

TEST REPORT

FCC Sub6 n66 Test for SM-A266M/DS
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2501-FC048

DATE OF ISSUE
January 22, 2025

Tested by
Jung Ki Lim



Technical Manager
Jong Seok Lee



HCT CO., LTD.
Bongjai Huh
BongJai Huh / CEO

**HCT CO.,LTD.**

2-6, 73, 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea
Tel. +82 31 645 6300 Fax. +82 31 645 6401

TEST REPORT

REPORT NO.

HCT-RF-2501-FC048

DATE OF ISSUE

January 22, 2025

Additional Model

SM-A266M

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-A266M/DS

Date of Test

December 09, 2024~ January 17, 2025

FCC ID

A3LSMA266M

Location of Test

☒ Permanent Testing Lab ☐ On Site Testing

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

FCC Classification:

PCS Licensed Transmitter Held to Ear (PCE)

Test Standard Used

FCC Rule Part: § 27

Test Results

PASS

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	January 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

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

CONTENTS

1. GENERAL INFORMATION	5
1.1 MAXIMUM OUTPUT POWER.....	6
2. INTRODUCTION.....	8
2.1 DESCRIPTION OF EUT.....	8
2.2 MEASURING INSTRUMENT CALIBRATION.....	8
2.3 TEST FACILITY.....	8
3. DESCRIPTION OF TESTS	9
3.1 TEST PROCEDURE	9
3.2 RADIATED POWER.....	10
3.3 RADIATED SPURIOUS EMISSIONS.....	11
3.4 PEAK- TO- AVERAGE RATIO	12
3.5 OCCUPIED BANDWIDTH.	14
3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL.....	15
3.7 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).....	20
4. LIST OF TEST EQUIPMENT	21
5. MEASUREMENT UNCERTAINTY.....	22
6. SUMMARY OF TEST RESULTS	23
7. SAMPLE CALCULATION	24
8. TEST DATA (Main 2 ANT)	26
8.1 EQUIVALENT ISOTROPIC RADIATED POWER	26
8.2 RADIATED SPURIOUS EMISSIONS.....	33
8.3 PEAK-TO-AVERAGE RATIO	34
8.4 OCCUPIED BANDWIDTH	35
8.5 CONDUCTED SPURIOUS EMISSIONS	36
8.6 BAND EDGE	36
8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE	37
9. TEST DATA (Sub 2 ANT).....	44
9.1 EQUIVALENT ISOTROPIC RADIATED POWER	44
9.2 RADIATED SPURIOUS EMISSIONS.....	51
9.3 PEAK-TO-AVERAGE RATIO	52
9.4 OCCUPIED BANDWIDTH	53
9.5 CONDUCTED SPURIOUS EMISSIONS	54
9.6 BAND EDGE	54
9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE	55
10. TEST PLOTS (Main 2 ANT)	62
11. TEST PLOTS (Sub 2 ANT).....	217
12. ANNEX A_ TEST SETUP PHOTO	372

MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name:	SAMSUNG Electronics Co., Ltd.
Address:	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
FCC ID:	A3LSMA266M
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§ 27
EUT Type:	Mobile phone
Model(s):	SM-A266M/DS
Additional Model(s)	SM-A266M
SCS(kHz):	15
Bandwidth(MHz):	5, 10, 15, 20, 25, 30, 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:	1712.5 MHz – 1777.5 MHz (Sub6 n66(5 MHz)) 1715.0 MHz – 1775.0 MHz (Sub6 n66(10 MHz)) 1717.5 MHz – 1772.5 MHz (Sub6 n66(15 MHz)) 1720.0 MHz – 1770.0 MHz (Sub6 n66(20 MHz)) 1722.5 MHz – 1767.5 MHz (Sub6 n66(25 MHz)) 1725.0 MHz – 1765.0 MHz (Sub6 n66(30 MHz)) 1730.0 MHz – 1760.0 MHz (Sub6 n66(40 MHz))
Date(s) of Tests:	December 09, 2024~ January 17, 2025
Serial number:	Radiated : R3CXB0V501F Conducted : 8b3223c57d537ece

1.1 MAXIMUM OUTPUT POWER

Main 2 ANT

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n66 (5)	1712.5 – 1777.5	4M52G7D	PI/2 BPSK	0.167	22.23
		4M52G7D	QPSK	0.166	22.20
		4M53W7D	16QAM	0.132	21.22
		4M53W7D	64QAM	0.093	19.69
		4M56W7D	256QAM	0.060	17.78
Sub6 n66 (10)	1715.0 – 1775.0	8M99G7D	PI/2 BPSK	0.172	22.36
		9M05G7D	QPSK	0.171	22.32
		9M00W7D	16QAM	0.136	21.34
		8M99W7D	64QAM	0.099	19.97
		8M96W7D	256QAM	0.062	17.92
Sub6 n66 (15)	1717.5 – 1772.5	13M4G7D	PI/2 BPSK	0.169	22.27
		13M5G7D	QPSK	0.163	22.12
		13M4W7D	16QAM	0.128	21.08
		13M4W7D	64QAM	0.093	19.68
		13M4W7D	256QAM	0.059	17.69
Sub6 n66 (20)	1720.0 – 1770.0	17M9G7D	PI/2 BPSK	0.170	22.30
		17M9G7D	QPSK	0.166	22.19
		17M9W7D	16QAM	0.137	21.36
		17M9W7D	64QAM	0.094	19.72
		17M9W7D	256QAM	0.060	17.79
Sub6 n66 (25)	1722.5 – 1767.5	22M9G7D	PI/2 BPSK	0.157	21.96
		22M9G7D	QPSK	0.155	21.91
		23M0W7D	16QAM	0.134	21.28
		23M0W7D	64QAM	0.083	19.20
		22M9W7D	256QAM	0.055	17.44
Sub6 n66 (30)	1725.0 – 1765.0	28M8G7D	PI/2 BPSK	0.162	22.10
		28M7G7D	QPSK	0.158	21.99
		28M7W7D	16QAM	0.129	21.11
		28M7W7D	64QAM	0.091	19.57
		28M7W7D	256QAM	0.057	17.58
Sub6 n66 (40)	1730.0 – 1760.0	38M8G7D	PI/2 BPSK	0.163	22.12
		38M8G7D	QPSK	0.161	22.08
		38M8W7D	16QAM	0.126	20.99
		38M8W7D	64QAM	0.092	19.63
		38M8W7D	256QAM	0.059	17.74

Sub 2 ANT

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n66 (5)	1712.5 – 1777.5	4M53G7D	PI/2 BPSK	0.094	19.72
		4M54G7D	QPSK	0.093	19.67
		4M56W7D	16QAM	0.074	18.70
		4M54W7D	64QAM	0.052	17.16
		4M54W7D	256QAM	0.033	15.24
Sub6 n66 (10)	1715.0 – 1775.0	9M00G7D	PI/2 BPSK	0.097	19.86
		9M02G7D	QPSK	0.097	19.85
		9M00W7D	16QAM	0.074	18.70
		8M99W7D	64QAM	0.052	17.18
		8M99W7D	256QAM	0.034	15.30
Sub6 n66 (15)	1717.5 – 1772.5	13M4G7D	PI/2 BPSK	0.095	19.76
		13M5G7D	QPSK	0.093	19.67
		13M5W7D	16QAM	0.073	18.64
		13M5W7D	64QAM	0.052	17.17
		13M4W7D	256QAM	0.033	15.24
Sub6 n66 (20)	1720.0 – 1770.0	17M9G7D	PI/2 BPSK	0.095	19.77
		17M9G7D	QPSK	0.094	19.75
		17M9W7D	16QAM	0.076	18.78
		17M9W7D	64QAM	0.054	17.34
		17M9W7D	256QAM	0.033	15.22
Sub6 n66 (25)	1722.5 – 1767.5	23M0G7D	PI/2 BPSK	0.099	19.95
		23M0G7D	QPSK	0.097	19.88
		23M0W7D	16QAM	0.077	18.87
		23M0W7D	64QAM	0.055	17.43
		22M9W7D	256QAM	0.034	15.28
Sub6 n66 (30)	1725.0 – 1765.0	28M7G7D	PI/2 BPSK	0.098	19.90
		28M8G7D	QPSK	0.097	19.88
		28M7W7D	16QAM	0.075	18.76
		28M7W7D	64QAM	0.053	17.27
		28M8W7D	256QAM	0.035	15.40
Sub6 n66 (40)	1730.0 – 1760.0	38M8G7D	PI/2 BPSK	0.095	19.80
		38M8G7D	QPSK	0.094	19.75
		38M7W7D	16QAM	0.077	18.86
		38M9W7D	64QAM	0.053	17.26
		38M8W7D	256QAM	0.034	15.29

2. INTRODUCTION

2.1 DESCRIPTION OF EUT

Please refer to the [2G3G] Test Report.

2.2 MEASURING INSTRUMENT CALIBRATION

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

2.3 TEST FACILITY

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

3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
Occupied Bandwidth	- KDB 971168 D01 v03r01 – Section 4.3 - ANSI C63.26-2015 – Section 5.4.4
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	- 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;

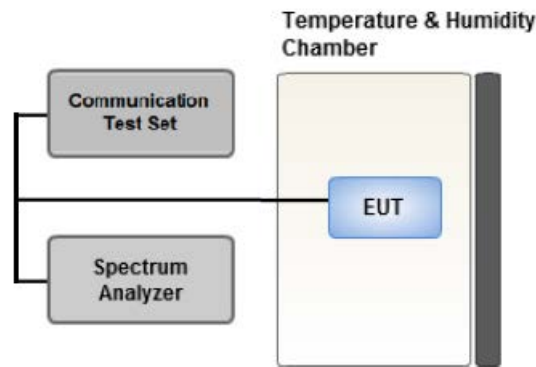
$$\text{Result}_{(\text{dBm})} = P_g_{(\text{dBm})} - \text{cable loss}_{(\text{dB})} + \text{antenna gain}_{(\text{dBi})}$$

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

① CCDF Procedure for PAPR

Test Settings

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

② Alternate Procedure for PAPR

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

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

Test Settings(Peak Power)

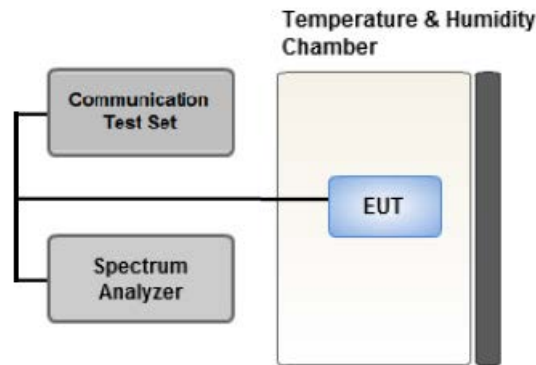
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

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

Test Settings(Average Power)

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

3.5 OCCUPIED BANDWIDTH.



Test setup

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

The EUT makes a call to the communication simulator.

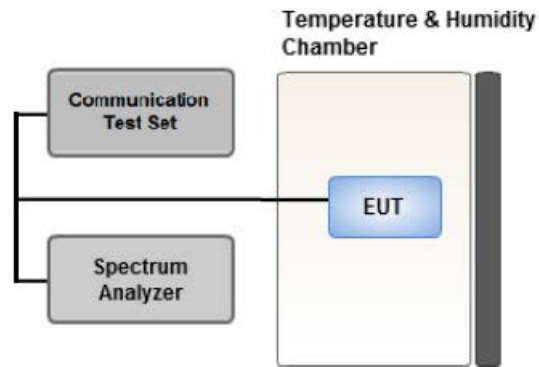
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

Test Settings

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

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

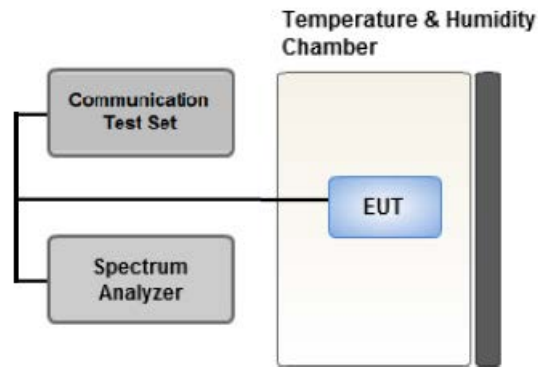
Test Overview

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

Test Settings

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

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 = auto couple
9. The trace was allowed to stabilize

Test Notes

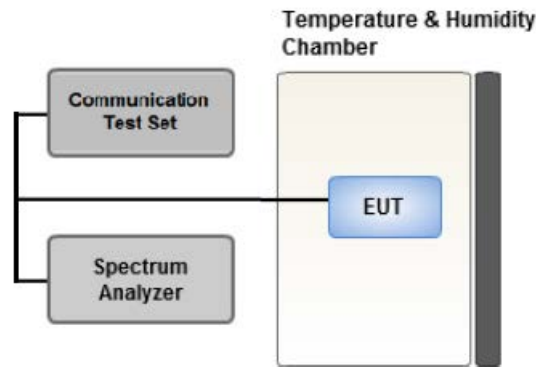
According to FCC 22.917, 24.238, 27.53 specified that power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. In the 1 MHz bands immediately outside and adjacent to the frequency block 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 $\text{Margin} < 1$ 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)

- 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: SA, NSA
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 : 10 MHz(Main 2 ANT), 25 MHz(Sub 2 ANT))
- SM-A266M/DS & additional models were tested and the worst case results are reported.
(Worst case : SM-A266M/DS)

[Main 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 8.1		X
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 8.2		Z

[Sub 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		Y

3.10 WORST CASE(CONDUCTED TEST)

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported.
(Worst case: DFT-S-OFDM)
- Modulation : All Modulation of operation were investigated and the worst case configuration results are reported.
(Worst case: PI/2 BPSK)
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: 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.
- SM-A266M/DS & additional models were tested and the worst case results are reported.
(Worst case : SM-A266M/DS)

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

4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacture	Serial No.	Due to Calibration	Calibration Interval
Precision Dipole Antenna	UHAP	Schwarzbeck	01273	03/10/2026	Biennial
Precision Dipole Antenna	UHAP	Schwarzbeck	01274	03/10/2026	Biennial
Horn Antenna(1~18 GHz)	BBHA 9120D	Schwarzbeck	02289	02/14/2026	Biennial
Horn Antenna(1~18 GHz)	BBHA 9120D	Schwarzbeck	9120D-1299	04/27/2025	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/20/2026	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170124	03/28/2025	Biennial
Loop Antenna(9 kHz~30 MHz)	FMZB1513	Rohde & Schwarz	1513-175	01/06/2027	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/09/2025	Biennial
Hybrid Antenna	VULB9160	Schwarzbeck	760	02/24/2025	Biennial
RF Switching System	FBSR-06B (1G HPF + LNA)	T&M SYSTEM	F3L1	05/14/2025	Annual
RF Switching System	FBSR-06B (3G HPF + LNA)	T&M SYSTEM	F3L2	05/14/2025	Annual
RF Switching System	FBSR-06B (6G HPF + LNA)	T&M SYSTEM	F3L3	05/14/2025	Annual
RF Switching System	FBSR-06B (LNA)	T&M SYSTEM	F3L4	05/14/2025	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/07/2025	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/26/2025	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	08/22/2025	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	02/29/2025	Annual
Chamber	SU-642	ESPEC	93008124	02/19/2025	Annual
Signal Analyzer(10 Hz~26.5 GHz)	N9020A	Agilent	MY51110063	04/04/2025	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/17/2025	Annual
Spectrum Analyzer (10 Hz~40 GHz)	FSV40	REOHDE & SCHWARZ	101436	02/13/2025	Annual
Signal & Spectrum Analyzer (2 Hz~67 GHz)	FSW67	REOHDE & SCHWARZ	101736	23/05/2025	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/05/2025	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/16/2025	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/14/2025	Annual
Signal Analyzer(5 Hz~40.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/17/2025	Annual
4-Way Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/10/2025	Annual
FCC LTE Mobile Conducted RF Automation Test Software	-	HCT CO., LTD.,	-	-	-

Note:

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

5. MEASUREMENT UNCERTAINTY

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

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

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

Parameter	Expanded Uncertainty ($\pm$ dB)
Block Edge	0.70 (Confidence level about 95 %, $k=2$)
Conducted Spurious Emissions	1.18 (Confidence level about 95 %, $k=2$)
Peak- to- Average Ratio	0.68 (Confidence level about 95 %, $k=2$)
Radiated Power	4.74 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.36 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.70 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.52 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.66 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (Above 40 GHz)	5.58 (Confidence level about 95 %, $k=2$)

6. SUMMARY OF TEST RESULTS

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(h)	< 43 + 10log10 (P[Watts]) at Band Edge and for all out-of-band emissions	PASS
Conducted Output Power	§ 2.1046	N/A	<u>See Note1</u>
Peak- to- Average Ratio	§ 27.50(d)(5)	< 13 dB	PASS
Frequency stability / variation of ambient temperature	§ 2.1055, § 27.54	Emission must remain in band	PASS

Note:

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

6.2 Test Condition: Radiated Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Equivalent Isotropic Radiated Power	§ 27.50(d)(4)	< 1 Watts max. EIRP	PASS
Radiated Spurious and Harmonic Emissions	§ 2.1053, § 27.53(h)	< 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 2 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
1712.5	Sub6 n66/ 5 MHz [15 kHz]	PI/2 BPSK	-20.09	12.99	10.12	2.06	H	< 1.00	0.127	21.05	1	12
		QPSK	-20.23	12.85	10.12	2.06	H		0.123	20.91		
		16-QAM	-21.05	12.03	10.12	2.06	H		0.102	20.09		
		64-QAM	-22.59	10.49	10.12	2.06	H		0.072	18.55		
		256-QAM	-24.53	8.55	10.12	2.06	H		0.046	16.61		
1745.0		PI/2 BPSK	-19.50	13.87	10.43	2.07	H		0.167	22.23	1	23
		QPSK	-19.53	13.84	10.43	2.07	H		0.166	22.20		
		16-QAM	-20.51	12.86	10.43	2.07	H		0.132	21.22		
		64-QAM	-22.04	11.33	10.43	2.07	H		0.093	19.69		
		256-QAM	-23.95	9.42	10.43	2.07	H		0.060	17.78		
1777.5		PI/2 BPSK	-19.62	13.74	10.50	2.09	H		0.164	22.15	1	12
		QPSK	-19.67	13.69	10.50	2.09	H		0.162	22.10		
		16-QAM	-20.65	12.71	10.50	2.09	H		0.129	21.12		
		64-QAM	-22.18	11.18	10.50	2.09	H		0.091	19.59		
		256-QAM	-24.23	9.13	10.50	2.09	H		0.057	17.54		

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
1715.0		PI/2 BPSK	-20.09	12.99	10.12	2.06	H	< 1.00	0.127	21.05	1	26
		QPSK	-20.18	12.90	10.12	2.06	H		0.125	20.96		
		16-QAM	-21.13	11.95	10.12	2.06	H		0.100	20.01		
		64-QAM	-22.76	10.32	10.12	2.06	H		0.069	18.38		
		256-QAM	-24.74	8.34	10.12	2.06	H		0.044	16.40		
1745.0	Sub6 n66/ 10 MHz [15 kHz]	PI/2 BPSK	-19.37	14.00	10.43	2.07	H	< 1.00	0.172	22.36	1	1
		QPSK	-19.41	13.96	10.43	2.07	H		0.171	22.32		
		16-QAM	-20.39	12.98	10.43	2.07	H		0.136	21.34		
		64-QAM	-21.76	11.61	10.43	2.07	H		0.099	19.97		
		256-QAM	-23.81	9.56	10.43	2.07	H		0.062	17.92		
1775.0		PI/2 BPSK	-19.84	13.56	10.49	2.09	H	< 1.00	0.157	21.96	1	1
		QPSK	-19.86	13.54	10.49	2.09	H		0.156	21.94		
		16-QAM	-20.78	12.62	10.49	2.09	H		0.126	21.02		
		64-QAM	-22.33	11.07	10.49	2.09	H		0.089	19.47		
		256-QAM	-24.27	9.13	10.49	2.09	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
1717.5	Sub6 n66/ 15 MHz [15 kHz]	PI/2 BPSK	-20.00	13.16	10.18	2.06	H	< 1.00	0.134	21.28	1	77
		QPSK	-20.05	13.11	10.18	2.06	H		0.133	21.23		
		16-QAM	-21.00	12.16	10.18	2.06	H		0.107	20.28		
		64-QAM	-22.61	10.55	10.18	2.06	H		0.074	18.67		
		256-QAM	-24.46	8.70	10.18	2.06	H		0.048	16.82		
1745.0		PI/2 BPSK	-19.46	13.91	10.43	2.07	H		0.169	22.27	1	1
		QPSK	-19.61	13.76	10.43	2.07	H		0.163	22.12		
		16-QAM	-20.68	12.69	10.43	2.07	H		0.127	21.05		
		64-QAM	-22.05	11.32	10.43	2.07	H		0.093	19.68		
		256-QAM	-24.04	9.33	10.43	2.07	H		0.059	17.69		
1772.5		PI/2 BPSK	-19.72	13.68	10.49	2.09	H		0.162	22.08	1	39
		QPSK	-19.84	13.56	10.49	2.09	H		0.157	21.96		
		16-QAM	-20.72	12.68	10.49	2.09	H		0.128	21.08		
		64-QAM	-22.27	11.13	10.49	2.09	H		0.090	19.53		
		256-QAM	-24.17	9.23	10.49	2.09	H		0.058	17.63		

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
1720.0		PI/2 BPSK	-19.76	13.40	10.18	2.06	H	< 1.00	0.142	21.52	1	104
		QPSK	-19.89	13.27	10.18	2.06	H		0.138	21.39		
		16-QAM	-20.83	12.33	10.18	2.06	H		0.111	20.45		
		64-QAM	-22.28	10.88	10.18	2.06	H		0.079	19.00		
		256-QAM	-24.26	8.90	10.18	2.06	H		0.050	17.02		
1745.0	Sub6 n66/ 20 MHz [15 kHz]	PI/2 BPSK	-19.43	13.94	10.43	2.07	H		0.170	22.30	1	53
		QPSK	-19.54	13.83	10.43	2.07	H		0.166	22.19		
		16-QAM	-20.37	13.00	10.43	2.07	H		0.137	21.36		
		64-QAM	-22.01	11.36	10.43	2.07	H		0.094	19.72		
		256-QAM	-23.94	9.43	10.43	2.07	H		0.060	17.79		
1770.0		PI/2 BPSK	-19.70	13.72	10.49	2.09	H		0.163	22.12	1	53
		QPSK	-19.74	13.68	10.49	2.09	H		0.162	22.08		
		16-QAM	-20.76	12.66	10.49	2.09	H		0.128	21.06		
		64-QAM	-22.25	11.17	10.49	2.09	H		0.091	19.57		
		256-QAM	-24.22	9.20	10.49	2.09	H		0.058	17.60		

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
1722.5		PI/2 BPSK	-19.89	13.39	10.23	2.07	H	< 1.00	0.143	21.55	1	131
		QPSK	-19.93	13.35	10.23	2.07	H		0.142	21.51		
		16-QAM	-20.88	12.40	10.23	2.07	H		0.114	20.56		
		64-QAM	-22.48	10.80	10.23	2.07	H		0.079	18.96		
		256-QAM	-24.35	8.93	10.23	2.07	H		0.051	17.09		
1745.0	Sub6 n66/ 25 MHz [15 kHz]	PI/2 BPSK	-19.77	13.60	10.43	2.07	H		0.157	21.96	1	66
		QPSK	-19.82	13.55	10.43	2.07	H		0.155	21.91		
		16-QAM	-20.45	12.92	10.43	2.07	H		0.134	21.28		
		64-QAM	-22.53	10.84	10.43	2.07	H		0.083	19.20		
		256-QAM	-24.29	9.08	10.43	2.07	H		0.055	17.44		
1767.5		PI/2 BPSK	-20.23	13.19	10.49	2.09	H		0.144	21.59	1	66
		QPSK	-20.29	13.13	10.49	2.09	H		0.142	21.53		
		16-QAM	-21.24	12.18	10.49	2.09	H		0.114	20.58		
		64-QAM	-22.78	10.64	10.49	2.09	H		0.080	19.04		
		256-QAM	-24.68	8.74	10.49	2.09	H		0.052	17.14		

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
1725.0	Sub6 n66/ 30 MHz [15 kHz]	PI/2 BPSK	-19.81	13.47	10.23	2.07	H	< 1.00	0.146	21.63	1	158
		QPSK	-19.86	13.42	10.23	2.07	H		0.144	21.58		
		16-QAM	-20.72	12.56	10.23	2.07	H		0.118	20.72		
		64-QAM	-22.27	11.01	10.23	2.07	H		0.083	19.17		
		256-QAM	-24.17	9.11	10.23	2.07	H		0.053	17.27		
1745.0		PI/2 BPSK	-19.63	13.74	10.43	2.07	H		0.162	22.10	1	80
		QPSK	-19.74	13.63	10.43	2.07	H		0.158	21.99		
		16-QAM	-20.62	12.75	10.43	2.07	H		0.129	21.11		
		64-QAM	-22.16	11.21	10.43	2.07	H		0.091	19.57		
		256-QAM	-24.15	9.22	10.43	2.07	H		0.057	17.58		
1765.0		PI/2 BPSK	-19.93	13.40	10.48	2.09	H	0.151	21.79	1	80	
		QPSK	-20.03	13.30	10.48	2.09	H	0.148	21.69			
		16-QAM	-21.04	12.29	10.48	2.09	H	0.117	20.68			
		64-QAM	-22.44	10.89	10.48	2.09	H	0.085	19.28			
		256-QAM	-24.49	8.84	10.48	2.09	H	0.053	17.23			

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
1730.0	Sub6 n66/ 40 MHz [15 kHz]	PI/2 BPSK	-19.79	13.61	10.29	2.08	H	< 1.00	0.152	21.82	1	108
		QPSK	-19.83	13.57	10.29	2.08	H		0.151	21.78		
		16-QAM	-20.77	12.63	10.29	2.08	H		0.121	20.84		
		64-QAM	-22.10	11.30	10.29	2.08	H		0.089	19.51		
		256-QAM	-24.19	9.21	10.29	2.08	H		0.055	17.42		
1745.0		PI/2 BPSK	-19.61	13.76	10.43	2.07	H		0.163	22.12	1	108
		QPSK	-19.65	13.72	10.43	2.07	H		0.161	22.08		
		16-QAM	-20.74	12.63	10.43	2.07	H		0.126	20.99		
		64-QAM	-22.10	11.27	10.43	2.07	H		0.092	19.63		
		256-QAM	-23.99	9.38	10.43	2.07	H		0.060	17.74		
1760.0		PI/2 BPSK	-19.96	13.26	10.48	2.09	H		0.146	21.65	1	1
		QPSK	-20.03	13.19	10.48	2.09	H		0.144	21.58		
		16-QAM	-21.00	12.22	10.48	2.09	H		0.115	20.61		
		64-QAM	-22.48	10.74	10.48	2.09	H		0.082	19.13		
		256-QAM	-24.45	8.77	10.48	2.09	H		0.052	17.16		

8.2 RADIATED SPURIOUS EMISSIONS

NR Band:	<u>N66</u>
Bandwidth:	<u>10 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
343000 (1715.0)	3 430.00	-57.73	11.80	-58.63	3.01	H	-49.84	-13.00	1	26
	5 145.00	-59.42	11.47	-53.06	3.78	H	-45.37	-13.00		
	6 860.00	-63.37	11.06	-51.97	4.39	H	-45.30	-13.00		
349000 (1745.0)	3 490.00	-61.26	12.04	-62.00	3.04	V	-53.00	-13.00	1	1
	5 235.00	-55.27	11.76	-49.94	3.78	H	-41.96	-13.00		
	6 980.00	-64.80	11.16	-52.02	4.48	V	-45.34	-13.00		
355000 (1775.0)	3 550.00	-60.08	12.04	-60.96	3.09	H	-52.01	-13.00	1	1
	5 325.00	-61.94	11.92	-56.44	3.78	H	-48.30	-13.00		
	7 100.00	-60.62	10.83	-46.36	4.48	H	-40.01	-13.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n66	5 MHz	1745.0	BPSK	25	0	5.18
			QPSK			5.49
			16-QAM			6.00
			64-QAM			5.94
			256-QAM			6.66
	10 MHz		BPSK	50		4.78
			QPSK			5.23
			16-QAM			5.81
			64-QAM			5.81
			256-QAM			6.64
	15 MHz		BPSK	75		4.17
			QPSK			5.07
			16-QAM			5.84
			64-QAM			5.78
			256-QAM			6.66
	20 MHz		BPSK	100		5.14
			QPSK			5.44
			16-QAM			5.92
			64-QAM			5.87
			256-QAM			6.71
	25 MHz		BPSK	128		4.11
			QPSK			5.16
			16-QAM			5.90
			64-QAM			5.86
			256-QAM			6.64
	30 MHz		BPSK	160		4.14
			QPSK			5.17
			16-QAM			5.88
			64-QAM			5.91
			256-QAM			6.58
	40 MHz		BPSK	216		4.13
			QPSK			5.14
			16-QAM			5.92
			64-QAM			5.90
			256-QAM			6.66

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 63 ~ 97.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n66	5 MHz	1745.0	BPSK	25	0	4.5178
			QPSK			4.5229
			16-QAM			4.5302
			64-QAM			4.5276
			256-QAM			4.5557
	10 MHz		BPSK	50		8.9916
			QPSK			9.0472
			16-QAM			9.0033
			64-QAM			8.9943
			256-QAM			8.9572
	15 MHz		BPSK	75		13.437
			QPSK			13.446
			16-QAM			13.441
			64-QAM			13.438
			256-QAM			13.436
	20 MHz		BPSK	100		17.930
			QPSK			17.917
			16-QAM			17.846
			64-QAM			17.913
			256-QAM			17.896
	25 MHz		BPSK	128		22.905
			QPSK			22.944
			16-QAM			22.967
			64-QAM			23.034
			256-QAM			22.914
	30 MHz		BPSK	160		28.762
			QPSK			28.674
			16-QAM			28.646
			64-QAM			28.658
			256-QAM			28.680
	40 MHz		BPSK	216		38.801
			QPSK			38.781
			16-QAM			38.822
			64-QAM			38.817
			256-QAM			38.757

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 98 ~ 132.

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 n66	5	1712.5	9.7308	30.815	-63.336	-32.521	-13.00
		1745.0	9.6909	30.815	-63.487	-32.672	
		1777.5	9.2523	30.815	-62.903	-32.088	
	10	1715.0	5.1945	30.815	-62.056	-31.241	
		1745.0	8.2553	30.815	-62.943	-32.128	
		1775.0	9.6311	30.815	-62.558	-31.743	
	15	1717.5	5.9821	30.815	-62.479	-31.664	
		1745.0	10.0000	30.815	-62.212	-31.397	
		1772.5	4.9552	30.200	-62.754	-32.554	
	20	1720.0	8.8834	30.815	-62.708	-31.893	
		1745.0	8.8634	30.815	-62.728	-31.913	
		1770.0	9.9502	30.815	-63.032	-32.217	
	25	1722.5	8.2752	30.815	-62.735	-31.920	
		1745.0	3.7887	30.200	-62.990	-32.790	
		1767.5	9.3619	30.815	-62.571	-31.756	
	30	1725.0	6.0220	30.815	-62.424	-31.609	
		1745.0	9.6112	30.815	-63.422	-32.607	
		1765.0	9.7109	30.815	-62.529	-31.714	
	40	1730.0	5.2144	30.815	-62.524	-31.709	
		1745.0	1.6850	30.815	-55.655	-24.840	
		1760.0	8.8834	30.815	-63.674	-32.859	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 133 ~ 174.
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	27.494
1 – 5	30.200
5 – 10	30.815
10 – 15	31.340
15 – 20	31.713
Above 20	32.355

8.6 BAND EDGE

- Plots of the EUT's Band Edge are shown Page 175 ~ 216.

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 5 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1712.5	100 %	+20(Ref)	1712 500 000	0.0	0.000 000	0.000
	100 %	-30	1712 500 000	0.2	0.000 000	0.000
	100 %	-20	1712 500 000	0.2	0.000 000	0.000
	100 %	-10	1712 499 999	-0.9	0.000 000	-0.001
	100 %	0	1712 500 000	0.0	0.000 000	0.000
	100 %	+10	1712 500 000	-0.2	0.000 000	0.000
	100 %	+30	1712 500 001	0.7	0.000 000	0.000
	100 %	+40	1712 500 000	-0.1	0.000 000	0.000
	100 %	+50	1712 500 000	0.2	0.000 000	0.000
	Batt. Endpoint	+20	1712 500 000	-0.3	0.000 000	0.000
1777.5	100 %	+20(Ref)	1777 500 000	0.0	0.000 000	0.000
	100 %	-30	1777 499 999	-0.8	0.000 000	0.000
	100 %	-20	1777 499 999	-0.8	0.000 000	0.000
	100 %	-10	1777 499 998	-1.2	0.000 000	-0.001
	100 %	0	1777 500 000	0.1	0.000 000	0.000
	100 %	+10	1777 499 999	-0.6	0.000 000	0.000
	100 %	+30	1777 500 000	0.3	0.000 000	0.000
	100 %	+40	1777 499 999	-0.8	0.000 000	0.000
	100 %	+50	1777 499 999	-0.6	0.000 000	0.000
	Batt. Endpoint	+20	1777 499 999	-0.7	0.000 000	0.000

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1715.0	100 %	+20(Ref)	1715 000 000	0.0	0.000 000	0.000
	100 %	-30	1715 000 000	-0.1	0.000 000	0.000
	100 %	-20	1715 000 000	0.1	0.000 000	0.000
	100 %	-10	1715 000 000	0.3	0.000 000	0.000
	100 %	0	1715 000 000	0.6	0.000 000	0.000
	100 %	+10	1715 000 000	0.2	0.000 000	0.000
	100 %	+30	1714 999 999	-0.6	0.000 000	0.000
	100 %	+40	1715 000 000	0.1	0.000 000	0.000
	100 %	+50	1714 999 999	-0.8	0.000 000	0.000
	Batt. Endpoint	+20	1715 000 000	0.1	0.000 000	0.000
1775.0	100 %	+20(Ref)	1775 000 000	0.0	0.000 000	0.000
	100 %	-30	1775 000 000	0.2	0.000 000	0.000
	100 %	-20	1775 000 001	0.8	0.000 000	0.000
	100 %	-10	1775 000 000	-0.1	0.000 000	0.000
	100 %	0	1775 000 000	0.0	0.000 000	0.000
	100 %	+10	1775 000 001	0.9	0.000 000	0.001
	100 %	+30	1775 000 000	-0.1	0.000 000	0.000
	100 %	+40	1775 000 000	0.2	0.000 000	0.000
	100 %	+50	1775 000 001	0.9	0.000 000	0.001
	Batt. Endpoint	+20	1775 000 000	0.0	0.000 000	0.000

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1717.5	100 %	+20(Ref)	1717 499 998	0.0	0.000 000	0.000
	100 %	-30	1717 499 996	-1.5	0.000 000	-0.001
	100 %	-20	1717 499 996	-1.5	0.000 000	-0.001
	100 %	-10	1717 499 997	-0.5	0.000 000	0.000
	100 %	0	1717 499 997	-1.2	0.000 000	-0.001
	100 %	+10	1717 499 997	-1.4	0.000 000	-0.001
	100 %	+30	1717 499 996	-1.6	0.000 000	-0.001
	100 %	+40	1717 499 997	-1.0	0.000 000	-0.001
	100 %	+50	1717 499 997	-1.2	0.000 000	-0.001
	Batt. Endpoint	+20	1717 499 996	-1.5	0.000 000	-0.001
1772.5	100 %	+20(Ref)	1772 500 000	0.0	0.000 000	0.000
	100 %	-30	1772 500 003	2.7	0.000 000	0.002
	100 %	-20	1772 500 002	1.2	0.000 000	0.001
	100 %	-10	1772 499 999	-1.6	0.000 000	-0.001
	100 %	0	1772 500 001	0.4	0.000 000	0.000
	100 %	+10	1772 500 001	0.6	0.000 000	0.000
	100 %	+30	1772 500 001	0.9	0.000 000	0.000
	100 %	+40	1772 500 000	-0.4	0.000 000	0.000
	100 %	+50	1772 500 003	2.1	0.000 000	0.001
	Batt. Endpoint	+20	1772 500 002	1.7	0.000 000	0.001

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1720.0	100 %	+20(Ref)	1720 000 000	0.0	0.000 000	0.000
	100 %	-30	1720 000 000	-0.1	0.000 000	0.000
	100 %	-20	1720 000 000	0.1	0.000 000	0.000
	100 %	-10	1719 999 999	-0.2	0.000 000	0.000
	100 %	0	1720 000 001	0.8	0.000 000	0.000
	100 %	+10	1719 999 999	-0.4	0.000 000	0.000
	100 %	+30	1720 000 000	0.5	0.000 000	0.000
	100 %	+40	1720 000 000	0.2	0.000 000	0.000
	100 %	+50	1720 000 000	0.8	0.000 000	0.000
	Batt. Endpoint	+20	1720 000 000	0.1	0.000 000	0.000
1770.0	100 %	+20(Ref)	1770 000 001	0.0	0.000 000	0.000
	100 %	-30	1770 000 002	0.3	0.000 000	0.000
	100 %	-20	1770 000 000	-1.5	0.000 000	-0.001
	100 %	-10	1769 999 999	-2.2	0.000 000	-0.001
	100 %	0	1770 000 000	-1.5	0.000 000	-0.001
	100 %	+10	1770 000 001	-0.5	0.000 000	0.000
	100 %	+30	1770 000 002	1.0	0.000 000	0.001
	100 %	+40	1770 000 001	-0.7	0.000 000	0.000
	100 %	+50	1769 999 998	-3.7	0.000 000	-0.002
	Batt. Endpoint	+20	1770 000 002	0.3	0.000 000	0.000

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1722.5	100 %	+20(Ref)	1722 500 000	0.0	0.000 000	0.000
	100 %	-30	1722 500 000	-0.4	0.000 000	0.000
	100 %	-20	1722 500 000	0.4	0.000 000	0.000
	100 %	-10	1722 500 002	1.6	0.000 000	0.001
	100 %	0	1722 500 000	-0.2	0.000 000	0.000
	100 %	+10	1722 500 001	0.6	0.000 000	0.000
	100 %	+30	1722 499 998	-1.5	0.000 000	-0.001
	100 %	+40	1722 499 999	-1.1	0.000 000	-0.001
	100 %	+50	1722 500 001	0.7	0.000 000	0.000
	Batt. Endpoint	+20	1722 500 000	0.2	0.000 000	0.000
1767.5	100 %	+20(Ref)	1767 500 000	0.0	0.000 000	0.000
	100 %	-30	1767 500 001	0.4	0.000 000	0.000
	100 %	-20	1767 499 999	-1.4	0.000 000	-0.001
	100 %	-10	1767 500 000	-0.3	0.000 000	0.000
	100 %	0	1767 499 999	-1.8	0.000 000	-0.001
	100 %	+10	1767 500 000	-0.2	0.000 000	0.000
	100 %	+30	1767 499 999	-0.9	0.000 000	-0.001
	100 %	+40	1767 500 001	0.9	0.000 000	0.001
	100 %	+50	1767 500 001	0.7	0.000 000	0.000
	Batt. Endpoint	+20	1767 500 001	0.4	0.000 000	0.000

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1725.0	100 %	+20(Ref)	1725 000 001	0.0	0.000 000	0.000
	100 %	-30	1725 000 000	-0.6	0.000 000	0.000
	100 %	-20	1725 000 000	-0.3	0.000 000	0.000
	100 %	-10	1725 000 001	0.2	0.000 000	0.000
	100 %	0	1725 000 001	0.8	0.000 000	0.000
	100 %	+10	1725 000 001	0.6	0.000 000	0.000
	100 %	+30	1725 000 002	1.1	0.000 000	0.001
	100 %	+40	1725 000 000	-0.5	0.000 000	0.000
	100 %	+50	1725 000 000	-0.3	0.000 000	0.000
	Batt. Endpoint	+20	1725 000 000	-0.4	0.000 000	0.000
1765.0	100 %	+20(Ref)	1765 000 001	0.0	0.000 000	0.000
	100 %	-30	1765 000 001	0.3	0.000 000	0.000
	100 %	-20	1765 000 001	-0.2	0.000 000	0.000
	100 %	-10	1765 000 002	1.2	0.000 000	0.001
	100 %	0	1765 000 001	0.4	0.000 000	0.000
	100 %	+10	1765 000 001	0.5	0.000 000	0.000
	100 %	+30	1765 000 003	1.8	0.000 000	0.001
	100 %	+40	1765 000 002	0.8	0.000 000	0.000
	100 %	+50	1765 000 001	0.5	0.000 000	0.000
	Batt. Endpoint	+20	1765 000 002	1.0	0.000 000	0.001

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1730.0	100 %	+20(Ref)	1730 000 001	0.0	0.000 000	0.000
	100 %	-30	1730 000 002	1.5	0.000 000	0.001
	100 %	-20	1730 000 001	0.2	0.000 000	0.000
	100 %	-10	1730 000 002	1.5	0.000 000	0.001
	100 %	0	1730 000 001	0.5	0.000 000	0.000
	100 %	+10	1730 000 001	0.1	0.000 000	0.000
	100 %	+30	1730 000 000	-0.5	0.000 000	0.000
	100 %	+40	1730 000 002	1.4	0.000 000	0.001
	100 %	+50	1730 000 000	-0.8	0.000 000	0.000
	Batt. Endpoint	+20	1730 000 000	-0.4	0.000 000	0.000
1760.0	100 %	+20(Ref)	1760 000 002	0.0	0.000 000	0.000
	100 %	-30	1760 000 001	-0.1	0.000 000	0.000
	100 %	-20	1760 000 004	2.2	0.000 000	0.001
	100 %	-10	1760 000 002	0.5	0.000 000	0.000
	100 %	0	1760 000 003	1.1	0.000 000	0.001
	100 %	+10	1760 000 003	1.0	0.000 000	0.001
	100 %	+30	1760 000 002	0.1	0.000 000	0.000
	100 %	+40	1760 000 001	-0.3	0.000 000	0.000
	100 %	+50	1760 000 000	-1.2	0.000 000	-0.001
	Batt. Endpoint	+20	1760 000 003	1.5	0.000 000	0.001

9. TEST DATA (Sub 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
1712.5		PI/2 BPSK	-21.42	11.66	10.12	2.06	H	< 1.00	0.094	19.72	1	12
		QPSK	-21.54	11.54	10.12	2.06	H		0.091	19.60		
		16-QAM	-22.44	10.64	10.12	2.06	H		0.074	18.70		
		64-QAM	-23.98	9.10	10.12	2.06	H		0.052	17.16		
		256-QAM	-26.18	6.90	10.12	2.06	H		0.031	14.96		
1745.0	Sub6 n66/ 5 MHz [15 kHz]	PI/2 BPSK	-22.01	11.36	10.43	2.07	H	< 1.00	0.094	19.72	1	23
		QPSK	-22.06	11.31	10.43	2.07	H		0.093	19.67		
		16-QAM	-23.19	10.18	10.43	2.07	H		0.071	18.54		
		64-QAM	-24.61	8.76	10.43	2.07	H		0.052	17.12		
		256-QAM	-26.49	6.88	10.43	2.07	H		0.033	15.24		
1777.5		PI/2 BPSK	-22.63	10.73	10.50	2.09	H	< 1.00	0.082	19.14	1	23
		QPSK	-22.64	10.72	10.50	2.09	H		0.082	19.13		
		16-QAM	-23.58	9.78	10.50	2.09	H		0.066	18.19		
		64-QAM	-25.18	8.18	10.50	2.09	H		0.046	16.59		
		256-QAM	-27.05	6.31	10.50	2.09	H		0.030	14.72		

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
1715.0		PI/2 BPSK	-21.55	11.53	10.12	2.06	H	< 1.00	0.091	19.59	1	26
		QPSK	-21.63	11.45	10.12	2.06	H		0.089	19.51		
		16-QAM	-22.62	10.46	10.12	2.06	H		0.071	18.52		
		64-QAM	-24.04	9.04	10.12	2.06	H		0.051	17.10		
		256-QAM	-26.08	7.00	10.12	2.06	H		0.032	15.06		
1745.0	Sub6 n66/ 10 MHz [15 kHz]	PI/2 BPSK	-21.87	11.50	10.43	2.07	H	< 1.00	0.097	19.86	1	1
		QPSK	-21.88	11.49	10.43	2.07	H		0.097	19.85		
		16-QAM	-23.03	10.34	10.43	2.07	H		0.074	18.70		
		64-QAM	-24.55	8.82	10.43	2.07	H		0.052	17.18		
		256-QAM	-26.43	6.94	10.43	2.07	H		0.034	15.30		
1775.0		PI/2 BPSK	-22.30	11.10	10.49	2.09	H	< 1.00	0.089	19.50	1	1
		QPSK	-22.39	11.01	10.49	2.09	H		0.087	19.41		
		16-QAM	-23.30	10.10	10.49	2.09	H		0.071	18.50		
		64-QAM	-24.67	8.73	10.49	2.09	H		0.052	17.13		
		256-QAM	-26.93	6.47	10.49	2.09	H		0.031	14.87		

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
1717.5	Sub6 n66/ 15 MHz [15 kHz]	PI/2 BPSK	-21.52	11.64	10.18	2.06	H	< 1.00	0.095	19.76	1	39
		QPSK	-21.71	11.45	10.18	2.06	H		0.091	19.57		
		16-QAM	-22.67	10.49	10.18	2.06	H		0.073	18.61		
		64-QAM	-24.11	9.05	10.18	2.06	H		0.052	17.17		
		256-QAM	-26.06	7.10	10.18	2.06	H		0.033	15.22		
1745.0		PI/2 BPSK	-22.04	11.33	10.43	2.07	H		0.093	19.69	1	39
		QPSK	-22.06	11.31	10.43	2.07	H		0.093	19.67		
		16-QAM	-23.16	10.21	10.43	2.07	H		0.072	18.57		
		64-QAM	-24.65	8.72	10.43	2.07	H		0.051	17.08		
		256-QAM	-26.49	6.88	10.43	2.07	H		0.033	15.24		
1772.5		PI/2 BPSK	-22.33	11.07	10.49	2.09	H		0.089	19.47	1	1
		QPSK	-22.46	10.94	10.49	2.09	H		0.086	19.34		
		16-QAM	-23.16	10.24	10.49	2.09	H		0.073	18.64		
		64-QAM	-24.83	8.57	10.49	2.09	H		0.050	16.97		
		256-QAM	-26.81	6.59	10.49	2.09	H		0.032	14.99		

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
1720.0	Sub6 n66/ 20 MHz [15 kHz]	PI/2 BPSK	-21.51	11.65	10.18	2.06	H	< 1.00	0.095	19.77	1	53
		QPSK	-21.53	11.63	10.18	2.06	H		0.095	19.75		
		16-QAM	-22.53	10.63	10.18	2.06	H		0.075	18.75		
		64-QAM	-23.94	9.22	10.18	2.06	H		0.054	17.34		
		256-QAM	-26.13	7.03	10.18	2.06	H		0.033	15.15		
1745.0		PI/2 BPSK	-21.98	11.39	10.43	2.07	H		0.094	19.75	1	53
		QPSK	-22.10	11.27	10.43	2.07	H		0.092	19.63		
		16-QAM	-22.95	10.42	10.43	2.07	H		0.076	18.78		
		64-QAM	-24.61	8.76	10.43	2.07	H		0.052	17.12		
		256-QAM	-26.51	6.86	10.43	2.07	H		0.033	15.22		
1770.0		PI/2 BPSK	-22.21	11.21	10.49	2.09	H	0.091	19.61	1	53	
		QPSK	-22.25	11.17	10.49	2.09	H	0.091	19.57			
		16-QAM	-23.26	10.16	10.49	2.09	H	0.072	18.56			
		64-QAM	-24.83	8.59	10.49	2.09	H	0.050	16.99			
		256-QAM	-26.85	6.57	10.49	2.09	H	0.031	14.97			

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
1722.5		PI/2 BPSK	-21.49	11.79	10.23	2.07	H	< 1.00	0.099	19.95	1	66
		QPSK	-21.56	11.72	10.23	2.07	H		0.097	19.88		
		16-QAM	-22.57	10.71	10.23	2.07	H		0.077	18.87		
		64-QAM	-24.24	9.04	10.23	2.07	H		0.053	17.20		
		256-QAM	-26.16	7.12	10.23	2.07	H		0.034	15.28		
1745.0	Sub6 n66/ 25 MHz [15 kHz]	PI/2 BPSK	-21.93	11.44	10.43	2.07	H		0.095	19.80	1	1
		QPSK	-21.96	11.41	10.43	2.07	H		0.095	19.77		
		16-QAM	-22.94	10.43	10.43	2.07	H		0.076	18.79		
		64-QAM	-24.30	9.07	10.43	2.07	H		0.055	17.43		
		256-QAM	-26.60	6.77	10.43	2.07	H		0.033	15.13		
1767.5		PI/2 BPSK	-21.98	11.44	10.49	2.09	H		0.096	19.84	1	1
		QPSK	-22.03	11.39	10.49	2.09	H		0.095	19.79		
		16-QAM	-23.15	10.27	10.49	2.09	H		0.074	18.67		
		64-QAM	-24.66	8.76	10.49	2.09	H		0.052	17.16		
		256-QAM	-26.57	6.85	10.49	2.09	H		0.034	15.25		

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
1725.0	Sub6 n66/ 30 MHz [15 kHz]	PI/2 BPSK	-21.56	11.72	10.23	2.07	H	< 1.00	0.098	19.90	1	80
		QPSK	-21.54	11.74	10.23	2.07	H		0.097	19.88		
		16-QAM	-22.77	10.51	10.23	2.07	H		0.074	18.67		
		64-QAM	-24.17	9.11	10.23	2.07	H		0.053	17.27		
		256-QAM	-26.04	7.24	10.23	2.07	H		0.035	15.40		
1745.0		PI/2 BPSK	-21.97	11.40	10.43	2.07	H		0.095	19.76	1	80
		QPSK	-22.11	11.26	10.43	2.07	H		0.092	19.62		
		16-QAM	-22.97	10.40	10.43	2.07	H		0.075	18.76		
		64-QAM	-24.53	8.84	10.43	2.07	H		0.052	17.20		
		256-QAM	-26.39	6.98	10.43	2.07	H		0.034	15.34		
1765.0		PI/2 BPSK	-22.01	11.32	10.48	2.09	H	0.094	19.71	1	80	
		QPSK	-22.07	11.26	10.48	2.09	H	0.092	19.65			
		16-QAM	-23.08	10.25	10.48	2.09	H	0.073	18.64			
		64-QAM	-24.67	8.66	10.48	2.09	H	0.051	17.05			
		256-QAM	-26.60	6.73	10.48	2.09	H	0.033	15.12			

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
1730.0	Sub6 n66/ 40 MHz [15 kHz]	PI/2 BPSK	-21.81	11.59	10.29	2.08	H	<1.00	0.095	19.80	1	108
		QPSK	-21.86	11.54	10.29	2.08	H		0.094	19.75		
		16-QAM	-22.75	10.65	10.29	2.08	H		0.077	18.86		
		64-QAM	-24.35	9.05	10.29	2.08	H		0.053	17.26		
		256-QAM	-26.32	7.08	10.29	2.08	H		0.034	15.29		
1745.0		PI/2 BPSK	-21.97	11.40	10.43	2.07	H		0.095	19.76	1	108
		QPSK	-22.01	11.36	10.43	2.07	H		0.094	19.72		
		16-QAM	-23.07	10.30	10.43	2.07	H		0.074	18.66		
		64-QAM	-24.64	8.73	10.43	2.07	H		0.051	17.09		
		256-QAM	-26.51	6.86	10.43	2.07	H		0.033	15.22		
1760.0		PI/2 BPSK	-22.08	11.14	10.48	2.09	H		0.090	19.53	1	108
		QPSK	-22.19	11.03	10.48	2.09	H		0.088	19.42		
		16-QAM	-23.25	9.97	10.48	2.09	H		0.069	18.36		
		64-QAM	-24.59	8.63	10.48	2.09	H		0.050	17.02		
		256-QAM	-26.70	6.52	10.48	2.09	H		0.031	14.91		

9.2 RADIATED SPURIOUS EMISSIONS

■ NR Band:	<u>N66</u>
■ Bandwidth:	<u>25 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
344500 (1722.5)	3 445.00	-59.88	11.90	-60.72	3.05	H	-51.87	-13.00	1	66
	5 167.50	-62.72	11.56	-57.18	3.78	H	-49.40	-13.00		
	6 890.00	-63.52	11.13	-51.39	4.42	H	-44.68	-13.00		
349000 (1745.0)	3 490.00	-61.27	12.04	-62.01	3.04	H	-53.01	-13.00	1	1
	5 235.00	-61.93	11.76	-56.60	3.78	H	-48.62	-13.00		
	6 980.00	-64.11	11.16	-51.33	4.48	H	-44.65	-13.00		
353500 (1767.5)	3 535.00	-60.46	12.04	-62.01	3.05	H	-53.02	-13.00	1	1
	5 302.50	-62.26	11.90	-56.38	3.83	H	-48.31	-13.00		
	7 070.00	-64.14	10.92	-49.69	4.50	H	-43.27	-13.00		

9.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n66	5 MHz	1745.0	BPSK	25	0	4.23
			QPSK			5.25
			16-QAM			6.00
			64-QAM			6.43
			256-QAM			6.76
	10 MHz		BPSK	50		4.12
			QPSK			5.17
			16-QAM			5.89
			64-QAM			6.26
			256-QAM			6.52
	15 MHz		BPSK	75		4.28
			QPSK			5.09
			16-QAM			5.92
			64-QAM			6.16
			256-QAM			6.51
	20 MHz		BPSK	100		4.01
			QPSK			5.11
			16-QAM			5.87
			64-QAM			6.23
			256-QAM			6.56
	25 MHz		BPSK	128		4.57
			QPSK			5.18
			16-QAM			5.89
			64-QAM			6.23
			256-QAM			6.54
	30 MHz		BPSK	160		4.32
			QPSK			5.20
			16-QAM			5.99
			64-QAM			6.24
			256-QAM			6.54
	40 MHz		BPSK	216		4.21
			QPSK			5.28
			16-QAM			6.06
			64-QAM			6.31
			256-QAM			6.66

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 218 ~ 252.

9.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n66	5 MHz	1745.0	BPSK	25	0	4.5304
			QPSK			4.5407
			16-QAM			4.5555
			64-QAM			4.5435
			256-QAM			4.5373
	10 MHz		BPSK	50		8.9952
			QPSK			9.0171
			16-QAM			8.9970
			64-QAM			8.9901
			256-QAM			8.9865
	15 MHz		BPSK	75		13.411
			QPSK			13.473
			16-QAM			13.451
			64-QAM			13.466
			256-QAM			13.416
	20 MHz		BPSK	100		17.932
			QPSK			17.862
			16-QAM			17.880
			64-QAM			17.909
			256-QAM			17.923
	25 MHz		BPSK	128		23.042
			QPSK			22.956
			16-QAM			22.959
			64-QAM			22.958
			256-QAM			22.925
	30 MHz		BPSK	160		28.712
			QPSK			28.755
			16-QAM			28.704
			64-QAM			28.707
			256-QAM			28.761
	40 MHz		BPSK	216		38.783
			QPSK			38.811
			16-QAM			38.734
			64-QAM			38.848
			256-QAM			38.811

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 253 ~ 287.

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 n66	5	1712.5	6.0319	30.815	-63.006	-32.191	-13.00
		1745.0	8.3450	30.815	-63.473	-32.658	
		1777.5	6.0120	30.815	-63.082	-32.267	
	10	1715.0	3.2503	30.200	-63.376	-33.176	
		1745.0	8.8834	30.815	-63.111	-32.296	
		1775.0	9.1426	30.815	-63.074	-32.259	
	15	1717.5	5.9921	30.815	-62.824	-32.009	
		1745.0	5.2044	30.815	-63.057	-32.242	
		1772.5	9.2124	30.815	-62.533	-31.718	
	20	1720.0	9.4118	30.815	-62.648	-31.833	
		1745.0	6.2912	30.815	-61.994	-31.179	
		1770.0	4.5364	30.200	-61.994	-31.794	
	25	1722.5	1.6850	30.200	-55.849	-25.649	
		1745.0	4.0080	30.200	-63.032	-32.832	
		1767.5	4.0579	30.200	-62.640	-32.440	
	30	1725.0	8.0459	30.815	-62.926	-32.111	
		1745.0	6.0220	30.815	-62.406	-31.591	
		1765.0	3.7588	30.200	-63.512	-33.312	
	40	1730.0	5.9921	30.815	-63.218	-32.403	
		1745.0	1.6850	30.815	-59.029	-28.214	
		1760.0	9.6810	30.200	-62.718	-32.518	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 288 ~ 329.
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	27.494
1 – 5	30.200
5 – 10	30.815
10 – 15	31.340
15 – 20	31.713
Above 20	32.355

9.6 BAND EDGE

- Plots of the EUT's Band Edge are shown Page 330 ~ 371.

9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 5 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1712.5	100 %	+20(Ref)	1712 500 000	0.0	0.000 000	0.000
	100 %	-30	1712 500 001	0.8	0.000 000	0.000
	100 %	-20	1712 500 000	-0.5	0.000 000	0.000
	100 %	-10	1712 500 000	-0.2	0.000 000	0.000
	100 %	0	1712 500 000	-0.4	0.000 000	0.000
	100 %	+10	1712 500 002	1.6	0.000 000	0.001
	100 %	+30	1712 500 001	0.6	0.000 000	0.000
	100 %	+40	1712 500 001	1.4	0.000 000	0.001
	100 %	+50	1712 500 000	0.1	0.000 000	0.000
	Batt. Endpoint	+20	1712 500 000	-0.2	0.000 000	0.000
1777.5	100 %	+20(Ref)	1777 499 999	0.0	0.000 000	0.000
	100 %	-30	1777 500 000	0.4	0.000 000	0.000
	100 %	-20	1777 499 999	-0.7	0.000 000	0.000
	100 %	-10	1777 499 999	-0.1	0.000 000	0.000
	100 %	0	1777 500 000	0.3	0.000 000	0.000
	100 %	+10	1777 499 999	-0.7	0.000 000	0.000
	100 %	+30	1777 499 999	-0.3	0.000 000	0.000
	100 %	+40	1777 499 999	-0.6	0.000 000	0.000
	100 %	+50	1777 499 999	-0.4	0.000 000	0.000
	Batt. Endpoint	+20	1777 500 000	0.2	0.000 000	0.000

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1715.0	100 %	+20(Ref)	1715 000 001	0.0	0.000 000	0.000
	100 %	-30	1715 000 001	0.7	0.000 000	0.000
	100 %	-20	1714 999 999	-1.1	0.000 000	-0.001
	100 %	-10	1715 000 000	-0.1	0.000 000	0.000
	100 %	0	1715 000 001	0.6	0.000 000	0.000
	100 %	+10	1715 000 001	0.4	0.000 000	0.000
	100 %	+30	1715 000 000	-0.5	0.000 000	0.000
	100 %	+40	1715 000 001	0.5	0.000 000	0.000
	100 %	+50	1715 000 000	-0.1	0.000 000	0.000
	Batt. Endpoint	+20	1715 000 002	1.1	0.000 000	0.001
1775.0	100 %	+20(Ref)	1775 000 000	0.0	0.000 000	0.000
	100 %	-30	1775 000 001	0.8	0.000 000	0.000
	100 %	-20	1775 000 000	-0.3	0.000 000	0.000
	100 %	-10	1775 000 000	-0.1	0.000 000	0.000
	100 %	0	1775 000 000	0.5	0.000 000	0.000
	100 %	+10	1775 000 001	1.1	0.000 000	0.001
	100 %	+30	1775 000 000	0.5	0.000 000	0.000
	100 %	+40	1775 000 000	-0.1	0.000 000	0.000
	100 %	+50	1775 000 000	0.5	0.000 000	0.000
	Batt. Endpoint	+20	1775 000 001	0.8	0.000 000	0.000

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1717.5	100 %	+20(Ref)	1717 499 999	0.0	0.000 000	0.000
	100 %	-30	1717 499 999	-0.3	0.000 000	0.000
	100 %	-20	1717 499 998	-1.3	0.000 000	-0.001
	100 %	-10	1717 499 999	-0.7	0.000 000	0.000
	100 %	0	1717 499 999	-0.5	0.000 000	0.000
	100 %	+10	1717 499 999	-0.7	0.000 000	0.000
	100 %	+30	1717 499 999	-0.1	0.000 000	0.000
	100 %	+40	1717 499 999	-0.5	0.000 000	0.000
	100 %	+50	1717 499 998	-1.4	0.000 000	-0.001
	Batt. Endpoint	+20	1717 499 998	-0.9	0.000 000	-0.001
1772.5	100 %	+20(Ref)	1772 499 999	0.0	0.000 000	0.000
	100 %	-30	1772 499 999	0.3	0.000 000	0.000
	100 %	-20	1772 499 998	-0.7	0.000 000	0.000
	100 %	-10	1772 499 999	0.1	0.000 000	0.000
	100 %	0	1772 500 000	0.9	0.000 000	0.000
	100 %	+10	1772 499 999	0.3	0.000 000	0.000
	100 %	+30	1772 500 000	0.6	0.000 000	0.000
	100 %	+40	1772 499 997	-1.4	0.000 000	-0.001
	100 %	+50	1772 499 999	0.5	0.000 000	0.000
	Batt. Endpoint	+20	1772 499 999	0.3	0.000 000	0.000

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1720.0	100 %	+20(Ref)	1720 000 000	0.0	0.000 000	0.000
	100 %	-30	1719 999 999	-0.9	0.000 000	-0.001
	100 %	-20	1720 000 000	0.1	0.000 000	0.000
	100 %	-10	1720 000 000	0.3	0.000 000	0.000
	100 %	0	1720 000 000	-0.3	0.000 000	0.000
	100 %	+10	1720 000 000	-0.3	0.000 000	0.000
	100 %	+30	1720 000 000	-0.1	0.000 000	0.000
	100 %	+40	1720 000 000	-0.1	0.000 000	0.000
	100 %	+50	1720 000 001	0.7	0.000 000	0.000
	Batt. Endpoint	+20	1719 999 999	-0.9	0.000 000	0.000
1770.0	100 %	+20(Ref)	1769 999 998	0.0	0.000 000	0.000
	100 %	-30	1769 999 998	0.2	0.000 000	0.000
	100 %	-20	1769 999 998	0.2	0.000 000	0.000
	100 %	-10	1769 999 998	0.2	0.000 000	0.000
	100 %	0	1769 999 998	-0.2	0.000 000	0.000
	100 %	+10	1769 999 997	-1.3	0.000 000	-0.001
	100 %	+30	1769 999 997	-0.8	0.000 000	0.000
	100 %	+40	1769 999 997	-1.5	0.000 000	-0.001
	100 %	+50	1769 999 997	-0.7	0.000 000	0.000
	Batt. Endpoint	+20	1769 999 998	-0.6	0.000 000	0.000

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1722.5	100 %	+20(Ref)	1722 500 001	0.0	0.000 000	0.000
	100 %	-30	1722 500 001	-0.2	0.000 000	0.000
	100 %	-20	1722 500 000	-1.0	0.000 000	-0.001
	100 %	-10	1722 500 001	-0.4	0.000 000	0.000
	100 %	0	1722 500 002	0.8	0.000 000	0.000
	100 %	+10	1722 500 001	0.0	0.000 000	0.000
	100 %	+30	1722 500 000	-1.1	0.000 000	-0.001
	100 %	+40	1722 500 001	0.1	0.000 000	0.000
	100 %	+50	1722 500 001	-0.2	0.000 000	0.000
	Batt. Endpoint	+20	1722 500 001	-0.1	0.000 000	0.000
1767.5	100 %	+20(Ref)	1767 500 001	0.0	0.000 000	0.000
	100 %	-30	1767 500 001	0.0	0.000 000	0.000
	100 %	-20	1767 500 001	-0.6	0.000 000	0.000
	100 %	-10	1767 500 001	-0.6	0.000 000	0.000
	100 %	0	1767 500 001	-0.3	0.000 000	0.000
	100 %	+10	1767 500 002	0.3	0.000 000	0.000
	100 %	+30	1767 500 001	0.0	0.000 000	0.000
	100 %	+40	1767 500 001	-0.5	0.000 000	0.000
	100 %	+50	1767 500 001	-0.3	0.000 000	0.000
	Batt. Endpoint	+20	1767 500 002	0.8	0.000 000	0.000

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

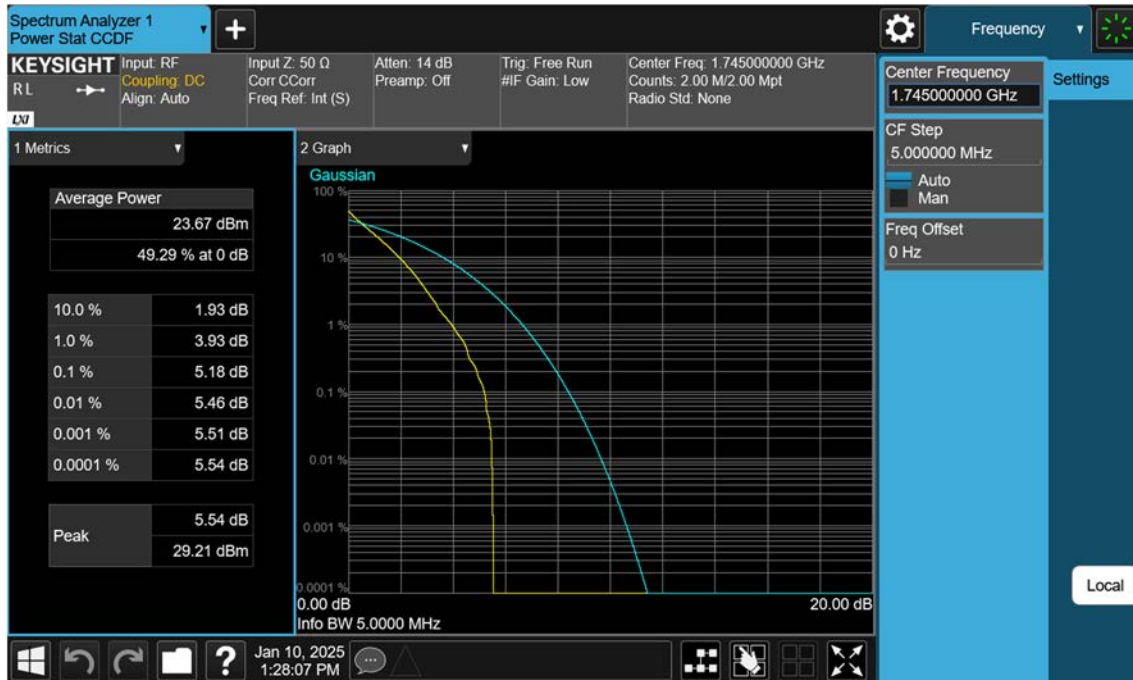
Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1725.0	100 %	+20(Ref)	1724 999 998	0.0	0.000 000	0.000
	100 %	-30	1724 999 996	-1.5	0.000 000	-0.001
	100 %	-20	1724 999 996	-1.5	0.000 000	-0.001
	100 %	-10	1724 999 996	-1.3	0.000 000	-0.001
	100 %	0	1724 999 996	-1.3	0.000 000	-0.001
	100 %	+10	1724 999 996	-1.2	0.000 000	-0.001
	100 %	+30	1724 999 997	-0.6	0.000 000	0.000
	100 %	+40	1724 999 995	-2.1	0.000 000	-0.001
	100 %	+50	1724 999 996	-1.3	0.000 000	-0.001
	Batt. Endpoint	+20	1724 999 996	-2.0	0.000 000	-0.001
1765.0	100 %	+20(Ref)	1765 000 000	0.0	0.000 000	0.000
	100 %	-30	1765 000 001	0.9	0.000 000	0.001
	100 %	-20	1764 999 999	-0.4	0.000 000	0.000
	100 %	-10	1765 000 000	0.5	0.000 000	0.000
	100 %	0	1765 000 001	1.1	0.000 000	0.001
	100 %	+10	1765 000 001	0.8	0.000 000	0.000
	100 %	+30	1765 000 002	1.8	0.000 000	0.001
	100 %	+40	1765 000 000	0.0	0.000 000	0.000
	100 %	+50	1765 000 000	0.3	0.000 000	0.000
	Batt. Endpoint	+20	1765 000 000	0.6	0.000 000	0.000

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

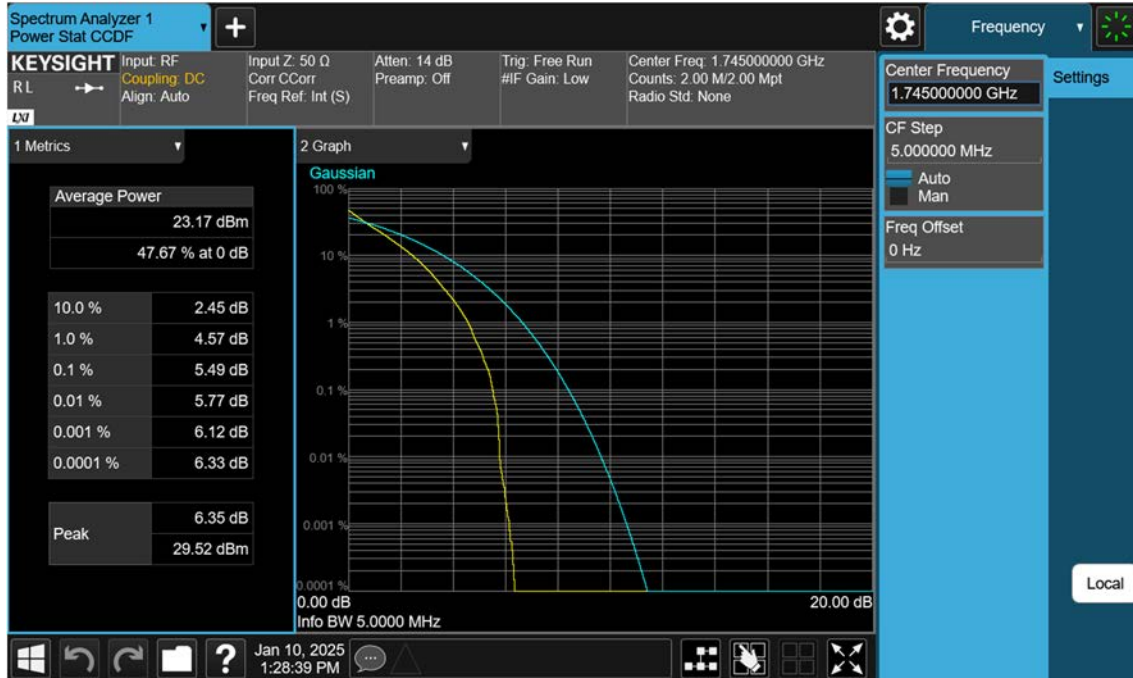
Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
1730.0	100 %	+20(Ref)	1730 000 000	0.0	0.000 000	0.000
	100 %	-30	1730 000 000	-0.2	0.000 000	0.000
	100 %	-20	1730 000 000	-0.5	0.000 000	0.000
	100 %	-10	1730 000 000	-0.4	0.000 000	0.000
	100 %	0	1729 999 999	-0.6	0.000 000	0.000
	100 %	+10	1730 000 000	-0.5	0.000 000	0.000
	100 %	+30	1730 000 000	-0.5	0.000 000	0.000
	100 %	+40	1730 000 000	-0.6	0.000 000	0.000
	100 %	+50	1730 000 000	-0.1	0.000 000	0.000
	Batt. Endpoint	+20	1729 999 999	-1.2	0.000 000	-0.001
1760.0	100 %	+20(Ref)	1760 000 000	0.0	0.000 000	0.000
	100 %	-30	1759 999 999	-0.9	0.000 000	-0.001
	100 %	-20	1760 000 001	0.4	0.000 000	0.000
	100 %	-10	1760 000 000	0.0	0.000 000	0.000
	100 %	0	1760 000 000	-0.5	0.000 000	0.000
	100 %	+10	1760 000 001	0.8	0.000 000	0.000
	100 %	+30	1759 999 999	-0.9	0.000 000	-0.001
	100 %	+40	1760 000 001	0.4	0.000 000	0.000
	100 %	+50	1760 000 000	0.2	0.000 000	0.000
	Batt. Endpoint	+20	1760 000 001	0.3	0.000 000	0.000

10. TEST PLOTS (Main 2 ANT)

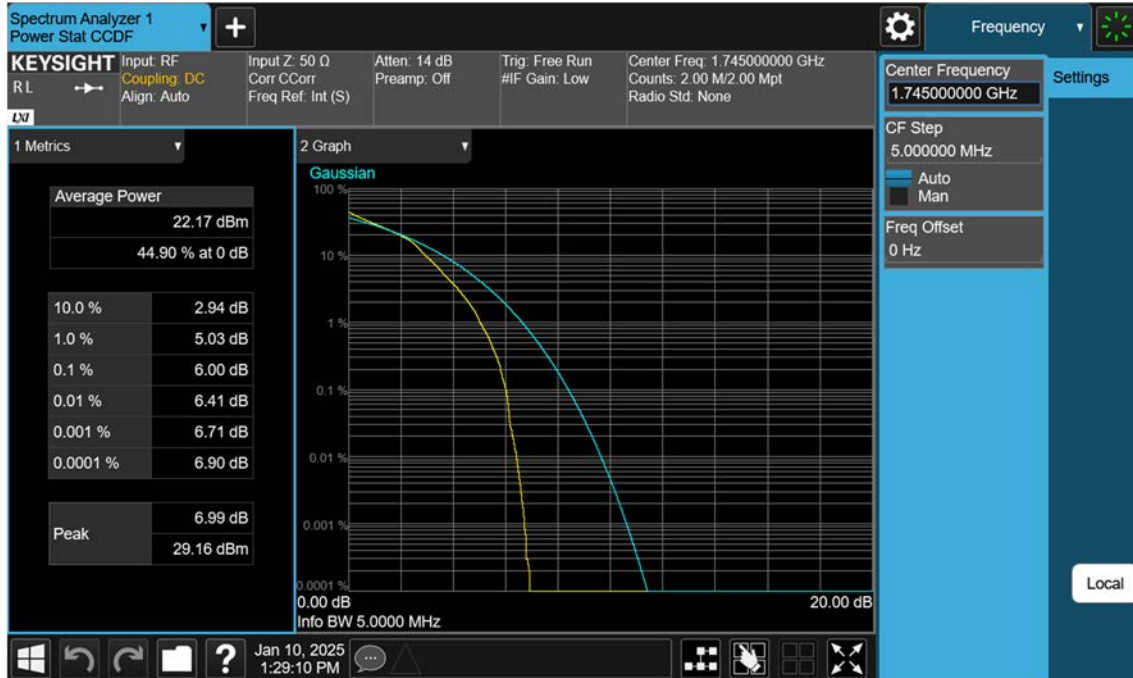
NR66_5 M_PAR_Mid_BPSK_FullRB



NR66_5 M_PAR_Mid_QPSK_FullRB



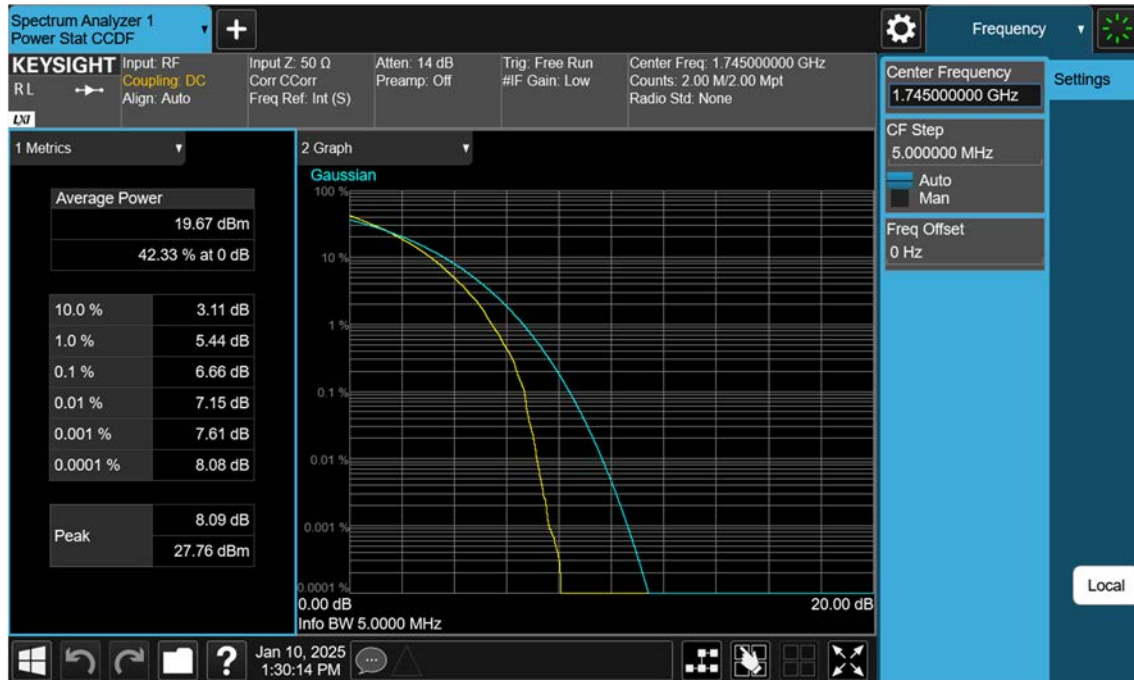
NR66_5 M_PAR_Mid_16QAM_FullRB



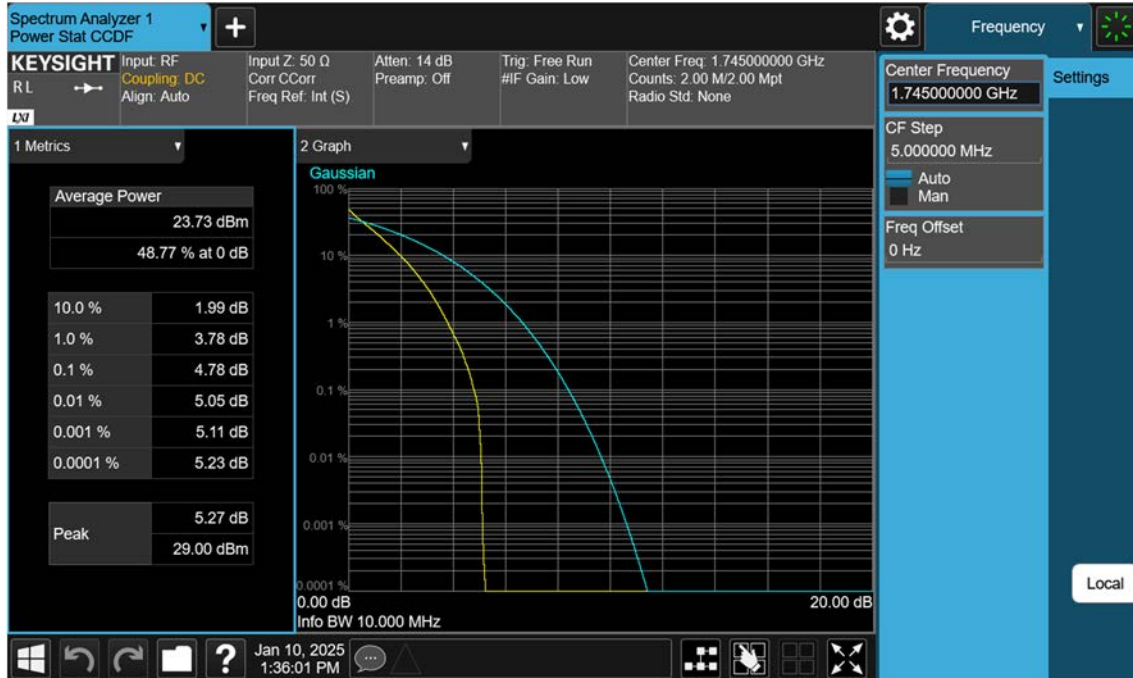
NR66_5 M_PAR_Mid_64QAM_FullRB



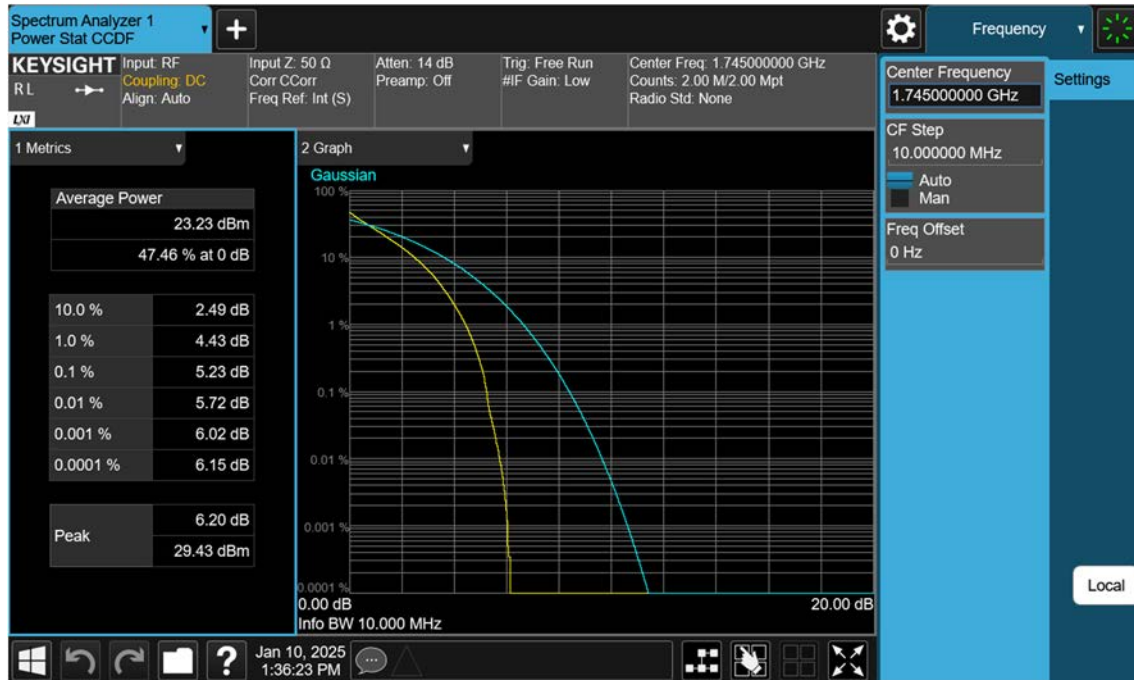
NR66_5 M_PAR_Mid_256QAM_FullRB



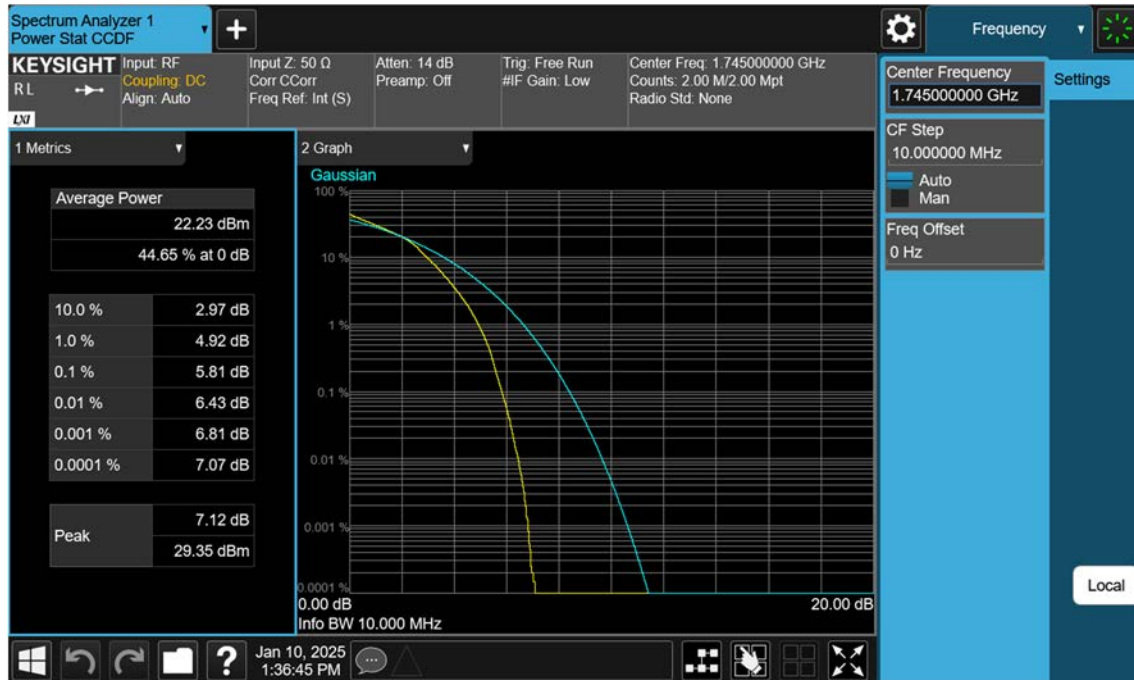
NR66_10 M_PAR_Mid_BPSK_FullRB



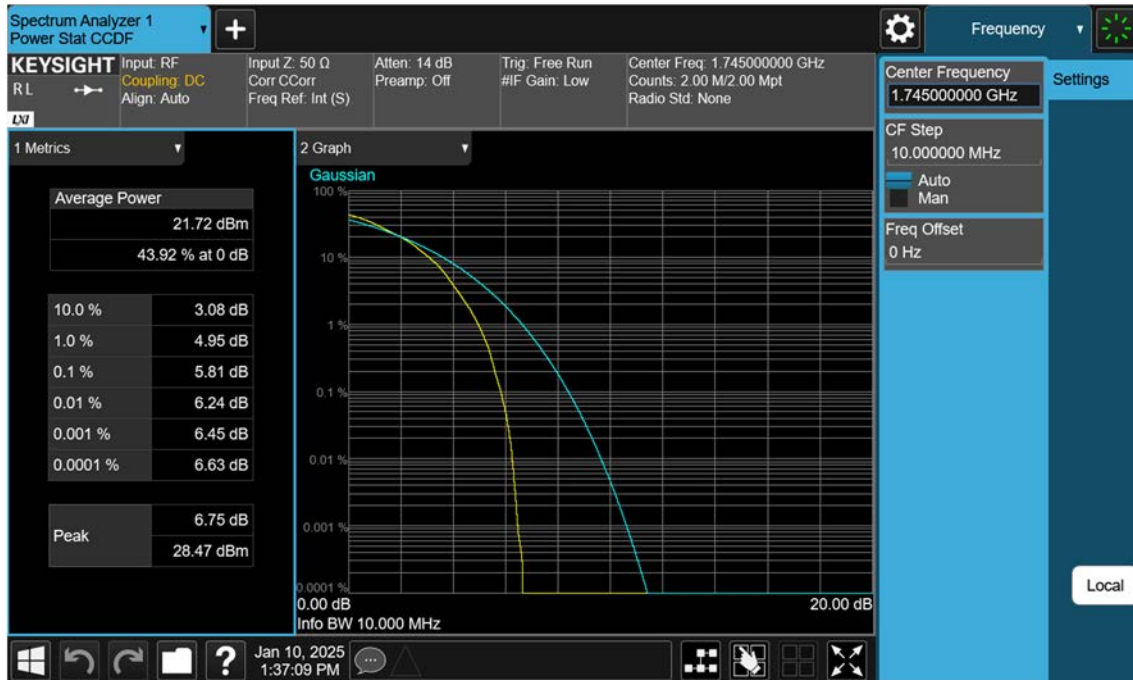
NR66_10 M_PAR_Mid_QPSK_FullRB



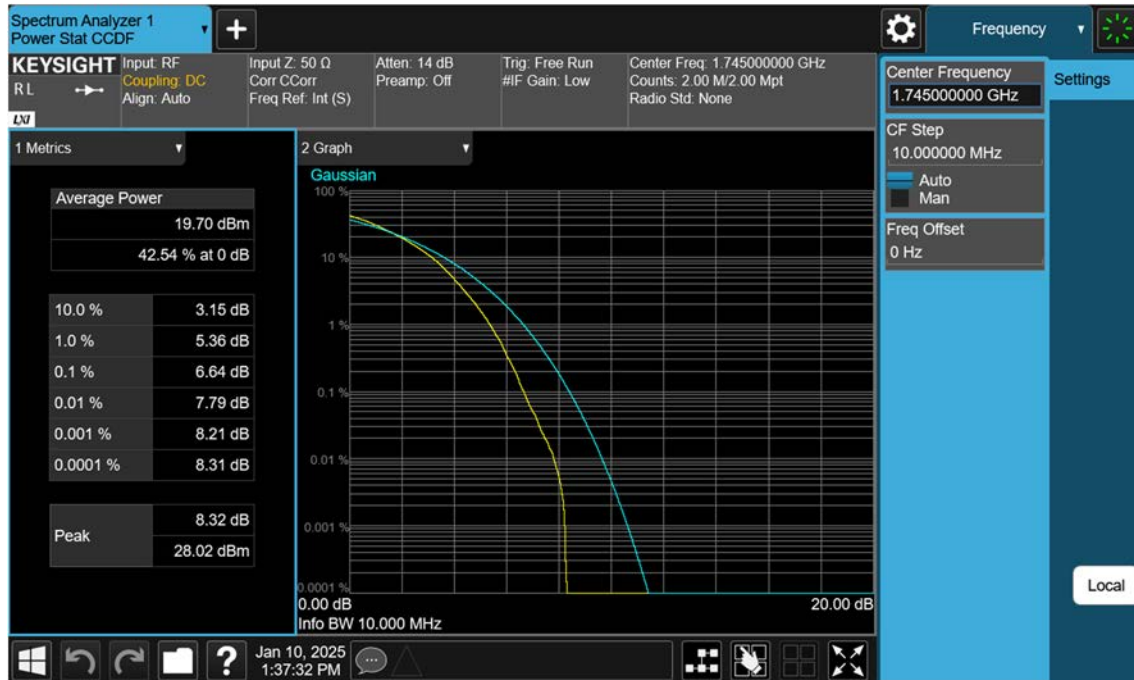
NR66_10 M_PAR_Mid_16QAM_FullRB



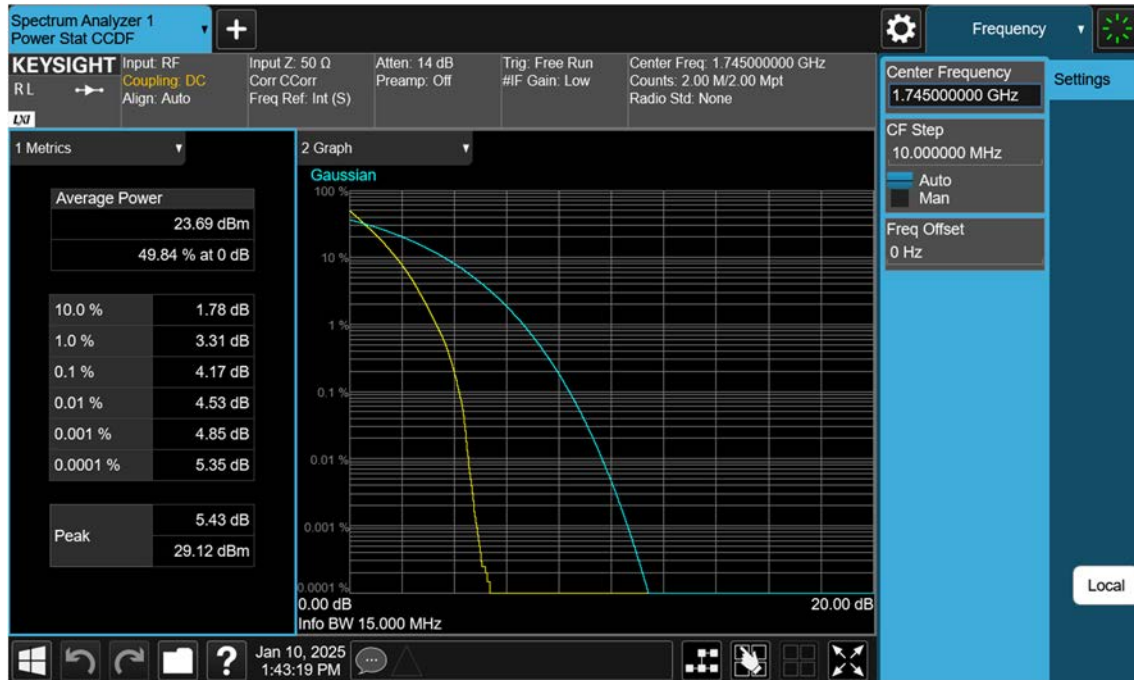
NR66_10 M_PAR_Mid_64QAM_FullRB



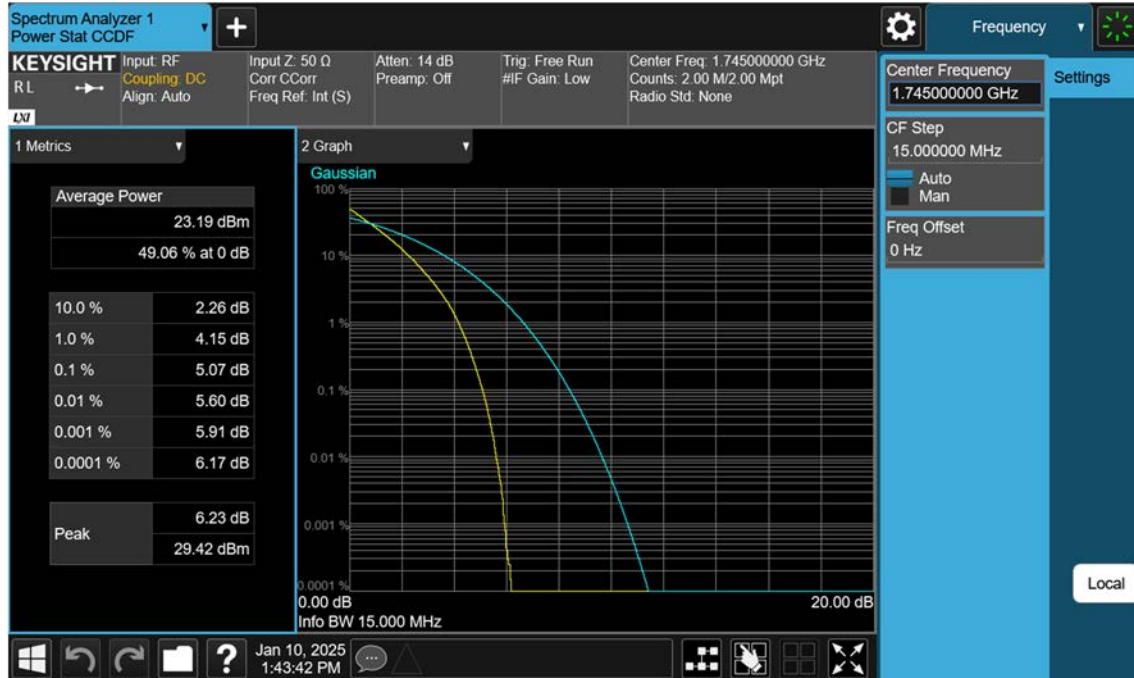
NR66_10 M_PAR_Mid_256QAM_FullRB



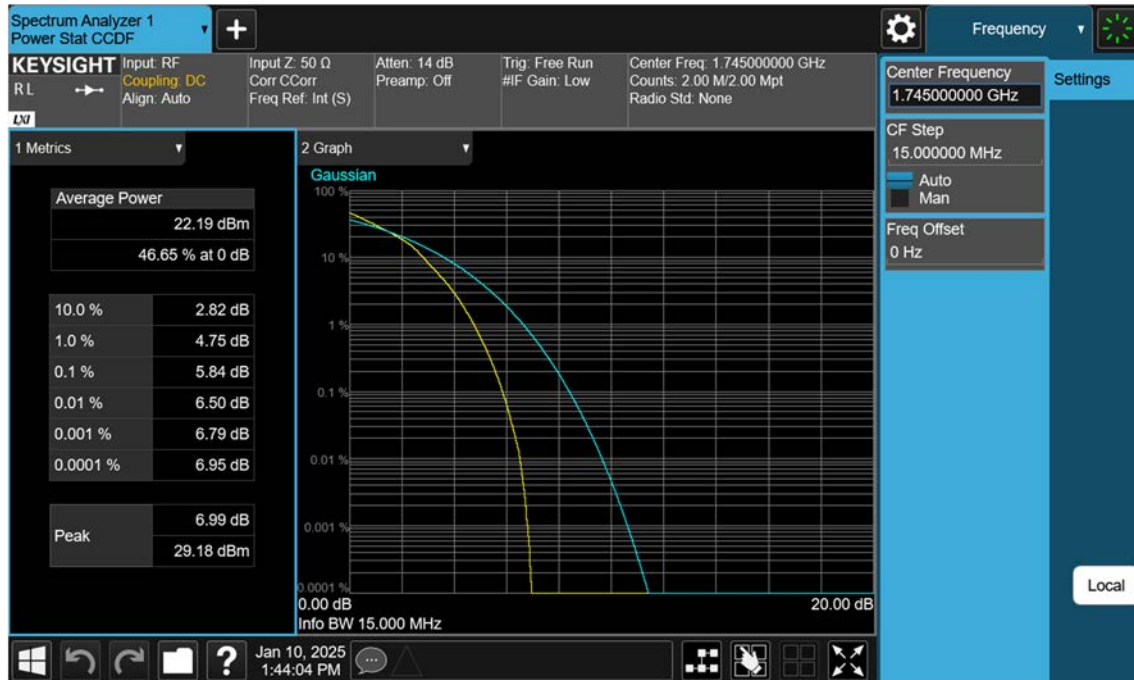
NR66_15 M_PAR_Mid_BPSK_FullRB



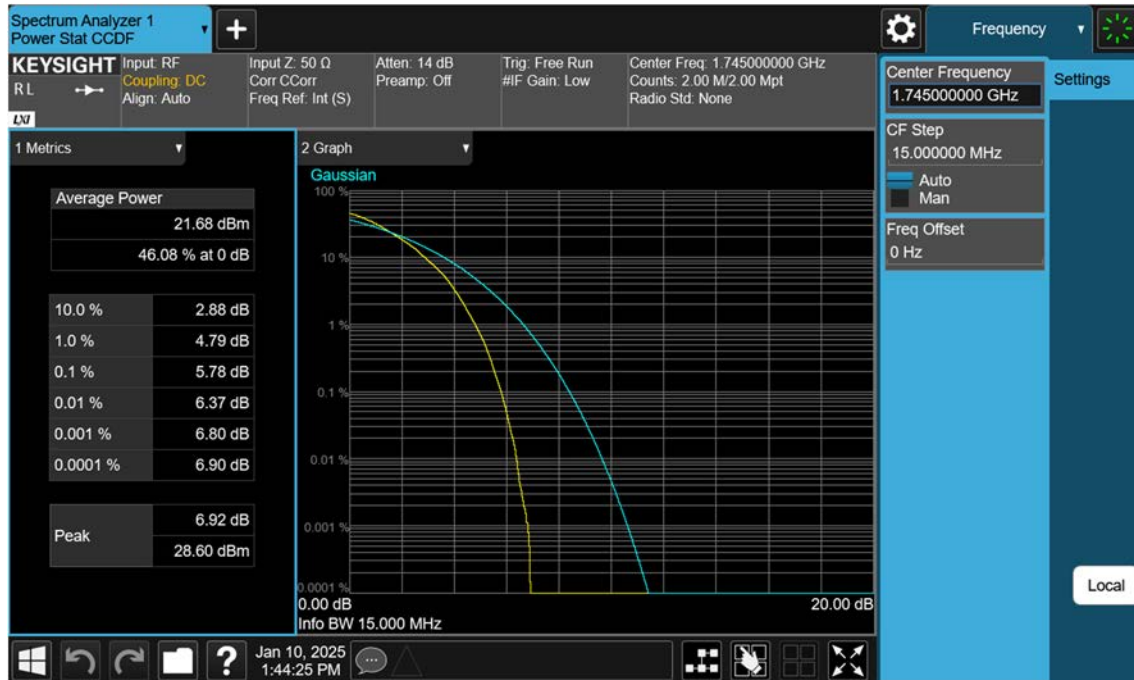
NR66_15 M_PAR_Mid_QPSK_FullRB



NR66_15 M_PAR_Mid_16QAM_FullRB



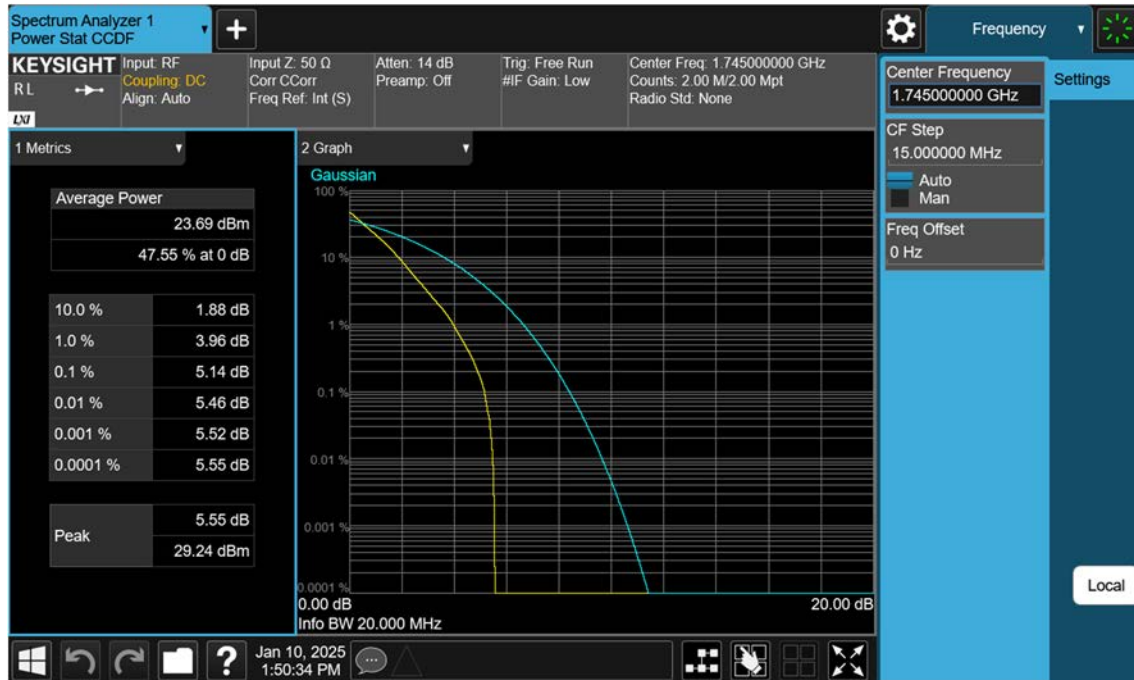
NR66_15 M_PAR_Mid_64QAM_FullRB



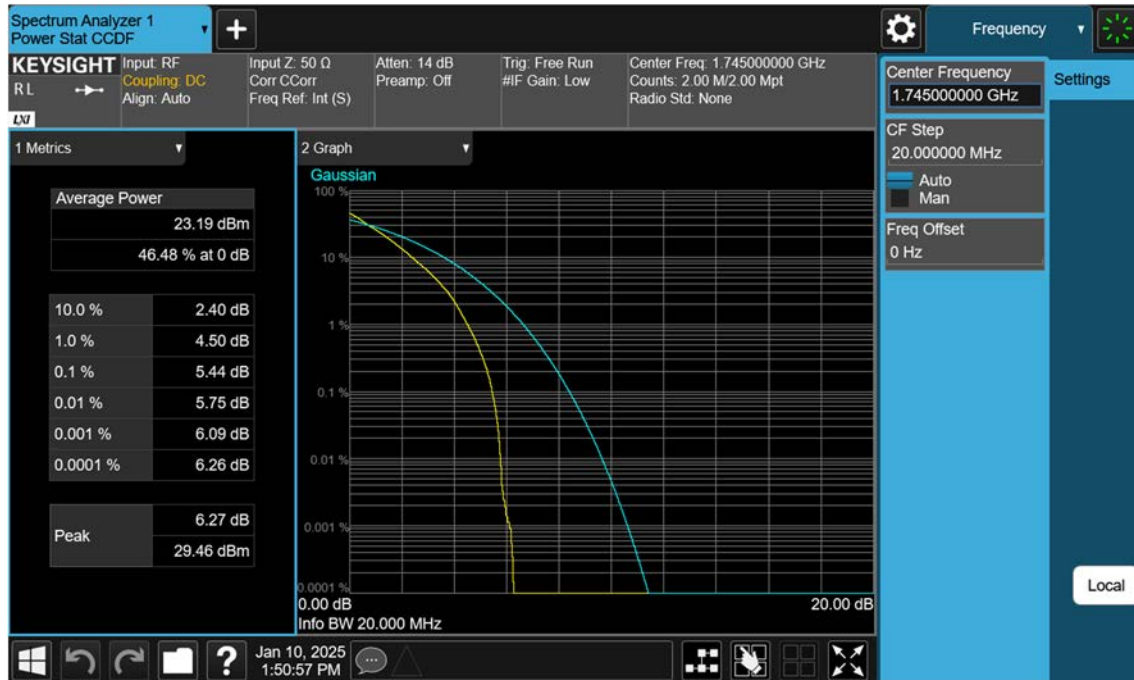
NR66_15 M_PAR_Mid_256QAM_FullRB



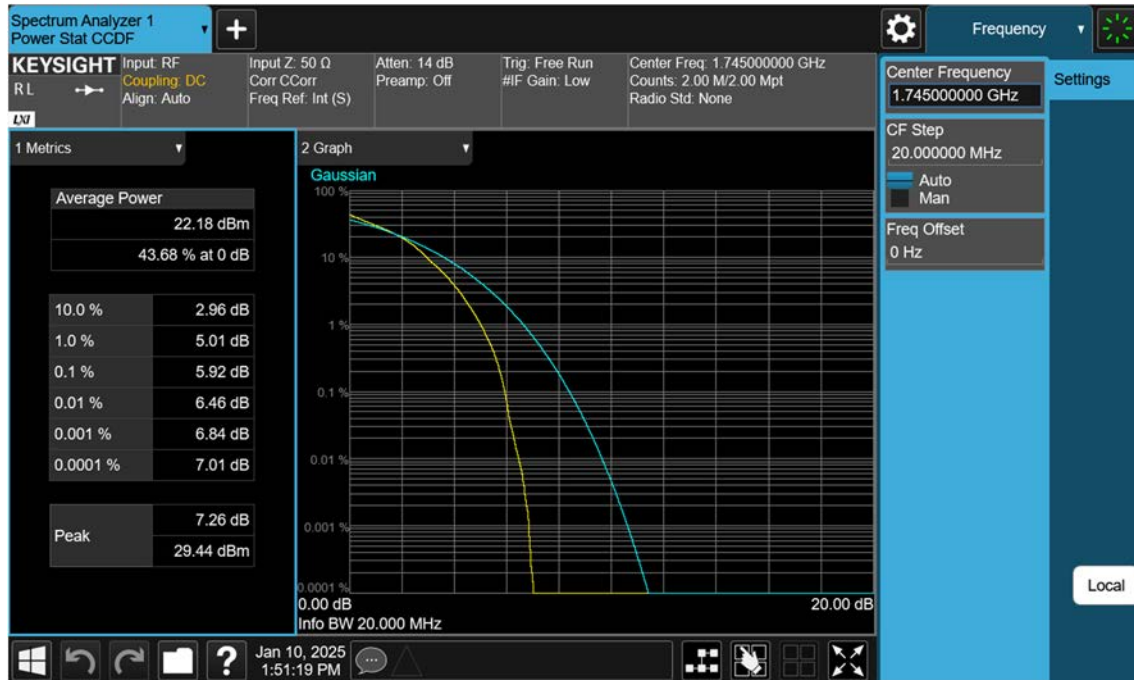
NR66_20 M_PAR_Mid_BPSK_FullRB



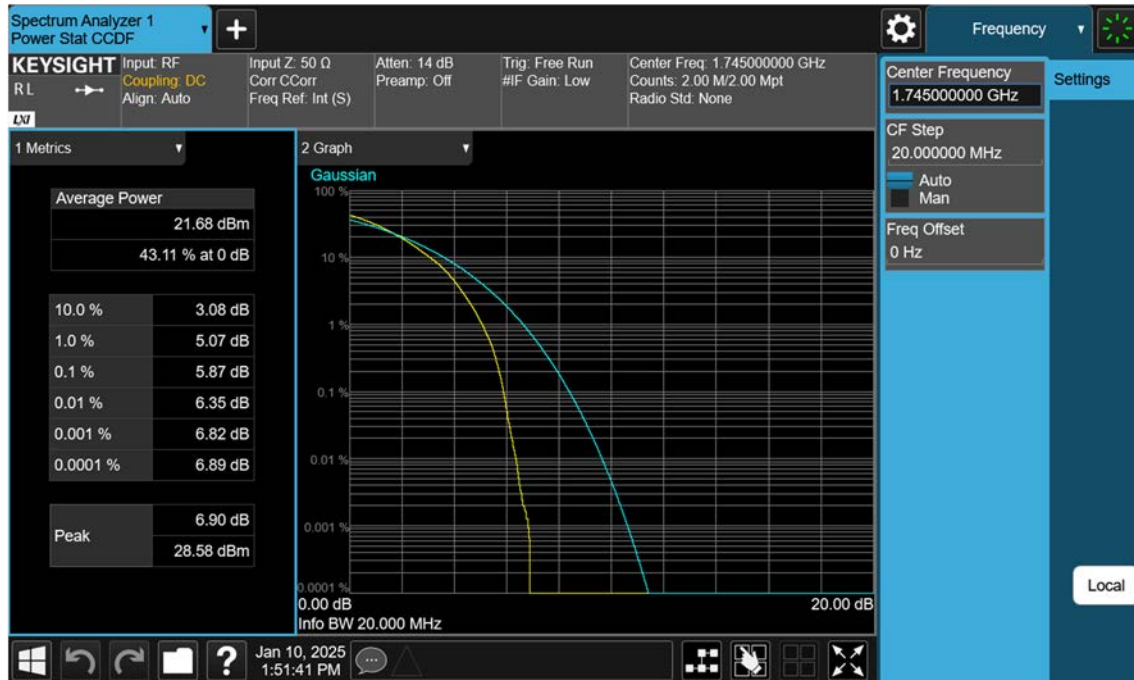
NR66_20 M_PAR_Mid_QPSK_FullRB



NR66_20 M_PAR_Mid_16QAM_FullRB



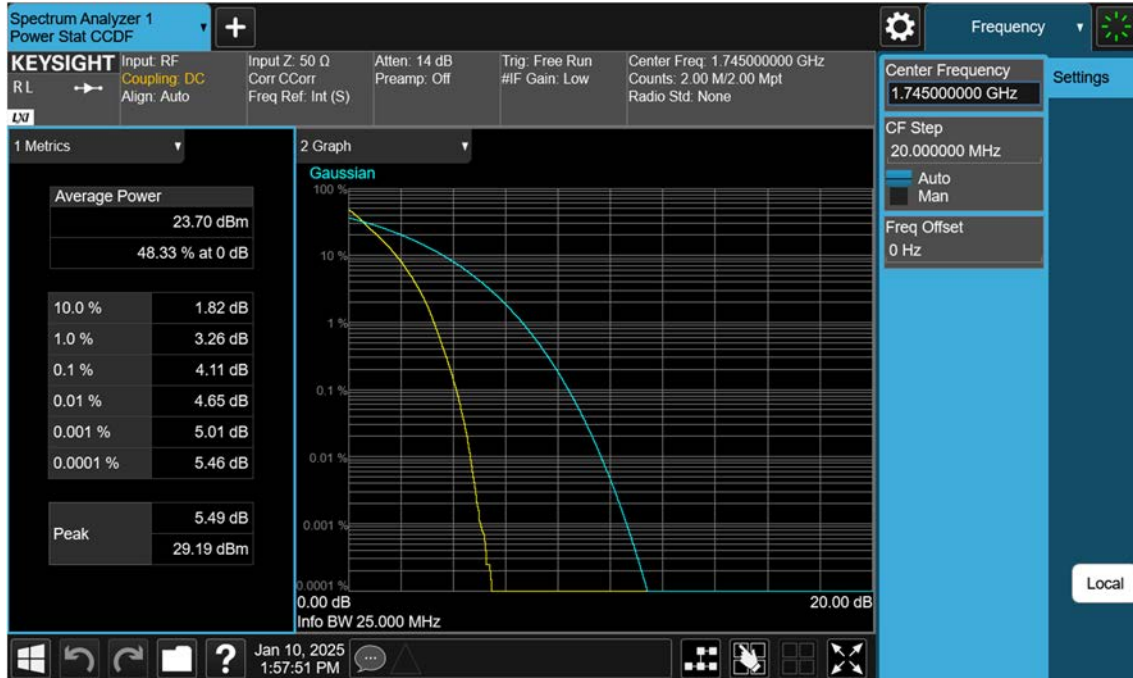
NR66_20 M_PAR_Mid_64QAM_FullRB



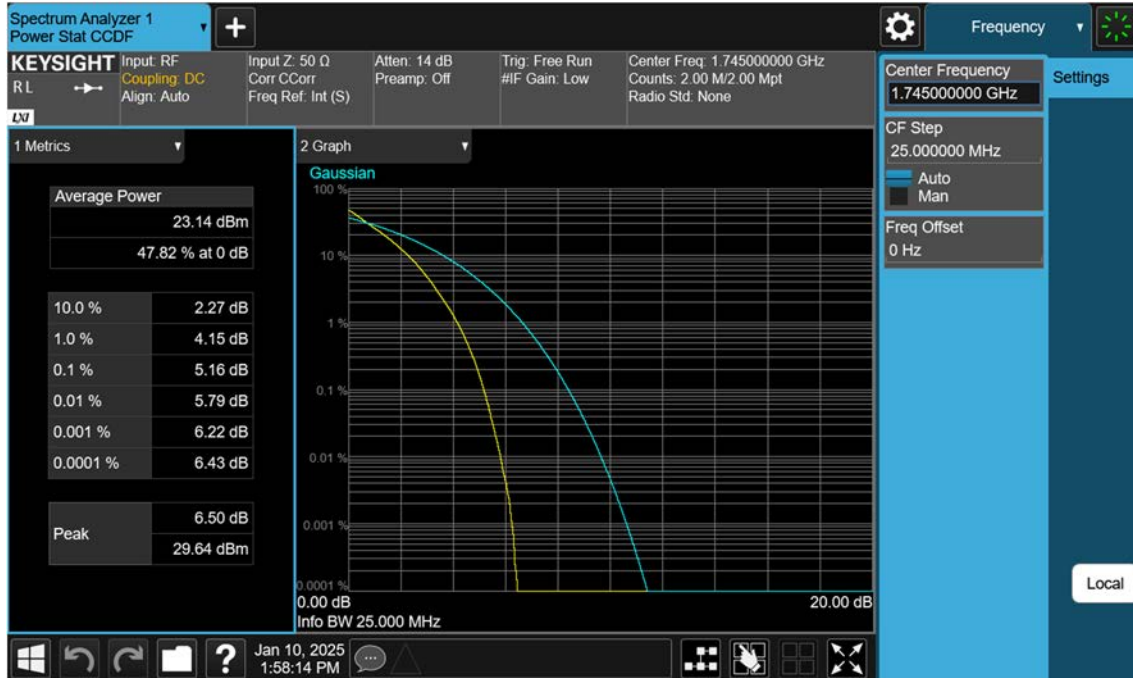
NR66_20 M_PAR_Mid_256QAM_FullRB



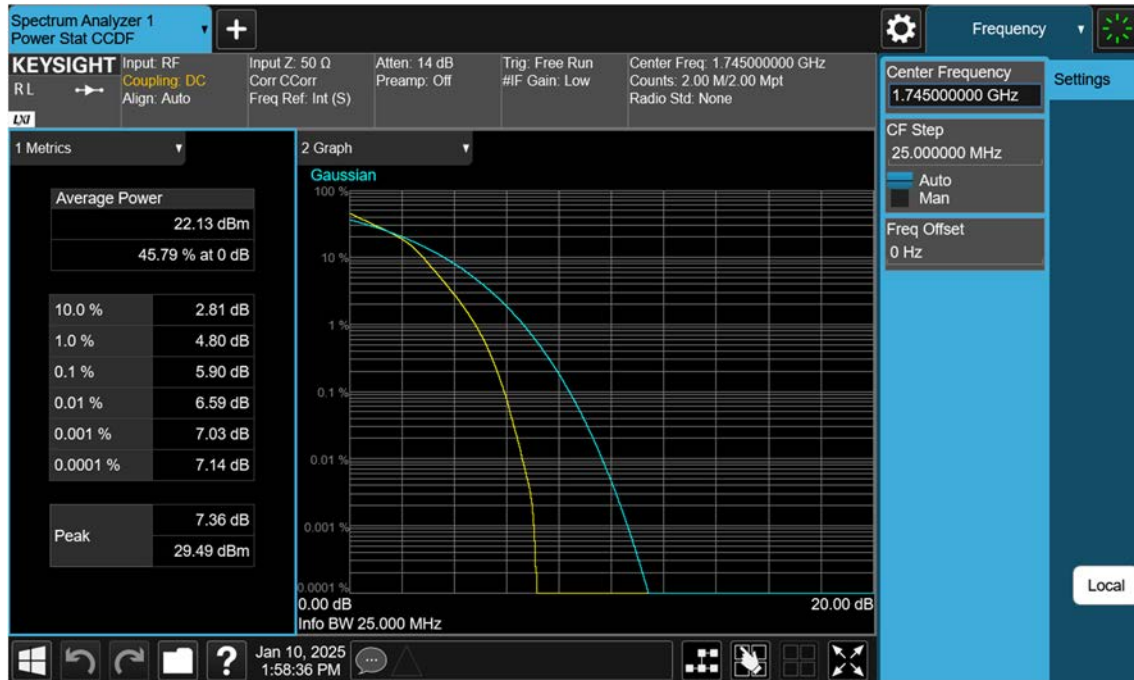
NR66_25 M_PAR_Mid_BPSK_FullRB



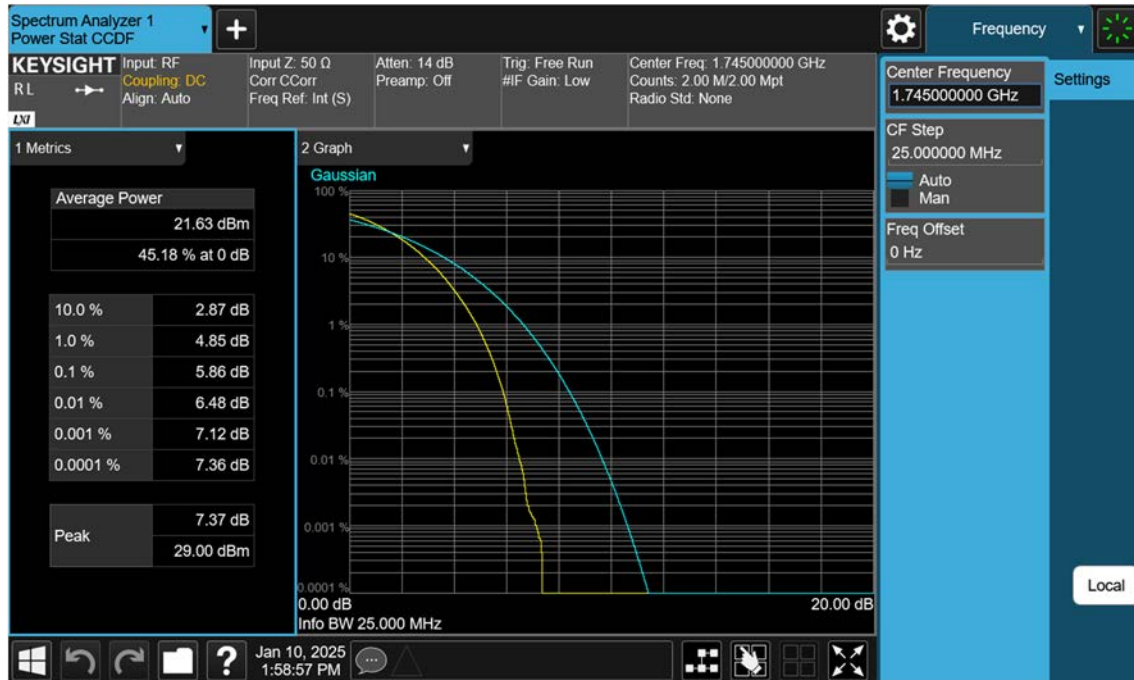
NR66_25 M_PAR_Mid_QPSK_FullRB



NR66_25 M_PAR_Mid_16QAM_FullRB



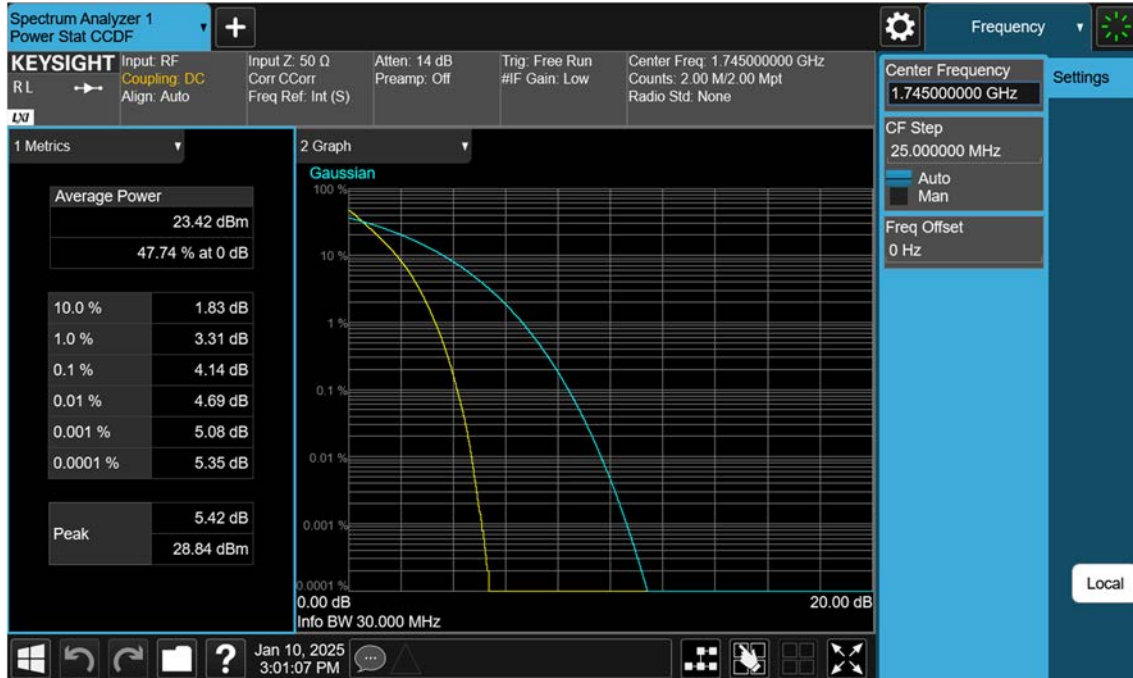
NR66_25 M_PAR_Mid_64QAM_FullRB



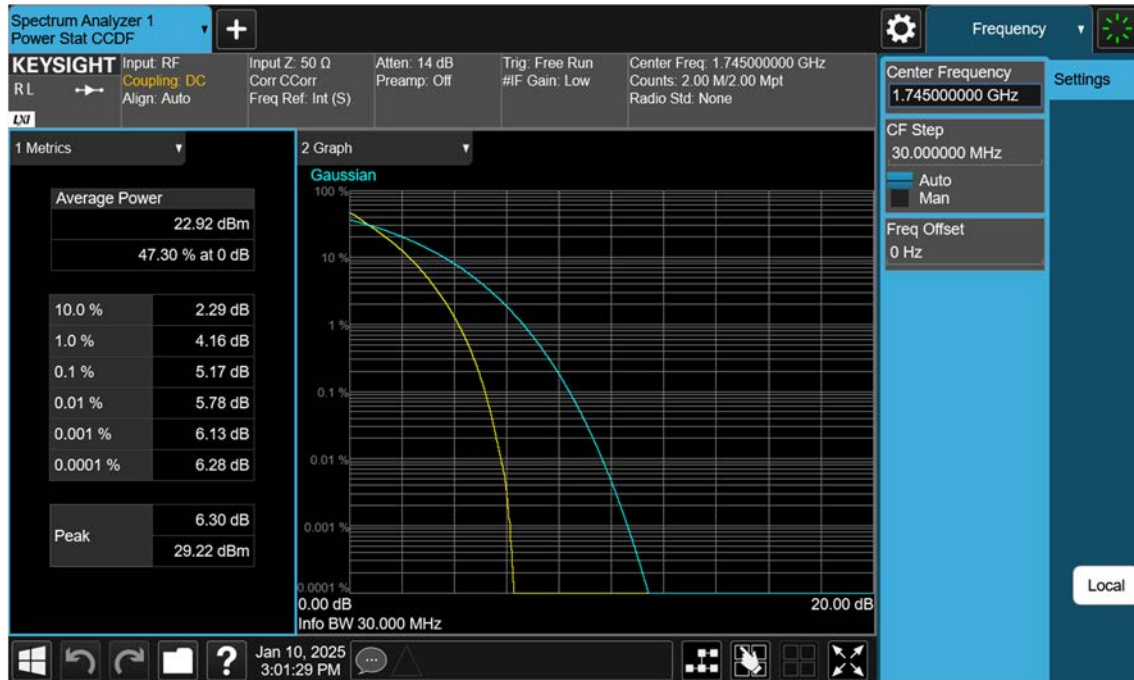
NR66_25 M_PAR_Mid_256QAM_FullRB



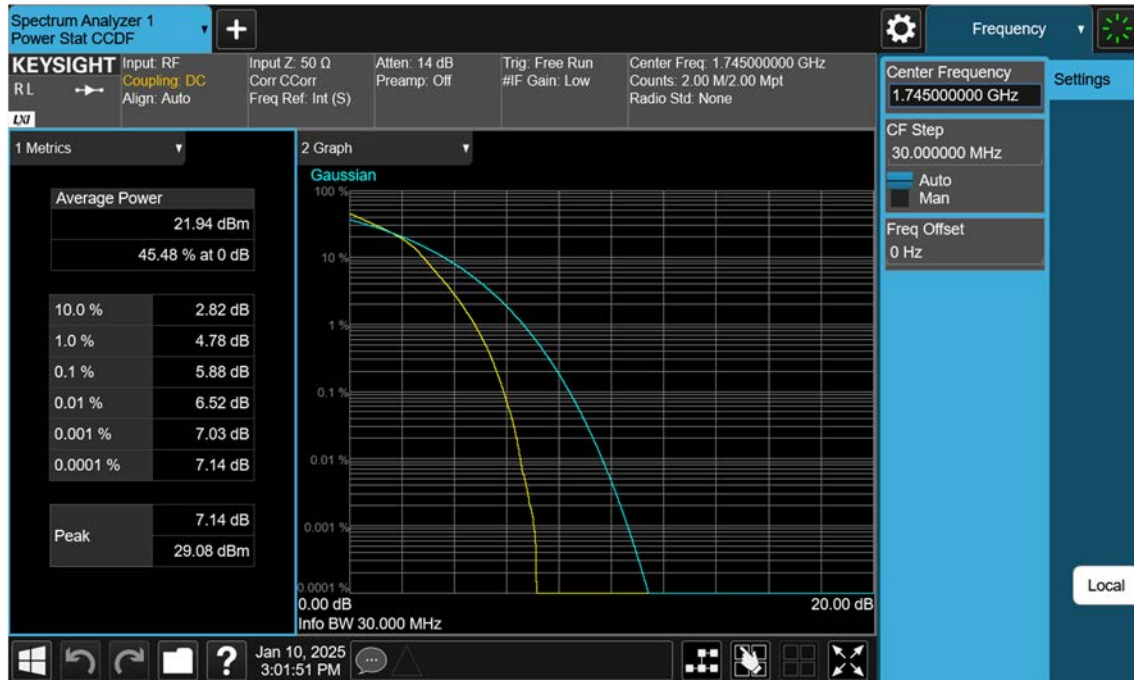
NR66_30 M_PAR_Mid_BPSK_FullRB



NR66_30 M_PAR_Mid_QPSK_FullRB



NR66_30 M_PAR_Mid_16QAM_FullRB



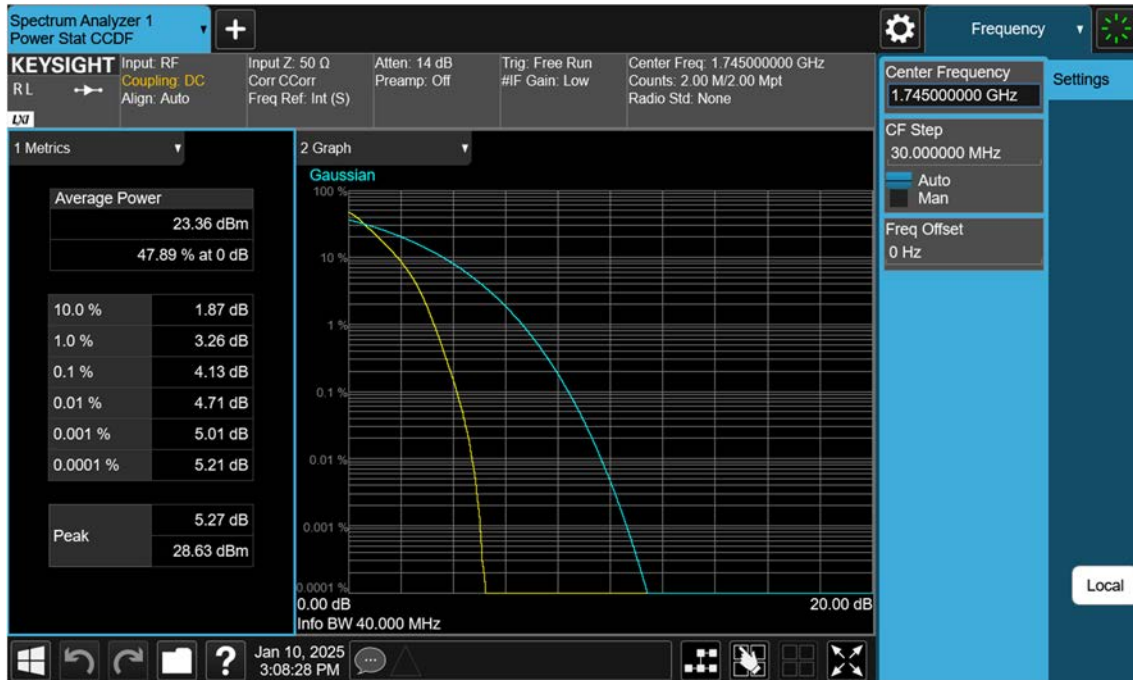
NR66_30 M_PAR_Mid_64QAM_FullRB



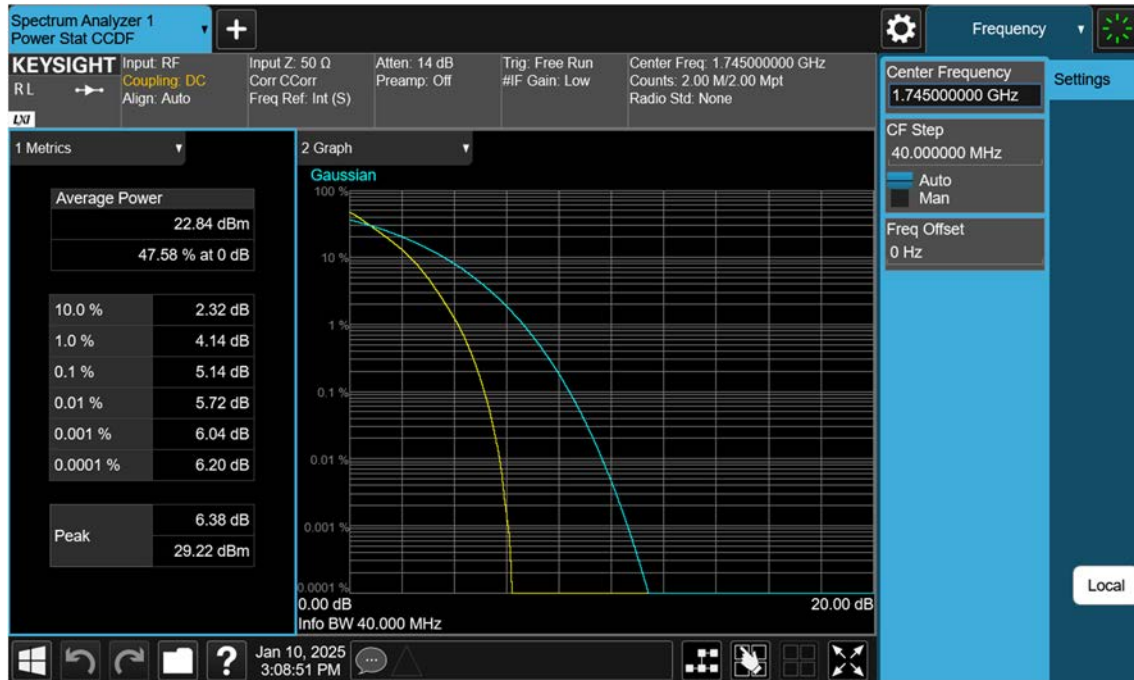
NR66_30 M_PAR_Mid_256QAM_FullRB



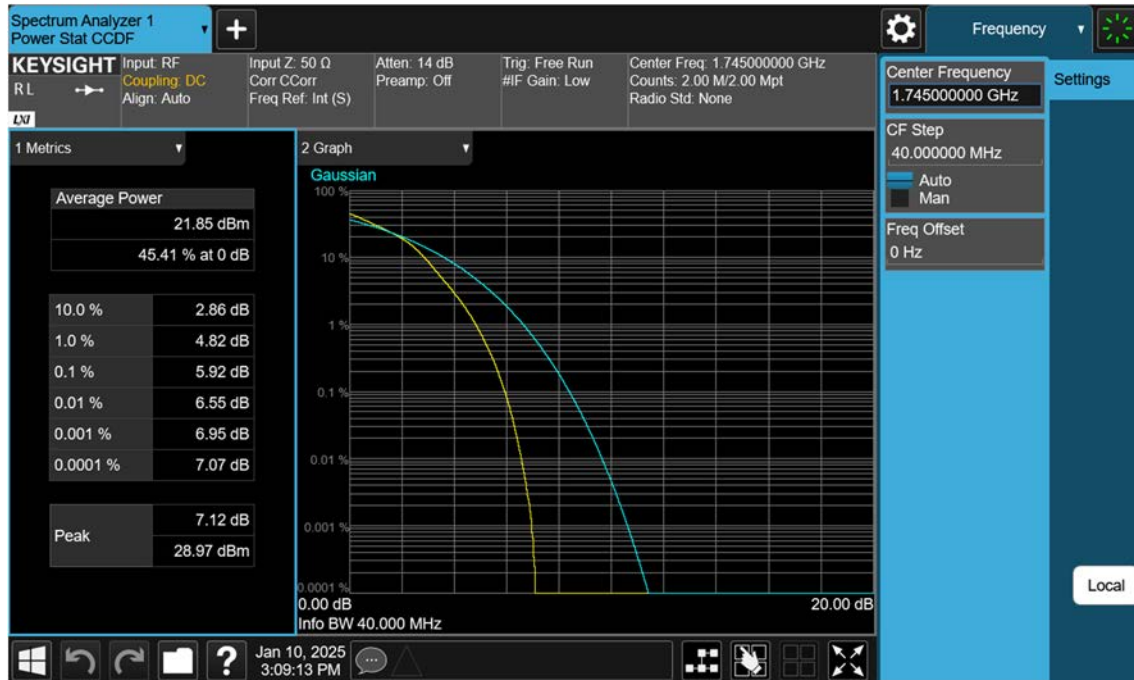
NR66_40 M_PAR_Mid_BPSK_FullRB



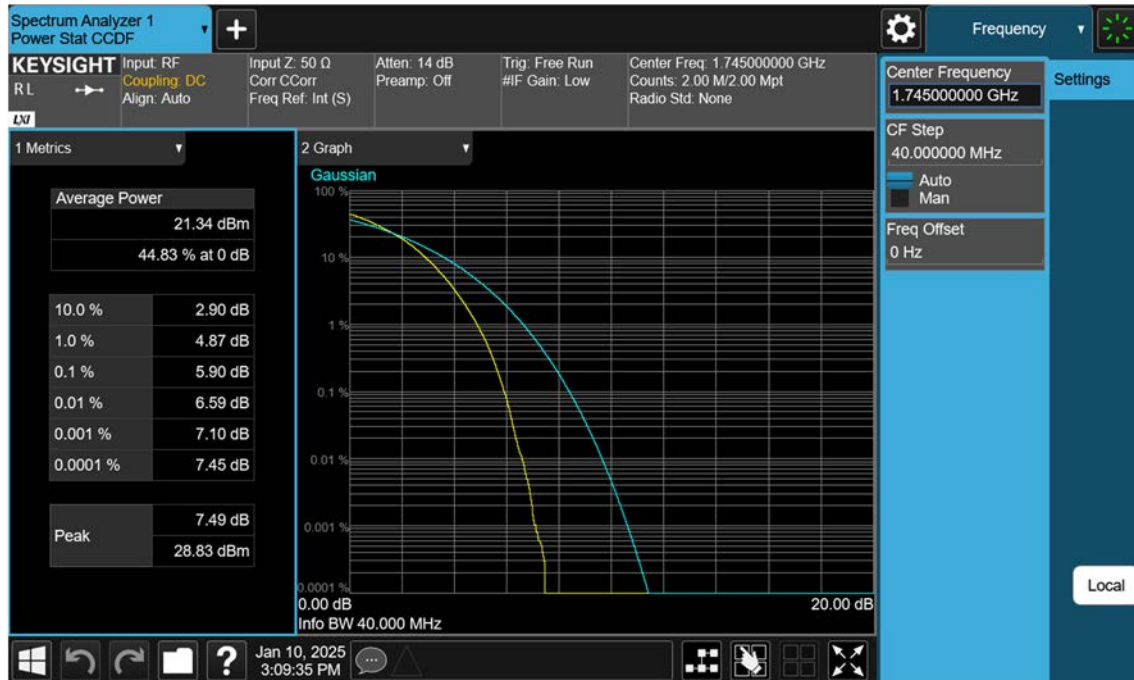
NR66_40 M_PAR_Mid_QPSK_FullRB



NR66_40 M_PAR_Mid_16QAM_FullRB



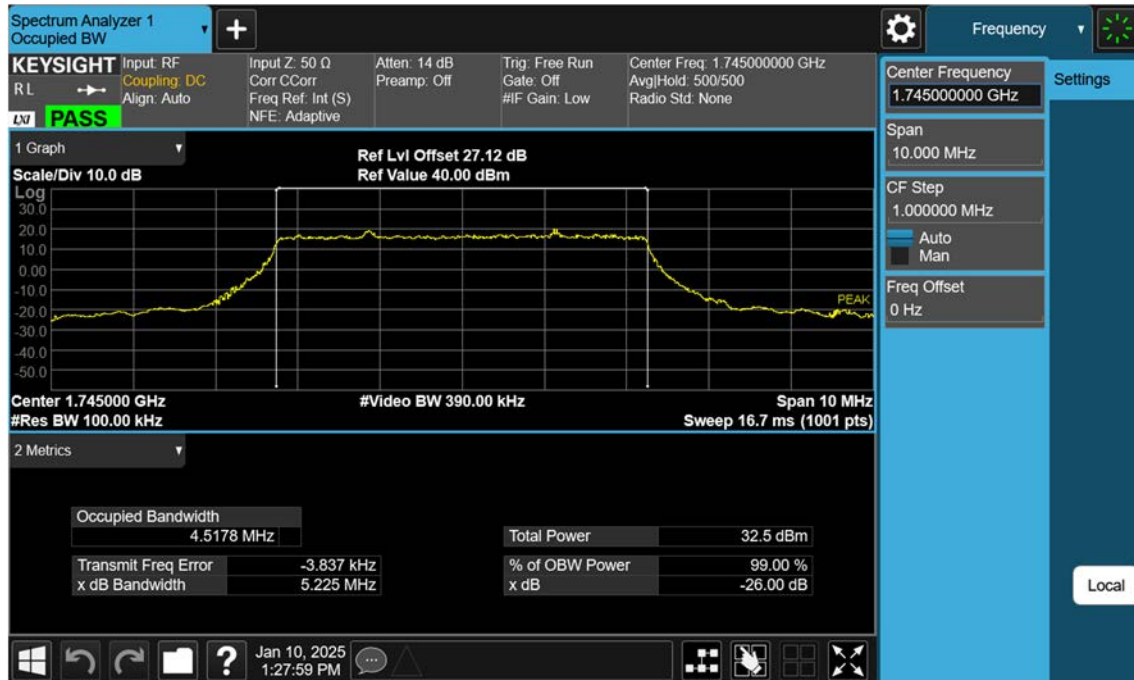
NR66_40 M_PAR_Mid_64QAM_FullRB



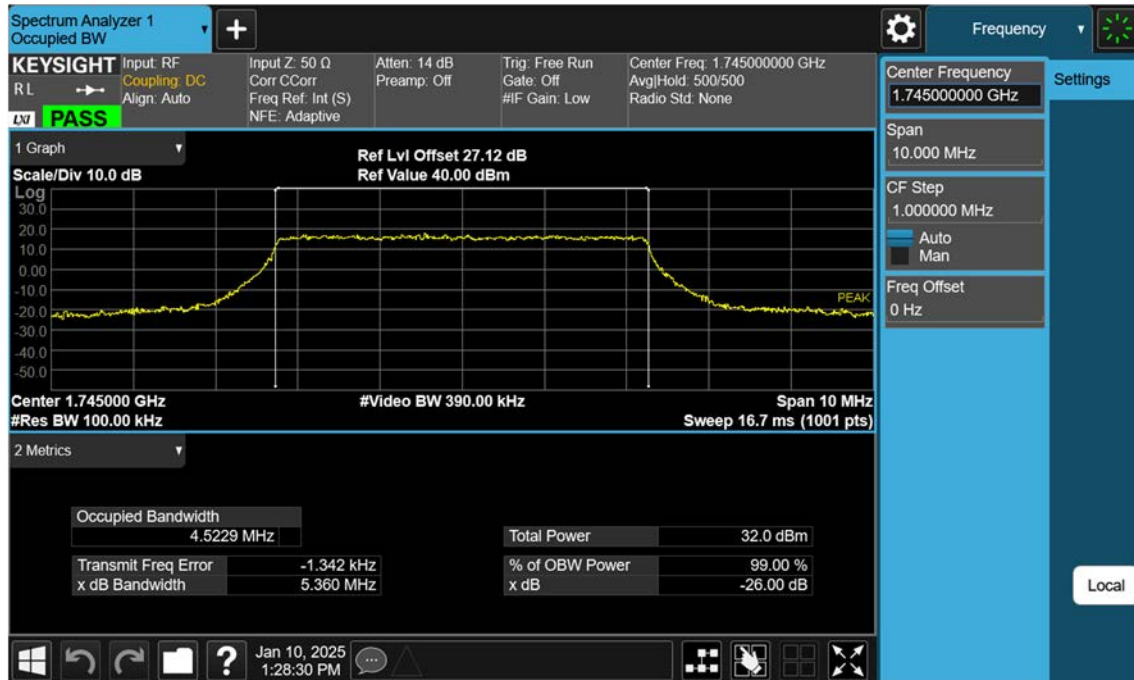
NR66_40 M_PAR_Mid_256QAM_FullRB



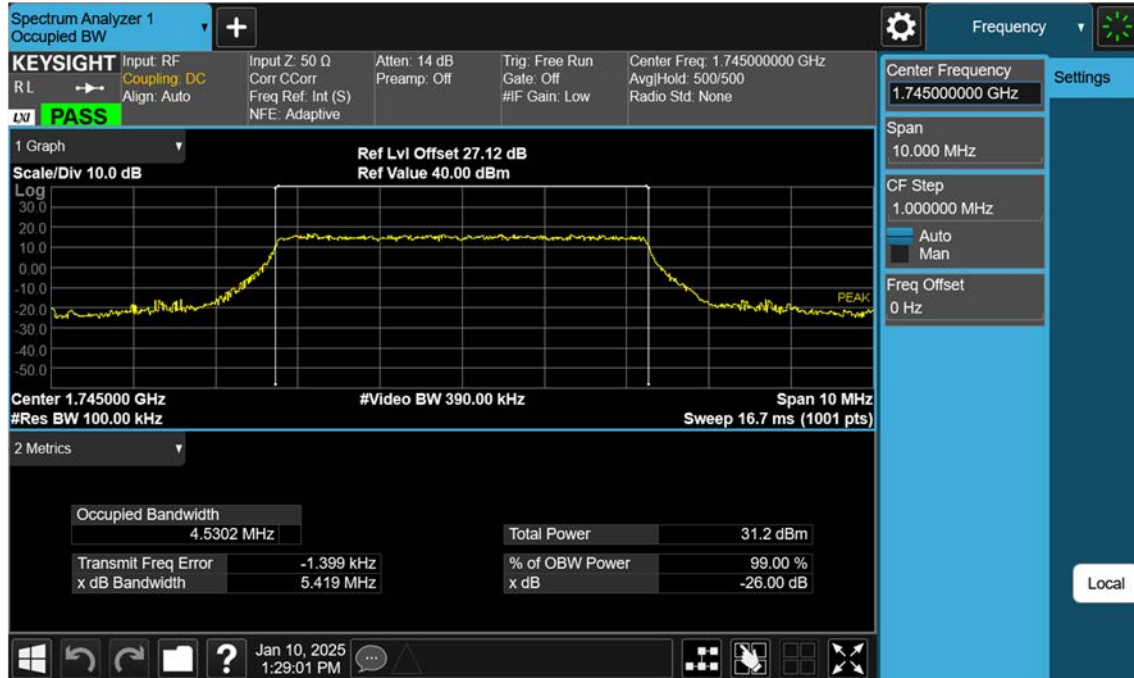
NR66_5 M_OBW_Mid_BPSK_FullRB



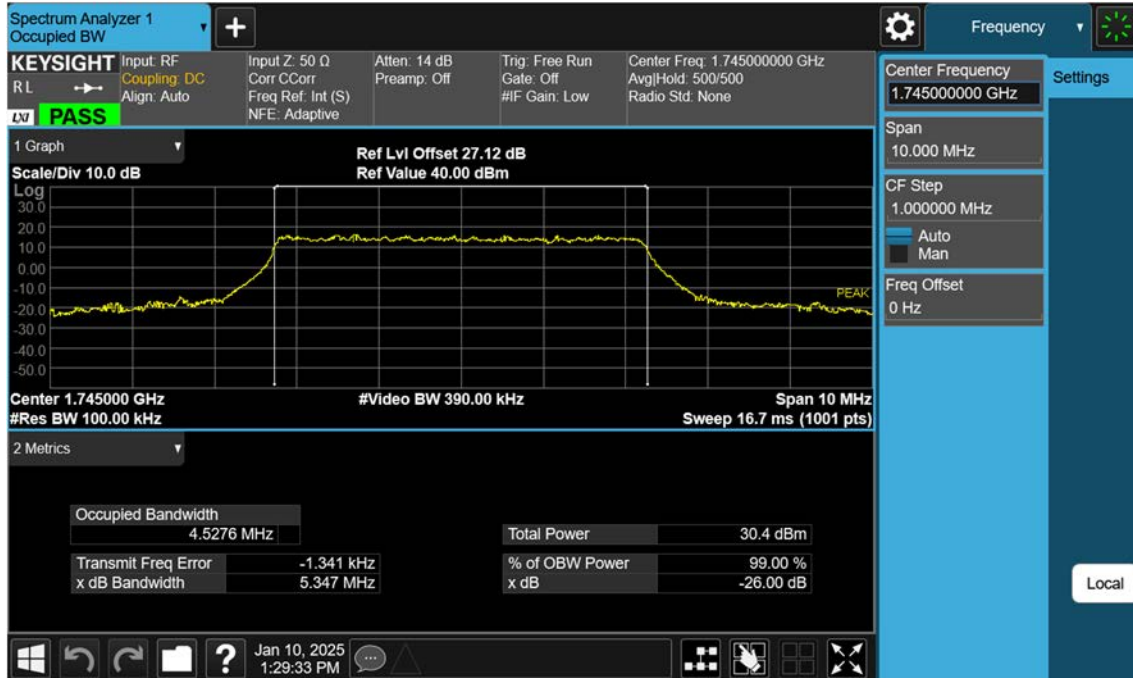
NR66_5 M_OBW_Mid_QPSK_FullRB



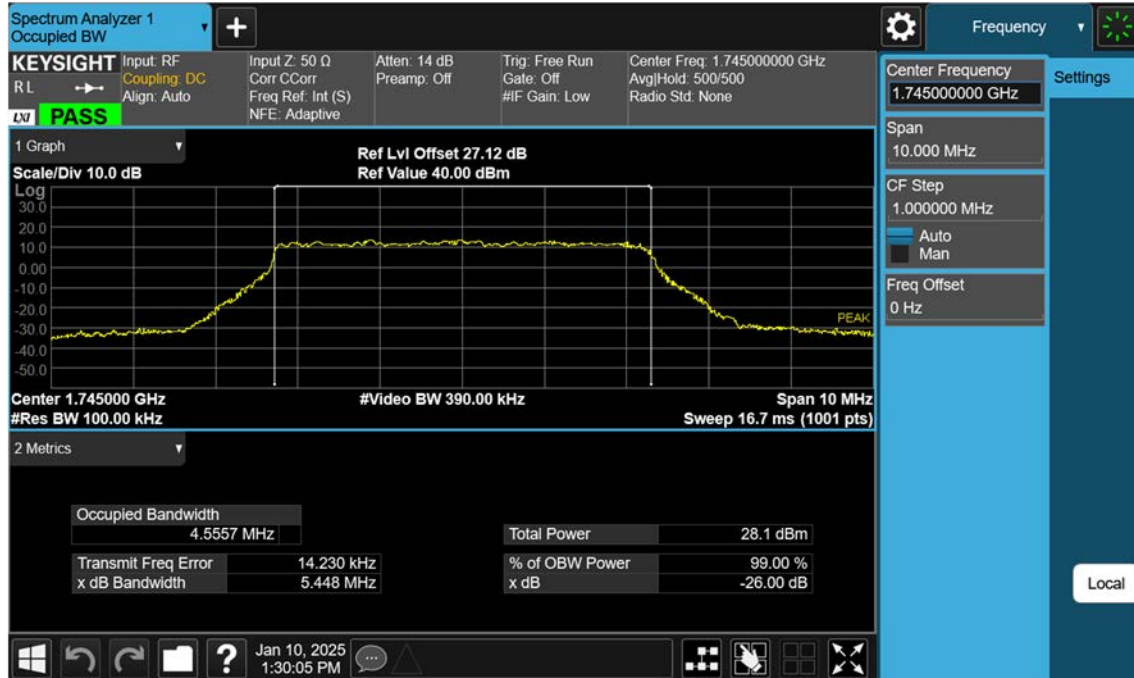
NR66_5 M_OBW_Mid_16QAM_FullRB



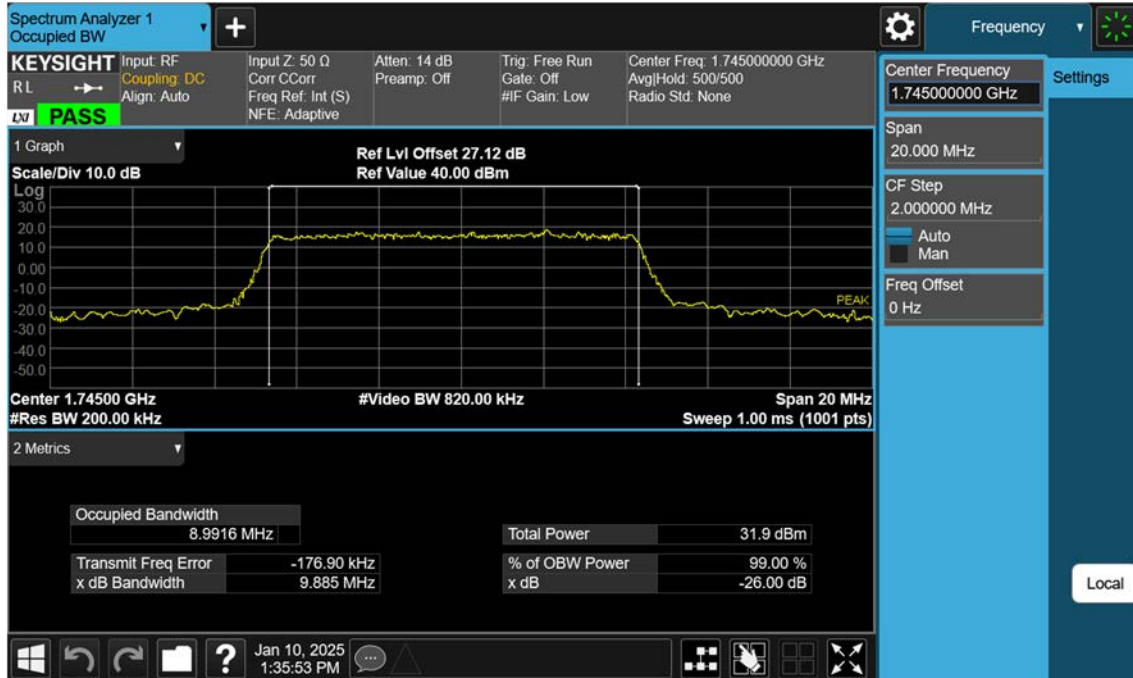
NR66_5 M_OBW_Mid_64QAM_FullRB



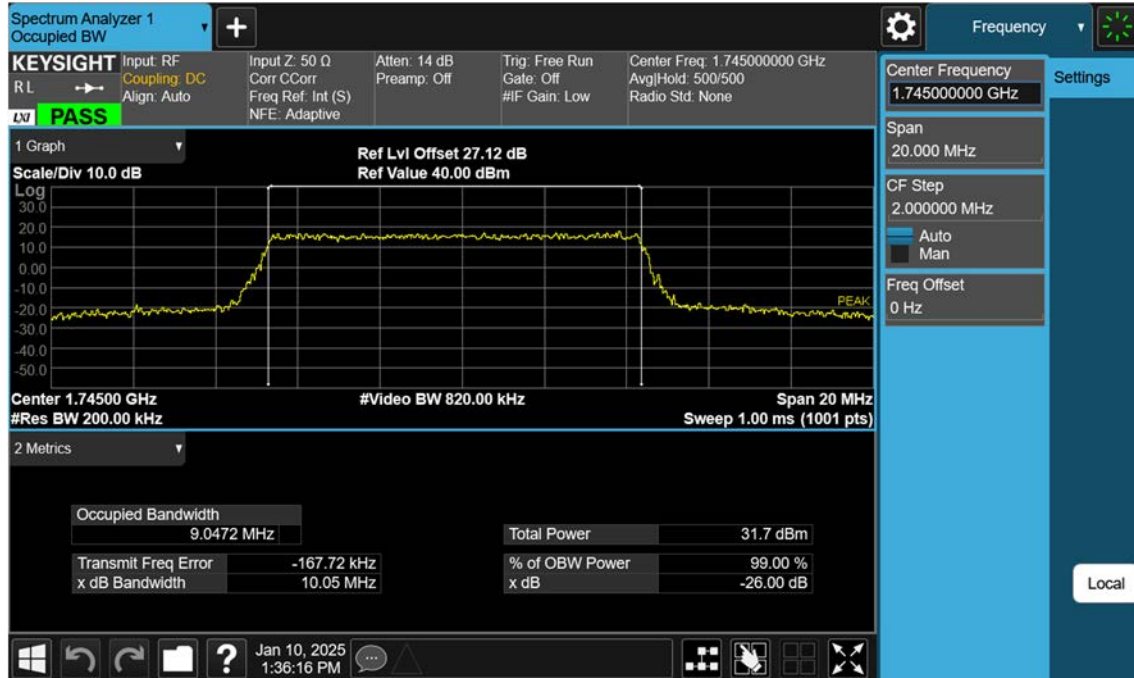
NR66_5 M_OBW_Mid_256QAM_FullRB



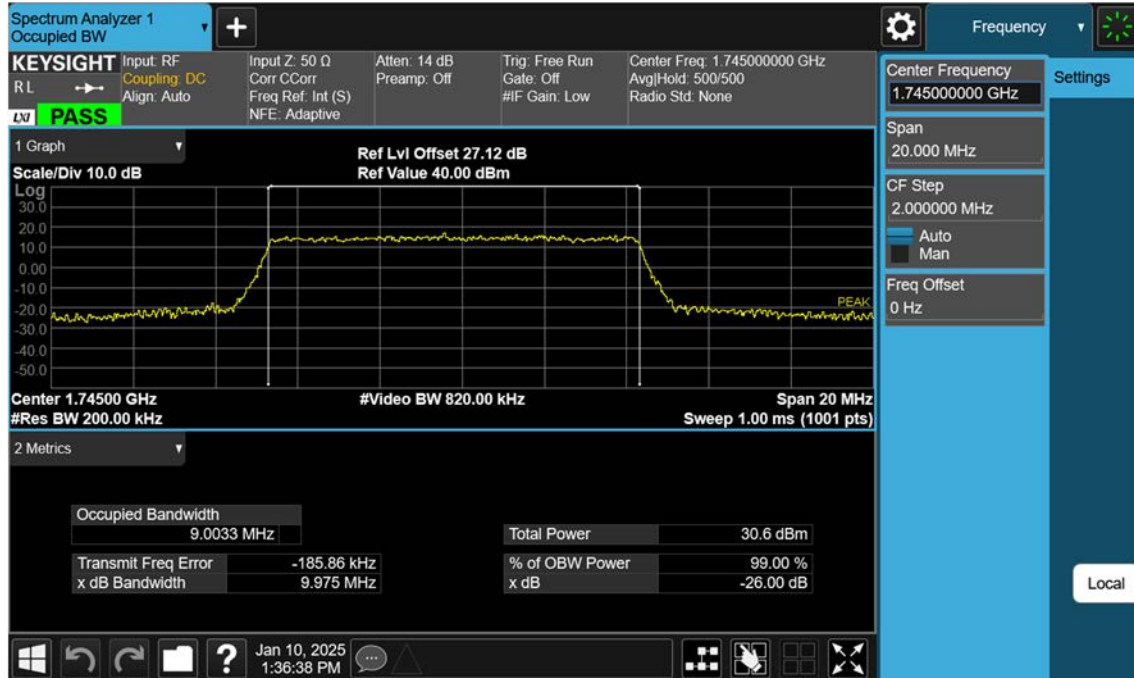
NR66_10 M_OBW_Mid_BPSK_FullRB



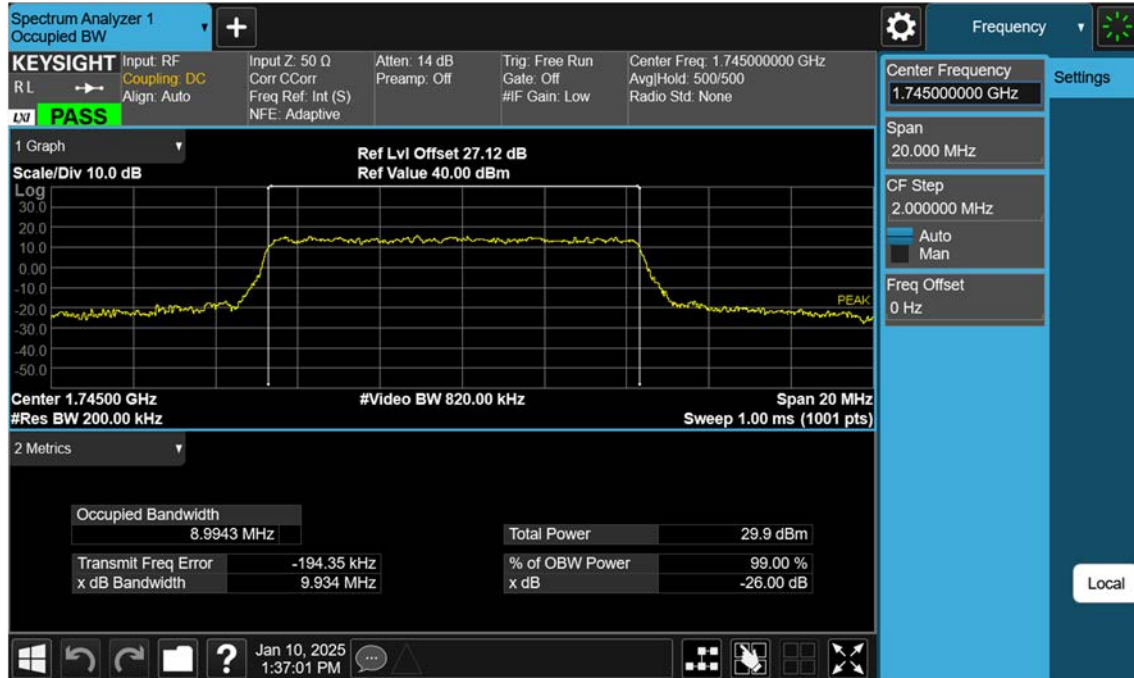
NR66_10 M_OBW_Mid_QPSK_FullRB



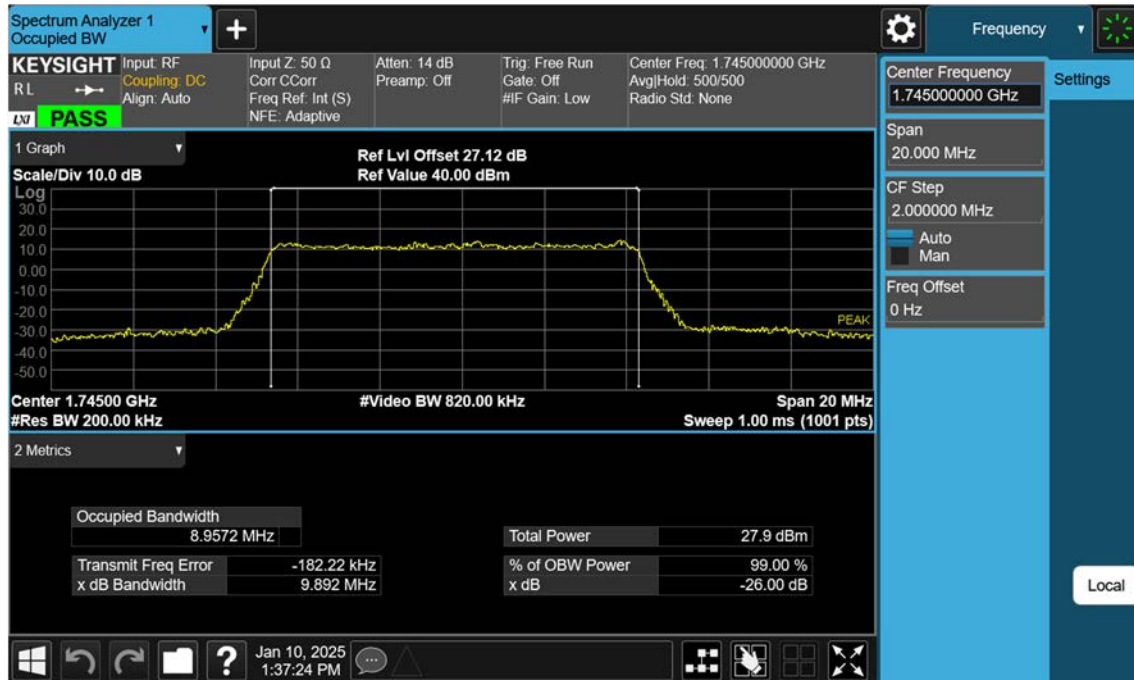
NR66_10 M_OBW_Mid_16QAM_FullRB



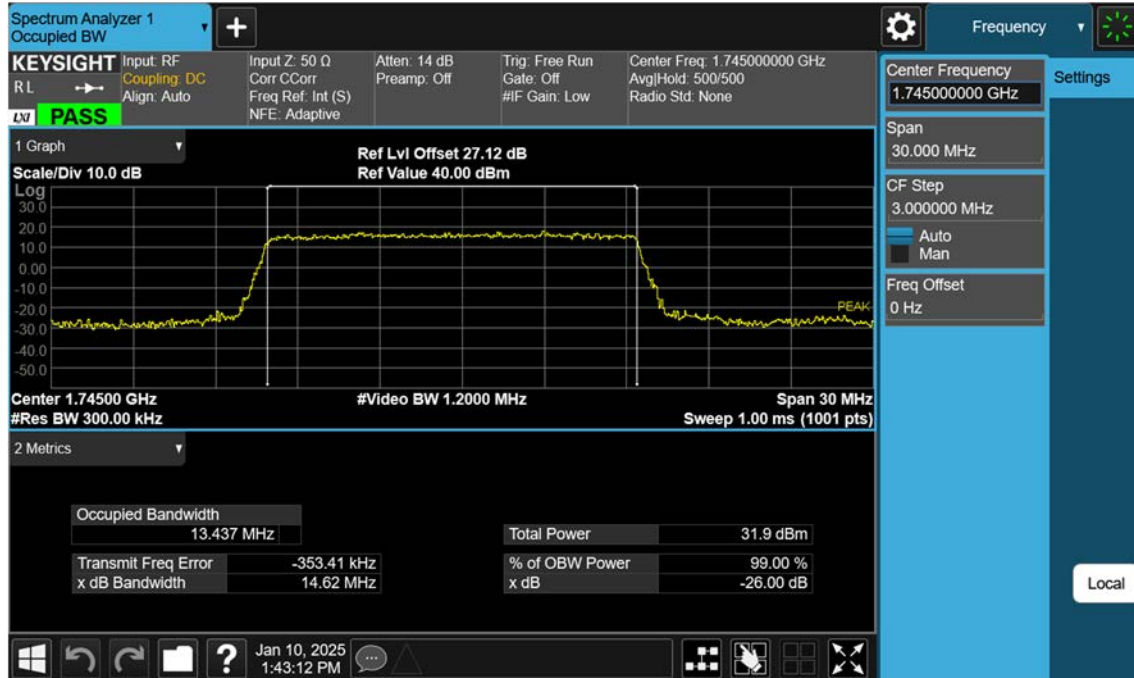
NR66_10 M_OBW_Mid_64QAM_FullRB



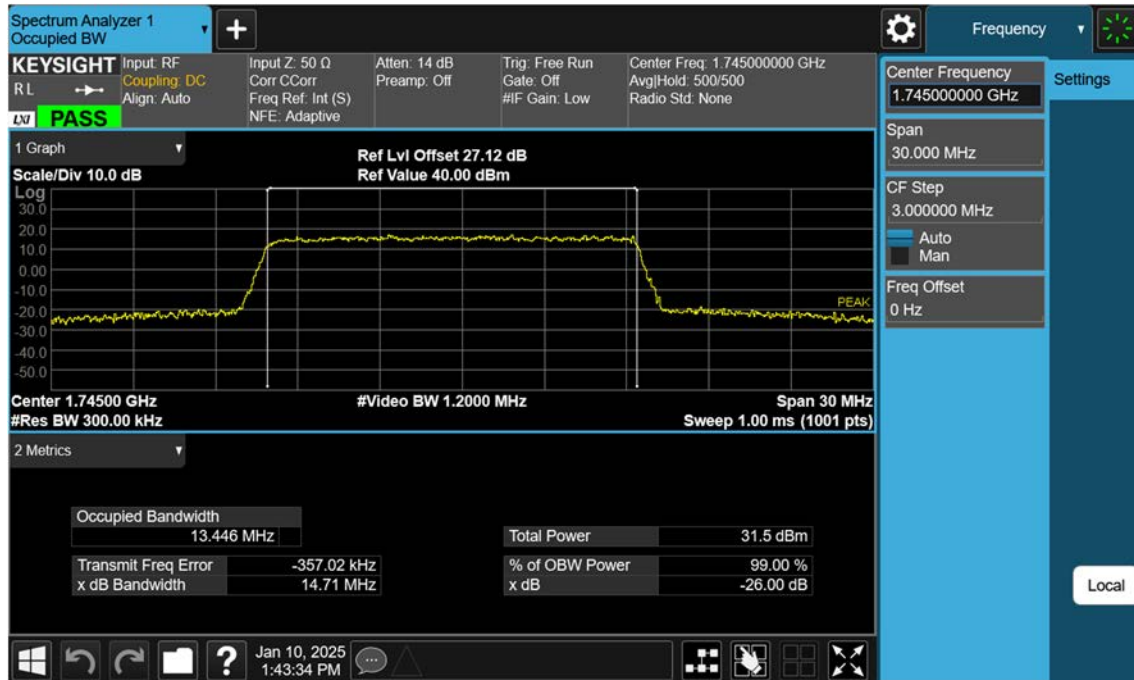
NR66_10 M_OBW_Mid_256QAM_FullRB



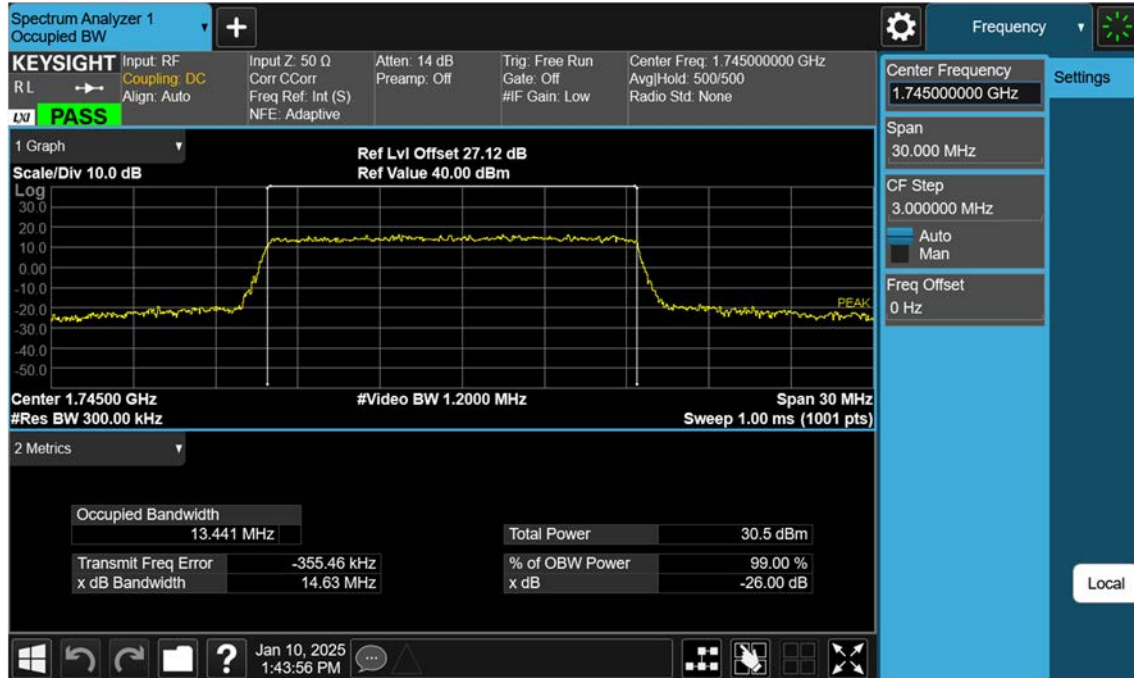
NR66_15 M_OBW_Mid_BPSK_FullRB



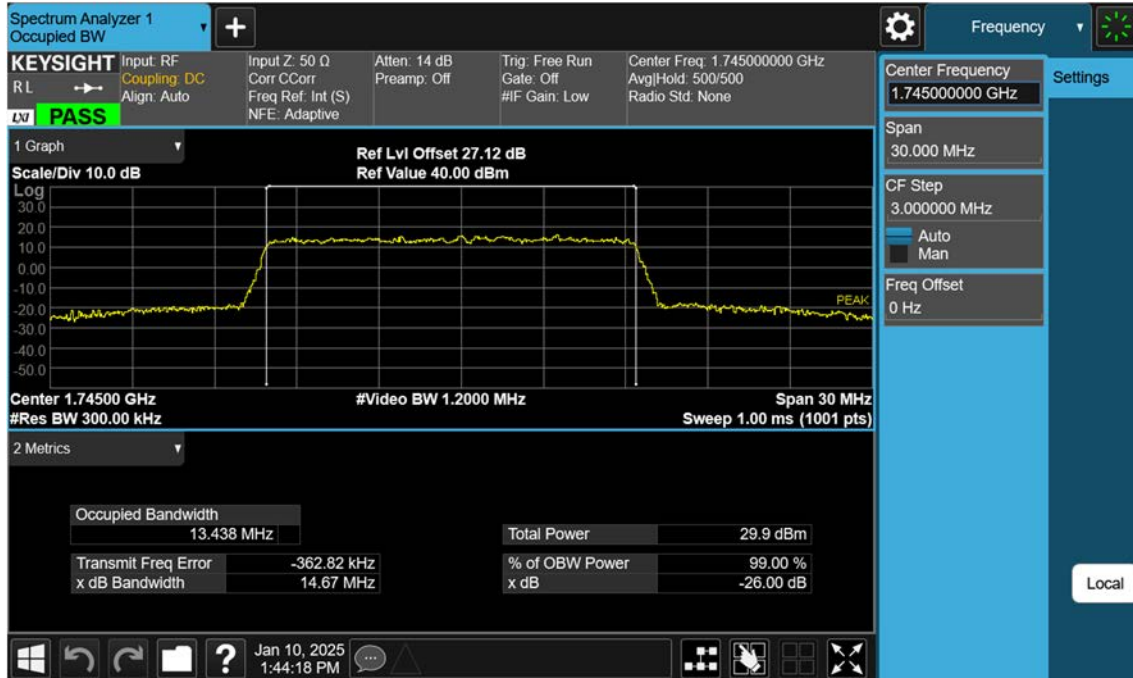
NR66_15 M_OBW_Mid_QPSK_FullRB



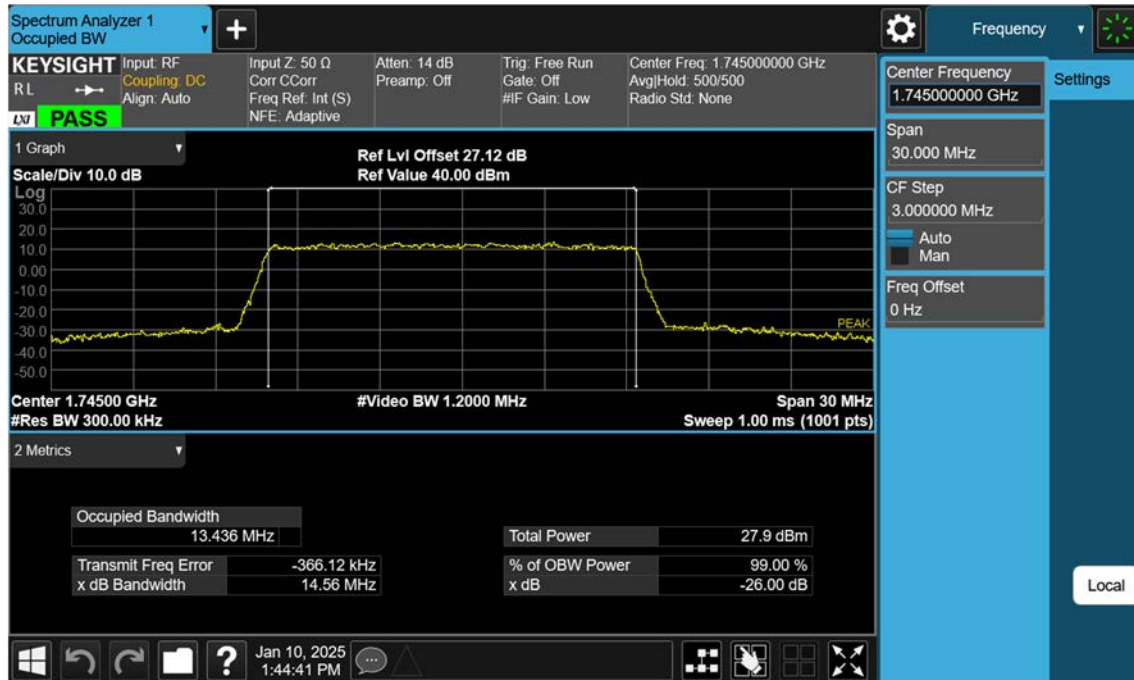
NR66_15 M_OBW_Mid_16QAM_FullRB



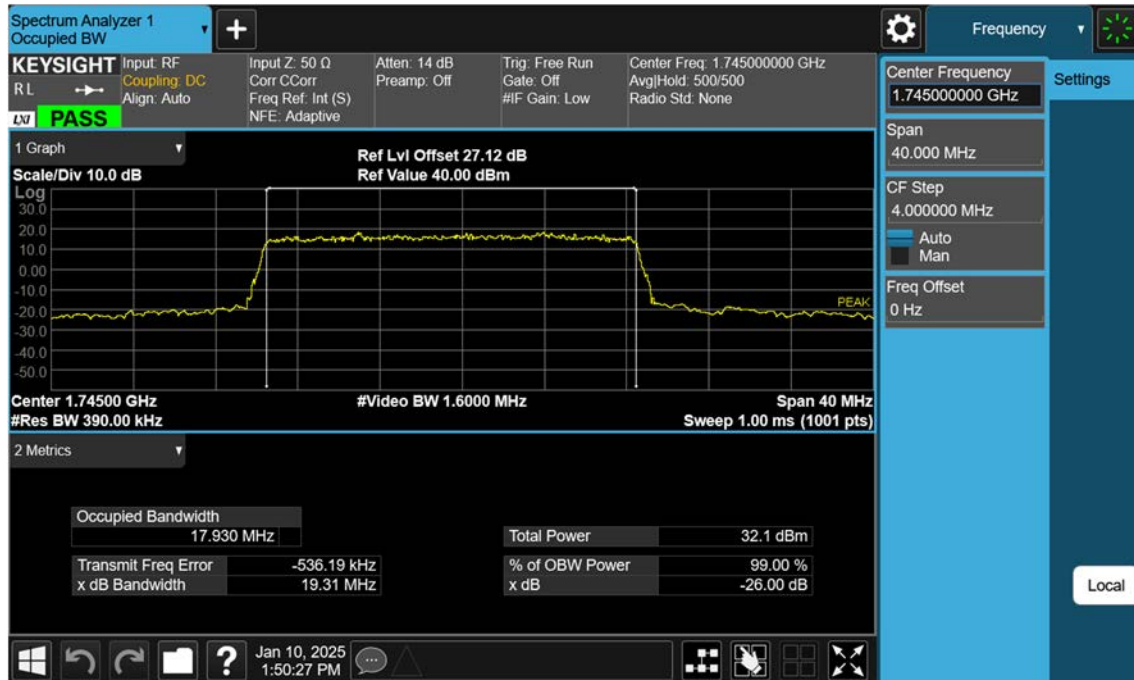
NR66_15 M_OBW_Mid_64QAM_FullRB



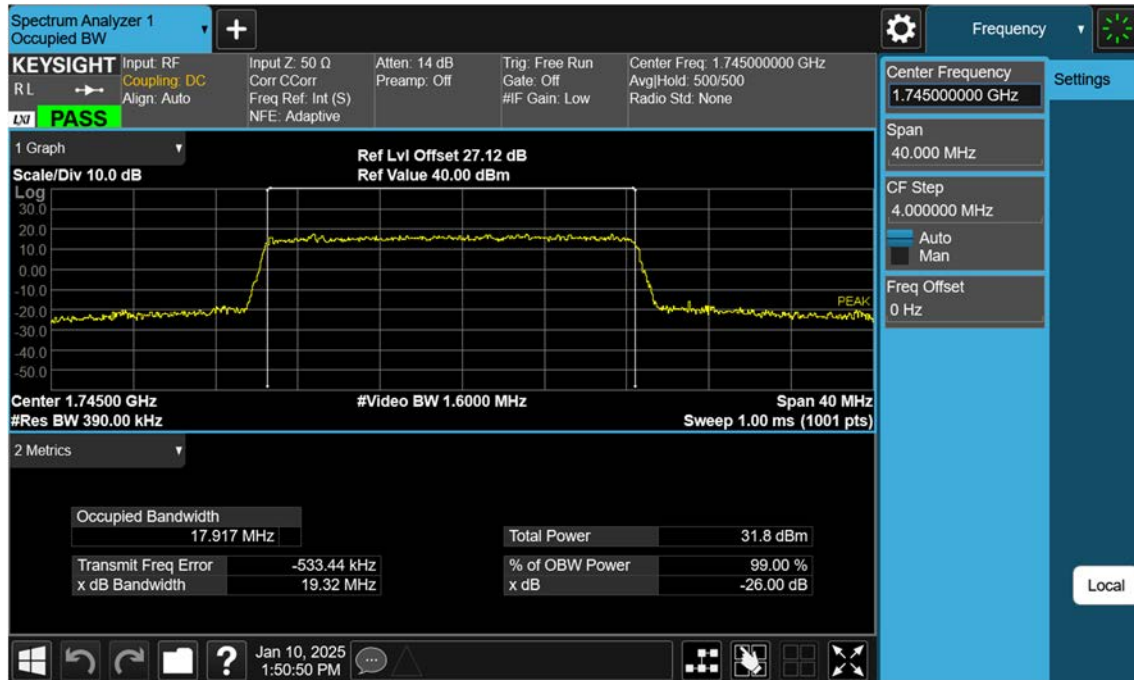
NR66_15 M_OBW_Mid_256QAM_FullRB



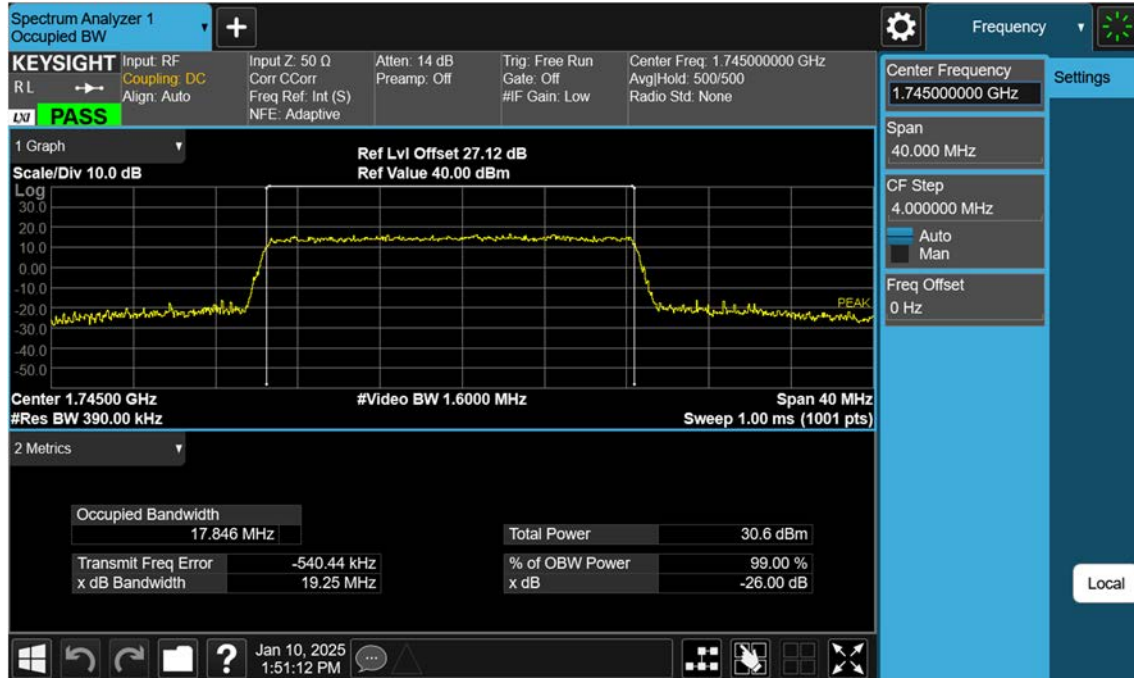
NR66_20 M_OBW_Mid_BPSK_FullRB



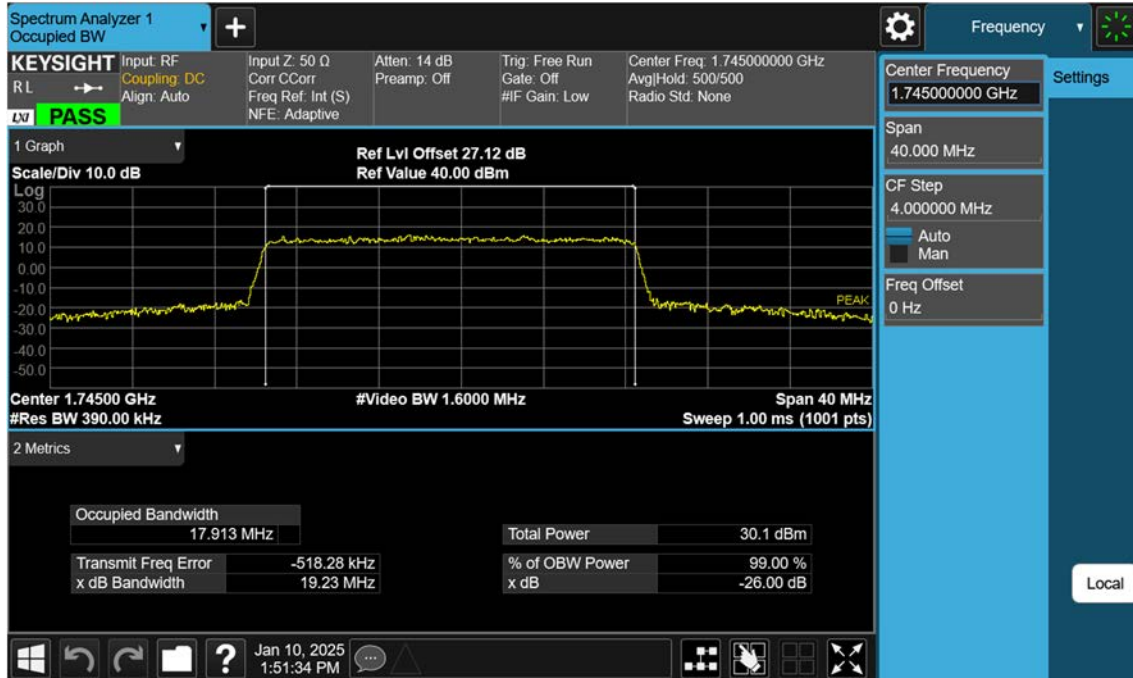
NR66_20 M_OBW_Mid_QPSK_FullRB



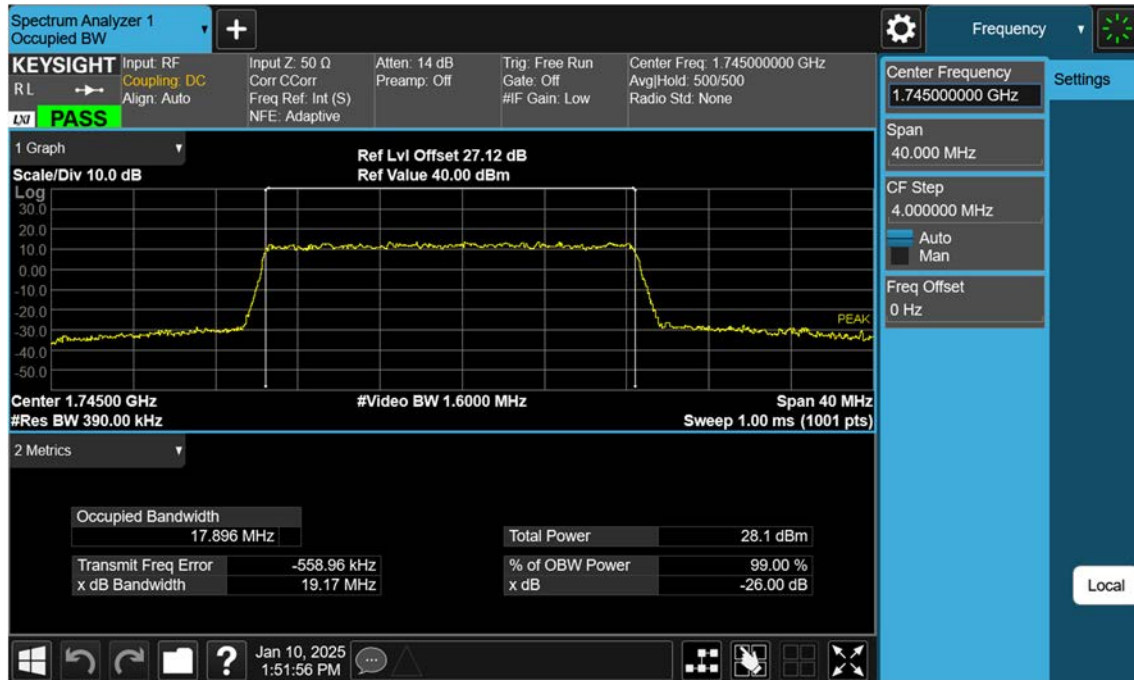
NR66_20 M_OBW_Mid_16QAM_FullRB



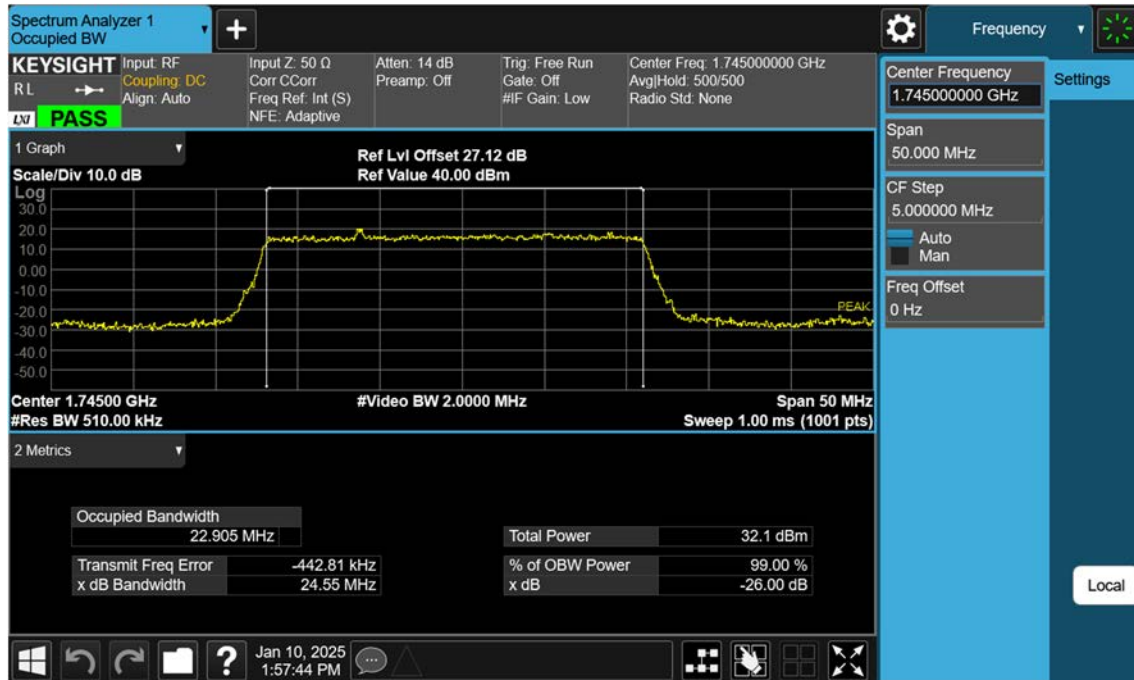
NR66_20 M_OBW_Mid_64QAM_FullRB



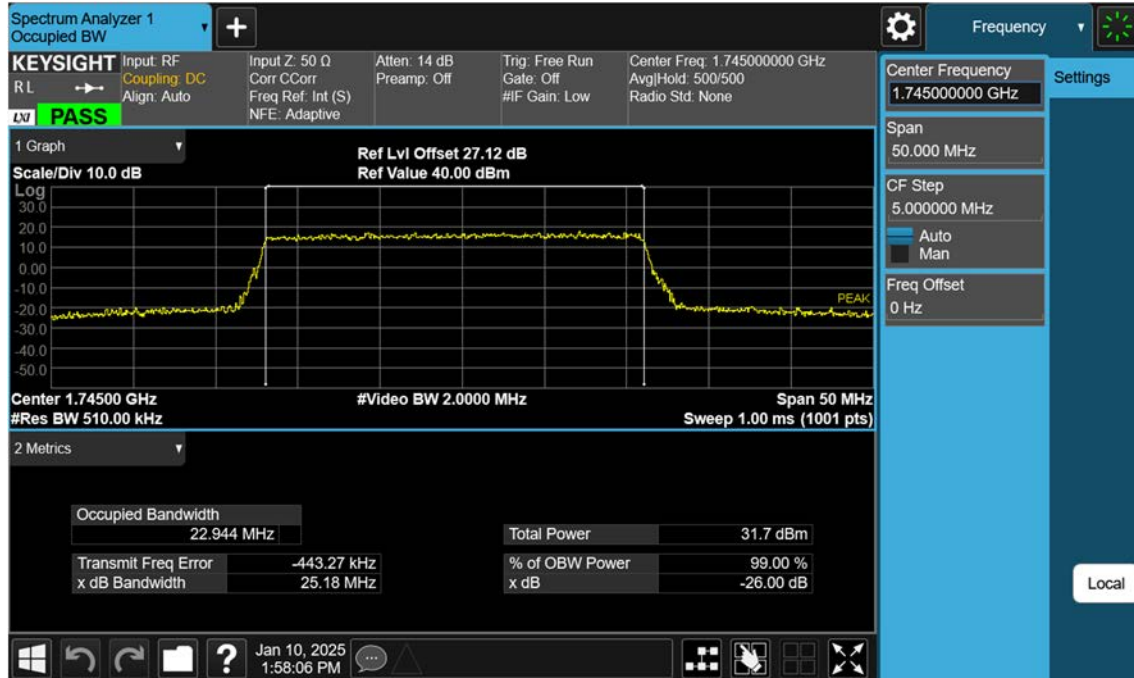
NR66_20 M_OBW_Mid_256QAM_FullRB



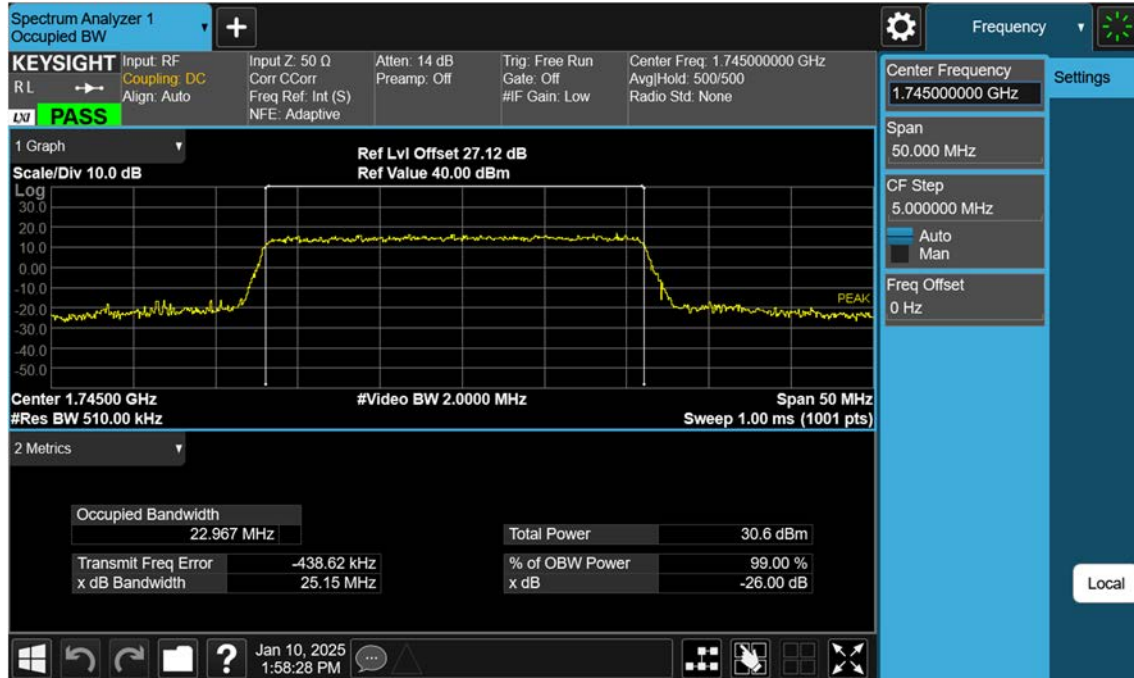
NR66_25 M_OBW_Mid_BPSK_FullRB



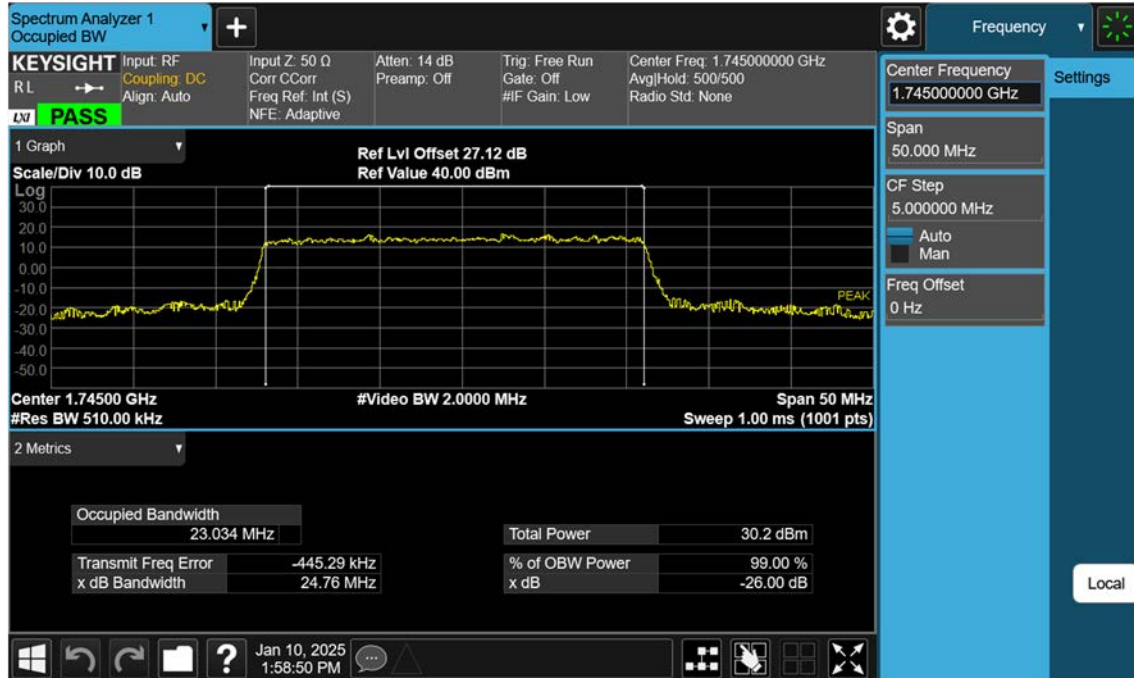
NR66_25 M_OBW_Mid_QPSK_FullRB



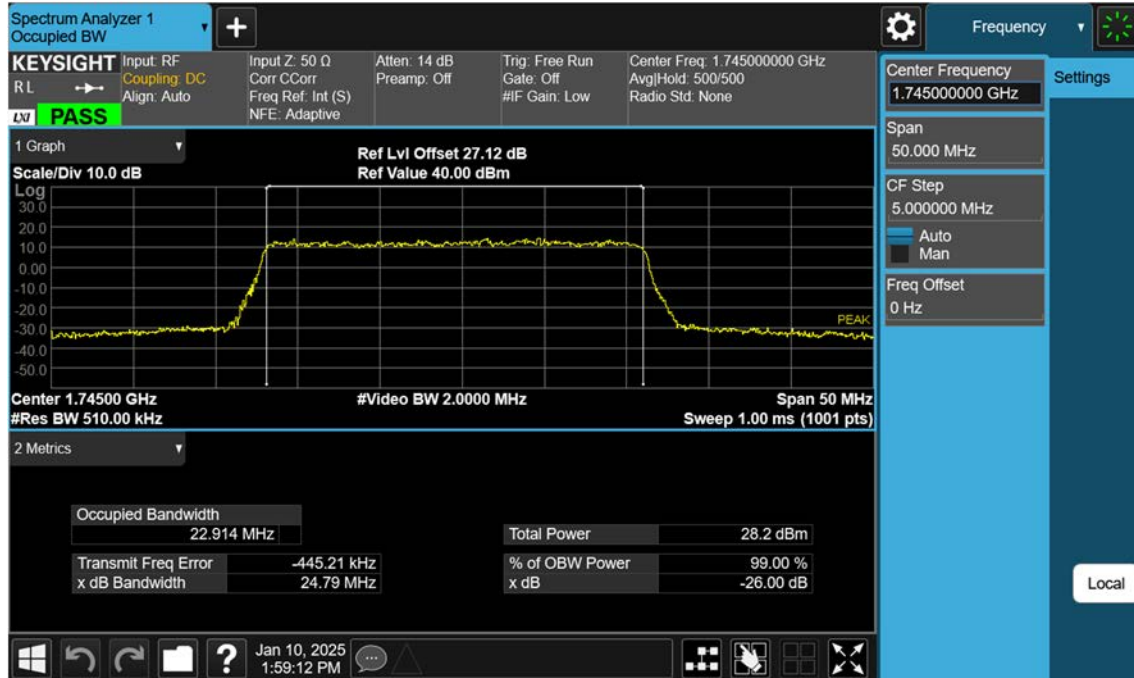
NR66_25 M_OBW_Mid_16QAM_FullRB



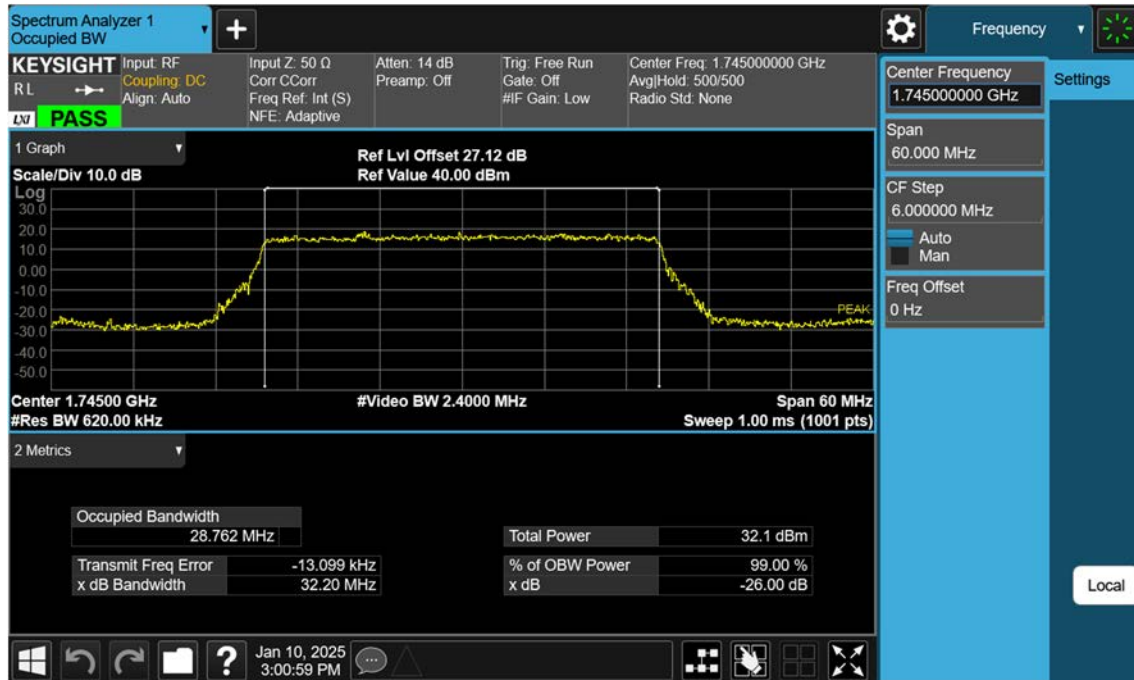
NR66_25 M_OBW_Mid_64QAM_FullRB



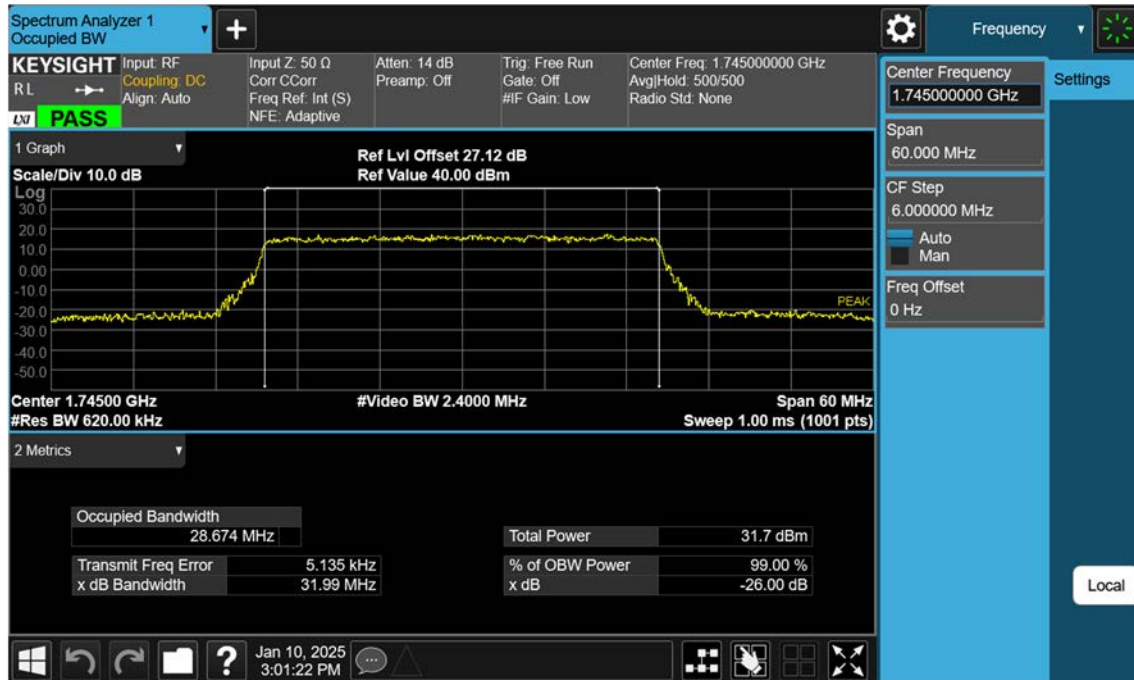
NR66_25 M_OBW_Mid_256QAM_FullRB



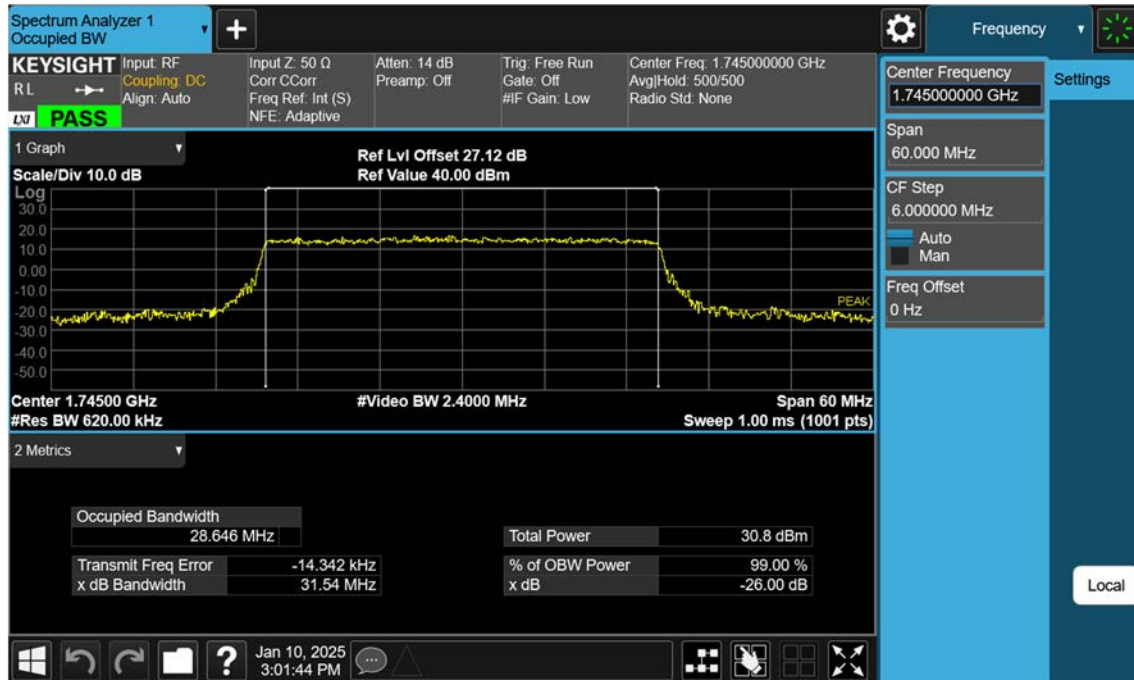
NR66_30 M_OBW_Mid_BPSK_FullRB



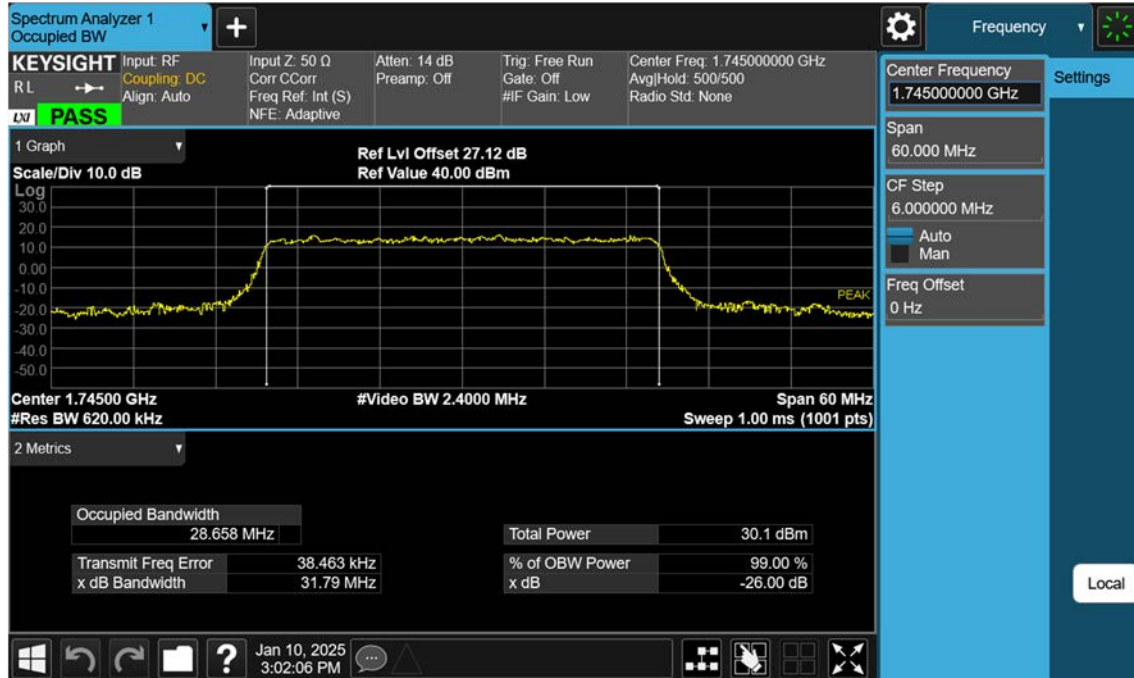
NR66_30 M_OBW_Mid_QPSK_FullRB



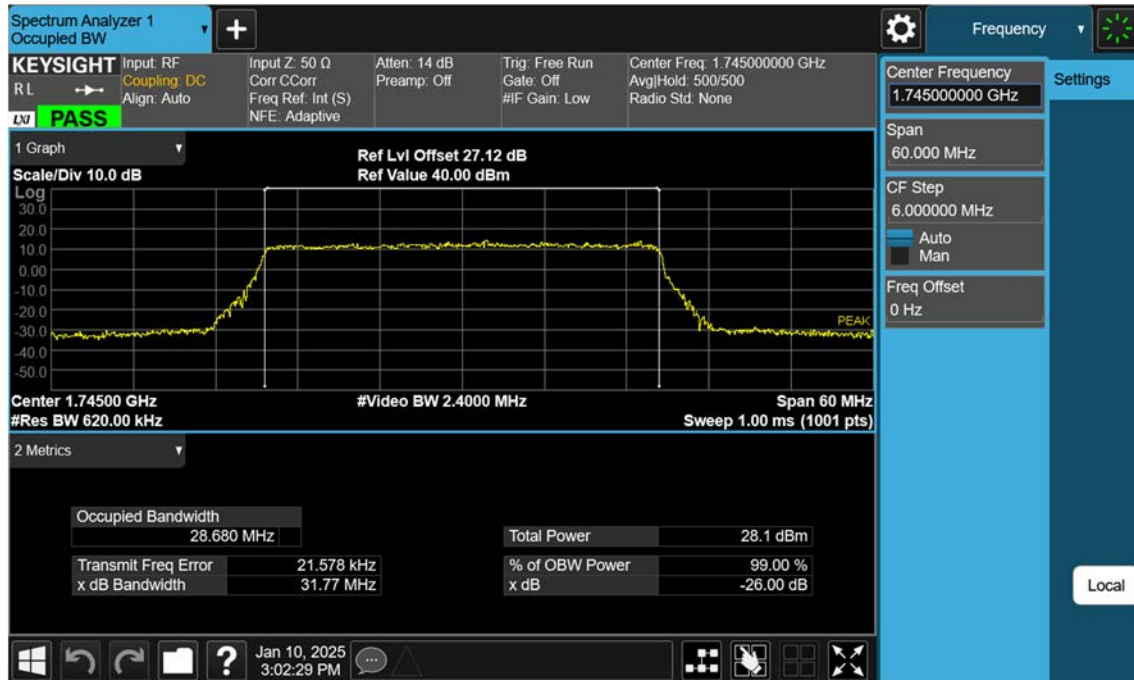
NR66_30 M_OBW_Mid_16QAM_FullRB



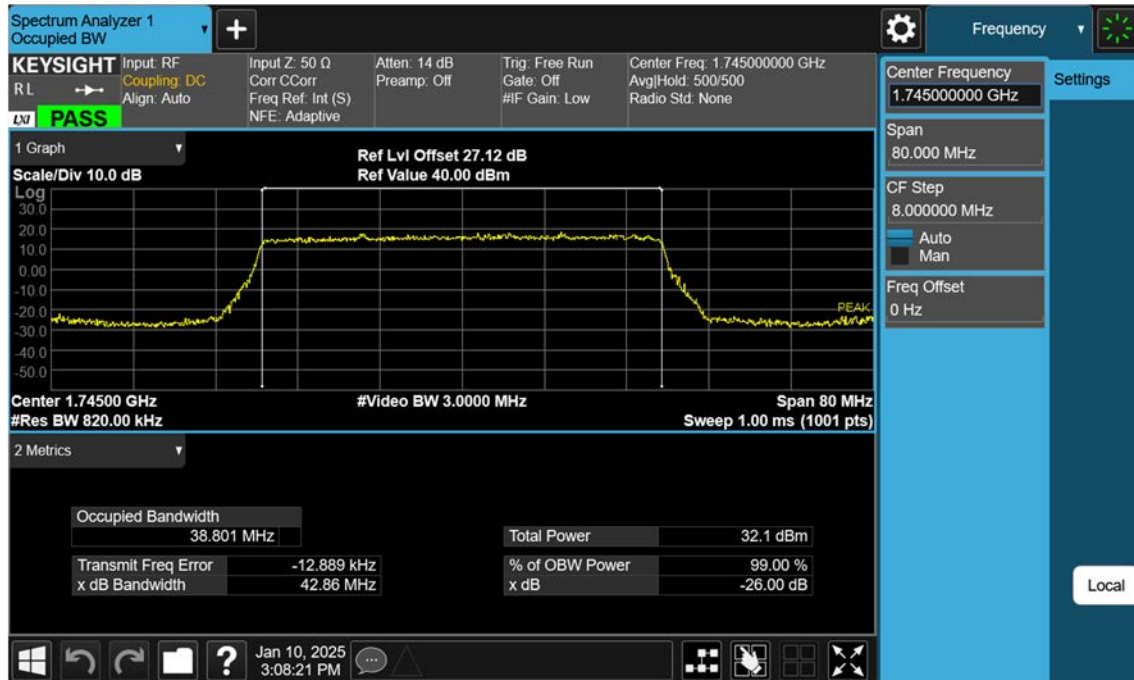
NR66_30 M_OBW_Mid_64QAM_FullRB



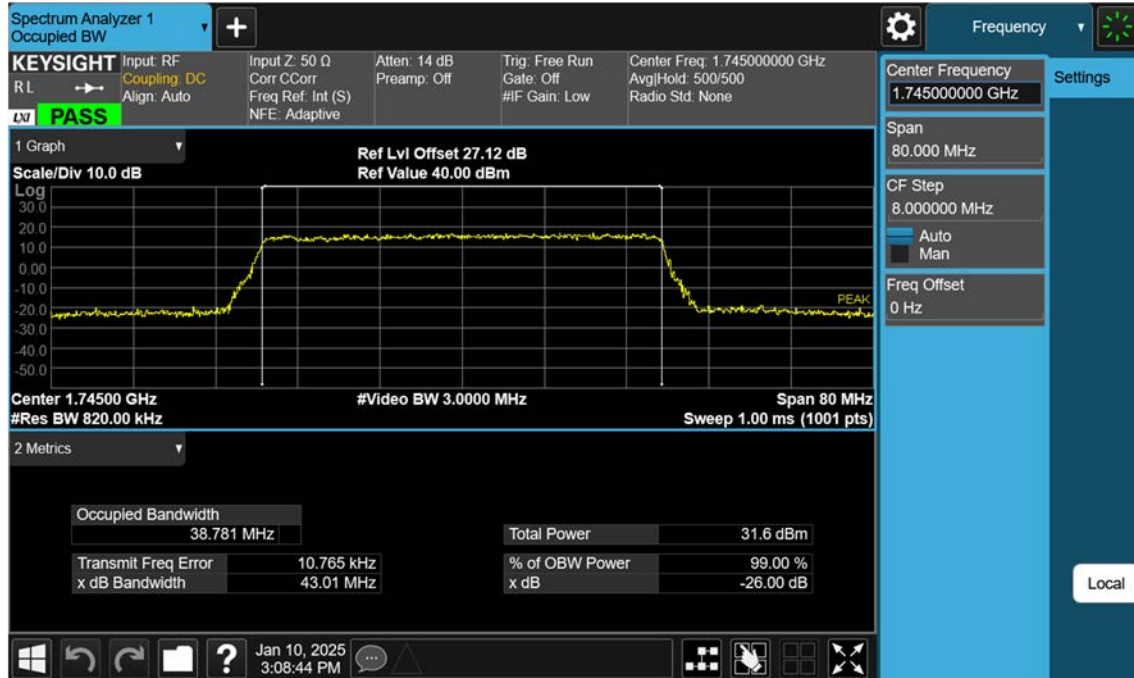
NR66_30 M_OBW_Mid_256QAM_FullRB



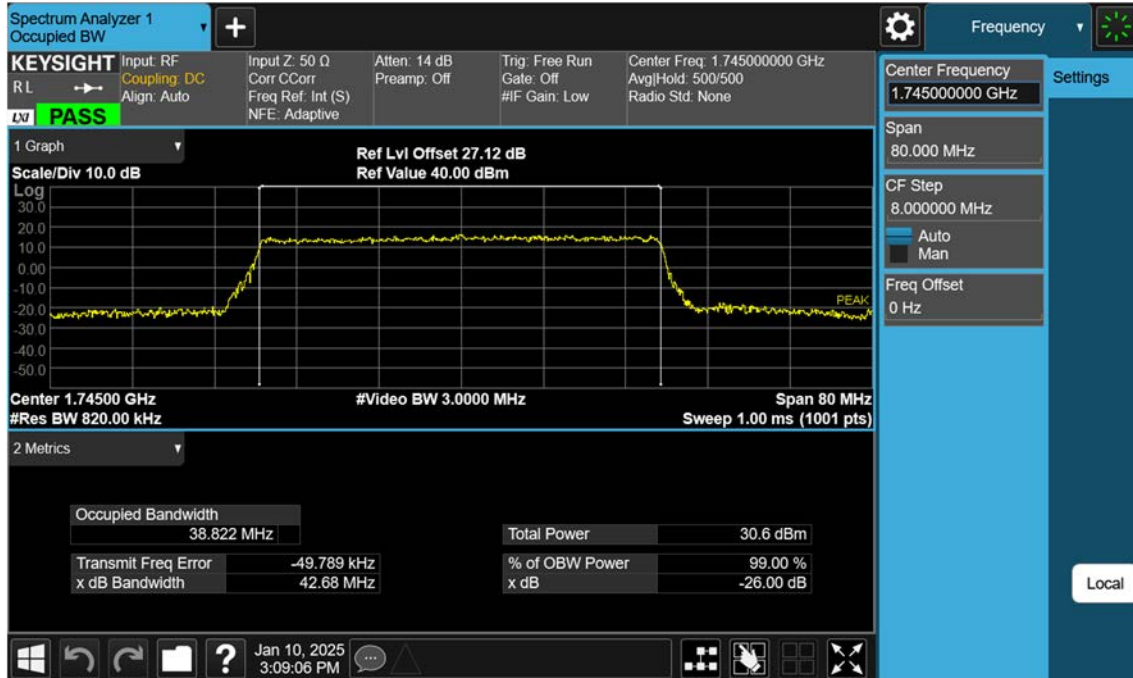
NR66_40 M_OBW_Mid_BPSK_FullRB



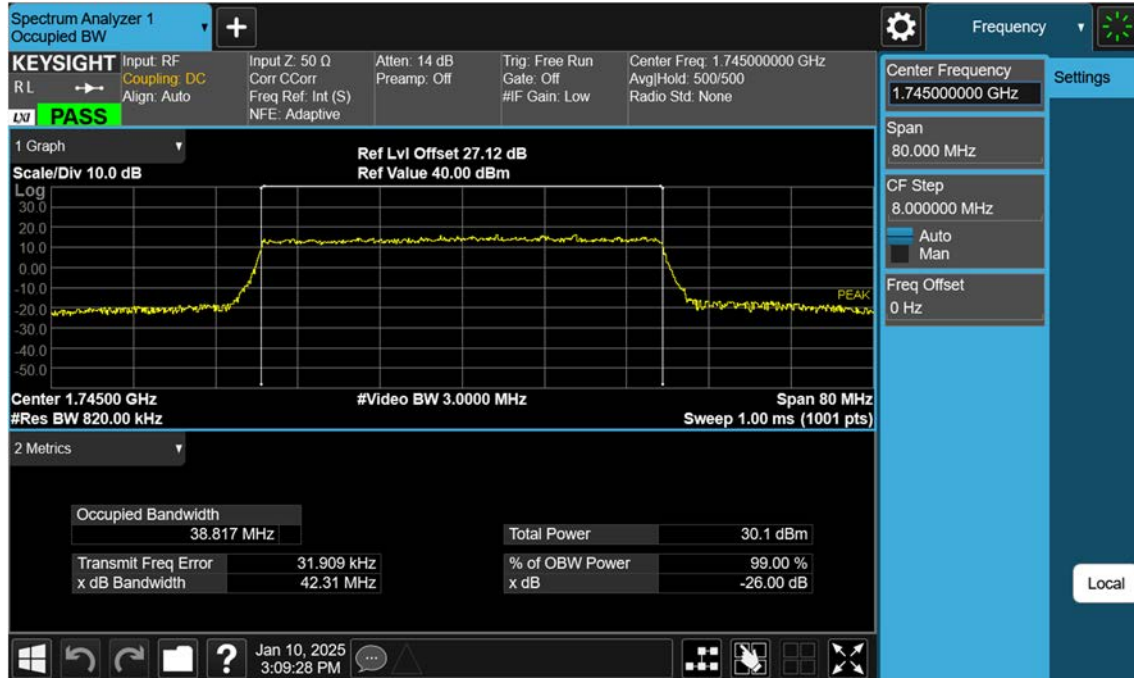
NR66_40 M_OBW_Mid_QPSK_FullRB



NR66_40 M_OBW_Mid_16QAM_FullRB



NR66_40 M_OBW_Mid_64QAM_FullRB



NR66_40 M_OBW_Mid_256QAM_FullRB

