

TEST REPORT

FCC Sub6 n41 Test for SM-A266U
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2501-FC023

DATE OF ISSUE
January 15, 2025

Tested by
Jung Ki Lim



Technical Manager
Jong Seok Lee



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

**HCT CO.,LTD.**

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

TEST REPORT

REPORT NO.

HCT-RF-2501-FC023

DATE OF ISSUE

January 15, 2025

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
Model Name

Mobile Phone
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: § 27

Test Results

PASS

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	January 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 Bs marked **.

Test results provided by external providers are marked ***.

When confirmation of authenticity of this test report is required, please contact www.hct.co.kr

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

CONTENTS

1. GENERAL INFORMATION	5
1.1. MAXIMUM OUTPUT POWER	6
2. INTRODUCTION	8
2.1. DESCRIPTION OF EUT	8
2.2. MEASURING INSTRUMENT CALIBRATION	8
2.3. TEST FACILITY	8
3. DESCRIPTION OF TESTS	9
3.1 TEST PROCEDURE	9
3.2 RADIATED POWER.....	10
3.3 RADIATED SPURIOUS EMISSIONS.....	11
3.4 PEAK- TO- AVERAGE RATIO	12
3.5 OCCUPIED BANDWIDTH.....	14
3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL.....	15
3.7 CHANNEL EDGE	16
3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE	18
3.9 WORST CASE(RADIATED TEST)	19
3.10 WORST CASE(CONDUCTED TEST).....	20
4. LIST OF TEST EQUIPMENT.....	22
5. MEASUREMENT UNCERTAINTY.....	23
6. SUMMARY OF TEST RESULTS.....	24
7. SAMPLE CALCULATION	25
8. TEST DATA	27
8.1 EQUIVALENT ISOTROPIC RADIATED POWER.....	27
8.2 RADIATED SPURIOUS EMISSIONS.....	38
8.3 PEAK-TO-AVERAGE RATIO	49
8.4 OCCUPIED BANDWIDTH.....	51
8.5 CONDUCTED SPURIOUS EMISSIONS	53
8.6 CHANNEL EDGE	55
8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE	58
9. TEST PLOTS.....	69
10. ANNEX A_ TEST SETUP PHOTO	323

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):	§ 27
EUT Type:	Mobile phone
Model(s):	SM-A266U
Additional Model(s)	SM-A266U1, SM-S266V
SCS(kHz):	30
Bandwidth(MHz):	Sub6 n41 : 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
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:	2501.010 – 2685.000 : 10 MHz(Sub6 n41) 2503.500 – 2682.480 : 15 MHz(Sub6 n41) 2506.020 – 2679.990 : 20 MHz(Sub6 n41) 2511.000 – 2674.980 : 30 MHz(Sub6 n41) 2516.010 – 2670.000 : 40 MHz(Sub6 n41) 2521.020 – 2664.990 : 50 MHz(Sub6 n41) 2526.000 – 2659.980 : 60 MHz(Sub6 n41) 2531.010 – 2655.000 : 70 MHz(Sub6 n41) 2536.020 – 2649.990 : 80 MHz(Sub6 n41) 2541.000 – 2644.980 : 90 MHz(Sub6 n41) 2546.010 – 2640.000 : 100 MHz(Sub6 n41)
Date(s) of Tests:	November 22, 2024~ January 10, 2025
Serial number:	Radiated : R3CXB07JAGW Conducted : R3CXB07HDAZ

1.1. MAXIMUM OUTPUT POWER

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n41 (10)	2501.010 – 2685.000	8M72G7D	PI/2 BPSK	0.320	25.05
		8M71G7D	QPSK	0.308	24.88
		8M68W7D	16QAM	0.237	23.74
		8M72W7D	64QAM	0.167	22.23
		8M70W7D	256QAM	0.105	20.22
Sub6 n41 (15)	2503.500 – 2682.480	13M0G7D	PI/2 BPSK	0.316	25.00
		13M0G7D	QPSK	0.308	24.88
		13M0W7D	16QAM	0.252	24.01
		13M0W7D	64QAM	0.173	22.39
		12M9W7D	256QAM	0.112	20.48
Sub6 n41 (20)	2506.020 – 2679.990	18M0G7D	PI/2 BPSK	0.340	25.32
		18M0G7D	QPSK	0.333	25.23
		18M5W7D	16QAM	0.269	24.29
		18M0W7D	64QAM	0.187	22.72
		17M9W7D	256QAM	0.115	20.62
Sub6 n41 (30)	2511.000 – 2674.980	27M0G7D	PI/2 BPSK	0.339	25.30
		27M0G7D	QPSK	0.332	25.21
		27M0W7D	16QAM	0.264	24.21
		26M9W7D	64QAM	0.177	22.49
		26M9W7D	256QAM	0.123	20.90
Sub6 n41 (40)	2516.010 – 2670.000	36M0G7D	PI/2 BPSK	0.323	25.09
		35M9G7D	QPSK	0.319	25.04
		35M9W7D	16QAM	0.258	24.11
		36M0W7D	64QAM	0.178	22.51
		36M0W7D	256QAM	0.112	20.51
Sub6 n41 (50)	2521.020 – 2664.990	46M0G7D	PI/2 BPSK	0.348	25.41
		45M9G7D	QPSK	0.337	25.28
		45M9W7D	16QAM	0.275	24.39
		46M1W7D	64QAM	0.190	22.78
		45M9W7D	256QAM	0.118	20.72
Sub6 n41 (60)	2526.000 – 2659.980	58M3G7D	PI/2 BPSK	0.311	24.93
		58M2G7D	QPSK	0.310	24.92
		58M2W7D	16QAM	0.256	24.08
		58M2W7D	64QAM	0.175	22.44
		58M2W7D	256QAM	0.111	20.45

Sub6 n41 (70)	2531.010 – 2655.000	64M7G7D	PI/2 BPSK	0.290	24.62
		64M8G7D	QPSK	0.288	24.60
		64M6W7D	16QAM	0.235	23.71
		64M8W7D	64QAM	0.158	22.00
		64M4W7D	256QAM	0.097	19.88
Sub6 n41 (80)	2536.020 – 2649.990	77M5G7D	PI/2 BPSK	0.299	24.76
		77M5G7D	QPSK	0.298	24.74
		77M7W7D	16QAM	0.245	23.90
		77M5W7D	64QAM	0.160	22.04
		77M7W7D	256QAM	0.101	20.04
Sub6 n41 (90)	2541.000 – 2644.980	87M3G7D	PI/2 BPSK	0.305	24.84
		87M2G7D	QPSK	0.302	24.80
		87M1W7D	16QAM	0.242	23.83
		87M3W7D	64QAM	0.170	22.31
		87M1W7D	256QAM	0.103	20.14
Sub6 n41 (100)	2546.010 – 2640.000	96M9G7D	PI/2 BPSK	0.293	24.67
		96M7G7D	QPSK	0.292	24.66
		96M8W7D	16QAM	0.234	23.69
		96M9W7D	64QAM	0.161	22.08
		97M0W7D	256QAM	0.107	20.30

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
Channel Edge	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Spurious and Harmonic Emissions at Antenna Terminal	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Conducted Output Power	- N/A (See SAR Report)
Peak- to- Average Ratio	- KDB 971168 D01 v03r01 – Section 5.7 - ANSI C63.26-2015 – Section 5.2.3.4
Frequency stability	- ANSI C63.26-2015 – Section 5.6
Radiated Power	- ANSI C63.26-2015 – Section 5.2.4.4 - KDB 971168 D01 v03r01 – Section 5.8
Radiated Spurious and Harmonic Emissions	- ANSI C63.26-2015 – Section 5.5.3 - KDB 971168 D01 v03r01 – Section 5.8

3.2 RADIATED POWER

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

The equipment under test is placed on a non-conductive table 3-meters away from the receive antenna.

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 – 5 % of the expected OBW, not to exceed 1 MHz
3. VBW $\geq$ 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points > 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto".
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize

Test Note

1. The turntable is rotated through 360 degrees, and the receiving antenna scans in order to determine the level of the maximized emission.
2. A half wave dipole is then substituted in place of the EUT. For emissions above 1 GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

The power is calculated by the following formula;

$$P_d \text{ (dBm)} = P_g \text{ (dBm)} - \text{cable loss (dB)} + \text{antenna gain (dB)}$$

Where: P_d is the dipole equivalent power and P_g is the generator output power into the substitution antenna.

3. The maximum value is calculated by adding the forward power to the calibrated source plus its appropriate gain value.

These steps are repeated with the receiving antenna in both vertical and horizontal polarization. the difference between the gain of the horn and an isotropic antenna are taken into consideration

4. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
5. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

3.3 RADIATED SPURIOUS EMISSIONS

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

Radiated Spurious Emission Measurements at 3 meters by Substitution Method.

Test Settings

1. RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz
2. VBW $\geq$ 3 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 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;

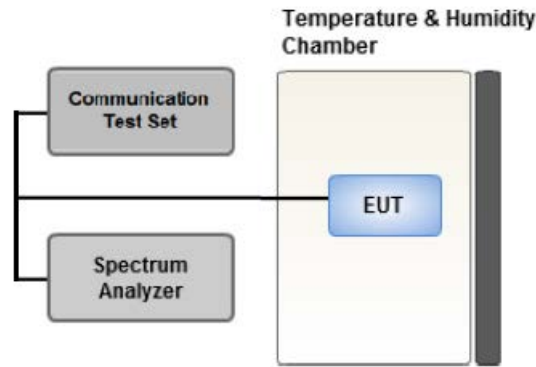
$$\text{Result}_{(\text{dBm})} = P_{\text{g}}_{(\text{dBm})} - \text{cable loss}_{(\text{dB})} + \text{antenna gain}_{(\text{dBi})}$$

Where: P_{g} is the generator output power into the substitution antenna.

If the fundamental frequency is below 1 GHz, RF output power has been converted to EIRP.

$$\text{EIRP}_{(\text{dBm})} = \text{ERP}_{(\text{dBm})} + 2.15$$

3.4 PEAK- TO- AVERAGE RATIO



Test setup

① CCDF Procedure for PAPR

Test Settings

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

② Alternate Procedure for PAPR

Use one of the procedures presented in 5.2(ANSI C63.26-2015) to measure the total peak power and record as P_{Pk} .

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

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

Test Settings(Peak Power)

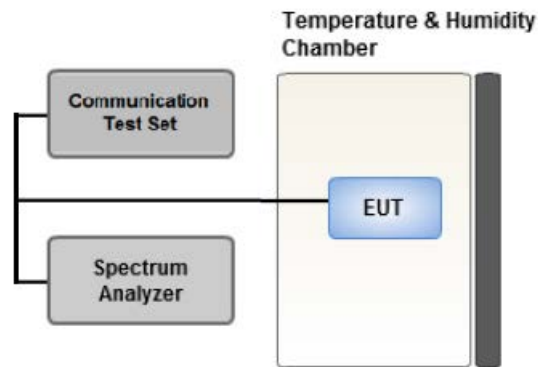
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

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

Test Settings(Average Power)

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

3.5 OCCUPIED BANDWIDTH.



Test setup

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

The EUT makes a call to the communication simulator.

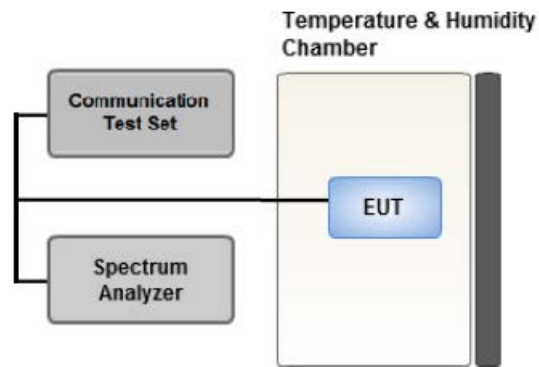
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

Test Settings

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

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

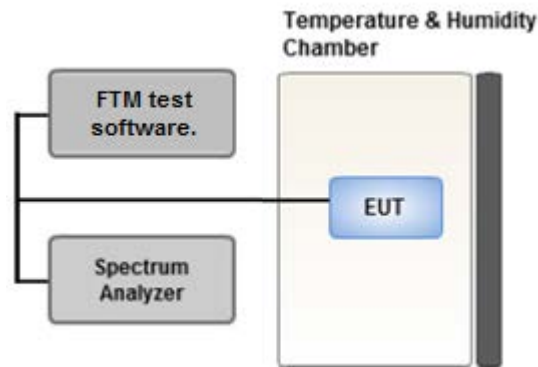
Test Overview

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

Test Settings

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

3.7 CHANNEL EDGE



Test setup

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum power and at the appropriate frequencies.

All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

Test Settings

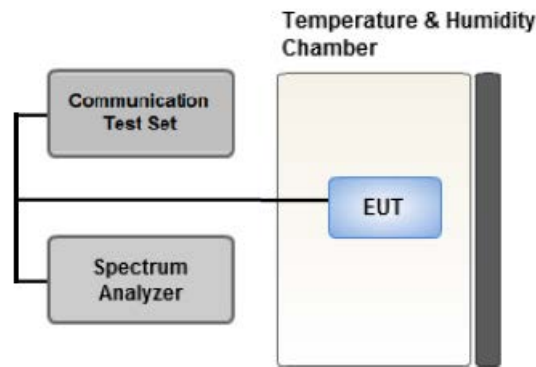
1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. Within 1 MHz of the channel edge the RBW should be 2 % of EBW, then 1 MHz after that.
4. VBW > 3 x RBW
5. 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

1. The attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge,
2. $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge.
3. $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge.
4. The attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz.
5. $55 + 10 \log (P)$ dB at or below 2490.5 MHz.
6. X is the greater of 6MHz or the actual emission bandwidth
7. The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer

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

3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



Test setup

Test Overview

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

The frequency stability of the transmitter is measured by:

1. Temperature:

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

2. Primary Supply Voltage:

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

Test Settings

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

3.9 WORST CASE(RADIATED TEST)

- 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.
- All power classes were tested, and the results were reported for the worst case PC2.
- 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.
- SM-A266U & additional models were tested and the worst case results are reported.
(Worst case : SM-A266U)

[Worst case]

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

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 power classes were tested, and the results were reported for the worst case PC2.
- 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	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Channel Edge	PI/2 BPSK	10	Low	1	0
			High	1	23
		15	Low	1	0
			High	1	37
		20	Low	1	0
			High	1	50
		30	Low	1	0
			High	1	77
		40	Low	1	0
			High	1	105
		50	Low	1	0
			High	1	132
		60	Low	1	0
			High	1	161
		70	Low	1	0
			High	1	188
		80	Low	1	0
			High	1	216
		90	Low	1	0
			High	1	244
		100	Low	1	0
			High	1	272
		10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100	Low, Mid, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100	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, § 27.53(m)(4)	■ $< 40 + 10\log_{10} (P[\text{Watts}])$ at Channel edges ■ $< 43 + 10\log_{10} (P[\text{Watts}])$ between 5 and X MHz from Channel edges ■ $< 55 + 10\log_{10} (P[\text{Watts}])$ beyond X MHz beyond from Channel edges ■ $< 43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz	PASS
Conducted Output Power	§ 2.1046	N/A	<u>See Note1</u>
Frequency stability / variation of ambient temperature	§ 2.1055, § 27.54	Emission must remain in band	PASS

Note:

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

6.2 Test Condition: Radiated Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Equivalent Isotropic Radiated Power	§ 27.50(h)(2)	< 2 Watts max. EIRP	PASS
Radiated Spurious and Harmonic Emissions	§ 2.1053, § 27.53(m)(4)	$< 55 + 10\log_{10} (P[\text{Watts}])$	PASS

Note:

1. Radiated tests were tested using 5G Wireless Tester.

7. SAMPLE CALCULATION

7.1 ERP Sample Calculation

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

$$\text{ERP} = \text{Substitute LEVEL(dBm)} + \text{Ant. Gain} - \text{CL(Cable Loss)}$$

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

7.2 EIRP Sample Calculation

Ch./ Freq.		Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	EIRP	
channel	Freq.(MHz)						W	dBm
20175	1,732.50	-15.75	18.45	9.90	1.76	H	0.456	26.59

$$\text{EIRP} = \text{Substitute LEVEL(dBm)} + \text{Ant. Gain} - \text{CL(Cable Loss)}$$

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

7.3. Emission Designator

GSM Emission Designator

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

EDGE Emission Designator

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

WCDMA Emission Designator

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

QPSK Modulation

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

QAM Modulation

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

8. TEST DATA

8.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2501.010	Sub6 n41 / 10 MHz [30 kHz]	PI/2 BPSK	-19.86	16.94	10.61	2.50	H	< 2.00	0.320	25.05	1	12
		QPSK	-20.03	16.77	10.61	2.50	H		0.308	24.88		
		16-QAM	-21.17	15.63	10.61	2.50	H		0.237	23.74		
		64-QAM	-22.68	14.12	10.61	2.50	H		0.167	22.23		
		256-QAM	-24.69	12.11	10.61	2.50	H		0.105	20.22		
2592.990		PI/2 BPSK	-20.90	15.81	11.00	2.55	H		0.267	24.26	1	1
		QPSK	-21.06	15.65	11.00	2.55	H		0.257	24.10		
		16-QAM	-22.15	14.56	11.00	2.55	H		0.200	23.01		
		64-QAM	-23.51	13.20	11.00	2.55	H		0.146	21.65		
		256-QAM	-25.75	10.96	11.00	2.55	H		0.087	19.41		
2685.000		PI/2 BPSK	-22.39	15.17	10.82	2.61	V		0.218	23.38	1	12
		QPSK	-22.51	15.05	10.82	2.61	V		0.212	23.26		
		16-QAM	-23.33	14.23	10.82	2.61	V		0.175	22.44		
		64-QAM	-24.99	12.57	10.82	2.61	V		0.120	20.78		
		256-QAM	-26.88	10.68	10.82	2.61	V		0.077	18.89		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2503.500	Sub6 n41 / 15 MHz [30 kHz]	PI/2 BPSK	-19.93	16.93	10.58	2.51	H		0.316	25.00	1	36
		QPSK	-20.05	16.81	10.58	2.51	H		0.308	24.88		
		16-QAM	-20.92	15.94	10.58	2.51	H		0.252	24.01		
		64-QAM	-22.54	14.32	10.58	2.51	H		0.173	22.39		
		256-QAM	-24.45	12.41	10.58	2.51	H		0.112	20.48		
2592.990		PI/2 BPSK	-20.82	15.89	11.00	2.55	H	< 2.00	0.272	24.34	1	1
		QPSK	-21.04	15.67	11.00	2.55	H		0.258	24.12		
		16-QAM	-22.10	14.61	11.00	2.55	H		0.202	23.06		
		64-QAM	-23.38	13.33	11.00	2.55	H		0.151	21.78		
		256-QAM	-25.53	11.18	11.00	2.55	H		0.092	19.63		
2682.480		PI/2 BPSK	-22.23	15.44	10.84	2.61	V		0.233	23.67	1	1
		QPSK	-22.30	15.37	10.84	2.61	V		0.229	23.60		
		16-QAM	-23.25	14.42	10.84	2.61	V		0.184	22.65		
		64-QAM	-24.86	12.81	10.84	2.61	V		0.127	21.04		
		256-QAM	-26.81	10.86	10.84	2.61	V		0.081	19.09		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2506.020	Sub6 n41 / 20 MHz [30 kHz]	PI/2 BPSK	-19.61	17.25	10.58	2.51	H		0.340	25.32	1	49
		QPSK	-19.70	17.16	10.58	2.51	H		0.333	25.23		
		16-QAM	-20.64	16.22	10.58	2.51	H		0.269	24.29		
		64-QAM	-22.21	14.65	10.58	2.51	H		0.187	22.72		
		256-QAM	-24.31	12.55	10.58	2.51	H		0.115	20.62		
2592.990		PI/2 BPSK	-21.25	15.46	11.00	2.55	H	< 2.00	0.246	23.91	1	1
		QPSK	-21.25	15.46	11.00	2.55	H		0.246	23.91		
		16-QAM	-22.23	14.48	11.00	2.55	H		0.196	22.93		
		64-QAM	-23.60	13.11	11.00	2.55	H		0.143	21.56		
		256-QAM	-25.71	11.00	11.00	2.55	H		0.088	19.45		
2679.990		PI/2 BPSK	-22.27	15.40	10.84	2.61	V		0.231	23.63	1	1
		QPSK	-22.40	15.27	10.84	2.61	V		0.224	23.50		
		16-QAM	-23.35	14.32	10.84	2.61	V		0.180	22.55		
		64-QAM	-24.79	12.88	10.84	2.61	V		0.129	21.11		
		256-QAM	-26.91	10.76	10.84	2.61	V		0.079	18.99		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2511.000	Sub6 n41 / 30 MHz [30 kHz]	PI/2 BPSK	-19.66	17.26	10.55	2.51	H		0.339	25.30	1	76
		QPSK	-19.75	17.17	10.55	2.51	H		0.332	25.21		
		16-QAM	-20.75	16.17	10.55	2.51	H		0.264	24.21		
		64-QAM	-22.47	14.45	10.55	2.51	H		0.177	22.49		
		256-QAM	-24.06	12.86	10.55	2.51	H		0.123	20.90		
2592.990		PI/2 BPSK	-20.89	15.82	11.00	2.55	H	< 2.00	0.267	24.27	1	1
		QPSK	-20.92	15.79	11.00	2.55	H		0.266	24.24		
		16-QAM	-21.86	14.85	11.00	2.55	H		0.214	23.30		
		64-QAM	-23.46	13.25	11.00	2.55	H		0.148	21.70		
		256-QAM	-25.44	11.27	11.00	2.55	H		0.094	19.72		
2674.980		PI/2 BPSK	-22.23	15.06	10.85	2.62	V		0.213	23.29	1	39
		QPSK	-22.26	15.03	10.85	2.62	V		0.212	23.26		
		16-QAM	-23.37	13.92	10.85	2.62	V		0.164	22.15		
		64-QAM	-25.21	12.08	10.85	2.62	V		0.107	20.31		
		256-QAM	-26.73	10.56	10.85	2.62	V		0.076	18.79		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2516.010	Sub6 n41 / 40 MHz [30 kHz]	PI/2 BPSK	-19.83	17.10	10.52	2.53	H		0.323	25.09	1	104
		QPSK	-19.88	17.05	10.52	2.53	H		0.319	25.04		
		16-QAM	-20.81	16.12	10.52	2.53	H		0.258	24.11		
		64-QAM	-22.41	14.52	10.52	2.53	H		0.178	22.51		
		256-QAM	-24.41	12.52	10.52	2.53	H		0.113	20.51		
2592.990		-20.43	-21.29	15.42	11.00	2.55	H	< 2.00	0.244	23.87	1	53
		-20.50	-21.33	15.38	11.00	2.55	H		0.242	23.83		
		-21.70	-22.04	14.67	11.00	2.55	H		0.205	23.12		
		-22.96	-23.76	12.95	11.00	2.55	H		0.138	21.40		
		-25.24	-25.73	10.98	11.00	2.55	H		0.088	19.43		
2670.000		PI/2 BPSK	-22.31	14.59	10.87	2.62	V		0.192	22.84	1	1
		QPSK	-22.58	14.32	10.87	2.62	V		0.181	22.57		
		16-QAM	-23.36	13.54	10.87	2.62	V		0.151	21.79		
		64-QAM	-24.93	11.97	10.87	2.62	V		0.105	20.22		
		256-QAM	-26.86	10.04	10.87	2.62	V		0.068	18.29		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2521.020	Sub6 n41 / 50 MHz [30 kHz]	PI/2 BPSK	-19.47	17.46	10.49	2.54	H		0.348	25.41	1	66
		QPSK	-19.60	17.33	10.49	2.54	H		0.337	25.28		
		16-QAM	-20.49	16.44	10.49	2.54	H		0.275	24.39		
		64-QAM	-22.10	14.83	10.49	2.54	H		0.190	22.78		
		256-QAM	-24.16	12.77	10.49	2.54	H		0.118	20.72		
2592.990		-20.43	-21.09	15.62	11.00	2.55	H	< 2.00	0.255	24.07	1	1
		-20.50	-21.20	15.51	11.00	2.55	H		0.249	23.96		
		-21.70	-22.15	14.56	11.00	2.55	H		0.200	23.01		
		-22.96	-23.79	12.92	11.00	2.55	H		0.137	21.37		
		-25.24	-25.86	10.85	11.00	2.55	H		0.085	19.30		
2664.990		PI/2 BPSK	-22.35	14.60	10.88	2.64	V		0.192	22.84	1	66
		QPSK	-22.48	14.47	10.88	2.64	V		0.187	22.71		
		16-QAM	-23.23	13.72	10.88	2.64	V		0.157	21.96		
		64-QAM	-25.10	11.85	10.88	2.64	V		0.102	20.09		
		256-QAM	-26.96	9.99	10.88	2.64	V		0.067	18.23		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2526.000	Sub6 41/ 60 MHz [30 kHz]	PI/2 BPSK	-19.68	16.95	10.52	2.54	H		0.311	24.93	1	82
		QPSK	-19.69	16.94	10.52	2.54	H		0.311	24.92		
		16-QAM	-20.53	16.10	10.52	2.54	H		0.256	24.08		
		64-QAM	-22.17	14.46	10.52	2.54	H		0.175	22.44		
		256-QAM	-24.16	12.47	10.52	2.54	H		0.111	20.45		
2592.990		PI/2 BPSK	-20.69	16.02	11.00	2.55	H	< 2.00	0.280	24.47	1	1
		QPSK	-20.95	15.76	11.00	2.55	H		0.264	24.21		
		16-QAM	-21.80	14.91	11.00	2.55	H		0.217	23.36		
		64-QAM	-23.33	13.38	11.00	2.55	H		0.152	21.83		
		256-QAM	-25.53	11.18	11.00	2.55	H		0.092	19.63		
2659.980		PI/2 BPSK	-21.96	15.05	10.90	2.67	V		0.213	23.28	1	82
		QPSK	-22.07	14.94	10.90	2.67	V		0.207	23.17		
		16-QAM	-23.31	13.70	10.90	2.67	V		0.156	21.93		
		64-QAM	-24.55	12.46	10.90	2.67	V		0.117	20.69		
		256-QAM	-26.46	10.55	10.90	2.67	V		0.076	18.78		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2531.010	Sub6 41/ 70 MHz [30 kHz]	PI/2 BPSK	-19.73	16.60	10.56	2.54	H		0.290	24.62	1	94
		QPSK	-19.75	16.58	10.56	2.54	H		0.288	24.60		
		16-QAM	-20.64	15.69	10.56	2.54	H		0.235	23.71		
		64-QAM	-22.35	13.98	10.56	2.54	H		0.159	22.00		
		256-QAM	-24.47	11.86	10.56	2.54	H		0.097	19.88		
2592.990		PI/2 BPSK	-20.94	15.77	11.00	2.55	H	< 2.00	0.264	24.22	1	1
		QPSK	-20.95	15.76	11.00	2.55	H		0.264	24.21		
		16-QAM	-21.95	14.76	11.00	2.55	H		0.209	23.21		
		64-QAM	-23.63	13.08	11.00	2.55	H		0.142	21.53		
		256-QAM	-25.76	10.95	11.00	2.55	H		0.087	19.40		
2655.000		PI/2 BPSK	-22.26	14.65	10.91	2.68	H		0.194	22.88	1	1
		QPSK	-22.27	14.64	10.91	2.68	H		0.194	22.87		
		16-QAM	-23.24	13.67	10.91	2.68	H		0.155	21.90		
		64-QAM	-24.90	12.01	10.91	2.68	H		0.106	20.24		
		256-QAM	-26.74	10.17	10.91	2.68	H		0.069	18.40		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2536.020	Sub6 41/ 80 MHz [30 kHz]	PI/2 BPSK	-19.75	16.71	10.59	2.54	H	< 2.00	0.299	24.76	1	108
		QPSK	-19.77	16.69	10.59	2.54	H		0.298	24.74		
		16-QAM	-20.61	15.85	10.59	2.54	H		0.246	23.90		
		64-QAM	-22.47	13.99	10.59	2.54	H		0.160	22.04		
		256-QAM	-24.47	11.99	10.59	2.54	H		0.101	20.04		
2592.990		PI/2 BPSK	-21.16	15.55	11.00	2.55	H		0.251	24.00	1	108
		QPSK	-21.31	15.40	11.00	2.55	H		0.243	23.85		
		16-QAM	-22.23	14.48	11.00	2.55	H		0.196	22.93		
		64-QAM	-23.78	12.93	11.00	2.55	H		0.137	21.38		
		256-QAM	-25.73	10.98	11.00	2.55	H		0.088	19.43		
2649.990		PI/2 BPSK	-22.03	14.76	10.93	2.69	H	0.200	23.00	1	1	
		QPSK	-22.32	14.47	10.93	2.69	H	0.187	22.71			
		16-QAM	-23.09	13.70	10.93	2.69	H	0.156	21.94			
		64-QAM	-24.73	12.06	10.93	2.69	H	0.107	20.30			
		256-QAM	-26.84	9.95	10.93	2.69	H	0.066	18.19			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2541.000	Sub6 41/ 90 MHz [30 kHz]	PI/2 BPSK	-19.83	16.75	10.62	2.53	H		0.305	24.84	1	122
		QPSK	-19.87	16.71	10.62	2.53	H		0.302	24.80		
		16-QAM	-20.84	15.74	10.62	2.53	H		0.242	23.83		
		64-QAM	-22.36	14.22	10.62	2.53	H		0.170	22.31		
		256-QAM	-24.53	12.05	10.62	2.53	H		0.103	20.14		
2592.990		PI/2 BPSK	-20.87	15.84	11.00	2.55	H	< 2.00	0.269	24.29	1	1
		QPSK	-21.08	15.63	11.00	2.55	H		0.256	24.08		
		16-QAM	-22.10	14.61	11.00	2.55	H		0.202	23.06		
		64-QAM	-23.63	13.08	11.00	2.55	H		0.142	21.53		
		256-QAM	-25.55	11.16	11.00	2.55	H		0.091	19.61		
2644.980		PI/2 BPSK	-21.81	15.30	10.95	2.68	H		0.228	23.57	1	1
		QPSK	-21.96	15.15	10.95	2.68	H		0.220	23.42		
		16-QAM	-22.65	14.46	10.95	2.68	H		0.188	22.73		
		64-QAM	-24.35	12.76	10.95	2.68	H		0.127	21.03		
		256-QAM	-26.15	10.96	10.95	2.68	H		0.084	19.23		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured	Substitute	Ant.	C.L	Pol	Limit	EIRP		RB	
			Level (dBm)	Level (dBm)	Gain (dBi)				W	W	dBm	Size
2546.010	Sub6 41/ 100 MHz [30 kHz]	PI/2 BPSK	-20.01	16.54	10.66	2.53	H		0.293	24.67	1	1
		QPSK	-20.02	16.53	10.66	2.53	H		0.292	24.66		
		16-QAM	-20.99	15.56	10.66	2.53	H		0.234	23.69		
		64-QAM	-22.75	13.80	10.66	2.53	H		0.156	21.93		
		256-QAM	-24.38	12.17	10.66	2.53	H		0.107	20.30		
2592.990		PI/2 BPSK	-21.07	15.64	11.00	2.55	H	< 2.00	0.256	24.09	1	1
		QPSK	-21.18	15.53	11.00	2.55	H		0.250	23.98		
		16-QAM	-22.18	14.53	11.00	2.55	H		0.199	22.98		
		64-QAM	-23.59	13.12	11.00	2.55	H		0.144	21.57		
		256-QAM	-25.74	10.97	11.00	2.55	H		0.088	19.42		
2640.000		PI/2 BPSK	-21.23	16.21	10.96	2.68	H		0.281	24.49	1	1
		QPSK	-21.46	15.98	10.96	2.68	H		0.267	24.26		
		16-QAM	-22.21	15.23	10.96	2.68	H		0.224	23.51		
		64-QAM	-23.64	13.80	10.96	2.68	H		0.161	22.08		
		256-QAM	-25.73	11.71	10.96	2.68	H		0.100	19.99		

8.2 RADIATED SPURIOUS EMISSIONS

NR Band:	<u>n41</u>
Bandwidth:	<u>10 MHz</u>
Modulation:	<u>PI/2 BPSK</u>
Distance:	<u>1 meter</u>
SCS:	<u>30 kHz</u>

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
500202 (2501.010)	5 002.02	-59.53	11.22	-61.24	3.71	H	-53.73	-25.00	1	12
	7 503.03	-61.71	11.54	-54.28	4.60	H	-47.34	-25.00		
	10 004.04	-55.69	11.47	-46.29	5.47	V	-40.29	-25.00		
518598 (2592.990)	5 185.98	-54.77	11.61	-55.94	3.80	H	-48.13	-25.00	1	1
	7 778.97	-64.53	11.26	-57.46	4.70	V	-50.90	-25.00		
	10 371.96	-56.01	11.68	-44.92	5.55	V	-38.79	-25.00		
537000 (2685.000)	5 370.00	-53.52	11.96	-55.15	3.92	H	-47.11	-25.00	1	12
	8 055.00	-62.58	11.24	-55.30	4.81	H	-48.87	-25.00		
	10 740.00	-48.85	11.55	-36.83	5.64	H	-30.92	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 15 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
500700 (2503.500)	5 007.00	-62.84	11.20	-64.27	3.71	H	-56.78	-25.00	1	36
	7 510.50	-64.11	11.55	-56.57	4.60	H	-49.62	-25.00		
	10 014.00	-58.11	11.46	-48.72	5.47	H	-42.73	-25.00		
518598 (2592.990)	5 185.98	-62.63	11.61	-63.80	3.80	H	-55.99	-25.00	1	1
	7 778.97	-62.39	11.26	-55.32	4.70	H	-48.76	-25.00		
	10 371.96	-56.91	11.68	-45.82	5.55	V	-39.69	-25.00		
536496 (2682.480)	5 364.96	-52.55	11.95	-54.07	3.91	V	-46.03	-25.00	1	1
	8 047.44	-62.75	11.23	-55.53	4.81	H	-49.11	-25.00		
	10 729.92	-50.16	11.56	-38.09	5.65	V	-32.18	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 20 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
501204 (2506.020)	5 012.04	-58.70	11.18	-59.84	3.72	V	-52.38	-25.00	1	49
	7 518.06	-63.91	11.56	-56.27	4.61	H	-49.32	-25.00		
	10 024.08	-55.83	11.46	-46.48	5.47	H	-40.49	-25.00		
518598 (2592.990)	5 185.98	-52.59	11.61	-53.76	3.80	V	-45.95	-25.00	1	1
	7 778.97	-64.40	11.26	-57.33	4.70	H	-50.77	-25.00		
	10 371.96	-56.18	11.68	-45.09	5.55	V	-38.96	-25.00		
535998 (2679.990)	5 359.98	-54.04	11.95	-55.47	3.90	V	-47.42	-25.00	1	1
	8 039.97	-64.22	11.22	-56.91	4.80	H	-50.49	-25.00		
	10 719.96	-51.53	11.56	-39.88	5.64	H	-33.96	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 30 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
502200 (2511.000)	5 022.00	-58.09	11.17	-58.79	3.69	V	-51.31	-25.00	1	76
	7 533.00	-64.47	11.57	-56.87	4.61	H	-49.91	-25.00		
	10 044.00	-56.30	11.44	-46.98	5.48	H	-41.02	-25.00		
518598 (2592.990)	5 185.98	-55.51	11.61	-56.68	3.80	V	-48.87	-25.00	1	1
	7 778.97	-64.35	11.26	-57.28	4.70	H	-50.72	-25.00		
	10 371.96	-55.64	11.68	-44.55	5.55	V	-38.42	-25.00		
534996 (2674.980)	5 349.96	-51.14	11.94	-52.83	3.85	H	-44.74	-25.00	1	39
	8 024.94	-61.62	11.20	-54.37	4.79	H	-47.96	-25.00		
	10 699.92	-46.37	11.57	-34.37	5.67	H	-28.47	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 40 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
503202 (2516.010)	5 032.02	-57.43	11.19	-58.27	3.67	H	-50.75	-25.00	1	104
	7 548.03	-65.53	11.59	-58.16	4.63	H	-51.20	-25.00		
	10 064.04	-56.66	11.42	-47.44	5.47	H	-41.49	-25.00		
518598 (2592.990)	5 185.98	-52.34	11.61	-53.51	3.80	H	-45.70	-25.00	1	53
	7 778.97	-64.62	11.26	-57.55	4.70	H	-50.99	-25.00		
	10 371.96	-55.72	11.68	-44.63	5.55	H	-38.50	-25.00		
534000 (2670.000)	5 340.00	-52.12	11.93	-54.10	3.80	V	-45.97	-25.00	1	1
	8 010.00	-64.89	11.17	-57.57	4.77	H	-51.17	-25.00		
	10 680.00	-47.45	11.57	-34.87	5.71	V	-29.01	-25.00		

☐ NR Band: n41
☐ Bandwidth: 50 MHz
☐ Modulation: PI/2 BPSK
☐ Distance: 1 meter
☐ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
504204 (2521.020)	5 042.04	-59.30	11.20	-60.34	3.68	H	-52.82	-25.00	1	66
	7 563.06	-65.86	11.60	-58.33	4.64	H	-51.37	-25.00		
	10 084.08	-57.55	11.40	-48.32	5.46	H	-42.38	-25.00		
518598 (2592.990)	5 185.98	-57.93	11.61	-59.10	3.80	V	-51.29	-25.00	1	1
	7 778.97	-63.86	11.26	-56.79	4.70	H	-50.23	-25.00		
	10 371.96	-55.42	11.68	-44.33	5.55	H	-38.20	-25.00		
532998 (2664.990)	5 329.98	-52.49	11.92	-54.22	3.77	H	-46.07	-25.00	1	66
	7 994.97	-60.49	11.13	-52.94	4.77	H	-46.58	-25.00		
	10 659.96	-48.80	11.58	-36.40	5.67	V	-30.49	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 60 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
505200 (2526.000)	5 052.00	-60.11	11.22	-61.58	3.73	V	-54.09	-25.00	1	82
	7 578.00	-65.48	11.61	-57.82	4.65	V	-50.86	-25.00		
	10 104.00	-56.42	11.39	-46.86	5.46	V	-40.93	-25.00		
518598 (2592.990)	5 185.98	-57.86	11.61	-59.03	3.80	H	-51.22	-25.00	1	1
	7 778.97	-64.74	11.26	-57.67	4.70	V	-51.11	-25.00		
	10 371.96	-54.88	11.68	-43.79	5.55	V	-37.66	-25.00		
531996 (2659.980)	5 319.96	-52.92	11.91	-54.47	3.79	H	-46.35	-25.00	1	82
	7 979.94	-64.40	11.10	-56.70	4.79	V	-50.39	-25.00		
	10 639.92	-48.24	11.58	-35.86	5.61	V	-29.89	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 70 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
506202 (2531.010)	5 062.02	-60.27	11.24	-61.64	3.78	H	-54.18	-25.00	1	94
	7 593.03	-64.49	11.62	-57.21	4.64	H	-50.23	-25.00		
	10 124.04	-57.93	11.37	-48.24	5.47	H	-42.34	-25.00		
518598 (2592.990)	5 185.98	-58.70	11.61	-59.87	3.80	H	-52.06	-25.00	1	1
	7 778.97	-64.32	11.26	-57.25	4.70	H	-50.69	-25.00		
	10 371.96	-56.05	11.68	-44.96	5.55	H	-38.83	-25.00		
531000 (2655.000)	5 310.00	-54.89	11.91	-56.00	3.82	V	-47.91	-25.00	1	1
	7 965.00	-63.08	11.07	-55.26	4.80	H	-48.99	-25.00		
	10 620.00	-49.91	11.58	-37.87	5.65	H	-31.94	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 80 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
507204 (2536.020)	5 072.04	-59.15	11.25	-60.31	3.80	H	-52.86	-25.00	1	108
	7 608.06	-62.67	11.60	-55.79	4.64	H	-48.83	-25.00		
	10 144.08	-55.93	11.36	-46.32	5.48	H	-40.44	-25.00		
518598 (2592.990)	5 185.98	-54.28	11.61	-55.45	3.80	H	-47.64	-25.00	1	108
	7 778.97	-64.07	11.26	-57.00	4.70	H	-50.44	-25.00		
	10 371.96	-54.10	11.68	-43.01	5.55	V	-36.88	-25.00		
529998 (2649.990)	5 299.98	-55.28	11.90	-56.78	3.83	H	-48.71	-25.00	1	1
	7 949.97	-62.37	11.03	-54.72	4.78	H	-48.47	-25.00		
	10 599.96	-49.44	11.58	-38.15	5.67	V	-32.24	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 90 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
508200 (2541.000)	5 082.00	-58.29	11.27	-59.09	3.81	H	-51.63	-25.00	1	122
	7 623.00	-63.52	11.57	-56.58	4.65	H	-49.66	-25.00		
	10 164.00	-55.44	11.34	-45.58	5.50	V	-39.74	-25.00		
518598 (2592.990)	5 185.98	-62.23	11.61	-63.40	3.80	H	-55.59	-25.00	1	1
	7 778.97	-64.63	11.26	-57.56	4.70	H	-51.00	-25.00		
	10 371.96	-56.40	11.68	-45.31	5.55	H	-39.18	-25.00		
528996 (2644.980)	5 289.96	-51.57	11.89	-53.15	3.83	H	-45.09	-25.00	1	1
	7 934.94	-63.62	11.01	-56.24	4.77	V	-50.00	-25.00		
	10 579.92	-51.91	11.62	-40.76	5.65	V	-34.79	-25.00		

■ NR Band: n41
 ■ Bandwidth: 100 MHz
 ■ Modulation: PI/2 BPSK
 ■ Distance: 1 meter
 ■ SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
509202 (2546.010)	5 092.02	-58.68	11.29	-59.56	3.78	V	-52.05	-25.00	1	1
	7 638.03	-64.22	11.54	-57.25	4.68	H	-50.39	-25.00		
	10 184.04	-57.07	11.35	-47.03	5.52	V	-41.20	-25.00		
518598 (2592.990)	5 185.98	-61.77	11.61	-62.94	3.80	H	-55.13	-25.00	1	1
	7 778.97	-65.06	11.26	-57.99	4.70	H	-51.43	-25.00		
	10 371.96	-55.46	11.68	-44.37	5.55	H	-38.24	-25.00		
528000 (2640.000)	5 280.00	-54.10	11.88	-56.12	3.80	H	-48.04	-25.00	1	1
	7 920.00	-63.68	11.02	-56.26	4.77	H	-50.01	-25.00		
	10 560.00	-52.56	11.65	-41.62	5.63	V	-35.60	-25.00		

8.3 PEAK-TO-AVERAGE RATIO

Band / BandWidth	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41 / 10 MHz	2592.990	BPSK	24	0	4.43
		QPSK			5.61
		16-QAM			6.22
		64-QAM			6.45
		256-QAM			6.62
Sub6 n41 / 15 MHz		BPSK	36		5.11
		QPSK			5.56
		16-QAM			6.23
		64-QAM			6.40
		256-QAM			6.53
Sub6 n41 / 20 MHz		BPSK	50		5.41
		QPSK			5.70
		16-QAM			6.21
		64-QAM			6.50
		256-QAM			6.59
Sub6 n41 / 30 MHz		BPSK	75		4.61
		QPSK			5.64
		16-QAM			6.28
		64-QAM			6.48
		256-QAM			6.68
Sub6 n41 / 40 MHz		BPSK	100		5.86
		QPSK			6.10
		16-QAM			6.44
		64-QAM			6.60
		256-QAM			6.77

Sub6 n41 / 50 MHz	2592.990	BPSK	128	0	4.40
		QPSK			5.61
		16-QAM			6.26
		64-QAM			6.46
		256-QAM			6.64
Sub6 n41 / 60 MHz		BPSK	162		4.59
		QPSK			5.59
		16-QAM			6.32
		64-QAM			6.46
		256-QAM			6.56
Sub6 n41 / 70 MHz		BPSK	180		4.56
		QPSK			5.59
		16-QAM			6.31
		64-QAM			6.49
		256-QAM			6.56
Sub6 n41 / 80 MHz		BPSK	216		4.70
		QPSK			5.60
		16-QAM			6.31
		64-QAM			6.44
		256-QAM			6.64
Sub6 n41 / 90 MHz		BPSK	243		4.74
		QPSK			5.59
		16-QAM			6.27
		64-QAM			6.53
		256-QAM			6.52
Sub6 n41 / 100 MHz		BPSK	270		5.00
		QPSK			5.58
		16-QAM			6.29
		64-QAM			6.44
		256-QAM			6.60

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 70 ~ 124.

8.4 OCCUPIED BANDWIDTH

Band / BandWidth	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41 / 10 MHz	2592.990	BPSK	24	0	8.7166
		QPSK			8.7064
		16-QAM			8.6825
		64-QAM			8.7228
		256-QAM			8.6975
Sub6 n41 / 15 MHz		BPSK	36		12.980
		QPSK			12.971
		16-QAM			12.963
		64-QAM			12.953
		256-QAM			12.927
Sub6 n41 / 20 MHz		BPSK	50		18.004
		QPSK			18.007
		16-QAM			18.507
		64-QAM			18.002
		256-QAM			17.928
Sub6 n41 / 30 MHz		BPSK	75		26.989
		QPSK			26.994
		16-QAM			26.951
		64-QAM			26.910
		256-QAM			26.902
Sub6 n41 / 40 MHz		BPSK	100		35.962
		QPSK			35.941
		16-QAM			35.880
		64-QAM			35.988
		256-QAM			35.964

Sub6 n41 / 50 MHz	2592.990	BPSK	128	0	45.979
		QPSK			45.939
		16-QAM			45.942
		64-QAM			46.097
		256-QAM			45.892
Sub6 n41 / 60 MHz		BPSK	162		58.260
		QPSK			58.203
		16-QAM			58.159
		64-QAM			58.145
		256-QAM			58.212
Sub6 n41 / 70 MHz		BPSK	180		64.707
		QPSK			64.749
		16-QAM			64.603
		64-QAM			64.840
		256-QAM			64.391
Sub6 n41 / 80 MHz		BPSK	216		77.504
		QPSK			77.471
		16-QAM			77.674
		64-QAM			77.527
		256-QAM			77.693
Sub6 n41 / 90 MHz		BPSK	243		87.283
		QPSK			87.193
		16-QAM			87.116
		64-QAM			87.251
		256-QAM			87.063
Sub6 n41 / 100 MHz		BPSK	270		96.873
		QPSK			96.700
		16-QAM			96.813
		64-QAM			96.853
		256-QAM			96.959

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 125 ~ 179.

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)
Sub 6 n41 / 10	2501.010	8.9133	30.815	-62.277	-31.462	-25.00
	2592.990	6.0419	30.815	-63.009	-32.194	
	2685.000	4.9552	30.200	-63.497	-33.297	
Sub 6 n41 / 15	2503.500	6.0120	30.815	-62.441	-31.626	
	2592.990	4.0379	30.200	-62.316	-32.116	
	2682.480	4.9552	30.200	-62.173	-31.973	
Sub 6 n41 / 20	2506.020	6.0220	30.815	-62.205	-31.390	
	2592.990	9.7009	30.815	-62.605	-31.790	
	2679.990	3.8385	30.200	-62.829	-32.629	
Sub 6 n41 / 30	2511.000	4.0679	30.200	-62.101	-31.901	
	2592.990	4.5763	30.200	-63.236	-33.036	
	2674.980	8.0160	30.815	-62.864	-32.049	
Sub 6 n41 / 40	2516.010	4.9652	30.200	-62.330	-32.130	
	2592.990	9.9601	30.815	-62.962	-32.147	
	2670.000	3.7787	30.200	-62.707	-32.507	
Sub 6 n41 / 50	2521.020	6.8993	30.815	-62.948	-32.133	
	2592.990	9.9900	30.815	-62.742	-31.927	
	2664.990	2.7219	30.200	-62.400	-32.200	
Sub 6 n41 / 60	2526.000	4.8854	30.200	-62.960	-32.760	
	2592.990	9.6909	30.815	-63.182	-32.367	
	2659.980	8.8136	30.815	-62.923	-32.108	
Sub 6 n41 / 70	2531.010	8.3051	30.815	-62.605	-31.790	
	2592.990	9.7707	30.815	-62.735	-31.920	
	2655.000	9.9003	30.815	-63.081	-32.266	
Sub 6 n41 / 80	2536.020	8.2553	30.815	-62.806	-31.991	
	2592.990	10.0000	30.815	-61.945	-31.130	
	2649.990	9.0828	30.815	-63.061	-32.246	
Sub 6 n41 / 90	2541.000	9.3719	30.815	-63.187	-32.372	
	2592.990	9.1924	30.815	-63.343	-32.528	
	2644.980	2.7219	30.200	-60.094	-29.894	
Sub 6 n41 / 100	2546.010	9.1625	30.815	-63.039	-32.224	
	2592.990	9.6610	30.815	-63.614	-32.799	
	2640.000	5.2742	30.815	-63.292	-32.477	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 180 ~ 245.

2. Factor(dB)

- Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter

- Result(dBm) = Reading + Factor

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 CHANNEL EDGE

BW (MHz)	Frequency (MHz)	Mod	RB (Size/ Offset)	2 495 MHz ~ 2 496 MHz	C.E ~ (C.E +1MHz)	2 490.5 MHz ~ 2 495 MHz	(C.E + 1 MHz) ~ (C.E + 5 MHz)	Below 2 490.5 MHz	(C.E + 5 MHz) ~ (C.E + X MHz)	Above (C.E + X MHz)
				Lower	Upper	Lower	Upper	Lower	Upper	Upper
10	2501.010	BPSK	Full RB	-22.85	-20.94	-26.14	-25.06	-35.33	-33.38	-37.94
15	2503.500	BPSK	Full RB	-22.63	-30.94	-28.19	-30.93	-32.95	-32.29	-37.02
20	2506.020	BPSK	Full RB	-24.05	-27.39	-30.87	-32.02	-35.87	-34.02	-41.08
30	2511.000	BPSK	Full RB	-25.54	-34.76	-33.41	-33.24	-35.05	-32.65	-35.95
40	2516.010	BPSK	Full RB	-25.33	-33.89	-34.62	-33.94	-38.14	-35.11	-41.12
50	2521.020	BPSK	Full RB	-22.53	-32.79	-29.76	-33.91	-38.41	-35.02	-37.74
60	2526.000	BPSK	Full RB	-17.05	-17.38	-25.70	-24.60	-34.54	-32.43	-36.04
70	2531.010	BPSK	Full RB	-22.33	-32.02	-27.63	-33.31	-36.84	-34.32	-40.19
80	2536.020	BPSK	Full RB	-22.39	-23.99	-27.56	-27.95	-35.74	-33.04	-42.63
90	2541.000	BPSK	Full RB	-20.94	-25.79	-27.57	-29.18	-34.71	-34.32	-44.90
100	2546.010	BPSK	Full RB	-20.34	-27.05	-28.40	-29.95	-35.36	-34.39	-46.48
Limit (dBm)				-13.0	-10.0	-13.0	-10.0	-25.0	-13.0	-25.0

Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	C.E ~ (C.E $\pm$ 1 MHz)		(C.E $\pm$ 1 MHz) ~ (C.E $\pm$ 5 MHz)	
					Lower	Upper	Lower	Upper
10 MHz	2592.990	BPSK	Full RB	0	-21.96	-20.47	-25.93	-25.19
	2685.000	BPSK	Full RB	0	-22.17	-23.40	-25.81	-27.40
15 MHz	2592.990	BPSK	Full RB	0	-22.34	-32.09	-28.15	-32.67
	2682.480	BPSK	Full RB	0	-20.98	-33.53	-26.82	-34.58
20 MHz	2592.990	BPSK	Full RB	0	-23.55	-28.05	-29.37	-32.12
	2679.990	BPSK	Full RB	0	-23.01	-28.71	-29.68	-34.06
30 MHz	2592.990	BPSK	Full RB	0	-24.42	-35.50	-32.39	-35.04
	2674.980	BPSK	Full RB	0	-24.47	-36.56	-31.01	-31.11
40 MHz	2592.990	BPSK	Full RB	0	-24.00	-34.47	-31.80	-33.28
	2670.000	BPSK	Full RB	0	-22.83	-37.13	-31.74	-36.32
50 MHz	2592.990	BPSK	Full RB	0	-22.68	-31.93	-29.39	-33.65
	2664.990	BPSK	Full RB	0	-20.86	-33.40	-27.77	-35.46
60 MHz	2592.990	BPSK	Full RB	0	-16.03	-17.87	-25.15	-25.22
	2659.980	BPSK	Full RB	0	-15.00	-18.75	-23.99	-26.17
70 MHz	2592.990	BPSK	Full RB	0	-20.46	-32.01	-25.90	-33.06
	2655.000	BPSK	Full RB	0	-19.40	-33.02	-24.92	-34.80
80 MHz	2592.990	BPSK	Full RB	0	-20.74	-24.97	-26.95	-28.69
	2649.990	BPSK	Full RB	0	-18.95	-25.71	-24.70	-29.25
90 MHz	2592.990	BPSK	Full RB	0	-19.58	-25.35	-26.36	-28.86
	2644.980	BPSK	Full RB	0	-18.26	-26.49	-24.97	-30.16
100 MHz	2592.990	BPSK	Full RB	0	-19.10	-28.45	-27.19	-31.15
	2640.000	BPSK	Full RB	0	-18.03	-29.19	-24.19	-31.26
Limit (dBm)					-10.0		-10.0	

Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	(C.E $\pm$ 5 MHz) ~ (C.E $\pm$ X MHz)		Above (C.E $\pm$ X MHz)	
					Lower	Upper	Lower	Upper
10 MHz	2592.990	BPSK	Full RB	0	-34.91	-35.19	-38.90	-38.82
	2685.000	BPSK	Full RB	0	-33.04	-34.69	-38.04	-40.10
15 MHz	2592.990	BPSK	Full RB	0	-31.87	-33.56	-37.60	-37.76
	2682.480	BPSK	Full RB	0	-33.23	-34.76	-39.00	-42.79
20 MHz	2592.990	BPSK	Full RB	0	-32.90	-33.58	-40.06	-39.34
	2679.990	BPSK	Full RB	0	-33.96	-34.88	-40.86	-43.39
30 MHz	2592.990	BPSK	Full RB	0	-34.66	-35.14	-39.50	-40.52
	2674.980	BPSK	Full RB	0	-30.79	-33.26	-36.26	-40.49
40 MHz	2592.990	BPSK	Full RB	0	-32.40	-33.30	-38.86	-40.72
	2670.000	BPSK	Full RB	0	-33.94	-35.17	-42.08	-47.86
50 MHz	2592.990	BPSK	Full RB	0	-35.39	-35.43	-40.06	-41.46
	2664.990	BPSK	Full RB	0	-34.30	-35.57	-38.91	-48.49
60 MHz	2592.990	BPSK	Full RB	0	-34.80	-33.71	-40.70	-41.90
	2659.980	BPSK	Full RB	0	-31.59	-30.18	-34.74	-53.42
70 MHz	2592.990	BPSK	Full RB	0	-34.48	-34.30	-42.64	-43.49
	2655.000	BPSK	Full RB	0	-33.75	-35.86	-40.42	-55.08
80 MHz	2592.990	BPSK	Full RB	0	-34.19	-33.25	-52.15	-44.53
	2649.990	BPSK	Full RB	0	-33.29	-33.36	-41.16	-54.85
90 MHz	2592.990	BPSK	Full RB	0	-34.23	-32.29	-55.19	-50.69
	2644.980	BPSK	Full RB	0	-33.09	-36.16	-42.91	-54.91
100 MHz	2592.990	BPSK	Full RB	0	-34.14	-32.67	-55.11	-51.58
	2640.000	BPSK	Full RB	0	-34.26	-35.57	-45.81	-54.95
Limit (dBm)					-13.0		-25.0	

Note:

1. C.E = Channel Edge
2. X = X is the greater of 6 MHz or the actual emission bandwidth
3. Duty Cycle factor already applied on the factor.
 - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
 - Result(dBm) = Reading + Factor
 - Duty Cycle Factor(dB) = 6.99
4. Plots of the EUT's Channel Edge are shown Page 246 ~ 322. (1RB & Full RB)

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

BandWidth:	10 MHz
Voltage(100 %):	4.200 VDC
Batt. Endpoint:	3.300 VDC
LIMIT:	Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2501.010	100 %	+20(Ref)	2501 009 993	0.0	0.000 000	0.000
	100 %	-30	2501 009 983	-9.8	0.000 000	-0.004
	100 %	-20	2501 009 984	-9.2	0.000 000	-0.004
	100 %	-10	2501 009 985	-8.5	0.000 000	-0.003
	100 %	0	2501 009 985	-8.2	0.000 000	-0.003
	100 %	+10	2501 009 985	-7.8	0.000 000	-0.003
	100 %	+30	2501 009 984	-9.5	0.000 000	-0.004
	100 %	+40	2501 009 984	-9.3	0.000 000	-0.004
	100 %	+50	2501 009 984	-8.6	0.000 000	-0.003
	Batt. Endpoint	+20	2501 009 985	-7.8	0.000 000	-0.003
2685.000	100 %	+20(Ref)	2684 999 990	0.0	0.000 000	0.000
	100 %	-30	2684 999 983	-7.5	0.000 000	-0.003
	100 %	-20	2684 999 983	-7.5	0.000 000	-0.003
	100 %	-10	2684 999 981	-9.7	0.000 000	-0.004
	100 %	0	2684 999 984	-6.0	0.000 000	-0.002
	100 %	+10	2684 999 981	-8.8	0.000 000	-0.003
	100 %	+30	2684 999 982	-7.9	0.000 000	-0.003
	100 %	+40	2684 999 983	-7.7	0.000 000	-0.003
	100 %	+50	2684 999 984	-5.8	0.000 000	-0.002
	Batt. Endpoint	+20	2684 999 984	-6.5	0.000 000	-0.002

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2503.500	100 %	+20(Ref)	2503 499 992	0.0	0.000 000	0.000
	100 %	-30	2503 499 985	-6.7	0.000 000	-0.003
	100 %	-20	2503 499 984	-8.1	0.000 000	-0.003
	100 %	-10	2503 499 984	-7.8	0.000 000	-0.003
	100 %	0	2503 499 985	-7.6	0.000 000	-0.003
	100 %	+10	2503 499 987	-5.6	0.000 000	-0.002
	100 %	+30	2503 499 986	-5.8	0.000 000	-0.002
	100 %	+40	2503 499 984	-7.9	0.000 000	-0.003
	100 %	+50	2503 499 983	-9.4	0.000 000	-0.004
	Batt. Endpoint	+20	2503 499 987	-5.1	0.000 000	-0.002
2682.480	100 %	+20(Ref)	2682 479 989	0.0	0.000 000	0.000
	100 %	-30	2682 479 982	-7.3	0.000 000	-0.003
	100 %	-20	2682 479 980	-8.7	0.000 000	-0.003
	100 %	-10	2682 479 983	-5.9	0.000 000	-0.002
	100 %	0	2682 479 981	-7.7	0.000 000	-0.003
	100 %	+10	2682 479 983	-5.6	0.000 000	-0.002
	100 %	+30	2682 479 983	-6.5	0.000 000	-0.002
	100 %	+40	2682 479 982	-7.4	0.000 000	-0.003
	100 %	+50	2682 479 982	-7.2	0.000 000	-0.003
	Batt. Endpoint	+20	2682 479 980	-8.9	0.000 000	-0.003

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2506.020	100 %	+20(Ref)	2506 019 991	0.0	0.000 000	0.000
	100 %	-30	2506 019 985	-5.8	0.000 000	-0.002
	100 %	-20	2506 019 983	-7.4	0.000 000	-0.003
	100 %	-10	2506 019 983	-7.2	0.000 000	-0.003
	100 %	0	2506 019 982	-8.2	0.000 000	-0.003
	100 %	+10	2506 019 982	-8.8	0.000 000	-0.004
	100 %	+30	2506 019 983	-7.7	0.000 000	-0.003
	100 %	+40	2506 019 984	-7.0	0.000 000	-0.003
	100 %	+50	2506 019 984	-7.1	0.000 000	-0.003
	Batt. Endpoint	+20	2506 019 985	-5.6	0.000 000	-0.002
2679.990	100 %	+20(Ref)	2679 989 993	0.0	0.000 000	0.000
	100 %	-30	2679 989 985	-7.5	0.000 000	-0.003
	100 %	-20	2679 989 984	-8.9	0.000 000	-0.003
	100 %	-10	2679 989 986	-6.8	0.000 000	-0.003
	100 %	0	2679 989 984	-9.1	0.000 000	-0.003
	100 %	+10	2679 989 986	-6.4	0.000 000	-0.002
	100 %	+30	2679 989 986	-7.0	0.000 000	-0.003
	100 %	+40	2679 989 985	-7.4	0.000 000	-0.003
	100 %	+50	2679 989 983	-9.9	0.000 000	-0.004
	Batt. Endpoint	+20	2679 989 983	-9.7	0.000 000	-0.004

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2511.000	100 %	+20(Ref)	2510 999 989	0.0	0.000 000	0.000
	100 %	-30	2510 999 982	-7.7	0.000 000	-0.003
	100 %	-20	2510 999 981	-7.8	0.000 000	-0.003
	100 %	-10	2510 999 981	-7.8	0.000 000	-0.003
	100 %	0	2510 999 981	-8.3	0.000 000	-0.003
	100 %	+10	2510 999 981	-8.4	0.000 000	-0.003
	100 %	+30	2510 999 979	-9.9	0.000 000	-0.004
	100 %	+40	2510 999 981	-7.9	0.000 000	-0.003
	100 %	+50	2510 999 979	-10.7	0.000 000	-0.004
	Batt. Endpoint	+20	2510 999 982	-6.8	0.000 000	-0.003
2674.980	100 %	+20(Ref)	2674 979 994	0.0	0.000 000	0.000
	100 %	-30	2674 979 985	-9.0	0.000 000	-0.003
	100 %	-20	2674 979 986	-8.1	0.000 000	-0.003
	100 %	-10	2674 979 988	-5.9	0.000 000	-0.002
	100 %	0	2674 979 988	-6.5	0.000 000	-0.002
	100 %	+10	2674 979 988	-6.4	0.000 000	-0.002
	100 %	+30	2674 979 988	-6.5	0.000 000	-0.002
	100 %	+40	2674 979 985	-9.7	0.000 000	-0.004
	100 %	+50	2674 979 988	-6.7	0.000 000	-0.003
	Batt. Endpoint	+20	2674 979 985	-9.3	0.000 000	-0.003

☐ BandWidth: 40 MHz
☐ Voltage(100 %): 4.200 VDC
☐ Batt. Endpoint: 3.300 VDC
☐ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2516.010	100 %	+20(Ref)	2516 009 987	0.0	0.000 000	0.000
	100 %	-30	2516 009 976	-10.7	0.000 000	-0.004
	100 %	-20	2516 009 977	-10.1	0.000 000	-0.004
	100 %	-10	2516 009 978	-9.3	0.000 000	-0.004
	100 %	0	2516 009 975	-11.7	0.000 000	-0.005
	100 %	+10	2516 009 978	-9.2	0.000 000	-0.004
	100 %	+30	2516 009 977	-9.9	0.000 000	-0.004
	100 %	+40	2516 009 978	-9.1	0.000 000	-0.004
	100 %	+50	2516 009 978	-9.3	0.000 000	-0.004
	Batt. Endpoint	+20	2516 009 977	-9.6	0.000 000	-0.004
2670.000	100 %	+20(Ref)	2669 999 994	0.0	0.000 000	0.000
	100 %	-30	2669 999 986	-8.2	0.000 000	-0.003
	100 %	-20	2669 999 987	-6.5	0.000 000	-0.002
	100 %	-10	2669 999 987	-7.1	0.000 000	-0.003
	100 %	0	2669 999 987	-7.3	0.000 000	-0.003
	100 %	+10	2669 999 985	-8.4	0.000 000	-0.003
	100 %	+30	2669 999 986	-7.8	0.000 000	-0.003
	100 %	+40	2669 999 987	-7.1	0.000 000	-0.003
	100 %	+50	2669 999 986	-8.0	0.000 000	-0.003
	Batt. Endpoint	+20	2669 999 988	-6.1	0.000 000	-0.002

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2521.020	100 %	+20(Ref)	2521 019 992	0.0	0.000 000	0.000
	100 %	-30	2521 019 985	-7.7	0.000 000	-0.003
	100 %	-20	2521 019 984	-7.9	0.000 000	-0.003
	100 %	-10	2521 019 982	-9.8	0.000 000	-0.004
	100 %	0	2521 019 984	-8.0	0.000 000	-0.003
	100 %	+10	2521 019 983	-9.1	0.000 000	-0.004
	100 %	+30	2521 019 983	-9.3	0.000 000	-0.004
	100 %	+40	2521 019 984	-8.4	0.000 000	-0.003
	100 %	+50	2521 019 984	-8.2	0.000 000	-0.003
	Batt. Endpoint	+20	2521 019 983	-9.5	0.000 000	-0.004
2664.990	100 %	+20(Ref)	2664 989 990	0.0	0.000 000	0.000
	100 %	-30	2664 989 982	-8.7	0.000 000	-0.003
	100 %	-20	2664 989 982	-8.7	0.000 000	-0.003
	100 %	-10	2664 989 982	-8.2	0.000 000	-0.003
	100 %	0	2664 989 979	-11.2	0.000 000	-0.004
	100 %	+10	2664 989 983	-7.4	0.000 000	-0.003
	100 %	+30	2664 989 981	-9.0	0.000 000	-0.003
	100 %	+40	2664 989 982	-8.3	0.000 000	-0.003
	100 %	+50	2664 989 983	-7.4	0.000 000	-0.003
	Batt. Endpoint	+20	2664 989 981	-9.8	0.000 000	-0.004

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2526.000	100 %	+20(Ref)	2525 999 999	0.0	0.000 000	0.000
	100 %	-30	2525 999 982	-17.5	-0.000 001	-0.007
	100 %	-20	2525 999 997	-2.2	0.000 000	-0.001
	100 %	-10	2525 999 993	-6.6	0.000 000	-0.003
	100 %	0	2525 999 998	-1.5	0.000 000	-0.001
	100 %	+10	2526 000 002	3.2	0.000 000	0.001
	100 %	+30	2525 999 999	-0.7	0.000 000	0.000
	100 %	+40	2525 999 991	-8.2	0.000 000	-0.003
	100 %	+50	2525 999 997	-1.8	0.000 000	-0.001
	Batt. Endpoint	+20	2525 999 997	-2.0	0.000 000	-0.001
2659.980	100 %	+20(Ref)	2659 979 992	0.0	0.000 000	0.000
	100 %	-30	2659 979 983	-9.8	0.000 000	-0.004
	100 %	-20	2659 979 987	-5.0	0.000 000	-0.002
	100 %	-10	2659 979 981	-11.4	0.000 000	-0.004
	100 %	0	2659 979 981	-11.0	0.000 000	-0.004
	100 %	+10	2659 979 987	-5.7	0.000 000	-0.002
	100 %	+30	2659 979 987	-5.2	0.000 000	-0.002
	100 %	+40	2659 979 985	-7.9	0.000 000	-0.003
	100 %	+50	2659 979 986	-5.9	0.000 000	-0.002
	Batt. Endpoint	+20	2659 979 979	-13.9	-0.000 001	-0.005

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2531.010	100 %	+20(Ref)	2531 009 934	0.0	0.000 000	0.000
	100 %	-30	2531 009 931	-2.2	0.000 000	-0.001
	100 %	-20	2531 009 933	-0.8	0.000 000	0.000
	100 %	-10	2531 009 922	-11.3	0.000 000	-0.004
	100 %	0	2531 009 923	-10.9	0.000 000	-0.004
	100 %	+10	2531 009 922	-12.0	0.000 000	-0.005
	100 %	+30	2531 009 925	-9.2	0.000 000	-0.004
	100 %	+40	2531 009 923	-10.5	0.000 000	-0.004
	100 %	+50	2531 009 922	-12.1	0.000 000	-0.005
	Batt. Endpoint	+20	2531 009 924	-9.5	0.000 000	-0.004
2655.000	100 %	+20(Ref)	2654 999 987	0.0	0.000 000	0.000
	100 %	-30	2654 999 978	-9.0	0.000 000	-0.003
	100 %	-20	2654 999 976	-11.0	0.000 000	-0.004
	100 %	-10	2654 999 976	-10.5	0.000 000	-0.004
	100 %	0	2654 999 977	-9.9	0.000 000	-0.004
	100 %	+10	2654 999 978	-9.2	0.000 000	-0.003
	100 %	+30	2654 999 978	-8.5	0.000 000	-0.003
	100 %	+40	2654 999 976	-10.7	0.000 000	-0.004
	100 %	+50	2654 999 976	-10.7	0.000 000	-0.004
	Batt. Endpoint	+20	2654 999 975	-11.7	0.000 000	-0.004

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2536.020	100 %	+20(Ref)	2536 019 990	0.0	0.000 000	0.000
	100 %	-30	2536 019 982	-8.1	0.000 000	-0.003
	100 %	-20	2536 019 977	-13.2	-0.000 001	-0.005
	100 %	-10	2536 019 992	1.9	0.000 000	0.001
	100 %	0	2536 019 974	-16.7	-0.000 001	-0.007
	100 %	+10	2536 019 986	-4.5	0.000 000	-0.002
	100 %	+30	2536 019 983	-7.3	0.000 000	-0.003
	100 %	+40	2536 019 968	-22.3	-0.000 001	-0.009
	100 %	+50	2536 019 980	-9.8	0.000 000	-0.004
	Batt. Endpoint	+20	2536 019 981	-9.6	0.000 000	-0.004
2649.990	100 %	+20(Ref)	2649 989 985	0.0	0.000 000	0.000
	100 %	-30	2649 989 974	-11.0	0.000 000	-0.004
	100 %	-20	2649 989 974	-11.0	0.000 000	-0.004
	100 %	-10	2649 989 974	-10.7	0.000 000	-0.004
	100 %	0	2649 989 987	2.6	0.000 000	0.001
	100 %	+10	2649 989 978	-7.0	0.000 000	-0.003
	100 %	+30	2649 989 975	-9.6	0.000 000	-0.004
	100 %	+40	2649 989 974	-10.4	0.000 000	-0.004
	100 %	+50	2649 989 974	-11.0	0.000 000	-0.004
	Batt. Endpoint	+20	2649 989 972	-12.4	0.000 000	-0.005

▣ BandWidth:	<u>90 MHz</u>
▣ Voltage(100 %):	<u>4.200 VDC</u>
▣ Batt. Endpoint:	<u>3.300 VDC</u>
▣ LIMIT:	<u>Emission must remain in band</u>

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2541.000	100 %	+20(Ref)	2540 999 982	0.0	0.000 000	0.000
	100 %	-30	2540 999 967	-14.9	-0.000 001	-0.006
	100 %	-20	2540 999 974	-8.3	0.000 000	-0.003
	100 %	-10	2540 999 974	-8.2	0.000 000	-0.003
	100 %	0	2540 999 917	-64.8	-0.000 003	-0.026
	100 %	+10	2540 999 974	-8.0	0.000 000	-0.003
	100 %	+30	2540 999 977	-4.9	0.000 000	-0.002
	100 %	+40	2540 999 969	-12.8	-0.000 001	-0.005
	100 %	+50	2540 999 969	-12.8	-0.000 001	-0.005
	Batt. Endpoint	+20	2540 999 968	-14.3	-0.000 001	-0.006
2644.980	100 %	+20(Ref)	2644 979 982	0.0	0.000 000	0.000
	100 %	-30	2644 979 975	-7.2	0.000 000	-0.003
	100 %	-20	2644 979 980	-2.6	0.000 000	-0.001
	100 %	-10	2644 979 973	-9.4	0.000 000	-0.004
	100 %	0	2644 979 973	-9.6	0.000 000	-0.004
	100 %	+10	2644 979 978	-4.0	0.000 000	-0.002
	100 %	+30	2644 979 974	-8.2	0.000 000	-0.003
	100 %	+40	2644 979 974	-8.2	0.000 000	-0.003
	100 %	+50	2644 979 974	-8.1	0.000 000	-0.003
	Batt. Endpoint	+20	2644 979 973	-9.4	0.000 000	-0.004

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 4.200 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2546.010	100 %	+20(Ref)	2546 009 992	0.0	0.000 000	0.000
	100 %	-30	2546 009 983	-8.4	0.000 000	-0.003
	100 %	-20	2546 009 985	-6.5	0.000 000	-0.003
	100 %	-10	2546 009 985	-7.3	0.000 000	-0.003
	100 %	0	2546 009 985	-7.3	0.000 000	-0.003
	100 %	+10	2546 009 985	-6.5	0.000 000	-0.003
	100 %	+30	2546 010 002	10.3	0.000 000	0.004
	100 %	+40	2546 009 982	-9.5	0.000 000	-0.004
	100 %	+50	2546 009 984	-7.9	0.000 000	-0.003
	Batt. Endpoint	+20	2546 009 985	-6.7	0.000 000	-0.003
2640.000	100 %	+20(Ref)	2639 999 989	0.0	0.000 000	0.000
	100 %	-30	2639 999 977	-12.7	0.000 000	-0.005
	100 %	-20	2639 999 978	-11.7	0.000 000	-0.004
	100 %	-10	2639 999 955	-34.3	-0.000 001	-0.013
	100 %	0	2639 999 980	-9.2	0.000 000	-0.003
	100 %	+10	2639 999 976	-13.9	-0.000 001	-0.005
	100 %	+30	2639 999 981	-8.9	0.000 000	-0.003
	100 %	+40	2639 999 980	-9.1	0.000 000	-0.003
	100 %	+50	2639 999 978	-11.0	0.000 000	-0.004
	Batt. Endpoint	+20	2639 999 980	-9.4	0.000 000	-0.004

9. TEST PLOTS

NR41_10 M_PAR_Mid_BPSK_FullIRB



NR41_10 M_PAR_Mid_QPSK_FullRB



NR41_10 M_PAR_Mid_16QAM_FullRB



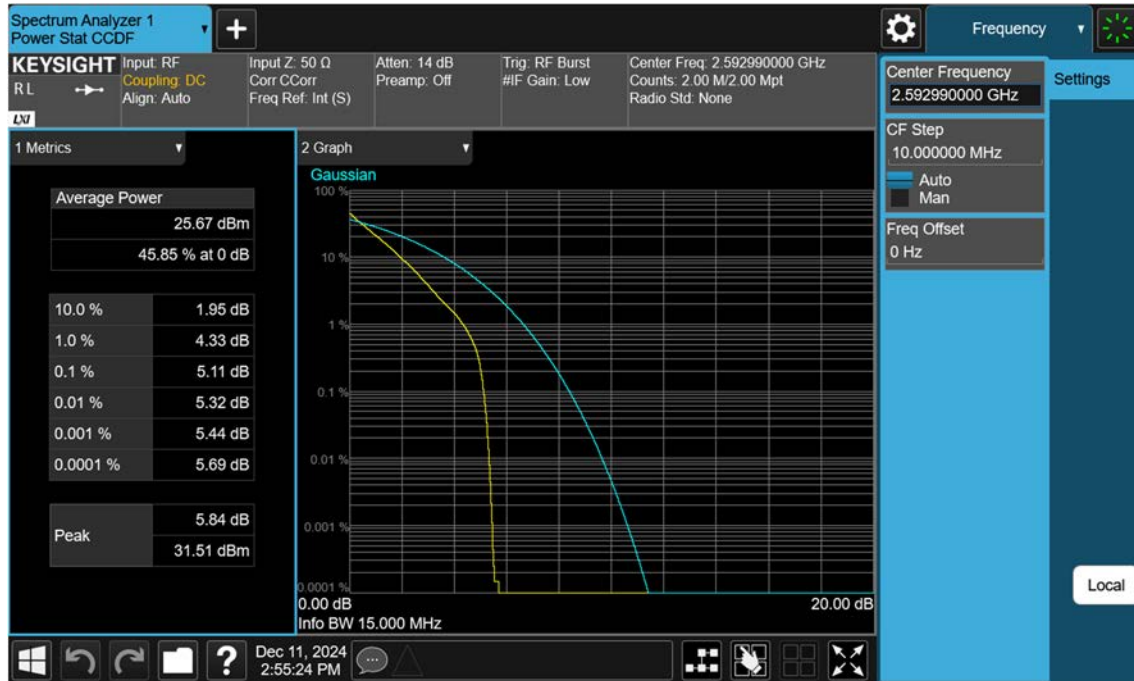
NR41_10 M_PAR_Mid_64QAM_FullRB



NR41_10 M_PAR_Mid_256QAM_FullRB



NR41_15 M_PAR_Mid_BPSK_FullIRB



NR41_15 M_PAR_Mid_QPSK_FullRB



NR41_15 M_PAR_Mid_16QAM_FullRB



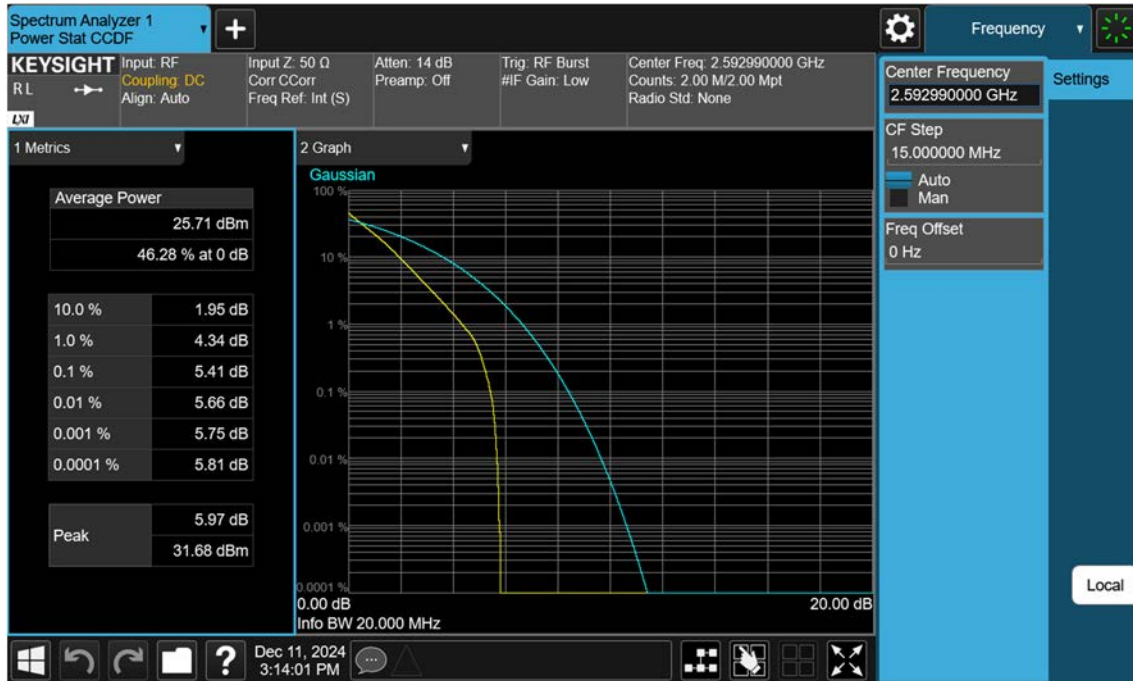
NR41_15 M_PAR_Mid_64QAM_FullRB



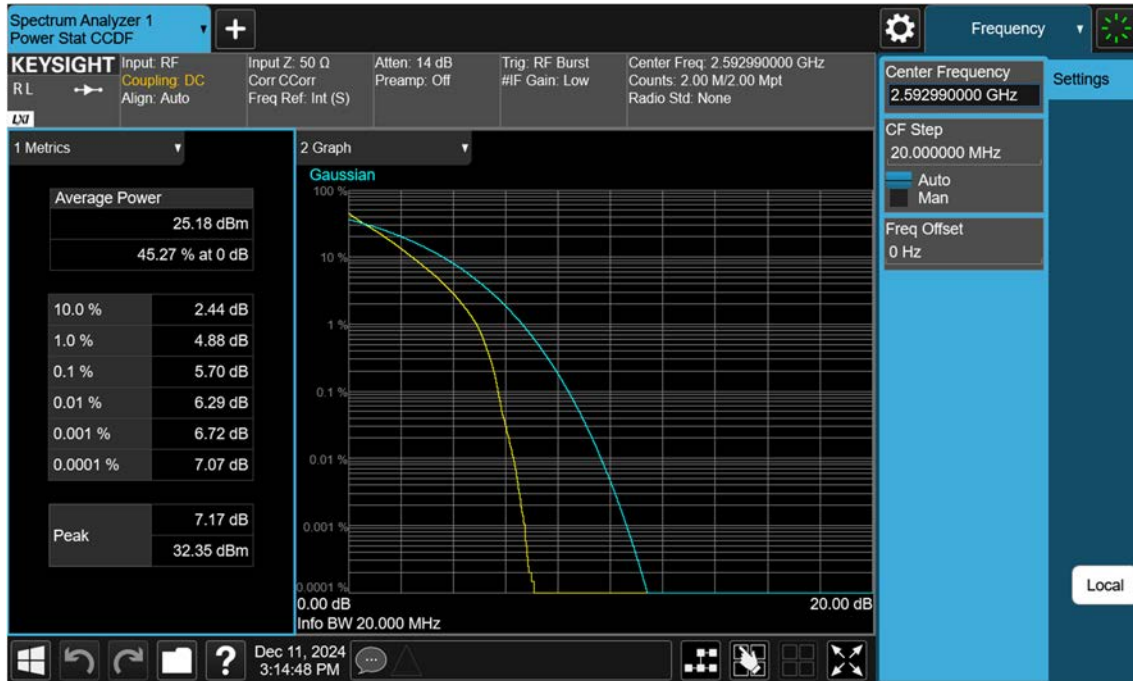
NR41_15 M_PAR_Mid_256QAM_FullRB



NR41_20 M_PAR_Mid_BPSK_FullRB



NR41_20 M_PAR_Mid_QPSK_FullRB



NR41_20 M_PAR_Mid_16QAM_FullRB



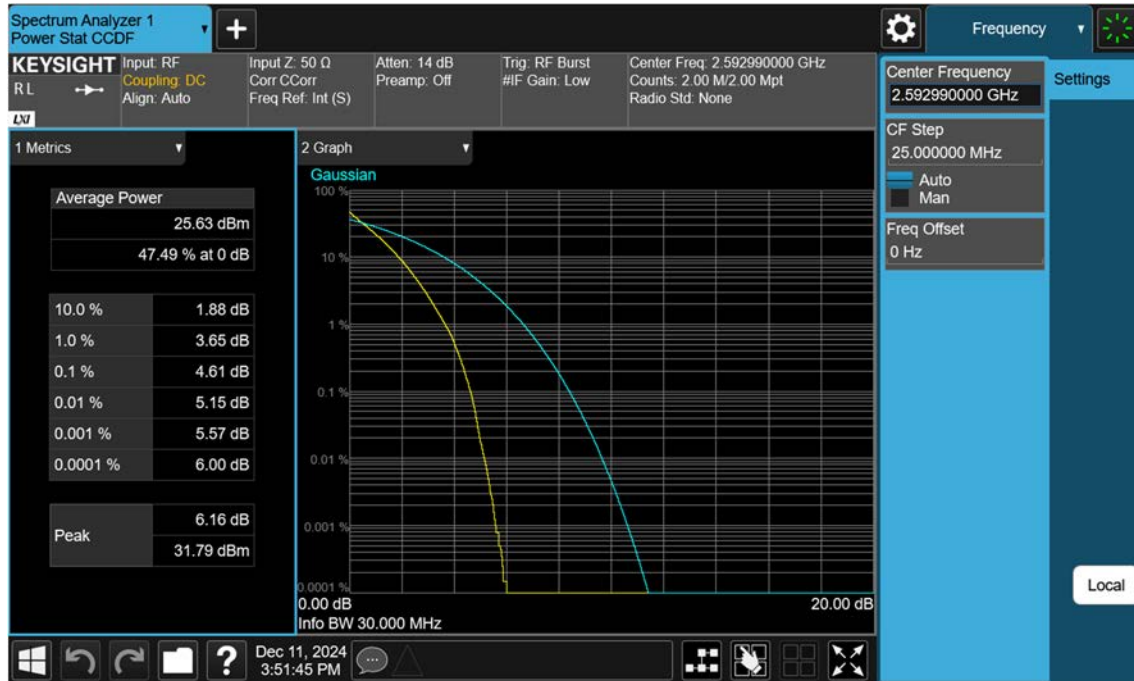
NR41_20 M_PAR_Mid_64QAM_FullRB



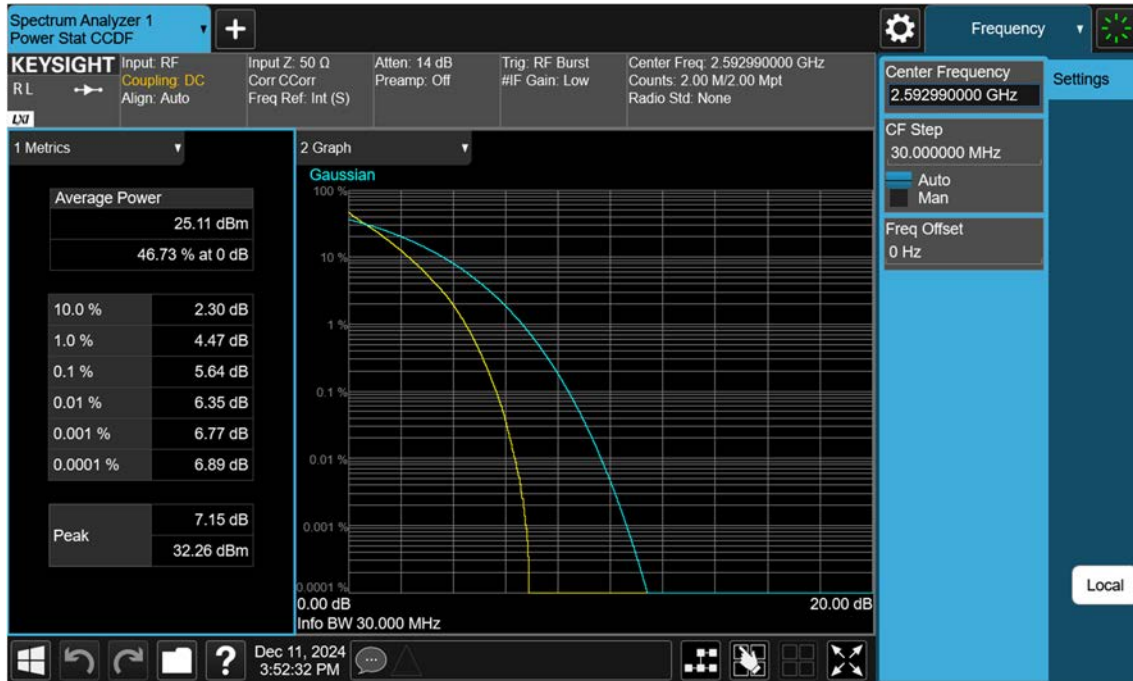
NR41_20 M_PAR_Mid_256QAM_FullRB



NR41_30 M_PAR_Mid_BPSK_FullIRB



NR41_30 M_PAR_Mid_QPSK_FullRB



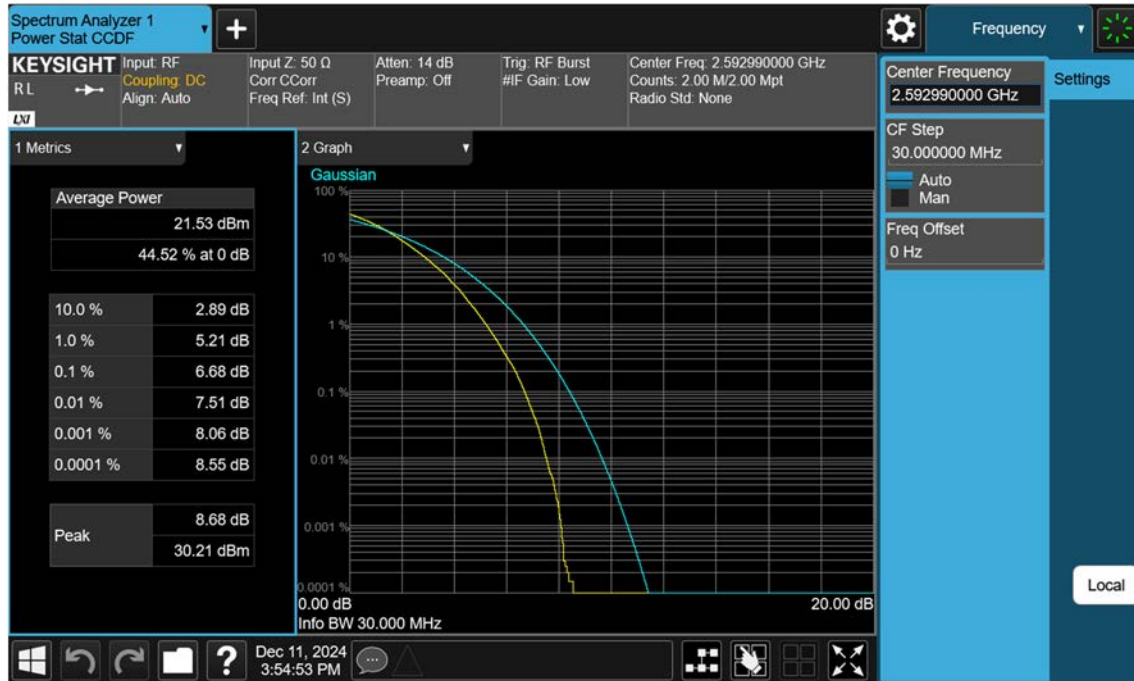
NR41_30 M_PAR_Mid_16QAM_FullRB



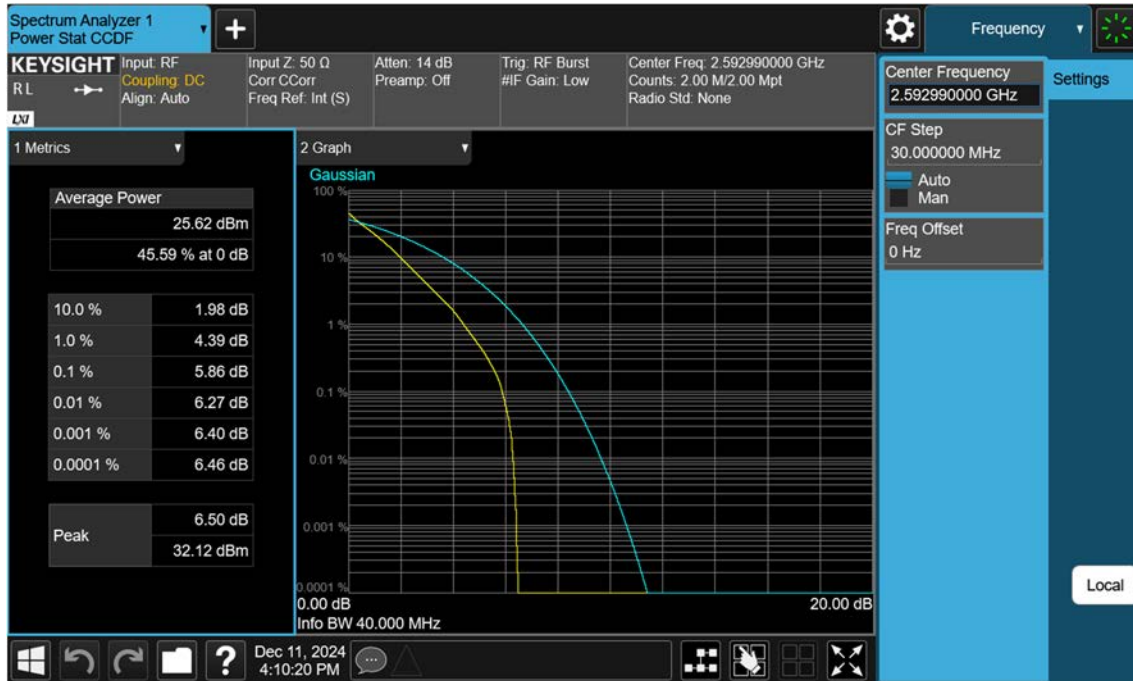
NR41_30 M_PAR_Mid_64QAM_FullRB



NR41_30 M_PAR_Mid_256QAM_FullRB



NR41_40 M_PAR_Mid_BPSK_FullIRB



NR41_40 M_PAR_Mid_QPSK_FullRB



NR41_40 M_PAR_Mid_16QAM_FullRB



NR41_40 M_PAR_Mid_64QAM_FullRB



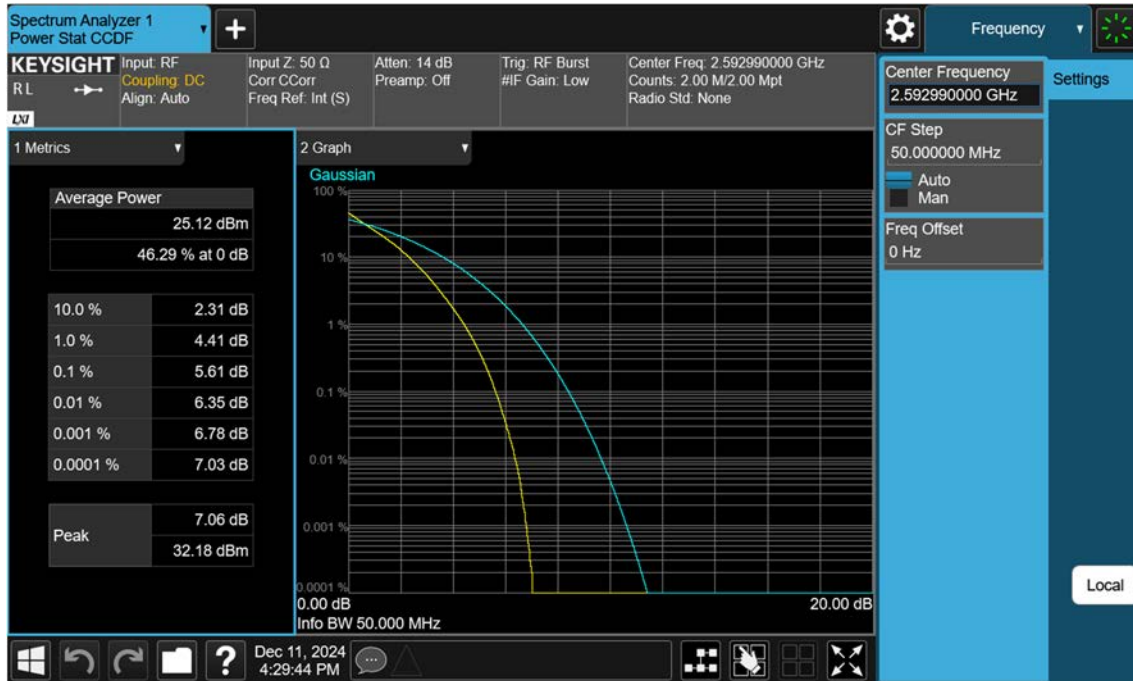
NR41_40 M_PAR_Mid_256QAM_FullRB



NR41_50 M_PAR_Mid_BPSK_FullIRB



NR41_50 M_PAR_Mid_QPSK_FullRB



NR41_50 M_PAR_Mid_16QAM_FullRB



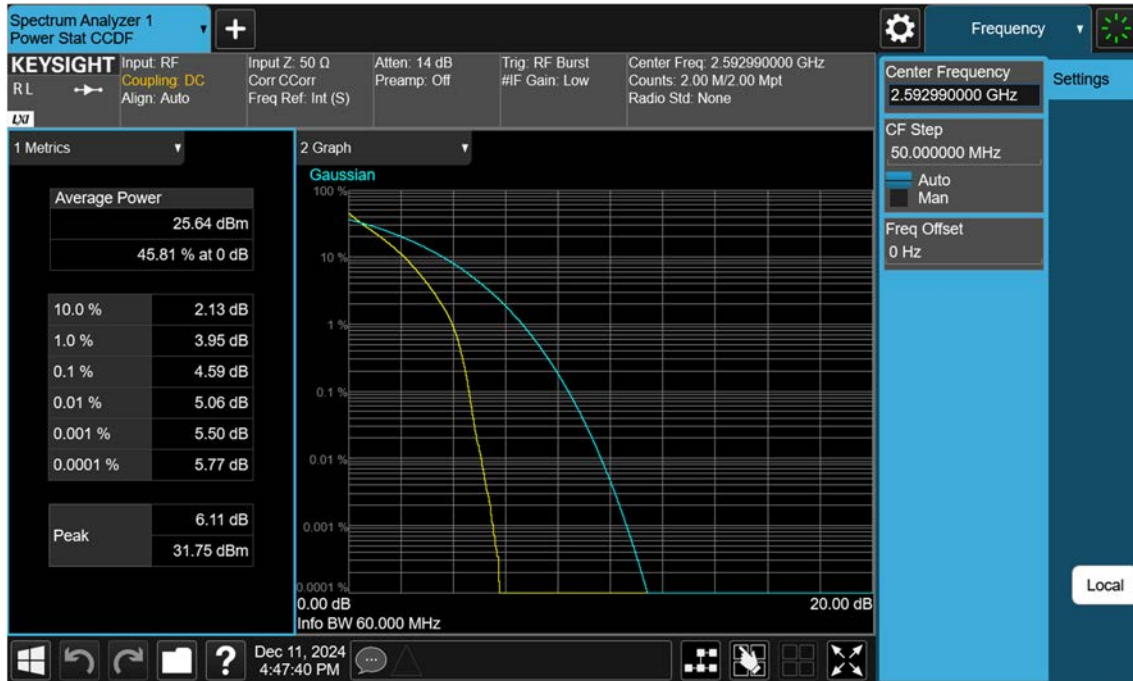
NR41_50 M_PAR_Mid_64QAM_FullRB



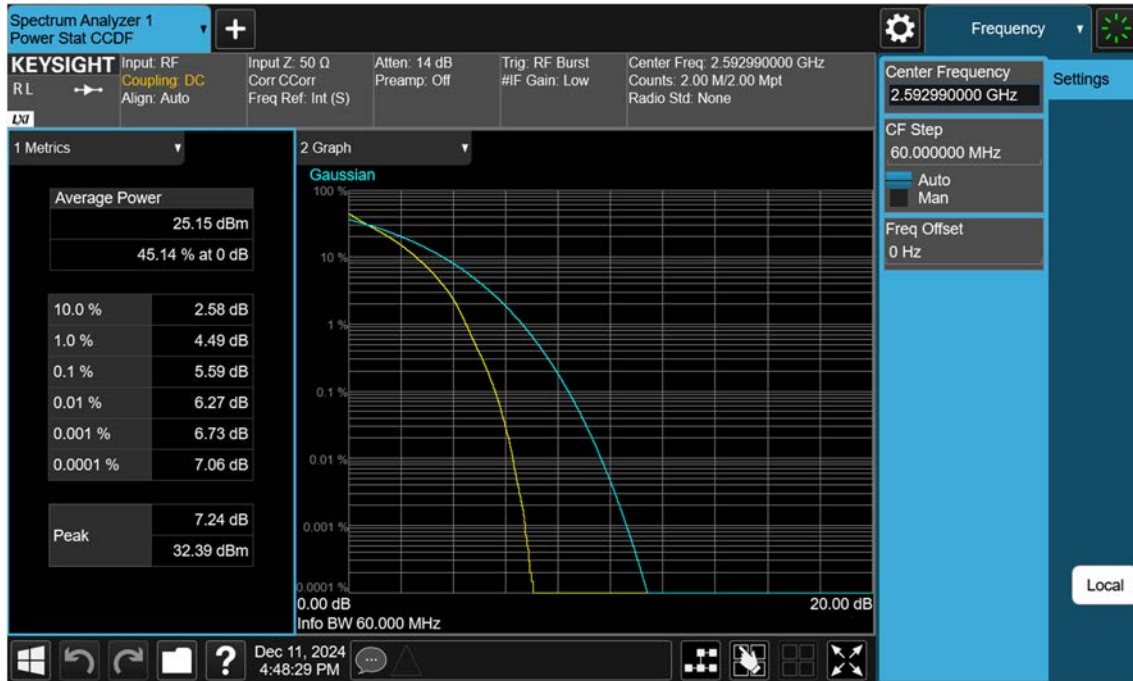
NR41_50 M_PAR_Mid_256QAM_FullRB



NR41_60 M_PAR_Mid_BPSK_FullIRB



NR41_60 M_PAR_Mid_QPSK_FullRB



NR41_60 M_PAR_Mid_16QAM_FullRB



NR41_60 M_PAR_Mid_64QAM_FullRB



NR41_60 M_PAR_Mid_256QAM_FullRB



NR41_70 M_PAR_Mid_BPSK_FullIRB



NR41_70 M_PAR_Mid_QPSK_FullRB



NR41_70 M_PAR_Mid_16QAM_FullRB



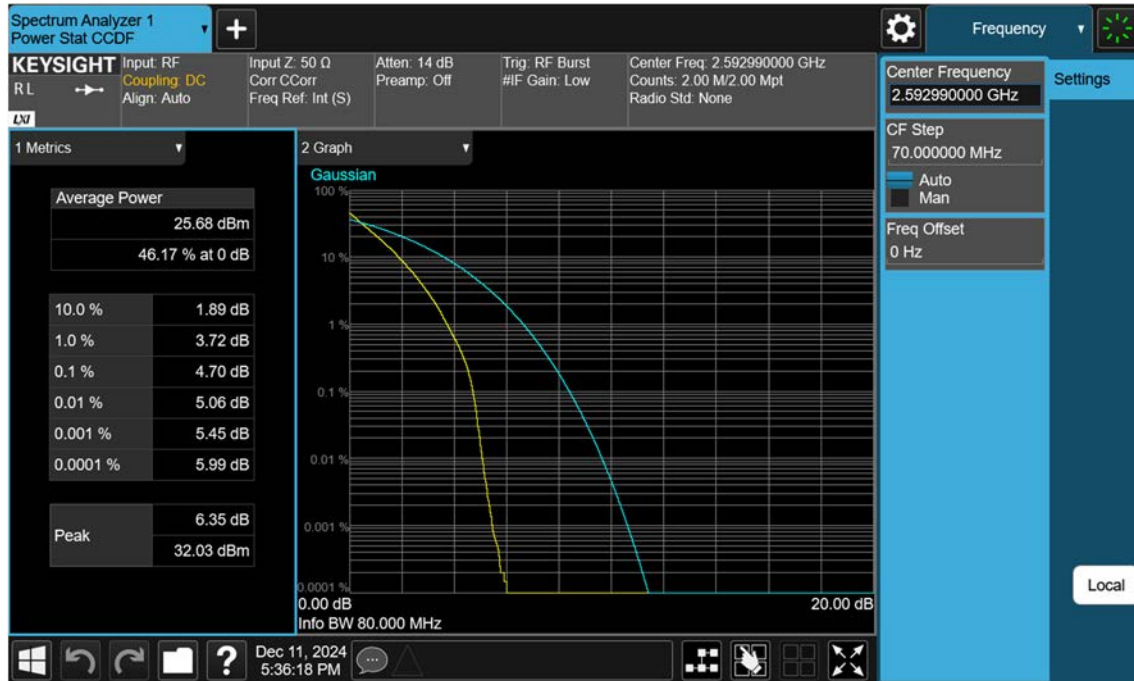
NR41_70 M_PAR_Mid_64QAM_FullRB



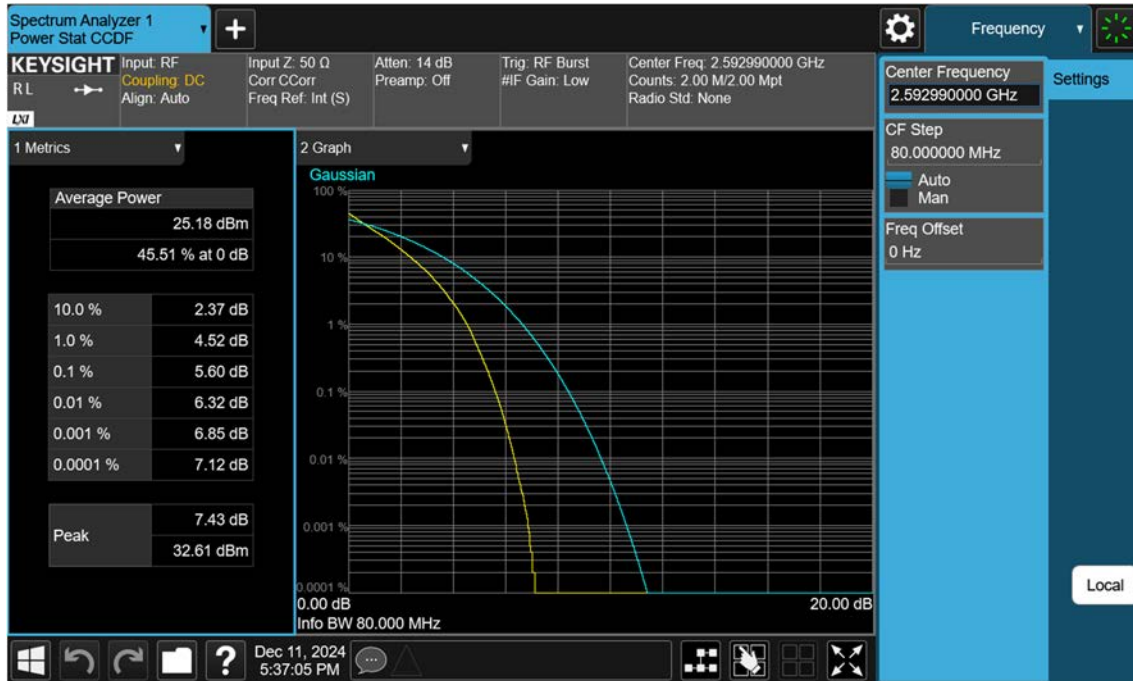
NR41_70 M_PAR_Mid_256QAM_FullRB



NR41_80 M_PAR_Mid_BPSK_FullIRB



NR41_80 M_PAR_Mid_QPSK_FullRB



NR41_80 M_PAR_Mid_16QAM_FullRB



NR41_80 M_PAR_Mid_64QAM_FullRB



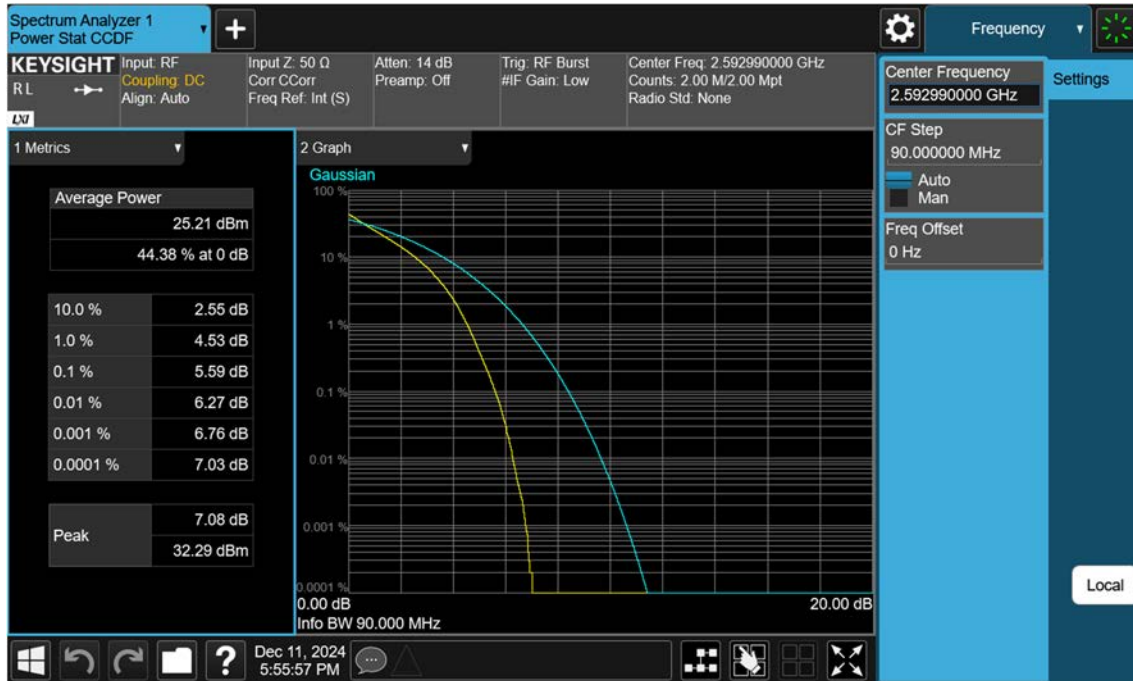
NR41_80 M_PAR_Mid_256QAM_FullRB



NR41_90 M_PAR_Mid_BPSK_FullRB



NR41_90 M_PAR_Mid_QPSK_FullRB



NR41_90 M_PAR_Mid_16QAM_FullRB



NR41_90 M_PAR_Mid_64QAM_FullRB



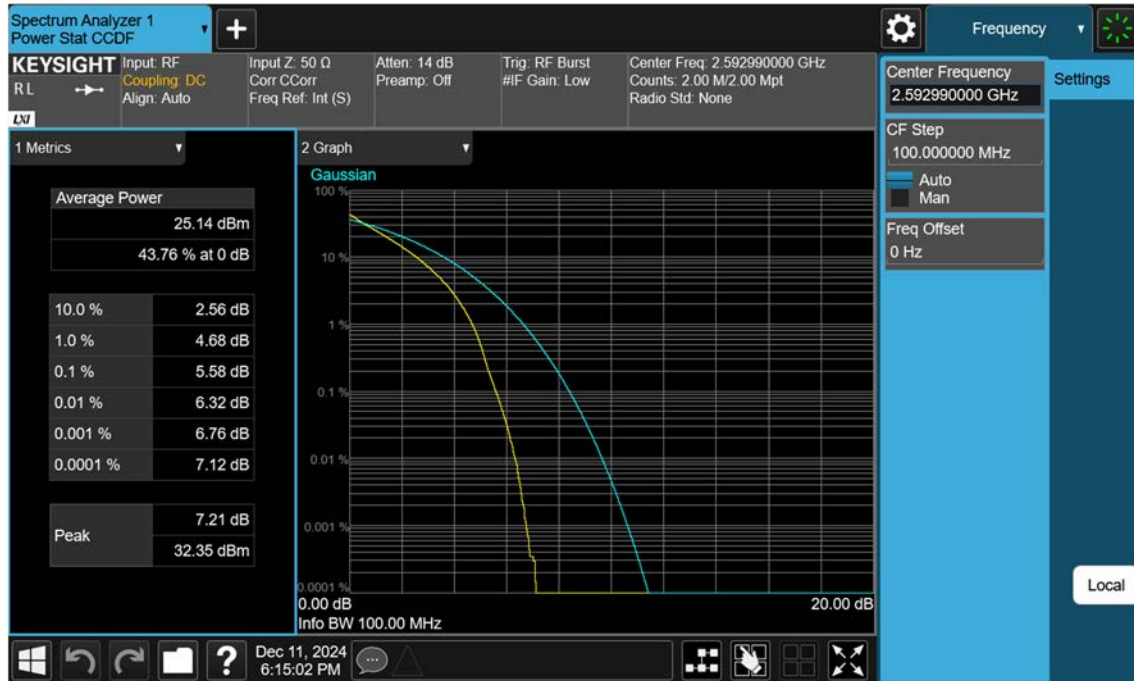
NR41_90 M_PAR_Mid_256QAM_FullRB



NR41_100 M_PAR_Mid_BPSK_FullRB



NR41_100 M_PAR_Mid_QPSK_FullRB



NR41_100 M_PAR_Mid_16QAM_FullRB



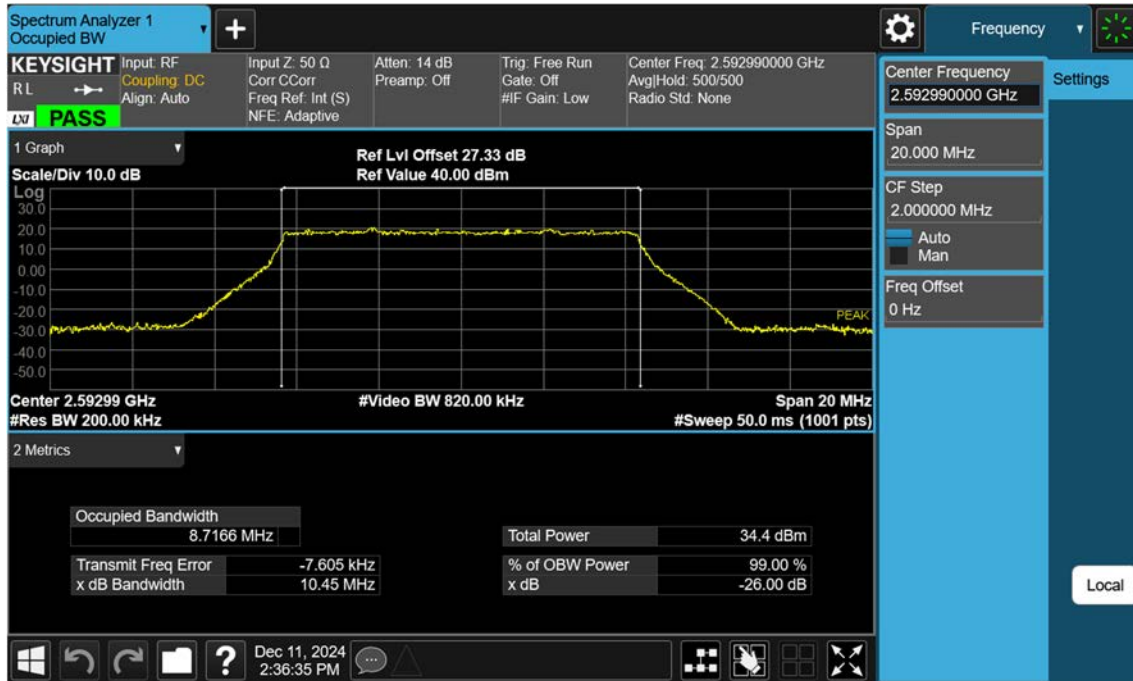
NR41_100 M_PAR_Mid_64QAM_FullRB



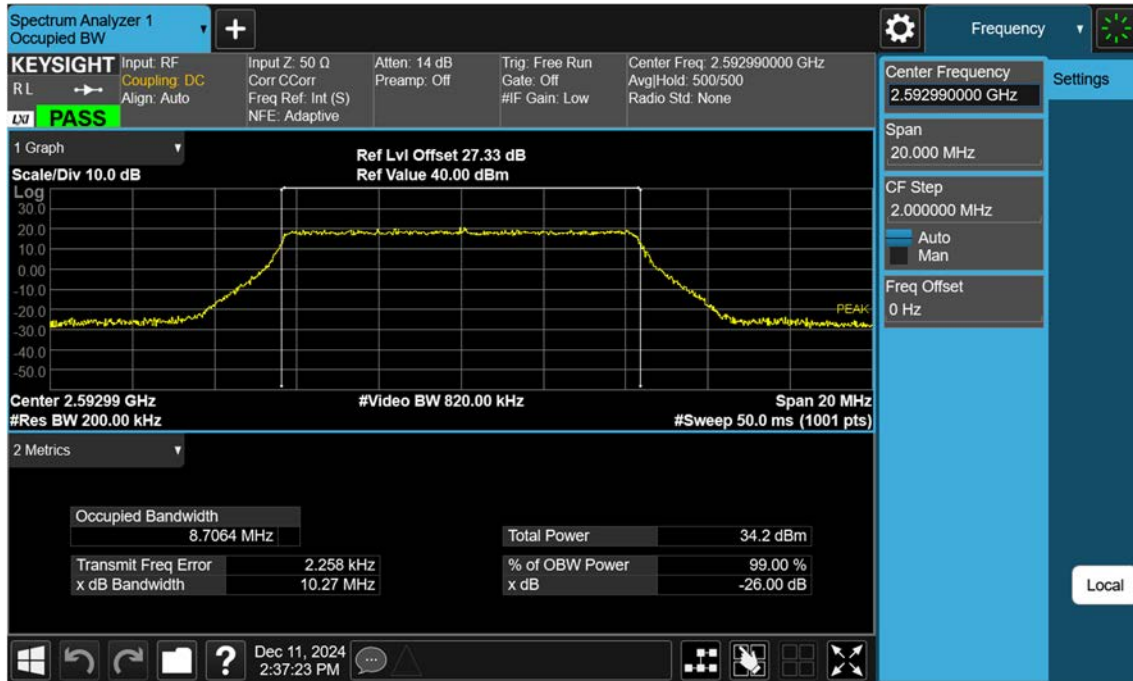
NR41_100 M_PAR_Mid_256QAM_FullRB



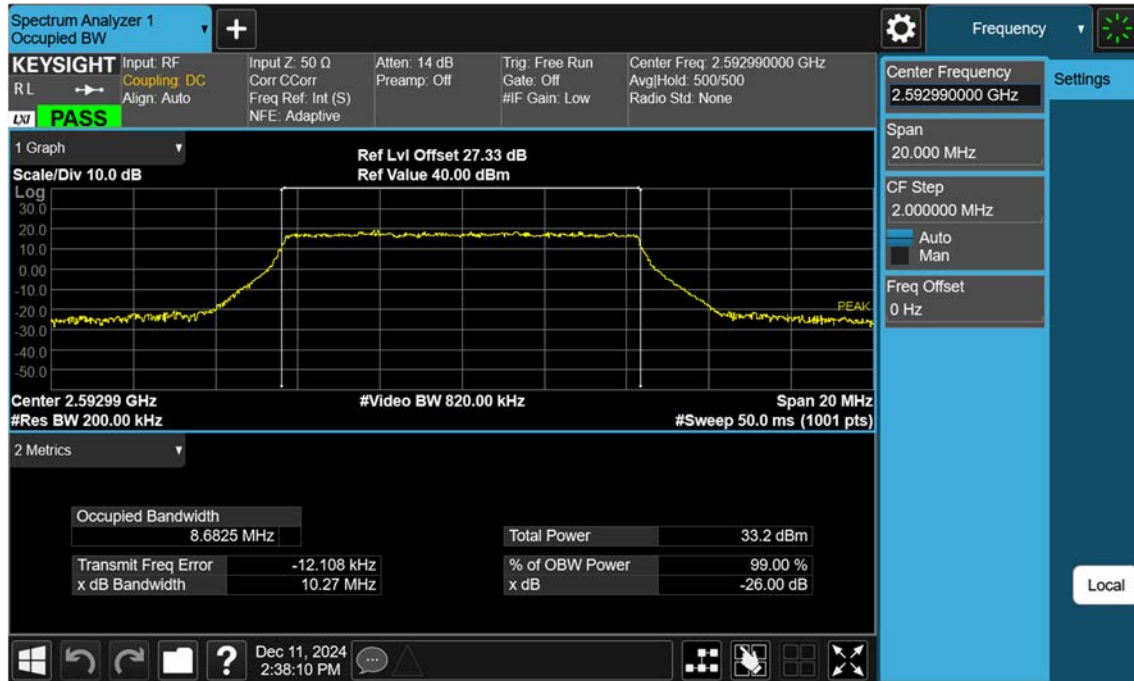
NR41_10 M_OBW_Mid_BPSK_FullRB



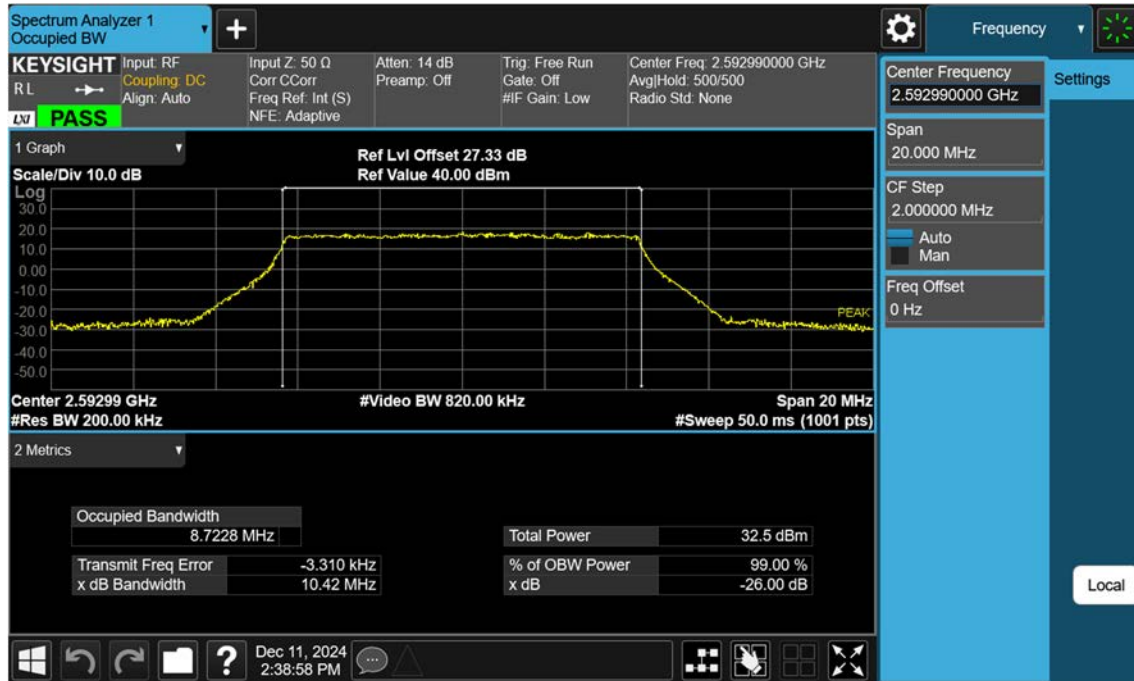
NR41_10 M_OBW_Mid_QPSK_FullRB



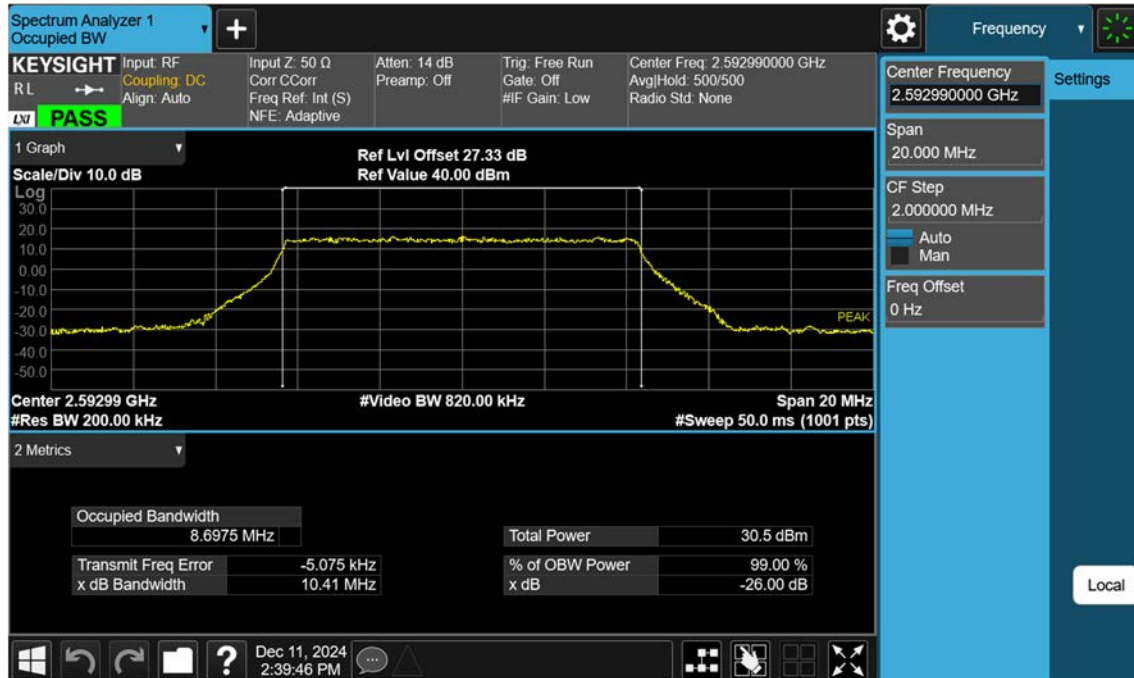
NR41_10 M_OBW_Mid_16QAM_FullRB



NR41_10 M_OBW_Mid_64QAM_FullRB



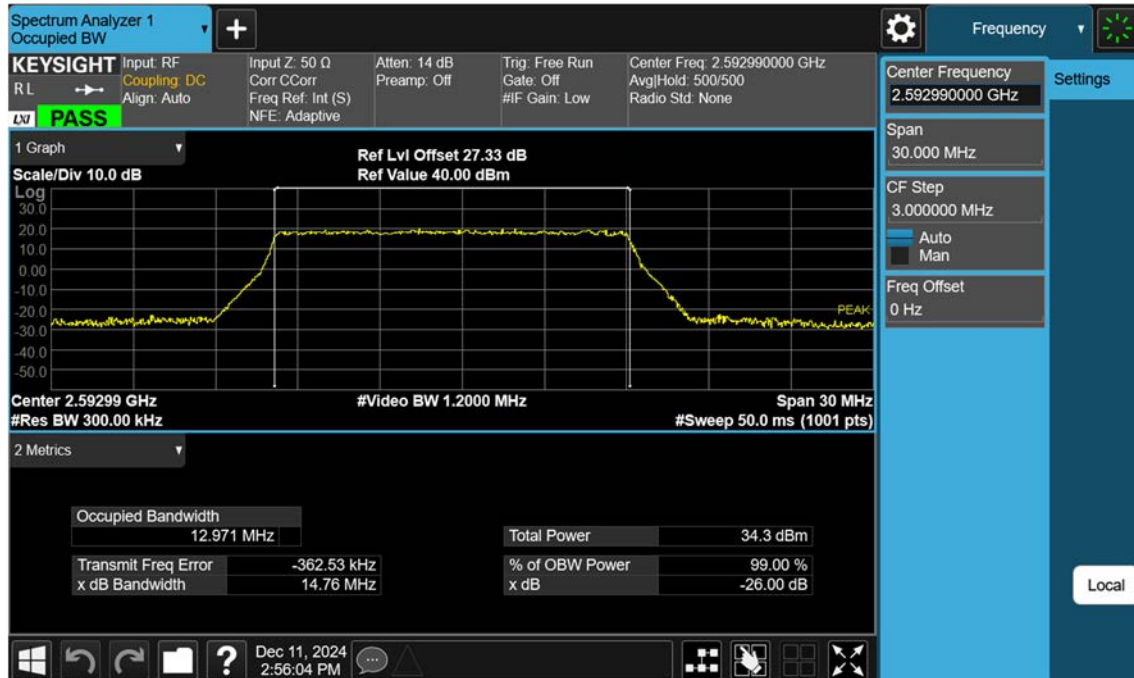
NR41_10 M_OBW_Mid_256QAM_FullRB



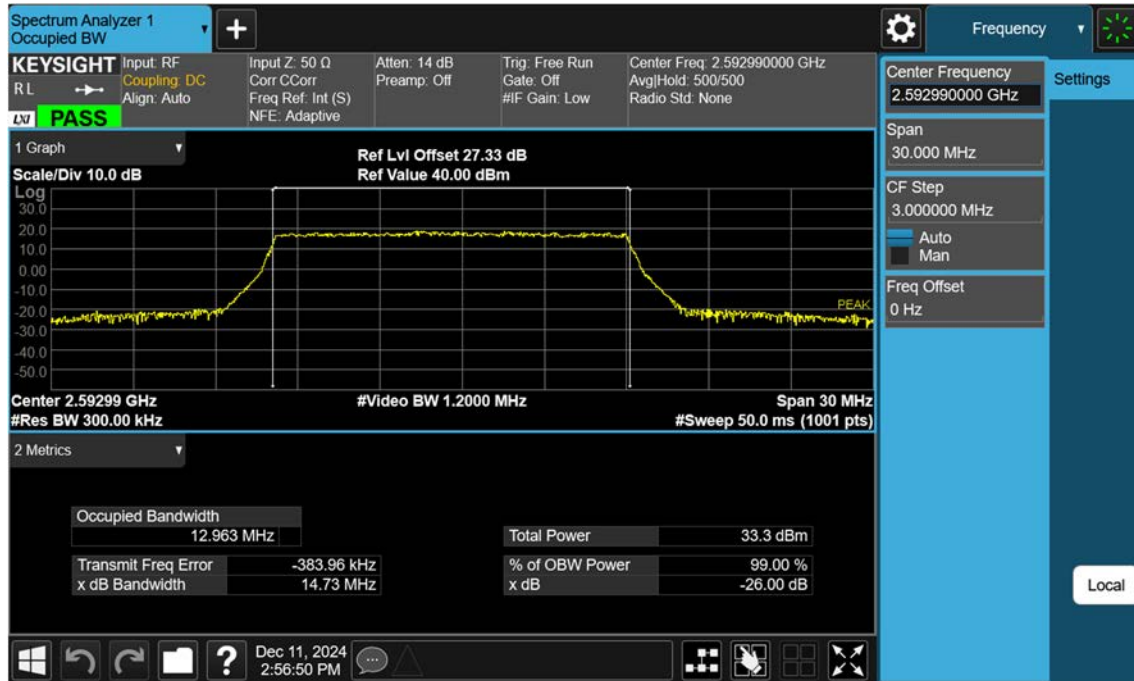
NR41_15 M_OBW_Mid_BPSK_FullRB



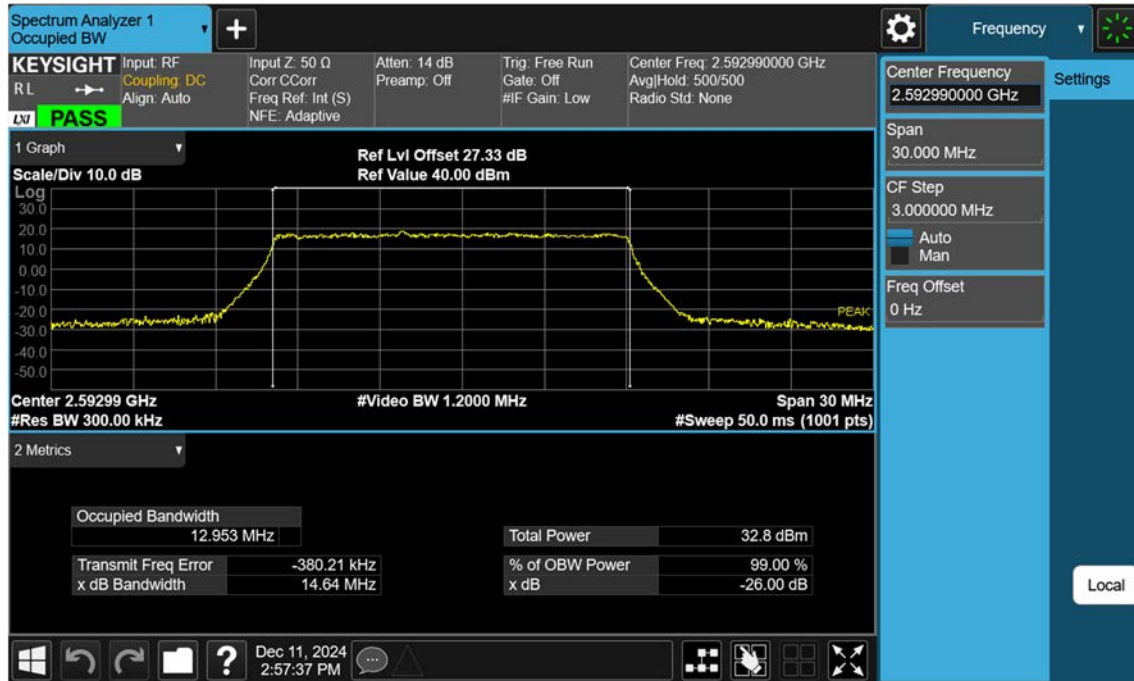
NR41_15 M_OBW_Mid_QPSK_FullRB



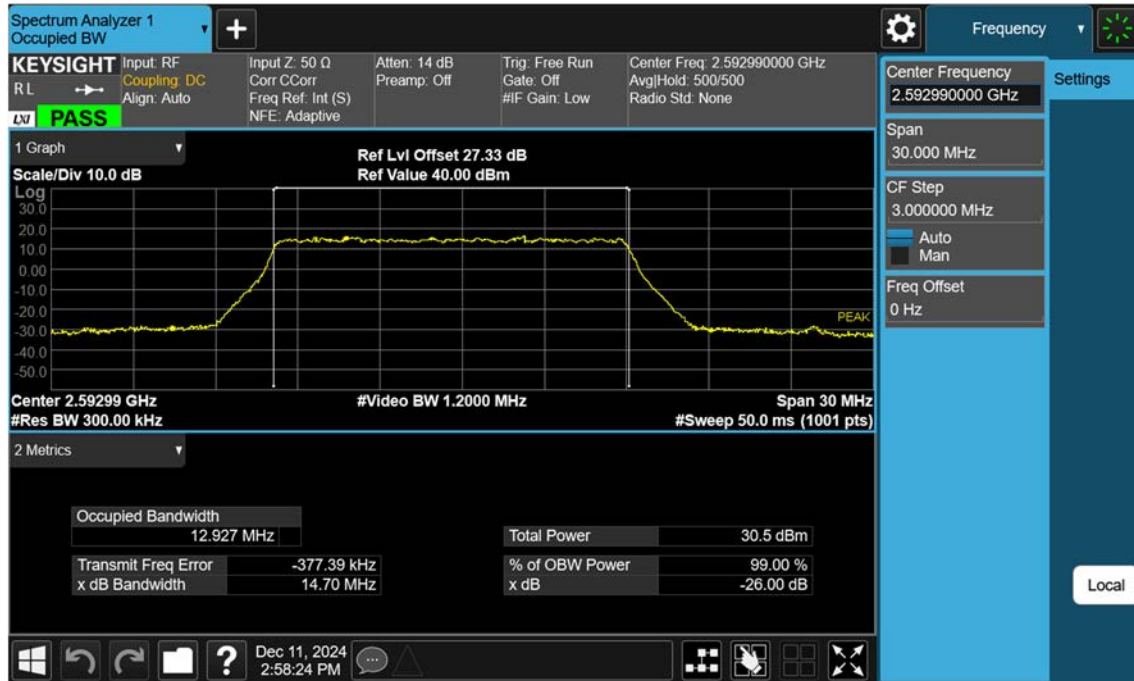
NR41_15 M_OBW_Mid_16QAM_FullRB



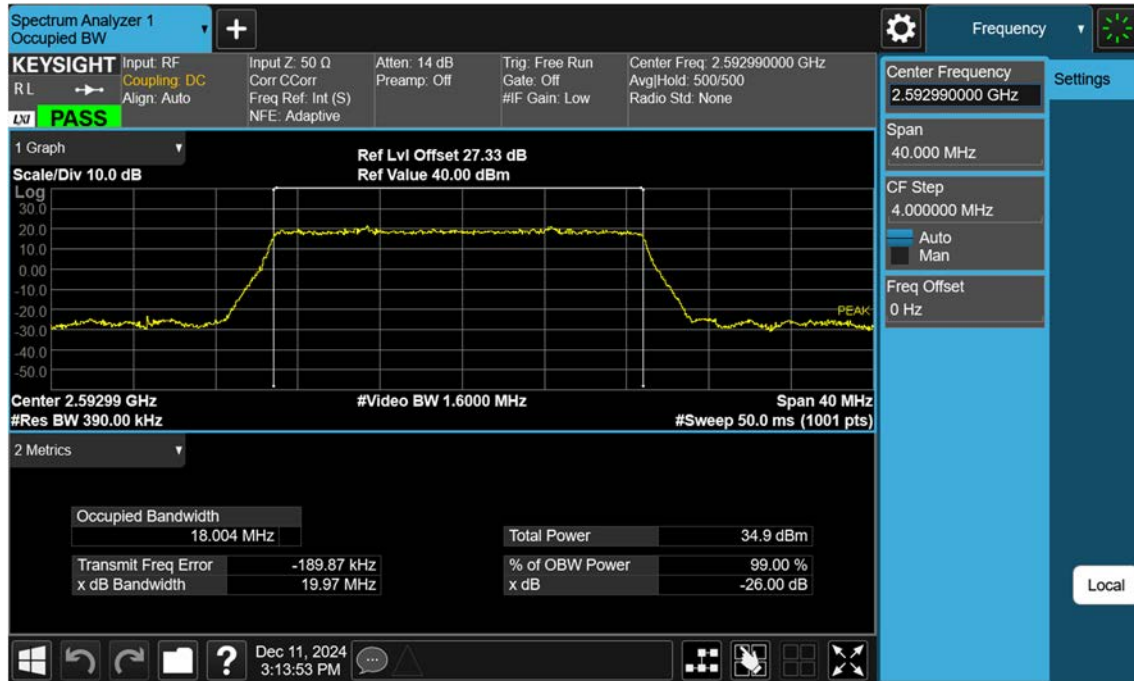
NR41_15 M_OBW_Mid_64QAM_FullRB



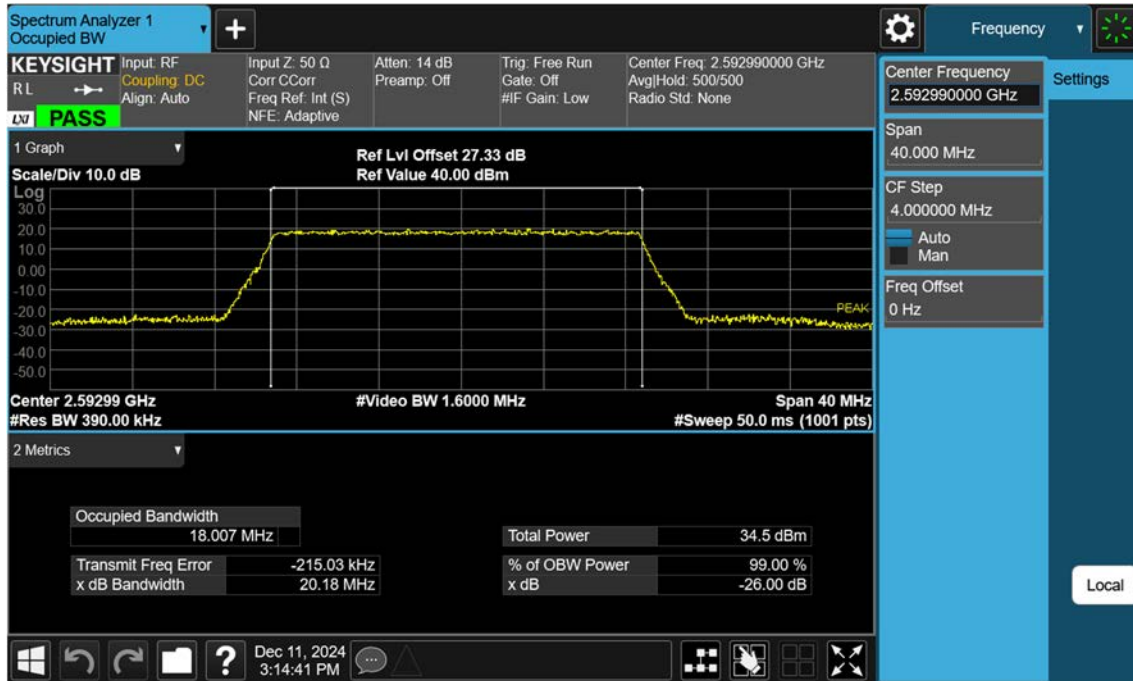
NR41_15 M_OBW_Mid_256QAM_FullRB



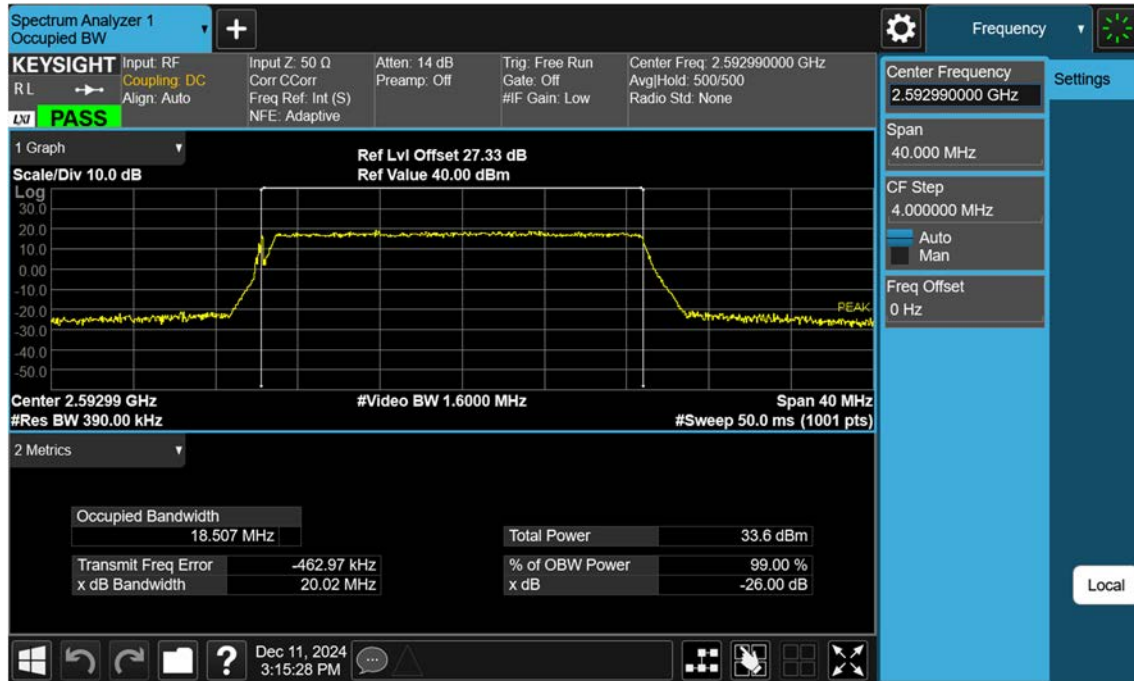
NR41_20 M_OBW_Mid_BPSK_FullRB



NR41_20 M_OBW_Mid_QPSK_FullRB



NR41_20 M_OBW_Mid_16QAM_FullRB



NR41_20 M_OBW_Mid_64QAM_FullRB

