

TEST REPORT



Dt&C Co., Ltd.

42, Yurim-ro, 154Beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea, 17042
Tel : 031-321-2664, Fax : 031-321-1664

1. Report No : DRTFCC2509-0064

2. Customer

• Name : Intellian Technologies, Inc.

• Address : 18-7, Jinwisandan-ro, Jinwi-myeon (Chungho-ri) Pyeongtaek-si, Gyeonggi-do South Korea 17709

3. Use of Report : FCC Original Certification

4. Product Name / Model Name : Manpack / OW7MP

FCC ID : XXZ-OW7MP

5. FCC Regulation(s): Part 25

Test Method Used : ANSI C63.26-2015, KDB971168 D01v03r01

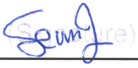
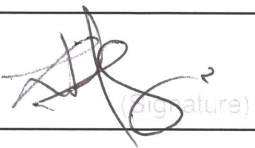
6. Date of Test : 2025.08.05 ~ 2025.08.26

7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing

8. Testing Environment : See appended test report.

9. Test Result : Refer to the attached test result.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test report is not related to KOLAS accreditation.

Affirmation	Tested by	Technical Manager
	Name : SeungMin Gil 	Name : JaeJin Lee 

2025 . 09 . 11 .

Dt&C Co., Ltd.

If this report is required to confirmation of authenticity, please contact to report@dtnc.net

Test Report Version

Test Report No.	Date	Description	Revised by	Reviewed by
DRTFCC2509-0064	Sep. 11. 2025	Initial issue	SeungMin Gil	JaeJin Lee

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1. GENERAL INFORMATION

Equipment Class	Licensed Non-Broadcast Station Transmitter(TNB)
Product Name	Manpack
Model Name(s)	OW7MP
EUT Serial Number	No Specified
Power Supply	DC 12 V, 24V
Modulation Type	QPSK, 8PSK, 16QAM
Nominal Bandwidth	19.8 MHz, 39.6 MHz
Antenna Type	Flat Panel Compact antenna
Antenna Gain	50.5 dBi

Nominal Bandwidth (MHz)	Modulation	TX Frequency (GHz)	Emission Designator	EIRP	
				(dBm/4kHz)	(W/4kHz)
19.8	QPSK	14.013 ~ 14.487	17M2G7D	32.05	1.603
19.8	8PSK	14.013 ~ 14.487	17M2G7D	32.21	1.663
19.8	16QAM	14.013 ~ 14.487	17M2W7D	32.08	1.614
39.6	QPSK	14.022 9 ~ 14.477 1	36M9G7D	31.43	1.390
39.6	8PSK	14.022 9 ~ 14.477 1	36M9G7D	31.31	1.352
39.6	16QAM	14.022 9 ~ 14.477 1	36M9W7D	31.37	1.371

2. INTRODUCTION

2.1. EUT DESCRIPTION

This device supports the following capabilities:

14 ~ 14.5 GHz satellite communication

Test Mode

Bandwidth (MHz)	Lowest Frequency (GHz)	Middle Frequency (GHz)	Highest Frequency (GHz)
19.8	14.013 0	14.263 0	14.487 0
39.6	14.022 9	14.272 9	14.471 1

Operation test setup for EUT

- Test software: Qualcomm Radio Control Toolkit For OneWeb v4.0_v 1.0-00030
- Power setting:

Bandwidth (MHz)	Tested Frequency	Setting Power
19.8	Lowest	-21
	Middle	-19
	Highest	-18
39.6	Lowest	-21
	Middle	-19
	Highest	-19

2.2. TESTING ENVIRONMENT

Ambient Condition	
▪ Temperature	+22 °C ~ +24 °C
▪ Relative Humidity	42 % ~ 53 %

2.3. 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.

2.4. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with requirements of ANSI C 63.4-2014. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95 % level of confidence.

Parameter	Measurement uncertainty
Antenna-port conducted emission	1.0 dB (The confidence level is about 95 %, $k = 2$)
Radiated emission (1 GHz Below)	5.0 dB (The confidence level is about 95 %, $k = 2$)
Radiated emission (1 GHz ~ 18 GHz)	4.8 dB (The confidence level is about 95 %, $k = 2$)
Radiated emission (18 GHz Above)	4.9 dB (The confidence level is about 95 %, $k = 2$)

2.5. TEST FACILITY

Dt&C Co., Ltd.		
The 3 m test site and conducted measurement facility used to collect the radiated data are located at the 42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042.		
The test site complies with the requirements of Part 2.948.		
- FCC & ISSED MRA Designation No. : KR0034		
- FCC Test Firm Registration No. : 704742		
- ISSED#: 5740A		
www.dtnc.net		
Telephone	:	+ 82-31-321-2664
FAX	:	+ 82-31-321-1664

3. LIST OF TEST EQUIPEMNT

Type	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next.Cal. Date (yy/mm/dd)	S/N
Spectrum Analyzer	KEYSIGHT	N9020A	24/11/28	25/11/28	MY53309959
Spectrum Analyzer	Agilent Technologies	N9020A	24/11/26	25/11/26	MY50410399
Spectrum Analyzer	KEYSIGHT	N9030B	24/11/25	25/11/25	MY55480168
Spectrum Analyzer	Rohde Schwarz	FSW85	24/12/11	25/12/11	101530
Bipolar DC power supply	NF Corporation	BP4620	24/11/29	25/11/29	9186074
Digital Multimeter	FLUKE	17B+	24/11/27	25/11/27	36390701WS
Temp & Humi Test Chamber	SJ Science	SJ-TH-S50	24/12/06	25/12/06	SJ-TH-S50- 131011
Thermohygrometer	BODYCOM	BJ5478	24/12/17	25/12/17	090205-4
Thermohygrometer	BODYCOM	BJ5478	24/12/05	25/12/05	120612-2
Signal Generator	Rohde Schwarz	SMBV100A	24/12/10	25/12/10	255571
Signal Generator	ANRITSU	MG3695C	24/11/29	25/11/29	173501
Multiplier	OML, Inc.	S15MS	25/06/12	26/06/12	170821-1
Loop Antenna	ETS-Lindgren	6502	24/11/08	26/11/08	00060496
Hybrid Antenna	Schwarzbeck	VULB 9160	24/12/13	25/12/13	3362
Horn Antenna	ETS	3117	24/12/11	25/12/11	00140394
Horn Antenna	A.H.Systems Inc.	SAS-574	25/06/12	26/06/12	155
Horn Antenna	MI Wave	RX ANT-5 261U+410U	25/06/12	26/06/12	108
Horn Antenna	MI Wave	RX ANT-6 261V+410V	25/06/12	26/06/12	110
PreAmplifier	H.P	8447D	24/12/11	25/12/11	2944A07774
PreAmplifier	Agilent	8449B	24/12/11	25/12/11	3008A02108
PreAmplifier	tsj	MLA-1840-J02-45	25/05/29	26/05/29	16966-10728
PreAmplifier	Norden Millimeter Inc.	NA4060G50N8P12	24/12/13	26/12/13	1003
PreAmplifier	ERAVABT	SBL-5037533550-151- E1-ET	24/12/13	25/12/13	10394-01
High Pass Filter	Wainwright Instruments	WHKX12-935-1000- 15000-40SS	24/12/11	25/12/11	7
High Pass Filter	Wainwright Instruments	WHKX10-2838-3300- 18000-60SS	24/12/11	25/12/11	2
High Pass Filter	Wainwright Instruments	WHKX6-6320-8000- 26500-40CC	24/12/11	25/12/11	2
Attenuator	SMAJK	SMAJK-50-10	25/05/26	26/05/26	3-50-10
Cable	HUBER+SUHNER	SUCOFLEX100	25/01/02	26/01/02	M-1
Cable	HUBER+SUHNER	SUCOFLEX100	25/01/02	26/01/02	M-2
Cable	Junkosha	MWX241/B	25/01/02	26/01/02	M-3
Cable	Junkosha	MWX221	25/01/02	26/01/02	M-4
Cable	Junkosha	MWX221	25/01/02	26/01/02	M-5
Cable	Junkosha	J12J101757-00	25/01/02	26/01/02	M-7
Cable	HUBER+SUHNER	SUCOFLEX104	25/01/02	26/01/02	M-8
Cable	HUBER+SUHNER	SUCOFLEX106	25/01/02	26/01/02	M-9
Cable	Junkosha	MWX315	25/01/02	26/01/02	M-10
Cable	Junkosha	MWX241	25/01/02	26/01/02	mmW-1
Cable	Junkosha	MWX241	25/01/02	26/01/02	mmW-4
Cable	Junkosha	MWX261	25/01/02	26/01/02	mmW-7
Cable	SAGE MILLIMETER Inc	SCW-1M1M024-F1	25/01/02	26/01/02	mmW-11
Cable	Junkosha	MWX261	25/01/02	26/01/02	mmW-15
Cable	Radiall	TESTPRO3	25/01/02	26/01/02	RFC-70
Test Software (Radiated)	tsj	EMI Measurement	NA	NA	Version 2.00.0185
3m Semi Anechoic Chamber	SYC	3m-SAC	25/06/13(NSA) 25/06/19(VSWR)	26/06/13(NSA) 26/06/19(VSWR)	3m-SAC-1

Note1: The measurement antennas were calibrated in accordance to the requirements of ANSI C63.5-2017.

Note2: The cable is not a regular calibration item, so it has been calibrated by Dt&C itself.

4. SUMMARY OF TEST RESULTS

FCC Part Section(s)	Test Description	Test Limit	Status Note 1
2.1049	Occupied Bandwidth	N/A	C
2.1046 25.204 25.218	RF Output Power and Off-Axis EIRP spectral Density	Refer to section 6.2	C
2.1051 25.202(f)	Emission Mask and Spurious Emissions at Antenna Terminal	In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: 25 dB; By more than 100 percent up to and including 250 percent : 35 dB; By more than 250 percent: $43 + 10\log_{10}(P)$	C
2.1053 25.202(f)	Undesirable Emissions (Radiated)	$> 43 + 10\log_{10}(P)$ dB for all out-of-band emissions	C Note 2
2.1055 25.202(d)	Frequency Stability	10 ppm	C
25.209	Earth Station Antenna Performance	Part 25.209	NA Note 3
Note 1: C =Comply NC =Not Comply NT =Not Tested NA =Not Applicable Note 2: This test item was performed with the transmit antenna port terminated. Note 3: This device is a user terminal communicating with NGSO FSS satellites. Note 4: All rated power configuration were investigated and the worst-case data report.			

5. EMISSION DESIGNATOR AND SAMPLE CALCULATION

A. Emission Designator

(QPSK, 8PSK)

Emission Designator = 17M2G7W

Occupied Band width = 17.180 MHz

G = Phase Modulation

7 = Two or more channels containing quantized or digital information

W = Combination

(16QAM)

Emission Designator = 17M2D7W

Occupied Band width = 17.180 MHz

D = Amplitude-modulated and angle-modulated

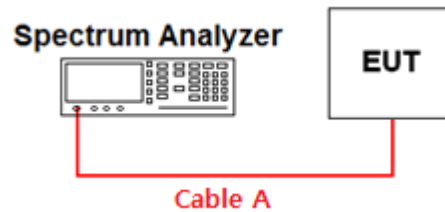
7 = Two or more channels containing quantized or digital information

W = Combination

6. TEST RESULTS

6.1. OCCUPIED BANDWIDTH

Test Configuration



Test Procedure

- KDB971168 D01v03r01 - Section 4.3
- ANSI C63.26-2015 – Section 5.4.4

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power of a given emission.

Test setting

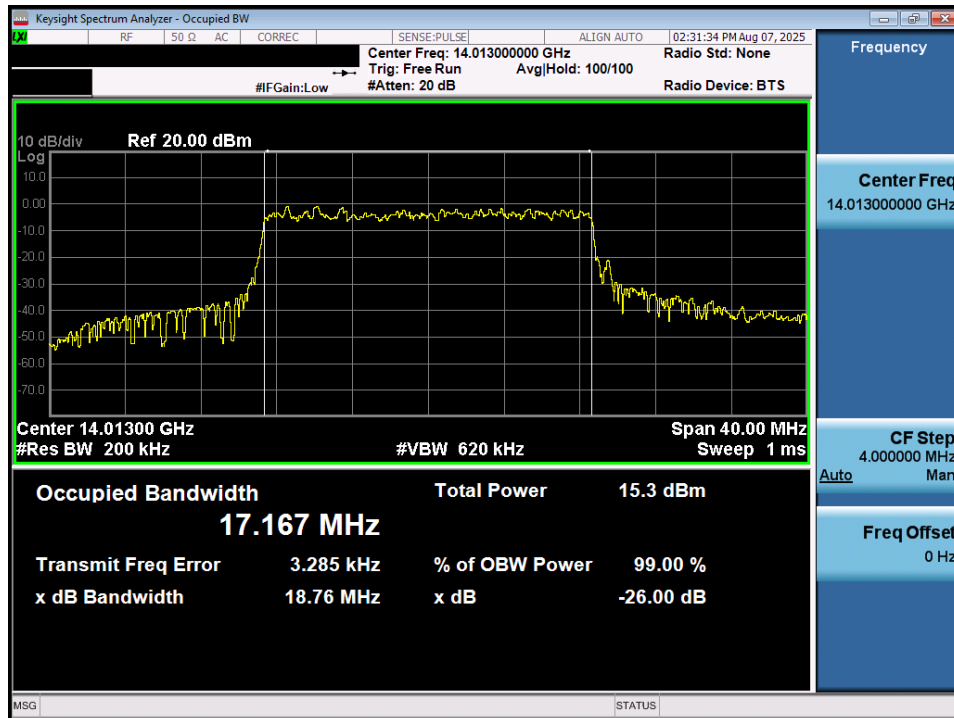
1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99 % occupied bandwidth and the 26 dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. $RBW = 1 \% \sim 5 \%$ of the expected OBW & $VBW \geq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

Limit

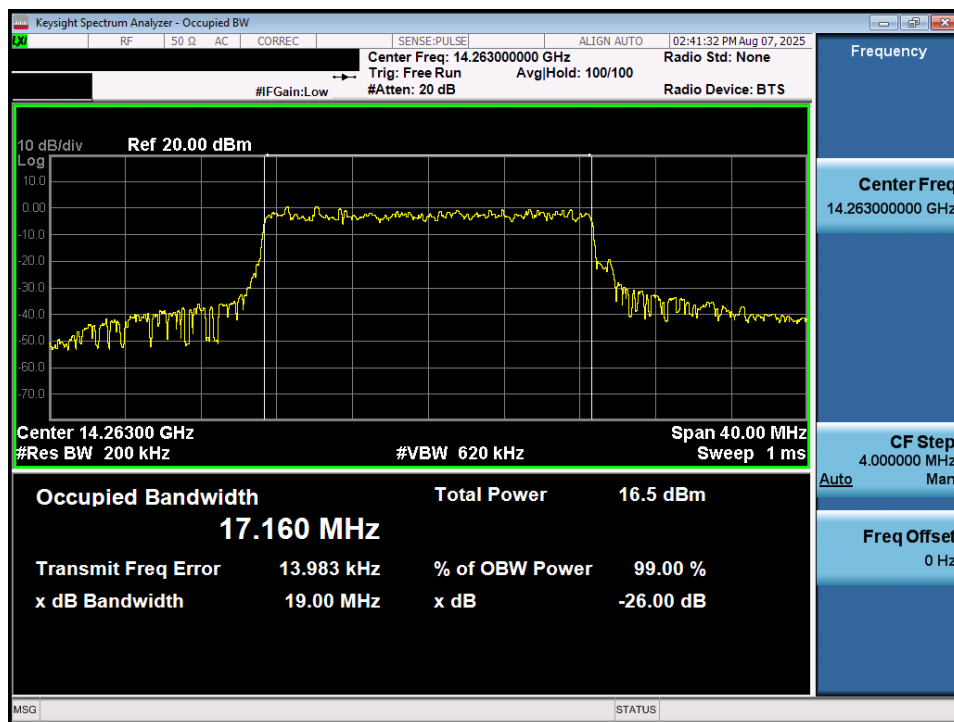
- NA

Test Results

Bandwidth (MHz)	Modulation	Tested Frequency	Test Result (MHz)
19.8	QPSK	Lowest	17.17
		Middle	17.16
		Highest	17.16
	8PSK	Lowest	17.18
		Middle	17.16
		Highest	17.16
	16QAM	Lowest	17.18
		Middle	17.15
		Highest	17.17
39.6	QPSK	Lowest	36.86
		Middle	36.86
		Highest	36.86
	8PSK	Lowest	36.85
		Middle	36.87
		Highest	36.85
	16QAM	Lowest	36.88
		Middle	36.85
		Highest	36.86



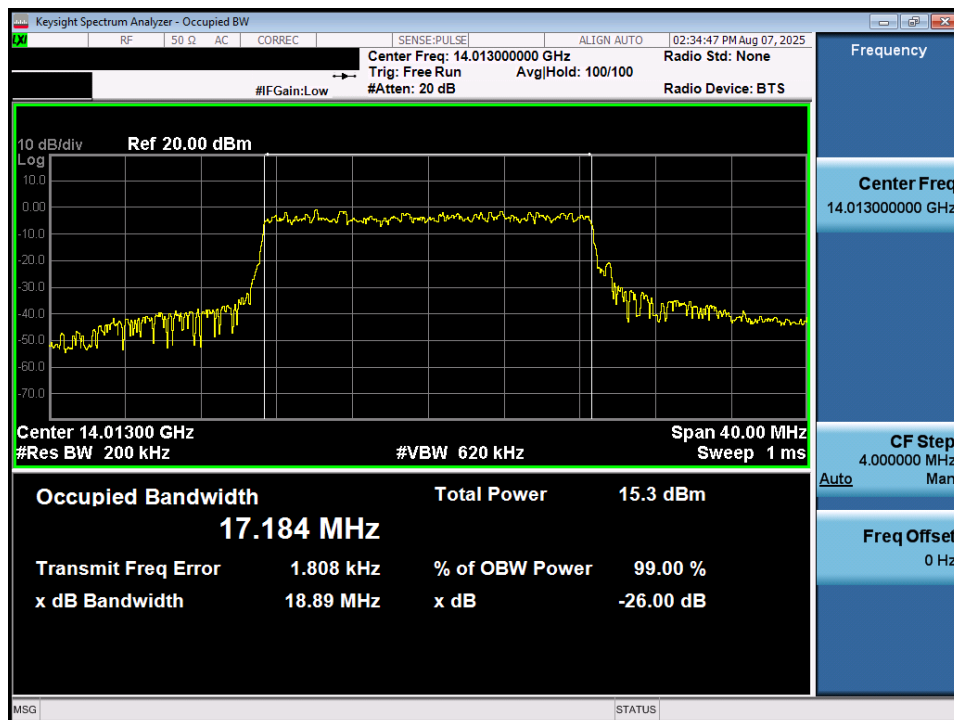
19.8 MHz / QPSK / Lowest



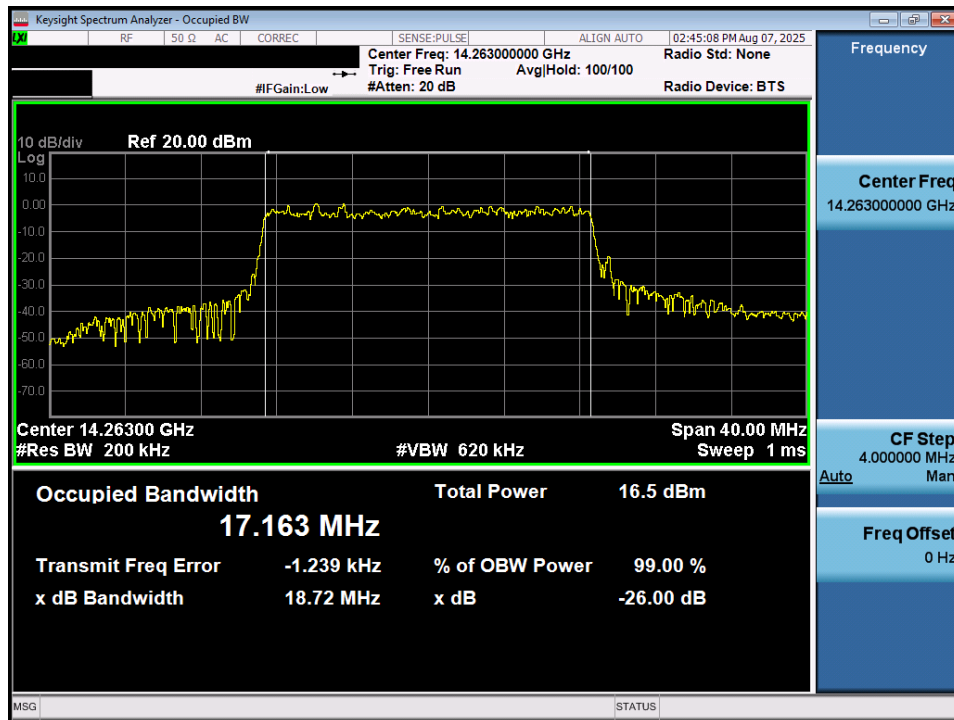
19.8 MHz / QPSK / Middle



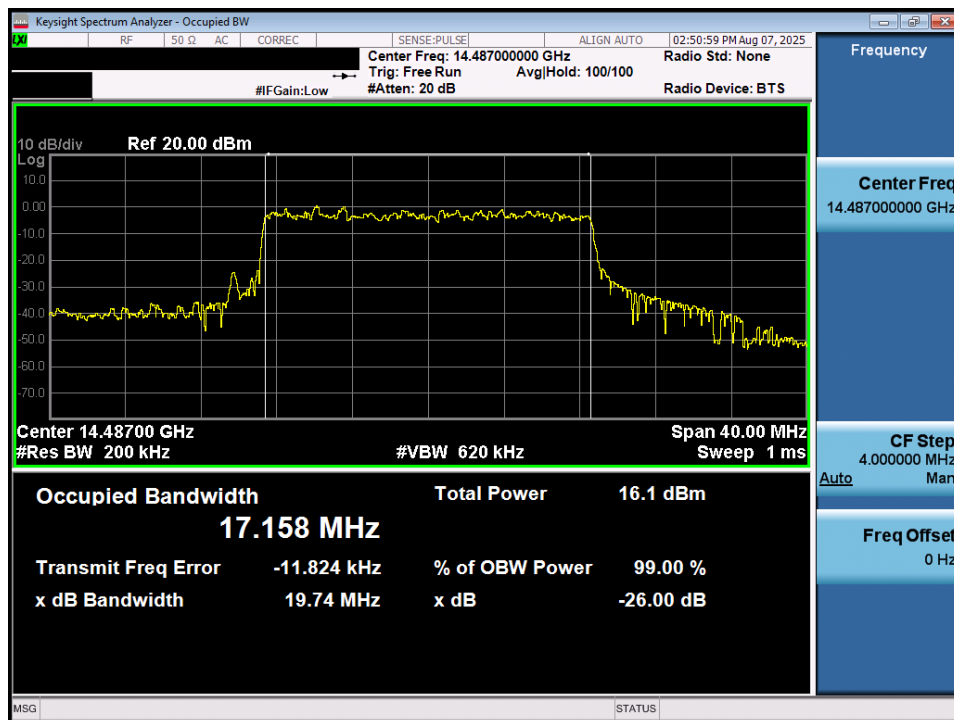
19.8 MHz / QPSK / Highest



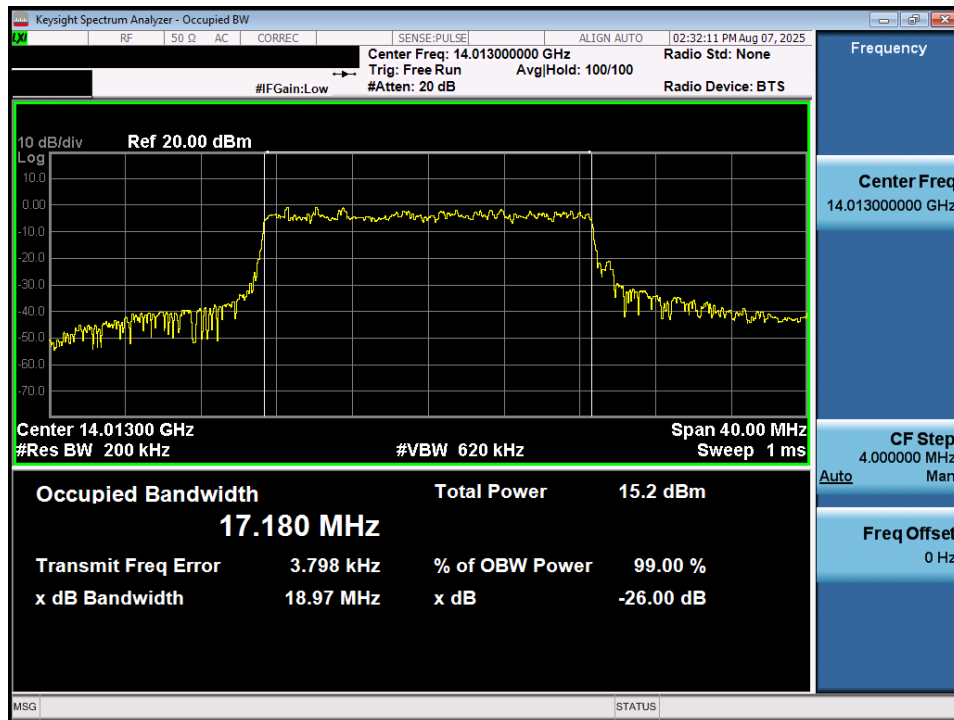
19.8 MHz / 8PSK / Lowest



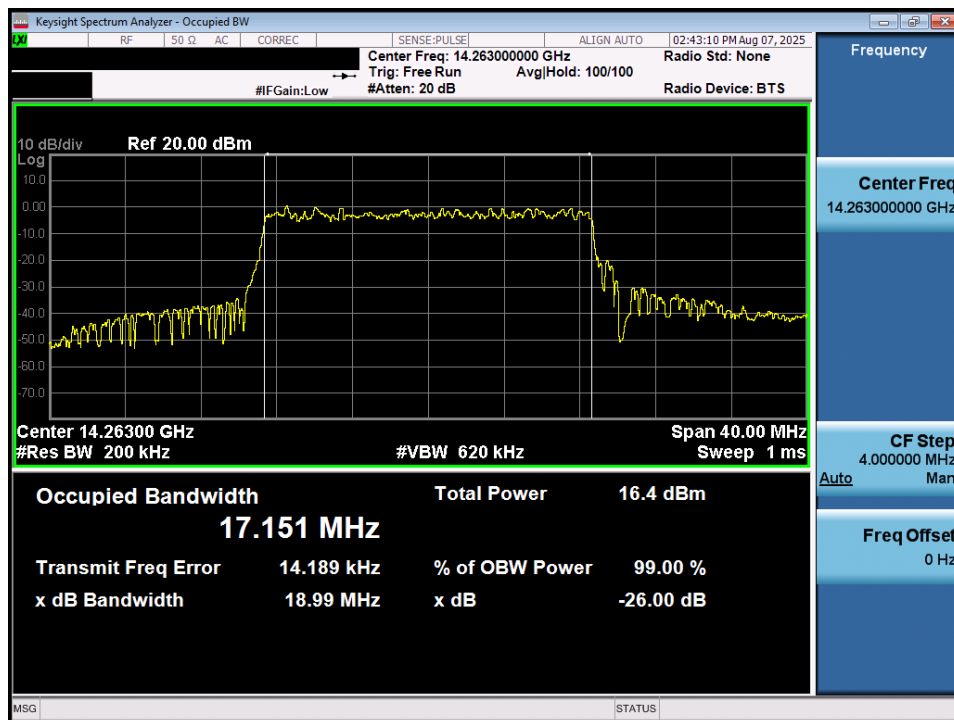
19.8 MHz / 8PSK / Middle



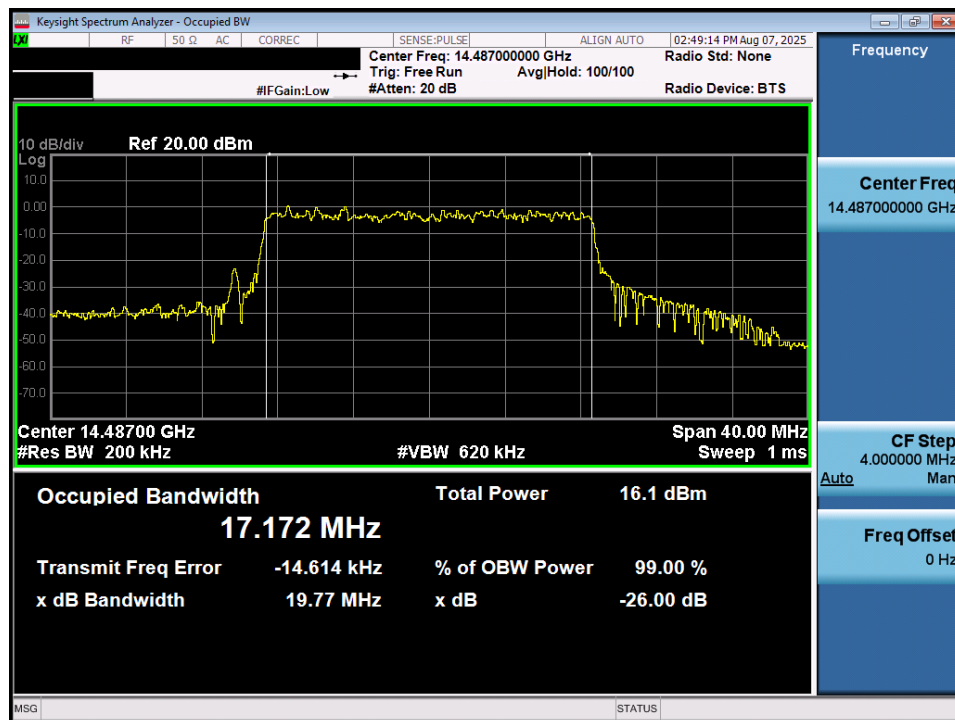
19.8 MHz / 8PSK / Highest



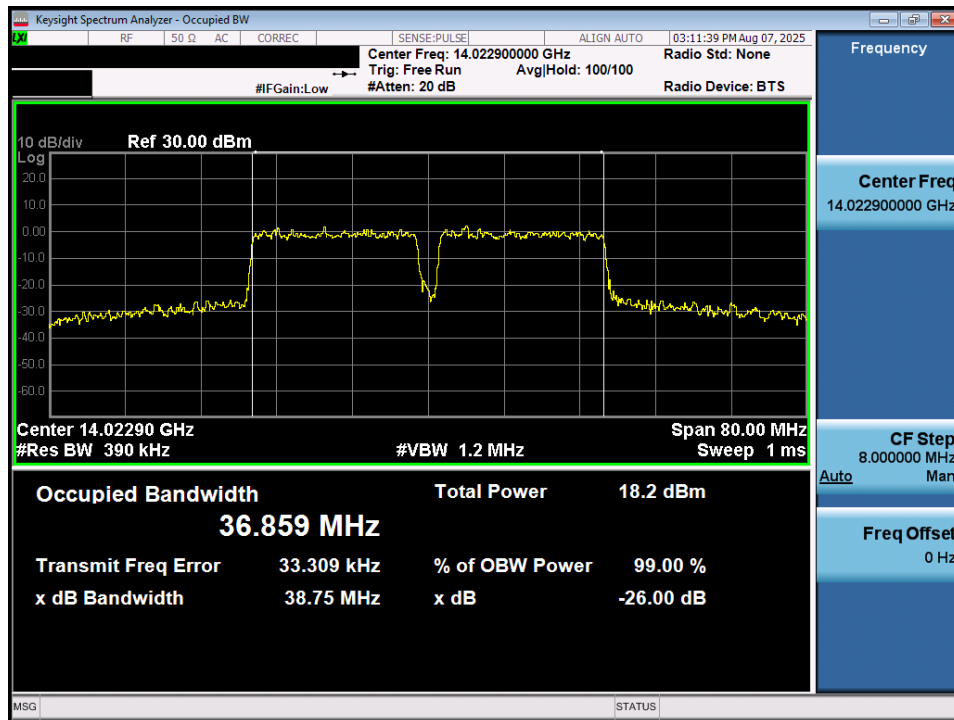
19.8 MHz / 16QAM / Lowest



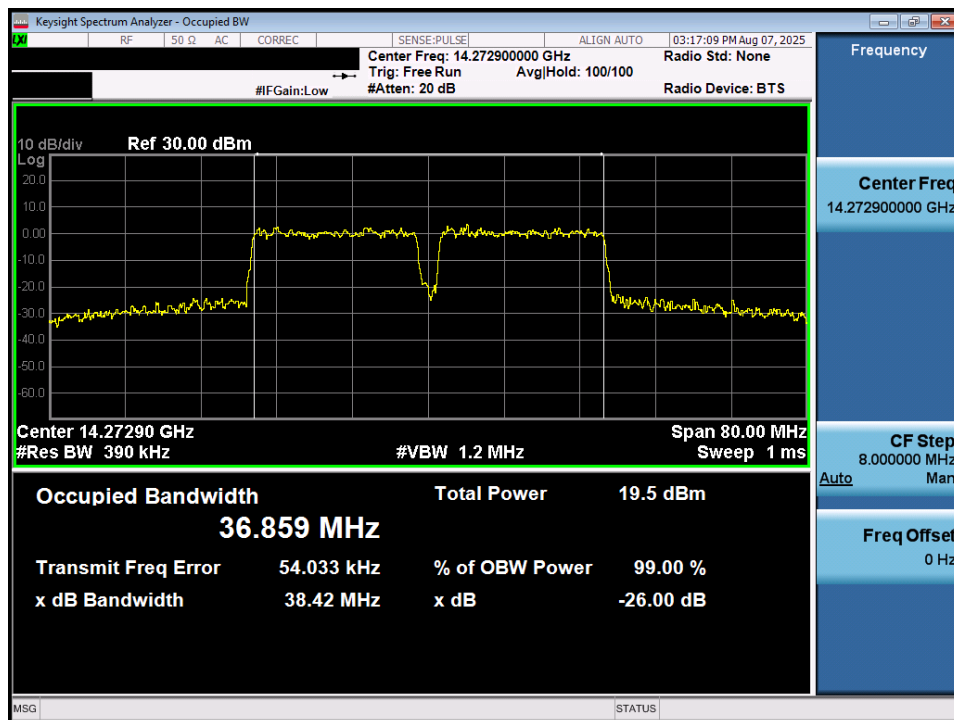
19.8 MHz / 16QAM / Middle



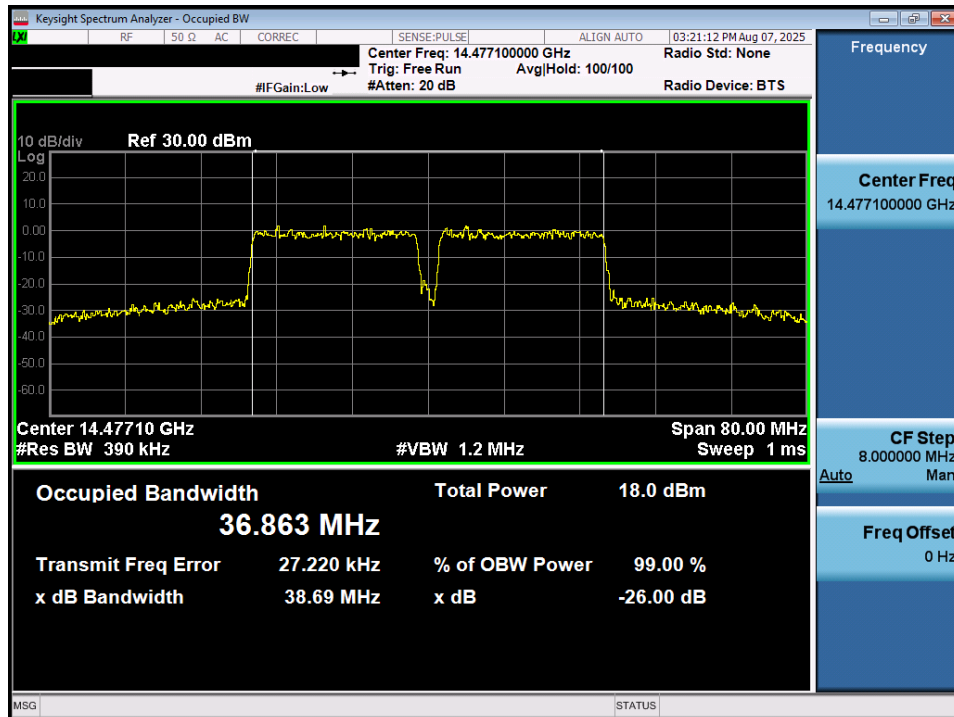
19.8 MHz / 16QAM / Highest



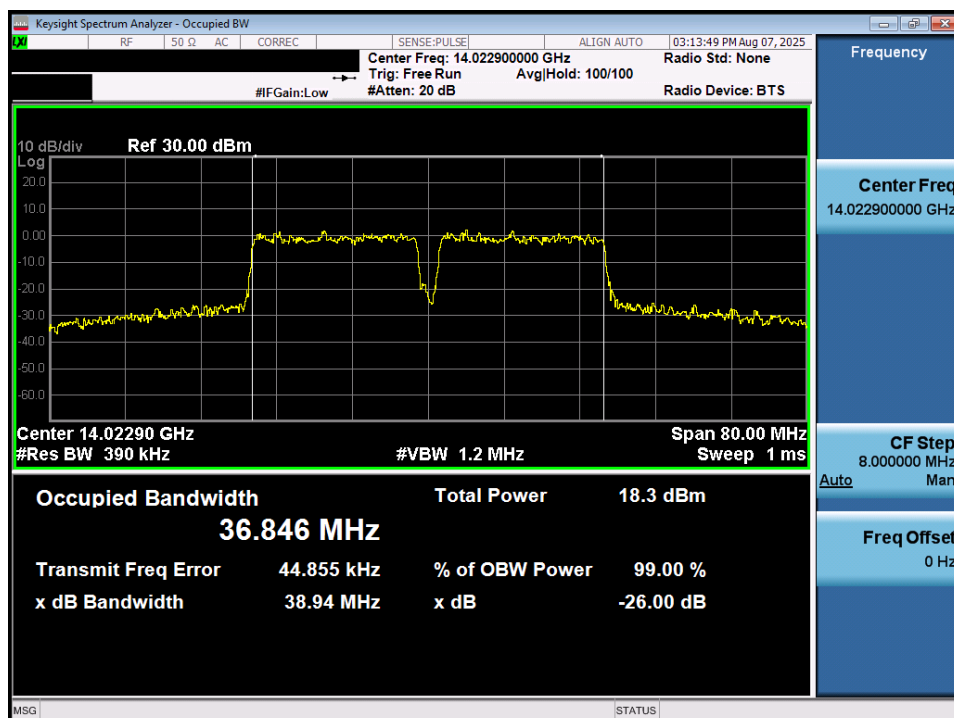
39.6 MHz / QPSK / Lowest



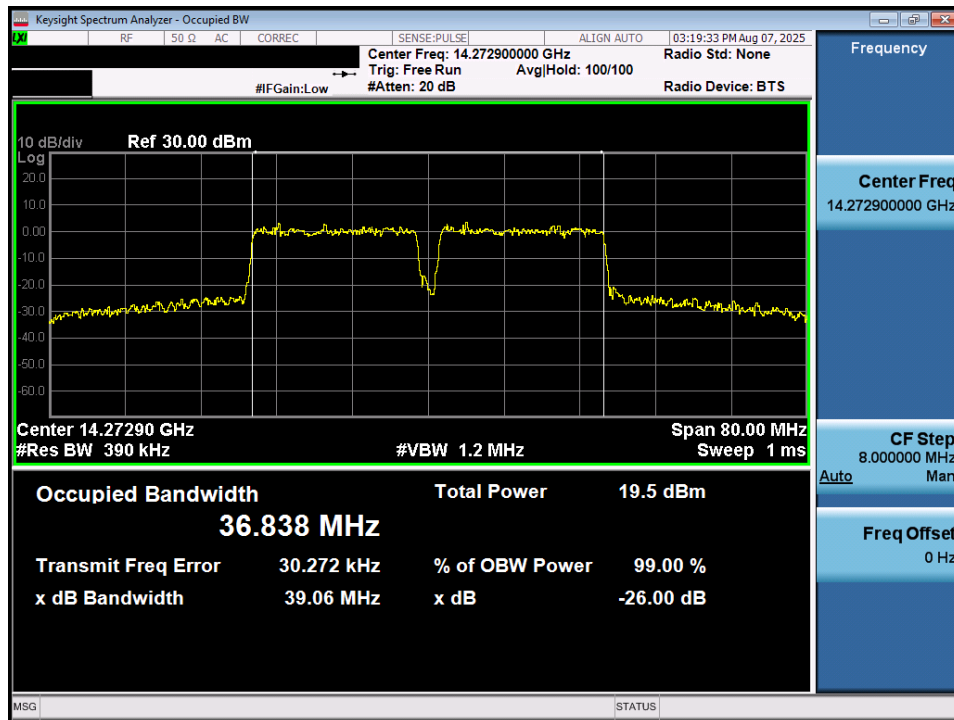
39.6 MHz / QPSK / Middle



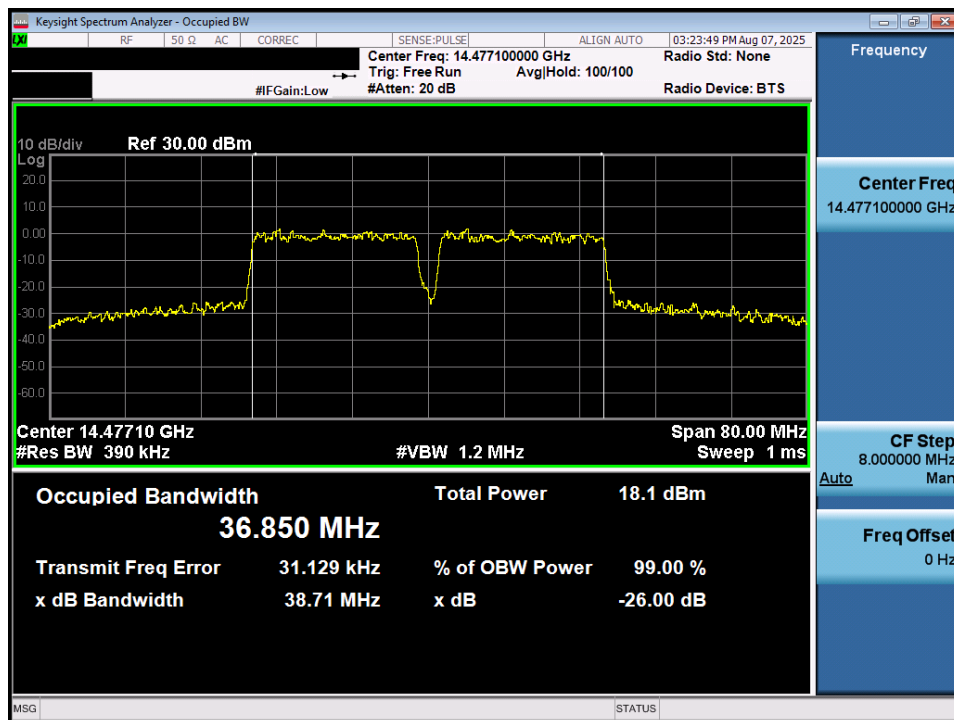
39.6 MHz / QPSK / Highest



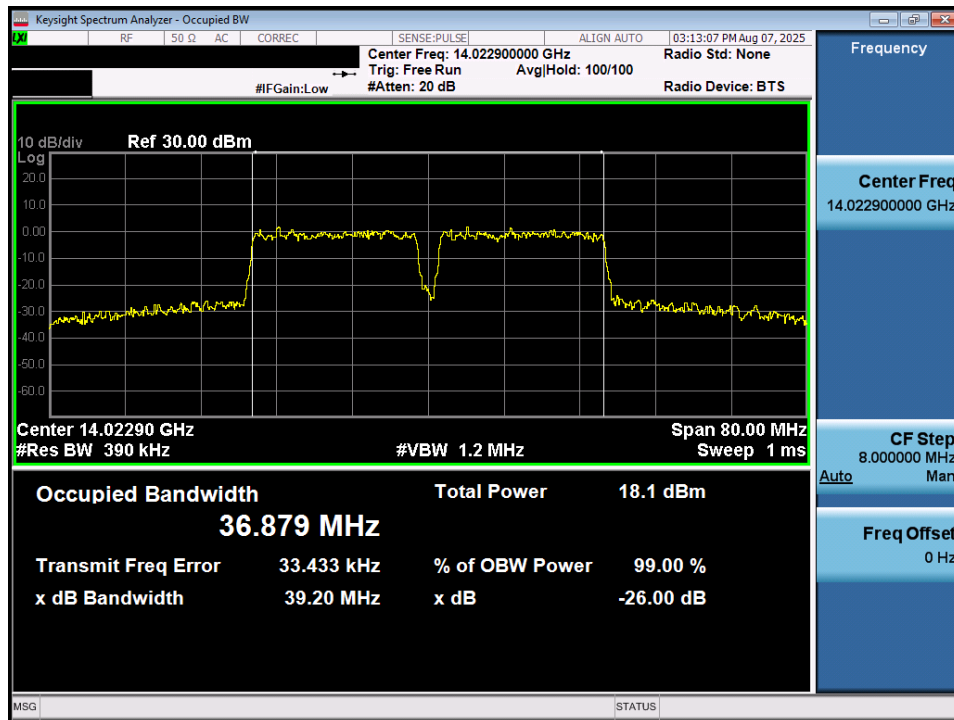
39.6 MHz / 8PSK / Lowest



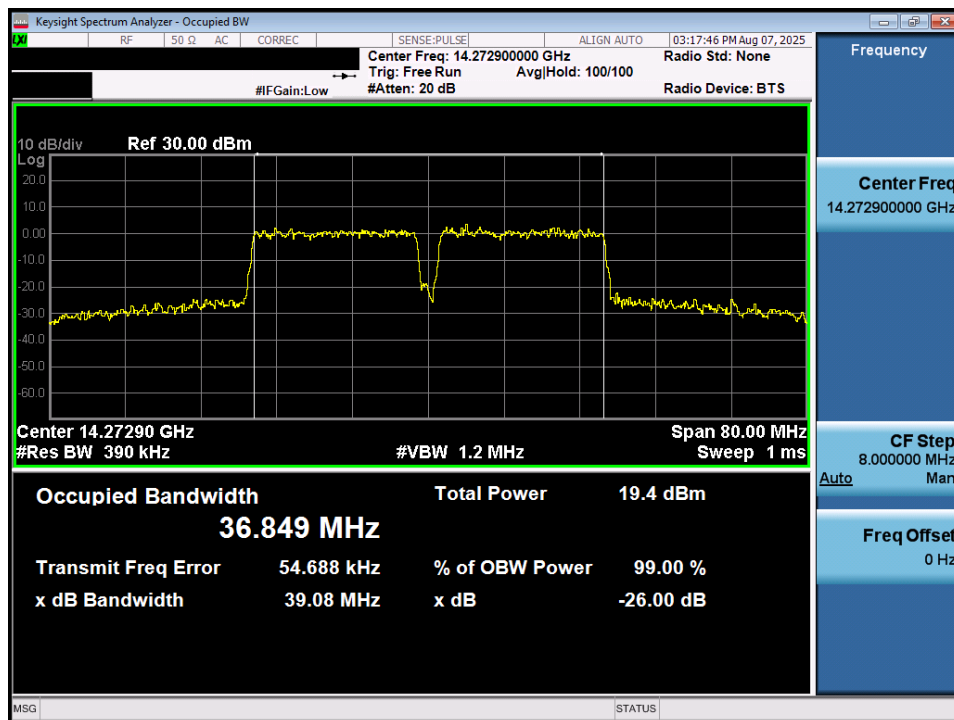
39.6 MHz / 8PSK / Middle



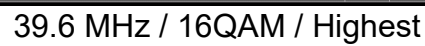
39.6 MHz / 8PSK / Highest



39.6 MHz / 16QAM / Lowest

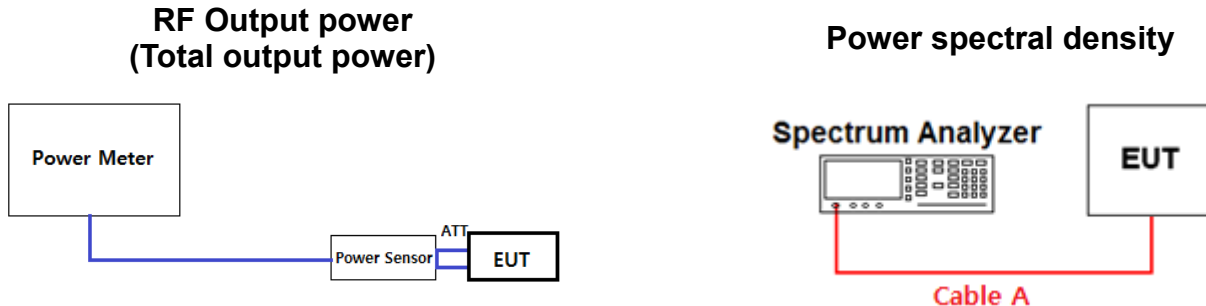


39.6 MHz / 16QAM / Middle



6.2. RF OUPUT POWER AND OFF-AXIS EIRP SPECTRAL DENSITY

Test Configuration



Test Procedure

- ERP & EIRP (Effective Radiated Power & Equivalent Isotropic Radiated Power)

- KDB971168 D01v03r01 - Section 5.6
- ANSI C63.26-2015 – Section 5.2.5.5

Determining ERP and EIRP from conducted RF output power measurement results

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T$$

where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

Test Procedure

RF Output Power

- KDB971168 D01v03r01 - Section 5.2.4
- ANSI C63.26-2015 – Section 5.2.4.2

When an average power meter is used to perform RF output power measurements, the fundamental condition that measurements be performed only over durations of active transmissions at maximum output power level applies. Thus, an average power meter can always be used to perform the measurement when the EUT can be configured to transmit continuously.

If the EUT cannot be configured to transmit continuously (i.e., burst duty cycle < 98%), then the following options can be implemented to facilitate measurement of the average power with an average power meter:

- a) A gated average power meter can be used to perform the measurement if the gating parameters can be adjusted such that the power is measured only during active transmission bursts at maximum output power levels.
- b) A conventional average power meter with no signal gating capability can also be used if the measured burst duty cycle is constant (i.e., duty cycle variations are less than or equal to $\pm 2\%$) by performing the measurement over the on/off burst cycles and then correcting (increasing) the measured level by a factor equal to $[10 \log (1/\text{duty cycle})]$.

Power Spectral Density

- KDB971168 D01v03r01 - Section 5.4
- ANSI C63.26-2015 – Section 5.2.4.5, 5.2.4.4.1

Test setting

1. Set span to 2 x to 3 x the OBW.
2. Set RBW = RBW specified by the requirement
3. Set VBW $\geq 3 \times$ RBW.
4. Set number of points in sweep $\geq 2 \times$ span / RBW.
5. Sweep time:
 - 1) Set = auto-couple, or
 - 2) Set $\geq [10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})]$ for single sweep (automation-compatible) measurement.
6. Detector = power averaging (rms).
7. Set sweep trigger to “free run”
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

Limit

Part 25.204

(a) In bands shared coequally with terrestrial radio communication services, the equivalent isotropically radiated power transmitted in any direction towards the horizon by an earth station, other than an ESV, operating in frequency bands between 1 and 15 GHz, shall not exceed the following limits except as provided for in paragraph (c) of this section:

+ 40 dBW in any 4 kHz band for $\theta \leq 0^\circ$

+ 40 + 3 θ dBW in any 4 kHz band for $0^\circ < \theta \leq 5^\circ$

where θ is the angle of elevation of the horizon viewed from the center of radiation of the antenna of the earth station and measured in degrees as positive above the horizontal plane and negative below it.

(b) In bands shared coequally with terrestrial radiocommunication services, the equivalent isotropically radiated power transmitted in any direction towards the horizon by an earth station operating in frequency bands above 15 GHz shall not exceed the following limits except as provided for in paragraph (c) of this section:

+ 64 dBW in any 1 MHz band for $\theta \leq 0^\circ$

+ 64 + 3 θ dBW in any 1 MHz band for $0^\circ < \theta \leq 5^\circ$

where θ is as defined in paragraph (a) of this section.

(c) For angles of elevation of the horizon greater than 5° there shall be no restriction as to the equivalent isotropically radiated power transmitted by an earth station towards the horizon.

Part 25.218

(f) Digital earth station operation in the conventional Ku-band.

(1) For co-polarized transmissions in the plane tangent to the GSO arc:

15-25log ₁₀ θ	dBW/4 kHz	for $1.5^\circ \leq \theta \leq 7^\circ$.
-6	dBW/4 kHz	for $7^\circ < \theta \leq 9.2^\circ$.
18-25log ₁₀ θ	dBW/4 kHz	for $9.2^\circ < \theta \leq 19.1^\circ$.
-14	dBW/4 kHz	for $19.1^\circ < \theta \leq 180^\circ$.

Where θ is as defined in paragraph (c)(1) of this section. The EIRP density levels specified for $\theta > 7^\circ$ may be exceeded by up to 3 dB in up to 10% of the range of θ angles from ± 7 -180°, and by up to 6 dB in the region of main reflector spillover energy.

(2) For co-polarized transmissions in the plane perpendicular to the GSO arc:

18-25log ₁₀ θ	dBW/4 kHz	for $3^\circ \leq \theta \leq 19.1^\circ$.
-14	dBW/4 kHz	for $19.1^\circ < \theta \leq 180^\circ$.

Where θ is as defined in paragraph (c)(1) of this section. These EIRP density levels may be exceeded by up to 6 dB in the region of main reflector spillover energy and in up to 10% of the range of θ angles not included in that region, on each side of the line from the earth station to the target satellite.

(3) For cross-polarized transmissions in the plane tangent to the GSO arc and in the plane perpendicular to the GSO arc:

5-25log ₁₀ θ	dBW/4 kHz	for $1.5^\circ \leq \theta \leq 7^\circ$.
--------------------------------	-----------	--

Where θ is as defined in paragraph (c)(1) of this section.

(4) A license application for earth station operation in a network using variable power density control of earth stations transmitting simultaneously in shared frequencies to the same target satellite receiving beam may be routinely processed if the applicant certifies that the aggregate off-axis EIRP density from all co-frequency earth stations transmitting simultaneously to the same target satellite receiving beam, not resulting from colliding data bursts transmitted pursuant to a contention protocol, will not exceed the off-axis EIRP density limits permissible for a single earth station, as specified in paragraphs (f)(1) through (f)(3) of this section.

Test Results

RF Output Power

Bandwidth (MHz)	Modulation	Tested Frequency	Conducted Output Power (dBm)	Conducted Spectral Density (dBm/4kHz)	Antenna Gain (dBi)	EIRP Spectral Density Result (dBm/4kHz)	Limit (dBm/4kHz)
19.8	QPSK	Lowest	7.24	-19.50	50.5	31.00	70
		Middle	8.26	-18.45	50.5	32.05	70
		Highest	8.27	-18.76	50.5	31.74	70
	8PSK	Lowest	7.22	-19.50	50.5	31.00	70
		Middle	8.25	-18.29	50.5	32.21	70
		Highest	8.24	-18.74	50.5	31.76	70
	16QAM	Lowest	7.21	-19.66	50.5	30.84	70
		Middle	8.24	-18.42	50.5	32.08	70
		Highest	8.25	-18.89	50.5	31.61	70
39.6	QPSK	Lowest	10.43	-19.73	50.5	30.77	70
		Middle	11.43	-19.07	50.5	31.43	70
		Highest	10.26	-20.32	50.5	30.18	70
	8PSK	Lowest	10.42	-20.23	50.5	30.27	70
		Middle	11.41	-19.19	50.5	31.31	70
		Highest	10.23	-19.94	50.5	30.56	70
	16QAM	Lowest	10.40	-20.16	50.5	30.34	70
		Middle	11.42	-19.13	50.5	31.37	70
		Highest	10.25	-19.93	50.5	30.57	70

Note 1: The RF output power(total power) was measured using an average power meter for reference only.

Off-Axis EIRP Spectral Density

Note:

The off-axis EIRP spectral density was determined based on the maximum conducted spectral density and the antenna gain as a function of the off-axis angle(θ). And the angle(θ) with the worst-case margin was reported.

For co-polarized transmissions in the plane tangent

(θ)	Modulation	Tested Frequency	Worst case (θ) angle ($^{\circ}$)	Conducted Spectral Density (dBm/4kHz)	Antenna Gain (dBi)	Off-Axis Spectral Density (dBm/4kHz)	Limit (dBm/4kHz)
$1.5^{\circ} \leq \theta \leq 7^{\circ}$	8PSK	Middle	2.5	-18.29	45.7	27.41	35.05
$7^{\circ} < \theta \leq 9.2^{\circ}$	8PSK	Middle	7.1	-18.29	33.1	14.81	24.00
$9.2^{\circ} < \theta \leq 19.1^{\circ}$	8PSK	Middle	14.7	-18.29	25.8	7.51	18.82
$19.1^{\circ} < \theta \leq 180^{\circ}$	8PSK	Middle	23.1	-18.29	25.2	6.91	16.00

For co-polarized transmissions in the plane perpendicular

(θ)	Modulation	Tested Frequency	Worst case (θ) angle ($^{\circ}$)	Conducted Spectral Density (dBm/4kHz)	Antenna Gain (dBi)	Off-Axis Spectral Density (dBm/4kHz)	Limit (dBm/4kHz)
$3^{\circ} \leq \theta \leq 19.1^{\circ}$	8PSK	Middle	7.2	-18.29	35.8	17.51	26.57
$19.1^{\circ} < \theta \leq 180^{\circ}$	8PSK	Middle	23.9	-18.29	24.3	6.01	16.00

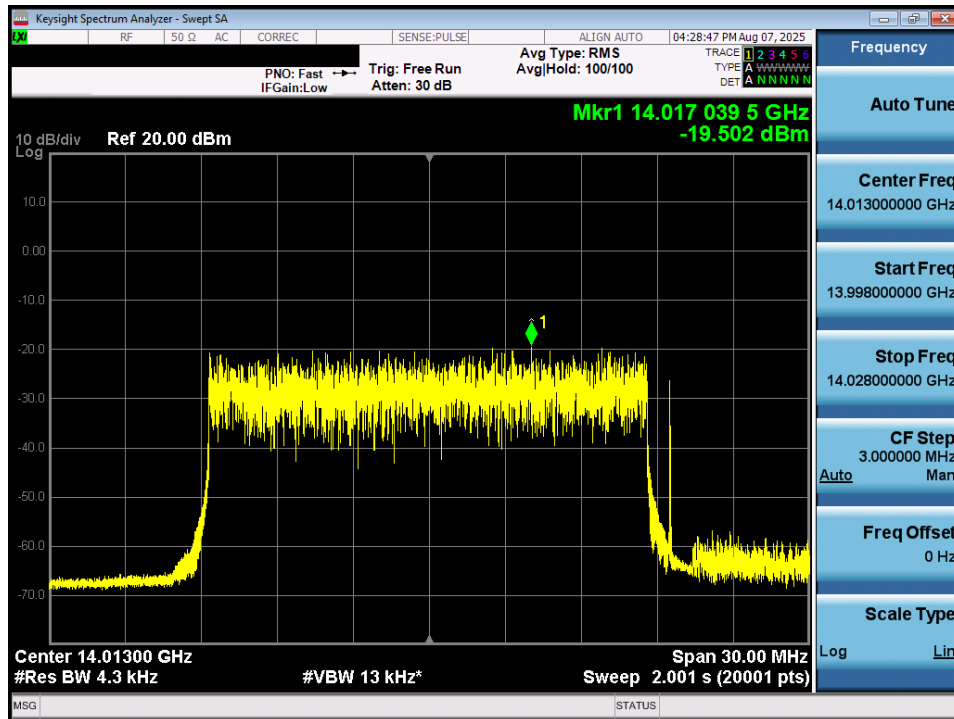
For cross-polarized transmissions in the plane tangent

(θ)	Modulation	Tested Frequency	Worst case (θ) angle ($^{\circ}$)	Conducted Spectral Density (dBm/4kHz)	Antenna Gain (dBi)	Off-Axis Spectral Density (dBm/4kHz)	Limit (dBm/4kHz)
$1.5^{\circ} \leq \theta \leq 7^{\circ}$	8PSK	Middle	6.9	-18.29	21.4	3.11	14.03

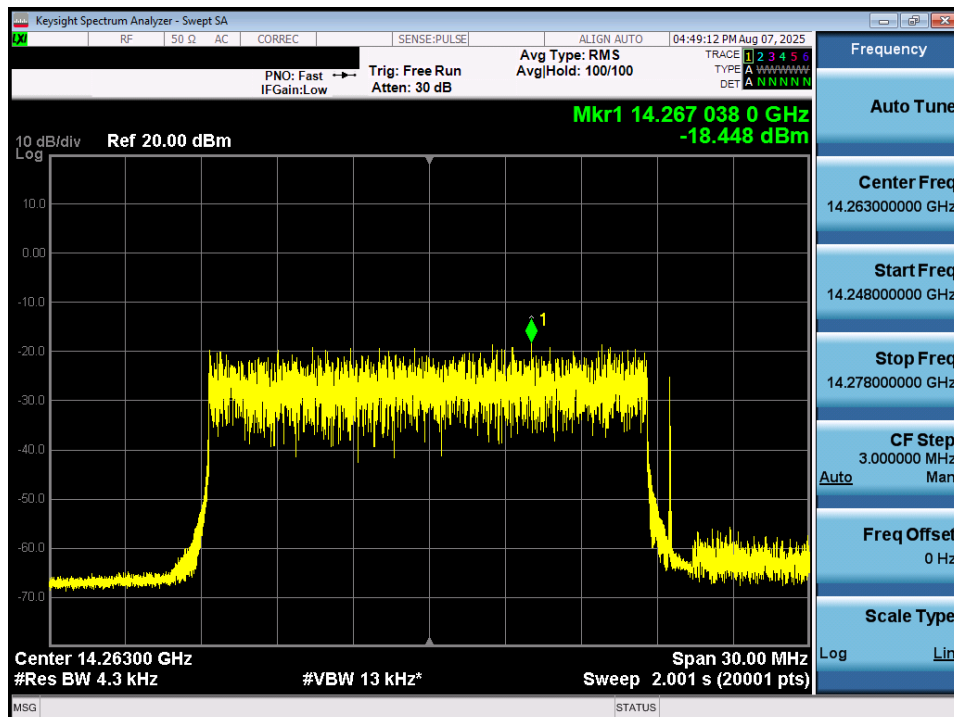
For cross-polarized transmissions in the plane perpendicular

(θ)	Modulation	Tested Frequency	Worst case (θ) angle ($^{\circ}$)	Conducted Spectral Density (dBm/4kHz)	Antenna Gain (dBi)	Off-Axis Spectral Density (dBm/4kHz)	Limit (dBm/4kHz)
$1.5^{\circ} \leq \theta \leq 7^{\circ}$	8PSK	Middle	7	-18.29	23	4.71	13.87

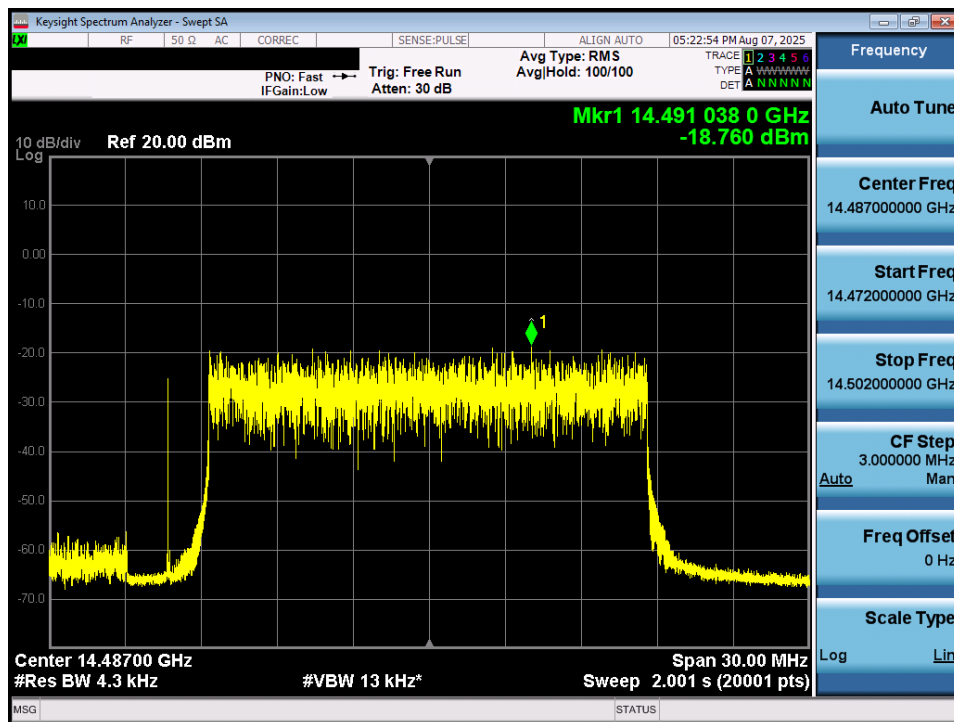
RF Output Power (dBm/4kHz)



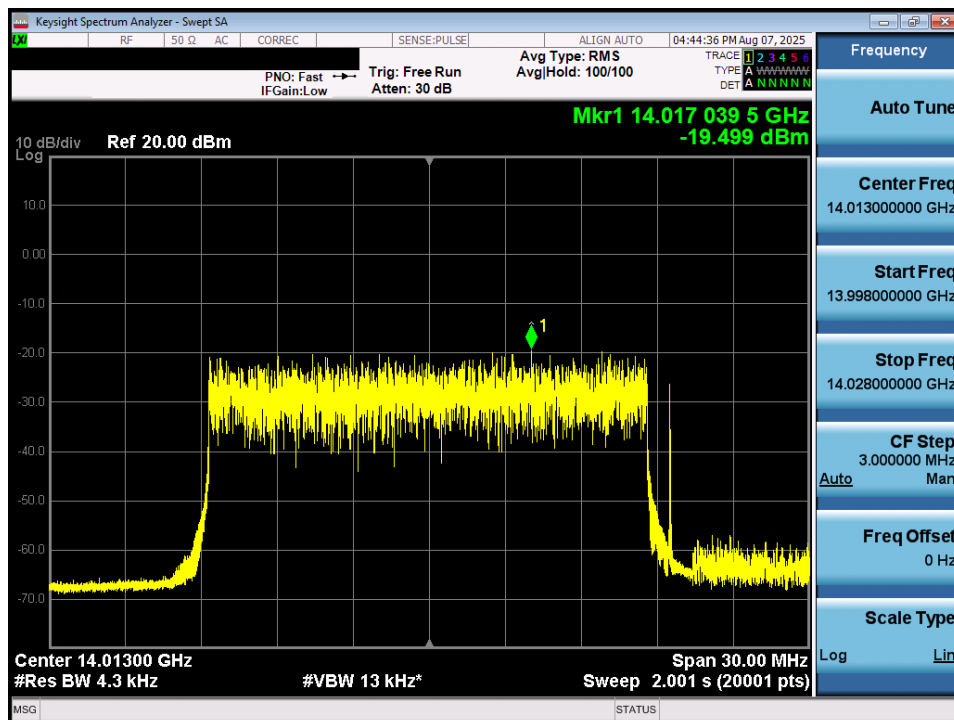
19.8 MHz / QPSK / Lowest Channel



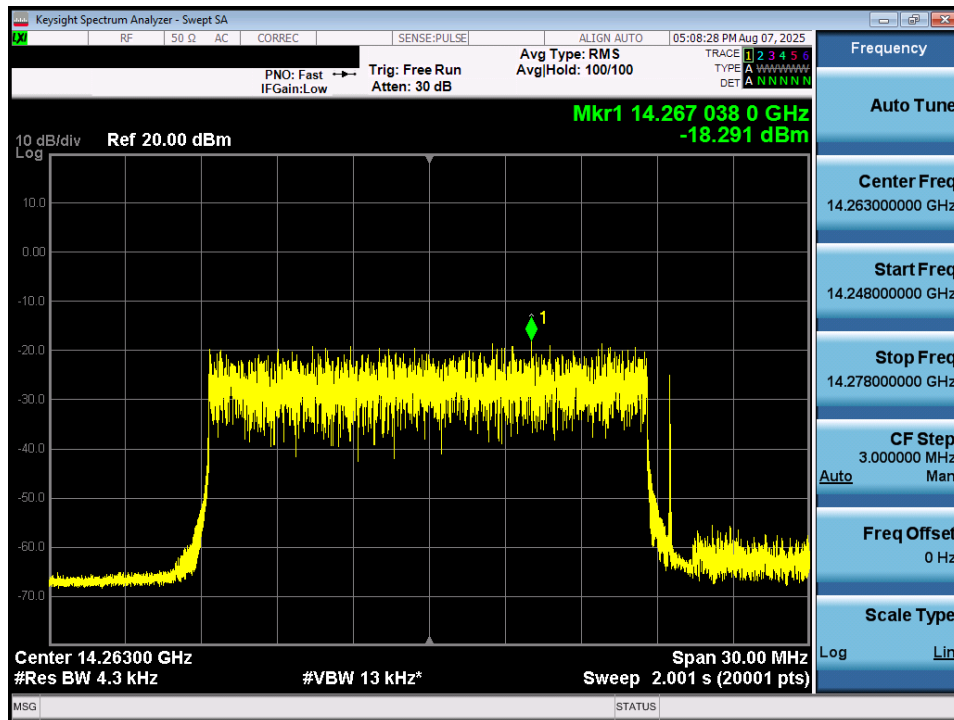
19.8 MHz / QPSK / Middle Channel



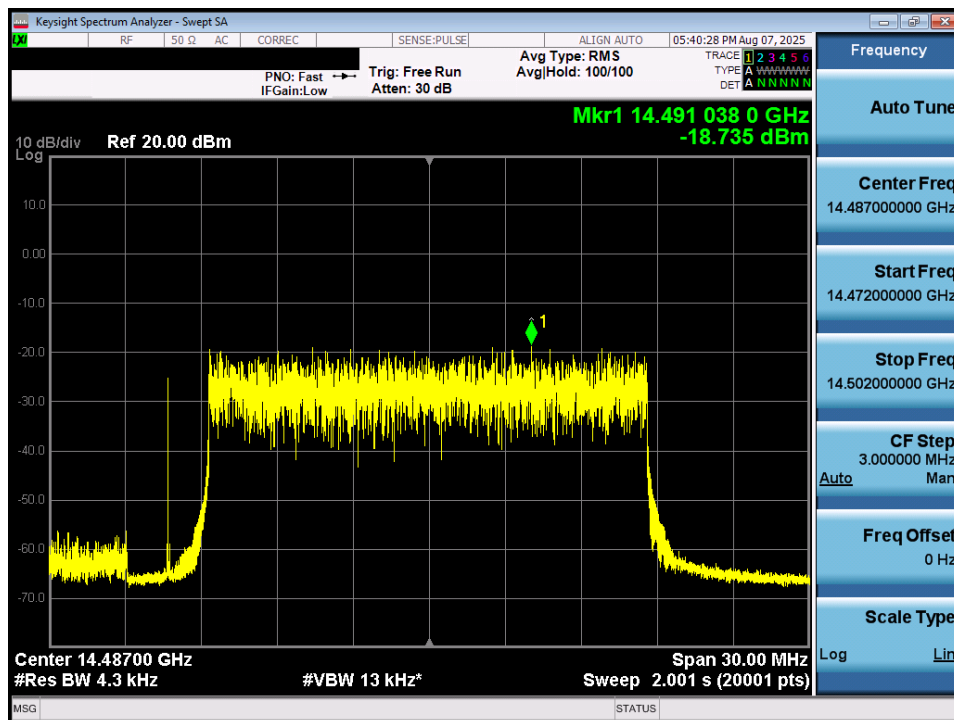
19.8 MHz / QPSK / Highest Channel



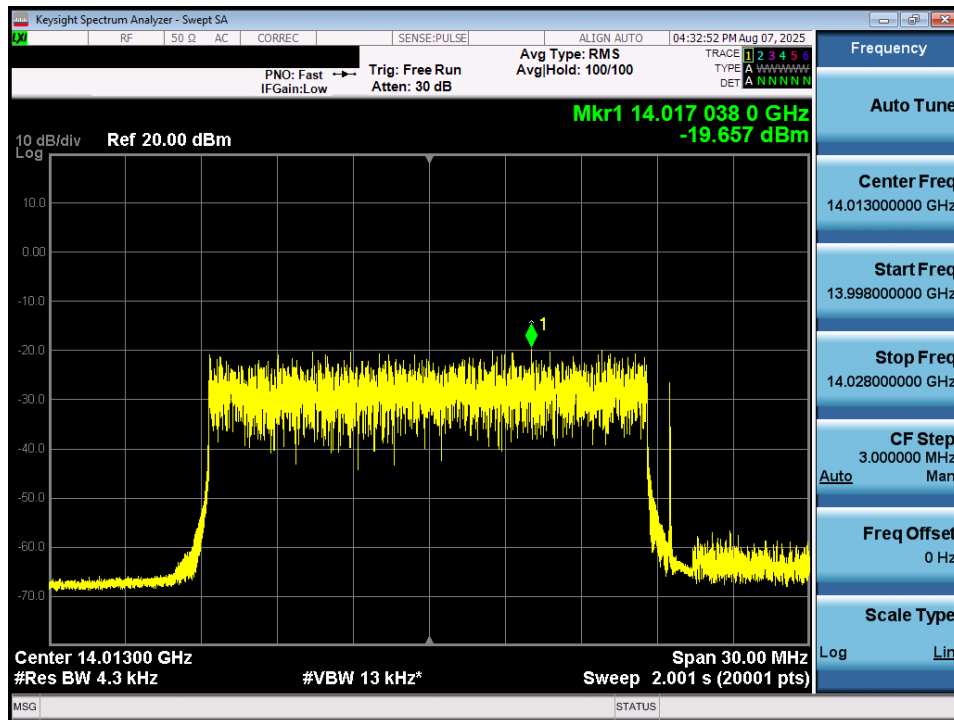
19.8 MHz / 8PSK / Lowest Channel



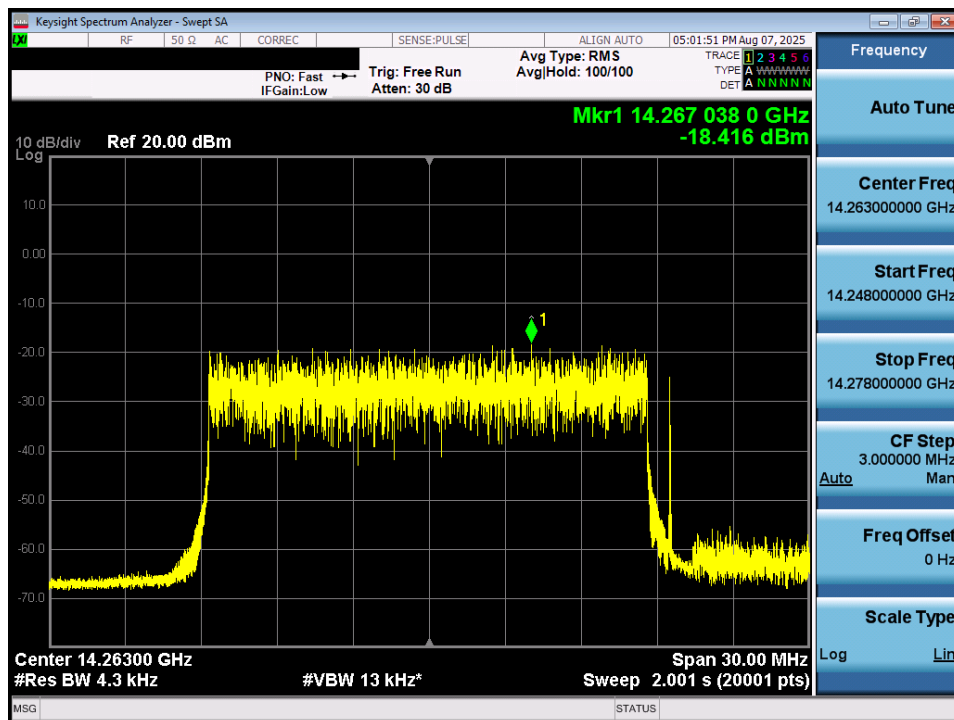
19.8 MHz / 8PSK / Middle Channel



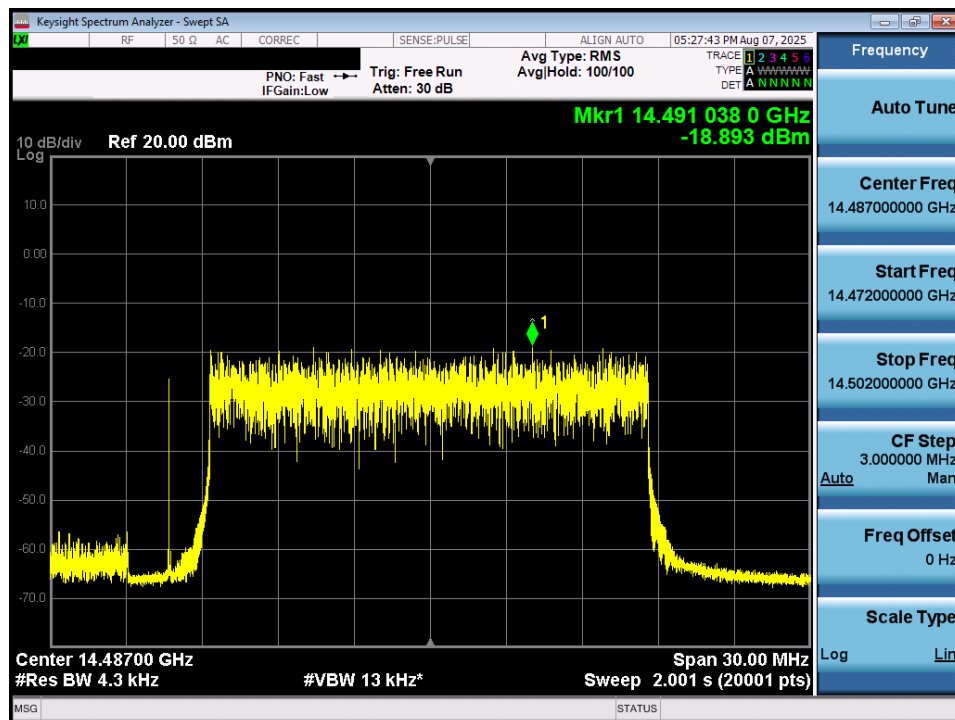
19.8 MHz / 8PSK / Highest Channel



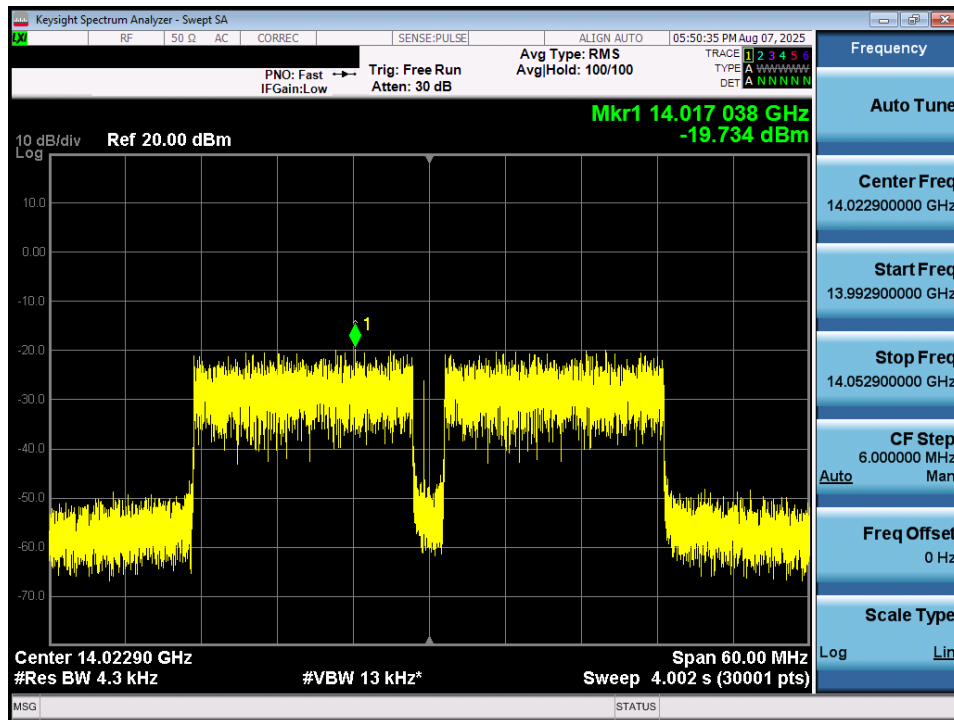
19.8 MHz / 16QAM / Lowest Channel



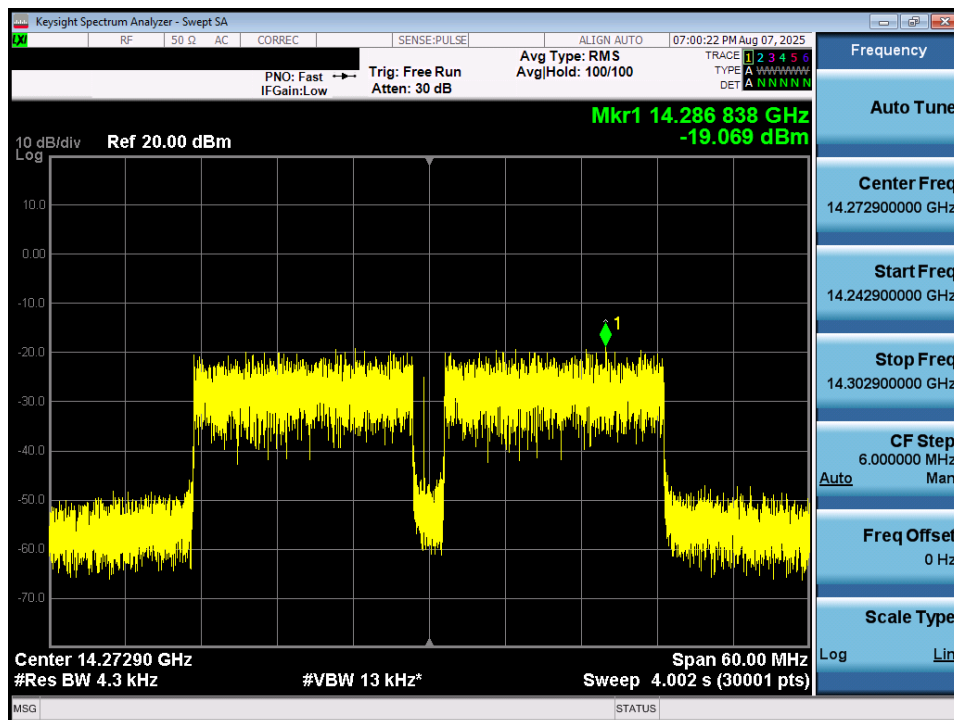
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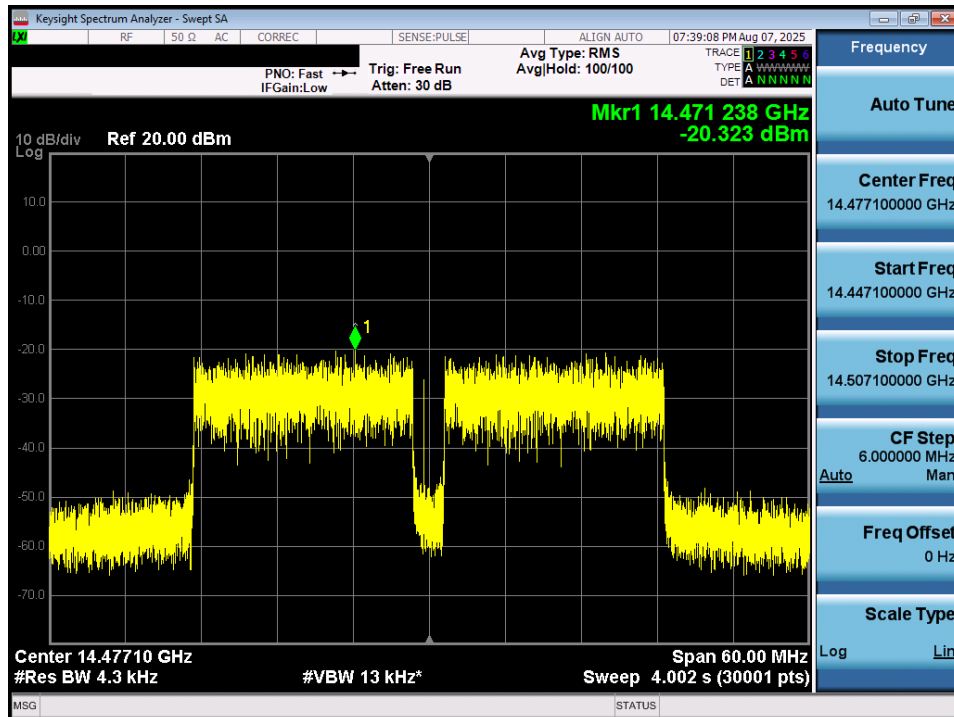
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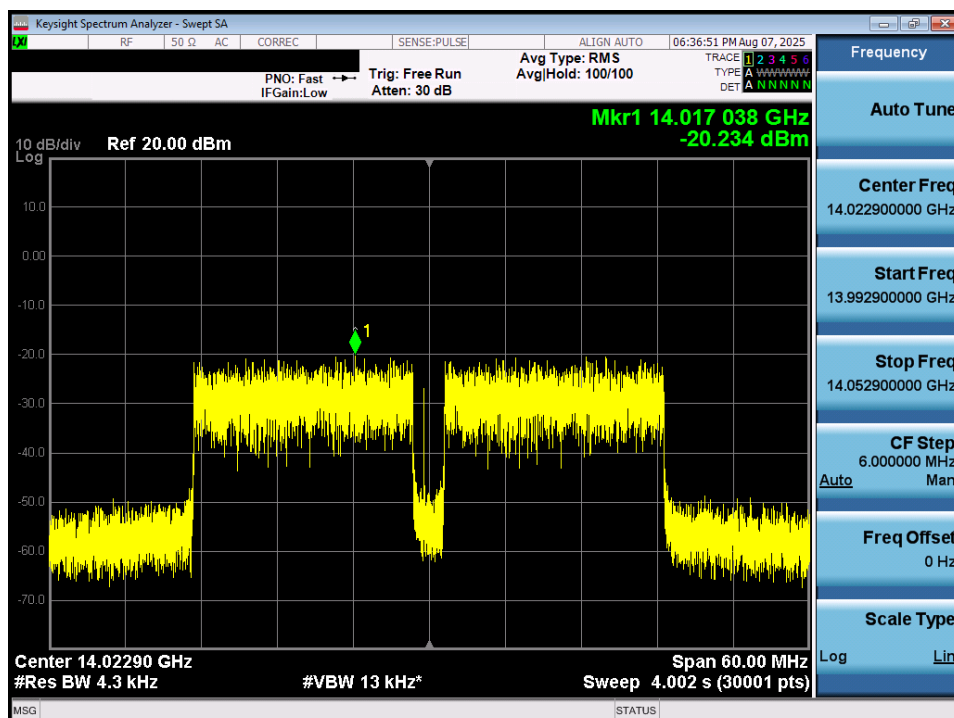
39.6 MHz / QPSK / Lowest Channel



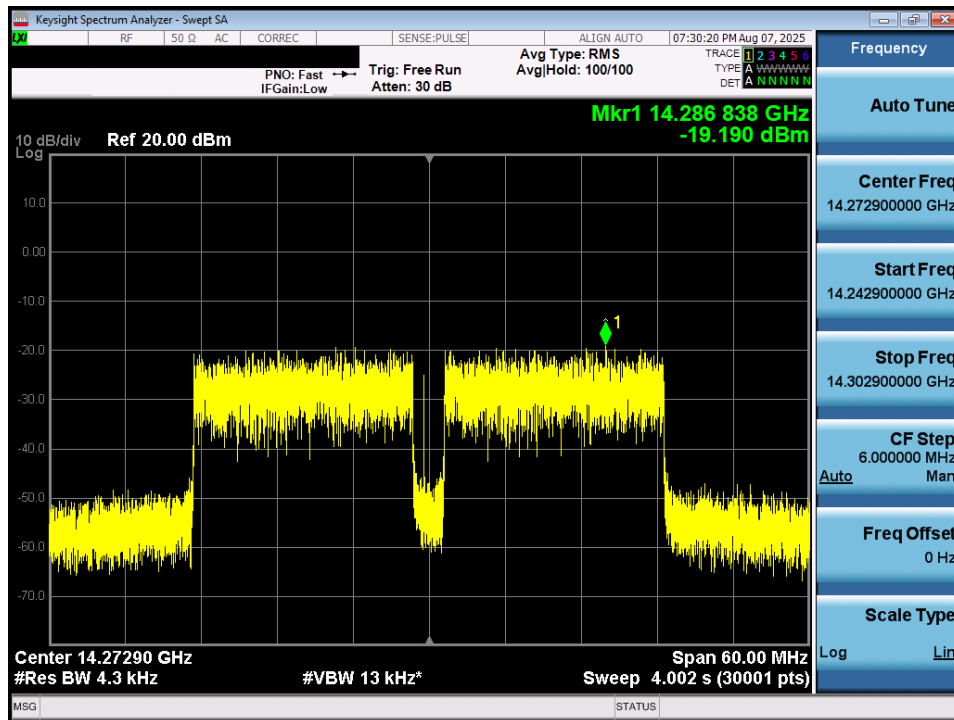
39.6 MHz / QPSK / Middle Channel



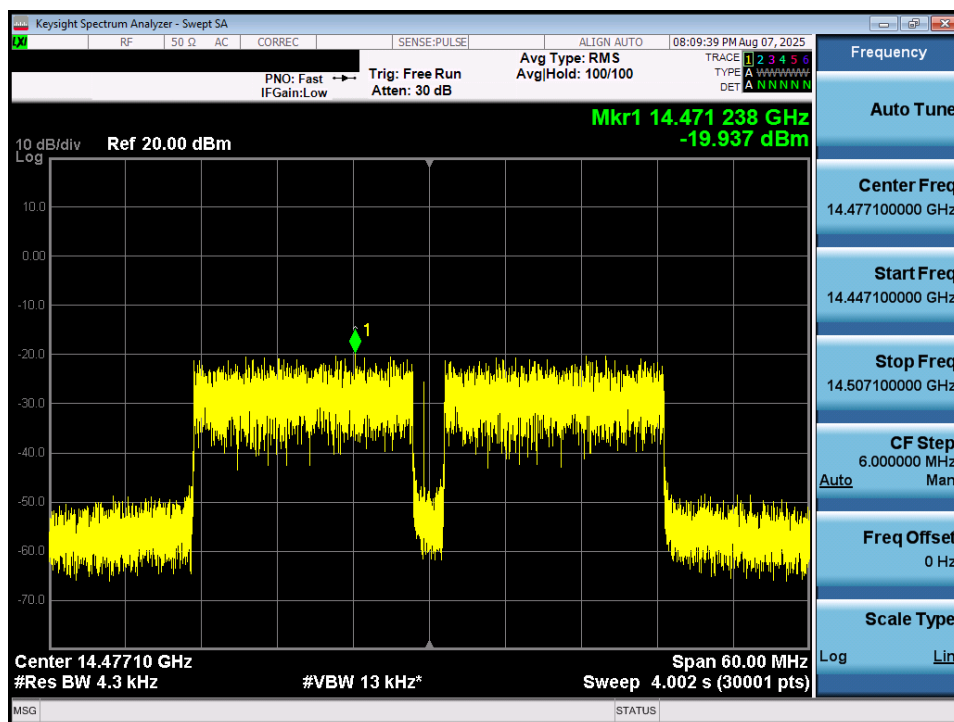
39.6 MHz / QPSK / Highest Channel



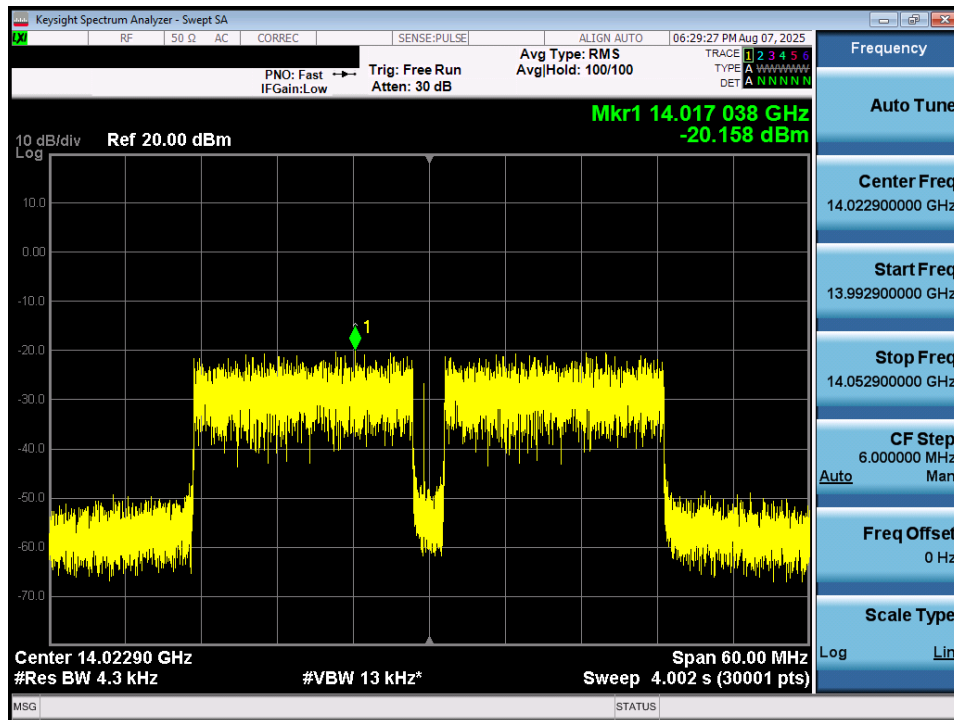
39.6 MHz / 8PSK / Lowest Channel



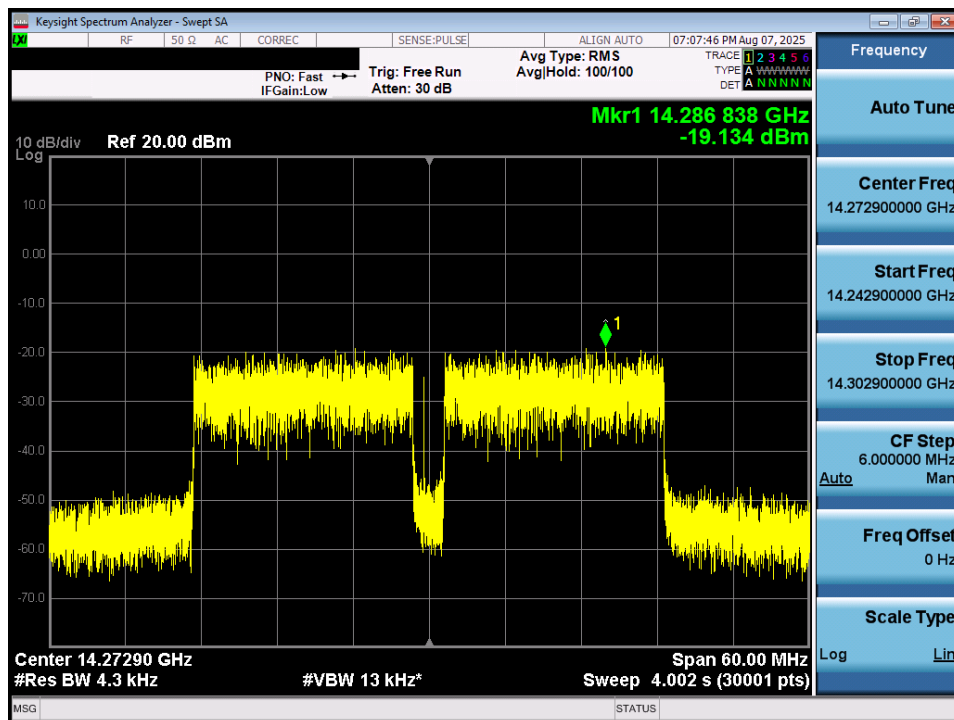
39.6 MHz / 8PSK / Middle Channel



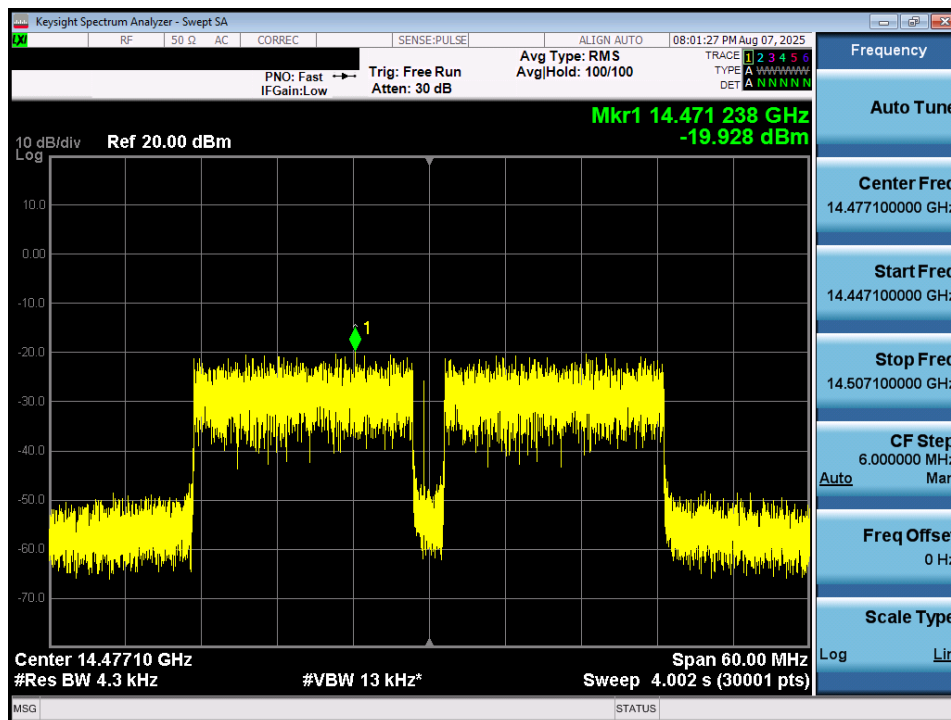
39.6 MHz / 8PSK / Highest Channel



39.6 MHz / 16QAM / Lowest Channel



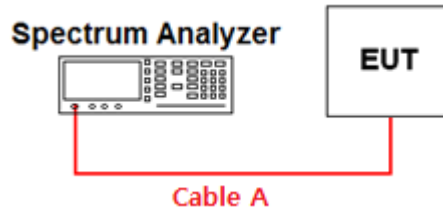
39.6 MHz / 16QAM / Middle Channel



39.6 MHz / 16QAM / Highest Channel

6.3. EMISSION MASK AT ANTENNA TERMINAL

Test Configuration



Test Procedure

- KDB971168 D01v03r01 - Section 6
- ANSI C63.26-2015 – Section 5.7

Test setting

- 1) RBW = 10 kHz
Note: The measurement was performed with an RBW greater than specified bandwidth (4 kHz).
- 2) VBW $\geq 3 \times$ RBW
- 3) Detector = RMS & Trace mode = Max hold
- 4) Sweep time = Auto couple
- 5) Number of sweep point $\geq 2 \times$ span / RBW
- 6) The trace was allowed to stabilize

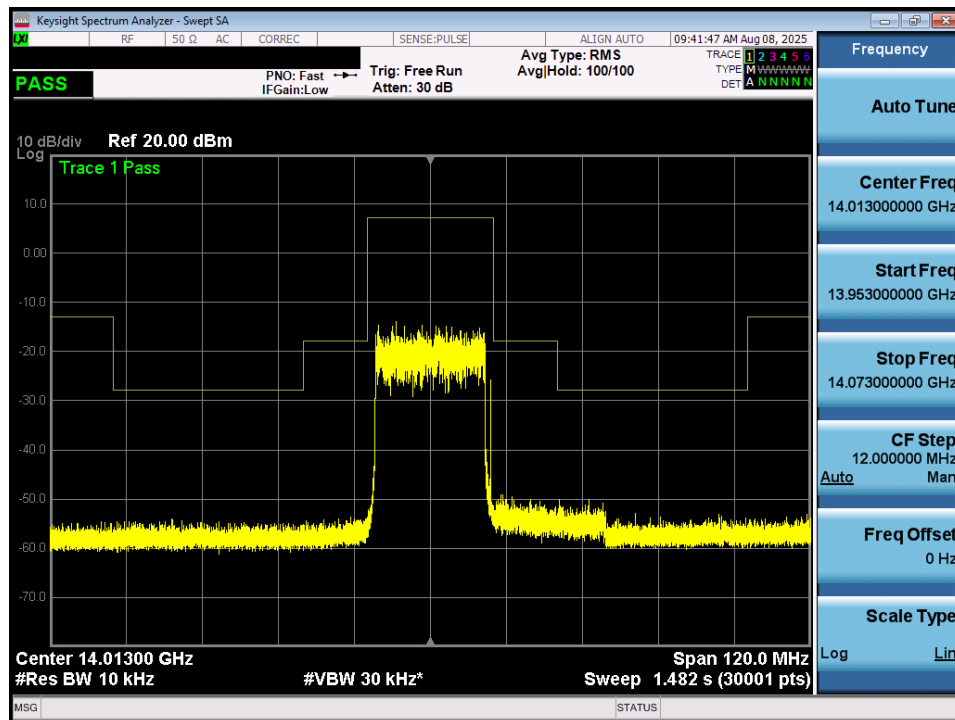
Limit

Part 25.202(f)

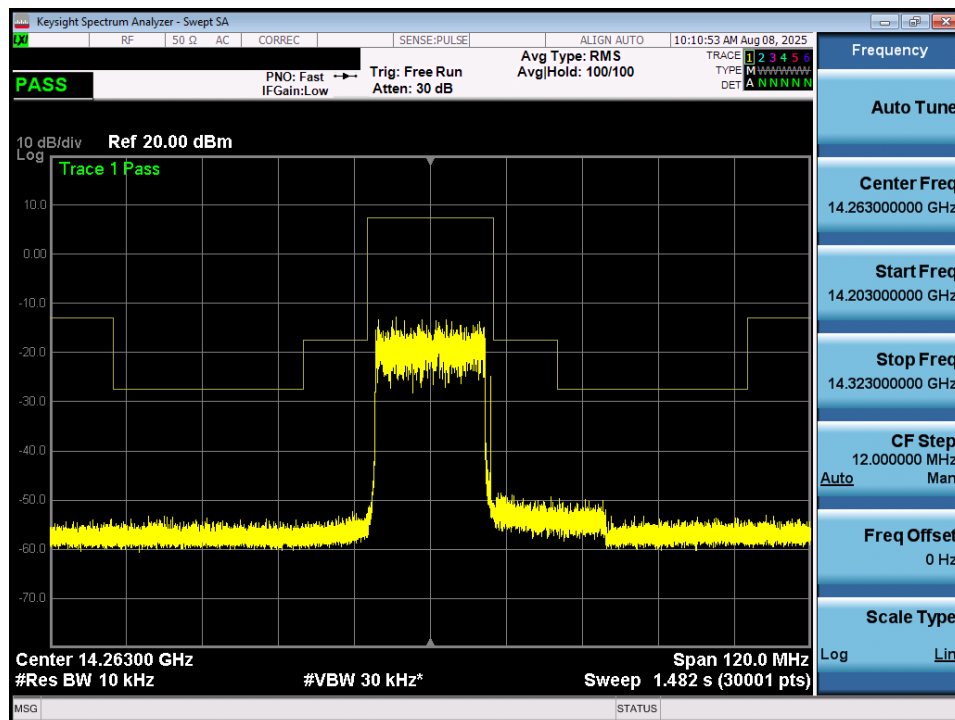
(f) *Emission limitations.* Except for SDARS terrestrial repeaters and as provided for in paragraph (i), the mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the schedule set forth in paragraphs (f)(1) through (f)(4) of this section. The out-of-band emissions of SDARS terrestrial repeaters shall be attenuated in accordance with the schedule set forth in paragraph (h) of this section.

- (1) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: 25 dB;
- (2) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: 35 dB;
- (3) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: An amount equal to 43 dB plus 10 times the logarithm (to the base 10) of the transmitter power in watts;
- (4) In any event, when an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in paragraphs (f) (1), (2) and (3) of this section.

Test Results



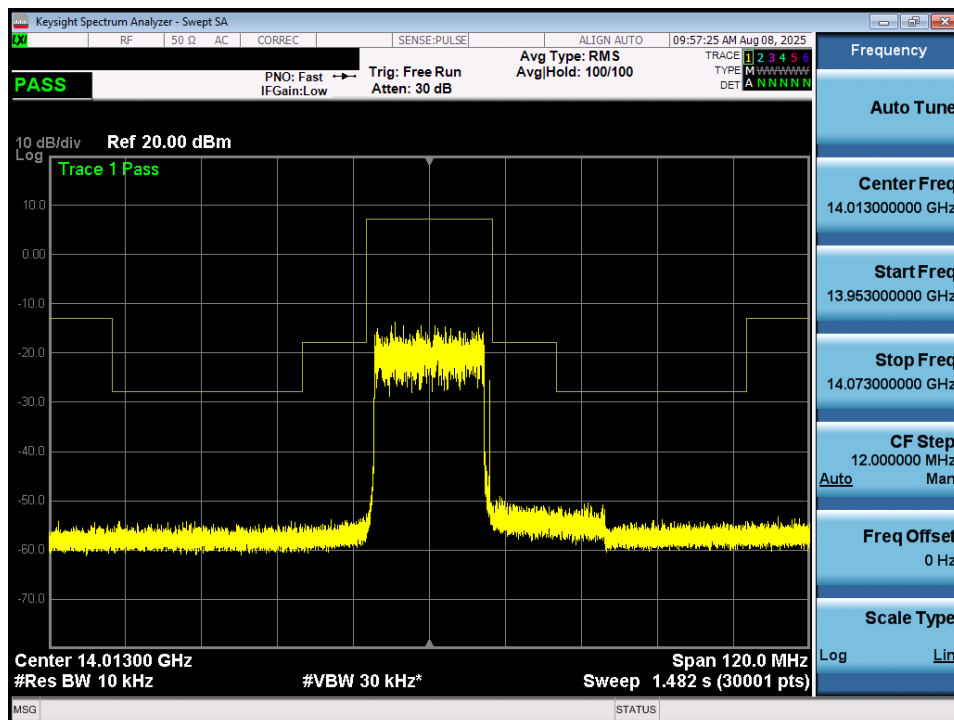
19.8 MHz / QPSK / Lowest Channel



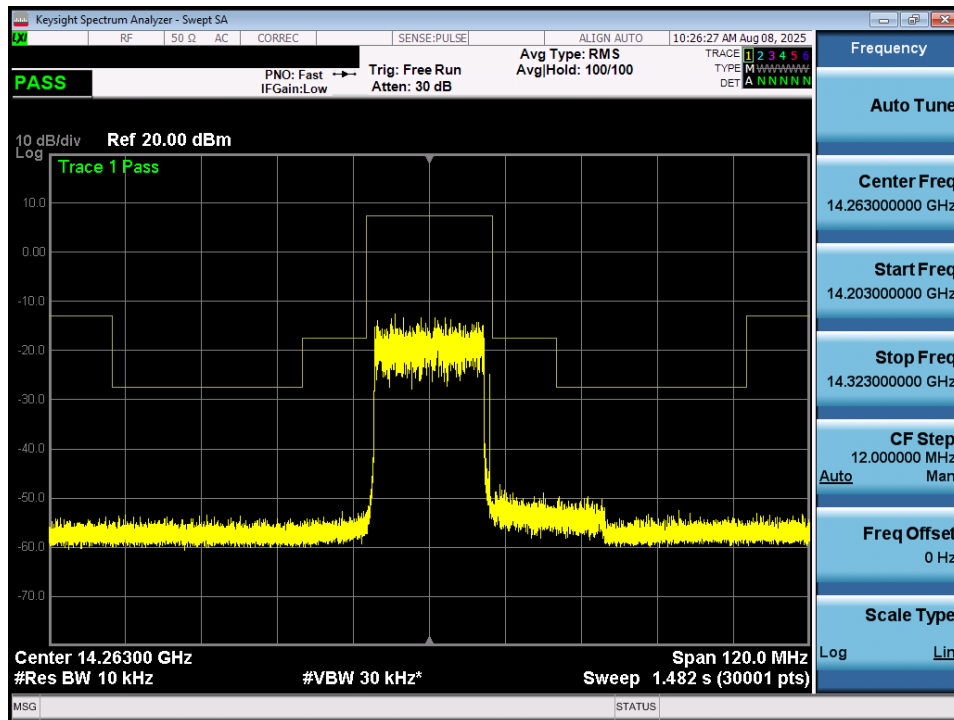
19.8 MHz / QPSK / Middle Channel



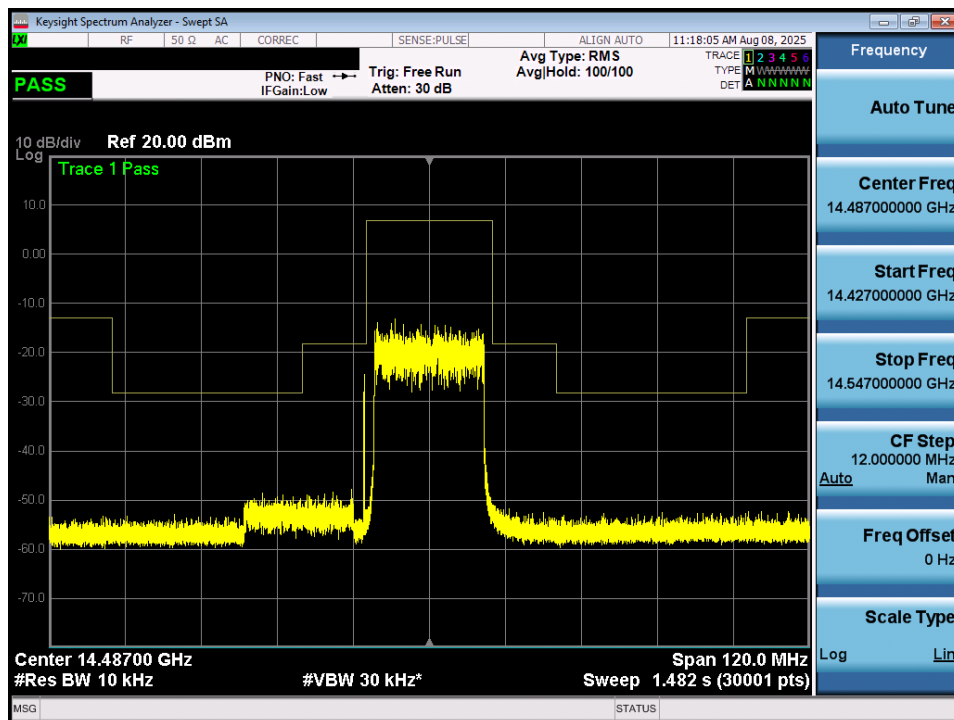
19.8 MHz / QPSK / Highest Channel



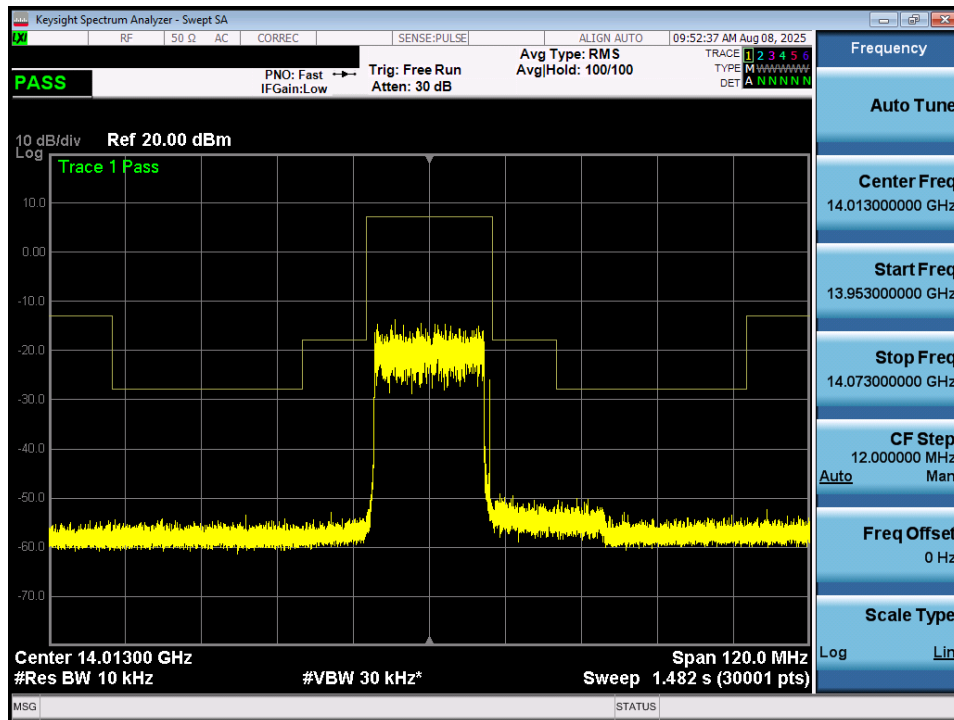
19.8 MHz / 8PSK / Lowest Channel



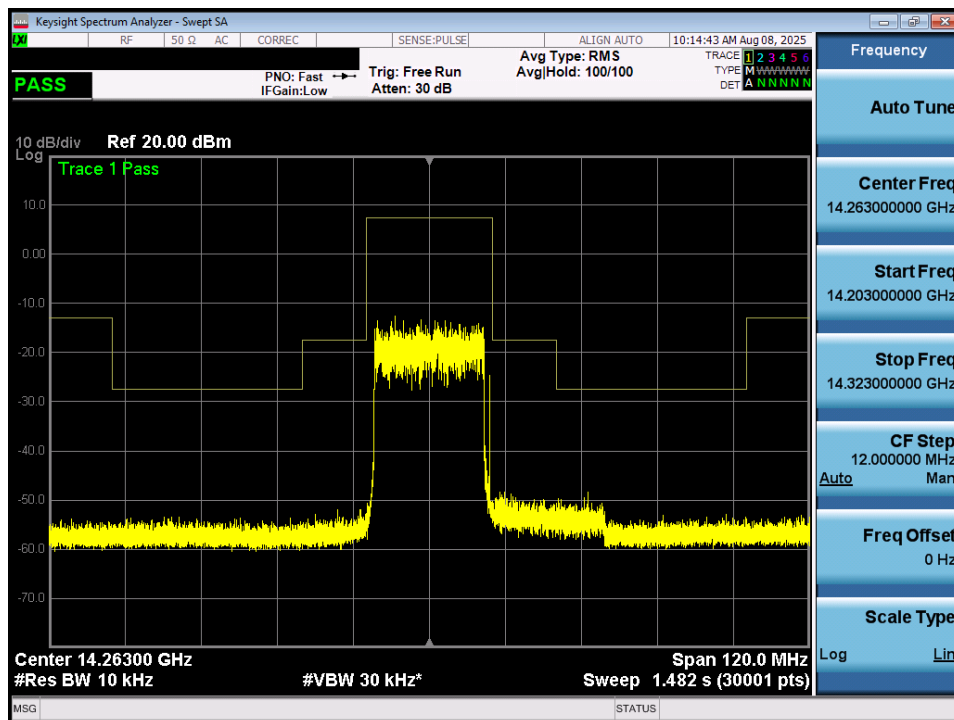
19.8 MHz / 8PSK / Middle Channel



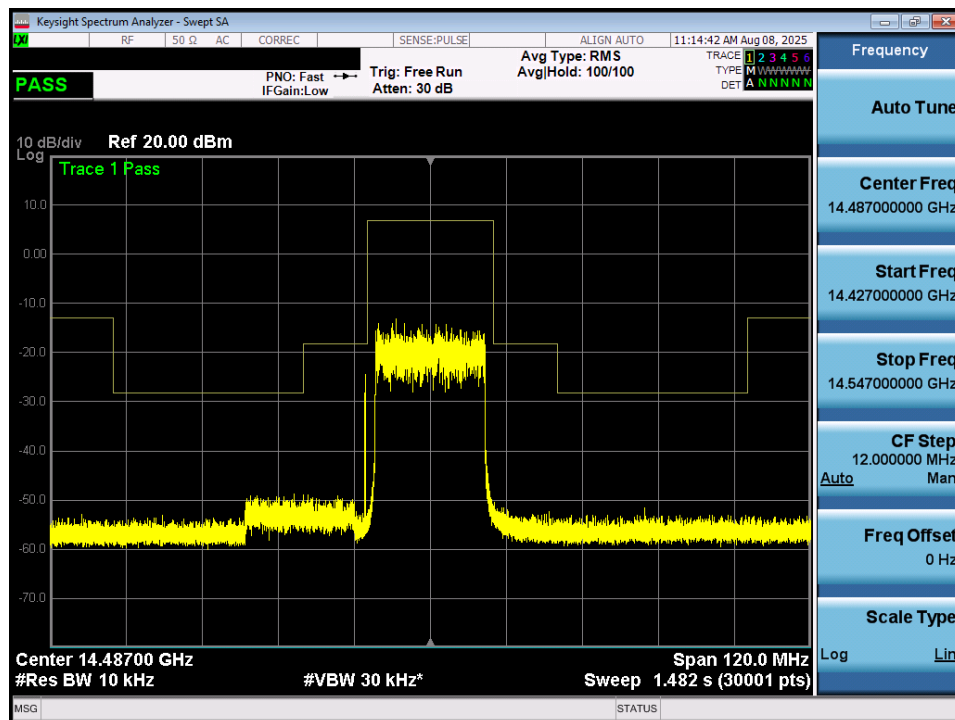
19.8 MHz / 8PSK / Highest Channel



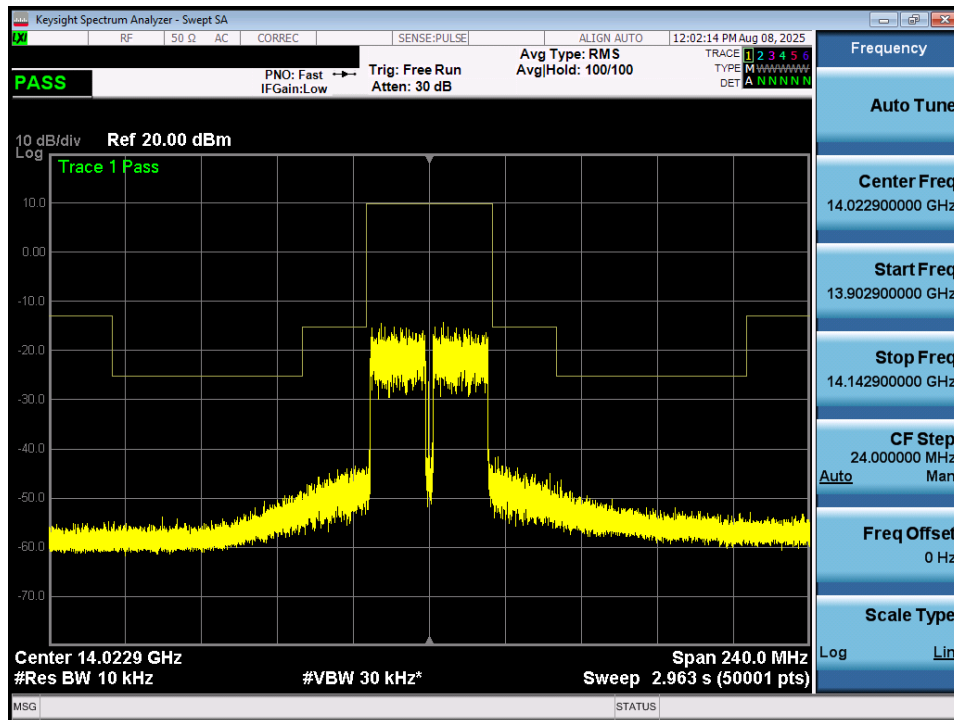
19.8 MHz / 16QAM / Lowest Channel



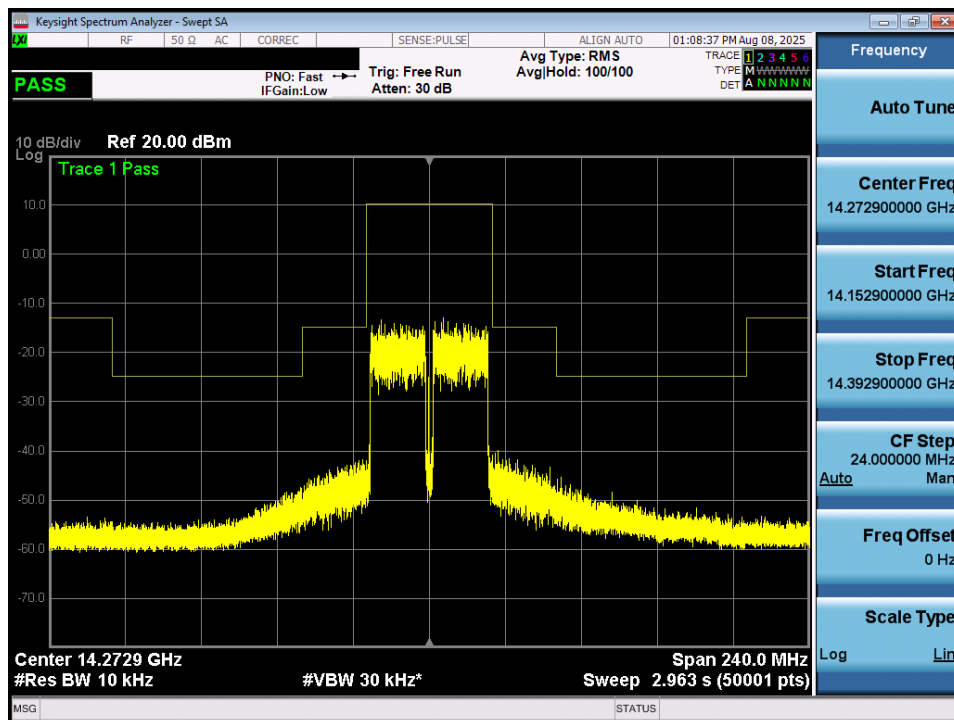
19.8 MHz / 16QAM / Middle Channel



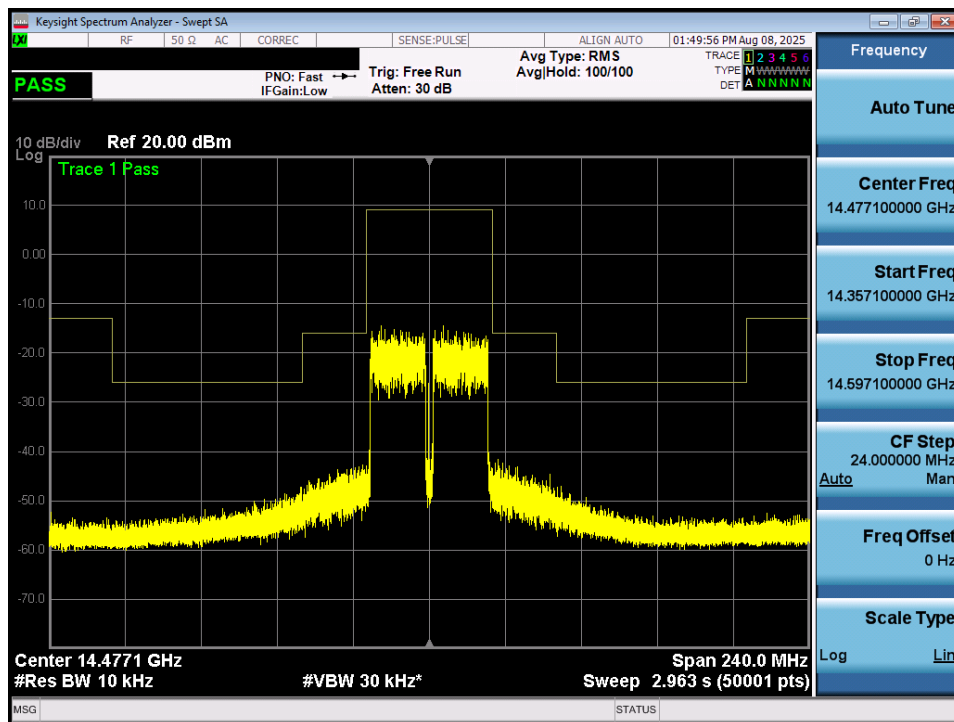
19.8 MHz / 16QAM / Highest Channel



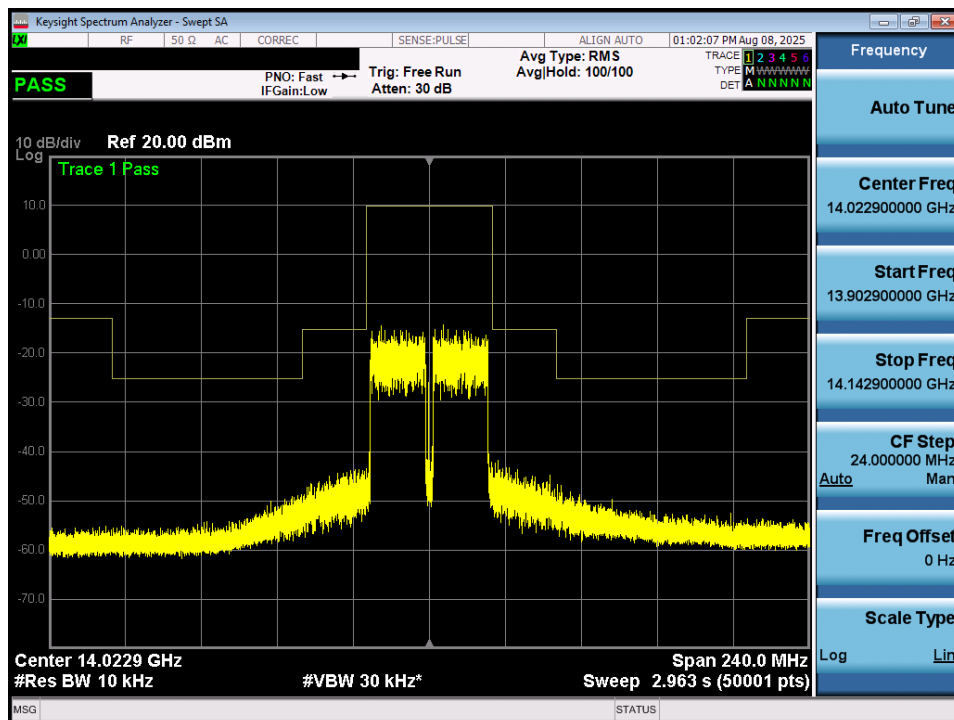
39.6 MHz / QPSK / Lowest Channel



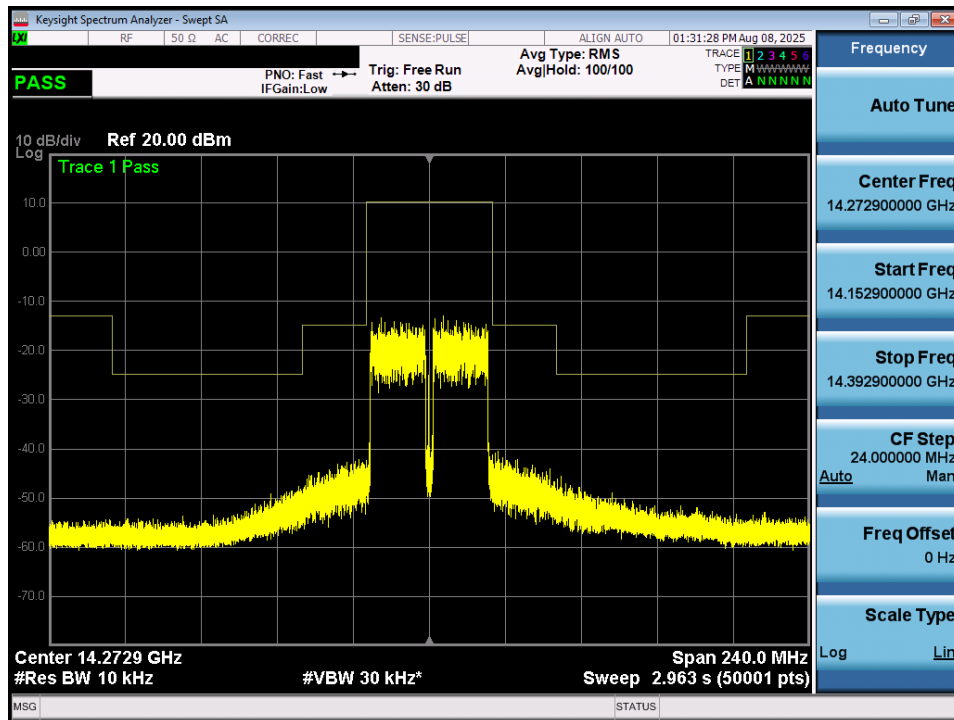
39.6 MHz / QPSK / Middle Channel



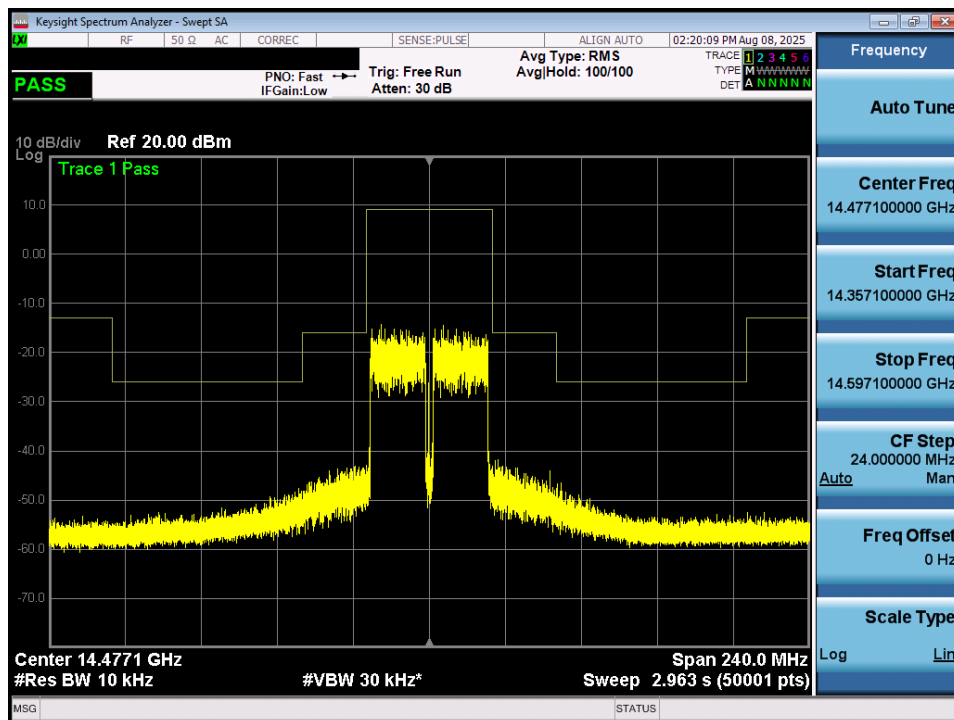
39.6 MHz / QPSK / Highest Channel



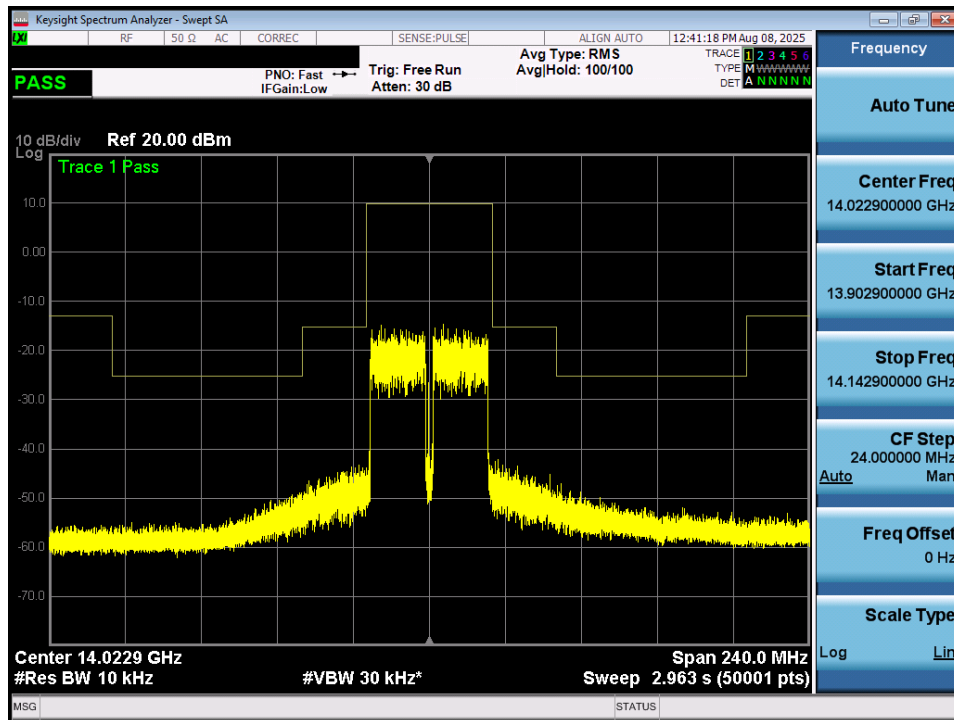
39.6 MHz / 8PSK / Lowest Channel



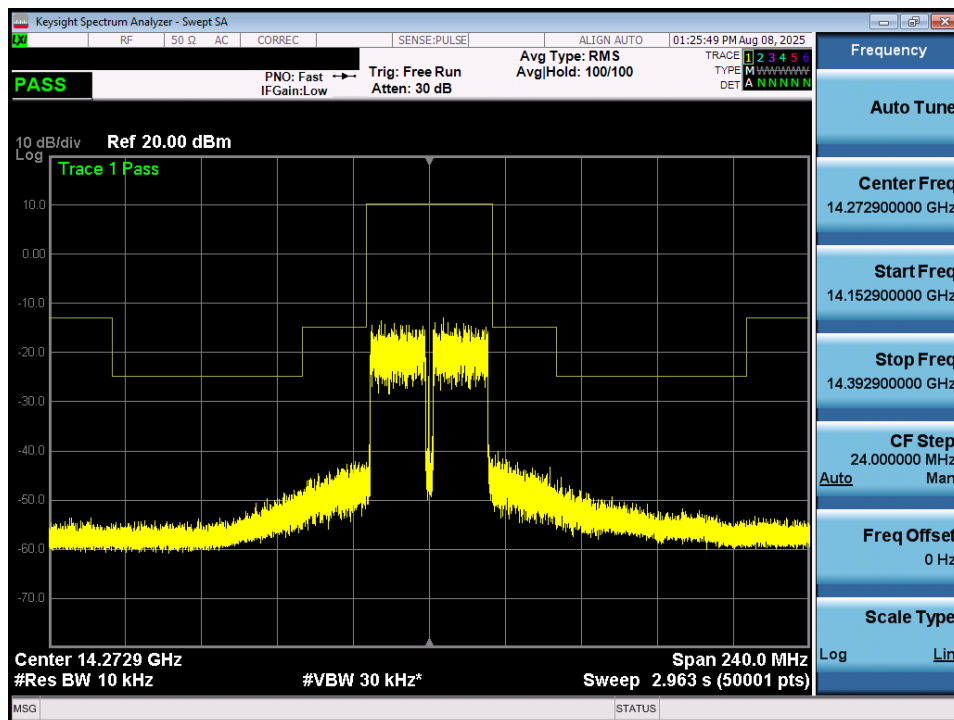
39.6 MHz / 8PSK / Middle Channel



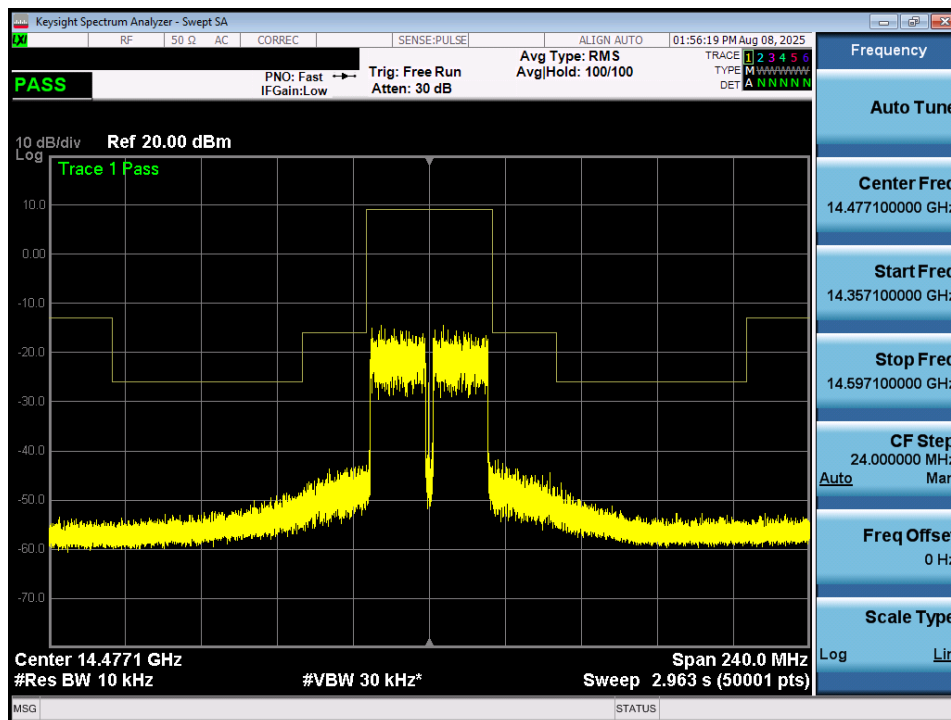
39.6 MHz / 8PSK / Highest Channel



39.6 MHz / 16QAM / Lowest Channel



39.6 MHz / 16QAM / Middle Channel



39.6 MHz / 16QAM / Highest Channel