

TEST REPORT

FCC Sub6 n25(2) Test for SM-A276U
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2604-FC027

DATE OF ISSUE
April 23, 2026

Tested by
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TEST REPORT

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Additional Model

SM-A276U1, SM-S276V

Applicant**SAMSUNG Electronics Co., Ltd.**

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

Product Name

Mobile Phone

Model Name

SM-A276U

Date of Test

March 11, 2026 ~ April 22, 2026

FCC ID

A3LSMA276U

Location of Test

☒ Permanent Testing Lab ☐ On Site Testing

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

FCC Classification:

PCS Licensed Transmitter Held to Ear (PCE)

Test Standard Used

FCC Rule Part : §24

Test Results

PASS

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	April 23, 2026	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

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

CONTENTS

1. GENERAL INFORMATION.....	6
1.1. MAXIMUM OUTPUT POWER	7
2. INTRODUCTION	9
2.1. DESCRIPTION OF EUT.....	9
2.2. MEASURING INSTRUMENT CALIBRATION.....	9
2.3. TEST FACILITY.....	9
2.4. EQUIPMENT	9
3. DESCRIPTION OF TESTS.....	10
3.1 TEST PROCEDURE.....	10
3.2 RADIATED POWER.....	11
3.3 RADIATED SPURIOUS EMISSIONS	12
3.4 PEAK- TO- AVERAGE RATIO	13
3.5 OCCUPIED BANDWIDTH.	14
3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL	15
3.7 BAND EDGE	16
3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE.....	18
3.9 WORST CASE(RADIATED TEST)	19
3.10 WORST CASE(CONDUCTED TEST)	21
4. LIST OF TEST EQUIPMENT.....	22
5. MEASUREMENT UNCERTAINTY.....	23
6. SUMMARY OF TEST RESULTS	24
7. SAMPLE CALCULATION	25
8. TEST DATA(Main 1 ANT).....	27
8.1 EQUIVALENT ISOTROPIC RADIATED POWER.....	27
8.2 RADIATED SPURIOUS EMISSIONS	35
8.3 PEAK-TO-AVERAGE RATIO	36
8.4 OCCUPIED BANDWIDTH	38
8.5 CONDUCTED SPURIOUS EMISSIONS	40
8.6 BAND EDGE	40
8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE.....	41
9. TEST DATA(Sub 2-2 ANT)	49
9.1 EQUIVALENT ISOTROPIC RADIATED POWER.....	49
9.2 RADIATED SPURIOUS EMISSIONS	57
9.3 PEAK-TO-AVERAGE RATIO	58
9.4 OCCUPIED BANDWIDTH	60
9.5 CONDUCTED SPURIOUS EMISSIONS	62
9.6 BAND EDGE	62
9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE.....	63
10. TEST PLOTS(Main 1 ANT).....	71
10.1 PEAK-TO-AVERAGE RATIO.....	72
10.2 OCCUPIED BANDWIDTH.....	112
10.3 CONDUCTED SPURIOUS EMISSIONS	152
10.4 BAND EDGE	200
11. TEST PLOTS(Sub 2-2 ANT)	248
11.1 PEAK-TO-AVERAGE RATIO.....	249

11.2 OCCUPIED BANDWIDTH	289
11.3 CONDUCTED SPURIOUS EMISSIONS	329
11.4 BAND EDGE	377
12. ANNEX A_ TEST SETUP PHOTO	425

MEASUREMENT REPORT

1. GENERAL INFORMATION

Model(s):	SM-A276U
Additional Model	SM-A276U1, SM-S276V
SCS(kHz):	15
Bandwidth(MHz):	5, 10, 15, 20, 25, 30, 35, 40
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:	1852.5 MHz – 1912.5 MHz (5 MHz) (Sub6 n25(2)) 1855.0 MHz – 1910.0 MHz (10 MHz) (Sub6 n25(2)) 1857.5 MHz – 1907.5 MHz (15 MHz) (Sub6 n25(2)) 1860.0 MHz – 1905.0 MHz (20 MHz) (Sub6 n25(2)) 1862.5 MHz – 1902.5 MHz (25 MHz) (Sub6 n25) 1865.0 MHz – 1900.0 MHz (30 MHz) (Sub6 n25) 1867.5 MHz – 1897.5 MHz (35 MHz) (Sub6 n25) 1870.0 MHz – 1895.0 MHz (40 MHz) (Sub6 n25)
Serial number:	Radiated : R37L300TFBR Conducted : 9aece1613d127ece
Antenna Information	Please refer to the Antenna Specification document.

1.1. MAXIMUM OUTPUT POWER

Main 1 ANT

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n25(2) (5)	1852.5 - 1912.5	4M52G7D	PI/2 BPSK	0.188	22.74
		4M49G7D	QPSK	0.175	22.43
		4M47W7D	16QAM	0.143	21.54
		4M50W7D	64QAM	0.101	20.06
		4M53W7D	256QAM	0.057	17.54
Sub6 n25(2) (10)	1855.0 - 1910.0	8M96G7D	PI/2 BPSK	0.183	22.63
		9M00G7D	QPSK	0.179	22.52
		8M99W7D	16QAM	0.146	21.65
		8M97W7D	64QAM	0.106	20.24
		9M01W7D	256QAM	0.059	17.73
Sub6 n25(2) (15)	1857.5 - 1907.5	13M4G7D	PI/2 BPSK	0.181	22.58
		13M5G7D	QPSK	0.177	22.47
		13M4W7D	16QAM	0.140	21.45
		13M5W7D	64QAM	0.104	20.18
		13M4W7D	256QAM	0.056	17.50
Sub6 n25(2) (20)	1860.0 - 1905.0	17M9G7D	PI/2 BPSK	0.184	22.65
		17M9G7D	QPSK	0.182	22.61
		17M9W7D	16QAM	0.147	21.67
		17M8W7D	64QAM	0.108	20.33
		17M8W7D	256QAM	0.059	17.70
Sub6 n25 (25)	1862.5 – 1902.5	22M9G7D	PI/2 BPSK	0.179	22.52
		22M8G7D	QPSK	0.177	22.47
		22M9W7D	16QAM	0.141	21.48
		22M8W7D	64QAM	0.103	20.14
		22M9W7D	256QAM	0.058	17.65
Sub6 n25 (30)	1865.0 – 1900.0	28M5G7D	PI/2 BPSK	0.179	22.54
		28M5G7D	QPSK	0.175	22.43
		28M6W7D	16QAM	0.141	21.49
		28M5W7D	64QAM	0.103	20.12
		28M5W7D	256QAM	0.058	17.61
Sub6 n25 (35)	1867.5 – 1897.5	32M1G7D	PI/2 BPSK	0.187	22.72
		32M1G7D	QPSK	0.182	22.61
		32M1W7D	16QAM	0.151	21.80
		32M0W7D	64QAM	0.109	20.38
		32M1W7D	256QAM	0.058	17.65
Sub6 n25 (40)	1870.0 – 1895.0	38M7G7D	PI/2 BPSK	0.182	22.59
		38M6G7D	QPSK	0.183	22.62
		38M6W7D	16QAM	0.143	21.55
		38M5W7D	64QAM	0.108	20.34
		38M5W7D	256QAM	0.060	17.80

Sub 2-2 ANT

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n25(2) (5)	1852.5 - 1912.5	4M54G7D	PI/2 BPSK	0.259	24.14
		4M53G7D	QPSK	0.247	23.92
		4M52W7D	16QAM	0.205	23.11
		4M51W7D	64QAM	0.145	21.62
		4M51W7D	256QAM	0.085	19.27
Sub6 n25(2) (10)	1855.0 - 1910.0	8M97G7D	PI/2 BPSK	0.251	24.00
		9M00G7D	QPSK	0.250	23.98
		9M02W7D	16QAM	0.204	23.09
		8M97W7D	64QAM	0.144	21.59
		8M99W7D	256QAM	0.080	19.03
Sub6 n25(2) (15)	1857.5 - 1907.5	13M5G7D	PI/2 BPSK	0.250	23.98
		13M5G7D	QPSK	0.208	23.19
		13M5W7D	16QAM	0.180	22.56
		13M5W7D	64QAM	0.138	21.39
		13M5W7D	256QAM	0.078	18.92
Sub6 n25(2) (20)	1860.0 - 1905.0	17M9G7D	PI/2 BPSK	0.261	24.16
		17M9G7D	QPSK	0.212	23.26
		17M9W7D	16QAM	0.183	22.62
		17M9W7D	64QAM	0.144	21.57
		17M9W7D	256QAM	0.080	19.05
Sub6 n25 (25)	1862.5 – 1902.5	23M0G7D	PI/2 BPSK	0.254	24.05
		22M9G7D	QPSK	0.241	23.82
		23M0W7D	16QAM	0.197	22.94
		22M9W7D	64QAM	0.143	21.54
		22M9W7D	256QAM	0.079	18.97
Sub6 n25 (30)	1865.0 – 1900.0	28M6G7D	PI/2 BPSK	0.265	24.24
		28M6G7D	QPSK	0.264	24.22
		28M6W7D	16QAM	0.215	23.33
		28M6W7D	64QAM	0.152	21.83
		28M6W7D	256QAM	0.085	19.30
Sub6 n25 (35)	1867.5 – 1897.5	32M2G7D	PI/2 BPSK	0.258	24.11
		32M2G7D	QPSK	0.239	23.79
		32M2W7D	16QAM	0.205	23.12
		32M2W7D	64QAM	0.147	21.67
		32M2W7D	256QAM	0.082	19.16
Sub6 n25 (40)	1870.0 – 1895.0	38M7G7D	PI/2 BPSK	0.257	24.10
		38M6G7D	QPSK	0.245	23.89
		38M7W7D	16QAM	0.198	22.97
		38M5W7D	64QAM	0.142	21.52
		38M7W7D	256QAM	0.080	19.04

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 February 26, 2026 (Registration Number: KR0032).

2.4. EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to ANSI/USEMCSC C63.2-2023, "American National Standard for Specifications of Electromagnetic Interference and Field Strength Measuring Instrumentation in the Frequency Range 9 kHz to 40 GHz".

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
Band 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	- KDB 971168 D01 v03r01 - Section 5.2.4 - ANSI C63.26-2015 - Section 5.2.1 & 5.2.4.2
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. No. of sweep points $> 2 \times$ span / RBW
4. Detector = Peak
5. Trace mode = Max Hold
6. The trace was allowed to stabilize
7. Test channel : Low/ Middle/ High
8. 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;

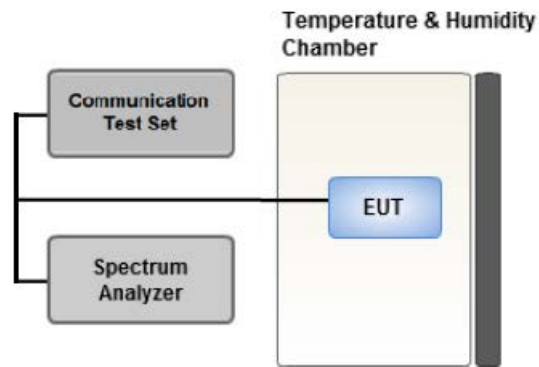
$$\text{Result}_{(\text{dBm})} = P_g_{(\text{dBm})} - \text{cable loss}_{(\text{dB})} + \text{antenna gain}_{(\text{dBi})}$$

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

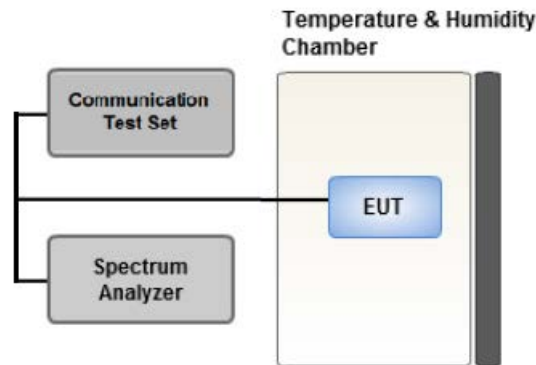


Test setup

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.

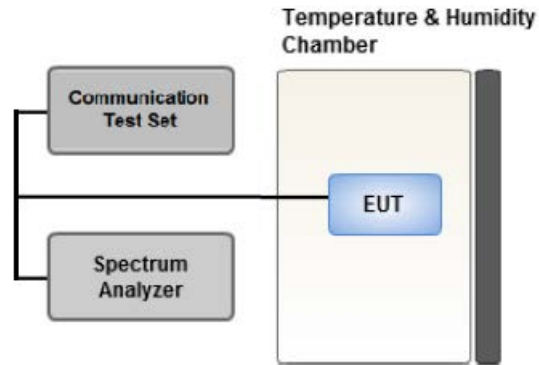
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

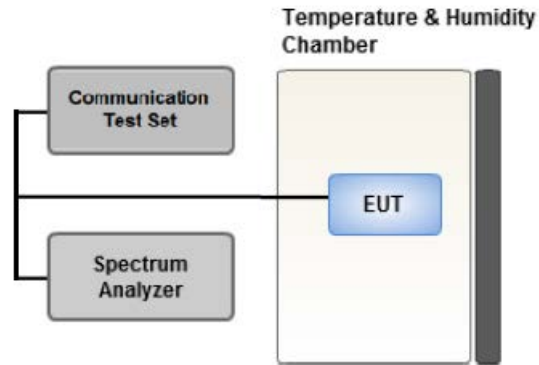
Test Overview

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 = 1001 pts

3.7 BAND 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 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. 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. RBW > 1 % of the emission bandwidth
4. VBW > 3 x RBW
5. Detector = RMS
6. Number of sweep points $\geq 2 \times \text{Span/RBW}$
7. Trace mode = trace average
8. Sweep time > (Number of Points) $\times$ (Symbol Period)
9. The trace was allowed to stabilize

Test Notes

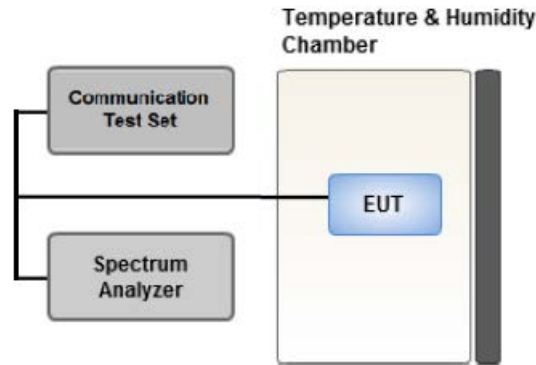
According to FCC 22.917, 24.238, 27.53 specified that power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

All measurements were done at 2 channels(low and high operational frequency range.)

The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



Test setup

Test Overview

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

The frequency stability of the transmitter is measured by:

1. Temperature:

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

2. Primary Supply Voltage:

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

Test Settings

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

3.9 WORST CASE(RADIATED TEST)

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported.
(Worst case: DFT-S-OFDM)
- The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: NSA. SA
Worst case: SA
Mode : Stand alone, Stand alone + External accessories (Earphone, AC adapter, etc)
Worst case : Stand alone
- All simultaneous transmission scenarios of operation were investigated, and the test results showed no additional significant emissions relative to the least restrictive limit were observed.
Therefore, only the worst case(stand-alone) results were reported.
- 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.
- In the case of radiated spurious emissions, all bandwidth of operation was investigated and the worst case bandwidth results are reported. (Worst case : 5 MHz (Main 1 ANT), 30 MHz (Sub 2-2 ANT))
- Sub6 n25 (1 850 – 1 915 MHz, 5/10/15/20/25/30/35/40 MHz bandwidth) overlaps the entire frequency range of Sub6 n2 (1 850 – 1 910 MHz, 5/10/15/20 MHz bandwidth) and they have the same Tune-up power. Therefore, test data provided in this report covers Sub6 n25 as well as Sub6 n2.
- SM-A276U & additional models were tested and the worst case results are reported.
(Worst case : SM-A276U)

[Main 1 ANT Worst case]

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

[Sub 2-2 ANT 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		X
Radiated Spurious and Harmonic 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: NSA, SA
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.
- Sub6 n25 (1 850 – 1 915 MHz, 5/10/15/20/25/30/35/40 MHz bandwidth) overlaps the entire frequency range of Sub6 n2 (1 850 – 1 910 MHz, 5/10/15/20 MHz bandwidth) and they have the same Tune-up power. Therefore, test data provided in this report covers Sub6 n25 as well as Sub6 n2.
- SM-A276U & additional models were tested and the worst case results are reported.
(Worst case : SM-A276U)

[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, 35, 40	Mid	Full RB	0
Band 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
		35	Low	1	0
			High	1	187
		40	Low	1	0
			High	1	215
		5, 10, 15, 20, 25,30, 35, 40	Low, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	5, 10, 15, 20, 25,30, 35, 40	Low, Mid, High	1	1

4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacture	Serial No.	Due to Calibration	Calibration Interval
Dipole Antenna	UHAP	Schwarzbeck	01273	03/05/2028	Biennial
Dipole Antenna	UHAP	Schwarzbeck	01274	03/05/2028	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	02289	02/10/2028	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	9120D-1299	04/17/2027	Biennial
Horn Antenna	BBHA 9170	Schwarzbeck	BBHA9170342	09/20/2026	Biennial
Horn Antenna	BBHA 9170	Schwarzbeck	BBHA9170124	03/23/2027	Biennial
Loop Antenna	FMZB1513	Schwarzbeck	1513-175	06/24/2027	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/05/2027	Biennial
Hybrid Antenna	VULB9168	Schwarzbeck	760	02/17/2027	Biennial
RF Switching System	FBSR-06B (1G HPF + LNA)	T&M SYSTEM	F3L1	05/08/2026	Annual
RF Switching System	FBSR-06B (3G HPF + LNA)	T&M SYSTEM	F3L2	05/08/2026	Annual
RF Switching System	FBSR-06B (6G HPF + LNA)	T&M SYSTEM	F3L3	05/08/2026	Annual
RF Switching System	FBSR-06B (LNA)	T&M SYSTEM	F3L4	05/08/2026	Annual
Broadband LNA	CBL18265035	CERNEX	22966	10/21/2026	Annual
Broadband LNA	CBL26405040	CERNEX	25956	02/09/2027	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	08/11/2026	Annual
Power Splitter	11667B	Hewlett Packard	11275	01/26/2027	Annual
Chamber	SU-642	ESPEC	93008124	02/04/2027	Annual
Signal Analyzer	N9020A	Agilent	MY51110063	04/01/2027	Annual
20dB ATTENUATOR	8493C	Hewlett Packard	15233	12/10/2026	Annual
Signal Analyzer	FSV40	ROHDE & SCHWARZ	101436	01/29/2027	Annual
Signal & Spectrum Analyzer	FSW67	ROHDE & SCHWARZ	101736	05/27/2026	Annual
Wireless Communications Set	E5515C	Agilent	MY48360800	07/29/2026	Annual
Radio Communication Analyzer	MT8821C	Anritsu Corp.	6262287701	05/14/2026	Annual
Radio Communication Test Station	MT8000A	Anritsu Corp.	6262302511	05/08/2026	Annual
Signal Analyzer	N9030B	KEYSIGHT	MY55480167	05/14/2026	Annual
UXM 5G Wireless Test Platform	E7515B	KEYSIGHT	MY60101126	01/29/2027	Annual
Power Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/05/2026	Annual
SIGNAL GENERATOR	SMB100A	ROHDE & SCHWARZ	177633	07/22/2026	Annual
Automation Software	FCC 2G/3G/4G Conducted	HCT CO., LTD	-	-	-
Automation Software	FCC NR Conducted	HCT CO., LTD	-	-	-
Automation Software	FCC LTE Radiated	HCT CO., LTD	-	-	-
Automation Software	FCC NR Radiated	HCT CO., LTD	-	-	-

Note:

- Equipment whose calibration due date was updated during the test period was not used between the previous due date and the update. All reported measurements were performed using equipment within valid calibration.
- Especially, all antenna for measurement is calibrated in accordance with the requirements of ANSI C63.5-2017.

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	1.11 (Confidence level about 95 %, $k=2$)
Peak- to- Average Ratio	0.73 (Confidence level about 95 %, $k=2$)
Radiated Power	4.74 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.54 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.74 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.80 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.86 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (Above 40 GHz)	5.44 (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, §24.238(a)	< 43 + 10log10 (P[Watts]) at Band Edge and for all out-of-band emissions	PASS
Conducted Output Power	§2.1046	N/A	PASS Note1
Peak- to- Average Ratio	§24.232(d)	< 13 dB	PASS
Frequency stability / variation of ambient temperature	§24.235	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	§24.232(c)	< 2 Watts max. EIRP	PASS
Radiated Spurious and Harmonic Emissions	§2.1053, §24.238(a)	< 43 + 10log10 (P[Watts]) for all out-of band emissions	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(Main 1 ANT)

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
1852.5		PI/2 BPSK	-18.51	14.84	10.05	2.15	H		0.188	22.74	1	23
		QPSK	-18.82	14.53	10.05	2.15	H		0.175	22.43		
		16-QAM	-19.71	13.64	10.05	2.15	H		0.143	21.54		
		64-QAM	-21.19	12.16	10.05	2.15	H		0.101	20.06		
		256-QAM	-23.71	9.64	10.05	2.15	H		0.057	17.54		
1882.5	Sub6 n25(2)/ 5 MHz [15 kHz]	PI/2 BPSK	-19.31	14.41	9.94	2.18	H	< 2.00	0.165	22.17	1	1
		QPSK	-19.47	14.25	9.94	2.18	H		0.159	22.01		
		16-QAM	-20.45	13.27	9.94	2.18	H		0.127	21.03		
		64-QAM	-21.70	12.02	9.94	2.18	H		0.095	19.78		
		256-QAM	-24.37	9.35	9.94	2.18	H		0.051	17.11		
1912.5		PI/2 BPSK	-19.34	14.54	9.83	2.19	H		0.165	22.18	1	23
		QPSK	-19.39	14.49	9.83	2.19	H		0.163	22.13		
		16-QAM	-20.29	13.59	9.83	2.19	H		0.133	21.23		
		64-QAM	-21.58	12.30	9.83	2.19	H		0.099	19.94		
		256-QAM	-24.12	9.76	9.83	2.19	H		0.055	17.40		

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
1855.0		PI/2 BPSK	-18.62	14.73	10.05	2.15	H		0.183	22.63	1	50
		QPSK	-18.73	14.62	10.05	2.15	H		0.179	22.52		
		16-QAM	-19.60	13.75	10.05	2.15	H		0.146	21.65		
		64-QAM	-21.01	12.34	10.05	2.15	H		0.106	20.24		
		256-QAM	-23.52	9.83	10.05	2.15	H		0.059	17.73		
1882.5	Sub6 n25(2)/ 10 MHz [15 kHz]	PI/2 BPSK	-19.16	14.56	9.94	2.18	H	< 2.00	0.171	22.32	1	50
		QPSK	-19.38	14.34	9.94	2.18	H		0.162	22.10		
		16-QAM	-20.27	13.45	9.94	2.18	H		0.132	21.21		
		64-QAM	-21.66	12.06	9.94	2.18	H		0.096	19.82		
		256-QAM	-24.20	9.52	9.94	2.18	H		0.053	17.28		
1910.0		PI/2 BPSK	-19.05	14.68	9.85	2.19	H		0.171	22.34	1	26
		QPSK	-19.13	14.60	9.85	2.19	H		0.168	22.26		
		16-QAM	-20.15	13.58	9.85	2.19	H		0.133	21.24		
		64-QAM	-21.49	12.24	9.85	2.19	H		0.098	19.90		
		256-QAM	-24.09	9.64	9.85	2.19	H		0.054	17.30		

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
1857.5		PI/2 BPSK	-18.60	14.71	10.03	2.16	H		0.181	22.58	1	1
		QPSK	-18.71	14.60	10.03	2.16	H		0.177	22.47		
		16-QAM	-19.73	13.58	10.03	2.16	H		0.140	21.45		
		64-QAM	-21.00	12.31	10.03	2.16	H		0.104	20.18		
		256-QAM	-23.68	9.63	10.03	2.16	H		0.056	17.50		
1882.5	Sub6 n25(2)/ 15 MHz [15 kHz]	PI/2 BPSK	-18.99	14.73	9.94	2.18	H		0.177	22.49	1	1
		QPSK	-19.04	14.68	9.94	2.18	H		0.175	22.44		
		16-QAM	-20.12	13.60	9.94	2.18	H	< 2.00	0.137	21.36		
		64-QAM	-21.33	12.39	9.94	2.18	H		0.104	20.15		
		256-QAM	-24.02	9.70	9.94	2.18	H		0.056	17.46		
1907.5		PI/2 BPSK	-19.05	14.68	9.85	2.19	H		0.171	22.34	1	77
		QPSK	-19.21	14.52	9.85	2.19	H		0.165	22.18		
		16-QAM	-20.17	13.56	9.85	2.19	H		0.132	21.22		
		64-QAM	-21.49	12.24	9.85	2.19	H		0.098	19.90		
		256-QAM	-24.19	9.54	9.85	2.19	H		0.052	17.20		

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
1860.0		PI/2 BPSK	-18.53	14.78	10.03	2.16	H	< 2.00	0.184	22.65	1	53
		QPSK	-18.57	14.74	10.03	2.16	H		0.182	22.61		
		16-QAM	-19.51	13.80	10.03	2.16	H		0.147	21.67		
		64-QAM	-20.85	12.46	10.03	2.16	H		0.108	20.33		
		256-QAM	-23.48	9.83	10.03	2.16	H		0.059	17.70		
1882.5	Sub6 n25(2)/ 20 MHz [15 kHz]	PI/2 BPSK	-19.13	14.59	9.94	2.18	H	< 2.00	0.172	22.35	1	1
		QPSK	-19.25	14.47	9.94	2.18	H		0.167	22.23		
		16-QAM	-20.15	13.57	9.94	2.18	H		0.136	21.33		
		64-QAM	-21.56	12.16	9.94	2.18	H		0.098	19.92		
		256-QAM	-24.13	9.59	9.94	2.18	H		0.054	17.35		
1905.0		PI/2 BPSK	-19.00	14.75	9.87	2.19	H	< 2.00	0.175	22.43	1	104
		QPSK	-19.23	14.52	9.87	2.19	H		0.166	22.20		
		16-QAM	-20.24	13.51	9.87	2.19	H		0.132	21.19		
		64-QAM	-21.50	12.25	9.87	2.19	H		0.098	19.93		
		256-QAM	-24.16	9.59	9.87	2.19	H		0.053	17.27		

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
1862.5		PI/2 BPSK	-18.75	14.65	10.01	2.16	H	< 2.00	0.178	22.50	1	1
		QPSK	-18.78	14.62	10.01	2.16	H		0.177	22.47		
		16-QAM	-19.80	13.60	10.01	2.16	H		0.140	21.45		
		64-QAM	-21.11	12.29	10.01	2.16	H		0.103	20.14		
		256-QAM	-23.60	9.80	10.01	2.16	H		0.058	17.65		
1882.5	Sub6 n25/ 25 MHz [15 kHz]	PI/2 BPSK	-18.98	14.74	9.94	2.18	H	< 2.00	0.178	22.50	1	131
		QPSK	-19.01	14.71	9.94	2.18	H		0.177	22.47		
		16-QAM	-20.00	13.72	9.94	2.18	H		0.141	21.48		
		64-QAM	-21.38	12.34	9.94	2.18	H		0.102	20.10		
		256-QAM	-24.04	9.68	9.94	2.18	H		0.055	17.44		
1902.5		PI/2 BPSK	-18.91	14.84	9.87	2.19	H	< 2.00	0.179	22.52	1	66
		QPSK	-19.97	13.78	9.87	2.19	H		0.140	21.46		
		16-QAM	-20.80	12.95	9.87	2.19	H		0.116	20.63		
		64-QAM	-22.18	11.57	9.87	2.19	H		0.084	19.25		
		256-QAM	-24.30	9.45	9.87	2.19	H		0.052	17.13		

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
1865.0		PI/2 BPSK	-18.76	14.64	10.01	2.16	H	< 2.00	0.177	22.49	1	80
		QPSK	-18.82	14.58	10.01	2.16	H		0.175	22.43		
		16-QAM	-19.76	13.64	10.01	2.16	H		0.141	21.49		
		64-QAM	-21.13	12.27	10.01	2.16	H		0.103	20.12		
		256-QAM	-23.77	9.63	10.01	2.16	H		0.056	17.48		
1882.5	Sub6 n25/ 30 MHz [15 kHz]	PI/2 BPSK	-19.05	14.67	9.94	2.18	H	< 2.00	0.175	22.43	1	1
		QPSK	-19.12	14.60	9.94	2.18	H		0.172	22.36		
		16-QAM	-20.01	13.71	9.94	2.18	H		0.140	21.47		
		64-QAM	-21.41	12.31	9.94	2.18	H		0.102	20.07		
		256-QAM	-23.87	9.85	9.94	2.18	H		0.058	17.61		
1900.0		PI/2 BPSK	-18.93	14.85	9.88	2.19	H	< 2.00	0.179	22.54	1	1
		QPSK	-19.09	14.69	9.88	2.19	H		0.173	22.38		
		16-QAM	-20.04	13.74	9.88	2.19	H		0.139	21.43		
		64-QAM	-21.35	12.43	9.88	2.19	H		0.103	20.12		
		256-QAM	-23.96	9.82	9.88	2.19	H		0.056	17.51		

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
1867.5		PI/2 BPSK	-18.60	14.89	10.00	2.17	H	< 2.00	0.187	22.72	1	94
		QPSK	-18.71	14.78	10.00	2.17	H		0.182	22.61		
		16-QAM	-19.52	13.97	10.00	2.17	H		0.151	21.80		
		64-QAM	-20.94	12.55	10.00	2.17	H		0.109	20.38		
		256-QAM	-23.67	9.82	10.00	2.17	H		0.058	17.65		
1882.5	Sub6 n25/ 35 MHz [15 kHz]	PI/2 BPSK	-19.11	14.61	9.94	2.18	H	< 2.00	0.173	22.37	1	186
		QPSK	-19.84	13.88	9.94	2.18	H		0.146	21.64		
		16-QAM	-20.80	12.92	9.94	2.18	H		0.117	20.68		
		64-QAM	-22.14	11.58	9.94	2.18	H		0.086	19.34		
		256-QAM	-24.10	9.62	9.94	2.18	H		0.055	17.38		
1897.5		PI/2 BPSK	-18.94	14.84	9.88	2.19	H	< 2.00	0.179	22.53	1	186
		QPSK	-19.33	14.45	9.88	2.19	H		0.164	22.14		
		16-QAM	-20.13	13.65	9.88	2.19	H		0.136	21.34		
		64-QAM	-21.30	12.48	9.88	2.19	H		0.104	20.17		
		256-QAM	-23.94	9.84	9.88	2.19	H		0.057	17.53		

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
1870.0		PI/2 BPSK	-18.70	14.79	10.00	2.17	H	< 2.00	0.183	22.62	1	1
		QPSK	-18.73	14.76	10.00	2.17	H		0.182	22.59		
		16-QAM	-19.77	13.72	10.00	2.17	H		0.143	21.55		
		64-QAM	-20.98	12.51	10.00	2.17	H		0.108	20.34		
		256-QAM	-23.52	9.97	10.00	2.17	H		0.060	17.80		
1882.5	Sub6 n25/ 40 MHz [15 kHz]	PI/2 BPSK	-19.00	14.72	9.94	2.18	H	< 2.00	0.177	22.48	1	214
		QPSK	-19.85	13.87	9.94	2.18	H		0.146	21.63		
		16-QAM	-20.70	13.02	9.94	2.18	H		0.120	20.78		
		64-QAM	-22.05	11.67	9.94	2.18	H		0.088	19.43		
		256-QAM	-24.05	9.67	9.94	2.18	H		0.055	17.43		
1895.0		PI/2 BPSK	-18.98	14.78	9.90	2.19	H	< 2.00	0.177	22.49	1	214
		QPSK	-19.26	14.50	9.90	2.19	H		0.166	22.21		
		16-QAM	-20.10	13.66	9.90	2.19	H		0.137	21.37		
		64-QAM	-21.32	12.44	9.90	2.19	H		0.104	20.15		
		256-QAM	-23.98	9.78	9.90	2.19	H		0.056	17.49		

8.2 RADIATED SPURIOUS EMISSIONS

■ NR Band:	<u>NR n25(2)</u>
■ Bandwidth:	<u>5 MHz</u>
■ Modulation:	<u>PI/2 BPSK</u>
■ Distance:	<u>3 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
370500 (1852.5)	3 705.00	-59.00	11.61	-59.20	3.16	V	-50.75	-13.00	1	23
		-58.76		-58.96		H	-50.51	-13.00		
	5 557.50	-61.42	12.09	-54.65	3.99	V	-46.55	-13.00		
		-61.15		-54.38		H	-46.28	-13.00		
	7 410.00	-53.62	11.32	-38.70	4.71	V	-32.09	-13.00		
		-52.45		-37.53		H	-30.92	-13.00		
376500 (1882.5)	3 765.00	-59.92	11.40	-58.96	3.21	V	-50.77	-13.00	1	1
		-58.99		-58.03		H	-49.84	-13.00		
	5 647.50	-60.95	11.98	-53.88	4.05	V	-45.95	-13.00		
		-61.20		-54.13		H	-46.20	-13.00		
	7 530.00	-54.71	11.62	-40.10	4.74	V	-33.22	-13.00		
		-54.86		-40.25		H	-33.37	-13.00		
382500 (1912.5)	3 825.00	-60.67	11.21	-58.83	3.21	V	-50.83	-13.00	1	23
		-58.97		-57.13		H	-49.13	-13.00		
	5 737.50	-62.00	11.69	-54.43	4.05	V	-46.79	-13.00		
		-61.70		-54.13		H	-46.49	-13.00		
	7 650.00	-56.58	11.69	-42.23	4.77	V	-35.31	-13.00		
		-56.33		-41.98		H	-35.06	-13.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	Limit (dB)
Sub6 n25(2)	5 MHz	1882.5	PI/2 BPSK	25	0	3.77	13.00
			QPSK			5.23	
			16-QAM			6.04	
			64-QAM			6.27	
			256-QAM			6.77	
	10 MHz		PI/2 BPSK	50		3.82	
			QPSK			5.31	
			16-QAM			6.03	
			64-QAM			6.41	
			256-QAM			6.81	
	15 MHz		PI/2 BPSK	75		4.01	
			QPSK			5.25	
			16-QAM			6.13	
			64-QAM			6.20	
			256-QAM			6.49	
	20 MHz		PI/2 BPSK	100		3.89	
			QPSK			5.16	
			16-QAM			5.94	
			64-QAM			6.26	
			256-QAM			6.44	

Sub6 n25	25 MHz	1882.5	PI/2 BPSK	128	0	3.75	
			QPSK			4.93	
			16-QAM			5.95	
			64-QAM			6.23	
			256-QAM			6.46	
	30 MHz		PI/2 BPSK	160		3.96	
			QPSK			5.13	
			16-QAM			5.93	
			64-QAM			6.30	
			256-QAM			6.59	
	35 MHz		PI/2 BPSK	180		3.98	
			QPSK			5.26	
			16-QAM			6.10	
			64-QAM			6.36	
			256-QAM			6.55	
	40 MHz		PI/2 BPSK	216		3.85	
			QPSK			5.23	
			16-QAM			6.11	
			64-QAM			6.35	
			256-QAM			6.53	

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n25(2)	5 MHz	1882.5	PI/2 BPSK	25	0	4.5149
			QPSK			4.4879
			16-QAM			4.4725
			64-QAM			4.4976
			256-QAM			4.5284
	10 MHz		PI/2 BPSK	50		8.9575
			QPSK			9.0005
			16-QAM			8.9849
			64-QAM			8.9652
			256-QAM			9.0047
	15 MHz		PI/2 BPSK	75		13.440
			QPSK			13.466
			16-QAM			13.444
			64-QAM			13.460
			256-QAM			13.399
	20 MHz		PI/2 BPSK	100		17.854
			QPSK			17.881
			16-QAM			17.862
			64-QAM			17.807
			256-QAM			17.820

Sub6 n25	25 MHz	1882.5	PI/2 BPSK	128	0	22.899
			QPSK			22.805
			16-QAM			22.885
			64-QAM			22.819
			256-QAM			22.850
	30 MHz		PI/2 BPSK	160		28.523
			QPSK			28.510
			16-QAM			28.551
			64-QAM			28.508
			256-QAM			28.516
	35 MHz		PI/2 BPSK	180		32.088
			QPSK			32.063
			16-QAM			32.064
			64-QAM			32.004
			256-QAM			32.079
	40 MHz		PI/2 BPSK	216		38.671
			QPSK			38.577
			16-QAM			38.610
			64-QAM			38.463
			256-QAM			38.500

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 n25(2)	5	1852.5	9.7607	29.116	-62.994	-33.878	-13.00
		1882.5	8.2353	29.116	-63.710	-34.594	
		1912.5	9.8903	29.116	-62.740	-33.624	
	10	1855.0	4.5165	28.533	-62.762	-34.229	
		1882.5	4.3370	28.533	-63.675	-35.142	
		1910.0	9.6710	29.116	-62.921	-33.805	
	15	1857.5	9.2822	29.116	-63.694	-34.578	
		1882.5	9.9900	29.116	-63.200	-34.084	
		1907.5	9.7109	29.116	-63.758	-34.642	
	20	1860.0	3.8086	28.533	-62.920	-34.387	
		1882.5	8.9532	29.116	-63.194	-34.078	
		1905.0	8.8335	29.116	-63.332	-34.216	
Sub6 n25	25	1862.5	9.9801	29.116	-62.733	-33.617	-13.00
		1882.5	4.0080	28.533	-61.965	-33.432	
		1902.5	5.1845	29.116	-62.876	-33.760	
	30	1865.0	3.7688	28.533	-63.847	-35.314	
		1882.5	4.0379	28.533	-63.369	-34.836	
		1900.0	6.0519	29.116	-63.005	-33.889	
	35	1867.5	9.1027	29.116	-63.294	-34.178	
		1882.5	9.4716	29.116	-63.534	-34.418	
		1897.5	9.1526	29.116	-63.262	-34.146	
	40	1870.0	9.4118	29.116	-63.402	-34.286	
		1882.5	8.9133	29.116	-63.078	-33.962	
		1895.0	5.4537	29.116	-63.105	-33.989	

Note:

1. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
2. Factor(dB) = Cable Loss + Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.012
1 – 5	28.533
5 – 10	29.116
10 – 15	30.025
15 – 20	31.052
Above 20	31.613

8.6 BAND EDGE

- Plots of the EUT's Band Edge are shown Section 10.4.

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

■ BandWidth:	<u>5 MHz</u>
■ Voltage(100 %):	<u>3.880 VDC</u>
■ Batt. Endpoint:	<u>3.300 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1852.5	100 %	+20(Ref)	1852 499 997	0.0	0.000 000	0.000
	100 %	-30	1852 499 996	-1.6	0.000 000	-0.001
	100 %	-20	1852 499 995	-2.4	0.000 000	-0.001
	100 %	-10	1852 499 995	-2.7	0.000 000	-0.001
	100 %	0	1852 499 994	-3.0	0.000 000	-0.002
	100 %	+10	1852 499 994	-3.2	0.000 000	-0.002
	100 %	+30	1852 499 996	-1.1	0.000 000	-0.001
	100 %	+40	1852 499 995	-2.5	0.000 000	-0.001
	100 %	+50	1852 499 997	-0.3	0.000 000	0.000
	Batt. Endpoint	+20	1852 499 994	-3.5	0.000 000	-0.002
1912.5	100 %	+20(Ref)	1912 499 997	0.0	0.000 000	0.000
	100 %	-30	1912 499 993	-4.1	0.000 000	-0.002
	100 %	-20	1912 499 993	-4.1	0.000 000	-0.002
	100 %	-10	1912 499 992	-4.3	0.000 000	-0.002
	100 %	0	1912 499 994	-3.2	0.000 000	-0.002
	100 %	+10	1912 499 992	-5.0	0.000 000	-0.003
	100 %	+30	1912 499 995	-2.0	0.000 000	-0.001
	100 %	+40	1912 499 993	-3.8	0.000 000	-0.002
	100 %	+50	1912 499 994	-2.8	0.000 000	-0.001
	Batt. Endpoint	+20	1912 499 993	-4.0	0.000 000	-0.002

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1855.0	100 %	+20(Ref)	1854 999 999	0.0	0.000 000	0.000
	100 %	-30	1855 000 001	1.4	0.000 000	0.001
	100 %	-20	1854 999 999	-0.1	0.000 000	0.000
	100 %	-10	1854 999 999	-0.3	0.000 000	0.000
	100 %	0	1855 000 001	1.0	0.000 000	0.001
	100 %	+10	1855 000 001	1.9	0.000 000	0.001
	100 %	+30	1855 000 000	0.9	0.000 000	0.000
	100 %	+40	1854 999 999	-0.2	0.000 000	0.000
	100 %	+50	1854 999 999	-0.1	0.000 000	0.000
	Batt. Endpoint	+20	1855 000 001	1.9	0.000 000	0.001
1910.0	100 %	+20(Ref)	1910 000 008	0.0	0.000 000	0.000
	100 %	-30	1910 000 016	7.5	0.000 000	0.004
	100 %	-20	1910 000 016	7.7	0.000 000	0.004
	100 %	-10	1910 000 016	7.4	0.000 000	0.004
	100 %	0	1910 000 016	8.0	0.000 000	0.004
	100 %	+10	1910 000 018	9.6	0.000 001	0.005
	100 %	+30	1910 000 017	8.9	0.000 000	0.005
	100 %	+40	1910 000 016	7.8	0.000 000	0.004
	100 %	+50	1910 000 019	10.6	0.000 001	0.006
	Batt. Endpoint	+20	1910 000 016	7.5	0.000 000	0.004

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1857.5	100 %	+20(Ref)	1857 499 999	0.0	0.000 000	0.000
	100 %	-30	1857 499 999	0.2	0.000 000	0.000
	100 %	-20	1857 499 999	0.0	0.000 000	0.000
	100 %	-10	1857 500 000	1.2	0.000 000	0.001
	100 %	0	1857 499 998	-0.6	0.000 000	0.000
	100 %	+10	1857 499 998	-1.2	0.000 000	-0.001
	100 %	+30	1857 500 000	1.3	0.000 000	0.001
	100 %	+40	1857 499 999	0.5	0.000 000	0.000
	100 %	+50	1857 499 999	0.6	0.000 000	0.000
	Batt. Endpoint	+20	1857 499 998	-0.7	0.000 000	0.000
1907.5	100 %	+20(Ref)	1907 500 004	0.0	0.000 000	0.000
	100 %	-30	1907 500 010	5.9	0.000 000	0.003
	100 %	-20	1907 500 008	4.0	0.000 000	0.002
	100 %	-10	1907 500 010	5.2	0.000 000	0.003
	100 %	0	1907 500 009	4.8	0.000 000	0.003
	100 %	+10	1907 500 011	6.3	0.000 000	0.003
	100 %	+30	1907 500 010	5.4	0.000 000	0.003
	100 %	+40	1907 500 010	5.1	0.000 000	0.003
	100 %	+50	1907 500 008	3.2	0.000 000	0.002
	Batt. Endpoint	+20	1907 500 010	5.5	0.000 000	0.003

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1860.0	100 %	+20(Ref)	1860 000 001	0.0	0.000 000	0.000
	100 %	-30	1860 000 005	3.3	0.000 000	0.002
	100 %	-20	1860 000 004	2.3	0.000 000	0.001
	100 %	-10	1860 000 003	2.1	0.000 000	0.001
	100 %	0	1860 000 006	4.3	0.000 000	0.002
	100 %	+10	1860 000 002	1.1	0.000 000	0.001
	100 %	+30	1860 000 003	1.3	0.000 000	0.001
	100 %	+40	1860 000 003	1.6	0.000 000	0.001
	100 %	+50	1860 000 004	2.9	0.000 000	0.002
	Batt. Endpoint	+20	1860 000 004	2.5	0.000 000	0.001
1905.0	100 %	+20(Ref)	1905 000 002	0.0	0.000 000	0.000
	100 %	-30	1905 000 006	3.6	0.000 000	0.002
	100 %	-20	1905 000 003	1.0	0.000 000	0.001
	100 %	-10	1905 000 003	1.1	0.000 000	0.001
	100 %	0	1905 000 005	3.1	0.000 000	0.002
	100 %	+10	1905 000 002	-0.8	0.000 000	0.000
	100 %	+30	1905 000 006	4.0	0.000 000	0.002
	100 %	+40	1905 000 004	1.8	0.000 000	0.001
	100 %	+50	1905 000 006	3.7	0.000 000	0.002
	Batt. Endpoint	+20	1905 000 007	4.1	0.000 000	0.002

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1862.5	100 %	+20(Ref)	1862 500 009	0.0	0.000 000	0.000
	100 %	-30	1862 500 021	11.4	0.000 001	0.006
	100 %	-20	1862 500 017	7.8	0.000 000	0.004
	100 %	-10	1862 500 017	7.9	0.000 000	0.004
	100 %	0	1862 500 018	9.2	0.000 000	0.005
	100 %	+10	1862 500 019	9.5	0.000 001	0.005
	100 %	+30	1862 500 018	8.7	0.000 000	0.005
	100 %	+40	1862 500 020	10.9	0.000 001	0.006
	100 %	+50	1862 500 017	7.8	0.000 000	0.004
	Batt. Endpoint	+20	1862 500 017	8.1	0.000 000	0.004
1902.5	100 %	+20(Ref)	1902 500 008	0.0	0.000 000	0.000
	100 %	-30	1902 500 017	8.3	0.000 000	0.004
	100 %	-20	1902 500 016	7.2	0.000 000	0.004
	100 %	-10	1902 500 016	7.9	0.000 000	0.004
	100 %	0	1902 500 019	11.1	0.000 001	0.006
	100 %	+10	1902 500 018	10.1	0.000 001	0.005
	100 %	+30	1902 500 015	6.7	0.000 000	0.004
	100 %	+40	1902 500 017	8.9	0.000 000	0.005
	100 %	+50	1902 500 015	7.0	0.000 000	0.004
	Batt. Endpoint	+20	1902 500 017	8.3	0.000 000	0.004

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1865.0	100 %	+20(Ref)	1865 000 007	0.0	0.000 000	0.000
	100 %	-30	1865 000 017	9.2	0.000 000	0.005
	100 %	-20	1865 000 015	7.1	0.000 000	0.004
	100 %	-10	1865 000 014	7.0	0.000 000	0.004
	100 %	0	1865 000 014	6.6	0.000 000	0.004
	100 %	+10	1865 000 017	9.1	0.000 000	0.005
	100 %	+30	1865 000 016	8.1	0.000 000	0.004
	100 %	+40	1865 000 013	5.8	0.000 000	0.003
	100 %	+50	1865 000 015	7.1	0.000 000	0.004
	Batt. Endpoint	+20	1865 000 014	6.6	0.000 000	0.004
1900.0	100 %	+20(Ref)	1900 000 007	0.0	0.000 000	0.000
	100 %	-30	1900 000 011	4.6	0.000 000	0.002
	100 %	-20	1900 000 011	4.1	0.000 000	0.002
	100 %	-10	1900 000 014	7.5	0.000 000	0.004
	100 %	0	1900 000 009	2.9	0.000 000	0.002
	100 %	+10	1900 000 012	5.1	0.000 000	0.003
	100 %	+30	1900 000 012	5.7	0.000 000	0.003
	100 %	+40	1900 000 012	5.6	0.000 000	0.003
	100 %	+50	1900 000 010	3.3	0.000 000	0.002
	Batt. Endpoint	+20	1900 000 013	6.2	0.000 000	0.003

- BandWidth: 35 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1867.5	100 %	+20(Ref)	1867 500 008	0.0	0.000 000	0.000
	100 %	-30	1867 500 016	7.9	0.000 000	0.004
	100 %	-20	1867 500 013	5.5	0.000 000	0.003
	100 %	-10	1867 500 013	5.1	0.000 000	0.003
	100 %	0	1867 500 014	6.2	0.000 000	0.003
	100 %	+10	1867 500 014	6.2	0.000 000	0.003
	100 %	+30	1867 500 012	3.8	0.000 000	0.002
	100 %	+40	1867 500 015	7.0	0.000 000	0.004
	100 %	+50	1867 500 016	7.9	0.000 000	0.004
	Batt. Endpoint	+20	1867 500 013	5.2	0.000 000	0.003
1897.5	100 %	+20(Ref)	1897 500 009	0.0	0.000 000	0.000
	100 %	-30	1897 500 016	7.8	0.000 000	0.004
	100 %	-20	1897 500 015	6.8	0.000 000	0.004
	100 %	-10	1897 500 017	8.1	0.000 000	0.004
	100 %	0	1897 500 017	8.4	0.000 000	0.004
	100 %	+10	1897 500 018	9.7	0.000 001	0.005
	100 %	+30	1897 500 018	9.3	0.000 000	0.005
	100 %	+40	1897 500 016	7.1	0.000 000	0.004
	100 %	+50	1897 500 019	10.1	0.000 001	0.005
	Batt. Endpoint	+20	1897 500 016	7.7	0.000 000	0.004

■ BandWidth:	<u>40 MHz</u>
■ Voltage(100 %):	<u>3.880 VDC</u>
■ Batt. Endpoint:	<u>3.300 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1870.0	100 %	+20(Ref)	1870 000 007	0.0	0.000 000	0.000
	100 %	-30	1870 000 015	8.1	0.000 000	0.004
	100 %	-20	1870 000 015	8.0	0.000 000	0.004
	100 %	-10	1870 000 013	6.5	0.000 000	0.003
	100 %	0	1870 000 014	7.2	0.000 000	0.004
	100 %	+10	1870 000 014	7.4	0.000 000	0.004
	100 %	+30	1870 000 016	9.0	0.000 000	0.005
	100 %	+40	1870 000 017	9.6	0.000 001	0.005
	100 %	+50	1870 000 015	7.5	0.000 000	0.004
	Batt. Endpoint	+20	1870 000 014	7.1	0.000 000	0.004
1895.0	100 %	+20(Ref)	1895 000 006	0.0	0.000 000	0.000
	100 %	-30	1895 000 016	9.5	0.000 000	0.005
	100 %	-20	1895 000 015	8.4	0.000 000	0.004
	100 %	-10	1895 000 015	8.3	0.000 000	0.004
	100 %	0	1895 000 013	6.4	0.000 000	0.003
	100 %	+10	1895 000 014	7.8	0.000 000	0.004
	100 %	+30	1895 000 015	8.5	0.000 000	0.004
	100 %	+40	1895 000 013	6.5	0.000 000	0.003
	100 %	+50	1895 000 016	9.3	0.000 000	0.005
	Batt. Endpoint	+20	1895 000 015	8.9	0.000 000	0.005

9. TEST DATA(Sub 2-2 ANT)

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
1852.5		PI/2 BPSK	-18.37	14.98	10.05	2.15	H		0.194	22.88	1	23
		QPSK	-18.53	14.82	10.05	2.15	H		0.187	22.72		
		16-QAM	-19.36	13.99	10.05	2.15	H		0.155	21.89		
		64-QAM	-20.95	12.40	10.05	2.15	H		0.107	20.30		
		256-QAM	-23.45	9.90	10.05	2.15	H		0.060	17.80		
1882.5	Sub6 n25(2)/ 5 MHz [15 kHz]	PI/2 BPSK	-17.35	16.37	9.94	2.18	H	< 2.00	0.259	24.13	1	23
		QPSK	-17.56	16.16	9.94	2.18	H		0.247	23.92		
		16-QAM	-18.37	15.35	9.94	2.18	H		0.205	23.11		
		64-QAM	-19.86	13.86	9.94	2.18	H		0.145	21.62		
		256-QAM	-22.33	11.39	9.94	2.18	H		0.082	19.15		
1912.5		PI/2 BPSK	-17.38	16.50	9.83	2.19	H		0.259	24.14	1	1
		QPSK	-18.24	15.64	9.83	2.19	H		0.213	23.28		
		16-QAM	-18.97	14.91	9.83	2.19	H		0.180	22.55		
		64-QAM	-20.16	13.72	9.83	2.19	H		0.137	21.36		
		256-QAM	-22.25	11.63	9.83	2.19	H		0.085	19.27		

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
1855.0		PI/2 BPSK	-18.10	15.25	10.05	2.15	H		0.207	23.15	1	50
		QPSK	-18.18	15.17	10.05	2.15	H		0.203	23.07		
		16-QAM	-19.01	14.34	10.05	2.15	H		0.167	22.24		
		64-QAM	-20.50	12.85	10.05	2.15	H		0.119	20.75		
		256-QAM	-23.08	10.27	10.05	2.15	H		0.066	18.17		
1882.5	Sub6 n25(2)/ 10 MHz [15 kHz]	PI/2 BPSK	-17.48	16.24	9.94	2.18	H		0.251	24.00	1	50
		QPSK	-17.50	16.22	9.94	2.18	H		0.250	23.98		
		16-QAM	-18.39	15.33	9.94	2.18	H	< 2.00	0.204	23.09		
		64-QAM	-19.89	13.83	9.94	2.18	H		0.144	21.59		
		256-QAM	-22.47	11.25	9.94	2.18	H		0.080	19.01		
1910.0		PI/2 BPSK	-17.47	16.26	9.85	2.19	H		0.247	23.92	1	26
		QPSK	-18.21	15.52	9.85	2.19	H		0.208	23.18		
		16-QAM	-19.04	14.69	9.85	2.19	H		0.172	22.35		
		64-QAM	-20.30	13.43	9.85	2.19	H		0.129	21.09		
		256-QAM	-22.36	11.37	9.85	2.19	H		0.080	19.03		

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
1857.5		PI/2 BPSK	-17.94	15.37	10.03	2.16	H	< 2.00	0.211	23.24	1	77
		QPSK	-18.50	14.81	10.03	2.16	H		0.185	22.68		
		16-QAM	-19.26	14.05	10.03	2.16	H		0.156	21.92		
		64-QAM	-20.40	12.91	10.03	2.16	H		0.120	20.78		
		256-QAM	-23.01	10.30	10.03	2.16	H		0.066	18.17		
1882.5	Sub6 n25(2)/ 15 MHz [15 kHz]	PI/2 BPSK	-17.50	16.22	9.94	2.18	H	< 2.00	0.250	23.98	1	39
		QPSK	-18.29	15.43	9.94	2.18	H		0.208	23.19		
		16-QAM	-18.92	14.80	9.94	2.18	H		0.180	22.56		
		64-QAM	-20.09	13.63	9.94	2.18	H		0.138	21.39		
		256-QAM	-22.56	11.16	9.94	2.18	H		0.078	18.92		
1907.5		PI/2 BPSK	-18.67	15.06	9.85	2.19	H	< 2.00	0.187	22.72	1	39
		QPSK	-19.39	14.34	9.85	2.19	H		0.158	22.00		
		16-QAM	-20.14	13.59	9.85	2.19	H		0.133	21.25		
		64-QAM	-21.35	12.38	9.85	2.19	H		0.101	20.04		
		256-QAM	-23.16	10.57	9.85	2.19	H		0.067	18.23		

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
1860.0		PI/2 BPSK	-18.06	15.25	10.03	2.16	H	< 2.00	0.205	23.12	1	53
		QPSK	-18.07	15.24	10.03	2.16	H		0.205	23.11		
		16-QAM	-18.98	14.33	10.03	2.16	H		0.166	22.20		
		64-QAM	-20.36	12.95	10.03	2.16	H		0.121	20.82		
		256-QAM	-22.92	10.39	10.03	2.16	H		0.067	18.26		
1882.5	Sub6 n25(2)/ 20 MHz [15 kHz]	PI/2 BPSK	-17.32	16.40	9.94	2.18	H	< 2.00	0.261	24.16	1	53
		QPSK	-18.22	15.50	9.94	2.18	H		0.212	23.26		
		16-QAM	-18.86	14.86	9.94	2.18	H		0.183	22.62		
		64-QAM	-19.91	13.81	9.94	2.18	H		0.144	21.57		
		256-QAM	-22.43	11.29	9.94	2.18	H		0.080	19.05		
1905.0		PI/2 BPSK	-18.34	15.41	9.87	2.19	H	< 2.00	0.204	23.09	1	1
		QPSK	-19.22	14.53	9.87	2.19	H		0.166	22.21		
		16-QAM	-19.87	13.88	9.87	2.19	H		0.143	21.56		
		64-QAM	-20.99	12.76	9.87	2.19	H		0.111	20.44		
		256-QAM	-22.58	11.17	9.87	2.19	H		0.077	18.85		

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
1862.5		PI/2 BPSK	-17.94	15.46	10.01	2.16	H	< 2.00	0.214	23.31	1	66
		QPSK	-17.95	15.45	10.01	2.16	H		0.214	23.30		
		16-QAM	-18.95	14.45	10.01	2.16	H		0.170	22.30		
		64-QAM	-20.26	13.14	10.01	2.16	H		0.126	20.99		
		256-QAM	-23.06	10.34	10.01	2.16	H		0.066	18.19		
1882.5	Sub6 n25/ 25 MHz [15 kHz]	PI/2 BPSK	-17.43	16.29	9.94	2.18	H	< 2.00	0.254	24.05	1	66
		QPSK	-18.21	15.51	9.94	2.18	H		0.212	23.27		
		16-QAM	-18.89	14.83	9.94	2.18	H		0.181	22.59		
		64-QAM	-20.08	13.64	9.94	2.18	H		0.138	21.40		
		256-QAM	-22.51	11.21	9.94	2.18	H		0.079	18.97		
1902.5		PI/2 BPSK	-17.55	16.20	9.87	2.19	H	< 2.00	0.244	23.88	1	1
		QPSK	-17.61	16.14	9.87	2.19	H		0.241	23.82		
		16-QAM	-18.49	15.26	9.87	2.19	H		0.197	22.94		
		64-QAM	-19.89	13.86	9.87	2.19	H		0.143	21.54		
		256-QAM	-22.46	11.29	9.87	2.19	H		0.079	18.97		

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
1865.0		PI/2 BPSK	-18.46	14.94	10.01	2.16	H	< 2.00	0.190	22.79	1	80
		QPSK	-19.12	14.28	10.01	2.16	H		0.163	22.13		
		16-QAM	-19.82	13.58	10.01	2.16	H		0.139	21.43		
		64-QAM	-20.95	12.45	10.01	2.16	H		0.107	20.30		
		256-QAM	-22.97	10.43	10.01	2.16	H		0.067	18.28		
1882.5	Sub6 n25/ 30 MHz [15 kHz]	PI/2 BPSK	-17.35	16.37	9.94	2.18	H	< 2.00	0.259	24.13	1	80
		QPSK	-18.22	15.50	9.94	2.18	H		0.212	23.26		
		16-QAM	-18.90	14.82	9.94	2.18	H		0.181	22.58		
		64-QAM	-20.07	13.65	9.94	2.18	H		0.138	21.41		
		256-QAM	-22.58	11.14	9.94	2.18	H		0.078	18.90		
1900.0		PI/2 BPSK	-17.23	16.55	9.88	2.19	H	< 2.00	0.265	24.24	1	1
		QPSK	-17.25	16.53	9.88	2.19	H		0.264	24.22		
		16-QAM	-18.14	15.64	9.88	2.19	H		0.215	23.33		
		64-QAM	-19.64	14.14	9.88	2.19	H		0.152	21.83		
		256-QAM	-22.17	11.61	9.88	2.19	H		0.085	19.30		

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
1867.5		PI/2 BPSK	-17.21	16.28	10.00	2.17	H		0.258	24.11	1	186
		QPSK	-17.53	15.96	10.00	2.17	H		0.239	23.79		
		16-QAM	-18.20	15.29	10.00	2.17	H		0.205	23.12		
		64-QAM	-19.65	13.84	10.00	2.17	H		0.147	21.67		
		256-QAM	-22.16	11.33	10.00	2.17	H		0.082	19.16		
1882.5	Sub6 n25/ 35 MHz [15 kHz]	PI/2 BPSK	-17.39	16.33	9.94	2.18	H	< 2.00	0.256	24.09	1	94
		QPSK	-18.26	15.46	9.94	2.18	H		0.210	23.22		
		16-QAM	-18.95	14.77	9.94	2.18	H		0.179	22.53		
		64-QAM	-20.02	13.70	9.94	2.18	H		0.140	21.46		
		256-QAM	-22.49	11.23	9.94	2.18	H		0.079	18.99		
1897.5		PI/2 BPSK	-18.24	15.54	9.88	2.19	H		0.210	23.23	1	1
		QPSK	-18.97	14.81	9.88	2.19	H		0.178	22.50		
		16-QAM	-19.65	14.13	9.88	2.19	H		0.152	21.82		
		64-QAM	-20.68	13.10	9.88	2.19	H		0.120	20.79		
		256-QAM	-22.34	11.44	9.88	2.19	H		0.082	19.13		

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
1870.0		PI/2 BPSK	-17.42	16.07	10.00	2.17	H	< 2.00	0.245	23.90	1	214
		QPSK	-17.43	16.06	10.00	2.17	H		0.245	23.89		
		16-QAM	-18.35	15.14	10.00	2.17	H		0.198	22.97		
		64-QAM	-19.85	13.64	10.00	2.17	H		0.140	21.47		
		256-QAM	-22.37	11.12	10.00	2.17	H		0.079	18.95		
1882.5	Sub6 n25/ 40 MHz [15 kHz]	PI/2 BPSK	-17.38	16.34	9.94	2.18	H	< 2.00	0.257	24.10	1	108
		QPSK	-18.16	15.56	9.94	2.18	H		0.215	23.32		
		16-QAM	-18.90	14.82	9.94	2.18	H		0.181	22.58		
		64-QAM	-19.96	13.76	9.94	2.18	H		0.142	21.52		
		256-QAM	-22.44	11.28	9.94	2.18	H		0.080	19.04		
1895.0		PI/2 BPSK	-17.97	15.79	9.90	2.19	H	< 2.00	0.224	23.50	1	108
		QPSK	-18.82	14.94	9.90	2.19	H		0.184	22.65		
		16-QAM	-19.65	14.11	9.90	2.19	H		0.152	21.82		
		64-QAM	-20.69	13.07	9.90	2.19	H		0.120	20.78		
		256-QAM	-22.48	11.28	9.90	2.19	H		0.079	18.99		

9.2 RADIATED SPURIOUS EMISSIONS

■ NR Band:	<u>NR n25</u>
■ Bandwidth:	<u>30 MHz</u>
■ Modulation:	<u>PI/2 BPSK</u>
■ Distance:	<u>3 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
373000 (1865.0)	3 730.00	-59.18	11.52	-58.90	3.18	V	-50.56	-13.00	1	80
		-58.53		-58.25		H	-49.91	-13.00		
	5 595.00	-61.15	12.08	-54.38	4.01	V	-46.31	-13.00		
		-61.08		-54.31		H	-46.24	-13.00		
	7 460.00	-62.18	11.47	-47.67	4.69	V	-40.89	-13.00		
		-62.27		-47.76		H	-40.98	-13.00		
376500 (1882.5)	3 765.00	-60.10	11.40	-59.14	3.21	V	-50.95	-13.00	1	80
		-59.85		-58.89		H	-50.70	-13.00		
	5 647.50	-61.67	11.98	-54.60	4.05	V	-46.67	-13.00		
		-61.69		-54.62		H	-46.69	-13.00		
	7 530.00	-63.47	11.62	-48.86	4.74	V	-41.98	-13.00		
		-62.66		-48.05		H	-41.17	-13.00		
380000 (1900.0)	3 800.00	-59.63	11.28	-58.07	3.20	V	-49.99	-13.00	1	1
		-60.23		-58.67		H	-50.59	-13.00		
	5 700.00	-60.56	11.84	-52.79	4.06	V	-45.01	-13.00		
		-60.55		-52.78		H	-45.00	-13.00		
	7 600.00	-64.25	11.71	-49.94	4.77	V	-43.00	-13.00		
		-62.21		-47.90		H	-40.96	-13.00		

9.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	Limit (dB)
Sub6 n25(2)	5 MHz	1882.5	PI/2 BPSK	25	0	4.96	13.00
			QPSK			5.61	
			16-QAM			6.67	
			64-QAM			6.84	
			256-QAM			6.86	
	10 MHz		PI/2 BPSK	50		4.69	
			QPSK			5.44	
			16-QAM			6.42	
			64-QAM			6.65	
			256-QAM			6.91	
	15 MHz		PI/2 BPSK	75		4.29	
			QPSK			5.53	
			16-QAM			6.30	
			64-QAM			6.65	
			256-QAM			6.72	
	20 MHz		PI/2 BPSK	100		4.23	
			QPSK			5.56	
			16-QAM			6.30	
			64-QAM			6.50	
			256-QAM			6.65	

Sub6 n25	25 MHz	1882.5	PI/2 BPSK	128	0	3.94	
			QPSK			5.45	
			16-QAM			6.29	
			64-QAM			6.51	
			256-QAM			6.66	
	30 MHz		PI/2 BPSK	160		3.91	
			QPSK			5.35	
			16-QAM			6.28	
			64-QAM			6.58	
			256-QAM			6.81	
	35 MHz		PI/2 BPSK	180		3.93	
			QPSK			5.39	
			16-QAM			6.31	
			64-QAM			6.58	
			256-QAM			6.74	
	40 MHz		PI/2 BPSK	216		4.19	
			QPSK			5.28	
			16-QAM			6.25	
			64-QAM			6.52	
			256-QAM			6.70	

9.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n25(2)	5 MHz	1882.5	PI/2 BPSK	25	0	4.5388
			QPSK			4.5246
			16-QAM			4.5229
			64-QAM			4.5073
			256-QAM			4.5087
	10 MHz		PI/2 BPSK	50		8.9743
			QPSK			9.0034
			16-QAM			9.0225
			64-QAM			8.9671
			256-QAM			8.9855
	15 MHz		PI/2 BPSK	75		13.458
			QPSK			13.461
			16-QAM			13.463
			64-QAM			13.475
			256-QAM			13.466
	20 MHz		PI/2 BPSK	100		17.924
			QPSK			17.930
			16-QAM			17.909
			64-QAM			17.856
			256-QAM			17.863

Sub6 n25	25 MHz	1882.5	PI/2 BPSK	128	0	23.040
			QPSK			22.938
			16-QAM			22.963
			64-QAM			22.890
			256-QAM			22.914
	30 MHz		PI/2 BPSK	160		28.588
			QPSK			28.623
			16-QAM			28.634
			64-QAM			28.573
			256-QAM			28.603
	35 MHz		PI/2 BPSK	180		32.227
			QPSK			32.170
			16-QAM			32.148
			64-QAM			32.147
			256-QAM			32.183
	40 MHz		PI/2 BPSK	216		38.721
			QPSK			38.599
			16-QAM			38.702
			64-QAM			38.542
			256-QAM			38.689

9.5 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 n25(2)	5	1852.5	8.3051	29.116	-62.120	-33.004	-13.00
		1882.5	3.7588	28.533	-63.064	-34.531	
		1912.5	4.0180	28.533	-63.118	-34.585	
	10	1855.0	4.0778	28.533	-62.804	-34.271	
		1882.5	4.0080	28.533	-63.301	-34.768	
		1910.0	9.7009	29.116	-62.785	-33.669	
	15	1857.5	8.8734	29.116	-63.713	-34.597	
		1882.5	5.9422	29.116	-63.516	-34.400	
		1907.5	4.0280	28.533	-63.433	-34.900	
	20	1860.0	4.9652	28.533	-62.231	-33.698	
		1882.5	9.9601	29.116	-62.203	-33.087	
		1905.0	4.0280	28.533	-62.810	-34.277	
Sub6 n25	25	1862.5	8.3151	29.116	-62.422	-33.306	-13.00
		1882.5	4.9352	28.533	-63.508	-34.975	
		1902.5	5.4637	29.116	-62.990	-33.874	
	30	1865.0	3.8286	28.533	-63.600	-35.067	
		1882.5	4.9053	28.533	-62.775	-34.242	
		1900.0	3.8286	28.533	-62.595	-34.062	
	35	1867.5	8.8335	29.116	-62.974	-33.858	
		1882.5	8.2553	29.116	-62.511	-33.395	
		1897.5	6.0120	29.116	-62.970	-33.854	
	40	1870.0	9.4217	29.116	-62.915	-33.799	
		1882.5	8.8834	29.116	-63.443	-34.327	
		1895.0	3.8186	28.533	-62.685	-34.152	

Note:

1. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
2. Factor(dB) = Cable Loss + Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.012
1 – 5	28.533
5 – 10	29.116
10 – 15	30.025
15 – 20	31.052
Above 20	31.613

9.6 BAND EDGE

- Plots of the EUT's Band Edge are shown Section 11.4.

9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

■ BandWidth:	<u>5 MHz</u>
■ Voltage(100 %):	<u>3.880 VDC</u>
■ Batt. Endpoint:	<u>3.300 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1852.5	100 %	+20(Ref)	1852 499 999	0.0	0.000 000	0.000
	100 %	-30	1852 499 998	-1.6	0.000 000	-0.001
	100 %	-20	1852 499 998	-1.6	0.000 000	-0.001
	100 %	-10	1852 500 000	1.3	0.000 000	0.001
	100 %	0	1852 499 997	-2.2	0.000 000	-0.001
	100 %	+10	1852 499 998	-0.7	0.000 000	0.000
	100 %	+30	1852 499 998	-1.2	0.000 000	-0.001
	100 %	+40	1852 499 997	-2.4	0.000 000	-0.001
	100 %	+50	1852 499 998	-1.3	0.000 000	-0.001
	Batt. Endpoint	+20	1852 499 998	-1.5	0.000 000	-0.001
1912.5	100 %	+20(Ref)	1912 499 997	0.0	0.000 000	0.000
	100 %	-30	1912 499 994	-3.7	0.000 000	-0.002
	100 %	-20	1912 499 996	-1.5	0.000 000	-0.001
	100 %	-10	1912 499 994	-3.4	0.000 000	-0.002
	100 %	0	1912 499 996	-1.4	0.000 000	-0.001
	100 %	+10	1912 499 997	-0.3	0.000 000	0.000
	100 %	+30	1912 499 994	-3.1	0.000 000	-0.002
	100 %	+40	1912 499 994	-3.7	0.000 000	-0.002
	100 %	+50	1912 499 996	-1.9	0.000 000	-0.001
	Batt. Endpoint	+20	1912 499 994	-3.5	0.000 000	-0.002

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1855.0	100 %	+20(Ref)	1855 000 001	0.0	0.000 000	0.000
	100 %	-30	1855 000 000	-0.7	0.000 000	0.000
	100 %	-20	1855 000 001	0.1	0.000 000	0.000
	100 %	-10	1855 000 002	1.1	0.000 000	0.001
	100 %	0	1855 000 001	-0.1	0.000 000	0.000
	100 %	+10	1854 999 999	-2.1	0.000 000	-0.001
	100 %	+30	1855 000 002	0.9	0.000 000	0.000
	100 %	+40	1855 000 000	-0.8	0.000 000	0.000
	100 %	+50	1855 000 000	-0.7	0.000 000	0.000
	Batt. Endpoint	+20	1855 000 001	0.5	0.000 000	0.000
1910.0	100 %	+20(Ref)	1910 000 006	0.0	0.000 000	0.000
	100 %	-30	1910 000 016	9.3	0.000 000	0.005
	100 %	-20	1910 000 013	6.6	0.000 000	0.003
	100 %	-10	1910 000 016	9.1	0.000 000	0.005
	100 %	0	1910 000 015	8.6	0.000 000	0.004
	100 %	+10	1910 000 013	6.0	0.000 000	0.003
	100 %	+30	1910 000 016	9.1	0.000 000	0.005
	100 %	+40	1910 000 014	7.6	0.000 000	0.004
	100 %	+50	1910 000 014	7.8	0.000 000	0.004
	Batt. Endpoint	+20	1910 000 017	11.0	0.000 001	0.006

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1857.5	100 %	+20(Ref)	1857 500 000	0.0	0.000 000	0.000
	100 %	-30	1857 499 997	-2.5	0.000 000	-0.001
	100 %	-20	1857 500 000	0.0	0.000 000	0.000
	100 %	-10	1857 500 001	0.7	0.000 000	0.000
	100 %	0	1857 500 000	-0.2	0.000 000	0.000
	100 %	+10	1857 500 000	0.5	0.000 000	0.000
	100 %	+30	1857 500 000	0.5	0.000 000	0.000
	100 %	+40	1857 500 001	0.8	0.000 000	0.000
	100 %	+50	1857 499 998	-1.8	0.000 000	-0.001
	Batt. Endpoint	+20	1857 499 999	-0.6	0.000 000	0.000
1907.5	100 %	+20(Ref)	1907 500 006	0.0	0.000 000	0.000
	100 %	-30	1907 500 012	6.3	0.000 000	0.003
	100 %	-20	1907 500 011	5.2	0.000 000	0.003
	100 %	-10	1907 500 011	5.0	0.000 000	0.003
	100 %	0	1907 500 010	4.1	0.000 000	0.002
	100 %	+10	1907 500 010	3.5	0.000 000	0.002
	100 %	+30	1907 500 011	4.4	0.000 000	0.002
	100 %	+40	1907 500 012	6.4	0.000 000	0.003
	100 %	+50	1907 500 012	5.8	0.000 000	0.003
	Batt. Endpoint	+20	1907 500 011	4.9	0.000 000	0.003

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1860.0	100 %	+20(Ref)	1860 000 000	0.0	0.000 000	0.000
	100 %	-30	1860 000 001	0.6	0.000 000	0.000
	100 %	-20	1860 000 003	2.3	0.000 000	0.001
	100 %	-10	1860 000 003	2.2	0.000 000	0.001
	100 %	0	1860 000 002	2.0	0.000 000	0.001
	100 %	+10	1860 000 003	2.2	0.000 000	0.001
	100 %	+30	1860 000 003	2.8	0.000 000	0.002
	100 %	+40	1860 000 002	1.7	0.000 000	0.001
	100 %	+50	1860 000 001	0.6	0.000 000	0.000
	Batt. Endpoint	+20	1860 000 001	0.7	0.000 000	0.000
1905.0	100 %	+20(Ref)	1905 000 001	0.0	0.000 000	0.000
	100 %	-30	1905 000 002	1.1	0.000 000	0.001
	100 %	-20	1905 000 004	3.0	0.000 000	0.002
	100 %	-10	1905 000 004	3.2	0.000 000	0.002
	100 %	0	1905 000 003	1.8	0.000 000	0.001
	100 %	+10	1905 000 003	1.6	0.000 000	0.001
	100 %	+30	1905 000 003	2.0	0.000 000	0.001
	100 %	+40	1905 000 002	0.8	0.000 000	0.000
	100 %	+50	1905 000 004	2.8	0.000 000	0.001
	Batt. Endpoint	+20	1905 000 004	2.7	0.000 000	0.001

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1862.5	100 %	+20(Ref)	1862 500 010	0.0	0.000 000	0.000
	100 %	-30	1862 500 021	11.2	0.000 001	0.006
	100 %	-20	1862 500 018	7.7	0.000 000	0.004
	100 %	-10	1862 500 019	9.1	0.000 000	0.005
	100 %	0	1862 500 020	10.1	0.000 001	0.005
	100 %	+10	1862 500 020	9.8	0.000 001	0.005
	100 %	+30	1862 500 020	10.1	0.000 001	0.005
	100 %	+40	1862 500 021	10.9	0.000 001	0.006
	100 %	+50	1862 500 018	8.3	0.000 000	0.004
	Batt. Endpoint	+20	1862 500 022	11.7	0.000 001	0.006
1902.5	100 %	+20(Ref)	1902 500 007	0.0	0.000 000	0.000
	100 %	-30	1902 500 017	9.2	0.000 000	0.005
	100 %	-20	1902 500 015	8.0	0.000 000	0.004
	100 %	-10	1902 500 017	9.2	0.000 000	0.005
	100 %	0	1902 500 015	7.3	0.000 000	0.004
	100 %	+10	1902 500 014	6.6	0.000 000	0.003
	100 %	+30	1902 500 016	8.8	0.000 000	0.005
	100 %	+40	1902 500 015	8.0	0.000 000	0.004
	100 %	+50	1902 500 014	6.1	0.000 000	0.003
	Batt. Endpoint	+20	1902 500 016	8.4	0.000 000	0.004

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

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1865.0	100 %	+20(Ref)	1865 000 007	0.0	0.000 000	0.000
	100 %	-30	1865 000 013	6.3	0.000 000	0.003
	100 %	-20	1865 000 013	6.1	0.000 000	0.003
	100 %	-10	1865 000 014	7.1	0.000 000	0.004
	100 %	0	1865 000 015	8.1	0.000 000	0.004
	100 %	+10	1865 000 013	6.3	0.000 000	0.003
	100 %	+30	1865 000 013	6.2	0.000 000	0.003
	100 %	+40	1865 000 014	7.3	0.000 000	0.004
	100 %	+50	1865 000 014	6.8	0.000 000	0.004
	Batt. Endpoint	+20	1865 000 016	8.8	0.000 000	0.005
1900.0	100 %	+20(Ref)	1900 000 005	0.0	0.000 000	0.000
	100 %	-30	1900 000 012	7.2	0.000 000	0.004
	100 %	-20	1900 000 009	4.7	0.000 000	0.002
	100 %	-10	1900 000 009	4.0	0.000 000	0.002
	100 %	0	1900 000 011	6.1	0.000 000	0.003
	100 %	+10	1900 000 009	4.0	0.000 000	0.002
	100 %	+30	1900 000 011	6.1	0.000 000	0.003
	100 %	+40	1900 000 008	3.5	0.000 000	0.002
	100 %	+50	1900 000 008	3.8	0.000 000	0.002
	Batt. Endpoint	+20	1900 000 010	5.1	0.000 000	0.003

- BandWidth: 35 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1867.5	100 %	+20(Ref)	1867 500 006	0.0	0.000 000	0.000
	100 %	-30	1867 500 012	6.4	0.000 000	0.003
	100 %	-20	1867 500 010	4.6	0.000 000	0.002
	100 %	-10	1867 500 012	6.6	0.000 000	0.004
	100 %	0	1867 500 010	4.0	0.000 000	0.002
	100 %	+10	1867 500 011	5.5	0.000 000	0.003
	100 %	+30	1867 500 011	5.4	0.000 000	0.003
	100 %	+40	1867 500 011	5.3	0.000 000	0.003
	100 %	+50	1867 500 013	7.4	0.000 000	0.004
	Batt. Endpoint	+20	1867 500 011	5.8	0.000 000	0.003
1897.5	100 %	+20(Ref)	1897 500 009	0.0	0.000 000	0.000
	100 %	-30	1897 500 015	6.9	0.000 000	0.004
	100 %	-20	1897 500 016	7.8	0.000 000	0.004
	100 %	-10	1897 500 018	9.7	0.000 001	0.005
	100 %	0	1897 500 016	7.8	0.000 000	0.004
	100 %	+10	1897 500 016	7.7	0.000 000	0.004
	100 %	+30	1897 500 016	7.4	0.000 000	0.004
	100 %	+40	1897 500 017	8.2	0.000 000	0.004
	100 %	+50	1897 500 016	7.9	0.000 000	0.004
	Batt. Endpoint	+20	1897 500 017	8.6	0.000 000	0.005

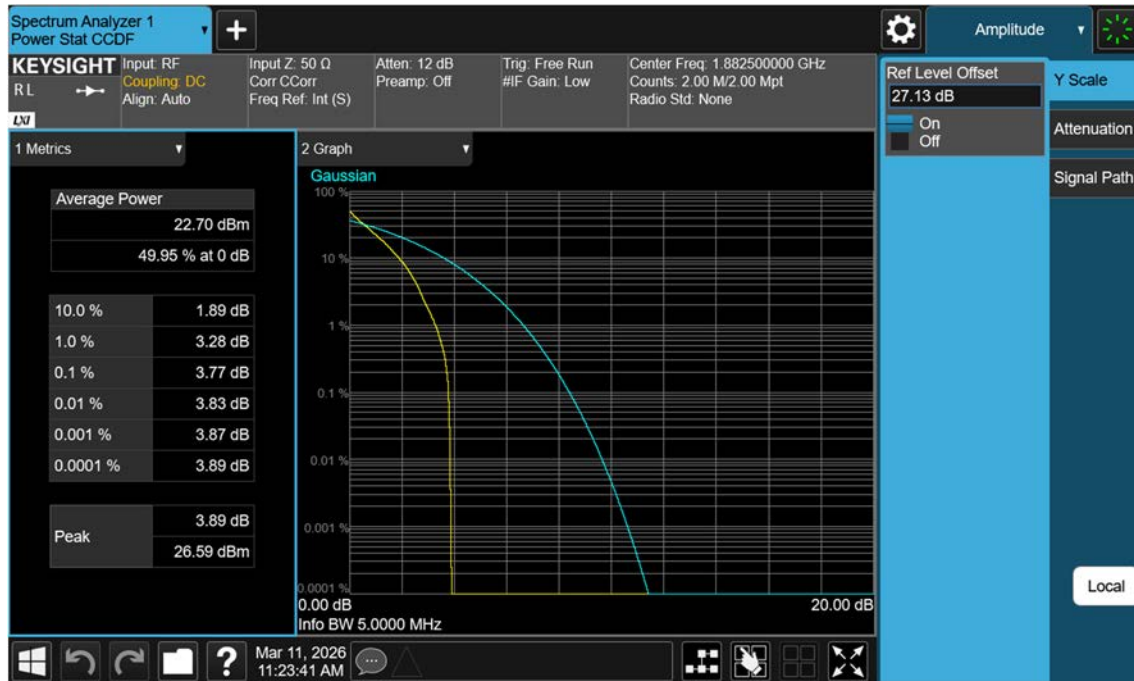
- BandWidth: 40 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1870.0	100 %	+20(Ref)	1870 000 008	0.0	0.000 000	0.000
	100 %	-30	1870 000 014	5.6	0.000 000	0.003
	100 %	-20	1870 000 015	6.2	0.000 000	0.003
	100 %	-10	1870 000 017	8.4	0.000 000	0.005
	100 %	0	1870 000 016	7.8	0.000 000	0.004
	100 %	+10	1870 000 014	6.1	0.000 000	0.003
	100 %	+30	1870 000 015	6.3	0.000 000	0.003
	100 %	+40	1870 000 015	6.2	0.000 000	0.003
	100 %	+50	1870 000 015	6.8	0.000 000	0.004
	Batt. Endpoint	+20	1870 000 017	8.9	0.000 000	0.005
1895.0	100 %	+20(Ref)	1895 000 007	0.0	0.000 000	0.000
	100 %	-30	1895 000 014	7.2	0.000 000	0.004
	100 %	-20	1895 000 014	6.5	0.000 000	0.003
	100 %	-10	1895 000 014	6.8	0.000 000	0.004
	100 %	0	1895 000 015	8.2	0.000 000	0.004
	100 %	+10	1895 000 016	8.6	0.000 000	0.005
	100 %	+30	1895 000 015	8.1	0.000 000	0.004
	100 %	+40	1895 000 015	8.1	0.000 000	0.004
	100 %	+50	1895 000 015	8.2	0.000 000	0.004
	Batt. Endpoint	+20	1895 000 015	8.3	0.000 000	0.004

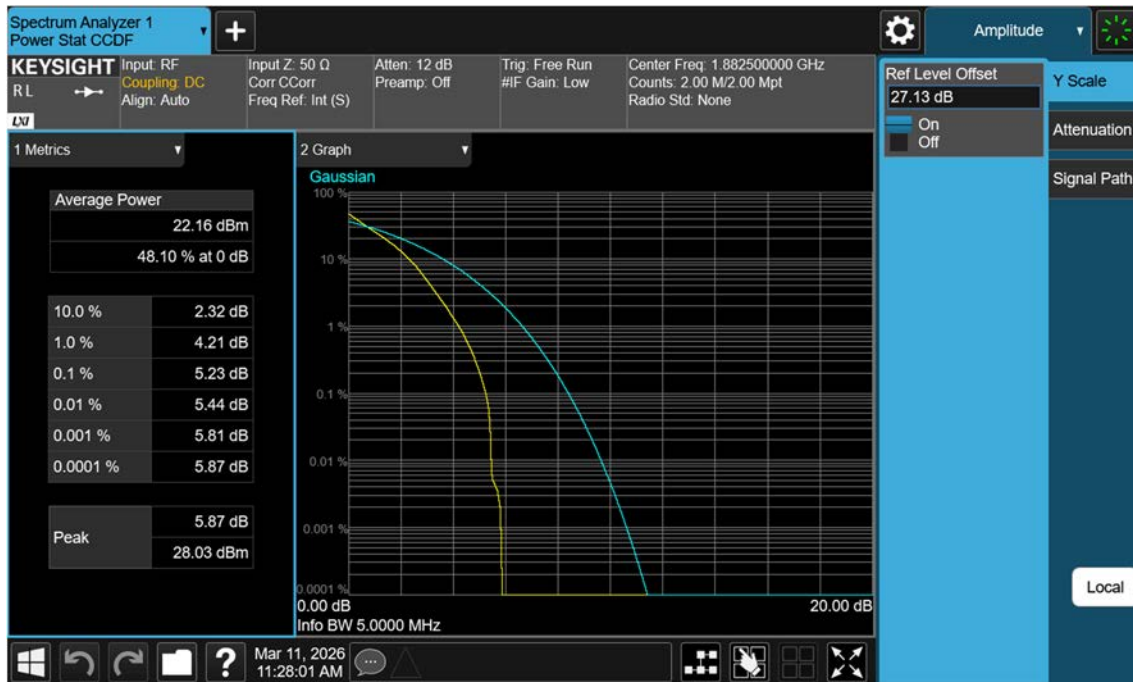
10. TEST PLOTS(Main 1 ANT)

10.1 PEAK-TO-AVERAGE RATIO

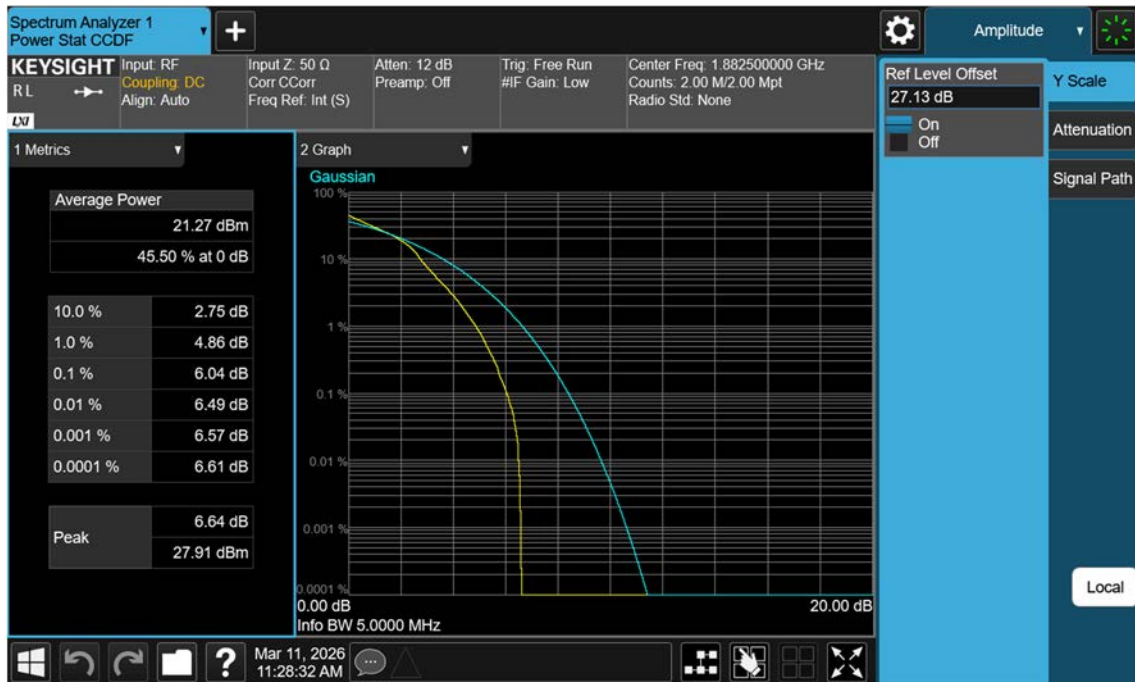
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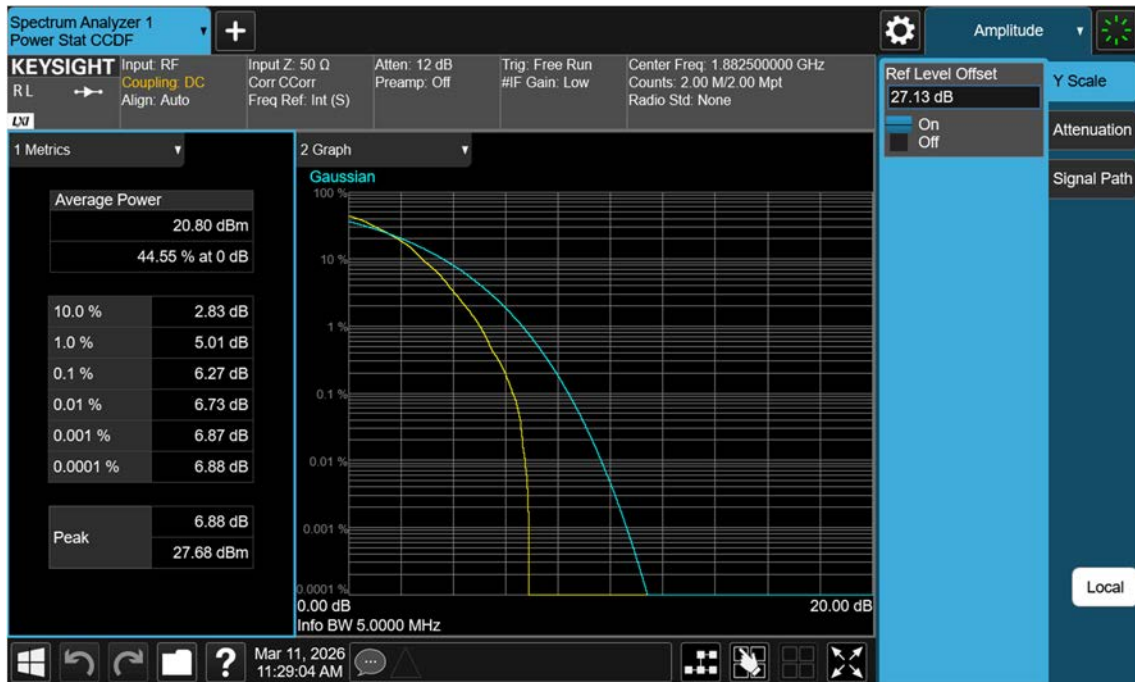
NR n25(2)_5 M_PAR_Mid_QPSK_FullRB



NR n25(2)_5 M_PAR_Mid_16QAM_FullIRB



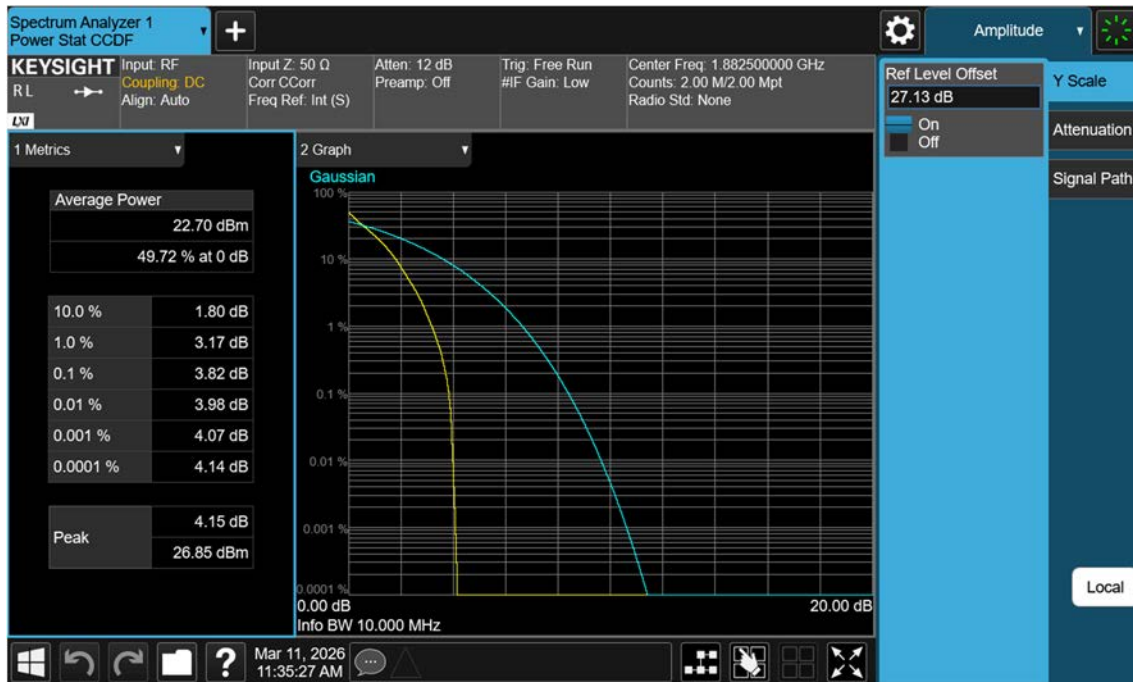
NR n25(2)_5 M_PAR_Mid_64QAM_FullRB



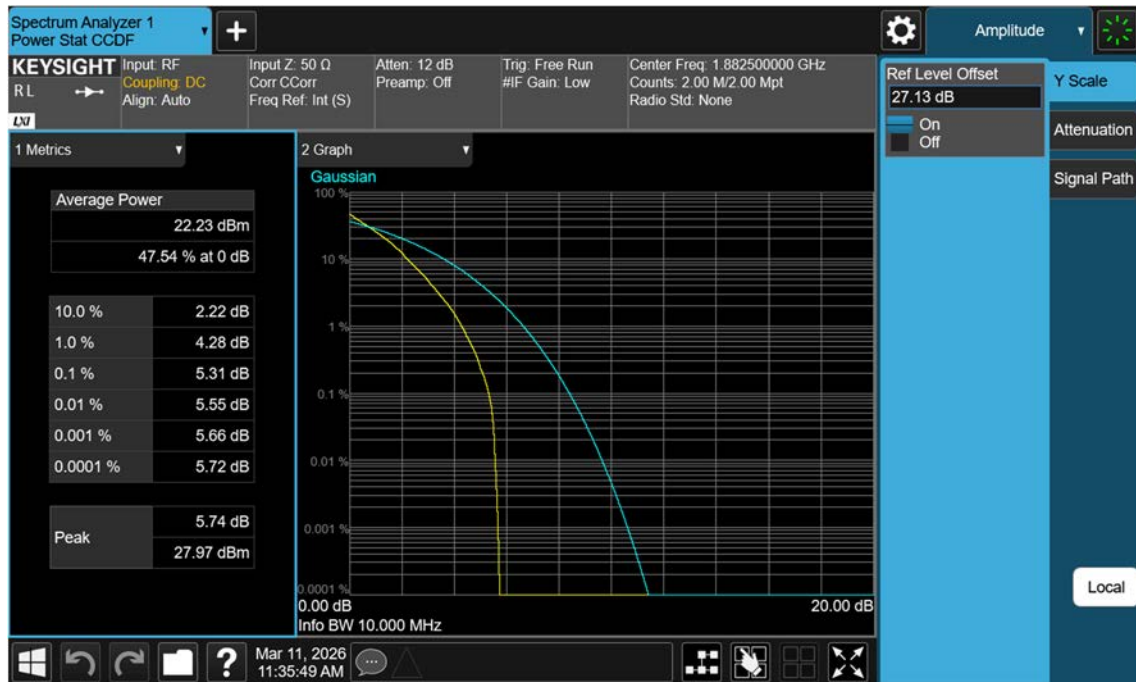
NR n25(2)_5 M_PAR_Mid_256QAM_FullRB



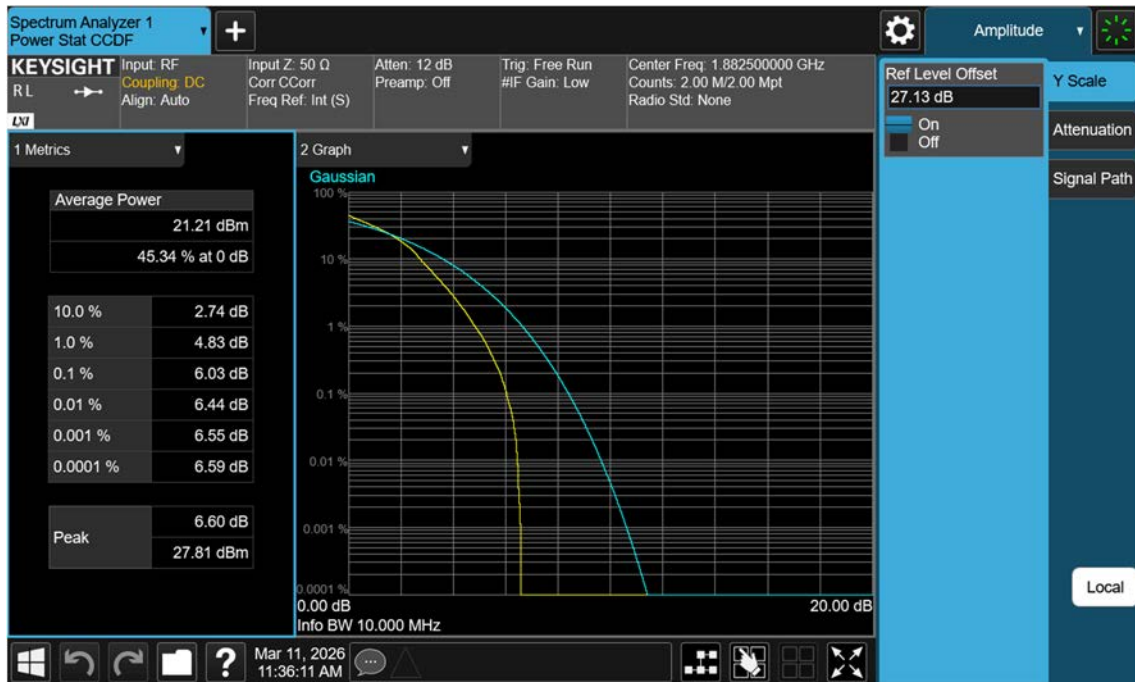
NR n25(2)_10 M_PAR_Mid_PI/2 BPSK_FullRB



NR n25(2)_10 M_PAR_Mid_QPSK_FullRB



NR n25(2)_10 M_PAR_Mid_16QAM_FullRB



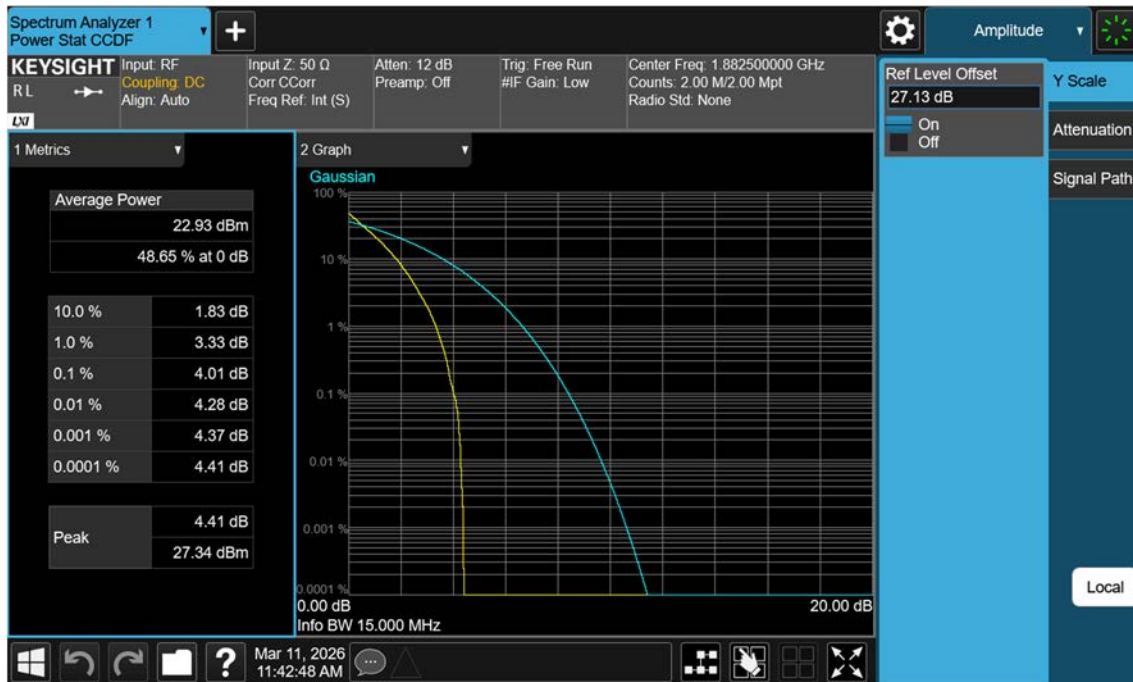
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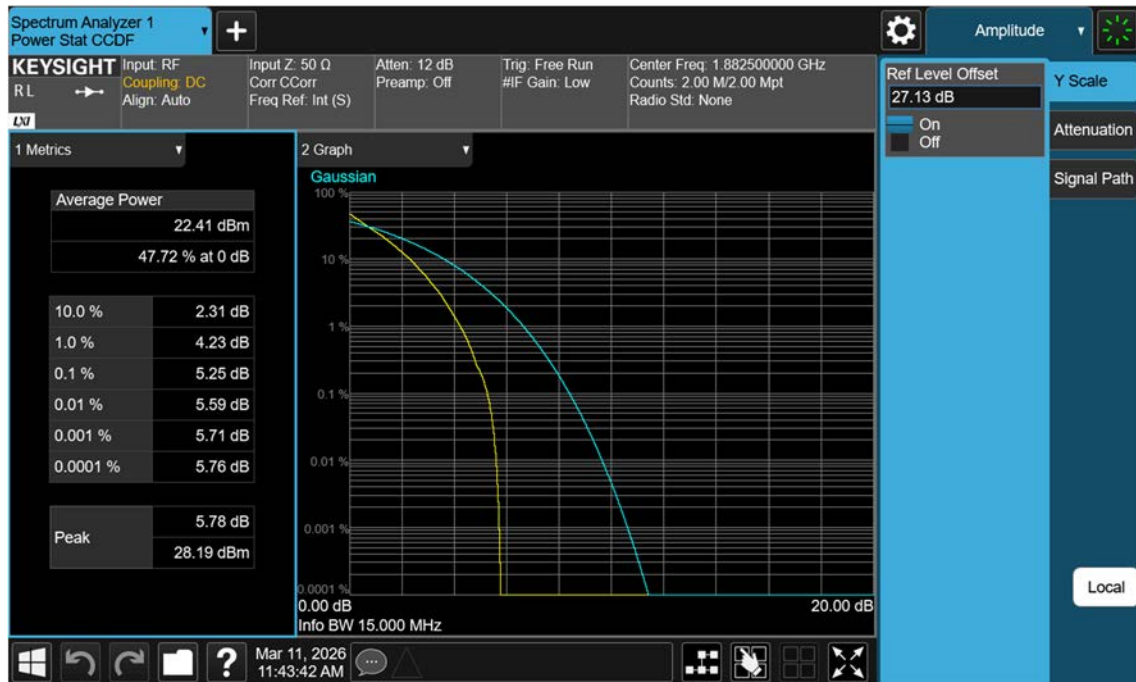
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NR n25(2)_15 M_PAR_Mid_PI/2 BPSK_FullRB



NR n25(2)_15 M_PAR_Mid_QPSK_FullRB



NR n25(2)_15 M_PAR_Mid_16QAM_FullRB



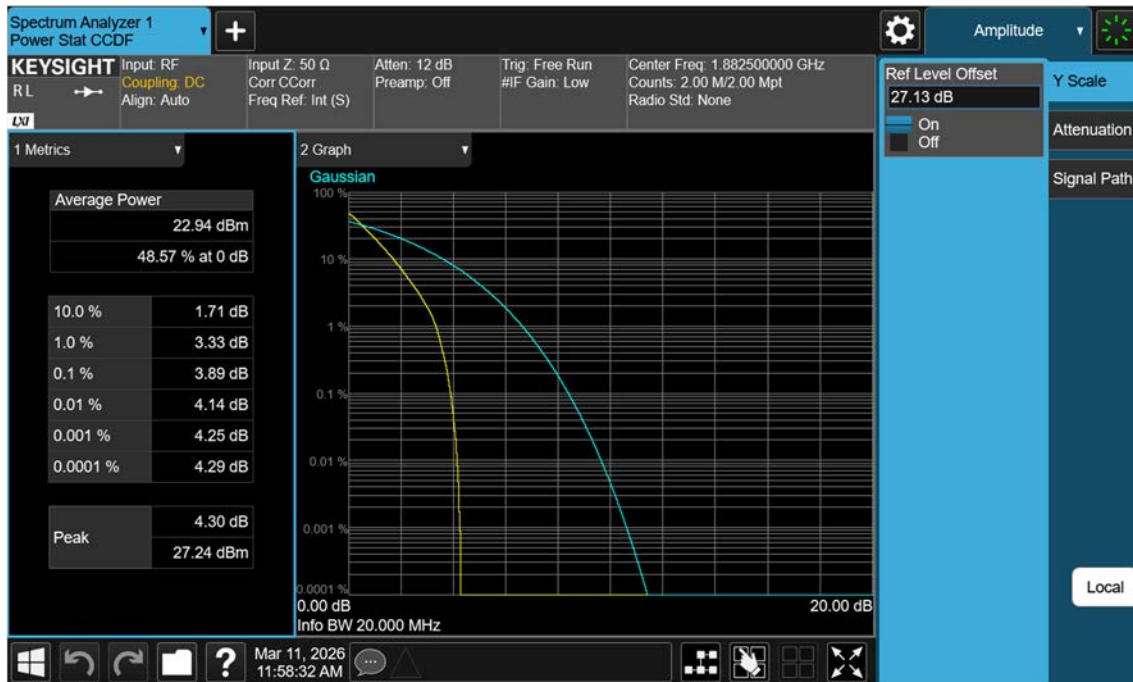
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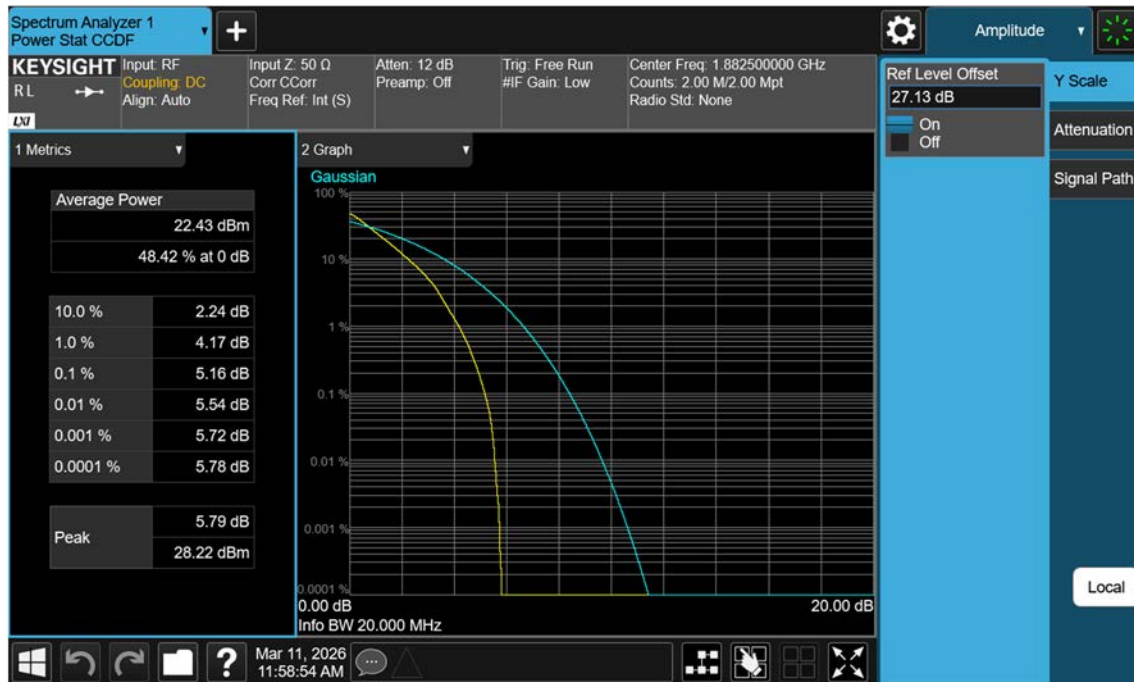
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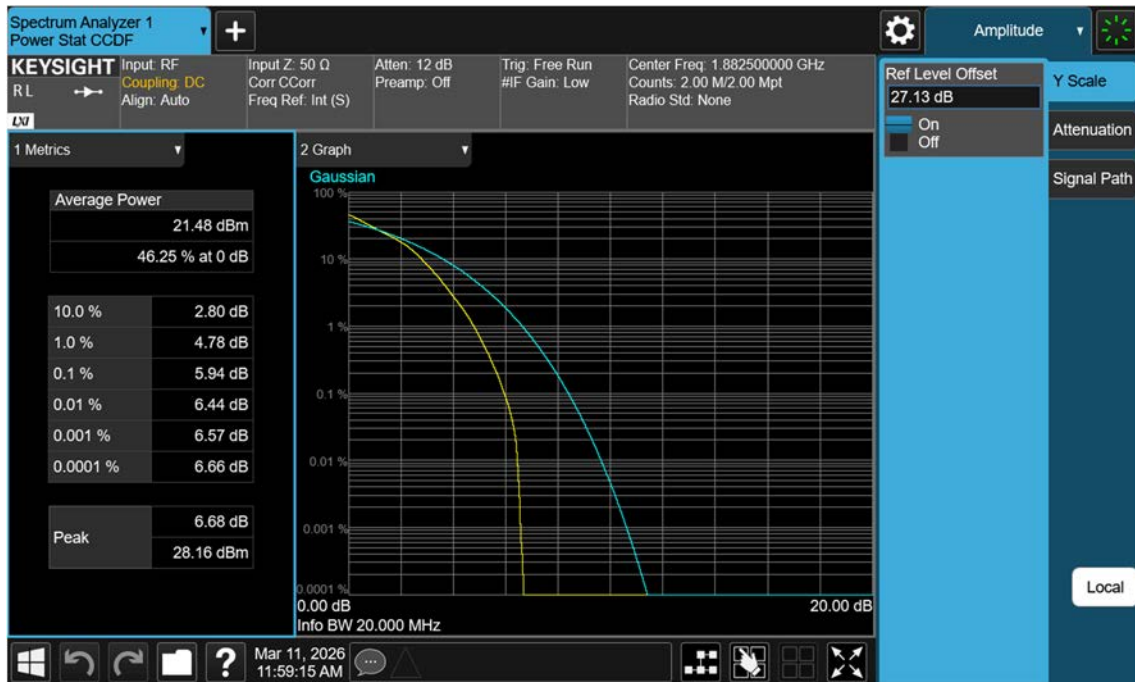
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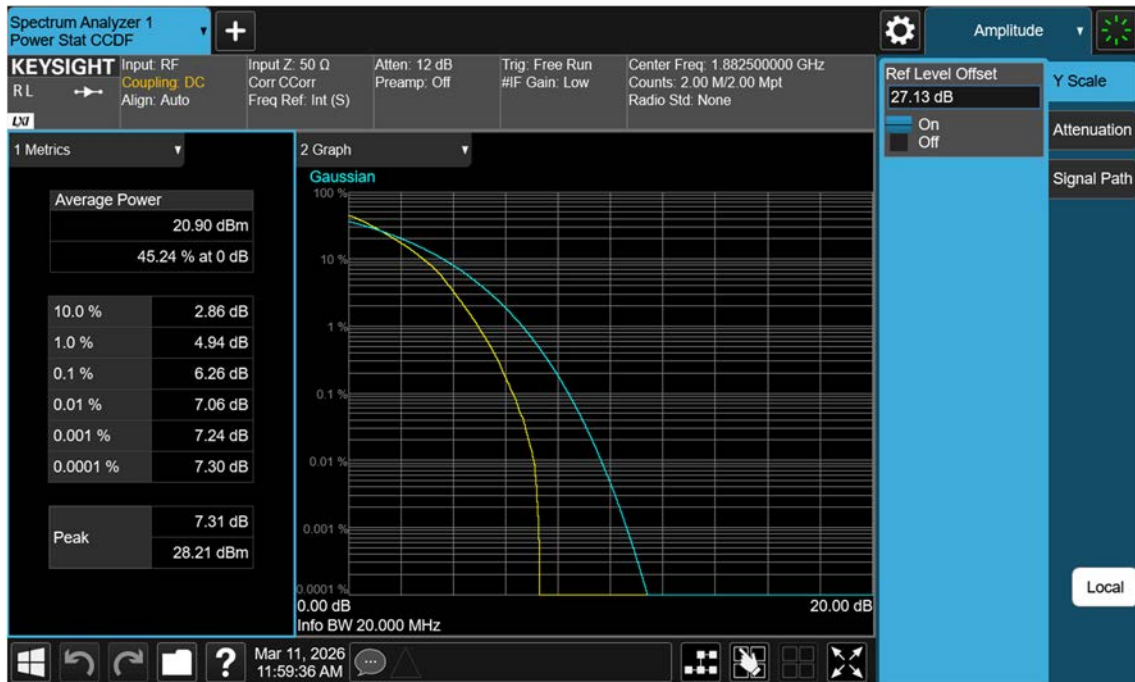
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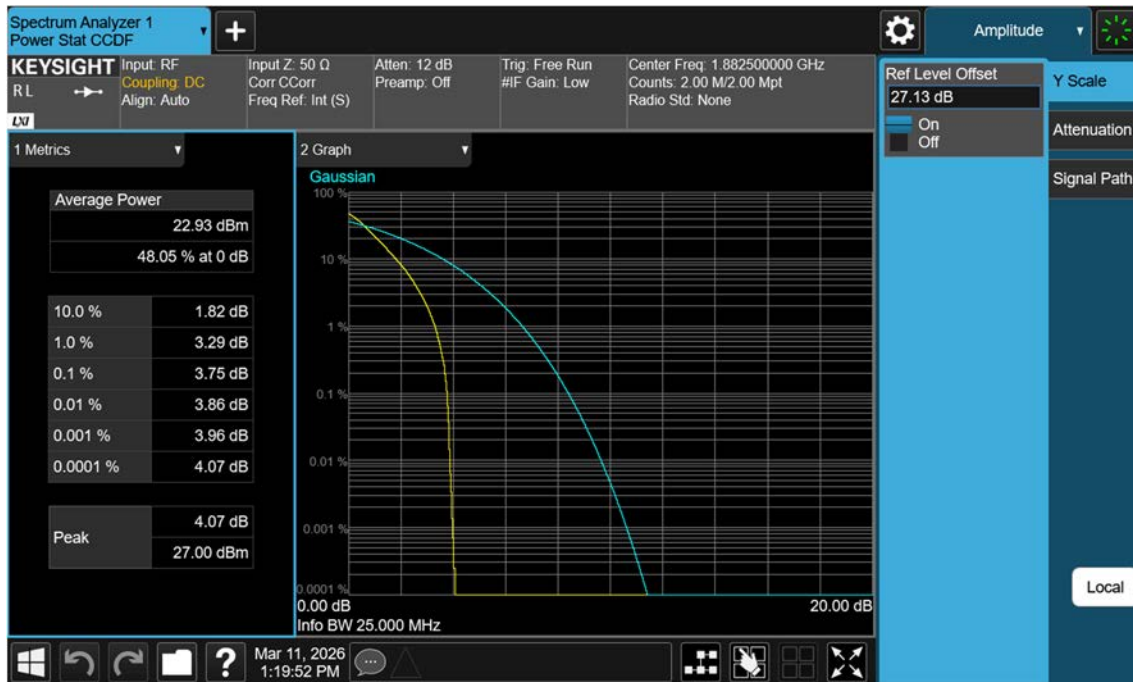
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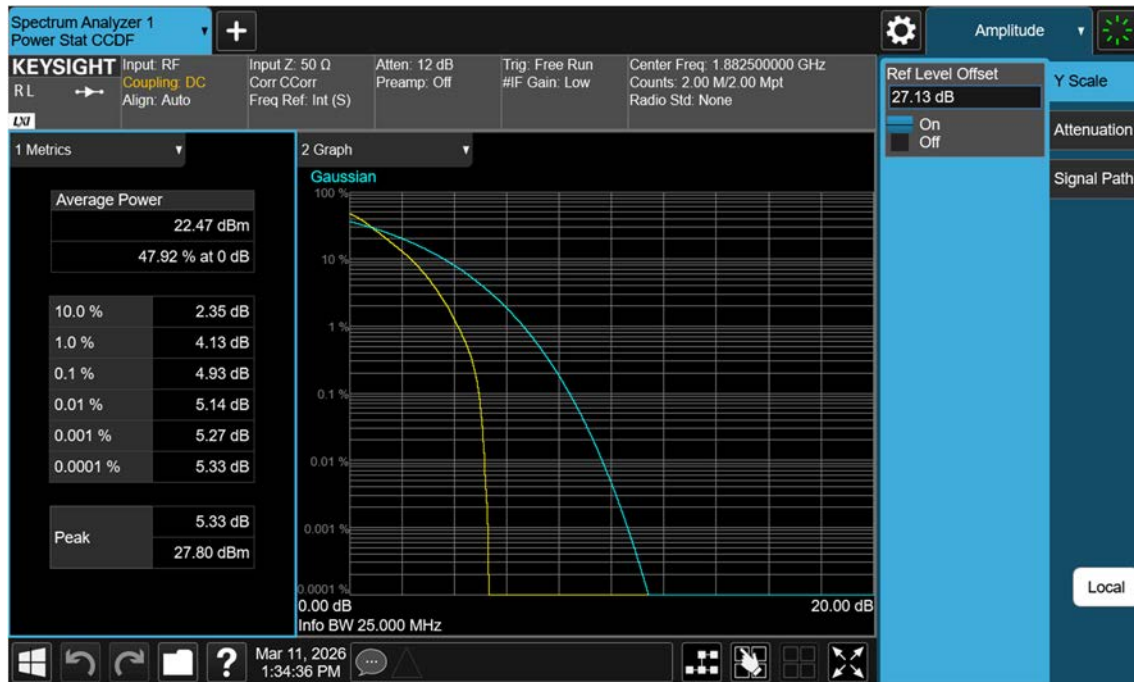
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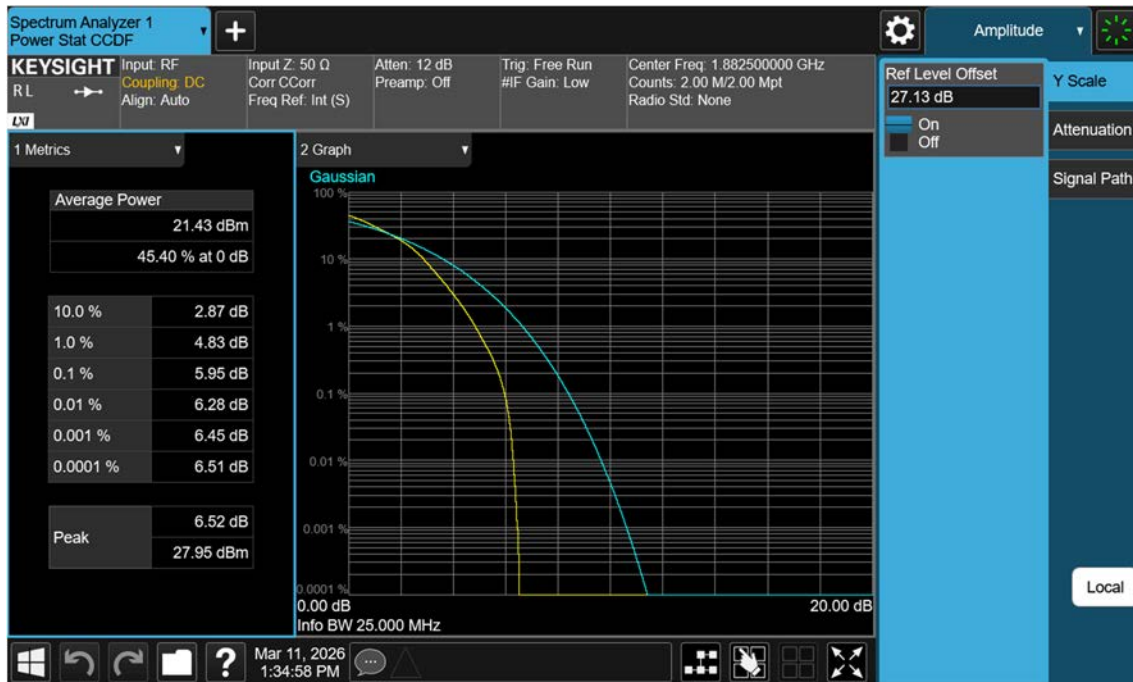
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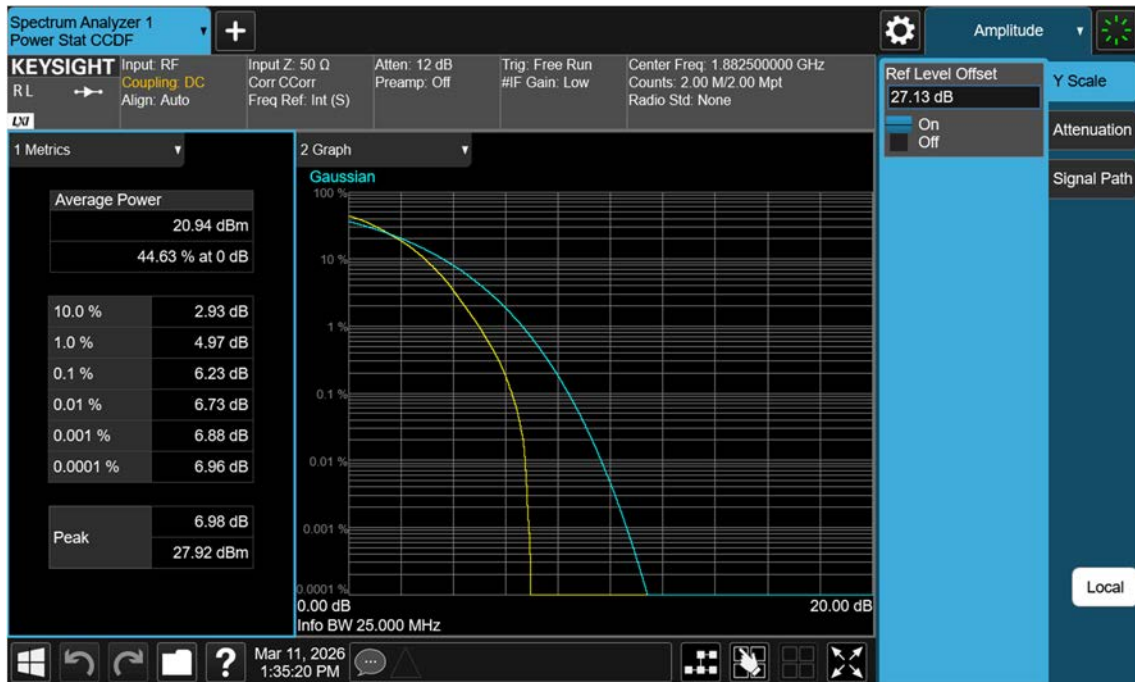
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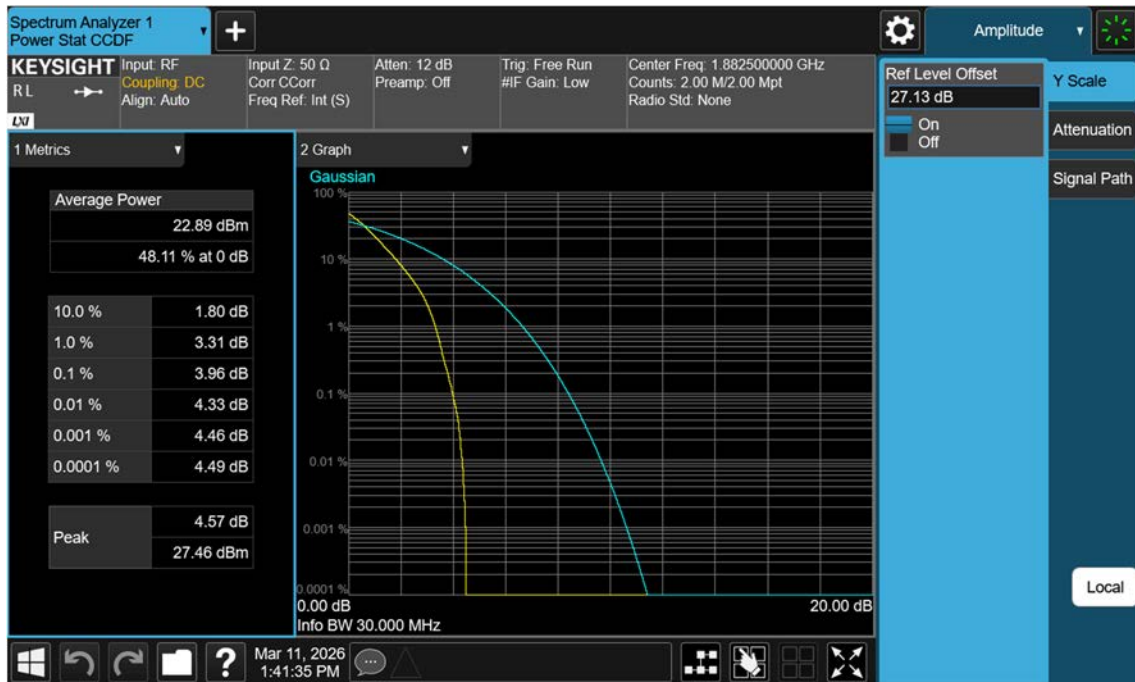
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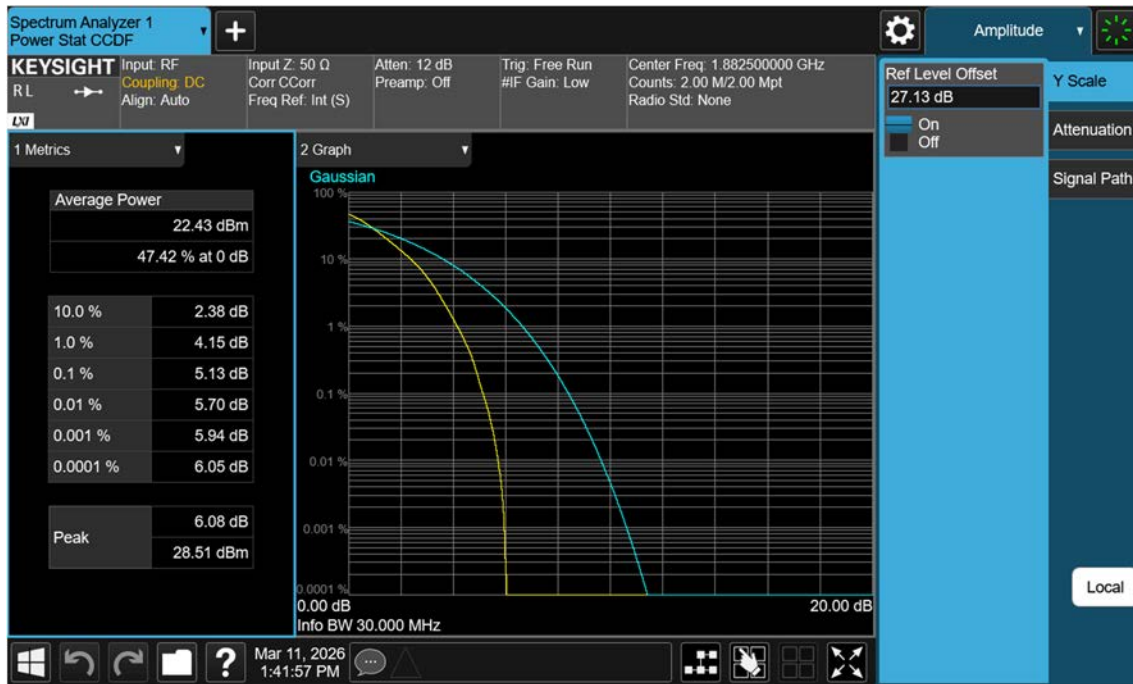
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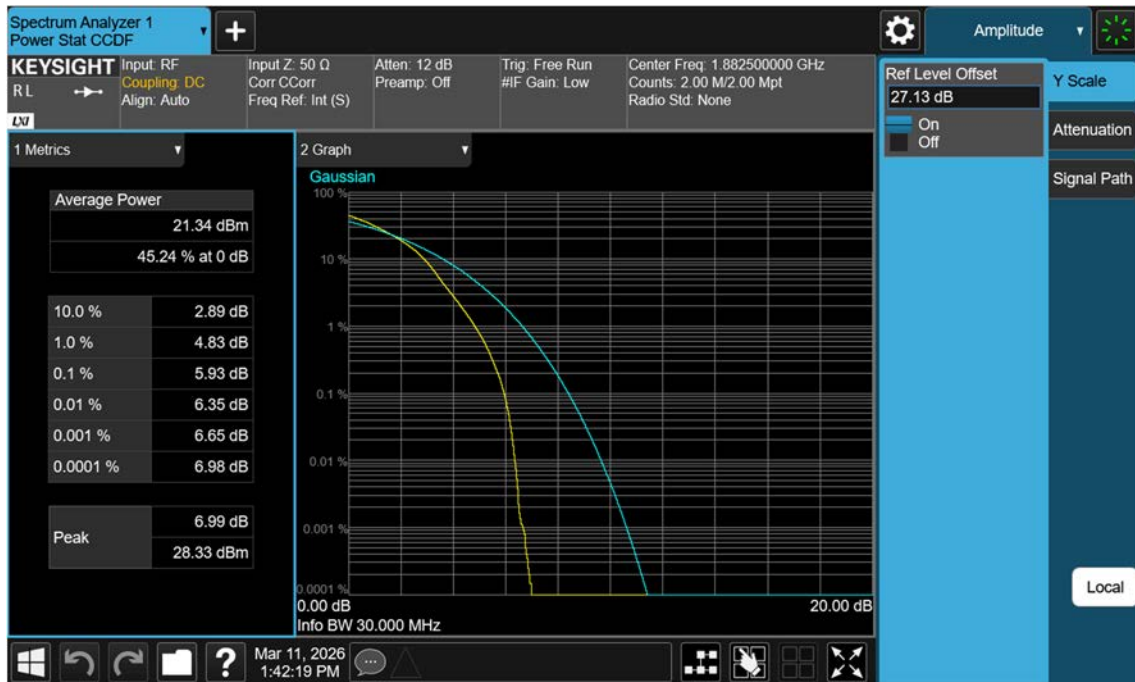
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NR n25_30 M_PAR_Mid_QPSK_FullRB



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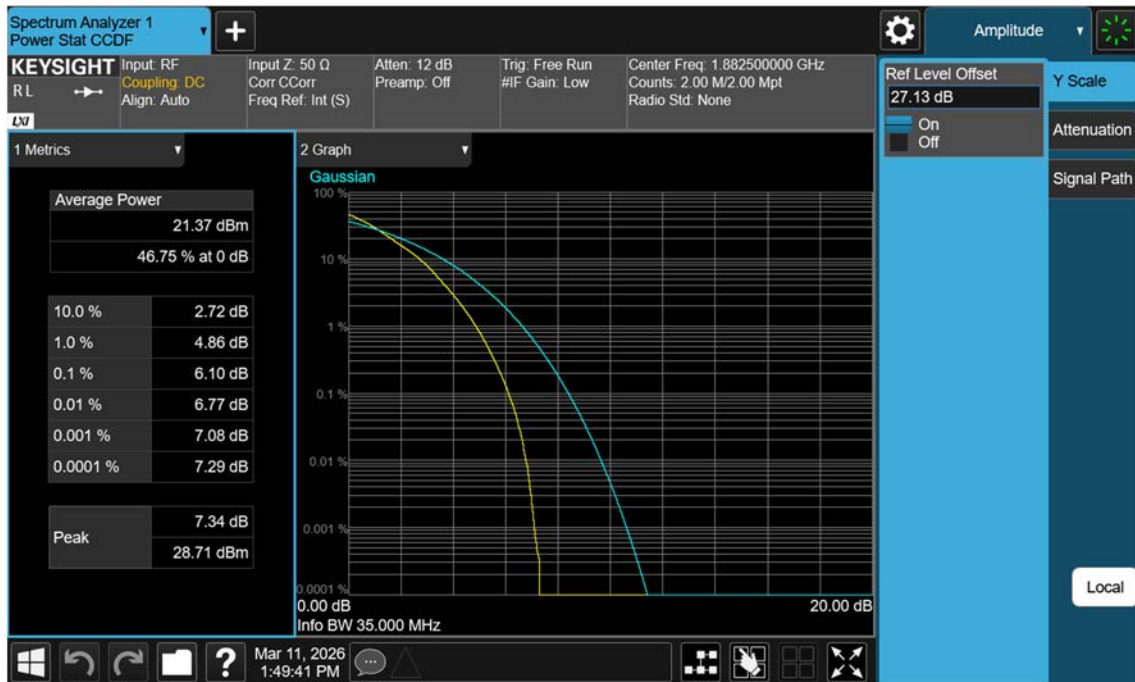
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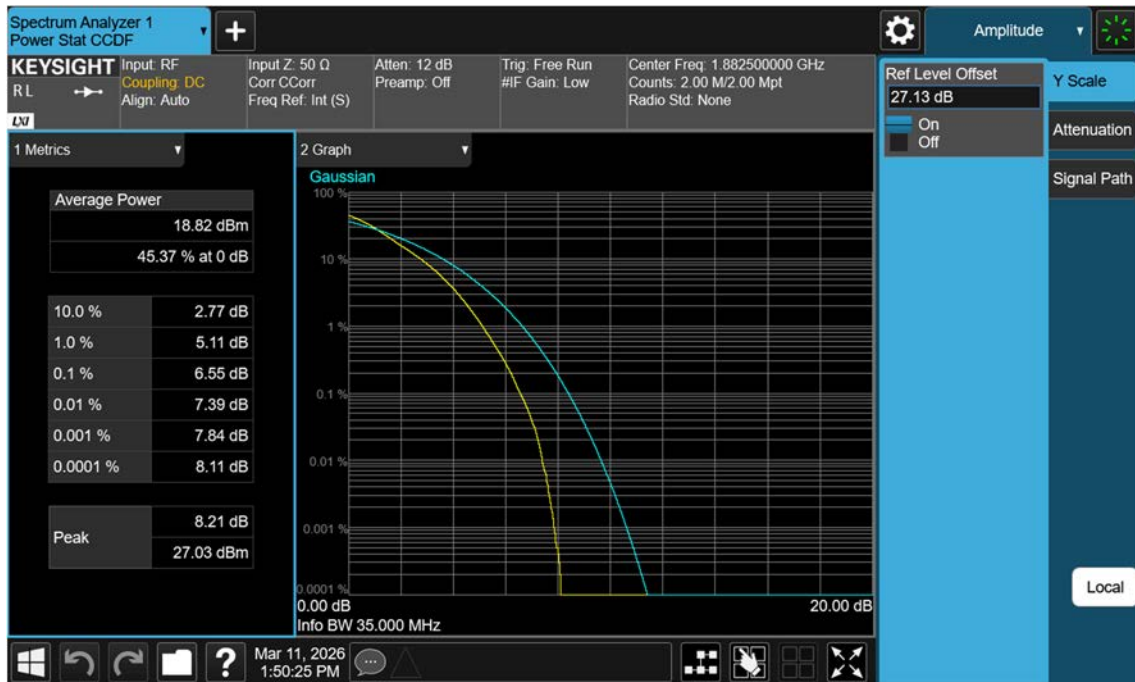
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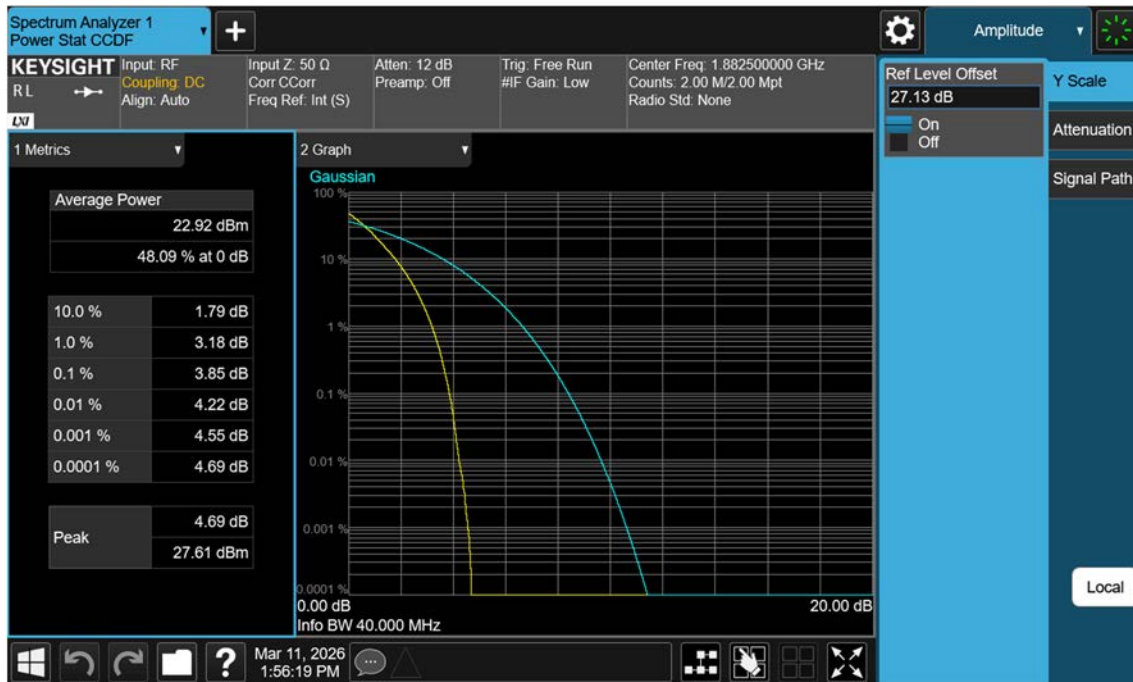
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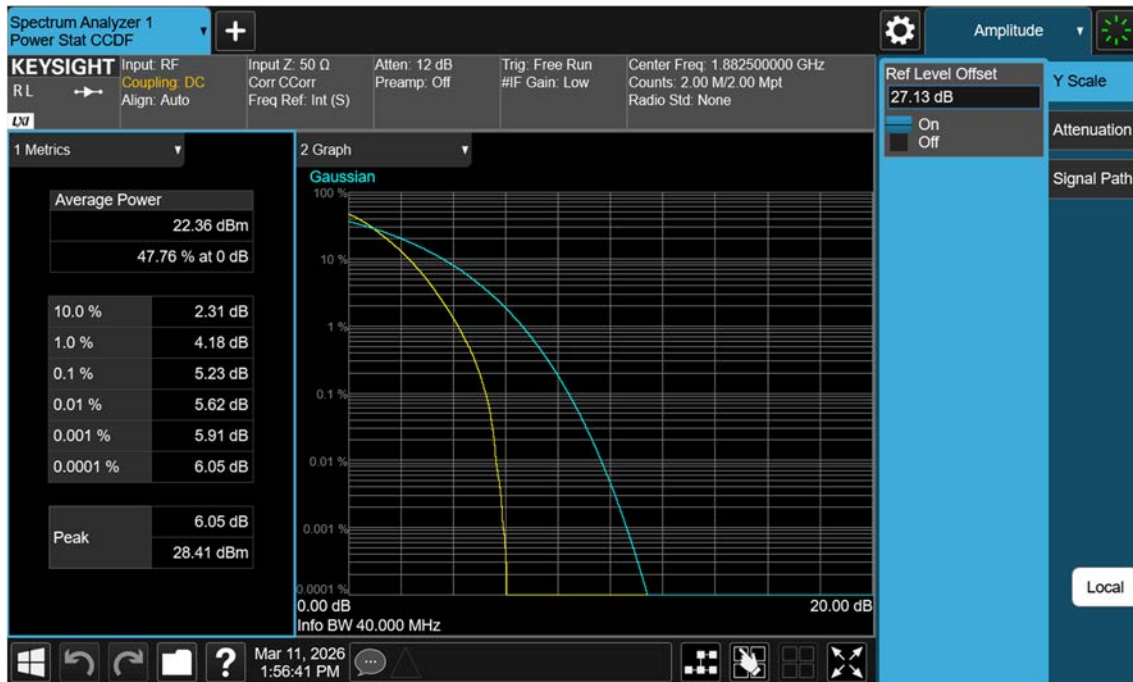
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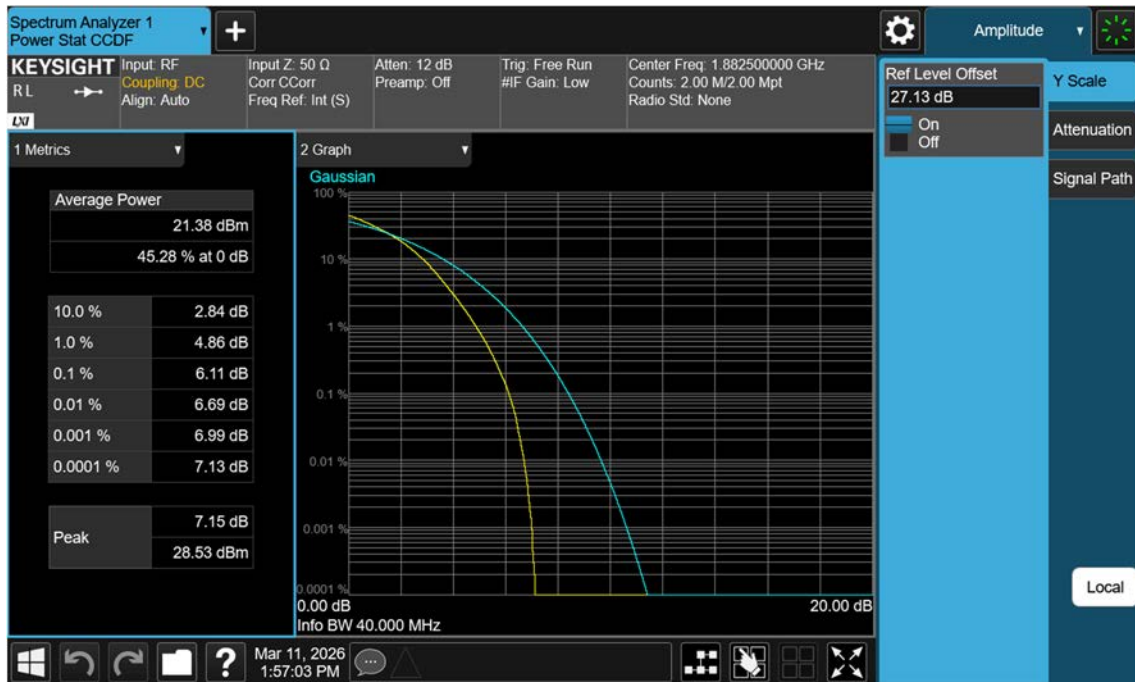
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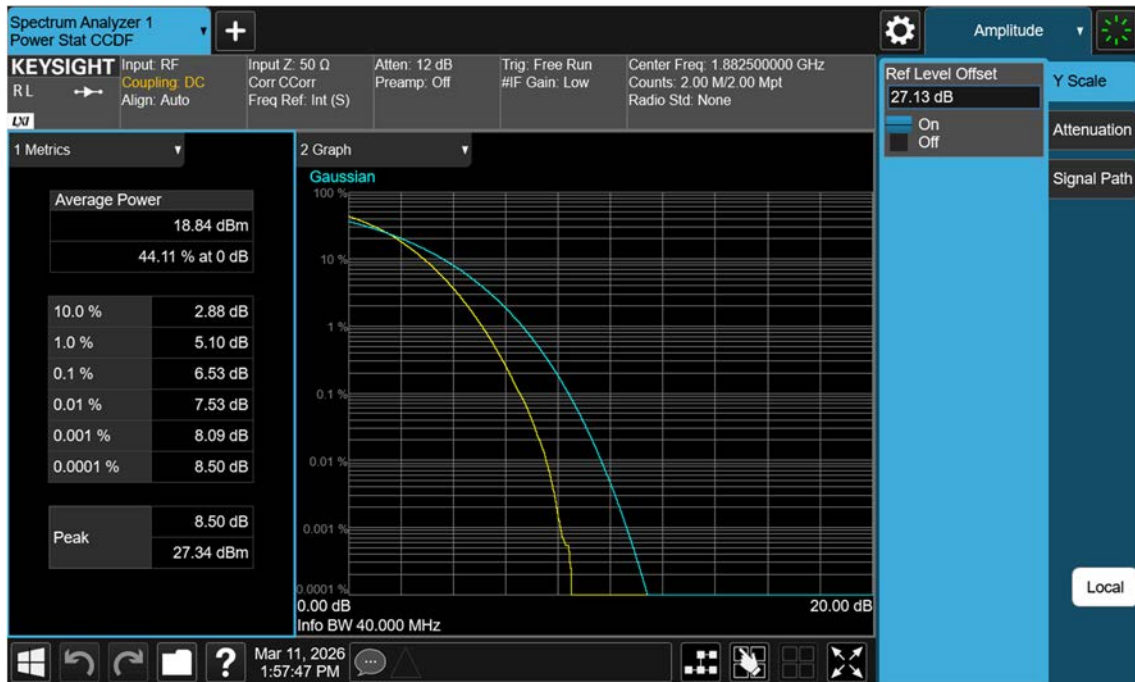
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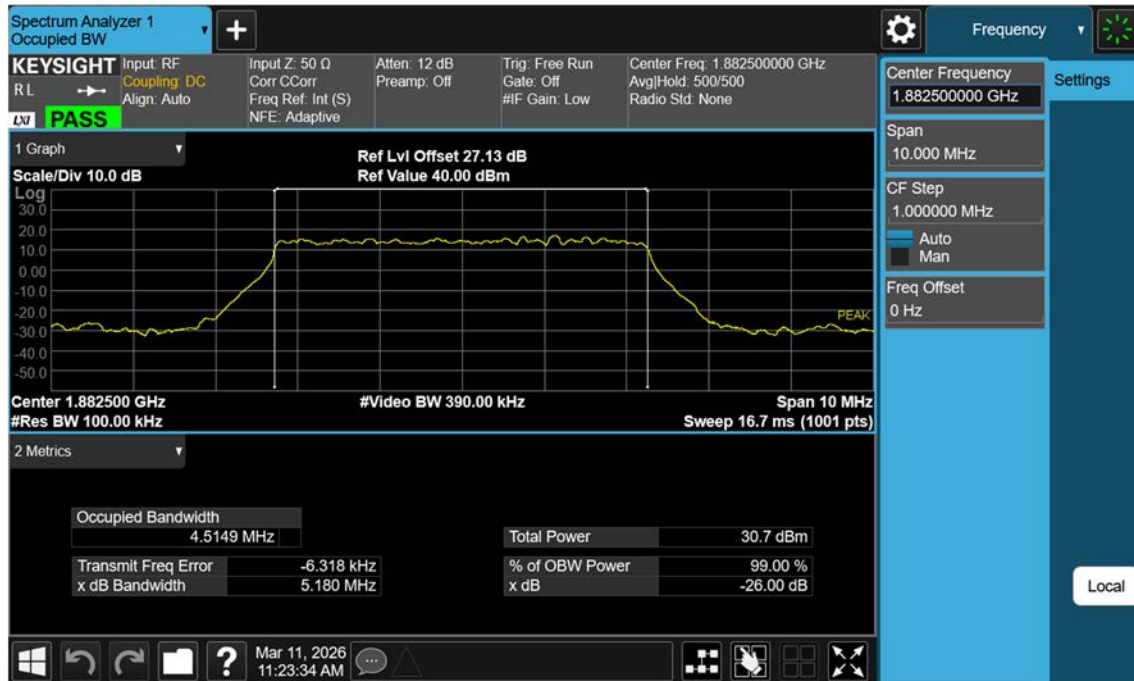


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10.2 OCCUPIED BANDWIDTH

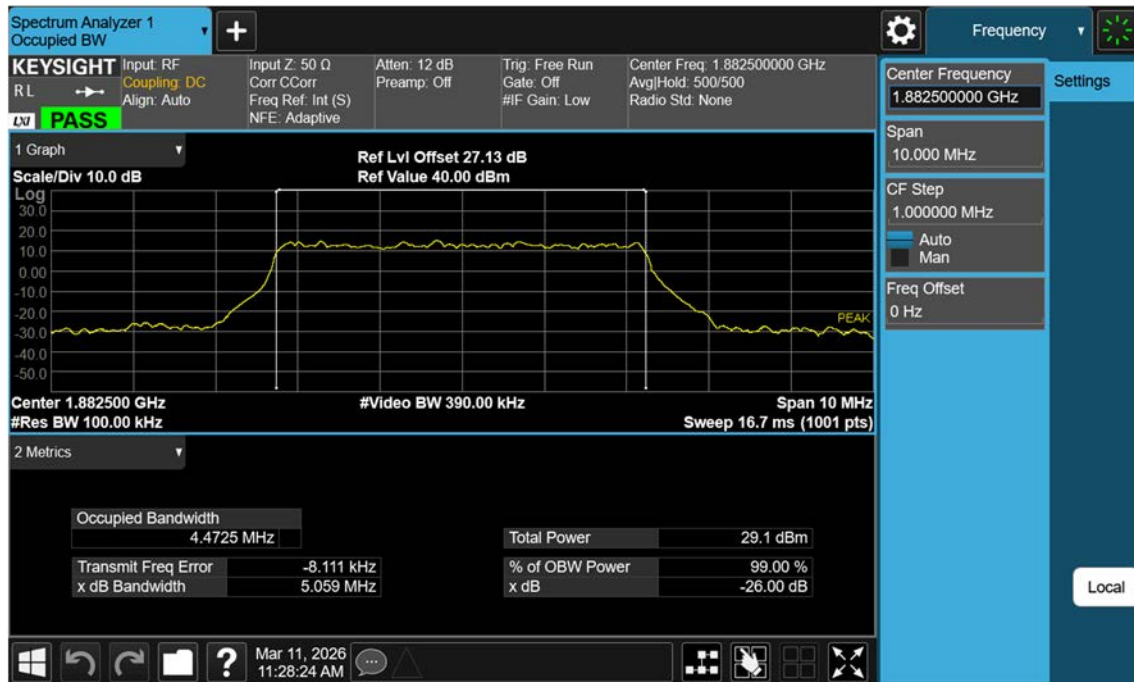
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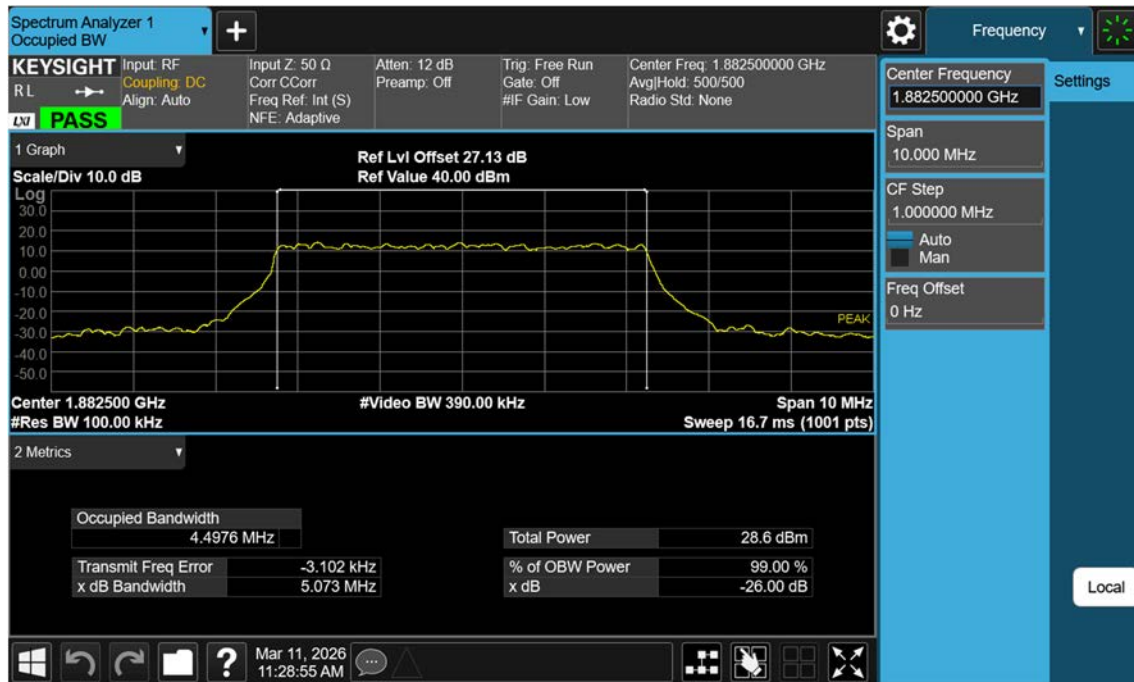
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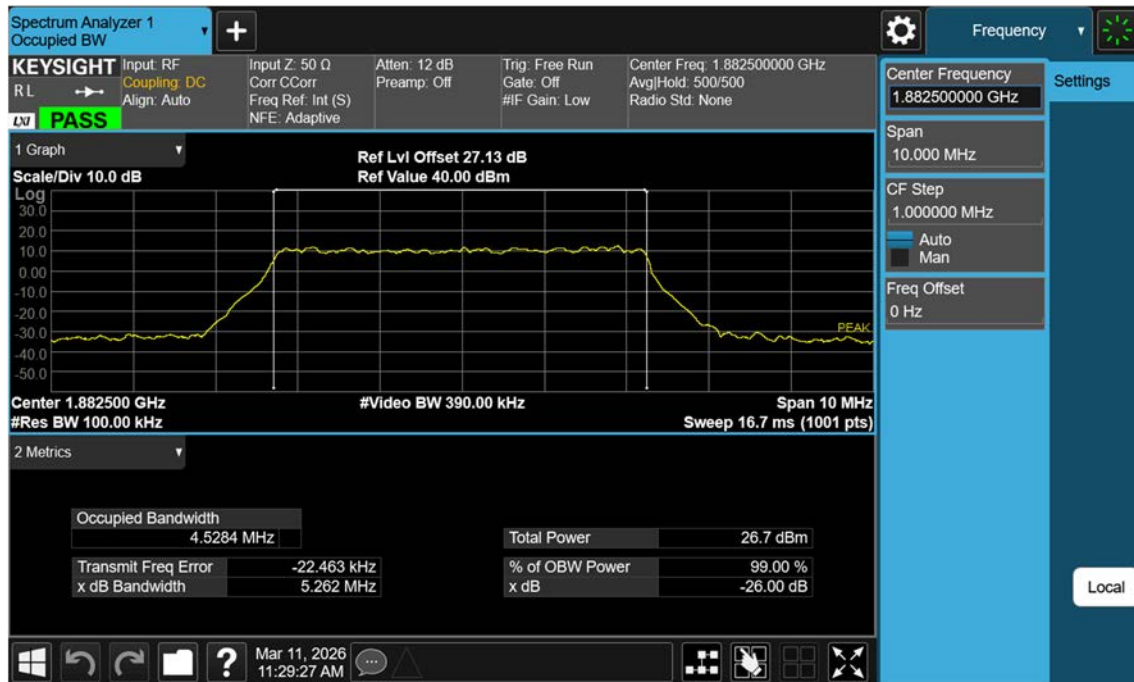
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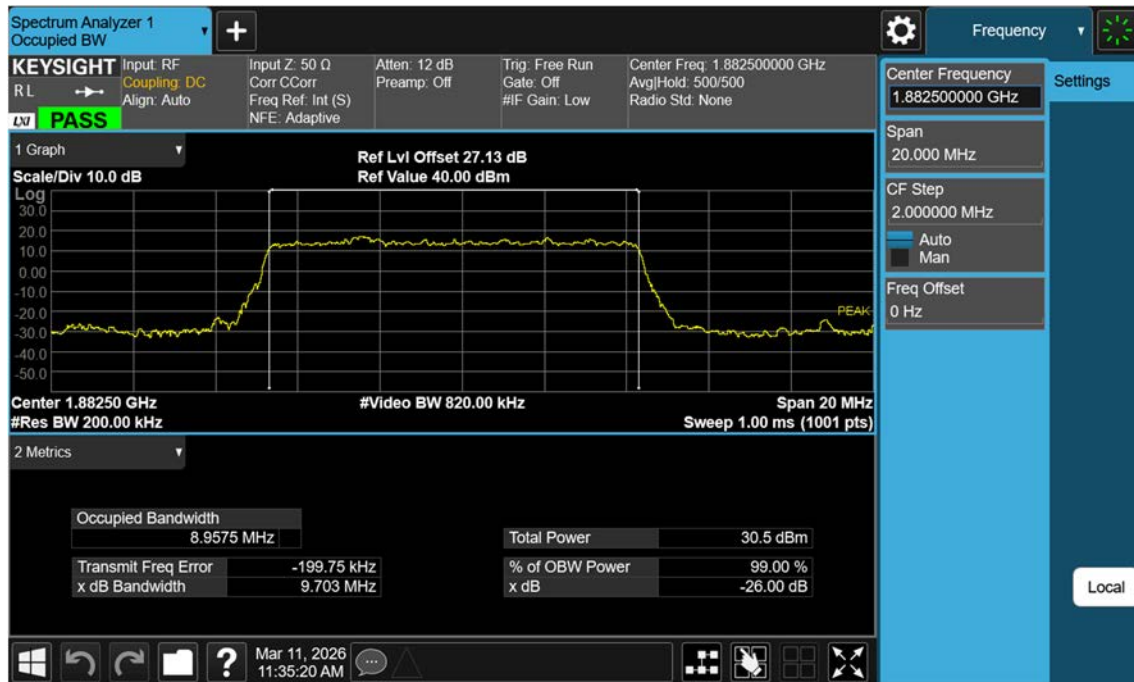
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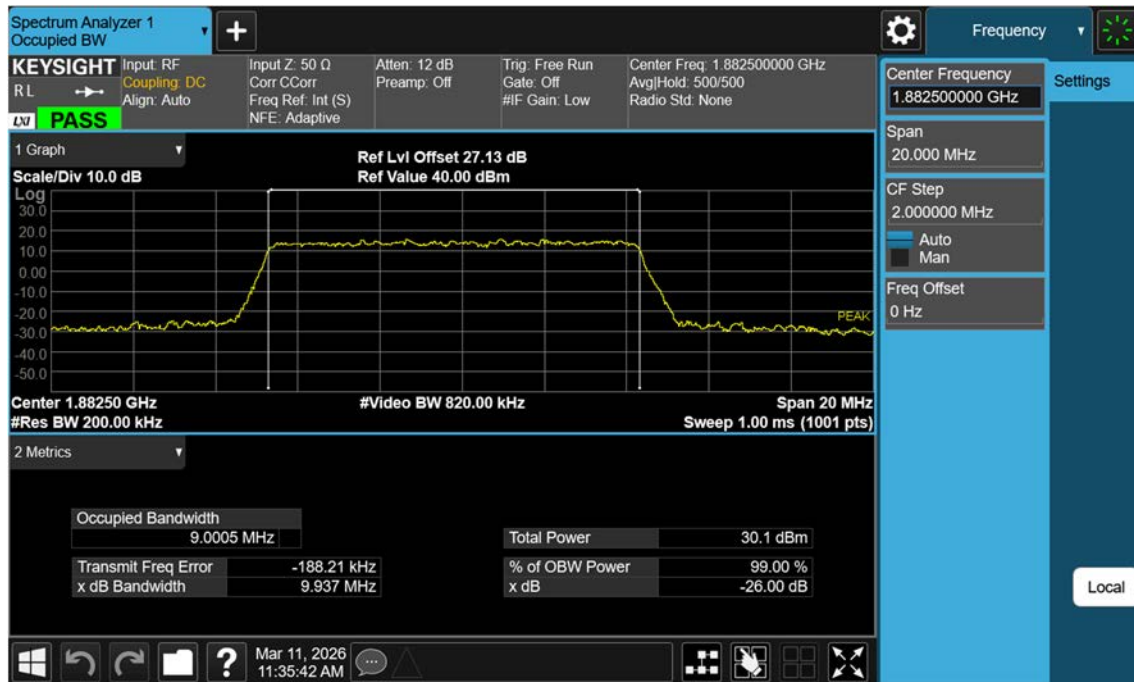
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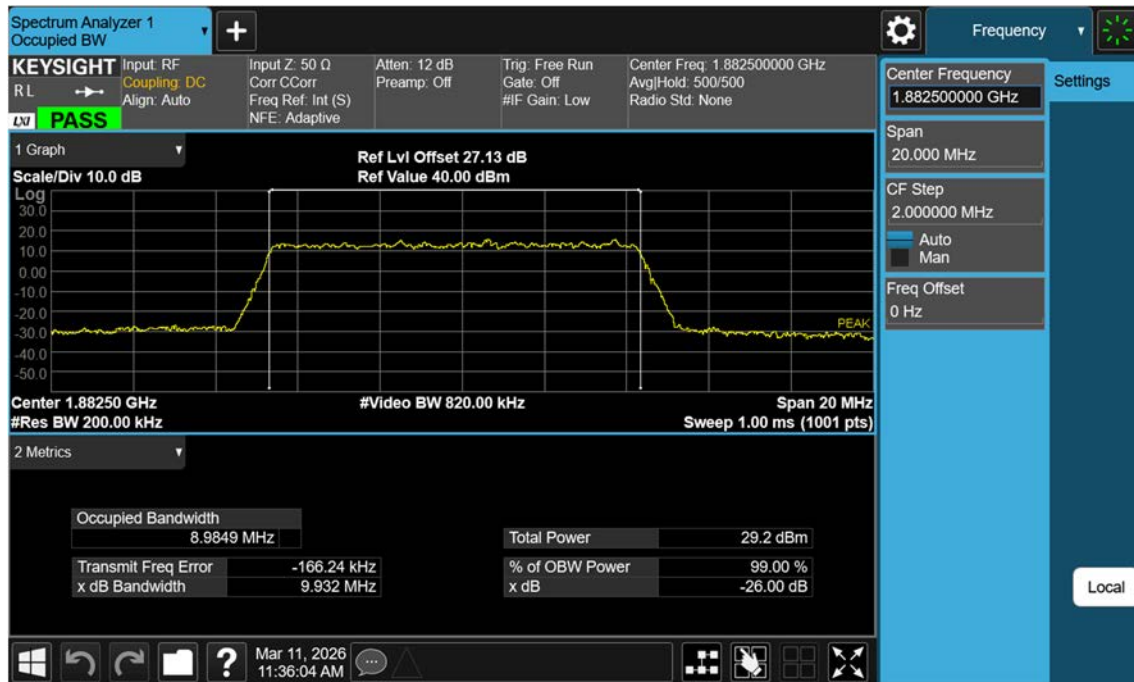
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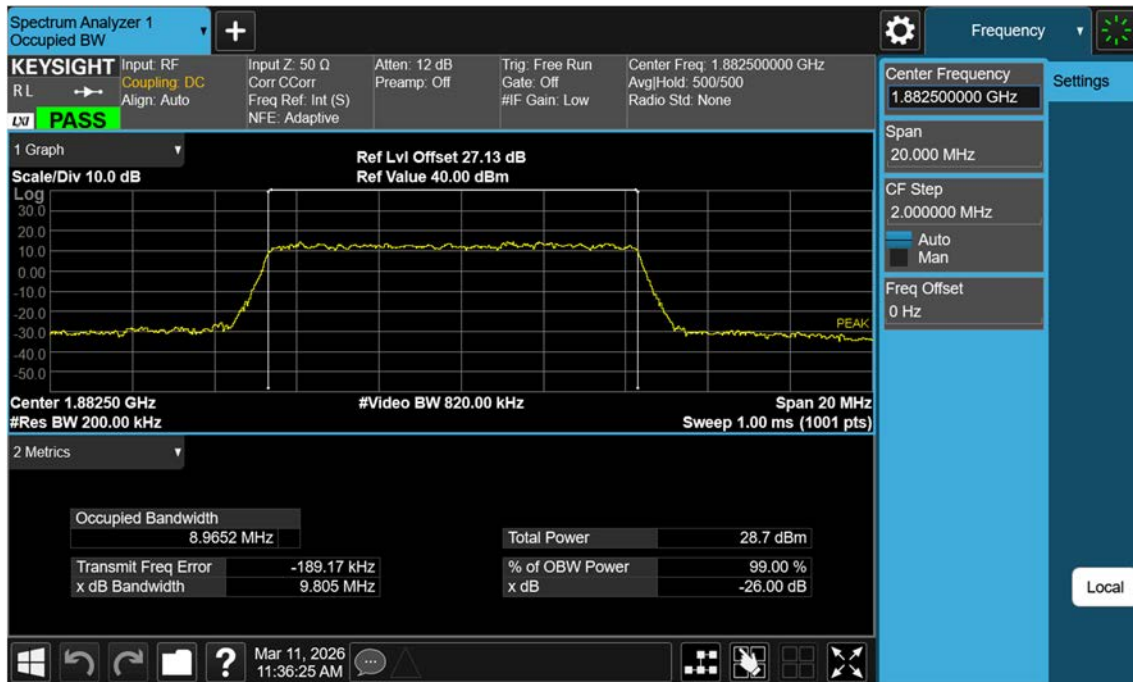
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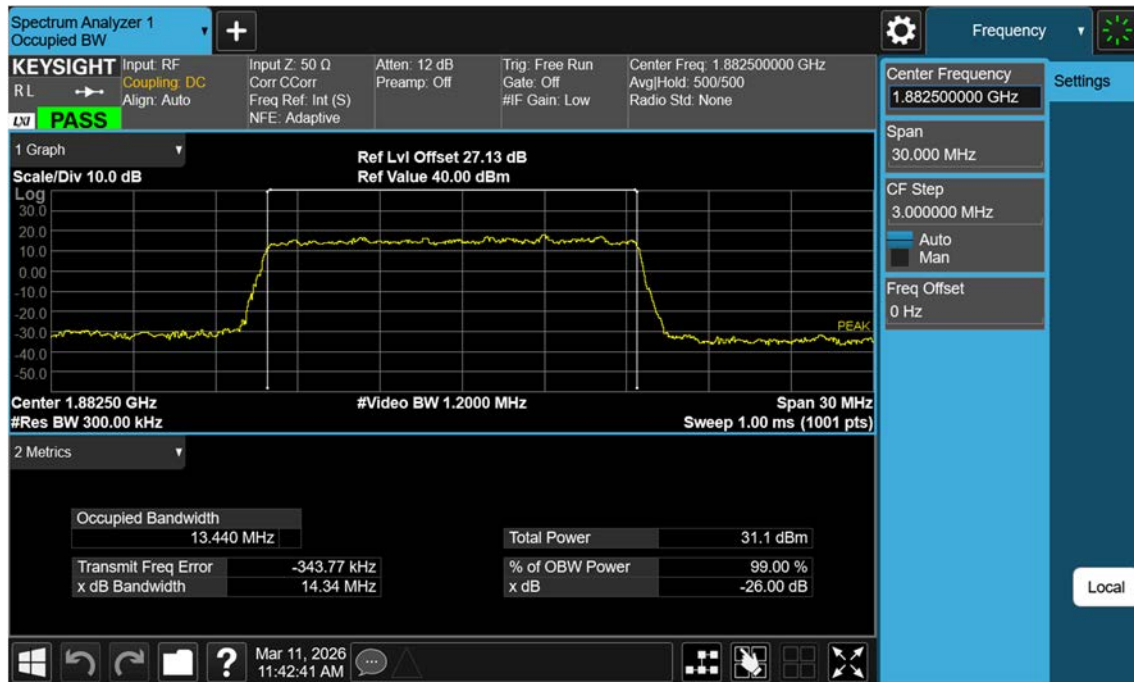
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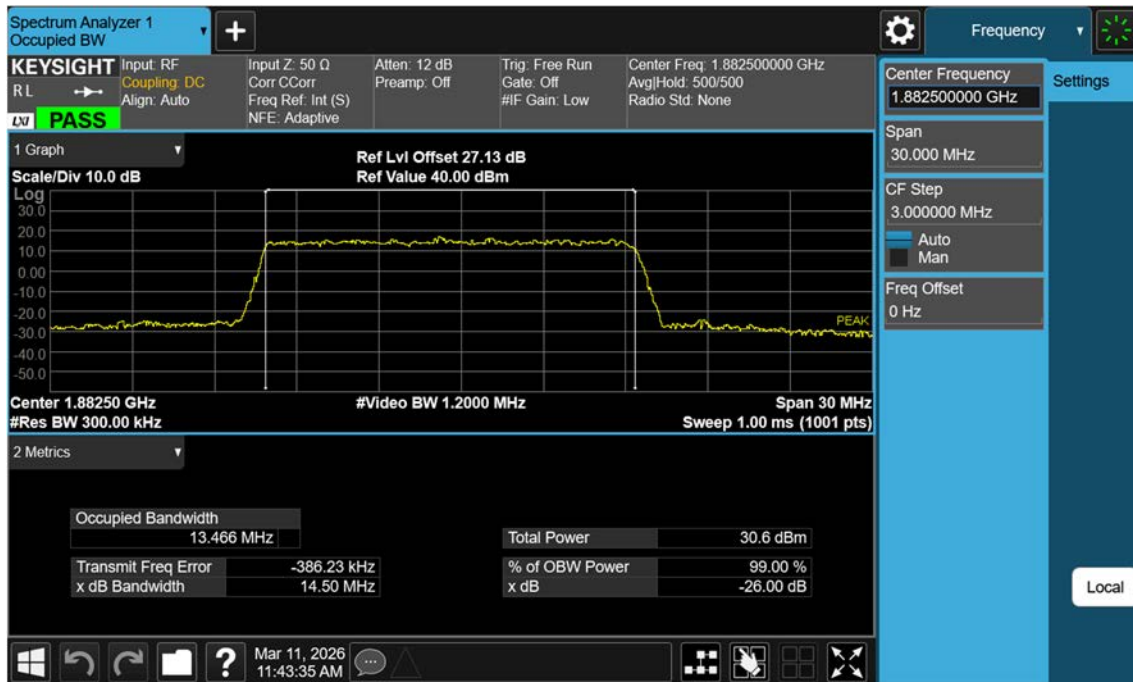
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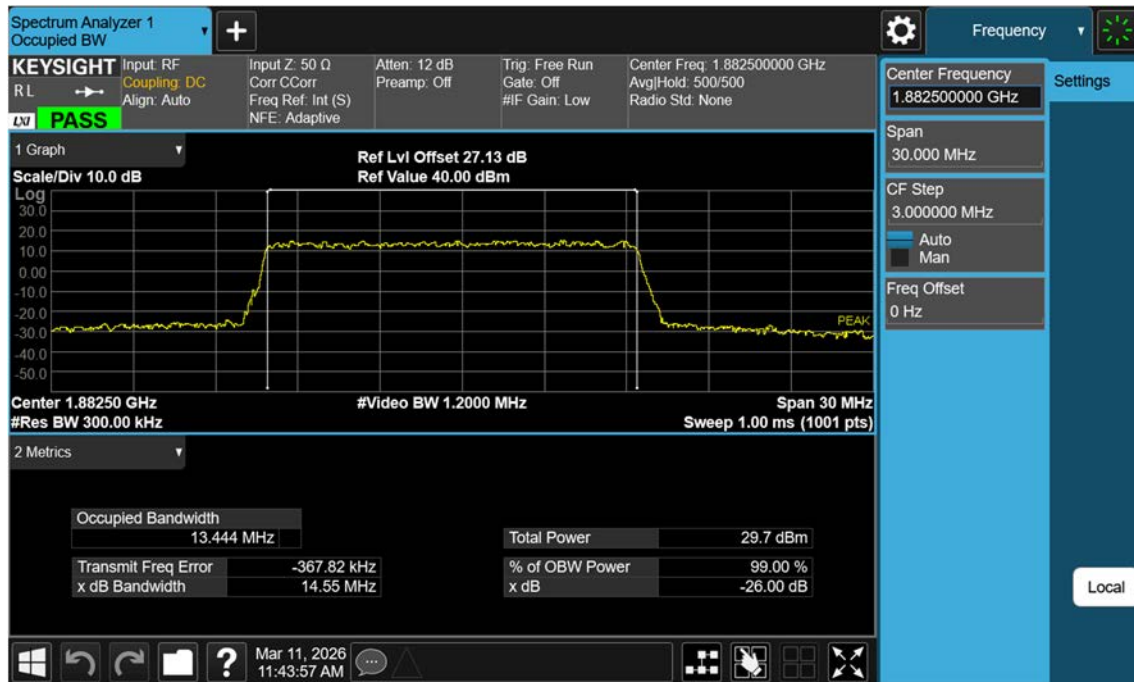
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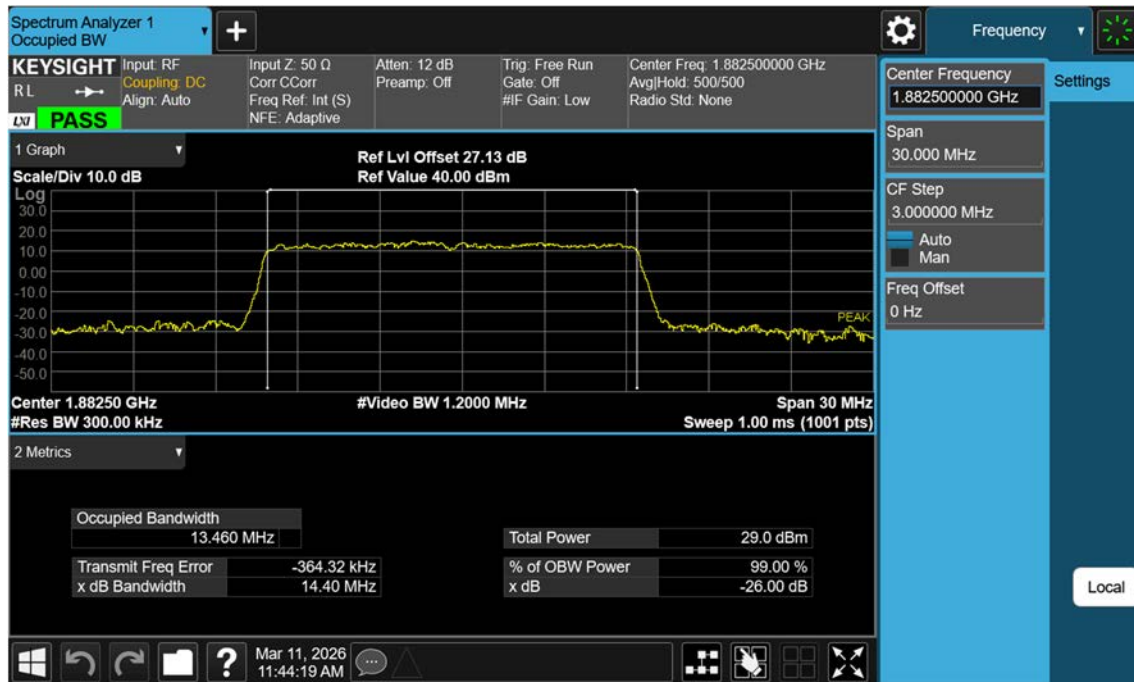
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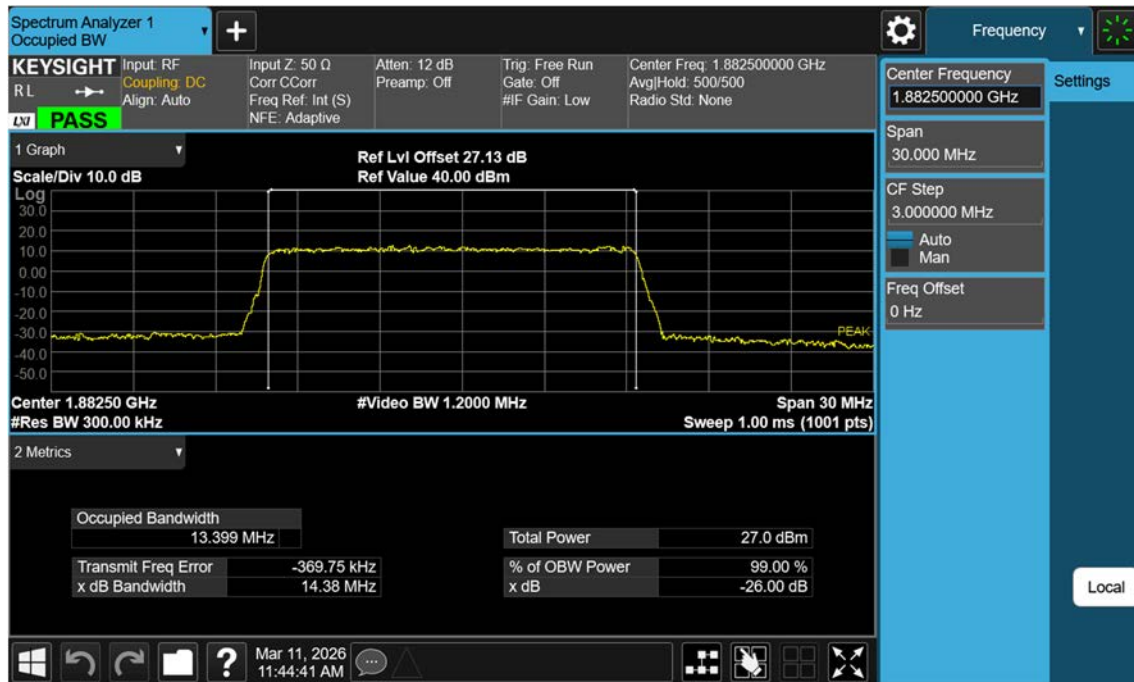
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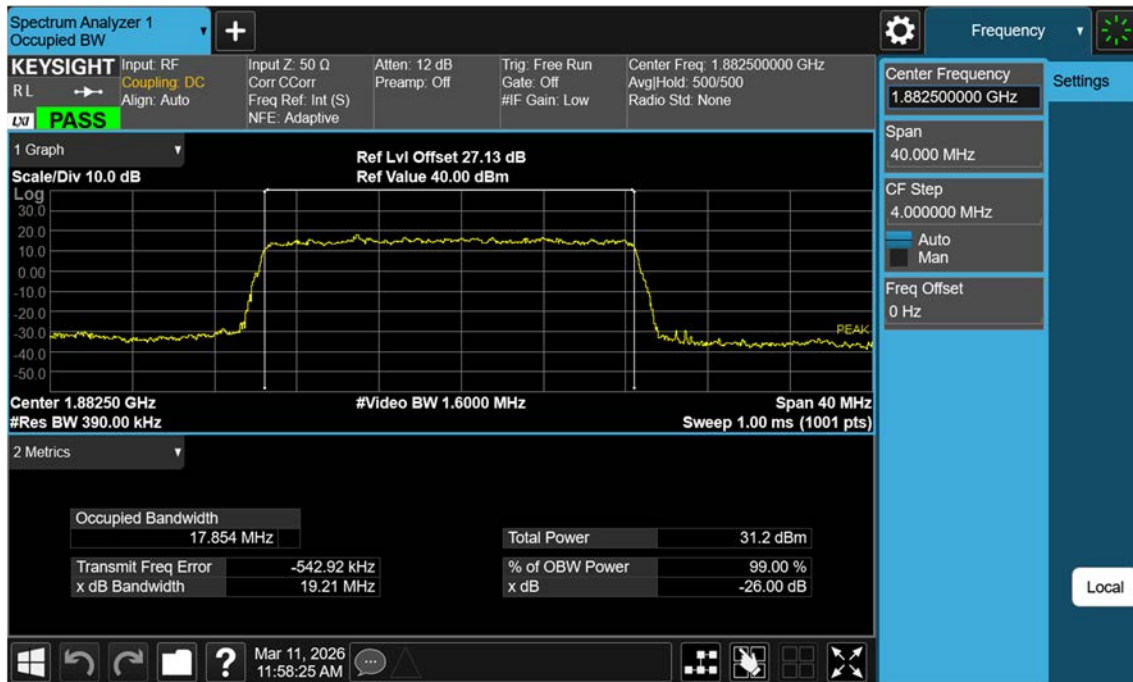
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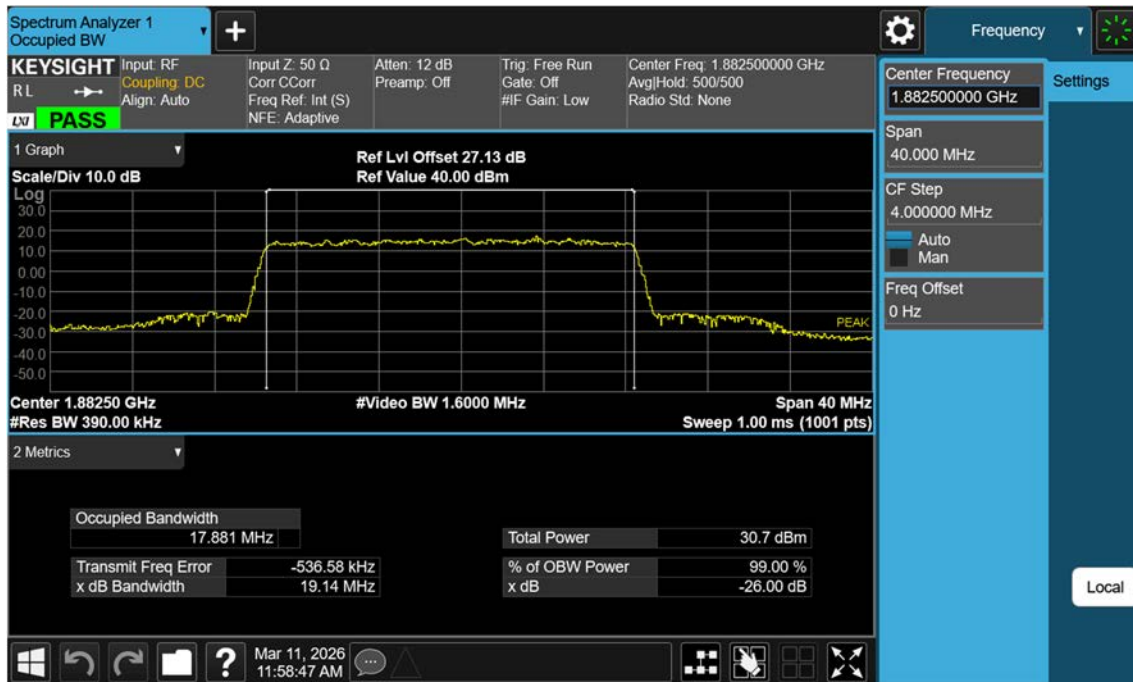
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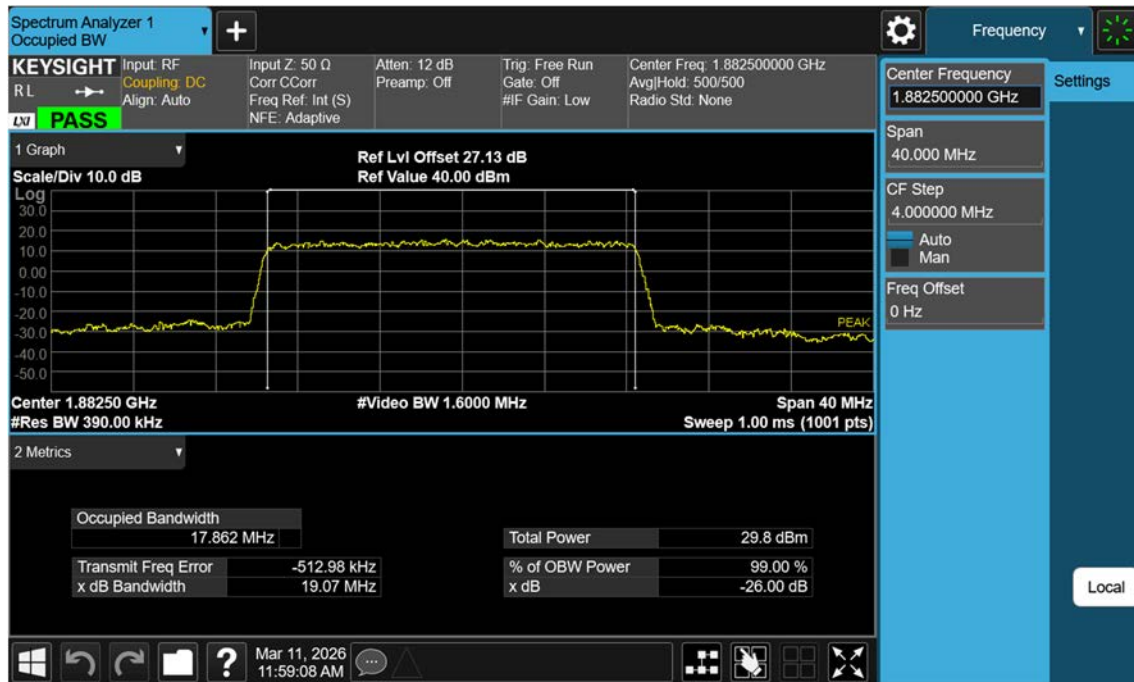
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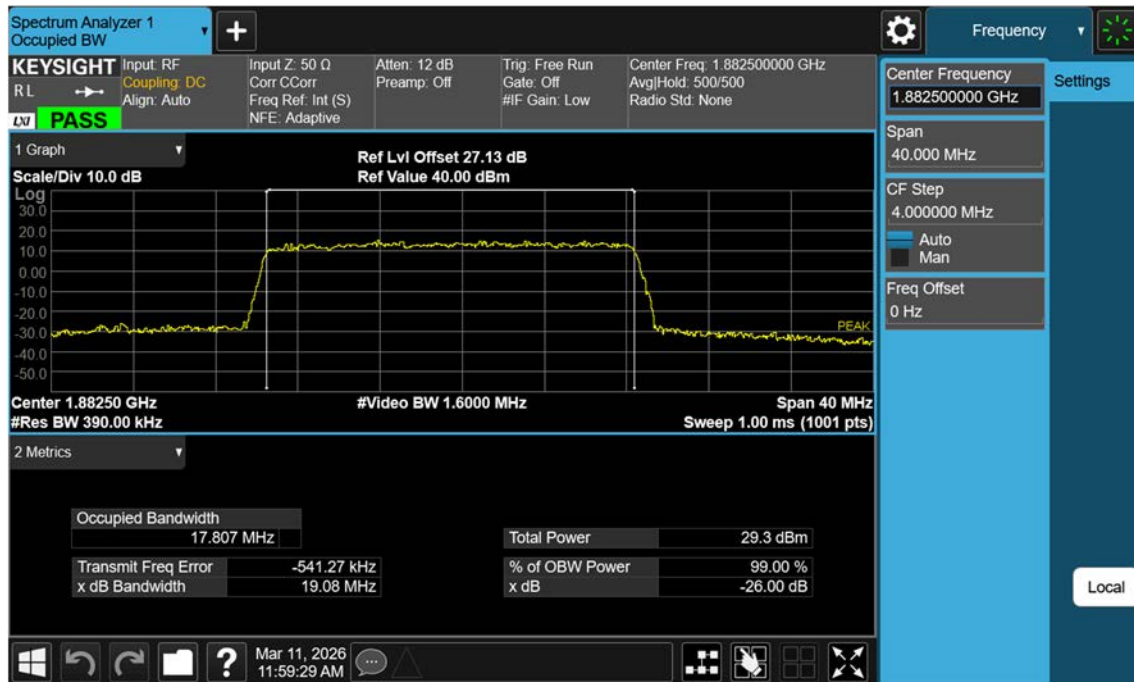
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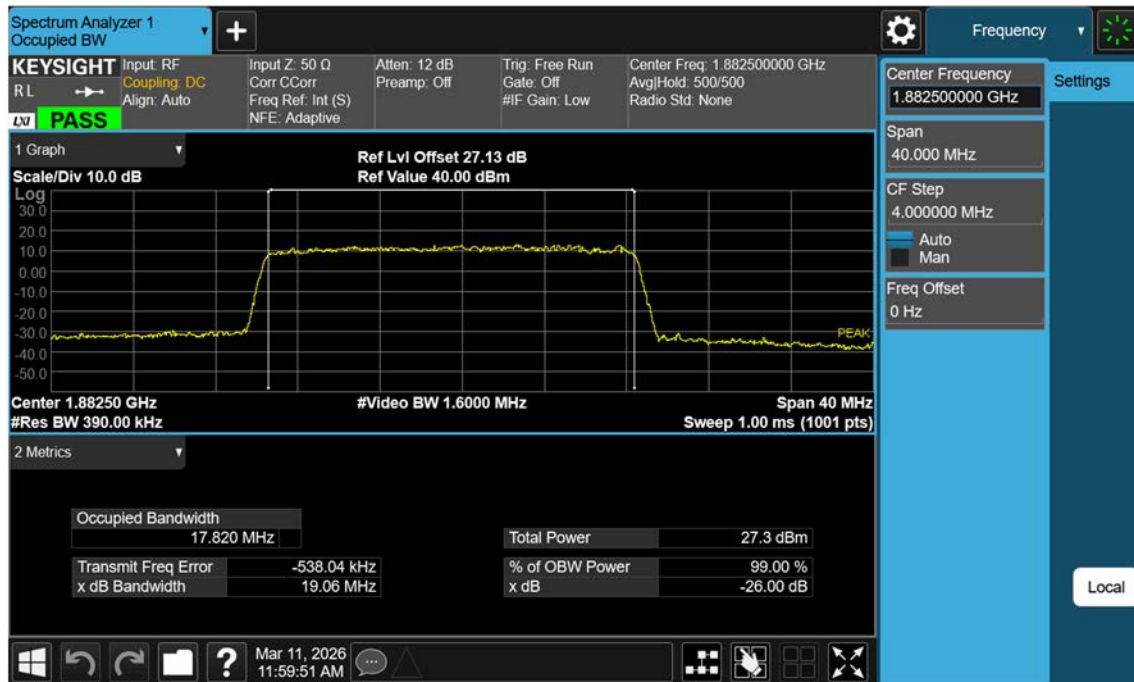
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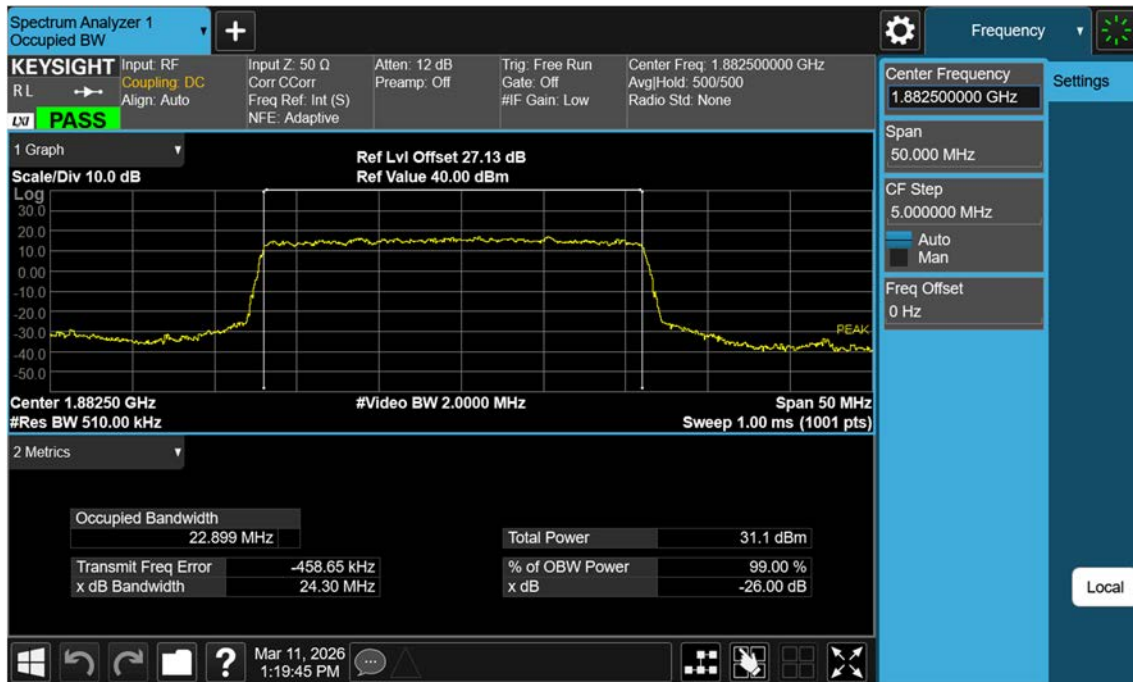
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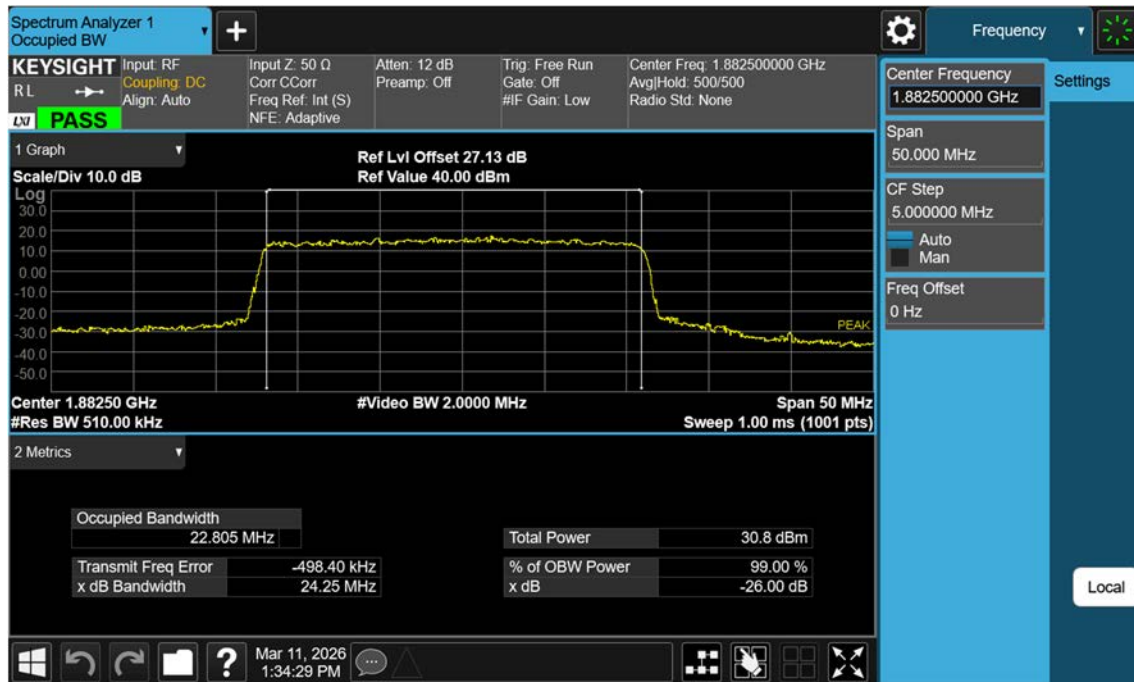
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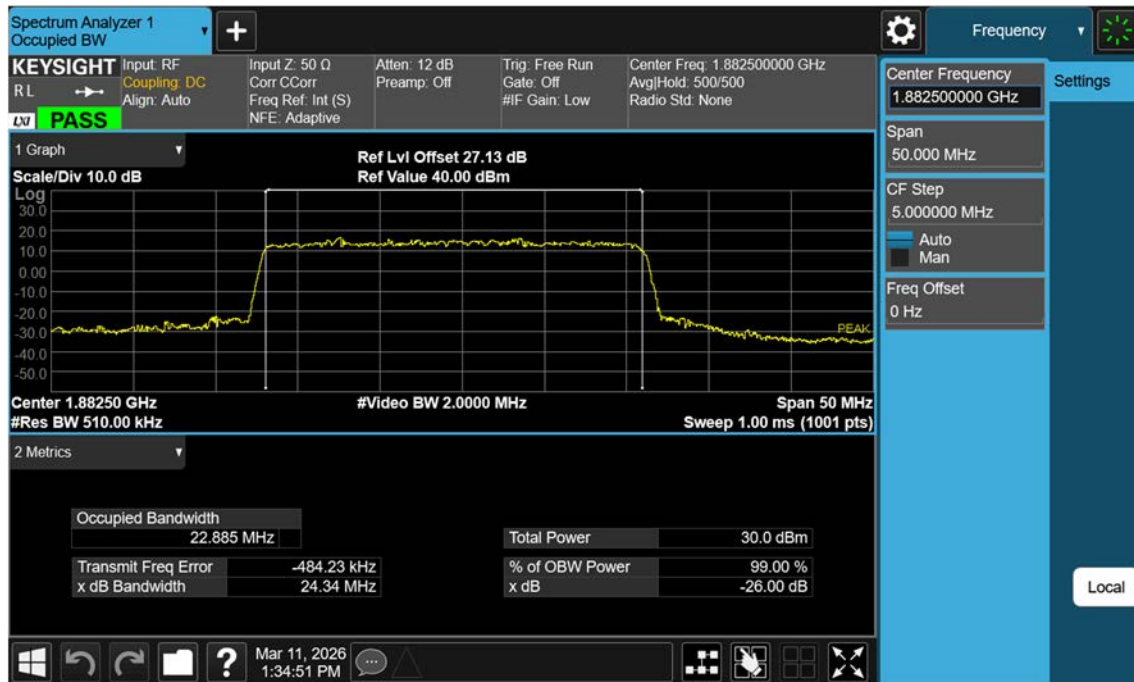
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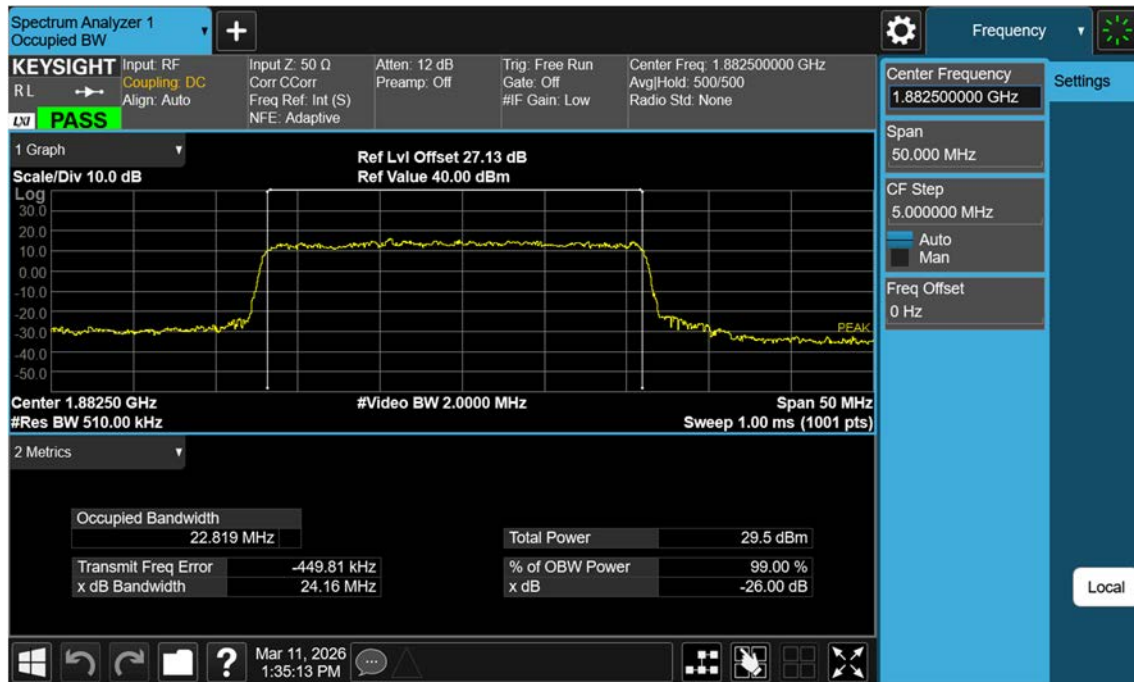
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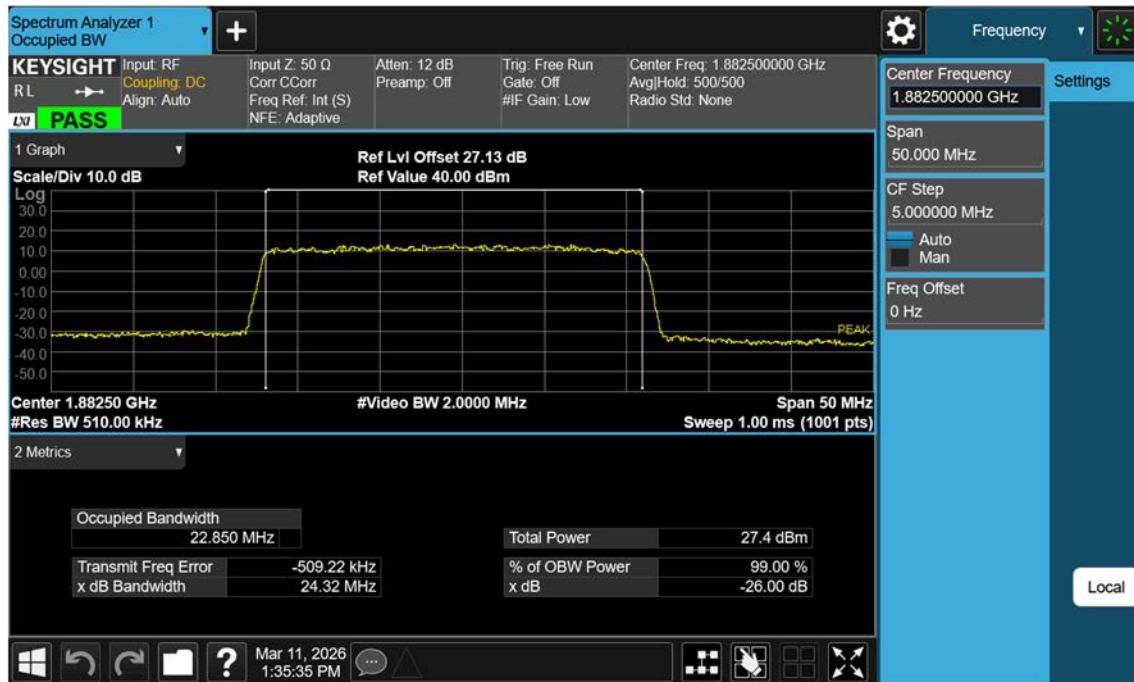
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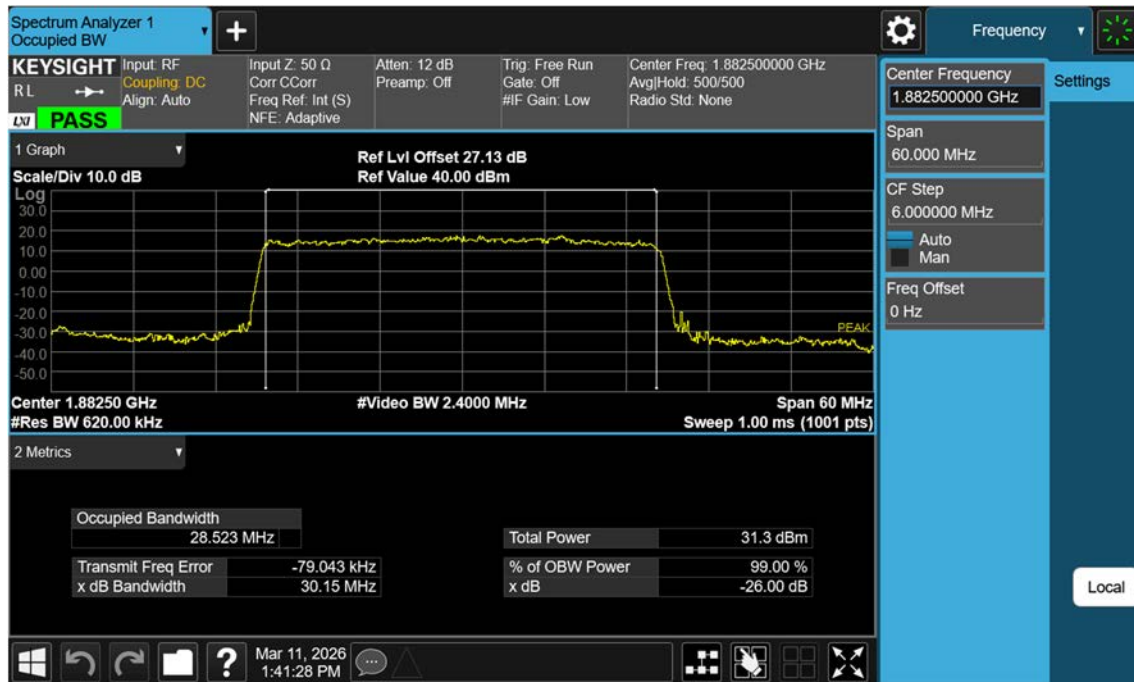
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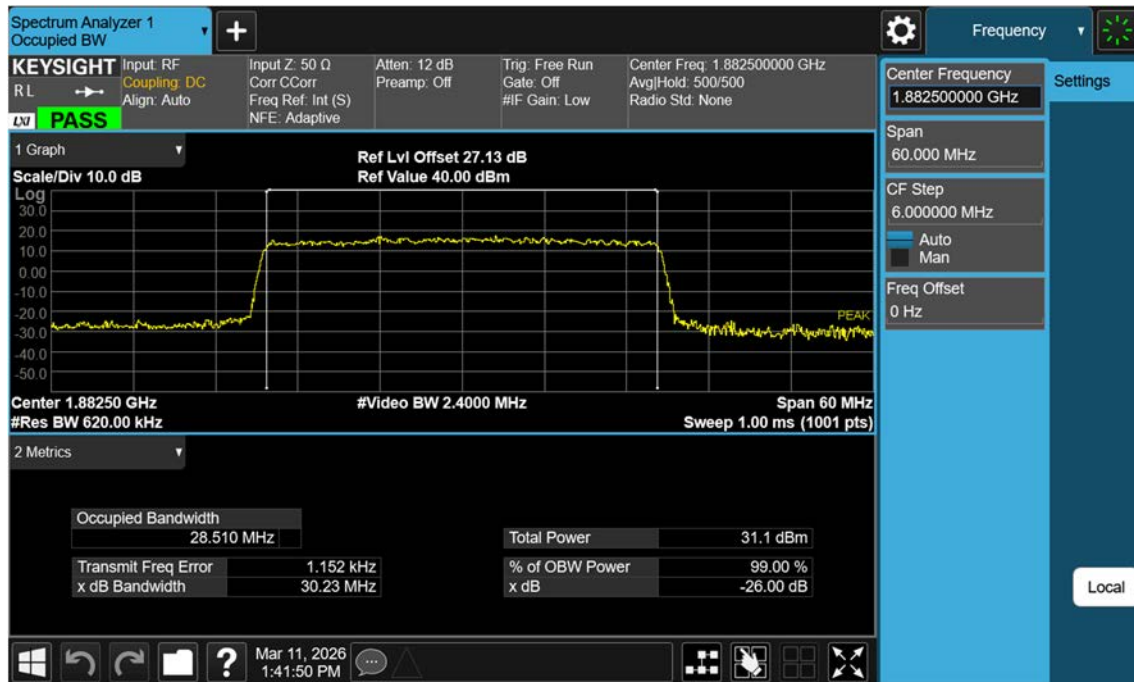
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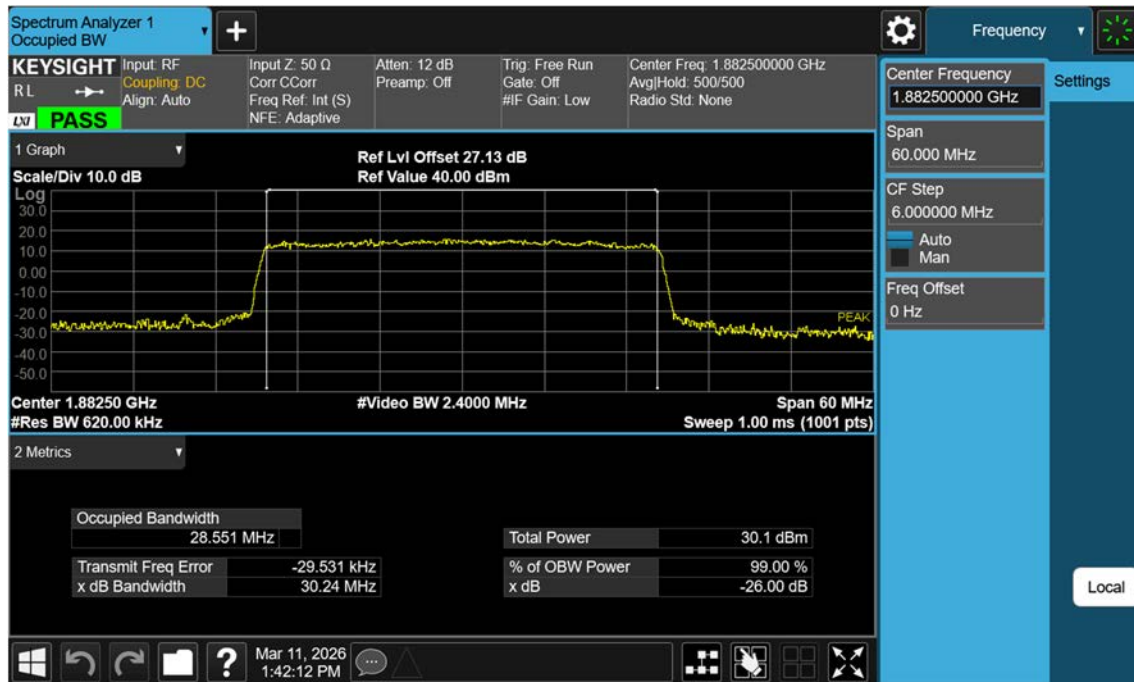
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