

FCC Sub6 REPORT

Certification

Applicant Name:

SAMSUNG Electronics Co., Ltd.

Date of Issue:

January 14, 2022

Address:

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Location:

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Report No.: HCT-RF-2201-FC035-R1

FCC ID:

A3LSMA536V

APPLICANT:

SAMSUNG Electronics Co., Ltd.

Model(s): SM-A536V
EUT Type: Mobile phone
FCC Classification: PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s): §27, §2

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)

1. 3450 MHz - 3550 MHz

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77 (10)	3455.01 – 3544.99	8M62G7D	PI/2 BPSK	0.393	25.94
		8M64G7D	QPSK	0.382	25.82
		8M62W7D	16QAM	0.300	24.77
		8M62W7D	64QAM	0.222	23.47
		8M58W7D	256QAM	0.141	21.48
Sub6 n77 (15)	3457.50 – 3542.50	13M0G7D	PI/2 BPSK	0.356	25.52
		13M0G7D	QPSK	0.356	25.51
		13M0W7D	16QAM	0.286	24.56
		12M9W7D	64QAM	0.202	23.05
		12M9W7D	256QAM	0.128	21.09
Sub6 n77 (20)	3460.02 – 3540.00	17M9G7D	PI/2 BPSK	0.354	25.49
		17M9G7D	QPSK	0.353	25.48
		17M9W7D	16QAM	0.298	24.74
		17M9W7D	64QAM	0.206	23.15
		17M9W7D	256QAM	0.128	21.09
Sub6 n77 (25)	3462.50 – 3537.50	23M1G7D	PI/2 BPSK	0.351	25.45
		23M1G7D	QPSK	0.350	25.44
		23M0W7D	16QAM	0.284	24.54
		22M9W7D	64QAM	0.198	22.97
		23M0W7D	256QAM	0.126	20.99
Sub6 n77 (30)	3465.00 – 3534.99	27M0G7D	PI/2 BPSK	0.353	25.48
		27M1G7D	QPSK	0.352	25.47
		27M0W7D	16QAM	0.266	24.25
		27M0W7D	64QAM	0.186	22.70
		27M0W7D	256QAM	0.123	20.90
Sub6 n77 (40)	3470.01 – 3529.98	36M1G7D	PI/2 BPSK	0.353	25.48
		36M0G7D	QPSK	0.339	25.31
		36M0W7D	16QAM	0.263	24.20
		35M9W7D	64QAM	0.195	22.90
		36M0W7D	256QAM	0.116	20.63
Sub6 n77 (50)	3475.02 – 3525.00	46M0G7D	PI/2 BPSK	0.339	25.30
		46M0G7D	QPSK	0.336	25.26
		45M8W7D	16QAM	0.266	24.25
		45M9W7D	64QAM	0.193	22.85
		45M8W7D	256QAM	0.125	20.97
Sub6 n77 (60)	3480.00 – 3519.99	58M0G7D	PI/2 BPSK	0.346	25.39
		57M8G7D	QPSK	0.331	25.19
		58M1W7D	16QAM	0.278	24.44
		58M1W7D	64QAM	0.195	22.89
		58M3W7D	256QAM	0.129	21.09
Sub6 n77 (70)	3485.01 – 3514.98	64M7G7D	PI/2 BPSK	0.346	25.40
		64M4G7D	QPSK	0.346	25.39
		64M6W7D	16QAM	0.283	24.53
		64M6W7D	64QAM	0.197	22.96
		64M6W7D	256QAM	0.126	21.01
Sub6 n77 (80)	3490.02 – 3510.00	77M5G7D	PI/2 BPSK	0.348	25.42
		77M4G7D	QPSK	0.347	25.41
		77M4W7D	16QAM	0.291	24.64
		77M4W7D	64QAM	0.200	23.01
		77M3W7D	256QAM	0.135	21.31
Sub6 n77 (90)	3495.00 – 3504.99	87M1G7D	PI/2 BPSK	0.343	25.35
		86M9G7D	QPSK	0.341	25.33
		87M1W7D	16QAM	0.278	24.44
		87M1W7D	64QAM	0.208	23.18
		87M1W7D	256QAM	0.126	21.02
Sub6 n77 (100)	3500.01	96M5G7D	PI/2 BPSK	0.340	25.32
		96M6G7D	QPSK	0.339	25.31
		96M9W7D	16QAM	0.277	24.42
		96M6W7D	64QAM	0.189	22.76
		96M8W7D	256QAM	0.123	20.90

2. 3700 MHz - 3980 MHz

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77 (10)	3705.00 – 3975.00	8M61G7D	PI/2 BPSK	0.382	25.82
		8M69G7D	QPSK	0.367	25.65
		8M58W7D	16QAM	0.294	24.68
		8M59W7D	64QAM	0.210	23.22
		8M58W7D	256QAM	0.139	21.42
Sub6 n77 (15)	3707.51 – 3972.48	12M8G7D	PI/2 BPSK	0.369	25.67
		12M9G7D	QPSK	0.361	25.57
		12M9W7D	16QAM	0.308	24.88
		12M9W7D	64QAM	0.213	23.28
		12M9W7D	256QAM	0.131	21.18
Sub6 n77 (20)	3710.01 – 3969.99	17M9G7D	PI/2 BPSK	0.366	25.64
		17M9G7D	QPSK	0.362	25.59
		17M9W7D	16QAM	0.303	24.81
		17M8W7D	64QAM	0.212	23.26
		17M8W7D	256QAM	0.134	21.28
Sub6 n77 (25)	3712.50 – 3967.50	22M9G7D	PI/2 BPSK	0.373	25.71
		23M0G7D	QPSK	0.372	25.70
		22M9W7D	16QAM	0.294	24.68
		23M0W7D	64QAM	0.200	23.01
		23M1W7D	256QAM	0.133	21.24
Sub6 n77 (30)	3715.02 – 3964.98	27M1G7D	PI/2 BPSK	0.374	25.72
		27M1G7D	QPSK	0.373	25.71
		26M9W7D	16QAM	0.299	24.75
		27M0W7D	64QAM	0.210	23.21
		27M0W7D	256QAM	0.131	21.18
Sub6 n77 (40)	3720.00 – 3960.00	35M8G7D	PI/2 BPSK	0.383	25.83
		36M0G7D	QPSK	0.375	25.74
		35M8W7D	16QAM	0.295	24.69
		36M0W7D	64QAM	0.219	23.40
		36M0W7D	256QAM	0.136	21.33
Sub6 n77 (50)	3725.10 – 3954.99	45M8G7D	PI/2 BPSK	0.384	25.84
		45M9G7D	QPSK	0.382	25.82
		46M0W7D	16QAM	0.303	24.81
		45M8W7D	64QAM	0.218	23.39
		45M8W7D	256QAM	0.133	21.24
Sub6 n77 (60)	3730.02 – 3949.98	58M0G7D	PI/2 BPSK	0.396	25.98
		58M1G7D	QPSK	0.384	25.84
		58M1W7D	16QAM	0.309	24.90
		57M9W7D	64QAM	0.225	23.53
		58M2W7D	256QAM	0.137	21.36
Sub6 n77 (70)	3735.00 – 3945.00	64M4G7D	PI/2 BPSK	0.393	25.94
		64M4G7D	QPSK	0.392	25.93
		64M6W7D	16QAM	0.317	25.01
		64M4W7D	64QAM	0.232	23.66
		64M4W7D	256QAM	0.142	21.52
Sub6 n77 (80)	3740.01 – 3939.99	77M3G7D	PI/2 BPSK	0.408	26.11
		77M4G7D	QPSK	0.407	26.10
		76M9W7D	16QAM	0.323	25.10
		77M5W7D	64QAM	0.228	23.58
		77M3W7D	256QAM	0.147	21.69
Sub6 n77 (90)	3745.02 – 3934.98	87M1G7D	PI/2 BPSK	0.433	26.36
		86M8G7D	QPSK	0.428	26.31
		87M0W7D	16QAM	0.344	25.36
		86M7W7D	64QAM	0.243	23.86
		86M6W7D	256QAM	0.146	21.63
Sub6 n77 (100)	3750.00 – 3930.00	96M5G7D	PI/2 BPSK	0.460	26.63
		96M5G7D	QPSK	0.459	26.62
		96M7W7D	16QAM	0.355	25.50
		96M6W7D	64QAM	0.251	24.00
		96M4W7D	256QAM	0.162	22.10

Report No.: HCT-RF-2201-FC035-R1

REVIEWED BY



Report prepared by : Jung Ki Lim
Engineer of Telecommunication Testing Center

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

This test results were applied only to the test methods required by the standard.

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

The above Test Report is the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA. (HCT Accreditation No.: KT197)

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Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2201-FC035	January 05, 2022	- First Approval Report
HCT-RF-2201-FC035-R1	January 14, 2022	- Revised the E.I.R.P result. (2 & 3 pages, 34 & 70 pages)

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

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MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name:	SAMSUNG Electronics Co., Ltd.
Address:	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
FCC ID:	A3LSMA536V
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§27, §2
EUT Type:	Mobile phone
Model(s):	SM-A536V
SCS(kHz):	30
Bandwidth(MHz):	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
Waveform:	CP-OFDM, DFT-S-OFDM
Modulation:	DFT-S-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
Tx Frequency: (3450 MHz - 3550 MHz)	3455.01 MHz – 3544.99 MHz (Sub6 n77(10 MHz)) 3457.50 MHz – 3542.50 MHz (Sub6 n77(15 MHz)) 3460.02 MHz – 3540.00 MHz (Sub6 n77(20 MHz)) 3462.50 MHz – 3537.50 MHz (Sub6 n77(25 MHz)) 3465.00 MHz – 3534.99 MHz (Sub6 n77(30 MHz)) 3470.01 MHz – 3529.98 MHz (Sub6 n77(40 MHz)) 3475.02 MHz – 3525.00 MHz (Sub6 n77(50 MHz)) 3480.00 MHz – 3519.99 MHz (Sub6 n77(60 MHz)) 3485.01 MHz – 3514.98 MHz (Sub6 n77(70 MHz)) 3490.02 MHz – 3510.00 MHz (Sub6 n77(80 MHz)) 3495.00 MHz – 3504.99 MHz (Sub6 n77(90 MHz)) 3500.01 MHz (Sub6 n77(100 MHz))
Tx Frequency: (3700 MHz - 3980 MHz)	3705.00 MHz – 3975.00 MHz (Sub6 n77(10 MHz)) 3707.51 MHz – 3972.48 MHz (Sub6 n77(15 MHz)) 3710.01 MHz – 3969.99 MHz (Sub6 n77(20 MHz)) 3712.50 MHz – 3967.50 MHz (Sub6 n77(25 MHz)) 3715.02 MHz – 3964.98 MHz (Sub6 n77(30 MHz)) 3720.00 MHz – 3960.00 MHz (Sub6 n77(40 MHz)) 3725.10 MHz – 3954.99 MHz (Sub6 n77(50 MHz)) 3730.02 MHz – 3949.98 MHz (Sub6 n77(60 MHz)) 3735.00 MHz – 3945.00 MHz (Sub6 n77(70 MHz)) 3740.01 MHz – 3939.99 MHz (Sub6 n77(80 MHz)) 3745.02 MHz – 3934.98 MHz (Sub6 n77(90 MHz)) 3750.00 MHz – 3930.00 MHz (Sub6 n77(100 MHz))
Date(s) of Tests:	November 29, 2021 ~ January 03, 2022
Serial number:	Radiated: R3CRA0Y6K5E Conducted: R3CRB0Z7LXJ

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), Bluetooth, BT LE, NFC, mmWave(n260/261).

2.2. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

2.3. TEST FACILITY

The Fully-anechoic chamber and conducted measurement facility used to collect the radiated data are located at the **74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA.**

3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
Occupied Bandwidth	- KDB 971168 D01 v03r01 – Section 4.3 - ANSI C63.26-2015 – Section 5.4.4
Band Edge	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Spurious and Harmonic Emissions at Antenna Terminal	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Conducted Output Power	- N/A (See SAR Report)
Peak- to- Average Ratio	- KDB 971168 D01 v03r01 – Section 5.7 - ANSI C63.26-2015 – Section 5.2.3.4 - 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 ≥ 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 = 100kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz
2. VBW $\geq 3 \times$ RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $> 2 \times$ span / RBW
5. Detector = Peak
6. Trace mode = Max Hold
7. The trace was allowed to stabilize
8. Test channel : Low/ Middle/ High
9. Frequency range : We are performed all frequency to 10th harmonics from 9 kHz.

Test Note

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

The spurious emissions is calculated by the following formula;

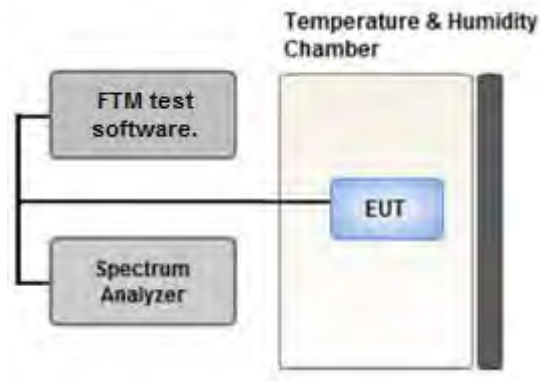
$$\text{Result}_{(dBm)} = P_g_{(dBm)} - \text{cable loss}_{(dB)} + \text{antenna gain}_{(dBi)}$$

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

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

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

3.4 PEAK- TO- AVERAGE RATIO



Test setup

① CCDF Procedure for PAPR

Test Settings

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

② Alternate Procedure for PAPR

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

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

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

Test Settings(Peak Power)

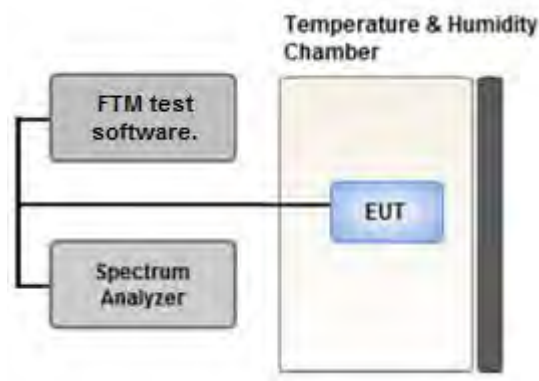
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

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

Test Settings(Average Power)

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

3.5 OCCUPIED BANDWIDTH.



Test setup

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

The EUT makes a call to the communication simulator.

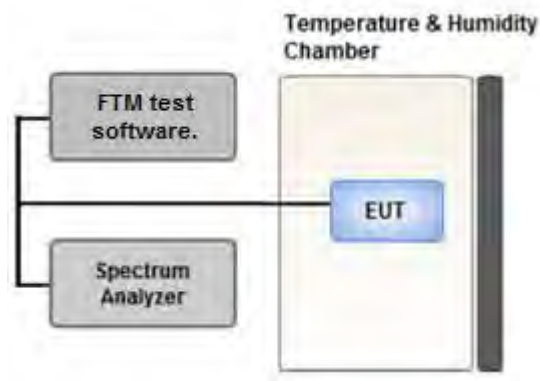
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

Test Settings

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

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic.

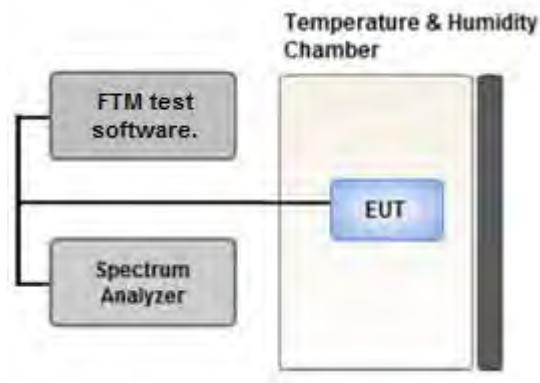
All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

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

Test Settings

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

3.7 BAND EDGE



Test setup

Test Overview

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

Test Settings

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

Test Notes

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

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

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

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

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

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

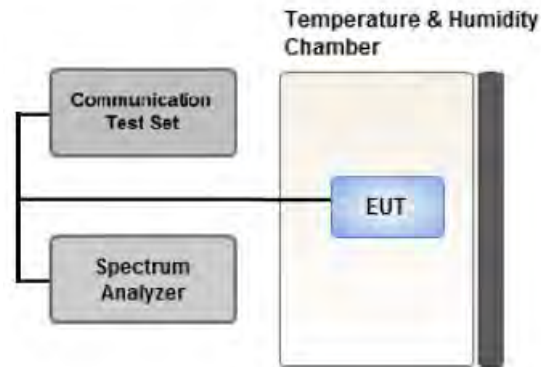
Measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater.

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

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

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

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

Worst case : Stand alone

Mode: Power Class 2(SA), Power Class 3(SA/ NSA), SRS

Worst case: Power Class 2(SA)

- We were performed the RSE test in condition of co-location. There has no significant emission raised.

Mode : WWAN + WLAN 5 GHz + BT (Worst case : Stand alone)

- All radiated spurious emissions were investigated and the worst case bandwidth results are reported.

- Radiated Spurious emissions are measured while operating in EN-DC mode with Sub 6 NR carrier as well as an LTE carrier (anchor).

Worst case: 2A - n77A(PC3) (10 MHz)

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

Please refer to the table below.

-In the case of radiated spurious emissions, all bandwidth of operation were investigated and the worst case bandwidth results are reported.

(Worst case : 10 MHz(3450 MHz – 3550 MHz), 100 MHz(3700 MHz – 3980 MHz))

[3450 MHz - 3550 MHz Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	1	1	Z
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	1	1	Y

[3700 MHz - 3980 MHz Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	1	1	Z
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	1	1	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: Power Class 2(SA), Power Class 3(SA/ NSA), SRS

Worst case: Power Class 2(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,	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Peak-To-Average Ratio	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Band Edge	PI/2 BPSK	10	Low	1	0
			High	1	23
		15	Low	1	0
			High	1	37
		20	Low	1	0
			High	1	50
		25	Low	1	0
			High	1	64
		30	Low	1	0
			High	1	77
		40	Low	1	0
			High	1	105
		50	Low	1	0
			High	1	132
		60	Low	1	0
			High	1	161
		70	Low	1	0
			High	1	188
		80	Low	1	0
			High	1	216
90	Low	1	0		
	High	1	244		
100	Low	1	0		
	High	1	272		
		10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Low, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Low, Mid, High	1	1

4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacture	Serial No.	Due to Calibration	Calibration Interval
Precision Dipole Antenna	UHAP	Schwarzbeck	01273	05/30/2022	Biennial
Precision Dipole Antenna	UHAP	Schwarzbeck	01274	05/30/2022	Biennial
Horn Antenna(1~18GHz)	BBHA 9120D	Schwarzbeck	02289	05/08/2022	Biennial
Horn Antenna(1~18GHz)	BBHA 9120D	Schwarzbeck	9120D-1299	05/04/2022	Biennial
Horn Antenna(15~40GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	10/13/2022	Biennial
Horn Antenna(15~40GHz)	BBHA 9170	Schwarzbeck	BBHA9170124	02/11/2022	Biennial
Loop Antenna(9kHz~30 MHz)	FMZB1513	Rohde & Schwarz	1513-175	05/18/2022	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/03/2023	Biennial
Hybrid Antenna	VULB9160	Schwarzbeck	760	02/22/2023	Biennial
High Pass Filter	WHKX10-900-1000-15000-40SS	Wainwright Instruments	15	06/15/2022	Annual
High Pass Filter	WHKX10-2700-3000-18000-40SS	Wainwright Instruments	145	06/15/2022	Annual
High Pass Filter	WHNX6-4740-6000-26500-40CC	Wainwright Instruments	11	06/15/2022	Annual
LOW NOISE AMP (100 MHz ~ 18GHz)	CBLU1183540B-01	CERNEC	26822	06/15/2022	Annual
Power Amplifier	CBL18265035	CERNEC	22966	12/02/2022	Annual
Power Amplifier	CBL26405040	CERNEC	25956	03/23/2022	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	09/15/2022	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	04/07/2022	Annual
Chamber	SU-642	ESPEC	93008124	03/15/2022	Annual
Signal Analyzer(10Hz~26.5GHz)	N9020A	Agilent	MY51110063	04/22/2022	Annual
ATTENUATOR(20dB)	8493C	Hewlett Packard	17280	06/01/2022	Annual
Spectrum Analyzer(10Hz~40GHz)	FSV40	REOHDE & SCHWARZ	101436	03/02/2022	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/18/2022	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287700	05/25/2022	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/26/2022	Annual
SIGNAL GENERATOR (100kHz~40GHz)	SMB100A	REOHDE & SCHWARZ	177633	07/05/2022	Annual
Signal Analyzer(5Hz~40.0GHz)	N9030B	KEYSIGHT	MY55480167	06/02/2022	Annual
4-Way Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/27/2022	Annua
FCC LTE Mobile Conducted RF Automation Test Software	-	HCT CO., LTD.,	-	-	-

Note:

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

5. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4:2014. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (\pm dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.82 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	3.40 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	4.80 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.70 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.05 (Confidence level about 95 %, $k=2$)

6. SUMMARY OF TEST RESULTS

6.1 Test Condition : Conducted Test

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

Note:

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

6.2 Test Condition : Radiated Test

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

Note:

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

7. SAMPLE CALCULATION

7.1 ERP Sample Calculation

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

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
349000	1,732.50	-15.75	18.45	9.90	1.76	H	0.456	26.59

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

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

7.3. Emission Designator

GSM Emission Designator

Emission Designator = 249KGXW

GSM BW = 249 kHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W

GSM BW = 249 kHz

G = Phase Modulation

7 = Quantized/Digital Info

W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W

WCDMA BW = 4.17 MHz

F = Frequency Modulation

9 = Composite Digital Info

W = Combination (Audio/Data)

PSK Modulation

Emission Designator = 4M48G7D

LTE BW = 4.48 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

QAM Modulation

Emission Designator = 4M48W7D

LTE BW = 4.48 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

8. TEST DATA (3450 MHz - 3550 MHz)

8.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
									W	W
3455.01	Sub6 n77/ 10 MHz [30 kHz]	PI/2 BPSK	-21.48	16.52	11.32	3.05	H	< 1.00	0.302	24.80
		QPSK	-21.56	16.44	11.32	3.05	H		0.296	24.72
		16-QAM	-22.55	15.45	11.32	3.05	H		0.236	23.73
		64-QAM	-24.00	14.00	11.32	3.05	H		0.169	22.28
		256-QAM	-25.93	12.07	11.32	3.05	H		0.108	20.35
3500.01		PI/2 BPSK	-21.10	17.07	11.50	3.06	H		0.356	25.51
		QPSK	-21.19	16.98	11.50	3.06	H		0.348	25.42
		16-QAM	-21.91	16.26	11.50	3.06	H		0.295	24.70
		64-QAM	-23.81	14.36	11.50	3.06	H		0.191	22.80
		256-QAM	-25.73	12.44	11.50	3.06	H		0.122	20.88
3544.99		PI/2 BPSK	-20.83	17.34	11.68	3.08	H		0.393	25.94
		QPSK	-20.95	17.22	11.68	3.08	H		0.382	25.82
		16-QAM	-22.00	16.17	11.68	3.08	H		0.300	24.77
		64-QAM	-23.30	14.87	11.68	3.08	H		0.222	23.47
		256-QAM	-25.29	12.88	11.68	3.08	H		0.141	21.48

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3457.50	Sub6 n77/ 15 MHz [30 kHz]	PI/2 BPSK	-21.59	16.37	11.34	3.03	H	< 1.00	0.294	24.68
		QPSK	-21.63	16.33	11.34	3.03	H		0.291	24.64
		16-QAM	-22.61	15.35	11.34	3.03	H		0.232	23.66
		64-QAM	-24.14	13.82	11.34	3.03	H		0.163	22.13
		256-QAM	-25.92	12.04	11.34	3.03	H		0.108	20.35
3500.01		PI/2 BPSK	-21.15	17.02	11.50	3.06	H		0.351	25.46
		QPSK	-21.16	17.01	11.50	3.06	H		0.351	25.45
		16-QAM	-22.13	16.04	11.50	3.06	H		0.280	24.48
		64-QAM	-23.76	14.41	11.50	3.06	H		0.193	22.85
		256-QAM	-25.66	12.51	11.50	3.06	H		0.124	20.95
3542.50	PI/2 BPSK	-21.13	16.93	11.66	3.07	H	0.356	25.52		
	QPSK	-21.14	16.92	11.66	3.07	H	0.356	25.51		
	16-QAM	-22.09	15.97	11.66	3.07	H	0.286	24.56		
	64-QAM	-23.60	14.46	11.66	3.07	H	0.202	23.05		
	256-QAM	-25.56	12.50	11.66	3.07	H	0.128	21.09		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3460.02	Sub6 n77/ 20 MHz [30 kHz]	PI/2 BPSK	-21.46	16.50	11.34	3.03	H	< 1.00	0.303	24.81
		QPSK	-21.53	16.43	11.34	3.03	H		0.298	24.74
		16-QAM	-22.46	15.50	11.34	3.03	H		0.240	23.81
		64-QAM	-23.85	14.11	11.34	3.03	H		0.175	22.42
		256-QAM	-25.95	12.01	11.34	3.03	H		0.108	20.32
3500.01		PI/2 BPSK	-21.21	16.96	11.50	3.06	H		0.347	25.40
		QPSK	-21.26	16.91	11.50	3.06	H		0.343	25.35
		16-QAM	-22.06	16.11	11.50	3.06	H		0.285	24.55
		64-QAM	-23.46	14.71	11.50	3.06	H		0.206	23.15
		256-QAM	-25.71	12.46	11.50	3.06	H		0.123	20.90
3540.00		PI/2 BPSK	-21.16	16.90	11.66	3.07	H		0.354	25.49
		QPSK	-21.17	16.89	11.66	3.07	H		0.353	25.48
		16-QAM	-21.91	16.15	11.66	3.07	H		0.298	24.74
		64-QAM	-23.56	14.50	11.66	3.07	H		0.204	23.09
		256-QAM	-25.56	12.50	11.66	3.07	H		0.128	21.09

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3462.50	Sub6 n77/ 25 MHz [30 kHz]	PI/2 BPSK	-21.56	16.40	11.34	3.03	H	< 1.00	0.296	24.71
		QPSK	-21.61	16.35	11.34	3.03	H		0.292	24.66
		16-QAM	-22.51	15.45	11.34	3.03	H		0.238	23.76
		64-QAM	-24.03	13.93	11.34	3.03	H		0.168	22.24
		256-QAM	-25.99	11.97	11.34	3.03	H		0.107	20.28
3500.01		PI/2 BPSK	-21.29	16.88	11.50	3.06	H		0.340	25.32
		QPSK	-21.39	16.78	11.50	3.06	H		0.333	25.22
		16-QAM	-22.36	15.81	11.50	3.06	H		0.266	24.25
		64-QAM	-23.64	14.53	11.50	3.06	H		0.198	22.97
		256-QAM	-25.76	12.41	11.50	3.06	H		0.122	20.85
3537.50	PI/2 BPSK	-21.20	16.86	11.66	3.07	H	0.351	25.45		
	QPSK	-21.21	16.85	11.66	3.07	H	0.350	25.44		
	16-QAM	-22.11	15.95	11.66	3.07	H	0.284	24.54		
	64-QAM	-23.74	14.32	11.66	3.07	H	0.195	22.91		
	256-QAM	-25.66	12.40	11.66	3.07	H	0.126	20.99		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3465.00	Sub6 n77/ 30 MHz [30 kHz]	PI/2 BPSK	-21.59	16.28	11.36	3.02	H	< 1.00	0.290	24.62
		QPSK	-21.63	16.24	11.36	3.02	H		0.287	24.58
		16-QAM	-22.45	15.42	11.36	3.02	H		0.238	23.76
		64-QAM	-23.79	14.08	11.36	3.02	H		0.175	22.42
		256-QAM	-26.01	11.86	11.36	3.02	H		0.105	20.20
3500.01		PI/2 BPSK	-21.41	16.76	11.50	3.06	H		0.331	25.20
		QPSK	-21.49	16.68	11.50	3.06	H		0.325	25.12
		16-QAM	-22.36	15.81	11.50	3.06	H		0.266	24.25
		64-QAM	-23.91	14.26	11.50	3.06	H		0.186	22.70
		256-QAM	-25.79	12.38	11.50	3.06	H		0.121	20.82
3534.99	PI/2 BPSK	-21.16	16.89	11.64	3.06	H	0.353	25.48		
	QPSK	-21.17	16.88	11.64	3.06	H	0.352	25.47		
	16-QAM	-23.74	14.31	11.64	3.06	H	0.195	22.90		
	64-QAM	-25.61	12.44	11.64	3.06	H	0.127	21.03		
	256-QAM	-25.74	12.31	11.64	3.06	H	0.123	20.90		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3470.01	Sub6 n77/ 40 MHz [30 kHz]	PI/2 BPSK	-21.74	16.03	11.38	3.00	H	< 1.00	0.276	24.41
		QPSK	-21.79	15.98	11.38	3.00	H		0.273	24.36
		16-QAM	-22.81	14.96	11.38	3.00	H		0.216	23.34
		64-QAM	-24.31	13.46	11.38	3.00	H		0.153	21.84
		256-QAM	-26.15	11.62	11.38	3.00	H		0.100	20.00
3500.01		PI/2 BPSK	-21.13	17.04	11.50	3.06	H		0.353	25.48
		QPSK	-21.30	16.87	11.50	3.06	H		0.339	25.31
		16-QAM	-22.41	15.76	11.50	3.06	H		0.263	24.20
		64-QAM	-23.71	14.46	11.50	3.06	H		0.195	22.90
		256-QAM	-26.00	12.17	11.50	3.06	H		0.115	20.61
3529.98	PI/2 BPSK	-21.41	16.64	11.62	3.04	H	0.332	25.22		
	QPSK	-21.44	16.61	11.62	3.04	H	0.330	25.19		
	16-QAM	-22.49	15.56	11.62	3.04	H	0.259	24.14		
	64-QAM	-23.86	14.19	11.62	3.04	H	0.189	22.77		
	256-QAM	-26.00	12.05	11.62	3.04	H	0.116	20.63		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3475.02	Sub6 n77/ 50 MHz [30 kHz]	PI/2 BPSK	-21.61	16.14	11.40	3.01	H	< 1.00	0.284	24.53
		QPSK	-21.66	16.09	11.40	3.01	H		0.280	24.48
		16-QAM	-22.41	15.34	11.40	3.01	H		0.236	23.73
		64-QAM	-24.00	13.75	11.40	3.01	H		0.164	22.14
		256-QAM	-26.12	11.63	11.40	3.01	H		0.100	20.02
3500.01		PI/2 BPSK	-21.34	16.83	11.50	3.06	H		0.336	25.27
		QPSK	-21.41	16.76	11.50	3.06	H		0.331	25.20
		16-QAM	-22.45	15.72	11.50	3.06	H		0.260	24.16
		64-QAM	-23.83	14.34	11.50	3.06	H		0.190	22.78
		256-QAM	-25.94	12.23	11.50	3.06	H		0.117	20.67
3525.00		PI/2 BPSK	-21.36	16.75	11.60	3.05	H		0.339	25.30
		QPSK	-21.40	16.71	11.60	3.05	H		0.336	25.26
		16-QAM	-22.41	15.70	11.60	3.05	H		0.266	24.25
		64-QAM	-23.81	14.30	11.60	3.05	H		0.193	22.85
		256-QAM	-25.69	12.42	11.60	3.05	H		0.125	20.97

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3480.00	Sub6 n77/ 60 MHz [30 kHz]	PI/2 BPSK	-21.85	15.87	11.42	3.02	H	< 1.00	0.267	24.27
		QPSK	-21.91	15.81	11.42	3.02	H		0.263	24.21
		16-QAM	-22.67	15.05	11.42	3.02	H		0.221	23.45
		64-QAM	-24.08	13.64	11.42	3.02	H		0.160	22.04
		256-QAM	-26.11	11.61	11.42	3.02	H		0.100	20.01
3500.01		PI/2 BPSK	-21.51	16.66	11.50	3.06	H		0.323	25.10
		QPSK	-21.57	16.60	11.50	3.06	H		0.319	25.04
		16-QAM	-22.36	15.81	11.50	3.06	H		0.266	24.25
		64-QAM	-23.99	14.18	11.50	3.06	H		0.183	22.62
		256-QAM	-25.90	12.27	11.50	3.06	H		0.118	20.71
3519.99	PI/2 BPSK	-21.31	16.86	11.58	3.05	H	0.346	25.39		
	QPSK	-21.51	16.66	11.58	3.05	H	0.331	25.19		
	16-QAM	-22.26	15.91	11.58	3.05	H	0.278	24.44		
	64-QAM	-23.81	14.36	11.58	3.05	H	0.195	22.89		
	256-QAM	-25.61	12.56	11.58	3.05	H	0.129	21.09		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3485.01	Sub6 n77/ 70 MHz [30 kHz]	PI/2 BPSK	-21.49	16.33	11.44	3.04	H	< 1.00	0.298	24.74
		QPSK	-21.64	16.18	11.44	3.04	H		0.287	24.59
		16-QAM	-22.54	15.28	11.44	3.04	H		0.234	23.69
		64-QAM	-24.00	13.82	11.44	3.04	H		0.167	22.23
		256-QAM	-26.33	11.49	11.44	3.04	H		0.098	19.90
3500.01		PI/2 BPSK	-21.43	16.74	11.50	3.06	H		0.330	25.18
		QPSK	-21.52	16.65	11.50	3.06	H		0.323	25.09
		16-QAM	-22.22	15.95	11.50	3.06	H		0.275	24.39
		64-QAM	-23.91	14.26	11.50	3.06	H		0.186	22.70
		256-QAM	-26.12	12.05	11.50	3.06	H		0.112	20.49
3514.98		PI/2 BPSK	-21.39	16.93	11.52	3.06	H		0.346	25.40
		QPSK	-21.40	16.92	11.52	3.06	H		0.346	25.39
		16-QAM	-22.26	16.06	11.52	3.06	H		0.283	24.53
		64-QAM	-23.83	14.49	11.52	3.06	H		0.197	22.96
		256-QAM	-25.78	12.54	11.52	3.06	H		0.126	21.01

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3490.02	Sub6 n77/ 80 MHz [30 kHz]	PI/2 BPSK	-21.48	16.44	11.46	3.05	H	< 1.00	0.306	24.85
		QPSK	-21.51	16.41	11.46	3.05	H		0.304	24.82
		16-QAM	-22.67	15.25	11.46	3.05	H		0.233	23.66
		64-QAM	-24.03	13.89	11.46	3.05	H		0.170	22.30
		256-QAM	-25.88	12.04	11.46	3.05	H		0.111	20.45
3500.01		PI/2 BPSK	-21.43	16.74	11.50	3.06	H		0.330	25.18
		QPSK	-21.47	16.70	11.50	3.06	H		0.326	25.14
		16-QAM	-22.48	15.69	11.50	3.06	H		0.259	24.13
		64-QAM	-24.00	14.17	11.50	3.06	H		0.182	22.61
		256-QAM	-26.19	11.98	11.50	3.06	H		0.110	20.42
3510.00	PI/2 BPSK	-21.45	16.94	11.54	3.06	H	0.348	25.42		
	QPSK	-21.46	16.93	11.54	3.06	H	0.347	25.41		
	16-QAM	-22.23	16.16	11.54	3.06	H	0.291	24.64		
	64-QAM	-23.86	14.53	11.54	3.06	H	0.200	23.01		
	256-QAM	-25.56	12.83	11.54	3.06	H	0.135	21.31		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3495.00	Sub6 n77/ 90 MHz [30 kHz]	PI/2 BPSK	-21.41	16.64	11.48	3.06	H	< 1.00	0.321	25.06
		QPSK	-21.48	16.57	11.48	3.06	H		0.316	24.99
		16-QAM	-22.39	15.66	11.48	3.06	H		0.256	24.08
		64-QAM	-23.84	14.21	11.48	3.06	H		0.183	22.63
		256-QAM	-25.99	12.06	11.48	3.06	H		0.112	20.48
3500.01		PI/2 BPSK	-21.43	16.74	11.50	3.06	H		0.330	25.18
		QPSK	-21.47	16.70	11.50	3.06	H		0.326	25.14
		16-QAM	-22.43	15.74	11.50	3.06	H		0.262	24.18
		64-QAM	-23.78	14.39	11.50	3.06	H		0.192	22.83
		256-QAM	-25.79	12.38	11.50	3.06	H		0.121	20.82
3504.99	PI/2 BPSK	-21.39	16.89	11.52	3.06	H	0.343	25.35		
	QPSK	-21.41	16.87	11.52	3.06	H	0.341	25.33		
	16-QAM	-22.30	15.98	11.52	3.06	H	0.278	24.44		
	64-QAM	-23.56	14.72	11.52	3.06	H	0.208	23.18		
	256-QAM	-25.72	12.56	11.52	3.06	H	0.126	21.02		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3500.01	Sub6 n77/ 100 MHz [30 kHz]	PI/2 BPSK	-21.29	16.88	11.50	3.06	H	< 1.00	0.340	25.32
		QPSK	-21.30	16.87	11.50	3.06	H		0.339	25.31
		16-QAM	-22.19	15.98	11.50	3.06	H		0.277	24.42
		64-QAM	-23.85	14.32	11.50	3.06	H		0.189	22.76
		256-QAM	-25.71	12.46	11.50	3.06	H		0.123	20.90

8.2 RADIATED SPURIOUS EMISSIONS

- NR Band: N77
- Bandwidth: 10 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)
630334 (3455.01)	6 910.02	-51.20	11.10	-43.86	4.34	H	-37.10	-13.00
	10 365.03	-62.33	11.80	-49.83	5.40	V	-43.42	-13.00
	13 820.04	-58.54	13.06	-45.23	6.44	H	-38.61	-13.00
633334 (3500.01)	7 000.02	-54.16	11.20	-45.54	4.38	H	-38.72	-13.00
	10 500.03	-59.10	11.80	-45.68	5.49	V	-39.37	-13.00
	14 000.04	-58.91	12.90	-46.47	6.48	V	-40.05	-13.00
636322 (3544.99)	7 089.98	-60.31	11.04	-51.44	4.46	H	-44.86	-13.00
	10 634.97	-57.59	11.70	-44.23	5.44	V	-37.97	-13.00
	14 179.96	-59.17	12.96	-47.64	6.50	V	-41.18	-13.00

- ENDC-Mode : 2A(10 MHz)-n77A(10 MHz) , PC3

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)
18900 (1880.0)	3760.00	-61.23	11.64	-61.46	3.16	H	-52.98	-13.00
	5640.00	-61.39	12.00	-55.21	3.93	H	-47.14	-13.00
	7520.00	-61.31	11.54	-46.86	4.51	H	-39.83	-13.00

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n77	10 MHz	3500.01	BPSK	Full RB	0	4.58
			QPSK			5.75
			16-QAM			6.38
			64-QAM			6.61
			256-QAM			6.42
	15 MHz		BPSK			4.46
			QPSK			5.68
			16-QAM			6.29
			64-QAM			6.53
			256-QAM			6.42
	20 MHz		BPSK			4.43
			QPSK			5.63
			16-QAM			6.30
			64-QAM			6.57
			256-QAM			6.43
	25 MHz		BPSK			4.62
			QPSK			5.76
			16-QAM			6.46
			64-QAM			6.63
			256-QAM			6.48
30 MHz	BPSK	4.66				
	QPSK	5.79				
	16-QAM	6.39				
	64-QAM	6.63				
	256-QAM	6.50				
40 MHz	BPSK	4.75				
	QPSK	5.81				
	16-QAM	6.43				
	64-QAM	6.64				
	256-QAM	6.49				
50 MHz	BPSK	4.77				

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	
			QPSK			5.63	
			16-QAM			6.30	
			64-QAM			6.55	
			256-QAM			6.40	
	60 MHz		BPSK			4.68	
			QPSK			5.70	
			16-QAM			6.29	
			64-QAM			6.52	
			256-QAM			6.54	
			70 MHz			BPSK	5.87
						QPSK	6.11
						16-QAM	6.42
	64-QAM					6.56	
			256-QAM			6.60	
			80 MHz			BPSK	4.51
						QPSK	5.68
						16-QAM	6.38
	64-QAM					6.46	
			256-QAM			6.48	
			90 MHz			BPSK	5.36
QPSK		5.77					
16-QAM		6.39					
64-QAM	6.53						
	256-QAM	6.50					
	100 MHz	BPSK	4.51				
		QPSK	5.66				
		16-QAM	6.34				
64-QAM		6.60					
			256-QAM			6.45	

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 152 ~ 211.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77	10 MHz	3500.01	BPSK	Full RB	0	8.6216
			QPSK			8.6408
			16-QAM			8.6203
			64-QAM			8.6180
			256-QAM			8.5771
	15 MHz		BPSK			12.980
			QPSK			12.954
			16-QAM			12.987
			64-QAM			12.896
			256-QAM			12.906
	20 MHz		BPSK			17.925
			QPSK			17.930
			16-QAM			17.913
			64-QAM			17.904
			256-QAM			17.883
	25 MHz		BPSK			23.068
			QPSK			23.049
			16-QAM			23.032
			64-QAM			22.936
			256-QAM			23.006
	30 MHz		BPSK			26.958
			QPSK			27.049
			16-QAM			26.982
			64-QAM			26.957
			256-QAM			27.044
40 MHz	BPSK	36.059				
	QPSK	35.992				
	16-QAM	35.964				
	64-QAM	35.929				
	256-QAM	35.964				
50 MHz	BPSK	45.963				

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)	
			QPSK			45.951	
			16-QAM			45.842	
			64-QAM			45.883	
			256-QAM			45.842	
	60 MHz		BPSK			58.030	
			QPSK			57.834	
			16-QAM			58.048	
			64-QAM			58.083	
			256-QAM			58.245	
			70 MHz			BPSK	64.706
						QPSK	64.371
						16-QAM	64.630
	64-QAM					64.586	
			256-QAM			64.546	
			80 MHz			BPSK	77.494
						QPSK	77.392
						16-QAM	77.366
	64-QAM					77.387	
			256-QAM			77.250	
			90 MHz			BPSK	87.045
QPSK		86.928					
16-QAM		87.062					
64-QAM	87.067						
	256-QAM	87.111					
	100 MHz	BPSK	96.490				
		QPSK	96.593				
		16-QAM	96.891				
64-QAM		96.558					
			256-QAM			96.776	

Note:

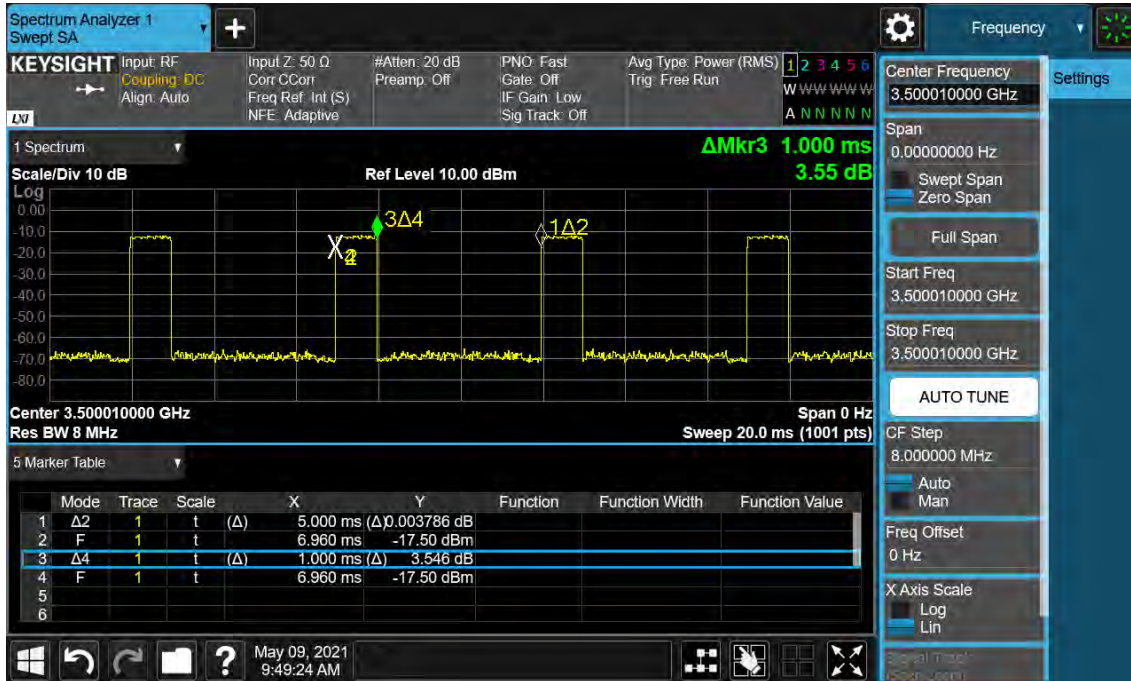
1. Plots of the EUT's Occupied Bandwidth are shown Page 92 ~ 151.

8.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77	10	3455.01	9.1002	37.805	-70.524	-32.719	-13.00
		3500.01	8.0205	37.805	-70.675	-32.870	
		3544.99	7.4856	37.805	-70.376	-32.571	
	15	3457.50	9.1521	37.805	-70.920	-33.115	
		3500.01	8.0264	37.805	-70.431	-32.626	
		3542.50	8.8285	37.805	-70.029	-32.224	
	20	3460.02	8.8933	37.805	-70.422	-32.617	
		3500.01	9.2049	37.805	-69.988	-32.183	
		3540.00	8.2802	37.805	-70.183	-32.378	
	25	3462.50	8.3320	37.805	-70.491	-32.686	
		3500.01	9.7183	37.805	-70.254	-32.449	
		3537.50	6.5494	37.805	-70.563	-32.758	
	30	3465.00	9.1221	37.805	-70.232	-32.427	
		3500.01	9.9676	37.805	-69.361	-31.556	
		3534.99	8.2508	37.805	-70.488	-32.683	
	40	3470.01	9.1416	37.805	-70.421	-32.616	
		3500.01	7.9776	37.805	-70.650	-32.845	
		3529.98	8.3265	37.805	-70.097	-32.292	
	50	3475.02	4.6052	37.190	-70.417	-33.227	
		3500.01	5.5070	37.805	-70.237	-32.432	
		3525.00	9.9766	37.805	-70.690	-32.885	
	60	3480.00	8.0220	37.805	-70.479	-32.674	
		3500.01	8.2767	37.805	-70.235	-32.430	
		3519.99	9.1356	37.805	-70.407	-32.602	
	70	3485.01	8.3136	37.805	-69.871	-32.066	
		3500.01	9.6909	37.805	-70.116	-32.311	
		3514.98	8.2981	37.805	-70.571	-32.766	
	80	3490.02	8.8664	37.805	-70.311	-32.506	
		3500.01	4.9726	37.190	-70.959	-33.769	
		3510.00	8.2228	37.805	-69.558	-31.753	
90	3495.00	9.9427	37.805	-70.525	-32.720		
	3500.01	7.9811	37.805	-69.858	-32.053		
	3504.99	7.9985	37.805	-70.260	-32.455		
100	3500.01	8.2338	37.805	-70.246	-32.441		

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 356 ~ 423.
2. Duty Cycle factor already applied on the factor.
 - Duty Cycle Factor(dB) = 6.990



- Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + 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 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 212 ~ 355.
2. Duty Cycle factor already applied on the factor.
 - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Divider
 - Result(dBm) = Reading + Factor
 - Duty Cycle Factor(dB) = 6.990

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 4.400 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
3455.010	100 %	+20(Ref)	3455 010 015	0.0	0.000 000	0.000
	100 %	-30	3455 010 022	7.8	0.000 000	0.002
	100 %	-20	3455 010 019	4.5	0.000 000	0.001
	100 %	-10	3455 010 031	16.1	0.000 000	0.005
	100 %	0	3455 010 027	12.3	0.000 000	0.004
	100 %	+10	3455 010 027	12.1	0.000 000	0.004
	100 %	+30	3455 010 020	5.3	0.000 000	0.002
	100 %	+40	3455 010 027	12.3	0.000 000	0.004
	100 %	+50	3455 010 021	5.9	0.000 000	0.002
	Batt. Endpoint	+20	3455 010 026	11.1	0.000 000	0.003
3544.980	100 %	+20(Ref)	3544 980 011	0.0	0.000 000	0.000
	100 %	-30	3544 980 017	5.1	0.000 000	0.001
	100 %	-20	3544 980 028	16.4	0.000 000	0.005
	100 %	-10	3544 980 025	13.5	0.000 000	0.004
	100 %	0	3544 980 023	11.5	0.000 000	0.003
	100 %	+10	3544 980 016	4.4	0.000 000	0.001
	100 %	+30	3544 980 022	10.8	0.000 000	0.003
	100 %	+40	3544 980 021	9.4	0.000 000	0.003
	100 %	+50	3544 980 018	6.5	0.000 000	0.002
	Batt. Endpoint	+20	3544 980 015	3.4	0.000 000	0.001

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.400 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
3457.500	100 %	+20(Ref)	3457 500 014	0.0	0.000 000	0.000
	100 %	-30	3457 500 031	16.7	0.000 000	0.005
	100 %	-20	3457 500 021	7.4	0.000 000	0.002
	100 %	-10	3457 500 020	5.6	0.000 000	0.002
	100 %	0	3457 500 025	11.0	0.000 000	0.003
	100 %	+10	3457 500 030	16.4	0.000 000	0.005
	100 %	+30	3457 500 018	4.1	0.000 000	0.001
	100 %	+40	3457 500 025	11.2	0.000 000	0.003
	100 %	+50	3457 500 029	14.7	0.000 000	0.004
	Batt. Endpoint	+20	3457 500 021	6.5	0.000 000	0.002
3542.490	100 %	+20(Ref)	3542 490 013	0.0	0.000 000	0.000
	100 %	-30	3542 490 019	6.9	0.000 000	0.002
	100 %	-20	3542 490 023	10.2	0.000 000	0.003
	100 %	-10	3542 490 018	5.6	0.000 000	0.002
	100 %	0	3542 490 017	4.9	0.000 000	0.001
	100 %	+10	3542 490 025	12.0	0.000 000	0.003
	100 %	+30	3542 490 024	11.9	0.000 000	0.003
	100 %	+40	3542 490 026	13.6	0.000 000	0.004
	100 %	+50	3542 490 025	12.5	0.000 000	0.004
	Batt. Endpoint	+20	3542 490 027	14.8	0.000 000	0.004

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.400 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
3460.020	100 %	+20(Ref)	3460 020 014	0.0	0.000 000	0.000
	100 %	-30	3460 020 027	13.1	0.000 000	0.004
	100 %	-20	3460 020 022	8.2	0.000 000	0.002
	100 %	-10	3460 020 020	6.2	0.000 000	0.002
	100 %	0	3460 020 025	11.5	0.000 000	0.003
	100 %	+10	3460 020 031	16.8	0.000 000	0.005
	100 %	+30	3460 020 027	13.3	0.000 000	0.004
	100 %	+40	3460 020 030	15.9	0.000 000	0.005
	100 %	+50	3460 020 021	6.8	0.000 000	0.002
	Batt. Endpoint	+20	3460 020 022	8.5	0.000 000	0.002
3540.000	100 %	+20(Ref)	3540 000 009	0.0	0.000 000	0.000
	100 %	-30	3540 000 015	6.2	0.000 000	0.002
	100 %	-20	3540 000 023	14.9	0.000 000	0.004
	100 %	-10	3540 000 014	5.7	0.000 000	0.002
	100 %	0	3540 000 017	8.3	0.000 000	0.002
	100 %	+10	3540 000 013	4.5	0.000 000	0.001
	100 %	+30	3540 000 023	14.3	0.000 000	0.004
	100 %	+40	3540 000 017	8.4	0.000 000	0.002
	100 %	+50	3540 000 013	4.6	0.000 000	0.001
	Batt. Endpoint	+20	3540 000 019	10.3	0.000 000	0.003

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 4.400 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
3462.500	100 %	+20(Ref)	3462 510 016	0.0	0.000 000	0.000
	100 %	-30	3462 510 021	5.6	0.000 000	0.002
	100 %	-20	3462 510 030	14.6	0.000 000	0.004
	100 %	-10	3462 510 029	13.5	0.000 000	0.004
	100 %	0	3462 510 021	5.1	0.000 000	0.001
	100 %	+10	3462 510 029	13.4	0.000 000	0.004
	100 %	+30	3462 510 022	6.5	0.000 000	0.002
	100 %	+40	3462 510 025	9.2	0.000 000	0.003
	100 %	+50	3462 510 024	8.3	0.000 000	0.002
	Batt. Endpoint	+20	3462 510 026	10.1	0.000 000	0.003
3537.500	100 %	+20(Ref)	3537 480 009	0.0	0.000 000	0.000
	100 %	-30	3537 480 022	12.3	0.000 000	0.003
	100 %	-20	3537 480 014	4.8	0.000 000	0.001
	100 %	-10	3537 480 016	6.2	0.000 000	0.002
	100 %	0	3537 480 023	13.1	0.000 000	0.004
	100 %	+10	3537 480 021	11.2	0.000 000	0.003
	100 %	+30	3537 480 018	8.2	0.000 000	0.002
	100 %	+40	3537 480 013	3.3	0.000 000	0.001
	100 %	+50	3537 480 014	4.6	0.000 000	0.001
	Batt. Endpoint	+20	3537 480 014	4.6	0.000 000	0.001

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 4.400 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
3465.000	100 %	+20(Ref)	3465 000 011	0.0	0.000 000	0.000
	100 %	-30	3465 000 022	11.1	0.000 000	0.003
	100 %	-20	3465 000 026	15.5	0.000 000	0.004
	100 %	-10	3465 000 015	3.9	0.000 000	0.001
	100 %	0	3465 000 026	15.3	0.000 000	0.004
	100 %	+10	3465 000 025	14.4	0.000 000	0.004
	100 %	+30	3465 000 018	7.1	0.000 000	0.002
	100 %	+40	3465 000 017	6.5	0.000 000	0.002
	100 %	+50	3465 000 028	16.8	0.000 000	0.005
	Batt. Endpoint	+20	3465 000 016	4.7	0.000 000	0.001
3534.990	100 %	+20(Ref)	3534 990 013	0.0	0.000 000	0.000
	100 %	-30	3534 990 017	3.9	0.000 000	0.001
	100 %	-20	3534 990 017	3.2	0.000 000	0.001
	100 %	-10	3534 990 024	10.3	0.000 000	0.003
	100 %	0	3534 990 020	6.6	0.000 000	0.002
	100 %	+10	3534 990 029	15.2	0.000 000	0.004
	100 %	+30	3534 990 022	8.6	0.000 000	0.002
	100 %	+40	3534 990 028	14.1	0.000 000	0.004
	100 %	+50	3534 990 029	15.0	0.000 000	0.004
	Batt. Endpoint	+20	3534 990 028	14.7	0.000 000	0.004

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 4.400 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
3470.010	100 %	+20(Ref)	3470 010 004	0.0	0.000 000	0.000
	100 %	-30	3470 010 007	3.1	0.000 000	0.001
	100 %	-20	3470 010 020	16.1	0.000 000	0.005
	100 %	-10	3470 010 015	10.8	0.000 000	0.003
	100 %	0	3470 010 018	13.7	0.000 000	0.004
	100 %	+10	3470 010 014	9.4	0.000 000	0.003
	100 %	+30	3470 010 012	7.2	0.000 000	0.002
	100 %	+40	3470 010 008	3.3	0.000 000	0.001
	100 %	+50	3470 010 016	11.9	0.000 000	0.003
	Batt. Endpoint	+20	3470 010 013	8.8	0.000 000	0.003
3529.980	100 %	+20(Ref)	3529 980 014	0.0	0.000 000	0.000
	100 %	-30	3529 980 021	6.5	0.000 000	0.002
	100 %	-20	3529 980 023	9.0	0.000 000	0.003
	100 %	-10	3529 980 027	12.9	0.000 000	0.004
	100 %	0	3529 980 023	8.5	0.000 000	0.002
	100 %	+10	3529 980 022	8.0	0.000 000	0.002
	100 %	+30	3529 980 020	5.9	0.000 000	0.002
	100 %	+40	3529 980 026	11.6	0.000 000	0.003
	100 %	+50	3529 980 024	9.9	0.000 000	0.003
	Batt. Endpoint	+20	3529 980 018	4.3	0.000 000	0.001

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 4.400 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
3475.020	100 %	+20(Ref)	3475 020 015	0.0	0.000 000	0.000
	100 %	-30	3475 020 031	16.1	0.000 000	0.005
	100 %	-20	3475 020 021	6.2	0.000 000	0.002
	100 %	-10	3475 020 028	12.8	0.000 000	0.004
	100 %	0	3475 020 025	10.2	0.000 000	0.003
	100 %	+10	3475 020 019	3.8	0.000 000	0.001
	100 %	+30	3475 020 030	14.9	0.000 000	0.004
	100 %	+40	3475 020 027	11.7	0.000 000	0.003
	100 %	+50	3475 020 021	6.2	0.000 000	0.002
	Batt. Endpoint	+20	3475 020 030	15.6	0.000 000	0.004
3525.000	100 %	+20(Ref)	3525 000 003	0.0	0.000 000	0.000
	100 %	-30	3525 000 007	4.0	0.000 000	0.001
	100 %	-20	3525 000 017	14.2	0.000 000	0.004
	100 %	-10	3525 000 006	3.1	0.000 000	0.001
	100 %	0	3525 000 015	11.8	0.000 000	0.003
	100 %	+10	3525 000 011	7.7	0.000 000	0.002
	100 %	+30	3525 000 006	3.1	0.000 000	0.001
	100 %	+40	3525 000 013	10.0	0.000 000	0.003
	100 %	+50	3525 000 011	8.2	0.000 000	0.002
	Batt. Endpoint	+20	3525 000 016	13.0	0.000 000	0.004

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 4.400 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
3480.000	100 %	+20(Ref)	3480 000 008	0.0	0.000 000	0.000
	100 %	-30	3480 000 014	5.9	0.000 000	0.002
	100 %	-20	3480 000 014	5.6	0.000 000	0.002
	100 %	-10	3480 000 019	10.5	0.000 000	0.003
	100 %	0	3480 000 023	14.6	0.000 000	0.004
	100 %	+10	3480 000 023	15.3	0.000 000	0.004
	100 %	+30	3480 000 019	10.8	0.000 000	0.003
	100 %	+40	3480 000 021	13.0	0.000 000	0.004
	100 %	+50	3480 000 012	4.1	0.000 000	0.001
	Batt. Endpoint	+20	3480 000 020	11.8	0.000 000	0.003
3519.990	100 %	+20(Ref)	3519 990 017	0.0	0.000 000	0.000
	100 %	-30	3519 990 030	12.9	0.000 000	0.004
	100 %	-20	3519 990 027	10.6	0.000 000	0.003
	100 %	-10	3519 990 026	9.1	0.000 000	0.003
	100 %	0	3519 990 026	8.9	0.000 000	0.003
	100 %	+10	3519 990 025	8.3	0.000 000	0.002
	100 %	+30	3519 990 028	11.2	0.000 000	0.003
	100 %	+40	3519 990 030	13.7	0.000 000	0.004
	100 %	+50	3519 990 023	6.9	0.000 000	0.002
	Batt. Endpoint	+20	3519 990 031	13.9	0.000 000	0.004

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 4.400 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
3485.010	100 %	+20(Ref)	3485 010 005	0.0	0.000 000	0.000
	100 %	-30	3485 010 010	5.7	0.000 000	0.002
	100 %	-20	3485 010 013	8.0	0.000 000	0.002
	100 %	-10	3485 010 011	6.5	0.000 000	0.002
	100 %	0	3485 010 009	4.8	0.000 000	0.001
	100 %	+10	3485 010 010	5.0	0.000 000	0.001
	100 %	+30	3485 010 016	11.5	0.000 000	0.003
	100 %	+40	3485 010 019	14.9	0.000 000	0.004
	100 %	+50	3485 010 012	7.5	0.000 000	0.002
	Batt. Endpoint	+20	3485 010 014	9.9	0.000 000	0.003
3514.980	100 %	+20(Ref)	3514 980 005	0.0	0.000 000	0.000
	100 %	-30	3514 980 016	11.0	0.000 000	0.003
	100 %	-20	3514 980 012	6.9	0.000 000	0.002
	100 %	-10	3514 980 011	6.6	0.000 000	0.002
	100 %	0	3514 980 008	3.0	0.000 000	0.001
	100 %	+10	3514 980 012	7.4	0.000 000	0.002
	100 %	+30	3514 980 014	9.4	0.000 000	0.003
	100 %	+40	3514 980 009	4.3	0.000 000	0.001
	100 %	+50	3514 980 017	12.2	0.000 000	0.003
	Batt. Endpoint	+20	3514 980 009	4.0	0.000 000	0.001

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 4.400 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
3490.020	100 %	+20(Ref)	3490 020 010	0.0	0.000 000	0.000
	100 %	-30	3490 020 024	14.3	0.000 000	0.004
	100 %	-20	3490 020 015	5.8	0.000 000	0.002
	100 %	-10	3490 020 018	7.9	0.000 000	0.002
	100 %	0	3490 020 024	14.1	0.000 000	0.004
	100 %	+10	3490 020 021	11.8	0.000 000	0.003
	100 %	+30	3490 020 020	10.8	0.000 000	0.003
	100 %	+40	3490 020 015	5.5	0.000 000	0.002
	100 %	+50	3490 020 019	9.8	0.000 000	0.003
	Batt. Endpoint	+20	3490 020 018	8.6	0.000 000	0.002
3510.000	100 %	+20(Ref)	3510 000 012	0.0	0.000 000	0.000
	100 %	-30	3510 000 027	14.5	0.000 000	0.004
	100 %	-20	3510 000 015	3.0	0.000 000	0.001
	100 %	-10	3510 000 022	9.6	0.000 000	0.003
	100 %	0	3510 000 025	12.7	0.000 000	0.004
	100 %	+10	3510 000 023	10.6	0.000 000	0.003
	100 %	+30	3510 000 026	13.5	0.000 000	0.004
	100 %	+40	3510 000 023	10.3	0.000 000	0.003
	100 %	+50	3510 000 023	10.5	0.000 000	0.003
	Batt. Endpoint	+20	3510 000 022	9.7	0.000 000	0.003

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 4.400 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
3495.000	100 %	+20(Ref)	3495 000 008	0.0	0.000 000	0.000
	100 %	-30	3495 000 024	15.9	0.000 000	0.005
	100 %	-20	3495 000 018	9.6	0.000 000	0.003
	100 %	-10	3495 000 025	16.9	0.000 000	0.005
	100 %	0	3495 000 019	10.8	0.000 000	0.003
	100 %	+10	3495 000 025	16.9	0.000 000	0.005
	100 %	+30	3495 000 017	8.1	0.000 000	0.002
	100 %	+40	3495 000 020	11.6	0.000 000	0.003
	100 %	+50	3495 000 012	3.7	0.000 000	0.001
	Batt. Endpoint	+20	3495 000 023	14.1	0.000 000	0.004
3504.990	100 %	+20(Ref)	3504 990 005	0.0	0.000 000	0.000
	100 %	-30	3504 990 019	14.9	0.000 000	0.004
	100 %	-20	3504 990 009	4.7	0.000 000	0.001
	100 %	-10	3504 990 017	12.7	0.000 000	0.004
	100 %	0	3504 990 020	15.1	0.000 000	0.004
	100 %	+10	3504 990 008	3.6	0.000 000	0.001
	100 %	+30	3504 990 020	15.3	0.000 000	0.004
	100 %	+40	3504 990 013	8.7	0.000 000	0.002
	100 %	+50	3504 990 018	13.1	0.000 000	0.004
	Batt. Endpoint	+20	3504 990 016	11.1	0.000 000	0.003

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 4.400 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
3500.010	100 %	+20(Ref)	3500 010 004	0.0	0.000 000	0.000
	100 %	-30	3500 010 014	10.8	0.000 000	0.003
	100 %	-20	3500 010 015	11.3	0.000 000	0.003
	100 %	-10	3500 010 007	3.5	0.000 000	0.001
	100 %	0	3500 010 016	12.6	0.000 000	0.004
	100 %	+10	3500 010 012	8.6	0.000 000	0.002
	100 %	+30	3500 010 008	3.9	0.000 000	0.001
	100 %	+40	3500 010 017	13.6	0.000 000	0.004
	100 %	+50	3500 010 017	13.3	0.000 000	0.004
	Batt. Endpoint	+20	3500 010 019	15.1	0.000 000	0.004

9. TEST DATA (3700 MHz - 3980 MHz)

9.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
									W	W
3705.00	Sub6 n77/ 10 MHz [30 kHz]	PI/2 BPSK	-21.09	17.25	11.70	3.14	H	< 1.00	0.382	25.82
		QPSK	-21.26	17.08	11.70	3.14	H		0.367	25.65
		16-QAM	-22.23	16.11	11.70	3.14	H		0.294	24.68
		64-QAM	-23.69	14.65	11.70	3.14	H		0.210	23.22
		256-QAM	-25.56	12.78	11.70	3.14	H		0.136	21.35
3840.00		PI/2 BPSK	-22.30	17.62	11.24	3.21	H		0.367	25.65
		QPSK	-22.33	17.59	11.24	3.21	H		0.365	25.62
		16-QAM	-23.44	16.48	11.24	3.21	H		0.283	24.51
		64-QAM	-24.79	15.13	11.24	3.21	H		0.207	23.16
		256-QAM	-26.53	13.39	11.24	3.21	H		0.139	21.42
3975.00		PI/2 BPSK	-23.74	15.89	11.20	3.23	H		0.243	23.86
		QPSK	-23.83	15.80	11.20	3.23	H		0.238	23.77
		16-QAM	-24.71	14.92	11.20	3.23	H		0.195	22.89
		64-QAM	-26.19	13.44	11.20	3.23	H		0.139	21.41
		256-QAM	-28.34	11.29	11.20	3.23	H		0.084	19.26

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3707.51	Sub6 n77/ 15 MHz [30 kHz]	PI/2 BPSK	-21.30	16.99	11.70	3.15	H	< 1.00	0.358	25.54
		QPSK	-21.31	16.98	11.70	3.15	H		0.358	25.53
		16-QAM	-21.96	16.33	11.70	3.15	H		0.308	24.88
		64-QAM	-23.56	14.73	11.70	3.15	H		0.213	23.28
		256-QAM	-25.79	12.50	11.70	3.15	H		0.128	21.05
3840.00		PI/2 BPSK	-22.28	17.64	11.24	3.21	H		0.369	25.67
		QPSK	-22.38	17.54	11.24	3.21	H		0.361	25.57
		16-QAM	-23.33	16.59	11.24	3.21	H		0.290	24.62
		64-QAM	-24.82	15.10	11.24	3.21	H		0.206	23.13
		256-QAM	-26.77	13.15	11.24	3.21	H		0.131	21.18
3972.48	PI/2 BPSK	-23.61	16.04	11.18	3.23	H	0.251	23.99		
	QPSK	-23.64	16.01	11.18	3.23	H	0.249	23.96		
	16-QAM	-24.54	15.11	11.18	3.23	H	0.202	23.06		
	64-QAM	-26.17	13.48	11.18	3.23	H	0.139	21.43		
	256-QAM	-28.11	11.54	11.18	3.23	H	0.089	19.49		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3710.01	Sub6 n77/ 20 MHz [30 kHz]	PI/2 BPSK	-21.25	17.04	11.70	3.15	H	< 1.00	0.363	25.59
		QPSK	-21.29	17.00	11.70	3.15	H		0.359	25.55
		16-QAM	-22.03	16.26	11.70	3.15	H		0.303	24.81
		64-QAM	-23.84	14.45	11.70	3.15	H		0.200	23.00
		256-QAM	-25.56	12.73	11.70	3.15	H		0.134	21.28
3840.00		PI/2 BPSK	-22.31	17.61	11.24	3.21	H		0.366	25.64
		QPSK	-22.36	17.56	11.24	3.21	H		0.362	25.59
		16-QAM	-23.18	16.74	11.24	3.21	H		0.300	24.77
		64-QAM	-24.69	15.23	11.24	3.21	H		0.212	23.26
		256-QAM	-26.71	13.21	11.24	3.21	H		0.133	21.24
3969.99	PI/2 BPSK	-23.61	16.04	11.18	3.23	H	0.251	23.99		
	QPSK	-23.63	16.02	11.18	3.23	H	0.250	23.97		
	16-QAM	-24.56	15.09	11.18	3.23	H	0.202	23.04		
	64-QAM	-26.00	13.65	11.18	3.23	H	0.145	21.60		
	256-QAM	-28.12	11.53	11.18	3.23	H	0.089	19.48		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3712.50	Sub6 n77/ 25 MHz [30 kHz]	PI/2 BPSK	-21.13	17.16	11.70	3.15	H	< 1.00	0.373	25.71
		QPSK	-21.14	17.15	11.70	3.15	H		0.372	25.70
		16-QAM	-22.16	16.13	11.70	3.15	H		0.294	24.68
		64-QAM	-23.83	14.46	11.70	3.15	H		0.200	23.01
		256-QAM	-25.60	12.69	11.70	3.15	H		0.133	21.24
3840.00		PI/2 BPSK	-22.51	17.41	11.24	3.21	H		0.350	25.44
		QPSK	-22.52	17.40	11.24	3.21	H		0.349	25.43
		16-QAM	-23.53	16.39	11.24	3.21	H		0.277	24.42
		64-QAM	-24.95	14.97	11.24	3.21	H		0.200	23.00
		256-QAM	-27.01	12.91	11.24	3.21	H		0.124	20.94
3967.50	PI/2 BPSK	-23.58	16.07	11.18	3.23	H	0.253	24.02		
	QPSK	-23.73	15.92	11.18	3.23	H	0.244	23.87		
	16-QAM	-24.51	15.14	11.18	3.23	H	0.204	23.09		
	64-QAM	-26.12	13.53	11.18	3.23	H	0.141	21.48		
	256-QAM	-28.29	11.36	11.18	3.23	H	0.085	19.31		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3715.02	Sub6 n77/ 30 MHz [30 kHz]	PI/2 BPSK	-21.22	17.20	11.70	3.18	H	< 1.00	0.374	25.72
		QPSK	-21.23	17.19	11.70	3.18	H		0.373	25.71
		16-QAM	-22.19	16.23	11.70	3.18	H		0.299	24.75
		64-QAM	-23.73	14.69	11.70	3.18	H		0.210	23.21
		256-QAM	-25.76	12.66	11.70	3.18	H		0.131	21.18
3840.00		PI/2 BPSK	-22.45	17.47	11.24	3.21	H		0.355	25.50
		QPSK	-22.49	17.43	11.24	3.21	H		0.352	25.46
		16-QAM	-23.28	16.64	11.24	3.21	H		0.293	24.67
		64-QAM	-24.91	15.01	11.24	3.21	H		0.201	23.04
		256-QAM	-26.93	12.99	11.24	3.21	H		0.127	21.02
3964.98	PI/2 BPSK	-23.47	16.20	11.16	3.23	H	0.259	24.13		
	QPSK	-23.48	16.19	11.16	3.23	H	0.258	24.12		
	16-QAM	-24.46	15.21	11.16	3.23	H	0.206	23.14		
	64-QAM	-25.95	13.72	11.16	3.23	H	0.146	21.65		
	256-QAM	-28.00	11.67	11.16	3.23	H	0.091	19.60		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3720.00	Sub6 n77/ 40 MHz [30 kHz]	PI/2 BPSK	-21.21	17.33	11.70	3.20	H	< 1.00	0.383	25.83
		QPSK	-21.30	17.24	11.70	3.20	H		0.375	25.74
		16-QAM	-22.35	16.19	11.70	3.20	H		0.295	24.69
		64-QAM	-23.64	14.90	11.70	3.20	H		0.219	23.40
		256-QAM	-25.71	12.83	11.70	3.20	H		0.136	21.33
3840.00		PI/2 BPSK	-22.44	17.48	11.24	3.21	H		0.356	25.51
		QPSK	-22.48	17.44	11.24	3.21	H		0.352	25.47
		16-QAM	-23.50	16.42	11.24	3.21	H		0.279	24.45
		64-QAM	-24.76	15.16	11.24	3.21	H		0.209	23.19
		256-QAM	-27.06	12.86	11.24	3.21	H		0.123	20.89
3960.00	PI/2 BPSK	-23.63	16.06	11.14	3.23	H	0.250	23.97		
	QPSK	-23.64	16.05	11.14	3.23	H	0.249	23.96		
	16-QAM	-24.43	15.26	11.14	3.23	H	0.208	23.17		
	64-QAM	-26.06	13.63	11.14	3.23	H	0.143	21.54		
	256-QAM	-28.00	11.69	11.14	3.23	H	0.091	19.60		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3725.10	Sub6 n77/ 50 MHz [30 kHz]	PI/2 BPSK	-21.26	17.36	11.70	3.22	H	< 1.00	0.384	25.84
		QPSK	-21.28	17.34	11.70	3.22	H		0.382	25.82
		16-QAM	-22.29	16.33	11.70	3.22	H		0.303	24.81
		64-QAM	-23.71	14.91	11.70	3.22	H		0.218	23.39
		256-QAM	-25.86	12.76	11.70	3.22	H		0.133	21.24
3840.00		PI/2 BPSK	-22.40	17.52	11.24	3.21	H		0.359	25.55
		QPSK	-22.41	17.51	11.24	3.21	H		0.358	25.54
		16-QAM	-23.48	16.44	11.24	3.21	H		0.280	24.47
		64-QAM	-24.96	14.96	11.24	3.21	H		0.199	22.99
		256-QAM	-27.02	12.90	11.24	3.21	H		0.124	20.93
3954.99	PI/2 BPSK	-23.46	16.25	11.12	3.23	H	0.260	24.14		
	QPSK	-23.56	16.15	11.12	3.23	H	0.254	24.04		
	16-QAM	-24.59	15.12	11.12	3.23	H	0.200	23.01		
	64-QAM	-25.91	13.80	11.12	3.23	H	0.148	21.69		
	256-QAM	-28.16	11.55	11.12	3.23	H	0.088	19.44		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3730.02	Sub6 n77/ 60 MHz [30 kHz]	PI/2 BPSK	-21.18	17.52	11.70	3.24	H	< 1.00	0.396	25.98
		QPSK	-21.32	17.38	11.70	3.24	H		0.384	25.84
		16-QAM	-22.26	16.44	11.70	3.24	H		0.309	24.90
		64-QAM	-23.63	15.07	11.70	3.24	H		0.225	23.53
		256-QAM	-25.80	12.90	11.70	3.24	H		0.137	21.36
3840.00		PI/2 BPSK	-22.51	17.41	11.24	3.21	H		0.350	25.44
		QPSK	-22.53	17.39	11.24	3.21	H		0.348	25.42
		16-QAM	-23.51	16.41	11.24	3.21	H		0.278	24.44
		64-QAM	-24.99	14.93	11.24	3.21	H		0.198	22.96
		256-QAM	-26.87	13.05	11.24	3.21	H		0.128	21.08
3949.98	PI/2 BPSK	-23.25	16.48	11.10	3.23	H	0.273	24.35		
	QPSK	-23.26	16.47	11.10	3.23	H	0.272	24.34		
	16-QAM	-24.14	15.59	11.10	3.23	H	0.222	23.46		
	64-QAM	-25.66	14.07	11.10	3.23	H	0.156	21.94		
	256-QAM	-27.63	12.10	11.10	3.23	H	0.099	19.97		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3735.00	Sub6 n77/ 70 MHz [30 kHz]	PI/2 BPSK	-21.28	17.48	11.70	3.24	H	< 1.00	0.393	25.94
		QPSK	-21.29	17.47	11.70	3.24	H		0.392	25.93
		16-QAM	-22.21	16.55	11.70	3.24	H		0.317	25.01
		64-QAM	-23.56	15.20	11.70	3.24	H		0.232	23.66
		256-QAM	-25.70	13.06	11.70	3.24	H		0.142	21.52
3840.00		PI/2 BPSK	-22.32	17.60	11.24	3.21	H		0.366	25.63
		QPSK	-22.44	17.48	11.24	3.21	H		0.356	25.51
		16-QAM	-23.32	16.60	11.24	3.21	H		0.290	24.63
		64-QAM	-25.01	14.91	11.24	3.21	H		0.197	22.94
		256-QAM	-26.78	13.14	11.24	3.21	H		0.131	21.17
3945.00	PI/2 BPSK	-23.05	16.69	11.09	3.23	H	0.285	24.55		
	QPSK	-23.06	16.68	11.09	3.23	H	0.285	24.54		
	16-QAM	-23.80	15.94	11.09	3.23	H	0.240	23.80		
	64-QAM	-25.39	14.35	11.09	3.23	H	0.167	22.21		
	256-QAM	-27.43	12.31	11.09	3.23	H	0.104	20.17		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3740.01	Sub6 n77/ 80 MHz [30 kHz]	PI/2 BPSK	-21.18	17.64	11.70	3.23	H	< 1.00	0.408	26.11
		QPSK	-21.19	17.63	11.70	3.23	H		0.407	26.10
		16-QAM	-22.19	16.63	11.70	3.23	H		0.323	25.10
		64-QAM	-23.71	15.11	11.70	3.23	H		0.228	23.58
		256-QAM	-25.60	13.22	11.70	3.23	H		0.147	21.69
3840.00		PI/2 BPSK	-22.14	17.78	11.24	3.21	H		0.381	25.81
		QPSK	-22.15	17.77	11.24	3.21	H		0.380	25.80
		16-QAM	-23.34	16.58	11.24	3.21	H		0.289	24.61
		64-QAM	-24.61	15.31	11.24	3.21	H		0.216	23.34
		256-QAM	-26.64	13.28	11.24	3.21	H		0.135	21.31
3939.99	PI/2 BPSK	-22.74	17.01	11.08	3.23	H	0.306	24.86		
	QPSK	-22.83	16.92	11.08	3.23	H	0.300	24.77		
	16-QAM	-23.83	15.92	11.08	3.23	H	0.238	23.77		
	64-QAM	-25.01	14.74	11.08	3.23	H	0.182	22.59		
	256-QAM	-27.11	12.64	11.08	3.23	H	0.112	20.49		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3745.02	Sub6 n77/ 90 MHz [30 kHz]	PI/2 BPSK	-20.96	17.88	11.70	3.22	H	< 1.00	0.433	26.36
		QPSK	-21.01	17.83	11.70	3.22	H		0.428	26.31
		16-QAM	-21.96	16.88	11.70	3.22	H		0.344	25.36
		64-QAM	-23.46	15.38	11.70	3.22	H		0.243	23.86
		256-QAM	-25.69	13.15	11.70	3.22	H		0.146	21.63
3840.00		PI/2 BPSK	-22.01	17.91	11.24	3.21	H		0.393	25.94
		QPSK	-22.04	17.88	11.24	3.21	H		0.390	25.91
		16-QAM	-23.06	16.86	11.24	3.21	H		0.308	24.89
		64-QAM	-24.51	15.41	11.24	3.21	H		0.221	23.44
		256-QAM	-26.65	13.27	11.24	3.21	H		0.135	21.30
3934.98	PI/2 BPSK	-22.25	17.51	11.07	3.23	H	0.343	25.35		
	QPSK	-22.26	17.50	11.07	3.23	H	0.342	25.34		
	16-QAM	-23.16	16.60	11.07	3.23	H	0.278	24.44		
	64-QAM	-24.89	14.87	11.07	3.23	H	0.187	22.71		
	256-QAM	-26.82	12.94	11.07	3.23	H	0.120	20.78		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP	
								W	W	dBm
3750.00	Sub6 n77/ 100 MHz [30 kHz]	PI/2 BPSK	-20.73	18.13	11.70	3.20	H	< 1.00	0.460	26.63
		QPSK	-20.74	18.12	11.70	3.20	H		0.459	26.62
		16-QAM	-21.86	17.00	11.70	3.20	H		0.355	25.50
		64-QAM	-23.36	15.50	11.70	3.20	H		0.251	24.00
		256-QAM	-25.26	13.60	11.70	3.20	H		0.162	22.10
3840.00		PI/2 BPSK	-21.81	18.11	11.24	3.21	H		0.411	26.14
		QPSK	-21.93	17.99	11.24	3.21	H		0.400	26.02
		16-QAM	-23.01	16.91	11.24	3.21	H		0.312	24.94
		64-QAM	-24.28	15.64	11.24	3.21	H		0.233	23.67
		256-QAM	-26.34	13.58	11.24	3.21	H		0.145	21.61
3930.00	PI/2 BPSK	-22.31	17.28	11.24	3.23	H	0.338	25.29		
	QPSK	-22.43	17.16	11.24	3.23	H	0.329	25.17		
	16-QAM	-23.51	16.08	11.24	3.23	H	0.257	24.09		
	64-QAM	-24.93	14.66	11.24	3.23	H	0.185	22.67		
	256-QAM	-26.91	12.68	11.24	3.23	H	0.117	20.69		

9.2 RADIATED SPURIOUS EMISSIONS

- NR Band: N77(PC2)
- 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)
650000 (3750.00)	7 500.00	-60.49	11.50	-50.98	4.54	V	-44.02	-13.00
	11 250.00	-61.40	12.20	-48.52	5.74	V	-42.06	-13.00
	15 000.00	-59.24	14.40	-51.10	6.75	V	-43.45	-13.00
656000 (3840.00)	7 680.00	-58.46	11.54	-48.69	4.60	H	-41.75	-13.00
	11 520.00	-64.34	12.44	-50.40	5.72	V	-43.68	-13.00
	15 360.00	-60.10	15.54	-51.97	6.81	V	-43.24	-13.00
662000 (3930.00)	7 860.00	-58.76	11.00	-49.10	4.71	H	-42.81	-13.00
	11 790.00	-63.44	12.90	-51.06	5.87	H	-44.03	-13.00
	15 720.00	-62.09	16.40	-53.15	6.88	V	-43.63	-13.00

- ENDC-Mode : 2A(10 MHz)-n77A(100 MHz) , PC3

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)
18900 (1880.0)	3760.00	-61.34	11.64	-61.57	3.16	H	-53.09	-13.00
	5640.00	-61.27	12.00	-55.09	3.93	H	-47.02	-13.00
	7520.00	-61.13	11.54	-46.68	4.51	V	-39.65	-13.00

9.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n77	10 MHz	3840.00	BPSK	Full RB	0	4.60
			QPSK			5.76
			16-QAM			6.40
			64-QAM			6.55
			256-QAM			6.48
	15 MHz		BPSK			4.37
			QPSK			5.70
			16-QAM			6.32
			64-QAM			6.52
			256-QAM			6.46
	20 MHz		BPSK			4.28
			QPSK			5.61
			16-QAM			6.31
			64-QAM			6.54
			256-QAM			6.47
	25 MHz		BPSK			4.51
			QPSK			5.69
			16-QAM			6.42
			64-QAM			6.59
			256-QAM			6.48
30 MHz	BPSK	4.58				
	QPSK	5.66				
	16-QAM	6.37				
	64-QAM	6.56				
	256-QAM	6.49				
40 MHz	BPSK	4.67				
	QPSK	5.67				
	16-QAM	6.34				
	64-QAM	6.58				
	256-QAM	6.52				

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
	50 MHz		BPSK			4.75
			QPSK			5.64
			16-QAM			6.33
			64-QAM			6.54
			256-QAM			6.51
	60 MHz		BPSK			4.44
			QPSK			5.57
			16-QAM			6.28
			64-QAM			6.57
			256-QAM			6.56
	70 MHz		BPSK			4.60
			QPSK			5.62
			16-QAM			6.29
			64-QAM			6.60
			256-QAM			6.51
	80 MHz		BPSK			5.08
			QPSK			5.64
			16-QAM			6.33
			64-QAM			6.58
			256-QAM			6.49
90 MHz	BPSK	4.51				
	QPSK	5.64				
	16-QAM	6.29				
	64-QAM	6.57				
	256-QAM	6.57				
100 MHz	BPSK	5.16				
	QPSK	5.64				
	16-QAM	6.28				
	64-QAM	6.56				
	256-QAM	6.53				

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 485 ~ 544.

9.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n77	10 MHz	3840.00	BPSK	Full RB	0	8.6141
			QPSK			8.6853
			16-QAM			8.5814
			64-QAM			8.5908
			256-QAM			8.5821
	15 MHz		BPSK			12.843
			QPSK			12.907
			16-QAM			12.856
			64-QAM			12.850
			256-QAM			12.931
	20 MHz		BPSK			17.920
			QPSK			17.893
			16-QAM			17.865
			64-QAM			17.830
			256-QAM			17.810
	25 MHz		BPSK			22.895
			QPSK			23.023
			16-QAM			22.926
			64-QAM			23.023
			256-QAM			23.072
30 MHz	BPSK	27.060				
	QPSK	27.095				
	16-QAM	26.916				
	64-QAM	26.946				
	256-QAM	26.949				
40 MHz	BPSK	35.821				
	QPSK	35.971				
	16-QAM	35.810				
	64-QAM	35.964				
	256-QAM	35.982				

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
	50 MHz		BPSK			45.781
			QPSK			45.875
			16-QAM			45.967
			64-QAM			45.805
			256-QAM			45.807
	60 MHz		BPSK			57.949
			QPSK			58.088
			16-QAM			58.113
			64-QAM			57.933
			256-QAM			58.222
	70 MHz		BPSK			64.391
			QPSK			64.369
			16-QAM			64.584
			64-QAM			64.423
			256-QAM			64.363
	80 MHz		BPSK			77.321
			QPSK			77.380
			16-QAM			76.853
			64-QAM			77.498
			256-QAM			77.338
90 MHz	BPSK	87.049				
	QPSK	86.843				
	16-QAM	87.027				
	64-QAM	86.673				
	256-QAM	86.631				
100 MHz	BPSK	96.522				
	QPSK	96.460				
	16-QAM	96.721				
	64-QAM	96.606				
	256-QAM	96.402				

Note:

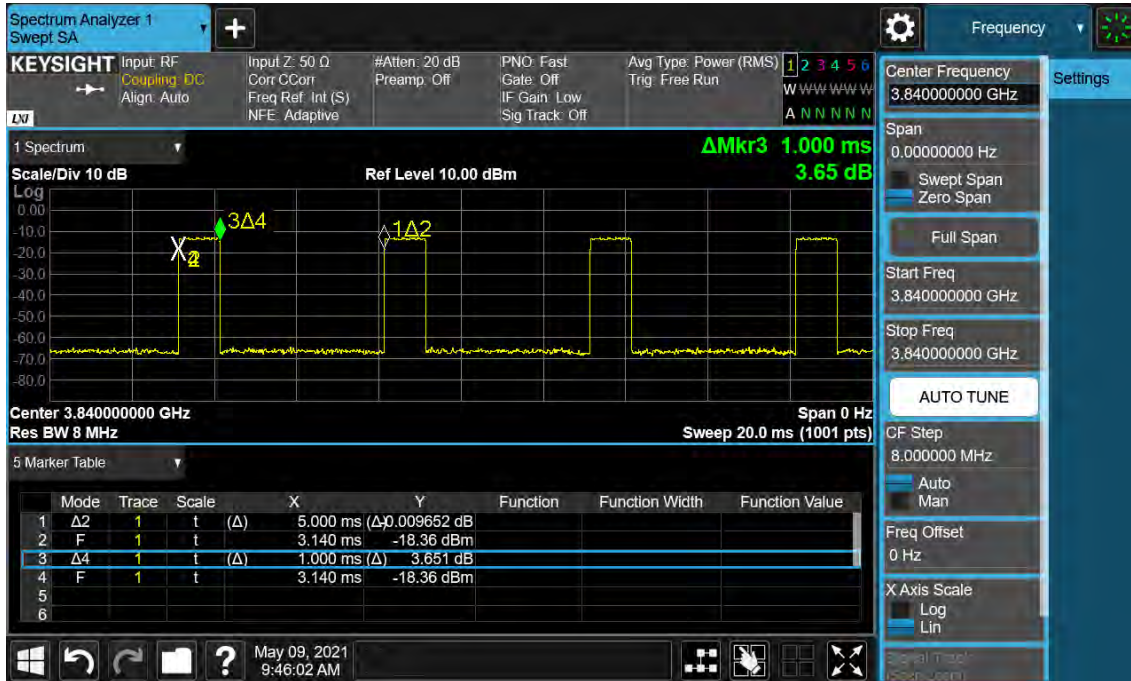
1. Plots of the EUT's Occupied Bandwidth are shown Page 425 ~ 484.

9.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77	10	3705.00	8.0359	37.805	-70.653	-32.848	-13.00
		3840.00	6.0389	37.805	-70.016	-32.211	
		3975.00	8.3265	37.805	-70.800	-32.995	
	15	3707.51	8.0005	37.805	-71.012	-33.207	
		3840.00	6.0115	37.805	-70.493	-32.688	
		3972.48	7.1182	37.805	-69.941	-32.136	
	20	3710.01	7.4751	37.805	-70.411	-32.606	
		3840.00	9.7293	37.805	-70.667	-32.862	
		3969.99	8.2852	37.805	-70.547	-32.742	
	25	3712.50	9.1097	37.805	-70.835	-33.030	
		3840.00	6.0294	37.805	-70.736	-32.931	
		3967.50	8.8510	37.805	-70.664	-32.859	
	30	3715.02	5.4696	37.805	-71.257	-33.452	
		3840.00	9.1570	37.805	-70.702	-32.897	
		3964.98	8.0389	37.805	-70.074	-32.269	
	40	3720.00	8.2233	37.805	-70.159	-32.354	
		3840.00	9.9487	37.805	-70.782	-32.977	
		3960.00	5.9975	37.805	-70.013	-32.208	
	50	3725.10	8.6117	37.805	-70.344	-32.539	
		3840.00	8.0030	37.805	-70.963	-33.158	
		3954.99	8.2807	37.805	-70.024	-32.219	
	60	3730.02	9.9402	37.805	-70.321	-32.516	
		3840.00	4.3291	37.190	-70.973	-33.783	
		3949.98	8.2817	37.805	-69.988	-32.183	
	70	3735.00	9.6815	37.805	-69.986	-32.181	
		3840.00	9.4178	37.805	-69.758	-31.953	
		3945.00	4.9731	37.190	-70.090	-32.900	
	80	3740.01	8.0329	37.805	-69.420	-31.615	
		3840.00	4.9143	37.190	-69.617	-32.427	
		3939.99	5.2373	37.805	-70.335	-32.530	
90	3745.02	9.6884	37.805	-70.300	-32.495		
	3840.00	8.5758	37.805	-69.467	-31.662		
	3934.98	4.5808	37.190	-70.075	-32.885		
100	3750.00	8.0175	37.805	-70.580	-32.775		
	3840.00	9.9746	37.805	-70.514	-32.709		
	3930.00	9.1301	37.805	-70.090	-32.285		

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 689 ~ 760.
2. Duty Cycle factor already applied on the factor.
 - Duty Cycle Factor(dB) = 6.990



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

9.6 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 545 ~ 688.
2. Duty Cycle factor already applied on the factor.
 - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Divider
 - Result(dBm) = Reading + Factor
 - Duty Cycle Factor(dB) = 6.990

9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 10 MHz
- ▣ Voltage(100 %): 4.400 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
3705.000	100 %	+20(Ref)	3705 000 013	0.0	0.000 000	0.000
	100 %	-30	3705 000 017	3.9	0.000 000	0.001
	100 %	-20	3705 000 029	15.6	0.000 000	0.004
	100 %	-10	3705 000 019	5.3	0.000 000	0.001
	100 %	0	3705 000 019	5.3	0.000 000	0.001
	100 %	+10	3705 000 029	15.7	0.000 000	0.004
	100 %	+30	3705 000 024	10.7	0.000 000	0.003
	100 %	+40	3705 000 022	8.3	0.000 000	0.002
	100 %	+50	3705 000 018	4.7	0.000 000	0.001
	Batt. Endpoint	+20	3705 000 017	4.0	0.000 000	0.001
3975.000	100 %	+20(Ref)	3975 000 010	0.0	0.000 000	0.000
	100 %	-30	3975 000 021	11.4	0.000 000	0.003
	100 %	-20	3975 000 016	6.6	0.000 000	0.002
	100 %	-10	3975 000 021	10.9	0.000 000	0.003
	100 %	0	3975 000 019	9.6	0.000 000	0.002
	100 %	+10	3975 000 025	15.0	0.000 000	0.004
	100 %	+30	3975 000 014	4.7	0.000 000	0.001
	100 %	+40	3975 000 018	8.0	0.000 000	0.002
	100 %	+50	3975 000 015	5.3	0.000 000	0.001
	Batt. Endpoint	+20	3975 000 025	14.8	0.000 000	0.004

- ▣ BandWidth: 15 MHz
- ▣ Voltage(100 %): 4.400 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
3707.520	100 %	+20(Ref)	3707 520 003	0.0	0.000 000	0.000
	100 %	-30	3707 520 016	12.9	0.000 000	0.003
	100 %	-20	3707 520 016	12.1	0.000 000	0.003
	100 %	-10	3707 520 011	7.1	0.000 000	0.002
	100 %	0	3707 520 012	9.0	0.000 000	0.002
	100 %	+10	3707 520 007	3.2	0.000 000	0.001
	100 %	+30	3707 520 009	5.8	0.000 000	0.002
	100 %	+40	3707 520 013	9.7	0.000 000	0.003
	100 %	+50	3707 520 015	11.6	0.000 000	0.003
	Batt. Endpoint	+20	3707 520 011	7.8	0.000 000	0.002
3972.480	100 %	+20(Ref)	3972 480 004	0.0	0.000 000	0.000
	100 %	-30	3972 480 018	14.4	0.000 000	0.004
	100 %	-20	3972 480 014	9.8	0.000 000	0.002
	100 %	-10	3972 480 010	6.3	0.000 000	0.002
	100 %	0	3972 480 013	9.0	0.000 000	0.002
	100 %	+10	3972 480 017	13.3	0.000 000	0.003
	100 %	+30	3972 480 008	4.4	0.000 000	0.001
	100 %	+40	3972 480 019	15.1	0.000 000	0.004
	100 %	+50	3972 480 012	8.0	0.000 000	0.002
	Batt. Endpoint	+20	3972 480 019	15.6	0.000 000	0.004

- ▣ BandWidth: 20 MHz
- ▣ Voltage(100 %): 4.400 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
3710.010	100 %	+20(Ref)	3710 010 011	0.0	0.000 000	0.000
	100 %	-30	3710 010 016	4.9	0.000 000	0.001
	100 %	-20	3710 010 025	14.3	0.000 000	0.004
	100 %	-10	3710 010 026	15.2	0.000 000	0.004
	100 %	0	3710 010 019	7.7	0.000 000	0.002
	100 %	+10	3710 010 026	14.8	0.000 000	0.004
	100 %	+30	3710 010 022	11.1	0.000 000	0.003
	100 %	+40	3710 010 017	6.4	0.000 000	0.002
	100 %	+50	3710 010 016	5.5	0.000 000	0.001
	Batt. Endpoint	+20	3710 010 020	9.3	0.000 000	0.003
3969.990	100 %	+20(Ref)	3969 990 007	0.0	0.000 000	0.000
	100 %	-30	3969 990 017	9.9	0.000 000	0.002
	100 %	-20	3969 990 010	3.3	0.000 000	0.001
	100 %	-10	3969 990 019	11.8	0.000 000	0.003
	100 %	0	3969 990 014	6.5	0.000 000	0.002
	100 %	+10	3969 990 017	9.4	0.000 000	0.002
	100 %	+30	3969 990 023	15.6	0.000 000	0.004
	100 %	+40	3969 990 012	4.5	0.000 000	0.001
	100 %	+50	3969 990 012	5.2	0.000 000	0.001
	Batt. Endpoint	+20	3969 990 020	12.9	0.000 000	0.003

- ▣ BandWidth: 25 MHz
- ▣ Voltage(100 %): 4.400 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
3712.500	100 %	+20(Ref)	3712 500 006	0.0	0.000 000	0.000
	100 %	-30	3712 500 022	15.7	0.000 000	0.004
	100 %	-20	3712 500 020	14.5	0.000 000	0.004
	100 %	-10	3712 500 019	13.1	0.000 000	0.004
	100 %	0	3712 500 016	10.6	0.000 000	0.003
	100 %	+10	3712 500 018	12.5	0.000 000	0.003
	100 %	+30	3712 500 017	11.1	0.000 000	0.003
	100 %	+40	3712 500 011	5.5	0.000 000	0.001
	100 %	+50	3712 500 011	5.6	0.000 000	0.002
	Batt. Endpoint	+20	3712 500 009	3.5	0.000 000	0.001
3967.500	100 %	+20(Ref)	3967 500 011	0.0	0.000 000	0.000
	100 %	-30	3967 500 017	6.1	0.000 000	0.002
	100 %	-20	3967 500 024	13.1	0.000 000	0.003
	100 %	-10	3967 500 024	12.9	0.000 000	0.003
	100 %	0	3967 500 024	13.2	0.000 000	0.003
	100 %	+10	3967 500 014	3.5	0.000 000	0.001
	100 %	+30	3967 500 024	12.8	0.000 000	0.003
	100 %	+40	3967 500 019	8.0	0.000 000	0.002
	100 %	+50	3967 500 023	12.6	0.000 000	0.003
	Batt. Endpoint	+20	3967 500 021	10.6	0.000 000	0.003

- ▣ BandWidth: 30 MHz
- ▣ Voltage(100 %): 4.400 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
3715.020	100 %	+20(Ref)	3715 020 014	0.0	0.000 000	0.000
	100 %	-30	3715 020 030	15.7	0.000 000	0.004
	100 %	-20	3715 020 019	4.9	0.000 000	0.001
	100 %	-10	3715 020 027	12.2	0.000 000	0.003
	100 %	0	3715 020 026	11.5	0.000 000	0.003
	100 %	+10	3715 020 021	6.9	0.000 000	0.002
	100 %	+30	3715 020 018	3.7	0.000 000	0.001
	100 %	+40	3715 020 029	14.9	0.000 000	0.004
	100 %	+50	3715 020 020	5.7	0.000 000	0.002
	Batt. Endpoint	+20	3715 020 021	6.2	0.000 000	0.002
3964.980	100 %	+20(Ref)	3964 980 010	0.0	0.000 000	0.000
	100 %	-30	3964 980 018	8.2	0.000 000	0.002
	100 %	-20	3964 980 025	14.7	0.000 000	0.004
	100 %	-10	3964 980 018	7.8	0.000 000	0.002
	100 %	0	3964 980 013	3.5	0.000 000	0.001
	100 %	+10	3964 980 014	3.8	0.000 000	0.001
	100 %	+30	3964 980 013	3.0	0.000 000	0.001
	100 %	+40	3964 980 024	14.5	0.000 000	0.004
	100 %	+50	3964 980 024	14.0	0.000 000	0.004
	Batt. Endpoint	+20	3964 980 026	16.5	0.000 000	0.004

- ▣ BandWidth: 40 MHz
- ▣ Voltage(100 %): 4.400 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
3720.000	100 %	+20(Ref)	3720 000 014	0.0	0.000 000	0.000
	100 %	-30	3720 000 018	4.1	0.000 000	0.001
	100 %	-20	3720 000 030	15.8	0.000 000	0.004
	100 %	-10	3720 000 027	13.5	0.000 000	0.004
	100 %	0	3720 000 019	5.1	0.000 000	0.001
	100 %	+10	3720 000 029	14.7	0.000 000	0.004
	100 %	+30	3720 000 028	14.5	0.000 000	0.004
	100 %	+40	3720 000 018	4.5	0.000 000	0.001
	100 %	+50	3720 000 018	3.8	0.000 000	0.001
	Batt. Endpoint	+20	3720 000 027	13.5	0.000 000	0.004
3960.000	100 %	+20(Ref)	3960 000 011	0.0	0.000 000	0.000
	100 %	-30	3960 000 015	4.1	0.000 000	0.001
	100 %	-20	3960 000 025	13.9	0.000 000	0.004
	100 %	-10	3960 000 016	5.1	0.000 000	0.001
	100 %	0	3960 000 016	5.1	0.000 000	0.001
	100 %	+10	3960 000 024	12.3	0.000 000	0.003
	100 %	+30	3960 000 022	11.2	0.000 000	0.003
	100 %	+40	3960 000 015	3.7	0.000 000	0.001
	100 %	+50	3960 000 023	11.9	0.000 000	0.003
	Batt. Endpoint	+20	3960 000 021	9.6	0.000 000	0.002

- ▣ BandWidth: 50 MHz
- ▣ Voltage(100 %): 4.400 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
3725.010	100 %	+20(Ref)	3725 010 004	0.0	0.000 000	0.000
	100 %	-30	3725 010 020	16.1	0.000 000	0.004
	100 %	-20	3725 010 011	7.5	0.000 000	0.002
	100 %	-10	3725 010 018	14.9	0.000 000	0.004
	100 %	0	3725 010 008	4.6	0.000 000	0.001
	100 %	+10	3725 010 014	10.6	0.000 000	0.003
	100 %	+30	3725 010 018	14.2	0.000 000	0.004
	100 %	+40	3725 010 010	6.5	0.000 000	0.002
	100 %	+50	3725 010 011	7.5	0.000 000	0.002
	Batt. Endpoint	+20	3725 010 008	4.1	0.000 000	0.001
3954.990	100 %	+20(Ref)	3954 990 011	0.0	0.000 000	0.000
	100 %	-30	3954 990 017	6.7	0.000 000	0.002
	100 %	-20	3954 990 015	4.5	0.000 000	0.001
	100 %	-10	3954 990 015	4.4	0.000 000	0.001
	100 %	0	3954 990 025	14.6	0.000 000	0.004
	100 %	+10	3954 990 015	4.2	0.000 000	0.001
	100 %	+30	3954 990 025	13.7	0.000 000	0.003
	100 %	+40	3954 990 022	10.8	0.000 000	0.003
	100 %	+50	3954 990 024	13.6	0.000 000	0.003
	Batt. Endpoint	+20	3954 990 025	14.5	0.000 000	0.004

- ▣ BandWidth: 60 MHz
- ▣ Voltage(100 %): 4.400 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
3730.020	100 %	+20(Ref)	3730 020 016	0.0	0.000 000	0.000
	100 %	-30	3730 020 021	5.1	0.000 000	0.001
	100 %	-20	3730 020 029	12.8	0.000 000	0.003
	100 %	-10	3730 020 025	8.6	0.000 000	0.002
	100 %	0	3730 020 022	6.0	0.000 000	0.002
	100 %	+10	3730 020 027	11.2	0.000 000	0.003
	100 %	+30	3730 020 032	15.7	0.000 000	0.004
	100 %	+40	3730 020 027	10.6	0.000 000	0.003
	100 %	+50	3730 020 027	11.1	0.000 000	0.003
	Batt. Endpoint	+20	3730 020 030	14.1	0.000 000	0.004
3949.995	100 %	+20(Ref)	3949 995 006	0.0	0.000 000	0.000
	100 %	-30	3949 995 016	10.7	0.000 000	0.003
	100 %	-20	3949 995 016	10.5	0.000 000	0.003
	100 %	-10	3949 995 019	13.2	0.000 000	0.003
	100 %	0	3949 995 021	15.2	0.000 000	0.004
	100 %	+10	3949 995 012	6.2	0.000 000	0.002
	100 %	+30	3949 995 016	10.3	0.000 000	0.003
	100 %	+40	3949 995 020	14.8	0.000 000	0.004
	100 %	+50	3949 995 020	14.4	0.000 000	0.004
	Batt. Endpoint	+20	3949 995 022	16.3	0.000 000	0.004

- ▣ BandWidth: 70 MHz
- ▣ Voltage(100 %): 4.400 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
3735.000	100 %	+20(Ref)	3735 000 008	0.0	0.000 000	0.000
	100 %	-30	3735 000 019	11.0	0.000 000	0.003
	100 %	-20	3735 000 021	13.3	0.000 000	0.004
	100 %	-10	3735 000 015	6.7	0.000 000	0.002
	100 %	0	3735 000 025	16.5	0.000 000	0.004
	100 %	+10	3735 000 017	9.2	0.000 000	0.002
	100 %	+30	3735 000 016	8.3	0.000 000	0.002
	100 %	+40	3735 000 020	12.1	0.000 000	0.003
	100 %	+50	3735 000 018	9.8	0.000 000	0.003
	Batt. Endpoint	+20	3735 000 023	15.3	0.000 000	0.004
3945.000	100 %	+20(Ref)	3945 000 017	0.0	0.000 000	0.000
	100 %	-30	3945 000 027	10.9	0.000 000	0.003
	100 %	-20	3945 000 030	13.1	0.000 000	0.003
	100 %	-10	3945 000 024	7.7	0.000 000	0.002
	100 %	0	3945 000 022	4.9	0.000 000	0.001
	100 %	+10	3945 000 026	9.7	0.000 000	0.002
	100 %	+30	3945 000 028	10.9	0.000 000	0.003
	100 %	+40	3945 000 027	9.9	0.000 000	0.003
	100 %	+50	3945 000 022	5.2	0.000 000	0.001
	Batt. Endpoint	+20	3945 000 023	6.2	0.000 000	0.002

- ▣ BandWidth: 80 MHz
- ▣ Voltage(100 %): 4.400 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
3740.010	100 %	+20(Ref)	3740 010 004	0.0	0.000 000	0.000
	100 %	-30	3740 010 008	4.0	0.000 000	0.001
	100 %	-20	3740 010 018	13.7	0.000 000	0.004
	100 %	-10	3740 010 013	8.5	0.000 000	0.002
	100 %	0	3740 010 016	12.0	0.000 000	0.003
	100 %	+10	3740 010 008	4.4	0.000 000	0.001
	100 %	+30	3740 010 018	13.4	0.000 000	0.004
	100 %	+40	3740 010 013	9.3	0.000 000	0.002
	100 %	+50	3740 010 019	15.0	0.000 000	0.004
	Batt. Endpoint	+20	3740 010 010	6.1	0.000 000	0.002
3939.990	100 %	+20(Ref)	3939 990 009	0.0	0.000 000	0.000
	100 %	-30	3939 990 013	4.0	0.000 000	0.001
	100 %	-20	3939 990 012	3.1	0.000 000	0.001
	100 %	-10	3939 990 013	3.8	0.000 000	0.001
	100 %	0	3939 990 026	16.9	0.000 000	0.004
	100 %	+10	3939 990 018	8.7	0.000 000	0.002
	100 %	+30	3939 990 022	12.6	0.000 000	0.003
	100 %	+40	3939 990 017	7.6	0.000 000	0.002
	100 %	+50	3939 990 017	8.1	0.000 000	0.002
	Batt. Endpoint	+20	3939 990 021	11.8	0.000 000	0.003

- ▣ BandWidth: 90 MHz
- ▣ Voltage(100 %): 4.400 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

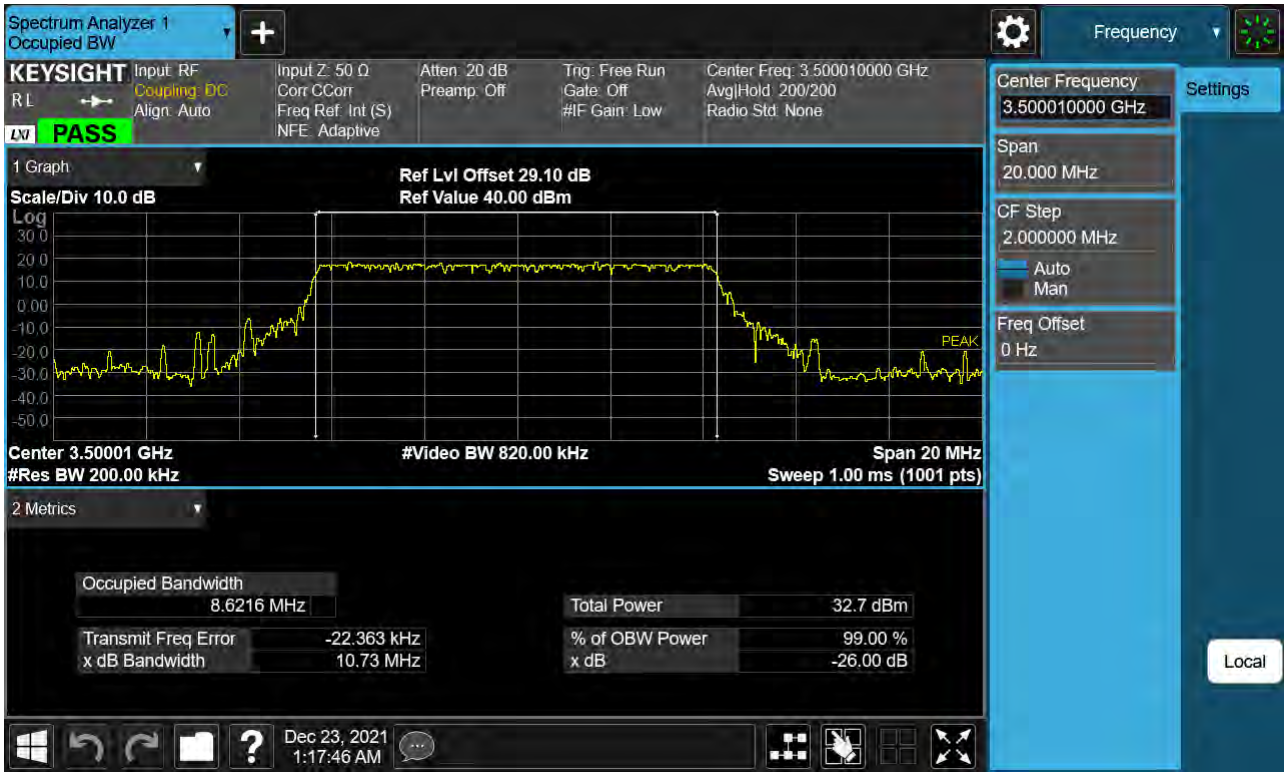
Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
3745.020	100 %	+20(Ref)	3745 020 009	0.0	0.000 000	0.000
	100 %	-30	3745 020 022	12.8	0.000 000	0.003
	100 %	-20	3745 020 014	4.9	0.000 000	0.001
	100 %	-10	3745 020 021	12.4	0.000 000	0.003
	100 %	0	3745 020 025	15.7	0.000 000	0.004
	100 %	+10	3745 020 013	4.5	0.000 000	0.001
	100 %	+30	3745 020 012	3.5	0.000 000	0.001
	100 %	+40	3745 020 018	9.4	0.000 000	0.003
	100 %	+50	3745 020 022	13.0	0.000 000	0.003
	Batt. Endpoint	+20	3745 020 018	9.4	0.000 000	0.003
3934.980	100 %	+20(Ref)	3934 980 003	0.0	0.000 000	0.000
	100 %	-30	3934 980 012	9.1	0.000 000	0.002
	100 %	-20	3934 980 019	16.1	0.000 000	0.004
	100 %	-10	3934 980 013	10.1	0.000 000	0.003
	100 %	0	3934 980 008	5.2	0.000 000	0.001
	100 %	+10	3934 980 018	15.2	0.000 000	0.004
	100 %	+30	3934 980 018	14.7	0.000 000	0.004
	100 %	+40	3934 980 018	14.9	0.000 000	0.004
	100 %	+50	3934 980 007	3.3	0.000 000	0.001
	Batt. Endpoint	+20	3934 980 015	11.3	0.000 000	0.003

- ▣ BandWidth: 100 MHz
- ▣ Voltage(100 %): 4.400 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

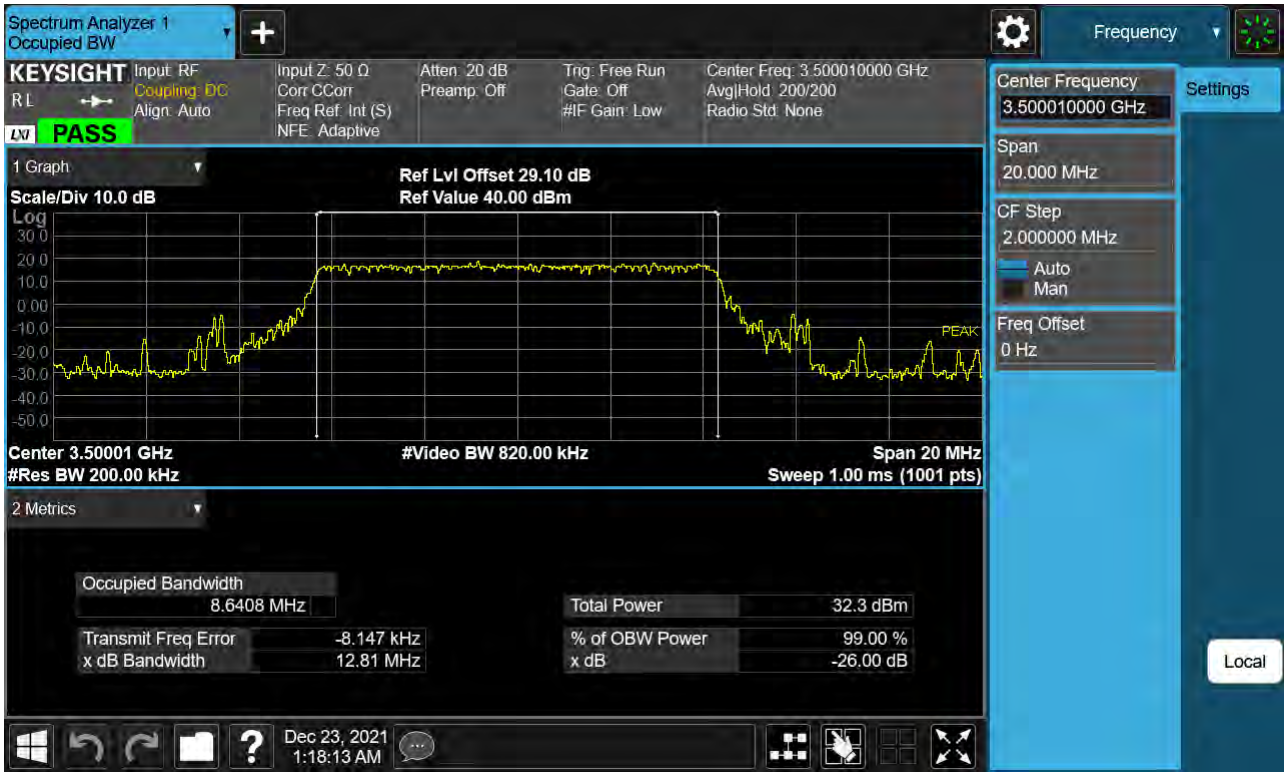
Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
3750.000	100 %	+20(Ref)	3750 000 015	0.0	0.000 000	0.000
	100 %	-30	3750 000 028	12.5	0.000 000	0.003
	100 %	-20	3750 000 028	13.0	0.000 000	0.003
	100 %	-10	3750 000 028	12.3	0.000 000	0.003
	100 %	0	3750 000 021	5.4	0.000 000	0.001
	100 %	+10	3750 000 024	8.7	0.000 000	0.002
	100 %	+30	3750 000 024	8.9	0.000 000	0.002
	100 %	+40	3750 000 029	13.4	0.000 000	0.004
	100 %	+50	3750 000 028	12.5	0.000 000	0.003
	Batt. Endpoint	+20	3750 000 029	13.8	0.000 000	0.004
3930.000	100 %	+20(Ref)	3930 000 010	0.0	0.000 000	0.000
	100 %	-30	3930 000 020	10.2	0.000 000	0.003
	100 %	-20	3930 000 018	7.7	0.000 000	0.002
	100 %	-10	3930 000 019	8.8	0.000 000	0.002
	100 %	0	3930 000 015	4.5	0.000 000	0.001
	100 %	+10	3930 000 014	3.3	0.000 000	0.001
	100 %	+30	3930 000 019	9.2	0.000 000	0.002
	100 %	+40	3930 000 023	12.3	0.000 000	0.003
	100 %	+50	3930 000 015	4.6	0.000 000	0.001
	Batt. Endpoint	+20	3930 000 017	6.8	0.000 000	0.002

10. TEST PLOTS(3450 MHz - 3550 MHz)

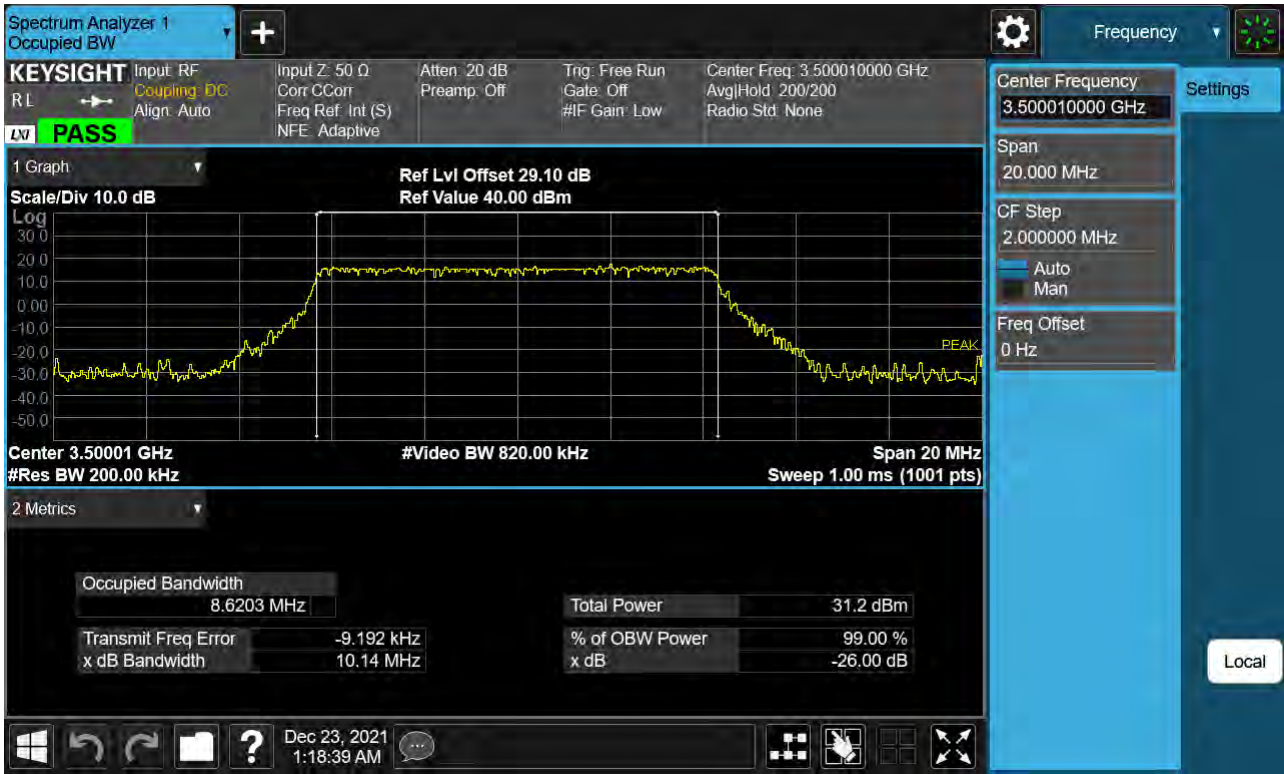
Sub6 n77. Occupied Bandwidth Plot (10 M BW Ch.633334 BPSK)



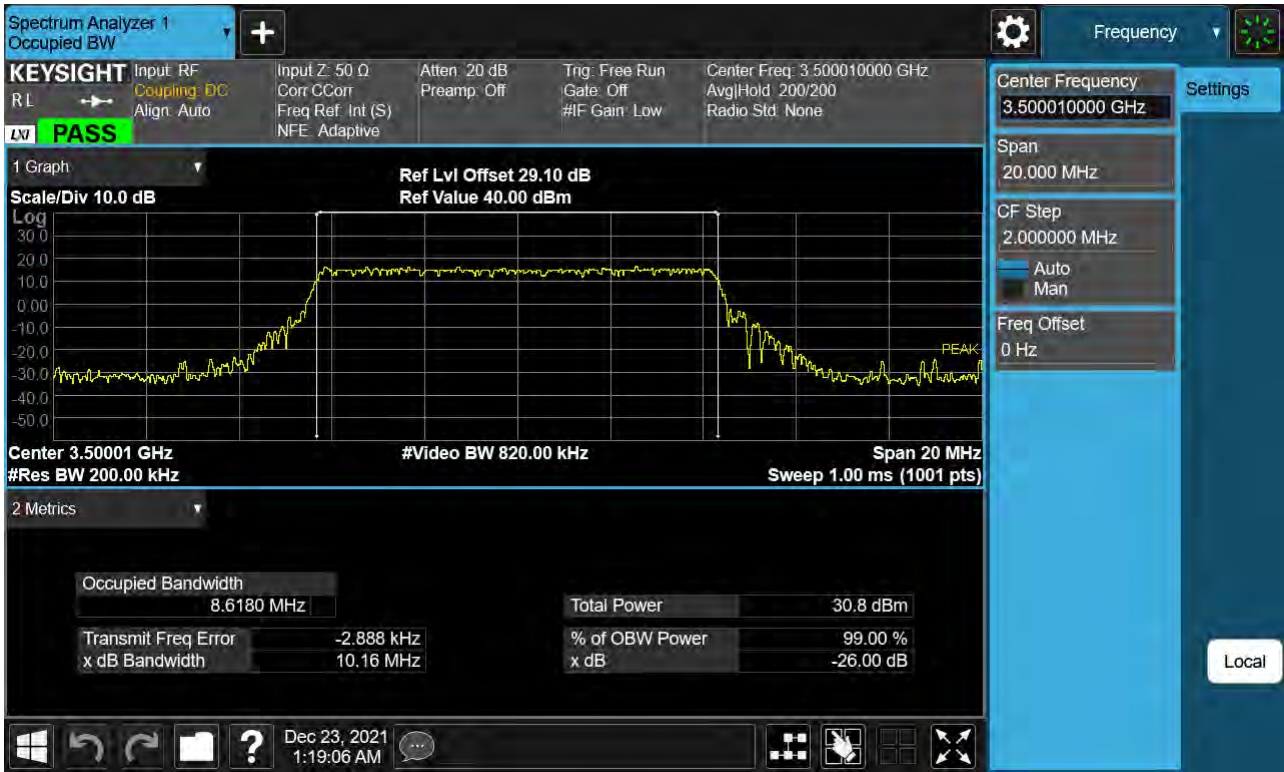
Sub6 n77. Occupied Bandwidth Plot (10 M BW Ch.633334 QPSK)



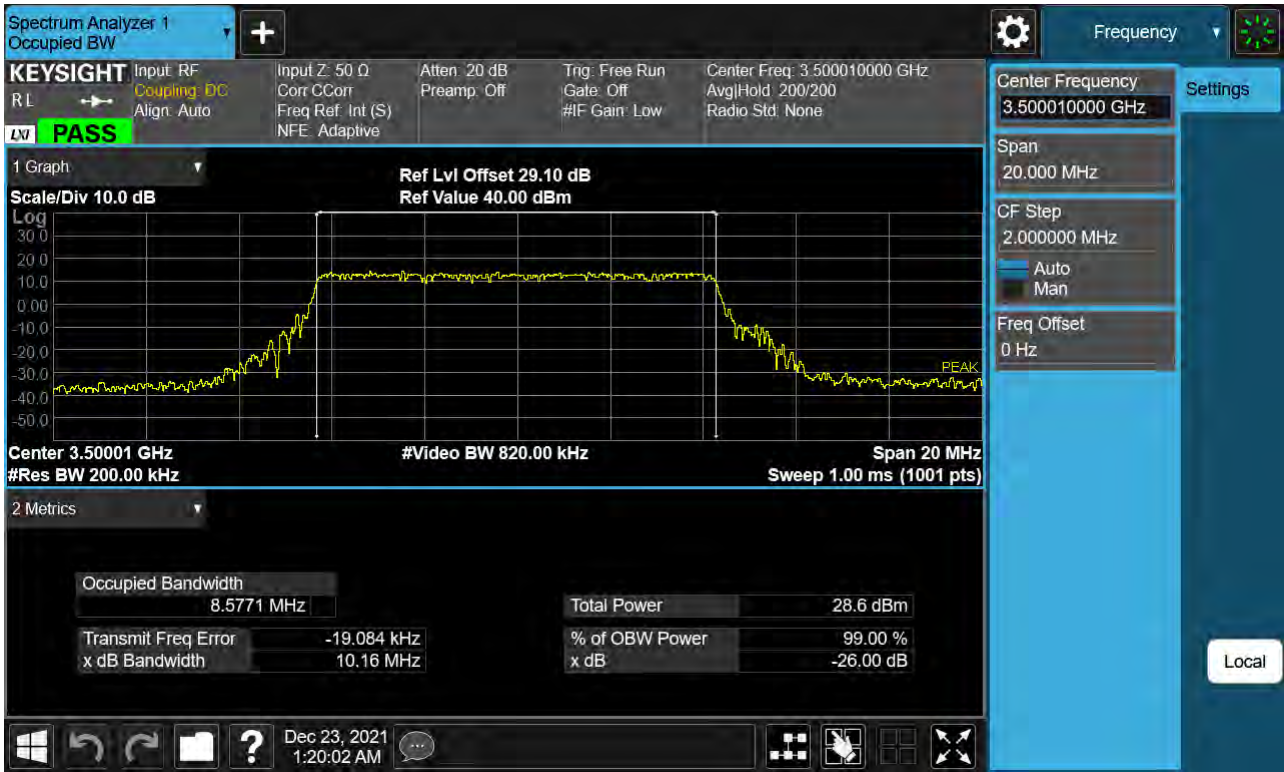
Sub6 n77. Occupied Bandwidth Plot (10 M BW Ch.633334 16QAM)



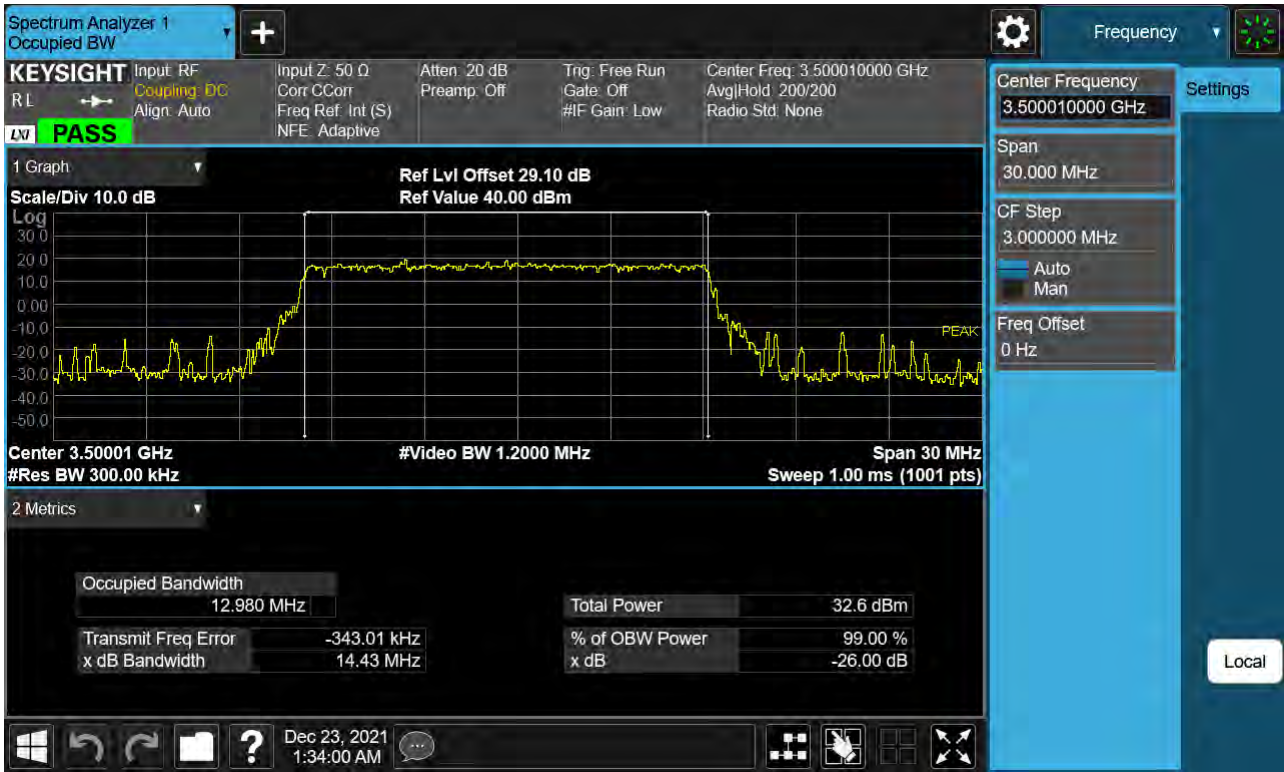
Sub6 n77. Occupied Bandwidth Plot (10 M BW Ch.633334 64QAM)



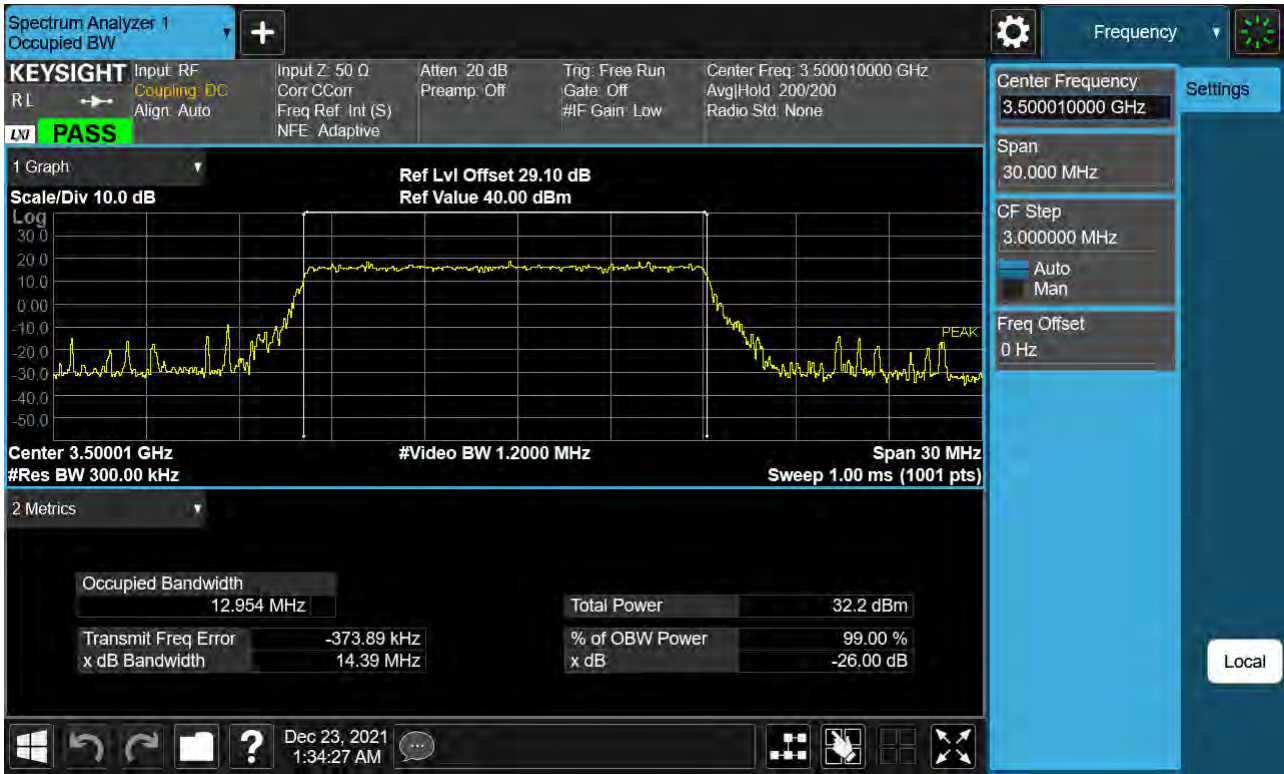
Sub6 n77. Occupied Bandwidth Plot (10 M BW Ch.633334 256QAM)



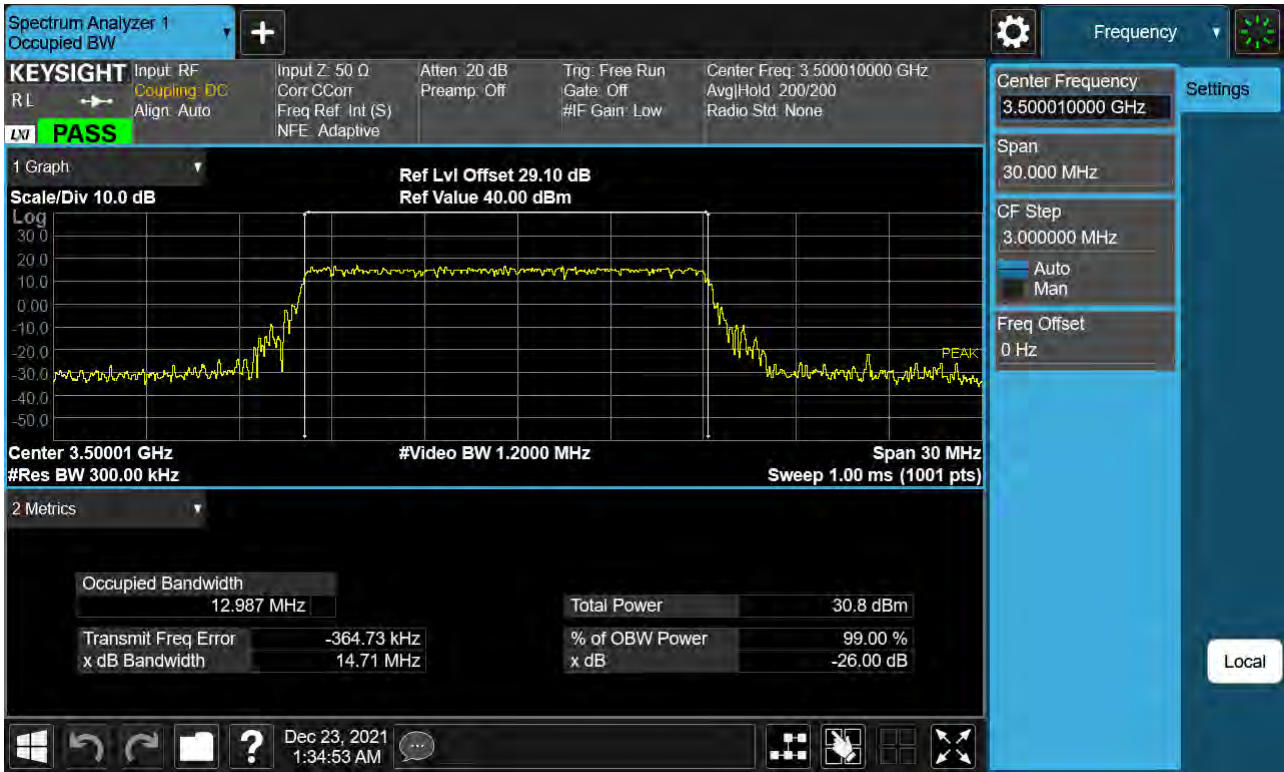
Sub6 n77. Occupied Bandwidth Plot (15 M BW Ch.633334 BPSK)



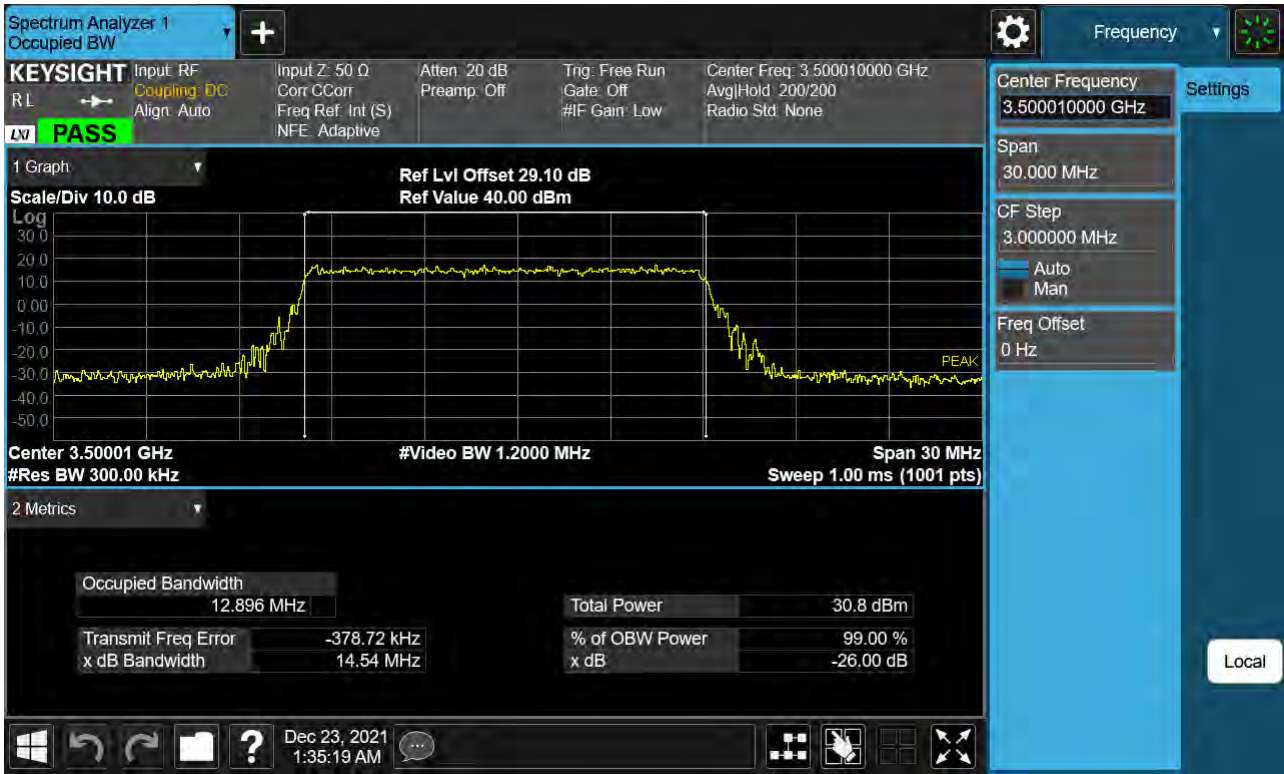
Sub6 n77. Occupied Bandwidth Plot (15 M BW Ch.633334 QPSK)



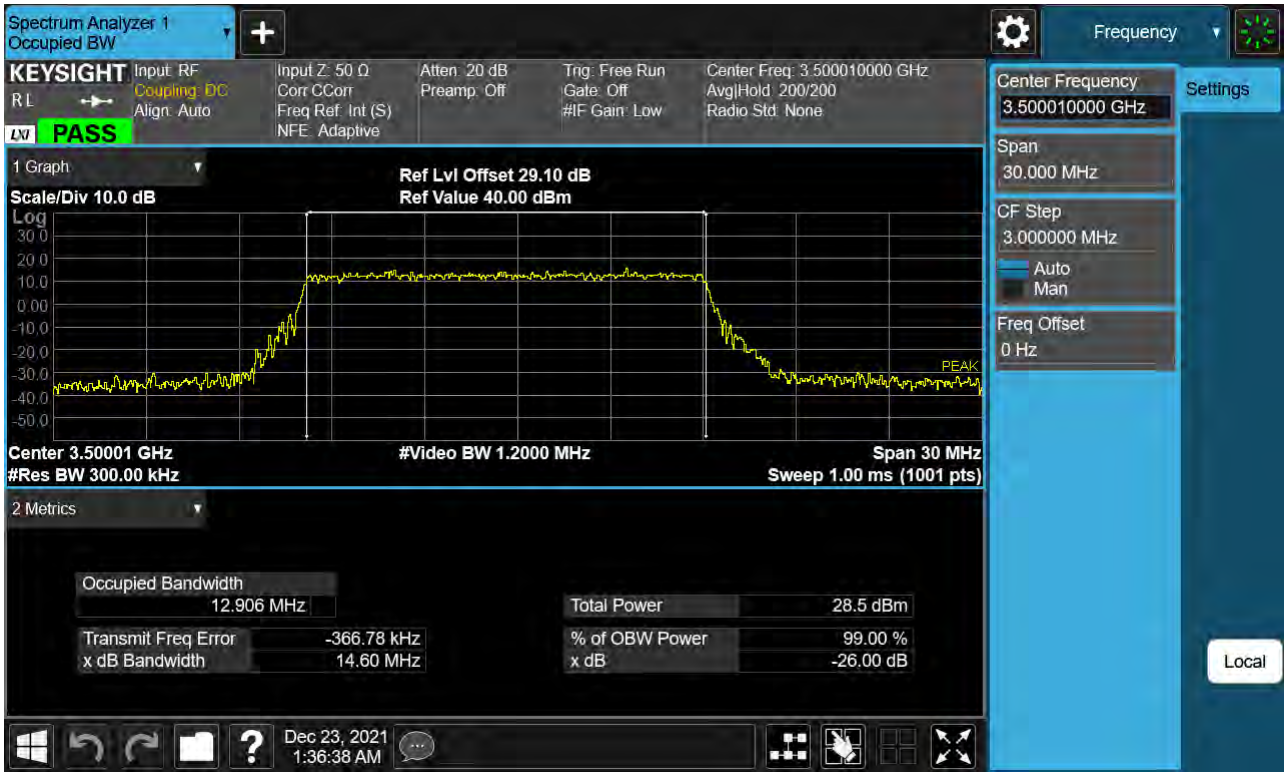
Sub6 n77. Occupied Bandwidth Plot (15 M BW Ch.633334 16QAM)



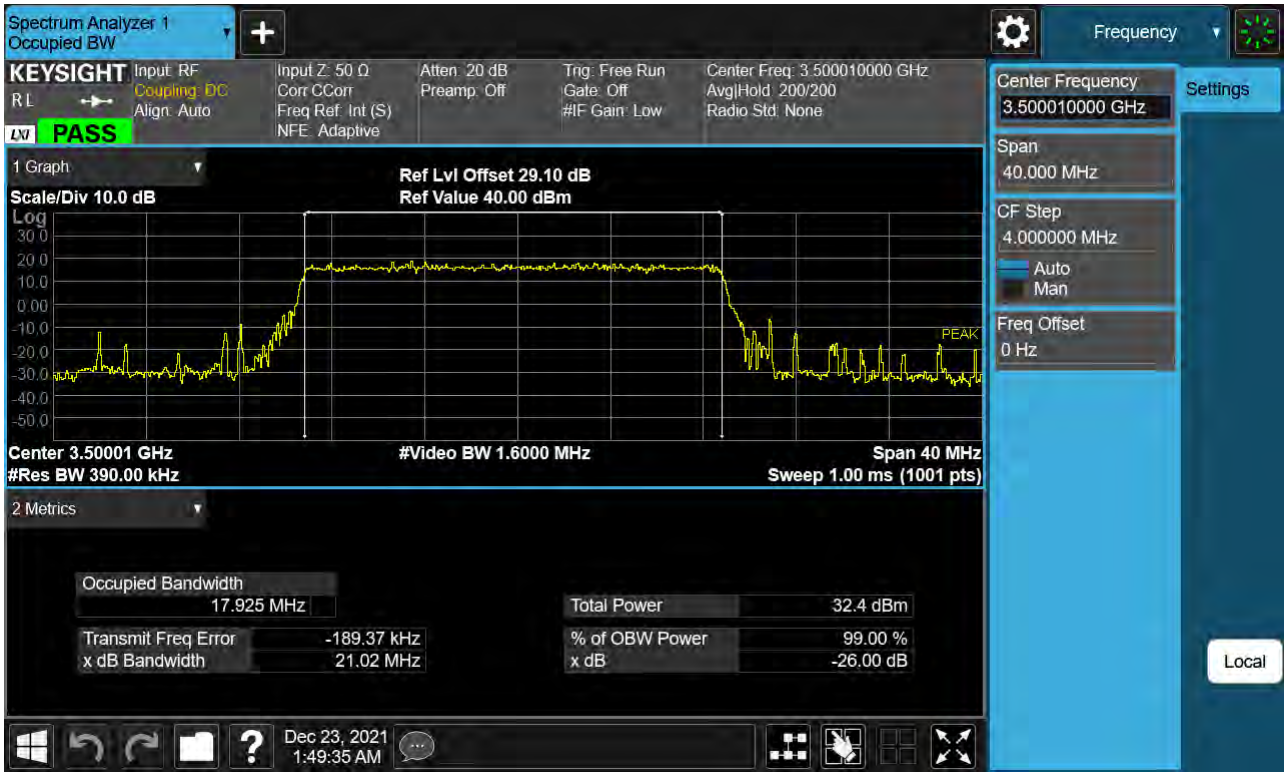
Sub6 n77. Occupied Bandwidth Plot (15 M BW Ch.633334 64QAM)



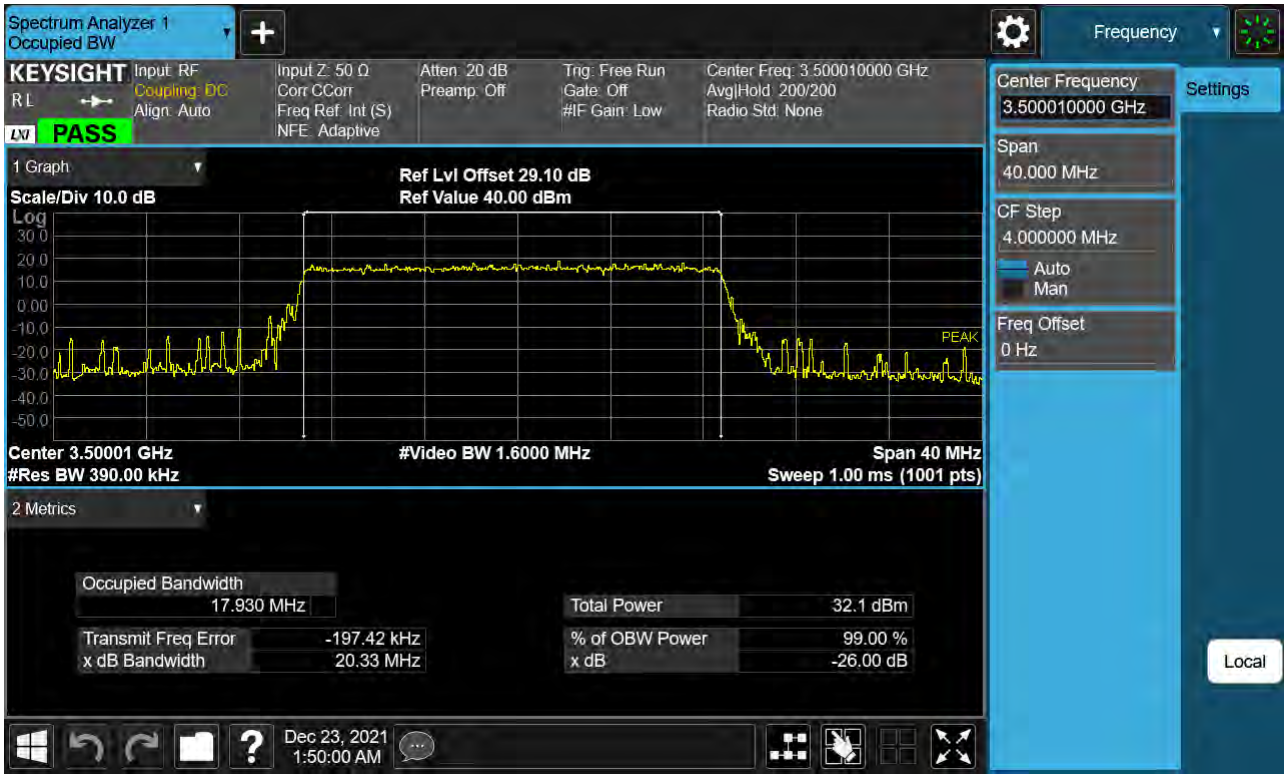
Sub6 n77. Occupied Bandwidth Plot (15 M BW Ch.633334 256QAM)



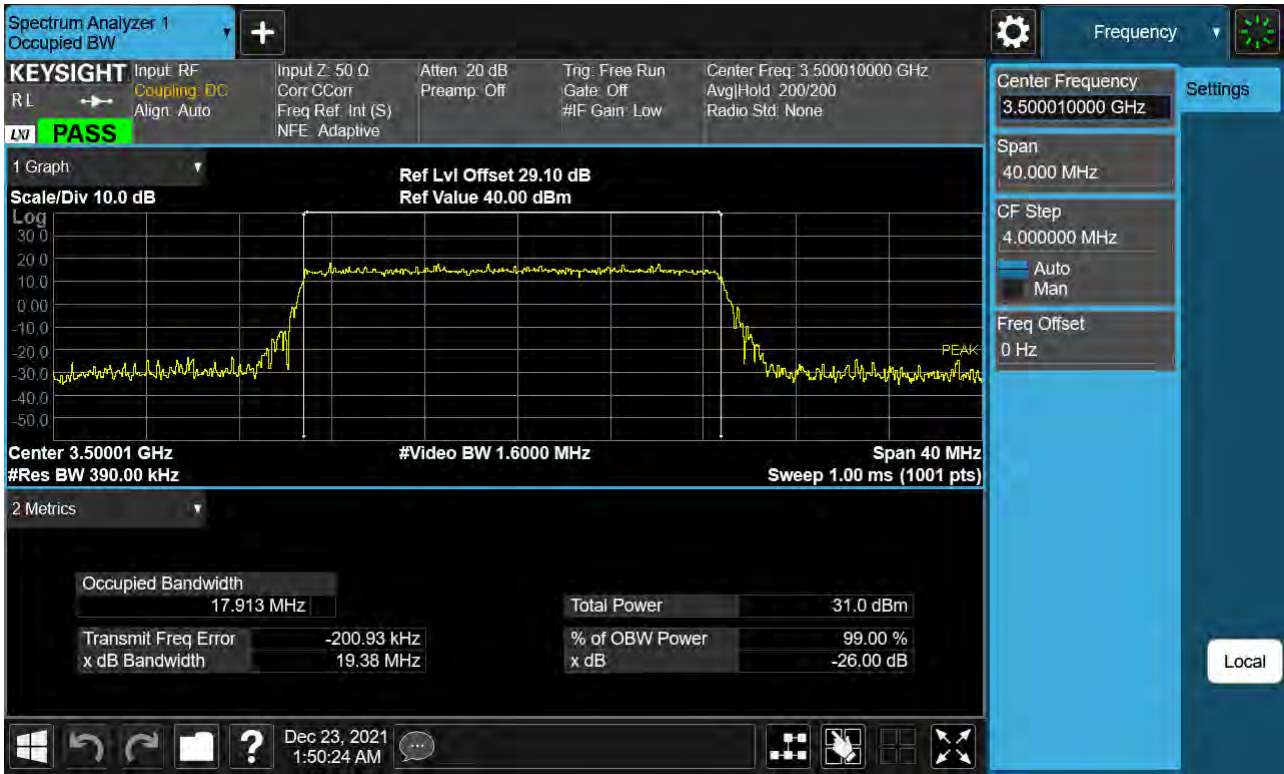
Sub6 n77. Occupied Bandwidth Plot (20 M BW Ch.633334 BPSK)



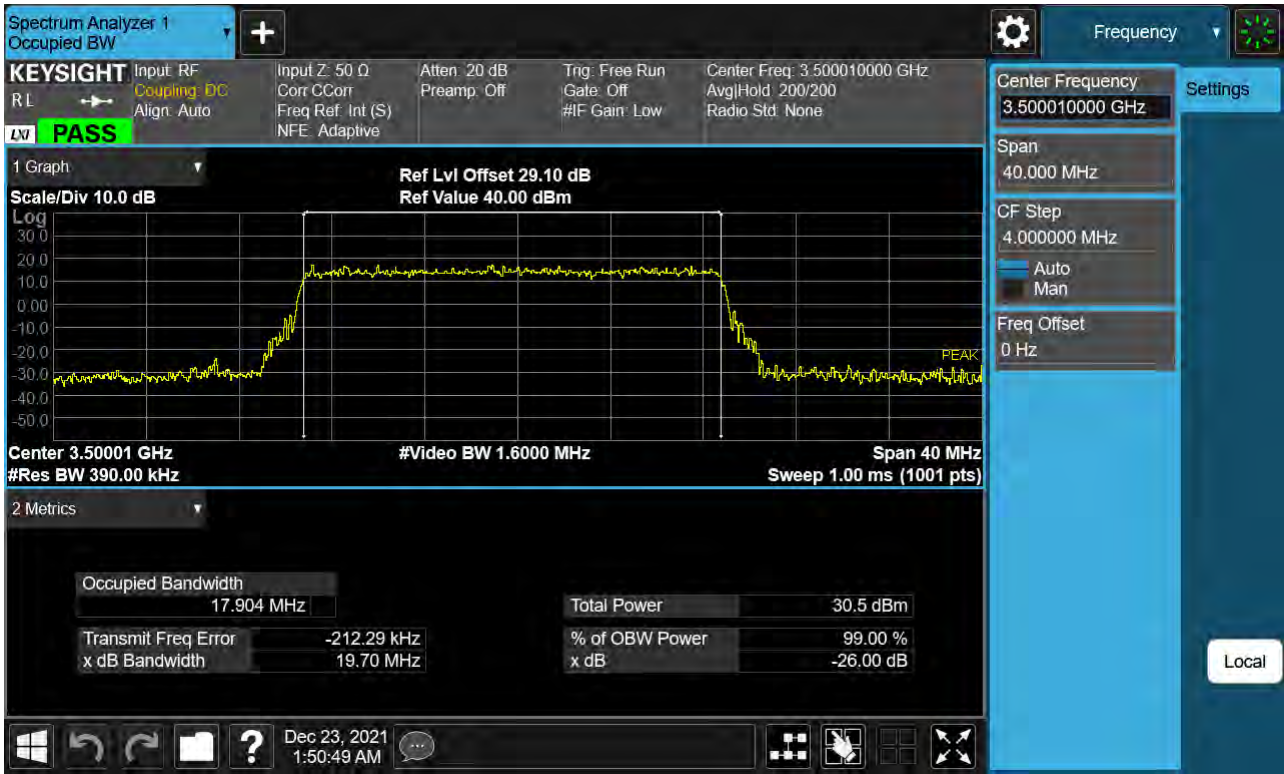
Sub6 n77. Occupied Bandwidth Plot (20 M BW Ch.633334 QPSK)



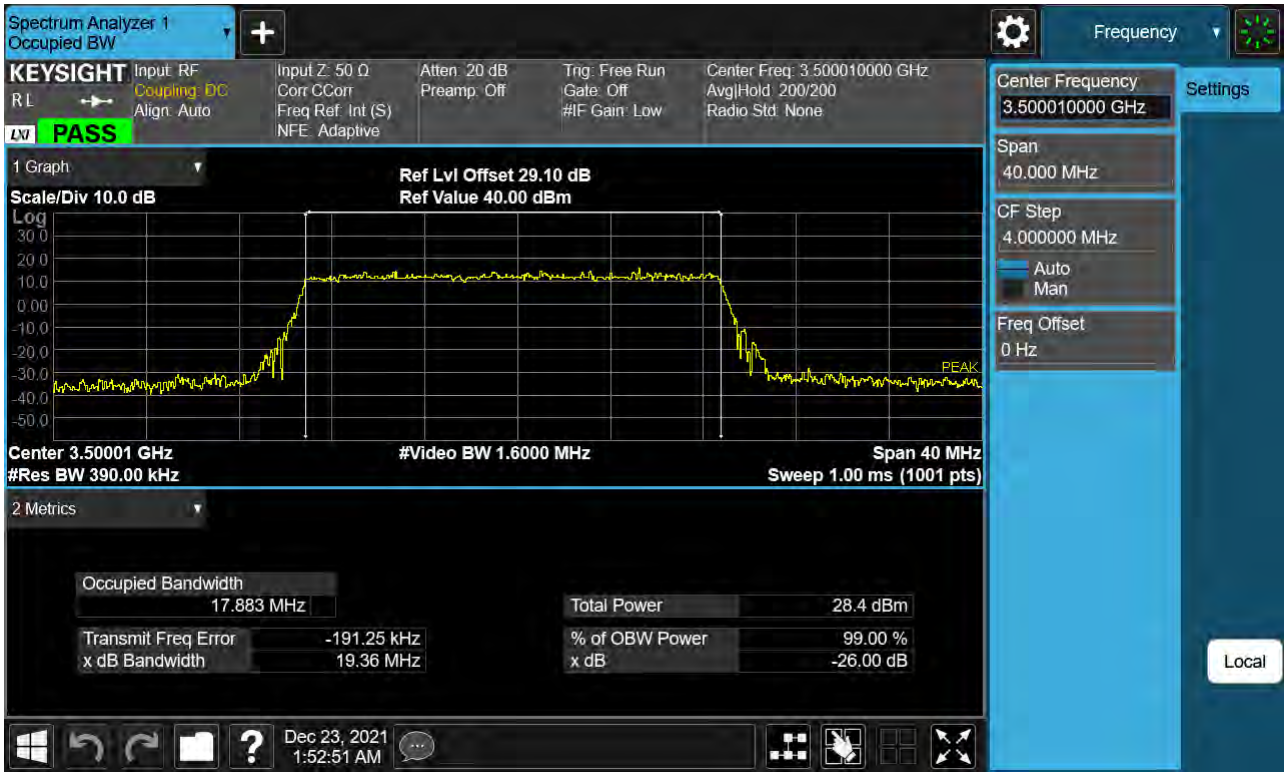
Sub6 n77. Occupied Bandwidth Plot (20 M BW Ch.633334 16QAM)



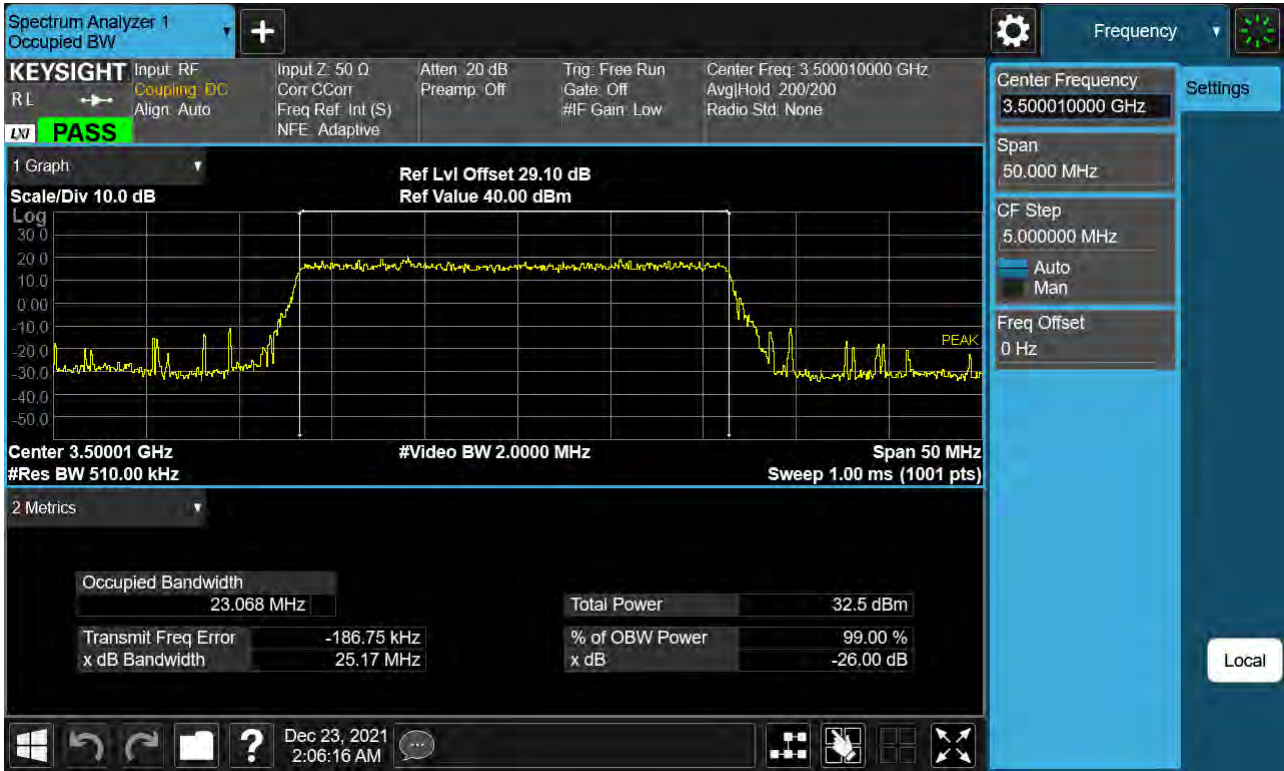
Sub6 n77. Occupied Bandwidth Plot (20 M BW Ch.633334 64QAM)



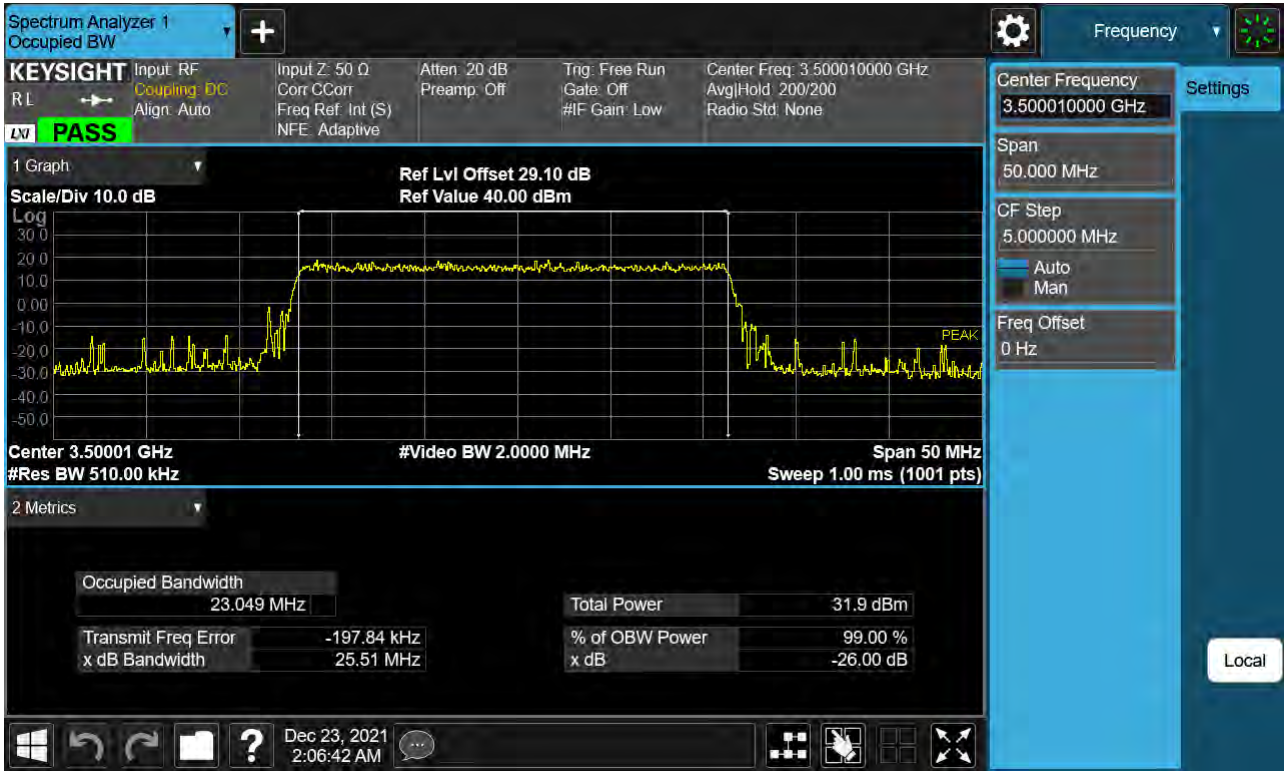
Sub6 n77. Occupied Bandwidth Plot (20 M BW Ch.633334 256QAM)



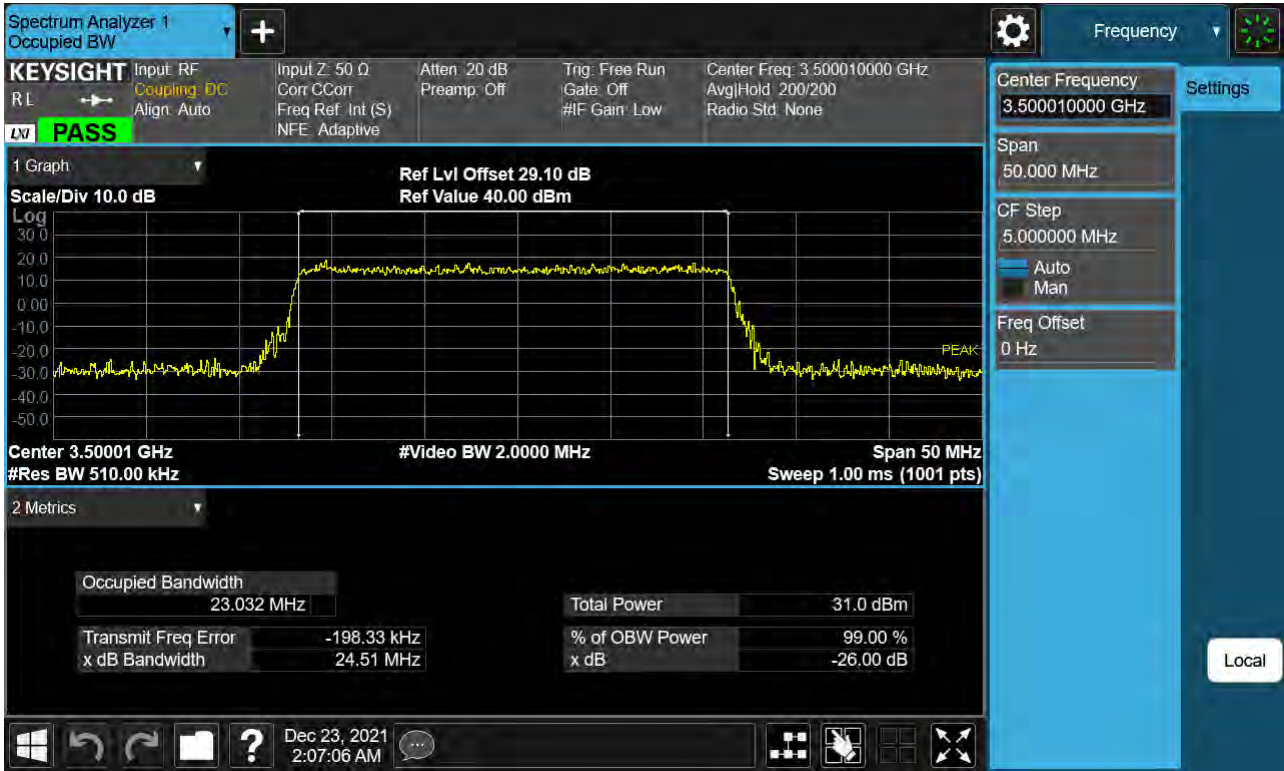
Sub6 n77. Occupied Bandwidth Plot (25 M BW Ch.633334 BPSK)



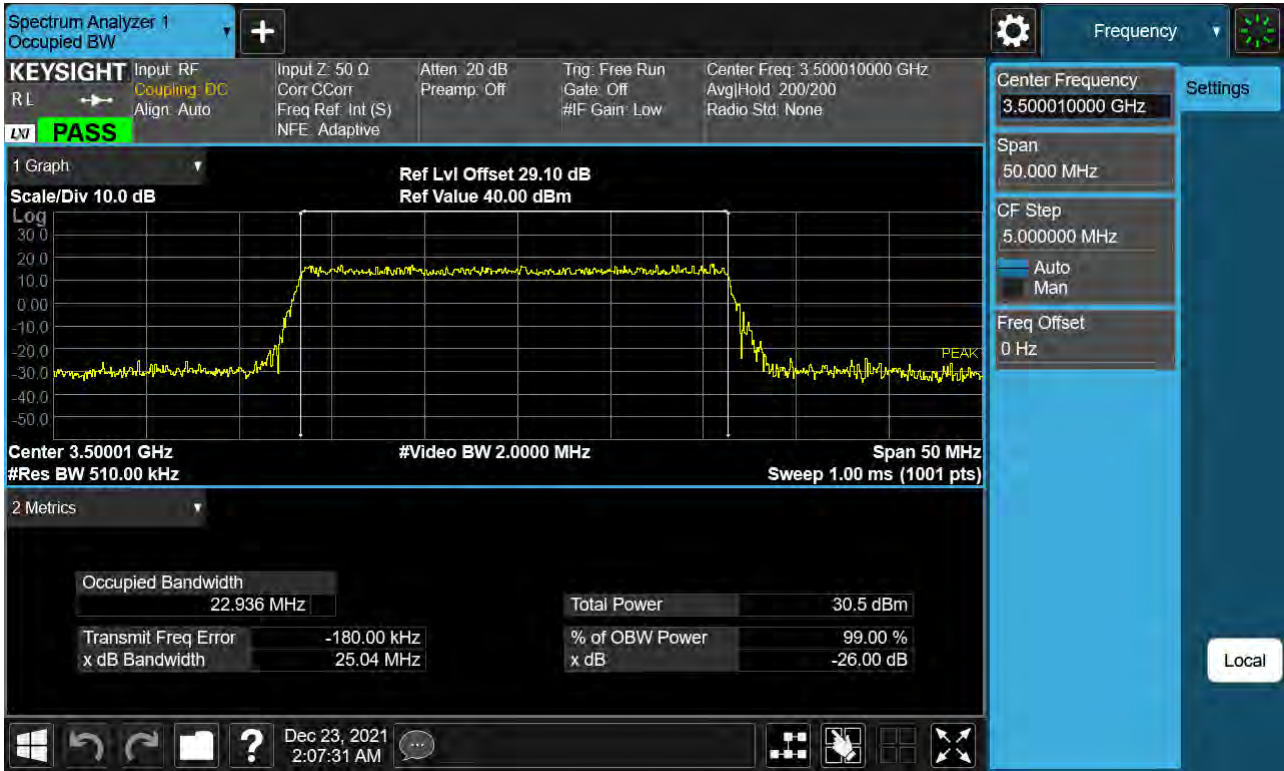
Sub6 n77. Occupied Bandwidth Plot (25 M BW Ch.633334 QPSK)



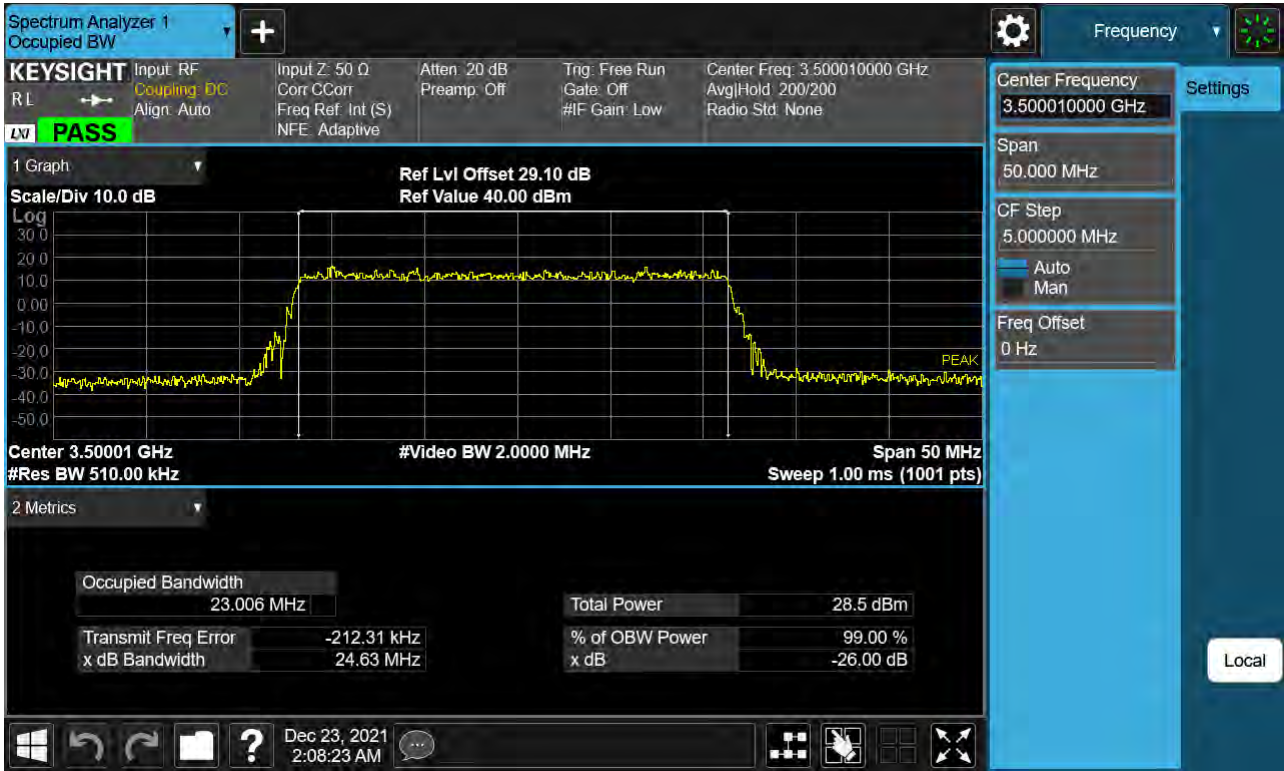
Sub6 n77. Occupied Bandwidth Plot (25 M BW Ch.633334 16QAM)



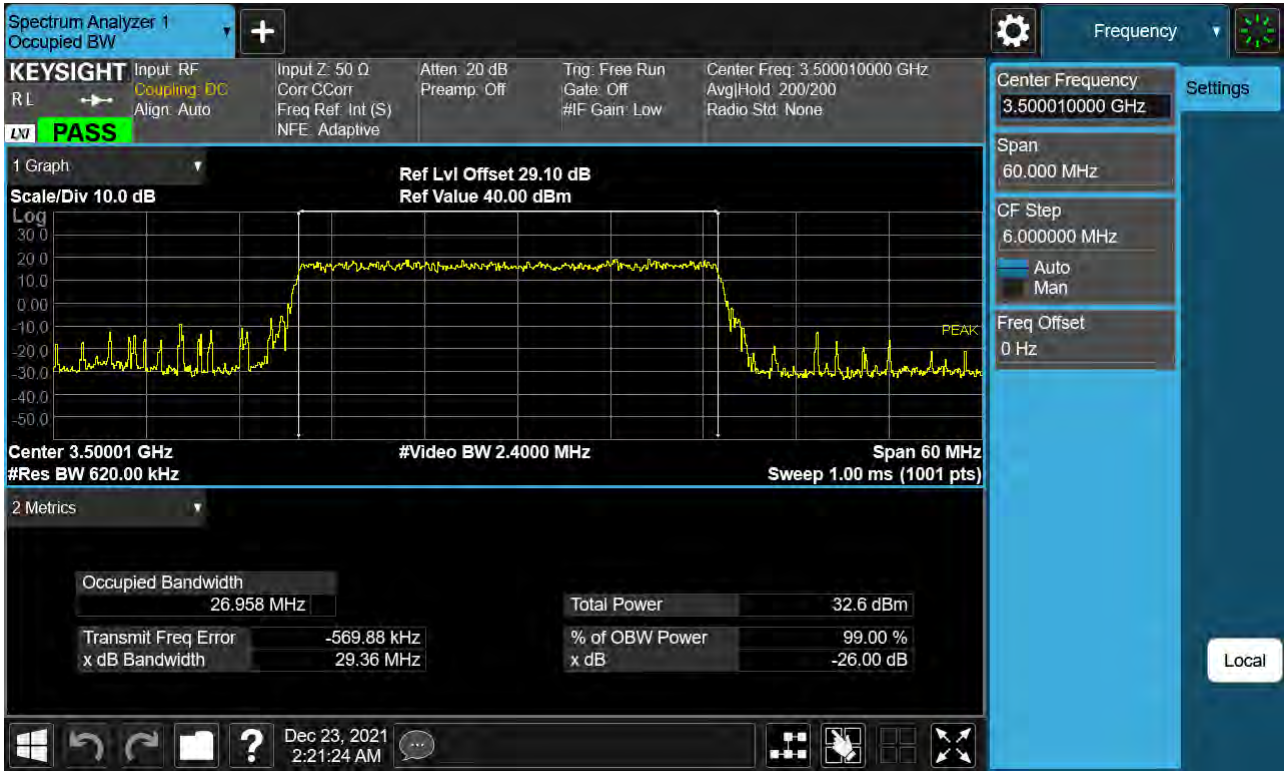
Sub6 n77. Occupied Bandwidth Plot (25 M BW Ch.633334 64QAM)



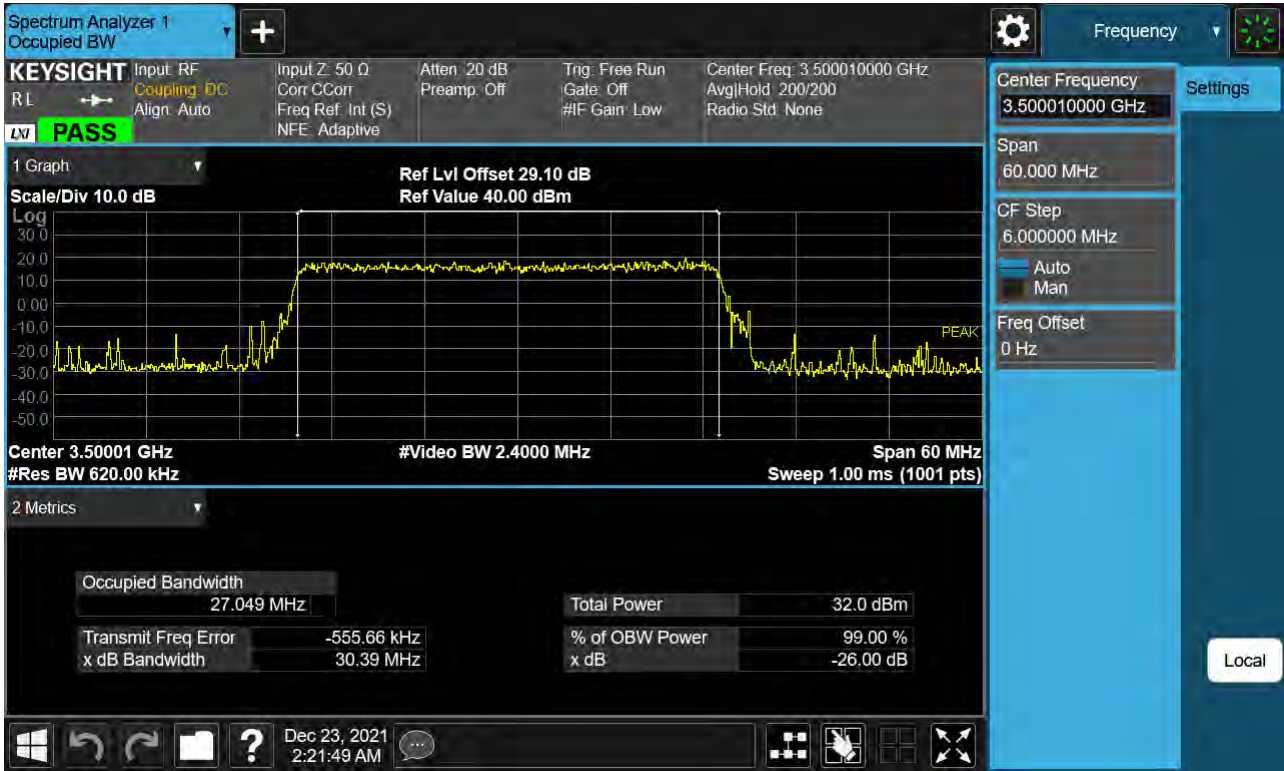
Sub6 n77. Occupied Bandwidth Plot (25 M BW Ch.633334 256QAM)



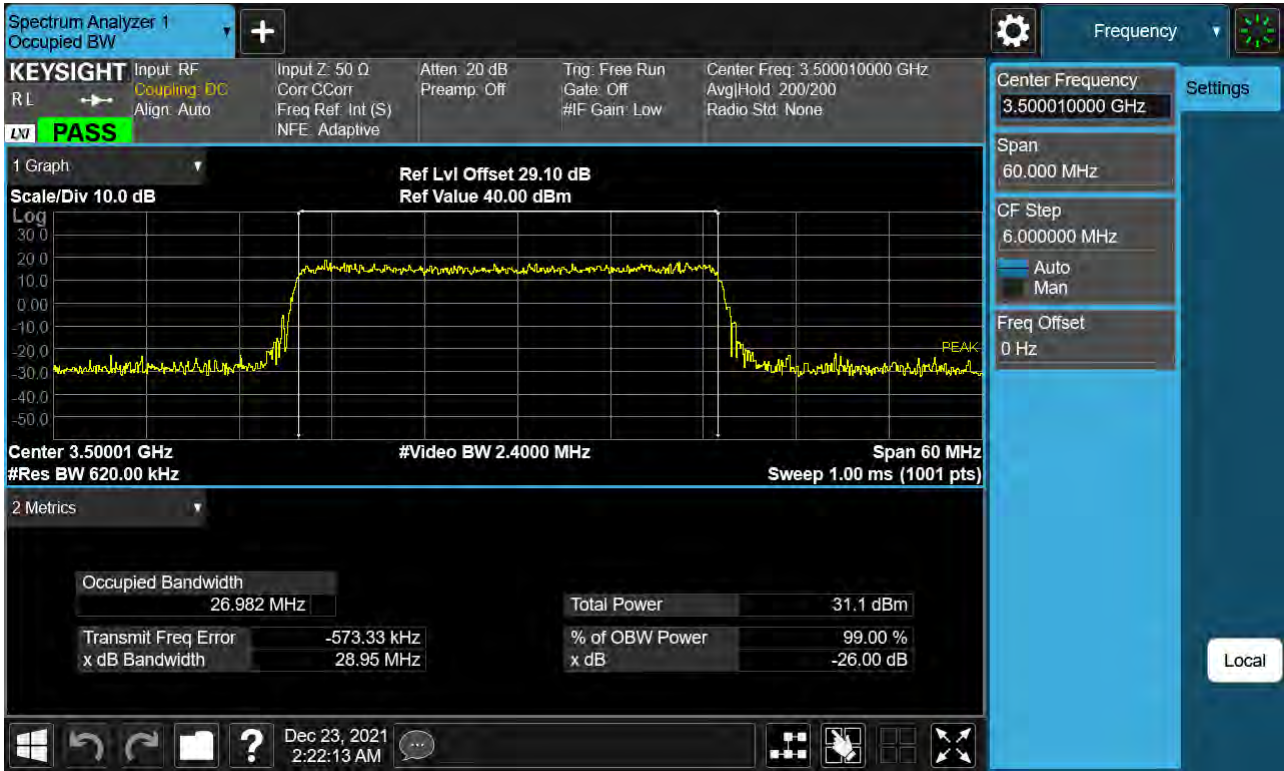
Sub6 n77. Occupied Bandwidth Plot (30 M BW Ch.633334 BPSK)



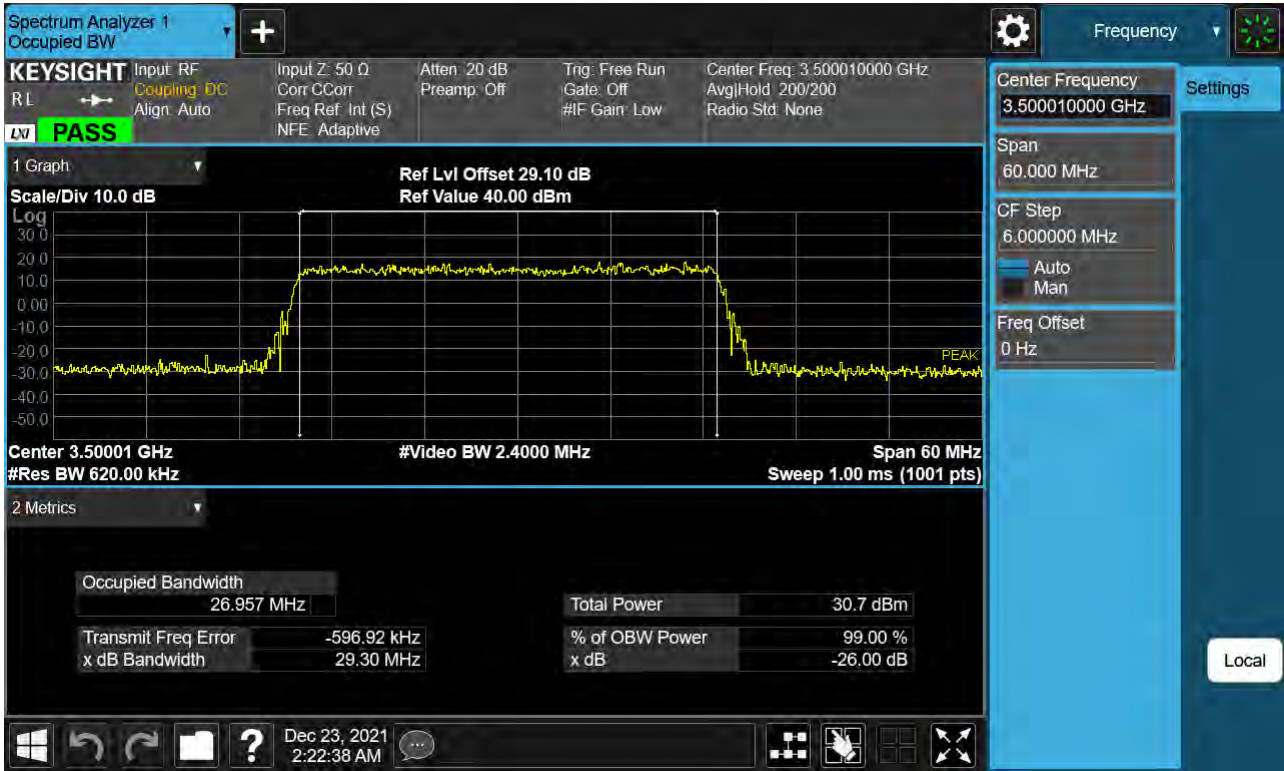
Sub6 n77. Occupied Bandwidth Plot (30 M BW Ch.633334 QPSK)



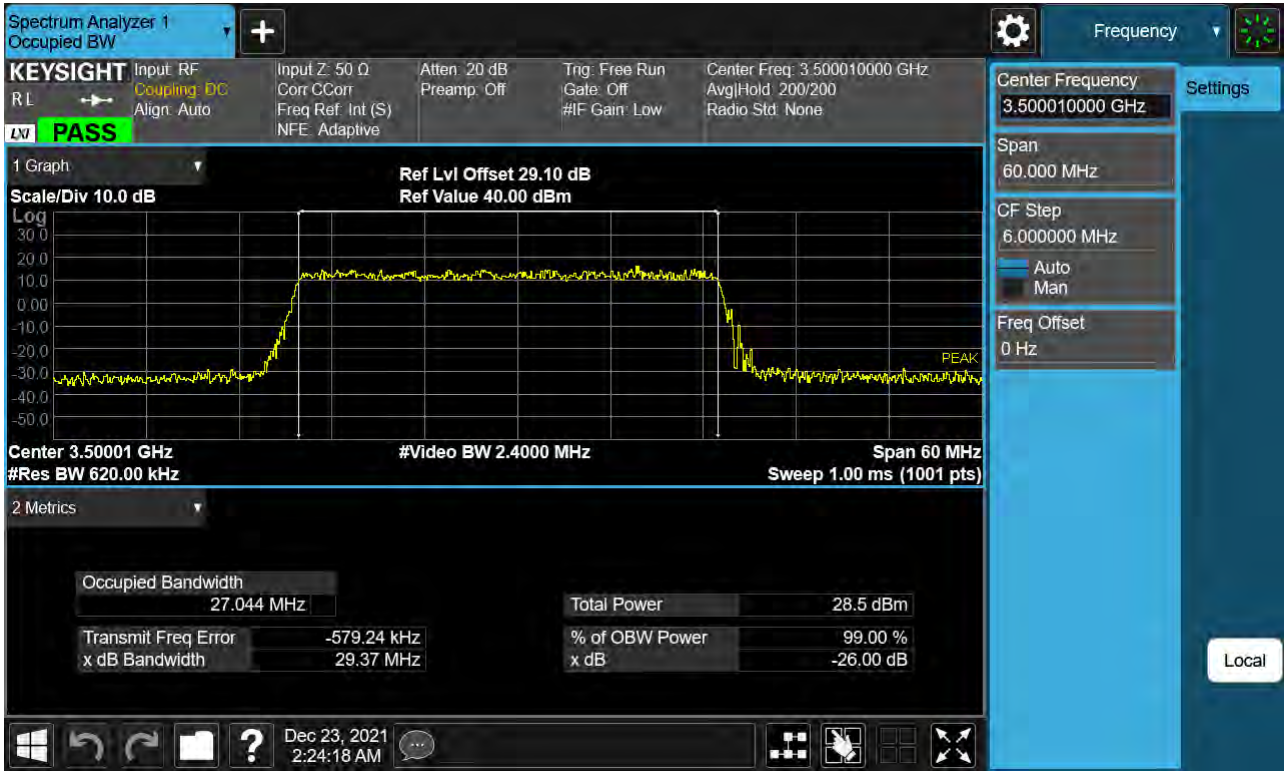
Sub6 n77. Occupied Bandwidth Plot (30 M BW Ch.633334 16QAM)



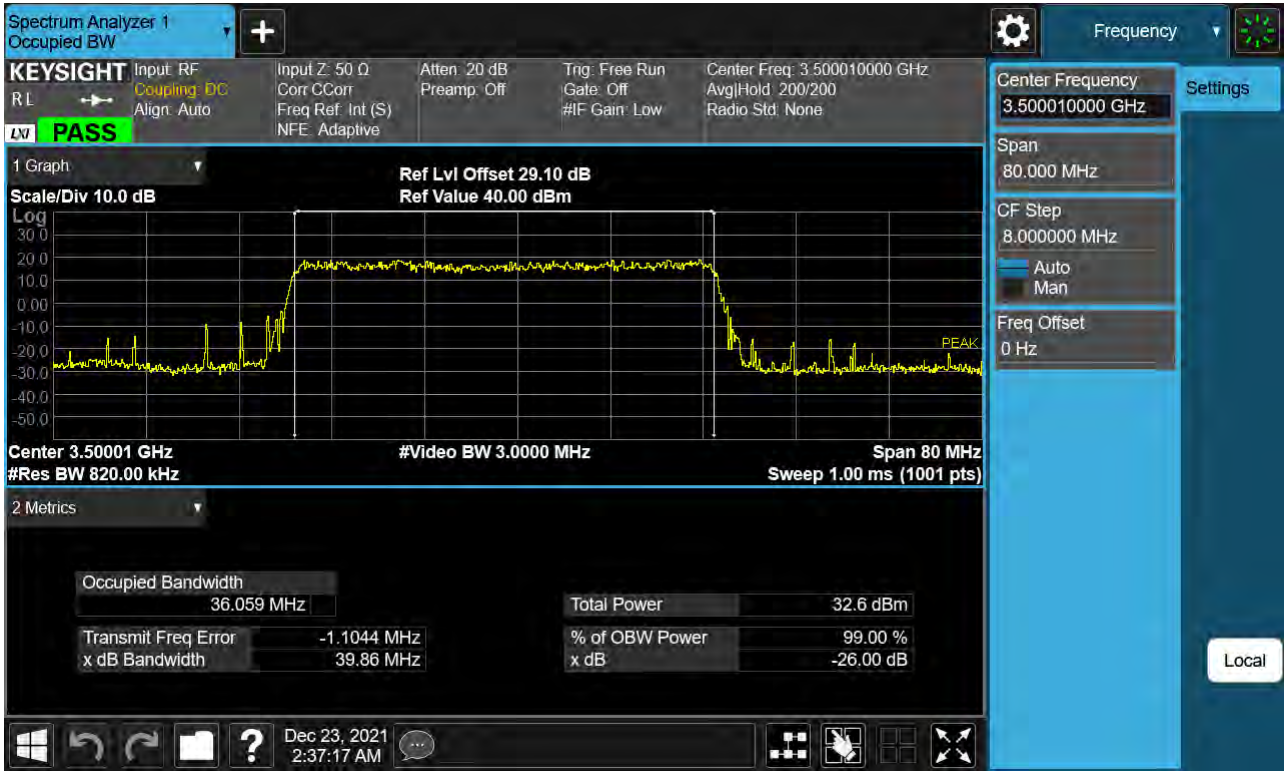
Sub6 n77. Occupied Bandwidth Plot (30 M BW Ch.633334 64QAM)



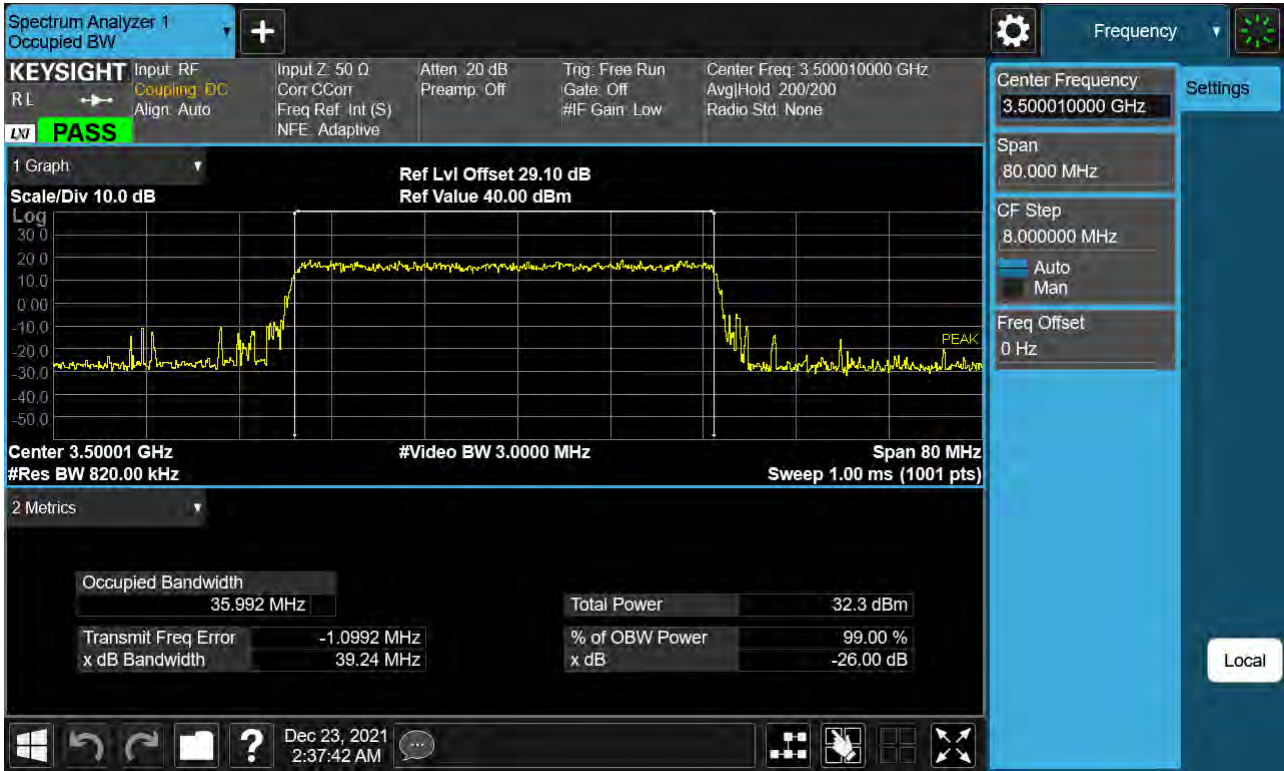
Sub6 n77. Occupied Bandwidth Plot (30 M BW Ch.633334 256QAM)



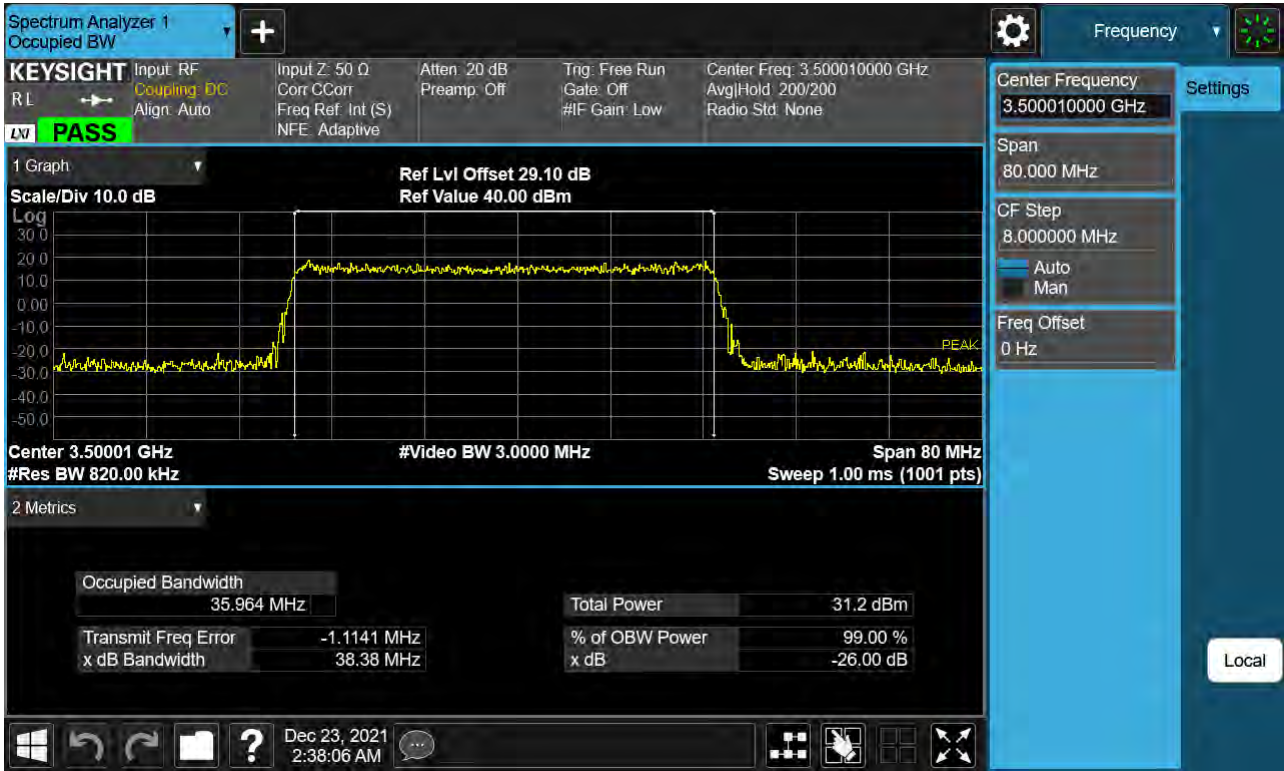
Sub6 n77. Occupied Bandwidth Plot (40 M BW Ch.633334 BPSK)



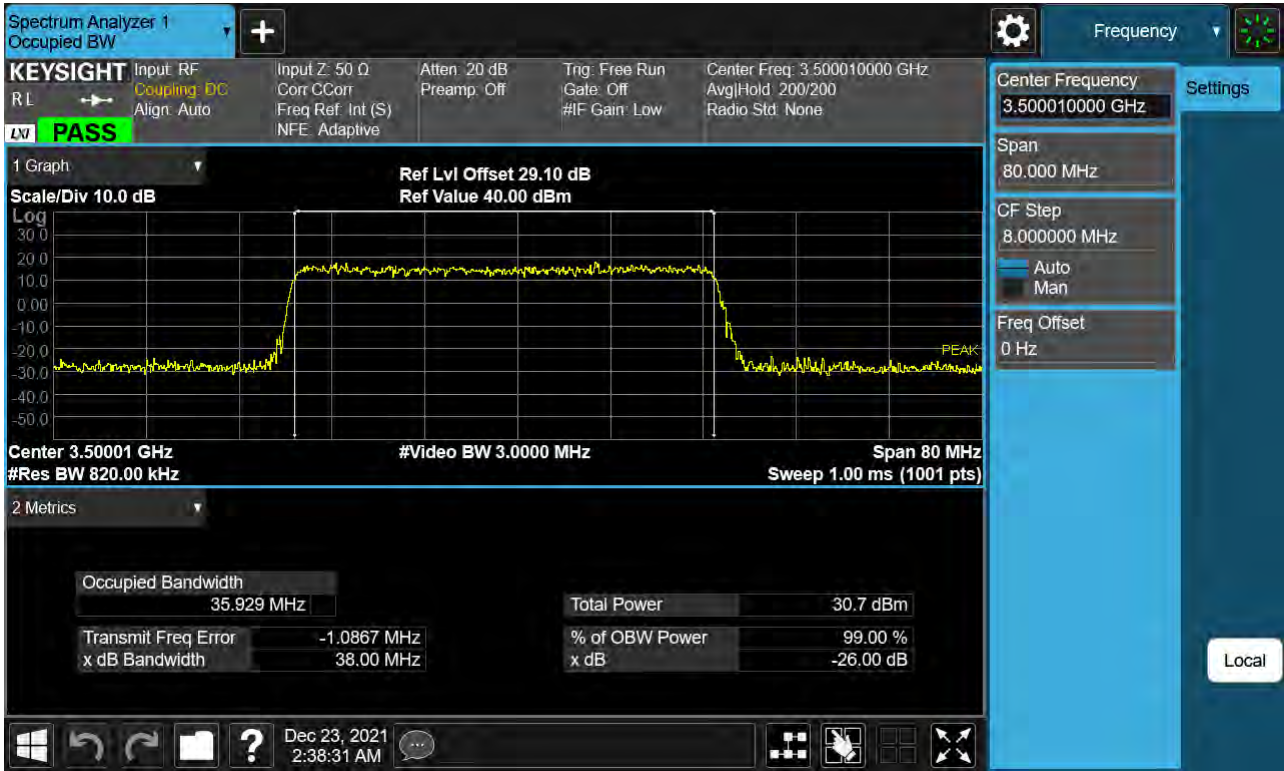
Sub6 n77. Occupied Bandwidth Plot (40 M BW Ch.633334 QPSK)



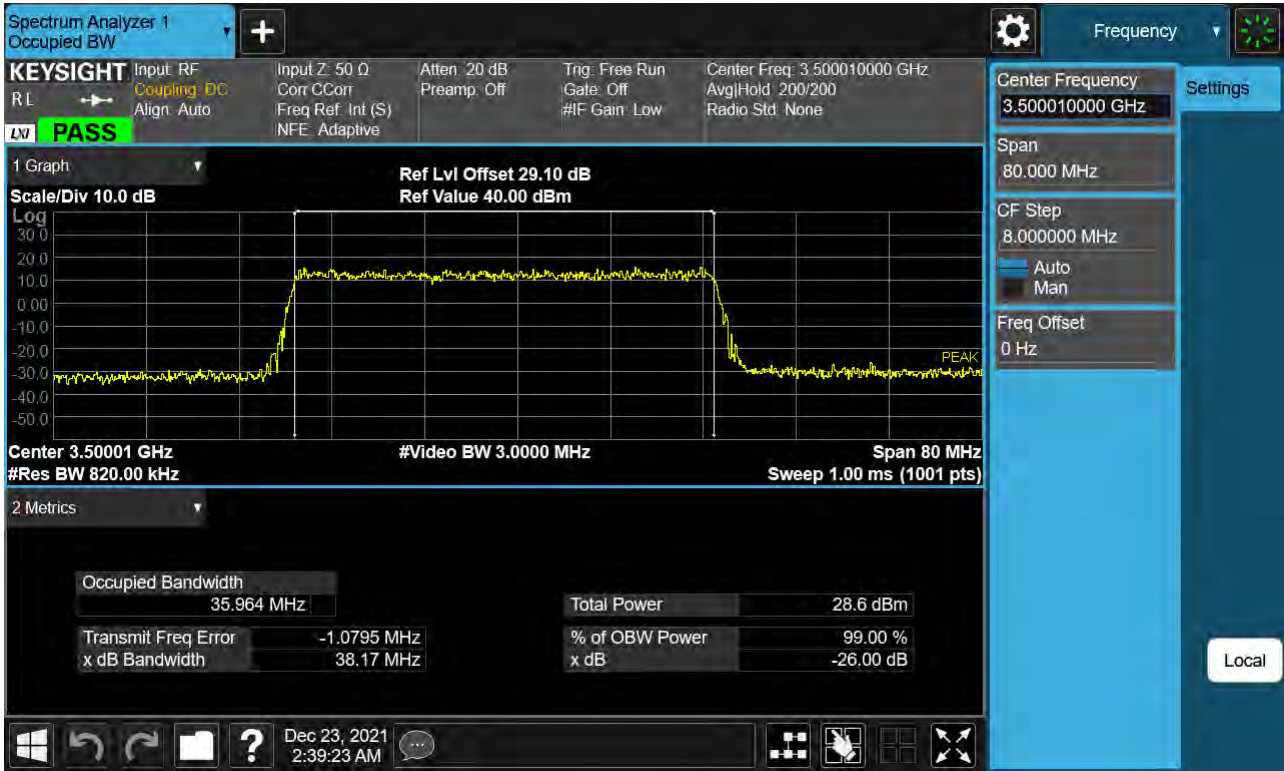
Sub6 n77. Occupied Bandwidth Plot (40 M BW Ch.633334 16QAM)



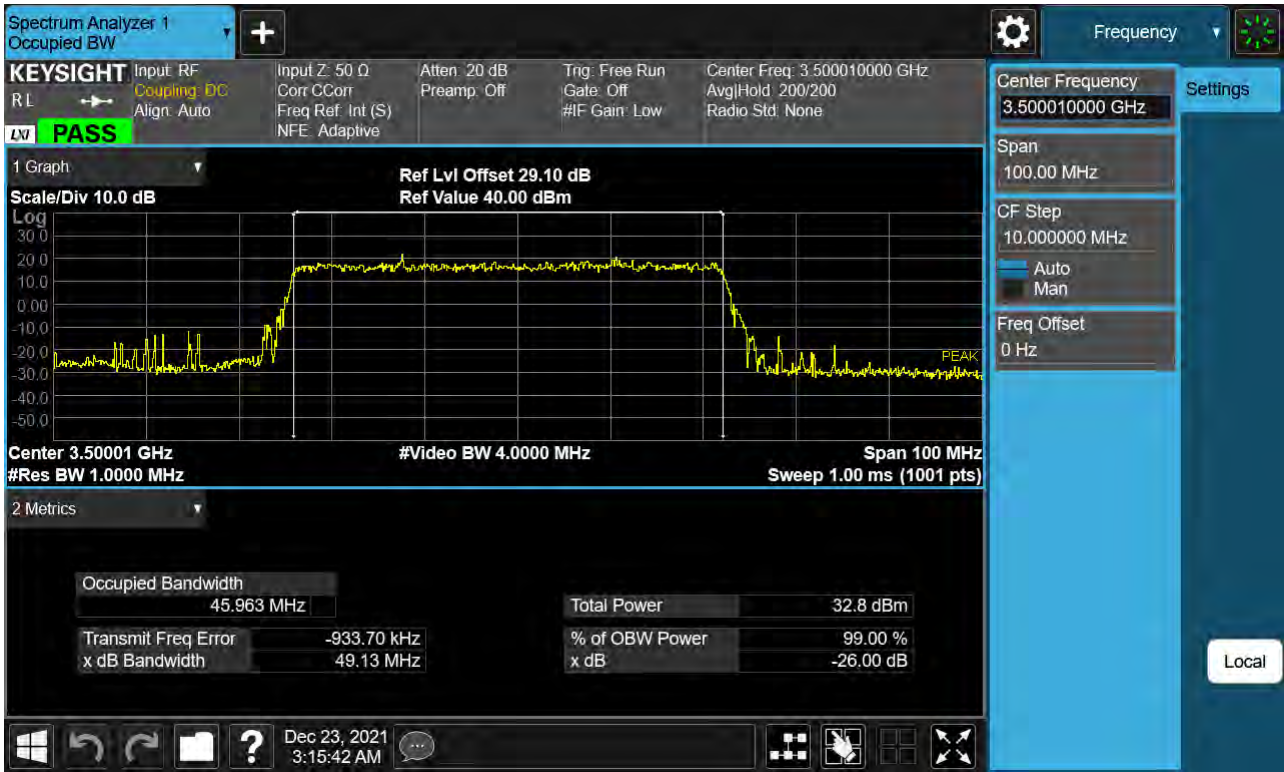
Sub6 n77. Occupied Bandwidth Plot (40 M BW Ch.633334 64QAM)



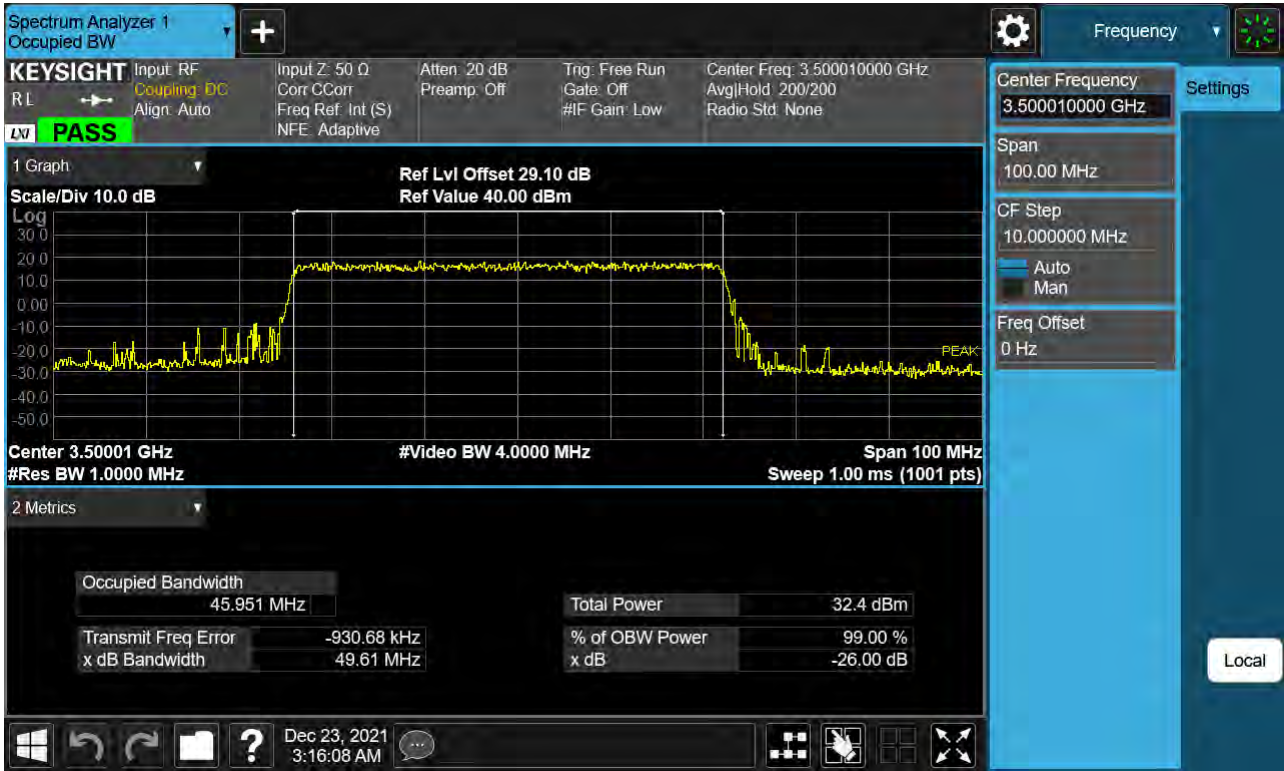
Sub6 n77. Occupied Bandwidth Plot (40 M BW Ch.633334 256QAM)



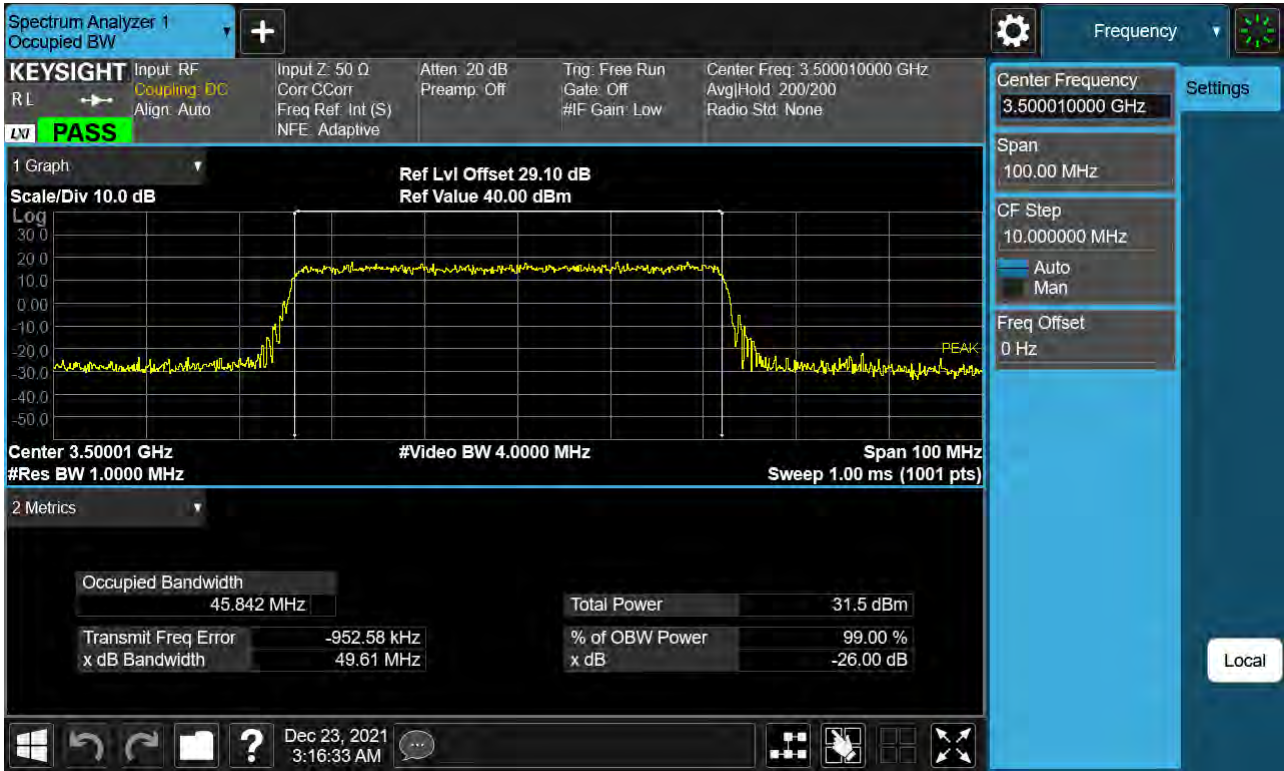
Sub6 n77. Occupied Bandwidth Plot (50 M BW Ch.633334 BPSK)



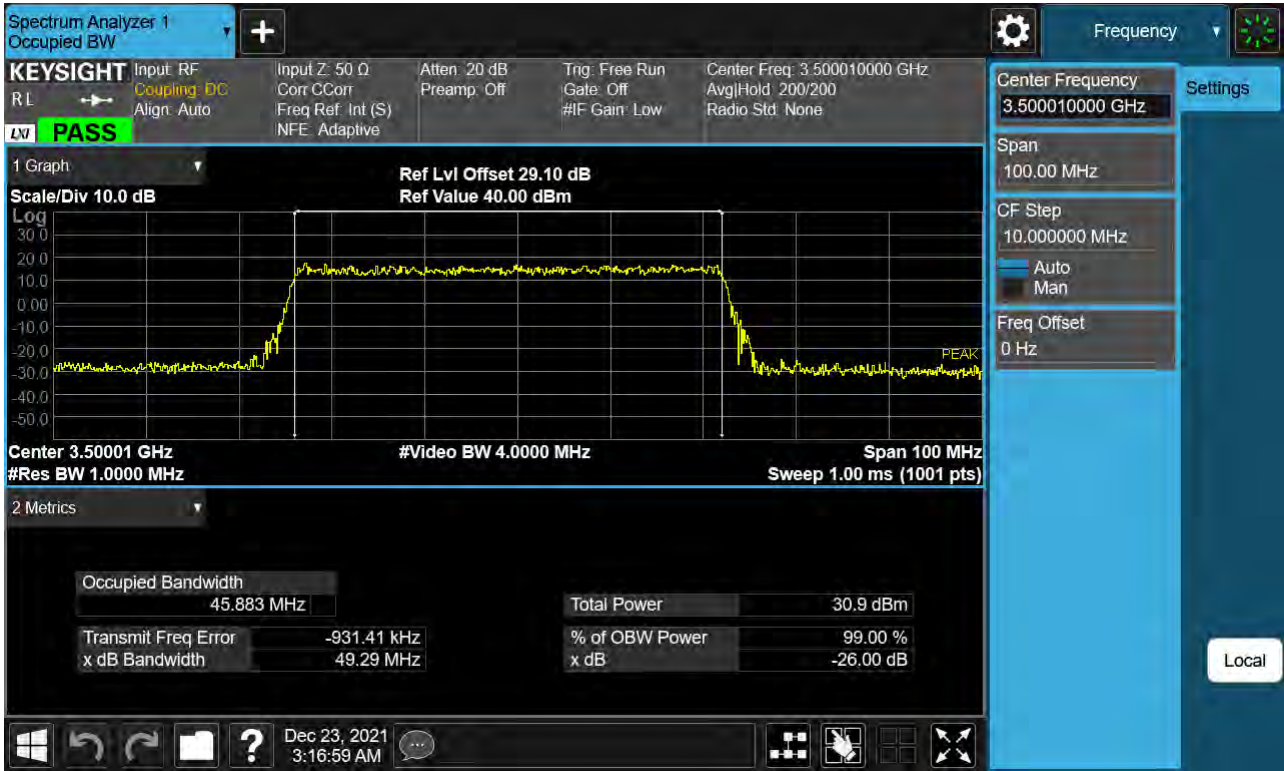
Sub6 n77. Occupied Bandwidth Plot (50 M BW Ch.633334 QPSK)



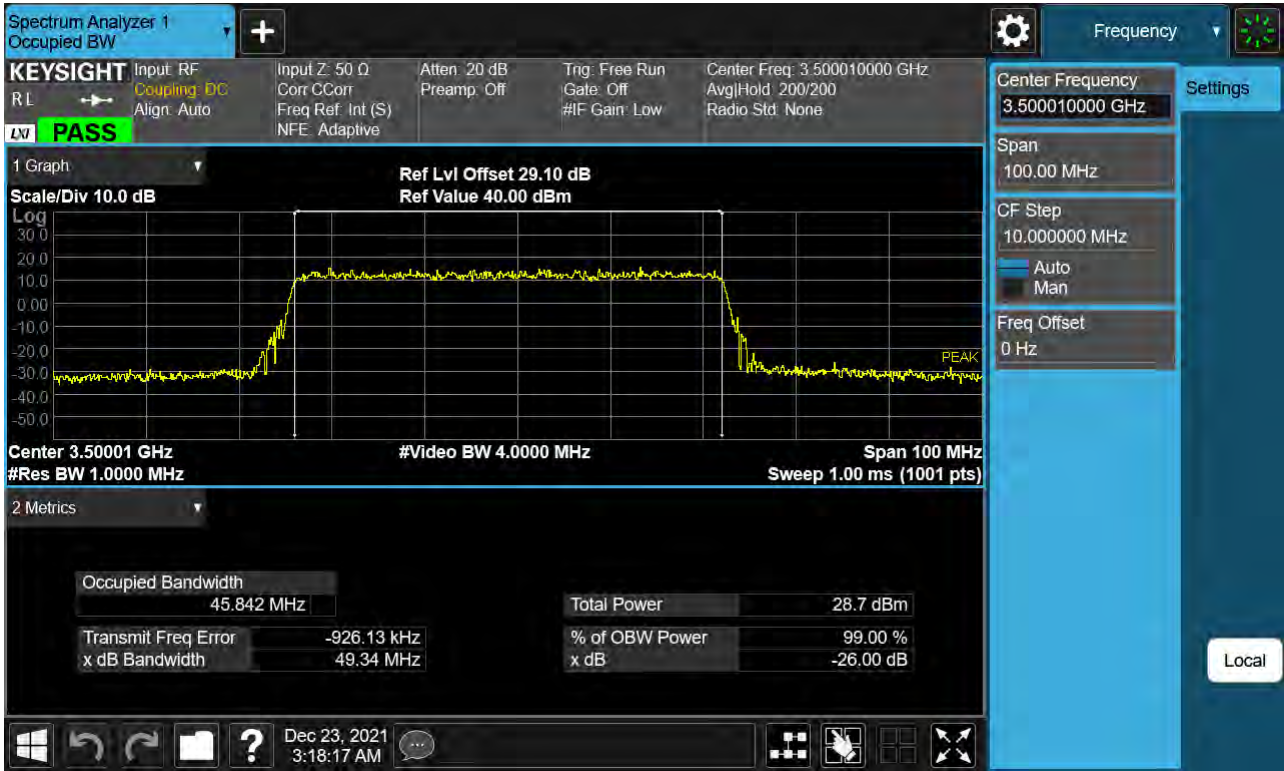
Sub6 n77. Occupied Bandwidth Plot (50 M BW Ch.633334 16QAM)



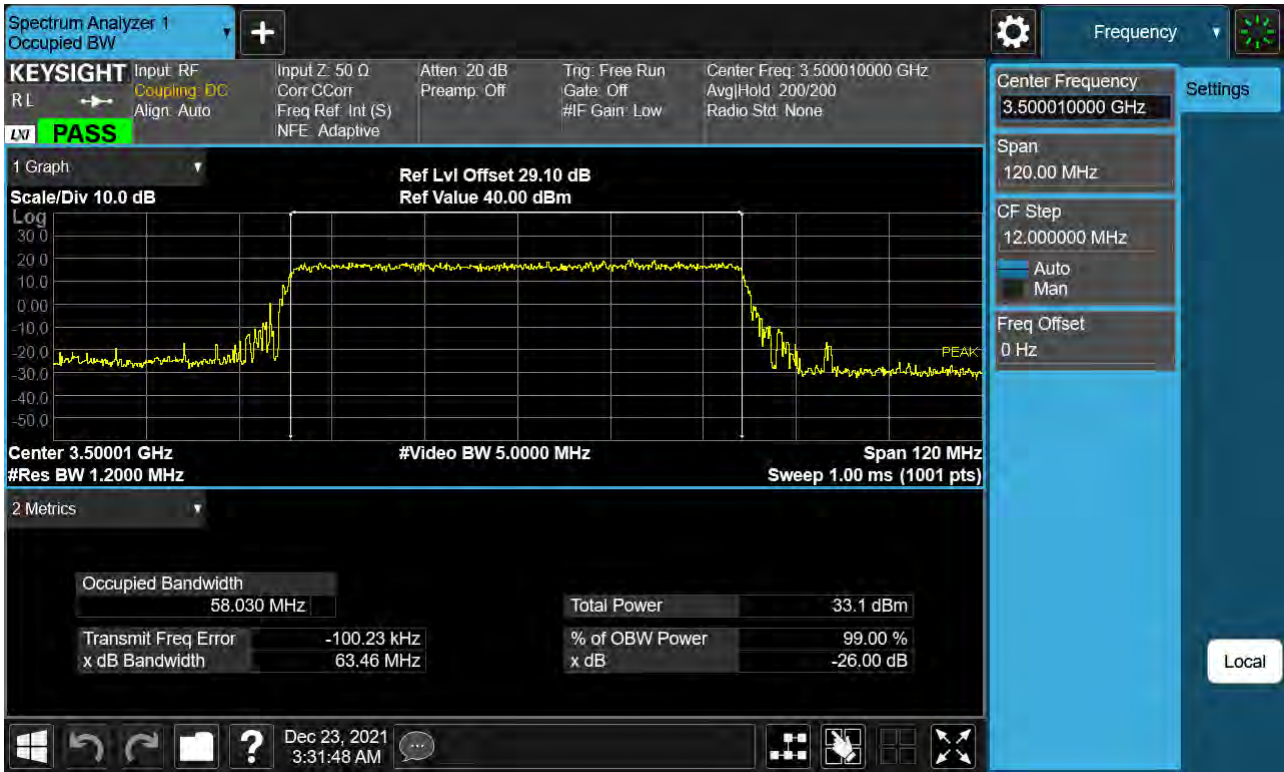
Sub6 n77. Occupied Bandwidth Plot (50 M BW Ch.633334 64QAM)



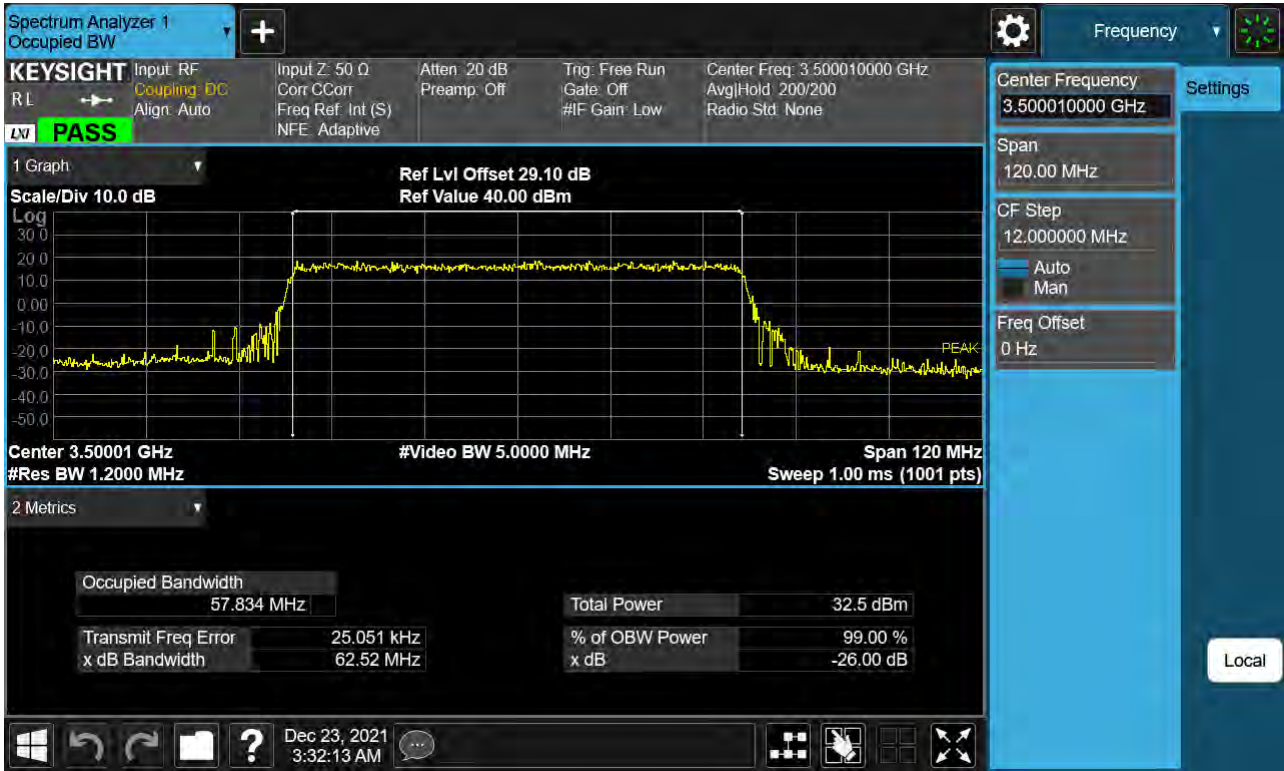
Sub6 n77. Occupied Bandwidth Plot (50 M BW Ch.633334 256QAM)



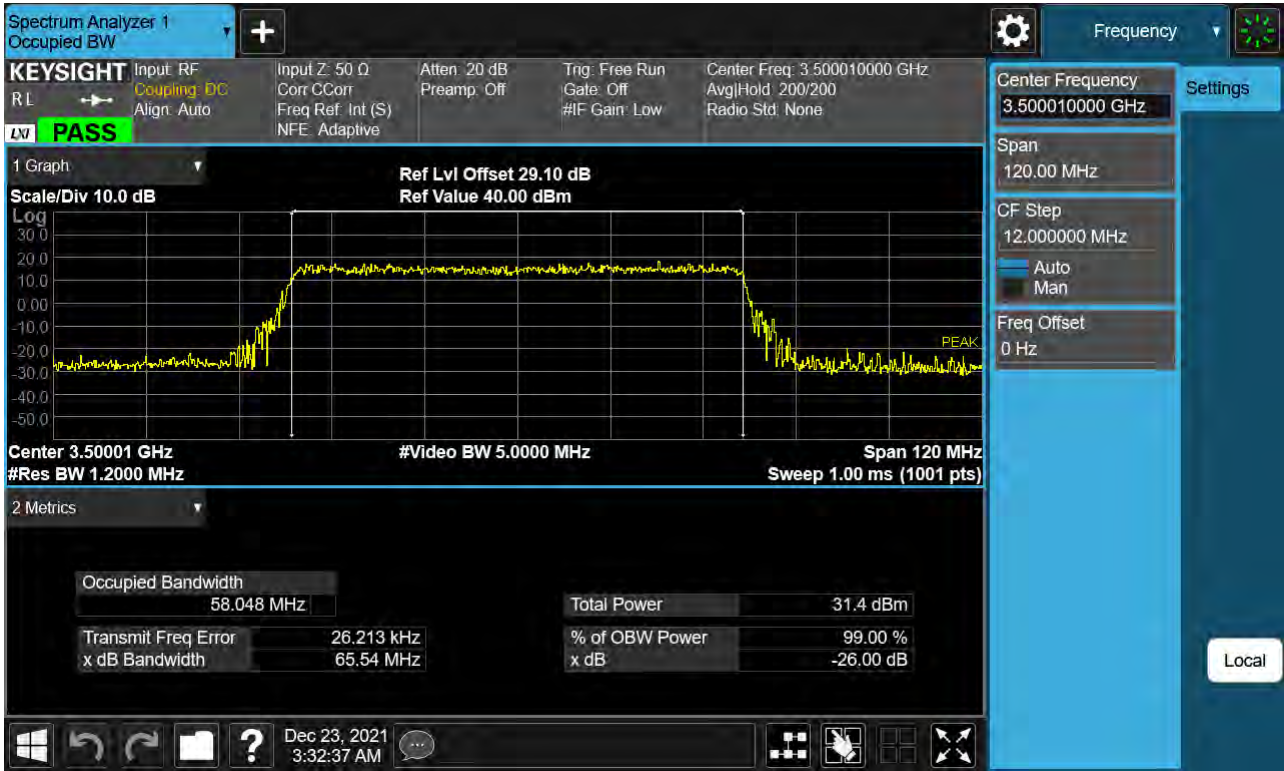
Sub6 n77. Occupied Bandwidth Plot (60 M BW Ch.633334 BPSK)



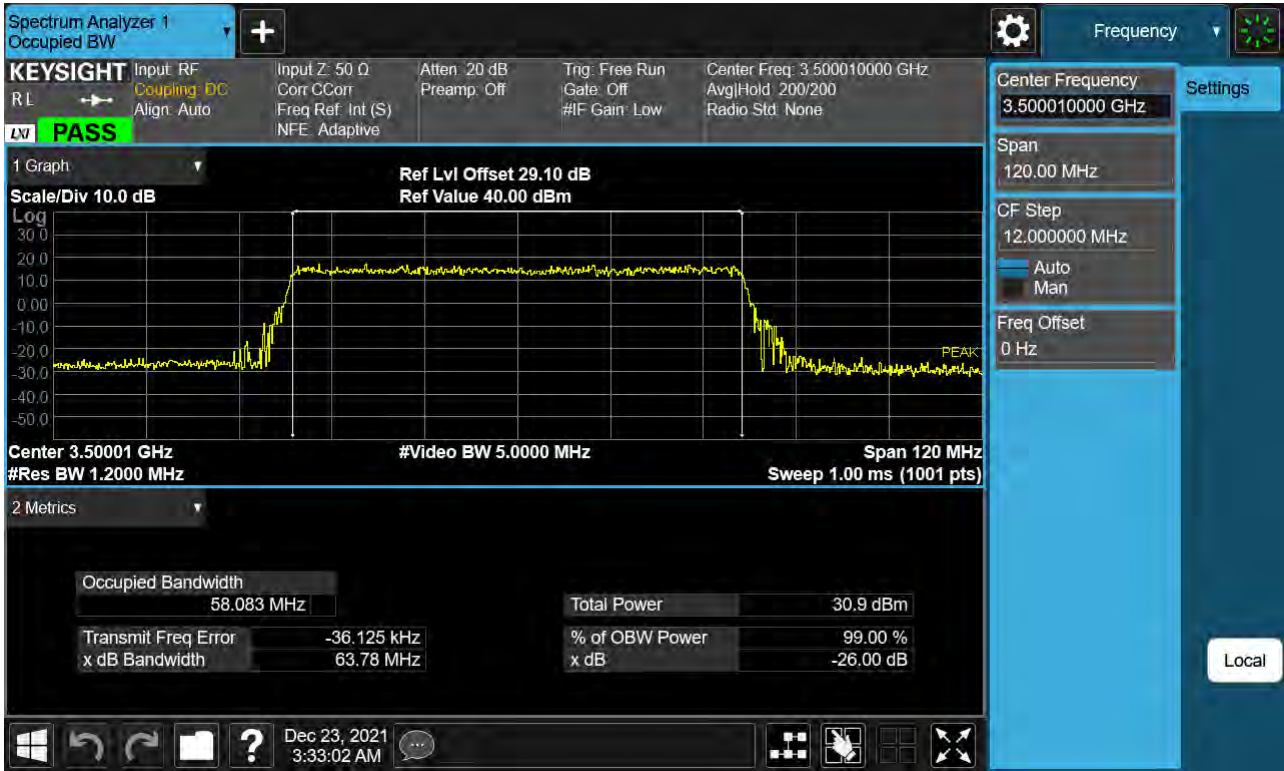
Sub6 n77. Occupied Bandwidth Plot (60 M BW Ch.633334 QPSK)



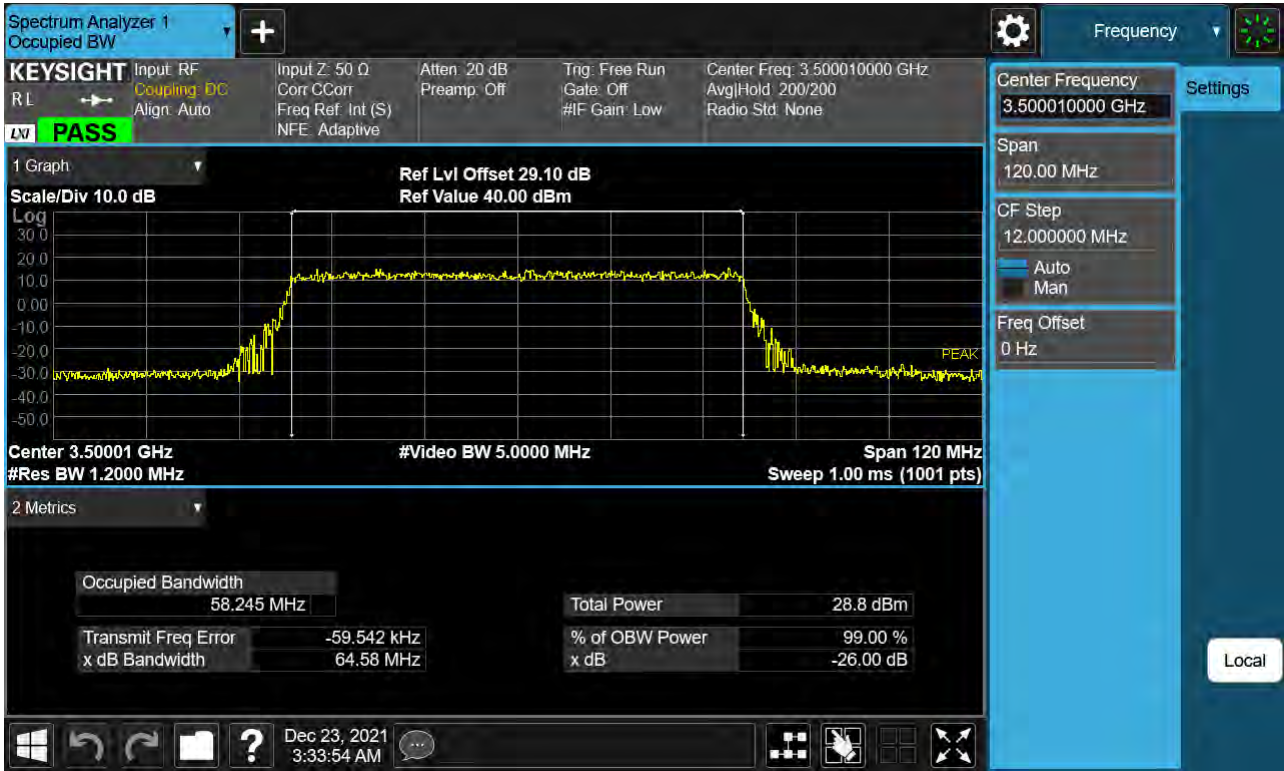
Sub6 n77. Occupied Bandwidth Plot (60 M BW Ch.633334 16QAM)



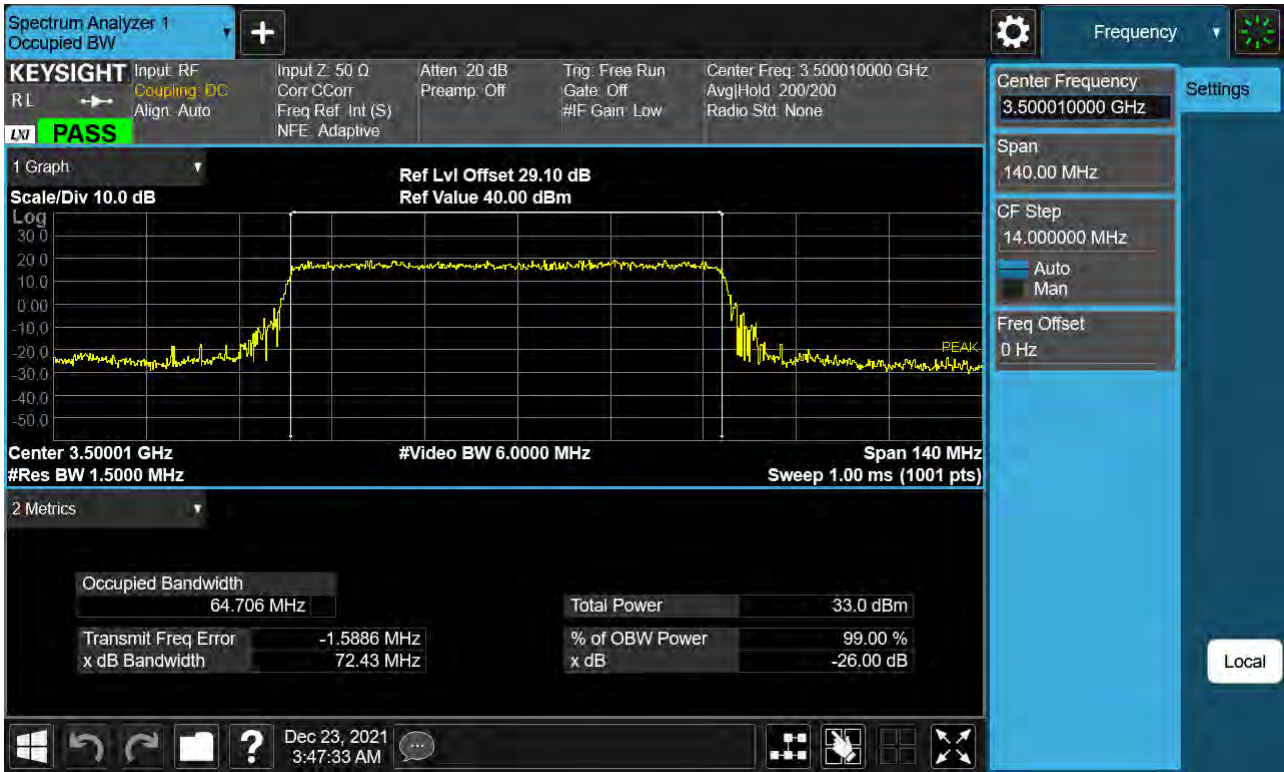
Sub6 n77. Occupied Bandwidth Plot (60 M BW Ch.633334 64QAM)



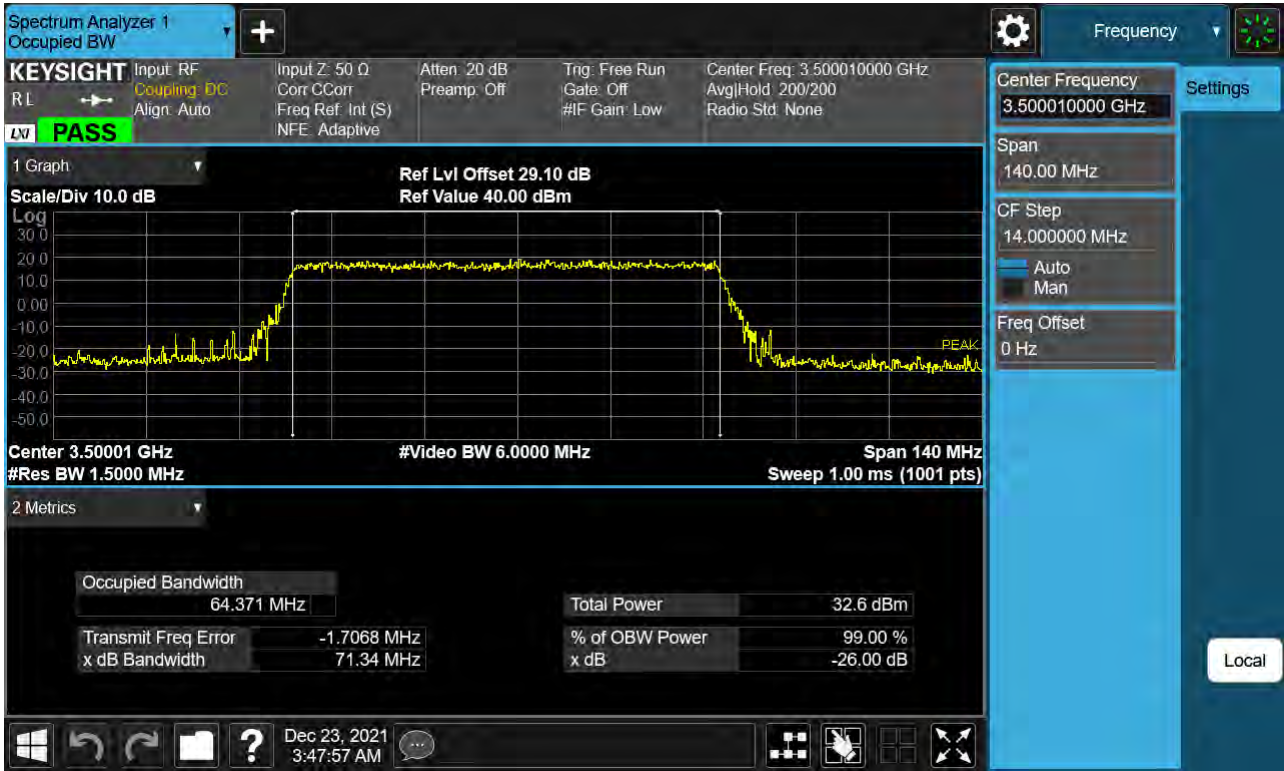
Sub6 n77. Occupied Bandwidth Plot (60 M BW Ch.633334 256QAM)



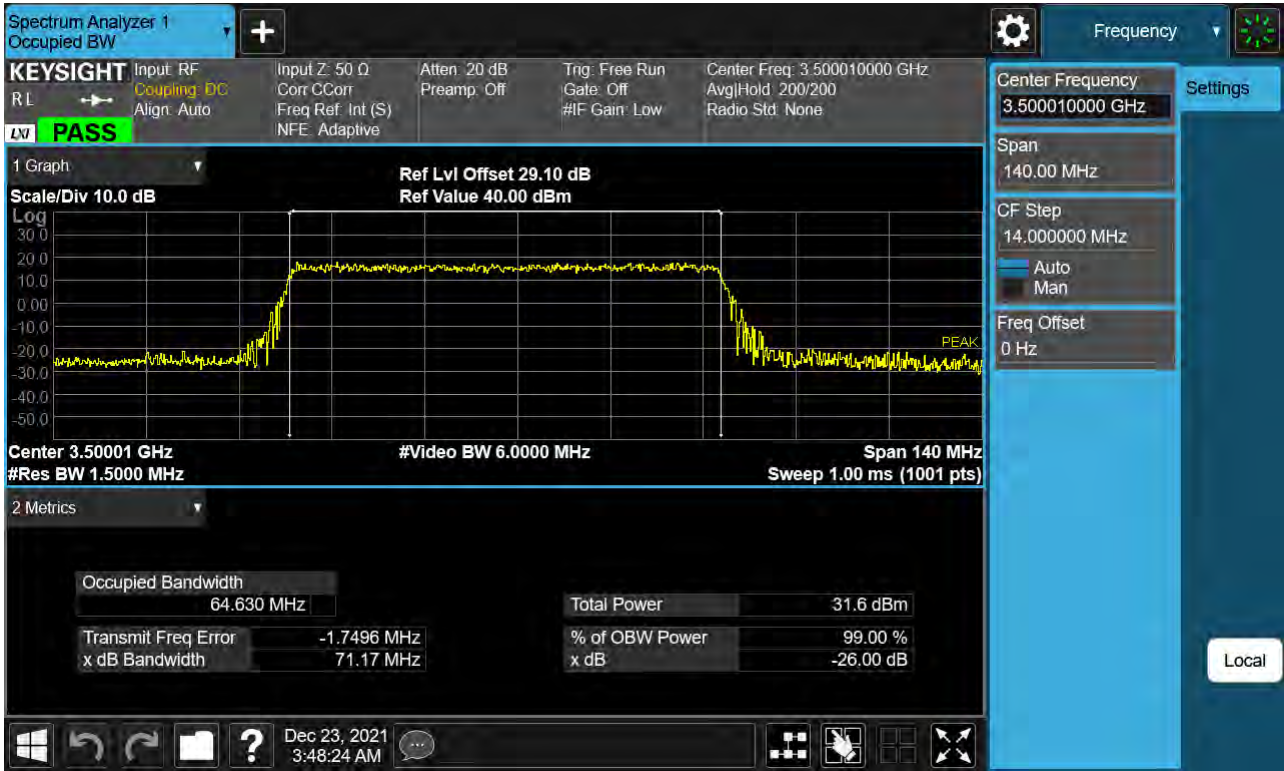
Sub6 n77. Occupied Bandwidth Plot (70 M BW Ch.633334 BPSK)



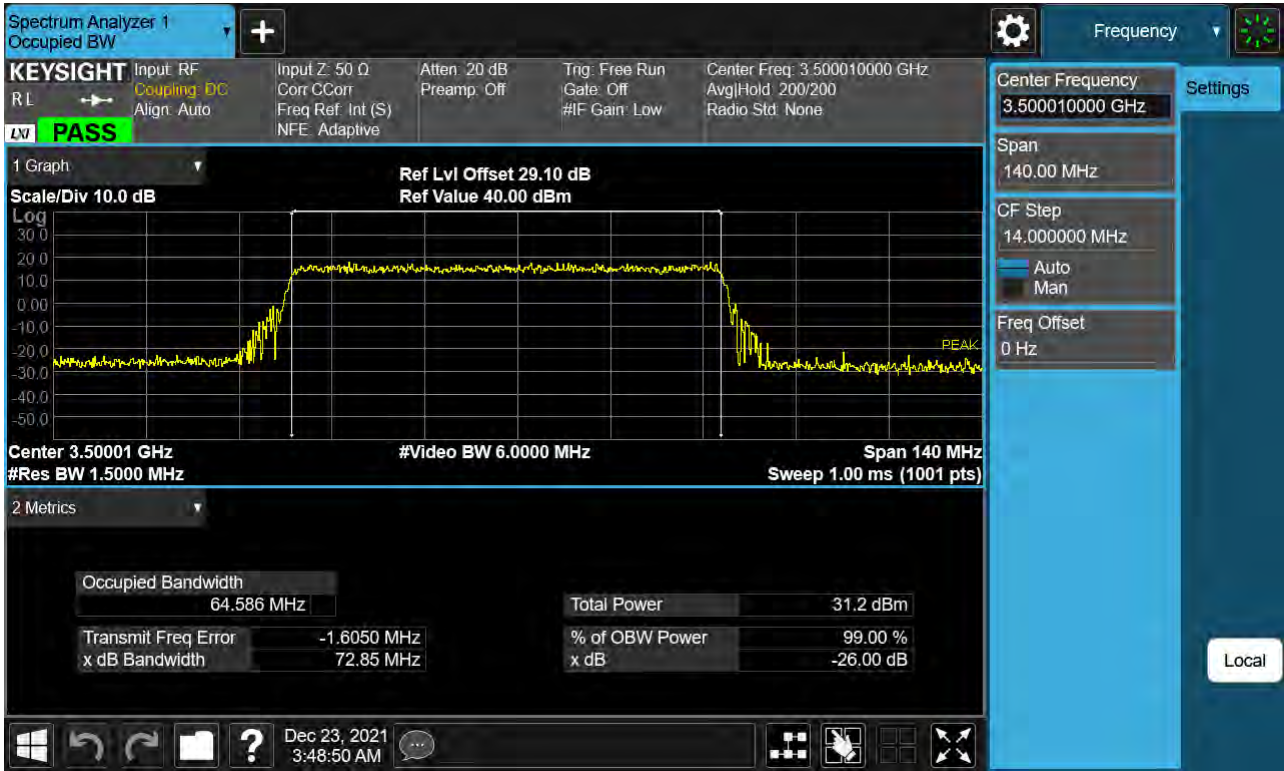
Sub6 n77. Occupied Bandwidth Plot (70 M BW Ch.633334 QPSK)



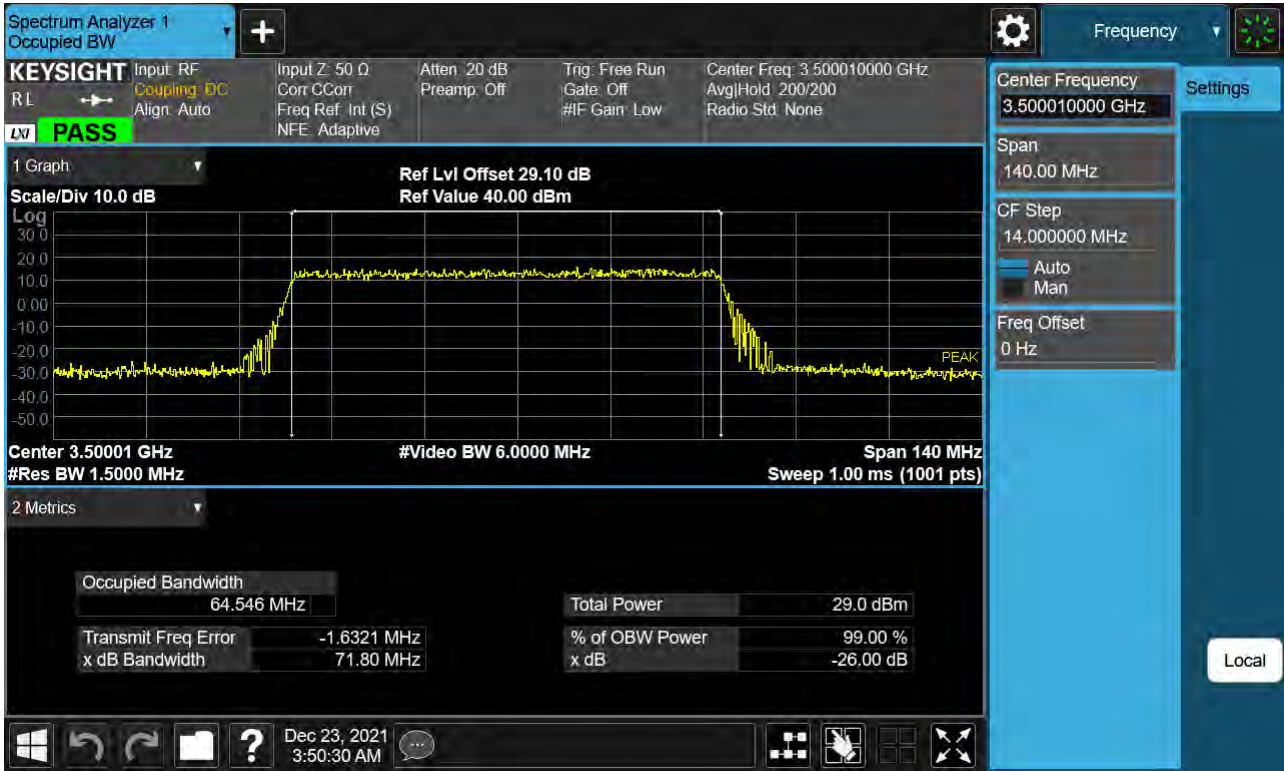
Sub6 n77. Occupied Bandwidth Plot (70 M BW Ch.633334 16QAM)



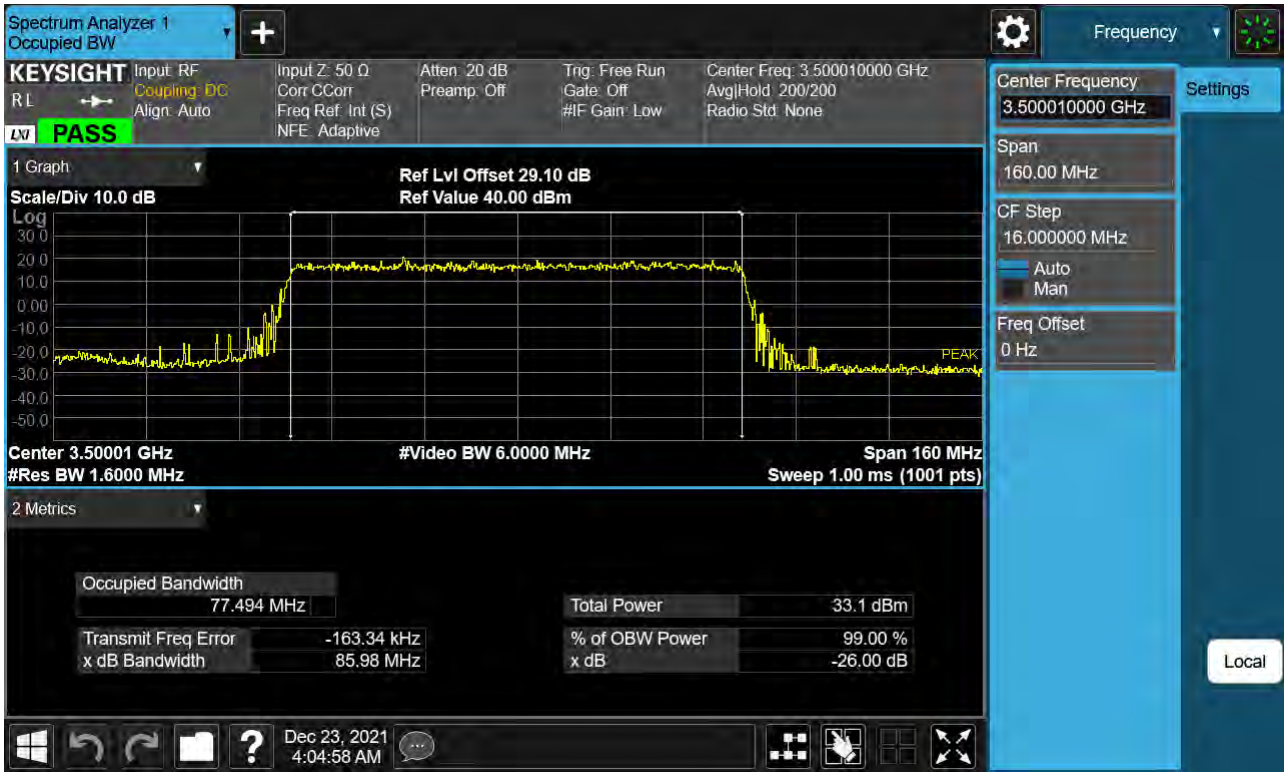
Sub6 n77. Occupied Bandwidth Plot (70 M BW Ch.633334 64QAM)



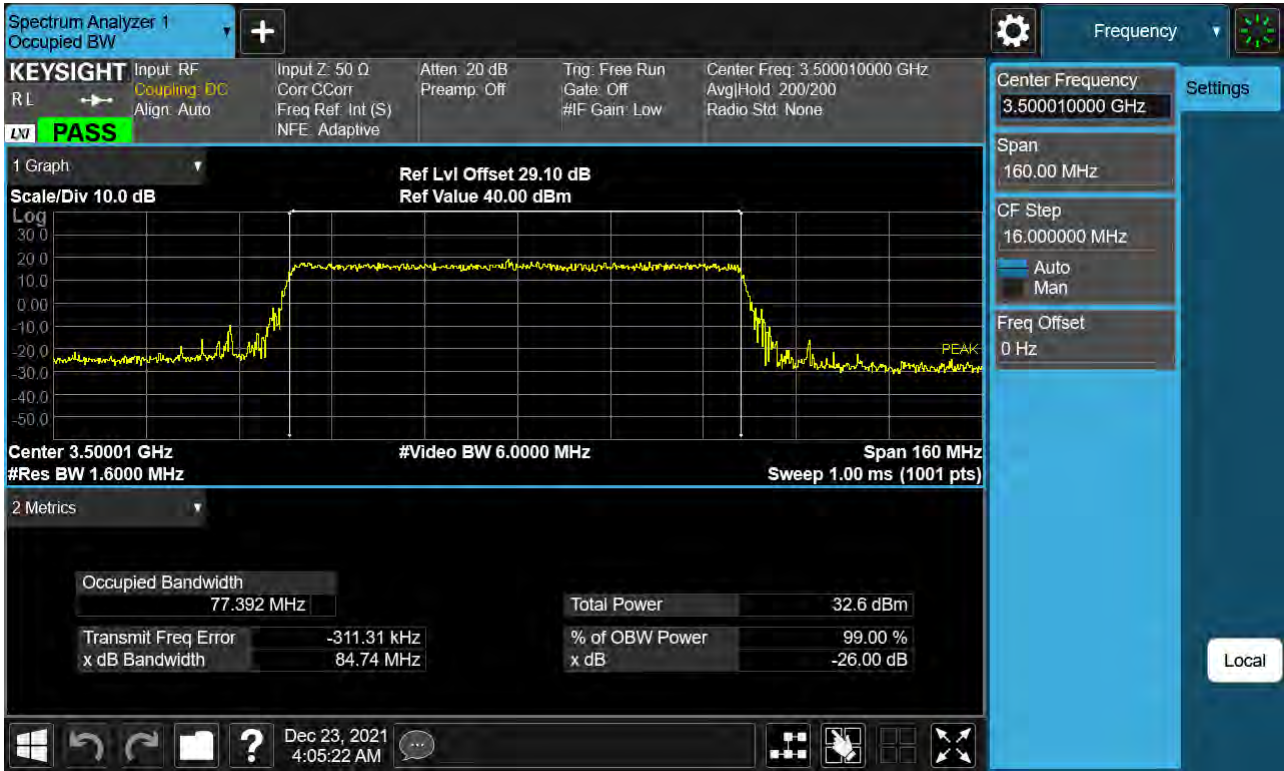
Sub6 n77. Occupied Bandwidth Plot (70 M BW Ch.633334 256QAM)



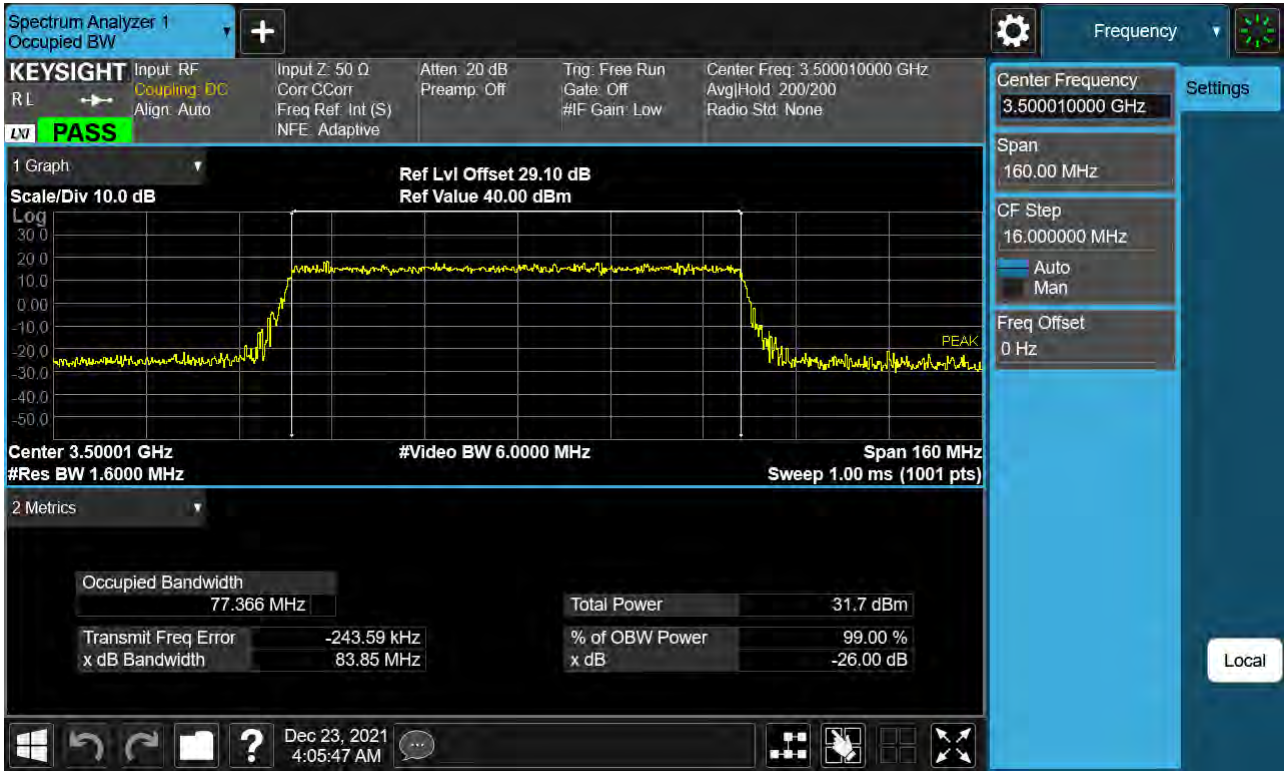
Sub6 n77. Occupied Bandwidth Plot (80 M BW Ch.633334 BPSK)



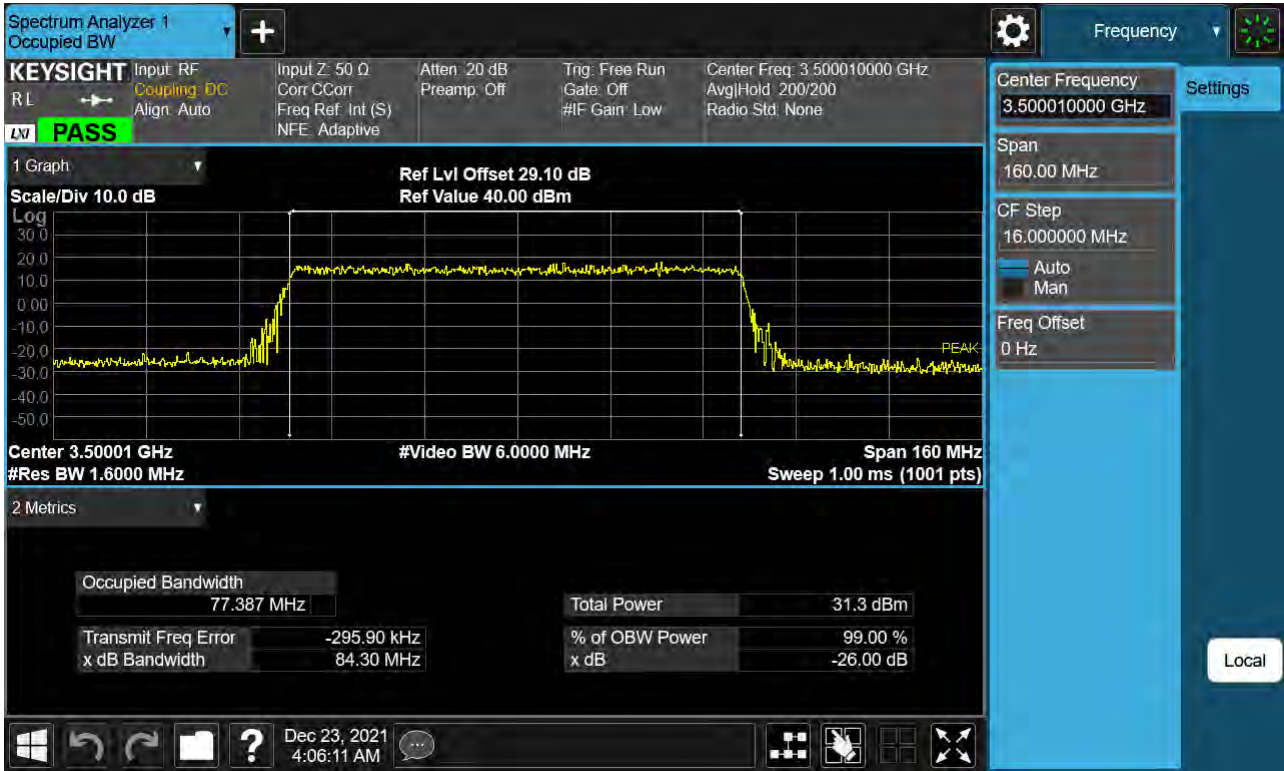
Sub6 n77. Occupied Bandwidth Plot (80 M BW Ch.633334 QPSK)



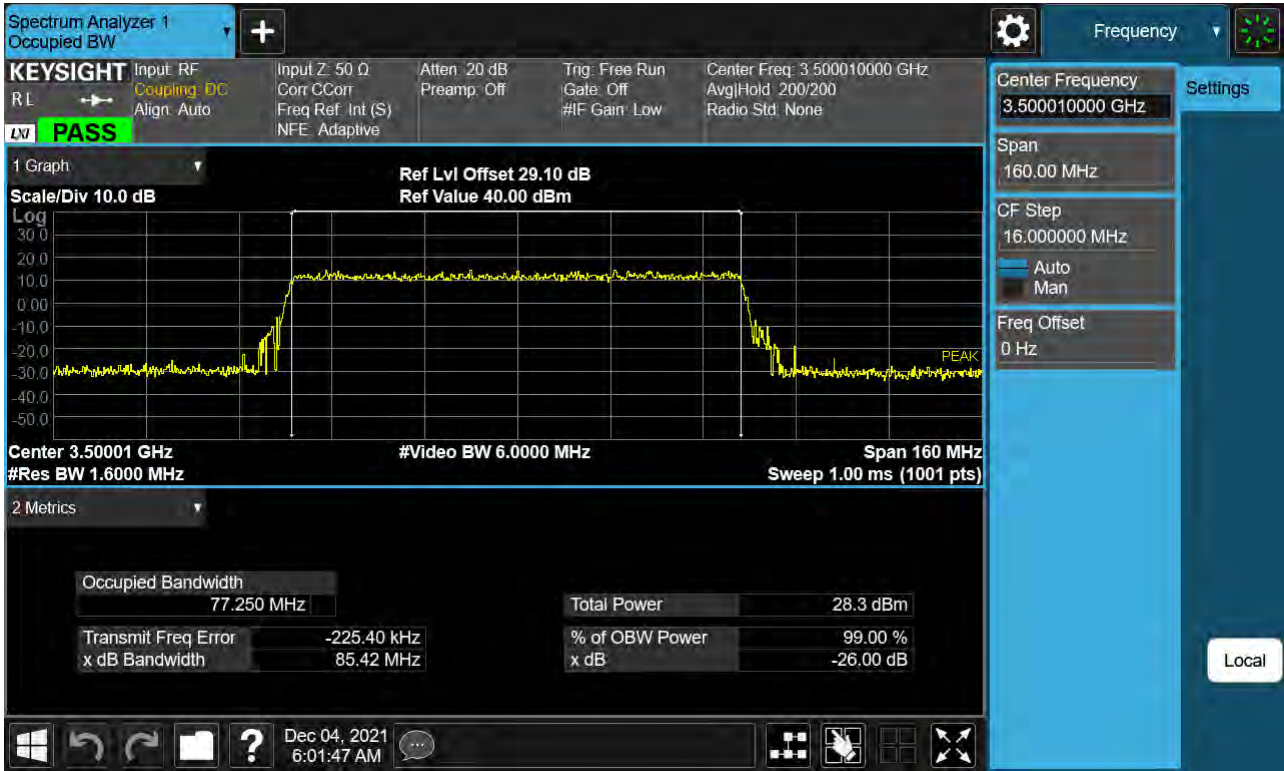
Sub6 n77. Occupied Bandwidth Plot (80 M BW Ch.633334 16QAM)



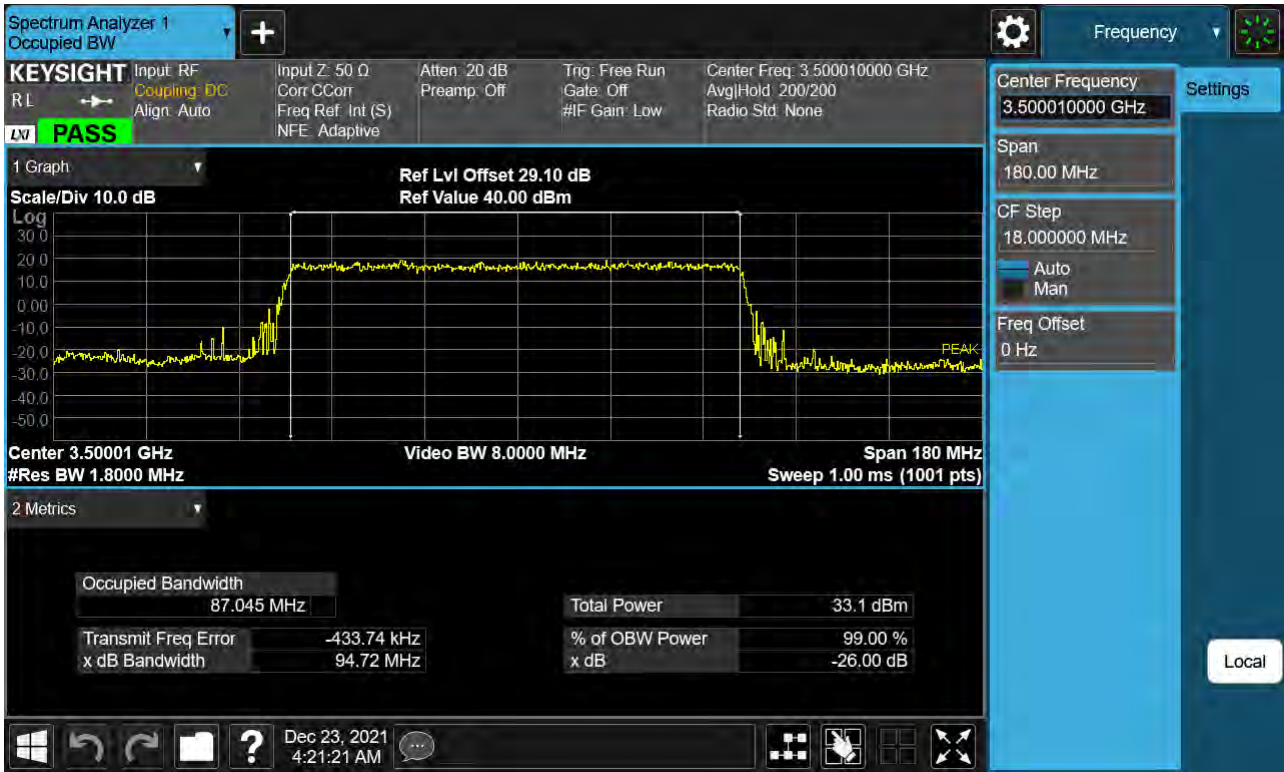
Sub6 n77. Occupied Bandwidth Plot (80 M BW Ch.633334 64QAM)



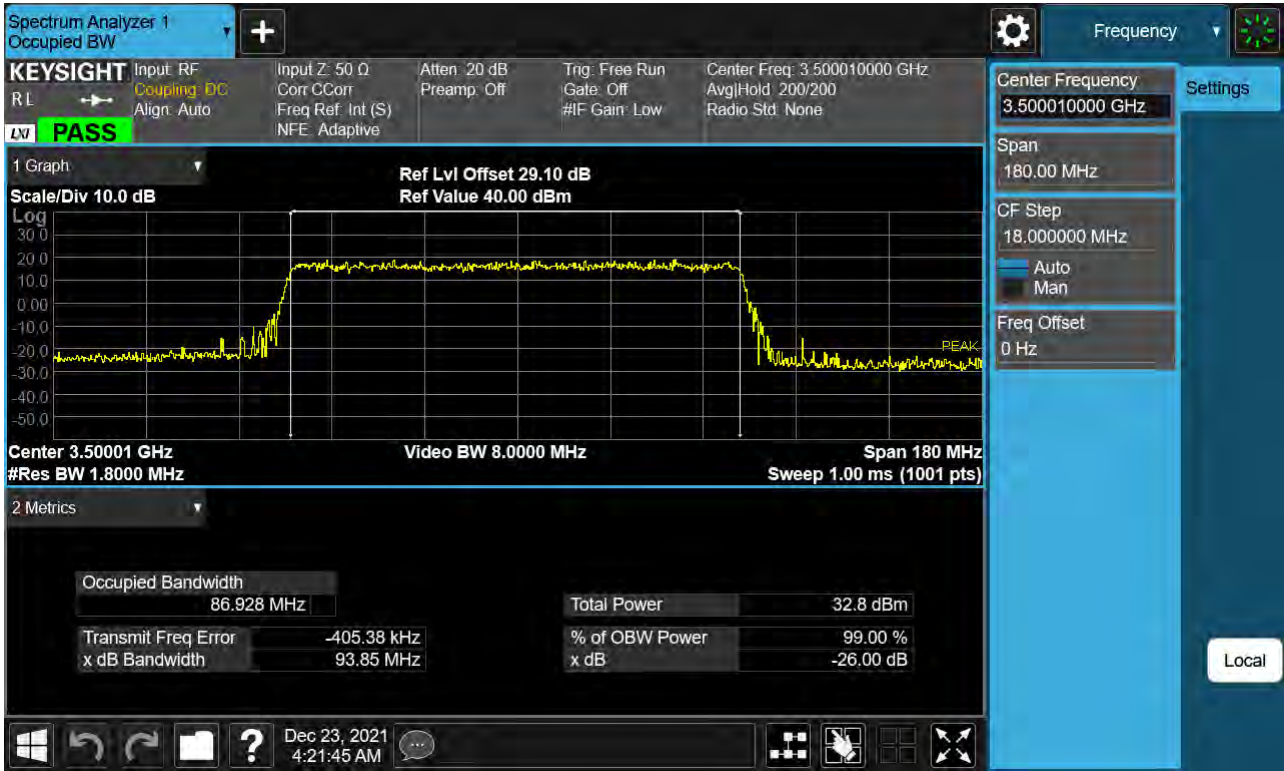
Sub6 n77. Occupied Bandwidth Plot (80 M BW Ch.633334 256QAM)



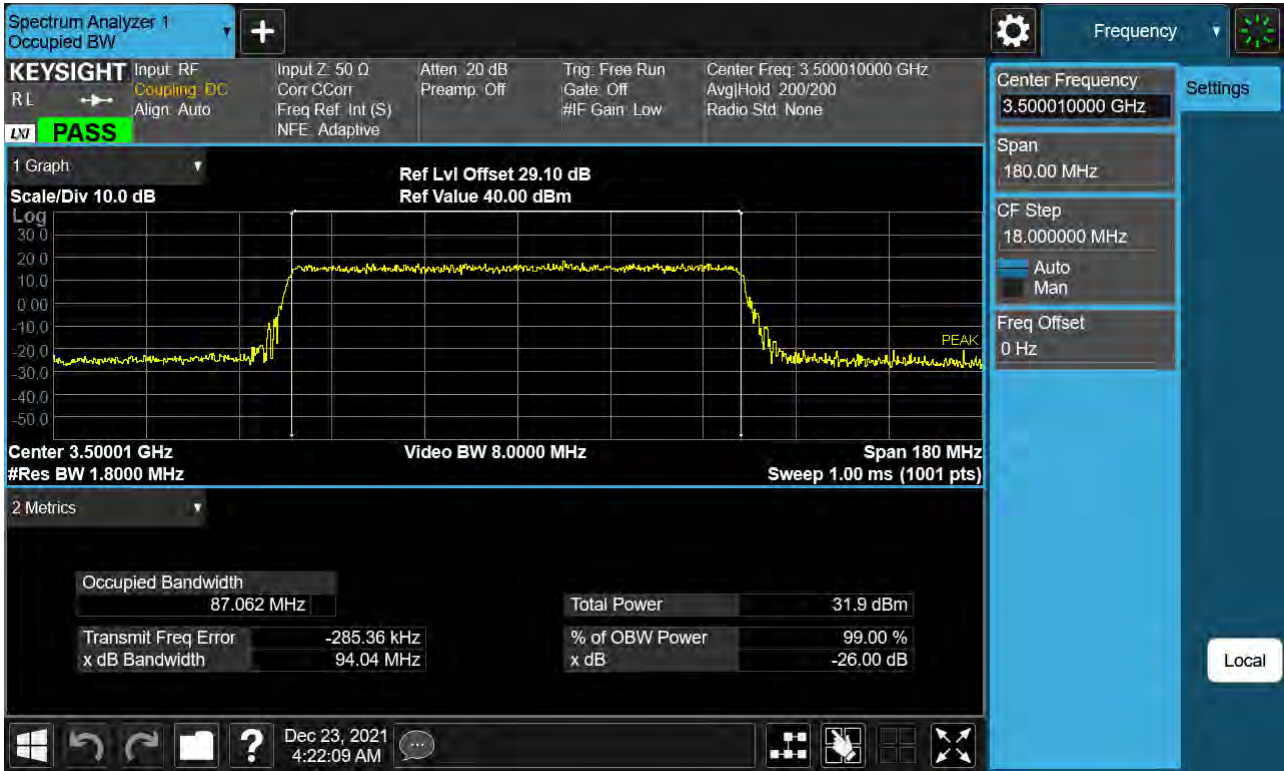
Sub6 n77. Occupied Bandwidth Plot (90 M BW Ch.633334 BPSK)



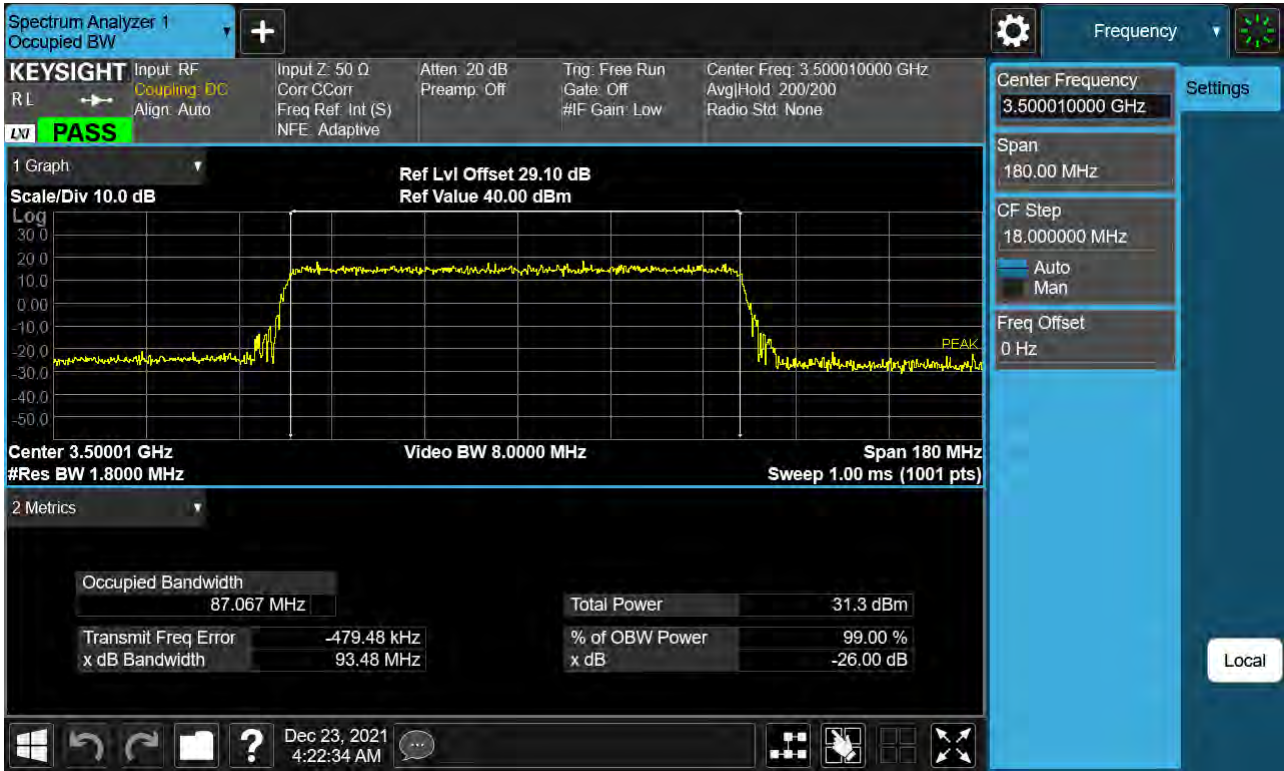
Sub6 n77. Occupied Bandwidth Plot (90 M BW Ch.633334 QPSK)



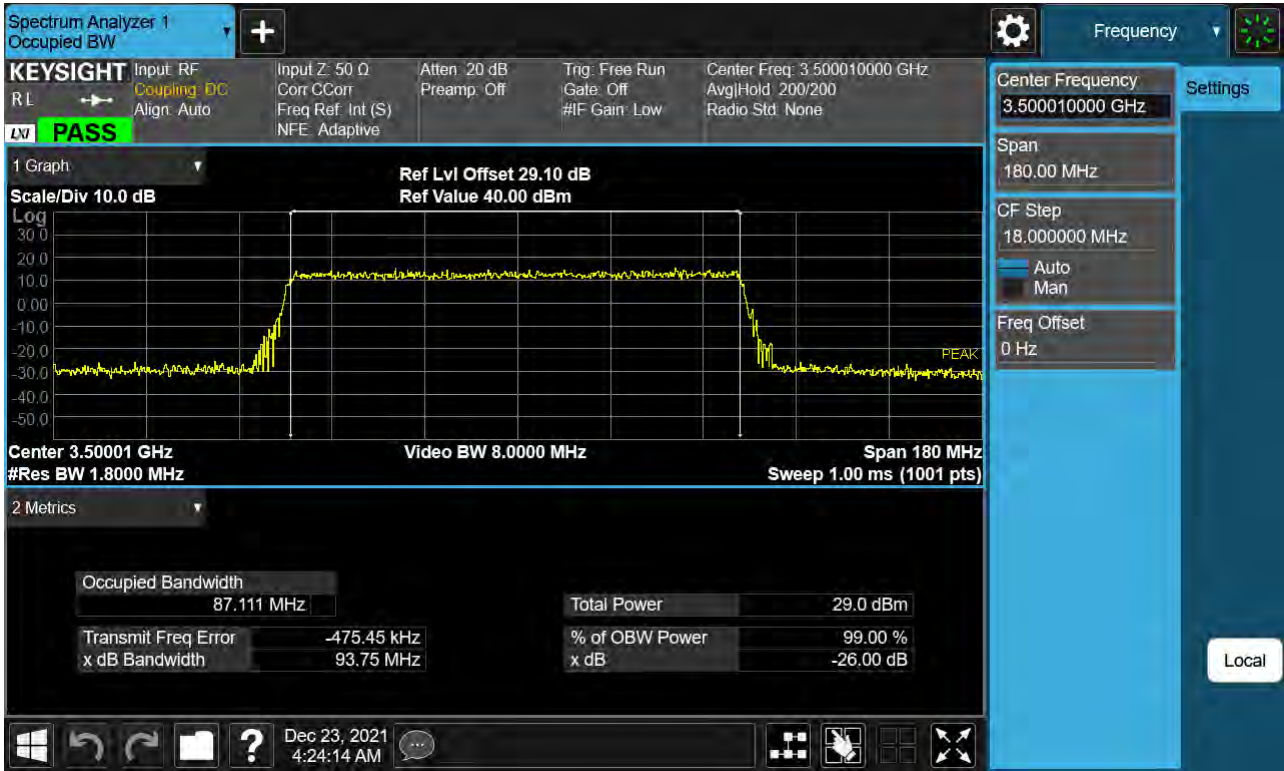
Sub6 n77. Occupied Bandwidth Plot (90 M BW Ch.633334 16QAM)



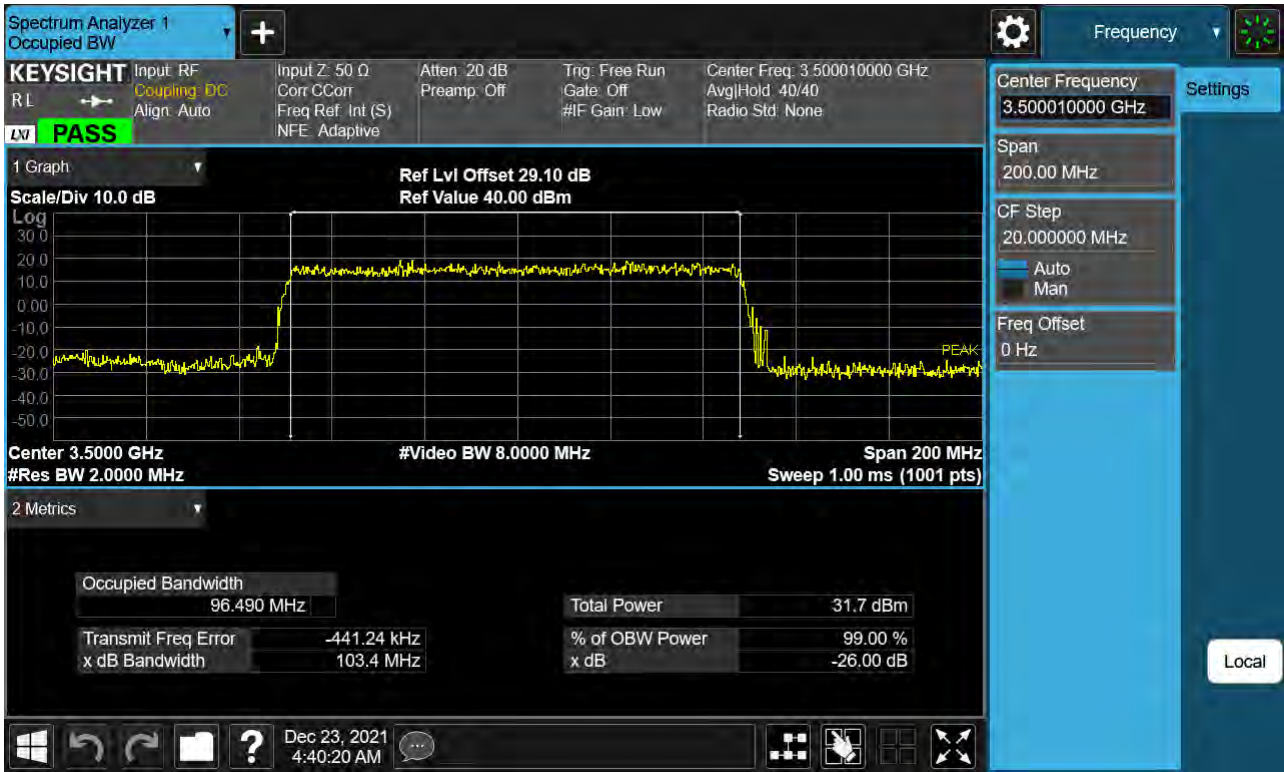
Sub6 n77. Occupied Bandwidth Plot (90 M BW Ch.633334 64QAM)



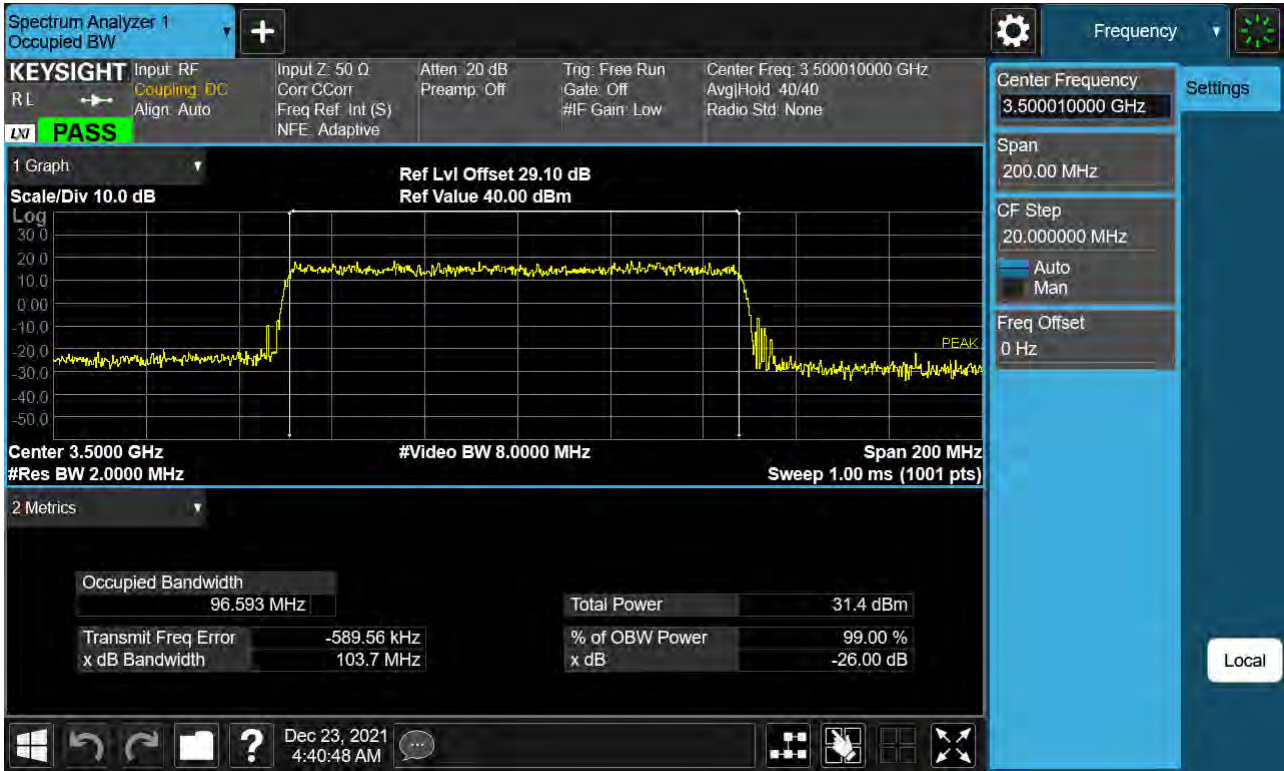
Sub6 n77. Occupied Bandwidth Plot (90 M BW Ch.633334 256QAM)



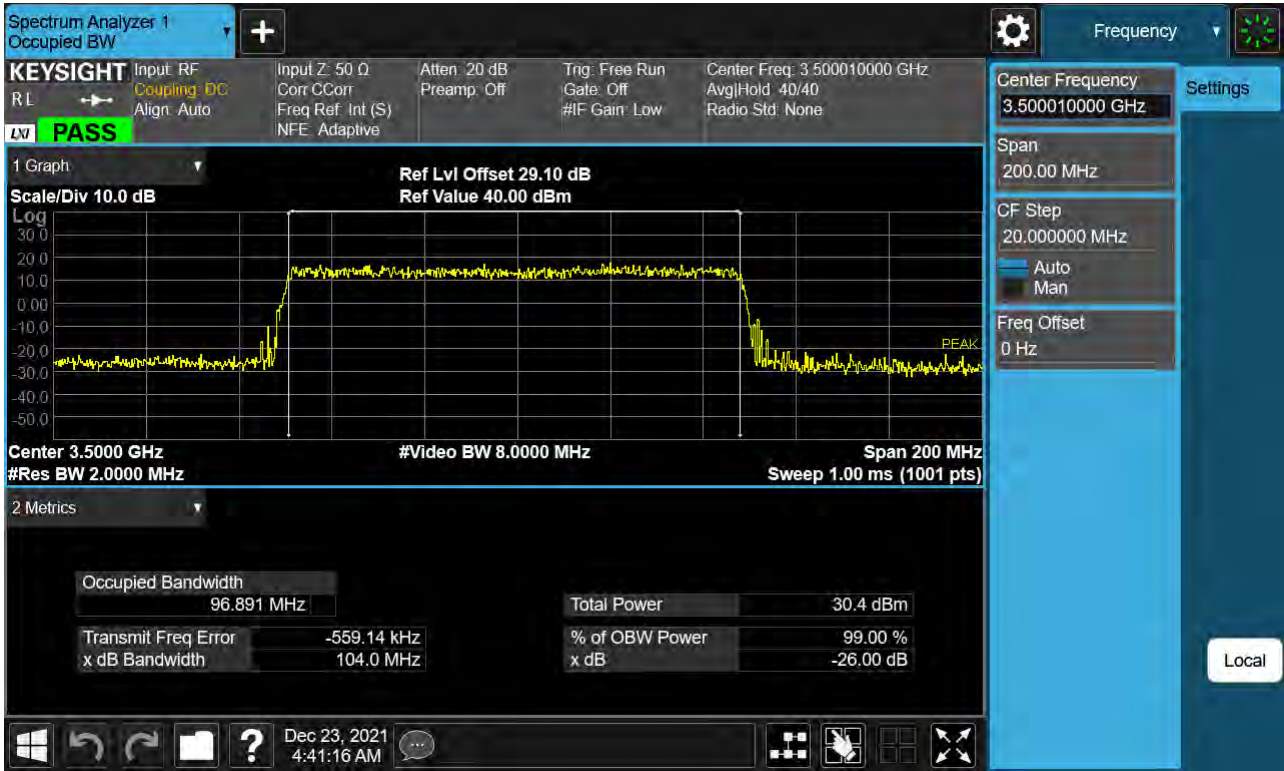
Sub6 n77. Occupied Bandwidth Plot (100 M BW Ch.633334 BPSK)



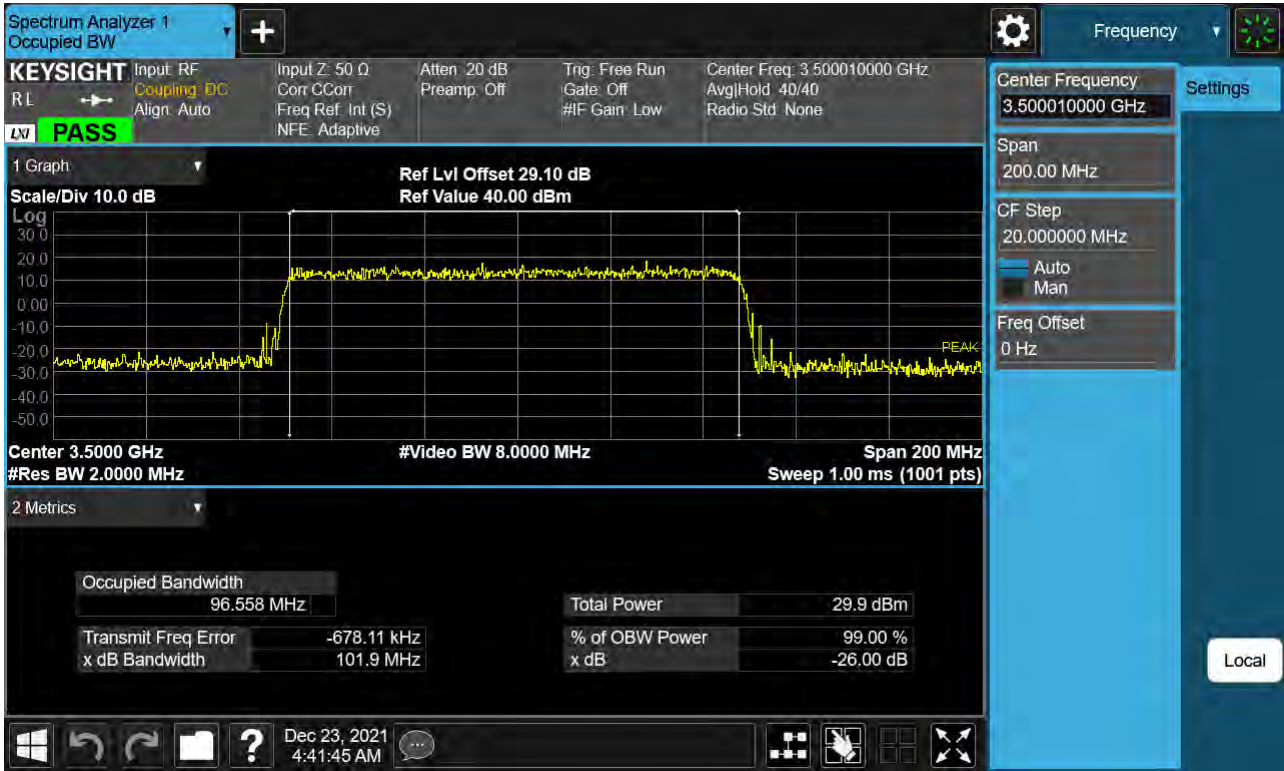
Sub6 n77. Occupied Bandwidth Plot (100 M BW Ch.633334 QPSK)



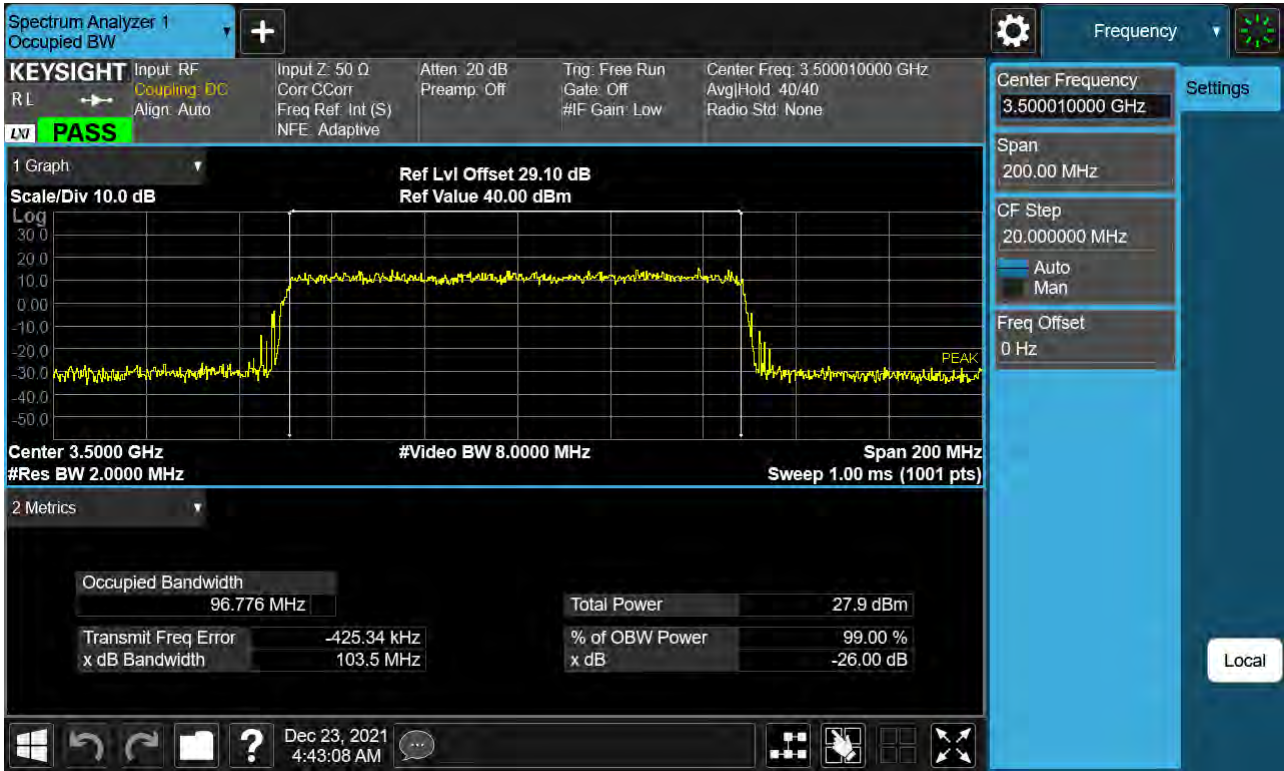
Sub6 n77. Occupied Bandwidth Plot (100 M BW Ch.633334 16QAM)



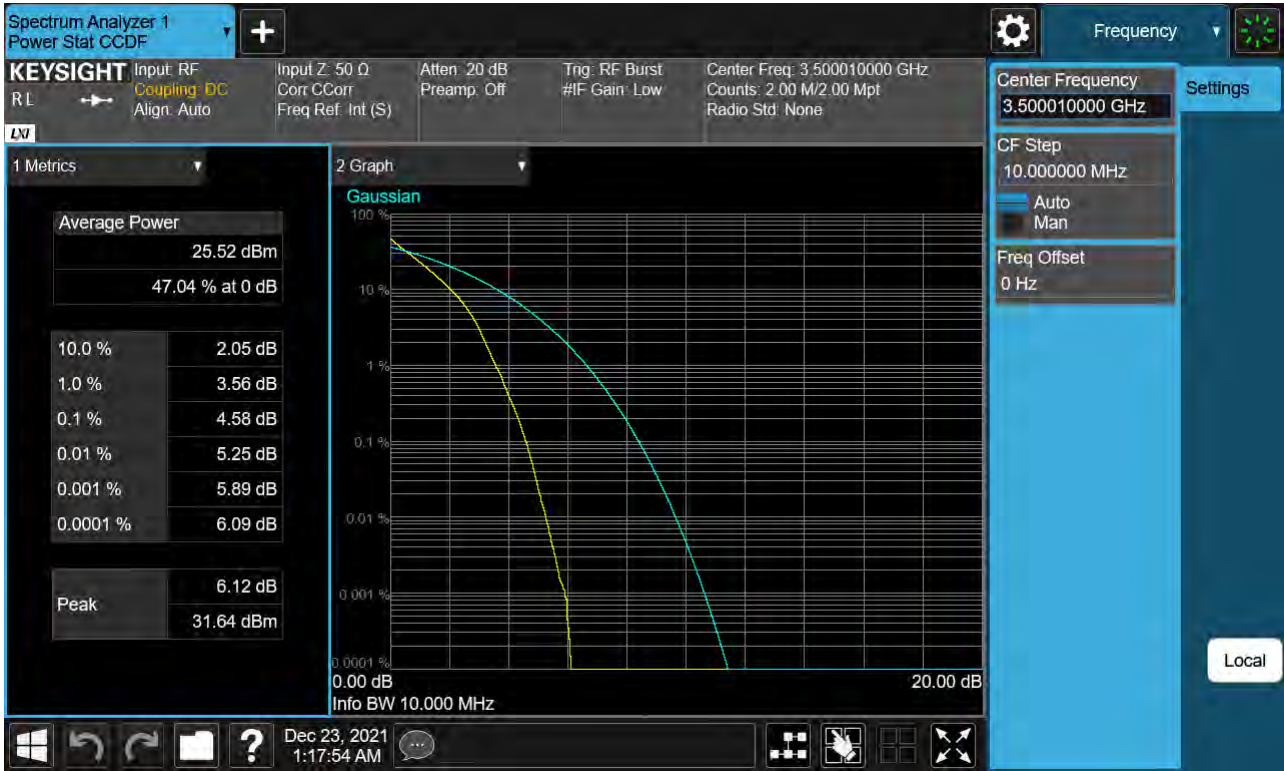
Sub6 n77. Occupied Bandwidth Plot (100 M BW Ch.633334 64QAM)



Sub6 n77. Occupied Bandwidth Plot (100 M BW Ch.633334 256QAM)



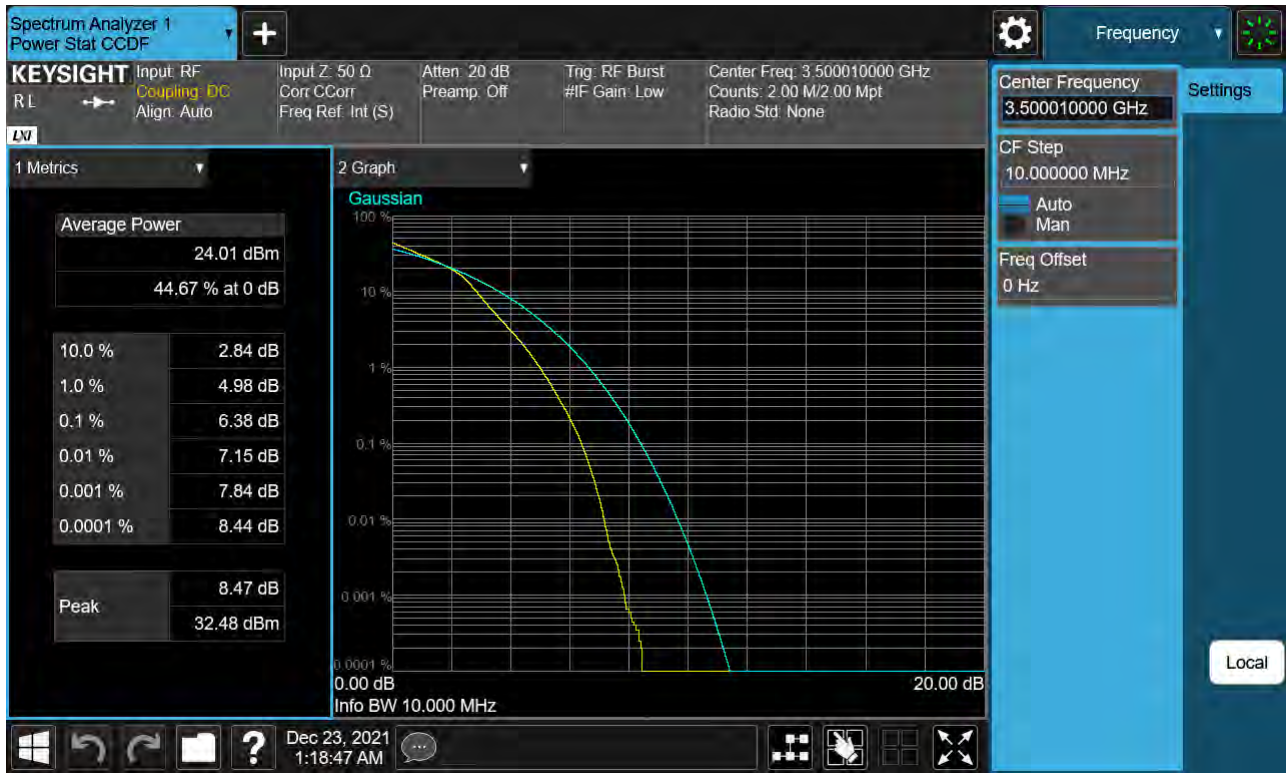
Sub6 n77. PAR Plot (10 M BW_Ch.633334_ BPSK)



Sub6 n77. PAR Plot (10 M BW_Ch.633334_QPSK)



Sub6 n77. PAR Plot (10 M BW_Ch.633334_16QAM)



Sub6 n77. PAR Plot (10 M BW_Ch.633334_64QAM)



Sub6 n77. PAR Plot (10 M BW_Ch.633334_256QAM)



Sub6 n77. PAR Plot (15 M BW_Ch.633334_ BPSK)



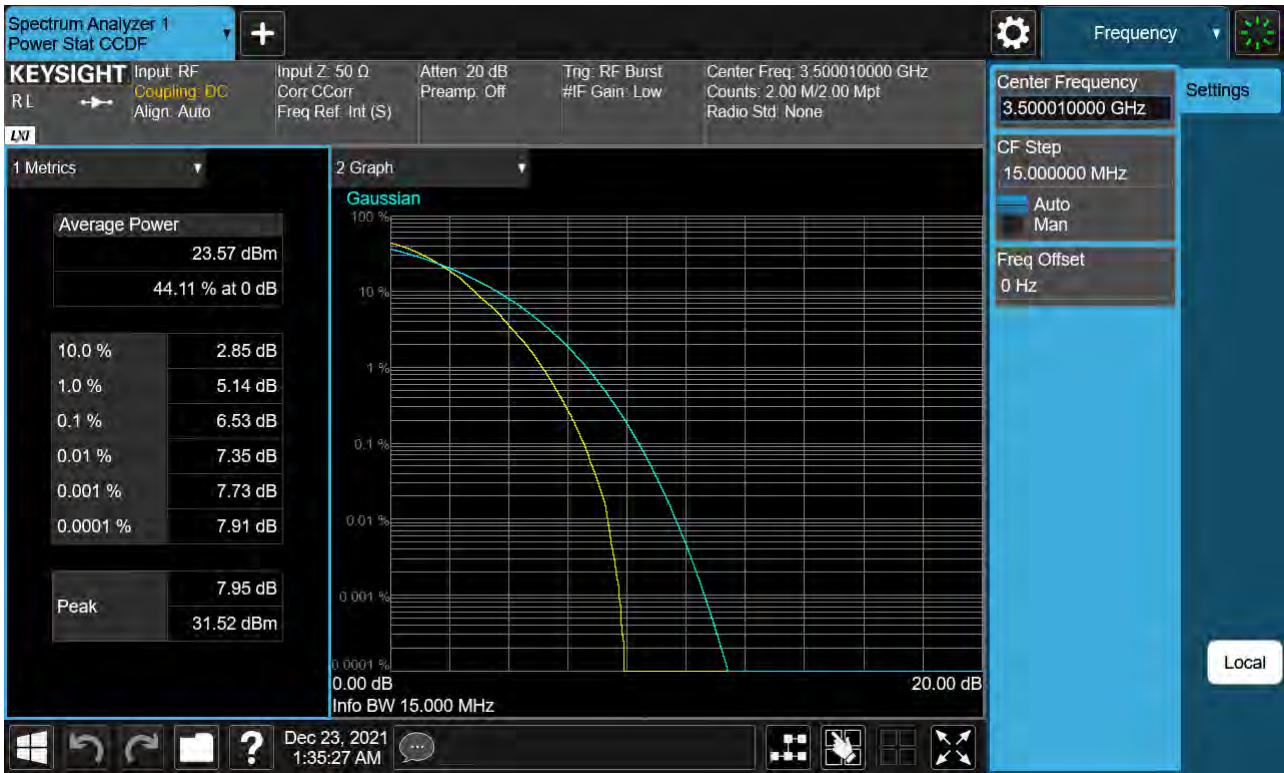
Sub6 n77. PAR Plot (15 M BW_Ch.633334_QPSK)



Sub6 n77. PAR Plot (15 M BW_Ch.633334_16QAM)



Sub6 n77. PAR Plot (15 M BW_Ch.633334_64QAM)



Sub6 n77. PAR Plot (15 M BW_Ch.633334_256QAM)



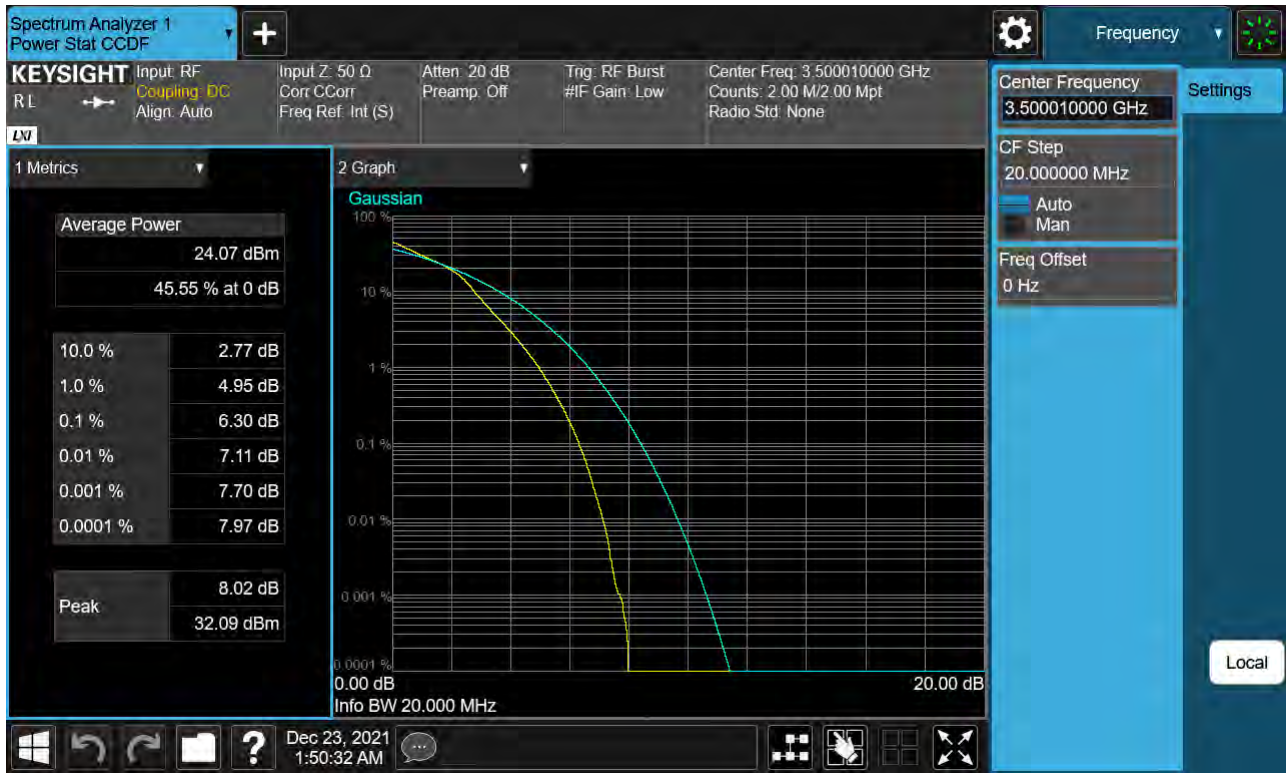
Sub6 n77. PAR Plot (20 M BW_Ch.633334_ BPSK)



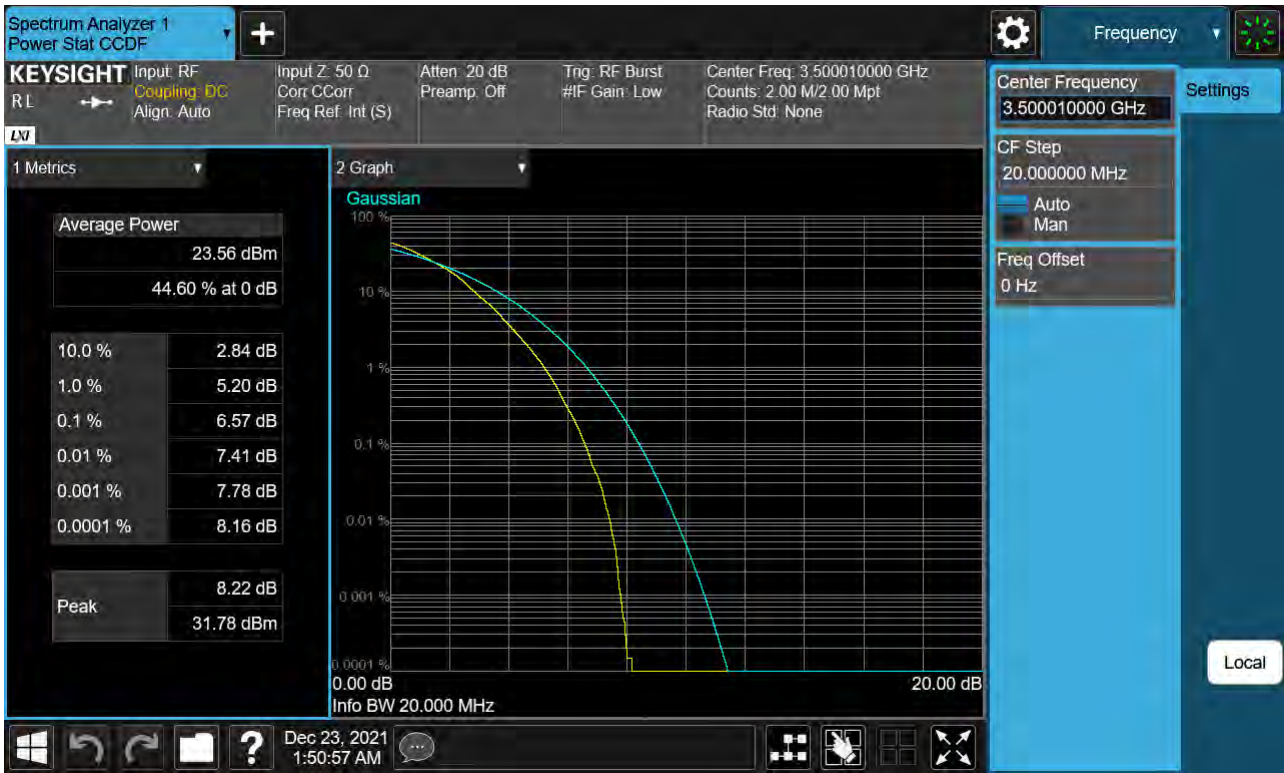
Sub6 n77. PAR Plot (20 M BW_Ch.633334_QPSK)



Sub6 n77. PAR Plot (20 M BW_Ch.633334_16QAM)



Sub6 n77. PAR Plot (20 M BW_Ch.633334_64QAM)



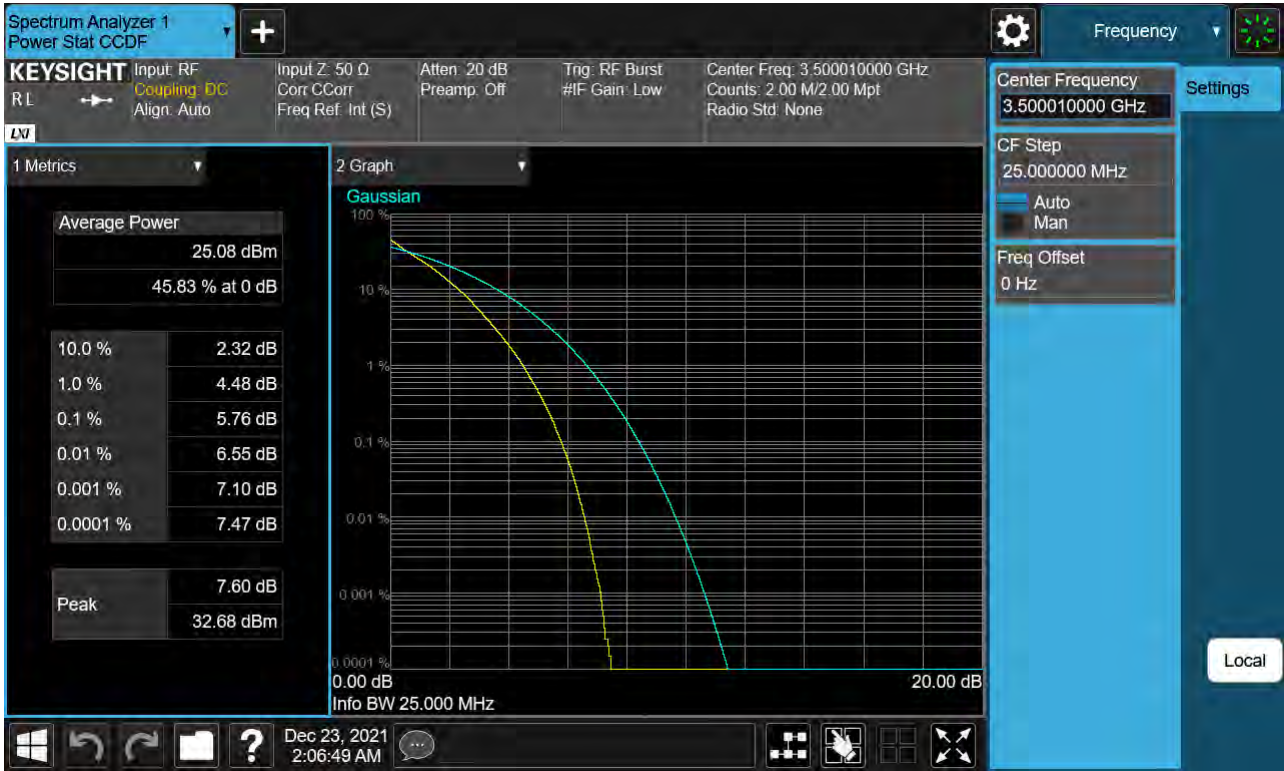
Sub6 n77. PAR Plot (20 M BW_Ch.633334_256QAM)



Sub6 n77. PAR Plot (25 M BW_Ch.633334_ BPSK)



Sub6 n77. PAR Plot (25 M BW_Ch.633334_QPSK)



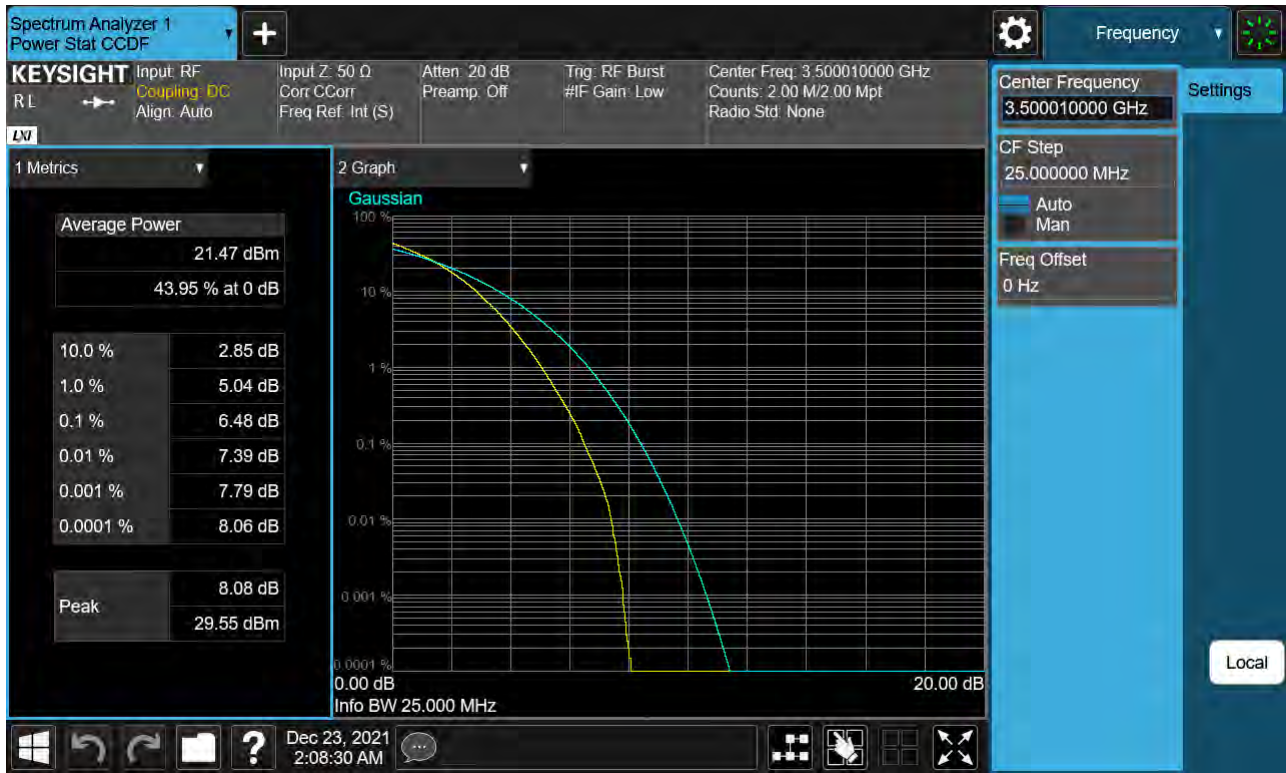
Sub6 n77. PAR Plot (25 M BW_Ch.633334_16QAM)



Sub6 n77. PAR Plot (25 M BW_Ch.633334_64QAM)



Sub6 n77. PAR Plot (25 M BW_Ch.633334_256QAM)



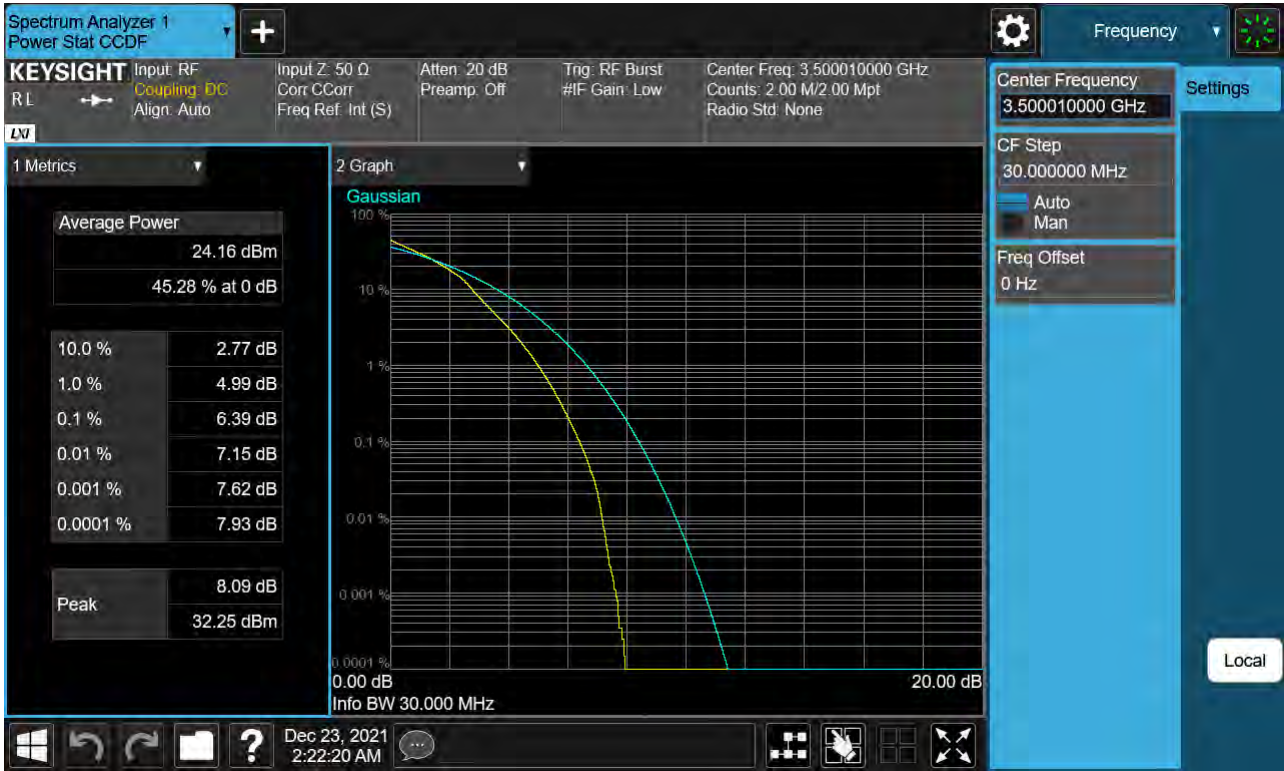
Sub6 n77. PAR Plot (30 M BW_Ch.633334_ BPSK)



Sub6 n77. PAR Plot (30 M BW_Ch.633334_QPSK)



Sub6 n77. PAR Plot (30 M BW_Ch.633334_16QAM)



Sub6 n77. PAR Plot (30 M BW_Ch.633334_64QAM)



Sub6 n77. PAR Plot (30 M BW_Ch.633334_256QAM)



Sub6 n77. PAR Plot (40 M BW_Ch.633334_ BPSK)

