

FCC LTE REPORT

Certification

Applicant Name:

SAMSUNG Electronics Co., Ltd.

Date of Issue:

October 31, 2023

Address:

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 Suwon-si, Gyeonggi-do, 16677, Rep. of Korea

Location:

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

Report No.: HCT-RF-2310-FC025-R1

FCC ID:	A3LSMS926U
APPLICANT:	SAMSUNG Electronics Co., Ltd.

Model(s): SM-S926U
 Additional Model(s): SM-S926U1
 EUT Type: Mobile phone
 FCC Classification: PCS Licensed Transmitter Held to Ear (PCE)
 FCC Rule Part(s): §90, §22

Main 1 Ant

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	Conducted Output Power	
				Max. Power (W)	Max. Power (dBm)
LTE – Band26 (1.4)	814.7 – 824.0	1M10G7D	QPSK	0.242	23.83
		1M11W7D	16QAM	0.199	22.99
		1M10W7D	64QAM	0.156	21.93
		1M10W7D	256QAM	0.078	18.93
LTE – Band26 (3)	815.5 – 824.0	2M71G7D	QPSK	0.242	23.84
		2M72W7D	16QAM	0.195	22.91
		2M72W7D	64QAM	0.159	22.02
		2M71W7D	256QAM	0.078	18.91
LTE – Band26 (5)	816.5 – 824.0	4M51G7D	QPSK	0.246	23.91
		4M50W7D	16QAM	0.196	22.93
		4M53W7D	64QAM	0.155	21.90
		4M49W7D	256QAM	0.078	18.92
LTE – Band26 (10)	819.0 – 824.0	8M99G7D	QPSK	0.224	23.51
		8M99W7D	16QAM	0.204	23.10
		9M00W7D	64QAM	0.163	22.13
		8M99W7D	256QAM	0.077	18.87
LTE – Band26 (15)	821.5	13M5G7D	QPSK	0.231	23.64
		13M5W7D	16QAM	0.200	23.00
		13M5W7D	64QAM	0.156	21.94
		13M5W7D	256QAM	0.078	18.92

Sub 1 Ant

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	Conducted Output Power	
				Max. Power (W)	Max. Power (dBm)
LTE – Band26 (1.4)	814.7 – 824.0	1M11G7D	QPSK	0.258	24.11
		1M10W7D	16QAM	0.232	23.66
		1M11W7D	64QAM	0.183	22.63
		1M10W7D	256QAM	0.088	19.44
LTE – Band26 (3)	815.5 – 824.0	2M71G7D	QPSK	0.249	23.97
		2M70W7D	16QAM	0.226	23.55
		2M72W7D	64QAM	0.182	22.61
		2M71W7D	256QAM	0.094	19.75
LTE – Band26 (5)	816.5 – 824.0	4M51G7D	QPSK	0.250	23.99
		4M51W7D	16QAM	0.229	23.60
		4M51W7D	64QAM	0.181	22.57
		4M51W7D	256QAM	0.089	19.50
LTE – Band26 (10)	819.0 – 824.0	9M01G7D	QPSK	0.272	24.34
		8M98W7D	16QAM	0.231	23.64
		8M98W7D	64QAM	0.184	22.65
		8M98W7D	256QAM	0.093	19.67
LTE – Band26 (15)	821.5	13M5G7D	QPSK	0.269	24.29
		13M5W7D	16QAM	0.228	23.59
		13M5W7D	64QAM	0.181	22.57
		13M5W7D	256QAM	0.091	19.61

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)

Report No.: HCT-RF-2310-FC025-R1

REVIEWED BY



Report prepared by : Jae Mun Do
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Report approved by : Jong Seok Lee
Manager of Telecommunication Testing Center

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

Test Report Statement:

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

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

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2310-FC025	October 16, 2023	- First Approval Report
HCT-RF-2310-FC025-R1	October 31, 2023	- Revised the ERP result.(re-test)

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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:	A3LSMS926U
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§90, §22, §2
EUT Type:	Mobile phone
Model(s):	SM-S926U
Additional Model(s):	SM-S926U1
Tx Frequency:	814.7 MHz – 824.0 MHz (LTE – Band 26 (1.4 MHz)) 815.5 MHz – 824.0 MHz (LTE – Band 26 (3 MHz)) 816.5 MHz – 824.0 MHz (LTE – Band 26 (5 MHz)) 819.0 MHz – 824.0 MHz (LTE – Band 26 (10 MHz)) 821.5 MHz (LTE – Band 26 (15 MHz))
Date(s) of Tests:	September 05, 2023 ~ October 26, 2023
Serial number:	Radiated: R3CW90B4EEV Conducted: 741c314dee0f7ece

2. INTRODUCTION

2.1. DESCRIPTION OF EUT

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

It also supports IEEE 802.11 a/b/g/n/ac/ax (20/40/80/160 MHz), WIFI 6E, Bluetooth, BT LE, NFC, UWB, WPT.

2.2. MEASURING INSTRUMENT CALIBRATION

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

2.3. TEST FACILITY

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

3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
Occupied Bandwidth	- KDB 971168 D01 v03r01 – Section 4.3 - ANSI C63.26-2015 – Section 5.4.4
Channel Edge	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Spurious and Harmonic Emissions at Antenna Terminal	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Conducted Output Power	- KDB 971168 D01 v03r01 - Section 5.2.4 - ANSI C63.26-2015 - Section 5.2.1 & 5.2.4.2
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 CONDUCTED OUTPUT POWER

Test Overview

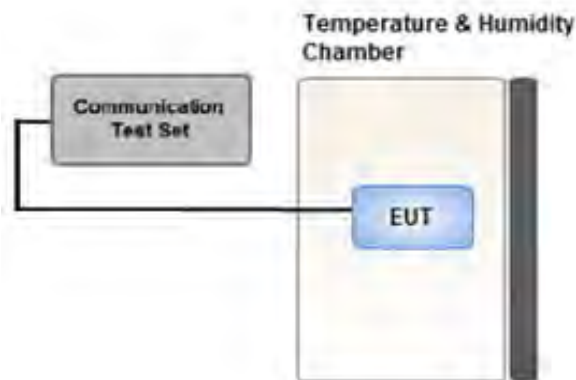
According to ANSI C63.26-2015 Section 5.2.1 when measuring the maximum RF output power from such devices, control over the EUT must be provided either through special test software (provided by manufacturer specifically for compliance testing, but not accessible by an end user) or through use of a base station emulator, communications test set, call box, or similar instrumentation that is capable of establishing a communications link with the EUT to enable control over variable parameters (e.g., output power, OBW, etc.).

In some cases, these instruments also include basic digital spectrum analyzer and/or power meter capabilities that can be utilized to measure the RF output power if the specified detectors and requirements can be realized and the measurement functions have been calibrated.

Test Procedure

1. The RF port of the EUT was connected to the Communication Tester via an RF cable.
2. Conducted average power was measured using a calibrated Radio Communication Tester.

Test setup



3.3 RADIATED POWER

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

The equipment under test is placed on a non-conductive table 3-meters away from the receive antenna in accordance with ANSI/TIA-603-E-2016 Clause 2.2.17.

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 – 5 % of the expected OBW, not to exceed 1 MHz
3. VBW \geq 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points $>$ 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto".
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize

Test Note

1. The turntable is rotated through 360 degrees, and the receiving antenna scans in order to determine the level of the maximized emission.
2. A half wave dipole is then substituted in place of the EUT. For emissions above 1 GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

The power is calculated by the following formula;

$$P_d \text{ (dBm)} = P_g \text{ (dBm)} - \text{cable loss (dB)} + \text{antenna gain (dB)}$$

Where: P_d is the dipole equivalent power and P_g is the generator output power into the substitution antenna.

3. The maximum value is calculated by adding the forward power to the calibrated source plus its appropriate gain value.

These steps are repeated with the receiving antenna in both vertical and horizontal polarization. the difference

between the gain of the horn and an isotropic antenna are taken into consideration

4. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
5. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

3.4 RADIATED SPURIOUS EMISSIONS

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

Radiated Spurious Emission Measurements at 3 meters by Substitution Method according to ANSI/TIA-603-E-2016.

Test Settings

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

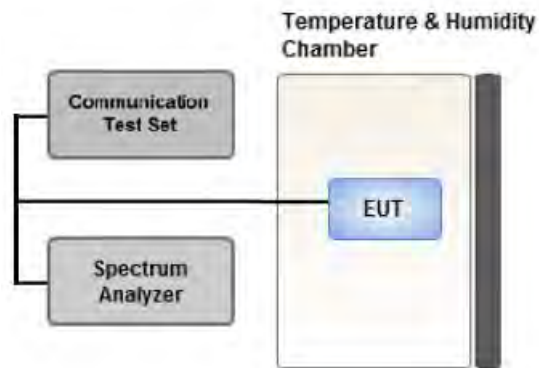
$$\text{Result}_{(dBm)} = P_g_{(dBm)} - \text{cable loss}_{(dB)} + \text{antenna gain}_{(dBi)}$$

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.

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

3.5 OCCUPIED BANDWIDTH.



Test setup

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

The EUT makes a call to the communication simulator.

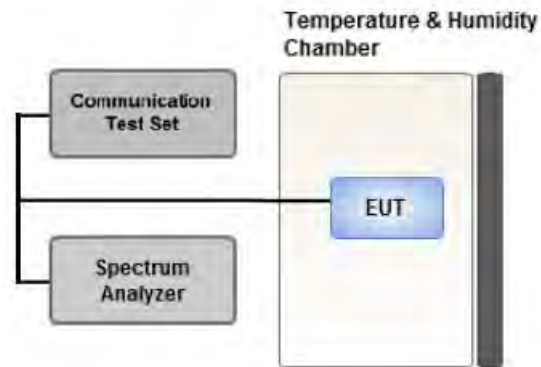
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

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

Test Settings

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

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

Test Overview

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

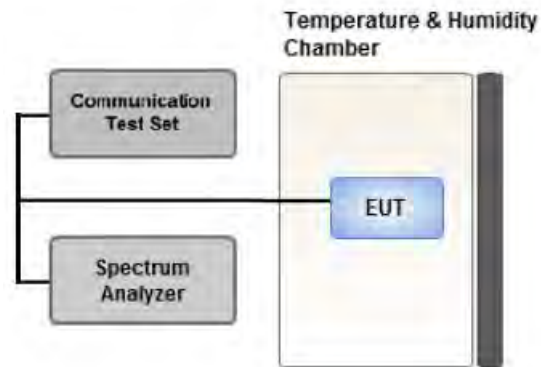
All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

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

Test Settings

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

3.7 CHANNEL EDGE



Test setup

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum 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

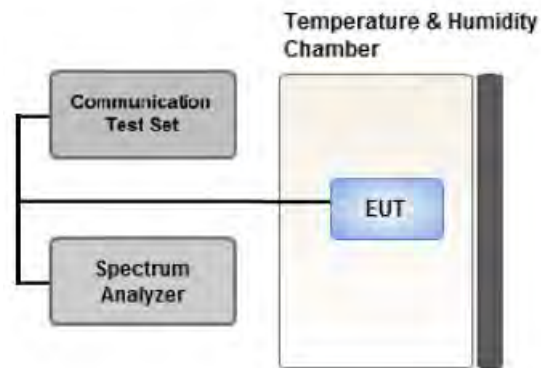
1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW :
 - .- EA licensee's frequency block by up to and including 37.5 kHz : 300 Hz
 - .- EA licensee's frequency block greater than 37.5 kHz : 100 kHz
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

For 90.691(a), RBW=300 Hz for offset less than 37.5 kHz from channel edge and RBW=100 kHz for offsets greater than 37.5 kHz is allowed.

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

3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



Test setup

Test Overview

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

The frequency stability of the transmitter is measured by:

1. Temperature:

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

2. Primary Supply Voltage:

- Unless otherwise specified, vary primary supply voltage from 85 % to 115% of the nominal value for other than hand carried battery equipment.
- For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20 °C to provide a reference).
2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10 °C intervals ranging from -30 °C to +50 °C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

3.9 WORST CASE(RADIATED TEST)

- 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
- We were performed the RSE test in condition of co-location.
 Mode : Stand alone, Simultaneous transmission scenarios
 Worst case : Stand alone
- In the case of radiated spurious emissions, all bandwidth of operation were investigated and the worst case bandwidth results are reported. (Worst case : 5 MHz(Main 1 Ant), 3 MHz(Sub 1 Ant))
- The worst case is reported with the EUT positioning, modulations, and paging service configurations shown in the test data.
- All modes of operation were tested and the worst case results are reported.
- Please refer to the table below.
- SM-S926U & additional models were tested and the worst case results are reported.
 (Worst case : SM-S926U)

[Main 1 Ant Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective Radiated Power	QPSK, 16QAM, 64QAM, 256QAM	1	0	X
Radiated Spurious and Harmonic Emissions	QPSK	1	0	Y

[Sub 1 Ant Worst case]

Test Description	Modulation	RB size	RB offset	Axis
Effective Radiated Power	QPSK, 16QAM, 64QAM, 256QAM	1	0	X
Radiated Spurious and Harmonic Emissions	QPSK	1	0	Z

3.10 WORST CASE(CONDUCTED TEST)

- Worst case : Of all modulation, We have tested modulation of the high Conducted Output Power.
- SM-S926U & additional models were tested and the worst case results are reported.
(Worst case : SM-S926U)

[Worst case]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth	QPSK, 16QAM, 64QAM, 256QAM	1.4, 3, 5	High	Full RB	0
	QPSK, 16QAM, 64QAM, 256QAM	10, 15	Mid	Full RB	0
Channel Edge	QPSK	1.4	Low	1	0
			High	1	5
		3	Low	1	0
			High	1	14
		5	Low	1	0
			High	1	24
		10	Mid	1	0
				1	49
		15	Mid	1	0
				1	74
1.4, 3, 5	Low, High	Full RB	0		
10, 15	Mid	Full RB	0		
Band Edge (Straddle Channel)	QPSK	1.4	Mid	1	5
		3	Mid	1	14
		5	Mid	1	24
		10	Mid	1	49
		1.4, 3, 5 10	Mid	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	QPSK	1.4, 3, 5	Low, High	1	0
		10, 15	Mid	1	0

4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
RF Switching System	FBSR-02B(1.2G HPF+LNA)	T&M SYSTEM	F1L1	01/19/2024	Annual
RF Switching System	FBSR-02B(3.3G HPF+LNA)	T&M SYSTEM	F1L2	01/19/2024	Annual
Power Splitter(DC ~ 26.5 GHz)	11667B	Hewlett Packard	5001	04/19/2024	Annual
DC Power Supply	E3632A	Agilent	MY40010147	06/23/2024	Annual
Dipole Antenna	UHAP	Schwarzbeck	557	03/09/2025	Biennial
Dipole Antenna	UHAP	Schwarzbeck	558	03/09/2025	Biennial
Chamber	SU-642	ESPEC	93008124	02/22/2024	Annual
Horn Antenna(1 ~ 18 GHz)	BBHA 9120D	Schwarzbeck	147	08/17/2025	Biennial
Horn Antenna(1 ~ 18 GHz)	BBHA 9120D	Schwarzbeck	9120D-1298	09/11/2025	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
Signal Analyzer(10 Hz ~ 26.5 GHz)	N9020A	Agilent	MY52090906	04/20/2024	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/19/2024	Annual
Spectrum Analyzer(10 Hz ~ 40 GHz)	FSV40	REOHDE & SCHWARZ	100931	08/17/2024	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/10/2024	Annual
Loop Antenna(9 kHz ~ 30 MHz)	FMZB1513	Schwarzbeck	1513-333	03/17/2024	Biennial
Trilog Broadband Antenna	VULB9168	Schwarzbeck	895	08/16/2024	Biennial
Trilog Broadband Antenna	VULB9168	Schwarzbeck	1135	03/21/2024	Biennial
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262094331	12/01/2023	Annual
Wideband Radio Communication Tester	MT8820C	Anritsu Corp.	6201026545	01/05/2024	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
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)	1.90 (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
Channel Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§2.1051, §90.691	< 50 + 10log10 (P[Watts]) at Band Edge and for all out-of-band emissions within 37.5 kHz of Block Edge	PASS
Band Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§2.1051, §22.917(a)	< 43 + 10log10 (P[Watts]) at Band Edge and for all out-of-band emissions	PASS
Conducted Output Power	§2.1046 §90.635	< 100 Watts	PASS
Frequency stability / variation of ambient temperature	§2.1055, §90.213 §22.355	< 2.5 ppm	PASS

6.2 Test Condition: Radiated Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Effective Radiated Power	§22.913(a)(5)	< 7 Watts max. ERP (Only 15 MHz B.W)	PASS
Radiated Spurious and Harmonic Emissions	§2.1053, §90.691 §22.917(a)	< 43 + 10log10 (P[Watts]) for all out-of band emissions	PASS

7. SAMPLE CALCULATION

7.1 ERP Sample Calculation

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

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

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

7.2 EIRP Sample Calculation

Ch./ Freq.		Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	EIRP	
channel	Freq.(MHz)						W	dBm
20175	1,732.50	-15.75	18.45	9.90	1.76	H	0.456	26.59

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

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

7.3. Emission Designator

GSM Emission Designator

Emission Designator = 249KGXW

GSM BW = 249 kHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W

GSM BW = 249 kHz

G = Phase Modulation

7 = Quantized/Digital Info

W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W

WCDMA BW = 4.17 MHz

F = Frequency Modulation

9 = Composite Digital Info

W = Combination (Audio/Data)

QPSK Modulation

Emission Designator = 4M48G7D

LTE BW = 4.48 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

QAM Modulation

Emission Designator = 4M48W7D

LTE BW = 4.48 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data transmission; telemetry; telecommand

8. TEST DATA(Main 1 Ant)

8.1 CONDUCTED OUTPUT POWER

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)				Limit (W)
				814.7 MHz		823.3 MHz		
				dBm	W	dBm	W	
1.4	QPSK	1	0	23.53	0.225	23.45	0.221	100
		1	3	23.83	0.242	23.61	0.230	100
		1	5	23.65	0.232	23.47	0.222	100
		3	0	23.63	0.231	23.63	0.231	100
		3	1	23.67	0.233	23.74	0.237	100
		3	3	23.65	0.232	23.70	0.234	100
		6	0	22.20	0.166	22.23	0.167	100
	16QAM	1	0	22.77	0.189	22.88	0.194	100
		1	3	22.99	0.199	22.92	0.196	100
		1	5	22.86	0.193	22.88	0.194	100
		3	0	22.77	0.189	22.76	0.189	100
		3	1	22.73	0.187	22.81	0.191	100
		3	3	22.76	0.189	22.79	0.190	100
		6	0	21.84	0.153	21.80	0.151	100
	64QAM	1	0	21.86	0.153	21.87	0.154	100
		1	3	21.90	0.155	21.93	0.156	100
		1	5	21.73	0.149	21.87	0.154	100
		3	0	21.78	0.151	21.77	0.150	100
		3	1	21.76	0.150	21.77	0.150	100
		3	3	21.81	0.152	21.78	0.151	100
		6	0	20.67	0.117	20.68	0.117	100
	256QAM	1	0	18.82	0.076	18.77	0.075	100
		1	3	18.93	0.078	18.90	0.078	100
		1	5	18.84	0.077	18.84	0.076	100
		3	0	18.76	0.075	18.78	0.076	100
		3	1	18.76	0.075	18.78	0.076	100
		3	3	18.75	0.075	18.80	0.076	100
		6	0	18.66	0.073	18.73	0.075	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)				Limit (W)
				815.5 MHz		822.5 MHz		
				dBm	W	dBm	W	
3	QPSK	1	0	23.58	0.228	23.78	0.239	100
		1	7	23.84	0.242	23.74	0.237	100
		1	14	23.62	0.230	23.61	0.230	100
		8	0	22.78	0.190	22.77	0.189	100
		8	3	22.68	0.185	22.72	0.187	100
		8	7	22.72	0.187	22.74	0.188	100
		15	0	22.67	0.185	22.73	0.187	100
	16QAM	1	0	22.91	0.195	22.85	0.193	100
		1	7	22.90	0.195	22.81	0.191	100
		1	14	22.90	0.195	22.85	0.193	100
		8	0	21.81	0.152	21.77	0.150	100
		8	3	21.85	0.153	21.89	0.154	100
		8	7	21.81	0.152	21.80	0.151	100
		15	0	21.74	0.149	21.75	0.150	100
	64QAM	1	0	21.90	0.155	21.80	0.151	100
		1	7	22.02	0.159	22.02	0.159	100
		1	14	21.78	0.151	21.86	0.153	100
		8	0	20.80	0.120	20.76	0.119	100
		8	3	20.77	0.119	20.82	0.121	100
		8	7	20.75	0.119	20.70	0.118	100
		15	0	20.72	0.118	20.73	0.118	100
	256QAM	1	0	18.75	0.075	18.71	0.074	100
		1	7	18.84	0.077	18.91	0.078	100
		1	14	18.60	0.072	18.70	0.074	100
		8	0	18.75	0.075	18.74	0.075	100
		8	3	18.84	0.077	18.84	0.076	100
		8	7	18.74	0.075	18.70	0.074	100
		15	0	18.75	0.075	18.77	0.075	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)				Limit (W)
				816.5 MHz		821.5 MHz		
				dBm	W	dBm	W	
5	QPSK	1	0	23.61	0.230	23.80	0.240	100
		1	12	23.61	0.230	23.82	0.241	100
		1	24	23.89	0.245	23.91	0.246	100
		12	0	22.81	0.191	22.76	0.189	100
		12	6	22.78	0.190	22.79	0.190	100
		12	11	22.79	0.190	22.79	0.190	100
		25	0	22.71	0.187	22.75	0.188	100
	16QAM	1	0	22.90	0.195	22.93	0.196	100
		1	12	22.82	0.191	22.90	0.195	100
		1	24	22.71	0.187	22.77	0.189	100
		12	0	21.76	0.150	21.74	0.149	100
		12	6	21.81	0.152	21.86	0.153	100
		12	11	21.78	0.151	21.82	0.152	100
		25	0	21.73	0.149	21.74	0.149	100
	64QAM	1	0	21.90	0.155	21.88	0.154	100
		1	12	21.83	0.152	21.86	0.153	100
		1	24	21.75	0.150	21.80	0.151	100
		12	0	20.79	0.120	20.75	0.119	100
		12	6	20.85	0.122	20.85	0.122	100
		12	11	20.80	0.120	20.78	0.120	100
		25	0	20.77	0.119	20.78	0.120	100
	256QAM	1	0	18.83	0.076	18.88	0.077	100
		1	12	18.92	0.078	18.88	0.077	100
		1	24	18.83	0.076	18.81	0.076	100
		12	0	18.81	0.076	18.75	0.075	100
		12	6	18.83	0.076	18.85	0.077	100
		12	11	18.77	0.075	18.79	0.076	100
		25	0	18.74	0.075	18.77	0.075	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				819 MHz		
				dBm	W	
10	QPSK	1	0	23.51	0.224	100
		1	24	23.50	0.224	100
		1	49	23.44	0.221	100
		25	0	22.66	0.185	100
		25	12	22.83	0.192	100
		25	24	22.77	0.189	100
		50	0	22.72	0.187	100
	16QAM	1	0	23.02	0.200	100
		1	24	22.90	0.195	100
		1	49	23.10	0.204	100
		25	0	21.80	0.151	100
		25	12	21.88	0.154	100
		25	24	21.84	0.153	100
		50	0	21.75	0.150	100
	64QAM	1	0	21.97	0.157	100
		1	24	22.13	0.163	100
		1	49	21.95	0.157	100
		25	0	20.72	0.118	100
		25	12	20.81	0.121	100
		25	24	20.79	0.120	100
		50	0	20.78	0.120	100
	256QAM	1	0	18.84	0.077	100
		1	24	18.87	0.077	100
		1	49	18.82	0.076	100
		25	0	18.77	0.075	100
		25	12	18.86	0.077	100
		25	24	18.81	0.076	100
		50	0	18.81	0.076	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				821.5 MHz		
				dBm	W	
15	QPSK	1	0	23.64	0.231	100
		1	36	23.60	0.229	100
		1	74	23.56	0.227	100
		36	0	22.68	0.185	100
		36	18	22.80	0.191	100
		36	39	22.78	0.190	100
		75	0	22.73	0.188	100
	16QAM	1	0	23.00	0.200	100
		1	36	22.80	0.191	100
		1	74	22.91	0.195	100
		36	0	21.77	0.150	100
		36	18	21.77	0.150	100
		36	39	21.78	0.151	100
		75	0	21.76	0.150	100
	64QAM	1	0	21.88	0.154	100
		1	36	21.83	0.153	100
		1	74	21.94	0.156	100
		36	0	20.74	0.119	100
		36	18	20.80	0.120	100
		36	39	20.72	0.118	100
		75	0	20.77	0.119	100
	256QAM	1	0	18.83	0.076	100
		1	36	18.92	0.078	100
		1	74	18.86	0.077	100
		36	0	18.73	0.075	100
		36	18	18.81	0.076	100
		36	39	18.75	0.075	100
		75	0	18.77	0.075	100

8.2 EFFECTIVE RADIATED POWER

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
814.7	LTE B26/ 1.4 MHz	QPSK	-33.36	27.48	-10.05	1.38	H	< 100	0.040	16.05
		16QAM	-34.10	26.74	-10.05	1.38	H		0.034	15.31
		64QAM	-35.07	25.77	-10.05	1.38	H		0.027	14.34
		256QAM	-38.00	22.84	-10.05	1.38	H		0.014	11.41
823.3		QPSK	-32.20	28.70	-10.05	1.38	H		0.053	17.27
		16QAM	-32.91	27.99	-10.05	1.38	H		0.045	16.56
		64QAM	-33.85	27.05	-10.05	1.38	H		0.037	15.62
		256QAM	-36.91	23.99	-10.05	1.38	H		0.018	12.56

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
815.5	LTE B26/ 3 MHz	QPSK	-32.35	28.46	-10.05	1.38	H	< 100	0.050	17.03
		16QAM	-33.10	27.71	-10.05	1.38	H		0.042	16.28
		64QAM	-34.04	26.77	-10.05	1.38	H		0.034	15.34
		256QAM	-36.90	23.91	-10.05	1.38	H		0.018	12.48
822.5		QPSK	-31.84	29.06	-10.05	1.38	H		0.058	17.63
		16QAM	-32.63	28.27	-10.05	1.38	H		0.048	16.84
		64QAM	-33.65	27.25	-10.05	1.38	H		0.038	15.82
		256QAM	-36.68	24.22	-10.05	1.38	H		0.019	12.79

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
									W	W
816.5	LTE B26/ 5 MHz	QPSK	-32.41	28.33	-10.05	1.38	H	< 100	0.049	16.90
		16QAM	-33.16	27.58	-10.05	1.38	H		0.041	16.15
		64QAM	-34.12	26.62	-10.05	1.38	H		0.033	15.19
		256QAM	-36.95	23.79	-10.05	1.38	H		0.017	12.36
821.5		QPSK	-31.81	29.11	-10.05	1.38	H		0.059	17.68
		16QAM	-32.65	28.27	-10.05	1.38	H		0.048	16.84
		64QAM	-33.69	27.23	-10.05	1.38	H		0.038	15.80
		256QAM	-36.71	24.21	-10.05	1.38	H		0.019	12.78

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
									W	W
819.0	LTE B26/ 10 MHz	QPSK	-32.43	28.31	-10.05	1.38	H	< 100	0.049	16.88
		16QAM	-33.17	27.57	-10.05	1.38	H		0.041	16.14
		64QAM	-34.12	26.62	-10.05	1.38	H		0.033	15.19
		256QAM	-36.78	23.96	-10.05	1.38	H		0.018	12.53

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
									W	W
821.5	LTE B26/ 15 MHz	QPSK	-32.37	28.55	-10.05	1.38	H	< 7.00	0.052	17.12
		16QAM	-33.11	27.81	-10.05	1.38	H		0.043	16.38
		64QAM	-34.05	26.87	-10.05	1.38	H		0.035	15.44
		256QAM	-36.72	24.20	-10.05	1.38	H		0.019	12.77

Note

1. Limit: None (for reporting purposes only)

8.3 RADIATED SPURIOUS EMISSIONS

- ▣ MODE: LTE B26
- ▣ MODULATION SIGNAL: 5 MHz QPSK
- ▣ DISTANCE: 3 meters

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit
26715 (816.5)	1,633.00	-53.33	8.70	-61.25	1.93	H	-54.48	-13.00
	2,449.50	-55.48	10.20	-60.10	2.52	V	-52.42	-13.00
	3,266.00	-57.30	10.60	-58.99	2.86	H	-51.25	-13.00
26765 (821.5)	1,643.00	-53.05	8.70	-61.67	1.97	H	-54.94	-13.00
	2,464.50	-56.09	10.20	-60.46	2.51	V	-52.77	-13.00
	3,286.00	-58.21	10.60	-60.65	2.89	H	-52.94	-13.00

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Band 26	1.4 MHz	823.3	QPSK	6	0	1.0963
			16QAM			1.1051
			64QAM			1.1009
			256QAM			1.0999
	3 MHz	822.5	QPSK	15		2.7066
			16QAM			2.7164
			64QAM			2.7162
			256QAM			2.7134
	5 MHz	821.5	QPSK	25		4.5123
			16QAM			4.5012
			64QAM			4.5328
			256QAM			4.4891
	10 MHz	819.0	QPSK	50		8.9893
			16QAM			8.9871
			64QAM			9.0038
			256QAM			8.9924
	15 MHz	821.5	QPSK	75		13.459
			16QAM			13.491
			64QAM			13.511
			256QAM			13.460

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 70 ~ 89.

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)
26	1.4	814.7	3.6765	27.976	-67.071	-39.095	-13.00
		823.3	3.7084	27.976	-67.148	-39.172	
	3	815.5	3.6825	27.976	-66.958	-38.982	
		822.5	3.7029	27.976	-66.811	-38.835	
	5	816.5	3.6840	27.976	-67.140	-39.164	
		821.5	3.7059	27.976	-67.160	-39.184	
	10	819.0	3.7089	27.976	-67.001	-39.025	
	15	821.5	3.7114	27.976	-67.217	-39.241	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 110 ~ 117.
2. Conducted Spurious Emissions was Tested QPSK Modulation, Resource Block Size 1 and Resource Block Offset 0
3. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
4. Factor (dB) = Cable Loss + Ext. Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	25.270
1 – 5	27.976
5 – 10	28.591
10 – 15	29.116
15 – 20	29.489
Above 20(26.5)	30.131

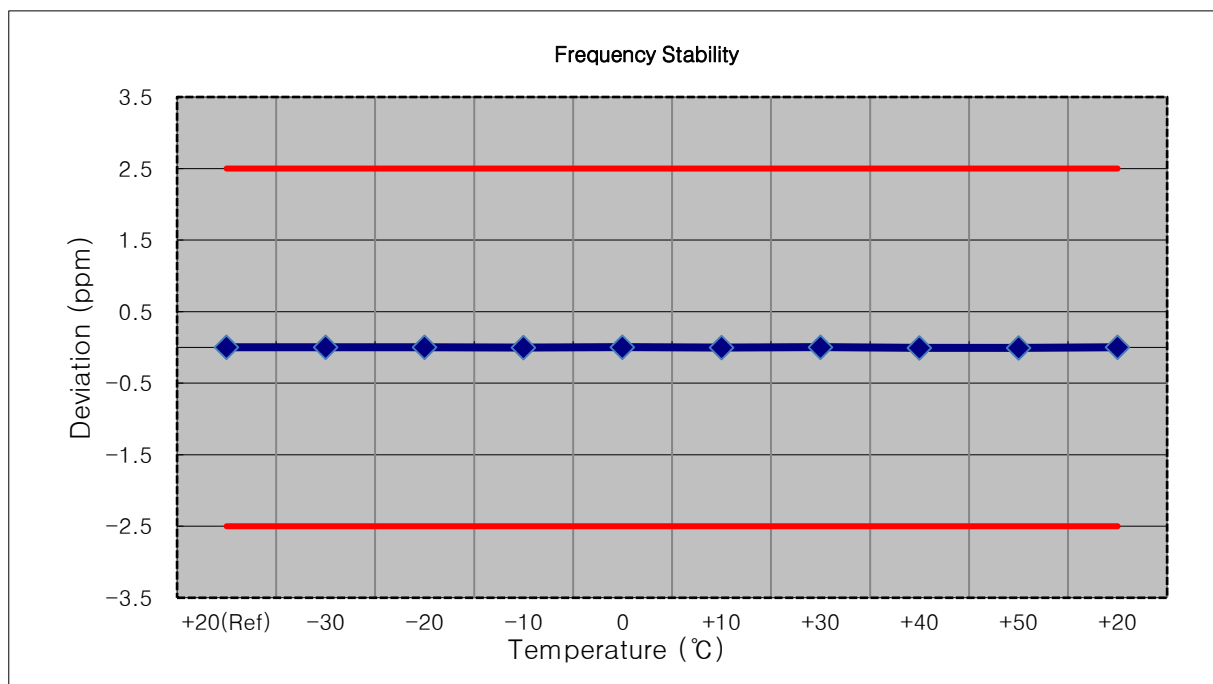
8.6 CHANNEL EDGE

- Plots of the EUT's Channel Edge are shown Page 90 ~ 109.

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

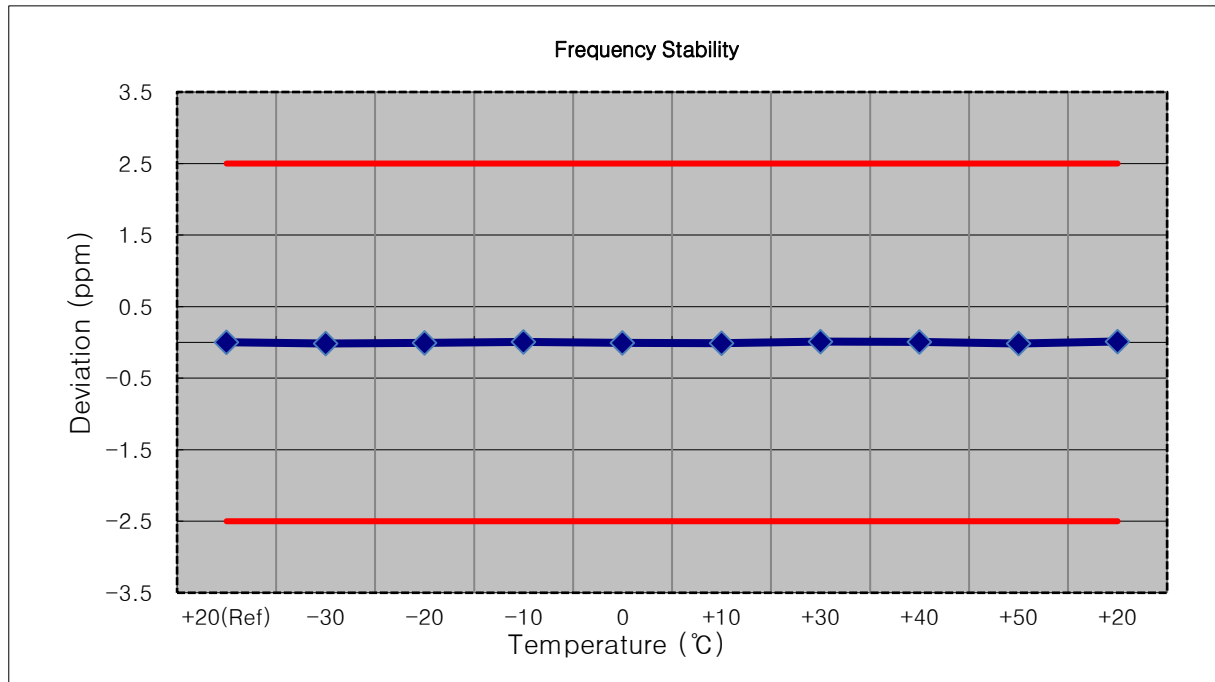
- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 814,700,000 Hz
- ▣ CHANNEL: 26697(1.4 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	814 700 003	0.0	0.000 000	0.000
100 %		-30	814 700 004	1.5	0.000 000	0.002
100 %		-20	814 700 006	3.3	0.000 000	0.004
100 %		-10	814 700 000	-2.6	0.000 000	-0.003
100 %		0	814 700 006	3.5	0.000 000	0.004
100 %		+10	814 700 001	-1.9	0.000 000	-0.002
100 %		+30	814 700 006	3.5	0.000 000	0.004
100 %		+40	814 699 998	-5.2	-0.000 001	-0.006
100 %		+50	814 699 999	-3.9	0.000 000	-0.005
Batt. Endpoint		3.300	+20	814 700 006	3.4	0.000 000



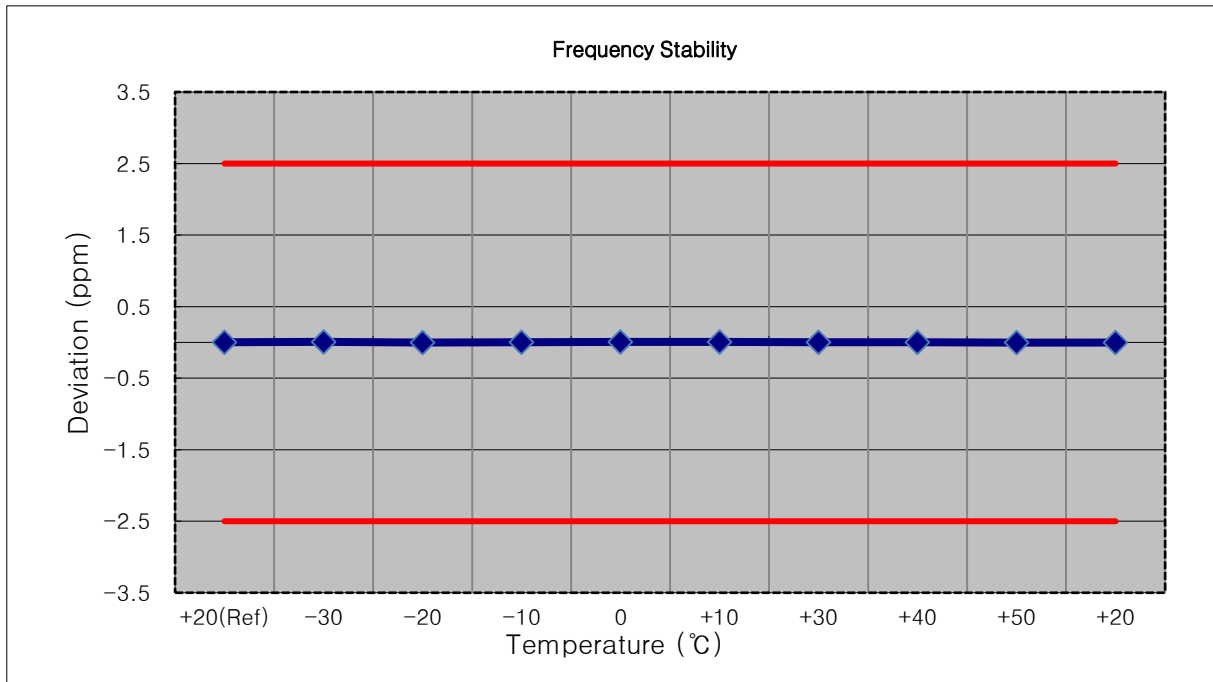
- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 815,500,000 Hz
- ▣ CHANNEL: 26705(3 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	815 499 987	0.0	0.000 000	0.000
100 %		-30	815 499 974	-12.7	-0.000 002	-0.016
100 %		-20	815 499 981	-6.1	-0.000 001	-0.007
100 %		-10	815 499 993	6.0	0.000 001	0.007
100 %		0	815 499 981	-6.4	-0.000 001	-0.008
100 %		+10	815 499 977	-10.5	-0.000 001	-0.013
100 %		+30	815 499 994	7.4	0.000 001	0.009
100 %		+40	815 499 993	6.2	0.000 001	0.008
100 %		+50	815 499 974	-12.9	-0.000 002	-0.016
Batt. Endpoint		3.300	+20	815 499 997	10.3	0.000 001



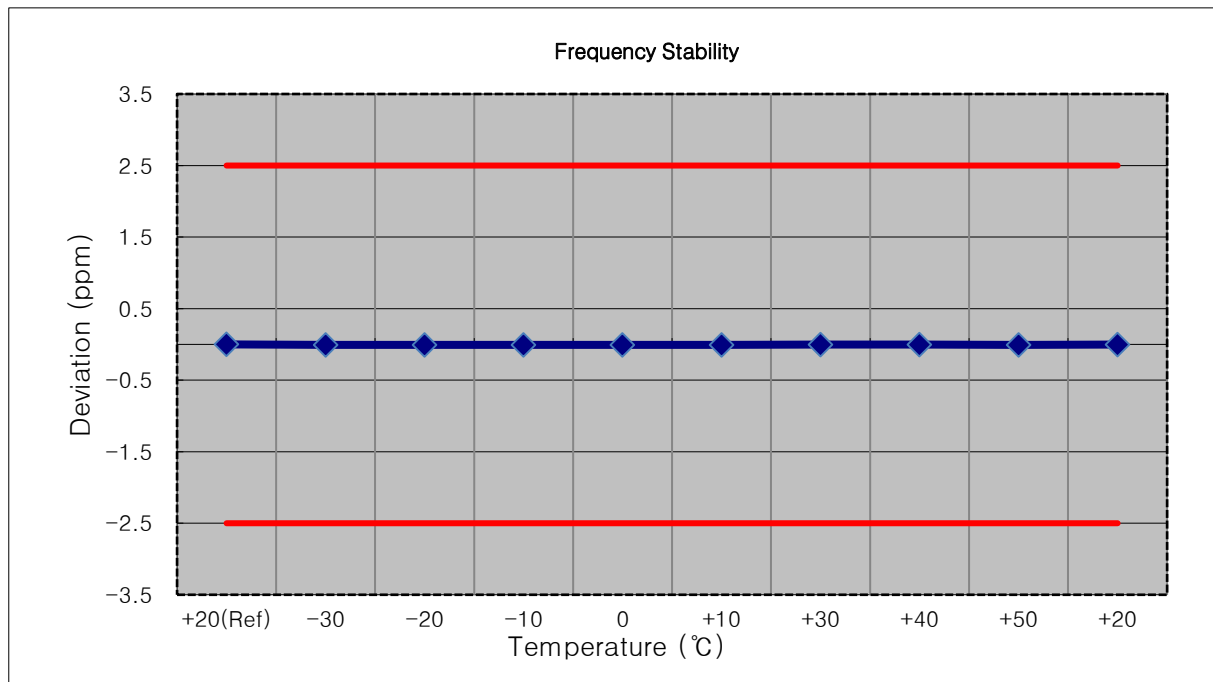
- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 816,500,000 Hz
- ▣ CHANNEL: 26715(5 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	816 500 005	0.0	0.000 000	0.000
100 %		-30	816 500 011	6.0	0.000 001	0.007
100 %		-20	816 500 002	-2.5	0.000 000	-0.003
100 %		-10	816 500 007	1.8	0.000 000	0.002
100 %		0	816 500 009	4.6	0.000 001	0.006
100 %		+10	816 500 010	5.1	0.000 001	0.006
100 %		+30	816 500 008	3.3	0.000 000	0.004
100 %		+40	816 500 007	2.6	0.000 000	0.003
100 %		+50	816 500 002	-2.9	0.000 000	-0.004
Batt. Endpoint		3.300	+20	816 500 002	-2.6	0.000 000



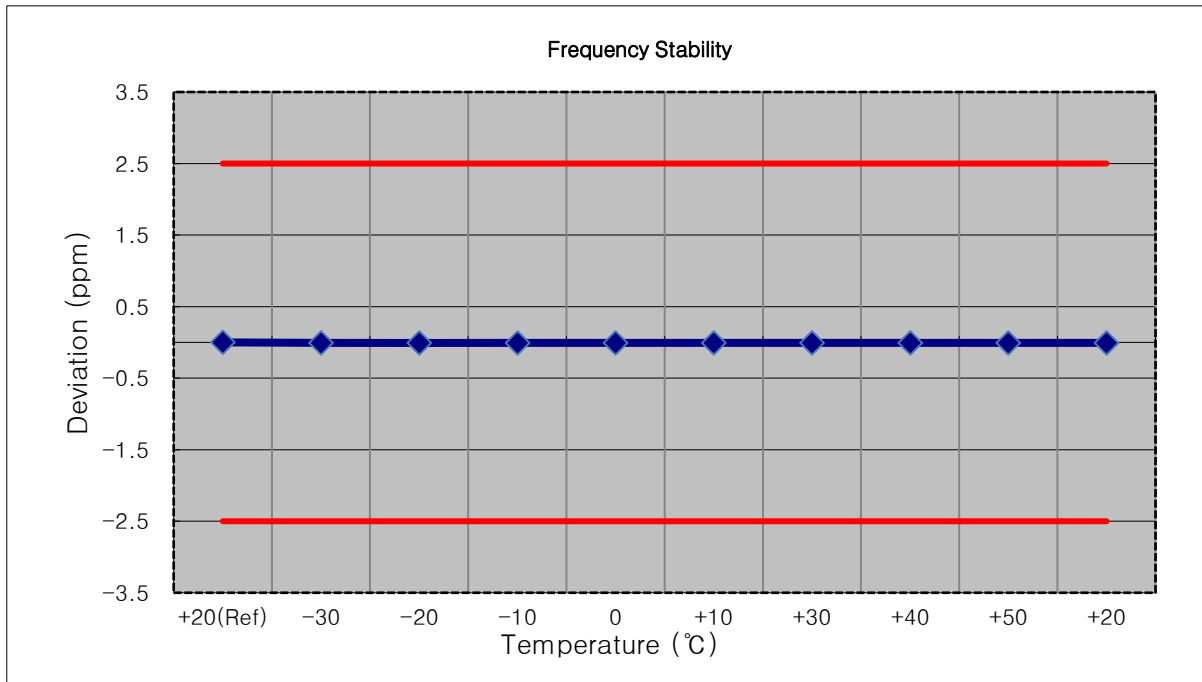
- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 819,000,000 Hz
- ▣ CHANNEL: 26740(10 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	818 999 996	0.0	0.000 000	0.000
100 %		-30	818 999 992	-4.5	-0.000 001	-0.005
100 %		-20	818 999 991	-4.7	-0.000 001	-0.006
100 %		-10	818 999 990	-5.7	-0.000 001	-0.007
100 %		0	818 999 991	-5.1	-0.000 001	-0.006
100 %		+10	818 999 991	-5.3	-0.000 001	-0.006
100 %		+30	818 999 993	-3.4	0.000 000	-0.004
100 %		+40	818 999 994	-2.5	0.000 000	-0.003
100 %		+50	818 999 990	-5.8	-0.000 001	-0.007
Batt. Endpoint		3.300	+20	818 999 993	-3.2	0.000 000



- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 821,500,000 Hz
- ▣ CHANNEL: 26765(15 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	821 499 992	0.0	0.000 000	0.000
100 %		-30	821 499 986	-5.9	-0.000 001	-0.007
100 %		-20	821 499 986	-6.4	-0.000 001	-0.008
100 %		-10	821 499 987	-4.6	-0.000 001	-0.006
100 %		0	821 499 987	-5.2	-0.000 001	-0.006
100 %		+10	821 499 987	-5.4	-0.000 001	-0.007
100 %		+30	821 499 987	-4.9	-0.000 001	-0.006
100 %		+40	821 499 986	-6.1	-0.000 001	-0.007
100 %		+50	821 499 988	-3.9	0.000 000	-0.005
Batt. Endpoint		3.300	+20	821 499 987	-4.8	-0.000 001



8.8 STRADDLE CHANNEL

8.8.1 CONDUCTED OUTPUT POWER

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				824 MHz		
				dBm	W	
1.4	QPSK	1	0	23.47	0.223	100
		1	3	23.59	0.229	100
		1	5	23.51	0.224	100
		3	0	23.65	0.232	100
		3	1	23.69	0.234	100
		3	3	23.71	0.235	100
		6	0	22.20	0.166	100
	16QAM	1	0	22.93	0.196	100
		1	3	22.93	0.196	100
		1	5	22.86	0.193	100
		3	0	22.72	0.187	100
		3	1	22.81	0.191	100
		3	3	22.78	0.190	100
		6	0	21.79	0.151	100
	64QAM	1	0	21.81	0.152	100
		1	3	21.91	0.155	100
		1	5	21.84	0.153	100
		3	0	21.75	0.150	100
		3	1	21.74	0.149	100
		3	3	21.80	0.151	100
		6	0	20.69	0.117	100
	256QAM	1	0	18.79	0.076	100
		1	3	18.87	0.077	100
		1	5	18.82	0.076	100
		3	0	18.80	0.076	100
		3	1	18.76	0.075	100
		3	3	18.79	0.076	100
		6	0	18.72	0.075	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				824 MHz		
				dBm	W	
3	QPSK	1	0	23.71	0.235	100
		1	7	23.68	0.233	100
		1	14	23.56	0.227	100
		8	0	22.74	0.188	100
		8	3	22.69	0.186	100
		8	7	22.74	0.188	100
		15	0	22.70	0.186	100
	16QAM	1	0	22.78	0.190	100
		1	7	22.82	0.191	100
		1	14	22.77	0.189	100
		8	0	21.75	0.150	100
		8	3	21.83	0.153	100
		8	7	21.80	0.151	100
		15	0	21.76	0.150	100
	64QAM	1	0	21.76	0.150	100
		1	7	21.93	0.156	100
		1	14	21.90	0.155	100
		8	0	20.73	0.118	100
		8	3	20.78	0.120	100
		8	7	20.72	0.118	100
		15	0	20.72	0.118	100
	256QAM	1	0	18.70	0.074	100
		1	7	18.92	0.078	100
		1	14	18.80	0.076	100
		8	0	18.71	0.074	100
		8	3	18.79	0.076	100
		8	7	18.68	0.074	100
		15	0	18.73	0.075	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				824 MHz		
				dBm	W	
5	QPSK	1	0	23.78	0.239	100
		1	12	23.82	0.241	100
		1	24	23.70	0.234	100
		12	0	22.72	0.187	100
		12	6	22.77	0.189	100
		12	11	22.76	0.189	100
		25	0	22.72	0.187	100
	16QAM	1	0	22.93	0.196	100
		1	12	22.88	0.194	100
		1	24	22.78	0.190	100
		12	0	21.76	0.150	100
		12	6	21.82	0.152	100
		12	11	21.80	0.151	100
		25	0	21.73	0.149	100
	64QAM	1	0	21.84	0.153	100
		1	12	21.88	0.154	100
		1	24	21.83	0.152	100
		12	0	20.77	0.119	100
		12	6	20.81	0.121	100
		12	11	20.81	0.120	100
		25	0	20.74	0.118	100
	256QAM	1	0	18.82	0.076	100
		1	12	18.85	0.077	100
		1	24	18.77	0.075	100
		12	0	18.71	0.074	100
		12	6	18.79	0.076	100
		12	11	18.75	0.075	100
		25	0	18.75	0.075	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				824 MHz		
				dBm	W	
10	QPSK	1	0	23.49	0.223	100
		1	24	23.48	0.223	100
		1	49	23.42	0.220	100
		25	0	22.64	0.184	100
		25	12	22.81	0.191	100
		25	24	22.75	0.188	100
		50	0	22.70	0.186	100
	16QAM	1	0	23.00	0.200	100
		1	24	22.88	0.194	100
		1	49	23.08	0.203	100
		25	0	21.78	0.151	100
		25	12	21.76	0.150	100
		25	24	21.82	0.152	100
		50	0	21.73	0.149	100
	64QAM	1	0	21.95	0.157	100
		1	24	22.11	0.163	100
		1	49	21.93	0.156	100
		25	0	20.70	0.117	100
		25	12	20.79	0.120	100
		25	24	20.77	0.119	100
		50	0	20.77	0.119	100
	256QAM	1	0	18.82	0.076	100
		1	24	18.85	0.077	100
		1	49	18.80	0.076	100
		25	0	18.75	0.075	100
		25	12	18.84	0.077	100
		25	24	18.79	0.076	100
		50	0	18.79	0.076	100

8.8.2 EFFECTIVE RADIATED POWER

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
824.0	LTE B26/ 1.4 MHz	QPSK	-32.14	28.76	-10.05	1.38	H	< 7.00	0.054	17.33
		16QAM	-32.87	28.03	-10.05	1.38	H		0.046	16.60
		64QAM	-33.81	27.09	-10.05	1.38	H		0.037	15.66
		256QAM	-36.89	24.01	-10.05	1.38	H		0.018	12.58

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
824.0	LTE B26/ 3 MHz	QPSK	-32.57	28.33	-10.05	1.38	H	< 7.00	0.049	16.90
		16QAM	-33.34	27.56	-10.05	1.38	H		0.041	16.13
		64QAM	-34.34	26.56	-10.05	1.38	H		0.033	15.13
		256QAM	-37.23	23.67	-10.05	1.38	H		0.017	12.24

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
824.0	LTE B26/ 5 MHz	QPSK	-31.82	29.08	-10.05	1.38	H	< 7.00	0.058	17.65
		16QAM	-32.64	28.26	-10.05	1.38	H		0.048	16.83
		64QAM	-33.67	27.23	-10.05	1.38	H		0.038	15.80
		256QAM	-36.75	24.15	-10.05	1.38	H		0.019	12.72

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
824.0	LTE B26/ 10 MHz	QPSK	-32.55	28.35	-10.05	1.38	H	< 7.00	0.049	16.92
		16QAM	-33.34	27.56	-10.05	1.38	H		0.041	16.13
		64QAM	-34.35	26.55	-10.05	1.38	H		0.033	15.12
		256QAM	-37.05	23.85	-10.05	1.38	H		0.018	12.42

8.8.3 RADIATED SPURIOUS EMISSIONS

- ▣ MODE: LTE B26
- ▣ MODULATION SIGNAL: 5 MHz QPSK
- ▣ DISTANCE: 3 meters

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit
26790 (824.0)	1 648.00	-53.61	9.58	-64.01	2.14	H	-56.57	-13.00
	2 472.00	-55.58	10.26	-60.06	2.66	H	-52.46	-13.00
	3 296.00	-58.40	12.13	-59.53	3.02	V	-50.41	-13.00

8.8.4 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
26	1.4	824.0	3.7064	27.976	-67.219	-39.243	-13.00
	3		3.6760	27.976	-66.825	-38.849	
	5		3.6830	27.976	-67.049	-39.073	
	10		3.7049	27.976	-67.114	-39.138	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 119 ~ 122.
2. Conducted Spurious Emissions was Tested QPSK Modulation, Resource Block Size 1 and Resource Block Offset 0
3. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
4. Factor (dB) = Cable Loss + Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	25.270
1 – 5	27.976
5 – 10	28.591
10 – 15	29.116
15 – 20	29.489
Above 20(26.5)	30.131

8.8.5 CHANNEL EDGE(Part90)

- Test Channel : 26790(824.0MHz)
- Plots of the EUT's Channel Edge are shown Page 123 ~ 134.

8.8.6 BAND EDGE(Part22)

- Test Channel : 26790(824.0 MHz)
- Plots of the EUT's Band Edge are shown Page 135 ~ 142.

9. TEST DATA(Sub 1 Ant)

9.1 CONDUCTED OUTPUT POWER

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)				Limit (W)
				814.7 MHz		823.3 MHz		
				dBm	W	dBm	W	
1.4	QPSK	1	0	23.29	0.213	23.70	0.234	100
		1	3	23.41	0.219	23.73	0.236	100
		1	5	23.36	0.217	23.65	0.232	100
		3	0	24.09	0.256	24.09	0.256	100
		3	1	24.08	0.256	24.11	0.258	100
		3	3	23.99	0.251	24.06	0.255	100
		6	0	22.80	0.191	22.77	0.189	100
	16QAM	1	0	23.41	0.219	23.51	0.224	100
		1	3	23.56	0.227	23.55	0.227	100
		1	5	23.66	0.232	23.56	0.227	100
		3	0	23.30	0.214	23.37	0.217	100
		3	1	23.33	0.215	23.35	0.216	100
		3	3	23.40	0.219	23.45	0.222	100
		6	0	22.38	0.173	22.39	0.174	100
	64QAM	1	0	22.57	0.181	22.47	0.176	100
		1	3	22.63	0.183	22.56	0.181	100
		1	5	22.52	0.179	22.41	0.174	100
		3	0	22.54	0.179	22.52	0.178	100
		3	1	22.44	0.175	22.43	0.175	100
		3	3	22.36	0.172	22.39	0.173	100
		6	0	21.35	0.136	21.34	0.136	100
	256QAM	1	0	19.36	0.086	19.40	0.087	100
		1	3	19.25	0.084	19.36	0.086	100
		1	5	19.43	0.088	19.33	0.086	100
		3	0	19.41	0.087	19.37	0.086	100
		3	1	19.38	0.087	19.42	0.087	100
		3	3	19.38	0.087	19.36	0.086	100
		6	0	19.44	0.088	19.39	0.087	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)				Limit (W)
				815.5 MHz		822.5 MHz		
				dBm	W	dBm	W	
3	QPSK	1	0	23.44	0.221	23.95	0.249	100
		1	7	23.58	0.228	23.97	0.249	100
		1	14	23.48	0.223	23.93	0.247	100
		8	0	23.39	0.218	23.35	0.216	100
		8	3	23.41	0.219	23.28	0.213	100
		8	7	23.37	0.217	23.36	0.217	100
		15	0	23.41	0.219	23.30	0.214	100
	16QAM	1	0	23.37	0.217	23.41	0.220	100
		1	7	23.31	0.214	23.43	0.221	100
		1	14	23.55	0.226	23.49	0.223	100
		8	0	22.44	0.175	22.39	0.173	100
		8	3	22.41	0.174	22.38	0.173	100
		8	7	22.42	0.175	22.33	0.171	100
		15	0	22.44	0.175	22.41	0.174	100
	64QAM	1	0	22.58	0.181	22.52	0.178	100
		1	7	22.61	0.182	22.54	0.179	100
		1	14	22.51	0.178	22.43	0.175	100
		8	0	21.48	0.141	21.36	0.137	100
		8	3	21.45	0.140	21.41	0.139	100
		8	7	21.55	0.143	21.44	0.139	100
		15	0	21.48	0.141	21.40	0.138	100
	256QAM	1	0	19.52	0.090	19.43	0.088	100
		1	7	19.53	0.090	19.49	0.089	100
		1	14	19.75	0.094	19.55	0.090	100
		8	0	19.44	0.088	19.39	0.087	100
		8	3	19.41	0.087	19.36	0.086	100
		8	7	19.52	0.090	19.38	0.087	100
		15	0	19.46	0.088	19.34	0.086	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)				Limit (W)
				816.5 MHz		821.5 MHz		
				dBm	W	dBm	W	
5	QPSK	1	0	23.44	0.221	23.92	0.247	100
		1	12	23.61	0.230	23.99	0.250	100
		1	24	23.41	0.219	23.85	0.242	100
		12	0	23.43	0.220	23.44	0.221	100
		12	6	23.38	0.218	23.38	0.218	100
		12	11	23.41	0.219	23.38	0.218	100
		25	0	23.40	0.219	23.40	0.219	100
	16QAM	1	0	23.53	0.225	23.52	0.225	100
		1	12	23.60	0.229	23.53	0.226	100
		1	24	23.45	0.221	23.45	0.221	100
		12	0	22.50	0.178	22.48	0.177	100
		12	6	22.58	0.181	22.52	0.179	100
		12	11	22.47	0.177	22.44	0.176	100
		25	0	22.48	0.177	22.43	0.175	100
	64QAM	1	0	22.40	0.174	22.45	0.176	100
		1	12	22.56	0.180	22.57	0.181	100
		1	24	22.40	0.174	22.51	0.178	100
		12	0	21.41	0.138	21.45	0.140	100
		12	6	21.49	0.141	21.50	0.141	100
		12	11	21.41	0.138	21.43	0.139	100
		25	0	21.43	0.139	21.43	0.139	100
	256QAM	1	0	19.39	0.087	19.33	0.086	100
		1	12	19.31	0.085	19.46	0.088	100
		1	24	19.50	0.089	19.41	0.087	100
		12	0	19.42	0.087	19.41	0.087	100
		12	6	19.31	0.085	19.34	0.086	100
		12	11	19.39	0.087	19.36	0.086	100
		25	0	19.47	0.089	19.45	0.088	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				819 MHz		
				dBm	W	
10	QPSK	1	0	23.60	0.229	100
		1	24	23.68	0.233	100
		1	49	24.34	0.272	100
		25	0	23.39	0.218	100
		25	12	23.48	0.223	100
		25	24	23.49	0.223	100
		50	0	23.50	0.224	100
	16QAM	1	0	23.37	0.217	100
		1	24	23.64	0.231	100
		1	49	23.42	0.220	100
		25	0	22.48	0.177	100
		25	12	22.50	0.178	100
		25	24	22.51	0.178	100
		50	0	22.47	0.177	100
	64QAM	1	0	22.65	0.184	100
		1	24	22.50	0.178	100
		1	49	22.54	0.179	100
		25	0	21.47	0.140	100
		25	12	21.50	0.141	100
		25	24	21.50	0.141	100
		50	0	21.44	0.139	100
	256QAM	1	0	19.67	0.093	100
		1	24	19.38	0.087	100
		1	49	19.52	0.090	100
		25	0	19.43	0.088	100
		25	12	19.51	0.089	100
		25	24	19.42	0.087	100
		50	0	19.47	0.089	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				821.5 MHz		
				dBm	W	
15	QPSK	1	0	24.16	0.261	100
		1	36	24.04	0.253	100
		1	74	24.29	0.269	100
		36	0	23.36	0.217	100
		36	18	23.41	0.219	100
		36	39	23.38	0.218	100
		75	0	23.44	0.221	100
	16QAM	1	0	23.53	0.225	100
		1	36	23.59	0.228	100
		1	74	23.41	0.219	100
		36	0	22.41	0.174	100
		36	18	22.48	0.177	100
		36	39	22.46	0.176	100
		75	0	22.43	0.175	100
	64QAM	1	0	22.57	0.181	100
		1	36	22.51	0.178	100
		1	74	22.43	0.175	100
		36	0	21.38	0.138	100
		36	18	21.44	0.139	100
		36	39	21.42	0.139	100
		75	0	21.42	0.139	100
	256QAM	1	0	19.61	0.091	100
		1	36	19.34	0.086	100
		1	74	19.46	0.088	100
		36	0	19.39	0.087	100
		36	18	19.43	0.088	100
		36	39	19.40	0.087	100
		75	0	19.41	0.087	100

9.2 EFFECTIVE RADIATED POWER

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
									W	W
814.7	LTE B26/ 1.4 MHz	QPSK	-30.43	30.41	-10.05	1.38	H	< 100	0.079	18.98
		16QAM	-31.09	29.75	-10.05	1.38	H		0.068	18.32
		64QAM	-32.16	28.68	-10.05	1.38	H		0.053	17.25
		256QAM	-35.21	25.63	-10.05	1.38	H		0.026	14.20
823.3		QPSK	-30.96	29.94	-10.05	1.38	H		0.071	18.51
		16QAM	-31.70	29.20	-10.05	1.38	H		0.060	17.77
		64QAM	-32.67	28.23	-10.05	1.38	H		0.048	16.80
		256QAM	-35.59	25.31	-10.05	1.38	H		0.025	13.88

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
									W	W
815.5	LTE B26/ 3 MHz	QPSK	-30.80	30.01	-10.05	1.38	H	< 100	0.072	18.58
		16QAM	-31.55	29.26	-10.05	1.38	H		0.061	17.83
		64QAM	-32.55	28.26	-10.05	1.38	H		0.048	16.83
		256QAM	-35.62	25.19	-10.05	1.38	H		0.024	13.76
822.5		QPSK	-30.46	30.44	-10.05	1.38	H		0.080	19.01
		16QAM	-31.34	29.56	-10.05	1.38	H		0.065	18.13
		64QAM	-32.36	28.54	-10.05	1.38	H		0.051	17.11
		256QAM	-35.41	25.49	-10.05	1.38	H		0.026	14.06

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
									W	W
816.5	LTE B26/ 5 MHz	QPSK	-30.85	29.89	-10.05	1.38	H	< 100	0.070	18.46
		16QAM	-31.57	29.17	-10.05	1.38	H		0.060	17.74
		64QAM	-32.52	28.22	-10.05	1.38	H		0.048	16.79
		256QAM	-35.60	25.14	-10.05	1.38	H		0.024	13.71
821.5		QPSK	-30.59	30.33	-10.05	1.38	H		0.078	18.90
		16QAM	-31.33	29.59	-10.05	1.38	H		0.065	18.16
		64QAM	-32.35	28.57	-10.05	1.38	H		0.052	17.14
		256QAM	-35.43	25.49	-10.05	1.38	H		0.025	14.06

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
									W	W
819.0	LTE B26/ 10 MHz	QPSK	-30.49	30.25	-10.05	1.38	H	< 100	0.076	18.82
		16QAM	-31.30	29.44	-10.05	1.38	H		0.063	18.01
		64QAM	-32.33	28.41	-10.05	1.38	H		0.050	16.98
		256QAM	-35.39	25.35	-10.05	1.38	H		0.025	13.92

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
									W	W
821.5	LTE B26/ 15 MHz	QPSK	-30.82	30.10	-10.05	1.38	H	< 7.00	0.074	18.67
		16QAM	-31.57	29.35	-10.05	1.38	H		0.062	17.92
		64QAM	-32.45	28.47	-10.05	1.38	H		0.051	17.04
		256QAM	-35.31	25.61	-10.05	1.38	H		0.026	14.18

Note

1. Limit: None (for reporting purposes only)

9.3 RADIATED SPURIOUS EMISSIONS

- ▣ MODE: LTE B26
- ▣ MODULATION SIGNAL: 3 MHz QPSK
- ▣ DISTANCE: 3 meters

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit
26705 (815.5)	1 631.00	-53.47	9.49	-63.98	2.10	H	-56.59	-13.00
	2 446.50	-55.99	10.10	-60.64	2.59	V	-53.14	-13.00
	3 262.00	-58.87	11.82	-59.71	3.10	H	-50.99	-13.00
26775 (822.5)	1 645.00	-53.05	9.56	-63.47	2.13	H	-56.04	-13.00
	2 467.50	-56.09	10.26	-60.57	2.66	V	-52.97	-13.00
	3 290.00	-58.21	12.10	-59.06	3.02	H	-49.98	-13.00

9.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Band 26	1.4 MHz	823.3	QPSK	6	0	1.1058
			16QAM			1.0989
			64QAM			1.1053
			256QAM			1.1013
	3 MHz	822.5	QPSK	15		2.7115
			16QAM			2.7024
			64QAM			2.7190
			256QAM			2.7082
	5 MHz	821.5	QPSK	25		4.5103
			16QAM			4.5078
			64QAM			4.5047
			256QAM			4.5120
	10 MHz	819.0	QPSK	50		9.0095
			16QAM			8.9839
			64QAM			8.9842
			256QAM			8.9838
	15 MHz	821.5	QPSK	75		13.505
			16QAM			13.501
			64QAM			13.492
			256QAM			13.475

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 144 ~ 163.

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)
26	1.4	814.7	3.6855	27.976	-67.160	-39.184	-13.00
		823.3	3.1691	27.976	-66.973	-38.997	
	3	815.5	3.7119	27.976	-66.998	-39.022	
		822.5	3.6925	27.976	-67.037	-39.061	
	5	816.5	3.7020	27.976	-66.895	-38.919	
		821.5	3.7084	27.976	-67.280	-39.304	
	10	819.0	3.7020	27.976	-67.278	-39.302	
	15	821.5	3.6910	27.976	-67.355	-39.379	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 184 ~ 191.
2. Conducted Spurious Emissions was Tested QPSK Modulation, Resource Block Size 1 and Resource Block Offset 0
3. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
4. Factor (dB) = Cable Loss + Ext. Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	25.270
1 – 5	27.976
5 – 10	28.591
10 – 15	29.116
15 – 20	29.489
Above 20(26.5)	30.131

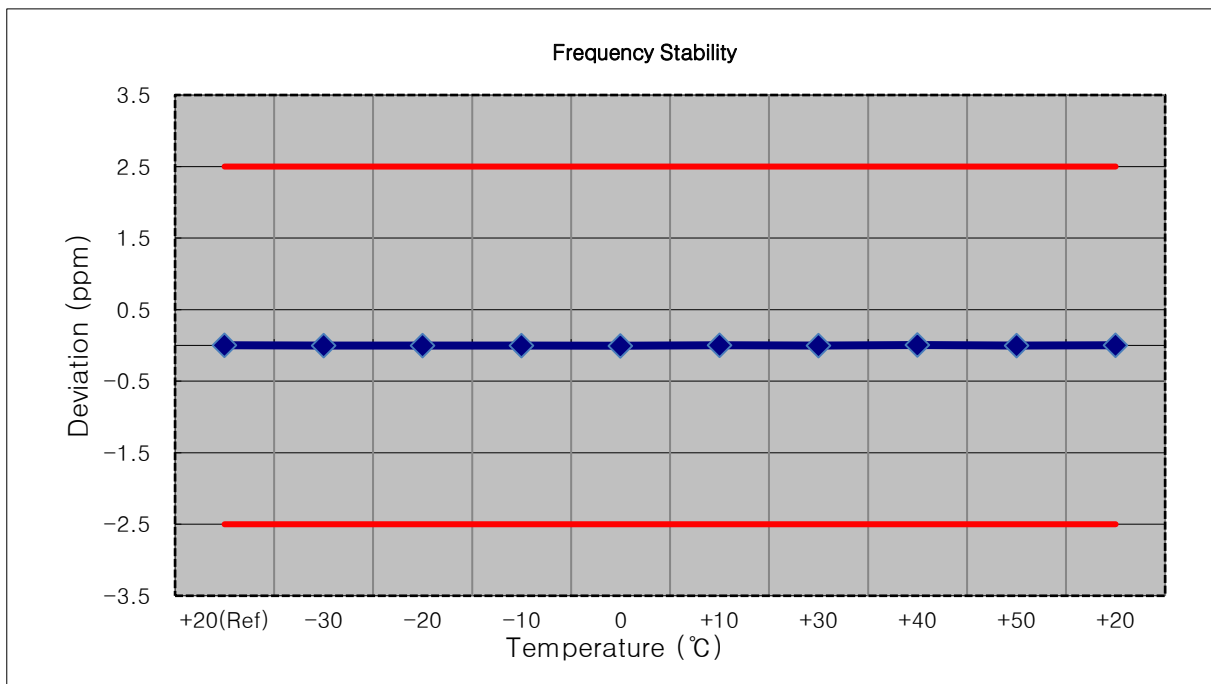
9.6 CHANNEL EDGE

- Plots of the EUT's Channel Edge are shown Page 164 ~ 183.

9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

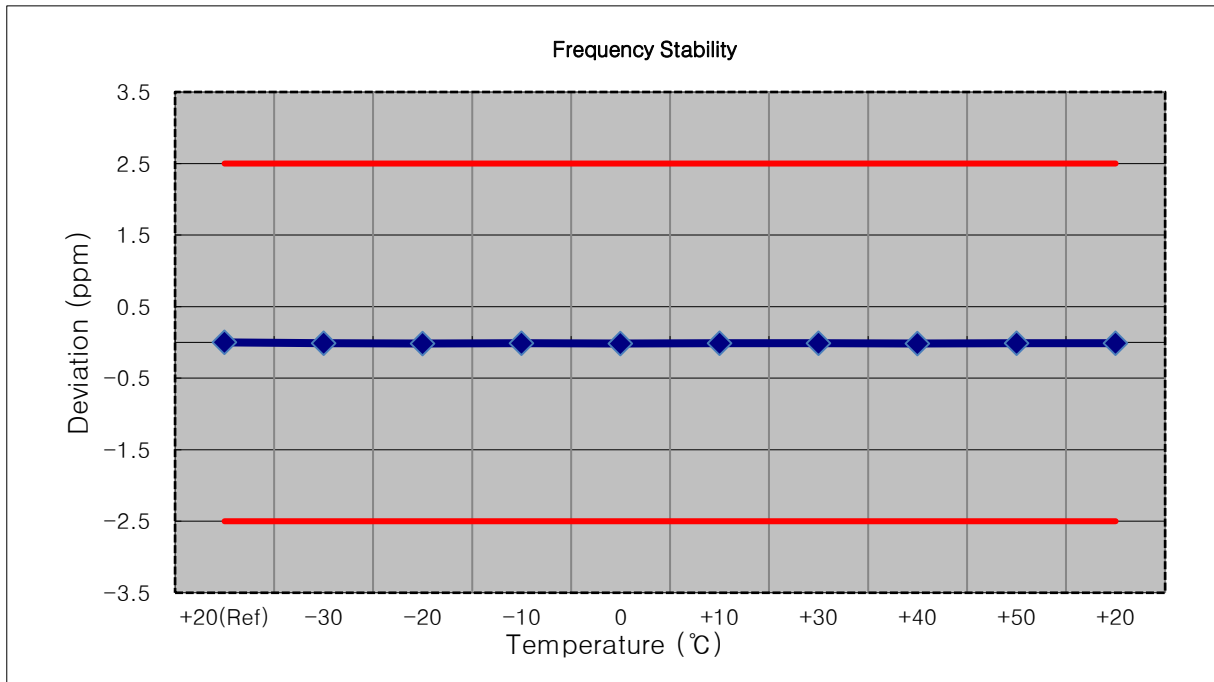
- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 814,700,000 Hz
- ▣ CHANNEL: 26697(1.4 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	814 699 995	0.0	0.000 000	0.000
100 %		-30	814 699 992	-3.0	0.000 000	-0.004
100 %		-20	814 699 992	-3.4	0.000 000	-0.004
100 %		-10	814 699 993	-2.3	0.000 000	-0.003
100 %		0	814 699 992	-3.8	0.000 000	-0.005
100 %		+10	814 699 997	1.8	0.000 000	0.002
100 %		+30	814 699 993	-2.7	0.000 000	-0.003
100 %		+40	814 700 000	4.4	0.000 001	0.005
100 %		+50	814 699 993	-2.4	0.000 000	-0.003
Batt. Endpoint		3.300	+20	814 699 998	2.1	0.000 000



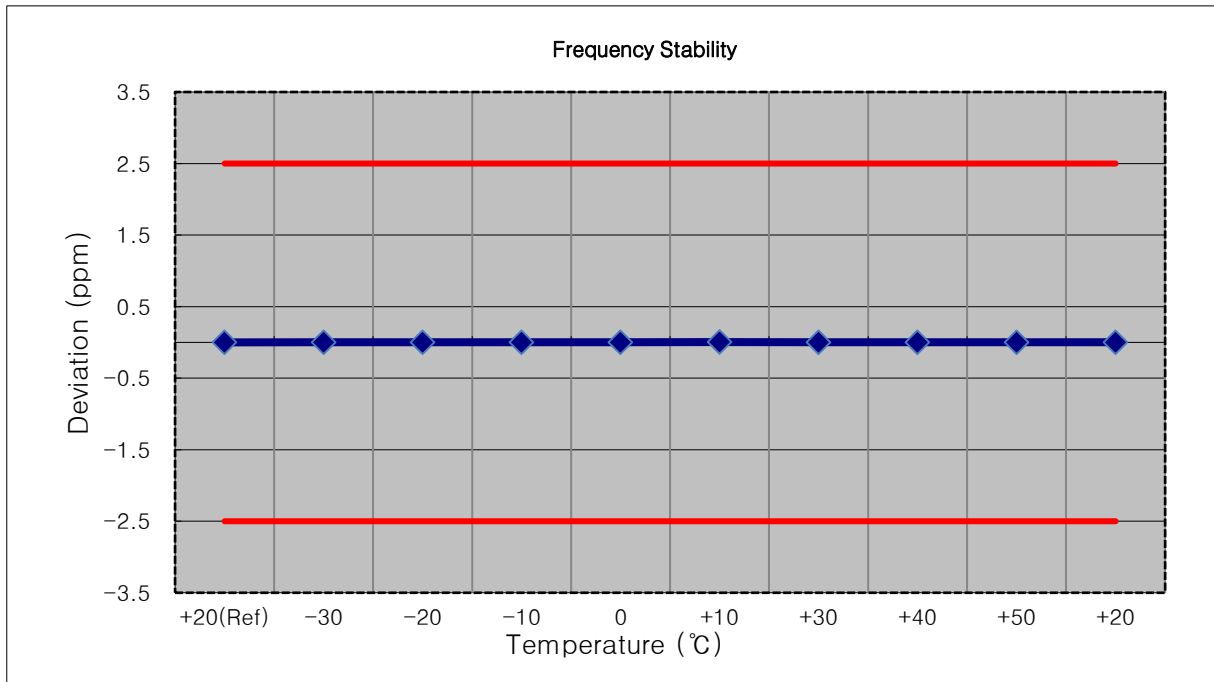
- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 815,500,000 Hz
- ▣ CHANNEL: 26705(3 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	815 499 988	0.0	0.000 000	0.000
100 %		-30	815 499 978	-9.9	-0.000 001	-0.012
100 %		-20	815 499 976	-11.4	-0.000 001	-0.014
100 %		-10	815 499 978	-9.3	-0.000 001	-0.011
100 %		0	815 499 976	-11.2	-0.000 001	-0.014
100 %		+10	815 499 978	-9.1	-0.000 001	-0.011
100 %		+30	815 499 977	-10.6	-0.000 001	-0.013
100 %		+40	815 499 975	-12.9	-0.000 002	-0.016
100 %		+50	815 499 977	-10.7	-0.000 001	-0.013
Batt. Endpoint		3.300	+20	815 499 980	-7.7	-0.000 001



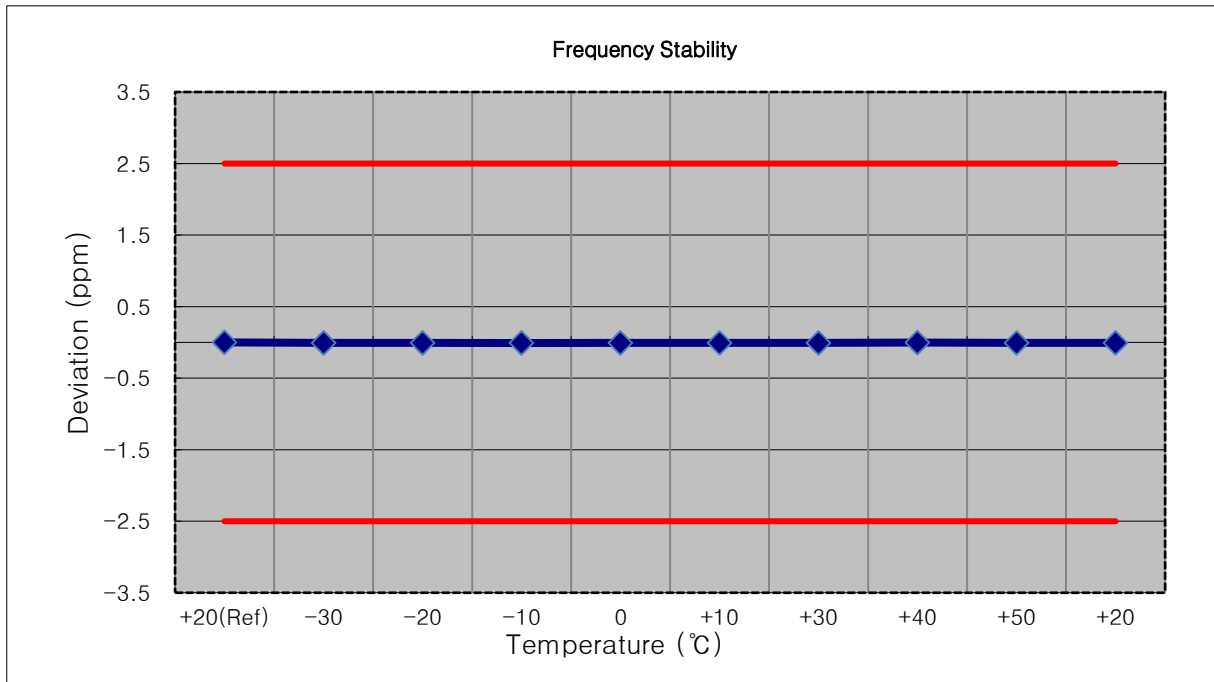
- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 816,500,000 Hz
- ▣ CHANNEL: 26715(5 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	816 500 003	0.0	0.000 000	0.000
100 %		-30	816 500 005	2.6	0.000 000	0.003
100 %		-20	816 500 005	2.5	0.000 000	0.003
100 %		-10	816 500 006	3.0	0.000 000	0.004
100 %		0	816 500 006	2.9	0.000 000	0.004
100 %		+10	816 500 007	3.7	0.000 000	0.005
100 %		+30	816 500 006	3.2	0.000 000	0.004
100 %		+40	816 500 006	2.9	0.000 000	0.004
100 %		+50	816 500 006	2.7	0.000 000	0.003
Batt. Endpoint		3.300	+20	816 500 006	3.5	0.000 000



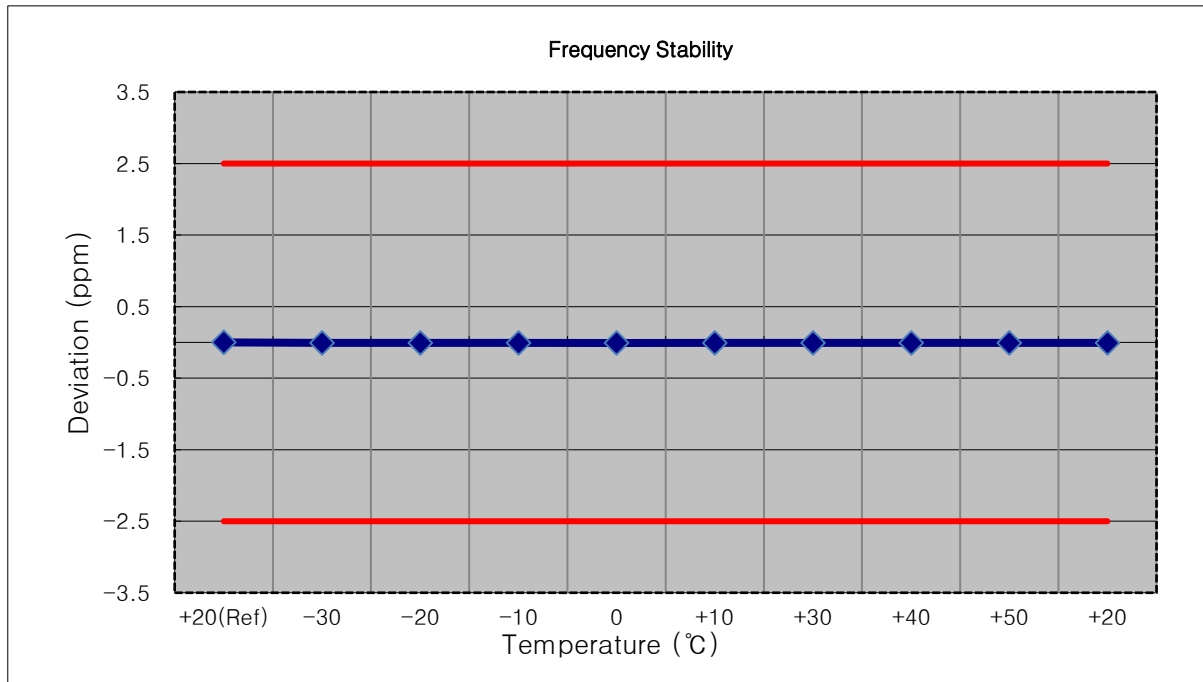
- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 819,000,000 Hz
- ▣ CHANNEL: 26740(10 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	818 999 995	0.0	0.000 000	0.000
100 %		-30	818 999 989	-6.1	-0.000 001	-0.007
100 %		-20	818 999 989	-6.1	-0.000 001	-0.007
100 %		-10	818 999 988	-7.3	-0.000 001	-0.009
100 %		0	818 999 992	-3.8	0.000 000	-0.005
100 %		+10	818 999 989	-6.3	-0.000 001	-0.008
100 %		+30	818 999 988	-7.0	-0.000 001	-0.009
100 %		+40	818 999 992	-3.2	0.000 000	-0.004
100 %		+50	818 999 989	-6.6	-0.000 001	-0.008
Batt. Endpoint		3.300	+20	818 999 988	-6.9	-0.000 001



- ▣ MODE: LTE 26
- ▣ OPERATING FREQUENCY: 821,500,000 Hz
- ▣ CHANNEL: 26765(15 MHz)
- ▣ REFERENCE VOLTAGE: 3.880 VDC
- ▣ DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100 %	3.880	+20(Ref)	821 499 994	0.0	0.000 000	0.000
100 %		-30	821 499 989	-5.4	-0.000 001	-0.007
100 %		-20	821 499 989	-4.7	-0.000 001	-0.006
100 %		-10	821 499 989	-4.5	-0.000 001	-0.005
100 %		0	821 499 987	-7.2	-0.000 001	-0.009
100 %		+10	821 499 989	-5.4	-0.000 001	-0.007
100 %		+30	821 499 988	-5.6	-0.000 001	-0.007
100 %		+40	821 499 988	-6.3	-0.000 001	-0.008
100 %		+50	821 499 988	-6.0	-0.000 001	-0.007
Batt. Endpoint		3.300	+20	821 499 989	-4.9	-0.000 001



9.8 STRADDLE CHANNEL

9.8.1 CONDUCTED OUTPUT POWER

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				824 MHz		
				dBm	W	
1.4	QPSK	1	0	23.88	0.244	100
		1	3	23.94	0.248	100
		1	5	23.83	0.241	100
		3	0	24.06	0.254	100
		3	1	24.07	0.255	100
		3	3	24.05	0.254	100
		6	0	22.80	0.191	100
	16QAM	1	0	23.52	0.225	100
		1	3	23.52	0.225	100
		1	5	23.52	0.225	100
		3	0	23.40	0.219	100
		3	1	23.38	0.218	100
		3	3	23.44	0.221	100
		6	0	22.40	0.174	100
	64QAM	1	0	22.45	0.176	100
		1	3	22.54	0.180	100
		1	5	22.46	0.176	100
		3	0	22.47	0.177	100
		3	1	22.42	0.175	100
		3	3	22.38	0.173	100
		6	0	21.35	0.136	100
	256QAM	1	0	19.41	0.087	100
		1	3	19.40	0.087	100
		1	5	19.38	0.087	100
		3	0	19.35	0.086	100
		3	1	19.42	0.087	100
		3	3	19.35	0.086	100
		6	0	19.36	0.086	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				824 MHz		
				dBm	W	
3	QPSK	1	0	23.88	0.244	100
		1	7	23.94	0.248	100
		1	14	23.87	0.244	100
		8	0	23.38	0.218	100
		8	3	23.39	0.219	100
		8	7	23.38	0.218	100
		15	0	23.36	0.217	100
	16QAM	1	0	23.50	0.224	100
		1	7	23.48	0.223	100
		1	14	23.53	0.225	100
		8	0	22.48	0.177	100
		8	3	22.39	0.173	100
		8	7	22.39	0.173	100
		15	0	22.46	0.176	100
	64QAM	1	0	22.51	0.178	100
		1	7	22.58	0.181	100
		1	14	22.49	0.177	100
		8	0	21.47	0.140	100
		8	3	21.44	0.139	100
		8	7	21.50	0.141	100
		15	0	21.47	0.140	100
	256QAM	1	0	19.40	0.087	100
		1	7	19.47	0.088	100
		1	14	19.52	0.090	100
		8	0	19.45	0.088	100
		8	3	19.41	0.087	100
		8	7	19.44	0.088	100
		15	0	19.46	0.088	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				824 MHz		
				dBm	W	
5	QPSK	1	0	24.03	0.253	100
		1	12	24.11	0.258	100
		1	24	23.98	0.250	100
		12	0	23.38	0.218	100
		12	6	23.39	0.218	100
		12	11	23.34	0.216	100
		25	0	23.39	0.218	100
	16QAM	1	0	23.58	0.228	100
		1	12	23.57	0.228	100
		1	24	23.41	0.219	100
		12	0	22.42	0.175	100
		12	6	22.50	0.178	100
		12	11	22.45	0.176	100
		25	0	22.41	0.174	100
	64QAM	1	0	22.41	0.174	100
		1	12	22.52	0.179	100
		1	24	22.43	0.175	100
		12	0	21.41	0.138	100
		12	6	21.47	0.140	100
		12	11	21.40	0.138	100
		25	0	21.39	0.138	100
	256QAM	1	0	19.27	0.085	100
		1	12	19.44	0.088	100
		1	24	19.41	0.087	100
		12	0	19.38	0.087	100
		12	6	19.34	0.086	100
		12	11	19.35	0.086	100
		25	0	19.41	0.087	100

Band Width	Modulation	RB Size	RB Offset	Max. output power(dBm)		Limit (W)
				824 MHz		
				dBm	W	
10	QPSK	1	0	23.99	0.251	100
		1	24	23.90	0.245	100
		1	49	24.32	0.270	100
		25	0	23.38	0.218	100
		25	12	23.43	0.220	100
		25	24	23.42	0.220	100
		50	0	23.48	0.223	100
	16QAM	1	0	23.38	0.218	100
		1	24	23.55	0.226	100
		1	49	23.42	0.220	100
		25	0	22.44	0.175	100
		25	12	22.51	0.178	100
		25	24	22.48	0.177	100
		50	0	22.44	0.175	100
	64QAM	1	0	22.59	0.182	100
		1	24	22.49	0.178	100
		1	49	22.48	0.177	100
		25	0	21.43	0.139	100
		25	12	21.46	0.140	100
		25	24	21.44	0.139	100
		50	0	21.41	0.139	100
	256QAM	1	0	19.67	0.093	100
		1	24	19.37	0.086	100
		1	49	19.44	0.088	100
		25	0	19.42	0.087	100
		25	12	19.47	0.089	100
		25	24	19.41	0.087	100
		50	0	19.41	0.087	100

9.8.2 EFFECTIVE RADIATED POWER

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
824.0	LTE B26/ 1.4 MHz	QPSK	-30.68	30.22	-10.05	1.38	H	< 7.00	0.076	18.79
		16QAM	-31.42	29.48	-10.05	1.38	H		0.064	18.05
		64QAM	-32.36	28.54	-10.05	1.38	H		0.052	17.11
		256QAM	-35.40	25.50	-10.05	1.38	H		0.026	14.07

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
824.0	LTE B26/ 3 MHz	QPSK	-30.59	30.31	-10.05	1.38	H	< 7.00	0.077	18.88
		16QAM	-31.36	29.54	-10.05	1.38	H		0.065	18.11
		64QAM	-32.32	28.58	-10.05	1.38	H		0.052	17.15
		256QAM	-35.30	25.60	-10.05	1.38	H		0.026	14.17

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
824.0	LTE B26/ 5 MHz	QPSK	-30.30	30.60	-10.05	1.38	H	< 7.00	0.083	19.17
		16QAM	-31.23	29.67	-10.05	1.38	H		0.067	18.24
		64QAM	-32.27	28.63	-10.05	1.38	H		0.053	17.20
		256QAM	-35.30	25.60	-10.05	1.38	H		0.026	14.17

Freq (MHz)	Bandwidth	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBd)	C.L	Pol	Limit	ERP	
								W	W	dBm
824.0	LTE B26/ 10 MHz	QPSK	-30.33	30.57	-10.05	1.38	H	< 7.00	0.082	19.14
		16QAM	-31.08	29.82	-10.05	1.38	H		0.069	18.39
		64QAM	-32.19	28.71	-10.05	1.38	H		0.054	17.28
		256QAM	-35.23	25.67	-10.05	1.38	H		0.027	14.24

9.8.3 RADIATED SPURIOUS EMISSIONS

- ▣ MODE: LTE B26
- ▣ MODULATION SIGNAL: 5 MHz QPSK
- ▣ DISTANCE: 3 meters

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit
26790 (824.0)	1 648.00	-52.78	9.58	-63.18	2.14	V	-55.74	-13.00
	2 472.00	-54.34	10.26	-58.82	2.66	V	-51.22	-13.00
	3 296.00	-58.09	12.13	-59.22	3.02	H	-50.10	-13.00

9.8.4 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
26	1.4	824.0	3.6940	27.976	-67.345	-39.369	-13.00
	3		3.7039	27.976	-67.013	-39.037	
	5		3.6945	27.976	-67.147	-39.171	
	10		3.7069	27.976	-67.133	-39.157	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 193 ~ 196.
2. Conducted Spurious Emissions was Tested QPSK Modulation, Resource Block Size 1 and Resource Block Offset 0
3. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)
4. Factor (dB) = Cable Loss + Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	25.270
1 – 5	27.976
5 – 10	28.591
10 – 15	29.116
15 – 20	29.489
Above 20(26.5)	30.131

9.8.5 CHANNEL EDGE(Part90)

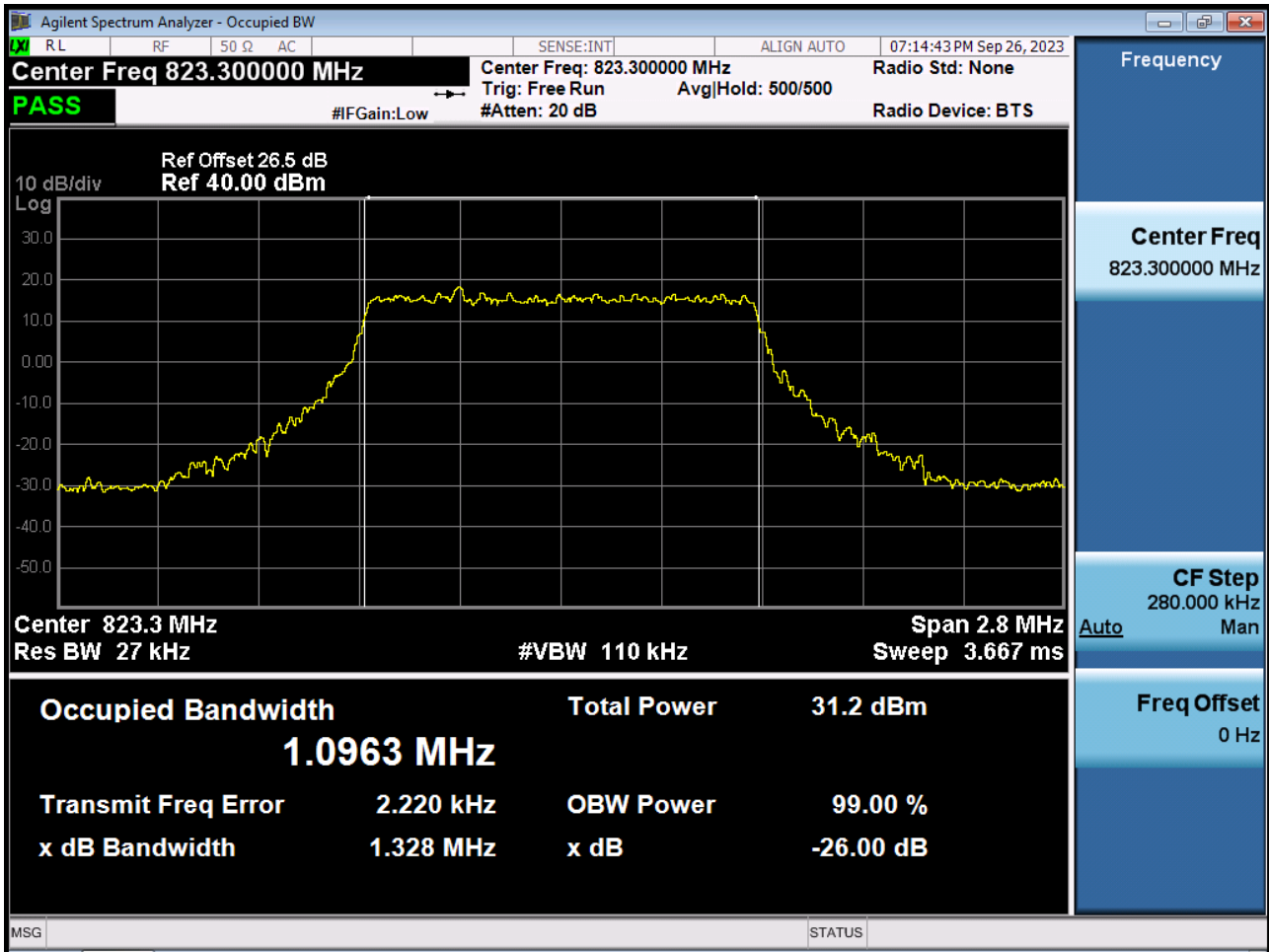
- Test Channel : 26790(824.0MHz)
- Plots of the EUT's Channel Edge are shown Page 197 ~ 208.

9.8.6 BAND EDGE(Part22)

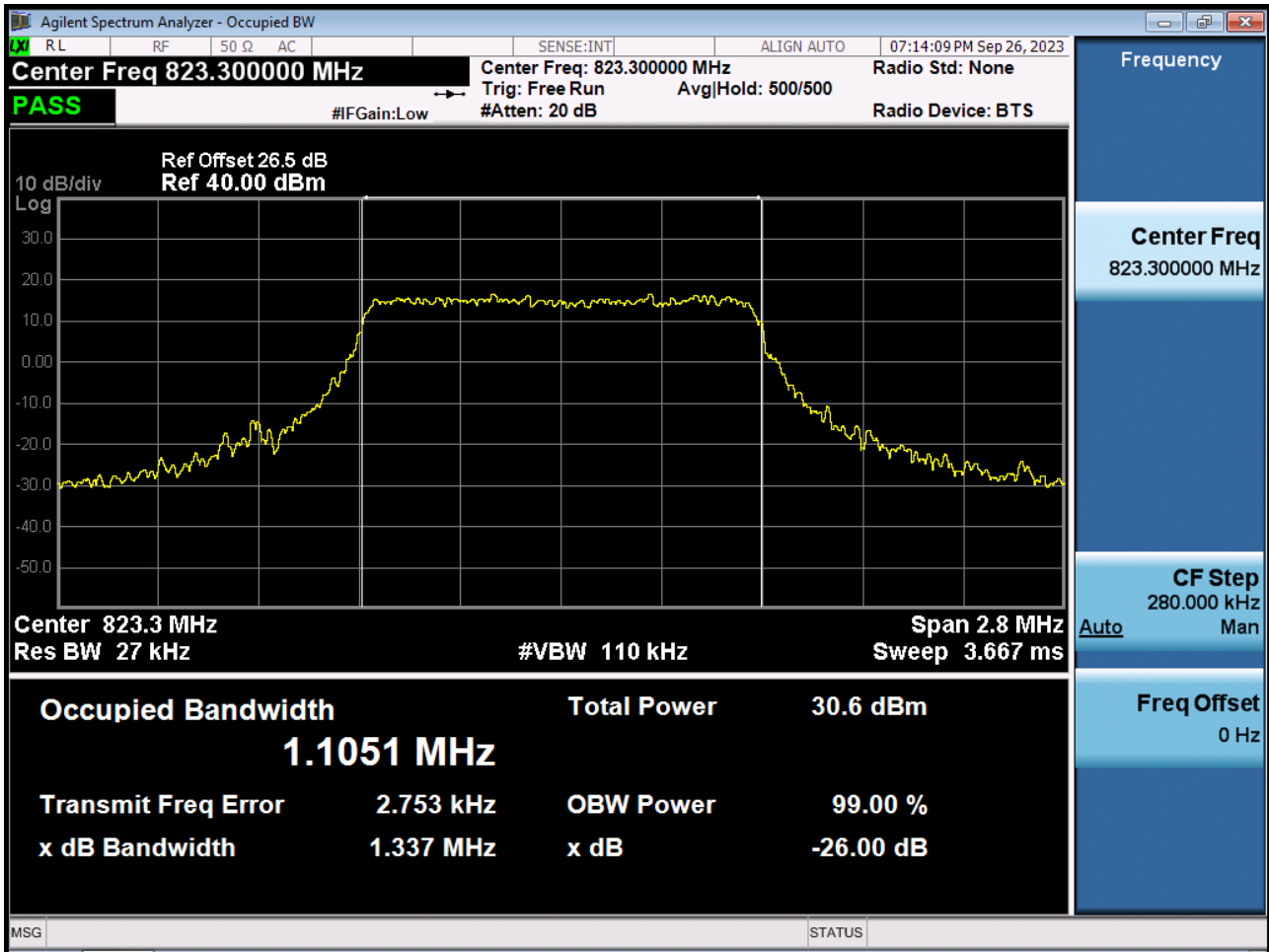
- Test Channel : 26790(824.0 MHz)
- Plots of the EUT's Band Edge are shown Page 209 ~ 216.

10. TEST PLOTS(Main 1 Ant)

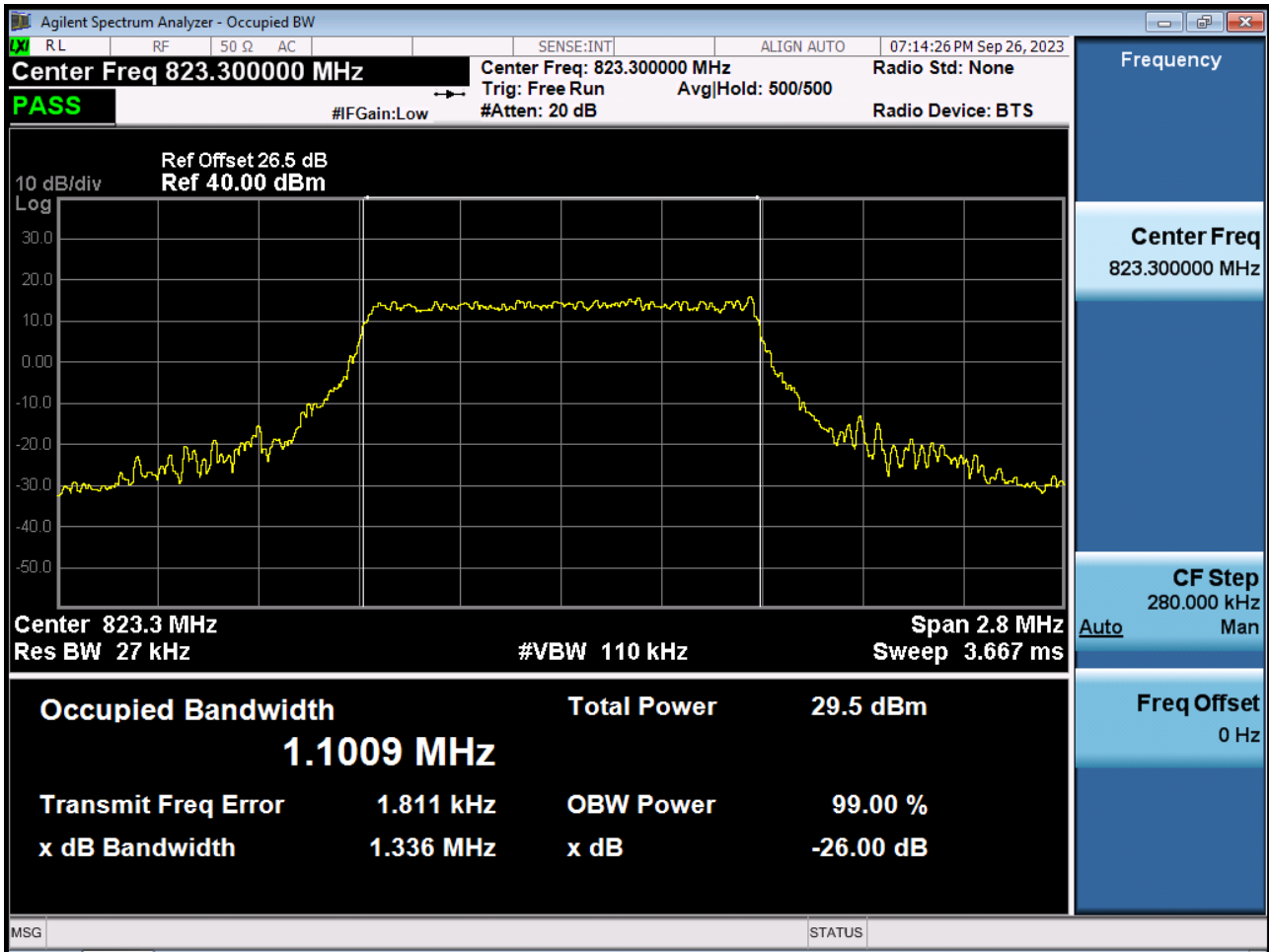
BAND 26. Occupied Bandwidth Plot (1.4 M BW Ch.26783 QPSK RB 6_0)



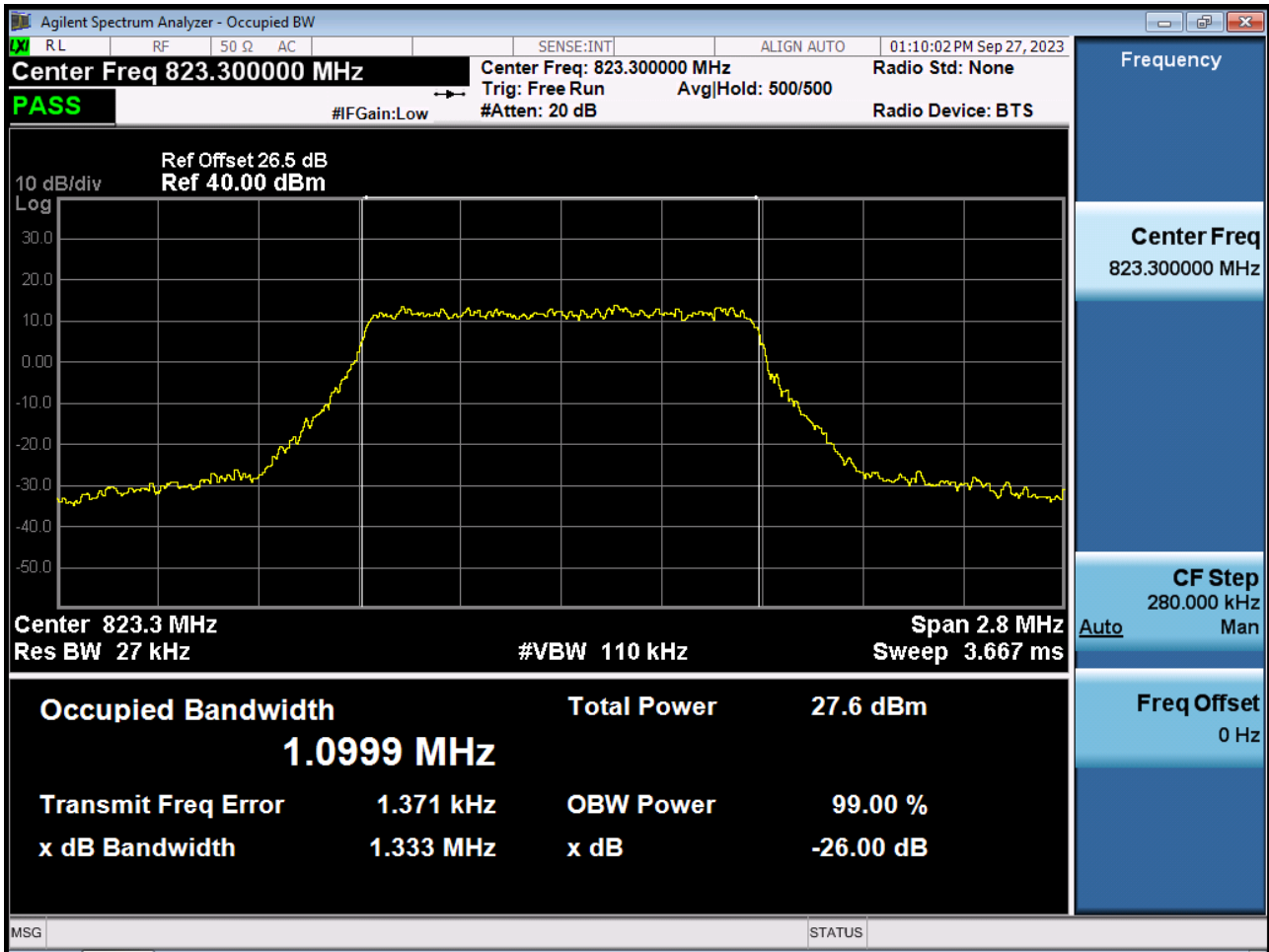
BAND 26. Occupied Bandwidth Plot (1.4 M BW Ch.26783 16QAM RB 6_0)



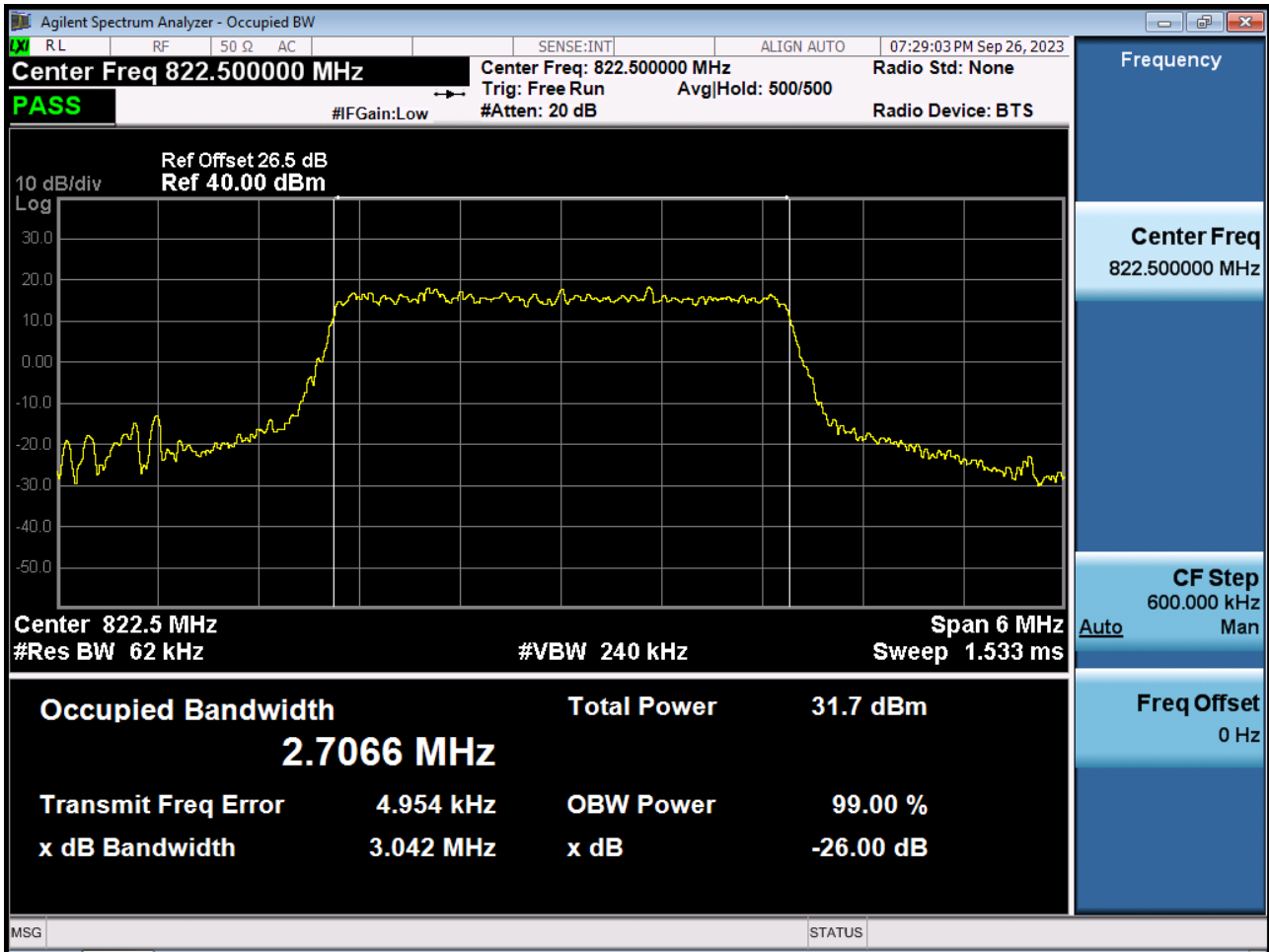
BAND 26. Occupied Bandwidth Plot (1.4 M BW Ch.26783 64QAM RB 6_0)



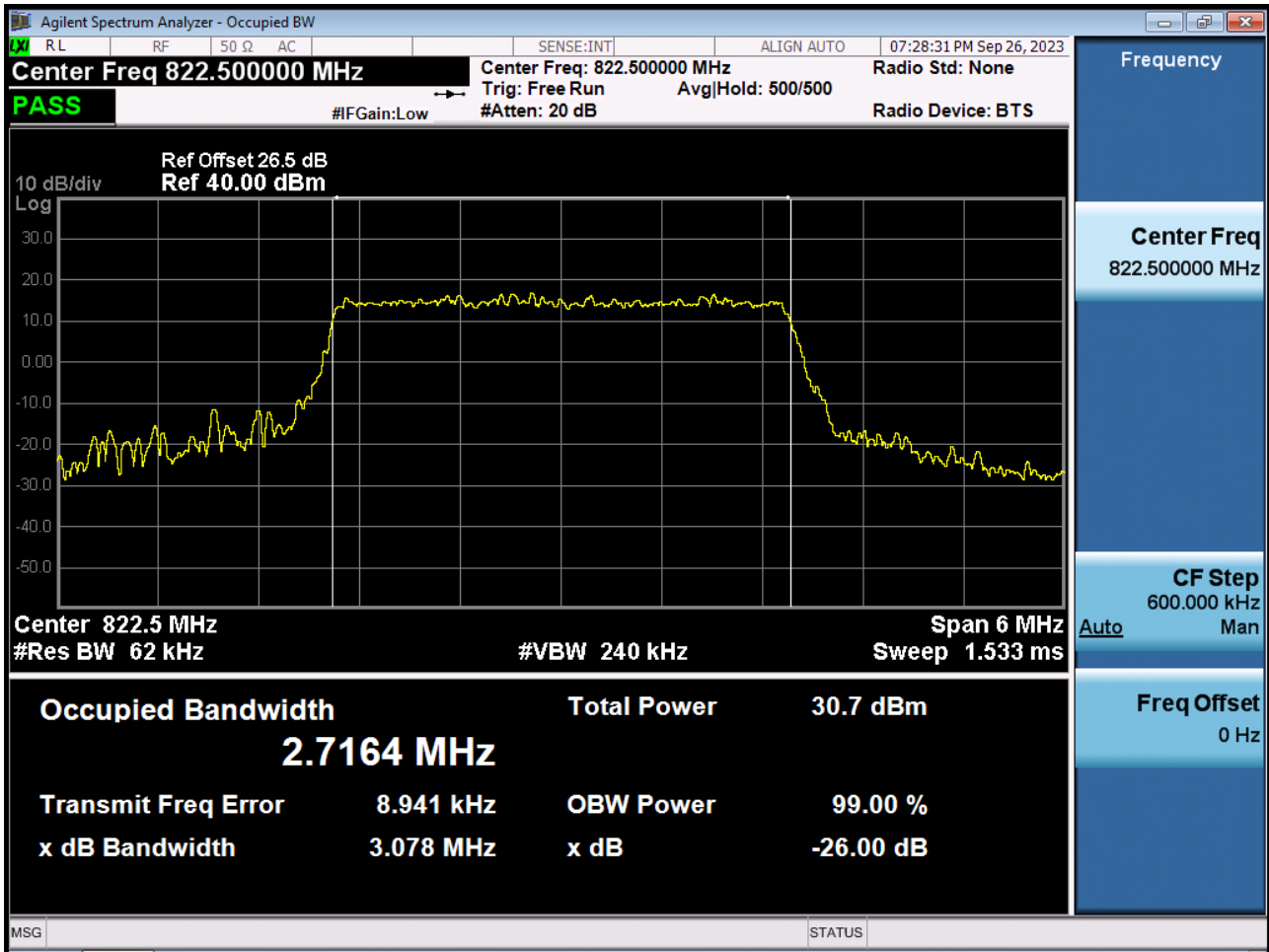
BAND 26. Occupied Bandwidth Plot (1.4 M BW Ch.26783 256QAM RB 6_0)



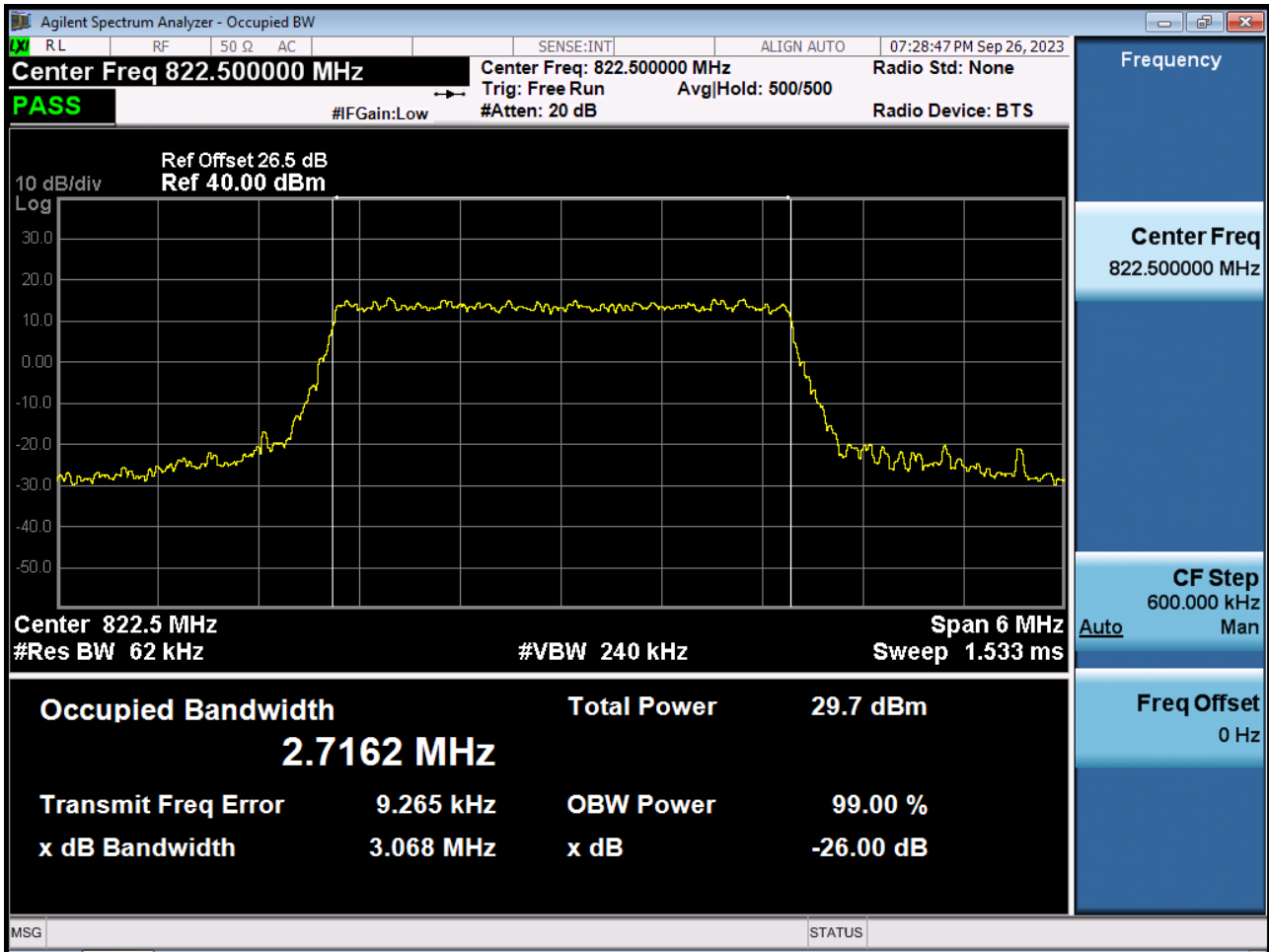
BAND 26. Occupied Bandwidth Plot (3 M BW Ch.26775 QPSK RB 15_0)



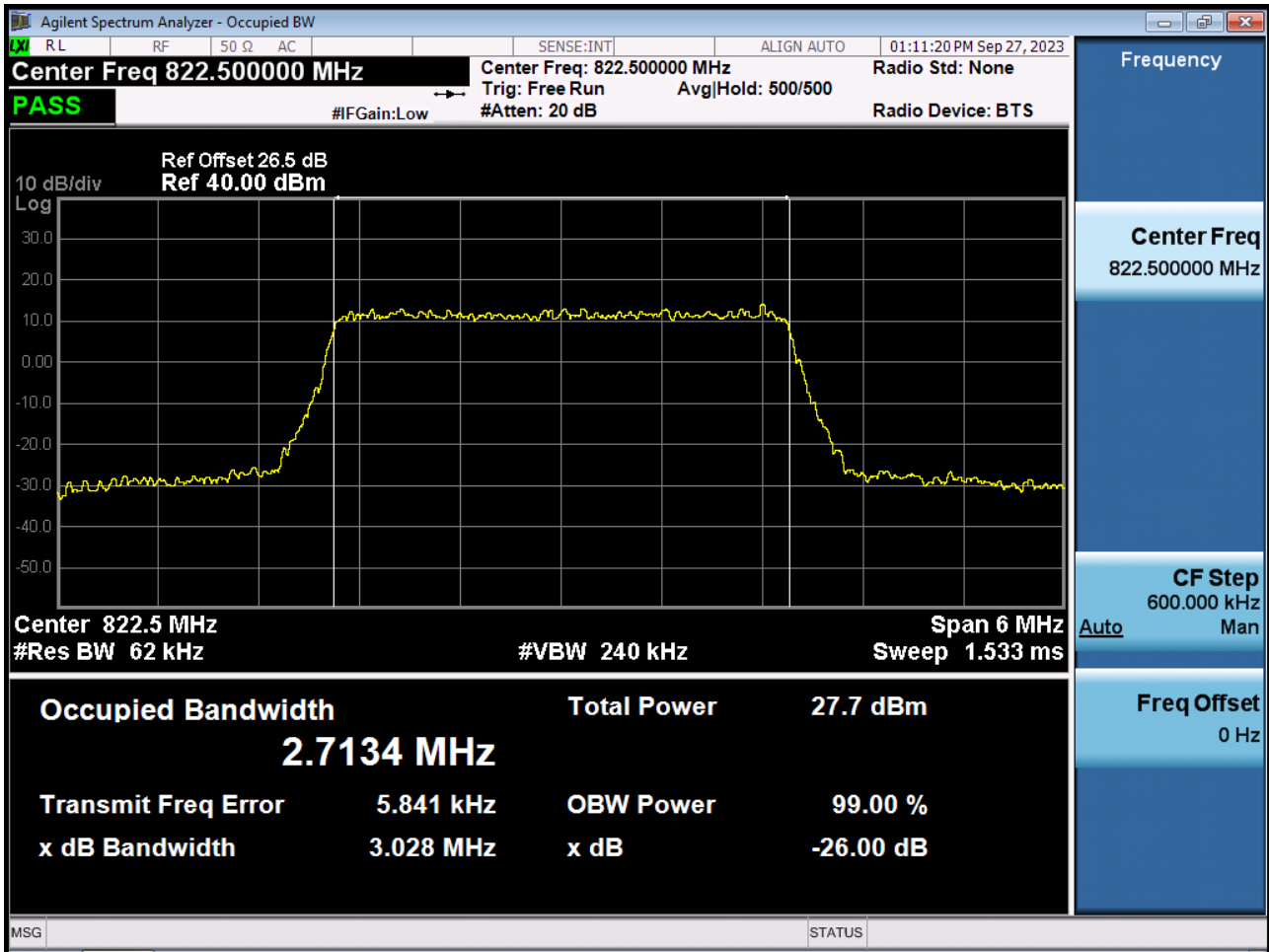
BAND 26. Occupied Bandwidth Plot (3 M BW Ch.26775 16QAM RB 15_0)



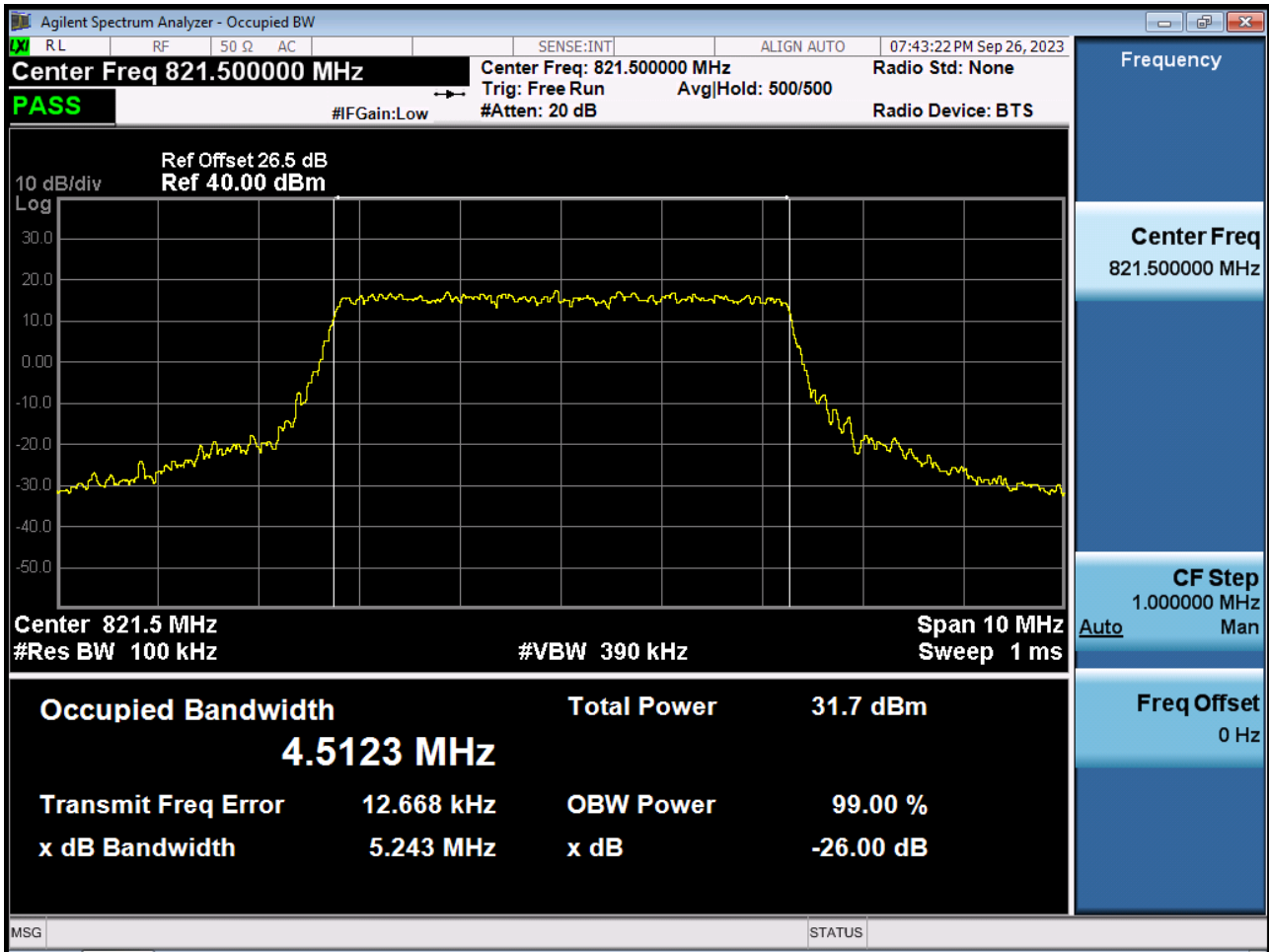
BAND 26. Occupied Bandwidth Plot (3 M BW Ch.26775 64QAM RB 15_0)



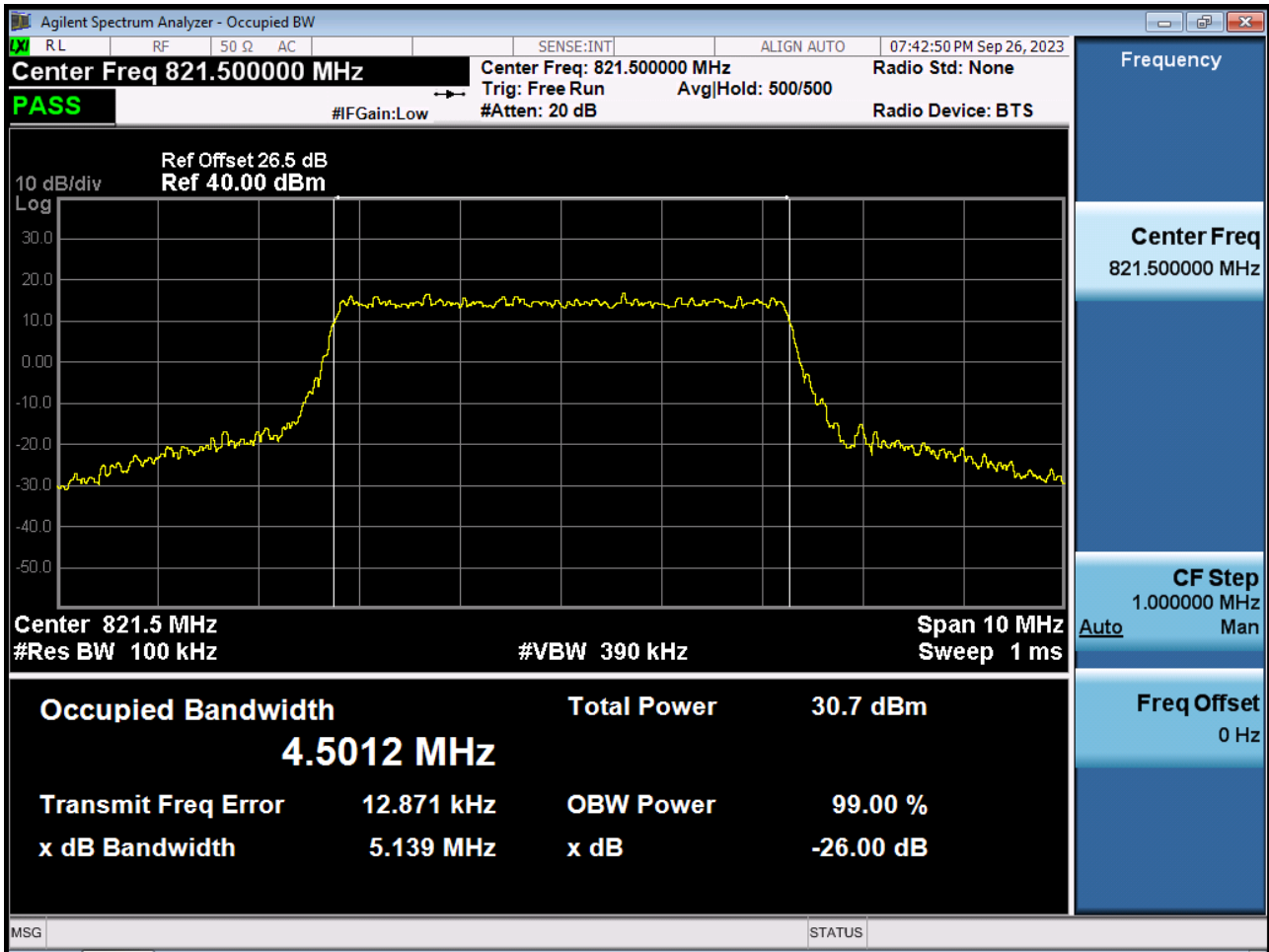
BAND 26. Occupied Bandwidth Plot (3 M BW Ch.26775 256QAM RB 15_0)



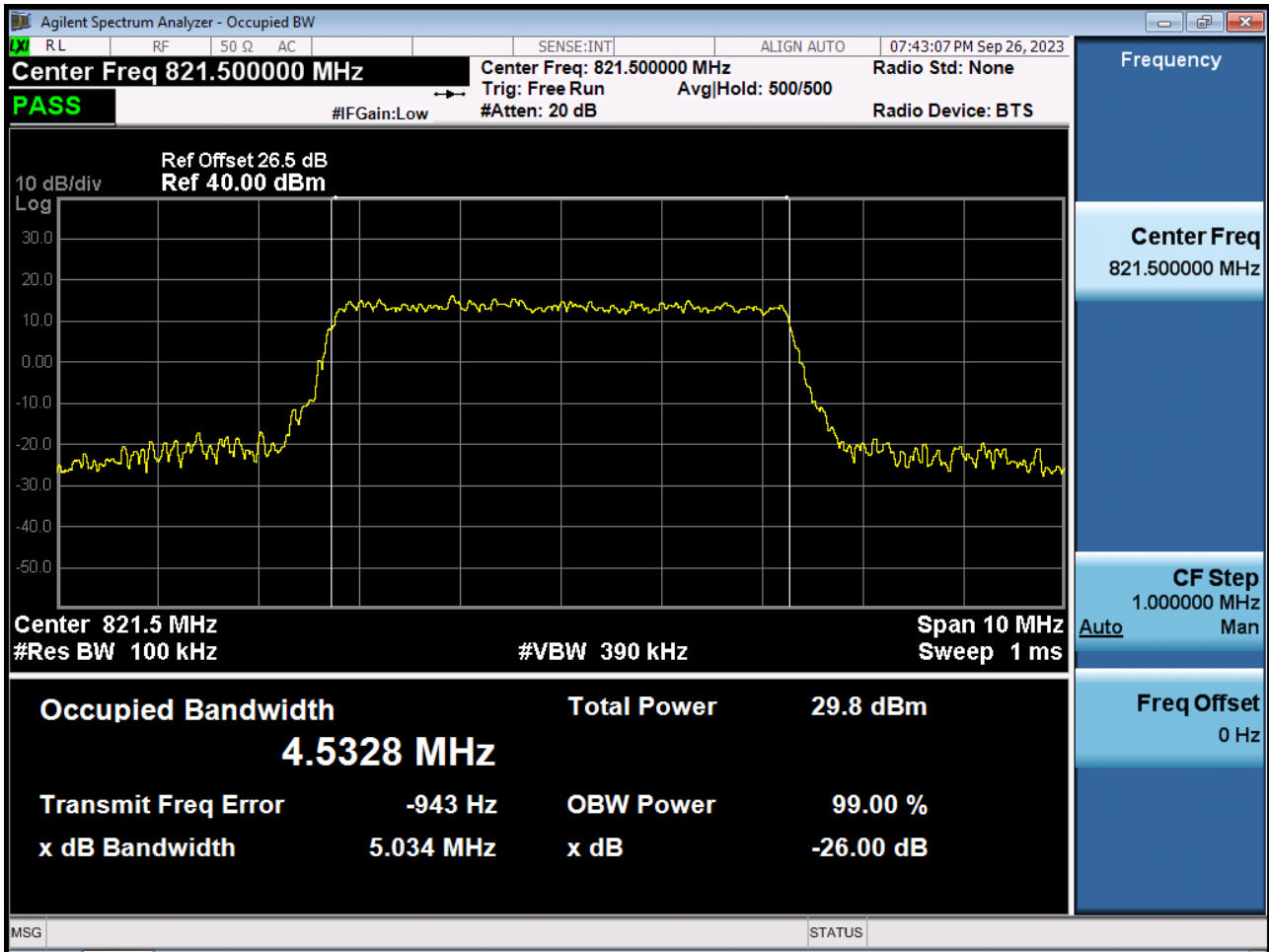
BAND 26. Occupied Bandwidth Plot (5 M BW Ch.26765 QPSK RB 25_0)



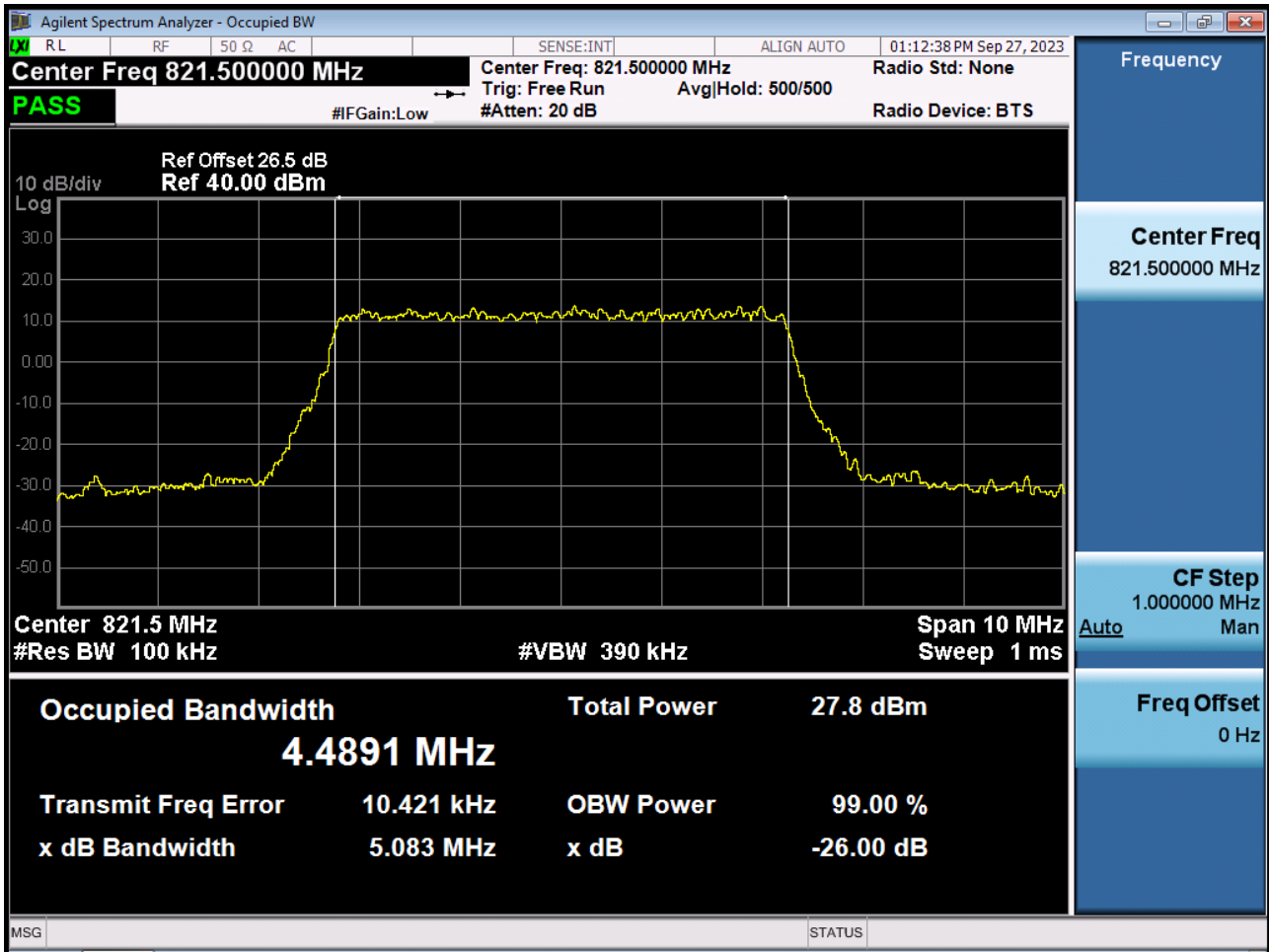
BAND 26. Occupied Bandwidth Plot (5 M BW Ch.26765 16QAM RB 25_0)



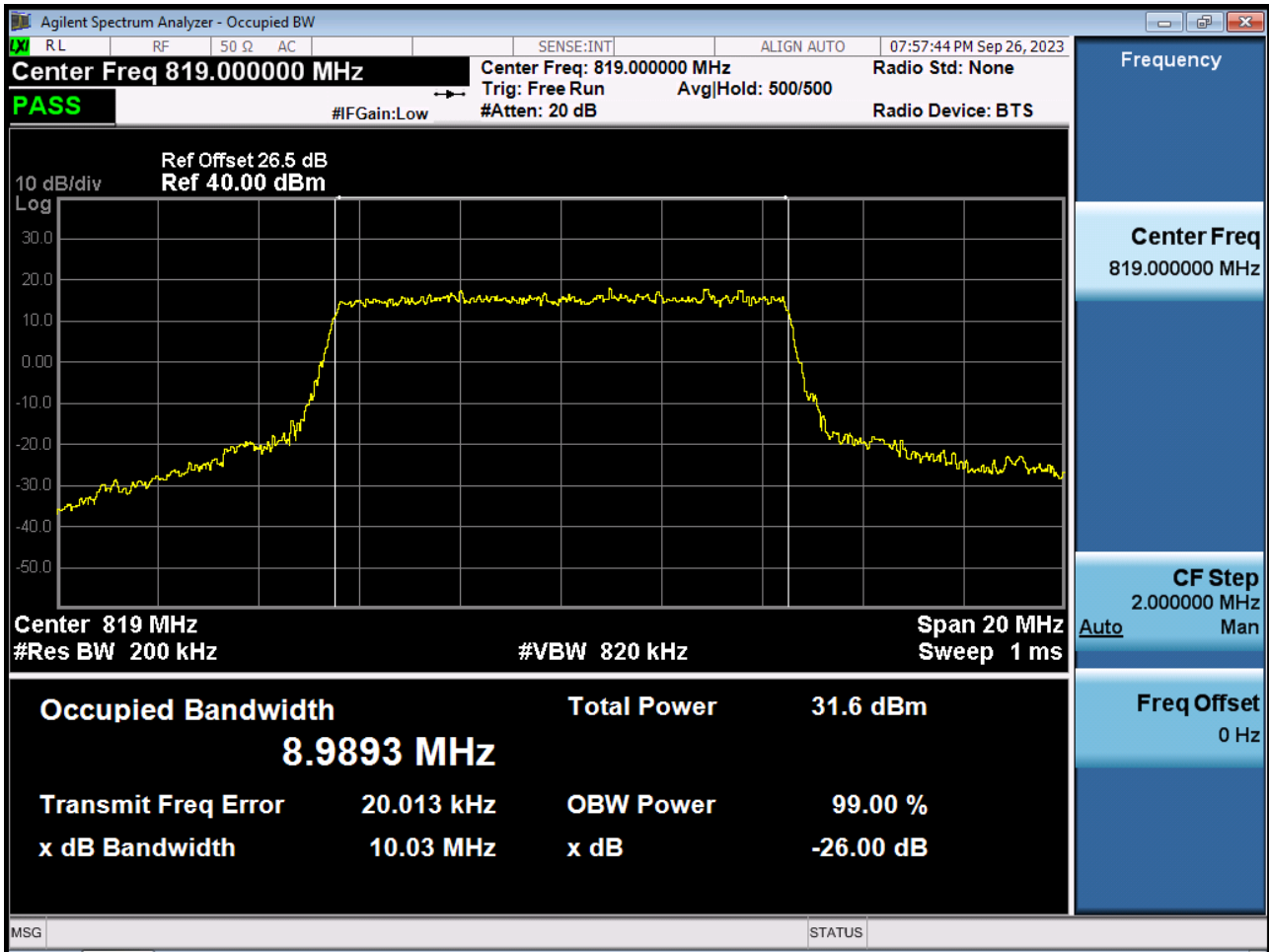
BAND 26. Occupied Bandwidth Plot (5 M BW Ch.26765 64QAM RB 25_0)



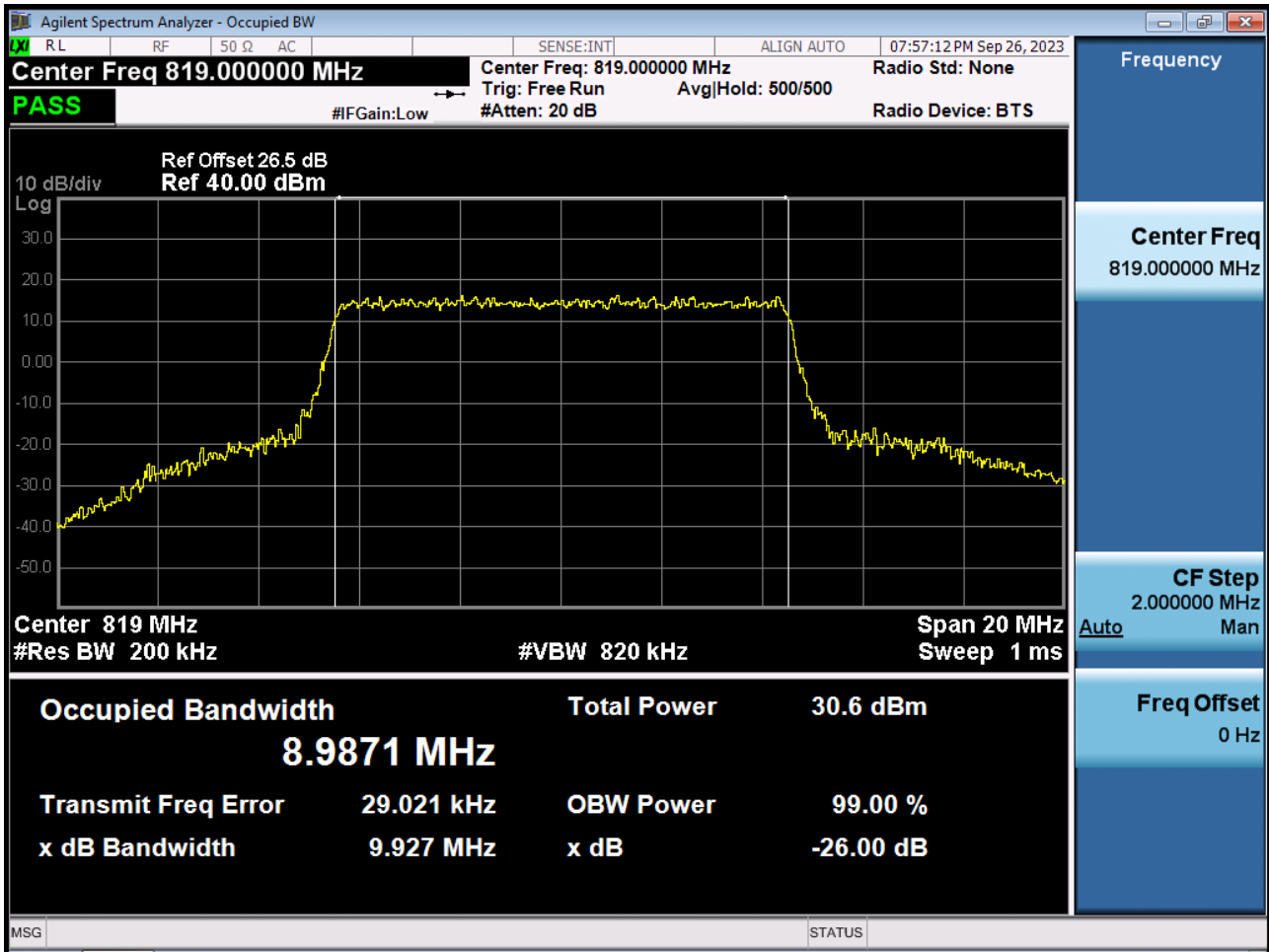
BAND 26. Occupied Bandwidth Plot (5 M BW Ch.26765 256QAM RB 25_0)



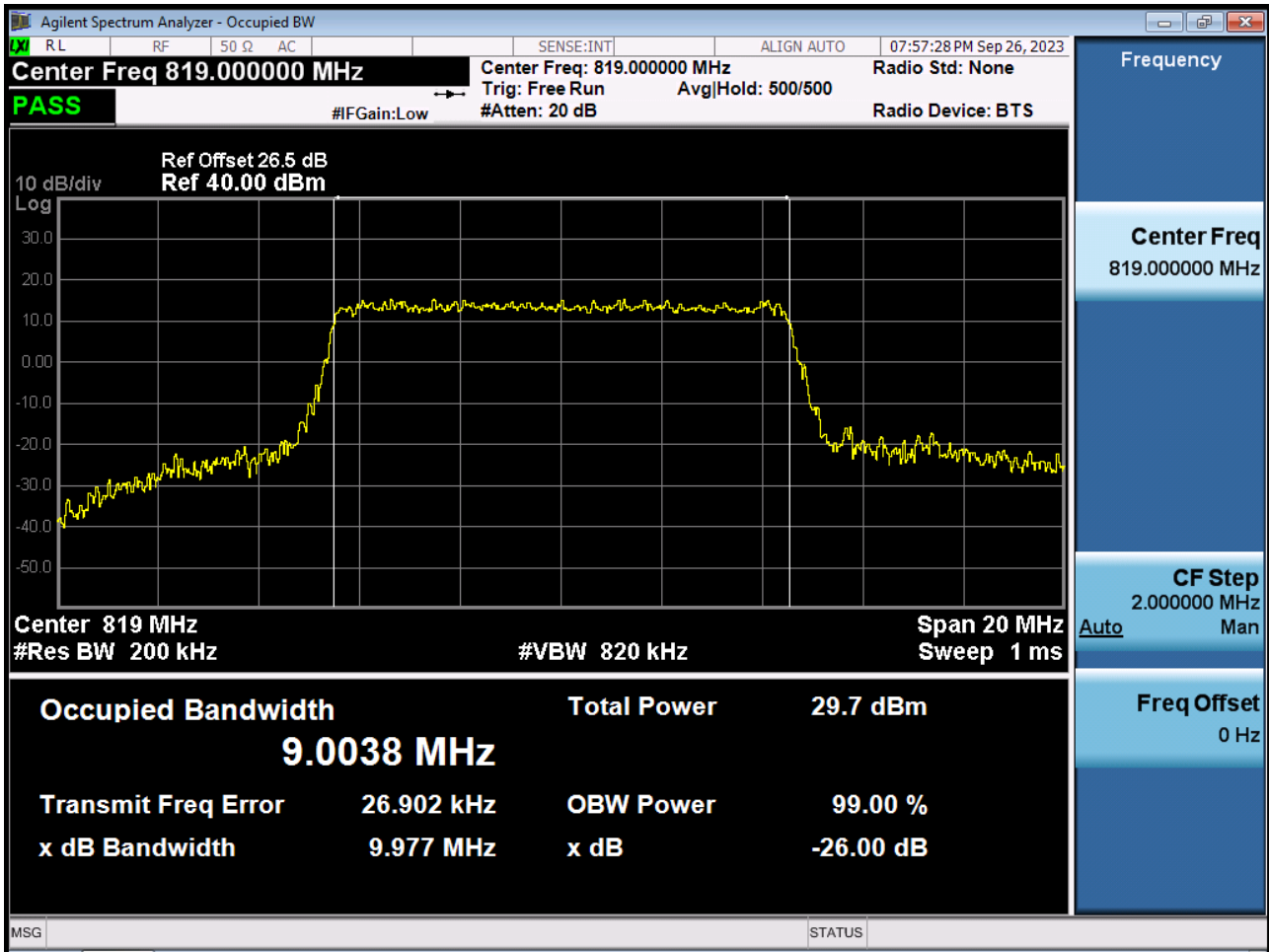
BAND 26. Occupied Bandwidth Plot (10 M BW Ch.26740 QPSK RB 50_0)



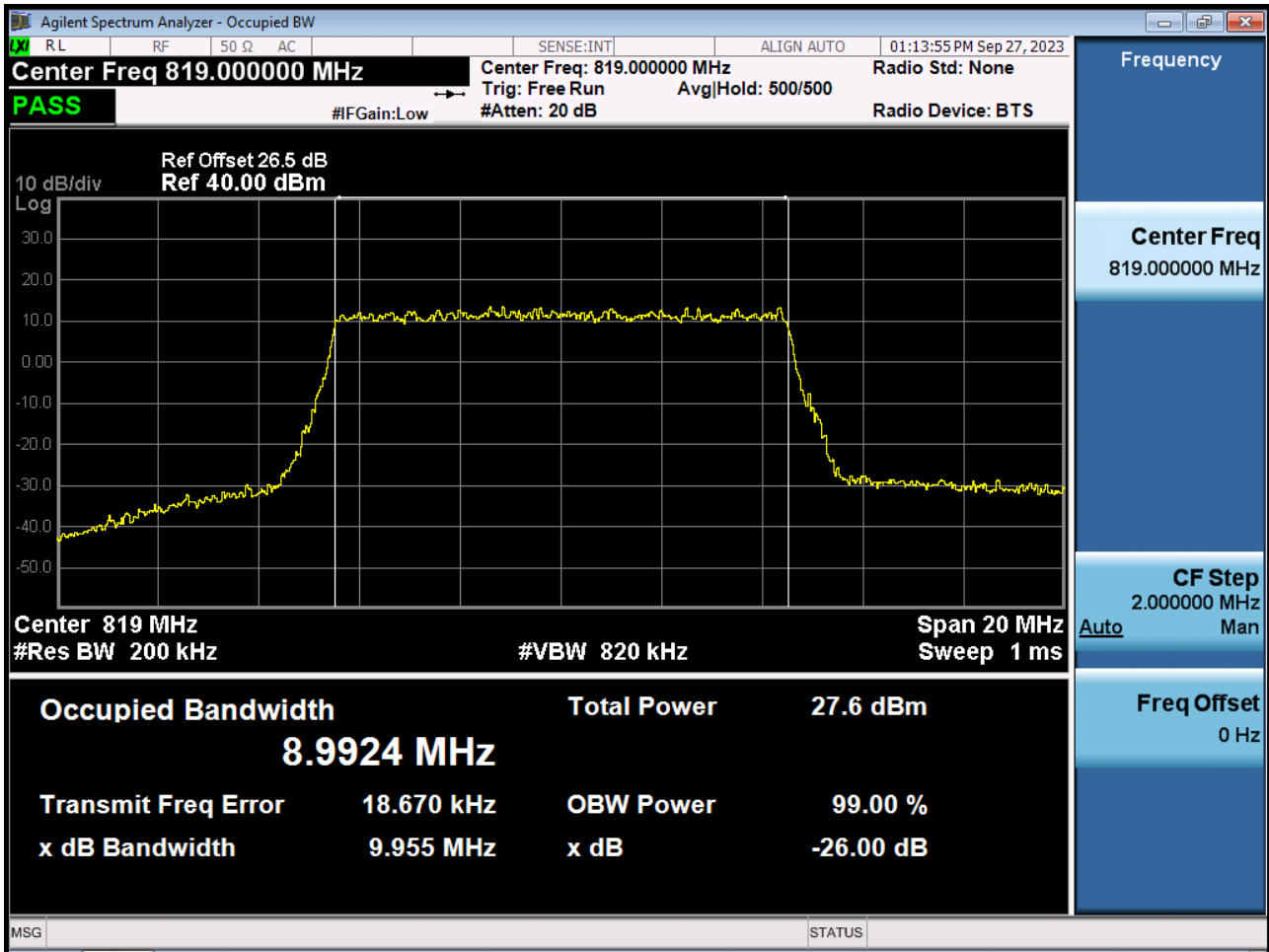
BAND 26. Occupied Bandwidth Plot (10 M BW Ch.26740 16QAM RB 50_0)



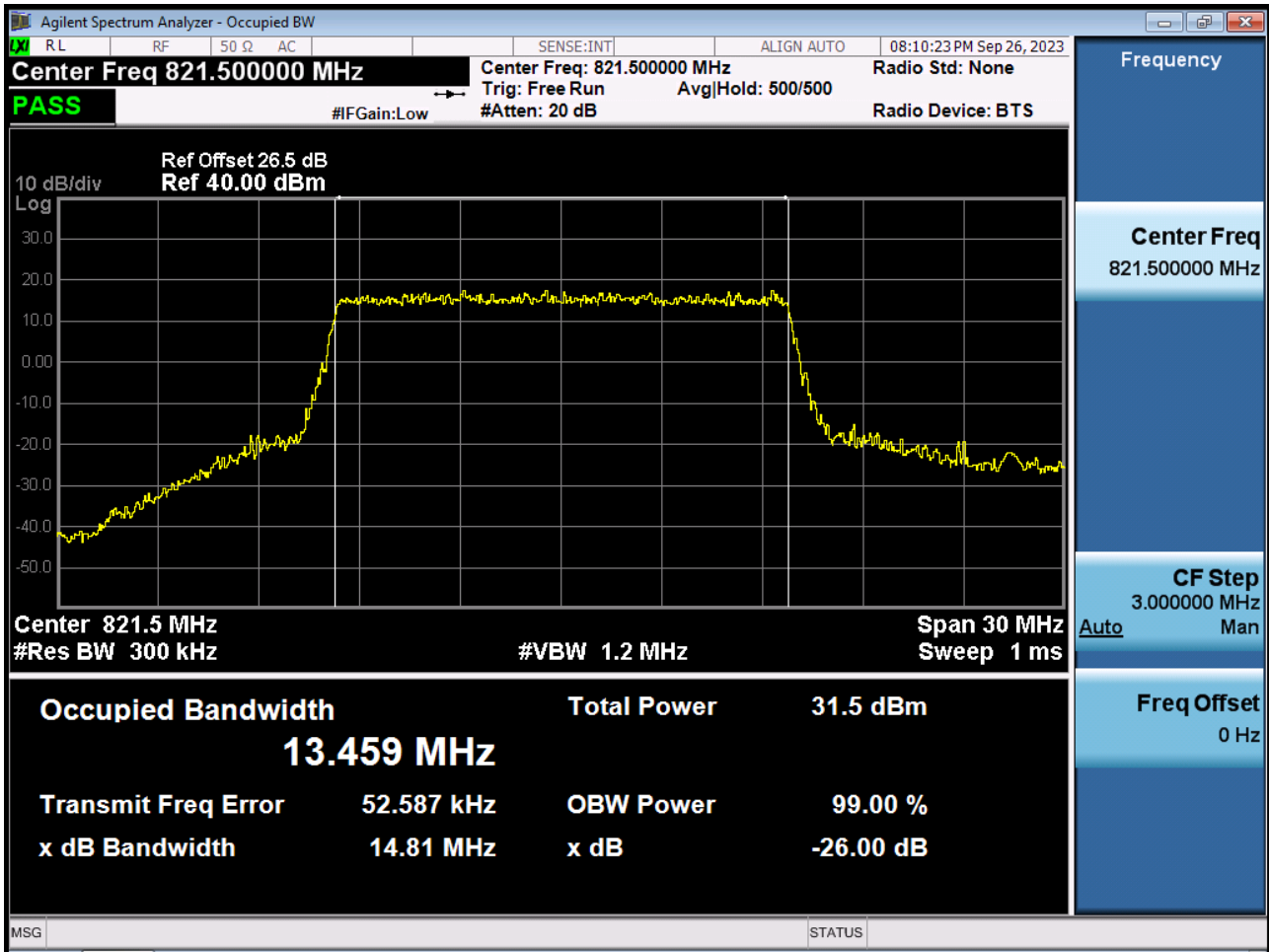
BAND 26. Occupied Bandwidth Plot (10 M BW Ch.26740 64QAM RB 50_0)



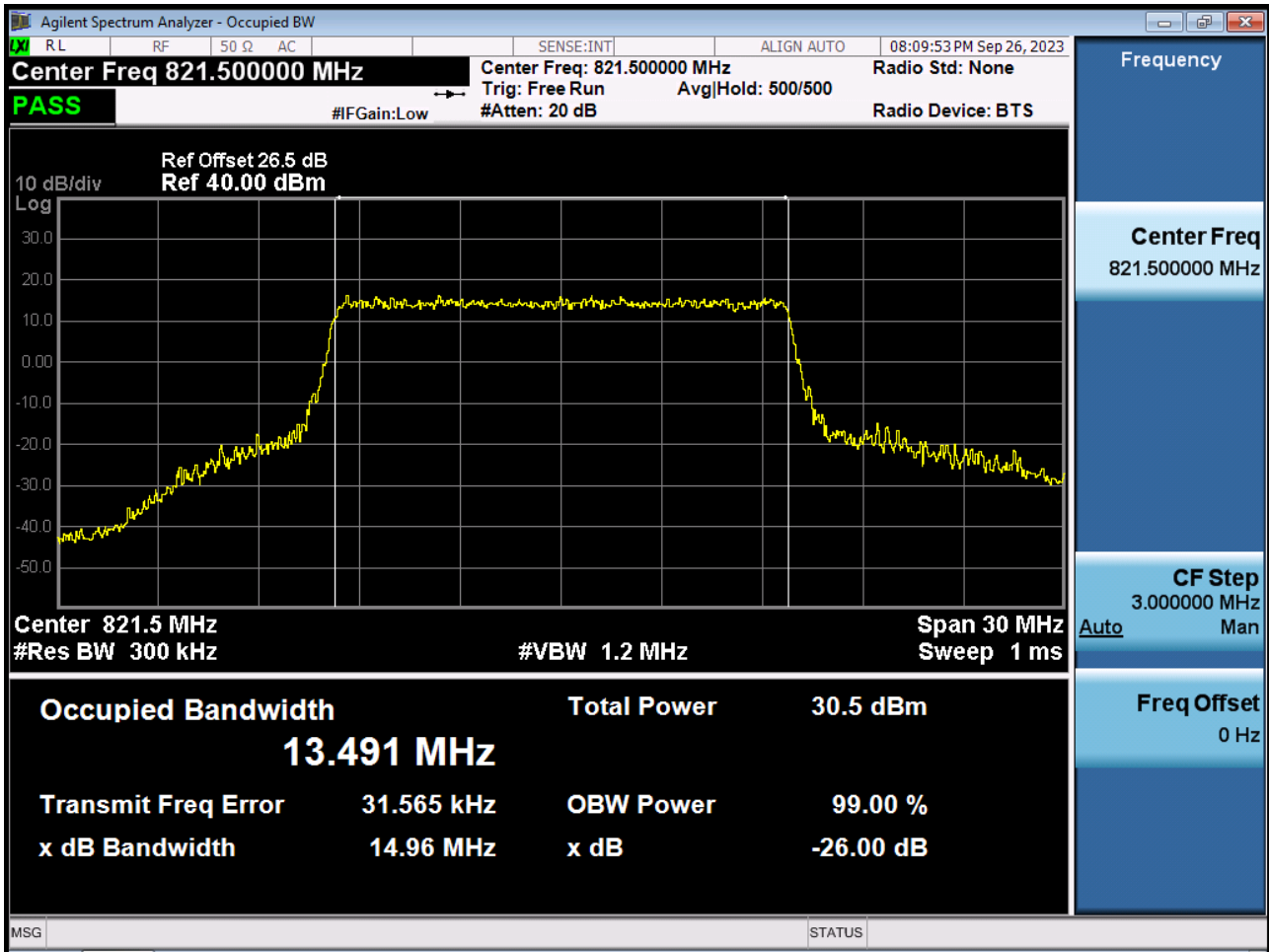
BAND 26. Occupied Bandwidth Plot (10 M BW Ch.26740 256QAM RB 50_0)



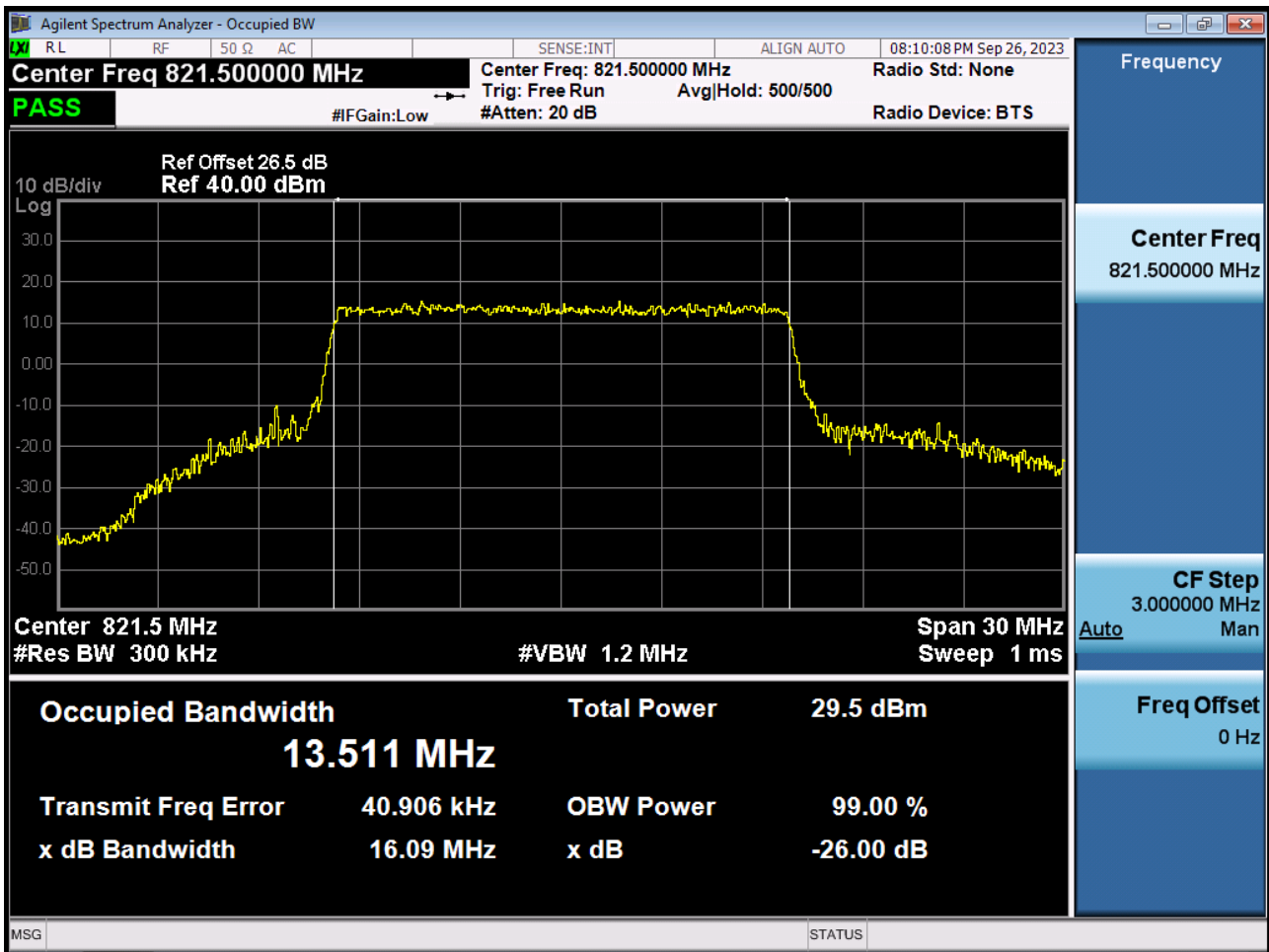
BAND 26. Occupied Bandwidth Plot (15 M BW Ch.26765 QPSK RB 75_0)



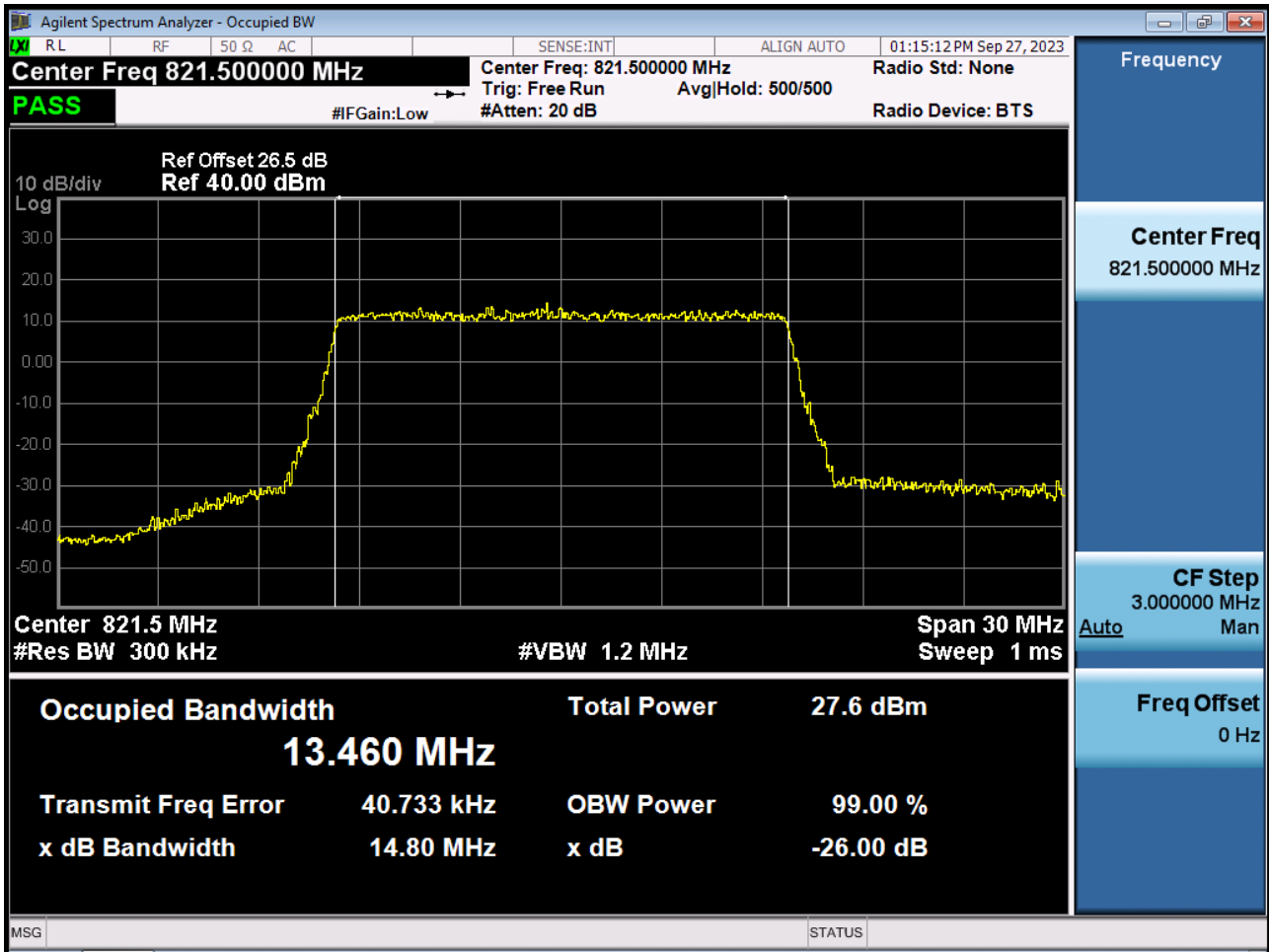
BAND 26. Occupied Bandwidth Plot (15 M BW Ch.26765 16QAM RB 75_0)



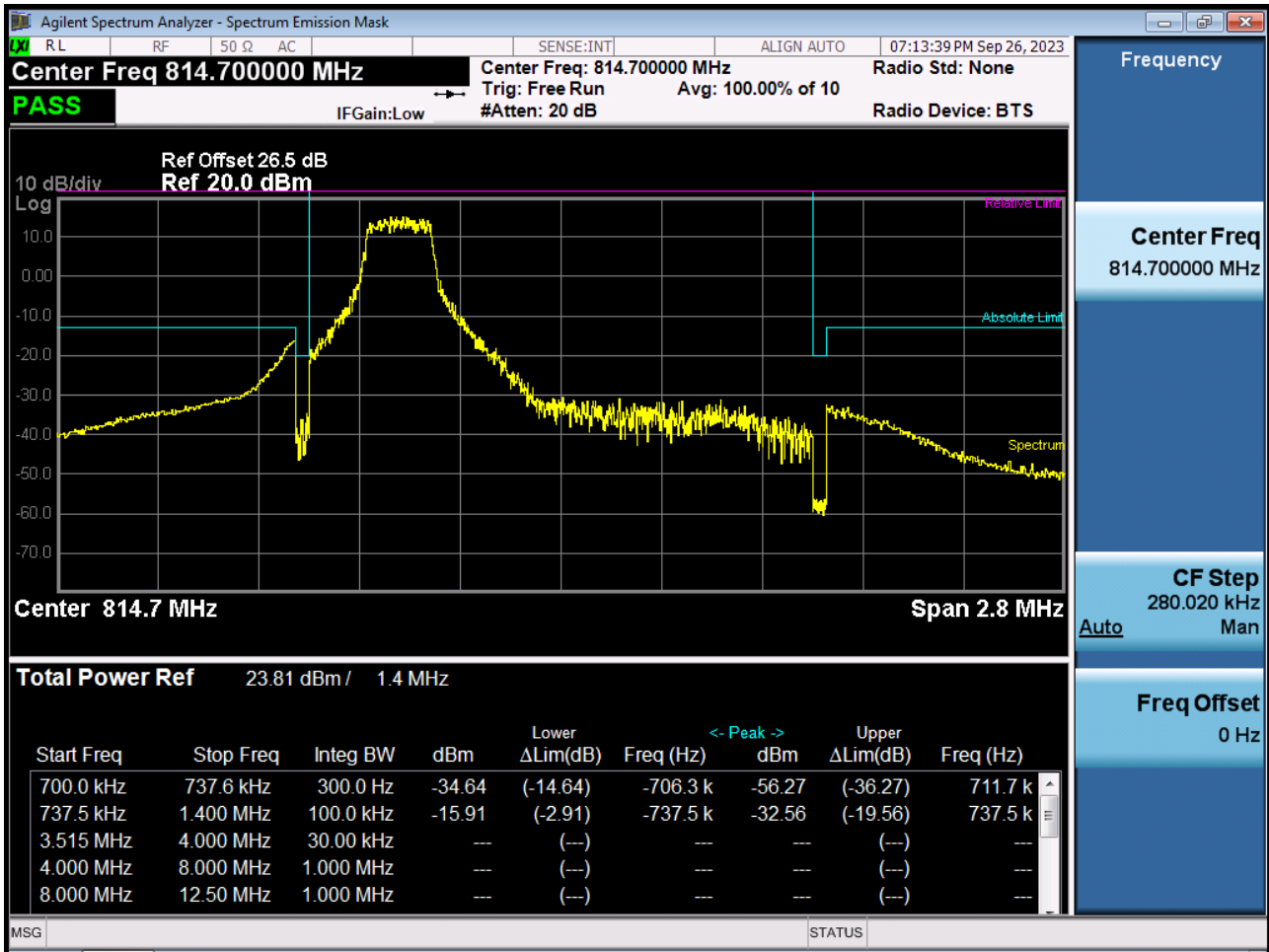
BAND 26. Occupied Bandwidth Plot (15 M BW Ch.26765 64QAM RB 75_0)



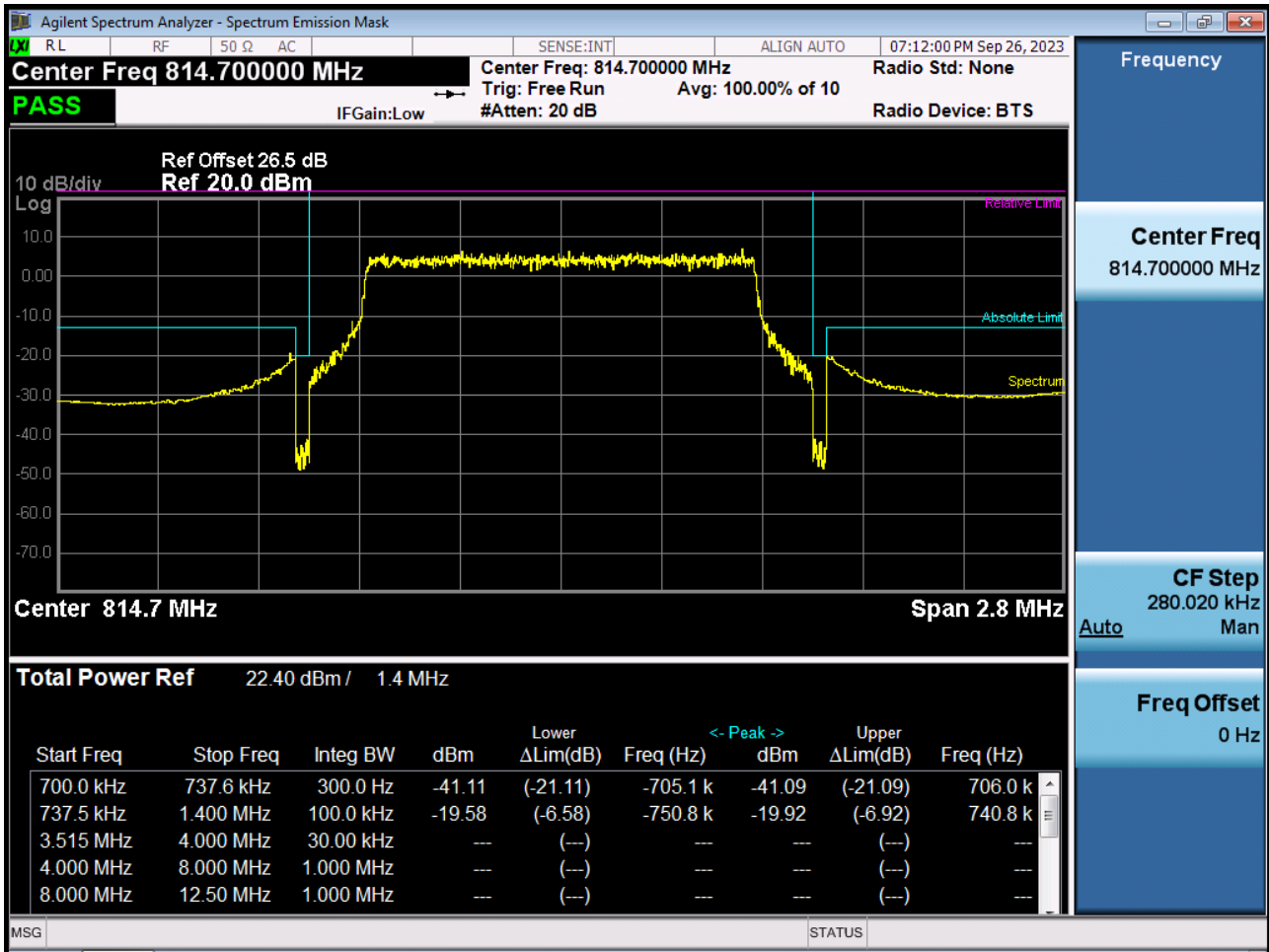
BAND 26. Occupied Bandwidth Plot (15 M BW Ch.26765 256QAM RB 75_0)



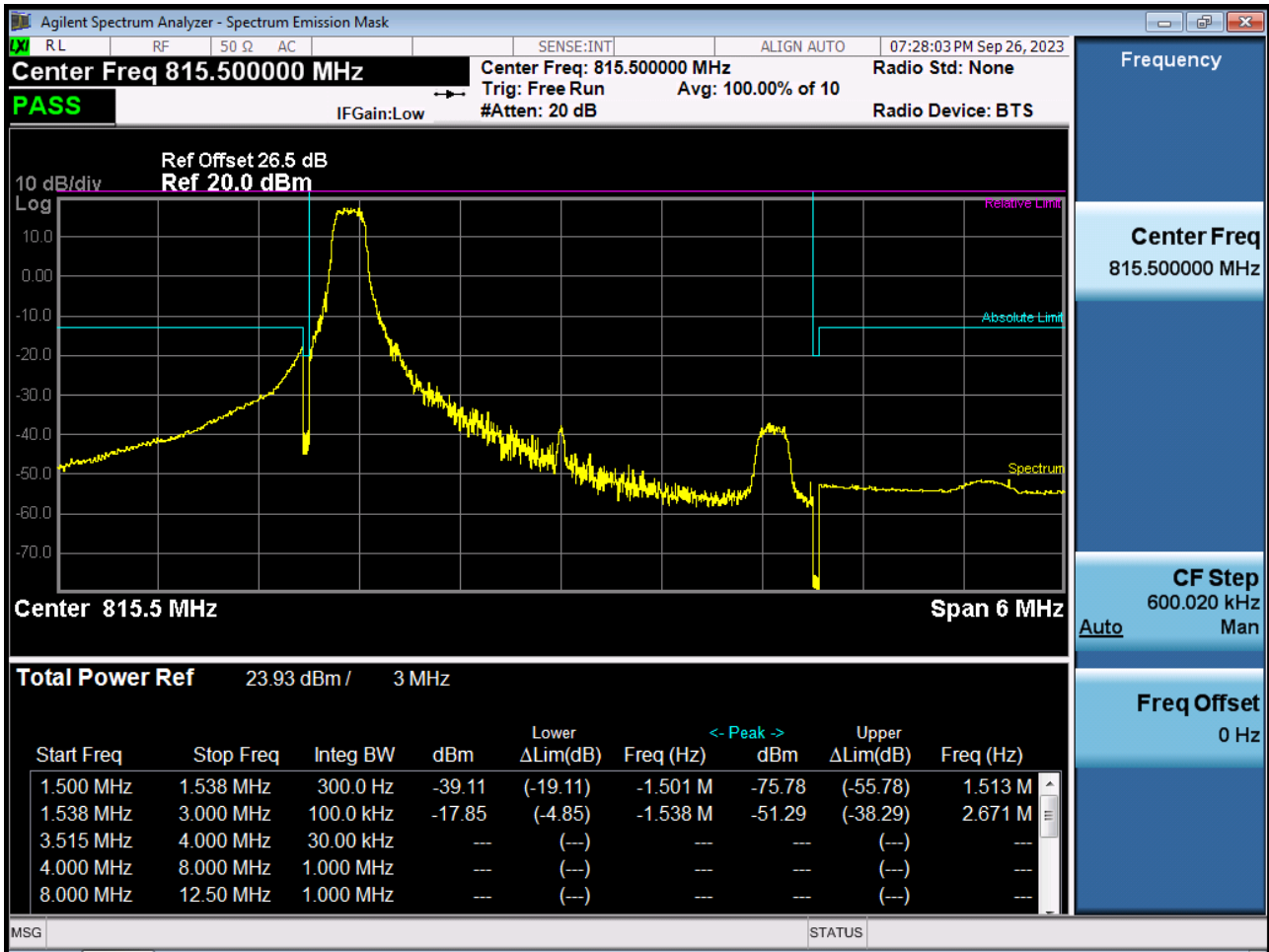
BAND 26. Lower Channel Edge Plot (1.4 M BW Ch.26697 QPSK RB 1, Offset 0)



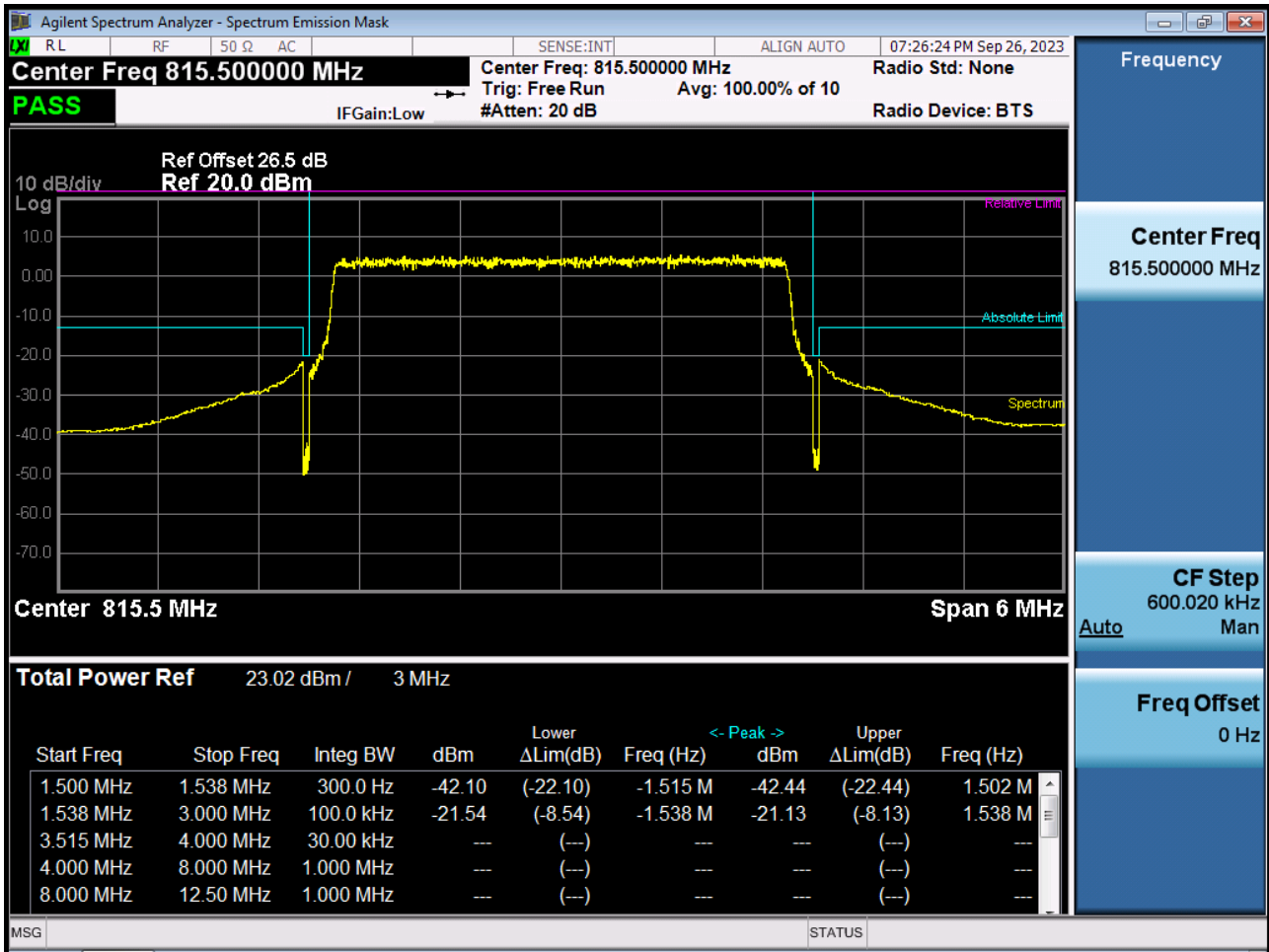
BAND 26. Lower Channel Edge Plot (1.4 M BW Ch.26697 QPSK_RB6_Offset 0)



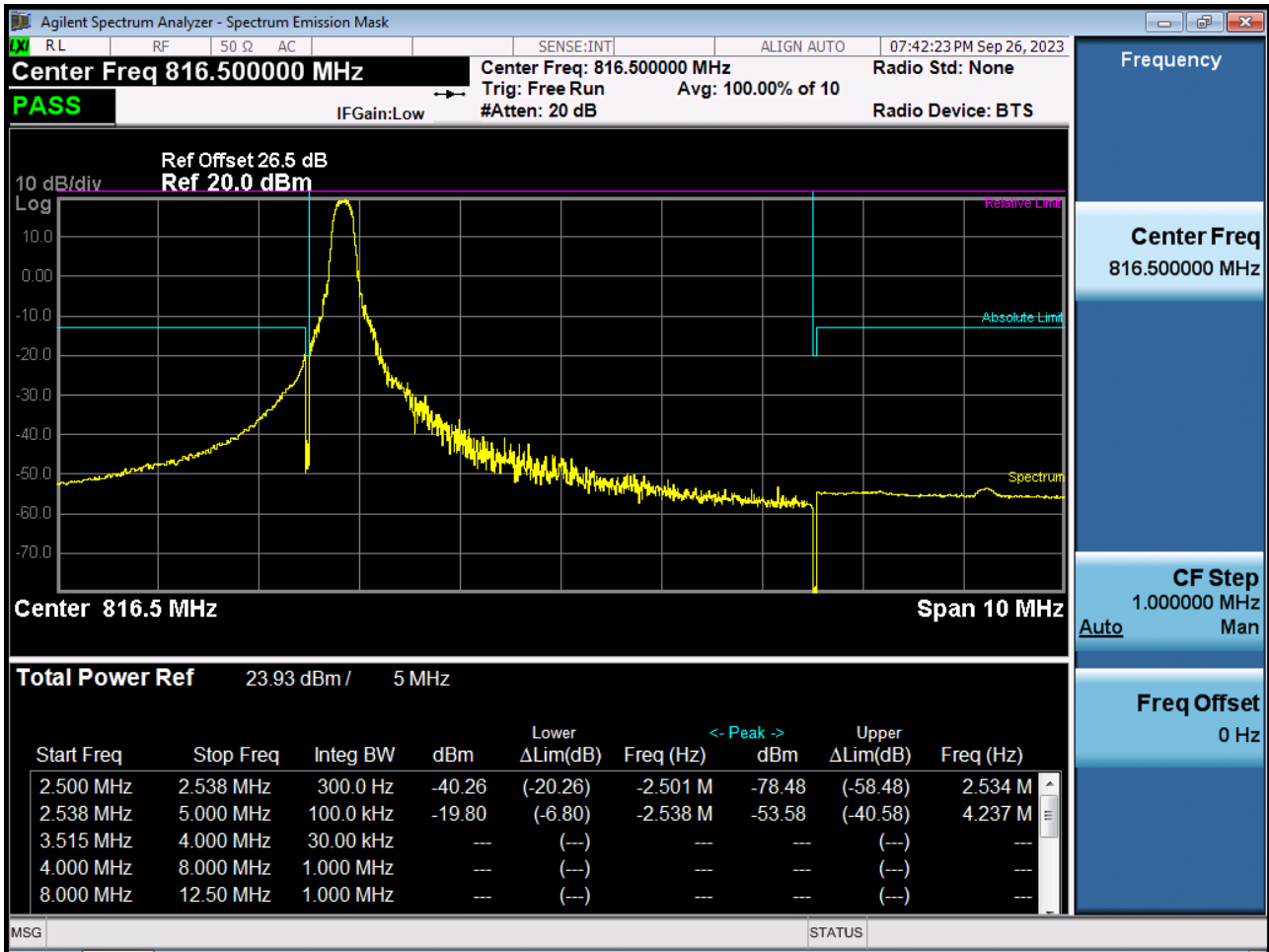
BAND 26. Lower Channel Edge Plot (3 M BW Ch.26705 QPSK RB 1, Offset 0)



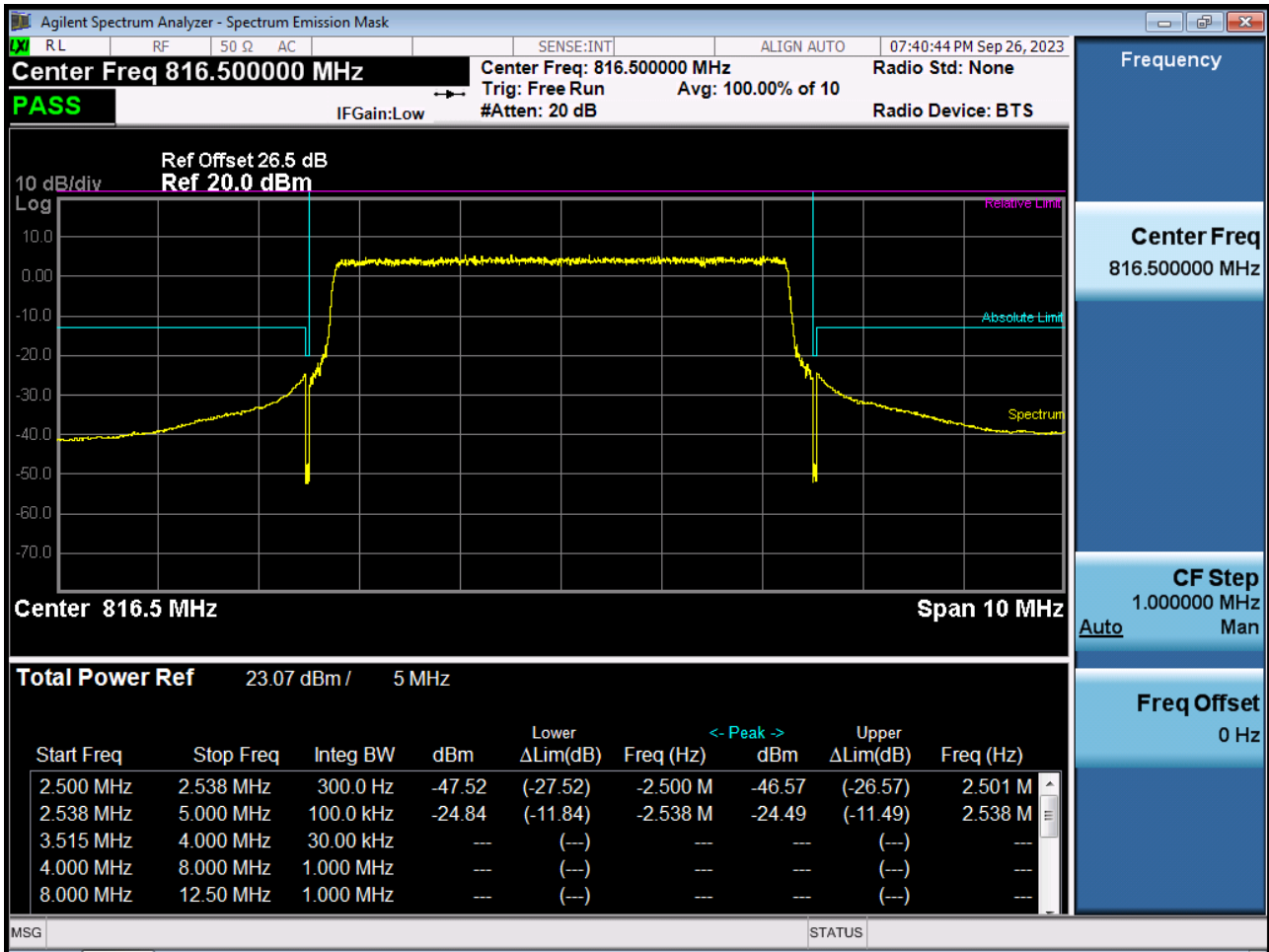
BAND 26. Lower Channel Edge Plot (3 M BW Ch.26705 QPSK_RB15_Offset 0)



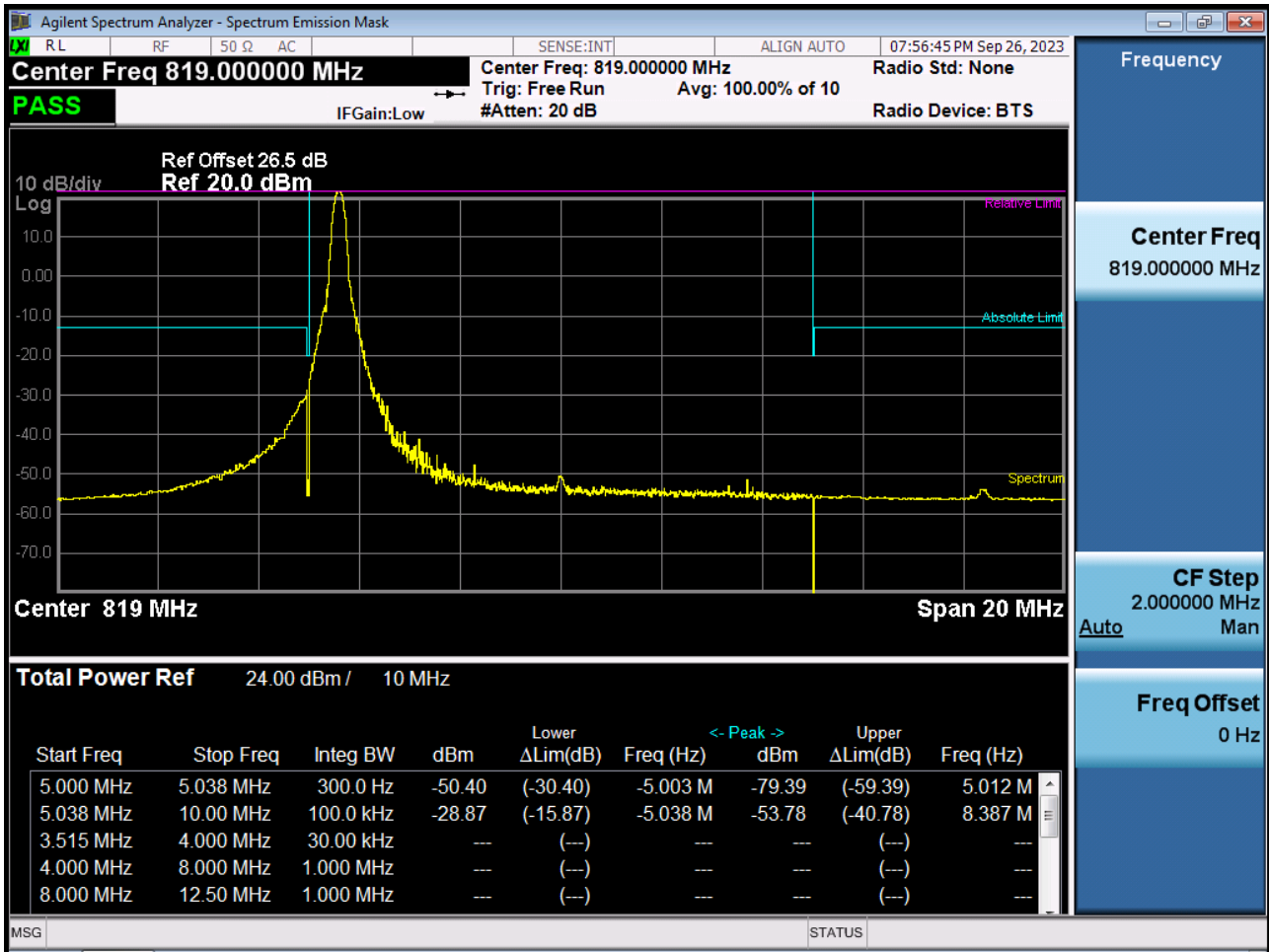
BAND 26. Lower Channel Edge Plot (5 M BW Ch.26715 QPSK RB 1, Offset 0)



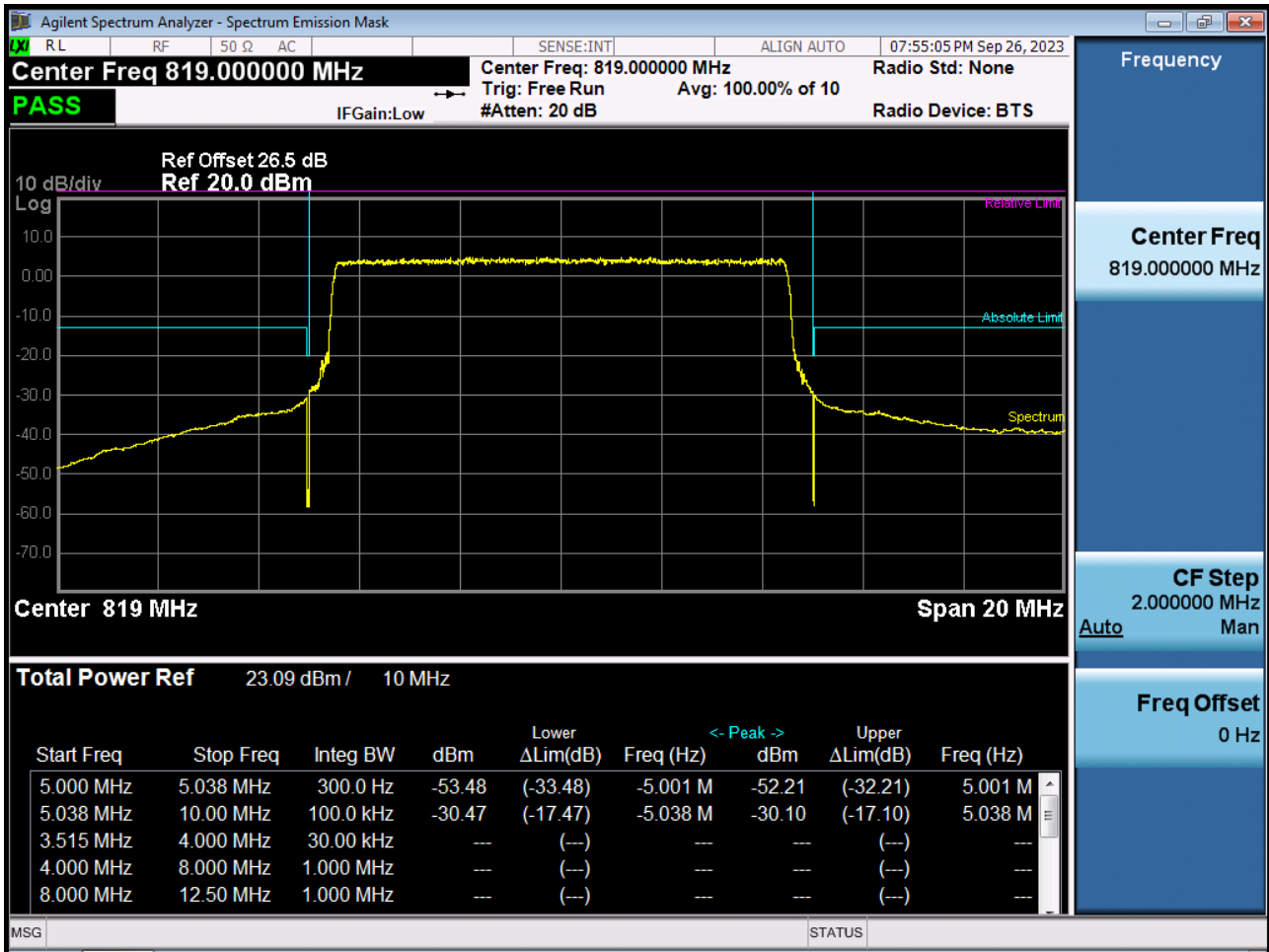
BAND 26. Lower Channel Edge Plot (5 M BW Ch.26715 QPSK_RB25_Offset 0)



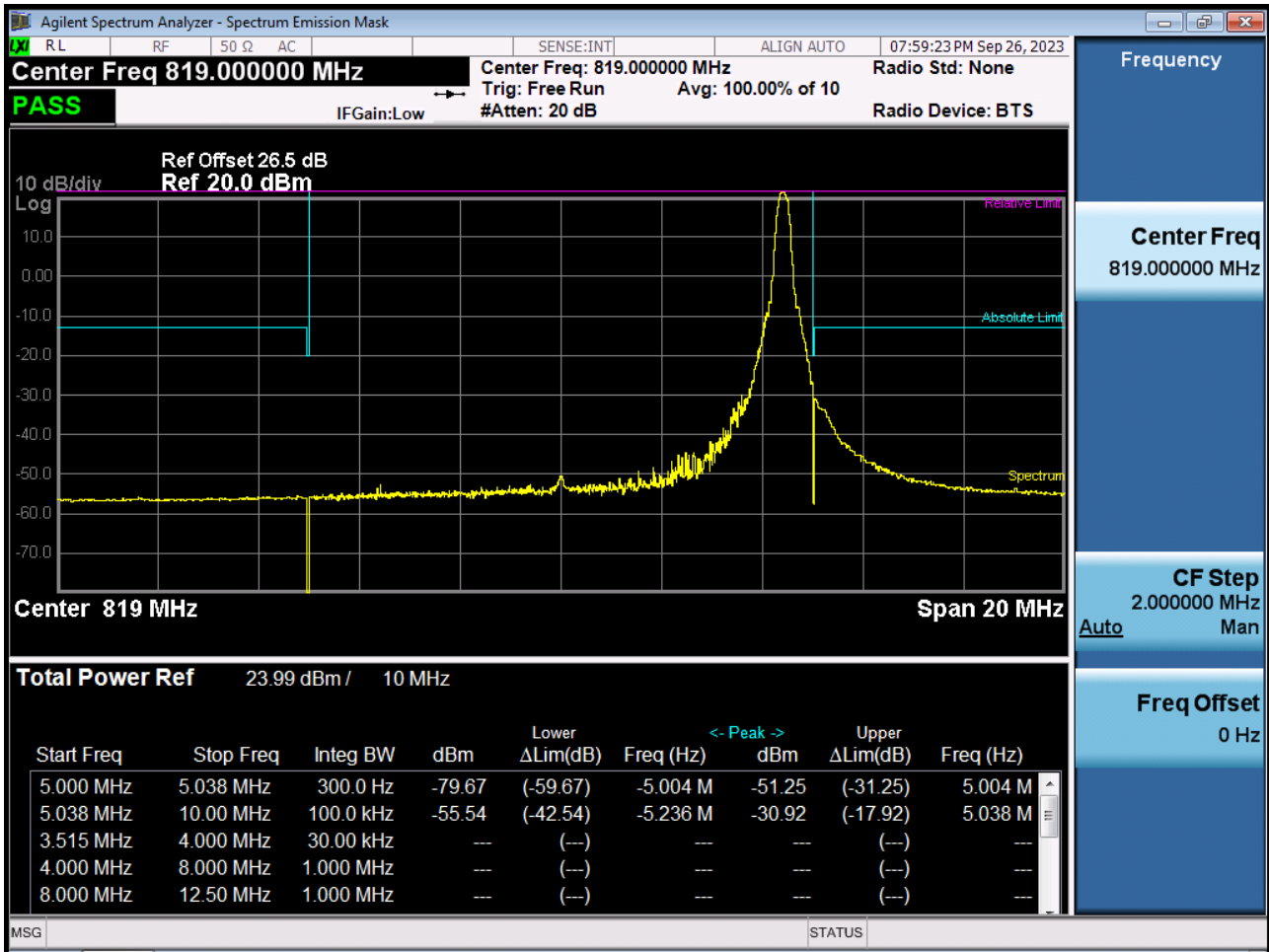
BAND 26. Low Channel Edge Plot (10 M BW Ch.26740 QPSK RB 1, Offset 0)



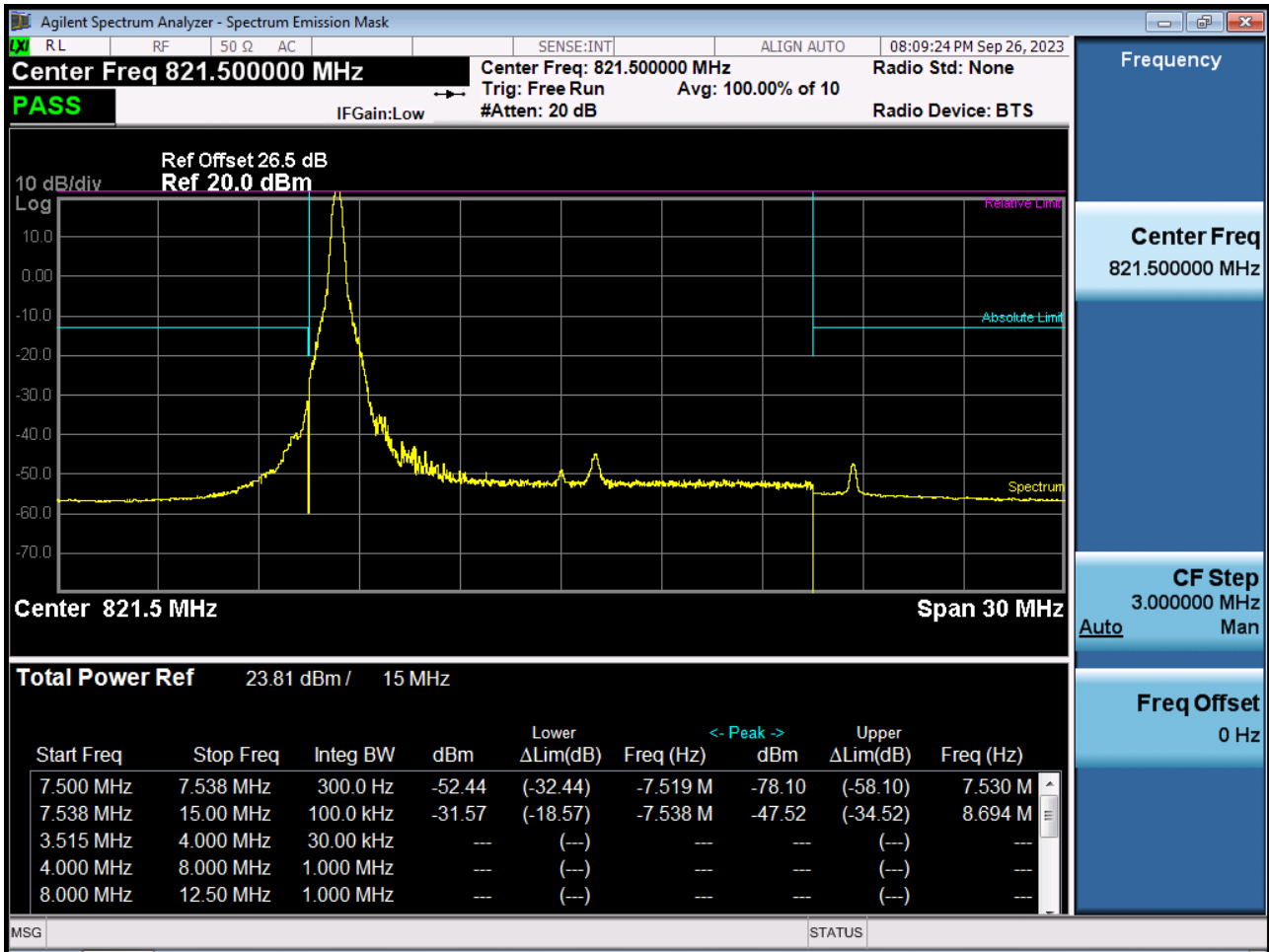
BAND 26. Low Channel Edge Plot (10 M BW Ch.26740 QPSK_RB50_Offset 0)



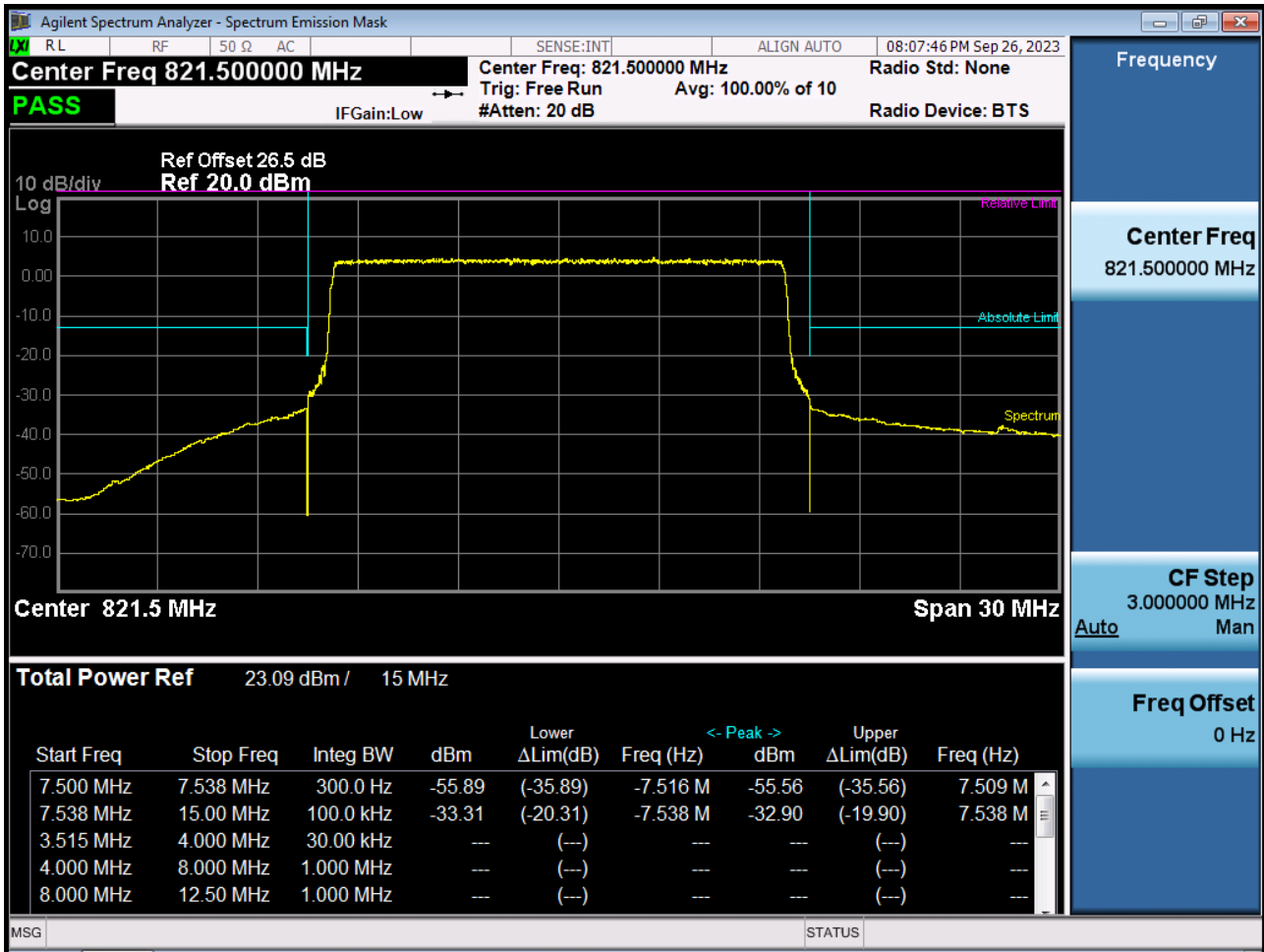
BAND 26. Mid Channel Edge Plot (10 M BW Ch. 26740 QPSK_RB1_Offset 49)



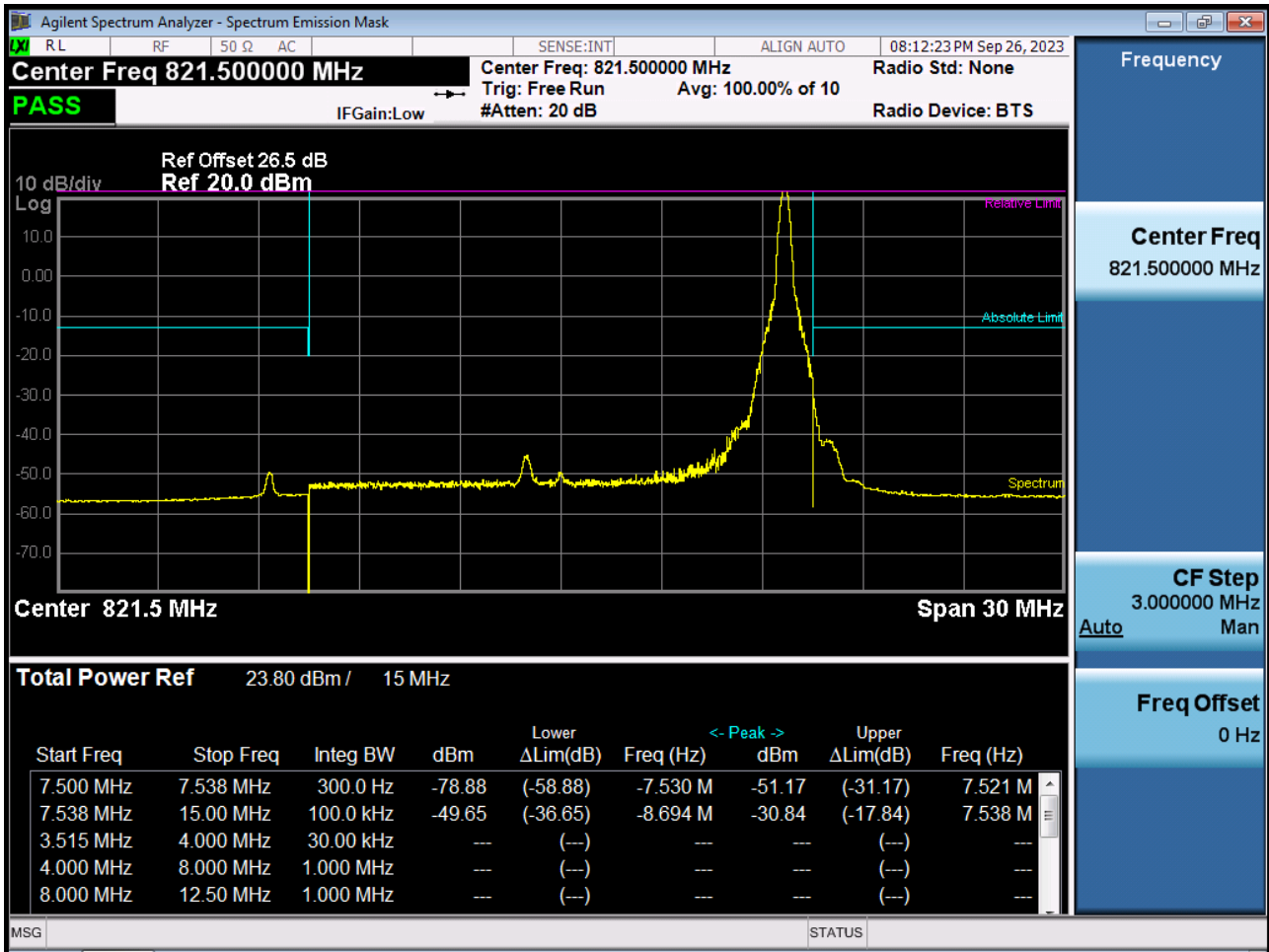
BAND 26. Low Channel Edge Plot (15 M BW Ch.26765 QPSK RB 1, Offset 0)



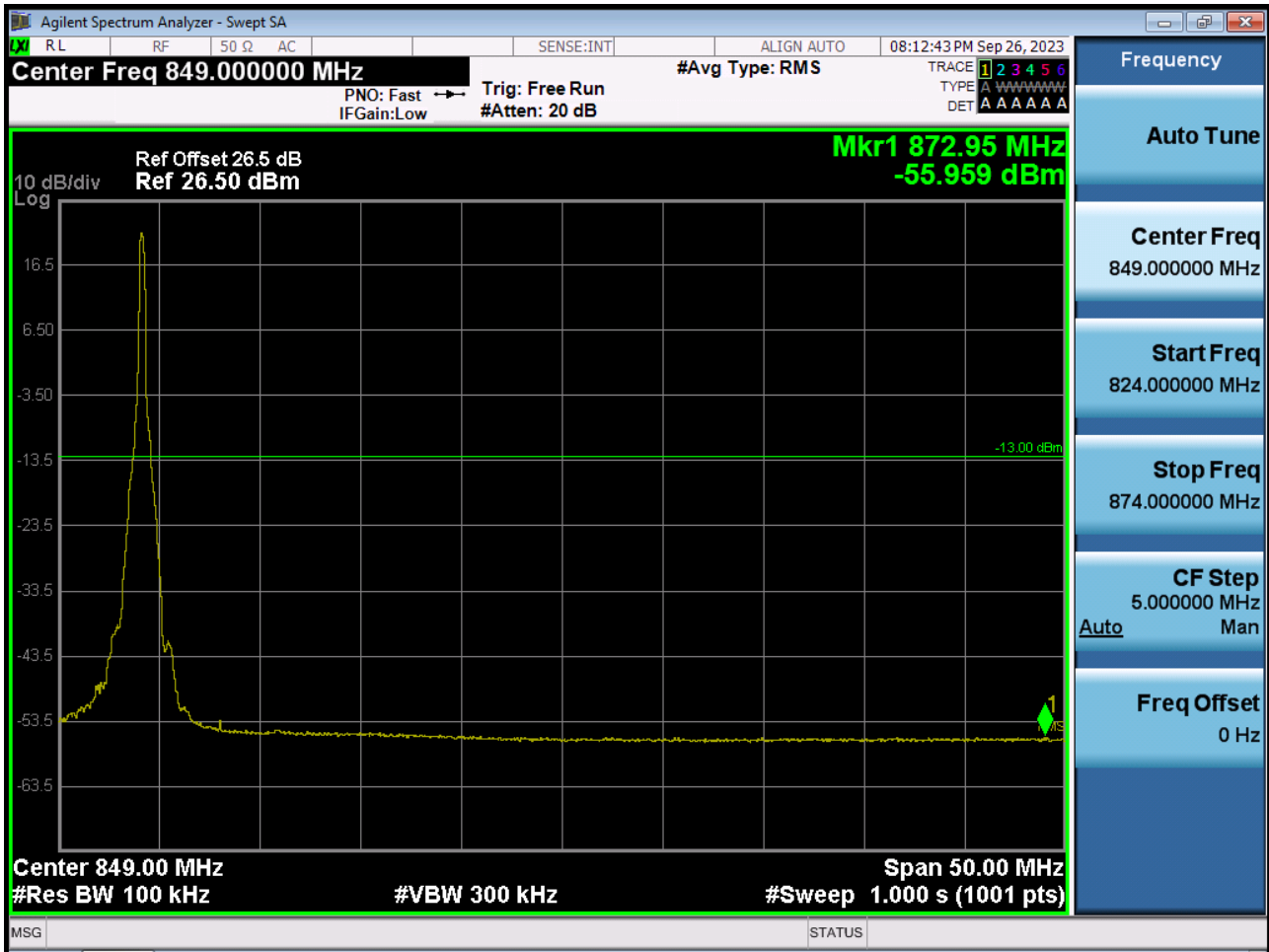
BAND 26. Low Channel Edge Plot (15 M BW Ch.26765 QPSK RB 75, Offset0)



BAND 26. Mid Channel Edge Plot (15 M BW Ch.26765 QPSK_RB1_Offset 74)



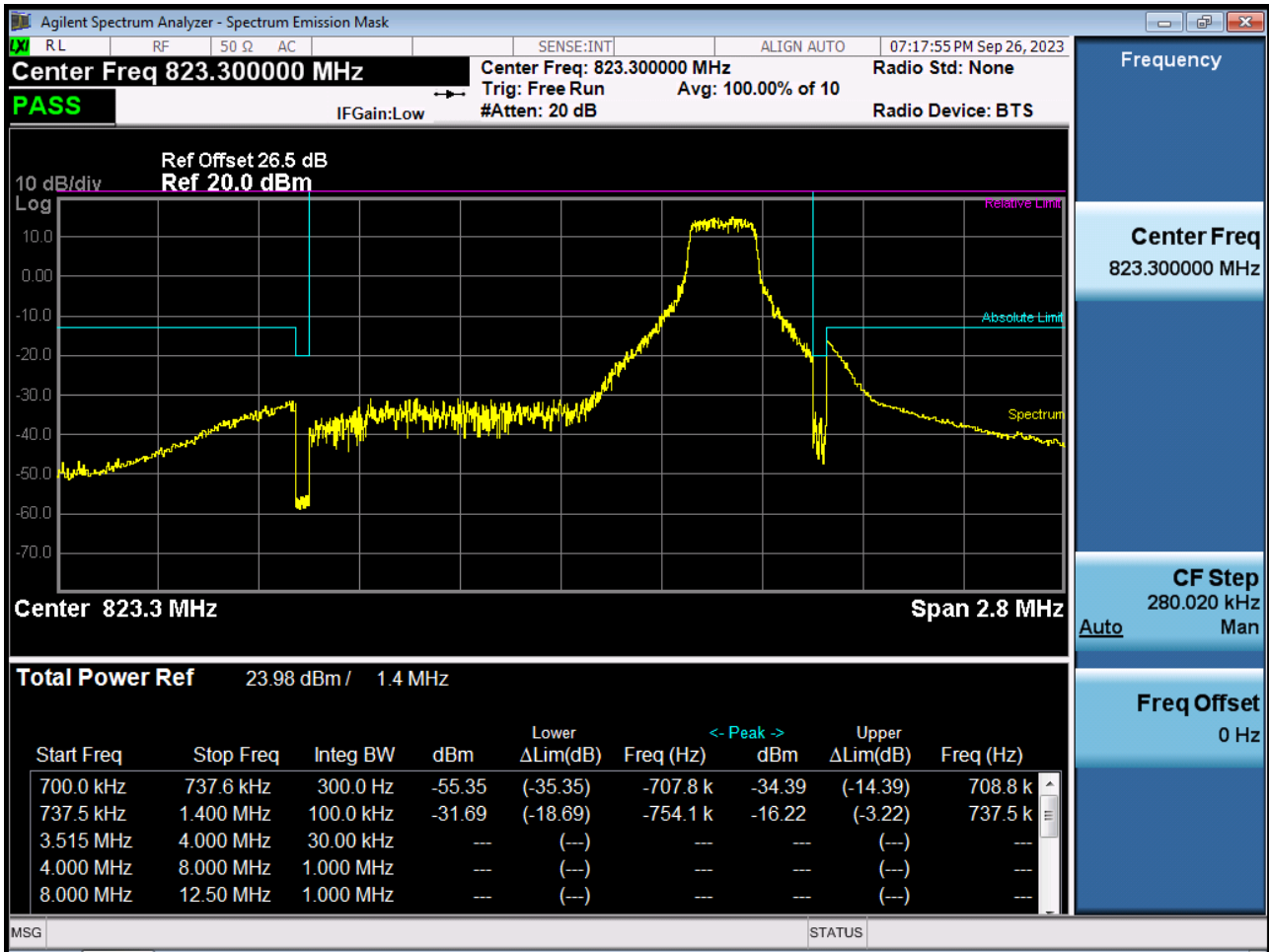
BAND 26. Mid Band Edge Plot (15 M BW Ch.26765 QPSK RB 1, Offset74)



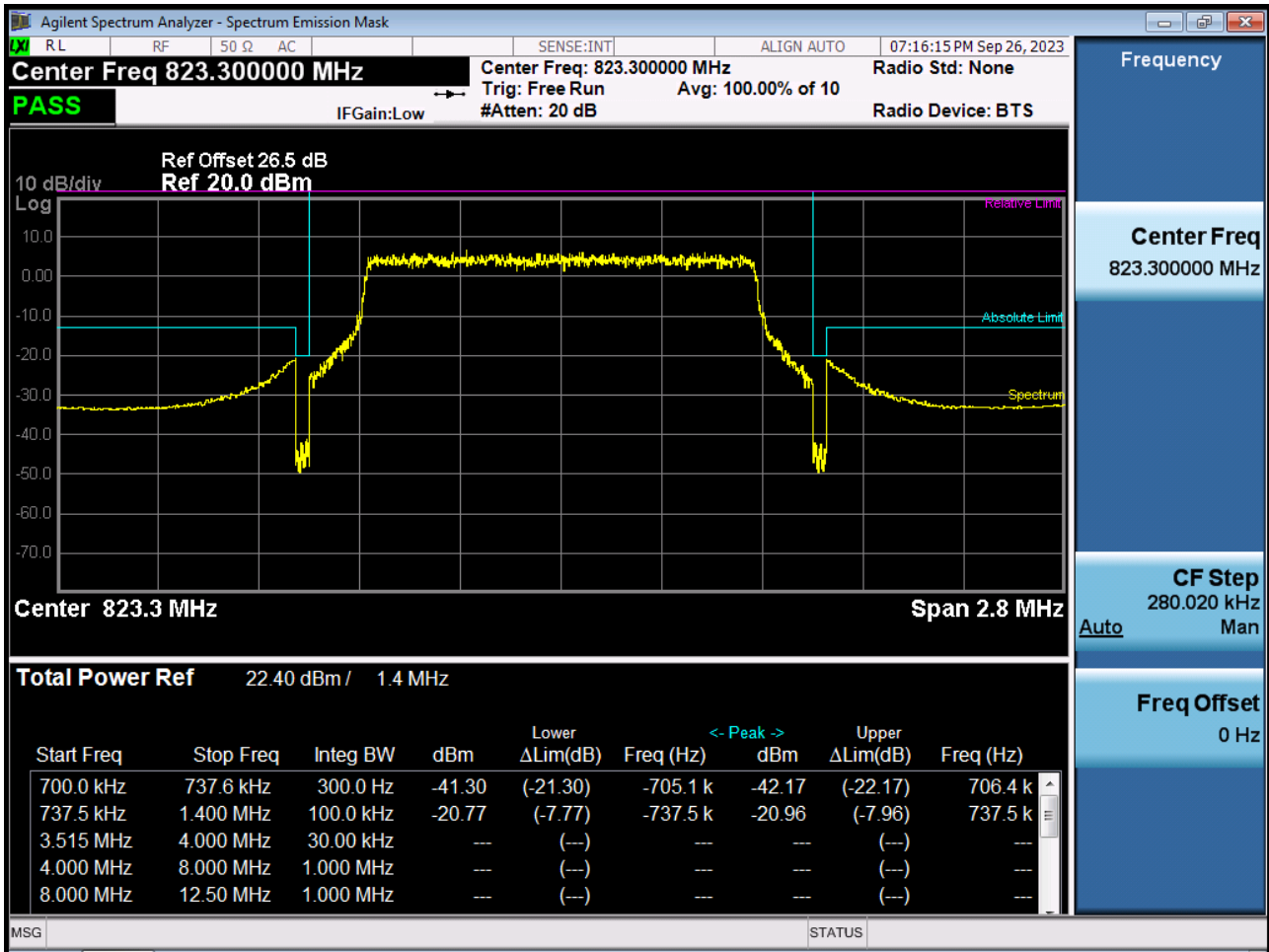
BAND 26. Mid Band Edge Plot (15 M BW Ch.26765 QPSK_RB75_Offset 0)



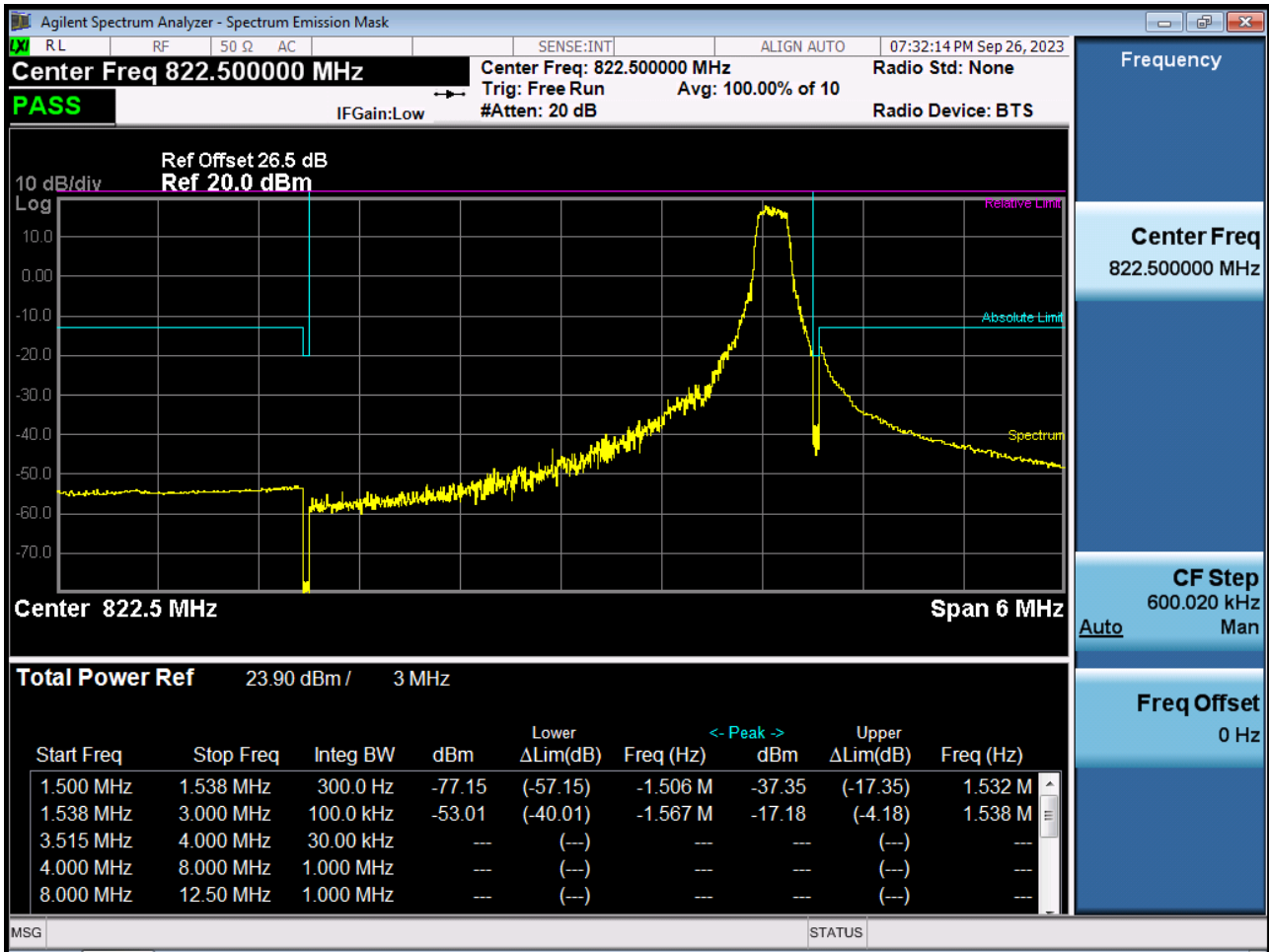
BAND 26. Upper Channel Edge Plot (1.4 M BW Ch.26783 QPSK_RB1_Offset 5)



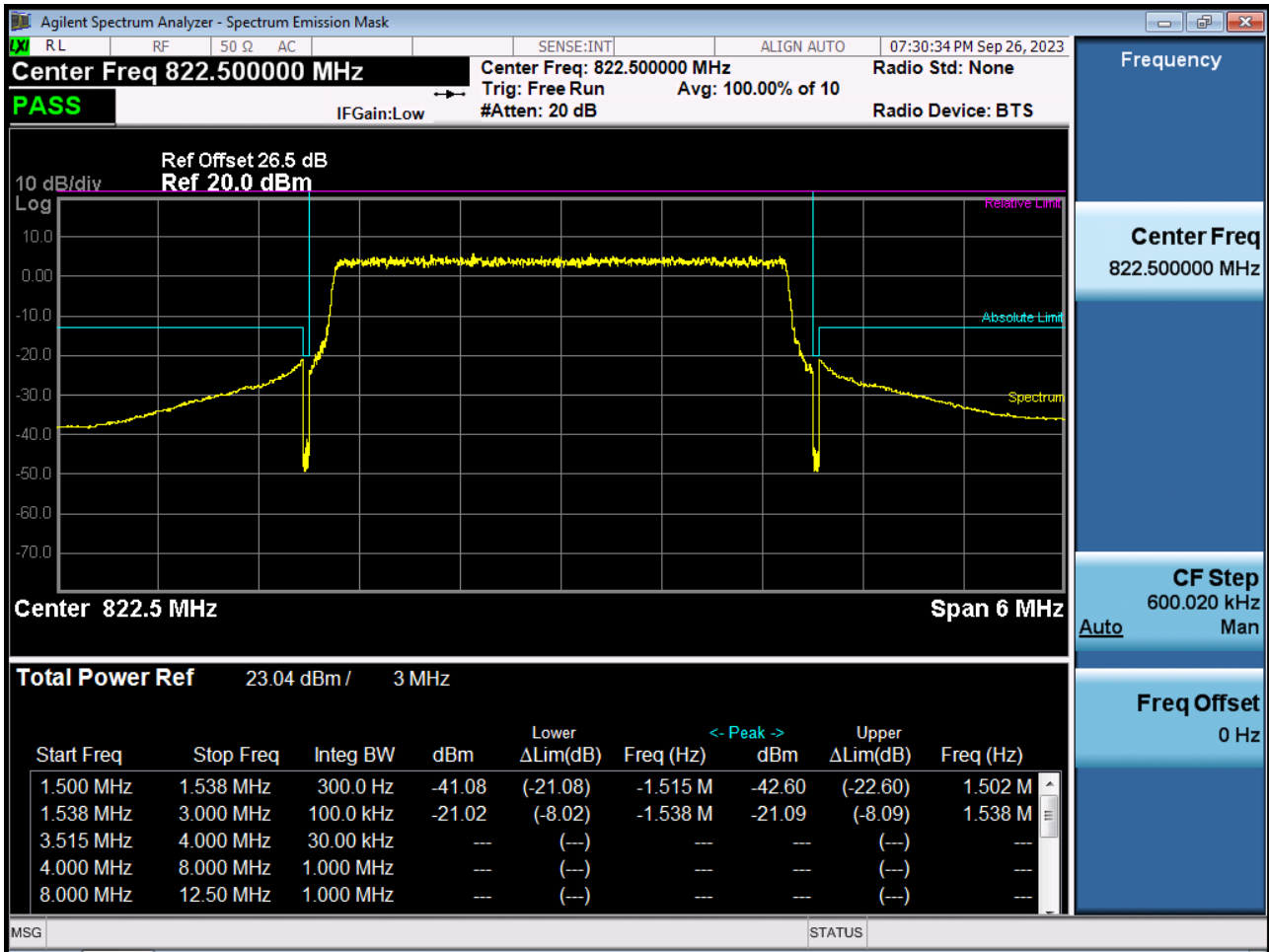
BAND 26. Upper Channel Edge Plot (1.4 M BW Ch.26783 QPSK_RB6_Offset 0)



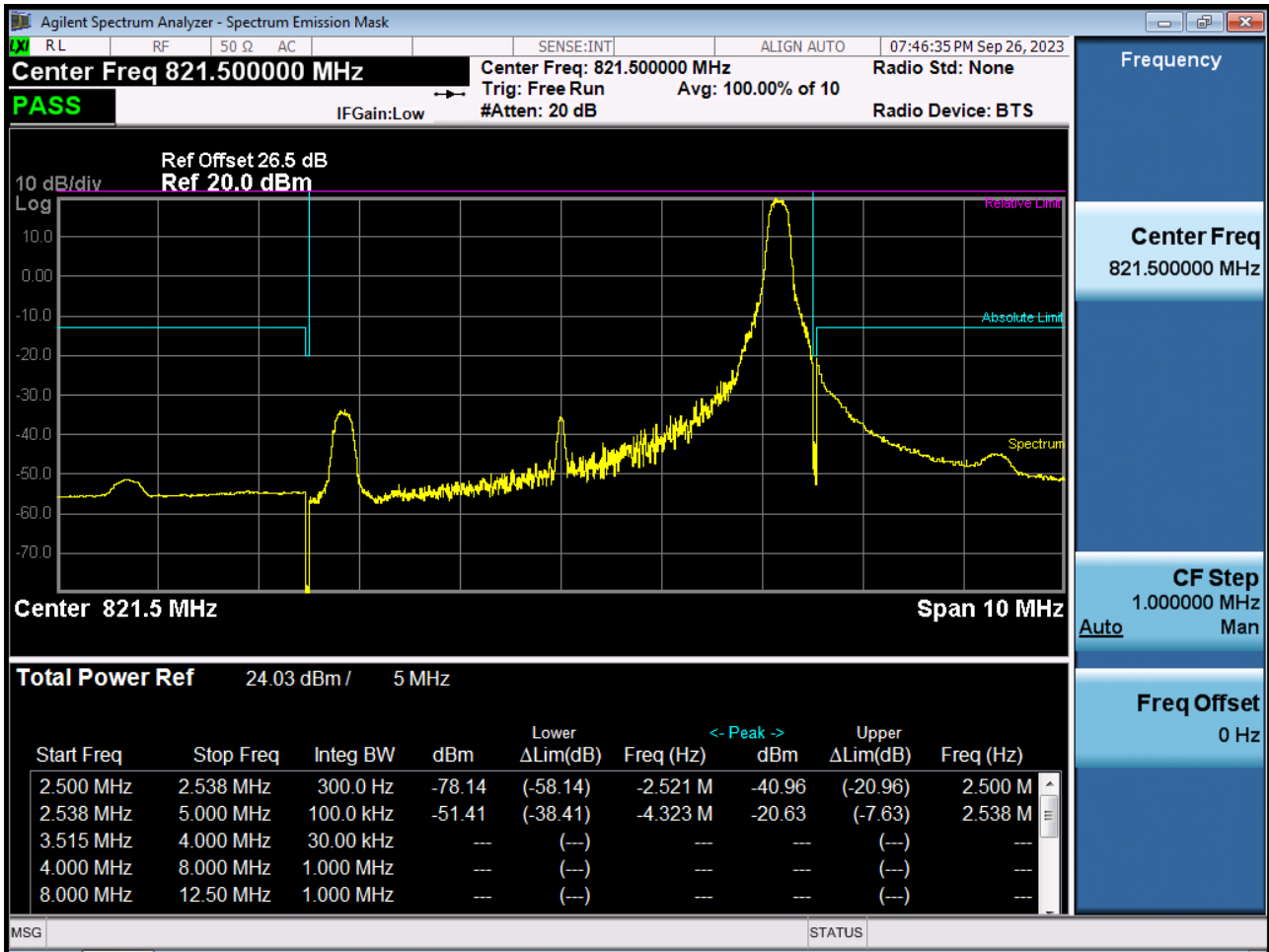
BAND 26. Upper Channel Edge Plot (3 M BW Ch.26775 QPSK_RB1_Offset 14)



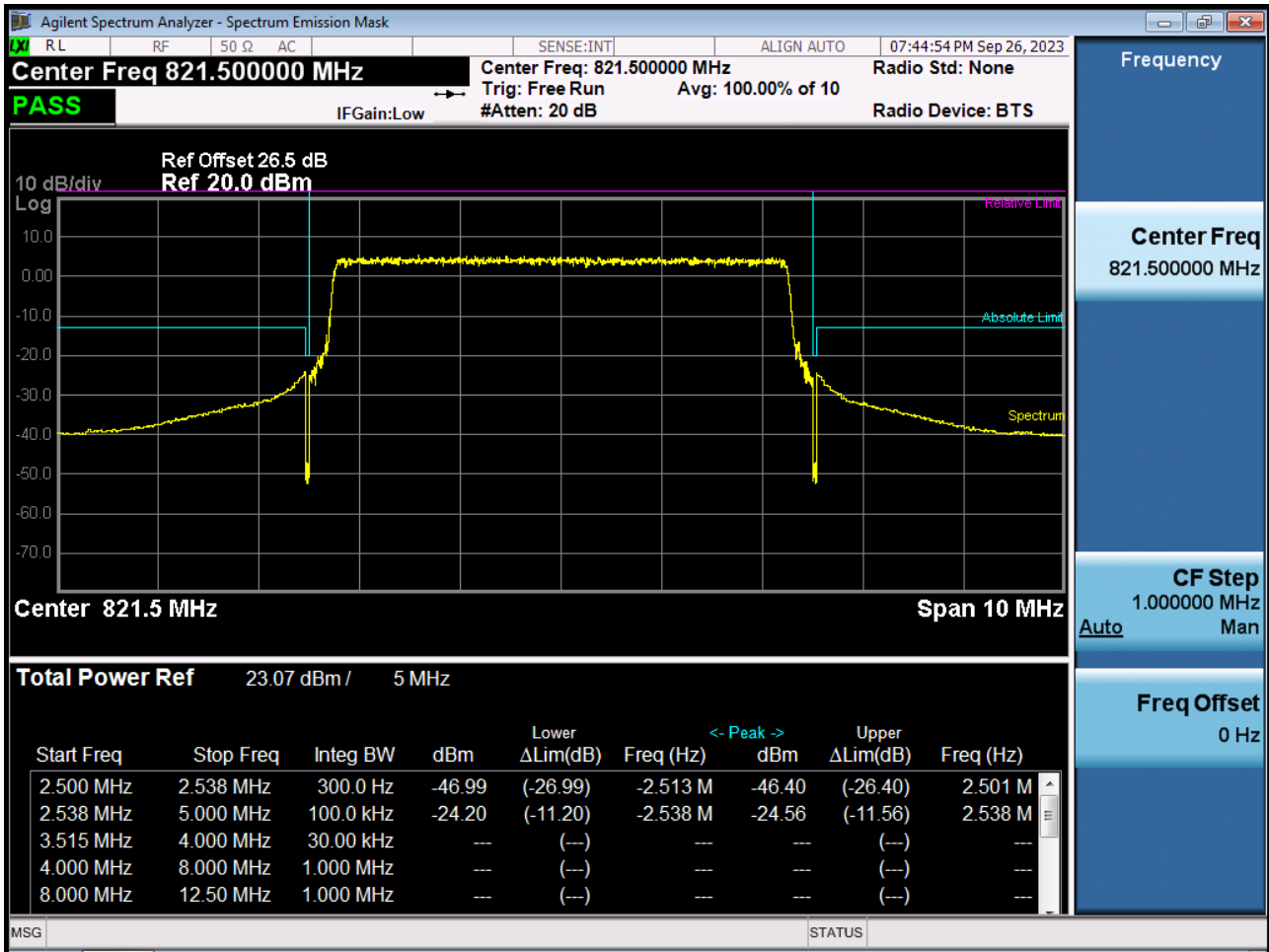
BAND 26. Upper Channel Edge Plot (3 M BW Ch.26775 QPSK_RB15_Offset 0)



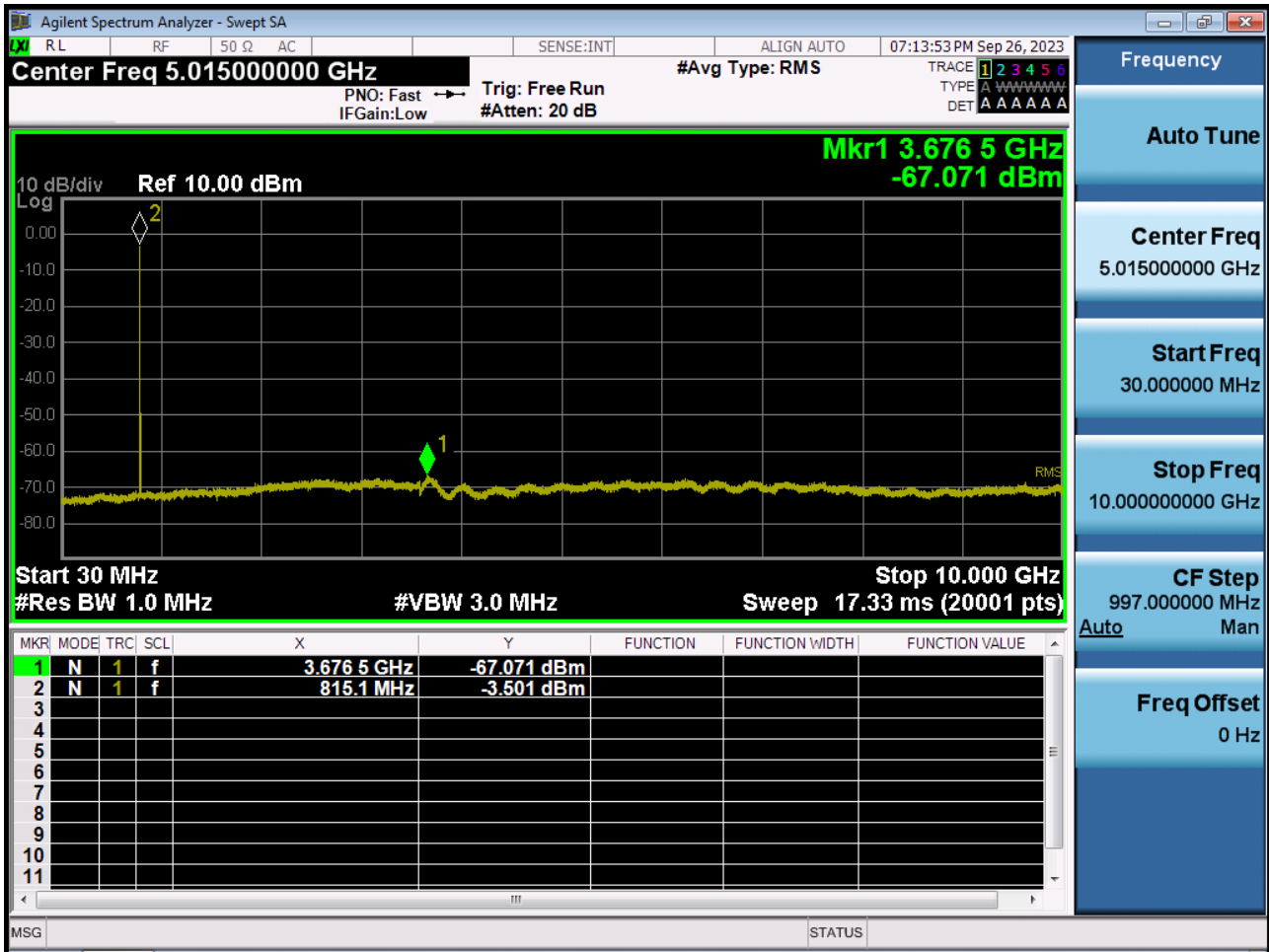
BAND 26. Upper Channel Edge Plot (5 M BW Ch.26765 QPSK_RB1_Offset 24)



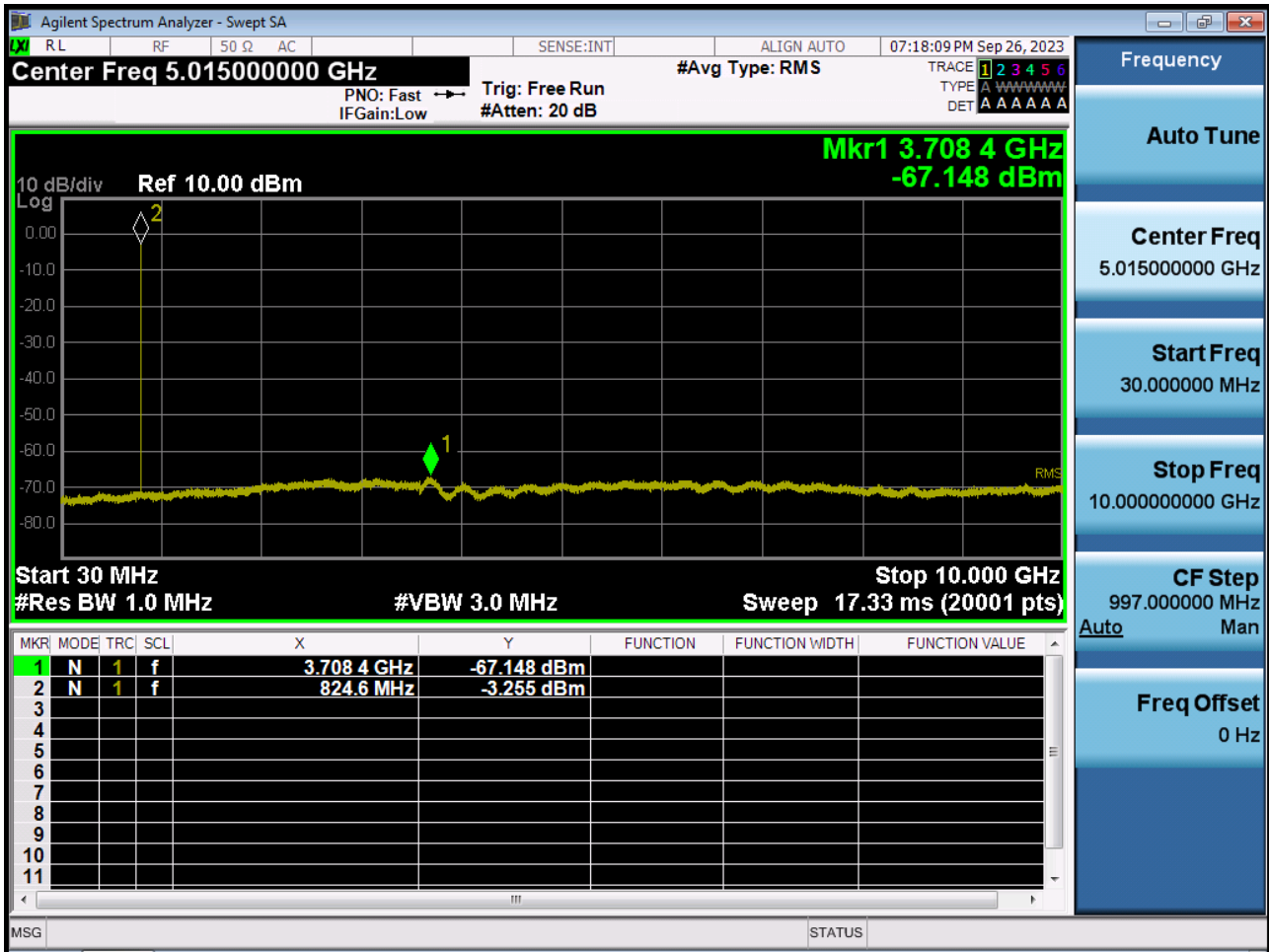
BAND 26. Upper Channel Edge Plot (5 M BW Ch.26765 QPSK_RB25_Offset 0)



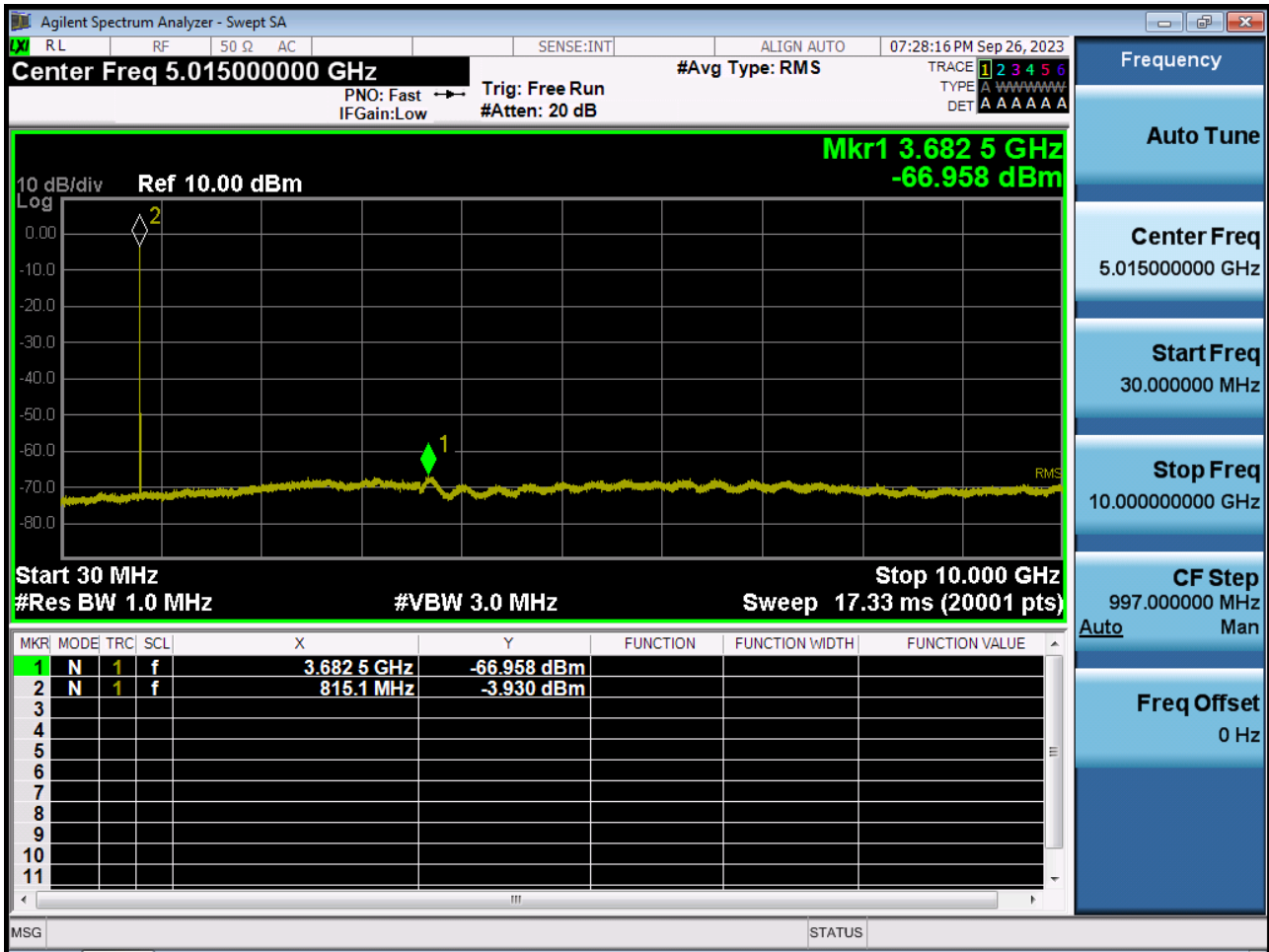
BAND 26. Conducted Spurious (26697 ch_1.4 MHz_QPSK_RB 1_0)



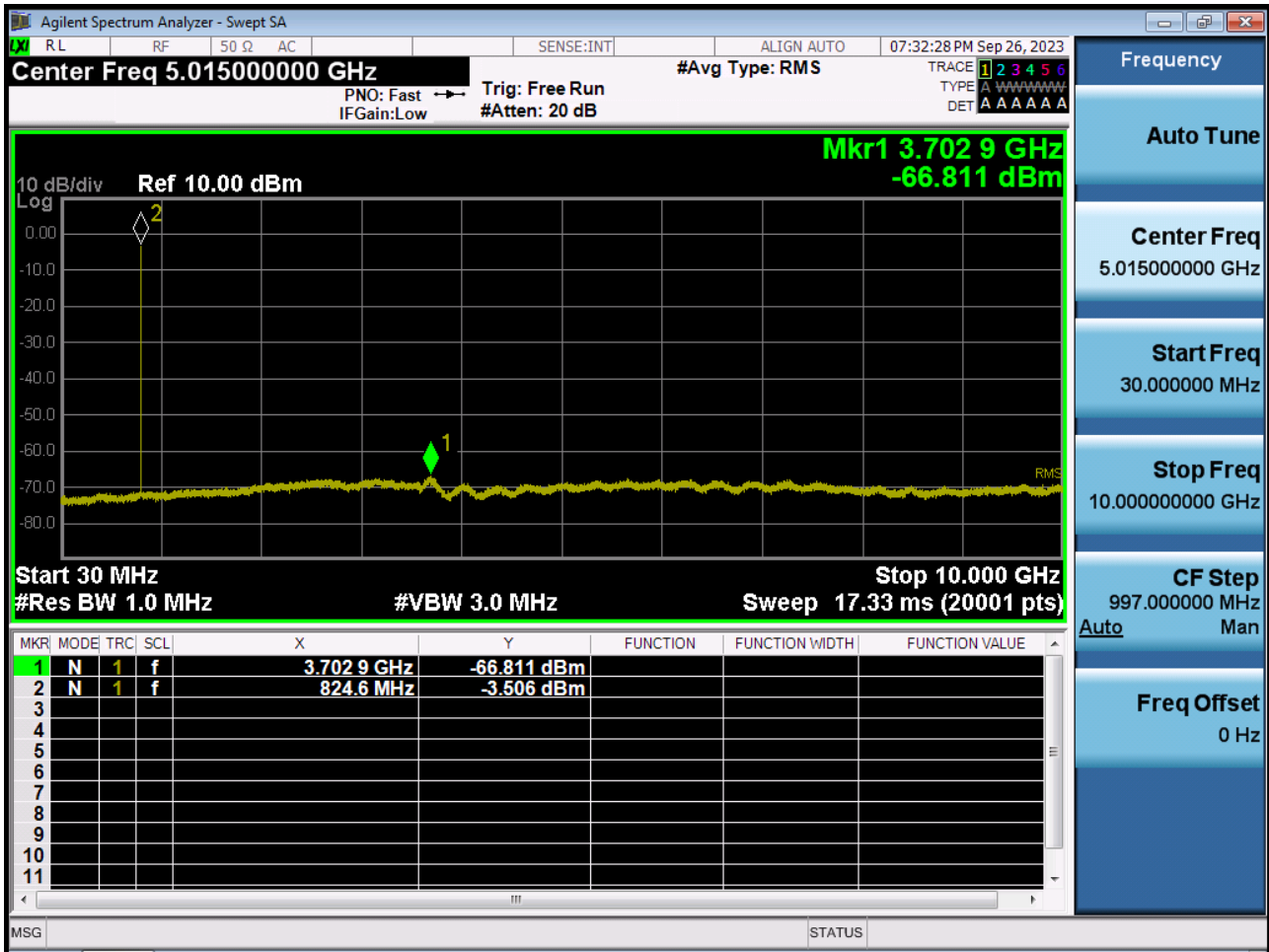
BAND 26. Conducted Spurious (26783 ch_1.4 MHz_QPSK_RB 1_0)



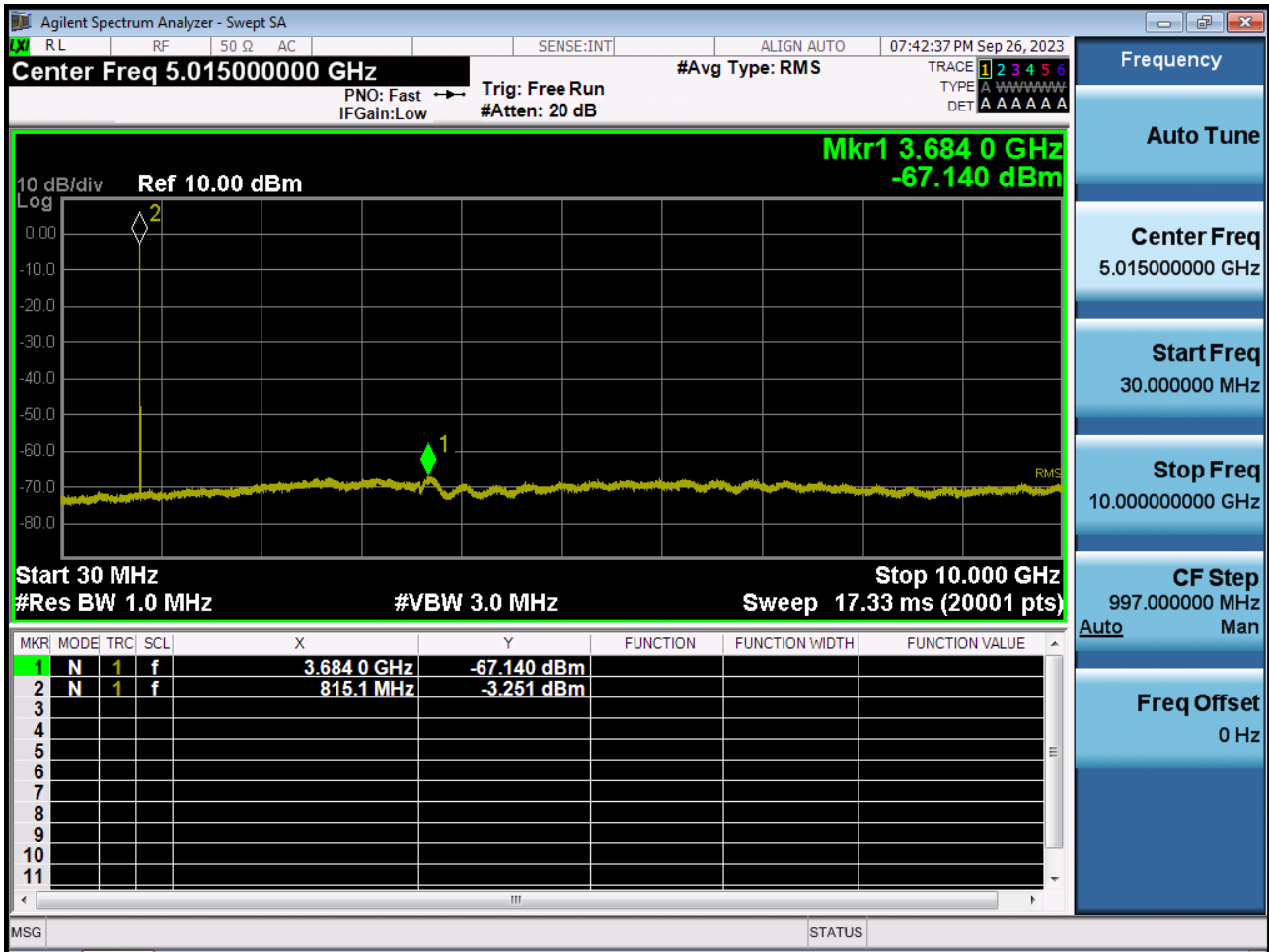
BAND 26. Conducted Spurious (26705 ch_3 MHz_QPSK_RB 1_0)



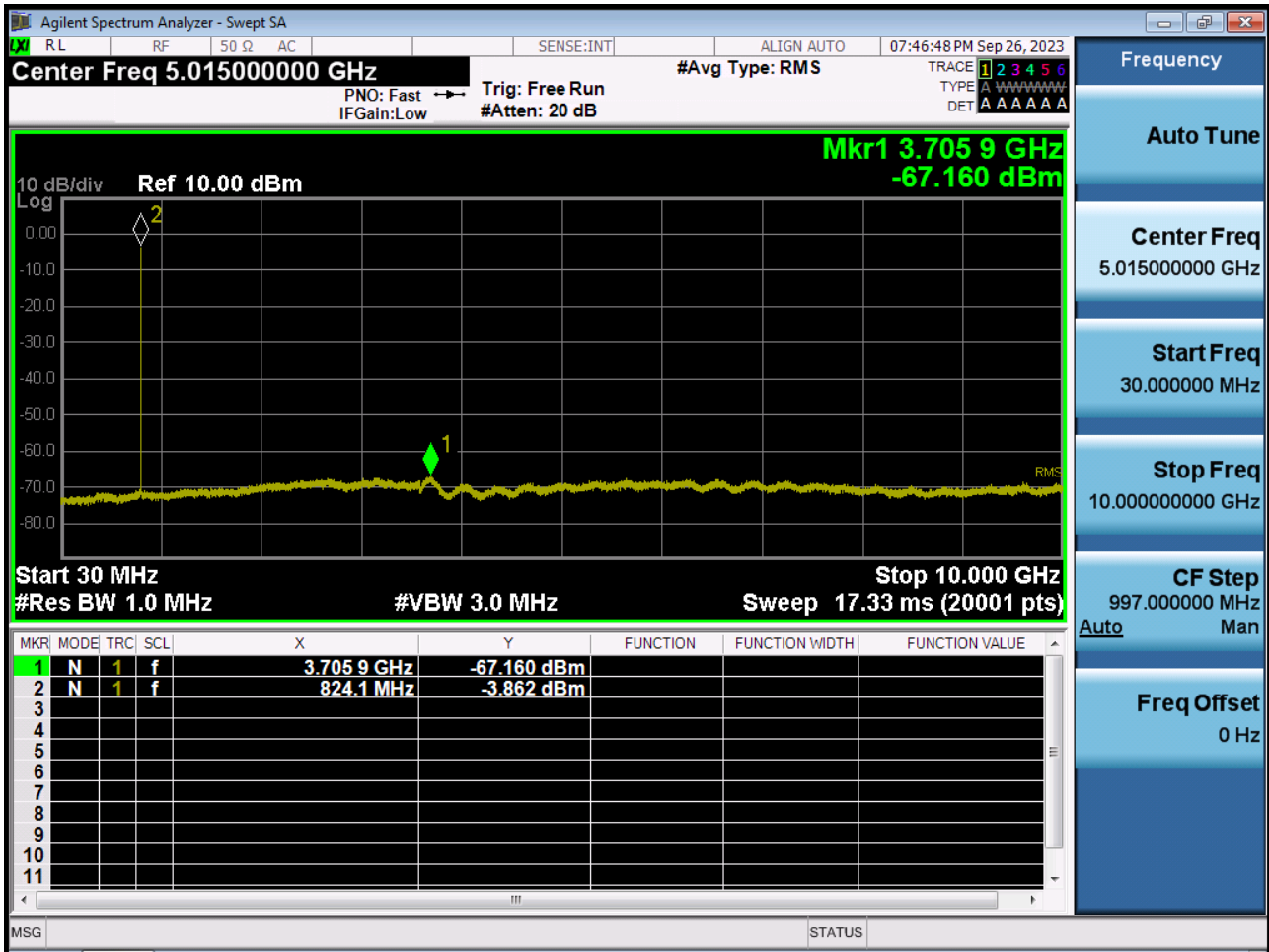
BAND 26. Conducted Spurious (26775 ch_3 MHz_QPSK_RB 1_0)



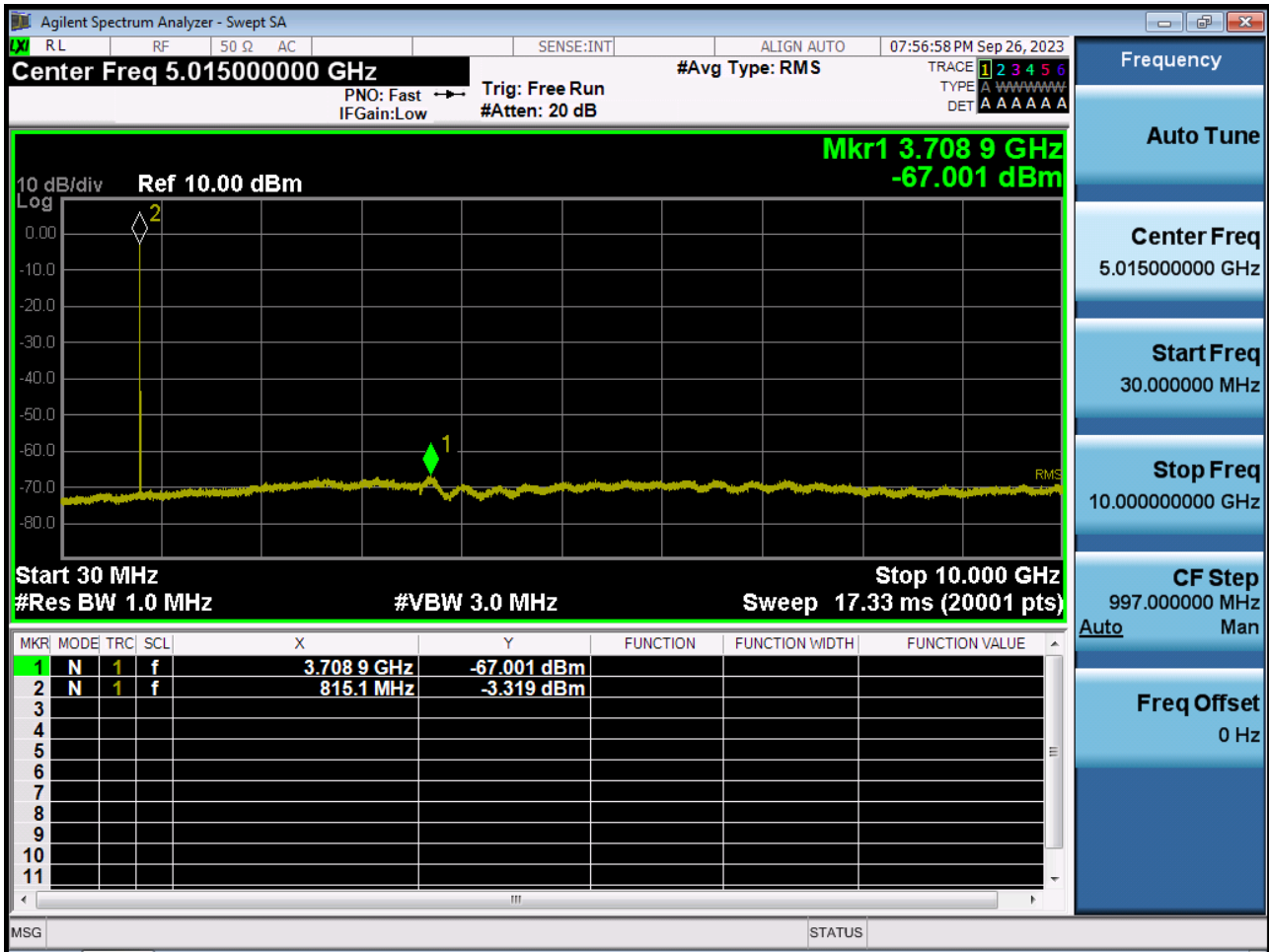
BAND 26. Conducted Spurious (26715 ch_5 MHz_QPSK_RB 1_0)



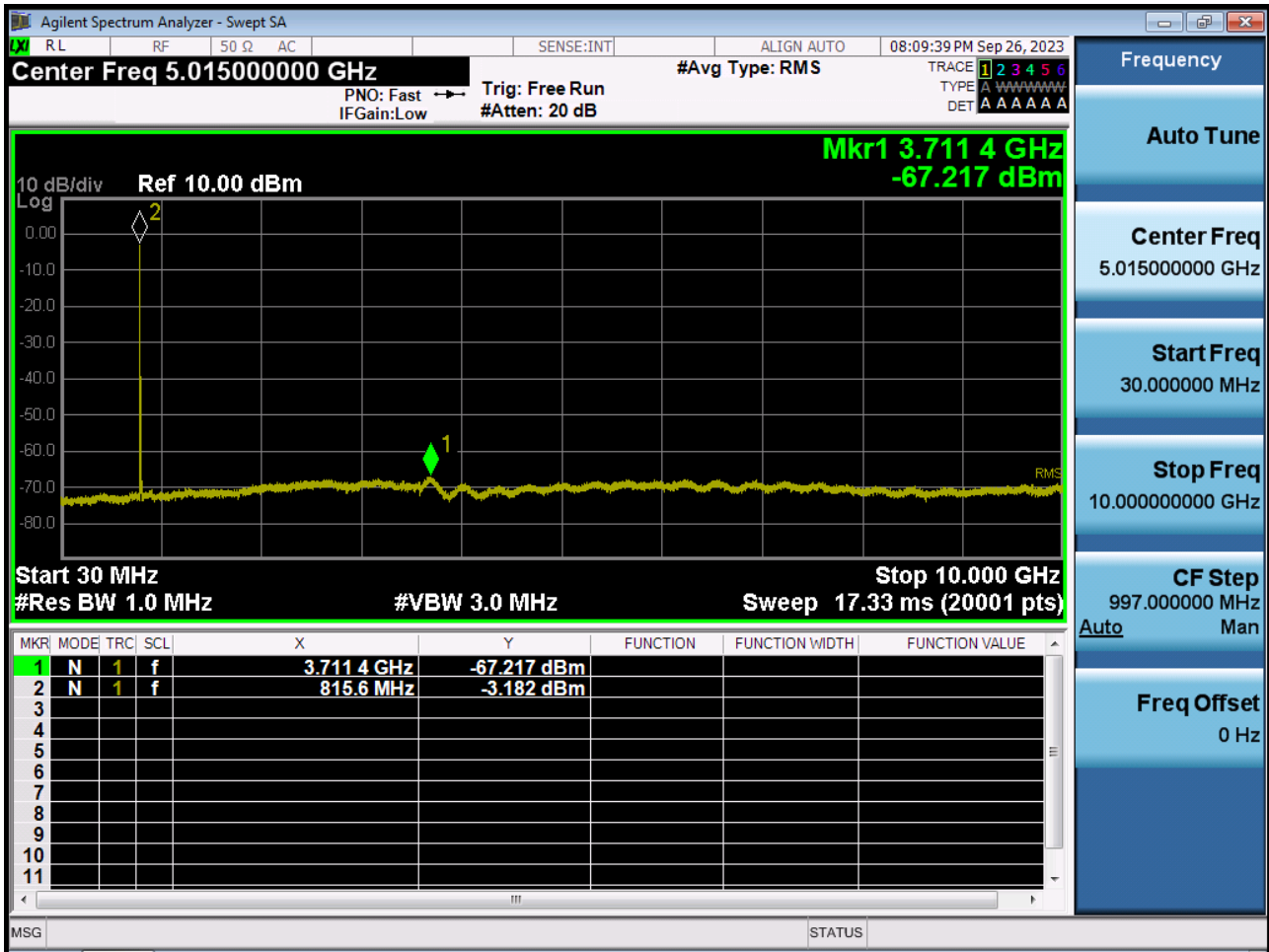
BAND 26. Conducted Spurious (26765 ch_5 MHz_QPSK_RB 1_0)



BAND 26. Conducted Spurious (26740 ch_10 MHz_QPSK_RB 1_0)

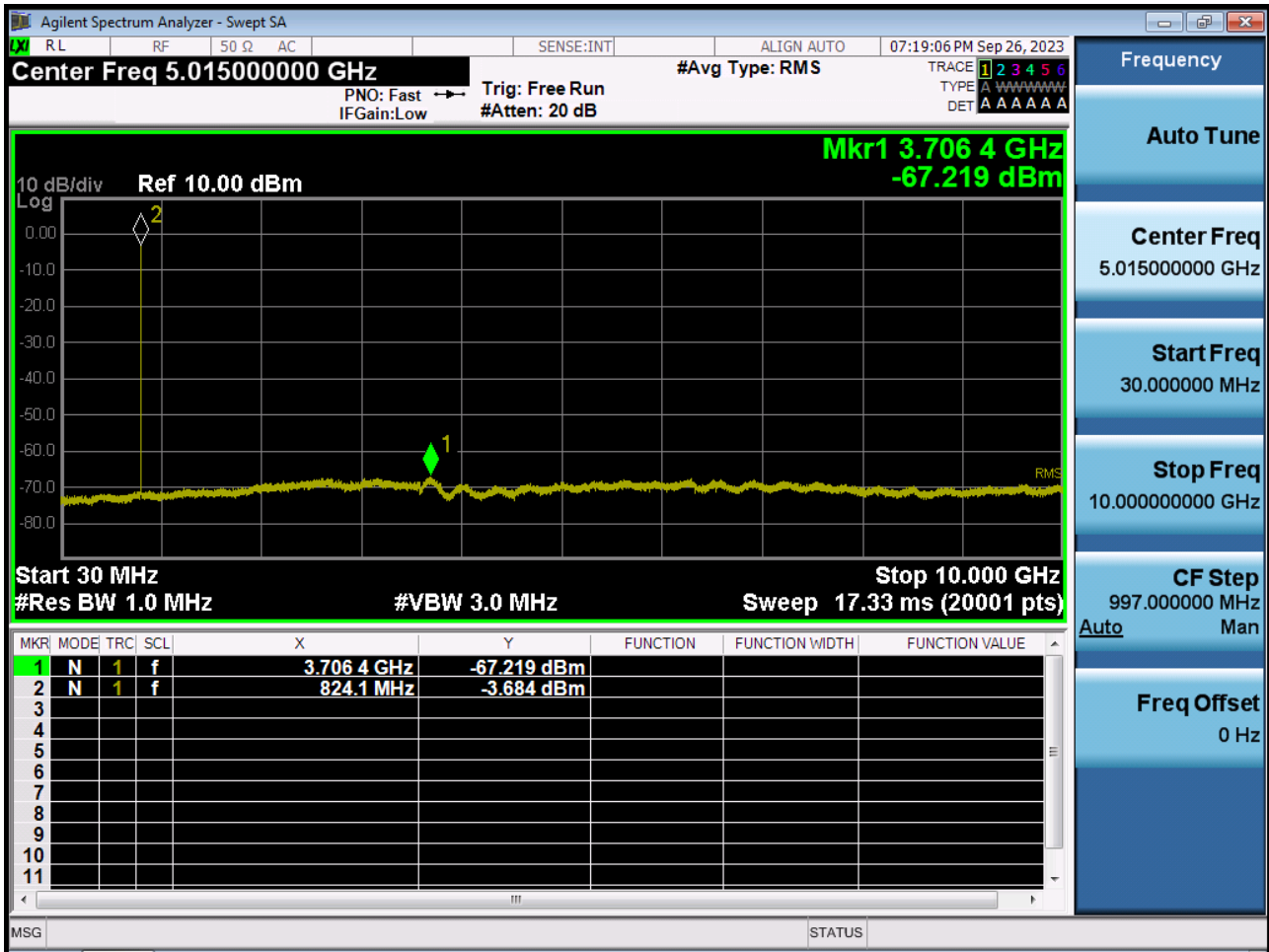


BAND 26. Conducted Spurious (26765 ch_15 MHz_QPSK_RB 1_0)

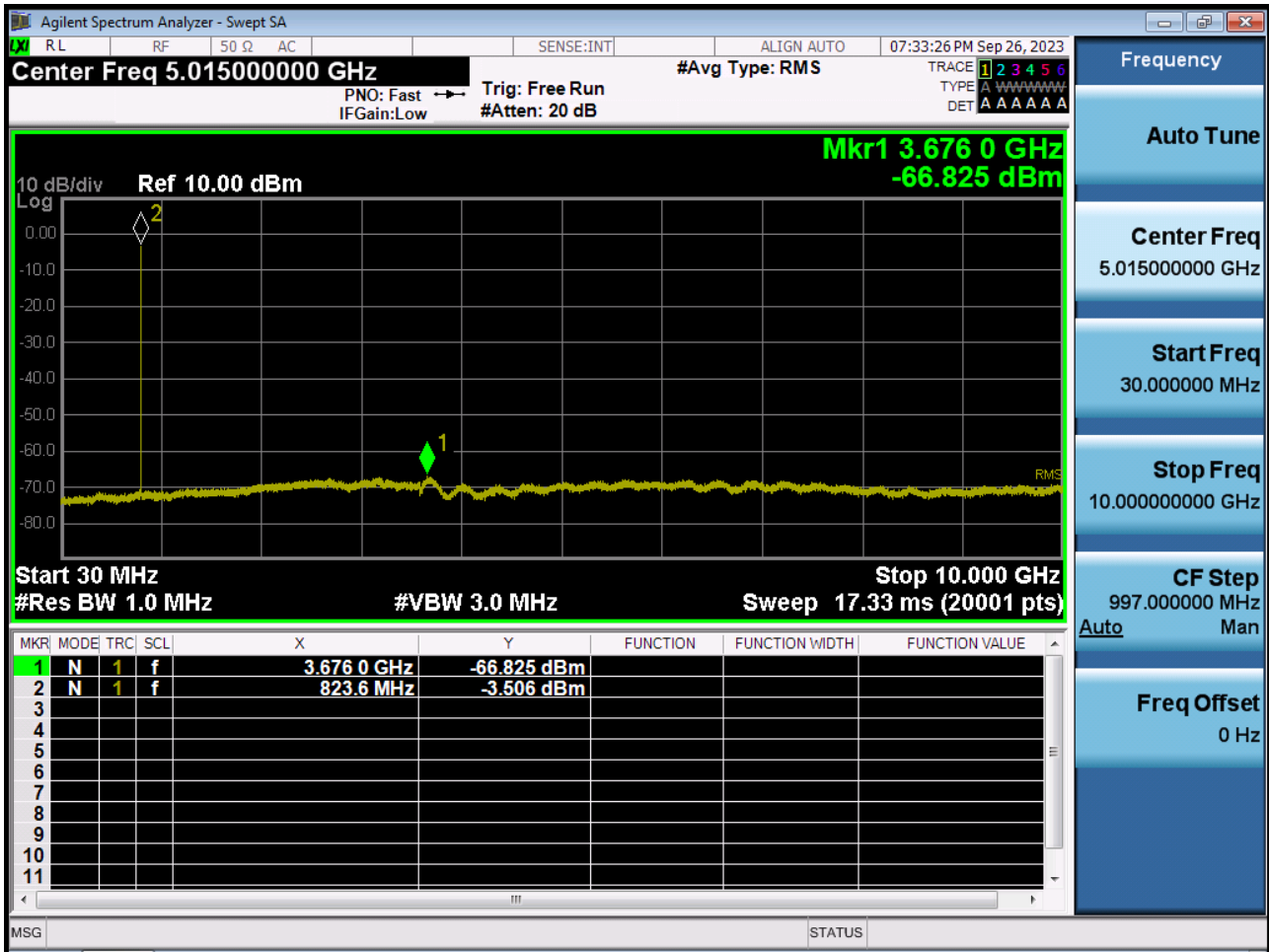


11. TEST PLOTS (Main 1 Ant _STRADDLE CHANNEL)

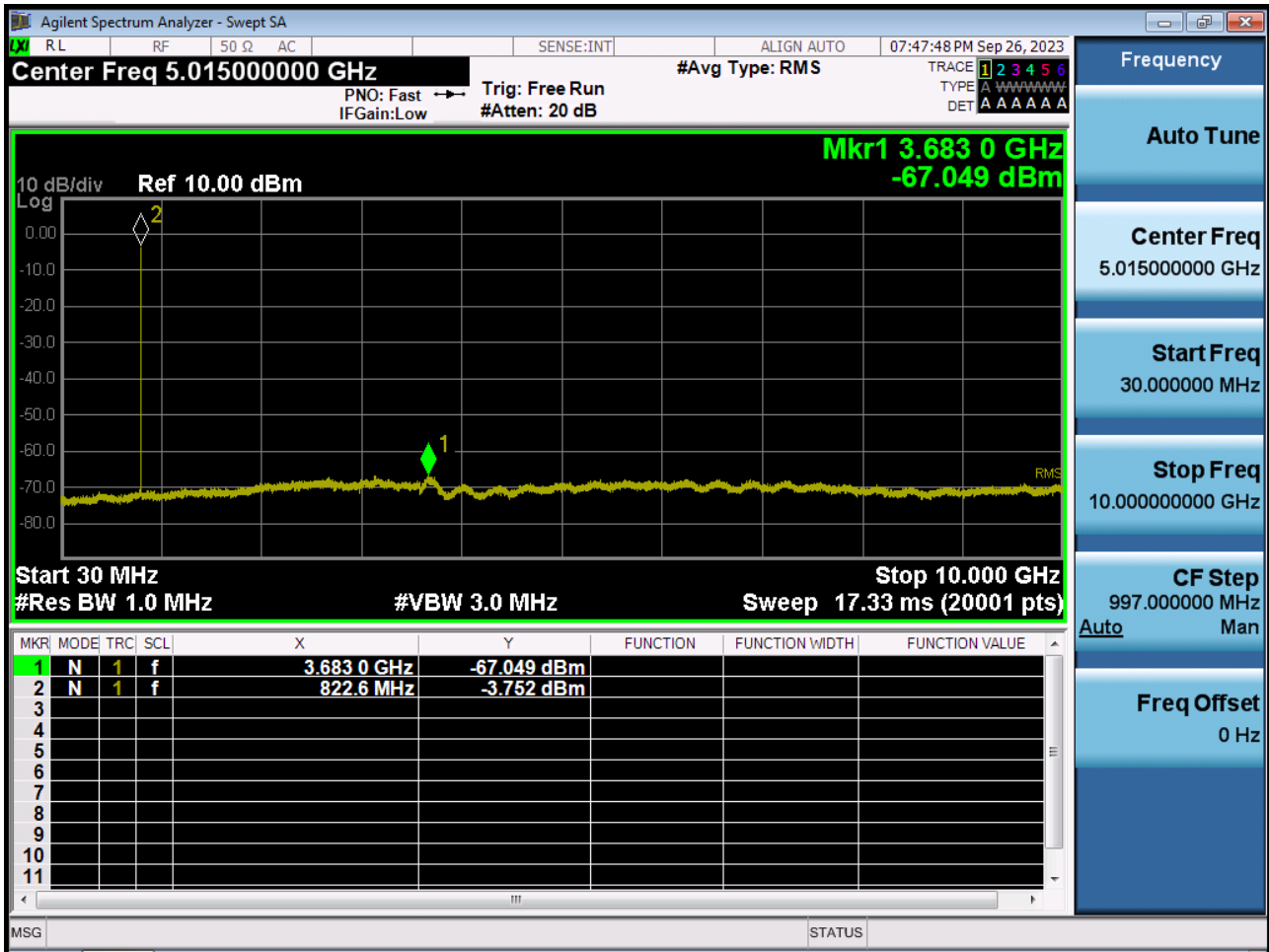
BAND 26. Conducted Spurious (1.4 MHz_QPSK_RB 1_0)



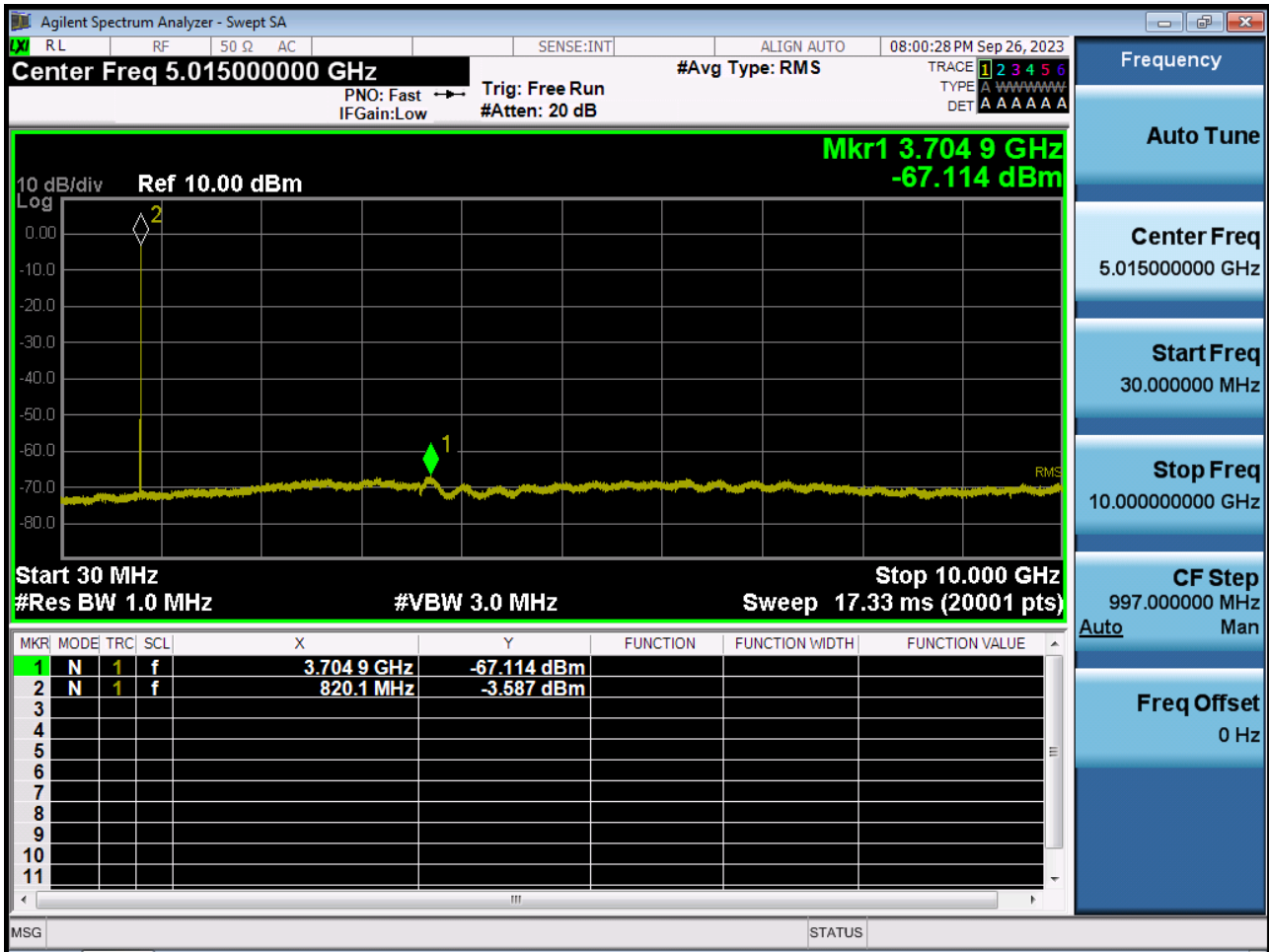
BAND 26. Conducted Spurious (3 MHz_QPSK_RB 1_0)



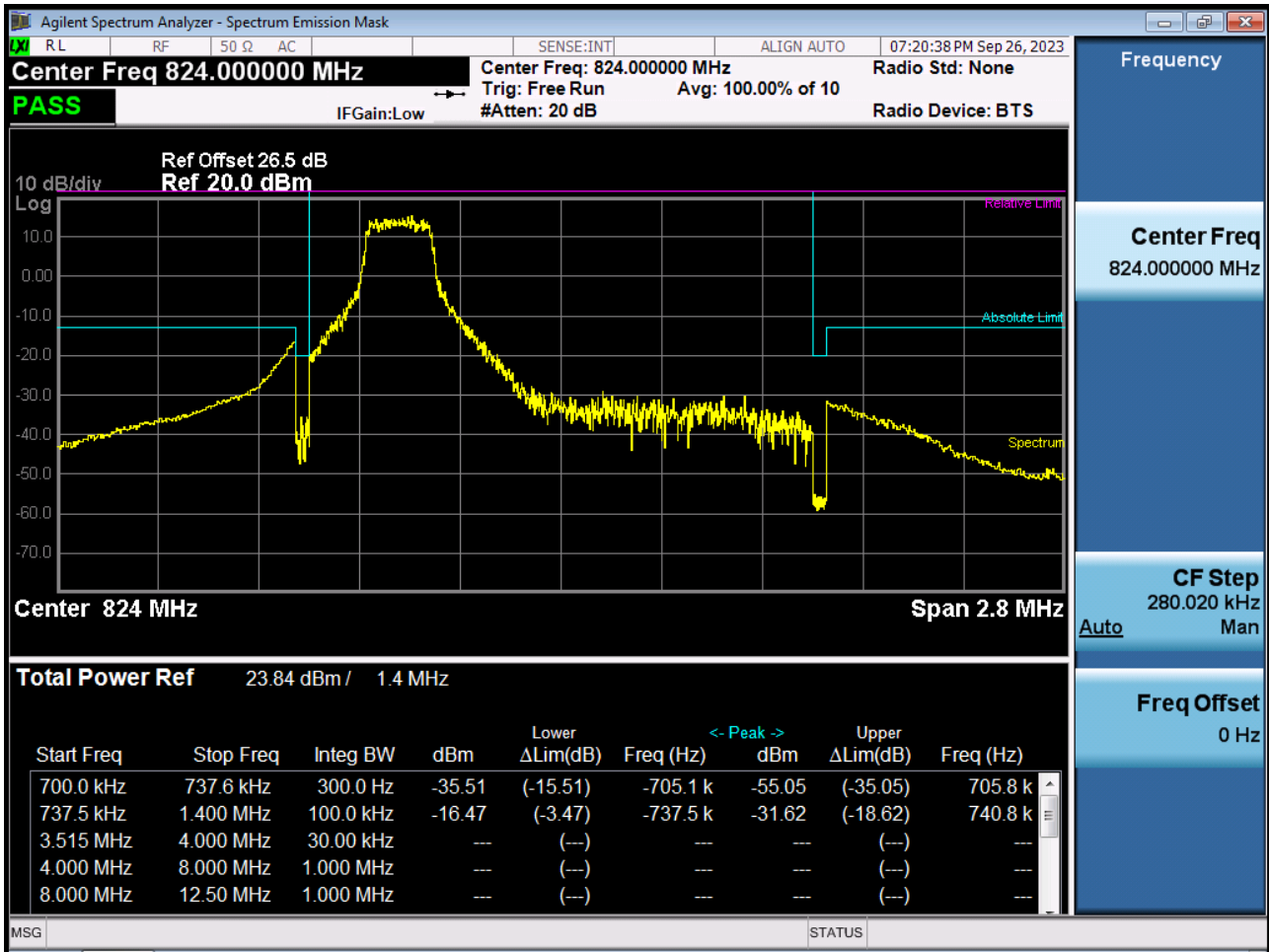
BAND 26. Conducted Spurious (5 MHz_QPSK_RB 1_0)



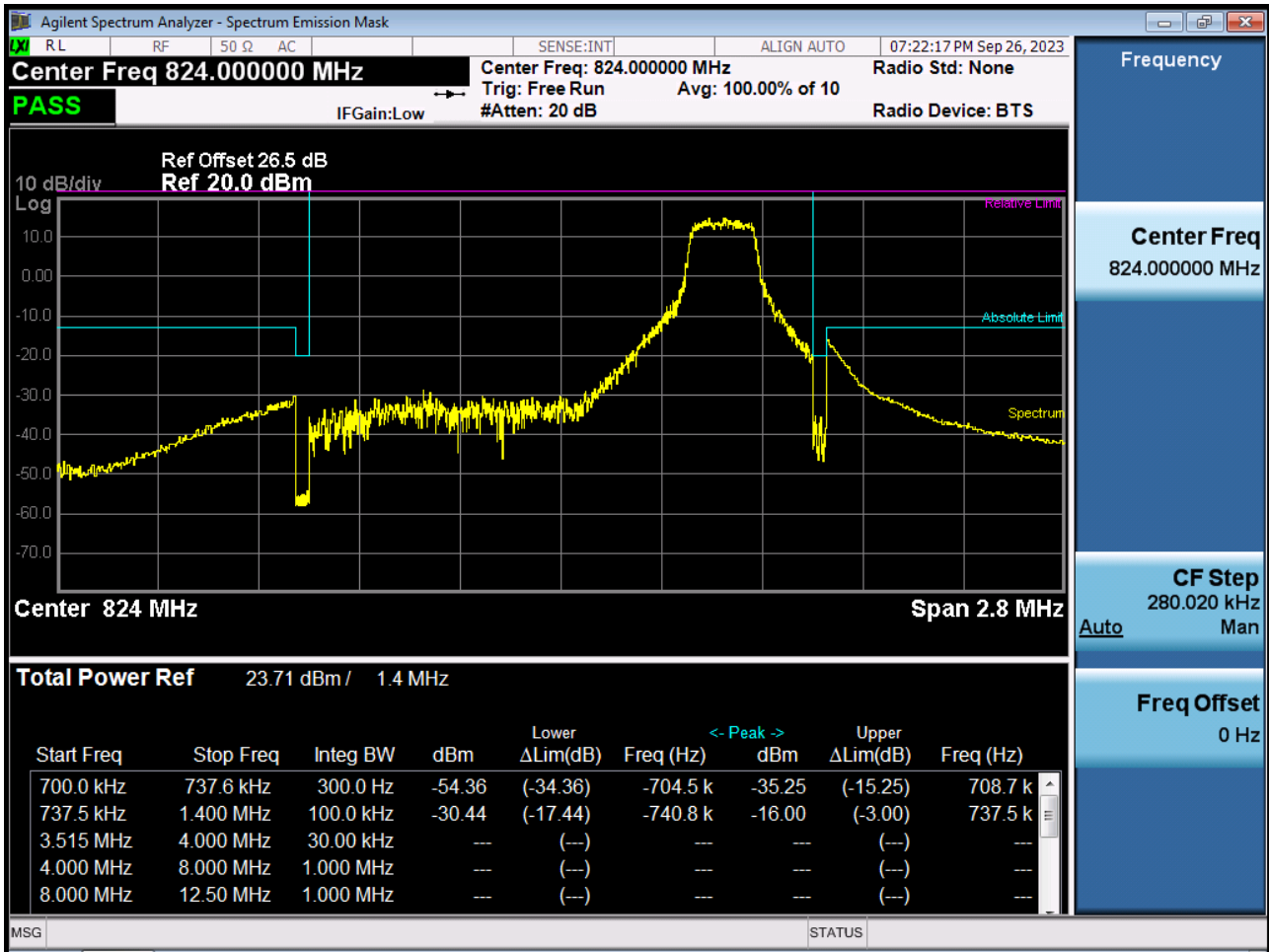
BAND 26. Conducted Spurious (10 MHz_QPSK_RB 1_0)



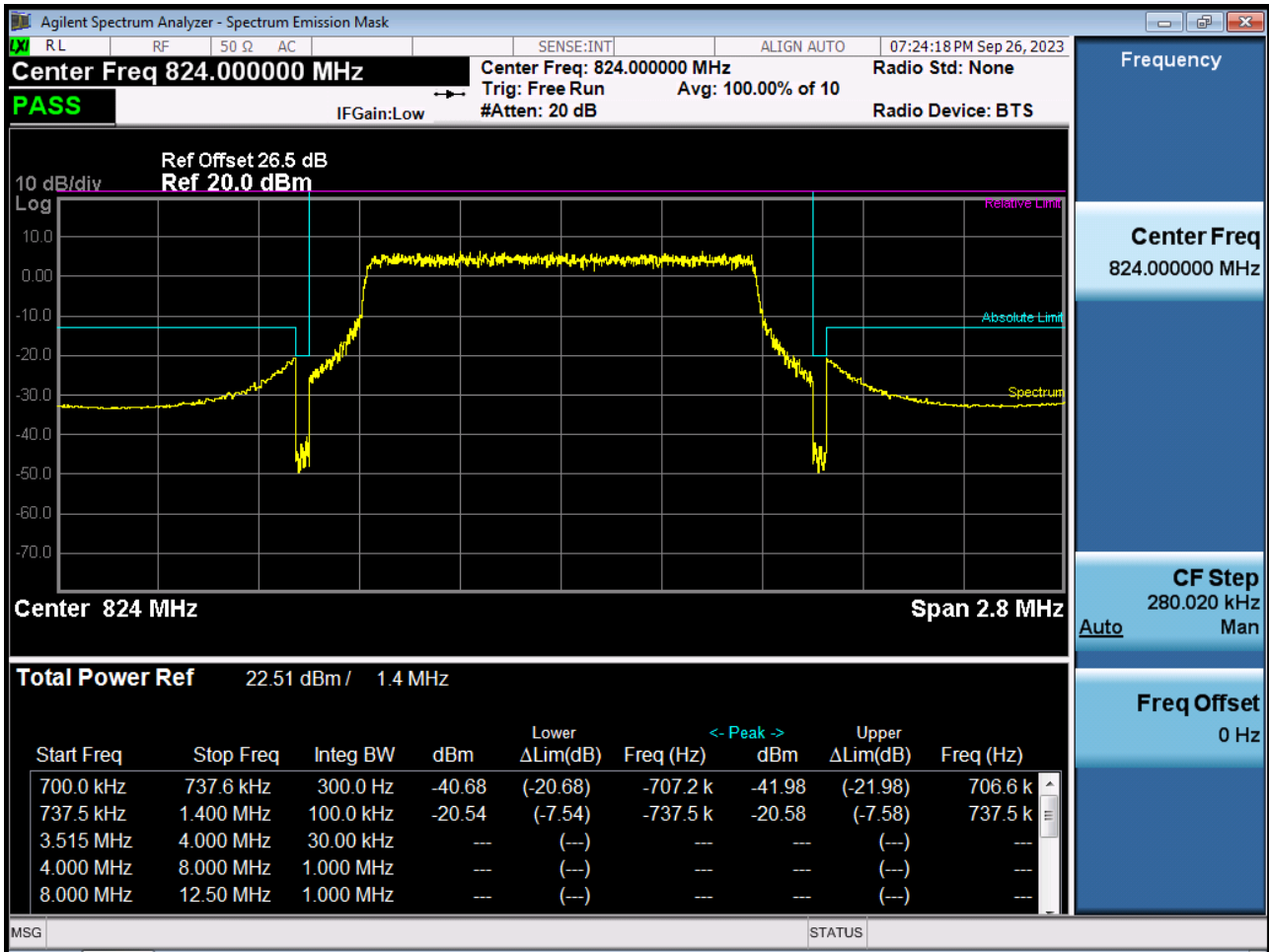
BAND 26. Channel Edge (1.4 MHz_QPSK_RB 1_0)



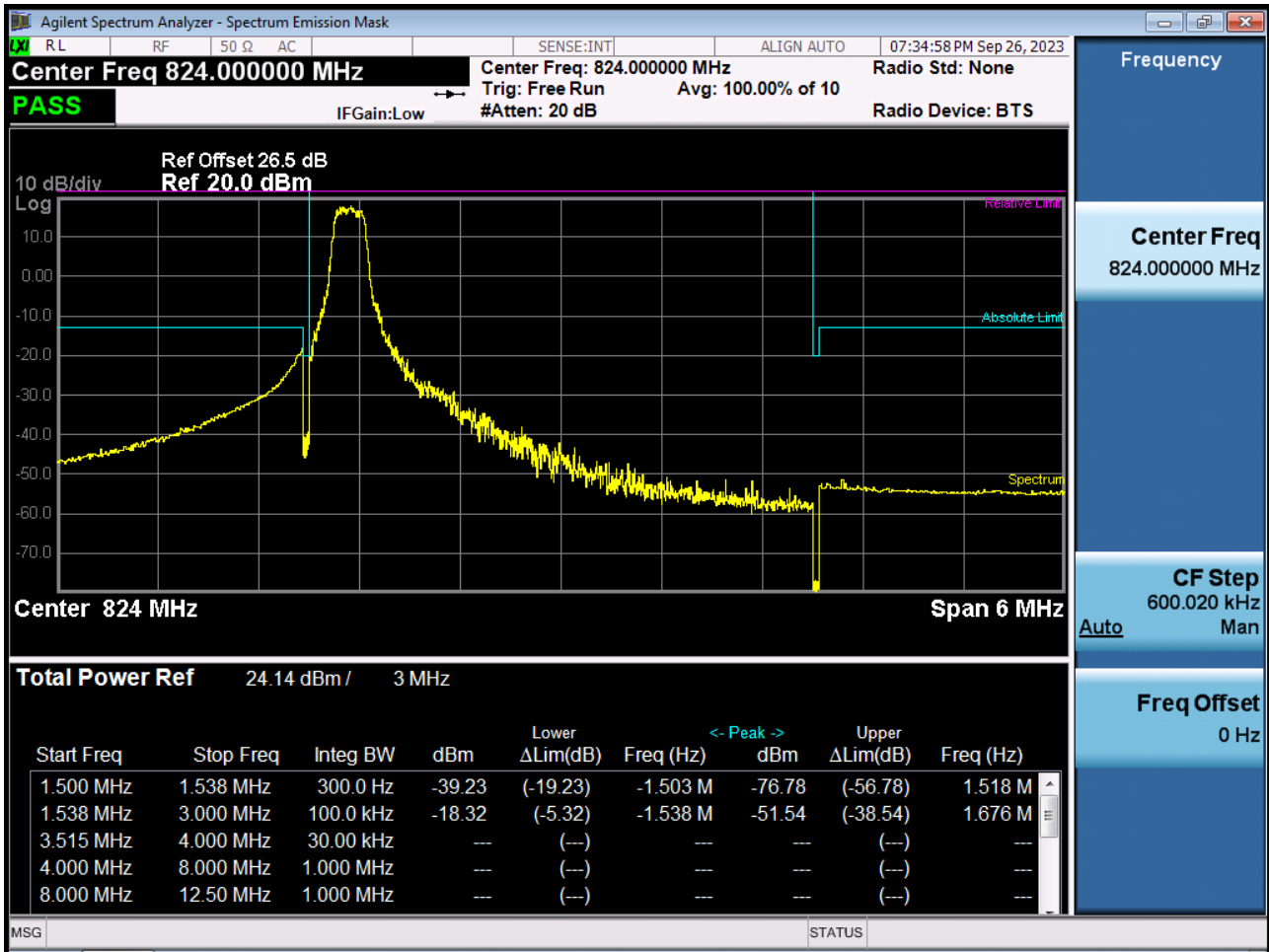
BAND 26. Channel Edge (1.4 MHz_QPSK_RB 1_5)



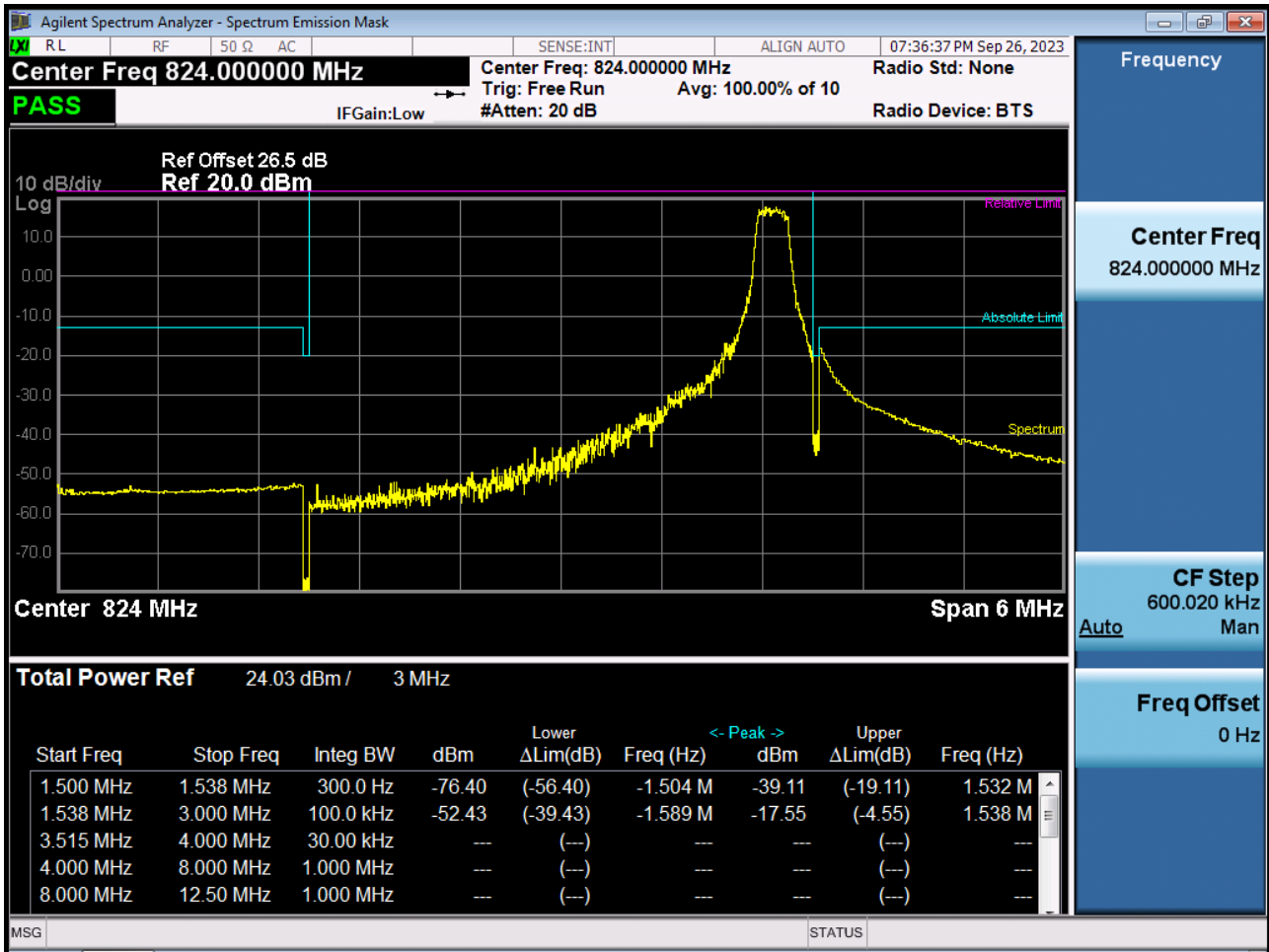
BAND 26. Channel Edge (1.4 MHz_QPSK_Full RB)



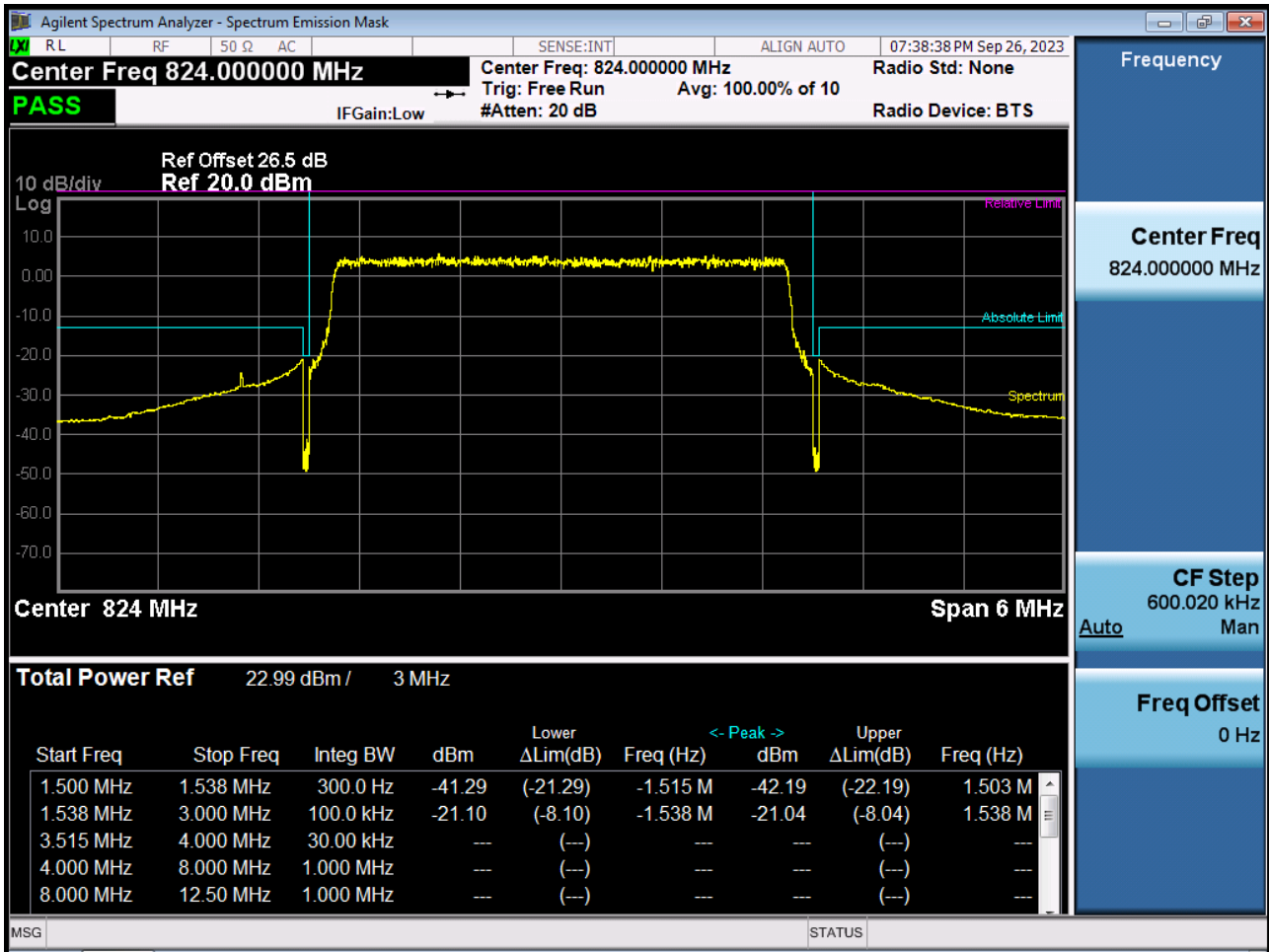
BAND 26. Channel Edge (3 MHz_QPSK_RB 1_0)



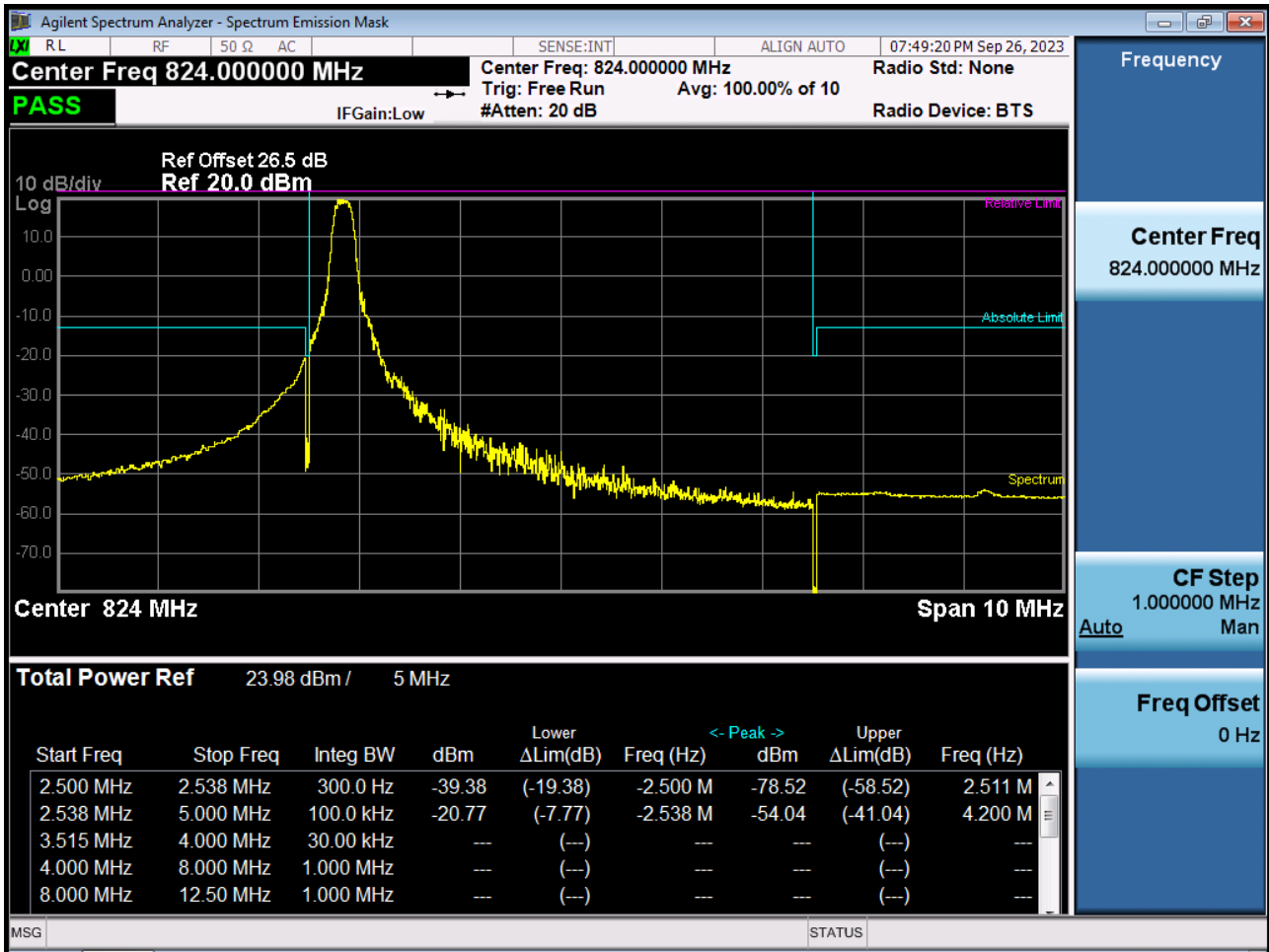
BAND 26. Channel Edge (3 MHz_QPSK_RB 1_14)



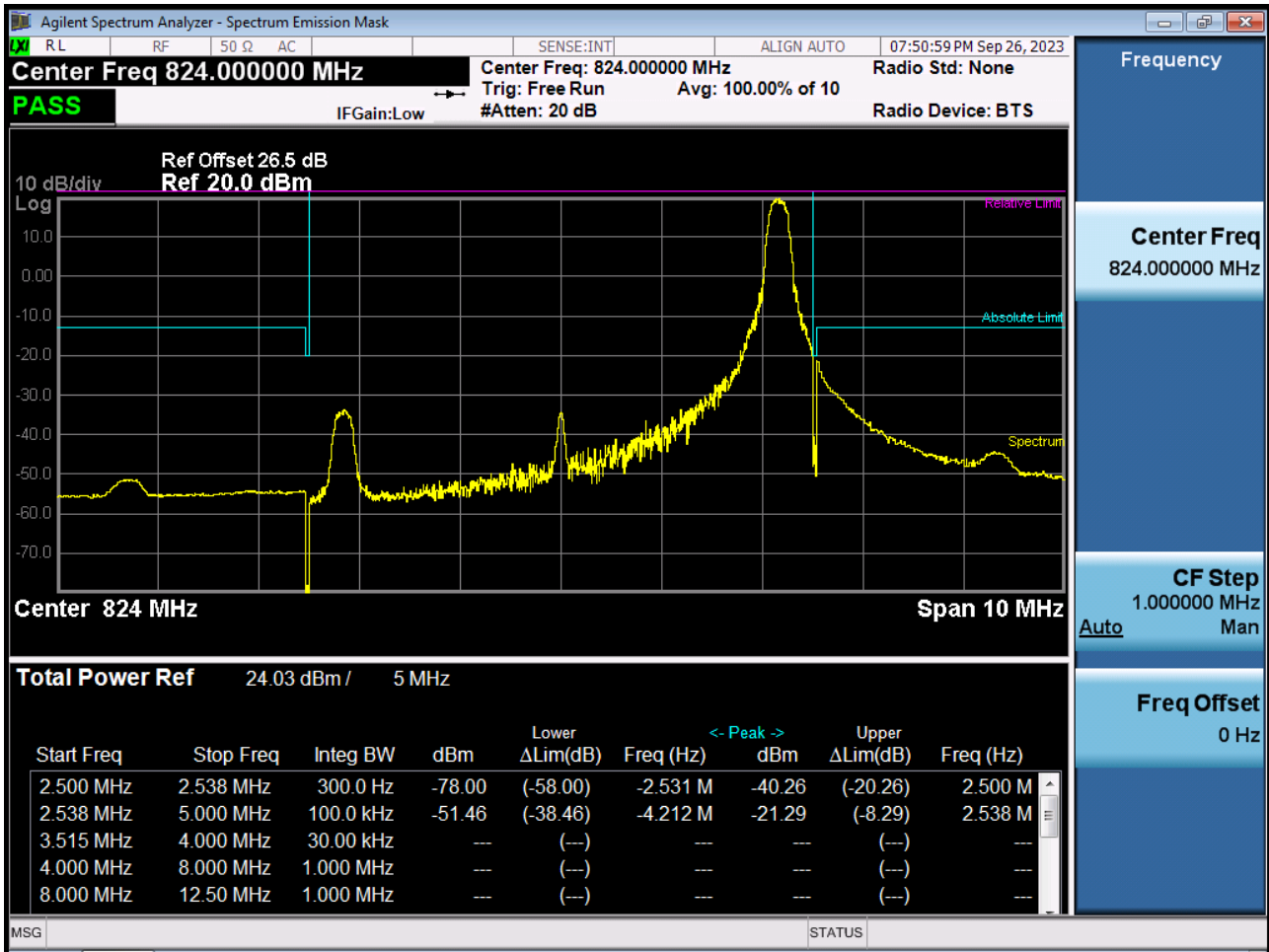
BAND 26. Channel Edge (3 MHz_QPSK_Full RB)



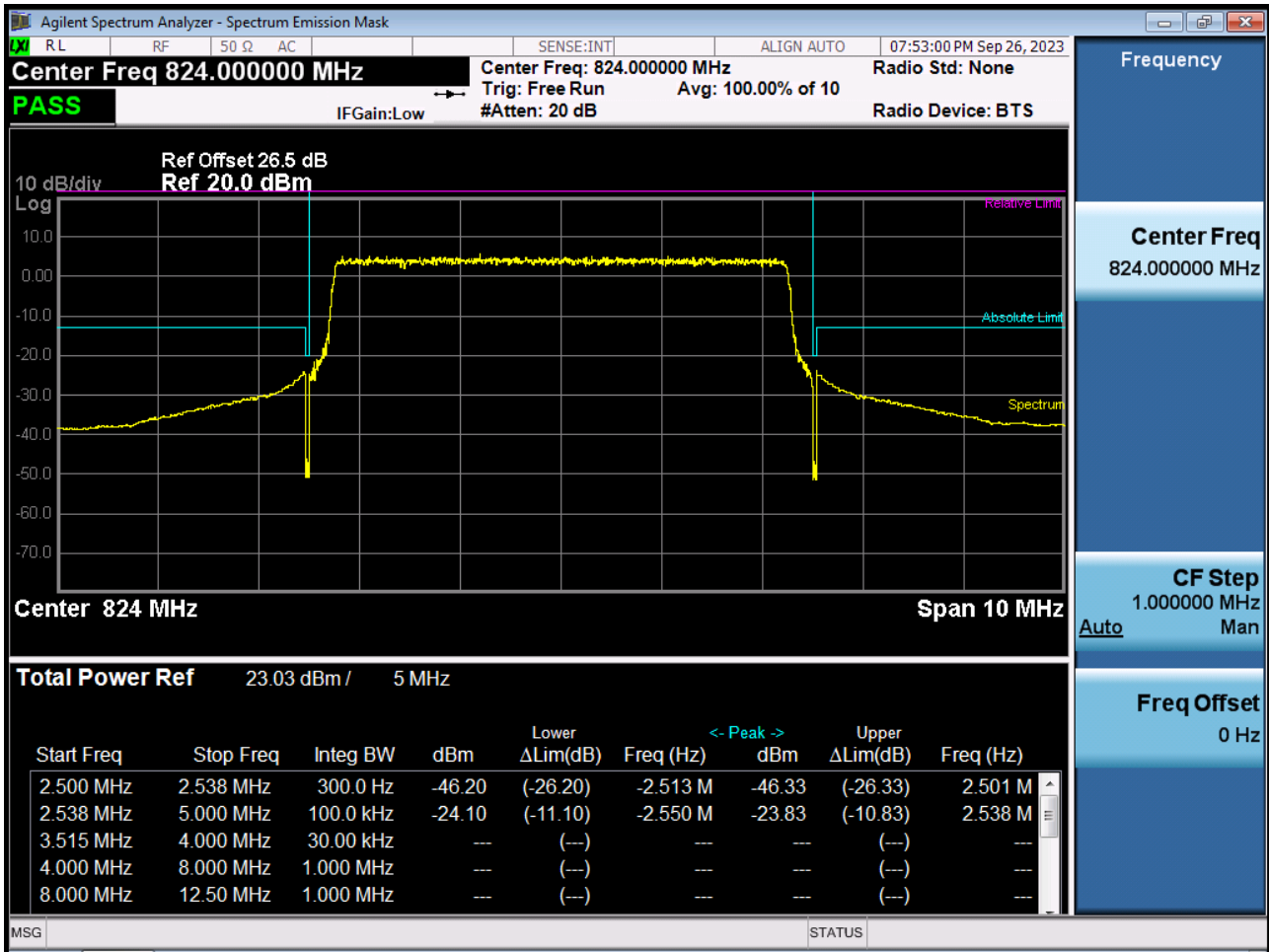
BAND 26. Channel Edge (5 MHz_QPSK_RB 1_0)



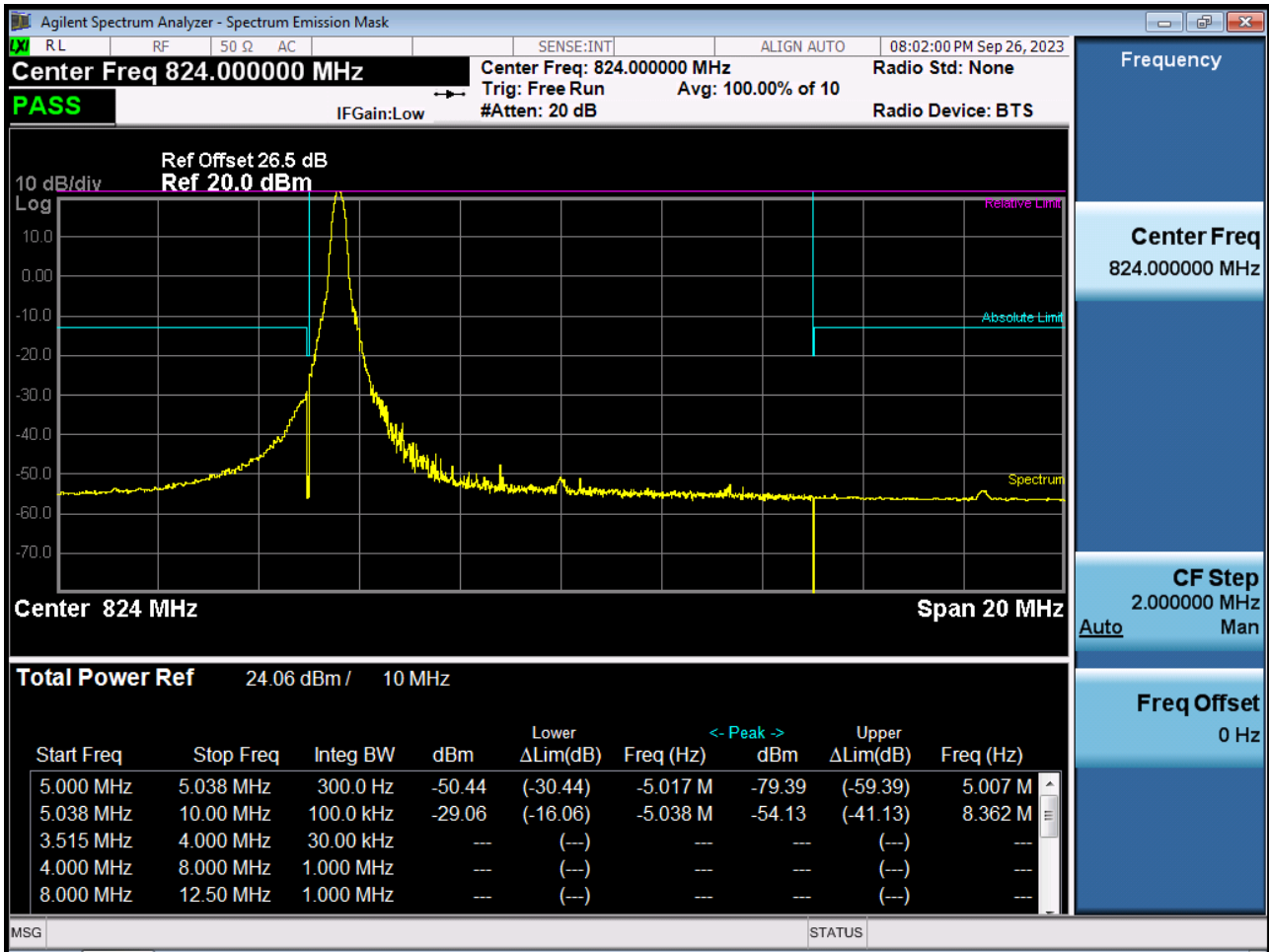
BAND 26. Channel Edge (5 MHz_QPSK_RB 1_24)



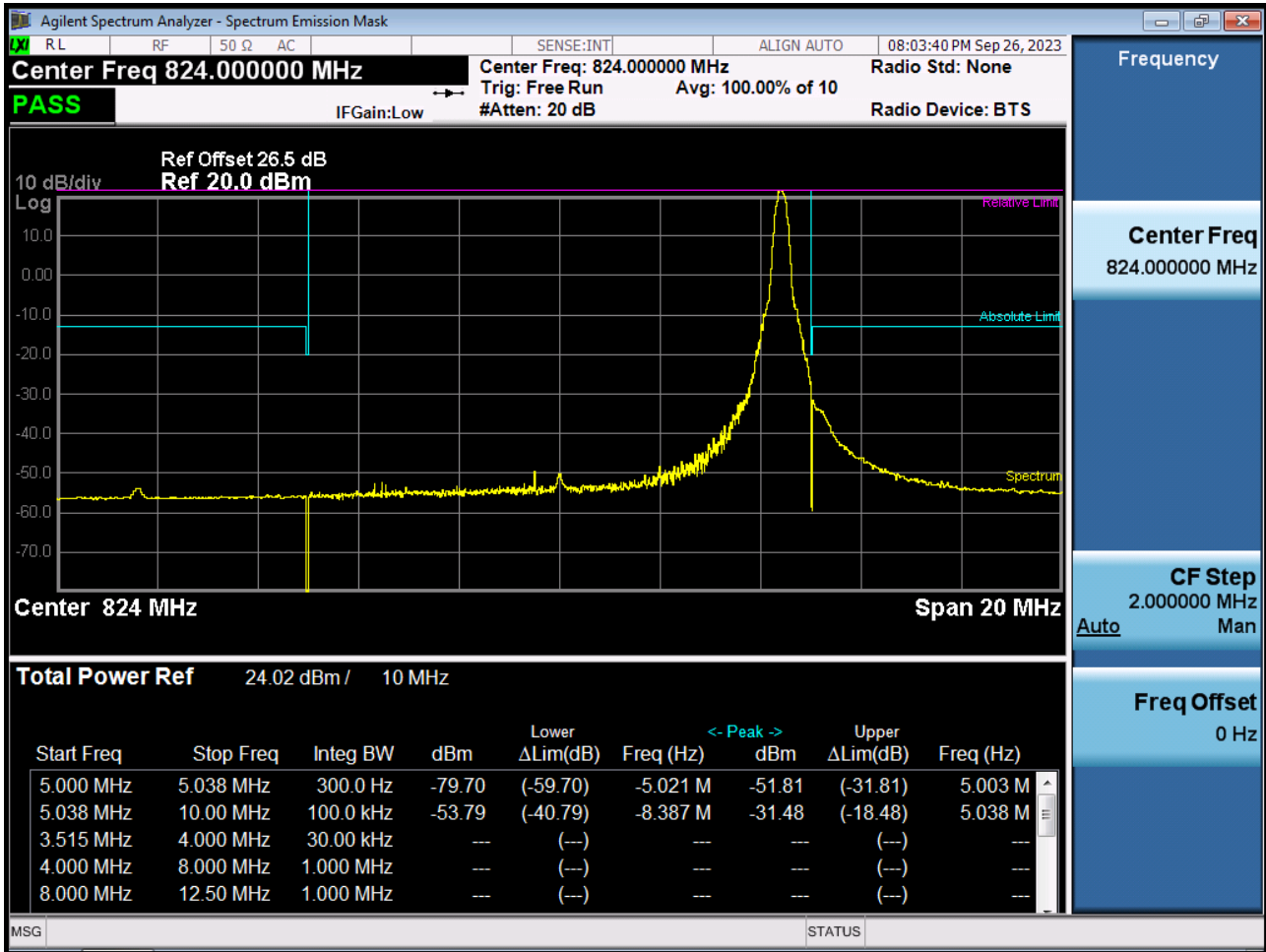
BAND 26. Channel Edge (5 MHz_QPSK_Full RB)



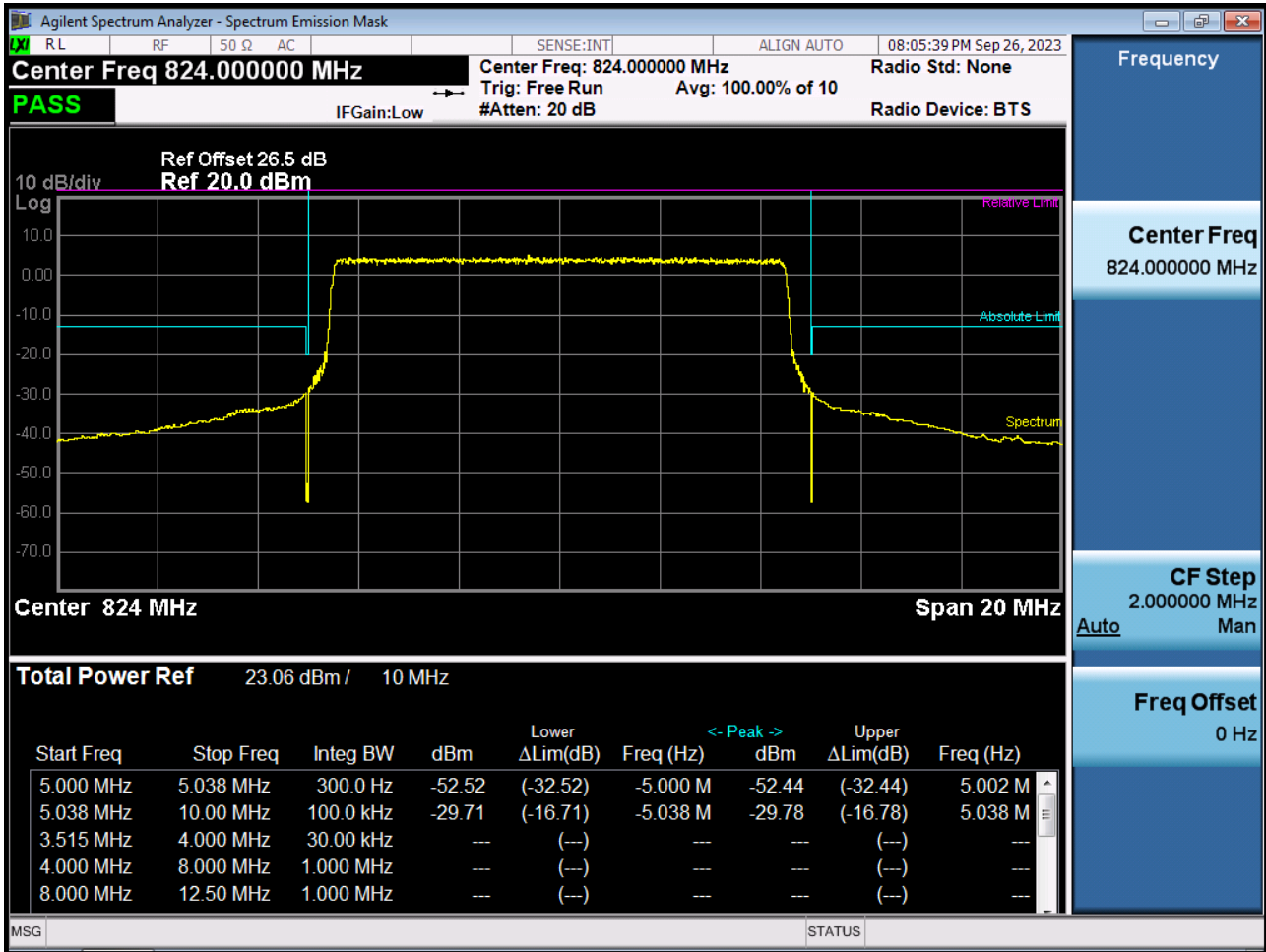
BAND 26. Channel Edge (10 MHz_QPSK_RB 1_0)



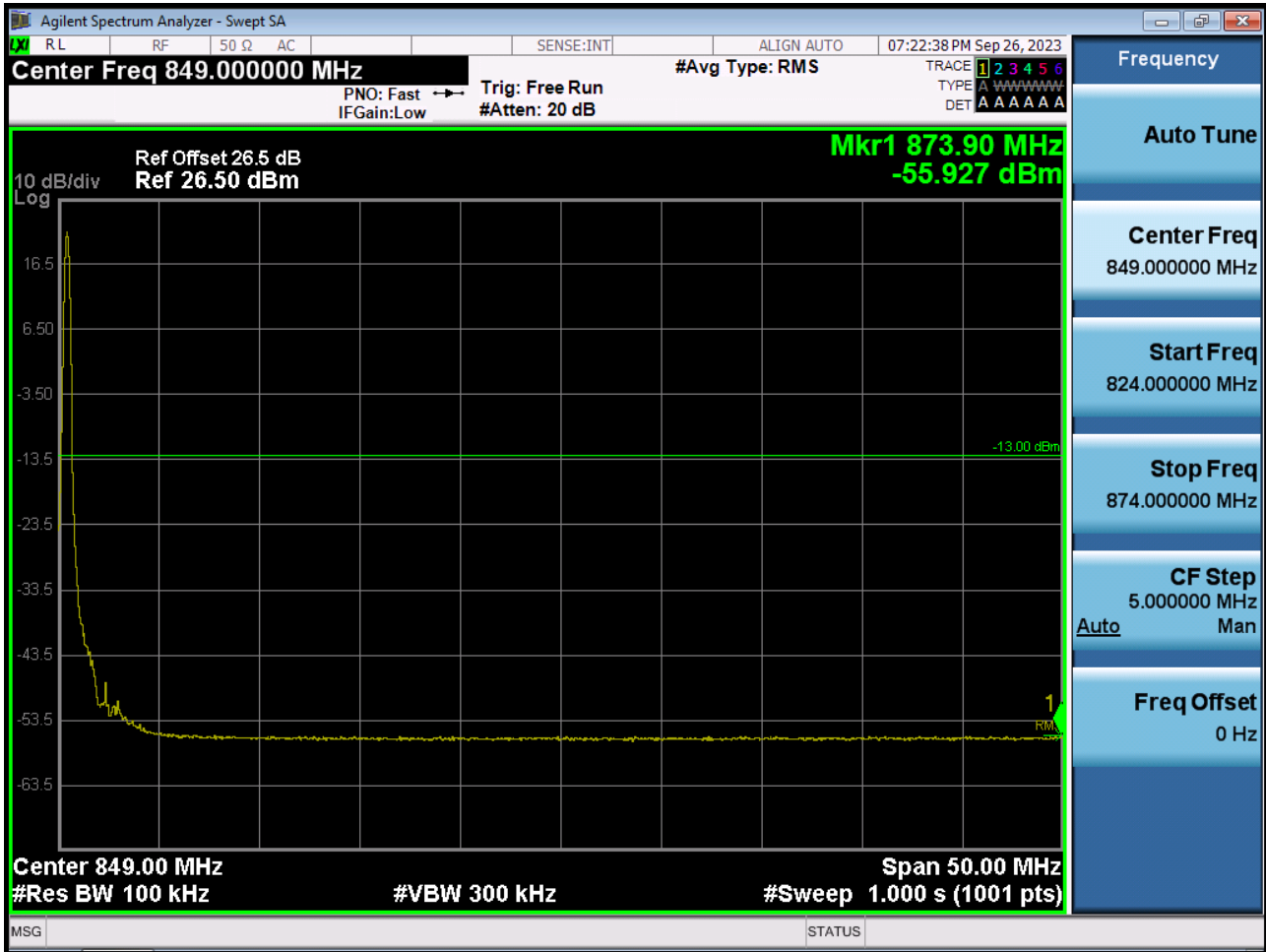
BAND 26. Channel Edge (10 MHz_QPSK_RB 1_49)



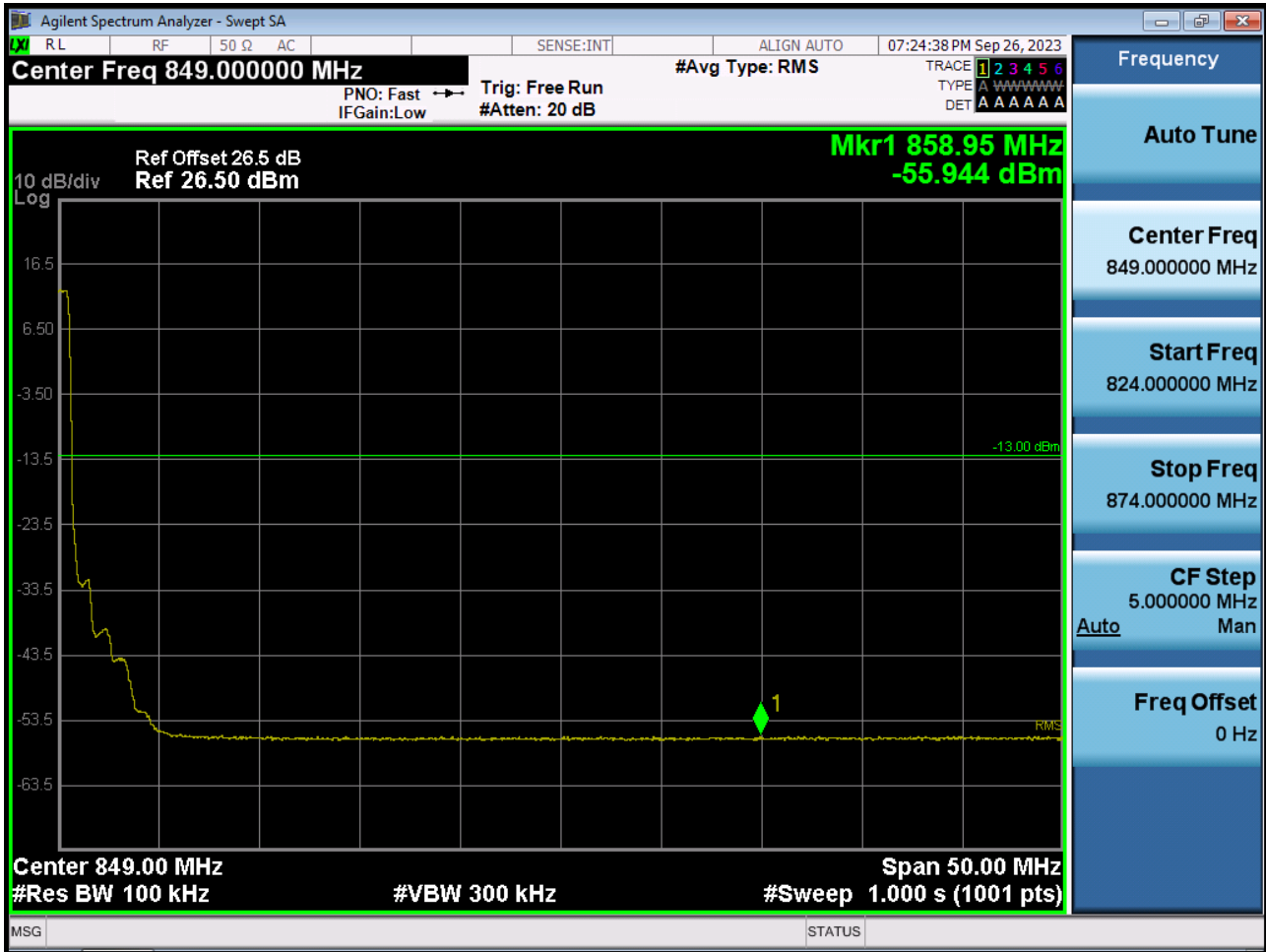
BAND 26. Channel Edge (10 MHz_QPSK_Full RB)



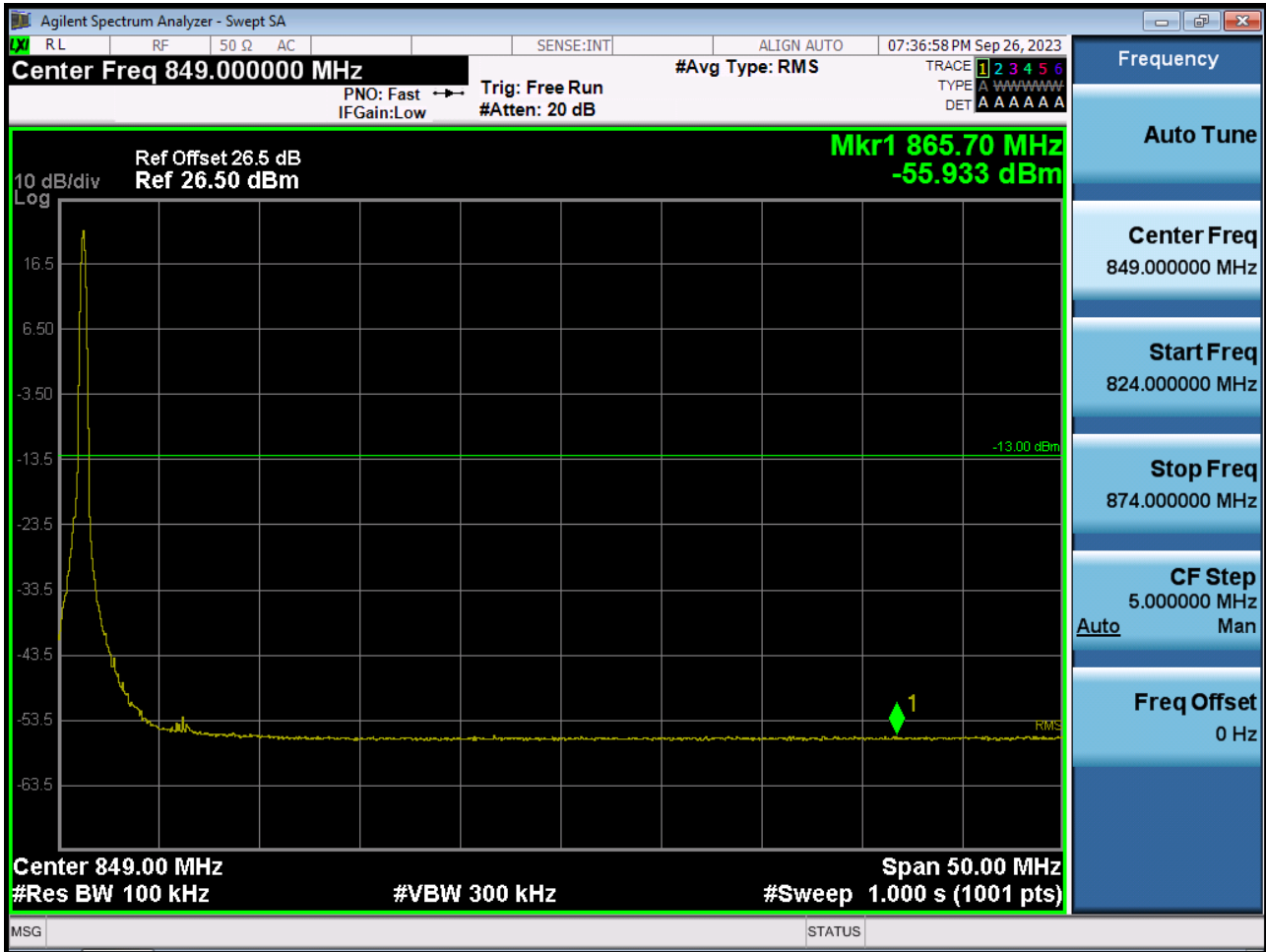
BAND 26. Band Edge (1.4 MHz_QPSK_RB 1_5)



BAND 26. Band Edge (1.4 MHz_QPSK_FullIRB)



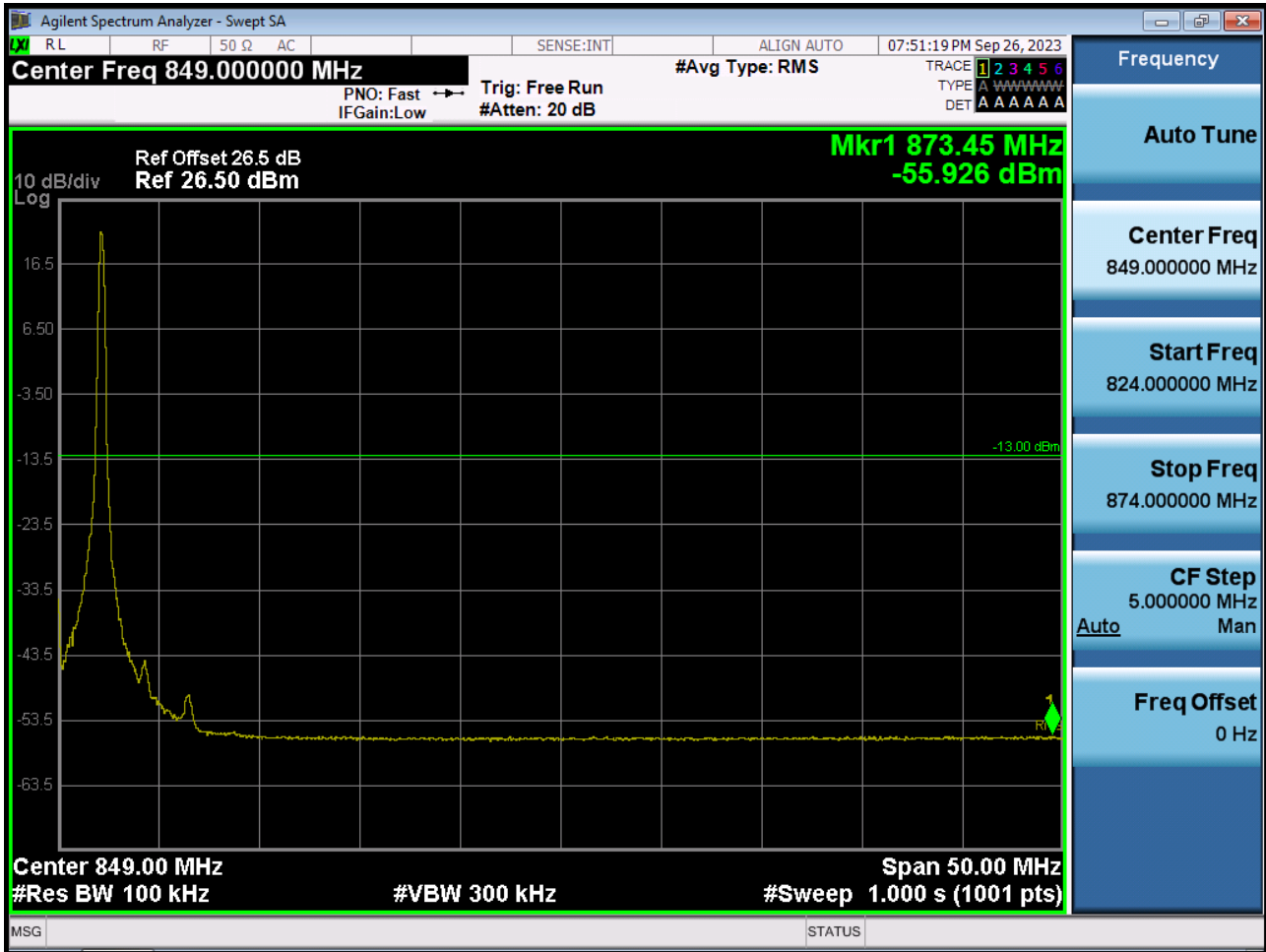
BAND 26. Band Edge (3 MHz_QPSK_RB 1_14)



BAND 26. Band Edge (3 MHz_QPSK_ Full RB)



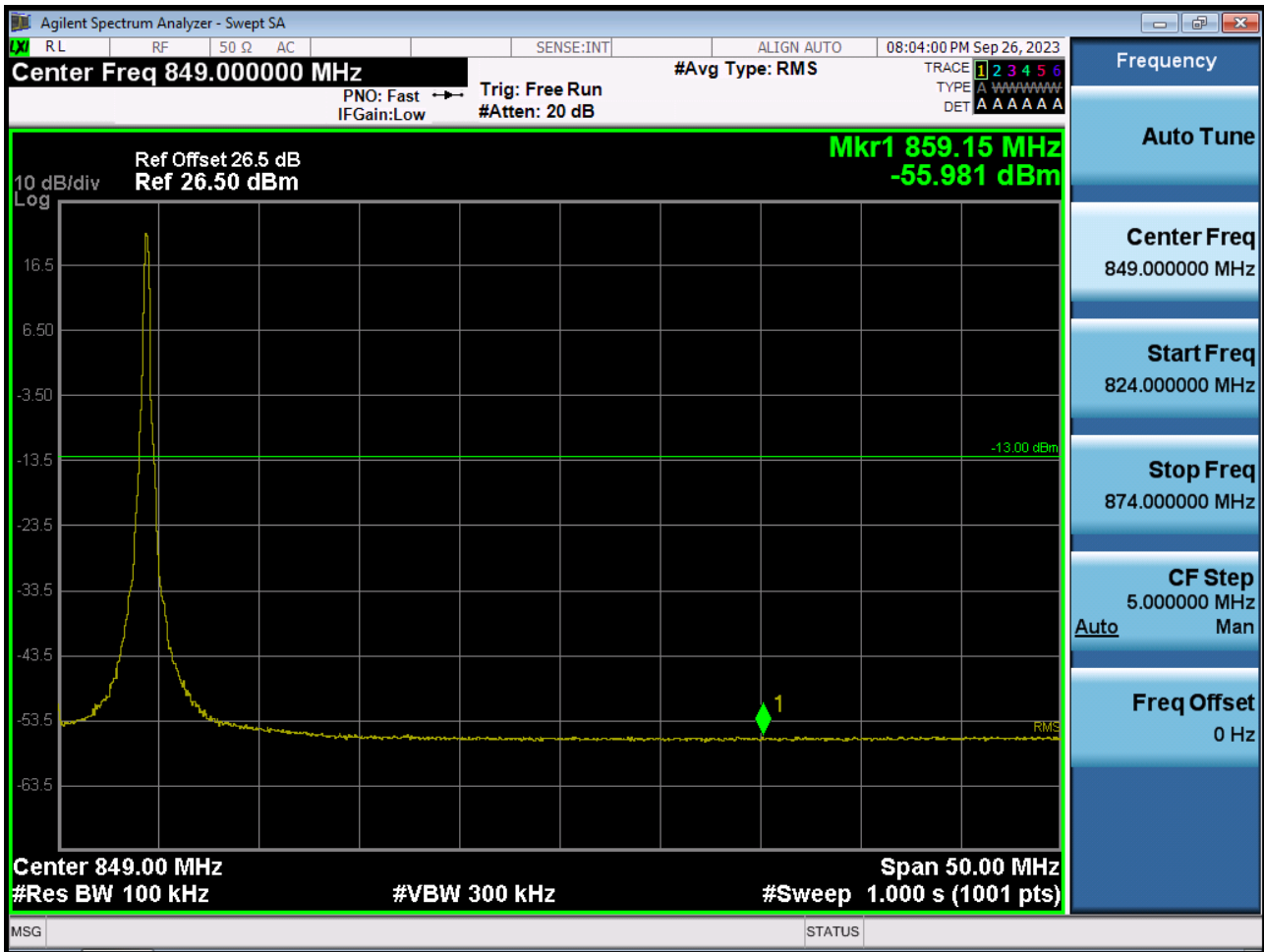
BAND 26. Band Edge (5 MHz_QPSK_RB 1_24)



BAND 26. Band Edge (5 MHz_QPSK_ Full RB)



BAND 26. Band Edge (10 MHz_QPSK_RB 1_49)

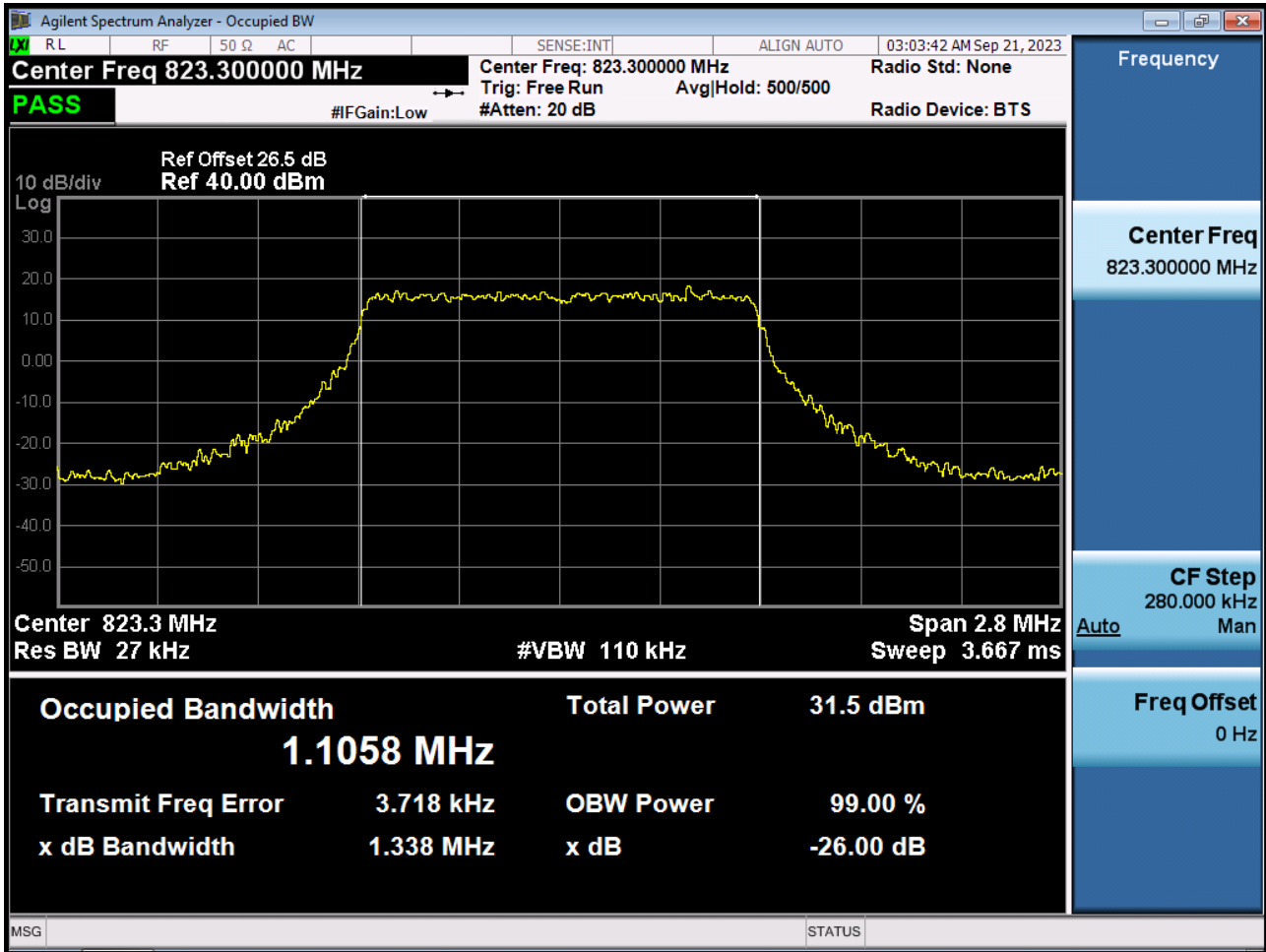


BAND 26. Band Edge (10 MHz_QPSK_ Full RB)

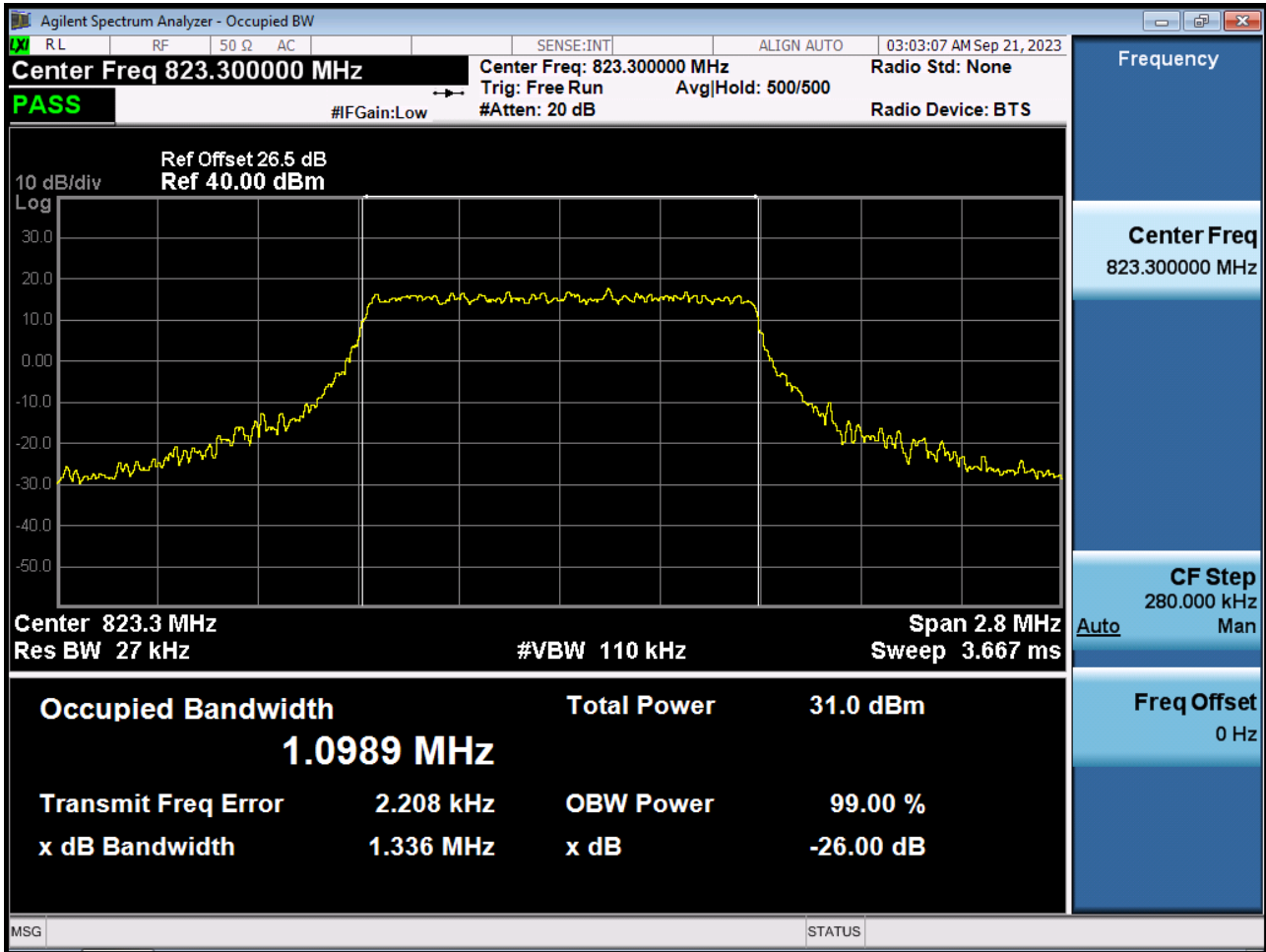


12. TEST PLOTS(Sub 1 Ant)

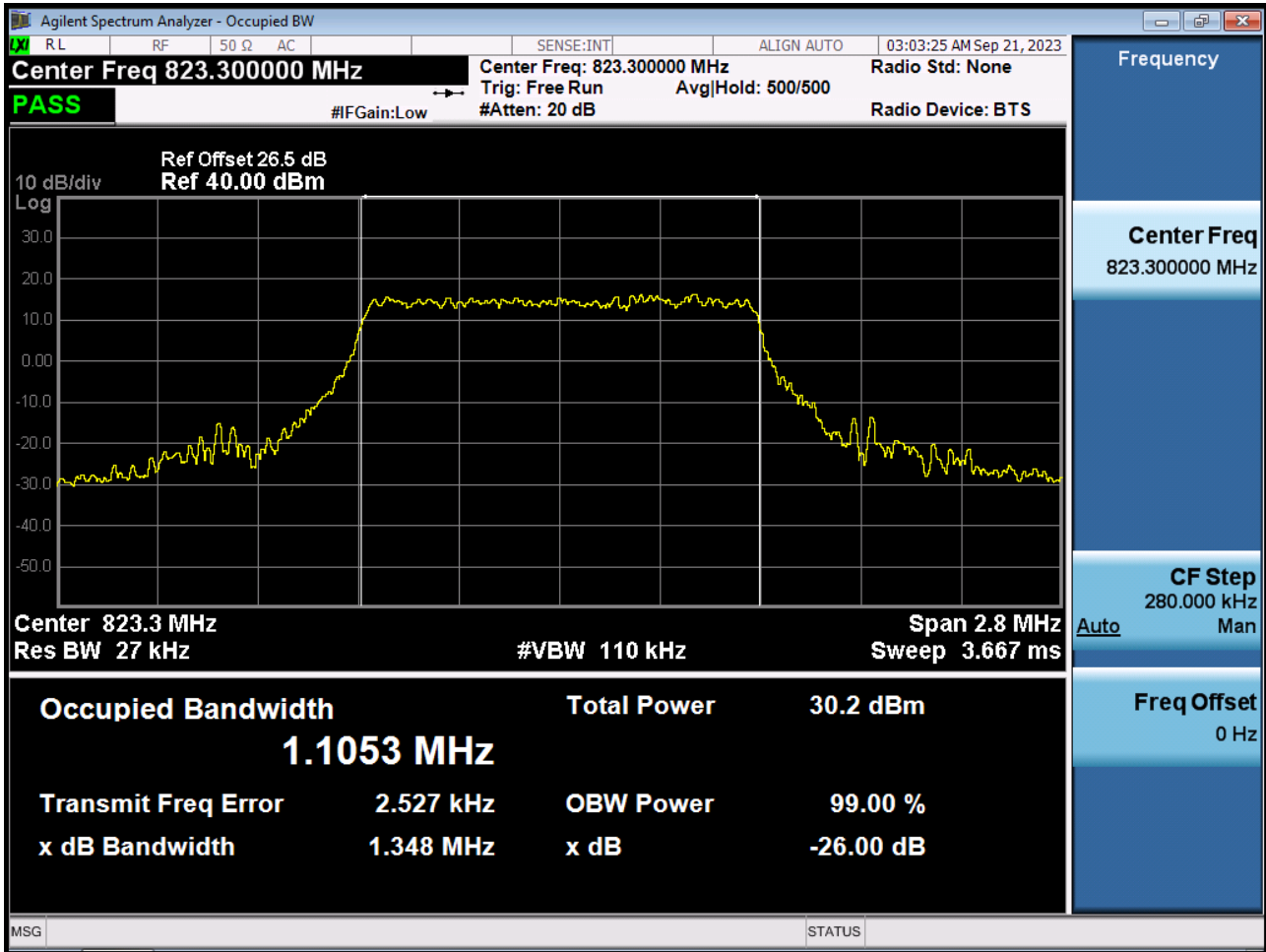
BAND 26. Occupied Bandwidth Plot (1.4 M BW Ch.26783 QPSK RB 6_0)



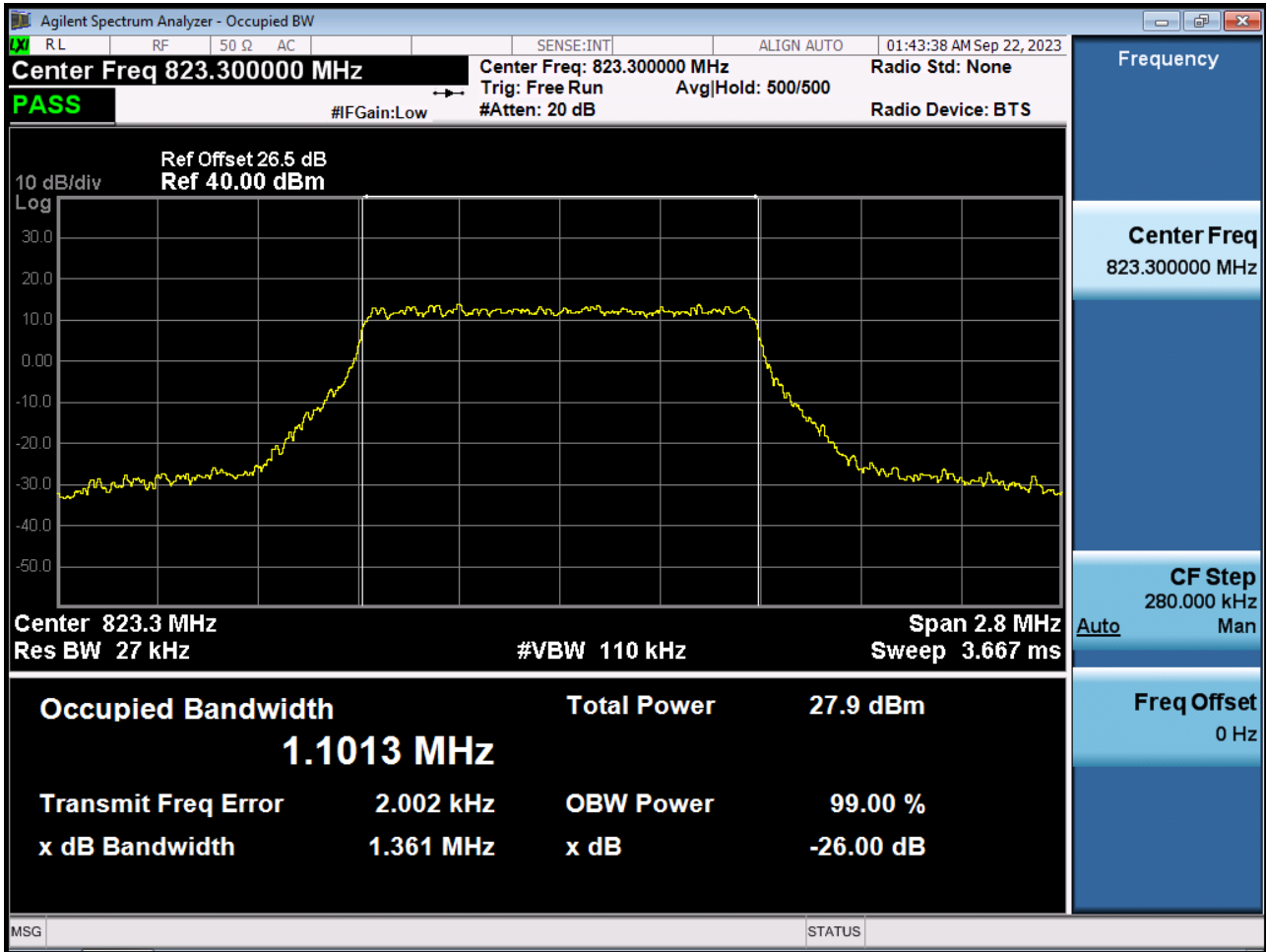
BAND 26. Occupied Bandwidth Plot (1.4 M BW Ch.26783 16QAM RB 6_0)



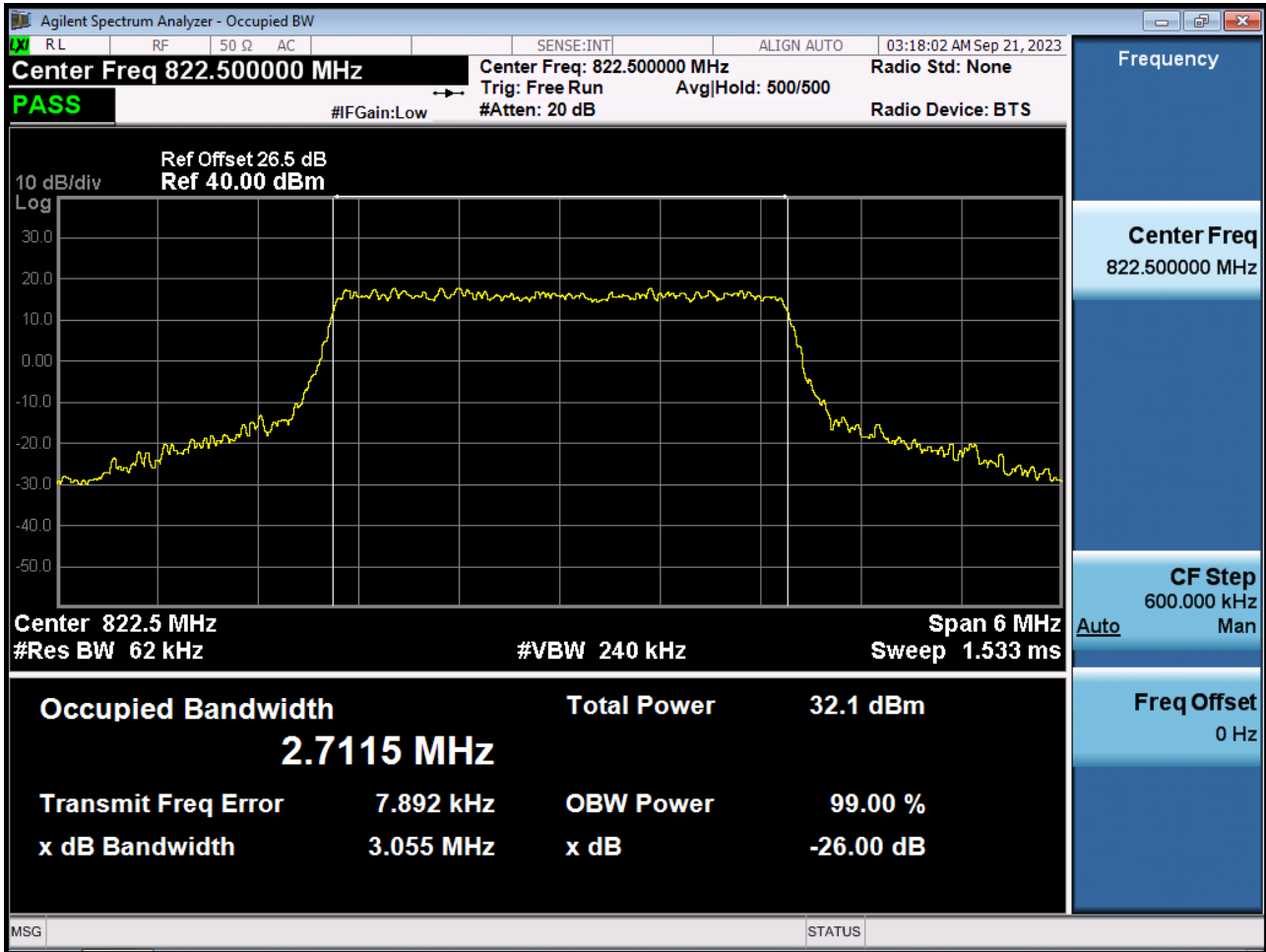
BAND 26. Occupied Bandwidth Plot (1.4 M BW Ch.26783 64QAM RB 6_0)



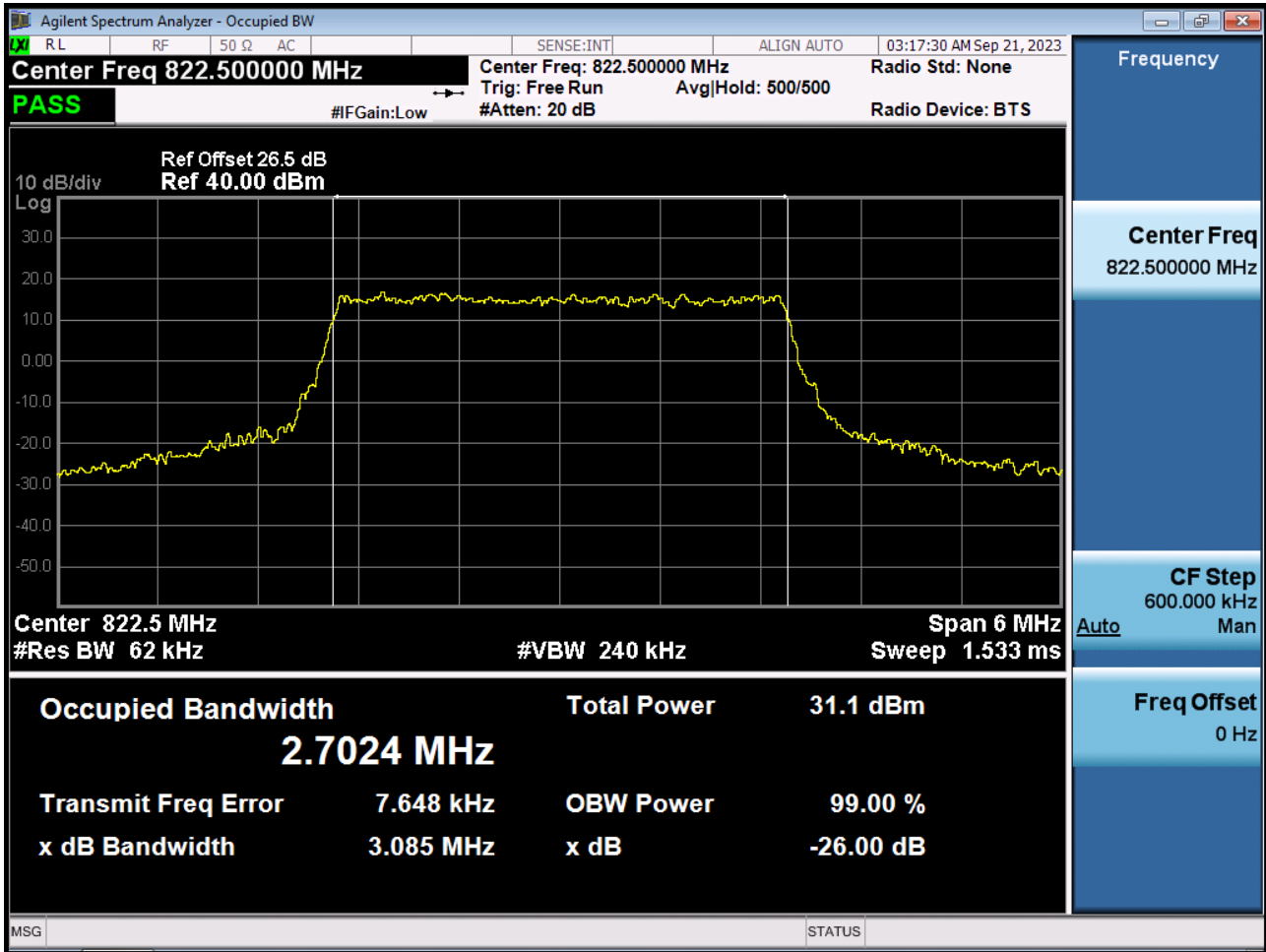
BAND 26. Occupied Bandwidth Plot (1.4 M BW Ch.26783 256QAM RB 6_0)



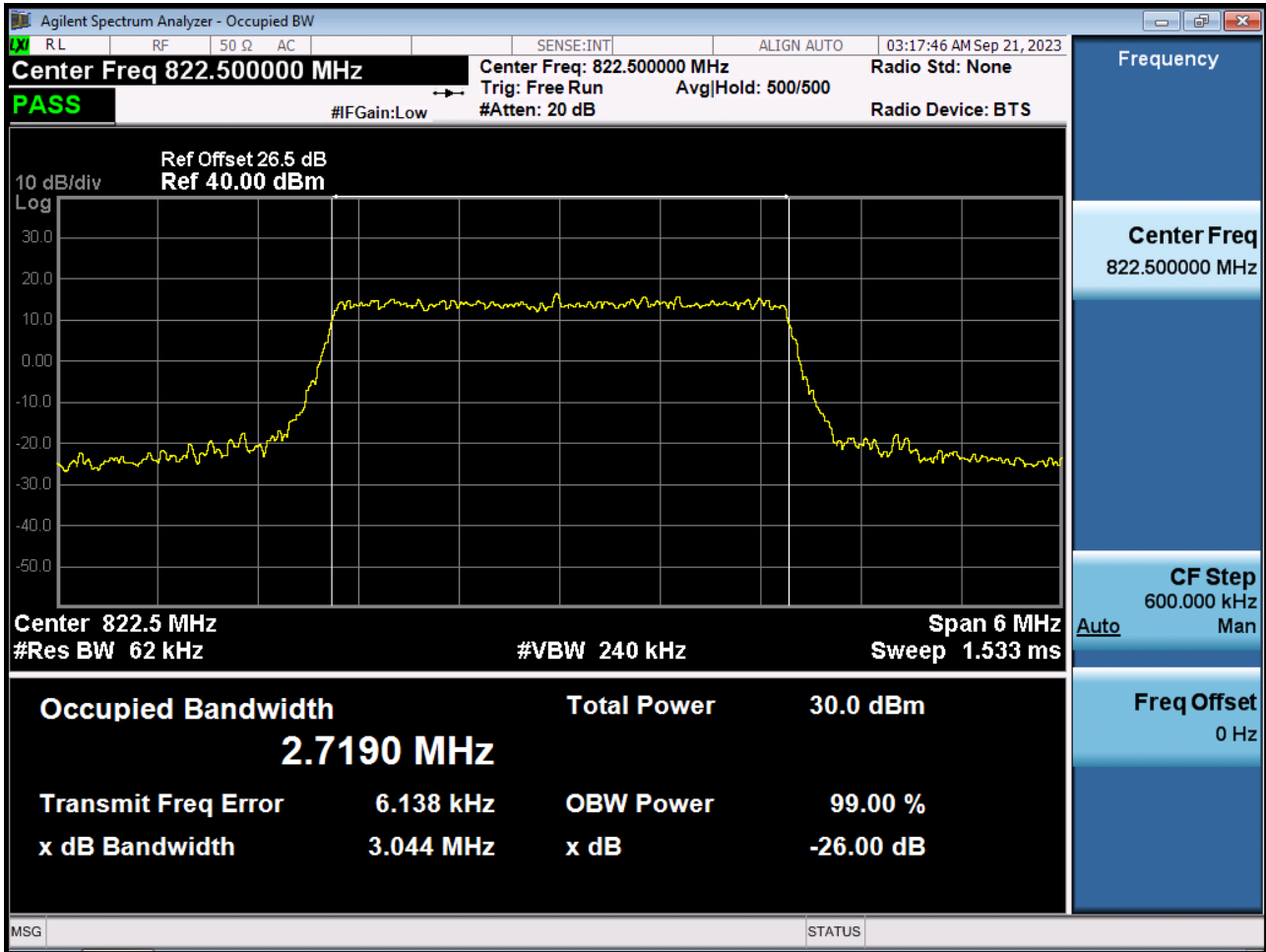
BAND 26. Occupied Bandwidth Plot (3 M BW Ch.26775 QPSK RB 15_0)



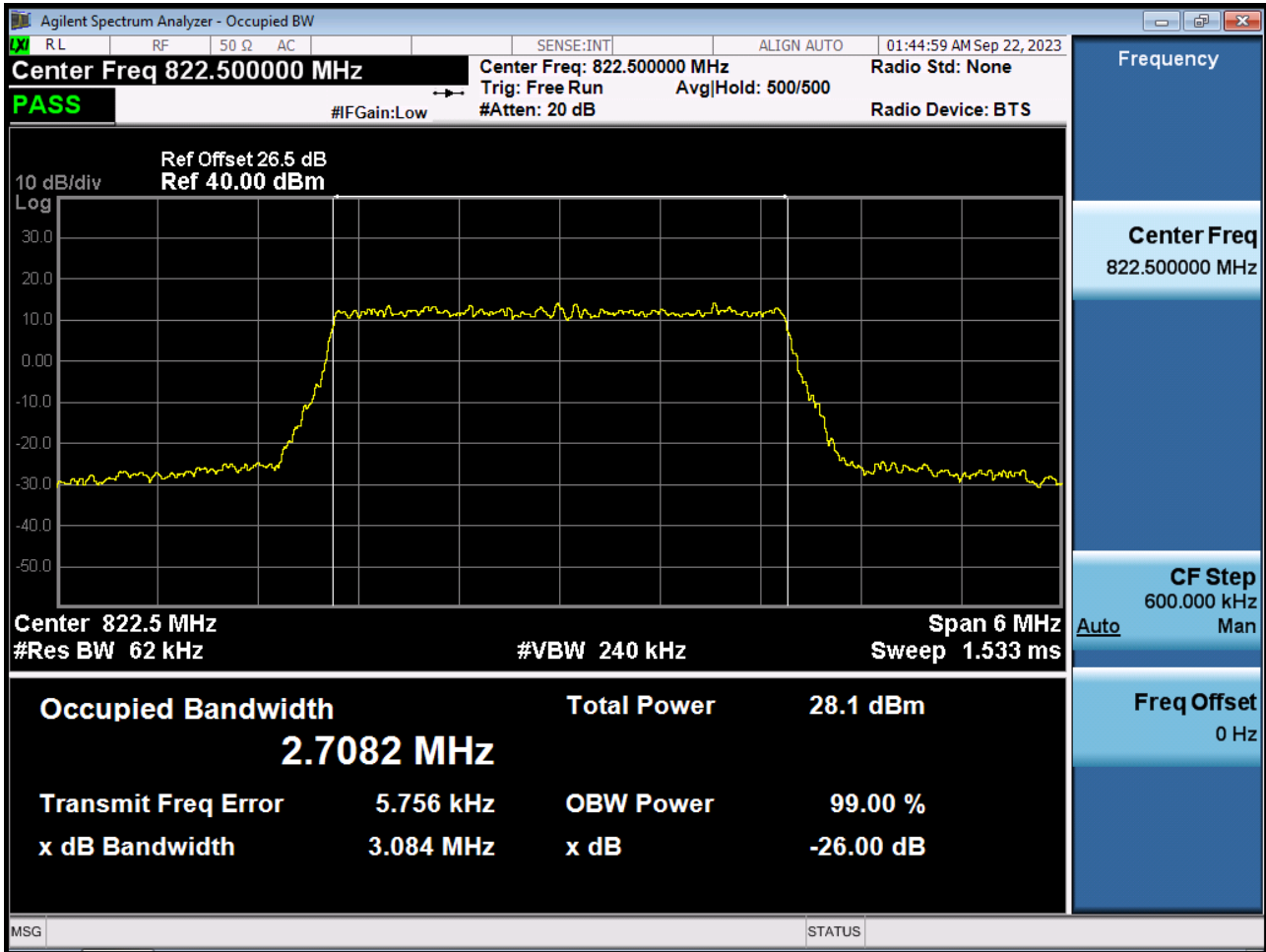
BAND 26. Occupied Bandwidth Plot (3 M BW Ch.26775 16QAM RB 15_0)



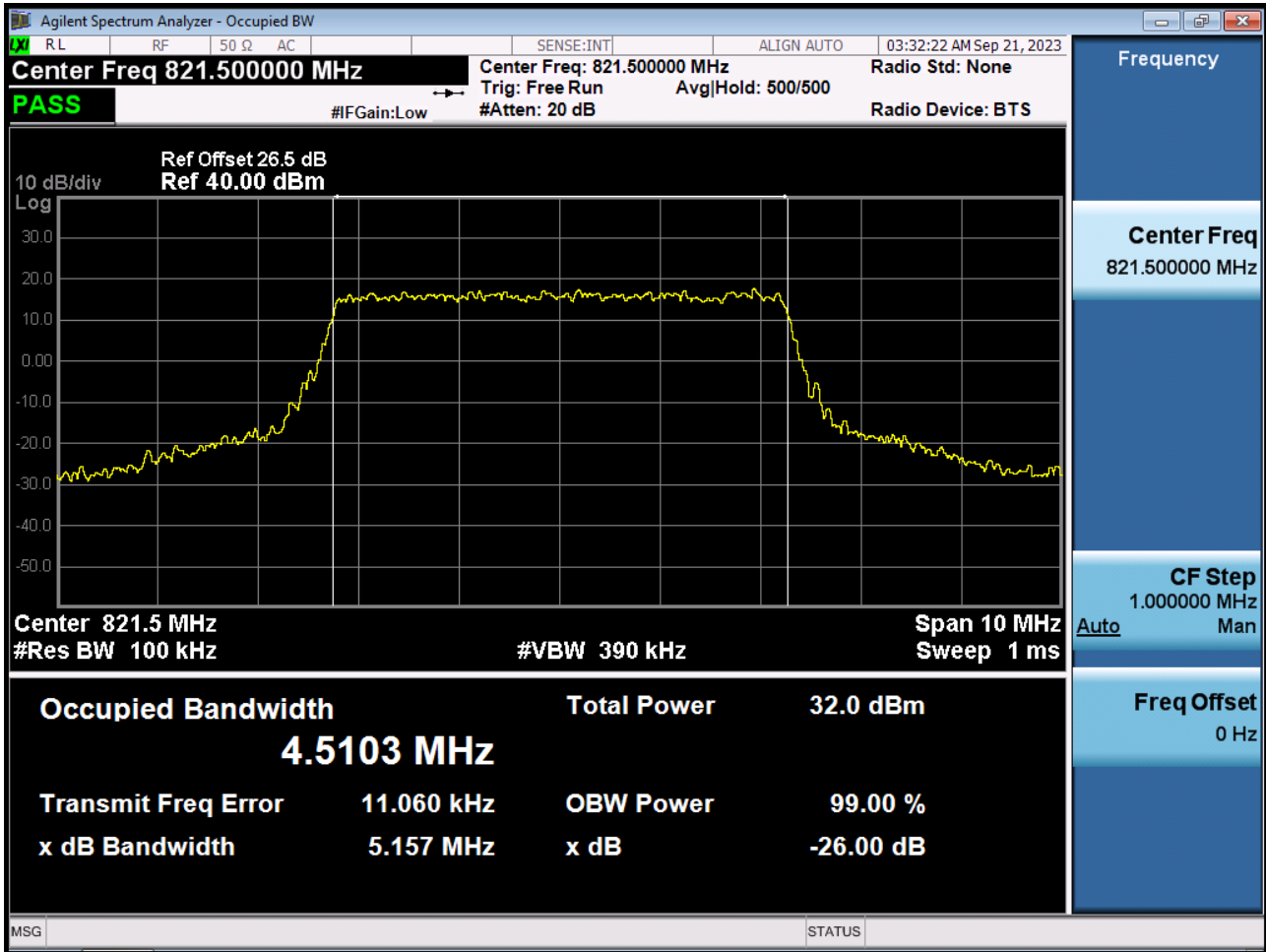
BAND 26. Occupied Bandwidth Plot (3 M BW Ch.26775 64QAM RB 15_0)



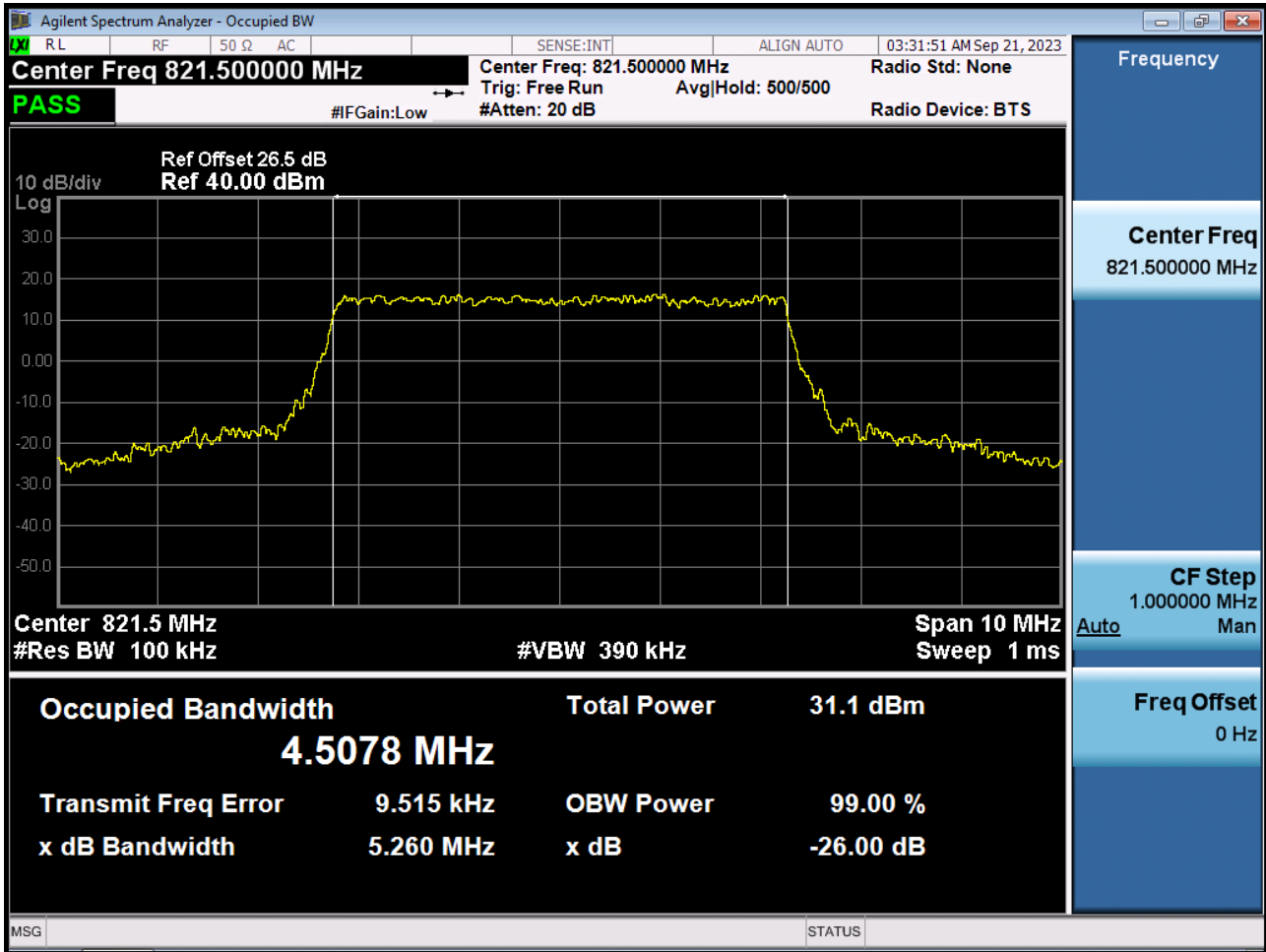
BAND 26. Occupied Bandwidth Plot (3 M BW Ch.26775 256QAM RB 15_0)



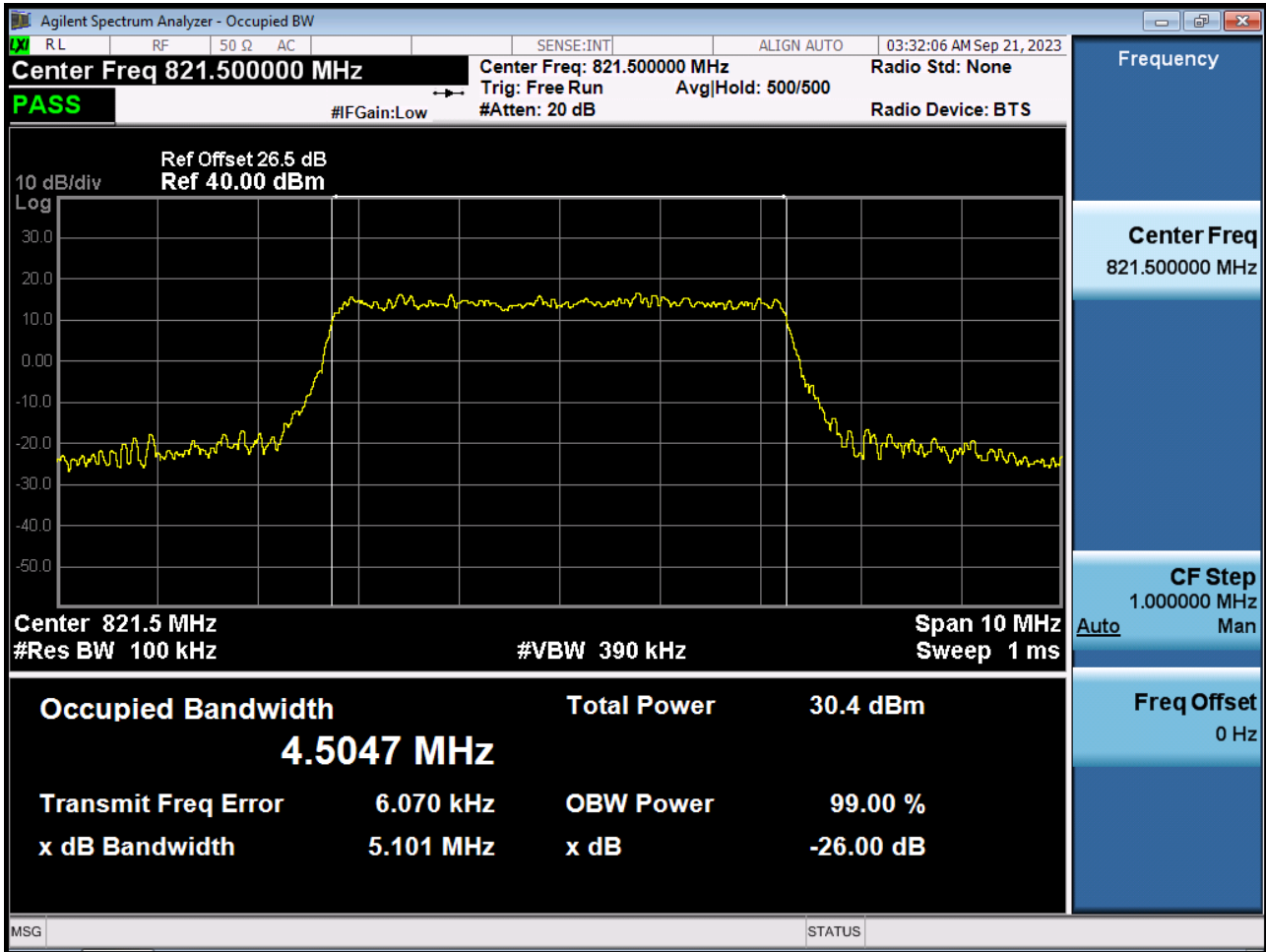
BAND 26. Occupied Bandwidth Plot (5 M BW Ch.26765 QPSK RB 25_0)



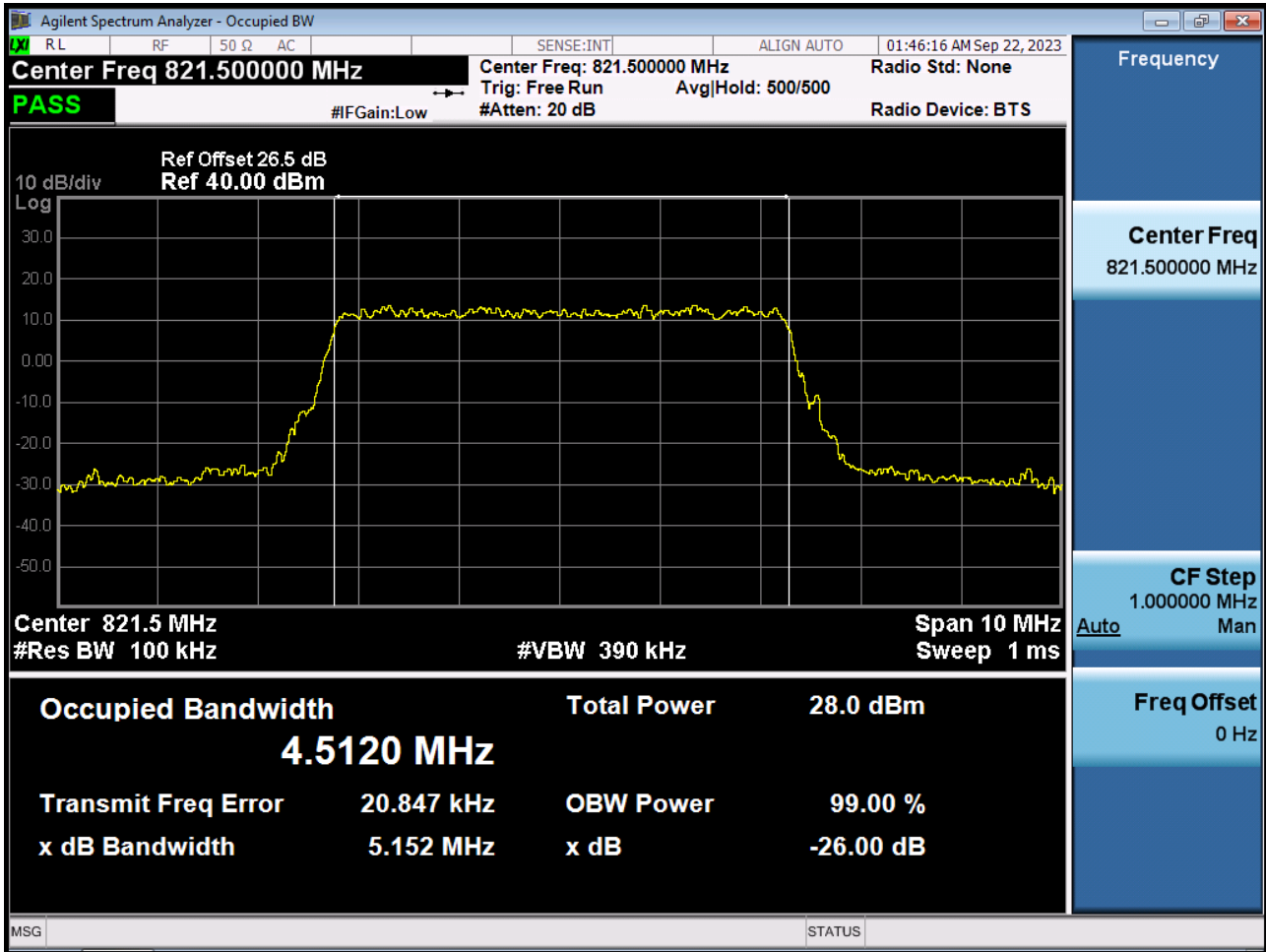
BAND 26. Occupied Bandwidth Plot (5 M BW Ch.26765 16QAM RB 25_0)



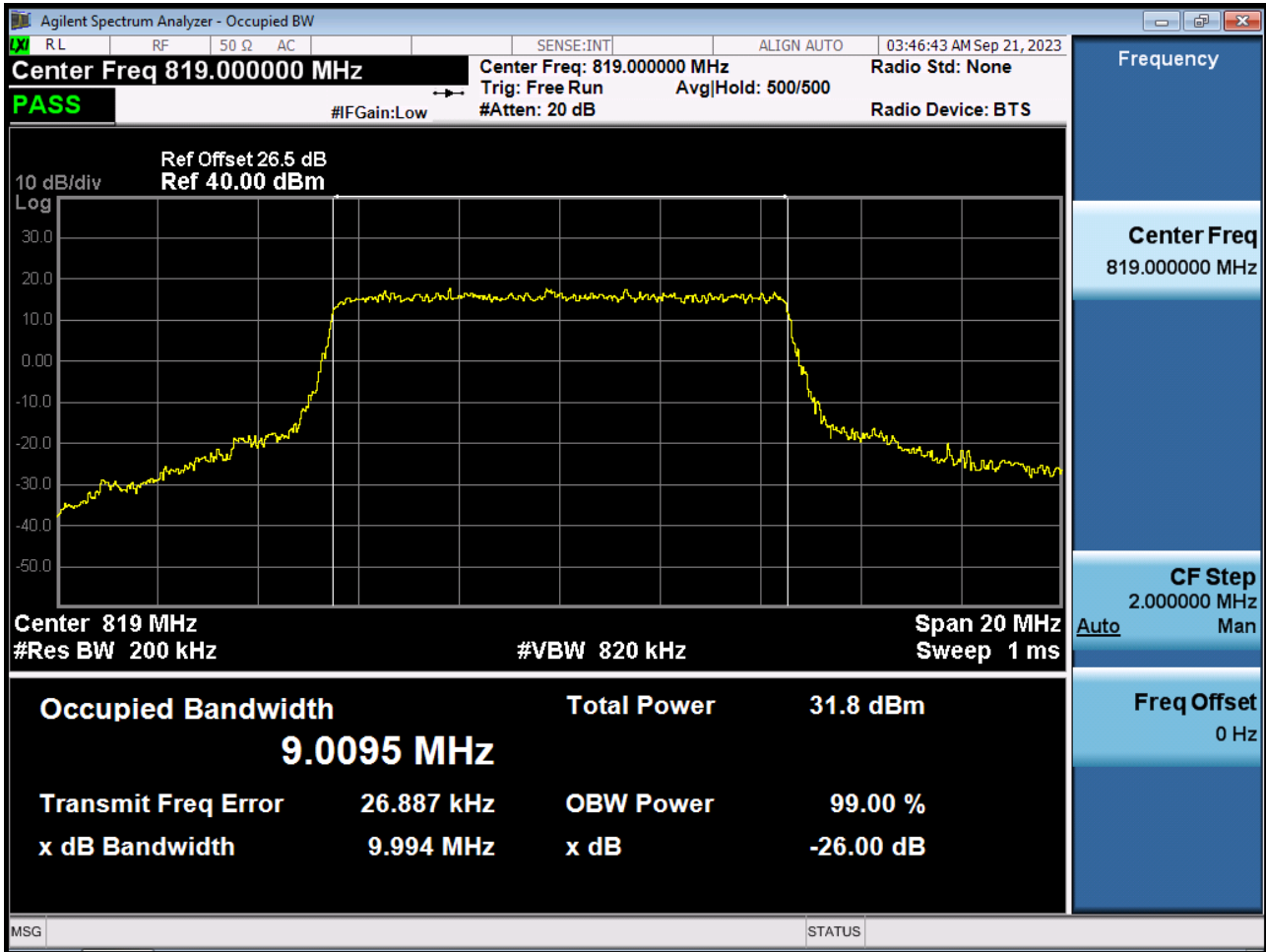
BAND 26. Occupied Bandwidth Plot (5 M BW Ch.26765 64QAM RB 25_0)



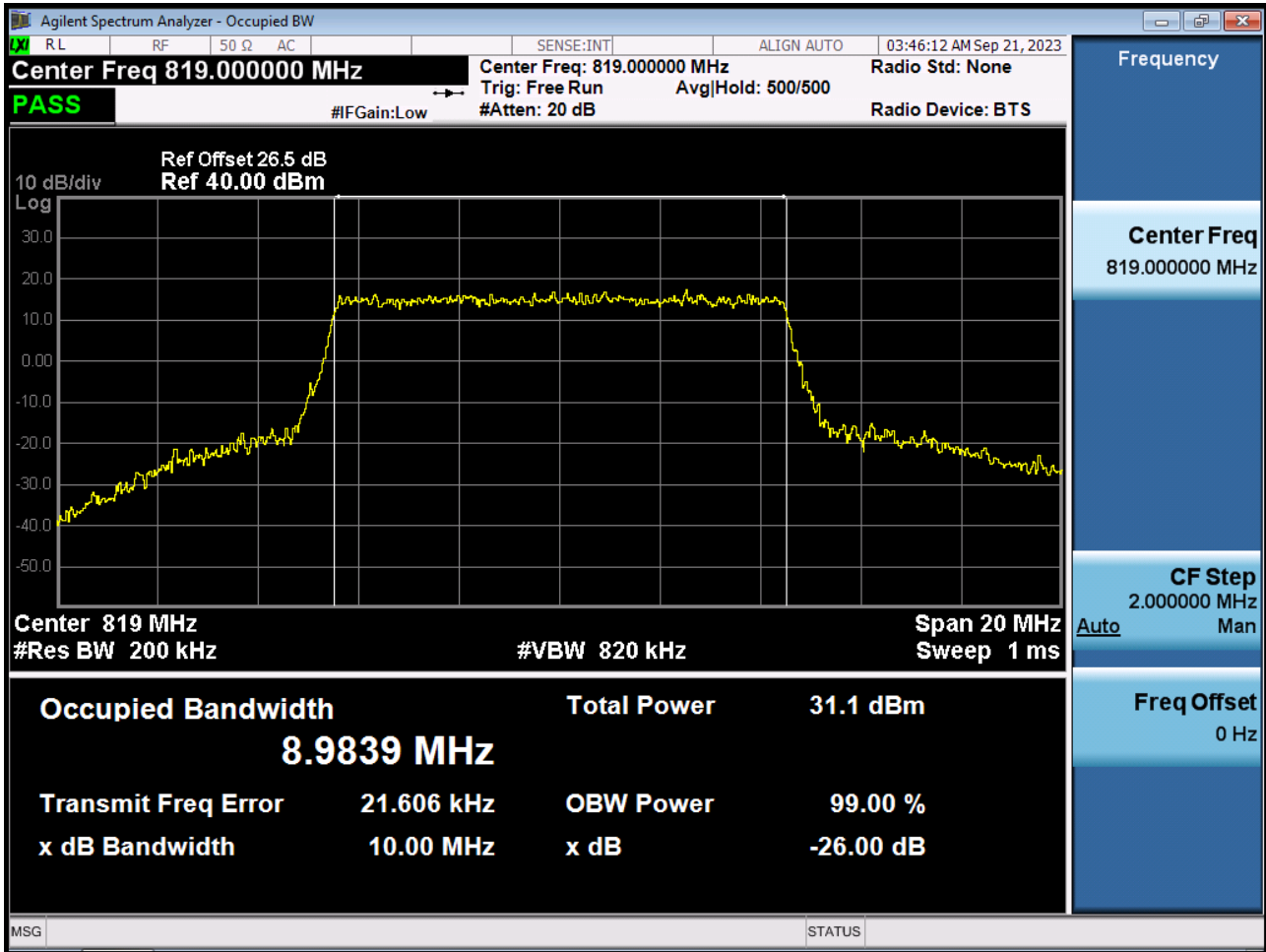
BAND 26. Occupied Bandwidth Plot (5 M BW Ch.26765 256QAM RB 25_0)



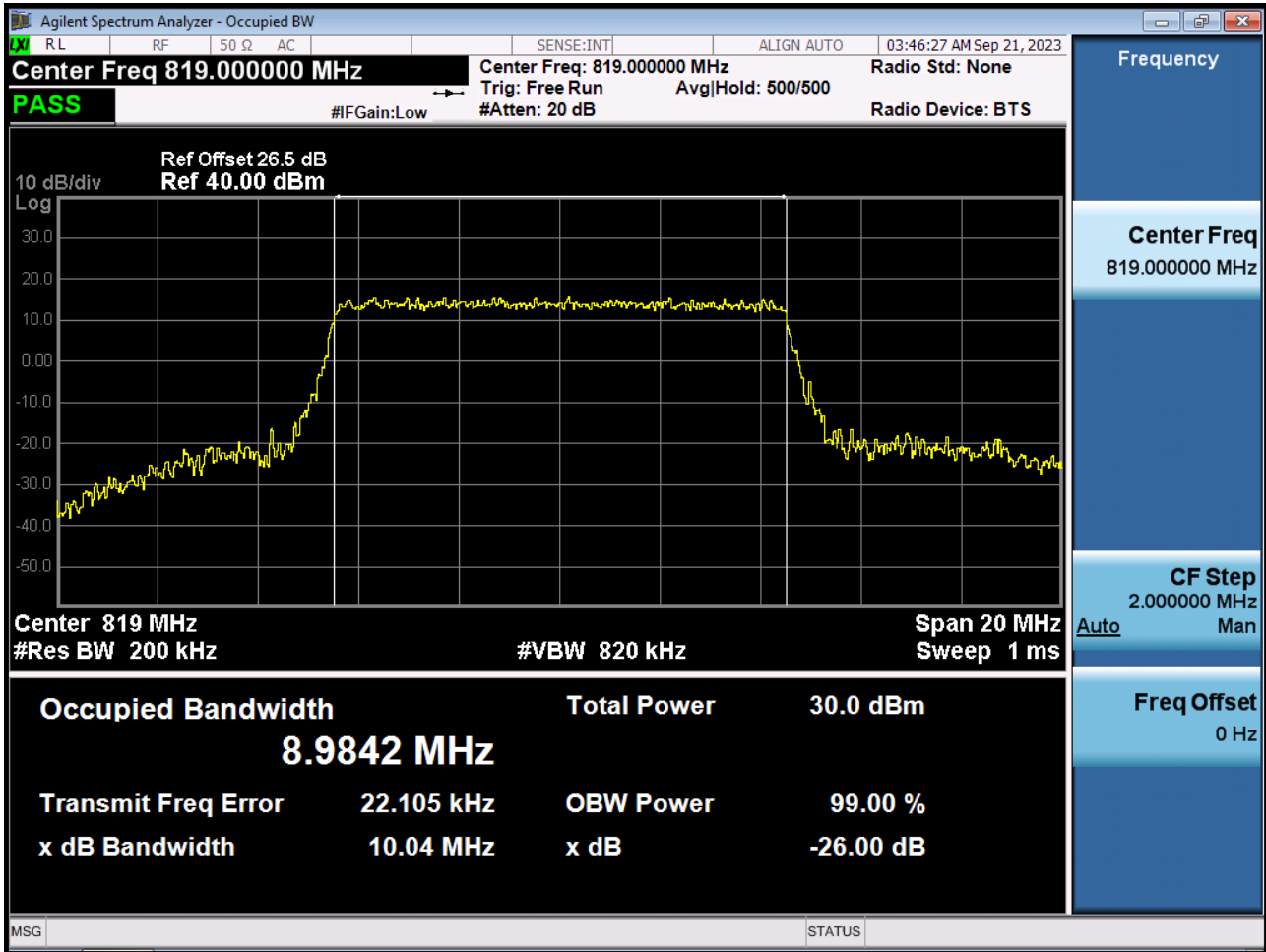
BAND 26. Occupied Bandwidth Plot (10 M BW Ch.26740 QPSK RB 50_0)



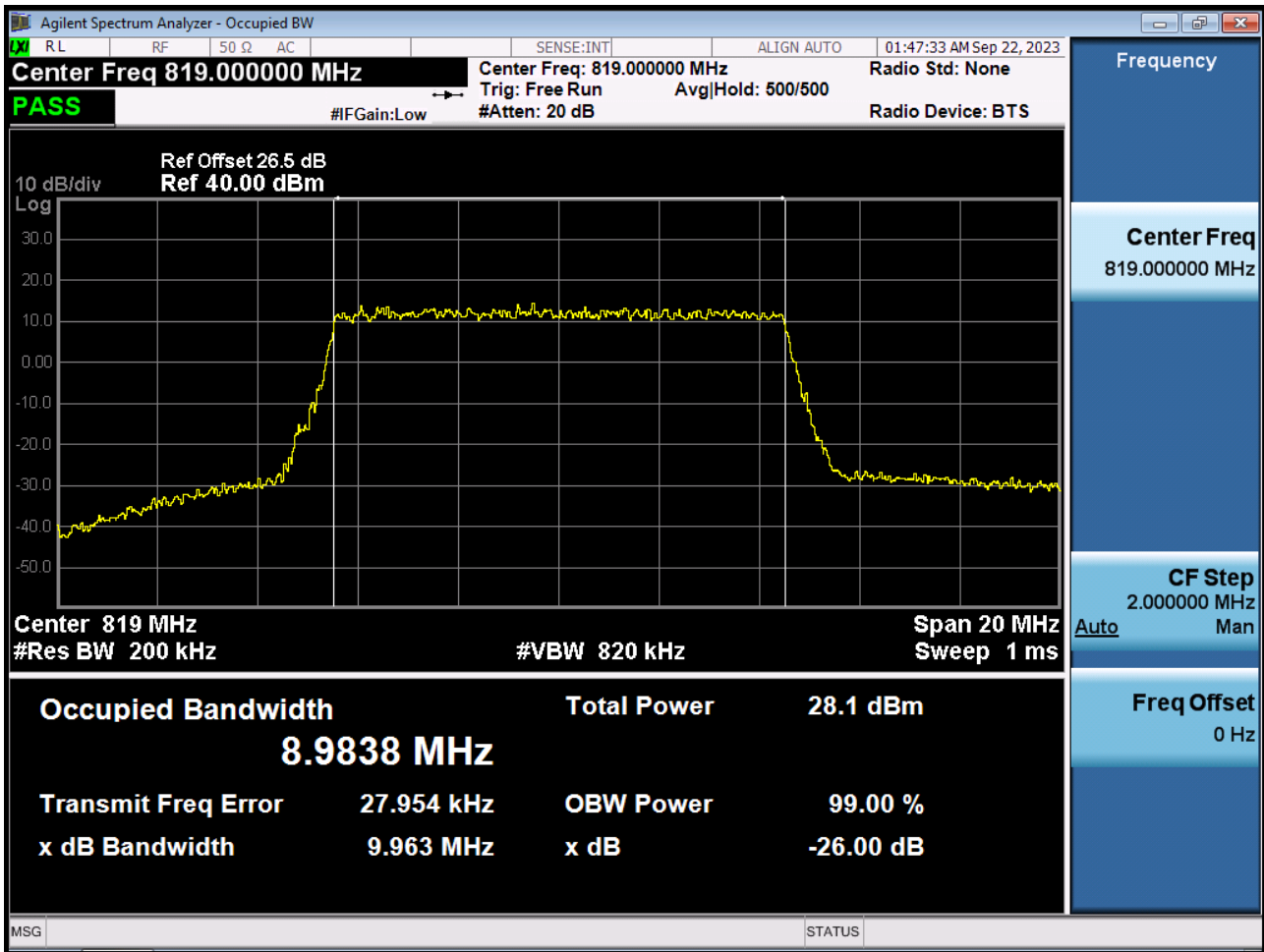
BAND 26. Occupied Bandwidth Plot (10 M BW Ch.26740 16QAM RB 50_0)



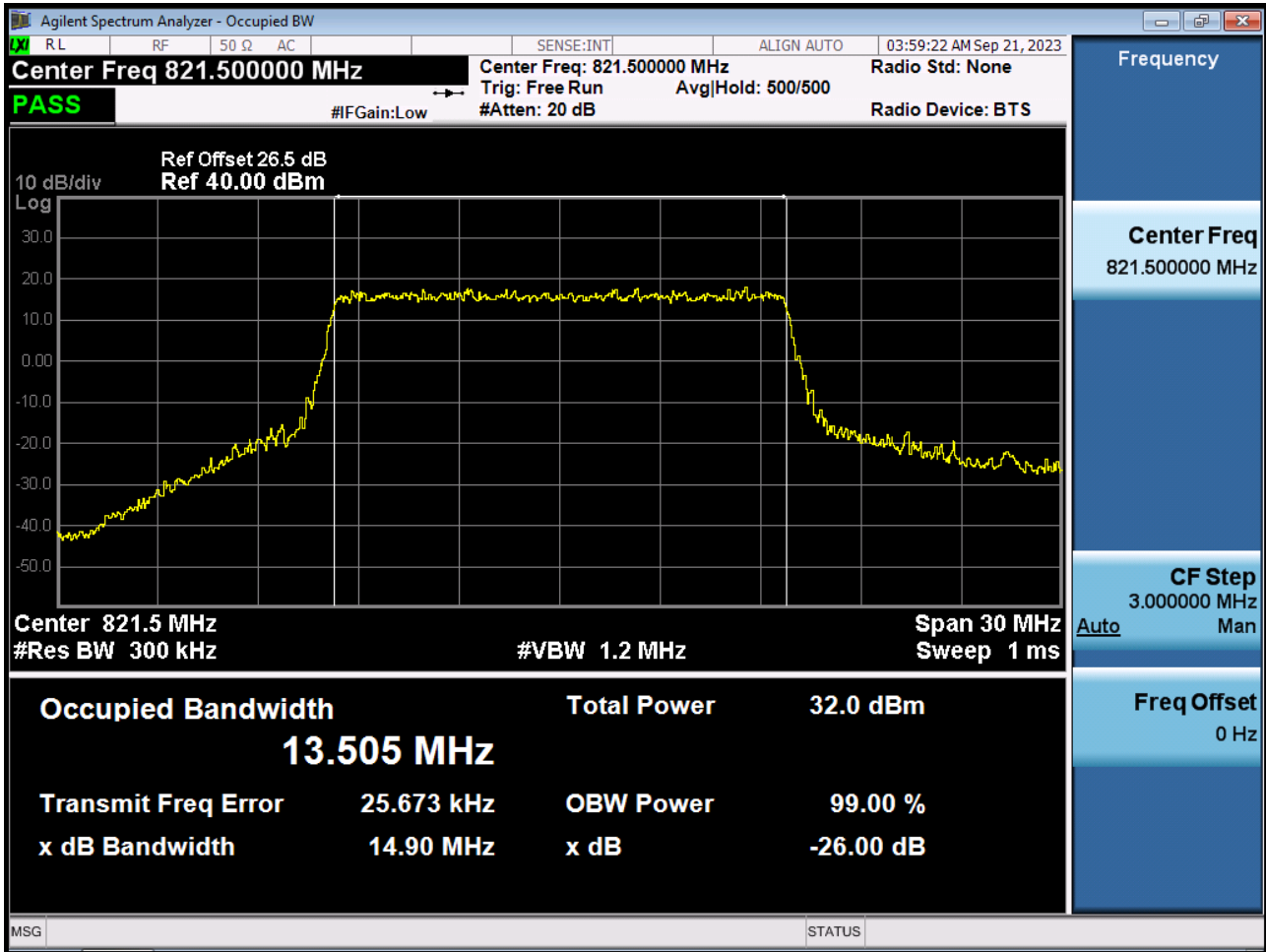
BAND 26. Occupied Bandwidth Plot (10 M BW Ch.26740 64QAM RB 50_0)



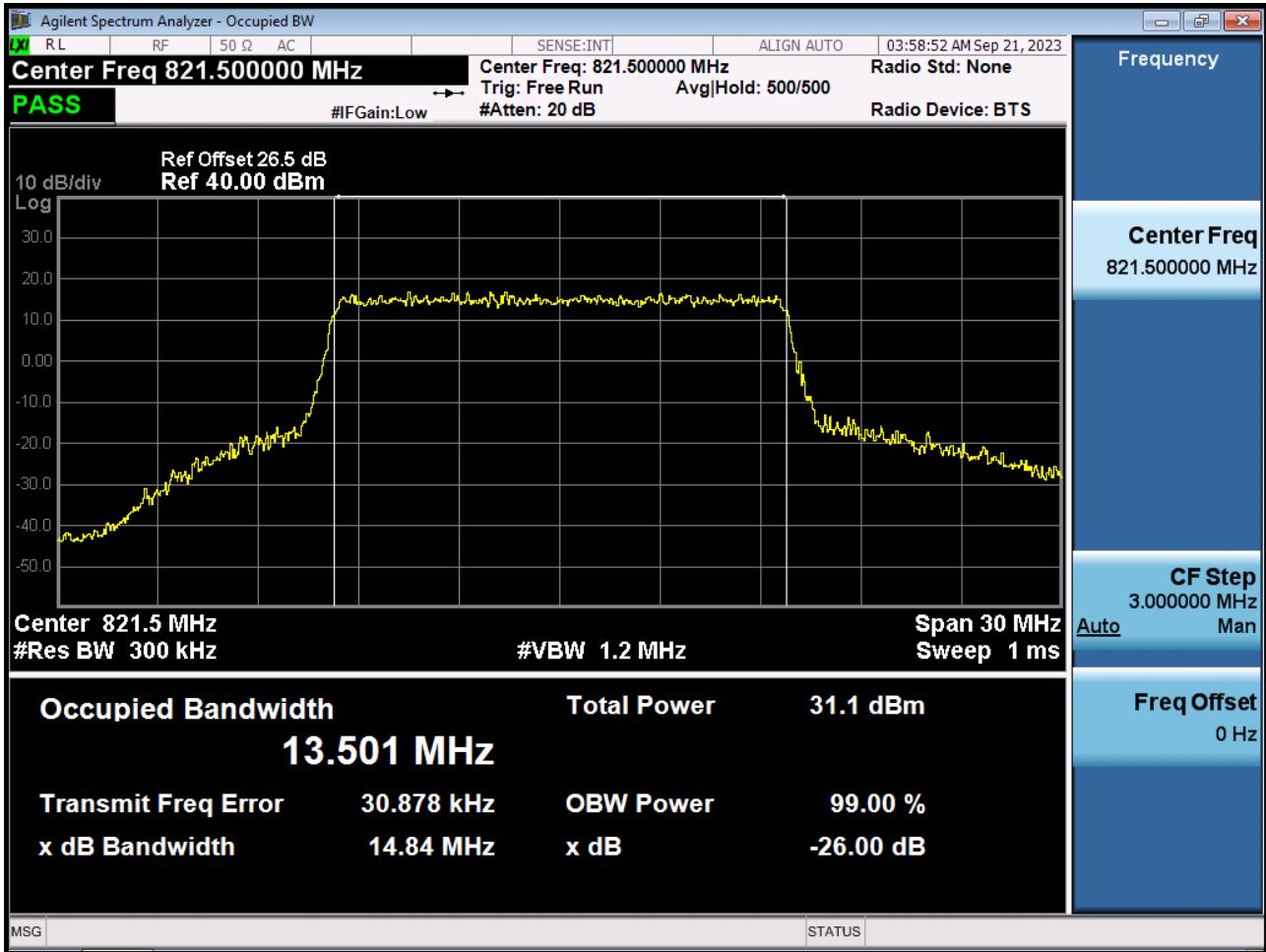
BAND 26. Occupied Bandwidth Plot (10 M BW Ch.26740 256QAM RB 50_0)



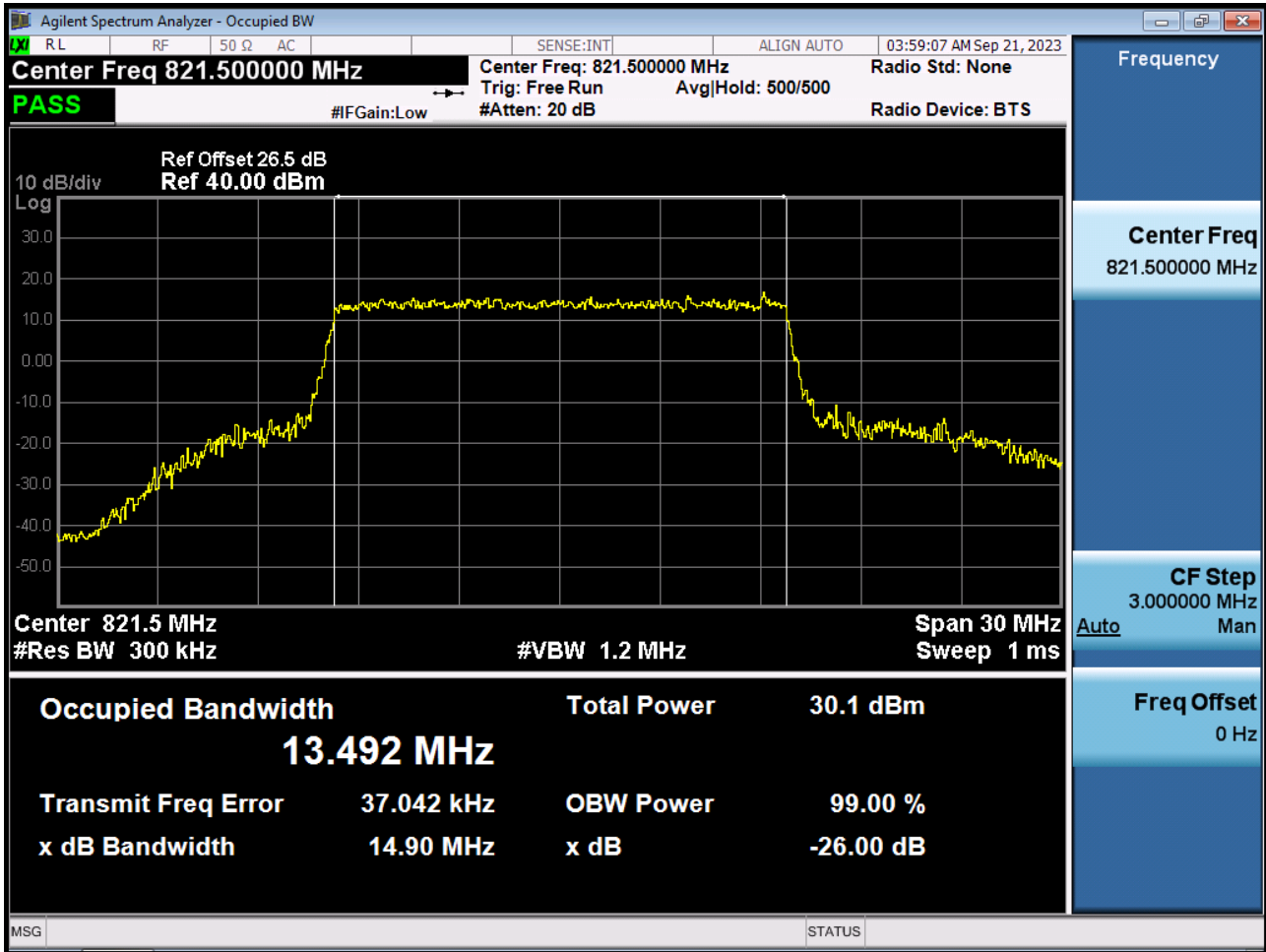
BAND 26. Occupied Bandwidth Plot (15 M BW Ch.26765 QPSK RB 75_0)



BAND 26. Occupied Bandwidth Plot (15 M BW Ch.26765 16QAM RB 75_0)



BAND 26. Occupied Bandwidth Plot (15 M BW Ch.26765 64QAM RB 75_0)



BAND 26. Occupied Bandwidth Plot (15 M BW Ch.26765 256QAM RB 75_0)

