

PART 96 RF TEST REPORT

FCC ID:	A3LSMS741U
Model (s):	SM-S741U, SM-S741U1
Device Type:	Portable Handset
Report Issue Date:	July 24, 2026

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

The measurement evaluations presented in this report are based on the maximum performance of the tested device(s), which has been shown to be capable of compliance with the applicable technical requirements specified herein and has been tested in accordance with the measurement procedures outlined in 47CFR §2.947, ANSI C63.26 - 2015.

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This document has been revised and replaces all previously issued versions of this document with the same Test Report S/N.



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Technical Manager

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1. DUT Specifics

1.1. Device under Test

The manufacturer has confirmed that the device is within operational tolerances expected for production units and has the same physical, mechanical, and thermal characteristics expected for production units. The serial number of the device used for each test is indicated alongside the results.

1.2. Maximum Power per Mode

Table 1-1 **Antenna F** Summary

Band	Band Width [MHz]	Modulation	Frequency Range [MHz]	Max E.I.R.P		OBW [MHz]	Emission Designator
				[dBm/10MHz]	[W]		
LTE Band 48	20	QPSK	3560.0 - 3690.0	21.29	0.135	18.00	18M0G7D
		16QAM	3560.0 - 3690.0	20.78	0.120	17.99	18M0W7D
	15	QPSK	3557.5 - 3692.5	21.19	0.132	13.53	13M5G7D
		16QAM	3557.5 - 3692.5	20.95	0.124	13.53	13M5W7D
	10	QPSK	3555.0 - 3695.0	21.25	0.133	9.08	9M08G7D
		16QAM	3555.0 - 3695.0	20.70	0.117	9.07	9M07W7D
	5	QPSK	3552.5 - 3697.5	21.14	0.130	4.56	4M56G7D
		16QAM	3552.5 - 3697.5	20.91	0.123	4.53	4M53W7D

Band	Band Width [MHz]	Modulation	Frequency Range [MHz]	Max E.I.R.P		OBW [MHz]	Emission Designator
				[dBm/10MHz]	[W]		
NR n48	40	BPSK	3570.0 - 3680.0	21.19	0.132	36.07	36M1G7D
		QPSK	3570.0 - 3680.0	21.17	0.131	38.20	38M2G7D
		16QAM	3570.0 - 3680.0	21.05	0.127	38.16	38M2W7D
	30	BPSK	3565.0 - 3685.0	21.15	0.130	27.08	27M1G7D
		QPSK	3565.0 - 3685.0	21.13	0.130	28.06	28M1G7D
		16QAM	3565.0 - 3685.0	21.00	0.126	28.00	28M0W7D
	20	BPSK	3560.0 - 3690.0	21.01	0.126	18.04	18M0G7D
		QPSK	3560.0 - 3690.0	20.98	0.125	18.35	18M4G7D
		16QAM	3560.0 - 3690.0	21.02	0.126	18.35	18M4W7D
	15	BPSK	3557.5 - 3692.5	21.17	0.131	13.04	13M0G7D
		QPSK	3557.5 - 3692.5	21.09	0.129	13.72	13M7G7D
		16QAM	3557.5 - 3692.5	21.10	0.129	13.74	13M7W7D
	10	BPSK	3555.0 - 3695.0	20.83	0.121	8.73	8M73G7D
		QPSK	3555.0 - 3695.0	20.72	0.118	8.93	8M93G7D
		16QAM	3555.0 - 3695.0	20.58	0.114	8.80	8M80W7D

Band	Band Width [MHz]	Modulation	Frequency Range [MHz]	Max E.I.R.P		OBW [MHz]	Emission Designator
				[dBm/10MHz]	[W]		
LTE Band 48 ULCA	20+20	QPSK	3560.0 - 3690.0	16.89	0.049	37.91	37M9G7D
		16QAM	3560.0 - 3690.0	16.02	0.040	37.87	37M9W7D
	15+20	QPSK	3557.5 - 3692.5	16.61	0.046	32.99	33M0G7D
		16QAM	3557.5 - 3692.5	16.09	0.041	33.02	33M0W7D
	10+20	QPSK	3555.0 - 3695.0	16.23	0.042	28.00	28M0G7D
		16QAM	3555.0 - 3695.0	15.98	0.040	27.94	27M9W7D
	5+20	QPSK	3552.5 - 3697.5	16.78	0.048	23.11	23M1G7D
		16QAM	3552.5 - 3697.5	16.50	0.045	23.02	23M0W7D

Table 1-2 Antenna C Summary

Band	Band Width [MHz]	Modulation	Frequency Range [MHz]	Max E.I.R.P		OBW [MHz]	Emission Designator
				[dBm]	[W]		
NR n48 SRS1	40	BPSK	3570.0 - 3680.0	20.85	0.122	36.05	36M1G7D
		QPSK	3570.0 - 3680.0	20.85	0.122	38.20	38M2G7D
		16QAM	3570.0 - 3680.0	20.77	0.119	38.09	38M1W7D

Table 1-3 Antenna I Summary

Band	Band Width [MHz]	Modulation	Frequency Range [MHz]	Max E.I.R.P		OBW [MHz]	Emission Designator
				[dBm]	[W]		
NR n48 SRS2	40	BPSK	3570.0 - 3680.0	16.25	0.042	35.94	35M9G7D
		QPSK	3570.0 - 3680.0	16.28	0.042	38.11	38M1G7D
		16QAM	3570.0 - 3680.0	16.11	0.041	38.19	38M2W7D

Table 1-4 Antenna D Summary

Band	Band Width [MHz]	Modulation	Frequency Range [MHz]	Max E.I.R.P		OBW [MHz]	Emission Designator
				[dBm]	[W]		
NR n48 SRS3	40	BPSK	3570.0 - 3680.0	14.80	0.030	35.93	35M9G7D
		QPSK	3570.0 - 3680.0	14.78	0.030	38.11	38M1G7D
		16QAM	3570.0 - 3680.0	14.58	0.029	38.10	38M1W7D

1.3. Antenna Configuration and Operating Band

The table below details the antennas supporting the licensed bands, with the specific bands evaluated in this report clearly checked.

Table 1-5 Supported Frequency Band per Antenna

Antenna	LTE Band 48	LTE Band 48C ULCA	NR n48
Ant A			
Ant F	✓	✓	✓
Ant B			
Ant D			✓
Ant E			
Ant C			✓
Ant I			✓

The antenna names utilized throughout this report are defined as follows:

Antenna	LTE Band 48	LTE Band 48C ULCA	NR n48
Ant F	Ant 1	Ant1	Ant 1
Ant C			SRS 1
Ant I			SRS 2
Ant D			SRS 3

2. Executive Summary

2.1. Device Description

The DUT is a portable wireless handset designed to operate across multiple communication standards and frequency bands. This report covers the complete compliance testing of LTE Band 48 & NR Band 48 and LTE Band 48C ULCA in accordance with the applicable standards and regulatory requirements.

2.2. Summary of Test Results

The DUT has been tested according to the following specifications. The test period was from June 17, 2026 through July 05, 2026.

Test Condition	Test Item	FCC Requirement	Limit	Test Result	Reference
Conducted	Occupied & Emission bandwidth	§ 2.1049(h)	Not Applicable	PASS	Section 4.4
	Conducted Band Edge	§ 96.41(e),(i) § 2.1051	-13 dBm/MHz (0–8 MHz from assigned channel edge) -25 dBm/MHz (>8 MHz from assigned channel edge) -40 dBm/MHz (<3530 MHz or >3720 MHz)	PASS	Section 4.5
	Conducted Spurious Emissions	§ 96.41(e),(i) § 2.1051	Any emission below 3530 MHz and above 3720 MHz ≤ -40 dBm/MHz	PASS	Section 4.6
	Frequency Stability	§ 2.1055(a)	shall be sufficient to ensure that it stays within the operating frequency block	PASS	Section 4.7
	End User Additional Requirement	§ 96.47	Please refer to UL NC Report S/N: R16314687-E10a		
Radiated	Effective Isotropic Radiated Power	§ 96.41(b)	Maximum EIRP 23 dBm/10 MHz	PASS	Section 5.4
	Radiated Spurious Emissions	§ 96.41(e) § 2.1053	≤ -40 dBm/MHz	PASS	Section 5.5

*Note : Refer to Appendix A for RF output power data as per §2.1046(a).

2.3. Test Guidance Applied

Testing was performed in accordance with the following rules, standards, and guidance:

- ANSI C63.26 -2015
- ANSI C63.4 - 2014 + C63.4a - 2017
- FCC 47 CFR Part 2
- FCC 47 CFR Part 96 Subpart E
- KDB 648474 D03 v01r04
- KDB 971168 D01 v03r01
- KDB 971168 D02 v02r02
- KDB 412172 D01 v01r01
- KDB 940660 D01 v03r01

2.4. NGTL Test Site Location

All measurement operations were conducted at the NGTL testing facility.

- Location: 52-7, Choha-ro, Mohyeon-eup, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea.
- Site Compliance: The measurement environments strictly adhere to the site validation requirements specified in ANSI C63.4-2014+C63.4a-2017 and FCC KDB 414788 D01.
- Accreditations: Fully accredited to ISO/IEC 17025 and designated by the National Radio Research Agency (RRA) as a Conformity Assessment Body (CAB) under the MRAs, maintaining official testing recognition from the FCC and ISED.

FCC Designation Number	FCC Test Firm Registration Number
KR0179	985720
ISED CAB identifier	ISED Company Number
KR0179	35746

3. Description of Tests

- The DUT is a handheld wireless device and was tested in accordance with ANSI C63.26-2015. For details regarding the test configuration, refer to the following sections.
- Antenna Port Conducted Test : Sections 4.1
- Radiated Emissions Test : Sections 5.1

- All tests were conducted under the environmental conditions specified below
- Ambient Temperature : 20 °C ~ 26 °C
- Relative Humidity : 40 % ~ 60 %

4. Conducted Test Results

4.1. Test Configuration

This section presents the results of the conducted tests performed at the antenna port in accordance with ANSI C63.26-2015. Conducted emissions were captured using automated test software 'NGTL ATE' Ver. 0.00.

4.2. Conducted Measurement Setup

Figure 4-1 Conducted Power Measurement Setup

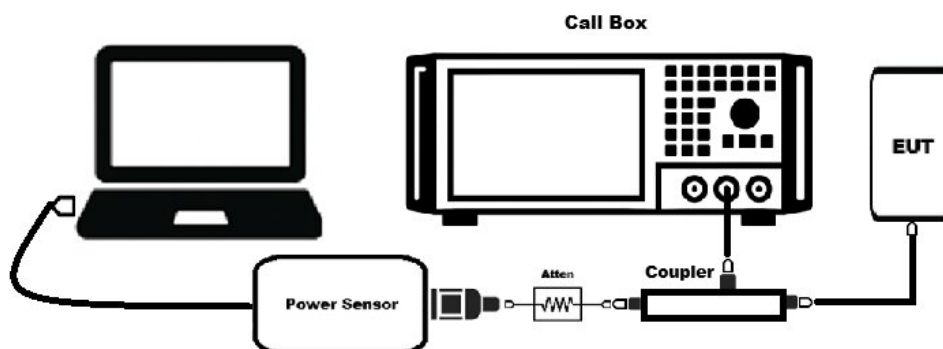
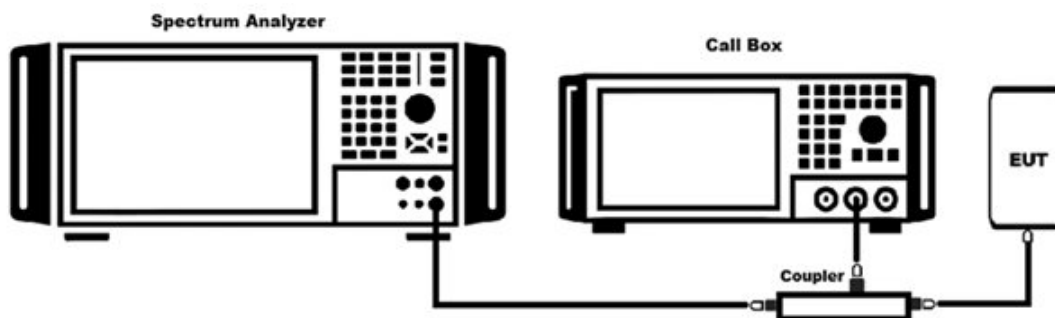


Figure 4-2 Conducted Measurement Setup



4.3. Conducted Measurement Sample

Serial Number(s) : ZDH0428M, ZEJ0893M, ZF50730M

4.4. Occupied & Emission Bandwidth

4.4.1. Regulatory Limit

The following test is for reporting purposes only.

§Part. 2.1049(h)

4.4.2. Test Method

ANSI C63.26-2015, clause 5.4

4.4.3. Test Procedure

The automatic bandwidth measurement function of the spectrum analyzer was used.

The procedure for this method is follows:

- a) Set center frequency to the nominal EUT channel center frequency.
- b) Set SPAN ≥ 1.5 times the OBW.
- c) Set RBW = 1% to 5% of the OBW (RBW - IF 3 dB filter)
- d) Set VBW $\geq 3 \times$ RBW
- e) Detector = Peak
- f) Trace mode = max-hold
- g) Allow the trace to stabilize

Test Note

- ✓ All modulation were evaluated, and only the worst-case results are reported herein.
- ✓ The 26 dB Bandwidth data from this section were used to perform the Section 4.7 Conducted Band Edge testing.

4.4.4. Test Results

Table 4-1 OBW and 26dB Bandwidth Data LTE Band 48 Ant 1

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
						Ant1	Ant1
LTE Band 48	20	3625	55990	100/0	QPSK	18.00	19.87
					16QAM	17.99	19.85
	15	3625	55990	75/0	QPSK	13.53	15.42
					16QAM	13.53	15.58
	10	3625	55990	50/0	QPSK	9.08	10.61
					16QAM	9.07	10.53
	5	3625	55990	25/0	QPSK	4.56	5.56
					16QAM	4.53	5.45

Table 4-2 OBW and 26dB Bandwidth Data LTE Band 48 ULCA Ant 1

Band	Band Width [MHz]	Frequency [MHz]	RB Size/Offset	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
					Ant1	Ant1
LTE Band 48 ULCA	20+20	3625+3644.8	100/0 + 100/0	QPSK	37.91	41.07
				16QAM	37.87	40.24
	15+20	3625+3642.1	75/0 + 100/0	QPSK	32.99	35.74
				16QAM	33.02	35.62
	10+20	3625+3639.4	50/0 + 100/0	QPSK	28.00	30.07
				16QAM	27.94	30.01
	5+20	3625+3636.7	25/0 + 100/0	QPSK	23.11	24.82
				16QAM	23.02	24.41

Table 4-3 OBW and 26dB Bandwidth Data NR n48 Ant 1

Band	Band Width [MHz]	Frequency [MHz]	NR-Arfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							Ant1	Ant1
NR n48	40	3624.99	641666	100/0	DFT-s-OFDM	BPSK	36.07	39.03
				106/0	CP-OFDM	QPSK	38.20	42.66
				106/0	CP-OFDM	16QAM	38.16	42.67
	30	3624.99	641666	75/0	DFT-s-OFDM	BPSK	27.08	29.75
				78/0	CP-OFDM	QPSK	28.06	30.90
				78/0	CP-OFDM	16QAM	28.00	30.62
	20	3624.99	641666	50/0	DFT-s-OFDM	BPSK	18.04	19.99
				51/0	CP-OFDM	QPSK	18.35	20.44
				51/0	CP-OFDM	16QAM	18.35	20.59
	15	3624.99	641666	36/0	DFT-s-OFDM	BPSK	13.04	14.88
				38/0	CP-OFDM	QPSK	13.72	15.87
				38/0	CP-OFDM	16QAM	13.74	16.27
	10	3624.99	641666	24/0	DFT-s-OFDM	BPSK	8.73	10.54
				24/0	CP-OFDM	QPSK	8.93	10.94
				24/0	CP-OFDM	16QAM	8.80	10.83

Table 4-4 OBW and 26dB Bandwidth Data NR n48 SRS 1

Band	Band Width [MHz]	Frequency [MHz]	NR-Arfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							SRS 1	SRS 1
NR n48	40	3624.99	641666	100/0	DFT-s-OFDM	BPSK	36.05	38.91
				106/0	CP-OFDM	QPSK	38.20	42.59
				106/0	CP-OFDM	16QAM	38.09	41.95

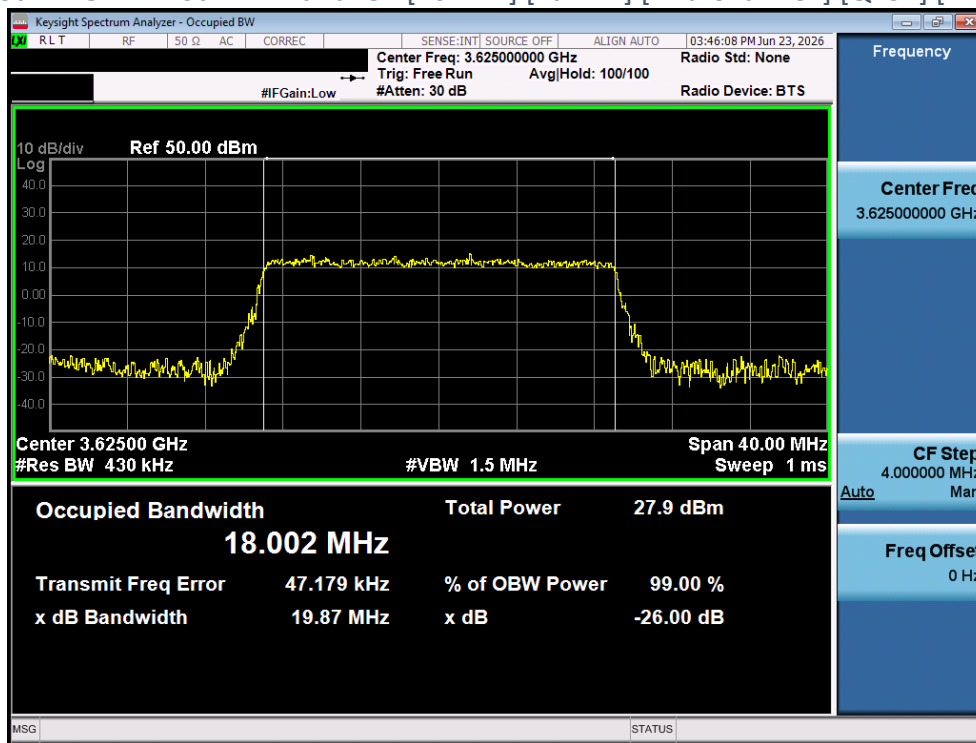
Table 4-5 OBW and 26dB Bandwidth Data NR n48 SRS 2

Band	Band Width [MHz]	Frequency [MHz]	NR-Arfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							SRS 2	SRS 2
NR n48	40	3624.99	641666	100/0	DFT-s-OFDM	BPSK	35.94	39.03
				106/0	CP-OFDM	QPSK	38.11	42.35
				106/0	CP-OFDM	16QAM	38.19	43.07

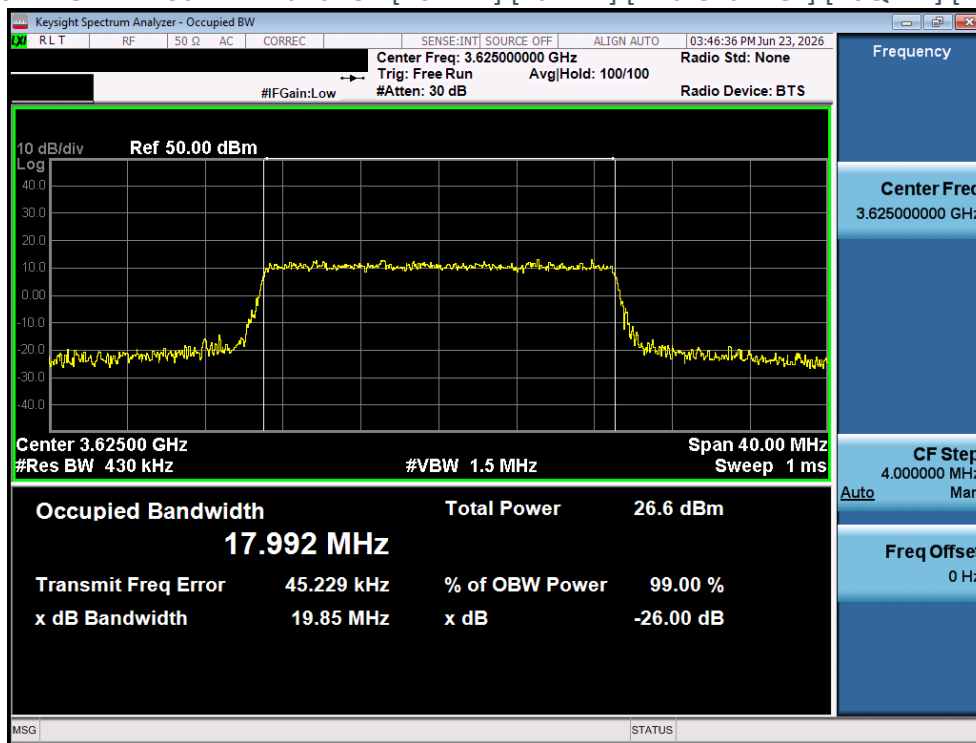
Table 4-6 OBW and 26dB Bandwidth Data NR n48 SRS 3

Band	Band Width [MHz]	Frequency [MHz]	NR-Arfcn UL	RB Size/Offset	Waveform	Modulation	Occupied Bandwidth [MHz]	26 dB Bandwidth [MHz]
							SRS 3	SRS 3
NR n48	40	3624.99	641666	100/0	DFT-s-OFDM	BPSK	35.93	39.06
				106/0	CP-OFDM	QPSK	38.11	42.73
				106/0	CP-OFDM	16QAM	38.10	42.68

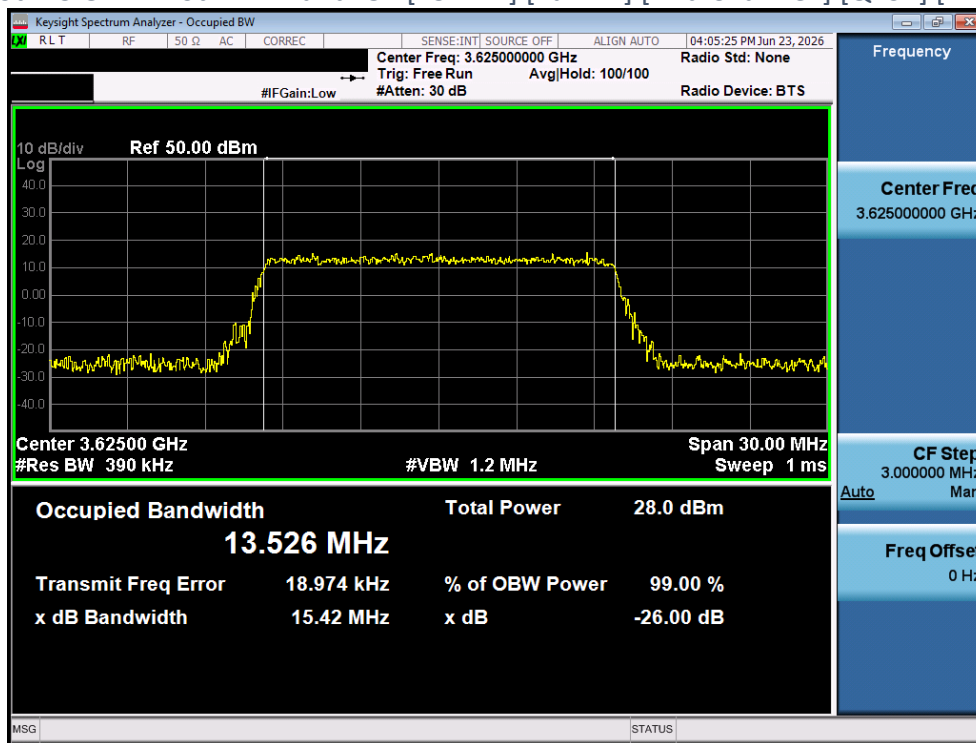
Plot 4-1 OBW Plot - LTE Band48 - [20MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



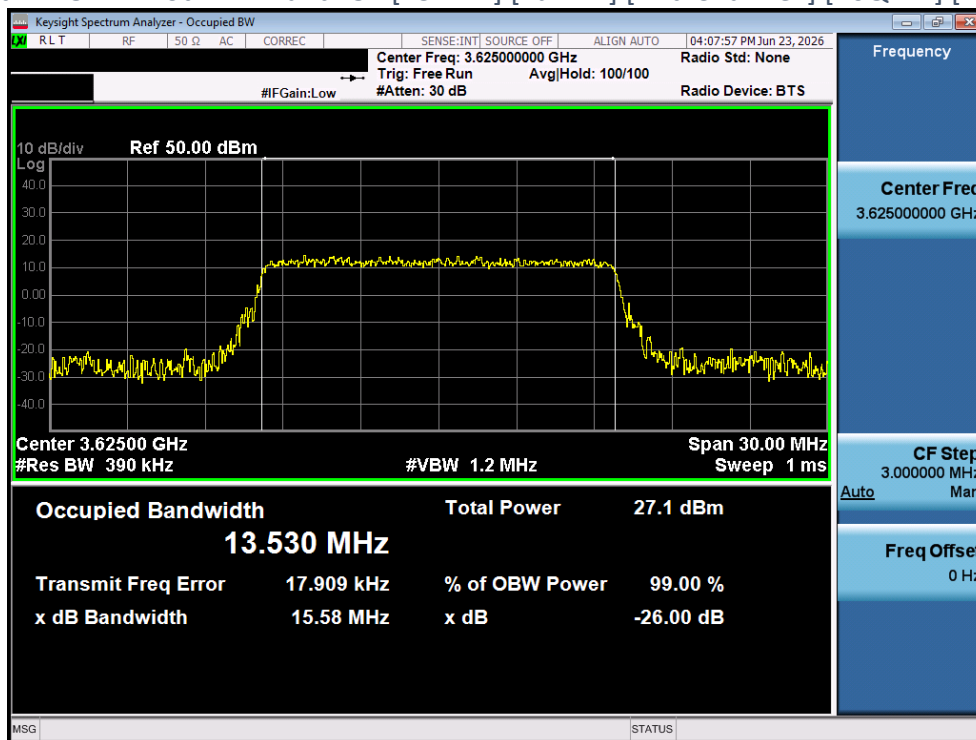
Plot 4-2 OBW Plot - LTE Band48 - [20MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



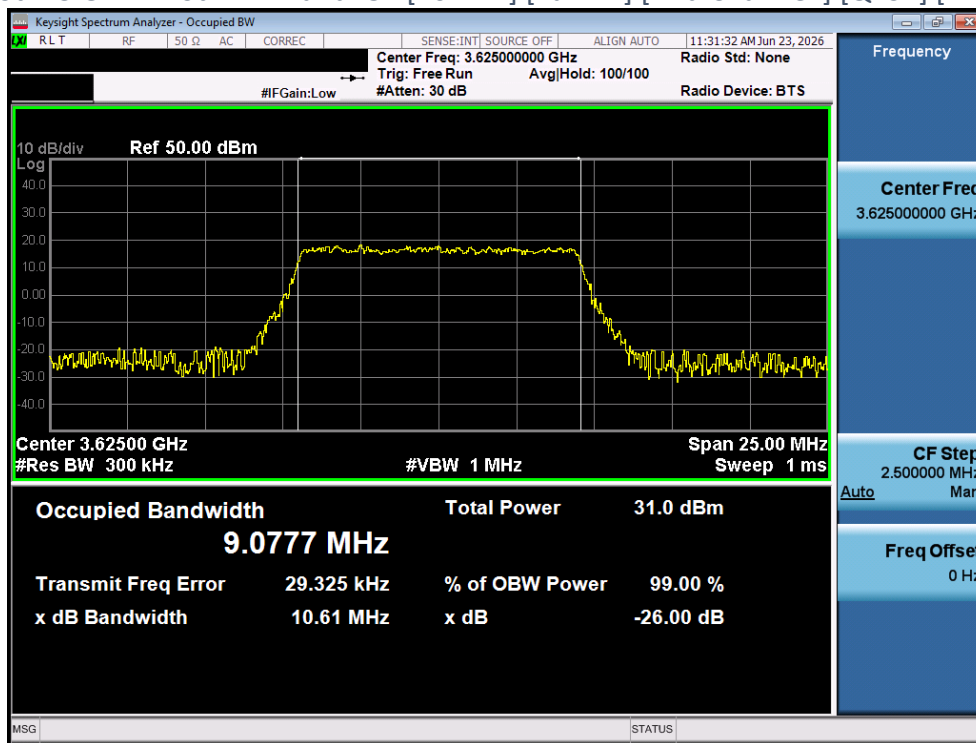
Plot 4-3 OBW Plot - LTE Band48 - [15MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



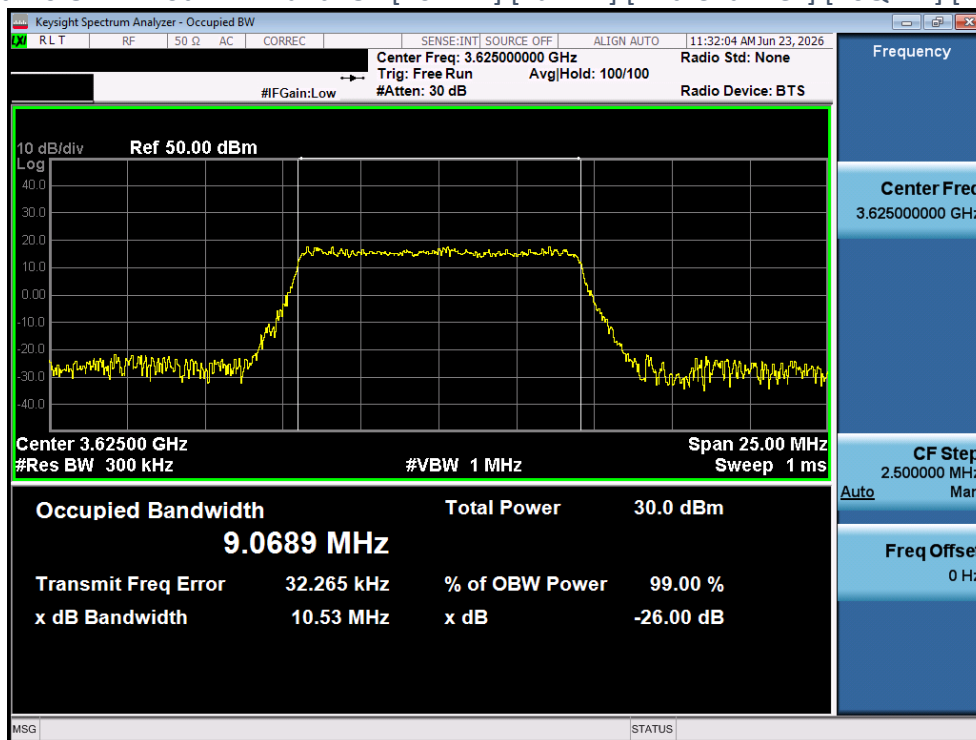
Plot 4-4 OBW Plot - LTE Band48 - [15MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



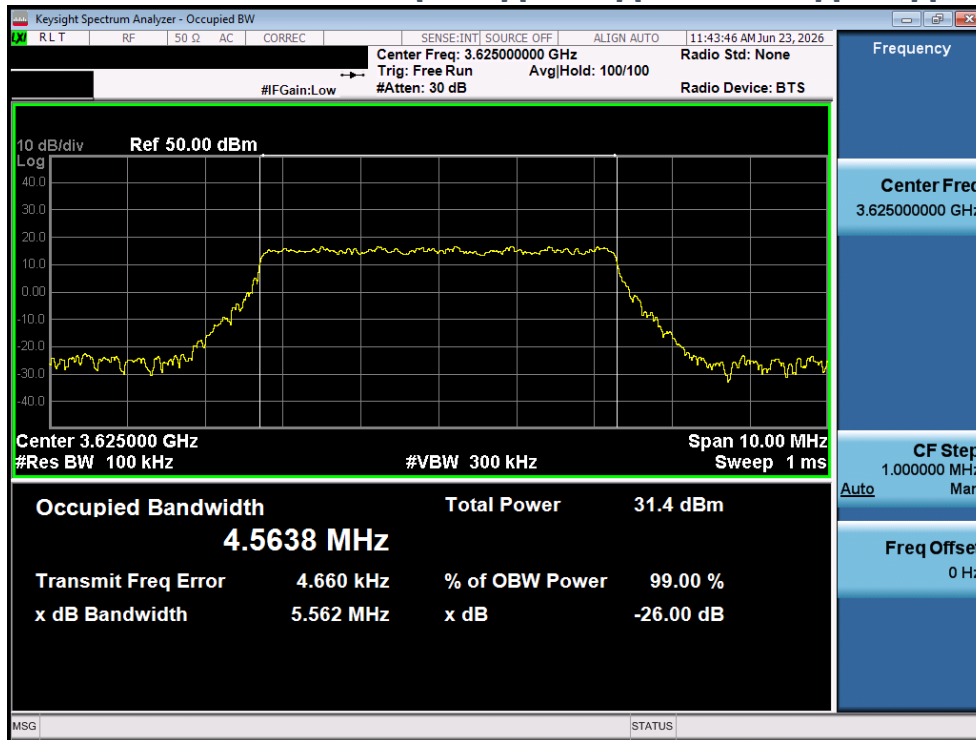
Plot 4-5 OBW Plot - LTE Band48 - [10MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



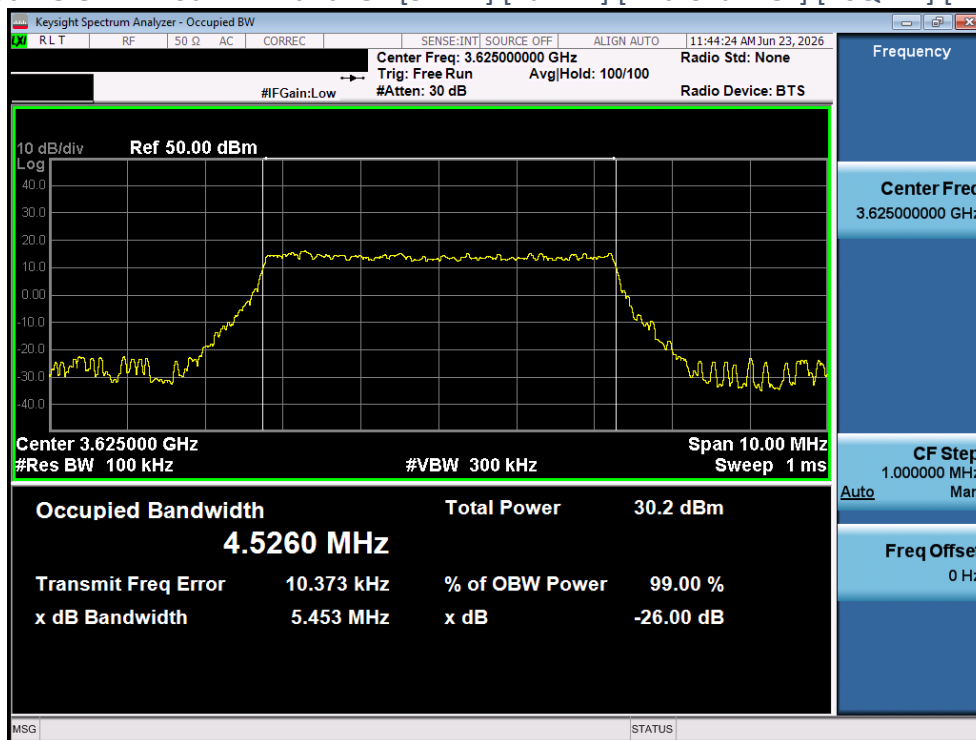
Plot 4-6 OBW Plot - LTE Band48 - [10MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



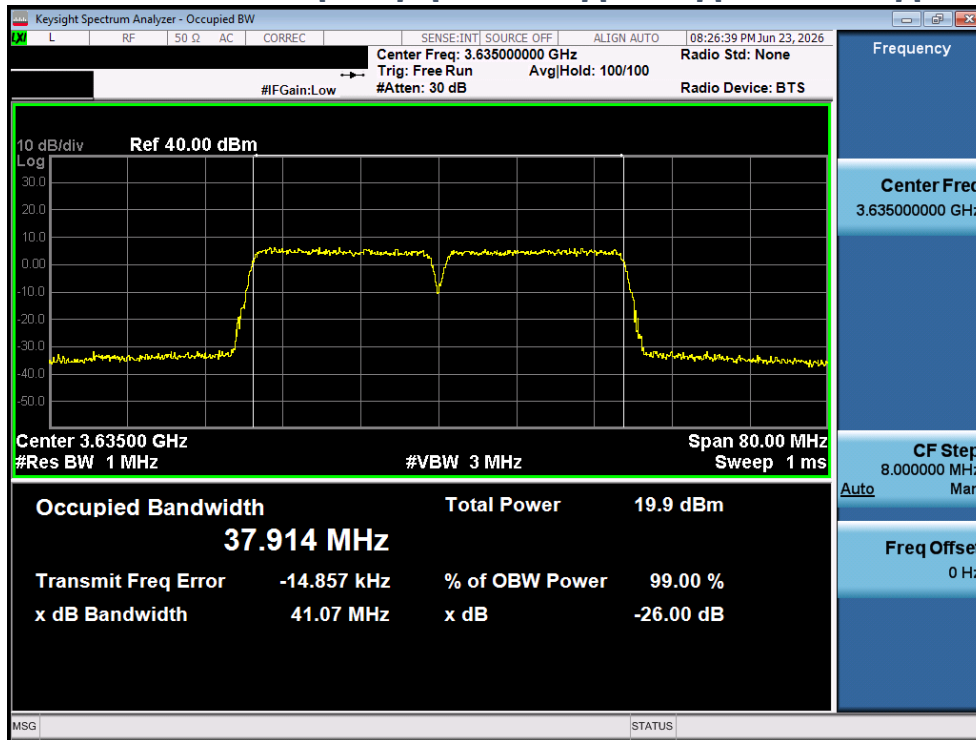
Plot 4-7 OBW Plot - LTE Band48 - [5MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



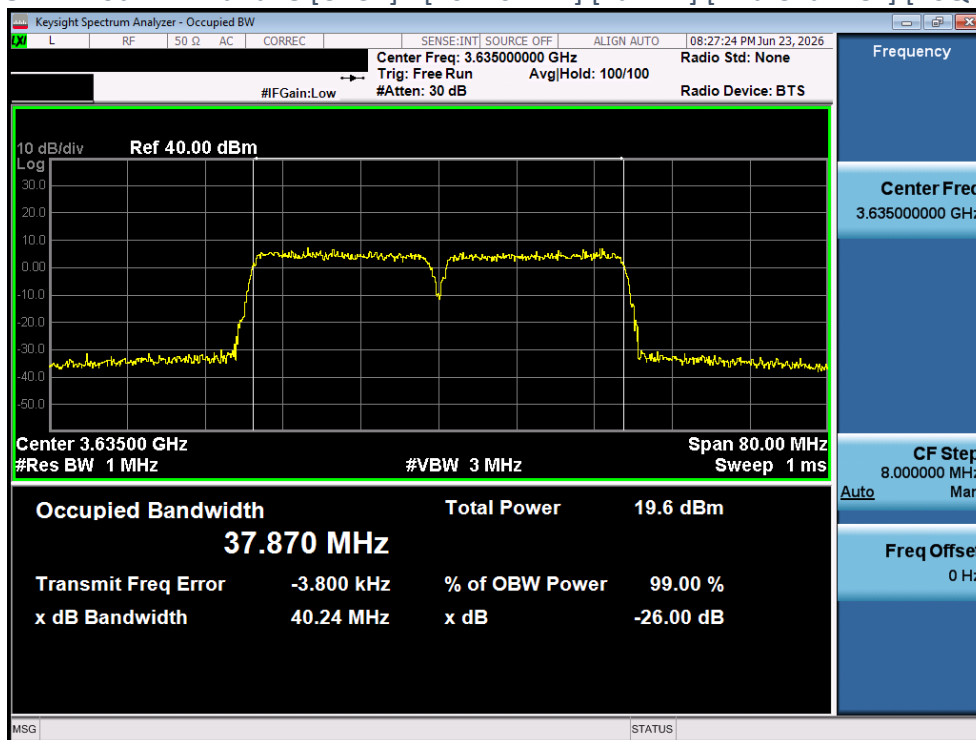
Plot 4-8 OBW Plot - LTE Band48 - [5MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



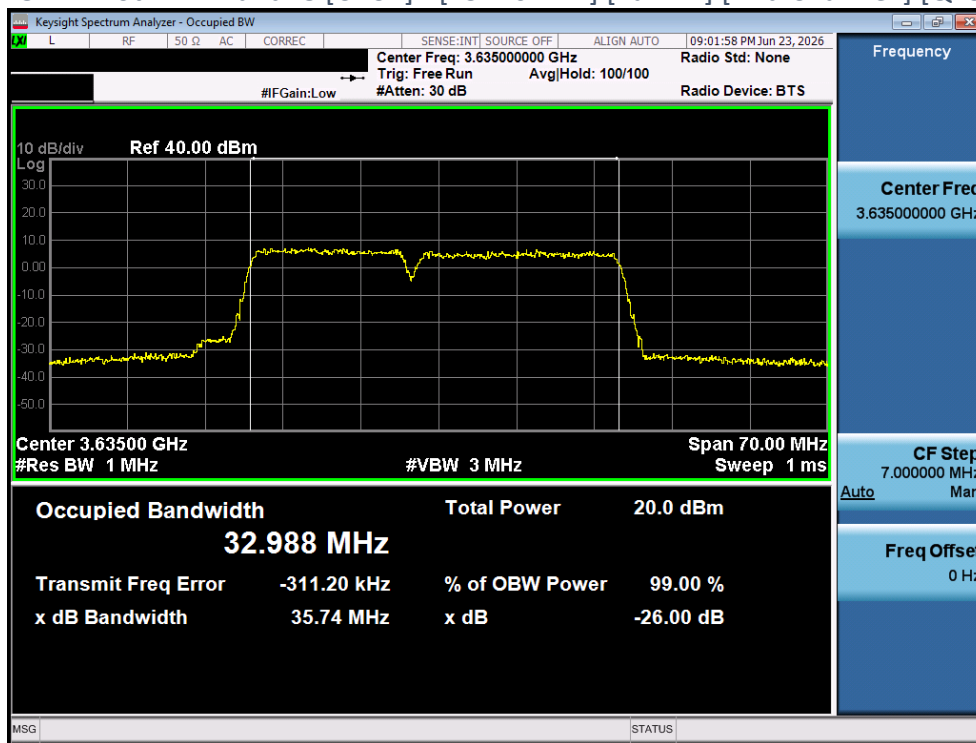
Plot 4-9 OBW Plot - LTE Band48 [ULCA] - [20+20MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



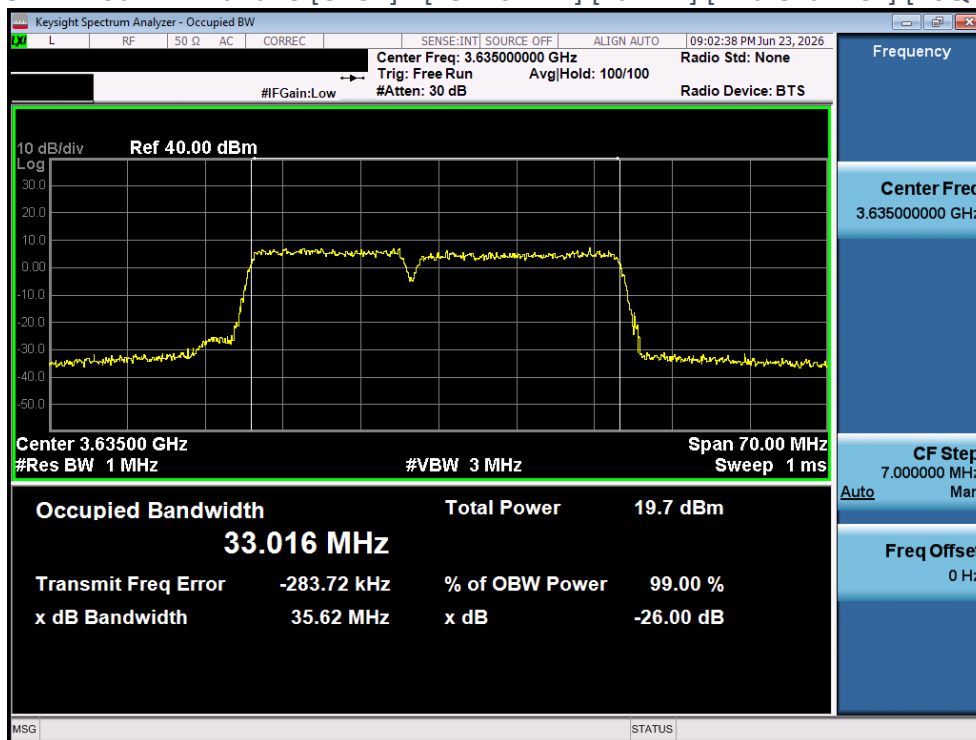
Plot 4-10 OBW Plot - LTE Band48 [ULCA] - [20+20MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



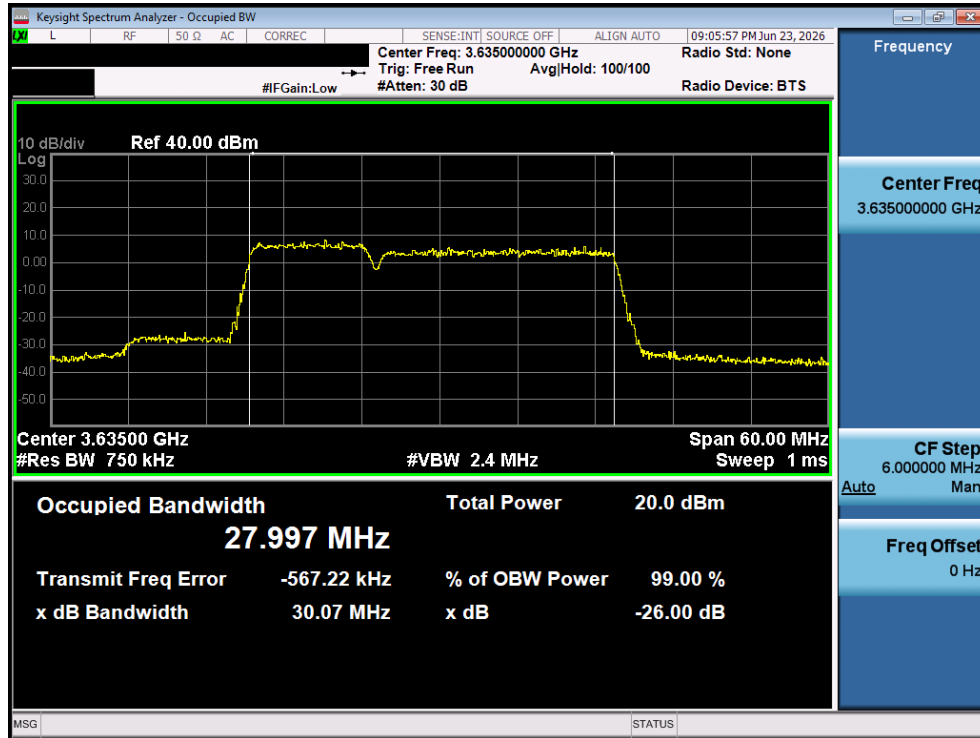
Plot 4-11 OBW Plot - LTE Band48 [ULCA] - [15+20MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



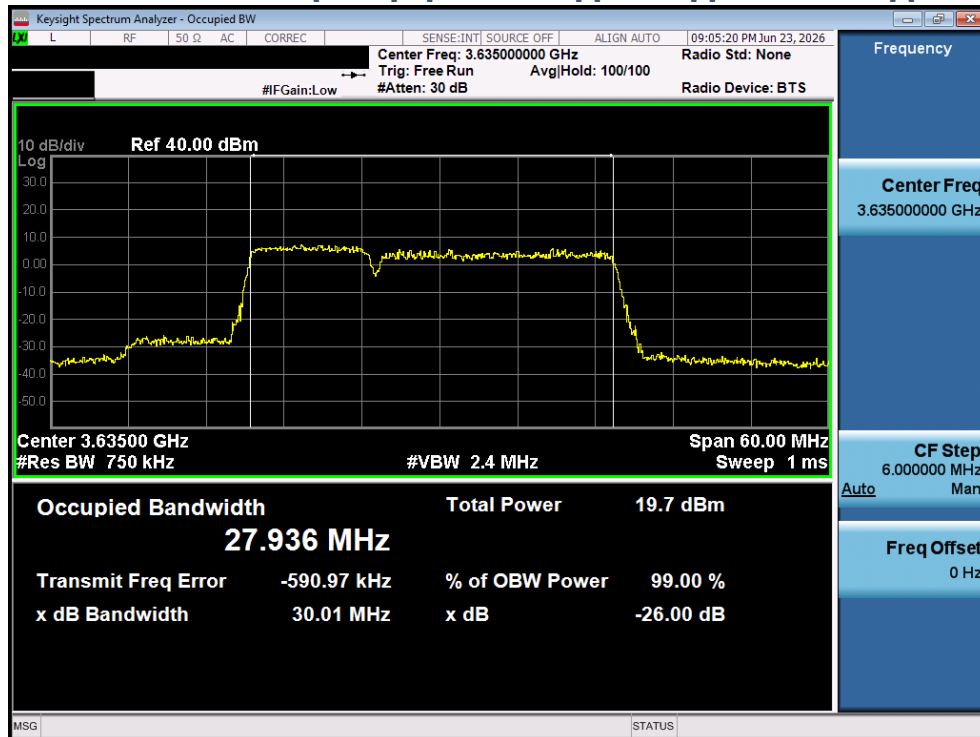
Plot 4-12 OBW Plot - LTE Band48 [ULCA] - [15+20MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



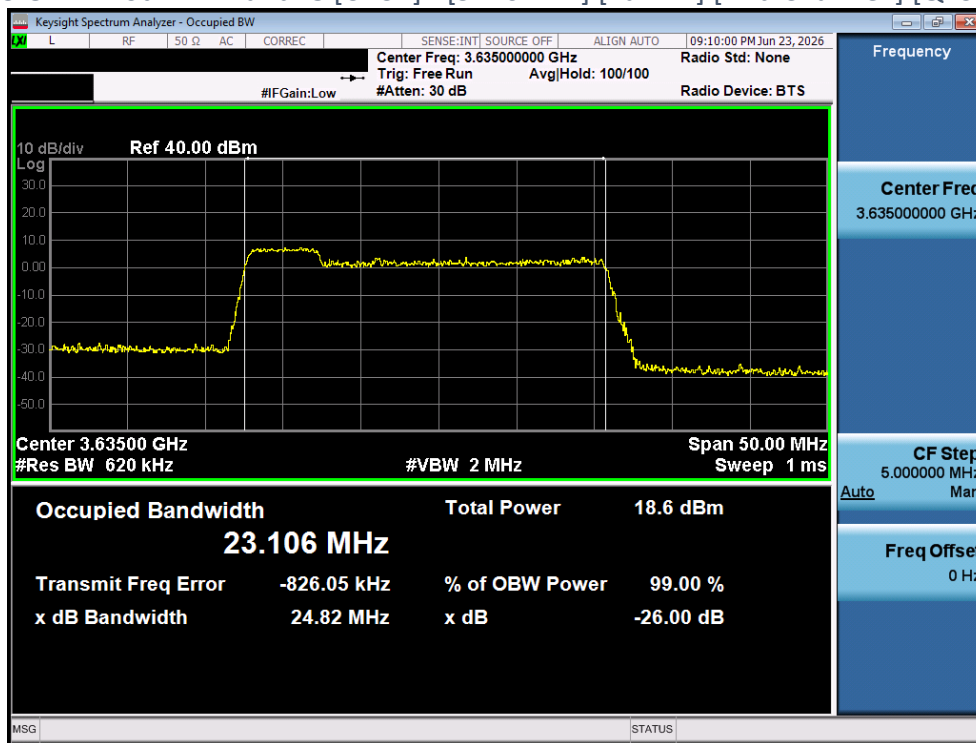
Plot 4-13 OBW Plot - LTE Band48 [ULCA] - [10+20MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



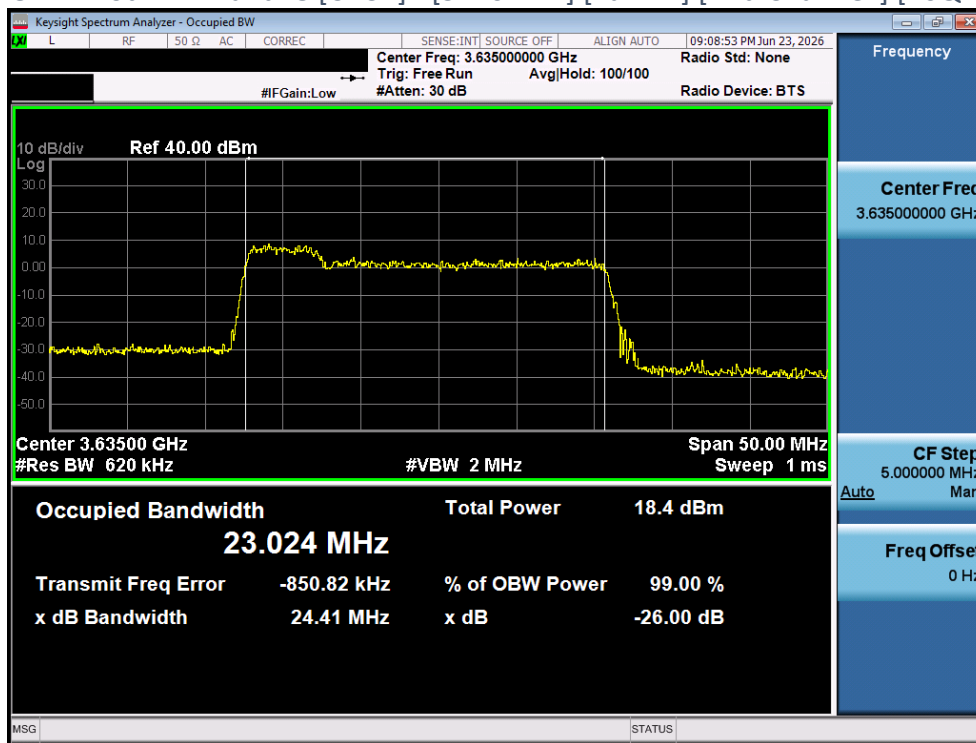
Plot 4-14 OBW Plot - LTE Band48 [ULCA] - [10+20MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



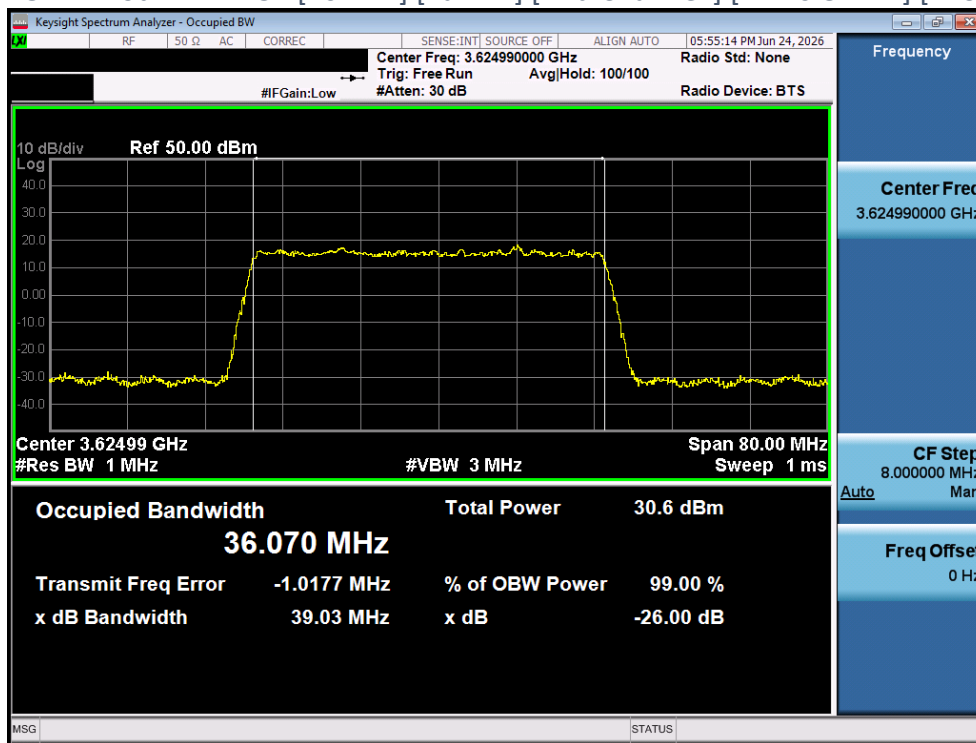
Plot 4-15 OBW Plot - LTE Band48 [ULCA] - [5+20MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



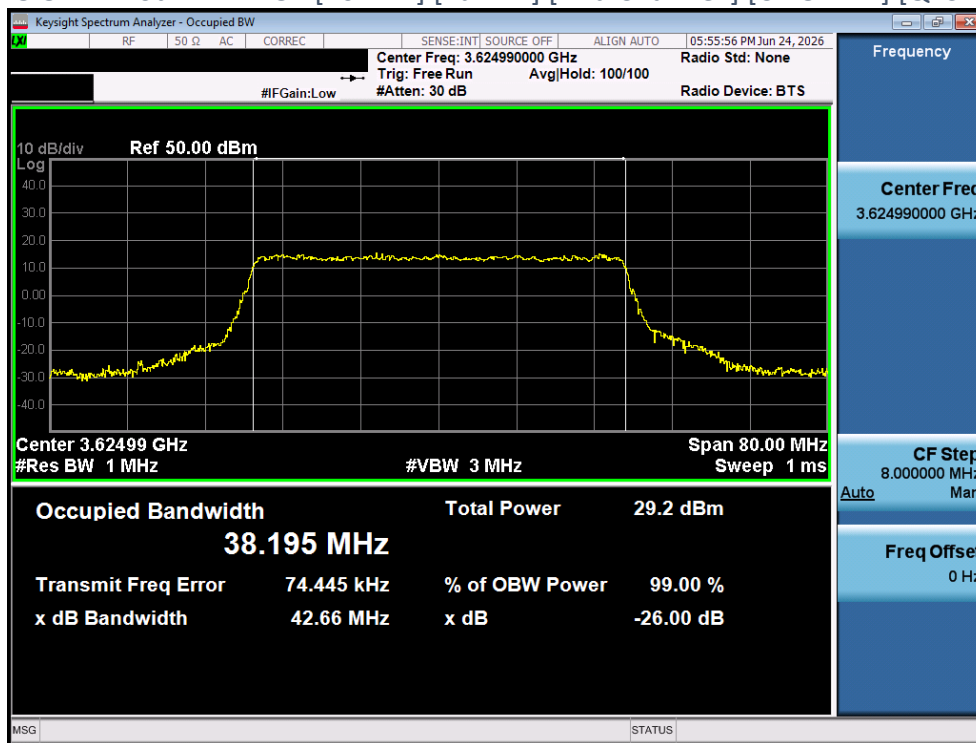
Plot 4-16 OBW Plot - LTE Band48 [ULCA] - [5+20MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



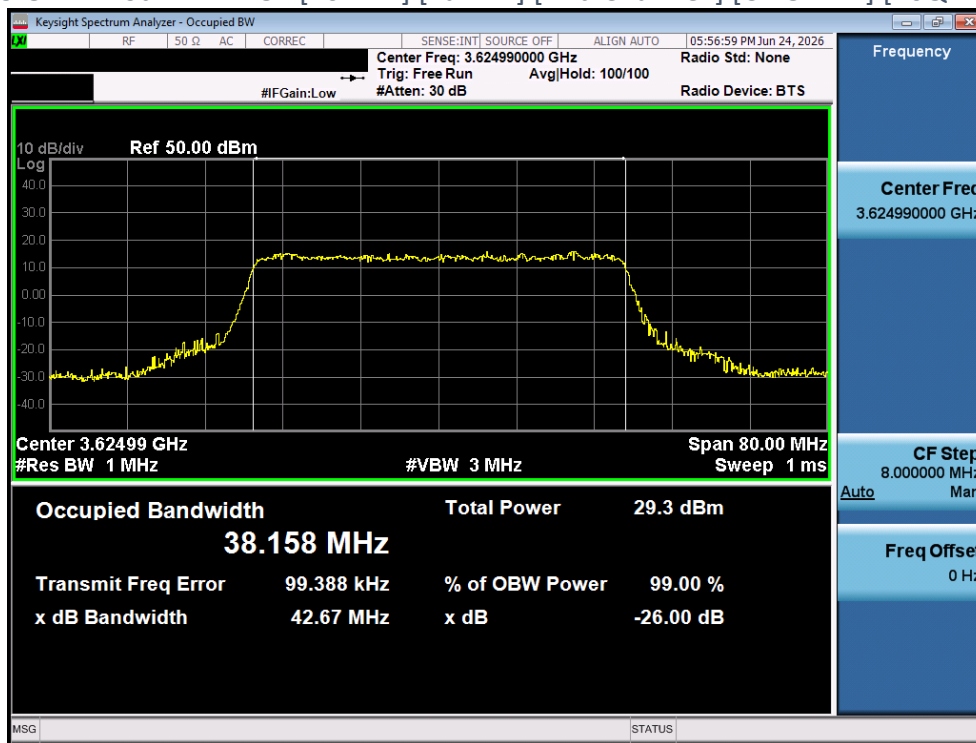
Plot 4-17 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



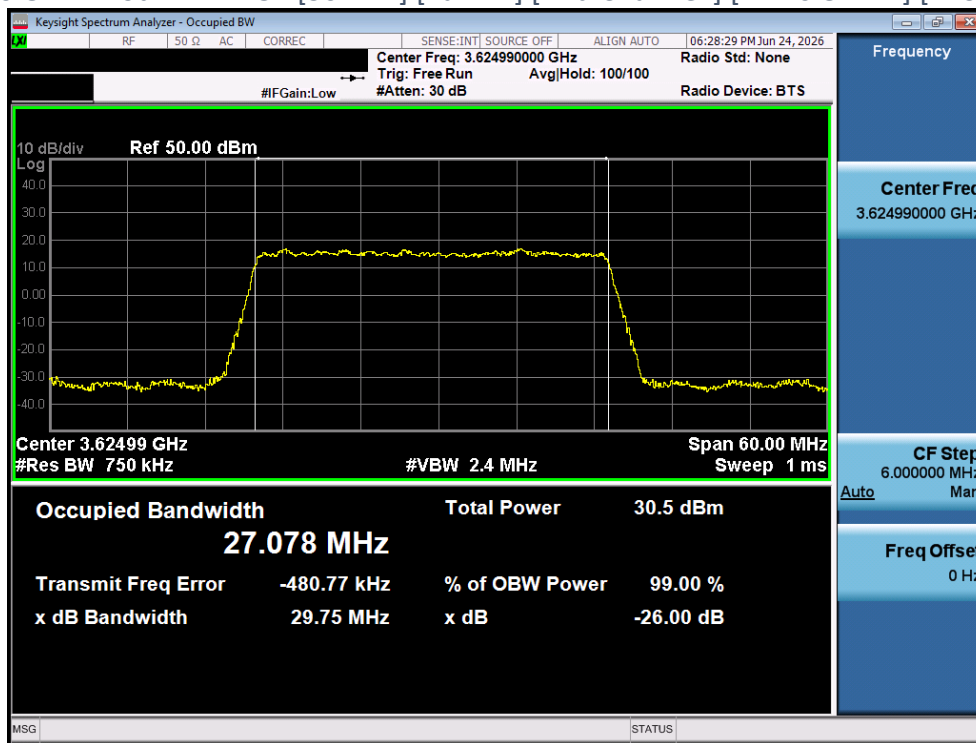
Plot 4-18 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



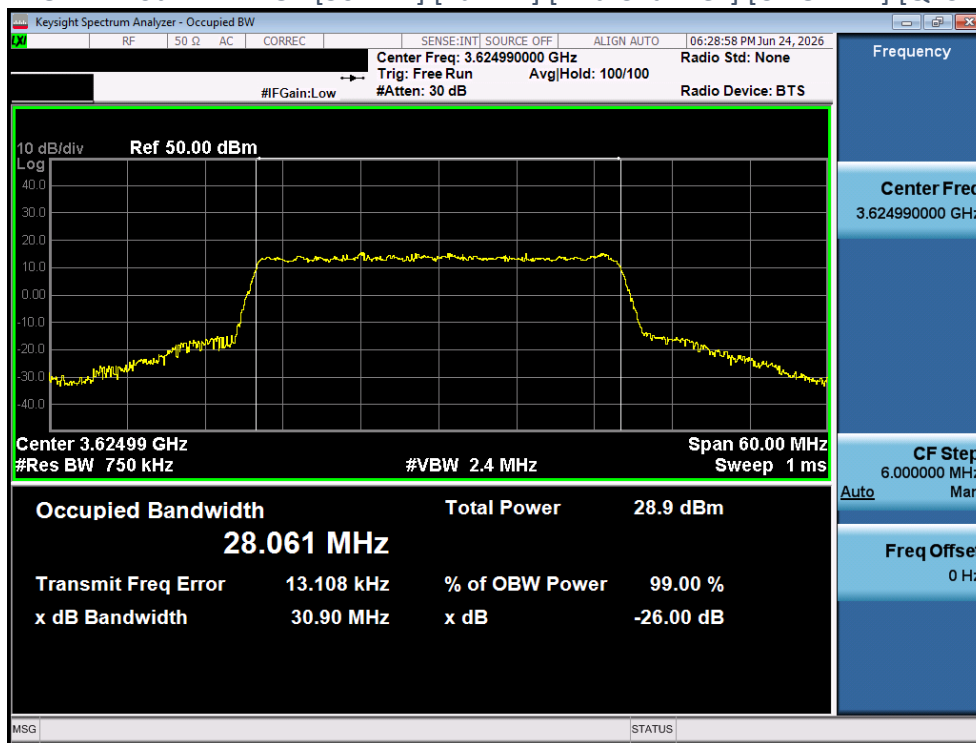
Plot 4-19 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



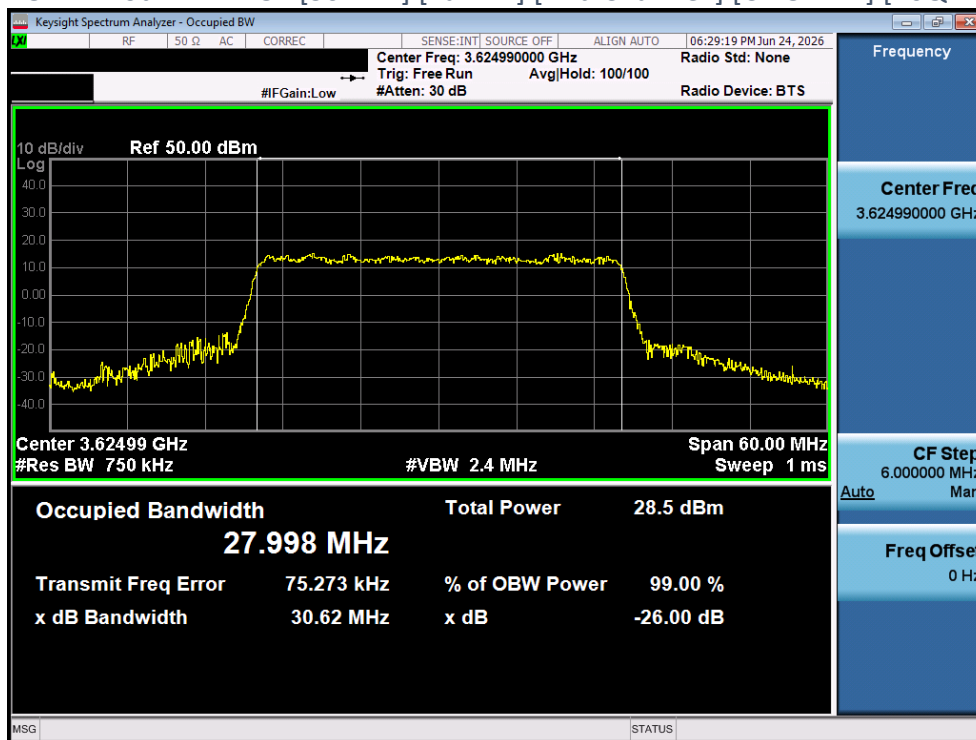
Plot 4-20 OBW Plot – NR n48 - [30MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



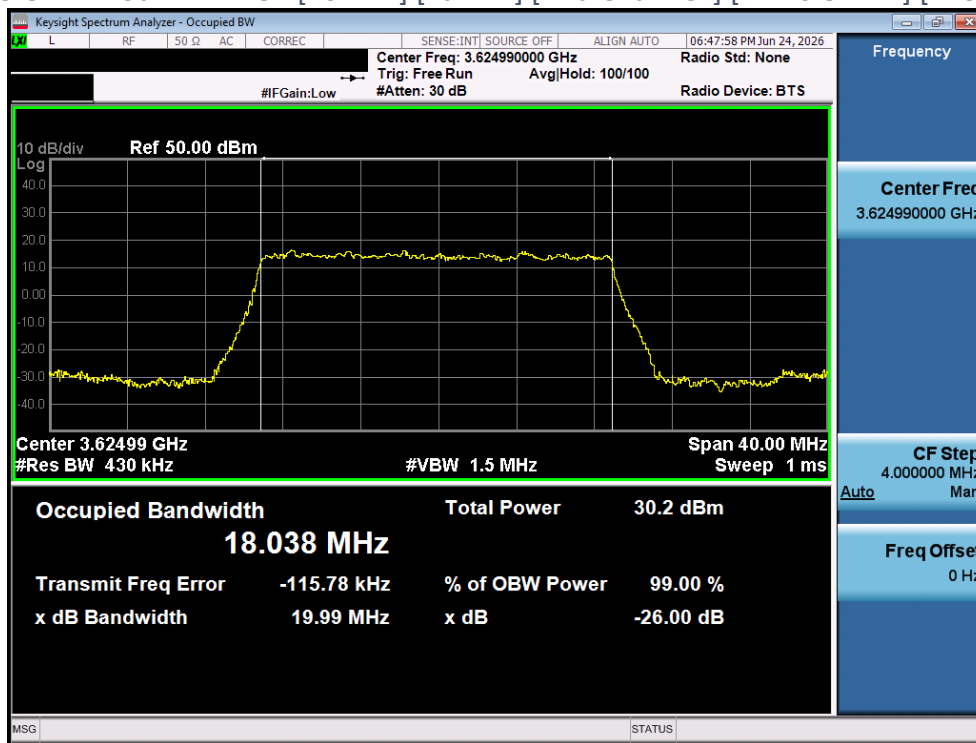
Plot 4-21 OBW Plot – NR n48 - [30MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



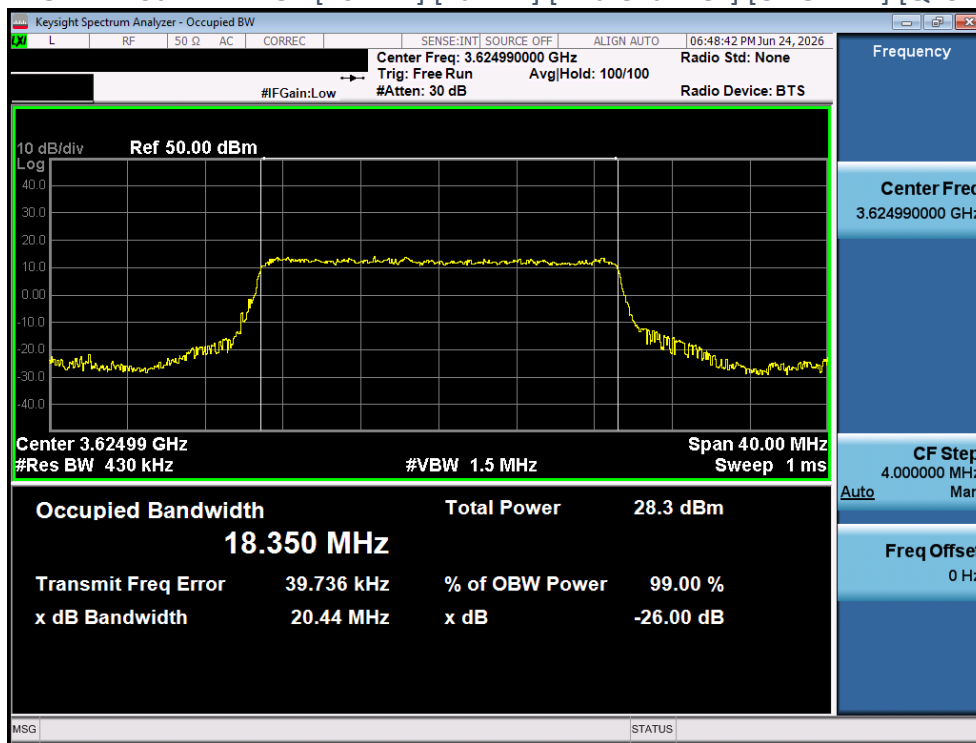
Plot 4-22 OBW Plot – NR n48 - [30MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



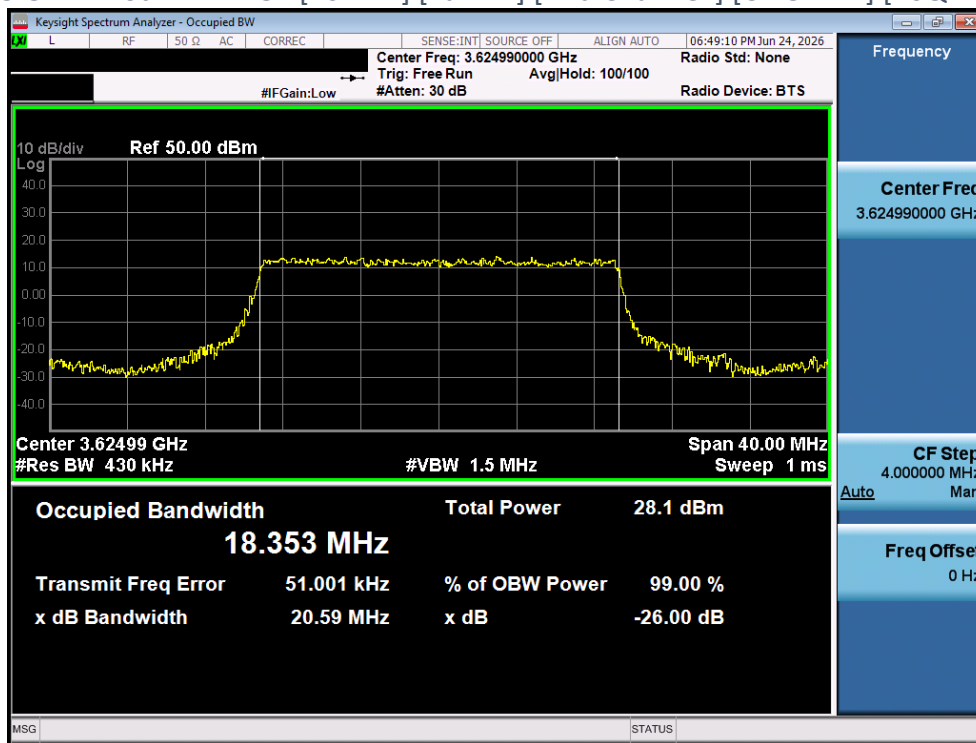
Plot 4-23 OBW Plot – NR n48 - [20MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



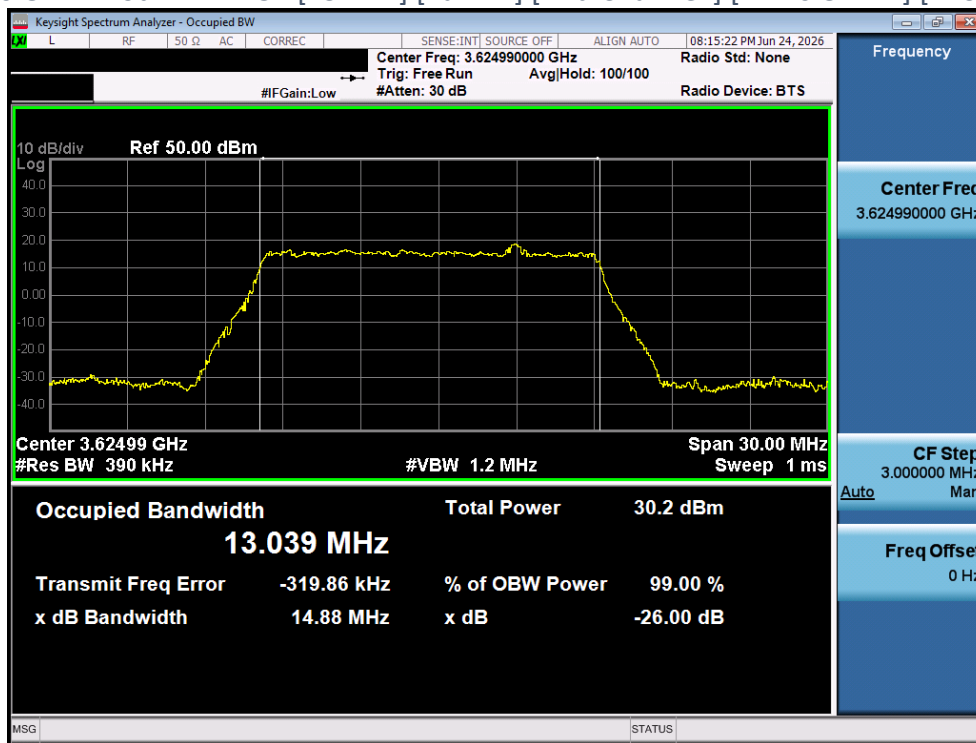
Plot 4-24 OBW Plot – NR n48 - [20MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



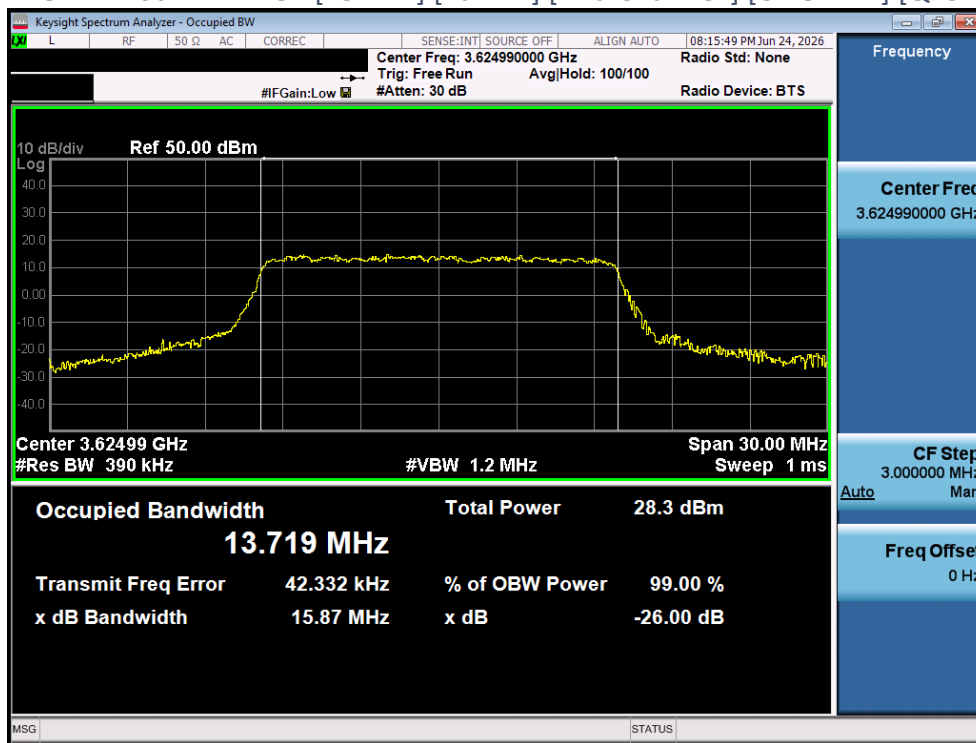
Plot 4-25 OBW Plot – NR n48 - [20MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



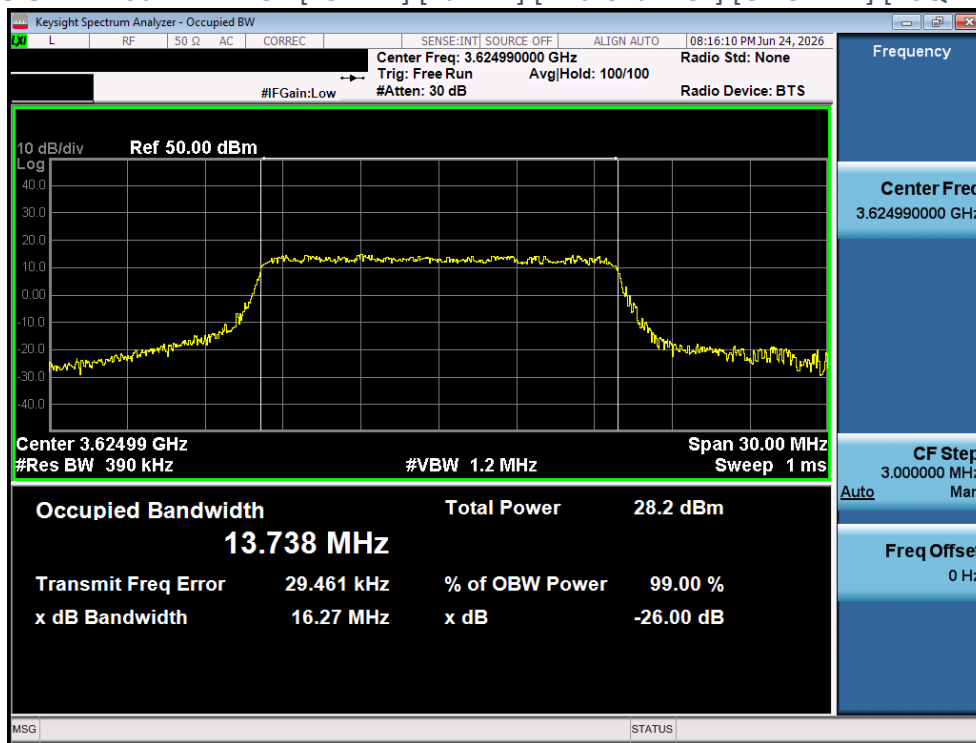
Plot 4-26 OBW Plot – NR n48 - [15MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



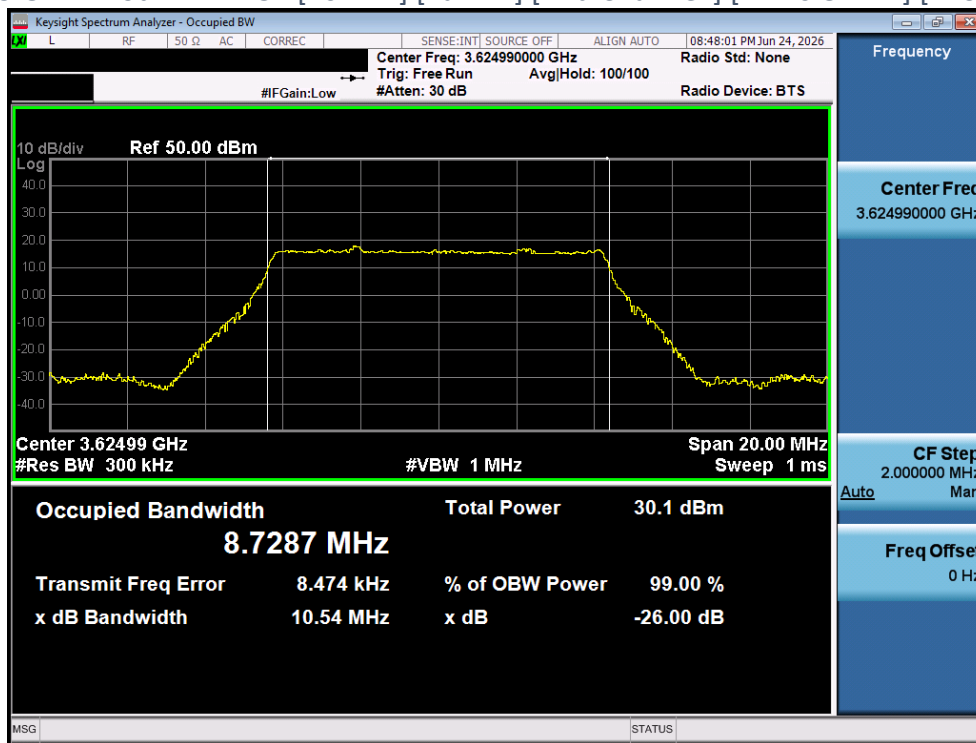
Plot 4-27 OBW Plot – NR n48 - [15MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



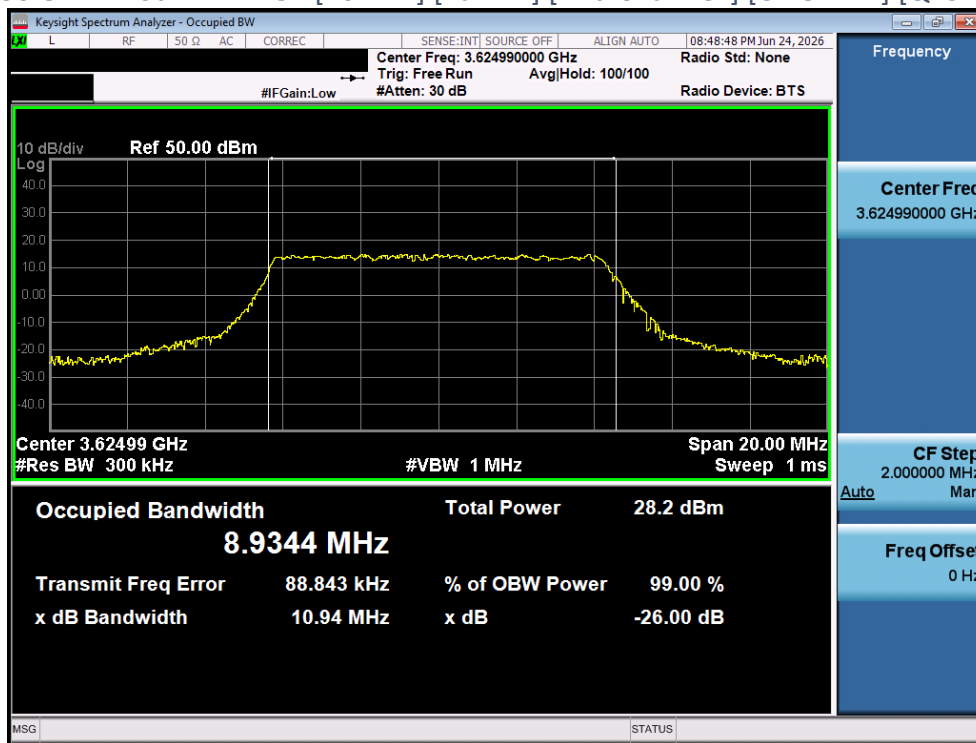
Plot 4-28 OBW Plot – NR n48 - [15MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



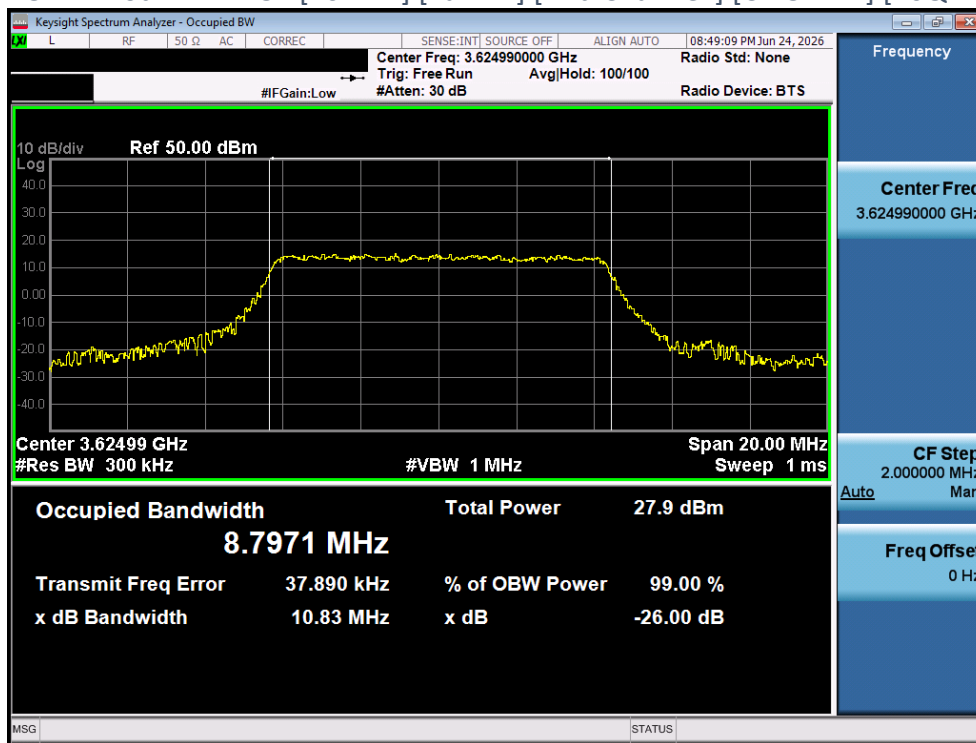
Plot 4-29 OBW Plot – NR n48 - [10MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [Ant 1]



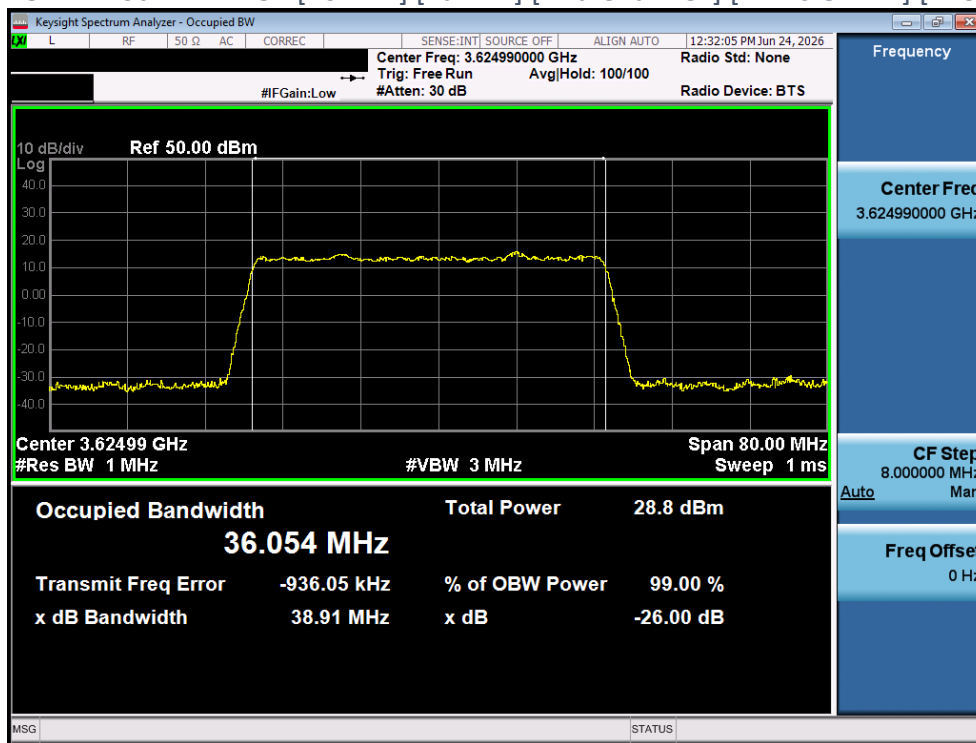
Plot 4-30 OBW Plot – NR n48 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [Ant 1]



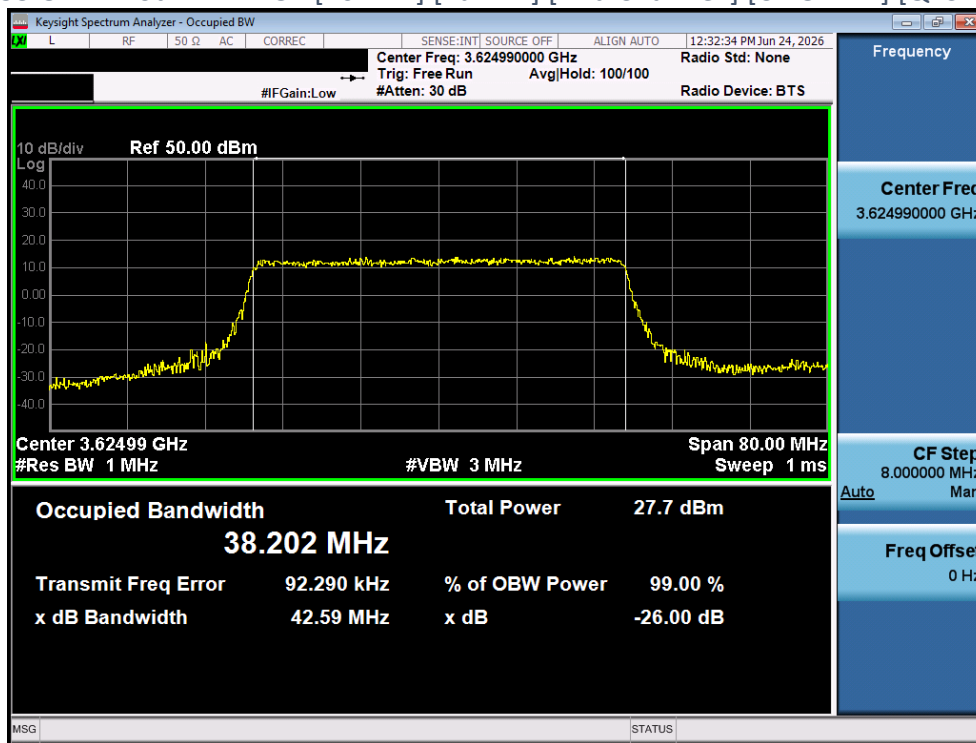
Plot 4-31 OBW Plot – NR n48 - [10MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [Ant 1]



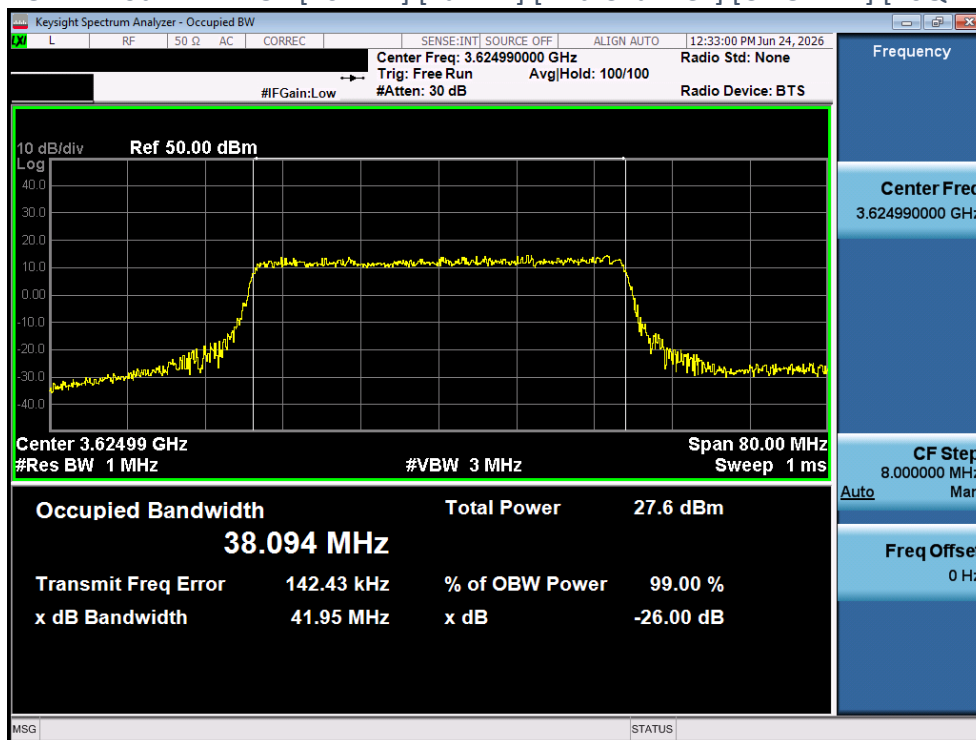
Plot 4-32 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [SRS 1]



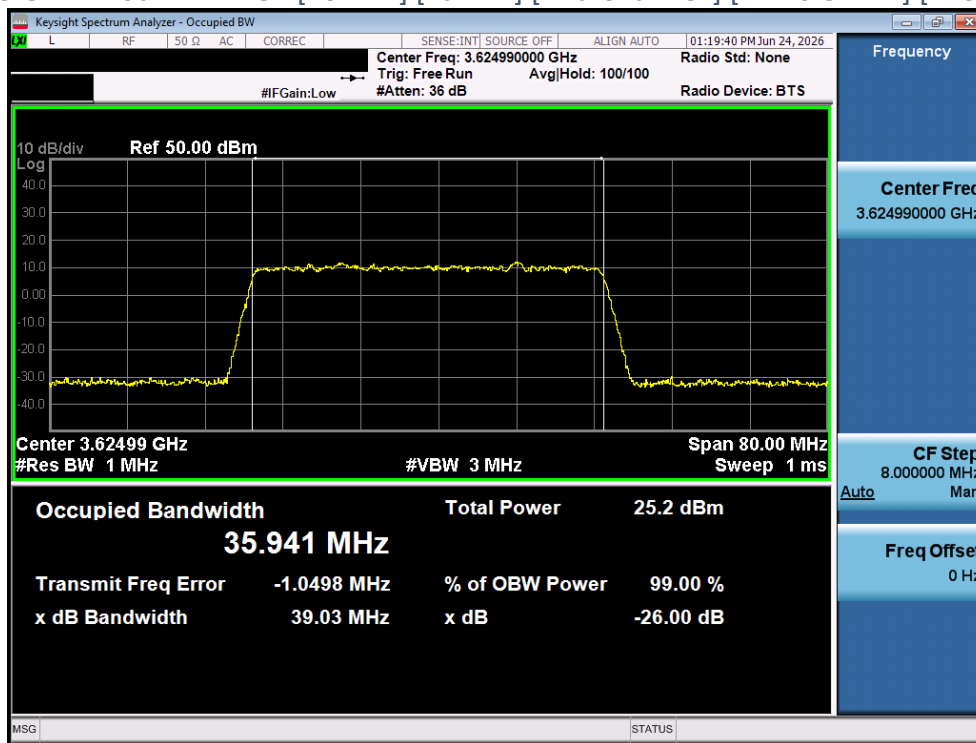
Plot 4-33 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [SRS 1]



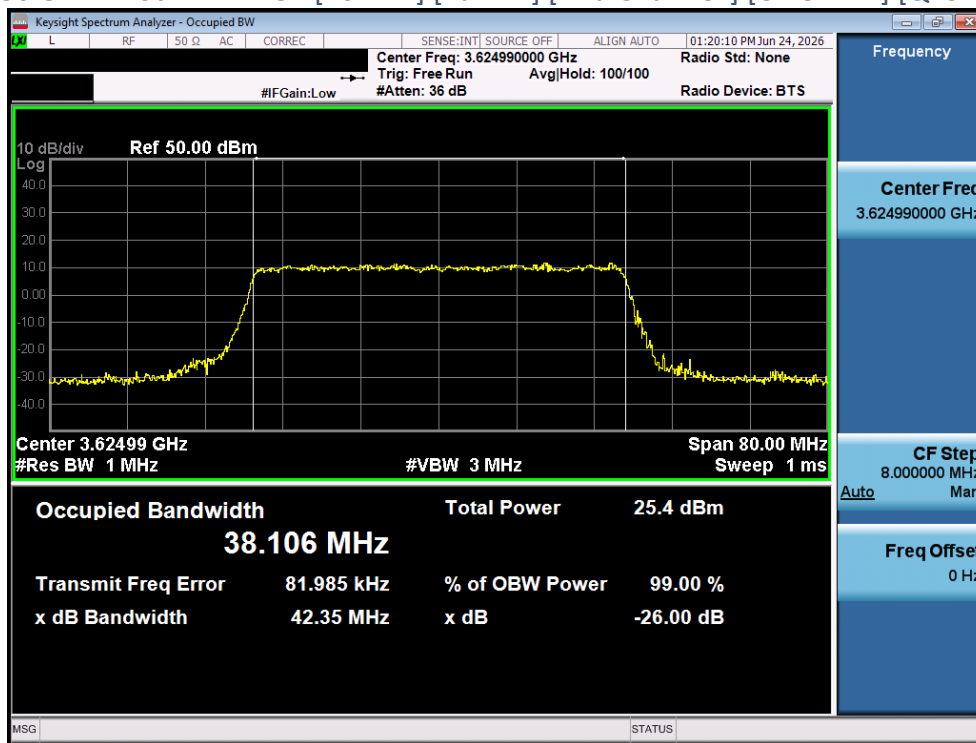
Plot 4-34 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [SRS 1]



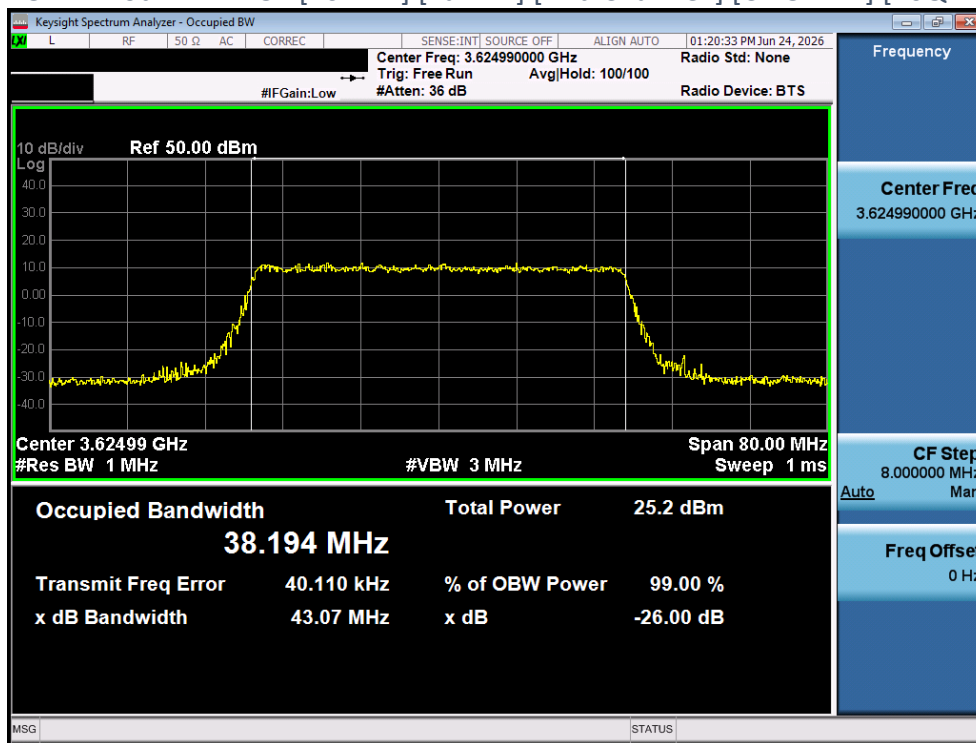
Plot 4-35 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [SRS 2]



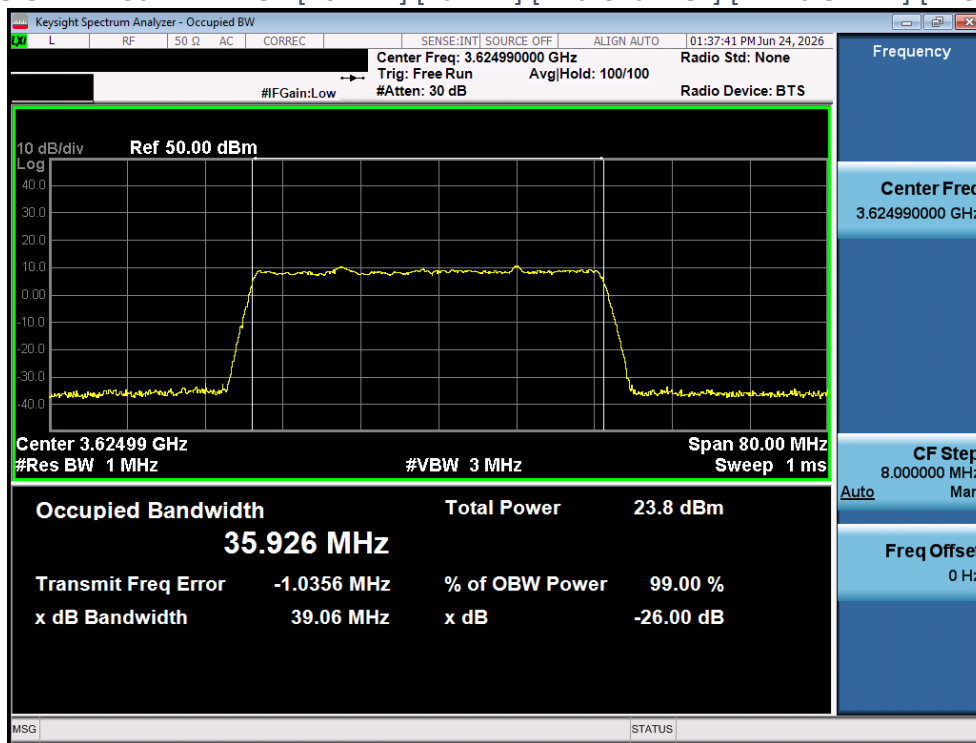
Plot 4-36 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [SRS 2]



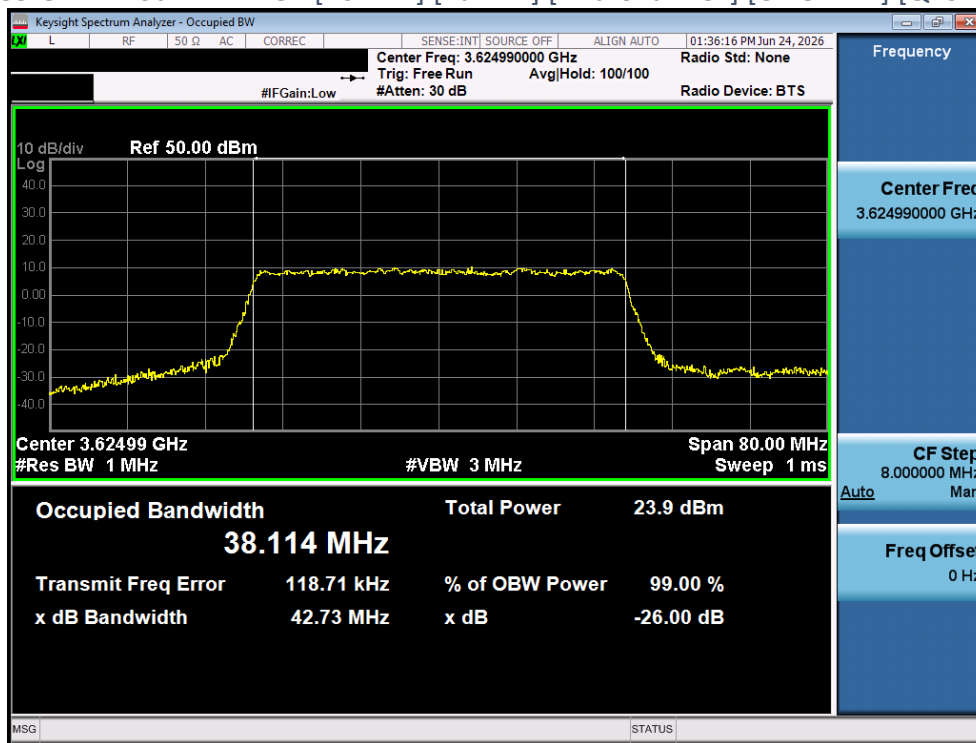
Plot 4-37 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [SRS 2]



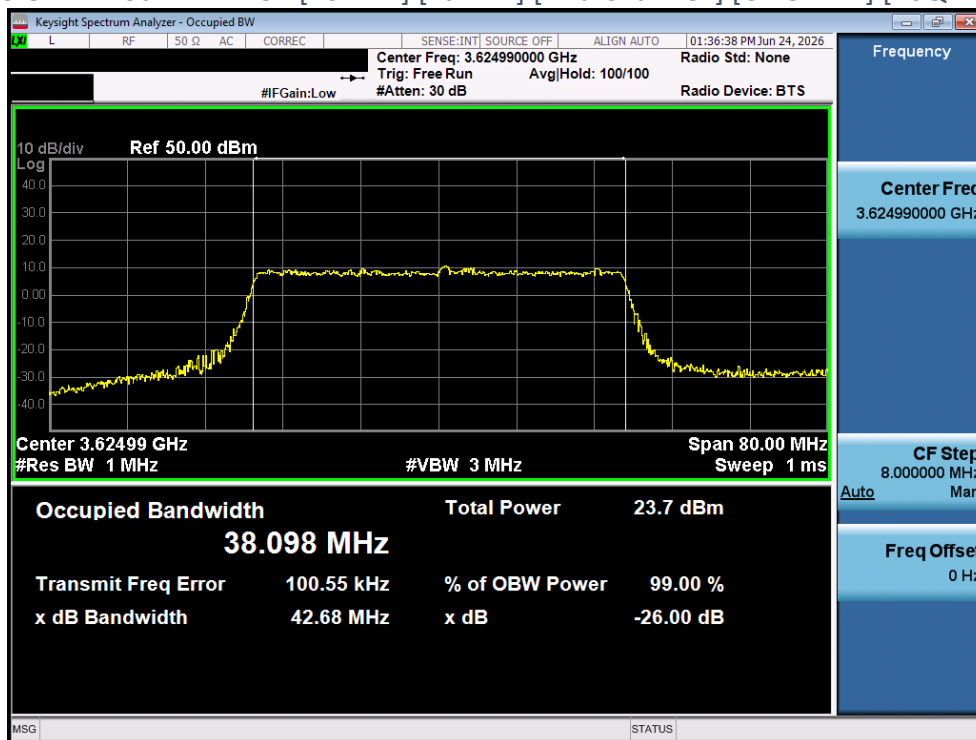
Plot 4-38 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [DFT-s OFDM] [BPSK] [SRS 3]



Plot 4-39 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [QPSK] [SRS 3]



Plot 4-40 OBW Plot – NR n48 - [40MHz] [Full RB] [Mid Channel] [CP OFDM] [16QAM] [SRS 3]



4.5. Band Edge Emissions

4.5.1. Regulatory Limit

§Part. 96.41(e)

- (1) Except as otherwise specified in paragraph (e)(2) of this section, for channel and frequency assignments made by a CBSD to End User Devices, the conducted power of any End User Device emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B megahertz (where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed -25 dBm/MHz.
- (2) Additional protection levels. Notwithstanding paragraph (e)(1) of this section, for CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

4.5.2. Test Method

ANSI C63.26-2015, clause 5.7.3

4.5.3. Test Procedure

The procedure for this method is follows:

- a) Set the spectrum analyzer center frequency to the block, band, or channel edge frequency.
- b) Set the span wide enough to capture the fundamental emission closest to the authorized block.
- c) Set RBW = 1 MHz
- d) Set the VBW $\geq 3 \times$ RBW.
- e) Set Number of points Sweep $\geq 2 \times$ span/RBW
- f) Detector = RMS
- g) Trace mode = Average
- h) Sweep time = auto

Test Note

- ✓ Per §96.41(e)(3)(i), compliance was evaluated using an RBW of 1 MHz or greater. In the 1 MHz bands immediately adjacent to the authorized channel edge, an RBW of at least 1% of the fundamental emission bandwidth was permitted. When a narrower RBW was used, the measured power was integrated over the applicable reference bandwidth.
- ✓ The spectrum analyzer trigger gate function was used to measure the DUT during the transmitter ON period only.
- ✓ All modulation were evaluated, and only the worst-case results are reported herein.
- ✓ Although 1RB and Half RB allocations were evaluated along with the Full RB, only the worst-case results are reported herein.

4.5.4. Test Results

Table 4-7 Band Edge Emissions Data LTE Band 48 Ant 1

Band	Band Width [MHz]	Channel	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	Level [dBm]	Limit [dBm]	Margin [dB]
LTE Band 48	20	Low	3560	55340	100/0	QPSK	-42.61	-40	-2.61
		Mid	3625	55990	100/0	QPSK	-34.32	-25	-9.32
		High	3690	56640	100/0	QPSK	-42.20	-40	-2.20
	15	Low	3557.5	55315	75/0	QPSK	-42.39	-40	-2.39
		Mid	3625	55990	75/0	QPSK	-35.60	-25	-10.60
		High	3692.5	56665	75/0	QPSK	-45.25	-40	-5.25
	10	Low	3555	55290	50/0	QPSK	-51.83	-40	-11.83
		Mid	3625	55990	50/0	QPSK	-42.99	-25	-17.99
		High	3695	56690	50/0	QPSK	-49.60	-40	-9.60
	5	Low	3552.5	55265	25/0	QPSK	-52.90	-40	-12.90
		Mid	3625	55990	25/0	QPSK	-30.50	-13	-17.50
		High	3697.5	56715	25/0	QPSK	-50.14	-40	-10.14

Table 4-8 Band Edge Emissions Data LTE Band 48 ULCA 48C Ant 1

Band	Band Width [MHz]	Channel	Frequency [MHz]	RB Size/Offset	Modulation	Level [dBm]	Limit [dBm]	Margin [dB]
LTE Band 48 ULCA	20+20	Low	3560+3579.8	100/0+100/0	QPSK	-48.14	-40	-8.14
		Mid	3625+3644.8	100/0+100/0	QPSK	-51.47	-25	-26.47
		High	3670.2+3690	100/0+100/0	QPSK	-47.64	-40	-7.64
	20+20	Low	3560+3579.8	1/1+1/1	QPSK	-53.86	-40	-13.86
		Mid	3625+3644.8	1/1+1/99	QPSK	-39.37	-13	-26.37
		High	3670.2+3690	1/99+1/99	QPSK	-51.60	-40	-11.60
	20+20	Low	3560+3579.8	1/99+1/1	QPSK	-45.70	-40	-5.70
		Mid	3625+3644.8	1/99+1/1	QPSK	-49.94	-25	-24.94
		High	3670.2+3690	1/99+1/1	QPSK	-47.09	-40	-7.09

Table 4-9 Band Edge Emissions Data NR n48 Ant 1

Band	Band Width [MHz]	Channel	Frequency [MHz]	NR-Arfcn UL	RB Size/Offset	Waveform	Modulation	Level [dBm]	Limit [dBm]	Margin [dB]
NR n48	40	Low	3570.00	638000	100/0	DFT-s-OFDM	BPSK	-44.07	-40	-4.07
					100/0	DFT-s-OFDM	QPSK	-43.26	-40	-3.26
					106/0	CP-OFDM	QPSK	-43.19	-40	-3.19
		Mid	3624.99	641666	100/0	DFT-s-OFDM	BPSK	-41.29	-25	-16.29
					100/0	DFT-s-OFDM	QPSK	-41.22	-25	-16.22
					106/0	CP-OFDM	QPSK	-41.05	-25	-16.05
		High	3679.98	645332	100/0	DFT-s-OFDM	BPSK	-43.36	-40	-3.36
					100/0	DFT-s-OFDM	QPSK	-41.38	-40	-1.38
					106/0	CP-OFDM	QPSK	-42.14	-40	-2.14
	30	Low	3565.02	637668	75/0	DFT-s-OFDM	BPSK	-43.24	-40	-3.24
					75/0	DFT-s-OFDM	QPSK	-42.38	-40	-2.38
					78/0	CP-OFDM	QPSK	-42.71	-40	-2.71
		Mid	3624.99	641666	75/0	DFT-s-OFDM	BPSK	-41.64	-25	-16.64
					75/0	DFT-s-OFDM	QPSK	-41.34	-25	-16.34
					78/0	CP-OFDM	QPSK	-41.16	-25	-16.16
		High	3684.99	645666	75/0	DFT-s-OFDM	BPSK	-43.85	-40	-3.85
					75/0	DFT-s-OFDM	QPSK	-42.36	-40	-2.36
					78/0	CP-OFDM	QPSK	-42.30	-40	-2.30
	20	Low	3560.01	637334	50/0	DFT-s-OFDM	BPSK	-46.15	-40	-6.15
					50/0	DFT-s-OFDM	QPSK	-41.40	-40	-1.40
					51/0	CP-OFDM	QPSK	-43.40	-40	-3.40
		Mid	3624.99	641666	50/0	DFT-s-OFDM	BPSK	-38.22	-25	-13.22
					50/0	DFT-s-OFDM	QPSK	-34.71	-25	-9.71
					51/0	CP-OFDM	QPSK	-36.76	-25	-11.76
		High	3690.00	646000	50/0	DFT-s-OFDM	BPSK	-46.40	-40	-6.40
					50/0	DFT-s-OFDM	QPSK	-41.24	-40	-1.24
					51/0	CP-OFDM	QPSK	-43.28	-40	-3.28
	15	Low	3557.52	637168	36/0	DFT-s-OFDM	BPSK	-48.43	-40	-8.43
					36/0	DFT-s-OFDM	QPSK	-45.90	-40	-5.90
					38/0	CP-OFDM	QPSK	-47.68	-40	-7.68
		Mid	3624.99	641666	36/0	DFT-s-OFDM	BPSK	-41.24	-25	-16.24
					36/0	DFT-s-OFDM	QPSK	-38.32	-25	-13.32
					38/0	CP-OFDM	QPSK	-40.17	-25	-15.17
		High	3692.49	646166	36/0	DFT-s-OFDM	BPSK	-47.86	-40	-7.86
					36/0	DFT-s-OFDM	QPSK	-46.08	-40	-6.08
					38/0	CP-OFDM	QPSK	-47.59	-40	-7.59
	10	Low	3555.00	637000	24/0	DFT-s-OFDM	BPSK	-52.29	-40	-12.29
					24/0	DFT-s-OFDM	QPSK	-52.34	-40	-12.34
					24/0	CP-OFDM	QPSK	-52.62	-40	-12.62
		Mid	3624.99	641666	24/0	DFT-s-OFDM	BPSK	-43.79	-25	-18.79
					24/0	DFT-s-OFDM	QPSK	-40.38	-25	-15.38
					24/0	CP-OFDM	QPSK	-41.91	-25	-16.91
		High	3694.98	646332	24/0	DFT-s-OFDM	BPSK	-50.41	-40	-10.41
					24/0	DFT-s-OFDM	QPSK	-49.79	-40	-9.79
					24/0	CP-OFDM	QPSK	-50.10	-40	-10.10

Table 4-10 Band Edge Emissions Data NR n48 SRS 1

Band	Band Width [MHz]	Channel	Frequency [MHz]	NR-Arfcn UL	RB Size/Offset	Waveform	Modulation	Level [dBm]	Limit [dBm]	Margin [dB]
NR n48	40	Low	3570.00	638000	100/0	DFT-s-OFDM	BPSK	-48.02	-40	-8.02
					100/0	DFT-s-OFDM	QPSK	-46.94	-40	-6.94
					106/0	CP-OFDM	QPSK	-46.44	-40	-6.44
		Mid	3624.99	641666	100/0	DFT-s-OFDM	BPSK	-43.93	-25	-18.93
					100/0	DFT-s-OFDM	QPSK	-43.69	-25	-18.69
					106/0	CP-OFDM	QPSK	-41.06	-25	-16.06
		High	3679.98	645332	100/0	DFT-s-OFDM	BPSK	-44.01	-40	-4.01
					100/0	DFT-s-OFDM	QPSK	-41.76	-40	-1.76
					106/0	CP-OFDM	QPSK	-41.25	-40	-1.25

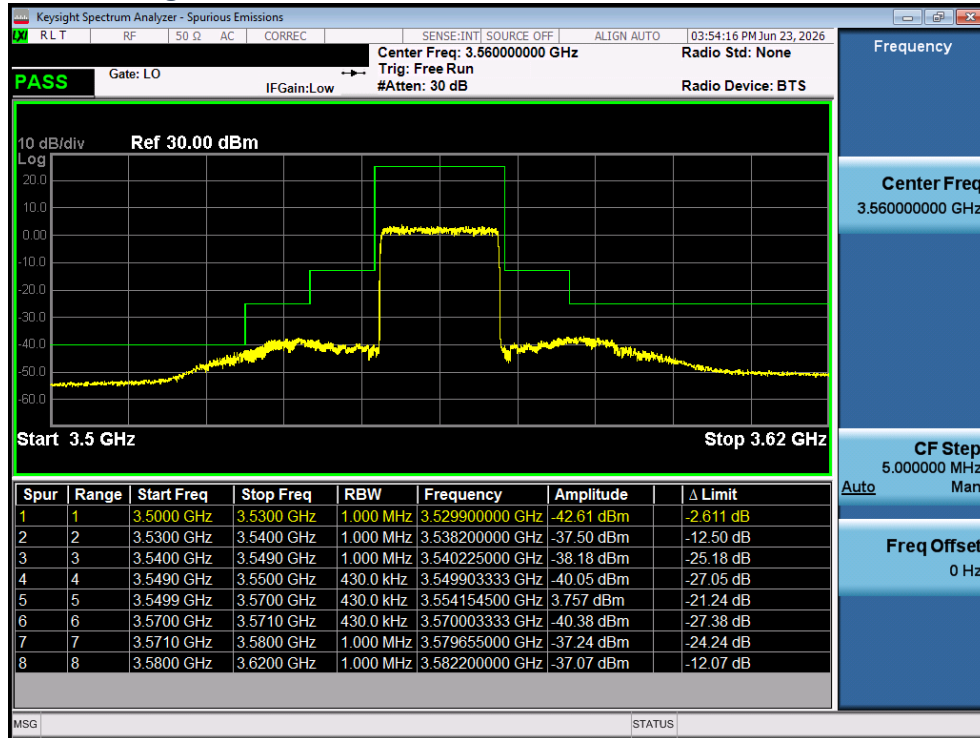
Table 4-11 Band Edge Emissions Data NR n48 SRS 2

Band	Band Width [MHz]	Channel	Frequency [MHz]	NR-Arfcn UL	RB Size/Offset	Waveform	Modulation	Level [dBm]	Limit [dBm]	Margin [dB]
NR n48	40	Low	3570.00	638000	100/0	DFT-s-OFDM	BPSK	-47.91	-40	-7.91
					100/0	DFT-s-OFDM	QPSK	-42.99	-40	-2.99
					106/0	CP-OFDM	QPSK	-46.79	-40	-6.79
		Mid	3624.99	641666	100/0	DFT-s-OFDM	BPSK	-46.81	-25	-21.81
					100/0	DFT-s-OFDM	QPSK	-43.58	-25	-18.58
					106/0	CP-OFDM	QPSK	-44.42	-25	-19.42
		High	3679.98	645332	100/0	DFT-s-OFDM	BPSK	-48.40	-40	-8.40
					100/0	DFT-s-OFDM	QPSK	-46.72	-40	-6.72
					106/0	CP-OFDM	QPSK	-45.00	-40	-5.00

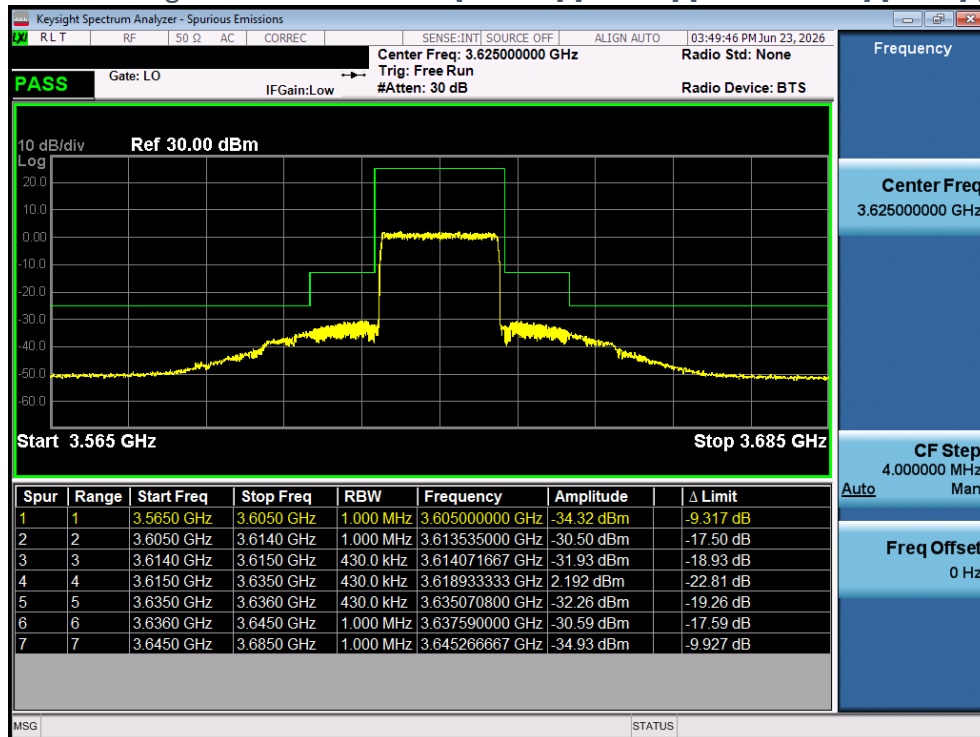
Table 4-12 Band Edge Emissions Data NR n48 SRS 3

Band	Band Width [MHz]	Channel	Frequency [MHz]	NR-Arfcn UL	RB Size/Offset	Waveform	Modulation	Level [dBm]	Limit [dBm]	Margin [dB]
NR n48	40	Low	3570.00	638000	100/0	DFT-s-OFDM	BPSK	-50.56	-40	-10.56
					100/0	DFT-s-OFDM	QPSK	-50.15	-40	-10.15
					106/0	CP-OFDM	QPSK	-49.28	-40	-9.28
		Mid	3624.99	641666	100/0	DFT-s-OFDM	BPSK	-48.22	-25	-23.22
					100/0	DFT-s-OFDM	QPSK	-46.04	-25	-21.04
					106/0	CP-OFDM	QPSK	-43.48	-25	-18.48
		High	3679.98	645332	100/0	DFT-s-OFDM	BPSK	-45.25	-40	-5.25
					100/0	DFT-s-OFDM	QPSK	-41.97	-40	-1.97
					106/0	CP-OFDM	QPSK	-41.12	-40	-1.12

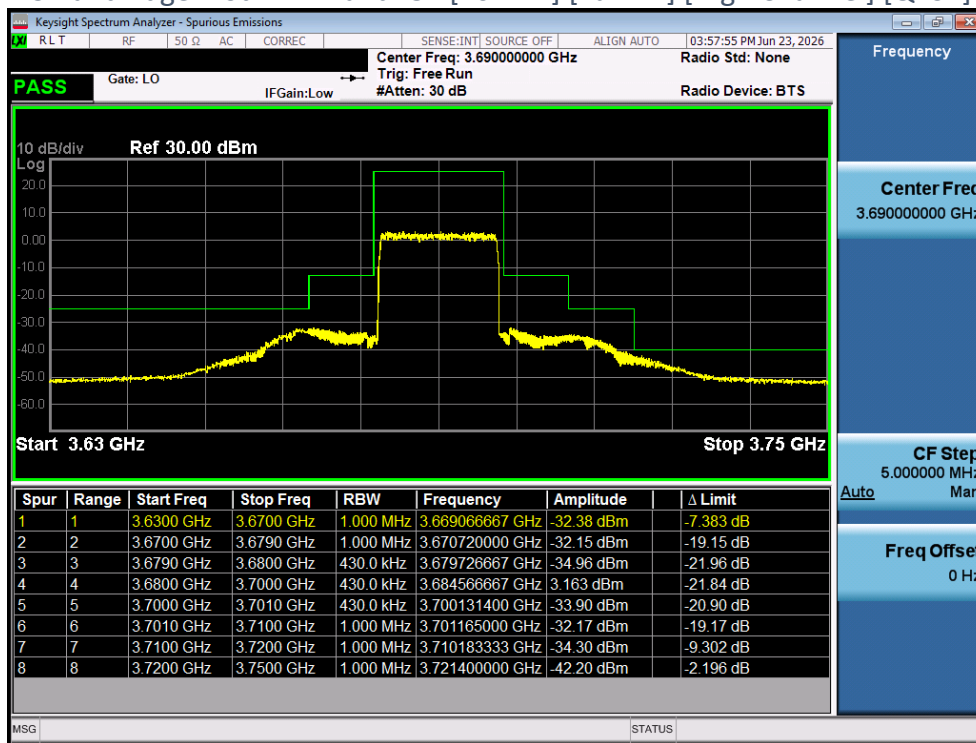
Plot 4-41 Band Edge Plot - LTE Band48 - [20MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]



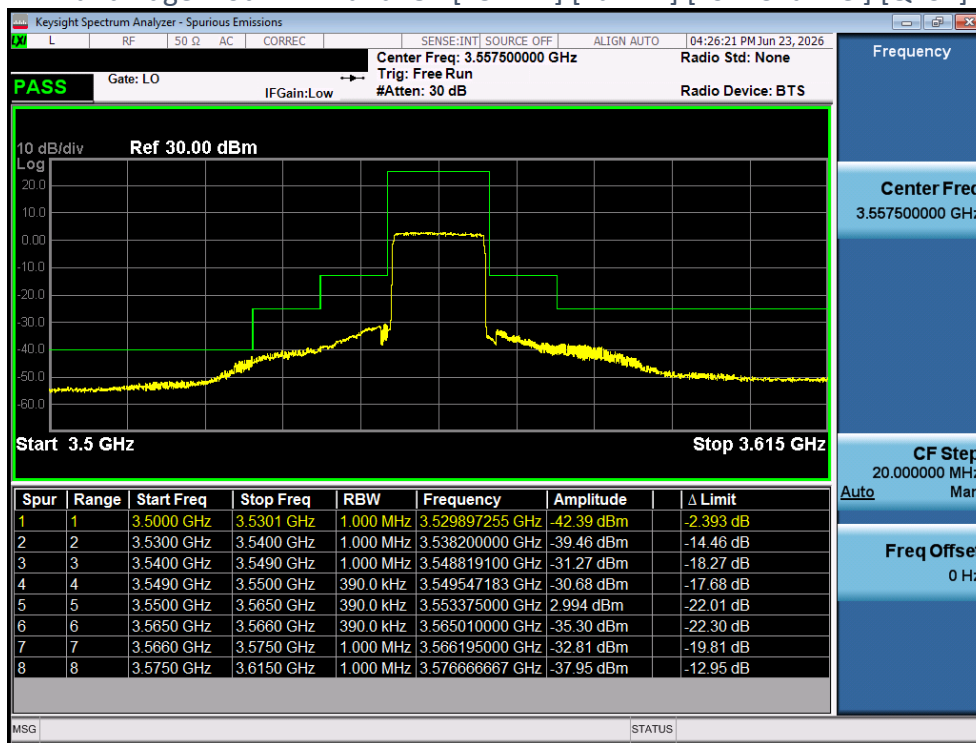
Plot 4-42 Band Edge Plot - LTE Band48 - [20MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



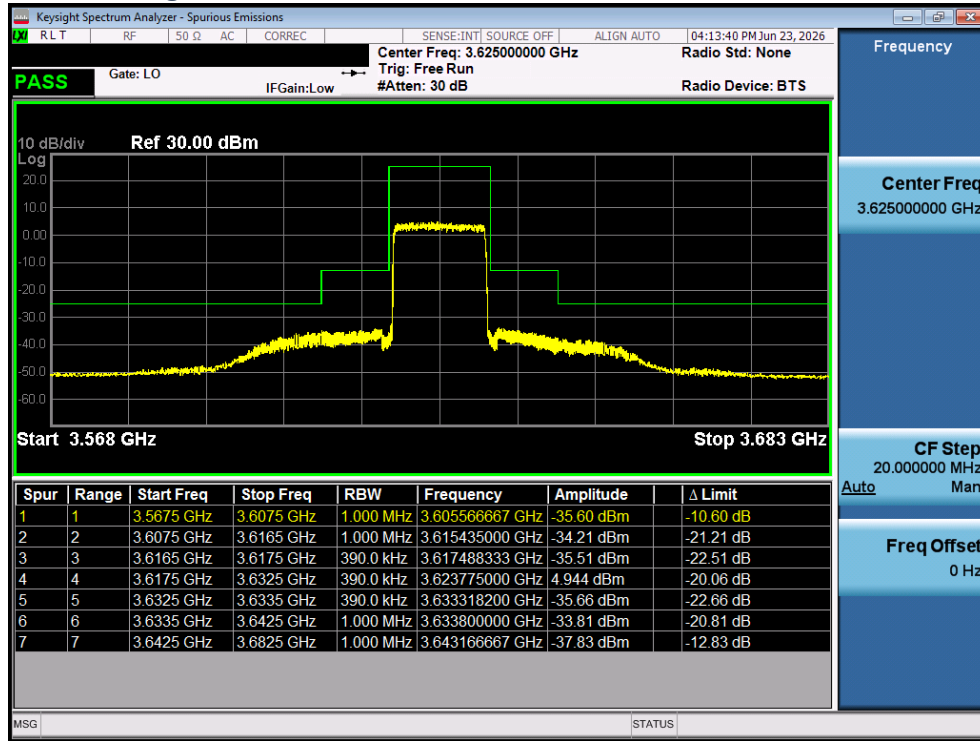
Plot 4-43 Band Edge Plot - LTE Band48 - [20MHz] [Full RB] [High Channel] [QPSK] [Ant 1]



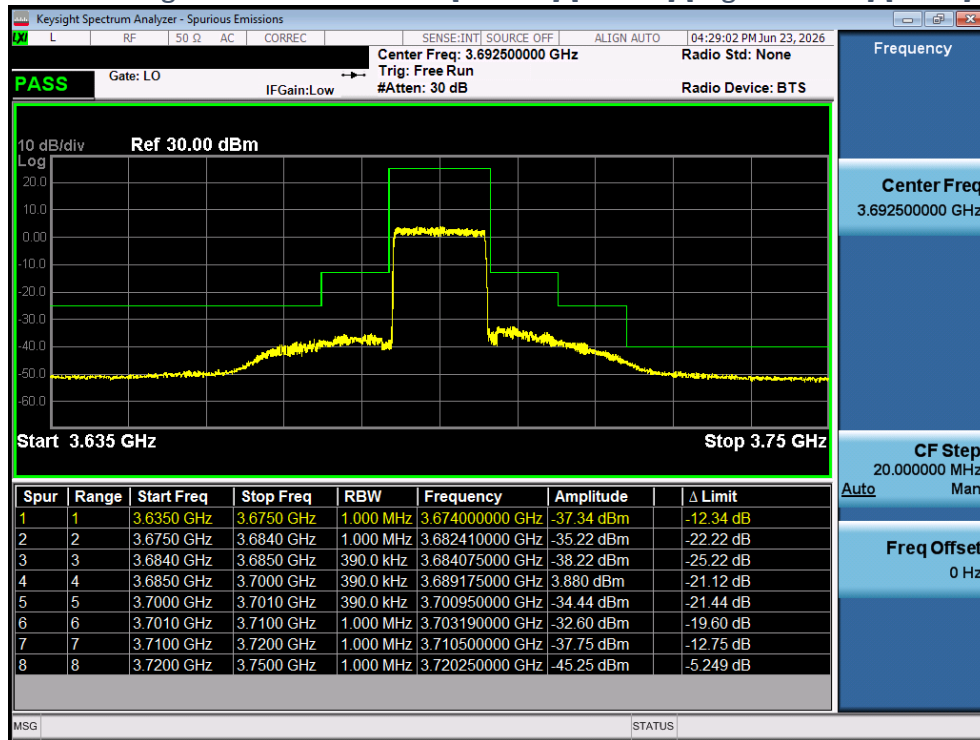
Plot 4-44 Band Edge Plot - LTE Band48 - [15MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]



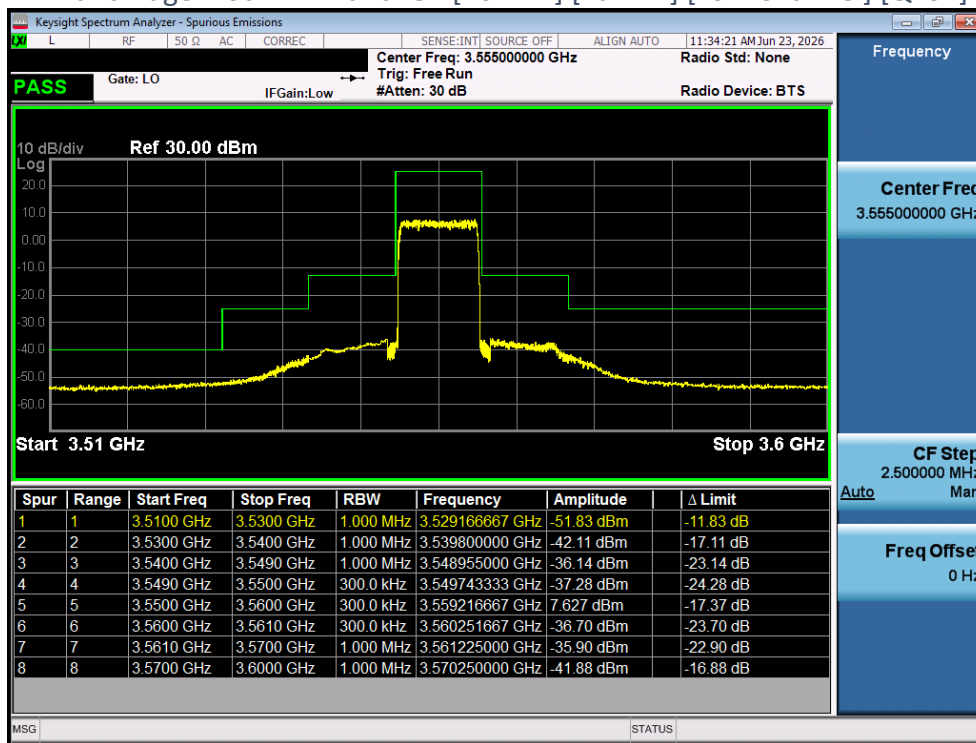
Plot 4-45 Band Edge Plot - LTE Band48 - [15MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



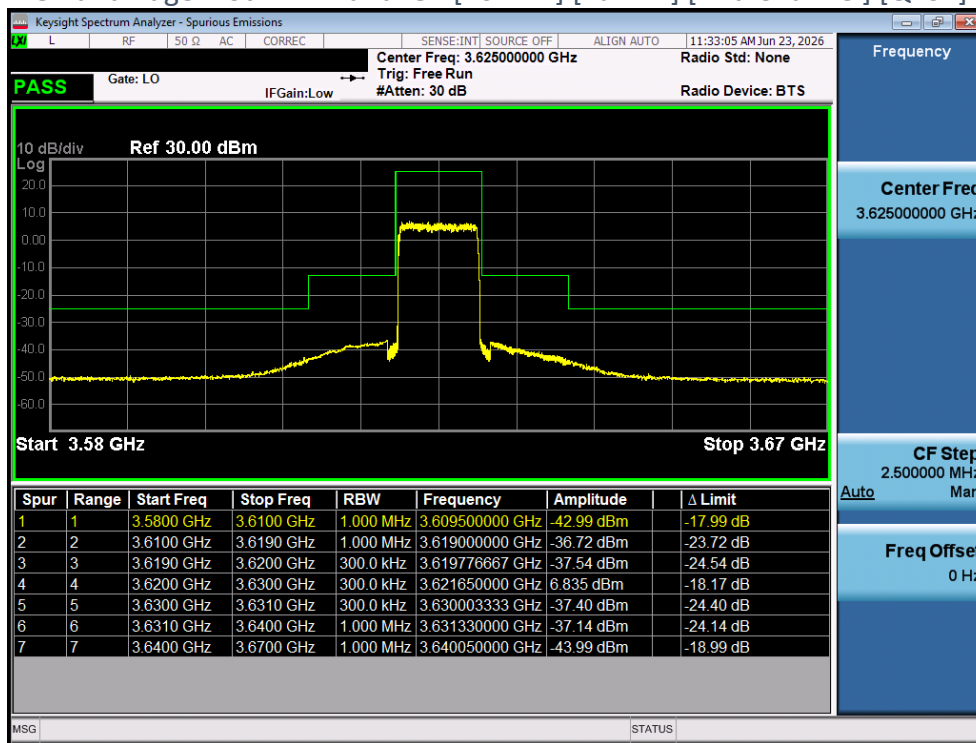
Plot 4-46 Band Edge Plot - LTE Band48 - [15MHz] [Full RB] [High Channel] [QPSK] [Ant 1]



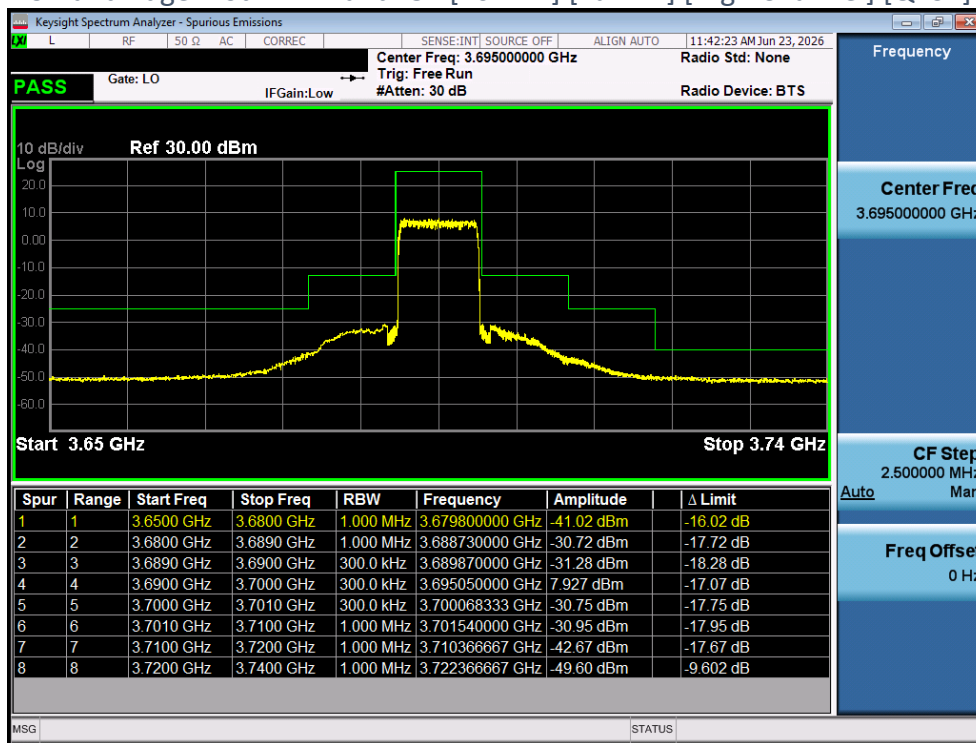
Plot 4-47 Band Edge Plot - LTE Band48 - [10MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]



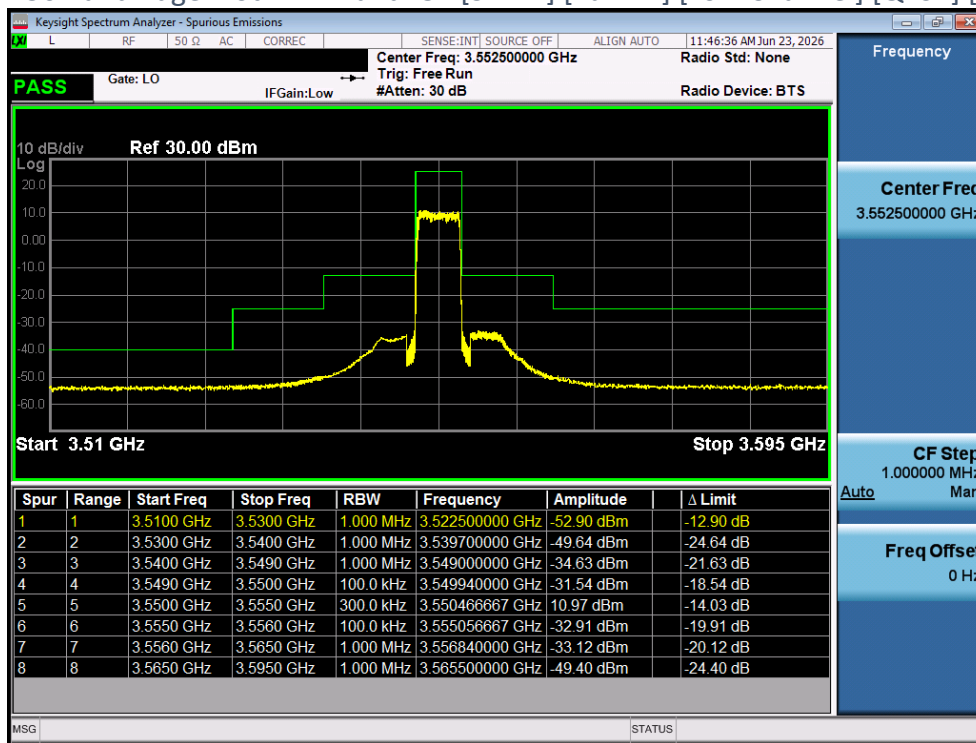
Plot 4-48 Band Edge Plot - LTE Band48 - [10MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



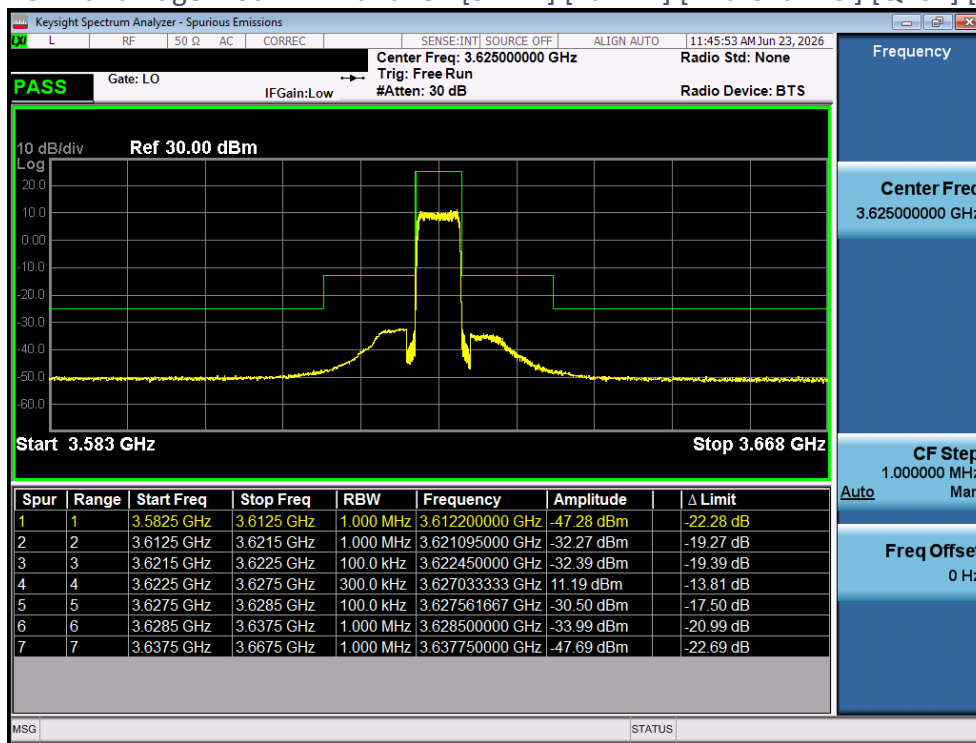
Plot 4-49 Band Edge Plot - LTE Band48 - [10MHz] [Full RB] [High Channel] [QPSK] [Ant 1]



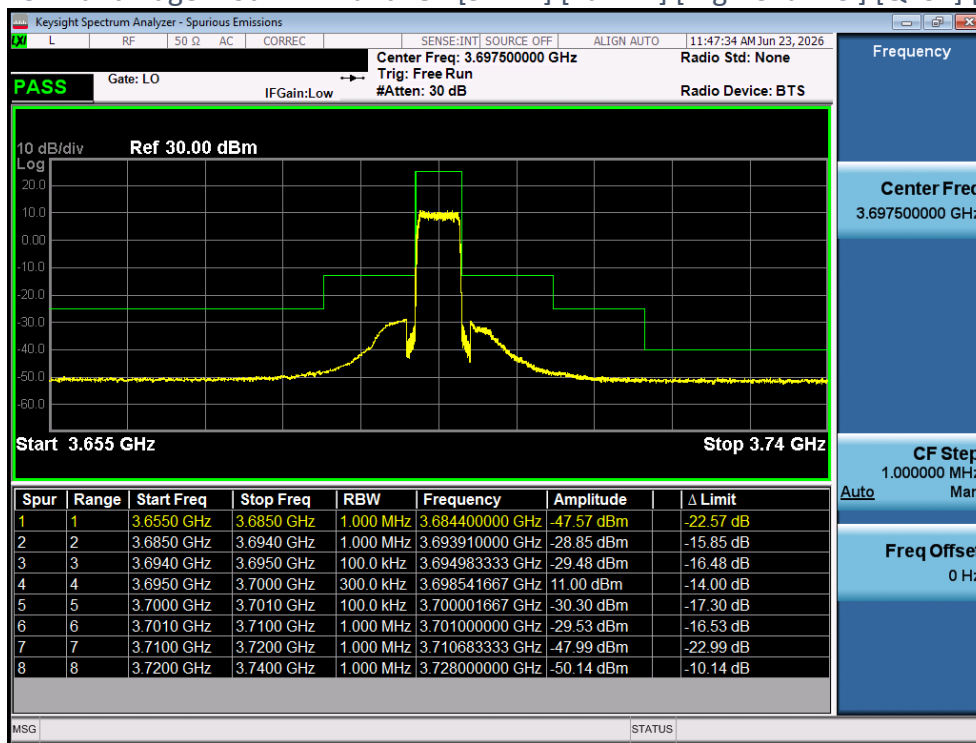
Plot 4-50 Band Edge Plot - LTE Band48 - [5MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]



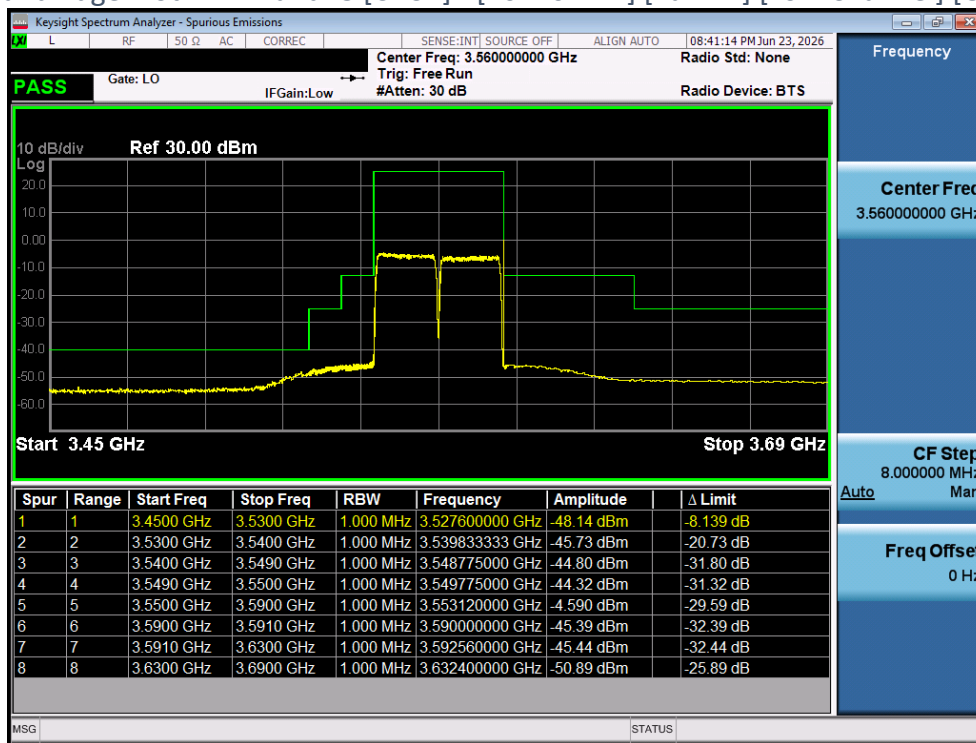
Plot 4-51 Band Edge Plot - LTE Band48 - [5MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



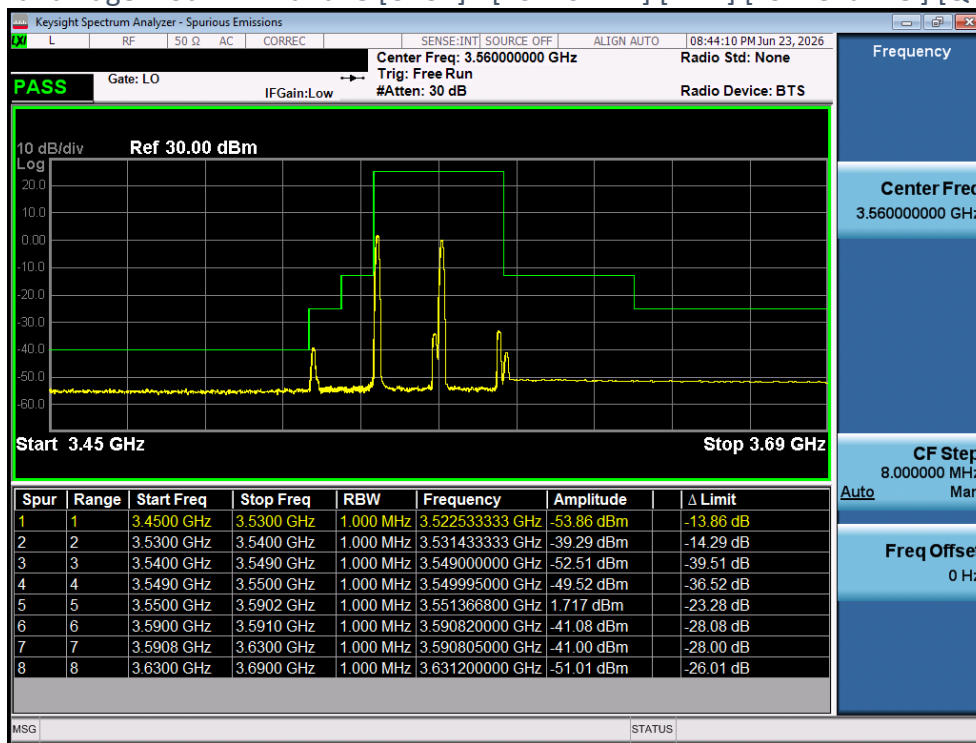
Plot 4-52 Band Edge Plot - LTE Band48 - [5MHz] [Full RB] [High Channel] [QPSK] [Ant 1]



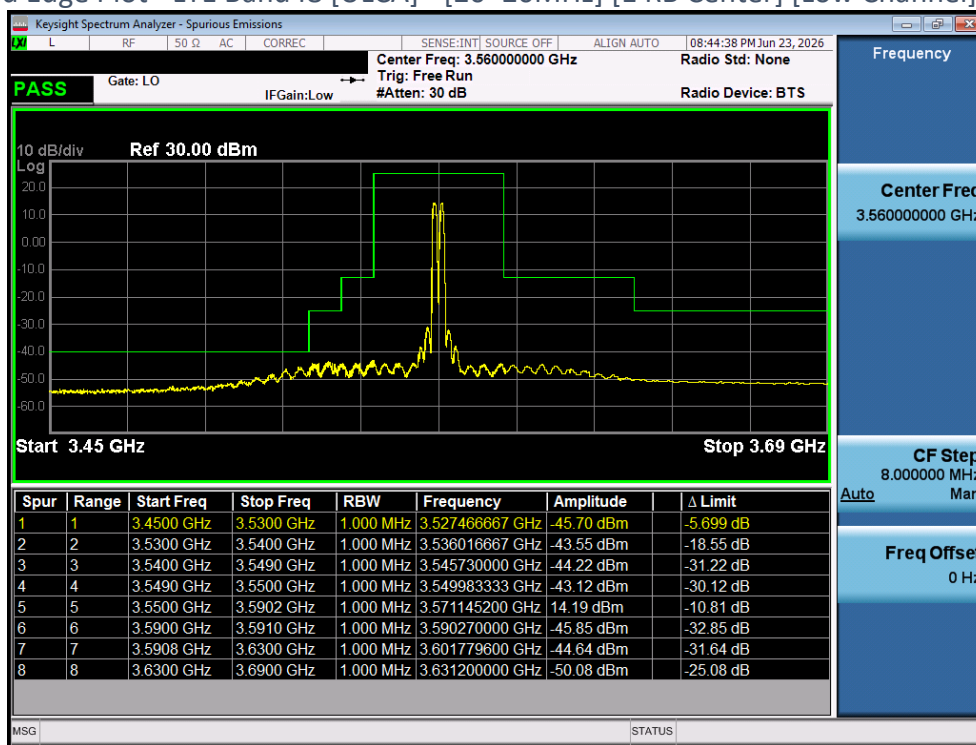
Plot 4-53 Band Edge Plot - LTE Band48 [ULCA] - [20+20MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]



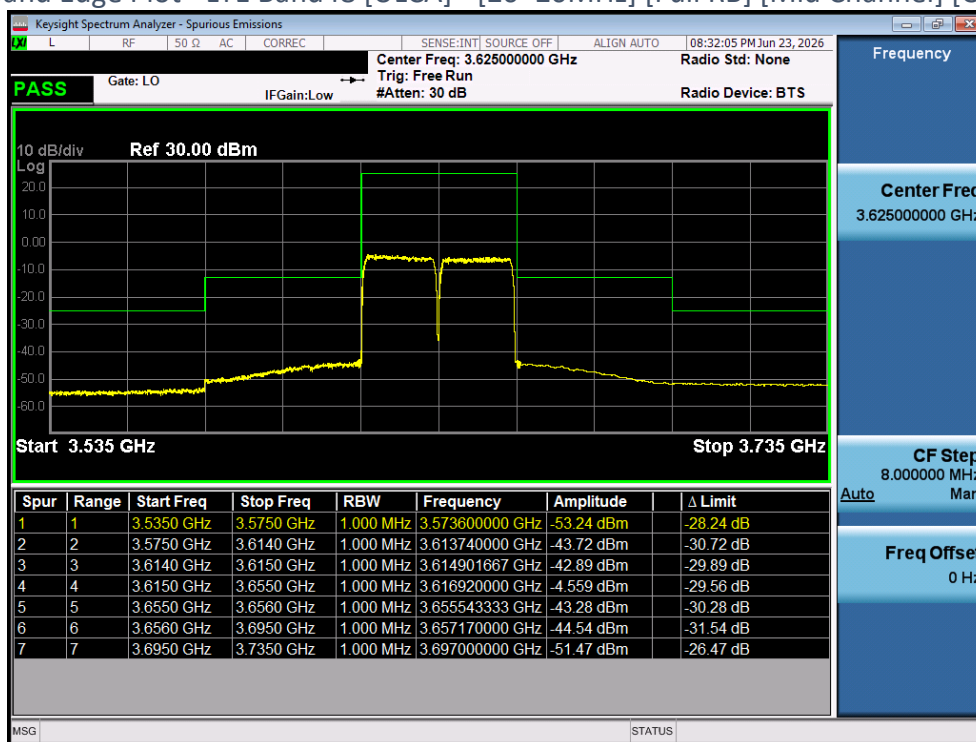
Plot 4-54 Band Edge Plot - LTE Band48 [ULCA] - [20+20MHz] [1 RB] [Low Channel] [QPSK] [Ant 1]



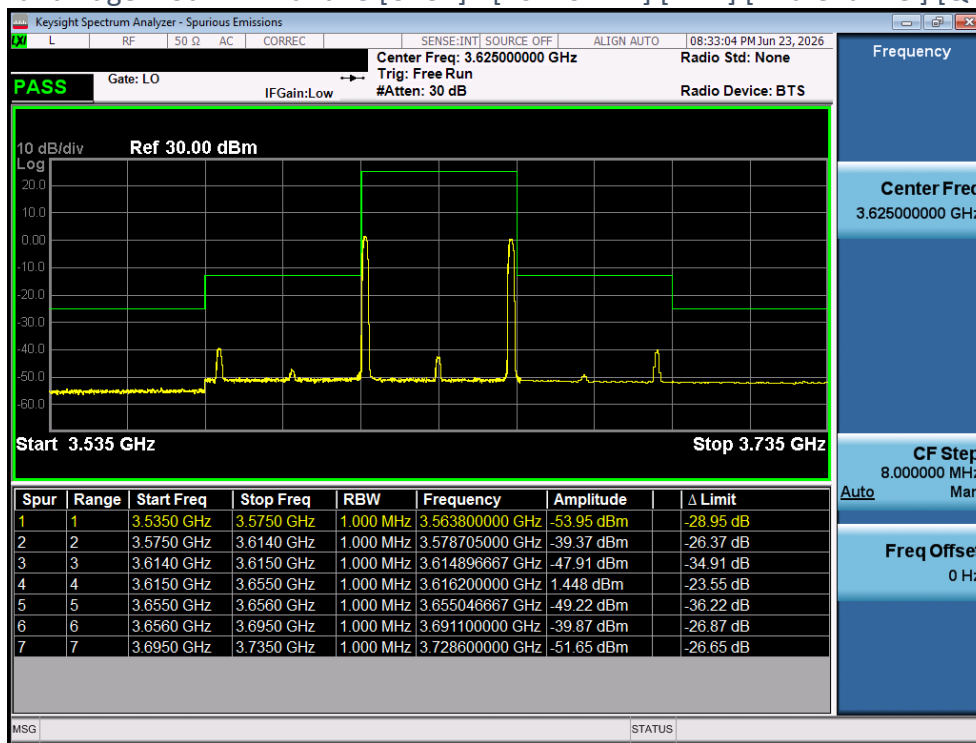
Plot 4-55 Band Edge Plot - LTE Band48 [ULCA] - [20+20MHz] [1 RB Center] [Low Channel] [QPSK] [Ant 1]



Plot 4-56 Band Edge Plot - LTE Band48 [ULCA] - [20+20MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



Plot 4-57 Band Edge Plot - LTE Band48 [ULCA] - [20+20MHz] [1 RB] [Mid Channel] [QPSK] [Ant 1]



Plot 4-58 Band Edge Plot - LTE Band48 [ULCA] - [20+20MHz] [1 RB Center] [Mid Channel] [QPSK] [Ant 1]

