TEST REPORT

FCC Sub6 n25(2) Test for TM18FNNABM0
Certification

APPLICANT
LG Electronics Inc.

REPORT NO.
HCT-RF-2506-FC067-R1

DATE OF ISSUE
July 21, 2025

Tested by
Jae Ryang Do

Technical Manager
Jong Seok Lee

Accredited by KOLAS, Republic of KOREA

HCT CO., LTD.
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

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

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Applicant	LG Electronics Inc. 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea
Product Name Model Name	Telematics TM18FNNABM0
Date of Test	February 08, 2025 ~ June 13, 2025
FCC ID	2BO3LTM18FNNABM0
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 (PCB)
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	June 17, 2025	Initial Release
1	July 21, 2025	Revised the note on page 19.

Notice

Content
The measurements shown in this report were made in accordance with the procedures specified in CFR47 section § 2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S. C.853(a) The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated. The test results have only been applied with the test methods required by the standard(s). The laboratory is not accredited for the test results marked *. Information provided by the applicant is marked **. Test results provided by external providers are marked ***. When confirmation of authenticity of this test report is required, please contact www.hct.co.kr This test report provides test result(s) under the scope accredited by the Korea Laboratory Accreditation Scheme (KOLAS), which signed the ILAC-MRA. (KOLAS (KS Q ISO/IEC 17025) Accreditation No. KT197)

CONTENTS

MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name:	LG Electronics Inc.
Address:	128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea
FCC ID:	2BO3LTM18FNNABM0
Application Type:	Certification
FCC Classification	PCS Licensed Transmitter (PCB)
FCC Rule Part(s):	§ 24
EUT Type:	Telematics
Model(s):	TM18FNNABM0
Voltage:	4.2V
SCS(kHz):	15
Bandwidth(MHz):	5, 10, 15, 20, 25, 30, 35, 40
Waveform:	CP-OFDM, DFT-S-OFDM
Modulation:	DFT-S-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
Tx Frequency:	1852.5 MHz – 1912.5 MHz (Sub6 n25(2) (5 MHz)) 1855.0 MHz – 1910.0 MHz (Sub6 n25(2) (10 MHz)) 1857.5 MHz – 1907.5 MHz (Sub6 n25(2) (15 MHz)) 1860.0 MHz – 1905.0 MHz (Sub6 n25(2) (20 MHz)) 1862.5 MHz – 1902.5 MHz (Sub6 n25 (25 MHz)) 1865.0 MHz – 1900.0 MHz (Sub6 n25 (30 MHz)) 1867.5 MHz – 1897.5 MHz (Sub6 n25 (35 MHz)) 1870.0 MHz – 1895.0 MHz (Sub6 n25 (40 MHz))
Date(s) of Tests:	February 08, 2025 ~ June 13, 2025
EUT Serial number:	Radiated : BMW ICON-25SF Radiated #1 Conducted : BMW ICON-25SF Conducted #3
Antenna Information	Please refer to the Antenna Specification document.

1.1. SUPPORTED BANDS PER ANTENNA PORT

Antenna Port	Supported bands
MIMO 1	- WCDMA: B2, 5 - LTE: B2, 4, 5, 7, 12, 13, 17, 25, 66, 26, 38, 42, 48, 71 - NR: n2, 5, 7, 12, 25, 41, 48, 66, 71, 77, 78
MIMO 2	- LTE: B42, 48 - NR: n48, 77, 78
MIMO 3	Only RX
MIMO 4	Only RX
Int. BUA (Back Up Antenna)	- WCDMA: B2, 5 - LTE: B2, 4, 5, 7, 25, 26, 38, 66 - NR: n2, 5, 7, 25, 41, 66

Note:

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

1.2. MAXIMUM OUTPUT POWER

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	Conducted Output Power	
				Max. Power (W)	Max. Power (dBm)
Sub6 n25(2) (5)	1852.5 - 1912.5	4M51G7D	PI/2 BPSK	0.223	23.48
		4M51G7D	QPSK	0.224	23.50
		4M49W7D	16QAM	0.182	22.61
		4M48W7D	64QAM	0.126	21.00
		4M50W7D	256QAM	0.076	18.81
Sub6 n25(2) (10)	1855.0 - 1910.0	9M00G7D	PI/2 BPSK	0.225	23.52
		8M94G7D	QPSK	0.225	23.52
		8M95W7D	16QAM	0.187	22.73
		8M98W7D	64QAM	0.128	21.08
		9M00W7D	256QAM	0.080	19.01
Sub6 n25(2) (15)	1857.5 - 1907.5	13M4G7D	PI/2 BPSK	0.228	23.57
		13M5G7D	QPSK	0.225	23.53
		13M4W7D	16QAM	0.187	22.73
		13M5W7D	64QAM	0.129	21.09
		13M4W7D	256QAM	0.079	18.99
Sub6 n25 (2) (20)	1860.0 - 1905.0	17M9G7D	PI/2 BPSK	0.225	23.53
		18M0G7D	QPSK	0.221	23.45
		18M0W7D	16QAM	0.186	22.70
		17M9W7D	64QAM	0.127	21.05
		17M9W7D	256QAM	0.080	19.01
Sub6 n25 (25)	1862.5 - 1902.5	23M0G7D	PI/2 BPSK	0.215	23.33
		22M9G7D	QPSK	0.212	23.26
		22M9W7D	16QAM	0.180	22.55
		22M9W7D	64QAM	0.124	20.92
		22M9W7D	256QAM	0.076	18.83
Sub6 n25 (30)	1865.0 –1900.0	28M7G7D	PI/2 BPSK	0.216	23.34
		28M7G7D	QPSK	0.217	23.36
		28M6W7D	16QAM	0.185	22.66
		28M6W7D	64QAM	0.126	21.00
		28M6W7D	256QAM	0.072	18.55
Sub6 n25 (35)	1865.0 –1900.0	32M2G7D	PI/2 BPSK	0.206	23.14
		32M2G7D	QPSK	0.207	23.17
		32M1W7D	16QAM	0.152	21.83
		32M2W7D	64QAM	0.125	20.98
		32M2W7D	256QAM	0.075	18.76
Sub6 n25 (40)	1870.0 –1895.0	38M6G7D	PI/2 BPSK	0.209	23.21
		38M7G7D	QPSK	0.207	23.16
		38M6W7D	16QAM	0.177	22.47
		38M6W7D	64QAM	0.119	20.77
		38M7W7D	256QAM	0.074	18.69

2. INTRODUCTION

2.1. DESCRIPTION OF EUT

Please refer to the [3G] 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

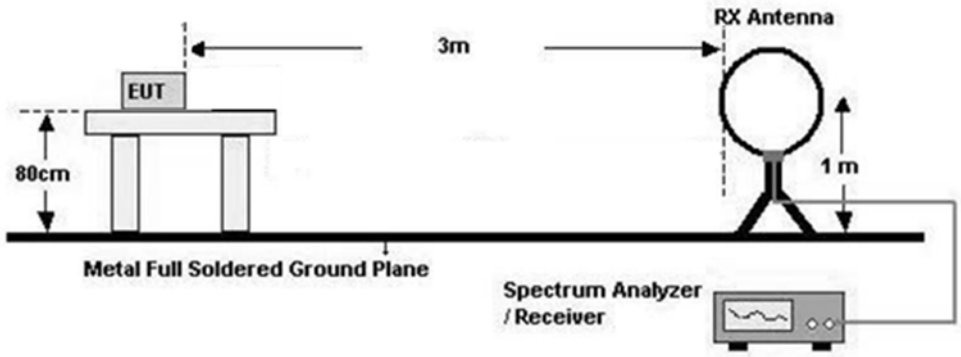
3.2 RADIATED POWER

Test Overview

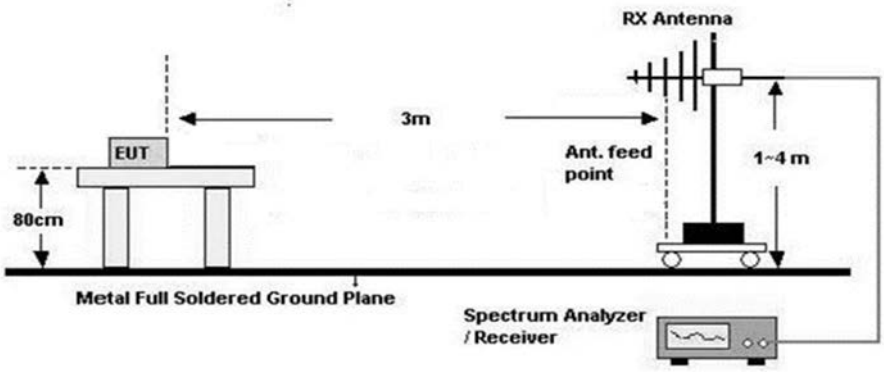
Radiated tests are performed in the semi-anechoic chamber. The equipment under test is placed on a non-conductive table on semi-anechoic chamber.

Test Configuration

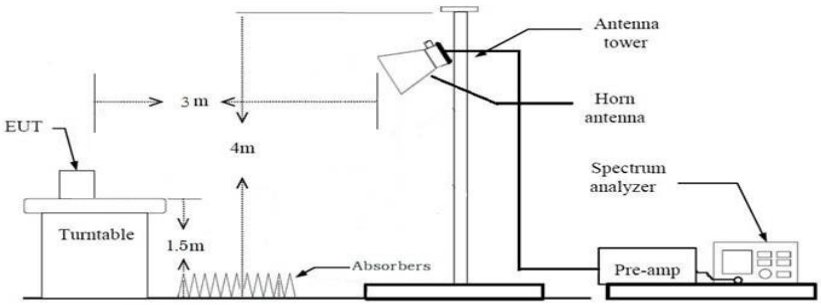
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



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 ≥ 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 EUT is placed on a turntable, which is 0.8 m above ground plane. (Below 1 GHz)
2. The EUT is placed on a turntable, which is 1.5 m above ground plane. (Above 1 GHz)
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
5. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
6. 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.
7. Total(dBμV/m) = Measured Value(dBμV) + Cable Loss(dB) + Antenna Factor(dB/m) + Distance Factor(D.F)
8. EIRP (dBm)
   = Total (dBμV/m) + 20 log D – 104.8 (where D is the measurement distance in meters. D=3)
   = Total (dBμV/m) - 95.2(dB)
9. ERP(dBm) = EIRP(dBm) - 2.15(dB)

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 ≥ 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points > 2 x span / RBW
5. Detector = Peak
6. Trace mode = Max Hold
7. The trace was allowed to stabilize
8. Test channel : Low/ Middle/ High
9. Frequency range : We are performed all frequency to 10^{th} 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;

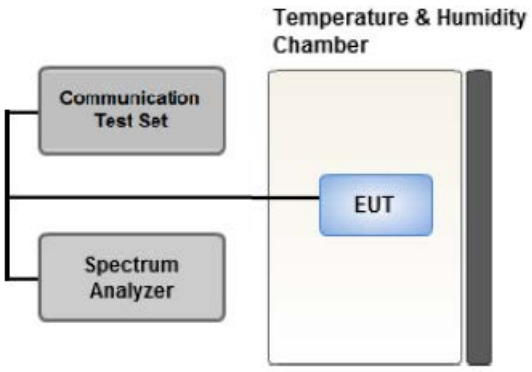
$$\text{Result}_{(dBm)} = Pg_{(dBm)} - \text{cable loss}_{(dB)} + \text{antenna gain}_{(dBi)}$$

   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.

$$EIRP_{(dBm)} = ERP_{(dBm)} + 2.15$$

3.4 PEAK- TO- AVERAGE RATIO



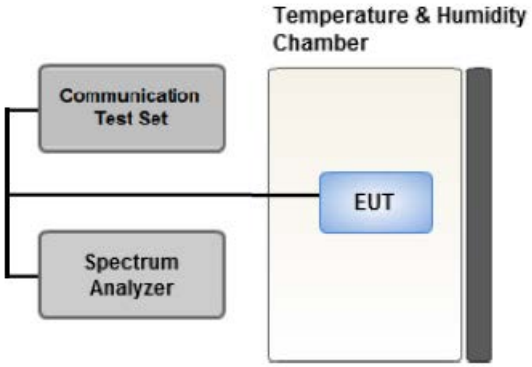
Test setup

CCDF Procedure for PAPR

Test Settings

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

3.5 OCCUPIED BANDWIDTH.



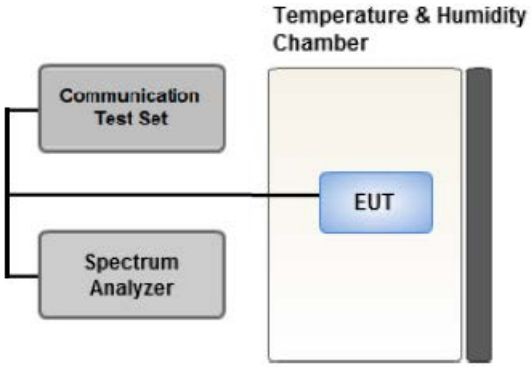
Test setup

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.
The EUT makes a call to the communication simulator.
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth

Test Settings

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99 % occupied bandwidth and the 26 dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5 % of the expected OBW
3. VBW ≥ 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

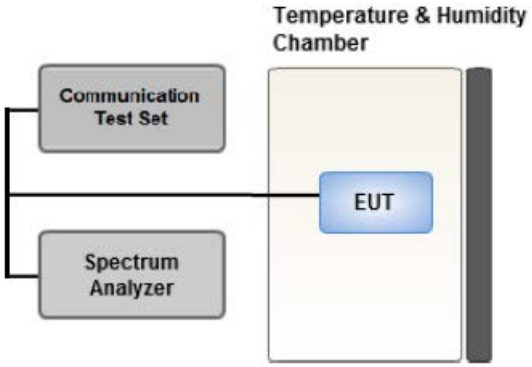
Test Overview

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 ≥ 3 MHz
3. Detector = Peak
4. Trace Mode = Max Hold
5. Sweep time = auto
6. Number of points in sweep ≥ 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

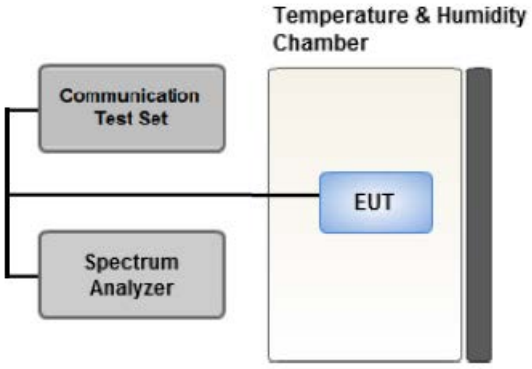
1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW > 1 % of the emission bandwidth
4. VBW > 3 x RBW
5. Detector = RMS
6. Number of sweep points ≥ 2 x Span/RBW
7. Trace mode = trace average
8. Sweep time > Number of points in sweep × Symbol period
9. The trace was allowed to stabilize

Test Notes

According to FCC 22.917, 24.238, 27.53 specified that power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.
All measurements were done at 2 channels(low and high operational frequency range.)
The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



Test setup

Test Overview

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015.
The frequency stability of the transmitter is measured by:

1. Temperature:
   The temperature is varied from -30 °C to +50 °C in 10 °C increments using an environmental chamber.
2. Primary Supply Voltage:
   .- Unless otherwise specified, vary primary supply voltage from 85 % to 115 % of the nominal value for other than hand carried battery equipment.
   .- For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.

Test Settings

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

3.9 WORST CASE(RADIATED TEST)

- The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
- The worst case is reported with the EUT positioning, modulations, and paging service configurations shown in the test data.
- Sub6 n25 supports only SA. Therefore, it was tested in SA mode only.
- All modes of operation for Sub6 n2 were investigated and the worst case configuration results are reported. (Mode: SA, NSA (Worst case: SA))
- Radiated Spurious emissions are measured while operating in EN-DC mode with Sub 6 n2 carrier as well as an LTE carrier (anchor). All EN-DC mode of operation (=anchor) were investigated and the test results were measured NoPeak 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.
- Sub6 n25 (1850 – 1915 MHz, 5/10/15/20/25/30/40 MHz bandwidth) overlaps the entire frequency range of Sub6 n2 (1850 - 1910 MHz, 5/10/15/20MHz bandwidth) and they have the same Tune-up power. Therefore, test data provided in this report covers Sub6 n25 as well as Sub6 n2.
- In the case of radiated spurious emissions, all bandwidth of operation was investigated and the worst case bandwidth results are reported. (Worst case : 35 MHz (External(MIMO1)), 20 MHz(Internal(BUA)))
- MIMO3 and MIMO4 have three types of Rx antennas. Operating modes were investigated for all Rx antennas, and the worst-case configuration results were reported.(Worst-case: FSA antenna)

[External(MIMO1) Worst case]

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

[Internal(BUA) Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	See Section 9.1		Y
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)
- Sub6 n25 supports only SA. Therefore, it was tested in SA mode only.
- All modes of operation for Sub6 n2 were investigated and the worst case configuration results are reported. (Mode: SA, NSA (Worst case: SA))
- Sub6 n25 (1850 – 1915 MHz, 5/10/15/20/25/30/40 MHz bandwidth) overlaps the entire frequency range of Sub6 n2 (1850 - 1910 MHz, 5/10/15/20MHz bandwidth) and they have the same Tune-up power. Therefore, test data provided in this report covers Sub6 n25 as well as Sub6 n2.
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported. Please refer to the table below.
- Both 85% and 115% conditions were measured for the Frequency Stability test, and results for the worst-case configuration (85%) were reported.
- In accordance with the customer's specification of 3.7V as the lowest operating voltage, testing was performed at 3.7V instead of 85% (3.57V).

[Worst case]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth, Peak-To-Average Ratio	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	5, 10, 15, 20, 25, 30,35, 40	Mid	Full RB	0
Band Edge	PI/2 BPSK	5	Low	1	0
			High	1	24
		10	Low	1	0
			High	1	51
		15	Low	1	0
			High	1	78
		20	Low	1	0
			High	1	105
		25	Low	1	0
			High	1	132
		30	Low	1	0
			High	1	159
		35	Low	1	0
			High	1	187
		40	Low	1	0
			High	1	215
		5, 10, 15, 20, 25, 30,35, 40	Low, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	5, 10, 15, 20, 25, 30,35, 40	Low, Mid, High	1	1

4. LIST OF TEST EQUIPMENT

[Radiated]

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

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Spectrum Analyzer(10 Hz ~ 40 GHz)	FSV40	ROHDE & SCHWARZ	101733	09/19/2025	Annual
Spectrum Analyzer(10 Hz ~ 40 GHz)	FSV40	REOHDE & SCHWARZ	101436	02/04/2026	Annual
Signal & Spectrum Analyzer (2 Hz~67 GHz)	FSW67	REOHDE & SCHWARZ	101736	05/27/2026	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/05/2025	Annual
Loop Antenna(9 kHz ~ 30 MHz)	FMZB1513	Schwarzbeck	1513-333	03/07/2026	Biennial
Trilog Broadband Antenna	VULB 9168	Schwarzbeck	9168-0895	08/28/2026	Biennial
Trilog Broadband Antenna	VULB9168	Schwarzbeck	895	08/28/2026	Biennial
Trilog Broadband Antenna	VULB9168	Schwarzbeck	1135	08/19/2026	Biennial
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/14/2026	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6272613402	08/28/2025	Annual
SIGNAL GENERATOR (100 kHz ~ 40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	07/26/2025	Annual
Automation Software	FCC LTE Radiated	HCT CO., LTD	-	-	-
Automation Software	FCC NR Radiated	HCT CO., LTD	-	-	-

[Conducted]

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

Note:

1. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
2. 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 (±kHz)
Occupied Bandwidth	95 (Confidence level about 95 %, k=2)
Frequency stability	28 (Confidence level about 95 %, k=2)

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

6. SUMMARY OF TEST RESULTS

-. The decision rule applies 'simple acceptance'

6.1 Test Condition: Conducted Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Occupied Bandwidth	§ 2.1049	N/A	PASS
Band Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§ 2.1051, § 24.238(a)	< 43 + 10log10 (P[Watts]) at Band Edge and for all out-of-band emissions	PASS
Conducted Output Power	§ 2.1046	N/A	Note[1]
Peak- to- Average Ratio	§ 24.232(d)	< 13 dB	PASS
Frequency stability / variation of ambient temperature	§ 24.235	Emission must remain in band	PASS

Note:

1. Refer to the SAR report.
2. All conducted tests were tested using 5G Wireless Tester.

6.2 Test Condition: Radiated Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Equivalent Isotropic Radiated Power	§ 24.232(c)	< 2 Watts max. EIRP	PASS
Radiated Spurious and Harmonic Emissions	§ 2.1053, § 24.238(a)	< 43 + 10log10 (P[Watts]) for all out-of band emissions	PASS

Note:

1. Radiated tests were tested using 5G Wireless Tester

7. SAMPLE CALCULATION

7.1 ERP Sample Calculation

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

ERP = Substitute LEVEL(dBm) + Ant. Gain – 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

EIRP = Substitute LEVEL(dBm) + Ant. Gain – CL(Cable Loss)

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

7.3. Emission Designator

GSM Emission Designator

Emission Designator = 249KGXW
GSM BW = 249 kHz
G = Phase Modulation
X = Cases not otherwise covered
W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W
GSM BW = 249 kHz
G = Phase Modulation
7 = Quantized/Digital Info
W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W
WCDMA BW = 4.17 MHz
F = Frequency Modulation
9 = Composite Digital Info
W = Combination (Audio/Data)

QPSK Modulation

Emission Designator = 4M48G7D
LTE BW = 4.48 MHz
G = Phase Modulation
7 = Quantized/Digital Info
D = Data transmission; telemetry; telecommand

QAM Modulation

Emission Designator = 4M48W7D
LTE BW = 4.48 MHz
W = Amplitude/Angle Modulated
7 = Quantized/Digital Info
D = Data transmission; telemetry; telecommand

8. TEST DATA (MIMO1)

8.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1852.5	Sub6 n25(2)/ 5 MHz [15 kHz]	PI/2 BPSK	87.97	27.70	3.93	119.60	H	< 2.00	0.275	24.40	1	1
		QPSK	87.73	27.70	3.93	119.35	H		0.260	24.15		
		16-QAM	86.82	27.70	3.93	118.45	H		0.211	23.25		
		64-QAM	85.84	27.70	3.93	117.47	H		0.169	22.27		
		256-QAM	83.40	27.70	3.93	115.03	H		0.096	19.83		
1882.5		PI/2 BPSK	87.00	28.00	3.94	118.94	H		0.237	23.74	1	12
		QPSK	86.83	28.00	3.94	118.77	H		0.228	23.57		
		16-QAM	85.85	28.00	3.94	117.79	H		0.182	22.59		
		64-QAM	84.87	28.00	3.94	116.81	H		0.145	21.61		
		256-QAM	82.43	28.00	3.94	114.37	H		0.083	19.17		
1912.5		PI/2 BPSK	86.21	28.00	3.99	118.20	H		0.199	23.00	1	12
		QPSK	85.81	28.00	3.99	117.80	H		0.182	22.60		
		16-QAM	85.23	28.00	3.99	117.22	H		0.159	22.02		
		64-QAM	84.25	28.00	3.99	116.24	H		0.127	21.04		
		256-QAM	81.81	28.00	3.99	113.80	H		0.072	18.60		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1855.0	Sub6 n25(2)/ 10 MHz [15 kHz]	PI/2 BPSK	87.92	27.70	3.93	119.55	H	< 2.00	0.272	24.35	1	1
		QPSK	87.77	27.70	3.93	119.40	H		0.263	24.20		
		16-QAM	86.78	27.70	3.93	118.41	H		0.209	23.21		
		64-QAM	85.79	27.70	3.93	117.42	H		0.167	22.22		
		256-QAM	83.58	27.70	3.93	115.21	H		0.100	20.01		
1882.5		PI/2 BPSK	87.09	28.00	3.94	119.03	H		0.241	23.83	1	26
		QPSK	86.93	28.00	3.94	118.87	H		0.233	23.67		
		16-QAM	85.94	28.00	3.94	117.88	H		0.185	22.68		
		64-QAM	84.95	28.00	3.94	116.89	H		0.148	21.69		
		256-QAM	82.74	28.00	3.94	114.68	H		0.089	19.48		
1910.0		PI/2 BPSK	86.47	28.00	3.99	118.46	H		0.212	23.26	1	1
		QPSK	86.12	28.00	3.99	118.11	H		0.195	22.91		
		16-QAM	85.13	28.00	3.99	117.12	H		0.156	21.92		
		64-QAM	84.14	28.00	3.99	116.13	H		0.124	20.93		
		256-QAM	81.93	28.00	3.99	113.92	H		0.074	18.72		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1857.5	Sub6 n25(2)/ 15 MHz [15 kHz]	PI/2 BPSK	87.90	27.70	3.93	119.53	H	< 2.00	0.271	24.33	1	1
		QPSK	87.80	27.70	3.93	119.42	H		0.265	24.22		
		16-QAM	86.86	27.70	3.93	118.49	H		0.213	23.29		
		64-QAM	85.87	27.70	3.93	117.50	H		0.170	22.30		
		256-QAM	83.66	27.70	3.93	115.29	H		0.102	20.09		
1882.5		PI/2 BPSK	86.99	28.00	3.94	118.93	H		0.236	23.73	1	39
		QPSK	86.99	28.00	3.94	118.93	H		0.236	23.73		
		16-QAM	86.00	28.00	3.94	117.94	H		0.188	22.74		
		64-QAM	85.01	28.00	3.94	116.95	H		0.150	21.75		
		256-QAM	82.80	28.00	3.94	114.74	H		0.090	19.54		
1907.5		PI/2 BPSK	86.63	28.00	3.99	118.62	H		0.220	23.42	1	1
		QPSK	86.42	28.00	3.99	118.41	H		0.210	23.21		
		16-QAM	85.43	28.00	3.99	117.42	H		0.167	22.22		
		64-QAM	84.44	28.00	3.99	116.43	H		0.133	21.23		
		256-QAM	82.23	28.00	3.99	114.22	H		0.080	19.02		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1860.0	Sub6 n25(2)/ 20 MHz [15 kHz]	PI/2 BPSK	87.99	27.70	3.93	119.62	H	< 2.00	0.277	24.42	1	1
		QPSK	87.80	27.70	3.93	119.43	H		0.265	24.23		
		16-QAM	86.87	27.70	3.93	118.50	H		0.214	23.30		
		64-QAM	85.88	27.70	3.93	117.51	H		0.170	22.31		
		256-QAM	83.67	27.70	3.93	115.30	H		0.102	20.10		
1882.5		PI/2 BPSK	87.06	28.00	3.94	119.00	H		0.240	23.80	1	53
		QPSK	86.95	28.00	3.94	118.89	H		0.234	23.69		
		16-QAM	85.96	28.00	3.94	117.90	H		0.186	22.70		
		64-QAM	84.97	28.00	3.94	116.91	H		0.148	21.71		
		256-QAM	82.76	28.00	3.94	114.70	H		0.089	19.50		
1905.0		PI/2 BPSK	86.99	28.00	3.99	118.98	H		0.239	23.78	1	1
		QPSK	86.77	28.00	3.99	118.75	H		0.227	23.55		
		16-QAM	85.78	28.00	3.99	117.76	H		0.181	22.56		
		64-QAM	84.79	28.00	3.99	116.77	H		0.144	21.57		
		256-QAM	82.58	28.00	3.99	114.56	H		0.086	19.36		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1862.5	Sub6 n25/ 25 MHz [15 kHz]	PI/2 BPSK	87.93	27.70	3.93	119.56	H	< 2.00	0.273	24.36	1	66
		QPSK	87.86	27.70	3.93	119.49	H		0.269	24.29		
		16-QAM	86.87	27.70	3.93	118.50	H		0.214	23.30		
		64-QAM	85.88	27.70	3.93	117.51	H		0.170	22.31		
		256-QAM	83.67	27.70	3.93	115.30	H		0.102	20.10		
1882.5		PI/2 BPSK	88.00	28.00	3.94	119.94	H		0.298	24.74	1	1
		QPSK	87.82	28.00	3.94	119.76	H		0.286	24.56		
		16-QAM	86.83	28.00	3.94	118.77	H		0.228	23.57		
		64-QAM	85.84	28.00	3.94	117.78	H		0.181	22.58		
		256-QAM	83.63	28.00	3.94	115.57	H		0.109	20.37		
1902.5		PI/2 BPSK	86.34	28.00	3.99	118.32	H		0.205	23.12	1	1
		QPSK	86.29	28.00	3.99	118.27	H		0.203	23.07		
		16-QAM	85.30	28.00	3.99	117.28	H		0.162	22.08		
		64-QAM	84.31	28.00	3.99	116.29	H		0.129	21.09		
		256-QAM	82.10	28.00	3.99	114.08	H		0.077	18.88		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1865.0	Sub6 n25/ 30 MHz [15 kHz]	PI/2 BPSK	88.30	27.70	3.93	119.93	H	< 2.00	0.297	24.73	1	80
		QPSK	88.15	27.70	3.93	119.78	H		0.287	24.58		
		16-QAM	87.29	27.70	3.93	118.92	H		0.235	23.72		
		64-QAM	86.30	27.70	3.93	117.93	H		0.187	22.73		
		256-QAM	84.09	27.70	3.93	115.72	H		0.113	20.52		
1882.5		PI/2 BPSK	87.94	28.00	3.94	119.88	H		0.294	24.68	1	1
		QPSK	87.90	28.00	3.94	119.84	H		0.291	24.64		
		16-QAM	86.95	28.00	3.94	118.89	H		0.234	23.69		
		64-QAM	85.96	28.00	3.94	117.90	H		0.186	22.70		
		256-QAM	83.75	28.00	3.94	115.69	H		0.112	20.49		
1900.0		PI/2 BPSK	86.73	28.00	3.99	118.72	H		0.225	23.52	1	1
		QPSK	86.62	28.00	3.99	118.61	H		0.219	23.41		
		16-QAM	85.74	28.00	3.99	117.73	H		0.179	22.53		
		64-QAM	84.75	28.00	3.99	116.74	H		0.143	21.54		
		256-QAM	82.54	28.00	3.99	114.53	H		0.086	19.33		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1867.5	Sub6 n25/ 35 MHz [15 kHz]	PI/2 BPSK	88.20	27.70	3.93	119.83	H	< 2.00	0.290	24.63	1	94
		QPSK	88.12	27.70	3.93	119.75	H		0.285	24.55		
		16-QAM	87.21	27.70	3.93	118.84	H		0.231	23.64		
		64-QAM	86.22	27.70	3.93	117.85	H		0.184	22.65		
		256-QAM	84.01	27.70	3.93	115.64	H		0.111	20.44		
1882.5		PI/2 BPSK	88.22	28.00	3.94	120.16	H		0.313	24.96	1	1
		QPSK	88.10	28.00	3.94	120.04	H		0.305	24.84		
		16-QAM	87.11	28.00	3.94	119.05	H		0.243	23.85		
		64-QAM	86.12	28.00	3.94	118.06	H		0.193	22.86		
		256-QAM	83.91	28.00	3.94	115.85	H		0.116	20.65		
1897.5		PI/2 BPSK	87.56	28.00	3.99	119.55	H		0.272	24.35	1	1
		QPSK	87.50	28.00	3.99	119.49	H		0.268	24.29		
		16-QAM	86.57	28.00	3.99	118.56	H		0.217	23.36		
		64-QAM	85.58	28.00	3.99	117.57	H		0.173	22.37		
		256-QAM	83.37	28.00	3.99	115.36	H		0.104	20.16		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1870.0	Sub6 n25/ 40 MHz [15 kHz]	PI/2 BPSK	87.83	27.70	3.93	119.46	H	< 2.00	0.266	24.26	1	108
		QPSK	87.82	27.70	3.93	119.45	H		0.266	24.25		
		16-QAM	86.84	27.70	3.93	118.47	H		0.212	23.27		
		64-QAM	85.85	27.70	3.93	117.48	H		0.169	22.28		
		256-QAM	83.64	27.70	3.93	115.27	H		0.102	20.07		
1882.5		PI/2 BPSK	88.17	28.00	3.94	120.11	H		0.310	24.91	1	1
		QPSK	88.08	28.00	3.94	120.02	H		0.304	24.82		
		16-QAM	87.15	28.00	3.94	119.08	H		0.245	23.88		
		64-QAM	86.16	28.00	3.94	118.09	H		0.195	22.89		
		256-QAM	83.95	28.00	3.94	115.88	H		0.117	20.68		
1895.0		PI/2 BPSK	87.62	28.00	3.99	119.61	H		0.276	24.41	1	1
		QPSK	87.62	28.00	3.99	119.60	H		0.276	24.40		
		16-QAM	86.63	28.00	3.99	118.62	H		0.220	23.42		
		64-QAM	85.64	28.00	3.99	117.63	H		0.175	22.43		
		256-QAM	83.43	28.00	3.99	115.42	H		0.105	20.22		

8.2 RADIATED SPURIOUS EMISSIONS

▣ NR Band: N25
▣ Bandwidth: 35 MHz
▣ Modulation: PI/2 BPSK
▣ Distance: 3 meters
▣ SCS: 15 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
373500 (1867.5)	3 735.00	-53.31	11.72	-60.20	3.18	H	-51.66	-13.00	1	94
	5 602.50	-55.16	12.07	-56.44	3.94	V	-48.31	-13.00		
	7 470.00	-54.65	11.35	-50.77	4.61	H	-44.03	-13.00		
	9 337.50	-55.03	11.27	-45.01	5.24	H	-38.98	-13.00		
	11 205.00	-54.65	12.34	-47.99	5.84	H	-41.49	-13.00		
376500 (1882.5)	3 765.00	-53.63	11.59	-60.10	3.11	V	-51.62	-13.00	1	1
	5 647.50	-55.31	12.01	-56.51	3.96	H	-48.46	-13.00		
	7 530.00	-55.52	11.50	-51.78	4.60	V	-44.88	-13.00		
	9 412.50	-55.07	11.28	-45.28	5.25	H	-39.25	-13.00		
	11 295.00	-55.32	12.26	-48.05	5.83	H	-41.62	-13.00		
379500 (1897.5)	3 795.00	-54.48	11.42	-60.87	3.20	H	-52.65	-13.00	1	1
	5 692.50	-54.86	11.93	-55.90	4.02	V	-47.99	-13.00		
	7 590.00	-53.97	11.56	-50.16	4.64	H	-43.24	-13.00		
	9 487.50	-55.86	11.27	-46.67	5.28	V	-40.68	-13.00		
	11 385.00	-54.07	12.23	-46.75	5.92	V	-40.44	-13.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n25(2)	5 MHz	1882.5	BPSK	25	0	4.55
			QPSK			5.85
			16-QAM			6.48
			64-QAM			6.47
			256-QAM			6.47
	10 MHz		BPSK	50		4.60
			QPSK			5.53
			16-QAM			6.35
			64-QAM			6.51
			256-QAM			6.48
	15 MHz		BPSK	75		4.52
			QPSK			5.78
			16-QAM			6.50
			64-QAM			6.83
			256-QAM			6.45
	20 MHz		BPSK	100		4.83
			QPSK			5.81
			16-QAM			6.52
			64-QAM			6.82
			256-QAM			6.62

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n25	25 MHz	1882.5	BPSK	128	0	4.93
			QPSK			5.73
			16-QAM			6.38
			64-QAM			6.64
			256-QAM			6.59
	30 MHz		BPSK	160		4.49
			QPSK			5.76
			16-QAM			6.42
			64-QAM			6.39
			256-QAM			6.59
	35 MHz		BPSK	180		6.18
			QPSK			6.05
			16-QAM			6.55
			64-QAM			6.76
			256-QAM			6.41
	40 MHz		BPSK	216		4.45
			QPSK			5.67
			16-QAM			6.38
			64-QAM			6.62
			256-QAM			6.47

Note:
1. Plots of the EUT's Peak- to- Average Ratio are shown Page 60 ~ 99.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n25(2)	5 MHz	1882.5	BPSK	25	0	4.5047
			QPSK			4.5068
			16-QAM			4.4885
			64-QAM			4.4837
			256-QAM			4.5042
	10 MHz		BPSK	50		8.9990
			QPSK			8.9392
			16-QAM			8.9484
			64-QAM			8.9751
			256-QAM			9.0013
	15 MHz		BPSK	75		13.439
			QPSK			13.449
			16-QAM			13.413
			64-QAM			13.473
			256-QAM			13.425
	20 MHz		BPSK	100		17.888
			QPSK			17.962
			16-QAM			17.953
			64-QAM			17.927
			256-QAM			17.913

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n25	25 MHz	1882.5	BPSK	128	0	22.967
			QPSK			22.903
			16-QAM			22.878
			64-QAM			22.916
			256-QAM			22.868
	30 MHz		BPSK	160		28.688
			QPSK			28.658
			16-QAM			28.624
			64-QAM			28.591
			256-QAM			28.608
	35 MHz		BPSK	180		32.173
			QPSK			32.195
			16-QAM			32.132
			64-QAM			32.160
			256-QAM			32.158
	40 MHz		BPSK	216		38.642
			QPSK			38.673
			16-QAM			38.644
			64-QAM			38.622
			256-QAM			38.664

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 100 ~ 139.

8.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n25(2)	5	1852.5	3.7488	29.320	-60.980	-31.660	-13.00
		1882.5	4.0080	29.320	-61.171	-31.851	
		1912.5	5.2044	29.910	-61.043	-31.133	
	10	1855.0	3.7887	29.320	-61.578	-32.258	
		1882.5	3.7987	29.320	-62.020	-32.700	
		1910.0	4.0878	29.320	-60.770	-31.450	
	15	1857.5	3.7488	29.320	-60.826	-31.506	
		1882.5	3.7688	29.320	-61.658	-32.338	
		1907.5	5.4637	29.910	-61.702	-31.792	
	20	1860.0	3.7289	29.320	-61.919	-32.599	
		1882.5	4.9053	29.320	-61.528	-32.208	
		1905.0	4.9352	29.320	-61.714	-32.394	
Sub6 n25	25	1862.5	7.1885	29.910	-61.677	-31.767	
		1882.5	4.9552	29.320	-61.646	-32.326	
		1902.5	8.8535	29.910	-61.878	-31.968	
	30	1865.0	4.0679	29.320	-60.923	-31.603	
		1882.5	3.7488	29.320	-62.198	-32.878	
		1900.0	10.0000	29.910	-61.947	-32.037	
	35	1867.5	4.0080	29.320	-61.931	-32.611	
		1882.5	7.2283	29.910	-62.086	-32.176	
		1897.5	4.6860	29.320	-61.871	-32.551	
	40	1870.0	4.0180	29.320	-61.119	-31.799	
		1882.5	6.8894	29.910	-61.862	-31.952	
		1895.0	5.1945	29.910	-61.230	-31.320	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 140 ~ 187.
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	27.250
1 – 5	29.320
5 – 10	29.910
10 – 15	30.530
15 – 20	31.840
Above 20(26.5)	32.520

8.6 BAND EDGE

- Plots of the EUT's Band Edge are shown Page 188 ~ 235.

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

▣ BandWidth: 5 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Lowest voltage: 3.700 VDC

▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1852.5	100 %	+20(Ref)	1852 499 997	0.0	0.000 000	0.000
	100 %	-30	1852 499 991	-6.3	0.000 000	-0.003
	100 %	-20	1852 499 995	-2.1	0.000 000	-0.001
	100 %	-10	1852 499 996	-1.3	0.000 000	-0.001
	100 %	0	1852 499 995	-2.5	0.000 000	-0.001
	100 %	+10	1852 499 996	-1.6	0.000 000	-0.001
	100 %	+30	1852 499 994	-3.6	0.000 000	-0.002
	100 %	+40	1852 499 995	-2.1	0.000 000	-0.001
	100 %	+50	1852 499 994	-3.8	0.000 000	-0.002
	Lowest voltage	+20	1852 499 994	-3.7	0.000 000	-0.002
1912.5	100 %	+20(Ref)	1912 499 988	0.0	0.000 000	0.000
	100 %	-30	1912 499 981	-7.3	0.000 000	-0.004
	100 %	-20	1912 499 980	-8.2	0.000 000	-0.004
	100 %	-10	1912 499 980	-8.3	0.000 000	-0.004
	100 %	0	1912 499 981	-6.4	0.000 000	-0.003
	100 %	+10	1912 499 982	-6.2	0.000 000	-0.003
	100 %	+30	1912 499 982	-5.6	0.000 000	-0.003
	100 %	+40	1912 499 984	-3.9	0.000 000	-0.002
	100 %	+50	1912 499 983	-4.7	0.000 000	-0.002
	Lowest voltage	+20	1912 499 984	-3.7	0.000 000	-0.002

▣ BandWidth: 10 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Lowest voltage: 3.700 VDC

▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1855.0	100 %	+20(Ref)	1855 000 003	0.0	0.000 000	0.000
	100 %	-30	1855 000 003	0.9	0.000 000	0.000
	100 %	-20	1855 000 007	4.1	0.000 000	0.002
	100 %	-10	1855 000 006	3.1	0.000 000	0.002
	100 %	0	1855 000 003	0.4	0.000 000	0.000
	100 %	+10	1855 000 004	1.8	0.000 000	0.001
	100 %	+30	1855 000 005	2.0	0.000 000	0.001
	100 %	+40	1855 000 005	2.2	0.000 000	0.001
	100 %	+50	1855 000 004	1.9	0.000 000	0.001
	Lowest voltage	+20	1855 000 005	2.8	0.000 000	0.002
1910.0	100 %	+20(Ref)	1910 000 001	0.0	0.000 000	0.000
	100 %	-30	1910 000 002	1.0	0.000 000	0.001
	100 %	-20	1910 000 002	1.1	0.000 000	0.001
	100 %	-10	1910 000 004	2.3	0.000 000	0.001
	100 %	0	1910 000 003	1.5	0.000 000	0.001
	100 %	+10	1910 000 006	4.7	0.000 000	0.002
	100 %	+30	1910 000 002	1.0	0.000 000	0.001
	100 %	+40	1910 000 000	-0.8	0.000 000	0.000
	100 %	+50	1910 000 001	-0.7	0.000 000	0.000
	Lowest voltage	+20	1910 000 003	1.7	0.000 000	0.001

▣ BandWidth: 15 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Lowest voltage: 3.700 VDC

▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1857.5	100 %	+20(Ref)	1857 500 003	0.0	0.000 000	0.000
	100 %	-30	1857 500 004	1.6	0.000 000	0.001
	100 %	-20	1857 500 004	1.1	0.000 000	0.001
	100 %	-10	1857 500 005	2.6	0.000 000	0.001
	100 %	0	1857 500 005	2.2	0.000 000	0.001
	100 %	+10	1857 500 002	-0.7	0.000 000	0.000
	100 %	+30	1857 500 002	-1.3	0.000 000	-0.001
	100 %	+40	1857 500 004	1.3	0.000 000	0.001
	100 %	+50	1857 500 002	-1.2	0.000 000	-0.001
	Lowest voltage	+20	1857 500 002	-1.2	0.000 000	-0.001
1907.5	100 %	+20(Ref)	1907 499 998	0.0	0.000 000	0.000
	100 %	-30	1907 499 993	-4.6	0.000 000	-0.002
	100 %	-20	1907 499 994	-3.7	0.000 000	-0.002
	100 %	-10	1907 499 993	-5.1	0.000 000	-0.003
	100 %	0	1907 499 994	-3.6	0.000 000	-0.002
	100 %	+10	1907 499 995	-2.6	0.000 000	-0.001
	100 %	+30	1907 499 995	-2.6	0.000 000	-0.001
	100 %	+40	1907 499 994	-3.7	0.000 000	-0.002
	100 %	+50	1907 499 994	-3.9	0.000 000	-0.002
	Lowest voltage	+20	1907 499 993	-4.7	0.000 000	-0.002

▣ BandWidth: 20 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Lowest voltage: 3.700 VDC

▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1860.0	100 %	+20(Ref)	1859 999 996	0.0	0.000 000	0.000
	100 %	-30	1859 999 991	-4.9	0.000 000	-0.003
	100 %	-20	1859 999 991	-4.5	0.000 000	-0.002
	100 %	-10	1859 999 989	-6.3	0.000 000	-0.003
	100 %	0	1859 999 991	-5.0	0.000 000	-0.003
	100 %	+10	1859 999 988	-7.3	0.000 000	-0.004
	100 %	+30	1859 999 989	-6.5	0.000 000	-0.004
	100 %	+40	1859 999 989	-6.1	0.000 000	-0.003
	100 %	+50	1859 999 989	-7.0	0.000 000	-0.004
	Lowest voltage	+20	1859 999 989	-6.3	0.000 000	-0.003
1905.0	100 %	+20(Ref)	1904 999 997	0.0	0.000 000	0.000
	100 %	-30	1904 999 995	-2.5	0.000 000	-0.001
	100 %	-20	1904 999 996	-1.1	0.000 000	-0.001
	100 %	-10	1904 999 996	-1.4	0.000 000	-0.001
	100 %	0	1904 999 995	-2.8	0.000 000	-0.001
	100 %	+10	1904 999 994	-3.2	0.000 000	-0.002
	100 %	+30	1904 999 994	-3.7	0.000 000	-0.002
	100 %	+40	1904 999 993	-4.3	0.000 000	-0.002
	100 %	+50	1904 999 994	-3.5	0.000 000	-0.002
	Lowest voltage	+20	1904 999 993	-4.2	0.000 000	-0.002

▣ BandWidth: 25 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Lowest voltage: 3.700 VDC

▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1862.5	100 %	+20(Ref)	1862 500 000	0.0	0.000 000	0.000
	100 %	-30	1862 499 997	-2.4	0.000 000	-0.001
	100 %	-20	1862 499 998	-1.6	0.000 000	-0.001
	100 %	-10	1862 499 999	-0.9	0.000 000	0.000
	100 %	0	1862 499 998	-1.7	0.000 000	-0.001
	100 %	+10	1862 500 000	0.5	0.000 000	0.000
	100 %	+30	1862 499 998	-1.6	0.000 000	-0.001
	100 %	+40	1862 500 000	0.1	0.000 000	0.000
	100 %	+50	1862 499 999	-1.2	0.000 000	-0.001
	Lowest voltage	+20	1862 500 001	1.1	0.000 000	0.001
1902.5	100 %	+20(Ref)	1902 499 998	0.0	0.000 000	0.000
	100 %	-30	1902 499 999	0.6	0.000 000	0.000
	100 %	-20	1902 499 999	0.3	0.000 000	0.000
	100 %	-10	1902 499 998	-0.6	0.000 000	0.000
	100 %	0	1902 499 999	0.9	0.000 000	0.000
	100 %	+10	1902 500 000	2.0	0.000 000	0.001
	100 %	+30	1902 499 999	0.7	0.000 000	0.000
	100 %	+40	1902 499 998	-0.3	0.000 000	0.000
	100 %	+50	1902 499 998	0.1	0.000 000	0.000
	Lowest voltage	+20	1902 499 997	-1.1	0.000 000	-0.001

▣ BandWidth: 30 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Lowest voltage: 3.700 VDC

▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1865.0	100 %	+20(Ref)	1864 999 993	0.0	0.000 000	0.000
	100 %	-30	1864 999 988	-5.6	0.000 000	-0.003
	100 %	-20	1864 999 988	-5.8	0.000 000	-0.003
	100 %	-10	1864 999 988	-5.6	0.000 000	-0.003
	100 %	0	1864 999 989	-4.4	0.000 000	-0.002
	100 %	+10	1864 999 987	-6.3	0.000 000	-0.003
	100 %	+30	1864 999 986	-7.2	0.000 000	-0.004
	100 %	+40	1864 999 986	-7.0	0.000 000	-0.004
	100 %	+50	1864 999 985	-8.2	0.000 000	-0.004
	Lowest voltage	+20	1864 999 986	-7.4	0.000 000	-0.004
1900.0	100 %	+20(Ref)	1899 999 995	0.0	0.000 000	0.000
	100 %	-30	1899 999 992	-3.6	0.000 000	-0.002
	100 %	-20	1899 999 994	-1.0	0.000 000	-0.001
	100 %	-10	1899 999 994	-1.6	0.000 000	-0.001
	100 %	0	1899 999 995	-0.4	0.000 000	0.000
	100 %	+10	1899 999 995	0.1	0.000 000	0.000
	100 %	+30	1899 999 995	-0.6	0.000 000	0.000
	100 %	+40	1899 999 995	-0.2	0.000 000	0.000
	100 %	+50	1899 999 995	-0.3	0.000 000	0.000
	Lowest voltage	+20	1899 999 993	-2.5	0.000 000	-0.001

▣ BandWidth: 35 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Lowest voltage: 3.700 VDC

▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1867.5	100 %	+20(Ref)	1867 499 993	0.0	0.000 000	0.000
	100 %	-30	1867 499 983	-10.4	-0.000 001	-0.006
	100 %	-20	1867 499 986	-7.8	0.000 000	-0.004
	100 %	-10	1867 499 985	-8.5	0.000 000	-0.005
	100 %	0	1867 499 988	-5.8	0.000 000	-0.003
	100 %	+10	1867 499 987	-6.6	0.000 000	-0.004
	100 %	+30	1867 499 989	-4.0	0.000 000	-0.002
	100 %	+40	1867 499 988	-5.8	0.000 000	-0.003
	100 %	+50	1867 499 988	-4.9	0.000 000	-0.003
	Lowest voltage	+20	1867 499 987	-6.0	0.000 000	-0.003
1897.5	100 %	+20(Ref)	1897 499 992	0.0	0.000 000	0.000
	100 %	-30	1897 499 983	-8.4	0.000 000	-0.004
	100 %	-20	1897 499 984	-7.6	0.000 000	-0.004
	100 %	-10	1897 499 984	-7.9	0.000 000	-0.004
	100 %	0	1897 499 981	-10.7	-0.000 001	-0.006
	100 %	+10	1897 499 983	-8.4	0.000 000	-0.004
	100 %	+30	1897 499 983	-8.9	0.000 000	-0.005
	100 %	+40	1897 499 980	-11.9	-0.000 001	-0.006
	100 %	+50	1897 499 980	-11.6	-0.000 001	-0.006
	Lowest voltage	+20	1897 499 984	-8.2	0.000 000	-0.004

▣ BandWidth: 40 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Lowest voltage: 3.700 VDC

▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
1870.0	100 %	+20(Ref)	1869 999 995	0.0	0.000 000	0.000
	100 %	-30	1869 999 991	-4.5	0.000 000	-0.002
	100 %	-20	1869 999 990	-5.1	0.000 000	-0.003
	100 %	-10	1869 999 992	-3.4	0.000 000	-0.002
	100 %	0	1869 999 993	-2.3	0.000 000	-0.001
	100 %	+10	1869 999 995	-0.6	0.000 000	0.000
	100 %	+30	1869 999 993	-1.8	0.000 000	-0.001
	100 %	+40	1869 999 992	-3.1	0.000 000	-0.002
	100 %	+50	1869 999 992	-3.5	0.000 000	-0.002
	Lowest voltage	+20	1869 999 991	-3.9	0.000 000	-0.002
1895.0	100 %	+20(Ref)	1894 999 996	0.0	0.000 000	0.000
	100 %	-30	1894 999 991	-4.7	0.000 000	-0.002
	100 %	-20	1894 999 992	-3.9	0.000 000	-0.002
	100 %	-10	1894 999 993	-2.1	0.000 000	-0.001
	100 %	0	1894 999 994	-1.2	0.000 000	-0.001
	100 %	+10	1894 999 995	-0.5	0.000 000	0.000
	100 %	+30	1894 999 995	-0.3	0.000 000	0.000
	100 %	+40	1894 999 995	-0.5	0.000 000	0.000
	100 %	+50	1894 999 994	-1.2	0.000 000	-0.001
	Lowest voltage	+20	1894 999 996	0.6	0.000 000	0.000

9. TEST DATA (Internal(BUA))

9.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBµV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBµV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1852.5	Sub6 n25(2)/ 5 MHz [15 kHz]	PI/2 BPSK	86.55	27.70	3.93	118.18	V	< 2.00	0.199	22.98	1	23
		QPSK	86.32	27.70	3.93	117.95	V		0.189	22.75		
		16-QAM	85.38	27.70	3.93	117.00	V		0.152	21.80		
		64-QAM	84.60	27.70	3.93	116.23	V		0.127	21.03		
		256-QAM	81.91	27.70	3.93	113.54	V		0.068	18.34		
1882.5		PI/2 BPSK	87.89	28.00	3.94	119.83	V		0.290	24.63	1	1
		QPSK	87.55	28.00	3.94	119.49	V		0.268	24.29		
		16-QAM	86.30	28.00	3.94	118.24	V		0.201	23.04		
		64-QAM	82.50	28.00	3.94	114.44	V		0.084	19.24		
		256-QAM	83.18	28.00	3.94	115.11	V		0.098	19.91		
1912.5		PI/2 BPSK	87.93	28.00	3.99	119.92	V		0.296	24.72	1	12
		QPSK	87.90	28.00	3.99	119.89	V		0.294	24.69		
		16-QAM	86.92	28.00	3.99	118.91	V		0.235	23.71		
		64-QAM	84.44	28.00	3.99	116.43	V		0.133	21.23		
		256-QAM	83.13	28.00	3.99	115.12	V		0.098	19.92		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1855.0	Sub6 n25(2)/ 10 MHz [15 kHz]	PI/2 BPSK	86.93	27.70	3.93	118.56	V	< 2.00	0.217	23.36	1	50
		QPSK	86.88	27.70	3.93	118.51	V		0.214	23.31		
		16-QAM	85.78	27.70	3.93	117.41	V		0.166	22.21		
		64-QAM	84.60	27.70	3.93	116.23	V		0.127	21.03		
		256-QAM	82.30	27.70	3.93	113.93	V		0.075	18.73		
1882.5		PI/2 BPSK	87.97	28.00	3.94	119.91	V		0.296	24.71	1	1
		QPSK	87.92	28.00	3.94	119.86	V		0.293	24.66		
		16-QAM	86.86	28.00	3.94	118.79	V		0.229	23.59		
		64-QAM	85.40	28.00	3.94	117.33	V		0.164	22.13		
		256-QAM	83.47	28.00	3.94	115.41	V		0.105	20.21		
1910.0		PI/2 BPSK	87.90	28.00	3.99	119.89	V		0.294	24.69	1	50
		QPSK	87.43	28.00	3.99	119.42	V		0.264	24.22		
		16-QAM	86.26	28.00	3.99	118.24	V		0.202	23.04		
		64-QAM	85.08	28.00	3.99	117.07	V		0.154	21.87		
		256-QAM	83.05	28.00	3.99	115.04	V		0.096	19.84		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1857.5	Sub6 n25(2)/ 15 MHz [15 kHz]	PI/2 BPSK	87.54	27.70	3.93	119.17	V	< 2.00	0.250	23.97	1	77
		QPSK	87.23	27.70	3.93	118.86	V		0.232	23.66		
		16-QAM	85.86	27.70	3.93	117.49	V		0.170	22.29		
		64-QAM	84.69	27.70	3.93	116.32	V		0.130	21.12		
		256-QAM	82.67	27.70	3.93	114.30	V		0.081	19.10		
1882.5		PI/2 BPSK	87.84	28.00	3.94	119.78	V		0.287	24.58	1	1
		QPSK	87.74	28.00	3.94	119.68	V		0.281	24.48		
		16-QAM	86.62	28.00	3.94	118.56	V		0.217	23.36		
		64-QAM	85.12	28.00	3.94	117.05	V		0.153	21.85		
		256-QAM	83.28	28.00	3.94	115.22	V		0.100	20.02		
1907.5		PI/2 BPSK	88.00	28.00	3.99	119.99	V		0.301	24.79	1	77
		QPSK	87.60	28.00	3.99	119.59	V		0.275	24.39		
		16-QAM	86.91	28.00	3.99	118.90	V		0.234	23.70		
		64-QAM	84.81	28.00	3.99	116.80	V		0.145	21.60		
		256-QAM	82.89	28.00	3.99	114.88	V		0.093	19.68		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1860.0	Sub6 n25(2)/ 20 MHz [15 kHz]	PI/2 BPSK	87.86	27.70	3.93	119.49	V	< 2.00	0.269	24.29	1	104
		QPSK	87.76	27.70	3.93	119.39	V		0.262	24.19		
		16-QAM	86.56	27.70	3.93	118.19	V		0.199	22.99		
		64-QAM	86.29	27.70	3.93	117.92	V		0.187	22.72		
		256-QAM	85.17	27.70	3.93	116.80	V		0.145	21.60		
1882.5		PI/2 BPSK	87.72	28.00	3.94	119.66	V		0.279	24.46	1	1
		QPSK	87.66	28.00	3.94	119.60	V		0.275	24.40		
		16-QAM	86.48	28.00	3.94	118.42	V		0.210	23.22		
		64-QAM	86.37	28.00	3.94	118.31	V		0.205	23.11		
		256-QAM	83.08	28.00	3.94	115.02	V		0.096	19.82		
1905.0		PI/2 BPSK	87.82	28.00	3.99	119.81	V		0.289	24.61	1	1
		QPSK	87.80	28.00	3.99	119.79	V		0.288	24.59		
		16-QAM	87.18	28.00	3.99	119.17	V		0.250	23.97		
		64-QAM	85.21	28.00	3.99	117.20	V		0.158	22.00		
		256-QAM	83.32	28.00	3.99	115.31	V		0.103	20.11		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1862.5	Sub6 n25/ 25 MHz [15 kHz]	PI/2 BPSK	87.26	27.70	3.93	118.89	V	< 2.00	0.234	23.69	1	131
		QPSK	86.97	27.70	3.93	118.59	V		0.219	23.39		
		16-QAM	86.00	27.70	3.93	117.63	V		0.175	22.43		
		64-QAM	84.34	27.70	3.93	115.96	V		0.119	20.76		
		256-QAM	82.52	27.70	3.93	114.15	V		0.079	18.95		
1882.5		PI/2 BPSK	87.34	28.00	3.94	119.28	V		0.256	24.08	1	1
		QPSK	87.08	28.00	3.94	119.02	V		0.241	23.82		
		16-QAM	86.15	28.00	3.94	118.09	V		0.195	22.89		
		64-QAM	84.56	28.00	3.94	116.50	V		0.135	21.30		
		256-QAM	82.42	28.00	3.94	114.36	V		0.082	19.16		
1902.5		PI/2 BPSK	87.40	28.00	3.99	119.39	V		0.262	24.19	1	131
		QPSK	87.09	28.00	3.99	119.08	V		0.244	23.88		
		16-QAM	85.83	28.00	3.99	117.82	V		0.183	22.62		
		64-QAM	84.48	28.00	3.99	116.47	V		0.134	21.27		
		256-QAM	82.30	28.00	3.99	114.29	V		0.081	19.09		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1865.0	Sub6 n25/ 30 MHz [15 kHz]	PI/2 BPSK	87.41	27.70	3.93	119.04	V	< 2.00	0.242	23.84	1	158
		QPSK	87.39	27.70	3.93	119.02	V		0.241	23.82		
		16-QAM	86.29	27.70	3.93	117.92	V		0.187	22.72		
		64-QAM	84.97	27.70	3.93	116.60	V		0.138	21.40		
		256-QAM	82.65	27.70	3.93	114.28	V		0.081	19.08		
1882.5		PI/2 BPSK	87.36	28.00	3.94	119.30	V		0.257	24.10	1	158
		QPSK	87.25	28.00	3.94	119.19	V		0.251	23.99		
		16-QAM	86.09	28.00	3.94	118.03	V		0.192	22.83		
		64-QAM	84.33	28.00	3.94	116.27	V		0.128	21.07		
		256-QAM	82.63	28.00	3.94	114.56	V		0.086	19.36		
1900.0		PI/2 BPSK	87.32	28.00	3.99	119.31	V		0.258	24.11	1	158
		QPSK	87.12	28.00	3.99	119.11	V		0.246	23.91		
		16-QAM	85.87	28.00	3.99	117.85	V		0.184	22.65		
		64-QAM	84.40	28.00	3.99	116.39	V		0.132	21.19		
		256-QAM	82.29	28.00	3.99	114.28	V		0.081	19.08		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1867.5	Sub6 n25/ 35 MHz [15 kHz]	PI/2 BPSK	87.07	27.70	3.93	118.70	V	< 2.00	0.224	23.50	1	186
		QPSK	86.75	27.70	3.93	118.38	V		0.208	23.18		
		16-QAM	85.64	27.70	3.93	117.27	V		0.161	22.07		
		64-QAM	84.27	27.70	3.93	115.90	V		0.117	20.70		
		256-QAM	82.44	27.70	3.93	114.07	V		0.077	18.87		
1882.5		PI/2 BPSK	87.00	28.00	3.94	118.94	V		0.237	23.74	1	94
		QPSK	86.87	28.00	3.94	118.81	V		0.229	23.61		
		16-QAM	85.82	28.00	3.94	117.76	V		0.180	22.56		
		64-QAM	84.51	28.00	3.94	116.45	V		0.133	21.25		
		256-QAM	82.51	28.00	3.94	114.45	V		0.084	19.25		
1897.5		PI/2 BPSK	87.15	28.00	3.99	119.14	V		0.248	23.94	1	94
		QPSK	87.02	28.00	3.99	119.01	V		0.240	23.81		
		16-QAM	85.80	28.00	3.99	117.79	V		0.182	22.59		
		64-QAM	84.43	28.00	3.99	116.42	V		0.133	21.22		
		256-QAM	82.34	28.00	3.99	114.33	V		0.082	19.13		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured (dBμV/m)	Ant. Factor + Dis. Factor(dB)	Cable loss(dB)	Total (dBμV/m)	Pol.	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1870.0	Sub6 n25/ 40 MHz [15 kHz]	PI/2 BPSK	87.30	27.70	3.93	118.93	V	< 2.00	0.236	23.73	1	108
		QPSK	87.28	27.70	3.93	118.91	V		0.235	23.71		
		16-QAM	86.21	27.70	3.93	117.84	V		0.184	22.64		
		64-QAM	84.81	27.70	3.93	116.44	V		0.133	21.24		
		256-QAM	82.73	27.70	3.93	114.36	V		0.082	19.16		
1882.5		PI/2 BPSK	87.14	28.00	3.94	119.08	V		0.244	23.88	1	214
		QPSK	86.94	28.00	3.94	118.88	V		0.233	23.68		
		16-QAM	85.83	28.00	3.94	117.77	V		0.181	22.57		
		64-QAM	84.44	28.00	3.94	116.37	V		0.131	21.17		
		256-QAM	82.35	28.00	3.94	114.29	V		0.081	19.09		
1895.0		PI/2 BPSK	87.21	28.00	3.99	119.20	V		0.251	24.00	1	108
		QPSK	87.20	28.00	3.99	119.19	V		0.251	23.99		
		16-QAM	86.41	28.00	3.99	118.39	V		0.209	23.19		
		64-QAM	84.53	28.00	3.99	116.52	V		0.136	21.32		
		256-QAM	82.46	28.00	3.99	114.45	V		0.084	19.25		

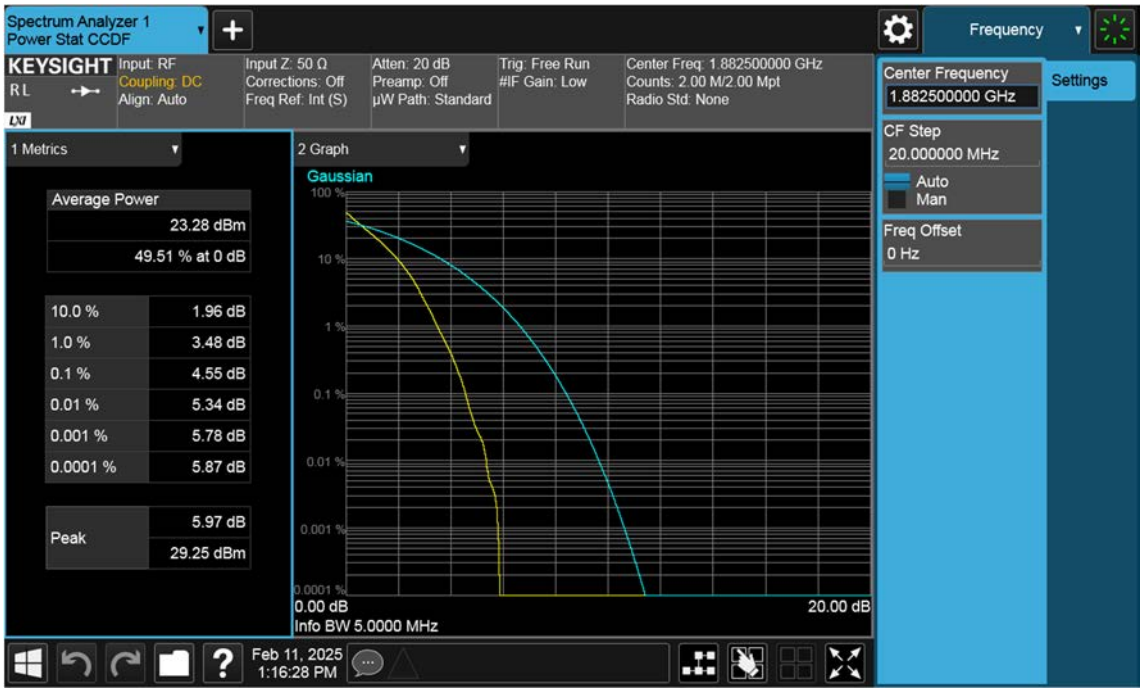
9.2 RADIATED SPURIOUS EMISSIONS

▣ NR Band: N25(2)
▣ Bandwidth: 20 MHz
▣ Modulation: PI/2 BPSK
▣ Distance: 3 meters
▣ SCS: 15 kHz

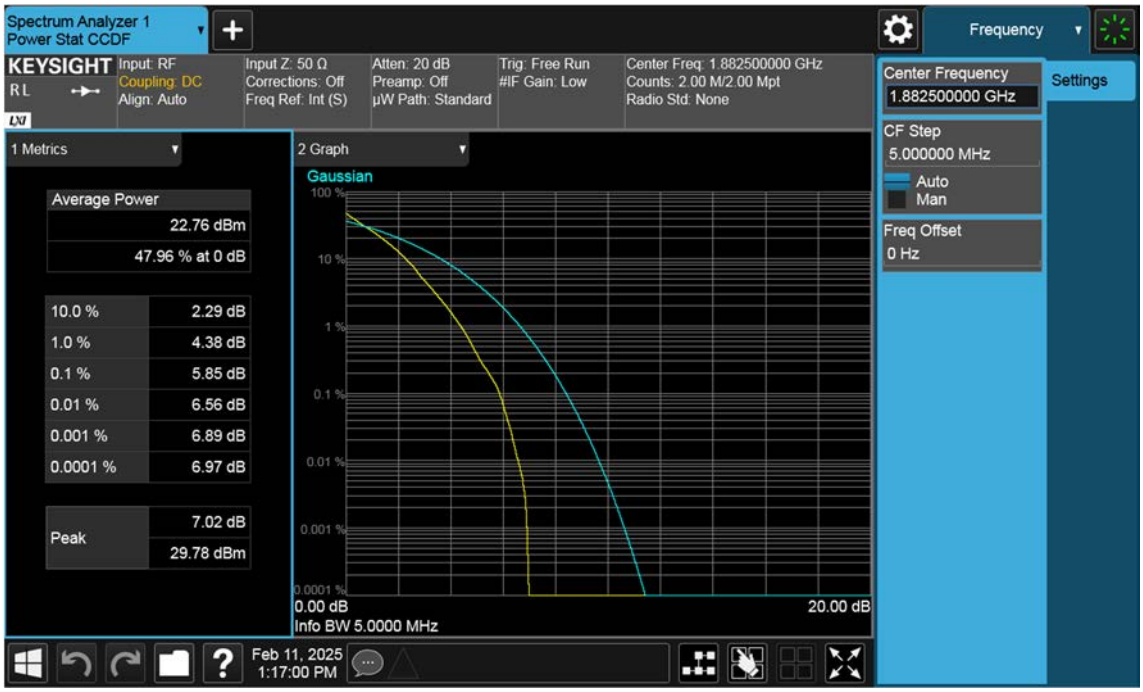
Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
372000 (1860.0)	3 720.00	-54.89	11.77	-62.15	3.13	H	-53.51	-13.00	1	104
	5 580.00	-54.98	12.08	-56.52	3.91	H	-48.35	-13.00		
	7 440.00	-55.06	11.22	-51.01	4.58	H	-44.37	-13.00		
	9 300.00	-56.37	11.27	-45.39	5.30	H	-39.42	-13.00		
	11 160.00	-54.74	12.33	-48.27	5.83	V	-41.77	-13.00		
376500 (1882.5)	3 765.00	-54.72	11.59	-61.19	3.11	H	-52.71	-13.00	1	1
	5 647.50	-56.38	12.01	-57.58	3.96	V	-49.53	-13.00		
	7 530.00	-54.10	11.50	-50.36	4.60	H	-43.46	-13.00		
	9 412.50	-55.62	11.28	-45.83	5.25	V	-39.80	-13.00		
	11 295.00	-55.21	12.26	-47.94	5.83	V	-41.51	-13.00		
381000 (1905.0)	3 810.00	-53.43	11.36	-59.79	3.20	V	-51.63	-13.00	1	1
	5 715.00	-55.19	11.86	-56.02	4.01	H	-48.17	-13.00		
	7 620.00	-55.35	11.57	-51.38	4.65	H	-44.46	-13.00		
	9 525.00	-55.69	11.29	-46.28	5.27	H	-40.26	-13.00		
	11 430.00	-54.28	12.29	-47.00	5.84	V	-40.55	-13.00		

10. TEST PLOTS

NR25_5 M_PAR_Mid_BPSK_FullRB



NR25_5 M_PAR_Mid_QPSK_FullRB

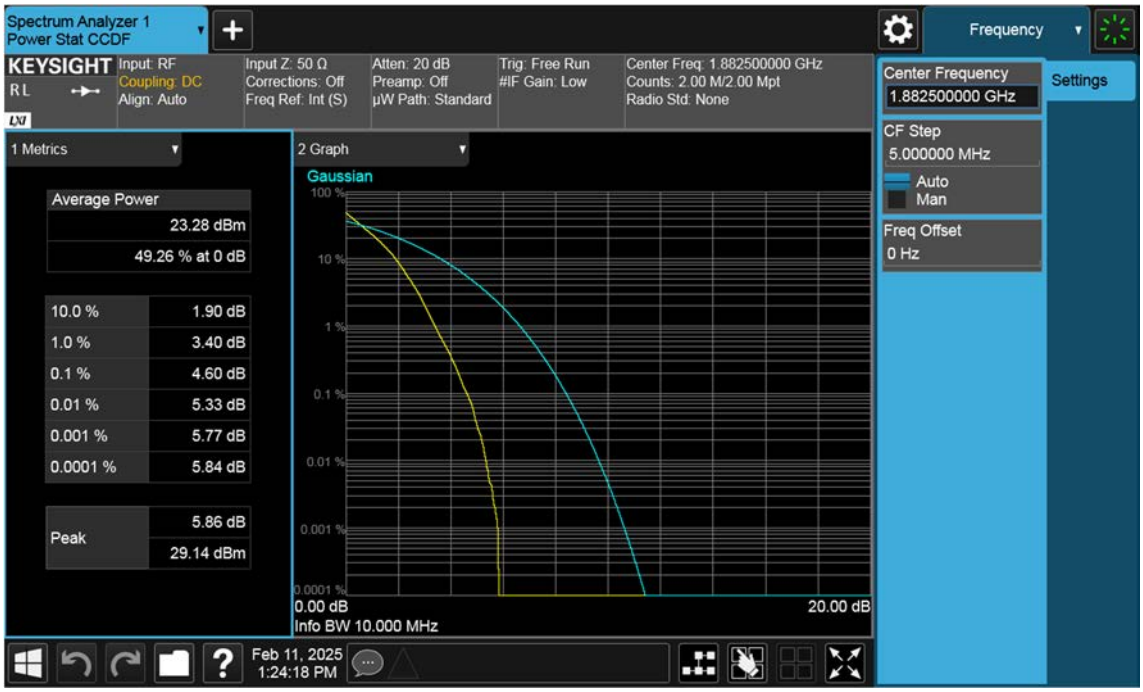


NR25_5 M_PAR_Mid_16QAM_FullRB

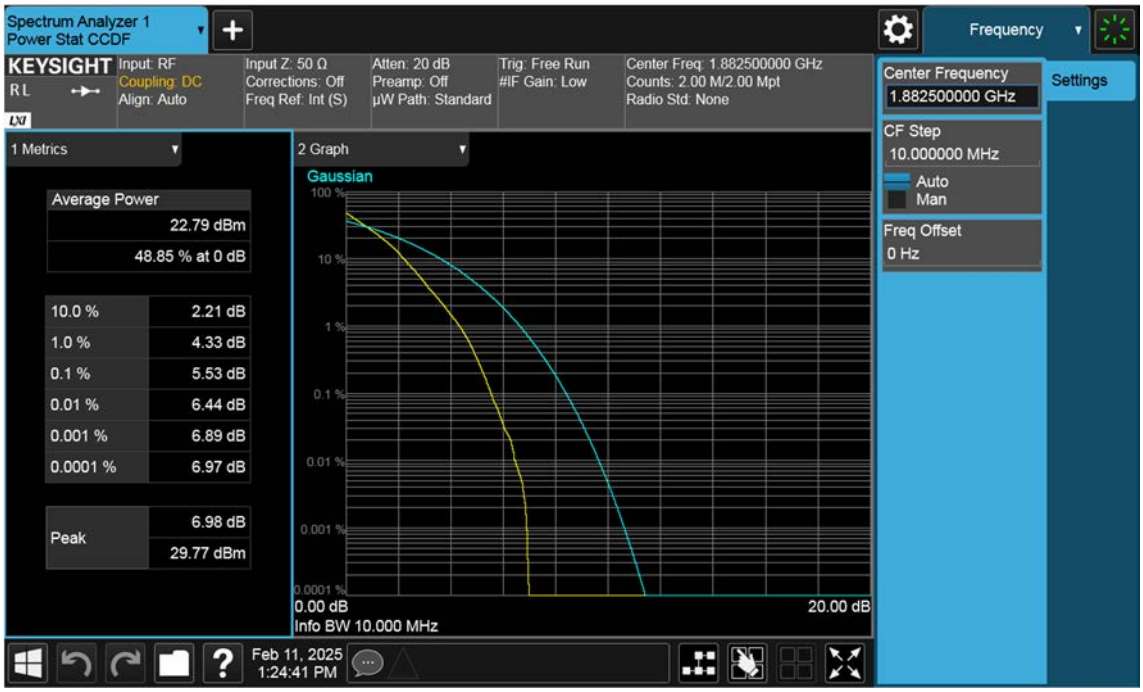
NR25_5 M_PAR_Mid_64QAM_FullRB

NR25_5 M_PAR_Mid_256QAM_FullRB

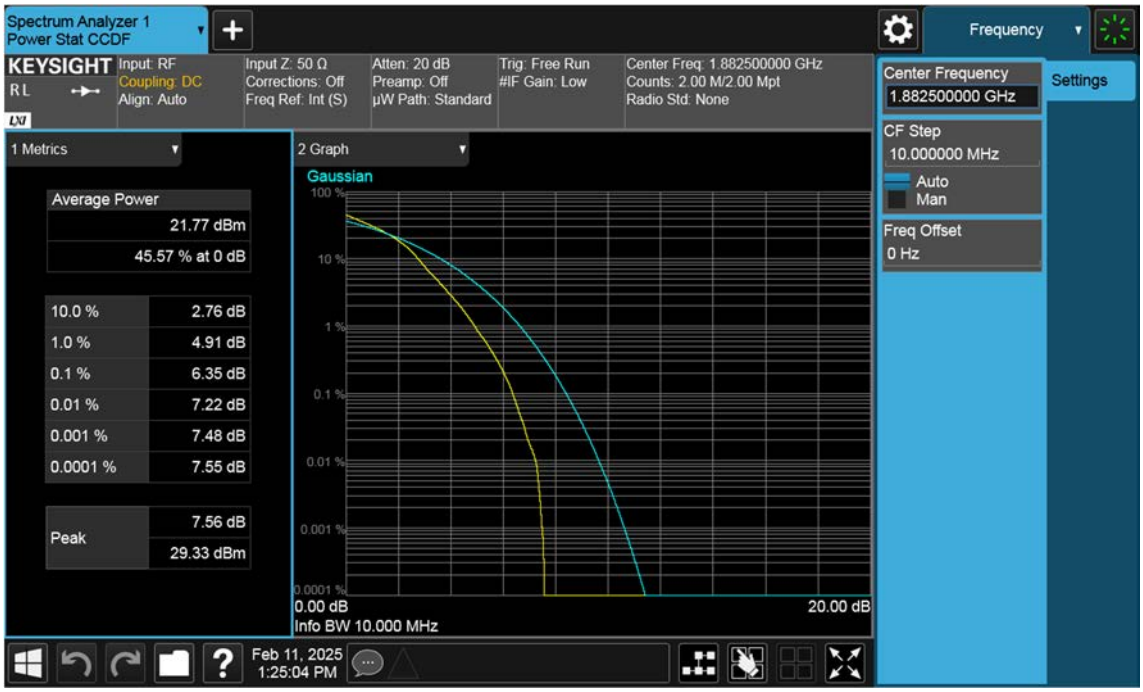
NR25_10 M_PAR_Mid_BPSK_FullRB



NR25_10 M_PAR_Mid_QPSK_FullRB



NR25_10 M_PAR_Mid_16QAM_FullRB

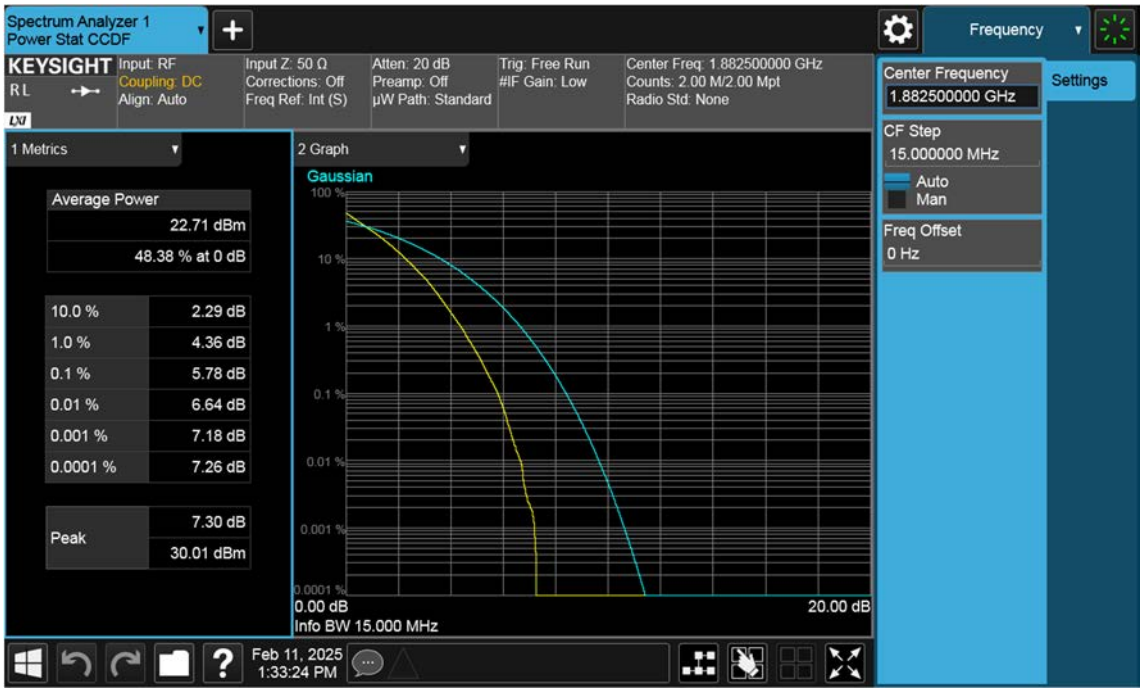


NR25_10 M_PAR_Mid_64QAM_FullRB

NR25_10 M_PAR_Mid_256QAM_FullRB

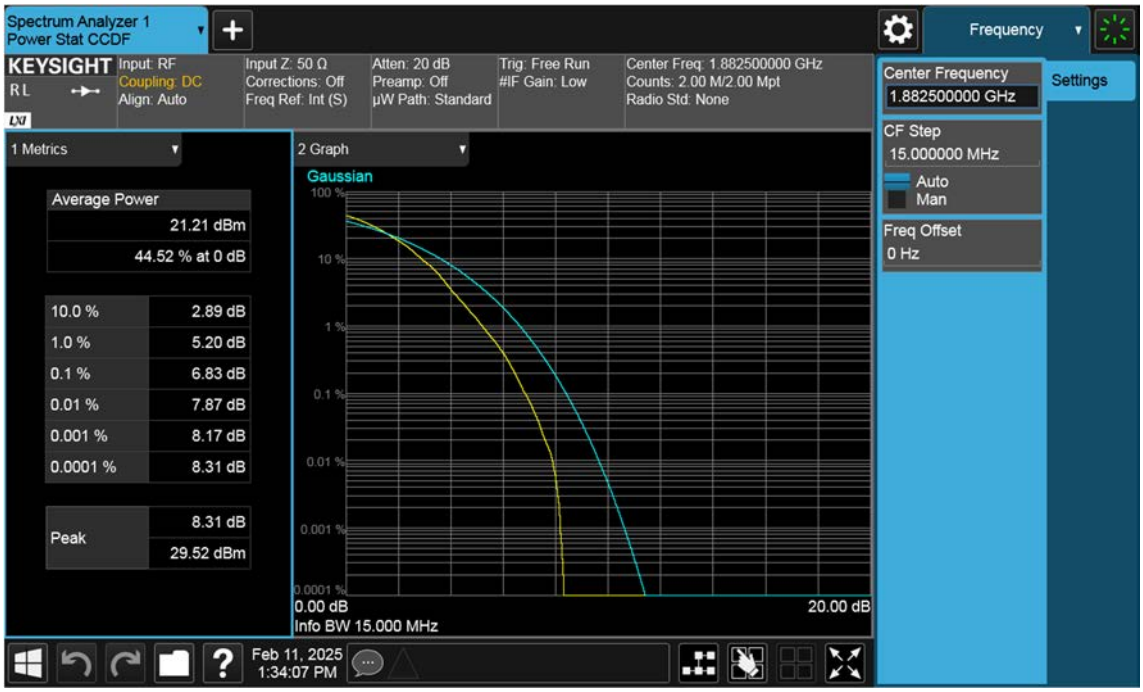
NR25_15 M_PAR_Mid_BPSK_FullRB

NR25_15 M_PAR_Mid_QPSK_FullRB



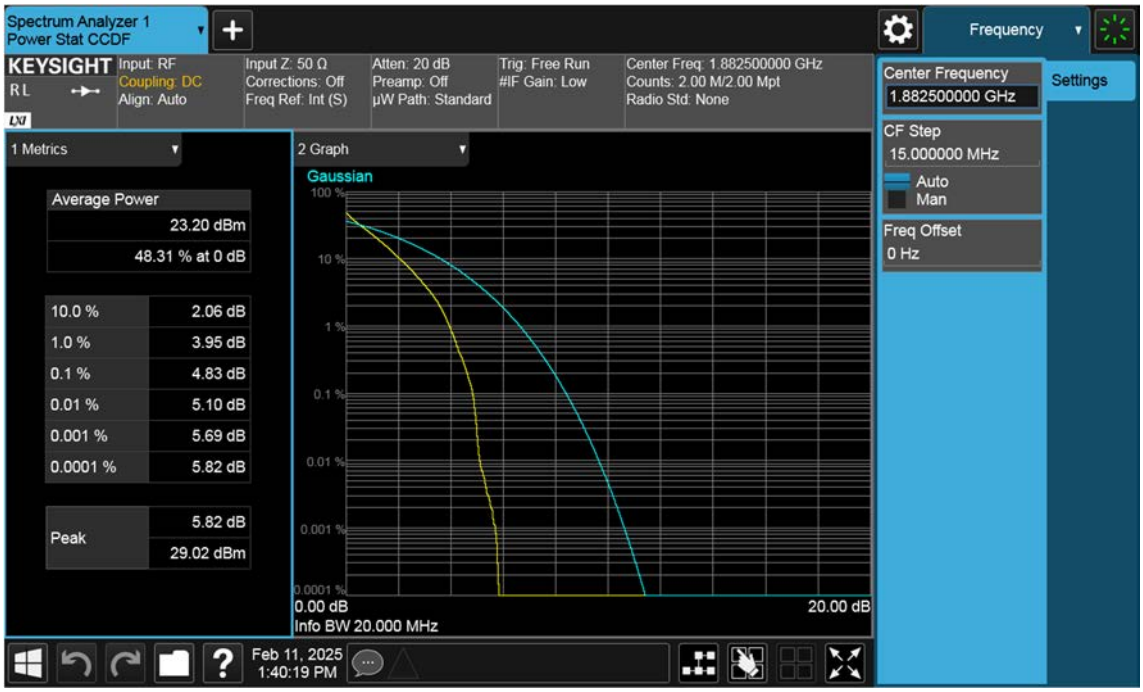
NR25_15 M_PAR_Mid_16QAM_FullRB

NR25_15 M_PAR_Mid_64QAM_FullRB

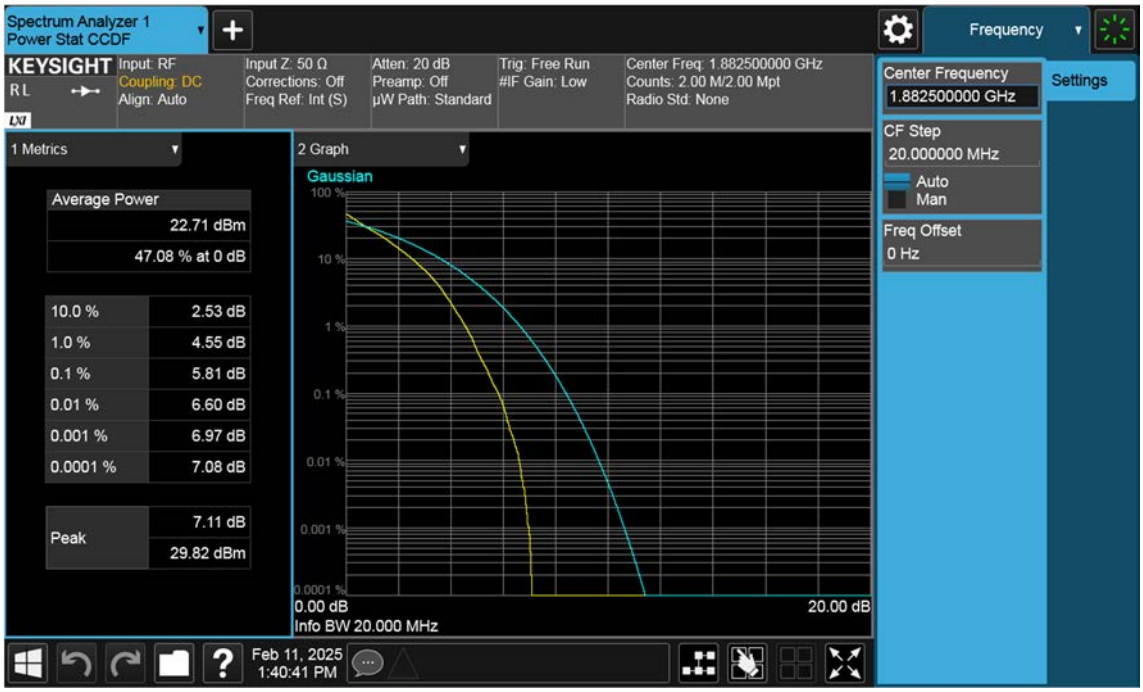


NR25_15 M_PAR_Mid_256QAM_FullRB

NR25_20 M_PAR_Mid_BPSK_FullRB

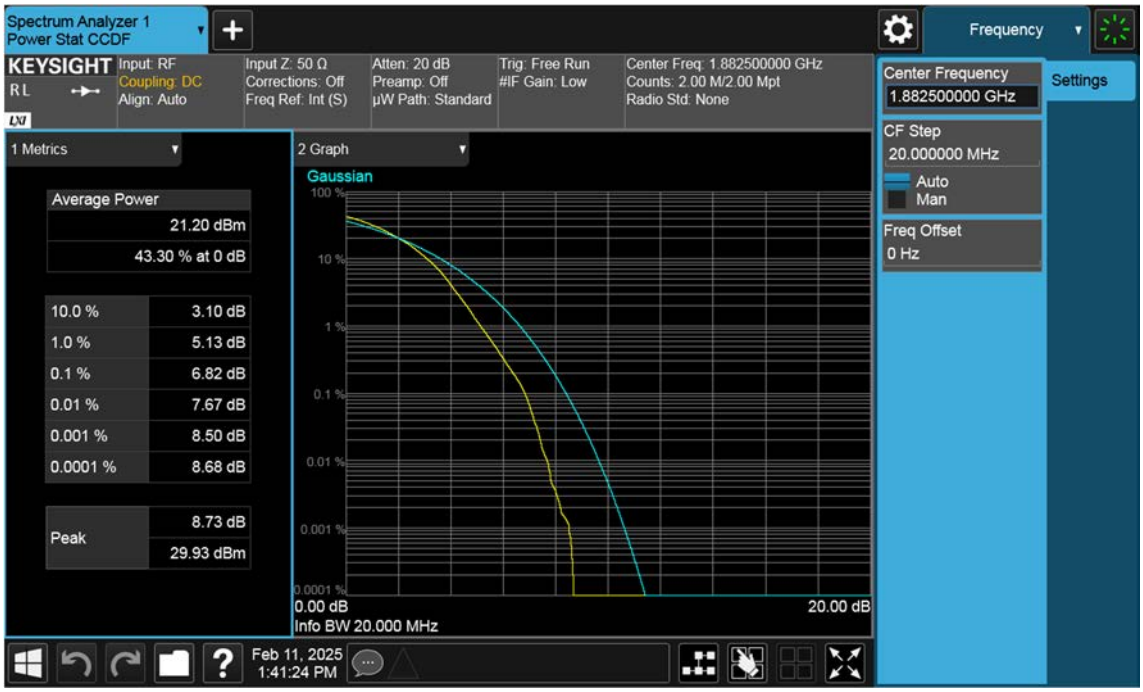


NR25_20 M_PAR_Mid_QPSK_FullRB

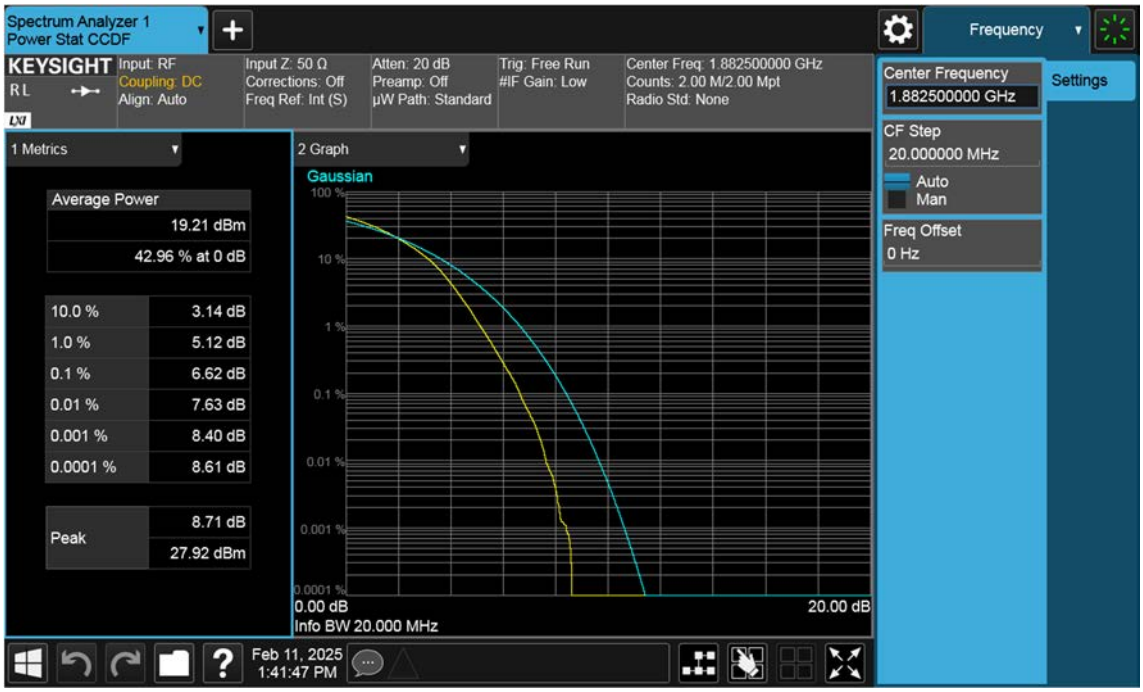


NR25_20 M_PAR_Mid_16QAM_FullRB

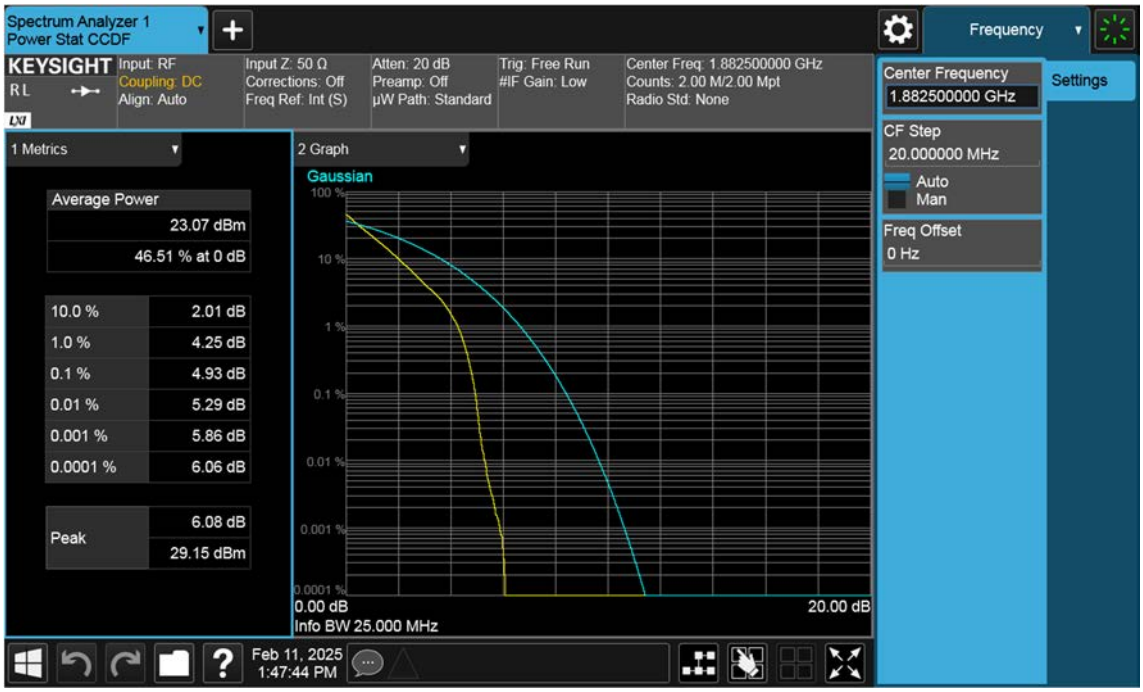
NR25_20 M_PAR_Mid_64QAM_FullRB



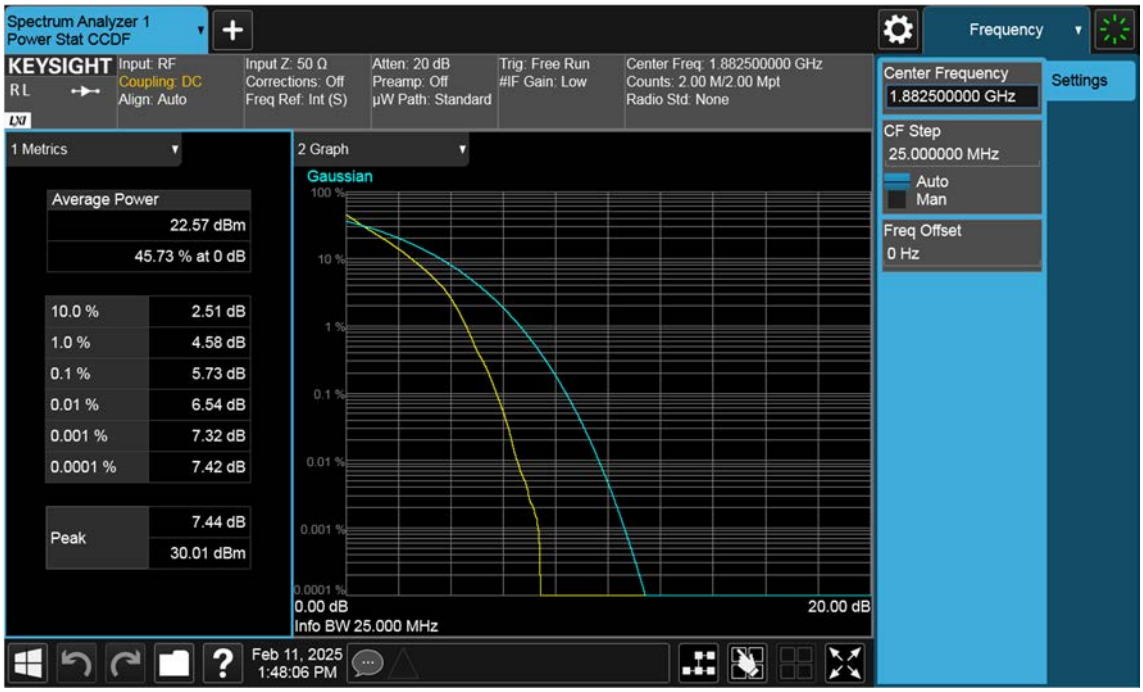
NR25_20 M_PAR_Mid_256QAM_FullRB



NR25_25 M_PAR_Mid_BPSK_FullRB

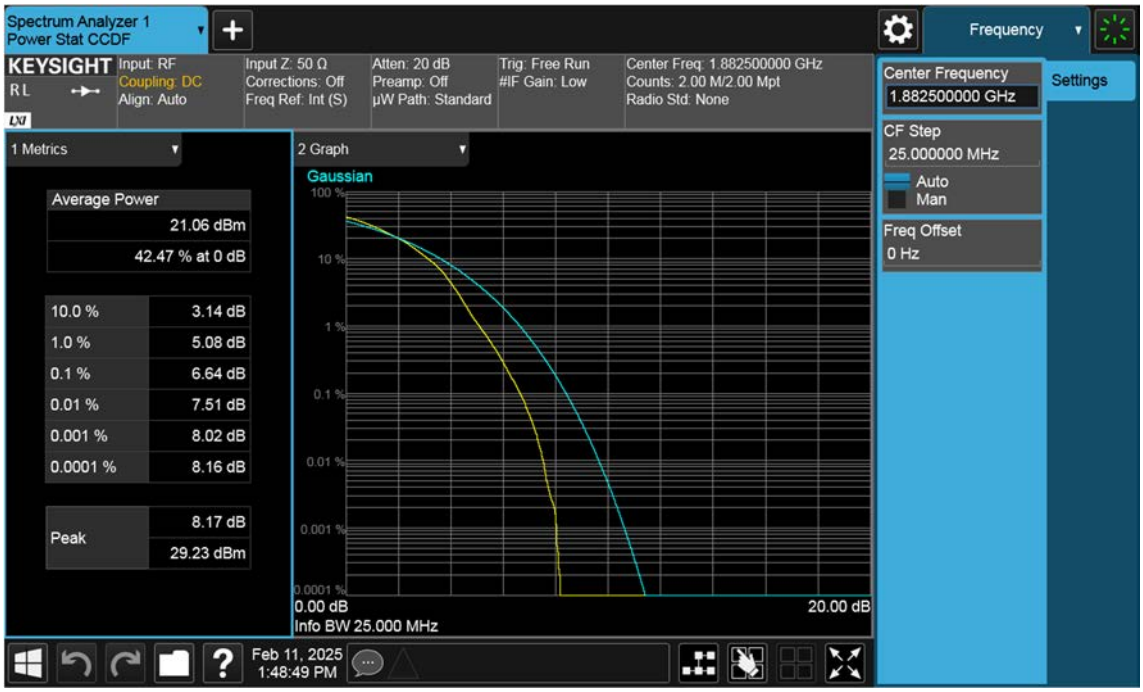


NR25_25 M_PAR_Mid_QPSK_FullRB

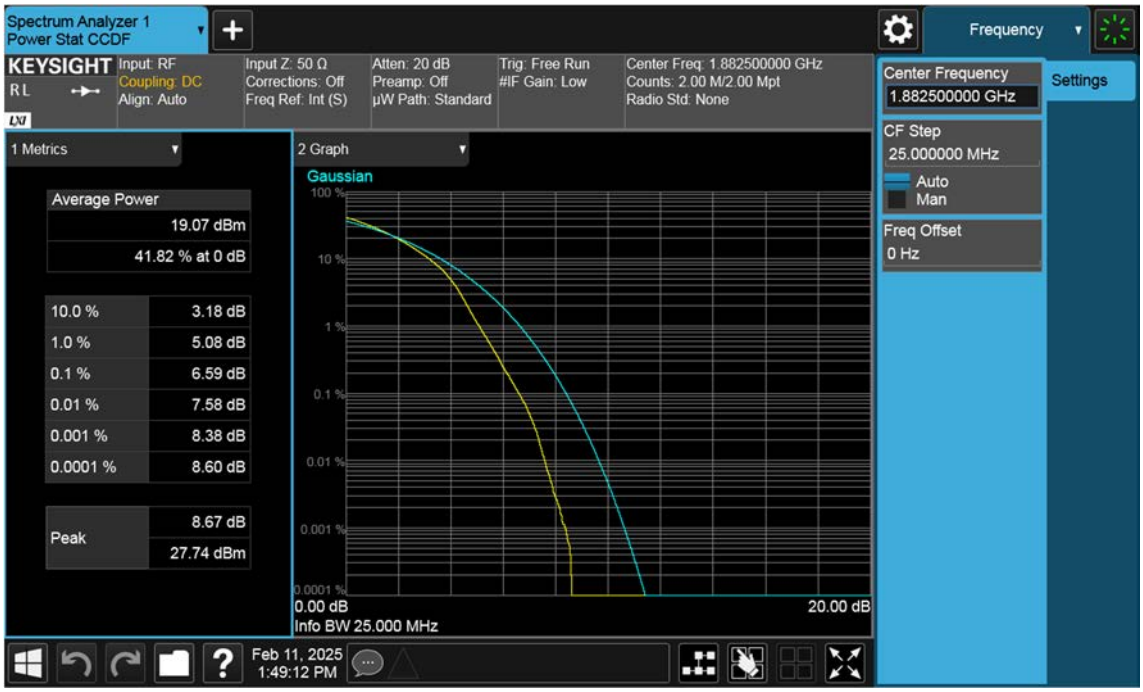


NR25_25 M_PAR_Mid_16QAM_FullRB

NR25_25 M_PAR_Mid_64QAM_FullRB

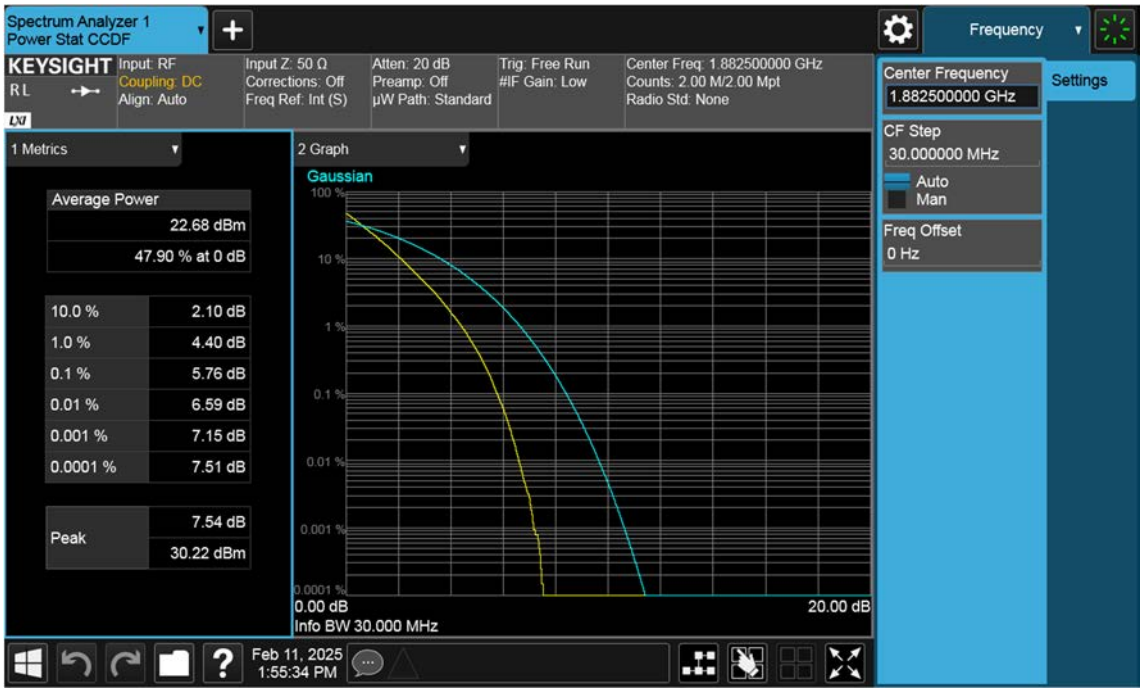


NR25_25 M_PAR_Mid_256QAM_FullRB



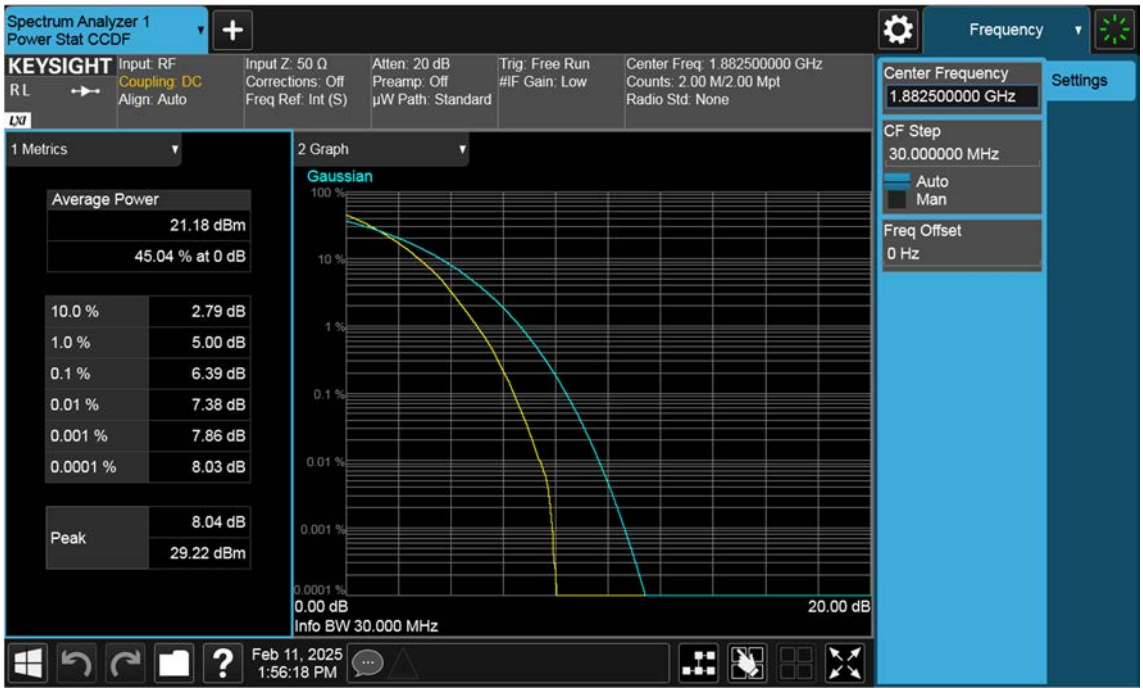
NR25_30 M_PAR_Mid_BPSK_FullRB

NR25_30 M_PAR_Mid_QPSK_FullRB



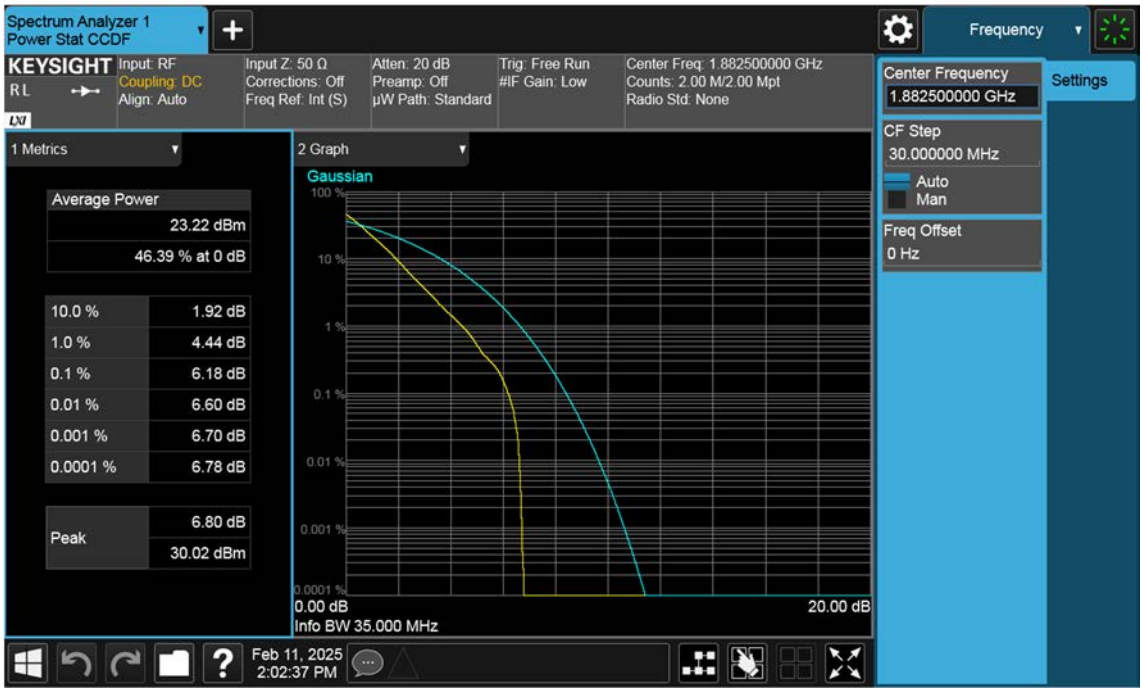
NR25_30 M_PAR_Mid_16QAM_FullRB

NR25_30 M_PAR_Mid_64QAM_FullRB

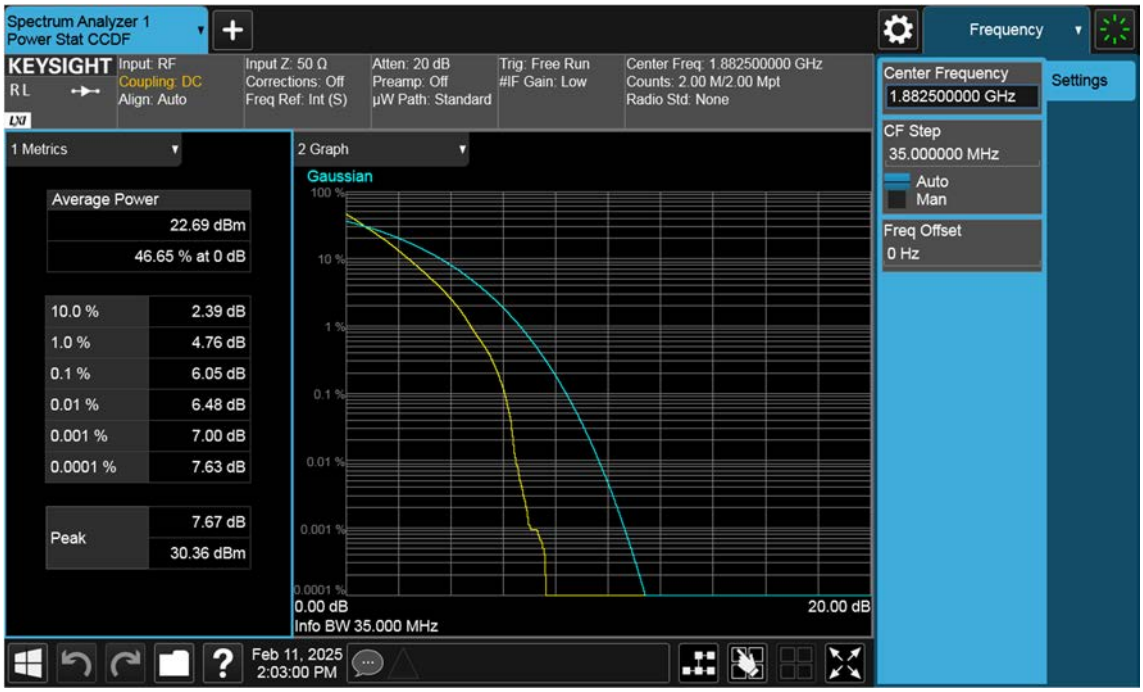


NR25_30 M_PAR_Mid_256QAM_FullRB

NR25_35 M_PAR_Mid_BPSK_FullRB



NR25_35 M_PAR_Mid_QPSK_FullRB

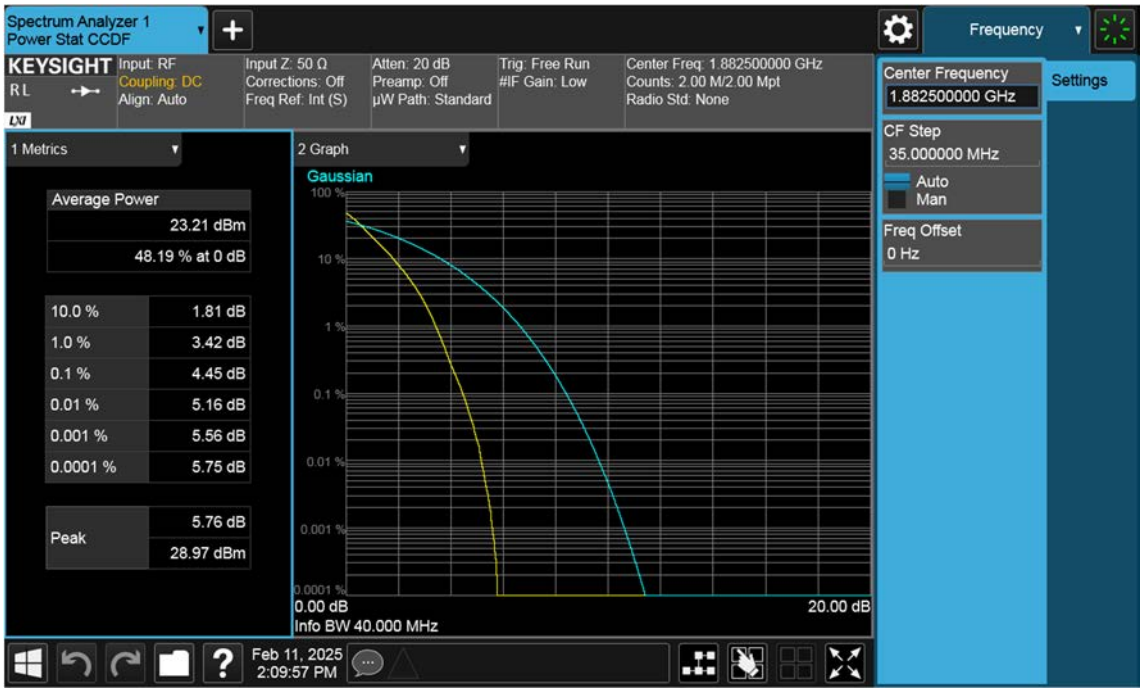


NR25_35 M_PAR_Mid_16QAM_FullRB

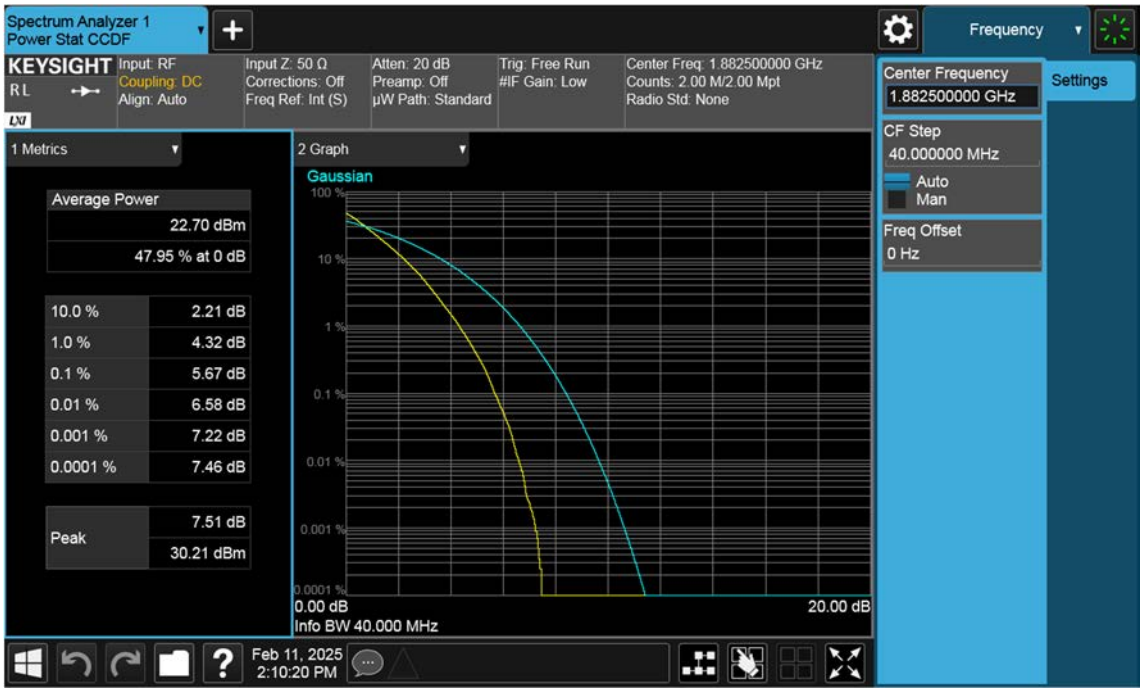
NR25_35 M_PAR_Mid_64QAM_FullRB

NR25_35 M_PAR_Mid_256QAM_FullRB

NR25_40 M_PAR_Mid_BPSK_FullRB

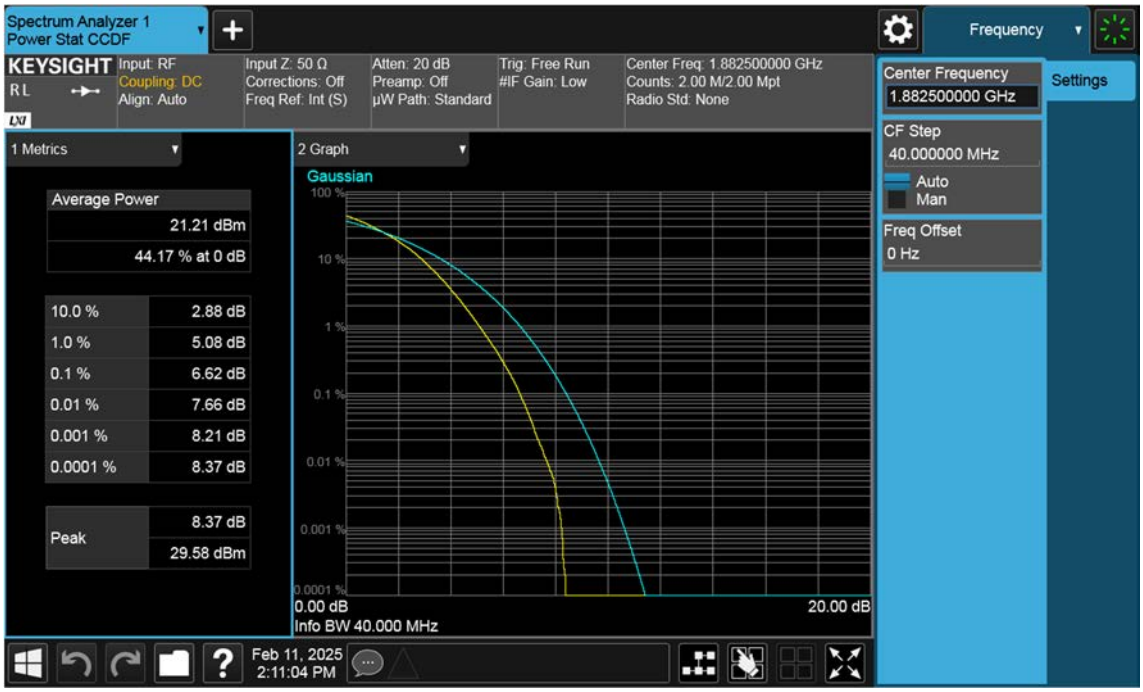


NR25_40 M_PAR_Mid_QPSK_FullRB



NR25_40 M_PAR_Mid_16QAM_FullRB

NR25_40 M_PAR_Mid_64QAM_FullRB

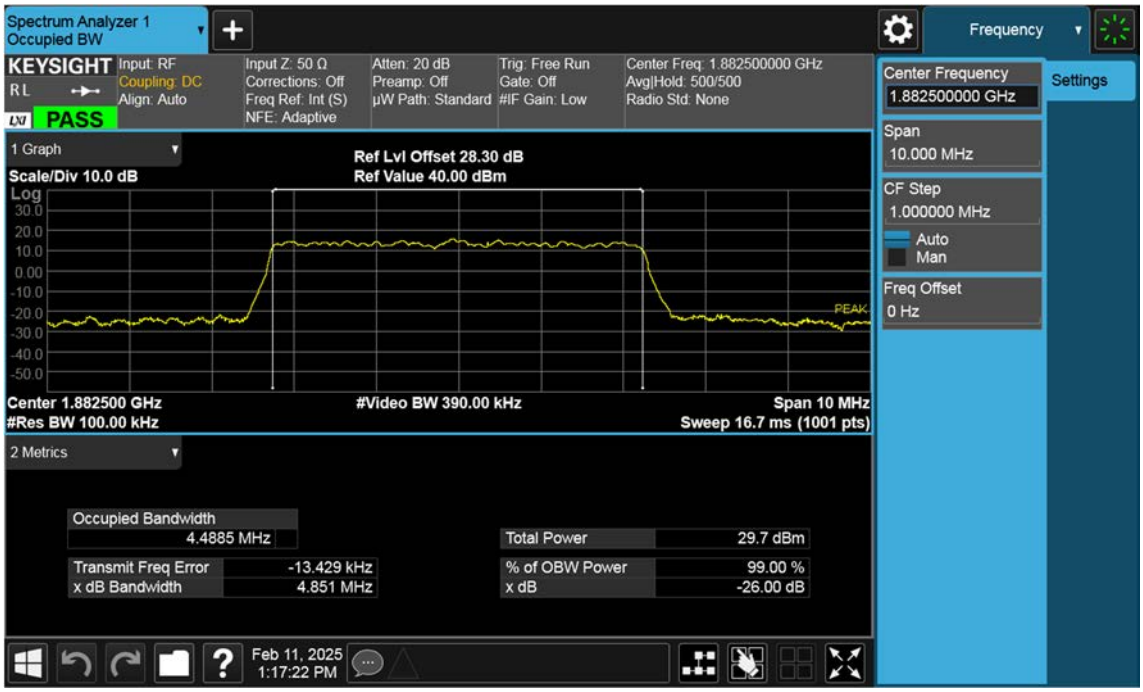


NR25_40 M_PAR_Mid_256QAM_FullRB

NR25_5 M_OBW_Mid_BPSK_FullRB

NR25_5 M_OBW_Mid_QPSK_FullRB

NR25_5 M_OBW_Mid_16QAM_FullRB



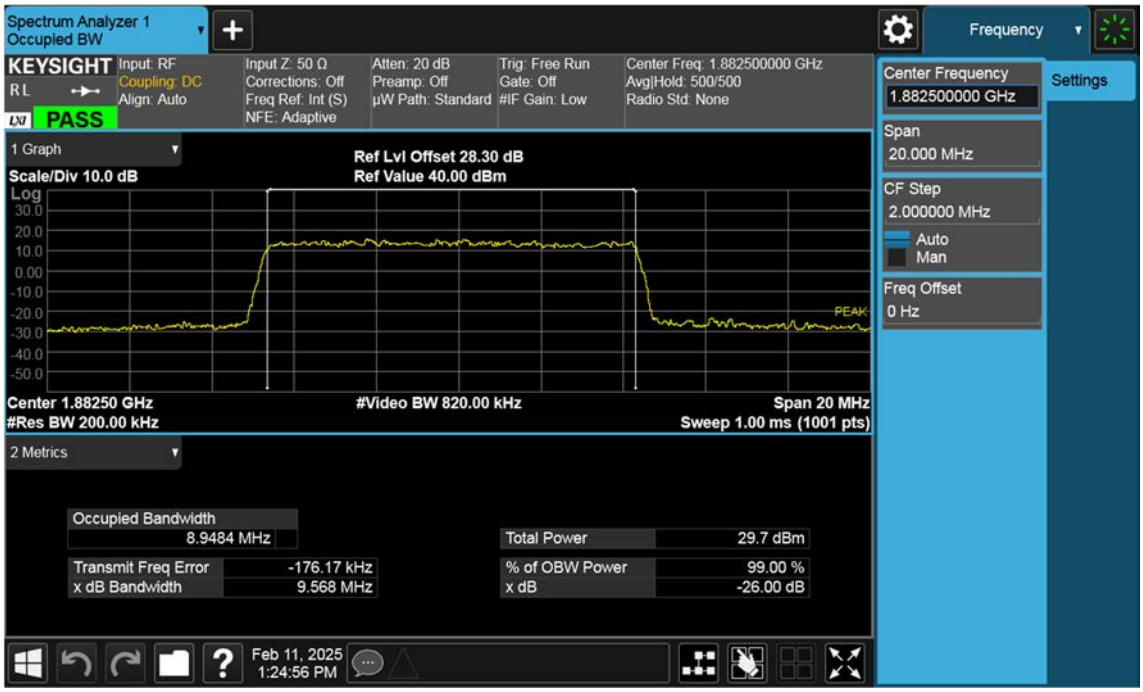
NR25_5 M_OBW_Mid_64QAM_FullRB

NR25_5 M_OBW_Mid_256QAM_FullRB

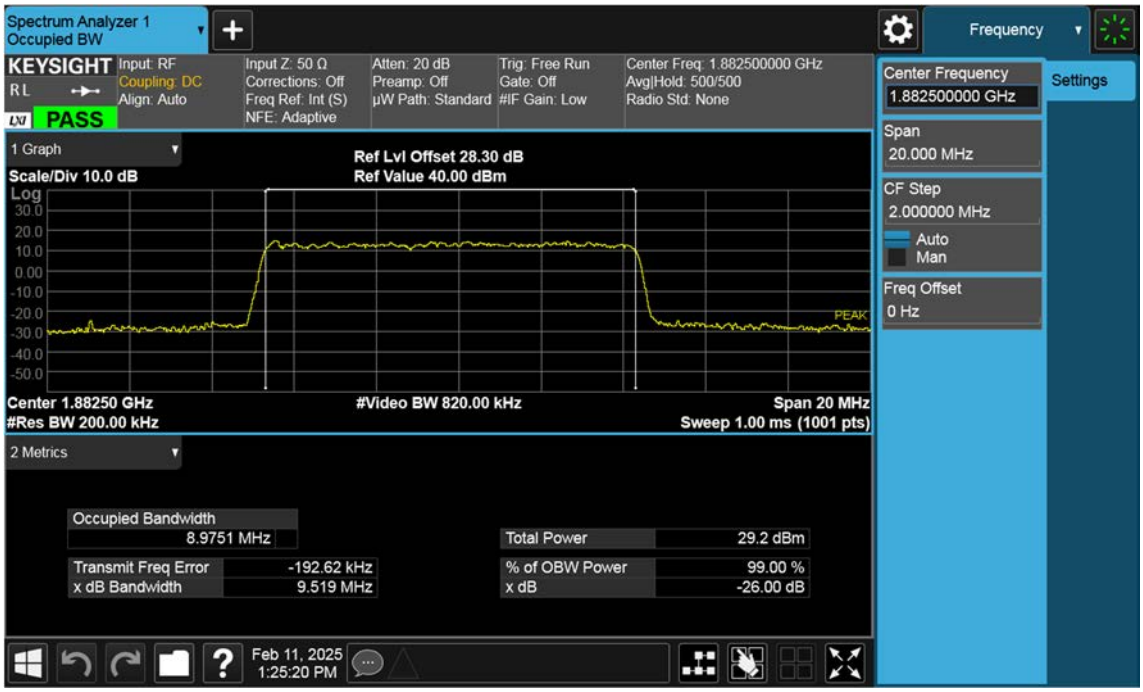
NR25_10 M_OBW_Mid_BPSK_FullRB

NR25_10 M_OBW_Mid_QPSK_FullRB

NR25_10 M_OBW_Mid_16QAM_FullRB



NR25_10 M_OBW_Mid_64QAM_FullRB



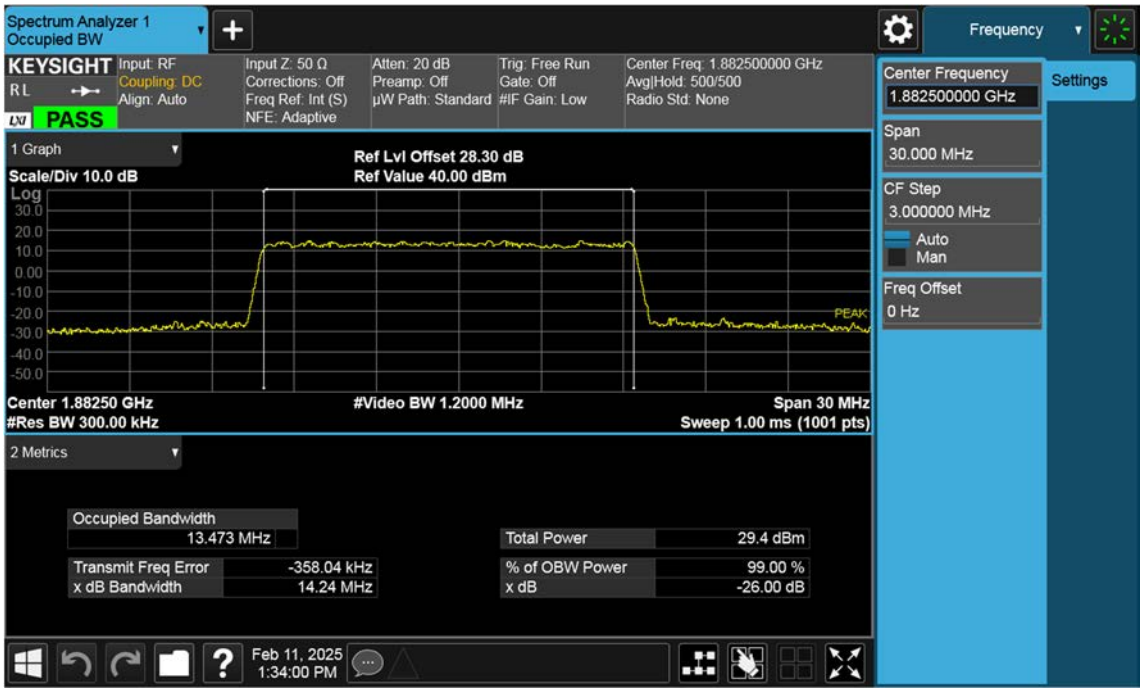
NR25_10 M_OBW_Mid_256QAM_FullRB

NR25_15 M_OBW_Mid_BPSK_FullRB

NR25_15 M_OBW_Mid_QPSK_FullRB

NR25_15 M_OBW_Mid_16QAM_FullRB

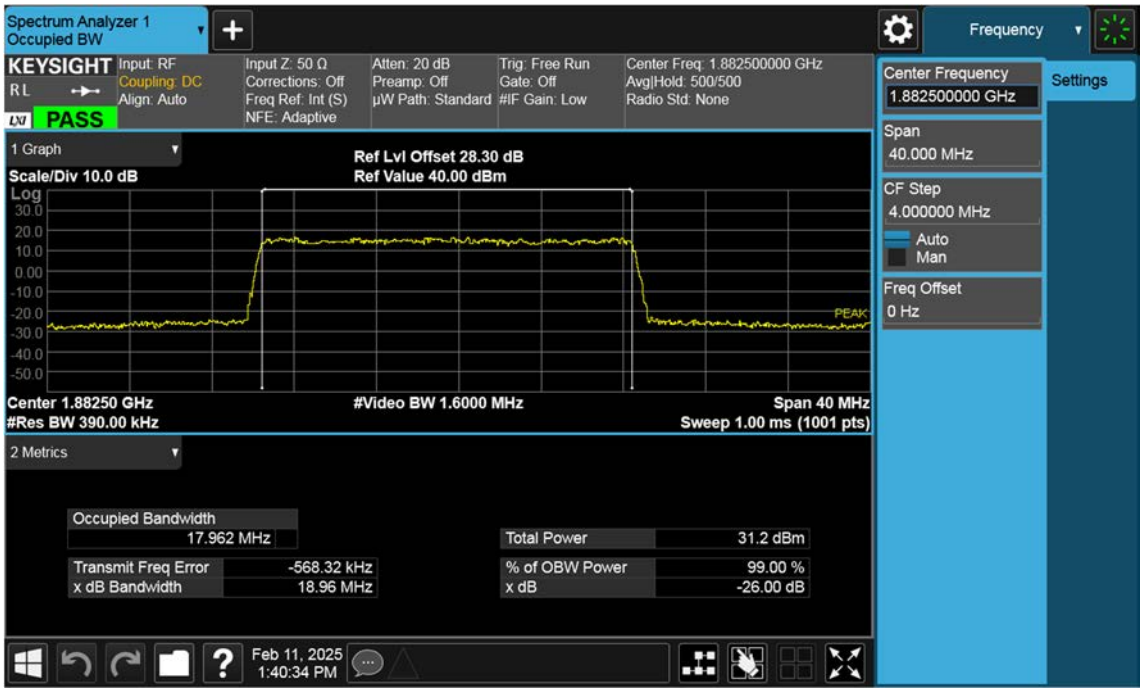
NR25_15 M_OBW_Mid_64QAM_FullRB



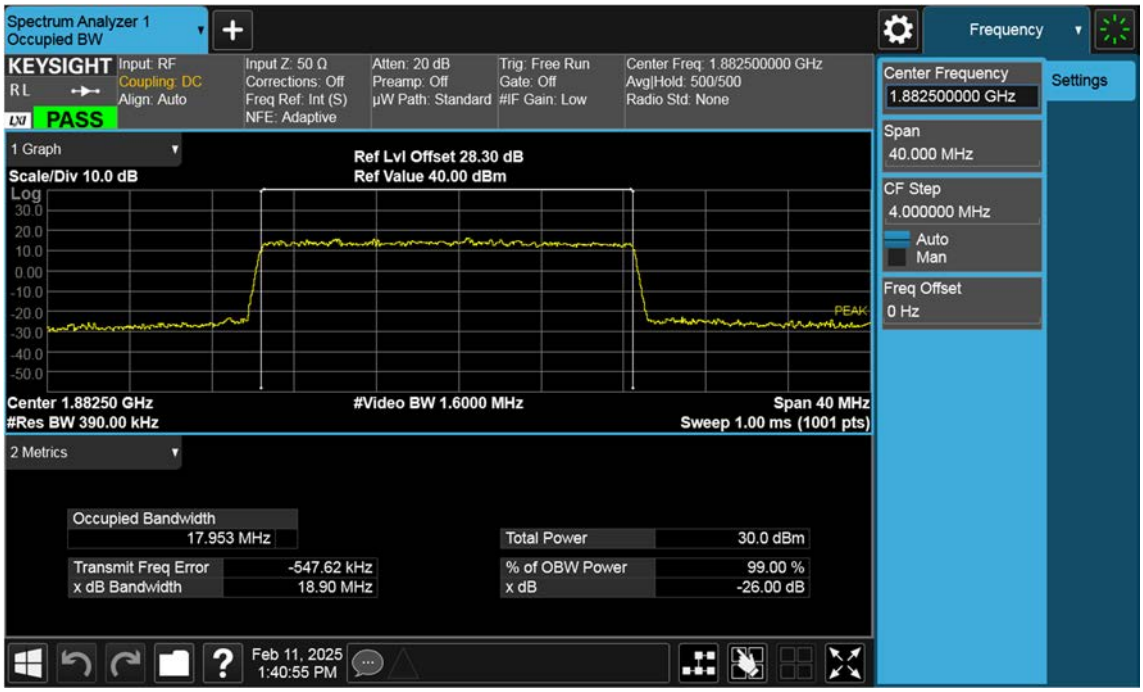
NR25_15 M_OBW_Mid_256QAM_FullRB

NR25_20 M_OBW_Mid_BPSK_FullRB

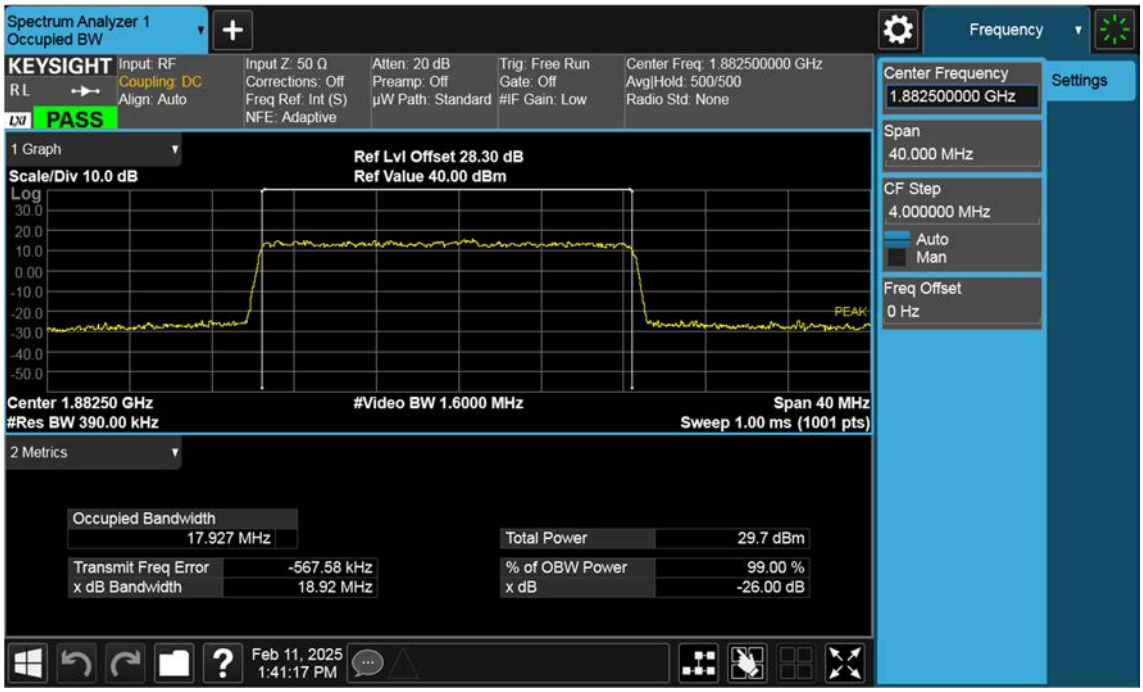
NR25_20 M_OBW_Mid_QPSK_FullRB



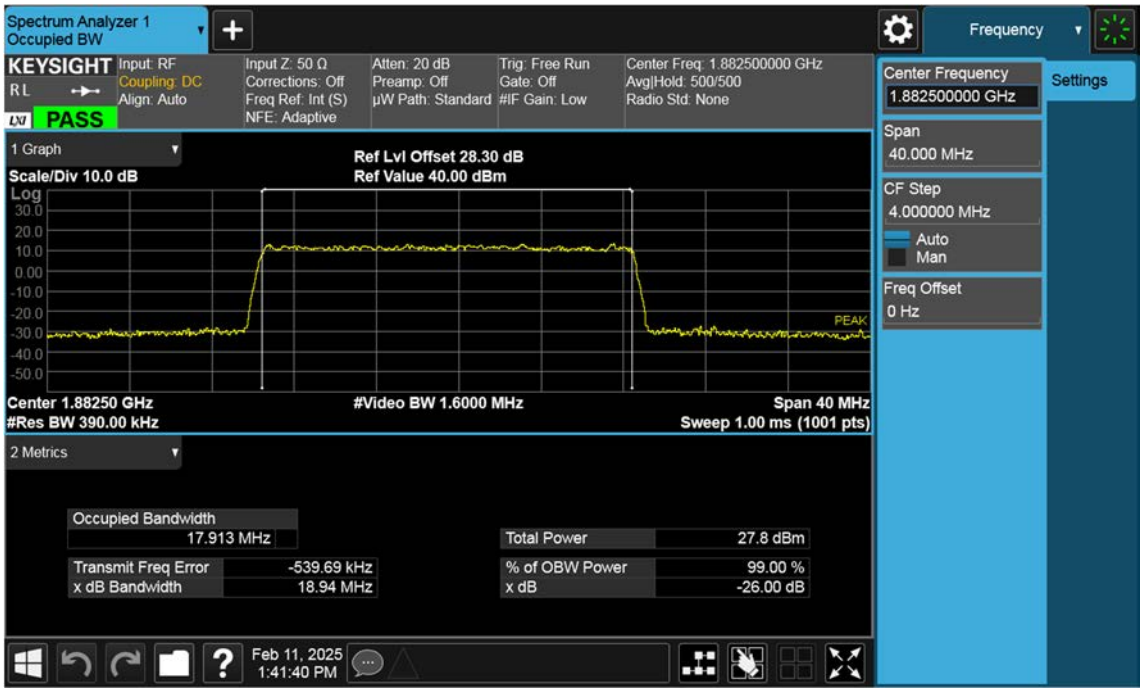
NR25_20 M_OBW_Mid_16QAM_FullRB



NR25_20 M_OBW_Mid_64QAM_FullRB



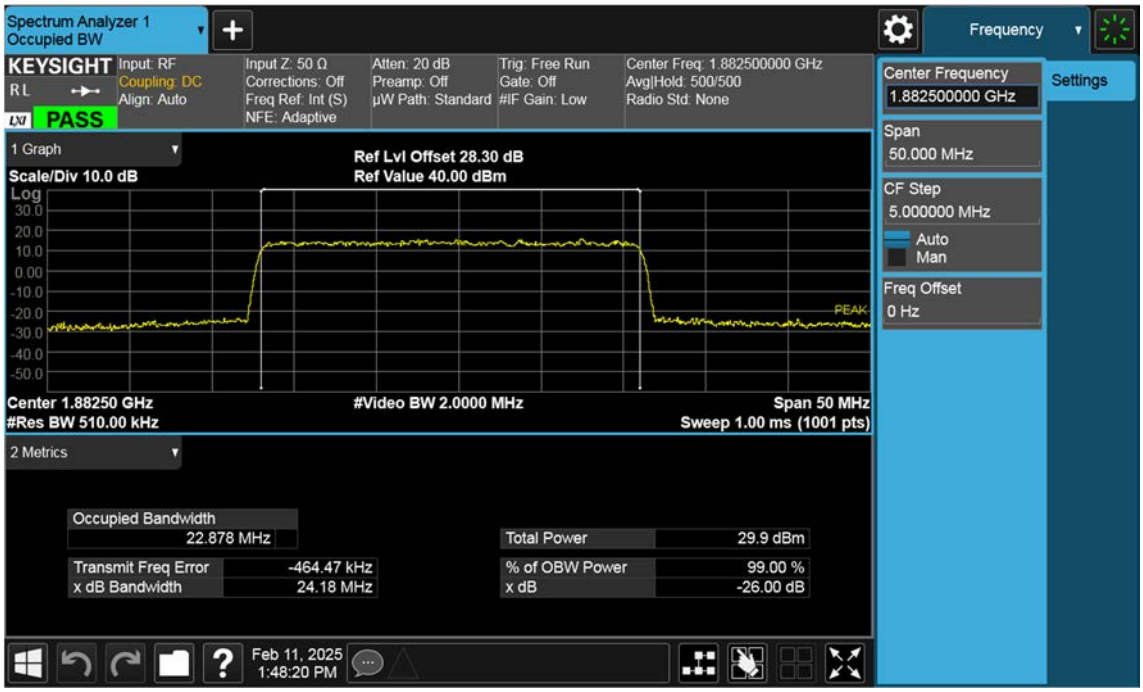
NR25_20 M_OBW_Mid_256QAM_FullRB



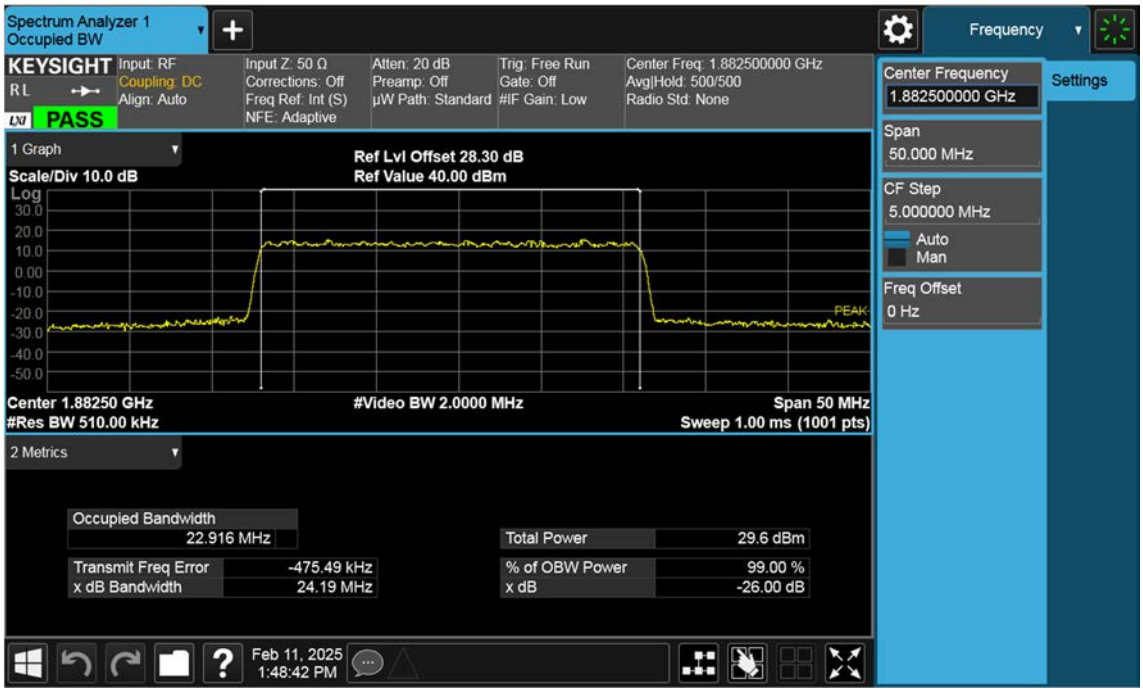
NR25_25 M_OBW_Mid_BPSK_FullRB

NR25_25 M_OBW_Mid_QPSK_FullRB

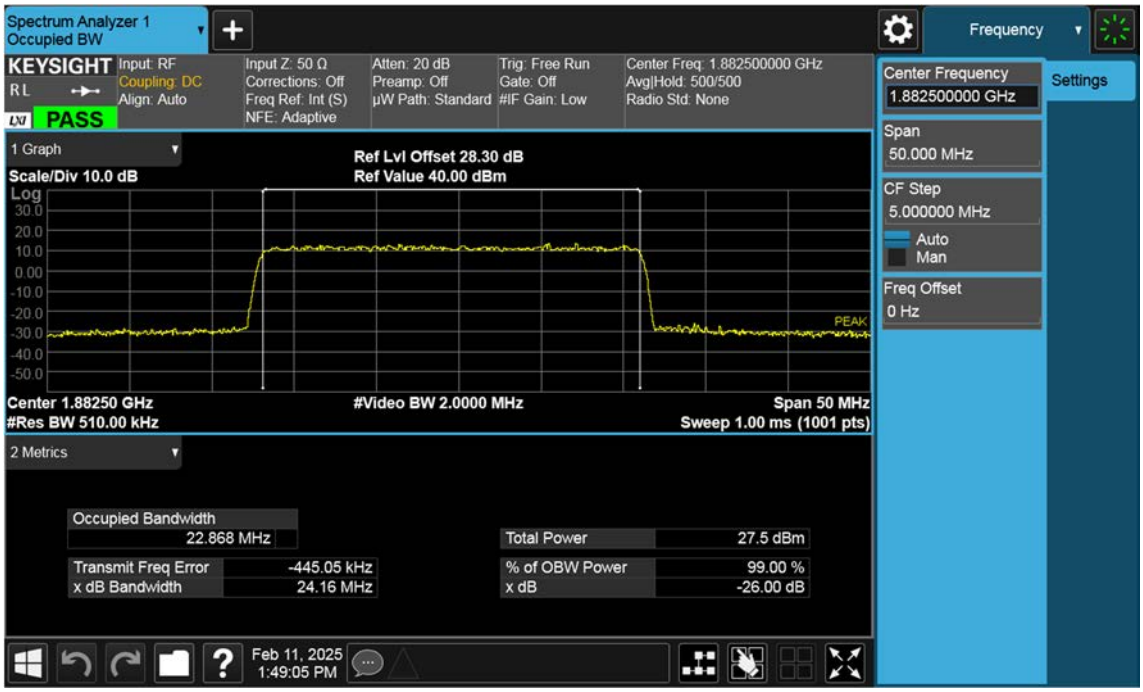
NR25_25 M_OBW_Mid_16QAM_FullRB



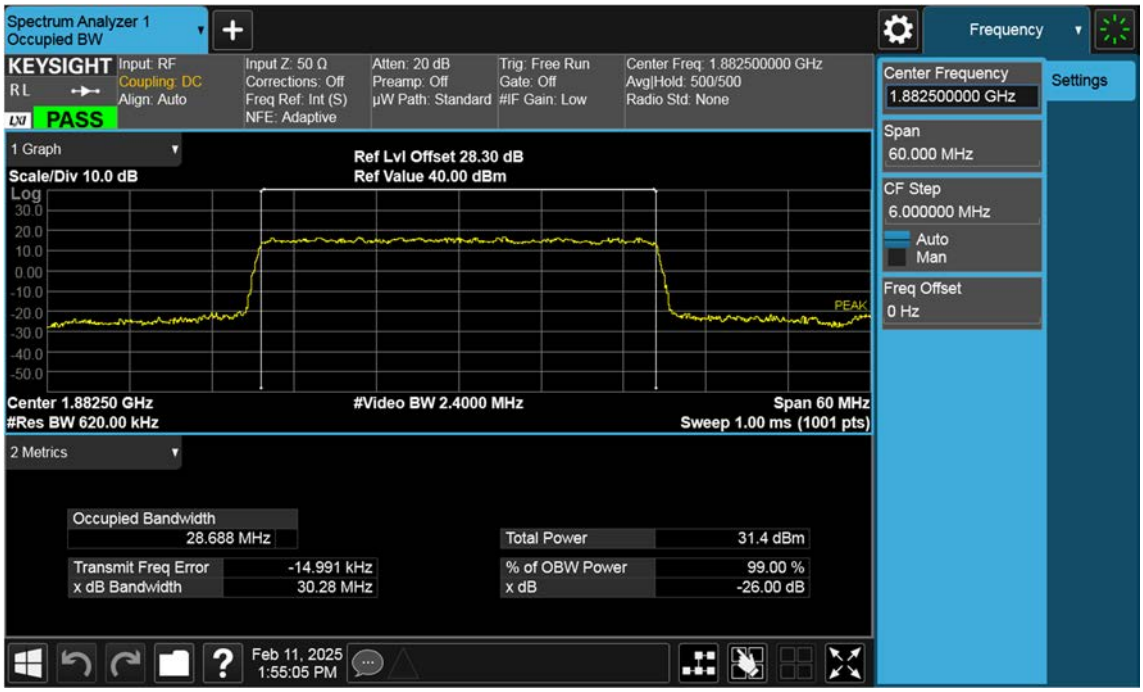
NR25_25 M_OBW_Mid_64QAM_FullRB



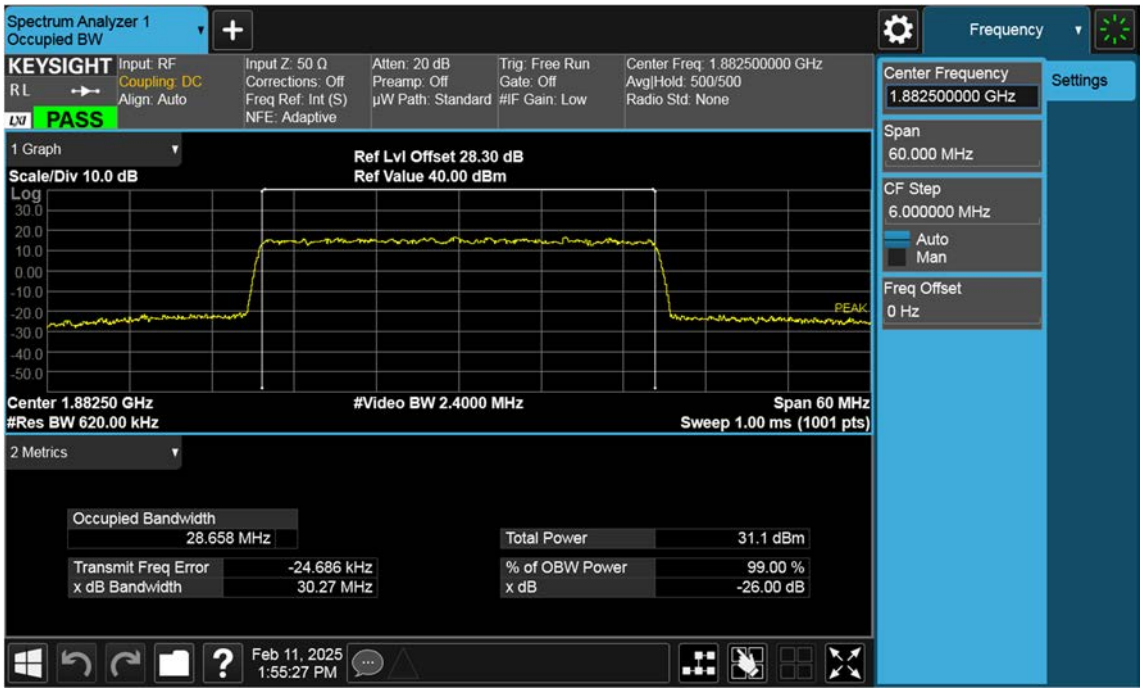
NR25_25 M_OBW_Mid_256QAM_FullRB



NR25_30 M_OBW_Mid_BPSK_FullRB



NR25_30 M_OBW_Mid_QPSK_FullRB



NR25_30 M_OBW_Mid_16QAM_FullRB