

FCC Sub6 REPORT

Certification

Applicant Name:

SAMSUNG Electronics Co., Ltd.

Date of Issue:

November 13, 2023

Location:

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Report No.: HCT-RF-2311-FC034

FCC ID:

A3LSMG556B

APPLICANT:

SAMSUNG Electronics Co., Ltd.

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

The measurements shown in this report were made in accordance with the procedures specified in CFR47 section §2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.
HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S. C.853(a)

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n66 (5)	1712.5 – 1777.5	4M59G7D	PI/2 BPSK	0.238	23.76
		4M57G7D	QPSK	0.236	23.72
		4M55W7D	16QAM	0.200	23.02
		4M57W7D	64QAM	0.142	21.53
		4M60W7D	256QAM	0.087	19.38
Sub6 n66 (10)	1715.0 – 1775.0	9M02G7D	PI/2 BPSK	0.245	23.89
		8M94G7D	QPSK	0.240	23.81
		8M96W7D	16QAM	0.201	23.03
		8M96W7D	64QAM	0.146	21.65
Sub6 n66 (15)	1717.5 – 1772.5	8M96W7D	256QAM	0.090	19.52
		13M5G7D	PI/2 BPSK	0.238	23.76
		13M5G7D	QPSK	0.233	23.68
		13M4W7D	16QAM	0.197	22.95
		13M4W7D	64QAM	0.139	21.44
Sub6 n66 (20)	1720.0 – 1770.0	13M4W7D	256QAM	0.086	19.33
		17M9G7D	PI/2 BPSK	0.220	23.42
		17M9G7D	QPSK	0.213	23.29
		17M9W7D	16QAM	0.175	22.44
		17M9W7D	64QAM	0.128	21.06
Sub6 n66 (25)	1722.5 – 1767.5	18M0W7D	256QAM	0.088	19.44
		23M0G7D	PI/2 BPSK	0.230	23.62
		23M0G7D	QPSK	0.220	23.42
		22M9W7D	16QAM	0.186	22.70
		23M0W7D	64QAM	0.134	21.27
Sub6 n66 (30)	1725.0 – 1765.0	22M9W7D	256QAM	0.086	19.35
		28M7G7D	PI/2 BPSK	0.234	23.69
		28M6G7D	QPSK	0.230	23.61
		28M6W7D	16QAM	0.197	22.95
		28M7W7D	64QAM	0.138	21.41
Sub6 n66 (35)	1727.5 – 1762.5	28M6W7D	256QAM	0.085	19.31
		32M2G7D	PI/2 BPSK	0.240	23.81
		32M2G7D	QPSK	0.237	23.74
		32M3W7D	16QAM	0.191	22.81
		32M3W7D	64QAM	0.141	21.48
Sub6 n66 (40)	1730.0 – 1760.0	32M2W7D	256QAM	0.086	19.37
		38M6G7D	PI/2 BPSK	0.244	23.88
		38M7G7D	QPSK	0.238	23.77
		38M8W7D	16QAM	0.189	22.77
		38M7W7D	64QAM	0.142	21.52
		38M7W7D	256QAM	0.089	19.47

Report No.: HCT-RF-2311-FC034

REVIEWED BY



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



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

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

Test Report Statement:

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

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

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2311-FC034	November 13, 2023	- First Approval Report

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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:	A3LSMG556B
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§27
EUT Type:	Mobile phone
Model(s):	SM-G556B
SCS(kHz):	15
Bandwidth(MHz):	5, 10, 15, 20, 25, 30, 35, 40
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:	1712.5 MHz – 1777.5 MHz (Sub6 n66(5 MHz)) 1715.0 MHz – 1775.0 MHz (Sub6 n66(10 MHz)) 1717.5 MHz – 1772.5 MHz (Sub6 n66(15 MHz)) 1720.0 MHz – 1770.0 MHz (Sub6 n66(20 MHz)) 1722.5 MHz – 1767.5 MHz (Sub6 n66(25 MHz)) 1725.0 MHz – 1765.0 MHz (Sub6 n66(30 MHz)) 1727.5 MHz – 1762.5 MHz (Sub6 n66(35 MHz)) 1730.0 MHz – 1760.0 MHz (Sub6 n66(40 MHz))
Date(s) of Tests:	September 27, 2023 ~ November 13, 2023
Serial number:	Radiated: R3CW908NFEN Conducted: R3CW908NHWB

2. INTRODUCTION

2.1. DESCRIPTION OF EUT

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

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

2.2. MEASURING INSTRUMENT CALIBRATION

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

2.3. TEST FACILITY

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

3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
Occupied Bandwidth	- KDB 971168 D01 v03r01 – Section 4.3 - ANSI C63.26-2015 – Section 5.4.4
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 $\geq 3 \times$ RBW
4. Span = 1.5 times the OBW
5. No. of sweep points $> 2 \times$ 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;

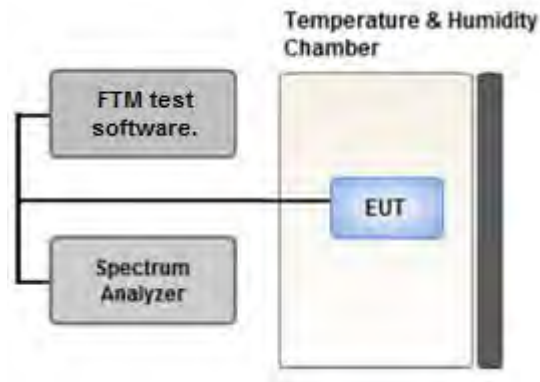
$$\text{Result}_{(\text{dBm})} = P_{g(\text{dBm})} - \text{cable loss}_{(\text{dB})} + \text{antenna gain}_{(\text{dBi})}$$

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

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

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

3.4 PEAK- TO- AVERAGE RATIO



Test setup

① CCDF Procedure for PAPR

Test Settings

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

② Alternate Procedure for PAPR

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

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

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

Test Settings(Peak Power)

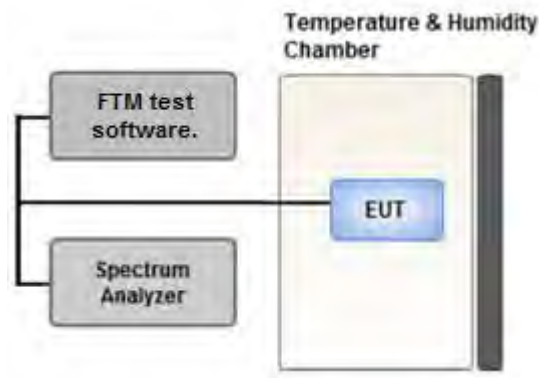
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

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

Test Settings(Average Power)

1. Set span to $2 \times$ to $3 \times$ the OBW.
2. Set RBW $\geq$ OBW.
3. Set VBW $\geq 3 \times$ RBW.
4. Set number of measurement points in sweep $\geq 2 \times$ span / RBW.
5. Sweep time:
Set $\geq [10 \times (\text{number of points in sweep}) \times (\text{transmission period})]$ 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.

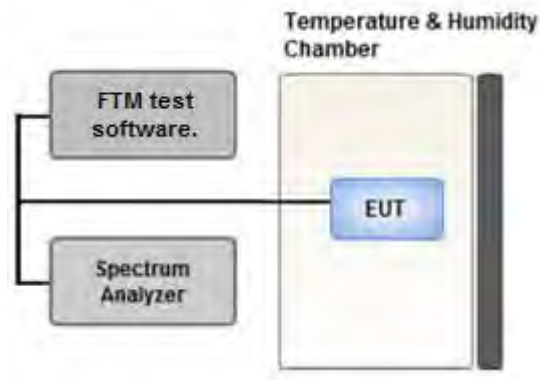
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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 $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5 % of the 99 % occupied bandwidth observed in Step 7

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

Test Overview

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

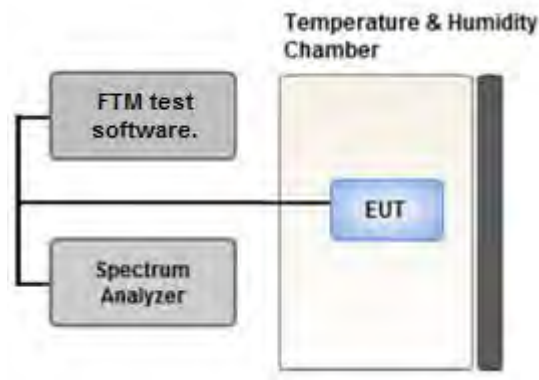
All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

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

Test Settings

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

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 $\geq 2 \times \text{Span/RBW}$
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Notes

According to FCC 22.917, 24.238, 27.53 specified that power of any emission outside of The authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

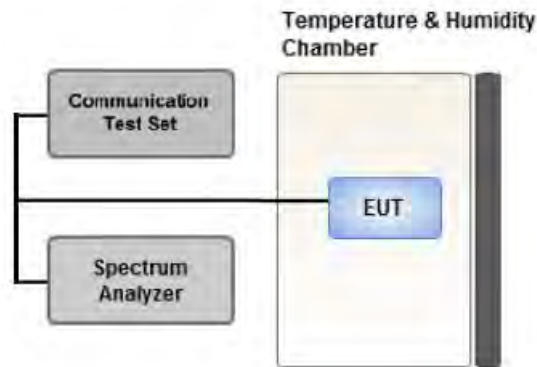
In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

All measurements were done at 2 channels(low and high operational frequency range).

The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



Test setup

Test Overview

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

The frequency stability of the transmitter is measured by:

1. Temperature:

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

2. Primary Supply Voltage:

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

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

Test Settings

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

(20 °C to provide a reference).

2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter.

Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.

3. Frequency measurements are made at 10 °C intervals ranging from -30 °C to +50 °C. A period of at

least one half-hour is provided to allow stabilization of the equipment at each temperature level.

3.9 WORST CASE(RADIATED TEST)

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

(Worst case: DFT-S-OFDM)

- The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
- All modes of operation were investigated and the worst case configuration results are reported.

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

Worst case : Stand alone

Mode : NSA, SA

Worst case: SA

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

Mode : Stand alone, Simultaneous transmission scenarios

Worst case : Stand alone

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

All EN-DC mode of operation (=anchor) were investigated and the test results were measured No Peak Found.

The test results which are attenuated more than 20 dB below the permissible value, so it was not reported.

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

Please refer to the table below.

- In the case of radiated spurious emissions, all bandwidth of operation was investigated and the worst case bandwidth results are reported. (Worst case : 10 MHz)

[Worst case]

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

3.10 WORST CASE(CONDUCTED TEST)

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

(Worst case: DFT-S-OFDM)

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

(Worst case: PI/2 BPSK)

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

Mode : NSA, SA

Worst case: SA

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

Please refer to the table below.

[Worst case]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth, Peak-To-Average Ratio	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	5, 10, 15, 20, 25, 30, 35, 40	Mid	Full RB	0
Band Edge	PI/2 BPSK	5	Low	1	0
			High	1	24
		10	Low	1	0
			High	1	51
		15	Low	1	0
			High	1	78
		20	Low	1	0
			High	1	105
		25	Low	1	0
			High	1	132
		30	Low	1	0
			High	1	159
		35	Low	1	0
			High	1	187
		40	Low	1	0
			High	1	215
		5, 10, 15, 20, 25, 30, 35, 40	Low, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	5, 10, 15, 20, 25, 30, 35, 40	Low, Mid, High	1	1

4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacture	Serial No.	Due to Calibration	Calibration Interval
Precision Dipole Antenna	UHAP	Schwarzbeck	01273	03/27/2024	Biennial
Precision Dipole Antenna	UHAP	Schwarzbeck	01274	03/27/2024	Biennial
Horn Antenna(1~18 GHz)	BBHA 9120D	Schwarzbeck	02289	03/21/2024	Biennial
Horn Antenna(1~18 GHz)	BBHA 9120D	Schwarzbeck	9120D-1299	04/27/2025	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/29/2024	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170124	03/28/2025	Biennial
Loop Antenna(9 kHz~30 MHz)	FMZB1513	Rohde & Schwarz	1513-175	01/16/2025	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/09/2025	Biennial
Hybrid Antenna	VULB9160	Schwarzbeck	760	02/24/2025	Biennial
RF Switching System	FBSR-06B (1G HPF + LNA)	T&M SYSTEM	F3L1	05/22/2024	Annual
RF Switching System	FBSR-06B (3G HPF + LNA)	T&M SYSTEM	F3L2	05/22/2024	Annual
RF Switching System	FBSR-06B (6G HPF + LNA)	T&M SYSTEM	F3L3	05/22/2024	Annual
RF Switching System	FBSR-06B (LNA)	T&M SYSTEM	F3L4	05/22/2024	Annual
Power Amplifier	CBL18265035	CERNEX	22966	12/01/2023	Annual
Power Amplifier	CBL26405040	CERNEX	25956	03/02/2024	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	08/25/2024	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	03/02/2024	Annual
Chamber	SU-642	ESPEC	93008124	02/22/2024	Annual
Signal Analyzer(10 Hz~26.5 GHz)	N9020A	Agilent	MY51110063	04/11/2024	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/19/2024	Annual
Spectrum Analyzer(10 Hz~40 GHz)	FSV40	REOHDE & SCHWARZ	101436	02/22/2024	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/10/2024	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/22/2024	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/23/2024	Annual
SIGNAL GENERATOR (100 kHz~40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	06/22/2024	Annual
Signal Analyzer(5 Hz~40.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/24/2024	Annual
4-Way Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/19/2024	Annual
FCC LTE Mobile Conducted RF Automation Test Software	-	HCT CO., LTD.,	-	-	-

Note:

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

5. MEASUREMENT UNCERTAINTY

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

Parameter	Expanded Uncertainty ($\pm$ dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.90 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.14 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.16 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.57 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.76 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (Above 40 GHz)	5.52 (Confidence level about 95 %, $k=2$)

6. SUMMARY OF TEST RESULTS

6.1 Test Condition: Conducted Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Occupied Bandwidth	§2.1049	N/A	PASS
Band Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§2.1051, §27.53(h)	$< 43 + 10\log_{10} (P[\text{Watts}])$ at Band Edge and for all out-of-band emissions	PASS
Conducted Output Power	§2.1046	N/A	<u>See Note1</u>
Peak- to- Average Ratio	§27.50(d)(5)	$< 13 \text{ dB}$	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(d)(4)	$< 1 \text{ Watts max. EIRP}$	PASS
Radiated Spurious and Harmonic Emissions	§2.1053, §27.53(h)	$< 43 + 10\log_{10} (P[\text{Watts}])$ for all out-of band emissions	PASS

Note:

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

7. SAMPLE CALCULATION

7.1 ERP Sample Calculation

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

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

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

7.2 EIRP Sample Calculation

Ch./ Freq.		Measured Level(dBm)	Substitute Level(dBm)	Ant. Gain (dBi)	C.L	Pol.	EIRP	
channel	Freq.(MHz)						W	dBm
349000	1,732.50	-15.75	18.45	9.90	1.76	H	0.456	26.59

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

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

7.3. Emission Designator

GSM Emission Designator

Emission Designator = 249KGXW

GSM BW = 249 kHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W

GSM BW = 249 kHz

G = Phase Modulation

7 = Quantized/Digital Info

W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W

WCDMA BW = 4.17 MHz

F = Frequency Modulation

9 = Composite Digital Info

W = Combination (Audio/Data)

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

8.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1712.5	Sub6 n66/ 5 MHz [15 kHz]	PI/2 BPSK	-17.76	15.60	9.60	2.00	V	< 1.00	0.209	23.20	1	23
		QPSK	-17.89	15.47	9.60	2.00	V		0.203	23.07		
		16-QAM	-18.50	14.86	9.60	2.00	V		0.176	22.46		
		64-QAM	-19.96	13.40	9.60	2.00	V		0.126	21.00		
		256-QAM	-22.07	11.29	9.60	2.00	V		0.077	18.89		
1745.0		PI/2 BPSK	-17.55	16.05	9.75	2.04	V		0.238	23.76	1	1
		QPSK	-17.59	16.01	9.75	2.04	V		0.236	23.72		
		16-QAM	-18.29	15.31	9.75	2.04	V		0.200	23.02		
		64-QAM	-19.78	13.82	9.75	2.04	V		0.142	21.53		
		256-QAM	-21.93	11.67	9.75	2.04	V		0.087	19.38		
1777.5	PI/2 BPSK	-18.21	15.33	9.90	2.08	V	0.207	23.15	1	23		
	QPSK	-18.34	15.20	9.90	2.08	V	0.200	23.02				
	16-QAM	-18.91	14.63	9.90	2.08	V	0.176	22.45				
	64-QAM	-20.32	13.22	9.90	2.08	V	0.127	21.04				
	256-QAM	-22.42	11.12	9.90	2.08	V	0.078	18.94				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1715.0	Sub6 n66/ 10 MHz [15 kHz]	PI/2 BPSK	-17.57	15.79	9.60	2.00	V	< 1.00	0.218	23.39	1	50
		QPSK	-17.65	15.71	9.60	2.00	V		0.214	23.31		
		16-QAM	-18.34	15.02	9.60	2.00	V		0.183	22.62		
		64-QAM	-19.80	13.56	9.60	2.00	V		0.131	21.16		
		256-QAM	-21.96	11.40	9.60	2.00	V		0.079	19.00		
1745.0		PI/2 BPSK	-17.42	16.18	9.75	2.04	V		0.245	23.89	1	1
		QPSK	-17.50	16.10	9.75	2.04	V		0.240	23.81		
		16-QAM	-18.28	15.32	9.75	2.04	V		0.201	23.03		
		64-QAM	-19.66	13.94	9.75	2.04	V		0.146	21.65		
		256-QAM	-21.79	11.81	9.75	2.04	V		0.090	19.52		
1775.0		PI/2 BPSK	-18.13	15.41	9.90	2.08	V		0.210	23.23	1	1
		QPSK	-18.19	15.35	9.90	2.08	V		0.207	23.17		
		16-QAM	-18.86	14.68	9.90	2.08	V		0.178	22.50		
		64-QAM	-20.27	13.27	9.90	2.08	V		0.129	21.09		
		256-QAM	-22.45	11.09	9.90	2.08	V		0.078	18.91		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1717.5	Sub6 n66/ 15 MHz [15 kHz]	PI/2 BPSK	-17.57	15.79	9.60	2.00	V	< 1.00	0.218	23.39	1	77
		QPSK	-17.70	15.66	9.60	2.00	V		0.212	23.26		
		16-QAM	-18.38	14.98	9.60	2.00	V		0.181	22.58		
		64-QAM	-19.88	13.48	9.60	2.00	V		0.128	21.08		
		256-QAM	-21.97	11.39	9.60	2.00	V		0.079	18.99		
1745.0		PI/2 BPSK	-17.55	16.05	9.75	2.04	V		0.238	23.76	1	1
		QPSK	-17.63	15.97	9.75	2.04	V		0.233	23.68		
		16-QAM	-18.36	15.24	9.75	2.04	V		0.197	22.95		
		64-QAM	-19.87	13.73	9.75	2.04	V		0.139	21.44		
		256-QAM	-21.98	11.62	9.75	2.04	V		0.086	19.33		
1772.5		PI/2 BPSK	-18.05	15.49	9.90	2.08	V		0.214	23.31	1	1
		QPSK	-18.15	15.39	9.90	2.08	V		0.209	23.21		
		16-QAM	-18.85	14.69	9.90	2.08	V		0.178	22.51		
		64-QAM	-20.57	12.97	9.90	2.08	V		0.120	20.79		
		256-QAM	-22.35	11.19	9.90	2.08	V		0.080	19.01		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1720.0	Sub6 n66/ 20 MHz [15 kHz]	PI/2 BPSK	-17.68	15.82	9.60	2.00	V	< 1.00	0.220	23.42	1	105
		QPSK	-18.00	15.50	9.60	2.00	V		0.204	23.10		
		16-QAM	-18.96	14.54	9.60	2.00	V		0.164	22.14		
		64-QAM	-20.42	13.08	9.60	2.00	V		0.117	20.68		
		256-QAM	-21.98	11.52	9.60	2.00	V		0.082	19.12		
1745.0		PI/2 BPSK	-18.00	15.60	9.75	2.04	V		0.214	23.31	1	1
		QPSK	-18.02	15.58	9.75	2.04	V		0.213	23.29		
		16-QAM	-18.87	14.73	9.75	2.04	V		0.175	22.44		
		64-QAM	-20.25	13.35	9.75	2.04	V		0.128	21.06		
		256-QAM	-21.87	11.73	9.75	2.04	V		0.088	19.44		
1770.0	PI/2 BPSK	-18.13	15.51	9.90	2.09	V	0.215	23.32	1	1		
	QPSK	-18.21	15.43	9.90	2.09	V	0.211	23.24				
	16-QAM	-19.01	14.63	9.90	2.09	V	0.175	22.44				
	64-QAM	-20.80	12.84	9.90	2.09	V	0.116	20.65				
	256-QAM	-22.38	11.26	9.90	2.09	V	0.081	19.07				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1722.5	Sub6 n66/ 25 MHz [15 kHz]	PI/2 BPSK	-17.53	16.03	9.60	2.01	V	< 1.00	0.230	23.62	1	131
		QPSK	-17.88	15.68	9.60	2.01	V		0.212	23.27		
		16-QAM	-18.50	15.06	9.60	2.01	V		0.184	22.65		
		64-QAM	-20.35	13.21	9.60	2.01	V		0.120	20.80		
		256-QAM	-21.85	11.71	9.60	2.01	V		0.085	19.30		
1745.0		PI/2 BPSK	-17.73	15.87	9.75	2.04	V		0.228	23.58	1	1
		QPSK	-17.92	15.68	9.75	2.04	V		0.218	23.39		
		16-QAM	-18.80	14.80	9.75	2.04	V		0.178	22.51		
		64-QAM	-20.38	13.22	9.75	2.04	V		0.124	20.93		
		256-QAM	-21.96	11.64	9.75	2.04	V		0.086	19.35		
1767.5		PI/2 BPSK	-17.82	15.66	9.90	2.09	V		0.222	23.47	1	1
		QPSK	-17.87	15.61	9.90	2.09	V		0.220	23.42		
		16-QAM	-18.59	14.89	9.90	2.09	V		0.186	22.70		
		64-QAM	-20.02	13.46	9.90	2.09	V		0.134	21.27		
		256-QAM	-22.13	11.35	9.90	2.09	V		0.082	19.16		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1725.0	Sub6 n66/ 30 MHz [15 kHz]	PI/2 BPSK	-17.51	16.05	9.60	2.01	V	< 1.00	0.231	23.64	1	158
		QPSK	-17.58	15.98	9.60	2.01	V		0.228	23.57		
		16-QAM	-18.32	15.24	9.60	2.01	V		0.192	22.83		
		64-QAM	-19.85	13.71	9.60	2.01	V		0.135	21.30		
		256-QAM	-21.96	11.60	9.60	2.01	V		0.083	19.19		
1745.0		PI/2 BPSK	-17.62	15.98	9.75	2.04	V		0.234	23.69	1	1
		QPSK	-17.70	15.90	9.75	2.04	V		0.230	23.61		
		16-QAM	-18.36	15.24	9.75	2.04	V		0.197	22.95		
		64-QAM	-19.90	13.70	9.75	2.04	V		0.138	21.41		
		256-QAM	-22.00	11.60	9.75	2.04	V		0.085	19.31		
1765.0	PI/2 BPSK	-17.78	15.70	9.90	2.09	V	0.224	23.51	1	1		
	QPSK	-17.81	15.67	9.90	2.09	V	0.223	23.48				
	16-QAM	-18.45	15.03	9.90	2.09	V	0.192	22.84				
	64-QAM	-20.01	13.47	9.90	2.09	V	0.134	21.28				
	256-QAM	-22.15	11.33	9.90	2.09	V	0.082	19.14				

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1727.5	Sub6 n66/ 35 MHz [15 kHz]	PI/2 BPSK	-17.60	15.96	9.60	2.01	V	< 1.00	0.226	23.55	1	186
		QPSK	-17.69	15.87	9.60	2.01	V		0.222	23.46		
		16-QAM	-18.40	15.16	9.60	2.01	V		0.188	22.75		
		64-QAM	-19.90	13.66	9.60	2.01	V		0.133	21.25		
		256-QAM	-21.98	11.58	9.60	2.01	V		0.083	19.17		
1745.0		PI/2 BPSK	-17.50	16.10	9.75	2.04	V		0.240	23.81	1	1
		QPSK	-17.57	16.03	9.75	2.04	V		0.237	23.74		
		16-QAM	-18.50	15.10	9.75	2.04	V		0.191	22.81		
		64-QAM	-19.83	13.77	9.75	2.04	V		0.141	21.48		
		256-QAM	-21.94	11.66	9.75	2.04	V		0.086	19.37		
1762.5		PI/2 BPSK	-17.68	15.64	9.90	2.09	V		0.221	23.45	1	1
		QPSK	-17.72	15.60	9.90	2.09	V		0.219	23.41		
		16-QAM	-18.45	14.87	9.90	2.09	V		0.185	22.68		
		64-QAM	-19.91	13.41	9.90	2.09	V		0.132	21.22		
		256-QAM	-22.01	11.31	9.90	2.09	V		0.082	19.12		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain(dBi)	C.L	Pol	Limit	EIRP		RB	
								W	W	dBm	Size	Offset
1730.0	Sub6 n66/ 40 MHz [15 kHz]	PI/2 BPSK	-17.58	16.03	9.60	2.01	V	< 1.00	0.230	23.62	1	214
		QPSK	-17.64	15.97	9.60	2.01	V		0.227	23.56		
		16-QAM	-18.43	15.18	9.60	2.01	V		0.189	22.77		
		64-QAM	-19.85	13.76	9.60	2.01	V		0.136	21.35		
		256-QAM	-21.94	11.67	9.60	2.01	V		0.084	19.26		
1745.0		PI/2 BPSK	-17.43	16.17	9.75	2.04	V		0.244	23.88	1	1
		QPSK	-17.54	16.06	9.75	2.04	V		0.238	23.77		
		16-QAM	-18.60	15.00	9.75	2.04	V		0.187	22.71		
		64-QAM	-19.79	13.81	9.75	2.04	V		0.142	21.52		
		256-QAM	-21.84	11.76	9.75	2.04	V		0.089	19.47		
1760.0		PI/2 BPSK	-17.48	15.84	9.90	2.09	V		0.232	23.65	1	1
		QPSK	-17.52	15.80	9.90	2.09	V		0.230	23.61		
		16-QAM	-18.82	14.50	9.90	2.09	V		0.170	22.31		
		64-QAM	-20.27	13.05	9.90	2.09	V		0.122	20.86		
		256-QAM	-21.84	11.48	9.90	2.09	V		0.085	19.29		

8.2 RADIATED SPURIOUS EMISSIONS

■ NR Band:	<u>N66</u>
■ Bandwidth:	<u>10 MHz</u>
■ Modulation:	<u>PI/2 BPSK</u>
■ Distance:	<u>3 meters</u>
■ SCS:	<u>15 kHz</u>

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
343000 (1715.0)	3 430.00	-58.76	11.10	-59.48	2.97	V	-51.35	-13.00	1	50
	5 145.00	-56.23	10.90	-51.41	3.63	V	-44.14	-13.00		
	6 860.00	-50.87	10.80	-39.52	4.31	H	-33.03	-13.00		
	8 575.00	-59.01	10.50	-45.45	4.88	V	-39.83	-13.00		
	10 290.00	-63.58	11.00	-46.42	5.34	V	-40.76	-13.00		
349000 (1745.0)	3 490.00	-60.14	11.20	-61.58	3.00	V	-53.38	-13.00	1	1
	5 235.00	-59.10	11.10	-54.17	3.70	V	-46.77	-13.00		
	6 980.00	-55.88	10.90	-43.17	4.30	H	-36.57	-13.00		
	8 725.00	-62.02	10.30	-47.66	4.88	H	-42.24	-13.00		
	10 470.00	-62.92	11.30	-45.19	5.43	H	-39.32	-13.00		
355000 (1775.0)	3 550.00	-58.00	11.40	-59.81	3.02	H	-51.43	-13.00	1	1
	5 325.00	-54.19	11.40	-49.50	3.69	H	-41.79	-13.00		
	7 100.00	-54.81	10.50	-40.65	4.35	V	-34.50	-13.00		
	8 875.00	-61.76	10.50	-48.01	4.94	V	-42.45	-13.00		
	10 650.00	-63.53	11.10	-43.76	5.50	V	-38.16	-13.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n66	5 MHz	1745.0	BPSK	25	0	3.99
			QPSK			4.97
			16-QAM			5.71
			64-QAM			5.97
			256-QAM			6.37
	10 MHz		BPSK	50		4.31
			QPSK			4.99
			16-QAM			5.84
			64-QAM			6.13
			256-QAM			6.56
	15 MHz		BPSK	75		4.11
			QPSK			4.97
			16-QAM			5.81
			64-QAM			6.06
			256-QAM			6.54
	20 MHz		BPSK	100		5.01
			QPSK			5.32
			16-QAM			5.93
			64-QAM			6.09
			256-QAM			6.62
	25 MHz		BPSK	128		4.08
			QPSK			5.16
			16-QAM			5.88
			64-QAM			6.15
			256-QAM			6.57
	30 MHz		BPSK	160		4.03
			QPSK			5.04
			16-QAM			5.78
			64-QAM			6.04
			256-QAM			6.51
	35 MHz		BPSK	180		4.19
			QPSK			5.05
			16-QAM			5.73
			64-QAM			6.08
			256-QAM			6.54
	40 MHz		BPSK	216		4.24
			QPSK			5.01
			16-QAM			5.84
			64-QAM			6.01
			256-QAM			6.60

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 86 ~ 125.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n66	5 MHz	1745.0	BPSK	25	0	4.5907
			QPSK			4.5687
			16-QAM			4.5537
			64-QAM			4.5742
			256-QAM			4.6035
	10 MHz		BPSK	50		9.0157
			QPSK			8.9371
			16-QAM			8.9546
			64-QAM			8.9577
			256-QAM			8.9575
	15 MHz		BPSK	75		13.529
			QPSK			13.508
			16-QAM			13.417
			64-QAM			13.437
			256-QAM			13.421
	20 MHz		BPSK	100		17.899
			QPSK			17.862
			16-QAM			17.885
			64-QAM			17.898
			256-QAM			17.960
	25 MHz		BPSK	128		22.972
			QPSK			22.948
			16-QAM			22.936
			64-QAM			22.977
			256-QAM			22.941
	30 MHz		BPSK	160		28.727
			QPSK			28.630
			16-QAM			28.621
			64-QAM			28.649
			256-QAM			28.620
35 MHz	BPSK	180	32.203			
	QPSK		32.155			
	16-QAM		32.252			
	64-QAM		32.253			
	256-QAM		32.186			
40 MHz	BPSK	216	38.613			
	QPSK		38.716			
	16-QAM		38.781			
	64-QAM		38.697			
	256-QAM		38.731			

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 46 ~ 85.

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 n66	5	1712.5	7.4611	30.815	-70.271	-39.456	-13.00
		1745.0	8.2602	30.815	-70.233	-39.418	
		1777.5	4.0499	30.200	-70.796	-40.596	
	10	1715.0	6.0170	30.815	-70.415	-39.600	
		1745.0	3.7862	30.200	-70.675	-40.475	
		1775.0	4.0160	30.200	-68.930	-38.730	
	15	1717.5	7.9950	30.815	-70.131	-39.316	
		1745.0	5.9851	30.815	-69.604	-38.789	
		1772.5	3.7747	30.200	-70.514	-40.314	
	20	1720.0	9.6590	30.815	-70.324	-39.509	
		1745.0	9.7124	30.815	-71.040	-40.225	
		1770.0	4.0599	30.200	-70.708	-40.508	
	25	1722.5	8.9018	30.815	-70.729	-39.914	
		1745.0	9.6874	30.815	-70.303	-39.488	
		1767.5	9.6929	30.815	-70.963	-40.148	
	30	1725.0	6.0384	30.815	-70.206	-39.391	
		1745.0	8.2722	30.815	-69.781	-38.966	
		1765.0	3.7887	30.200	-70.749	-40.549	
	35	1727.5	9.9257	30.815	-70.538	-39.723	
		1745.0	4.9053	30.200	-70.704	-40.504	
		1762.5	8.0165	30.815	-70.992	-40.177	
	40	1730.0	5.2553	30.815	-70.977	-40.162	
		1745.0	8.2303	30.815	-70.662	-39.847	
		1760.0	8.0210	30.200	-70.523	-40.323	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 174 ~ 221.
2. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
3. Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.494
1 – 5	30.200
5 – 10	30.815
10 – 15	31.340
15 – 20	31.713
Above 20	32.355

8.6 BAND EDGE

- Plots of the EUT's Band Edge are shown Page 126 ~ 173.

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- ▣ BandWidth: 5 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
1712.5	100 %	+20(Ref)	1712 500 000	0.0	0.000 000	0.000
	100 %	-30	1712 499 999	-1.0	0.000 000	-0.001
	100 %	-20	1712 499 998	-1.8	0.000 000	-0.001
	100 %	-10	1712 500 001	0.7	0.000 000	0.000
	100 %	0	1712 500 000	-0.4	0.000 000	0.000
	100 %	+10	1712 499 999	-1.4	0.000 000	-0.001
	100 %	+30	1712 499 999	-1.4	0.000 000	-0.001
	100 %	+40	1712 500 000	-0.5	0.000 000	0.000
	100 %	+50	1712 499 999	-1.3	0.000 000	-0.001
	Batt. Endpoint	+20	1712 500 000	0.3	0.000 000	0.000
1777.5	100 %	+20(Ref)	1777 500 001	0.0	0.000 000	0.000
	100 %	-30	1777 500 002	0.7	0.000 000	0.000
	100 %	-20	1777 500 000	-1.2	0.000 000	-0.001
	100 %	-10	1777 500 001	0.2	0.000 000	0.000
	100 %	0	1777 500 002	0.7	0.000 000	0.000
	100 %	+10	1777 500 004	2.6	0.000 000	0.001
	100 %	+30	1777 500 001	0.0	0.000 000	0.000
	100 %	+40	1777 500 001	-0.6	0.000 000	0.000
	100 %	+50	1777 500 000	-1.3	0.000 000	-0.001
	Batt. Endpoint	+20	1777 500 002	1.2	0.000 000	0.001

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

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
1715.0	100 %	+20(Ref)	1715 000 002	0.0	0.000 000	0.000
	100 %	-30	1715 000 004	2.5	0.000 000	0.001
	100 %	-20	1715 000 005	3.3	0.000 000	0.002
	100 %	-10	1715 000 003	1.5	0.000 000	0.001
	100 %	0	1715 000 005	2.9	0.000 000	0.002
	100 %	+10	1715 000 004	2.0	0.000 000	0.001
	100 %	+30	1715 000 004	2.7	0.000 000	0.002
	100 %	+40	1715 000 004	2.0	0.000 000	0.001
	100 %	+50	1715 000 004	2.7	0.000 000	0.002
	Batt. Endpoint	+20	1715 000 003	0.9	0.000 000	0.001
1775.0	100 %	+20(Ref)	1774 999 998	0.0	0.000 000	0.000
	100 %	-30	1774 999 995	-3.3	0.000 000	-0.002
	100 %	-20	1774 999 996	-3.0	0.000 000	-0.002
	100 %	-10	1774 999 997	-2.0	0.000 000	-0.001
	100 %	0	1774 999 995	-3.0	0.000 000	-0.002
	100 %	+10	1774 999 997	-1.4	0.000 000	-0.001
	100 %	+30	1774 999 996	-2.8	0.000 000	-0.002
	100 %	+40	1774 999 996	-2.7	0.000 000	-0.002
	100 %	+50	1774 999 998	-0.7	0.000 000	0.000
	Batt. Endpoint	+20	1774 999 996	-2.1	0.000 000	-0.001

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

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
1717.5	100 %	+20(Ref)	1717 500 000	0.0	0.000 000	0.000
	100 %	-30	1717 499 998	-1.8	0.000 000	-0.001
	100 %	-20	1717 499 997	-2.8	0.000 000	-0.002
	100 %	-10	1717 499 999	-0.5	0.000 000	0.000
	100 %	0	1717 499 999	-0.3	0.000 000	0.000
	100 %	+10	1717 499 998	-1.3	0.000 000	-0.001
	100 %	+30	1717 500 000	0.3	0.000 000	0.000
	100 %	+40	1717 500 000	0.0	0.000 000	0.000
	100 %	+50	1717 499 997	-2.6	0.000 000	-0.001
	Batt. Endpoint	+20	1717 499 999	-0.4	0.000 000	0.000
1772.5	100 %	+20(Ref)	1772 499 994	0.0	0.000 000	0.000
	100 %	-30	1772 499 989	-4.1	0.000 000	-0.002
	100 %	-20	1772 499 989	-4.9	0.000 000	-0.003
	100 %	-10	1772 499 988	-5.4	0.000 000	-0.003
	100 %	0	1772 499 989	-4.2	0.000 000	-0.002
	100 %	+10	1772 499 989	-4.9	0.000 000	-0.003
	100 %	+30	1772 499 990	-3.4	0.000 000	-0.002
	100 %	+40	1772 499 988	-5.2	0.000 000	-0.003
	100 %	+50	1772 499 989	-4.8	0.000 000	-0.003
	Batt. Endpoint	+20	1772 499 991	-2.9	0.000 000	-0.002

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

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
1720.0	100 %	+20(Ref)	1720 000 000	0.0	0.000 000	0.000
	100 %	-30	1719 999 997	-2.3	0.000 000	-0.001
	100 %	-20	1719 999 998	-1.8	0.000 000	-0.001
	100 %	-10	1719 999 999	-1.0	0.000 000	-0.001
	100 %	0	1719 999 999	-0.6	0.000 000	0.000
	100 %	+10	1719 999 997	-2.2	0.000 000	-0.001
	100 %	+30	1719 999 997	-2.4	0.000 000	-0.001
	100 %	+40	1719 999 997	-2.2	0.000 000	-0.001
	100 %	+50	1719 999 994	-5.5	0.000 000	-0.003
	Batt. Endpoint	+20	1719 999 995	-4.7	0.000 000	-0.003
1770.0	100 %	+20(Ref)	1769 999 997	0.0	0.000 000	0.000
	100 %	-30	1769 999 993	-4.3	0.000 000	-0.002
	100 %	-20	1769 999 995	-1.9	0.000 000	-0.001
	100 %	-10	1769 999 994	-3.2	0.000 000	-0.002
	100 %	0	1769 999 993	-4.0	0.000 000	-0.002
	100 %	+10	1769 999 996	-1.1	0.000 000	-0.001
	100 %	+30	1769 999 995	-2.2	0.000 000	-0.001
	100 %	+40	1769 999 996	-1.4	0.000 000	-0.001
	100 %	+50	1769 999 995	-2.3	0.000 000	-0.001
	Batt. Endpoint	+20	1769 999 998	0.8	0.000 000	0.000

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

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
1722.5	100 %	+20(Ref)	1722 500 000	0.0	0.000 000	0.000
	100 %	-30	1722 499 999	-0.8	0.000 000	0.000
	100 %	-20	1722 499 999	-1.0	0.000 000	-0.001
	100 %	-10	1722 499 999	-1.5	0.000 000	-0.001
	100 %	0	1722 499 999	-1.3	0.000 000	-0.001
	100 %	+10	1722 499 999	-1.0	0.000 000	-0.001
	100 %	+30	1722 499 999	-1.2	0.000 000	-0.001
	100 %	+40	1722 499 999	-1.0	0.000 000	-0.001
	100 %	+50	1722 499 999	-1.4	0.000 000	-0.001
	Batt. Endpoint	+20	1722 500 000	0.0	0.000 000	0.000
1767.5	100 %	+20(Ref)	1767 499 999	0.0	0.000 000	0.000
	100 %	-30	1767 499 997	-2.6	0.000 000	-0.001
	100 %	-20	1767 499 997	-2.6	0.000 000	-0.001
	100 %	-10	1767 499 999	-0.8	0.000 000	0.000
	100 %	0	1767 500 000	0.1	0.000 000	0.000
	100 %	+10	1767 499 998	-1.6	0.000 000	-0.001
	100 %	+30	1767 499 997	-2.2	0.000 000	-0.001
	100 %	+40	1767 499 998	-1.5	0.000 000	-0.001
	100 %	+50	1767 499 996	-3.2	0.000 000	-0.002
	Batt. Endpoint	+20	1767 499 996	-3.8	0.000 000	-0.002

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

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
1725.0	100 %	+20(Ref)	1724 999 997	0.0	0.000 000	0.000
	100 %	-30	1724 999 993	-4.0	0.000 000	-0.002
	100 %	-20	1724 999 995	-1.4	0.000 000	-0.001
	100 %	-10	1724 999 994	-2.3	0.000 000	-0.001
	100 %	0	1724 999 995	-2.0	0.000 000	-0.001
	100 %	+10	1724 999 993	-3.9	0.000 000	-0.002
	100 %	+30	1724 999 995	-2.0	0.000 000	-0.001
	100 %	+40	1724 999 994	-2.8	0.000 000	-0.002
	100 %	+50	1724 999 994	-2.6	0.000 000	-0.001
	Batt. Endpoint	+20	1724 999 994	-3.0	0.000 000	-0.002
1765.0	100 %	+20(Ref)	1764 999 999	0.0	0.000 000	0.000
	100 %	-30	1764 999 998	-1.0	0.000 000	-0.001
	100 %	-20	1764 999 995	-3.4	0.000 000	-0.002
	100 %	-10	1764 999 998	-1.1	0.000 000	-0.001
	100 %	0	1764 999 995	-3.2	0.000 000	-0.002
	100 %	+10	1764 999 996	-2.3	0.000 000	-0.001
	100 %	+30	1764 999 996	-2.4	0.000 000	-0.001
	100 %	+40	1764 999 998	-0.8	0.000 000	0.000
	100 %	+50	1764 999 996	-2.3	0.000 000	-0.001
	Batt. Endpoint	+20	1764 999 995	-3.4	0.000 000	-0.002

- ▣ BandWidth: 35 MHz
- ▣ Voltage(100 %): 3.850 VDC
- ▣ Batt. Endpoint: 3.400 VDC
- ▣ LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
1727.5	100 %	+20(Ref)	1727 500 000	0.0	0.000 000	0.000
	100 %	-30	1727 500 001	1.0	0.000 000	0.001
	100 %	-20	1727 500 001	1.4	0.000 000	0.001
	100 %	-10	1727 499 998	-1.9	0.000 000	-0.001
	100 %	0	1727 500 002	2.0	0.000 000	0.001
	100 %	+10	1727 500 006	6.0	0.000 000	0.003
	100 %	+30	1727 500 005	4.9	0.000 000	0.003
	100 %	+40	1727 500 002	2.2	0.000 000	0.001
	100 %	+50	1727 500 002	2.0	0.000 000	0.001
	Batt. Endpoint	+20	1727 500 004	3.8	0.000 000	0.002
1762.5	100 %	+20(Ref)	1762 499 999	0.0	0.000 000	0.000
	100 %	-30	1762 499 999	-0.5	0.000 000	0.000
	100 %	-20	1762 499 998	-1.1	0.000 000	-0.001
	100 %	-10	1762 499 994	-4.8	0.000 000	-0.003
	100 %	0	1762 499 995	-3.9	0.000 000	-0.002
	100 %	+10	1762 499 997	-2.3	0.000 000	-0.001
	100 %	+30	1762 499 995	-4.2	0.000 000	-0.002
	100 %	+40	1762 499 994	-5.5	0.000 000	-0.003
	100 %	+50	1762 499 996	-3.2	0.000 000	-0.002
	Batt. Endpoint	+20	1762 499 996	-3.3	0.000 000	-0.002

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

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
1730.0	100 %	+20(Ref)	1729 999 999	0.0	0.000 000	0.000
	100 %	-30	1729 999 998	-1.6	0.000 000	-0.001
	100 %	-20	1729 999 999	-0.9	0.000 000	-0.001
	100 %	-10	1729 999 999	-0.3	0.000 000	0.000
	100 %	0	1729 999 999	-0.3	0.000 000	0.000
	100 %	+10	1729 999 996	-3.1	0.000 000	-0.002
	100 %	+30	1729 999 997	-2.9	0.000 000	-0.002
	100 %	+40	1729 999 995	-4.7	0.000 000	-0.003
	100 %	+50	1729 999 993	-6.4	0.000 000	-0.004
	Batt. Endpoint	+20	1729 999 995	-4.5	0.000 000	-0.003
1760.0	100 %	+20(Ref)	1759 999 998	0.0	0.000 000	0.000
	100 %	-30	1759 999 996	-2.0	0.000 000	-0.001
	100 %	-20	1759 999 996	-2.1	0.000 000	-0.001
	100 %	-10	1759 999 994	-3.9	0.000 000	-0.002
	100 %	0	1759 999 995	-2.9	0.000 000	-0.002
	100 %	+10	1759 999 995	-2.7	0.000 000	-0.002
	100 %	+30	1759 999 994	-4.1	0.000 000	-0.002
	100 %	+40	1759 999 995	-3.3	0.000 000	-0.002
	100 %	+50	1759 999 994	-3.8	0.000 000	-0.002
	Batt. Endpoint	+20	1759 999 994	-3.4	0.000 000	-0.002

9. TEST PLOTS

Sub6 n66. Occupied Bandwidth Plot (5 M BW Ch.349000 BPSK Full RB)



Sub6 n66. Occupied Bandwidth Plot (5 M BW Ch.349000 QPSK Full RB)



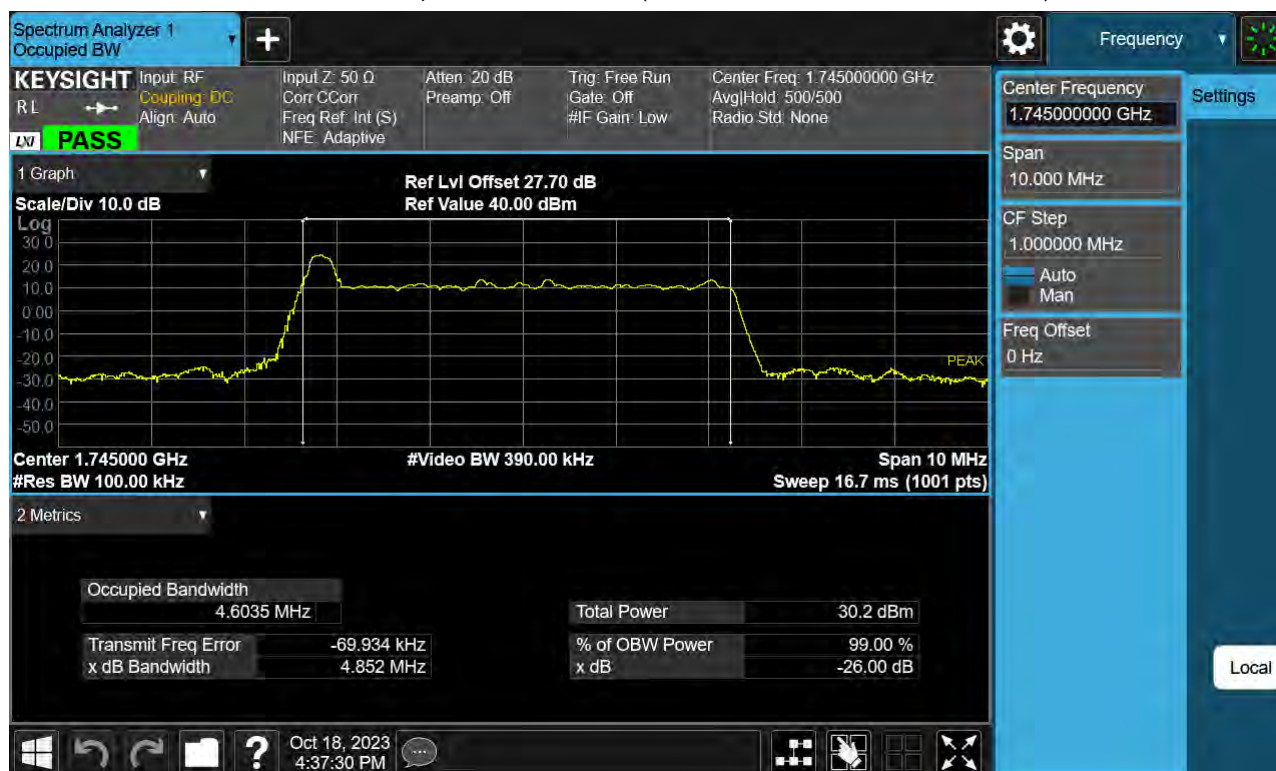
Sub6 n66. Occupied Bandwidth Plot (5 M BW Ch.349000 16QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (5 M BW Ch.349000 64QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (5 M BW Ch.349000 256QAM Full RB)



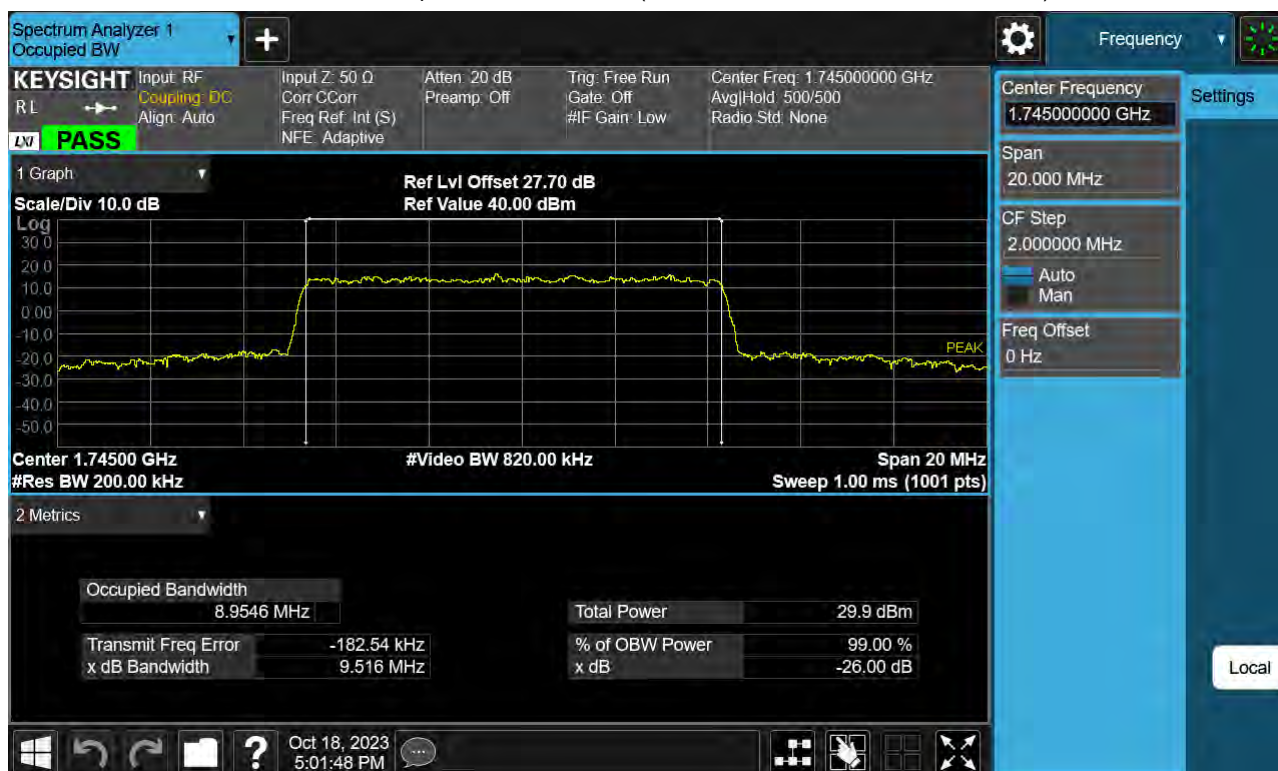
Sub6 n66. Occupied Bandwidth Plot (10 M BW Ch.349000 BPSK Full RB)



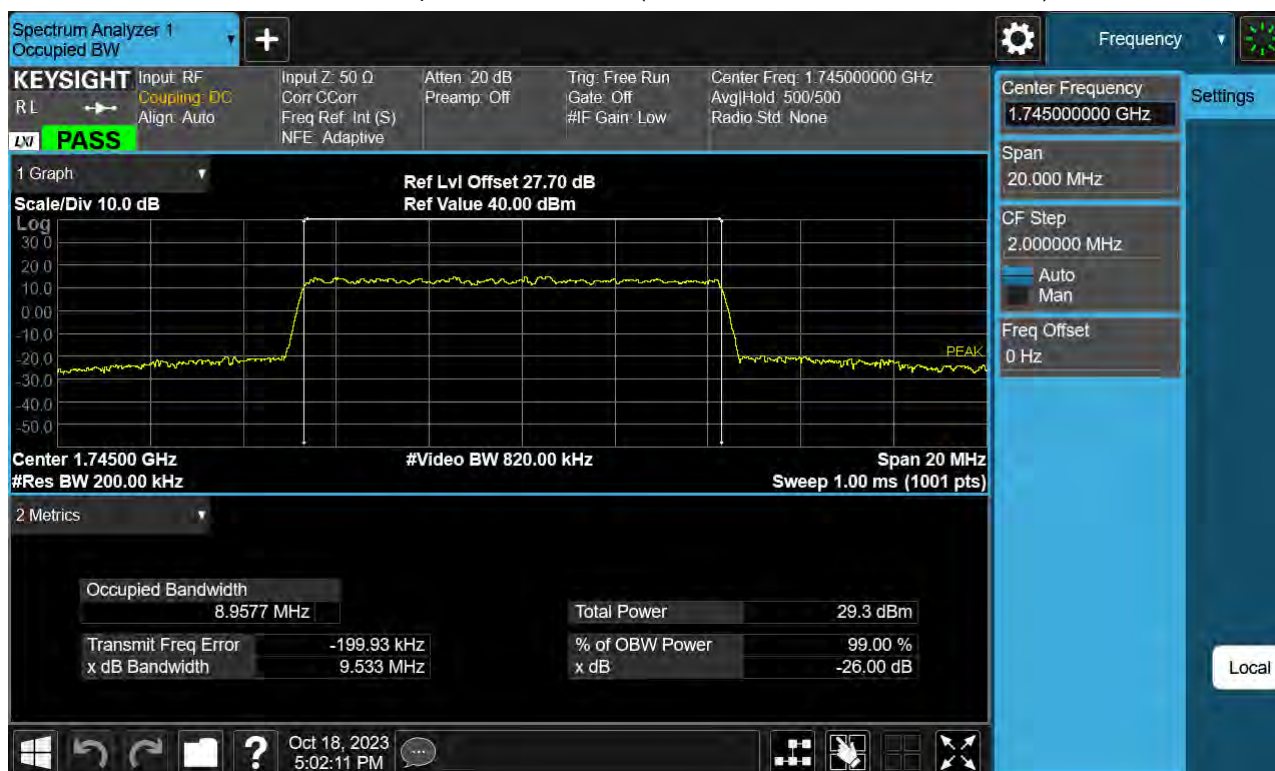
Sub6 n66. Occupied Bandwidth Plot (10 M BW Ch.349000 QPSK Full RB)



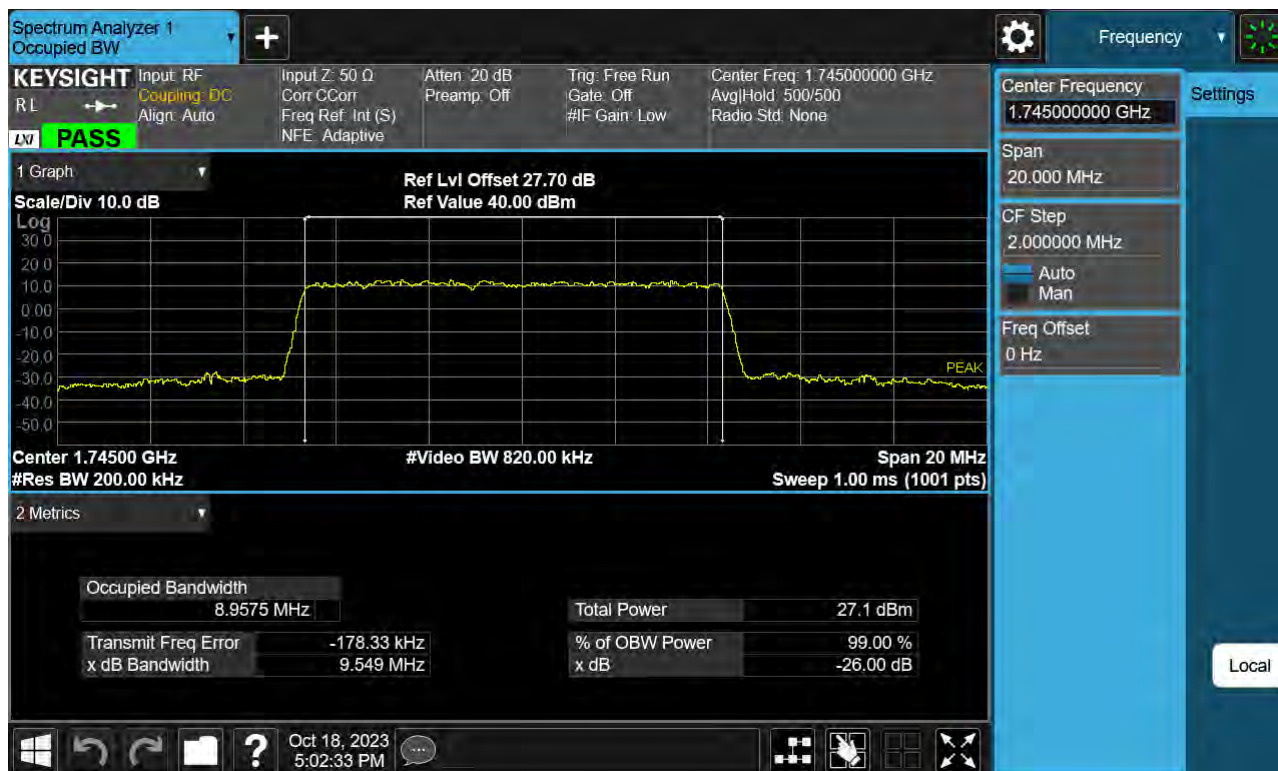
Sub6 n66. Occupied Bandwidth Plot (10 M BW Ch.349000 16QAM Full RB)



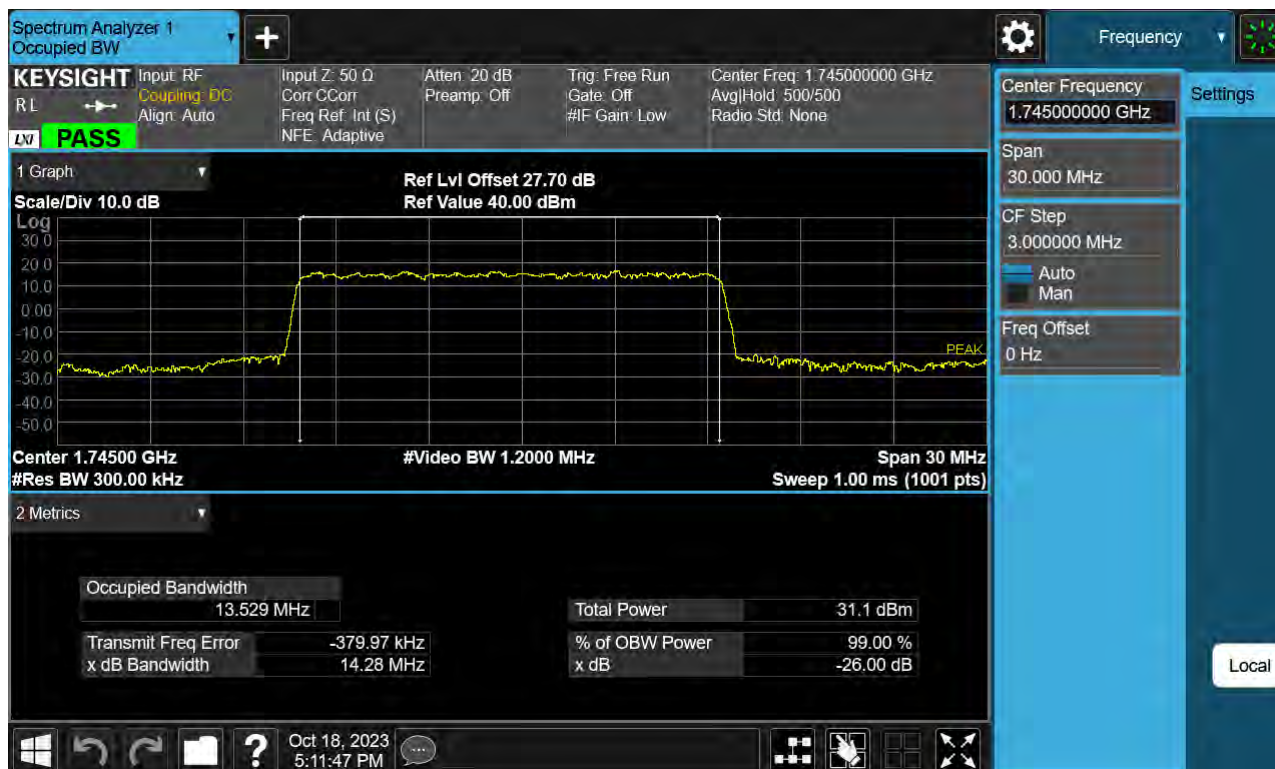
Sub6 n66. Occupied Bandwidth Plot (10 M BW Ch.349000 64QAM Full RB)



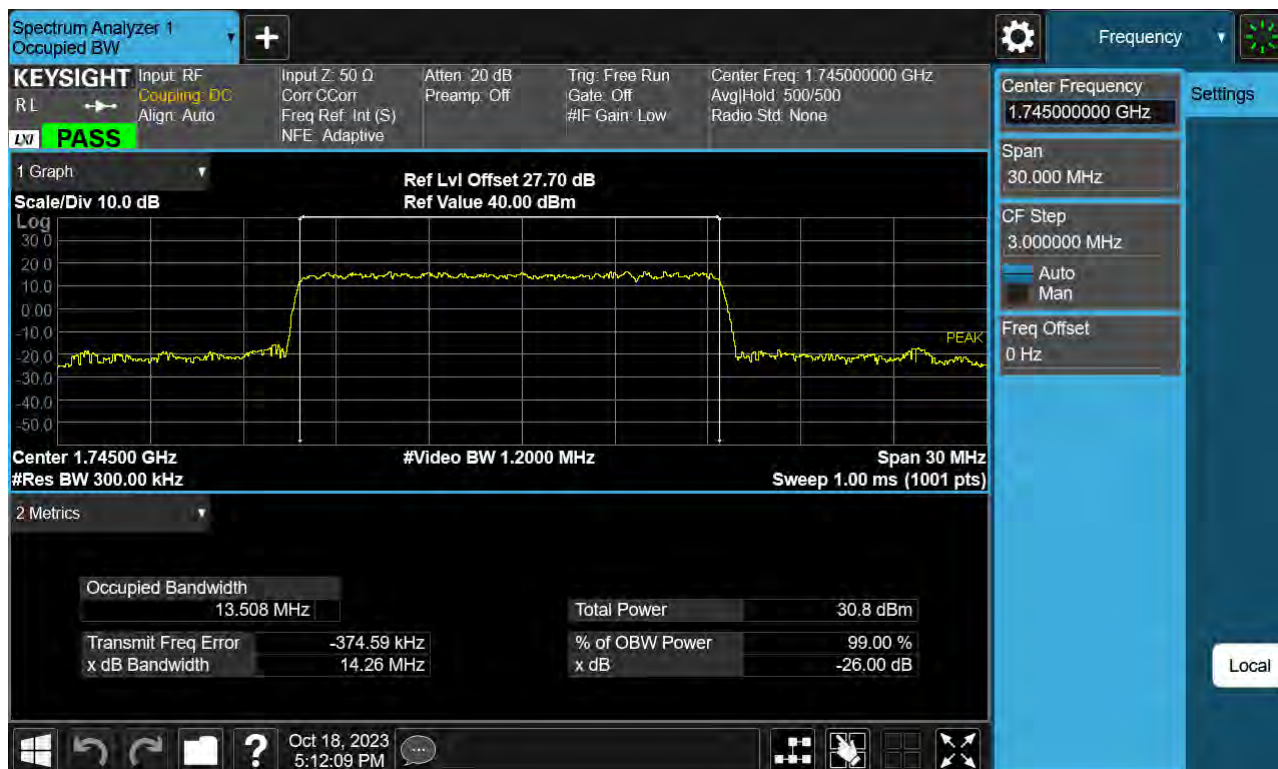
Sub6 n66. Occupied Bandwidth Plot (10 M BW Ch.349000 256QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (15 M BW Ch.349000 BPSK Full RB)



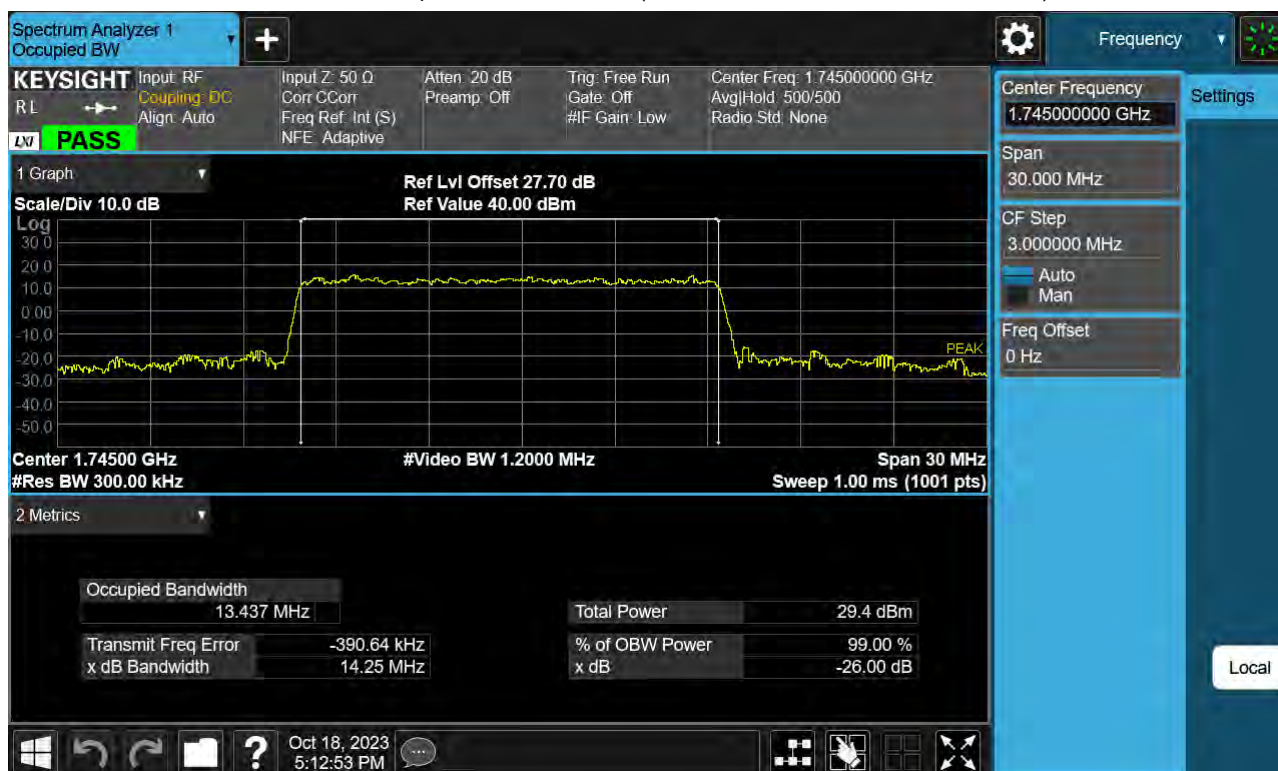
Sub6 n66. Occupied Bandwidth Plot (15 M BW Ch.349000 QPSK Full RB)



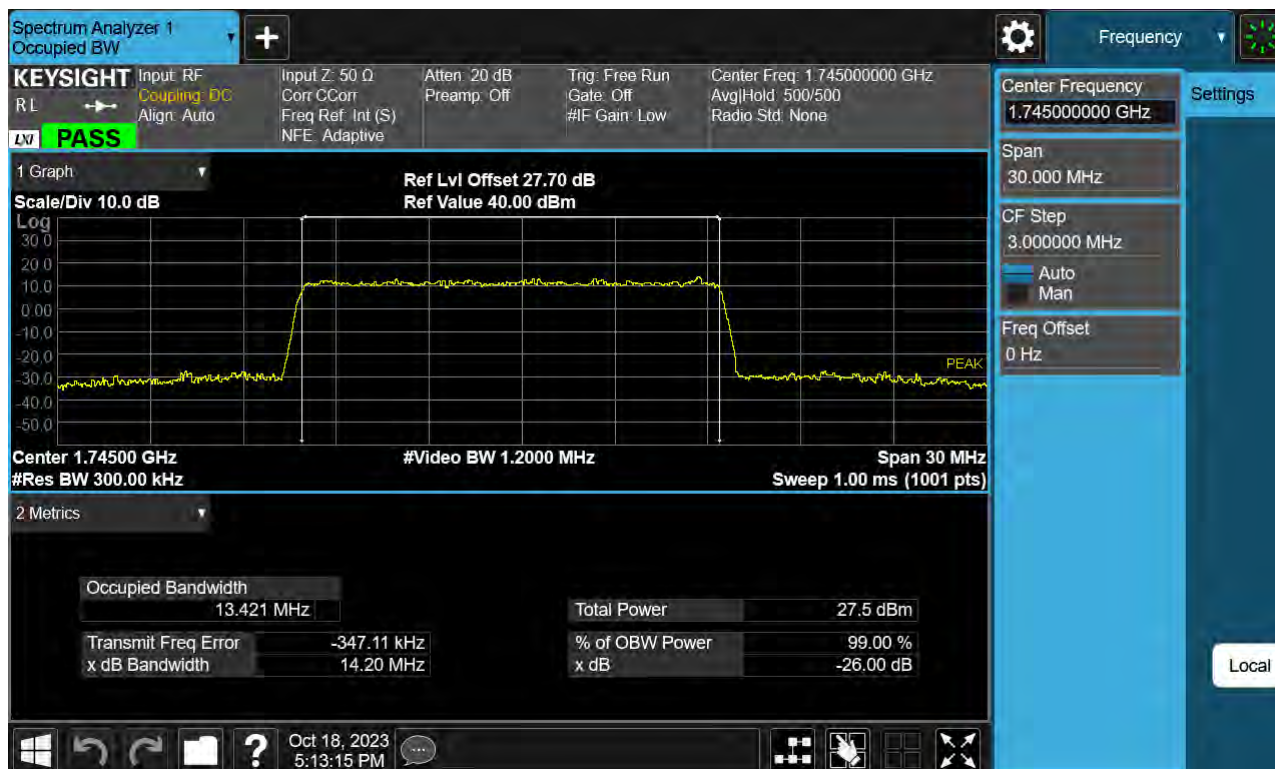
Sub6 n66. Occupied Bandwidth Plot (15 M BW Ch.349000 16QAM Full RB)



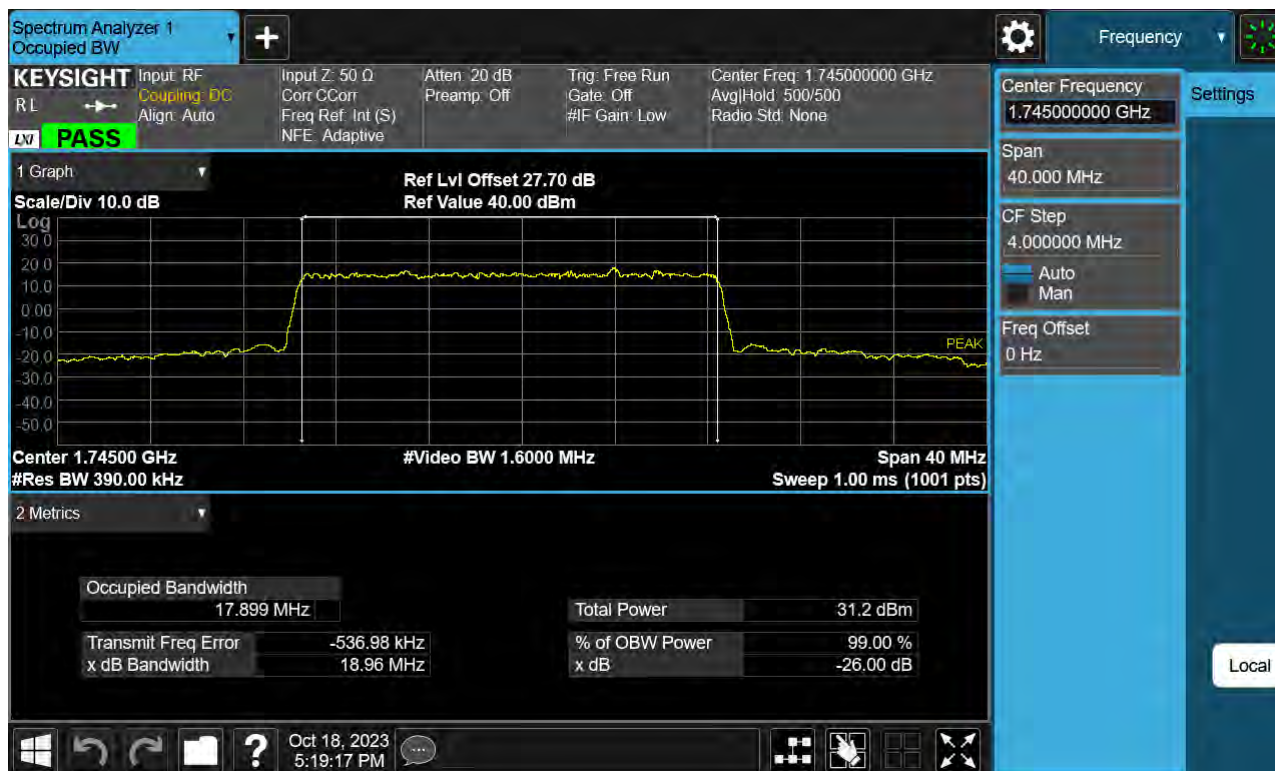
Sub6 n66. Occupied Bandwidth Plot (15 M BW Ch.349000 64QAM Full RB)



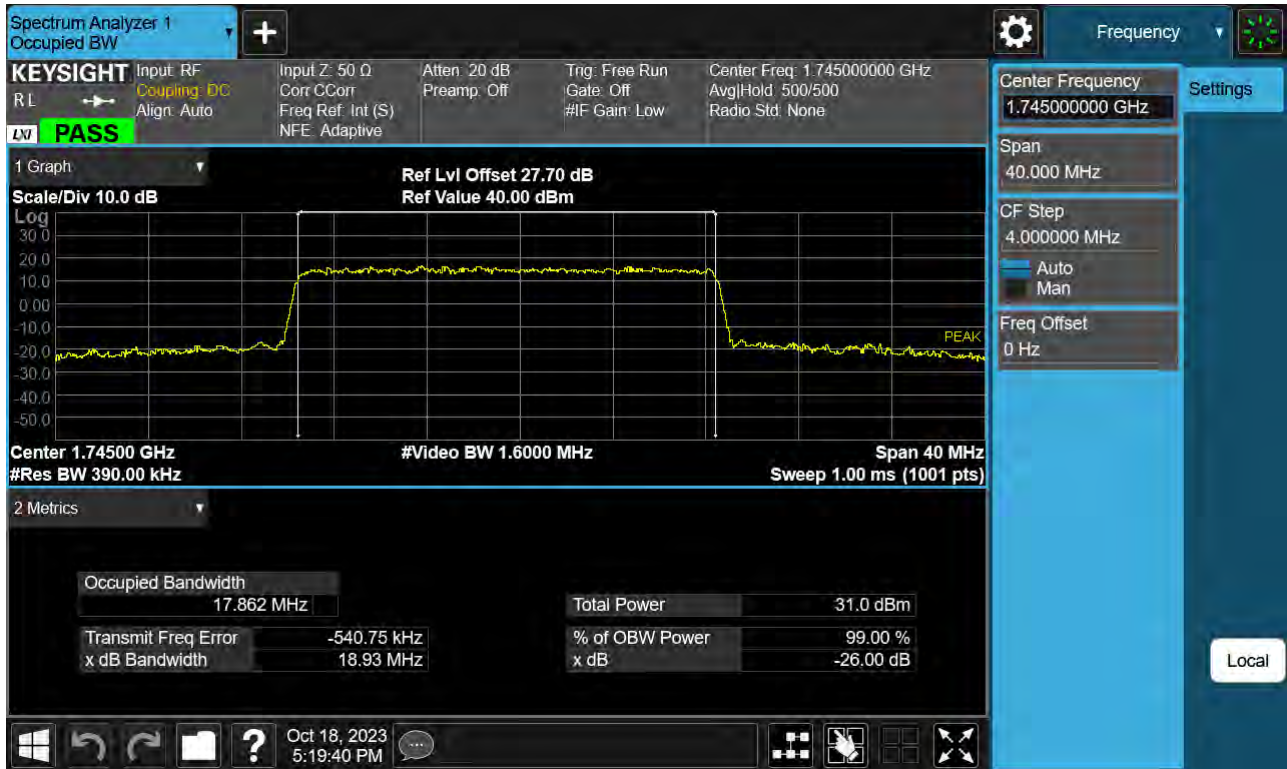
Sub6 n66. Occupied Bandwidth Plot (15 M BW Ch.349000 256QAM Full RB)



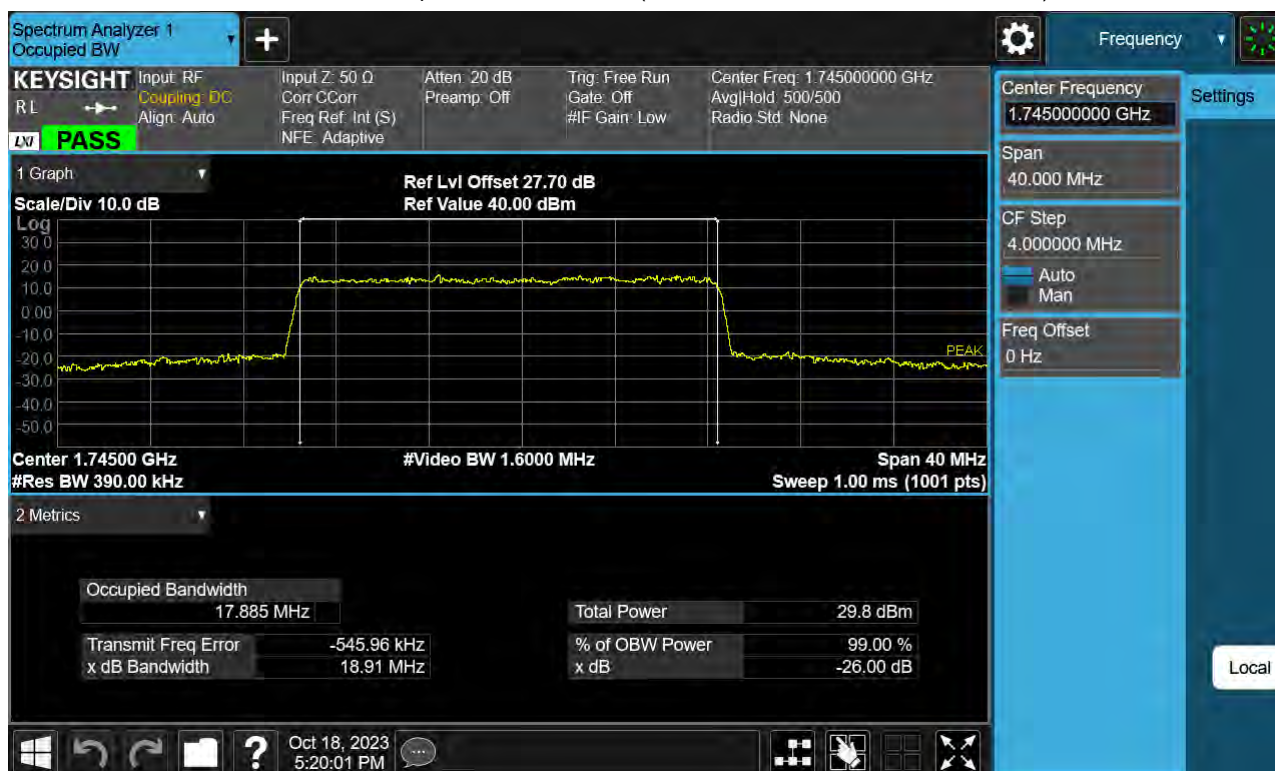
Sub6 n66. Occupied Bandwidth Plot (20 M BW Ch.349000 BPSK Full RB)



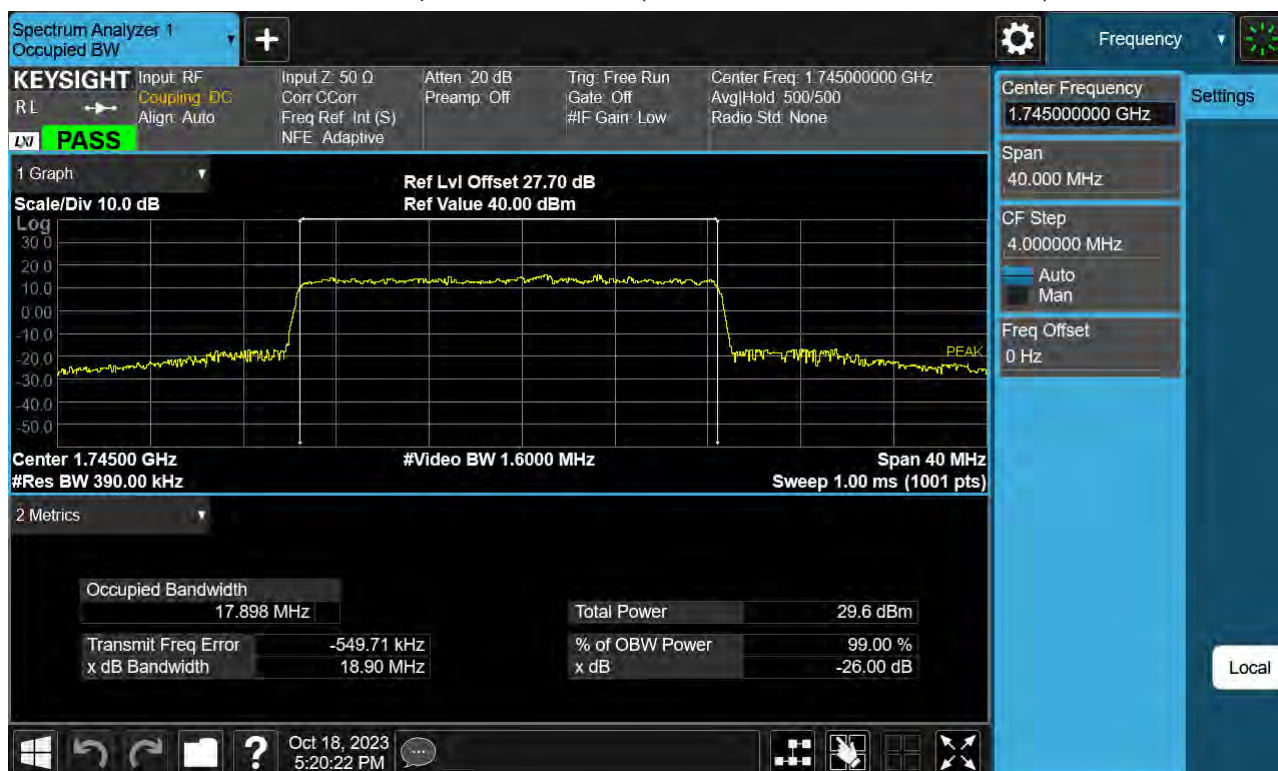
Sub6 n66. Occupied Bandwidth Plot (20 M BW Ch.349000 QPSK Full RB)



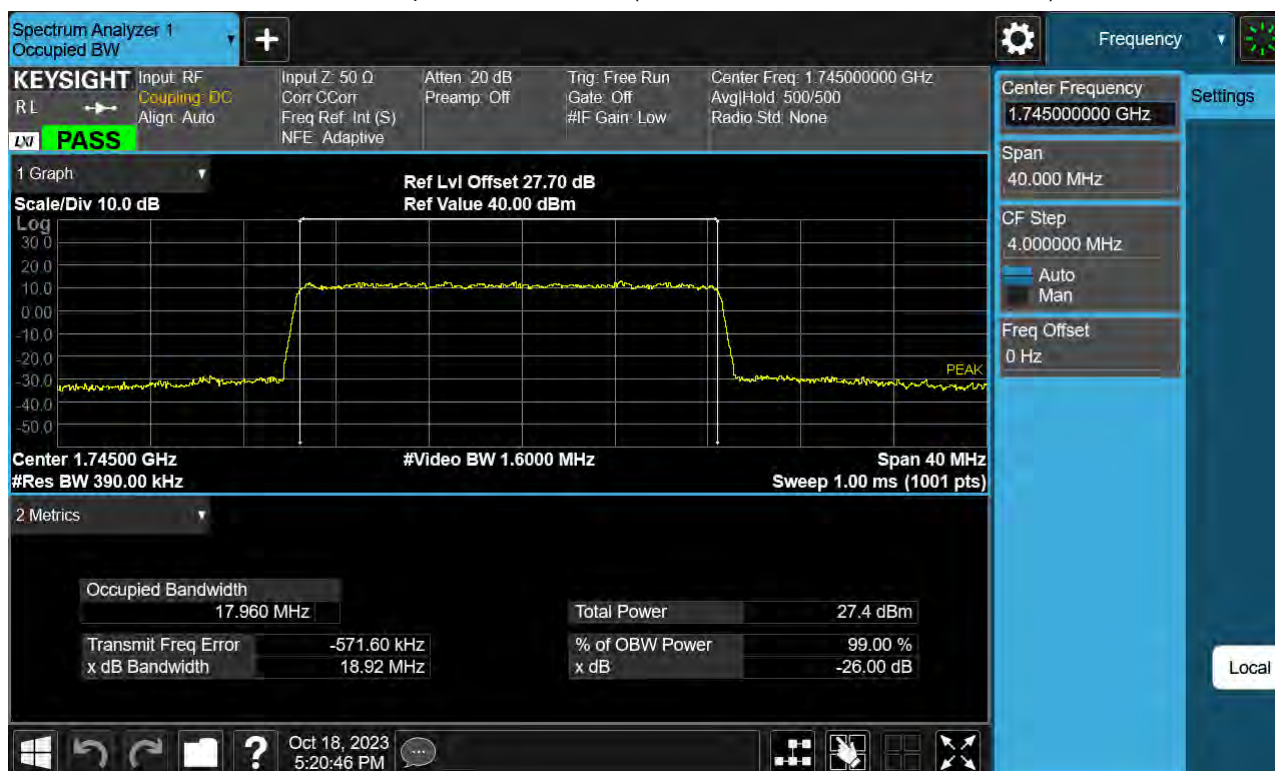
Sub6 n66. Occupied Bandwidth Plot (20 M BW Ch.349000 16QAM Full RB)



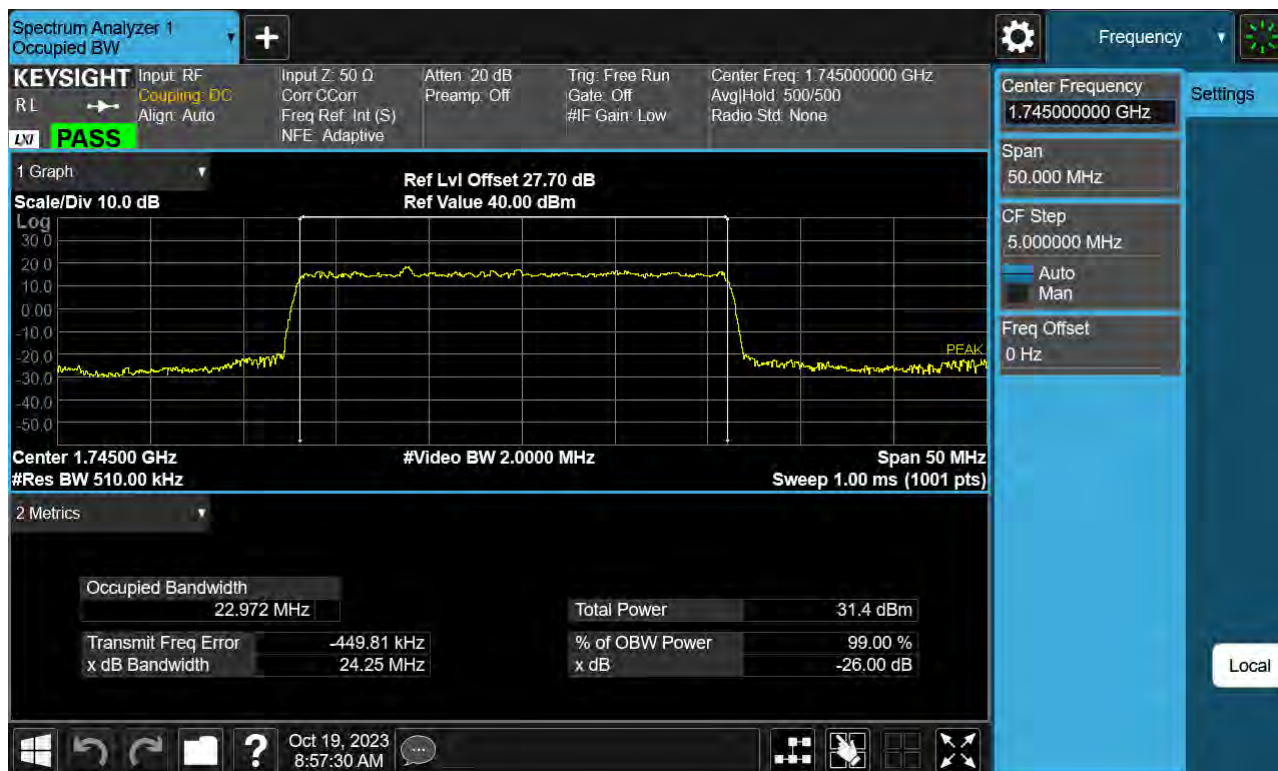
Sub6 n66. Occupied Bandwidth Plot (20 M BW Ch.349000 64QAM Full RB)



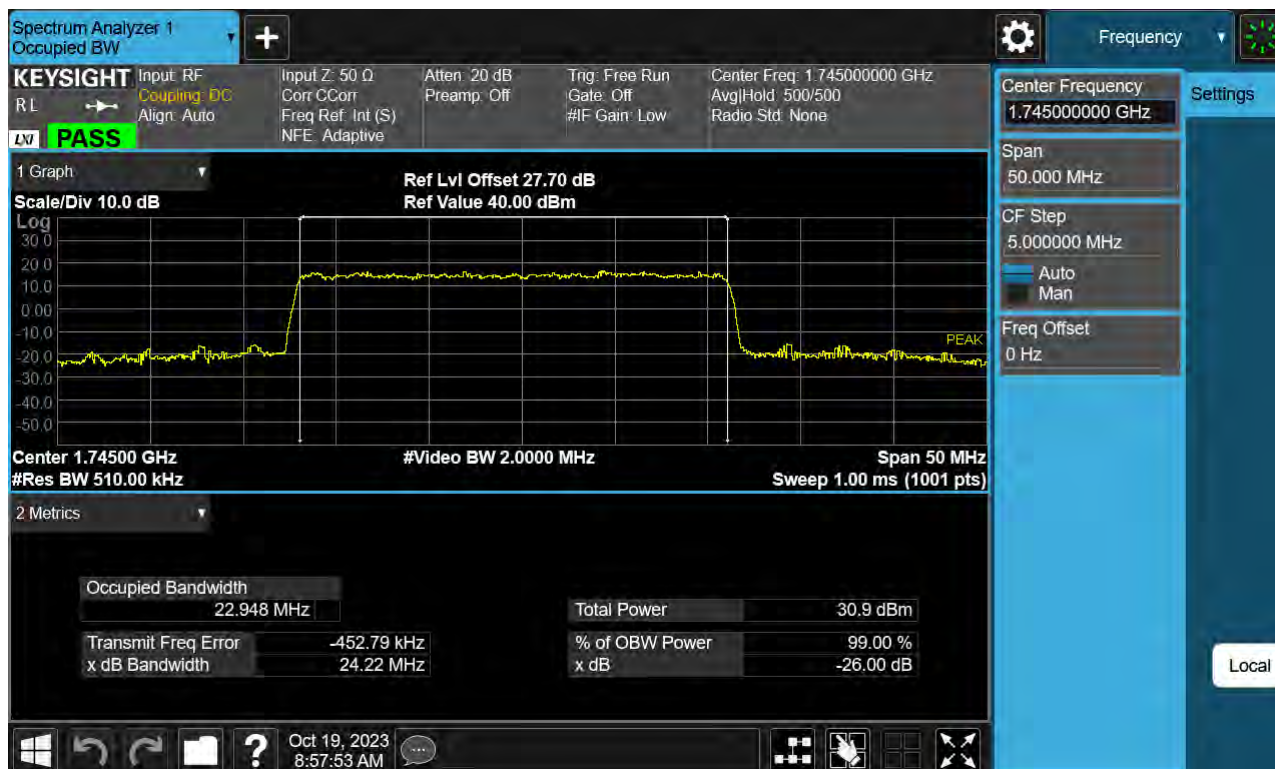
Sub6 n66. Occupied Bandwidth Plot (20 M BW Ch.349000 256QAM Full RB)



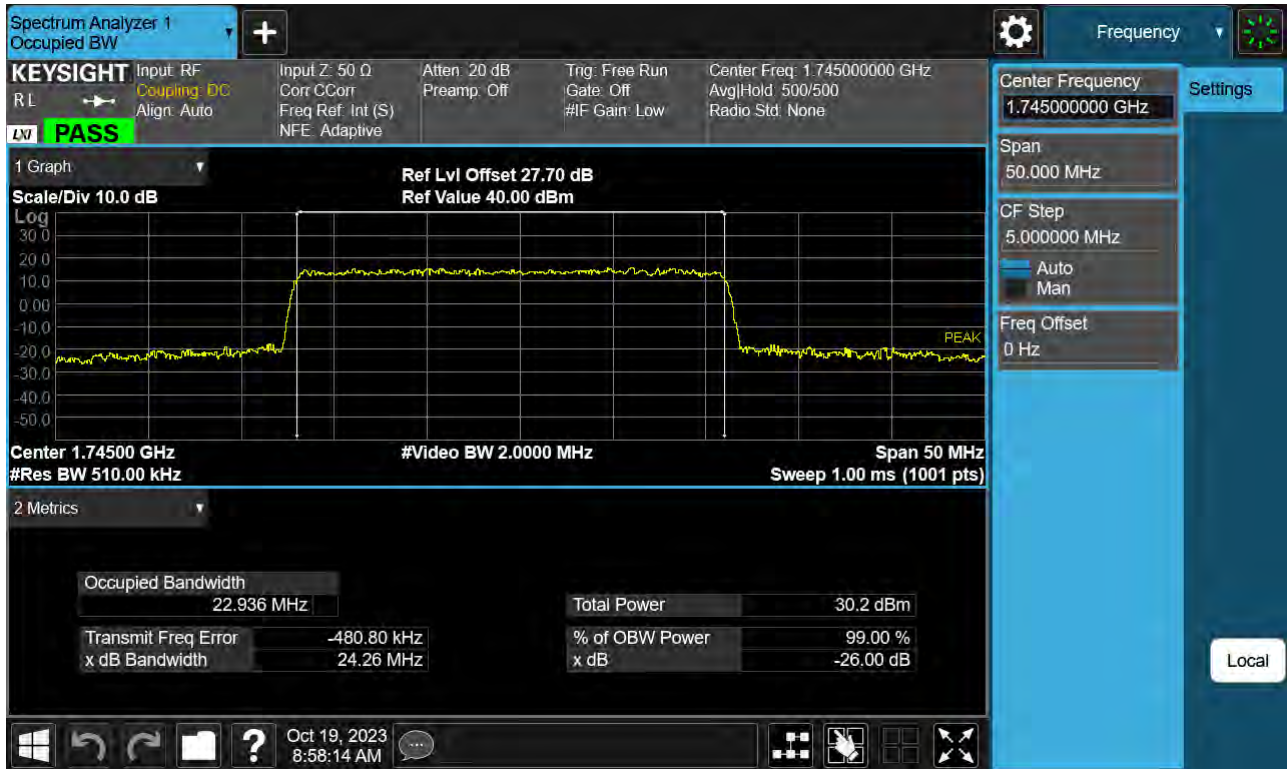
Sub6 n66. Occupied Bandwidth Plot (25 M BW Ch.349000 BPSK Full RB)



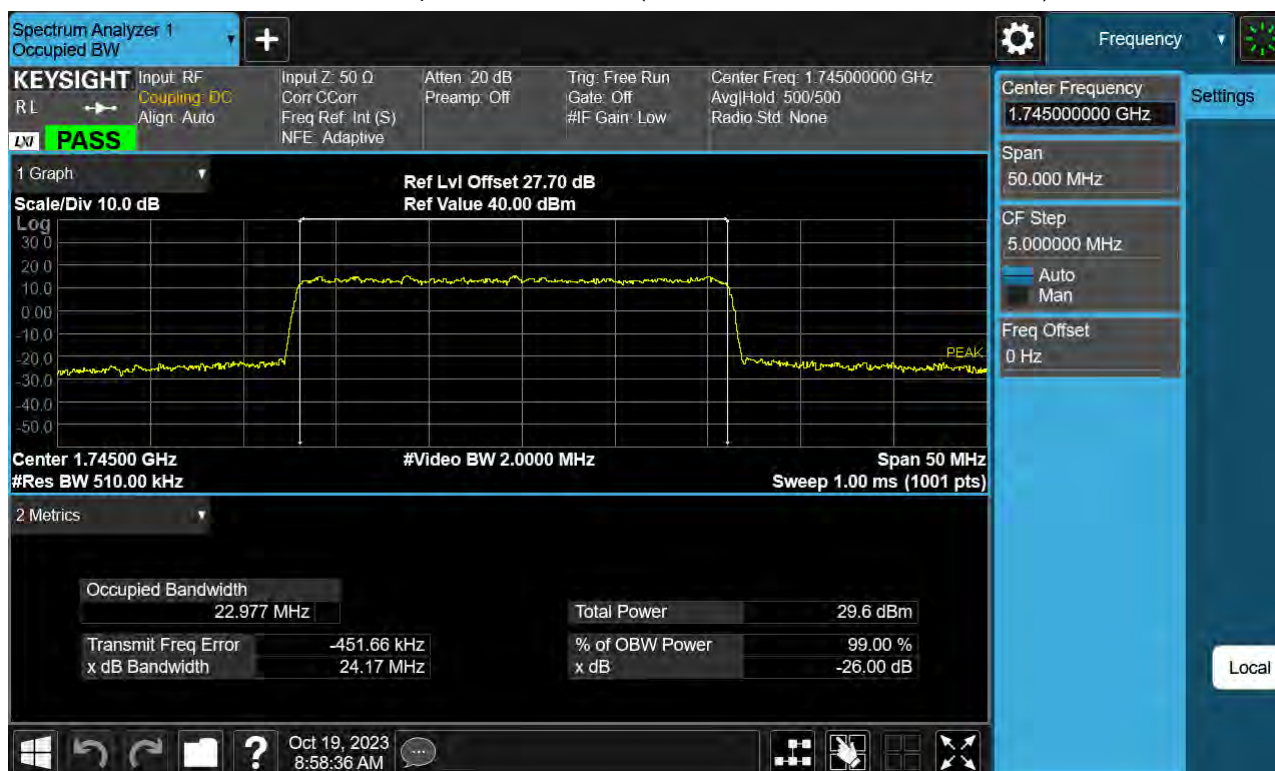
Sub6 n66. Occupied Bandwidth Plot (25 M BW Ch.349000 QPSK Full RB)



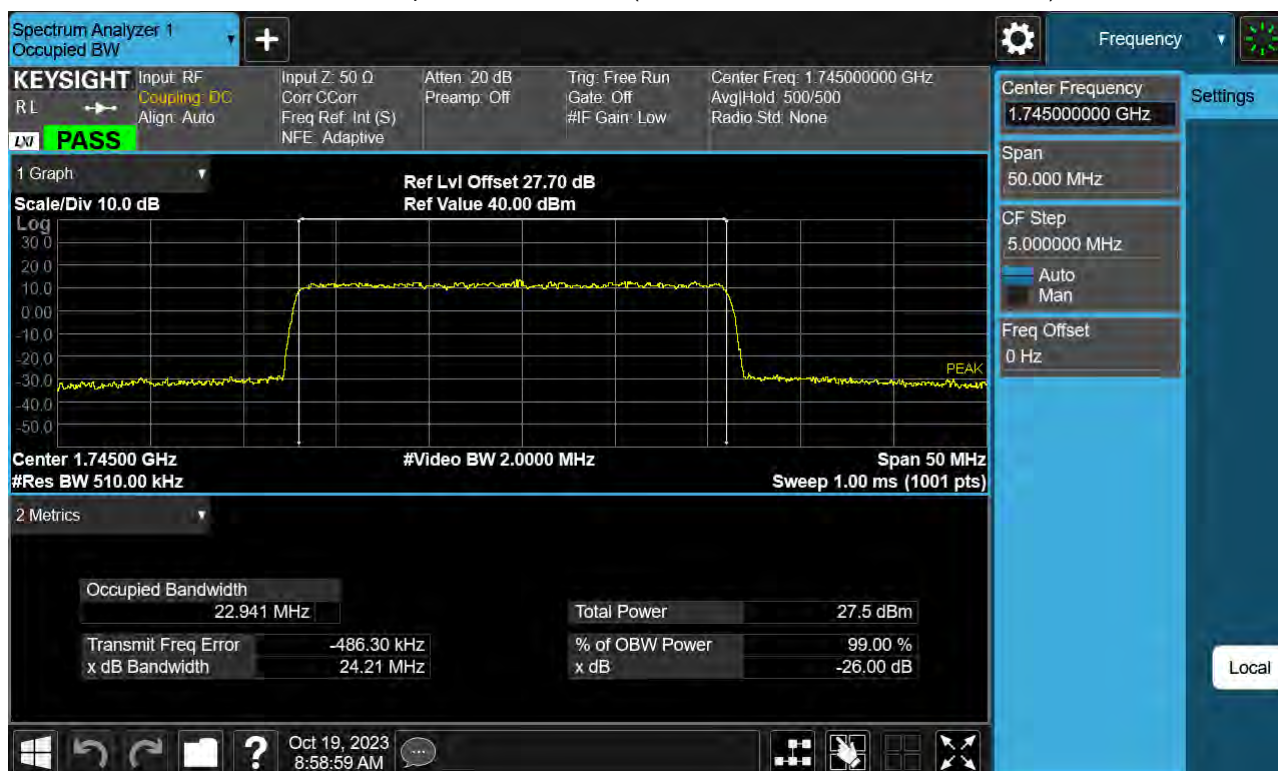
Sub6 n66. Occupied Bandwidth Plot (25 M BW Ch.349000 16QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (25 M BW Ch.349000 64QAM Full RB)



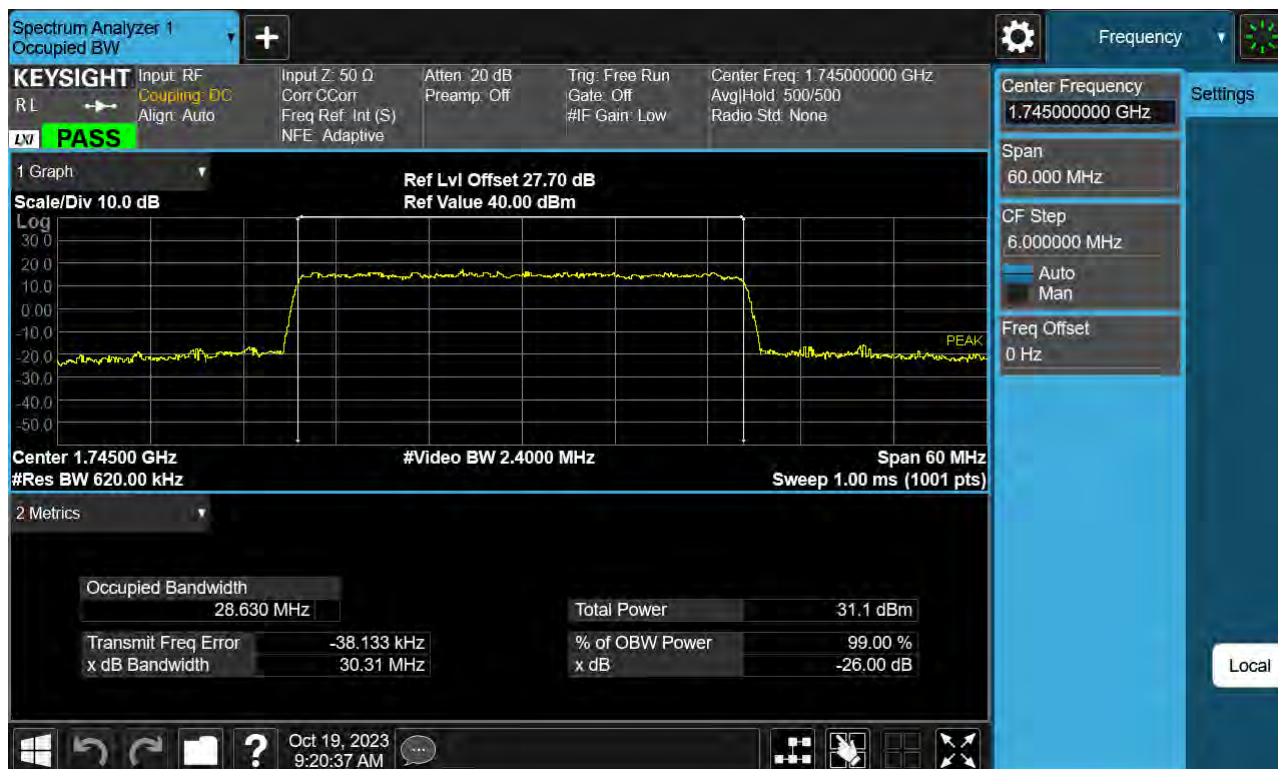
Sub6 n66. Occupied Bandwidth Plot (25 M BW Ch.349000 256QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (30 M BW Ch.349000 BPSK Full RB)



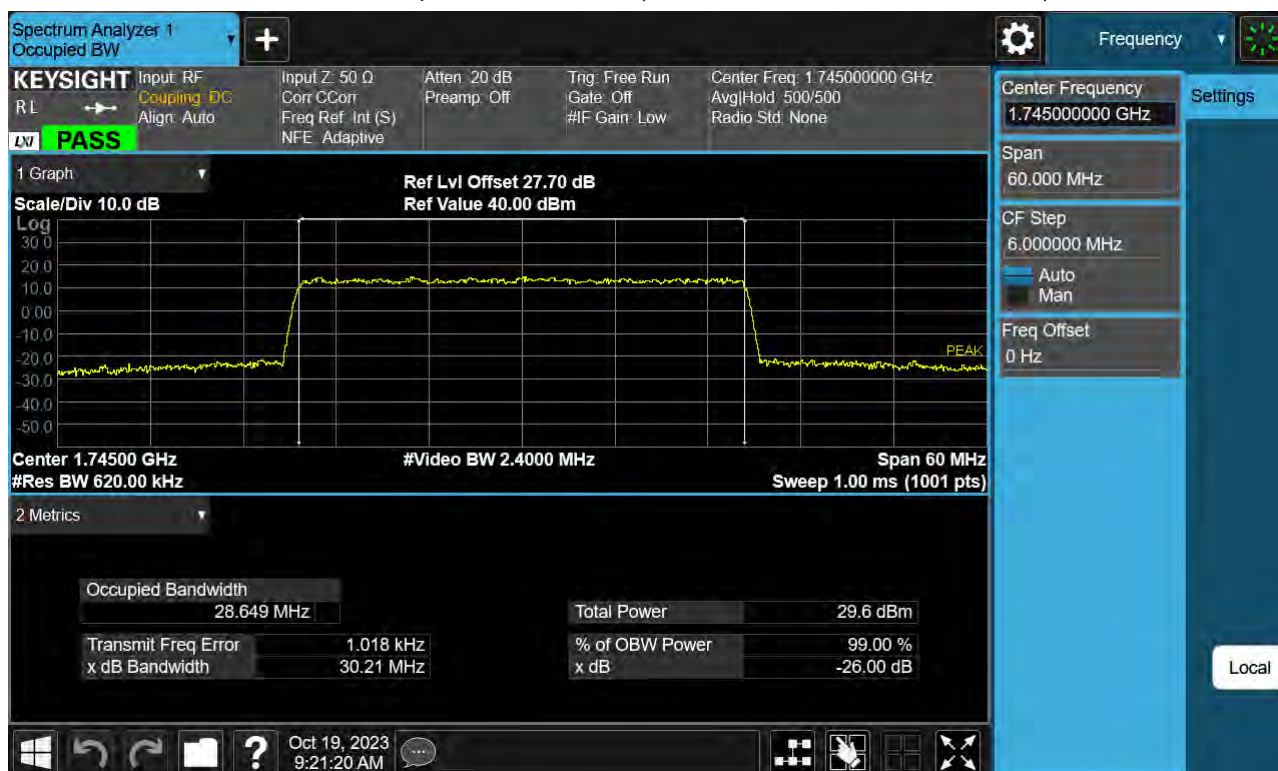
Sub6 n66. Occupied Bandwidth Plot (30 M BW Ch.349000 QPSK Full RB)



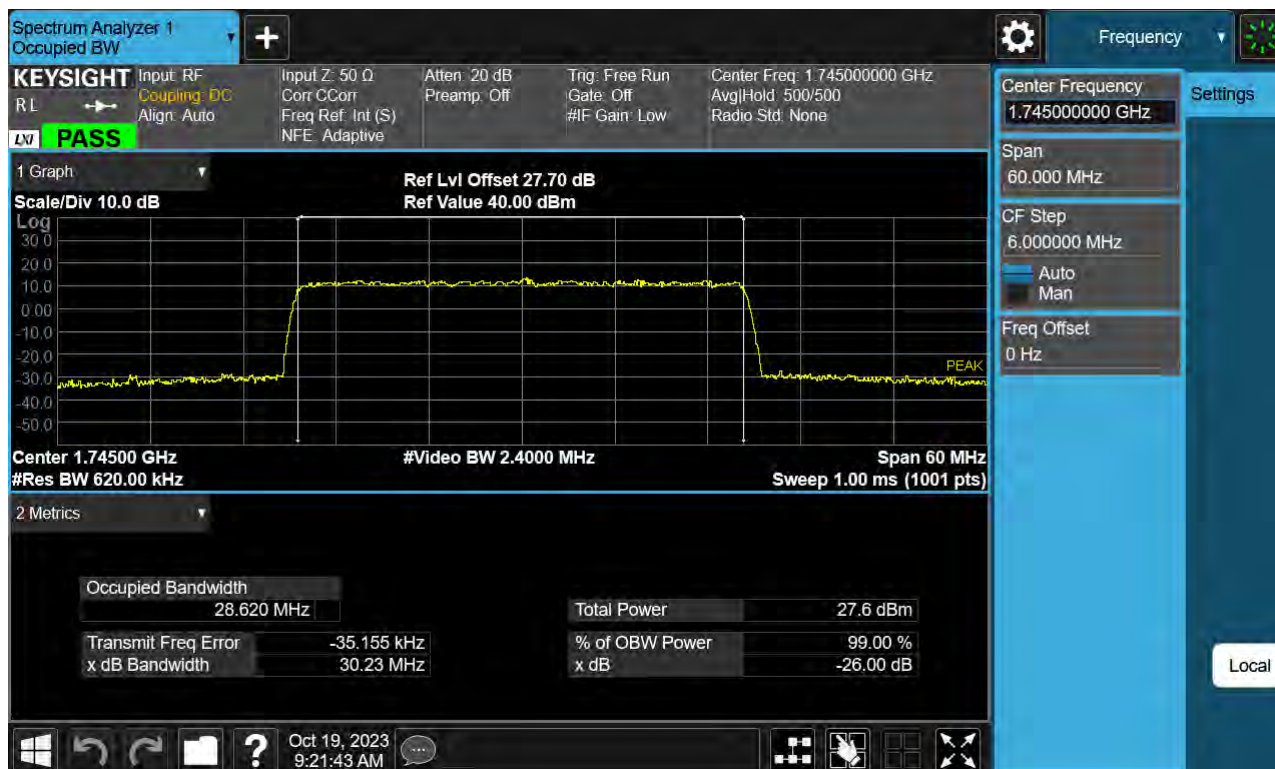
Sub6 n66. Occupied Bandwidth Plot (30 M BW Ch.349000 16QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (30 M BW Ch.349000 64QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (30 M BW Ch.349000 256QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (35 M BW Ch.349000 BPSK Full RB)



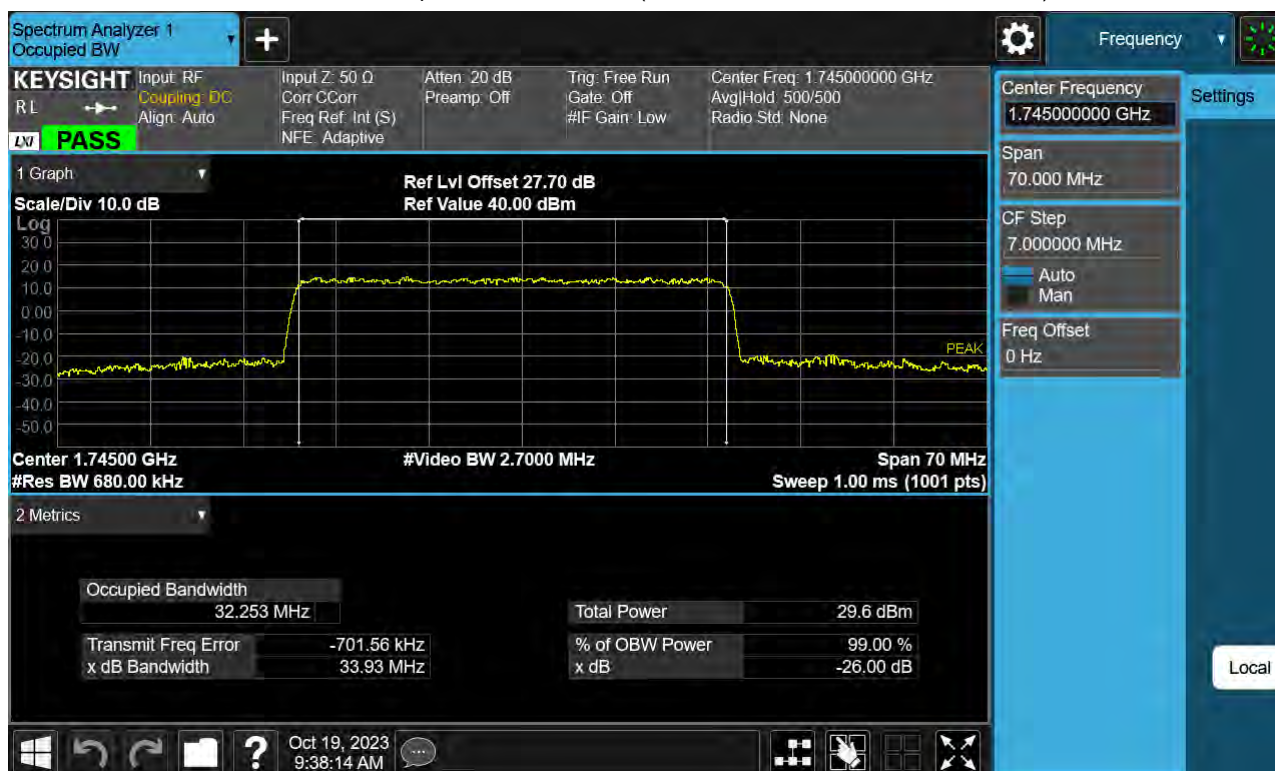
Sub6 n66. Occupied Bandwidth Plot (35 M BW Ch.349000 QPSK Full RB)



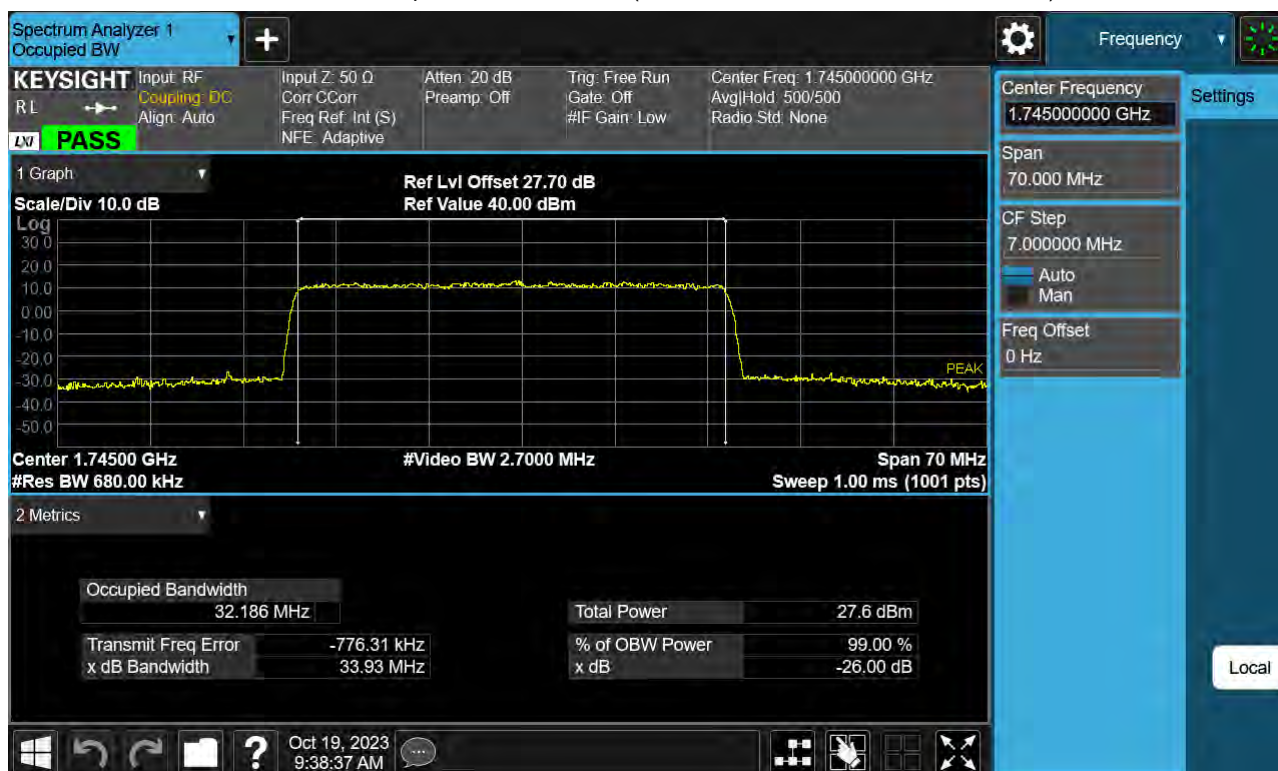
Sub6 n66. Occupied Bandwidth Plot (35 M BW Ch.349000 16QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (35 M BW Ch.349000 64QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (35 M BW Ch.349000 256QAM Full RB)



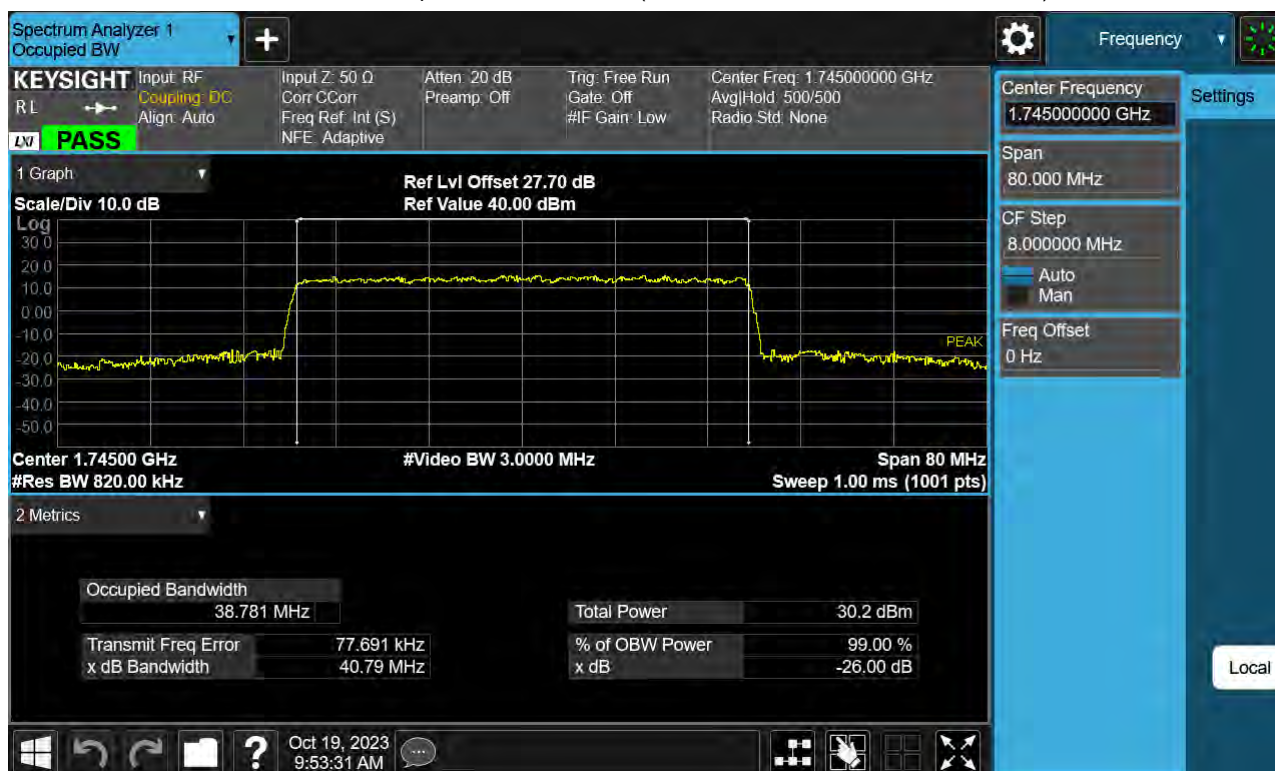
Sub6 n66. Occupied Bandwidth Plot (40 M BW Ch.349000 BPSK Full RB)



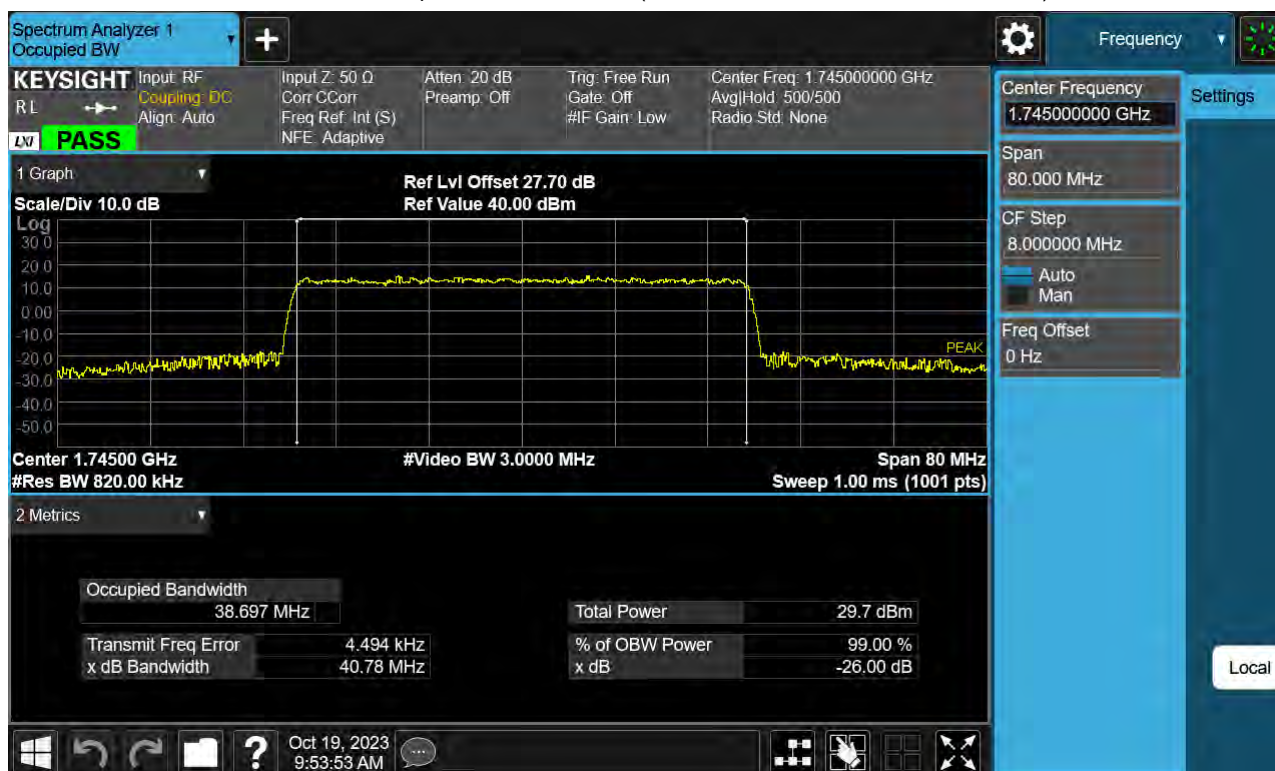
Sub6 n66. Occupied Bandwidth Plot (40 M BW Ch.349000 QPSK Full RB)



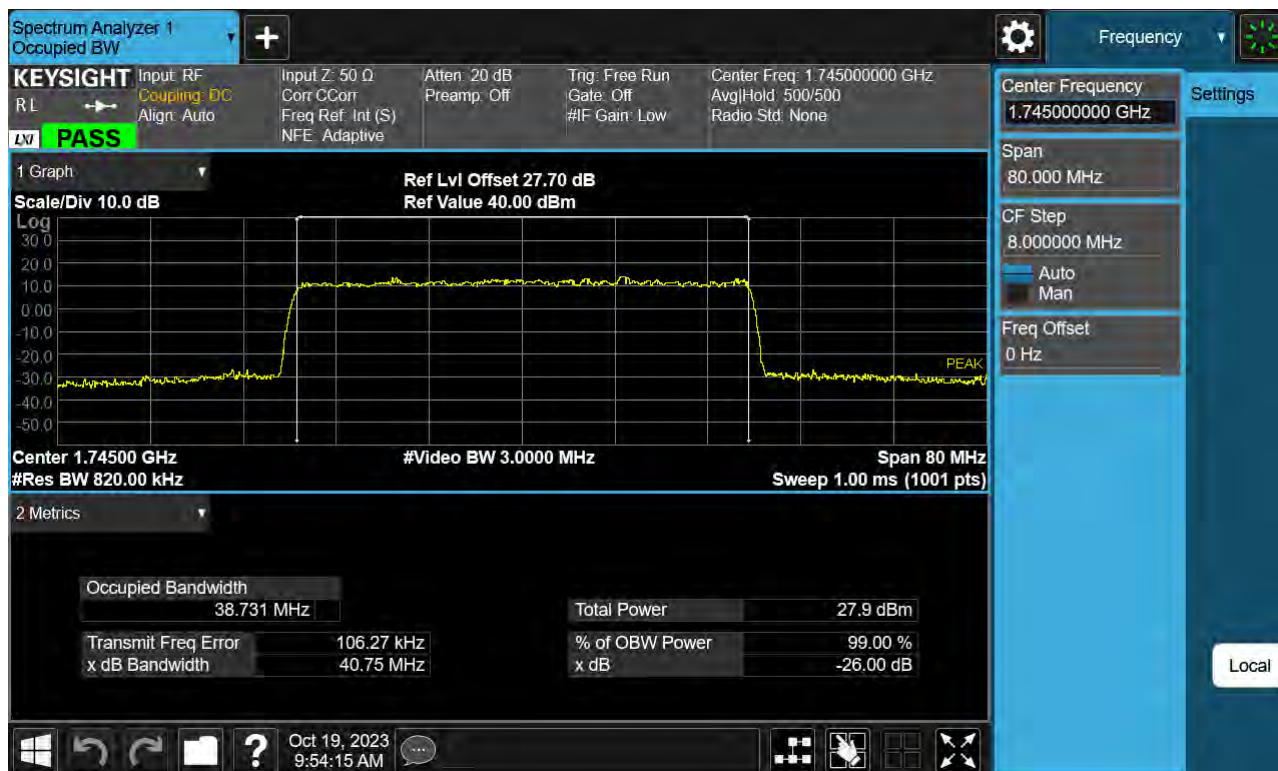
Sub6 n66. Occupied Bandwidth Plot (40 M BW Ch.349000 16QAM Full RB)



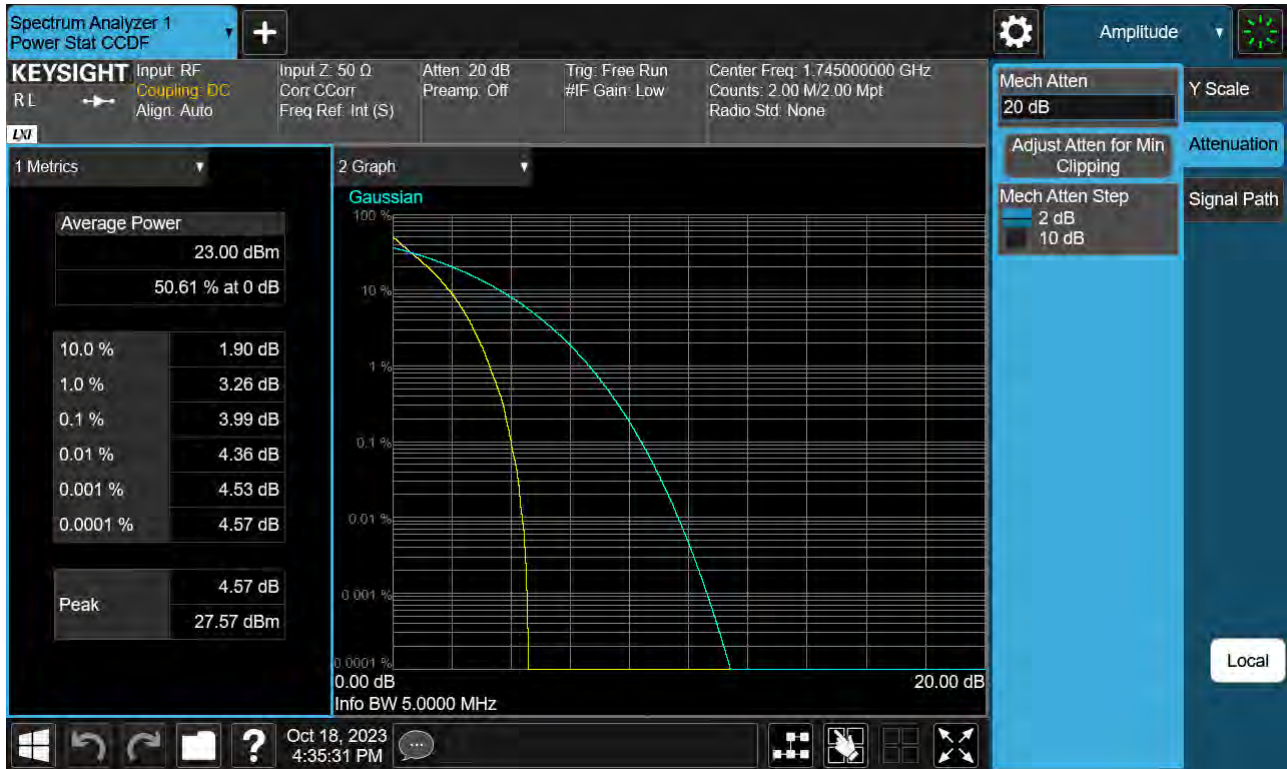
Sub6 n66. Occupied Bandwidth Plot (40 M BW Ch.349000 64QAM Full RB)



Sub6 n66. Occupied Bandwidth Plot (40 M BW Ch.349000 256QAM Full RB)



Sub6 n66. PAR Plot (5 M BW_Ch.349000_ BPSK_ Full RB)



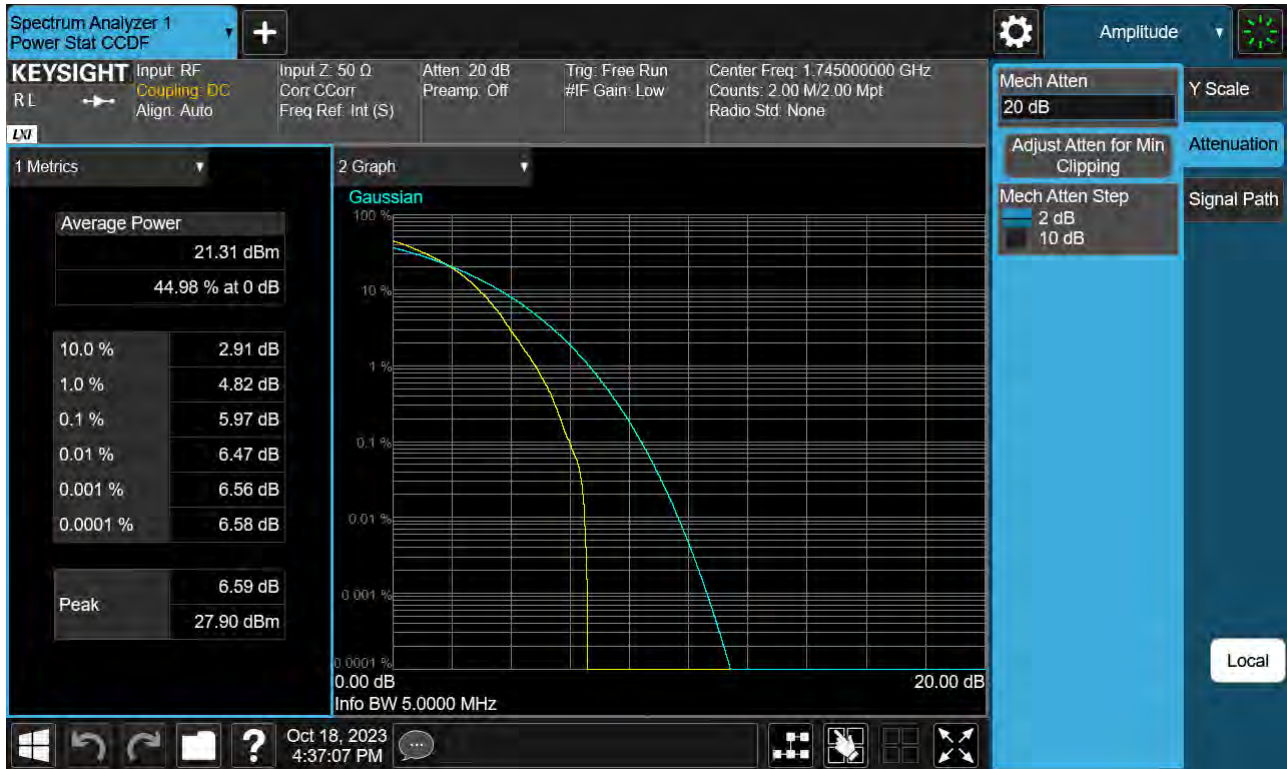
Sub6 n66. PAR Plot (5 M BW_Ch.349000_QPSK_Full RB)



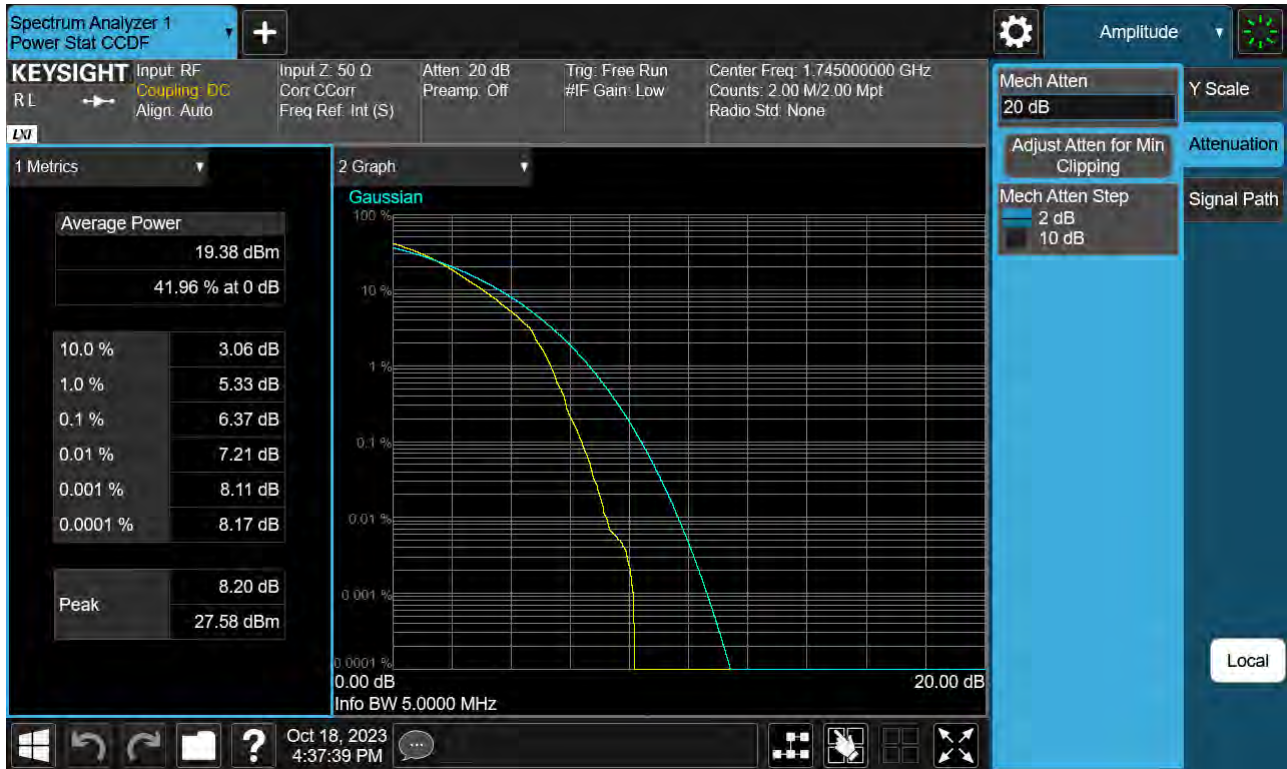
Sub6 n66. PAR Plot (5 M BW_Ch.349000_16QAM_Full RB)



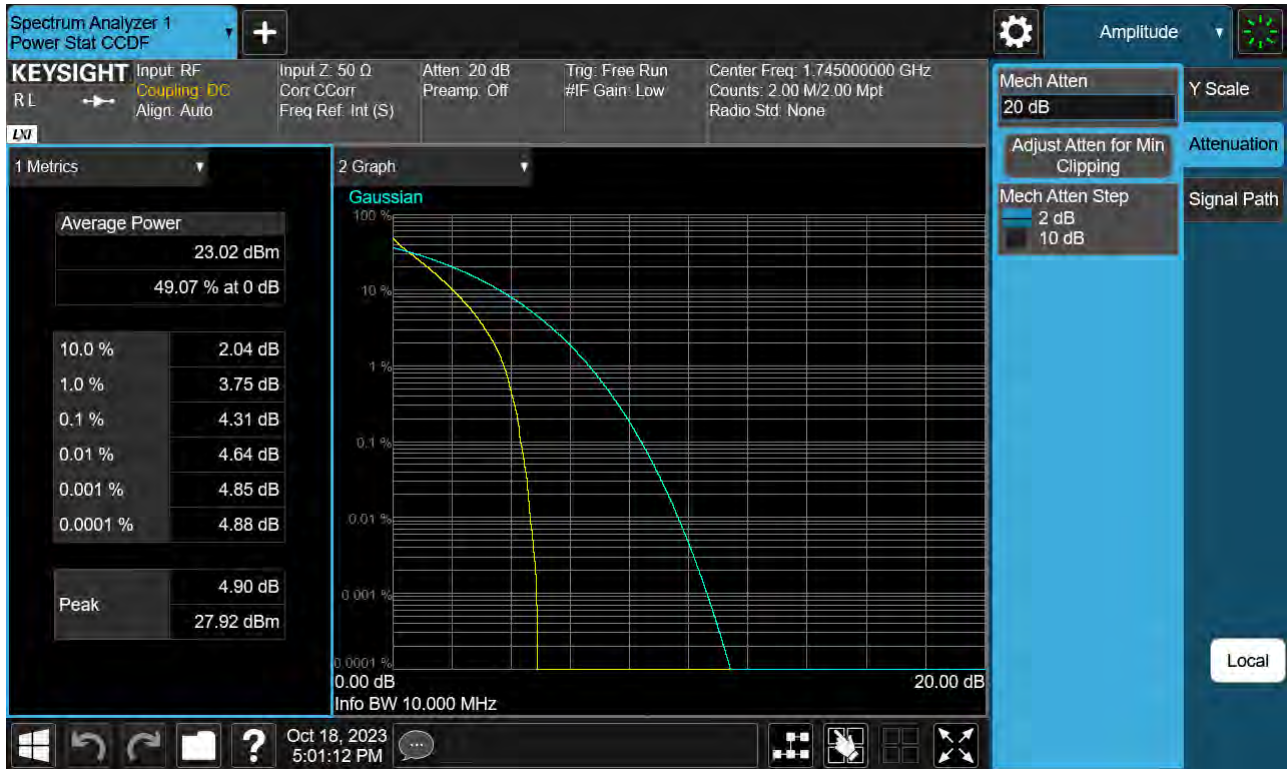
Sub6 n66. PAR Plot (5 M BW_Ch.349000_64QAM_Full RB)



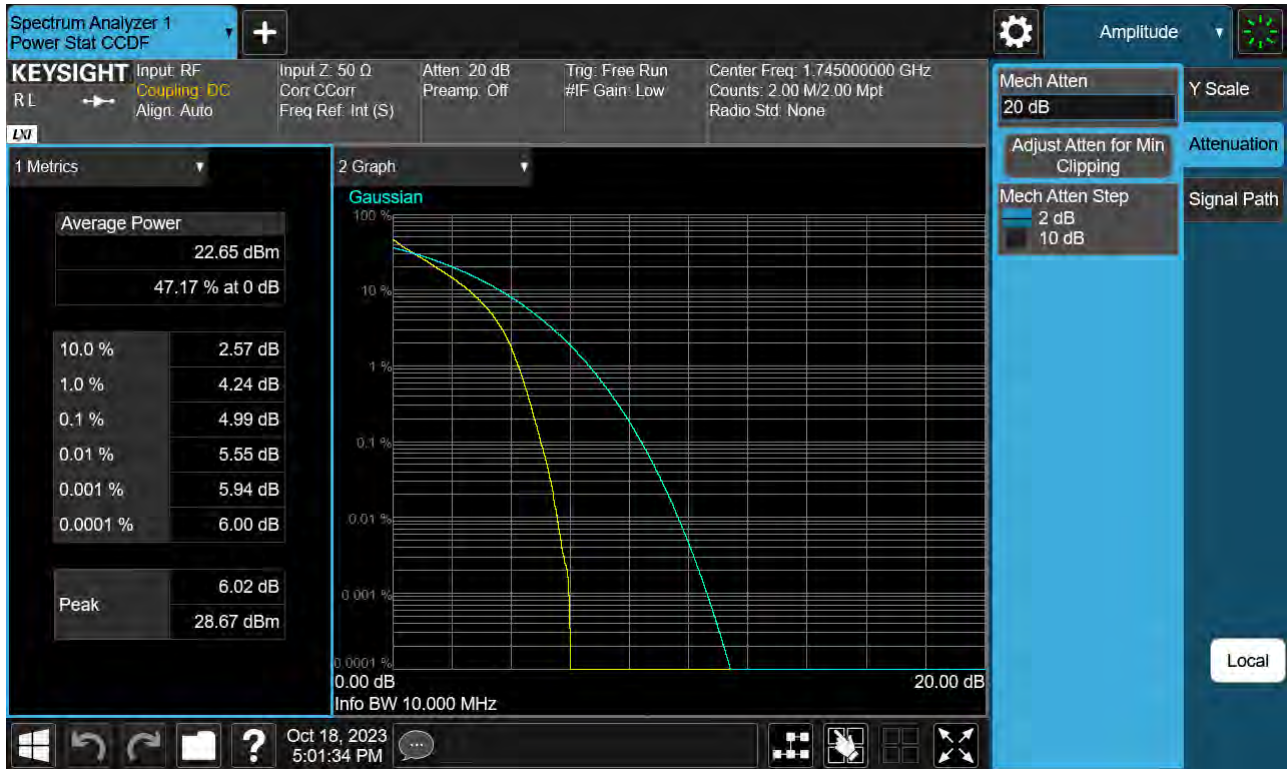
Sub6 n66. PAR Plot (5 M BW_Ch.349000_256QAM_Full RB)



Sub6 n66. PAR Plot (10 M BW_Ch.349000_ BPSK_ Full RB)



Sub6 n66. PAR Plot (10 M BW_Ch.349000_QPSK_Full RB)



Sub6 n66. PAR Plot (10 M BW_Ch.349000_16QAM_Full RB)



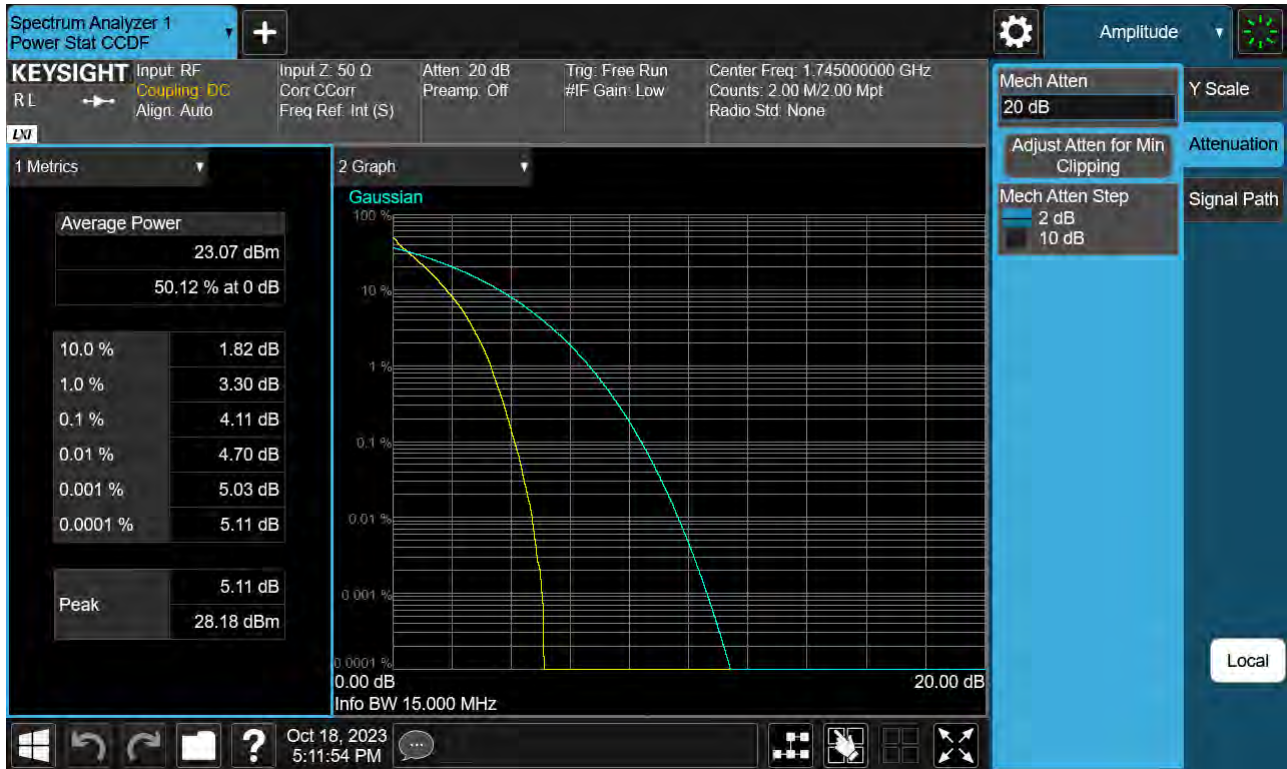
Sub6 n66. PAR Plot (10 M BW_Ch.349000_64QAM_Full RB)



Sub6 n66. PAR Plot (10 M BW_Ch.349000_256QAM_Full RB)



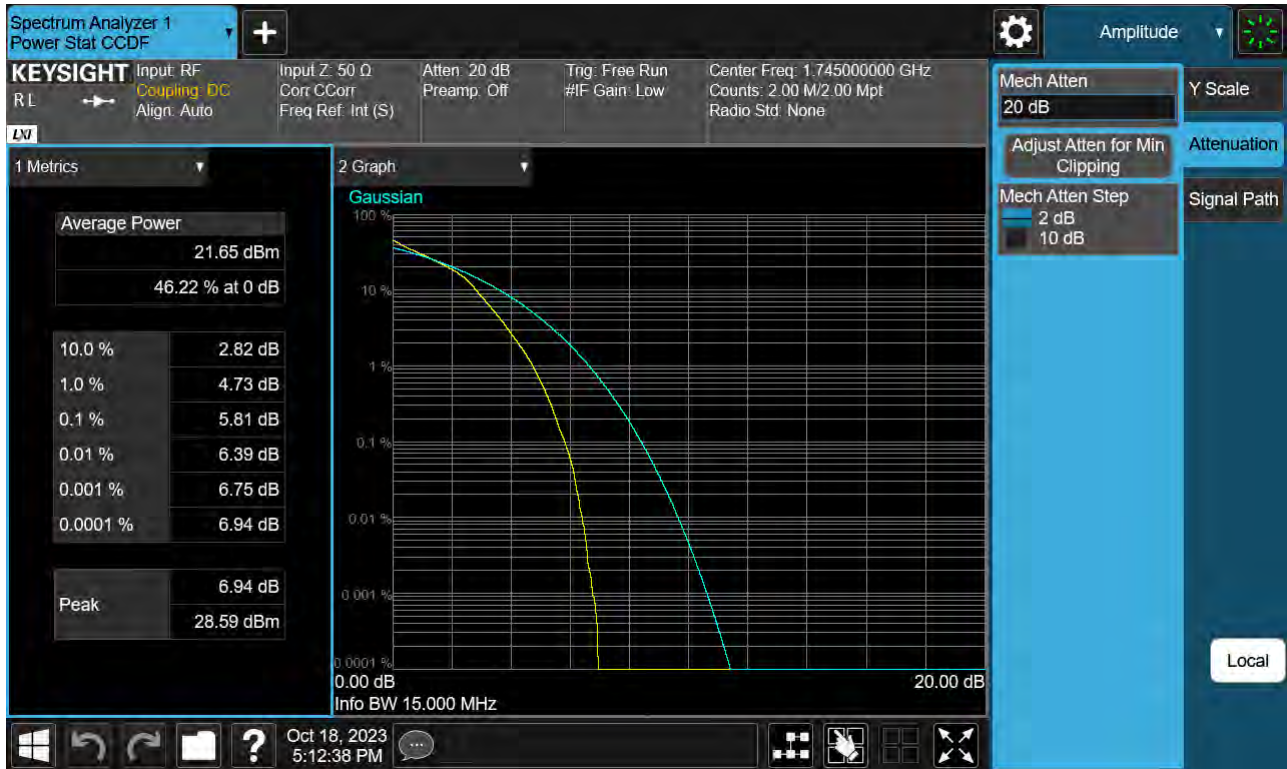
Sub6 n66. PAR Plot (15 M BW_Ch.349000_ BPSK_ Full RB)



Sub6 n66. PAR Plot (15 M BW_Ch.349000_QPSK_Full RB)



Sub6 n66. PAR Plot (15 M BW_Ch.349000_16QAM_Full RB)



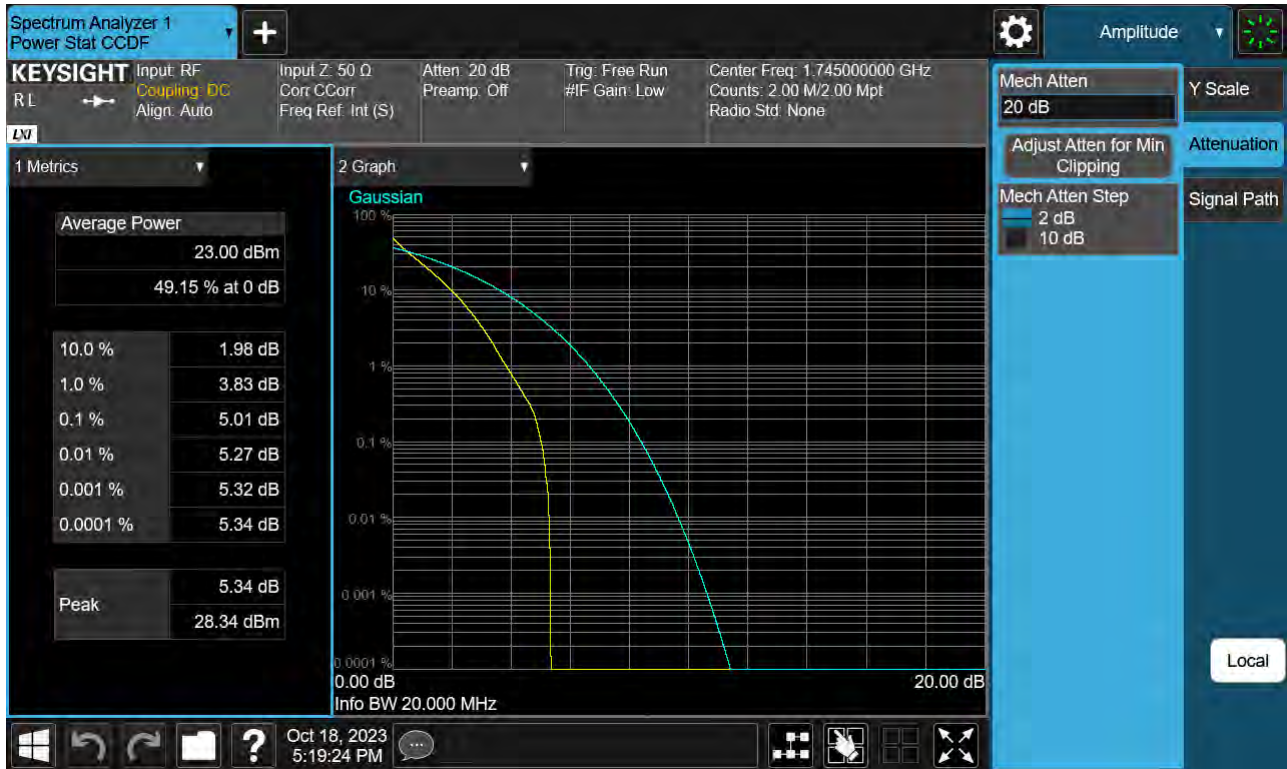
Sub6 n66. PAR Plot (15 M BW_Ch.349000_64QAM_Full RB)



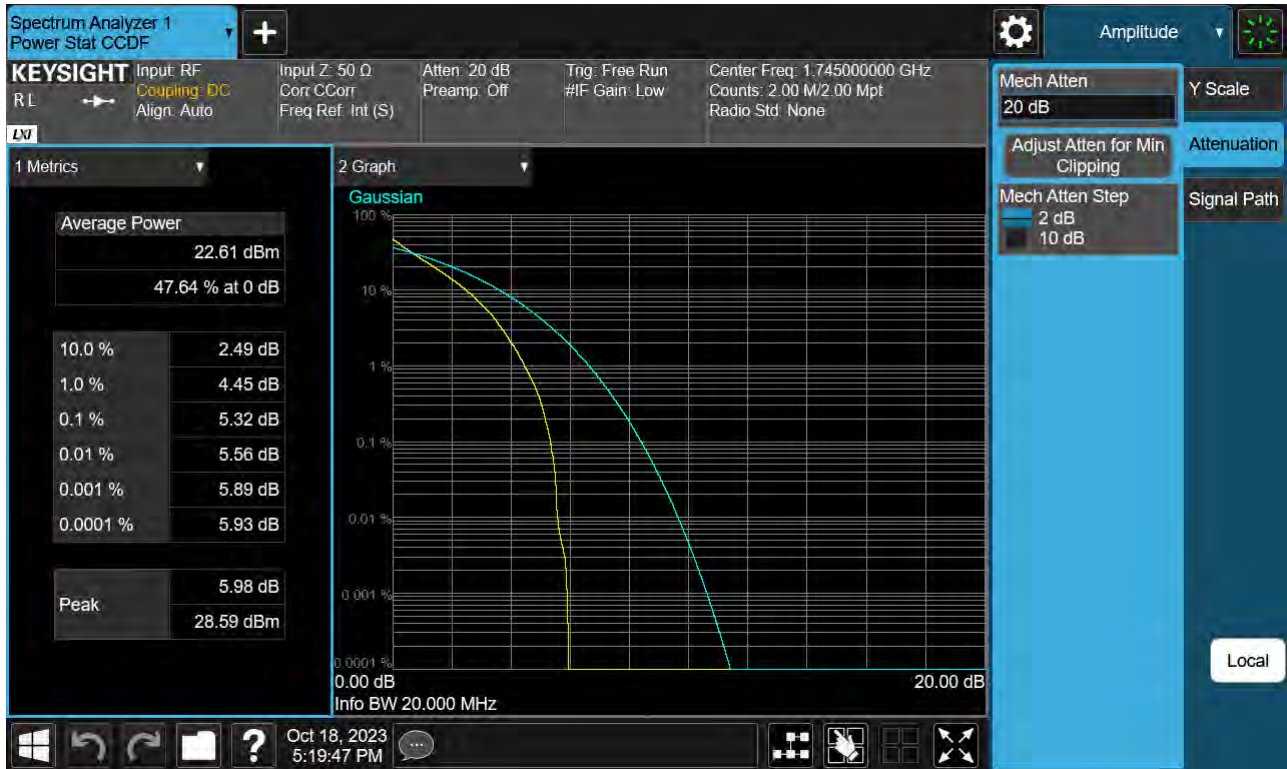
Sub6 n66. PAR Plot (15 M BW_Ch.349000_256QAM_Full RB)



Sub6 n66. PAR Plot (20 M BW_Ch.349000_ BPSK_ Full RB)



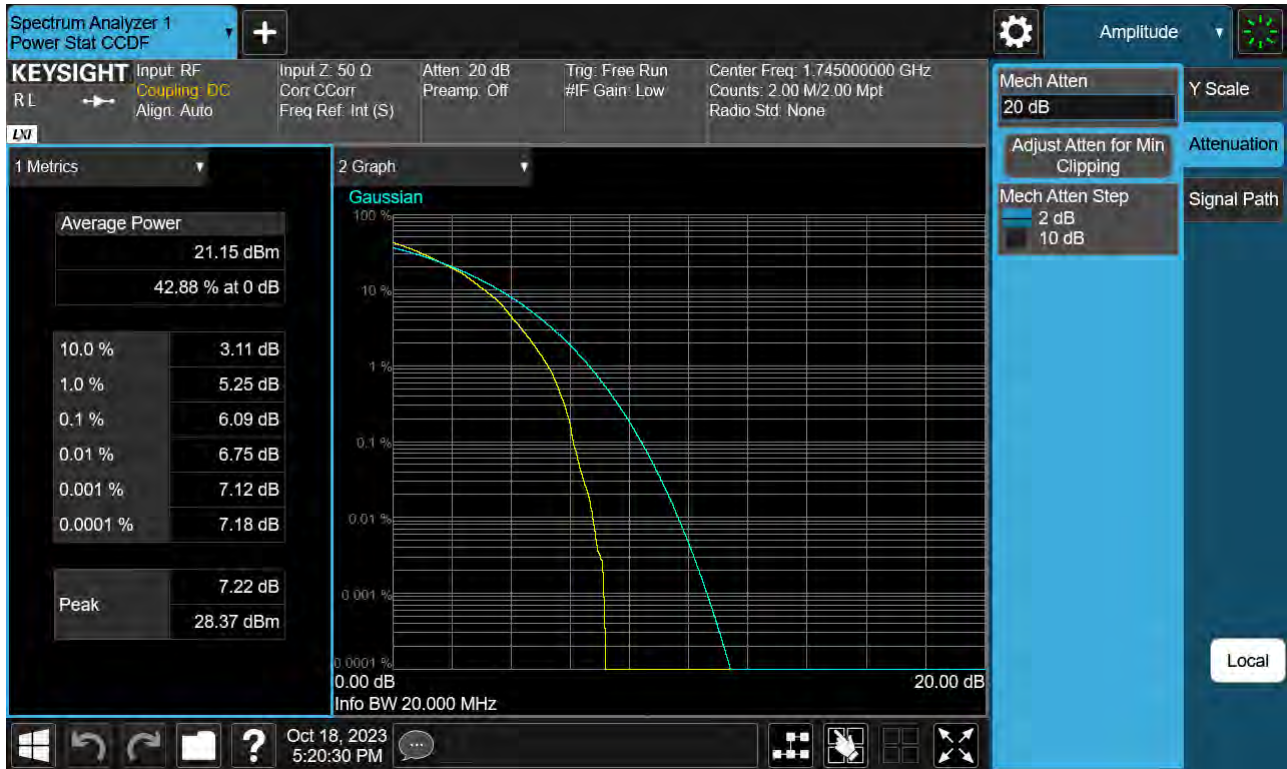
Sub6 n66. PAR Plot (20 M BW_Ch.349000_QPSK_Full RB)



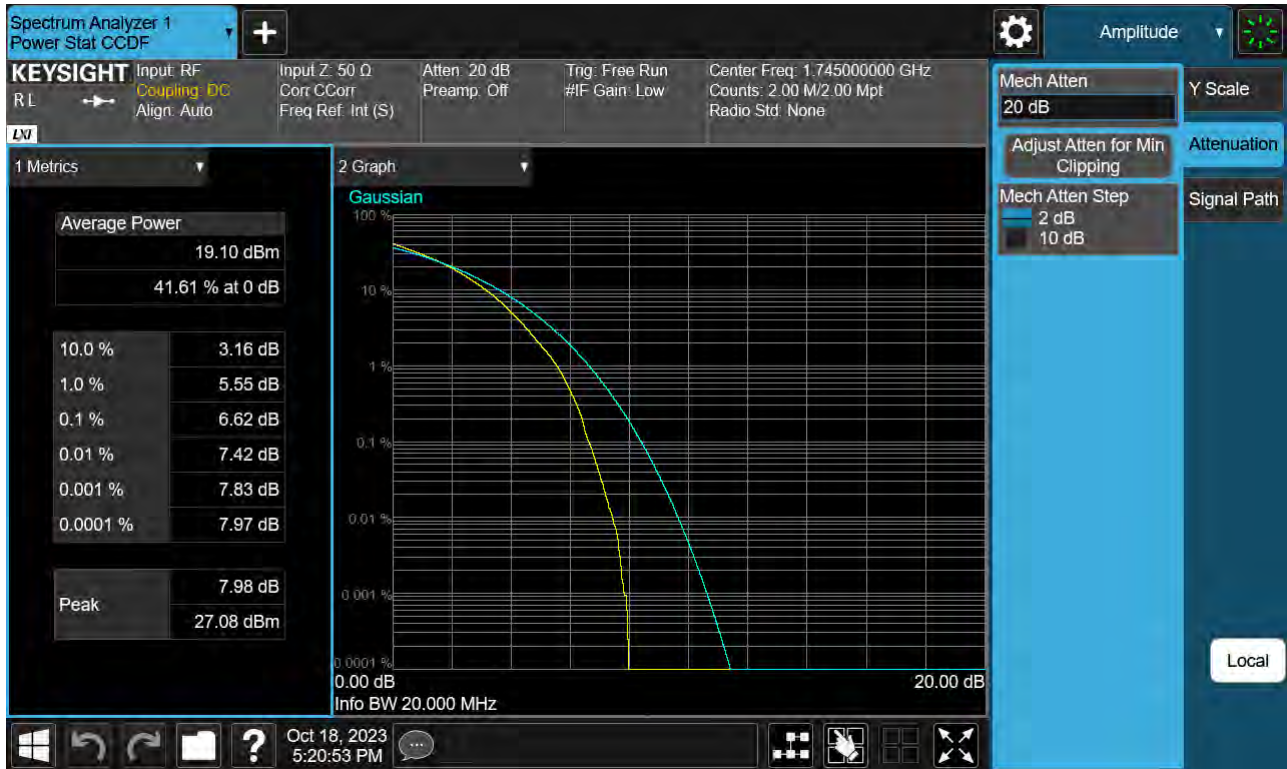
Sub6 n66. PAR Plot (20 M BW_Ch.349000_16QAM_Full RB)



Sub6 n66. PAR Plot (20 M BW_Ch.349000_64QAM_Full RB)



Sub6 n66. PAR Plot (20 M BW_Ch.349000_256QAM_Full RB)



Sub6 n66. PAR Plot (25 M BW_Ch.349000_ BPSK_ Full RB)



Sub6 n66. PAR Plot (25 M BW_Ch.349000_QPSK_Full RB)



Sub6 n66. PAR Plot (25 M BW_Ch.349000_16QAM_Full RB)



Sub6 n66. PAR Plot (25 M BW_Ch.349000_64QAM_Full RB)



Sub6 n66. PAR Plot (25 M BW_Ch.349000_256QAM_Full RB)



Sub6 n66. PAR Plot (30 M BW_Ch.349000_ BPSK_ Full RB)



Sub6 n66. PAR Plot (30 M BW_Ch.349000_QPSK_Full RB)



Sub6 n66. PAR Plot (30 M BW_Ch.349000_16QAM_Full RB)



Sub6 n66. PAR Plot (30 M BW_Ch.349000_64QAM_Full RB)



Sub6 n66. PAR Plot (30 M BW_Ch.349000_256QAM_Full RB)



Sub6 n66. PAR Plot (35 M BW_Ch.349000_ BPSK_ Full RB)



Sub6 n66. PAR Plot (35 M BW_Ch.349000_QPSK_Full RB)



Sub6 n66. PAR Plot (35 M BW_Ch.349000_16QAM_Full RB)



Sub6 n66. PAR Plot (35 M BW_Ch.349000_64QAM_Full RB)



Sub6 n66. PAR Plot (35 M BW_Ch.349000_256QAM_Full RB)



Sub6 n66. PAR Plot (40 M BW_Ch.349000_ BPSK_ Full RB)



Sub6 n66. PAR Plot (40 M BW_Ch.349000_QPSK_Full RB)



Sub6 n66. PAR Plot (40 M BW_Ch.349000_16QAM_Full RB)



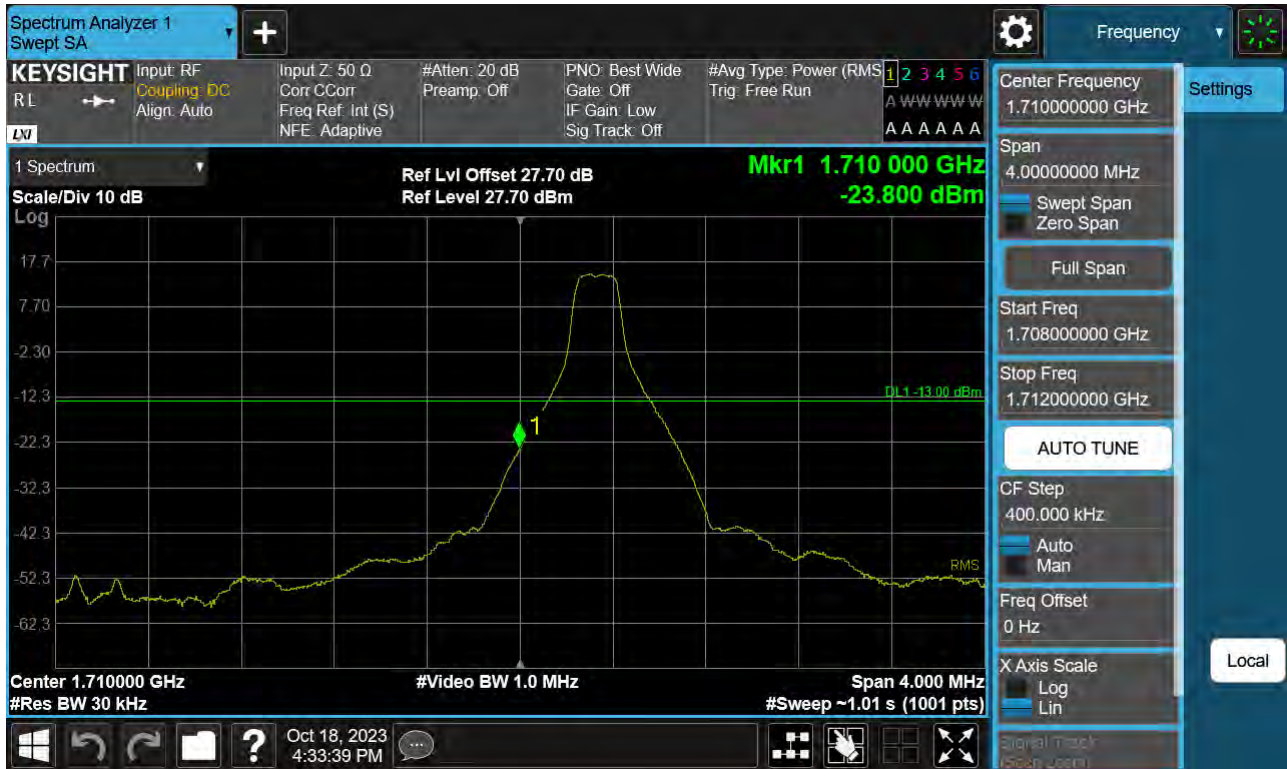
Sub6 n66. PAR Plot (40 M BW_Ch.349000_64QAM_Full RB)



Sub6 n66. PAR Plot (40 M BW_Ch.349000_256QAM_Full RB)



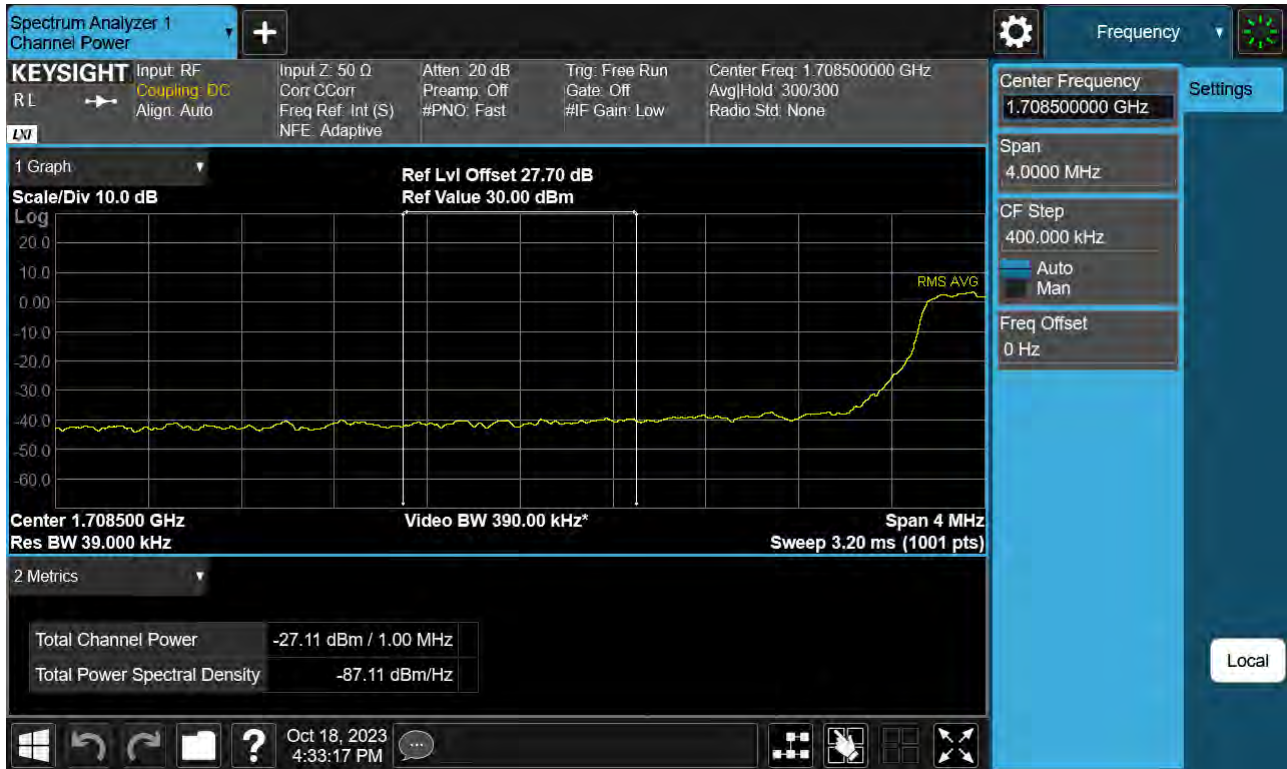
Sub6 n66. Lower Band Edge Plot (5 M BW Ch.342500 BPSK RB 1, Offset 0) -1



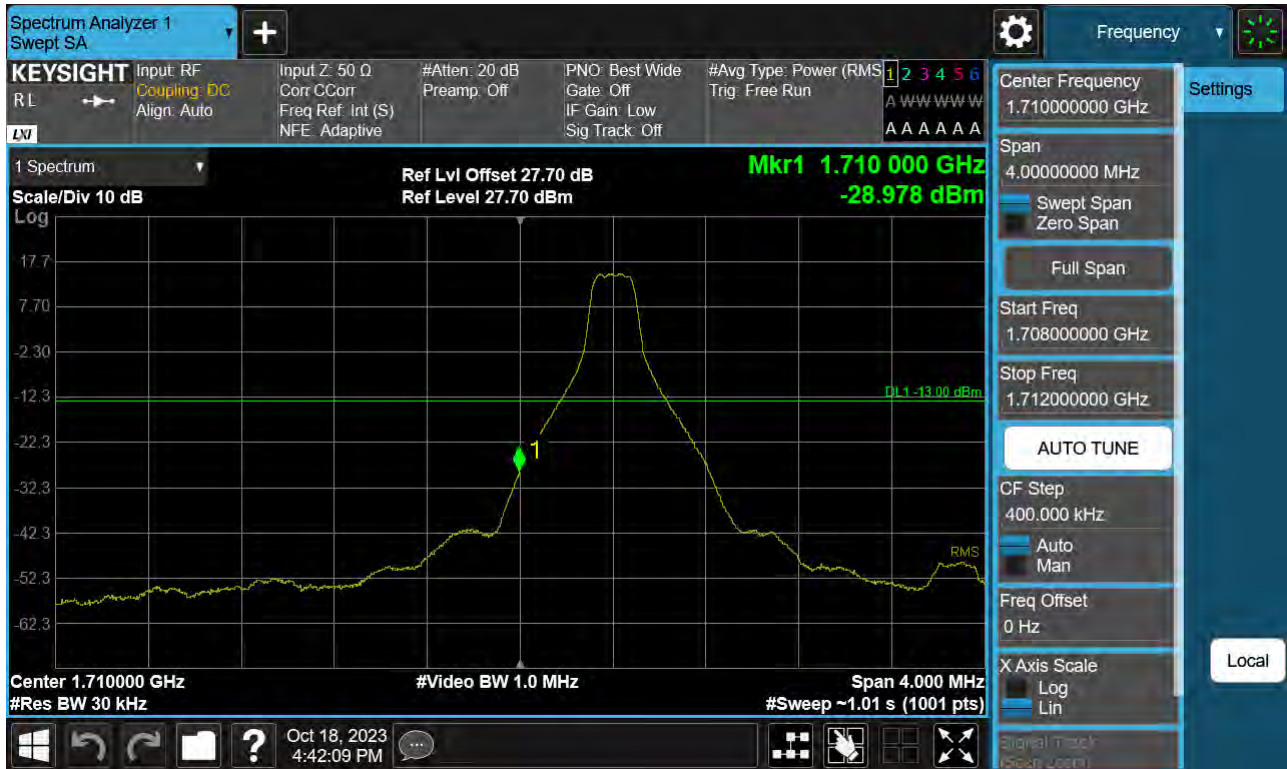
Sub6 n66. Lower Band Edge Plot (5 M BW Ch.342500 BPSK Full RB) -2



Sub6 n66. Lower Extended Band Edge Plot (5 M BW Ch.342500 BPSK_ Full RB) -3



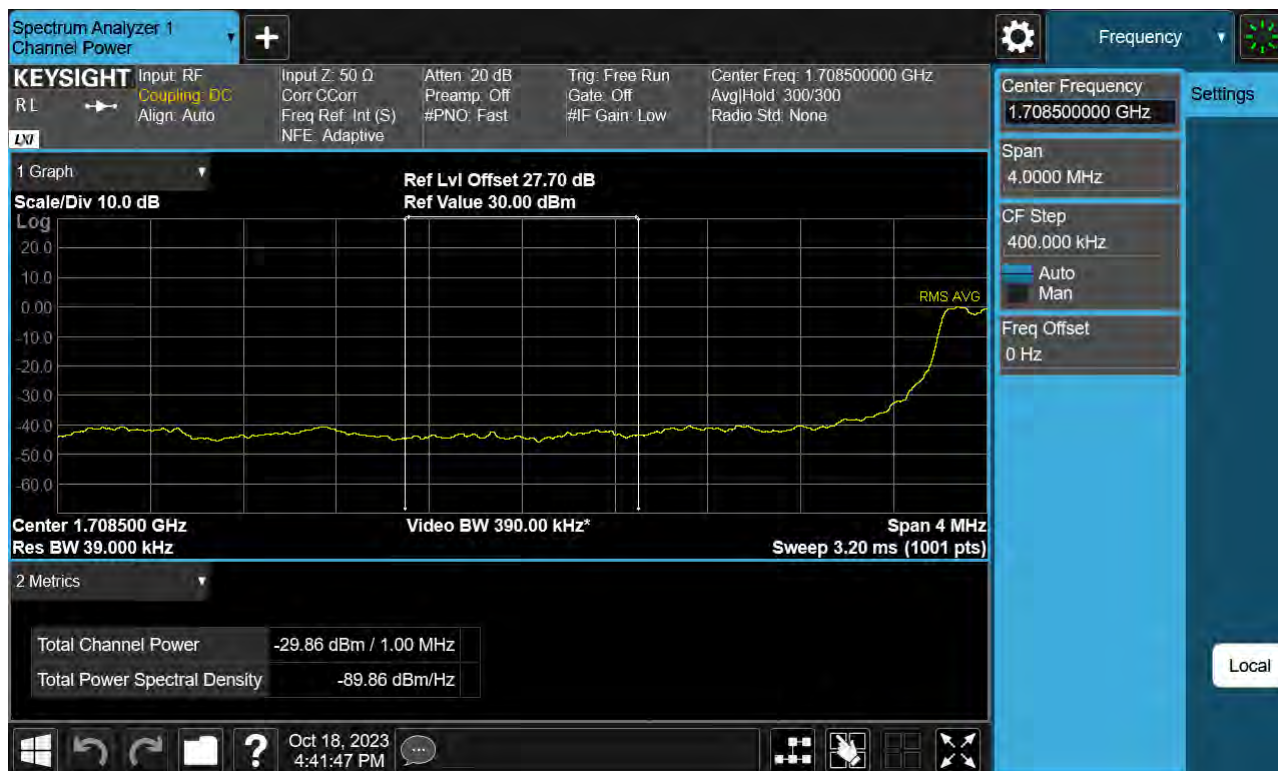
Sub6 n66. Lower Band Edge Plot (10 M BW Ch.343000 BPSK RB 1, Offset 0) -1



Sub6 n66. Lower Band Edge Plot (10 M BW Ch.343000 BPSK Full RB) -2



Sub6 n66. Lower Extended Band Edge Plot (10 M BW Ch.343000 BPSK_ Full RB) -3



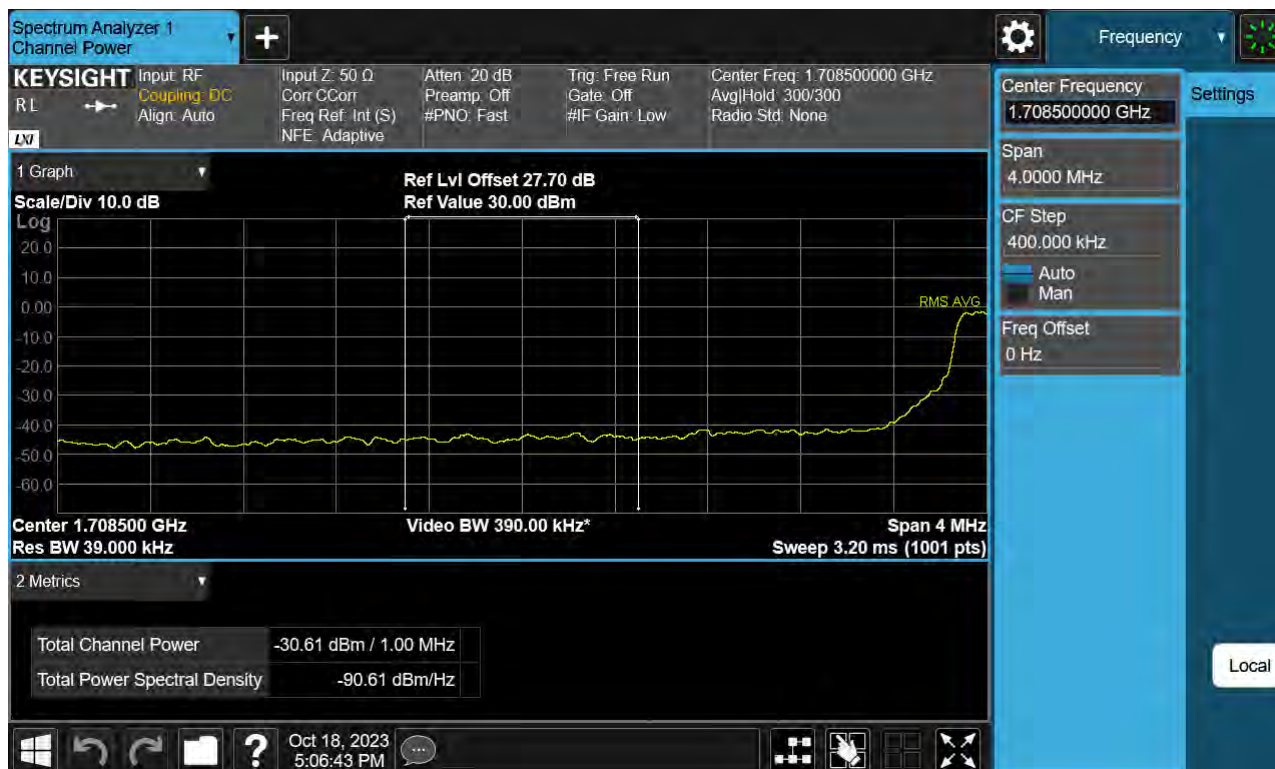
Sub6 n66. Lower Band Edge Plot (15 M BW Ch.343500 BPSK RB 1, Offset 0) -1



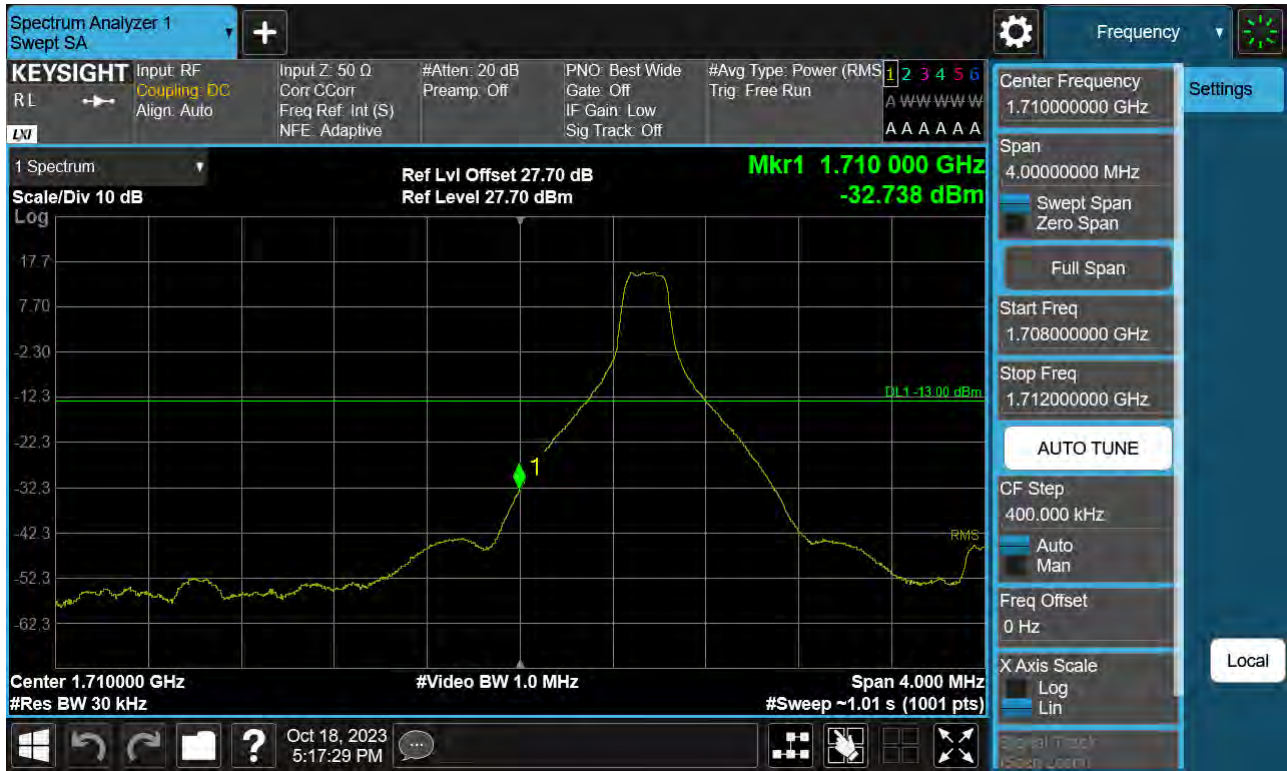
Sub6 n66. Lower Band Edge Plot (15 M BW Ch.343500 BPSK Full RB) -2



Sub6 n66. Lower Extended Band Edge Plot (15 M BW Ch.343500 BPSK_ Full RB) -3



Sub6 n66. Lower Band Edge Plot (20 M BW Ch.344000 BPSK RB 1, Offset 0) -1



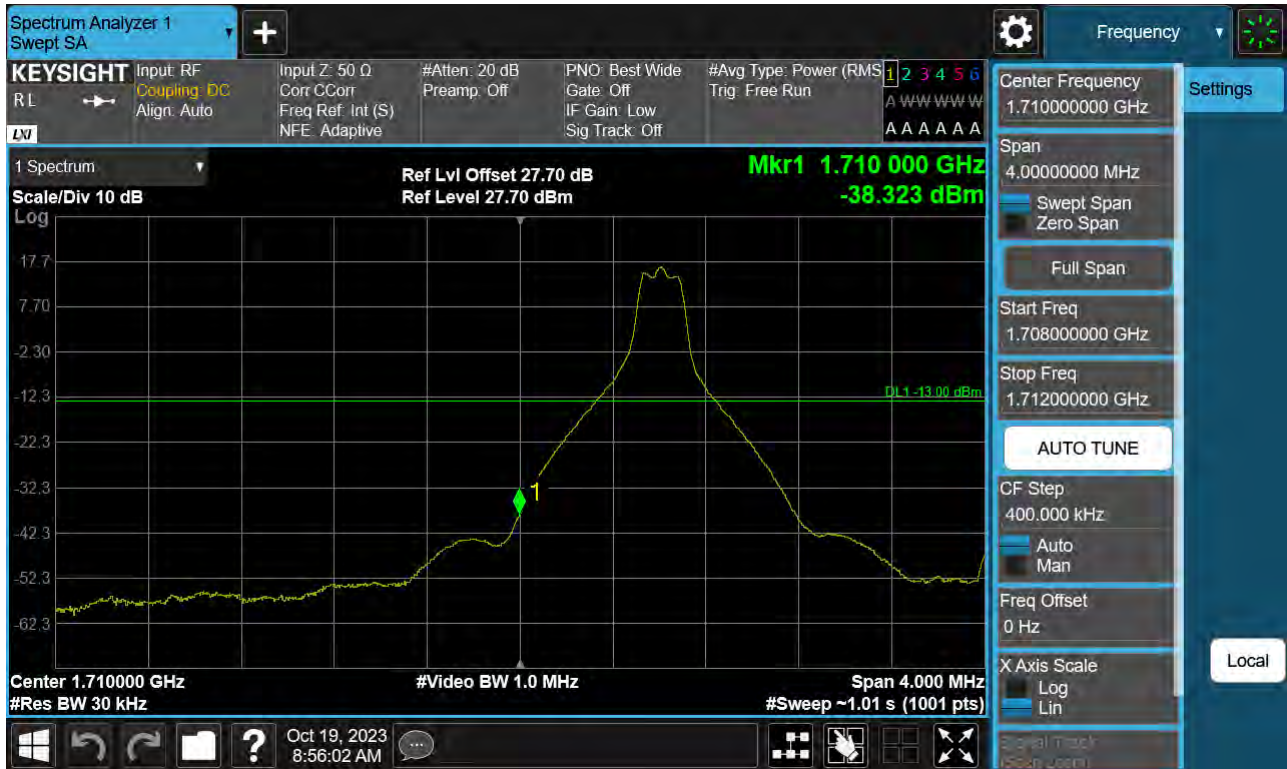
Sub6 n66. Lower Band Edge Plot (20 M BW Ch.344000 BPSK Full RB) -2



Sub6 n66. Lower Extended Band Edge Plot (20 M BW Ch.344000 BPSK_ Full RB) -3



Sub6 n66. Lower Band Edge Plot (25 M BW Ch.344500 BPSK RB 1, Offset 0) -1



Sub6 n66. Lower Band Edge Plot (25 M BW Ch.344500 BPSK Full RB) -2



Sub6 n66. Lower Extended Band Edge Plot (25 M BW Ch.344500 BPSK_ Full RB) -3



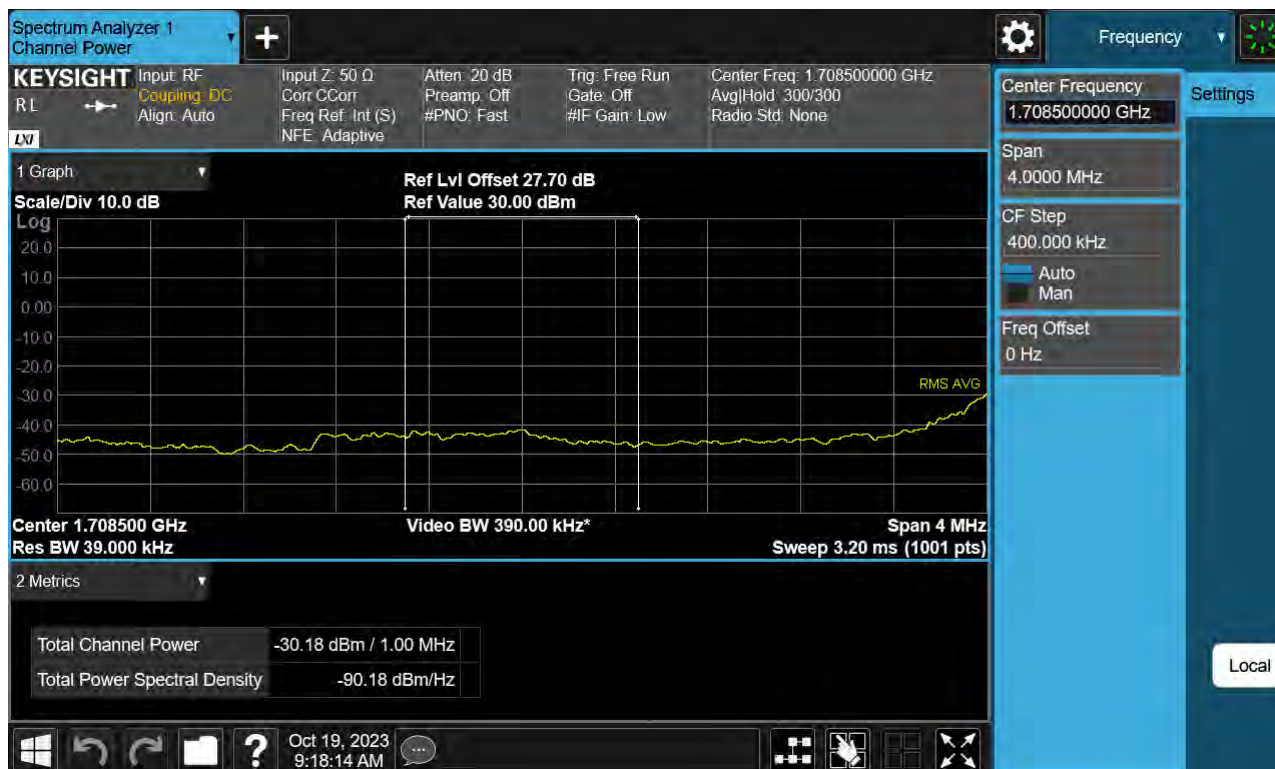
Sub6 n66. Lower Band Edge Plot (30 M BW Ch.345000 BPSK RB 1, Offset 0) -1



Sub6 n66. Lower Band Edge Plot (30 M BW Ch.345000 BPSK Full RB) -2



Sub6 n66. Lower Extended Band Edge Plot (30 M BW Ch.345000 BPSK_ Full RB) -3



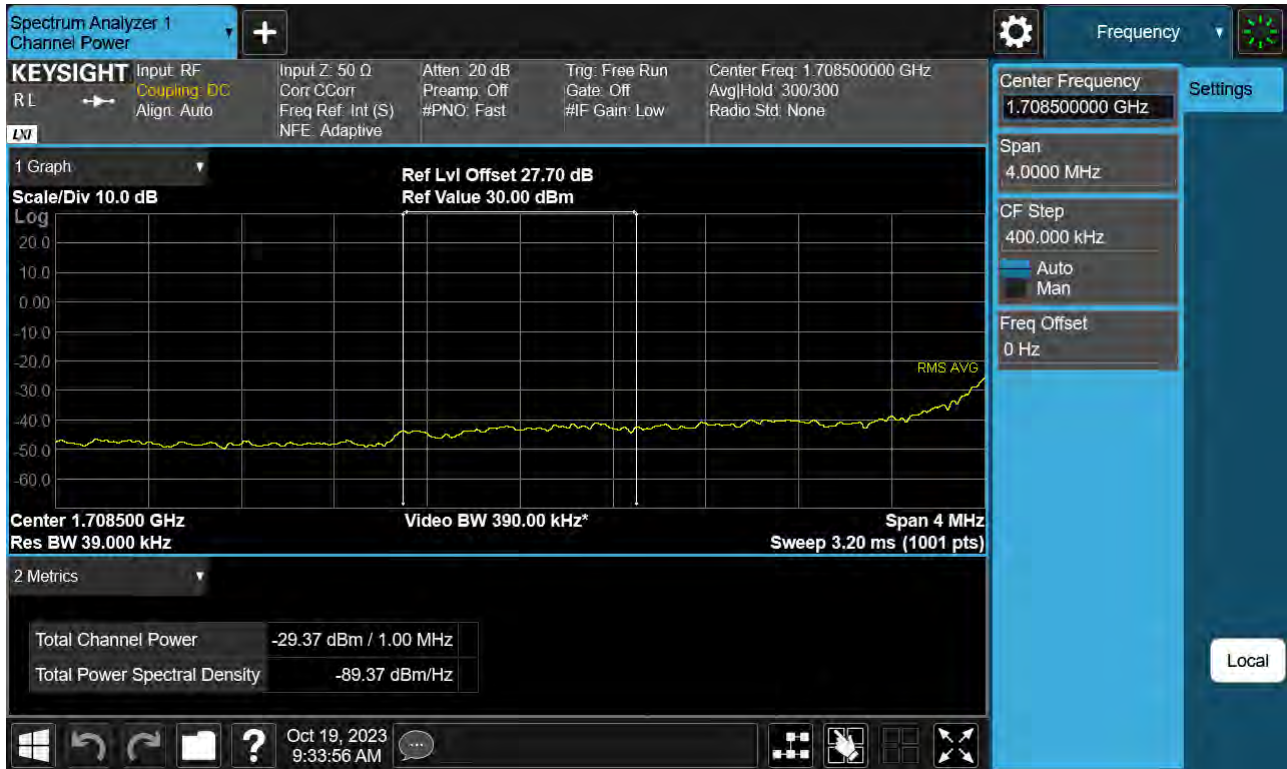
Sub6 n66. Lower Band Edge Plot (35 M BW Ch.345500 BPSK RB 1, Offset 0) -1



Sub6 n66. Lower Band Edge Plot (35 M BW Ch.345500 BPSK Full RB) -2



Sub6 n66. Lower Extended Band Edge Plot (35 M BW Ch.345500 BPSK_ Full RB) -3



Sub6 n66. Lower Band Edge Plot (40 M BW Ch.346000 BPSK RB 1, Offset 0) -1

