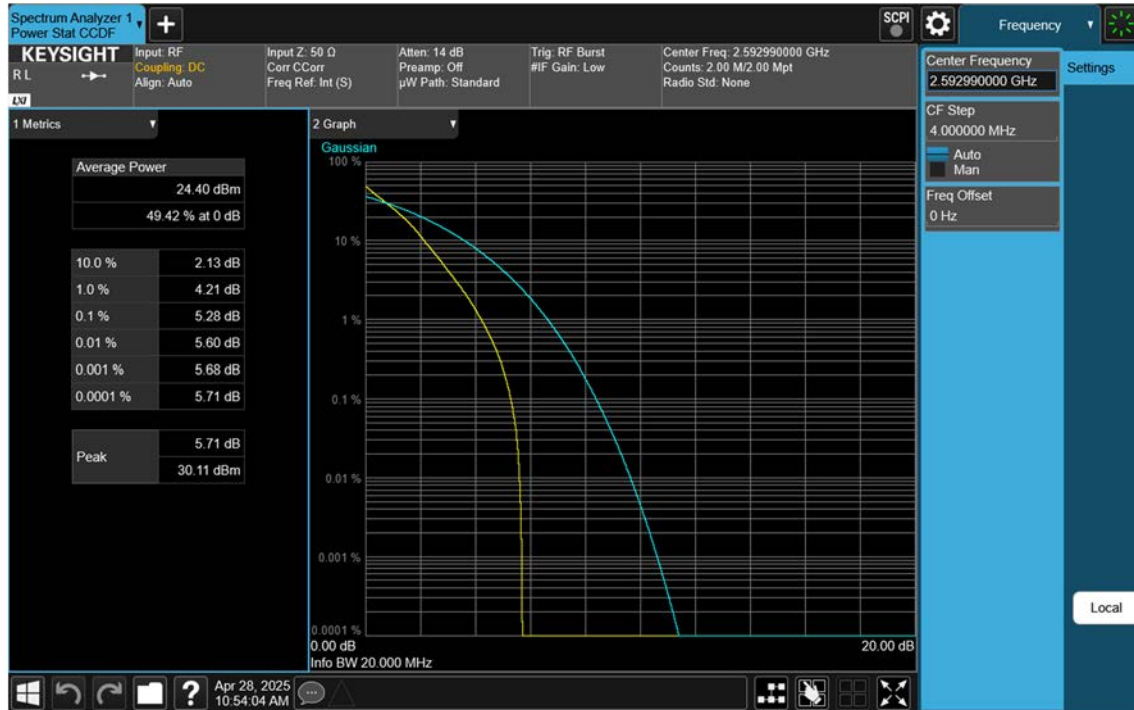
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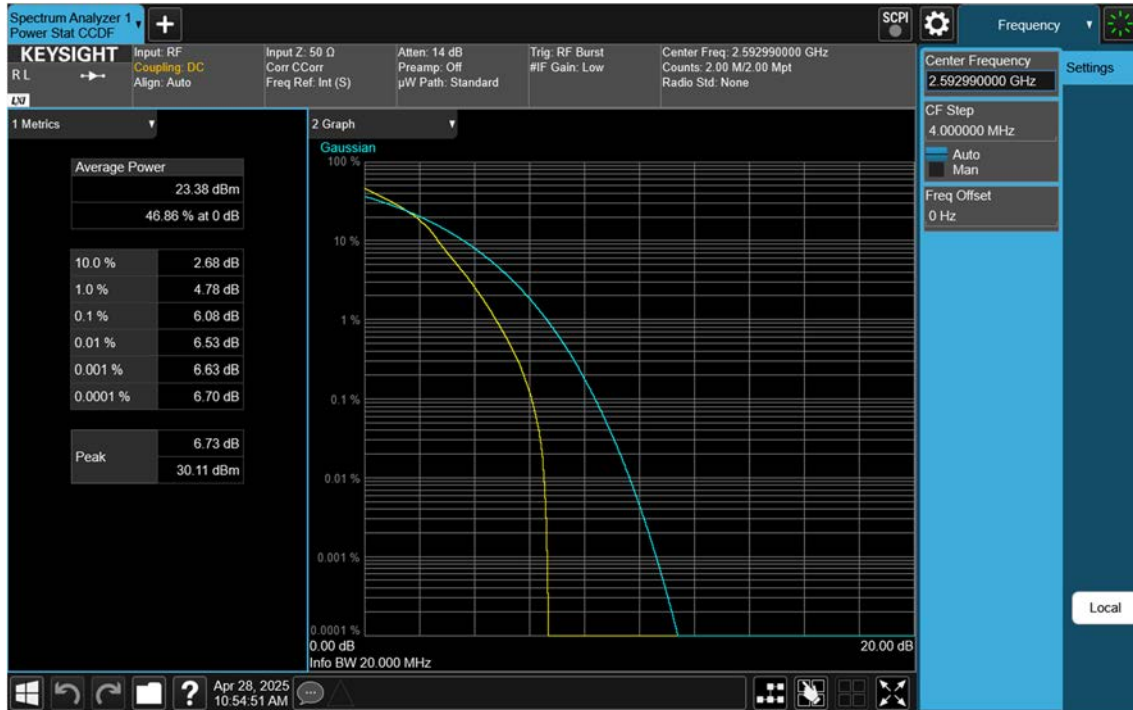
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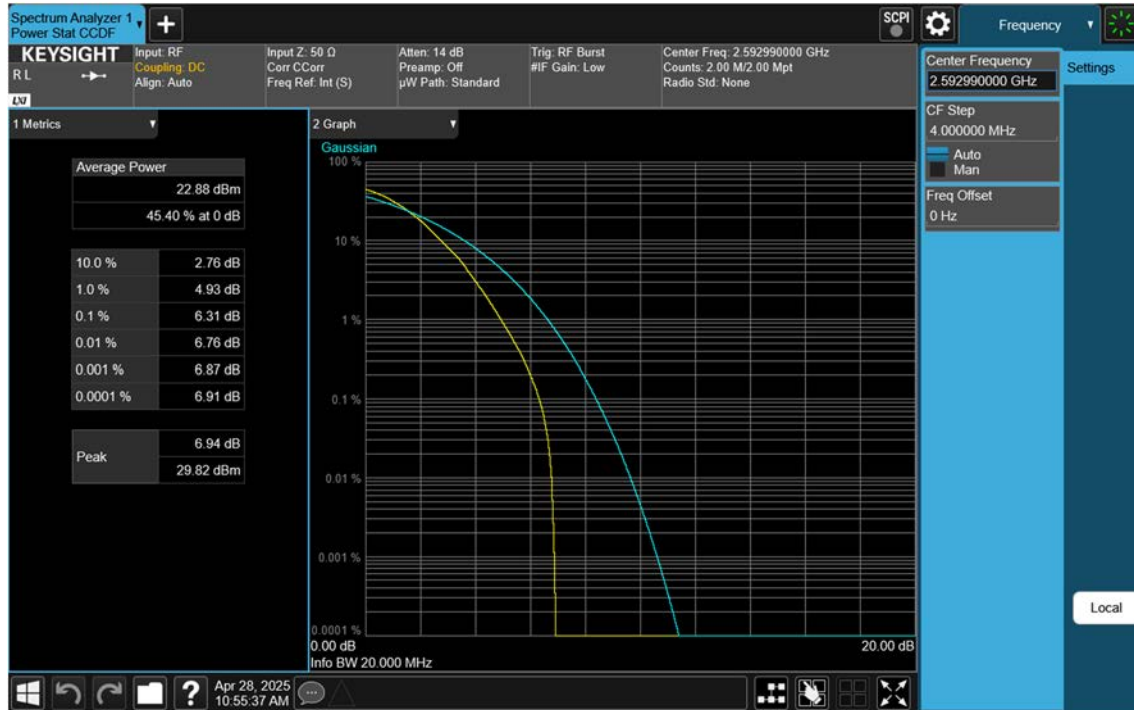
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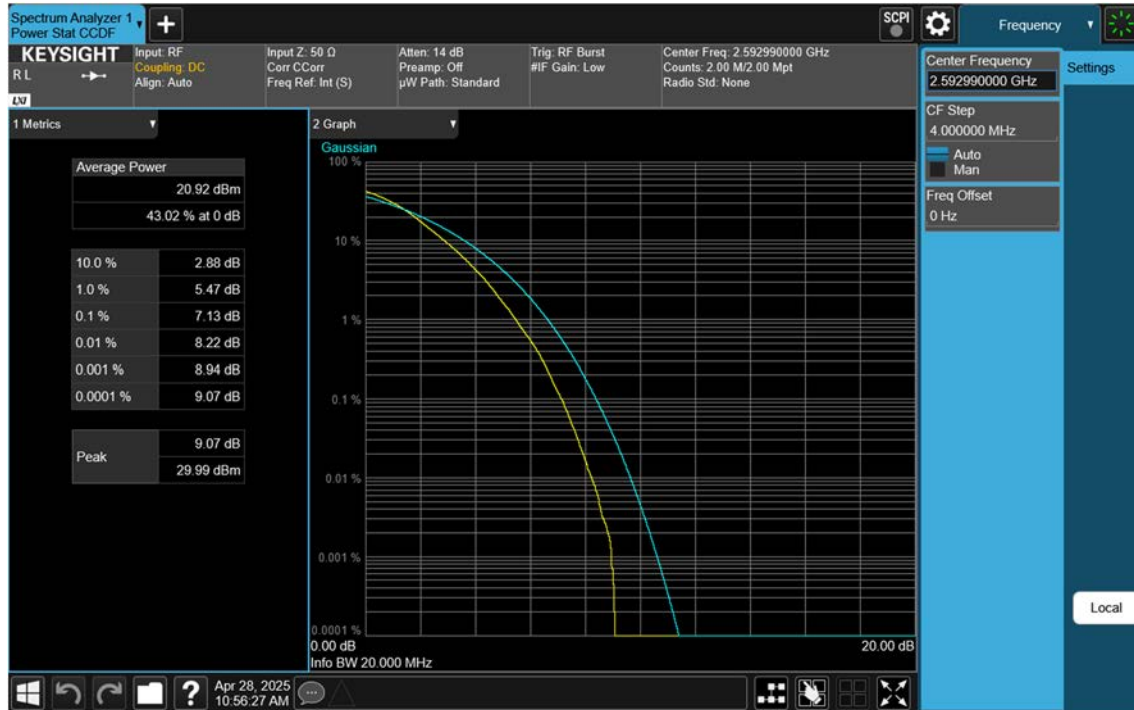
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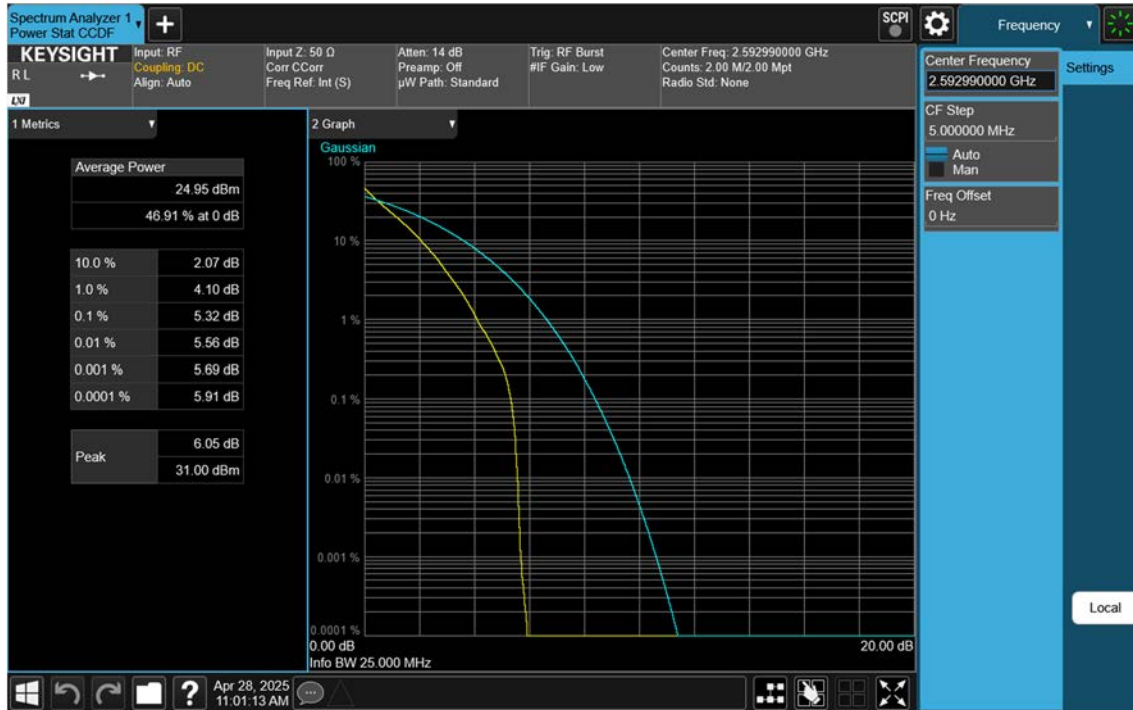
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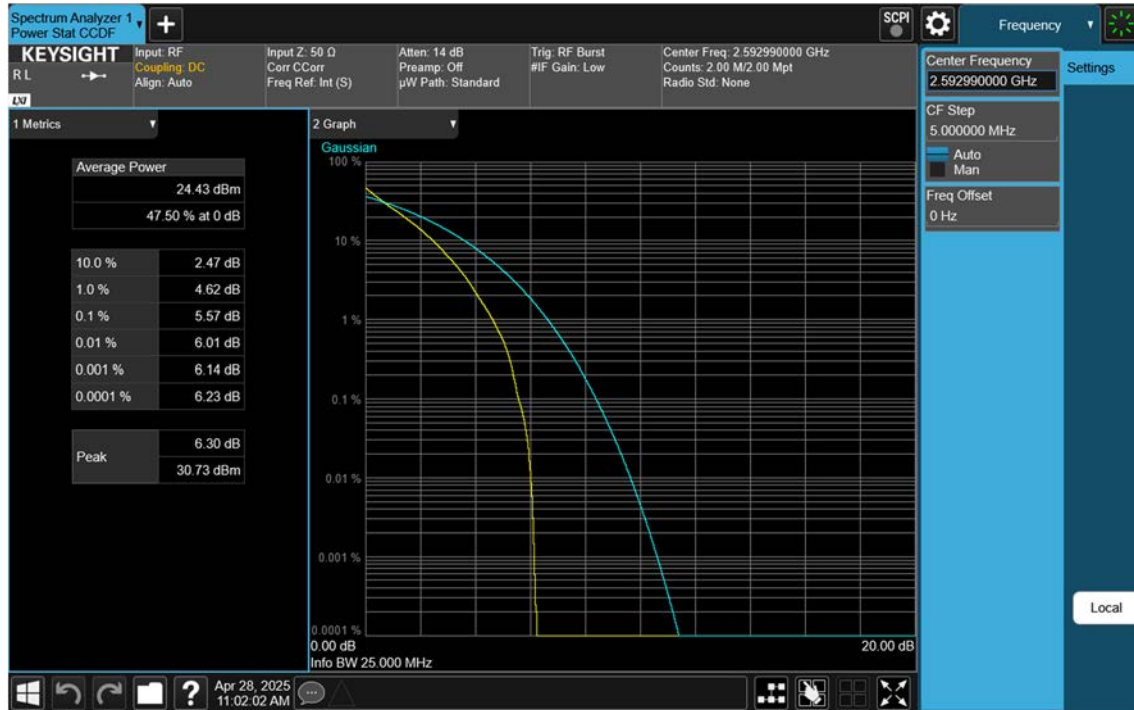
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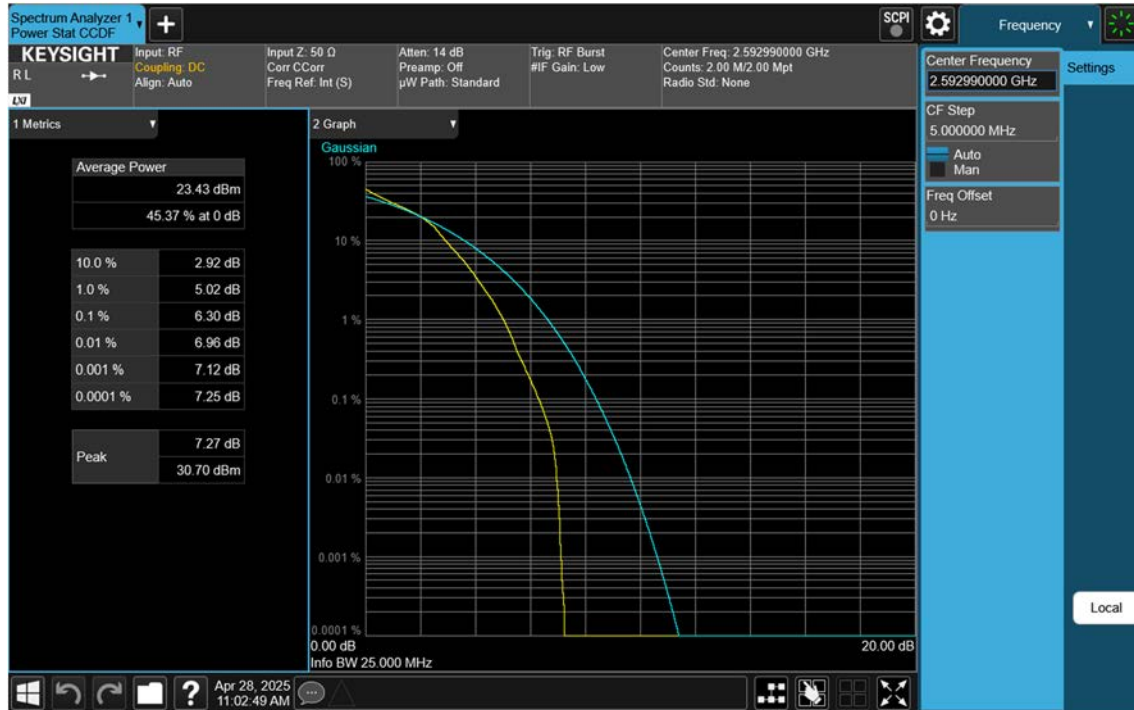
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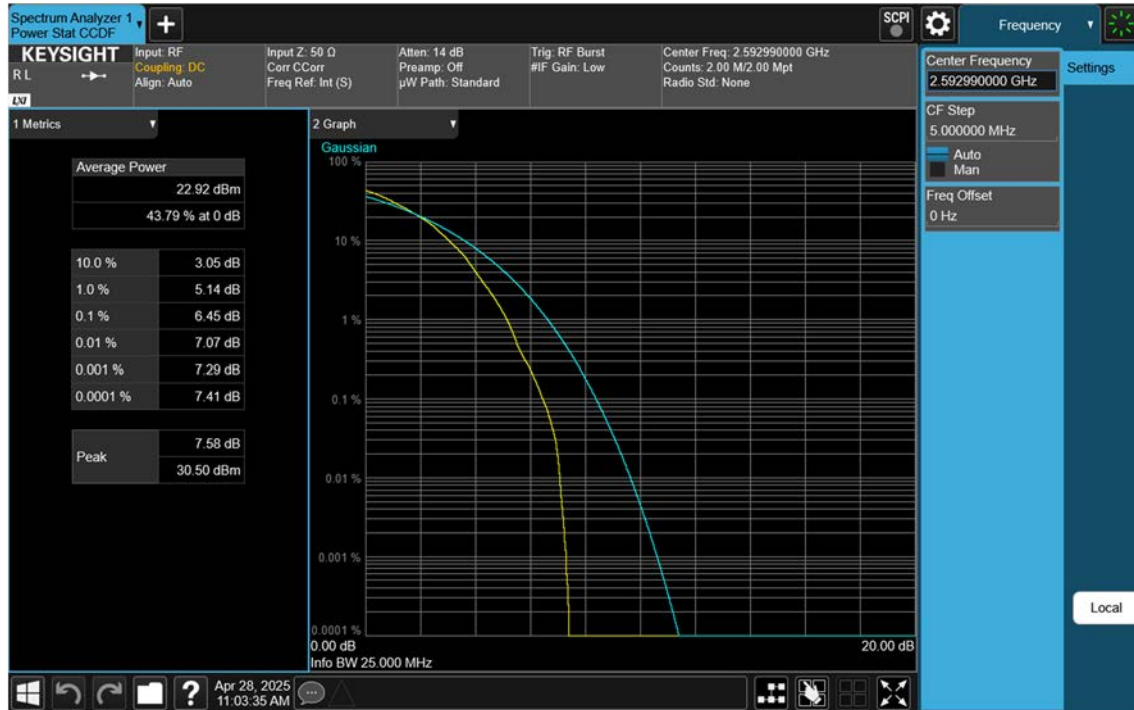
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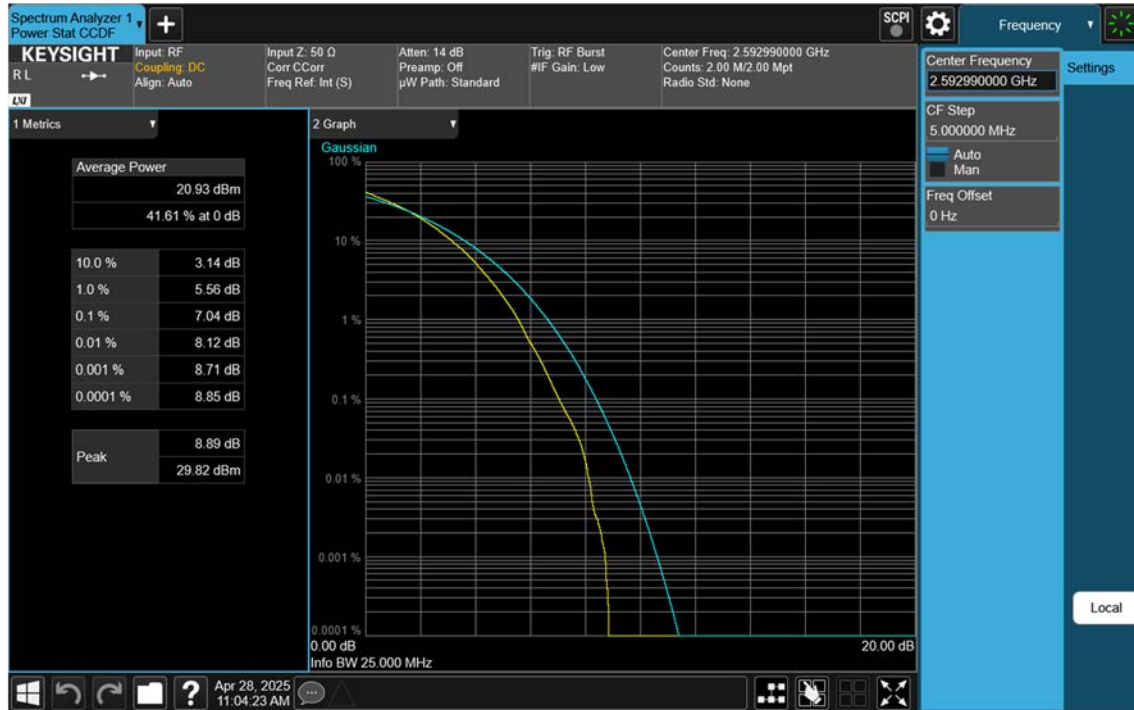
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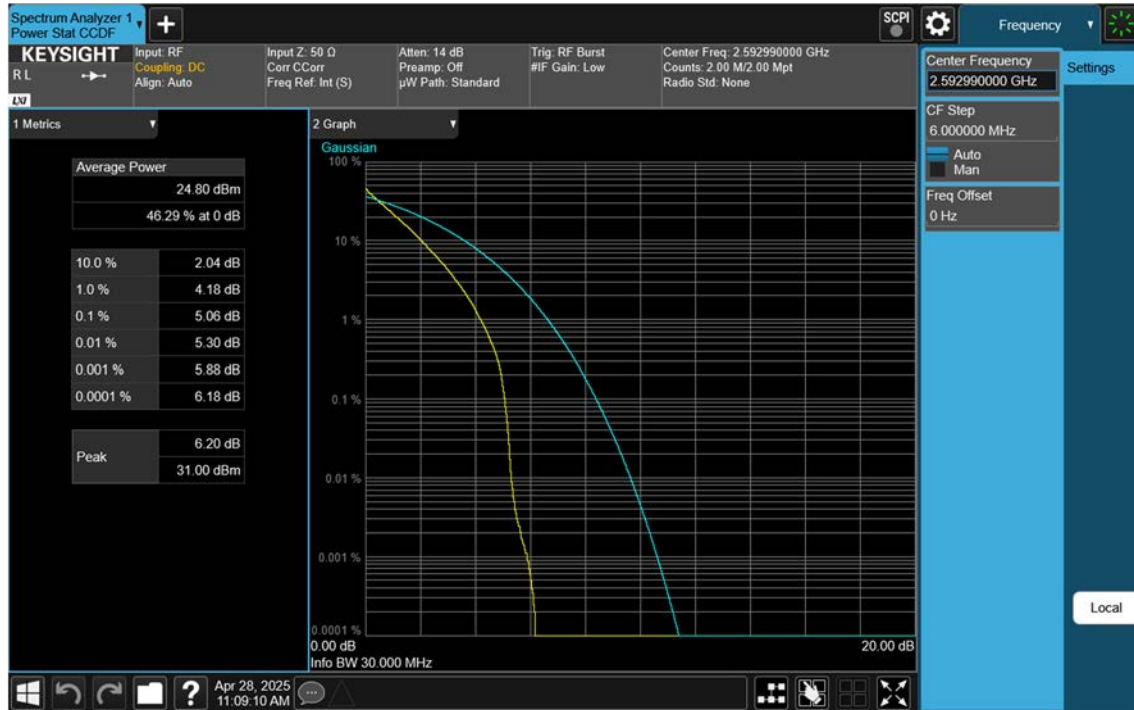
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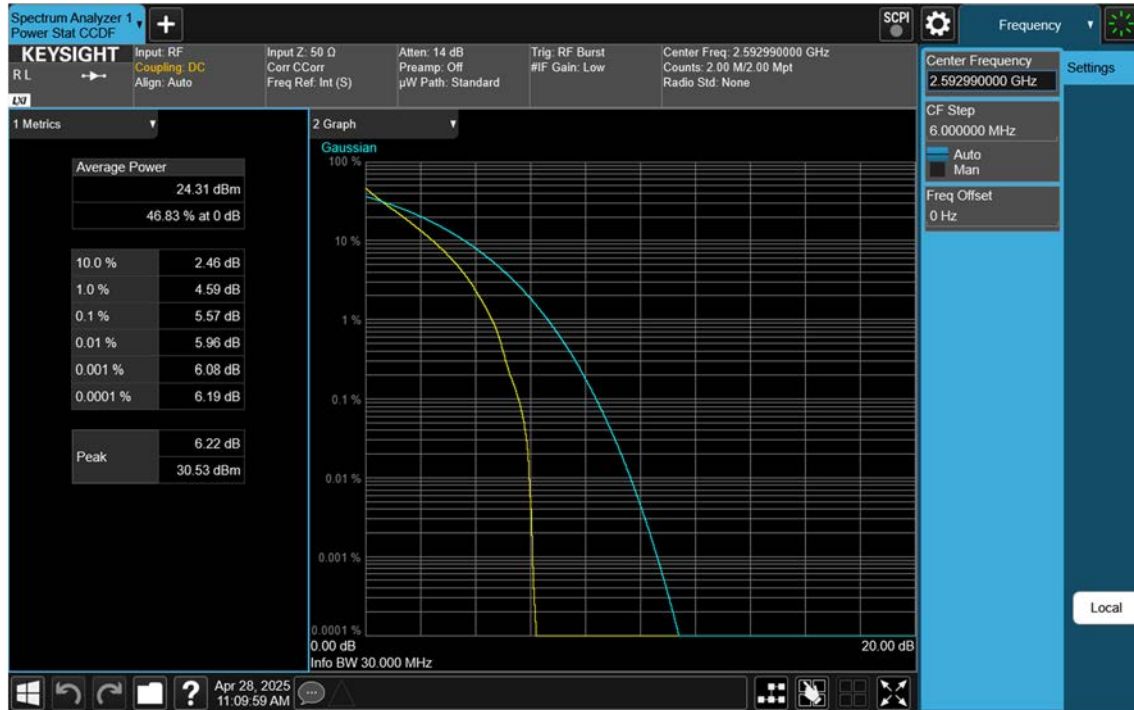
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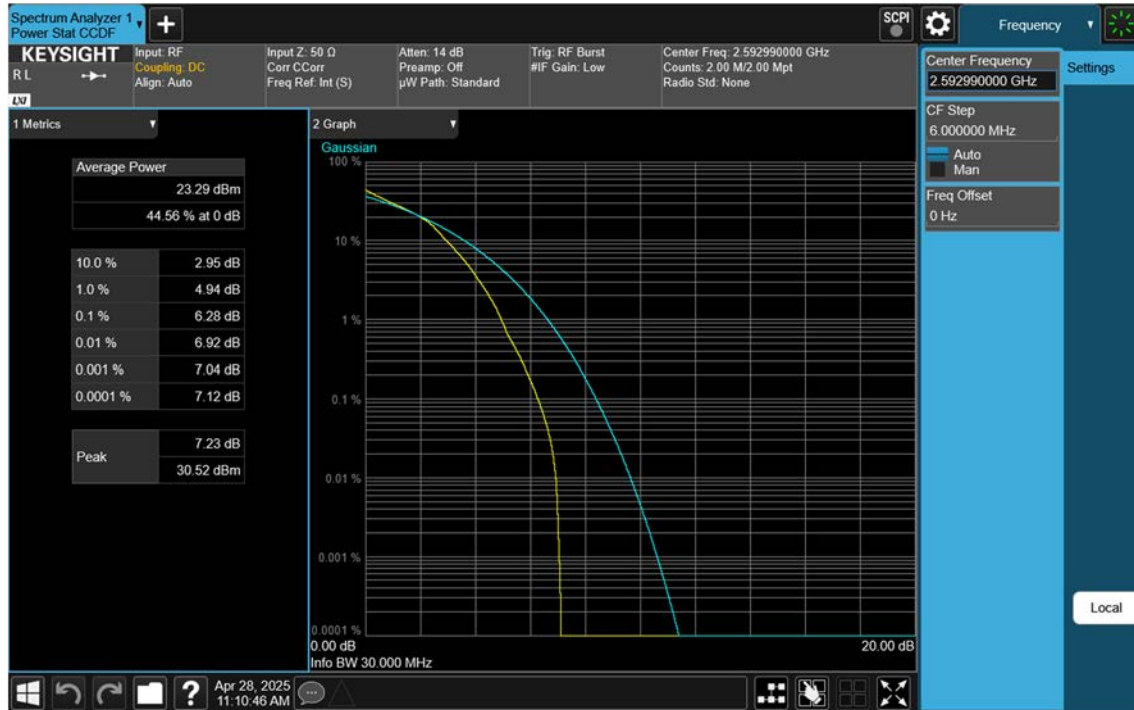
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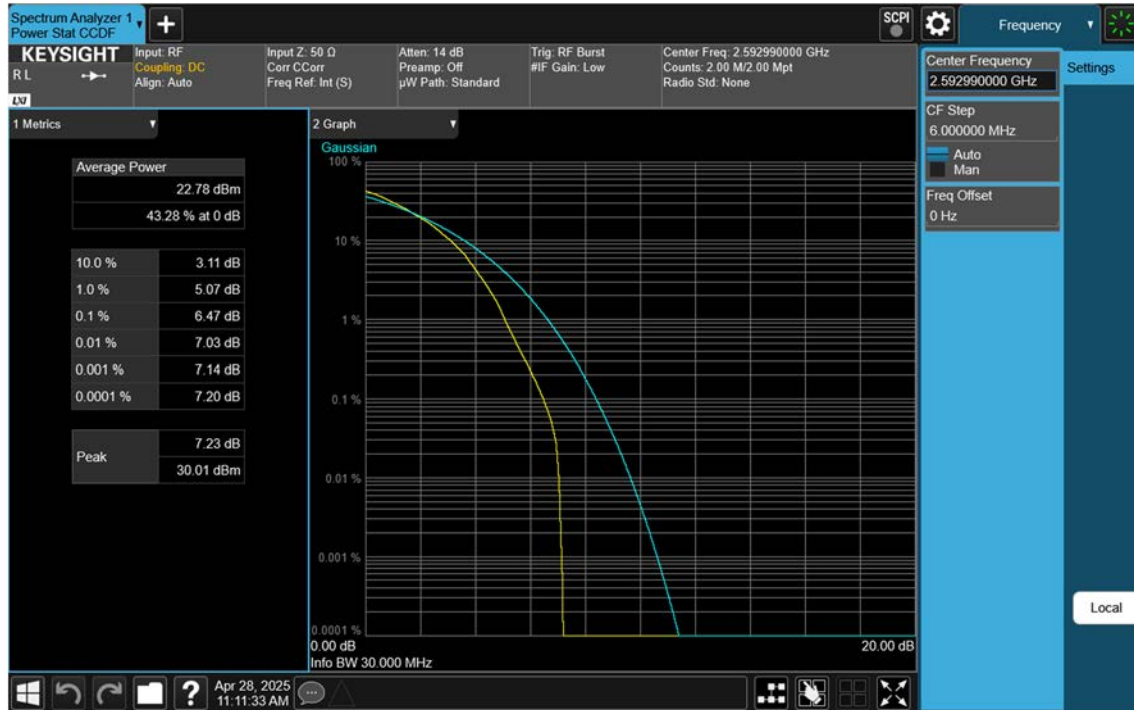
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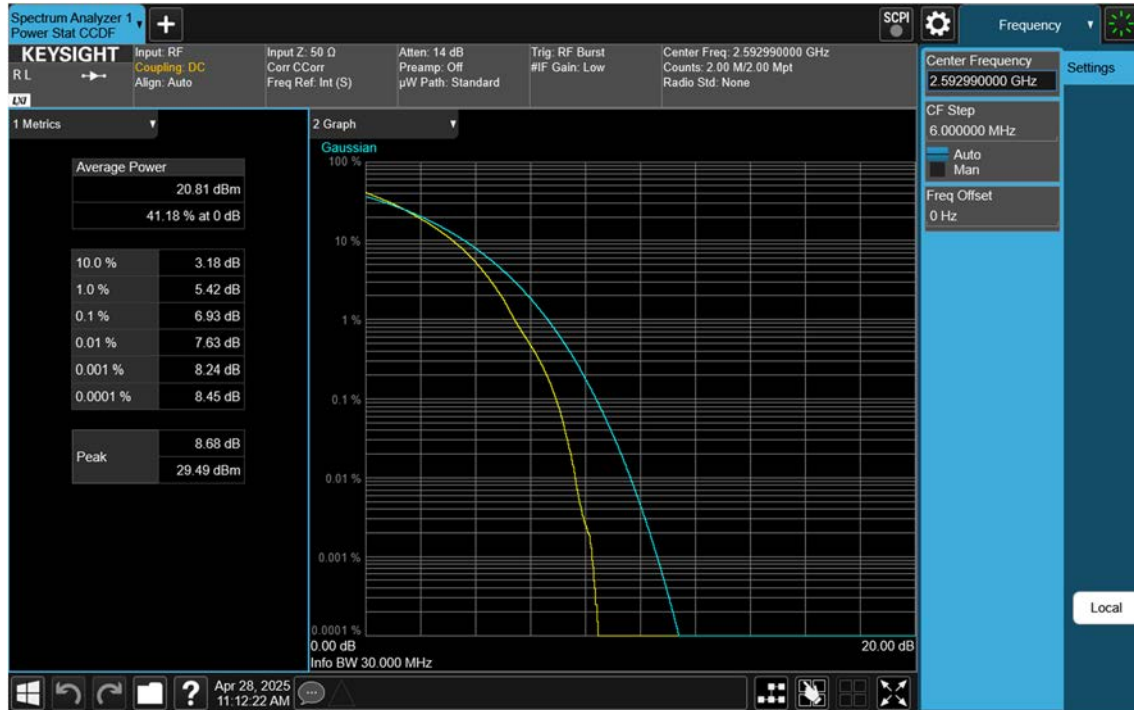
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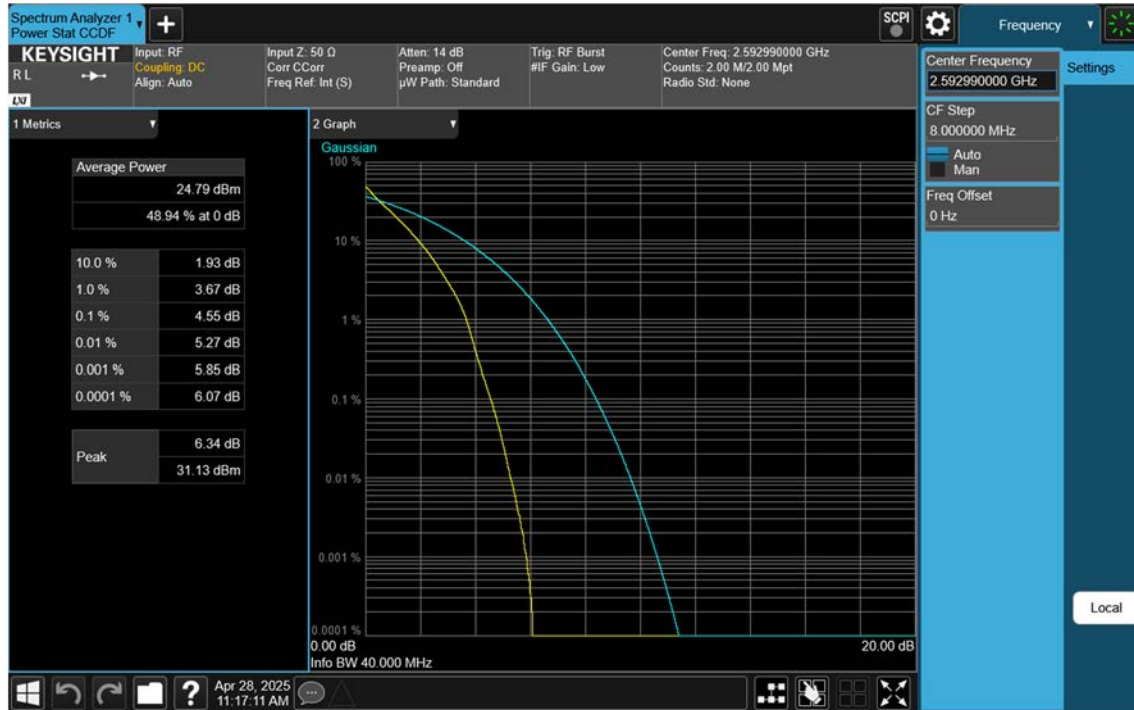
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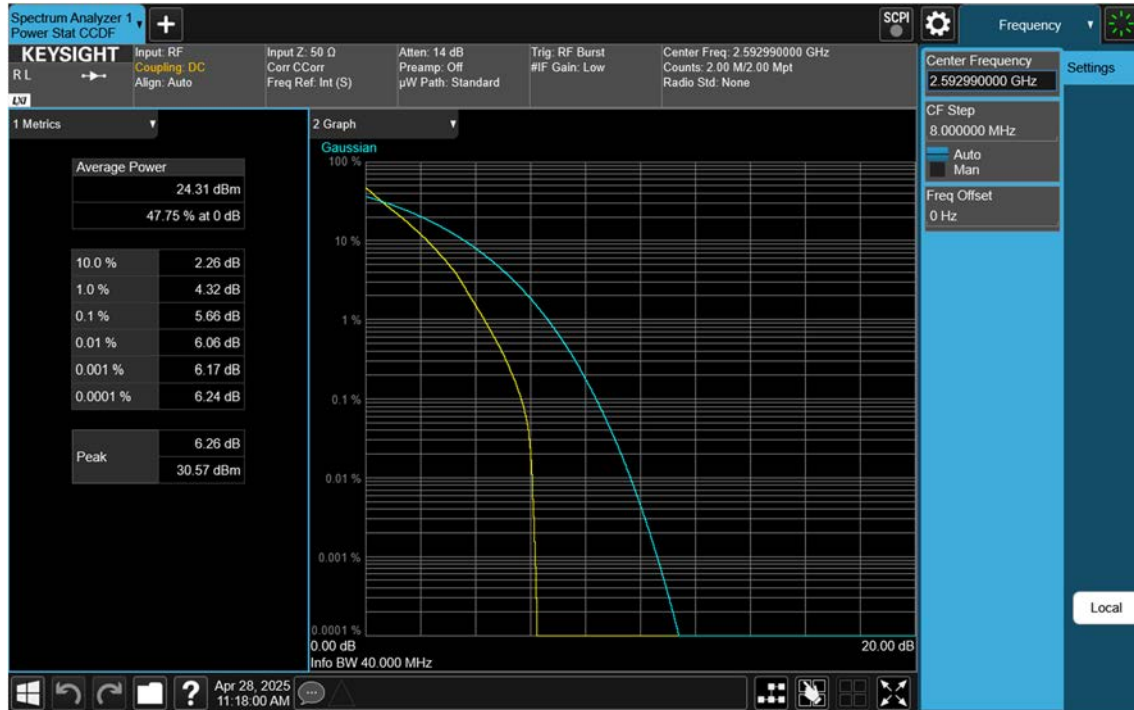
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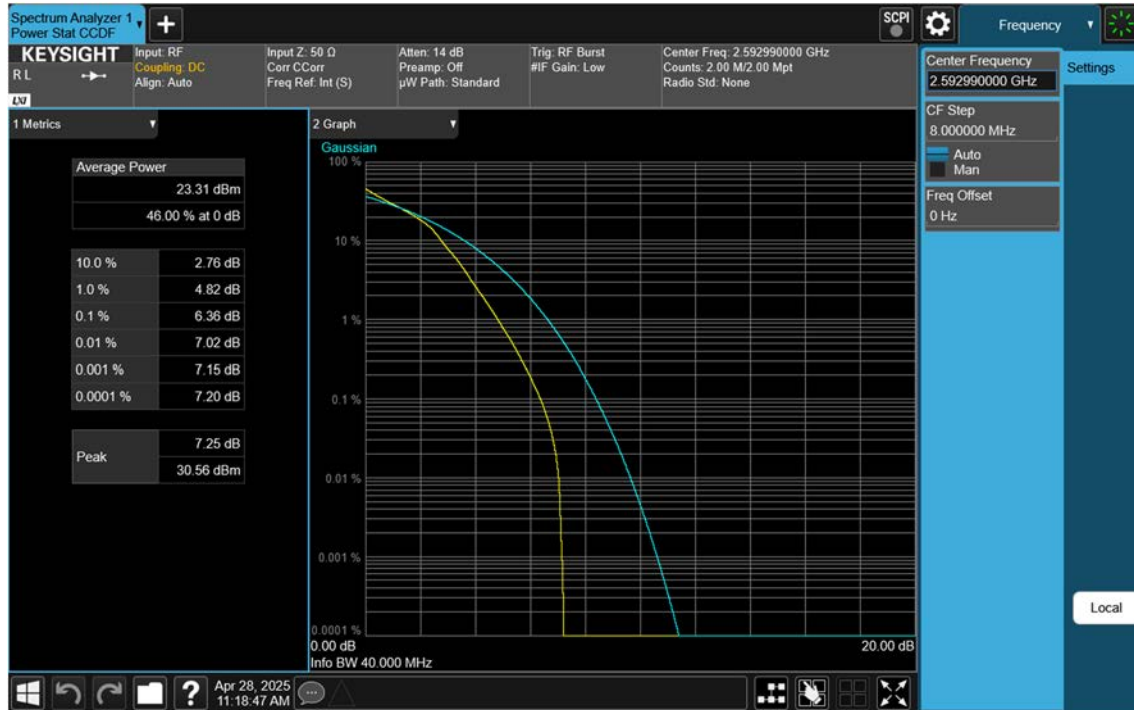
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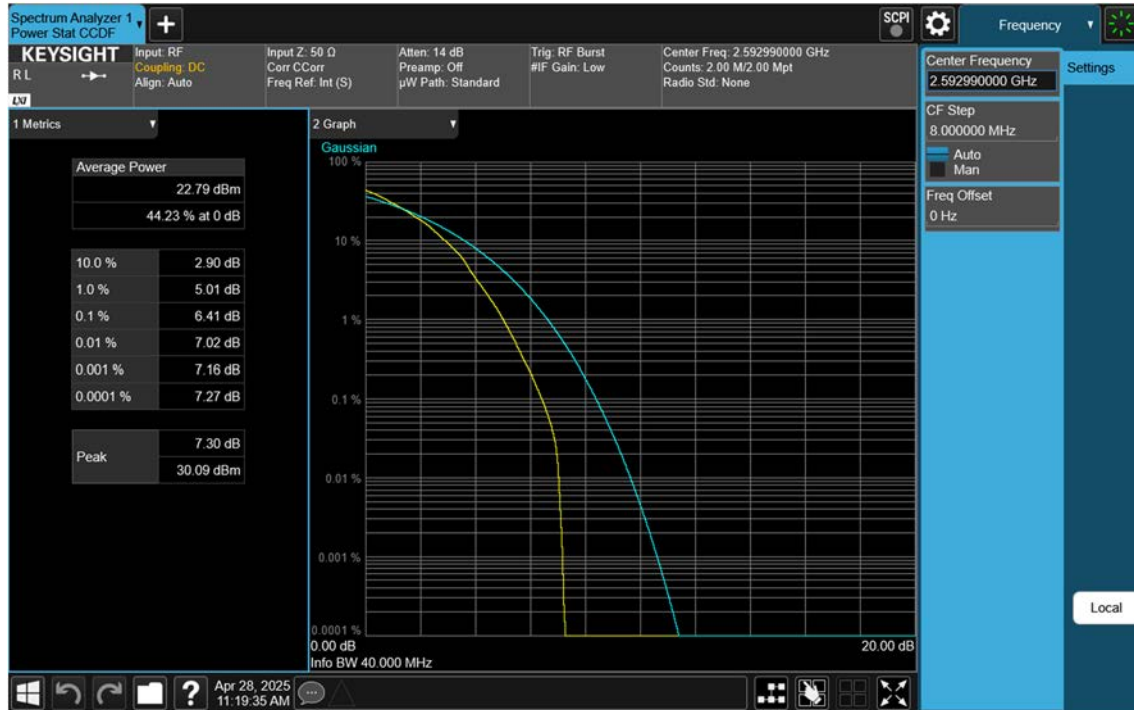
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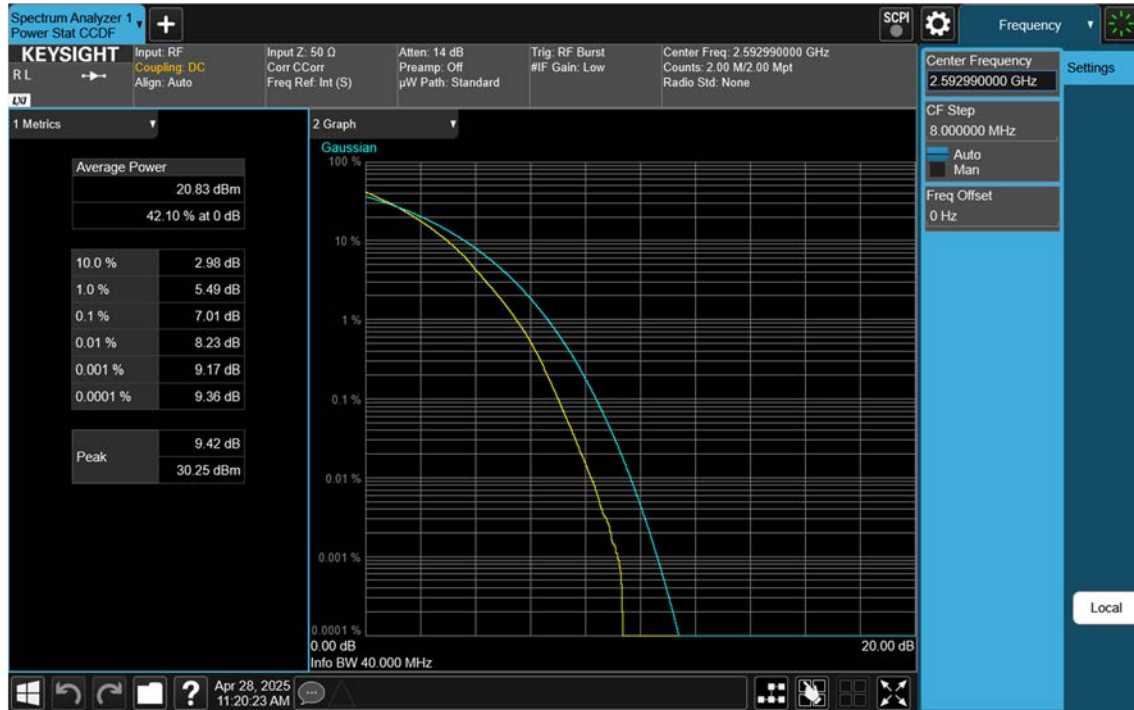
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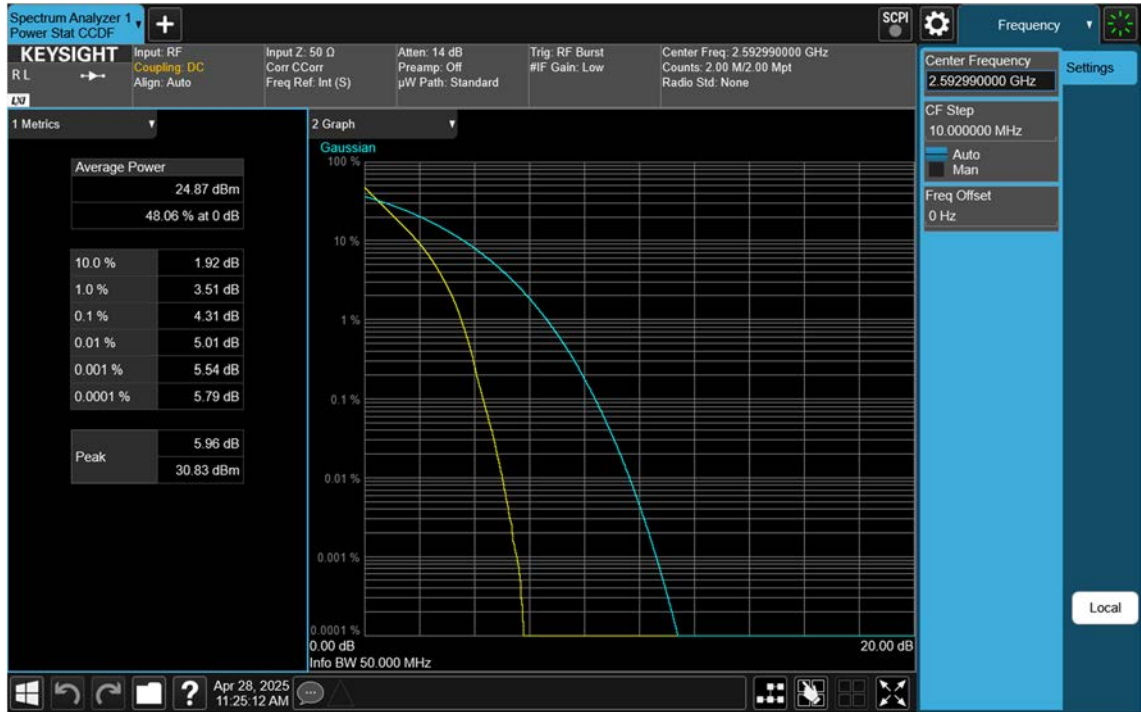
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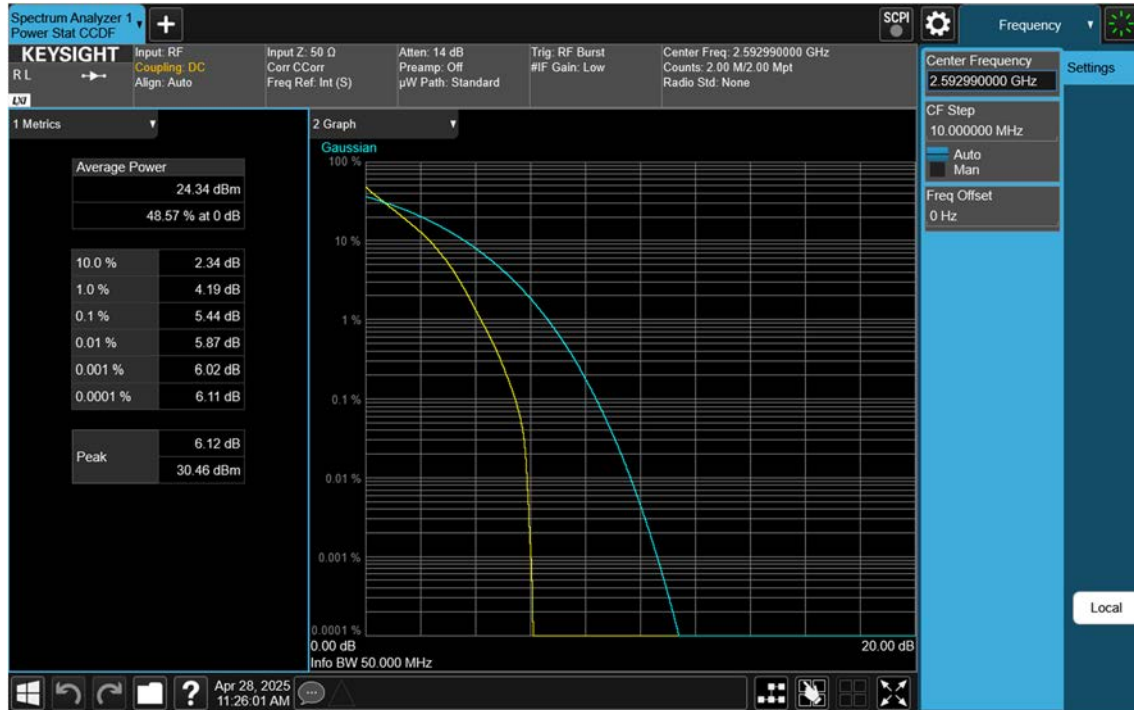
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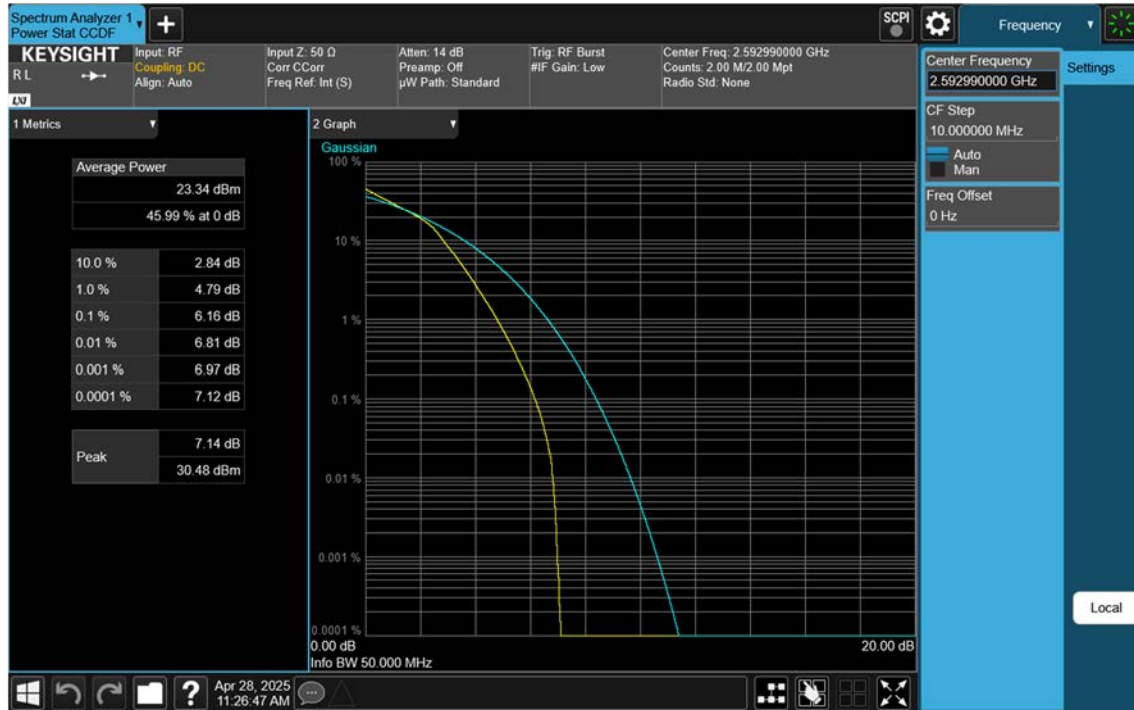
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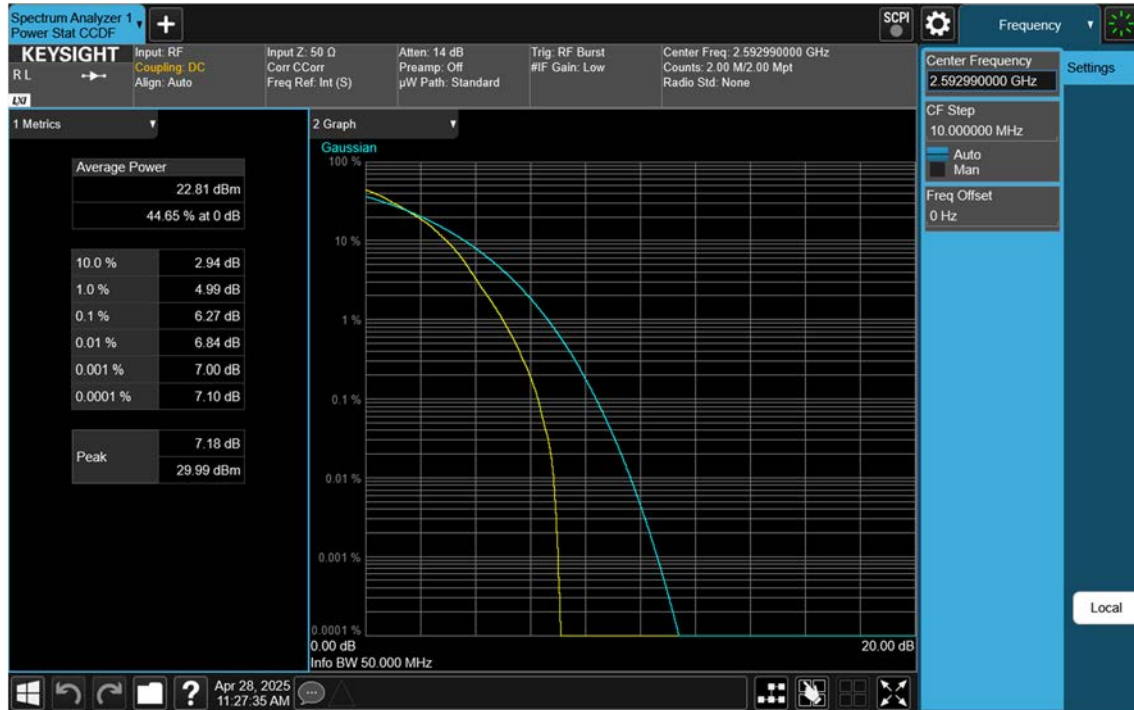
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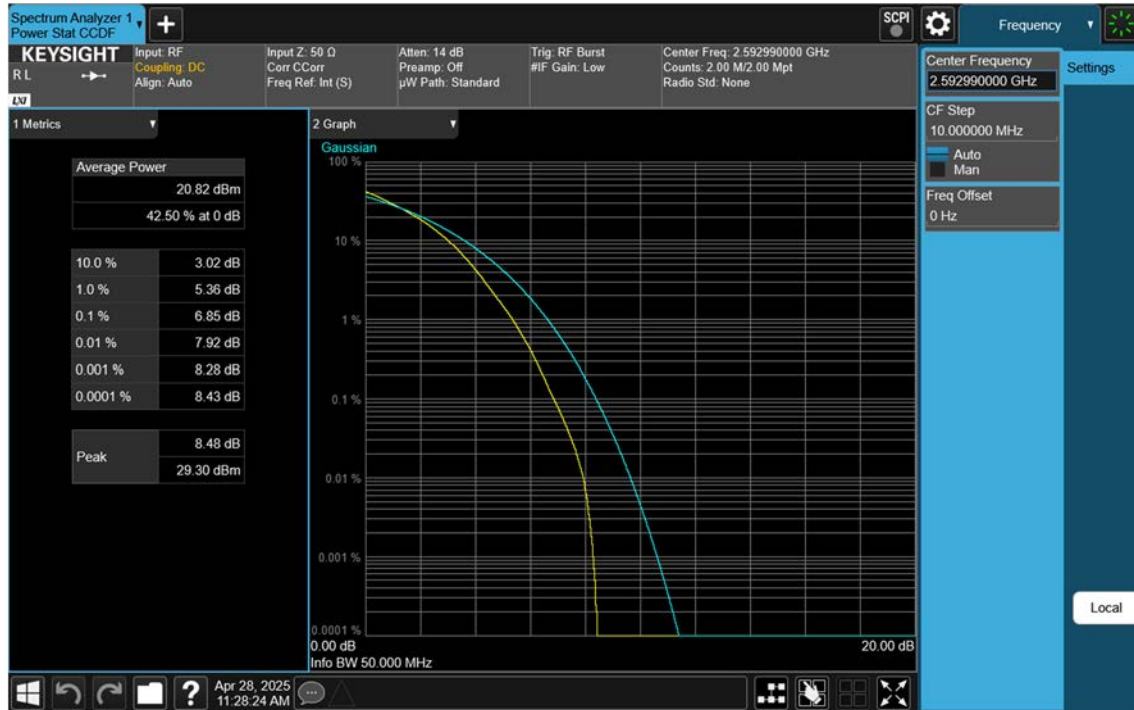
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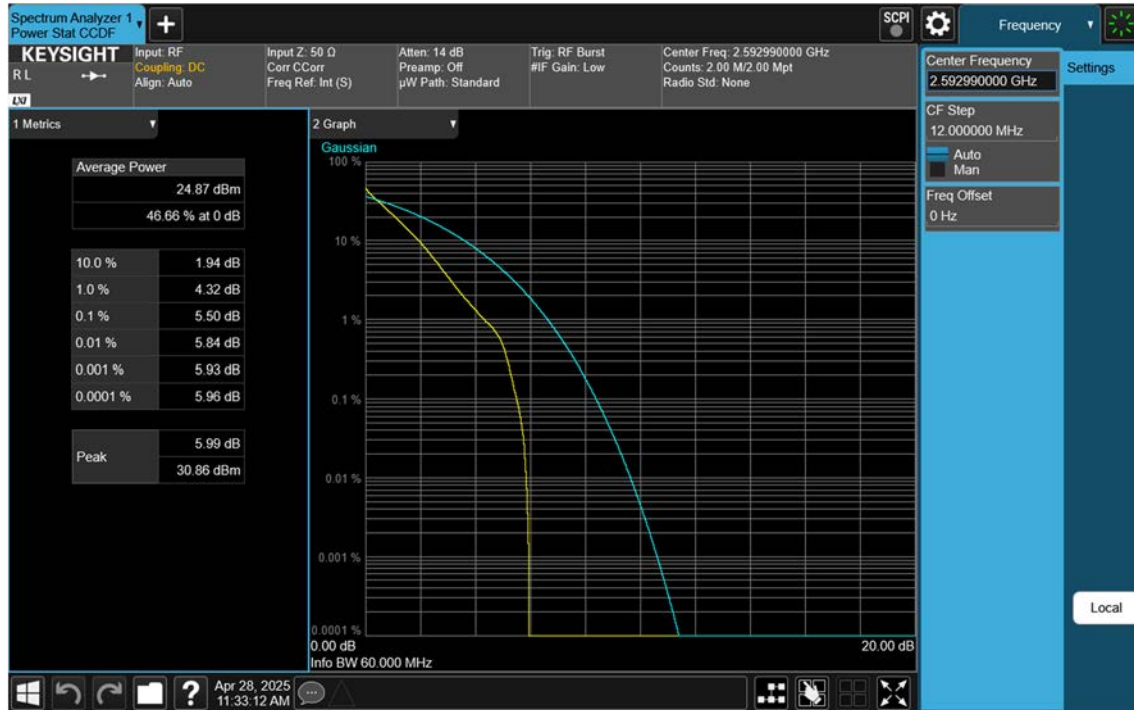
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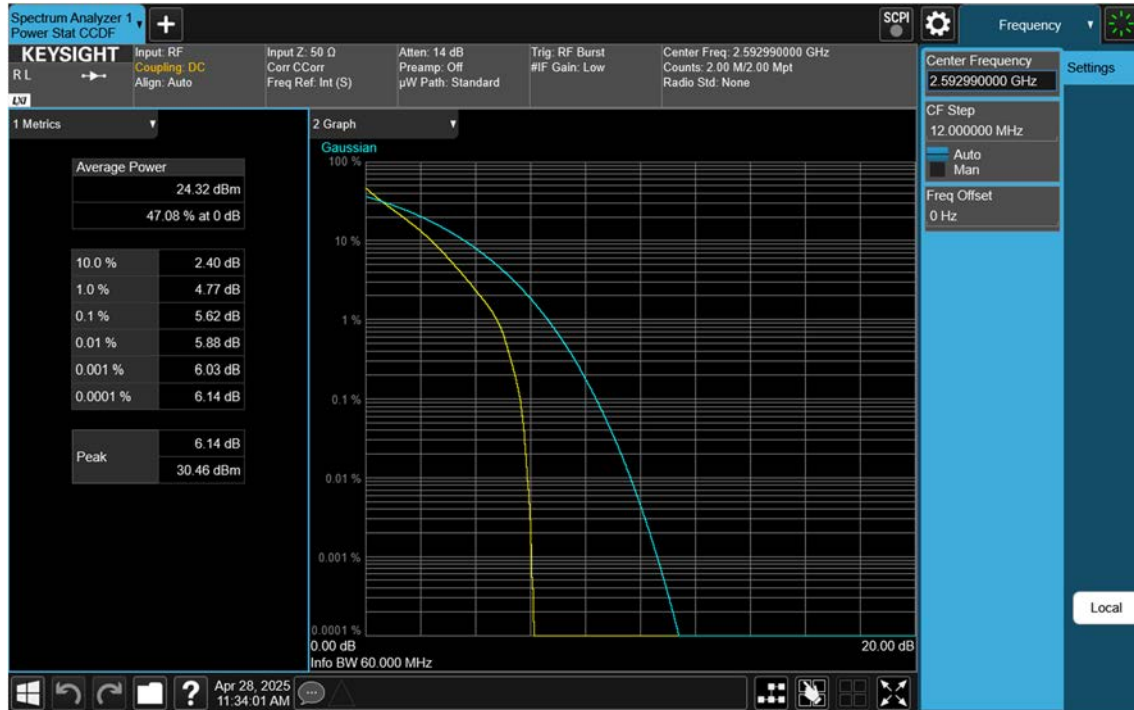
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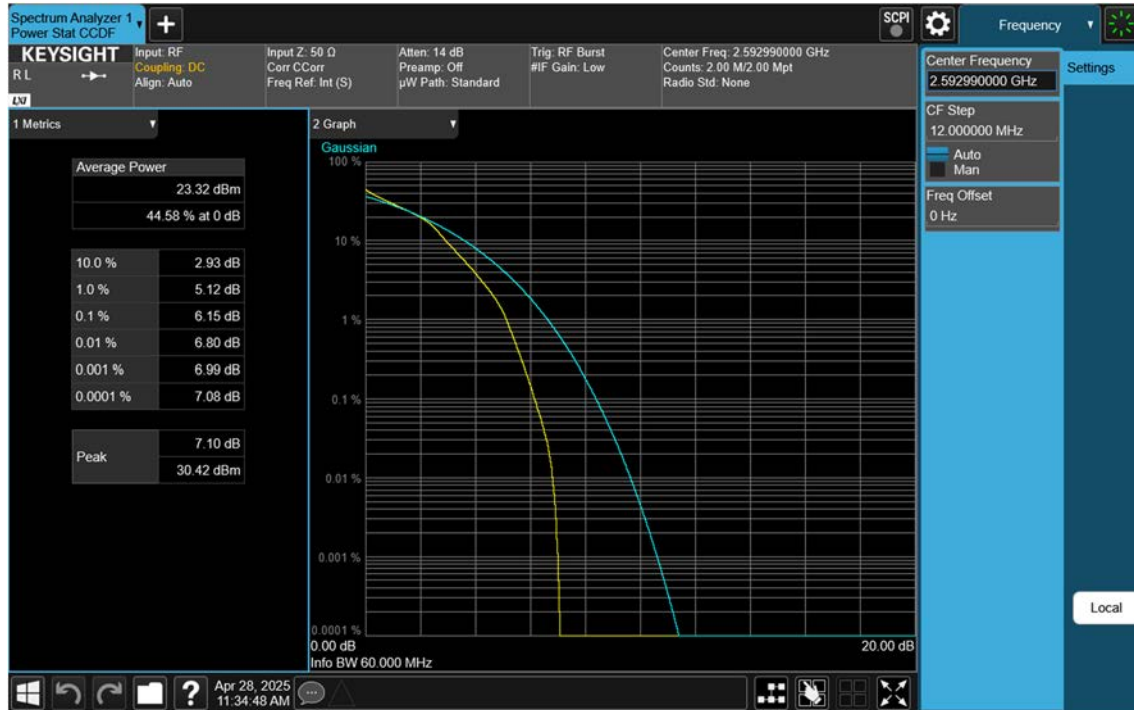
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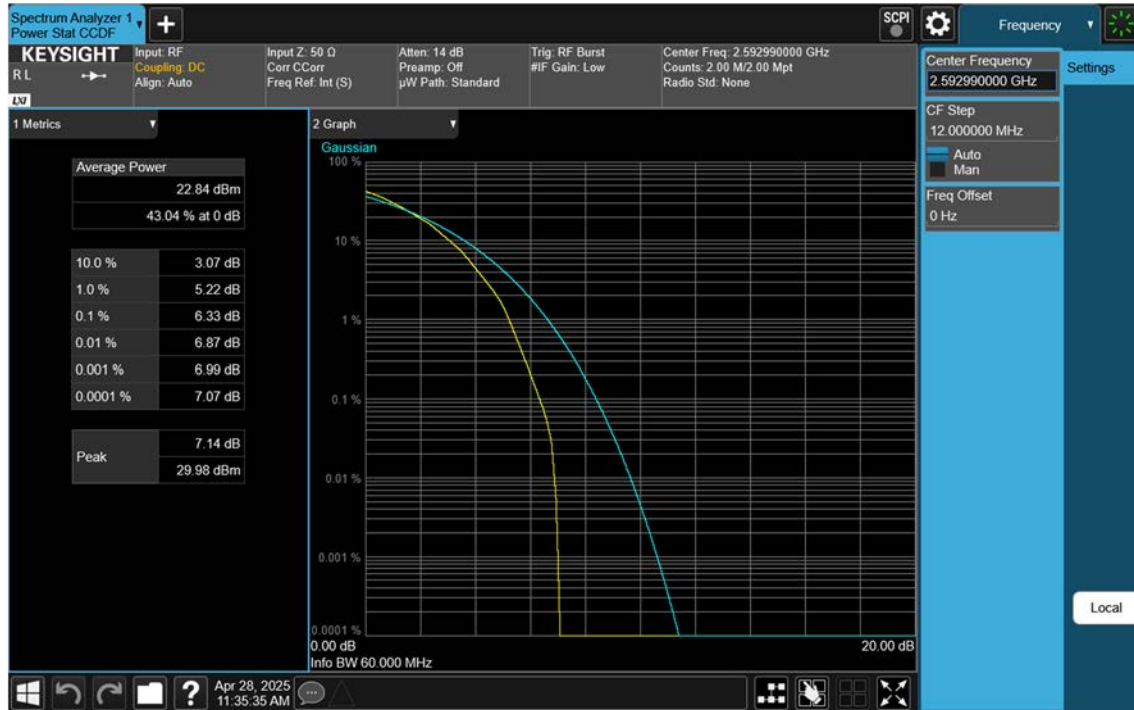
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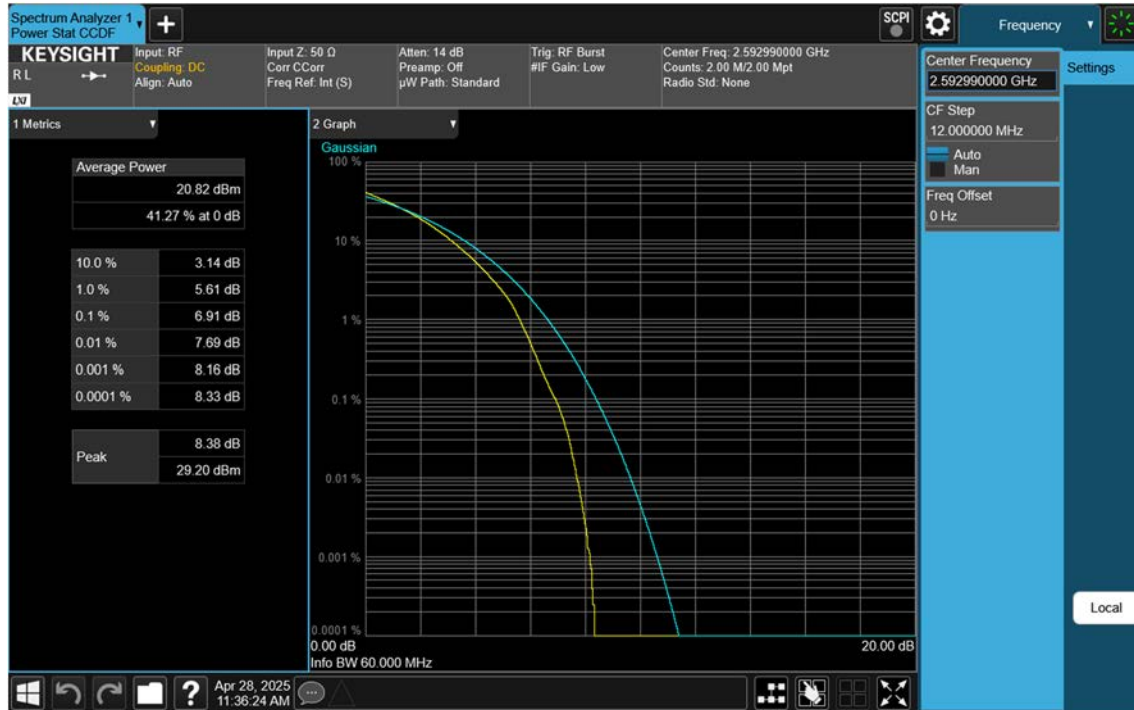
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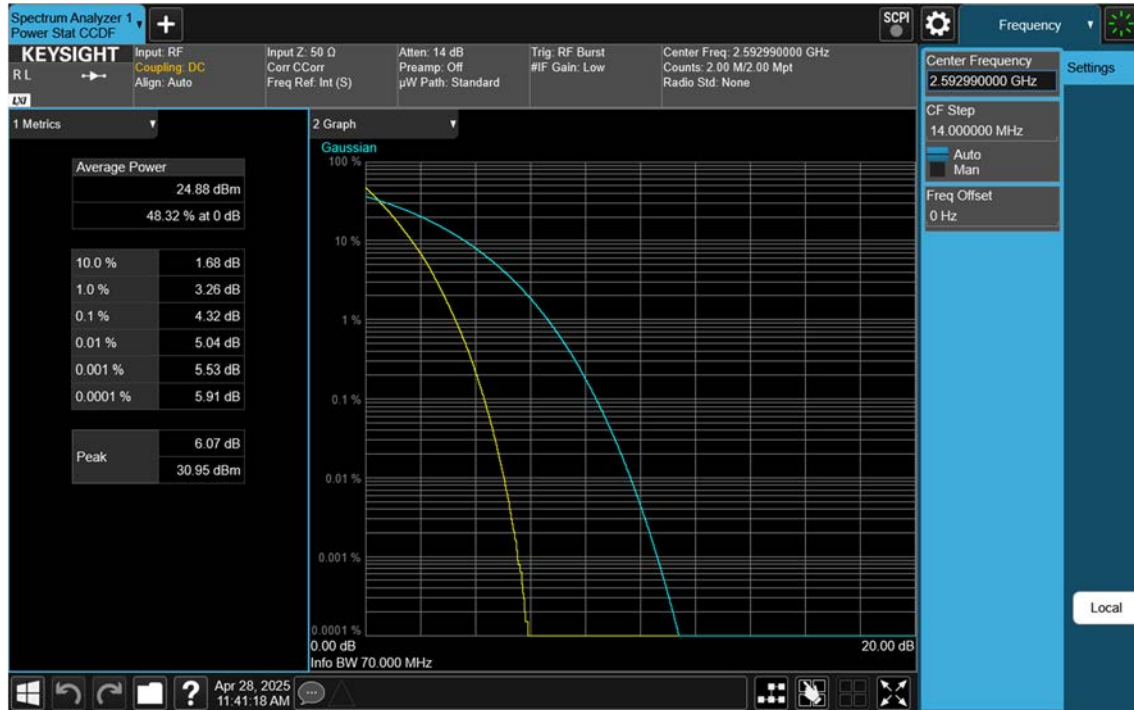
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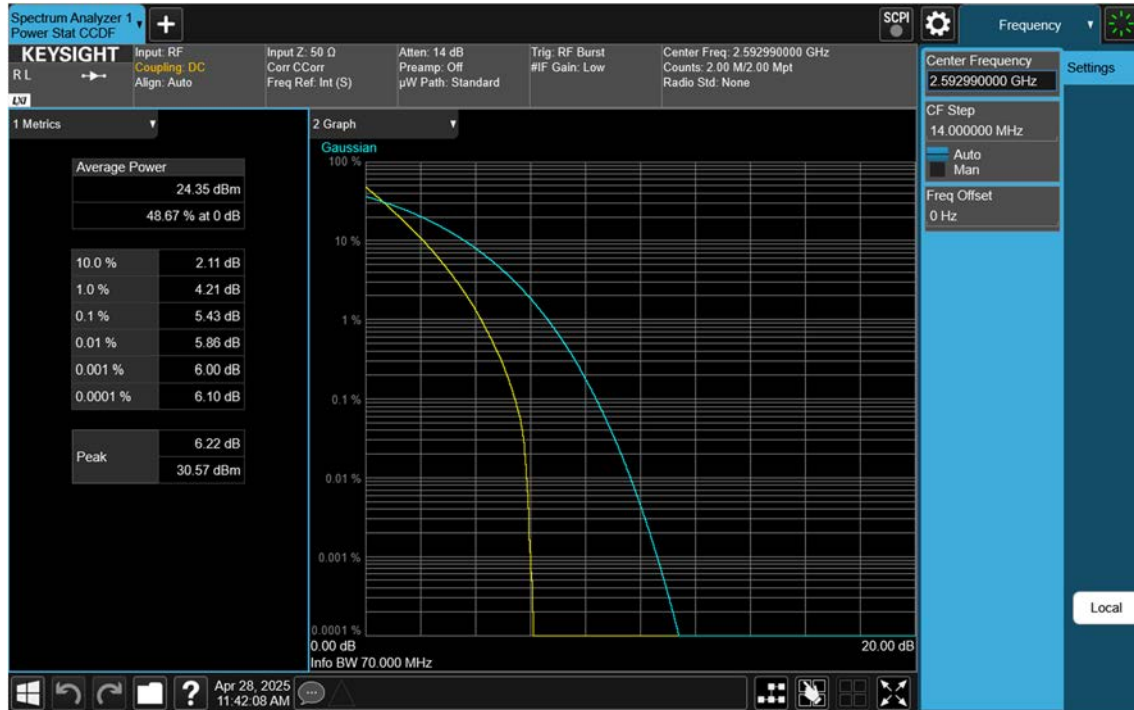
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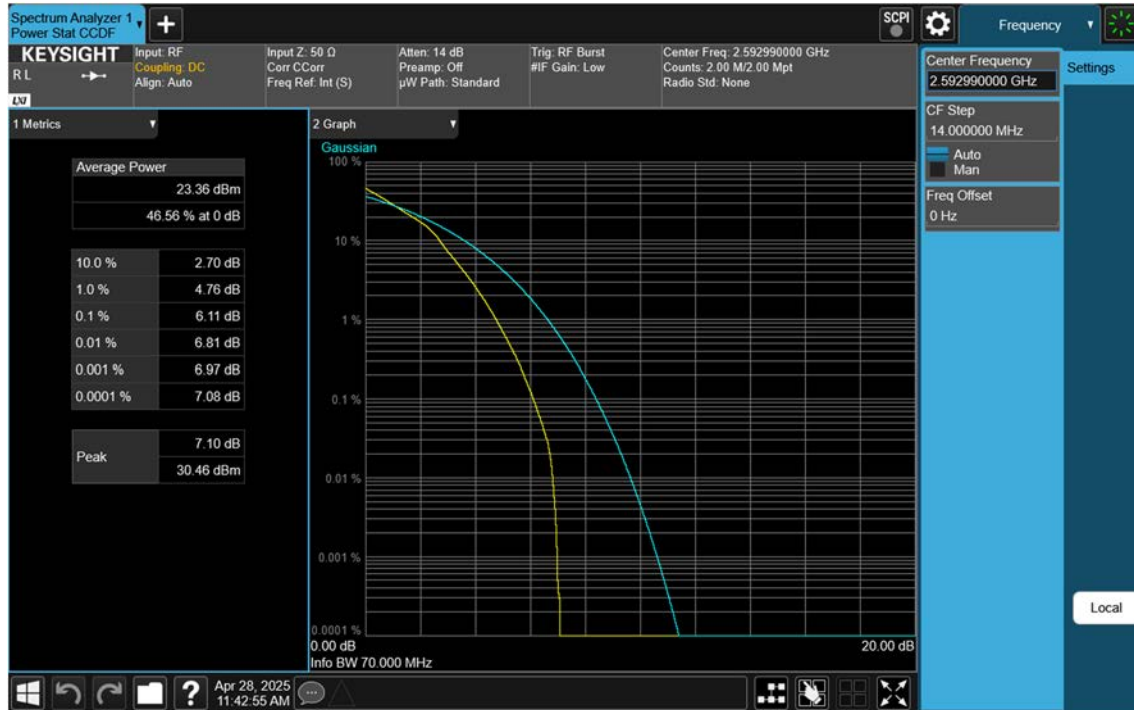
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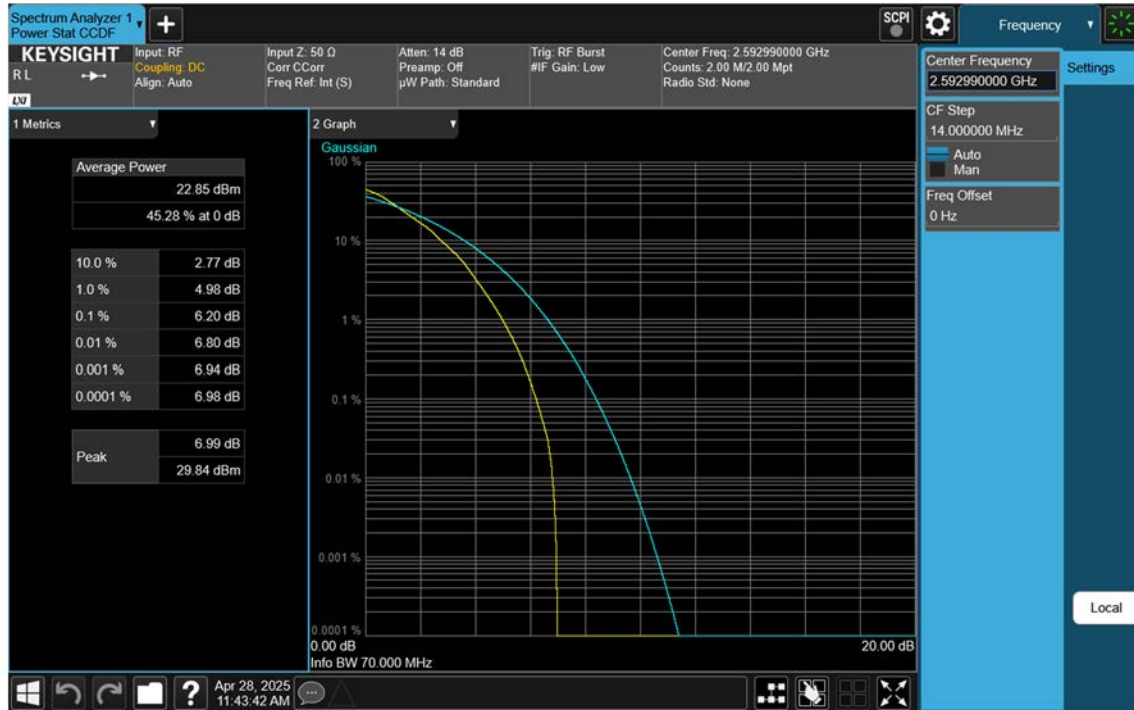
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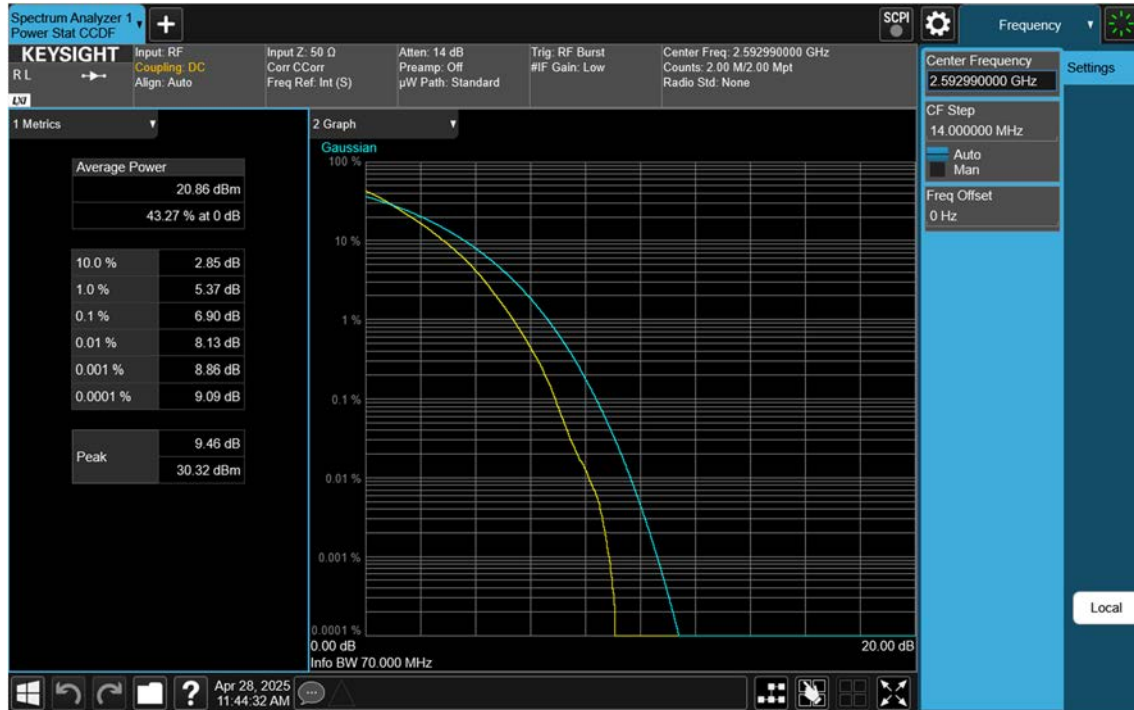
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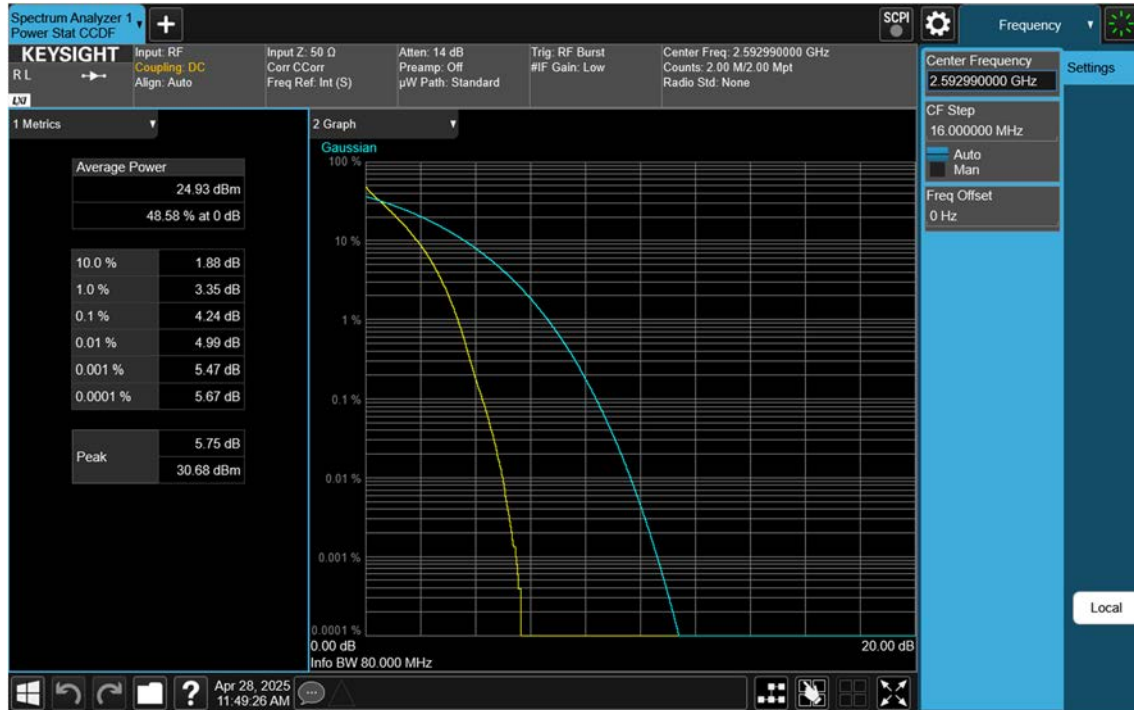
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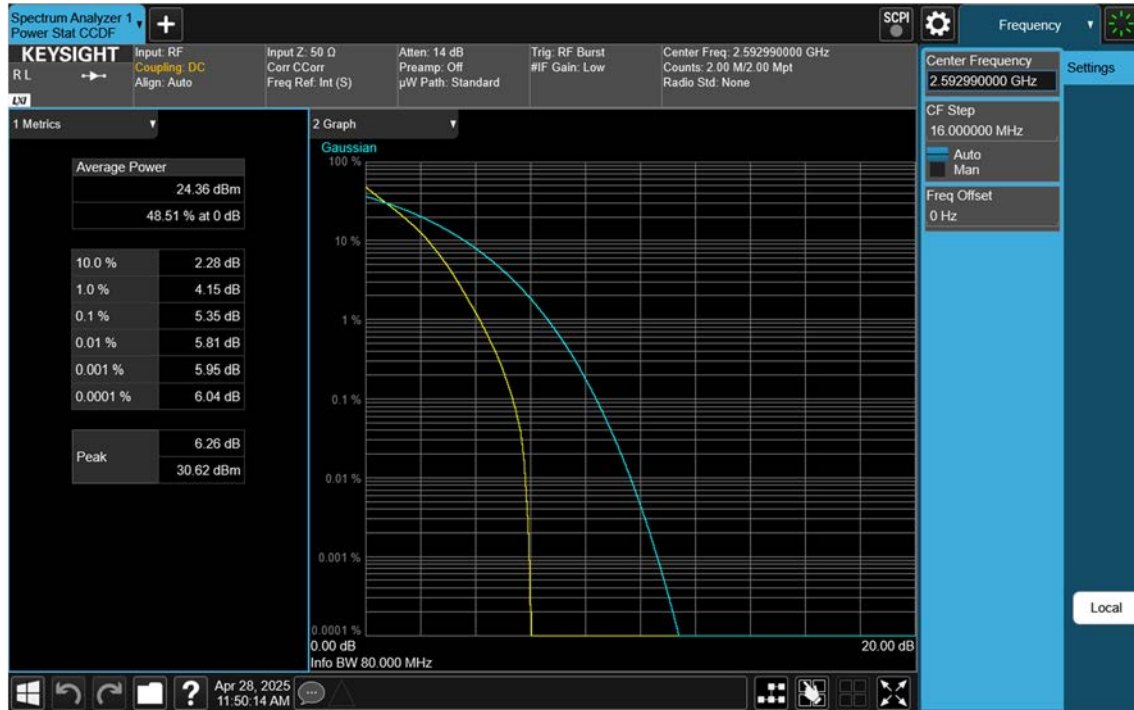
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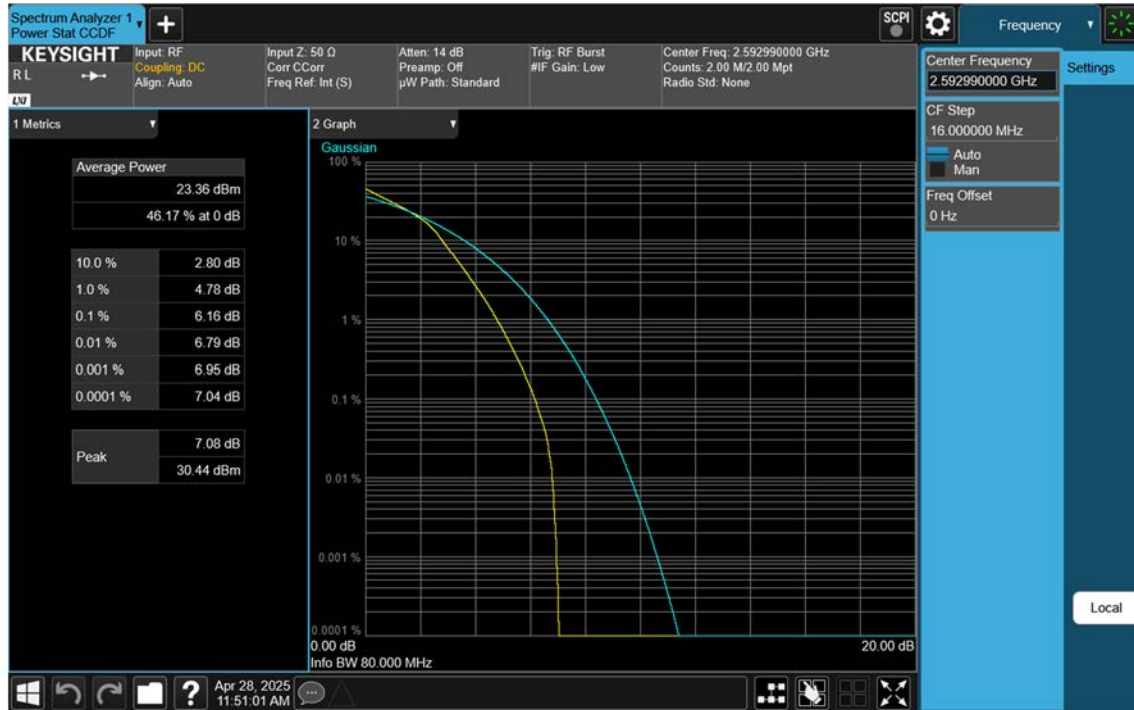
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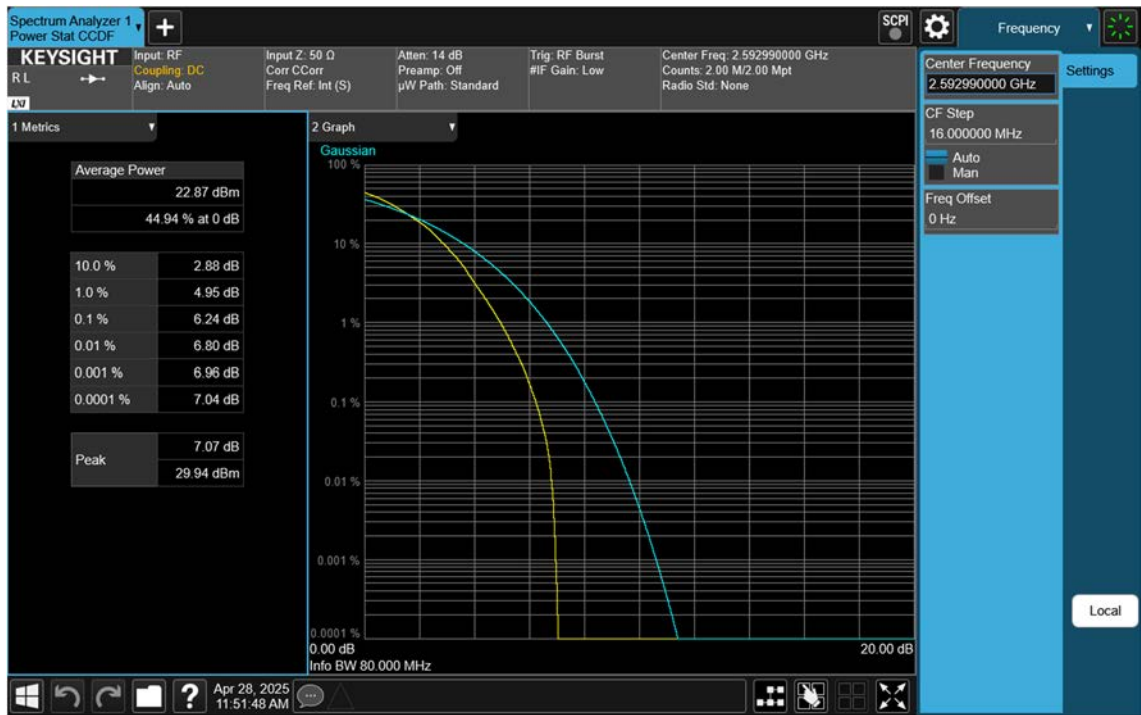
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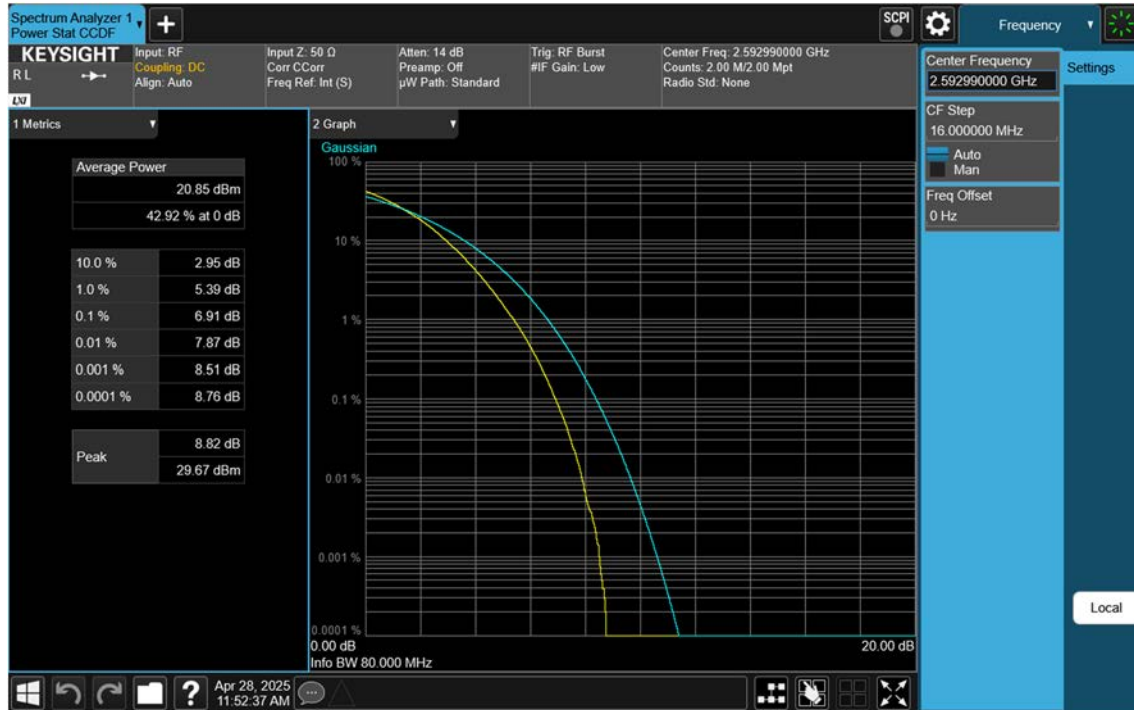
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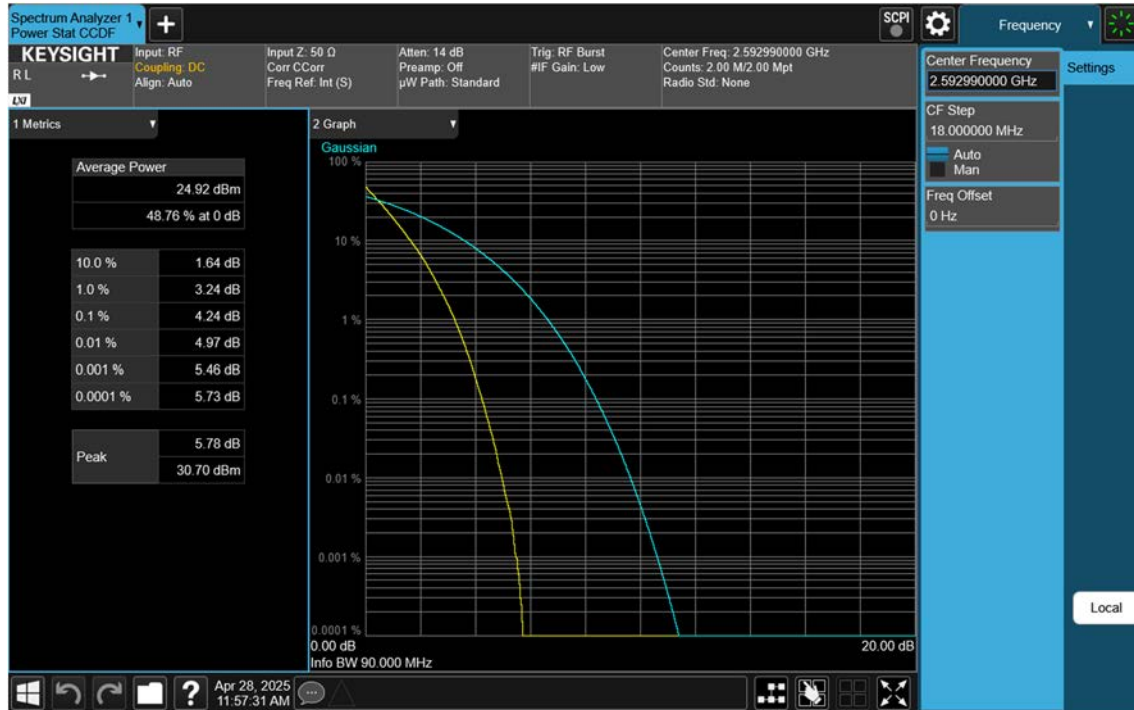
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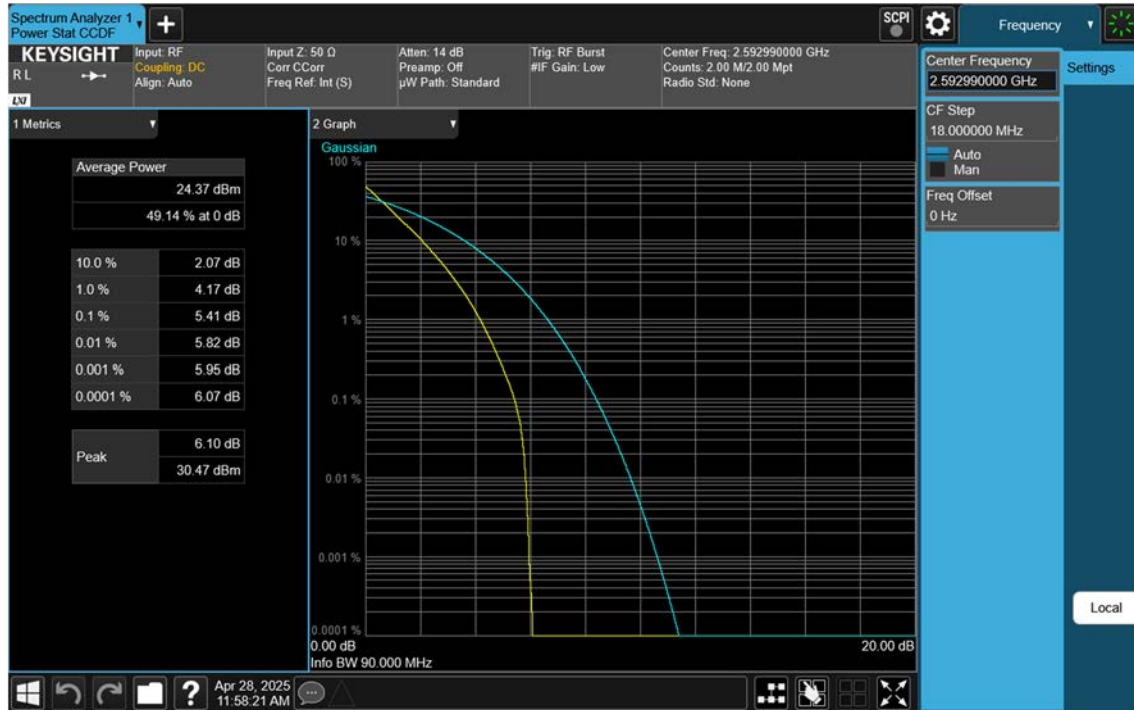
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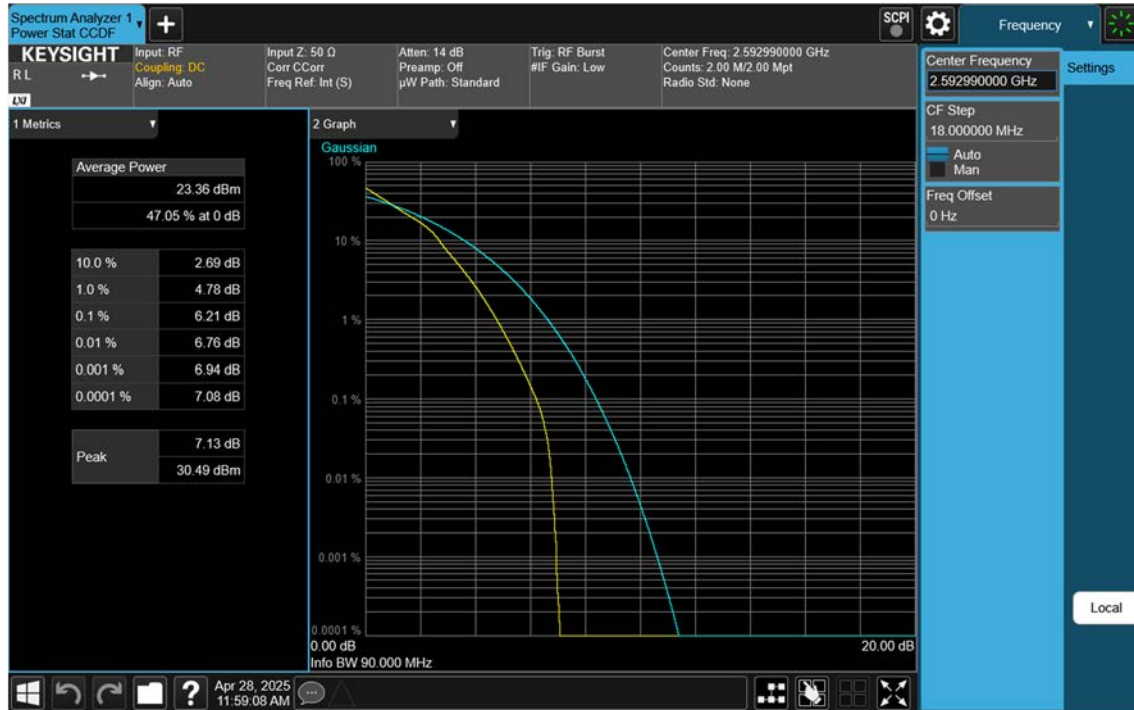
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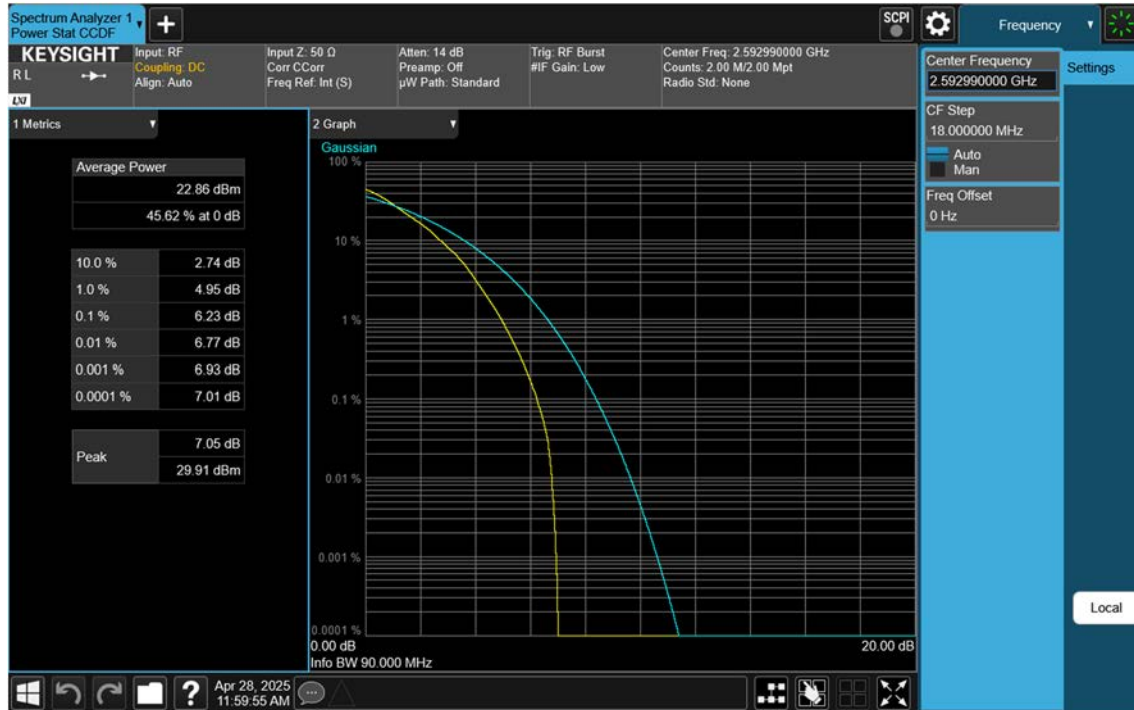
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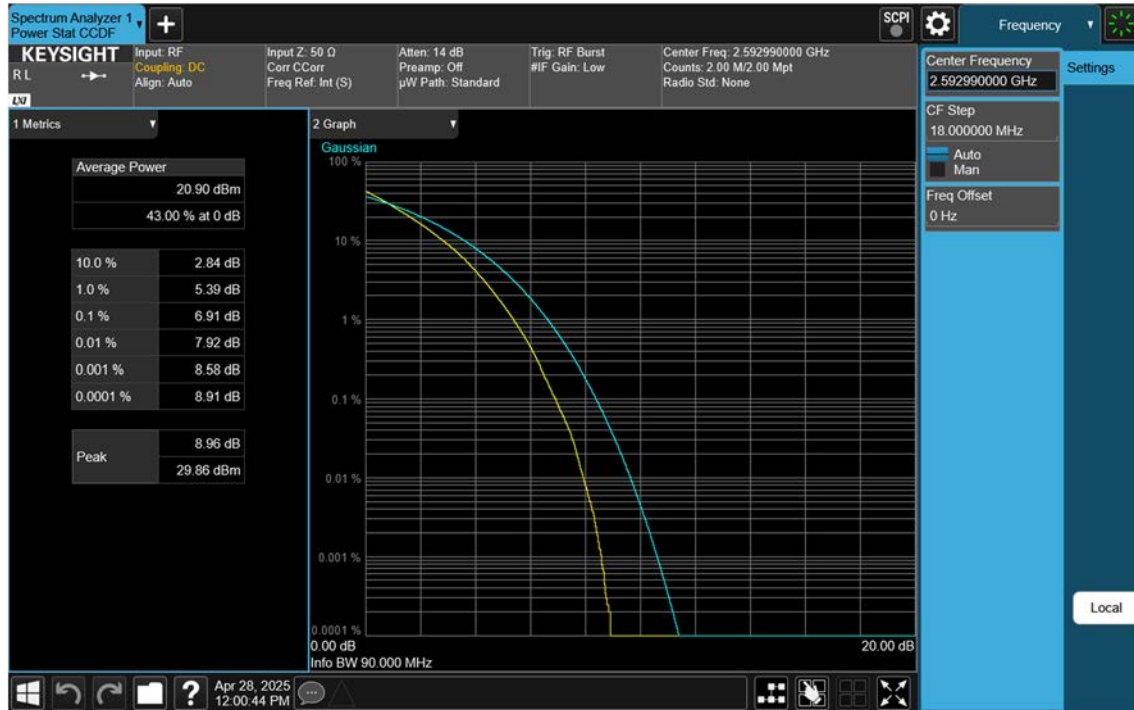
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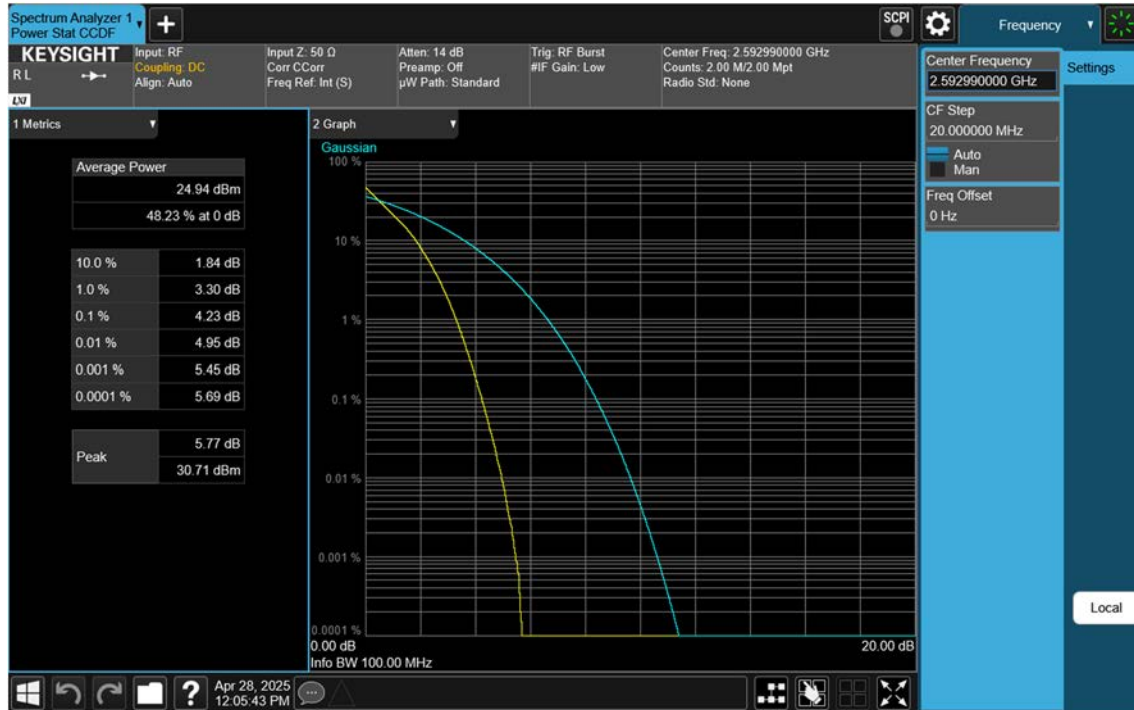
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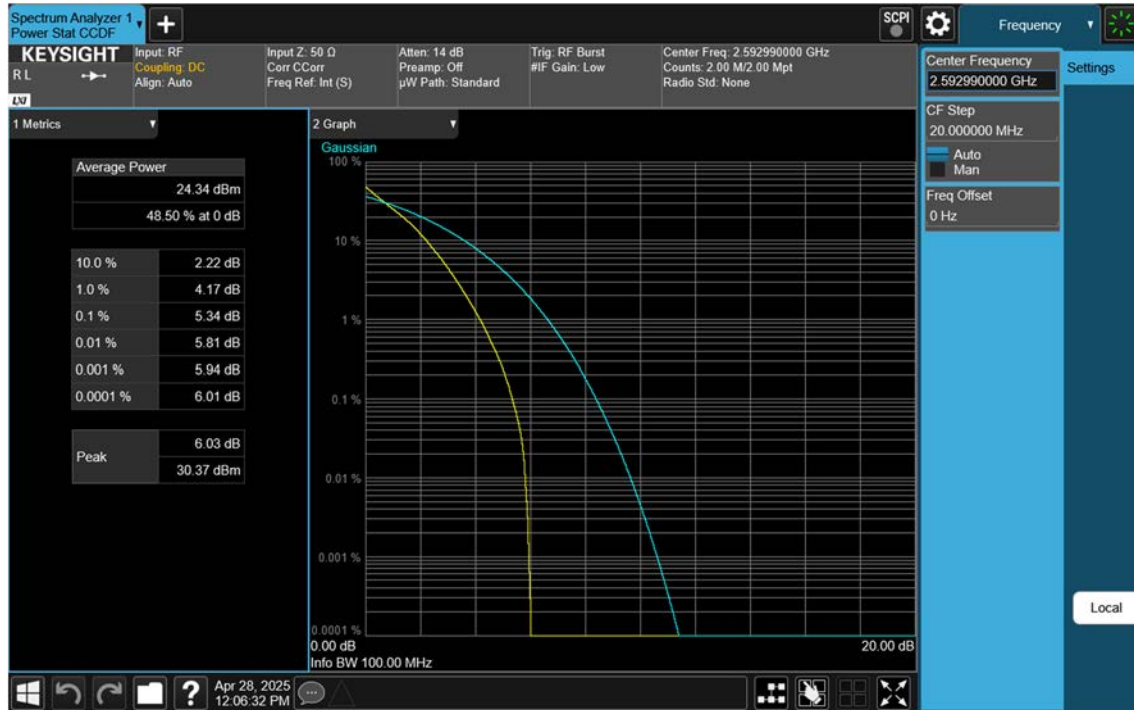
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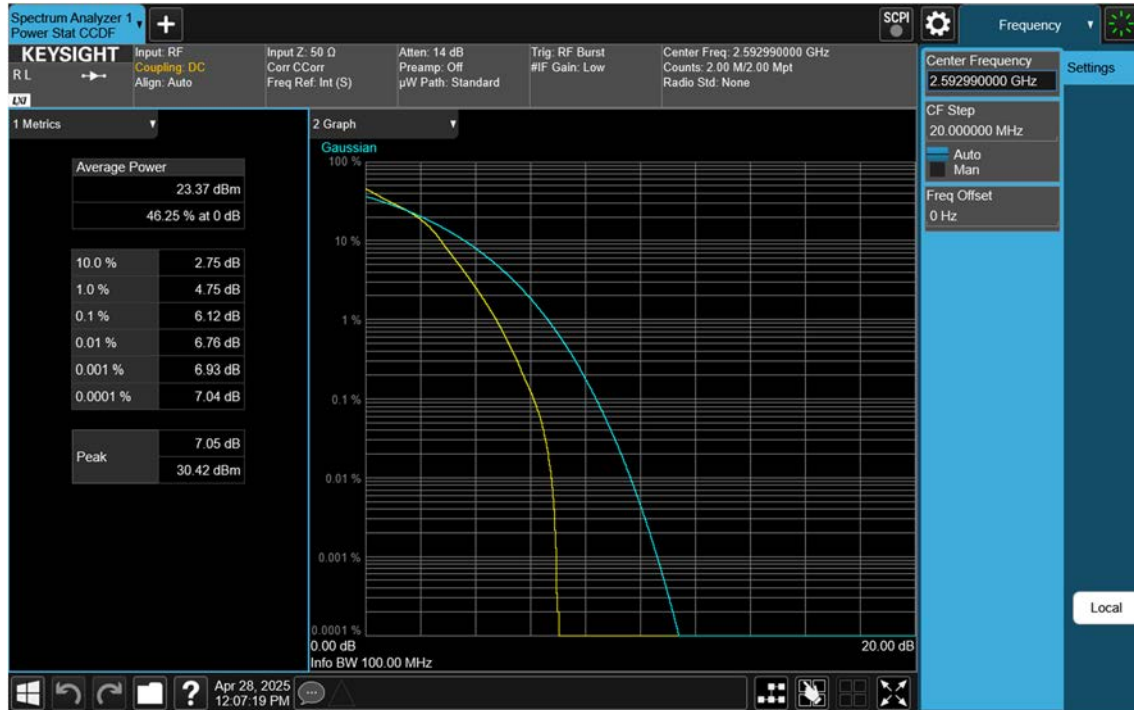
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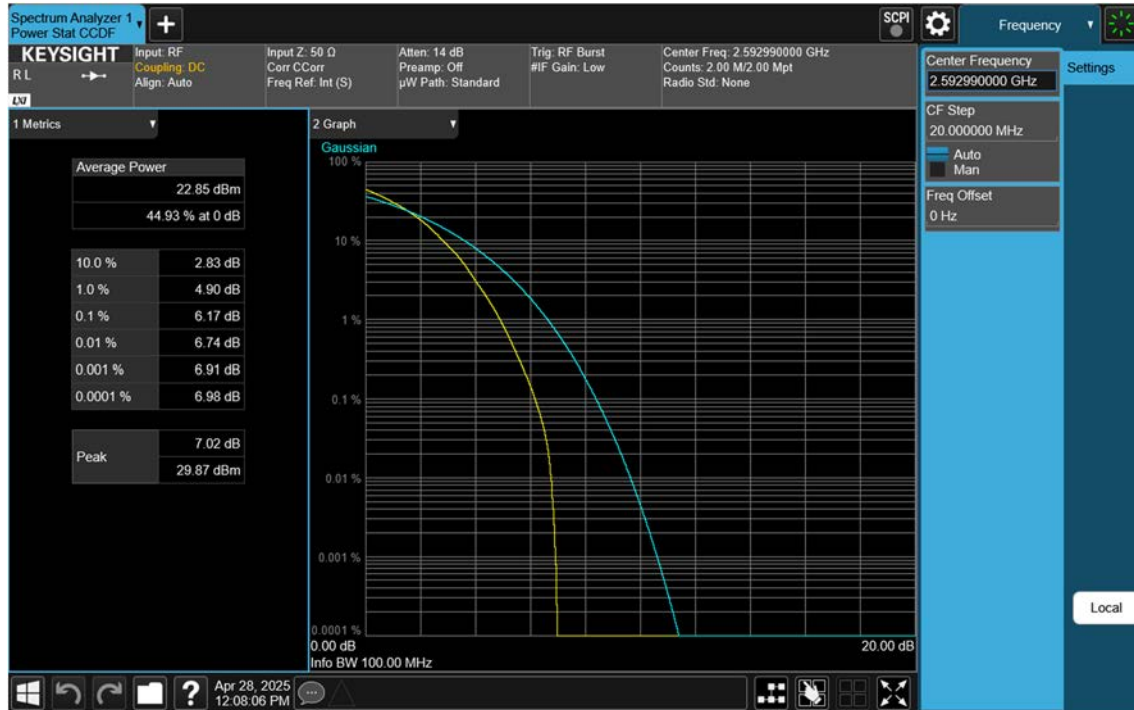
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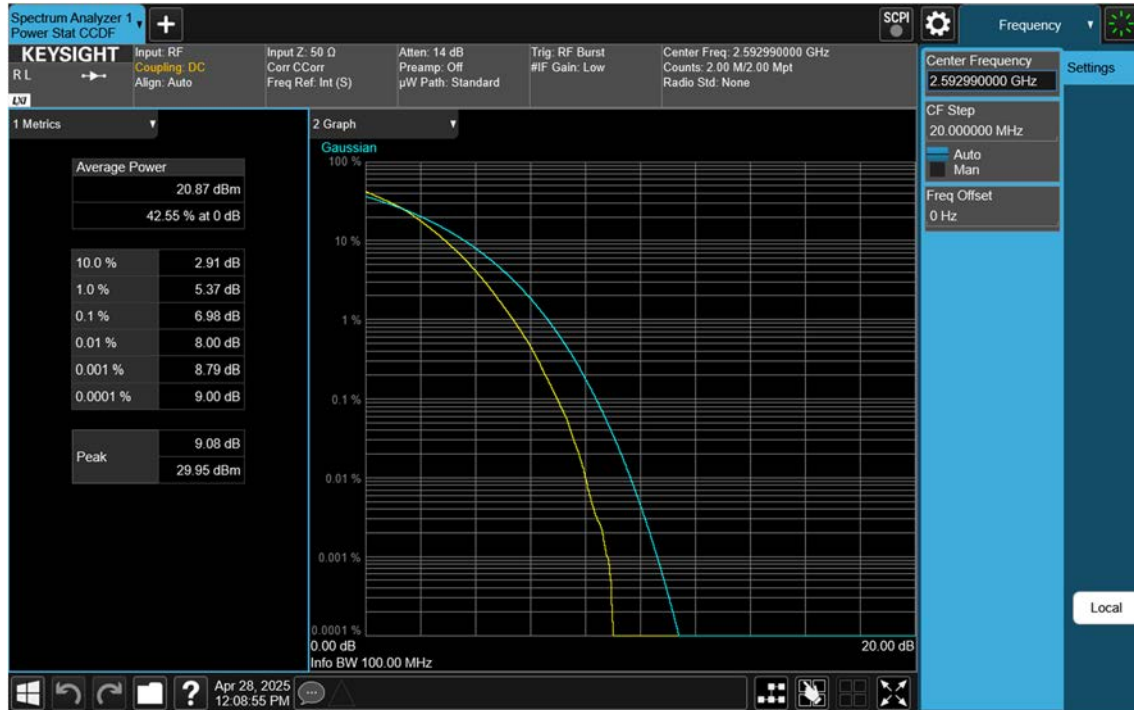
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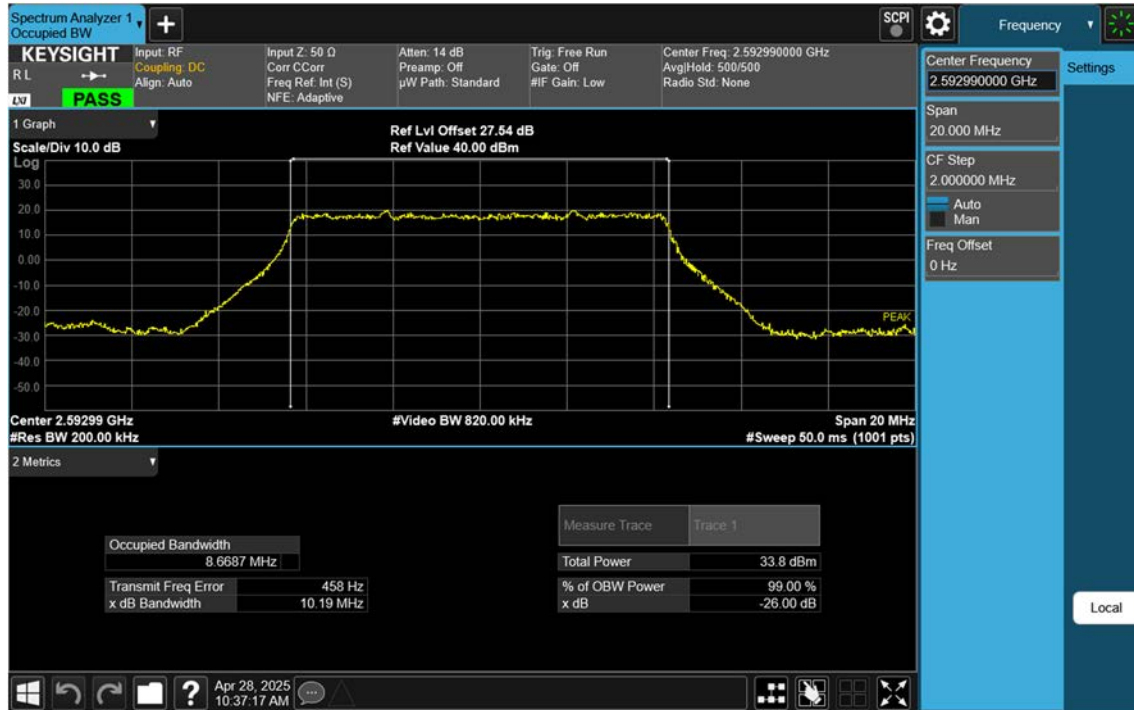
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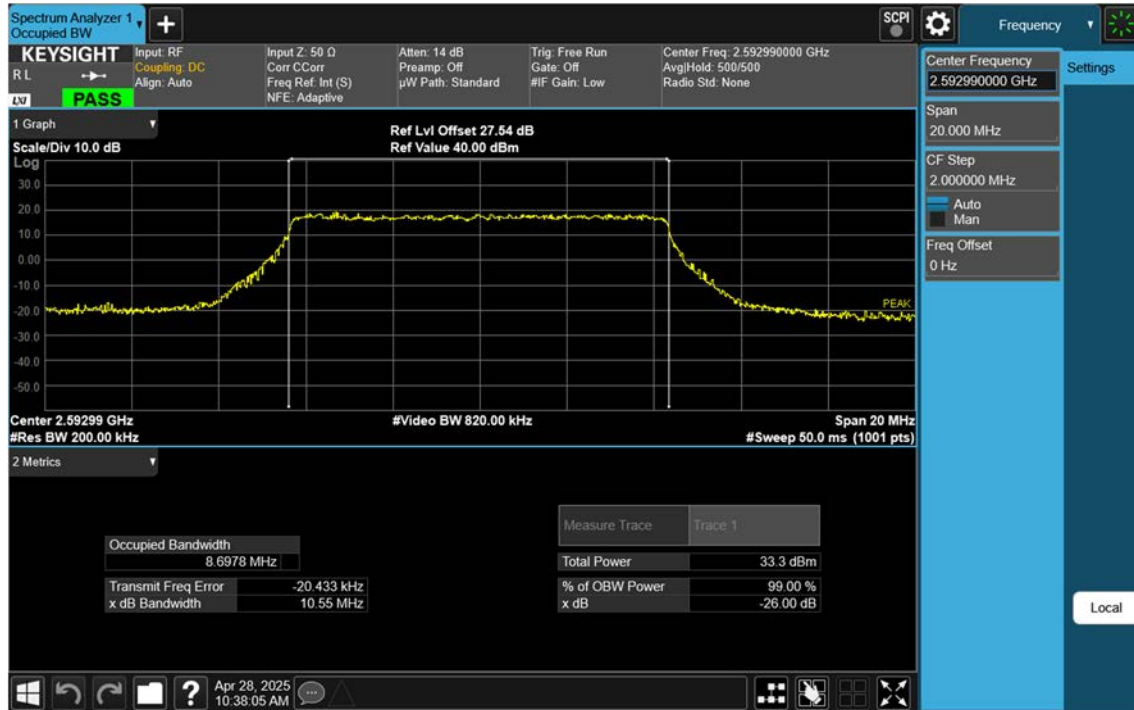
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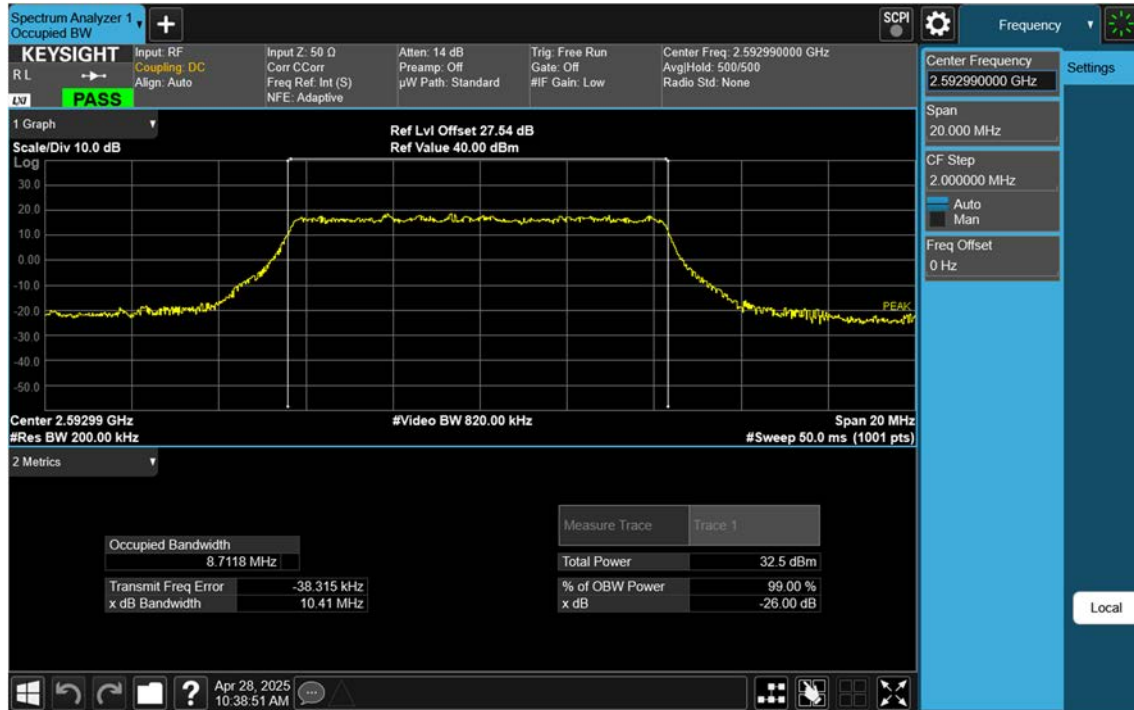
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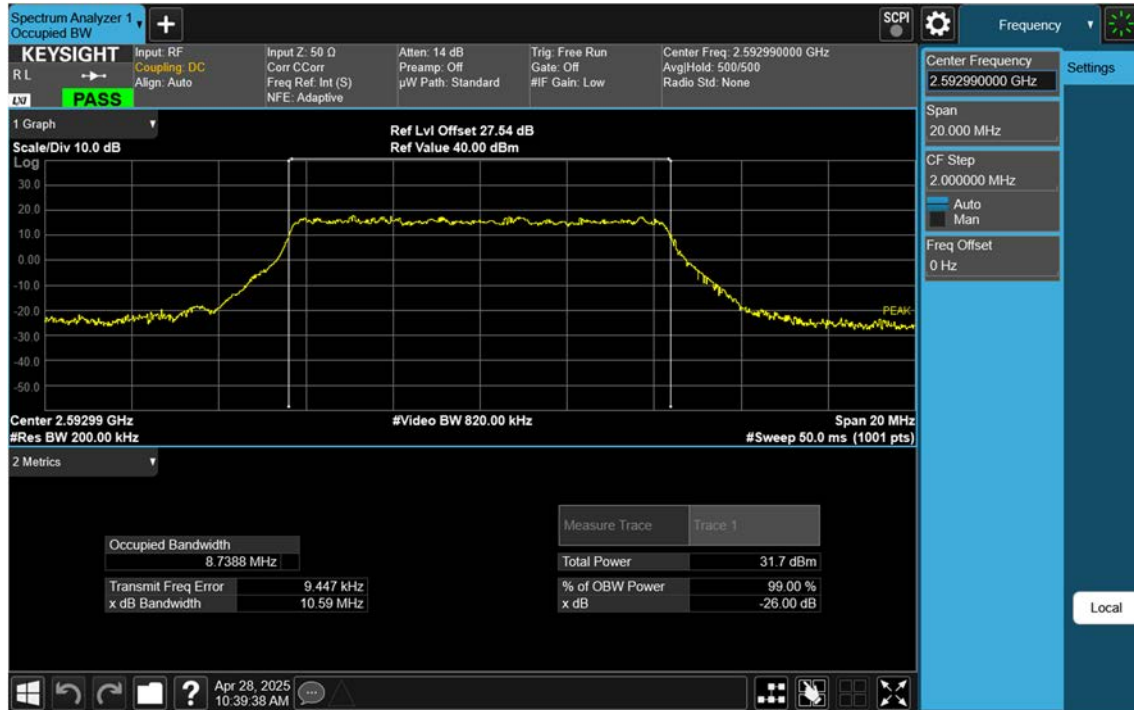
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NR41_10 M_OBW_Mid_16QAM_FullRB



NR41_10 M_OBW_Mid_64QAM_FullRB



NR41_10 M_OBW_Mid_256QAM_FullRB



NR41_15 M_OBW_Mid_BPSK_FullRB

