

TEST REPORT

FCC Sub6 n7 Test for TM18FNROBM0
Certification

APPLICANT
LG Electronics Inc.

REPORT NO.
HCT-RF-2507-FC092

DATE OF ISSUE
July 22, 2025

Tested by
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Technical Manager
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Accredited by KOLAS, Republic of KOREA

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Applicant

LG Electronics Inc.

128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea

Product Name

Telematics

Model Name

TM18FNROBM0

Date of Test

May 16, 2025 ~ July 22, 2025

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 ID

2B03LTM18FNROBM0

FCC Classification

PCS Licensed Transmitter (PCB)

Test Standard Used

FCC Rule Part(s) : § 27

Test Results

PASS

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	July 22, 2025	Initial Release

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 is 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

This test report provides test result(s) under the scope accredited by the Korea Laboratory Accreditation Scheme (KOLAS), which signed the ILAC-MRA.
(KOLAS (KS Q ISO/IEC 17025) Accreditation No. KT197)

CONTENTS

1. GENERAL INFORMATION	5
1.1. SUPPORTED BANDS PER ANTENNA PORT	6
1.2 MAXIMUM OUTPUT POWER.....	7
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.	13
3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL	14
3.7 CHANNEL EDGE.....	15
3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE.....	17
3.9 WORST CASE(RADIATED TEST).....	18
3.10 WORST CASE(CONDUCTED TEST)	19
4. LIST OF TEST EQUIPMENT	21
5. MEASUREMENT UNCERTAINTY	24
6. SUMMARY OF TEST RESULTS.....	25
7. SAMPLE CALCULATION	26
8. TEST DATA (MIMO1)	28
8.1 EQUIVALENT ISOTROPIC RADIATED POWER	28
8.2 RADIATED SPURIOUS EMISSIONS	36
8.3 PEAK-TO-AVERAGE RATIO.....	44
8.4 OCCUPIED BANDWIDTH	45
8.5 CONDUCTED SPURIOUS EMISSIONS.....	46
8.6 CHANNEL EDGE.....	47
8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE.....	49
9. TEST DATA (Internal(BUA)).....	57
9.1 EQUIVALENT ISOTROPIC RADIATED POWER	57
9.2 RADIATED SPURIOUS EMISSIONS	65
10. TEST PLOTS.....	73
11. ANNEX A_ TEST SETUP PHOTO	258

MEASUREMENT REPORT

1. GENERAL INFORMATION

Model(s):	TM18FNROBM0
Voltage:	4.2V
SCS(kHz):	15
Bandwidth(MHz):	5, 10, 15, 20, 25, 30, 40, 50
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:	2502.5 MHz – 2567.5 MHz (Sub6 n7(5 MHz)) 2505.0 MHz – 2565.0 MHz (Sub6 n7(10 MHz)) 2507.5 MHz – 2562.5 MHz (Sub6 n7(15 MHz)) 2510.0 MHz – 2560.0 MHz (Sub6 n7(20 MHz)) 2512.5 MHz – 2557.5 MHz (Sub6 n7(25 MHz)) 2515.0 MHz – 2555.0 MHz (Sub6 n7(30 MHz)) 2520.0 MHz – 2550.0 MHz (Sub6 n7(40 MHz)) 2525.0 MHz – 2545.0 MHz (Sub6 n7(50 MHz))
EUT Serial number:	Radiated : BMW ICON-25SF Radiated #5 Conducted : BMW ICON-25SF Conducted #17
Antenna Information	Please refer to the Antenna Specification document.

1.1. SUPPORTED BANDS PER ANTENNA PORT

Antenna Port	Supported bands
MIMO 1	- GSM850, 1900 - WCDMA: B2, 4, 5 - LTE: B4, 7, 12(17), 25(2), 26(5), 41(38), 42 - NR: n7, 41, 77(78) - ULCA: 7C
MIMO 2	- LTE: B42 - NR: n77(78)
MIMO 3	Only RX
MIMO 4	Only RX
Int. BUA (Back Up Antenna)	- GSM850, 1900 - WCDMA: B2, 4, 5 - LTE: B4, 7, 25(2), 26(5), 41(38) - NR: n7, 41 - ULCA: 7C

Note:

1. Since the Int. BUA uses the same antenna port as MIMO1, only radiated testing was performed.

1.2 MAXIMUM OUTPUT POWER

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	Conducted Output Power	
				Max. Power (W)	Max. Power (dBm)
Sub6 n7 (5)	2502.5 – 2567.5	4M48G7D	PI/2 BPSK	0.283	24.52
		4M49G7D	QPSK	0.286	24.57
		4M49W7D	16QAM	0.225	23.52
		4M49W7D	64QAM	0.169	22.28
		4M50W7D	256QAM	0.096	19.82
Sub6 n7 (10)	2505.0 – 2565.0	8M97G7D	PI/2 BPSK	0.301	24.78
		8M94G7D	QPSK	0.304	24.83
		8M93W7D	16QAM	0.240	23.80
		8M97W7D	64QAM	0.167	22.24
		9M00W7D	256QAM	0.101	20.03
Sub6 n7 (15)	2507.5 – 2562.5	13M4G7D	PI/2 BPSK	0.301	24.78
		13M5G7D	QPSK	0.297	24.73
		13M4W7D	16QAM	0.236	23.73
		13M4W7D	64QAM	0.166	22.19
		13M4W7D	256QAM	0.109	20.37
Sub6 n7 (20)	2510.0 – 2560.0	17M9G7D	PI/2 BPSK	0.299	24.76
		17M9G7D	QPSK	0.297	24.73
		18M0W7D	16QAM	0.237	23.74
		17M9W7D	64QAM	0.167	22.22
		17M9W7D	256QAM	0.106	20.26
Sub6 n7 (25)	2512.5 – 2557.5	23M0G7D	PI/2 BPSK	0.290	24.62
		22M9G7D	QPSK	0.289	24.61
		22M9W7D	16QAM	0.231	23.64
		22M9W7D	64QAM	0.161	22.07
		22M9W7D	256QAM	0.102	20.08
Sub6 n7 (30)	2515.0 – 2555.0	28M6G7D	PI/2 BPSK	0.291	24.64
		28M7G7D	QPSK	0.294	24.68
		28M6W7D	16QAM	0.232	23.66
		28M6W7D	64QAM	0.164	22.15
		28M6W7D	256QAM	0.103	20.14
Sub6 n7 (40)	2520.0 – 2550.0	38M7G7D	PI/2 BPSK	0.292	24.65
		38M7G7D	QPSK	0.285	24.55
		38M6W7D	16QAM	0.216	23.35
		38M7W7D	64QAM	0.154	21.87
		38M7W7D	256QAM	0.096	19.81
Sub6 n7 (50)	2525.0 – 2545.0	48M4G7D	PI/2 BPSK	0.294	24.69
		48M4G7D	QPSK	0.290	24.63
		48M3W7D	16QAM	0.219	23.40
		48M4W7D	64QAM	0.136	21.35
		48M3W7D	256QAM	0.094	19.74

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.

Detailed description of test facility was submitted to the Commission and accepted dated March 11, 2024 (Registration Number: KR0032).

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 $\geq 3 \times$ RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $> 2 \times$ 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;

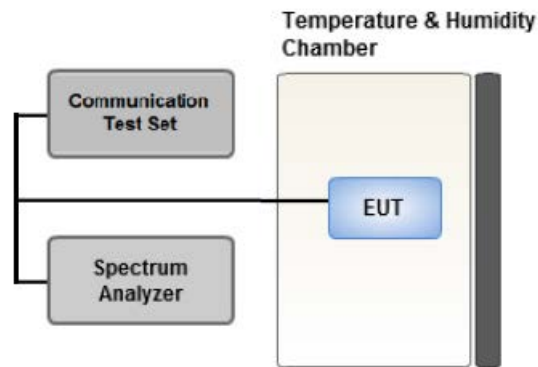
$$\text{Result}_{(\text{dBm})} = P_g_{(\text{dBm})} - \text{cable loss}_{(\text{dB})} + \text{antenna gain}_{(\text{dBi})}$$

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



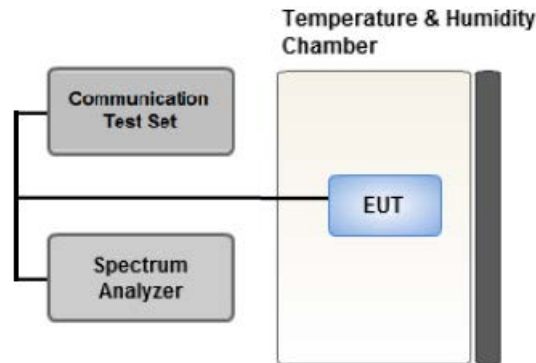
Test setup

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 %.

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 $\geq 3 \times$ RBW

4. Detector = Peak

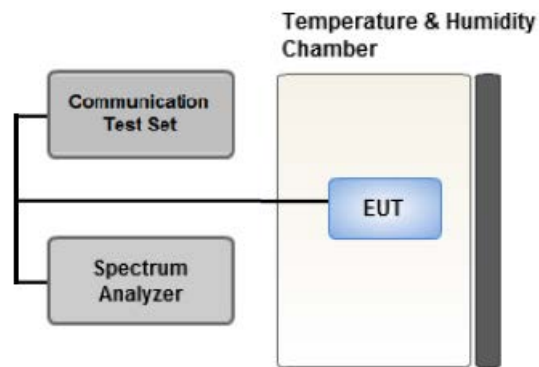
5. Trace mode = max hold

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

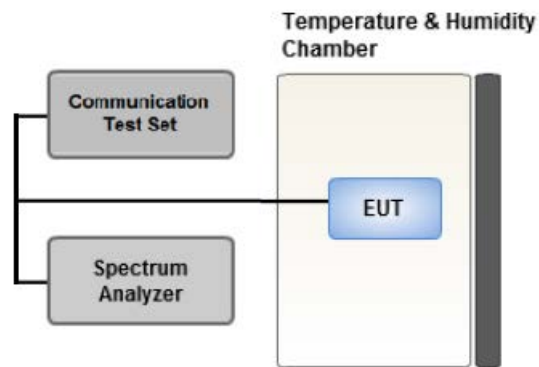
Test Overview

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 $\geq 2 \times \text{Span} / \text{RBW}$

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

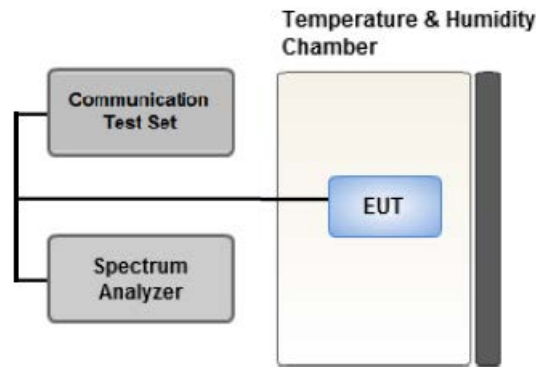
1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. Within 1MHz of the channel edge the RBW should be 2 % of EBW, then 1 MHz after that.
4. $VBW > 3 \times RBW$
5. Detector = RMS
6. Number of sweep points $\geq 2 \times \text{Span}/RBW$
7. Trace mode = trace average
8. Sweep time $> \text{Number of points in sweep} \times \text{Symbol period}$
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 $10 \log(1 \text{ MHz} / \text{RB})$ 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)

- The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
- The worst case is reported with the EUT positioning, modulations, and paging service configurations shown in the test data.
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: SA, NSA (Worst case: SA)
- 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.
- MIMO3 and MIMO4 have three types of Rx antennas. Operating modes were investigated for all Rx antennas, and the worst-case configuration results were reported.
(Worst-case: FSA antenna)

[External(MIMO1) 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		Z
Radiated Spurious Emissions	PI/2 BPSK	See Section 8.2		Z

[Internal(BUA) Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	See Section 9.1		Z
Radiated Spurious Emissions	PI/2 BPSK	See Section 9.2		Z

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: SA, NSA (Worst case: SA)
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
Please refer to the table below.
- Both 85% and 115% conditions were measured for the Frequency Stability test, and results for the worst-case configuration (85%) were reported.
- In accordance with the customer's specification of 3.7V as the lowest operating voltage, testing was performed at 3.7V instead of 85% (3.57V).

[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	5, 10, 15, 20, 25, 30, 40,50	Mid	Full RB	0
Channel Edge	PI/2 BPSK	5	Low	1	0
			High	1	24
		10	Low	1	0
			High	1	51
		15	Low	1	0
			High	1	78
		20	Low	1	0
			High	1	105
		25	Low	1	0
			High	1	132
		30	Low	1	0
			High	1	159
		40	Low	1	0
			High	1	215
		50	Low	1	0
			High	1	269
		5, 10, 15, 20, 25, 30, 40,50	Low, Mid, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	5, 10, 15, 20, 25, 30, 40,50	Low, Mid, High	1	1

4. LIST OF TEST EQUIPMENT

[Radiated]

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
RF Switch System	FBSR-04C(3G HPF+LNA)	TNM System	S4L1	03/12/2026	Annual
RF Switch System	FBSR-04C(7G HPF+LNA)	TNM System	S4L5	03/12/2026	Annual
RF Switch System	FBSR-04C(LNA)	TNM System	S4L4	03/12/2026	Annual
RF Switch System	FBSR-04C(Thru)	TNM System	S4L6	03/12/2026	Annual
Antenna Position Tower	MA4640	Innco systems	S4AM	08/07/2025	Annual
Turn Table	DS2000-S	Innco systems	N/A	N/A	-
Controller (Antenna mast & Turn Table)	CO3000	Innco systems	CO3000/1251/48920320/P	N/A	-
Amp & Filter Bank Switch Controller	FBSM-01B	TNM system	TM20090002	N/A	-
RF Switching System	Switch box(1 G HPF+LNA)	HCT CO., LTD.,	F2L2	12/12/2025	Annual
RF Switching System	Switch box(3 G HPF+LNA)	HCT CO., LTD.,	F2L3	12/12/2025	Annual
RF Switching System	Switch box(LNA)	HCT CO., LTD.,	F2L5	12/12/2025	Annual
RF Switching System	Switch box(6 G HPF+LNA)	HCT CO., LTD.,	F2L14	12/12/2025	Annual
HIGHPASS FILTER	WHKX10-900-1000-15000-40SS	WAINWRIGHT INSTRUMENTS	16	07/24/2025	Annual
LOW NOISE AMPLIFIER	310N	SONOMA Instrument	186169	02/05/2026	Annual
LOW NOISE AMPLIFIER	TK-PA1840H	TESTEK	170011-L	10/11/2025	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/07/2025	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/19/2026	Annual
Power Splitter(DC ~ 26.5 GHz)	11667B	Hewlett Packard	5001	04/10/2026	Annual
DC Power Supply	E3632A	Agilent	MY40010147	08/06/2025	Annual
Dipole Antenna	UHAP	Schwarzbeck	01274	03/10/2026	Biennial
Dipole Antenna	UHAP	Schwarzbeck	01288	08/07/2026	Biennial
Horn Antenna(1 ~ 18 GHz)	BBHA 9120D	Schwarzbeck	03197	11/28/2025	Biennial
Horn Antenna(1 ~ 18 GHz)	BBHA 9120D	Schwarzbeck	03201	11/28/2025	Biennial
Horn Antenna(1 ~ 18 GHz)	BBHA 9120	Schwarzbeck	937	02/07/2027	Biennial
Horn Antenna(15 ~ 40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170124	03/23/2027	Biennial
Horn Antenna(15 ~ 40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/20/2026	Biennial

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Spectrum Analyzer(10 Hz ~ 40 GHz)	FSV40	ROHDE & SCHWARZ	101733	09/19/2025	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	05/27/2026	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/05/2025	Annual
Loop Antenna(9 kHz ~ 30 MHz)	FMZB1513	Schwarzbeck	1513-333	03/07/2026	Biennial
Trilog Broadband Antenna	VULB 9168	Schwarzbeck	9168-0895	08/28/2026	Biennial
Trilog Broadband Antenna	VULB9168	Schwarzbeck	895	08/28/2026	Biennial
Trilog Broadband Antenna	VULB9168	Schwarzbeck	1135	08/19/2026	Biennial
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/14/2026	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6272613402	08/28/2025	Annual
SIGNAL GENERATOR (100 kHz ~ 40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	07/26/2025	Annual
Automation Software	FCC LTE Radiated	HCT CO., LTD	-	-	-
Automation Software	FCC NR Radiated	HCT CO., LTD	-	-	-

[Conducted]

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Power Splitter (DC ~ 26.5 GHz)	11667B	Hewlett Packard	5001	04/10/2026	Annual
DC Power Supply	E3632A	Agilent	MY40010147	08/06/2025	Annual
Chamber	SU-642	ESPEC	93008124	02/11/2026	Annual
ATTENUATOR (20 dB)	8493C	Hewlett Packard	17280	04/10/2026	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/05/2025	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262094331	11/13/2025	Annual
UXM 5G Wireless Test Platform	E7515B	KEYSIGHT	MY60101126	02/10/2026	Annual
Signal Analyzer (2 Hz ~ 50.0 GHz)	N9030B	KEYSIGHT	MY56320554	02/03/2026	Annual
FCC LTE Mobile Conducted RF Automation Test Software	-	HCT CO., LTD.	-	-	-
Automation Software	FCC 2G/3G/4G Conducted	HCT CO., LTD	-	-	-
Automation Software	FCC NR Conducted	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

- 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 + 10log₁₀ (P[Watts]) at Channel edges < 43 + 10log₁₀ (P[Watts]) between 5 and X MHz from Channel edges < 55 + 10log₁₀ (P[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	Note ¹
Frequency stability / variation of ambient temperature	§ 2.1055, § 27.54	Emission must remain in band	PASS

Note:

1. Refer to the 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 + 10log ₁₀ (P[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 (MIMO1)

8.1 EQUIVALENT ISOTROPIC RADIATED POWER

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
2502.5		PI/2 BPSK	-23.87	14.58	10.26	2.51	H		0.171	22.33	1	23
		QPSK	-23.94	14.51	10.26	2.51	H		0.168	22.26		
		16-QAM	-24.94	13.51	10.26	2.51	H		0.134	21.26		
		64-QAM	-26.35	12.10	10.26	2.51	H		0.097	19.85		
		256-QAM	-28.63	9.82	10.26	2.51	H		0.057	17.57		
2535.0	Sub6 n7/ 5 MHz [15 kHz]	PI/2 BPSK	-23.47	15.37	10.25	2.54	H	< 2.00	0.203	23.08	1	12
		QPSK	-23.48	15.36	10.25	2.54	H		0.203	23.07		
		16-QAM	-24.24	14.60	10.25	2.54	H		0.170	22.31		
		64-QAM	-25.77	13.07	10.25	2.54	H		0.120	20.78		
		256-QAM	-27.97	10.87	10.25	2.54	H		0.072	18.58		
2567.5		PI/2 BPSK	-26.46	12.62	10.27	2.65	H	< 2.00	0.106	20.24	1	1
		QPSK	-26.56	12.52	10.27	2.65	H		0.103	20.14		
		16-QAM	-27.13	11.95	10.27	2.65	H		0.091	19.57		
		64-QAM	-28.91	10.17	10.27	2.65	H		0.060	17.79		
		256-QAM	-31.06	8.02	10.27	2.65	H		0.037	15.64		

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
2505.0	Sub6 n7/ 10 MHz [15 kHz]	PI/2 BPSK	-23.78	14.67	10.26	2.51	H	< 2.00	0.175	22.42	1	50
		QPSK	-23.84	14.61	10.26	2.51	H		0.172	22.36		
		16-QAM	-24.87	13.58	10.26	2.51	H		0.136	21.33		
		64-QAM	-26.26	12.19	10.26	2.51	H		0.099	19.94		
		256-QAM	-28.58	9.87	10.26	2.51	H		0.058	17.62		
2535.0		PI/2 BPSK	-23.43	15.41	10.25	2.54	H		0.205	23.12	1	26
		QPSK	-25.49	13.35	10.25	2.54	H		0.128	21.06		
		16-QAM	-24.02	14.82	10.25	2.54	H		0.179	22.53		
		64-QAM	-25.34	13.50	10.25	2.54	H		0.132	21.21		
		256-QAM	-28.09	10.75	10.25	2.54	H		0.070	18.46		
2565.0		PI/2 BPSK	-25.50	13.56	10.26	2.62	H		0.132	21.20	1	1
		QPSK	-25.72	13.34	10.26	2.62	H		0.125	20.98		
		16-QAM	-26.60	12.46	10.26	2.62	H		0.102	20.10		
		64-QAM	-28.15	10.91	10.26	2.62	H		0.072	18.55		
		256-QAM	-30.45	8.61	10.26	2.62	H		0.042	16.25		

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
2507.5		PI/2 BPSK	-23.48	15.05	10.26	2.51	H		0.191	22.80	1	77
		QPSK	-23.61	14.92	10.26	2.51	H		0.185	22.67		
		16-QAM	-24.35	14.18	10.26	2.51	H		0.156	21.93		
		64-QAM	-25.97	12.56	10.26	2.51	H		0.107	20.31		
		256-QAM	-28.27	10.26	10.26	2.51	H		0.063	18.01		
2535.0	Sub6 n7/ 15 MHz [15 kHz]	PI/2 BPSK	-23.42	15.42	10.25	2.54	H		0.205	23.13	1	1
		QPSK	-23.47	15.37	10.25	2.54	H		0.203	23.08		
		16-QAM	-24.19	14.65	10.25	2.54	H	< 2.00	0.172	22.36		
		64-QAM	-25.82	13.02	10.25	2.54	H		0.118	20.73		
		256-QAM	-28.19	10.65	10.25	2.54	H		0.069	18.36		
2562.5		PI/2 BPSK	-25.40	13.66	10.26	2.62	H		0.135	21.30	1	1
		QPSK	-25.48	13.58	10.26	2.62	H		0.132	21.22		
		16-QAM	-26.32	12.74	10.26	2.62	H		0.109	20.38		
		64-QAM	-27.78	11.28	10.26	2.62	H		0.078	18.92		
		256-QAM	-29.96	9.10	10.26	2.62	H		0.047	16.74		

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
2510.0	Sub6 n7/ 20 MHz [15 kHz]	PI/2 BPSK	-23.48	15.05	10.26	2.51	H	< 2.00	0.190	22.80	1	104
		QPSK	-23.52	15.01	10.26	2.51	H		0.189	22.76		
		16-QAM	-24.48	14.05	10.26	2.51	H		0.151	21.80		
		64-QAM	-25.97	12.56	10.26	2.51	H		0.107	20.31		
		256-QAM	-28.12	10.41	10.26	2.51	H		0.065	18.16		
2535.0		PI/2 BPSK	-23.34	15.50	10.25	2.54	H		0.210	23.21	1	1
		QPSK	-23.42	15.42	10.25	2.54	H		0.206	23.13		
		16-QAM	-24.16	14.68	10.25	2.54	H		0.174	22.39		
		64-QAM	-25.75	13.09	10.25	2.54	H		0.120	20.80		
		256-QAM	-27.96	10.88	10.25	2.54	H		0.072	18.59		
2560.0		PI/2 BPSK	-24.68	14.36	10.26	2.59	H	0.160	22.03	1	1	
		QPSK	-24.69	14.35	10.26	2.59	H	0.159	22.02			
		16-QAM	-25.75	13.29	10.26	2.59	H	0.125	20.96			
		64-QAM	-27.20	11.84	10.26	2.59	H	0.089	19.51			
		256-QAM	-29.36	9.68	10.26	2.59	H	0.054	17.35			

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
2512.5	Sub6 n7/ 25 MHz [15 kHz]	PI/2 BPSK	-23.58	14.99	10.26	2.53	H	< 2.00	0.187	22.72	1	131
		QPSK	-23.75	14.82	10.26	2.53	H		0.180	22.55		
		16-QAM	-24.53	14.04	10.26	2.53	H		0.150	21.77		
		64-QAM	-26.15	12.42	10.26	2.53	H		0.104	20.15		
		256-QAM	-28.21	10.36	10.26	2.53	H		0.064	18.09		
2535.0		PI/2 BPSK	-23.64	15.20	10.25	2.54	H		0.196	22.91	1	1
		QPSK	-23.77	15.07	10.25	2.54	H		0.190	22.78		
		16-QAM	-24.68	14.16	10.25	2.54	H		0.154	21.87		
		64-QAM	-26.21	12.63	10.25	2.54	H		0.108	20.34		
		256-QAM	-28.36	10.48	10.25	2.54	H		0.066	18.19		
2557.5		PI/2 BPSK	-24.66	14.38	10.26	2.59	H		0.160	22.05	1	1
		QPSK	-24.68	14.36	10.26	2.59	H		0.159	22.03		
		16-QAM	-25.48	13.56	10.26	2.59	H		0.133	21.23		
		64-QAM	-27.10	11.94	10.26	2.59	H		0.091	19.61		
		256-QAM	-29.42	9.62	10.26	2.59	H		0.054	17.29		

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
2515.0	Sub6 n7/ 30 MHz [15 kHz]	PI/2 BPSK	-23.96	14.61	10.26	2.53	H	< 2.00	0.171	22.34	1	80
		QPSK	-24.05	14.52	10.26	2.53	H		0.168	22.25		
		16-QAM	-24.93	13.64	10.26	2.53	H		0.137	21.37		
		64-QAM	-26.70	11.87	10.26	2.53	H		0.091	19.60		
		256-QAM	-28.69	9.88	10.26	2.53	H		0.058	17.61		
2535.0		PI/2 BPSK	-23.96	14.88	10.25	2.54	H		0.181	22.59	1	1
		QPSK	-24.07	14.77	10.25	2.54	H		0.177	22.48		
		16-QAM	-25.01	13.83	10.25	2.54	H		0.143	21.54		
		64-QAM	-26.51	12.33	10.25	2.54	H		0.101	20.04		
		256-QAM	-28.68	10.16	10.25	2.54	H		0.061	17.87		
2555.0		PI/2 BPSK	-24.18	14.85	10.25	2.56	H	0.180	22.54	1	1	
		QPSK	-24.44	14.59	10.25	2.56	H	0.169	22.28			
		16-QAM	-25.34	13.69	10.25	2.56	H	0.138	21.38			
		64-QAM	-26.86	12.17	10.25	2.56	H	0.097	19.86			
		256-QAM	-29.20	9.83	10.25	2.56	H	0.056	17.52			

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
2520.0	Sub6 n7/ 40 MHz [15 kHz]	PI/2 BPSK	-23.77	14.83	10.26	2.54	H	< 2.00	0.180	22.55	1	108
		QPSK	-23.97	14.63	10.26	2.54	H		0.172	22.35		
		16-QAM	-24.95	13.65	10.26	2.54	H		0.137	21.37		
		64-QAM	-26.49	12.11	10.26	2.54	H		0.096	19.83		
		256-QAM	-28.75	9.85	10.26	2.54	H		0.057	17.57		
2535.0		PI/2 BPSK	-23.71	15.13	10.25	2.54	H		0.192	22.84	1	108
		QPSK	-23.89	14.95	10.25	2.54	H		0.184	22.66		
		16-QAM	-24.53	14.31	10.25	2.54	H		0.159	22.02		
		64-QAM	-26.13	12.71	10.25	2.54	H		0.110	20.42		
		256-QAM	-28.43	10.41	10.25	2.54	H		0.065	18.12		
2550.0		PI/2 BPSK	-23.76	15.25	10.24	2.53	H		0.198	22.96	1	1
		QPSK	-23.90	15.11	10.24	2.53	H		0.192	22.82		
		16-QAM	-24.57	14.44	10.24	2.53	H		0.164	22.15		
		64-QAM	-26.16	12.85	10.24	2.53	H		0.114	20.56		
		256-QAM	-28.46	10.55	10.24	2.53	H		0.067	18.26		

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
2525.0		PI/2 BPSK	-23.41	15.27	10.25	2.54	H	< 2.00	0.199	22.98	1	135
		QPSK	-23.52	15.16	10.25	2.54	H		0.194	22.87		
		16-QAM	-24.34	14.34	10.25	2.54	H		0.160	22.05		
		64-QAM	-25.99	12.69	10.25	2.54	H		0.110	20.40		
		256-QAM	-28.18	10.50	10.25	2.54	H		0.066	18.21		
2535.0	Sub6 n7/ 50 MHz [15 kHz]	PI/2 BPSK	-23.78	15.06	10.25	2.54	H	< 2.00	0.189	22.77	1	135
		QPSK	-23.96	14.88	10.25	2.54	H		0.182	22.59		
		16-QAM	-24.55	14.29	10.25	2.54	H		0.158	22.00		
		64-QAM	-26.15	12.69	10.25	2.54	H		0.110	20.40		
		256-QAM	-28.42	10.42	10.25	2.54	H		0.065	18.13		
2545.0		PI/2 BPSK	-23.67	15.29	10.25	2.53	H	< 2.00	0.200	23.01	1	1
		QPSK	-23.72	15.24	10.25	2.53	H		0.198	22.96		
		16-QAM	-24.68	14.28	10.25	2.53	H		0.158	22.00		
		64-QAM	-26.19	12.77	10.25	2.53	H		0.112	20.49		
		256-QAM	-28.46	10.50	10.25	2.53	H		0.066	18.22		

8.2 RADIATED SPURIOUS EMISSIONS

NR Band:	<u>N7</u>
Bandwidth:	<u>5 MHz</u>
Modulation:	<u>PI/2 BPSK</u>
Distance:	<u>1 meters</u>
SCS:	<u>15 kHz</u>

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
500500 (2502.5)	5 005.00	-55.76	10.91	-62.30	3.71	H	-55.10	-25.00	1	23
	7 507.50	-56.23	11.59	-58.34	4.60	H	-51.35			
	10 010.00	-55.02	11.39	-54.61	5.47	H	-48.69			
	12 512.50	-56.99	13.16	-53.47	6.09	V	-46.40			
	15 015.00	-63.94	14.28	-45.82	6.76	H	-38.30			
507000 (2535.0)	5 070.00	-55.33	10.92	-62.09	3.80	V	-54.97		1	12
	7 605.00	-54.66	11.66	-56.85	4.64	V	-49.83			
	10 140.00	-55.24	11.34	-54.60	5.48	V	-48.74			
	12 675.00	-56.13	12.88	-52.10	6.24	V	-45.46			
	15 210.00	-62.57	14.81	-44.15	6.81	V	-36.15			
513500 (2567.5)	5 135.00	-56.07	11.04	-63.18	3.81	V	-55.95		1	1
	7 702.50	-54.58	11.56	-56.24	4.66	H	-49.34			
	10 270.00	-54.14	11.46	-53.50	5.57	V	-47.61			
	12 837.50	-56.03	12.73	-51.41	6.24	V	-44.92			
	15 405.00	-62.21	15.34	-43.06	6.85	H	-34.57			

☐ NR Band: N7
☐ Bandwidth: 10 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
501000 (2505.0)	5 010.00	-55.61	10.91	-62.20	3.72	H	-55.01	-25.00	1	50
	7 515.00	-56.18	11.59	-58.42	4.60	H	-51.43			
	10 020.00	-55.23	11.39	-54.38	5.47	V	-48.46			
	12 525.00	-56.91	13.14	-53.43	6.09	V	-46.38			
	15 030.00	-63.87	14.32	-46.06	6.73	H	-38.47			
507000 (2535.0)	5 070.00	-55.31	10.92	-62.07	3.80	V	-54.95		1	26
	7 605.00	-54.61	11.66	-56.80	4.64	V	-49.78			
	10 140.00	-55.20	11.34	-54.56	5.48	V	-48.70			
	12 675.00	-56.22	12.88	-52.19	6.24	V	-45.55			
	15 210.00	-62.84	14.81	-44.42	6.81	V	-36.42			
513000 (2565.0)	5 130.00	-56.13	11.02	-63.04	3.81	V	-55.83		1	1
	7 695.00	-54.51	11.58	-56.34	4.66	H	-49.42			
	10 260.00	-54.56	11.44	-53.89	5.56	V	-48.01			
	12 825.00	-56.18	12.74	-51.83	6.21	V	-45.30			
	15 390.00	-62.35	15.30	-43.12	6.85	H	-34.67			

☐ NR Band: N7
☐ Bandwidth: 15 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
501500 (2507.5)	5 015.00	-55.23	10.91	-61.78	3.70	V	-54.57	-25.00	1	77
	7 522.50	-54.16	11.60	-56.54	4.61	V	-49.55			
	10 030.00	-54.51	11.39	-53.86	5.47	V	-47.94			
	12 537.50	-55.35	13.13	-51.77	6.13	V	-44.77			
	15 045.00	-62.35	14.35	-44.46	6.75	V	-36.86			
507000 (2535.0)	5 070.00	-55.35	10.92	-62.11	3.80	H	-54.99		1	1
	7 605.00	-54.41	11.66	-56.60	4.64	H	-49.58			
	10 140.00	-53.75	11.34	-53.11	5.48	H	-47.25			
	12 675.00	-56.61	12.88	-52.58	6.24	H	-45.94			
	15 210.00	-62.11	14.81	-43.69	6.81	H	-35.69			
512500 (2562.5)	5 125.00	-54.41	11.01	-61.42	3.81	V	-54.22		1	1
	7 687.50	-54.25	11.58	-56.13	4.66	H	-49.21			
	10 250.00	-54.61	11.42	-54.24	5.54	V	-48.36			
	12 812.50	-57.13	12.74	-52.87	6.20	V	-46.33			
	15 375.00	-62.67	15.26	-43.44	6.87	V	-35.05			

☐ NR Band: N7
☐ Bandwidth: 20 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
502000 (2510.0)	5 020.00	-55.15	10.90	-61.63	3.69	V	-54.42	-25.00	1	104
	7 530.00	-54.11	11.61	-56.52	4.60	V	-49.51			
	10 040.00	-54.33	11.38	-53.81	5.49	V	-47.92			
	12 550.00	-55.32	13.11	-51.68	6.19	V	-44.76			
	15 060.00	-62.20	14.39	-44.24	6.78	V	-36.63			
507000 (2535.0)	5 070.00	-54.85	10.92	-61.61	3.80	H	-54.49		1	1
	7 605.00	-54.35	11.66	-56.54	4.64	H	-49.52			
	10 140.00	-53.74	11.34	-53.10	5.48	H	-47.24			
	12 675.00	-56.12	12.88	-52.09	6.24	H	-45.45			
	15 210.00	-62.05	14.81	-43.63	6.81	H	-35.63			
512000 (2560.0)	5 120.00	-54.37	11.00	-61.48	3.81	V	-54.29		1	1
	7 680.00	-53.99	11.60	-55.96	4.70	H	-49.06			
	10 240.00	-54.45	11.41	-54.02	5.54	V	-48.15			
	12 800.00	-57.06	12.75	-52.80	6.21	V	-46.26			
	15 360.00	-62.21	15.21	-42.65	6.88	V	-34.32			

☐ NR Band: N7
☐ Bandwidth: 25 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
502500 (2512.5)	5 025.00	-54.53	10.90	-61.24	3.68	H	-54.02	-25.00	1	131
	7 537.50	-54.53	11.62	-56.97	4.61	V	-49.96			
	10 050.00	-53.59	11.38	-53.15	5.48	V	-47.25			
	12 562.50	-56.32	13.09	-52.66	6.24	H	-45.81			
	15 075.00	-62.57	14.42	-44.53	6.82	H	-36.93			
507000 (2535.0)	5 070.00	-55.60	10.92	-62.36	3.80	H	-55.24		1	1
	7 605.00	-54.27	11.66	-56.46	4.64	H	-49.44			
	10 140.00	-53.68	11.34	-53.04	5.48	V	-47.18			
	12 675.00	-57.52	12.88	-53.49	6.24	H	-46.85			
	15 210.00	-62.26	14.81	-43.84	6.81	H	-35.84			
511500 (2557.5)	5 115.00	-55.12	10.98	-62.25	3.80	V	-55.07		1	1
	7 672.50	-53.81	11.60	-55.78	4.70	V	-48.88			
	10 230.00	-53.07	11.39	-52.60	5.54	V	-46.75			
	12 787.50	-55.80	12.76	-51.53	6.22	V	-44.99			
	15 345.00	-63.59	15.17	-44.51	6.86	V	-36.20			

☐ NR Band: N7
☐ Bandwidth: 30 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
503000 (2515.0)	5 030.00	-54.19	10.90	-61.13	3.67	V	-53.90	-25.00	1	80
	7 545.00	-54.19	11.63	-56.61	4.62	H	-49.60			
	10 060.00	-53.47	11.37	-52.84	5.48	V	-46.95			
	12 575.00	-56.11	13.07	-52.44	6.25	H	-45.62			
	15 090.00	-62.75	14.46	-45.03	6.81	V	-37.38			
507000 (2535.0)	5 070.00	-55.26	10.92	-62.02	3.80	H	-54.90		1	1
	7 605.00	-55.14	11.66	-57.33	4.64	V	-50.31			
	10 140.00	-53.78	11.34	-53.14	5.48	H	-47.28			
	12 675.00	-55.84	12.88	-51.81	6.24	H	-45.17			
	15 210.00	-61.79	14.81	-43.37	6.81	H	-35.37			
511000 (2555.0)	5 110.00	-54.19	10.97	-61.35	3.79	V	-54.17		1	1
	7 665.00	-53.76	11.62	-55.73	4.70	H	-48.81			
	10 220.00	-53.74	11.38	-53.28	5.54	H	-47.44			
	12 775.00	-56.31	12.76	-52.11	6.23	V	-45.58			
	15 330.00	-62.98	15.13	-44.23	6.82	H	-35.92			

☐ NR Band: N7
☐ Bandwidth: 40 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
504000 (2520.0)	5 040.00	-53.46	10.90	-60.13	3.68	V	-52.91	-25.00	1	108
	7 560.00	-54.67	11.64	-56.86	4.64	H	-49.86			
	10 080.00	-54.57	11.37	-54.20	5.47	H	-48.30			
	12 600.00	-55.72	13.03	-51.94	6.18	V	-45.09			
	15 120.00	-62.55	14.54	-44.54	6.80	V	-36.80			
507000 (2535.0)	5 070.00	-53.23	10.92	-59.99	3.80	H	-52.87		1	108
	7 605.00	-53.71	11.66	-55.90	4.64	H	-48.88			
	10 140.00	-54.47	11.34	-53.83	5.48	V	-47.97			
	12 675.00	-56.98	12.88	-52.95	6.24	H	-46.31			
	15 210.00	-63.35	14.81	-44.93	6.81	V	-36.93			
510000 (2550.0)	5 100.00	-54.77	10.95	-61.49	3.78	V	-54.32		1	1
	7 650.00	-52.42	11.64	-54.49	4.68	H	-47.53			
	10 200.00	-54.95	11.35	-54.43	5.54	V	-48.62			
	12 750.00	-56.84	12.78	-52.71	6.23	H	-46.16			
	15 300.00	-63.27	15.06	-44.46	6.83	V	-36.23			

☐ NR Band: N7
☐ Bandwidth: 50 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
505000 (2525.0)	5 050.00	-54.27	10.90	-61.00	3.73	H	-53.83	-25.00	1	135
	7 575.00	-55.52	11.65	-57.76	4.65	V	-50.76			
	10 100.00	-55.78	11.36	-55.14	5.46	V	-49.24			
	12 625.00	-56.11	12.98	-52.20	6.22	V	-45.44			
	15 150.00	-63.37	14.61	-45.26	6.80	H	-37.45			
507000 (2535.0)	5 070.00	-54.80	10.92	-61.56	3.80	H	-54.44		1	135
	7 605.00	-54.36	11.66	-56.55	4.64	H	-49.53			
	10 140.00	-53.37	11.34	-52.73	5.48	H	-46.87			
	12 675.00	-57.44	12.88	-53.41	6.24	V	-46.77			
	15 210.00	-63.36	14.81	-44.94	6.81	V	-36.94			
509000 (2545.0)	5 090.00	-55.97	10.94	-62.84	3.78	H	-55.68		1	1
	7 635.00	-53.36	11.64	-55.46	4.67	H	-48.49			
	10 180.00	-54.81	11.34	-54.15	5.51	H	-48.32			
	12 725.00	-57.08	12.81	-53.39	6.21	V	-46.79			
	15 270.00	-62.44	14.99	-43.91	6.82	V	-35.74			

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	Limit (dB)
Sub6 n7	5 MHz	2535.0	BPSK	25	0	4.42	13.00
			QPSK			5.44	
			16-QAM			6.34	
			64-QAM			6.47	
			256-QAM			6.84	
	10 MHz		BPSK	50		4.47	
			QPSK			5.55	
			16-QAM			6.20	
			64-QAM			6.49	
			256-QAM			6.59	
	15 MHz		BPSK	75		4.56	
			QPSK			5.46	
			16-QAM			6.35	
			64-QAM			6.38	
			256-QAM			6.56	
	20 MHz		BPSK	100		4.93	
			QPSK			5.57	
			16-QAM			6.21	
			64-QAM			6.50	
			256-QAM			6.60	
	25 MHz		BPSK	128		4.61	
			QPSK			5.53	
			16-QAM			6.30	
			64-QAM			6.46	
			256-QAM			6.55	
	30 MHz		BPSK	160		4.38	
			QPSK			5.63	
			16-QAM			6.34	
			64-QAM			6.41	
			256-QAM			6.56	
	40 MHz		BPSK	216		4.55	
			QPSK			5.63	
			16-QAM			6.33	
			64-QAM			6.48	
			256-QAM			6.57	
	50 MHz		BPSK	270		4.39	
			QPSK			5.67	
			16-QAM			6.23	
			64-QAM			6.59	
			256-QAM			6.64	

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 74 ~ 113.
2. P.A.P.R is not required. These values are reported for information only.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n7	5 MHz	2535.0	BPSK	25	0	4.4801
			QPSK			4.4906
			16-QAM			4.4935
			64-QAM			4.4903
			256-QAM			4.5014
	10 MHz		BPSK	50		8.9718
			QPSK			8.9441
			16-QAM			8.9328
			64-QAM			8.9708
			256-QAM			9.0033
	15 MHz		BPSK	75		13.426
			QPSK			13.466
			16-QAM			13.418
			64-QAM			13.393
			256-QAM			13.417
	20 MHz		BPSK	100		17.900
			QPSK			17.927
			16-QAM			17.958
			64-QAM			17.917
			256-QAM			17.888
	25 MHz		BPSK	128		23.008
			QPSK			22.899
			16-QAM			22.906
			64-QAM			22.926
			256-QAM			22.902
	30 MHz		BPSK	160		28.634
			QPSK			28.706
			16-QAM			28.595
			64-QAM			28.628
			256-QAM			28.611
	40 MHz		BPSK	216		38.726
			QPSK			38.651
			16-QAM			38.635
			64-QAM			38.713
			256-QAM			38.735
	50 MHz		BPSK	270		48.380
			QPSK			48.372
			16-QAM			48.288
			64-QAM			48.370
			256-QAM			48.295

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 114 ~ 153.

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)
Sub6 n7	5	2502.500	3.60923	28.150	-63.74	-35.592	-25.00
		2535.000	4.79566	28.150	-63.21	-35.059	
		2567.500	4.58629	28.150	-63.04	-34.893	
	10	2505.000	9.12264	28.730	-62.53	-33.800	
		2535.000	5.00503	28.730	-62.29	-33.558	
		2565.000	9.22234	28.730	-63.64	-34.912	
	15	2507.500	9.05285	28.730	-63.87	-35.140	
		2535.000	5.24431	28.730	-62.93	-34.201	
		2562.500	9.05285	28.730	-64.04	-35.308	
	20	2510.000	4.58629	28.150	-62.85	-34.701	
		2535.000	4.98509	28.150	-63.12	-34.967	
		2560.000	4.78569	28.150	-62.93	-34.779	
	25	2512.500	3.99806	28.150	-64.07	-35.919	
		2535.000	6.84948	28.730	-62.79	-34.061	
		2557.500	9.00300	28.730	-63.61	-34.884	
	30	2515.000	4.78569	28.150	-63.48	-35.331	
		2535.000	4.78569	28.150	-63.72	-35.570	
		2555.000	3.83854	28.150	-61.74	-33.592	
	40	2520.000	4.98509	28.150	-63.41	-35.258	
		2535.000	4.80563	28.150	-63.25	-35.101	
		2550.000	6.07182	28.730	-63.58	-34.849	
	50	2525.000	6.15158	28.730	-63.72	-34.992	
		2535.000	4.18749	28.150	-64.14	-35.992	
		2545.000	3.75878	28.150	-63.19	-35.044	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 154 ~ 201.
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	27.270
1 - 5	28.150
5 - 10	28.730
10 - 15	29.330
15 - 20	30.520
Above 20	31.890

8.6 CHANNEL EDGE

BW (MHz)	Frequency (MHz)	Mod	RB (Size/ Offset)	2 500 MHz ~ 2 496 MHz	C.E ~ (C.E +1 MHz)	2 490.5 MHz ~ 2 496 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
5 MHz	2502.500	BPSK	Full RB	-25.72	-28.30	-28.17	-26.59	-45.15	-31.08	-32.25
10 MHz	2505.000	BPSK	Full RB	-28.35	-34.66	-29.96	-28.61	-38.41	-28.81	-34.07
15 MHz	2507.500	BPSK	Full RB	-29.16	-30.51	-28.60	-27.20	-32.83	-30.03	-33.47
20 MHz	2510.000	BPSK	Full RB	-25.42	-29.52	-30.29	-28.03	-32.36	-28.47	-38.90
25 MHz	2512.500	BPSK	Full RB	-26.90	-29.96	-30.32	-28.09	-32.66	-30.28	-40.90
30 MHz	2515.000	BPSK	Full RB	-25.80	-26.69	-28.01	-28.06	-31.76	-30.72	-40.84
40 MHz	2520.000	BPSK	Full RB	-16.08	-17.11	-29.68	-27.29	-32.72	-29.05	-47.12
50 MHz	2525.000	BPSK	Full RB	-12.96	-13.96	-28.64	-27.28	-31.63	-27.67	-60.94
Limit(dBm)				-10.0	-10.0	-13.0	-10.0	-25.0	-13.0	-25.0

BW (MHz)	Frequency (MHz)	Mod	RB (Size/ Offset)	C.E ~ (C.E ± 1 MHz)		(C.E ± 1 MHz) ~ (C.E ± 5 MHz)	
				Lower	Upper	Lower	Upper
5 MHz	2535.000	BPSK	Full RB	-29.53	-29.56	-27.22	-26.52
	2567.500	BPSK	Full RB	-28.31	-29.04	-25.63	-27.10
10 MHz	2535.000	BPSK	Full RB	-32.82	-33.71	-29.86	-28.44
	2565.000	BPSK	Full RB	-28.64	-30.84	-24.72	-24.16
15 MHz	2535.000	BPSK	Full RB	-30.89	-34.30	-30.15	-30.13
	2562.500	BPSK	Full RB	-25.94	-27.91	-22.72	-23.65
20 MHz	2535.000	BPSK	Full RB	-29.79	-34.01	-28.79	-29.54
	2560.000	BPSK	Full RB	-24.97	-28.69	-25.76	-26.77
25 MHz	2535.000	BPSK	Full RB	-30.91	-29.84	-32.29	-28.49
	2557.500	BPSK	Full RB	-27.13	-31.67	-25.80	-29.28
30 MHz	2535.000	BPSK	Full RB	-26.24	-28.68	-31.74	-32.01
	2555.000	BPSK	Full RB	-25.90	-27.29	-28.19	-27.37
40 MHz	2535.000	BPSK	Full RB	-14.57	-17.12	-30.35	-29.63
	2550.000	BPSK	Full RB	-15.67	-17.01	-31.21	-31.05
50 MHz	2535.000	BPSK	Full RB	-12.72	-14.43	-26.10	-29.18
	2545.000	BPSK	Full RB	-12.42	-13.49	-29.93	-29.13
Limi(dBm)				-10.0		-10.0	

BW (MHz)	Frequency (MHz)	Mod	RB (Size/ Offset)	(C.E $\pm$ 5 MHz)		Above (C.E $\pm$ X MHz)	
				~ (C.E $\pm$ X MHz)			
				Lower	Upper	Lower	Upper
5 MHz	2535.000	BPSK	Full RB	-31.80	-31.99	-32.70	-32.53
	2567.500	BPSK	Full RB	-30.28	-33.29	-30.46	-33.62
10 MHz	2535.000	BPSK	Full RB	-31.49	-31.74	-35.40	-35.47
	2565.000	BPSK	Full RB	-28.04	-30.17	-29.72	-36.64
15 MHz	2535.000	BPSK	Full RB	-30.27	-30.65	-36.05	-37.29
	2562.500	BPSK	Full RB	-26.69	-28.80	-30.82	-43.33
20 MHz	2535.000	BPSK	Full RB	-30.59	-31.28	-37.35	-35.90
	2560.000	BPSK	Full RB	-28.09	-29.87	-35.35	-45.67
25 MHz	2535.000	BPSK	Full RB	-33.19	-31.75	-41.48	-40.24
	2557.500	BPSK	Full RB	-29.50	-32.45	-35.83	-55.64
30 MHz	2535.000	BPSK	Full RB	-32.41	-30.91	-44.01	-40.74
	2555.000	BPSK	Full RB	-29.34	-32.16	-35.74	-61.12
40 MHz	2535.000	BPSK	Full RB	-32.64	-30.00	-61.48	-56.20
	2550.000	BPSK	Full RB	-30.02	-34.20	-43.12	-60.94
50 MHz	2535.000	BPSK	Full RB	-30.36	-31.22	-61.73	-60.99
	2545.000	BPSK	Full RB	-30.27	-29.67	-61.66	-60.98
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. Plots of the EUT's Channel Edge are shown Page 202 ~ 257.

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 5 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
2502.500	100 %	+20(Ref)	2502 500 002	0.0	0.000 000	0.000
	100 %	-30	2502 500 007	5.3	0.000 000	0.002
	100 %	-20	2502 500 004	2.2	0.000 000	0.001
	100 %	-10	2502 500 001	-1.3	0.000 000	-0.001
	100 %	0	2502 499 996	-5.9	0.000 000	-0.002
	100 %	+10	2502 500 005	3.3	0.000 000	0.001
	100 %	+30	2502 500 004	1.7	0.000 000	0.001
	100 %	+40	2502 500 001	-0.7	0.000 000	0.000
	100 %	+50	2502 499 999	-3.3	0.000 000	-0.001
	Lowest voltage	+20	2502 500 004	2.4	0.000 000	0.001
2567.500	100 %	+20(Ref)	2567 499 995	0.0	0.000 000	0.000
	100 %	-30	2567 499 986	-9.5	0.000 000	-0.004
	100 %	-20	2567 499 988	-7.4	0.000 000	-0.003
	100 %	-10	2567 499 988	-6.9	0.000 000	-0.003
	100 %	0	2567 499 986	-8.9	0.000 000	-0.003
	100 %	+10	2567 499 994	-1.6	0.000 000	-0.001
	100 %	+30	2567 499 994	-1.3	0.000 000	-0.001
	100 %	+40	2567 499 992	-2.7	0.000 000	-0.001
	100 %	+50	2567 499 991	-3.7	0.000 000	-0.001
	Lowest voltage	+20	2567 499 990	-4.9	0.000 000	-0.002

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
2505.000	100 %	+20(Ref)	2505 000 001	0.0	0.000 000	0.000
	100 %	-30	2505 000 004	2.7	0.000 000	0.001
	100 %	-20	2505 000 002	0.7	0.000 000	0.000
	100 %	-10	2505 000 003	1.6	0.000 000	0.001
	100 %	0	2505 000 004	2.8	0.000 000	0.001
	100 %	+10	2505 000 004	2.5	0.000 000	0.001
	100 %	+30	2505 000 004	2.6	0.000 000	0.001
	100 %	+40	2505 000 005	4.0	0.000 000	0.002
	100 %	+50	2505 000 004	2.8	0.000 000	0.001
	Lowest voltage	+20	2504 999 999	-2.7	0.000 000	-0.001
2565.000	100 %	+20(Ref)	2565 000 002	0.0	0.000 000	0.000
	100 %	-30	2565 000 005	2.7	0.000 000	0.001
	100 %	-20	2565 000 009	7.2	0.000 000	0.003
	100 %	-10	2565 000 007	5.2	0.000 000	0.002
	100 %	0	2565 000 006	3.7	0.000 000	0.001
	100 %	+10	2565 000 007	4.3	0.000 000	0.002
	100 %	+30	2565 000 008	5.4	0.000 000	0.002
	100 %	+40	2565 000 003	1.0	0.000 000	0.000
	100 %	+50	2565 000 006	4.0	0.000 000	0.002
	Lowest voltage	+20	2565 000 003	1.1	0.000 000	0.000

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
2507.500	100 %	+20(Ref)	2507 499 998	0.0	0.000 000	0.000
	100 %	-30	2507 500 001	2.6	0.000 000	0.001
	100 %	-20	2507 499 993	-5.0	0.000 000	-0.002
	100 %	-10	2507 499 995	-3.2	0.000 000	-0.001
	100 %	0	2507 499 997	-1.0	0.000 000	0.000
	100 %	+10	2507 499 997	-1.0	0.000 000	0.000
	100 %	+30	2507 499 996	-2.4	0.000 000	-0.001
	100 %	+40	2507 499 997	-1.1	0.000 000	0.000
	100 %	+50	2507 499 999	0.4	0.000 000	0.000
	Lowest voltage	+20	2507 499 996	-2.2	0.000 000	-0.001
2562.500	100 %	+20(Ref)	2562 500 003	0.0	0.000 000	0.000
	100 %	-30	2562 500 001	-2.1	0.000 000	-0.001
	100 %	-20	2562 499 999	-3.9	0.000 000	-0.002
	100 %	-10	2562 500 002	-0.3	0.000 000	0.000
	100 %	0	2562 499 995	-7.8	0.000 000	-0.003
	100 %	+10	2562 499 995	-8.0	0.000 000	-0.003
	100 %	+30	2562 499 997	-5.8	0.000 000	-0.002
	100 %	+40	2562 499 996	-6.6	0.000 000	-0.003
	100 %	+50	2562 499 994	-8.6	0.000 000	-0.003
	Lowest voltage	+20	2562 499 996	-6.3	0.000 000	-0.002

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
2510.000	100 %	+20(Ref)	2509 999 995	0.0	0.000 000	0.000
	100 %	-30	2509 999 991	-3.7	0.000 000	-0.001
	100 %	-20	2509 999 991	-3.2	0.000 000	-0.001
	100 %	-10	2509 999 993	-1.6	0.000 000	-0.001
	100 %	0	2509 999 990	-4.8	0.000 000	-0.002
	100 %	+10	2509 999 988	-6.6	0.000 000	-0.003
	100 %	+30	2509 999 992	-2.2	0.000 000	-0.001
	100 %	+40	2509 999 991	-3.2	0.000 000	-0.001
	100 %	+50	2509 999 993	-2.0	0.000 000	-0.001
	Lowest voltage	+20	2509 999 993	-1.9	0.000 000	-0.001
2560.000	100 %	+20(Ref)	2560 000 001	0.0	0.000 000	0.000
	100 %	-30	2560 000 004	3.8	0.000 000	0.001
	100 %	-20	2560 000 005	3.9	0.000 000	0.002
	100 %	-10	2560 000 006	5.2	0.000 000	0.002
	100 %	0	2560 000 005	4.7	0.000 000	0.002
	100 %	+10	2560 000 004	3.5	0.000 000	0.001
	100 %	+30	2560 000 005	3.9	0.000 000	0.002
	100 %	+40	2560 000 002	1.2	0.000 000	0.000
	100 %	+50	2560 000 001	0.0	0.000 000	0.000
	Lowest voltage	+20	2560 000 003	2.4	0.000 000	0.001

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
2512.500	100 %	+20(Ref)	2512 500 002	0.0	0.000 000	0.000
	100 %	-30	2512 500 002	0.2	0.000 000	0.000
	100 %	-20	2512 500 003	1.0	0.000 000	0.000
	100 %	-10	2512 500 006	4.3	0.000 000	0.002
	100 %	0	2512 500 002	0.2	0.000 000	0.000
	100 %	+10	2512 500 005	3.2	0.000 000	0.001
	100 %	+30	2512 500 006	4.2	0.000 000	0.002
	100 %	+40	2512 500 005	3.7	0.000 000	0.001
	100 %	+50	2512 500 009	7.1	0.000 000	0.003
	Lowest voltage	+20	2512 500 006	4.5	0.000 000	0.002
2557.500	100 %	+20(Ref)	2557 499 993	0.0	0.000 000	0.000
	100 %	-30	2557 499 996	2.7	0.000 000	0.001
	100 %	-20	2557 499 993	-0.5	0.000 000	0.000
	100 %	-10	2557 499 988	-5.4	0.000 000	-0.002
	100 %	0	2557 499 988	-4.9	0.000 000	-0.002
	100 %	+10	2557 499 987	-5.8	0.000 000	-0.002
	100 %	+30	2557 499 988	-5.4	0.000 000	-0.002
	100 %	+40	2557 499 993	-0.3	0.000 000	0.000
	100 %	+50	2557 499 988	-4.8	0.000 000	-0.002
	Lowest voltage	+20	2557 499 988	-5.3	0.000 000	-0.002

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
2515.000	100 %	+20(Ref)	2514 999 996	0.0	0.000 000	0.000
	100 %	-30	2514 999 988	-7.8	0.000 000	-0.003
	100 %	-20	2514 999 992	-3.7	0.000 000	-0.001
	100 %	-10	2514 999 995	-0.5	0.000 000	0.000
	100 %	0	2514 999 995	-1.1	0.000 000	0.000
	100 %	+10	2514 999 997	1.0	0.000 000	0.000
	100 %	+30	2514 999 993	-2.8	0.000 000	-0.001
	100 %	+40	2514 999 991	-5.1	0.000 000	-0.002
	100 %	+50	2514 999 992	-4.2	0.000 000	-0.002
	Lowest voltage	+20	2514 999 991	-5.0	0.000 000	-0.002
2555.000	100 %	+20(Ref)	2554 999 998	0.0	0.000 000	0.000
	100 %	-30	2554 999 993	-4.2	0.000 000	-0.002
	100 %	-20	2554 999 994	-3.4	0.000 000	-0.001
	100 %	-10	2554 999 992	-5.2	0.000 000	-0.002
	100 %	0	2554 999 988	-9.2	0.000 000	-0.004
	100 %	+10	2554 999 993	-4.9	0.000 000	-0.002
	100 %	+30	2554 999 996	-1.9	0.000 000	-0.001
	100 %	+40	2554 999 992	-5.3	0.000 000	-0.002
	100 %	+50	2554 999 991	-6.6	0.000 000	-0.003
	Lowest voltage	+20	2554 999 994	-3.8	0.000 000	-0.001

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
2520.000	100 %	+20(Ref)	2519 999 992	0.0	0.000 000	0.000
	100 %	-30	2519 999 991	-1.6	0.000 000	-0.001
	100 %	-20	2519 999 991	-1.3	0.000 000	-0.001
	100 %	-10	2519 999 992	-0.3	0.000 000	0.000
	100 %	0	2519 999 988	-3.8	0.000 000	-0.002
	100 %	+10	2519 999 988	-4.6	0.000 000	-0.002
	100 %	+30	2519 999 991	-1.6	0.000 000	-0.001
	100 %	+40	2519 999 994	2.1	0.000 000	0.001
	100 %	+50	2519 999 989	-2.9	0.000 000	-0.001
	Lowest voltage	+20	2519 999 989	-3.3	0.000 000	-0.001
2550.000	100 %	+20(Ref)	2549 999 999	0.0	0.000 000	0.000
	100 %	-30	2549 999 996	-2.4	0.000 000	-0.001
	100 %	-20	2549 999 998	-0.3	0.000 000	0.000
	100 %	-10	2550 000 002	3.2	0.000 000	0.001
	100 %	0	2550 000 000	0.8	0.000 000	0.000
	100 %	+10	2550 000 003	4.2	0.000 000	0.002
	100 %	+30	2549 999 999	0.2	0.000 000	0.000
	100 %	+40	2549 999 999	0.8	0.000 000	0.000
	100 %	+50	2549 999 997	-2.0	0.000 000	-0.001
	Lowest voltage	+20	2549 999 993	-5.4	0.000 000	-0.002

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Lowest voltage: 3.700 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
2525.000	100 %	+20(Ref)	2524 999 998	0.0	0.000 000	0.000
	100 %	-30	2524 999 994	-3.1	0.000 000	-0.001
	100 %	-20	2524 999 996	-1.6	0.000 000	-0.001
	100 %	-10	2524 999 996	-2.0	0.000 000	-0.001
	100 %	0	2524 999 995	-3.1	0.000 000	-0.001
	100 %	+10	2524 999 993	-5.0	0.000 000	-0.002
	100 %	+30	2524 999 993	-4.3	0.000 000	-0.002
	100 %	+40	2524 999 995	-2.4	0.000 000	-0.001
	100 %	+50	2525 000 000	1.9	0.000 000	0.001
	Lowest voltage	+20	2524 999 995	-2.1	0.000 000	-0.001
2545.000	100 %	+20(Ref)	2545 000 000	0.0	0.000 000	0.000
	100 %	-30	2544 999 996	-4.3	0.000 000	-0.002
	100 %	-20	2544 999 990	-9.9	0.000 000	-0.004
	100 %	-10	2544 999 992	-7.9	0.000 000	-0.003
	100 %	0	2544 999 995	-5.1	0.000 000	-0.002
	100 %	+10	2544 999 995	-4.9	0.000 000	-0.002
	100 %	+30	2544 999 994	-6.0	0.000 000	-0.002
	100 %	+40	2544 999 993	-7.0	0.000 000	-0.003
	100 %	+50	2544 999 996	-4.0	0.000 000	-0.002
	Lowest voltage	+20	2544 999 998	-1.9	0.000 000	-0.001

9. TEST DATA (Internal(BUA))

9.1 EQUIVALENT ISOTROPIC RADIATED POWER

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
2502.5		PI/2 BPSK	-24.42	14.03	10.26	2.51	H		0.151	21.78	1	12
		QPSK	-24.52	13.93	10.26	2.51	H		0.147	21.68		
		16-QAM	-25.39	13.06	10.26	2.51	H		0.121	20.81		
		64-QAM	-26.87	11.58	10.26	2.51	H		0.086	19.33		
		256-QAM	-28.44	10.01	10.26	2.51	H		0.060	17.76		
2535.0	Sub6 n7/ 5 MHz [15 kHz]	PI/2 BPSK	-23.65	15.19	10.25	2.54	H	< 2.00	0.195	22.90	1	12
		QPSK	-23.72	15.12	10.25	2.54	H		0.192	22.83		
		16-QAM	-24.53	14.31	10.25	2.54	H		0.159	22.02		
		64-QAM	-26.03	12.81	10.25	2.54	H		0.113	20.52		
		256-QAM	-27.57	11.27	10.25	2.54	H		0.079	18.98		
2567.5		PI/2 BPSK	-23.74	15.34	10.27	2.65	H		0.198	22.96	1	12
		QPSK	-23.90	15.18	10.27	2.65	H		0.191	22.80		
		16-QAM	-24.15	14.93	10.27	2.65	H		0.180	22.55		
		64-QAM	-25.66	13.42	10.27	2.65	H		0.127	21.04		
		256-QAM	-27.33	11.75	10.27	2.65	H		0.087	19.37		

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
2505.0		PI/2 BPSK	-24.44	14.01	10.26	2.51	H	< 2.00	0.150	21.76	1	26
		QPSK	-24.47	13.98	10.26	2.51	H		0.149	21.73		
		16-QAM	-25.42	13.03	10.26	2.51	H		0.120	20.78		
		64-QAM	-26.99	11.46	10.26	2.51	H		0.083	19.21		
		256-QAM	-28.40	10.05	10.26	2.51	H		0.060	17.80		
2535.0	Sub6 n7/ 10 MHz [15 kHz]	PI/2 BPSK	-23.56	15.28	10.25	2.54	H	< 2.00	0.199	22.99	1	26
		QPSK	-23.57	15.27	10.25	2.54	H		0.199	22.98		
		16-QAM	-24.51	14.33	10.25	2.54	H		0.160	22.04		
		64-QAM	-25.91	12.93	10.25	2.54	H		0.116	20.64		
		256-QAM	-27.47	11.37	10.25	2.54	H		0.081	19.08		
2565.0		PI/2 BPSK	-23.68	15.38	10.26	2.62	H	< 2.00	0.200	23.02	1	1
		QPSK	-23.84	15.22	10.26	2.62	H		0.193	22.86		
		16-QAM	-24.29	14.77	10.26	2.62	H		0.174	22.41		
		64-QAM	-25.75	13.31	10.26	2.62	H		0.124	20.95		
		256-QAM	-27.44	11.62	10.26	2.62	H		0.084	19.26		

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
2507.5		PI/2 BPSK	-24.32	14.21	10.26	2.51	H		0.157	21.96	1	77
		QPSK	-24.37	14.16	10.26	2.51	H		0.155	21.91		
		16-QAM	-26.93	11.60	10.26	2.51	H		0.086	19.35		
		64-QAM	-26.75	11.78	10.26	2.51	H		0.090	19.53		
		256-QAM	-28.43	10.10	10.26	2.51	H		0.061	17.85		
2535.0	Sub6 n7/ 15 MHz [15 kHz]	PI/2 BPSK	-23.57	15.27	10.25	2.54	H	< 2.00	0.199	22.98	1	39
		QPSK	-23.69	15.15	10.25	2.54	H		0.193	22.86		
		16-QAM	-24.51	14.33	10.25	2.54	H		0.160	22.04		
		64-QAM	-26.06	12.78	10.25	2.54	H		0.112	20.49		
		256-QAM	-27.50	11.34	10.25	2.54	H		0.080	19.05		
2562.5		PI/2 BPSK	-23.55	15.51	10.26	2.62	H		0.207	23.15	1	1
		QPSK	-23.58	15.48	10.26	2.62	H		0.205	23.12		
		16-QAM	-24.46	14.60	10.26	2.62	H		0.168	22.24		
		64-QAM	-25.91	13.15	10.26	2.62	H		0.120	20.79		
		256-QAM	-27.51	11.55	10.26	2.62	H		0.083	19.19		

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
2510.0	Sub6 n7/ 20 MHz [15 kHz]	PI/2 BPSK	-24.49	14.04	10.26	2.51	H	< 2.00	0.151	21.79	1	104
		QPSK	-24.51	14.02	10.26	2.51	H		0.150	21.77		
		16-QAM	-25.39	13.14	10.26	2.51	H		0.123	20.89		
		64-QAM	-26.86	11.67	10.26	2.51	H		0.088	19.42		
		256-QAM	-28.47	10.06	10.26	2.51	H		0.060	17.81		
2535.0		PI/2 BPSK	-23.70	15.14	10.25	2.54	H		0.193	22.85	1	104
		QPSK	-23.85	14.99	10.25	2.54	H		0.186	22.70		
		16-QAM	-24.64	14.20	10.25	2.54	H		0.155	21.91		
		64-QAM	-26.00	12.84	10.25	2.54	H		0.113	20.55		
		256-QAM	-27.68	11.16	10.25	2.54	H		0.077	18.87		
2560.0		PI/2 BPSK	-23.53	15.51	10.26	2.59	H	0.208	23.18	1	104	
		QPSK	-23.55	15.49	10.26	2.59	H	0.207	23.16			
		16-QAM	-24.28	14.76	10.26	2.59	H	0.175	22.43			
		64-QAM	-25.69	13.35	10.26	2.59	H	0.127	21.02			
		256-QAM	-27.36	11.68	10.26	2.59	H	0.086	19.35			

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
2512.5	Sub6 n7/ 25 MHz [15 kHz]	PI/2 BPSK	-24.17	14.40	10.26	2.53	H	< 2.00	0.163	22.13	1	131
		QPSK	-24.41	14.16	10.26	2.53	H		0.154	21.89		
		16-QAM	-25.26	13.31	10.26	2.53	H		0.127	21.04		
		64-QAM	-26.69	11.88	10.26	2.53	H		0.091	19.61		
		256-QAM	-28.34	10.23	10.26	2.53	H		0.063	17.96		
2535.0		PI/2 BPSK	-23.75	15.09	10.25	2.54	H		0.191	22.80	1	131
		QPSK	-23.80	15.04	10.25	2.54	H		0.189	22.75		
		16-QAM	-24.78	14.06	10.25	2.54	H		0.150	21.77		
		64-QAM	-26.23	12.61	10.25	2.54	H		0.108	20.32		
		256-QAM	-27.69	11.15	10.25	2.54	H		0.077	18.86		
2557.5		PI/2 BPSK	-23.75	15.29	10.26	2.59	H		0.198	22.96	1	131
		QPSK	-23.86	15.18	10.26	2.59	H		0.193	22.85		
		16-QAM	-24.46	14.58	10.26	2.59	H		0.168	22.25		
		64-QAM	-25.98	13.06	10.26	2.59	H		0.118	20.73		
		256-QAM	-27.61	11.43	10.26	2.59	H		0.081	19.10		

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
2515.0	Sub6 n7/ 30 MHz [15 kHz]	PI/2 BPSK	-24.30	14.27	10.26	2.53	H	< 2.00	0.158	22.00	1	158
		QPSK	-24.37	14.20	10.26	2.53	H		0.156	21.93		
		16-QAM	-25.30	13.27	10.26	2.53	H		0.126	21.00		
		64-QAM	-26.79	11.78	10.26	2.53	H		0.089	19.51		
		256-QAM	-28.26	10.31	10.26	2.53	H		0.064	18.04		
2535.0		PI/2 BPSK	-23.92	14.92	10.25	2.54	H		0.183	22.63	1	80
		QPSK	-23.95	14.89	10.25	2.54	H		0.182	22.60		
		16-QAM	-24.93	13.91	10.25	2.54	H		0.145	21.62		
		64-QAM	-26.37	12.47	10.25	2.54	H		0.104	20.18		
		256-QAM	-28.09	10.75	10.25	2.54	H		0.070	18.46		
2555.0		PI/2 BPSK	-23.93	15.10	10.25	2.56	H		0.190	22.79	1	158
		QPSK	-24.05	14.98	10.25	2.56	H		0.185	22.67		
		16-QAM	-24.40	14.63	10.25	2.56	H		0.171	22.32		
		64-QAM	-25.90	13.13	10.25	2.56	H		0.121	20.82		
		256-QAM	-27.68	11.35	10.25	2.56	H		0.080	19.04		

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
2520.0	Sub6 n7/ 40 MHz [15 kHz]	PI/2 BPSK	-24.03	14.57	10.26	2.54	H	< 2.00	0.170	22.29	1	214
		QPSK	-24.11	14.49	10.26	2.54	H		0.166	22.21		
		16-QAM	-25.10	13.50	10.26	2.54	H		0.132	21.22		
		64-QAM	-26.57	12.03	10.26	2.54	H		0.094	19.75		
		256-QAM	-28.06	10.54	10.26	2.54	H		0.067	18.26		
2535.0		PI/2 BPSK	-23.93	14.91	10.25	2.54	H		0.183	22.62	1	214
		QPSK	-23.98	14.86	10.25	2.54	H		0.181	22.57		
		16-QAM	-24.95	13.89	10.25	2.54	H		0.145	21.60		
		64-QAM	-26.38	12.46	10.25	2.54	H		0.104	20.17		
		256-QAM	-27.97	10.87	10.25	2.54	H		0.072	18.58		
2550.0		PI/2 BPSK	-23.68	15.33	10.24	2.53	H		0.202	23.04	1	214
		QPSK	-24.04	14.97	10.24	2.53	H		0.185	22.68		
		16-QAM	-24.62	14.39	10.24	2.53	H		0.162	22.10		
		64-QAM	-25.92	13.09	10.24	2.53	H		0.120	20.80		
		256-QAM	-28.01	11.00	10.24	2.53	H		0.074	18.71		

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
2525.0		PI/2 BPSK	-24.41	14.27	10.25	2.54	H		0.158	21.98	1	268
		QPSK	-24.43	14.25	10.25	2.54	H		0.157	21.96		
		16-QAM	-25.41	13.27	10.25	2.54	H		0.125	20.98		
		64-QAM	-26.86	11.82	10.25	2.54	H		0.090	19.53		
		256-QAM	-28.04	10.64	10.25	2.54	H		0.068	18.35		
2535.0	Sub6 n7/ 50 MHz [15 kHz]	PI/2 BPSK	-23.86	14.98	10.25	2.54	H	< 2.00	0.186	22.69	1	268
		QPSK	-23.89	14.95	10.25	2.54	H		0.185	22.66		
		16-QAM	-24.73	14.11	10.25	2.54	H		0.152	21.82		
		64-QAM	-26.28	12.56	10.25	2.54	H		0.106	20.27		
		256-QAM	-27.83	11.01	10.25	2.54	H		0.074	18.72		
2545.0		PI/2 BPSK	-23.98	14.98	10.25	2.53	H		0.186	22.70	1	268
		QPSK	-24.16	14.80	10.25	2.53	H		0.179	22.52		
		16-QAM	-24.70	14.26	10.25	2.53	H		0.158	21.98		
		64-QAM	-26.16	12.80	10.25	2.53	H		0.113	20.52		
		256-QAM	-27.92	11.04	10.25	2.53	H		0.075	18.76		

9.2 RADIATED SPURIOUS EMISSIONS

NR Band:	<u>N7</u>
Bandwidth:	<u>5 MHz</u>
Modulation:	<u>PI/2 BPSK</u>
Distance:	<u>1 meters</u>
SCS:	<u>15 kHz</u>

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
500500 (2502.5)	5 005.00	-55.42	10.91	-61.96	3.71	H	-54.76	-25.00	1	12
	7 507.50	-53.71	11.59	-55.82	4.60	V	-48.83			
	10 010.00	-54.11	11.39	-53.70	5.47	H	-47.78			
	12 512.50	-55.25	13.16	-51.73	6.09	V	-44.66			
	15 015.00	-62.60	14.28	-44.48	6.76	V	-36.96			
507000 (2535.0)	5 070.00	-54.63	10.92	-61.39	3.80	H	-54.27		1	12
	7 605.00	-53.78	11.66	-55.97	4.64	V	-48.95			
	10 140.00	-53.88	11.34	-53.24	5.48	V	-47.38			
	12 675.00	-56.62	12.88	-52.59	6.24	V	-45.95			
	15 210.00	-63.03	14.81	-44.61	6.81	H	-36.61			
513500 (2567.5)	5 135.00	-53.85	11.04	-60.96	3.81	V	-53.73		1	12
	7 702.50	-54.96	11.56	-56.62	4.66	H	-49.72			
	10 270.00	-54.58	11.46	-53.94	5.57	H	-48.05			
	12 837.50	-56.54	12.73	-51.92	6.24	H	-45.43			
	15 405.00	-62.80	15.34	-43.65	6.85	V	-35.16			

☐ NR Band: N7
☐ Bandwidth: 10 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
501000 (2505.0)	5 010.00	-55.82	10.91	-62.41	3.72	H	-55.22	-25.00	1	26
	7 515.00	-54.51	11.59	-56.75	4.60	V	-49.76			
	10 020.00	-54.01	11.39	-53.16	5.47	H	-47.24			
	12 525.00	-55.94	13.14	-52.46	6.09	H	-45.41			
	15 030.00	-62.29	14.32	-44.48	6.73	H	-36.89			
507000 (2535.0)	5 070.00	-54.85	10.92	-61.61	3.80	V	-54.49		1	26
	7 605.00	-53.68	11.66	-55.87	4.64	V	-48.85			
	10 140.00	-53.48	11.34	-52.84	5.48	V	-46.98			
	12 675.00	-57.37	12.88	-53.34	6.24	H	-46.70			
	15 210.00	-62.33	14.81	-43.91	6.81	H	-35.91			
513000 (2565.0)	5 130.00	-53.50	11.02	-60.41	3.81	H	-53.20		1	1
	7 695.00	-54.56	11.58	-56.39	4.66	H	-49.47			
	10 260.00	-54.48	11.44	-53.81	5.56	H	-47.93			
	12 825.00	-56.94	12.74	-52.59	6.21	H	-46.06			
	15 390.00	-63.10	15.30	-43.87	6.85	V	-35.42			

☐ NR Band: N7
☐ Bandwidth: 15 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
501500 (2507.5)	5 015.00	-55.82	10.91	-62.37	3.70	H	-55.16	-25.00	1	77
	7 522.50	-53.91	11.60	-56.29	4.61	V	-49.30			
	10 030.00	-54.52	11.39	-53.87	5.47	V	-47.95			
	12 537.50	-54.55	13.13	-50.97	6.13	V	-43.97			
	15 045.00	-62.30	14.35	-44.41	6.75	V	-36.81			
507000 (2535.0)	5 070.00	-55.43	10.92	-62.19	3.80	H	-55.07		1	39
	7 605.00	-53.88	11.66	-56.07	4.64	V	-49.05			
	10 140.00	-53.28	11.34	-52.64	5.48	V	-46.78			
	12 675.00	-56.72	12.88	-52.69	6.24	V	-46.05			
	15 210.00	-62.63	14.81	-44.21	6.81	H	-36.21			
512500 (2562.5)	5 125.00	-53.40	11.01	-60.41	3.81	H	-53.21		1	1
	7 687.50	-54.26	11.58	-56.14	4.66	H	-49.22			
	10 250.00	-55.09	11.42	-54.72	5.54	V	-48.84			
	12 812.50	-57.24	12.74	-52.98	6.20	H	-46.44			
	15 375.00	-63.00	15.26	-43.77	6.87	H	-35.38			

☐ NR Band: N7
☐ Bandwidth: 20 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
502000 (2510.0)	5 020.00	-55.04	10.90	-61.52	3.69	H	-54.31	-25.00	1	104
	7 530.00	-54.30	11.61	-56.71	4.60	H	-49.70			
	10 040.00	-53.76	11.38	-53.24	5.49	H	-47.35			
	12 550.00	-55.57	13.11	-51.93	6.19	H	-45.01			
	15 060.00	-61.05	14.39	-43.09	6.78	H	-35.48			
507000 (2535.0)	5 070.00	-54.97	10.92	-61.73	3.80	V	-54.61		1	104
	7 605.00	-54.62	11.66	-56.81	4.64	V	-49.79			
	10 140.00	-54.43	11.34	-53.79	5.48	V	-47.93			
	12 675.00	-56.35	12.88	-52.32	6.24	H	-45.68			
	15 210.00	-62.34	14.81	-43.92	6.81	H	-35.92			
512000 (2560.0)	5 120.00	-54.50	11.00	-61.61	3.81	H	-54.42		1	104
	7 680.00	-53.78	11.60	-55.75	4.70	H	-48.85			
	10 240.00	-53.68	11.41	-53.25	5.54	H	-47.38			
	12 800.00	-55.20	12.75	-50.94	6.21	H	-44.40			
	15 360.00	-62.40	15.21	-42.84	6.88	H	-34.51			

☐ NR Band: N7
☐ Bandwidth: 25 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
502500 (2512.5)	5 025.00	-55.18	10.90	-61.89	3.68	V	-54.67	-25.00	1	131
	7 537.50	-54.57	11.62	-57.01	4.61	V	-50.00			
	10 050.00	-53.66	11.38	-53.22	5.48	H	-47.32			
	12 562.50	-54.97	13.09	-51.31	6.24	H	-44.46			
	15 075.00	-60.95	14.42	-42.91	6.82	H	-35.31			
507000 (2535.0)	5 070.00	-56.89	10.92	-63.65	3.80	H	-56.53		1	131
	7 605.00	-54.81	11.66	-57.00	4.64	H	-49.98			
	10 140.00	-54.04	11.34	-53.40	5.48	V	-47.54			
	12 675.00	-56.27	12.88	-52.24	6.24	V	-45.60			
	15 210.00	-63.04	14.81	-44.62	6.81	H	-36.62			
511500 (2557.5)	5 115.00	-53.80	10.98	-60.93	3.80	H	-53.75		1	131
	7 672.50	-54.24	11.60	-56.21	4.70	V	-49.31			
	10 230.00	-53.38	11.39	-52.91	5.54	H	-47.06			
	12 787.50	-54.90	12.76	-50.63	6.22	H	-44.09			
	15 345.00	-61.80	15.17	-42.72	6.86	H	-34.41			

☐ NR Band: N7
☐ Bandwidth: 30 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
503000 (2515.0)	5 030.00	-55.37	10.90	-62.31	3.67	V	-55.08	-25.00	1	158
	7 545.00	-53.57	11.63	-55.99	4.62	V	-48.98			
	10 060.00	-53.46	11.37	-52.83	5.48	H	-46.94			
	12 575.00	-54.87	13.07	-51.20	6.25	H	-44.38			
	15 090.00	-61.45	14.46	-43.73	6.81	V	-36.08			
507000 (2535.0)	5 070.00	-56.17	10.92	-62.93	3.80	V	-55.81		1	80
	7 605.00	-54.51	11.66	-56.70	4.64	H	-49.68			
	10 140.00	-54.64	11.34	-54.00	5.48	V	-48.14			
	12 675.00	-56.57	12.88	-52.54	6.24	V	-45.90			
	15 210.00	-62.04	14.81	-43.62	6.81	H	-35.62			
511000 (2555.0)	5 110.00	-54.70	10.97	-61.86	3.79	H	-54.68		1	158
	7 665.00	-54.86	11.62	-56.83	4.70	H	-49.91			
	10 220.00	-54.33	11.38	-53.87	5.54	V	-48.03			
	12 775.00	-55.00	12.76	-50.80	6.23	H	-44.27			
	15 330.00	-62.60	15.13	-43.85	6.82	H	-35.54			

☐ NR Band: N7
☐ Bandwidth: 40 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

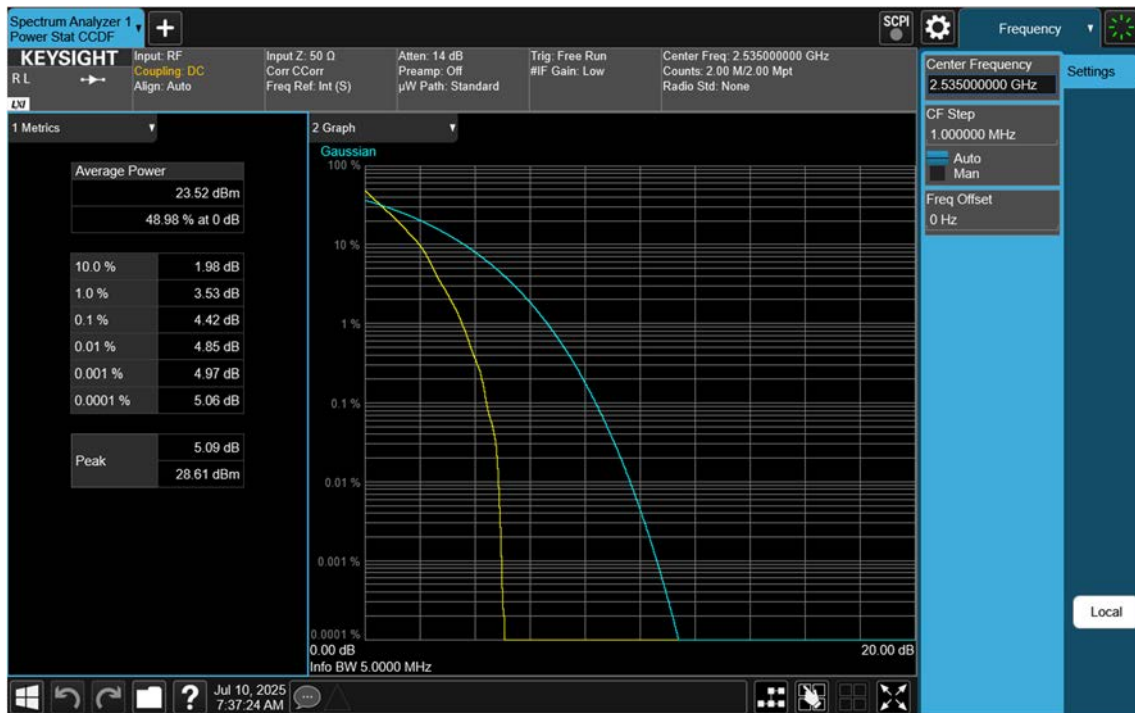
Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
504000 (2520.0)	5 040.00	-55.25	10.90	-61.92	3.68	V	-54.70	-25.00	1	214
	7 560.00	-54.77	11.64	-56.96	4.64	V	-49.96			
	10 080.00	-53.94	11.37	-53.57	5.47	V	-47.67			
	12 600.00	-55.81	13.03	-52.03	6.18	V	-45.18			
	15 120.00	-60.35	14.54	-42.34	6.80	H	-34.60			
507000 (2535.0)	5 070.00	-56.27	10.92	-63.03	3.80	V	-55.91		1	214
	7 605.00	-54.31	11.66	-56.50	4.64	H	-49.48			
	10 140.00	-54.44	11.34	-53.80	5.48	V	-47.94			
	12 675.00	-56.57	12.88	-52.54	6.24	V	-45.90			
	15 210.00	-61.84	14.81	-43.42	6.81	H	-35.42			
510000 (2550.0)	5 100.00	-55.50	10.95	-62.22	3.78	H	-55.05		1	214
	7 650.00	-53.46	11.64	-55.53	4.68	H	-48.57			
	10 200.00	-53.48	11.35	-52.96	5.54	H	-47.15			
	12 750.00	-56.30	12.78	-52.17	6.23	H	-45.62			
	15 300.00	-61.70	15.06	-42.89	6.83	H	-34.66			

☐ NR Band: N7
☐ Bandwidth: 50 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meters
☐ SCS: 15 kHz

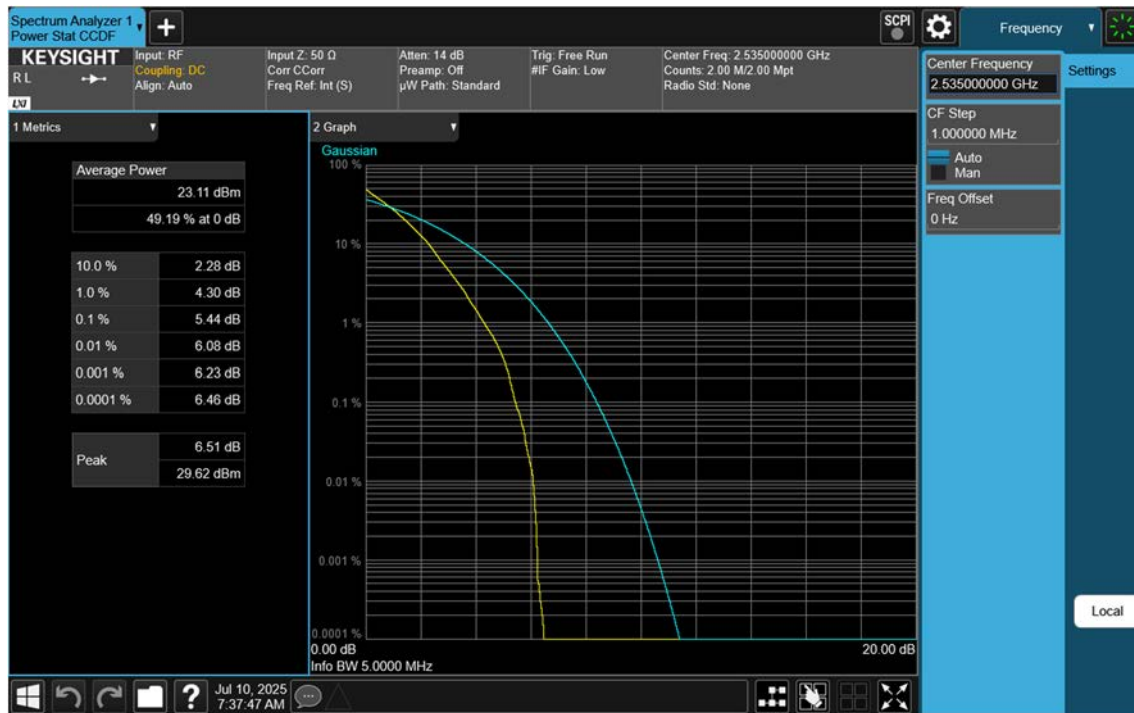
Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
505000 (2525.0)	5 050.00	-55.11	10.90	-61.84	3.73	V	-54.67	-25.00	1	268
	7 575.00	-53.47	11.65	-55.71	4.65	V	-48.71			
	10 100.00	-53.54	11.36	-52.90	5.46	V	-47.00			
	12 625.00	-55.37	12.98	-51.46	6.22	H	-44.70			
	15 150.00	-61.75	14.61	-43.64	6.80	H	-35.83			
507000 (2535.0)	5 070.00	-55.77	10.92	-62.53	3.80	V	-55.41		1	268
	7 605.00	-54.99	11.66	-57.18	4.64	V	-50.16			
	10 140.00	-54.64	11.34	-54.00	5.48	V	-48.14			
	12 675.00	-57.77	12.88	-53.74	6.24	V	-47.10			
	15 210.00	-63.04	14.81	-44.62	6.81	H	-36.62			
509000 (2545.0)	5 090.00	-54.90	10.94	-61.77	3.78	H	-54.61		1	268
	7 635.00	-54.94	11.64	-57.04	4.67	V	-50.07			
	10 180.00	-53.83	11.34	-53.17	5.51	V	-47.34			
	12 725.00	-55.70	12.81	-52.01	6.21	H	-45.41			
	15 270.00	-63.00	14.99	-44.47	6.82	H	-36.30			

10. TEST PLOTS

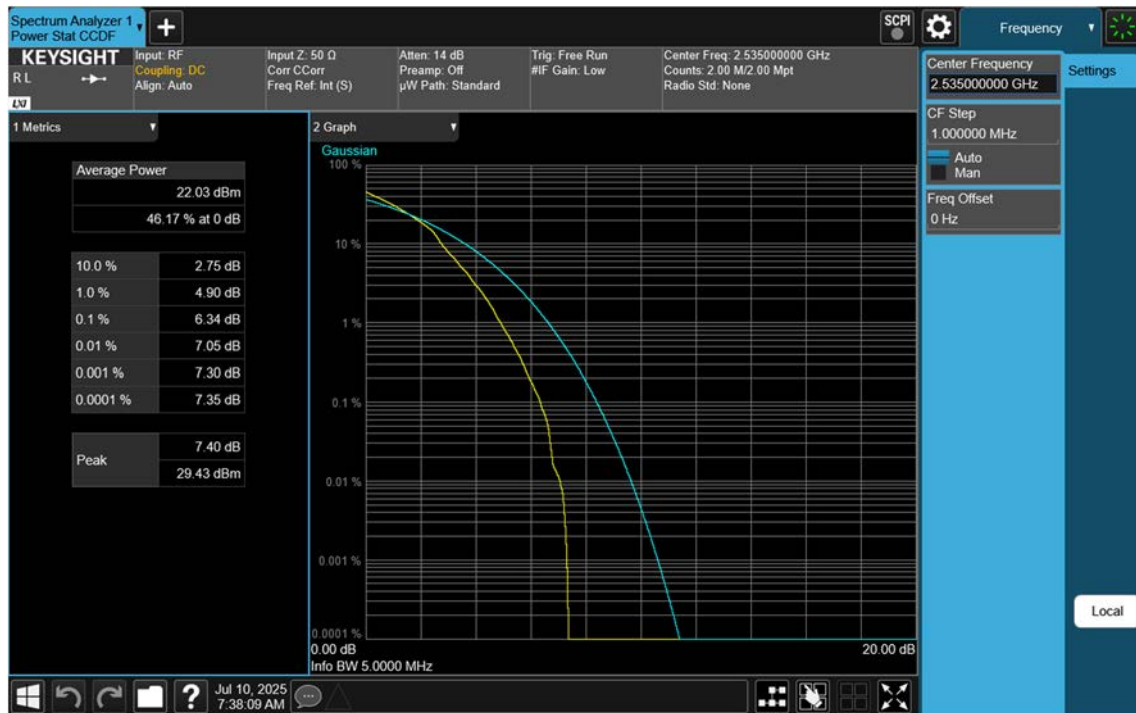
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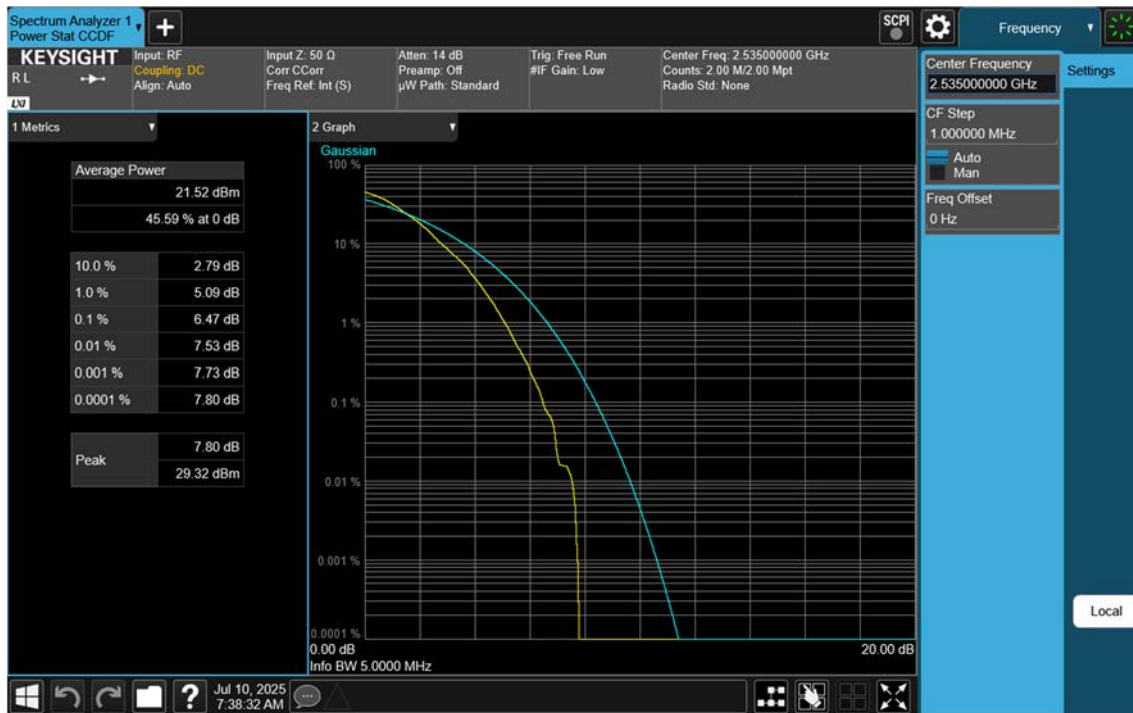
NR7_5 M_PAR_Mid_QPSK_FullRB



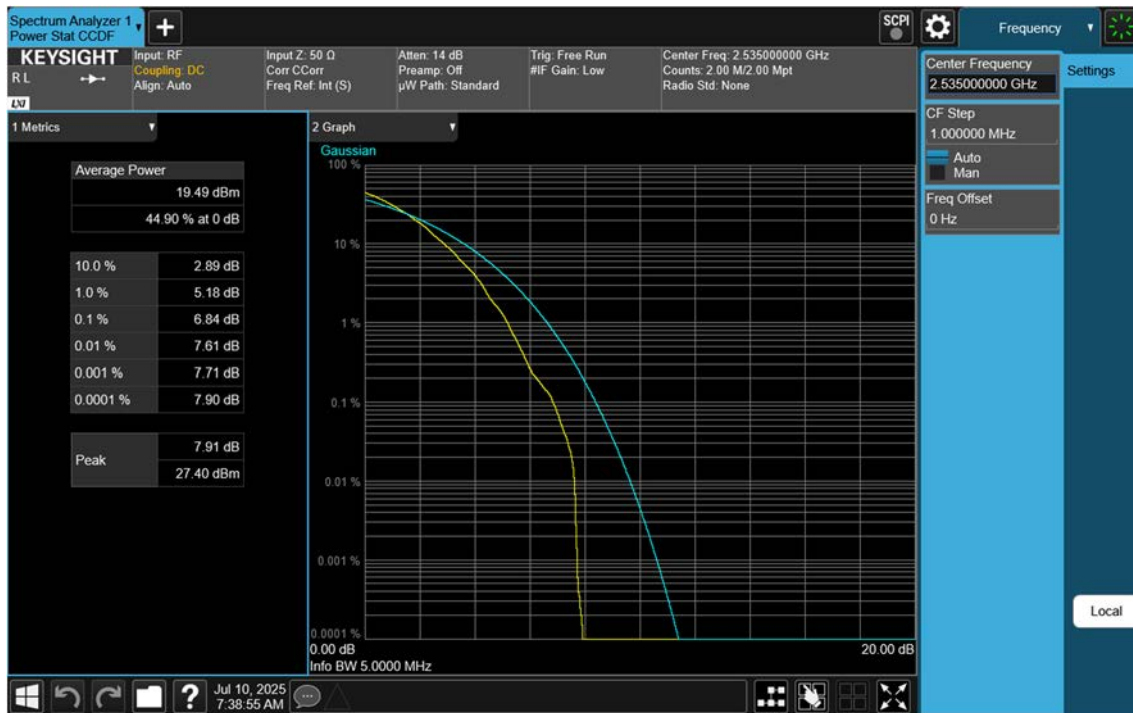
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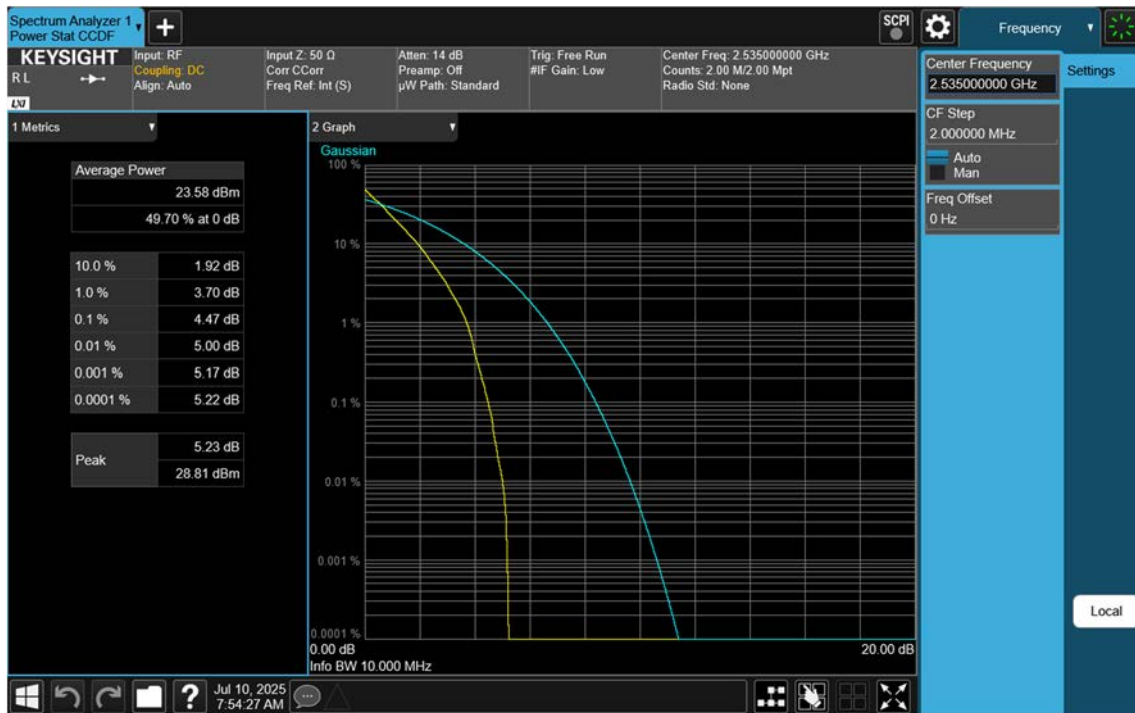
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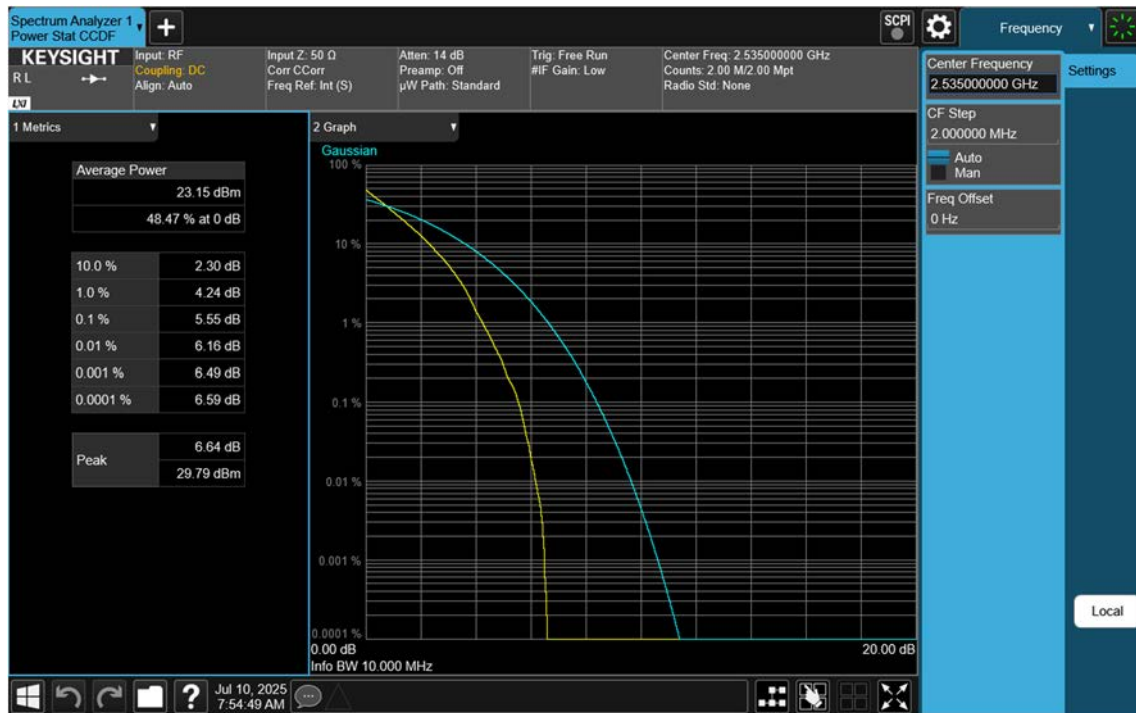
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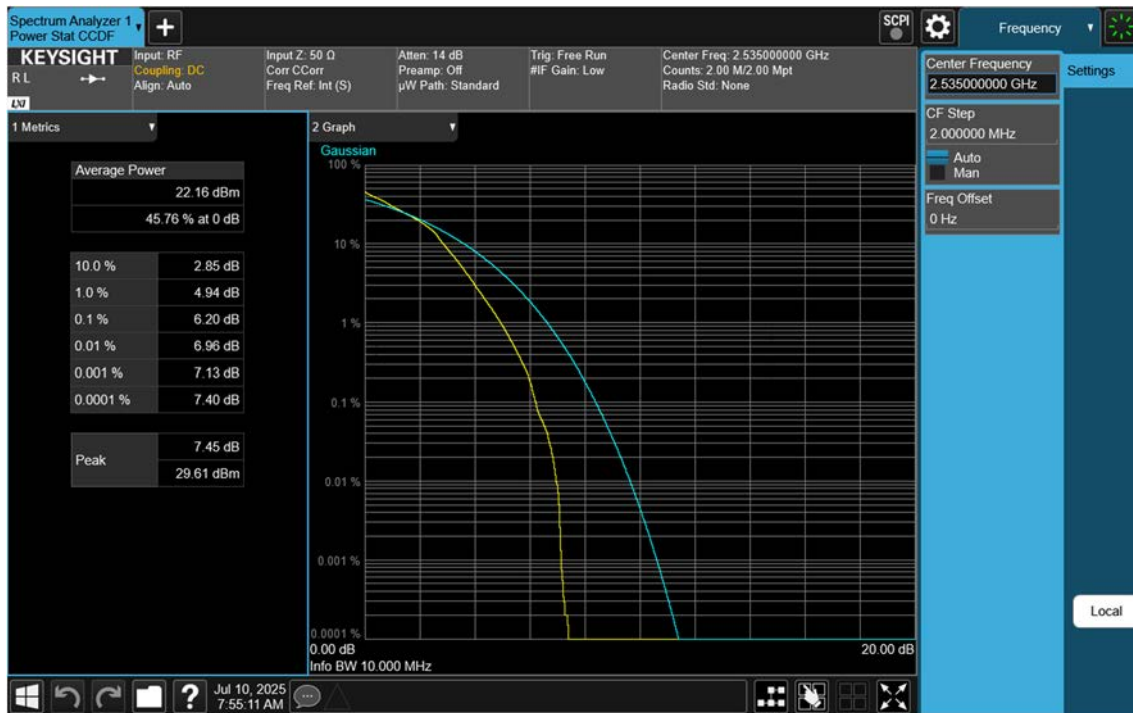
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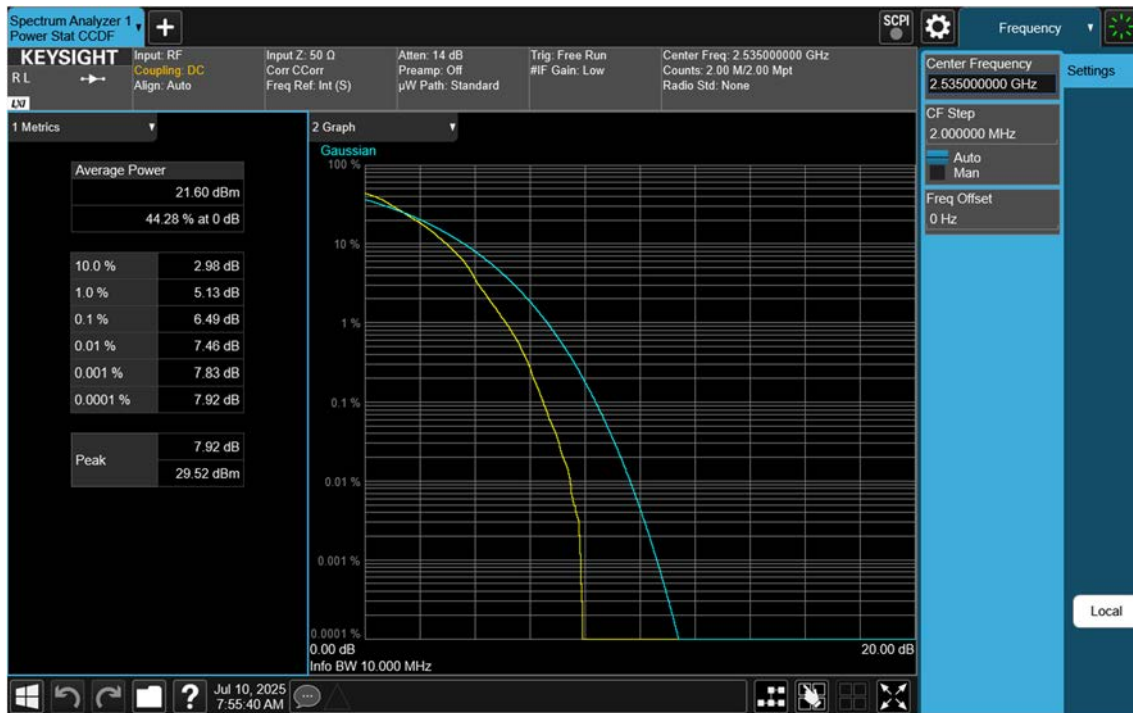
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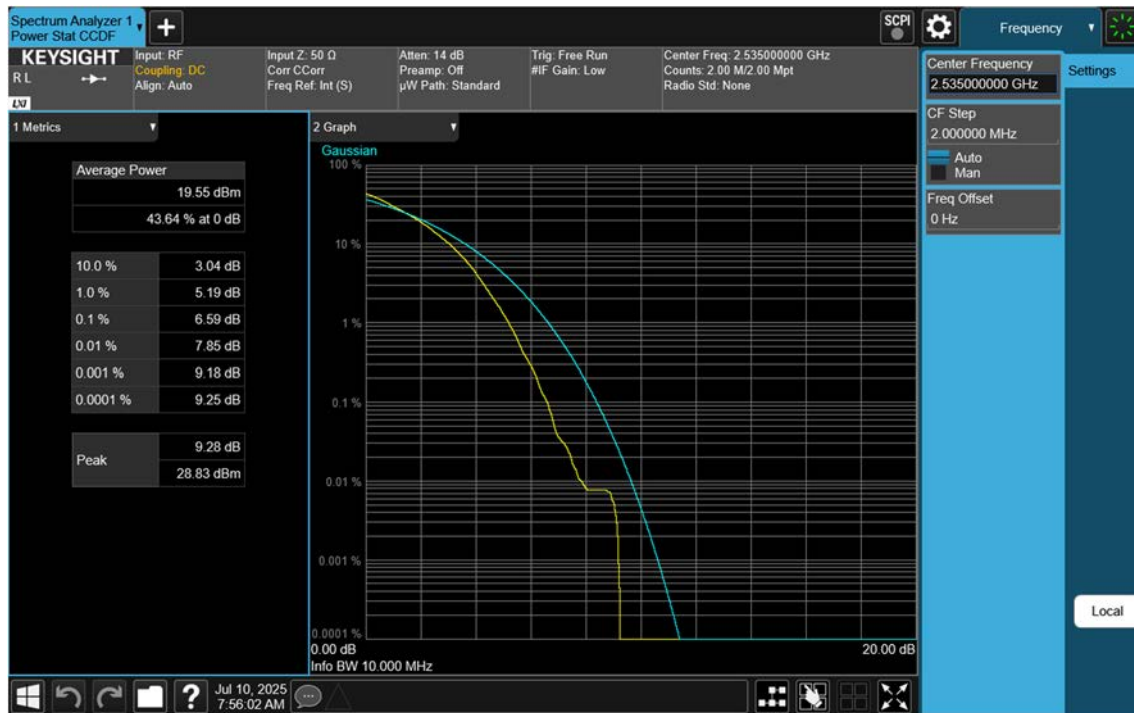
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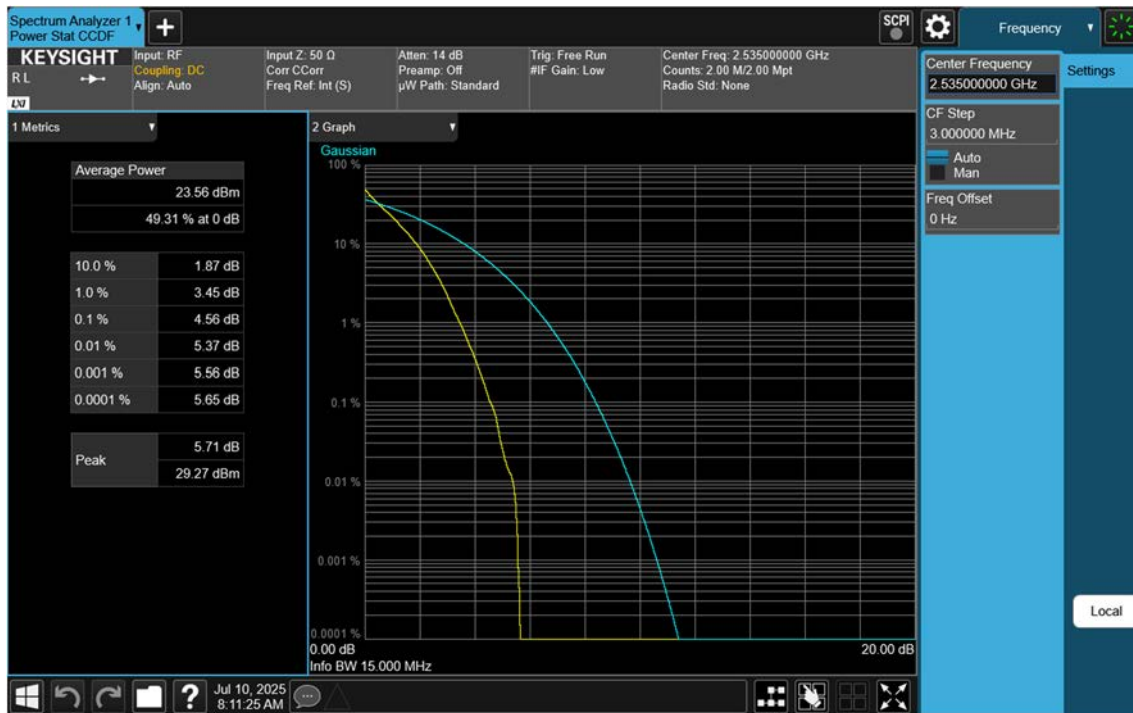
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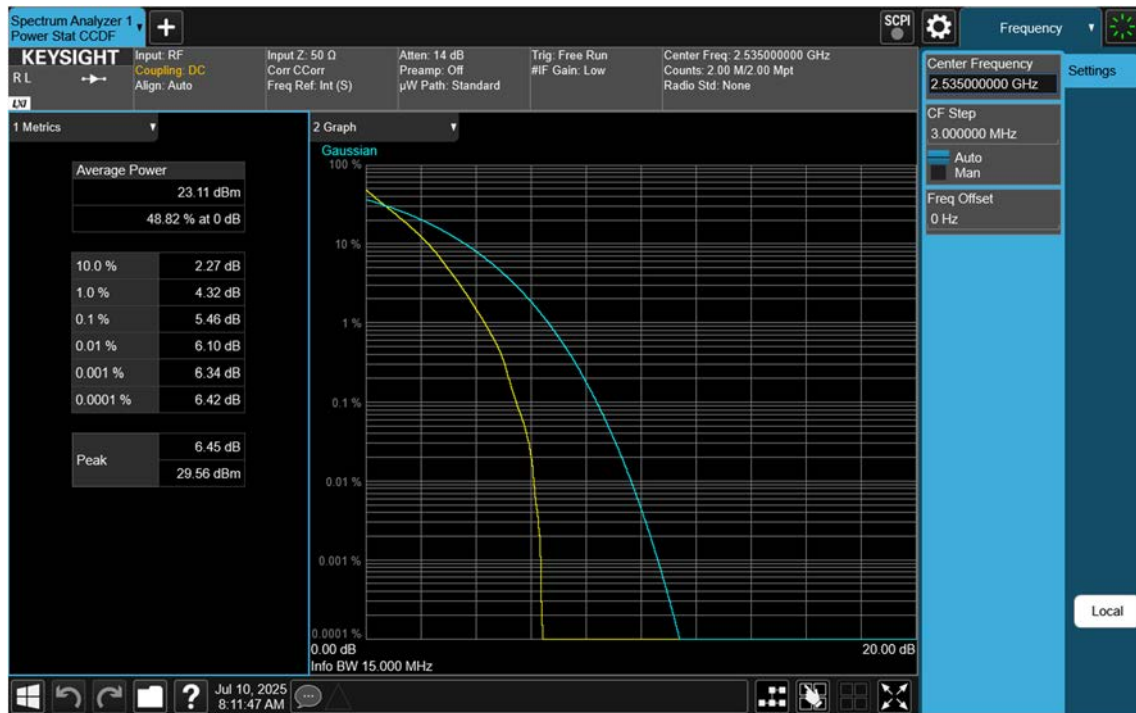
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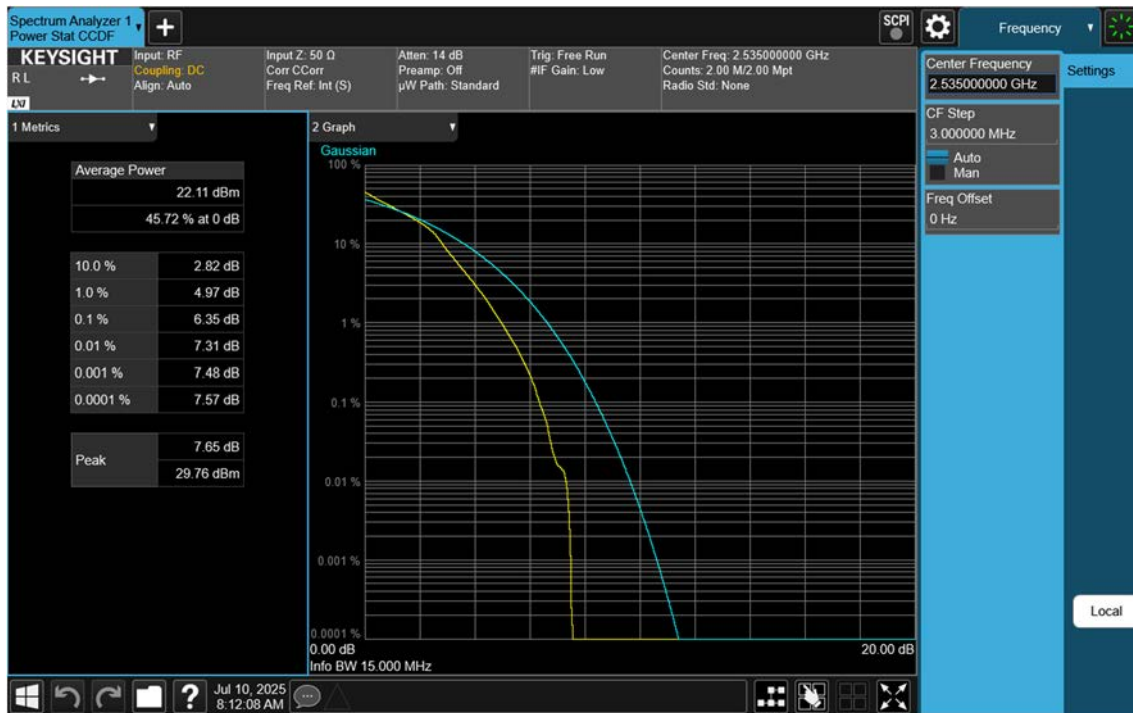
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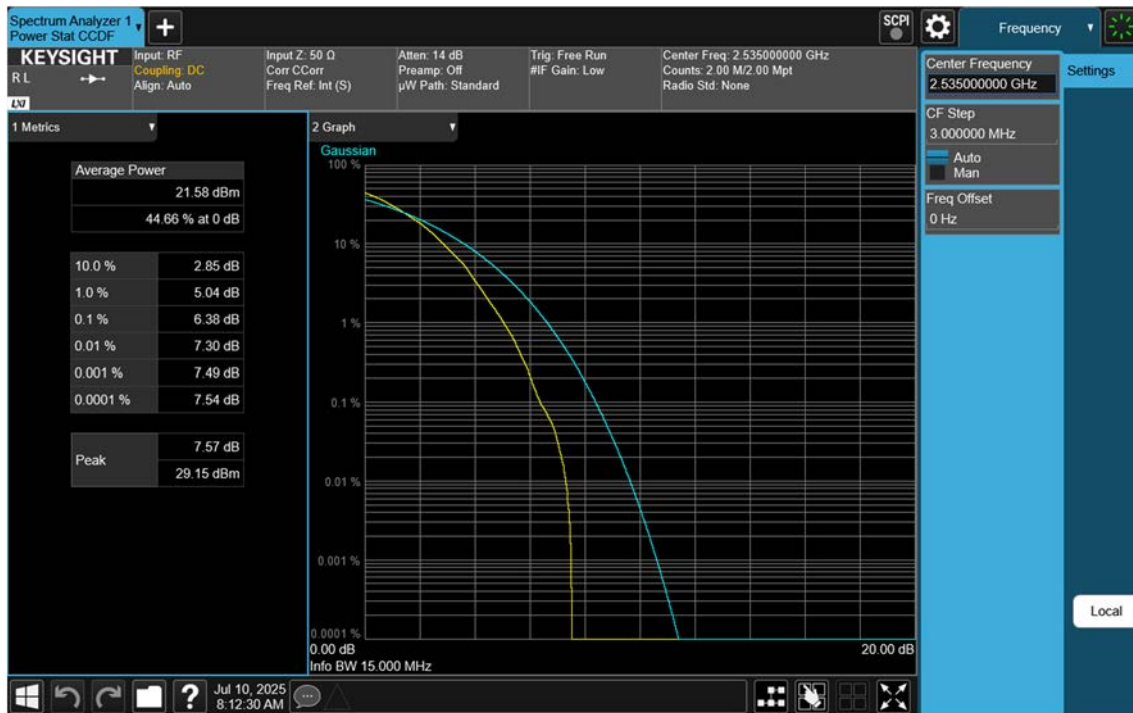
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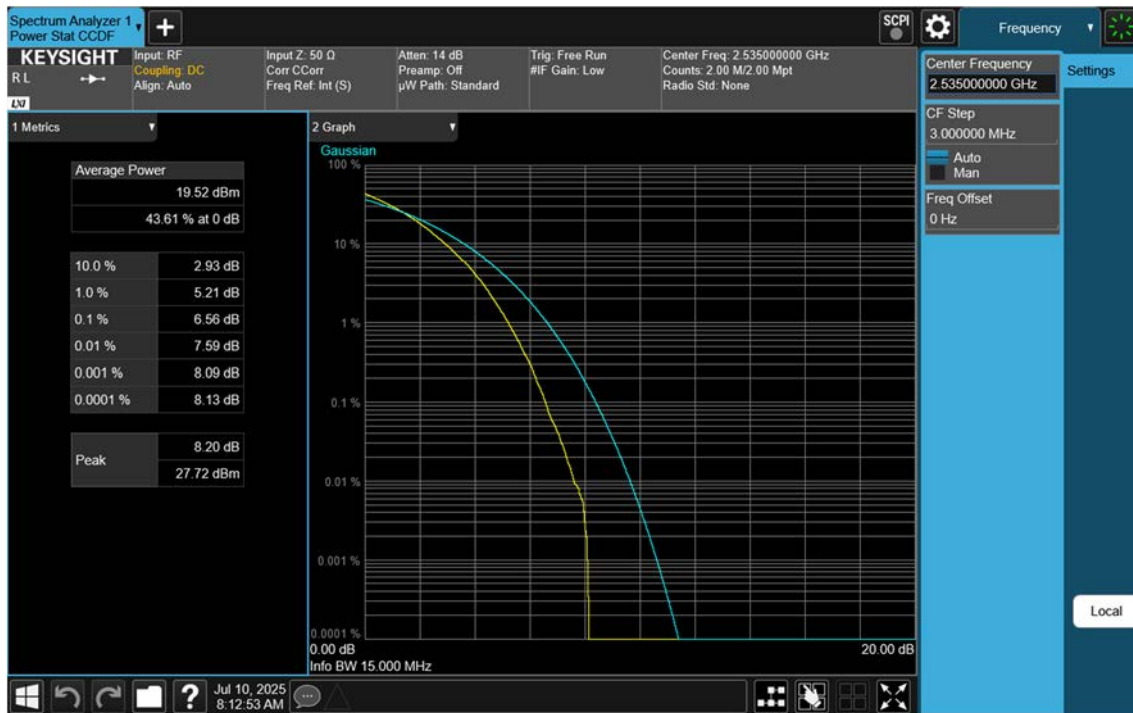
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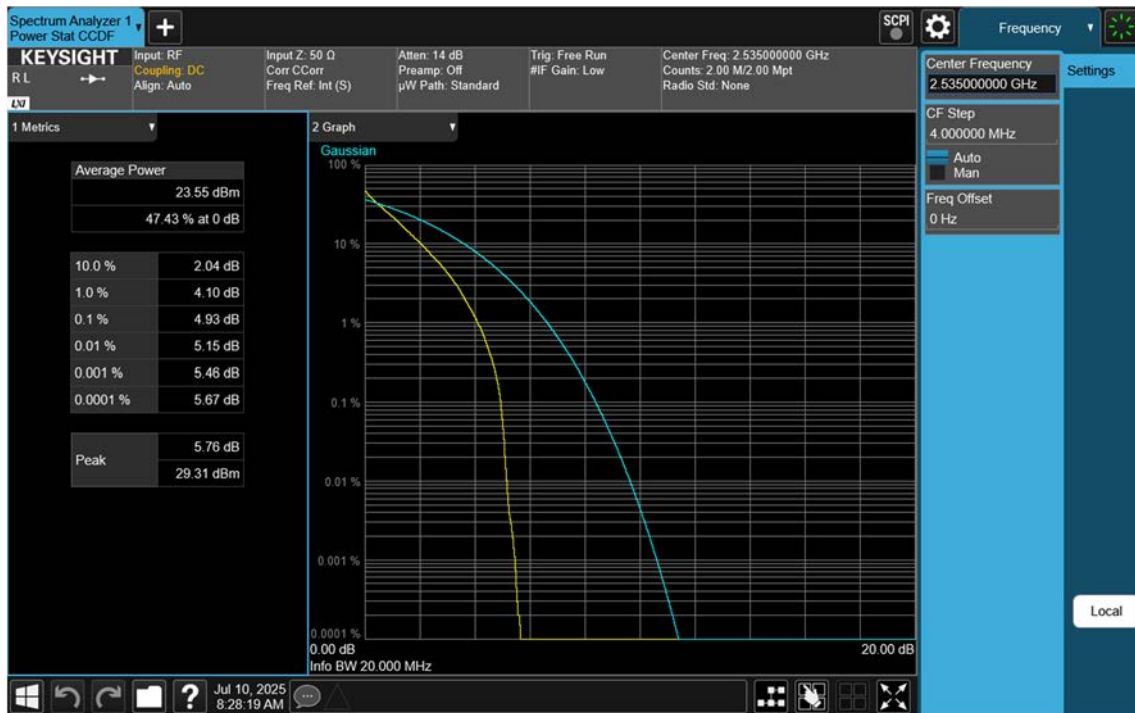
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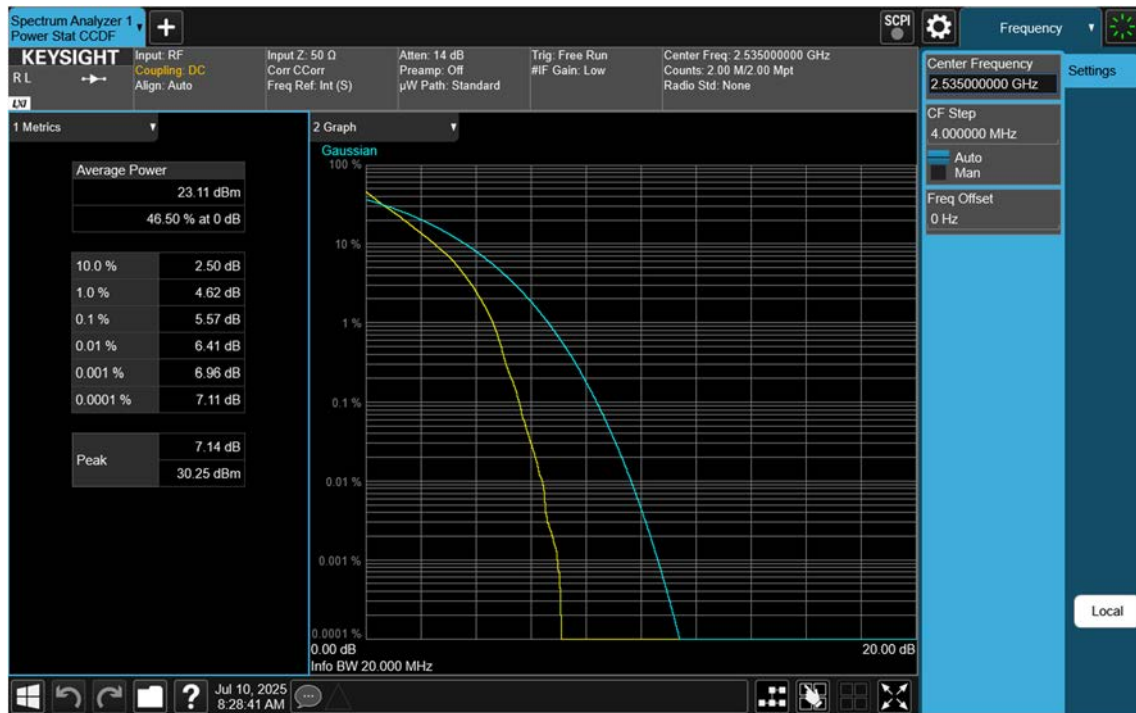
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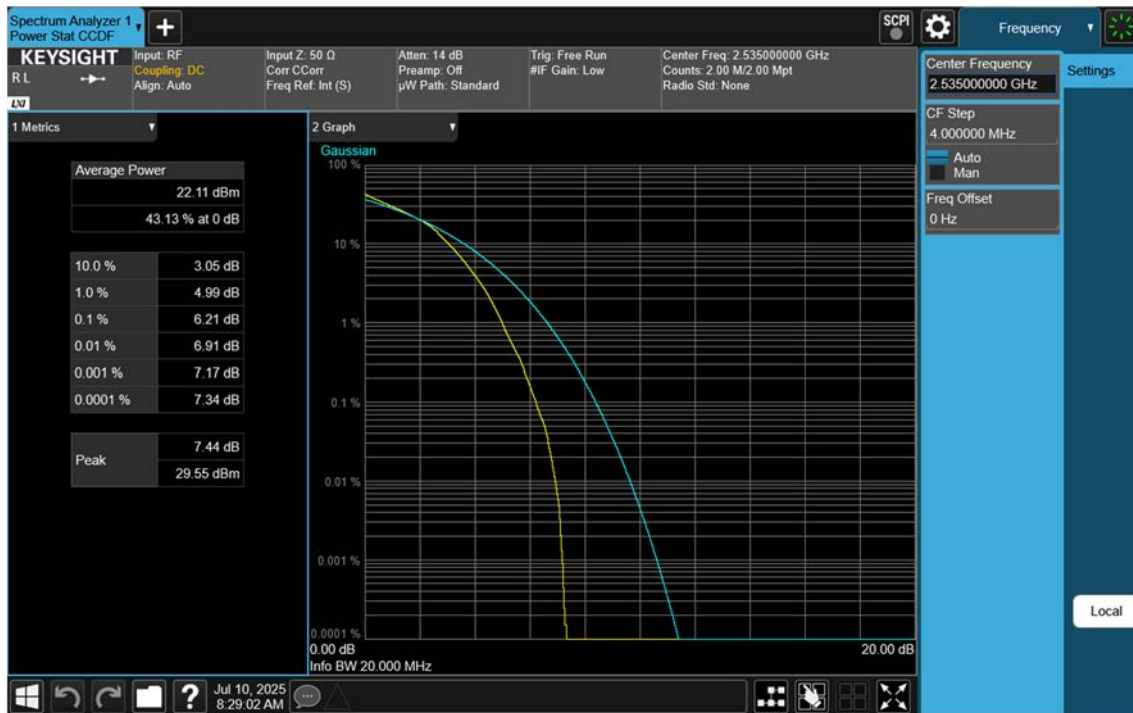
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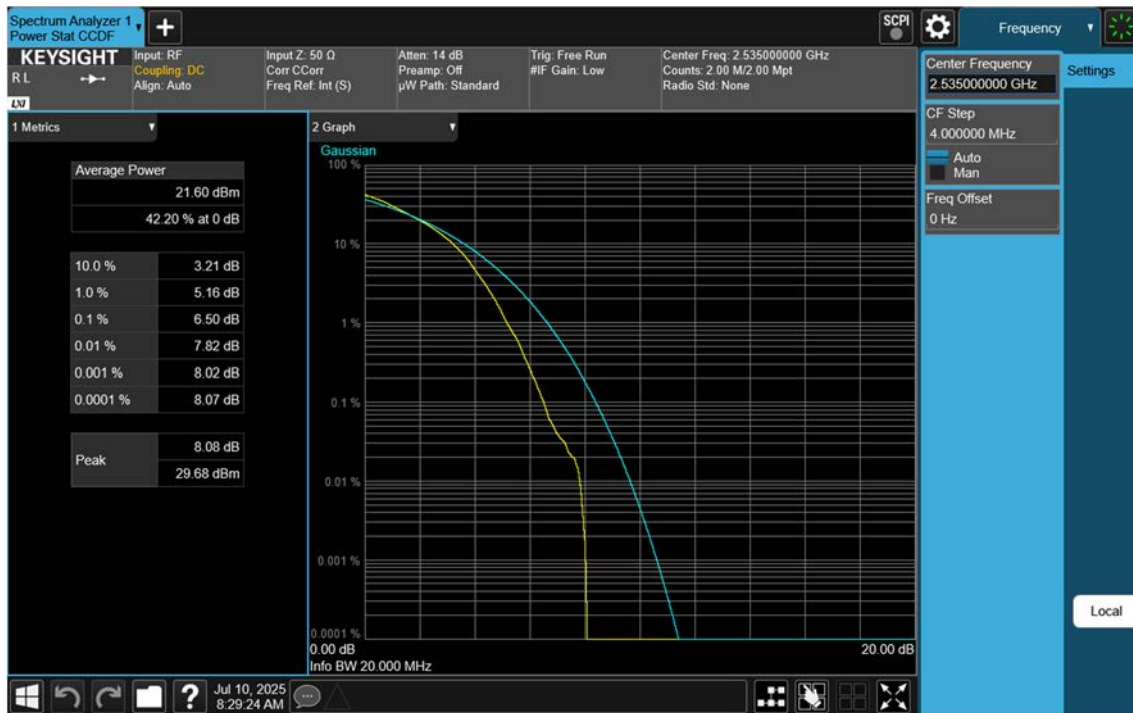
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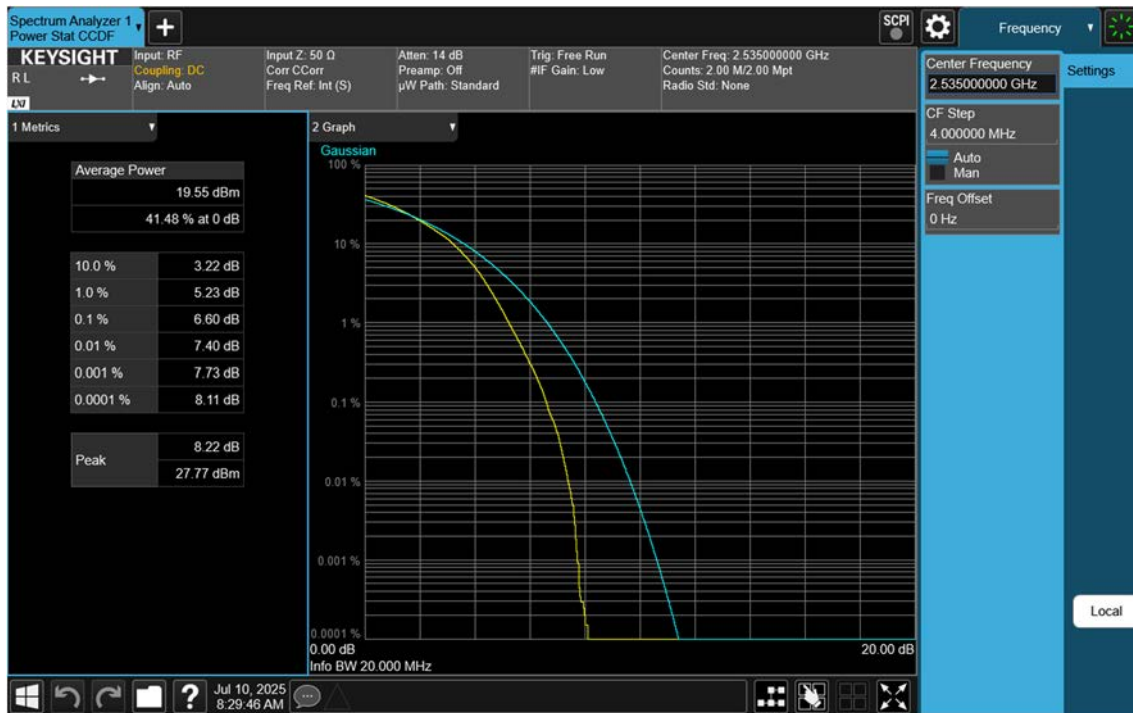
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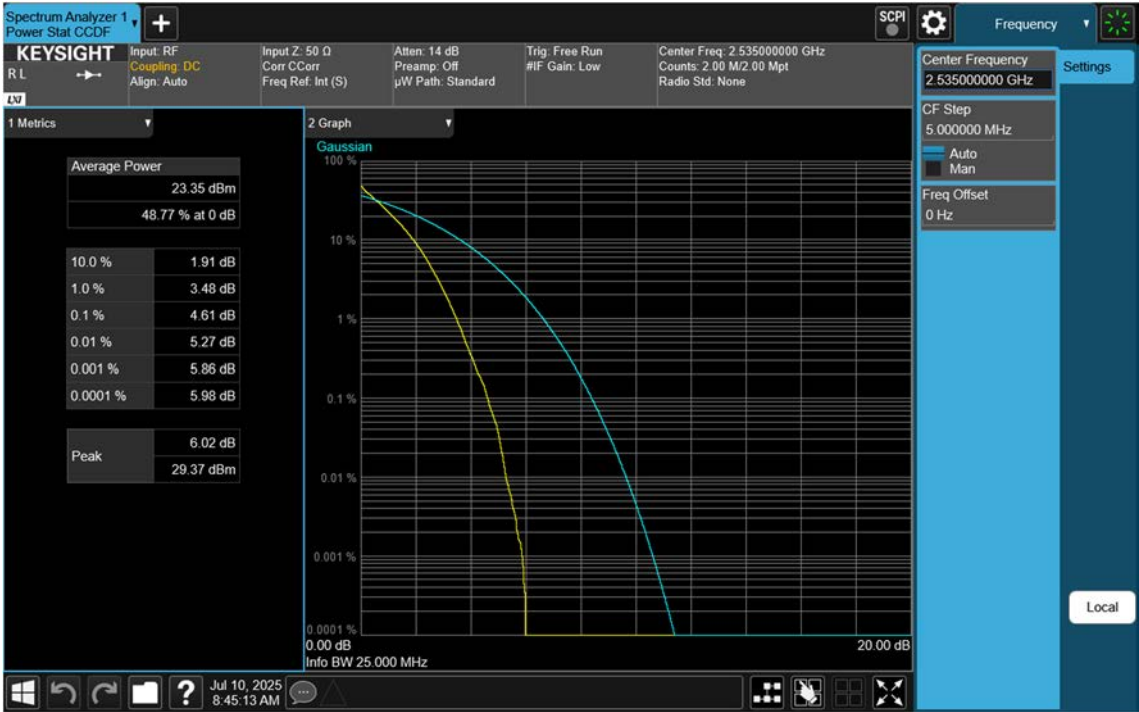
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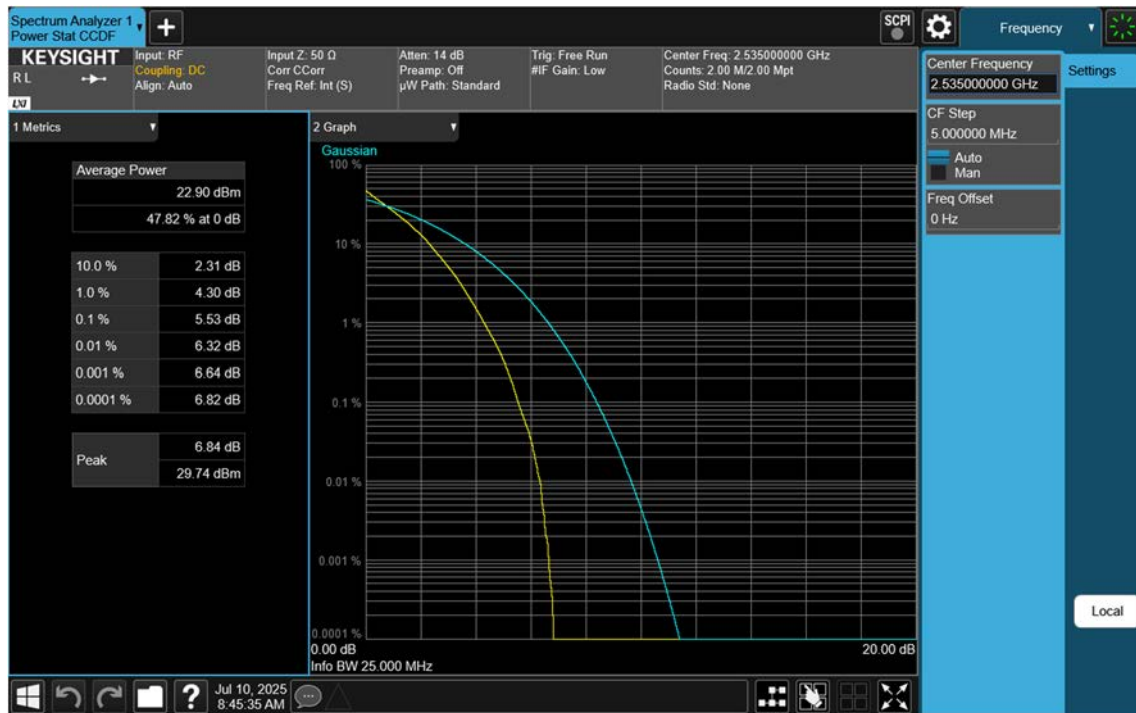
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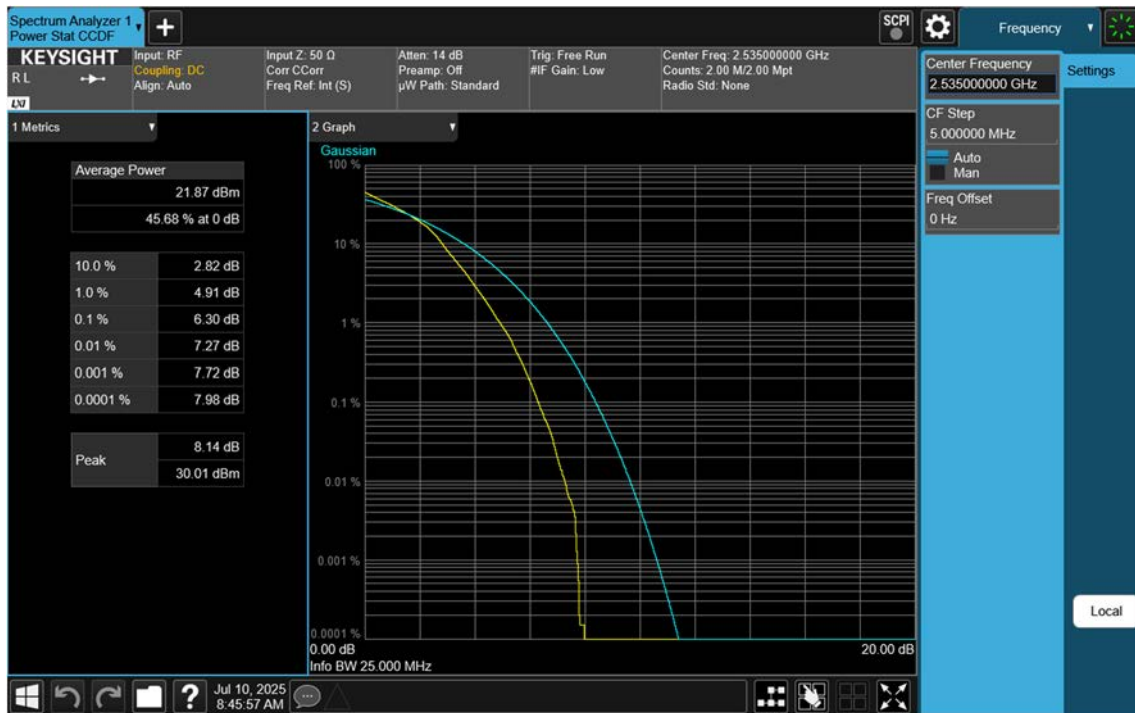
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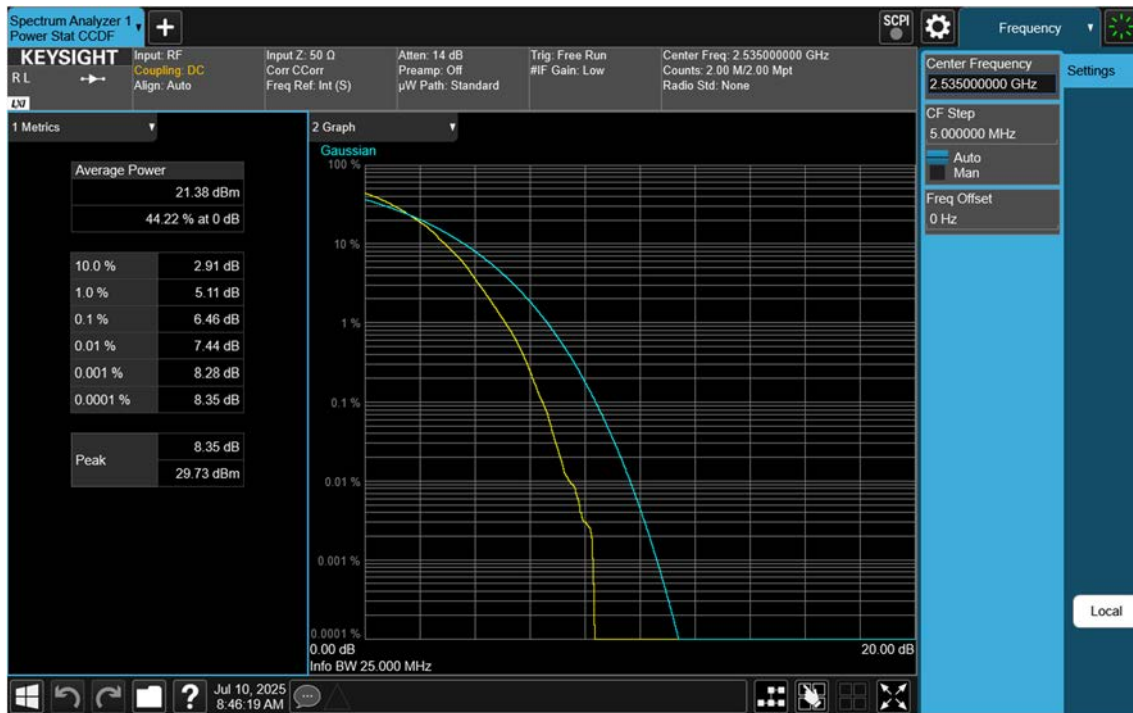
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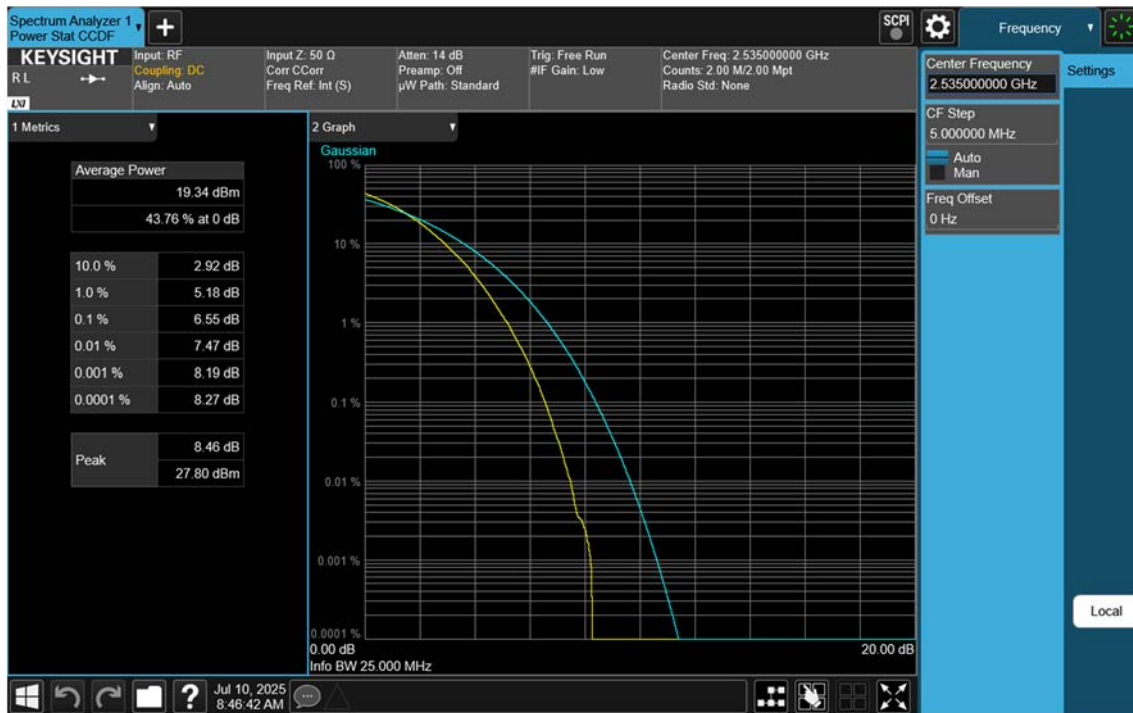
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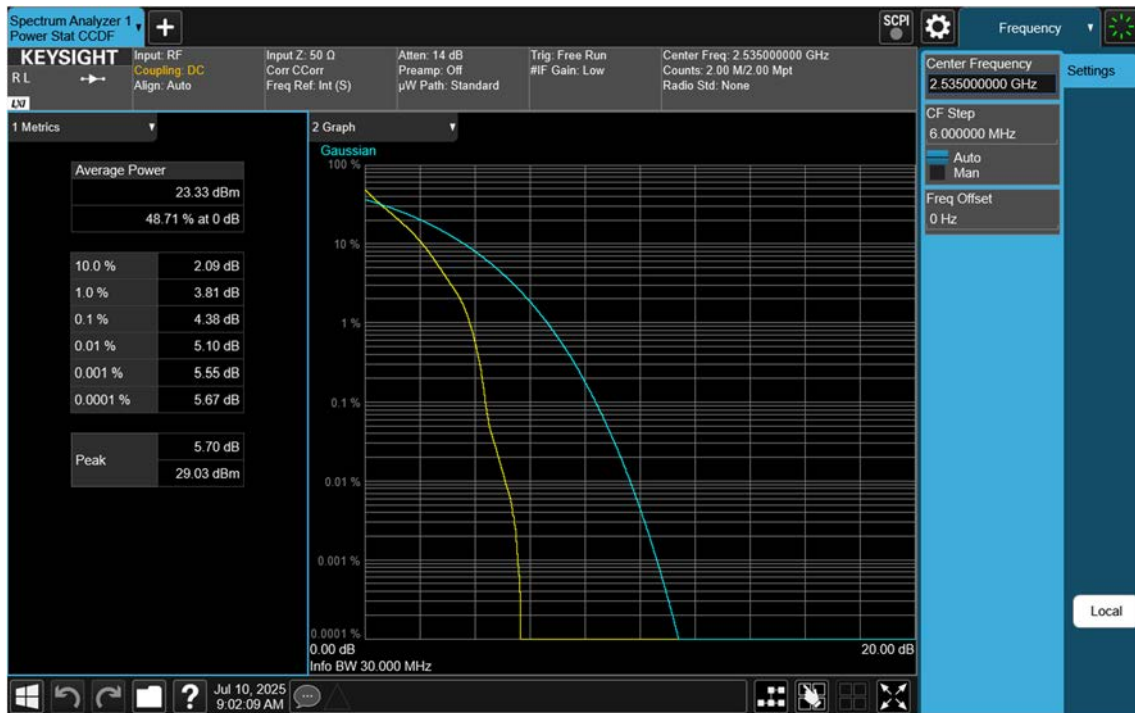
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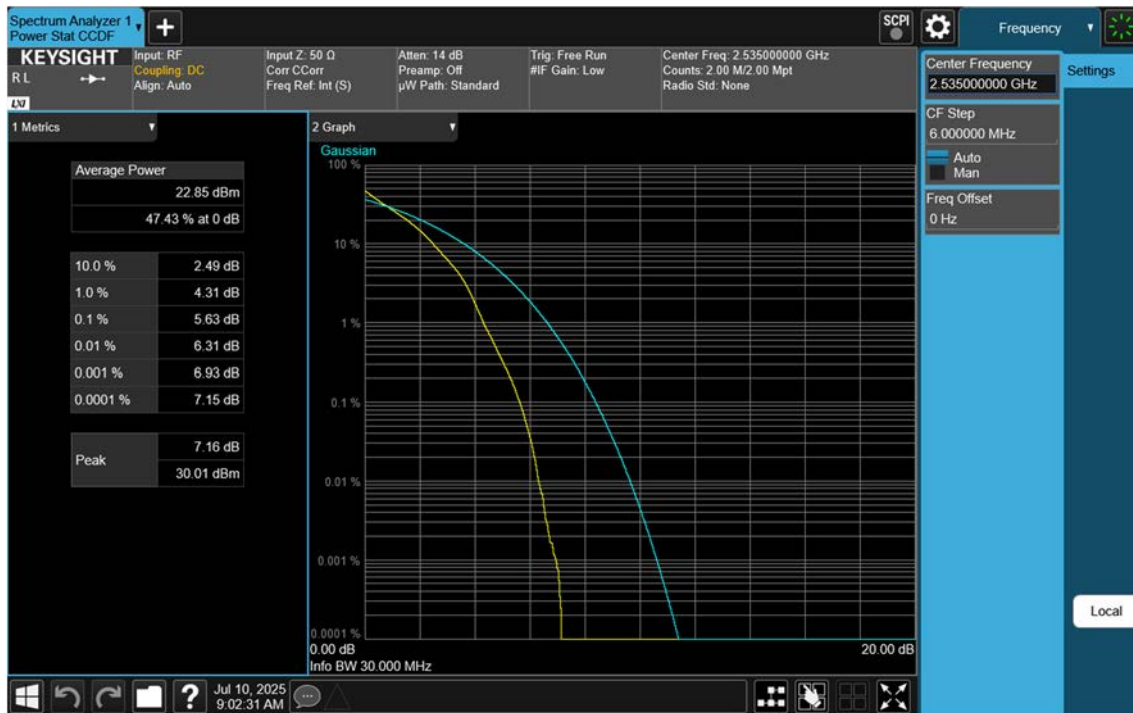
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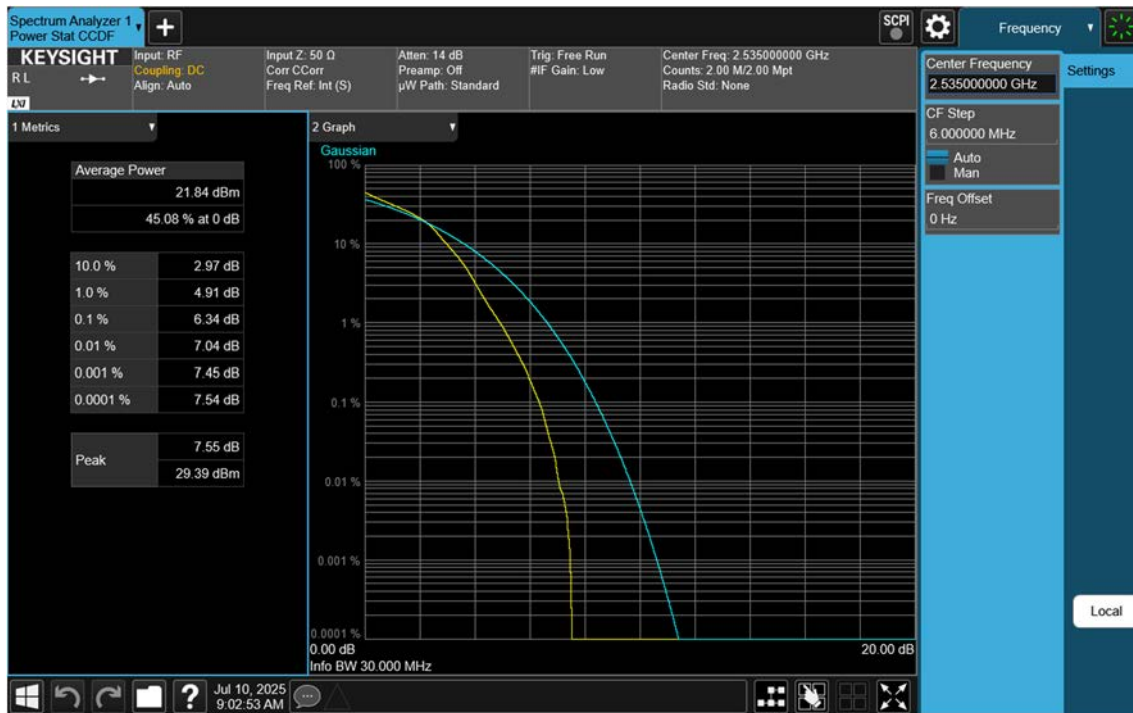
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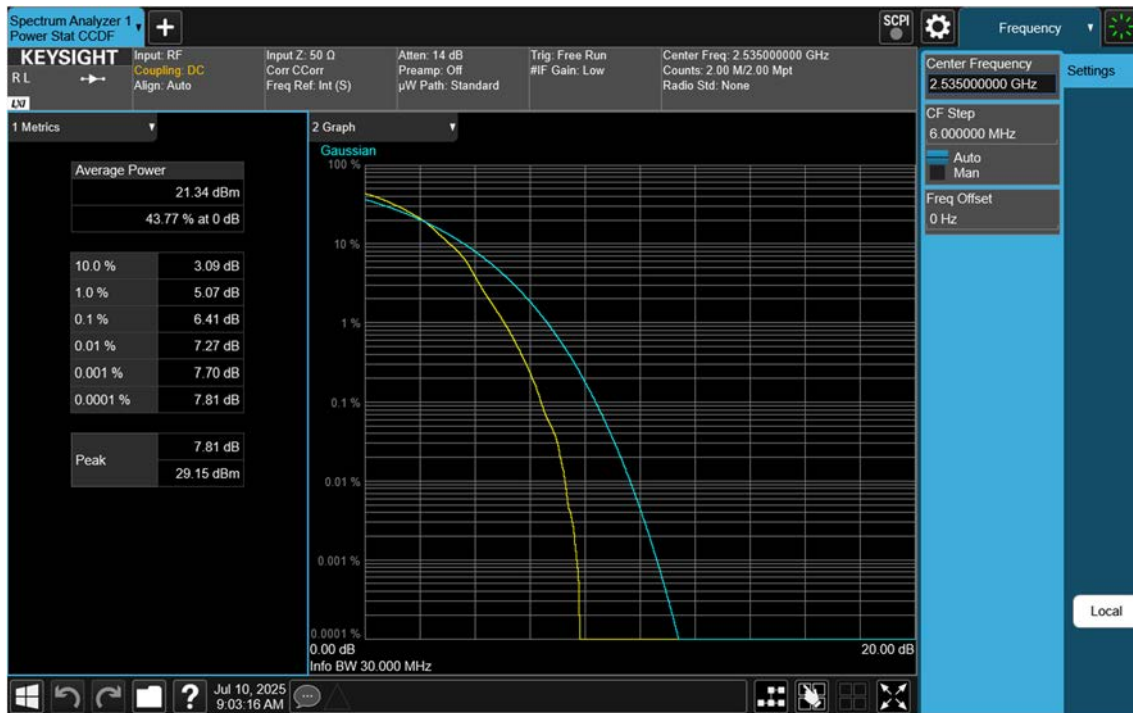
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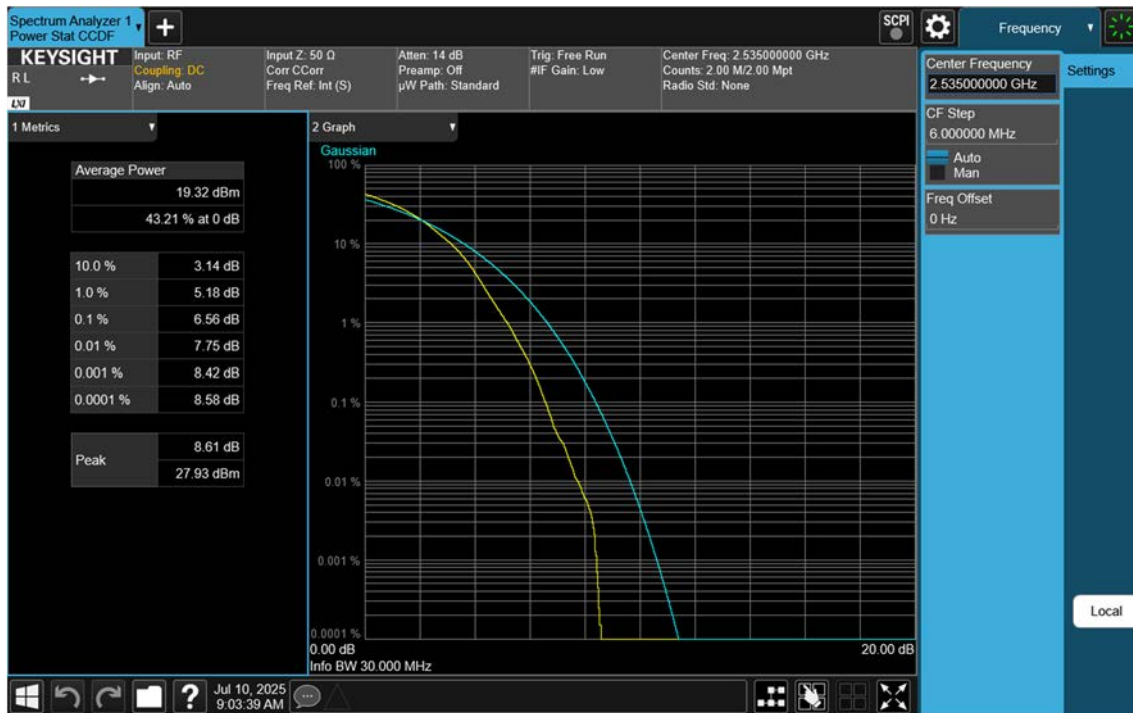
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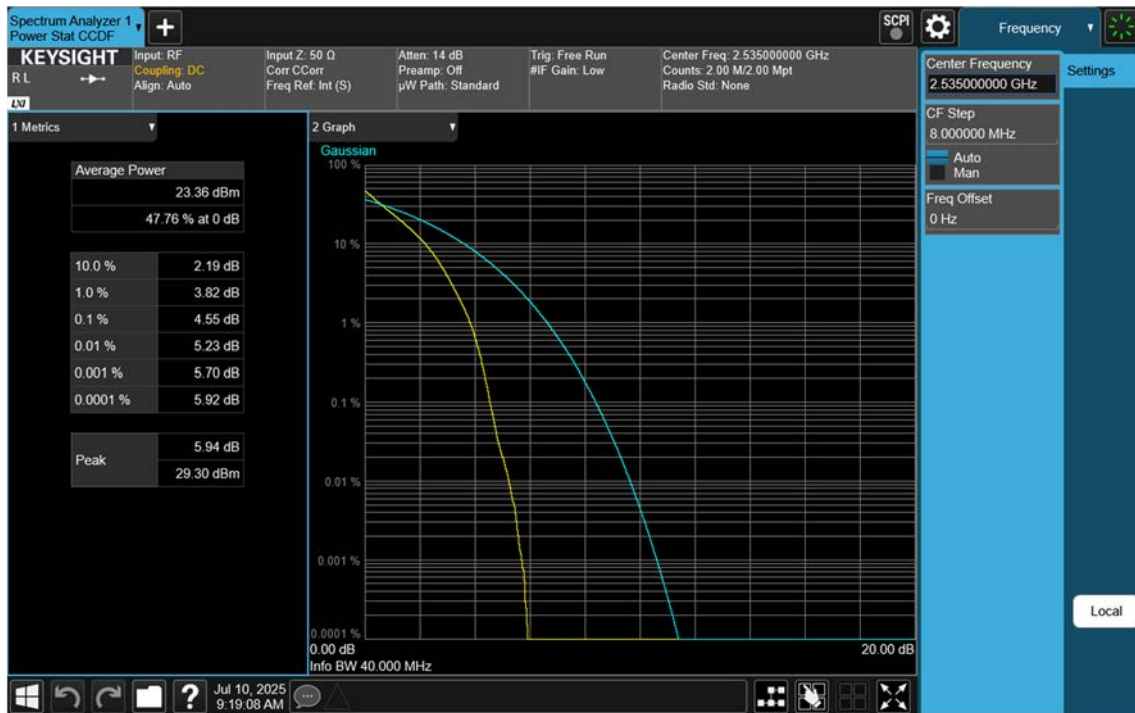
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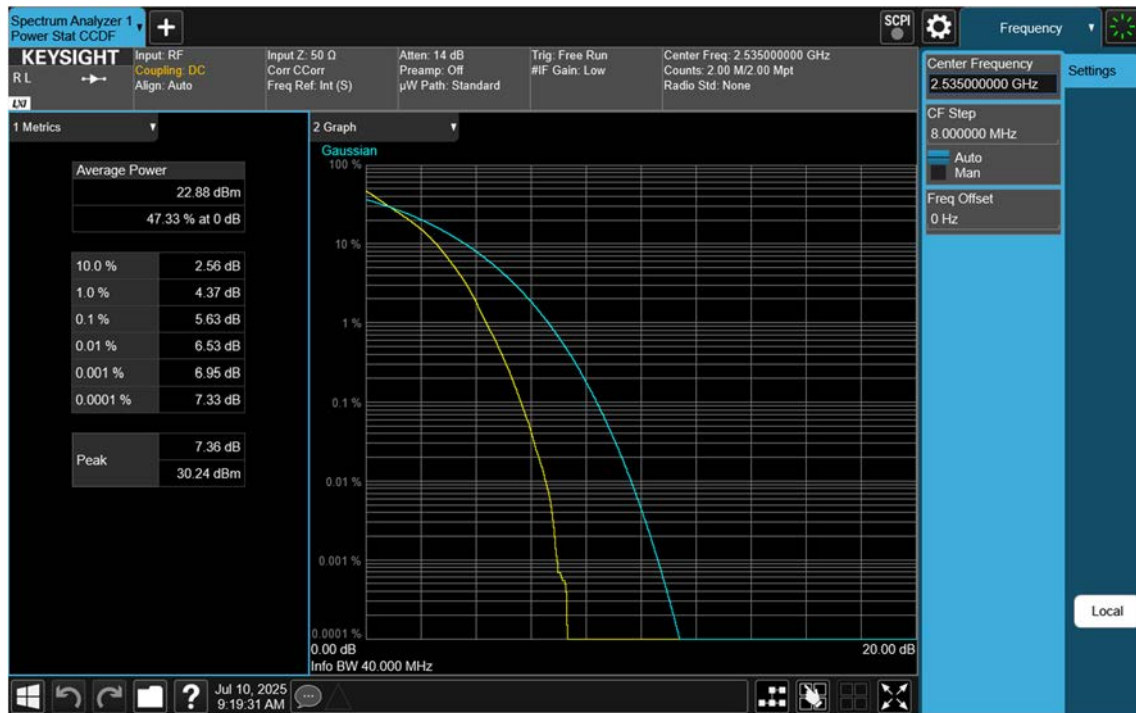
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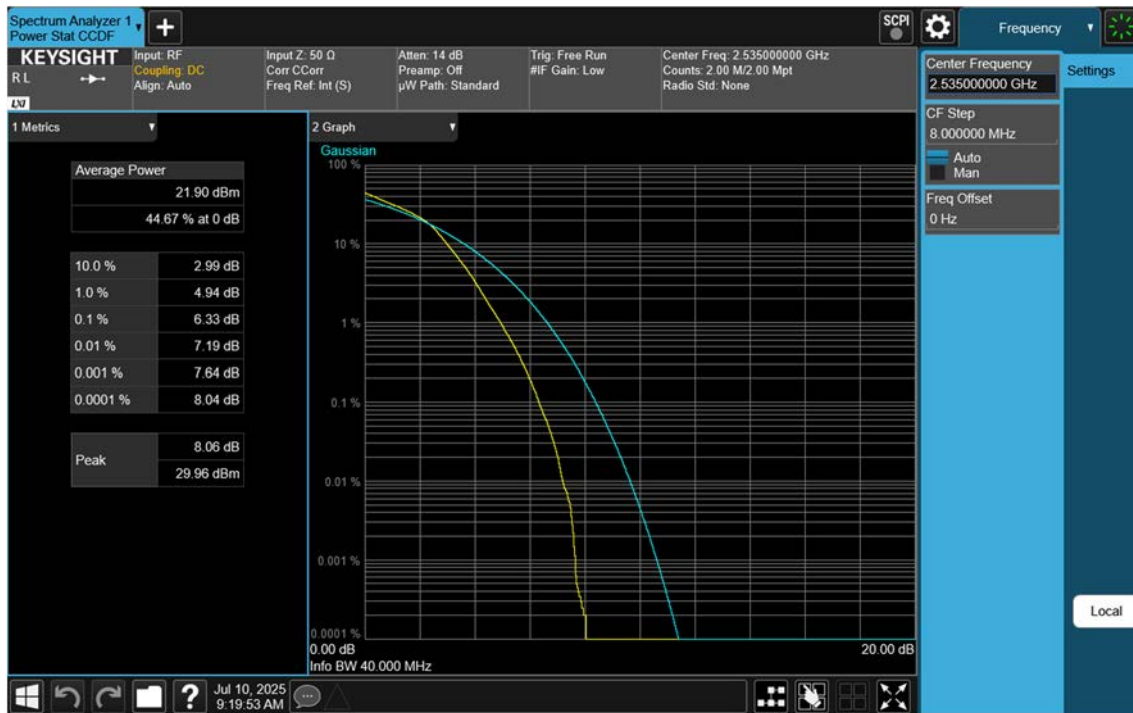
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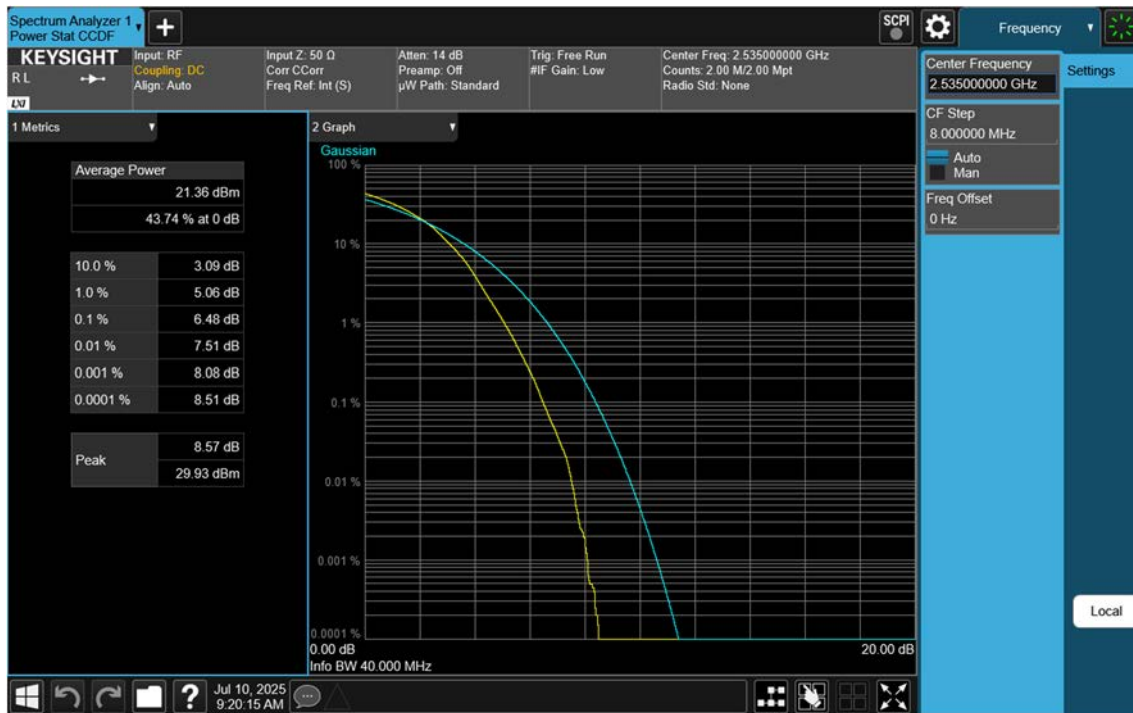
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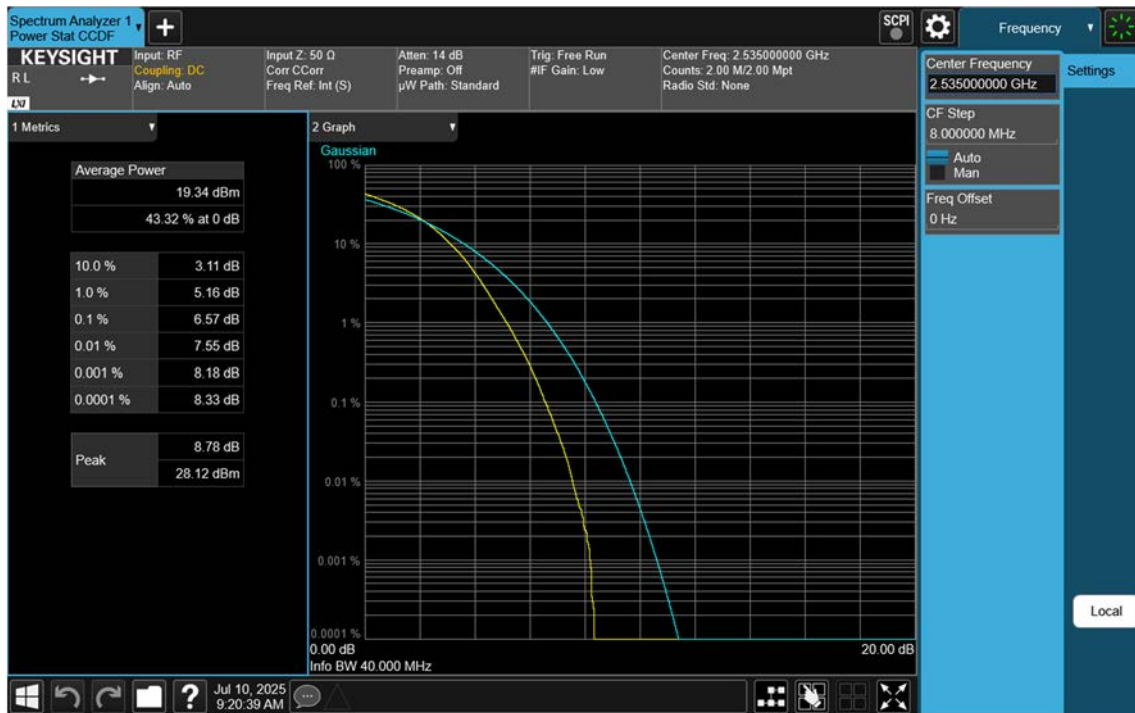
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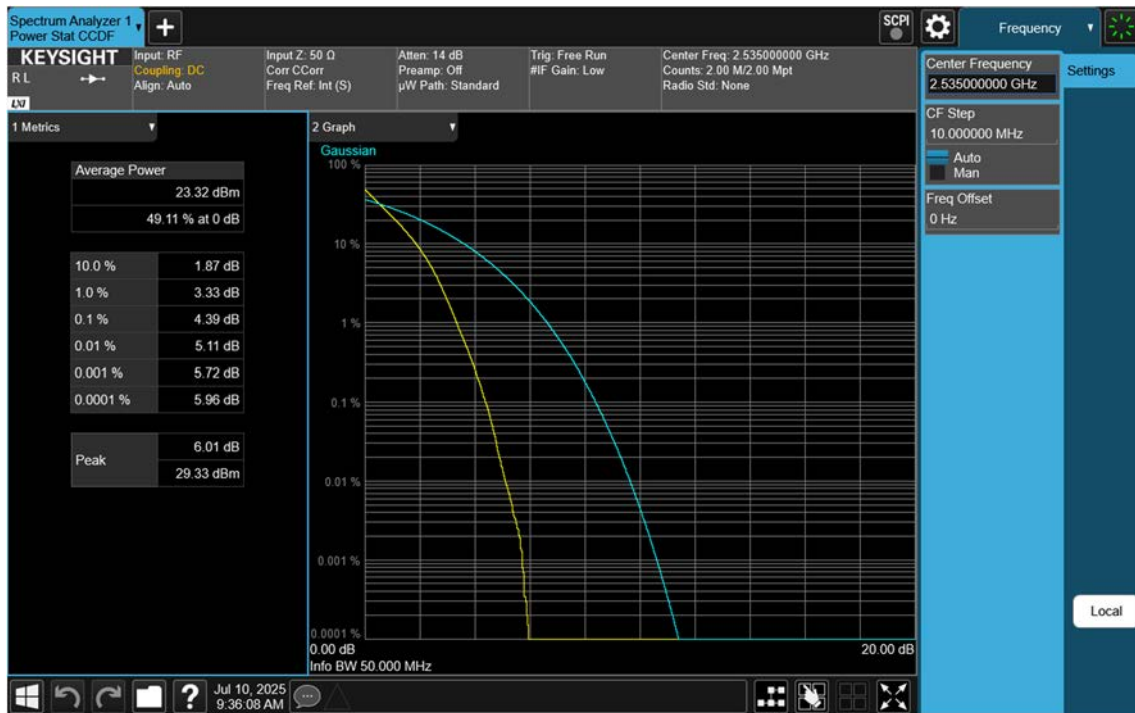
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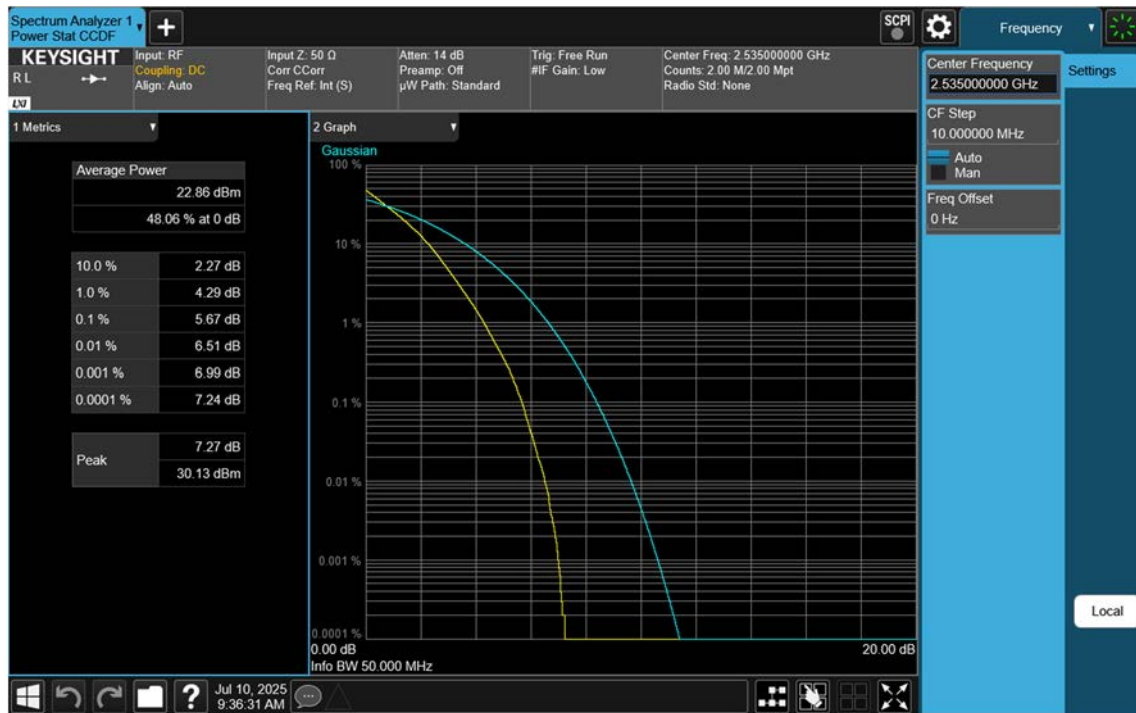
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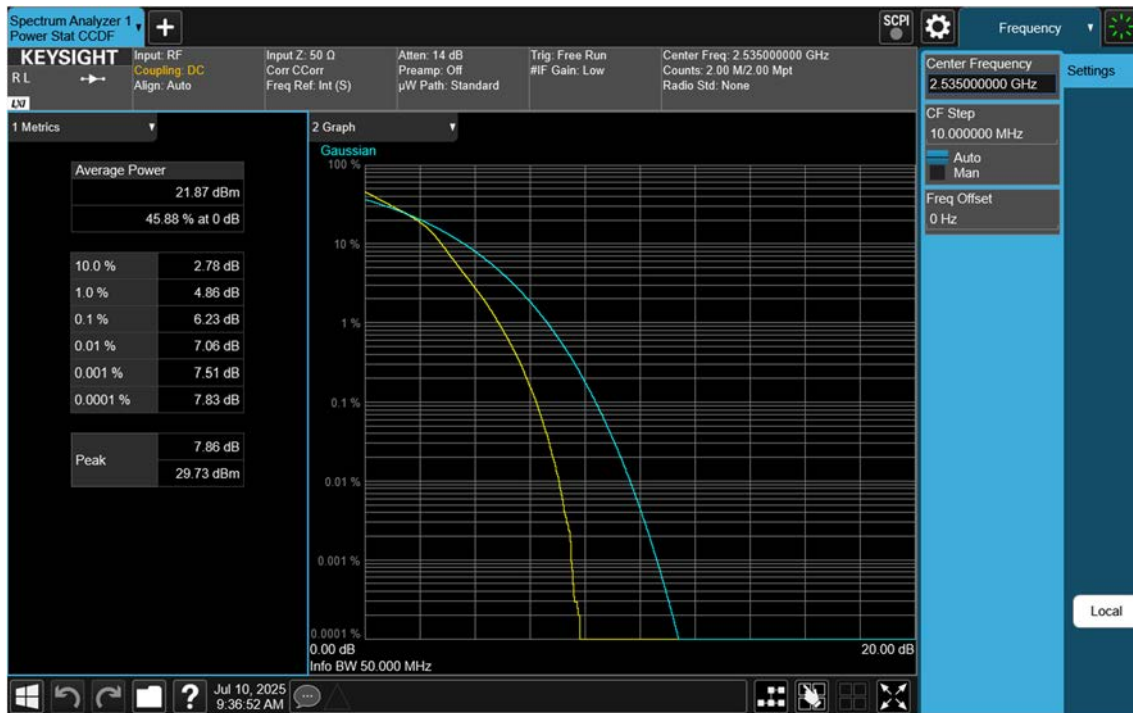
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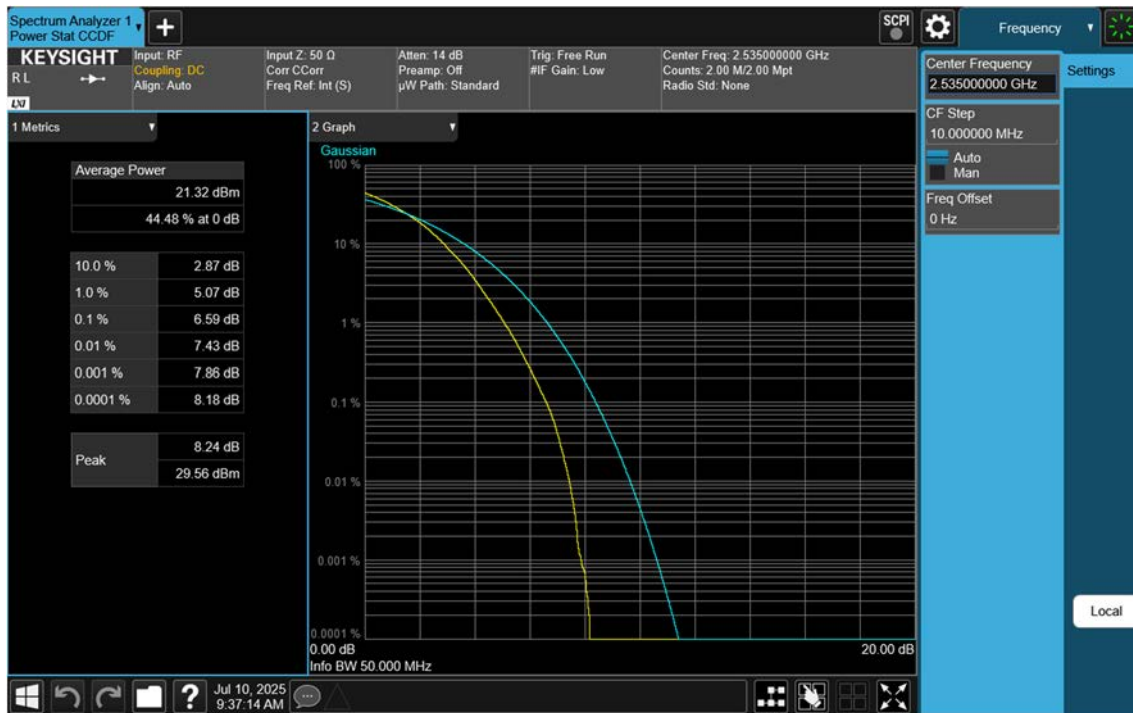
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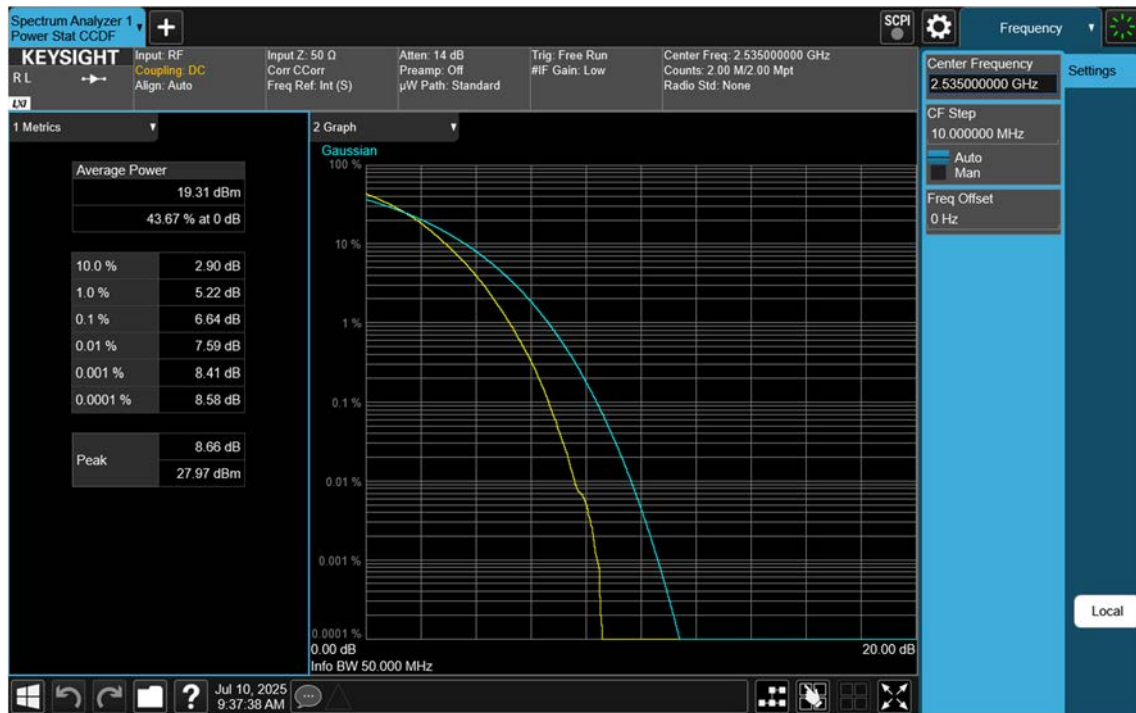
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NR7_50 M_PAR_Mid_64QAM_FullRB



NR7_50 M_PAR_Mid_256QAM_FullRB



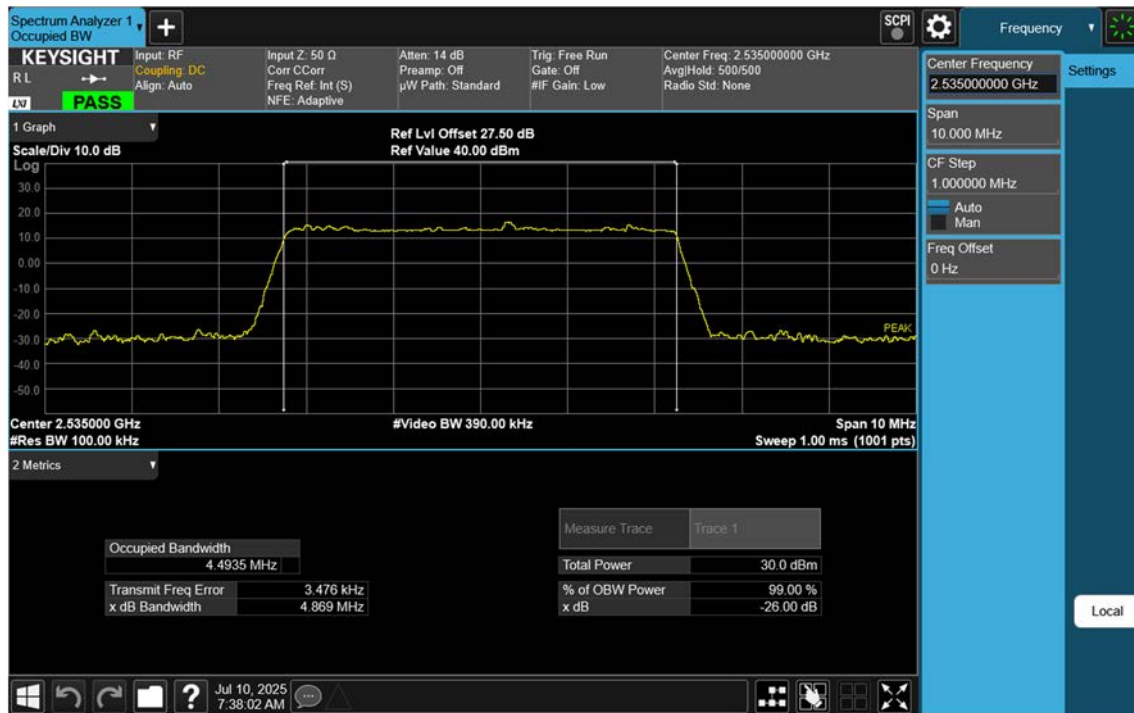
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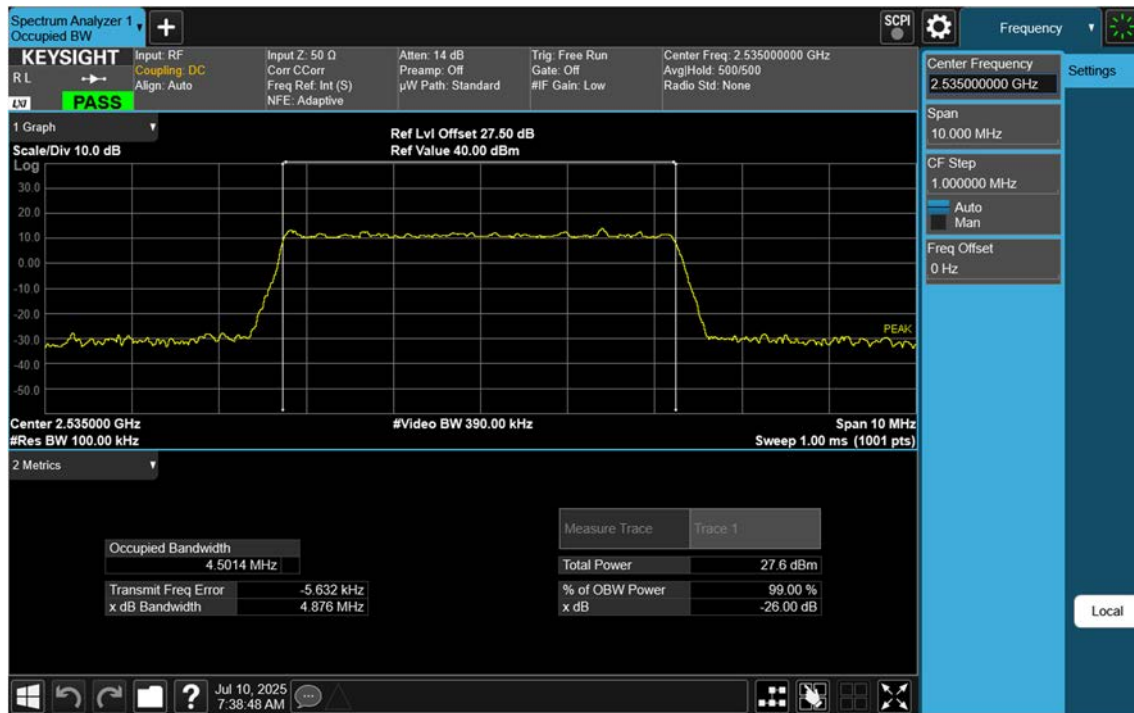
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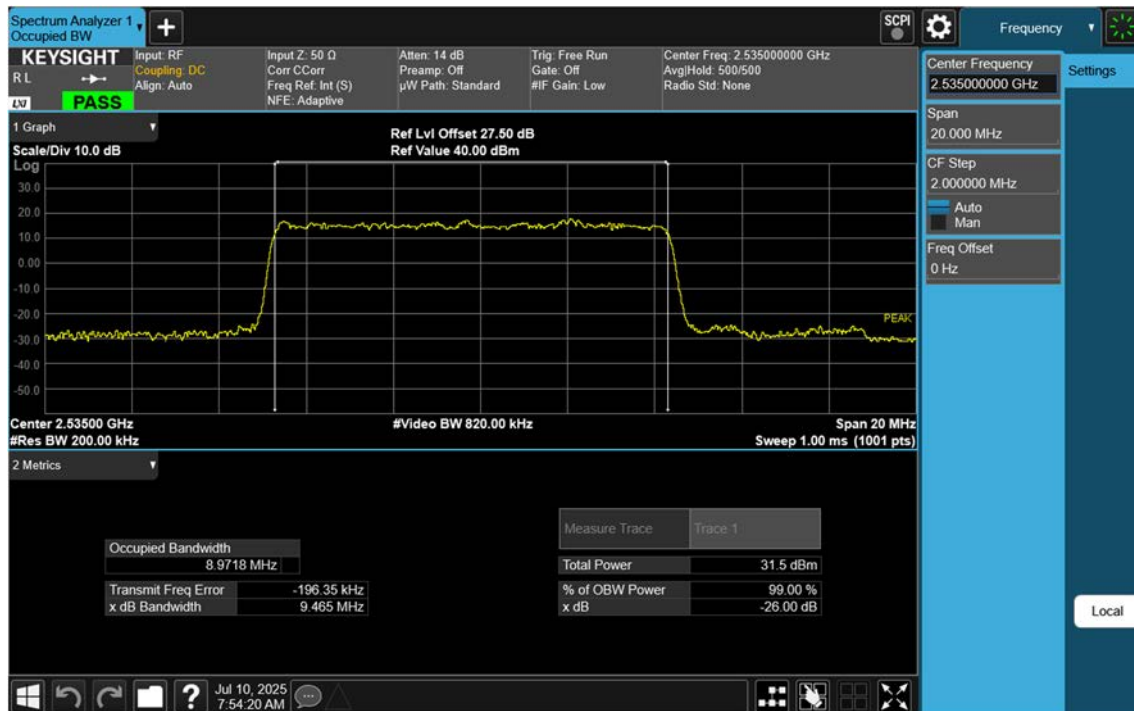
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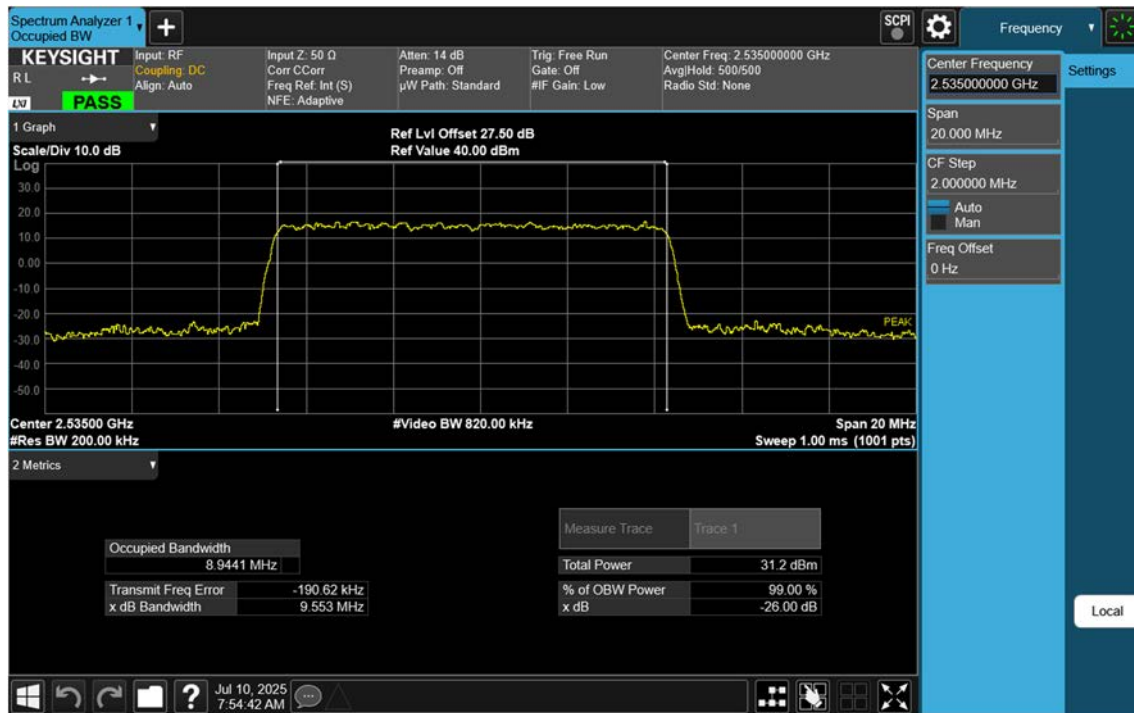
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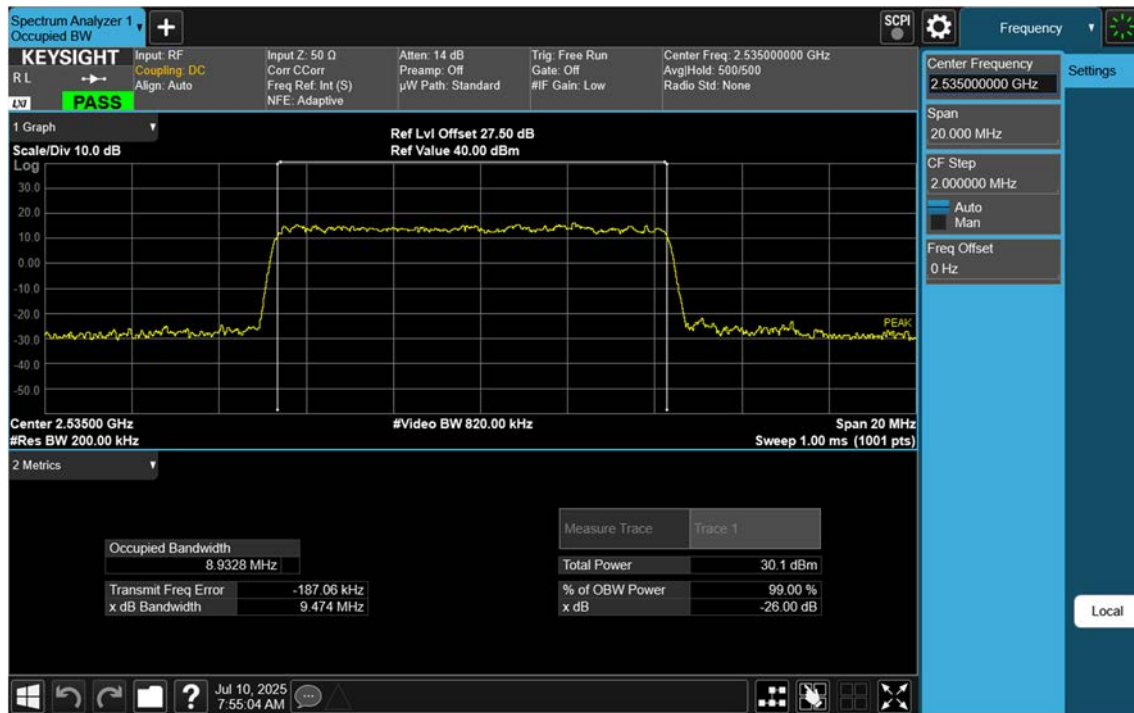
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NR7_10 M_OBW_Mid_QPSK_FullRB



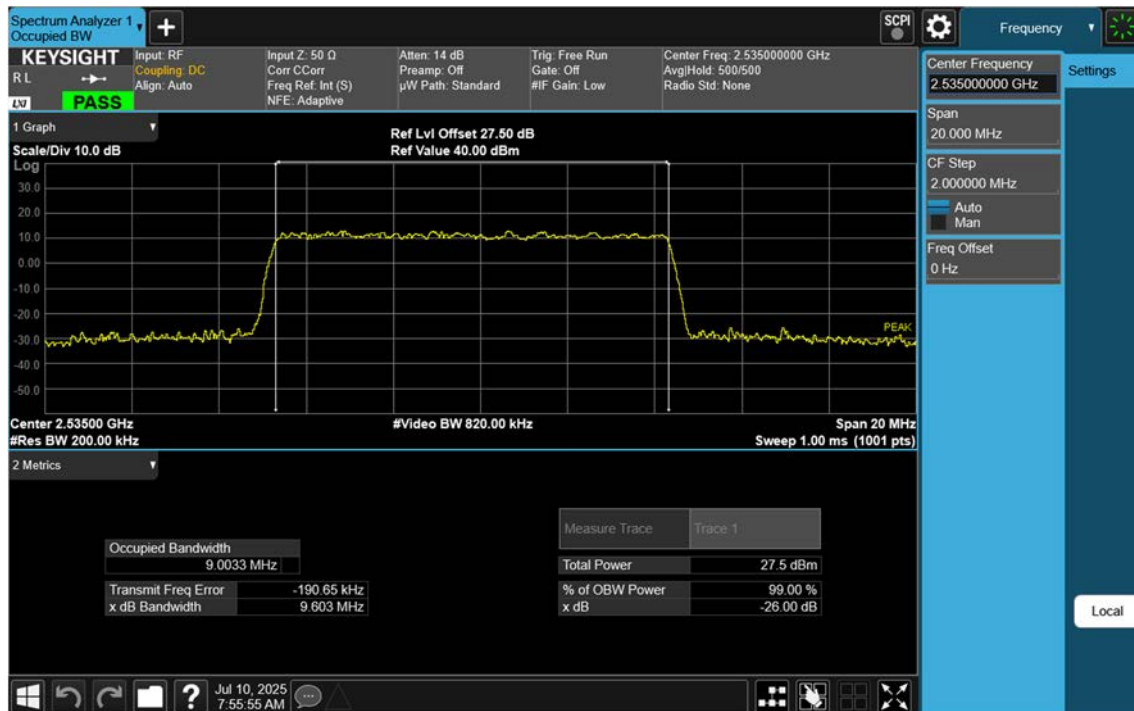
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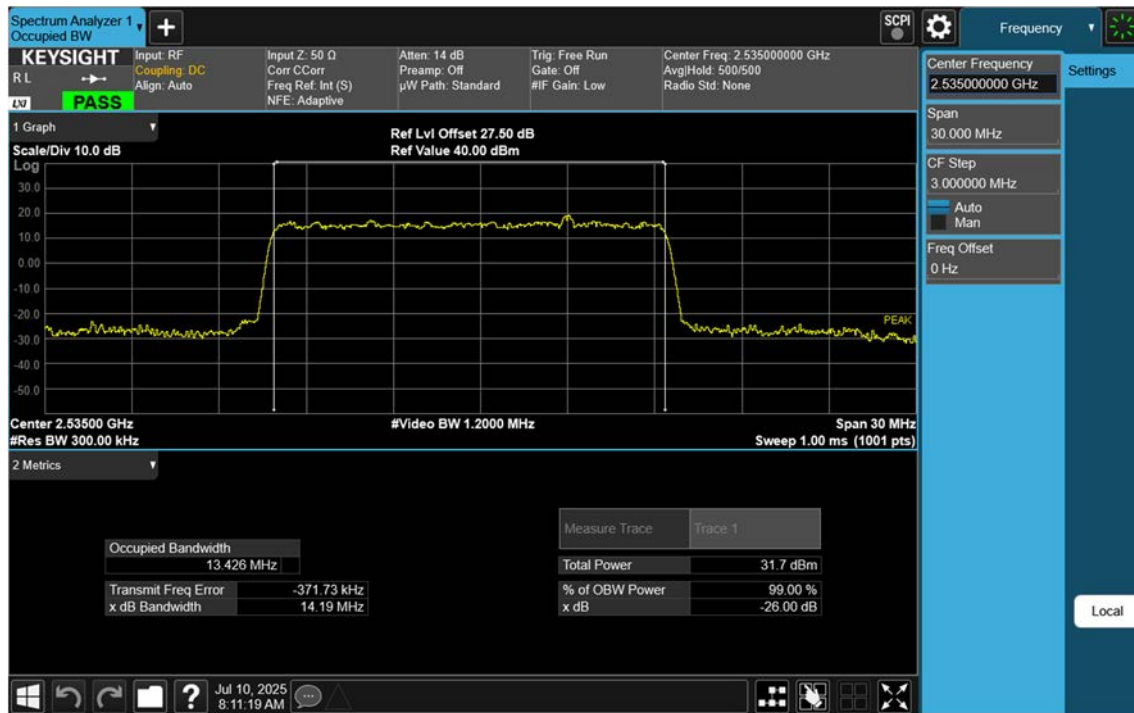
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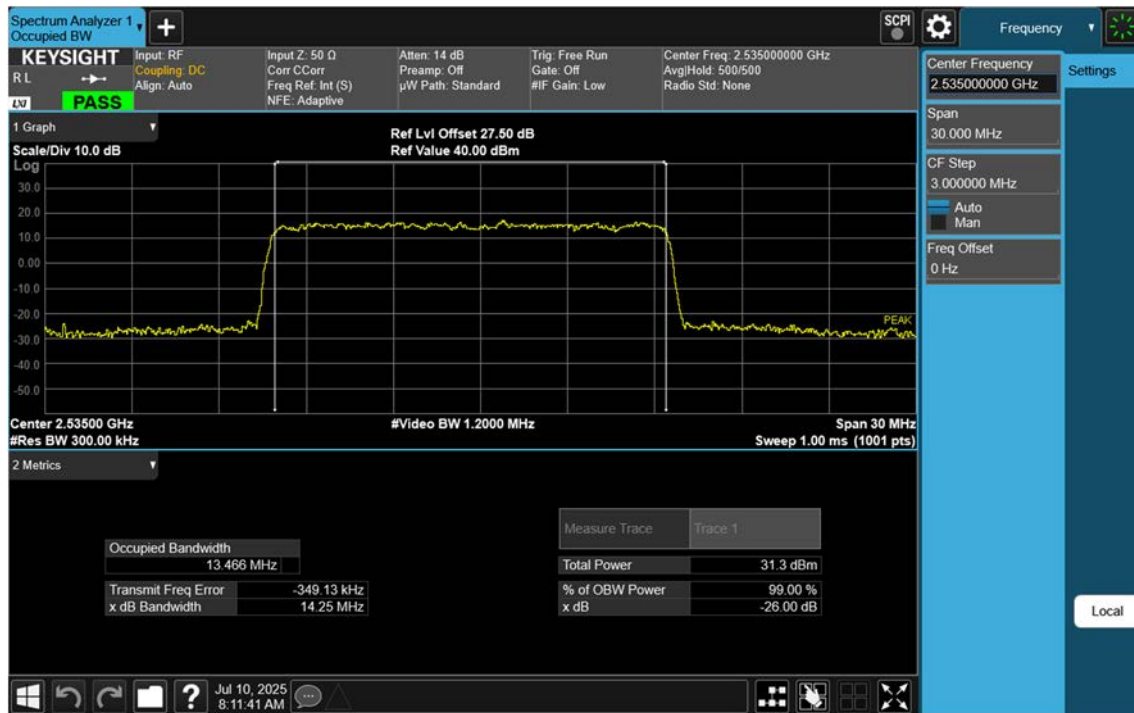
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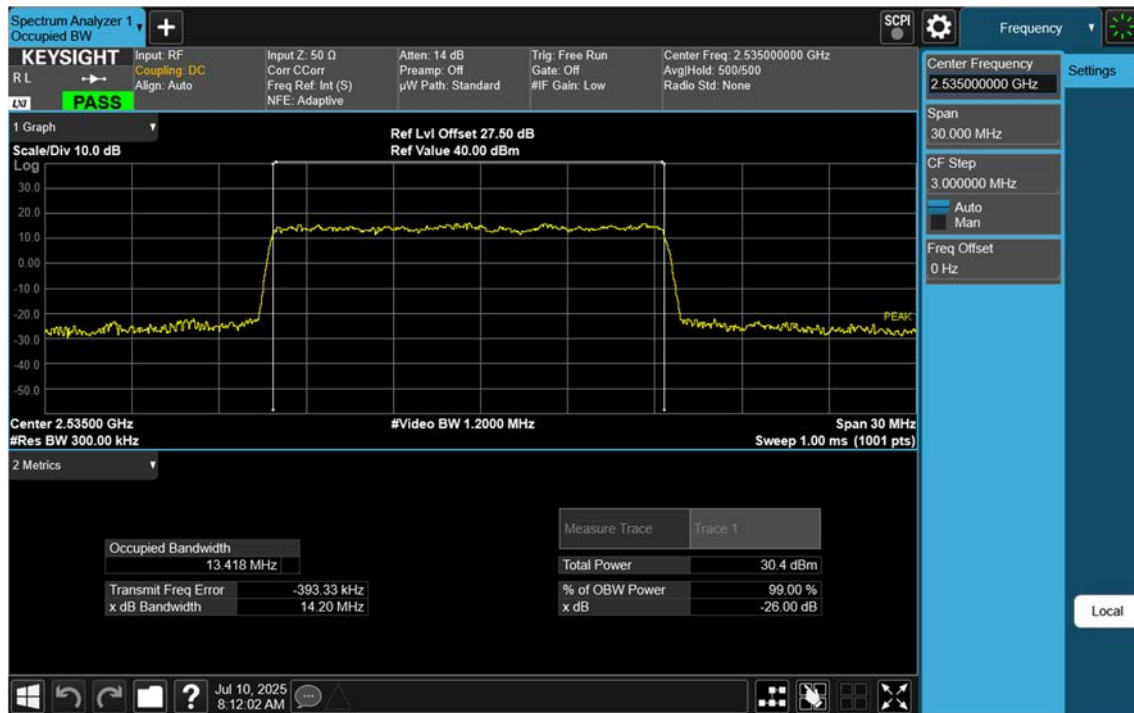
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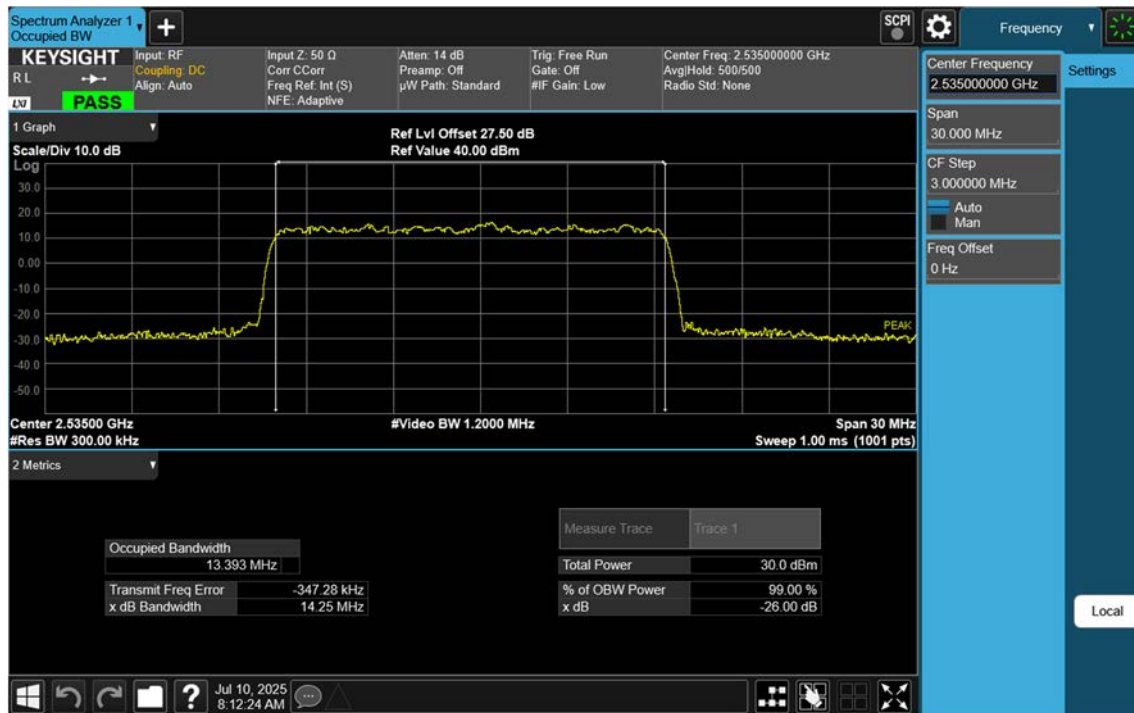
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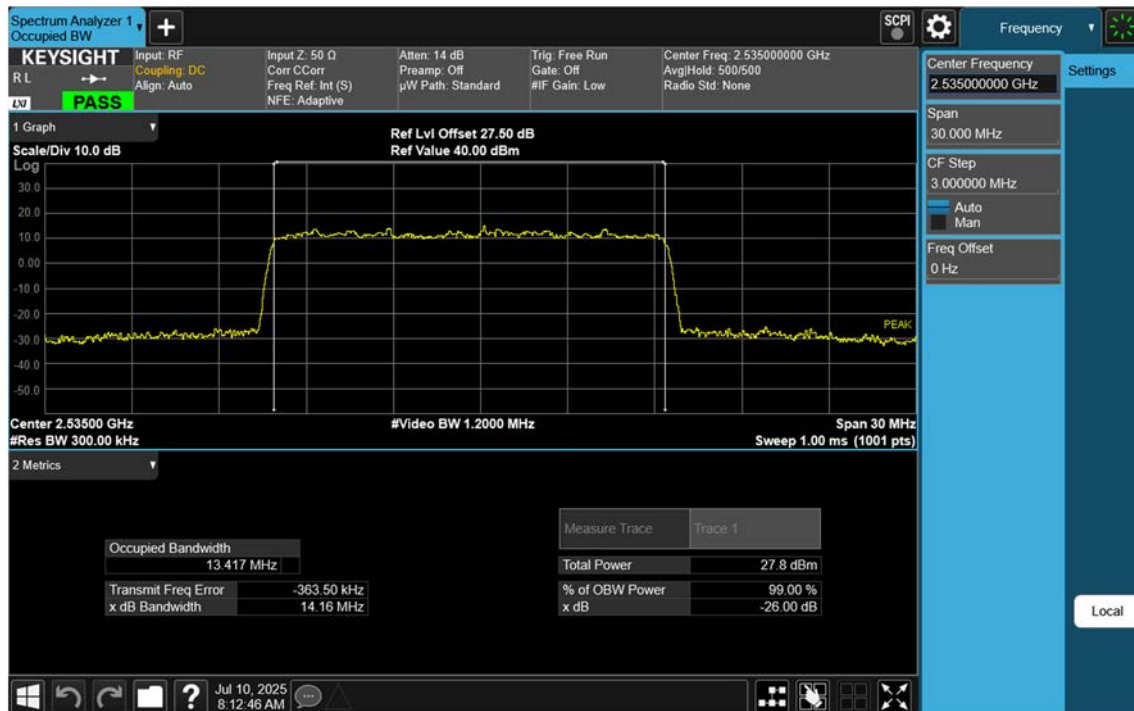
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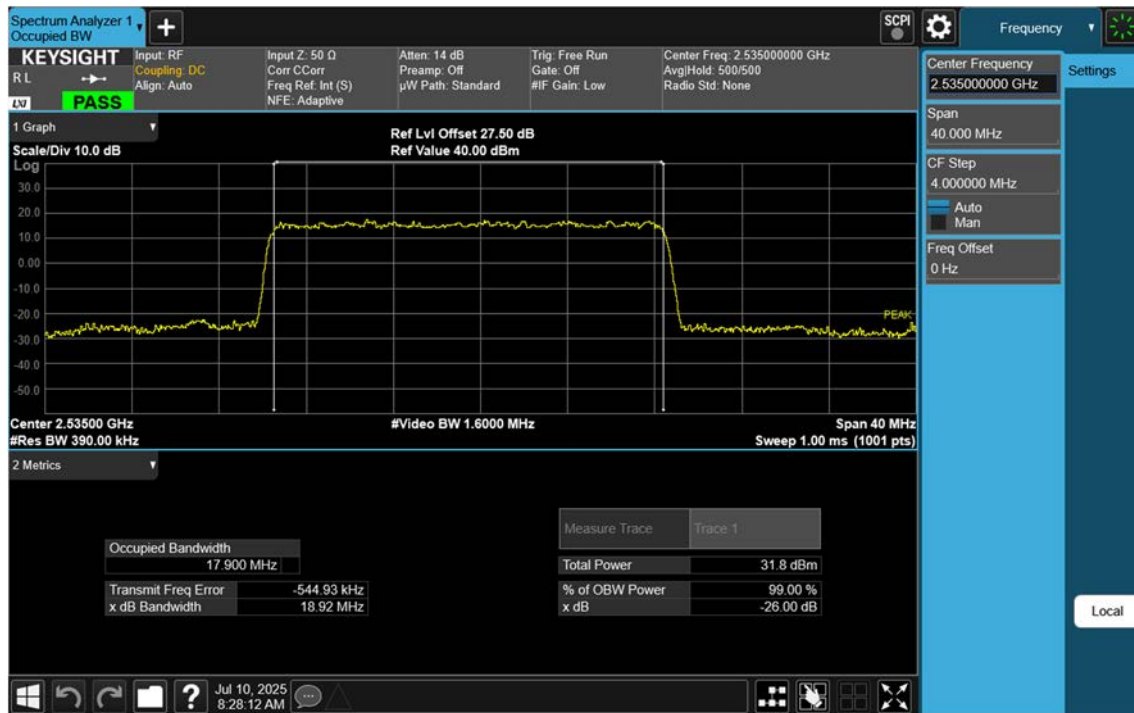
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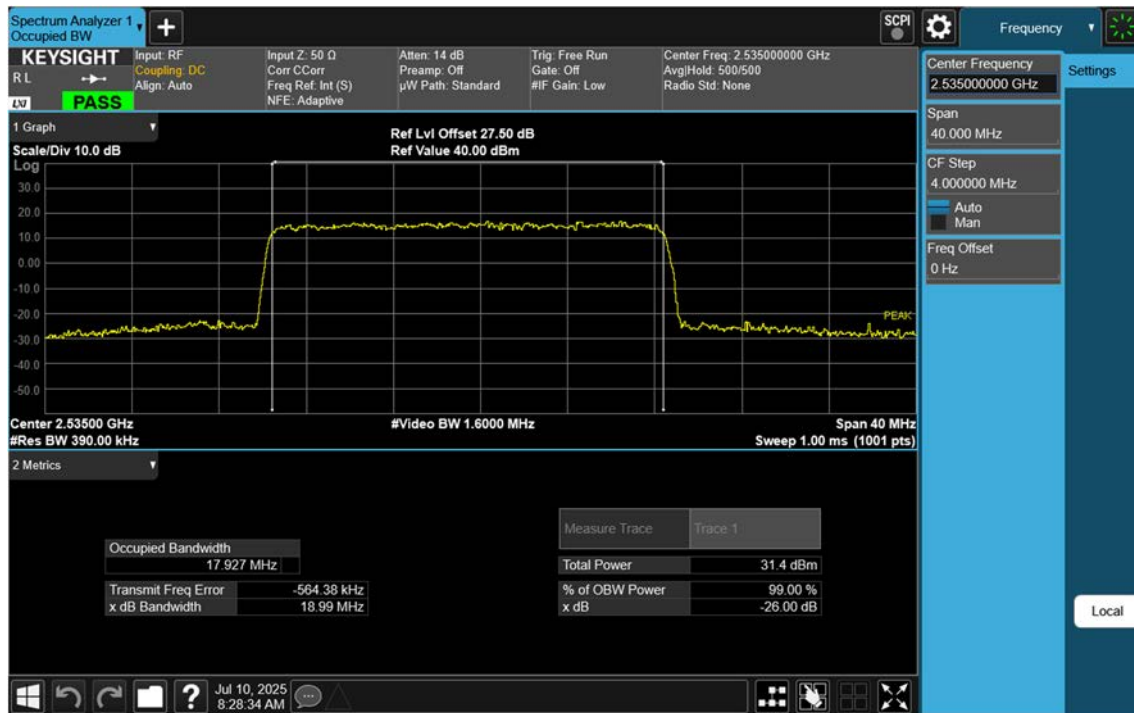
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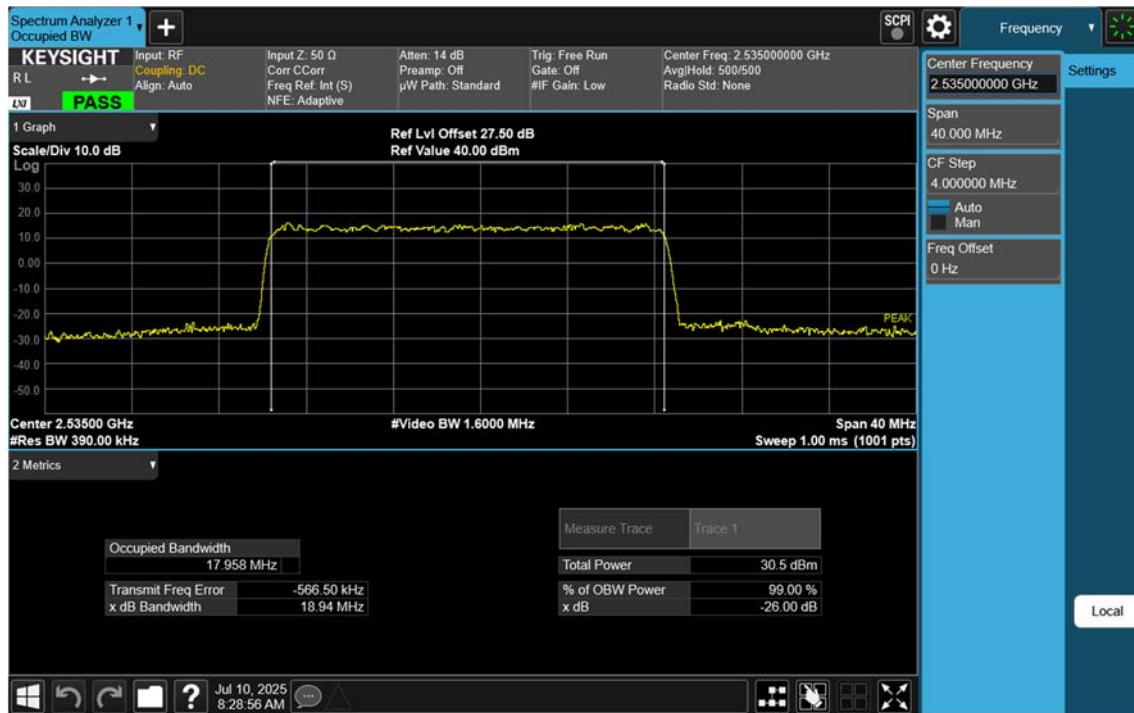
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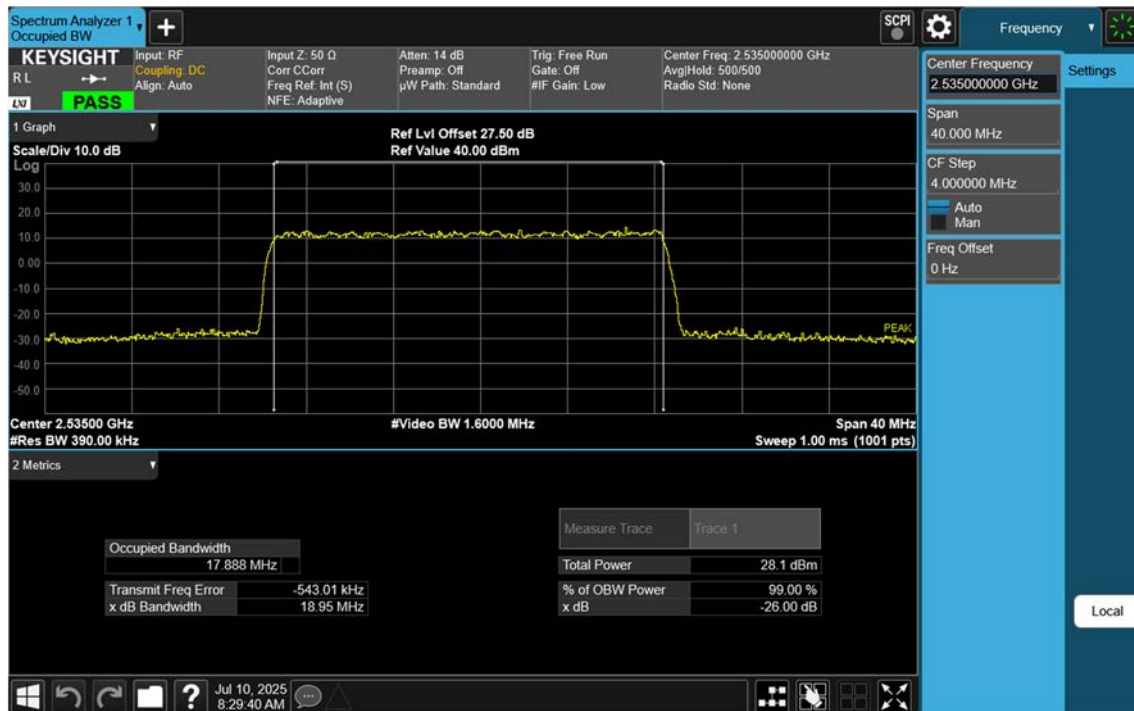
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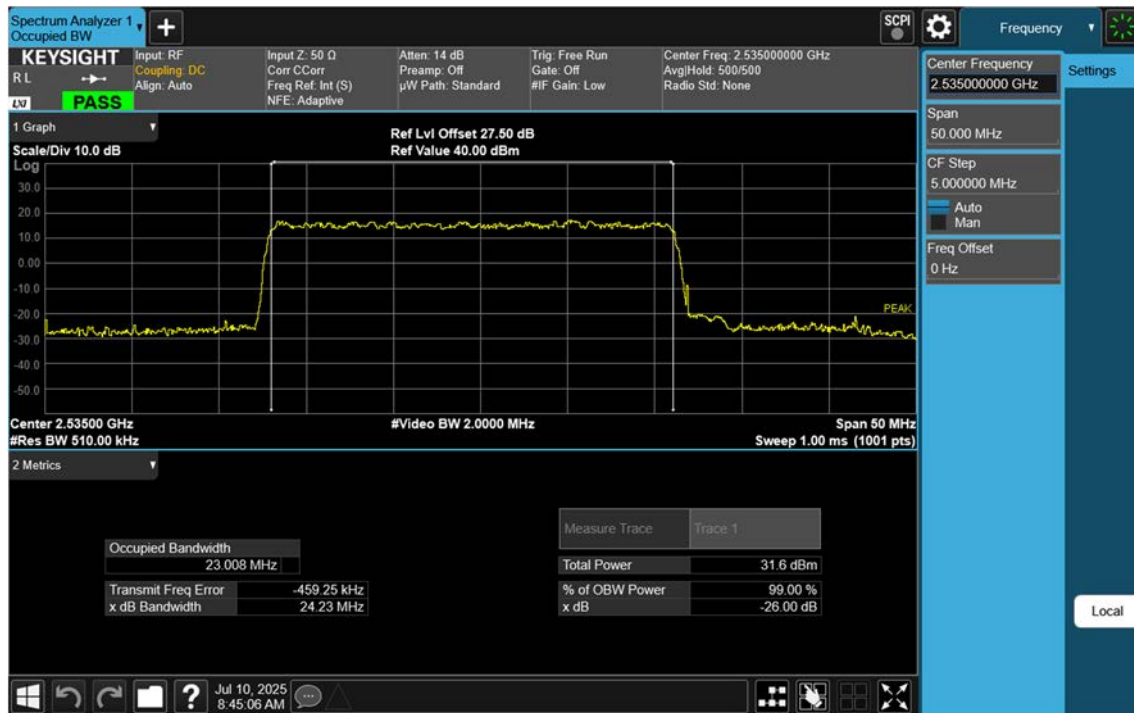
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NR7_20 M_OBW_Mid_256QAM_FullRB



NR7_25 M_OBW_Mid_BPSK_FullRB



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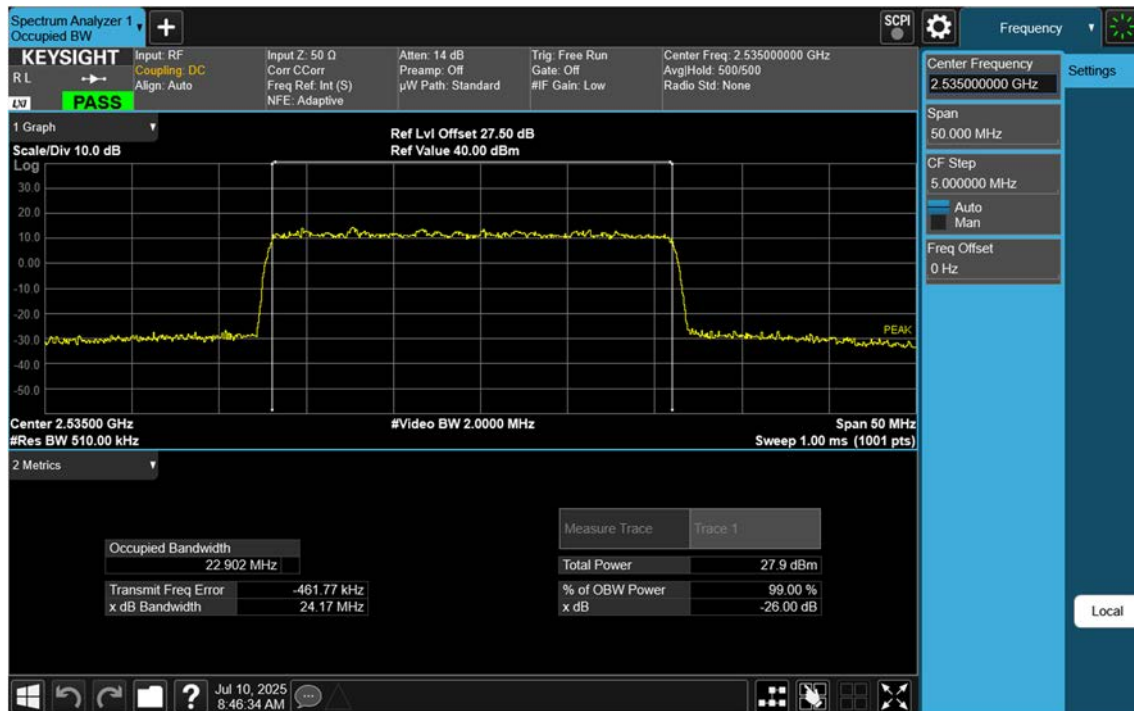
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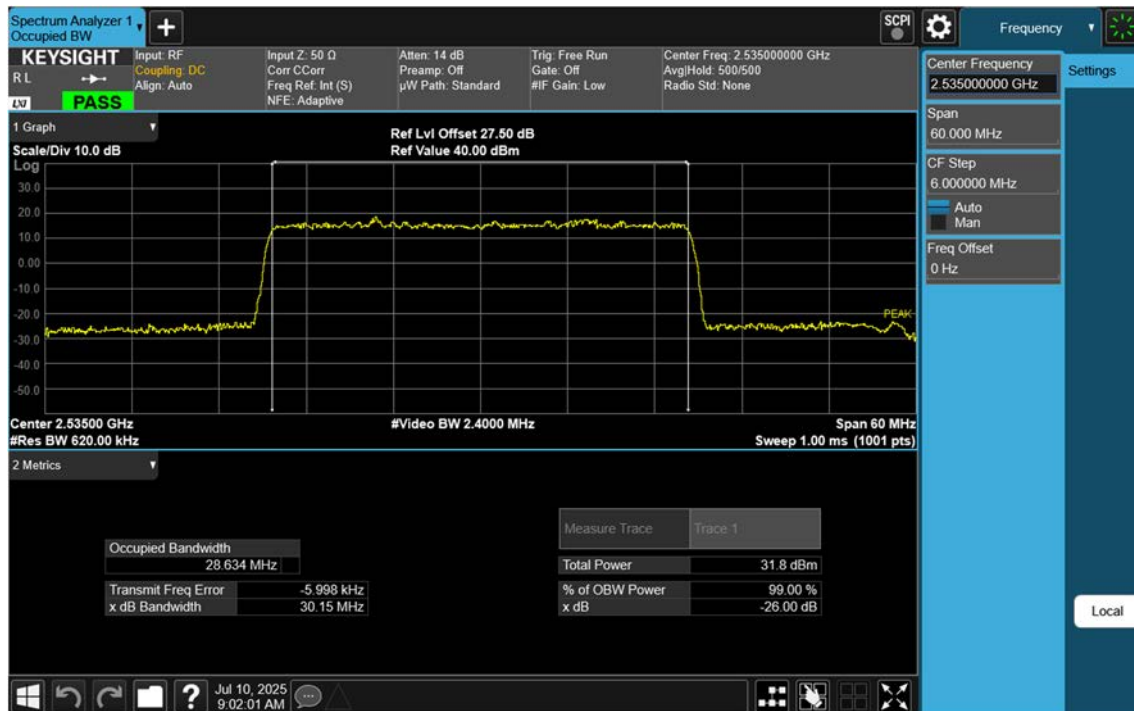
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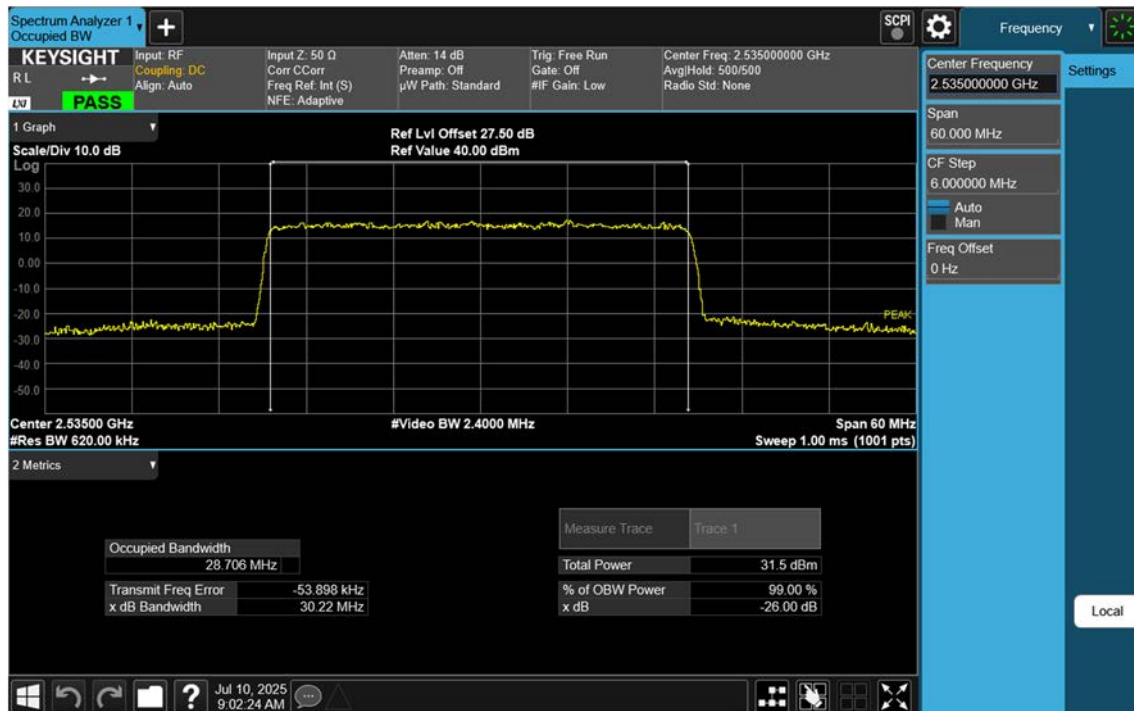
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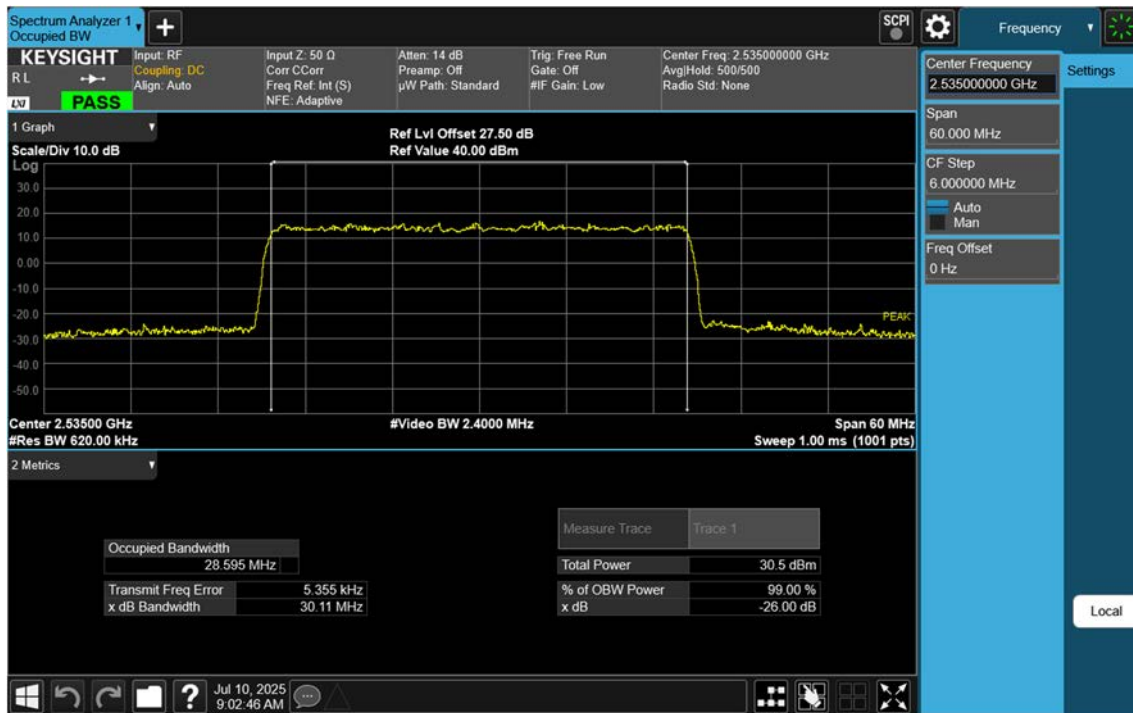
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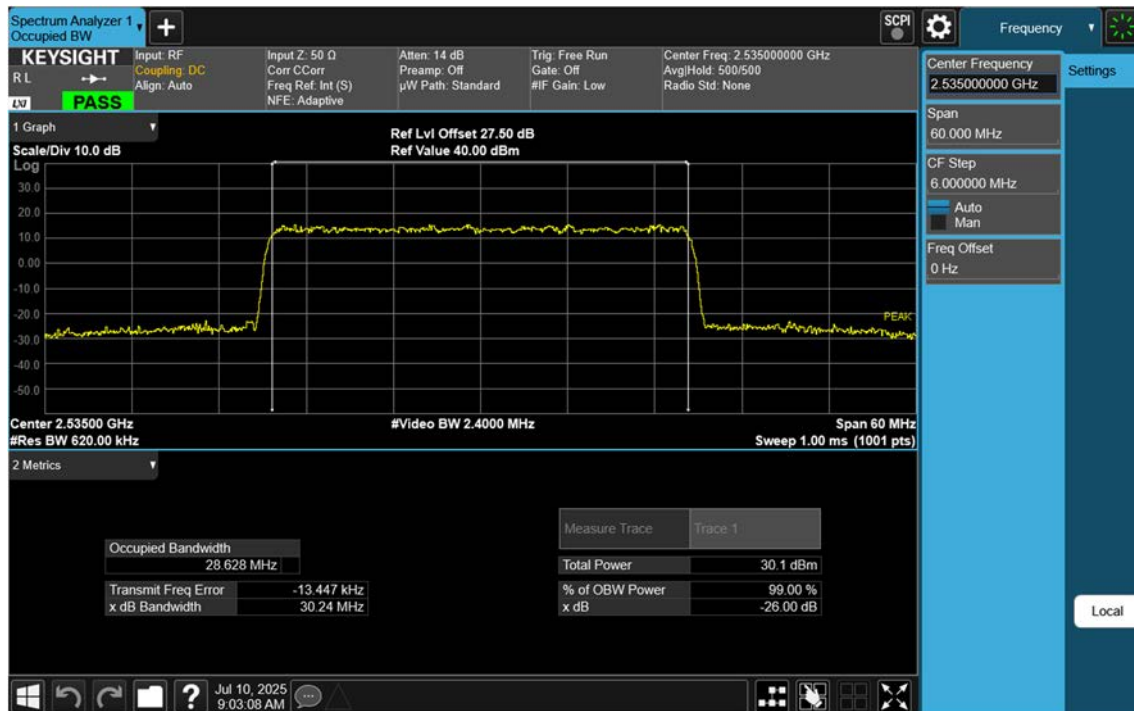
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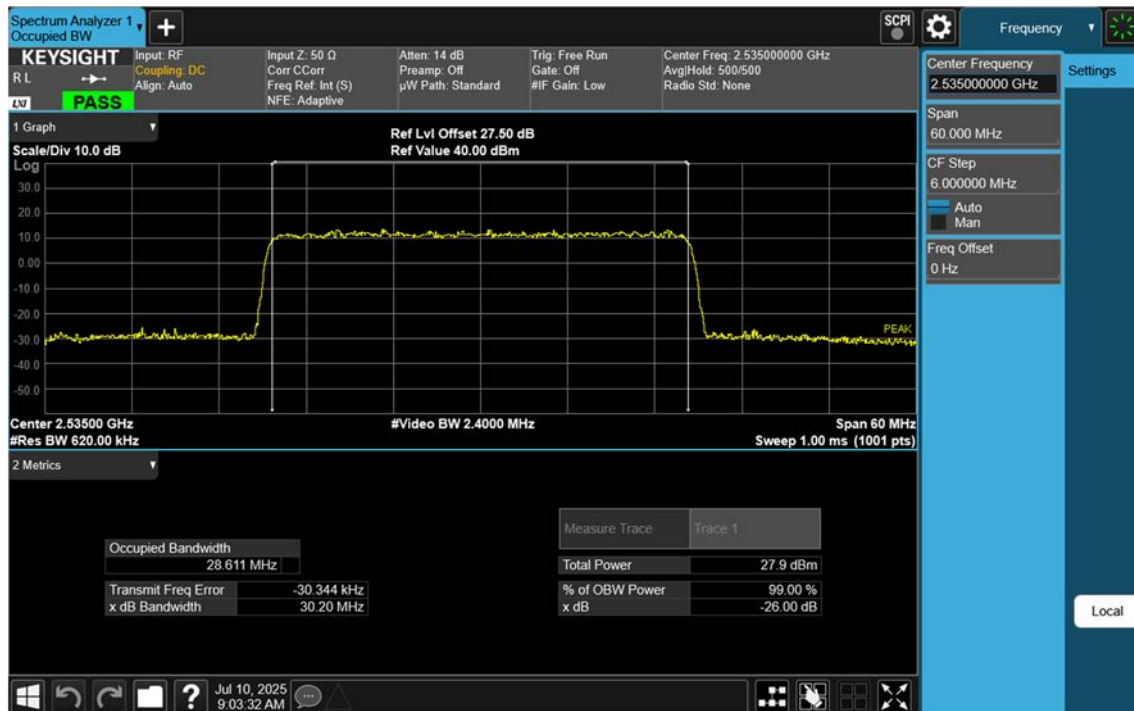
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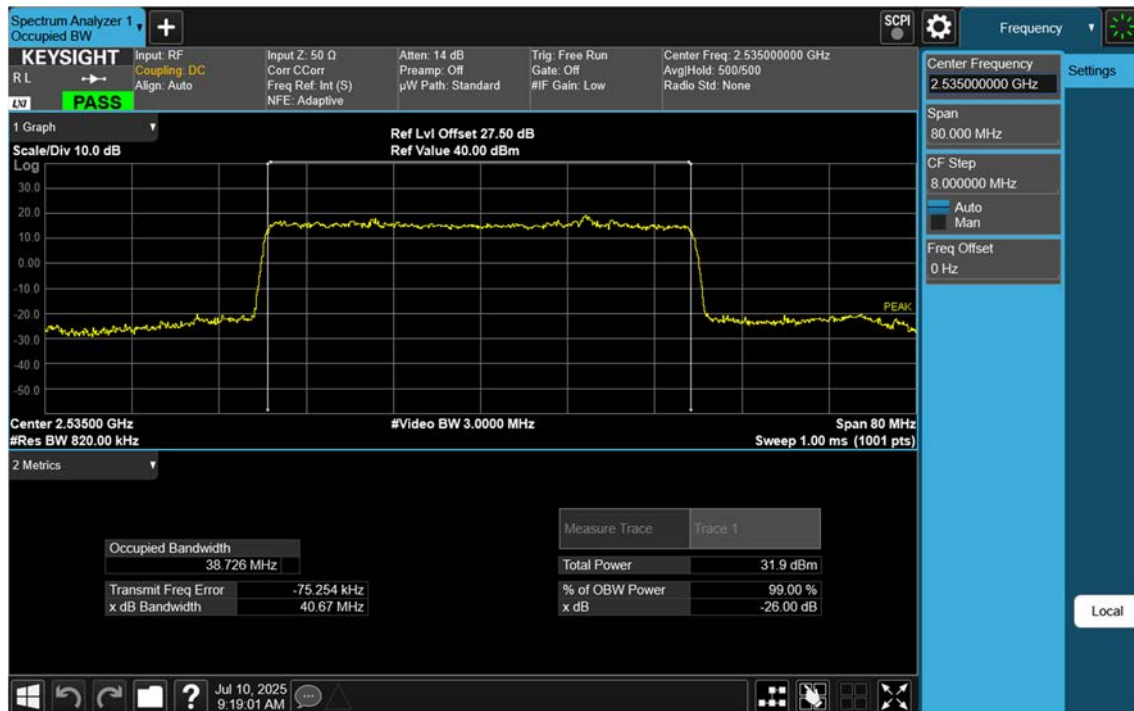
NR7_30 M_OBW_Mid_64QAM_FullRB



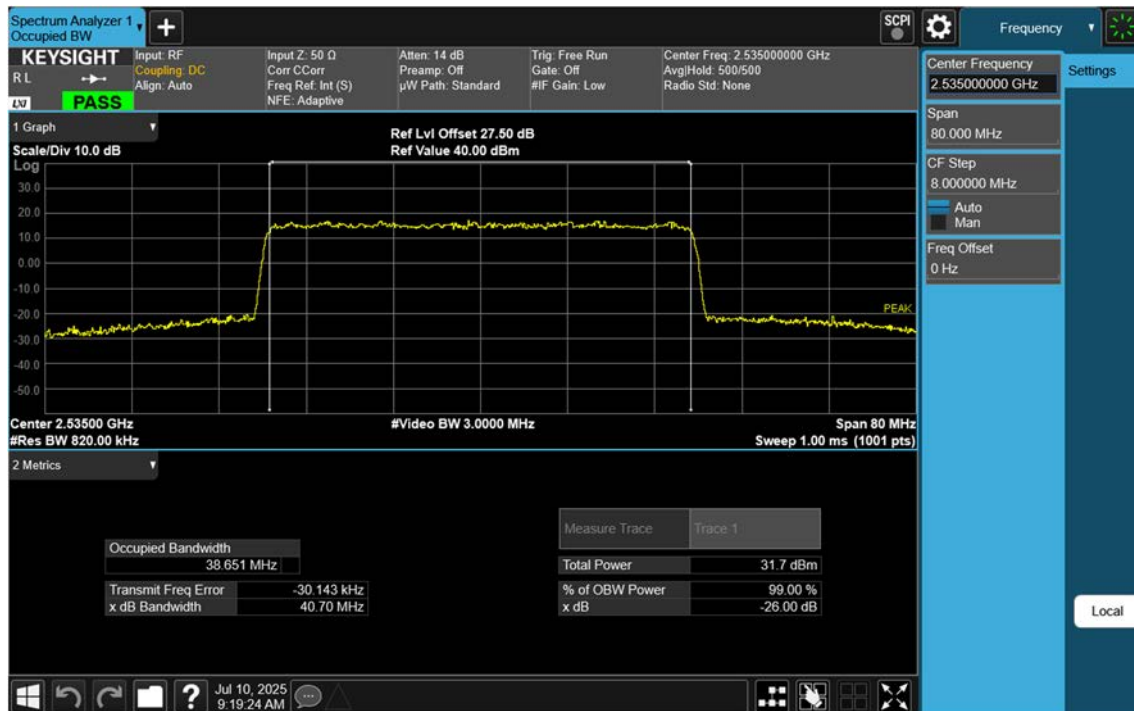
NR7_30 M_OBW_Mid_256QAM_FullRB



NR7_40 M_OBW_Mid_BPSK_FullRB



NR7_40 M_OBW_Mid_QPSK_FullRB



NR7_40 M_OBW_Mid_16QAM_FullRB

