

TEST REPORT

FCC Sub6 n2 Test for SM-A266U
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2501-FC019

DATE OF ISSUE
January 15, 2025

Tested by
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TEST REPORT

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Additional Model

SM-A266U1, SM-S266V

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-A266U

Date of Test

November 22, 2024~ January 10, 2025

FCC ID

A3LSMA266U

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	January 15, 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).

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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:	A3LSMA266U
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§ 24
EUT Type:	Mobile phone
Model(s):	SM-A266U
Additional Model(s)	SM-A266U1, SM-S266V
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:	1852.5 MHz – 1907.5 MHz (Sub6 n2 (5 MHz)) 1855.0 MHz – 1905.0 MHz (Sub6 n2 (10 MHz)) 1857.5 MHz – 1902.5 MHz (Sub6 n2 (15 MHz)) 1860.0 MHz – 1900.0 MHz (Sub6 n2 (20 MHz)) 1862.5 MHz – 1897.5 MHz (Sub6 n2 (25 MHz)) 1865.0 MHz – 1895.0 MHz (Sub6 n2 (30 MHz)) 1870.0 MHz – 1890.0 MHz (Sub6 n2 (40 MHz))
Date(s) of Tests:	November 22, 2024~ January 10, 2025
Serial number:	Radiated : R3CXB07JAGW Conducted : R3CXB07HDAZ

1.1. MAXIMUM OUTPUT POWER

Main2

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n2 (5)	1852.5 – 1907.5	4M53G7D	PI/2 BPSK	0.245	23.89
		4M52G7D	QPSK	0.242	23.83
		4M52W7D	16QAM	0.185	22.68
		4M55W7D	64QAM	0.130	21.15
		4M54W7D	256QAM	0.085	19.27
Sub6 n2 (10)	1855.0 - 1905.0	8M99G7D	PI/2 BPSK	0.247	23.92
		8M99G7D	QPSK	0.245	23.89
		8M98W7D	16QAM	0.191	22.82
		9M00W7D	64QAM	0.137	21.37
		8M97W7D	256QAM	0.088	19.44
Sub6 n2 (15)	1857.5 – 1902.5	13M5G7D	PI/2 BPSK	0.248	23.94
		13M4G7D	QPSK	0.241	23.83
		13M5W7D	16QAM	0.195	22.89
		13M5W7D	64QAM	0.132	21.22
		13M4W7D	256QAM	0.082	19.13
Sub6 n2 (20)	1860.0 – 1900.0	17M9G7D	PI/2 BPSK	0.252	24.02
		17M9G7D	QPSK	0.246	23.92
		17M9W7D	16QAM	0.200	23.02
		18M0W7D	64QAM	0.139	21.43
		17M9W7D	256QAM	0.090	19.53
Sub6 n2 (25)	1862.5 – 1897.5	22M9G7D	PI/2 BPSK	0.250	23.98
		23M0G7D	QPSK	0.249	23.96
		23M0W7D	16QAM	0.197	22.95
		23M0W7D	64QAM	0.142	21.52
		22M9W7D	256QAM	0.089	19.50
Sub6 n2 (30)	1865.0 – 1895.0	28M8G7D	PI/2 BPSK	0.251	23.99
		28M7G7D	QPSK	0.249	23.96
		28M7W7D	16QAM	0.198	22.96
		28M7W7D	64QAM	0.139	21.44
		28M7W7D	256QAM	0.087	19.41
Sub6 n2 (40)	1870.0 – 1890.0	38M8G7D	PI/2 BPSK	0.256	24.08
		38M7G7D	QPSK	0.251	24.00
		38M7W7D	16QAM	0.209	23.21
		38M7W7D	64QAM	0.145	21.62
		38M8W7D	256QAM	0.089	19.52

Sub2

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n2 (5)	1852.5 – 1907.5	4M52G7D	PI/2 BPSK	0.096	19.83
		4M52G7D	QPSK	0.094	19.72
		4M52W7D	16QAM	0.075	18.76
		4M51W7D	64QAM	0.053	17.26
		4M53W7D	256QAM	0.033	15.13
Sub6 n2 (10)	1855.0 - 1905.0	9M02G7D	PI/2 BPSK	0.094	19.74
		9M01G7D	QPSK	0.092	19.63
		9M00W7D	16QAM	0.077	18.84
		9M00W7D	64QAM	0.053	17.28
		8M97W7D	256QAM	0.034	15.35
Sub6 n2 (15)	1857.5 – 1902.5	13M5G7D	PI/2 BPSK	0.098	19.91
		13M5G7D	QPSK	0.098	19.90
		13M5W7D	16QAM	0.079	18.96
		13M4W7D	64QAM	0.055	17.43
		13M4W7D	256QAM	0.036	15.52
Sub6 n2 (20)	1860.0 – 1900.0	17M9G7D	PI/2 BPSK	0.095	19.80
		17M9G7D	QPSK	0.095	19.76
		17M9W7D	16QAM	0.075	18.78
		17M9W7D	64QAM	0.054	17.29
		17M9W7D	256QAM	0.034	15.32
Sub6 n2 (25)	1862.5 – 1897.5	23M0G7D	PI/2 BPSK	0.107	20.29
		23M0G7D	QPSK	0.102	20.08
		22M9W7D	16QAM	0.085	19.31
		23M0W7D	64QAM	0.059	17.72
		22M9W7D	256QAM	0.037	15.70
Sub6 n2 (30)	1865.0 – 1895.0	28M7G7D	PI/2 BPSK	0.108	20.33
		28M7G7D	QPSK	0.106	20.27
		28M7W7D	16QAM	0.084	19.22
		28M7W7D	64QAM	0.060	17.75
		28M7W7D	256QAM	0.037	15.66
Sub6 n2 (40)	1870.0 – 1890.0	38M8G7D	PI/2 BPSK	0.103	20.12
		38M7G7D	QPSK	0.102	20.07
		38M7W7D	16QAM	0.080	19.06
		38M7W7D	64QAM	0.058	17.66
		38M6W7D	256QAM	0.035	15.50

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;

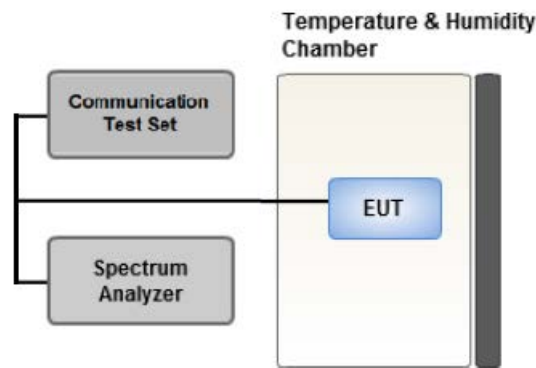
$$\text{Result}_{(\text{dBm})} = P_g_{(\text{dBm})} - \text{cable loss}_{(\text{dB})} + \text{antenna gain}_{(\text{dBi})}$$

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)

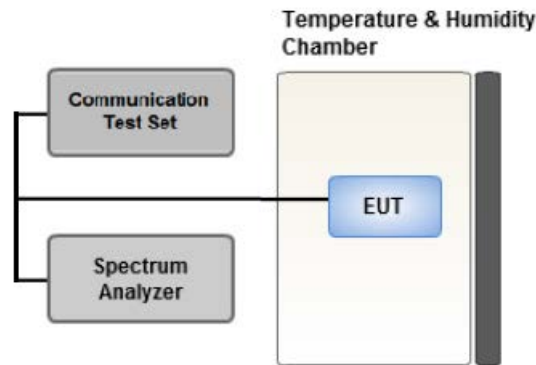
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

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.

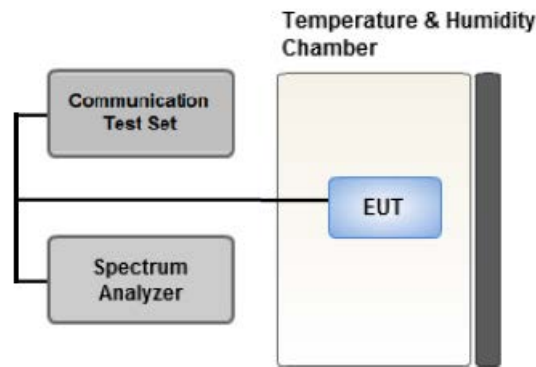
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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. $VBW \geq 3 \times RBW$
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within $1 - 5\%$ of the 99 % occupied bandwidth observed in Step 7

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

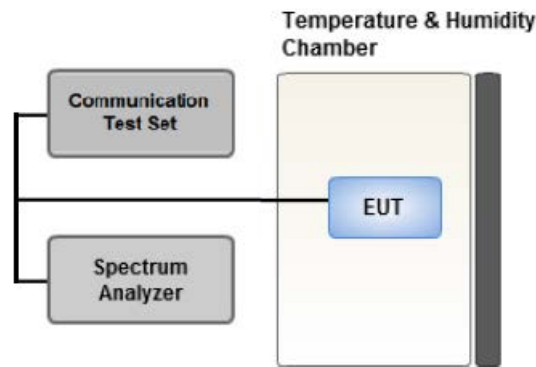
Test Overview

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

Test Settings

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

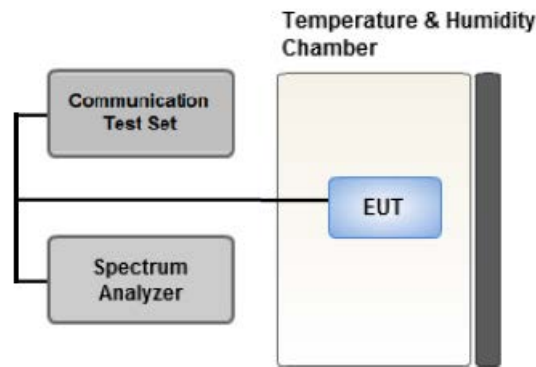
According to FCC 22.917, 24.238, 27.53 specified that power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. In the 1 MHz bands immediately outside and adjacent to the frequency block 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: 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 : 40 MHz (Main2), 30 MHz (Sub2))
- SM-A266U & additional models were tested and the worst case results are reported.
(Worst case : SM-A266U)

[Main2 Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective 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

[Sub2 Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	See Section 9.1		Z
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.
- SM-A266U & additional models were tested and the worst case results are reported.
(Worst case : SM-A266U)

[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
SIGNAL GENERATOR (100 kHz ~ 40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	07/26/2025	Annual
FCC LTE Mobile Conducted RF Automation Test Software	-	HCT CO., LTD.,	-	-	-

Note:

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

5. MEASUREMENT UNCERTAINTY

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

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

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

Parameter	Expanded Uncertainty ($\pm$ dB)
Block Edge	0.70 (Confidence level about 95 %, $k=2$)
Conducted Spurious Emissions	1.18 (Confidence level about 95 %, $k=2$)
Peak- to- Average Ratio	0.68 (Confidence level about 95 %, $k=2$)
Radiated Power	4.74 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.36 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.70 (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, § 24.238(a)	$< 43 + 10\log_{10} (P[\text{Watts}])$ 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	§ 24.232(d)	$< 13 \text{ dB}$	PASS
Frequency stability / variation of ambient temperature	§ 24.235	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	§ 24.232(c)	$< 2 \text{ Watts max. EIRP}$	PASS
Radiated Spurious and Harmonic Emissions	§ 2.1053, § 24.238(a)	$< 43 + 10\log_{10} (P[\text{Watts}])$ 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(Main2)

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	Sub6 n2/ 5 MHz [15 kHz]	PI/2 BPSK	-18.11	15.52	10.45	2.08	V	< 2.00	0.245	23.89	1	12
		QPSK	-18.17	15.46	10.45	2.08	V		0.242	23.83		
		16-QAM	-19.33	14.30	10.45	2.08	V		0.185	22.67		
		64-QAM	-20.85	12.78	10.45	2.08	V		0.130	21.15		
		256-QAM	-22.73	10.90	10.45	2.08	V		0.085	19.27		
1880.0		PI/2 BPSK	-18.18	15.39	10.34	2.21	V		0.225	23.52	1	12
		QPSK	-18.21	15.36	10.34	2.21	V		0.223	23.49		
		16-QAM	-19.13	14.44	10.34	2.21	V		0.181	22.57		
		64-QAM	-20.56	13.01	10.34	2.21	V		0.130	21.14		
		256-QAM	-22.86	10.71	10.34	2.21	V		0.077	18.84		
1907.5		PI/2 BPSK	-18.17	15.73	10.21	2.17	V		0.238	23.77	1	23
		QPSK	-18.27	15.63	10.21	2.17	V		0.233	23.67		
		16-QAM	-19.26	14.64	10.21	2.17	V		0.185	22.68		
		64-QAM	-20.92	12.98	10.21	2.17	V		0.126	21.02		
		256-QAM	-22.84	11.06	10.21	2.17	V		0.081	19.10		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1855.0		PI/2 BPSK	-18.19	15.44	10.45	2.08	V	< 2.00	0.240	23.81	1	50
		QPSK	-18.20	15.43	10.45	2.08	V		0.240	23.80		
		16-QAM	-19.28	14.35	10.45	2.08	V		0.187	22.72		
		64-QAM	-20.73	12.90	10.45	2.08	V		0.134	21.27		
		256-QAM	-22.56	11.07	10.45	2.08	V		0.088	19.44		
1880.0	Sub6 n2/ 10 MHz [15 kHz]	PI/2 BPSK	-18.03	15.54	10.34	2.21	V	< 2.00	0.233	23.67	1	26
		QPSK	-18.09	15.48	10.34	2.21	V		0.229	23.61		
		16-QAM	-19.18	14.39	10.34	2.21	V		0.179	22.52		
		64-QAM	-20.72	12.85	10.34	2.21	V		0.125	20.98		
		256-QAM	-22.74	10.83	10.34	2.21	V		0.079	18.96		
1905.0		PI/2 BPSK	-18.16	15.88	10.23	2.19	V	< 2.00	0.247	23.92	1	1
		QPSK	-18.19	15.85	10.23	2.19	V		0.245	23.89		
		16-QAM	-19.26	14.78	10.23	2.19	V		0.191	22.82		
		64-QAM	-20.71	13.33	10.23	2.19	V		0.137	21.37		
		256-QAM	-22.80	11.24	10.23	2.19	V		0.085	19.28		

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	-18.31	15.01	10.43	2.10	V	< 2.00	0.216	23.34	1	77
		QPSK	-18.32	15.00	10.43	2.10	V		0.215	23.33		
		16-QAM	-19.39	13.93	10.43	2.10	V		0.168	22.26		
		64-QAM	-20.71	12.61	10.43	2.10	V		0.124	20.94		
		256-QAM	-22.74	10.58	10.43	2.10	V		0.078	18.91		
1880.0	Sub6 n2/ 15 MHz [15 kHz]	PI/2 BPSK	-18.19	15.38	10.34	2.21	V	< 2.00	0.224	23.51	1	39
		QPSK	-18.20	15.37	10.34	2.21	V		0.224	23.50		
		16-QAM	-19.10	14.47	10.34	2.21	V		0.182	22.60		
		64-QAM	-20.48	13.09	10.34	2.21	V		0.132	21.22		
		256-QAM	-22.74	10.83	10.34	2.21	V		0.079	18.96		
1902.5		PI/2 BPSK	-18.14	15.90	10.23	2.19	V	< 2.00	0.248	23.94	1	39
		QPSK	-18.25	15.79	10.23	2.19	V		0.241	23.83		
		16-QAM	-19.19	14.85	10.23	2.19	V		0.195	22.89		
		64-QAM	-20.86	13.18	10.23	2.19	V		0.132	21.22		
		256-QAM	-22.95	11.09	10.23	2.19	V		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
1860.0		PI/2 BPSK	-18.06	15.26	10.43	2.10	V	< 2.00	0.229	23.59	1	53
		QPSK	-18.18	15.14	10.43	2.10	V		0.222	23.47		
		16-QAM	-19.22	14.10	10.43	2.10	V		0.175	22.43		
		64-QAM	-20.61	12.71	10.43	2.10	V		0.127	21.04		
		256-QAM	-22.86	10.46	10.43	2.10	V		0.076	18.79		
1880.0	Sub6 n2/ 20 MHz [15 kHz]	PI/2 BPSK	-18.11	15.46	10.34	2.21	V	< 2.00	0.229	23.59	1	53
		QPSK	-18.13	15.44	10.34	2.21	V		0.227	23.57		
		16-QAM	-19.17	14.40	10.34	2.21	V		0.179	22.53		
		64-QAM	-20.76	12.81	10.34	2.21	V		0.124	20.94		
		256-QAM	-22.83	10.74	10.34	2.21	V		0.077	18.87		
1900.0		PI/2 BPSK	-18.20	15.97	10.25	2.20	V	< 2.00	0.252	24.02	1	53
		QPSK	-18.30	15.87	10.25	2.20	V		0.246	23.92		
		16-QAM	-19.20	14.97	10.25	2.20	V		0.200	23.02		
		64-QAM	-20.79	13.38	10.25	2.20	V		0.139	21.43		
		256-QAM	-22.69	11.48	10.25	2.20	V		0.090	19.53		

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
1862.5		PI/2 BPSK	-18.27	15.34	10.41	2.13	V	< 2.00	0.230	23.62	1	131
		QPSK	-18.28	15.33	10.41	2.13	V		0.230	23.61		
		16-QAM	-19.31	14.30	10.41	2.13	V		0.181	22.58		
		64-QAM	-20.73	12.88	10.41	2.13	V		0.131	21.16		
		256-QAM	-22.77	10.84	10.41	2.13	V		0.082	19.12		
1880.0	Sub6 n2/ 25 MHz [15 kHz]	PI/2 BPSK	-18.08	15.49	10.34	2.21	V	< 2.00	0.230	23.62	1	66
		QPSK	-18.17	15.40	10.34	2.21	V		0.225	23.53		
		16-QAM	-19.11	14.46	10.34	2.21	V		0.182	22.59		
		64-QAM	-20.69	12.88	10.34	2.21	V		0.126	21.01		
		256-QAM	-22.82	10.75	10.34	2.21	V		0.077	18.88		
1897.5		PI/2 BPSK	-18.24	15.93	10.25	2.20	V	< 2.00	0.250	23.98	1	131
		QPSK	-18.26	15.91	10.25	2.20	V		0.249	23.96		
		16-QAM	-19.27	14.90	10.25	2.20	V		0.197	22.95		
		64-QAM	-20.70	13.47	10.25	2.20	V		0.142	21.52		
		256-QAM	-22.72	11.45	10.25	2.20	V		0.089	19.50		

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	Sub6 n2/ 30 MHz [15 kHz]	PI/2 BPSK	-18.18	15.43	10.41	2.13	V	< 2.00	0.235	23.71	1	158
		QPSK	-18.21	15.40	10.41	2.13	V		0.233	23.68		
		16-QAM	-19.20	14.41	10.41	2.13	V		0.186	22.69		
		64-QAM	-20.65	12.96	10.41	2.13	V		0.133	21.24		
		256-QAM	-22.63	10.98	10.41	2.13	V		0.084	19.26		
1880.0		PI/2 BPSK	-18.21	15.36	10.34	2.21	V		0.224	23.49	1	80
		QPSK	-18.26	15.31	10.34	2.21	V		0.221	23.44		
		16-QAM	-19.08	14.49	10.34	2.21	V		0.183	22.62		
		64-QAM	-20.66	12.91	10.34	2.21	V		0.127	21.04		
		256-QAM	-22.81	10.76	10.34	2.21	V		0.078	18.89		
1895.0		PI/2 BPSK	-18.27	15.91	10.28	2.20	V		0.251	23.99	1	80
		QPSK	-18.30	15.88	10.28	2.20	V		0.249	23.96		
		16-QAM	-19.30	14.88	10.28	2.20	V		0.198	22.96		
		64-QAM	-20.82	13.36	10.28	2.20	V		0.139	21.44		
		256-QAM	-22.85	11.33	10.28	2.20	V		0.087	19.41		

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	Sub6 n2/ 40 MHz [15 kHz]	PI/2 BPSK	-18.09	15.82	10.39	2.16	V	< 2.00	0.254	24.05	1	108
		QPSK	-18.30	15.61	10.39	2.16	V		0.242	23.84		
		16-QAM	-19.27	14.64	10.39	2.16	V		0.194	22.87		
		64-QAM	-20.77	13.14	10.39	2.16	V		0.137	21.37		
		256-QAM	-22.92	10.99	10.39	2.16	V		0.084	19.22		
1880.0		PI/2 BPSK	-18.09	15.48	10.34	2.21	V		0.229	23.61	1	108
		QPSK	-18.10	15.47	10.34	2.21	V		0.229	23.60		
		16-QAM	-19.20	14.37	10.34	2.21	V		0.178	22.50		
		64-QAM	-20.81	12.76	10.34	2.21	V		0.123	20.89		
		256-QAM	-22.74	10.83	10.34	2.21	V		0.079	18.96		
1890.0		PI/2 BPSK	-18.22	15.99	10.30	2.21	V		0.256	24.08	1	1
		QPSK	-18.30	15.91	10.30	2.21	V		0.251	24.00		
		16-QAM	-19.09	15.12	10.30	2.21	V		0.209	23.21		
		64-QAM	-20.68	13.53	10.30	2.21	V		0.145	21.62		
		256-QAM	-22.78	11.43	10.30	2.21	V		0.090	19.52		

8.2 RADIATED SPURIOUS EMISSIONS

■ NR Band:	<u>N2</u>
■ Bandwidth:	<u>40 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
374000 (1870.0)	3 740.00	-61.68	12.00	-61.62	3.19	V	-52.81	-13.00	1	108
	5 610.00	-62.31	12.21	-56.58	3.92	V	-48.29	-13.00		
	7 480.00	-57.02	11.45	-42.22	4.62	H	-35.39	-13.00		
376000 (1880.0)	3 760.00	-61.00	11.90	-60.63	3.12	V	-51.85	-13.00	1	108
	5 640.00	-62.31	12.14	-55.99	3.92	V	-47.77	-13.00		
	7 520.00	-60.34	11.56	-45.49	4.61	H	-38.54	-13.00		
378000 (1890.0)	3 780.00	-61.05	11.81	-59.87	3.14	V	-51.20	-13.00	1	1
	5 670.00	-63.50	12.05	-57.46	4.01	V	-49.42	-13.00		
	7 560.00	-57.64	11.60	-43.10	4.64	H	-36.14	-13.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n2	5 MHz	1882.5	BPSK	25	0	4.60
			QPSK			5.81
			16-QAM			6.49
			64-QAM			6.89
			256-QAM			6.79
	10 MHz		BPSK	50		4.42
			QPSK			5.60
			16-QAM			6.35
			64-QAM			6.67
			256-QAM			6.82
	15 MHz		BPSK	75		4.30
			QPSK			5.53
			16-QAM			6.32
			64-QAM			6.53
			256-QAM			6.62
	20 MHz		BPSK	100		4.83
			QPSK			5.61
			16-QAM			6.36
			64-QAM			6.62
			256-QAM			6.60

Sub6 n2	25 MHz	1882.5	BPSK	128	0	4.72
			QPSK			5.65
			16-QAM			6.36
			64-QAM			6.50
			256-QAM			6.67
	30 MHz		BPSK	160		4.46
			QPSK			5.64
			16-QAM			6.44
			64-QAM			6.58
			256-QAM			6.70
	40 MHz		BPSK	216		4.48
			QPSK			5.63
			16-QAM			6.38
			64-QAM			6.58
			256-QAM			6.73

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 68 ~ 102.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n2	5 MHz	1882.5	BPSK	25	0	4.5248
			QPSK			4.5242
			16-QAM			4.5154
			64-QAM			4.5535
			256-QAM			4.5403
	10 MHz		BPSK	50		8.9942
			QPSK			8.9872
			16-QAM			8.9800
			64-QAM			9.0006
			256-QAM			8.9690
	15 MHz		BPSK	75		13.480
			QPSK			13.418
			16-QAM			13.461
			64-QAM			13.454
			256-QAM			13.427
	20 MHz		BPSK	100		17.877
			QPSK			17.932
			16-QAM			17.920
			64-QAM			17.970
			256-QAM			17.889

Sub6 n2	25 MHz	1882.5	BPSK	128	0	22.940
			QPSK			22.975
			16-QAM			22.950
			64-QAM			23.008
			256-QAM			22.854
	30 MHz		BPSK	160		28.792
			QPSK			28.715
			16-QAM			28.733
			64-QAM			28.666
			256-QAM			28.731
	40 MHz		BPSK	216		38.803
			QPSK			38.744
			16-QAM			38.740
			64-QAM			38.721
			256-QAM			38.778

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 103 ~ 137.

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 n2	5	1852.5	3.8086	30.200	-62.491	-32.291	-13.00
		1880.0	4.0379	30.200	-62.630	-32.430	
		1907.5	9.6909	30.815	-62.758	-31.943	
	10	1855.0	4.9352	30.200	-63.391	-33.191	
		1880.0	4.8954	30.200	-63.227	-33.027	
		1905.0	9.6909	30.815	-62.424	-31.609	
	15	1857.5	3.6292	30.200	-63.174	-32.974	
		1880.0	8.6341	30.815	-63.494	-32.679	
		1902.5	9.1725	30.815	-62.636	-31.821	
	20	1860.0	9.7308	30.815	-62.742	-31.927	
		1880.0	4.5364	30.200	-63.790	-33.590	
		1900.0	4.9253	30.200	-62.962	-32.762	
	25	1862.5	9.6511	30.815	-61.899	-31.084	
		1880.0	7.4577	30.815	-63.414	-32.599	
		1897.5	8.3550	30.815	-63.768	-32.953	
	30	1865.0	9.4716	30.815	-62.363	-31.548	
		1880.0	9.7109	30.815	-62.852	-32.037	
		1895.0	9.3220	30.815	-62.860	-32.045	
	40	1870.0	3.7189	30.200	-63.180	-32.980	
		1880.0	3.7987	30.200	-61.464	-31.264	
		1890.0	6.0419	30.815	-62.998	-32.183	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 138 ~ 179.
2. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
3. Factor(dB) = Cable Loss + 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 180 ~ 221.

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

■ BandWidth:	<u>5 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 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 499 998	0.0	0.000 000	0.000
	100 %	-30	1852 499 995	-3.0	0.000 000	-0.002
	100 %	-20	1852 499 995	-2.7	0.000 000	-0.001
	100 %	-10	1852 499 995	-2.2	0.000 000	-0.001
	100 %	0	1852 499 994	-3.6	0.000 000	-0.002
	100 %	+10	1852 499 995	-2.3	0.000 000	-0.001
	100 %	+30	1852 499 995	-2.4	0.000 000	-0.001
	100 %	+40	1852 499 995	-2.9	0.000 000	-0.002
	100 %	+50	1852 499 994	-3.6	0.000 000	-0.002
	Batt. Endpoint	+20	1852 499 996	-2.0	0.000 000	-0.001
1907.5	100 %	+20(Ref)	1907 500 000	0.0	0.000 000	0.000
	100 %	-30	1907 499 999	-1.0	0.000 000	-0.001
	100 %	-20	1907 499 999	-0.4	0.000 000	0.000
	100 %	-10	1907 499 998	-1.8	0.000 000	-0.001
	100 %	0	1907 499 999	-0.8	0.000 000	0.000
	100 %	+10	1907 499 999	-0.7	0.000 000	0.000
	100 %	+30	1907 499 999	-0.5	0.000 000	0.000
	100 %	+40	1907 500 000	0.5	0.000 000	0.000
	100 %	+50	1907 499 999	-0.2	0.000 000	0.000
	Batt. Endpoint	+20	1907 499 999	-1.0	0.000 000	-0.001

■ 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 Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1855.0	100 %	+20(Ref)	1854 999 999	0.0	0.000 000	0.000
	100 %	-30	1854 999 999	-0.2	0.000 000	0.000
	100 %	-20	1854 999 999	-0.9	0.000 000	0.000
	100 %	-10	1854 999 999	-0.2	0.000 000	0.000
	100 %	0	1855 000 000	0.4	0.000 000	0.000
	100 %	+10	1854 999 998	-1.4	0.000 000	-0.001
	100 %	+30	1854 999 998	-0.9	0.000 000	0.000
	100 %	+40	1855 000 000	1.0	0.000 000	0.001
	100 %	+50	1855 000 000	0.3	0.000 000	0.000
	Batt. Endpoint	+20	1854 999 998	-1.4	0.000 000	-0.001
1905.0	100 %	+20(Ref)	1905 000 000	0.0	0.000 000	0.000
	100 %	-30	1905 000 000	-0.2	0.000 000	0.000
	100 %	-20	1904 999 999	-1.0	0.000 000	-0.001
	100 %	-10	1905 000 001	0.1	0.000 000	0.000
	100 %	0	1905 000 000	-0.8	0.000 000	0.000
	100 %	+10	1905 000 000	-0.3	0.000 000	0.000
	100 %	+30	1905 000 001	0.3	0.000 000	0.000
	100 %	+40	1905 000 000	-0.1	0.000 000	0.000
	100 %	+50	1905 000 000	-0.9	0.000 000	0.000
	Batt. Endpoint	+20	1905 000 001	0.2	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 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 499 998	-0.8	0.000 000	0.000
	100 %	-20	1857 499 999	-0.5	0.000 000	0.000
	100 %	-10	1857 499 998	-1.1	0.000 000	-0.001
	100 %	0	1857 499 999	-0.7	0.000 000	0.000
	100 %	+10	1857 499 998	-1.0	0.000 000	-0.001
	100 %	+30	1857 499 998	-1.5	0.000 000	-0.001
	100 %	+40	1857 499 998	-1.7	0.000 000	-0.001
	100 %	+50	1857 499 998	-1.2	0.000 000	-0.001
	Batt. Endpoint	+20	1857 499 997	-1.8	0.000 000	-0.001
1902.5	100 %	+20(Ref)	1902 499 999	0.0	0.000 000	0.000
	100 %	-30	1902 499 998	-1.3	0.000 000	-0.001
	100 %	-20	1902 499 999	-0.5	0.000 000	0.000
	100 %	-10	1902 499 998	-1.5	0.000 000	-0.001
	100 %	0	1902 499 997	-1.9	0.000 000	-0.001
	100 %	+10	1902 499 996	-3.1	0.000 000	-0.002
	100 %	+30	1902 499 997	-2.0	0.000 000	-0.001
	100 %	+40	1902 499 999	0.4	0.000 000	0.000
	100 %	+50	1902 499 996	-2.7	0.000 000	-0.001
	Batt. Endpoint	+20	1902 499 998	-1.4	0.000 000	-0.001

■ BandWidth:	<u>20 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1860.0	100 %	+20(Ref)	1859 999 999	0.0	0.000 000	0.000
	100 %	-30	1859 999 998	-1.3	0.000 000	-0.001
	100 %	-20	1859 999 998	-1.2	0.000 000	-0.001
	100 %	-10	1859 999 999	0.0	0.000 000	0.000
	100 %	0	1859 999 998	-1.1	0.000 000	-0.001
	100 %	+10	1859 999 998	-0.5	0.000 000	0.000
	100 %	+30	1859 999 998	-1.0	0.000 000	-0.001
	100 %	+40	1859 999 998	-0.5	0.000 000	0.000
	100 %	+50	1859 999 997	-2.1	0.000 000	-0.001
	Batt. Endpoint	+20	1859 999 998	-1.1	0.000 000	-0.001
1900.0	100 %	+20(Ref)	1900 000 001	0.0	0.000 000	0.000
	100 %	-30	1900 000 001	0.1	0.000 000	0.000
	100 %	-20	1900 000 000	-0.9	0.000 000	0.000
	100 %	-10	1900 000 000	-0.6	0.000 000	0.000
	100 %	0	1900 000 001	0.3	0.000 000	0.000
	100 %	+10	1900 000 001	0.2	0.000 000	0.000
	100 %	+30	1900 000 002	0.8	0.000 000	0.000
	100 %	+40	1900 000 000	-0.4	0.000 000	0.000
	100 %	+50	1900 000 001	-0.2	0.000 000	0.000
	Batt. Endpoint	+20	1900 000 001	-0.1	0.000 000	0.000

■ BandWidth:	<u>25 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1862.5	100 %	+20(Ref)	1862 499 999	0.0	0.000 000	0.000
	100 %	-30	1862 499 997	-1.5	0.000 000	-0.001
	100 %	-20	1862 499 997	-2.2	0.000 000	-0.001
	100 %	-10	1862 499 996	-2.3	0.000 000	-0.001
	100 %	0	1862 499 998	-1.1	0.000 000	-0.001
	100 %	+10	1862 499 998	-0.4	0.000 000	0.000
	100 %	+30	1862 499 998	-1.2	0.000 000	-0.001
	100 %	+40	1862 499 998	-1.0	0.000 000	-0.001
	100 %	+50	1862 499 997	-1.5	0.000 000	-0.001
	Batt. Endpoint	+20	1862 499 998	-1.2	0.000 000	-0.001
1897.5	100 %	+20(Ref)	1897 500 000	0.0	0.000 000	0.000
	100 %	-30	1897 500 000	-0.7	0.000 000	0.000
	100 %	-20	1897 500 000	-0.6	0.000 000	0.000
	100 %	-10	1897 500 001	0.9	0.000 000	0.000
	100 %	0	1897 500 000	-0.6	0.000 000	0.000
	100 %	+10	1897 500 001	0.3	0.000 000	0.000
	100 %	+30	1897 500 001	0.2	0.000 000	0.000
	100 %	+40	1897 500 001	0.2	0.000 000	0.000
	100 %	+50	1897 500 000	0.0	0.000 000	0.000
	Batt. Endpoint	+20	1897 500 001	0.3	0.000 000	0.000

■ BandWidth:	<u>30 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1865.0	100 %	+20(Ref)	1864 999 999	0.0	0.000 000	0.000
	100 %	-30	1865 000 000	0.5	0.000 000	0.000
	100 %	-20	1864 999 999	-0.1	0.000 000	0.000
	100 %	-10	1865 000 000	0.6	0.000 000	0.000
	100 %	0	1864 999 998	-0.6	0.000 000	0.000
	100 %	+10	1864 999 998	-0.9	0.000 000	0.000
	100 %	+30	1865 000 000	0.6	0.000 000	0.000
	100 %	+40	1864 999 999	0.0	0.000 000	0.000
	100 %	+50	1864 999 999	-0.4	0.000 000	0.000
	Batt. Endpoint	+20	1864 999 999	-0.1	0.000 000	0.000
1895.0	100 %	+20(Ref)	1895 000 000	0.0	0.000 000	0.000
	100 %	-30	1894 999 999	-0.7	0.000 000	0.000
	100 %	-20	1894 999 999	-0.9	0.000 000	0.000
	100 %	-10	1894 999 999	-0.8	0.000 000	0.000
	100 %	0	1895 000 000	-0.1	0.000 000	0.000
	100 %	+10	1894 999 998	-1.2	0.000 000	-0.001
	100 %	+30	1894 999 999	-0.5	0.000 000	0.000
	100 %	+40	1895 000 000	0.5	0.000 000	0.000
	100 %	+50	1894 999 998	-1.3	0.000 000	-0.001
	Batt. Endpoint	+20	1895 000 000	0.3	0.000 000	0.000

■ BandWidth:	<u>40 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 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 000 000	0.0	0.000 000	0.000
	100 %	-30	1870 000 001	1.0	0.000 000	0.001
	100 %	-20	1869 999 999	-0.6	0.000 000	0.000
	100 %	-10	1869 999 998	-1.4	0.000 000	-0.001
	100 %	0	1870 000 000	0.4	0.000 000	0.000
	100 %	+10	1869 999 999	-1.0	0.000 000	-0.001
	100 %	+30	1869 999 999	-0.8	0.000 000	0.000
	100 %	+40	1869 999 999	-0.5	0.000 000	0.000
	100 %	+50	1869 999 999	-0.4	0.000 000	0.000
	Batt. Endpoint	+20	1870 000 000	0.8	0.000 000	0.000
1890.0	100 %	+20(Ref)	1890 000 000	0.0	0.000 000	0.000
	100 %	-30	1890 000 000	-0.4	0.000 000	0.000
	100 %	-20	1889 999 999	-0.8	0.000 000	0.000
	100 %	-10	1890 000 000	0.2	0.000 000	0.000
	100 %	0	1889 999 999	-0.7	0.000 000	0.000
	100 %	+10	1889 999 999	-0.9	0.000 000	0.000
	100 %	+30	1889 999 999	-1.4	0.000 000	-0.001
	100 %	+40	1890 000 000	-0.4	0.000 000	0.000
	100 %	+50	1889 999 999	-0.8	0.000 000	0.000
	Batt. Endpoint	+20	1889 999 999	-1.2	0.000 000	-0.001

9. TEST DATA(Sub2)

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	-22.17	11.46	10.45	2.08	V	< 2.00	0.096	19.83	1	12
		QPSK	-22.28	11.35	10.45	2.08	V		0.094	19.72		
		16-QAM	-23.24	10.39	10.45	2.08	V		0.075	18.76		
		64-QAM	-24.74	8.89	10.45	2.08	V		0.053	17.26		
		256-QAM	-26.87	6.76	10.45	2.08	V		0.033	15.13		
1880.0	Sub6 n2/ 5 MHz [15 kHz]	PI/2 BPSK	-21.97	11.60	10.34	2.21	V	< 2.00	0.094	19.73	1	12
		QPSK	-22.05	11.52	10.34	2.21	V		0.092	19.65		
		16-QAM	-22.97	10.60	10.34	2.21	V		0.075	18.73		
		64-QAM	-24.54	9.03	10.34	2.21	V		0.052	17.16		
		256-QAM	-26.57	7.00	10.34	2.21	V		0.033	15.13		
1907.5		PI/2 BPSK	-22.30	11.60	10.21	2.17	V	< 2.00	0.092	19.64	1	23
		QPSK	-22.40	11.50	10.21	2.17	V		0.090	19.54		
		16-QAM	-23.20	10.70	10.21	2.17	V		0.075	18.74		
		64-QAM	-24.76	9.14	10.21	2.17	V		0.052	17.18		
		256-QAM	-26.85	7.05	10.21	2.17	V		0.032	15.09		

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	-22.40	11.23	10.45	2.08	V	< 2.00	0.091	19.60	1	26
		QPSK	-22.46	11.17	10.45	2.08	V		0.090	19.54		
		16-QAM	-23.53	10.10	10.45	2.08	V		0.070	18.47		
		64-QAM	-25.07	8.56	10.45	2.08	V		0.049	16.93		
		256-QAM	-27.06	6.57	10.45	2.08	V		0.031	14.94		
1880.0	Sub6 n2/ 10 MHz [15 kHz]	PI/2 BPSK	-22.05	11.52	10.34	2.21	V	< 2.00	0.092	19.65	1	50
		QPSK	-22.07	11.50	10.34	2.21	V		0.092	19.63		
		16-QAM	-22.93	10.64	10.34	2.21	V		0.075	18.77		
		64-QAM	-24.53	9.04	10.34	2.21	V		0.052	17.17		
		256-QAM	-26.62	6.95	10.34	2.21	V		0.032	15.08		
1905.0		PI/2 BPSK	-22.34	11.70	10.23	2.19	V	< 2.00	0.094	19.74	1	50
		QPSK	-22.48	11.56	10.23	2.19	V		0.091	19.60		
		16-QAM	-23.24	10.80	10.23	2.19	V		0.077	18.84		
		64-QAM	-24.80	9.24	10.23	2.19	V		0.054	17.28		
		256-QAM	-26.73	7.31	10.23	2.19	V		0.034	15.35		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1857.5		PI/2 BPSK	-22.68	10.64	10.43	2.10	V	< 2.00	0.079	18.97	1	1
		QPSK	-22.69	10.63	10.43	2.10	V		0.079	18.96		
		16-QAM	-23.53	9.79	10.43	2.10	V		0.065	18.12		
		64-QAM	-24.85	8.47	10.43	2.10	V		0.048	16.80		
		256-QAM	-26.92	6.40	10.43	2.10	V		0.030	14.73		
1880.0	Sub6 n2/ 15 MHz [15 kHz]	PI/2 BPSK	-21.99	11.58	10.34	2.21	V	< 2.00	0.094	19.71	1	77
		QPSK	-22.13	11.44	10.34	2.21	V		0.091	19.57		
		16-QAM	-23.07	10.50	10.34	2.21	V		0.073	18.63		
		64-QAM	-24.60	8.97	10.34	2.21	V		0.051	17.10		
		256-QAM	-26.72	6.85	10.34	2.21	V		0.032	14.98		
1902.5		PI/2 BPSK	-22.17	11.87	10.23	2.19	V	< 2.00	0.098	19.91	1	39
		QPSK	-22.18	11.86	10.23	2.19	V		0.098	19.90		
		16-QAM	-23.12	10.92	10.23	2.19	V		0.079	18.96		
		64-QAM	-24.65	9.39	10.23	2.19	V		0.055	17.43		
		256-QAM	-26.56	7.48	10.23	2.19	V		0.036	15.52		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1860.0		PI/2 BPSK	-22.26	11.06	10.43	2.10	V	< 2.00	0.087	19.39	1	53
		QPSK	-22.43	10.89	10.43	2.10	V		0.084	19.22		
		16-QAM	-23.53	9.79	10.43	2.10	V		0.065	18.12		
		64-QAM	-24.94	8.38	10.43	2.10	V		0.047	16.71		
		256-QAM	-26.93	6.39	10.43	2.10	V		0.030	14.72		
1880.0	Sub6 n2/ 20 MHz [15 kHz]	PI/2 BPSK	-21.99	11.58	10.34	2.21	V	< 2.00	0.094	19.71	1	53
		QPSK	-22.00	11.57	10.34	2.21	V		0.093	19.70		
		16-QAM	-22.96	10.61	10.34	2.21	V		0.075	18.74		
		64-QAM	-24.42	9.15	10.34	2.21	V		0.053	17.28		
		256-QAM	-26.68	6.89	10.34	2.21	V		0.032	15.02		
1900.0		PI/2 BPSK	-22.42	11.75	10.25	2.20	V	< 2.00	0.096	19.80	1	1
		QPSK	-22.46	11.71	10.25	2.20	V		0.095	19.76		
		16-QAM	-23.44	10.73	10.25	2.20	V		0.076	18.78		
		64-QAM	-24.93	9.24	10.25	2.20	V		0.054	17.29		
		256-QAM	-26.90	7.27	10.25	2.20	V		0.034	15.32		

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	-22.24	11.37	10.41	2.13	V	< 2.00	0.092	19.65	1	131
		QPSK	-22.33	11.28	10.41	2.13	V		0.090	19.56		
		16-QAM	-23.22	10.39	10.41	2.13	V		0.074	18.67		
		64-QAM	-24.92	8.69	10.41	2.13	V		0.050	16.97		
		256-QAM	-26.90	6.71	10.41	2.13	V		0.032	14.99		
1880.0	Sub6 n2/ 25 MHz [15 kHz]	PI/2 BPSK	-21.91	11.66	10.34	2.21	V	< 2.00	0.095	19.79	1	66
		QPSK	-21.92	11.65	10.34	2.21	V		0.095	19.78		
		16-QAM	-22.96	10.61	10.34	2.21	V		0.075	18.74		
		64-QAM	-24.42	9.15	10.34	2.21	V		0.053	17.28		
		256-QAM	-26.54	7.03	10.34	2.21	V		0.033	15.16		
1897.5		PI/2 BPSK	-21.93	12.24	10.25	2.20	V	< 2.00	0.107	20.29	1	1
		QPSK	-22.14	12.03	10.25	2.20	V		0.102	20.08		
		16-QAM	-22.91	11.26	10.25	2.20	V		0.085	19.31		
		64-QAM	-24.50	9.67	10.25	2.20	V		0.059	17.72		
		256-QAM	-26.52	7.65	10.25	2.20	V		0.037	15.70		

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	Sub6 n2/ 30 MHz [15 kHz]	PI/2 BPSK	-21.97	11.64	10.41	2.13	V	< 2.00	0.098	19.92	1	158
		QPSK	-21.99	11.62	10.41	2.13	V		0.098	19.90		
		16-QAM	-22.90	10.71	10.41	2.13	V		0.079	18.99		
		64-QAM	-24.60	9.01	10.41	2.13	V		0.054	17.29		
		256-QAM	-26.81	6.80	10.41	2.13	V		0.032	15.08		
1880.0		PI/2 BPSK	-21.93	11.64	10.34	2.21	V		0.095	19.77	1	80
		QPSK	-22.00	11.57	10.34	2.21	V		0.093	19.70		
		16-QAM	-23.08	10.49	10.34	2.21	V		0.073	18.62		
		64-QAM	-24.42	9.15	10.34	2.21	V		0.054	17.28		
		256-QAM	-26.47	7.10	10.34	2.21	V		0.033	15.23		
1895.0		PI/2 BPSK	-21.93	12.25	10.28	2.20	V		0.108	20.33	1	1
		QPSK	-21.99	12.19	10.28	2.20	V		0.106	20.27		
		16-QAM	-23.04	11.14	10.28	2.20	V		0.084	19.22		
		64-QAM	-24.51	9.67	10.28	2.20	V		0.060	17.75		
		256-QAM	-26.60	7.58	10.28	2.20	V		0.037	15.66		

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	Sub6 n2/ 40 MHz [15 kHz]	PI/2 BPSK	-22.47	11.44	10.39	2.16	V	< 2.00	0.093	19.67	1	214
		QPSK	-22.53	11.38	10.39	2.16	V		0.091	19.61		
		16-QAM	-23.47	10.44	10.39	2.16	V		0.074	18.67		
		64-QAM	-24.87	9.04	10.39	2.16	V		0.053	17.27		
		256-QAM	-26.86	7.05	10.39	2.16	V		0.034	15.28		
1880.0		PI/2 BPSK	-21.99	11.58	10.34	2.21	V		0.094	19.71	1	108
		QPSK	-22.09	11.48	10.34	2.21	V		0.091	19.61		
		16-QAM	-22.96	10.61	10.34	2.21	V		0.075	18.74		
		64-QAM	-24.58	8.99	10.34	2.21	V		0.052	17.12		
		256-QAM	-26.65	6.92	10.34	2.21	V		0.032	15.05		
1890.0		PI/2 BPSK	-22.18	12.03	10.30	2.21	V		0.103	20.12	1	214
		QPSK	-22.23	11.98	10.30	2.21	V		0.102	20.07		
		16-QAM	-23.24	10.97	10.30	2.21	V		0.081	19.06		
		64-QAM	-24.64	9.57	10.30	2.21	V		0.058	17.66		
		256-QAM	-26.80	7.41	10.30	2.21	V		0.036	15.50		

9.2 RADIATED SPURIOUS EMISSIONS

■ NR Band:	<u>N2</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	-59.90	12.04	-59.76	3.17	V	-50.89	-13.00	1	158
	5 595.00	-61.40	12.22	-55.19	3.95	V	-46.92	-13.00		
	7 460.00	-49.18	11.37	-34.11	4.61	V	-27.35	-13.00		
376000 (1880.0)	3 760.00	-61.62	11.90	-61.25	3.12	H	-52.47	-13.00	1	80
	5 640.00	-57.79	12.14	-51.47	3.92	V	-43.25	-13.00		
	7 520.00	-48.16	11.56	-33.31	4.61	V	-26.36	-13.00		
379000 (1900.0)	3 800.00	-60.70	11.71	-60.27	3.21	V	-51.77	-13.00	1	1
	5 700.00	-62.26	11.95	-55.14	4.02	V	-47.21	-13.00		
	7 600.00	-50.26	11.61	-36.25	4.64	V	-29.28	-13.00		

9.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n2	5 MHz	1882.5	BPSK	25	0	5.57
			QPSK			5.83
			16-QAM			6.27
			64-QAM			6.51
			256-QAM			6.41
	10 MHz		BPSK	50		5.13
			QPSK			5.54
			16-QAM			6.08
			64-QAM			6.36
			256-QAM			6.37
	15 MHz		BPSK	75		4.40
			QPSK			5.41
			16-QAM			6.13
			64-QAM			6.34
			256-QAM			6.41
	20 MHz		BPSK	100		5.68
			QPSK			5.94
			16-QAM			6.35
			64-QAM			6.56
			256-QAM			6.49

	25 MHz		BPSK	128		4.40
			QPSK			5.59
			16-QAM			6.29
			64-QAM			6.51
			256-QAM			6.53
	30 MHz		BPSK	160		5.26
			QPSK			5.64
			16-QAM			6.24
			64-QAM			6.46
			256-QAM			6.54
	40 MHz		BPSK	216		5.04
			QPSK			5.63
			16-QAM			6.35
			64-QAM			6.51
			256-QAM			6.51

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 223 ~ 257.

9.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n2	5 MHz	1882.5	BPSK	25	0	4.5170
			QPSK			4.5216
			16-QAM			4.5147
			64-QAM			4.5144
			256-QAM			4.5284
	10 MHz		BPSK	50		9.0205
			QPSK			9.0057
			16-QAM			9.0033
			64-QAM			9.0017
			256-QAM			8.9738
	15 MHz		BPSK	75		13.450
			QPSK			13.447
			16-QAM			13.458
			64-QAM			13.441
			256-QAM			13.431
	20 MHz		BPSK	100		17.902
			QPSK			17.925
			16-QAM			17.884
			64-QAM			17.879
			256-QAM			17.935

	25 MHz		BPSK	128		23.002
			QPSK			22.976
			16-QAM			22.921
			64-QAM			22.982
			256-QAM			22.930
	30 MHz		BPSK	160		28.702
			QPSK			28.684
			16-QAM			28.680
			64-QAM			28.655
			256-QAM			28.741
	40 MHz		BPSK	216		38.768
			QPSK			38.716
			16-QAM			38.716
			64-QAM			38.721
			256-QAM			38.631

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 258 ~ 292.

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 n2	5	1852.5	4.0479	30.200	-63.565	-33.365	-13.00
		1880.0	7.3978	30.815	-62.245	-31.430	
		1907.5	3.7787	30.200	-63.449	-33.249	
	10	1855.0	3.7688	30.200	-62.620	-32.420	
		1880.0	4.0280	30.200	-62.532	-32.332	
		1905.0	7.7368	30.815	-62.240	-31.425	
	15	1857.5	5.1945	30.815	-62.979	-32.164	
		1880.0	3.7987	30.200	-62.328	-32.128	
		1902.5	7.9562	30.815	-63.207	-32.392	
	20	1860.0	3.2403	30.200	-62.804	-32.604	
		1880.0	9.8006	30.815	-62.810	-31.995	
		1900.0	9.1326	30.815	-63.052	-32.237	
	25	1862.5	5.2144	30.815	-62.353	-31.538	
		1880.0	9.1924	30.815	-63.120	-32.305	
		1897.5	9.4217	30.815	-62.810	-31.995	
	30	1865.0	3.8485	30.200	-62.717	-32.517	
		1880.0	6.2712	30.815	-62.805	-31.990	
		1895.0	3.7787	30.200	-62.549	-32.349	
	40	1870.0	5.3041	30.815	-62.492	-31.677	
		1880.0	3.7887	30.200	-62.217	-32.017	
		1890.0	8.1954	30.815	-62.769	-31.954	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 293 ~ 334.
2. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
3. Factor(dB) = Cable Loss + 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 335 ~ 376.

9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

■ BandWidth:	<u>5 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 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 499 997	-2.4	0.000 000	-0.001
	100 %	-20	1852 499 999	-0.7	0.000 000	0.000
	100 %	-10	1852 499 998	-0.9	0.000 000	0.000
	100 %	0	1852 499 998	-1.0	0.000 000	-0.001
	100 %	+10	1852 499 999	-0.3	0.000 000	0.000
	100 %	+30	1852 499 998	-0.9	0.000 000	0.000
	100 %	+40	1852 499 998	-1.2	0.000 000	-0.001
	100 %	+50	1852 499 998	-1.6	0.000 000	-0.001
	Batt. Endpoint	+20	1852 499 999	-0.6	0.000 000	0.000
1907.5	100 %	+20(Ref)	1907 500 000	0.0	0.000 000	0.000
	100 %	-30	1907 499 999	-1.2	0.000 000	-0.001
	100 %	-20	1907 500 000	-0.2	0.000 000	0.000
	100 %	-10	1907 499 999	-0.8	0.000 000	0.000
	100 %	0	1907 500 000	-0.1	0.000 000	0.000
	100 %	+10	1907 499 999	-0.6	0.000 000	0.000
	100 %	+30	1907 500 001	0.9	0.000 000	0.000
	100 %	+40	1907 499 999	-0.6	0.000 000	0.000
	100 %	+50	1907 499 999	-0.4	0.000 000	0.000
	Batt. Endpoint	+20	1907 500 001	0.7	0.000 000	0.000

■ BandWidth:	<u>10 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1855.0	100 %	+20(Ref)	1855 000 000	0.0	0.000 000	0.000
	100 %	-30	1854 999 999	-0.2	0.000 000	0.000
	100 %	-20	1855 000 000	-0.1	0.000 000	0.000
	100 %	-10	1855 000 000	0.0	0.000 000	0.000
	100 %	0	1854 999 999	-0.2	0.000 000	0.000
	100 %	+10	1855 000 000	0.1	0.000 000	0.000
	100 %	+30	1854 999 998	-1.3	0.000 000	-0.001
	100 %	+40	1855 000 001	1.1	0.000 000	0.001
	100 %	+50	1855 000 000	0.4	0.000 000	0.000
	Batt. Endpoint	+20	1854 999 999	-0.4	0.000 000	0.000
1905.0	100 %	+20(Ref)	1905 000 000	0.0	0.000 000	0.000
	100 %	-30	1904 999 999	-0.7	0.000 000	0.000
	100 %	-20	1904 999 999	-0.7	0.000 000	0.000
	100 %	-10	1905 000 000	0.4	0.000 000	0.000
	100 %	0	1905 000 000	0.4	0.000 000	0.000
	100 %	+10	1905 000 002	2.1	0.000 000	0.001
	100 %	+30	1905 000 001	0.6	0.000 000	0.000
	100 %	+40	1905 000 001	0.8	0.000 000	0.000
	100 %	+50	1905 000 000	-0.2	0.000 000	0.000
	Batt. Endpoint	+20	1905 000 000	-0.1	0.000 000	0.000

■ BandWidth:	<u>15 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1857.5	100 %	+20(Ref)	1857 499 998	0.0	0.000 000	0.000
	100 %	-30	1857 499 996	-2.2	0.000 000	-0.001
	100 %	-20	1857 499 996	-2.1	0.000 000	-0.001
	100 %	-10	1857 499 997	-1.4	0.000 000	-0.001
	100 %	0	1857 499 996	-2.0	0.000 000	-0.001
	100 %	+10	1857 499 997	-0.9	0.000 000	-0.001
	100 %	+30	1857 499 997	-0.9	0.000 000	0.000
	100 %	+40	1857 499 997	-1.5	0.000 000	-0.001
	100 %	+50	1857 499 997	-0.9	0.000 000	-0.001
	Batt. Endpoint	+20	1857 499 996	-1.7	0.000 000	-0.001
1902.5	100 %	+20(Ref)	1902 499 999	0.0	0.000 000	0.000
	100 %	-30	1902 499 998	-1.4	0.000 000	-0.001
	100 %	-20	1902 499 998	-1.7	0.000 000	-0.001
	100 %	-10	1902 499 998	-1.6	0.000 000	-0.001
	100 %	0	1902 499 999	0.0	0.000 000	0.000
	100 %	+10	1902 499 998	-1.9	0.000 000	-0.001
	100 %	+30	1902 499 999	-0.5	0.000 000	0.000
	100 %	+40	1902 499 999	-0.1	0.000 000	0.000
	100 %	+50	1902 499 999	-0.6	0.000 000	0.000
	Batt. Endpoint	+20	1902 499 998	-1.3	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 Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1860.0	100 %	+20(Ref)	1859 999 999	0.0	0.000 000	0.000
	100 %	-30	1859 999 997	-2.0	0.000 000	-0.001
	100 %	-20	1859 999 997	-2.1	0.000 000	-0.001
	100 %	-10	1859 999 996	-2.9	0.000 000	-0.002
	100 %	0	1859 999 996	-2.4	0.000 000	-0.001
	100 %	+10	1859 999 996	-2.6	0.000 000	-0.001
	100 %	+30	1859 999 997	-2.1	0.000 000	-0.001
	100 %	+40	1859 999 997	-2.1	0.000 000	-0.001
	100 %	+50	1859 999 997	-2.0	0.000 000	-0.001
	Batt. Endpoint	+20	1859 999 998	-1.1	0.000 000	-0.001
1900.0	100 %	+20(Ref)	1899 999 999	0.0	0.000 000	0.000
	100 %	-30	1899 999 999	0.1	0.000 000	0.000
	100 %	-20	1899 999 998	-1.4	0.000 000	-0.001
	100 %	-10	1899 999 999	0.0	0.000 000	0.000
	100 %	0	1899 999 999	-0.6	0.000 000	0.000
	100 %	+10	1899 999 999	-0.7	0.000 000	0.000
	100 %	+30	1899 999 999	-0.3	0.000 000	0.000
	100 %	+40	1900 000 000	0.4	0.000 000	0.000
	100 %	+50	1899 999 998	-1.6	0.000 000	-0.001
	Batt. Endpoint	+20	1899 999 998	-1.1	0.000 000	-0.001

■ BandWidth:	<u>25 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1862.5	100 %	+20(Ref)	1862 499 999	0.0	0.000 000	0.000
	100 %	-30	1862 499 997	-1.5	0.000 000	-0.001
	100 %	-20	1862 499 996	-2.3	0.000 000	-0.001
	100 %	-10	1862 499 997	-2.0	0.000 000	-0.001
	100 %	0	1862 499 997	-2.2	0.000 000	-0.001
	100 %	+10	1862 499 997	-2.1	0.000 000	-0.001
	100 %	+30	1862 499 997	-1.7	0.000 000	-0.001
	100 %	+40	1862 499 998	-1.2	0.000 000	-0.001
	100 %	+50	1862 499 998	-0.9	0.000 000	0.000
	Batt. Endpoint	+20	1862 499 997	-1.9	0.000 000	-0.001
1897.5	100 %	+20(Ref)	1897 500 000	0.0	0.000 000	0.000
	100 %	-30	1897 500 001	0.3	0.000 000	0.000
	100 %	-20	1897 500 001	0.1	0.000 000	0.000
	100 %	-10	1897 499 999	-1.7	0.000 000	-0.001
	100 %	0	1897 500 001	0.8	0.000 000	0.000
	100 %	+10	1897 499 999	-1.0	0.000 000	-0.001
	100 %	+30	1897 500 000	-0.7	0.000 000	0.000
	100 %	+40	1897 500 000	-0.7	0.000 000	0.000
	100 %	+50	1897 500 000	-0.5	0.000 000	0.000
	Batt. Endpoint	+20	1897 500 001	0.3	0.000 000	0.000

■ BandWidth:	<u>30 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

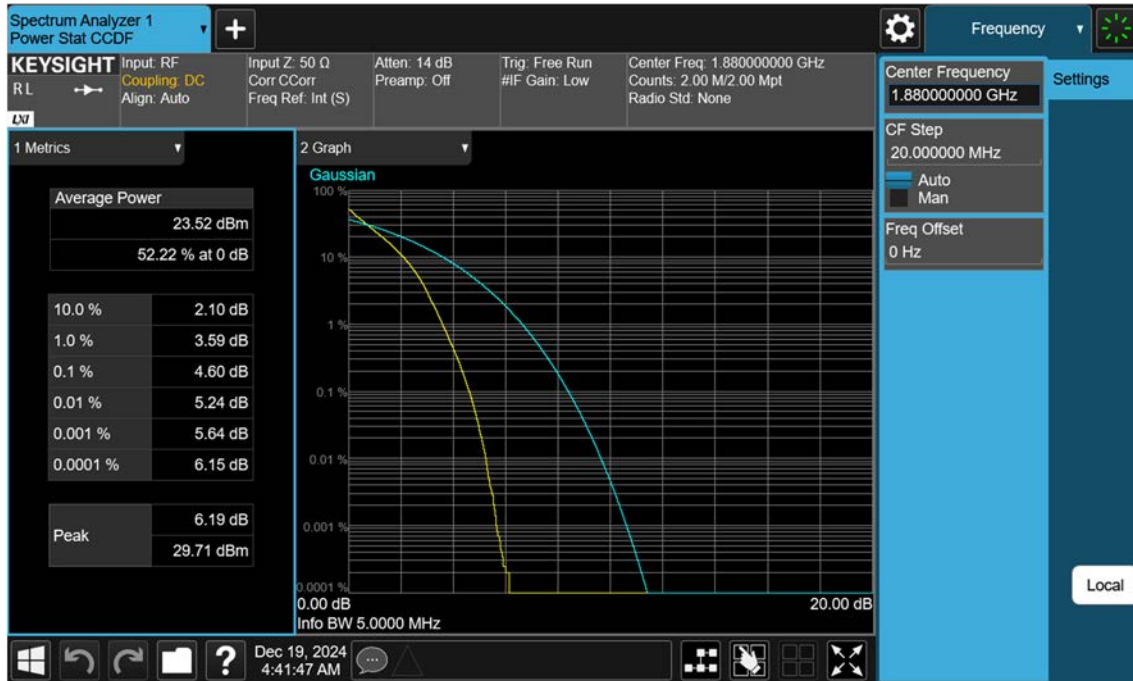
Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1865.0	100 %	+20(Ref)	1864 999 999	0.0	0.000 000	0.000
	100 %	-30	1865 000 000	0.8	0.000 000	0.000
	100 %	-20	1865 000 000	0.6	0.000 000	0.000
	100 %	-10	1865 000 000	0.4	0.000 000	0.000
	100 %	0	1865 000 001	1.2	0.000 000	0.001
	100 %	+10	1864 999 999	-0.7	0.000 000	0.000
	100 %	+30	1865 000 000	0.3	0.000 000	0.000
	100 %	+40	1865 000 000	0.1	0.000 000	0.000
	100 %	+50	1865 000 000	0.4	0.000 000	0.000
	Batt. Endpoint	+20	1865 000 000	0.1	0.000 000	0.000
1895.0	100 %	+20(Ref)	1895 000 000	0.0	0.000 000	0.000
	100 %	-30	1894 999 997	-2.2	0.000 000	-0.001
	100 %	-20	1894 999 999	-1.2	0.000 000	-0.001
	100 %	-10	1894 999 998	-1.2	0.000 000	-0.001
	100 %	0	1894 999 998	-2.2	0.000 000	-0.001
	100 %	+10	1895 000 000	0.4	0.000 000	0.000
	100 %	+30	1894 999 999	-0.5	0.000 000	0.000
	100 %	+40	1894 999 998	-2.1	0.000 000	-0.001
	100 %	+50	1894 999 999	-0.7	0.000 000	0.000
	Batt. Endpoint	+20	1895 000 000	-0.1	0.000 000	0.000

■ BandWidth:	<u>40 MHz</u>
■ Voltage(100 %):	<u>4.200 VDC</u>
■ Batt. Endpoint:	<u>3.400 VDC</u>
■ LIMIT:	<u>Emission must remain in band</u>

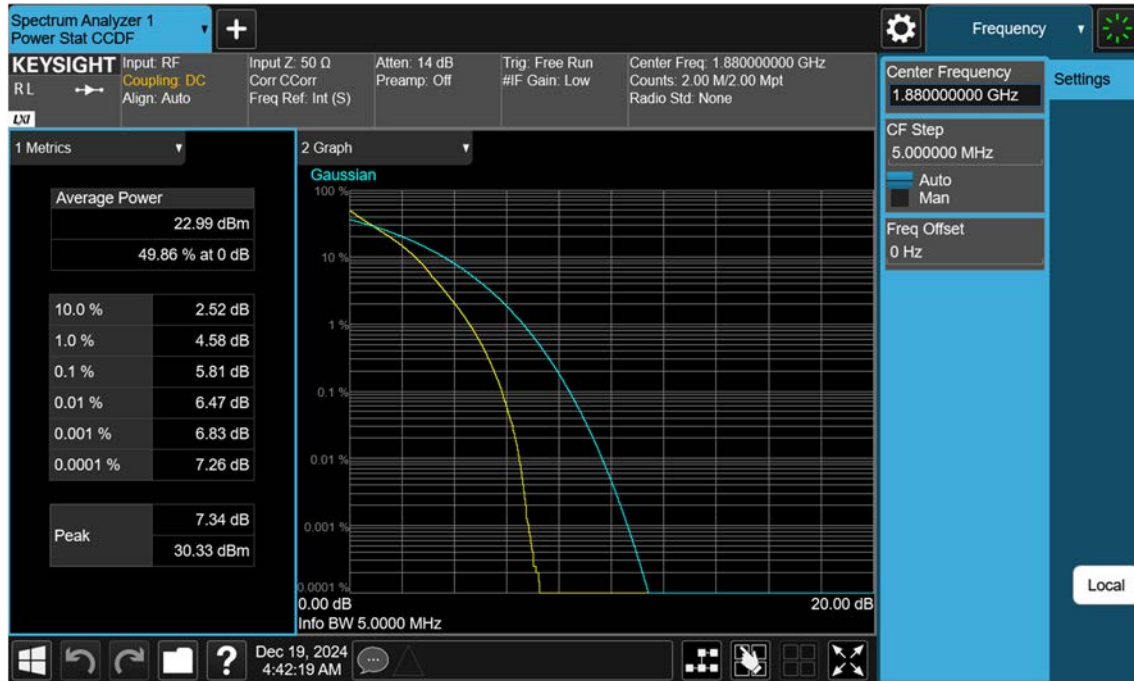
Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1870.0	100 %	+20(Ref)	1869 999 999	0.0	0.000 000	0.000
	100 %	-30	1869 999 997	-1.6	0.000 000	-0.001
	100 %	-20	1869 999 997	-1.2	0.000 000	-0.001
	100 %	-10	1869 999 996	-2.2	0.000 000	-0.001
	100 %	0	1869 999 997	-1.2	0.000 000	-0.001
	100 %	+10	1869 999 996	-2.8	0.000 000	-0.002
	100 %	+30	1869 999 997	-1.3	0.000 000	-0.001
	100 %	+40	1869 999 995	-3.0	0.000 000	-0.002
	100 %	+50	1869 999 997	-1.1	0.000 000	-0.001
	Batt. Endpoint	+20	1869 999 997	-1.6	0.000 000	-0.001
1890.0	100 %	+20(Ref)	1889 999 999	0.0	0.000 000	0.000
	100 %	-30	1889 999 997	-1.5	0.000 000	-0.001
	100 %	-20	1889 999 998	-1.1	0.000 000	-0.001
	100 %	-10	1889 999 997	-1.7	0.000 000	-0.001
	100 %	0	1889 999 998	-1.4	0.000 000	-0.001
	100 %	+10	1889 999 998	-1.0	0.000 000	-0.001
	100 %	+30	1889 999 998	-1.1	0.000 000	-0.001
	100 %	+40	1889 999 999	0.2	0.000 000	0.000
	100 %	+50	1889 999 997	-1.7	0.000 000	-0.001
	Batt. Endpoint	+20	1889 999 998	-0.9	0.000 000	0.000

10. TEST PLOTS(Main2)

NR2_5 M_PAR_Mid_BPSK_FullRB



NR2_5 M_PAR_Mid_QPSK_FullRB



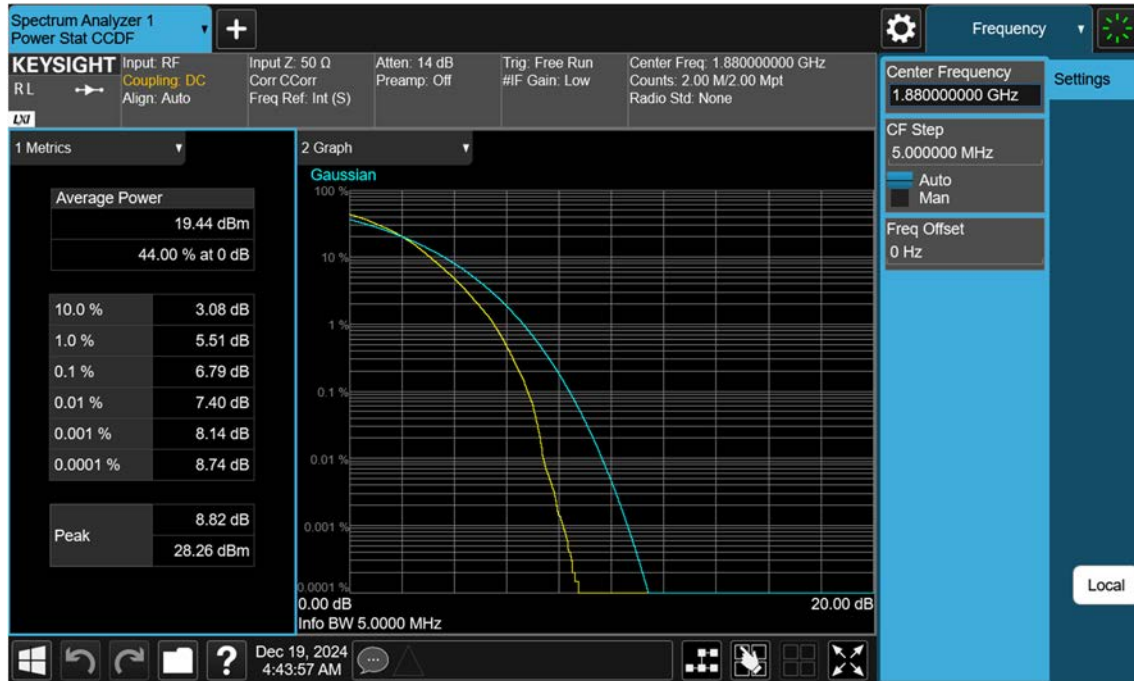
NR2_5 M_PAR_Mid_16QAM_FullIRB



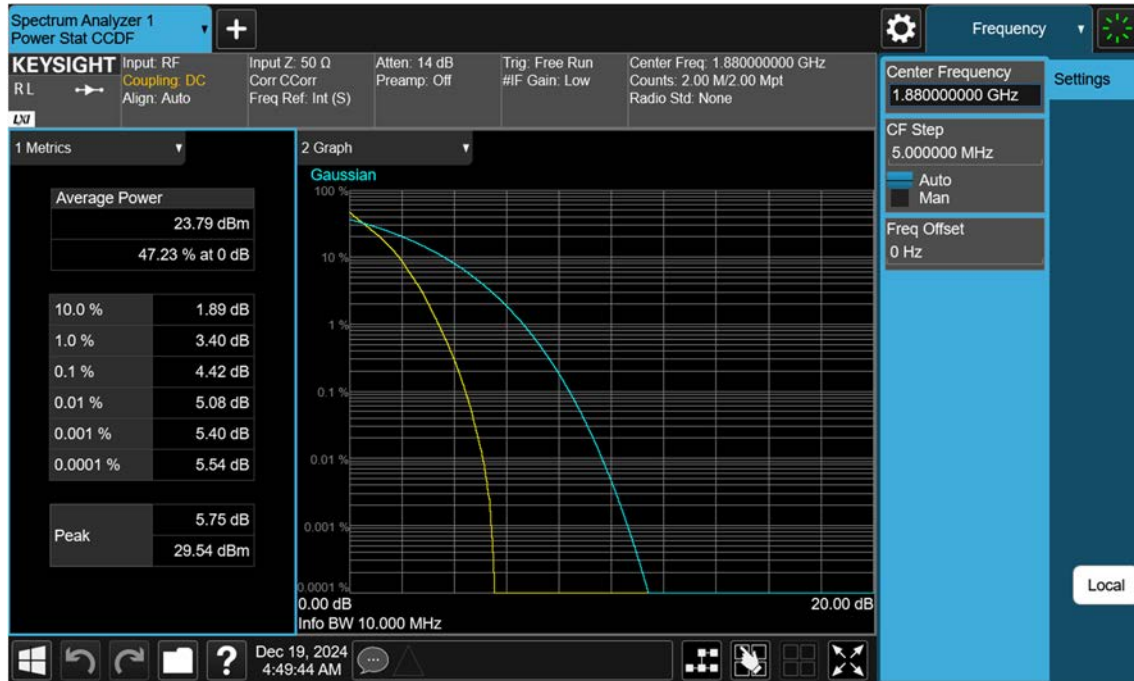
NR2_5 M_PAR_Mid_64QAM_FullIRB



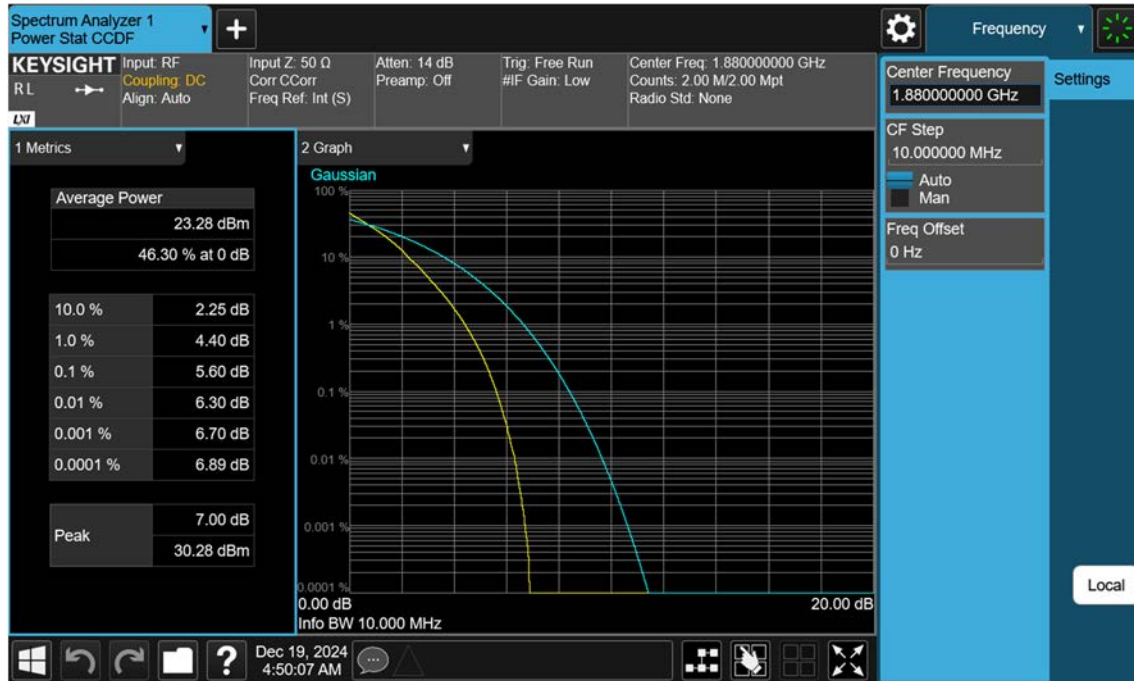
NR2_5 M_PAR_Mid_256QAM_FullRB



NR2_10 M_PAR_Mid_BPSK_FullRB



NR2_10 M_PAR_Mid_QPSK_FullRB



NR2_10 M_PAR_Mid_16QAM_FullRB



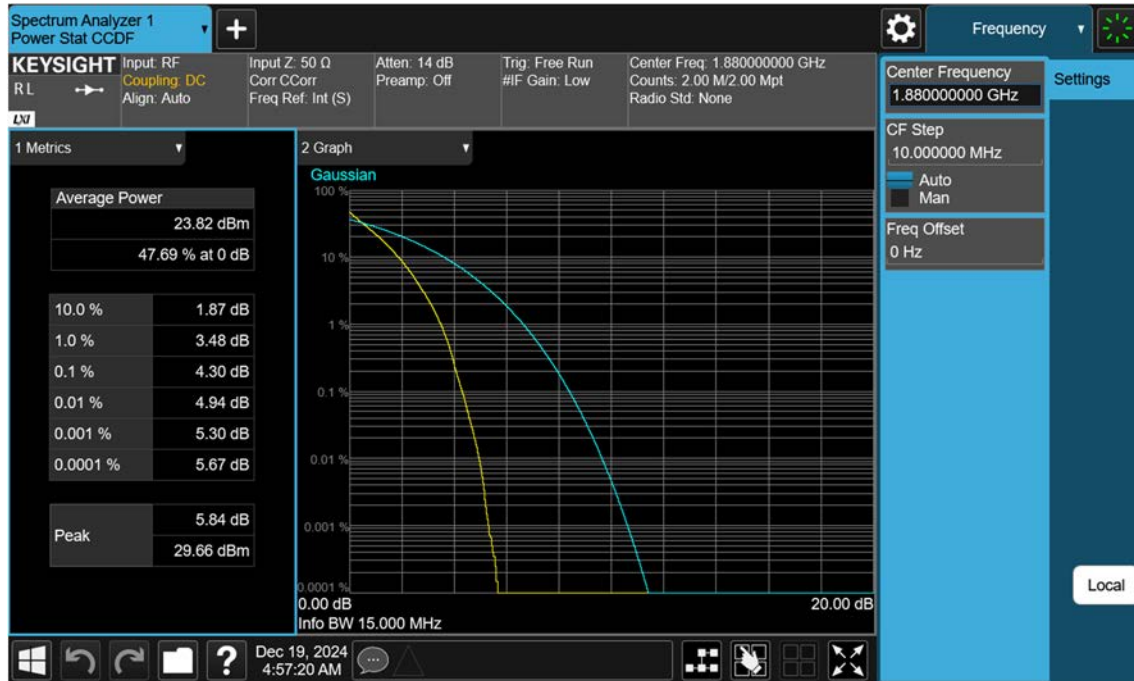
NR2_10 M_PAR_Mid_64QAM_FullRB



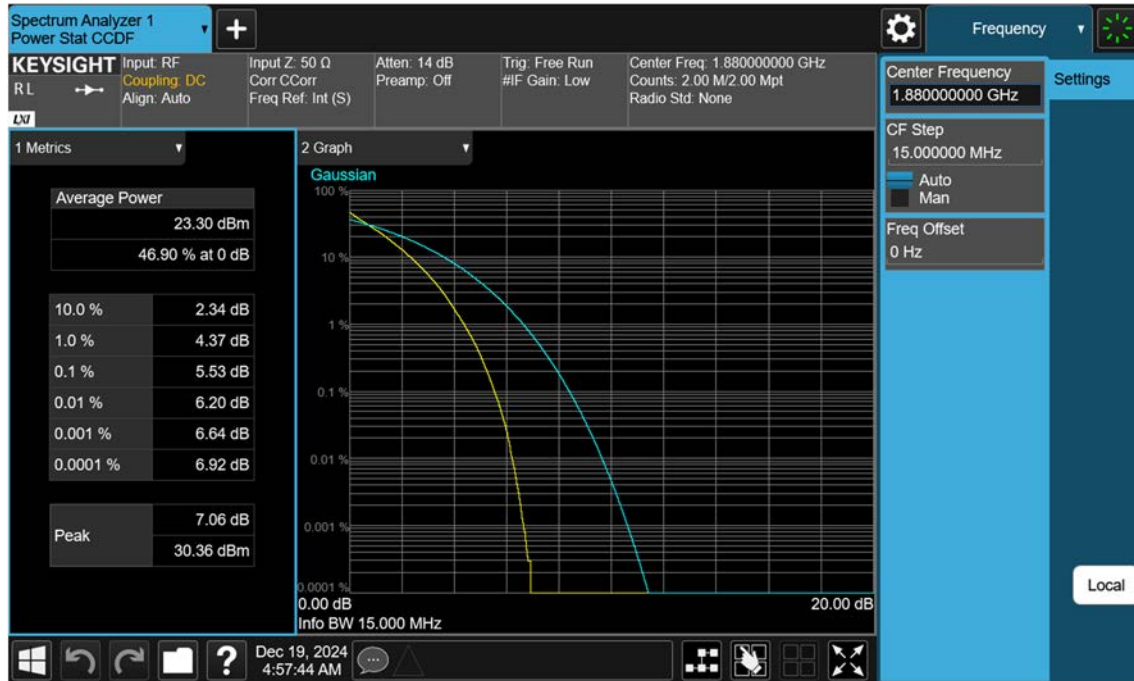
NR2_10 M_PAR_Mid_256QAM_FullRB



NR2_15 M_PAR_Mid_BPSK_FullIRB



NR2_15 M_PAR_Mid_QPSK_FullRB



NR2_15 M_PAR_Mid_16QAM_FullRB



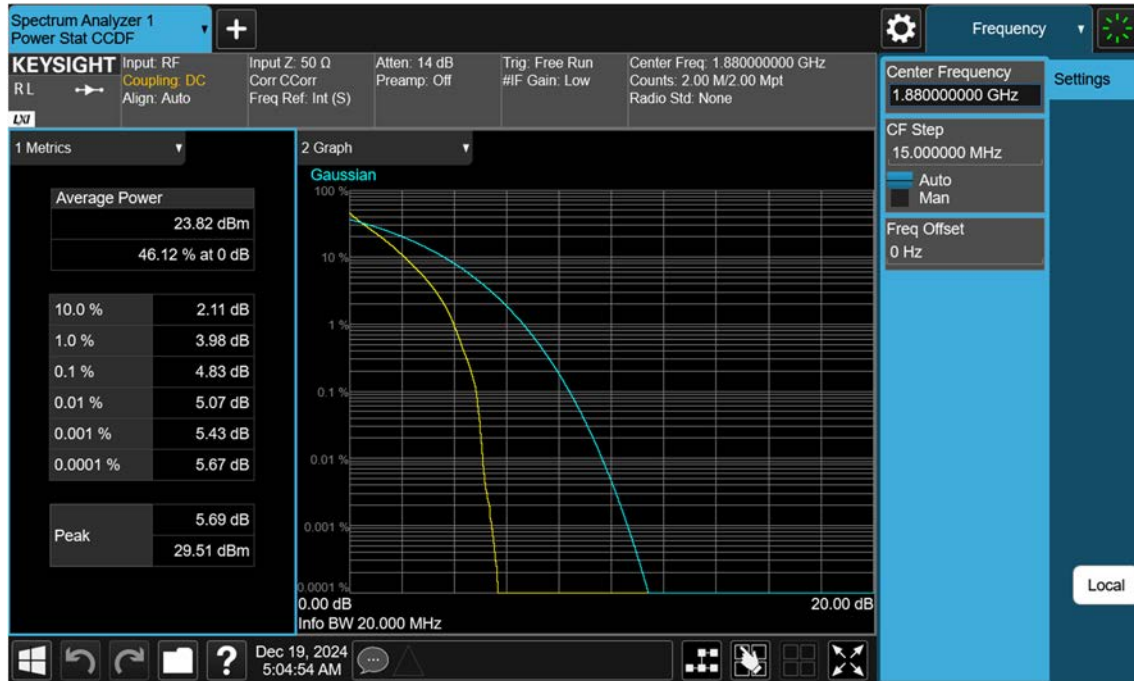
NR2_15 M_PAR_Mid_64QAM_FullRB



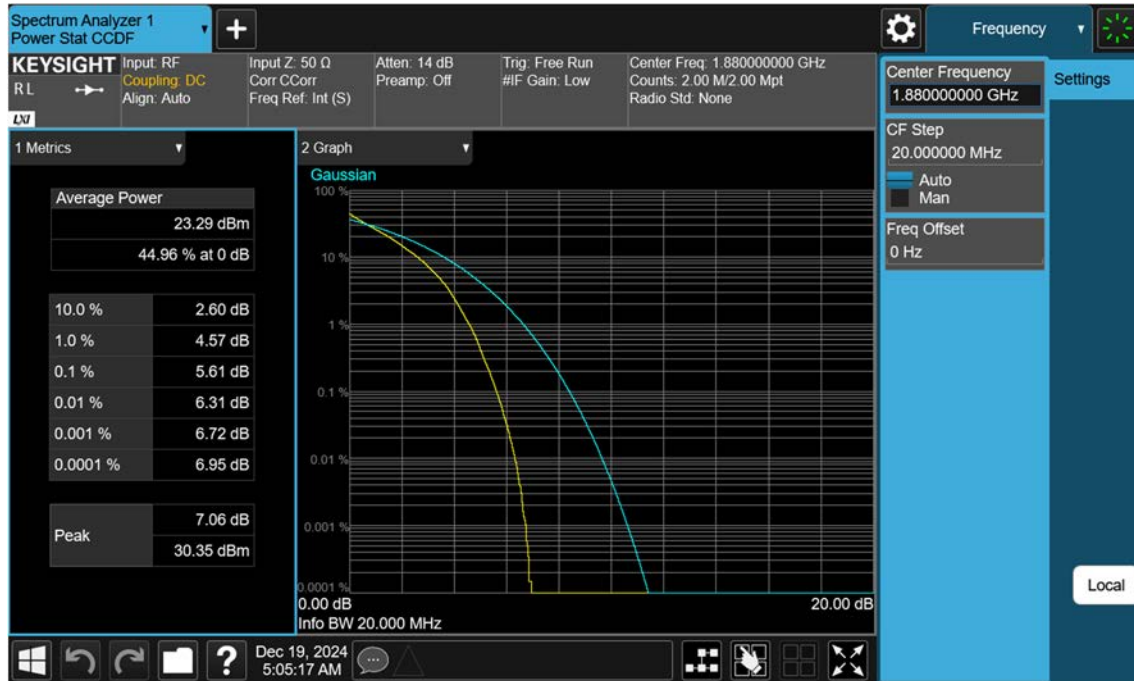
NR2_15 M_PAR_Mid_256QAM_FullRB



NR2_20 M_PAR_Mid_BPSK_FullRB



NR2_20 M_PAR_Mid_QPSK_FullRB



NR2_20 M_PAR_Mid_16QAM_FullRB



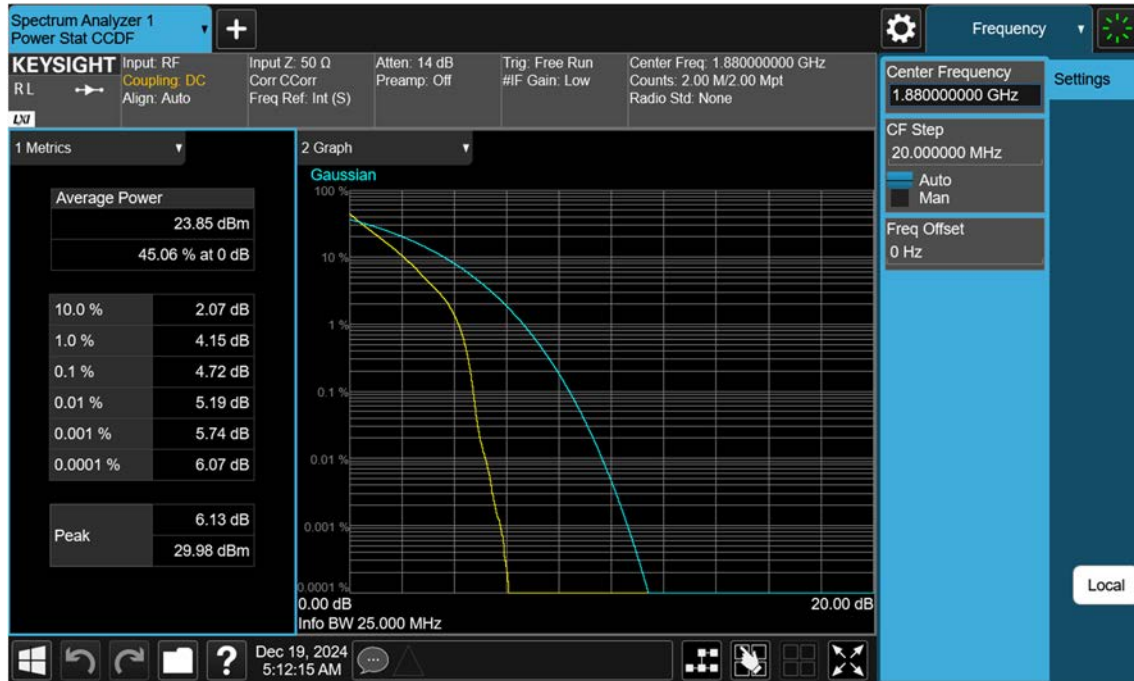
NR2_20 M_PAR_Mid_64QAM_FullRB



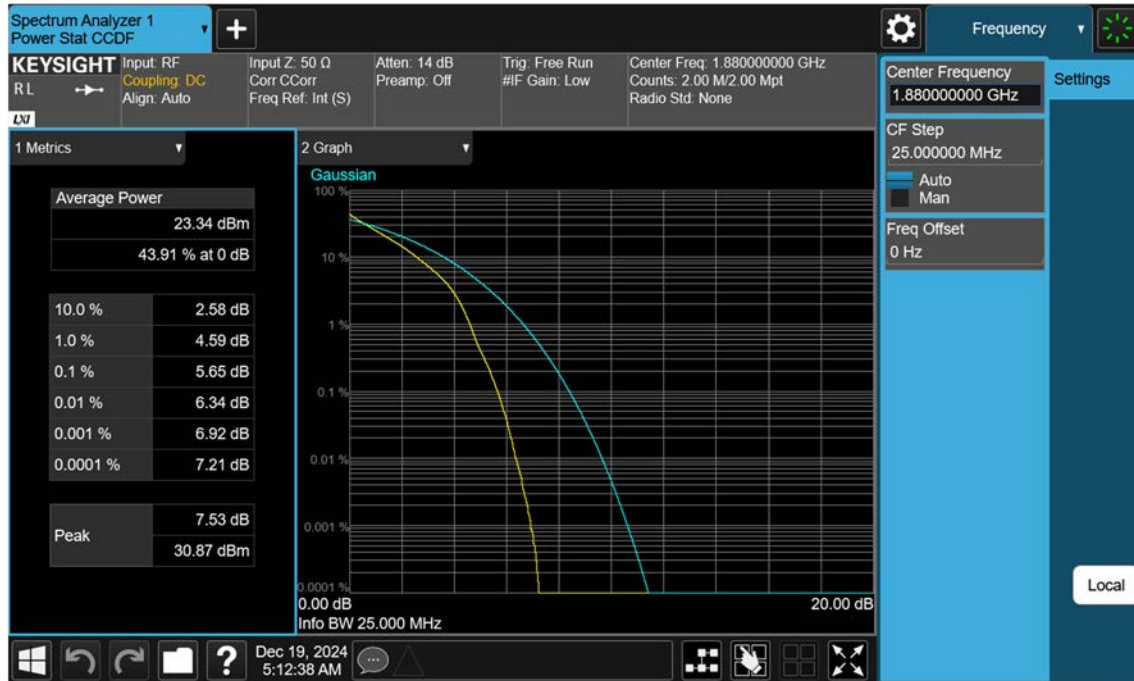
NR2_20 M_PAR_Mid_256QAM_FullRB



NR2_25 M_PAR_Mid_BPSK_FullIRB



NR2_25 M_PAR_Mid_QPSK_FullRB



NR2_25 M_PAR_Mid_16QAM_FullRB



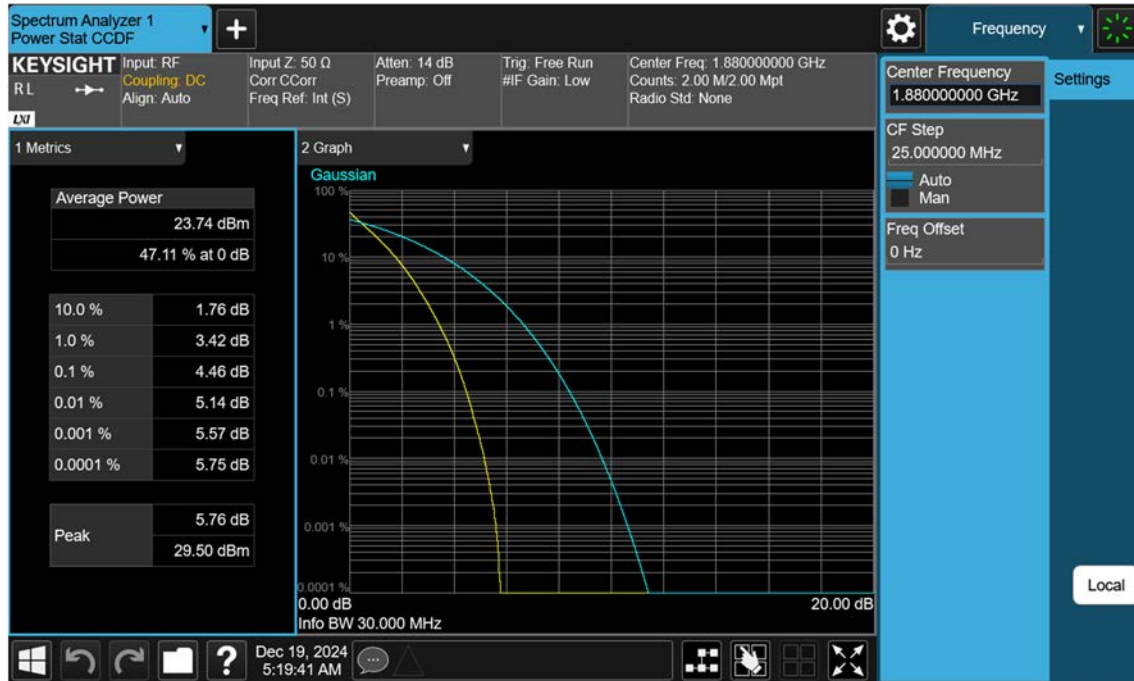
NR2_25 M_PAR_Mid_64QAM_FullRB



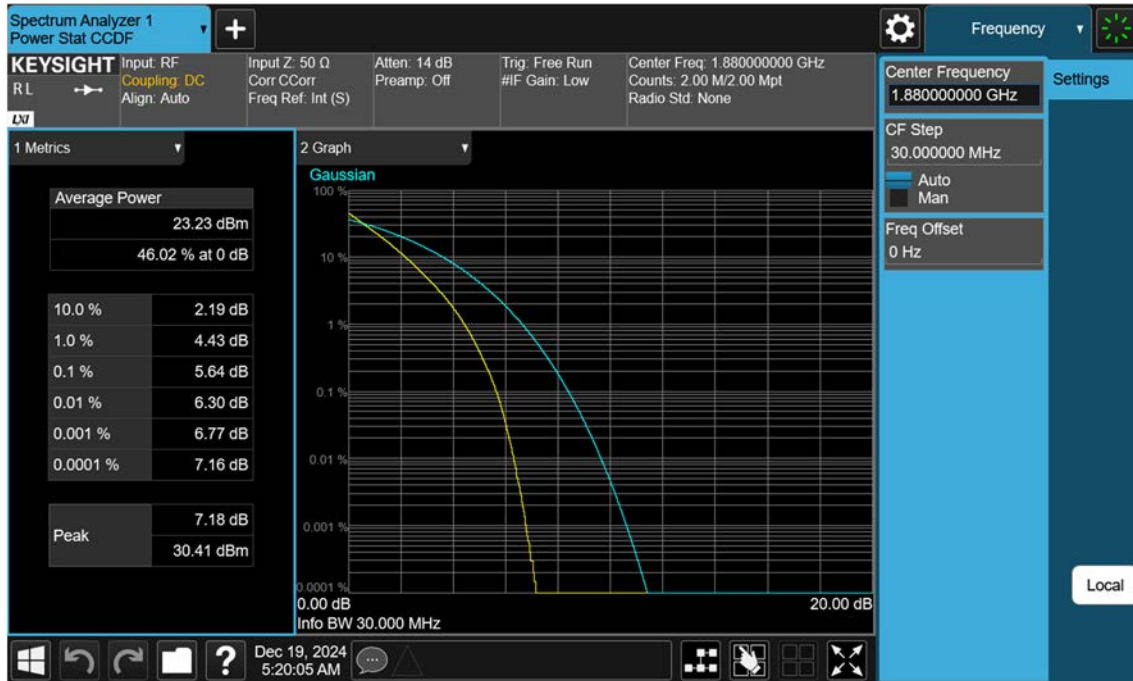
NR2_25 M_PAR_Mid_256QAM_FullRB



NR2_30 M_PAR_Mid_BPSK_FullIRB



NR2_30 M_PAR_Mid_QPSK_FullRB



NR2_30 M_PAR_Mid_16QAM_FullRB



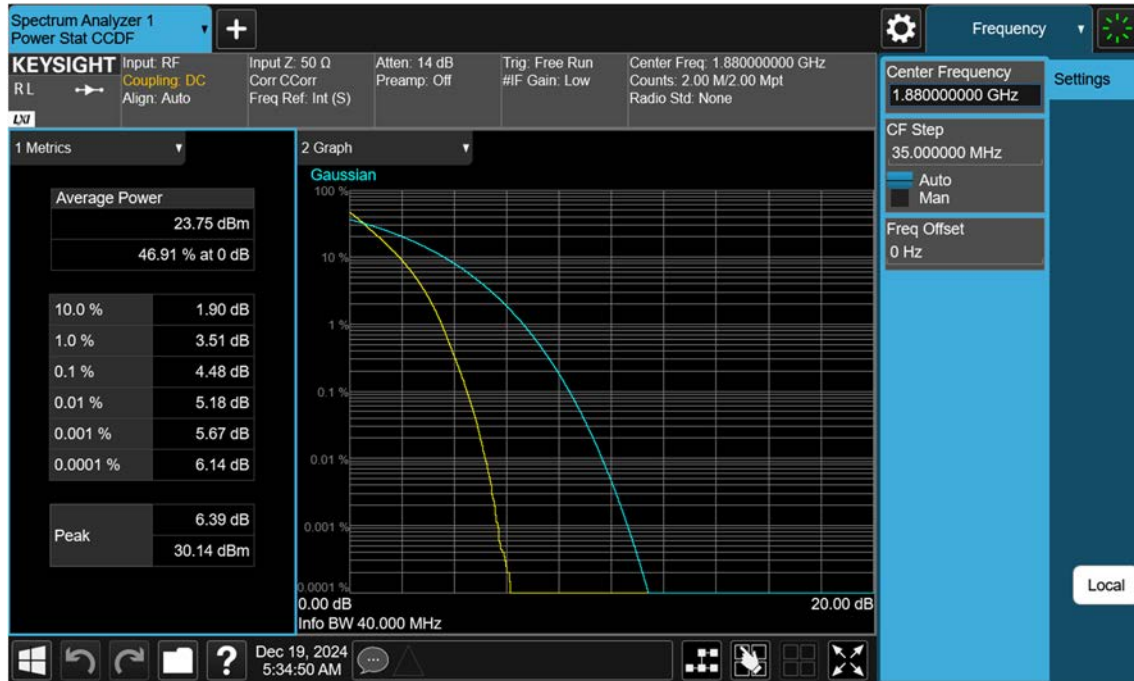
NR2_30 M_PAR_Mid_64QAM_FullRB



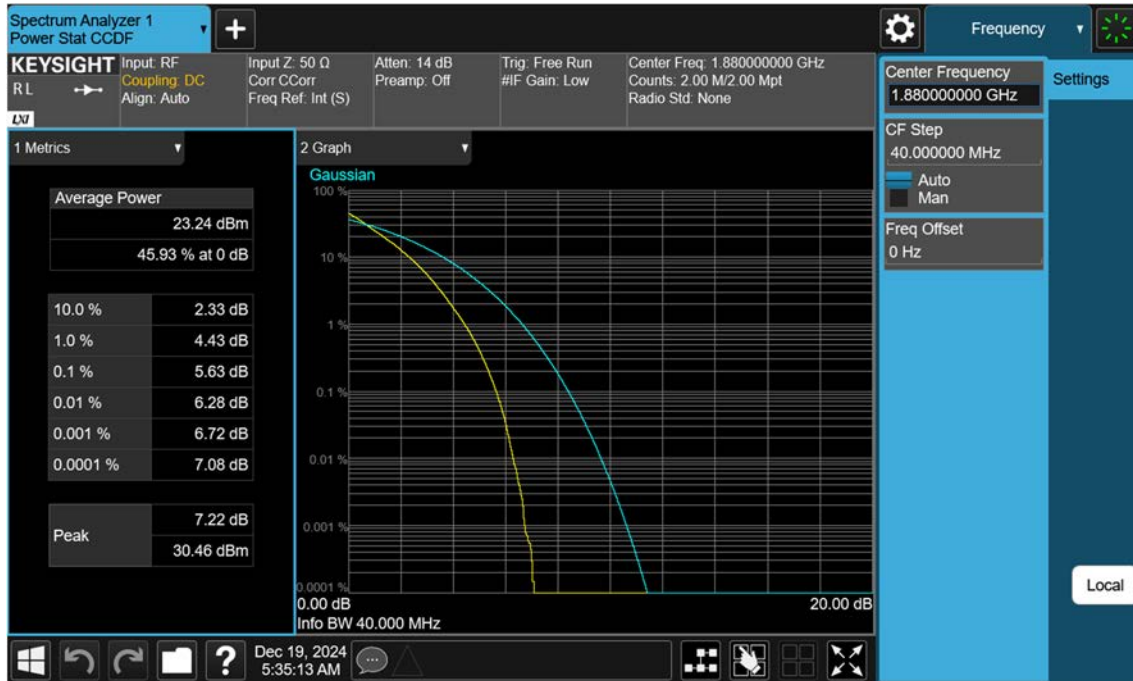
NR2_30 M_PAR_Mid_256QAM_FullRB



NR2_40 M_PAR_Mid_BPSK_FullRB



NR2_40 M_PAR_Mid_QPSK_FullRB



NR2_40 M_PAR_Mid_16QAM_FullRB



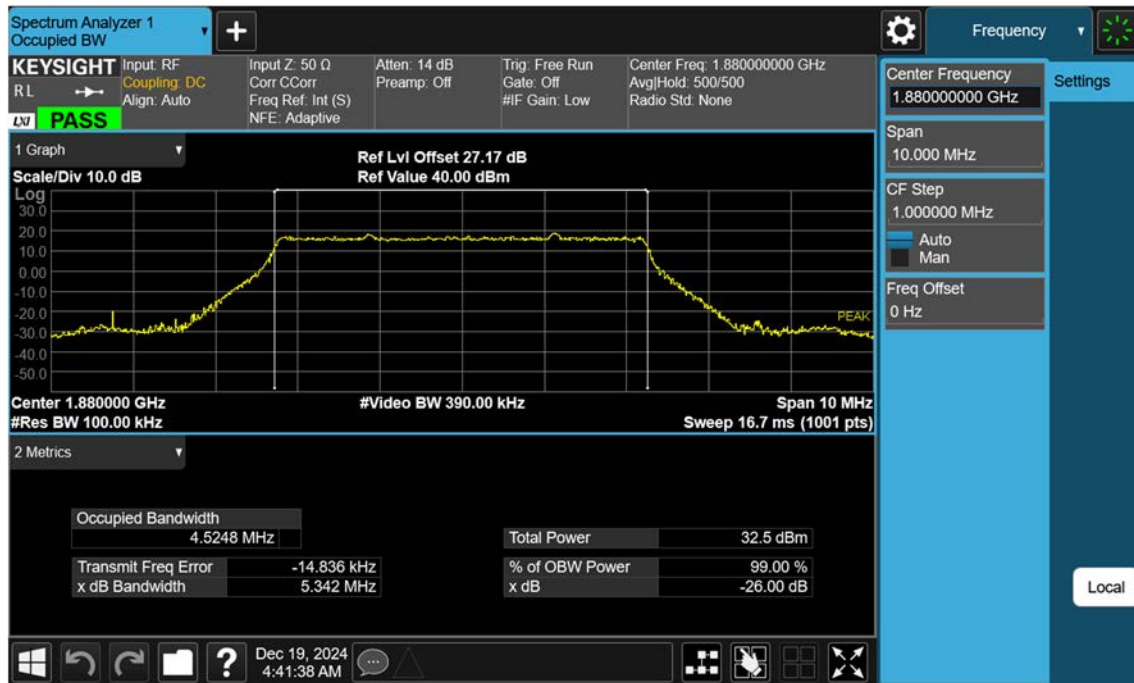
NR2_40 M_PAR_Mid_64QAM_FullRB



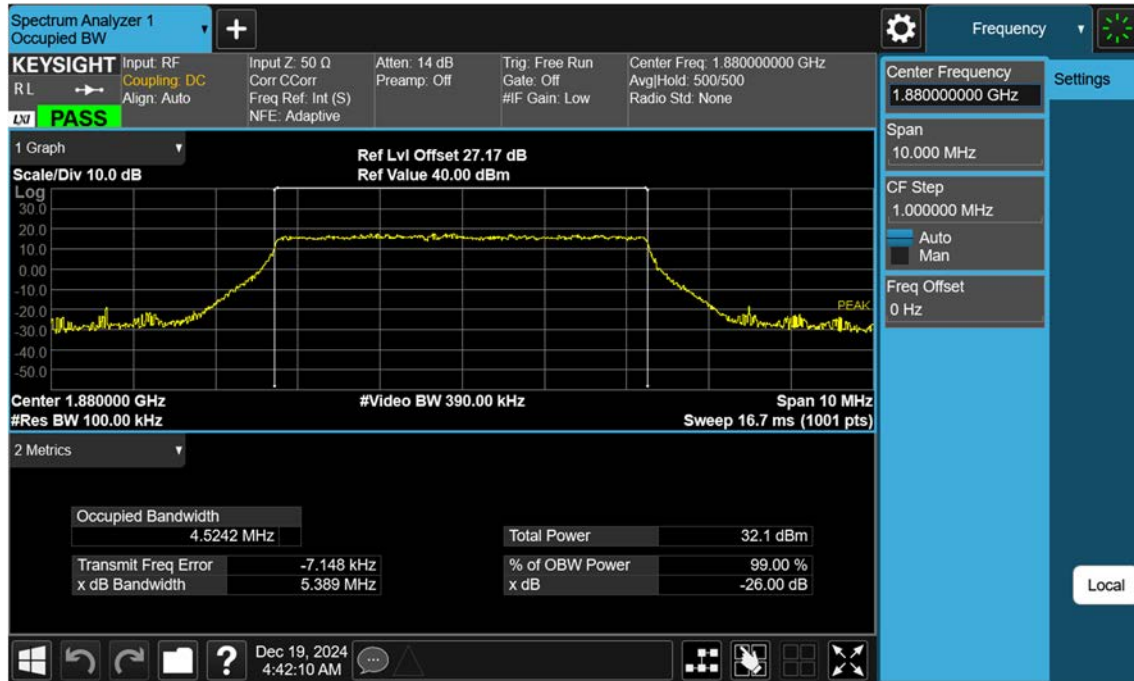
NR2_40 M_PAR_Mid_256QAM_FullRB



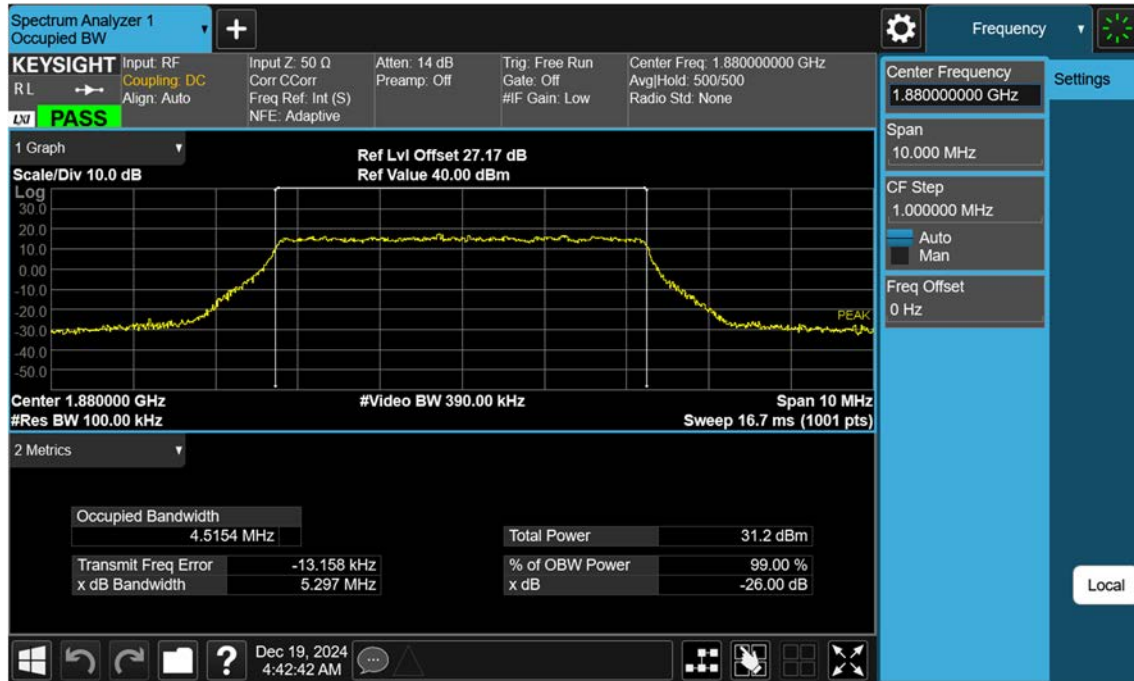
NR2_5 M_OBW_Mid_BPSK_FullIRB



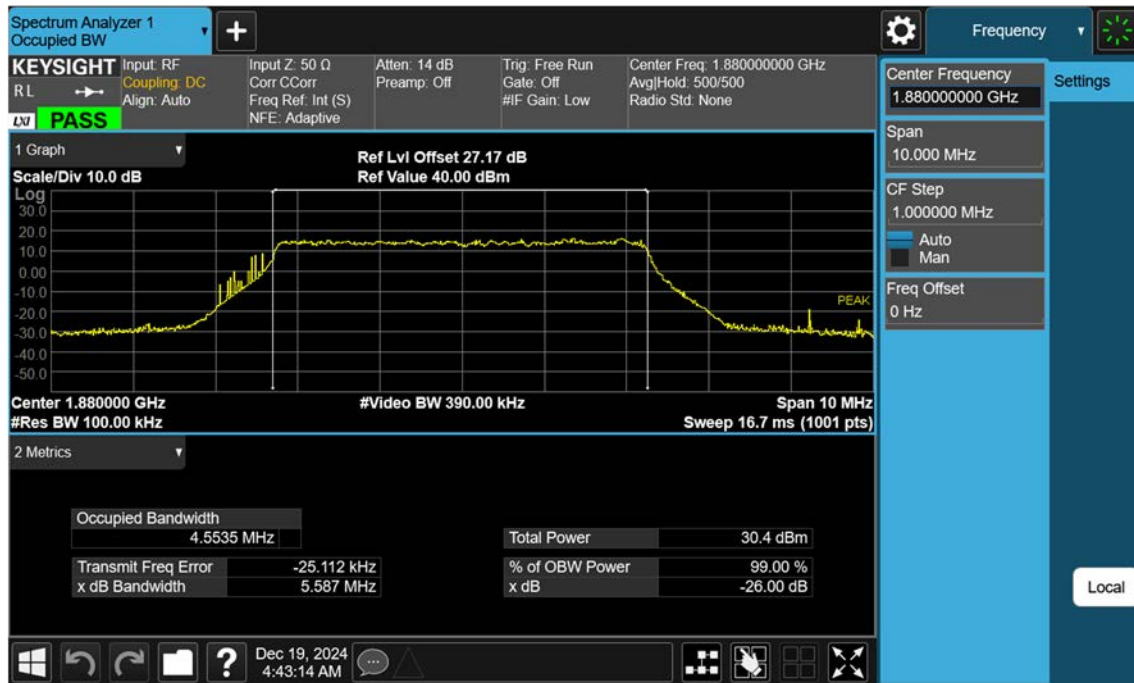
NR2_5 M_OBW_Mid_QPSK_FullRB



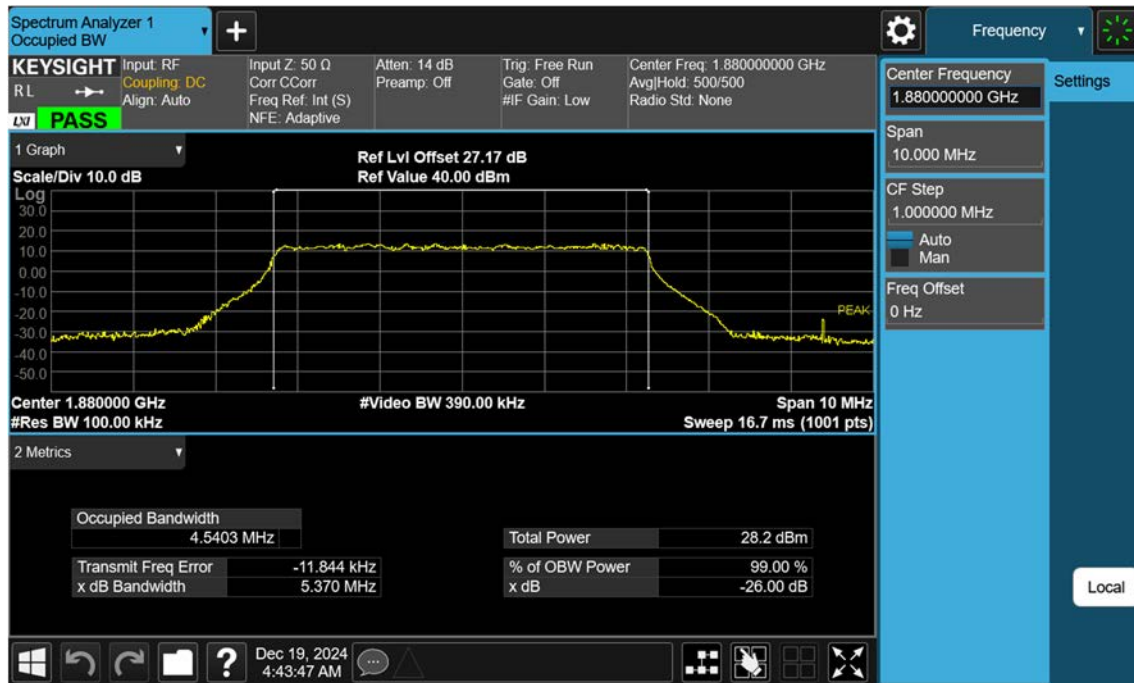
NR2_5 M_OBW_Mid_16QAM_FullRB



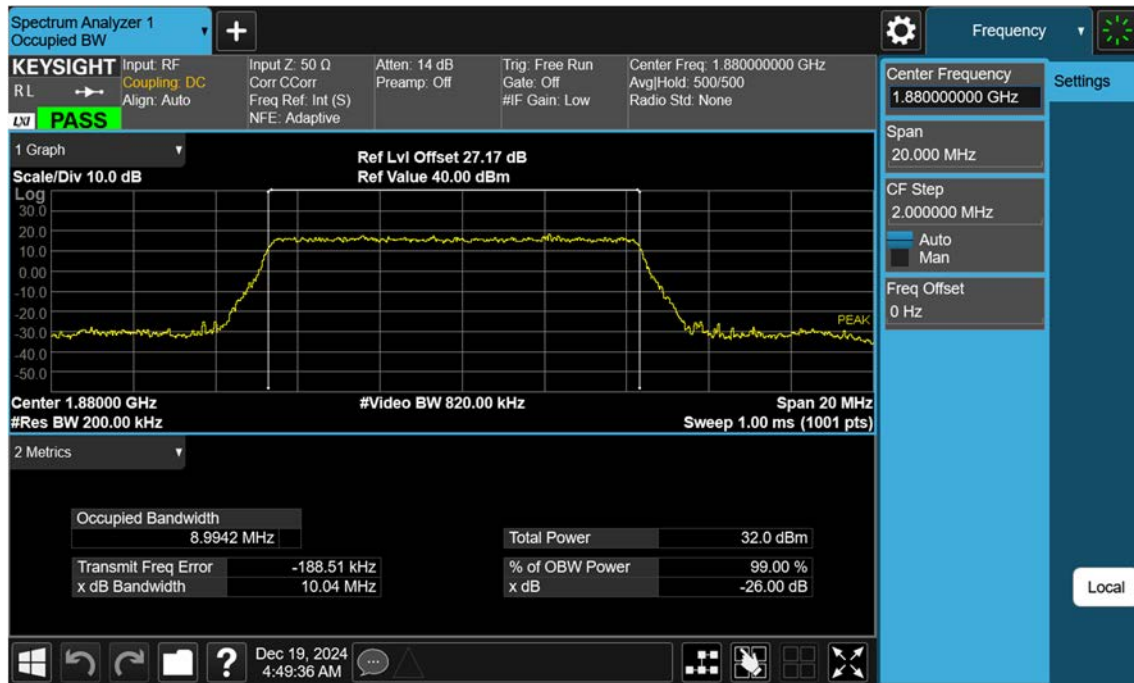
NR2_5 M_OBW_Mid_64QAM_FullRB



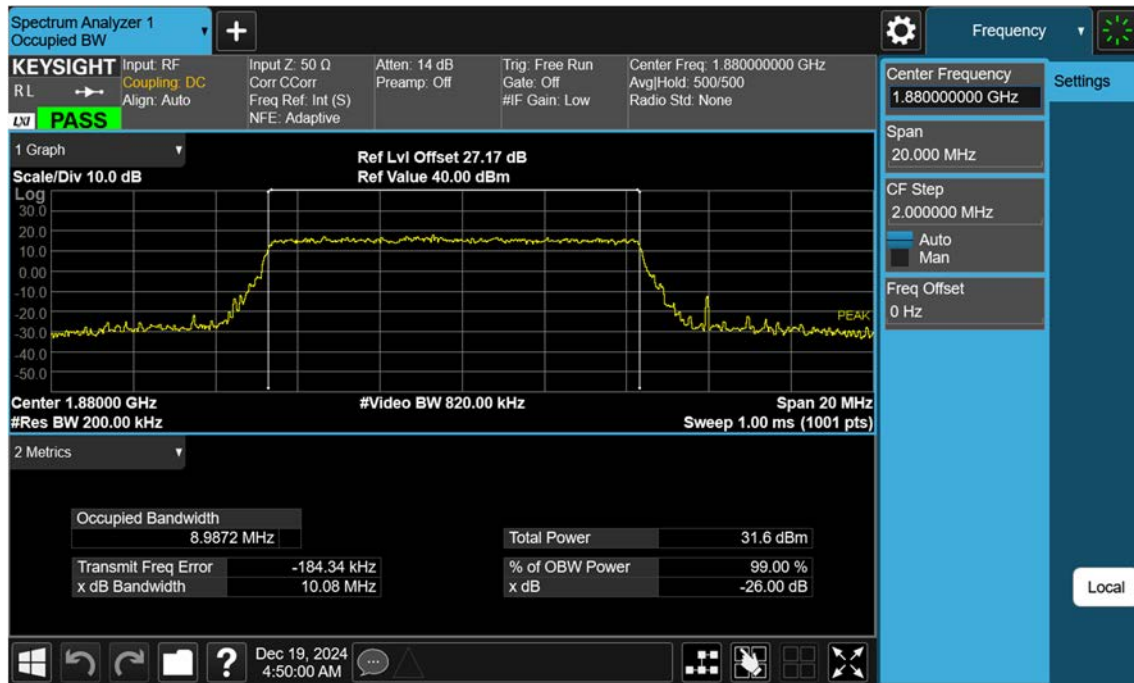
NR2_5 M_OBW_Mid_256QAM_FullRB



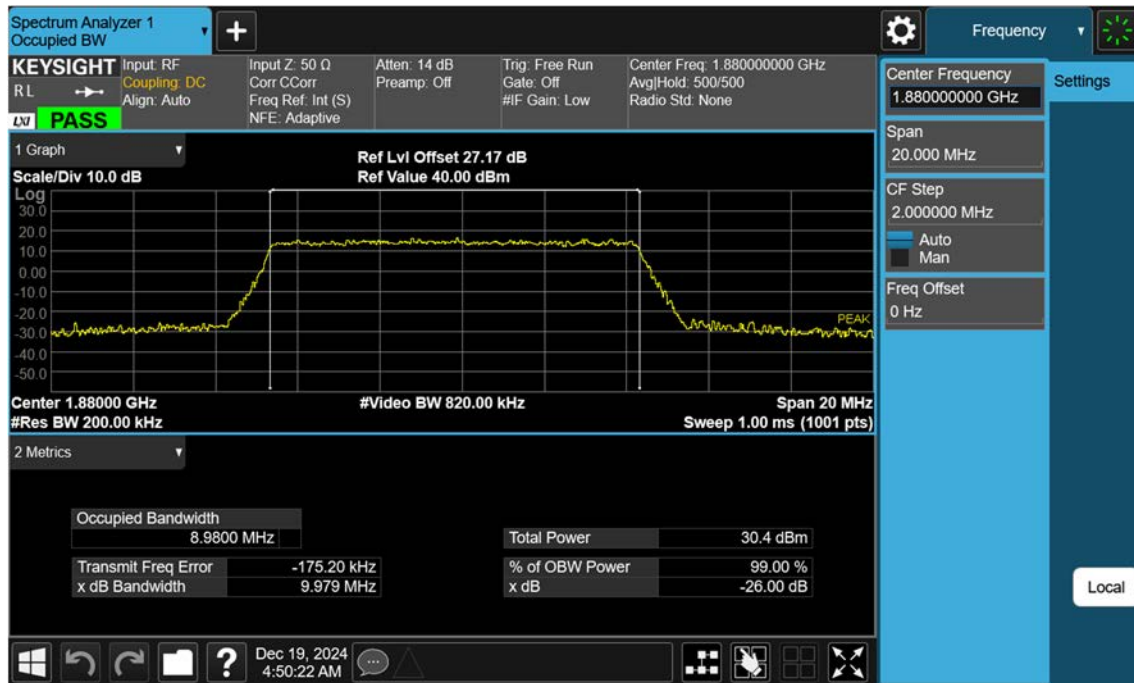
NR2_10 M_OBW_Mid_BPSK_FullIRB



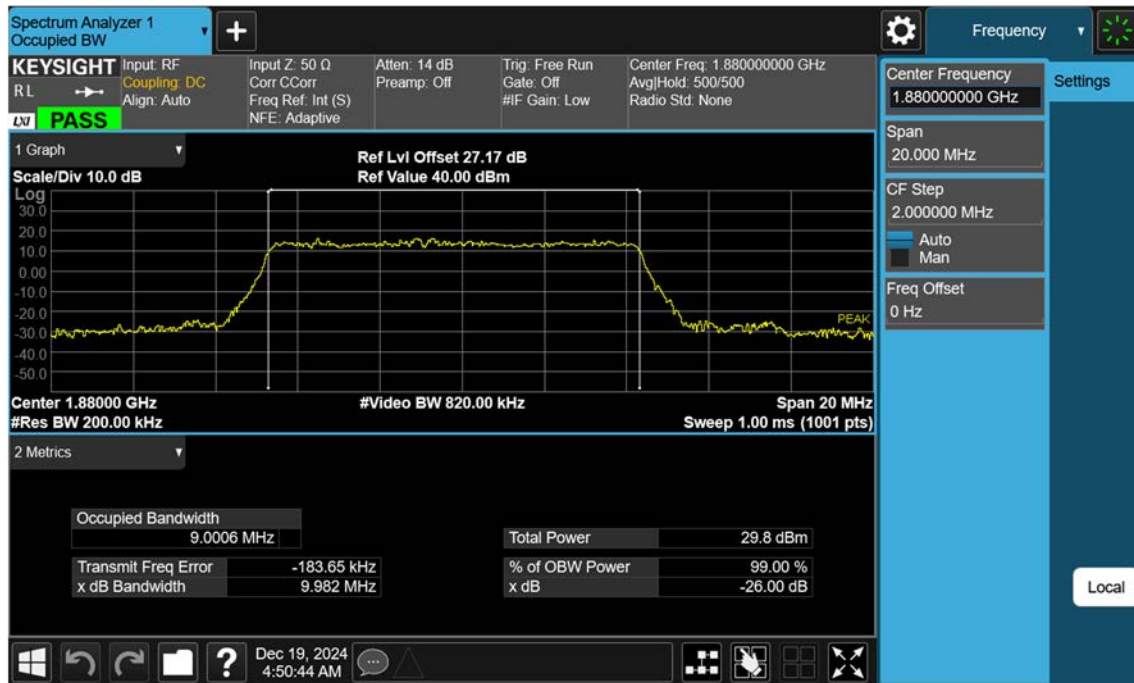
NR2_10 M_OBW_Mid_QPSK_FullRB



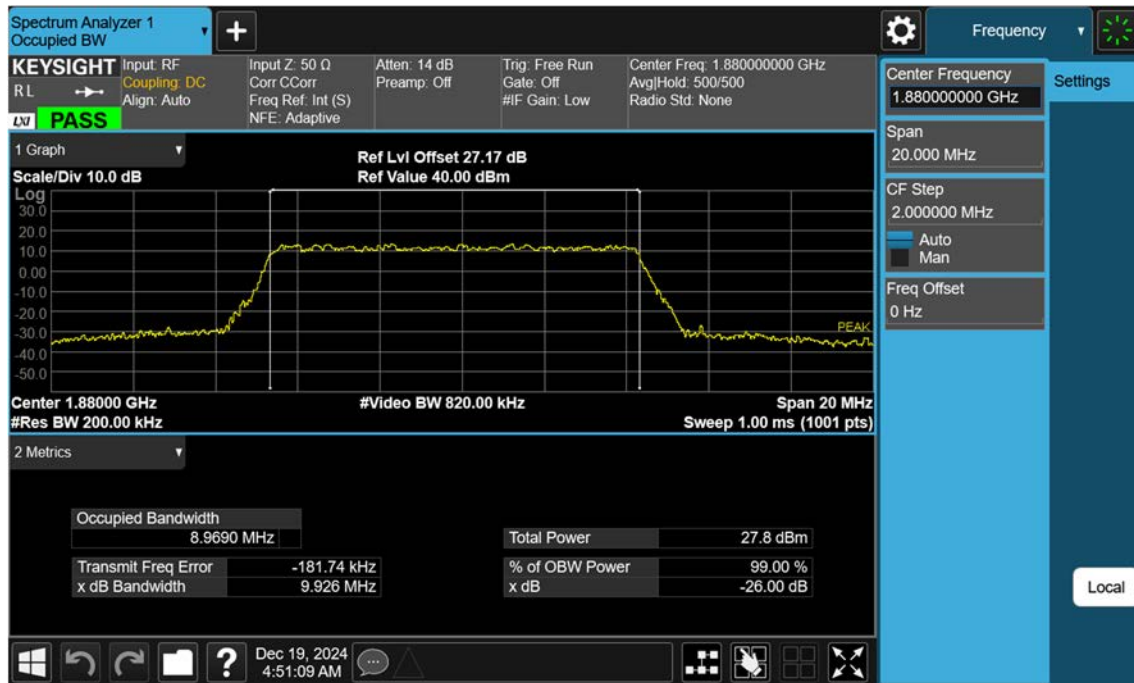
NR2_10 M_OBW_Mid_16QAM_FullRB



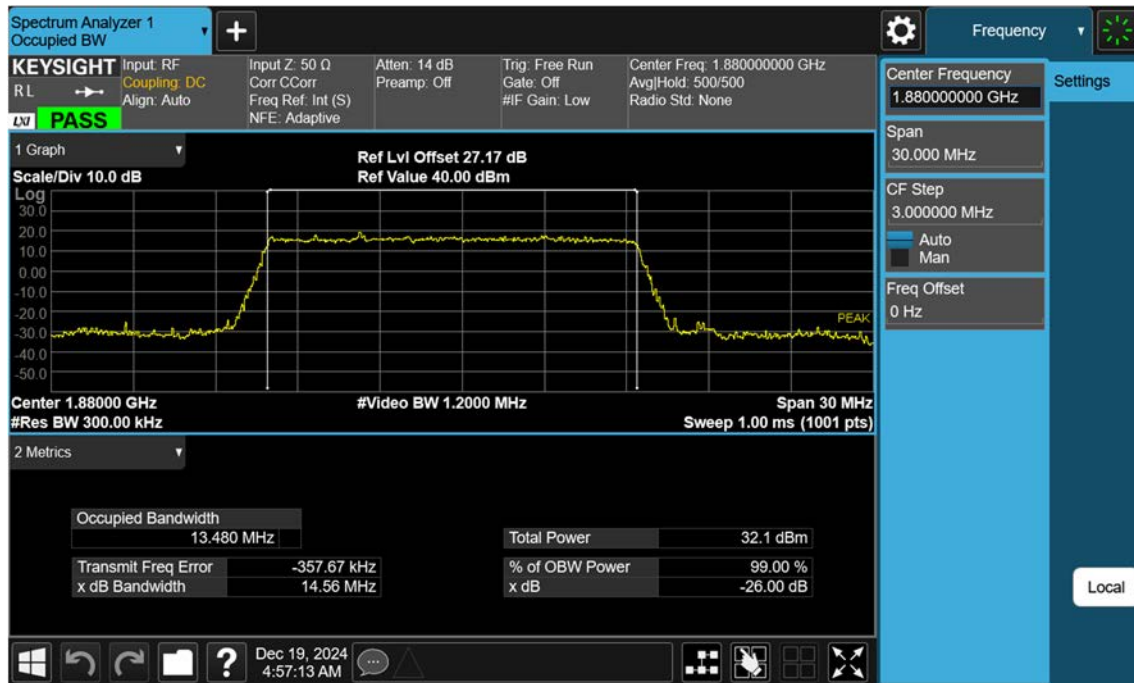
NR2_10 M_OBW_Mid_64QAM_FullRB



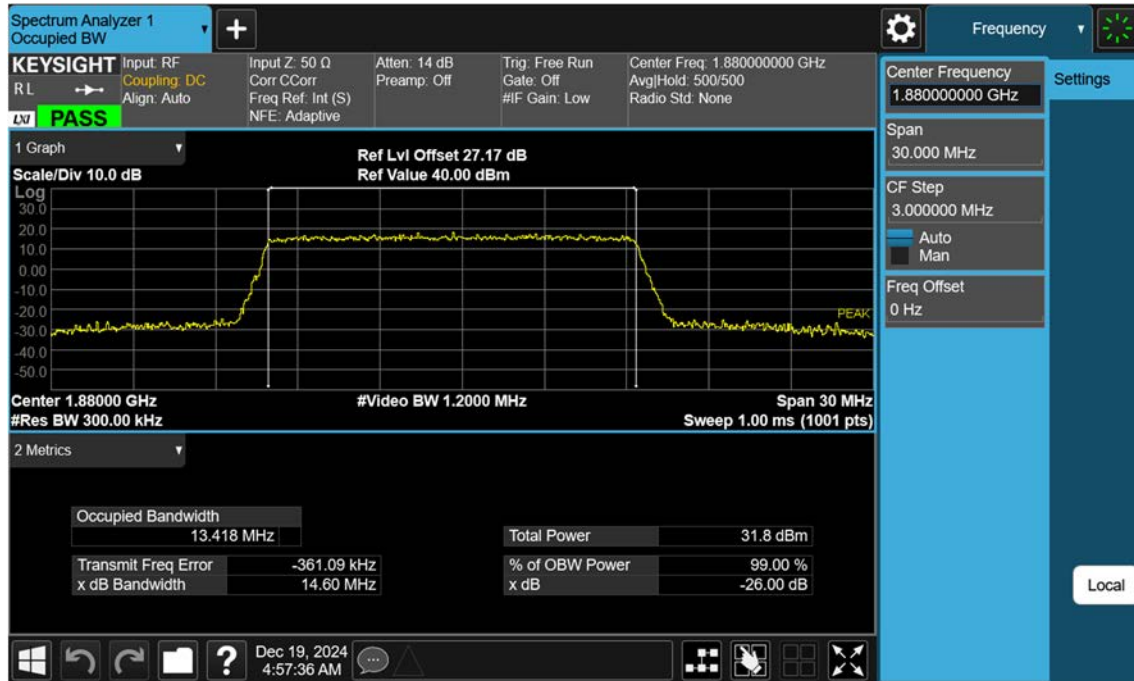
NR2_10 M_OBW_Mid_256QAM_FullRB



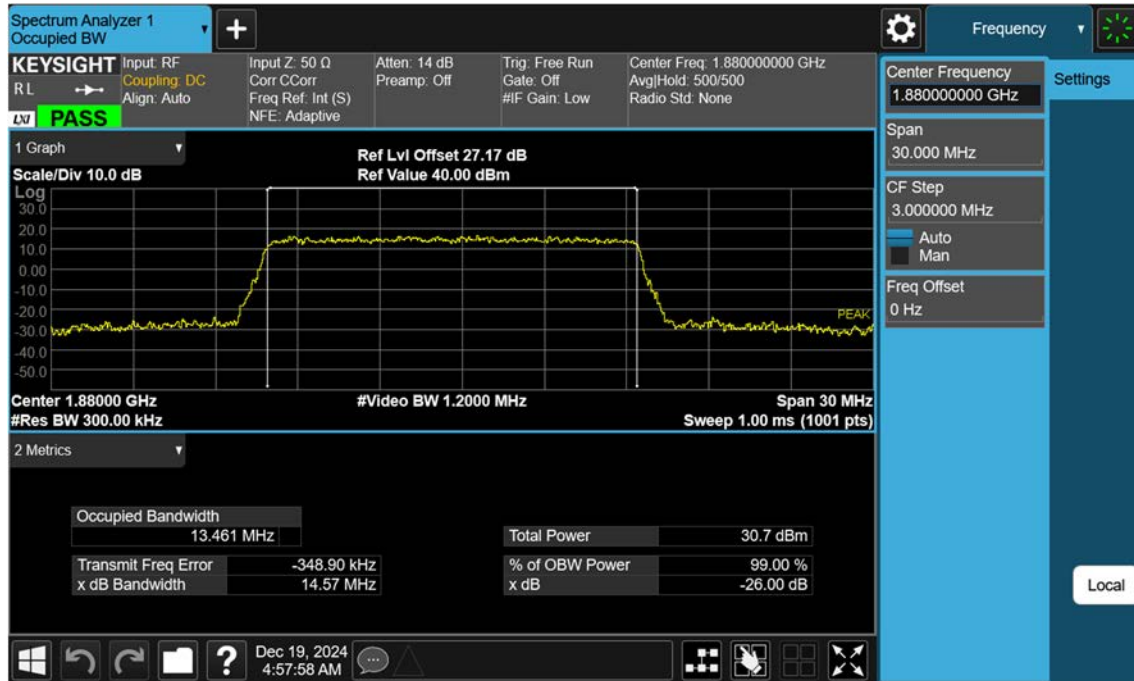
NR2_15 M_OBW_Mid_BPSK_FullIRB



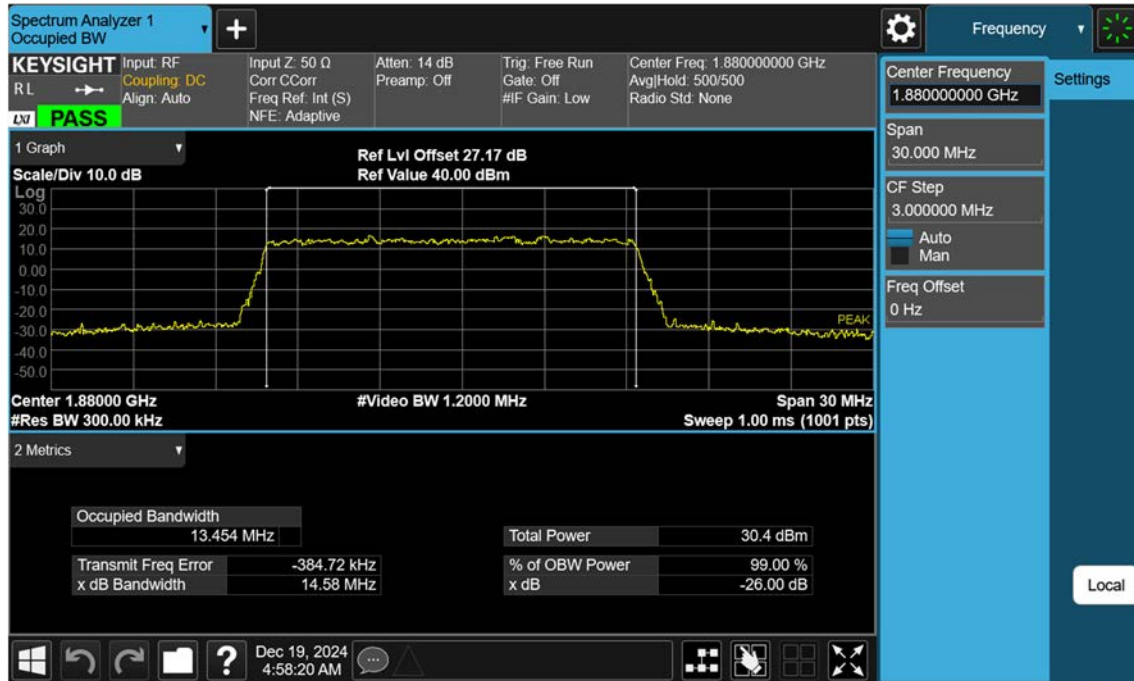
NR2_15 M_OBW_Mid_QPSK_FullRB



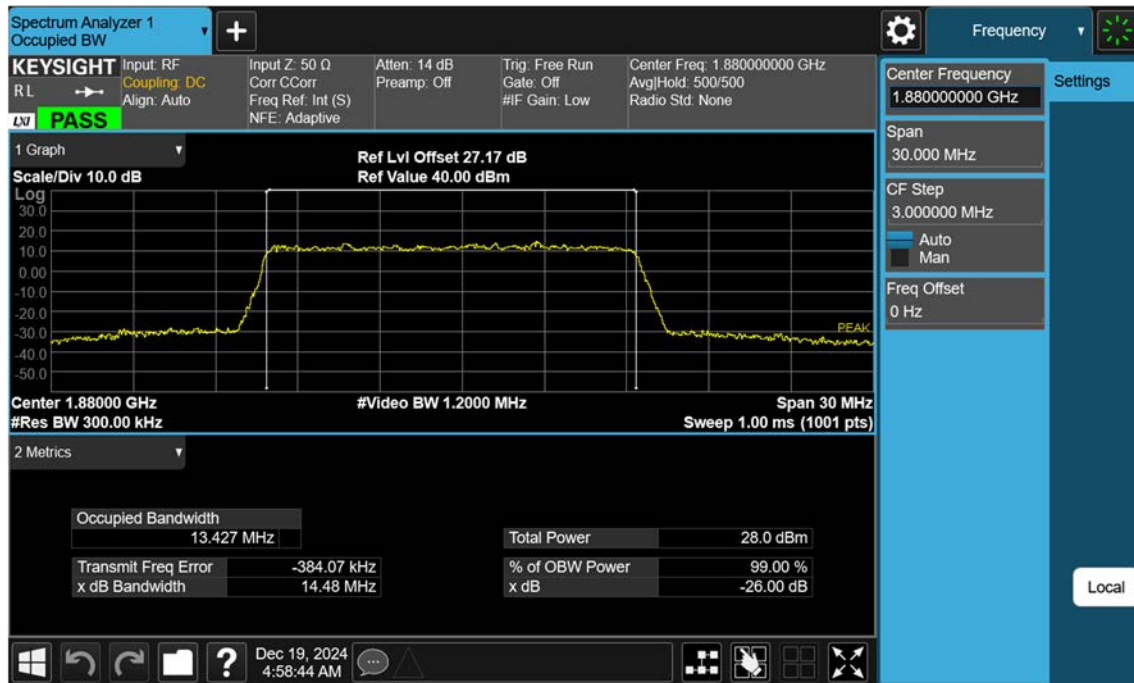
NR2_15 M_OBW_Mid_16QAM_FullRB



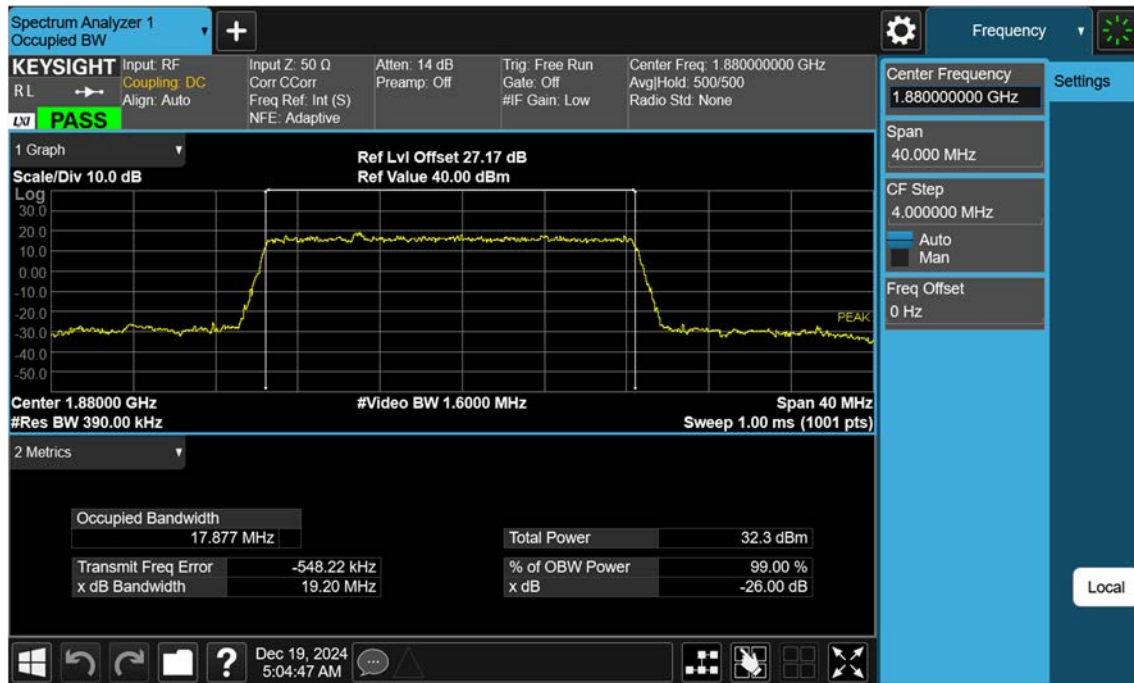
NR2_15 M_OBW_Mid_64QAM_FullRB



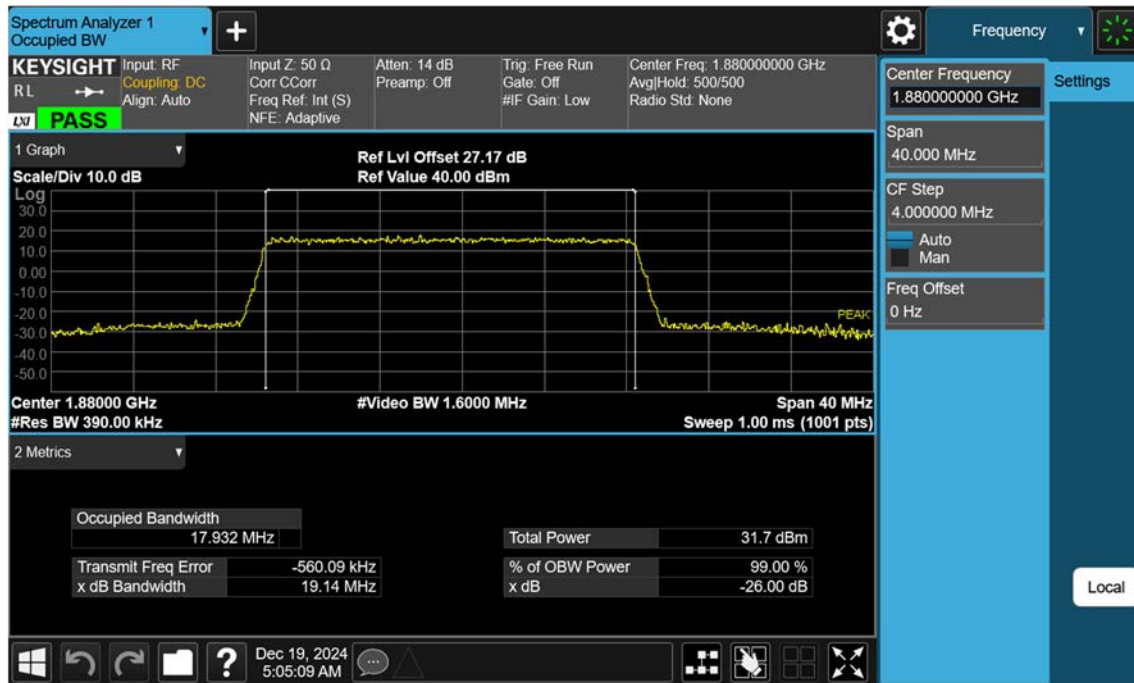
NR2_15 M_OBW_Mid_256QAM_FullRB



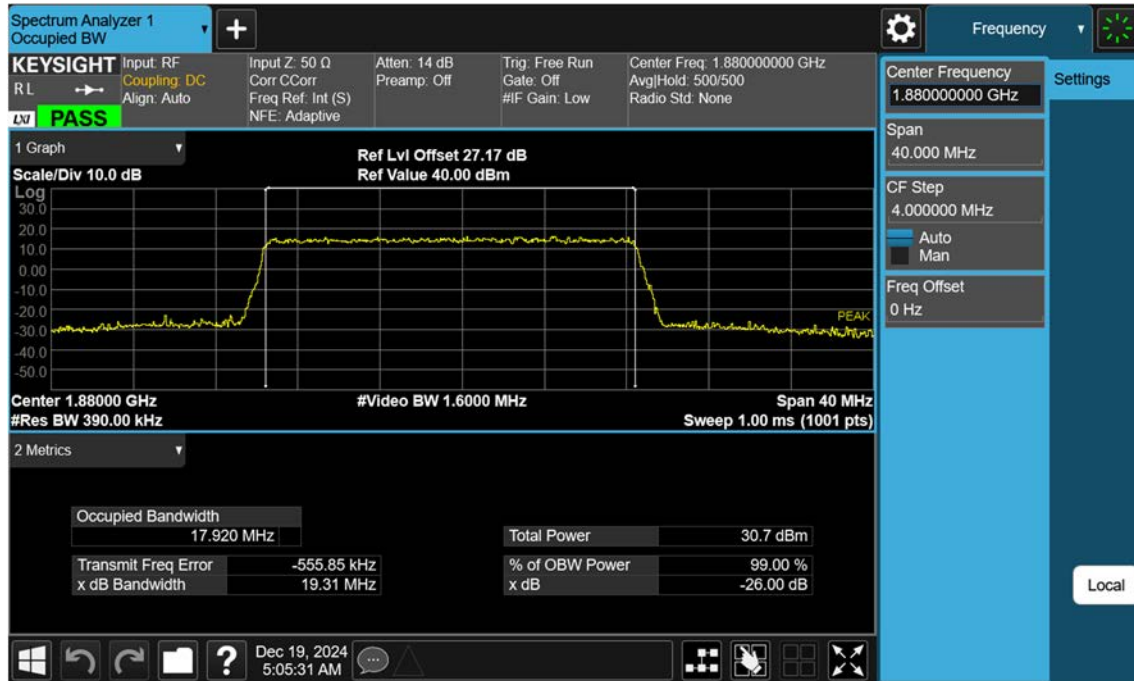
NR2_20 M_OBW_Mid_BPSK_FullIRB



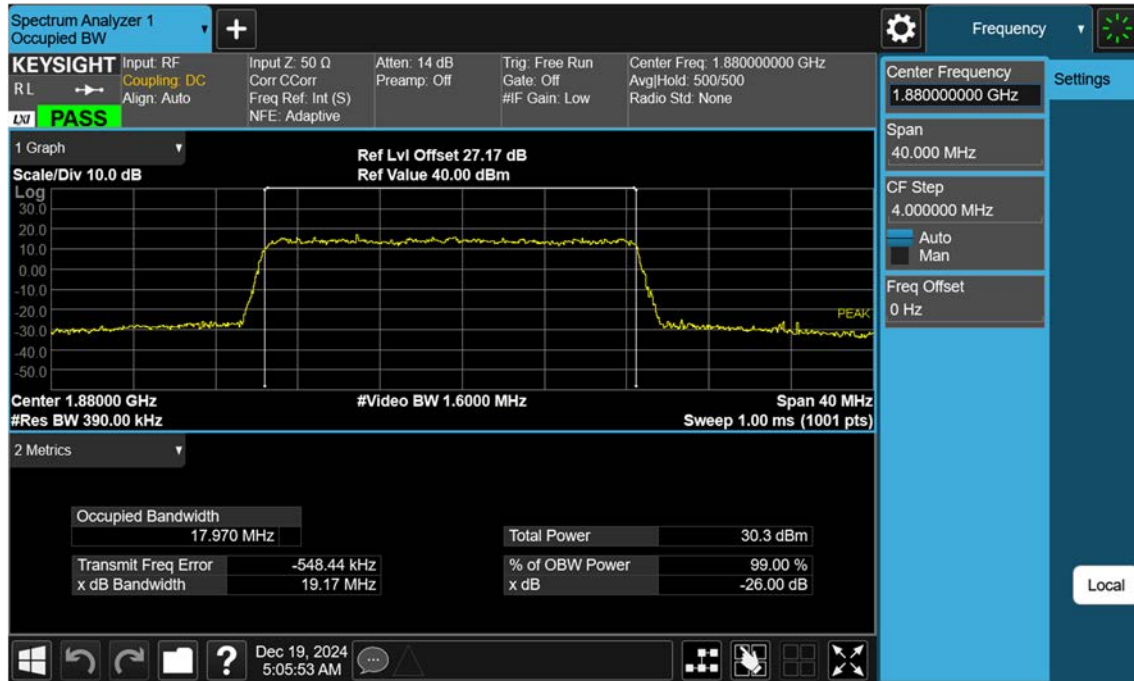
NR2_20 M_OBW_Mid_QPSK_FullRB



NR2_20 M_OBW_Mid_16QAM_FullRB



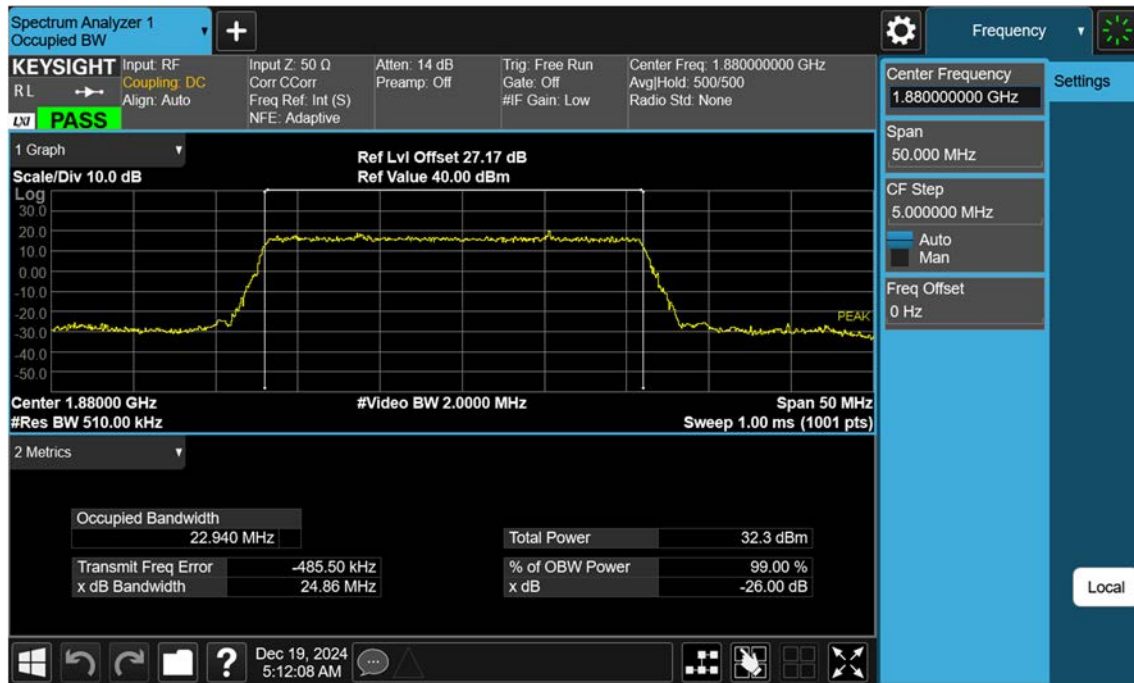
NR2_20 M_OBW_Mid_64QAM_FullRB



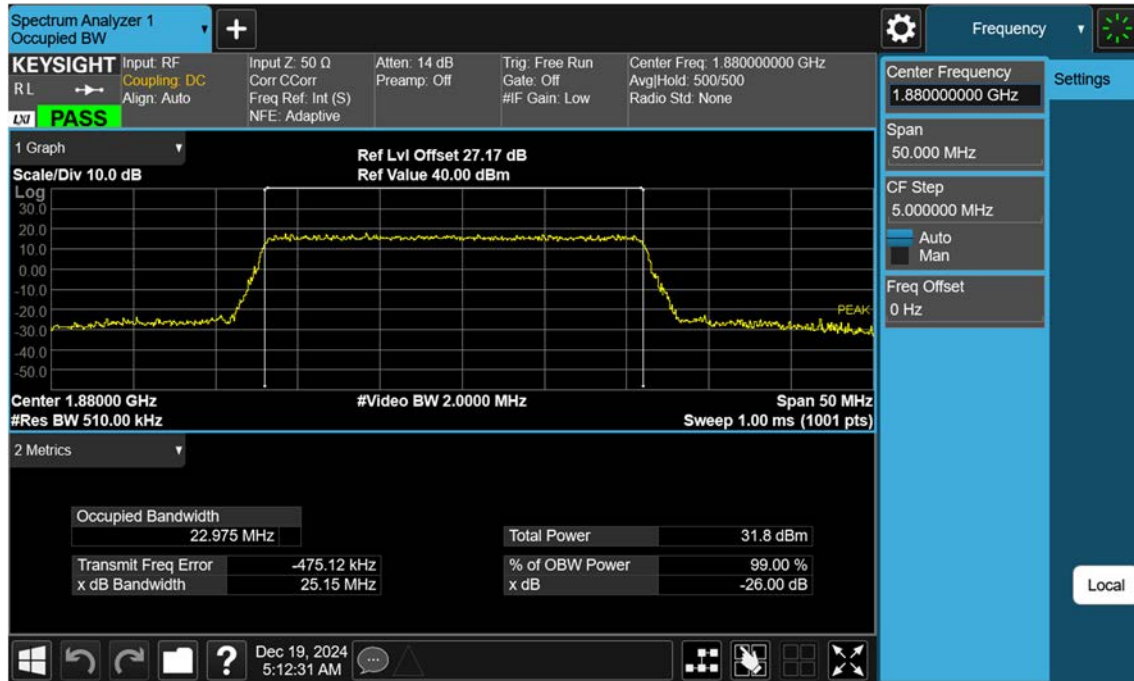
NR2_20 M_OBW_Mid_256QAM_FullRB



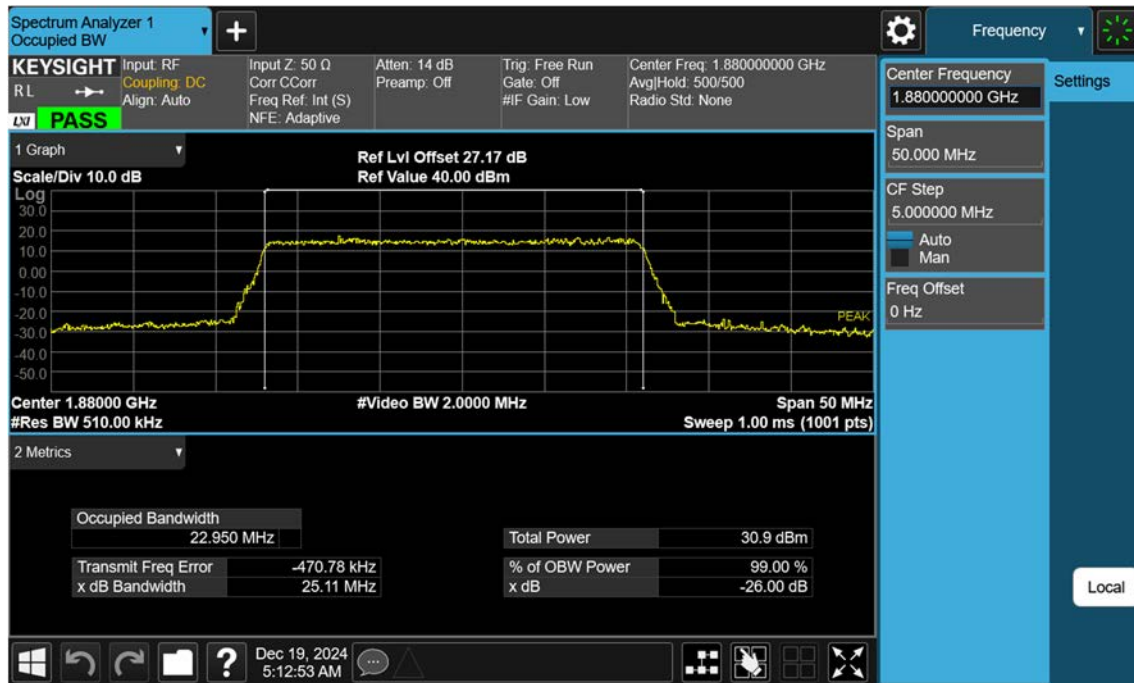
NR2_25 M_OBW_Mid_BPSK_FullIRB



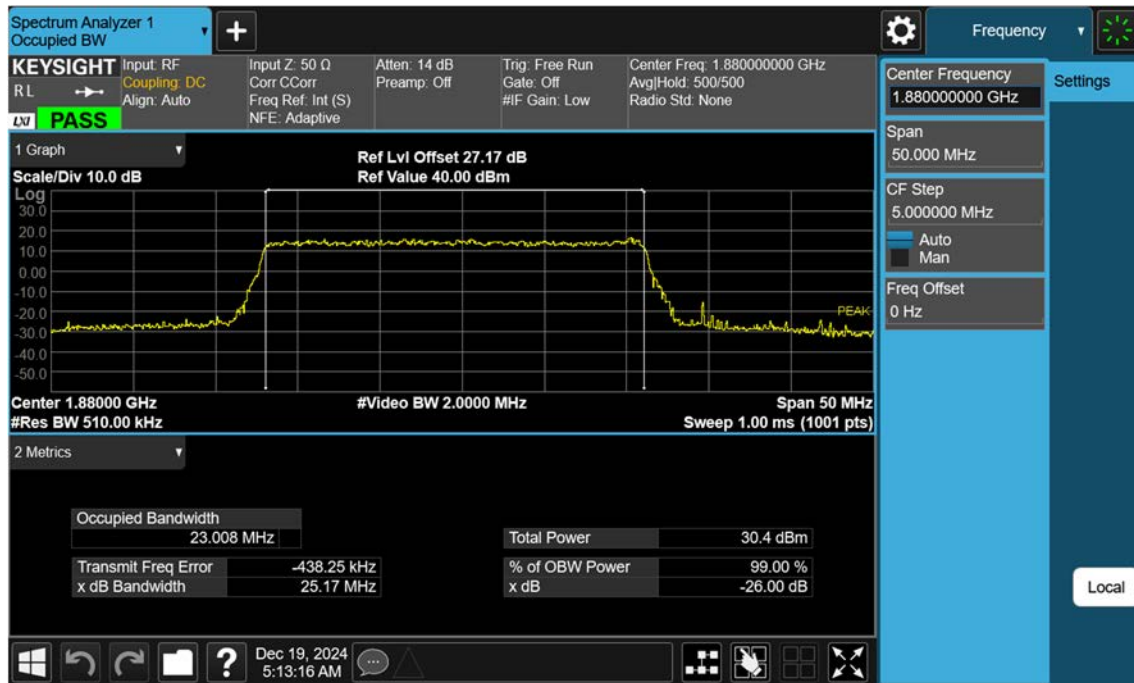
NR2_25 M_OBW_Mid_QPSK_FullRB



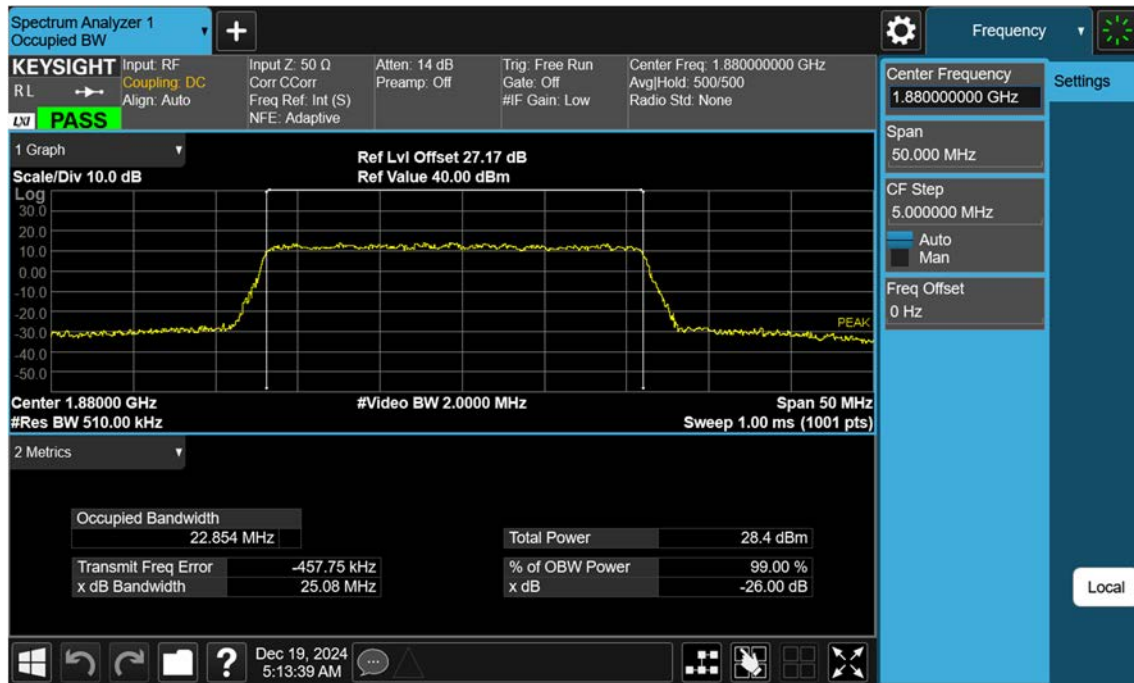
NR2_25 M_OBW_Mid_16QAM_FullRB



NR2_25 M_OBW_Mid_64QAM_FullRB



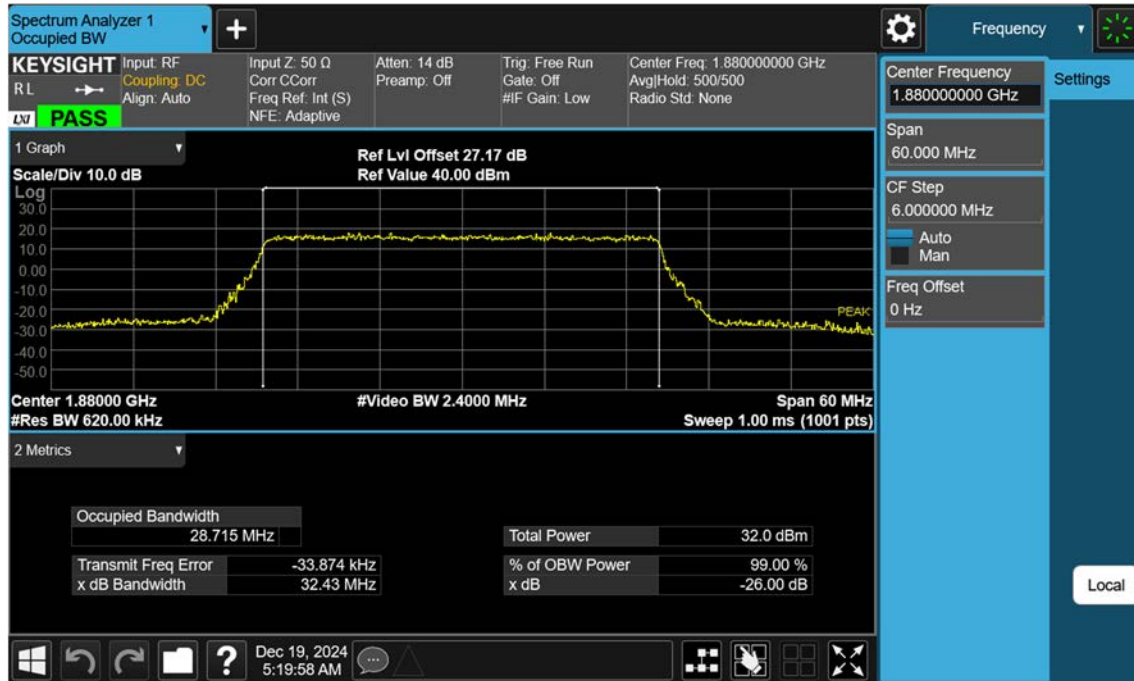
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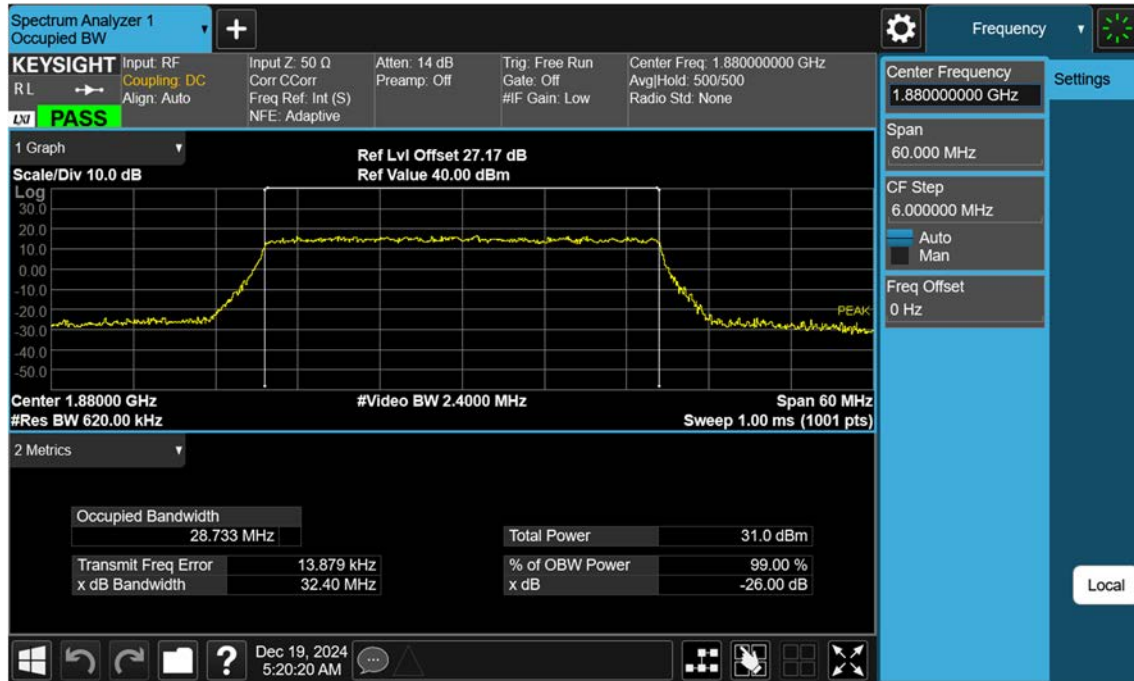
NR2_30 M_OBW_Mid_BPSK_FullIRB



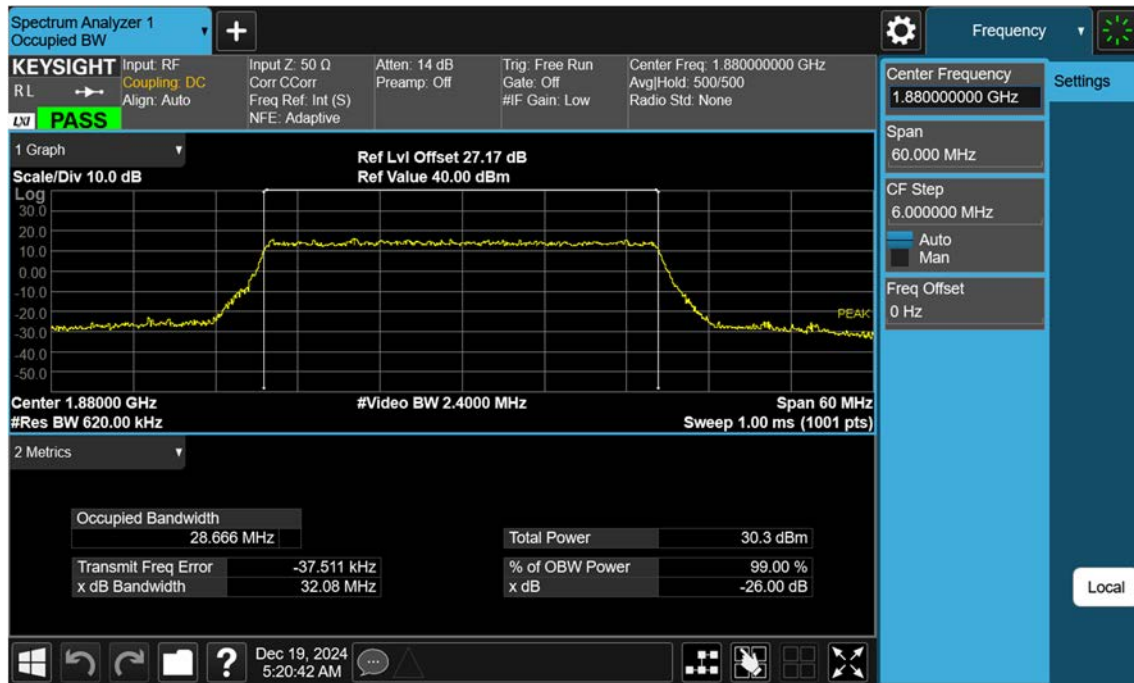
NR2_30 M_OBW_Mid_QPSK_FullRB



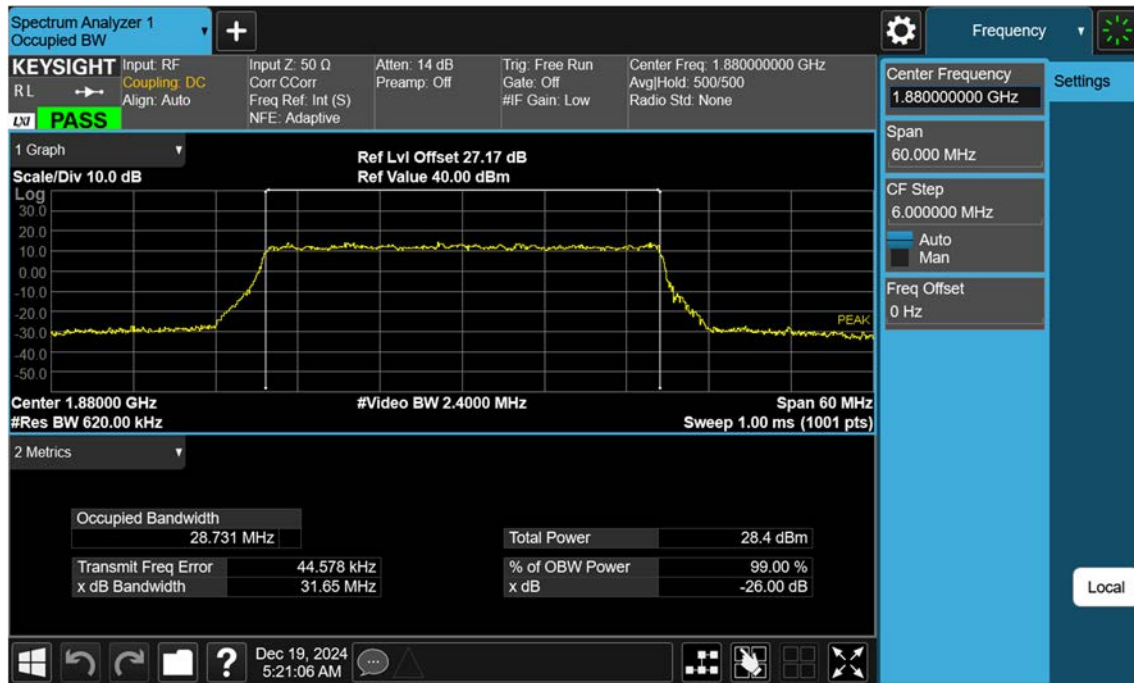
NR2_30 M_OBW_Mid_16QAM_FullRB



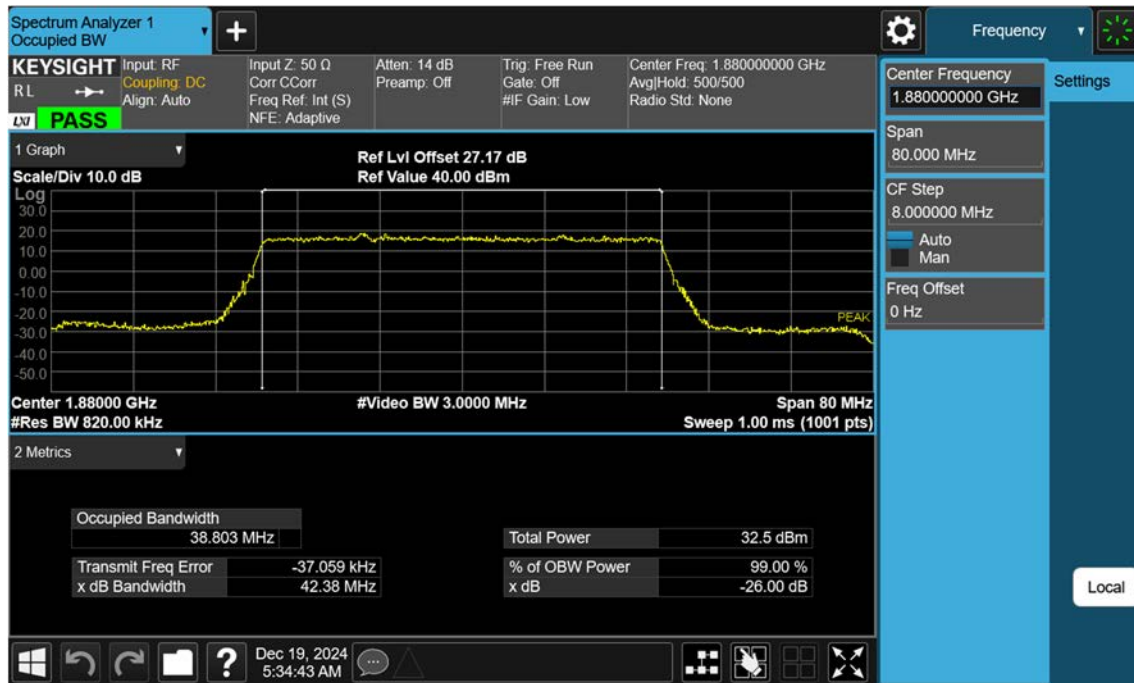
NR2_30 M_OBW_Mid_64QAM_FullRB



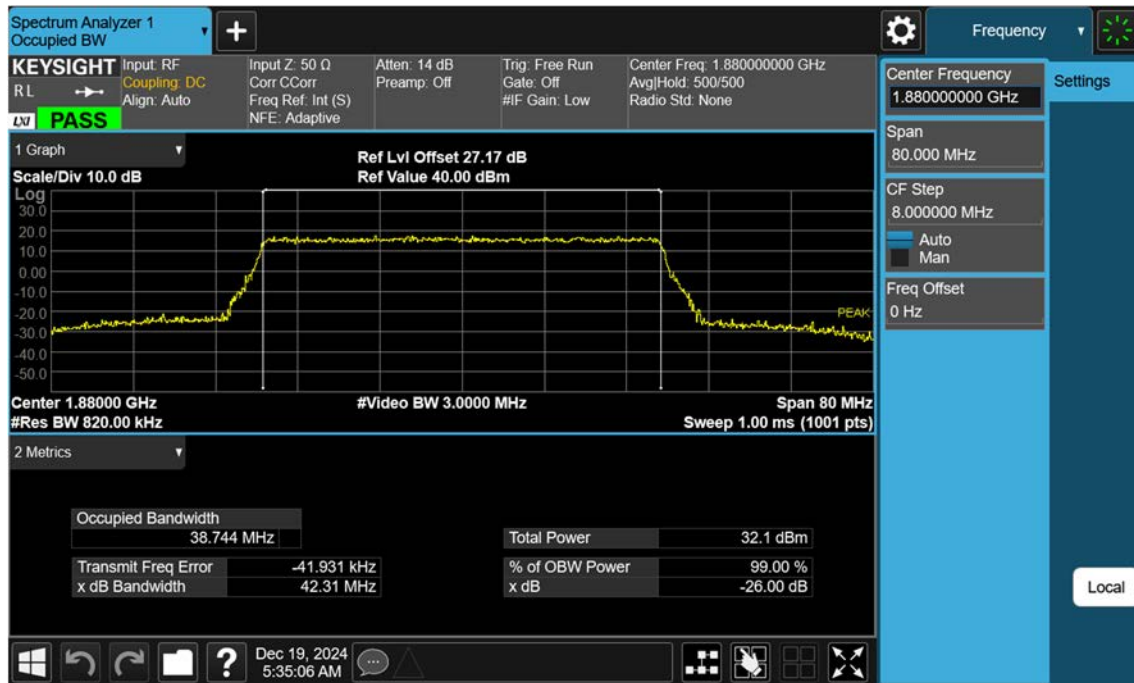
NR2_30 M_OBW_Mid_256QAM_FullRB



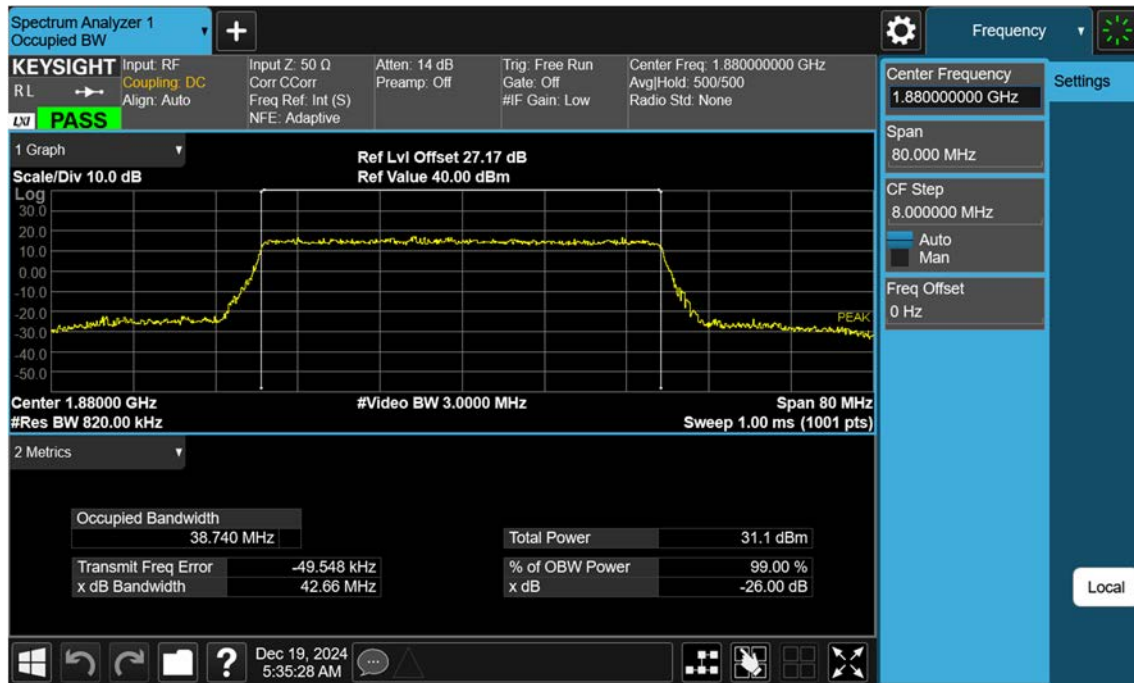
NR2_40 M_OBW_Mid_BPSK_FullIRB



NR2_40 M_OBW_Mid_QPSK_FullRB



NR2_40 M_OBW_Mid_16QAM_FullRB



NR2_40 M_OBW_Mid_64QAM_FullRB

