

TEST REPORT

FCC Sub6 n41 Test for SM-F766B
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2505-FC033-R1

DATE OF ISSUE
May 27, 2025

Tested by
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TEST REPORT

REPORT NO.

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May 27, 2025

Applicant

SAMSUNG Electronics Co., Ltd.

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

Product Name

Mobile Phone

Model Name

SM-F766B

Date of Test

February 24, 2025 ~ May 07, 2025

FCC ID

A3LSMF766B

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	May 07, 2025	Initial Release
1	May 27, 2025	Revised the Power Supply Voltage. (DC 3.88 V → DC 3.90 V)

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).

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MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name:	SAMSUNG Electronics Co., Ltd.
Address:	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
FCC ID:	A3LSMF766B
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§ 27
EUT Type:	Mobile Phone
Model(s):	SM-F766B
SCS(kHz):	30
Bandwidth(MHz):	Sub6 n41 : 10, 15, 20, 25, 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) 2508.510 – 2677.500 : 25 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:	February 24, 2025 ~ May 07, 2025
Serial number:	Radiated : R3CY30RT0PR Conducted : R3CY30P2PAH
Antenna Information	Please refer to the Antenna Specification document.

1.1 MAXIMUM OUTPUT POWER

Main 2 ANT

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n41 (10)	2501.010 – 2685.000	8M70G7D	PI/2 BPSK	0.109	20.38
		8M69G7D	QPSK	0.108	20.34
		8M68W7D	16QAM	0.085	19.29
		8M69W7D	64QAM	0.060	17.81
		8M67W7D	256QAM	0.036	15.52
Sub6 n41 (15)	2503.500 – 2682.480	13M0G7D	PI/2 BPSK	0.115	20.60
		13M0G7D	QPSK	0.115	20.59
		13M0W7D	16QAM	0.091	19.59
		13M0W7D	64QAM	0.065	18.13
		13M0W7D	256QAM	0.042	16.26
Sub6 n41 (20)	2506.020 – 2679.990	18M0G7D	PI/2 BPSK	0.118	20.71
		18M0G7D	QPSK	0.117	20.67
		18M0W7D	16QAM	0.093	19.70
		18M0W7D	64QAM	0.065	18.16
		18M0W7D	256QAM	0.040	16.05
Sub6 n41 (25)	2508.510 – 2677.500	23M0G7D	PI/2 BPSK	0.119	20.76
		23M0G7D	QPSK	0.119	20.74
		23M0W7D	16QAM	0.096	19.81
		23M1W7D	64QAM	0.065	18.15
		23M0W7D	256QAM	0.043	16.29
Sub6 n41 (30)	2511.000 – 2674.980	27M1G7D	PI/2 BPSK	0.115	20.59
		27M0G7D	QPSK	0.114	20.58
		27M0W7D	16QAM	0.092	19.63
		27M0W7D	64QAM	0.063	18.01
		27M0W7D	256QAM	0.040	16.07
Sub6 n41 (40)	2516.010 – 2670.000	36M0G7D	PI/2 BPSK	0.107	20.28
		35M9G7D	QPSK	0.106	20.27
		35M9W7D	16QAM	0.087	19.42
		35M9W7D	64QAM	0.060	17.75
		35M9W7D	256QAM	0.036	15.61
Sub6 n41 (50)	2521.020 – 2664.990	46M3G7D	PI/2 BPSK	0.101	20.03
		46M0G7D	QPSK	0.099	19.97
		45M9W7D	16QAM	0.083	19.17
		46M0W7D	64QAM	0.056	17.50
		46M0W7D	256QAM	0.034	15.35

Sub6 n41 (60)	2526.000 – 2659.980	58M3G7D	PI/2 BPSK	0.109	20.39
		58M3G7D	QPSK	0.109	20.37
		58M1W7D	16QAM	0.087	19.39
		58M2W7D	64QAM	0.060	17.78
		58M1W7D	256QAM	0.037	15.74
Sub6 n41 (70)	2531.010 – 2655.000	64M9G7D	PI/2 BPSK	0.105	20.21
		64M9G7D	QPSK	0.103	20.12
		65M0W7D	16QAM	0.081	19.09
		64M9W7D	64QAM	0.056	17.49
		65M1W7D	256QAM	0.037	15.68
Sub6 n41 (80)	2536.020 – 2649.990	77M5G7D	PI/2 BPSK	0.099	19.94
		77M7G7D	QPSK	0.098	19.92
		77M5W7D	16QAM	0.079	18.99
		77M5W7D	64QAM	0.054	17.36
		77M6W7D	256QAM	0.033	15.13
Sub6 n41 (90)	2541.000 – 2644.980	87M3G7D	PI/2 BPSK	0.109	20.37
		87M1G7D	QPSK	0.108	20.34
		87M0W7D	16QAM	0.088	19.45
		87M2W7D	64QAM	0.063	17.97
		87M2W7D	256QAM	0.039	15.91
Sub6 n41 (100)	2546.010 – 2640.000	97M1G7D	PI/2 BPSK	0.118	20.73
		97M0G7D	QPSK	0.117	20.69
		96M6W7D	16QAM	0.094	19.71
		96M9W7D	64QAM	0.067	18.24
		96M7W7D	256QAM	0.040	16.07

Sub 5 ANT

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n41 (10)	2501.010 – 2685.000	8M71G7D	PI/2 BPSK	0.097	19.86
		8M67G7D	QPSK	0.096	19.84
		8M67W7D	16QAM	0.080	19.04
		8M70W7D	64QAM	0.054	17.35
		8M66W7D	256QAM	0.035	15.46
Sub6 n41 (15)	2503.500 – 2682.480	13M0G7D	PI/2 BPSK	0.102	20.08
		13M0G7D	QPSK	0.101	20.05
		13M0W7D	16QAM	0.082	19.13
		13M0W7D	64QAM	0.056	17.51
		13M0W7D	256QAM	0.036	15.61
Sub6 n41 (20)	2506.020 – 2679.990	18M0G7D	PI/2 BPSK	0.098	19.90
		18M0G7D	QPSK	0.097	19.88
		18M0W7D	16QAM	0.079	18.96
		18M0W7D	64QAM	0.055	17.43
		18M0W7D	256QAM	0.034	15.28
Sub6 n41 (25)	2508.510 – 2677.500	23M1G7D	PI/2 BPSK	0.100	20.01
		23M0G7D	QPSK	0.099	19.97
		23M0W7D	16QAM	0.080	19.05
		23M6W7D	64QAM	0.057	17.54
		23M1W7D	256QAM	0.036	15.62
Sub6 n41 (30)	2511.000 – 2674.980	27M0G7D	PI/2 BPSK	0.102	20.09
		27M0G7D	QPSK	0.101	20.06
		27M0W7D	16QAM	0.080	19.04
		26M9W7D	64QAM	0.056	17.48
		27M0W7D	256QAM	0.035	15.41
Sub6 n41 (40)	2516.010 – 2670.000	36M0G7D	PI/2 BPSK	0.099	19.94
		35M9G7D	QPSK	0.098	19.92
		35M9W7D	16QAM	0.079	18.95
		36M0W7D	64QAM	0.053	17.26
		35M9W7D	256QAM	0.035	15.49
Sub6 n41 (50)	2521.020 – 2664.990	46M0G7D	PI/2 BPSK	0.099	19.94
		46M0G7D	QPSK	0.097	19.86
		46M0W7D	16QAM	0.077	18.89
		47M7W7D	64QAM	0.055	17.37
		45M9W7D	256QAM	0.036	15.51
Sub6 n41 (60)	2526.000 – 2659.980	58M3G7D	PI/2 BPSK	0.104	20.19
		58M2G7D	QPSK	0.103	20.13

		58M1W7D	16QAM	0.080	19.04
		58M2W7D	64QAM	0.058	17.62
		58M2W7D	256QAM	0.036	15.57
Sub6 n41 (70)	2531.010 – 2655.000	64M9G7D	PI/2 BPSK	0.109	20.37
		64M8G7D	QPSK	0.109	20.36
		64M7W7D	16QAM	0.085	19.29
		64M8W7D	64QAM	0.062	17.95
		64M5W7D	256QAM	0.038	15.85
Sub6 n41 (80)	2536.020 – 2649.990	77M6G7D	PI/2 BPSK	0.102	20.08
		77M6G7D	QPSK	0.101	20.03
		77M6W7D	16QAM	0.082	19.12
		77M6W7D	64QAM	0.057	17.53
		77M8W7D	256QAM	0.036	15.54
Sub6 n41 (90)	2541.000 – 2644.980	87M2G7D	PI/2 BPSK	0.117	20.70
		87M1G7D	QPSK	0.116	20.65
		87M1W7D	16QAM	0.094	19.71
		87M1W7D	64QAM	0.065	18.12
		87M1W7D	256QAM	0.041	16.15
Sub6 n41 (100)	2546.010 – 2640.000	97M1G7D	PI/2 BPSK	0.133	21.23
		96M9G7D	QPSK	0.132	21.20
		96M7W7D	16QAM	0.103	20.14
		97M0W7D	64QAM	0.075	18.76
		97M0W7D	256QAM	0.047	16.71

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

Test Note

1. Measurements value show only up to 3 maximum emissions noted, or would be lesser
if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit)
and considered that's already beyond the background noise floor.
2. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets,
and channel bandwidth configurations shown in the test data
3. For spurious emissions above 1 GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is
driven by a signal generator and the previously recorded signal was duplicated.
The spurious emissions is calculated by the following formula;

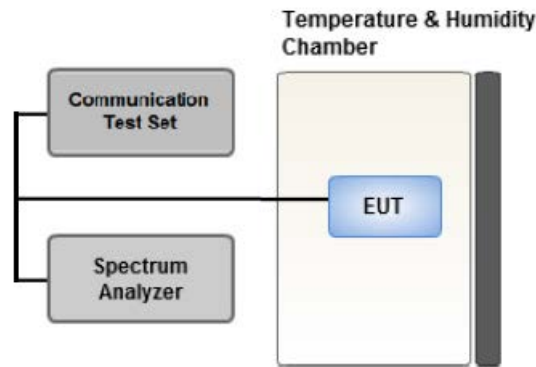
$$\text{Result}_{(\text{dBm})} = P_g_{(\text{dBm})} - \text{cable loss}_{(\text{dB})} + \text{antenna gain}_{(\text{dBi})}$$

Where: P_g is the generator output power into the substitution antenna.

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

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

3.4 PEAK- TO- AVERAGE RATIO



Test setup

① CCDF Procedure for PAPR

Test Settings

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

② Alternate Procedure for PAPR

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

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

Test Settings(Peak Power)

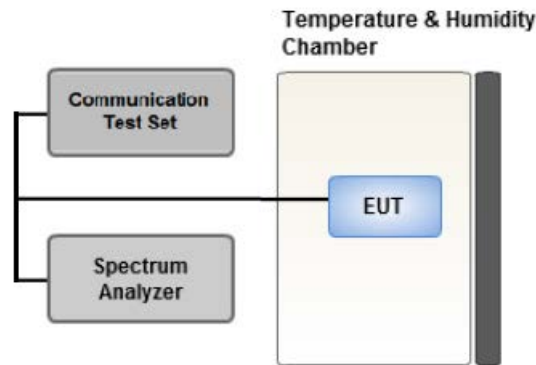
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

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

Test Settings(Average Power)

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

3.5 OCCUPIED BANDWIDTH.



Test setup

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

The EUT makes a call to the communication simulator.

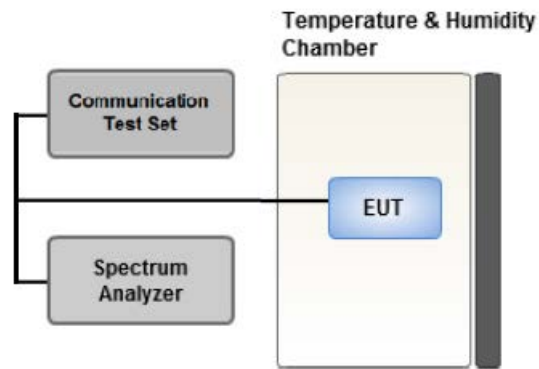
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

Test Settings

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

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

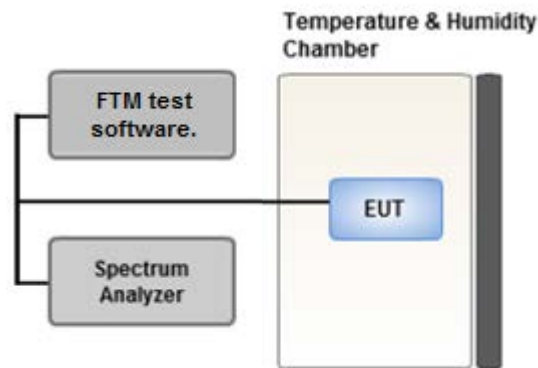
Test Overview

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

Test Settings

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

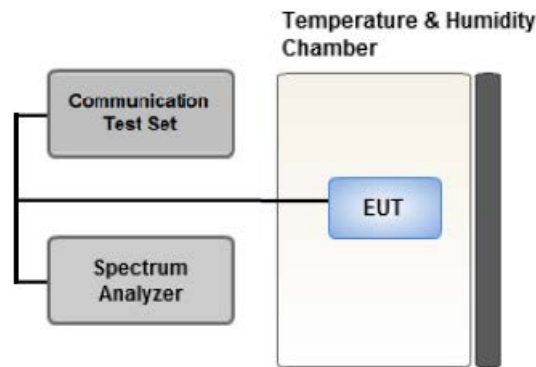
1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. Within 1 MHz of the channel edge the RBW should be 2 % of EBW, then 1 MHz after that.
4. VBW > 3 x RBW
5. 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.
- The EUT was tested in three modes(Open, Half-open, Closed), the worst case configuration results are reported.
- Worst case (Equivalent Isotropic Radiated Power)
: Main 2 ANT (Open, Half Open), Sub 5 ANT (Open)
- Worst case (Radiated Spurious Emissions)
: Main 2 ANT (Open), Sub 5 ANT (Open)
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: NSA, SA, SRS
Worst case: SA
- All power classes were tested, and the results were reported for the worst case PC3. (PC3 Only)
Mode : Stand alone, Stand alone + External accessories (Earphone, AC adapter, etc)
Worst case : Stand alone
- All simultaneous transmission scenarios of operation were investigated, and the test results showed no additional significant emissions relative to the least restrictive limit were observed.
Therefore, only the worst case(stand-alone) results were reported.
- Radiated Spurious emissions are measured while operating in EN-DC mode with Sub 6 NR carrier as well as an LTE carrier (anchor).
All EN-DC mode of operation (=anchor) were investigated and the test results were measured No Peak Found.
The test results which are attenuated more than 20 dB below the permissible value, so it was not reported.
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
Please refer to the table below.

[Main 2 ANT Worst case]

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

[Sub 5 ANT Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	See Section 9.1		X
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 9.2		X

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, SRS
Worst case: SA
- All power classes were tested, and the results were reported for the worst case PC3. (PC3 Only)
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
Please refer to the table below.

[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, 25, 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
		25	Low	1	0
			High	1	64
		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, 25, 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, 25, 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	04/17/2027	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/20/2026	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170124	03/23/2027	Biennial
Loop Antenna(9 kHz~30 MHz)	FMZB1513	Rohde & Schwarz	1513-175	01/06/2027	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/05/2027	Biennial
Hybrid Antenna	VULB9160	Schwarzbeck	760	02/17/2027	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	02/19/2026	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	08/22/2025	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	02/04/2026	Annual
Chamber	SU-642	ESPEC	93008124	02/11/2026	Annual
Signal Analyzer(10 Hz~26.5 GHz)	N9020A	Agilent	MY51110063	03/21/2026	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/10/2026	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	05/23/2025	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
UXM 5G Wireless Test Platform	E7515B	KEYSIGHT	MY60101126	02/10/2026	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)	5.68 (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, § 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(Main 2 ANT)

8.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2501.010	Sub6 n41 / 10 MHz [30 kHz]	PI/2 BPSK	-25.32	11.48	10.61	2.50	H	< 2.00	0.091	19.59	1	12
		QPSK	-25.37	11.43	10.61	2.50	H		0.090	19.54		
		16-QAM	-26.27	10.53	10.61	2.50	H		0.073	18.64		
		64-QAM	-27.82	8.98	10.61	2.50	H		0.051	17.09		
		256-QAM	-29.94	6.86	10.61	2.50	H		0.031	14.97		
2592.990		PI/2 BPSK	-25.53	11.18	11.00	2.55	V		0.092	19.63	1	1
		QPSK	-25.57	11.14	11.00	2.55	V		0.091	19.59		
		16-QAM	-26.54	10.17	11.00	2.55	V		0.073	18.62		
		64-QAM	-28.05	8.66	11.00	2.55	V		0.051	17.11		
		256-QAM	-30.27	6.44	11.00	2.55	V		0.031	14.89		
2685.000		PI/2 BPSK	-25.39	12.17	10.82	2.61	V		0.109	20.38	1	12
		QPSK	-25.43	12.13	10.82	2.61	V		0.108	20.34		
		16-QAM	-26.48	11.08	10.82	2.61	V		0.085	19.29		
		64-QAM	-27.96	9.60	10.82	2.61	V		0.060	17.81		
		256-QAM	-30.25	7.31	10.82	2.61	V		0.036	15.52		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2503.500	Sub6 n41 / 15 MHz [30 kHz]	PI/2 BPSK	-25.47	11.39	10.58	2.51	H	< 2.00	0.088	19.46	1	36
		QPSK	-25.50	11.36	10.58	2.51	H		0.088	19.43		
		16-QAM	-26.38	10.48	10.58	2.51	H		0.072	18.55		
		64-QAM	-27.87	8.99	10.58	2.51	H		0.051	17.06		
		256-QAM	-29.98	6.88	10.58	2.51	H		0.031	14.95		
2592.990		PI/2 BPSK	-25.42	11.29	11.00	2.55	V		0.094	19.74	1	1
		QPSK	-25.44	11.27	11.00	2.55	V		0.094	19.72		
		16-QAM	-26.48	10.23	11.00	2.55	V		0.074	18.68		
		64-QAM	-27.92	8.79	11.00	2.55	V		0.053	17.24		
		256-QAM	-29.85	6.86	11.00	2.55	V		0.034	15.31		
2682.480		PI/2 BPSK	-25.30	12.37	10.84	2.61	V		0.115	20.60	1	1
		QPSK	-25.31	12.36	10.84	2.61	V		0.115	20.59		
		16-QAM	-26.31	11.36	10.84	2.61	V		0.091	19.59		
		64-QAM	-27.77	9.90	10.84	2.61	V		0.065	18.13		
		256-QAM	-29.64	8.03	10.84	2.61	V		0.042	16.26		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2506.020	Sub6 n41 / 20 MHz [30 kHz]	PI/2 BPSK	-25.21	11.65	10.58	2.51	H	< 2.00	0.094	19.72	1	49
		QPSK	-25.27	11.59	10.58	2.51	H		0.092	19.66		
		16-QAM	-26.04	10.82	10.58	2.51	H		0.077	18.89		
		64-QAM	-27.73	9.13	10.58	2.51	H		0.052	17.20		
		256-QAM	-29.75	7.11	10.58	2.51	H		0.033	15.18		
2592.990		PI/2 BPSK	-25.53	11.18	11.00	2.55	V		0.092	19.63	1	49
		QPSK	-25.57	11.14	11.00	2.55	V		0.091	19.59		
		16-QAM	-26.49	10.22	11.00	2.55	V		0.074	18.67		
		64-QAM	-28.12	8.59	11.00	2.55	V		0.051	17.04		
		256-QAM	-29.98	6.73	11.00	2.55	V		0.033	15.18		
2679.990		PI/2 BPSK	-25.19	12.48	10.84	2.61	V		0.118	20.71	1	1
		QPSK	-25.23	12.44	10.84	2.61	V		0.117	20.67		
		16-QAM	-26.20	11.47	10.84	2.61	V		0.093	19.70		
		64-QAM	-27.74	9.93	10.84	2.61	V		0.065	18.16		
		256-QAM	-29.85	7.82	10.84	2.61	V		0.040	16.05		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2508.510	Sub6 n41 / 25 MHz [30 kHz]	PI/2 BPSK	-25.14	11.78	10.55	2.51	H	< 2.00	0.096	19.82	1	63
		QPSK	-25.17	11.75	10.55	2.51	H		0.095	19.79		
		16-QAM	-26.05	10.87	10.55	2.51	H		0.078	18.91		
		64-QAM	-27.64	9.28	10.55	2.51	H		0.054	17.32		
		256-QAM	-29.61	7.31	10.55	2.51	H		0.034	15.35		
2592.990		PI/2 BPSK	-25.32	11.39	11.00	2.55	V		0.096	19.84	1	1
		QPSK	-25.38	11.33	11.00	2.55	V		0.095	19.78		
		16-QAM	-26.40	10.31	11.00	2.55	V		0.075	18.76		
		64-QAM	-27.94	8.77	11.00	2.55	V		0.053	17.22		
		256-QAM	-30.20	6.51	11.00	2.55	V		0.031	14.96		
2677.500		PI/2 BPSK	-25.14	12.53	10.84	2.61	V		0.119	20.76	1	1
		QPSK	-25.16	12.51	10.84	2.61	V		0.119	20.74		
		16-QAM	-26.09	11.58	10.84	2.61	V		0.096	19.81		
		64-QAM	-27.75	9.92	10.84	2.61	V		0.065	18.15		
		256-QAM	-29.61	8.06	10.84	2.61	V		0.043	16.29		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2511.000	Sub6 n41 / 30 MHz [30 kHz]	PI/2 BPSK	-25.19	11.73	10.55	2.51	H	< 2.00	0.095	19.77	1	76
		QPSK	-25.20	11.72	10.55	2.51	H		0.095	19.76		
		16-QAM	-26.05	10.87	10.55	2.51	H		0.078	18.91		
		64-QAM	-27.76	9.16	10.55	2.51	H		0.052	17.20		
		256-QAM	-29.81	7.11	10.55	2.51	H		0.033	15.15		
2592.990		PI/2 BPSK	-25.19	11.52	11.00	2.55	V		0.099	19.97	1	1
		QPSK	-25.20	11.51	11.00	2.55	V		0.099	19.96		
		16-QAM	-26.23	10.48	11.00	2.55	V		0.078	18.93		
		64-QAM	-27.79	8.92	11.00	2.55	V		0.055	17.37		
		256-QAM	-30.12	6.59	11.00	2.55	V		0.032	15.04		
2674.980		PI/2 BPSK	-24.93	12.36	10.85	2.62	V		0.115	20.59	1	1
		QPSK	-24.94	12.35	10.85	2.62	V		0.114	20.58		
		16-QAM	-25.89	11.40	10.85	2.62	V		0.092	19.63		
		64-QAM	-27.51	9.78	10.85	2.62	V		0.063	18.01		
		256-QAM	-29.45	7.84	10.85	2.62	V		0.040	16.07		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2516.010	Sub6 n41 / 40 MHz [30 kHz]	PI/2 BPSK	-25.05	11.88	10.52	2.53	H	< 2.00	0.097	19.87	1	53
		QPSK	-25.07	11.86	10.52	2.53	H		0.097	19.85		
		16-QAM	-25.99	10.94	10.52	2.53	H		0.078	18.93		
		64-QAM	-27.56	9.37	10.52	2.53	H		0.054	17.36		
		256-QAM	-29.66	7.27	10.52	2.53	H		0.034	15.26		
2592.990		PI/2 BPSK	-25.33	11.38	11.00	2.55	V		0.096	19.83	1	104
		QPSK	-25.34	11.37	11.00	2.55	V		0.096	19.82		
		16-QAM	-26.34	10.37	11.00	2.55	V		0.076	18.82		
		64-QAM	-27.95	8.76	11.00	2.55	V		0.053	17.21		
		256-QAM	-30.17	6.54	11.00	2.55	V		0.032	14.99		
2670.000	PI/2 BPSK	-24.87	12.03	10.87	2.62	V	0.107	20.28	1	1		
	QPSK	-24.88	12.02	10.87	2.62	V	0.106	20.27				
	16-QAM	-25.73	11.17	10.87	2.62	V	0.087	19.42				
	64-QAM	-27.40	9.50	10.87	2.62	V	0.060	17.75				
	256-QAM	-29.54	7.36	10.87	2.62	V	0.036	15.61				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2521.020	Sub6 n41 / 50 MHz [30 kHz]	PI/2 BPSK	-24.98	11.95	10.49	2.54	H	< 2.00	0.098	19.90	1	66
		QPSK	-25.09	11.84	10.49	2.54	H		0.095	19.79		
		16-QAM	-25.96	10.97	10.49	2.54	H		0.078	18.92		
		64-QAM	-27.63	9.30	10.49	2.54	H		0.053	17.25		
		256-QAM	-29.64	7.29	10.49	2.54	H		0.033	15.24		
2592.990		PI/2 BPSK	-25.39	11.32	11.00	2.55	V		0.095	19.77	1	131
		QPSK	-25.43	11.28	11.00	2.55	V		0.094	19.73		
		16-QAM	-26.42	10.29	11.00	2.55	V		0.075	18.74		
		64-QAM	-27.95	8.76	11.00	2.55	V		0.053	17.21		
		256-QAM	-29.81	6.90	11.00	2.55	V		0.034	15.35		
2664.990		PI/2 BPSK	-25.16	11.79	10.88	2.64	V		0.101	20.03	1	66
		QPSK	-25.22	11.73	10.88	2.64	V		0.099	19.97		
		16-QAM	-26.02	10.93	10.88	2.64	V		0.083	19.17		
		64-QAM	-27.69	9.26	10.88	2.64	V		0.056	17.50		
		256-QAM	-29.91	7.04	10.88	2.64	V		0.034	15.28		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2526.000	Sub6 41/ 60 MHz [30 kHz]	PI/2 BPSK	-25.14	11.49	10.52	2.54	H	< 2.00	0.089	19.47	1	82
		QPSK	-25.15	11.48	10.52	2.54	H		0.088	19.46		
		16-QAM	-26.08	10.55	10.52	2.54	H		0.071	18.53		
		64-QAM	-27.64	8.99	10.52	2.54	H		0.050	16.97		
		256-QAM	-29.63	7.00	10.52	2.54	H		0.031	14.98		
2592.990		PI/2 BPSK	-25.09	11.62	11.00	2.55	V		0.102	20.07	1	160
		QPSK	-25.10	11.61	11.00	2.55	V		0.101	20.06		
		16-QAM	-26.06	10.65	11.00	2.55	V		0.081	19.10		
		64-QAM	-27.67	9.04	11.00	2.55	V		0.056	17.49		
		256-QAM	-29.87	6.84	11.00	2.55	V		0.034	15.29		
2659.980		PI/2 BPSK	-24.85	12.16	10.90	2.67	V		0.109	20.39	1	82
		QPSK	-24.87	12.14	10.90	2.67	V		0.109	20.37		
		16-QAM	-25.85	11.16	10.90	2.67	V		0.087	19.39		
		64-QAM	-27.46	9.55	10.90	2.67	V		0.060	17.78		
		256-QAM	-29.50	7.51	10.90	2.67	V		0.037	15.74		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2531.010	Sub6 41/ 70 MHz [30 kHz]	PI/2 BPSK	-25.13	11.20	10.56	2.54	H	< 2.00	0.084	19.22	1	187
		QPSK	-25.15	11.18	10.56	2.54	H		0.083	19.20		
		16-QAM	-26.11	10.22	10.56	2.54	H		0.067	18.24		
		64-QAM	-27.62	8.71	10.56	2.54	H		0.047	16.73		
		256-QAM	-29.67	6.66	10.56	2.54	H		0.029	14.68		
2592.990		PI/2 BPSK	-25.34	11.37	11.00	2.55	V		0.096	19.82	1	187
		QPSK	-25.35	11.36	11.00	2.55	V		0.096	19.81		
		16-QAM	-26.38	10.33	11.00	2.55	V		0.076	18.78		
		64-QAM	-27.88	8.83	11.00	2.55	V		0.053	17.28		
		256-QAM	-29.77	6.94	11.00	2.55	V		0.035	15.39		
2655.000		PI/2 BPSK	-24.93	11.98	10.91	2.68	V		0.105	20.21	1	94
		QPSK	-25.02	11.89	10.91	2.68	V		0.103	20.12		
		16-QAM	-26.05	10.86	10.91	2.68	V		0.081	19.09		
		64-QAM	-27.65	9.26	10.91	2.68	V		0.056	17.49		
		256-QAM	-29.46	7.45	10.91	2.68	V		0.037	15.68		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2536.020	Sub6 41/ 80 MHz [30 kHz]	PI/2 BPSK	-25.17	11.29	10.59	2.54	H	< 2.00	0.086	19.34	1	108
		QPSK	-25.20	11.26	10.59	2.54	H		0.085	19.31		
		16-QAM	-26.29	10.17	10.59	2.54	H		0.066	18.22		
		64-QAM	-27.67	8.79	10.59	2.54	H		0.048	16.84		
		256-QAM	-29.74	6.72	10.59	2.54	H		0.030	14.77		
2592.990		PI/2 BPSK	-25.23	11.48	11.00	2.55	V		0.098	19.93	1	215
		QPSK	-25.27	11.44	11.00	2.55	V		0.097	19.89		
		16-QAM	-26.17	10.54	11.00	2.55	V		0.079	18.99		
		64-QAM	-27.87	8.84	11.00	2.55	V		0.054	17.29		
		256-QAM	-30.10	6.61	11.00	2.55	V		0.032	15.06		
2649.990		PI/2 BPSK	-25.09	11.70	10.93	2.69	V		0.099	19.94	1	1
		QPSK	-25.11	11.68	10.93	2.69	V		0.098	19.92		
		16-QAM	-26.09	10.70	10.93	2.69	V		0.078	18.94		
		64-QAM	-27.67	9.12	10.93	2.69	V		0.054	17.36		
		256-QAM	-29.90	6.89	10.93	2.69	V		0.033	15.13		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2541.000	Sub6 41/ 90 MHz [30 kHz]	PI/2 BPSK	-25.14	11.44	10.62	2.53	V	< 2.00	0.090	19.53	1	243
		QPSK	-25.15	11.43	10.62	2.53	V		0.090	19.52		
		16-QAM	-26.11	10.47	10.62	2.53	V		0.072	18.56		
		64-QAM	-27.65	8.93	10.62	2.53	V		0.050	17.02		
		256-QAM	-29.97	6.61	10.62	2.53	V		0.030	14.70		
2592.990		PI/2 BPSK	-24.93	11.78	11.00	2.55	V		0.105	20.23	1	243
		QPSK	-24.94	11.77	11.00	2.55	V		0.105	20.22		
		16-QAM	-25.91	10.80	11.00	2.55	V		0.084	19.25		
		64-QAM	-27.61	9.10	11.00	2.55	V		0.057	17.55		
		256-QAM	-29.69	7.02	11.00	2.55	V		0.035	15.47		
2644.980		PI/2 BPSK	-25.01	12.10	10.95	2.68	V		0.109	20.37	1	122
		QPSK	-25.04	12.07	10.95	2.68	V		0.108	20.34		
		16-QAM	-25.93	11.18	10.95	2.68	V		0.088	19.45		
		64-QAM	-27.41	9.70	10.95	2.68	V		0.063	17.97		
		256-QAM	-29.47	7.64	10.95	2.68	V		0.039	15.91		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2546.010	Sub6 41/ 100 MHz [30 kHz]	PI/2 BPSK	-25.04	11.51	10.66	2.53	V	< 2.00	0.092	19.64	1	271
		QPSK	-25.10	11.45	10.66	2.53	V		0.091	19.58		
		16-QAM	-26.03	10.52	10.66	2.53	V		0.073	18.65		
		64-QAM	-27.45	9.10	10.66	2.53	V		0.053	17.23		
		256-QAM	-29.63	6.92	10.66	2.53	V		0.032	15.05		
2592.990		PI/2 BPSK	-25.02	11.69	11.00	2.55	V		0.103	20.14	1	271
		QPSK	-25.07	11.64	11.00	2.55	V		0.102	20.09		
		16-QAM	-26.04	10.67	11.00	2.55	V		0.082	19.12		
		64-QAM	-27.75	8.96	11.00	2.55	V		0.055	17.41		
		256-QAM	-29.58	7.13	11.00	2.55	V		0.036	15.58		
2640.000		PI/2 BPSK	-24.99	12.45	10.96	2.68	V		0.118	20.73	1	1
		QPSK	-25.03	12.41	10.96	2.68	V		0.117	20.69		
		16-QAM	-26.01	11.43	10.96	2.68	V		0.094	19.71		
		64-QAM	-27.48	9.96	10.96	2.68	V		0.067	18.24		
		256-QAM	-29.65	7.79	10.96	2.68	V		0.040	16.07		

8.2 RADIATED SPURIOUS EMISSIONS

- ▣ NR Band: n41
- ▣ Bandwidth: 10 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
500202 (2501.010)	5 002.02	-61.77	11.22	-63.48	3.71	H	-55.97	-25.00	1	12
	7 503.03	-64.24	11.54	-56.81	4.60	H	-49.87	-25.00		
	10 004.04	-61.67	11.47	-52.27	5.47	H	-46.27	-25.00		
518598 (2592.990)	5 185.98	-61.86	11.61	-63.03	3.80	H	-55.22	-25.00	1	1
	7 778.97	-63.38	11.26	-56.31	4.70	H	-49.75	-25.00		
	10 371.96	-64.60	11.68	-53.51	5.55	H	-47.38	-25.00		
537000 (2685.000)	5 370.00	-62.37	11.96	-64.00	3.92	H	-55.96	-25.00	1	12
	8 055.00	-61.31	11.24	-54.03	4.81	H	-47.60	-25.00		
	10 740.00	-64.02	11.55	-52.00	5.64	H	-46.09	-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	-62.50	11.20	-63.93	3.71	H	-56.44	-25.00	1	36
	7 510.50	-63.33	11.55	-55.79	4.60	H	-48.84	-25.00		
	10 014.00	-62.46	11.46	-53.07	5.47	H	-47.08	-25.00		
518598 (2592.990)	5 185.98	-62.58	11.61	-63.75	3.80	H	-55.94	-25.00	1	1
	7 778.97	-63.70	11.26	-56.63	4.70	H	-50.07	-25.00		
	10 371.96	-63.90	11.68	-52.81	5.55	H	-46.68	-25.00		
536496 (2682.480)	5 364.96	-63.31	11.95	-64.83	3.91	H	-56.79	-25.00	1	1
	8 047.44	-61.85	11.23	-54.63	4.81	H	-48.21	-25.00		
	10 729.92	-63.49	11.56	-51.42	5.65	H	-45.51	-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	-62.55	11.18	-63.69	3.72	H	-56.23	-25.00	1	49
	7 518.06	-63.79	11.56	-56.15	4.61	H	-49.20	-25.00		
	10 024.08	-64.02	11.46	-54.67	5.47	H	-48.68	-25.00		
518598 (2592.990)	5 185.98	-63.58	11.61	-64.75	3.80	H	-56.94	-25.00	1	49
	7 778.97	-63.40	11.26	-56.33	4.70	H	-49.77	-25.00		
	10 371.96	-63.85	11.68	-52.76	5.55	H	-46.63	-25.00		
535998 (2679.990)	5 359.98	-63.66	11.95	-65.09	3.90	H	-57.04	-25.00	1	1
	8 039.97	-62.43	11.22	-55.12	4.80	H	-48.70	-25.00		
	10 719.96	-63.10	11.56	-51.45	5.64	H	-45.53	-25.00		

- ▣ NR Band: n41
- ▣ Bandwidth: 25 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
501702 (2508.510)	5 017.02	-61.49	11.17	-62.41	3.70	H	-54.94	-25.00	1	63
	7 525.53	-62.90	11.57	-55.25	4.61	H	-48.29	-25.00		
	10 034.04	-63.37	11.45	-54.13	5.48	H	-48.16	-25.00		
518598 (2592.990)	5 185.98	-63.50	11.61	-64.67	3.80	H	-56.86	-25.00	1	1
	7 778.97	-64.19	11.26	-57.12	4.70	H	-50.56	-25.00		
	10 371.96	-62.70	11.68	-51.61	5.55	H	-45.48	-25.00		
535500 (2677.500)	5 355.00	-63.10	11.94	-64.65	3.88	H	-56.59	-25.00	1	1
	8 032.50	-62.99	11.21	-55.70	4.80	H	-49.29	-25.00		
	10 710.00	-63.51	11.57	-51.79	5.65	H	-45.87	-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	-62.79	11.17	-63.49	3.69	H	-56.01	-25.00	1	76
	7 533.00	-63.00	11.57	-55.40	4.61	H	-48.44	-25.00		
	10 044.00	-64.28	11.44	-54.96	5.48	H	-49.00	-25.00		
518598 (2592.990)	5 185.98	-64.01	11.61	-65.18	3.80	H	-57.37	-25.00	1	1
	7 778.97	-63.85	11.26	-56.78	4.70	H	-50.22	-25.00		
	10 371.96	-63.43	11.68	-52.34	5.55	H	-46.21	-25.00		
534996 (2674.980)	5 349.96	-63.60	11.94	-65.29	3.85	H	-57.20	-25.00	1	1
	8 024.94	-63.51	11.20	-56.26	4.79	H	-49.85	-25.00		
	10 699.92	-64.23	11.57	-52.23	5.67	H	-46.33	-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	-63.61	11.19	-64.45	3.67	H	-56.93	-25.00	1	53
	7 548.03	-64.32	11.59	-56.95	4.63	H	-49.99	-25.00		
	10 064.04	-63.70	11.42	-54.48	5.47	H	-48.53	-25.00		
518598 (2592.990)	5 185.98	-63.59	11.61	-64.76	3.80	H	-56.95	-25.00	1	104
	7 778.97	-63.66	11.26	-56.59	4.70	H	-50.03	-25.00		
	10 371.96	-62.43	11.68	-51.34	5.55	H	-45.21	-25.00		
534000 (2670.000)	5 340.00	-63.30	11.93	-65.28	3.80	H	-57.15	-25.00	1	1
	8 010.00	-63.84	11.17	-56.52	4.77	H	-50.12	-25.00		
	10 680.00	-63.90	11.57	-51.32	5.71	H	-45.46	-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	-63.66	11.20	-64.70	3.68	H	-57.18	-25.00	1	66
	7 563.06	-64.18	11.60	-56.65	4.64	H	-49.69	-25.00		
	10 084.08	-63.80	11.40	-54.57	5.46	H	-48.63	-25.00		
518598 (2592.990)	5 185.98	-63.52	11.61	-64.69	3.80	H	-56.88	-25.00	1	131
	7 778.97	-63.37	11.26	-56.30	4.70	H	-49.74	-25.00		
	10 371.96	-62.48	11.68	-51.39	5.55	H	-45.26	-25.00		
532998 (2664.990)	5 329.98	-64.05	11.92	-65.78	3.77	H	-57.63	-25.00	1	66
	7 994.97	-64.85	11.13	-57.30	4.77	H	-50.94	-25.00		
	10 659.96	-63.89	11.58	-51.49	5.67	H	-45.58	-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	-62.40	11.22	-63.87	3.73	H	-56.38	-25.00	1	82
	7 578.00	-63.55	11.61	-55.89	4.65	H	-48.93	-25.00		
	10 104.00	-63.18	11.39	-53.62	5.46	H	-47.69	-25.00		
518598 (2592.990)	5 185.98	-63.48	11.61	-64.65	3.80	H	-56.84	-25.00	1	161
	7 778.97	-63.50	11.26	-56.43	4.70	H	-49.87	-25.00		
	10 371.96	-62.98	11.68	-51.89	5.55	H	-45.76	-25.00		
531996 (2659.980)	5 319.96	-63.60	11.91	-65.15	3.79	H	-57.03	-25.00	1	82
	7 979.94	-63.47	11.10	-55.77	4.79	H	-49.46	-25.00		
	10 639.92	-62.92	11.58	-50.54	5.61	H	-44.57	-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	-63.88	11.24	-65.25	3.78	H	-57.79	-25.00	1	187
	7 593.03	-64.25	11.62	-56.97	4.64	H	-49.99	-25.00		
	10 124.04	-62.78	11.37	-53.09	5.47	H	-47.19	-25.00		
518598 (2592.990)	5 185.98	-63.50	11.61	-64.67	3.80	H	-56.86	-25.00	1	187
	7 778.97	-63.95	11.26	-56.88	4.70	H	-50.32	-25.00		
	10 371.96	-64.11	11.68	-53.02	5.55	H	-46.89	-25.00		
531000 (2655.000)	5 310.00	-63.59	11.91	-64.70	3.82	H	-56.61	-25.00	1	94
	7 965.00	-64.01	11.07	-56.19	4.80	H	-49.92	-25.00		
	10 620.00	-63.80	11.58	-51.76	5.65	H	-45.83	-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	-63.50	11.25	-64.66	3.80	H	-57.21	-25.00	1	108
	7 608.06	-63.91	11.60	-57.03	4.64	H	-50.07	-25.00		
	10 144.08	-64.02	11.36	-54.41	5.48	H	-48.53	-25.00		
518598 (2592.990)	5 185.98	-64.00	11.61	-65.17	3.80	H	-57.36	-25.00	1	215
	7 778.97	-63.77	11.26	-56.70	4.70	H	-50.14	-25.00		
	10 371.96	-62.46	11.68	-51.37	5.55	H	-45.24	-25.00		
529998 (2649.990)	5 299.98	-62.80	11.90	-64.30	3.83	H	-56.23	-25.00	1	1
	7 949.97	-63.73	11.03	-56.08	4.78	H	-49.83	-25.00		
	10 599.96	-63.49	11.58	-52.20	5.67	H	-46.29	-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	-62.40	11.27	-63.20	3.81	H	-55.74	-25.00	1	243
	7 623.00	-62.85	11.57	-55.91	4.65	H	-48.99	-25.00		
	10 164.00	-63.50	11.34	-53.64	5.50	H	-47.80	-25.00		
518598 (2592.990)	5 185.98	-63.44	11.61	-64.61	3.80	H	-56.80	-25.00	1	243
	7 778.97	-63.29	11.26	-56.22	4.70	H	-49.66	-25.00		
	10 371.96	-63.85	11.68	-52.76	5.55	H	-46.63	-25.00		
528996 (2644.980)	5 289.96	-63.50	11.89	-65.08	3.83	H	-57.02	-25.00	1	122
	7 934.94	-64.01	11.01	-56.63	4.77	H	-50.39	-25.00		
	10 579.92	-63.90	11.62	-52.75	5.65	H	-46.78	-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	-61.79	11.29	-62.67	3.78	H	-55.16	-25.00	1	271
	7 638.03	-62.40	11.54	-55.43	4.68	H	-48.57	-25.00		
	10 184.04	-62.93	11.35	-52.89	5.52	H	-47.06	-25.00		
518598 (2592.990)	5 185.98	-63.60	11.61	-64.77	3.80	H	-56.96	-25.00	1	271
	7 778.97	-62.85	11.26	-55.78	4.70	H	-49.22	-25.00		
	10 371.96	-64.00	11.68	-52.91	5.55	H	-46.78	-25.00		
528000 (2640.000)	5 280.00	-63.90	11.88	-65.93	3.80	H	-57.85	-25.00	1	1
	7 920.00	-63.44	11.02	-56.02	4.77	H	-49.77	-25.00		
	10 560.00	-63.85	11.65	-52.91	5.63	H	-46.89	-25.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41	10 MHz	2592.990	BPSK	24	0	4.78
			QPSK			5.93
			16-QAM			6.68
			64-QAM			6.99
			256-QAM			6.64
	15 MHz		BPSK	36		4.76
			QPSK			5.92
			16-QAM			6.70
			64-QAM			7.10
			256-QAM			7.60
	20 MHz		BPSK	50		5.16
			QPSK			5.91
			16-QAM			6.70
			64-QAM			6.84
			256-QAM			6.75
	25 MHz		BPSK	64		4.77
			QPSK			5.87
			16-QAM			6.60
			64-QAM			6.62
			256-QAM			6.72
	30 MHz		BPSK	75		4.69
			QPSK			5.89
			16-QAM			6.60
			64-QAM			6.67
			256-QAM			6.83
	40 MHz		BPSK	100		4.74
			QPSK			5.93
			16-QAM			6.62
			64-QAM			6.67
			256-QAM			6.67
	50 MHz		BPSK	128		4.51
			QPSK			5.71
			16-QAM			6.48
			64-QAM			6.64
			256-QAM			6.63

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41	60 MHz	2592.990	BPSK	162	0	4.79
			QPSK			5.65
			16-QAM			6.34
			64-QAM			6.54
			256-QAM			6.55
	70 MHz		BPSK	180		5.26
			QPSK			5.66
			16-QAM			6.47
			64-QAM			6.53
			256-QAM			6.63
	80 MHz		BPSK	216		4.50
			QPSK			5.62
			16-QAM			6.45
			64-QAM			6.51
			256-QAM			6.65
	90 MHz		BPSK	243		5.74
			QPSK			5.91
			16-QAM			6.44
			64-QAM			6.49
			256-QAM			6.74
	100 MHz		BPSK	270		4.38
			QPSK			5.59
			16-QAM			6.30
			64-QAM			6.41
			256-QAM			6.54

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 121 ~ 180.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41	10 MHz	2592.990	BPSK	24	0	8.7025
			QPSK			8.6899
			16-QAM			8.6788
			64-QAM			8.6867
			256-QAM			8.6719
	15 MHz		BPSK	36		12.986
			QPSK			12.974
			16-QAM			12.986
			64-QAM			13.001
			256-QAM			12.965
	20 MHz		BPSK	50		17.989
			QPSK			18.036
			16-QAM			17.989
			64-QAM			18.022
			256-QAM			17.963
	25 MHz		BPSK	64		23.011
			QPSK			23.001
			16-QAM			23.025
			64-QAM			23.053
			256-QAM			22.998
	30 MHz		BPSK	75		27.053
			QPSK			27.030
			16-QAM			27.019
			64-QAM			27.024
			256-QAM			26.992
	40 MHz		BPSK	100		36.003
			QPSK			35.920
			16-QAM			35.927
			64-QAM			35.895
			256-QAM			35.903
	50 MHz		BPSK	128		46.264
			QPSK			45.951
			16-QAM			45.882
			64-QAM			45.960
			256-QAM			45.977

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41	60 MHz	2592.990	BPSK	162	0	58.276
			QPSK			58.252
			16-QAM			58.094
			64-QAM			58.198
			256-QAM			58.144
	70 MHz		BPSK	180		64.920
			QPSK			64.875
			16-QAM			64.951
			64-QAM			64.889
			256-QAM			65.106
	80 MHz		BPSK	216		77.446
			QPSK			77.646
			16-QAM			77.488
			64-QAM			77.464
			256-QAM			77.609
	90 MHz		BPSK	243		87.267
			QPSK			87.126
			16-QAM			86.978
			64-QAM			87.174
			256-QAM			87.244
	100 MHz		BPSK	270		97.058
			QPSK			96.948
			16-QAM			96.604
			64-QAM			96.866
			256-QAM			96.733

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 181 ~ 240.

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 n41	10	2501.010	4.7857	29.722	-63.730	-34.008	-25.00
		2592.990	4.9851	29.722	-63.357	-33.635	
		2685.000	3.9482	29.722	-62.423	-32.701	
	15	2503.500	9.7208	30.315	-63.294	-32.979	
		2592.990	3.8784	29.722	-62.913	-33.191	
		2682.480	4.3769	29.722	-63.217	-33.495	
	20	2506.020	4.8156	29.722	-63.129	-33.407	
		2592.990	8.1954	30.315	-62.712	-32.397	
		2679.990	4.8355	29.722	-63.482	-33.760	
	25	2508.510	3.2902	29.722	-62.747	-33.025	
		2592.990	4.5564	29.722	-62.707	-32.985	
		2677.500	3.8784	29.722	-62.751	-33.029	
	30	2511.000	3.9183	29.722	-63.031	-33.309	
		2592.990	3.7388	29.722	-63.176	-33.454	
		2674.980	4.9652	29.722	-61.930	-32.208	
	40	2516.010	8.6341	30.315	-63.584	-33.269	
		2592.990	3.9283	29.722	-63.225	-33.503	
		2670.000	3.9283	29.722	-61.602	-31.880	
	50	2521.020	4.9951	29.722	-62.327	-32.605	
		2592.990	3.0709	29.722	-62.607	-32.885	
		2664.990	2.7319	29.722	-62.309	-32.587	
	60	2526.000	4.9751	29.722	-62.216	-32.494	
		2592.990	7.2583	30.315	-63.239	-32.924	
		2659.980	4.7658	29.722	-63.015	-33.293	
	70	2531.010	3.9582	29.722	-62.333	-32.611	
		2592.990	3.9382	29.722	-62.064	-32.342	
		2655.000	2.7219	29.722	-62.655	-32.933	
	80	2536.020	8.3550	30.315	-62.318	-32.003	
		2592.990	8.8136	30.315	-63.034	-32.719	
		2649.990	3.4896	29.722	-63.096	-33.374	
	90	2541.000	3.9083	29.722	-63.178	-33.456	
		2592.990	7.2583	30.315	-63.480	-33.165	
		2644.980	3.9582	29.722	-62.798	-33.076	
	100	2546.010	4.9951	29.722	-62.878	-33.156	
		2592.990	4.7757	29.722	-63.140	-33.418	
		2640.000	2.7418	29.722	-62.706	-32.984	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 241 ~ 312.
2. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
3. Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.012
1 – 5	29.722
5 – 10	30.315
10 – 15	30.840
15 – 20	31.213
Above 20	31.855

8.6 CHANNEL EDGE

BW	Test. Frequency (MHz)	Modulation	RB Size	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 MHz	2501.010	BPSK	Full RB	-23.06	-22.67	-26.06	-26.28	-28.50	-27.94	-30.46
15 MHz	2503.500	BPSK	Full RB	-23.24	-31.61	-26.39	-30.01	-29.69	-30.37	-33.38
20 MHz	2506.020	BPSK	Full RB	-24.21	-29.49	-24.67	-28.38	-27.66	-23.64	-28.27
25 MHz	2508.510	BPSK	Full RB	-25.12	-29.62	-30.60	-32.91	-32.91	-30.27	-30.18
30 MHz	2511.000	BPSK	Full RB	-26.69	-37.09	-33.32	-36.91	-37.57	-31.78	-35.38
40 MHz	2516.010	BPSK	Full RB	-26.36	-38.16	-33.16	-35.26	-36.35	-28.76	-35.89
50 MHz	2521.020	BPSK	Full RB	-24.03	-32.97	-30.01	-35.03	-34.90	-32.00	-39.10
60 MHz	2526.000	BPSK	Full RB	-19.18	-19.94	-27.30	-27.82	-35.06	-33.85	-38.38
70 MHz	2531.010	BPSK	Full RB	-22.89	-33.68	-27.69	-31.41	-34.43	-30.62	-35.71
80 MHz	2536.020	BPSK	Full RB	-22.75	-26.84	-28.30	-30.93	-35.70	-34.00	-42.03
90 MHz	2541.000	BPSK	Full RB	-22.31	-29.67	-28.11	-32.27	-33.62	-32.95	-41.59
100 MHz	2546.010	BPSK	Full RB	-21.55	-30.28	-29.14	-32.53	-35.33	-32.96	-43.63
Limit				-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	-23.45	-23.08	-25.18	-25.21
	2685.000	BPSK	Full RB	0	-23.57	-23.81	-25.80	-26.80
15 MHz	2592.990	BPSK	Full RB	0	-23.48	-30.04	-24.02	-24.86
	2682.480	BPSK	Full RB	0	-23.43	-32.72	-25.88	-31.42
20 MHz	2592.990	BPSK	Full RB	0	-24.49	-27.88	-27.61	-29.18
	2679.990	BPSK	Full RB	0	-23.33	-28.71	-26.80	-31.79
25 MHz	2592.990	BPSK	Full RB	0	-25.58	-29.11	-32.08	-35.08
	2677.500	BPSK	Full RB	0	-22.49	-27.84	-25.28	-29.15
30 MHz	2592.990	BPSK	Full RB	0	-27.13	-37.82	-32.24	-34.83
	2679.990	BPSK	Full RB	0	-23.67	-32.06	-26.84	-30.64
40 MHz	2592.990	BPSK	Full RB	0	-25.52	-36.70	-33.23	-36.78
	2670.000	BPSK	Full RB	0	-22.95	-31.44	-25.35	-29.98
50 MHz	2592.990	BPSK	Full RB	0	-22.57	-33.04	-29.93	-33.12
	2664.990	BPSK	Full RB	0	-21.64	-30.93	-25.62	-32.45
60 MHz	2592.990	BPSK	Full RB	0	-18.49	-19.02	-27.60	-26.62
	2659.980	BPSK	Full RB	0	-17.09	-21.02	-24.14	-27.65
70 MHz	2592.990	BPSK	Full RB	0	-22.85	-34.60	-28.01	-36.04
	2655.000	BPSK	Full RB	0	-21.88	-33.03	-25.83	-34.00
80 MHz	2592.990	BPSK	Full RB	0	-23.37	-27.54	-29.20	-31.35
	2649.990	BPSK	Full RB	0	-20.21	-27.35	-27.16	-30.59
90 MHz	2592.990	BPSK	Full RB	0	-21.87	-27.81	-27.80	-30.71
	2644.980	BPSK	Full RB	0	-21.65	-24.82	-27.66	-32.38
100 MHz	2592.990	BPSK	Full RB	0	-21.31	-31.17	-29.22	-33.68
	2640.000	BPSK	Full RB	0	-20.00	-31.99	-27.67	-34.73
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	-31.14	-27.56	-35.36	-33.64
	2685.000	BPSK	Full RB	0	-30.71	-32.61	-36.75	-35.99
15 MHz	2592.990	BPSK	Full RB	0	-27.00	-28.28	-36.50	-34.63
	2682.480	BPSK	Full RB	0	-27.50	-32.01	-33.84	-34.84
20 MHz	2592.990	BPSK	Full RB	0	-33.03	-27.85	-36.91	-34.93
	2679.990	BPSK	Full RB	0	-24.15	-27.79	-30.58	-30.95
25 MHz	2592.990	BPSK	Full RB	0	-33.81	-36.12	-40.20	-40.08
	2677.500	BPSK	Full RB	0	-25.36	-32.21	-38.57	-42.85
30 MHz	2592.990	BPSK	Full RB	0	-32.48	-32.26	-39.02	-38.65
	2679.990	BPSK	Full RB	0	-24.41	-32.74	-37.24	-41.72
40 MHz	2592.990	BPSK	Full RB	0	-31.58	-31.93	-42.78	-41.40
	2670.000	BPSK	Full RB	0	-24.80	-32.37	-34.75	-36.71
50 MHz	2592.990	BPSK	Full RB	0	-35.10	-33.46	-41.32	-43.40
	2664.990	BPSK	Full RB	0	-28.23	-35.21	-40.39	-51.03
60 MHz	2592.990	BPSK	Full RB	0	-34.40	-31.02	-41.01	-40.04
	2659.980	BPSK	Full RB	0	-28.27	-31.11	-40.57	-51.95
70 MHz	2592.990	BPSK	Full RB	0	-35.05	-35.83	-43.09	-43.89
	2655.000	BPSK	Full RB	0	-29.69	-35.41	-39.54	-54.05
80 MHz	2592.990	BPSK	Full RB	0	-34.67	-35.13	-53.15	-43.49
	2649.990	BPSK	Full RB	0	-30.06	-34.73	-39.94	-54.28
90 MHz	2592.990	BPSK	Full RB	0	-33.64	-33.82	-54.94	-45.58
	2644.980	BPSK	Full RB	0	-29.96	-35.56	-43.27	-54.46
100 MHz	2592.990	BPSK	Full RB	0	-34.83	-35.17	-54.94	-46.33
	2640.000	BPSK	Full RB	0	-31.51	-37.89	-47.49	-54.80
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 313 ~ 396. (1RB & Full RB)

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

BandWidth:	10 MHz
Voltage(100 %):	3.900 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)	(%)	
2501.010	100 %	+20(Ref)	2501 009 997	0.0	0.000 000	0.000
	100 %	-30	2501 009 993	-4.2	0.000 000	-0.002
	100 %	-20	2501 009 996	-1.6	0.000 000	-0.001
	100 %	-10	2501 009 993	-4.5	0.000 000	-0.002
	100 %	0	2501 009 998	0.8	0.000 000	0.000
	100 %	+10	2501 009 998	1.0	0.000 000	0.000
	100 %	+30	2501 009 994	-3.0	0.000 000	-0.001
	100 %	+40	2501 009 994	-3.1	0.000 000	-0.001
	100 %	+50	2501 009 995	-2.4	0.000 000	-0.001
	Batt. Endpoint	+20	2501 009 997	0.0	0.000 000	0.000
2685.000	100 %	+20(Ref)	2684 999 994	0.0	0.000 000	0.000
	100 %	-30	2684 999 989	-5.2	0.000 000	-0.002
	100 %	-20	2684 999 985	-9.1	0.000 000	-0.003
	100 %	-10	2684 999 984	-9.8	0.000 000	-0.004
	100 %	0	2684 999 990	-4.5	0.000 000	-0.002
	100 %	+10	2684 999 991	-2.8	0.000 000	-0.001
	100 %	+30	2684 999 986	-8.3	0.000 000	-0.003
	100 %	+40	2684 999 987	-7.1	0.000 000	-0.003
	100 %	+50	2684 999 989	-4.7	0.000 000	-0.002
	Batt. Endpoint	+20	2684 999 992	-1.9	0.000 000	-0.001

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 3.900 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 499 999	0.0	0.000 000	0.000
	100 %	-30	2503 500 000	1.0	0.000 000	0.000
	100 %	-20	2503 499 995	-3.7	0.000 000	-0.001
	100 %	-10	2503 499 997	-1.8	0.000 000	-0.001
	100 %	0	2503 499 998	-0.8	0.000 000	0.000
	100 %	+10	2503 499 999	-0.2	0.000 000	0.000
	100 %	+30	2503 499 997	-1.6	0.000 000	-0.001
	100 %	+40	2503 499 999	0.3	0.000 000	0.000
	100 %	+50	2503 499 997	-1.6	0.000 000	-0.001
	Batt. Endpoint	+20	2503 499 999	-0.2	0.000 000	0.000
2682.480	100 %	+20(Ref)	2682 479 996	0.0	0.000 000	0.000
	100 %	-30	2682 479 996	-0.5	0.000 000	0.000
	100 %	-20	2682 479 988	-8.6	0.000 000	-0.003
	100 %	-10	2682 479 994	-2.7	0.000 000	-0.001
	100 %	0	2682 480 000	3.7	0.000 000	0.001
	100 %	+10	2682 479 995	-1.0	0.000 000	0.000
	100 %	+30	2682 479 996	-0.8	0.000 000	0.000
	100 %	+40	2682 479 995	-1.1	0.000 000	0.000
	100 %	+50	2682 479 994	-2.5	0.000 000	-0.001
	Batt. Endpoint	+20	2682 479 997	0.3	0.000 000	0.000

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 3.900 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 019 998	0.0	0.000 000	0.000
	100 %	-30	2506 019 997	-0.8	0.000 000	0.000
	100 %	-20	2506 020 000	2.3	0.000 000	0.001
	100 %	-10	2506 019 997	-0.3	0.000 000	0.000
	100 %	0	2506 019 995	-2.1	0.000 000	-0.001
	100 %	+10	2506 019 997	-0.5	0.000 000	0.000
	100 %	+30	2506 019 994	-3.7	0.000 000	-0.001
	100 %	+40	2506 019 996	-1.7	0.000 000	-0.001
	100 %	+50	2506 019 995	-2.5	0.000 000	-0.001
	Batt. Endpoint	+20	2506 019 998	0.1	0.000 000	0.000
2679.990	100 %	+20(Ref)	2679 990 001	0.0	0.000 000	0.000
	100 %	-30	2679 989 994	-7.5	0.000 000	-0.003
	100 %	-20	2679 989 997	-4.1	0.000 000	-0.002
	100 %	-10	2679 989 992	-8.9	0.000 000	-0.003
	100 %	0	2679 989 996	-5.1	0.000 000	-0.002
	100 %	+10	2679 990 003	1.7	0.000 000	0.001
	100 %	+30	2679 989 999	-2.1	0.000 000	-0.001
	100 %	+40	2679 989 995	-6.4	0.000 000	-0.002
	100 %	+50	2679 989 999	-2.6	0.000 000	-0.001
	Batt. Endpoint	+20	2679 990 000	-1.6	0.000 000	-0.001

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 3.900 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)	(%)	
2508.510	100 %	+20(Ref)	2508 509 994	0.0	0.000 000	0.000
	100 %	-30	2508 509 990	-3.2	0.000 000	-0.001
	100 %	-20	2508 509 988	-5.8	0.000 000	-0.002
	100 %	-10	2508 509 991	-2.2	0.000 000	-0.001
	100 %	0	2508 509 990	-3.9	0.000 000	-0.002
	100 %	+10	2508 509 991	-2.0	0.000 000	-0.001
	100 %	+30	2508 509 992	-1.5	0.000 000	-0.001
	100 %	+40	2508 509 989	-4.6	0.000 000	-0.002
	100 %	+50	2508 509 990	-3.9	0.000 000	-0.002
	Batt. Endpoint	+20	2508 509 988	-5.3	0.000 000	-0.002
2677.500	100 %	+20(Ref)	2677 499 999	0.0	0.000 000	0.000
	100 %	-30	2677 499 993	-5.8	0.000 000	-0.002
	100 %	-20	2677 499 991	-7.5	0.000 000	-0.003
	100 %	-10	2677 499 996	-2.7	0.000 000	-0.001
	100 %	0	2677 499 992	-6.5	0.000 000	-0.002
	100 %	+10	2677 499 994	-4.8	0.000 000	-0.002
	100 %	+30	2677 499 992	-7.1	0.000 000	-0.003
	100 %	+40	2677 499 991	-7.6	0.000 000	-0.003
	100 %	+50	2677 499 990	-8.4	0.000 000	-0.003
	Batt. Endpoint	+20	2677 499 995	-3.5	0.000 000	-0.001

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 3.900 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 999 999	0.0	0.000 000	0.000
	100 %	-30	2510 999 998	-0.8	0.000 000	0.000
	100 %	-20	2510 999 999	0.1	0.000 000	0.000
	100 %	-10	2511 000 000	1.2	0.000 000	0.000
	100 %	0	2510 999 998	-1.1	0.000 000	0.000
	100 %	+10	2510 999 998	-1.3	0.000 000	-0.001
	100 %	+30	2510 999 999	-0.6	0.000 000	0.000
	100 %	+40	2510 999 999	-0.5	0.000 000	0.000
	100 %	+50	2510 999 995	-4.1	0.000 000	-0.002
	Batt. Endpoint	+20	2511 000 001	2.0	0.000 000	0.001
2674.980	100 %	+20(Ref)	2674 980 002	0.0	0.000 000	0.000
	100 %	-30	2674 980 006	4.7	0.000 000	0.002
	100 %	-20	2674 980 004	2.1	0.000 000	0.001
	100 %	-10	2674 980 007	5.1	0.000 000	0.002
	100 %	0	2674 980 012	10.4	0.000 000	0.004
	100 %	+10	2674 980 003	0.9	0.000 000	0.000
	100 %	+30	2674 980 005	3.5	0.000 000	0.001
	100 %	+40	2674 980 010	8.0	0.000 000	0.003
	100 %	+50	2674 980 008	6.3	0.000 000	0.002
	Batt. Endpoint	+20	2674 980 005	3.1	0.000 000	0.001

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 3.900 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 010 001	0.0	0.000 000	0.000
	100 %	-30	2516 010 004	2.4	0.000 000	0.001
	100 %	-20	2516 010 001	-0.4	0.000 000	0.000
	100 %	-10	2516 010 004	2.4	0.000 000	0.001
	100 %	0	2516 009 999	-2.4	0.000 000	-0.001
	100 %	+10	2516 010 007	5.9	0.000 000	0.002
	100 %	+30	2516 009 998	-3.5	0.000 000	-0.001
	100 %	+40	2516 010 001	-0.1	0.000 000	0.000
	100 %	+50	2516 010 002	0.5	0.000 000	0.000
	Batt. Endpoint	+20	2516 009 997	-4.0	0.000 000	-0.002
2670.000	100 %	+20(Ref)	2669 999 998	0.0	0.000 000	0.000
	100 %	-30	2669 999 998	-0.8	0.000 000	0.000
	100 %	-20	2669 999 995	-3.4	0.000 000	-0.001
	100 %	-10	2669 999 996	-2.4	0.000 000	-0.001
	100 %	0	2669 999 998	-0.7	0.000 000	0.000
	100 %	+10	2669 999 997	-1.3	0.000 000	0.000
	100 %	+30	2669 999 998	-0.4	0.000 000	0.000
	100 %	+40	2669 999 998	-0.7	0.000 000	0.000
	100 %	+50	2669 999 995	-3.0	0.000 000	-0.001
	Batt. Endpoint	+20	2669 999 997	-1.8	0.000 000	-0.001

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 3.900 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 019 995	0.0	0.000 000	0.000
	100 %	-30	2521 019 991	-4.4	0.000 000	-0.002
	100 %	-20	2521 019 991	-3.8	0.000 000	-0.002
	100 %	-10	2521 019 991	-4.1	0.000 000	-0.002
	100 %	0	2521 019 993	-2.2	0.000 000	-0.001
	100 %	+10	2521 019 992	-3.3	0.000 000	-0.001
	100 %	+30	2521 019 991	-4.1	0.000 000	-0.002
	100 %	+40	2521 019 992	-3.3	0.000 000	-0.001
	100 %	+50	2521 019 990	-5.5	0.000 000	-0.002
	Batt. Endpoint	+20	2521 019 994	-1.2	0.000 000	0.000
2664.990	100 %	+20(Ref)	2664 989 996	0.0	0.000 000	0.000
	100 %	-30	2664 989 994	-2.1	0.000 000	-0.001
	100 %	-20	2664 989 992	-4.3	0.000 000	-0.002
	100 %	-10	2664 989 993	-3.6	0.000 000	-0.001
	100 %	0	2664 989 994	-2.1	0.000 000	-0.001
	100 %	+10	2664 989 990	-6.0	0.000 000	-0.002
	100 %	+30	2664 989 996	-0.4	0.000 000	0.000
	100 %	+40	2664 989 992	-4.4	0.000 000	-0.002
	100 %	+50	2664 989 991	-4.7	0.000 000	-0.002
	Batt. Endpoint	+20	2664 989 996	-0.4	0.000 000	0.000

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 3.900 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 999 997	0.0	0.000 000	0.000
	100 %	-30	2525 999 994	-3.4	0.000 000	-0.001
	100 %	-20	2525 999 999	1.5	0.000 000	0.001
	100 %	-10	2525 999 997	-0.6	0.000 000	0.000
	100 %	0	2525 999 996	-1.2	0.000 000	0.000
	100 %	+10	2525 999 995	-2.3	0.000 000	-0.001
	100 %	+30	2525 999 994	-3.1	0.000 000	-0.001
	100 %	+40	2525 999 997	-0.9	0.000 000	0.000
	100 %	+50	2525 999 996	-1.5	0.000 000	-0.001
	Batt. Endpoint	+20	2525 999 992	-5.2	0.000 000	-0.002
2659.980	100 %	+20(Ref)	2659 980 002	0.0	0.000 000	0.000
	100 %	-30	2659 979 999	-3.6	0.000 000	-0.001
	100 %	-20	2659 979 999	-3.6	0.000 000	-0.001
	100 %	-10	2659 980 007	4.9	0.000 000	0.002
	100 %	0	2659 980 003	0.8	0.000 000	0.000
	100 %	+10	2659 980 001	-1.7	0.000 000	-0.001
	100 %	+30	2659 980 002	-0.1	0.000 000	0.000
	100 %	+40	2659 980 000	-2.6	0.000 000	-0.001
	100 %	+50	2659 979 996	-5.8	0.000 000	-0.002
	Batt. Endpoint	+20	2659 980 003	0.4	0.000 000	0.000

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 3.900 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 009 999	0.0	0.000 000	0.000
	100 %	-30	2531 010 005	5.5	0.000 000	0.002
	100 %	-20	2531 009 992	-7.3	0.000 000	-0.003
	100 %	-10	2531 009 998	-1.6	0.000 000	-0.001
	100 %	0	2531 010 003	3.3	0.000 000	0.001
	100 %	+10	2531 010 002	2.8	0.000 000	0.001
	100 %	+30	2531 010 000	0.9	0.000 000	0.000
	100 %	+40	2531 009 998	-0.9	0.000 000	0.000
	100 %	+50	2531 010 001	1.9	0.000 000	0.001
	Batt. Endpoint	+20	2531 009 996	-3.2	0.000 000	-0.001
2655.000	100 %	+20(Ref)	2655 000 006	0.0	0.000 000	0.000
	100 %	-30	2655 000 013	7.0	0.000 000	0.003
	100 %	-20	2655 000 012	6.3	0.000 000	0.002
	100 %	-10	2655 000 013	7.1	0.000 000	0.003
	100 %	0	2655 000 008	2.0	0.000 000	0.001
	100 %	+10	2655 000 009	3.2	0.000 000	0.001
	100 %	+30	2655 000 008	2.4	0.000 000	0.001
	100 %	+40	2655 000 008	2.1	0.000 000	0.001
	100 %	+50	2655 000 013	7.7	0.000 000	0.003
	Batt. Endpoint	+20	2655 000 012	6.6	0.000 000	0.002

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 3.900 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 020 004	0.0	0.000 000	0.000
	100 %	-30	2536 020 008	4.3	0.000 000	0.002
	100 %	-20	2536 020 008	4.0	0.000 000	0.002
	100 %	-10	2536 020 009	4.7	0.000 000	0.002
	100 %	0	2536 020 006	2.0	0.000 000	0.001
	100 %	+10	2536 020 007	3.5	0.000 000	0.001
	100 %	+30	2536 020 005	1.0	0.000 000	0.000
	100 %	+40	2536 020 005	1.1	0.000 000	0.000
	100 %	+50	2536 020 008	4.3	0.000 000	0.002
	Batt. Endpoint	+20	2536 020 008	4.0	0.000 000	0.002
2649.990	100 %	+20(Ref)	2649 990 009	0.0	0.000 000	0.000
	100 %	-30	2649 990 012	3.1	0.000 000	0.001
	100 %	-20	2649 990 014	5.6	0.000 000	0.002
	100 %	-10	2649 990 013	4.1	0.000 000	0.002
	100 %	0	2649 990 013	4.7	0.000 000	0.002
	100 %	+10	2649 990 011	2.4	0.000 000	0.001
	100 %	+30	2649 990 012	3.2	0.000 000	0.001
	100 %	+40	2649 990 008	-0.2	0.000 000	0.000
	100 %	+50	2649 990 013	4.5	0.000 000	0.002
	Batt. Endpoint	+20	2649 990 014	5.3	0.000 000	0.002

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 3.900 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)	(%)	
2541.000	100 %	+20(Ref)	2540 999 996	0.0	0.000 000	0.000
	100 %	-30	2540 999 990	-5.7	0.000 000	-0.002
	100 %	-20	2540 999 989	-7.1	0.000 000	-0.003
	100 %	-10	2540 999 987	-8.5	0.000 000	-0.003
	100 %	0	2540 999 995	-1.0	0.000 000	0.000
	100 %	+10	2540 999 990	-5.7	0.000 000	-0.002
	100 %	+30	2540 999 991	-4.6	0.000 000	-0.002
	100 %	+40	2540 999 985	-10.4	0.000 000	-0.004
	100 %	+50	2540 999 989	-6.4	0.000 000	-0.003
	Batt. Endpoint	+20	2540 999 986	-9.7	0.000 000	-0.004
2644.980	100 %	+20(Ref)	2644 980 002	0.0	0.000 000	0.000
	100 %	-30	2644 980 003	1.3	0.000 000	0.000
	100 %	-20	2644 980 002	0.1	0.000 000	0.000
	100 %	-10	2644 980 002	0.6	0.000 000	0.000
	100 %	0	2644 980 003	1.3	0.000 000	0.000
	100 %	+10	2644 980 001	-0.7	0.000 000	0.000
	100 %	+30	2644 980 005	3.5	0.000 000	0.001
	100 %	+40	2644 980 009	7.7	0.000 000	0.003
	100 %	+50	2644 980 003	1.4	0.000 000	0.001
	Batt. Endpoint	+20	2644 980 002	0.2	0.000 000	0.000

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 3.900 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 010 003	0.0	0.000 000	0.000
	100 %	-30	2546 010 007	3.7	0.000 000	0.001
	100 %	-20	2546 010 006	3.0	0.000 000	0.001
	100 %	-10	2546 010 005	2.4	0.000 000	0.001
	100 %	0	2546 009 998	-4.5	0.000 000	-0.002
	100 %	+10	2546 010 004	1.0	0.000 000	0.000
	100 %	+30	2546 010 007	4.4	0.000 000	0.002
	100 %	+40	2546 010 004	0.6	0.000 000	0.000
	100 %	+50	2546 010 001	-1.7	0.000 000	-0.001
	Batt. Endpoint	+20	2546 010 007	4.2	0.000 000	0.002
2640.000	100 %	+20(Ref)	2640 000 002	0.0	0.000 000	0.000
	100 %	-30	2640 000 000	-1.6	0.000 000	-0.001
	100 %	-20	2640 000 007	5.3	0.000 000	0.002
	100 %	-10	2640 000 004	2.6	0.000 000	0.001
	100 %	0	2640 000 008	6.7	0.000 000	0.003
	100 %	+10	2640 000 006	4.9	0.000 000	0.002
	100 %	+30	2640 000 006	4.4	0.000 000	0.002
	100 %	+40	2640 000 007	5.4	0.000 000	0.002
	100 %	+50	2640 000 000	-1.1	0.000 000	0.000
	Batt. Endpoint	+20	2640 000 005	3.7	0.000 000	0.001

9. TEST DATA(Sub 5 ANT)

9.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2501.010	Sub6 n41 / 10 MHz [30 kHz]	PI/2 BPSK	-26.44	10.36	10.61	2.50	H	< 2.00	0.070	18.47	1	22
		QPSK	-26.49	10.31	10.61	2.50	H		0.070	18.42		
		16-QAM	-27.46	9.34	10.61	2.50	H		0.056	17.45		
		64-QAM	-28.90	7.90	10.61	2.50	H		0.040	16.01		
		256-QAM	-30.98	5.82	10.61	2.50	H		0.025	13.93		
2592.990		PI/2 BPSK	-25.30	11.41	11.00	2.55	H		0.097	19.86	1	1
		QPSK	-25.32	11.39	11.00	2.55	H		0.096	19.84		
		16-QAM	-26.12	10.59	11.00	2.55	H		0.080	19.04		
		64-QAM	-27.81	8.90	11.00	2.55	H		0.054	17.35		
		256-QAM	-29.70	7.01	11.00	2.55	H		0.035	15.46		
2685.000		PI/2 BPSK	-27.40	10.16	10.82	2.61	H		0.069	18.37	1	12
		QPSK	-27.42	10.14	10.82	2.61	H		0.068	18.35		
		16-QAM	-28.31	9.25	10.82	2.61	H		0.056	17.46		
		64-QAM	-29.86	7.70	10.82	2.61	H		0.039	15.91		
		256-QAM	-31.87	5.69	10.82	2.61	H		0.025	13.90		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2503.500	Sub6 n41 / 15 MHz [30 kHz]	PI/2 BPSK	-26.46	10.40	10.58	2.51	H	< 2.00	0.070	18.47	1	36
		QPSK	-26.47	10.39	10.58	2.51	H		0.070	18.46		
		16-QAM	-27.44	9.42	10.58	2.51	H		0.056	17.49		
		64-QAM	-28.95	7.91	10.58	2.51	H		0.040	15.98		
		256-QAM	-30.87	5.99	10.58	2.51	H		0.025	14.06		
2592.990		PI/2 BPSK	-25.08	11.63	11.00	2.55	H		0.102	20.08	1	1
		QPSK	-25.11	11.60	11.00	2.55	H		0.101	20.05		
		16-QAM	-26.03	10.68	11.00	2.55	H		0.082	19.13		
		64-QAM	-27.65	9.06	11.00	2.55	H		0.056	17.51		
		256-QAM	-29.55	7.16	11.00	2.55	H		0.036	15.61		
2682.480		PI/2 BPSK	-27.50	10.17	10.84	2.61	H		0.069	18.40	1	1
		QPSK	-27.53	10.14	10.84	2.61	H		0.069	18.37		
		16-QAM	-28.43	9.24	10.84	2.61	H		0.056	17.47		
		64-QAM	-29.97	7.70	10.84	2.61	H		0.039	15.93		
		256-QAM	-31.99	5.68	10.84	2.61	H		0.025	13.91		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2506.020	Sub6 n41 / 20 MHz [30 kHz]	PI/2 BPSK	-25.93	10.93	10.58	2.51	H	< 2.00	0.079	19.00	1	49
		QPSK	-26.02	10.84	10.58	2.51	H		0.078	18.91		
		16-QAM	-27.06	9.80	10.58	2.51	H		0.061	17.87		
		64-QAM	-28.63	8.23	10.58	2.51	H		0.043	16.30		
		256-QAM	-30.47	6.39	10.58	2.51	H		0.028	14.46		
2592.990		PI/2 BPSK	-25.26	11.45	11.00	2.55	H		0.098	19.90	1	1
		QPSK	-25.28	11.43	11.00	2.55	H		0.097	19.88		
		16-QAM	-26.20	10.51	11.00	2.55	H		0.079	18.96		
		64-QAM	-27.73	8.98	11.00	2.55	H		0.055	17.43		
		256-QAM	-29.88	6.83	11.00	2.55	H		0.034	15.28		
2679.990		PI/2 BPSK	-27.34	10.33	10.84	2.61	H		0.072	18.56	1	1
		QPSK	-27.35	10.32	10.84	2.61	H		0.072	18.55		
		16-QAM	-28.29	9.38	10.84	2.61	H		0.058	17.61		
		64-QAM	-29.88	7.79	10.84	2.61	H		0.040	16.02		
		256-QAM	-31.96	5.71	10.84	2.61	H		0.025	13.94		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2508.510	Sub6 n41 / 25 MHz [30 kHz]	PI/2 BPSK	-25.75	11.17	10.55	2.51	H	< 2.00	0.083	19.21	1	63
		QPSK	-25.79	11.13	10.55	2.51	H		0.083	19.17		
		16-QAM	-26.81	10.11	10.55	2.51	H		0.065	18.15		
		64-QAM	-28.40	8.52	10.55	2.51	H		0.045	16.56		
		256-QAM	-30.34	6.58	10.55	2.51	H		0.029	14.62		
2592.990		PI/2 BPSK	-25.15	11.56	11.00	2.55	H		0.100	20.01	1	1
		QPSK	-25.19	11.52	11.00	2.55	H		0.099	19.97		
		16-QAM	-26.11	10.60	11.00	2.55	H		0.080	19.05		
		64-QAM	-27.62	9.09	11.00	2.55	H		0.057	17.54		
		256-QAM	-29.54	7.17	11.00	2.55	H		0.036	15.62		
2677.500		PI/2 BPSK	-27.26	10.41	10.84	2.61	H		0.073	18.64	1	1
		QPSK	-27.29	10.38	10.84	2.61	H		0.073	18.61		
		16-QAM	-28.24	9.43	10.84	2.61	H		0.058	17.66		
		64-QAM	-29.77	7.90	10.84	2.61	H		0.041	16.13		
		256-QAM	-31.71	5.96	10.84	2.61	H		0.026	14.19		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2511.000	Sub6 n41 / 30 MHz [30 kHz]	PI/2 BPSK	-25.51	11.41	10.55	2.51	H	< 2.00	0.088	19.45	1	76
		QPSK	-25.56	11.36	10.55	2.51	H		0.087	19.40		
		16-QAM	-26.51	10.41	10.55	2.51	H		0.070	18.45		
		64-QAM	-28.10	8.82	10.55	2.51	H		0.049	16.86		
		256-QAM	-29.97	6.95	10.55	2.51	H		0.032	14.99		
2592.990		PI/2 BPSK	-25.07	11.64	11.00	2.55	H		0.102	20.09	1	1
		QPSK	-25.10	11.61	11.00	2.55	H		0.101	20.06		
		16-QAM	-26.12	10.59	11.00	2.55	H		0.080	19.04		
		64-QAM	-27.68	9.03	11.00	2.55	H		0.056	17.48		
		256-QAM	-29.75	6.96	11.00	2.55	H		0.035	15.41		
2674.980		PI/2 BPSK	-27.07	10.22	10.85	2.62	H		0.070	18.45	1	1
		QPSK	-27.08	10.21	10.85	2.62	H		0.070	18.44		
		16-QAM	-28.03	9.26	10.85	2.62	H		0.056	17.49		
		64-QAM	-29.58	7.71	10.85	2.62	H		0.039	15.94		
		256-QAM	-31.48	5.81	10.85	2.62	H		0.025	14.04		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2516.010	Sub6 n41 / 40 MHz [30 kHz]	PI/2 BPSK	-25.16	11.77	10.52	2.53	H	< 2.00	0.095	19.76	1	104
		QPSK	-25.17	11.76	10.52	2.53	H		0.094	19.75		
		16-QAM	-26.18	10.75	10.52	2.53	H		0.075	18.74		
		64-QAM	-27.68	9.25	10.52	2.53	H		0.053	17.24		
		256-QAM	-29.56	7.37	10.52	2.53	H		0.034	15.36		
2592.990		PI/2 BPSK	-25.22	11.49	11.00	2.55	H		0.099	19.94	1	1
		QPSK	-25.24	11.47	11.00	2.55	H		0.098	19.92		
		16-QAM	-26.21	10.50	11.00	2.55	H		0.079	18.95		
		64-QAM	-27.90	8.81	11.00	2.55	H		0.053	17.26		
		256-QAM	-29.67	7.04	11.00	2.55	H		0.035	15.49		
2670.000		PI/2 BPSK	-26.41	10.49	10.87	2.62	H		0.075	18.74	1	1
		QPSK	-26.47	10.43	10.87	2.62	H		0.074	18.68		
		16-QAM	-27.47	9.43	10.87	2.62	H		0.059	17.68		
		64-QAM	-28.93	7.97	10.87	2.62	H		0.042	16.22		
		256-QAM	-30.88	6.02	10.87	2.62	H		0.027	14.27		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2521.020	Sub6 n41 / 50 MHz [30 kHz]	PI/2 BPSK	-25.12	11.81	10.49	2.54	H	< 2.00	0.095	19.76	1	131
		QPSK	-25.15	11.78	10.49	2.54	H		0.094	19.73		
		16-QAM	-26.10	10.83	10.49	2.54	H		0.076	18.78		
		64-QAM	-27.77	9.16	10.49	2.54	H		0.051	17.11		
		256-QAM	-29.59	7.34	10.49	2.54	H		0.034	15.29		
2592.990		PI/2 BPSK	-25.22	11.49	11.00	2.55	H		0.099	19.94	1	66
		QPSK	-25.30	11.41	11.00	2.55	H		0.097	19.86		
		16-QAM	-26.27	10.44	11.00	2.55	H		0.077	18.89		
		64-QAM	-27.79	8.92	11.00	2.55	H		0.055	17.37		
		256-QAM	-29.65	7.06	11.00	2.55	H		0.036	15.51		
2664.990		PI/2 BPSK	-26.42	10.53	10.88	2.64	H		0.075	18.77	1	1
		QPSK	-26.47	10.48	10.88	2.64	H		0.074	18.72		
		16-QAM	-27.40	9.55	10.88	2.64	H		0.060	17.79		
		64-QAM	-28.97	7.98	10.88	2.64	H		0.042	16.22		
		256-QAM	-30.99	5.96	10.88	2.64	H		0.026	14.20		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2526.000	Sub6 41/ 60 MHz [30 kHz]	PI/2 BPSK	-25.36	11.27	10.52	2.54	H	< 2.00	0.084	19.25	1	160
		QPSK	-25.37	11.26	10.52	2.54	H		0.084	19.24		
		16-QAM	-26.41	10.22	10.52	2.54	H		0.066	18.20		
		64-QAM	-27.90	8.73	10.52	2.54	H		0.047	16.71		
		256-QAM	-29.95	6.68	10.52	2.54	H		0.029	14.66		
2592.990		PI/2 BPSK	-24.97	11.74	11.00	2.55	H		0.104	20.19	1	1
		QPSK	-25.03	11.68	11.00	2.55	H		0.103	20.13		
		16-QAM	-26.12	10.59	11.00	2.55	H		0.080	19.04		
		64-QAM	-27.54	9.17	11.00	2.55	H		0.058	17.62		
		256-QAM	-29.59	7.12	11.00	2.55	H		0.036	15.57		
2659.980		PI/2 BPSK	-25.93	11.08	10.90	2.67	H		0.085	19.31	1	1
		QPSK	-25.99	11.02	10.90	2.67	H		0.084	19.25		
		16-QAM	-26.87	10.14	10.90	2.67	H		0.069	18.37		
		64-QAM	-28.42	8.59	10.90	2.67	H		0.048	16.82		
		256-QAM	-30.46	6.55	10.90	2.67	H		0.030	14.78		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2531.010	Sub6 41/ 70 MHz [30 kHz]	PI/2 BPSK	-24.95	11.38	10.56	2.54	H	< 2.00	0.087	19.40	1	187
		QPSK	-24.99	11.34	10.56	2.54	H		0.086	19.36		
		16-QAM	-26.05	10.28	10.56	2.54	H		0.068	18.30		
		64-QAM	-27.43	8.90	10.56	2.54	H		0.049	16.92		
		256-QAM	-29.54	6.79	10.56	2.54	H		0.030	14.81		
2592.990		PI/2 BPSK	-24.79	11.92	11.00	2.55	H		0.109	20.37	1	1
		QPSK	-24.80	11.91	11.00	2.55	H		0.109	20.36		
		16-QAM	-25.87	10.84	11.00	2.55	H		0.085	19.29		
		64-QAM	-27.21	9.50	11.00	2.55	H		0.062	17.95		
		256-QAM	-29.31	7.40	11.00	2.55	H		0.038	15.85		
2655.000		PI/2 BPSK	-25.25	11.66	10.91	2.68	H		0.097	19.89	1	1
		QPSK	-25.28	11.63	10.91	2.68	H		0.097	19.86		
		16-QAM	-26.19	10.72	10.91	2.68	H		0.079	18.95		
		64-QAM	-27.81	9.10	10.91	2.68	H		0.054	17.33		
		256-QAM	-29.81	7.10	10.91	2.68	H		0.034	15.33		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2536.020	Sub6 41/ 80 MHz [30 kHz]	PI/2 BPSK	-25.07	11.39	10.59	2.54	H	< 2.00	0.088	19.44	1	215
		QPSK	-25.11	11.35	10.59	2.54	H		0.087	19.40		
		16-QAM	-26.20	10.26	10.59	2.54	H		0.068	18.31		
		64-QAM	-27.60	8.86	10.59	2.54	H		0.049	16.91		
		256-QAM	-29.50	6.96	10.59	2.54	H		0.032	15.01		
2592.990		PI/2 BPSK	-25.19	11.52	11.00	2.55	H		0.099	19.97	1	1
		QPSK	-25.22	11.49	11.00	2.55	H		0.099	19.94		
		16-QAM	-26.15	10.56	11.00	2.55	H		0.080	19.01		
		64-QAM	-27.64	9.07	11.00	2.55	H		0.056	17.52		
		256-QAM	-29.75	6.96	11.00	2.55	H		0.035	15.41		
2649.990		PI/2 BPSK	-24.95	11.84	10.93	2.69	H		0.102	20.08	1	1
		QPSK	-25.00	11.79	10.93	2.69	H		0.101	20.03		
		16-QAM	-25.91	10.88	10.93	2.69	H		0.082	19.12		
		64-QAM	-27.50	9.29	10.93	2.69	H		0.057	17.53		
		256-QAM	-29.49	7.30	10.93	2.69	H		0.036	15.54		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2541.000	Sub6 41/ 90 MHz [30 kHz]	PI/2 BPSK	-25.01	11.57	10.62	2.53	H	< 2.00	0.092	19.66	1	243
		QPSK	-25.04	11.54	10.62	2.53	H		0.092	19.63		
		16-QAM	-26.08	10.50	10.62	2.53	H		0.072	18.59		
		64-QAM	-27.52	9.06	10.62	2.53	H		0.052	17.15		
		256-QAM	-29.61	6.97	10.62	2.53	H		0.032	15.06		
2592.990		PI/2 BPSK	-24.71	12.00	11.00	2.55	H		0.111	20.45	1	1
		QPSK	-24.75	11.96	11.00	2.55	H		0.110	20.41		
		16-QAM	-25.74	10.97	11.00	2.55	H		0.087	19.42		
		64-QAM	-27.24	9.47	11.00	2.55	H		0.062	17.92		
		256-QAM	-29.24	7.47	11.00	2.55	H		0.039	15.92		
2644.980		PI/2 BPSK	-24.68	12.43	10.95	2.68	H		0.117	20.70	1	1
		QPSK	-24.73	12.38	10.95	2.68	H		0.116	20.65		
		16-QAM	-25.67	11.44	10.95	2.68	H		0.094	19.71		
		64-QAM	-27.26	9.85	10.95	2.68	H		0.065	18.12		
		256-QAM	-29.23	7.88	10.95	2.68	H		0.041	16.15		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2546.010	Sub6 41/ 100 MHz [30 kHz]	PI/2 BPSK	-24.86	11.69	10.66	2.53	H	< 2.00	0.096	19.82	1	271
		QPSK	-24.91	11.64	10.66	2.53	H		0.095	19.77		
		16-QAM	-25.79	10.76	10.66	2.53	H		0.077	18.89		
		64-QAM	-27.31	9.24	10.66	2.53	H		0.055	17.37		
		256-QAM	-29.34	7.21	10.66	2.53	H		0.034	15.34		
2592.990		PI/2 BPSK	-24.78	11.93	11.00	2.55	H		0.109	20.38	1	1
		QPSK	-24.79	11.92	11.00	2.55	H		0.109	20.37		
		16-QAM	-25.79	10.92	11.00	2.55	H		0.086	19.37		
		64-QAM	-27.34	9.37	11.00	2.55	H		0.061	17.82		
		256-QAM	-29.26	7.45	11.00	2.55	H		0.039	15.90		
2640.000		PI/2 BPSK	-24.49	12.95	10.96	2.68	H		0.133	21.23	1	1
		QPSK	-24.52	12.92	10.96	2.68	H		0.132	21.20		
		16-QAM	-25.58	11.86	10.96	2.68	H		0.103	20.14		
		64-QAM	-26.96	10.48	10.96	2.68	H		0.075	18.76		
		256-QAM	-29.01	8.43	10.96	2.68	H		0.047	16.71		

9.2 RADIATED SPURIOUS EMISSIONS

- ▣ NR Band: n41
- ▣ Bandwidth: 10 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
500202 (2501.010)	5 002.02	-59.51	11.22	-61.22	3.71	V	-53.71	-25.00	1	22
	7 503.03	-64.01	11.54	-56.58	4.60	V	-49.64	-25.00		
	10 004.04	-62.85	11.47	-53.45	5.47	V	-47.45	-25.00		
518598 (2592.990)	5 185.98	-62.13	11.61	-63.30	3.80	H	-55.49	-25.00	1	1
	7 778.97	-63.82	11.26	-56.75	4.70	H	-50.19	-25.00		
	10 371.96	-64.50	11.68	-53.41	5.55	H	-47.28	-25.00		
537000 (2685.000)	5 370.00	-61.54	11.96	-63.17	3.92	H	-55.13	-25.00	1	12
	8 055.00	-61.43	11.24	-54.15	4.81	H	-47.72	-25.00		
	10 740.00	-63.59	11.55	-51.57	5.64	H	-45.66	-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	-59.74	11.20	-61.17	3.71	V	-53.68	-25.00	1	36
	7 510.50	-63.58	11.55	-56.04	4.60	V	-49.09	-25.00		
	10 014.00	-63.10	11.46	-53.71	5.47	V	-47.72	-25.00		
518598 (2592.990)	5 185.98	-62.55	11.61	-63.72	3.80	V	-55.91	-25.00	1	1
	7 778.97	-64.02	11.26	-56.95	4.70	V	-50.39	-25.00		
	10 371.96	-64.40	11.68	-53.31	5.55	V	-47.18	-25.00		
536496 (2682.480)	5 364.96	-62.88	11.95	-64.40	3.91	V	-56.36	-25.00	1	1
	8 047.44	-61.95	11.23	-54.73	4.81	V	-48.31	-25.00		
	10 729.92	-63.80	11.56	-51.73	5.65	V	-45.82	-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	-61.34	11.18	-62.48	3.72	V	-55.02	-25.00	1	49
	7 518.06	-63.30	11.56	-55.66	4.61	V	-48.71	-25.00		
	10 024.08	-64.21	11.46	-54.86	5.47	V	-48.87	-25.00		
518598 (2592.990)	5 185.98	-62.79	11.61	-63.96	3.80	V	-56.15	-25.00	1	1
	7 778.97	-63.68	11.26	-56.61	4.70	V	-50.05	-25.00		
	10 371.96	-64.02	11.68	-52.93	5.55	V	-46.80	-25.00		
535998 (2679.990)	5 359.98	-63.00	11.95	-64.43	3.90	V	-56.38	-25.00	1	1
	8 039.97	-62.45	11.22	-55.14	4.80	V	-48.72	-25.00		
	10 719.96	-63.66	11.56	-52.01	5.64	V	-46.09	-25.00		

☐ NR Band: n41
☐ Bandwidth: 25 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
501702 (2508.510)	5 017.02	-62.00	11.17	-62.92	3.70	V	-55.45	-25.00	1	63
	7 525.53	-63.81	11.57	-56.16	4.61	V	-49.20	-25.00		
	10 034.04	-63.73	11.45	-54.49	5.48	V	-48.52	-25.00		
518598 (2592.990)	5 185.98	-62.50	11.61	-63.67	3.80	V	-55.86	-25.00	1	1
	7 778.97	-62.14	11.26	-55.07	4.70	V	-48.51	-25.00		
	10 371.96	-63.08	11.68	-51.99	5.55	V	-45.86	-25.00		
535500 (2677.500)	5 355.00	-61.54	11.94	-63.09	3.88	V	-55.03	-25.00	1	1
	8 032.50	-63.17	11.21	-55.88	4.80	V	-49.47	-25.00		
	10 710.00	-63.89	11.57	-52.17	5.65	V	-46.25	-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	-60.54	11.17	-61.24	3.69	V	-53.76	-25.00	1	76
	7 533.00	-62.46	11.57	-54.86	4.61	V	-47.90	-25.00		
	10 044.00	-63.33	11.44	-54.01	5.48	V	-48.05	-25.00		
518598 (2592.990)	5 185.98	-62.11	11.61	-63.28	3.80	V	-55.47	-25.00	1	1
	7 778.97	-62.50	11.26	-55.43	4.70	V	-48.87	-25.00		
	10 371.96	-62.51	11.68	-51.42	5.55	V	-45.29	-25.00		
534996 (2674.980)	5 349.96	-61.34	11.94	-63.03	3.85	V	-54.94	-25.00	1	1
	8 024.94	-63.82	11.20	-56.57	4.79	V	-50.16	-25.00		
	10 699.92	-63.59	11.57	-51.59	5.67	V	-45.69	-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	-62.33	11.19	-63.17	3.67	V	-55.65	-25.00	1	104
	7 548.03	-63.85	11.59	-56.48	4.63	V	-49.52	-25.00		
	10 064.04	-61.01	11.42	-51.79	5.47	V	-45.84	-25.00		
518598 (2592.990)	5 185.98	-63.17	11.61	-64.34	3.80	V	-56.53	-25.00	1	1
	7 778.97	-62.95	11.26	-55.88	4.70	V	-49.32	-25.00		
	10 371.96	-63.00	11.68	-51.91	5.55	V	-45.78	-25.00		
534000 (2670.000)	5 340.00	-62.43	11.93	-64.41	3.80	V	-56.28	-25.00	1	1
	8 010.00	-63.40	11.17	-56.08	4.77	V	-49.68	-25.00		
	10 680.00	-63.89	11.57	-51.31	5.71	V	-45.45	-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	-62.84	11.20	-63.88	3.68	V	-56.36	-25.00	1	131
	7 563.06	-63.11	11.60	-55.58	4.64	V	-48.62	-25.00		
	10 084.08	-62.79	11.40	-53.56	5.46	V	-47.62	-25.00		
518598 (2592.990)	5 185.98	-63.39	11.61	-64.56	3.80	V	-56.75	-25.00	1	66
	7 778.97	-62.80	11.26	-55.73	4.70	V	-49.17	-25.00		
	10 371.96	-63.21	11.68	-52.12	5.55	V	-45.99	-25.00		
532998 (2664.990)	5 329.98	-62.49	11.92	-64.22	3.77	V	-56.07	-25.00	1	1
	7 994.97	-62.99	11.13	-55.44	4.77	V	-49.08	-25.00		
	10 659.96	-63.17	11.58	-50.77	5.67	V	-44.86	-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	-62.46	11.22	-63.93	3.73	V	-56.44	-25.00	1	160
	7 578.00	-62.64	11.61	-54.98	4.65	V	-48.02	-25.00		
	10 104.00	-62.50	11.39	-52.94	5.46	V	-47.01	-25.00		
518598 (2592.990)	5 185.98	-63.18	11.61	-64.35	3.80	V	-56.54	-25.00	1	1
	7 778.97	-62.50	11.26	-55.43	4.70	V	-48.87	-25.00		
	10 371.96	-62.64	11.68	-51.55	5.55	V	-45.42	-25.00		
531996 (2659.980)	5 319.96	-61.50	11.91	-63.05	3.79	V	-54.93	-25.00	1	1
	7 979.94	-61.59	11.10	-53.89	4.79	V	-47.58	-25.00		
	10 639.92	-63.68	11.58	-51.30	5.61	V	-45.33	-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	-63.89	11.24	-65.26	3.78	V	-57.80	-25.00	1	187
	7 593.03	-63.66	11.62	-56.38	4.64	V	-49.40	-25.00		
	10 124.04	-63.28	11.37	-53.59	5.47	V	-47.69	-25.00		
518598 (2592.990)	5 185.98	-63.80	11.61	-64.97	3.80	V	-57.16	-25.00	1	1
	7 778.97	-62.46	11.26	-55.39	4.70	V	-48.83	-25.00		
	10 371.96	-64.79	11.68	-53.70	5.55	V	-47.57	-25.00		
531000 (2655.000)	5 310.00	-63.90	11.91	-65.01	3.82	V	-56.92	-25.00	1	1
	7 965.00	-63.34	11.07	-55.52	4.80	V	-49.25	-25.00		
	10 620.00	-63.82	11.58	-51.78	5.65	V	-45.85	-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	-64.32	11.25	-65.48	3.80	V	-58.03	-25.00	1	215
	7 608.06	-64.18	11.60	-57.30	4.64	V	-50.34	-25.00		
	10 144.08	-62.79	11.36	-53.18	5.48	V	-47.30	-25.00		
518598 (2592.990)	5 185.98	-63.20	11.61	-64.37	3.80	V	-56.56	-25.00	1	1
	7 778.97	-62.55	11.26	-55.48	4.70	V	-48.92	-25.00		
	10 371.96	-63.61	11.68	-52.52	5.55	V	-46.39	-25.00		
529998 (2649.990)	5 299.98	-63.43	11.90	-64.93	3.83	V	-56.86	-25.00	1	1
	7 949.97	-62.90	11.03	-55.25	4.78	V	-49.00	-25.00		
	10 599.96	-62.58	11.58	-51.29	5.67	V	-45.38	-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	-63.66	11.27	-64.46	3.81	V	-57.00	-25.00	1	243
	7 623.00	-63.75	11.57	-56.81	4.65	V	-49.89	-25.00		
	10 164.00	-63.00	11.34	-53.14	5.50	V	-47.30	-25.00		
518598 (2592.990)	5 185.98	-62.49	11.61	-63.66	3.80	V	-55.85	-25.00	1	1
	7 778.97	-64.58	11.26	-57.51	4.70	V	-50.95	-25.00		
	10 371.96	-64.03	11.68	-52.94	5.55	V	-46.81	-25.00		
528996 (2644.980)	5 289.96	-62.98	11.89	-64.56	3.83	V	-56.50	-25.00	1	1
	7 934.94	-64.01	11.01	-56.63	4.77	V	-50.39	-25.00		
	10 579.92	-63.33	11.62	-52.18	5.65	V	-46.21	-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	-64.50	11.29	-65.38	3.78	V	-57.87	-25.00	1	271
	7 638.03	-63.58	11.54	-56.61	4.68	V	-49.75	-25.00		
	10 184.04	-62.96	11.35	-52.92	5.52	V	-47.09	-25.00		
518598 (2592.990)	5 185.98	62.80	11.61	61.63	3.80	V	69.44	-25.00	1	1
	7 778.97	-63.42	11.26	-56.35	4.70	V	-49.79	-25.00		
	10 371.96	-63.58	11.68	-52.49	5.55	V	-46.36	-25.00		
528000 (2640.000)	5 280.00	-63.08	11.88	-65.11	3.80	V	-57.03	-25.00	1	1
	7 920.00	-62.90	11.02	-55.48	4.77	V	-49.23	-25.00		
	10 560.00	-63.17	11.65	-52.23	5.63	V	-46.21	-25.00		

9.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41	10 MHz	2592.990	BPSK	24	0	4.52
			QPSK			5.77
			16-QAM			6.43
			64-QAM			6.62
			256-QAM			6.99
	15 MHz		BPSK	36		5.31
			QPSK			5.71
			16-QAM			6.41
			64-QAM			6.41
			256-QAM			6.80
	20 MHz		BPSK	50		5.71
			QPSK			5.92
			16-QAM			6.41
			64-QAM			6.70
			256-QAM			6.86
	25 MHz		BPSK	64		4.41
			QPSK			5.67
			16-QAM			6.36
			64-QAM			6.54
			256-QAM			6.82
	30 MHz		BPSK	75		4.54
			QPSK			5.63
			16-QAM			6.41
			64-QAM			6.43
			256-QAM			6.99
	40 MHz		BPSK	100		5.83
			QPSK			6.02
			16-QAM			6.49
			64-QAM			6.55
			256-QAM			7.05
	50 MHz		BPSK	128		4.47
			QPSK			5.50
			16-QAM			6.27
			64-QAM			6.42
			256-QAM			6.86

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41	60 MHz	2592.990	BPSK	162	0	4.65
			QPSK			5.46
			16-QAM			6.25
			64-QAM			6.40
			256-QAM			6.76
	70 MHz		BPSK	180		4.62
			QPSK			5.47
			16-QAM			6.21
			64-QAM			6.36
			256-QAM			6.80
	80 MHz		BPSK	216		4.76
			QPSK			5.44
			16-QAM			6.19
			64-QAM			6.34
			256-QAM			6.86
	90 MHz		BPSK	243		4.78
			QPSK			5.40
			16-QAM			6.16
			64-QAM			6.37
			256-QAM			6.70
	100 MHz		BPSK	270		5.02
			QPSK			5.35
			16-QAM			6.10
			64-QAM			6.28
			256-QAM			6.78

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 398 ~ 457.

9.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41	10 MHz	2592.990	BPSK	24	0	8.7136
			QPSK			8.6684
			16-QAM			8.6710
			64-QAM			8.7006
			256-QAM			8.6577
	15 MHz		BPSK	36		12.967
			QPSK			13.007
			16-QAM			12.977
			64-QAM			12.973
			256-QAM			12.953
	20 MHz		BPSK	50		17.981
			QPSK			17.991
			16-QAM			17.968
			64-QAM			17.969
			256-QAM			17.982
	25 MHz		BPSK	64		23.089
			QPSK			23.034
			16-QAM			23.011
			64-QAM			23.589
			256-QAM			23.100
	30 MHz		BPSK	75		27.007
			QPSK			26.979
			16-QAM			26.995
			64-QAM			26.933
			256-QAM			26.955
	40 MHz		BPSK	100		35.973
			QPSK			35.944
			16-QAM			35.935
			64-QAM			35.960
			256-QAM			35.911
	50 MHz		BPSK	128		46.016
			QPSK			46.024
			16-QAM			46.019
			64-QAM			47.680
			256-QAM			45.936

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41	60 MHz	2592.990	BPSK	162	0	58.304
			QPSK			58.174
			16-QAM			58.093
			64-QAM			58.149
			256-QAM			58.242
	70 MHz		BPSK	180		64.901
			QPSK			64.790
			16-QAM			64.652
			64-QAM			64.775
			256-QAM			64.456
	80 MHz		BPSK	216		77.611
			QPSK			77.571
			16-QAM			77.621
			64-QAM			77.603
			256-QAM			77.761
	90 MHz		BPSK	243		87.228
			QPSK			87.101
			16-QAM			87.100
			64-QAM			87.087
			256-QAM			87.118
	100 MHz		BPSK	270		97.054
			QPSK			96.902
			16-QAM			96.675
			64-QAM			96.978
			256-QAM			97.000

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 458 ~ 517.

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 n41	10	2501.010	3.9283	29.722	-63.453	-33.731	-25.00
		2592.990	3.7189	29.722	-62.392	-32.670	
		2685.000	5.0250	30.315	-63.409	-33.094	
	15	2503.500	9.9202	30.315	-63.842	-33.527	
		2592.990	3.9382	29.722	-63.494	-33.772	
		2682.480	3.9781	29.722	-63.018	-33.296	
	20	2506.020	5.2244	30.315	-63.750	-33.435	
		2592.990	7.6670	30.315	-64.068	-33.753	
		2679.990	4.7857	29.722	-62.234	-32.512	
	25	2508.510	3.0709	29.722	-63.465	-33.743	
		2592.990	7.2882	30.315	-62.786	-32.471	
		2677.500	9.6311	30.315	-63.359	-33.044	
	30	2511.000	4.7857	29.722	-62.662	-32.940	
		2592.990	7.9163	30.315	-63.664	-33.349	
		2674.980	9.9701	30.315	-63.591	-33.276	
	40	2516.010	4.9851	29.722	-63.541	-33.819	
		2592.990	7.6870	30.315	-63.618	-33.303	
		2670.000	3.7488	29.722	-63.221	-33.499	
	50	2521.020	6.3610	30.315	-63.519	-33.204	
		2592.990	4.1576	29.722	-63.039	-33.317	
		2664.990	2.7319	29.722	-63.025	-33.303	
	60	2526.000	4.7558	29.722	-61.587	-31.865	
		2592.990	6.2014	30.315	-63.432	-33.117	
		2659.980	4.7757	29.722	-62.326	-32.604	
	70	2531.010	4.7857	29.722	-62.534	-32.812	
		2592.990	5.2044	30.315	-62.636	-32.321	
		2655.000	3.2005	29.722	-62.745	-33.023	
	80	2536.020	6.1915	30.315	-62.234	-31.919	
		2592.990	4.7857	29.722	-62.511	-32.789	
		2649.990	4.7957	29.722	-63.053	-33.331	
	90	2541.000	4.7857	29.722	-62.331	-32.609	
		2592.990	2.7219	29.722	-61.922	-32.200	
		2644.980	2.7219	29.722	-62.380	-32.658	
	100	2546.010	3.7189	29.722	-62.765	-33.043	
		2592.990	3.9083	29.722	-62.631	-32.909	
		2640.000	2.7418	29.722	-61.030	-31.308	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 518 ~ 589.
2. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
3. Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.012
1 – 5	29.722
5 – 10	30.315
10 – 15	30.840
15 – 20	31.213
Above 20	31.855

8.6 CHANNEL EDGE

BW	Test. Frequency (MHz)	Modulation	RB Size	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 MHz	2501.010	BPSK	Full RB	-24.10	-24.33	-24.84	-24.75	-28.72	-26.41	-39.56
15 MHz	2503.500	BPSK	Full RB	-23.47	-28.86	-25.78	-28.04	-28.25	-27.58	-41.85
20 MHz	2506.020	BPSK	Full RB	-24.89	-27.45	-26.84	-27.85	-29.44	-28.41	-41.12
25 MHz	2508.510	BPSK	Full RB	-24.37	-26.67	-26.89	-27.47	-30.91	-29.28	-40.31
30 MHz	2511.000	BPSK	Full RB	-24.62	-29.00	-26.93	-28.48	-30.94	-29.23	-41.97
40 MHz	2516.010	BPSK	Full RB	-23.57	-25.75	-24.93	-24.97	-27.31	-26.42	-44.99
50 MHz	2521.020	BPSK	Full RB	-24.48	-37.71	-31.42	-40.13	-39.71	-40.91	-41.73
60 MHz	2526.000	BPSK	Full RB	-19.49	-20.85	-28.51	-29.02	-39.69	-40.15	-41.94
70 MHz	2531.010	BPSK	Full RB	-23.09	-36.75	-28.40	-38.04	-37.33	-40.67	-42.27
80 MHz	2536.020	BPSK	Full RB	-23.85	-26.96	-29.64	-31.35	-38.82	-39.20	-45.10
90 MHz	2541.000	BPSK	Full RB	-23.51	-30.14	-30.34	-33.60	-38.37	-39.11	-45.95
100 MHz	2546.010	BPSK	Full RB	-22.43	-31.34	-30.59	-34.41	-38.76	-38.93	-47.42
Limit				-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	-24.35	-23.63	-28.65	-28.30
	2685.000	BPSK	Full RB	0	-24.46	-23.84	-25.09	-25.48
15 MHz	2592.990	BPSK	Full RB	0	-25.08	-34.39	-31.08	-37.02
	2682.480	BPSK	Full RB	0	-24.32	-31.05	-25.37	-25.79
20 MHz	2592.990	BPSK	Full RB	0	-25.60	-31.39	-32.68	-35.13
	2679.990	BPSK	Full RB	0	-24.81	-28.36	-27.89	-29.35
25 MHz	2592.990	BPSK	Full RB	0	-25.60	-29.81	-31.48	-33.31
	2677.500	BPSK	Full RB	0	-24.40	-27.91	-27.58	-29.41
30 MHz	2592.990	BPSK	Full RB	0	-26.97	-37.36	-34.12	-38.29
	2679.990	BPSK	Full RB	0	-24.66	-30.54	-26.91	-28.57
40 MHz	2592.990	BPSK	Full RB	0	-25.99	-37.93	-33.77	-36.07
	2670.000	BPSK	Full RB	0	-24.84	-32.86	-29.27	-32.31
50 MHz	2592.990	BPSK	Full RB	0	-24.28	-34.69	-31.91	-36.60
	2664.990	BPSK	Full RB	0	-23.02	-37.38	-30.67	-40.16
60 MHz	2592.990	BPSK	Full RB	0	-19.08	-20.96	-27.70	-28.95
	2659.980	BPSK	Full RB	0	-18.63	-21.22	-27.71	-29.14
70 MHz	2592.990	BPSK	Full RB	0	-22.60	-34.42	-27.76	-36.51
	2655.000	BPSK	Full RB	0	-23.57	-37.37	-29.12	-38.84
80 MHz	2592.990	BPSK	Full RB	0	-22.24	-27.61	-28.27	-31.77
	2649.990	BPSK	Full RB	0	-23.67	-29.95	-29.85	-34.01
90 MHz	2592.990	BPSK	Full RB	0	-22.69	-30.89	-29.95	-34.13
	2644.980	BPSK	Full RB	0	-22.49	-30.49	-29.25	-33.87
100 MHz	2592.990	BPSK	Full RB	0	-21.49	-29.99	-30.46	-33.42
	2640.000	BPSK	Full RB	0	-21.29	-31.07	-29.39	-34.20
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	-37.00	-37.14	-39.76	-39.64
	2685.000	BPSK	Full RB	0	-28.00	-28.33	-40.33	-41.04
15 MHz	2592.990	BPSK	Full RB	0	-37.70	-38.59	-41.32	-40.97
	2682.480	BPSK	Full RB	0	-27.31	-28.04	-41.96	-42.80
20 MHz	2592.990	BPSK	Full RB	0	-35.25	-34.34	-38.86	-37.11
	2679.990	BPSK	Full RB	0	-30.79	-30.62	-41.26	-41.96
25 MHz	2592.990	BPSK	Full RB	0	-37.01	-37.22	-39.53	-40.49
	2677.500	BPSK	Full RB	0	-30.43	-32.29	-38.97	-43.28
30 MHz	2592.990	BPSK	Full RB	0	-38.03	-37.07	-43.09	-41.78
	2679.990	BPSK	Full RB	0	-28.11	-29.29	-39.53	-43.41
40 MHz	2592.990	BPSK	Full RB	0	-37.60	-36.89	-41.95	-41.84
	2670.000	BPSK	Full RB	0	-32.26	-33.96	-43.40	-41.39
50 MHz	2592.990	BPSK	Full RB	0	-40.80	-37.53	-42.08	-44.45
	2664.990	BPSK	Full RB	0	-39.06	-41.53	-39.45	-47.31
60 MHz	2592.990	BPSK	Full RB	0	-38.79	-37.40	-42.55	-44.70
	2659.980	BPSK	Full RB	0	-34.92	-38.05	-39.49	-49.31
70 MHz	2592.990	BPSK	Full RB	0	-38.59	-39.06	-44.82	-40.61
	2655.000	BPSK	Full RB	0	-37.86	-42.16	-40.61	-53.69
80 MHz	2592.990	BPSK	Full RB	0	-39.79	-37.91	-52.49	-49.29
	2649.990	BPSK	Full RB	0	-38.06	-40.09	-41.10	-53.79
90 MHz	2592.990	BPSK	Full RB	0	-38.93	-40.26	-54.38	-50.67
	2644.980	BPSK	Full RB	0	-37.70	-40.01	-43.61	-54.00
100 MHz	2592.990	BPSK	Full RB	0	-39.84	-38.77	-54.35	-52.51
	2640.000	BPSK	Full RB	0	-37.19	-38.84	-46.00	-53.96
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 590 ~ 673. (1RB & Full RB)

9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

BandWidth:	10 MHz
Voltage(100 %):	3.900 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)	(%)	
2501.010	100 %	+20(Ref)	2501 010 000	0.0	0.000 000	0.000
	100 %	-30	2501 009 998	-1.8	0.000 000	-0.001
	100 %	-20	2501 009 999	-0.8	0.000 000	0.000
	100 %	-10	2501 010 000	0.1	0.000 000	0.000
	100 %	0	2501 009 997	-3.8	0.000 000	-0.002
	100 %	+10	2501 010 000	-0.3	0.000 000	0.000
	100 %	+30	2501 010 002	1.7	0.000 000	0.001
	100 %	+40	2501 009 999	-1.6	0.000 000	-0.001
	100 %	+50	2501 009 992	-7.8	0.000 000	-0.003
	Batt. Endpoint	+20	2501 009 998	-2.0	0.000 000	-0.001
2685.000	100 %	+20(Ref)	2685 000 003	0.0	0.000 000	0.000
	100 %	-30	2685 000 000	-2.4	0.000 000	-0.001
	100 %	-20	2685 000 000	-2.5	0.000 000	-0.001
	100 %	-10	2685 000 013	10.3	0.000 000	0.004
	100 %	0	2685 000 000	-2.2	0.000 000	-0.001
	100 %	+10	2685 000 002	-1.0	0.000 000	0.000
	100 %	+30	2685 000 001	-1.6	0.000 000	-0.001
	100 %	+40	2685 000 003	0.1	0.000 000	0.000
	100 %	+50	2684 999 999	-3.9	0.000 000	-0.001
	Batt. Endpoint	+20	2685 000 000	-2.8	0.000 000	-0.001

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 3.900 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 499 994	0.0	0.000 000	0.000
	100 %	-30	2503 499 987	-7.1	0.000 000	-0.003
	100 %	-20	2503 499 990	-4.4	0.000 000	-0.002
	100 %	-10	2503 499 986	-8.6	0.000 000	-0.003
	100 %	0	2503 499 989	-5.4	0.000 000	-0.002
	100 %	+10	2503 499 993	-1.6	0.000 000	-0.001
	100 %	+30	2503 499 989	-5.3	0.000 000	-0.002
	100 %	+40	2503 499 991	-3.5	0.000 000	-0.001
	100 %	+50	2503 499 990	-4.5	0.000 000	-0.002
	Batt. Endpoint	+20	2503 499 991	-3.6	0.000 000	-0.001
2682.480	100 %	+20(Ref)	2682 479 998	0.0	0.000 000	0.000
	100 %	-30	2682 479 991	-7.0	0.000 000	-0.003
	100 %	-20	2682 479 994	-4.4	0.000 000	-0.002
	100 %	-10	2682 479 998	0.0	0.000 000	0.000
	100 %	0	2682 479 993	-5.0	0.000 000	-0.002
	100 %	+10	2682 479 999	0.7	0.000 000	0.000
	100 %	+30	2682 479 998	-0.6	0.000 000	0.000
	100 %	+40	2682 479 999	0.5	0.000 000	0.000
	100 %	+50	2682 479 993	-5.5	0.000 000	-0.002
	Batt. Endpoint	+20	2682 479 997	-1.2	0.000 000	0.000

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 3.900 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 019 999	0.0	0.000 000	0.000
	100 %	-30	2506 020 001	1.9	0.000 000	0.001
	100 %	-20	2506 020 001	1.6	0.000 000	0.001
	100 %	-10	2506 020 000	0.5	0.000 000	0.000
	100 %	0	2506 019 995	-4.0	0.000 000	-0.002
	100 %	+10	2506 019 997	-2.4	0.000 000	-0.001
	100 %	+30	2506 019 999	0.3	0.000 000	0.000
	100 %	+40	2506 020 001	1.5	0.000 000	0.001
	100 %	+50	2506 020 000	1.2	0.000 000	0.000
	Batt. Endpoint	+20	2506 020 002	2.5	0.000 000	0.001
2679.990	100 %	+20(Ref)	2679 989 998	0.0	0.000 000	0.000
	100 %	-30	2679 989 995	-3.8	0.000 000	-0.001
	100 %	-20	2679 989 991	-7.4	0.000 000	-0.003
	100 %	-10	2679 989 994	-4.4	0.000 000	-0.002
	100 %	0	2679 989 993	-5.1	0.000 000	-0.002
	100 %	+10	2679 989 999	0.3	0.000 000	0.000
	100 %	+30	2679 989 994	-4.9	0.000 000	-0.002
	100 %	+40	2679 989 991	-7.2	0.000 000	-0.003
	100 %	+50	2679 989 999	0.7	0.000 000	0.000
	Batt. Endpoint	+20	2679 989 998	-0.9	0.000 000	0.000

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 3.900 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)	(%)	
2508.510	100 %	+20(Ref)	2508 510 001	0.0	0.000 000	0.000
	100 %	-30	2508 510 006	4.5	0.000 000	0.002
	100 %	-20	2508 510 006	4.9	0.000 000	0.002
	100 %	-10	2508 510 002	0.3	0.000 000	0.000
	100 %	0	2508 509 998	-3.0	0.000 000	-0.001
	100 %	+10	2508 510 004	2.8	0.000 000	0.001
	100 %	+30	2508 509 996	-5.4	0.000 000	-0.002
	100 %	+40	2508 510 000	-1.3	0.000 000	-0.001
	100 %	+50	2508 510 004	2.7	0.000 000	0.001
	Batt. Endpoint	+20	2508 510 004	2.5	0.000 000	0.001
2677.500	100 %	+20(Ref)	2677 499 997	0.0	0.000 000	0.000
	100 %	-30	2677 499 989	-7.3	0.000 000	-0.003
	100 %	-20	2677 499 996	-0.7	0.000 000	0.000
	100 %	-10	2677 499 995	-1.9	0.000 000	-0.001
	100 %	0	2677 499 994	-2.9	0.000 000	-0.001
	100 %	+10	2677 499 989	-8.1	0.000 000	-0.003
	100 %	+30	2677 499 996	-0.3	0.000 000	0.000
	100 %	+40	2677 499 995	-2.1	0.000 000	-0.001
	100 %	+50	2677 499 994	-2.2	0.000 000	-0.001
	Batt. Endpoint	+20	2677 499 995	-1.9	0.000 000	-0.001

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 3.900 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 999 998	0.0	0.000 000	0.000
	100 %	-30	2510 999 998	0.0	0.000 000	0.000
	100 %	-20	2510 999 997	-0.5	0.000 000	0.000
	100 %	-10	2510 999 996	-1.5	0.000 000	-0.001
	100 %	0	2510 999 996	-1.1	0.000 000	0.000
	100 %	+10	2510 999 989	-8.3	0.000 000	-0.003
	100 %	+30	2510 999 993	-4.7	0.000 000	-0.002
	100 %	+40	2510 999 995	-3.0	0.000 000	-0.001
	100 %	+50	2510 999 995	-2.2	0.000 000	-0.001
	Batt. Endpoint	+20	2510 999 999	1.5	0.000 000	0.001
2674.980	100 %	+20(Ref)	2674 980 007	0.0	0.000 000	0.000
	100 %	-30	2674 980 015	8.1	0.000 000	0.003
	100 %	-20	2674 980 009	1.2	0.000 000	0.000
	100 %	-10	2674 980 010	3.2	0.000 000	0.001
	100 %	0	2674 980 009	1.5	0.000 000	0.001
	100 %	+10	2674 980 007	-0.4	0.000 000	0.000
	100 %	+30	2674 980 015	7.9	0.000 000	0.003
	100 %	+40	2674 980 013	5.3	0.000 000	0.002
	100 %	+50	2674 980 014	6.4	0.000 000	0.002
	Batt. Endpoint	+20	2674 980 011	3.5	0.000 000	0.001

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 3.900 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 009 993	0.0	0.000 000	0.000
	100 %	-30	2516 009 987	-6.5	0.000 000	-0.003
	100 %	-20	2516 009 992	-0.9	0.000 000	0.000
	100 %	-10	2516 009 993	-0.8	0.000 000	0.000
	100 %	0	2516 009 990	-3.3	0.000 000	-0.001
	100 %	+10	2516 009 994	0.4	0.000 000	0.000
	100 %	+30	2516 009 988	-5.0	0.000 000	-0.002
	100 %	+40	2516 009 987	-6.4	0.000 000	-0.003
	100 %	+50	2516 009 990	-2.9	0.000 000	-0.001
	Batt. Endpoint	+20	2516 009 993	-0.8	0.000 000	0.000
2670.000	100 %	+20(Ref)	2669 999 998	0.0	0.000 000	0.000
	100 %	-30	2670 000 000	1.4	0.000 000	0.001
	100 %	-20	2669 999 994	-3.8	0.000 000	-0.001
	100 %	-10	2669 999 998	0.2	0.000 000	0.000
	100 %	0	2670 000 001	2.8	0.000 000	0.001
	100 %	+10	2670 000 000	1.6	0.000 000	0.001
	100 %	+30	2669 999 999	0.8	0.000 000	0.000
	100 %	+40	2669 999 999	0.9	0.000 000	0.000
	100 %	+50	2669 999 998	-0.1	0.000 000	0.000
	Batt. Endpoint	+20	2669 999 995	-3.0	0.000 000	-0.001

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 3.900 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 020 001	0.0	0.000 000	0.000
	100 %	-30	2521 019 999	-2.4	0.000 000	-0.001
	100 %	-20	2521 019 996	-4.9	0.000 000	-0.002
	100 %	-10	2521 019 998	-2.8	0.000 000	-0.001
	100 %	0	2521 019 998	-3.3	0.000 000	-0.001
	100 %	+10	2521 019 998	-3.0	0.000 000	-0.001
	100 %	+30	2521 019 996	-4.5	0.000 000	-0.002
	100 %	+40	2521 020 000	-0.8	0.000 000	0.000
	100 %	+50	2521 019 998	-3.3	0.000 000	-0.001
	Batt. Endpoint	+20	2521 019 999	-2.2	0.000 000	-0.001
2664.990	100 %	+20(Ref)	2664 989 997	0.0	0.000 000	0.000
	100 %	-30	2664 989 997	0.0	0.000 000	0.000
	100 %	-20	2664 989 986	-10.6	0.000 000	-0.004
	100 %	-10	2664 989 996	-1.1	0.000 000	0.000
	100 %	0	2664 989 995	-2.0	0.000 000	-0.001
	100 %	+10	2664 989 996	-1.4	0.000 000	-0.001
	100 %	+30	2664 989 996	-0.7	0.000 000	0.000
	100 %	+40	2664 989 997	-0.2	0.000 000	0.000
	100 %	+50	2664 990 000	2.5	0.000 000	0.001
	Batt. Endpoint	+20	2664 989 992	-5.0	0.000 000	-0.002

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 3.900 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 999 997	0.0	0.000 000	0.000
	100 %	-30	2525 999 995	-2.3	0.000 000	-0.001
	100 %	-20	2525 999 995	-2.1	0.000 000	-0.001
	100 %	-10	2525 999 995	-2.4	0.000 000	-0.001
	100 %	0	2525 999 998	0.8	0.000 000	0.000
	100 %	+10	2525 999 998	1.1	0.000 000	0.000
	100 %	+30	2525 999 999	1.6	0.000 000	0.001
	100 %	+40	2525 999 998	1.2	0.000 000	0.000
	100 %	+50	2525 999 994	-3.3	0.000 000	-0.001
	Batt. Endpoint	+20	2525 999 992	-4.5	0.000 000	-0.002
2659.980	100 %	+20(Ref)	2659 979 999	0.0	0.000 000	0.000
	100 %	-30	2659 980 003	4.0	0.000 000	0.002
	100 %	-20	2659 979 999	0.3	0.000 000	0.000
	100 %	-10	2659 980 001	1.8	0.000 000	0.001
	100 %	0	2659 980 001	2.2	0.000 000	0.001
	100 %	+10	2659 979 999	-0.4	0.000 000	0.000
	100 %	+30	2659 979 998	-1.2	0.000 000	0.000
	100 %	+40	2659 979 997	-2.1	0.000 000	-0.001
	100 %	+50	2659 980 001	1.7	0.000 000	0.001
	Batt. Endpoint	+20	2659 980 001	1.7	0.000 000	0.001

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 3.900 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 009 995	0.0	0.000 000	0.000
	100 %	-30	2531 009 999	4.2	0.000 000	0.002
	100 %	-20	2531 010 000	5.0	0.000 000	0.002
	100 %	-10	2531 009 992	-3.4	0.000 000	-0.001
	100 %	0	2531 009 997	2.3	0.000 000	0.001
	100 %	+10	2531 009 991	-4.5	0.000 000	-0.002
	100 %	+30	2531 009 988	-6.9	0.000 000	-0.003
	100 %	+40	2531 009 990	-4.7	0.000 000	-0.002
	100 %	+50	2531 009 989	-6.0	0.000 000	-0.002
	Batt. Endpoint	+20	2531 009 993	-1.7	0.000 000	-0.001
2655.000	100 %	+20(Ref)	2655 000 003	0.0	0.000 000	0.000
	100 %	-30	2655 000 012	8.3	0.000 000	0.003
	100 %	-20	2655 000 004	1.1	0.000 000	0.000
	100 %	-10	2655 000 010	6.1	0.000 000	0.002
	100 %	0	2655 000 009	5.4	0.000 000	0.002
	100 %	+10	2655 000 008	4.6	0.000 000	0.002
	100 %	+30	2655 000 005	1.8	0.000 000	0.001
	100 %	+40	2655 000 004	0.2	0.000 000	0.000
	100 %	+50	2655 000 003	-0.5	0.000 000	0.000
	Batt. Endpoint	+20	2655 000 009	5.4	0.000 000	0.002

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 3.900 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 019 999	0.0	0.000 000	0.000
	100 %	-30	2536 020 000	0.8	0.000 000	0.000
	100 %	-20	2536 020 002	2.1	0.000 000	0.001
	100 %	-10	2536 020 004	4.6	0.000 000	0.002
	100 %	0	2536 020 003	3.2	0.000 000	0.001
	100 %	+10	2536 020 004	5.0	0.000 000	0.002
	100 %	+30	2536 020 003	3.6	0.000 000	0.001
	100 %	+40	2536 020 002	2.5	0.000 000	0.001
	100 %	+50	2536 020 005	5.1	0.000 000	0.002
	Batt. Endpoint	+20	2536 020 001	1.7	0.000 000	0.001
2649.990	100 %	+20(Ref)	2649 990 001	0.0	0.000 000	0.000
	100 %	-30	2649 990 004	2.7	0.000 000	0.001
	100 %	-20	2649 990 005	3.6	0.000 000	0.001
	100 %	-10	2649 990 004	3.0	0.000 000	0.001
	100 %	0	2649 990 010	8.7	0.000 000	0.003
	100 %	+10	2649 990 001	-0.3	0.000 000	0.000
	100 %	+30	2649 989 999	-2.3	0.000 000	-0.001
	100 %	+40	2649 990 007	5.9	0.000 000	0.002
	100 %	+50	2649 990 005	4.6	0.000 000	0.002
	Batt. Endpoint	+20	2649 990 004	3.2	0.000 000	0.001

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 3.900 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

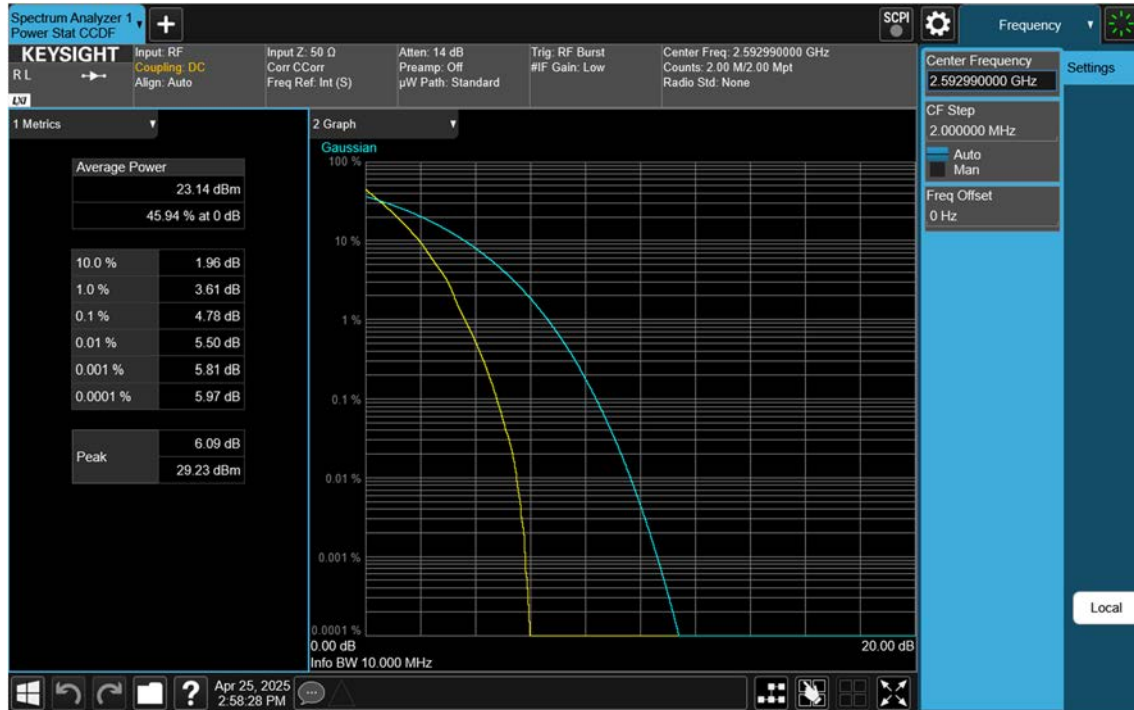
Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2541.000	100 %	+20(Ref)	2540 999 997	0.0	0.000 000	0.000
	100 %	-30	2540 999 992	-5.6	0.000 000	-0.002
	100 %	-20	2540 999 992	-5.5	0.000 000	-0.002
	100 %	-10	2540 999 993	-4.1	0.000 000	-0.002
	100 %	0	2540 999 994	-3.4	0.000 000	-0.001
	100 %	+10	2540 999 991	-6.3	0.000 000	-0.002
	100 %	+30	2540 999 994	-3.7	0.000 000	-0.001
	100 %	+40	2540 999 992	-5.6	0.000 000	-0.002
	100 %	+50	2540 999 990	-7.5	0.000 000	-0.003
	Batt. Endpoint	+20	2540 999 989	-8.1	0.000 000	-0.003
2644.980	100 %	+20(Ref)	2644 980 003	0.0	0.000 000	0.000
	100 %	-30	2644 980 008	4.5	0.000 000	0.002
	100 %	-20	2644 980 010	7.2	0.000 000	0.003
	100 %	-10	2644 980 002	-0.9	0.000 000	0.000
	100 %	0	2644 980 004	0.9	0.000 000	0.000
	100 %	+10	2644 980 006	2.8	0.000 000	0.001
	100 %	+30	2644 980 007	3.4	0.000 000	0.001
	100 %	+40	2644 980 007	3.3	0.000 000	0.001
	100 %	+50	2644 980 012	8.5	0.000 000	0.003
	Batt. Endpoint	+20	2644 980 011	8.0	0.000 000	0.003

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 3.900 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

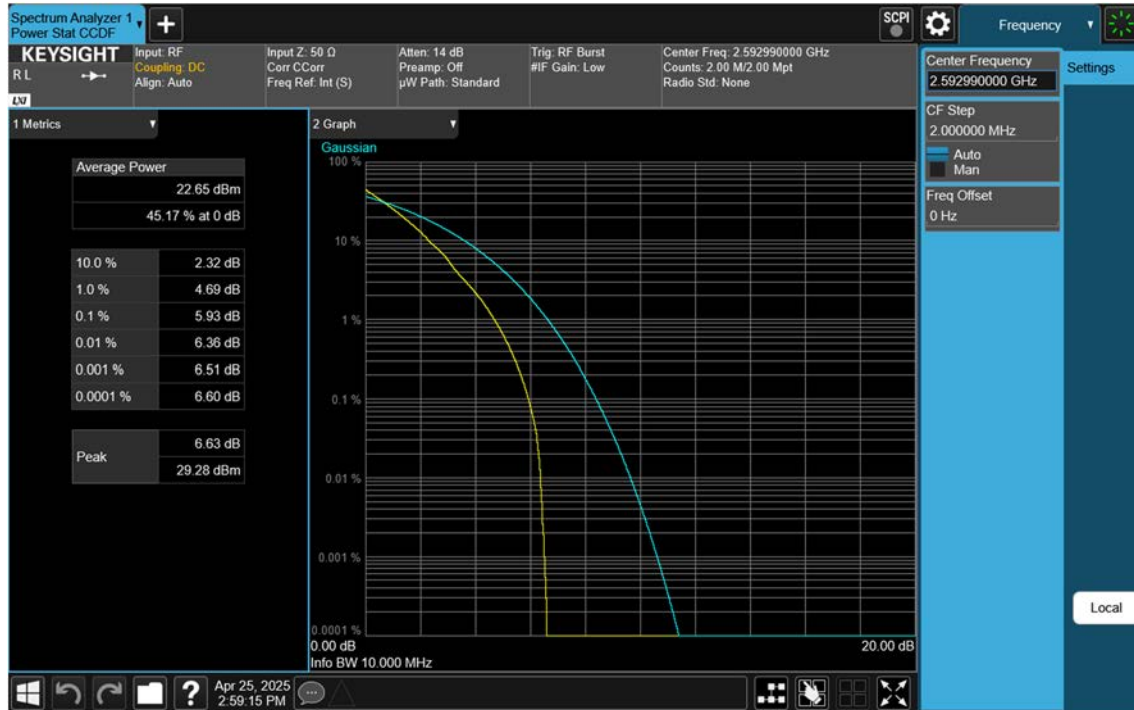
Test. Frequency	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2546.010	100 %	+20(Ref)	2546 010 003	0.0	0.000 000	0.000
	100 %	-30	2546 010 002	-0.3	0.000 000	0.000
	100 %	-20	2546 010 004	1.4	0.000 000	0.001
	100 %	-10	2546 010 004	1.7	0.000 000	0.001
	100 %	0	2546 010 004	1.6	0.000 000	0.001
	100 %	+10	2546 010 006	3.3	0.000 000	0.001
	100 %	+30	2546 010 003	0.2	0.000 000	0.000
	100 %	+40	2546 010 001	-1.3	0.000 000	-0.001
	100 %	+50	2546 010 002	-0.5	0.000 000	0.000
	Batt. Endpoint	+20	2546 009 999	-4.0	0.000 000	-0.002
2640.000	100 %	+20(Ref)	2640 000 005	0.0	0.000 000	0.000
	100 %	-30	2640 000 009	4.1	0.000 000	0.002
	100 %	-20	2640 000 005	0.5	0.000 000	0.000
	100 %	-10	2640 000 006	1.6	0.000 000	0.001
	100 %	0	2640 000 004	-0.2	0.000 000	0.000
	100 %	+10	2640 000 009	5.0	0.000 000	0.002
	100 %	+30	2640 000 008	3.5	0.000 000	0.001
	100 %	+40	2640 000 004	-0.5	0.000 000	0.000
	100 %	+50	2640 000 006	1.4	0.000 000	0.001
	Batt. Endpoint	+20	2640 000 006	1.2	0.000 000	0.000

10. TEST PLOTS(Main 2 ANT)

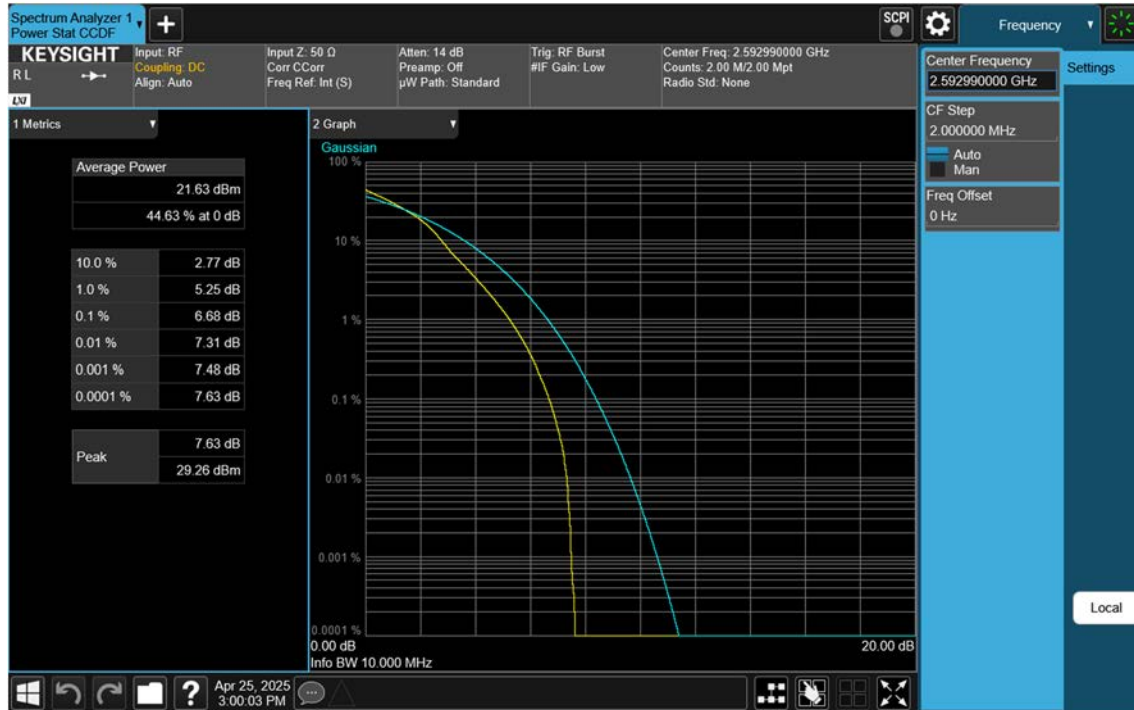
NR41_10 M_PAR_Mid_BPSK_FullRB



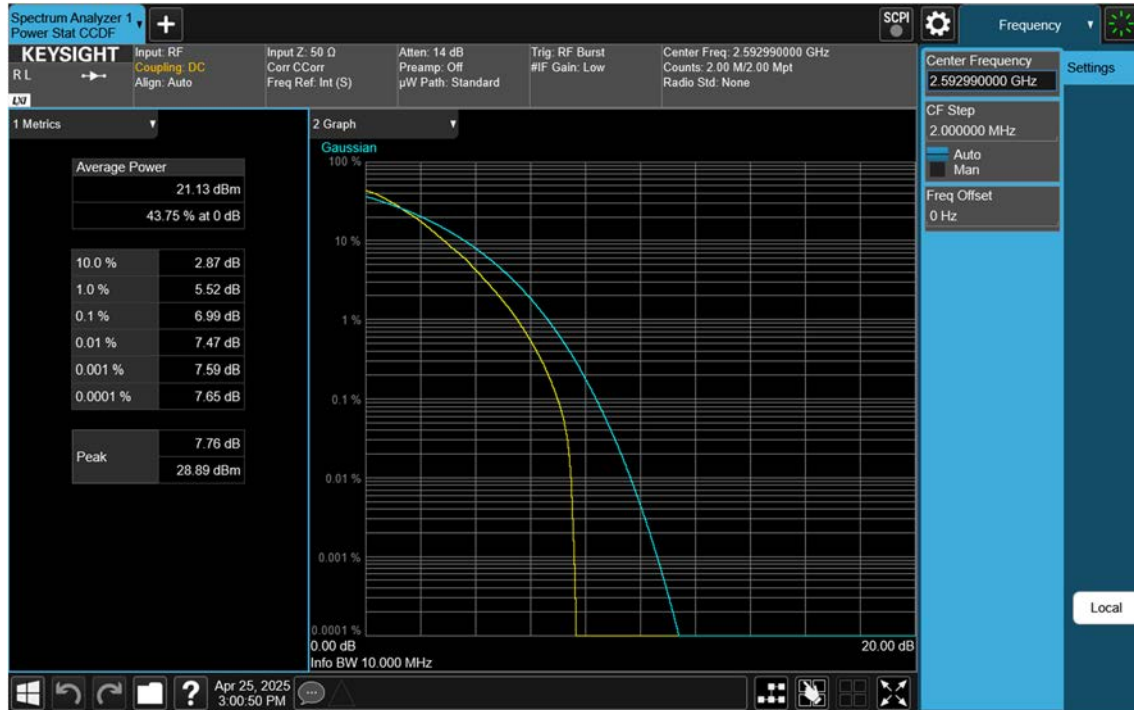
NR41_10 M_PAR_Mid_QPSK_FullRB



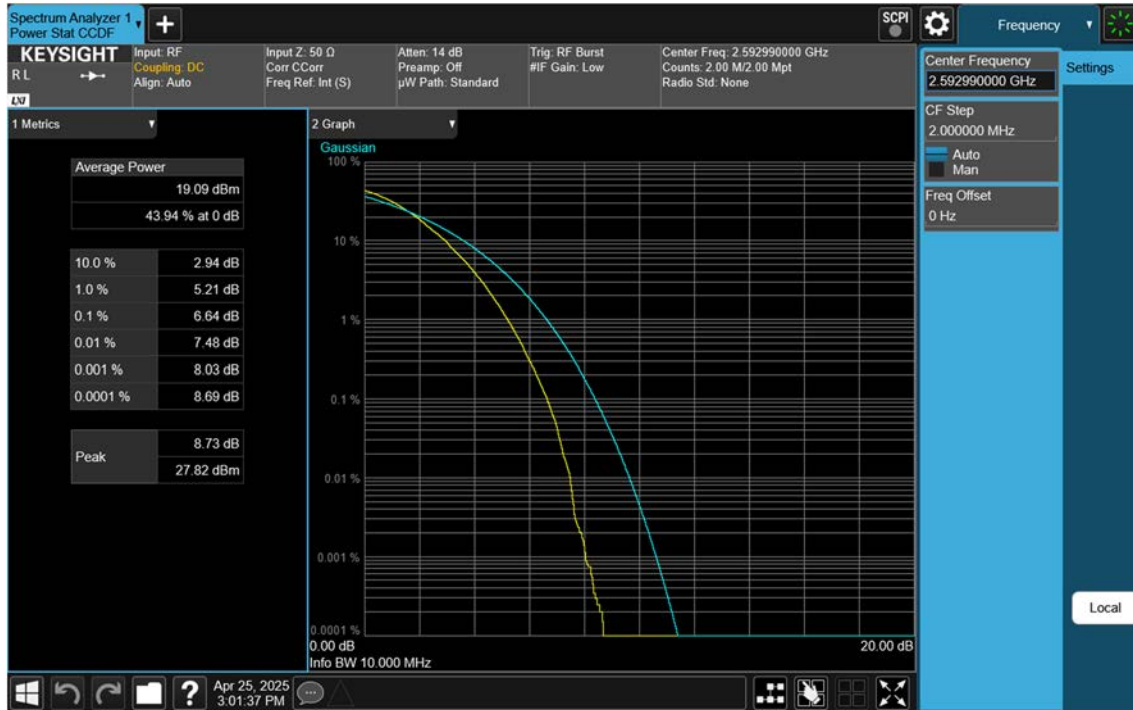
NR41_10 M_PAR_Mid_16QAM_FullRB



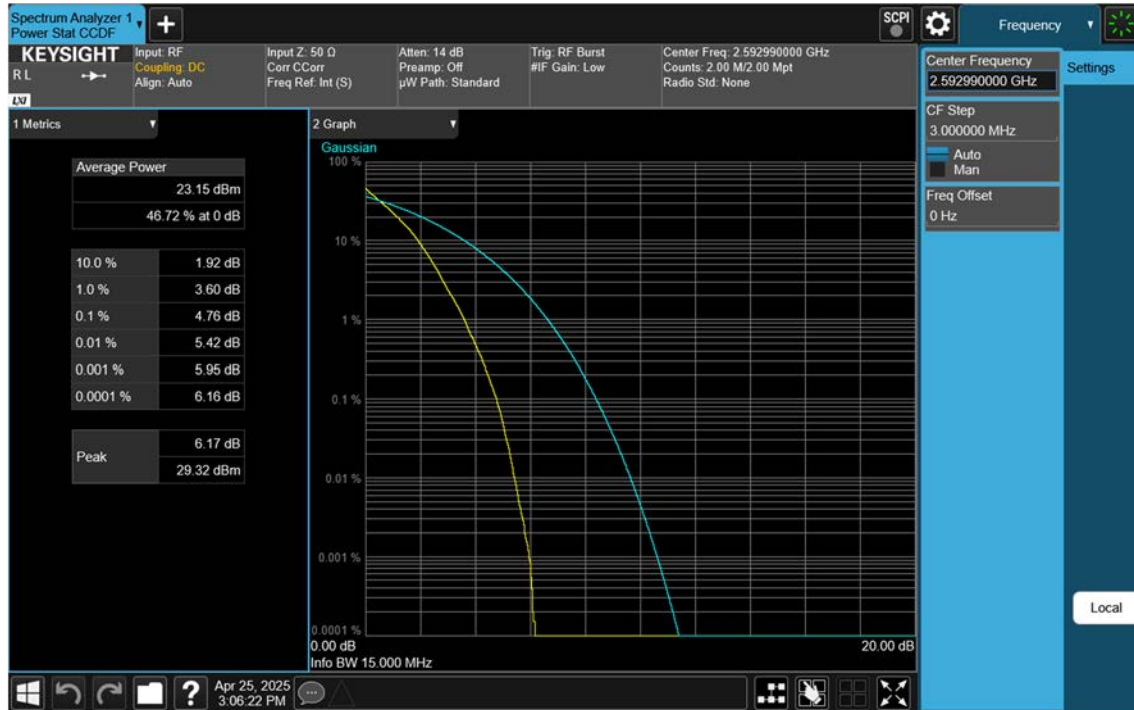
NR41_10 M_PAR_Mid_64QAM_FullRB



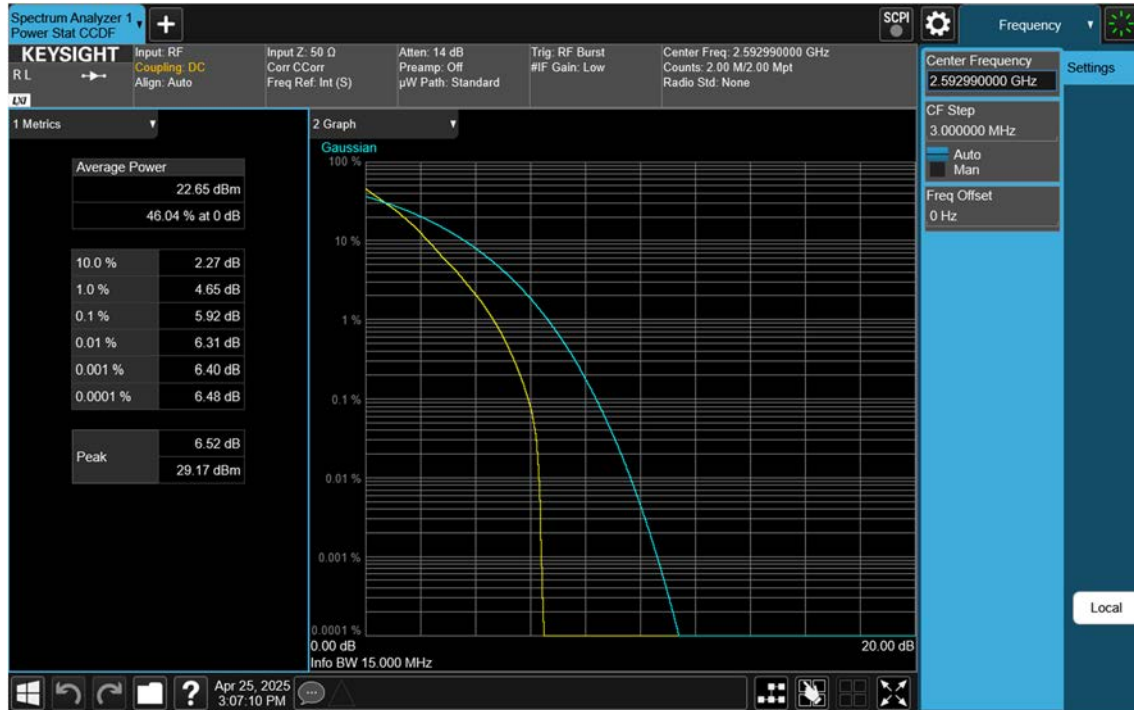
NR41_10 M_PAR_Mid_256QAM_FullRB



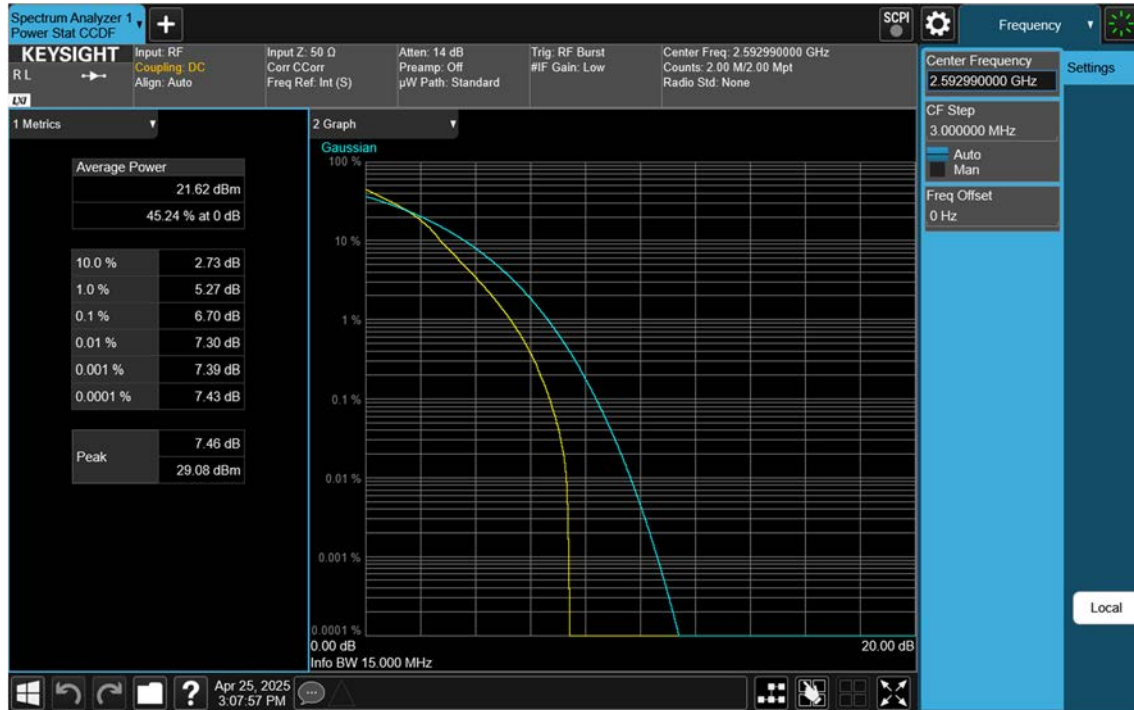
NR41_15 M_PAR_Mid_BPSK_FullRB



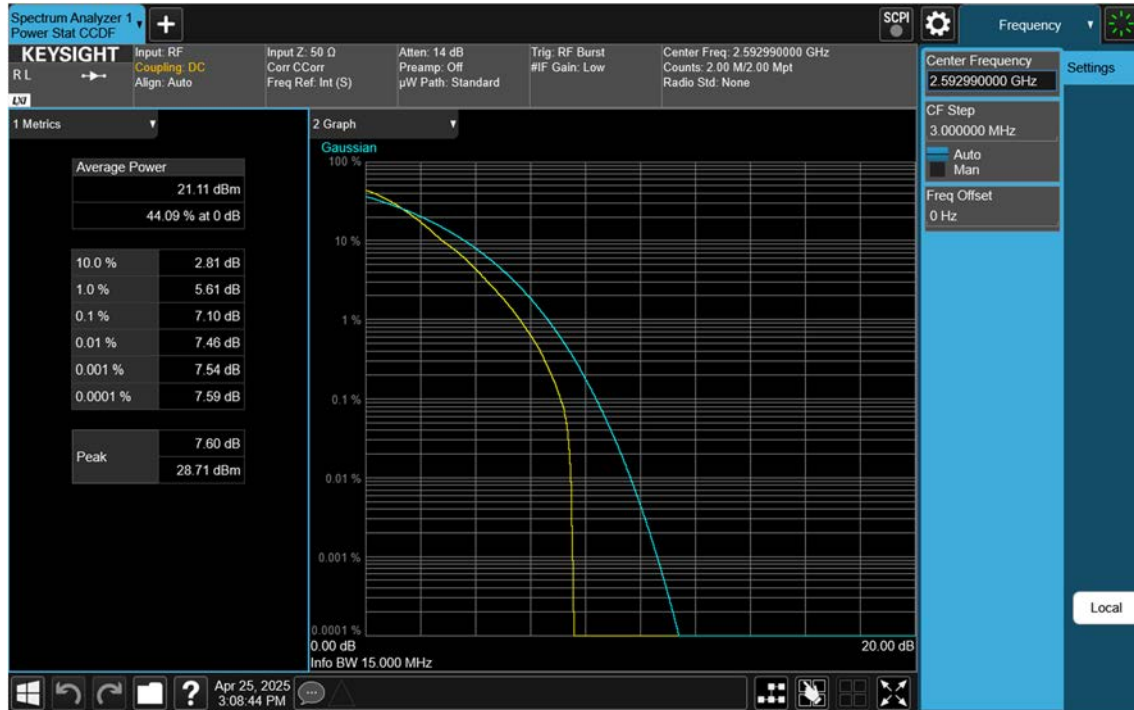
NR41_15 M_PAR_Mid_QPSK_FullRB



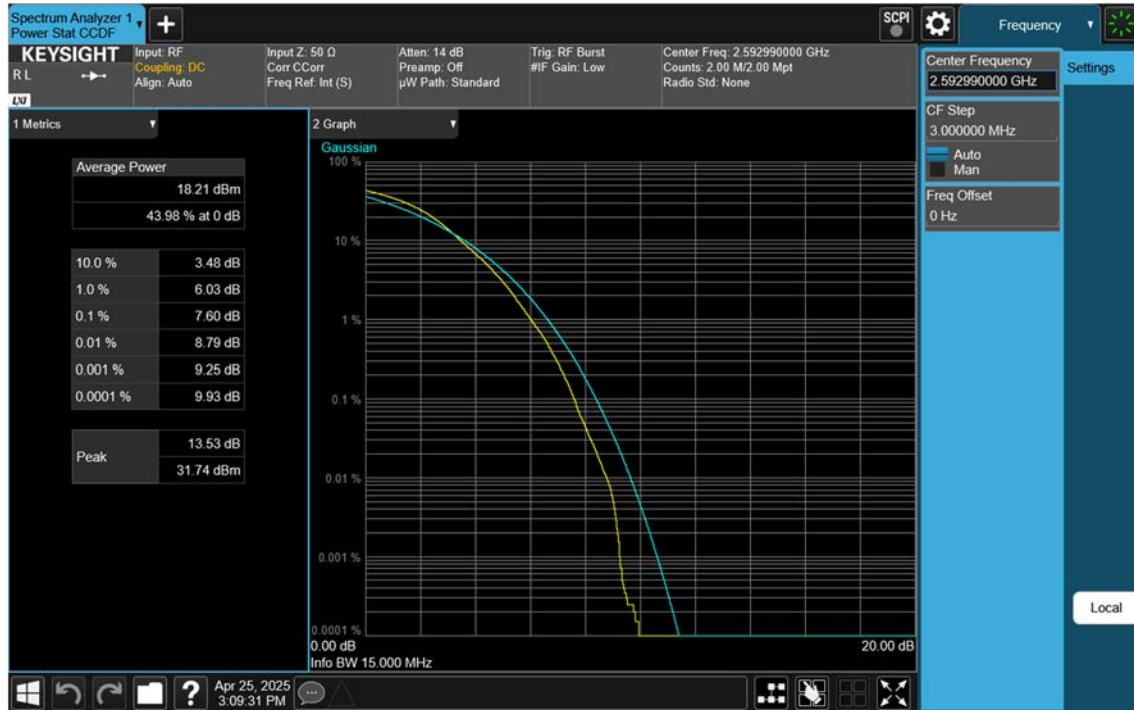
NR41_15 M_PAR_Mid_16QAM_FullRB



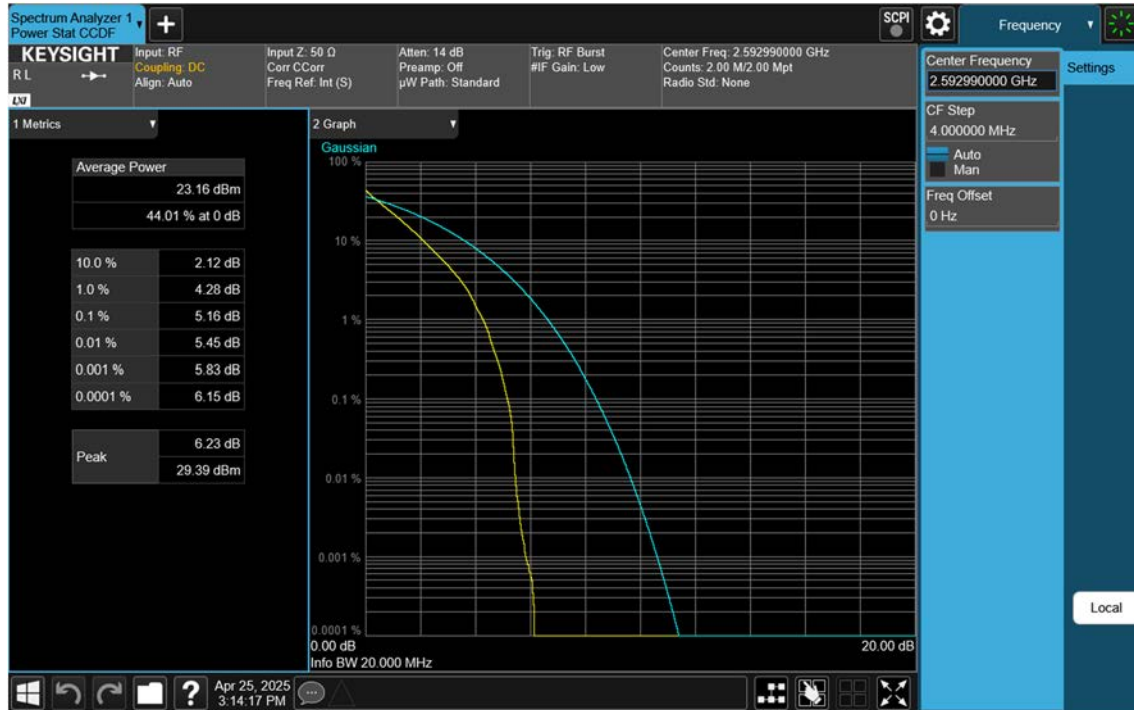
NR41_15 M_PAR_Mid_64QAM_FullRB



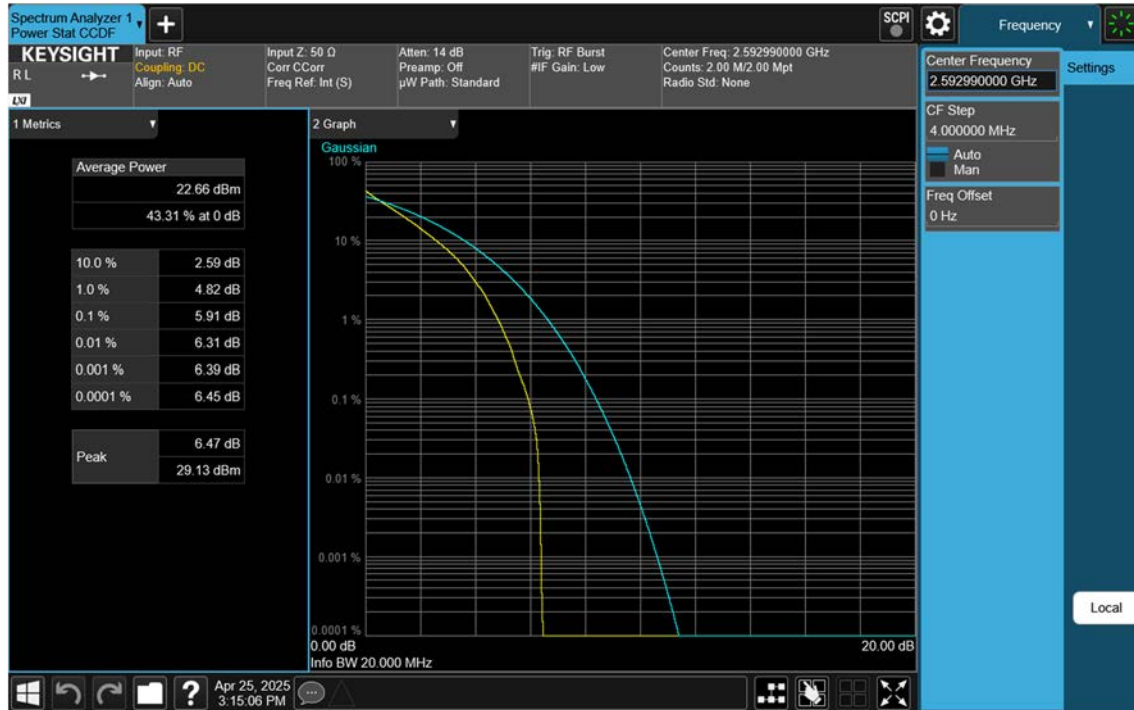
NR41_15 M_PAR_Mid_256QAM_FullRB



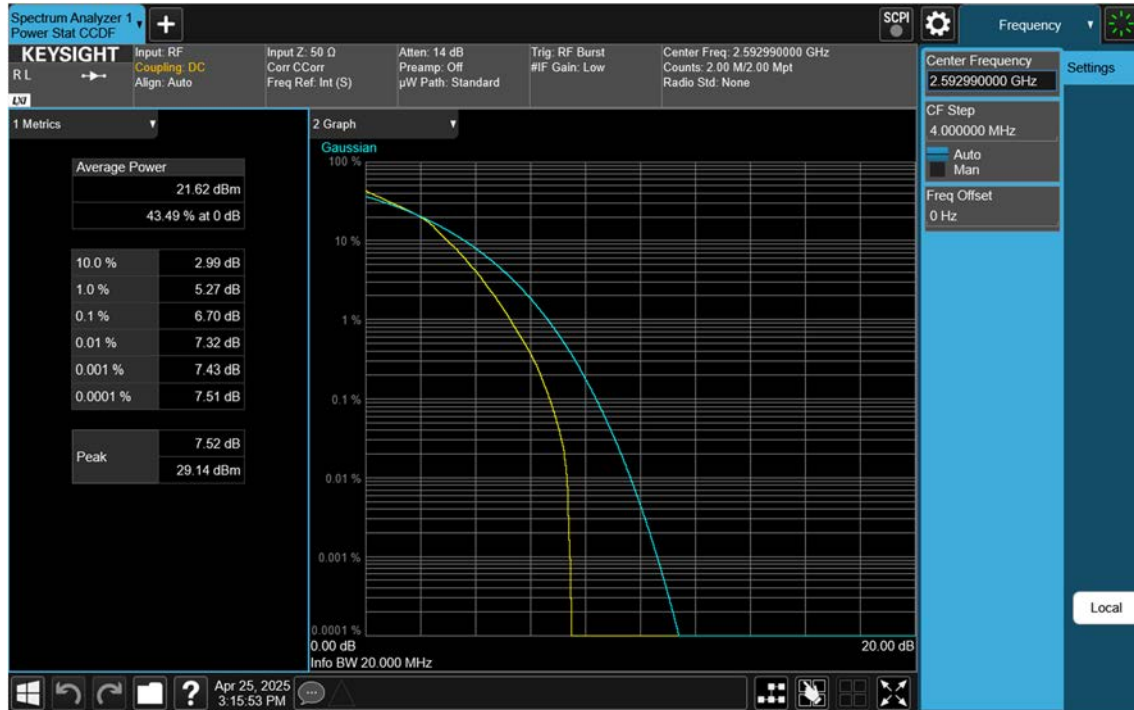
NR41_20 M_PAR_Mid_BPSK_FullRB



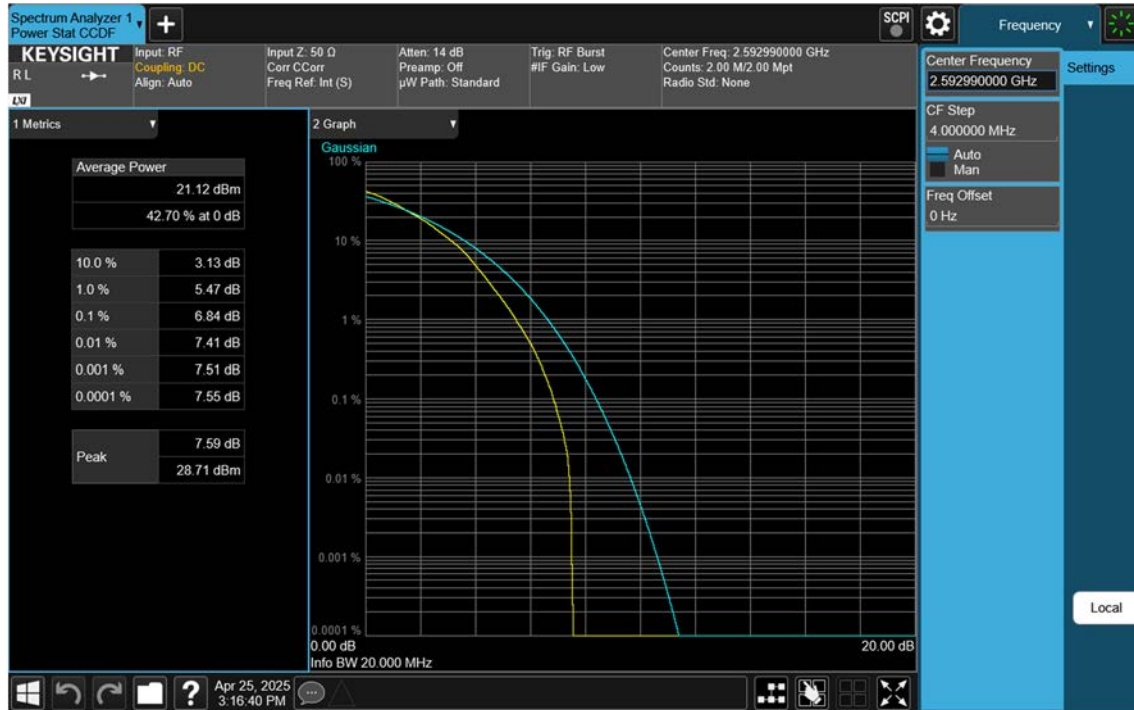
NR41_20 M_PAR_Mid_QPSK_FullRB



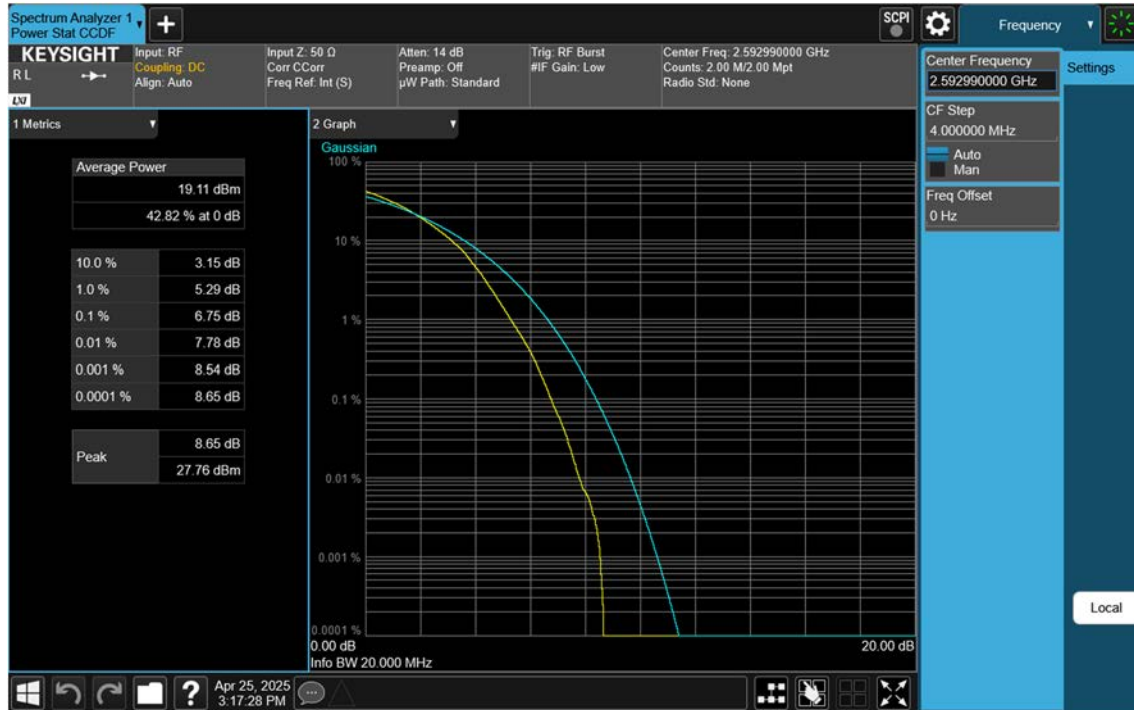
NR41_20 M_PAR_Mid_16QAM_FullRB



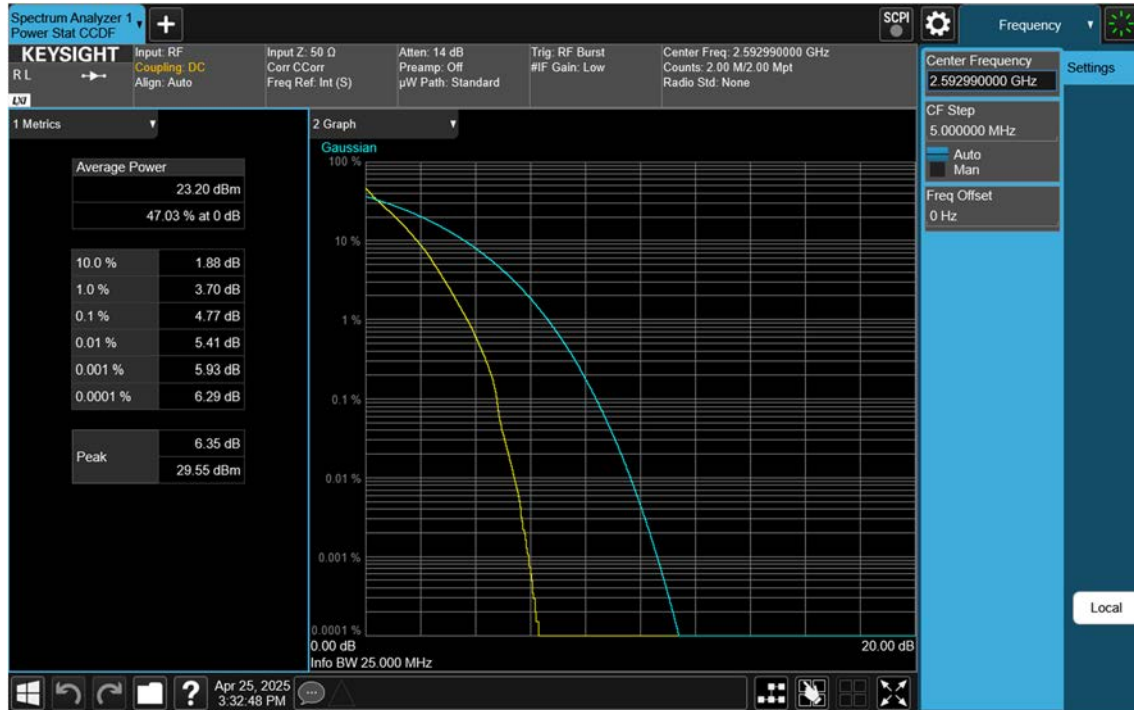
NR41_20 M_PAR_Mid_64QAM_FullRB



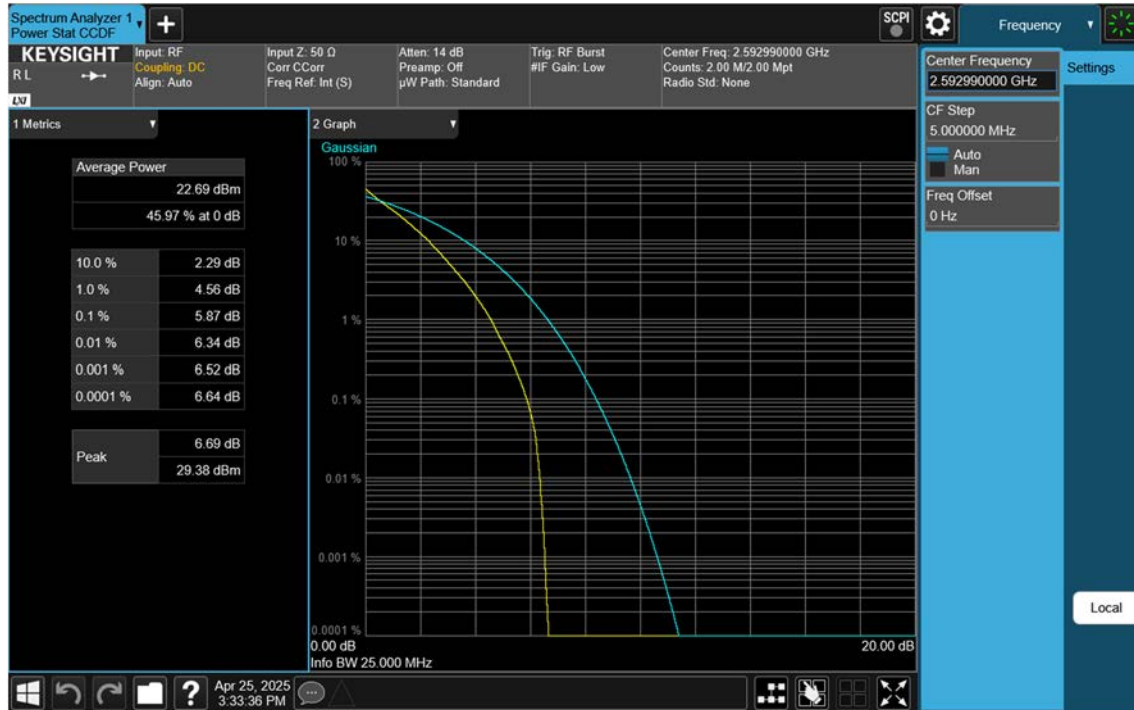
NR41_20 M_PAR_Mid_256QAM_FullRB



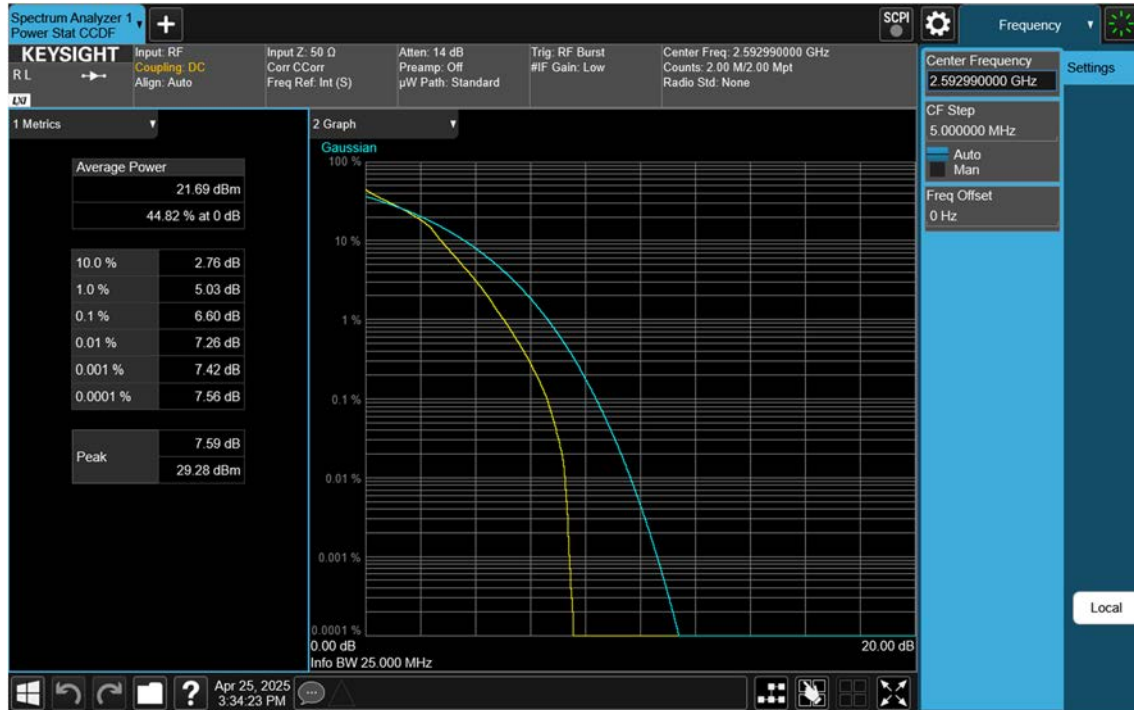
NR41_25 M_PAR_Mid_BPSK_FullRB



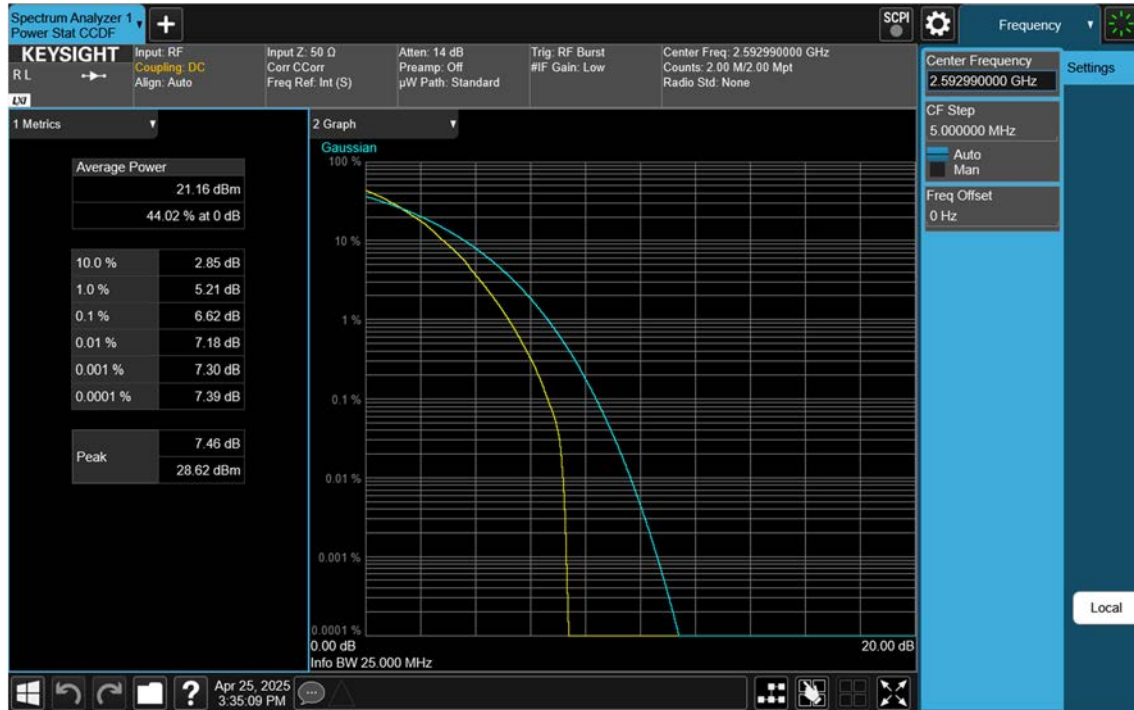
NR41_25 M_PAR_Mid_QPSK_FullRB



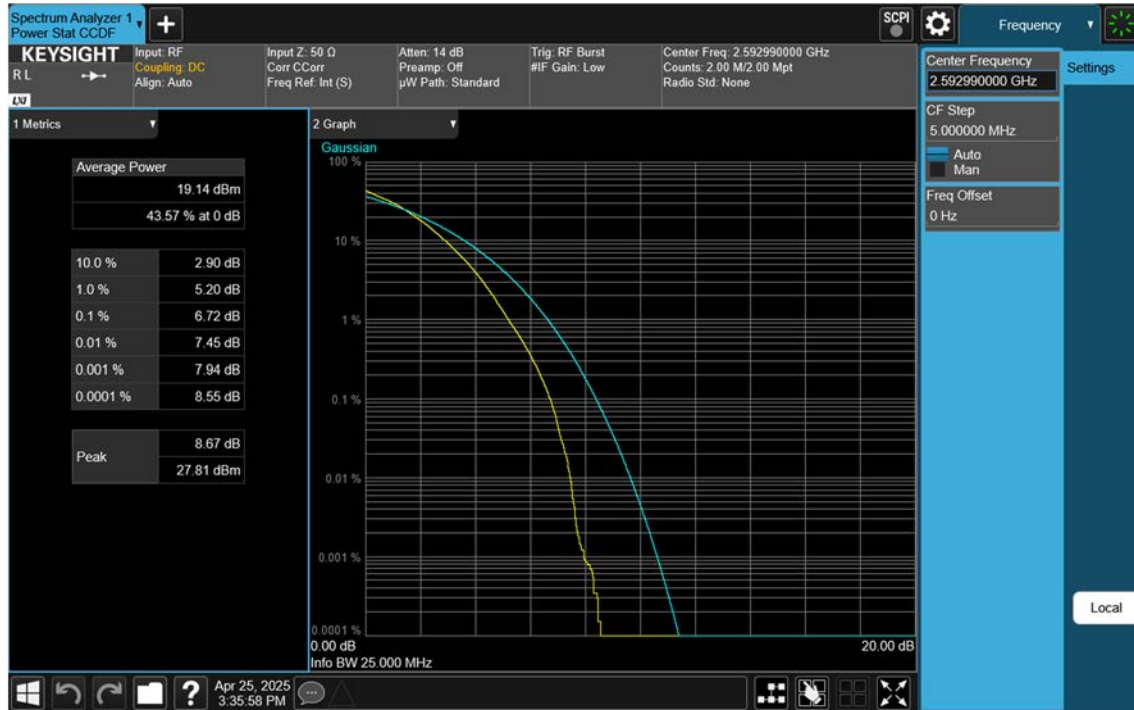
NR41_25 M_PAR_Mid_16QAM_FullRB



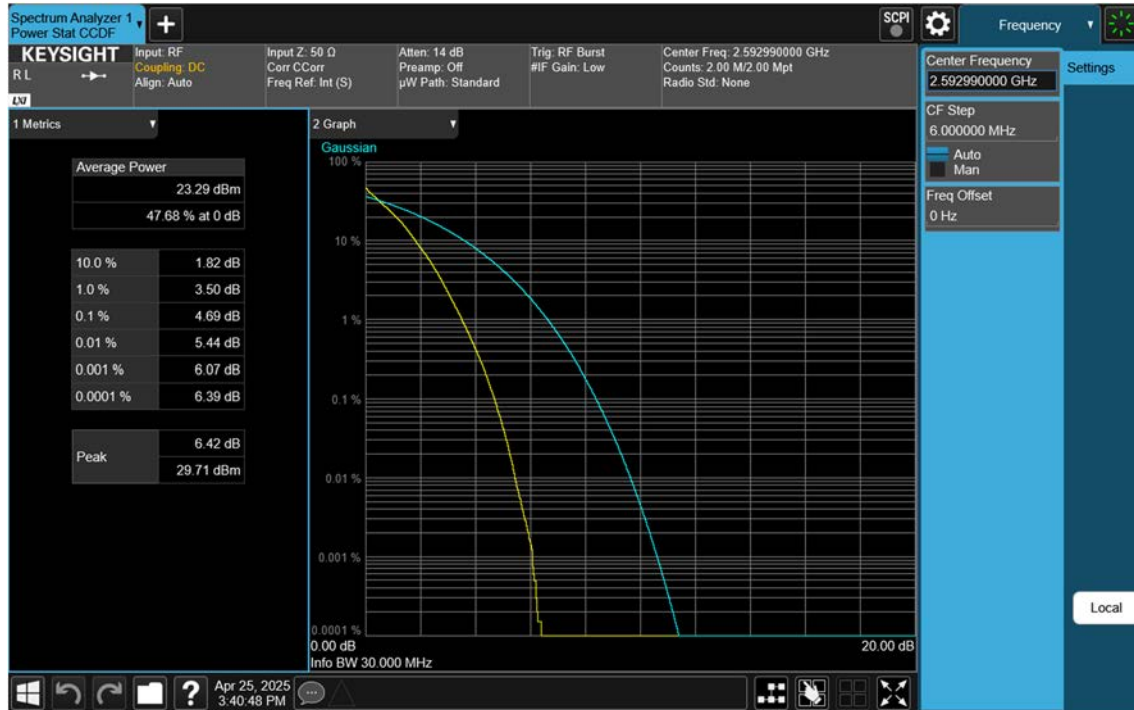
NR41_25 M_PAR_Mid_64QAM_FullRB



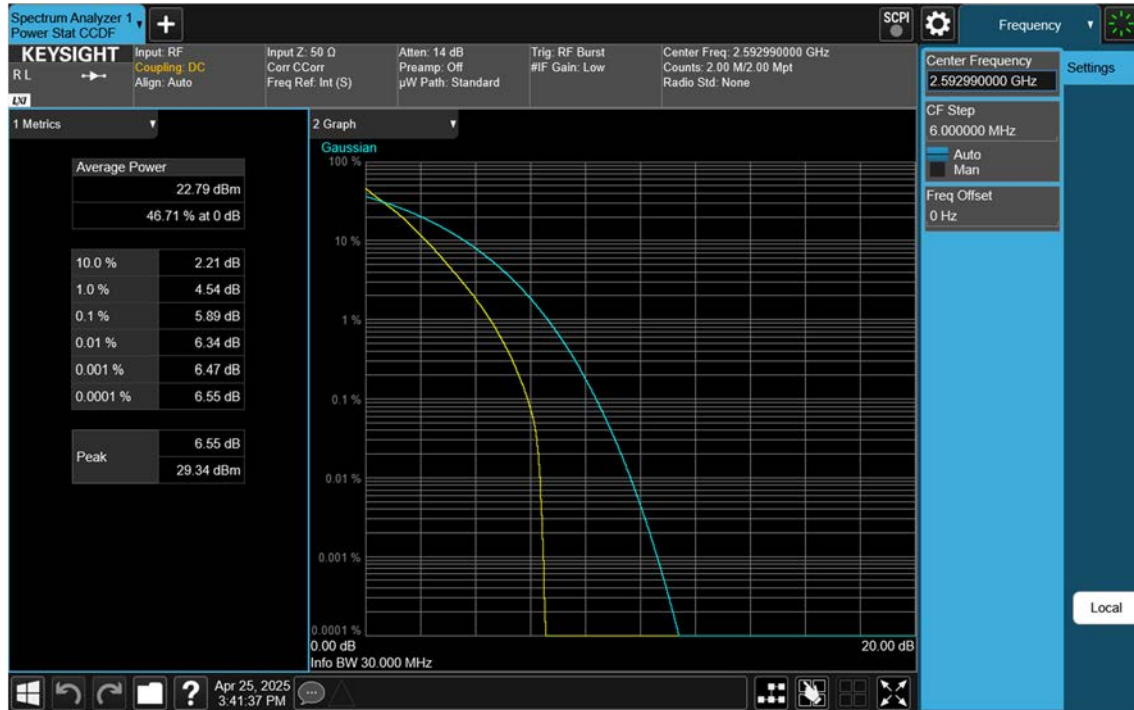
NR41_25 M_PAR_Mid_256QAM_FullRB



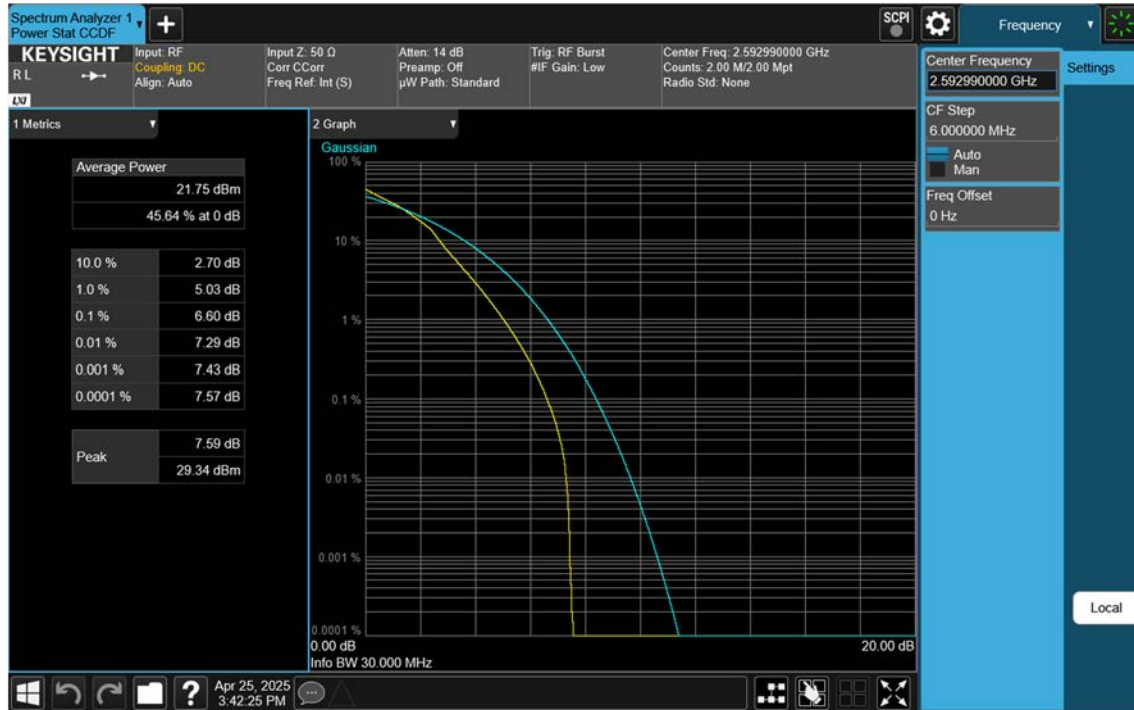
NR41_30 M_PAR_Mid_BPSK_FullRB



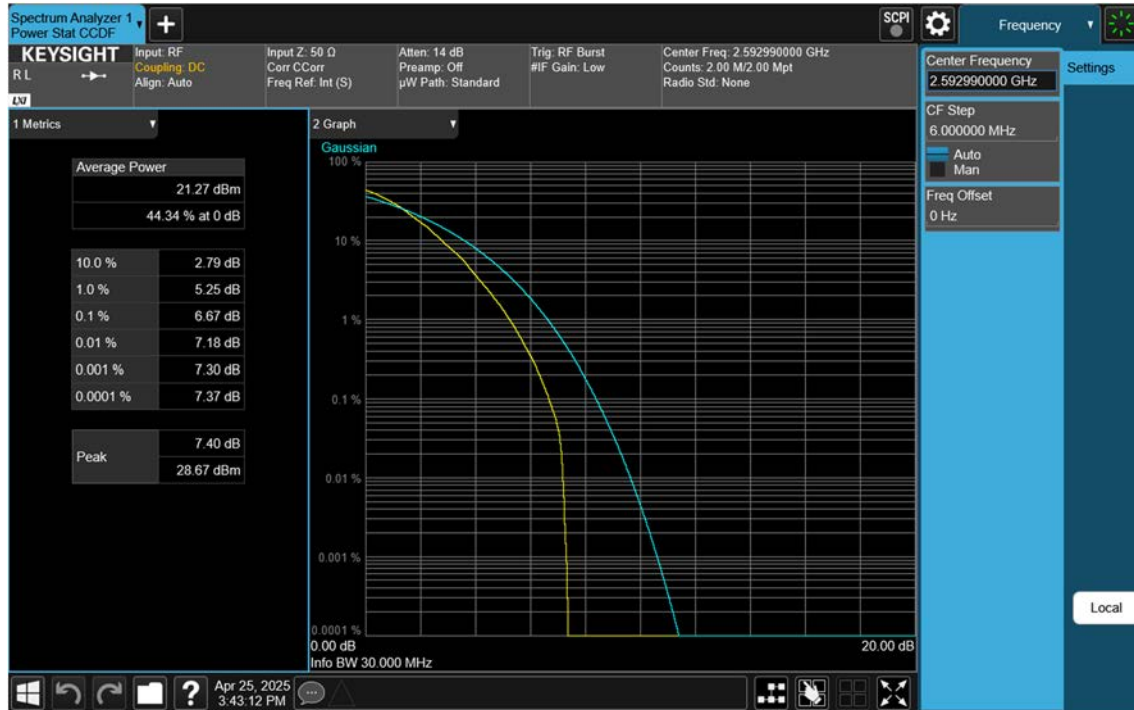
NR41_30 M_PAR_Mid_QPSK_FullRB



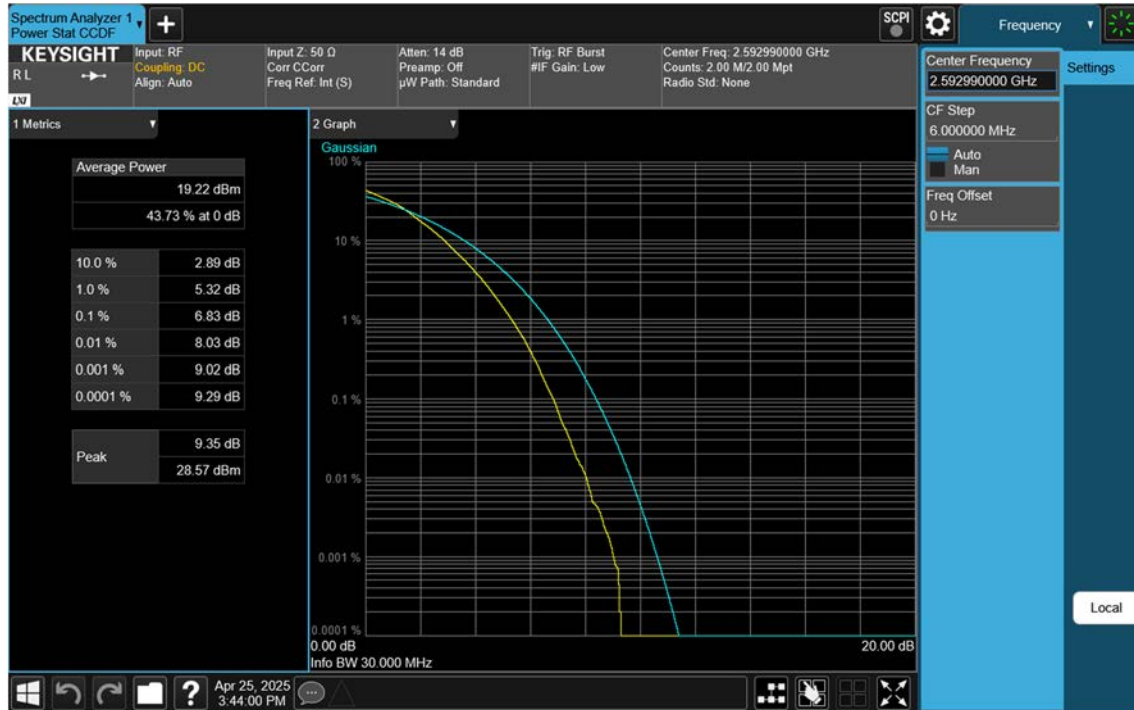
NR41_30 M_PAR_Mid_16QAM_FullRB



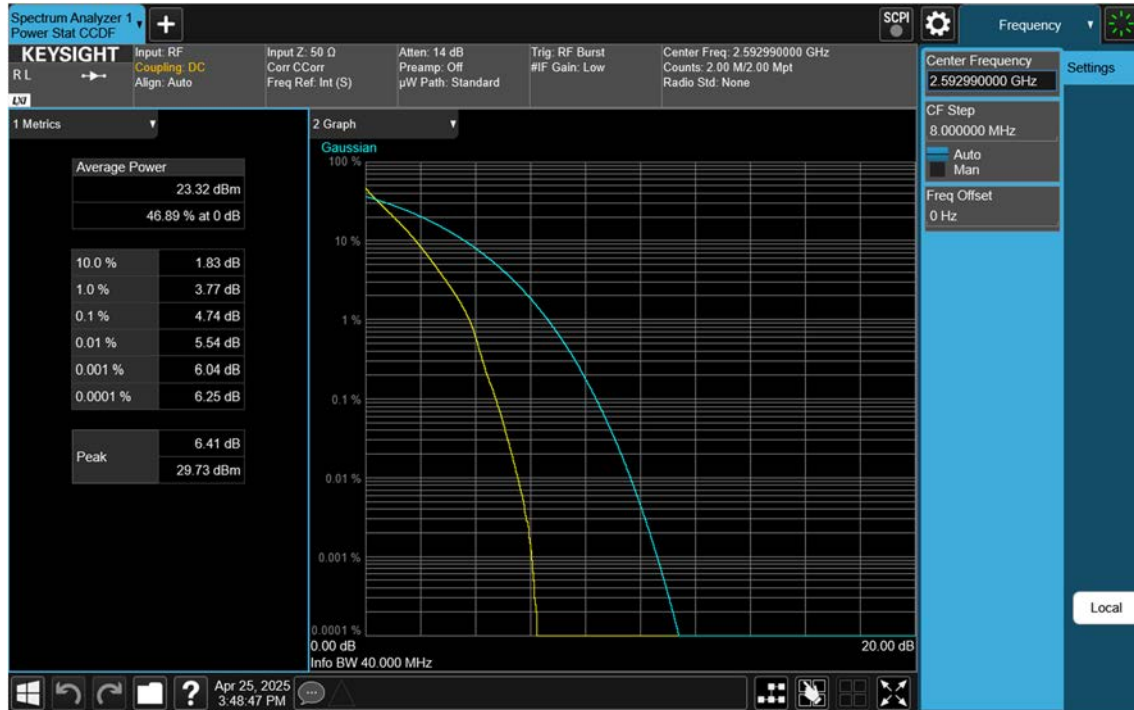
NR41_30 M_PAR_Mid_64QAM_FullRB



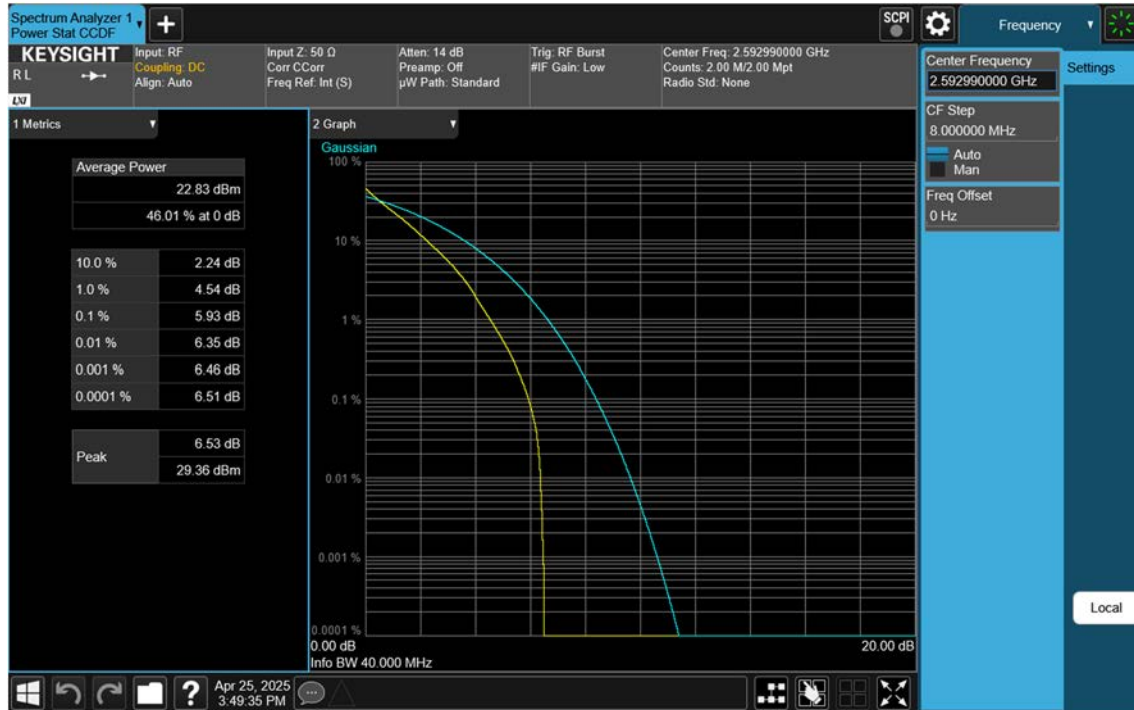
NR41_30 M_PAR_Mid_256QAM_FullRB



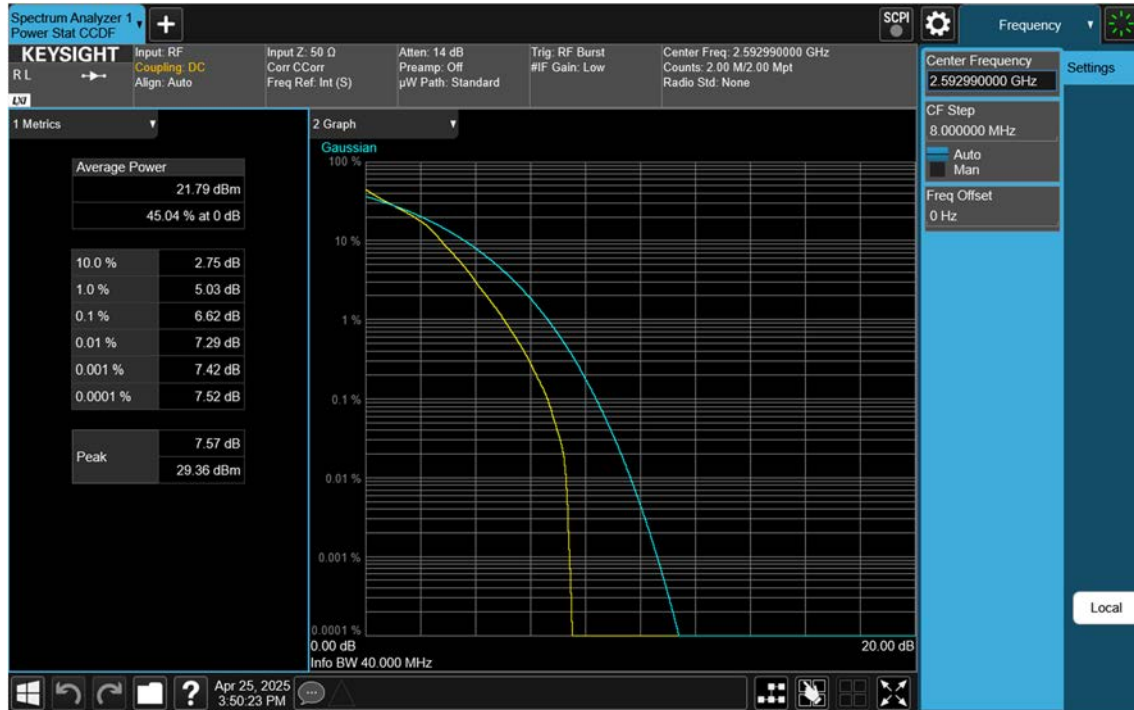
NR41_40 M_PAR_Mid_BPSK_FullRB



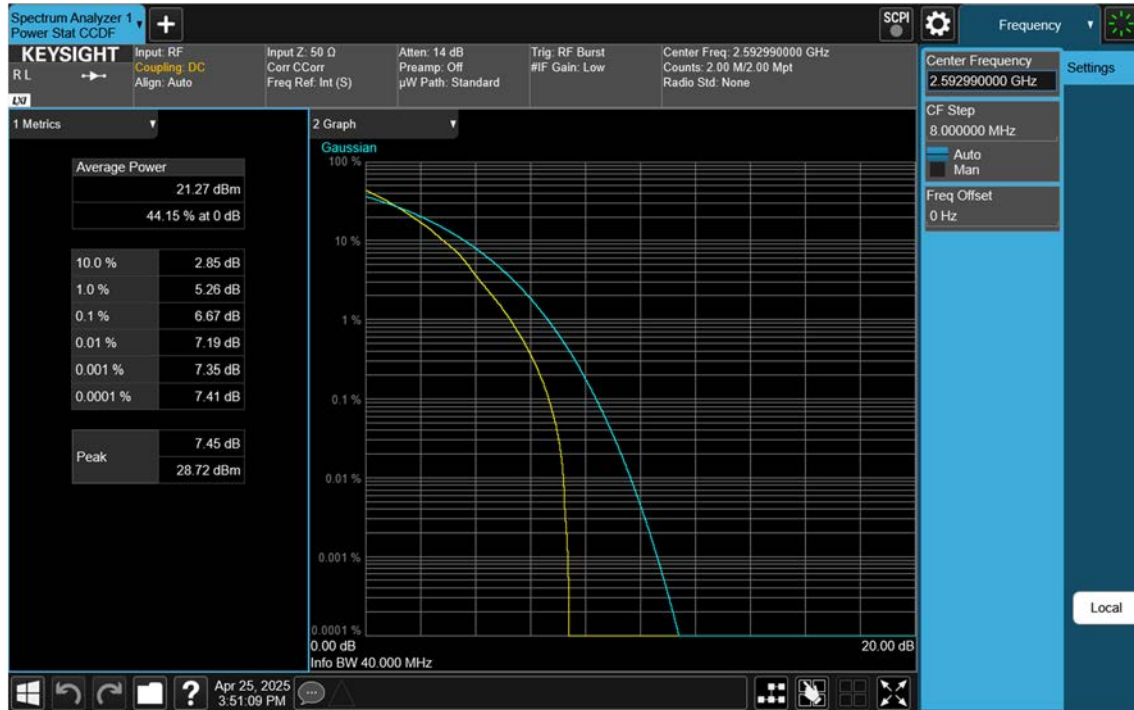
NR41_40 M_PAR_Mid_QPSK_FullRB



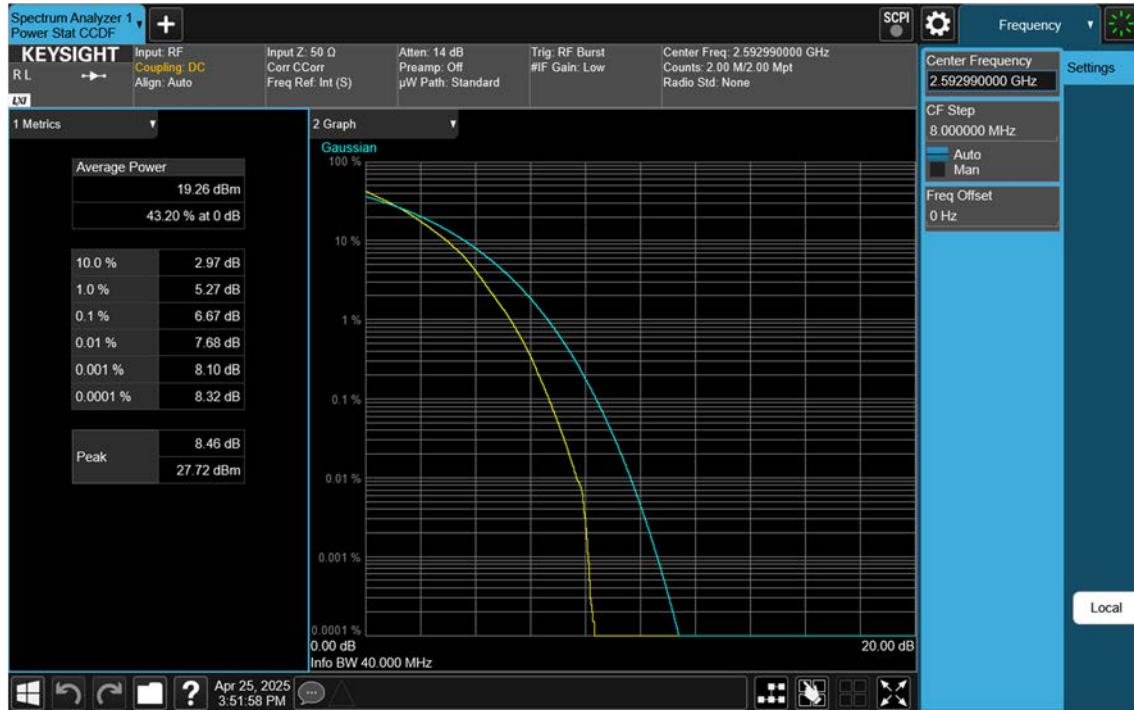
NR41_40 M_PAR_Mid_16QAM_FullRB



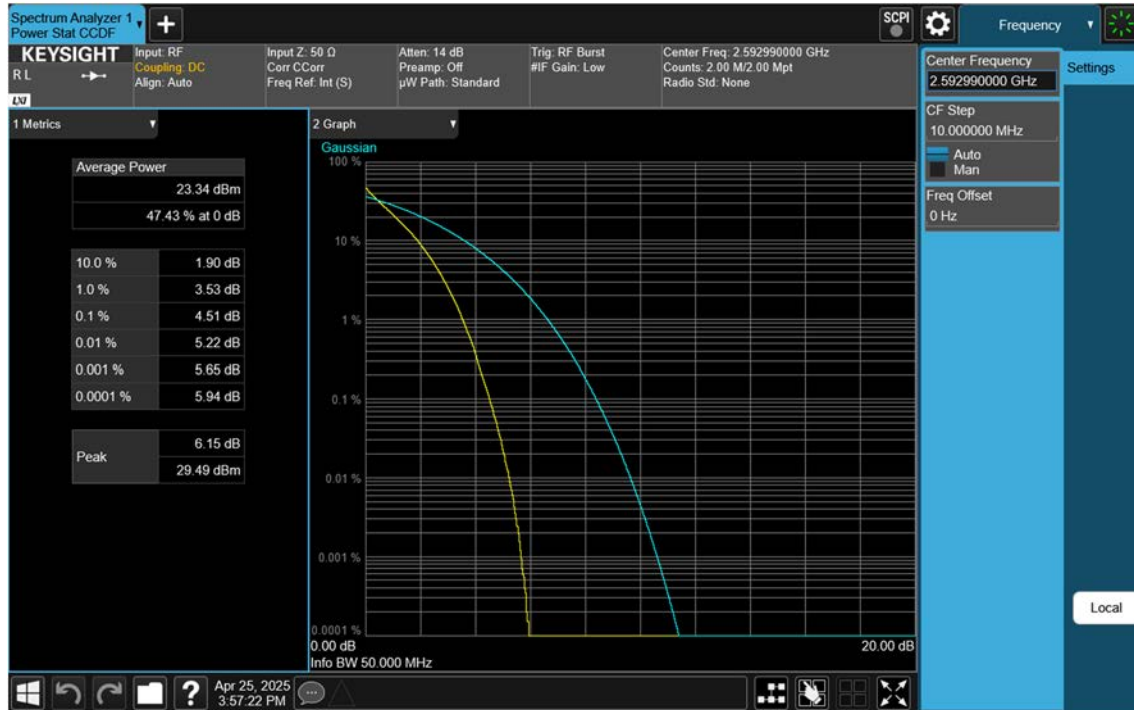
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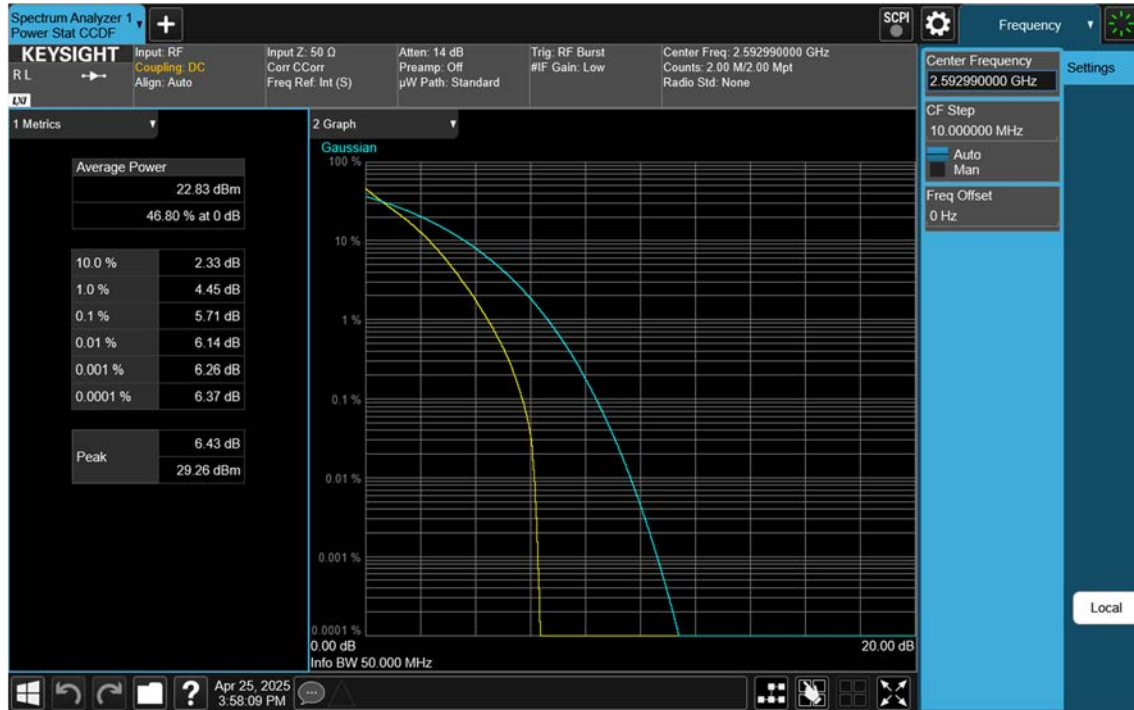
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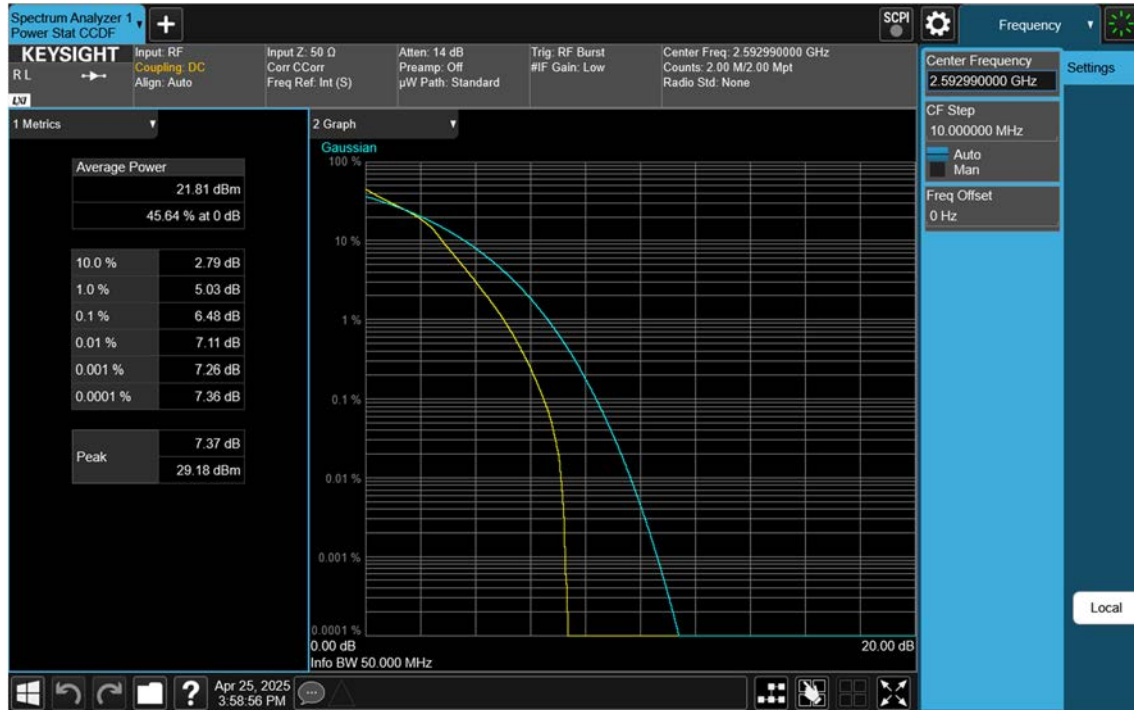
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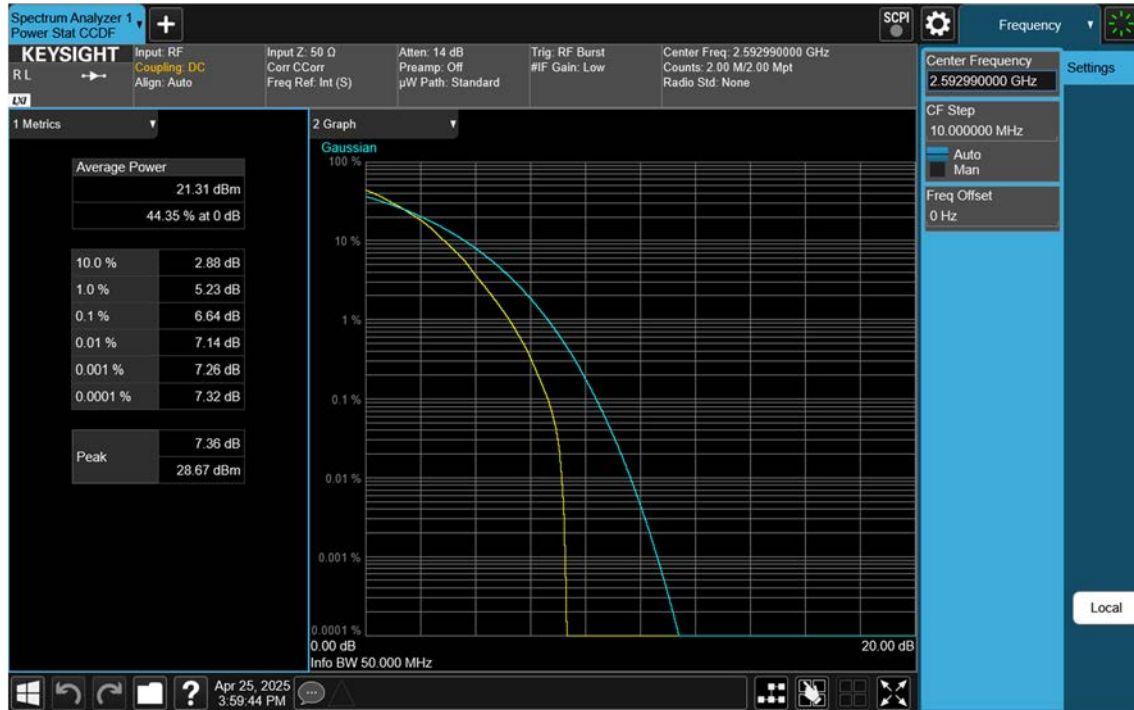
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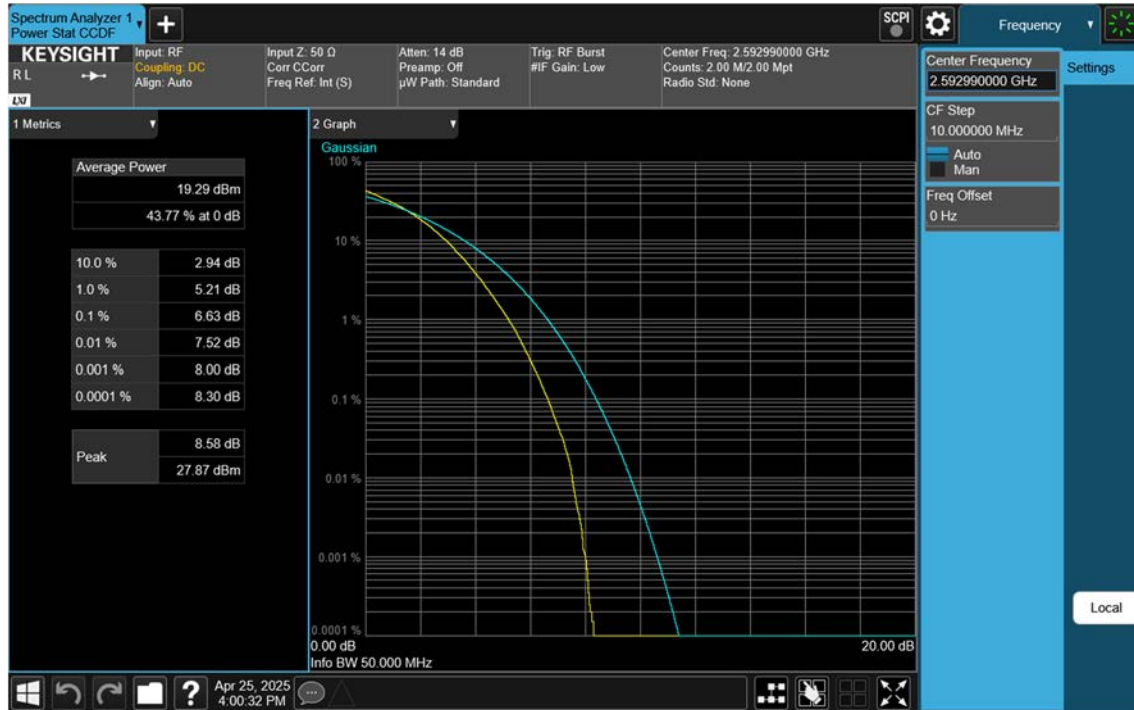
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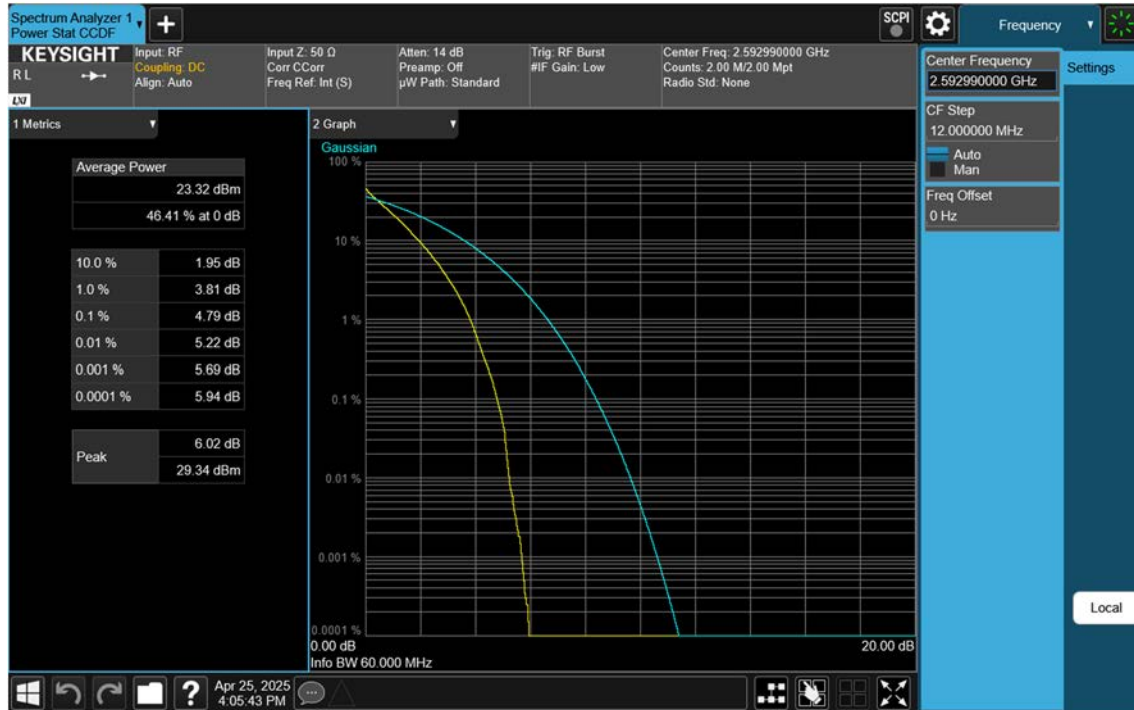
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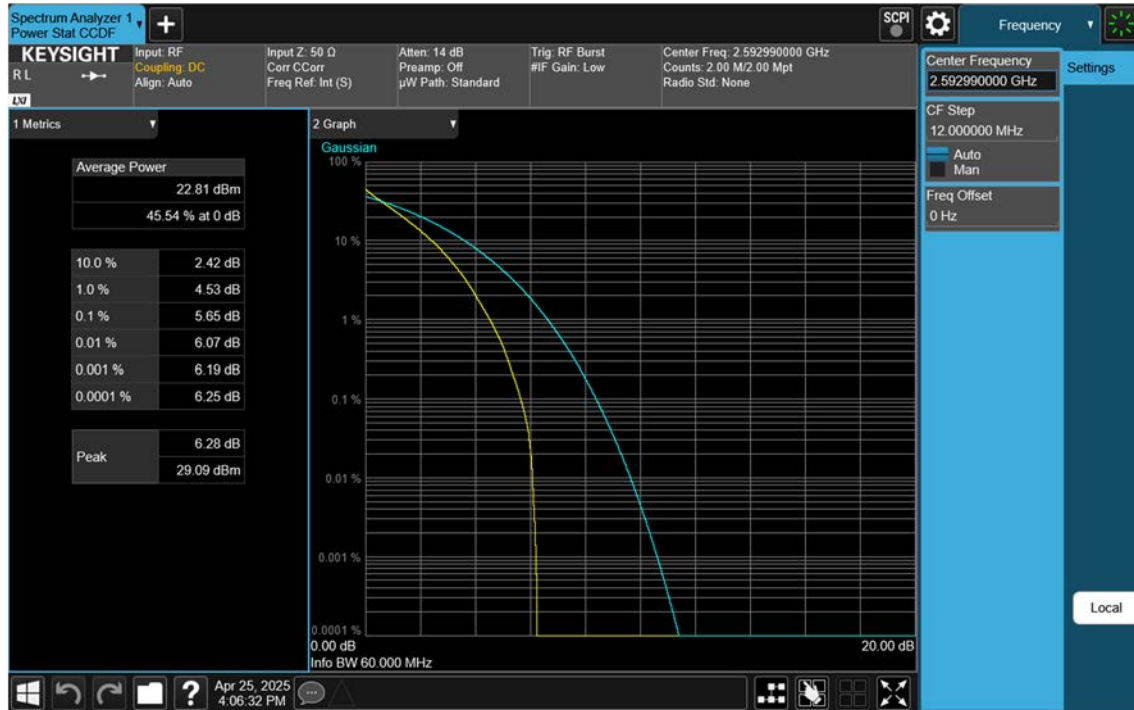
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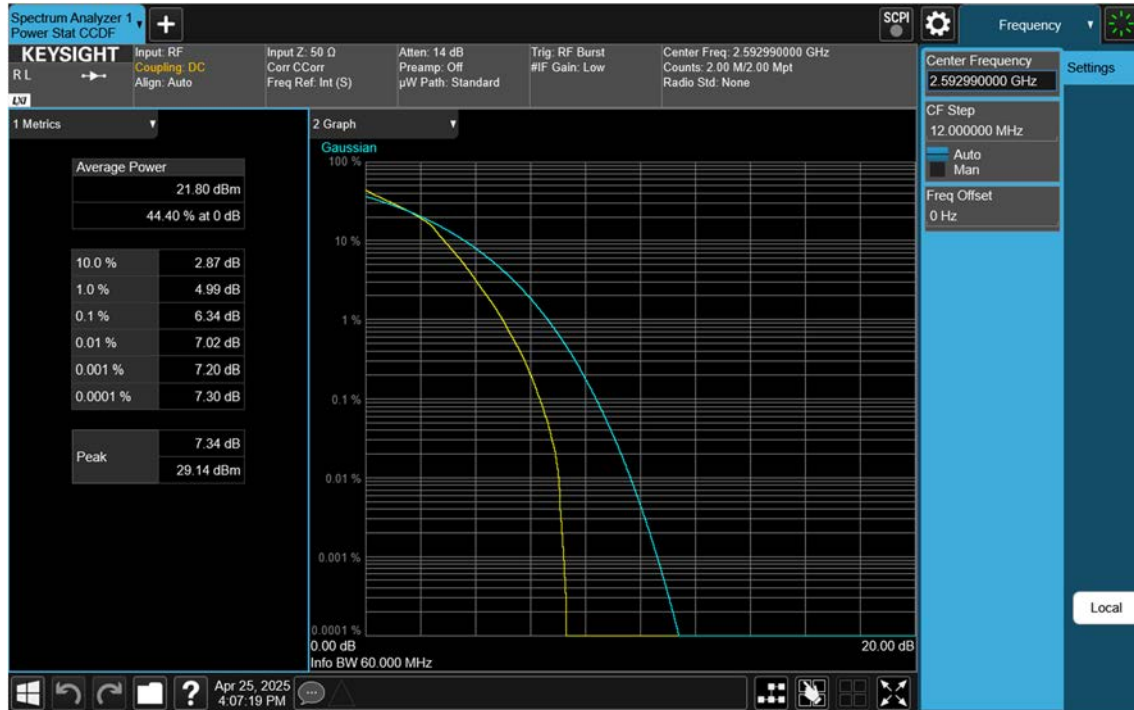
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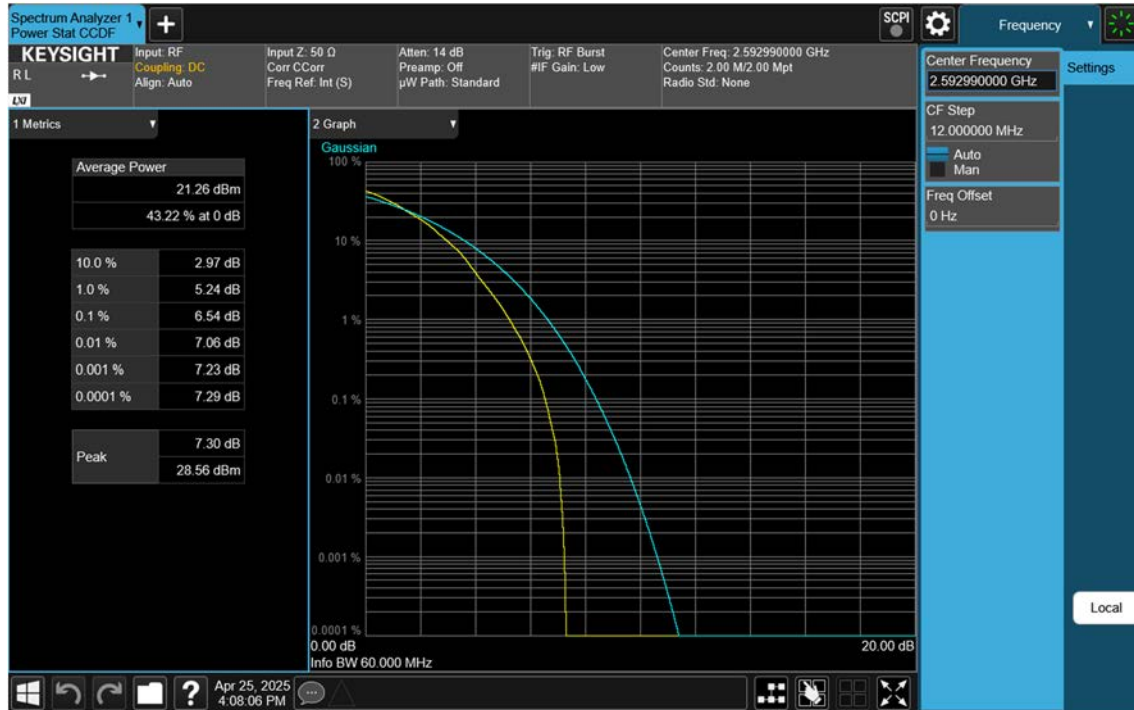
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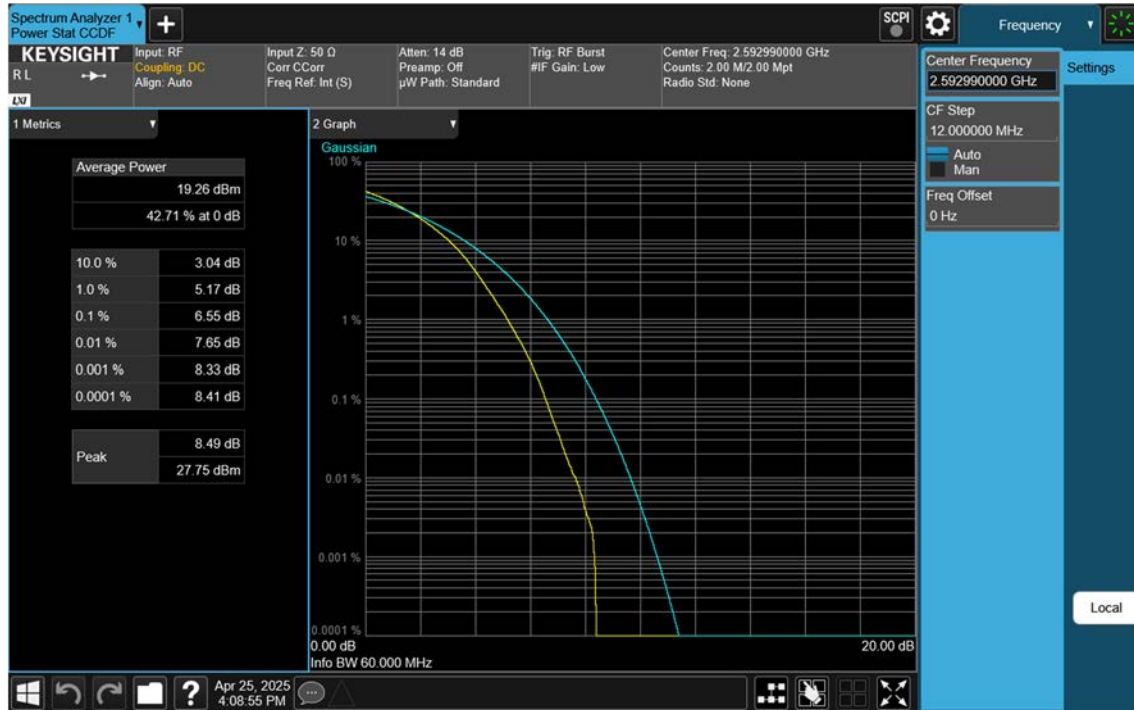
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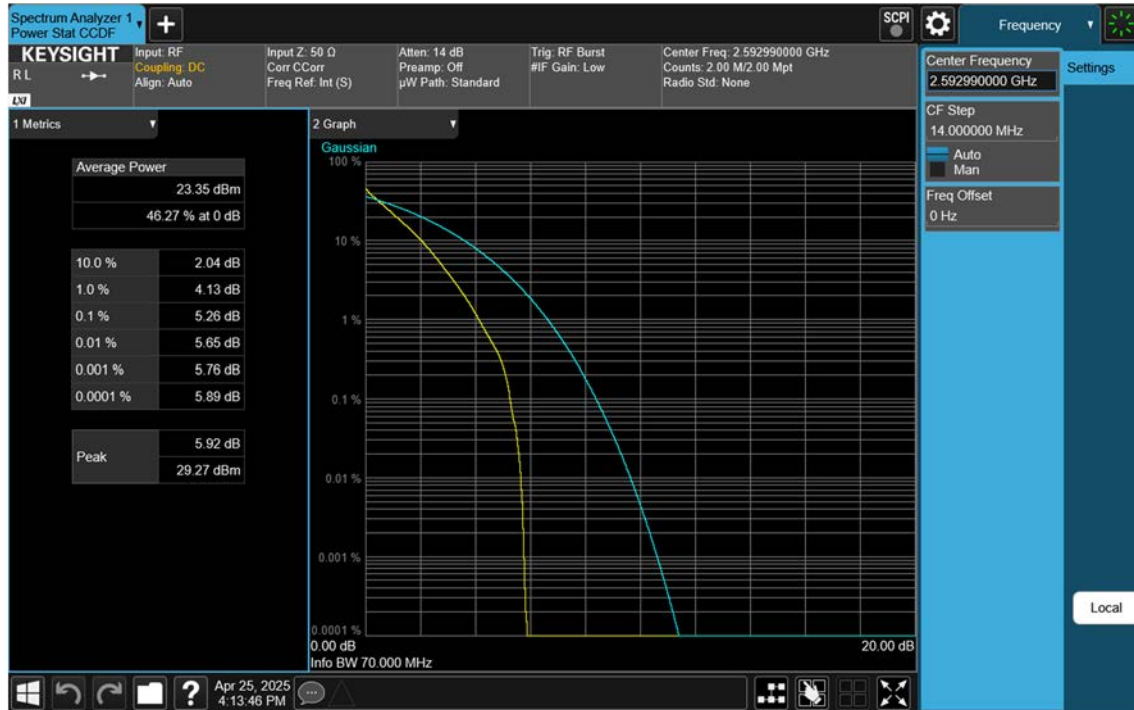
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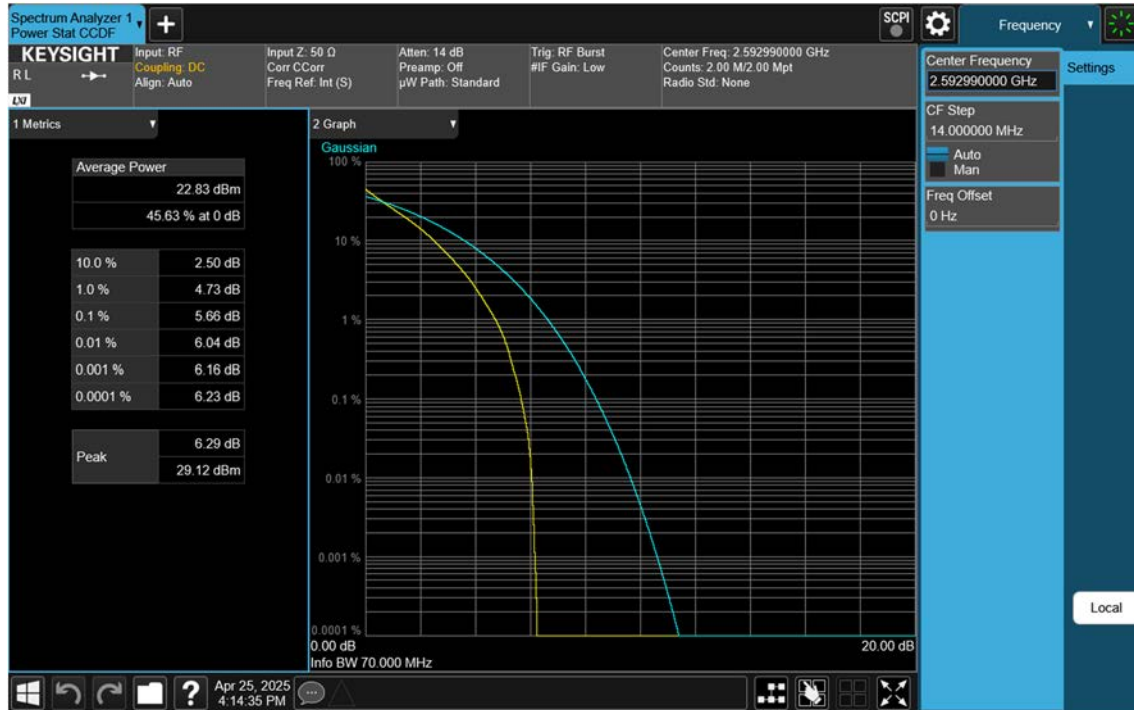
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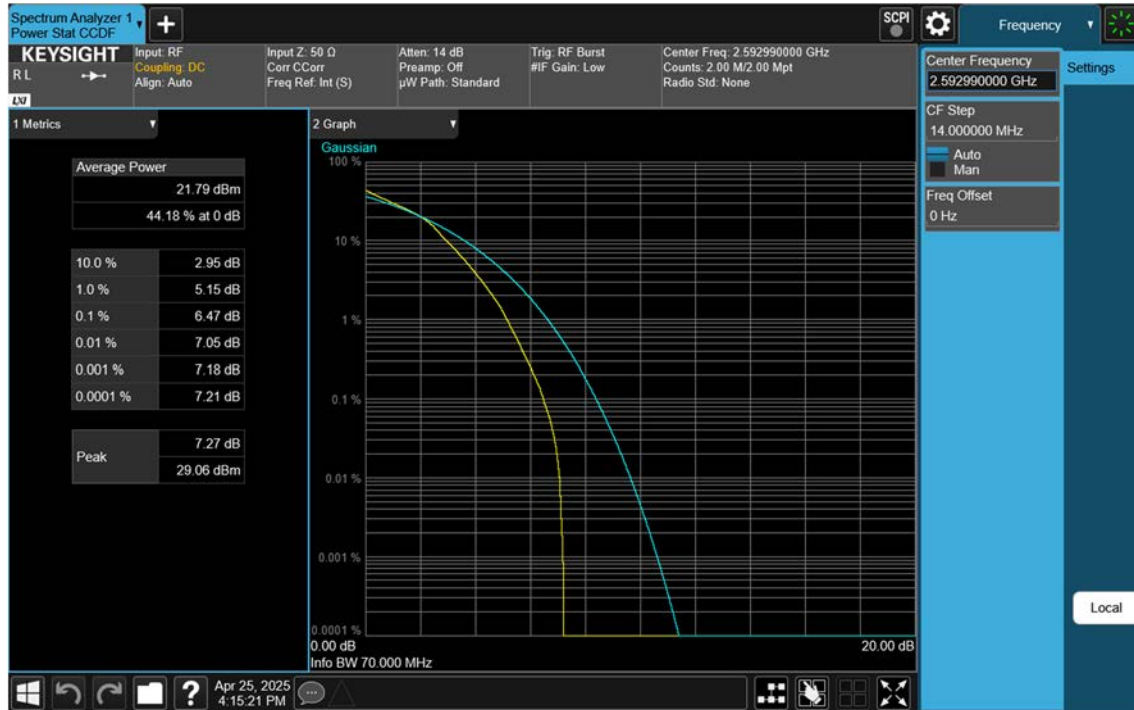
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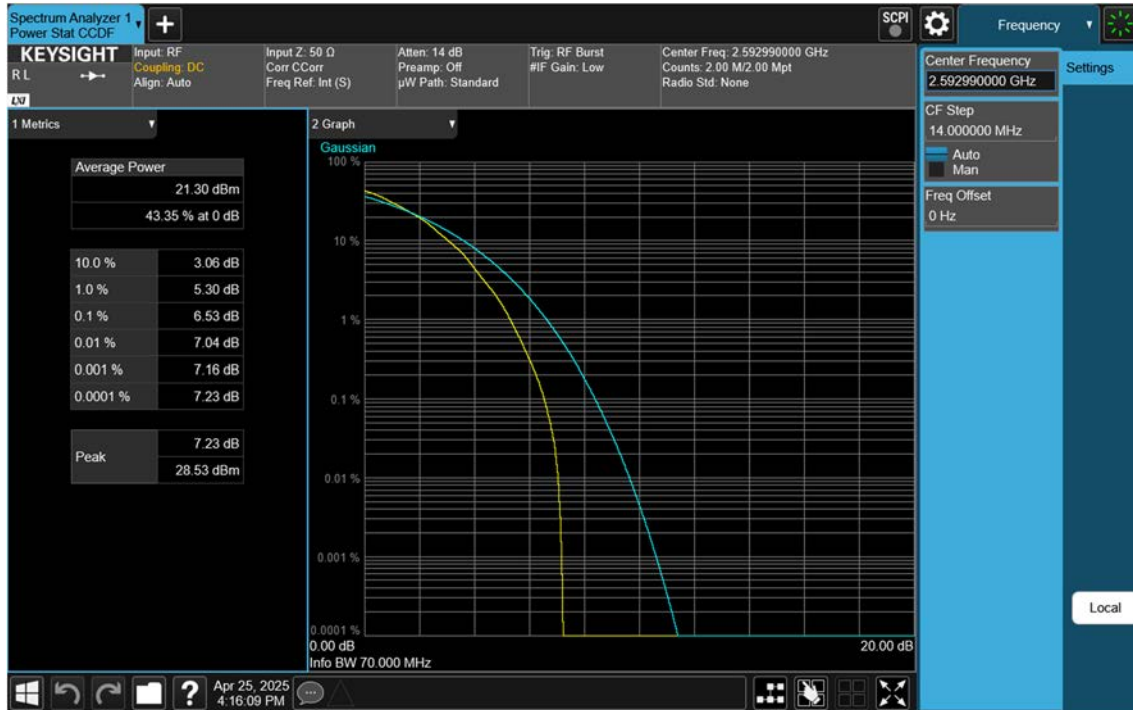
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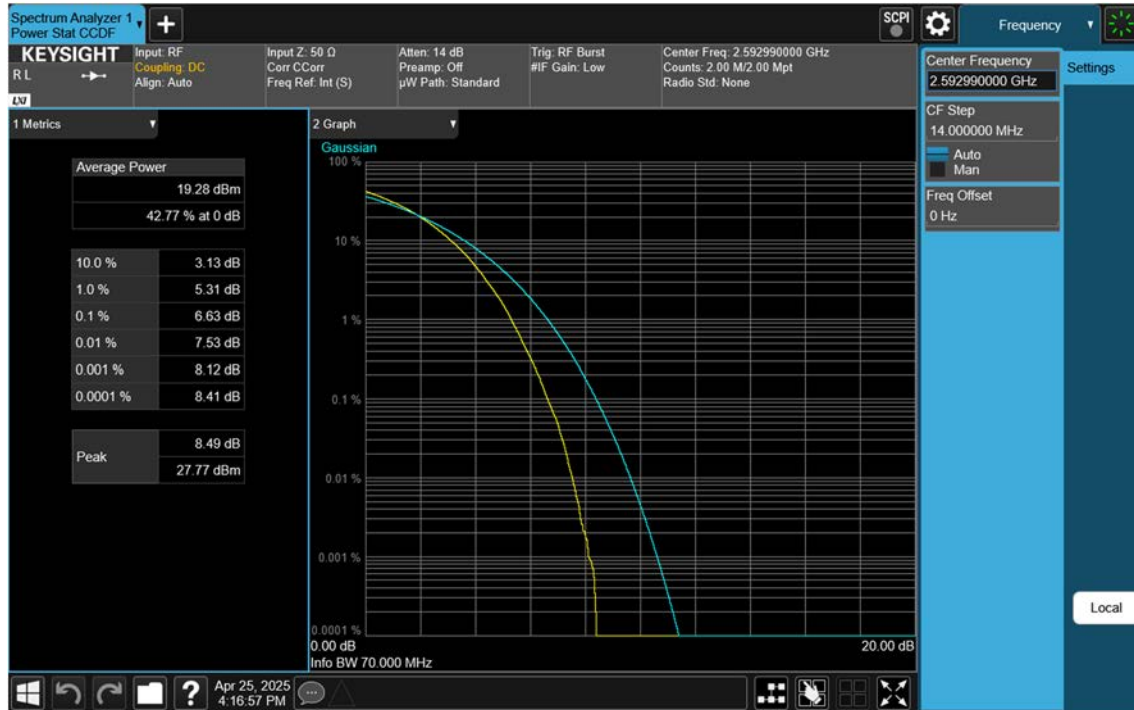
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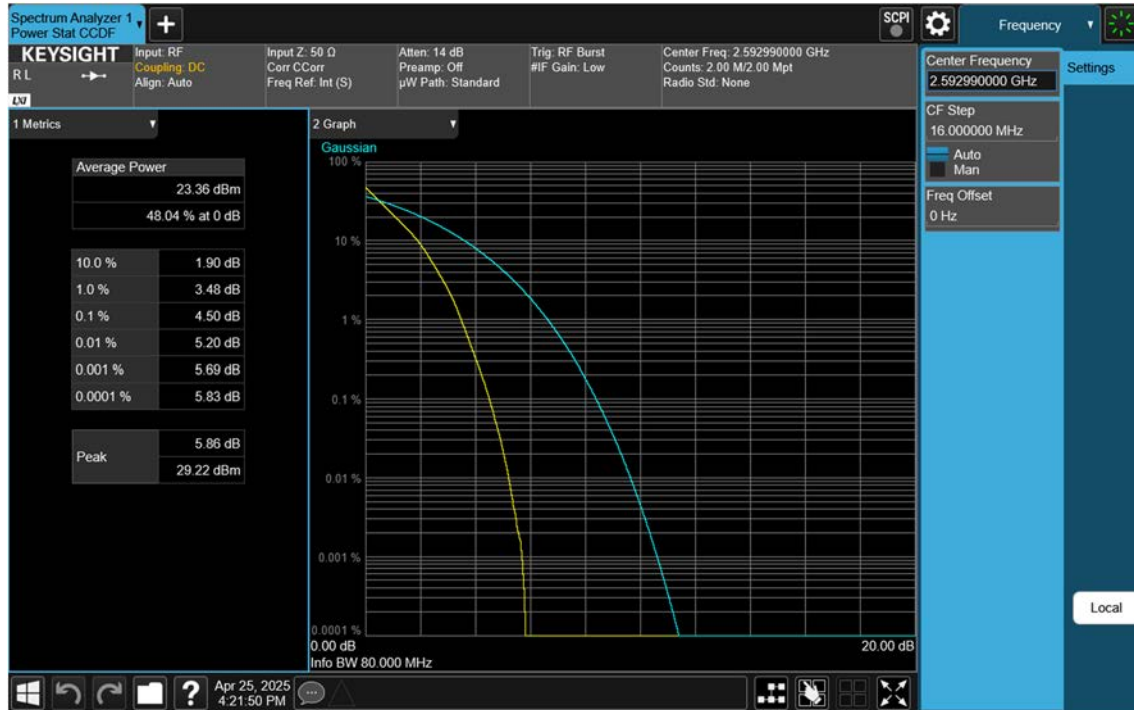
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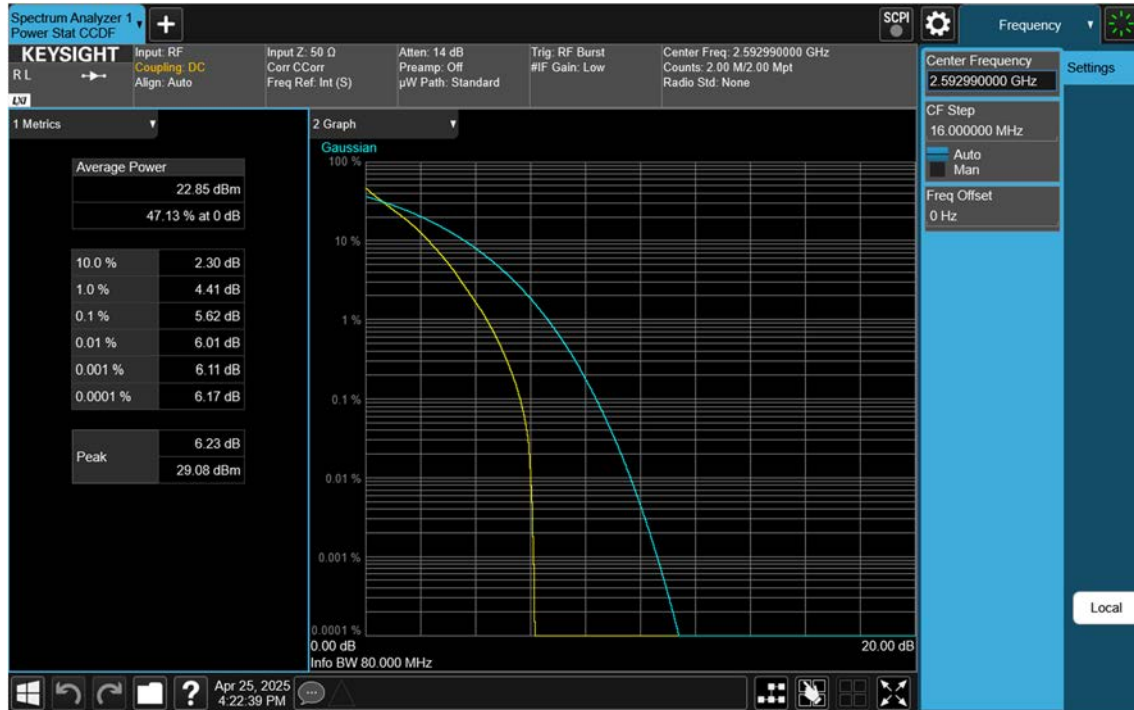
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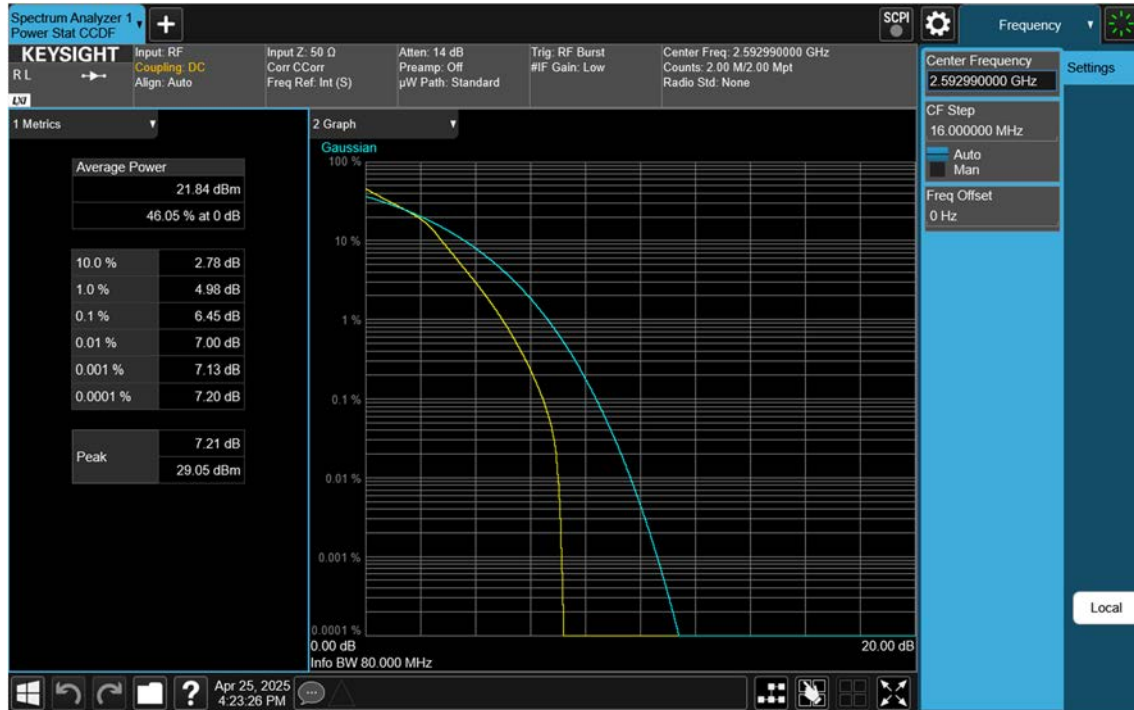
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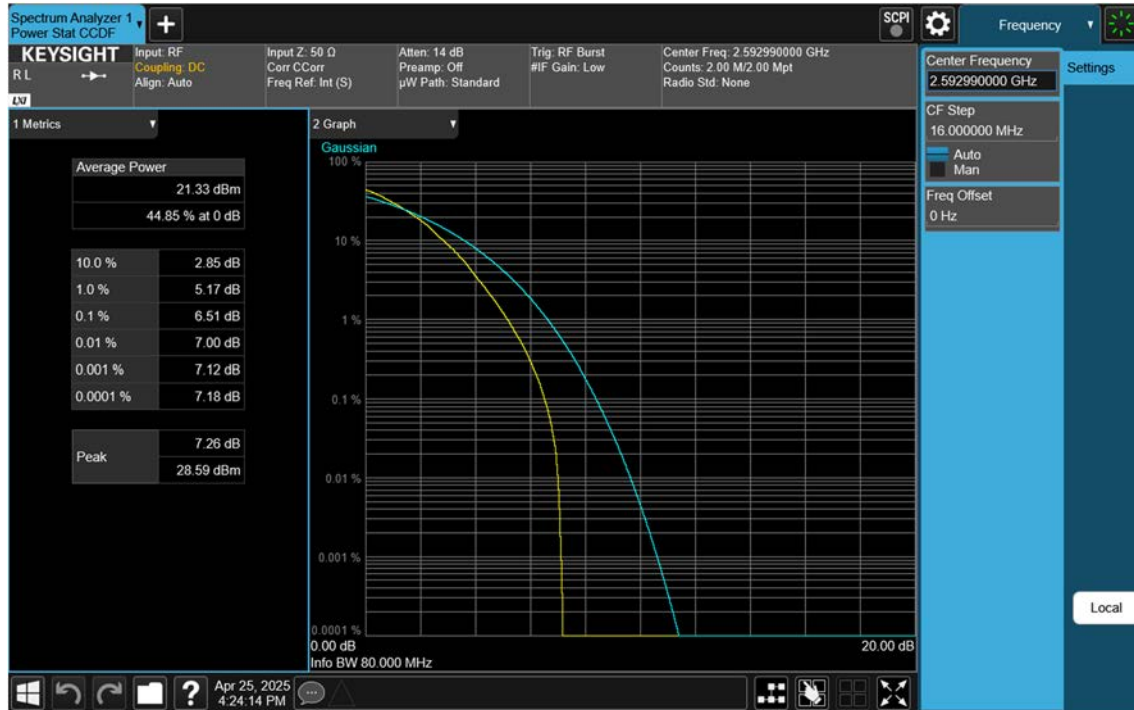
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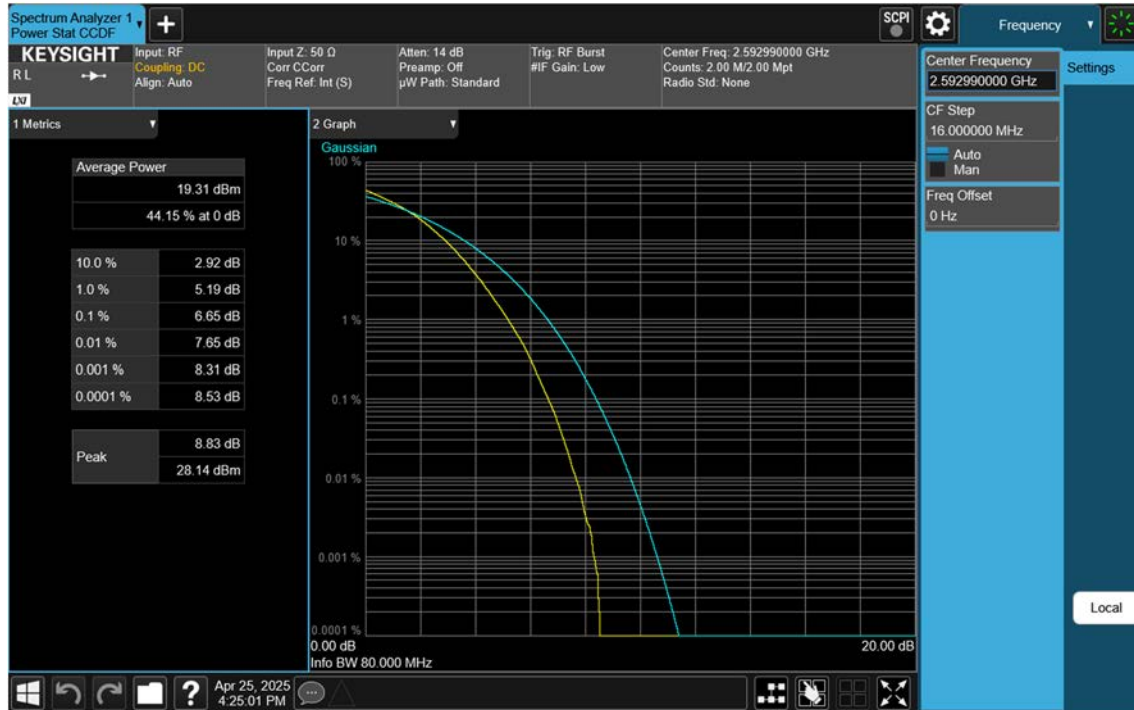
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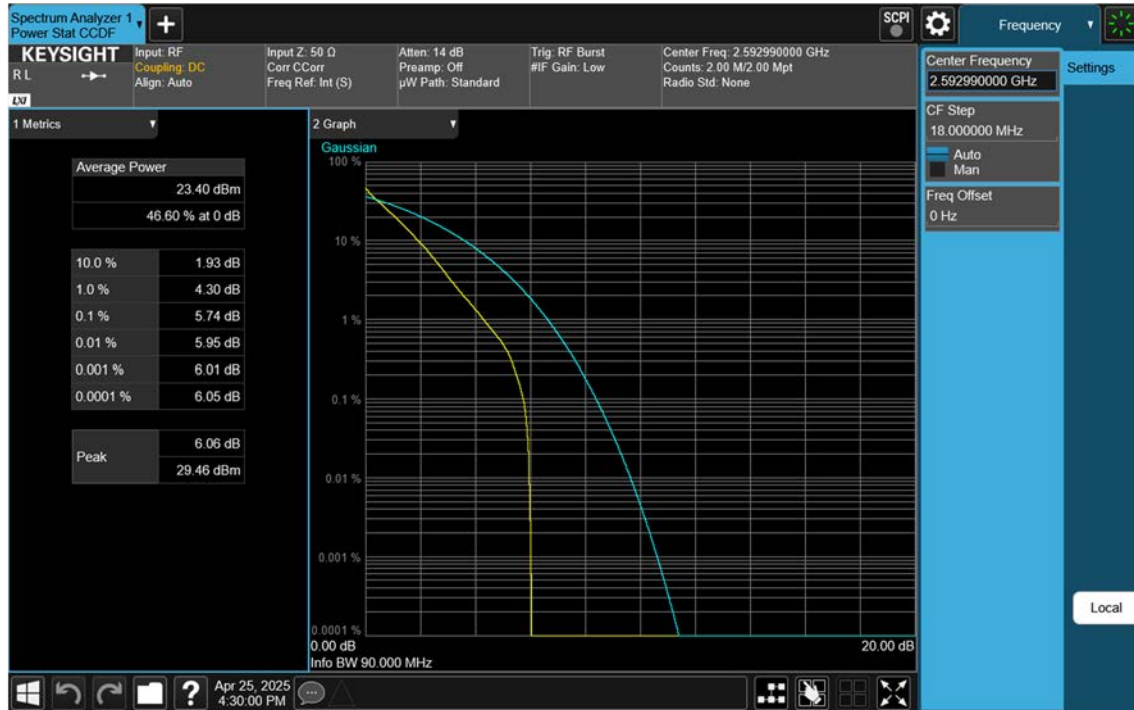
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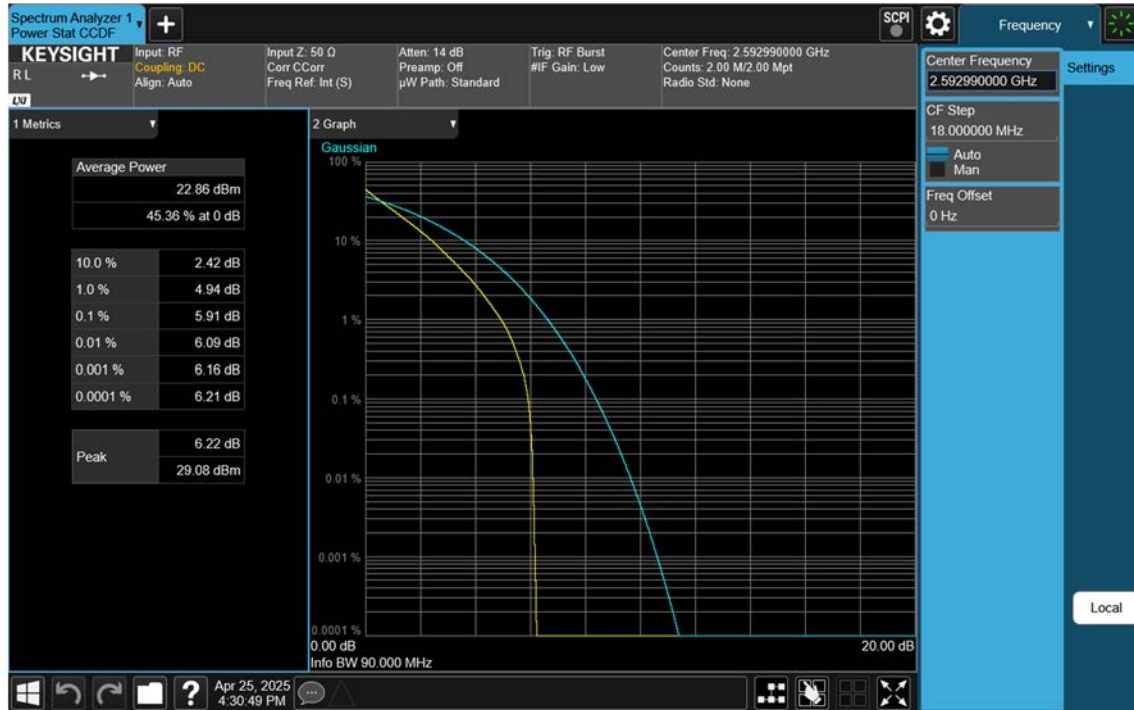
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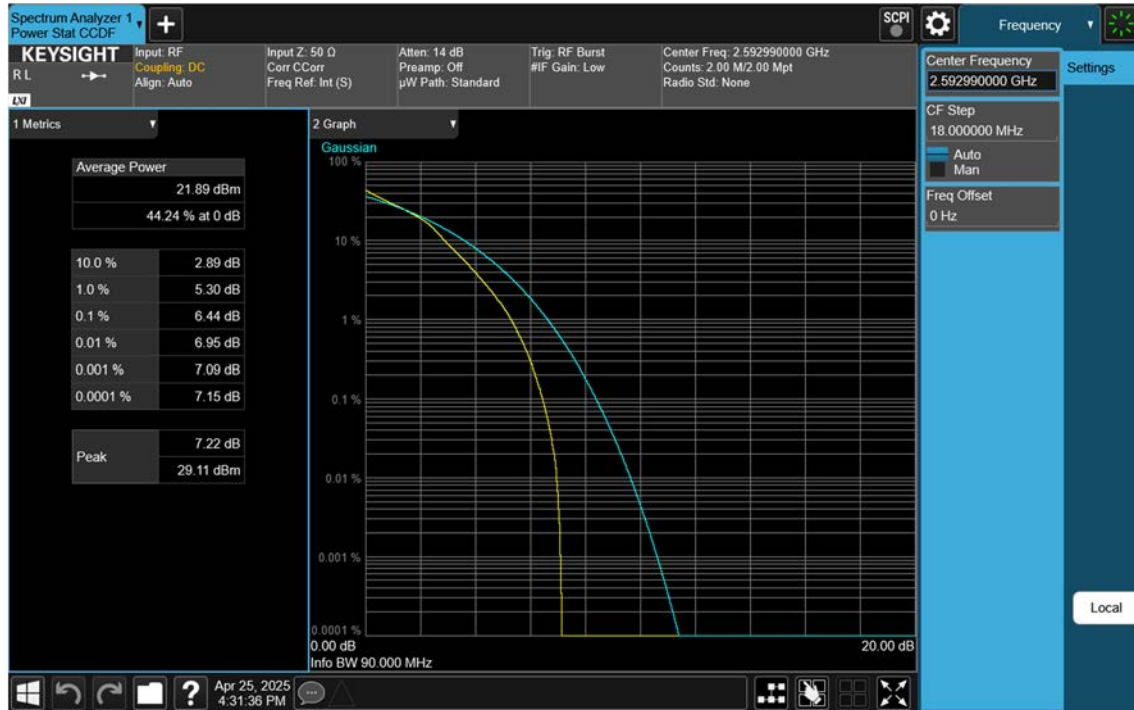
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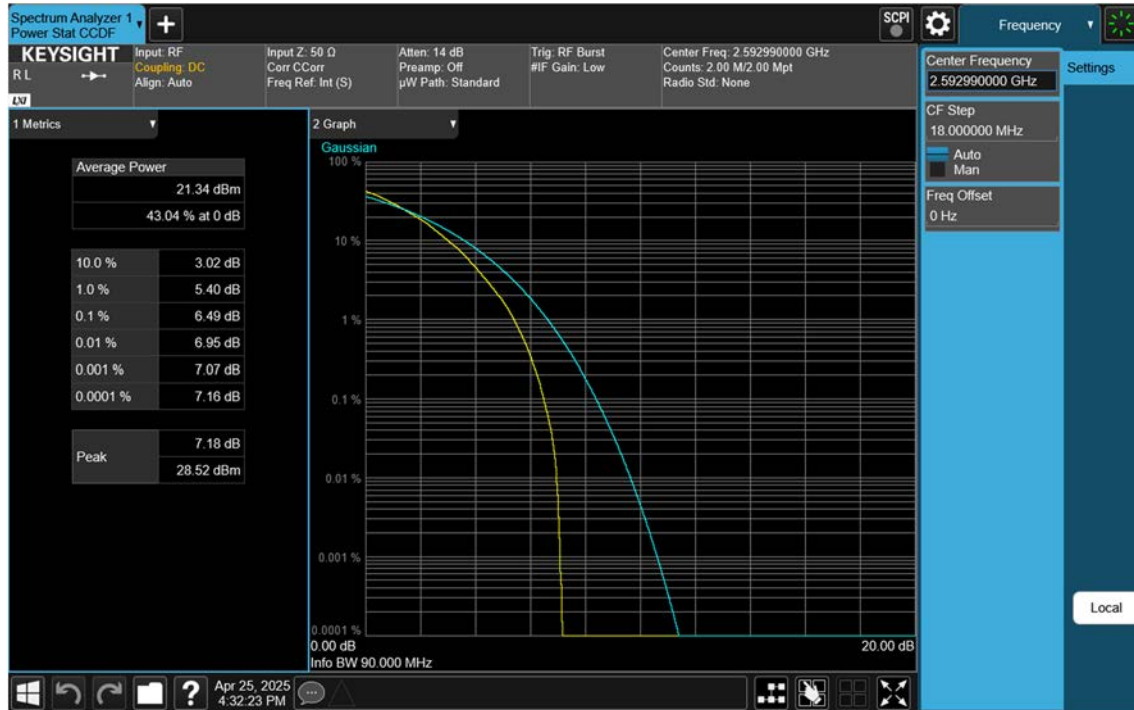
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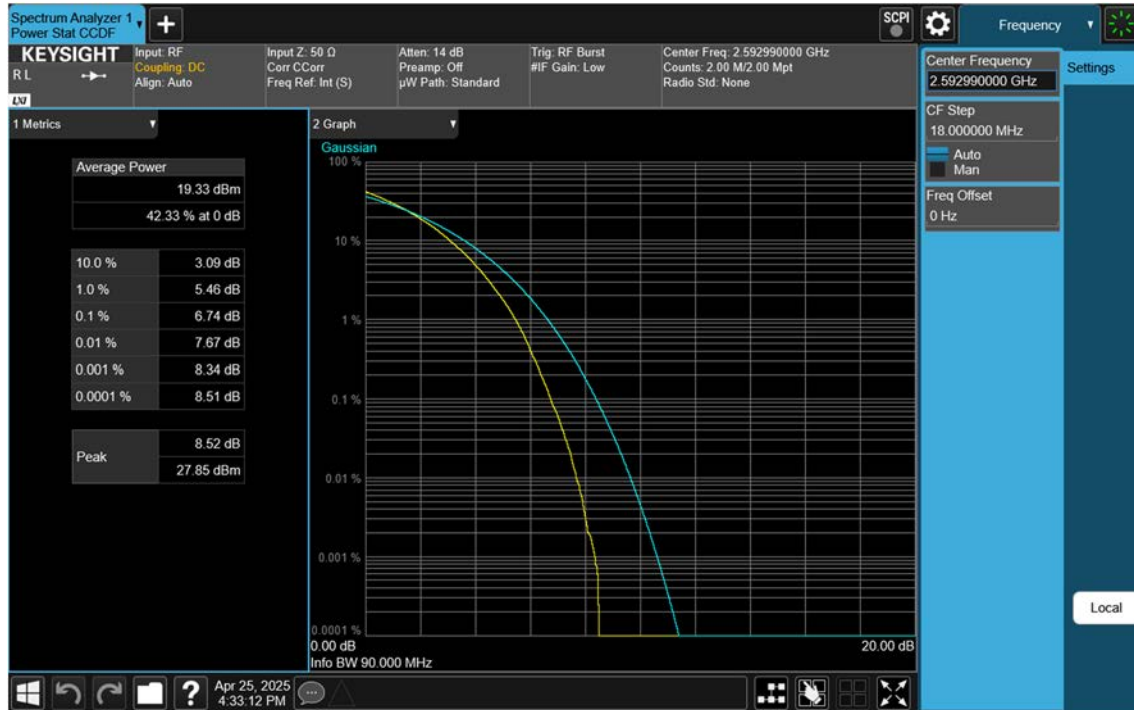
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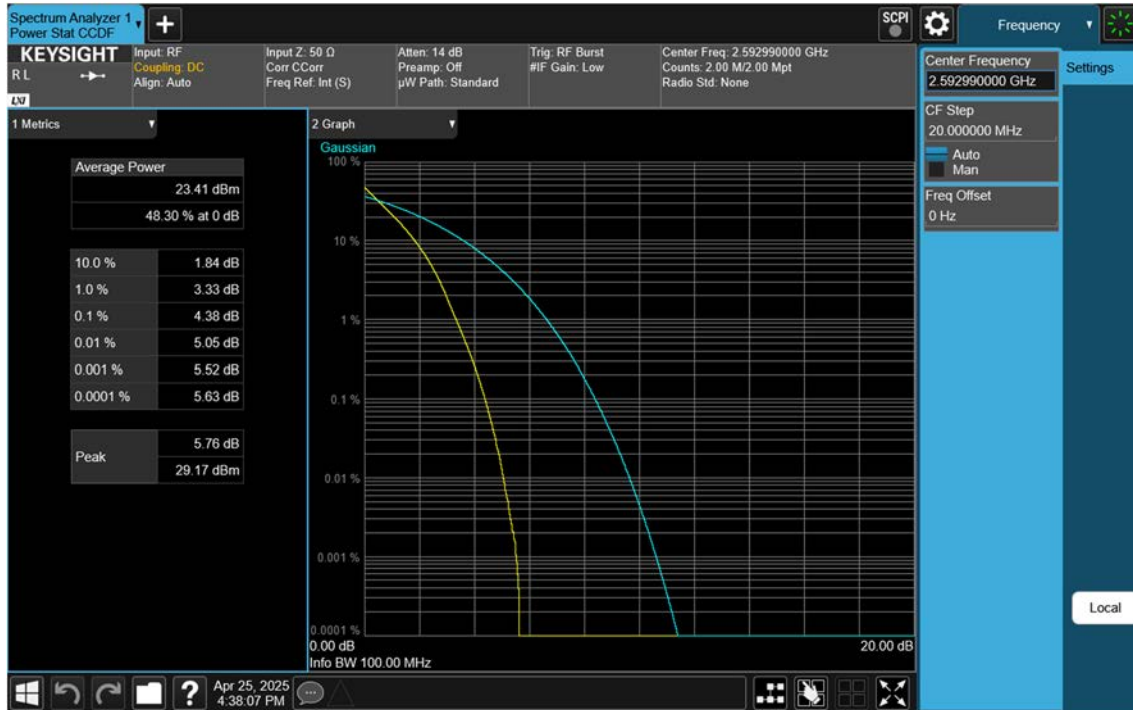
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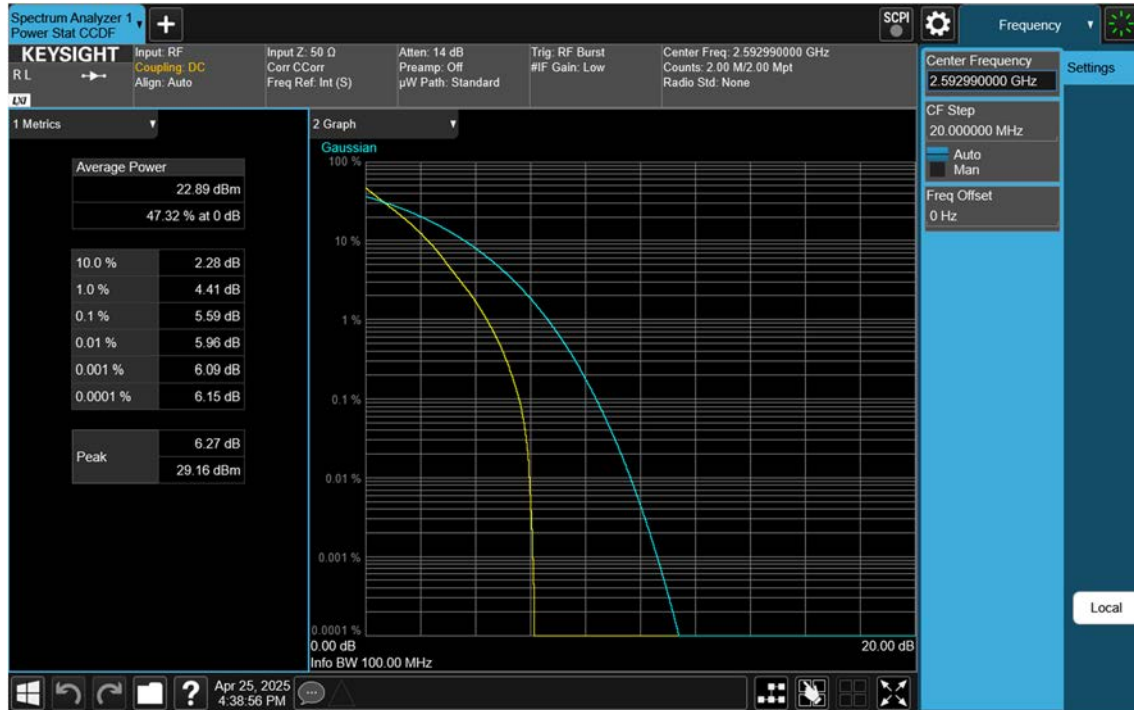
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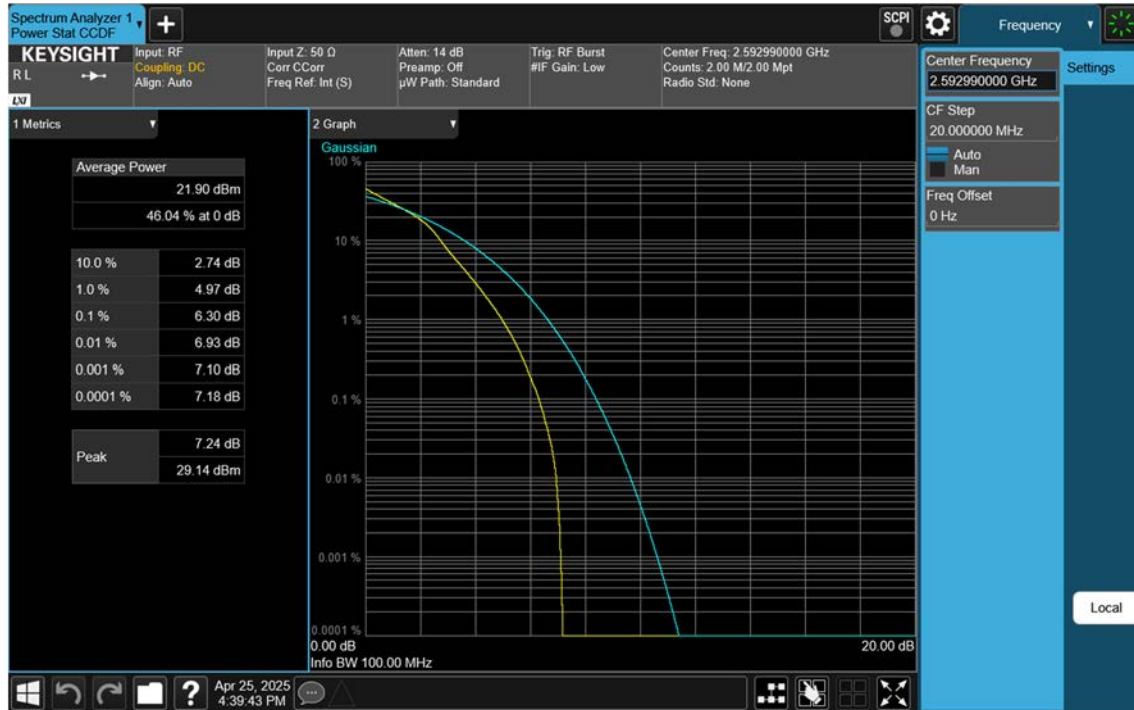
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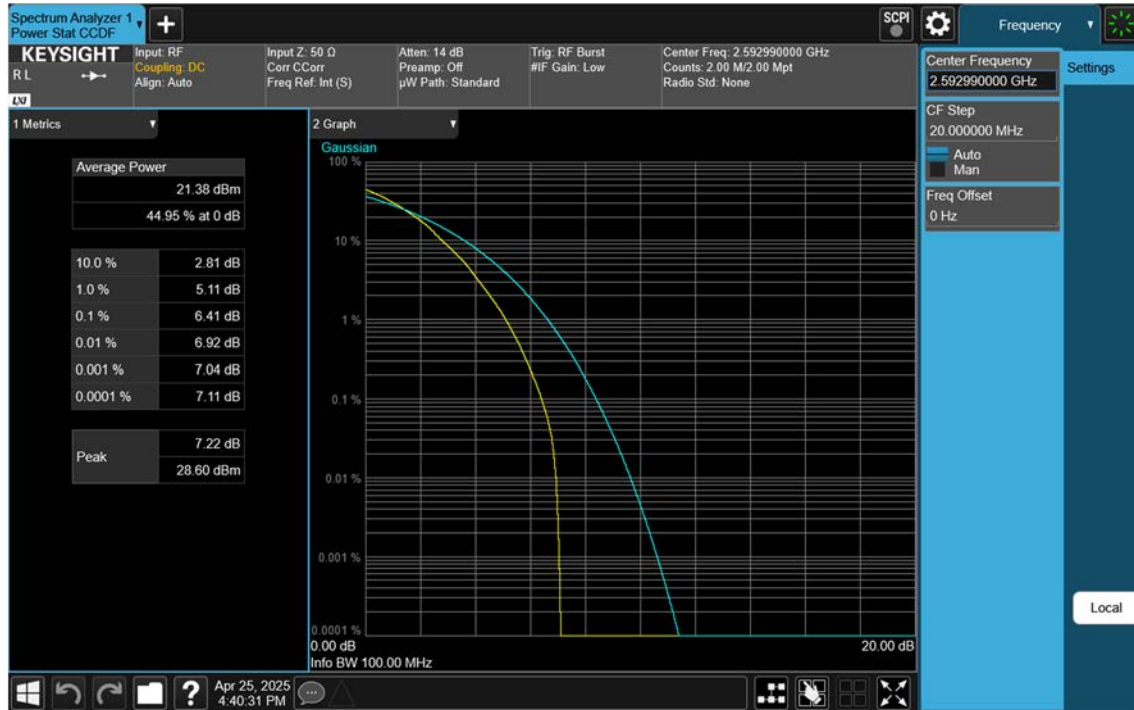
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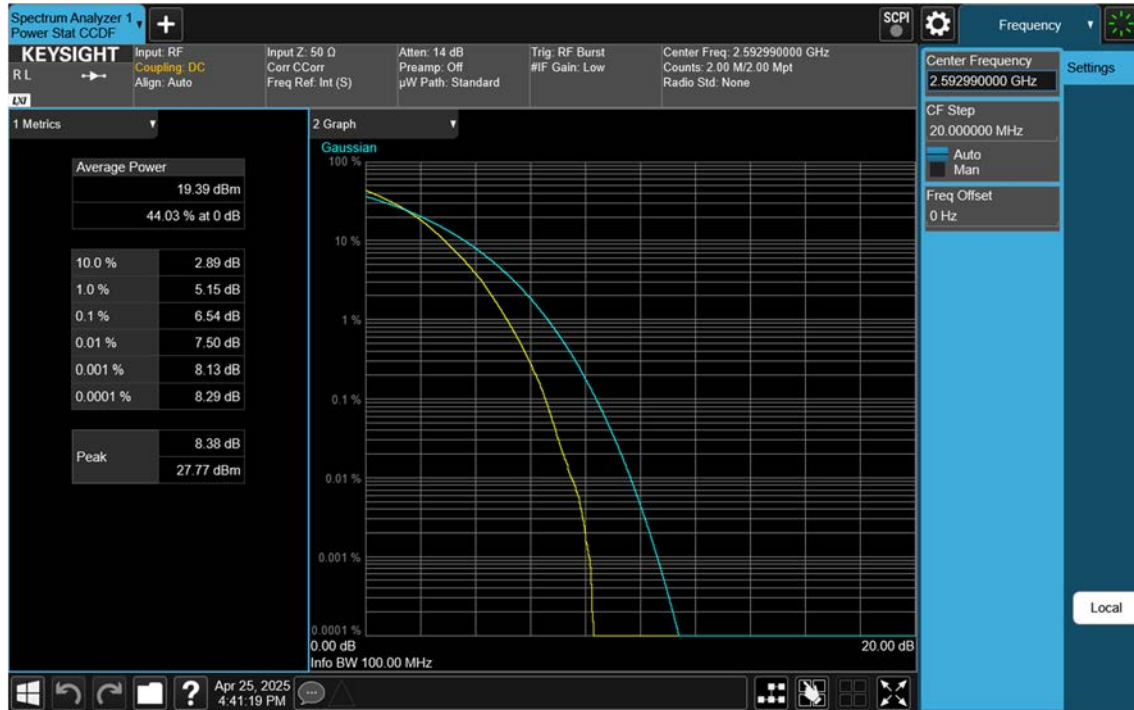
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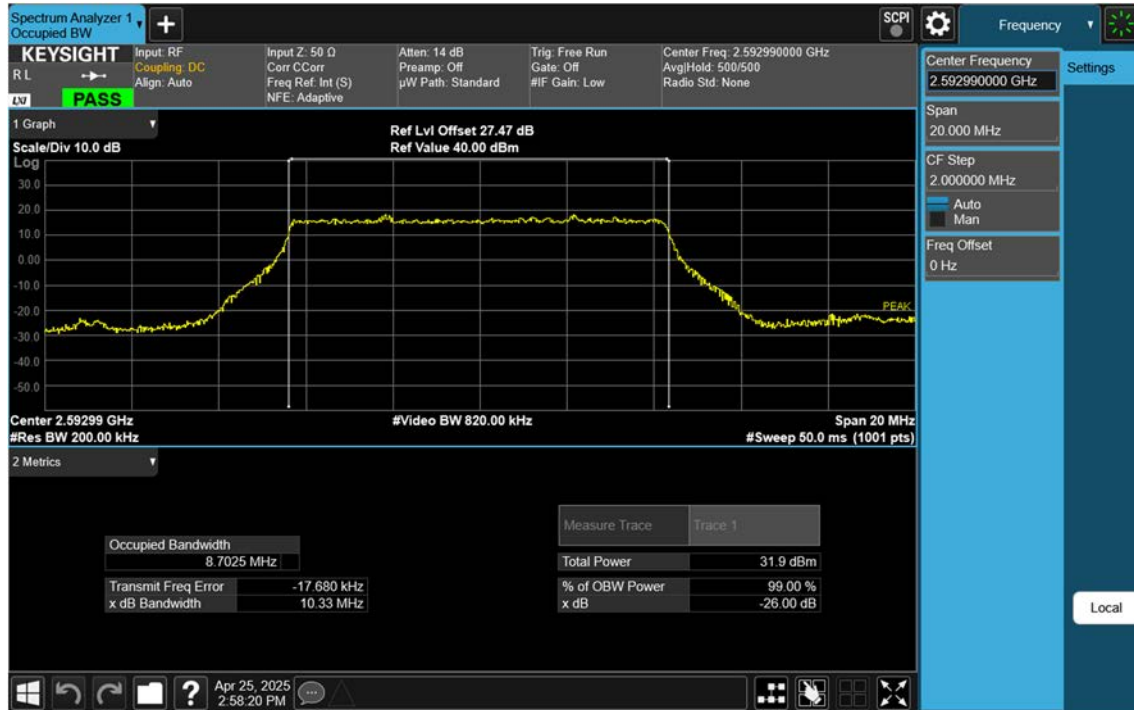
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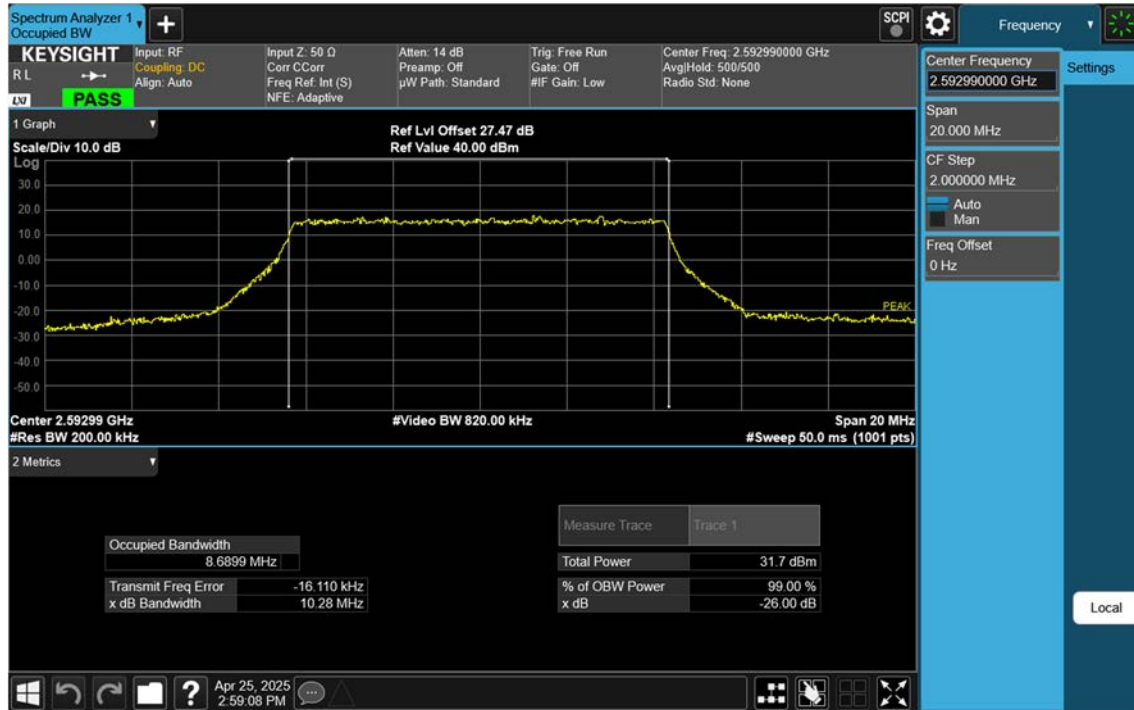
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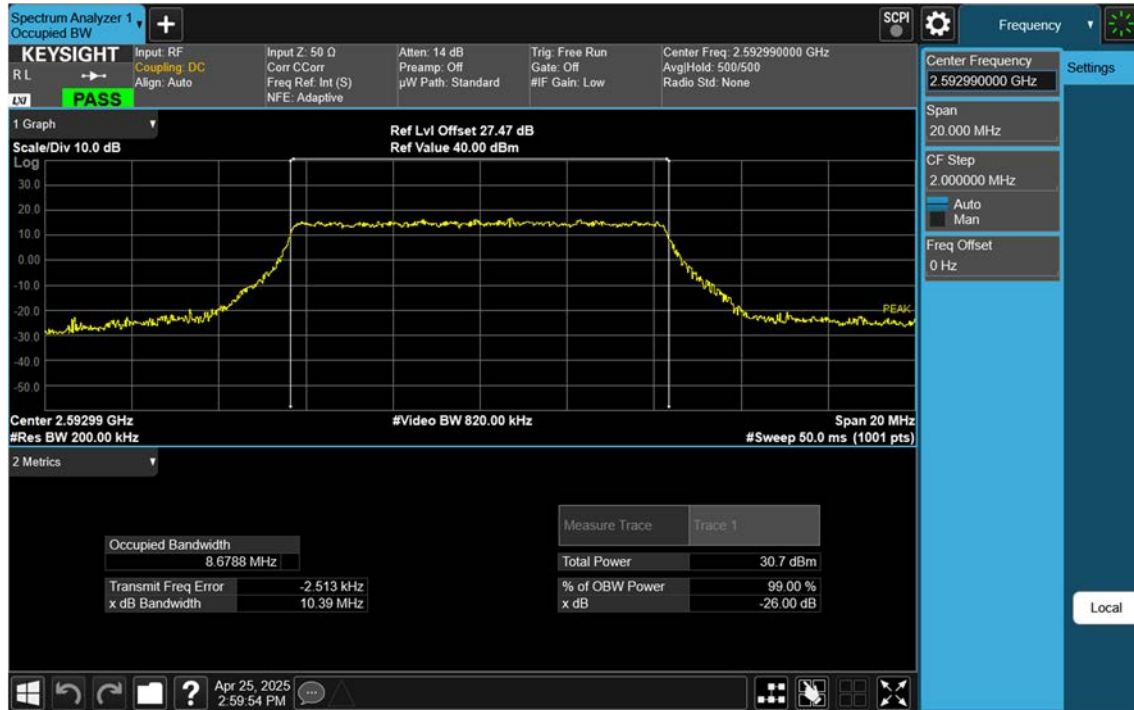
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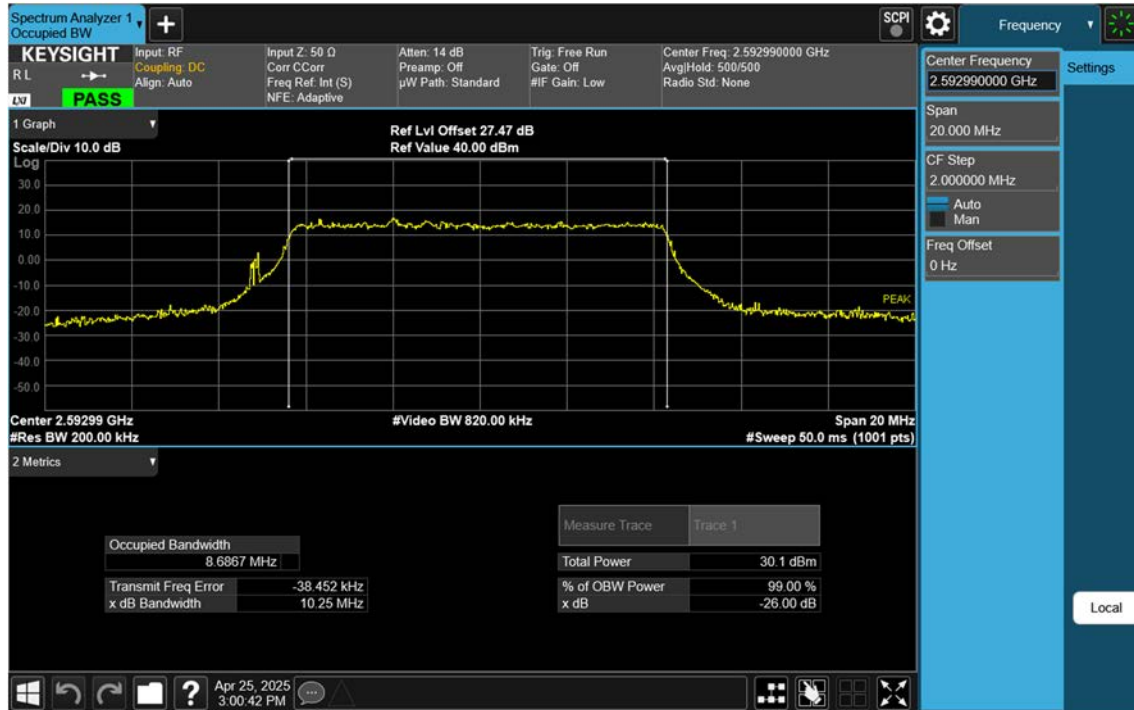
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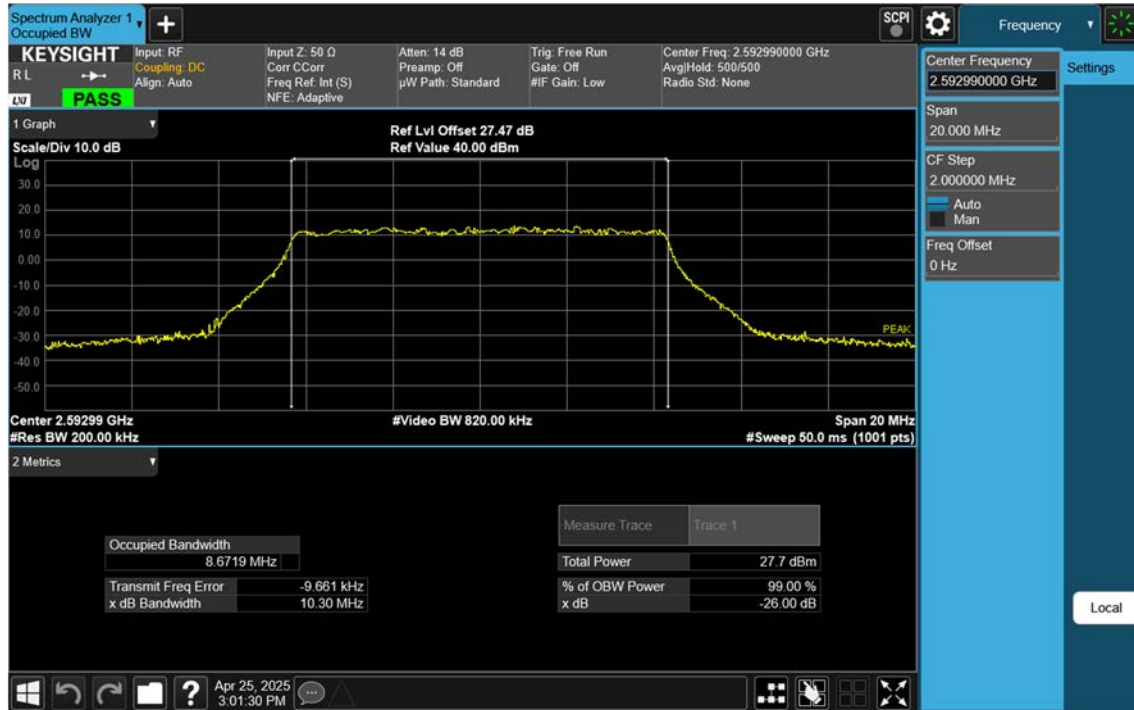
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NR41_10 M_OBW_Mid_64QAM_FullRB



NR41_10 M_OBW_Mid_256QAM_FullRB



NR41_15 M_OBW_Mid_BPSK_FullRB



NR41_15 M_OBW_Mid_QPSK_FullRB

