

TEST REPORT

FCC Sub6 n77 Test for SM-S721U
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2407-FC040

DATE OF ISSUE
July 23, 2024

Tested by
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**TEST
REPORT**

REPORT NO.
HCT-RF-2407-FC040

DATE OF ISSUE
July 23, 2024

Additional Model
SM-S721U1

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-S721U

Date of Test May 21, 2024 ~ July 19, 2024

FCC ID A3LSMS721U

Location of Test Permanent Testing Lab On Site Testing
(Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 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	July 23, 2024	Initial Release

Notice

Content

The measurements shown in this report were made in accordance with the procedures specified in CFR47 section § 2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S. C. 853(a)

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

The laboratory is not accredited for the test results marked *.

Information provided by the applicant is marked **.

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

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

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

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MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name:	SAMSUNG Electronics Co., Ltd.
Address:	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
FCC ID:	A3LSMS721U
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§ 27
EUT Type:	Mobile phone
Model(s):	SM-S721U
Additional Model(s)	SM-S721U1
SCS(kHz):	30
Bandwidth(MHz):	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: (3450 MHz - 3550 MHz)	3455.01 MHz - 3544.99 MHz (Sub6 n77(78)(10 MHz)) 3457.50 MHz - 3542.50 MHz (Sub6 n77(78)(15 MHz)) 3460.02 MHz - 3540.00 MHz (Sub6 n77(78)(20 MHz)) 3462.50 MHz - 3537.50 MHz (Sub6 n77(78)(25 MHz)) 3465.00 MHz - 3534.99 MHz (Sub6 n77(78)(30 MHz)) 3470.01 MHz - 3529.98 MHz (Sub6 n77(78)(40 MHz)) 3475.02 MHz - 3525.00 MHz (Sub6 n77(78)(50 MHz)) 3480.00 MHz - 3519.99 MHz (Sub6 n77(78)(60 MHz)) 3485.01 MHz - 3514.98 MHz (Sub6 n77(78)(70 MHz)) 3490.02 MHz - 3510.00 MHz (Sub6 n77(78)(80 MHz)) 3495.00 MHz - 3504.99 MHz (Sub6 n77(78)(90 MHz)) 3500.01 MHz (Sub6 n77(78)(100 MHz))
Tx Frequency: (3700 MHz - 3980 MHz)	3705.00 MHz - 3975.00 MHz (Sub6 n77(78)(10 MHz)) 3707.51 MHz - 3972.48 MHz (Sub6 n77(78)(15 MHz)) 3710.01 MHz - 3969.99 MHz (Sub6 n77(78)(20 MHz)) 3712.50 MHz - 3967.50 MHz (Sub6 n77(78)(25 MHz)) 3715.02 MHz - 3964.98 MHz (Sub6 n77(78)(30 MHz)) 3720.00 MHz - 3960.00 MHz (Sub6 n77(78)(40 MHz)) 3725.10 MHz - 3954.99 MHz (Sub6 n77(78)(50 MHz)) 3730.02 MHz - 3949.98 MHz (Sub6 n77(78)(60 MHz)) 3735.00 MHz - 3945.00 MHz (Sub6 n77(78)(70 MHz)) 3740.01 MHz - 3939.99 MHz (Sub6 n77(78)(80 MHz)) 3745.02 MHz - 3934.98 MHz (Sub6 n77(78)(90 MHz)) 3745.02 MHz - 3934.98 MHz (Sub6 n77(78)(90 MHz)) 3750.00 MHz - 3930.00 MHz (Sub6 n77(78)(100 MHz))
Date(s) of Tests:	May 21, 2024 ~ July 19, 2024
Serial number:	Radiated : 67d50ecc63197ece Conducted : R3CX40SV7PD

1.1. MAXIMUM OUTPUT POWER
1. 3450 MHz - 3550 MHz

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (10)	3455.01 – 3544.99	8M69G7D	PI/2 BPSK	0.150	21.75
		8M73G7D	QPSK	0.148	21.71
		8M73W7D	16QAM	0.115	20.62
		8M73W7D	64QAM	0.083	19.17
		8M76W7D	256QAM	0.053	17.24
Sub6 n77(78) (15)	3457.50 – 3542.50	13M0G7D	PI/2 BPSK	0.144	21.59
		13M0G7D	QPSK	0.143	21.55
		13M0W7D	16QAM	0.115	20.60
		13M0W7D	64QAM	0.081	19.11
		13M0W7D	256QAM	0.051	17.11
Sub6 n77(78) (20)	3460.02 – 3540.00	18M0G7D	PI/2 BPSK	0.143	21.56
		18M0G7D	QPSK	0.141	21.49
		18M1W7D	16QAM	0.111	20.45
		18M1W7D	64QAM	0.078	18.93
		18M0W7D	256QAM	0.051	17.06
Sub6 n77(78) (25)	3462.50 – 3537.50	23M0G7D	PI/2 BPSK	0.143	21.55
		23M1G7D	QPSK	0.141	21.48
		23M1W7D	16QAM	0.114	20.58
		23M1W7D	64QAM	0.081	19.07
		23M0W7D	256QAM	0.052	17.12
Sub6 n77(78) (30)	3465.00 – 3534.99	27M0G7D	PI/2 BPSK	0.151	21.78
		27M0G7D	QPSK	0.148	21.70
		27M1W7D	16QAM	0.115	20.59
		27M1W7D	64QAM	0.084	19.22
		27M0W7D	256QAM	0.053	17.27
Sub6 n77(78) (40)	3470.01 – 3529.98	36M0G7D	PI/2 BPSK	0.151	21.80
		36M1G7D	QPSK	0.150	21.76
		36M0W7D	16QAM	0.116	20.64
		36M1W7D	64QAM	0.083	19.21
		36M0W7D	256QAM	0.053	17.23
Sub6 n77(78) (50)	3475.02 – 3525.00	46M1G7D	PI/2 BPSK	0.152	21.83
		46M3G7D	QPSK	0.152	21.81
		46M1W7D	16QAM	0.120	20.80
		46M1W7D	64QAM	0.089	19.47
		46M0W7D	256QAM	0.054	17.36
Sub6 n77(78) (60)	3480.00 – 3519.99	58M2G7D	PI/2 BPSK	0.152	21.83
		58M3G7D	QPSK	0.152	21.82
		58M4W7D	16QAM	0.120	20.80
		58M4W7D	64QAM	0.088	19.46
		58M2W7D	256QAM	0.054	17.31
Sub6 n77(78) (70)	3485.01 – 3514.98	64M9G7D	PI/2 BPSK	0.157	21.97
		65M0G7D	QPSK	0.156	21.92
		64M8W7D	16QAM	0.120	20.78
		64M9W7D	64QAM	0.090	19.52
		65M0W7D	256QAM	0.055	17.40
Sub6 n77(78) (80)	3490.02 – 3510.00	77M7G7D	PI/2 BPSK	0.153	21.86
		77M7G7D	QPSK	0.153	21.84
		77M7W7D	16QAM	0.123	20.90
		77M6W7D	64QAM	0.084	19.25
		77M5W7D	256QAM	0.054	17.33
Sub6 n77(78) (90)	3495.00 – 3504.99	87M4G7D	PI/2 BPSK	0.153	21.86
		87M4G7D	QPSK	0.153	21.84
		87M6W7D	16QAM	0.119	20.77
		87M3W7D	64QAM	0.087	19.38
		87M5W7D	256QAM	0.055	17.39
Sub6 n77(78) (100)	3500.01	96M9G7D	PI/2 BPSK	0.155	21.89
		96M8G7D	QPSK	0.153	21.84
		96M9W7D	16QAM	0.121	20.81
		96M8W7D	64QAM	0.085	19.31
		96M8W7D	256QAM	0.055	17.39

2. 3700 MHz - 3980 MHz

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (10)	3705.00 – 3975.00	8M69G7D	PI/2 BPSK	0.176	22.46
		8M69G7D	QPSK	0.173	22.39
		8M68W7D	16QAM	0.139	21.43
		8M67W7D	64QAM	0.099	19.97
		8M65W7D	256QAM	0.065	18.10
Sub6 n77(78) (15)	3707.51 – 3972.48	13M0G7D	PI/2 BPSK	0.176	22.45
		13M0G7D	QPSK	0.173	22.37
		13M0W7D	16QAM	0.140	21.46
		13M0W7D	64QAM	0.100	19.98
		12M9W7D	256QAM	0.063	17.98
Sub6 n77(78) (20)	3710.01 – 3969.99	17M9G7D	PI/2 BPSK	0.174	22.41
		18M0G7D	QPSK	0.172	22.36
		18M0W7D	16QAM	0.138	21.41
		18M0W7D	64QAM	0.096	19.81
Sub6 n77(78) (25)	3712.50 – 3967.50	18M0W7D	256QAM	0.064	18.07
		23M0G7D	PI/2 BPSK	0.175	22.43
		23M0G7D	QPSK	0.173	22.38
		23M0W7D	16QAM	0.140	21.47
Sub6 n77(78) (30)	3715.02 – 3964.98	23M0W7D	64QAM	0.100	20.01
		23M0W7D	256QAM	0.062	17.94
		27M0G7D	PI/2 BPSK	0.176	22.46
		27M0G7D	QPSK	0.173	22.39
Sub6 n77(78) (40)	3720.00 – 3960.00	27M0W7D	16QAM	0.139	21.42
		27M0W7D	64QAM	0.098	19.92
		27M0W7D	256QAM	0.063	17.98
		36M0G7D	PI/2 BPSK	0.183	22.62
Sub6 n77(78) (50)	3725.10 – 3954.99	36M0W7D	256QAM	0.064	18.06
		35M9G7D	PI/2 BPSK	0.180	22.56
		35M9G7D	QPSK	0.178	22.50
		45M9W7D	16QAM	0.136	21.35
Sub6 n77(78) (60)	3730.02 – 3949.98	45M9W7D	64QAM	0.098	19.92
		46M0W7D	256QAM	0.065	18.16
		58M2G7D	PI/2 BPSK	0.181	22.57
		58M2G7D	QPSK	0.181	22.57
Sub6 n77(78) (70)	3735.00 – 3945.00	58M0W7D	16QAM	0.143	21.54
		58M1W7D	64QAM	0.102	20.08
		58M2W7D	256QAM	0.065	18.16
		64M9G7D	PI/2 BPSK	0.183	22.62
Sub6 n77(78) (80)	3740.01 – 3939.99	64M8G7D	QPSK	0.182	22.59
		64M6W7D	16QAM	0.145	21.60
		64M7W7D	64QAM	0.105	20.22
		64M7W7D	256QAM	0.065	18.14
Sub6 n77(78) (90)	3745.02 – 3934.98	77M5G7D	PI/2 BPSK	0.185	22.66
		77M5G7D	QPSK	0.183	22.62
		77M4W7D	16QAM	0.143	21.56
		77M5W7D	64QAM	0.103	20.12
Sub6 n77(78) (100)	3750.00 – 3930.00	77M4W7D	256QAM	0.068	18.32
		87M1G7D	PI/2 BPSK	0.186	22.70
		87M1G7D	QPSK	0.185	22.67
		87M3W7D	16QAM	0.146	21.65
Sub6 n77(78) (100)	3750.00 – 3930.00	87M1W7D	64QAM	0.104	20.16
		87M3W7D	256QAM	0.068	18.30
		96M8G7D	PI/2 BPSK	0.190	22.78
		96M8G7D	QPSK	0.187	22.73
Sub6 n77(78) (100)	3750.00 – 3930.00	97M0W7D	16QAM	0.150	21.77
		96M7W7D	64QAM	0.105	20.22
		97M0W7D	256QAM	0.067	18.27

2. INTRODUCTION

2.1. DESCRIPTION OF EUT

The EUT was a Mobile Phone with GSM/GPRS/EGPRS/UMTS and LTE, Sub 6, mmWave. It also supports IEEE 802.11 a/b/g/n/ac/ax (20/40/80/160 MHz), Bluetooth(iPA, ePA), BT LE(iPA, ePA), NFC, WPT, WIFI 6E.

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, 17383, Rep. of KOREA.**

3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
Occupied Bandwidth	- KDB 971168 D01 v03r01 – Section 4.3 - ANSI C63.26-2015 – Section 5.4.4
Band Edge	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Spurious and Harmonic Emissions at Antenna Terminal	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Conducted Output Power	- N/A (See SAR Report)
Peak- to- Average Ratio	- KDB 971168 D01 v03r01 – Section 5.7 - ANSI C63.26-2015 – Section 5.2.3.4
Frequency stability	- ANSI C63.26-2015 – Section 5.6
Effective Radiated Power/ Effective Isotropic Radiated Power	- KDB 971168 D01 v03r01 – Section 5.2 & 5.8 - ANSI/TIA-603-E-2016 – Section 2.2.17
Radiated Spurious and Harmonic Emissions	- KDB 971168 D01 v03r01 – Section 6.2 - ANSI/TIA-603-E-2016 – Section 2.2.12

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 in accordance with ANSI/TIA-603-E-2016 Clause 2.2.17.

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 according to ANSI/TIA-603-E-2016.

Test Settings

1. RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz
2. VBW \geq 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $>$ 2 x span / RBW
5. Detector = Peak
6. Trace mode = Max Hold
7. The trace was allowed to stabilize
8. Test channel : Low/ Middle/ High
9. Frequency range : We are performed all frequency to 10th harmonics from 9 kHz.

Test Note

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

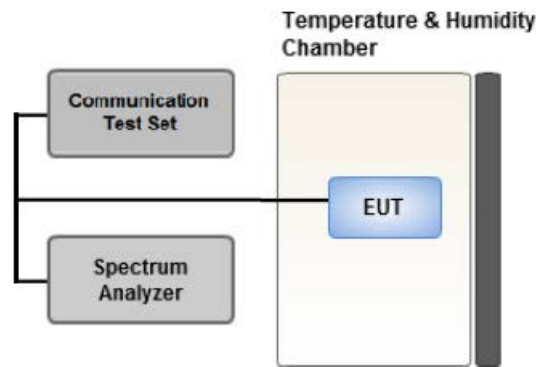
$$\text{Result}_{(dBm)} = P_g_{(dBm)} - \text{cable loss}_{(dB)} + \text{antenna gain}_{(dBi)}$$

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

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

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

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)

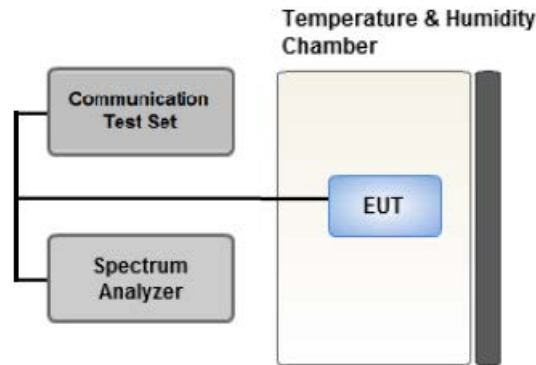
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

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 $\geq [10 \times$ (number of points in sweep) \times (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 $[10 \log (1/0.25)] = 6$ 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.

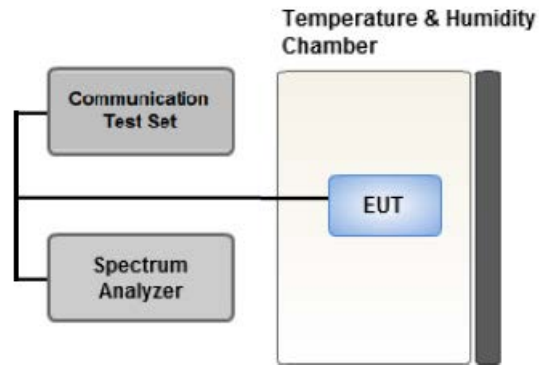
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

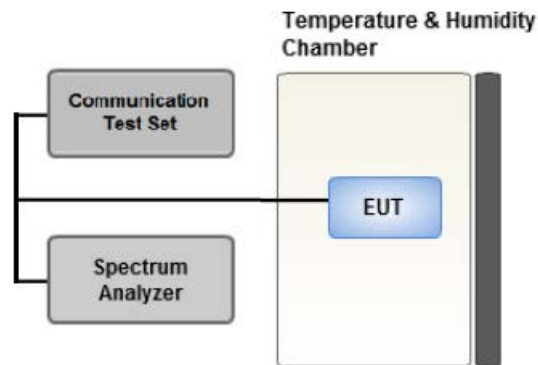
Test Overview

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 = RMS
4. Trace Mode = trace average
5. Sweep time = auto
6. Number of points in sweep \geq 2 x Span / RBW

3.7 BAND EDGE



Test setup

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

Test Settings

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

Test Notes

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater.

However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz.

In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

Measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater.

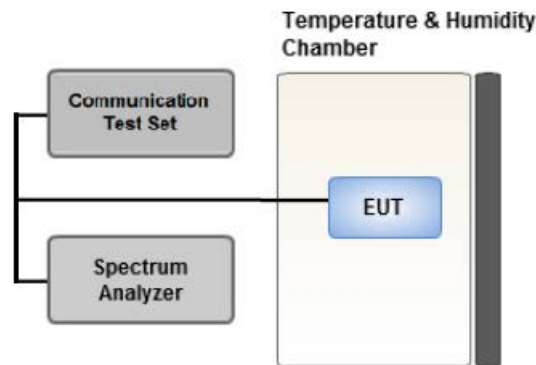
However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz.

In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. .

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.
- NR n77 (3450 – 3550 MHz / 3700 – 3980 MHz) overlaps the entire frequency range of NR n78 (3450 - 3550 MHz / 3700 – 3800 MHz) and they have the same Tune-up power.
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: NSA, SA, SRS
Worst case: SA
Mode : Stand alone, Stand alone + External accessories (Earphone, AC adapter, etc)
Worst case : Stand alone
- All simultaneous transmission scenarios of operation were investigated, and the test results showed no additional significant emissions relative to the least restrictive limit were observed.
Therefore, only the worst case(stand-alone) results were reported.
- All power classes were tested, and the results were reported for the worst case PC2. (PC2 Only)
- Radiated Spurious emissions are measured while operating in EN-DC mode with Sub 6 NR carrier as well as an LTE carrier (anchor).
All EN-DC mode of operation (=anchor) were investigated and the test results were measured No Peak Found.
The test results which are attenuated more than 20 dB below the permissible value, so it was not reported.
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
Please refer to the table below.
- In the case of radiated spurious emissions, all bandwidth of operation were investigated and the worst case bandwidth results are reported.
(Worst case : 70 MHz(3450 MHz – 3550 MHz), 100 MHz (3700 MHz – 3980 MHz))
- SM-S721U & additional models were tested and the worst case results are reported.
(Worst case : SM-S721U)

[3450 MHz - 3550 MHz Worst case]

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

[3700 MHz - 3980 MHz Worst case]

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

3.10 WORST CASE(CONDUCTED TEST)

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported.
(Worst case: DFT-S-OFDM)
- Modulation : All Modulation of operation were investigated and the worst case configuration results are reported.
(Worst case: PI/2 BPSK)
- NR n77 (3450 – 3550 MHz / 3700 – 3980 MHz) overlaps the entire frequency range of NR n78 (3450 -3550 MHz / 3700 – 3800 MHz) and they have the same Tune-up power.
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: SA, NSA, SRS
Worst case: SA
- All power classes were tested, and the results were reported for the worst case PC2. (PC2 Only)
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
Please refer to the table below.
- SM-S721U & additional models were tested and the worst case results are reported.
(Worst case : SM-S721U)

[Worst case]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth,	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
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
Band 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, 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	04/27/2025	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/29/2024	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170124	03/28/2025	Biennial
Loop Antenna(9 kHz~30 MHz)	FMZB1513	Rohde & Schwarz	1513-175	01/16/2025	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/09/2025	Biennial
Hybrid Antenna	VULB9160	Schwarzbeck	760	02/24/2025	Biennial
RF Switching System	FBSR-06B (1G HPF + LNA)	T&M SYSTEM	F3L1	05/14/2025	Annual
RF Switching System	FBSR-06B (3G HPF + LNA)	T&M SYSTEM	F3L2	05/14/2025	Annual
RF Switching System	FBSR-06B (6G HPF + LNA)	T&M SYSTEM	F3L3	05/14/2025	Annual
RF Switching System	FBSR-06B (LNA)	T&M SYSTEM	F3L4	05/14/2025	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/17/2024	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/26/2025	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	08/25/2024	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	02/29/2025	Annual
Chamber	SU-642	ESPEC	93008124	02/19/2025	Annual
Signal Analyzer(10 Hz~26.5 GHz)	N9020A	Agilent	MY51110063	04/04/2025	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/17/2025	Annual
Spectrum Analyzer(10 Hz~40 GHz)	FSV40	REOHDE & SCHWARZ	101436	02/13/2025	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/10/2024	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/16/2025	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/14/2025	Annual
Signal Analyzer(5 Hz~40.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/17/2025	Annual
4-Way Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/19/2024	Annual
FCC LTE Mobile Conducted RF Automation Test Software	-	HCT CO., LTD.,	-	-	-

Note:

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

5. MEASUREMENT UNCERTAINTY

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

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

Parameter	Expanded Uncertainty (\pm dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.98 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.36 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.70 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.52 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.66 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (Above 40 GHz)	5.58 (Confidence level about 95 %, $k=2$)

6. SUMMARY OF TEST RESULTS

6.1 Test Condition : Conducted Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Occupied Bandwidth	§ 2.1049	N/A	PASS
Band Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§ 2.1051, § 27.53(n)(2), § 27.53(l)(2)	< -13 dBm	PASS
Conducted Output Power	§ 2.1046	N/A	<u>See Note1</u>
Peak- to- Average Ratio	§ 27.50(k)(4), § 27.50(j)(4)	< 13 dB	PASS
Frequency stability / variation of ambient temperature	§ 2.1055, § 27.54	Emission must remain in band	PASS

Note:

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

6.2 Test Condition : Radiated Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Equivalent Isotropic Radiated Power	§ 27.50(k)(3), § 27.50(j)(3)	< 1 Watts max. EIRP	PASS
Radiated Spurious and Harmonic Emissions	§ 2.1051, § 27.53(n)(2), § 27.53(l)(2)	< -13 dBm	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(3450 MHz - 3550 MHz)

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
3455.01		PI/2 BPSK	-24.44	13.50	11.20	2.96	H		0.150	21.75	1	1
		QPSK	-24.48	13.46	11.20	2.96	H		0.148	21.71		
		16-QAM	-25.57	12.37	11.20	2.96	H		0.115	20.62		
		64-QAM	-27.02	10.92	11.20	2.96	H		0.083	19.17		
		256-QAM	-28.95	8.99	11.20	2.96	H		0.053	17.24		
3500.01	Sub6 n77(78)/ 10 MHz [30 kHz]	PI/2 BPSK	-24.98	13.27	11.30	3.00	H	< 1.00	0.144	21.57	1	12
		QPSK	-25.07	13.18	11.30	3.00	H		0.141	21.48		
		16-QAM	-26.08	12.17	11.30	3.00	H		0.111	20.47		
		64-QAM	-27.57	10.68	11.30	3.00	H		0.079	18.98		
		256-QAM	-29.55	8.70	11.30	3.00	H		0.050	17.00		
3544.99		PI/2 BPSK	-25.08	12.99	11.35	3.02	H		0.135	21.32	1	1
		QPSK	-25.15	12.92	11.35	3.02	H		0.133	21.25		
		16-QAM	-26.11	11.96	11.35	3.02	H		0.107	20.29		
		64-QAM	-27.86	10.21	11.35	3.02	H		0.071	18.54		
		256-QAM	-29.58	8.49	11.35	3.02	H		0.048	16.82		

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
3457.50		PI/2 BPSK	-24.57	13.34	11.20	2.95	H		0.144	21.59	1	1
		QPSK	-24.61	13.30	11.20	2.95	H		0.143	21.55		
		16-QAM	-25.56	12.35	11.20	2.95	H		0.115	20.60		
		64-QAM	-27.05	10.86	11.20	2.95	H		0.081	19.11		
		256-QAM	-29.05	8.86	11.20	2.95	H		0.051	17.11		
3500.01	Sub6 n77(78)/ 15 MHz [30 kHz]	PI/2 BPSK	-25.05	13.20	11.30	3.00	H	< 1.00	0.141	21.50	1	19
		QPSK	-25.10	13.15	11.30	3.00	H		0.140	21.45		
		16-QAM	-26.17	12.08	11.30	3.00	H		0.109	20.38		
		64-QAM	-27.67	10.58	11.30	3.00	H		0.077	18.88		
		256-QAM	-29.59	8.66	11.30	3.00	H		0.050	16.96		
3542.50		PI/2 BPSK	-25.07	12.88	11.30	3.02	H		0.131	21.16	1	1
		QPSK	-25.11	12.84	11.30	3.02	H		0.129	21.12		
		16-QAM	-26.16	11.79	11.30	3.02	H		0.102	20.07		
		64-QAM	-27.44	10.51	11.30	3.02	H		0.076	18.79		
		256-QAM	-29.51	8.44	11.30	3.02	H		0.047	16.72		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	W	dBm	Size
3460.02		PI/2 BPSK	-24.60	13.31	11.20	2.95	H		0.143	21.56	1	25
		QPSK	-24.67	13.24	11.20	2.95	H		0.141	21.49		
		16-QAM	-25.71	12.20	11.20	2.95	H		0.111	20.45		
		64-QAM	-27.23	10.68	11.20	2.95	H		0.078	18.93		
		256-QAM	-29.10	8.81	11.20	2.95	H		0.051	17.06		
3500.01	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-25.11	13.14	11.30	3.00	H	< 1.00	0.139	21.44	1	49
		QPSK	-25.15	13.10	11.30	3.00	H		0.138	21.40		
		16-QAM	-26.15	12.10	11.30	3.00	H		0.110	20.40		
		64-QAM	-27.69	10.56	11.30	3.00	H		0.077	18.86		
		256-QAM	-29.55	8.70	11.30	3.00	H		0.050	17.00		
3540.00		PI/2 BPSK	-24.97	12.98	11.30	3.02	H		0.134	21.26	1	1
		QPSK	-25.02	12.93	11.30	3.02	H		0.132	21.21		
		16-QAM	-26.04	11.91	11.30	3.02	H		0.104	20.19		
		64-QAM	-27.44	10.51	11.30	3.02	H		0.076	18.79		
		256-QAM	-29.52	8.43	11.30	3.02	H		0.047	16.71		

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
3462.50		PI/2 BPSK	-24.61	13.30	11.20	2.95	H		0.143	21.55	1	1
		QPSK	-24.68	13.23	11.20	2.95	H		0.141	21.48		
		16-QAM	-25.58	12.33	11.20	2.95	H		0.114	20.58		
		64-QAM	-27.09	10.82	11.20	2.95	H		0.081	19.07		
		256-QAM	-29.04	8.87	11.20	2.95	H		0.052	17.12		
3500.01	Sub6 n77(78)/ 25 MHz [30 kHz]	PI/2 BPSK	-25.13	13.12	11.30	3.00	H	< 1.00	0.139	21.42	1	63
		QPSK	-25.15	13.10	11.30	3.00	H		0.138	21.40		
		16-QAM	-26.15	12.10	11.30	3.00	H		0.110	20.40		
		64-QAM	-27.62	10.63	11.30	3.00	H		0.078	18.93		
		256-QAM	-29.54	8.71	11.30	3.00	H		0.050	17.01		
3537.50		PI/2 BPSK	-24.96	12.99	11.30	3.02	H		0.134	21.27	1	1
		QPSK	-24.99	12.96	11.30	3.02	H		0.133	21.24		
		16-QAM	-26.03	11.92	11.30	3.02	H		0.105	20.20		
		64-QAM	-27.59	10.36	11.30	3.02	H		0.073	18.64		
		256-QAM	-29.50	8.45	11.30	3.02	H		0.047	16.73		

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
3465.00		PI/2 BPSK	-24.60	13.27	11.20	2.95	H		0.142	21.52	1	39
		QPSK	-24.68	13.19	11.20	2.95	H		0.139	21.44		
		16-QAM	-25.69	12.18	11.20	2.95	H		0.110	20.43		
		64-QAM	-27.13	10.74	11.20	2.95	H		0.079	18.99		
		256-QAM	-29.10	8.77	11.20	2.95	H		0.050	17.02		
3500.01	Sub6 n77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-24.77	13.48	11.30	3.00	H	< 1.00	0.151	21.78	1	76
		QPSK	-24.85	13.40	11.30	3.00	H		0.148	21.70		
		16-QAM	-25.96	12.29	11.30	3.00	H		0.115	20.59		
		64-QAM	-27.33	10.92	11.30	3.00	H		0.084	19.22		
		256-QAM	-29.28	8.97	11.30	3.00	H		0.053	17.27		
3534.99		PI/2 BPSK	-24.66	13.25	11.30	3.01	H		0.143	21.55	1	1
		QPSK	-24.67	13.24	11.30	3.01	H		0.143	21.54		
		16-QAM	-25.78	12.13	11.30	3.01	H		0.110	20.43		
		64-QAM	-27.35	10.56	11.30	3.01	H		0.077	18.86		
		256-QAM	-29.16	8.75	11.30	3.01	H		0.051	17.05		

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
3470.01		PI/2 BPSK	-24.53	13.30	11.20	2.95	H		0.143	21.55	1	1
		QPSK	-24.55	13.28	11.20	2.95	H		0.142	21.53		
		16-QAM	-25.58	12.25	11.20	2.95	H		0.112	20.50		
		64-QAM	-27.06	10.77	11.20	2.95	H		0.080	19.02		
		256-QAM	-28.95	8.88	11.20	2.95	H		0.052	17.13		
3500.01	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-24.75	13.50	11.30	3.00	H	< 1.00	0.151	21.80	1	104
		QPSK	-24.79	13.46	11.30	3.00	H		0.150	21.76		
		16-QAM	-25.91	12.34	11.30	3.00	H		0.116	20.64		
		64-QAM	-27.34	10.91	11.30	3.00	H		0.083	19.21		
		256-QAM	-29.32	8.93	11.30	3.00	H		0.053	17.23		
3529.98		PI/2 BPSK	-24.73	13.15	11.30	2.99	H		0.140	21.46	1	53
		QPSK	-24.75	13.13	11.30	2.99	H		0.139	21.44		
		16-QAM	-25.80	12.08	11.30	2.99	H		0.109	20.39		
		64-QAM	-27.29	10.59	11.30	2.99	H		0.078	18.90		
		256-QAM	-29.21	8.67	11.30	2.99	H		0.050	16.98		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	dBm	Size	Offset
3475.02		PI/2 BPSK	-24.43	13.45	11.20	2.97	H		0.147	21.68	1	1
		QPSK	-24.46	13.42	11.20	2.97	H		0.146	21.65		
		16-QAM	-25.51	12.37	11.20	2.97	H		0.115	20.60		
		64-QAM	-26.98	10.90	11.20	2.97	H		0.082	19.13		
		256-QAM	-28.98	8.90	11.20	2.97	H		0.052	17.13		
3500.01	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-24.72	13.53	11.30	3.00	H	< 1.00	0.152	21.83	1	131
		QPSK	-24.74	13.51	11.30	3.00	H		0.152	21.81		
		16-QAM	-25.75	12.50	11.30	3.00	H		0.120	20.80		
		64-QAM	-27.08	11.17	11.30	3.00	H		0.089	19.47		
		256-QAM	-29.19	9.06	11.30	3.00	H		0.054	17.36		
3525.00		PI/2 BPSK	-24.63	13.27	11.30	2.98	H		0.144	21.59	1	66
		QPSK	-24.83	13.07	11.30	2.98	H		0.138	21.39		
		16-QAM	-25.90	12.00	11.30	2.98	H		0.108	20.32		
		64-QAM	-27.28	10.62	11.30	2.98	H		0.078	18.94		
		256-QAM	-29.33	8.57	11.30	2.98	H		0.049	16.89		

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
3480.00		PI/2 BPSK	-24.48	13.46	11.20	2.99	H		0.147	21.67	1	1
		QPSK	-24.50	13.44	11.20	2.99	H		0.146	21.65		
		16-QAM	-25.35	12.59	11.20	2.99	H		0.120	20.80		
		64-QAM	-27.06	10.88	11.20	2.99	H		0.081	19.09		
		256-QAM	-29.11	8.83	11.20	2.99	H		0.051	17.04		
3500.01	Sub6 n77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-24.72	13.53	11.30	3.00	H	< 1.00	0.152	21.83	1	160
		QPSK	-24.73	13.52	11.30	3.00	H		0.152	21.82		
		16-QAM	-25.85	12.40	11.30	3.00	H		0.118	20.70		
		64-QAM	-27.09	11.16	11.30	3.00	H		0.088	19.46		
		256-QAM	-29.24	9.01	11.30	3.00	H		0.054	17.31		
3519.99		PI/2 BPSK	-24.63	13.29	11.30	2.97	H		0.145	21.62	1	81
		QPSK	-24.76	13.16	11.30	2.97	H		0.141	21.49		
		16-QAM	-25.70	12.22	11.30	2.97	H		0.114	20.55		
		64-QAM	-27.30	10.62	11.30	2.97	H		0.079	18.95		
		256-QAM	-29.25	8.67	11.30	2.97	H		0.050	17.00		

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
3485.01		PI/2 BPSK	-24.44	13.57	11.20	3.00	H		0.150	21.77	1	1
		QPSK	-24.47	13.54	11.20	3.00	H		0.149	21.74		
		16-QAM	-25.48	12.53	11.20	3.00	H		0.118	20.73		
		64-QAM	-26.91	11.10	11.20	3.00	H		0.085	19.30		
		256-QAM	-28.81	9.20	11.20	3.00	H		0.055	17.40		
3500.01	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	-24.58	13.67	11.30	3.00	H	< 1.00	0.157	21.97	1	1
		QPSK	-24.63	13.62	11.30	3.00	H		0.156	21.92		
		16-QAM	-25.77	12.48	11.30	3.00	H		0.120	20.78		
		64-QAM	-27.03	11.22	11.30	3.00	H		0.090	19.52		
		256-QAM	-29.16	9.09	11.30	3.00	H		0.055	17.39		
3514.98		PI/2 BPSK	-24.82	13.24	11.30	2.98	H		0.144	21.57	1	94
		QPSK	-24.83	13.23	11.30	2.98	H		0.143	21.56		
		16-QAM	-25.97	12.09	11.30	2.98	H		0.110	20.42		
		64-QAM	-27.23	10.83	11.30	2.98	H		0.082	19.16		
		256-QAM	-29.19	8.87	11.30	2.98	H		0.053	17.20		

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
3490.02		PI/2 BPSK	-24.62	13.46	11.20	3.00	H		0.147	21.66	1	1
		QPSK	-24.64	13.44	11.20	3.00	H		0.146	21.64		
		16-QAM	-25.65	12.43	11.20	3.00	H		0.116	20.63		
		64-QAM	-27.03	11.05	11.20	3.00	H		0.084	19.25		
		256-QAM	-29.06	9.02	11.20	3.00	H		0.053	17.22		
3500.01	Sub6 n77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-24.69	13.56	11.30	3.00	H	< 1.00	0.153	21.86	1	1
		QPSK	-24.71	13.54	11.30	3.00	H		0.153	21.84		
		16-QAM	-25.65	12.60	11.30	3.00	H		0.123	20.90		
		64-QAM	-27.36	10.89	11.30	3.00	H		0.083	19.19		
		256-QAM	-29.22	9.03	11.30	3.00	H		0.054	17.33		
3510.00		PI/2 BPSK	-24.99	13.22	11.30	2.98	H		0.143	21.54	1	108
		QPSK	-25.03	13.18	11.30	2.98	H		0.141	21.50		
		16-QAM	-26.05	12.16	11.30	2.98	H		0.112	20.48		
		64-QAM	-27.39	10.82	11.30	2.98	H		0.082	19.14		
		256-QAM	-29.69	8.52	11.30	2.98	H		0.048	16.84		

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
3495.00		PI/2 BPSK	-25.13	13.04	11.25	3.00	H		0.134	21.29	1	243
		QPSK	-25.17	13.00	11.25	3.00	H		0.133	21.25		
		16-QAM	-26.15	12.02	11.25	3.00	H		0.106	20.27		
		64-QAM	-27.65	10.52	11.25	3.00	H		0.075	18.77		
		256-QAM	-29.68	8.49	11.25	3.00	H		0.047	16.74		
3500.01	Sub6 n77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-24.69	13.56	11.30	3.00	H	< 1.00	0.153	21.86	1	1
		QPSK	-24.71	13.54	11.30	3.00	H		0.153	21.84		
		16-QAM	-25.78	12.47	11.30	3.00	H		0.119	20.77		
		64-QAM	-27.17	11.08	11.30	3.00	H		0.087	19.38		
		256-QAM	-29.16	9.09	11.30	3.00	H		0.055	17.39		
3504.99		PI/2 BPSK	-24.74	13.49	11.30	2.99	H		0.151	21.80	1	1
		QPSK	-24.78	13.45	11.30	2.99	H		0.150	21.76		
		16-QAM	-25.82	12.41	11.30	2.99	H		0.118	20.72		
		64-QAM	-27.18	11.05	11.30	2.99	H		0.086	19.36		
		256-QAM	-29.26	8.97	11.30	2.99	H		0.053	17.28		

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
3500.01	Sub6 n77(78)/ 100 MHz [30 kHz]	Pl/2 BPSK	-24.66	13.59	11.30	3.00	H	< 1.00	0.155	21.89	1	1
		QPSK	-24.71	13.54	11.30	3.00	H		0.153	21.84		
		16-QAM	-25.74	12.51	11.30	3.00	H		0.121	20.81		
		64-QAM	-27.24	11.01	11.30	3.00	H		0.085	19.31		
		256-QAM	-29.16	9.09	11.30	3.00	H		0.055	17.39		

8.2 RADIATED SPURIOUS EMISSIONS

- ▣ NR Band: N77(78)
- ▣ Bandwidth: 70 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meters
- ▣ 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
632334 (3485.01)	6 970.02	-64.33	10.90	-58.58	4.31	H	-51.99	-13.00	1	1
	10 455.03	-64.61	11.30	-54.68	5.42	H	-48.80	-13.00		
	13 940.04	-57.07	12.40	-46.53	6.38	V	-40.51	-13.00		
633334 (3500.01)	7 000.02	-63.95	10.90	-58.03	4.32	V	-51.45	-13.00	1	1
	10 500.03	-63.99	11.30	-53.39	5.41	V	-47.50	-13.00		
	14 000.04	-54.82	12.30	-45.47	6.35	H	-39.52	-13.00		
634332 (3514.98)	7 029.96	-63.96	10.90	-57.09	4.35	V	-50.54	-13.00	1	94
	10 544.94	-61.30	11.25	-50.29	5.43	V	-44.47	-13.00		
	14 059.92	-53.54	12.20	-44.33	6.41	V	-38.54	-13.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n77(78)	10 MHz	3500.01	BPSK	Full RB	0	3.26
			QPSK			4.12
			16-QAM			4.76
			64-QAM			4.99
			256-QAM			5.88
	15 MHz		BPSK			3.21
			QPSK			4.04
			16-QAM			4.71
			64-QAM			4.96
			256-QAM			5.73
	20 MHz		BPSK			3.28
			QPSK			4.14
			16-QAM			4.77
			64-QAM			4.98
			256-QAM			5.75
	25 MHz		BPSK			3.40
			QPSK			4.29
			16-QAM			4.90
			64-QAM			5.17
			256-QAM			5.86
	30 MHz		BPSK			3.29
			QPSK			4.16
			16-QAM			4.77
			64-QAM			5.02
			256-QAM			5.79
	40 MHz		BPSK			3.98
			QPSK			4.40
			16-QAM			4.95
			64-QAM			5.16
			256-QAM			5.93
	50 MHz		BPSK			3.30
			QPSK			4.17
			16-QAM			4.80
			64-QAM			5.02
			256-QAM			5.85
	60 MHz		BPSK			3.37
			QPSK			4.24
			16-QAM			4.85
			64-QAM			5.09
			256-QAM			5.86
70 MHz	BPSK	3.50				
	QPSK	4.18				
	16-QAM	4.77				
	64-QAM	5.01				
	256-QAM	5.81				
80 MHz	BPSK	3.74				
	QPSK	4.25				

	90 MHz	16-QAM	4.85
		64-QAM	5.07
		256-QAM	5.85
		BPSK	3.59
		QPSK	4.24
		16-QAM	4.85
	100 MHz	64-QAM	5.08
		256-QAM	5.86
		BPSK	3.35
		QPSK	4.22
		16-QAM	4.83
		64-QAM	5.05
		256-QAM	5.79

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 91 ~ 150.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77(78)	10 MHz	3500.01	BPSK	Full RB	0	8.6875
			QPSK			8.7280
			16-QAM			8.7296
			64-QAM			8.7251
			256-QAM			8.7573
	15 MHz		BPSK			12.970
			QPSK			13.024
			16-QAM			13.047
			64-QAM			13.017
			256-QAM			12.970
	20 MHz		BPSK			18.019
			QPSK			18.022
			16-QAM			18.047
			64-QAM			18.065
			256-QAM			18.032
	25 MHz		BPSK			23.004
			QPSK			23.102
			16-QAM			23.085
			64-QAM			23.098
			256-QAM			23.016
	30 MHz		BPSK			27.009
			QPSK			27.037
			16-QAM			27.117
			64-QAM			27.077
			256-QAM			26.971
	40 MHz		BPSK			36.034
			QPSK			36.121
			16-QAM			36.033
			64-QAM			36.047
			256-QAM			36.036
	50 MHz		BPSK			46.048
			QPSK			46.250
			16-QAM			46.132
			64-QAM			46.106
			256-QAM			45.982
	60 MHz		BPSK			58.206
			QPSK			58.328
			16-QAM			58.346
			64-QAM			58.406
			256-QAM			58.231
70 MHz	BPSK	64.874				
	QPSK	65.026				
	16-QAM	64.771				
	64-QAM	64.886				
	256-QAM	64.958				
80 MHz	BPSK	77.659				
	QPSK	77.685				

	90 MHz	16-QAM	77.675
		64-QAM	77.644
		256-QAM	77.466
		BPSK	87.372
		QPSK	87.378
		16-QAM	87.570
	100 MHz	64-QAM	87.319
		256-QAM	87.471
		BPSK	96.888
		QPSK	96.834
		16-QAM	96.869
		64-QAM	96.782
		256-QAM	96.816

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 151 ~ 210.

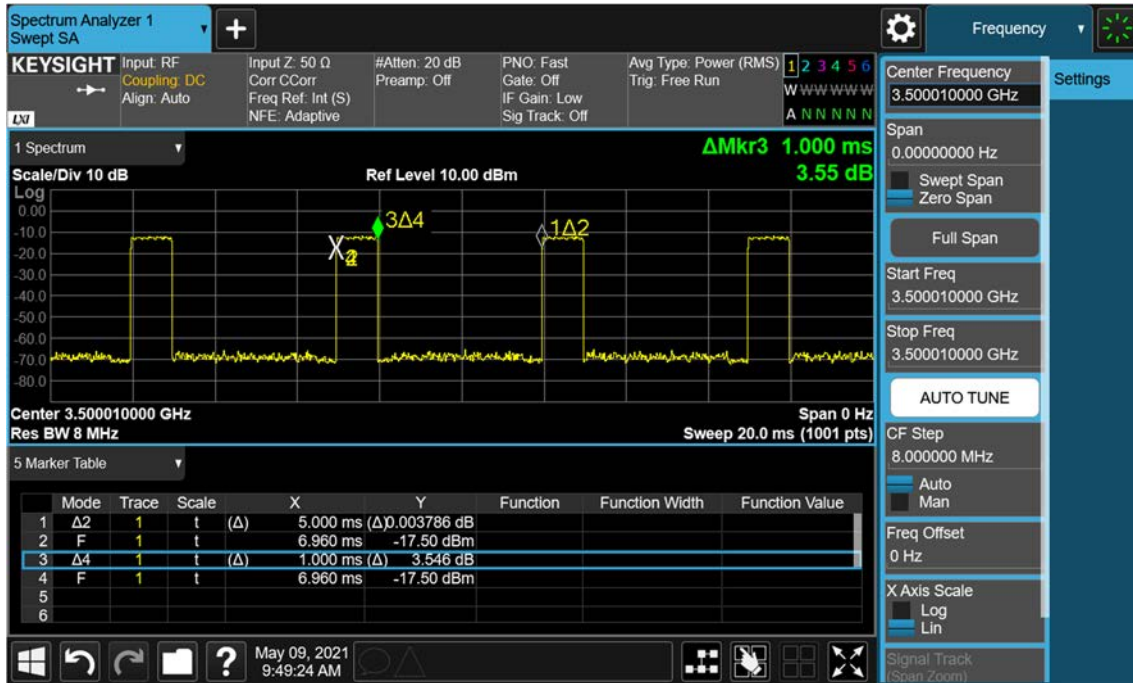
8.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77(78)	10	3455.01	6.0354	37.005	-70.528	-33.523	-13.00
		3500.01	7.9930	37.005	-70.647	-33.642	
		3544.98	5.2353	37.005	-70.501	-33.496	
	15	3457.50	8.2388	37.005	-71.165	-34.160	
		3500.01	8.0344	37.005	-70.104	-33.099	
		3542.49	7.9980	37.005	-70.446	-33.441	
	20	3460.02	9.4347	37.005	-71.044	-34.039	
		3500.01	8.8584	37.005	-70.503	-33.498	
		3540.00	4.9068	36.390	-70.184	-33.794	
	25	3462.51	9.9387	37.005	-71.246	-34.241	
		3500.01	8.7547	37.005	-71.359	-34.354	
		3537.48	8.3001	37.005	-71.116	-34.111	
	30	3465.00	5.1930	37.005	-71.082	-34.077	
		3500.01	4.9686	36.390	-70.247	-33.857	
		3534.99	8.6112	37.005	-71.402	-34.397	
	40	3470.01	9.7129	37.005	-71.083	-34.078	
		3500.01	5.7393	37.005	-71.448	-34.443	
		3529.98	4.9048	36.390	-70.877	-34.487	
	50	3475.02	8.2473	37.005	-71.506	-34.501	
		3500.01	8.0100	37.005	-69.838	-32.833	
		3525.00	5.2144	37.005	-70.832	-33.827	
	60	3480.00	8.3016	37.005	-70.880	-33.875	
		3500.01	8.2543	37.005	-70.435	-33.430	
		3519.99	9.9497	37.005	-70.842	-33.837	
	70	3485.01	9.7238	37.005	-70.462	-33.457	
		3500.01	8.2538	37.005	-71.175	-34.170	
		3514.98	6.0140	37.005	-70.473	-33.468	
	80	3490.02	9.1082	37.005	-71.569	-34.564	
		3500.01	9.7752	37.005	-70.679	-33.674	
		3510.00	8.2548	37.005	-70.839	-33.834	
90	3495.00	9.4207	37.005	-70.716	-33.711		
	3500.01	9.4701	37.005	-71.129	-34.124		
	3504.99	8.2926	37.005	-70.150	-33.145		
100	3500.01	8.8779	37.005	-70.624	-33.619		

Note:

1. Plots of the EUT’s Conducted Spurious Emissions are shown Page 211 ~ 278.
2. Duty Cycle factor already applied on the factor.

- Duty Cycle Factor(dB) = 6.990



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

- Result(dBm) = Reading + Factor

3. Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	33.684
1 – 5	36.390
5 – 10	37.005
10 – 15	37.530
15 – 20	37.903
Above 20	38.545

8.6 BAND EDGE

1. Plots of the EUT’s Band Edge are shown Page 279 ~ 424.
2. 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) = 6.990

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3455.010	100 %	+20(Ref)	3455 010 003	0.0	0.000 000	0.000
	100 %	-30	3455 010 005	2.2	0.000 000	0.001
	100 %	-20	3455 010 003	0.7	0.000 000	0.000
	100 %	-10	3455 010 006	2.8	0.000 000	0.001
	100 %	0	3455 010 005	1.8	0.000 000	0.001
	100 %	+10	3455 010 005	2.5	0.000 000	0.001
	100 %	+30	3455 010 002	-0.8	0.000 000	0.000
	100 %	+40	3455 010 005	1.8	0.000 000	0.001
	100 %	+50	3455 010 003	0.0	0.000 000	0.000
	Batt. Endpoint	+20	3455 010 004	1.7	0.000 000	0.000
3544.980	100 %	+20(Ref)	3544 979 994	0.0	0.000 000	0.000
	100 %	-30	3544 979 989	-5.6	0.000 000	-0.002
	100 %	-20	3544 979 990	-5.0	0.000 000	-0.001
	100 %	-10	3544 979 989	-5.1	0.000 000	-0.001
	100 %	0	3544 979 988	-6.3	0.000 000	-0.002
	100 %	+10	3544 979 987	-7.4	0.000 000	-0.002
	100 %	+30	3544 979 990	-4.8	0.000 000	-0.001
	100 %	+40	3544 979 992	-2.0	0.000 000	-0.001
	100 %	+50	3544 979 991	-3.3	0.000 000	-0.001
	Batt. Endpoint	+20	3544 979 989	-5.7	0.000 000	-0.002

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3457.500	100 %	+20(Ref)	3457 499 994	0.0	0.000 000	0.000
	100 %	-30	3457 499 986	-7.7	0.000 000	-0.002
	100 %	-20	3457 499 989	-5.0	0.000 000	-0.001
	100 %	-10	3457 499 990	-4.5	0.000 000	-0.001
	100 %	0	3457 499 988	-6.3	0.000 000	-0.002
	100 %	+10	3457 499 989	-4.9	0.000 000	-0.001
	100 %	+30	3457 499 988	-6.4	0.000 000	-0.002
	100 %	+40	3457 499 988	-5.7	0.000 000	-0.002
	100 %	+50	3457 499 990	-4.7	0.000 000	-0.001
	Batt. Endpoint	+20	3457 499 989	-5.4	0.000 000	-0.002
3542.490	100 %	+20(Ref)	3542 489 994	0.0	0.000 000	0.000
	100 %	-30	3542 489 991	-3.6	0.000 000	-0.001
	100 %	-20	3542 489 989	-5.3	0.000 000	-0.001
	100 %	-10	3542 489 987	-7.0	0.000 000	-0.002
	100 %	0	3542 489 989	-5.3	0.000 000	-0.001
	100 %	+10	3542 489 988	-6.7	0.000 000	-0.002
	100 %	+30	3542 489 989	-5.5	0.000 000	-0.002
	100 %	+40	3542 489 988	-6.4	0.000 000	-0.002
	100 %	+50	3542 489 991	-3.3	0.000 000	-0.001
	Batt. Endpoint	+20	3542 489 989	-5.5	0.000 000	-0.002

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3460.020	100 %	+20(Ref)	3460 020 000	0.0	0.000 000	0.000
	100 %	-30	3460 020 000	-0.1	0.000 000	0.000
	100 %	-20	3460 019 998	-2.7	0.000 000	-0.001
	100 %	-10	3460 020 000	-0.7	0.000 000	0.000
	100 %	0	3460 019 999	-1.2	0.000 000	0.000
	100 %	+10	3460 020 001	1.2	0.000 000	0.000
	100 %	+30	3460 019 998	-2.6	0.000 000	-0.001
	100 %	+40	3460 020 000	-0.2	0.000 000	0.000
	100 %	+50	3460 019 998	-1.9	0.000 000	-0.001
	Batt. Endpoint	+20	3460 020 003	3.0	0.000 000	0.001
3540.000	100 %	+20(Ref)	3540 000 001	0.0	0.000 000	0.000
	100 %	-30	3540 000 000	-0.7	0.000 000	0.000
	100 %	-20	3540 000 002	1.0	0.000 000	0.000
	100 %	-10	3539 999 999	-1.6	0.000 000	0.000
	100 %	0	3540 000 002	0.8	0.000 000	0.000
	100 %	+10	3540 000 001	0.5	0.000 000	0.000
	100 %	+30	3540 000 002	1.1	0.000 000	0.000
	100 %	+40	3540 000 001	-0.4	0.000 000	0.000
	100 %	+50	3540 000 000	-1.2	0.000 000	0.000
	Batt. Endpoint	+20	3540 000 003	1.9	0.000 000	0.001

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3462.510	100 %	+20(Ref)	3462 509 996	0.0	0.000 000	0.000
	100 %	-30	3462 509 995	-1.0	0.000 000	0.000
	100 %	-20	3462 509 991	-4.5	0.000 000	-0.001
	100 %	-10	3462 509 993	-2.8	0.000 000	-0.001
	100 %	0	3462 509 993	-2.8	0.000 000	-0.001
	100 %	+10	3462 509 991	-4.3	0.000 000	-0.001
	100 %	+30	3462 509 994	-1.6	0.000 000	0.000
	100 %	+40	3462 509 995	-1.1	0.000 000	0.000
	100 %	+50	3462 509 992	-3.5	0.000 000	-0.001
	Batt. Endpoint	+20	3462 509 992	-3.3	0.000 000	-0.001
3537.480	100 %	+20(Ref)	3537 479 994	0.0	0.000 000	0.000
	100 %	-30	3537 479 990	-3.7	0.000 000	-0.001
	100 %	-20	3537 479 988	-6.0	0.000 000	-0.002
	100 %	-10	3537 479 988	-5.6	0.000 000	-0.002
	100 %	0	3537 479 989	-4.8	0.000 000	-0.001
	100 %	+10	3537 479 988	-6.2	0.000 000	-0.002
	100 %	+30	3537 479 986	-8.1	0.000 000	-0.002
	100 %	+40	3537 479 989	-5.3	0.000 000	-0.001
	100 %	+50	3537 479 990	-3.5	0.000 000	-0.001
	Batt. Endpoint	+20	3537 479 987	-6.5	0.000 000	-0.002

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3465.000	100 %	+20(Ref)	3464 999 998	0.0	0.000 000	0.000
	100 %	-30	3464 999 996	-2.3	0.000 000	-0.001
	100 %	-20	3464 999 995	-3.3	0.000 000	-0.001
	100 %	-10	3464 999 994	-3.9	0.000 000	-0.001
	100 %	0	3464 999 993	-5.1	0.000 000	-0.001
	100 %	+10	3464 999 993	-5.4	0.000 000	-0.002
	100 %	+30	3464 999 992	-6.5	0.000 000	-0.002
	100 %	+40	3464 999 996	-2.3	0.000 000	-0.001
	100 %	+50	3464 999 995	-2.9	0.000 000	-0.001
	Batt. Endpoint	+20	3464 999 995	-2.7	0.000 000	-0.001
3534.990	100 %	+20(Ref)	3534 989 999	0.0	0.000 000	0.000
	100 %	-30	3534 989 998	-0.6	0.000 000	0.000
	100 %	-20	3534 989 999	0.2	0.000 000	0.000
	100 %	-10	3534 989 998	-1.2	0.000 000	0.000
	100 %	0	3534 989 998	-1.4	0.000 000	0.000
	100 %	+10	3534 989 997	-2.2	0.000 000	-0.001
	100 %	+30	3534 989 998	-0.5	0.000 000	0.000
	100 %	+40	3534 990 000	1.1	0.000 000	0.000
	100 %	+50	3534 989 994	-5.3	0.000 000	-0.002
	Batt. Endpoint	+20	3534 989 997	-2.0	0.000 000	-0.001

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3470.010	100 %	+20(Ref)	3470 009 994	0.0	0.000 000	0.000
	100 %	-30	3470 009 987	-7.3	0.000 000	-0.002
	100 %	-20	3470 009 989	-5.5	0.000 000	-0.002
	100 %	-10	3470 009 987	-6.9	0.000 000	-0.002
	100 %	0	3470 009 990	-4.0	0.000 000	-0.001
	100 %	+10	3470 009 991	-3.6	0.000 000	-0.001
	100 %	+30	3470 009 988	-6.6	0.000 000	-0.002
	100 %	+40	3470 009 986	-8.1	0.000 000	-0.002
	100 %	+50	3470 009 988	-6.2	0.000 000	-0.002
	Batt. Endpoint	+20	3470 009 987	-6.9	0.000 000	-0.002
3529.980	100 %	+20(Ref)	3529 979 996	0.0	0.000 000	0.000
	100 %	-30	3529 979 996	-0.4	0.000 000	0.000
	100 %	-20	3529 979 995	-1.3	0.000 000	0.000
	100 %	-10	3529 979 993	-3.6	0.000 000	-0.001
	100 %	0	3529 979 993	-3.5	0.000 000	-0.001
	100 %	+10	3529 979 993	-3.1	0.000 000	-0.001
	100 %	+30	3529 979 995	-1.2	0.000 000	0.000
	100 %	+40	3529 979 992	-4.4	0.000 000	-0.001
	100 %	+50	3529 979 992	-4.1	0.000 000	-0.001
	Batt. Endpoint	+20	3529 979 993	-3.7	0.000 000	-0.001

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3475.020	100 %	+20(Ref)	3475 019 991	0.0	0.000 000	0.000
	100 %	-30	3475 019 982	-9.2	0.000 000	-0.003
	100 %	-20	3475 019 984	-7.8	0.000 000	-0.002
	100 %	-10	3475 019 984	-7.0	0.000 000	-0.002
	100 %	0	3475 019 985	-6.5	0.000 000	-0.002
	100 %	+10	3475 019 984	-7.9	0.000 000	-0.002
	100 %	+30	3475 019 983	-8.6	0.000 000	-0.002
	100 %	+40	3475 019 984	-7.5	0.000 000	-0.002
	100 %	+50	3475 019 982	-9.4	0.000 000	-0.003
	Batt. Endpoint	+20	3475 019 984	-8.0	0.000 000	-0.002
3525.000	100 %	+20(Ref)	3524 999 996	0.0	0.000 000	0.000
	100 %	-30	3524 999 992	-4.0	0.000 000	-0.001
	100 %	-20	3524 999 992	-4.3	0.000 000	-0.001
	100 %	-10	3524 999 991	-5.6	0.000 000	-0.002
	100 %	0	3524 999 989	-7.4	0.000 000	-0.002
	100 %	+10	3524 999 992	-4.2	0.000 000	-0.001
	100 %	+30	3524 999 992	-4.5	0.000 000	-0.001
	100 %	+40	3524 999 989	-7.1	0.000 000	-0.002
	100 %	+50	3524 999 992	-4.8	0.000 000	-0.001
	Batt. Endpoint	+20	3524 999 992	-4.7	0.000 000	-0.001

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3480.000	100 %	+20(Ref)	3479 999 993	0.0	0.000 000	0.000
	100 %	-30	3479 999 989	-3.9	0.000 000	-0.001
	100 %	-20	3479 999 990	-3.4	0.000 000	-0.001
	100 %	-10	3479 999 988	-5.2	0.000 000	-0.002
	100 %	0	3479 999 987	-6.4	0.000 000	-0.002
	100 %	+10	3479 999 987	-6.1	0.000 000	-0.002
	100 %	+30	3479 999 988	-5.4	0.000 000	-0.002
	100 %	+40	3479 999 989	-3.8	0.000 000	-0.001
	100 %	+50	3479 999 987	-6.2	0.000 000	-0.002
	Batt. Endpoint	+20	3479 999 986	-7.5	0.000 000	-0.002
3519.990	100 %	+20(Ref)	3519 989 993	0.0	0.000 000	0.000
	100 %	-30	3519 989 987	-6.0	0.000 000	-0.002
	100 %	-20	3519 989 986	-7.1	0.000 000	-0.002
	100 %	-10	3519 989 987	-6.8	0.000 000	-0.002
	100 %	0	3519 989 987	-6.3	0.000 000	-0.002
	100 %	+10	3519 989 989	-4.7	0.000 000	-0.001
	100 %	+30	3519 989 985	-8.7	0.000 000	-0.002
	100 %	+40	3519 989 987	-6.4	0.000 000	-0.002
	100 %	+50	3519 989 989	-4.6	0.000 000	-0.001
	Batt. Endpoint	+20	3519 989 988	-5.6	0.000 000	-0.002

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3485.010	100 %	+20(Ref)	3485 010 003	0.0	0.000 000	0.000
	100 %	-30	3485 010 004	1.1	0.000 000	0.000
	100 %	-20	3485 010 005	2.1	0.000 000	0.001
	100 %	-10	3485 010 005	2.6	0.000 000	0.001
	100 %	0	3485 010 001	-1.5	0.000 000	0.000
	100 %	+10	3485 010 002	-0.5	0.000 000	0.000
	100 %	+30	3485 010 007	4.7	0.000 000	0.001
	100 %	+40	3485 010 004	1.6	0.000 000	0.000
	100 %	+50	3485 010 005	2.5	0.000 000	0.001
	Batt. Endpoint	+20	3485 010 005	2.3	0.000 000	0.001
3514.980	100 %	+20(Ref)	3514 979 993	0.0	0.000 000	0.000
	100 %	-30	3514 979 986	-7.1	0.000 000	-0.002
	100 %	-20	3514 979 987	-6.6	0.000 000	-0.002
	100 %	-10	3514 979 985	-8.4	0.000 000	-0.002
	100 %	0	3514 979 988	-5.7	0.000 000	-0.002
	100 %	+10	3514 979 989	-3.8	0.000 000	-0.001
	100 %	+30	3514 979 984	-9.3	0.000 000	-0.003
	100 %	+40	3514 979 989	-4.0	0.000 000	-0.001
	100 %	+50	3514 979 988	-5.0	0.000 000	-0.001
	Batt. Endpoint	+20	3514 979 988	-4.9	0.000 000	-0.001

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3490.020	100 %	+20(Ref)	3490 019 991	0.0	0.000 000	0.000
	100 %	-30	3490 019 983	-8.3	0.000 000	-0.002
	100 %	-20	3490 019 981	-9.6	0.000 000	-0.003
	100 %	-10	3490 019 981	-9.7	0.000 000	-0.003
	100 %	0	3490 019 981	-9.7	0.000 000	-0.003
	100 %	+10	3490 019 983	-7.8	0.000 000	-0.002
	100 %	+30	3490 019 981	-9.7	0.000 000	-0.003
	100 %	+40	3490 019 983	-8.2	0.000 000	-0.002
	100 %	+50	3490 019 983	-8.3	0.000 000	-0.002
	Batt. Endpoint	+20	3490 019 981	-9.6	0.000 000	-0.003
3510.000	100 %	+20(Ref)	3509 999 997	0.0	0.000 000	0.000
	100 %	-30	3509 999 993	-3.6	0.000 000	-0.001
	100 %	-20	3509 999 990	-6.8	0.000 000	-0.002
	100 %	-10	3509 999 989	-7.2	0.000 000	-0.002
	100 %	0	3509 999 990	-6.2	0.000 000	-0.002
	100 %	+10	3509 999 991	-6.0	0.000 000	-0.002
	100 %	+30	3509 999 991	-5.9	0.000 000	-0.002
	100 %	+40	3509 999 994	-3.1	0.000 000	-0.001
	100 %	+50	3509 999 992	-4.6	0.000 000	-0.001
	Batt. Endpoint	+20	3509 999 992	-4.8	0.000 000	-0.001

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3495.000	100 %	+20(Ref)	3494 999 991	0.0	0.000 000	0.000
	100 %	-30	3494 999 988	-2.9	0.000 000	-0.001
	100 %	-20	3494 999 986	-5.0	0.000 000	-0.001
	100 %	-10	3494 999 985	-6.0	0.000 000	-0.002
	100 %	0	3494 999 987	-3.8	0.000 000	-0.001
	100 %	+10	3494 999 986	-5.7	0.000 000	-0.002
	100 %	+30	3494 999 987	-4.2	0.000 000	-0.001
	100 %	+40	3494 999 987	-4.2	0.000 000	-0.001
	100 %	+50	3494 999 986	-4.8	0.000 000	-0.001
	Batt. Endpoint	+20	3494 999 989	-2.6	0.000 000	-0.001
3504.990	100 %	+20(Ref)	3504 990 002	0.0	0.000 000	0.000
	100 %	-30	3504 990 003	1.4	0.000 000	0.000
	100 %	-20	3504 990 002	0.1	0.000 000	0.000
	100 %	-10	3504 990 004	1.8	0.000 000	0.001
	100 %	0	3504 990 005	3.3	0.000 000	0.001
	100 %	+10	3504 990 001	-1.2	0.000 000	0.000
	100 %	+30	3504 990 005	2.6	0.000 000	0.001
	100 %	+40	3504 990 005	2.5	0.000 000	0.001
	100 %	+50	3504 990 003	0.9	0.000 000	0.000
	Batt. Endpoint	+20	3504 990 004	2.4	0.000 000	0.001

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3500.010	100 %	+20(Ref)	3500 009 996	0.0	0.000 000	0.000
	100 %	-30	3500 009 992	-4.1	0.000 000	-0.001
	100 %	-20	3500 009 994	-2.4	0.000 000	-0.001
	100 %	-10	3500 009 991	-4.9	0.000 000	-0.001
	100 %	0	3500 009 994	-2.6	0.000 000	-0.001
	100 %	+10	3500 009 991	-4.7	0.000 000	-0.001
	100 %	+30	3500 009 994	-2.1	0.000 000	-0.001
	100 %	+40	3500 009 993	-3.7	0.000 000	-0.001
	100 %	+50	3500 009 990	-5.7	0.000 000	-0.002
	Batt. Endpoint	+20	3500 009 993	-3.6	0.000 000	-0.001

9. TEST DATA (3700 MHz - 3980 MHz)

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
3705.00	Sub6 n77(78)/ 10 MHz [30 kHz]	PI/2 BPSK	-24.51	13.98	11.40	3.09	H	< 1.00	0.169	22.29	1	12
		QPSK	-24.56	13.93	11.40	3.09	H		0.168	22.24		
		16-QAM	-25.51	12.98	11.40	3.09	H		0.135	21.29		
		64-QAM	-27.12	11.37	11.40	3.09	H		0.093	19.68		
		256-QAM	-28.97	9.52	11.40	3.09	H		0.061	17.83		
3840.00		PI/2 BPSK	-25.81	13.87	11.10	3.14	H		0.153	21.83	1	22
		QPSK	-25.88	13.80	11.10	3.14	H		0.150	21.76		
		16-QAM	-26.81	12.87	11.10	3.14	H		0.121	20.83		
		64-QAM	-28.38	11.30	11.10	3.14	H		0.084	19.26		
		256-QAM	-30.25	9.43	11.10	3.14	H		0.055	17.39		
3975.00	PI/2 BPSK	-24.89	14.76	10.90	3.20	H	0.176	22.46	1	12		
	QPSK	-24.96	14.69	10.90	3.20	H	0.173	22.39				
	16-QAM	-25.92	13.73	10.90	3.20	H	0.139	21.43				
	64-QAM	-27.38	12.27	10.90	3.20	H	0.099	19.97				
	256-QAM	-29.25	10.40	10.90	3.20	H	0.065	18.10				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	W	dBm	Size
3707.51		PI/2 BPSK	-24.56	13.93	11.40	3.09	H		0.168	22.24	1	1
		QPSK	-24.59	13.90	11.40	3.09	H		0.166	22.21		
		16-QAM	-25.53	12.96	11.40	3.09	H		0.134	21.27		
		64-QAM	-26.97	11.52	11.40	3.09	H		0.096	19.83		
		256-QAM	-29.10	9.39	11.40	3.09	H		0.059	17.70		
3840.00	Sub6 n77(78)/ 15 MHz [30 kHz]	PI/2 BPSK	-25.78	13.90	11.10	3.14	H	< 1.00	0.154	21.86	1	36
		QPSK	-25.81	13.87	11.10	3.14	H		0.153	21.83		
		16-QAM	-26.82	12.86	11.10	3.14	H		0.121	20.82		
		64-QAM	-28.31	11.37	11.10	3.14	H		0.086	19.33		
		256-QAM	-30.25	9.43	11.10	3.14	H		0.055	17.39		
3972.48		PI/2 BPSK	-24.90	14.75	10.90	3.20	H		0.176	22.45	1	19
		QPSK	-24.98	14.67	10.90	3.20	H		0.173	22.37		
		16-QAM	-25.89	13.76	10.90	3.20	H		0.140	21.46		
		64-QAM	-27.37	12.28	10.90	3.20	H		0.100	19.98		
		256-QAM	-29.37	10.28	10.90	3.20	H		0.063	17.98		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	dBm	Size	Offset
3710.01		PI/2 BPSK	-24.59	13.93	11.40	3.11	H		0.167	22.22	1	25
		QPSK	-24.62	13.90	11.40	3.11	H		0.166	22.19		
		16-QAM	-25.69	12.83	11.40	3.11	H		0.129	21.12		
		64-QAM	-27.00	11.52	11.40	3.11	H		0.096	19.81		
		256-QAM	-29.19	9.33	11.40	3.11	H		0.058	17.62		
3840.00	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-25.73	13.95	11.10	3.14	H	< 1.00	0.155	21.91	1	49
		QPSK	-25.79	13.89	11.10	3.14	H		0.153	21.85		
		16-QAM	-26.77	12.91	11.10	3.14	H		0.122	20.87		
		64-QAM	-28.29	11.39	11.10	3.14	H		0.086	19.35		
		256-QAM	-30.14	9.54	11.10	3.14	H		0.056	17.50		
3969.99		PI/2 BPSK	-24.91	14.71	10.90	3.20	H		0.174	22.41	1	25
		QPSK	-24.96	14.66	10.90	3.20	H		0.172	22.36		
		16-QAM	-25.91	13.71	10.90	3.20	H		0.138	21.41		
		64-QAM	-34.38	5.24	10.90	3.20	H		0.020	12.94		
		256-QAM	-29.25	10.37	10.90	3.20	H		0.064	18.07		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	dBm	Size	Offset
3712.50		PI/2 BPSK	-24.54	14.13	11.40	3.12	H		0.174	22.41	1	1
		QPSK	-24.62	14.05	11.40	3.12	H		0.171	22.33		
		16-QAM	-25.48	13.19	11.40	3.12	H		0.140	21.47		
		64-QAM	-26.98	11.69	11.40	3.12	H		0.099	19.97		
		256-QAM	-29.09	9.58	11.40	3.12	H		0.061	17.86		
3840.00	Sub6 n77(78)/ 25 MHz [30 kHz]	PI/2 BPSK	-25.60	14.08	11.10	3.14	H	< 1.00	0.160	22.04	1	63
		QPSK	-25.68	14.00	11.10	3.14	H		0.157	21.96		
		16-QAM	-26.66	13.02	11.10	3.14	H		0.125	20.98		
		64-QAM	-28.23	11.45	11.10	3.14	H		0.087	19.41		
		256-QAM	-30.16	9.52	11.10	3.14	H		0.056	17.48		
3967.50		PI/2 BPSK	-24.95	14.74	10.90	3.21	H		0.175	22.43	1	32
		QPSK	-25.00	14.69	10.90	3.21	H		0.173	22.38		
		16-QAM	-26.03	13.66	10.90	3.21	H		0.136	21.35		
		64-QAM	-27.37	12.32	10.90	3.21	H		0.100	20.01		
		256-QAM	-29.44	10.25	10.90	3.21	H		0.062	17.94		

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
3715.02		PI/2 BPSK	-24.56	14.11	11.40	3.12	H		0.173	22.39	1	1
		QPSK	-24.61	14.06	11.40	3.12	H		0.171	22.34		
		16-QAM	-25.65	13.02	11.40	3.12	H		0.135	21.30		
		64-QAM	-27.13	11.54	11.40	3.12	H		0.096	19.82		
		256-QAM	-29.09	9.58	11.40	3.12	H		0.061	17.86		
3840.00	Sub6 n77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-25.52	14.16	11.10	3.14	H	< 1.00	0.163	22.12	1	76
		QPSK	-25.63	14.05	11.10	3.14	H		0.159	22.01		
		16-QAM	-26.55	13.13	11.10	3.14	H		0.129	21.09		
		64-QAM	-28.11	11.57	11.10	3.14	H		0.090	19.53		
		256-QAM	-29.98	9.70	11.10	3.14	H		0.058	17.66		
3964.98		PI/2 BPSK	-24.92	14.77	10.90	3.21	H		0.176	22.46	1	76
		QPSK	-24.99	14.70	10.90	3.21	H		0.173	22.39		
		16-QAM	-25.96	13.73	10.90	3.21	H		0.139	21.42		
		64-QAM	-27.46	12.23	10.90	3.21	H		0.098	19.92		
		256-QAM	-29.40	10.29	10.90	3.21	H		0.063	17.98		

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
3720.00		PI/2 BPSK	-24.59	14.10	11.40	3.14	H		0.172	22.36	1	1
		QPSK	-24.63	14.06	11.40	3.14	H		0.171	22.32		
		16-QAM	-25.69	13.00	11.40	3.14	H		0.134	21.26		
		64-QAM	-27.24	11.45	11.40	3.14	H		0.094	19.71		
		256-QAM	-29.01	9.68	11.40	3.14	H		0.062	17.94		
3840.00	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-25.43	14.25	11.10	3.14	H	< 1.00	0.167	22.21	1	104
		QPSK	-25.46	14.22	11.10	3.14	H		0.165	22.18		
		16-QAM	-26.50	13.18	11.10	3.14	H		0.130	21.14		
		64-QAM	-28.11	11.57	11.10	3.14	H		0.090	19.53		
		256-QAM	-29.92	9.76	11.10	3.14	H		0.059	17.72		
3960.00		PI/2 BPSK	-24.85	14.93	10.90	3.21	H		0.183	22.62	1	104
		QPSK	-24.92	14.86	10.90	3.21	H		0.180	22.55		
		16-QAM	-26.08	13.70	10.90	3.21	H		0.138	21.39		
		64-QAM	-27.48	12.30	10.90	3.21	H		0.100	19.99		
		256-QAM	-29.41	10.37	10.90	3.21	H		0.064	18.06		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	dBm	Size	Offset
3725.10		PI/2 BPSK	-24.54	14.30	11.40	3.14	H		0.180	22.56	1	1
		QPSK	-24.60	14.24	11.40	3.14	H		0.178	22.50		
		16-QAM	-25.75	13.09	11.40	3.14	H		0.136	21.35		
		64-QAM	-27.18	11.66	11.40	3.14	H		0.098	19.92		
		256-QAM	-29.13	9.71	11.40	3.14	H		0.063	17.97		
3840.00	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-25.46	14.22	11.10	3.14	H	< 1.00	0.165	22.18	1	131
		QPSK	-25.52	14.16	11.10	3.14	H		0.163	22.12		
		16-QAM	-26.54	13.14	11.10	3.14	H		0.129	21.10		
		64-QAM	-28.13	11.55	11.10	3.14	H		0.089	19.51		
		256-QAM	-29.89	9.79	11.10	3.14	H		0.060	17.75		
3954.99		PI/2 BPSK	-25.09	14.70	10.90	3.21	H		0.173	22.39	1	1
		QPSK	-25.17	14.62	10.90	3.21	H		0.170	22.31		
		16-QAM	-26.15	13.64	10.90	3.21	H		0.136	21.33		
		64-QAM	-27.57	12.22	10.90	3.21	H		0.098	19.91		
		256-QAM	-29.32	10.47	10.90	3.21	H		0.065	18.16		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	dBm	Size	Offset
3730.02		PI/2 BPSK	-24.55	14.31	11.40	3.14	H		0.181	22.57	1	1
		QPSK	-24.62	14.24	11.40	3.14	H		0.178	22.50		
		16-QAM	-25.58	13.28	11.40	3.14	H		0.143	21.54		
		64-QAM	-27.18	11.68	11.40	3.14	H		0.099	19.94		
		256-QAM	-29.00	9.86	11.40	3.14	H		0.065	18.12		
3840.00	Sub6 n77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-25.50	14.18	11.10	3.14	H	< 1.00	0.164	22.14	1	160
		QPSK	-25.59	14.09	11.10	3.14	H		0.161	22.05		
		16-QAM	-26.56	13.12	11.10	3.14	H		0.128	21.08		
		64-QAM	-28.12	11.56	11.10	3.14	H		0.090	19.52		
		256-QAM	-29.92	9.76	11.10	3.14	H		0.059	17.72		
3949.98		PI/2 BPSK	-24.92	14.86	10.90	3.20	H		0.180	22.56	1	160
		QPSK	-24.91	14.87	10.90	3.20	H		0.181	22.57		
		16-QAM	-25.96	13.82	10.90	3.20	H		0.142	21.52		
		64-QAM	-27.40	12.38	10.90	3.20	H		0.102	20.08		
		256-QAM	-29.32	10.46	10.90	3.20	H		0.065	18.16		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	dBm	Size	Offset
3735.00		PI/2 BPSK	-24.53	14.33	11.40	3.12	H		0.182	22.61	1	1
		QPSK	-24.57	14.29	11.40	3.12	H		0.181	22.57		
		16-QAM	-25.54	13.32	11.40	3.12	H		0.145	21.60		
		64-QAM	-27.10	11.76	11.40	3.12	H		0.101	20.04		
		256-QAM	-29.00	9.86	11.40	3.12	H		0.065	18.14		
3840.00	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	-25.52	14.16	11.10	3.14	H	< 1.00	0.163	22.12	1	187
		QPSK	-25.56	14.12	11.10	3.14	H		0.162	22.08		
		16-QAM	-26.55	13.13	11.10	3.14	H		0.129	21.09		
		64-QAM	-27.98	11.70	11.10	3.14	H		0.093	19.66		
		256-QAM	-30.00	9.68	11.10	3.14	H		0.058	17.64		
3945.00		PI/2 BPSK	-24.89	14.95	10.85	3.18	H		0.183	22.62	1	187
		QPSK	-24.92	14.92	10.85	3.18	H		0.182	22.59		
		16-QAM	-25.99	13.85	10.85	3.18	H		0.142	21.52		
		64-QAM	-27.29	12.55	10.85	3.18	H		0.105	20.22		
		256-QAM	-29.38	10.46	10.85	3.18	H		0.065	18.13		

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
3740.01		PI/2 BPSK	-25.09	13.77	11.40	3.10	H		0.161	22.07	1	108
		QPSK	-25.14	13.72	11.40	3.10	H		0.159	22.02		
		16-QAM	-26.07	12.79	11.40	3.10	H		0.129	21.09		
		64-QAM	-27.48	11.38	11.40	3.10	H		0.093	19.68		
		256-QAM	-29.59	9.27	11.40	3.10	H		0.057	17.57		
3840.00	Sub6 n77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-25.75	13.93	11.10	3.14	H	< 1.00	0.155	21.89	1	215
		QPSK	-25.81	13.87	11.10	3.14	H		0.153	21.83		
		16-QAM	-26.79	12.89	11.10	3.14	H		0.122	20.85		
		64-QAM	-28.21	11.47	11.10	3.14	H		0.088	19.43		
		256-QAM	-30.18	9.50	11.10	3.14	H		0.056	17.46		
3939.99		PI/2 BPSK	-24.87	14.36	11.40	3.10	H		0.185	22.66	1	215
		QPSK	-24.91	14.32	11.40	3.10	H		0.183	22.62		
		16-QAM	-25.97	13.26	11.40	3.10	H		0.143	21.56		
		64-QAM	-27.41	11.82	11.40	3.10	H		0.103	20.12		
		256-QAM	-29.21	10.02	11.40	3.10	H		0.068	18.32		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	dBm	Size	Offset
3745.02		PI/2 BPSK	-25.07	13.67	11.35	3.09	H		0.156	21.93	1	1
		QPSK	-25.09	13.65	11.35	3.09	H		0.155	21.91		
		16-QAM	-25.99	12.75	11.35	3.09	H		0.126	21.01		
		64-QAM	-27.59	11.15	11.35	3.09	H		0.087	19.41		
		256-QAM	-29.38	9.36	11.35	3.09	H		0.058	17.62		
3840.00	Sub6 n77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-25.67	14.01	11.10	3.14	H	< 1.00	0.158	21.97	1	243
		QPSK	-25.75	13.93	11.10	3.14	H		0.155	21.89		
		16-QAM	-26.81	12.87	11.10	3.14	H		0.121	20.83		
		64-QAM	-28.25	11.43	11.10	3.14	H		0.087	19.39		
		256-QAM	-30.03	9.65	11.10	3.14	H		0.058	17.61		
3934.98		PI/2 BPSK	-24.86	15.06	10.80	3.16	H		0.186	22.70	1	243
		QPSK	-24.89	15.03	10.80	3.16	H		0.185	22.67		
		16-QAM	-25.91	14.01	10.80	3.16	H		0.146	21.65		
		64-QAM	-27.40	12.52	10.80	3.16	H		0.104	20.16		
		256-QAM	-29.26	10.66	10.80	3.16	H		0.068	18.30		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	dBm	Size	Offset
3750.00		PI/2 BPSK	-25.00	13.63	11.30	3.08	H		0.153	21.85	1	1
		QPSK	-25.08	13.55	11.30	3.08	H		0.150	21.77		
		16-QAM	-26.07	12.56	11.30	3.08	H		0.120	20.78		
		64-QAM	-27.72	10.91	11.30	3.08	H		0.082	19.13		
		256-QAM	-29.52	9.11	11.30	3.08	H		0.054	17.33		
3840.00	Sub6 n77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	-25.94	13.74	11.10	3.14	H	< 1.00	0.148	21.70	1	271
		QPSK	-25.98	13.70	11.10	3.14	H		0.147	21.66		
		16-QAM	-27.08	12.60	11.10	3.14	H		0.114	20.56		
		64-QAM	-28.47	11.21	11.10	3.14	H		0.083	19.17		
		256-QAM	-30.46	9.22	11.10	3.14	H		0.052	17.18		
3930.00		PI/2 BPSK	-24.81	15.14	10.80	3.16	H		0.190	22.78	1	271
		QPSK	-24.86	15.09	10.80	3.16	H		0.187	22.73		
		16-QAM	-25.82	14.13	10.80	3.16	H		0.150	21.77		
		64-QAM	-27.37	12.58	10.80	3.16	H		0.105	20.22		
		256-QAM	-29.32	10.63	10.80	3.16	H		0.067	18.27		

9.2 RADIATED SPURIOUS EMISSIONS

- ▣ NR Band: N77(78)
- ▣ Bandwidth: 100 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meters
- ▣ 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
650000 (3750.00)	7 500.00	-61.93	11.10	-54.82	4.50	H	-48.22	-13.00	1	1
	11 250.00	-59.70	11.40	-49.16	5.64	V	-43.40	-13.00		
	15 000.00	-55.34	13.80	-48.85	6.65	H	-41.70	-13.00		
656000 (3840.00)	7 680.00	-62.43	11.10	-55.57	4.55	V	-49.02	-13.00	1	271
	11 520.00	-65.25	11.50	-54.11	5.70	V	-48.31	-13.00		
	15 360.00	-60.48	15.10	-54.69	6.72	V	-46.31	-13.00		
662000 (3930.00)	7 860.00	-61.03	10.60	-53.67	4.61	V	-47.68	-13.00	1	271
	11 790.00	-63.79	12.20	-53.83	5.78	V	-47.41	-13.00		
	15 720.00	-61.02	15.10	-55.46	6.82	V	-47.18	-13.00		

9.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n77(78)	10 MHz	3840.00	BPSK	Full RB	0	4.18
			QPSK			5.16
			16-QAM			5.88
			64-QAM			6.17
			256-QAM			6.67
	15 MHz		BPSK			4.12
			QPSK			5.14
			16-QAM			5.89
			64-QAM			6.10
			256-QAM			6.64
	20 MHz		BPSK			4.20
			QPSK			5.19
			16-QAM			5.95
			64-QAM			6.14
			256-QAM			6.56
	25 MHz		BPSK			4.23
			QPSK			5.23
			16-QAM			6.02
			64-QAM			6.29
			256-QAM			6.71
	30 MHz		BPSK			4.21
			QPSK			5.14
			16-QAM			5.90
			64-QAM			6.18
			256-QAM			6.62
	40 MHz		BPSK			5.14
			QPSK			5.45
			16-QAM			6.01
			64-QAM			6.20
			256-QAM			6.71
	50 MHz		BPSK			4.21
			QPSK			5.19
			16-QAM			5.97
			64-QAM			6.14
			256-QAM			6.74
	60 MHz		BPSK			4.21
			QPSK			5.23
			16-QAM			5.95
			64-QAM			6.14
			256-QAM			6.74
70 MHz	BPSK	4.39				
	QPSK	5.21				
	16-QAM	5.94				
	64-QAM	6.14				
	256-QAM	6.67				
80 MHz	BPSK	4.62				
	QPSK	5.20				

90 MHz	16-QAM	5.95
	64-QAM	6.10
	256-QAM	6.66
	BPSK	4.45
	QPSK	5.19
	16-QAM	5.94
	64-QAM	6.10
	256-QAM	6.68
	100 MHz	BPSK
QPSK		5.18
16-QAM		5.94
64-QAM		6.15
256-QAM		6.63

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 426 ~ 485.

9.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77(78)	10 MHz	3840.00	BPSK	Full RB	0	8.6847
			QPSK			8.6853
			16-QAM			8.6777
			64-QAM			8.6720
			256-QAM			8.6494
	15 MHz		BPSK			12.982
			QPSK			12.976
			16-QAM			12.956
			64-QAM			13.005
			256-QAM			12.949
	20 MHz		BPSK			17.944
			QPSK			17.994
			16-QAM			17.968
			64-QAM			17.987
			256-QAM			18.001
	25 MHz		BPSK			22.996
			QPSK			22.997
			16-QAM			22.985
			64-QAM			23.043
			256-QAM			23.018
	30 MHz		BPSK			26.977
			QPSK			26.989
			16-QAM			26.956
			64-QAM			27.008
			256-QAM			26.950
	40 MHz		BPSK			35.956
			QPSK			35.940
			16-QAM			35.869
			64-QAM			35.824
			256-QAM			35.962
	50 MHz		BPSK			45.897
			QPSK			45.891
			16-QAM			45.927
			64-QAM			45.924
			256-QAM			45.952
	60 MHz		BPSK			58.163
			QPSK			58.200
			16-QAM			58.038
			64-QAM			58.121
			256-QAM			58.217
70 MHz	BPSK	64.875				
	QPSK	64.833				
	16-QAM	64.615				
	64-QAM	64.683				
	256-QAM	64.680				
80 MHz	BPSK	77.522				
	QPSK	77.507				

90 MHz	16-QAM	77.413
	64-QAM	77.509
	256-QAM	77.410
	BPSK	87.109
	QPSK	87.101
	16-QAM	87.303
	64-QAM	87.125
	256-QAM	87.325
	100 MHz	BPSK
QPSK		96.819
16-QAM		96.968
64-QAM		96.668
256-QAM		96.987

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 486 ~ 545.

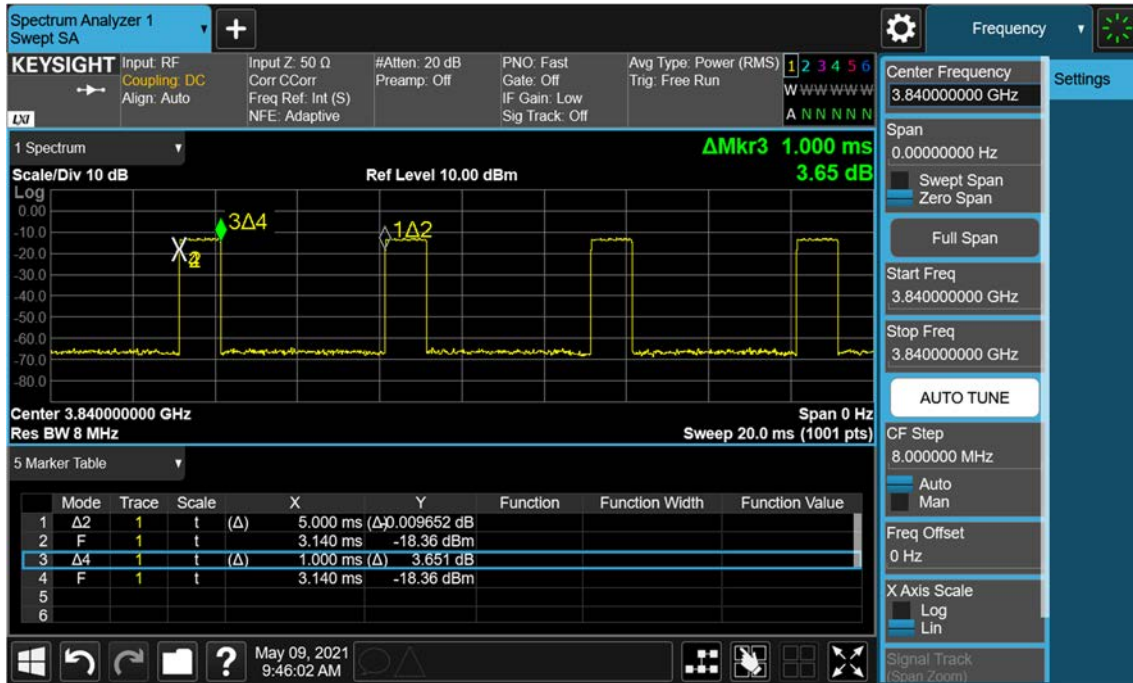
9.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77(78)	10	3705.00	9.6979	37.005	-71.444	-34.439	-13.00
		3840.00	9.1301	37.005	-70.457	-33.452	
		3975.00	5.2204	37.005	-70.829	-33.824	
	15	3707.52	9.6610	37.005	-70.983	-33.978	
		3840.00	8.2787	37.005	-71.633	-34.628	
		3972.48	8.2991	37.005	-71.097	-34.092	
	20	3710.01	6.0474	37.005	-71.091	-34.086	
		3840.00	7.9621	37.005	-71.383	-34.378	
		3969.99	5.5035	37.005	-71.173	-34.168	
	25	3712.50	9.0902	37.005	-70.692	-33.687	
		3840.00	9.4571	37.005	-70.574	-33.569	
		3967.50	5.5225	37.005	-70.772	-33.767	
	30	3715.02	9.6595	37.005	-70.796	-33.791	
		3840.00	8.8674	37.005	-70.848	-33.843	
		3964.98	9.7178	37.005	-71.220	-34.215	
	40	3720.00	9.9307	37.005	-70.846	-33.841	
		3840.00	8.3250	37.005	-70.916	-33.911	
		3960.00	9.7154	37.005	-70.999	-33.994	
	50	3725.10	8.5843	37.005	-70.965	-33.960	
		3840.00	6.0010	37.005	-70.800	-33.795	
		3954.99	8.8525	37.005	-70.356	-33.351	
	60	3730.02	6.0185	37.005	-70.609	-33.604	
		3840.00	7.9895	37.005	-71.232	-34.227	
		3949.98	8.2562	37.005	-71.315	-34.310	
	70	3735.00	7.9935	37.005	-69.510	-32.505	
		3840.00	8.2697	37.005	-70.730	-33.725	
		3945.00	9.1466	37.005	-71.036	-34.031	
	80	3740.01	8.0055	37.005	-70.555	-33.550	
		3840.00	8.2602	37.005	-70.659	-33.654	
		3939.99	8.8305	37.005	-69.762	-32.757	
90	3745.02	8.0494	37.005	-70.928	-33.923		
	3840.00	8.8230	37.005	-71.048	-34.043		
	3934.98	8.2612	37.005	-69.544	-32.539		
100	3750.00	9.9511	37.005	-71.111	-34.106		
	3840.00	9.1725	37.005	-70.446	-33.441		
	3930.00	8.8609	37.005	-70.042	-33.037		

Note:

1. Plots of the EUT’s Conducted Spurious Emissions are shown Page 546 ~ 617.
2. Duty Cycle factor already applied on the factor.

- Duty Cycle Factor(dB) = 6.990



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

- Result(dBm) = Reading + Factor

3. Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	33.684
1 – 5	36.390
5 – 10	37.005
10 – 15	37.530
15 – 20	37.903
Above 20	38.545

9.6 BAND EDGE

1. Plots of the EUT’s Band Edge are shown Page 618 ~ 761.
2. 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) = 6.990

9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3705.000	100 %	+20(Ref)	3704 999 996	0.0	0.000 000	0.000
	100 %	-30	3704 999 994	-2.7	0.000 000	-0.001
	100 %	-20	3704 999 994	-2.1	0.000 000	-0.001
	100 %	-10	3704 999 991	-5.2	0.000 000	-0.001
	100 %	0	3704 999 991	-5.2	0.000 000	-0.001
	100 %	+10	3704 999 993	-3.4	0.000 000	-0.001
	100 %	+30	3704 999 996	-0.4	0.000 000	0.000
	100 %	+40	3704 999 994	-2.3	0.000 000	-0.001
	100 %	+50	3704 999 995	-0.9	0.000 000	0.000
	Batt. Endpoint	+20	3704 999 992	-4.2	0.000 000	-0.001
3975.000	100 %	+20(Ref)	3974 999 994	0.0	0.000 000	0.000
	100 %	-30	3974 999 989	-5.1	0.000 000	-0.001
	100 %	-20	3974 999 988	-6.3	0.000 000	-0.002
	100 %	-10	3974 999 990	-4.5	0.000 000	-0.001
	100 %	0	3974 999 985	-9.0	0.000 000	-0.002
	100 %	+10	3974 999 989	-4.7	0.000 000	-0.001
	100 %	+30	3974 999 989	-4.7	0.000 000	-0.001
	100 %	+40	3974 999 988	-6.0	0.000 000	-0.002
	100 %	+50	3974 999 989	-4.7	0.000 000	-0.001
	Batt. Endpoint	+20	3974 999 989	-5.2	0.000 000	-0.001

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3707.520	100 %	+20(Ref)	3707 519 995	0.0	0.000 000	0.000
	100 %	-30	3707 519 991	-3.9	0.000 000	-0.001
	100 %	-20	3707 519 990	-4.8	0.000 000	-0.001
	100 %	-10	3707 519 989	-5.4	0.000 000	-0.001
	100 %	0	3707 519 993	-1.5	0.000 000	0.000
	100 %	+10	3707 519 991	-4.4	0.000 000	-0.001
	100 %	+30	3707 519 992	-3.2	0.000 000	-0.001
	100 %	+40	3707 519 991	-3.4	0.000 000	-0.001
	100 %	+50	3707 519 993	-1.5	0.000 000	0.000
	Batt. Endpoint	+20	3707 519 989	-6.1	0.000 000	-0.002
3972.480	100 %	+20(Ref)	3972 479 993	0.0	0.000 000	0.000
	100 %	-30	3972 479 988	-4.3	0.000 000	-0.001
	100 %	-20	3972 479 987	-6.1	0.000 000	-0.002
	100 %	-10	3972 479 986	-6.9	0.000 000	-0.002
	100 %	0	3972 479 988	-5.0	0.000 000	-0.001
	100 %	+10	3972 479 989	-3.7	0.000 000	-0.001
	100 %	+30	3972 479 986	-6.3	0.000 000	-0.002
	100 %	+40	3972 479 989	-3.2	0.000 000	-0.001
	100 %	+50	3972 479 986	-6.2	0.000 000	-0.002
	Batt. Endpoint	+20	3972 479 988	-4.7	0.000 000	-0.001

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3710.010	100 %	+20(Ref)	3710 009 996	0.0	0.000 000	0.000
	100 %	-30	3710 009 992	-3.6	0.000 000	-0.001
	100 %	-20	3710 009 993	-3.1	0.000 000	-0.001
	100 %	-10	3710 009 989	-6.4	0.000 000	-0.002
	100 %	0	3710 009 991	-5.1	0.000 000	-0.001
	100 %	+10	3710 009 989	-6.5	0.000 000	-0.002
	100 %	+30	3710 009 993	-2.9	0.000 000	-0.001
	100 %	+40	3710 009 992	-4.2	0.000 000	-0.001
	100 %	+50	3710 009 992	-4.2	0.000 000	-0.001
	Batt. Endpoint	+20	3710 009 992	-3.9	0.000 000	-0.001
3969.990	100 %	+20(Ref)	3969 990 004	0.0	0.000 000	0.000
	100 %	-30	3969 990 007	3.1	0.000 000	0.001
	100 %	-20	3969 990 010	6.1	0.000 000	0.002
	100 %	-10	3969 990 009	4.9	0.000 000	0.001
	100 %	0	3969 990 005	0.8	0.000 000	0.000
	100 %	+10	3969 990 005	1.6	0.000 000	0.000
	100 %	+30	3969 990 010	6.2	0.000 000	0.002
	100 %	+40	3969 990 009	4.8	0.000 000	0.001
	100 %	+50	3969 990 004	0.4	0.000 000	0.000
	Batt. Endpoint	+20	3969 990 010	5.9	0.000 000	0.001

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3712.500	100 %	+20(Ref)	3712 499 995	0.0	0.000 000	0.000
	100 %	-30	3712 499 993	-1.9	0.000 000	-0.001
	100 %	-20	3712 499 993	-2.7	0.000 000	-0.001
	100 %	-10	3712 499 990	-4.9	0.000 000	-0.001
	100 %	0	3712 499 994	-1.5	0.000 000	0.000
	100 %	+10	3712 499 991	-4.0	0.000 000	-0.001
	100 %	+30	3712 499 993	-2.2	0.000 000	-0.001
	100 %	+40	3712 499 991	-4.5	0.000 000	-0.001
	100 %	+50	3712 499 991	-4.0	0.000 000	-0.001
	Batt. Endpoint	+20	3712 499 992	-2.8	0.000 000	-0.001
3967.500	100 %	+20(Ref)	3967 499 992	0.0	0.000 000	0.000
	100 %	-30	3967 499 982	-9.9	0.000 000	-0.002
	100 %	-20	3967 499 984	-8.0	0.000 000	-0.002
	100 %	-10	3967 499 982	-9.5	0.000 000	-0.002
	100 %	0	3967 499 983	-8.6	0.000 000	-0.002
	100 %	+10	3967 499 985	-6.7	0.000 000	-0.002
	100 %	+30	3967 499 986	-6.1	0.000 000	-0.002
	100 %	+40	3967 499 986	-6.1	0.000 000	-0.002
	100 %	+50	3967 499 982	-10.0	0.000 000	-0.003
	Batt. Endpoint	+20	3967 499 980	-11.8	0.000 000	-0.003

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3715.020	100 %	+20(Ref)	3715 019 996	0.0	0.000 000	0.000
	100 %	-30	3715 019 992	-4.1	0.000 000	-0.001
	100 %	-20	3715 019 990	-6.3	0.000 000	-0.002
	100 %	-10	3715 019 991	-4.5	0.000 000	-0.001
	100 %	0	3715 019 993	-3.0	0.000 000	-0.001
	100 %	+10	3715 019 989	-6.6	0.000 000	-0.002
	100 %	+30	3715 019 991	-5.0	0.000 000	-0.001
	100 %	+40	3715 019 991	-5.4	0.000 000	-0.001
	100 %	+50	3715 019 992	-4.2	0.000 000	-0.001
	Batt. Endpoint	+20	3715 019 991	-4.6	0.000 000	-0.001
3964.980	100 %	+20(Ref)	3964 979 998	0.0	0.000 000	0.000
	100 %	-30	3964 979 997	-1.8	0.000 000	0.000
	100 %	-20	3964 979 997	-0.8	0.000 000	0.000
	100 %	-10	3964 979 996	-2.4	0.000 000	-0.001
	100 %	0	3964 979 993	-5.2	0.000 000	-0.001
	100 %	+10	3964 979 997	-1.4	0.000 000	0.000
	100 %	+30	3964 979 994	-4.6	0.000 000	-0.001
	100 %	+40	3964 979 996	-2.8	0.000 000	-0.001
	100 %	+50	3964 979 993	-5.2	0.000 000	-0.001
	Batt. Endpoint	+20	3964 979 996	-2.6	0.000 000	-0.001

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3720.000	100 %	+20(Ref)	3719 999 996	0.0	0.000 000	0.000
	100 %	-30	3719 999 991	-5.2	0.000 000	-0.001
	100 %	-20	3719 999 991	-4.7	0.000 000	-0.001
	100 %	-10	3719 999 992	-3.9	0.000 000	-0.001
	100 %	0	3719 999 992	-3.7	0.000 000	-0.001
	100 %	+10	3719 999 991	-5.0	0.000 000	-0.001
	100 %	+30	3719 999 990	-6.2	0.000 000	-0.002
	100 %	+40	3719 999 991	-5.0	0.000 000	-0.001
	100 %	+50	3719 999 992	-3.7	0.000 000	-0.001
	Batt. Endpoint	+20	3719 999 996	-0.5	0.000 000	0.000
3960.000	100 %	+20(Ref)	3959 999 998	0.0	0.000 000	0.000
	100 %	-30	3959 999 995	-3.3	0.000 000	-0.001
	100 %	-20	3959 999 995	-3.5	0.000 000	-0.001
	100 %	-10	3959 999 993	-4.9	0.000 000	-0.001
	100 %	0	3959 999 995	-3.2	0.000 000	-0.001
	100 %	+10	3959 999 995	-3.6	0.000 000	-0.001
	100 %	+30	3959 999 991	-7.0	0.000 000	-0.002
	100 %	+40	3959 999 992	-6.4	0.000 000	-0.002
	100 %	+50	3959 999 992	-6.3	0.000 000	-0.002
	Batt. Endpoint	+20	3959 999 993	-5.2	0.000 000	-0.001

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3725.010	100 %	+20(Ref)	3725 009 995	0.0	0.000 000	0.000
	100 %	-30	3725 009 990	-4.8	0.000 000	-0.001
	100 %	-20	3725 009 991	-4.4	0.000 000	-0.001
	100 %	-10	3725 009 991	-3.6	0.000 000	-0.001
	100 %	0	3725 009 990	-4.8	0.000 000	-0.001
	100 %	+10	3725 009 989	-6.5	0.000 000	-0.002
	100 %	+30	3725 009 990	-5.5	0.000 000	-0.001
	100 %	+40	3725 009 991	-4.4	0.000 000	-0.001
	100 %	+50	3725 009 991	-4.0	0.000 000	-0.001
	Batt. Endpoint	+20	3725 009 988	-7.0	0.000 000	-0.002
3954.990	100 %	+20(Ref)	3954 989 996	0.0	0.000 000	0.000
	100 %	-30	3954 989 991	-4.5	0.000 000	-0.001
	100 %	-20	3954 989 993	-3.3	0.000 000	-0.001
	100 %	-10	3954 989 992	-4.3	0.000 000	-0.001
	100 %	0	3954 989 990	-6.3	0.000 000	-0.002
	100 %	+10	3954 989 991	-4.9	0.000 000	-0.001
	100 %	+30	3954 989 991	-4.8	0.000 000	-0.001
	100 %	+40	3954 989 994	-2.3	0.000 000	-0.001
	100 %	+50	3954 989 990	-6.0	0.000 000	-0.002
	Batt. Endpoint	+20	3954 989 992	-3.8	0.000 000	-0.001

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3730.020	100 %	+20(Ref)	3730 019 998	0.0	0.000 000	0.000
	100 %	-30	3730 019 994	-4.1	0.000 000	-0.001
	100 %	-20	3730 019 993	-4.6	0.000 000	-0.001
	100 %	-10	3730 019 990	-7.4	0.000 000	-0.002
	100 %	0	3730 019 994	-3.3	0.000 000	-0.001
	100 %	+10	3730 019 996	-2.0	0.000 000	-0.001
	100 %	+30	3730 019 994	-3.4	0.000 000	-0.001
	100 %	+40	3730 019 996	-1.9	0.000 000	0.000
	100 %	+50	3730 019 994	-4.1	0.000 000	-0.001
	Batt. Endpoint	+20	3730 019 995	-3.2	0.000 000	-0.001
3949.980	100 %	+20(Ref)	3949 979 995	0.0	0.000 000	0.000
	100 %	-30	3949 979 992	-3.4	0.000 000	-0.001
	100 %	-20	3949 979 995	-0.5	0.000 000	0.000
	100 %	-10	3949 979 992	-3.3	0.000 000	-0.001
	100 %	0	3949 979 992	-3.6	0.000 000	-0.001
	100 %	+10	3949 979 991	-4.0	0.000 000	-0.001
	100 %	+30	3949 979 991	-3.7	0.000 000	-0.001
	100 %	+40	3949 979 988	-7.4	0.000 000	-0.002
	100 %	+50	3949 979 992	-3.5	0.000 000	-0.001
	Batt. Endpoint	+20	3949 979 991	-3.9	0.000 000	-0.001

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3735.000	100 %	+20(Ref)	3734 999 996	0.0	0.000 000	0.000
	100 %	-30	3734 999 991	-4.6	0.000 000	-0.001
	100 %	-20	3734 999 992	-3.8	0.000 000	-0.001
	100 %	-10	3734 999 992	-3.2	0.000 000	-0.001
	100 %	0	3734 999 990	-5.2	0.000 000	-0.001
	100 %	+10	3734 999 990	-5.8	0.000 000	-0.002
	100 %	+30	3734 999 994	-1.3	0.000 000	0.000
	100 %	+40	3734 999 992	-3.4	0.000 000	-0.001
	100 %	+50	3734 999 991	-4.8	0.000 000	-0.001
	Batt. Endpoint	+20	3734 999 992	-3.6	0.000 000	-0.001
3945.000	100 %	+20(Ref)	3944 999 995	0.0	0.000 000	0.000
	100 %	-30	3944 999 987	-8.4	0.000 000	-0.002
	100 %	-20	3944 999 990	-5.1	0.000 000	-0.001
	100 %	-10	3944 999 989	-6.5	0.000 000	-0.002
	100 %	0	3944 999 988	-7.0	0.000 000	-0.002
	100 %	+10	3944 999 994	-1.3	0.000 000	0.000
	100 %	+30	3944 999 989	-6.6	0.000 000	-0.002
	100 %	+40	3944 999 992	-3.5	0.000 000	-0.001
	100 %	+50	3944 999 989	-6.8	0.000 000	-0.002
	Batt. Endpoint	+20	3944 999 990	-5.6	0.000 000	-0.001

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3740.010	100 %	+20(Ref)	3740 009 997	0.0	0.000 000	0.000
	100 %	-30	3740 009 992	-4.8	0.000 000	-0.001
	100 %	-20	3740 009 992	-5.5	0.000 000	-0.001
	100 %	-10	3740 009 995	-1.7	0.000 000	0.000
	100 %	0	3740 009 993	-4.0	0.000 000	-0.001
	100 %	+10	3740 009 993	-4.0	0.000 000	-0.001
	100 %	+30	3740 009 994	-2.8	0.000 000	-0.001
	100 %	+40	3740 009 992	-4.8	0.000 000	-0.001
	100 %	+50	3740 009 992	-5.5	0.000 000	-0.001
	Batt. Endpoint	+20	3740 009 992	-4.9	0.000 000	-0.001
3939.990	100 %	+20(Ref)	3939 989 999	0.0	0.000 000	0.000
	100 %	-30	3939 989 995	-3.9	0.000 000	-0.001
	100 %	-20	3939 989 994	-4.4	0.000 000	-0.001
	100 %	-10	3939 989 993	-5.1	0.000 000	-0.001
	100 %	0	3939 989 996	-2.3	0.000 000	-0.001
	100 %	+10	3939 989 995	-3.8	0.000 000	-0.001
	100 %	+30	3939 989 994	-4.8	0.000 000	-0.001
	100 %	+40	3939 989 996	-2.1	0.000 000	-0.001
	100 %	+50	3939 989 994	-4.6	0.000 000	-0.001
	Batt. Endpoint	+20	3939 989 995	-3.9	0.000 000	-0.001

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

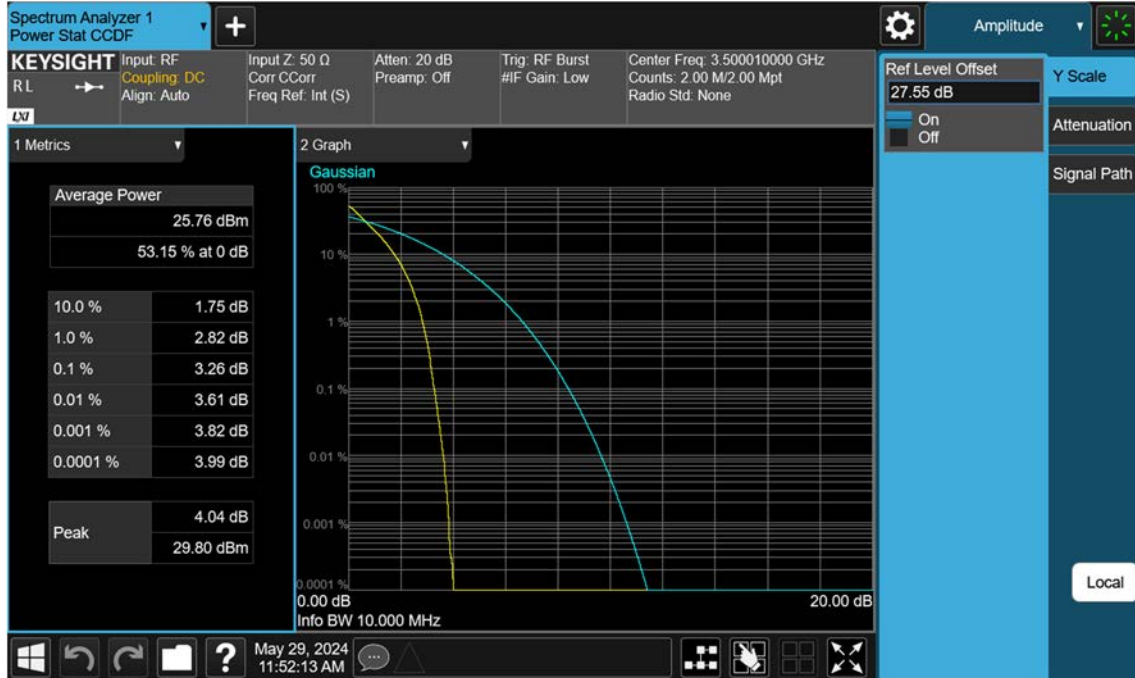
Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3745.020	100 %	+20(Ref)	3745 019 995	0.0	0.000 000	0.000
	100 %	-30	3745 019 992	-3.5	0.000 000	-0.001
	100 %	-20	3745 019 993	-2.8	0.000 000	-0.001
	100 %	-10	3745 019 990	-5.4	0.000 000	-0.001
	100 %	0	3745 019 993	-2.4	0.000 000	-0.001
	100 %	+10	3745 019 992	-3.8	0.000 000	-0.001
	100 %	+30	3745 019 993	-2.3	0.000 000	-0.001
	100 %	+40	3745 019 992	-3.8	0.000 000	-0.001
	100 %	+50	3745 019 992	-3.2	0.000 000	-0.001
	Batt. Endpoint	+20	3745 019 992	-3.0	0.000 000	-0.001
3934.980	100 %	+20(Ref)	3934 980 001	0.0	0.000 000	0.000
	100 %	-30	3934 980 001	0.6	0.000 000	0.000
	100 %	-20	3934 980 004	3.7	0.000 000	0.001
	100 %	-10	3934 980 001	0.7	0.000 000	0.000
	100 %	0	3934 980 004	3.0	0.000 000	0.001
	100 %	+10	3934 980 002	1.3	0.000 000	0.000
	100 %	+30	3934 980 002	1.1	0.000 000	0.000
	100 %	+40	3934 980 005	4.3	0.000 000	0.001
	100 %	+50	3934 980 000	-0.2	0.000 000	0.000
	Batt. Endpoint	+20	3934 980 003	2.4	0.000 000	0.001

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 3.880 VDC
- ▣ Batt. Endpoint: 3.300 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3750.000	100 %	+20(Ref)	3749 999 997	0.0	0.000 000	0.000
	100 %	-30	3749 999 992	-5.1	0.000 000	-0.001
	100 %	-20	3749 999 994	-3.0	0.000 000	-0.001
	100 %	-10	3749 999 993	-4.3	0.000 000	-0.001
	100 %	0	3749 999 993	-4.4	0.000 000	-0.001
	100 %	+10	3749 999 993	-4.3	0.000 000	-0.001
	100 %	+30	3749 999 995	-2.6	0.000 000	-0.001
	100 %	+40	3749 999 993	-4.5	0.000 000	-0.001
	100 %	+50	3749 999 993	-4.5	0.000 000	-0.001
	Batt. Endpoint	+20	3749 999 993	-3.8	0.000 000	-0.001
3930.000	100 %	+20(Ref)	3929 999 995	0.0	0.000 000	0.000
	100 %	-30	3929 999 988	-6.4	0.000 000	-0.002
	100 %	-20	3929 999 989	-6.3	0.000 000	-0.002
	100 %	-10	3929 999 990	-5.2	0.000 000	-0.001
	100 %	0	3929 999 989	-6.2	0.000 000	-0.002
	100 %	+10	3929 999 990	-4.7	0.000 000	-0.001
	100 %	+30	3929 999 988	-6.7	0.000 000	-0.002
	100 %	+40	3929 999 989	-6.1	0.000 000	-0.002
	100 %	+50	3929 999 989	-6.2	0.000 000	-0.002
	Batt. Endpoint	+20	3929 999 989	-6.3	0.000 000	-0.002

10. TEST PLOTS(3450 MHz - 3550 MHz)

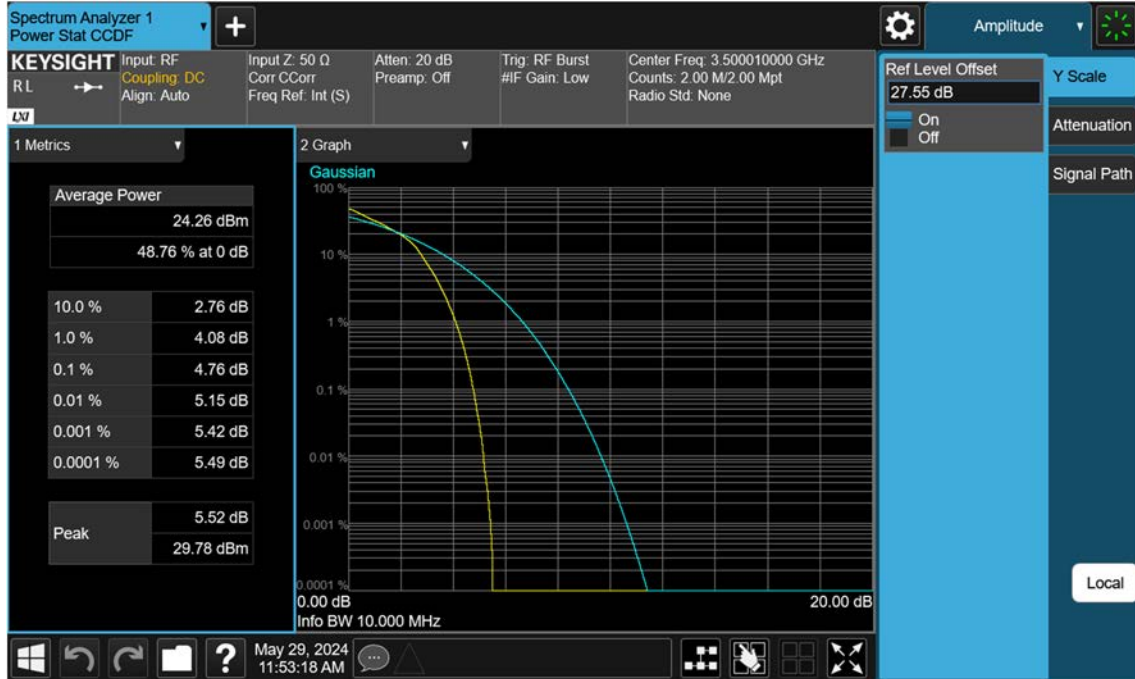
n77(3450~3550 MHz)_10 M_PAR_Mid_BPSK_FullRB



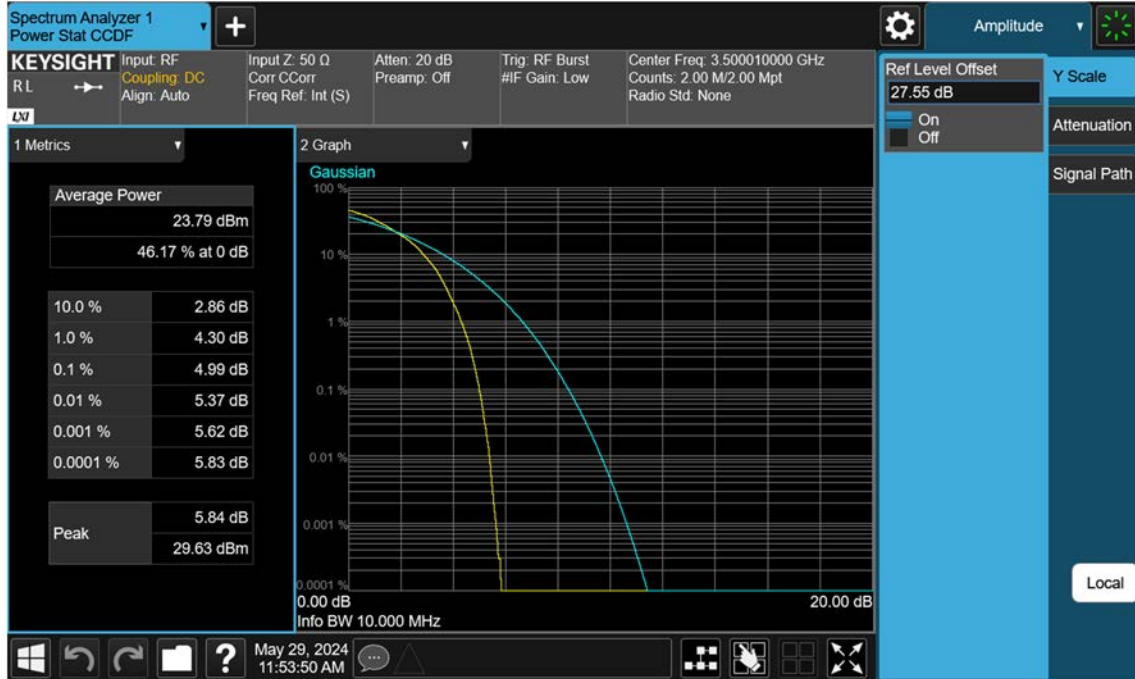
n77(3450~3550 MHz)_10 M_PAR_Mid_QPSK_FullRB



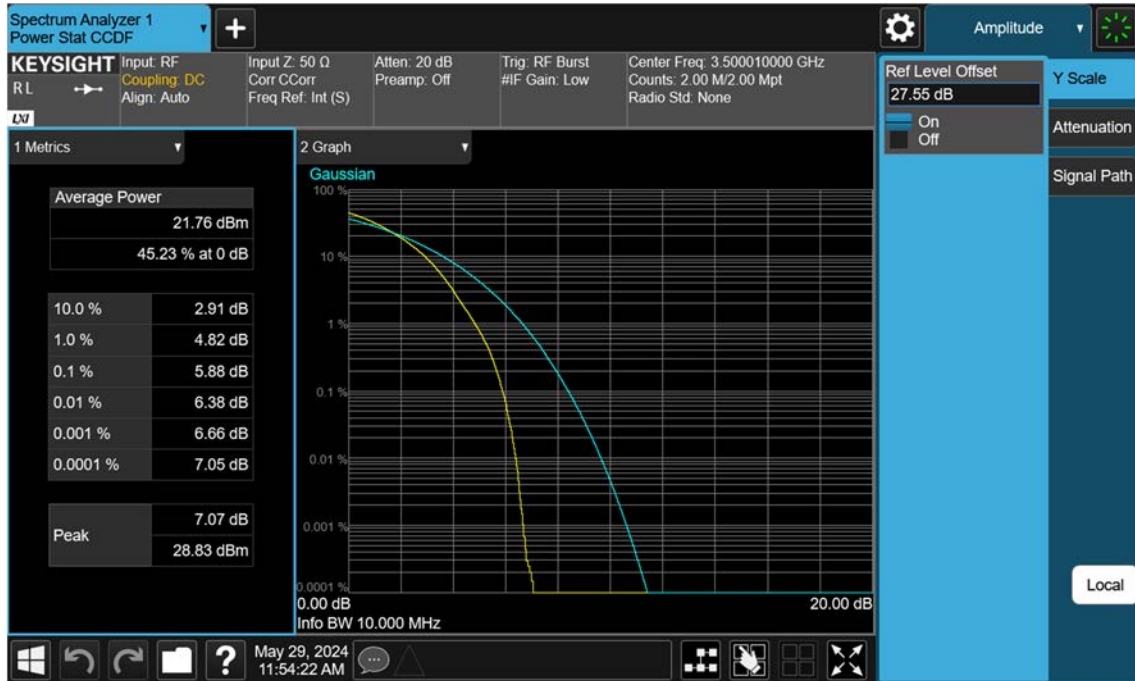
n77(3450~3550 MHz)_10 M_PAR_Mid_16QAM_FullRB



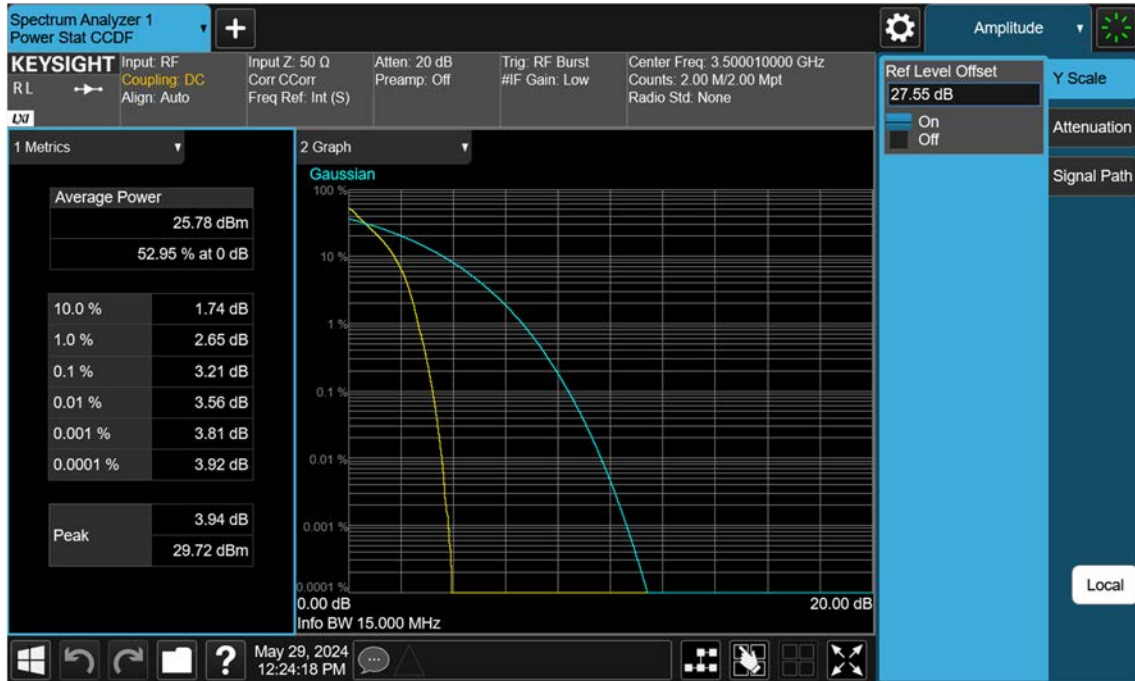
n77(3450~3550 MHz)_10 M_PAR_Mid_64QAM_FullRB



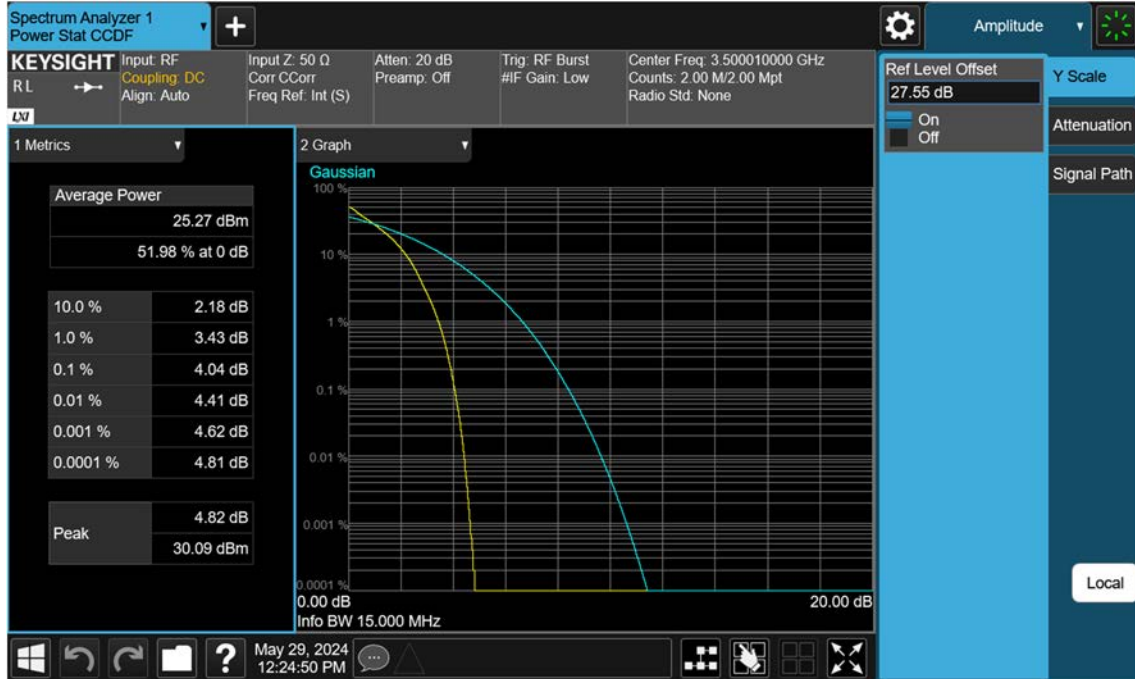
n77(3450~3550 MHz)_10 M_PAR_Mid_256QAM_FullRB



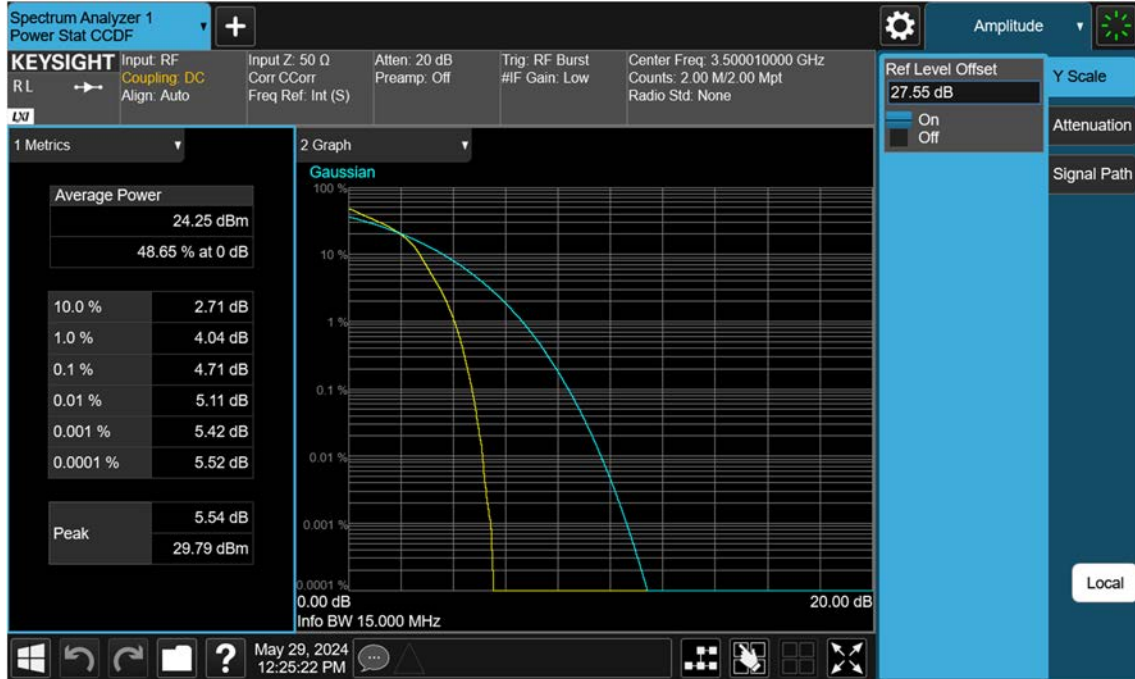
n77(3450~3550 MHz)_15 M_PAR_Mid_BPSK_FullRB



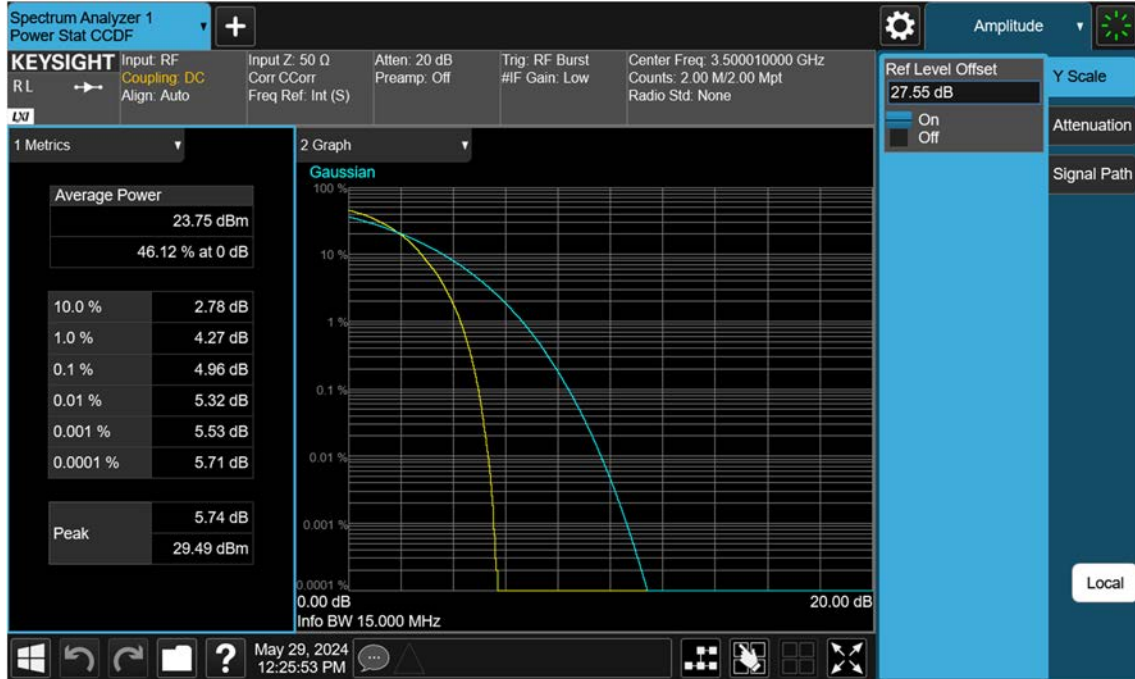
n77(3450~3550 MHz)_15 M_PAR_Mid_QPSK_FullRB



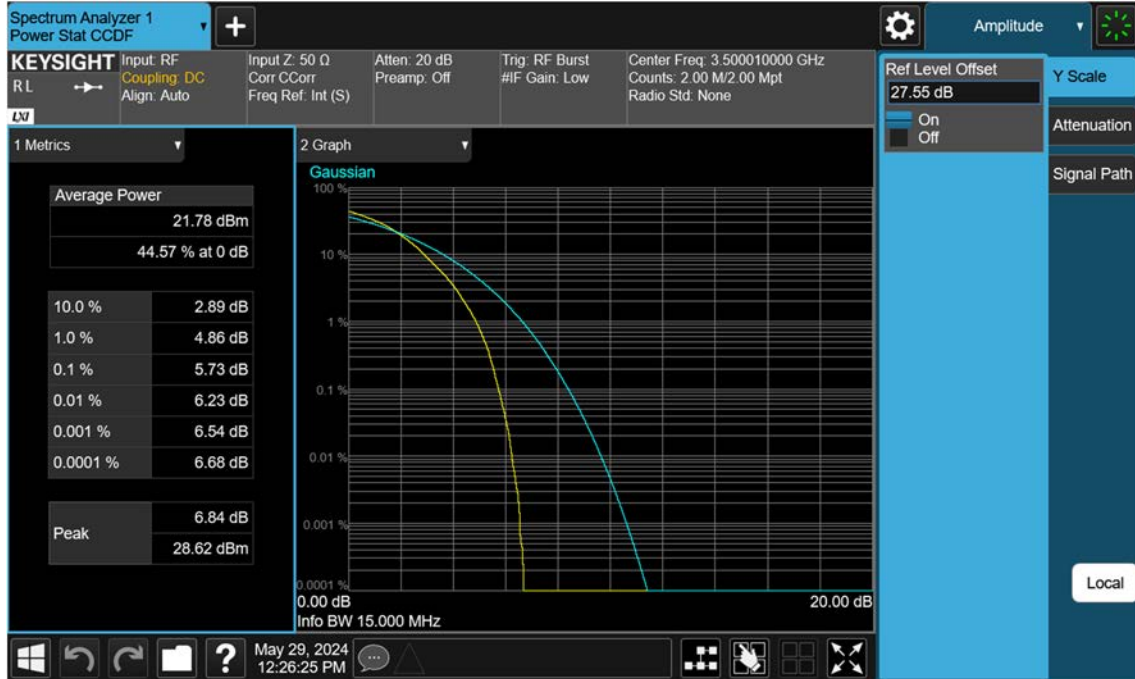
n77(3450~3550 MHz)_15 M_PAR_Mid_16QAM_FullRB



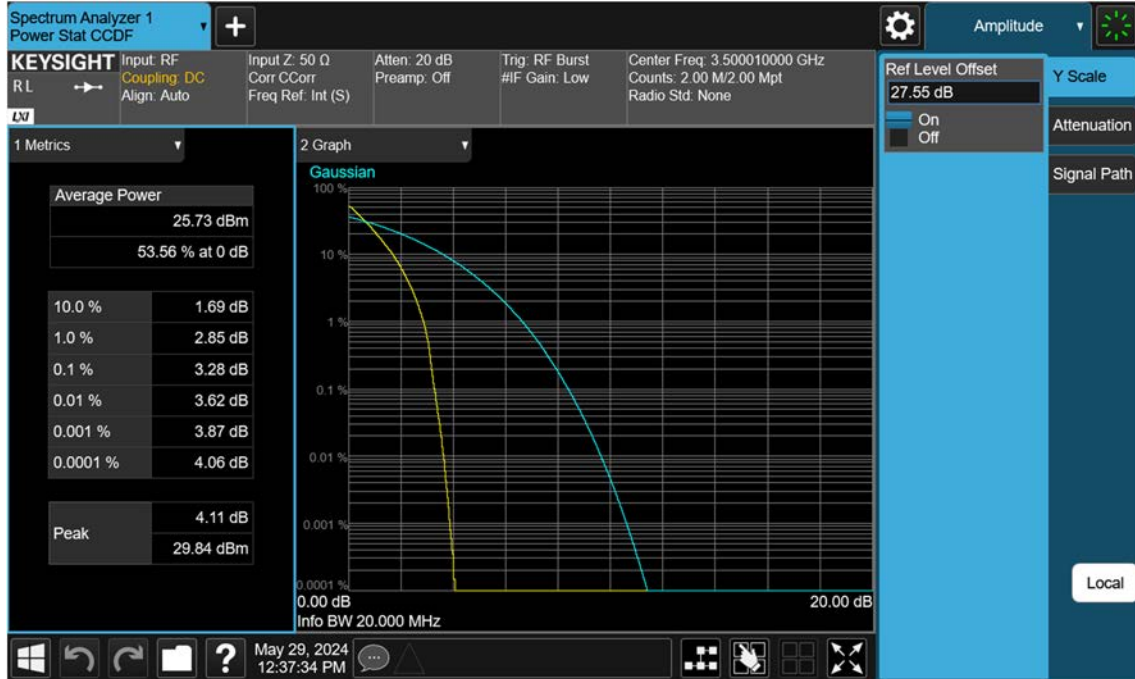
n77(3450~3550 MHz)_15 M_PAR_Mid_64QAM_FullRB



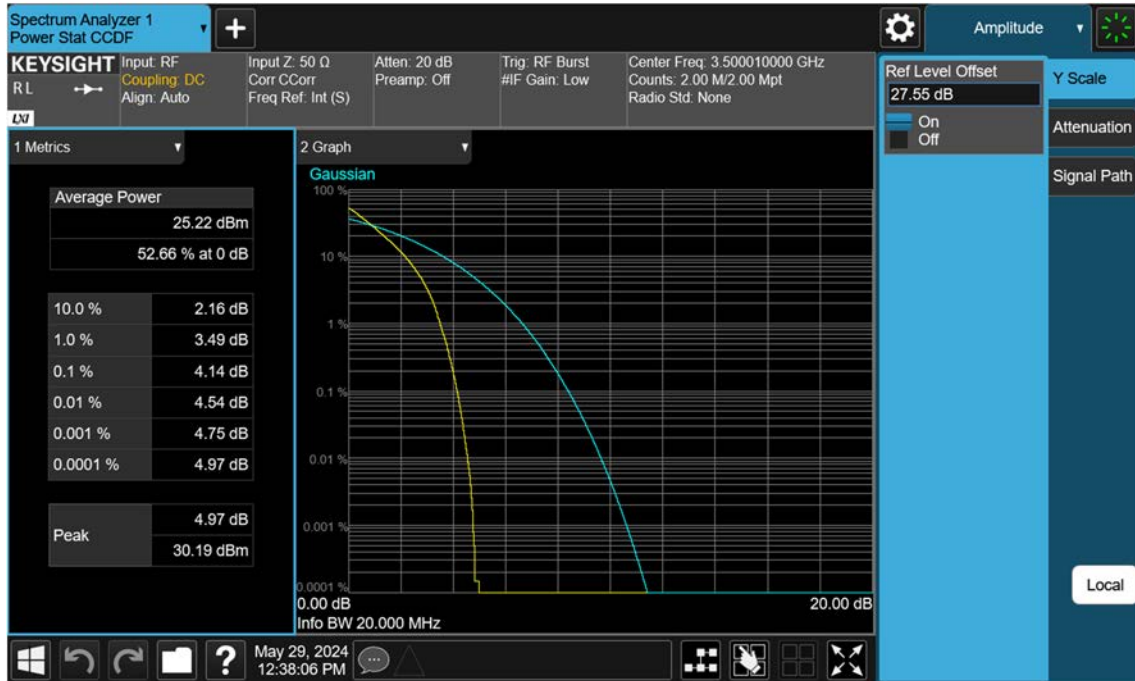
n77(3450~3550 MHz)_15 M_PAR_Mid_256QAM_FullRB



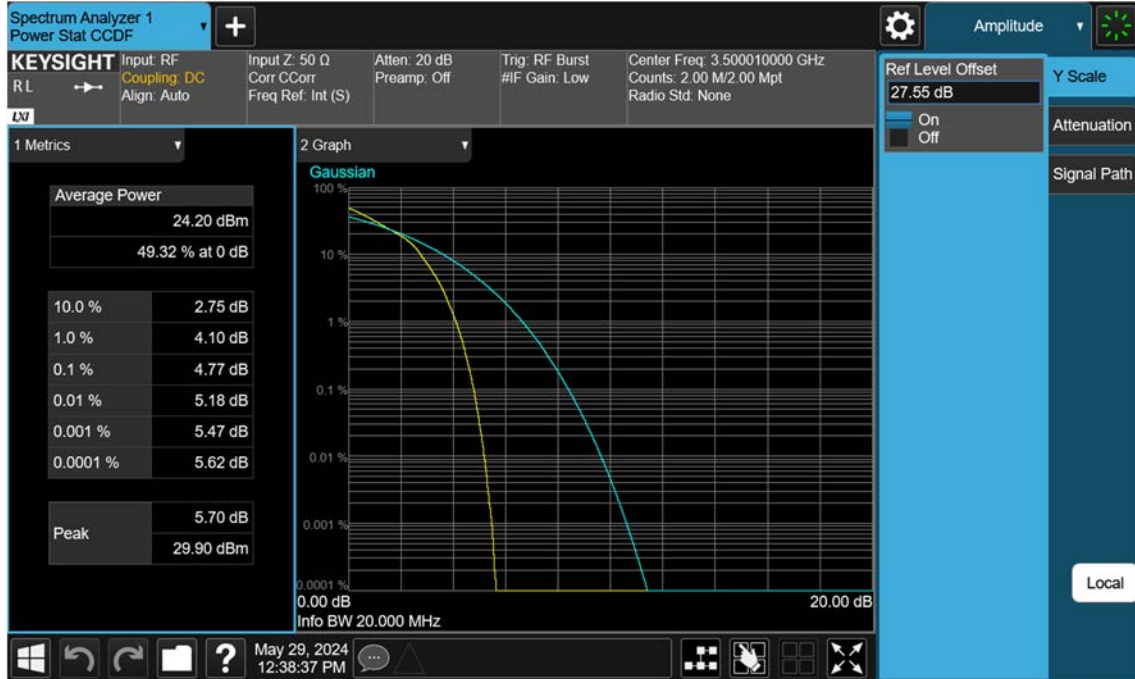
n77(3450~3550 MHz)_20 M_PAR_Mid_BPSK_FullRB



n77(3450~3550 MHz)_20 M_PAR_Mid_QPSK_FullRB



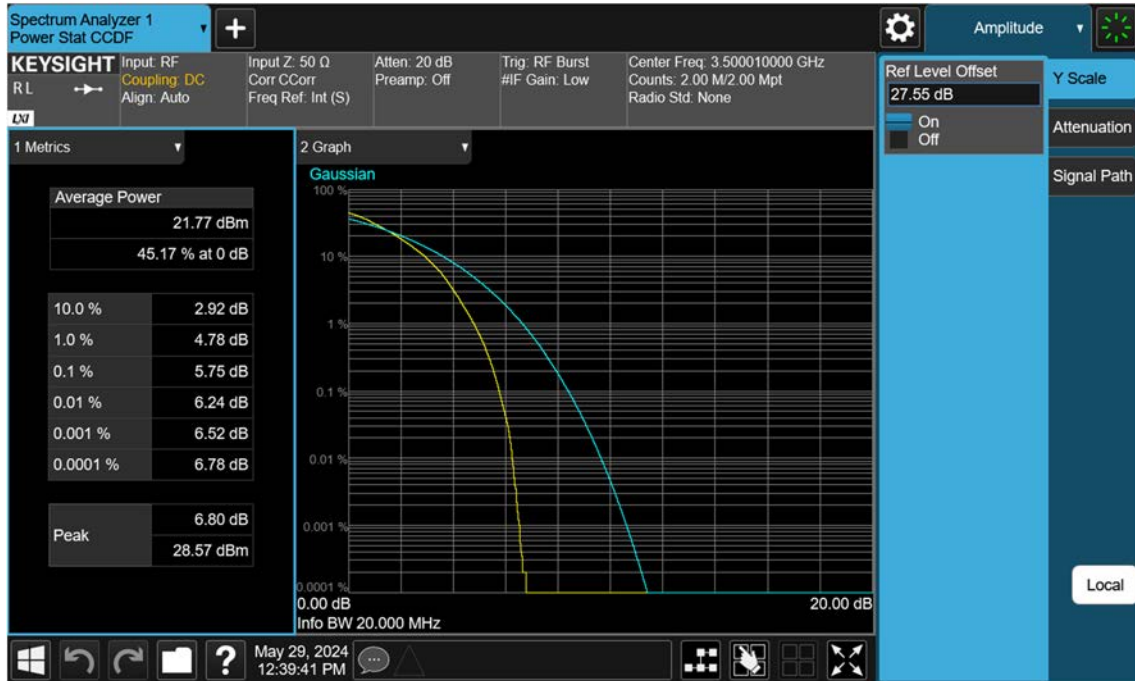
n77(3450~3550 MHz)_20 M_PAR_Mid_16QAM_FullRB



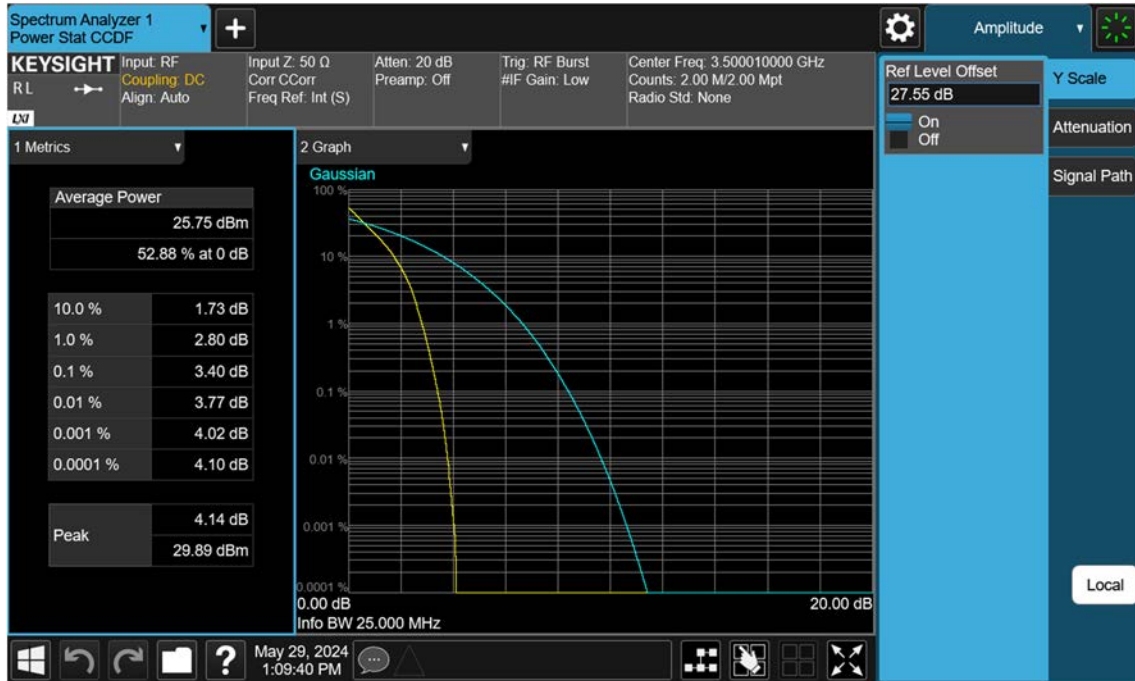
n77(3450~3550 MHz)_20 M_PAR_Mid_64QAM_FullRB



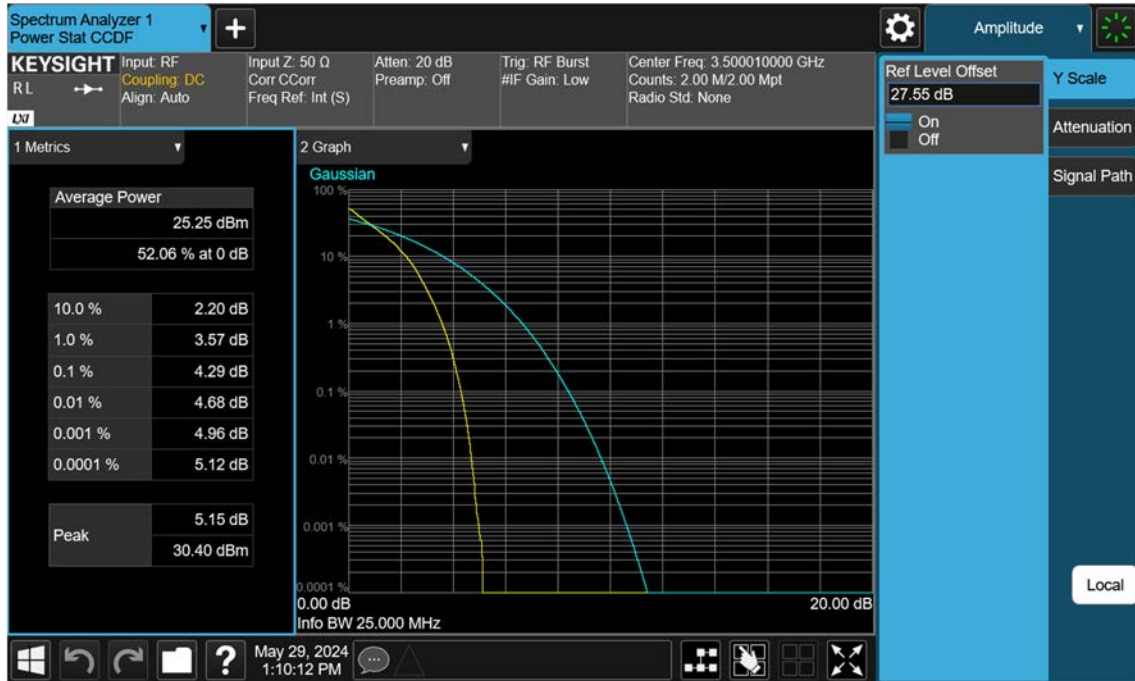
n77(3450~3550 MHz)_20 M_PAR_Mid_256QAM_FullRB



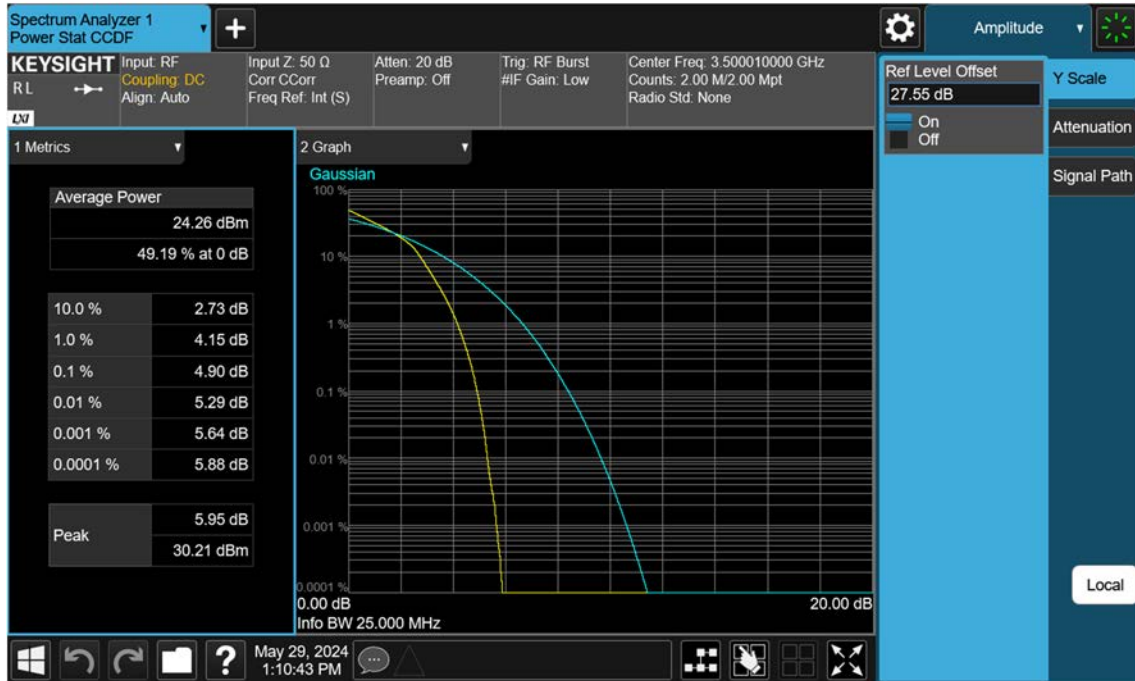
n77(3450~3550 MHz)_25 M_PAR_Mid_BPSK_FullRB



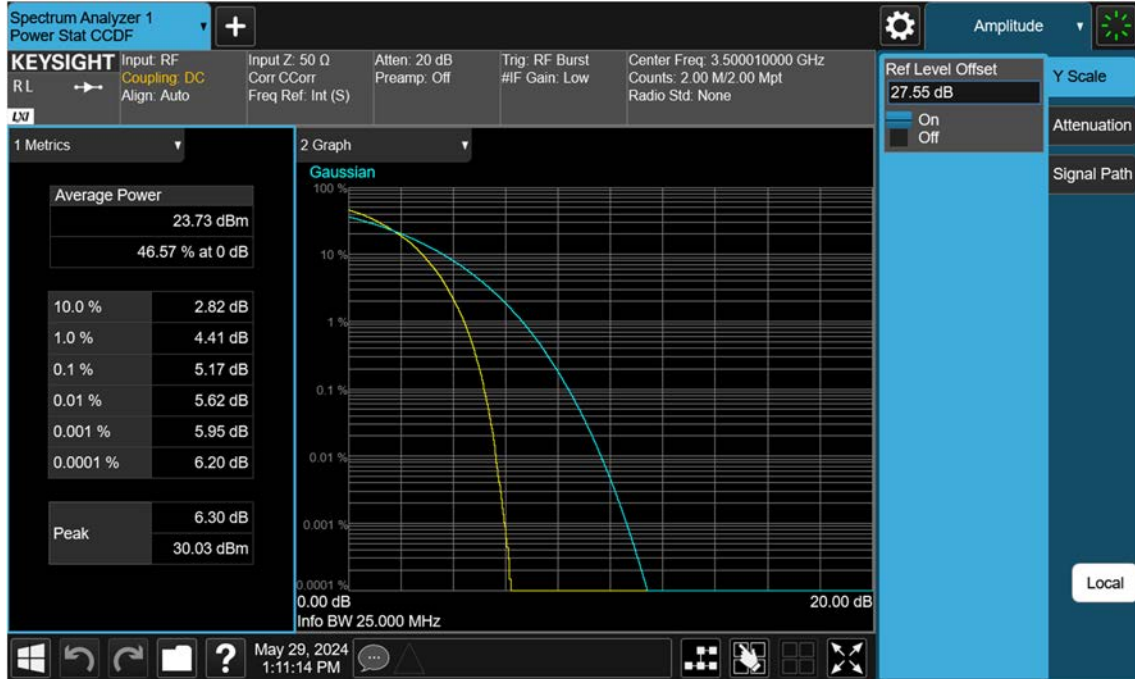
n77(3450~3550 MHz)_25 M_PAR_Mid_QPSK_FullRB



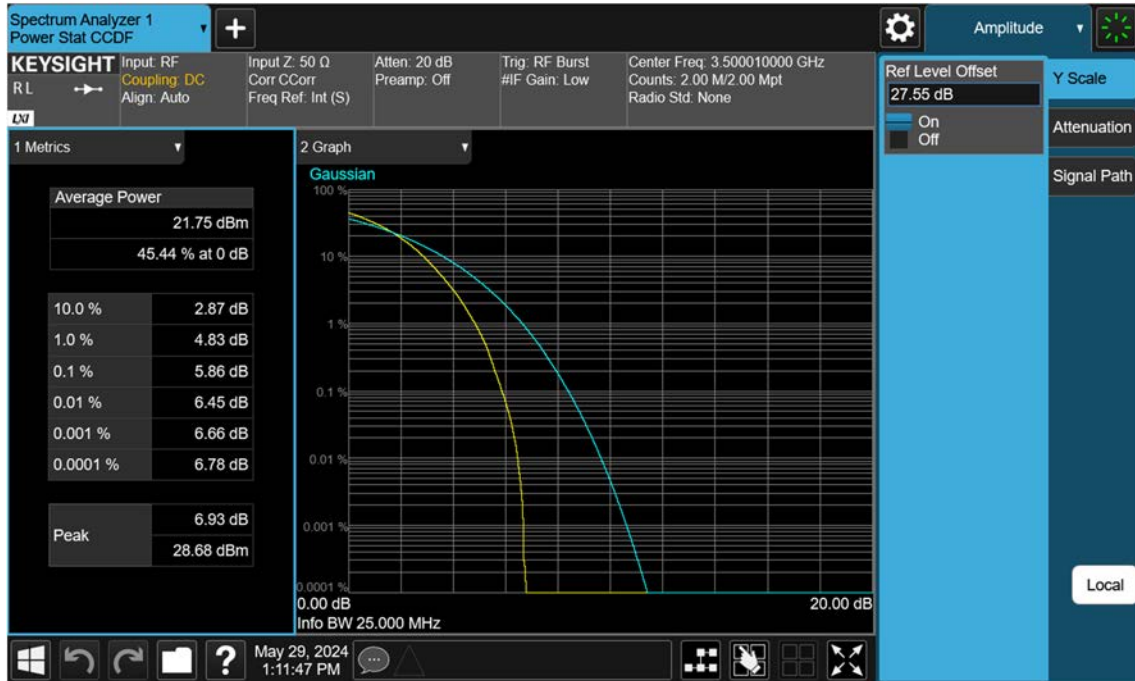
n77(3450~3550 MHz)_25 M_PAR_Mid_16QAM_FullRB



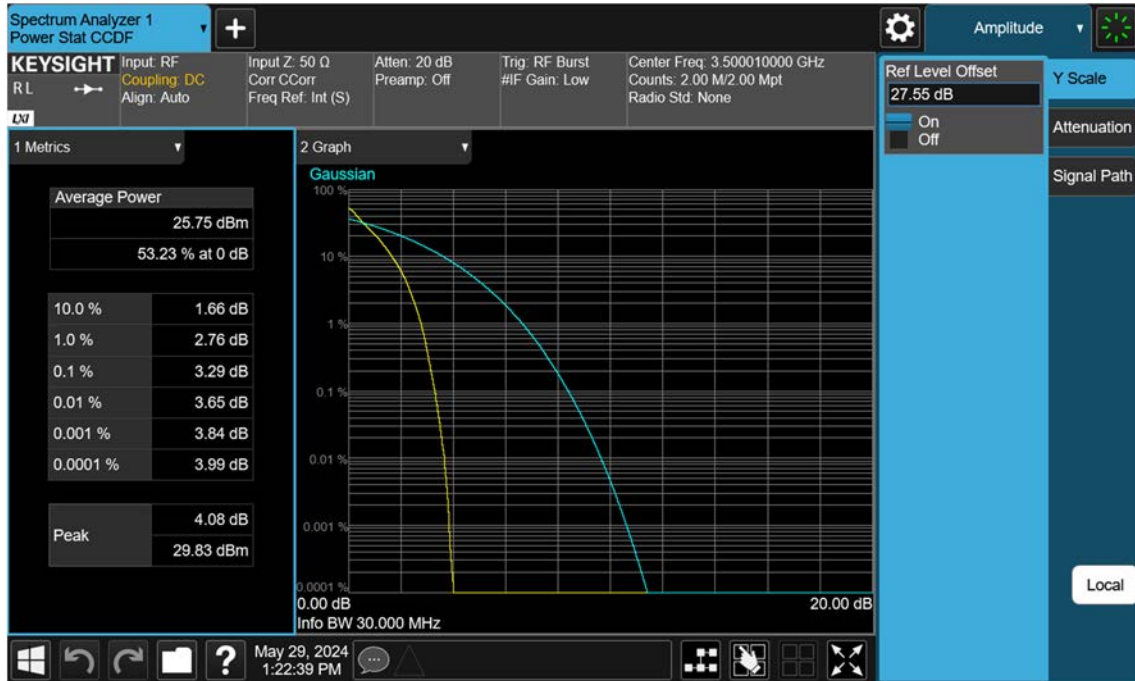
n77(3450~3550 MHz)_25 M_PAR_Mid_64QAM_FullRB



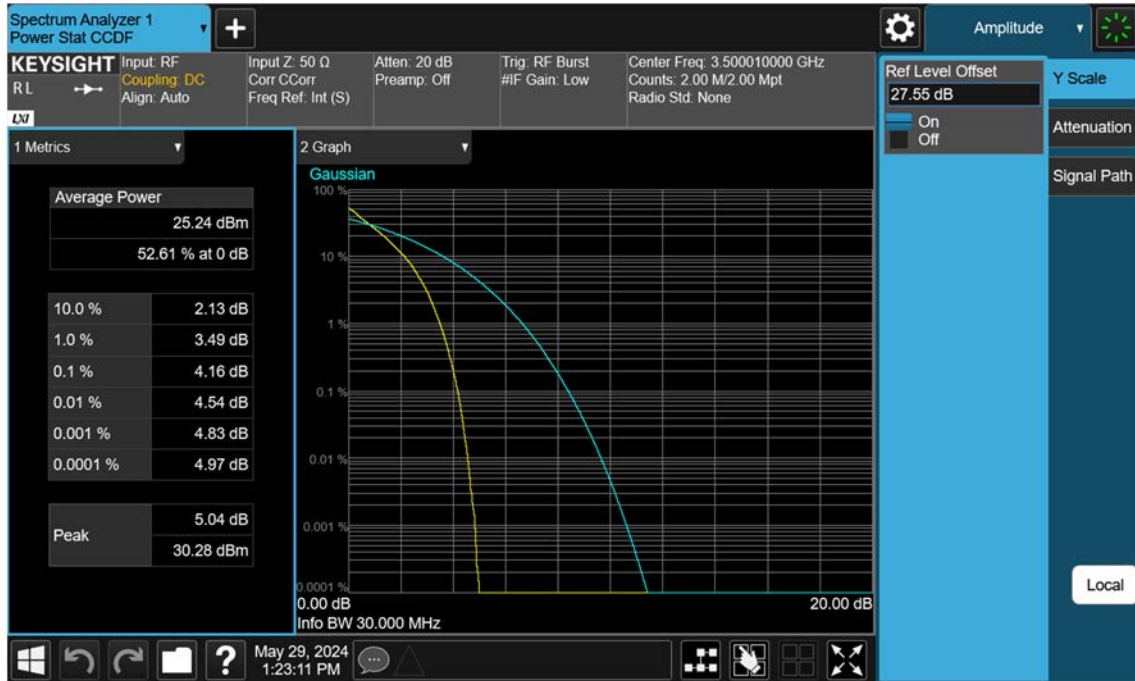
n77(3450~3550 MHz)_25 M_PAR_Mid_256QAM_FullRB



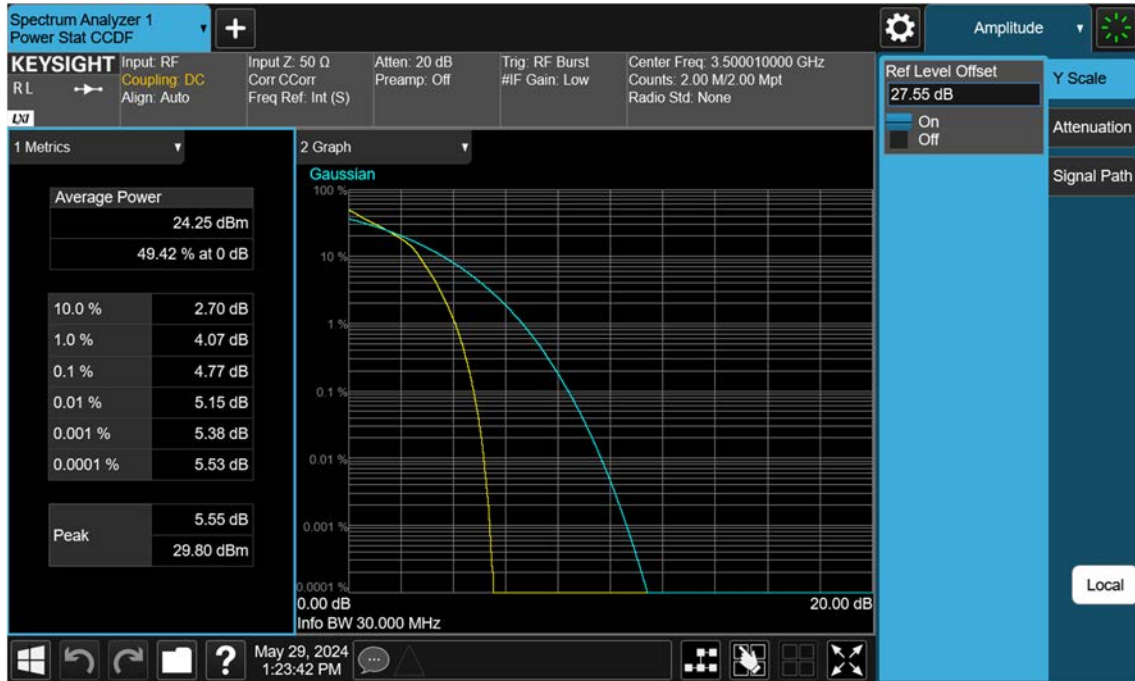
n77(3450~3550 MHz)_30 M_PAR_Mid_BPSK_FullRB



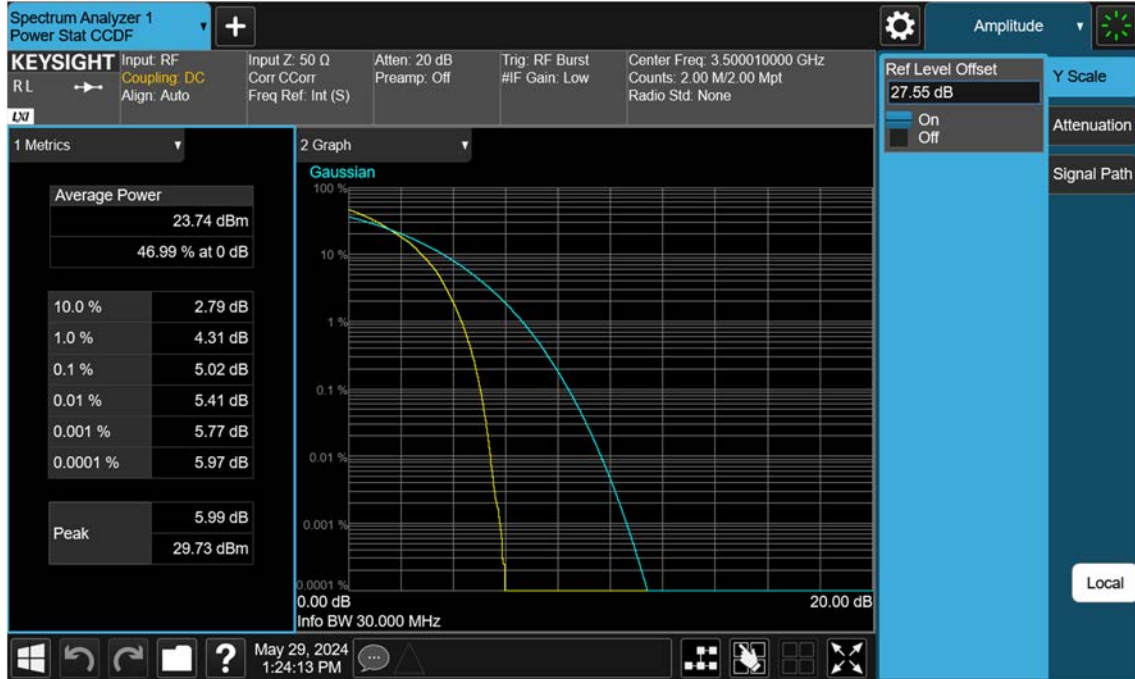
n77(3450~3550 MHz)_30 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_30 M_PAR_Mid_16QAM_FullRB



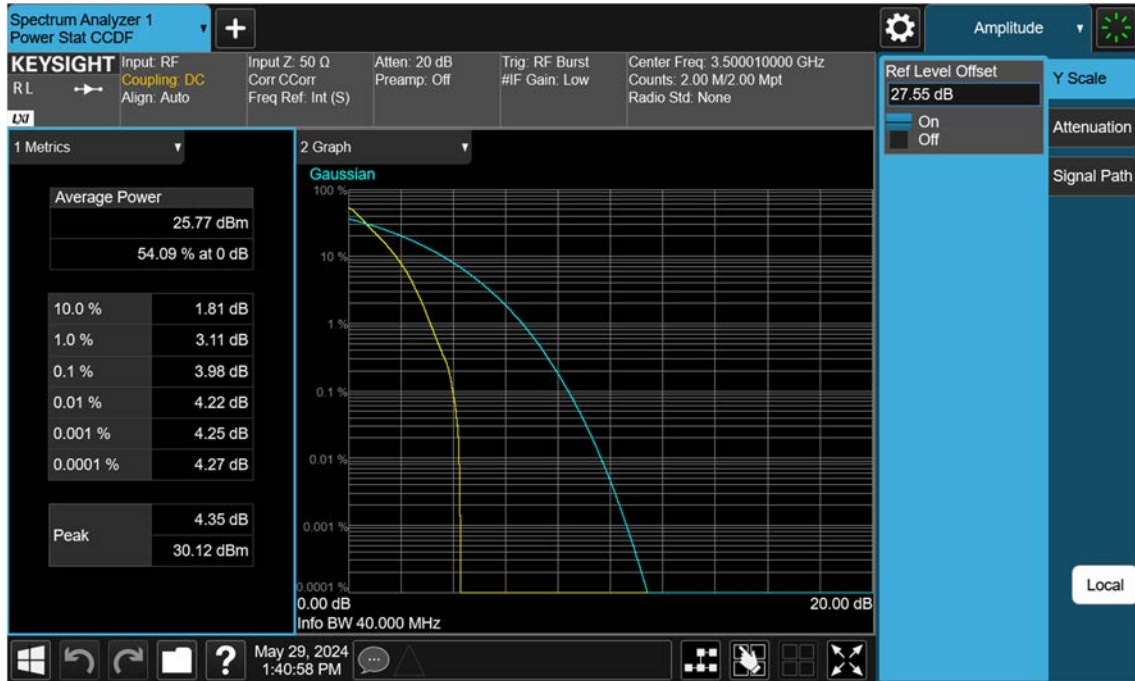
n77(3450~3550 MHz)_30 M_PAR_Mid_64QAM_FullRB



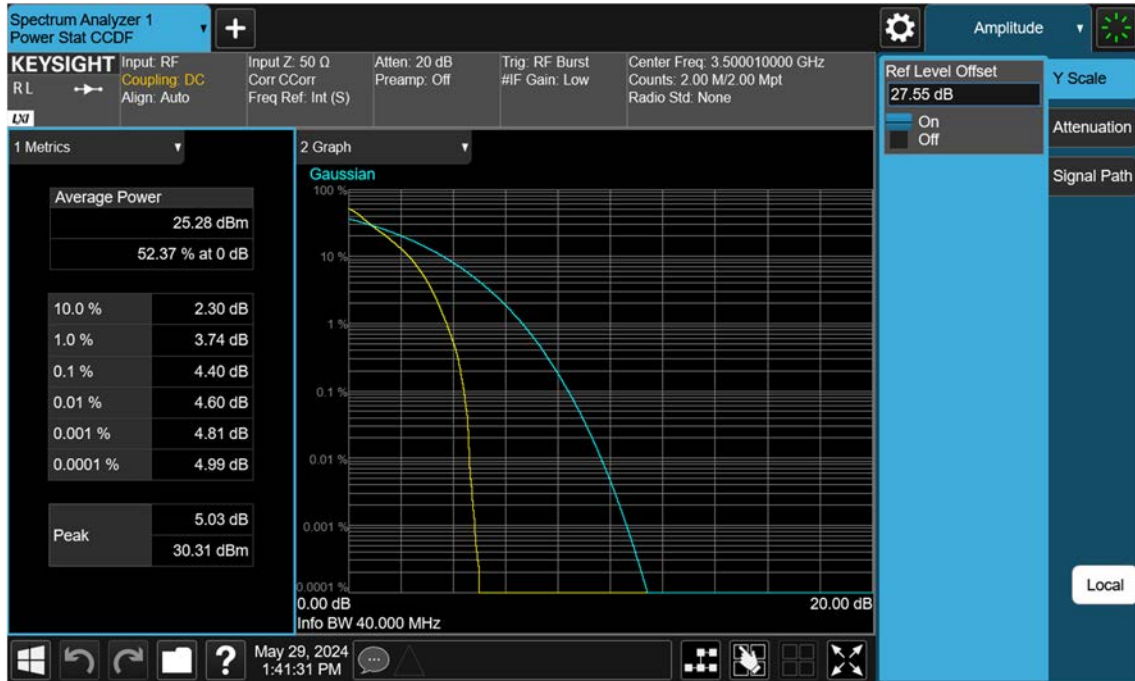
n77(3450~3550 MHz)_30 M_PAR_Mid_256QAM_FullRB



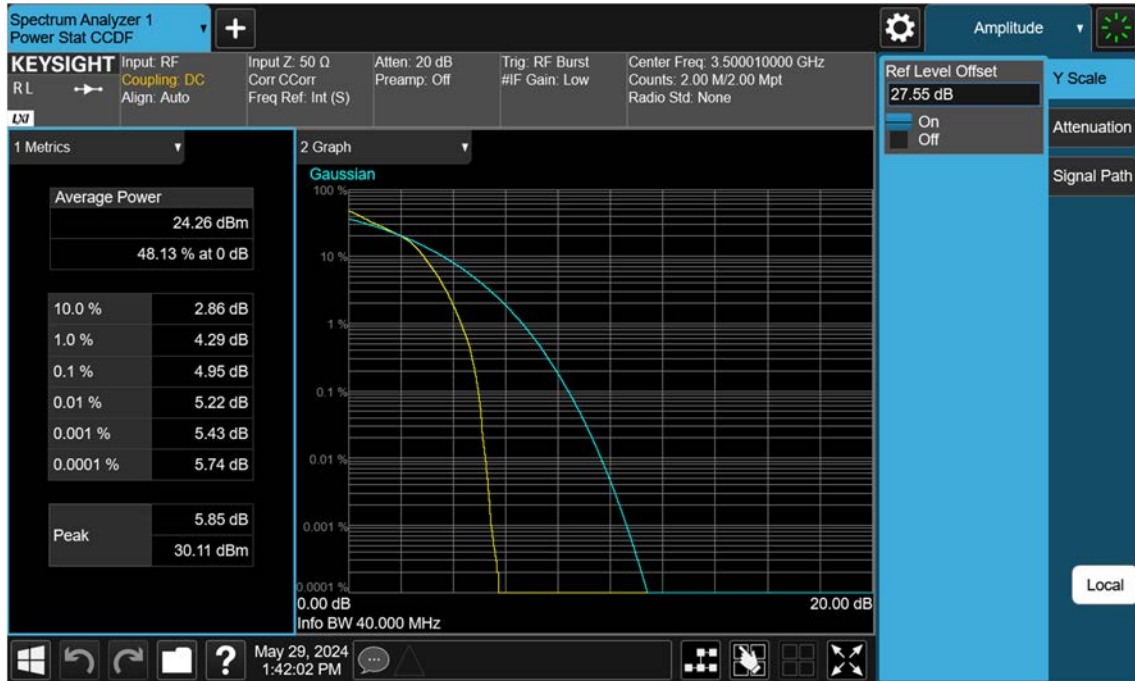
n77(3450~3550 MHz)_40 M_PAR_Mid_BPSK_FullRB



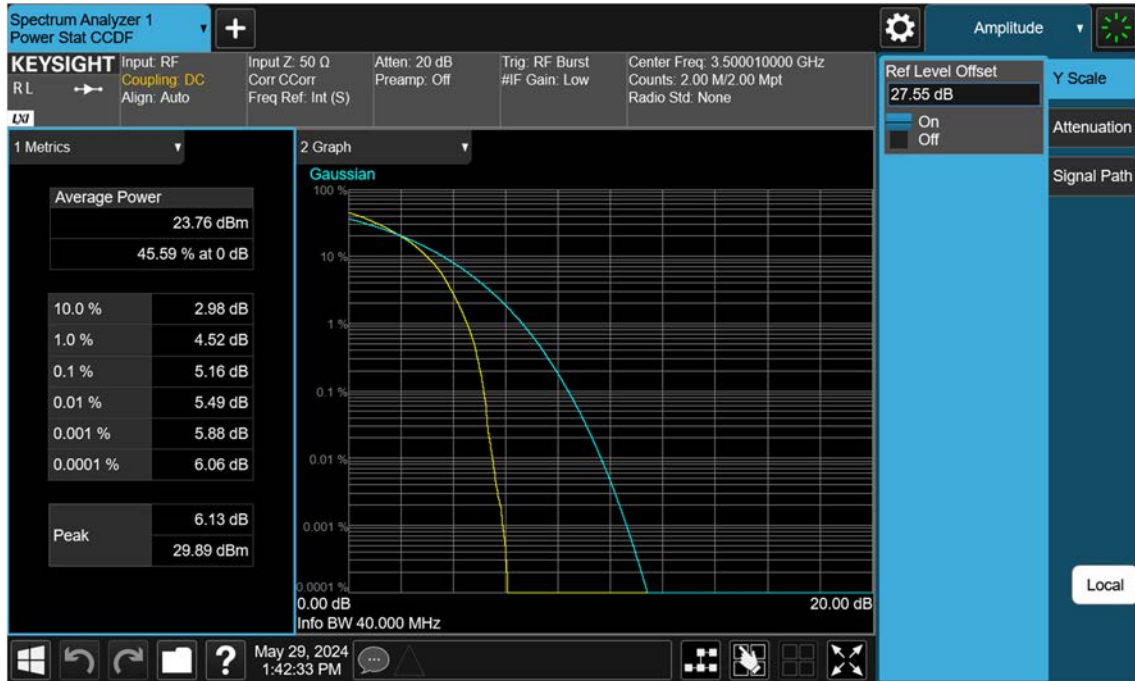
n77(3450~3550 MHz)_40 M_PAR_Mid_QPSK_FullRB



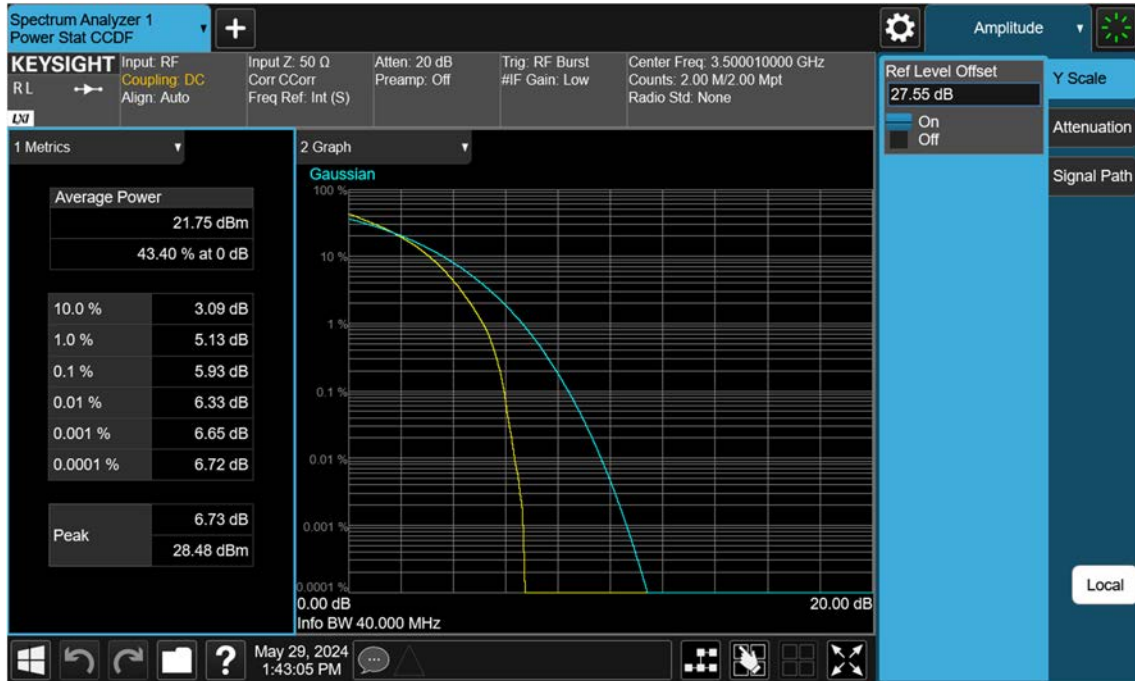
n77(3450~3550 MHz)_40 M_PAR_Mid_16QAM_FullRB



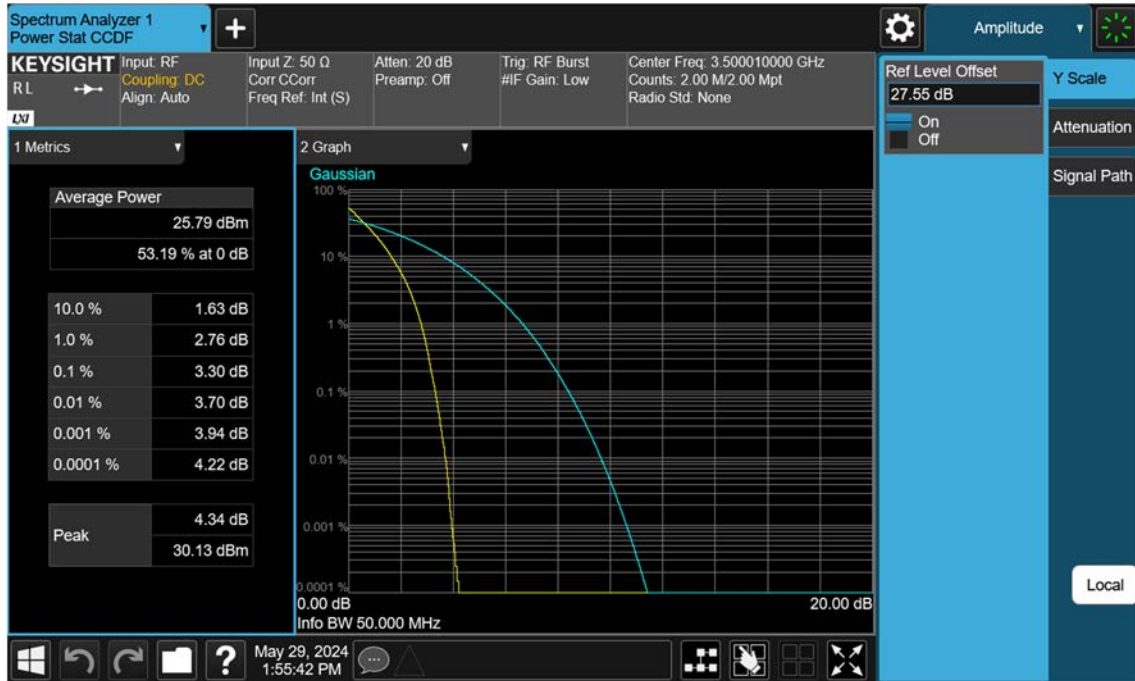
n77(3450~3550 MHz)_40 M_PAR_Mid_64QAM_FullRB



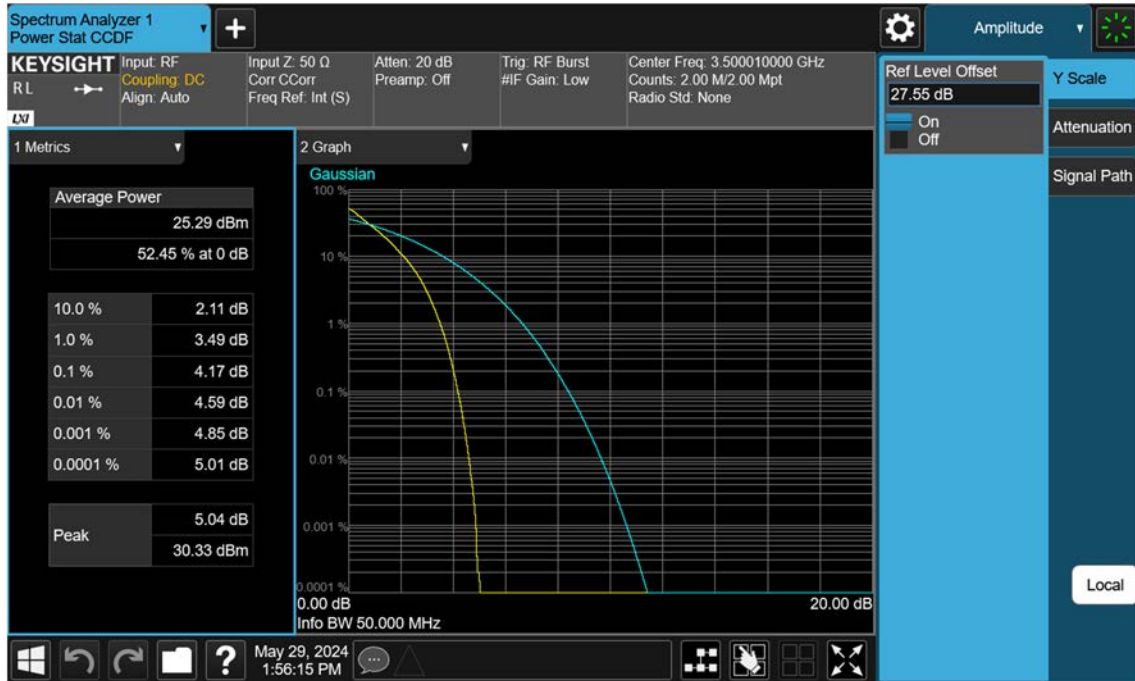
n77(3450~3550 MHz)_40 M_PAR_Mid_256QAM_FullRB



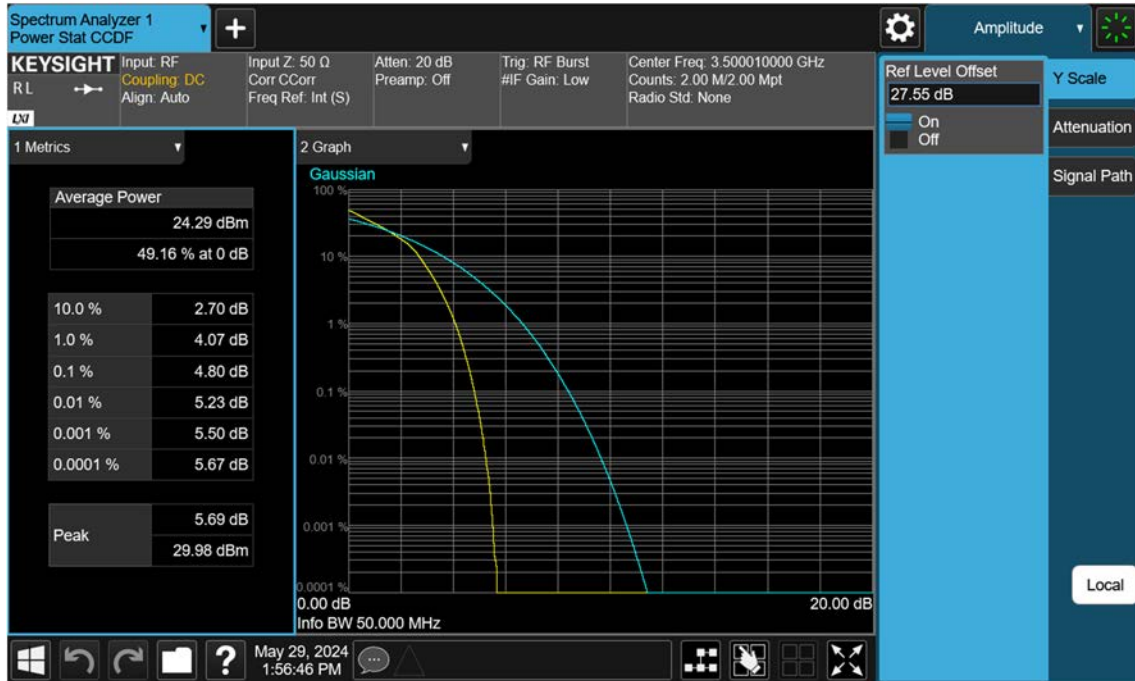
n77(3450~3550 MHz)_50 M_PAR_Mid_BPSK_FullRB



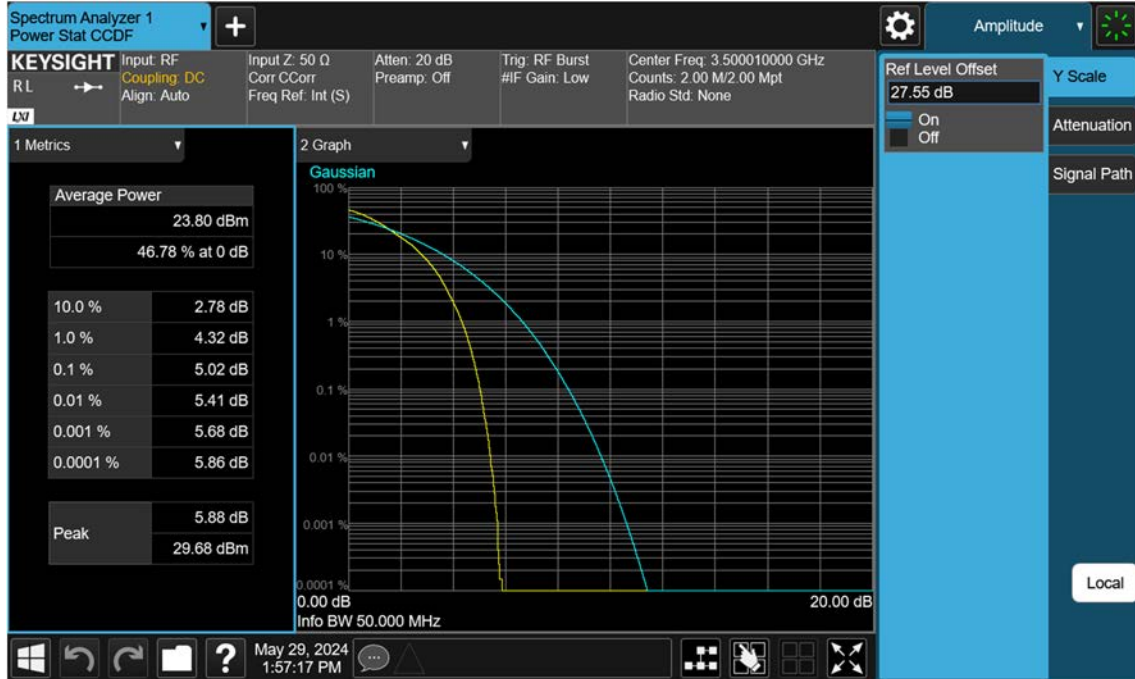
n77(3450~3550 MHz)_50 M_PAR_Mid_QPSK_FullRB



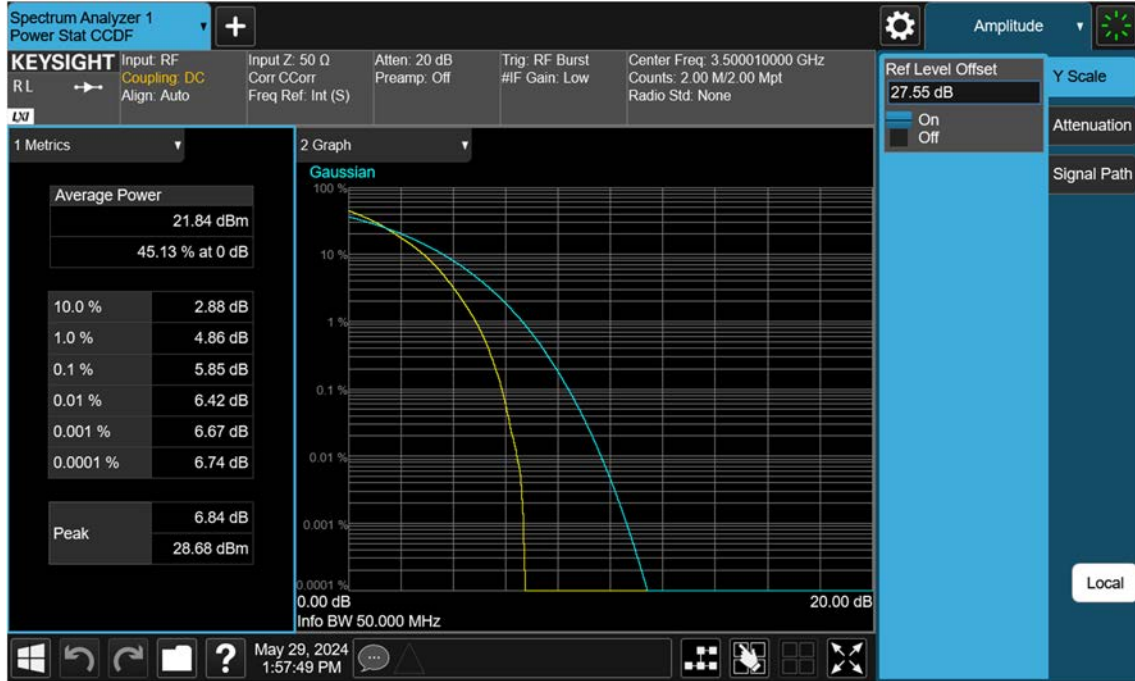
n77(3450~3550 MHz)_50 M_PAR_Mid_16QAM_FullRB



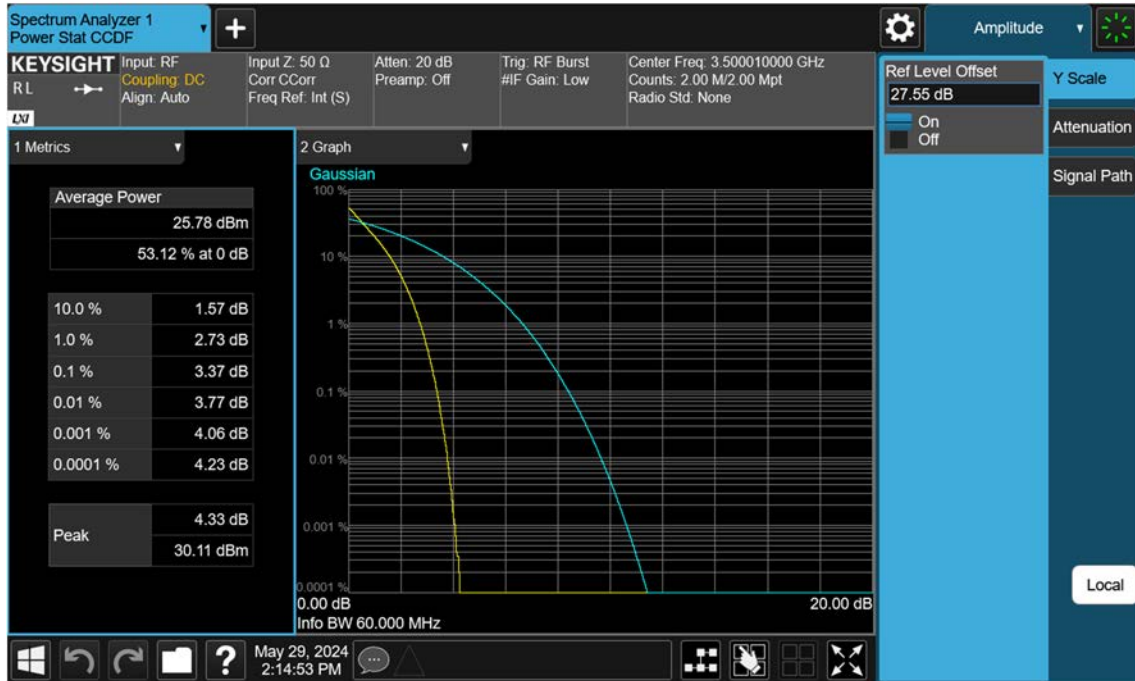
n77(3450~3550 MHz)_50 M_PAR_Mid_64QAM_FullRB



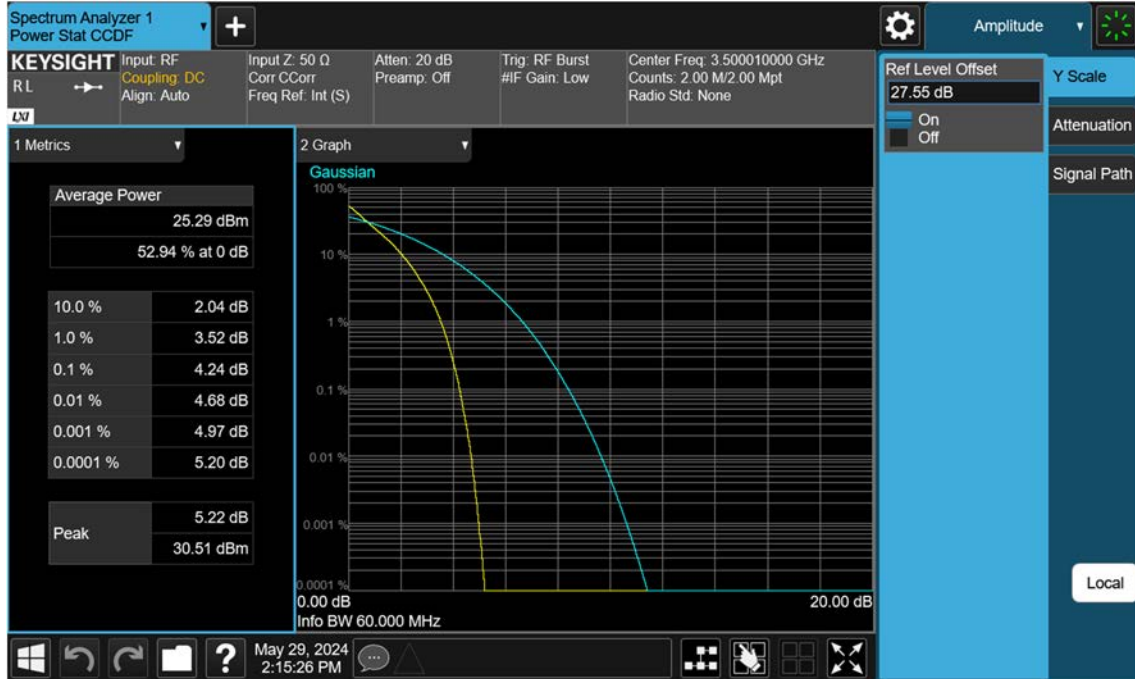
n77(3450~3550 MHz)_50 M_PAR_Mid_256QAM_FullRB



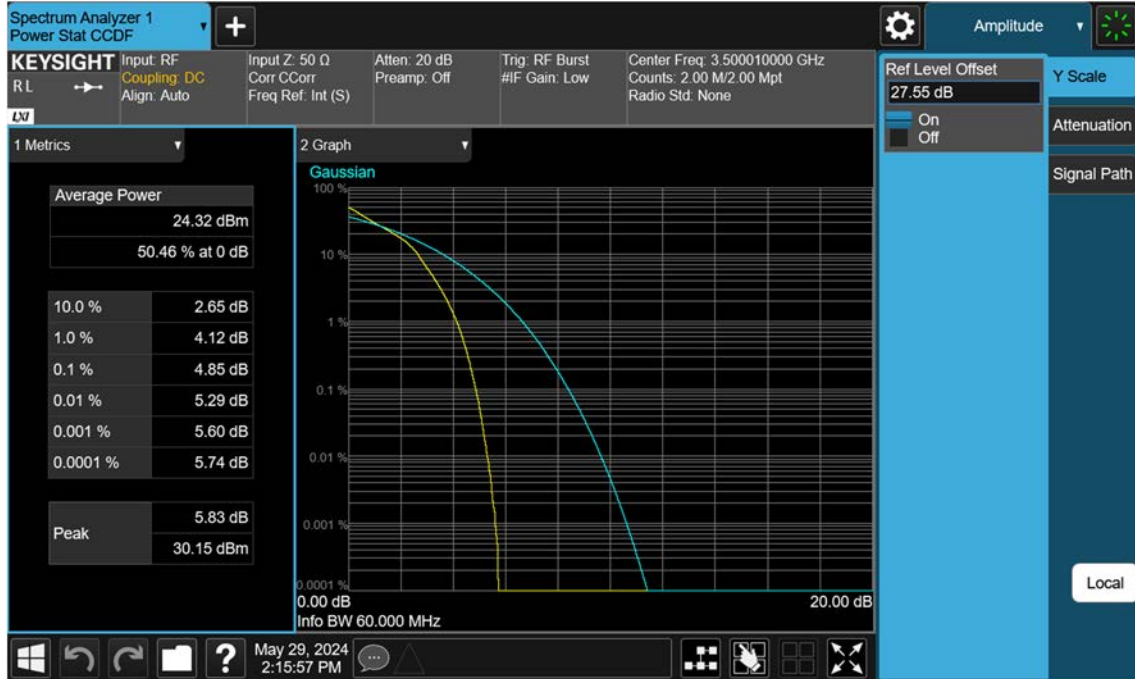
n77(3450~3550 MHz)_60 M_PAR_Mid_BPSK_FullRB



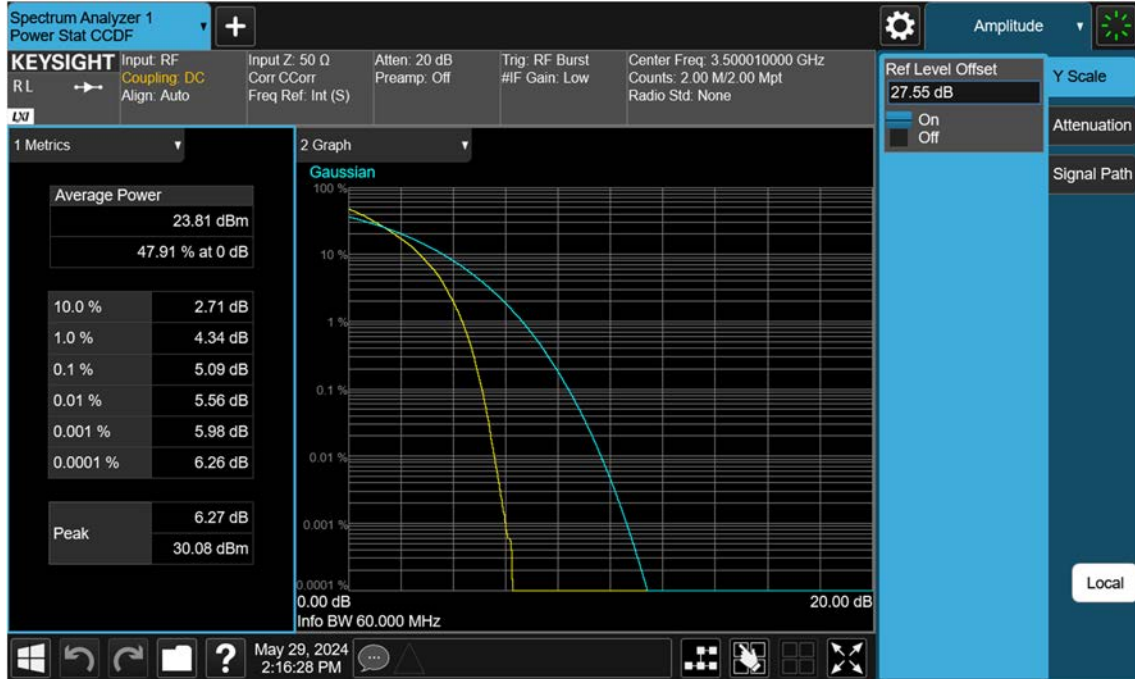
n77(3450~3550 MHz)_60 M_PAR_Mid_QPSK_FullRB



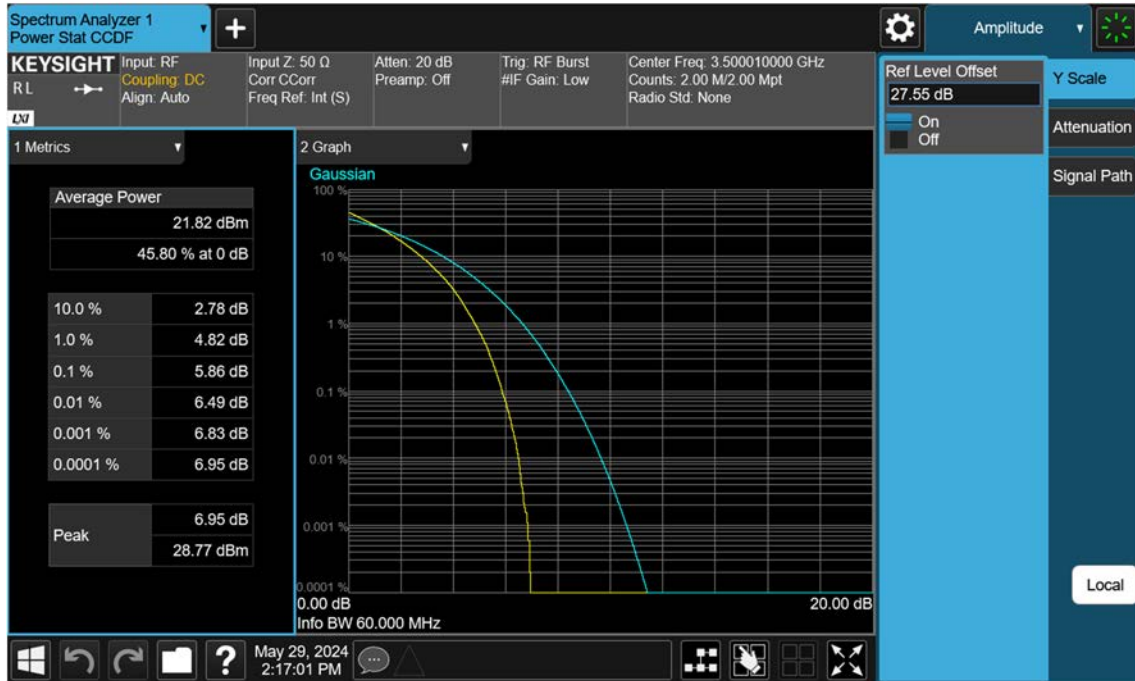
n77(3450~3550 MHz)_60 M_PAR_Mid_16QAM_FullRB



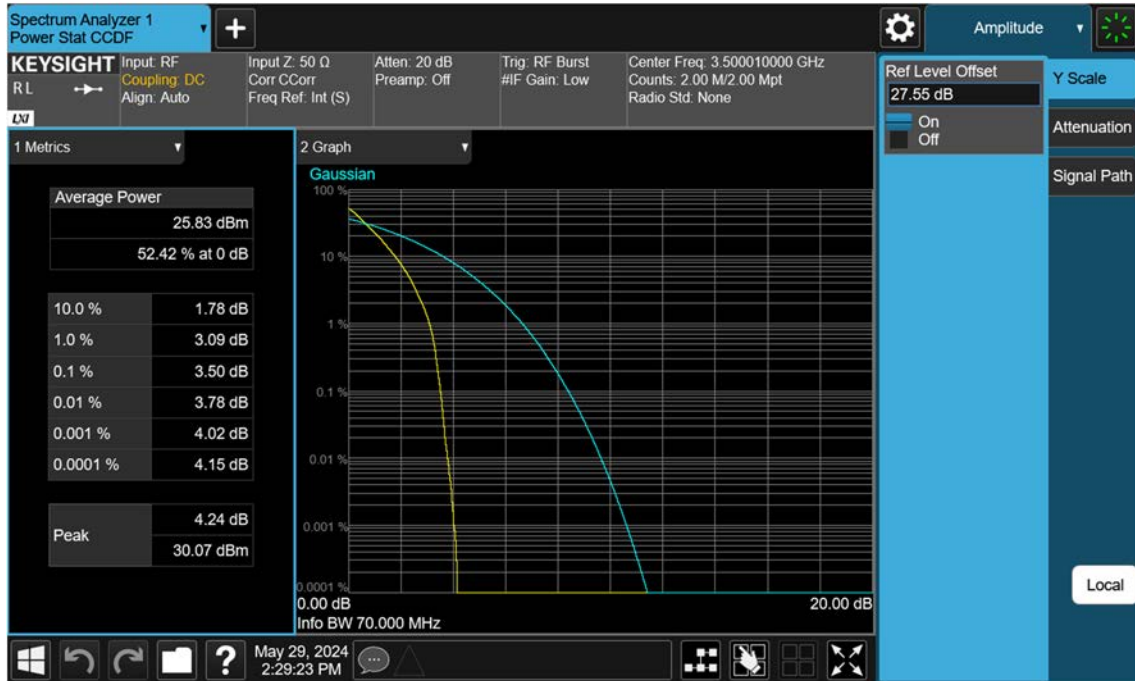
n77(3450~3550 MHz)_60 M_PAR_Mid_64QAM_FullRB



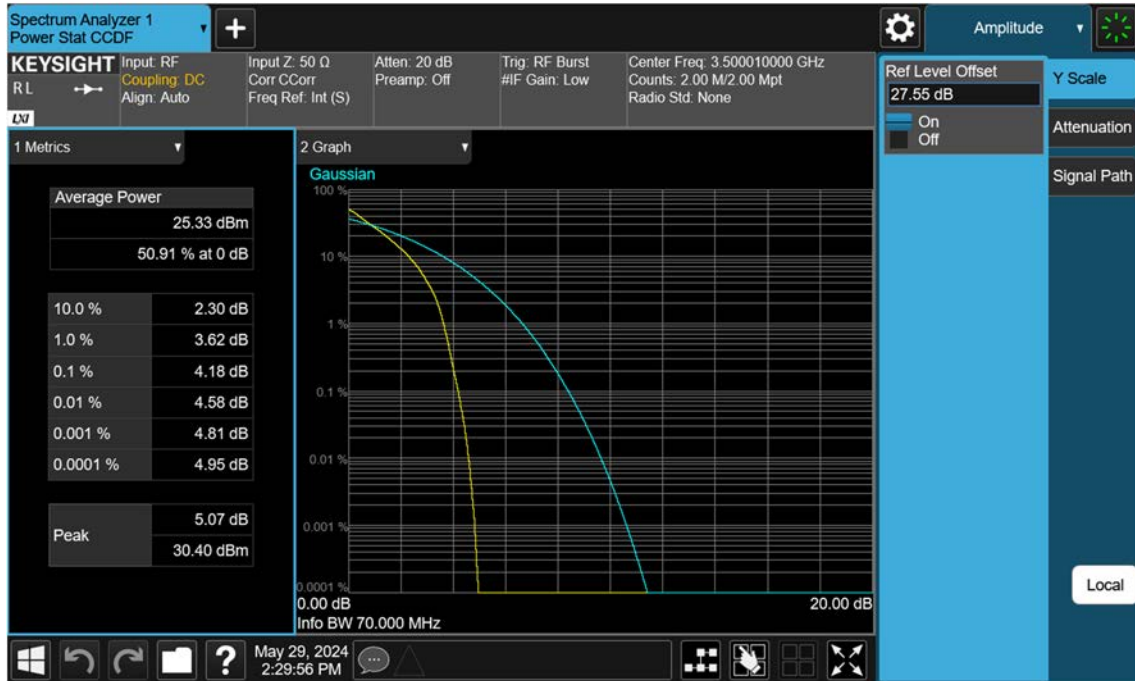
n77(3450~3550 MHz)_60 M_PAR_Mid_256QAM_FullRB



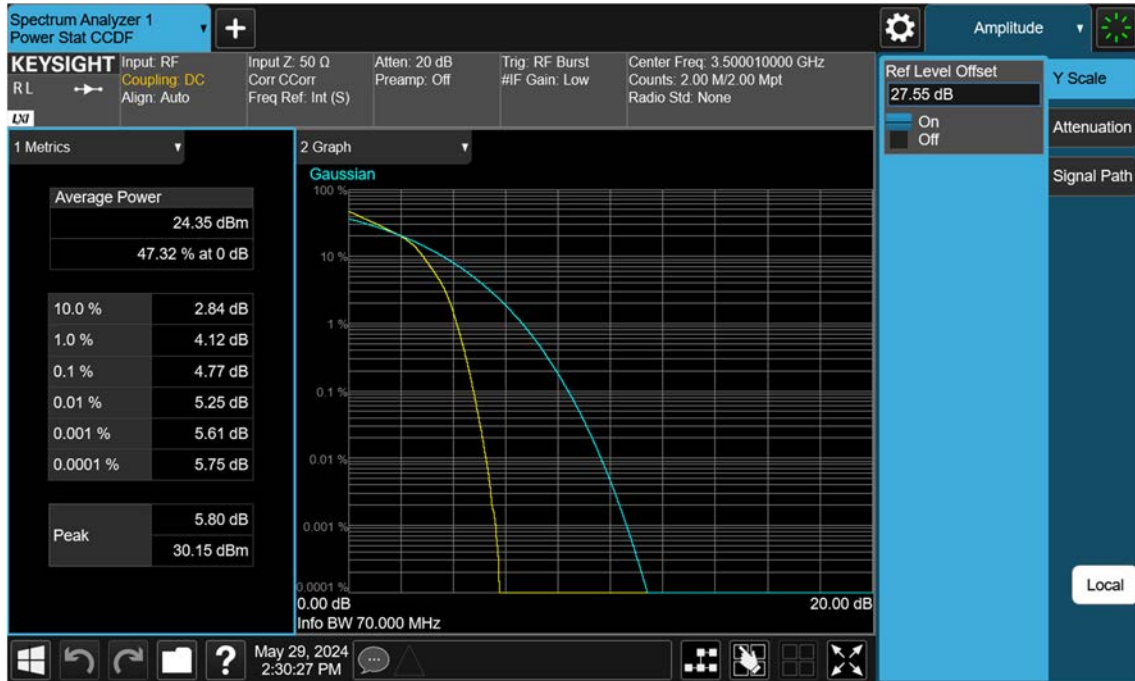
n77(3450~3550 MHz)_70 M_PAR_Mid_BPSK_FullRB



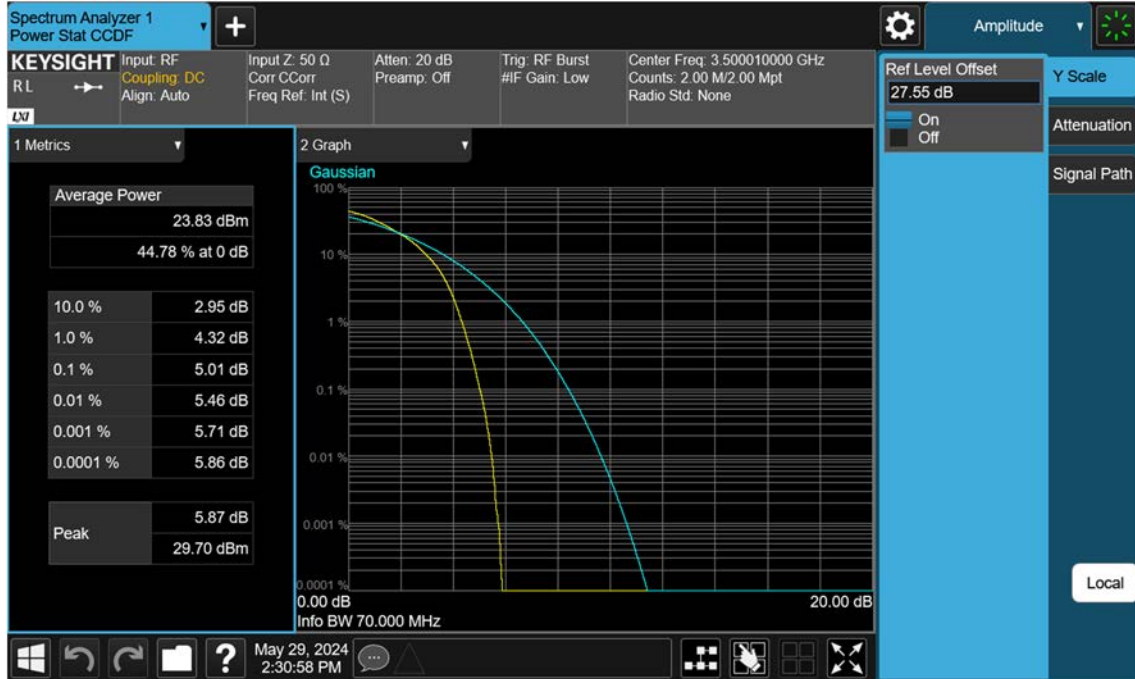
n77(3450~3550 MHz)_70 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_70 M_PAR_Mid_16QAM_FullRB



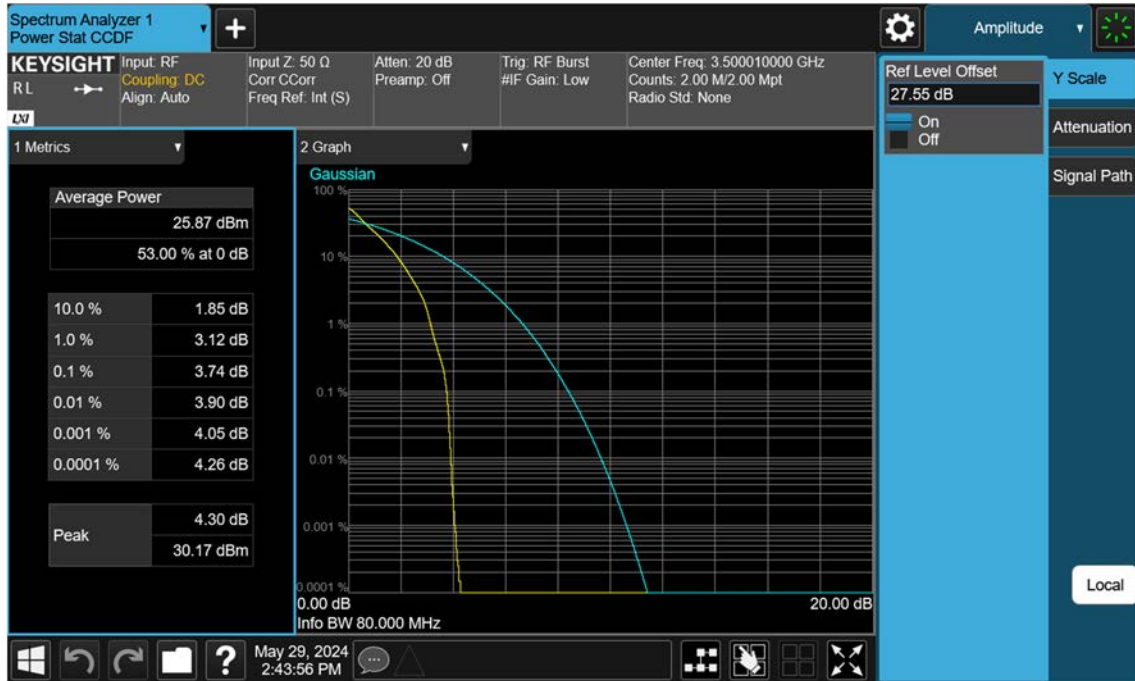
n77(3450~3550 MHz)_70 M_PAR_Mid_64QAM_FullRB



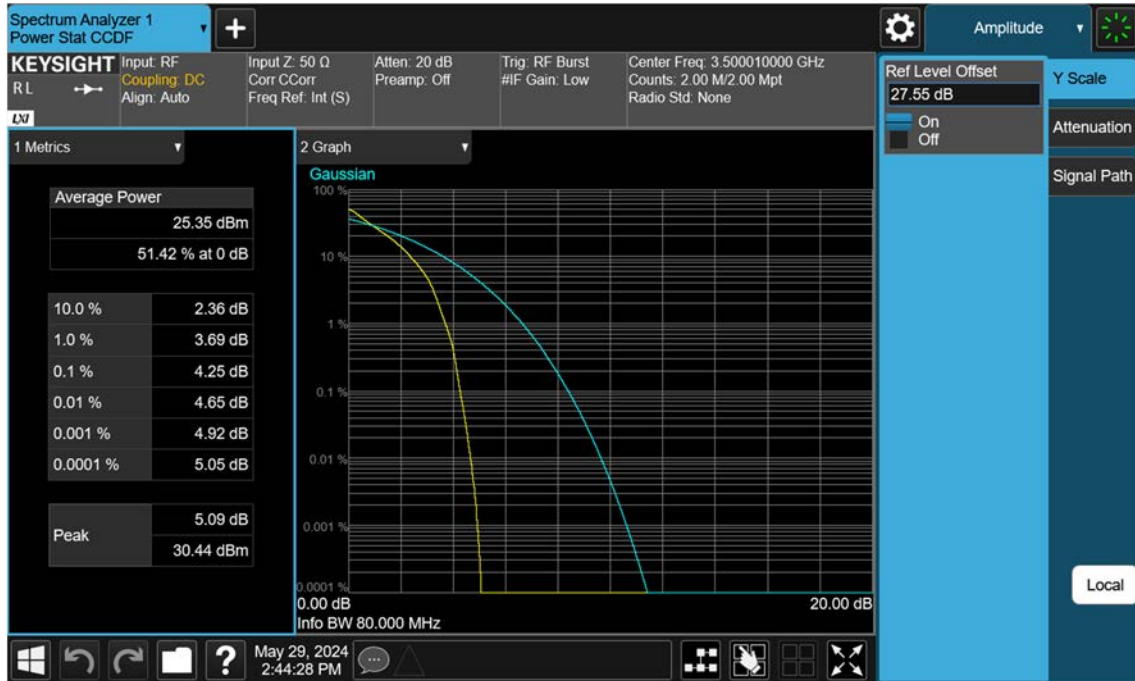
n77(3450~3550 MHz)_70 M_PAR_Mid_256QAM_FullRB



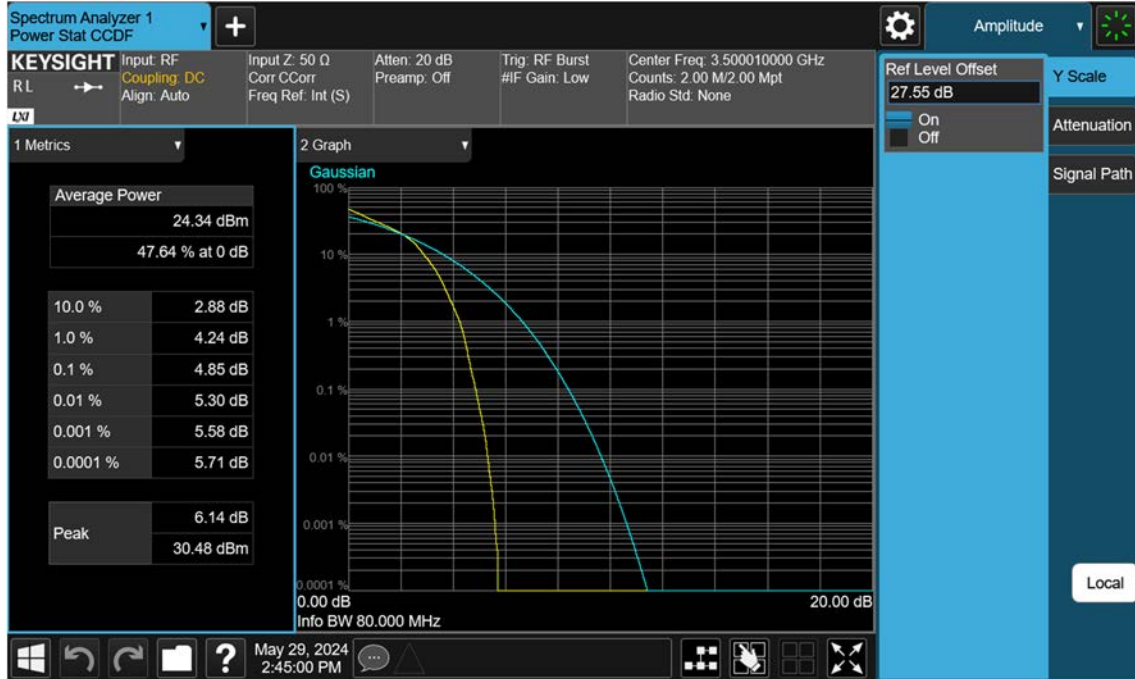
n77(3450~3550 MHz)_80 M_PAR_Mid_BPSK_FullRB



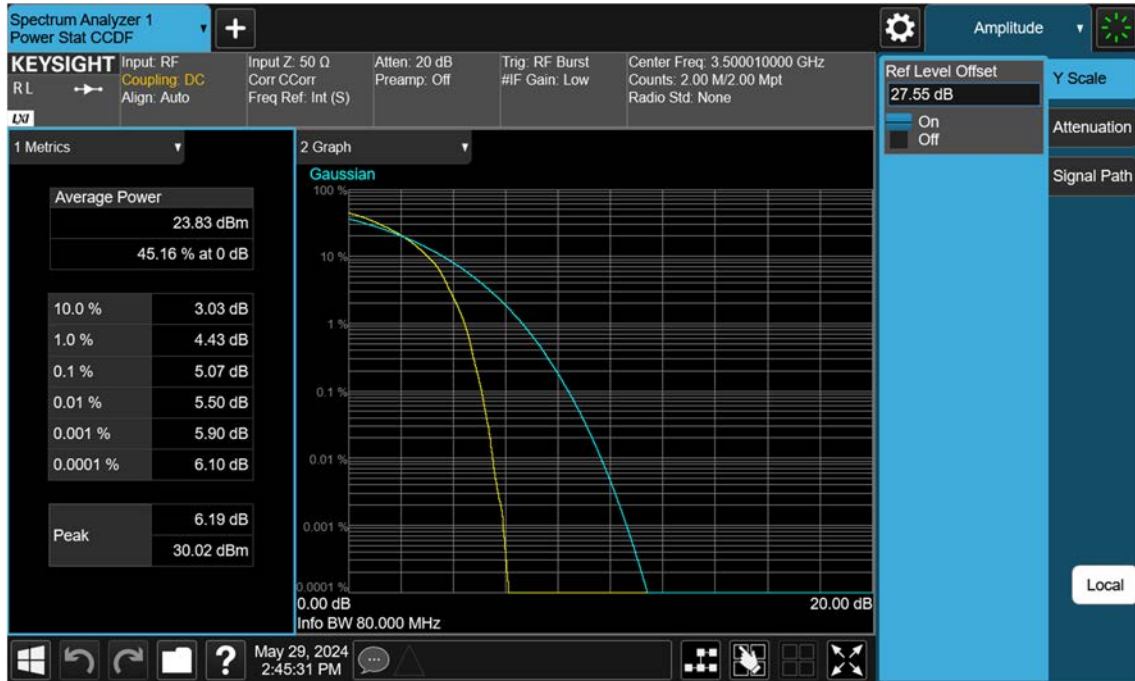
n77(3450~3550 MHz)_80 M_PAR_Mid_QPSK_FullRB



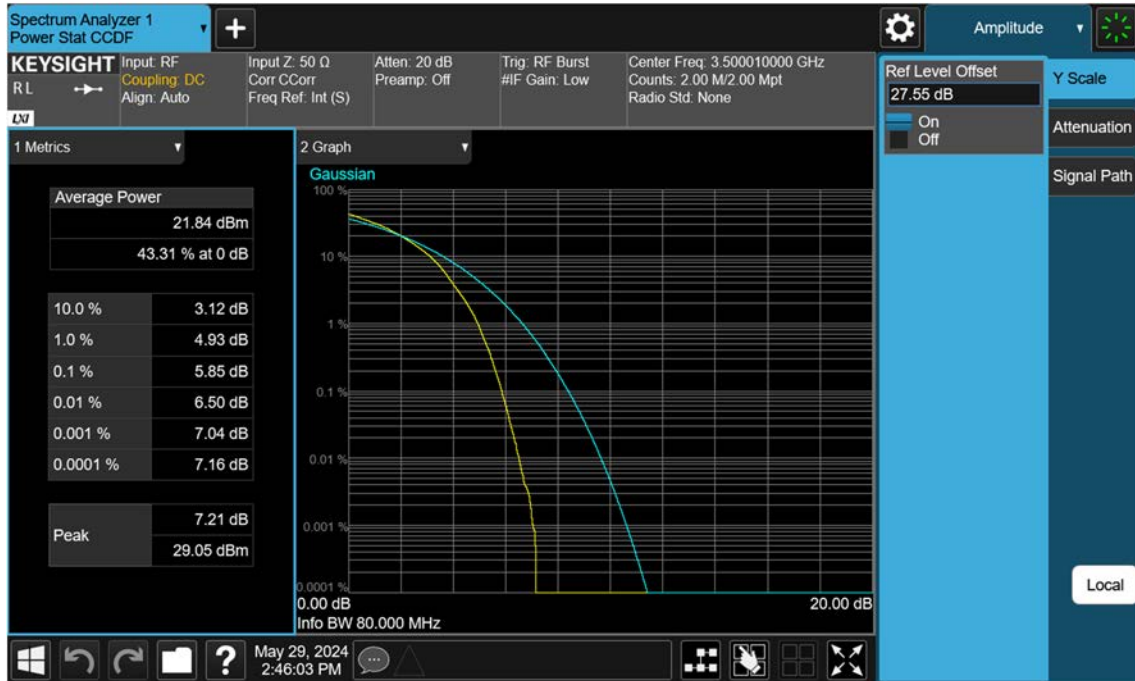
n77(3450~3550 MHz)_80 M_PAR_Mid_16QAM_FullRB



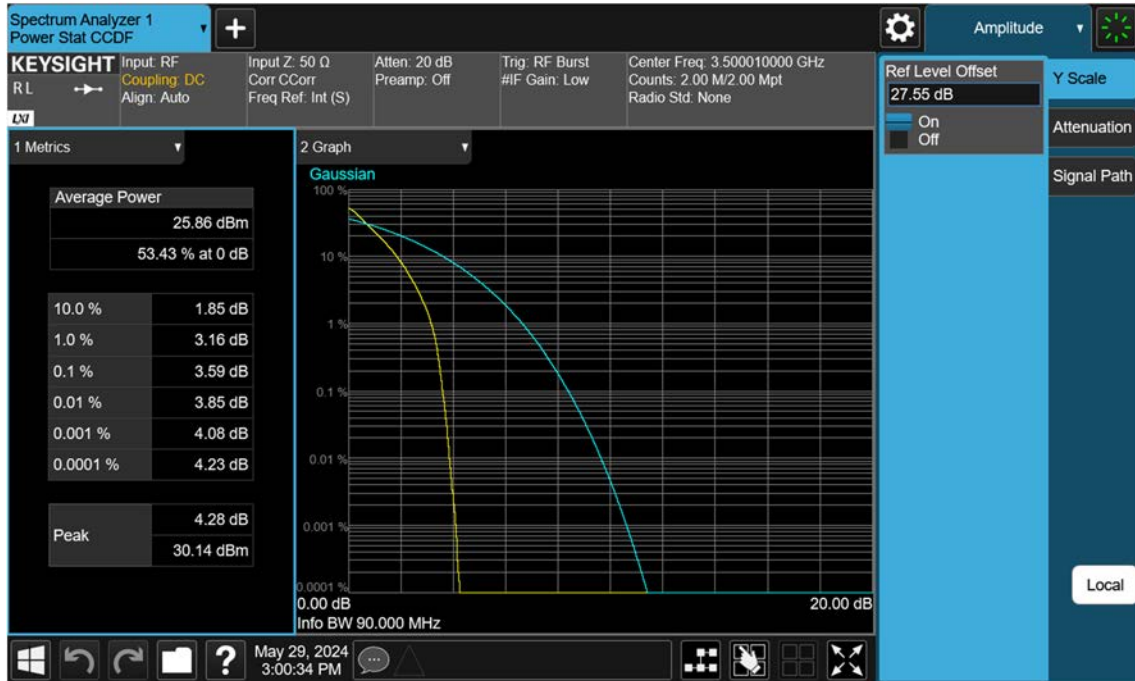
n77(3450~3550 MHz)_80 M_PAR_Mid_64QAM_FullRB



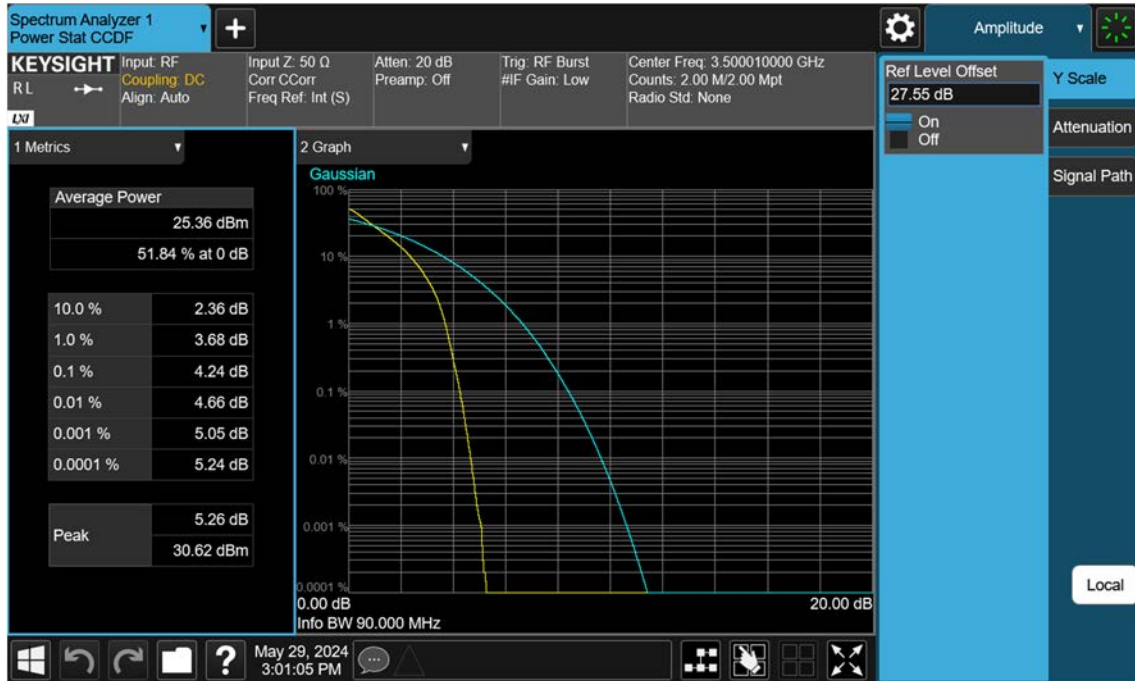
n77(3450~3550 MHz)_80 M_PAR_Mid_256QAM_FullRB



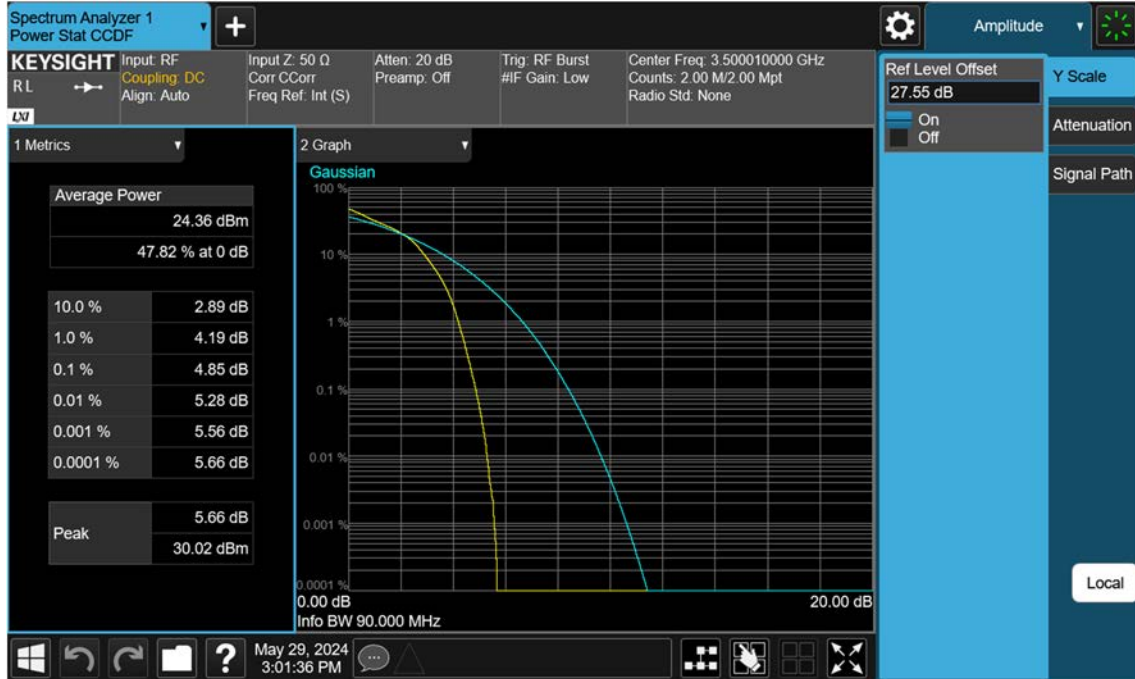
n77(3450~3550 MHz)_90 M_PAR_Mid_BPSK_FullRB



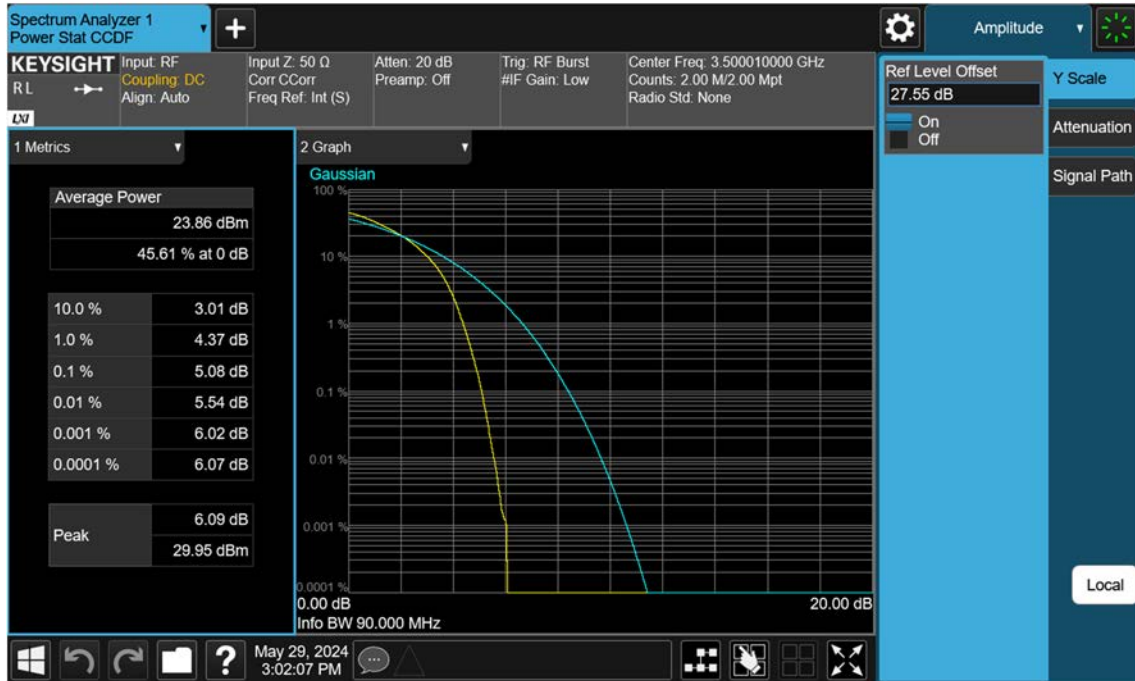
n77(3450~3550 MHz)_90 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_90 M_PAR_Mid_16QAM_FullRB



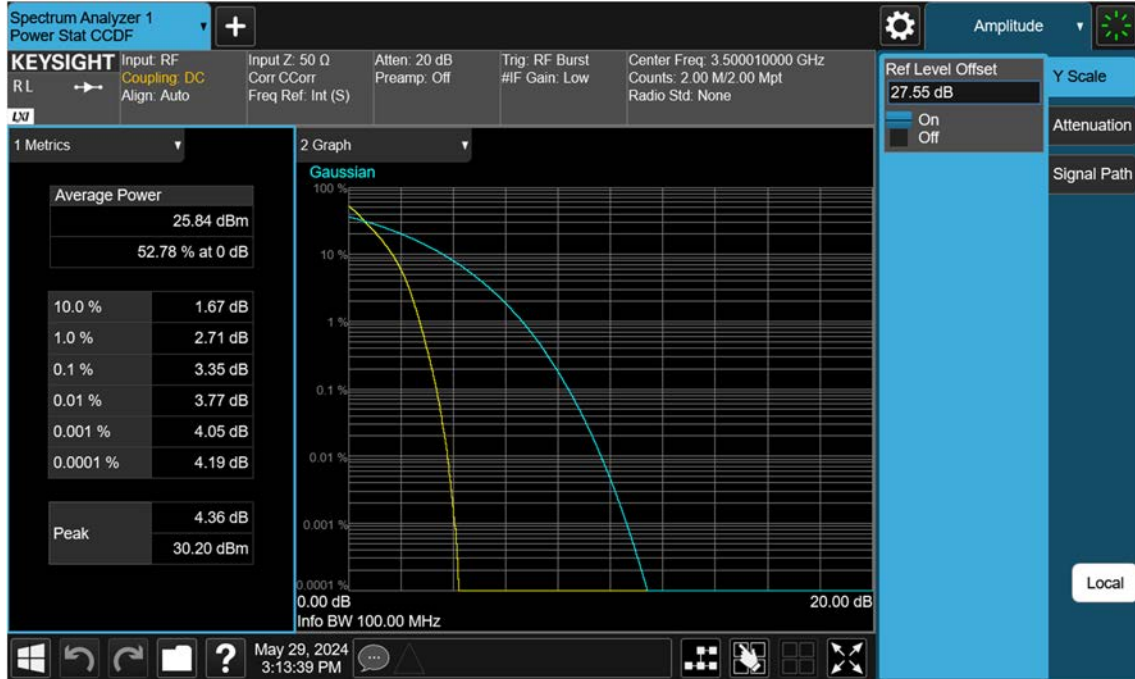
n77(3450~3550 MHz)_90 M_PAR_Mid_64QAM_FullRB



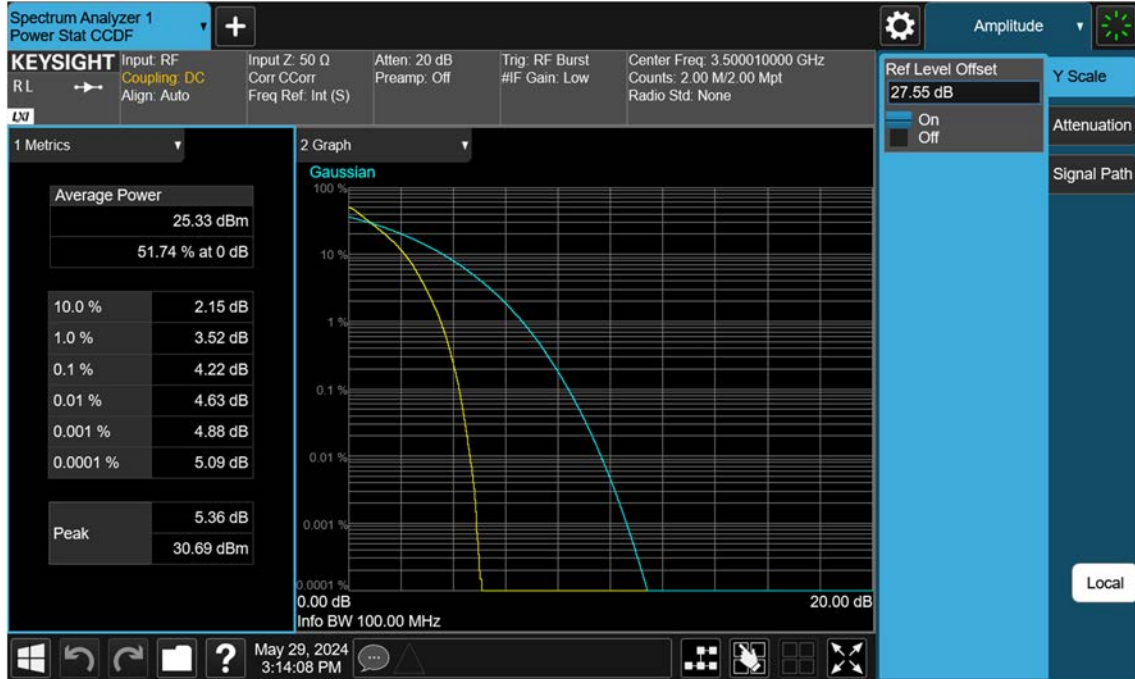
n77(3450~3550 MHz)_90 M_PAR_Mid_256QAM_FullRB



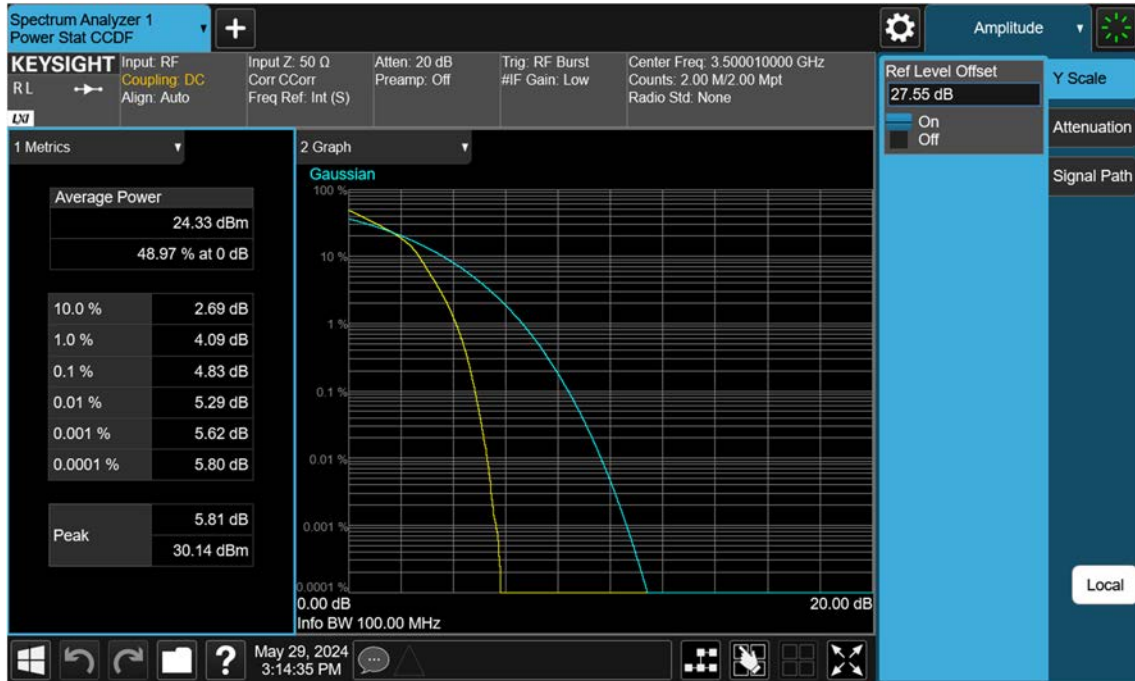
n77(3450~3550 MHz)_100 M_PAR_Mid_BPSK_FullRB



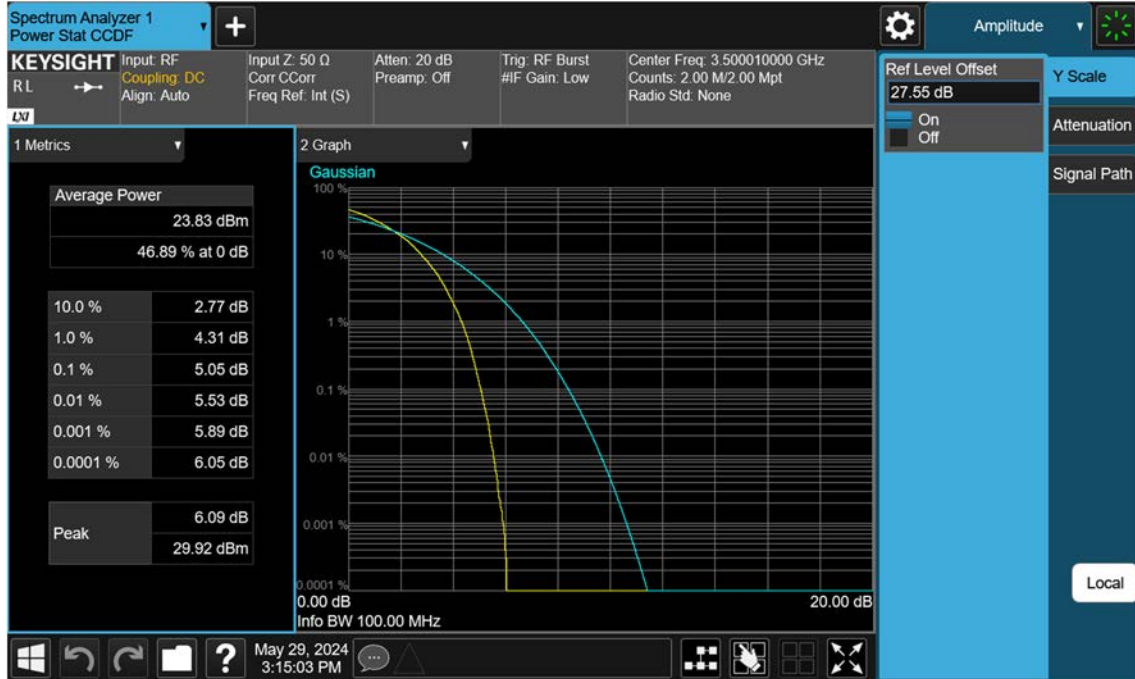
n77(3450~3550 MHz)_100 M_PAR_Mid_QPSK_FullRB



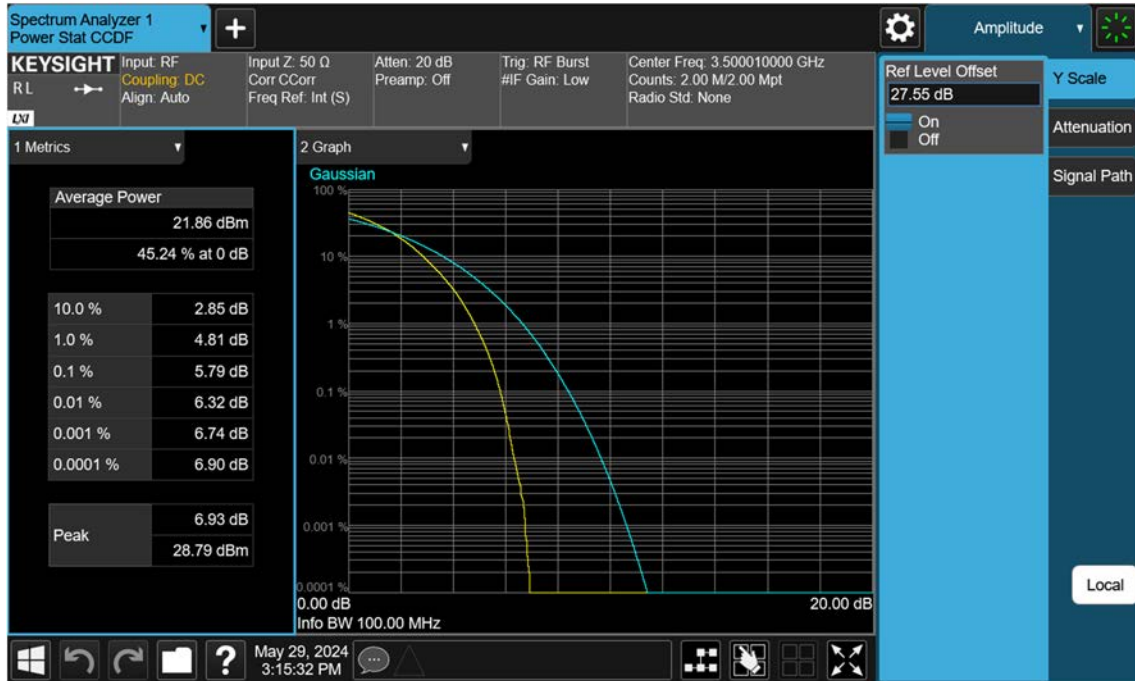
n77(3450~3550 MHz)_100 M_PAR_Mid_16QAM_FullRB



n77(3450~3550 MHz)_100 M_PAR_Mid_64QAM_FullRB



n77(3450~3550 MHz)_100 M_PAR_Mid_256QAM_FullRB



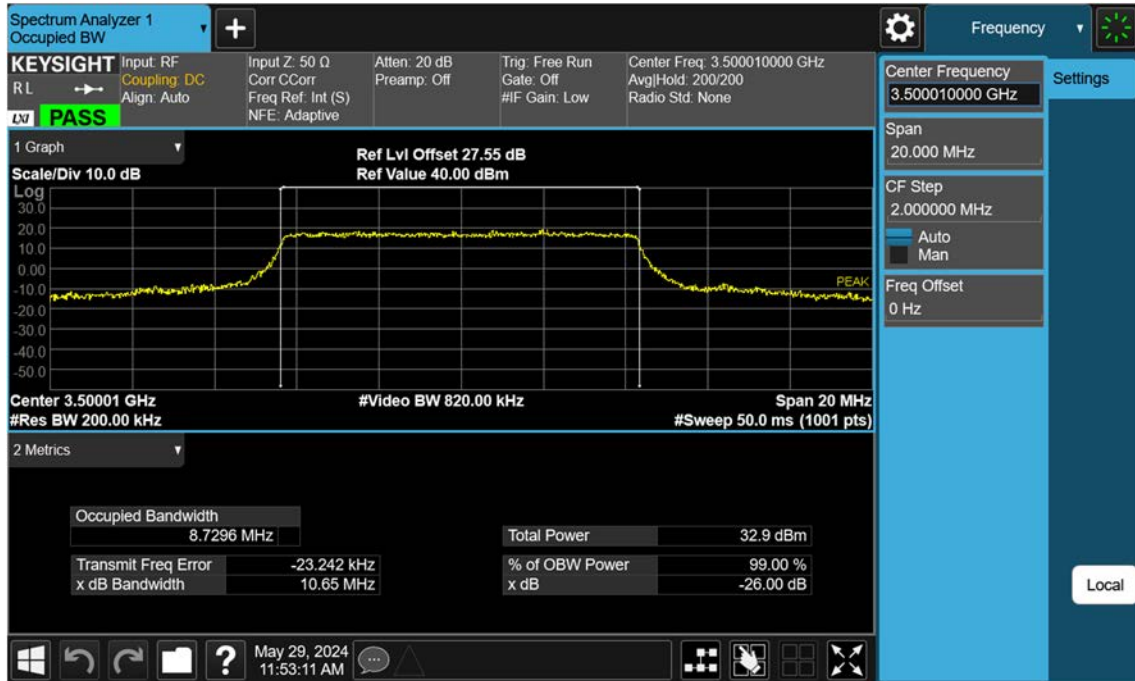
n77(3450~3550 MHz)_10 M_OBW_Mid_BPSK_FullRB



n77(3450~3550 MHz)_10 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_10 M_OBW_Mid_16QAM_FullRB



n77(3450~3550 MHz)_10 M_OBW_Mid_64QAM_FullRB



n77(3450~3550 MHz)_10 M_OBW_Mid_256QAM_FullRB



n77(3450~3550 MHz)_15 M_OBW_Mid_BPSK_FullRB

