

# FCC Sub6 REPORT

## Certification

**Applicant Name:**

SAMSUNG Electronics Co., Ltd.

**Date of Issue:**

November 13, 2023

**Address:**

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

**Location:**

HCT CO., LTD.,  
74, Seoicheon-ro 578beon-gil, Majang-myeon,  
Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA

**Report No.:** HCT-RF-2311-FC033

**FCC ID:**

**A3LSMG556B**

**APPLICANT:**

**SAMSUNG Electronics Co., Ltd.**

Model(s): SM-G556B  
EUT Type: Mobile Phone  
FCC Classification: PCS Licensed Transmitter Held to Ear (PCE)  
FCC Rule Part(s): §27

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)

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n41 (10)	2501.010 – 2685.000	8M63G7D	PI/2 BPSK	0.208	23.18
		8M62G7D	QPSK	0.207	23.17
		8M67W7D	16QAM	0.168	22.26
		8M66W7D	64QAM	0.130	21.15
		8M66W7D	256QAM	0.076	18.81
Sub6 n41 (15)	2503.500 – 2682.480	13M0G7D	PI/2 BPSK	0.192	22.84
		13M0G7D	QPSK	0.188	22.74
		12M9W7D	16QAM	0.153	21.85
		13M0W7D	64QAM	0.121	20.83
		12M9W7D	256QAM	0.068	18.34
Sub6 n41 (20)	2506.020 – 2679.990	17M9G7D	PI/2 BPSK	0.201	23.03
		17M9G7D	QPSK	0.197	22.95
		17M9W7D	16QAM	0.164	22.14
		17M9W7D	64QAM	0.129	21.11
		18M0W7D	256QAM	0.072	18.55
Sub6 n41 (25)	2508.510 – 2677.500	23M0G7D	PI/2 BPSK	0.232	23.66
		23M0G7D	QPSK	0.230	23.61
		22M9W7D	16QAM	0.187	22.73
		23M0W7D	64QAM	0.143	21.55
		23M0W7D	256QAM	0.083	19.21
Sub6 n41 (30)	2511.000 – 2674.980	27M0G7D	PI/2 BPSK	0.216	23.34
		26M9G7D	QPSK	0.213	23.28
		26M9W7D	16QAM	0.175	22.44
		26M9W7D	64QAM	0.135	21.30
		26M9W7D	256QAM	0.077	18.87
Sub6 n41 (40)	2516.010 – 2670.000	35M9G7D	PI/2 BPSK	0.218	23.39
		35M9G7D	QPSK	0.215	23.33
		35M8W7D	16QAM	0.175	22.44
		35M9W7D	64QAM	0.136	21.34
		35M9W7D	256QAM	0.078	18.93
Sub6 n41 (50)	2521.020 – 2664.990	45M9G7D	PI/2 BPSK	0.196	22.93
		45M8G7D	QPSK	0.192	22.83
		45M8W7D	16QAM	0.164	22.15
		46M0W7D	64QAM	0.125	20.97
		45M8W7D	256QAM	0.074	18.70
Sub6 n41 (60)	2526.000 – 2659.980	58M2G7D	PI/2 BPSK	0.202	23.05
		58M2G7D	QPSK	0.199	22.99
		58M0W7D	16QAM	0.168	22.26
		58M2W7D	64QAM	0.128	21.08
		58M0W7D	256QAM	0.074	18.71
Sub6 n41 (70)	2531.010 – 2655.000	64M5G7D	PI/2 BPSK	0.202	23.06
		64M6G7D	QPSK	0.199	22.99
		64M3W7D	16QAM	0.165	22.18
		64M6W7D	64QAM	0.126	21.01
		64M4W7D	256QAM	0.072	18.58
Sub6 n41 (80)	2536.020 – 2649.990	77M3G7D	PI/2 BPSK	0.193	22.86
		77M4G7D	QPSK	0.190	22.79
		77M6W7D	16QAM	0.159	22.02
		77M5W7D	64QAM	0.119	20.77
		77M6W7D	256QAM	0.068	18.34
Sub6 n41 (90)	2541.000 – 2644.980	86M9G7D	PI/2 BPSK	0.210	23.22
		87M0G7D	QPSK	0.201	23.03
		87M1W7D	16QAM	0.172	22.36
		86M8W7D	64QAM	0.134	21.28
		87M0W7D	256QAM	0.074	18.68
Sub6 n41 (100)	2546.010 – 2640.000	96M8G7D	PI/2 BPSK	0.224	23.50
		97M1G7D	QPSK	0.221	23.44
		96M5W7D	16QAM	0.183	22.63
		96M8W7D	64QAM	0.144	21.57
		97M8W7D	256QAM	0.081	19.07

Report No.: HCT-RF-2311-FC033

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REVIEWED BY



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Report prepared by : Jae Ryang Do  
Engineer of Telecommunication Testing Center

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Report approved by : Jong Seok Lee  
Manager of Telecommunication Testing Center

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.  
This test results were applied only to the test methods required by the standard.

Test Report Statement:

The above Test Report is not related to the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA.

The report shall not be reproduced except in full(only partly) without approval of the laboratory.

## Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2311-FC033	November 13, 2023	- First Approval Report

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# MEASUREMENT REPORT

## 1. GENERAL INFORMATION

<b>Applicant Name:</b>	SAMSUNG Electronics Co., Ltd.
<b>Address:</b>	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
<b>FCC ID:</b>	A3LSMG556B
<b>Application Type:</b>	Certification
<b>FCC Classification:</b>	PCS Licensed Transmitter Held to Ear (PCE)
<b>FCC Rule Part(s):</b>	§27
<b>EUT Type:</b>	Mobile Phone
<b>Model(s):</b>	SM-G556B
<b>SCS(kHz):</b>	30
<b>Bandwidth(MHz):</b>	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
<b>Waveform:</b>	CP-OFDM, DFT-S-OFDM
<b>Modulation:</b>	DFT-S-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
<b>Tx Frequency(SCS 30kHz):</b>	2501.010 – 2685.000 : 10 MHz 2503.500 – 2682.480 : 15 MHz 2506.020 – 2679.990 : 20 MHz 2508.510 – 2677.500 : 25 MHz 2511.000 – 2674.980 : 30 MHz 2516.010 – 2670.000 : 40 MHz 2521.020 – 2664.990 : 50 MHz 2526.000 – 2659.980 : 60 MHz 2531.010 – 2655.000 : 70 MHz 2536.020 – 2649.990 : 80 MHz 2541.000 – 2644.980 : 90 MHz 2546.010 – 2640.000 : 100 MHz
<b>Date(s) of Tests:</b>	September 27, 2023 ~ November 13, 2023
<b>Serial number:</b>	Radiated: R3CW908NFEN Conducted: R3CW908NHWB

## **2. INTRODUCTION**

### **2.1. DESCRIPTION OF EUT**

The EUT was a Mobile Phone with GSM/GPRS/EGPRS/UMTS and LTE, Sub6.

It also supports IEEE 802.11 a/b/g/n/ac (20/40/80 MHz), Bluetooth, BT LE, NFC, AIT.

### **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
Channel Edge	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Spurious and Harmonic Emissions at Antenna Terminal	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Conducted Output Power	- N/A (See SAR Report)
Peak- to- Average Ratio	- KDB 971168 D01 v03r01 – Section 5.7 - ANSI C63.26-2015 – Section 5.2.3.4 - ANSI C63.26-2015 – Section 5.2.6(only GSM)
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  $\geq 3 \times$  RBW
3. Span = 1.5 times the OBW
4. No. of sweep points  $> 2 \times$  span / RBW
5. Detector = Peak
6. Trace mode = Max Hold
7. The trace was allowed to stabilize
8. Test channel : Low/ Middle/ High
9. Frequency range : We are performed all frequency to 10<sup>th</sup> 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;

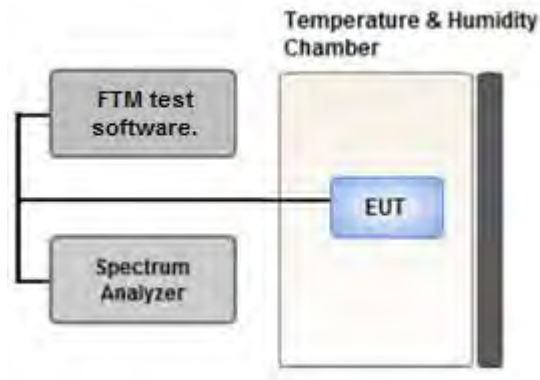
$$\text{Result}_{(dBm)} = P_g_{(dBm)} - \text{cable loss}_{(dB)} + \text{antenna gain}_{(dBi)}$$

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.

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

### 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)**

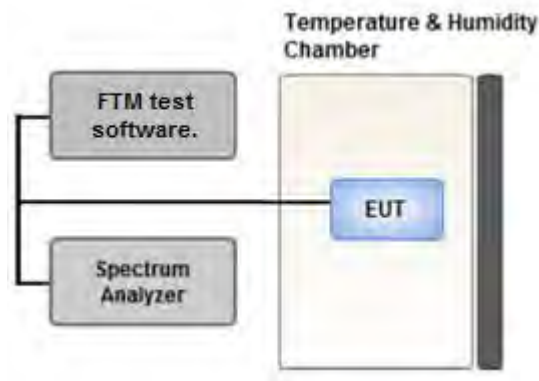
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW  $\geq 3 \times$  RBW.

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  $[10 \log (1/0.25)] = 6 \text{ dB}$  if the duty cycle is a constant 25 %.

### 3.5 OCCUPIED BANDWIDTH.



#### Test setup

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

The EUT makes a call to the communication simulator.

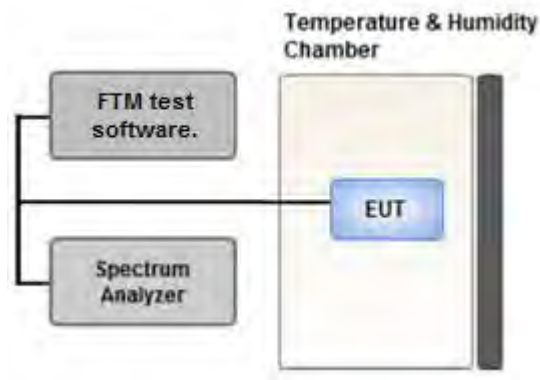
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

#### Test Settings

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

### 3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

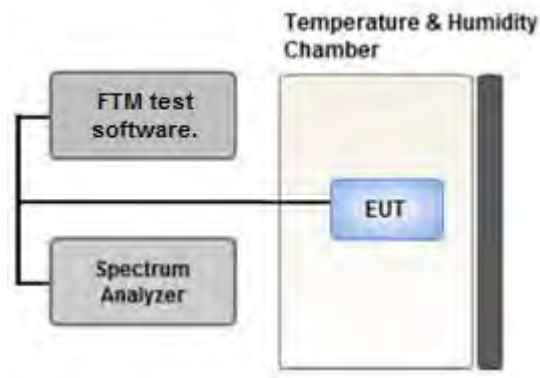
#### Test Overview

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

#### Test Settings

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

### 3.7 CHANNEL EDGE



**Test setup**

#### **Test Overview**

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

#### **Test Settings**

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

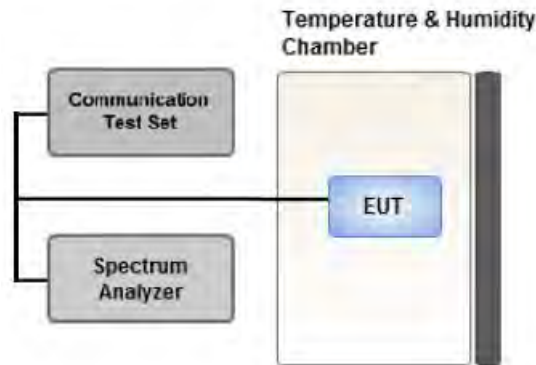
**Test Notes**

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

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



### 3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



**Test setup**

#### **Test Overview**

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

The frequency stability of the transmitter is measured by:

1. Temperature:

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

2. Primary Supply Voltage:

- Unless otherwise specified, vary primary supply voltage from 85 % to 115 % of the nominal value for other than hand carried battery equipment.

- For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.

#### **Test Settings**

1. The carrier frequency of the transmitter is measured at room temperature

(20 °C to provide a reference).

2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.

3. Frequency measurements are made at 10 °C intervals ranging from -30 °C to +50 °C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

**3.9 WORST CASE(RADIATED TEST)**

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported.

(Worst case: DFT-S-OFDM)

- The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.

- All modes of operation were investigated and the worst case configuration results are reported.

Mode: SA, NSA, SRS

Worst case: SA

Mode : Stand alone, Stand alone + External accessories (Earphone, AC adapter, etc)

Worst case : Stand alone

- We were performed the RSE test in condition of co-location.

Mode : Stand alone, Simultaneous transmission scenarios

Worst case : Stand alone

- 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 were not reported.

- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.

Please refer to the table below.

[ Worst case ]

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

### **3.10 WORST CASE(CONDUCTED TEST)**

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported.

(Worst case: DFT-S-OFDM)

- Modulation : All Modulation of operation were investigated and the worst case configuration results are reported.

(Worst case: PI/2 BPSK)

- All modes of operation were investigated and the worst case configuration results are reported.

Mode: SA, NSA, SRS

Worst case: SA

- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.

Please refer to the table below.

[ Worst case ]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset		
Occupied Bandwidth, Peak-To-Average Ratio	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100	Mid	Full RB	0		
Channel Edge	PI/2 BPSK	10	Low	1	0		
			High	1	23		
		15	Low	1	0		
			High	1	37		
		20	Low	1	0		
			High	1	50		
		25	Low	1	0		
			High	1	64		
		30	Low	1	0		
			High	1	77		
		40	Low	1	0		
			High	1	105		
		50	Low	1	0		
			High	1	132		
		60	Low	1	0		
			High	1	161		
		70	Low	1	0		
			High	1	188		
		80	Low	1	0		
			High	1	216		
		90	Low	1	0		
			High	1	244		
		100	Low	1	0		
			High	1	272		
				10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100	Low, Mid High	Full RB	0
		Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	10, 15, 20, 25, 30, 40, 50, 60, 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	03/27/2024	Biennial
Precision Dipole Antenna	UHAP	Schwarzbeck	01274	03/27/2024	Biennial
Horn Antenna(1~18 GHz)	BBHA 9120D	Schwarzbeck	02289	03/21/2024	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	05/22/2024	Annual
RF Switching System	FBSR-06B (3G HPF + LNA)	T&M SYSTEM	F3L2	05/22/2024	Annual
RF Switching System	FBSR-06B (6G HPF + LNA)	T&M SYSTEM	F3L3	05/22/2024	Annual
RF Switching System	FBSR-06B (LNA)	T&M SYSTEM	F3L4	05/22/2024	Annual
Power Amplifier	CBL18265035	CERNEK	22966	12/01/2023	Annual
Power Amplifier	CBL26405040	CERNEK	25956	03/02/2024	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	08/25/2024	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	03/02/2024	Annual
Chamber	SU-642	ESPEC	93008124	02/22/2024	Annual
Signal Analyzer(10 Hz~26.5 GHz)	N9020A	Agilent	MY51110063	04/11/2024	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/19/2024	Annual
Spectrum Analyzer(10 Hz~40 GHz)	FSV40	REOHDE & SCHWARZ	101436	02/22/2024	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/10/2024	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/22/2024	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/23/2024	Annual
SIGNAL GENERATOR (100 kHz~40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	06/22/2024	Annual
Signal Analyzer(5 Hz~40.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/24/2024	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  $U_{\text{CISPR}}$  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)	1.90 (Confidence level about 95 %, $k=2$ )
Radiated Disturbance (9 kHz ~ 30 MHz)	4.14 (Confidence level about 95 %, $k=2$ )
Radiated Disturbance (30 MHz ~ 1 GHz)	5.16 (Confidence level about 95 %, $k=2$ )
Radiated Disturbance (1 GHz ~ 18 GHz)	5.57 (Confidence level about 95 %, $k=2$ )
Radiated Disturbance (18 GHz ~ 40 GHz)	5.76 (Confidence level about 95 %, $k=2$ )
Radiated Disturbance (Above 40 GHz)	5.52 (Confidence level about 95 %, $k=2$ )

## 6. SUMMARY OF TEST RESULTS

### 6.1 Test Condition: Conducted Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Occupied Bandwidth	§2.1049	N/A	PASS
Band Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§2.1051, §27.53(m)(4)	<ul style="list-style-type: none"> <li>■ <math>&lt; 40 + 10\log_{10} (P[\text{Watts}])</math> at Channel edges</li> <li>■ <math>&lt; 43 + 10\log_{10} (P[\text{Watts}])</math> between 5 and X MHz from Channel edges</li> <li>■ <math>&lt; 55 + 10\log_{10} (P[\text{Watts}])</math> beyond X MHz beyond from Channel edges</li> <li>■ <math>&lt; 43 + 10 \log (P)</math> dB on all frequencies between 2490.5 MHz and 2496 MHz</li> </ul>	PASS
Conducted Output Power	§2.1046	N/A	<u>See Note1</u>
Frequency stability / variation of ambient temperature	§2.1055, §27.54	Emission must remain in band	PASS

Note:

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

### 6.2 Test Condition: Radiated Test

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

Note:

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

## 7. SAMPLE CALCULATION

### 7.1 ERP Sample Calculation

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

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

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

### 7.2 EIRP Sample Calculation

Ch./ Freq.		Measured Level(dBm)	Substitute Level(dBm)	Ant. Gain (dBi)	C.L	Pol.	EIRP	
channel	Freq.(MHz)						W	dBm
518598	2593.0	-15.75	18.45	9.90	1.76	H	0.456	26.59

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

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



7.3. Emission Designator

GSM Emission Designator

Emission Designator = 249KGXW

GSM BW = 249 kHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W

GSM BW = 249 kHz

G = Phase Modulation

7 = Quantized/Digital Info

W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W

WCDMA BW = 4.17 MHz

F = Frequency Modulation

9 = Composite Digital Info

W = Combination (Audio/Data)

QPSK Modulation

Emission Designator = 4M48G7D

LTE BW = 4.48 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

QAM Modulation

Emission Designator = 4M48W7D

LTE BW = 4.48 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

## 8. TEST DATA

### 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
2501.010	Sub6 41/ 10 MHz [30 kHz]	PI/2 BPSK	-22.09	14.55	10.30	2.47	H	< 2.00	0.173	22.38	1	22
		QPSK	-22.17	14.47	10.30	2.47	H		0.170	22.30		
		16-QAM	-23.06	13.58	10.30	2.47	H		0.138	21.41		
		64-QAM	-24.20	12.44	10.30	2.47	H		0.106	20.27		
		256-QAM	-26.60	10.04	10.30	2.47	H		0.061	17.87		
2592.990		PI/2 BPSK	-20.67	15.63	10.05	2.50	H		0.208	23.18	1	1
		QPSK	-20.68	15.62	10.05	2.50	H		0.207	23.17		
		16-QAM	-21.59	14.71	10.05	2.50	H		0.168	22.26		
		64-QAM	-22.70	13.60	10.05	2.50	H		0.130	21.15		
		256-QAM	-25.04	11.26	10.05	2.50	H		0.076	18.81		
2685.000	PI/2 BPSK	-24.81	12.65	10.10	2.58	H	0.104	20.17	1	12		
	QPSK	-24.99	12.47	10.10	2.58	H	0.100	19.99				
	16-QAM	-25.85	11.61	10.10	2.58	H	0.082	19.13				
	64-QAM	-26.93	10.53	10.10	2.58	H	0.064	18.05				
	256-QAM	-28.93	8.53	10.10	2.58	H	0.040	16.05				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
									W	dBm	Size	Offset
2503.500	Sub6 41/ 15 MHz [30 kHz]	PI/2 BPSK	-21.83	14.80	10.30	2.48	H	< 2.00	0.183	22.62	1	36
		QPSK	-21.92	14.71	10.30	2.48	H		0.179	22.53		
		16-QAM	-22.75	13.88	10.30	2.48	H		0.148	21.70		
		64-QAM	-23.86	12.77	10.30	2.48	H		0.115	20.59		
		256-QAM	-26.27	10.36	10.30	2.48	H		0.066	18.18		
2592.990		PI/2 BPSK	-21.01	15.29	10.05	2.50	H		0.192	22.84	1	1
		QPSK	-21.11	15.19	10.05	2.50	H		0.188	22.74		
		16-QAM	-22.00	14.30	10.05	2.50	H		0.153	21.85		
		64-QAM	-23.02	13.28	10.05	2.50	H		0.121	20.83		
		256-QAM	-25.51	10.79	10.05	2.50	H		0.068	18.34		
2682.480		PI/2 BPSK	-25.22	12.49	10.10	2.58	H		0.100	20.01	1	1
		QPSK	-25.31	12.40	10.10	2.58	H		0.098	19.92		
		16-QAM	-26.13	11.58	10.10	2.58	H		0.081	19.10		
		64-QAM	-27.16	10.55	10.10	2.58	H		0.064	18.07		
		256-QAM	-29.64	8.07	10.10	2.58	H		0.036	15.59		

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
2506.020	Sub6 41/ 20 MHz [30 kHz]	PI/2 BPSK	-21.42	15.21	10.30	2.48	H	< 2.00	0.201	23.03	1	49
		QPSK	-21.50	15.13	10.30	2.48	H		0.197	22.95		
		16-QAM	-22.31	14.32	10.30	2.48	H		0.164	22.14		
		64-QAM	-23.34	13.29	10.30	2.48	H		0.129	21.11		
		256-QAM	-25.90	10.73	10.30	2.48	H		0.072	18.55		
2592.990		PI/2 BPSK	-21.11	15.19	10.05	2.50	H		0.188	22.74	1	1
		QPSK	-21.21	15.09	10.05	2.50	H		0.184	22.64		
		16-QAM	-22.12	14.18	10.05	2.50	H		0.149	21.73		
		64-QAM	-23.12	13.18	10.05	2.50	H		0.118	20.73		
		256-QAM	-25.67	10.63	10.05	2.50	H		0.066	18.18		
2679.990		PI/2 BPSK	-25.21	12.50	10.10	2.58	H		0.100	20.02	1	1
		QPSK	-25.28	12.43	10.10	2.58	H		0.099	19.95		
		16-QAM	-26.06	11.65	10.10	2.58	H		0.083	19.17		
		64-QAM	-27.07	10.64	10.10	2.58	H		0.065	18.16		
		256-QAM	-29.65	8.06	10.10	2.58	H		0.036	15.58		

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
2508.510	Sub6 41/ 25 MHz [30 kHz]	PI/2 BPSK	-20.78	15.85	10.30	2.49	H	< 2.00	0.232	23.66	1	63
		QPSK	-20.83	15.80	10.30	2.49	H		0.230	23.61		
		16-QAM	-21.71	14.92	10.30	2.49	H		0.187	22.73		
		64-QAM	-22.89	13.74	10.30	2.49	H		0.143	21.55		
		256-QAM	-25.23	11.40	10.30	2.49	H		0.083	19.21		
2592.990		PI/2 BPSK	-20.80	15.50	10.05	2.50	H		0.202	23.05	1	1
		QPSK	-20.81	15.49	10.05	2.50	H		0.201	23.04		
		16-QAM	-21.65	14.65	10.05	2.50	H		0.166	22.20		
		64-QAM	-22.75	13.55	10.05	2.50	H		0.129	21.10		
		256-QAM	-25.19	11.11	10.05	2.50	H		0.074	18.66		
2677.500		PI/2 BPSK	-24.60	12.96	10.10	2.58	H		0.112	20.48	1	1
		QPSK	-24.61	12.95	10.10	2.58	H		0.111	20.47		
		16-QAM	-25.55	12.01	10.10	2.58	H		0.090	19.53		
		64-QAM	-26.57	10.99	10.10	2.58	H		0.071	18.51		
		256-QAM	-29.07	8.49	10.10	2.58	H		0.040	16.01		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
									W	W dBm	Size	Offset
2511.000	Sub6 41/ 30 MHz [30 kHz]	PI/2 BPSK	-21.08	15.54	10.30	2.50	H	< 2.00	0.216	23.34	1	76
		QPSK	-21.14	15.48	10.30	2.50	H		0.213	23.28		
		16-QAM	-21.98	14.64	10.30	2.50	H		0.175	22.44		
		64-QAM	-23.12	13.50	10.30	2.50	H		0.135	21.30		
		256-QAM	-25.55	11.07	10.30	2.50	H		0.077	18.87		
2592.990		PI/2 BPSK	-21.00	15.30	10.05	2.50	H		0.201	23.04	1	1
		QPSK	-20.85	15.45	10.05	2.50	H		0.200	23.00		
		16-QAM	-21.77	14.53	10.05	2.50	H		0.161	22.08		
		64-QAM	-22.92	13.38	10.05	2.50	H		0.124	20.93		
		256-QAM	-25.28	11.02	10.05	2.50	H		0.072	18.57		
2674.980	PI/2 BPSK	-24.66	12.75	10.10	2.58	H	0.106	20.27	1	1		
	QPSK	-24.71	12.70	10.10	2.58	H	0.105	20.22				
	16-QAM	-25.45	11.96	10.10	2.58	H	0.089	19.48				
	64-QAM	-26.72	10.69	10.10	2.58	H	0.066	18.21				
	256-QAM	-29.13	8.28	10.10	2.58	H	0.038	15.80				

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
2516.010	Sub6 41/ 40 MHz [30 kHz]	PI/2 BPSK	-20.89	15.60	10.30	2.51	H	< 2.00	0.218	23.39	1	104
		QPSK	-20.95	15.54	10.30	2.51	H		0.215	23.33		
		16-QAM	-21.84	14.65	10.30	2.51	H		0.175	22.44		
		64-QAM	-22.94	13.55	10.30	2.51	H		0.136	21.34		
		256-QAM	-25.35	11.14	10.30	2.51	H		0.078	18.93		
2592.990		PI/2 BPSK	-20.99	15.31	10.05	2.50	H		0.193	22.86	1	1
		QPSK	-21.14	15.16	10.05	2.50	H		0.187	22.71		
		16-QAM	-21.91	14.39	10.05	2.50	H		0.156	21.94		
		64-QAM	-23.05	13.25	10.05	2.50	H		0.120	20.80		
		256-QAM	-25.50	10.80	10.05	2.50	H		0.068	18.35		
2670.000	PI/2 BPSK	-24.20	12.92	10.10	2.58	H	0.111	20.44	1	1		
	QPSK	-24.26	12.86	10.10	2.58	H	0.109	20.38				
	16-QAM	-25.00	12.12	10.10	2.58	H	0.092	19.64				
	64-QAM	-26.17	10.95	10.10	2.58	H	0.070	18.47				
	256-QAM	-28.53	8.59	10.10	2.58	H	0.041	16.11				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
									W	W dBm	Size	Offset
2521.020	Sub6 41/ 50 MHz [30 kHz]	PI/2 BPSK	-21.21	15.46	10.00	2.53	H	< 2.00	0.196	22.93	1	131
		QPSK	-21.31	15.36	10.00	2.53	H		0.192	22.83		
		16-QAM	-21.99	14.68	10.00	2.53	H		0.164	22.15		
		64-QAM	-23.17	13.50	10.00	2.53	H		0.125	20.97		
		256-QAM	-25.44	11.23	10.00	2.53	H		0.074	18.70		
2592.990		PI/2 BPSK	-21.12	15.18	10.05	2.50	H		0.187	22.73	1	1
		QPSK	-21.18	15.12	10.05	2.50	H		0.185	22.67		
		16-QAM	-21.89	14.41	10.05	2.50	H		0.157	21.96		
		64-QAM	-23.09	13.21	10.05	2.50	H		0.119	20.76		
		256-QAM	-25.36	10.94	10.05	2.50	H		0.071	18.49		
2664.990	PI/2 BPSK	-23.91	13.18	10.10	2.60	H	0.117	20.68	1	1		
	QPSK	-23.94	13.15	10.10	2.60	H	0.116	20.65				
	16-QAM	-24.78	12.31	10.10	2.60	H	0.096	19.81				
	64-QAM	-25.92	11.17	10.10	2.60	H	0.074	18.67				
	256-QAM	-28.32	8.77	10.10	2.60	H	0.042	16.27				



Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
2526.000	Sub6 41/ 60 MHz [30 kHz]	PI/2 BPSK	-21.20	15.06	10.30	2.53	H	< 2.00	0.192	22.83	1	160
		QPSK	-21.46	14.80	10.30	2.53	H		0.181	22.57		
		16-QAM	-21.98	14.28	10.30	2.53	H		0.160	22.05		
		64-QAM	-23.22	13.04	10.30	2.53	H		0.121	20.81		
		256-QAM	-25.44	10.82	10.30	2.53	H		0.072	18.59		
2592.990		PI/2 BPSK	-20.80	15.50	10.05	2.50	H		0.202	23.05	1	1
		QPSK	-20.86	15.44	10.05	2.50	H		0.199	22.99		
		16-QAM	-21.59	14.71	10.05	2.50	H		0.168	22.26		
		64-QAM	-22.77	13.53	10.05	2.50	H		0.128	21.08		
		256-QAM	-25.14	11.16	10.05	2.50	H		0.074	18.71		
2659.980	PI/2 BPSK	-23.21	13.64	10.10	2.61	H	0.130	21.13	1	1		
	QPSK	-23.26	13.59	10.10	2.61	H	0.128	21.08				
	16-QAM	-24.09	12.76	10.10	2.61	H	0.106	20.25				
	64-QAM	-25.23	11.62	10.10	2.61	H	0.082	19.11				
	256-QAM	-27.62	9.23	10.10	2.61	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	dBm	Size	Offset
2531.010	Sub6 41/ 70 MHz [30 kHz]	PI/2 BPSK	-20.84	15.28	10.30	2.52	H	< 2.00	0.202	23.06	1	187
		QPSK	-20.91	15.21	10.30	2.52	H		0.199	22.99		
		16-QAM	-21.72	14.40	10.30	2.52	H		0.165	22.18		
		64-QAM	-22.89	13.23	10.30	2.52	H		0.126	21.01		
		256-QAM	-25.32	10.80	10.30	2.52	H		0.072	18.58		
2592.990		PI/2 BPSK	-21.11	15.19	10.05	2.50	H		0.188	22.74	1	1
		QPSK	-21.24	15.06	10.05	2.50	H		0.182	22.61		
		16-QAM	-21.95	14.35	10.05	2.50	H		0.155	21.90		
		64-QAM	-23.11	13.19	10.05	2.50	H		0.119	20.74		
		256-QAM	-25.65	10.65	10.05	2.50	H		0.066	18.20		
2655.000	PI/2 BPSK	-22.37	14.39	10.10	2.63	H	0.154	21.86	1	1		
	QPSK	-22.41	14.35	10.10	2.63	H	0.152	21.82				
	16-QAM	-23.13	13.63	10.10	2.63	H	0.129	21.10				
	64-QAM	-24.43	12.33	10.10	2.63	H	0.096	19.80				
	256-QAM	-26.55	10.21	10.10	2.63	H	0.059	17.68				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
									W	W dBm	Size	Offset
2536.020	Sub6 41/ 80 MHz [30 kHz]	PI/2 BPSK	-21.16	15.08	10.30	2.52	H	< 2.00	0.193	22.86	1	215
		QPSK	-21.23	15.01	10.30	2.52	H		0.190	22.79		
		16-QAM	-22.00	14.24	10.30	2.52	H		0.159	22.02		
		64-QAM	-23.25	12.99	10.30	2.52	H		0.119	20.77		
		256-QAM	-25.68	10.56	10.30	2.52	H		0.068	18.34		
2592.990		PI/2 BPSK	-21.24	15.06	10.05	2.50	H		0.182	22.61	1	1
		QPSK	-21.64	14.66	10.05	2.50	H		0.166	22.21		
		16-QAM	-22.04	14.26	10.05	2.50	H		0.152	21.81		
		64-QAM	-23.23	13.07	10.05	2.50	H		0.115	20.62		
		256-QAM	-25.73	10.57	10.05	2.50	H		0.065	18.12		
2649.990	PI/2 BPSK	-22.22	14.45	10.10	2.65	H	0.155	21.90	1	1		
	QPSK	-22.31	14.36	10.10	2.65	H	0.152	21.81				
	16-QAM	-23.09	13.58	10.10	2.65	H	0.127	21.03				
	64-QAM	-24.29	12.38	10.10	2.65	H	0.096	19.83				
	256-QAM	-26.56	10.11	10.10	2.65	H	0.057	17.56				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
									W	W dBm	Size	Offset
2541.000	Sub6 41/ 90 MHz [30 kHz]	PI/2 BPSK	-20.92	15.44	10.30	2.52	H	< 2.00	0.210	23.22	1	122
		QPSK	-21.11	15.25	10.30	2.52	H		0.201	23.03		
		16-QAM	-21.78	14.58	10.30	2.52	H		0.172	22.36		
		64-QAM	-22.86	13.50	10.30	2.52	H		0.134	21.28		
		256-QAM	-25.46	10.90	10.30	2.52	H		0.074	18.68		
2592.990		PI/2 BPSK	-21.01	15.29	10.05	2.50	H		0.192	22.84	1	1
		QPSK	-21.23	15.07	10.05	2.50	H		0.183	22.62		
		16-QAM	-21.89	14.41	10.05	2.50	H		0.157	21.96		
		64-QAM	-22.99	13.31	10.05	2.50	H		0.122	20.86		
		256-QAM	-25.52	10.78	10.05	2.50	H		0.068	18.33		
2644.980	PI/2 BPSK	-21.84	14.97	10.00	2.66	H	0.170	22.31	1	1		
	QPSK	-21.93	14.88	10.00	2.66	H	0.167	22.22				
	16-QAM	-22.64	14.17	10.00	2.66	H	0.142	21.51				
	64-QAM	-23.95	12.86	10.00	2.66	H	0.105	20.20				
	256-QAM	-26.24	10.57	10.00	2.66	H	0.062	17.91				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
									W	W dBm	Size	Offset
2546.010	Sub6 41/ 100 MHz [30 kHz]	PI/2 BPSK	-20.58	15.79	10.25	2.54	H	< 2.00	0.224	23.50	1	136
		QPSK	-20.64	15.73	10.25	2.54	H		0.221	23.44		
		16-QAM	-21.45	14.92	10.25	2.54	H		0.183	22.63		
		64-QAM	-22.51	13.86	10.25	2.54	H		0.144	21.57		
		256-QAM	-25.14	11.23	10.25	2.54	H		0.078	18.94		
2592.990		PI/2 BPSK	-20.71	15.59	10.05	2.50	H		0.206	23.14	1	1
		QPSK	-20.76	15.54	10.05	2.50	H		0.204	23.09		
		16-QAM	-21.58	14.72	10.05	2.50	H		0.169	22.27		
		64-QAM	-22.66	13.64	10.05	2.50	H		0.132	21.19		
		256-QAM	-25.19	11.11	10.05	2.50	H		0.074	18.66		
2640.000	PI/2 BPSK	-20.78	16.17	9.90	2.67	H	0.219	23.40	1	1		
	QPSK	-20.93	16.02	9.90	2.67	H	0.211	23.25				
	16-QAM	-21.74	15.21	9.90	2.67	H	0.175	22.44				
	64-QAM	-22.88	14.07	9.90	2.67	H	0.135	21.30				
	256-QAM	-25.11	11.84	9.90	2.67	H	0.081	19.07				

**8.2 RADIATED SPURIOUS EMISSIONS**

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

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB		Detector
									Size	Offset	
500202 (2501.010)	5 002.02	-41.12	10.70	-42.47	3.63	H	-35.40	-25.00	1	22	Peak
	7 503.03	-43.88	11.10	-36.87	4.50	H	-30.27	-25.00			Average
	10 004.04	-49.72	11.20	-41.26	5.26	V	-35.32	-25.00			Peak
	12 505.05	-54.68	12.10	-45.34	6.04	V	-39.28	-25.00			Peak
	15 006.06	-50.64	13.80	-44.04	6.65	H	-36.89	-25.00			Peak
518598 (2592.990)	5 185.98	-51.79	11.00	-53.29	3.70	H	-45.99	-25.00	1	1	Peak
	7 778.97	-43.75	10.90	-36.37	4.61	V	-30.08	-25.00			Peak
	10 371.96	-47.51	11.20	-36.81	5.41	H	-31.02	-25.00			Peak
	12 964.95	-60.33	12.00	-50.40	6.11	V	-44.51	-25.00			Peak
	15 557.94	-56.11	15.40	-50.78	6.77	V	-42.15	-25.00			Peak
537000 (2685.000)	5 370.00	-51.55	11.50	-54.07	3.74	V	-46.31	-25.00	1	12	Peak
	8 055.00	-47.34	10.90	-40.13	4.71	V	-33.94	-25.00			Peak
	10 740.00	-51.38	11.10	-40.78	5.50	H	-35.18	-25.00			Peak
	13 425.00	-55.76	11.80	-44.91	6.22	H	-39.33	-25.00			Peak
	16 110.00	-64.87	15.70	-55.73	6.91	H	-46.94	-25.00			Peak

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

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB		Detector
									Size	Offset	
500700 (2503.500)	5 007.00	-41.14	10.70	-42.42	3.61	H	-35.33	-25.00	1	36	Peak
	7 510.50	-41.71	11.10	-34.64	4.50	H	-28.04	-25.00			Average
	10 014.00	-49.38	11.20	-40.77	5.27	H	-34.84	-25.00			Peak
	12 517.50	-64.17	12.10	-54.54	6.04	H	-48.48	-25.00			Peak
	15 021.00	-53.27	13.80	-46.79	6.65	H	-39.64	-25.00			Peak
518598 (2592.990)	5 185.98	-52.97	11.00	-54.47	3.70	H	-47.17	-25.00	1	1	Peak
	7 778.97	-46.66	10.90	-39.28	4.61	H	-32.99	-25.00			Peak
	10 371.96	-51.79	11.20	-41.09	5.41	H	-35.30	-25.00			Peak
	12 964.95	-64.29	12.00	-54.36	6.11	H	-48.47	-25.00			Peak
	15 557.94	-57.00	15.40	-51.67	6.77	H	-43.04	-25.00			Peak
536496 (2682.480)	5 364.96	-50.86	11.50	-53.15	3.75	H	-45.40	-25.00	1	1	Peak
	8 047.44	-45.15	10.85	-37.97	4.69	H	-31.81	-25.00			Peak
	10 729.92	-53.27	11.10	-42.04	5.47	H	-36.41	-25.00			Peak
	13 412.40	-59.40	11.80	-48.73	6.21	H	-43.14	-25.00			Peak
	16 094.88	-64.86	15.60	-55.40	6.91	H	-46.71	-25.00			Peak

- NR Band: n41
- Bandwidth: 20 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		Detector
									Size	Offset	
501204 (2506.020)	5 012.04	-41.78	10.70	-42.99	3.59	H	-35.88	-25.00	1	49	Peak
	7 518.06	-41.89	11.10	-34.78	4.51	H	-28.19	-25.00			Average
	10 024.08	-49.24	11.20	-40.42	5.27	H	-34.49	-25.00			Peak
	12 530.10	-63.67	12.10	-53.85	6.01	H	-47.76	-25.00			Peak
	15 036.12	-54.96	13.80	-48.72	6.65	H	-41.57	-25.00			Peak
518598 (2592.990)	5 185.98	-51.80	11.00	-53.30	3.70	H	-46.00	-25.00	1	1	Peak
	7 778.97	-42.49	10.90	-35.11	4.61	H	-28.82	-25.00			Peak
	10 371.96	-52.32	11.20	-41.62	5.41	H	-35.83	-25.00			Peak
	12 964.95	-63.09	12.00	-53.16	6.11	H	-47.27	-25.00			Peak
	15 557.94	-56.18	15.40	-50.85	6.77	H	-42.22	-25.00			Peak
535998 (2679.990)	5 359.98	-50.13	11.50	-52.19	3.76	H	-44.45	-25.00	1	1	Peak
	8 039.97	-44.03	10.80	-36.86	4.68	H	-30.74	-25.00			Peak
	10 719.96	-52.25	11.10	-40.62	5.46	H	-34.98	-25.00			Peak
	13 399.95	-57.62	11.80	-47.27	6.22	H	-41.69	-25.00			Peak
	16 079.94	-64.16	15.50	-54.88	6.90	H	-46.28	-25.00			Peak



- NR Band: n41
- Bandwidth: 25 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		Detector
									Size	Offset	
501702 (2508.510)	5 017.02	-41.68	10.70	-43.05	3.57	V	-35.92	-25.00	1	63	Peak
	7 525.53	-42.01	11.10	-34.70	4.51	V	-28.11	-25.00			Average
	10 034.04	-47.41	11.20	-38.50	5.27	V	-32.57	-25.00			Peak
	12 542.55	-60.79	12.10	-51.20	6.00	V	-45.10	-25.00			Peak
	15 051.06	-52.74	14.00	-46.68	6.66	V	-39.34	-25.00			Peak
518598 (2592.990)	5 185.98	-52.17	11.00	-53.67	3.70	V	-46.37	-25.00	1	1	Peak
	7 778.97	-43.93	10.90	-36.55	4.61	V	-30.26	-25.00			Peak
	10 371.96	-49.49	11.20	-38.79	5.41	V	-33.00	-25.00			Peak
	12 964.95	-62.30	12.00	-52.37	6.11	V	-46.48	-25.00			Peak
	15 557.94	-53.39	15.40	-48.06	6.77	V	-39.43	-25.00			Peak
535500 (2677.500)	5 355.00	-51.82	11.50	-53.68	3.75	V	-45.93	-25.00	1	1	Peak
	8 032.50	-46.64	10.80	-39.64	4.65	V	-33.49	-25.00			Peak
	10 710.00	-54.37	11.10	-42.49	5.47	V	-36.86	-25.00			Peak
	13 387.50	-57.16	11.90	-46.94	6.23	V	-41.27	-25.00			Peak
	16 065.00	-59.27	15.50	-50.22	6.90	V	-41.62	-25.00			Peak

- NR Band: n41
- Bandwidth: 30 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		Detector
									Size	Offset	
502200 (2511.000)	5 022.00	-41.04	10.70	-42.57	3.55	H	-35.42	-25.00	1	76	Peak
	7 533.00	-42.22	11.10	-34.74	4.50	H	-28.14	-25.00			Average
	10 044.00	-45.34	11.15	-36.49	5.27	H	-30.61	-25.00			Peak
	12 555.00	-63.50	12.10	-54.19	6.00	H	-48.09	-25.00			Peak
	15 066.00	-53.51	14.00	-47.90	6.65	H	-40.55	-25.00			Peak
518598 (2592.990)	5 185.98	-49.93	11.00	-51.43	3.70	H	-44.13	-25.00	1	1	Peak
	7 778.97	-48.47	10.90	-41.09	4.61	H	-34.80	-25.00			Average
	10 371.96	-54.08	11.20	-43.38	5.41	H	-37.59	-25.00			Average
	12 964.95	-60.52	12.00	-50.59	6.11	H	-44.70	-25.00			Peak
	15 557.94	-60.94	15.40	-55.61	6.77	H	-46.98	-25.00			Peak
534996 (2674.980)	5 349.96	-54.19	11.50	-55.84	3.75	H	-48.09	-25.00	1	1	Peak
	8 024.94	-47.43	10.80	-40.72	4.62	H	-34.54	-25.00			Peak
	10 699.92	-54.85	11.10	-43.17	5.48	H	-37.55	-25.00			Peak
	13 374.90	-56.13	11.90	-46.07	6.23	H	-40.40	-25.00			Peak
	16 049.88	-64.92	15.50	-56.07	6.90	H	-47.47	-25.00			Peak

- NR Band: n41
- Bandwidth: 40 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		Detector
									Size	Offset	
503202 (2516.010)	5 032.02	-43.37	10.70	-45.47	3.56	H	-38.33	-25.00	1	104	Peak
	7 548.03	-43.13	11.10	-35.79	4.50	H	-29.19	-25.00			Average
	10 064.04	-49.65	11.10	-40.84	5.28	H	-35.02	-25.00			Peak
	12 580.05	-64.27	12.10	-54.64	6.06	H	-48.60	-25.00			Peak
	15 096.06	-54.51	14.05	-49.18	6.67	H	-41.80	-25.00			Peak
518598 (2592.990)	5 185.98	-48.46	11.00	-49.96	3.70	H	-42.66	-25.00	1	1	Peak
	7 778.97	-42.21	10.90	-34.83	4.61	H	-28.54	-25.00			Peak
	10 371.96	-49.10	11.20	-38.40	5.41	H	-32.61	-25.00			Peak
	12 964.95	-58.84	12.00	-48.91	6.11	H	-43.02	-25.00			Peak
	15 557.94	-55.05	15.40	-49.72	6.77	H	-41.09	-25.00			Peak
534000 (2670.000)	5 340.00	-55.39	11.40	-57.09	3.75	H	-49.44	-25.00	1	1	Peak
	8 010.00	-47.85	10.80	-40.78	4.62	H	-34.60	-25.00			Peak
	10 680.00	-56.21	11.10	-44.75	5.46	H	-39.11	-25.00			Peak
	13 350.00	-63.10	11.90	-53.05	6.21	H	-47.36	-25.00			Peak
	16 020.00	-59.68	15.20	-51.33	6.68	H	-42.81	-25.00			Peak

- NR Band: n41
- Bandwidth: 50 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		Detector
									Size	Offset	
504204 (2521.020)	5 042.04	-44.99	10.70	-46.96	3.60	H	-39.86	-25.00	1	131	Peak
	7 563.06	-44.05	11.10	-37.23	4.52	H	-30.65	-25.00			Average
	10 084.08	-48.19	11.10	-38.97	5.30	H	-33.17	-25.00			Peak
	12 605.10	-60.78	12.00	-51.28	6.05	H	-45.33	-25.00			Peak
	15 126.12	-55.82	14.10	-49.86	6.67	H	-42.43	-25.00			Peak
518598 (2592.990)	5 185.98	-45.16	11.00	-46.66	3.70	H	-39.36	-25.00	1	1	Peak
	7 778.97	-42.51	10.90	-35.13	4.61	H	-28.84	-25.00			Peak
	10 371.96	-48.64	11.20	-37.94	5.41	H	-32.15	-25.00			Peak
	12 964.95	-60.06	12.00	-50.13	6.11	H	-44.24	-25.00			Peak
	15 557.94	-54.74	15.40	-49.41	6.77	H	-40.78	-25.00			Peak
532998 (2664.990)	5 329.98	-53.22	11.40	-55.19	3.71	H	-47.50	-25.00	1	1	Peak
	7 994.97	-46.82	10.75	-39.41	4.66	H	-33.32	-25.00			Peak
	10 659.96	-51.96	11.10	-39.80	5.49	H	-34.19	-25.00			Peak
	13 324.95	-59.80	12.00	-49.09	6.19	H	-43.28	-25.00			Peak
	15 989.94	-63.45	15.10	-55.63	6.88	H	-47.41	-25.00			Peak

- NR Band: n41
- Bandwidth: 60 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		Detector
									Size	Offset	
505200 (2526.000)	5 052.00	-44.95	10.70	-46.60	3.63	H	-39.53	-25.00	1	160	Peak
	7 578.00	-43.89	11.10	-37.10	4.54	H	-30.54	-25.00			Average
	10 104.00	-48.50	11.10	-39.66	5.29	H	-33.85	-25.00			Peak
	12 630.00	-57.24	12.00	-48.01	6.02	H	-42.03	-25.00			Peak
	15 156.00	-56.62	14.20	-51.13	6.67	H	-43.60	-25.00			Peak
518598 (2592.990)	5 185.98	-47.33	11.00	-48.83	3.70	H	-41.53	-25.00	1	1	Peak
	7 778.97	-42.87	10.90	-35.49	4.61	H	-29.20	-25.00			Peak
	10 371.96	-54.99	11.20	-44.29	5.41	H	-38.50	-25.00			Peak
	12 964.95	-58.25	12.00	-48.32	6.11	H	-42.43	-25.00			Peak
	15 557.94	-54.42	15.40	-49.09	6.77	H	-40.46	-25.00			Peak
531996 (2659.980)	5 319.96	-54.72	11.40	-57.46	3.66	H	-49.72	-25.00	1	1	Peak
	7 979.94	-45.13	10.70	-37.88	4.67	H	-31.85	-25.00			Peak
	10 639.92	-50.06	11.20	-38.63	5.49	H	-32.92	-25.00			Peak
	13 299.90	-63.47	12.00	-53.32	6.19	H	-47.51	-25.00			Peak
	15 959.88	-64.98	15.10	-56.32	6.87	H	-48.09	-25.00			Peak

- NR Band: n41
- 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		Detector
									Size	Offset	
506202 (2531.010)	5 062.02	-45.93	10.70	-46.91	3.65	H	-39.86	-25.00	1	187	Peak
	7 593.03	-45.57	11.15	-38.53	4.53	H	-31.91	-25.00			Average
	10 124.04	-46.57	11.10	-37.69	5.30	H	-31.89	-25.00			Peak
	12 655.05	-63.22	11.90	-53.71	6.03	H	-47.84	-25.00			Peak
	15 186.06	-53.18	14.20	-47.93	6.67	H	-40.40	-25.00			Peak
518598 (2592.990)	5 185.98	-51.13	11.00	-52.63	3.70	H	-45.33	-25.00	1	1	Peak
	7 778.97	-41.94	10.90	-34.56	4.61	H	-28.27	-25.00			Peak
	10 371.96	-48.83	11.20	-38.13	5.41	H	-32.34	-25.00			Peak
	12 964.95	-64.27	12.00	-54.34	6.11	H	-48.45	-25.00			Peak
	15 557.94	-61.86	15.40	-56.53	6.77	H	-47.90	-25.00			Peak
531000 (2655.000)	5 310.00	-54.15	11.40	-56.39	3.65	H	-48.64	-25.00	1	1	Peak
	7 965.00	-46.14	10.70	-38.97	4.65	H	-32.92	-25.00			Peak
	10 620.00	-54.65	11.20	-43.96	5.41	H	-38.17	-25.00			Peak
	13 275.00	-59.31	12.10	-48.98	6.22	H	-43.10	-25.00			Peak
	15 930.00	-63.14	15.00	-54.87	6.88	H	-46.75	-25.00			Peak

- NR Band: n41
- Bandwidth: 80 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		Detector
									Size	Offset	
507204 (2536.020)	5 072.04	-48.24	10.70	-49.52	3.62	V	-42.44	-25.00	1	215	Peak
	7 608.06	-43.38	11.20	-36.37	4.52	V	-29.69	-25.00			Peak
	10 144.08	-50.55	11.05	-41.08	5.32	V	-35.35	-25.00			Peak
	12 680.10	-58.80	11.90	-48.59	6.06	V	-42.75	-25.00			Peak
	15 216.12	-53.75	14.40	-48.79	6.69	V	-41.08	-25.00			Peak
518598 (2592.990)	5 185.98	-43.79	11.00	-45.29	3.70	V	-37.99	-25.00	1	1	Peak
	7 778.97	-43.96	10.90	-36.58	4.61	V	-30.29	-25.00			Average
	10 371.96	-49.63	11.20	-38.93	5.41	V	-33.14	-25.00			Peak
	12 964.95	-60.47	12.00	-50.54	6.11	V	-44.65	-25.00			Peak
	15 557.94	-62.53	15.40	-57.20	6.77	V	-48.57	-25.00			Peak
529998 (2649.990)	5 299.98	-58.02	11.40	-60.13	3.69	V	-52.42	-25.00	1	1	Peak
	7 949.97	-47.57	10.70	-40.26	4.64	V	-34.20	-25.00			Peak
	10 599.96	-53.85	11.20	-42.66	5.41	V	-36.87	-25.00			Peak
	13 249.95	-64.56	12.10	-54.50	6.18	V	-48.58	-25.00			Peak
	15 899.94	-63.20	15.00	-55.37	6.87	V	-47.24	-25.00			Peak

- NR Band: n41
- Bandwidth: 90 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		Detector
									Size	Offset	
508200 (2541.000)	5 082.00	-46.54	10.70	-48.18	3.61	V	-41.09	-25.00	1	122	Peak
	7 623.00	-41.97	11.20	-35.57	4.52	V	-28.89	-25.00			Average
	10 164.00	-48.89	11.00	-39.81	5.33	V	-34.14	-25.00			Peak
	12 705.00	-63.84	11.90	-53.32	6.06	V	-47.48	-25.00			Peak
	15 246.00	-55.45	14.50	-49.57	6.73	V	-41.80	-25.00			Peak
518598 (2592.990)	5 185.98	-46.16	11.00	-47.66	3.70	V	-40.36	-25.00	1	1	Peak
	7 778.97	-42.79	10.90	-35.41	4.61	V	-29.12	-25.00			Average
	10 371.96	-49.29	11.20	-38.59	5.41	V	-32.80	-25.00			Peak
	12 964.95	-63.37	12.00	-53.44	6.11	V	-47.55	-25.00			Peak
	15 557.94	-61.43	15.40	-56.10	6.77	V	-47.47	-25.00			Peak
528996 (2644.980)	5 289.96	-56.66	11.30	-58.13	3.73	V	-50.56	-25.00	1	1	Peak
	7 934.94	-45.38	10.70	-38.03	4.64	V	-31.97	-25.00			Peak
	10 579.92	-51.98	11.20	-41.53	5.46	V	-35.79	-25.00			Peak
	13 224.90	-63.95	12.10	-53.92	6.16	V	-47.98	-25.00			Peak
	15 869.88	-62.52	14.90	-55.77	6.85	V	-47.72	-25.00			Peak



- NR Band: n41
- 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		Detector
									Size	Offset	
509202 (2546.010)	5 092.02	-45.71	10.70	-47.86	3.64	V	-40.80	-25.00	1	136	Peak
	7 638.03	-43.04	11.20	-36.65	4.53	V	-29.98	-25.00			Average
	10 184.04	-43.99	11.00	-34.53	5.33	V	-28.86	-25.00			Peak
	12 730.05	-62.44	11.90	-51.99	6.02	V	-46.11	-25.00			Peak
	15 276.06	-54.61	14.60	-48.74	6.71	V	-40.85	-25.00			Peak
518598 (2592.990)	5 185.98	-44.70	11.00	-46.20	3.70	V	-38.90	-25.00	1	1	Peak
	7 778.97	-43.38	10.90	-36.00	4.61	V	-29.71	-25.00			Average
	10 371.96	-54.51	11.20	-43.81	5.41	V	-38.02	-25.00			Average
	12 964.95	-62.77	12.00	-52.84	6.11	V	-46.95	-25.00			Peak
	15 557.94	-54.03	15.40	-48.70	6.77	V	-40.07	-25.00			Peak
528000 (2640.000)	5 280.00	-55.54	11.30	-57.45	3.75	V	-49.90	-25.00	1	1	Peak
	7 920.00	-50.31	10.70	-43.13	4.63	V	-37.06	-25.00			Peak
	10 560.00	-54.67	11.20	-44.76	5.45	V	-39.01	-25.00			Peak
	13 200.00	-57.60	12.10	-47.16	6.19	V	-41.25	-25.00			Peak
	15 840.00	-64.02	14.90	-56.91	6.84	V	-48.85	-25.00			Peak

**8.3 PEAK-TO-AVERAGE RATIO**

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data ( dB )
Sub6 n41	10 MHz	2592.990	BPSK	24	0	5.21
			QPSK			5.64
			16-QAM			6.32
			64-QAM			6.36
			256-QAM			6.59
	15 MHz		BPSK	36		4.30
			QPSK			5.51
			16-QAM			6.29
			64-QAM			6.52
	20 MHz		256-QAM	50		6.78
			BPSK			5.17
			QPSK			5.55
			16-QAM			6.16
	25 MHz		64-QAM	64		6.44
			256-QAM			6.76
			BPSK			4.38
			QPSK			5.61
	30 MHz		16-QAM	75		6.24
			64-QAM			6.57
			256-QAM			6.74
			BPSK			4.48
	40 MHz		QPSK	100		5.51
			16-QAM			6.39
			64-QAM			6.47
			256-QAM			6.82
	50 MHz		BPSK	128		5.50
			QPSK			5.81
			16-QAM			6.28
			64-QAM			6.49
	60 MHz		256-QAM	162		6.81
			BPSK			4.29
			QPSK			5.44
			16-QAM			6.21
	70 MHz		64-QAM	180		6.41
			256-QAM			6.76
			BPSK			4.44
			QPSK			5.46
	80 MHz		16-QAM	216		6.19
			64-QAM			6.43
			256-QAM			6.67
BPSK		4.47				
90 MHz	QPSK	243	5.48			
	16-QAM		6.18			
	64-QAM		6.43			
	256-QAM		6.70			
100 MHz	BPSK	270	4.58			
	QPSK		5.43			
	16-QAM		6.20			
	64-QAM		6.40			
			256-QAM			6.78
			BPSK			4.56
			QPSK			5.38
			16-QAM			6.21
			64-QAM			6.47
			256-QAM			6.61
			BPSK			4.81
			QPSK			5.37
			16-QAM			6.13
			64-QAM			6.39
			256-QAM			6.69

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 130 ~ 189.

**8.4 OCCUPIED BANDWIDTH**

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data ( MHz )
Sub6 n41	10 MHz	2592.990	BPSK	24	0	8.6322
			QPSK			8.6213
			16-QAM			8.6698
			64-QAM			8.6252
			256-QAM			8.6563
	15 MHz		BPSK	36		12.988
			QPSK			12.960
			16-QAM			12.910
			64-QAM			12.961
			256-QAM			12.893
	20 MHz		BPSK	50		17.900
			QPSK			17.932
			16-QAM			17.911
			64-QAM			17.872
			256-QAM			17.945
	25 MHz		BPSK	64		22.972
			QPSK			22.972
			16-QAM			22.922
			64-QAM			22.955
			256-QAM			22.945
	30 MHz		BPSK	75		26.958
			QPSK			26.936
			16-QAM			26.862
			64-QAM			26.879
			256-QAM			26.873
	40 MHz		BPSK	100		35.928
			QPSK			35.882
			16-QAM			35.780
			64-QAM			35.872
			256-QAM			35.865
	50 MHz		BPSK	128		45.884
			QPSK			45.791
			16-QAM			45.763
			64-QAM			46.039
			256-QAM			45.831
	60 MHz		BPSK	162		58.149
			QPSK			58.099
			16-QAM			57.997
			64-QAM			58.073
			256-QAM			57.996
70 MHz	BPSK	180	64.526			
	QPSK		64.559			
	16-QAM		64.263			
	64-QAM		64.623			
	256-QAM		64.365			
80 MHz	BPSK	216	77.225			
	QPSK		77.392			
	16-QAM		77.602			
	64-QAM		77.487			
	256-QAM		77.572			
90 MHz	BPSK	243	86.939			
	QPSK		86.970			
	16-QAM		87.099			
	64-QAM		86.786			
	256-QAM		87.004			
100 MHz	BPSK	270	96.768			
	QPSK		97.101			
	16-QAM		96.446			
	64-QAM		96.788			
	256-QAM		96.815			

**Note:**

1. Plots of the EUT's Occupied Bandwidth are shown Page 70 ~ 129.

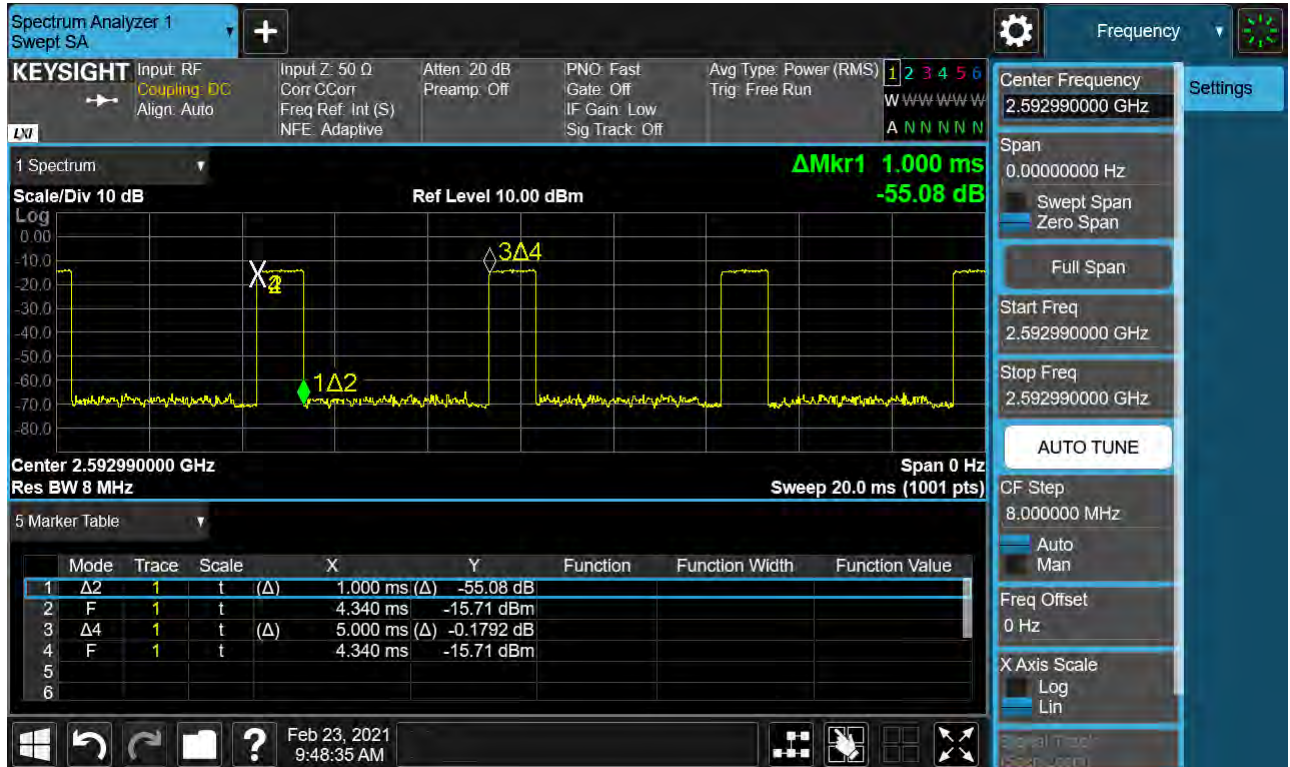
**8.5 CONDUCTED SPURIOUS EMISSIONS**

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n41	10	2501.010	4.0160	37.190	-70.945	-33.755	-25.00
		2592.990	9.6815	37.805	-71.001	-33.196	
		2685.000	4.0175	37.190	-70.838	-33.648	
	15	2503.500	8.2747	37.805	-70.465	-32.660	
		2592.990	4.8679	37.190	-71.384	-34.194	
		2682.480	4.0679	37.190	-71.072	-33.882	
	20	2506.020	4.0240	37.190	-70.899	-33.709	
		2592.990	9.4422	37.805	-70.891	-33.086	
		2679.990	5.2079	37.805	-70.522	-32.717	
	25	2508.510	9.1236	37.805	-69.785	-31.980	
		2592.990	3.7962	37.190	-70.158	-32.968	
		2677.500	3.7658	37.190	-70.276	-33.086	
	30	2511.000	9.7024	37.805	-69.899	-32.094	
		2592.990	9.7149	37.805	-71.050	-33.245	
		2674.980	3.7772	37.190	-71.077	-33.887	
	40	2516.010	3.0539	37.190	-71.121	-33.931	
		2592.990	4.9113	37.190	-70.184	-32.994	
		2670.000	4.9357	37.190	-70.907	-33.717	
	50	2521.020	9.4666	37.805	-70.480	-32.675	
		2592.990	4.9098	37.190	-70.447	-33.257	
		2664.990	7.4906	37.805	-71.140	-33.335	
	60	2526.000	4.8330	37.190	-70.601	-33.411	
		2592.990	3.7563	37.190	-71.126	-33.936	
		2659.980	5.5050	37.805	-70.920	-33.115	
	70	2531.010	4.9397	37.190	-71.065	-33.875	
		2592.990	8.2867	37.805	-70.811	-33.006	
		2655.000	9.7119	37.805	-70.156	-32.351	
	80	2536.020	8.0254	37.805	-70.349	-32.544	
		2592.990	4.9048	37.190	-70.546	-33.356	
		2649.990	4.0215	37.190	-69.739	-32.549	
90	2541.000	8.2847	37.805	-69.946	-32.141		
	2592.990	4.0439	37.190	-70.248	-33.058		
	2644.980	9.1102	37.805	-69.935	-32.130		
100	2546.010	4.0609	37.190	-70.368	-33.178		
	2592.990	9.0833	37.805	-70.723	-32.918		
	2640.000	9.9781	37.805	-70.103	-32.298		

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 284 ~ 345.
2. Duty Cycle factor already applied on the factor.

- Duty Cycle Factor(dB) = 6.99



- 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	34.484
1 – 5	37.190
5 – 10	37.805
10 – 15	38.330
15 – 20	38.703
Above 20	39.345

### 8.6 CHANNEL EDGE

BW (MHz)	Frequency (MHz)	Mod	RB (Size/Offset)	2 495 MHz ~ 2 496 MHz	C.E ~ (C.E +1MHz)	2 490.5 MHz ~ 2 495 MHz	(C.E + 1 MHz) ~ (C.E + 5 MHz)	Below 2 490.5 MHz	(C.E + 5 MHz) ~ (C.E + X MHz)	Above (C.E + X MHz)
				Lower	Upper	Lower	Upper	Lower	Upper	Lower
10	2501.010	BPSK	Full RB	-33.78	-31.54	-28.95	-27.19	-31.09	-25.09	-35.76
15	2503.500	BPSK	Full RB	-32.54	-33.45	-29.95	-29.06	-31.36	-28.54	-38.20
20	2506.020	BPSK	Full RB	-33.60	-31.78	-31.95	-29.62	-34.35	-29.80	-37.60
25	2508.510	BPSK	Full RB	-26.01	-25.16	-26.90	-22.96	-28.83	-24.75	-35.87
30	2511.000	BPSK	Full RB	-29.68	-28.96	-31.85	-27.15	-32.94	-26.75	-36.36
40	2516.010	BPSK	Full RB	-32.49	-32.58	-34.88	-31.83	-35.31	-29.89	-42.64
50	2521.020	BPSK	Full RB	-31.88	-27.50	-34.23	-28.46	-36.37	-28.87	-39.39
60	2526.000	BPSK	Full RB	-22.09	-21.13	-32.45	-25.91	-33.21	-24.52	-35.76
70	2531.010	BPSK	Full RB	-31.66	-30.59	-36.63	-31.92	-37.83	-30.72	-41.20
80	2536.020	BPSK	Full RB	-29.04	-27.49	-35.82	-29.12	-36.74	-28.13	-43.08
90	2541.000	BPSK	Full RB	-26.94	-30.62	-34.85	-30.83	-35.34	-30.95	-41.42
100	2546.010	BPSK	Full RB	-25.16	-29.55	-35.54	-28.59	-36.79	-28.86	-41.22
Limit (dBm)				-13.0	-10.0	-13.0	-10.0	-25.0	-13.0	-25.0

Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	C.E ~ (C.E ± 1 MHz)		(C.E ± 1 MHz) ~ (C.E ± 5 MHz)	
					Lower	Upper	Lower	Upper
10 MHz	2592.990	BPSK	Full RB	0	-31.32	-30.91	-25.83	-25.79
	2685.000	BPSK	Full RB	0	-28.27	-29.90	-24.48	-25.69
15 MHz	2592.990	BPSK	Full RB	0	-31.78	-34.70	-29.32	-30.46
	2682.480	BPSK	Full RB	0	-28.49	-33.77	-25.21	-27.30
20 MHz	2592.990	BPSK	Full RB	0	-31.22	-31.16	-26.65	-27.25
	2679.990	BPSK	Full RB	0	-28.53	-31.80	-25.70	-29.45
25 MHz	2592.990	BPSK	Full RB	0	-30.77	-33.96	-30.48	-32.79
	2677.500	BPSK	Full RB	0	-28.07	-32.11	-26.42	-30.09
30 MHz	2592.990	BPSK	Full RB	0	-30.73	-33.36	-31.33	-32.47
	2679.990	BPSK	Full RB	0	-26.78	-33.03	-26.89	-30.44
40 MHz	2592.990	BPSK	Full RB	0	-27.47	-29.01	-28.75	-29.43
	2670.000	BPSK	Full RB	0	-26.02	-33.68	-27.10	-34.68
50 MHz	2592.990	BPSK	Full RB	0	-28.00	-34.14	-31.39	-35.40
	2664.990	BPSK	Full RB	0	-25.63	-33.08	-28.03	-35.44
60 MHz	2592.990	BPSK	Full RB	0	-20.79	-23.49	-31.91	-33.11
	2659.980	BPSK	Full RB	0	-19.15	-24.72	-28.66	-30.92
70 MHz	2592.990	BPSK	Full RB	0	-26.66	-34.67	-32.59	-34.12
	2655.000	BPSK	Full RB	0	-25.42	-36.12	-28.65	-36.70
80 MHz	2592.990	BPSK	Full RB	0	-27.59	-33.84	-32.72	-34.27
	2649.990	BPSK	Full RB	0	-25.60	-35.56	-28.74	-36.60
90 MHz	2592.990	BPSK	Full RB	0	-25.70	-33.90	-32.25	-31.98
	2644.980	BPSK	Full RB	0	-22.94	-34.71	-28.86	-37.04
100 MHz	2592.990	BPSK	Full RB	0	-23.13	-32.34	-32.07	-33.45
	2640.000	BPSK	Full RB	0	-21.50	-35.94	-29.30	-36.77
Limit (dBm)					-10.0		-10.0	

Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	(C.E ± 5 MHz) ~ (C.E ± X MHz)		Above (C.E ± X MHz)	
					Lower	Upper	Lower	Upper
					10 MHz	2592.990	BPSK	Full RB
	2685.000	BPSK	Full RB	0	-25.73	-29.55	-34.01	-36.49
15 MHz	2592.990	BPSK	Full RB	0	-28.44	-29.72	-39.44	-39.00
	2682.480	BPSK	Full RB	0	-24.52	-27.03	-35.66	-38.17
20 MHz	2592.990	BPSK	Full RB	0	-27.70	-27.54	-34.91	-33.56
	2679.990	BPSK	Full RB	0	-24.53	-28.59	-36.23	-38.95
25 MHz	2592.990	BPSK	Full RB	0	-30.62	-32.43	-41.82	-41.59
	2677.500	BPSK	Full RB	0	-26.43	-30.82	-39.12	-43.88
30 MHz	2592.990	BPSK	Full RB	0	-30.02	-32.56	-39.13	-40.59
	2679.990	BPSK	Full RB	0	-26.43	-31.48	-35.44	-40.01
40 MHz	2592.990	BPSK	Full RB	0	-28.97	-28.73	-40.55	-39.53
	2670.000	BPSK	Full RB	0	-27.93	-33.60	-42.72	-47.81
50 MHz	2592.990	BPSK	Full RB	0	-31.75	-35.67	-46.42	-45.61
	2664.990	BPSK	Full RB	0	-28.51	-34.95	-41.64	-47.99
60 MHz	2592.990	BPSK	Full RB	0	-30.35	-30.34	-45.93	-43.92
	2659.980	BPSK	Full RB	0	-25.67	-34.10	-36.61	-48.11
70 MHz	2592.990	BPSK	Full RB	0	-31.43	-32.64	-47.26	-43.09
	2655.000	BPSK	Full RB	0	-29.57	-39.13	-44.66	-47.73
80 MHz	2592.990	BPSK	Full RB	0	-31.54	-32.89	-47.60	-45.94
	2649.990	BPSK	Full RB	0	-26.88	-35.27	-45.02	-47.73
90 MHz	2592.990	BPSK	Full RB	0	-31.49	-31.61	-47.69	-46.82
	2644.980	BPSK	Full RB	0	-29.75	-37.48	-46.79	-47.66
100 MHz	2592.990	BPSK	Full RB	0	-32.70	-28.61	-48.09	-47.96
	2640.000	BPSK	Full RB	0	-29.79	-37.66	-47.39	-47.83
Limit (dBm)					-13.0		-25.0	

Note:

1. C.E = Channel Edge
2. X = X is the greater of 6 MHz or the actual emission bandwidth
3. Duty Cycle factor already applied on the factor.
  - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
  - Result(dBm) = Reading + Factor
  - Duty Cycle Factor(dB) = 6.99
4. Plots of the EUT's Channel Edge are shown Page 190 ~ 273. (1RB & Full RB)



**8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE**

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2501.010	100 %	+20(Ref)	2501 009 986	0.0	0.000 000	0.000
	100 %	-30	2501 009 970	-16.1	-0.000 001	-0.006
	100 %	-20	2501 009 971	-14.9	-0.000 001	-0.006
	100 %	-10	2501 009 969	-16.9	-0.000 001	-0.007
	100 %	0	2501 009 971	-15.1	-0.000 001	-0.006
	100 %	+10	2501 009 972	-14.3	-0.000 001	-0.006
	100 %	+30	2501 009 972	-13.6	-0.000 001	-0.005
	100 %	+40	2501 009 975	-11.3	0.000 000	-0.005
	100 %	+50	2501 009 972	-14.3	-0.000 001	-0.006
	Batt. Endpoint	+20	2501 009 970	-16.0	-0.000 001	-0.006
2685.000	100 %	+20(Ref)	2684 999 978	0.0	0.000 000	0.000
	100 %	-30	2684 999 958	-20.0	-0.000 001	-0.007
	100 %	-20	2684 999 961	-17.4	-0.000 001	-0.006
	100 %	-10	2684 999 956	-22.2	-0.000 001	-0.008
	100 %	0	2684 999 959	-19.6	-0.000 001	-0.007
	100 %	+10	2684 999 959	-19.3	-0.000 001	-0.007
	100 %	+30	2684 999 958	-19.9	-0.000 001	-0.007
	100 %	+40	2684 999 958	-20.1	-0.000 001	-0.007
	100 %	+50	2684 999 957	-21.2	-0.000 001	-0.008
	Batt. Endpoint	+20	2684 999 959	-19.4	-0.000 001	-0.007

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2503.500	100 %	+20(Ref)	2503 499 983	0.0	0.000 000	0.000
	100 %	-30	2503 499 966	-17.1	-0.000 001	-0.007
	100 %	-20	2503 499 965	-18.2	-0.000 001	-0.007
	100 %	-10	2503 499 964	-18.8	-0.000 001	-0.008
	100 %	0	2503 499 966	-16.6	-0.000 001	-0.007
	100 %	+10	2503 499 965	-17.8	-0.000 001	-0.007
	100 %	+30	2503 499 965	-18.0	-0.000 001	-0.007
	100 %	+40	2503 499 965	-17.6	-0.000 001	-0.007
	100 %	+50	2503 499 965	-17.6	-0.000 001	-0.007
	Batt. Endpoint	+20	2503 499 968	-15.4	-0.000 001	-0.006
2682.480	100 %	+20(Ref)	2682 479 980	0.0	0.000 000	0.000
	100 %	-30	2682 479 961	-19.1	-0.000 001	-0.007
	100 %	-20	2682 479 963	-16.9	-0.000 001	-0.006
	100 %	-10	2682 479 960	-20.1	-0.000 001	-0.007
	100 %	0	2682 479 961	-19.1	-0.000 001	-0.007
	100 %	+10	2682 479 963	-17.3	-0.000 001	-0.006
	100 %	+30	2682 479 964	-16.1	-0.000 001	-0.006
	100 %	+40	2682 479 960	-20.6	-0.000 001	-0.008
	100 %	+50	2682 479 965	-15.7	-0.000 001	-0.006
	Batt. Endpoint	+20	2682 479 961	-19.6	-0.000 001	-0.007

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2506.020	100 %	+20(Ref)	2506 019 987	0.0	0.000 000	0.000
	100 %	-30	2506 019 973	-14.4	-0.000 001	-0.006
	100 %	-20	2506 019 975	-12.9	-0.000 001	-0.005
	100 %	-10	2506 019 975	-12.8	-0.000 001	-0.005
	100 %	0	2506 019 976	-11.4	0.000 000	-0.005
	100 %	+10	2506 019 974	-13.5	-0.000 001	-0.005
	100 %	+30	2506 019 971	-15.9	-0.000 001	-0.006
	100 %	+40	2506 019 975	-12.8	-0.000 001	-0.005
	100 %	+50	2506 019 973	-14.2	-0.000 001	-0.006
	Batt. Endpoint	+20	2506 019 972	-15.4	-0.000 001	-0.006
2679.990	100 %	+20(Ref)	2679 989 985	0.0	0.000 000	0.000
	100 %	-30	2679 989 968	-16.8	-0.000 001	-0.006
	100 %	-20	2679 989 968	-17.0	-0.000 001	-0.006
	100 %	-10	2679 989 966	-18.6	-0.000 001	-0.007
	100 %	0	2679 989 967	-17.5	-0.000 001	-0.007
	100 %	+10	2679 989 967	-17.5	-0.000 001	-0.007
	100 %	+30	2679 989 967	-17.9	-0.000 001	-0.007
	100 %	+40	2679 989 967	-17.3	-0.000 001	-0.006
	100 %	+50	2679 989 965	-19.3	-0.000 001	-0.007
	Batt. Endpoint	+20	2679 989 968	-16.7	-0.000 001	-0.006

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2508.510	100 %	+20(Ref)	2508 509 988	0.0	0.000 000	0.000
	100 %	-30	2508 509 974	-14.1	-0.000 001	-0.006
	100 %	-20	2508 509 973	-15.2	-0.000 001	-0.006
	100 %	-10	2508 509 975	-13.2	-0.000 001	-0.005
	100 %	0	2508 509 976	-11.5	0.000 000	-0.005
	100 %	+10	2508 509 975	-13.3	-0.000 001	-0.005
	100 %	+30	2508 509 975	-12.7	-0.000 001	-0.005
	100 %	+40	2508 509 978	-10.0	0.000 000	-0.004
	100 %	+50	2508 509 974	-13.5	-0.000 001	-0.005
	Batt. Endpoint	+20	2508 509 977	-10.7	0.000 000	-0.004
2677.500	100 %	+20(Ref)	2677 499 984	0.0	0.000 000	0.000
	100 %	-30	2677 499 967	-16.5	-0.000 001	-0.006
	100 %	-20	2677 499 968	-15.9	-0.000 001	-0.006
	100 %	-10	2677 499 964	-20.1	-0.000 001	-0.007
	100 %	0	2677 499 966	-17.4	-0.000 001	-0.007
	100 %	+10	2677 499 965	-18.1	-0.000 001	-0.007
	100 %	+30	2677 499 967	-16.6	-0.000 001	-0.006
	100 %	+40	2677 499 964	-19.6	-0.000 001	-0.007
	100 %	+50	2677 499 962	-21.1	-0.000 001	-0.008
	Batt. Endpoint	+20	2677 499 965	-18.6	-0.000 001	-0.007

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2511.000	100 %	+20(Ref)	2510 999 983	0.0	0.000 000	0.000
	100 %	-30	2510 999 966	-17.0	-0.000 001	-0.007
	100 %	-20	2510 999 963	-19.4	-0.000 001	-0.008
	100 %	-10	2510 999 965	-18.2	-0.000 001	-0.007
	100 %	0	2510 999 964	-19.0	-0.000 001	-0.008
	100 %	+10	2510 999 964	-19.0	-0.000 001	-0.008
	100 %	+30	2510 999 967	-15.8	-0.000 001	-0.006
	100 %	+40	2510 999 967	-16.2	-0.000 001	-0.006
	100 %	+50	2510 999 964	-18.9	-0.000 001	-0.008
	Batt. Endpoint	+20	2510 999 963	-19.8	-0.000 001	-0.008
2674.980	100 %	+20(Ref)	2674 979 989	0.0	0.000 000	0.000
	100 %	-30	2674 979 976	-12.7	0.000 000	-0.005
	100 %	-20	2674 979 978	-11.2	0.000 000	-0.004
	100 %	-10	2674 979 974	-14.7	-0.000 001	-0.006
	100 %	0	2674 979 977	-11.3	0.000 000	-0.004
	100 %	+10	2674 979 978	-11.3	0.000 000	-0.004
	100 %	+30	2674 979 979	-9.4	0.000 000	-0.004
	100 %	+40	2674 979 975	-14.2	-0.000 001	-0.005
	100 %	+50	2674 979 978	-11.0	0.000 000	-0.004
	Batt. Endpoint	+20	2674 979 978	-10.3	0.000 000	-0.004

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2516.010	100 %	+20(Ref)	2516 009 985	0.0	0.000 000	0.000
	100 %	-30	2516 009 970	-14.9	-0.000 001	-0.006
	100 %	-20	2516 009 969	-16.0	-0.000 001	-0.006
	100 %	-10	2516 009 970	-14.9	-0.000 001	-0.006
	100 %	0	2516 009 970	-15.1	-0.000 001	-0.006
	100 %	+10	2516 009 975	-10.4	0.000 000	-0.004
	100 %	+30	2516 009 969	-15.8	-0.000 001	-0.006
	100 %	+40	2516 009 972	-13.7	-0.000 001	-0.005
	100 %	+50	2516 009 968	-16.9	-0.000 001	-0.007
	Batt. Endpoint	+20	2516 009 969	-16.3	-0.000 001	-0.006
2670.000	100 %	+20(Ref)	2669 999 982	0.0	0.000 000	0.000
	100 %	-30	2669 999 965	-16.6	-0.000 001	-0.006
	100 %	-20	2669 999 966	-15.6	-0.000 001	-0.006
	100 %	-10	2669 999 964	-18.3	-0.000 001	-0.007
	100 %	0	2669 999 965	-17.1	-0.000 001	-0.006
	100 %	+10	2669 999 965	-17.5	-0.000 001	-0.007
	100 %	+30	2669 999 966	-16.4	-0.000 001	-0.006
	100 %	+40	2669 999 967	-15.5	-0.000 001	-0.006
	100 %	+50	2669 999 962	-19.8	-0.000 001	-0.007
	Batt. Endpoint	+20	2669 999 964	-17.7	-0.000 001	-0.007

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2521.020	100 %	+20(Ref)	2521 019 985	0.0	0.000 000	0.000
	100 %	-30	2521 019 971	-13.4	-0.000 001	-0.005
	100 %	-20	2521 019 972	-12.7	-0.000 001	-0.005
	100 %	-10	2521 019 972	-12.3	0.000 000	-0.005
	100 %	0	2521 019 970	-14.5	-0.000 001	-0.006
	100 %	+10	2521 019 967	-17.1	-0.000 001	-0.007
	100 %	+30	2521 019 967	-17.5	-0.000 001	-0.007
	100 %	+40	2521 019 970	-14.1	-0.000 001	-0.006
	100 %	+50	2521 019 972	-12.8	-0.000 001	-0.005
	Batt. Endpoint	+20	2521 019 969	-15.7	-0.000 001	-0.006
2664.990	100 %	+20(Ref)	2664 989 985	0.0	0.000 000	0.000
	100 %	-30	2664 989 970	-14.7	-0.000 001	-0.006
	100 %	-20	2664 989 973	-11.6	0.000 000	-0.004
	100 %	-10	2664 989 972	-13.0	0.000 000	-0.005
	100 %	0	2664 989 970	-14.2	-0.000 001	-0.005
	100 %	+10	2664 989 973	-11.7	0.000 000	-0.004
	100 %	+30	2664 989 970	-14.2	-0.000 001	-0.005
	100 %	+40	2664 989 971	-13.7	-0.000 001	-0.005
	100 %	+50	2664 989 969	-15.1	-0.000 001	-0.006
	Batt. Endpoint	+20	2664 989 971	-13.4	-0.000 001	-0.005

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2526.000	100 %	+20(Ref)	2525 999 986	0.0	0.000 000	0.000
	100 %	-30	2525 999 970	-15.5	-0.000 001	-0.006
	100 %	-20	2525 999 971	-15.0	-0.000 001	-0.006
	100 %	-10	2525 999 974	-11.7	0.000 000	-0.005
	100 %	0	2525 999 971	-14.4	-0.000 001	-0.006
	100 %	+10	2525 999 971	-14.3	-0.000 001	-0.006
	100 %	+30	2525 999 972	-13.5	-0.000 001	-0.005
	100 %	+40	2525 999 971	-15.0	-0.000 001	-0.006
	100 %	+50	2525 999 971	-14.6	-0.000 001	-0.006
	Batt. Endpoint	+20	2525 999 969	-16.5	-0.000 001	-0.007
2659.980	100 %	+20(Ref)	2659 979 988	0.0	0.000 000	0.000
	100 %	-30	2659 979 975	-12.9	0.000 000	-0.005
	100 %	-20	2659 979 974	-14.2	-0.000 001	-0.005
	100 %	-10	2659 979 977	-11.7	0.000 000	-0.004
	100 %	0	2659 979 976	-12.3	0.000 000	-0.005
	100 %	+10	2659 979 973	-15.6	-0.000 001	-0.006
	100 %	+30	2659 979 977	-11.8	0.000 000	-0.004
	100 %	+40	2659 979 975	-13.7	-0.000 001	-0.005
	100 %	+50	2659 979 977	-11.6	0.000 000	-0.004
	Batt. Endpoint	+20	2659 979 979	-9.7	0.000 000	-0.004



- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2531.010	100 %	+20(Ref)	2531 009 983	0.0	0.000 000	0.000
	100 %	-30	2531 009 972	-11.3	0.000 000	-0.004
	100 %	-20	2531 009 969	-14.2	-0.000 001	-0.006
	100 %	-10	2531 009 969	-14.4	-0.000 001	-0.006
	100 %	0	2531 009 970	-13.4	-0.000 001	-0.005
	100 %	+10	2531 009 968	-14.6	-0.000 001	-0.006
	100 %	+30	2531 009 971	-11.7	0.000 000	-0.005
	100 %	+40	2531 009 971	-11.8	0.000 000	-0.005
	100 %	+50	2531 009 971	-12.3	0.000 000	-0.005
	Batt. Endpoint	+20	2531 009 971	-12.4	0.000 000	-0.005
2655.000	100 %	+20(Ref)	2654 999 985	0.0	0.000 000	0.000
	100 %	-30	2654 999 967	-17.4	-0.000 001	-0.007
	100 %	-20	2654 999 969	-16.0	-0.000 001	-0.006
	100 %	-10	2654 999 969	-15.6	-0.000 001	-0.006
	100 %	0	2654 999 969	-15.1	-0.000 001	-0.006
	100 %	+10	2654 999 969	-15.5	-0.000 001	-0.006
	100 %	+30	2654 999 968	-16.6	-0.000 001	-0.006
	100 %	+40	2654 999 970	-14.9	-0.000 001	-0.006
	100 %	+50	2654 999 970	-14.1	-0.000 001	-0.005
	Batt. Endpoint	+20	2654 999 966	-18.6	-0.000 001	-0.007

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2536.020	100 %	+20(Ref)	2536 019 983	0.0	0.000 000	0.000
	100 %	-30	2536 019 964	-19.5	-0.000 001	-0.008
	100 %	-20	2536 019 964	-18.7	-0.000 001	-0.007
	100 %	-10	2536 019 962	-20.8	-0.000 001	-0.008
	100 %	0	2536 019 964	-19.5	-0.000 001	-0.008
	100 %	+10	2536 019 964	-19.3	-0.000 001	-0.008
	100 %	+30	2536 019 963	-19.9	-0.000 001	-0.008
	100 %	+40	2536 019 962	-21.5	-0.000 001	-0.008
	100 %	+50	2536 019 965	-18.2	-0.000 001	-0.007
	Batt. Endpoint	+20	2536 019 965	-18.2	-0.000 001	-0.007
2649.990	100 %	+20(Ref)	2649 989 987	0.0	0.000 000	0.000
	100 %	-30	2649 989 973	-14.0	-0.000 001	-0.005
	100 %	-20	2649 989 973	-14.0	-0.000 001	-0.005
	100 %	-10	2649 989 973	-14.5	-0.000 001	-0.005
	100 %	0	2649 989 968	-19.5	-0.000 001	-0.007
	100 %	+10	2649 989 972	-15.2	-0.000 001	-0.006
	100 %	+30	2649 989 972	-15.9	-0.000 001	-0.006
	100 %	+40	2649 989 972	-15.4	-0.000 001	-0.006
	100 %	+50	2649 989 972	-15.4	-0.000 001	-0.006
	Batt. Endpoint	+20	2649 989 973	-14.0	-0.000 001	-0.005

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2541.000	100 %	+20(Ref)	2540 999 983	0.0	0.000 000	0.000
	100 %	-30	2540 999 965	-17.7	-0.000 001	-0.007
	100 %	-20	2540 999 965	-18.0	-0.000 001	-0.007
	100 %	-10	2540 999 965	-17.9	-0.000 001	-0.007
	100 %	0	2540 999 964	-19.2	-0.000 001	-0.008
	100 %	+10	2540 999 965	-17.8	-0.000 001	-0.007
	100 %	+30	2540 999 966	-17.1	-0.000 001	-0.007
	100 %	+40	2540 999 964	-18.3	-0.000 001	-0.007
	100 %	+50	2540 999 963	-19.8	-0.000 001	-0.008
	Batt. Endpoint	+20	2540 999 968	-15.3	-0.000 001	-0.006
2644.980	100 %	+20(Ref)	2644 979 988	0.0	0.000 000	0.000
	100 %	-30	2644 979 977	-11.6	0.000 000	-0.004
	100 %	-20	2644 979 979	-9.5	0.000 000	-0.004
	100 %	-10	2644 979 977	-11.7	0.000 000	-0.004
	100 %	0	2644 979 975	-13.9	-0.000 001	-0.005
	100 %	+10	2644 979 977	-11.0	0.000 000	-0.004
	100 %	+30	2644 979 978	-10.8	0.000 000	-0.004
	100 %	+40	2644 979 978	-10.8	0.000 000	-0.004
	100 %	+50	2644 979 976	-12.8	0.000 000	-0.005
	Batt. Endpoint	+20	2644 979 978	-10.4	0.000 000	-0.004

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

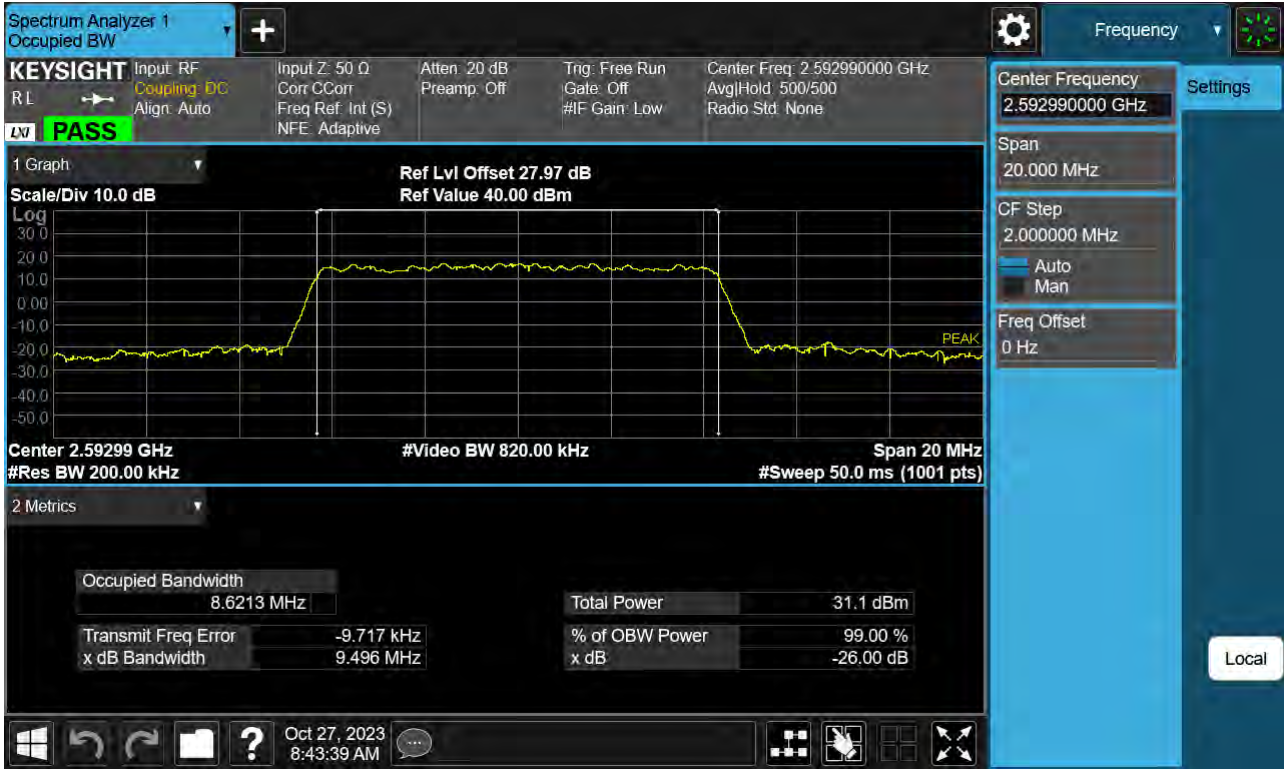
Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2546.010	100 %	+20(Ref)	2546 009 985	0.0	0.000 000	0.000
	100 %	-30	2546 009 970	-15.2	-0.000 001	-0.006
	100 %	-20	2546 009 970	-15.2	-0.000 001	-0.006
	100 %	-10	2546 009 971	-13.6	-0.000 001	-0.005
	100 %	0	2546 009 970	-15.1	-0.000 001	-0.006
	100 %	+10	2546 009 973	-12.0	0.000 000	-0.005
	100 %	+30	2546 009 969	-16.1	-0.000 001	-0.006
	100 %	+40	2546 009 973	-12.2	0.000 000	-0.005
	100 %	+50	2546 009 969	-15.7	-0.000 001	-0.006
	Batt. Endpoint	+20	2546 009 972	-12.8	-0.000 001	-0.005
2640.000	100 %	+20(Ref)	2639 999 988	0.0	0.000 000	0.000
	100 %	-30	2639 999 978	-10.3	0.000 000	-0.004
	100 %	-20	2639 999 974	-13.9	-0.000 001	-0.005
	100 %	-10	2639 999 976	-12.3	0.000 000	-0.005
	100 %	0	2639 999 978	-10.3	0.000 000	-0.004
	100 %	+10	2639 999 975	-12.5	0.000 000	-0.005
	100 %	+30	2639 999 973	-14.6	-0.000 001	-0.006
	100 %	+40	2639 999 976	-11.6	0.000 000	-0.004
	100 %	+50	2639 999 976	-11.6	0.000 000	-0.004
	Batt. Endpoint	+20	2639 999 976	-12.1	0.000 000	-0.005

## 9. TEST PLOTS

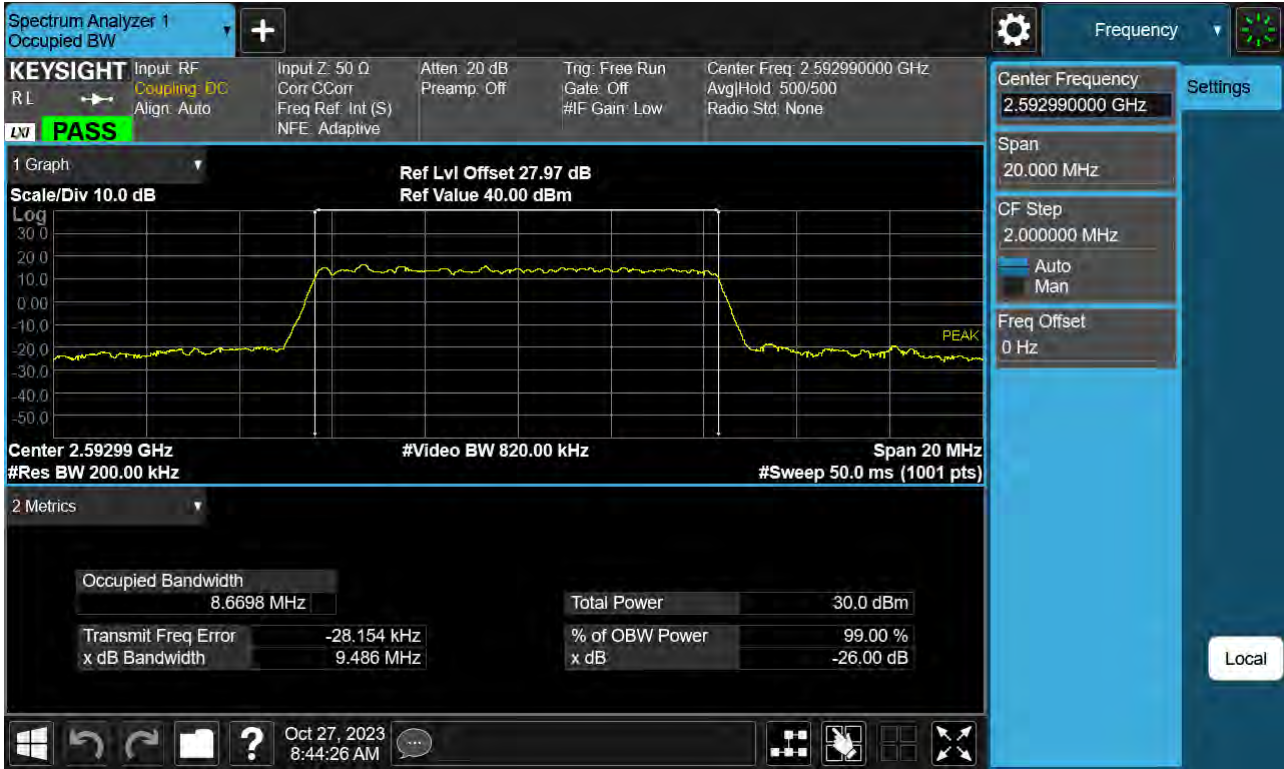
Sub6 n41. Occupied Bandwidth Plot (10 MHz Ch.518598 BPSK )



Sub6 n41. Occupied Bandwidth Plot (10 MHz Ch.518598 QPSK )

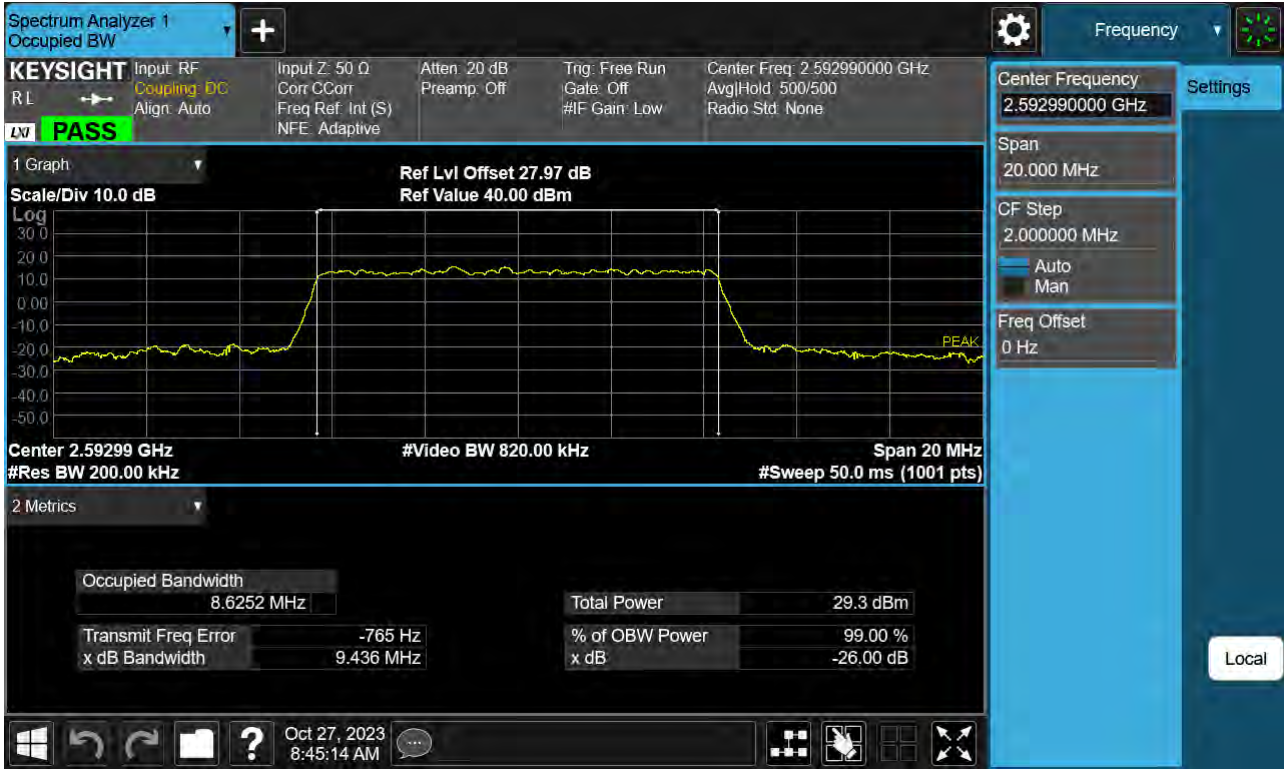


Sub6 n41. Occupied Bandwidth Plot (10 MHz Ch.518598 16-QAM )

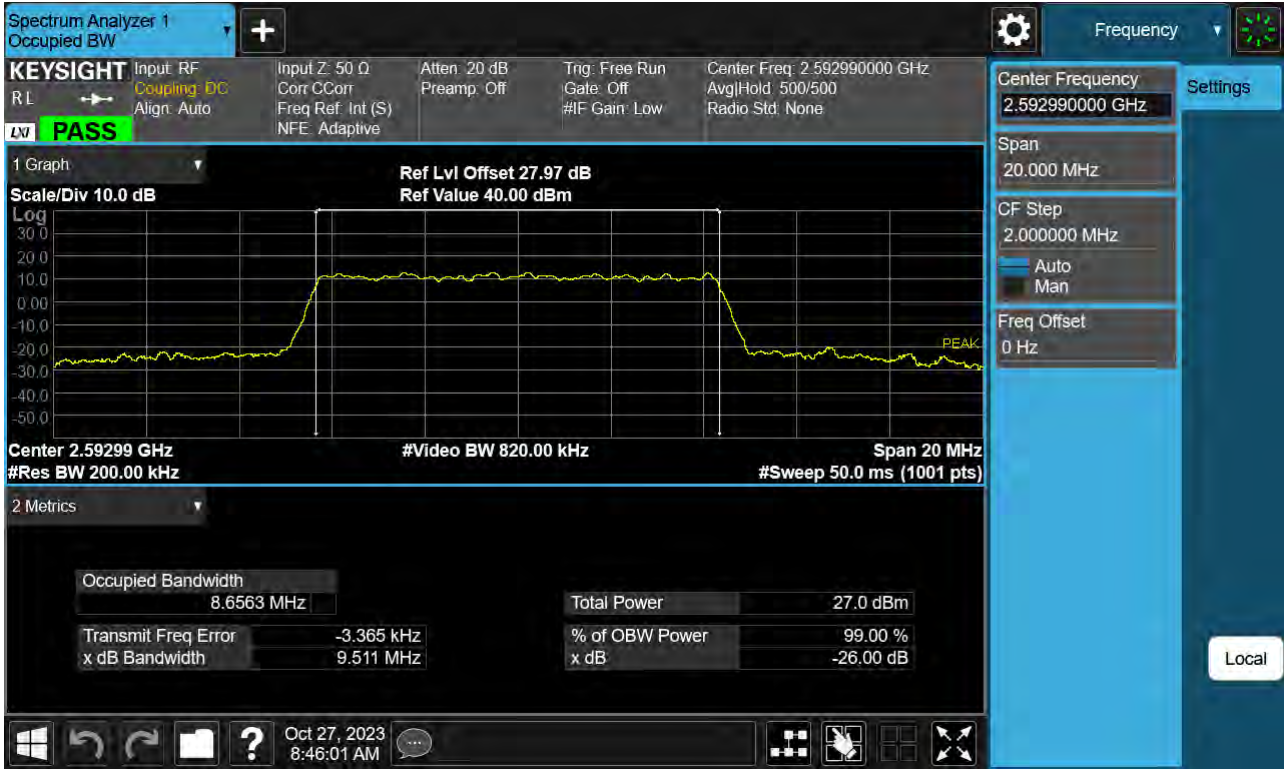




Sub6 n41. Occupied Bandwidth Plot (10 MHz Ch.518598 64-QAM )



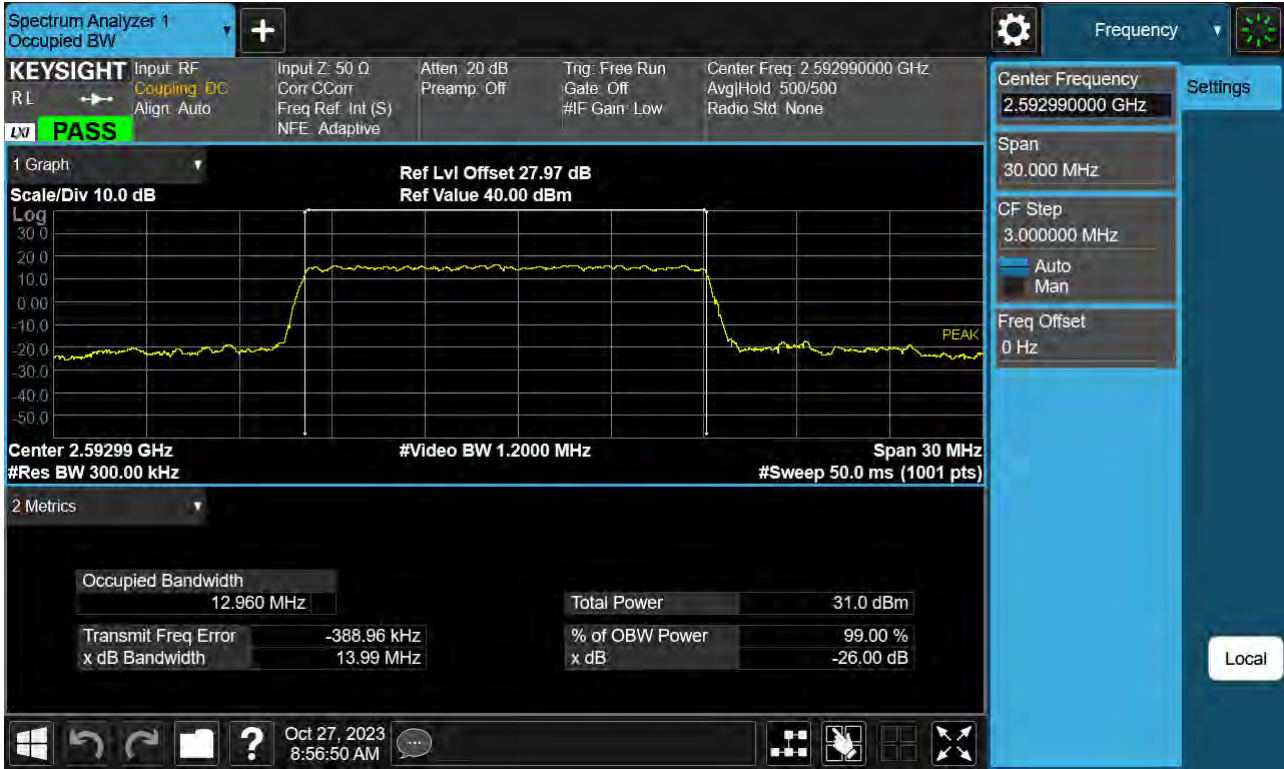
Sub6 n41. Occupied Bandwidth Plot (10 MHz Ch.518598 256-QAM )



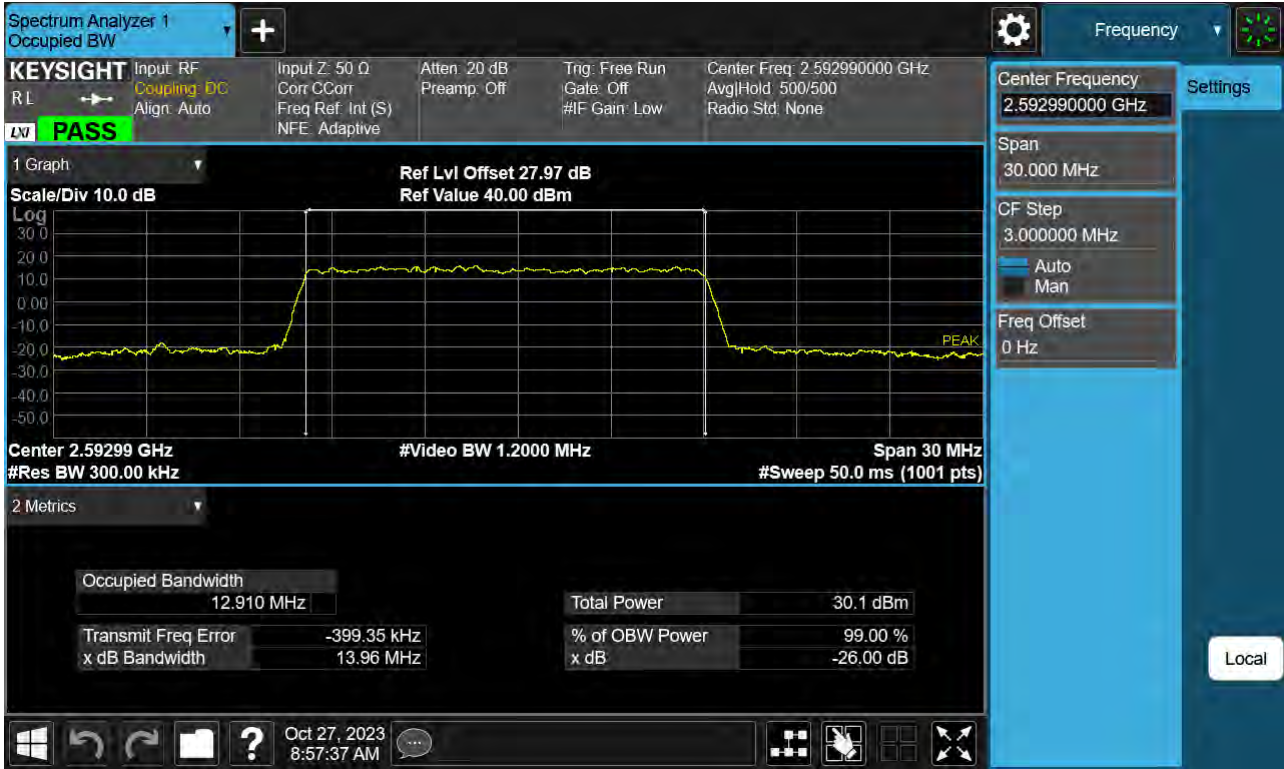
Sub6 n41. Occupied Bandwidth Plot (15 MHz Ch.518598 BPSK )



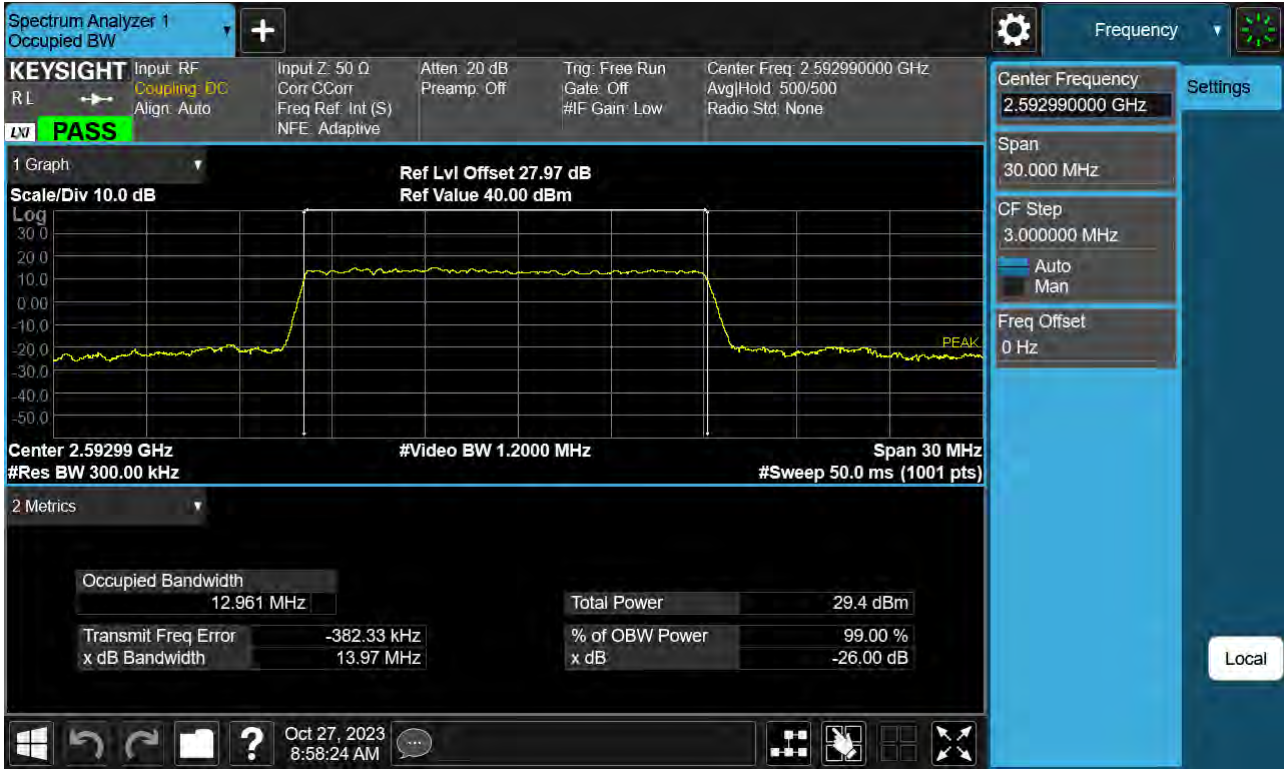
Sub6 n41. Occupied Bandwidth Plot (15 MHz Ch.518598 QPSK )



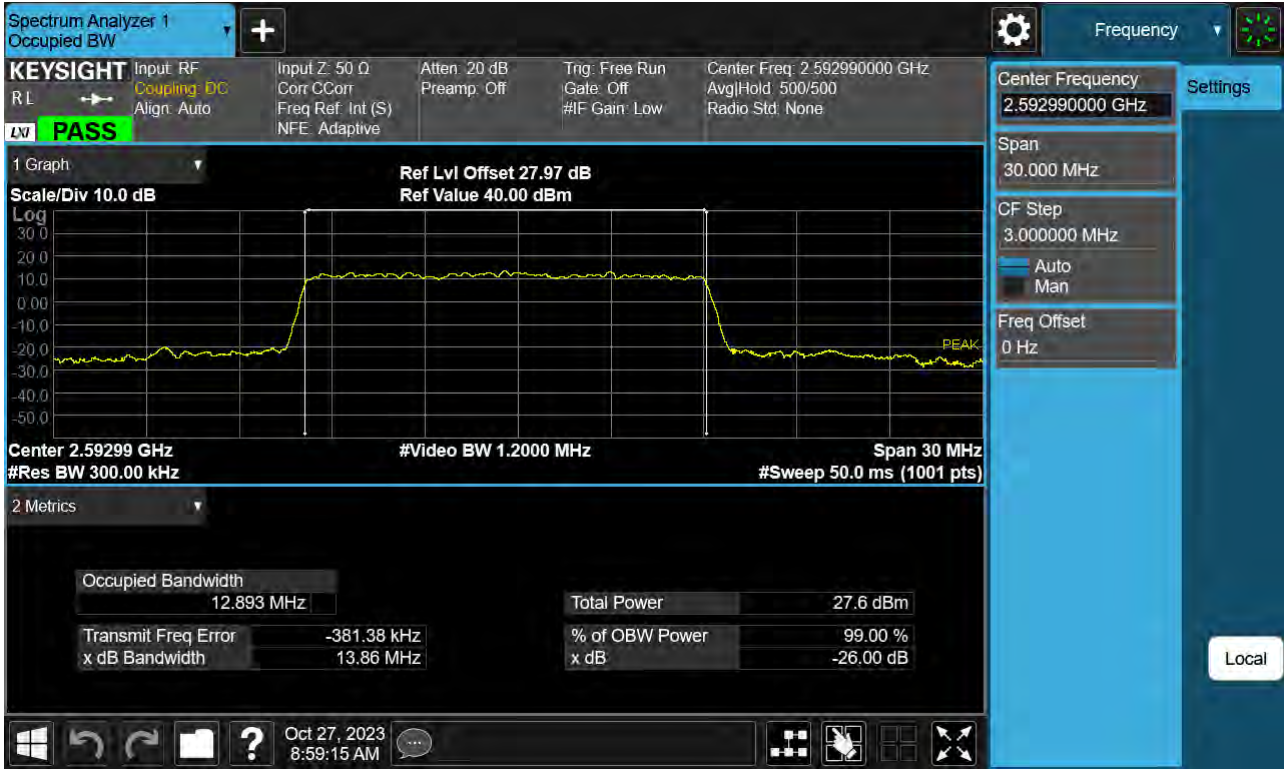
Sub6 n41. Occupied Bandwidth Plot (15 MHz Ch.518598 16-QAM )



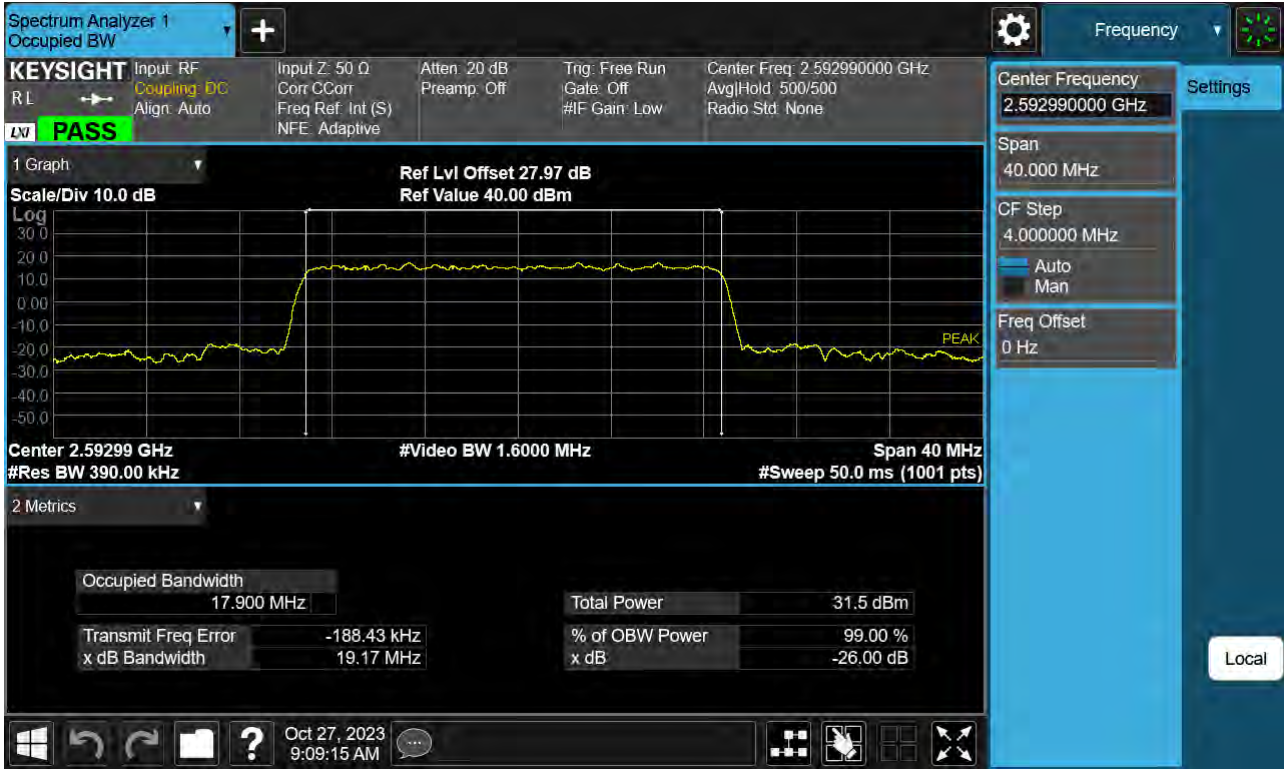
Sub6 n41. Occupied Bandwidth Plot (15 MHz Ch.518598 64-QAM )



Sub6 n41. Occupied Bandwidth Plot (15 MHz Ch.518598 256-QAM )



Sub6 n41. Occupied Bandwidth Plot (20 MHz Ch.518598 BPSK )





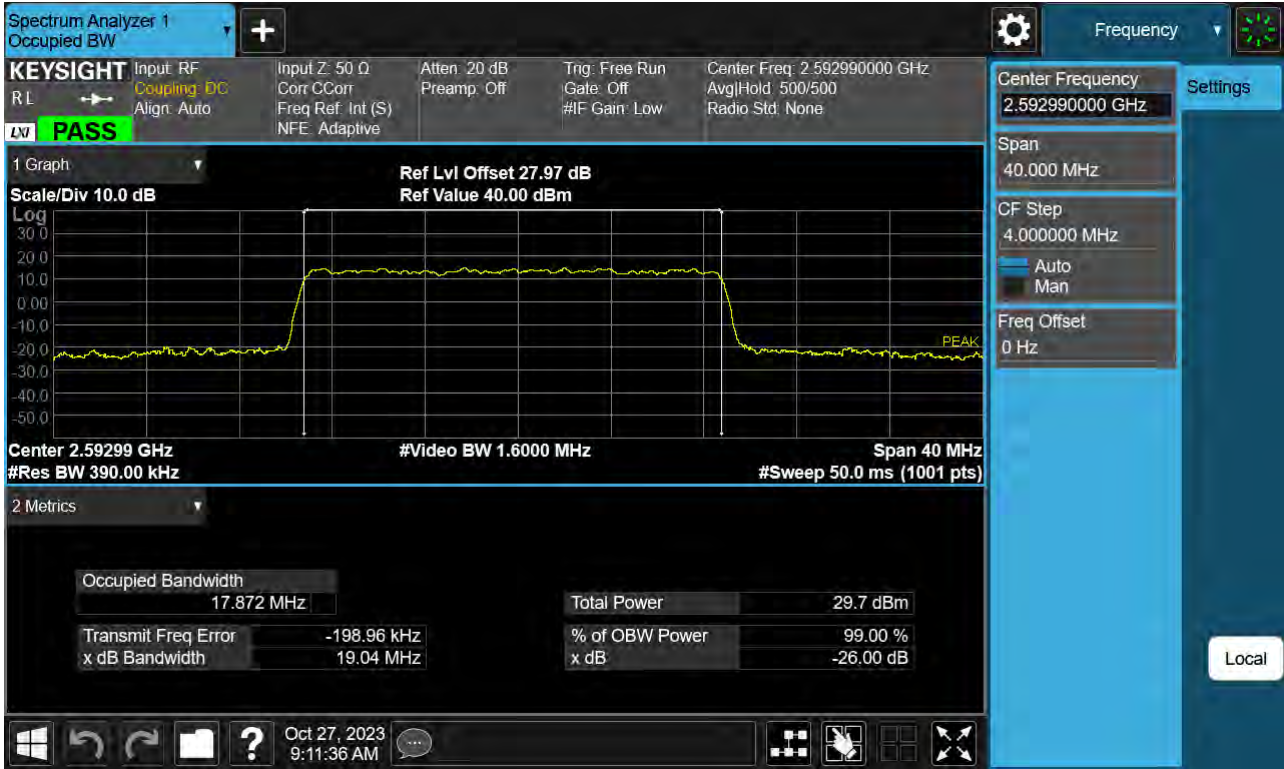
Sub6 n41. Occupied Bandwidth Plot (20 MHz Ch.518598 QPSK )



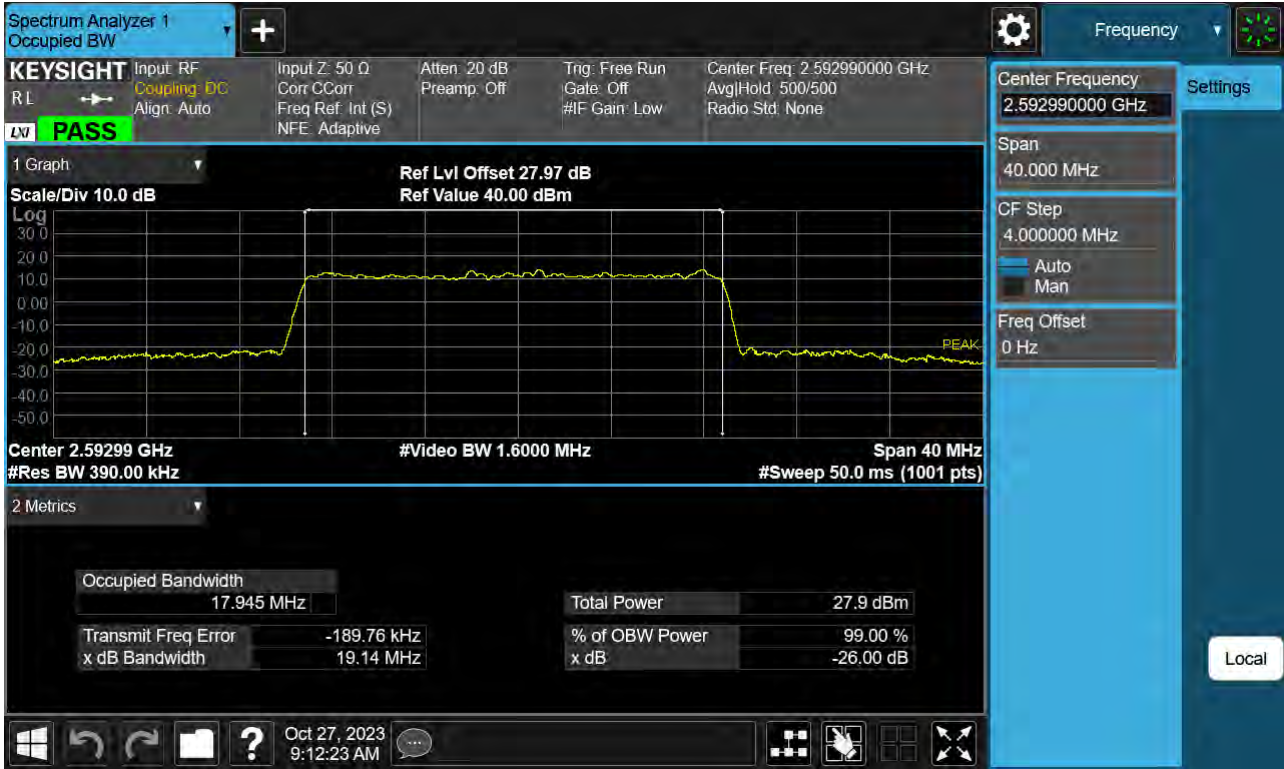
Sub6 n41. Occupied Bandwidth Plot (20 MHz Ch.518598 16-QAM )



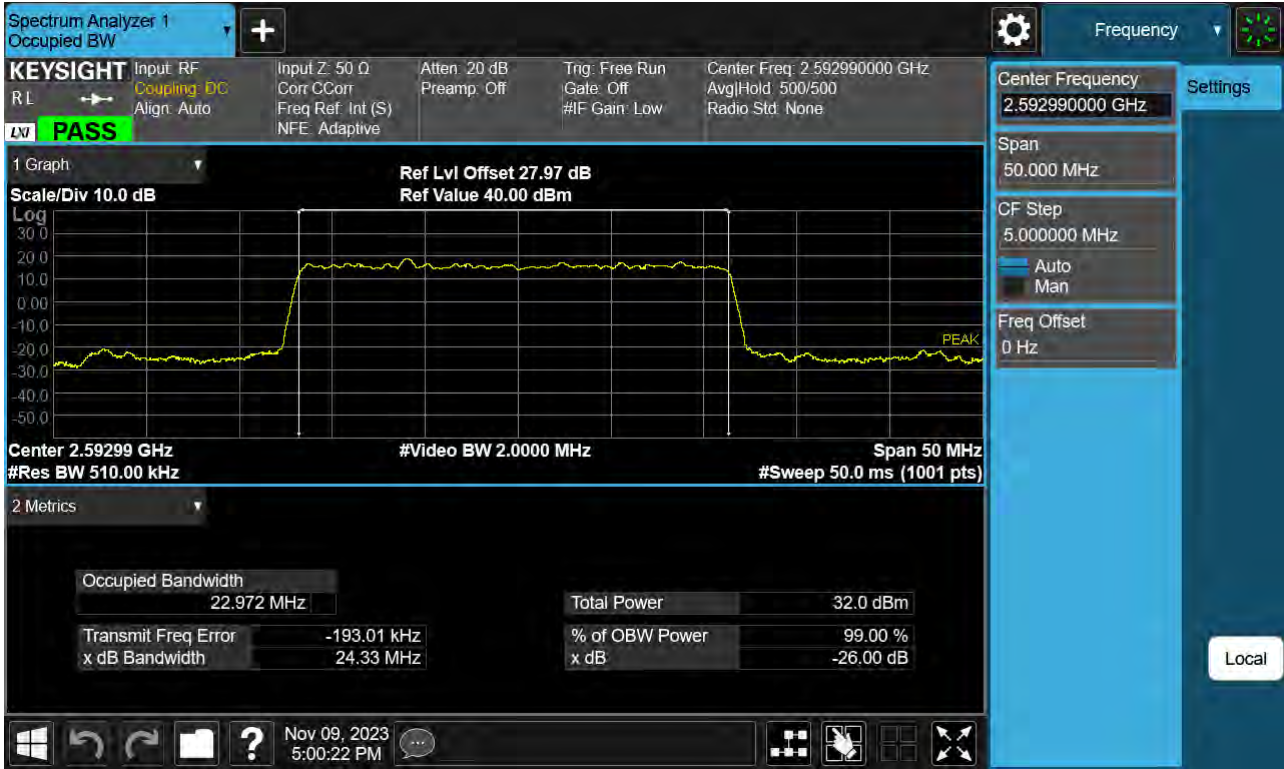
Sub6 n41. Occupied Bandwidth Plot (20 MHz Ch.518598 64-QAM )



Sub6 n41. Occupied Bandwidth Plot (20 MHz Ch.518598 256-QAM )



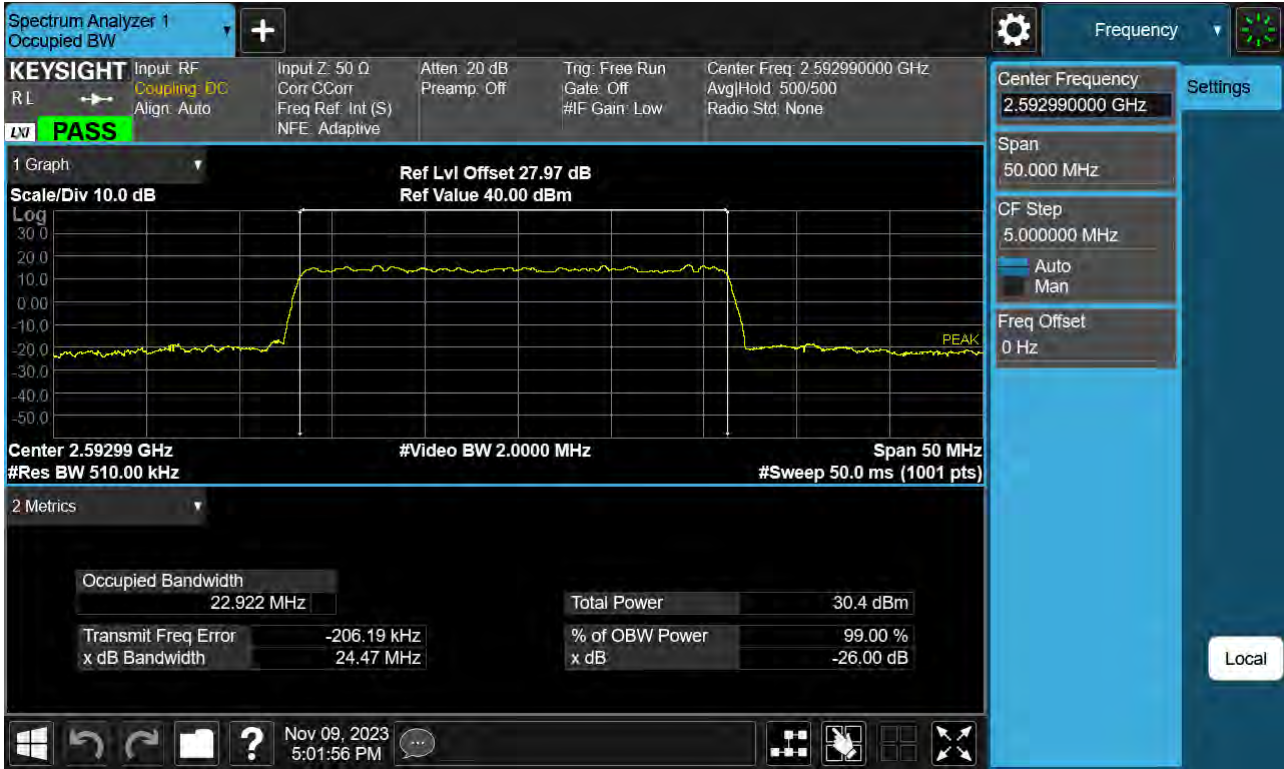
Sub6 n41. Occupied Bandwidth Plot (25 MHz Ch.518598 BPSK )



Sub6 n41. Occupied Bandwidth Plot (25 MHz Ch.518598 QPSK )



Sub6 n41. Occupied Bandwidth Plot (25 MHz Ch.518598 16-QAM )

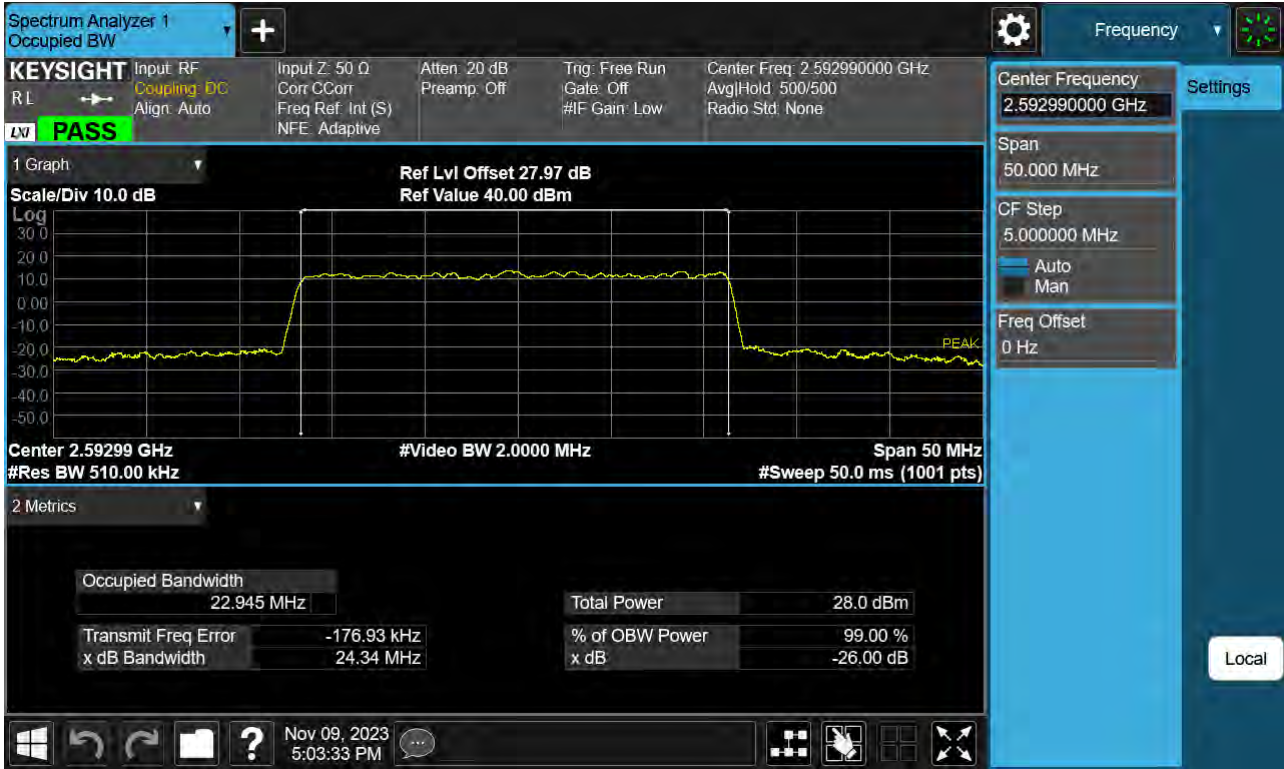


Sub6 n41. Occupied Bandwidth Plot (25 MHz Ch.518598 64-QAM )





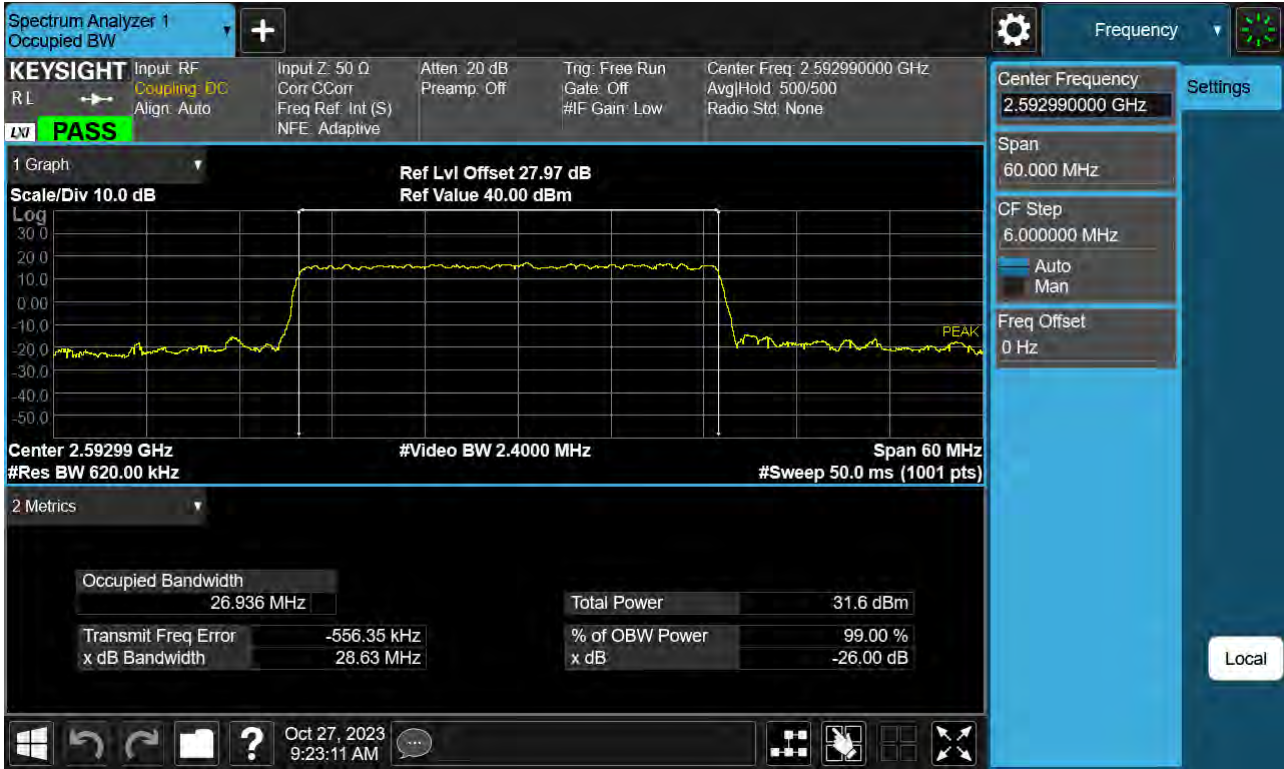
Sub6 n41. Occupied Bandwidth Plot (25 MHz Ch.518598 256-QAM )



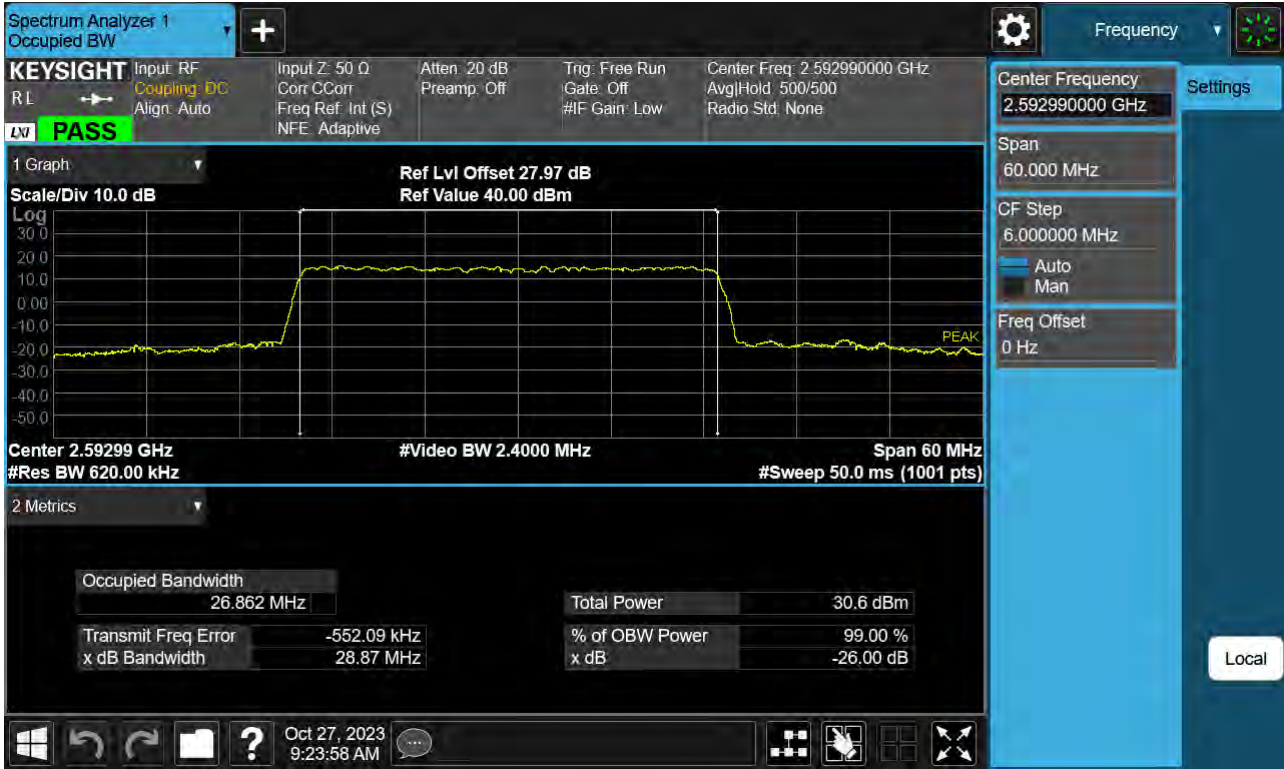
Sub6 n41. Occupied Bandwidth Plot (30 MHz Ch.518598 BPSK )



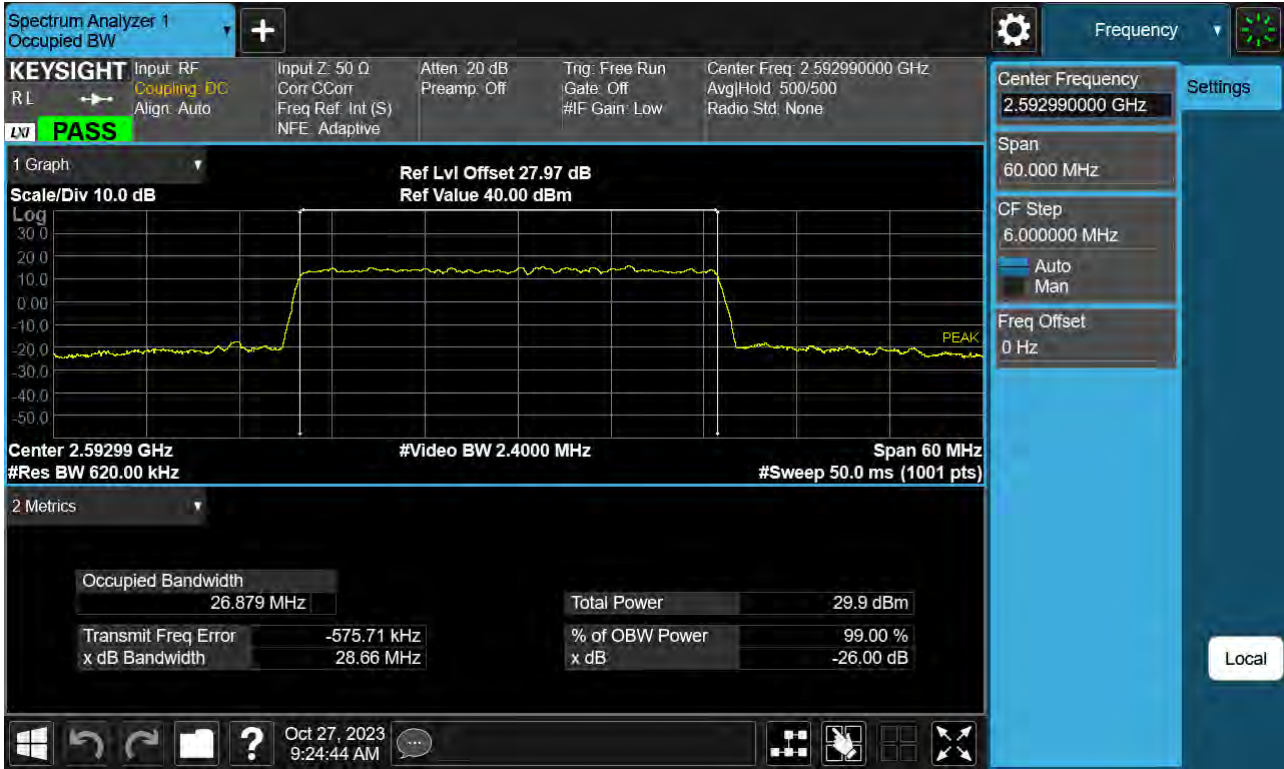
Sub6 n41. Occupied Bandwidth Plot (30 MHz Ch.518598 QPSK )



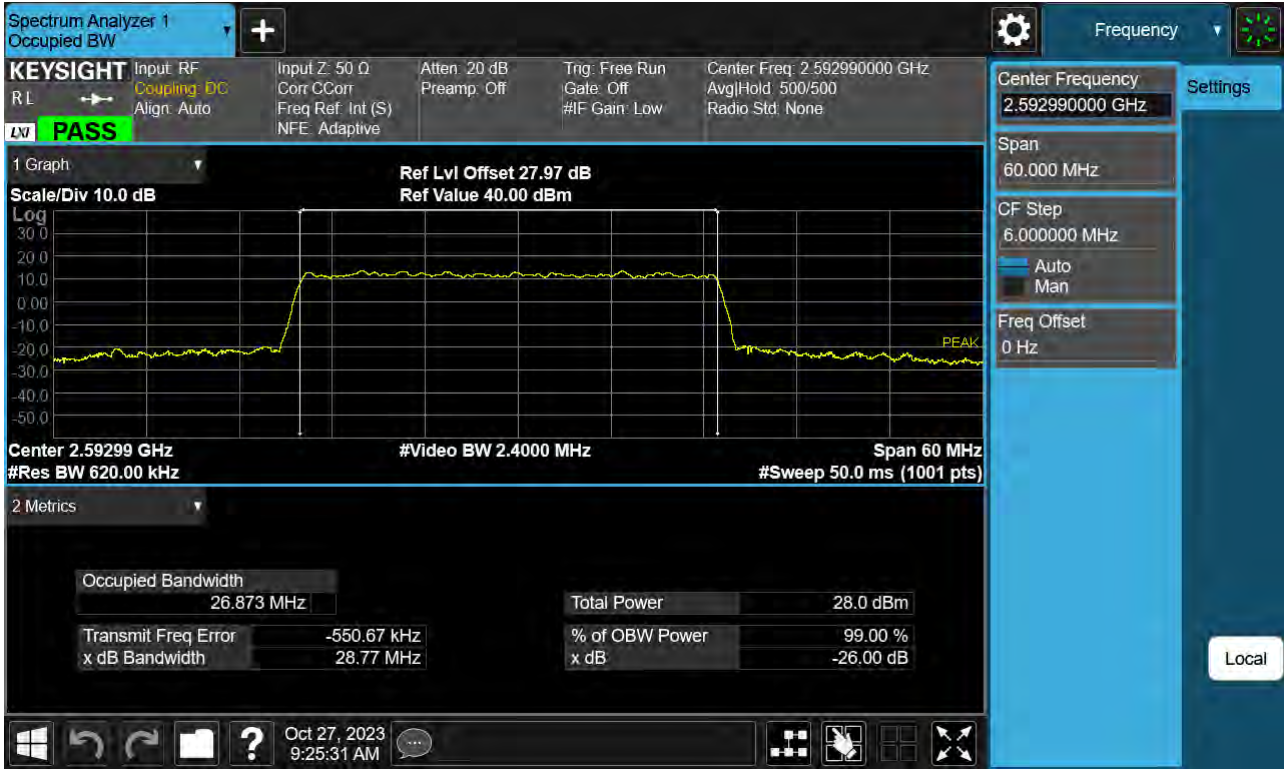
Sub6 n41. Occupied Bandwidth Plot (30 MHz Ch.518598 16-QAM )



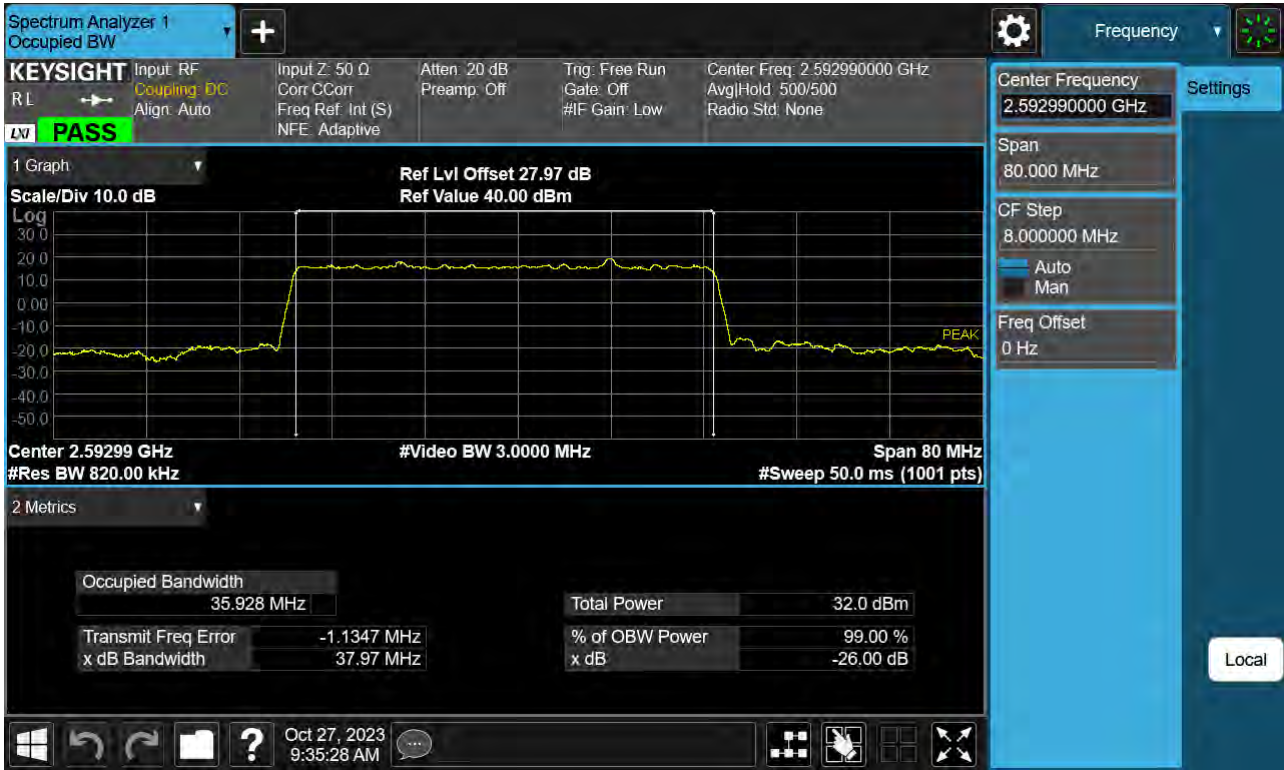
Sub6 n41. Occupied Bandwidth Plot (30 MHz Ch.518598 64-QAM )



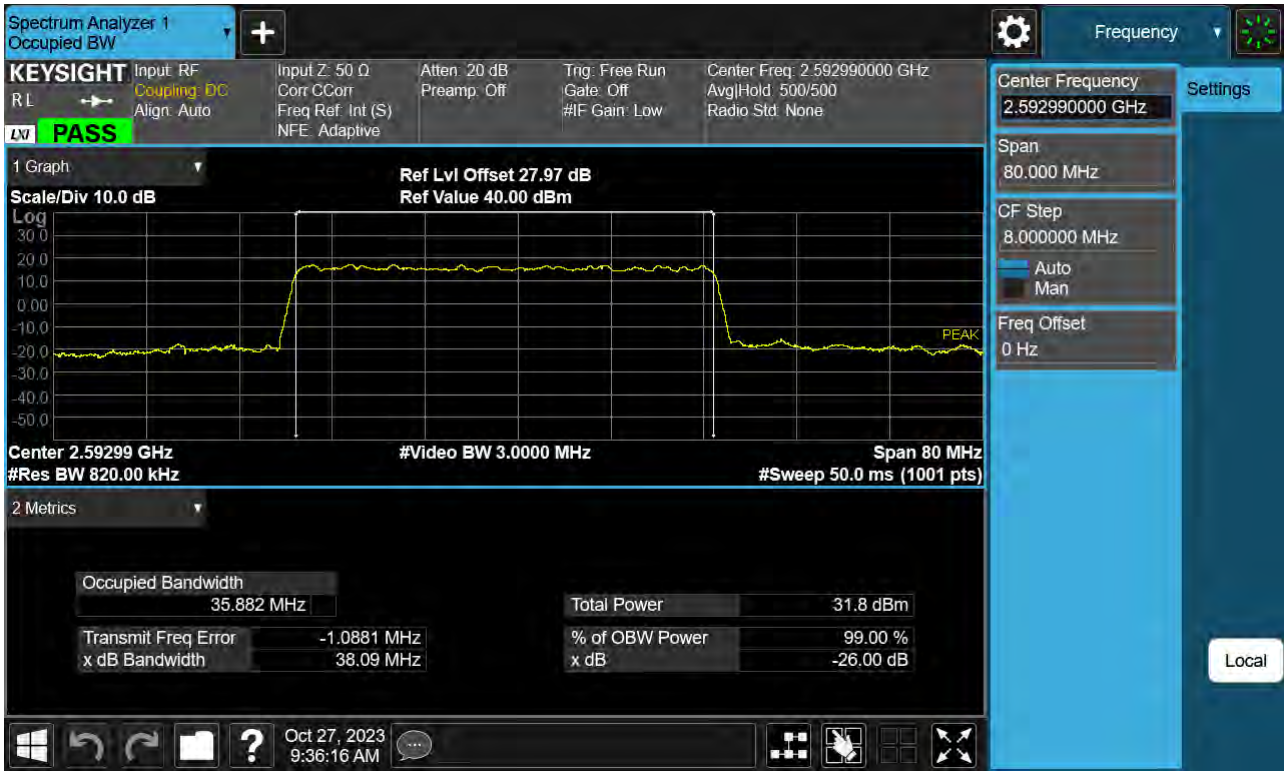
Sub6 n41. Occupied Bandwidth Plot (30 MHz Ch.518598 256-QAM )



Sub6 n41. Occupied Bandwidth Plot (40 MHz Ch.518598 BPSK )

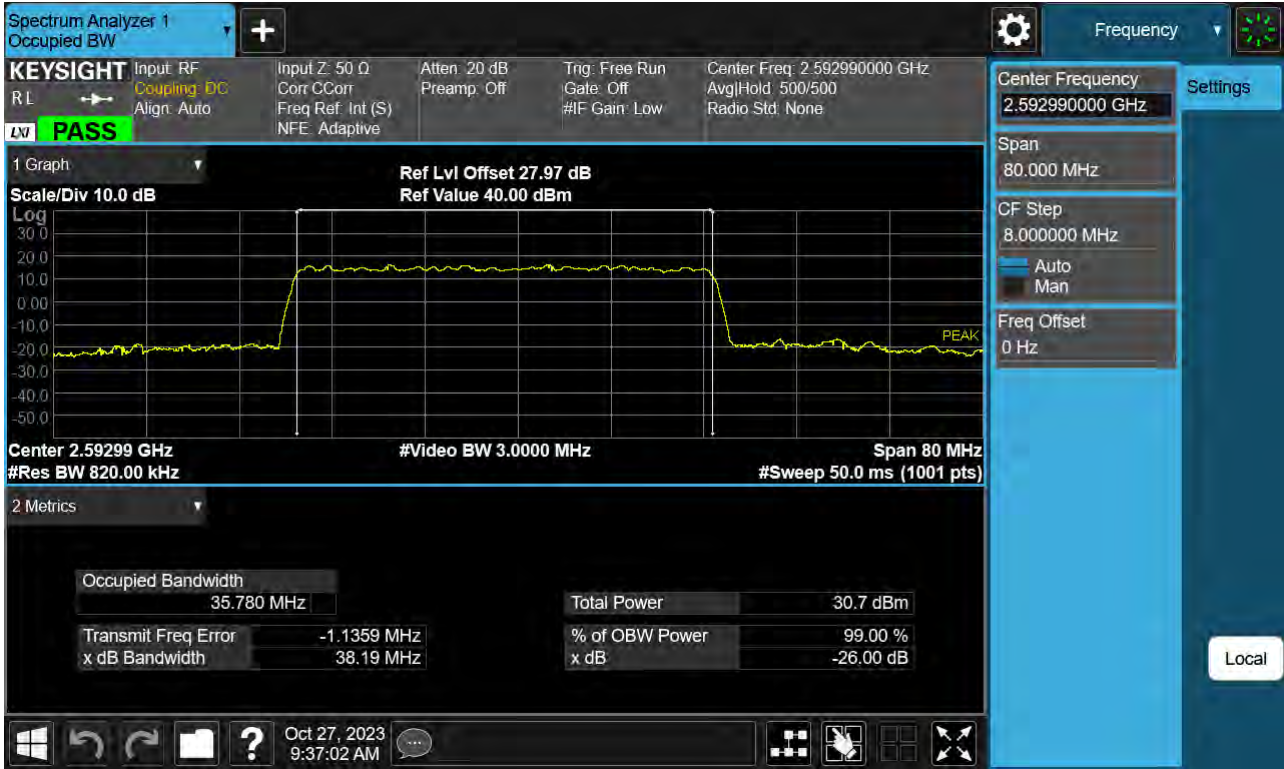


Sub6 n41. Occupied Bandwidth Plot (40 MHz Ch.518598 QPSK )

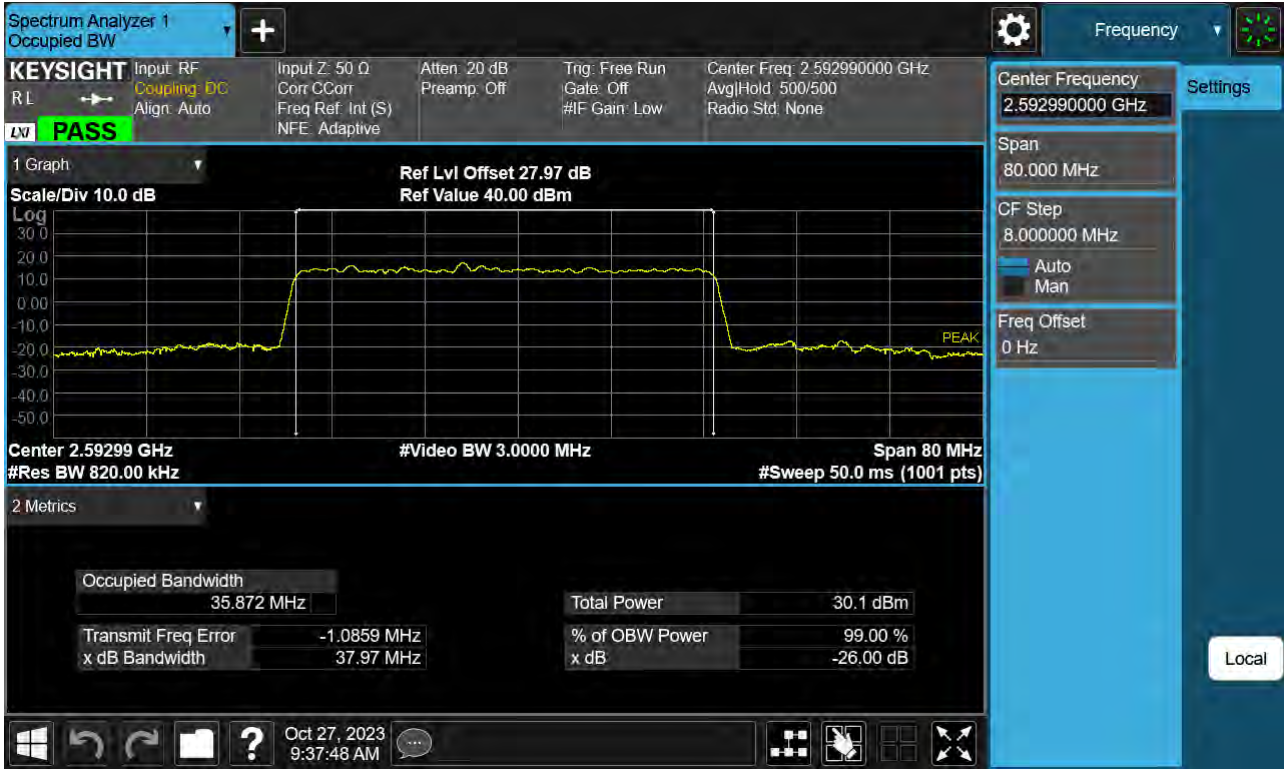




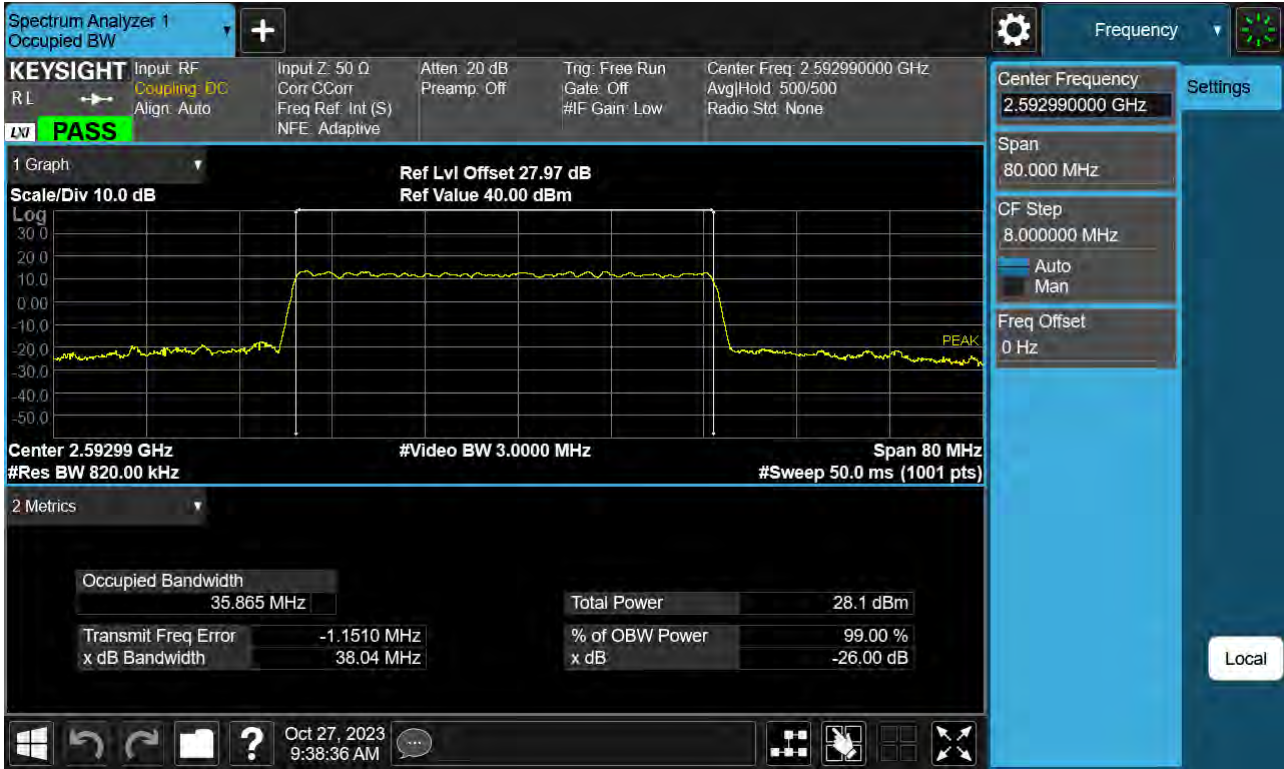
Sub6 n41. Occupied Bandwidth Plot (40 MHz Ch.518598 16-QAM )



Sub6 n41. Occupied Bandwidth Plot (40 MHz Ch.518598 64-QAM )



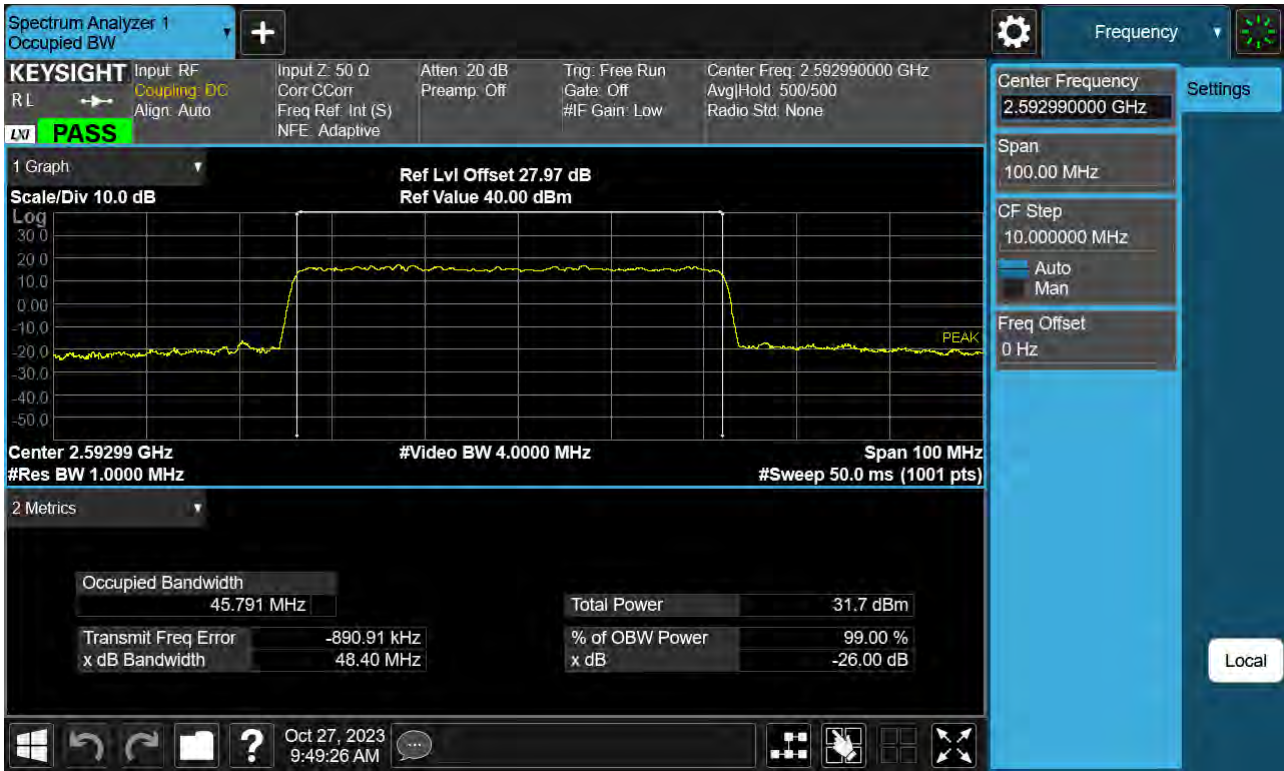
Sub6 n41. Occupied Bandwidth Plot (40 MHz Ch.518598 256-QAM )



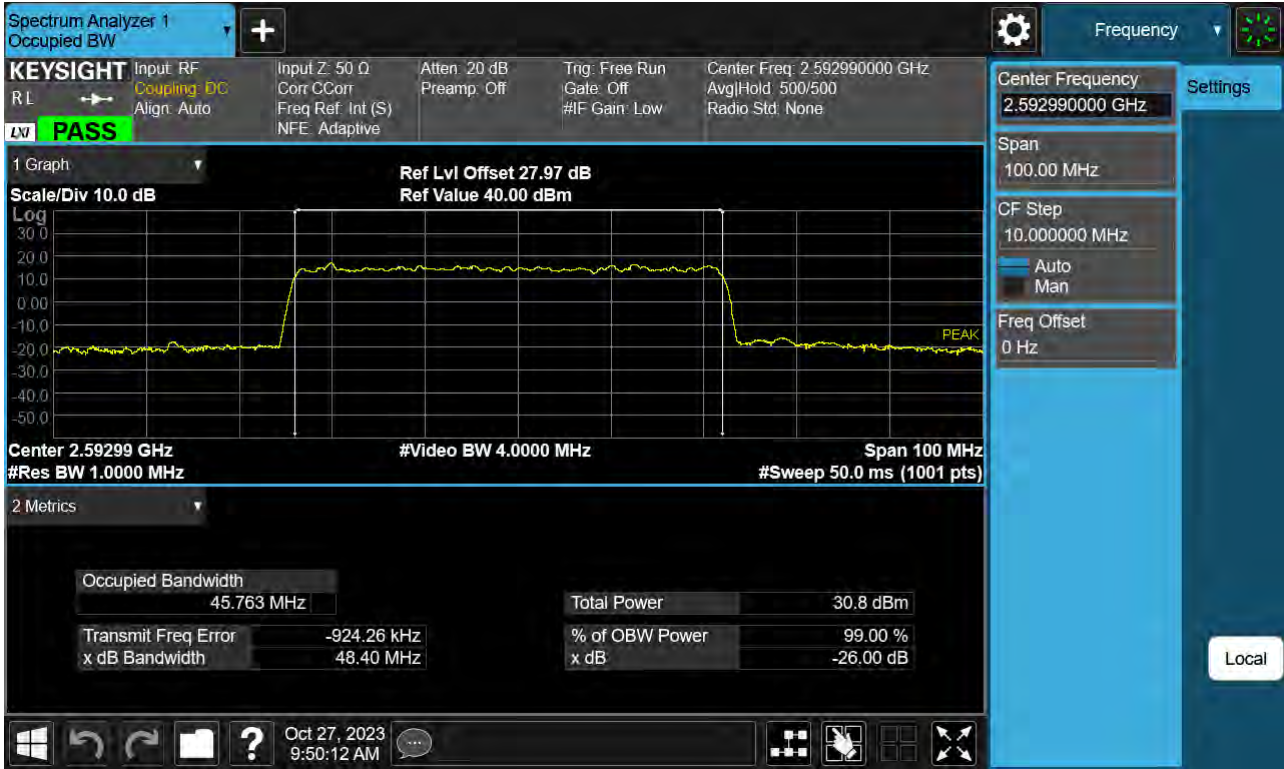
Sub6 n41. Occupied Bandwidth Plot (50 MHz Ch.518598 BPSK )



Sub6 n41. Occupied Bandwidth Plot (50 MHz Ch.518598 QPSK )



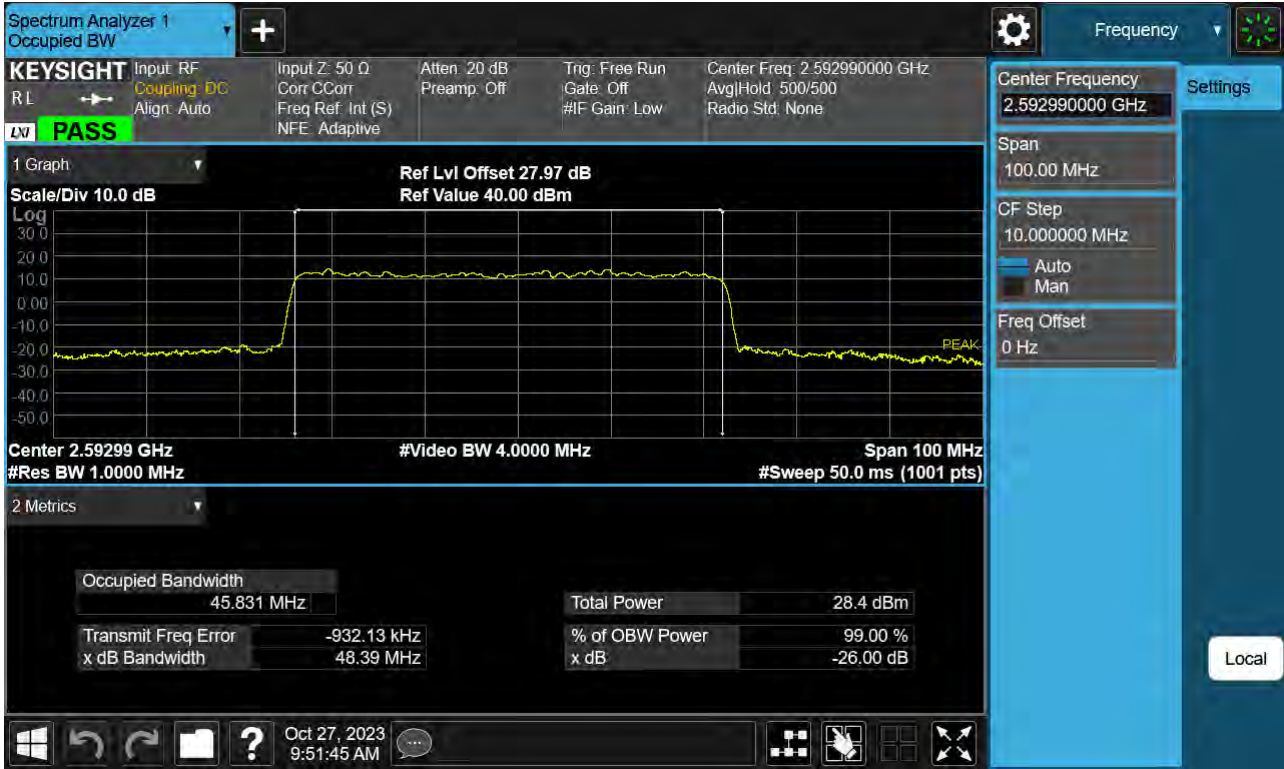
Sub6 n41. Occupied Bandwidth Plot (50 MHz Ch.518598 16-QAM )



Sub6 n41. Occupied Bandwidth Plot (50 MHz Ch.518598 64-QAM )

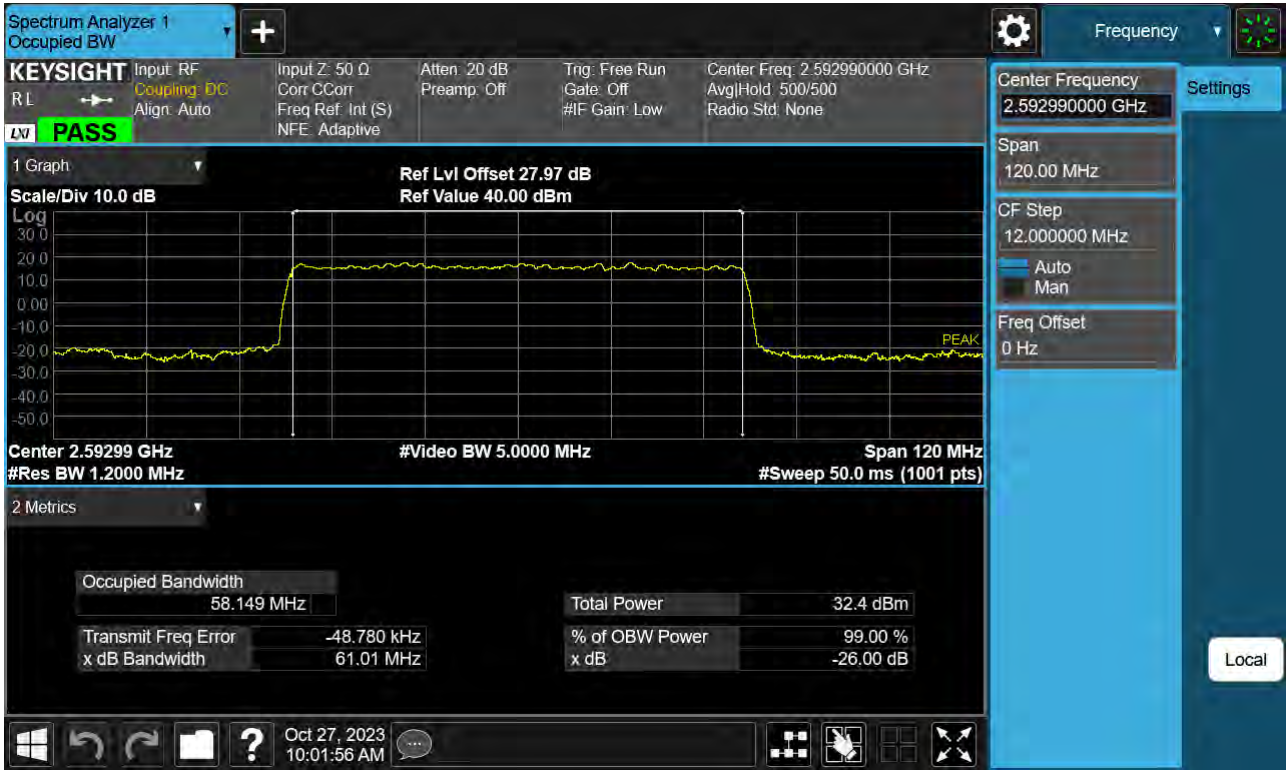


Sub6 n41. Occupied Bandwidth Plot (50 MHz Ch.518598 256-QAM )

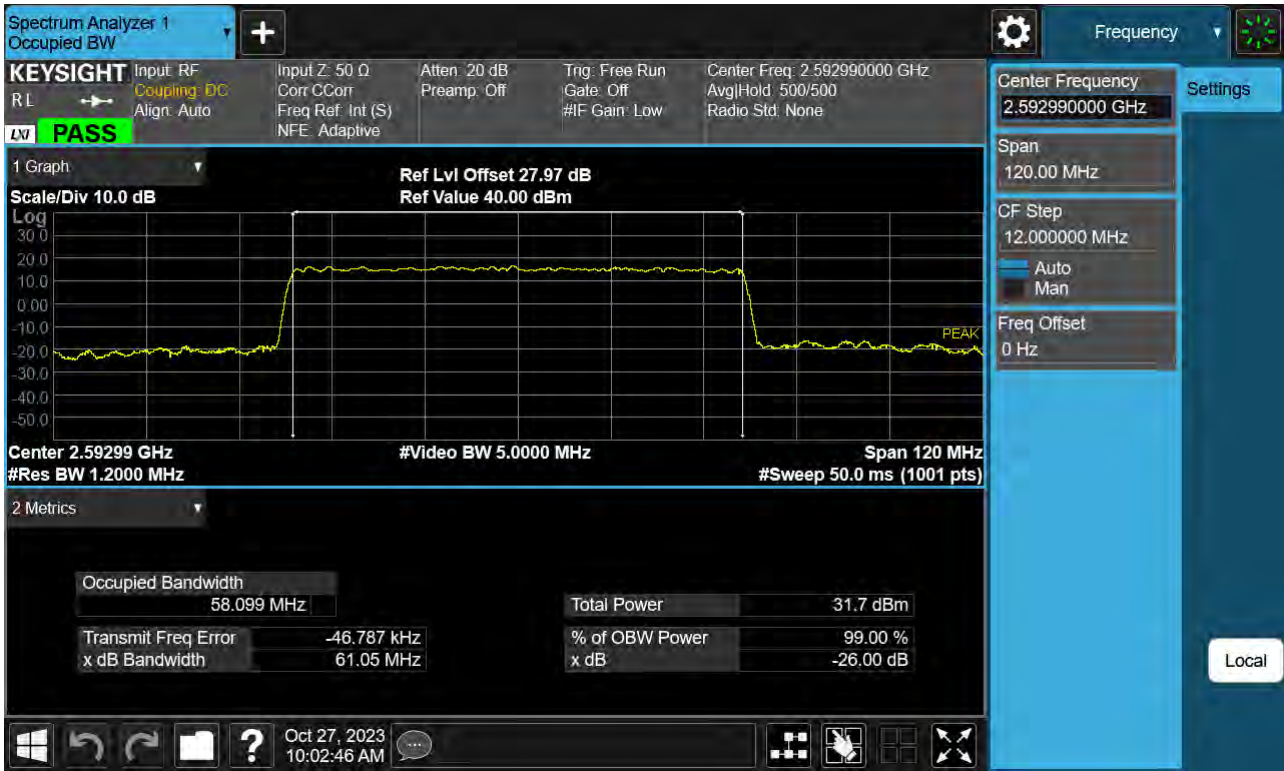




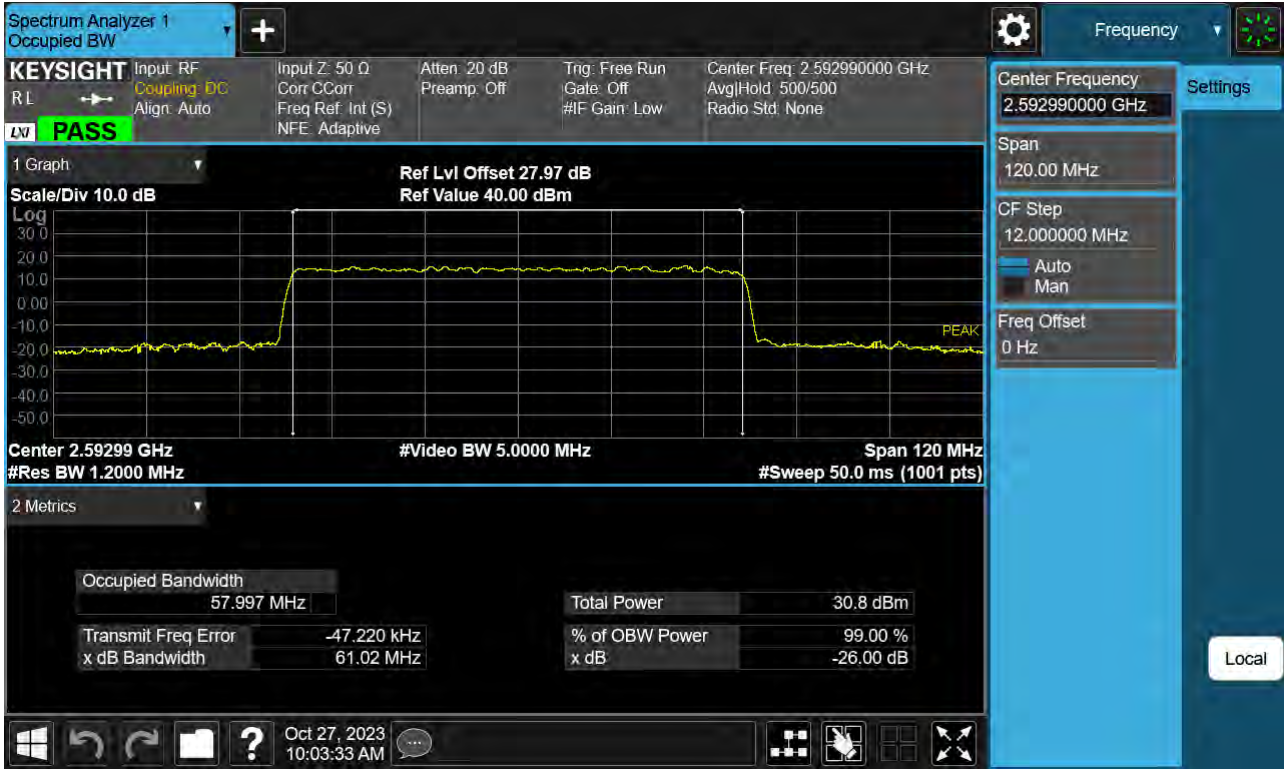
Sub6 n41. Occupied Bandwidth Plot (60 MHz Ch.518598 BPSK )



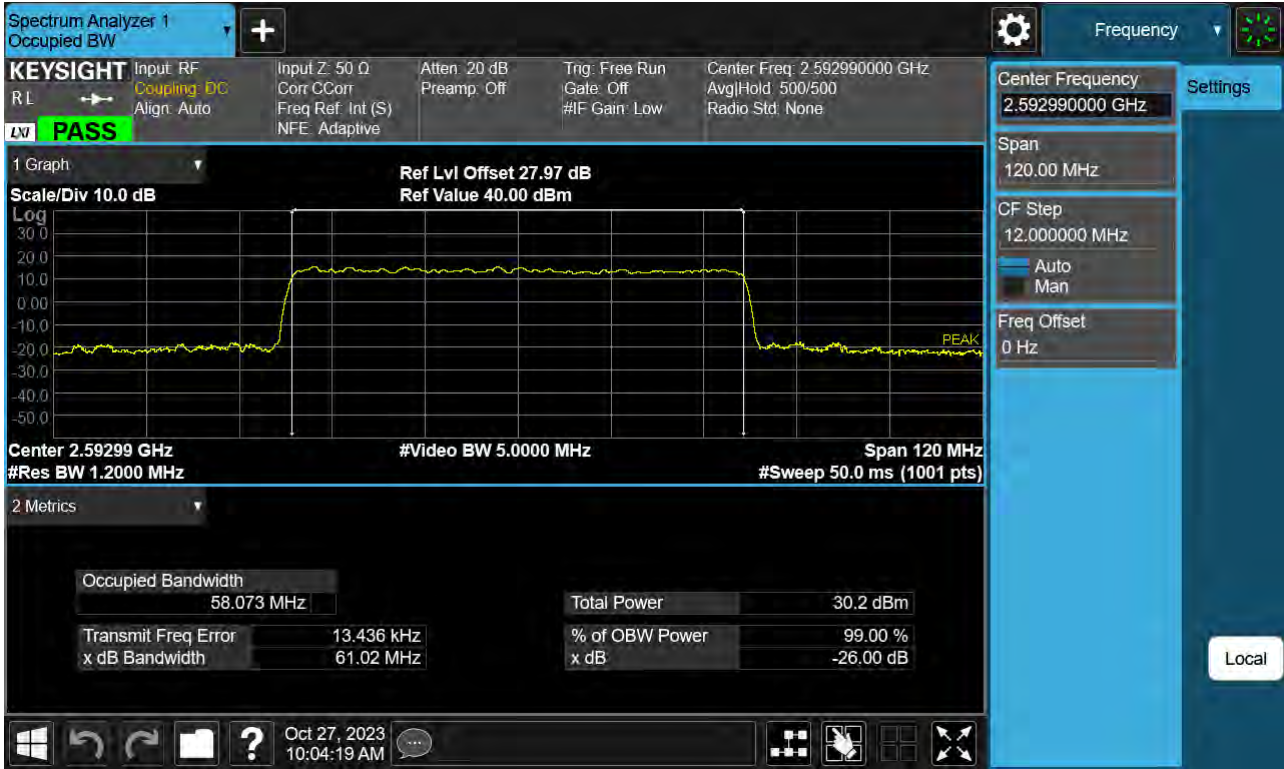
Sub6 n41. Occupied Bandwidth Plot (60 MHz Ch.518598 QPSK )



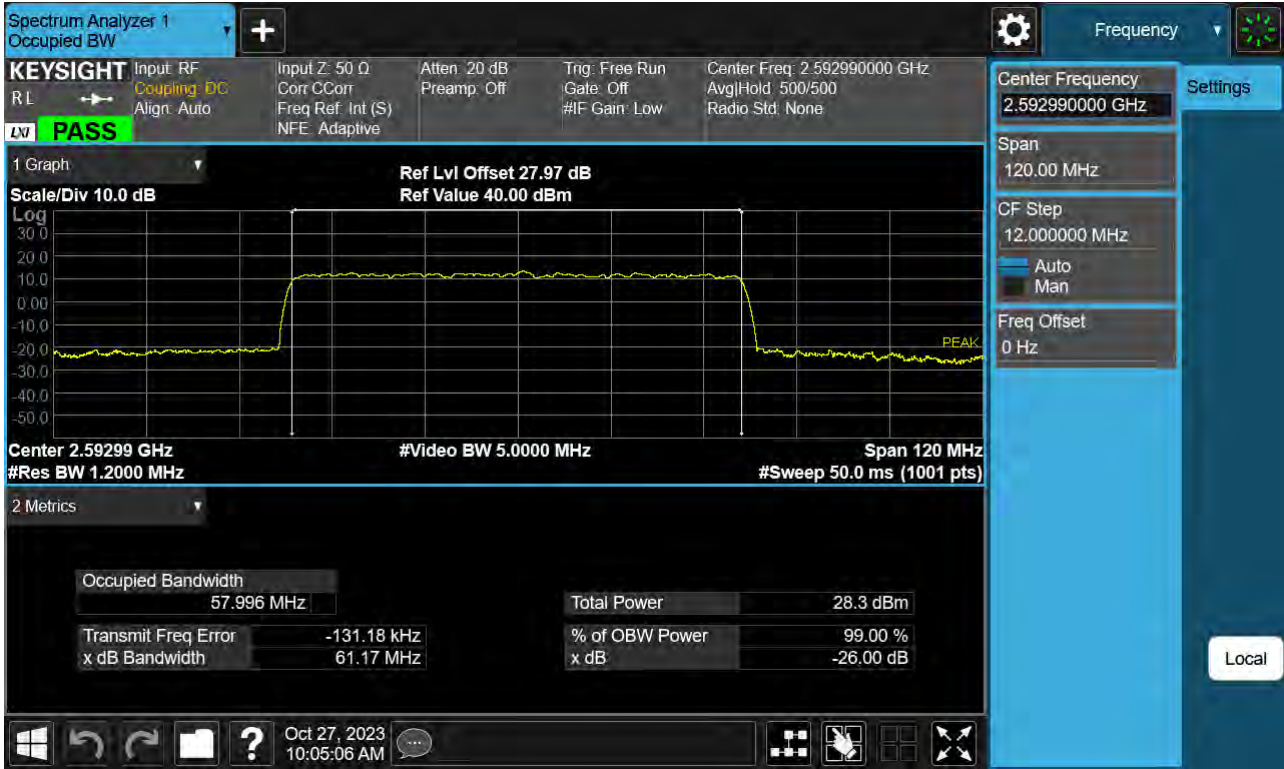
Sub6 n41. Occupied Bandwidth Plot (60 MHz Ch.518598 16-QAM )



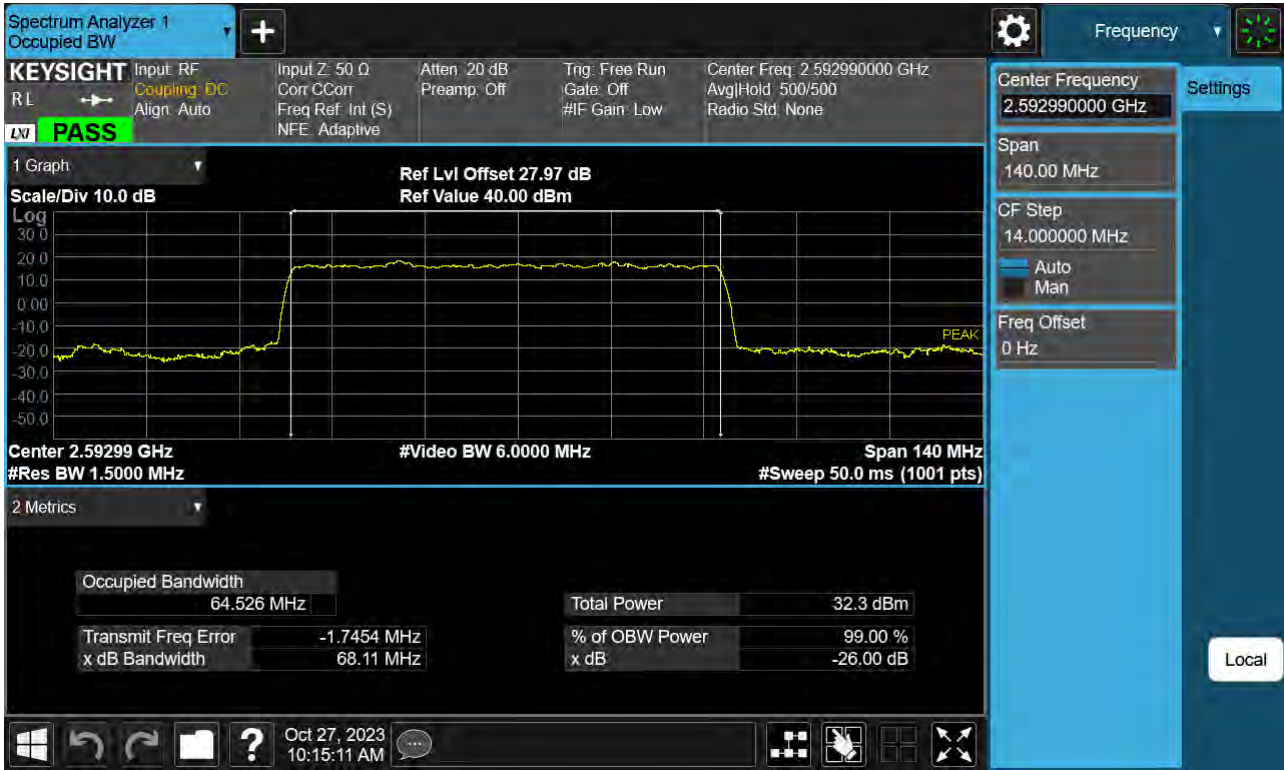
Sub6 n41. Occupied Bandwidth Plot (60 MHz Ch.518598 64-QAM )



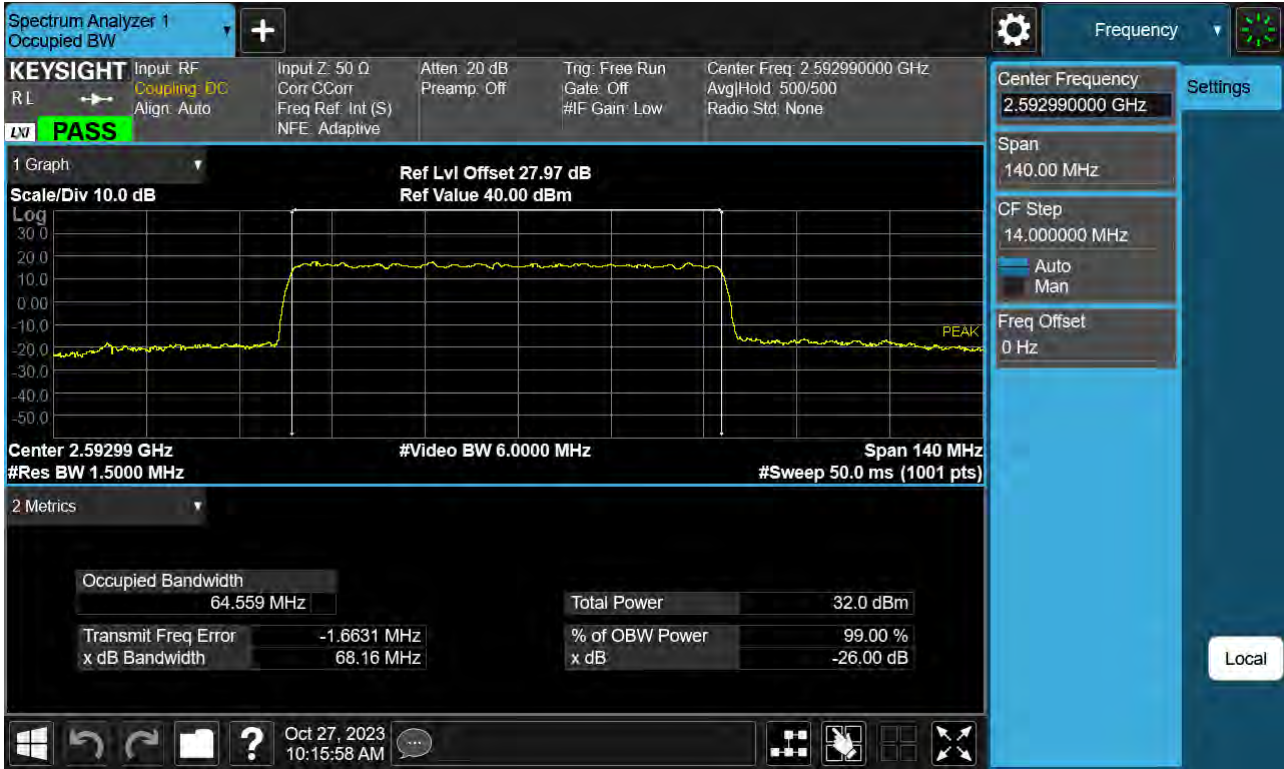
Sub6 n41. Occupied Bandwidth Plot (60 MHz Ch.518598 256-QAM )



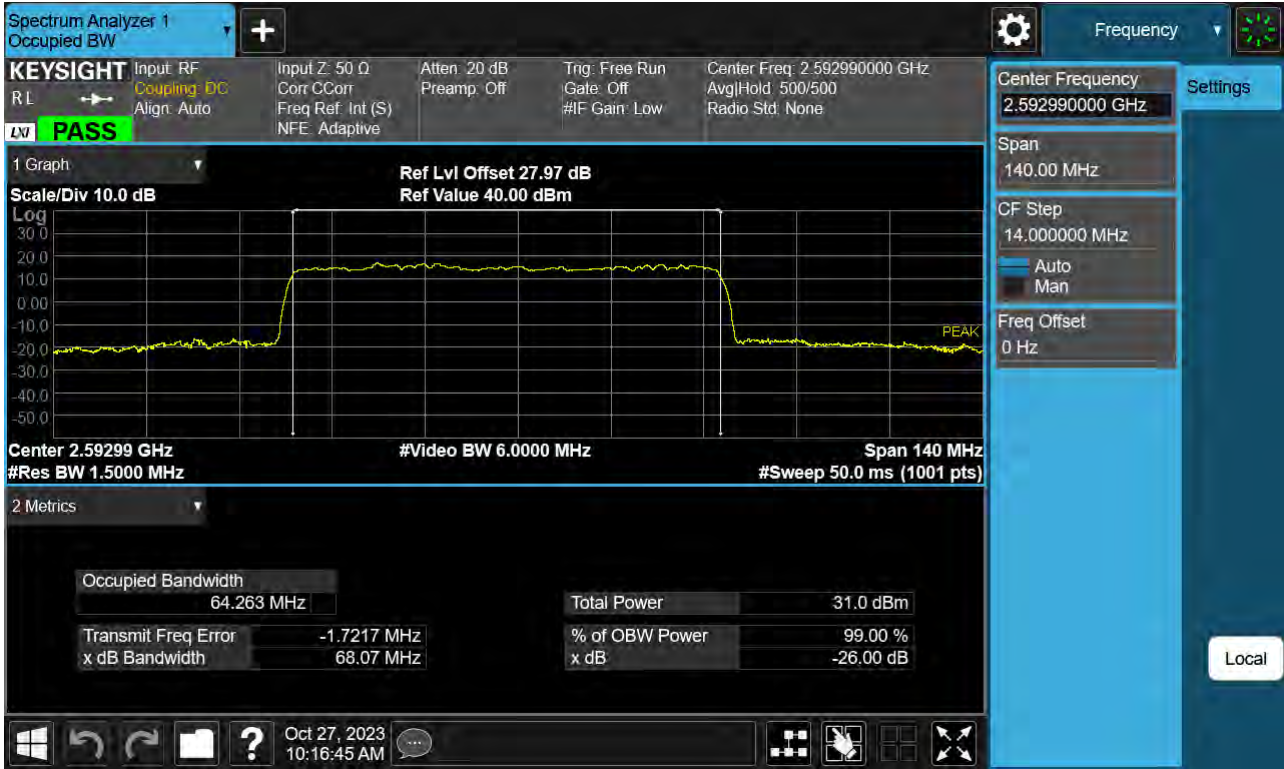
Sub6 n41. Occupied Bandwidth Plot (70 MHz Ch.518598 BPSK )



Sub6 n41. Occupied Bandwidth Plot (70 MHz Ch.518598 QPSK )

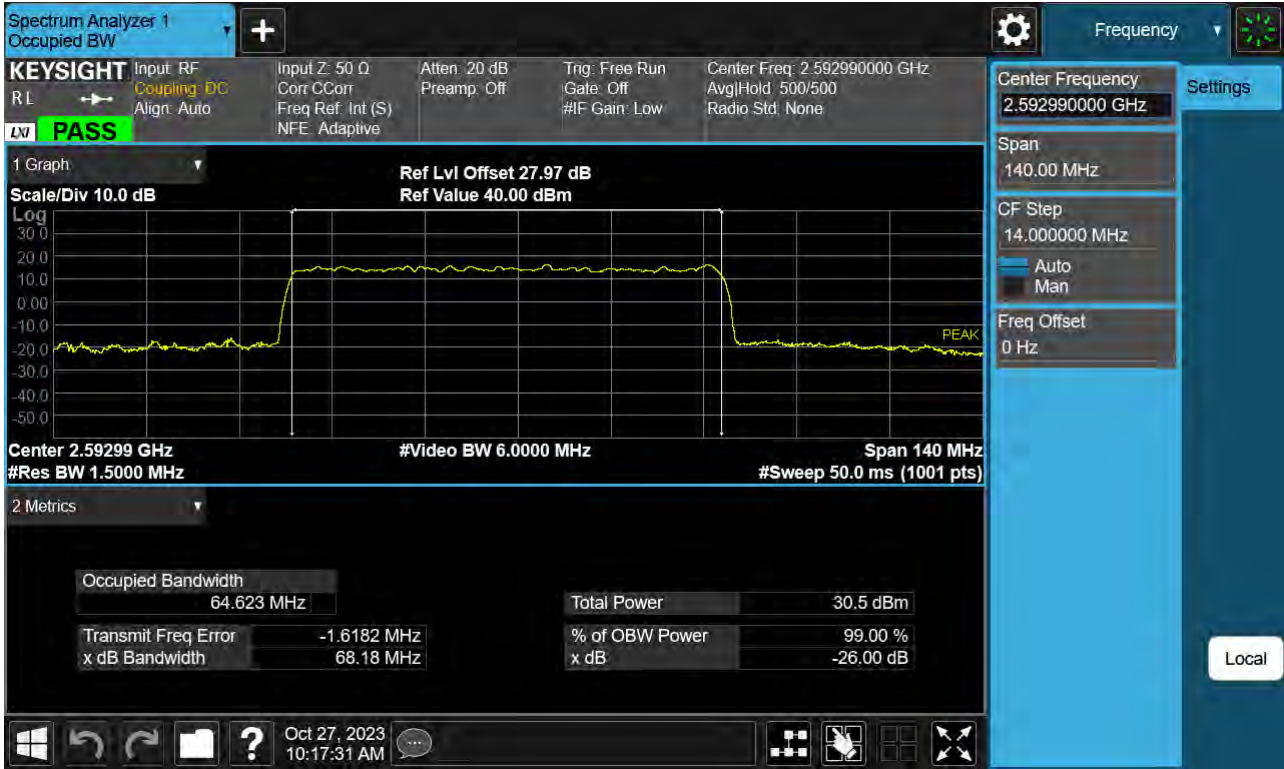


Sub6 n41. Occupied Bandwidth Plot (70 MHz Ch.518598 16-QAM )

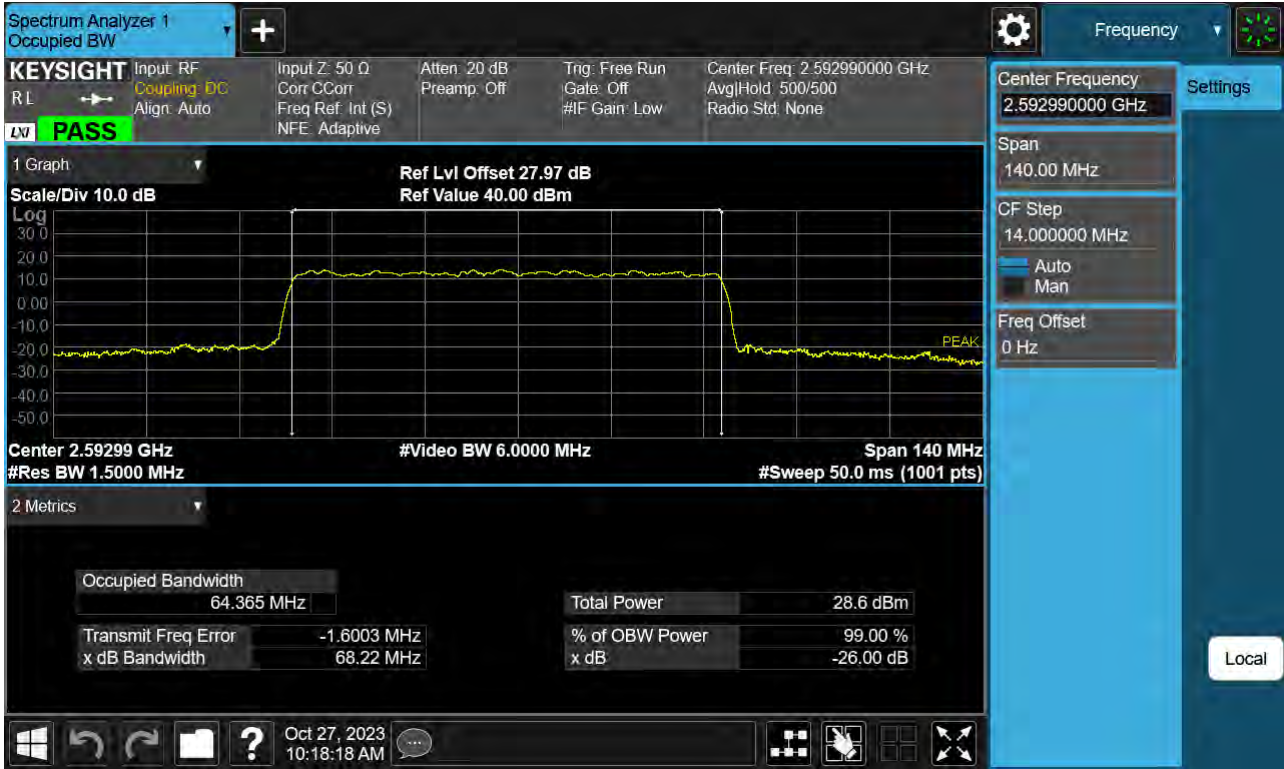




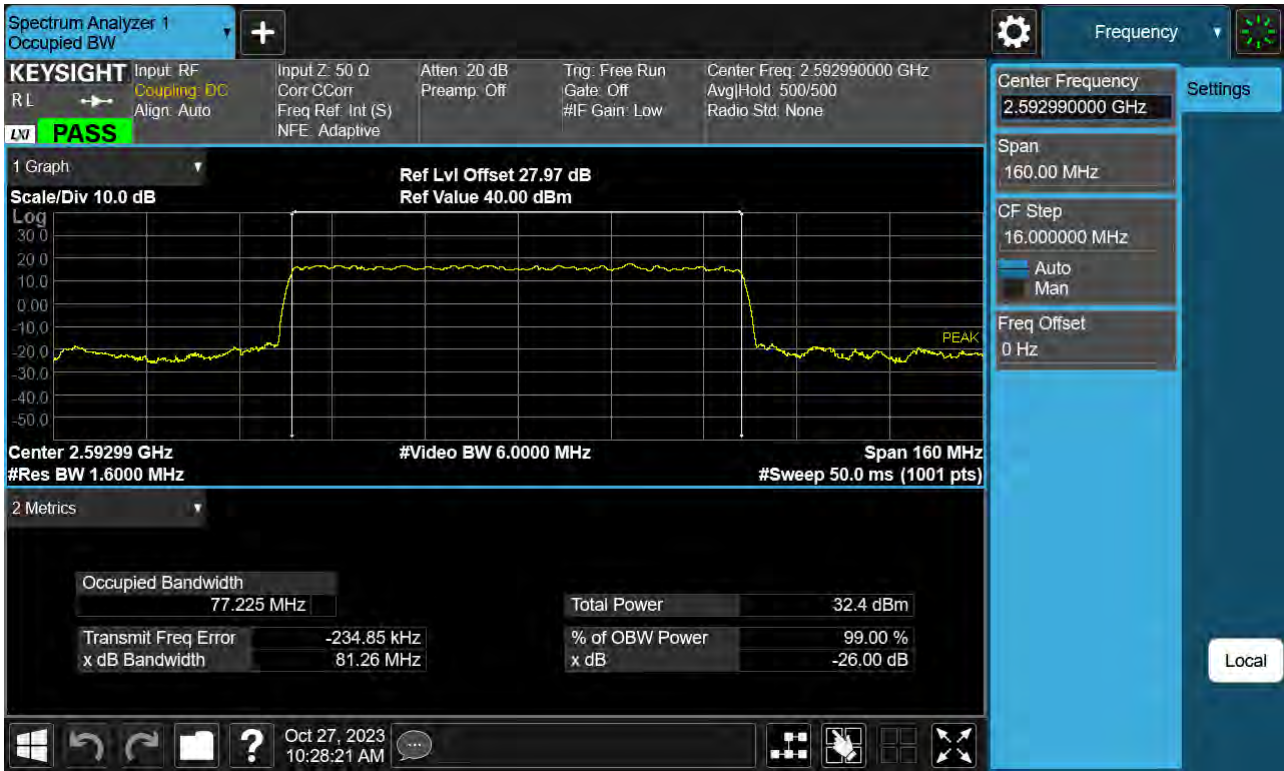
Sub6 n41. Occupied Bandwidth Plot (70 MHz Ch.518598 64-QAM )



Sub6 n41. Occupied Bandwidth Plot (70 MHz Ch.518598 256-QAM )



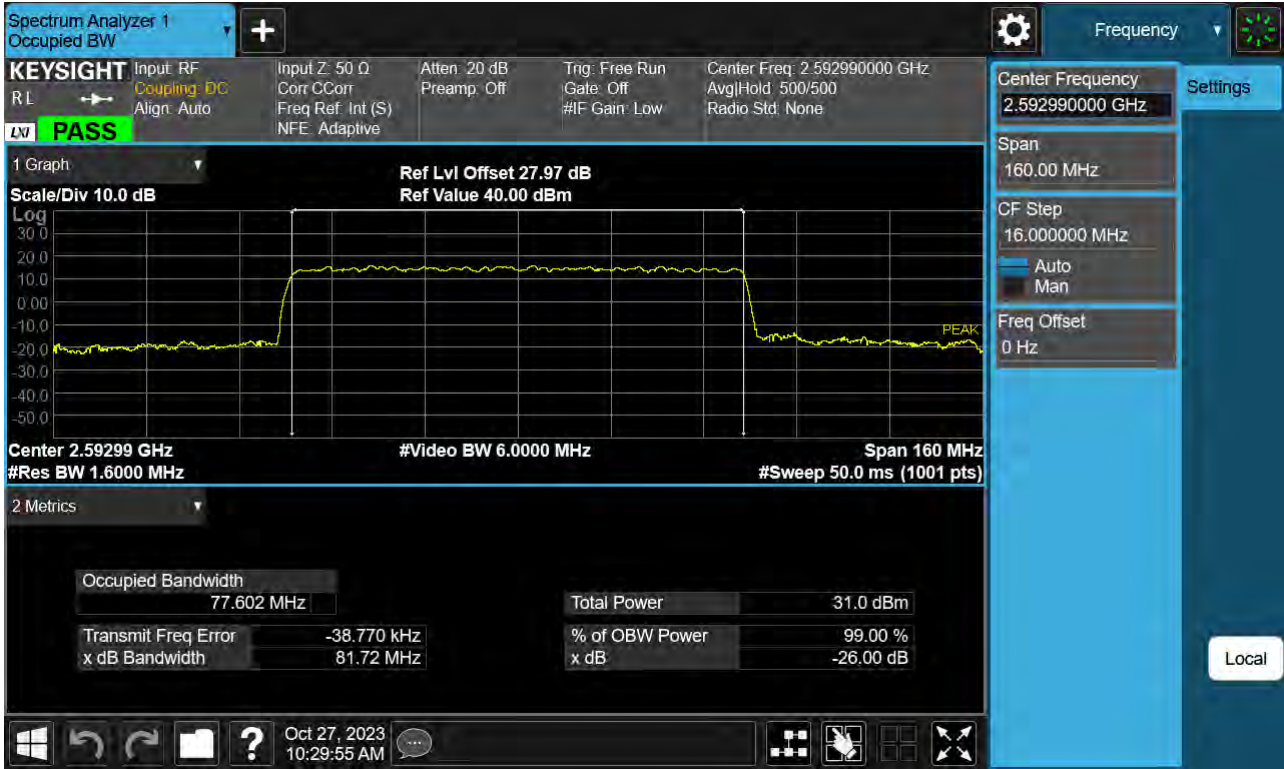
Sub6 n41. Occupied Bandwidth Plot (80 MHz Ch.518598 BPSK )



Sub6 n41. Occupied Bandwidth Plot (80 MHz Ch.518598 QPSK )



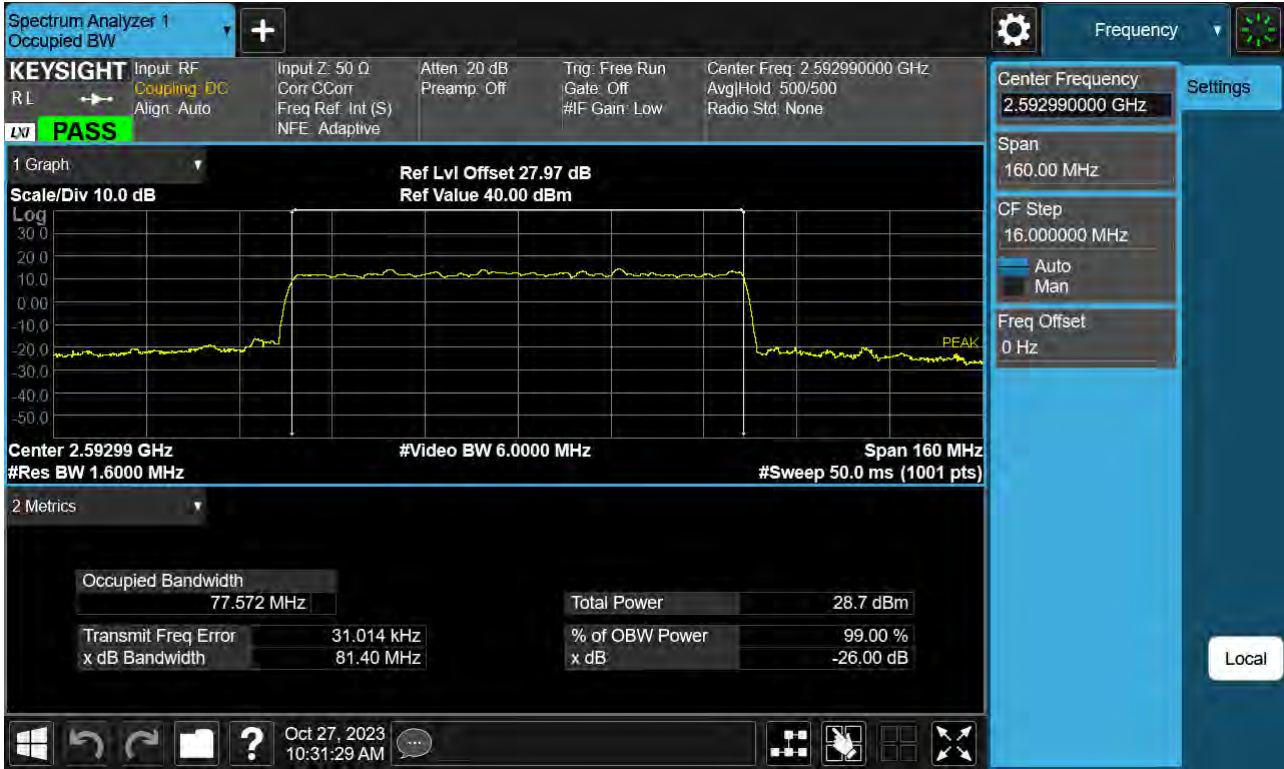
Sub6 n41. Occupied Bandwidth Plot (80 MHz Ch.518598 16-QAM )



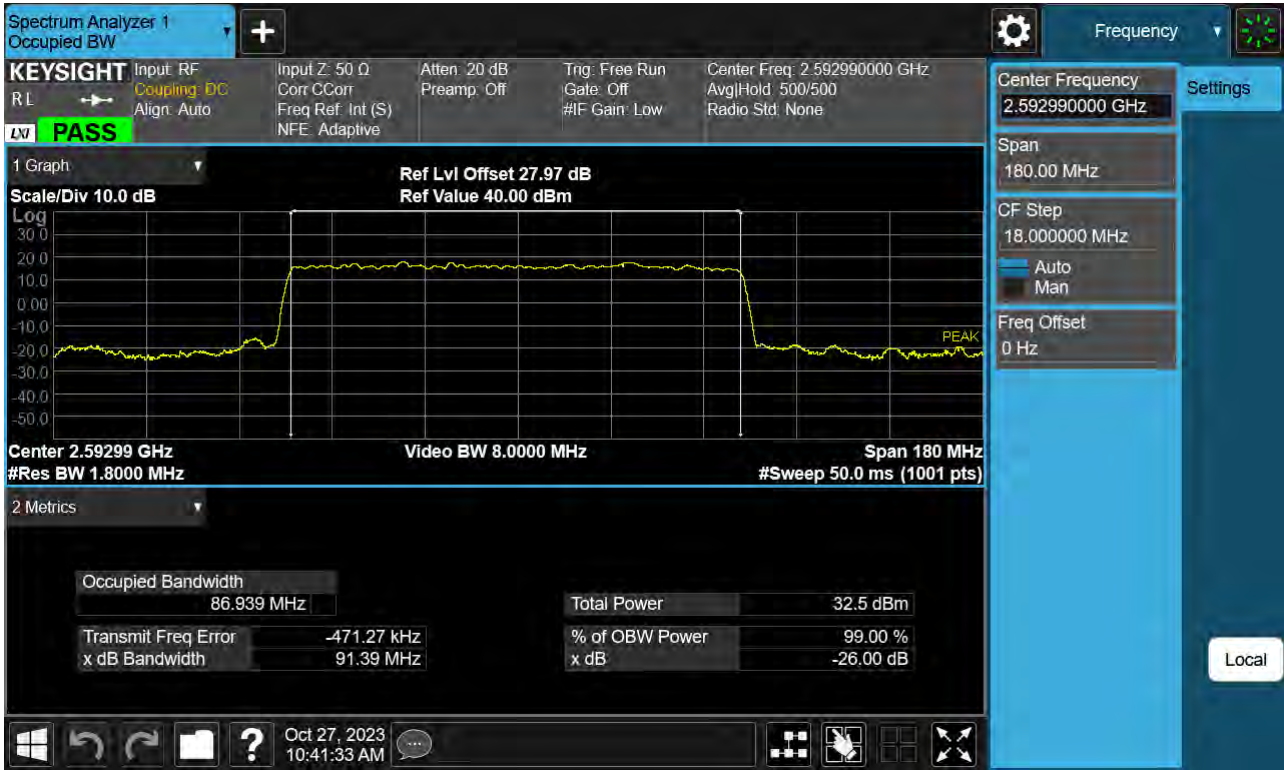
Sub6 n41. Occupied Bandwidth Plot (80 MHz Ch.518598 64-QAM )



Sub6 n41. Occupied Bandwidth Plot (80 MHz Ch.518598 256-QAM )

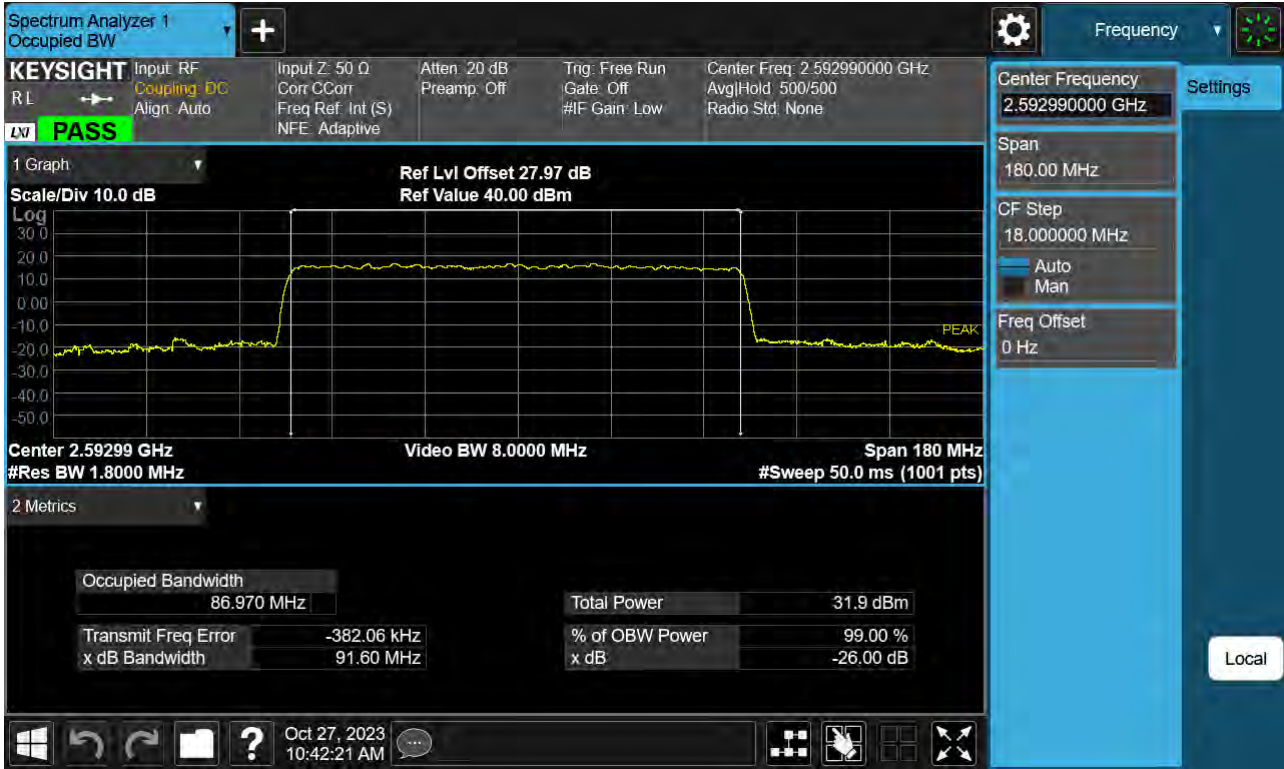


Sub6 n41. Occupied Bandwidth Plot (90 MHz Ch.518598 BPSK )





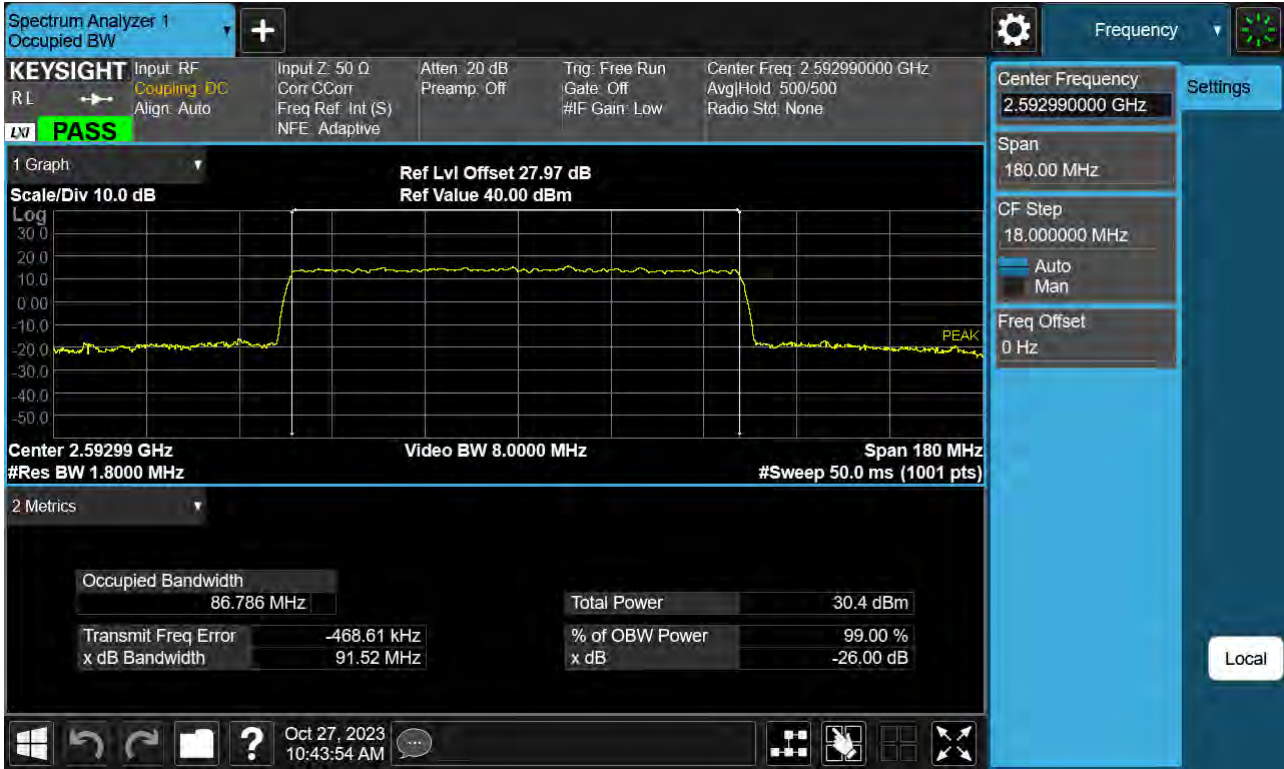
Sub6 n41. Occupied Bandwidth Plot (90 MHz Ch.518598 QPSK )



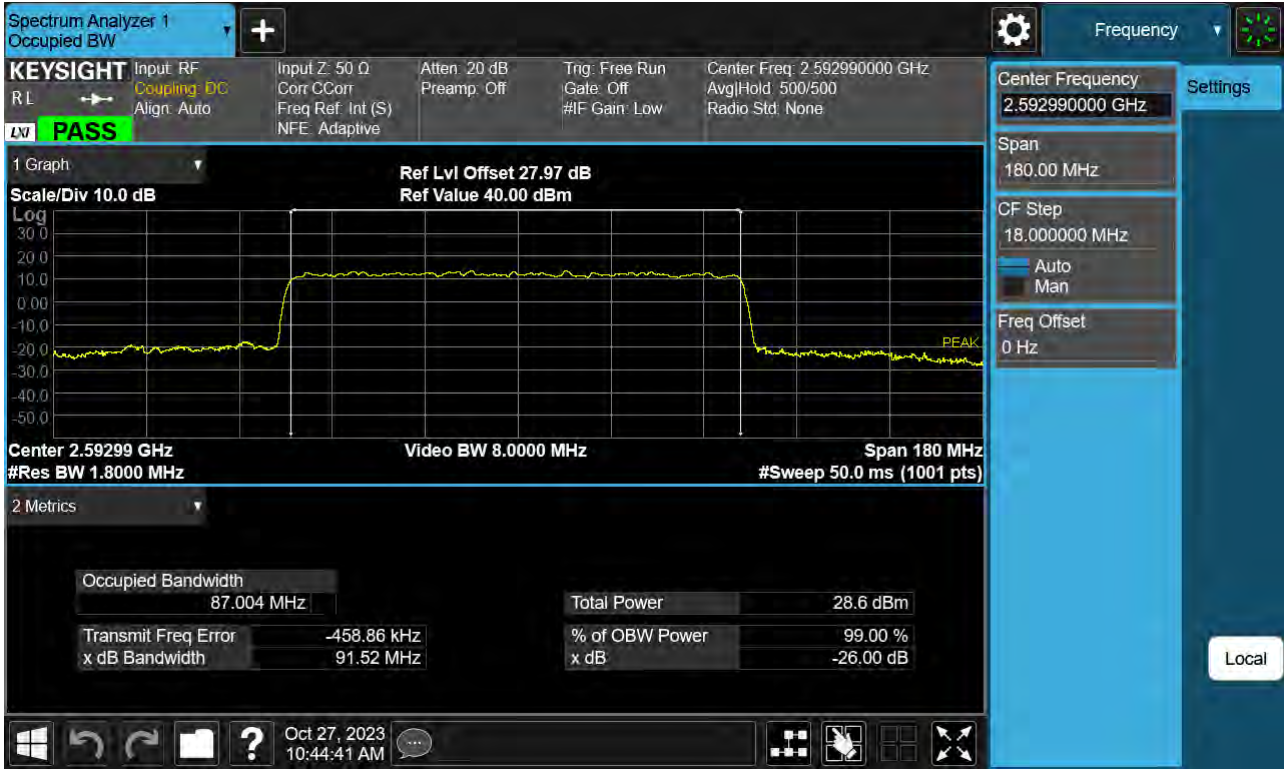
Sub6 n41. Occupied Bandwidth Plot (90 MHz Ch.518598 16-QAM )



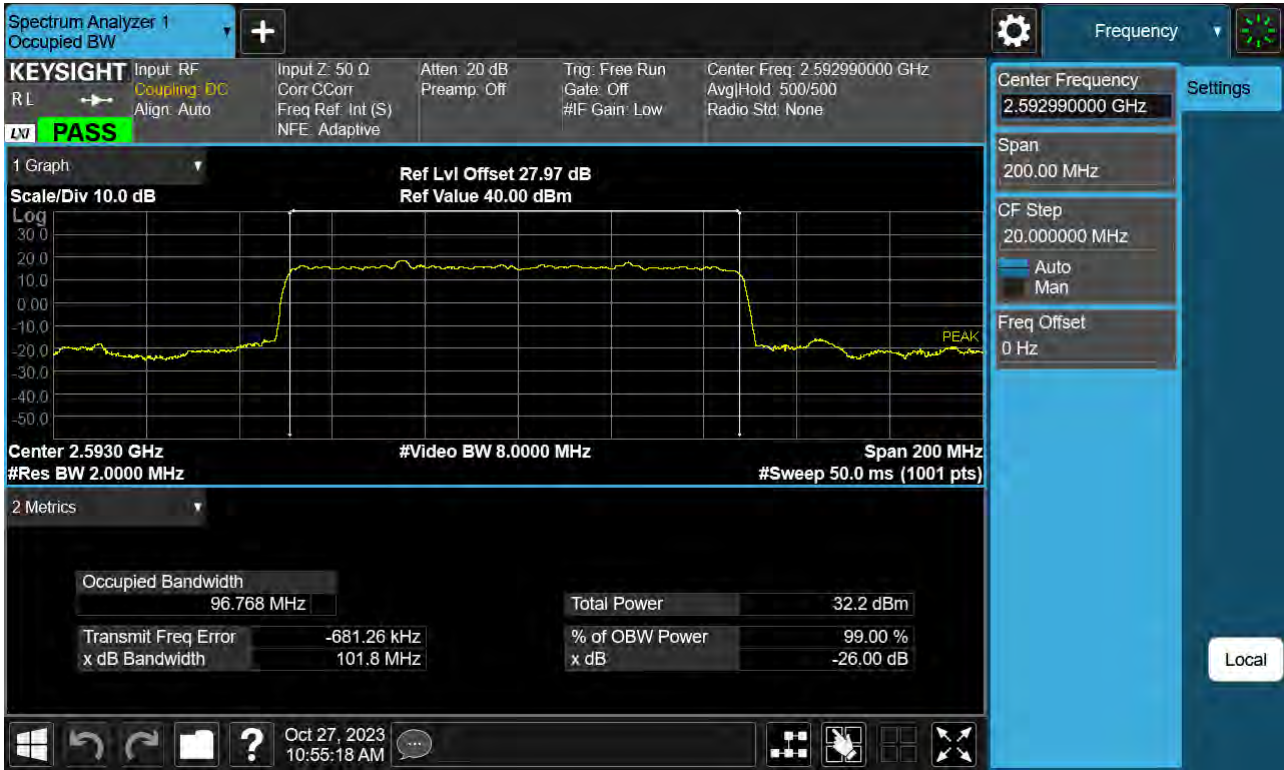
Sub6 n41. Occupied Bandwidth Plot (90 MHz Ch.518598 64-QAM )



Sub6 n41. Occupied Bandwidth Plot (90 MHz Ch.518598 256-QAM )



Sub6 n41. Occupied Bandwidth Plot (100 MHz Ch.518598 BPSK )



Sub6 n41. Occupied Bandwidth Plot (100 MHz Ch.518598 QPSK )



Sub6 n41. Occupied Bandwidth Plot (100 MHz Ch.518598 16-QAM )

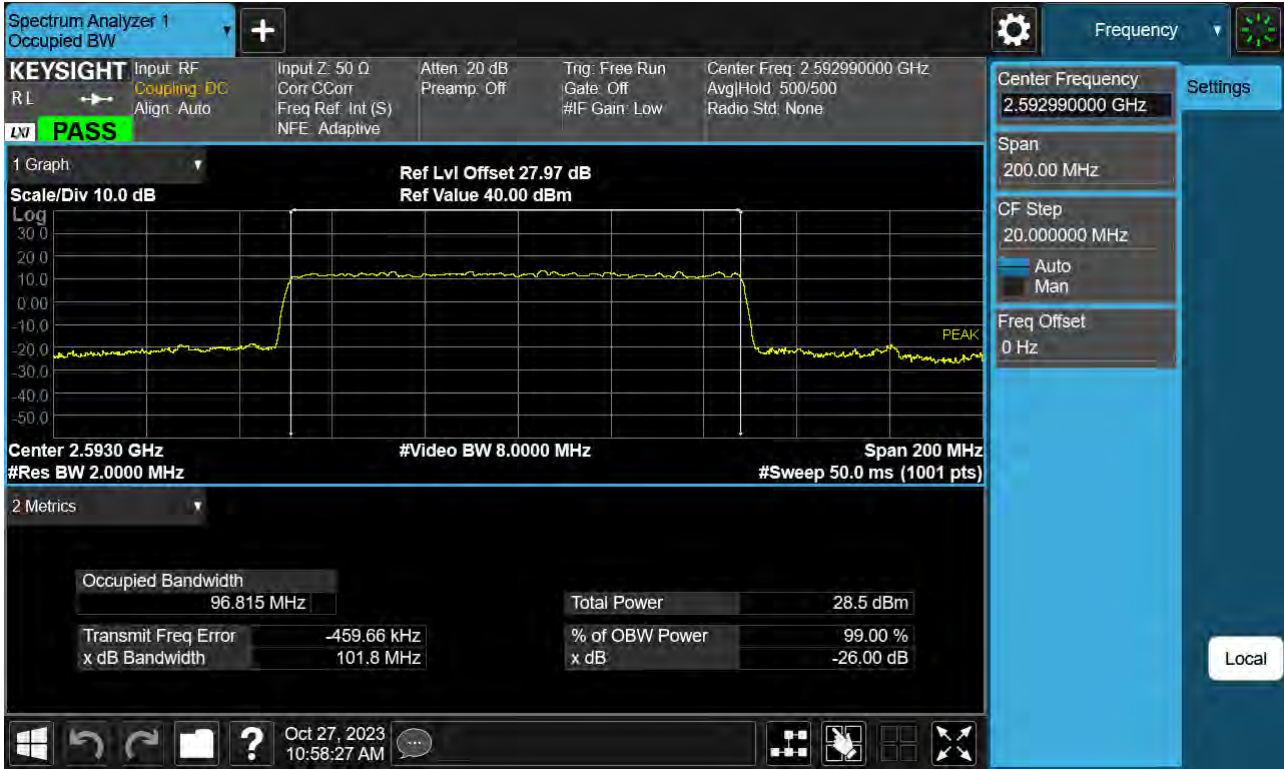


Sub6 n41. Occupied Bandwidth Plot (100 MHz Ch.518598 64-QAM )





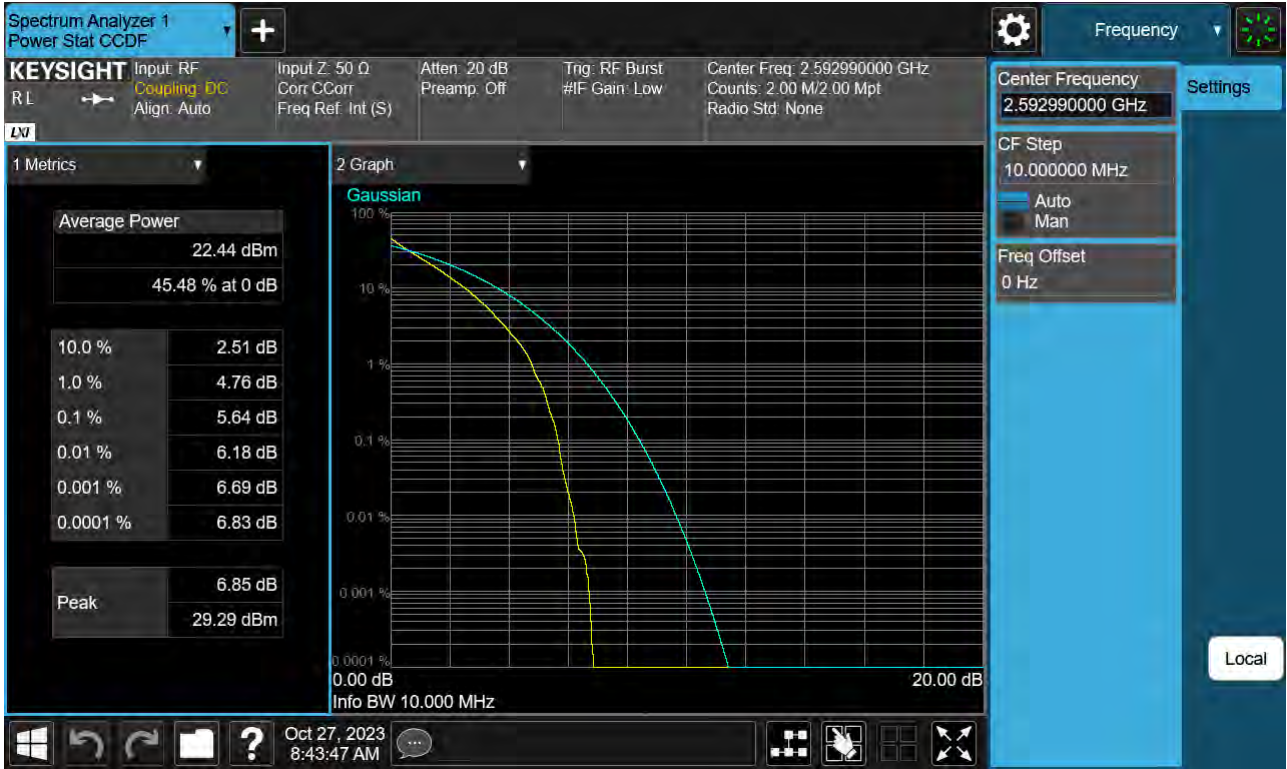
Sub6 n41. Occupied Bandwidth Plot (100 MHz Ch.518598 256-QAM)



Sub6 n41. PAR Plot (10 M BW\_Ch.518598\_BPSK)



Sub6 n41. PAR Plot (10 M BW\_Ch.518598\_QPSK)



Sub6 n41. PAR Plot (10 M BW\_Ch.518598\_16QAM)



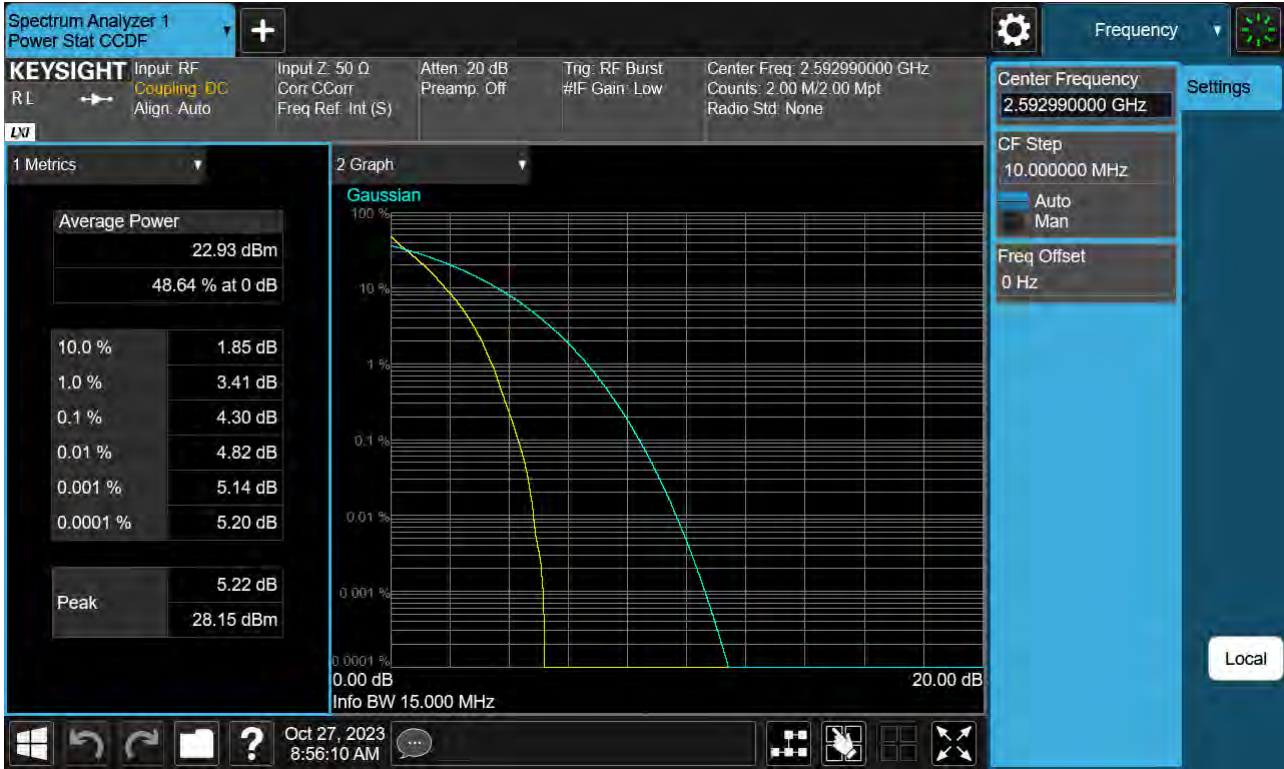
Sub6 n41. PAR Plot (10 M BW\_Ch.518598\_64QAM)



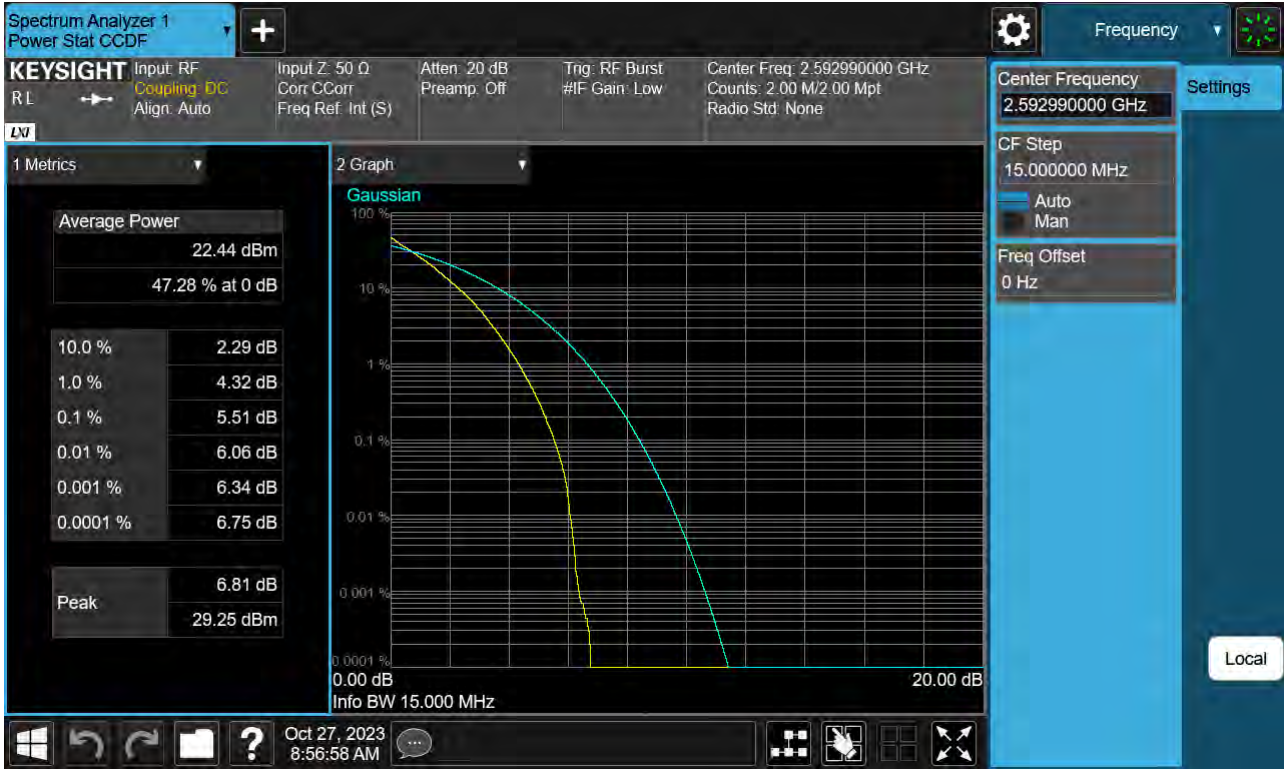
Sub6 n41. PAR Plot (10 M BW\_Ch.518598\_256QAM)



Sub6 n41. PAR Plot (15 M BW\_Ch.518598\_BPSK)



Sub6 n41. PAR Plot (15 M BW\_Ch.518598\_QPSK)





Sub6 n41. PAR Plot (15 M BW\_Ch.518598\_16QAM)



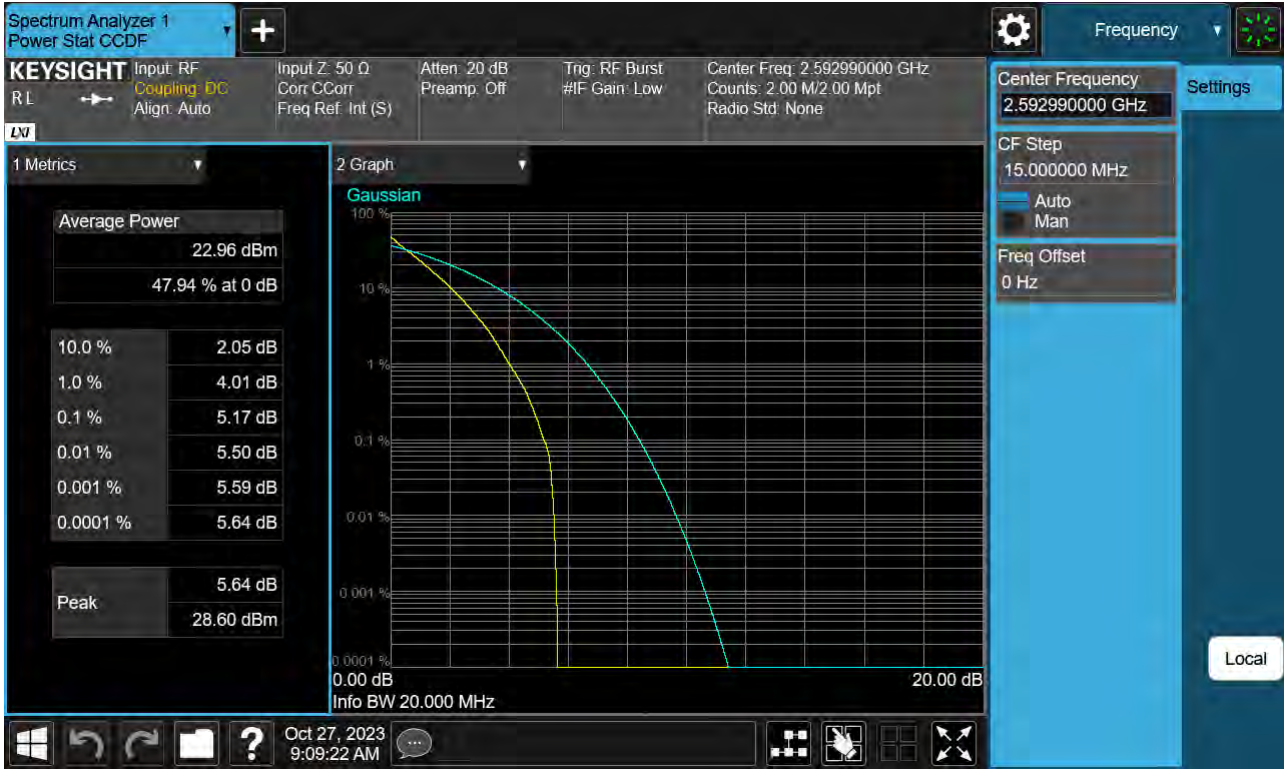
Sub6 n41. PAR Plot (15 M BW\_Ch.518598\_64QAM)



Sub6 n41. PAR Plot (15 M BW\_Ch.518598\_256QAM)



Sub6 n41. PAR Plot (20 M BW\_Ch.518598\_BPSK)



Sub6 n41. PAR Plot (20 M BW\_Ch.518598\_QPSK)



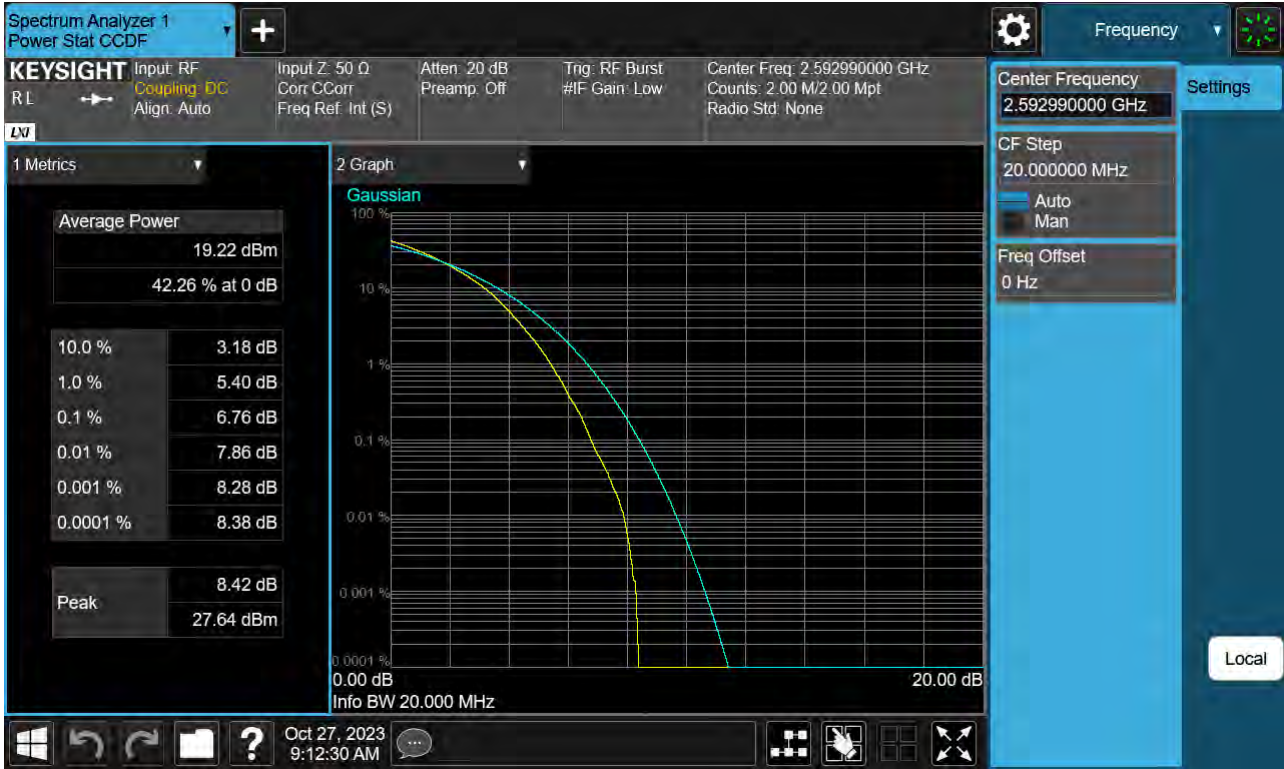
Sub6 n41. PAR Plot (20 M BW\_Ch.518598\_16QAM)



Sub6 n41. PAR Plot (20 M BW\_Ch.518598\_64QAM)



Sub6 n41. PAR Plot (20 M BW\_Ch.518598\_256QAM)





Sub6 n41. PAR Plot (25 M BW\_Ch.518598\_BPSK)



Sub6 n41. PAR Plot (25 M BW\_Ch.518598\_QPSK)



Sub6 n41. PAR Plot (25 M BW\_Ch.518598\_16QAM)



Sub6 n41. PAR Plot (25 M BW\_Ch.518598\_64QAM)



Sub6 n41. PAR Plot (25 M BW\_Ch.518598\_256QAM)



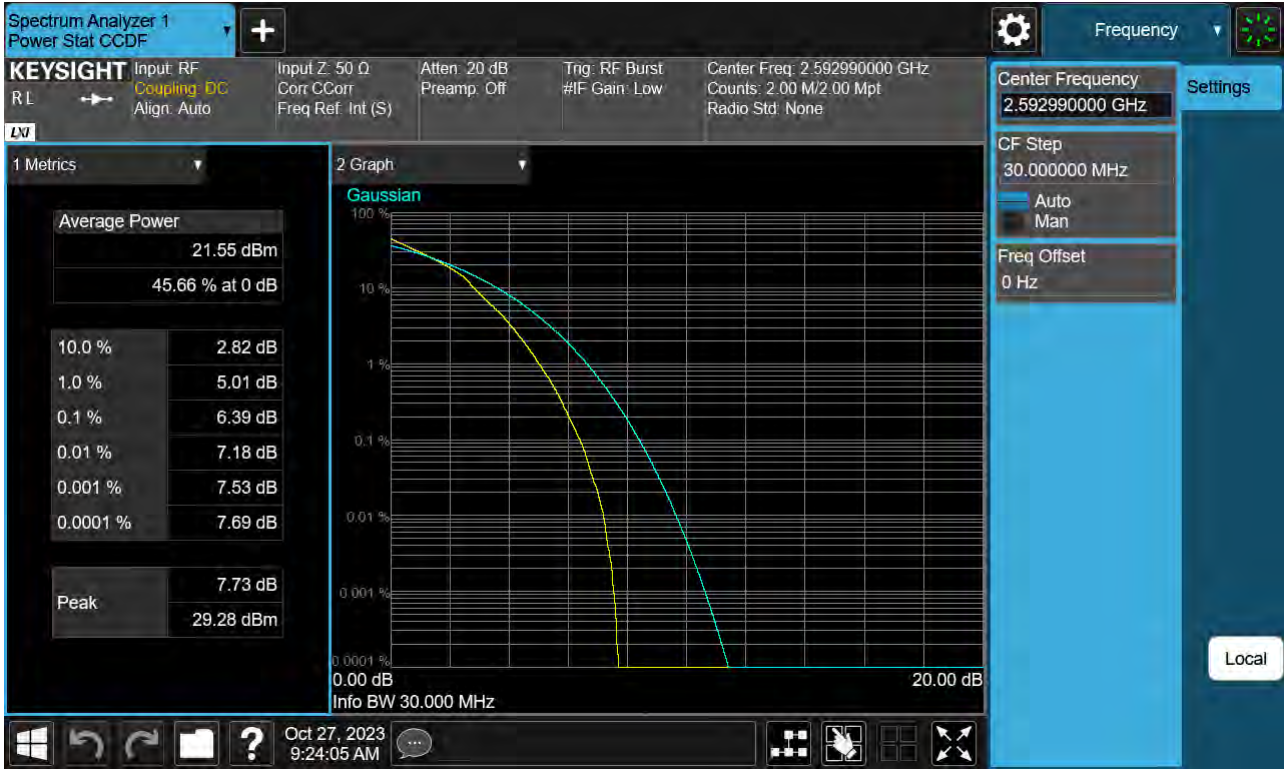
Sub6 n41. PAR Plot (30 BW\_Ch.518598\_BPSK)



Sub6 n41. PAR Plot (30 M BW\_Ch.518598\_QPSK)

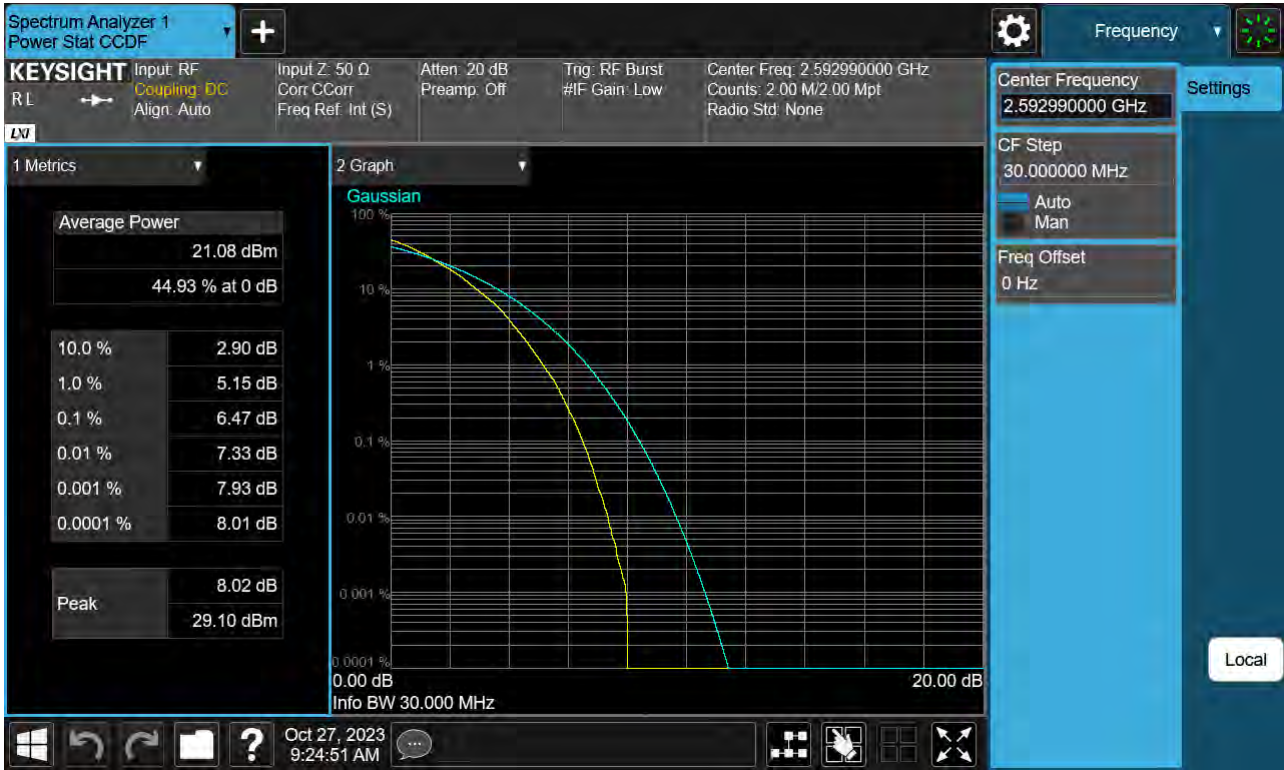


Sub6 n41. PAR Plot (30 M BW\_Ch.518598\_16QAM)





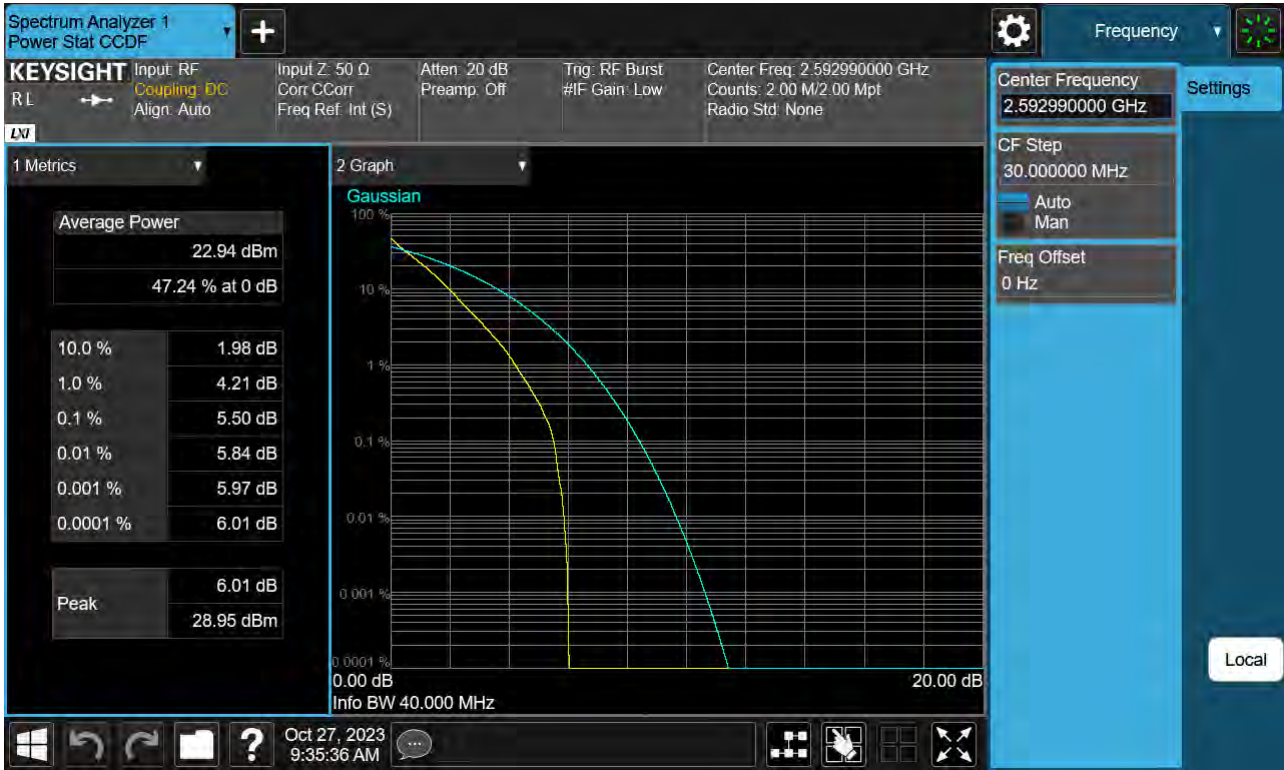
Sub6 n41. PAR Plot (30 M BW\_Ch.518598\_64QAM)



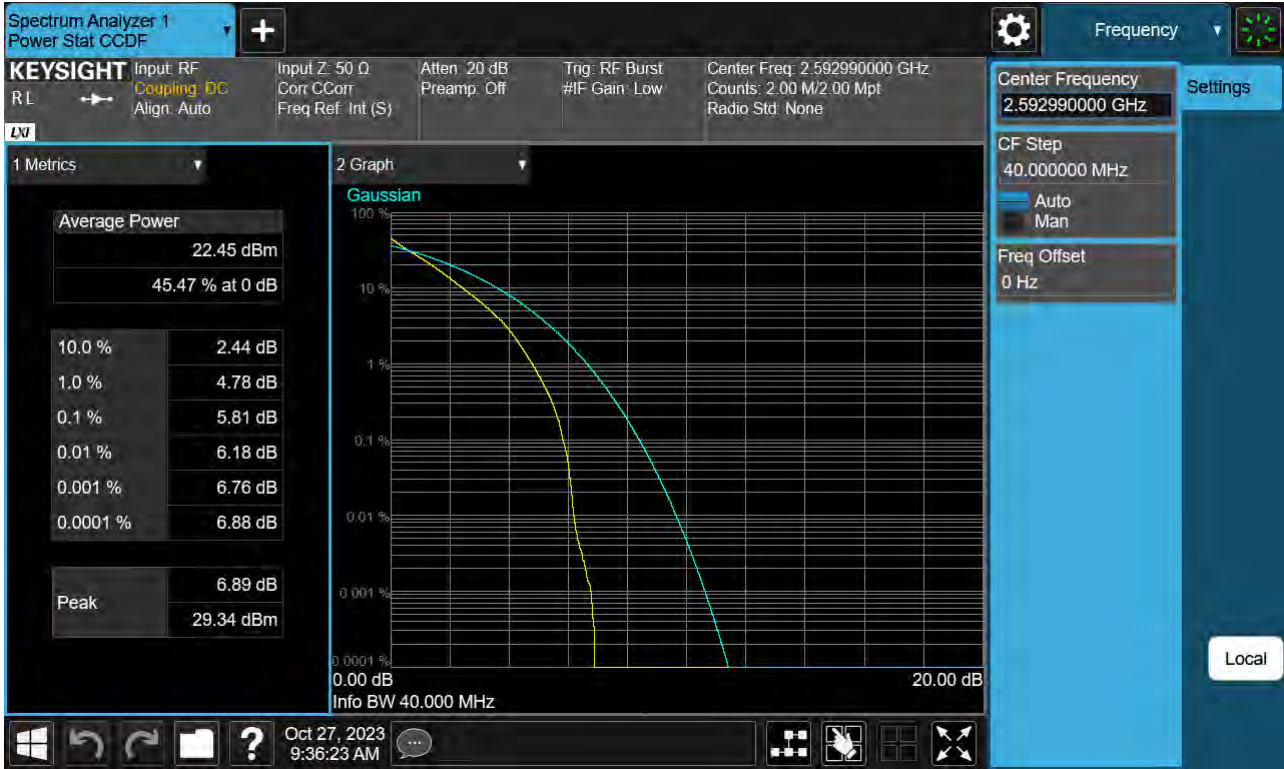
Sub6 n41. PAR Plot (30 M BW\_Ch.518598\_256QAM)



Sub6 n41. PAR Plot (40 M BW\_Ch.518598\_BPSK)



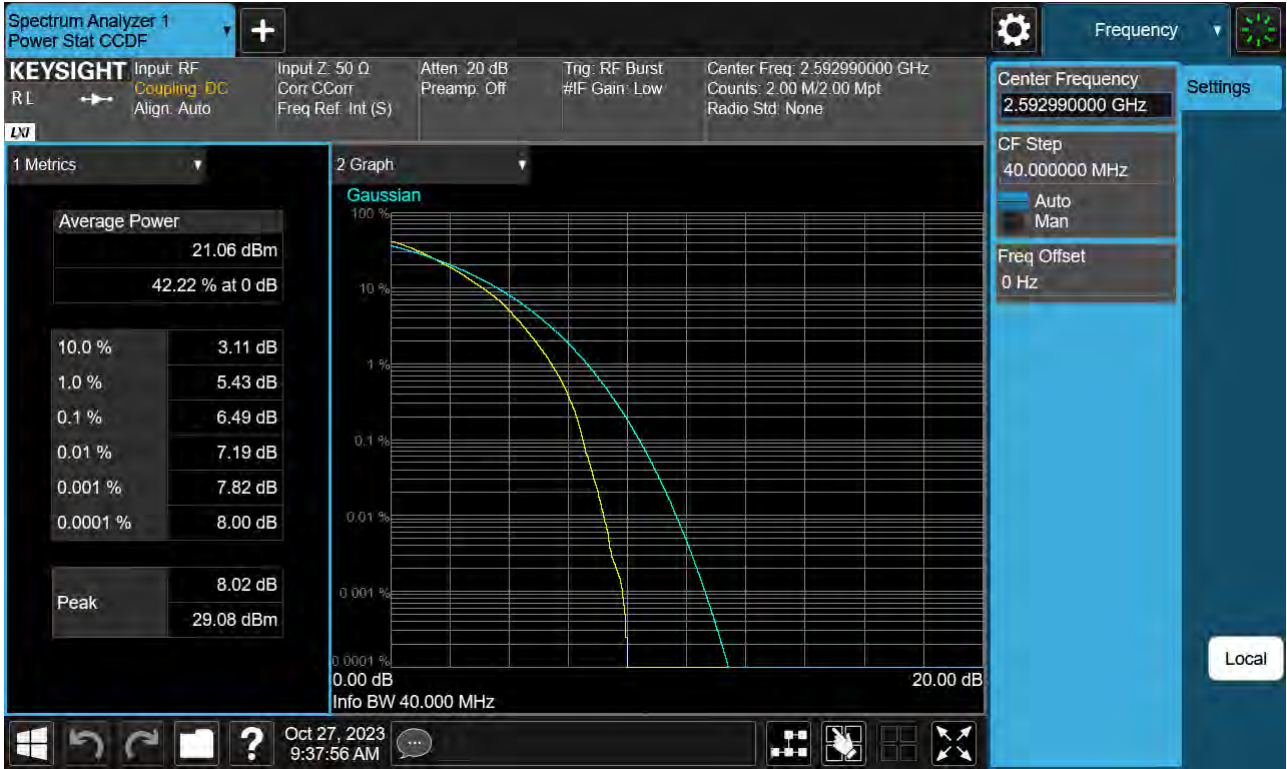
Sub6 n41. PAR Plot (40 M BW\_Ch.518598\_QPSK)



Sub6 n41. PAR Plot (40 M BW\_Ch.518598\_16QAM)



Sub6 n41. PAR Plot (40 M BW\_Ch.518598\_64QAM)



Sub6 n41. PAR Plot (40 M BW\_Ch.518598\_256QAM)

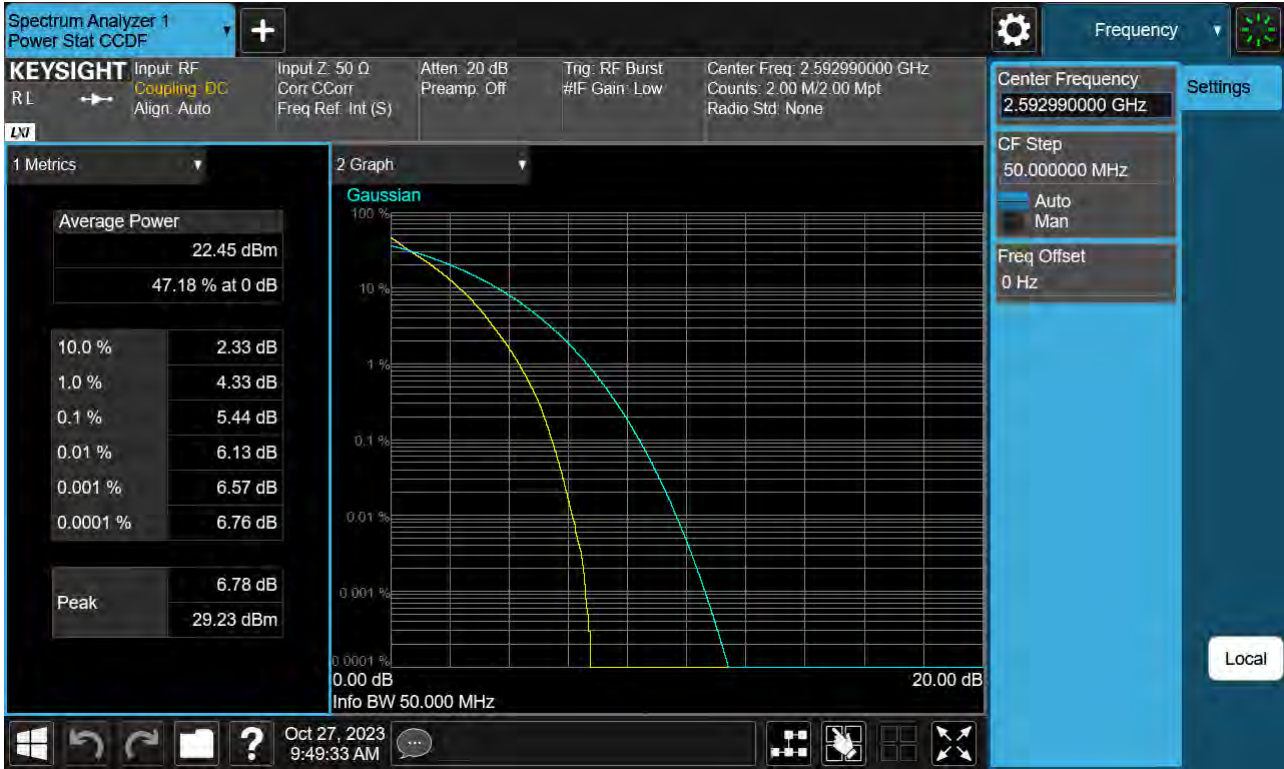


Sub6 n41. PAR Plot (50 M BW\_Ch.518598\_BPSK)





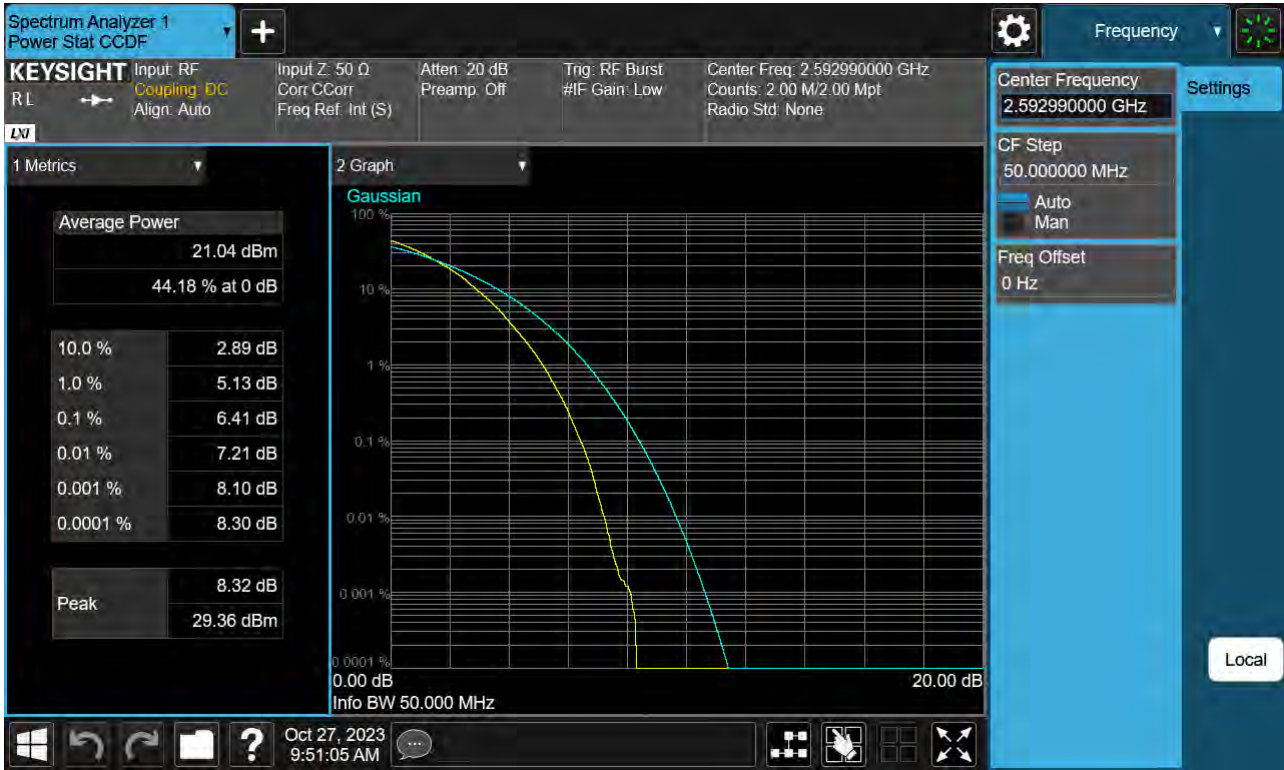
Sub6 n41. PAR Plot (50 M BW\_Ch.518598\_QPSK)



Sub6 n41. PAR Plot (50 M BW\_Ch.518598\_16QAM)



Sub6 n41. PAR Plot (50 M BW\_Ch.518598\_64QAM)



Sub6 n41. PAR Plot (50 M BW\_Ch.518598\_256QAM)

