



## Element Materials Technology

(formerly PCTEST)

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## PART 24 MEASUREMENT REPORT

**Applicant Name:**

Apple Inc.  
One Apple Park Way  
Cupertino, CA 95014  
United States

**Date of Testing:**

7/1/2024 - 12/9/2024

**Test Report Issue Date:**

1/17/2025

**Test Site/Location:**

Element Materials Technology Morgan Hill, CA, USA

**Test Report Serial No.:**

1C2410210073-08-R1.BCG

**FCC ID:**

**BCGA3267**

**Applicant Name:**

**Apple Inc.**

**Application Type:**

Certification

**Model:**

A3267, A3270

**EUT Type:**

Tablet Device

**FCC Classification:**

PCS Licensed Transmitter (PCB)

**FCC Rule Part:**

24

**Test Procedure(s):**

ANSI C63.26-2015, TIA-603-E-2016, KDB 971168 D01  
v03r01

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947. Test results reported herein relate only to the item(s) tested.

This revised Test Report (S/N: 1C2410210073-08-R1.BCG) supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose accordingly.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

RJ Ortanez

Executive Vice President



CERT #2041.02

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 1 of 219

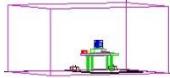
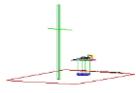
V2.2 09/07/2023

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## T A B L E   O F   C O N T E N T S

1.0	INTRODUCTION .....	5
1.1	Scope .....	5
1.2	Element Materials Technology Test Location .....	5
1.3	Test Facility / Accreditations .....	5
2.0	PRODUCT INFORMATION .....	6
2.1	Equipment Description .....	6
2.2	Device Capabilities .....	6
2.3	Antenna Description .....	7
2.4	Test Support Equipment .....	7
2.5	Test Configuration .....	7
2.6	Software and Firmware .....	7
2.7	EMI Suppression Device(s)/Modifications .....	7
3.0	DESCRIPTION OF TESTS .....	8
3.1	Evaluation Procedure .....	8
3.2	Radiated Spurious Emissions .....	8
4.0	MEASUREMENT UNCERTAINTY .....	9
5.0	TEST EQUIPMENT CALIBRATION DATA .....	10
6.0	SAMPLE CALCULATIONS .....	11
7.0	TEST RESULTS .....	12
7.1	Summary .....	12
7.2	Occupied Bandwidth .....	13
7.3	Spurious and Harmonic Emissions at Antenna Terminal .....	48
7.4	Band Edge Emissions at Antenna Terminal .....	65
7.5	Peak-Average Ratio .....	117
7.6	Radiated Power (EIRP) .....	174
7.7	Radiated Spurious Emissions .....	196
7.8	Frequency Stability / Temperature Variation .....	214
8.0	CONCLUSION .....	219

FCC ID: BCGA3267	 <b>element</b>	PART 24 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 2 of 219

## PART 24 MEASUREMENT REPORT

Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	OBW [MHz]	PAR at 0.1% [dB]	EIRP		Emission Designator
						Max. Power [W]	Max. Power [dBm]	
WCDMA1900	5 MHz	Spread Spectrum	1852.4 - 1907.6	4.1722	2.85	0.546	27.37	4M17F9W
Band 2	1.4 MHz	QPSK	1850.7 - 1909.3	1.1150	4.92	0.541	27.33	1M12G7W
		16QAM	1850.7 - 1909.3	1.1209	5.73	0.436	26.39	1M12D7W
		64QAM	1850.7 - 1909.3	1.1093	6.30	0.347	25.40	1M11D7W
		256QAM	1850.7 - 1909.3	1.1081	6.60	0.178	22.51	1M11D7W
	3 MHz	QPSK	1851.5 - 1908.5	2.7382	4.62	0.546	27.37	2M74G7W
		16QAM	1851.5 - 1908.5	2.7343	5.67	0.437	26.40	2M73D7W
		64QAM	1851.5 - 1908.5	2.7411	6.38	0.344	25.37	2M74D7W
		256QAM	1851.5 - 1908.5	2.7356	6.58	0.177	22.48	2M74D7W
	5 MHz	QPSK	1852.5 - 1907.5	4.5594	4.89	0.543	27.35	4M56G7W
		16QAM	1852.5 - 1907.5	4.5675	5.82	0.433	26.36	4M57D7W
		64QAM	1852.5 - 1907.5	4.5634	6.37	0.342	25.34	4M56D7W
		256QAM	1852.5 - 1907.5	4.5673	6.59	0.177	22.49	4M57D7W
	10MHz	QPSK	1855 - 1905	9.0787	4.99	0.550	27.40	9M08G7W
		16QAM	1856 - 1905	9.0918	5.86	0.433	26.36	9M09D7W
		64QAM	1857 - 1905	9.0739	6.42	0.344	25.36	9M07D7W
		256QAM	1858 - 1905	9.0883	6.60	0.177	22.47	9M09D7W
	15 MHz	QPSK	1857.5 - 1902.5	13.6250	4.98	0.547	27.38	13M6G7W
		16QAM	1857.5 - 1902.5	13.6165	5.88	0.427	26.30	13M6D7W
		64QAM	1857.5 - 1902.5	13.6251	6.40	0.336	25.26	13M6D7W
		256QAM	1857.5 - 1902.5	13.6130	6.61	0.177	22.48	13M6D7W
	20 MHz	QPSK	1860 - 1900	18.1643	4.93	0.543	27.35	18M2G7W
		16QAM	1860 - 1900	18.1321	5.82	0.424	26.27	18M1D7W
		64QAM	1860 - 1900	18.1305	6.36	0.347	25.40	18M1D7W
		256QAM	1860 - 1900	18.1079	6.59	0.177	22.48	18M1D7W
Band 25	1.4 MHz	QPSK	1850.7 - 1914.3	1.1150	4.97	0.547	27.38	1M12G7W
		16QAM	1850.7 - 1914.3	1.1209	5.78	0.462	26.65	1M12D7W
		64QAM	1850.7 - 1914.3	1.1093	6.38	0.352	25.47	1M11D7W
		256QAM	1850.7 - 1914.3	1.1081	6.60	0.177	22.47	1M11D7W
	3 MHz	QPSK	1851.5 - 1913.5	2.7382	4.64	0.538	27.31	2M74G7W
		16QAM	1851.5 - 1913.5	2.7343	5.70	0.460	26.63	2M73D7W
		64QAM	1851.5 - 1913.5	2.7411	6.43	0.366	25.63	2M74D7W
		256QAM	1851.5 - 1913.5	2.7356	6.64	0.181	22.58	2M74D7W
	5 MHz	QPSK	1852.5 - 1912.5	4.5594	4.89	0.550	27.40	4M56G7W
		16QAM	1852.5 - 1912.5	4.5675	5.89	0.480	26.81	4M57D7W
		64QAM	1852.5 - 1912.5	4.5634	6.43	0.361	25.58	4M56D7W
		256QAM	1852.5 - 1912.5	4.5673	6.62	0.177	22.48	4M57D7W
	10 MHz	QPSK	1855 - 1910	9.0787	5.02	0.538	27.31	9M08G7W
		16QAM	1855 - 1910	9.0918	5.89	0.450	26.53	9M09D7W
		64QAM	1855 - 1910	9.0739	6.46	0.357	25.53	9M07D7W
		256QAM	1855 - 1910	9.0883	6.62	0.177	22.47	9M09D7W
	15 MHz	QPSK	1857.5 - 1907.5	13.6250	5.01	0.509	27.07	13M6G7W
		16QAM	1857.5 - 1907.5	13.6165	5.90	0.450	26.53	13M6D7W
		64QAM	1857.5 - 1907.5	13.6251	6.42	0.341	25.33	13M6D7W
		256QAM	1857.5 - 1907.5	13.6130	6.61	0.170	22.31	13M6D7W
	20 MHz	QPSK	1860 - 1905	18.1643	4.96	0.518	27.14	18M2G7W
		16QAM	1860 - 1905	18.1321	5.87	0.472	26.74	18M1D7W
		64QAM	1860 - 1905	18.1305	6.42	0.348	25.41	18M1D7W
		256QAM	1860 - 1905	18.1079	6.61	0.173	22.37	18M1D7W

### EUT Overview

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V2.2 09/07/2023

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Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	OBW [MHz]	PAR at 0.1% [dB]	EIRP		Emission Designator
						Max. Power [W]	Max. Power [dBm]	
NR Band n2	5 MHz	π/2 BPSK	1852.5 - 1907.5	4.4863	4.07	0.543	27.35	4M49G7W
		QPSK	1852.5 - 1907.5	4.4994	5.43	0.550	27.40	4M50G7W
		16QAM	1852.5 - 1907.5	4.4744	6.35	0.438	26.41	4M47D7W
		64QAM	1852.5 - 1907.5	4.4727	6.55	0.348	25.41	4M47D7W
		256QAM	1852.5 - 1907.5	4.4741	6.43	0.177	22.47	4M47D7W
	10 MHz	π/2 BPSK	1855 - 1905	8.9535	4.38	0.540	27.32	8M95G7W
		QPSK	1855 - 1905	9.3267	5.62	0.550	27.40	9M33G7W
		16QAM	1855 - 1905	9.2876	6.32	0.443	26.46	9M29D7W
		64QAM	1855 - 1905	9.3344	6.61	0.348	25.41	9M33D7W
		256QAM	1855 - 1905	9.3052	6.74	0.179	22.54	9M31D7W
	15 MHz	π/2 BPSK	1857.5 - 1902.5	13.4508	4.31	0.550	27.40	13M5G7W
		QPSK	1857.5 - 1902.5	14.1988	5.51	0.548	27.39	14M2G7W
		16QAM	1857.5 - 1902.5	14.1458	6.36	0.432	26.35	14M1D7W
		64QAM	1857.5 - 1902.5	14.1796	6.63	0.337	25.27	14M2D7W
		256QAM	1857.5 - 1902.5	14.0722	6.68	0.178	22.50	14M1D7W
	20 MHz	π/2 BPSK	1860 - 1900	17.8930	4.39	0.547	27.38	17M9G7W
		QPSK	1860 - 1900	19.0358	5.59	0.550	27.40	19M0G7W
		16QAM	1860 - 1900	18.9798	6.38	0.435	26.38	19M0D7W
		64QAM	1860 - 1900	19.0212	6.56	0.345	25.38	19M0D7W
		256QAM	1860 - 1900	18.9753	6.59	0.177	22.49	19M0D7W
NR Band n25	5 MHz	π/2 BPSK	1852.5 - 1912.5	4.4863	4.09	0.550	27.40	4M49G7W
		QPSK	1852.5 - 1912.5	4.4994	5.42	0.550	27.40	4M50G7W
		16QAM	1852.5 - 1912.5	4.4744	6.45	0.441	26.44	4M47D7W
		64QAM	1852.5 - 1912.5	4.4727	6.64	0.342	25.34	4M47D7W
		256QAM	1852.5 - 1912.5	4.4741	6.79	0.176	22.45	4M47D7W
	10 MHz	π/2 BPSK	1855 - 1910	8.9535	4.32	0.550	27.40	8M95G7W
		QPSK	1855 - 1910	9.3267	5.65	0.540	27.32	9M33G7W
		16QAM	1855 - 1910	9.2876	6.36	0.434	26.37	9M29D7W
		64QAM	1855 - 1910	9.3344	6.72	0.346	25.39	9M33D7W
		256QAM	1855 - 1910	9.3052	6.72	0.177	22.49	9M31D7W
	15 MHz	π/2 BPSK	1857.5 - 1907.5	13.4508	4.25	0.550	27.40	13M5G7W
		QPSK	1857.5 - 1907.5	14.1988	5.51	0.542	27.34	14M2G7W
		16QAM	1857.5 - 1907.5	14.1458	6.36	0.440	26.43	14M1D7W
		64QAM	1857.5 - 1907.5	14.1796	6.71	0.345	25.38	14M2D7W
		256QAM	1857.5 - 1907.5	14.0722	6.76	0.178	22.51	14M1D7W
	20 MHz	π/2 BPSK	1860 - 1905	17.8930	4.36	0.550	27.40	17M9G7W
		QPSK	1860 - 1905	19.0358	5.60	0.547	27.38	19M0G7W
		16QAM	1860 - 1905	18.9798	6.38	0.422	26.25	19M0D7W
		64QAM	1860 - 1905	19.0212	6.54	0.351	25.45	19M0D7W
		256QAM	1860 - 1905	18.9753	6.67	0.179	22.53	19M0D7W
	25 MHz	π/2 BPSK	1862.5 - 1902.5	22.8480	4.21	0.550	27.40	22M8G7W
		QPSK	1862.5 - 1902.5	23.9100	5.49	0.538	27.31	23M9G7W
		16QAM	1862.5 - 1902.5	23.7820	6.31	0.433	26.36	23M8D7W
		64QAM	1862.5 - 1902.5	23.7495	6.59	0.348	25.42	23M7D7W
		256QAM	1862.5 - 1902.5	23.8221	6.65	0.174	22.40	23M8D7W
	30 MHz	π/2 BPSK	1865 - 1900	28.7134	4.44	0.547	27.38	28M7G7W
		QPSK	1865 - 1900	28.7064	5.71	0.550	27.40	28M7G7W
		16QAM	1865 - 1900	28.6395	6.46	0.430	26.33	28M6D7W
		64QAM	1865 - 1900	28.6285	6.69	0.347	25.40	28M6D7W
		256QAM	1865 - 1900	28.6661	6.64	0.177	22.48	28M7D7W
	35 MHz	π/2 BPSK	1867.5 - 1897.5	32.1544	4.55	0.547	27.38	32M2G7W
		QPSK	1867.5 - 1897.5	33.6466	5.81	0.550	27.40	33M6G7W
		16QAM	1867.5 - 1897.5	33.6642	6.45	0.436	26.39	33M7D7W
		64QAM	1867.5 - 1897.5	33.6662	6.65	0.338	25.29	33M7D7W
		256QAM	1867.5 - 1897.5	33.6628	6.84	0.179	22.54	33M7D7W
	40 MHz	π/2 BPSK	1870 - 1895	38.5193	4.74	0.550	27.40	38M5G7W
		QPSK	1870 - 1895	38.5995	5.74	0.542	27.34	38M6G7W
		16QAM	1870 - 1895	38.7033	6.51	0.436	26.39	38M7D7W
		64QAM	1870 - 1895	38.7468	6.73	0.345	25.38	38M7D7W
		256QAM	1870 - 1895	38.6555	6.81	0.176	22.46	38M7D7W

### EUT Overview

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V2.2 09/07/2023

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## 1.0 INTRODUCTION

### 1.1 Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada.

### 1.2 Element Materials Technology Test Location

These measurement tests were conducted at the Element Materials Technology facility located at 18855 Adams Court, Morgan Hill, CA 95037. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014 and KDB 414788 D01 v01r01.

### 1.3 Test Facility / Accreditations

Measurements were performed at Element Materials Technology.

- Element Materials Technology is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.02 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.
- Element Materials Technology TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC 17065-2012 by A2LA (Certificate number 2041.03) in all scopes of FCC Rules and ISED Standards (RSS).
- Element Materials Technology facility is a registered (22831) test laboratory with the site description on file with ISED.
- Element Washington DC LLC is a Recognized U.S. Certification Assessment Body (CAB # US0110) for ISED Canada as designated by NIST under the U.S. and Canada Mutual Agreements (MRAs).

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Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 5 of 219

## 2.0 PRODUCT INFORMATION

### 2.1 Equipment Description

The Equipment Under Test (EUT) is the **Apple Tablet Device FCC ID:BCGA3267**. The test data contained in this report pertains only to the emissions due to the EUT's licensed transmitters that operate under the provisions of Part 24.

**Test Device Serial No.:** WJR90Q30N3, LYHQ6QQTKY, D4WG6WKFL6, DLXH5R0001N0000RMD, DLXH5R0001E0000RMD

### 2.2 Device Capabilities

This device contains the following capabilities:

850/1700/1900 WCDMA/HSPA, Multi-band LTE, 5G NR (FR1), 802.11b/g/n/ax WLAN, 802.11a/n/ac/ax UNII, 802.11a/ax WIFI 6E, 802.15.4, Bluetooth (1x, EDR, LE1M, LE2M, HDR4, HDR8), NB UNII (1x, HDR4, HDR8), WPT

This device supports BT Beamforming

This device supports simultaneous transmission operations, which allows for multiple transmitters to transmit simultaneously on the same antenna. The table below shows all configurations possible.

Antenna	Simultaneous Tx Config	Bluetooth 2.4GHz	Thread	WLAN	NB UNII	WIFI 5GHz	WIFI 6GHz	LTE / FR1 NR		
		BDR, EDR, HDR4/8, LE1/2M	802.15.4	802.11 b/g/n/ax	BDR, HDR4/8	802.11 a/n/ac/ax	802.11 a/ax	LB	MB/HB	Ultra High Band
Ant 3a	Config 1	✓	✗	✗	✗	✓	✗	✗	✓	✗
Ant 3a	Config 2	✗	✓	✗	✗	✓	✗	✗	✓	✗
Ant 3a	Config 3	✗	✗	✓	✓	✗	✗	✗	✓	✗
Ant 3a	Config 4	✓	✗	✗	✗	✗	✓	✗	✓	✗
Ant 3a	Config 5	✗	✓	✗	✗	✗	✓	✗	✓	✗
Ant 3a	Config 6	✓	✗	✗	✗	✓	✗	✗	✗	✗
Ant 3a	Config 7	✗	✓	✗	✗	✓	✗	✗	✗	✗
Ant 3a	Config 8	✗	✗	✓	✓	✗	✗	✗	✗	✗
Ant 3a	Config 9	✓	✗	✗	✗	✗	✓	✗	✗	✗
Ant 3a	Config 10	✗	✓	✗	✗	✗	✓	✗	✗	✗
Ant 1a	Config 11	✓	✗	✗	✗	✗	✗	✗	✗	✓
Ant 1a	Config 12	✗	✓	✗	✗	✗	✗	✗	✗	✓
Ant 1a	Config 13	✗	✗	✓	✗	✗	✗	✗	✗	✓
Ant 1b	Config 14	✗	✗	✗	✗	✗	✓	✗	✗	✓
Ant 1b	Config 15	✗	✗	✗	✗	✓	✗	✗	✗	✓
Ant 1b	Config 16	✗	✗	✗	✓	✗	✗	✗	✗	✓

Table 2-1. Simultaneous Transmission Configurations

✓ = Support; ✗ = Not Support

**Note:**

All the above simultaneous transmission configurations have been tested and the worst-case configuration was found to be Config 1 and reported in RF Bluetooth, RF UNII OFDM, and RF FCC Part 27b test reports.

Specific 2.4 GHz Wi-Fi antenna that can only transmit simultaneously with 2.4 GHz Bluetooth antenna is listed in the SAR test report. For BT (2.4 GHz), in both connected and disconnected modes, and Wi-Fi (2.4 GHz) – Wi-Fi max power will not exceed minimum of (13.5dBm, SAR max cap, Reg max cap) power. Bluetooth can simultaneously transmit with IEEE 802.11a/n/ac/ax 5/6 GHz on separate antenna.

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## 2.3 Antenna Description

The following antenna gains provided by the manufacturer were used for testing.

Band	Antenna Gain [dBi]			
	Antenna 4	Antenna 2b	Antenna 3a	Antenna 1b
WCDMA 1900				
LTE Band 2/25	1.7	-3.6	-2.1	-1.6
NR Band n2/n25				

**Table 2-2. Highest Antenna Gain**

## 2.4 Test Support Equipment

Test Support Equipment					
1	Apple MacBook Pro w/AC/DC Adapter	Model: A2141 Model: A2166	S/N: C02H604EQ05D S/N: C4H042705ZNP0WA6		
2	Apple USB-C Cable	Model: Spartan	S/N: GXK1336018XKTR024		
3	USB-C Cable w/ AC Adapter	Model: A246C Model: A2305	S/N: DWH80115BK826GV19 S/N: C4H95160004PF4F4V		
4	Apple Pencil	Model: B532	S/N: KJ26TCFXJW		
5	DC Power Supply	Model: KPS3010D	S/N: N/A		

**Table 2-3. Test Support Equipment**

## 2.5 Test Configuration

The EUT was tested per the guidance of ANSI C63.26-2015, TIA-603-E-2016 and KDB 971168 D01 v03r01. See Section 7.0 of this test report for a description of the radiated and antenna port conducted emissions tests.

For emissions from 1GHz – 18GHz, low, mid, and high channels were tested with highest power and worst case configuration. The emissions below 1GHz and above 18GHz were tested with the highest transmitting power and the worst case channel.

The EUT was manipulated through three orthogonal planes of X-orientation (flatbed), Y-orientation (landscape), and Z-orientation (portrait) during the testing. Only the worst case emissions were reported in this test report.

## 2.6 Software and Firmware

The test was conducted with firmware version 22D20 installed on the EUT.

## 2.7 EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and no modifications were made during testing.

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 7 of 219

## 3.0 DESCRIPTION OF TESTS

### 3.1 Evaluation Procedure

The measurement procedures described in the documents titled “American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services” (ANSI C63.26-2015 and TIA-603-E-2016) and “Procedures for Compliance Measurement of the Fundamental Emission Power of Licensed Wideband (> 1 MHz) Digital Transmission Systems” (KDB 971168 D01 v03r01) were used in the measurement of the EUT.

**Deviation from Measurement Procedure.....**None

### 3.2 Radiated Spurious Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. The test site inside the chamber is a 6m x 5.2m elliptical, obstruction-free area in accordance with Figure 5.7 of Clause 5 in ANSI C63.4-2014. Absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections for measurements above 1GHz. For measurements below 1GHz, the absorbers are removed. A raised turntable is used for radiated measurement. The turn table is a continuously rotatable, remote-controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm tall test table made of Styrodur is placed on top of the turn table. A Styrodur pedestal is placed on top of the test table to bring the total table height to 1.5m.

The equipment under test was transmitting while connected to its integral antenna and is placed on a turntable 3 meters from the receive antenna. The receive antenna height is adjusted between 1 and 4 meter height, the turntable is rotated through 360 degrees, and the EUT is manipulated through all orthogonal planes representative of its typical use to achieve the highest reading on the receive spectrum analyzer.

For radiated spurious emissions measurements and calculations, conversion method is used per the formulas in KDB 971168 Section 5.8.4. Field Strength (EIRP) is calculated using the following formulas:

$$E_{\text{dB}\mu\text{V/m}} = \text{Measured amplitude level}_{\text{dBm}} + 107 + \text{Cable Loss}_{\text{dB}} + \text{Antenna Factor}_{\text{dB/m}}$$

And

$$\text{EIRP}_{\text{dBm}} = E_{\text{dB}\mu\text{V/m}} + 20\log D - 104.8; \text{ where } D \text{ is the measurement distance in meters.}$$

All radiated measurements are performed in a chamber that meets the site requirements per ANSI C63.4-2014.

Per KDB 414788 D01 v01r01, radiated emission test sites other than open-field test sites (e.g., shielded anechoic chambers), may be employed for emission measurements below 30MHz if characterized so that the measurements correspond to those obtained at an open-field test site. To determine test site equivalency, a reference sample transmitting at 149kHz was measured on an open field test site (asphalt with no ground plane) and then measured in the 3m semi-anechoic chamber. A calibrated 60cm loop antenna was used while the reference device was rotated through the X, Y and Z axis in order to capture the worst case level. A maximum deviation of 2.77dB at 149kHz was measured when comparing the 3 meter semi-anechoic chamber to the open field site.

Radiated spurious emission levels are investigated with the receive antenna horizontally and vertically polarized per ANSI C63.26-2015 and TIA-603-E-2016.

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 8 of 219

## 4.0 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.23-2012. All measurement uncertainty values are shown with a coverage factor of  $k = 2$  to indicate a 95% level of confidence. The measurement uncertainty shown below 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.

Contribution	Expanded Uncertainty ( $\pm$ dB)
Conducted Bench Top Measurements	2.07
Radiated Disturbance (<30MHz)	4.12
Radiated Disturbance (30MHz-1GHz)	4.85
Radiated Disturbance (1-18GHz)	5.08
Radiated Disturbance (>18GHz)	5.22

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 9 of 219

## 5.0 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST). Measurements antennas used during testing were calibrated in accordance to the requirements of ANSI C63.5-2017.

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
ATM	180-442A-KF	20dB Nominal Gain Horn Antenna	3/14/2024	Annual	3/14/2025	T058701-01
ESPEC	SU-241	Tabletop Temperature Chamber	10/24/2024	Annual	10/24/2025	92009574
ETS-Lindgren	3117	Double Ridged Guide Antenna (1-18 GHz)	4/9/2024	Annual	4/9/2025	00218555
Fairview Microwave/MCL	FMCA1975-36/BW-K10-2W44+	30MHz-40GHz RF Cable/Attenuator *	6/10/2024	Annual	6/10/2025	-
Fairview Microwave	M2CP1122-10	RF Directional Coupler *	6/10/2024	Annual	6/10/2025	1946
Keysight Technology	N9040B	UXA Signal Analyzer	5/28/2024	Annual	5/28/2025	MY57212015
Rohde & Schwarz	FSW67	Signal and Spectrum Analyzer (2Hz-67GHz)	7/5/2024	Annual	7/5/2025	101366
Rohde & Schwarz	TS-PR18	Pre-Amplifier (1GHz - 18GHz)	3/1/2024	Annual	3/1/2025	102143
Rohde & Schwarz	FSV40	Signal Analyzer (10Hz-40GHz)	5/29/2024	Annual	5/29/2025	101619
Rohde & Schwarz	ESW44	EMI Test Receiver	5/1/2024	Annual	5/1/2025	101867
Rohde & Schwarz	TS-PR8	Pre-Amplifier (30MHz - 8GHz)	7/3/2024	Annual	7/3/2025	102356
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	12/27/2023	Annual	12/27/2024	164715
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	10/21/2024	Annual	10/21/2025	187423
Rohde & Schwarz	TS-PR1840	Pre-Amplifier (18GHz - 40GHz)	6/10/2024	Annual	6/10/2025	100057
Rohde & Schwarz	HFH2-Z2	Loop Antenna	6/21/2024	Annual	6/21/2025	100519
Rohde & Schwarz	ENV216	Two-Line V-Network	4/24/2024	Annual	4/24/2025	101364
Schwarzbeck	VULB 9162	Bilog Antenna (30MHz - 6GHz)	4/29/2024	Annual	4/29/2025	00304

**Table 5-1. Test Equipment**

**Notes:**

1. For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.
2. \* denotes passive equipment that has been internally verified/calibrated.

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 10 of 219

## 6.0 SAMPLE CALCULATIONS

### Emission Designator

#### WCDMA Emission Designator

**Emission Designator = 4M16F9W**

WCDMA BW = 4.16 MHz

F = Frequency Modulation

9 = Composite Digital Info

W = Combination (Audio/Data)

#### $\pi/2$ BPSK / QPSK Modulation

**Emission Designator = 8M62G7W**

BW = 8.62 MHz

G = Phase Modulation

7 = Quantized/Digital Info

W = Combination of Any

#### QAM Modulation

**Emission Designator = 8M45D7W**

BW = 8.45 MHz

D = Amplitude/Angle Modulated

7 = Quantized/Digital Info

W = Combination of Any

### Spurious Radiated Emission

#### **Example: Spurious emission at 3700.40 MHz**

The receive spectrum analyzer reading at 3 meters with the EUT on the turntable was  $-81.0$  dBm. The gain of the substituted antenna is  $8.1$  dBi. The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of  $-81.0$  dBm on the spectrum analyzer. The loss of the cable between the signal generator and the terminals of the substituted antenna is  $2.0$  dB at  $3700.40$  MHz. So  $6.1$  dB is added to the signal generator reading of  $-30.9$  dBm yielding  $-24.80$  dBm. The fundamental EIRP was  $25.50$  dBm so this harmonic was  $25.50$  dBm  $- (-24.80) = 50.3$  dBc.

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 11 of 219

## 7.0 TEST RESULTS

### 7.1 Summary

Company Name: Apple Inc.  
 FCC ID: BCGA3267  
 FCC Classification: PCS Licensed Transmitter (PCB)  
 Mode(s): WCDMA/LTE/NR

Test Condition	Test Description	FCC Part Section(s)	Test Limit	Test Result	Reference
CONDUCTED	Occupied Bandwidth	2.1049	N/A	<span style="background-color: #a0c0ff; border: 1px solid #a0c0ff; padding: 2px 5px; border-radius: 5px;">N/A</span>	Section 7.2
	Conducted Band Edge / Spurious Emissions	2.1051, 24.238(a)	-13 dBm at Band Edge and for all out-of-band emissions	<span style="background-color: #a0c0ff; border: 1px solid #a0c0ff; padding: 2px 5px; border-radius: 5px;">PASS</span>	Sections 7.3, 7.4
	Peak-Average Ratio	24.232(d)	< 13 dB	<span style="background-color: #a0c0ff; border: 1px solid #a0c0ff; padding: 2px 5px; border-radius: 5px;">PASS</span>	Section 7.5
	Transmitter Conducted Output Power	2.1046	N/A	<span style="background-color: #a0c0ff; border: 1px solid #a0c0ff; padding: 2px 5px; border-radius: 5px;">N/A</span>	See RF Exposure Report
	Frequency Stability	2.1055, 24.235	Fundamental emissions stay within authorized frequency block over the temperature and voltage range as tested	<span style="background-color: #a0c0ff; border: 1px solid #a0c0ff; padding: 2px 5px; border-radius: 5px;">PASS</span>	Section 7.8
	Effective Radiated Power / Equivalent Isotropic Radiated Power	24.232(c)	< 2 Watts max. EIRP	<span style="background-color: #a0c0ff; border: 1px solid #a0c0ff; padding: 2px 5px; border-radius: 5px;">PASS</span>	Section 7.6
RADIATED	Radiated Spurious Emissions	2.1053, 24.238(a)	-13 dBm for all out-of-band emissions	<span style="background-color: #a0c0ff; border: 1px solid #a0c0ff; padding: 2px 5px; border-radius: 5px;">PASS</span>	Section 7.7

**Table 7-1. Summary of Test Results**

**Notes:**

1. All modes of operation and data rates were investigated. The test results shown in the following sections represent the worst case emissions.
2. The analyzer plots were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables, directional couplers, and attenuators used as part of the system to maintain a link between the call box and the EUT at all frequencies of interest.
3. All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables, attenuators, and couplers.
4. All conducted emissions measurements are performed with automated test software to capture the corresponding plots necessary to show compliance. The measurement software utilized is Element EMC Software Tool EMC Software Tool v1.1.

FCC ID: BCGA3267	 <b>element</b>		PART 24 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 12 of 219	

## 7.2 Occupied Bandwidth

§2.1049

### Test Overview

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 radiated by a given emission shall be measured. All modes of operation were investigated and the worst case configuration results are reported in this section. All ports were tested and only the worst case data were reported.

### Test Procedure Used

KDB 971168 D01 v03r01 – Section 4.2

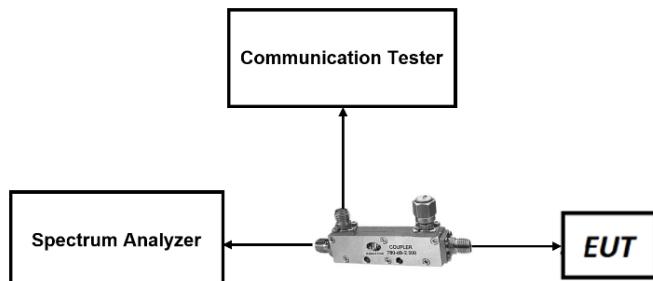
### Test Settings

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

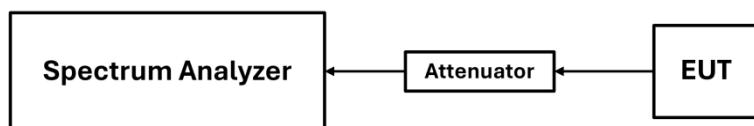
FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 13 of 219

## Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



**Figure 7-1. LTE Test Instrument & Measurement Setup**



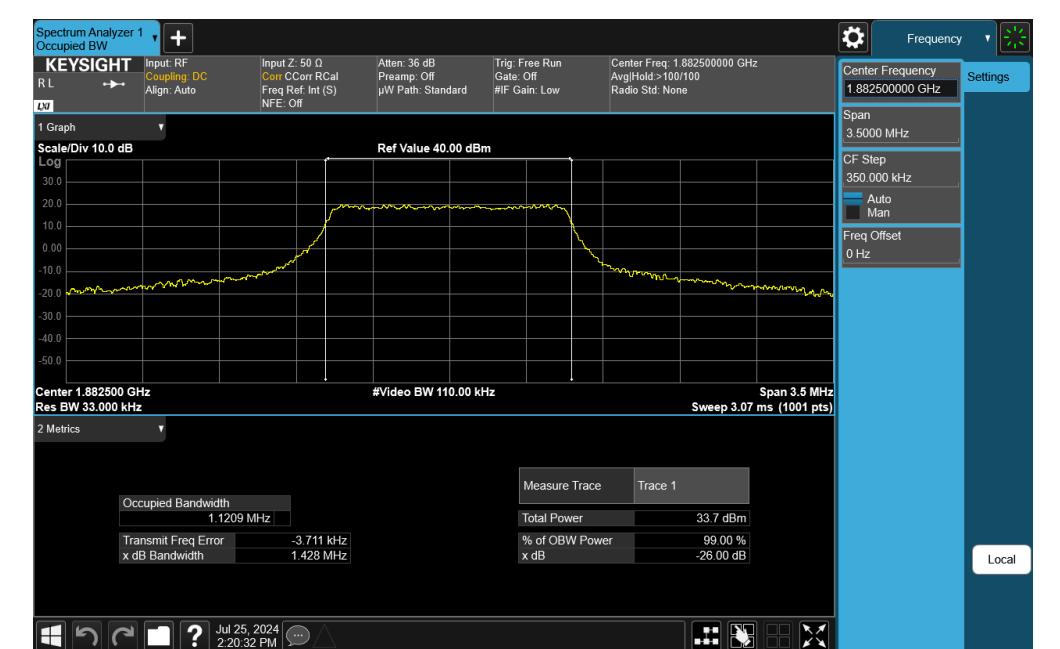
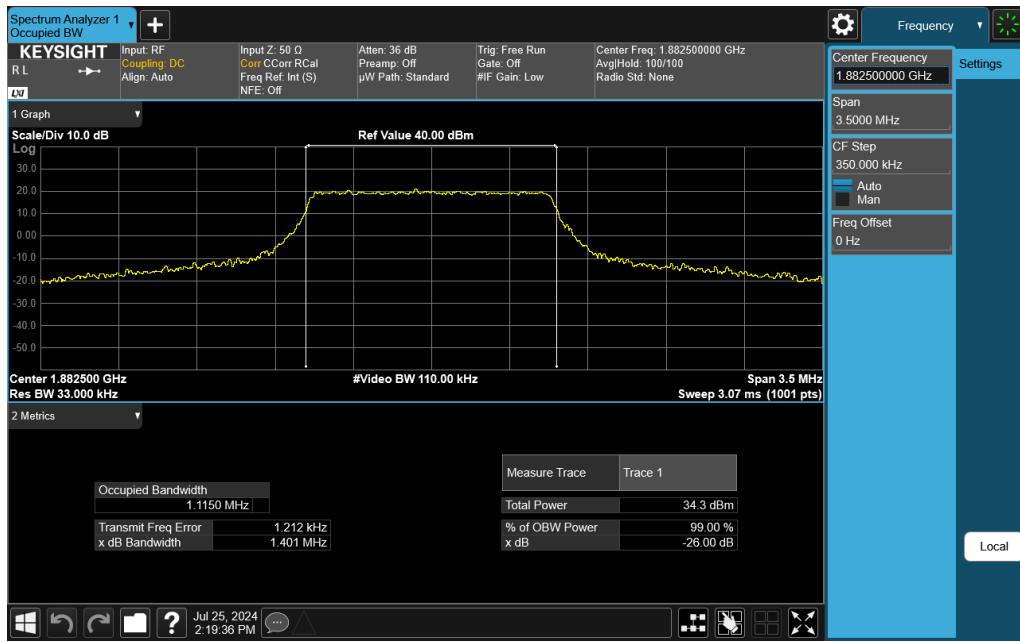
**Figure 7-2. FR1 Test Instrument & Measurement Setup**

## Test Notes

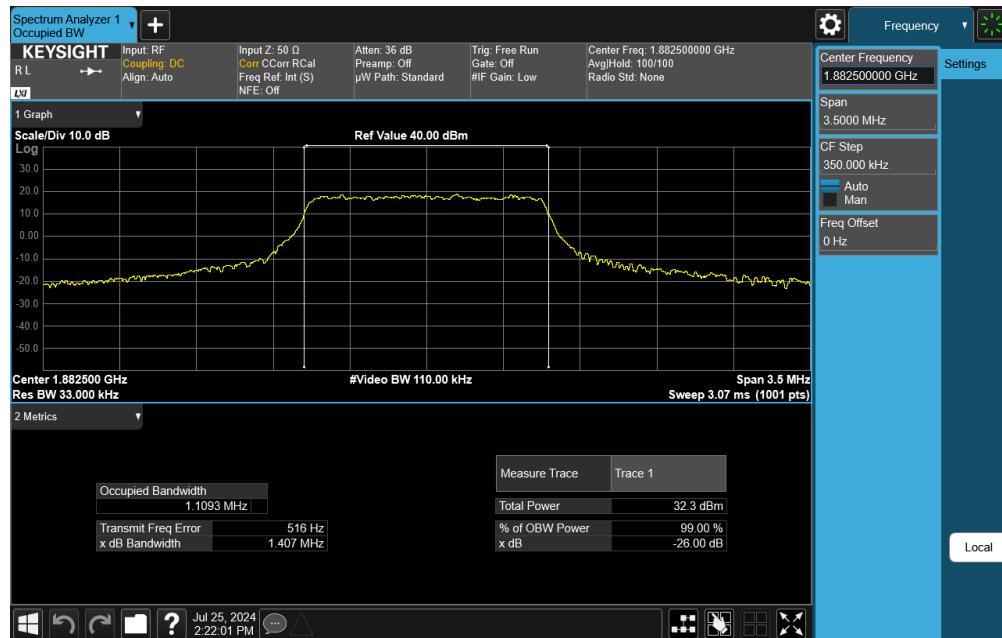
None.

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 14 of 219

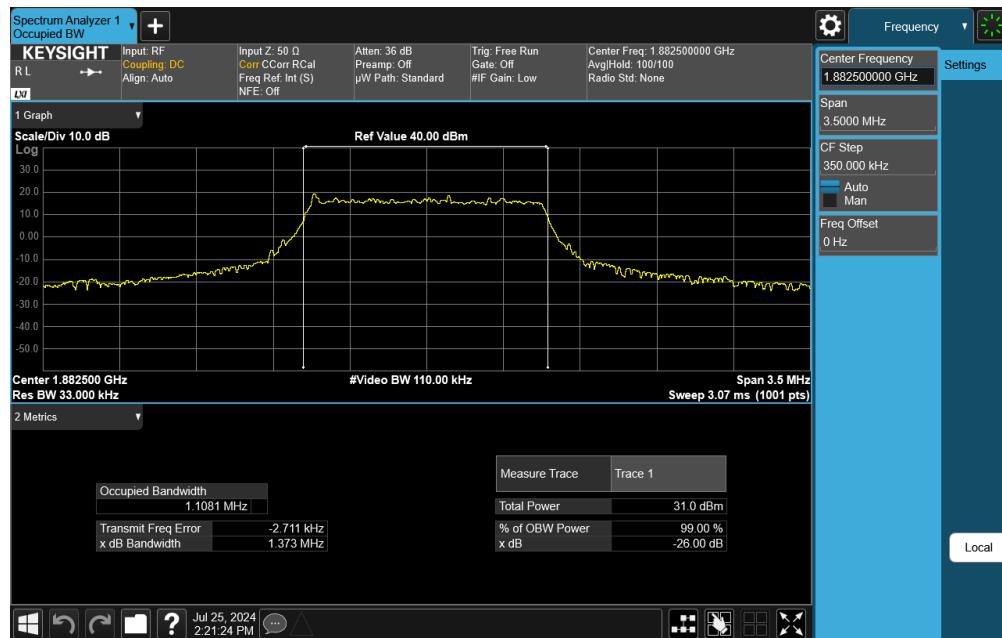
## LTE Band 25/2



FCC ID: BCGA3267	 element		PART 24 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 15 of 219	

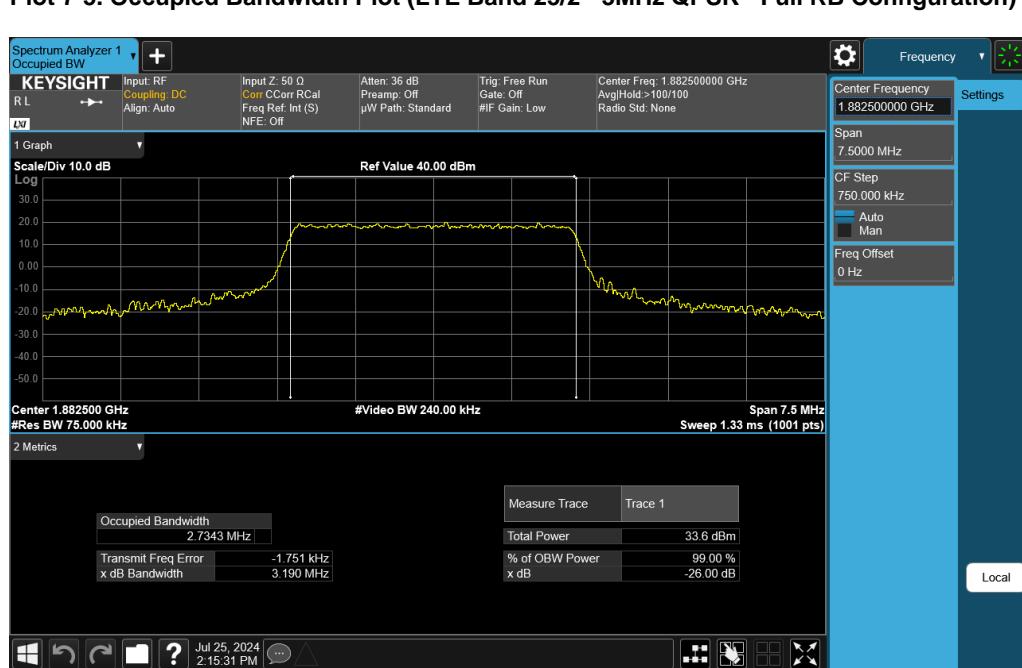
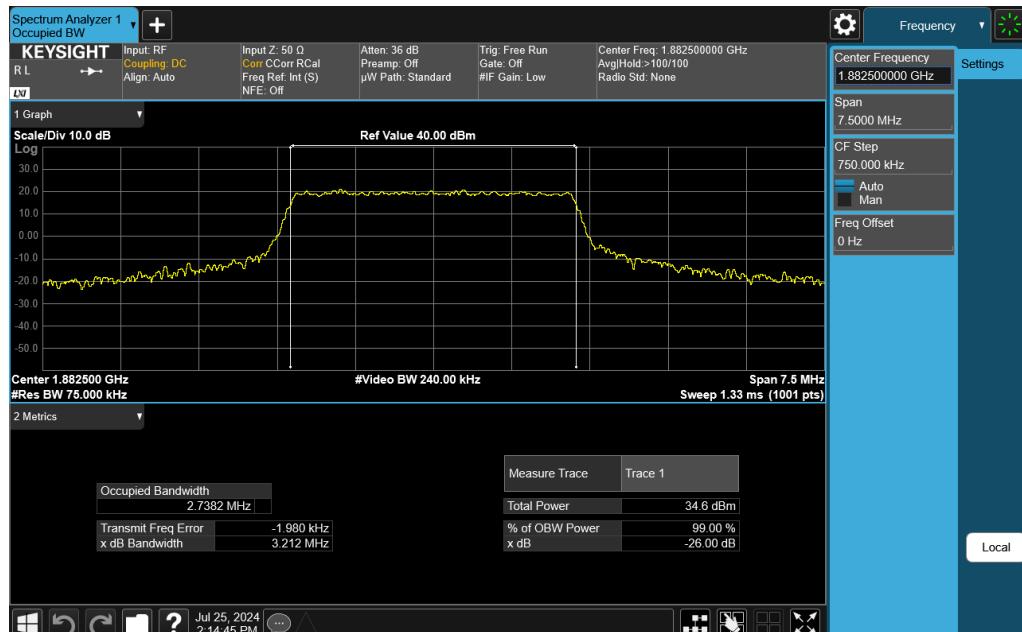


Plot 7-3. Occupied Bandwidth Plot (LTE Band 25/2 - 1.4MHz 64-QAM - Full RB Configuration)

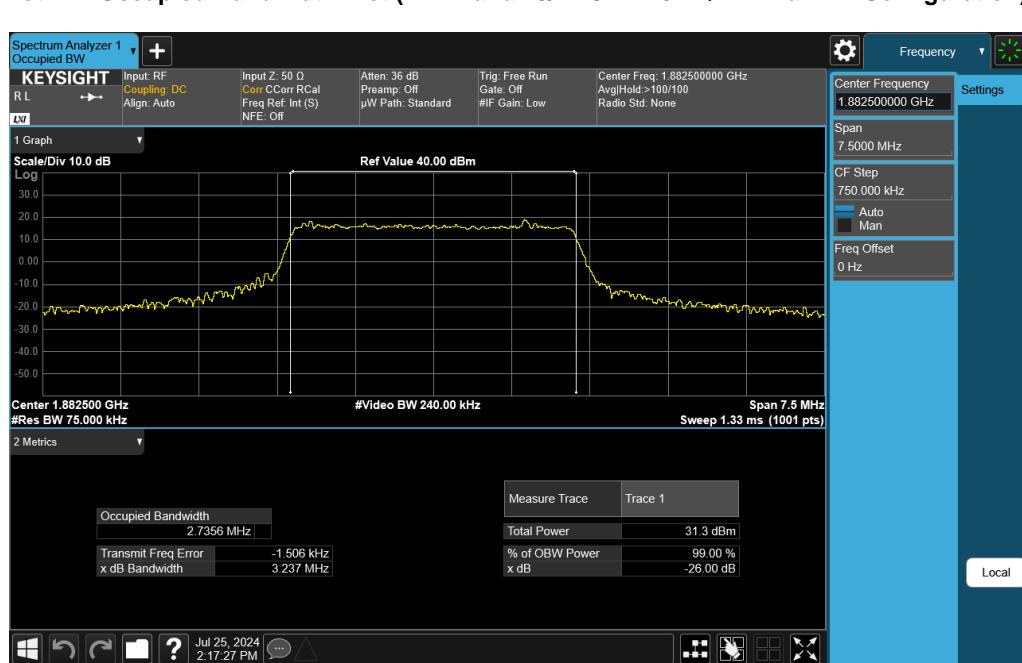
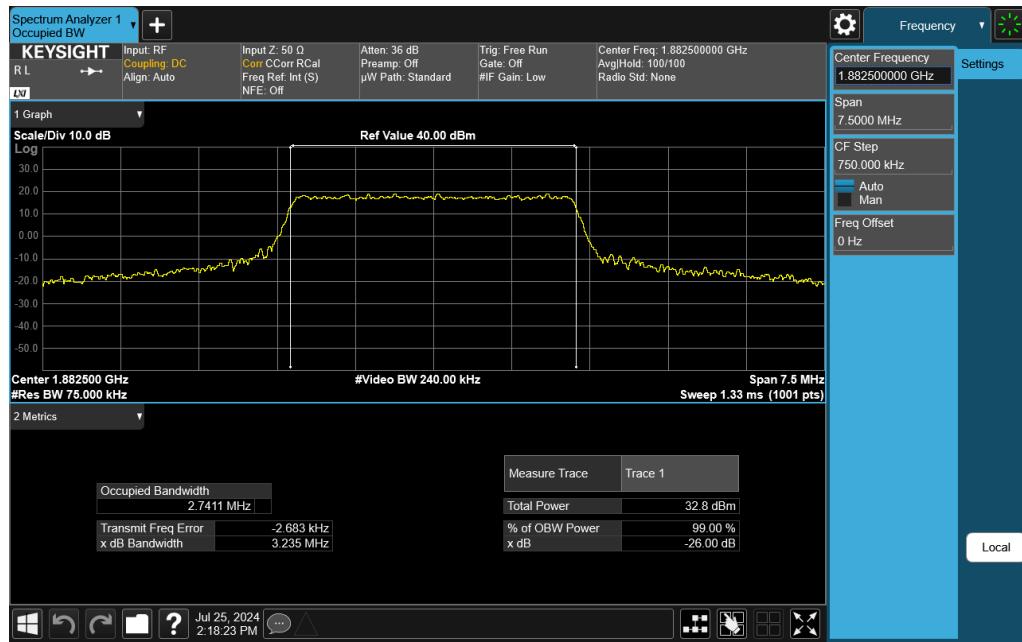


P6.lot 7-4. Occupied Bandwidth Plot (LTE Band 25/2 - 1.4MHz 256-QAM - Full RB Configuration)

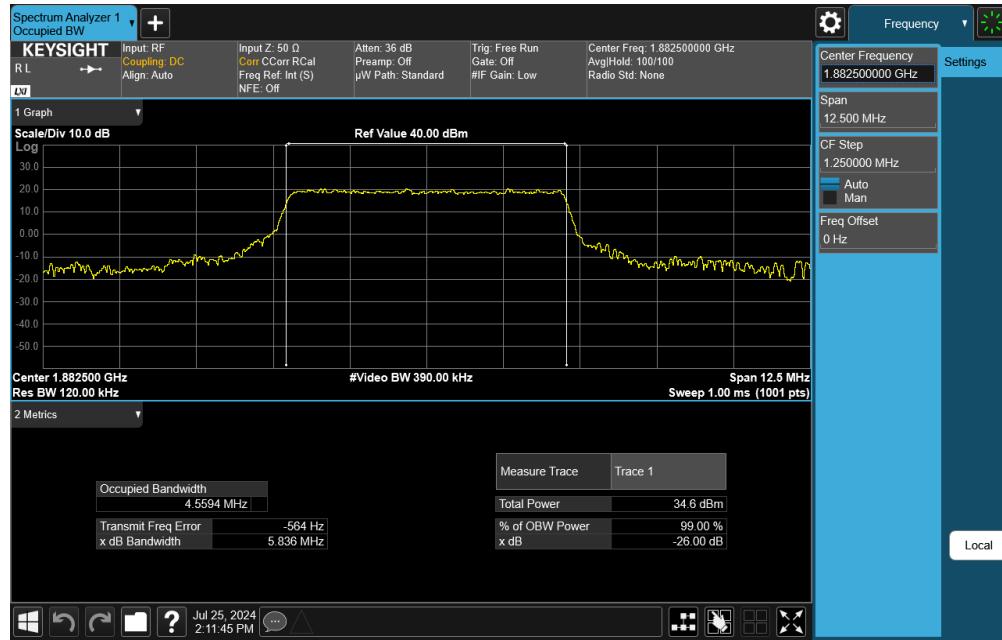
FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 16 of 219



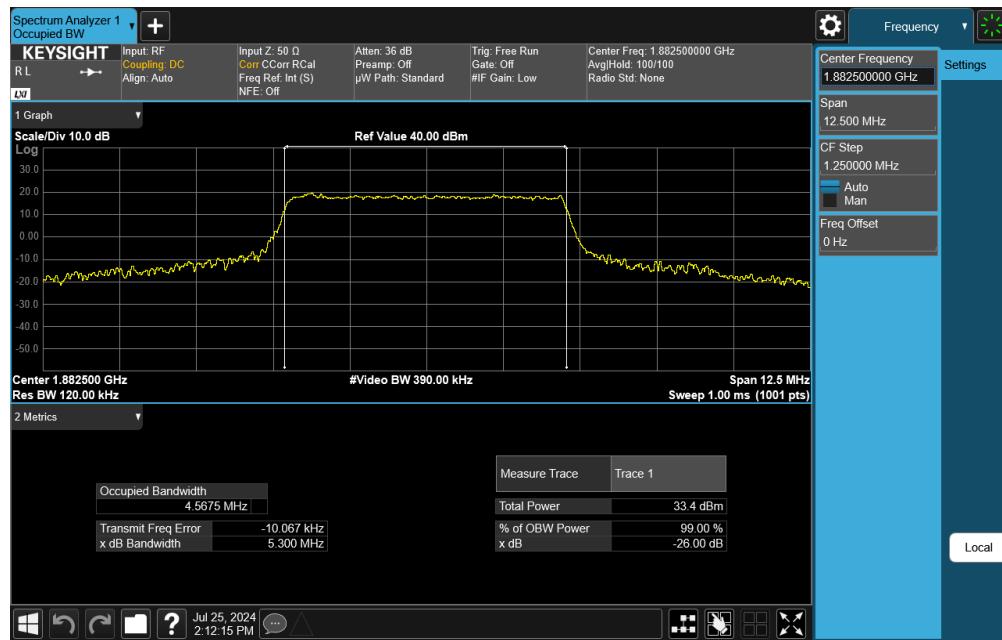
FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 17 of 219



FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 18 of 219



Plot 7-9. Occupied Bandwidth Plot (LTE Band 25/2 - 5MHz QPSK - Full RB Configuration)

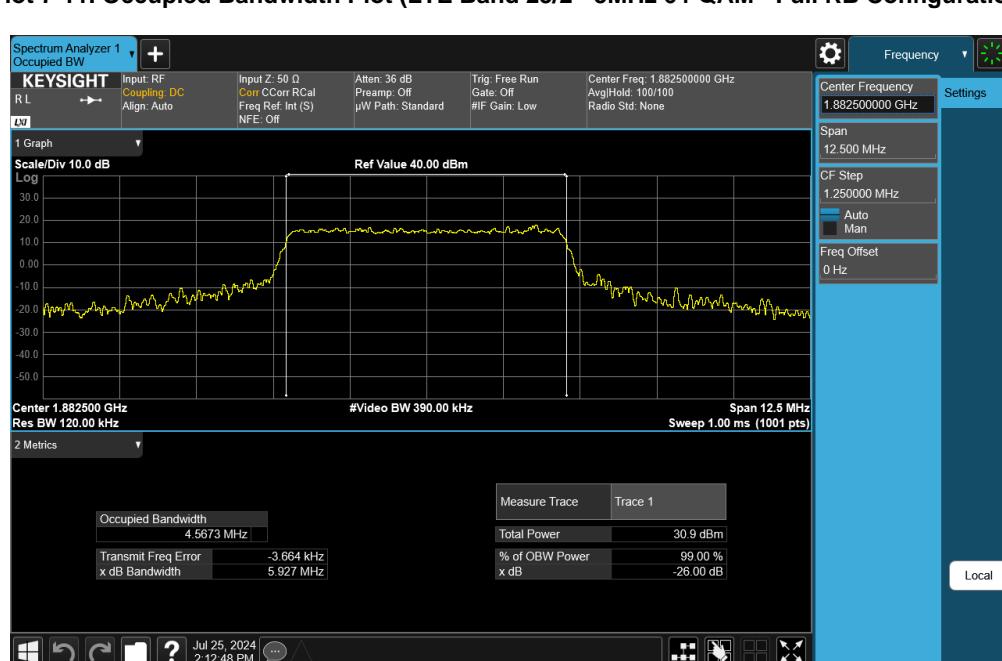
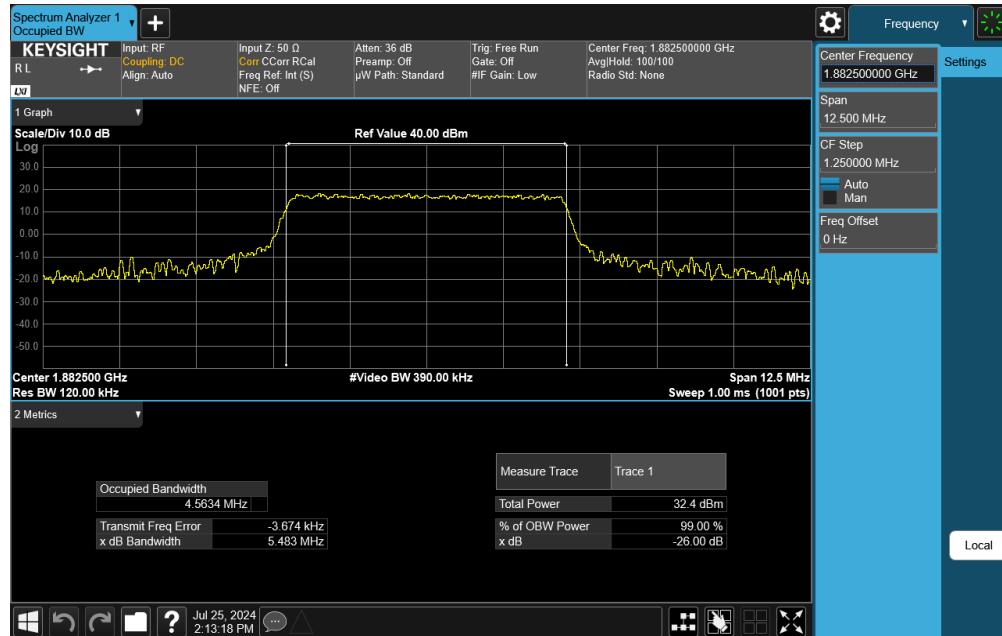


Plot 7-10. Occupied Bandwidth Plot (LTE Band 25/2 - 5MHz 16-QAM - Full RB Configuration)

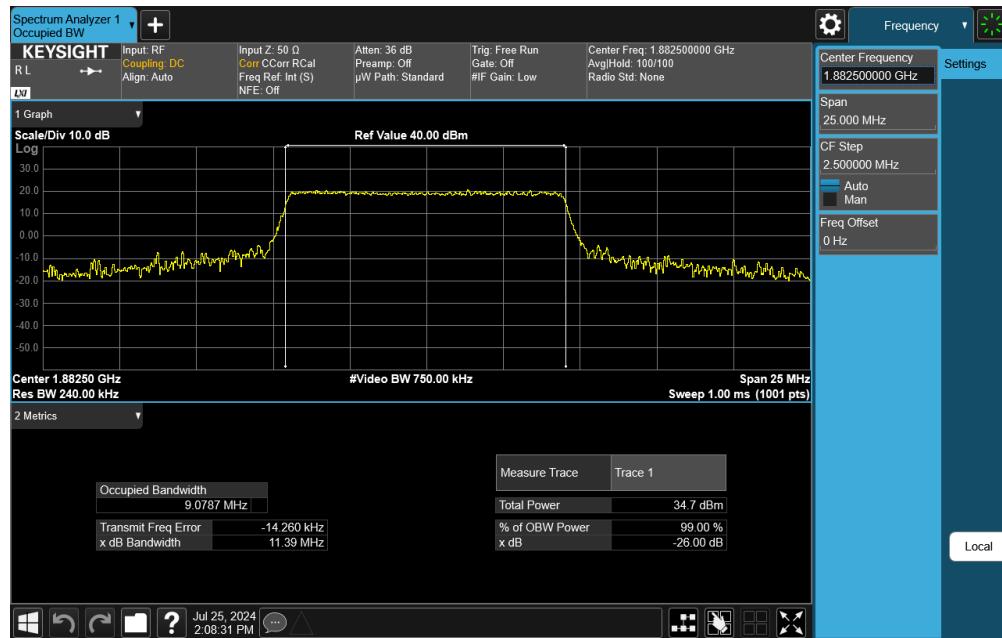
FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 19 of 219

V2.2 09/07/2023

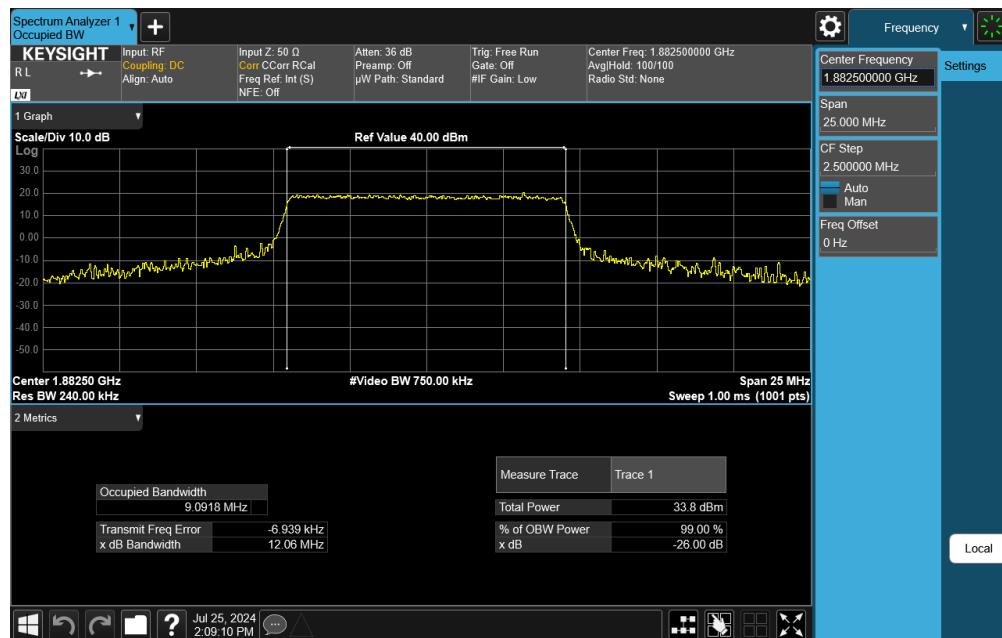
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FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 20 of 219

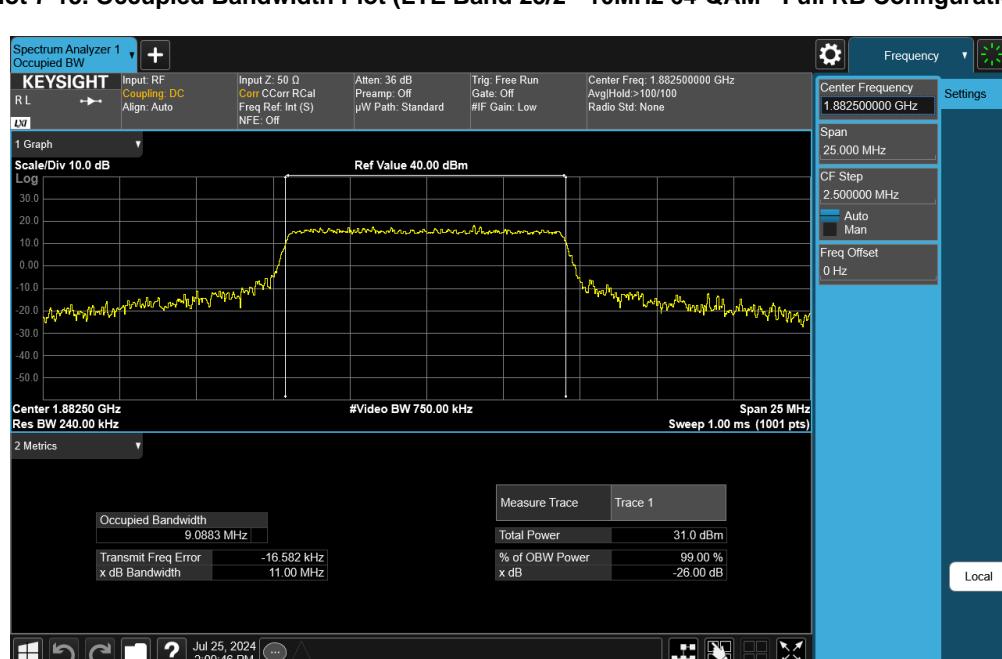
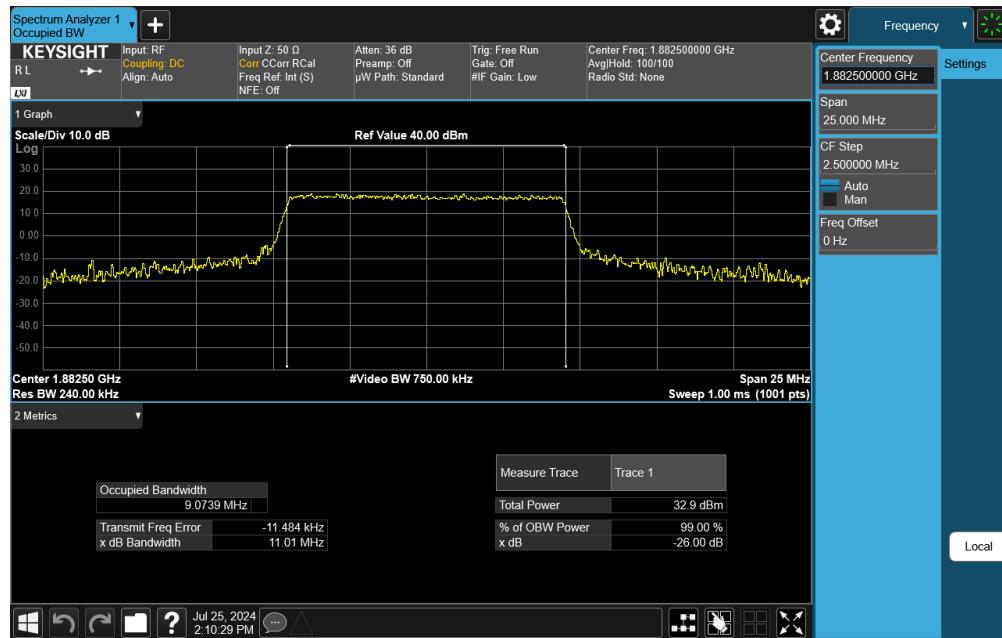


Plot 7-13. Occupied Bandwidth Plot (LTE Band 25/2 - 10MHz QPSK - Full RB Configuration)

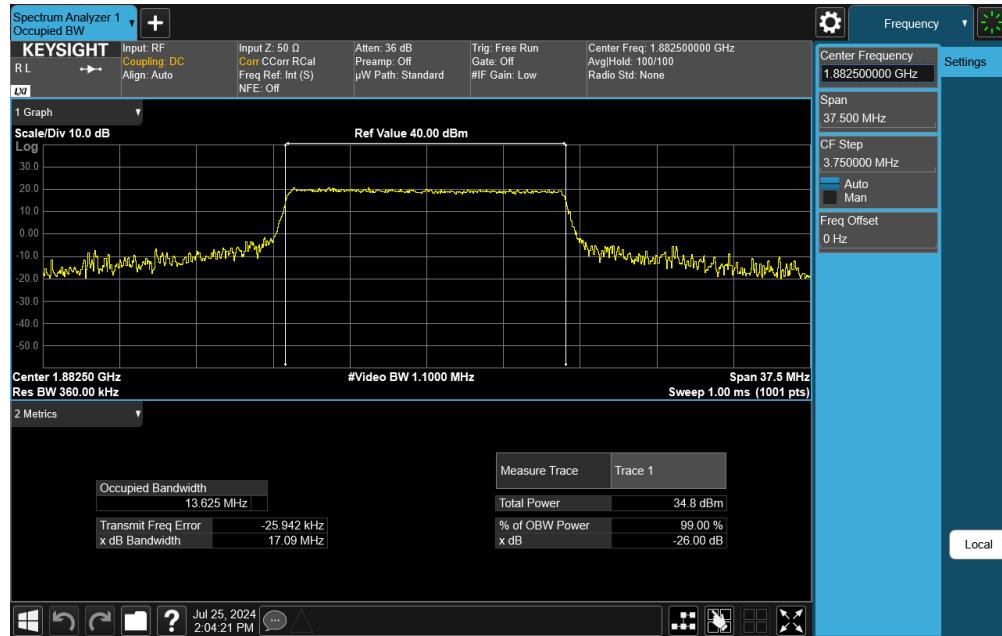


Plot 7-14. Occupied Bandwidth Plot (LTE Band 25/2 - 10MHz 16-QAM - Full RB Configuration)

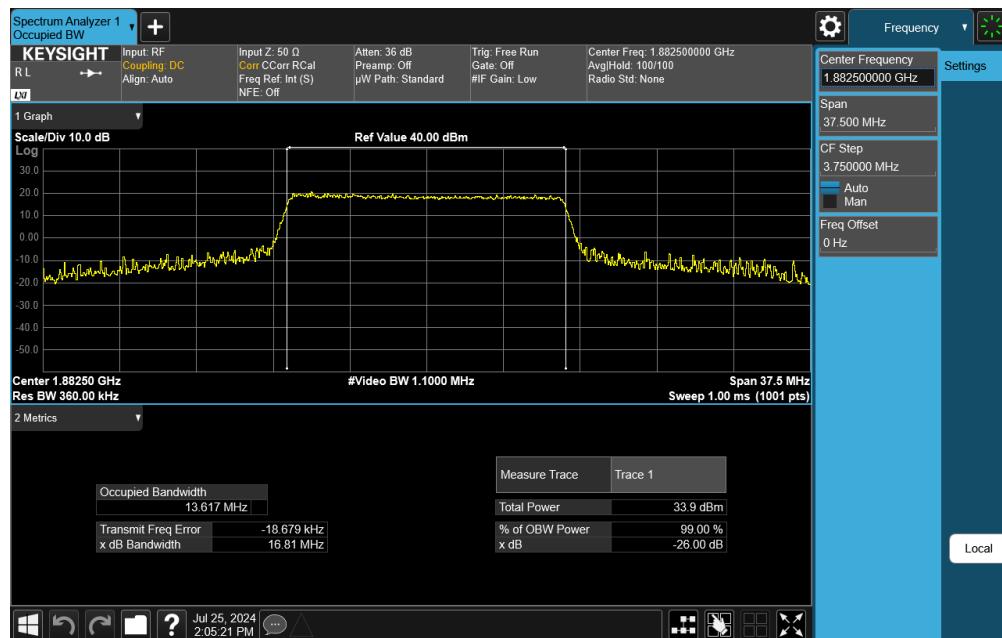
FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 21 of 219



FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 22 of 219

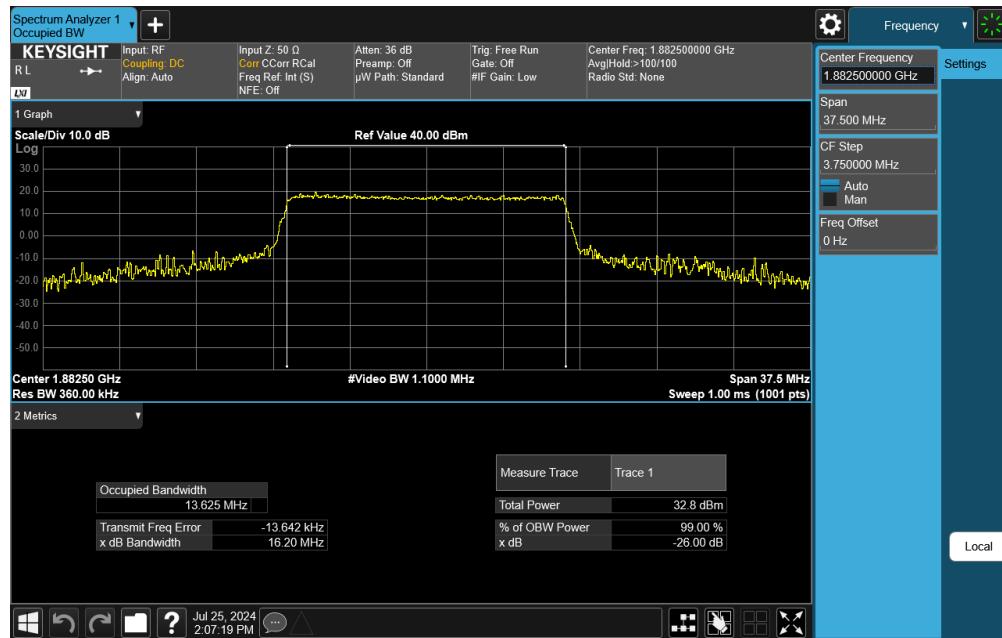


Plot 7-17. Occupied Bandwidth Plot (LTE Band 25/2 - 15MHz QPSK - Full RB Configuration)

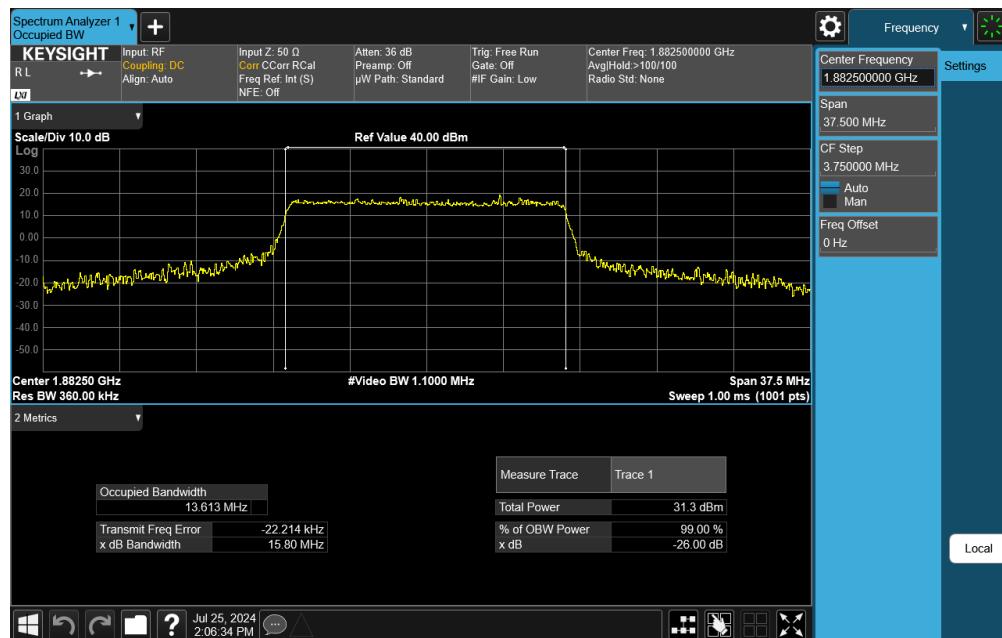


Plot 7-18. Occupied Bandwidth Plot (LTE Band 25/2 - 15MHz 16-QAM - Full RB Configuration)

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 23 of 219



Plot 7-19. Occupied Bandwidth Plot (LTE Band 25/2 - 15MHz 64-QAM - Full RB Configuration)

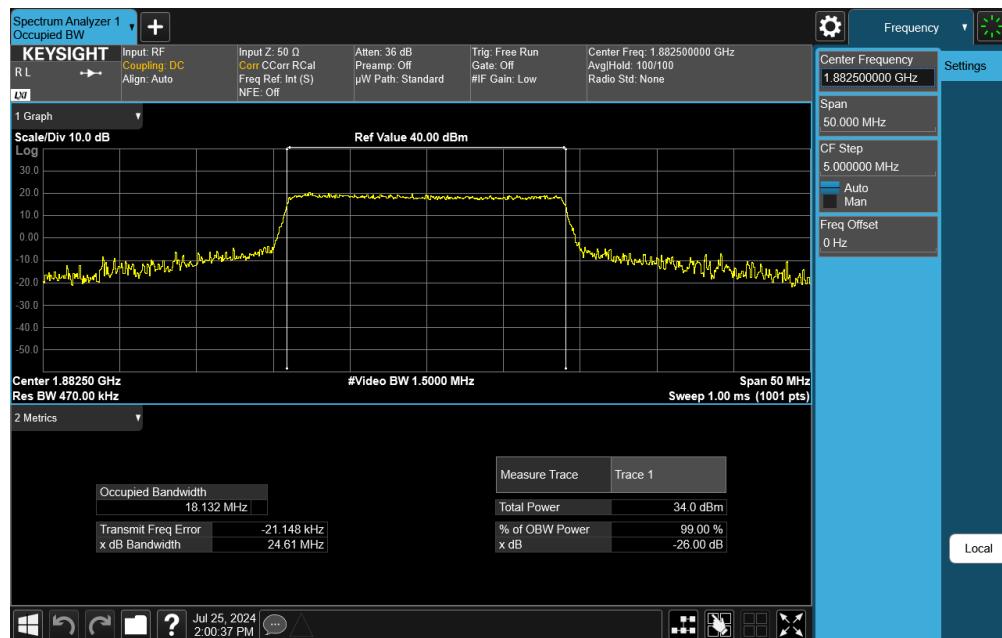


Plot 7-20. Occupied Bandwidth Plot (LTE Band 25/2 - 15MHz 256-QAM - Full RB Configuration)

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 24 of 219

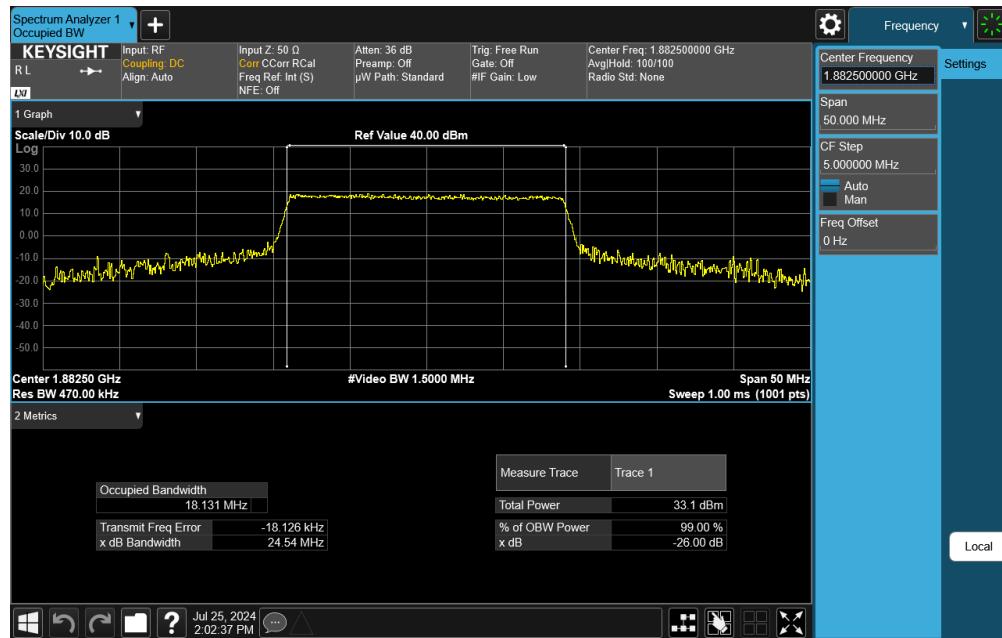


Plot 7-21. Occupied Bandwidth Plot (LTE Band 25/2 - 20MHz QPSK - Full RB Configuration)

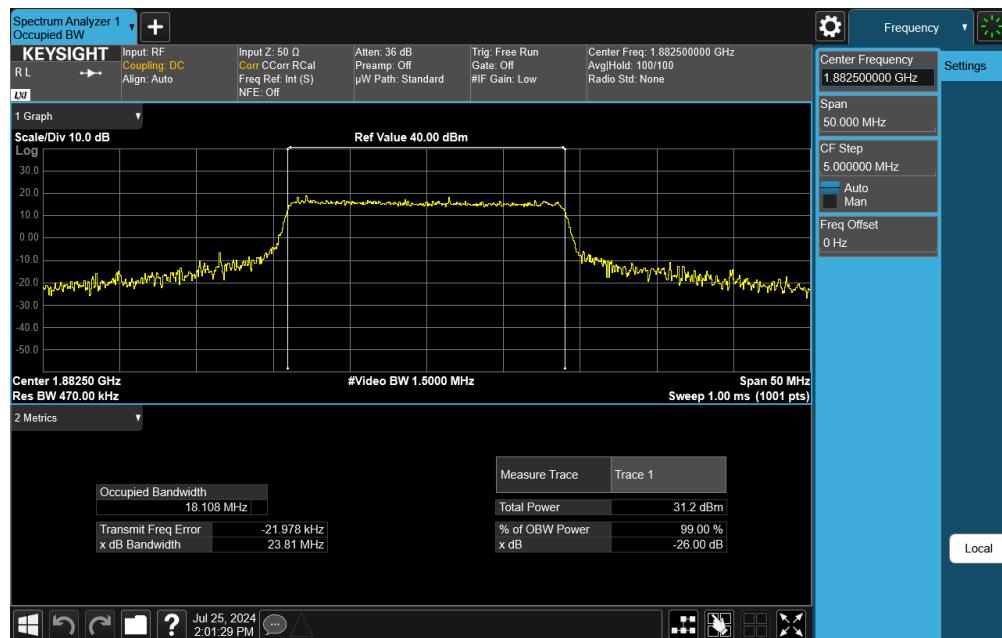


Plot 7-22. Occupied Bandwidth Plot (LTE Band 25/2 - 20MHz 16-QAM - Full RB Configuration)

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 25 of 219



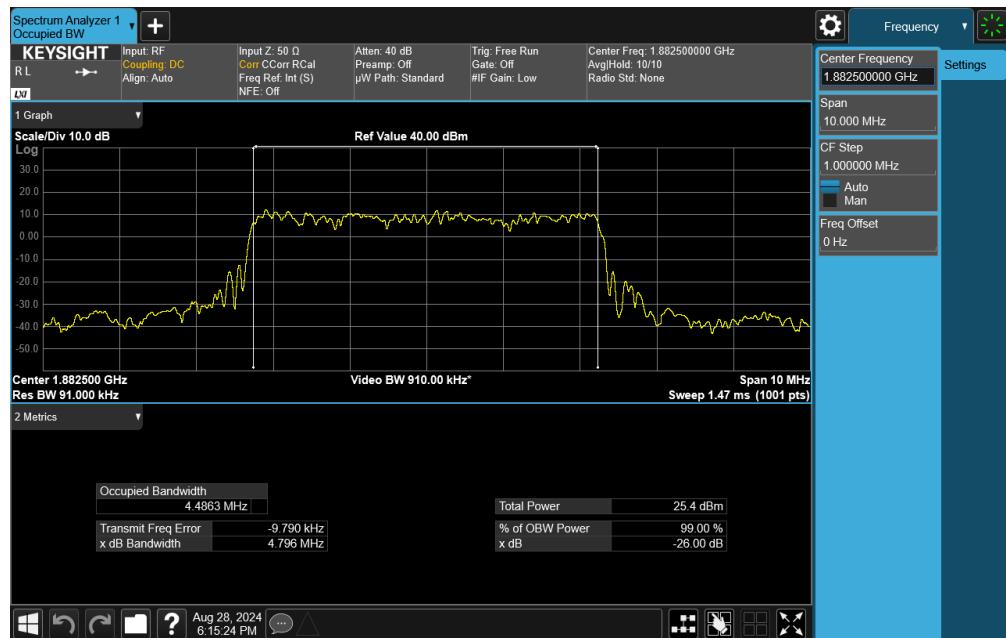
Plot 7-23. Occupied Bandwidth Plot (LTE Band 25/2 - 20MHz 64-QAM - Full RB Configuration)



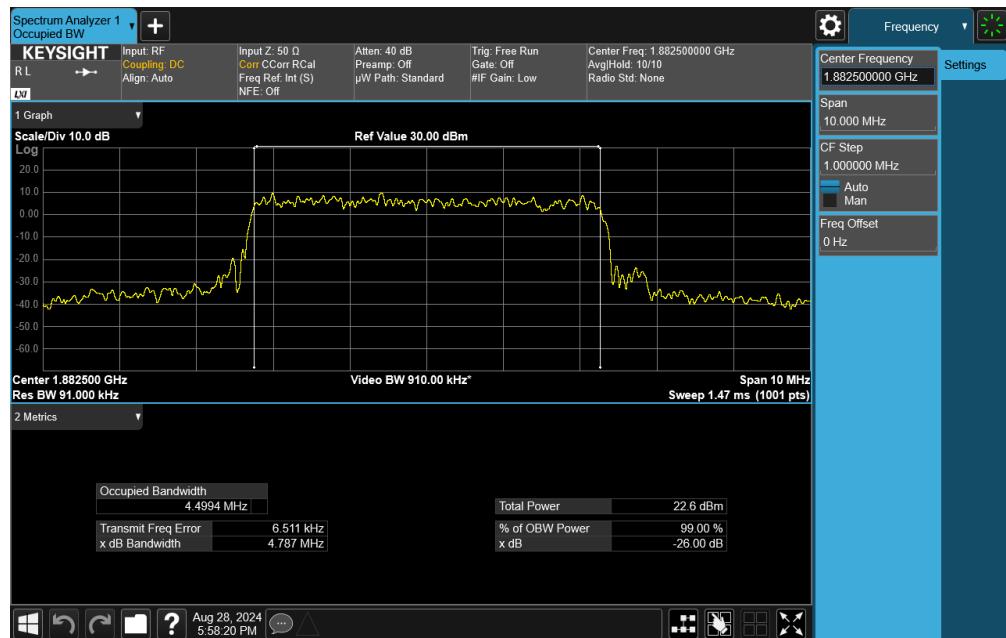
Plot 7-24. Occupied Bandwidth Plot (LTE Band 25/2 - 20MHz 256-QAM - Full RB Configuration)

FCC ID: BCGA3267	element		PART 24 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 26 of 219	

## NR Band n25/n2

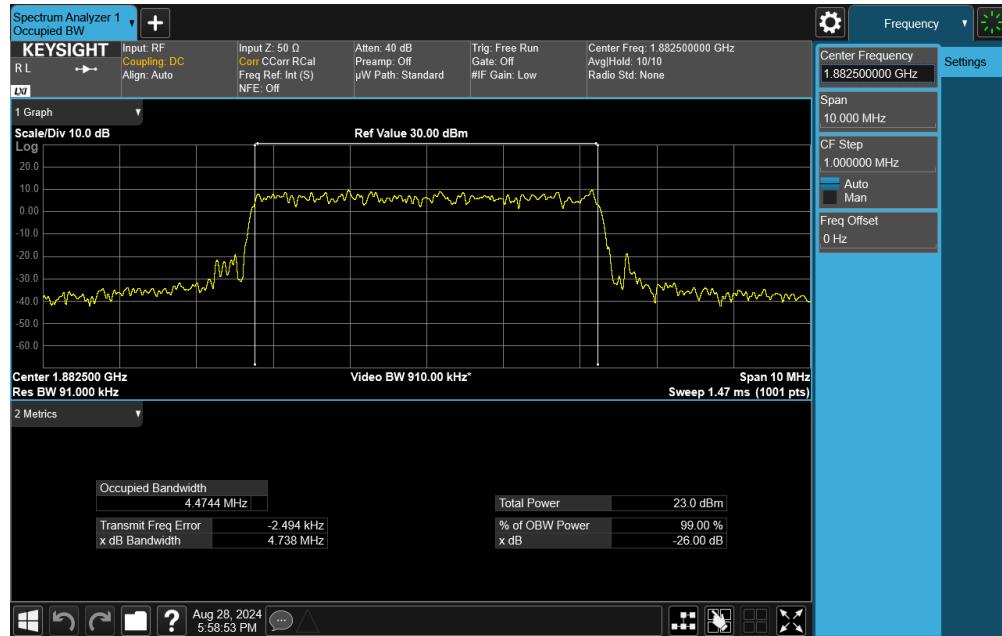


Plot 7-25. Occupied Bandwidth Plot (NR Band n25/n2 - 5MHz DFT-s-OFDM π/2 BPSK - Full RB)

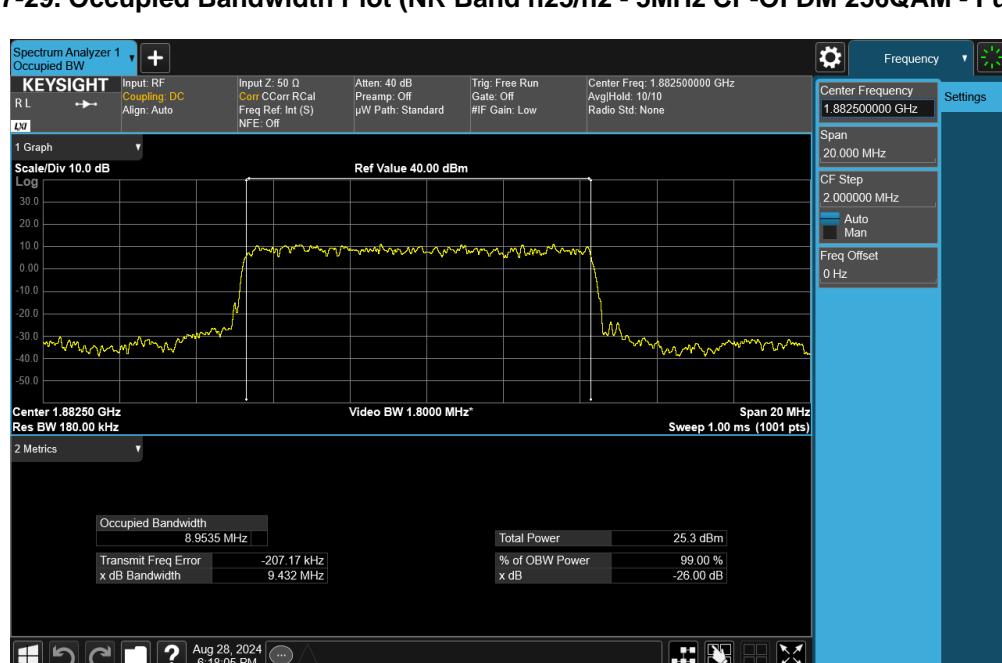
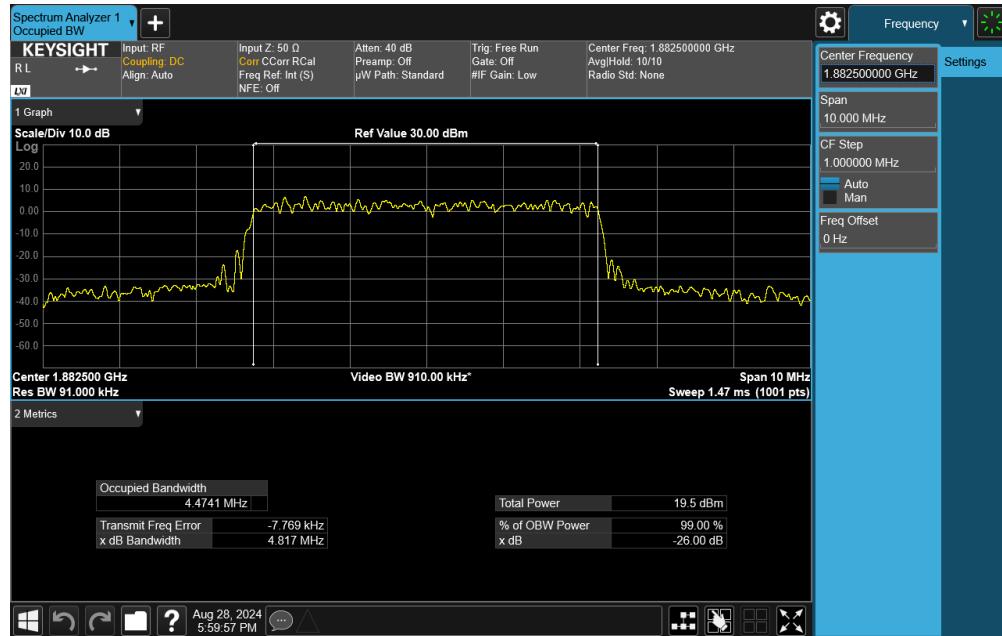


Plot 7-26. Occupied Bandwidth Plot (NR Band n25/n2 - 5MHz CP-OFDM QPSK - Full RB)

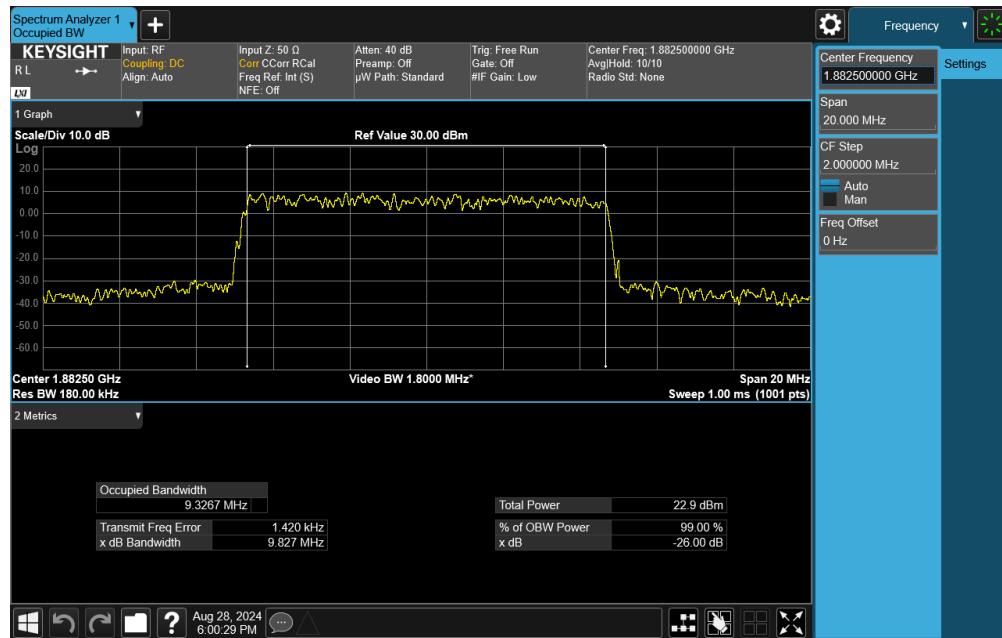
FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 27 of 219



FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 28 of 219



FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 29 of 219

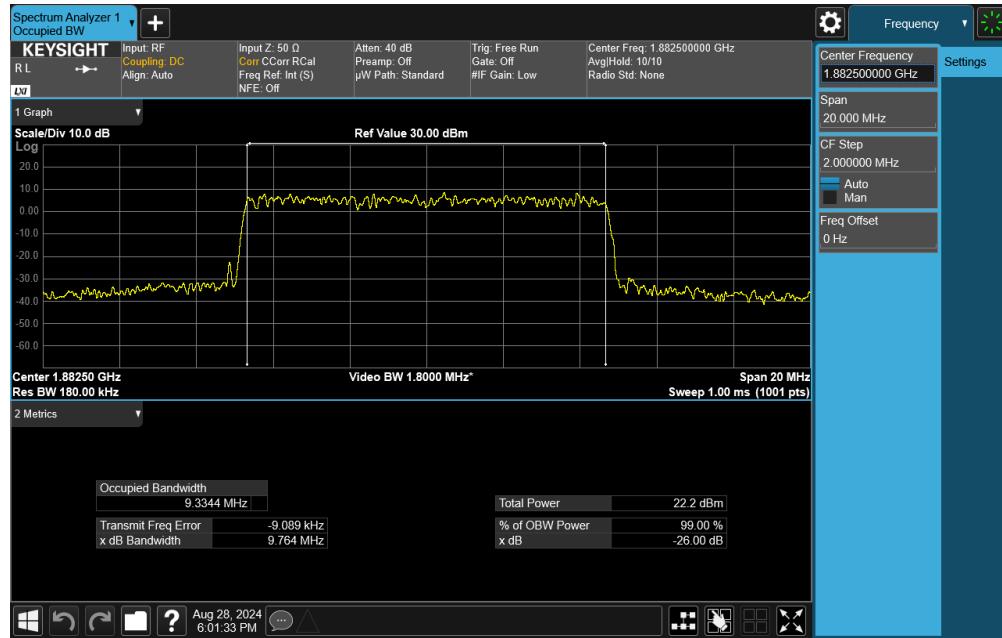


**Plot 7-31. Occupied Bandwidth Plot (NR Band n25/n2 - 10MHz CP-OFDM QPSK - Full RB)**



**Plot 7-32. Occupied Bandwidth Plot (NR Band n25/n2 - 10MHz CP-OFDM 16QAM - Full RB)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 30 of 219

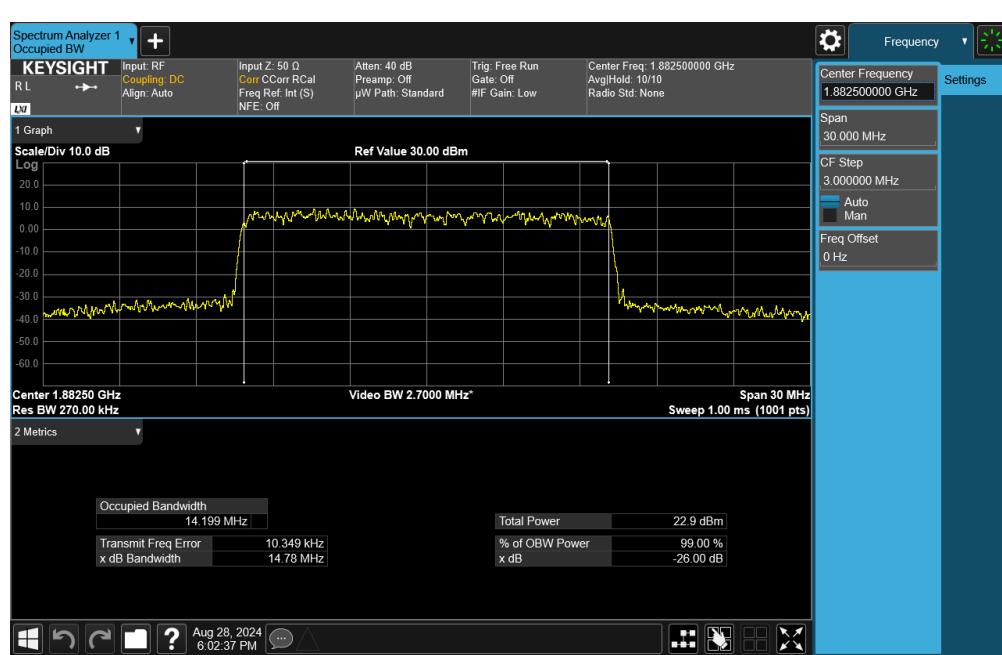


Plot 7-33. Occupied Bandwidth Plot (NR Band n25/n2 - 10MHz CP-OFDM 64QAM - Full RB)



Plot 7-34. Occupied Bandwidth Plot (NR Band n25/n2 - 10MHz CP-OFDM 256QAM - Full RB)

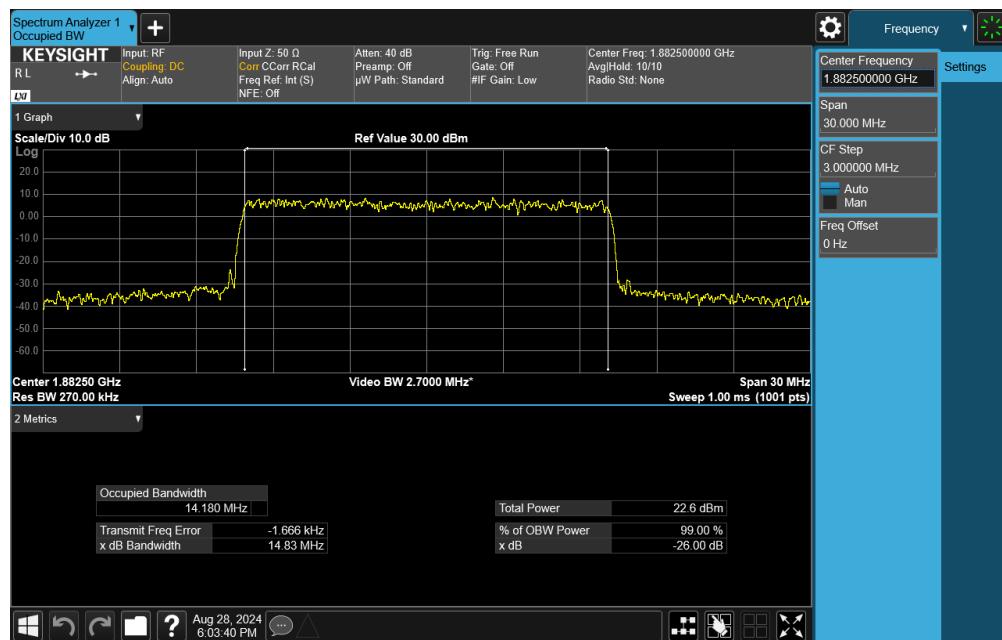
FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 31 of 219



FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 32 of 219



**Plot 7-37. Occupied Bandwidth Plot (NR Band n25/n2 - 15MHz CP-OFDM 16QAM - Full RB)**



**Plot 7-38. Occupied Bandwidth Plot (NR Band n25/n2 - 15MHz CP-OFDM 64QAM - Full RB)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 33 of 219



**Plot 7-39. Occupied Bandwidth Plot (NR Band n25/n2 - 15MHz CP-OFDM 256QAM - Full RB)**



**Plot 7-40. Occupied Bandwidth Plot (NR Band n25/n2 - 20MHz DFT-s-OFDM π/2 BPSK - Full RB)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 34 of 219

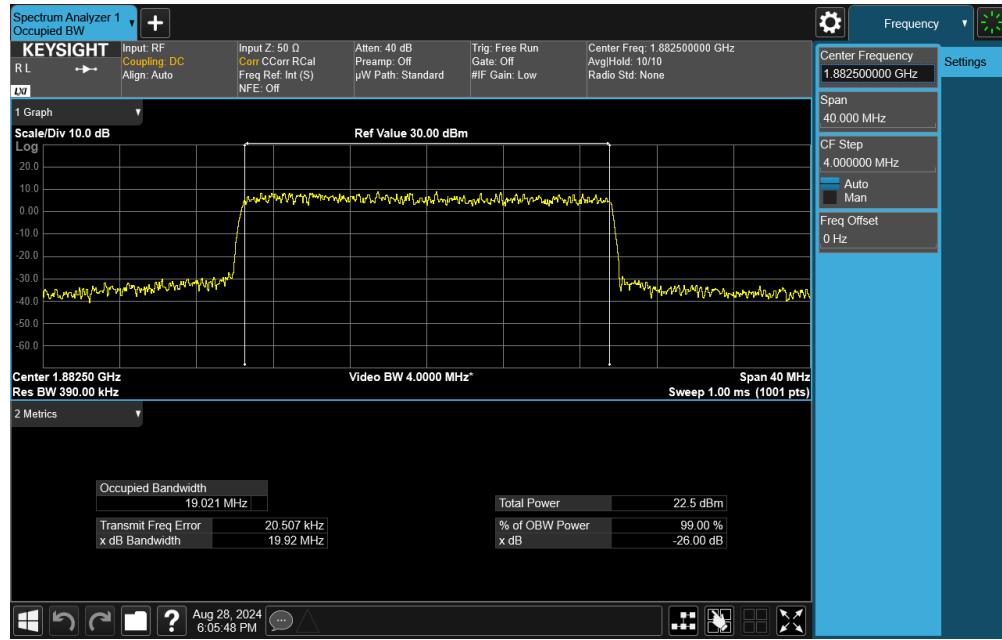


**Plot 7-41. Occupied Bandwidth Plot (NR Band n25/n2 - 20MHz CP-OFDM QPSK - Full RB)**



**Plot 7-42. Occupied Bandwidth Plot (NR Band n25/n2 - 20MHz CP-OFDM 16QAM - Full RB)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 35 of 219



**Plot 7-43. Occupied Bandwidth Plot (NR Band n25/n2 - 20MHz CP-OFDM 64QAM - Full RB)**

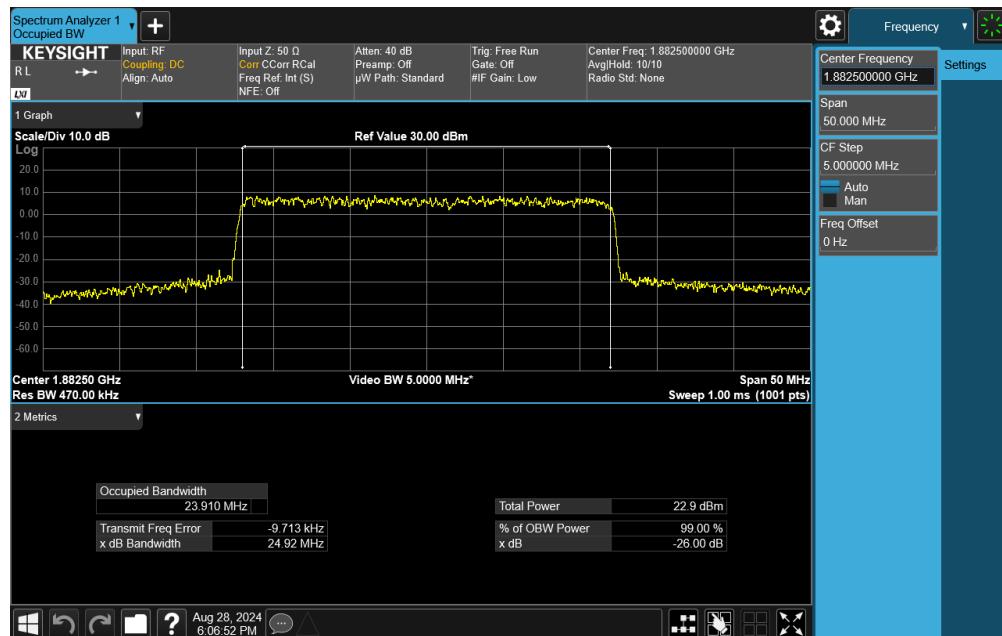


**Plot 7-44. Occupied Bandwidth Plot (NR Band n25/n2 - 20MHz CP-OFDM 256QAM - Full RB)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 36 of 219



**Plot 7-45. Occupied Bandwidth Plot (NR Band n25 - 25MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB)**

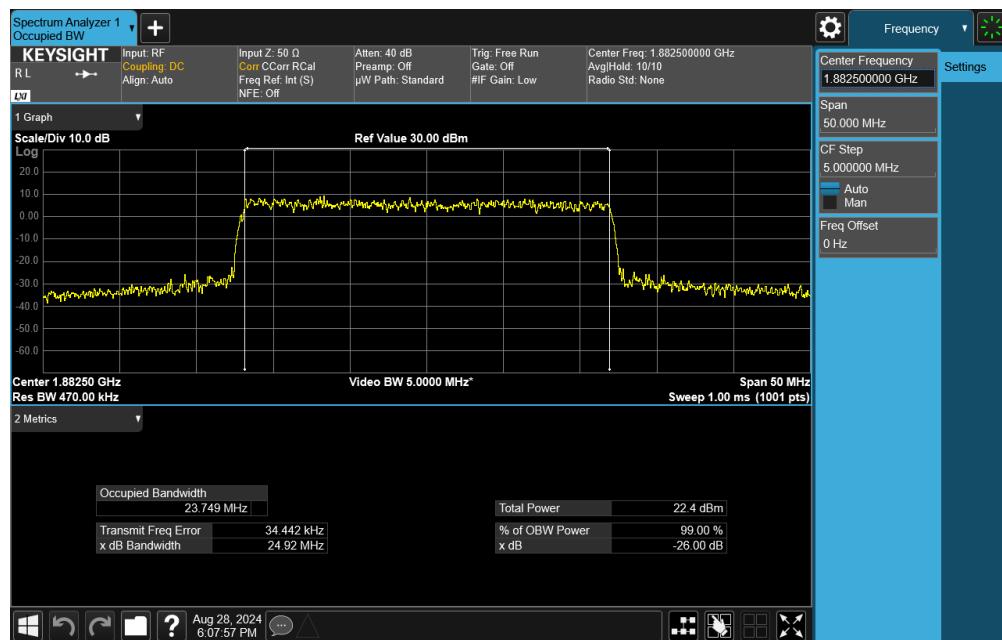


**Plot 7-46. Occupied Bandwidth Plot (NR Band n25 - 25MHz CP-OFDM QPSK - Full RB)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 37 of 219

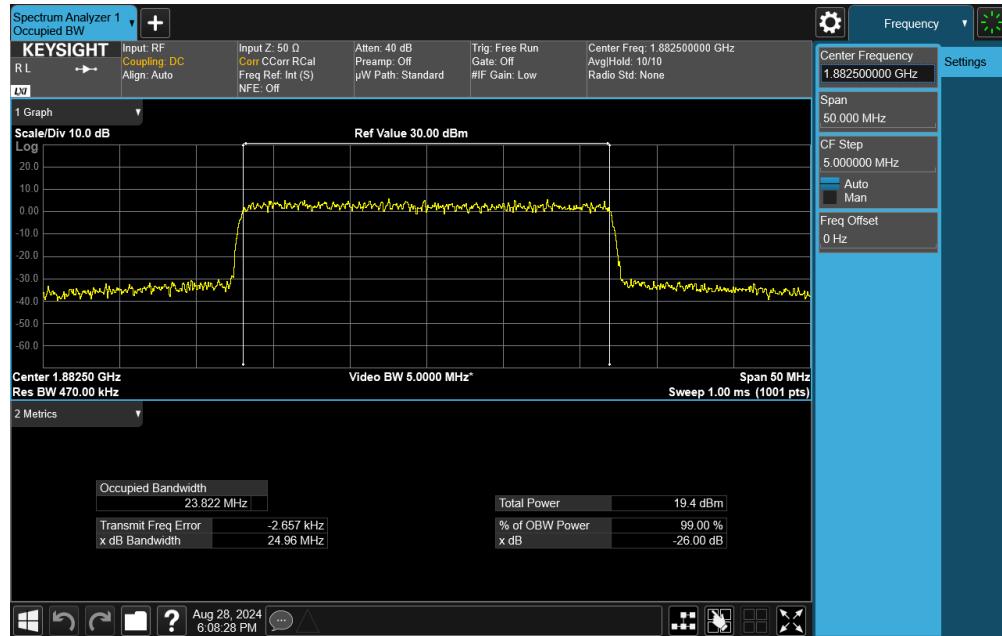


**Plot 7-47. Occupied Bandwidth Plot (NR Band n25 - 25MHz CP-OFDM 16QAM - Full RB)**



**Plot 7-48. Occupied Bandwidth Plot (NR Band n25 - 25MHz CP-OFDM 64QAM - Full RB)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 38 of 219

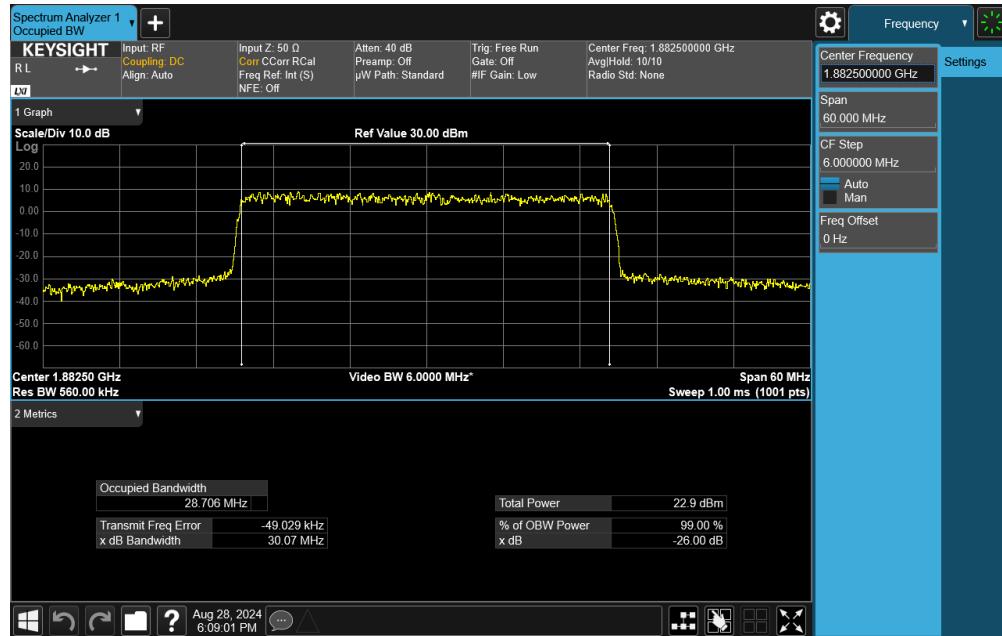


**Plot 7-49. Occupied Bandwidth Plot (NR Band n25 - 25MHz CP-OFDM 256QAM - Full RB)**

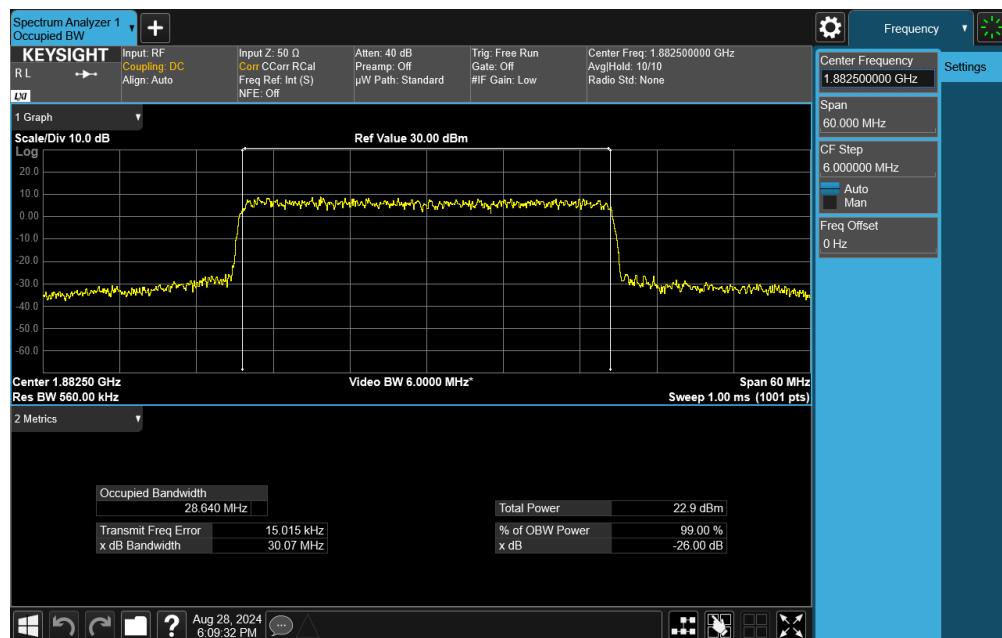


**Plot 7-50. Occupied Bandwidth Plot (NR Band n25 - 30MHz DFT-s-OFDM π/2 BPSK - Full RB)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 39 of 219

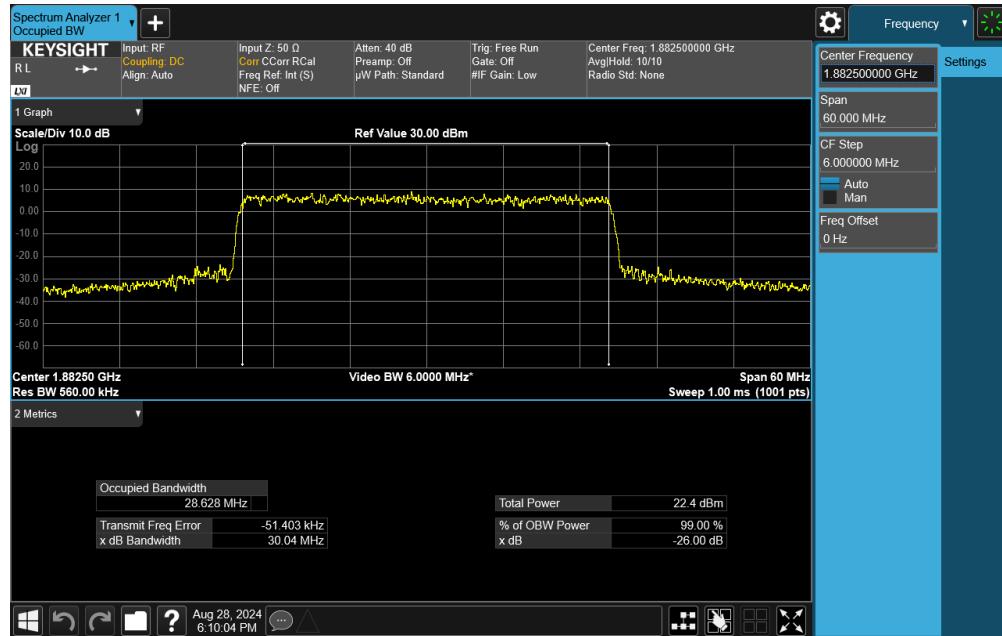


**Plot 7-51. Occupied Bandwidth Plot (NR Band n25 - 30MHz CP-OFDM QPSK - Full RB)**

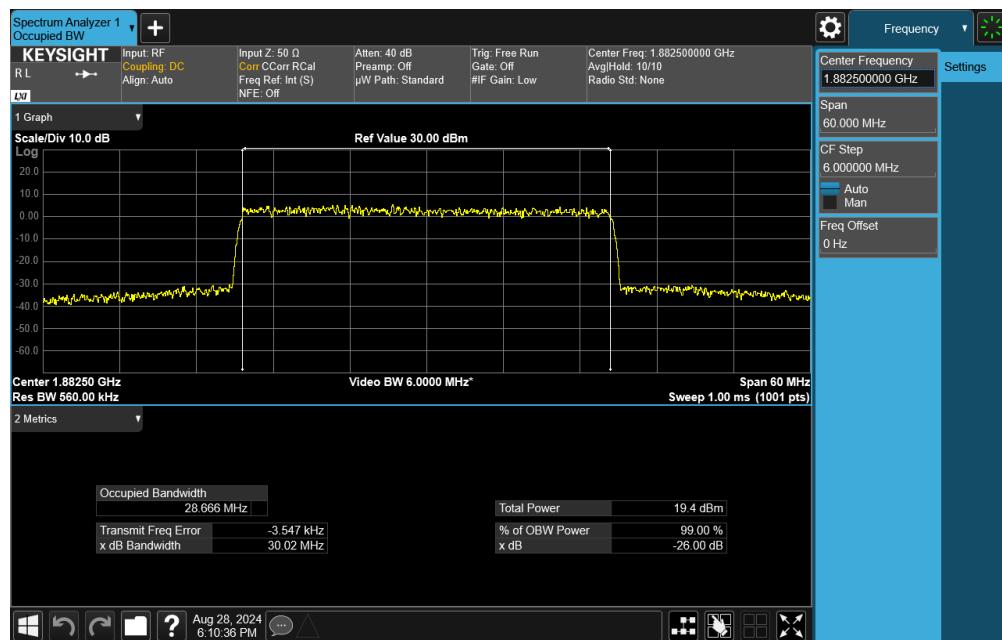


**Plot 7-52. Occupied Bandwidth Plot (NR Band n25 - 30MHz CP-OFDM 16QAM - Full RB)**

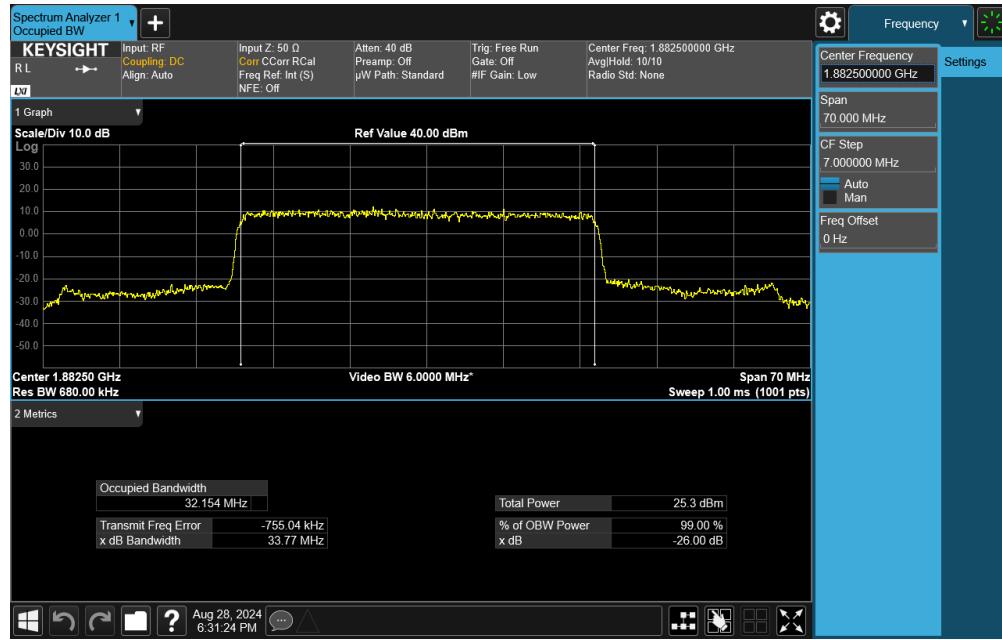
FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 40 of 219



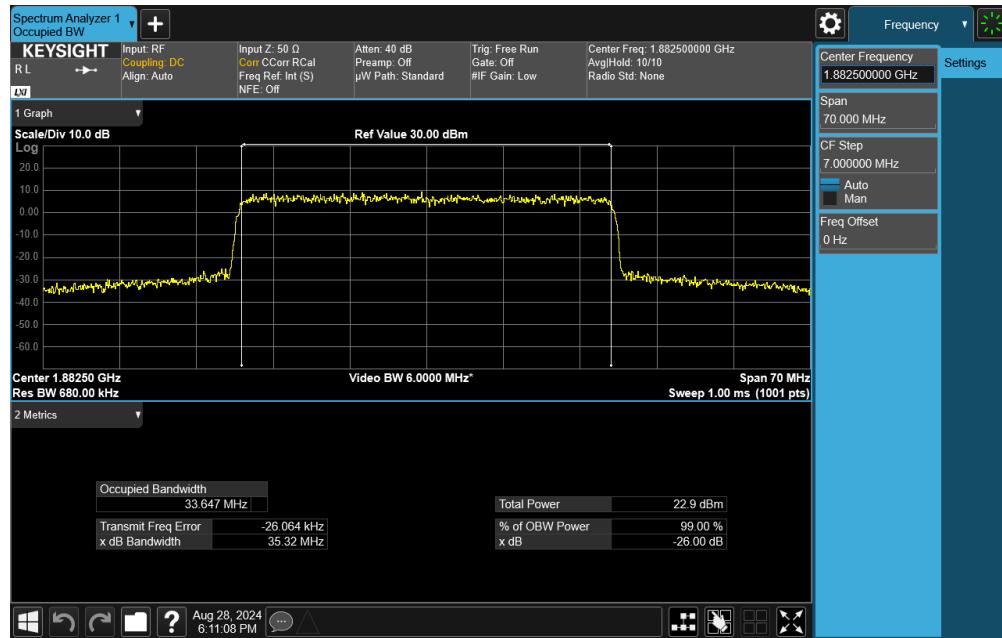
**Plot 7-53. Occupied Bandwidth Plot (NR Band n25 - 30MHz CP-OFDM 64QAM - Full RB)**



FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 41 of 219

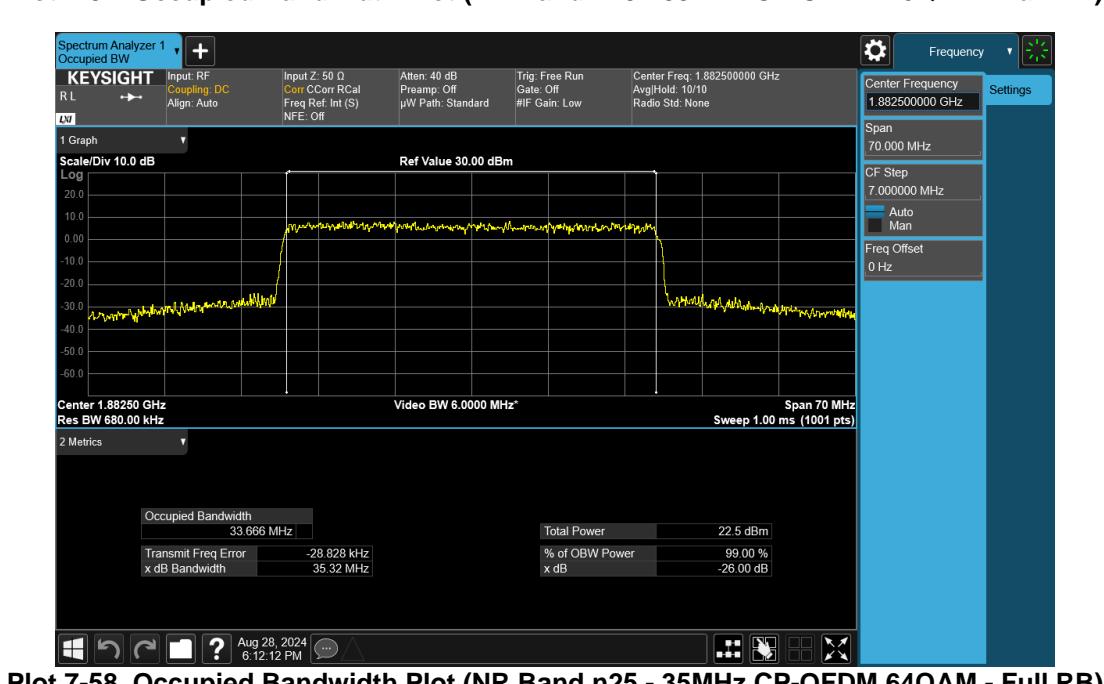
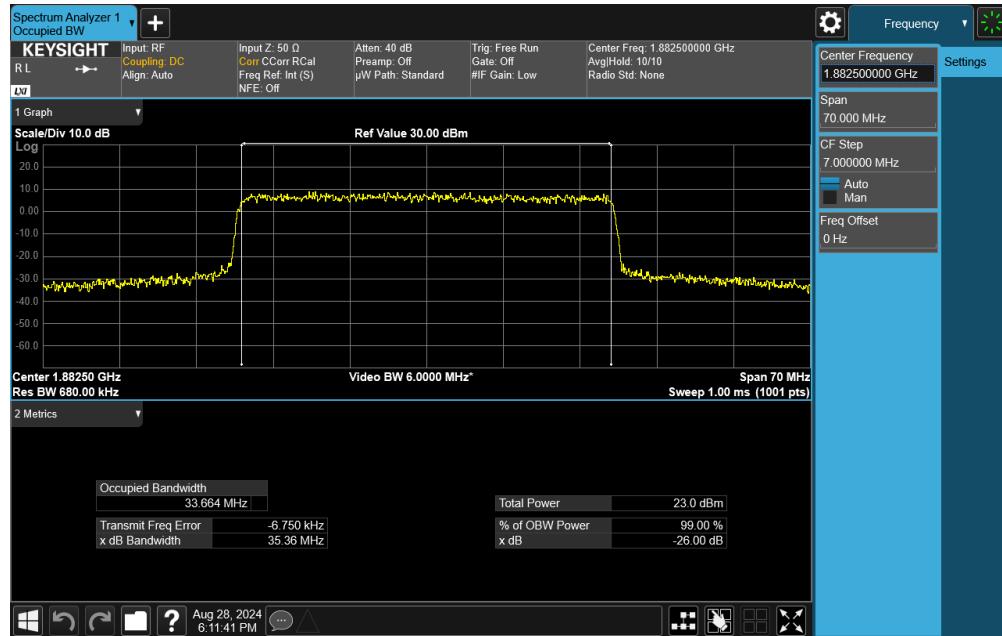


**Plot 7-55. Occupied Bandwidth Plot (NR Band n25 - 35MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB)**

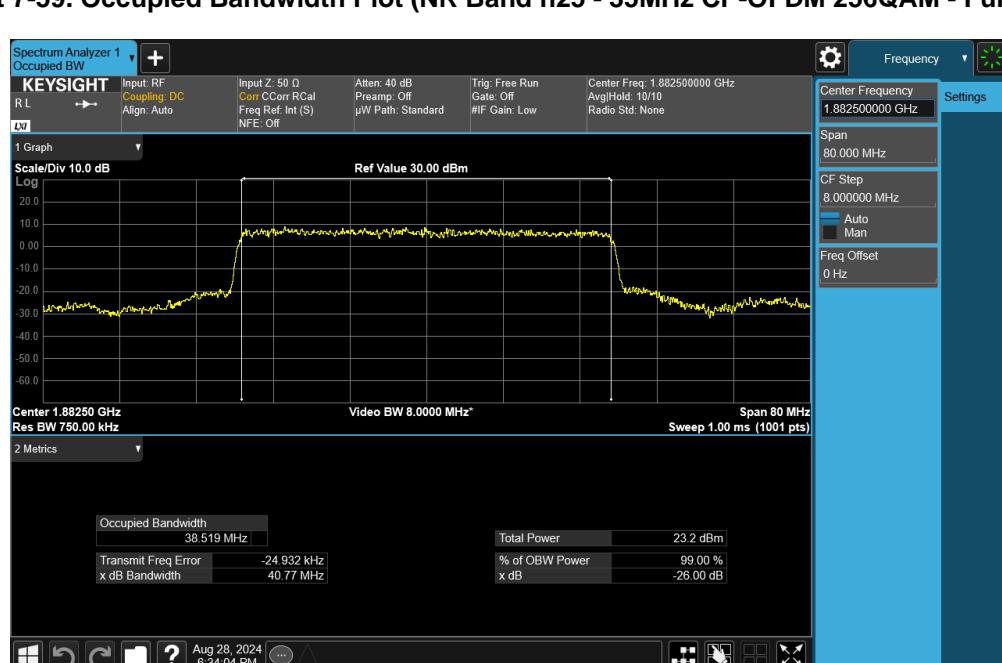


**Plot 7-56. Occupied Bandwidth Plot (NR Band n25 - 35MHz CP-OFDM QPSK - Full RB)**

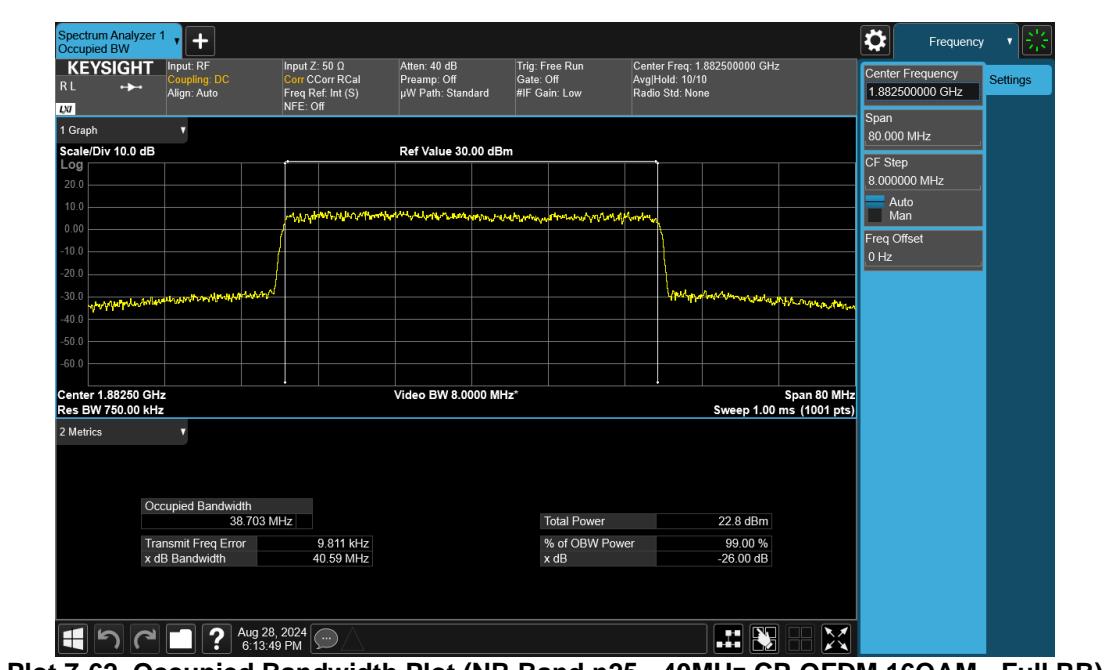
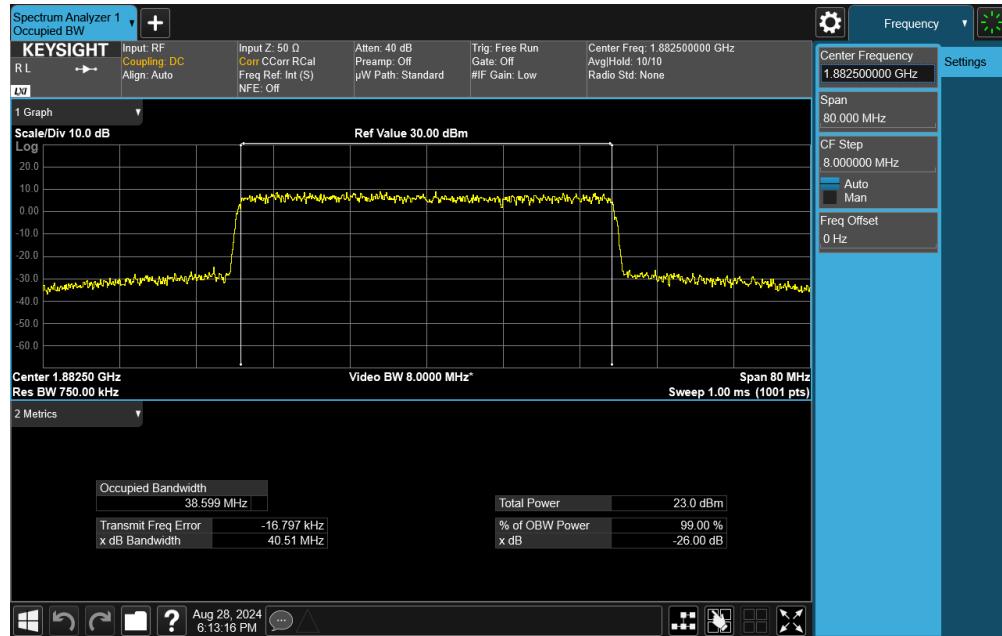
FCC ID: BCGA3267	<b>element</b> PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 42 of 219



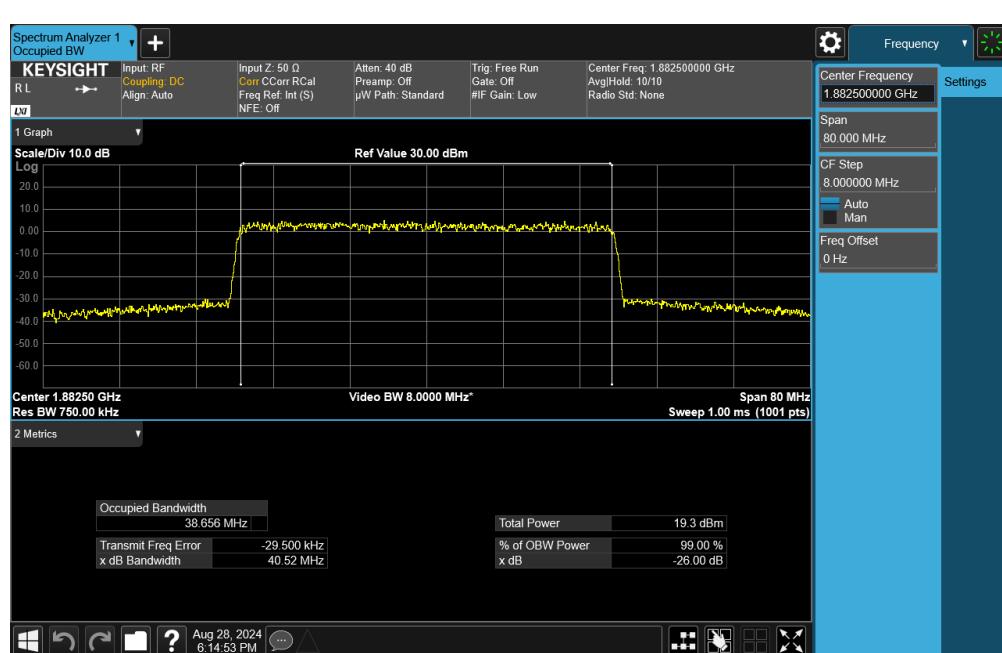
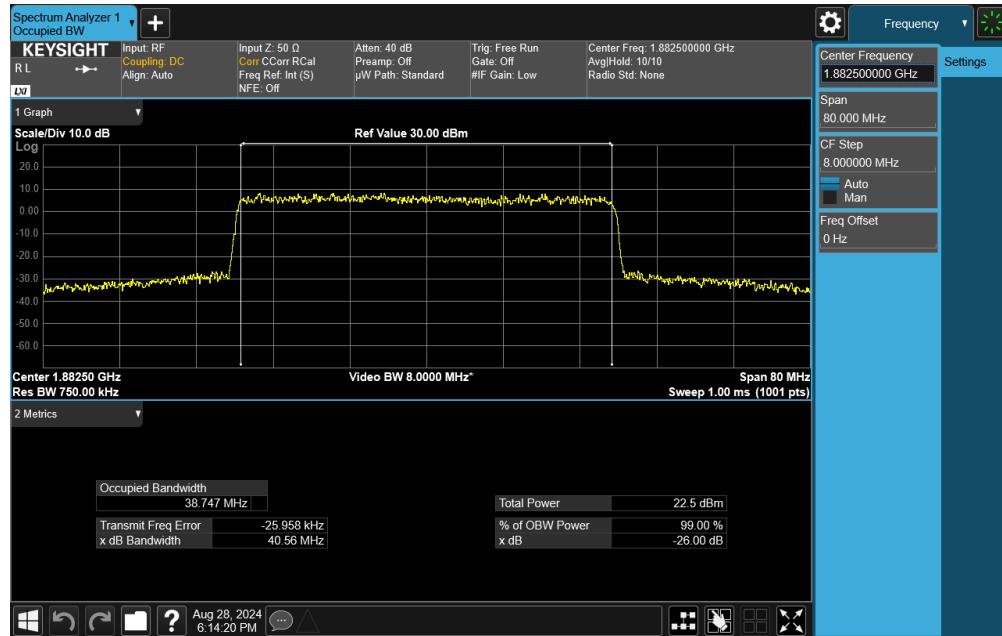
FCC ID: BCGA3267	 <b>PART 24 MEASUREMENT REPORT</b>			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 43 of 219



FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 44 of 219

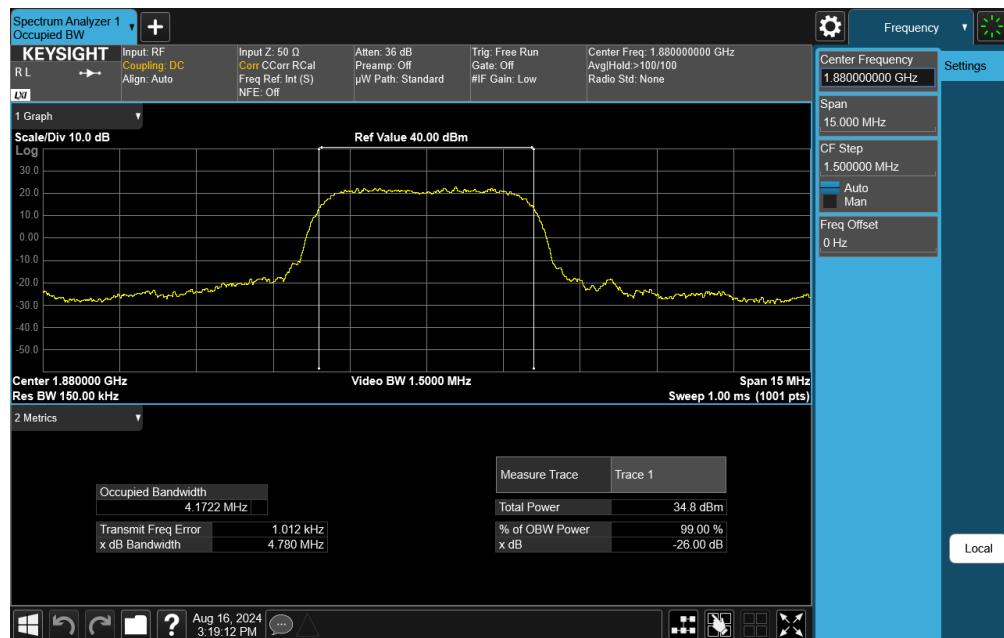


FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 45 of 219



FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 46 of 219

## WCDMA PCS



Plot 7-65. Occupied Bandwidth Plot (WCDMA, Ch. 9400)

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 47 of 219

## 7.3 Spurious and Harmonic Emissions at Antenna Terminal

§2.1051, §24.238(a)

### Test Overview and Limit

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 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. All ports were tested and only the worst case data were reported.

***The minimum permissible attenuation level of any spurious emission is  $43 + 10 \log_{10}(P_{[Watts]})$ , where P is the transmitter power in Watts.***

### Test Procedure Used

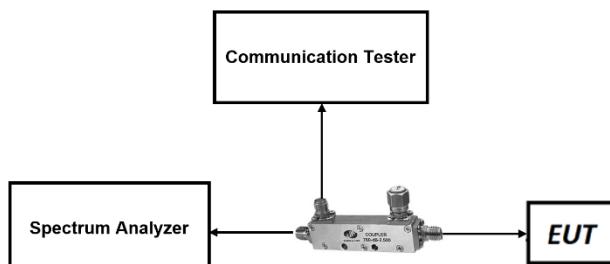
KDB 971168 D01 v03r01 – Section 6.0

### Test Settings

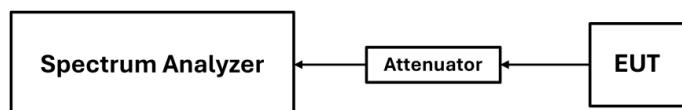
1. Start frequency was set to 30MHz and stop frequency was set to 20GHz (separated into at least two plots per channel)
2. Detector = RMS
3. Trace mode = trace average for continuous emissions, max hold for pulse emissions
4. Sweep time = auto couple
5. The trace was allowed to stabilize
6. Please see test notes below for RBW and VBW settings

### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



**Figure 7-3. LTE Test Instrument & Measurement Setup**



**Figure 7-4. FR1 Test Instrument & Measurement Setup**

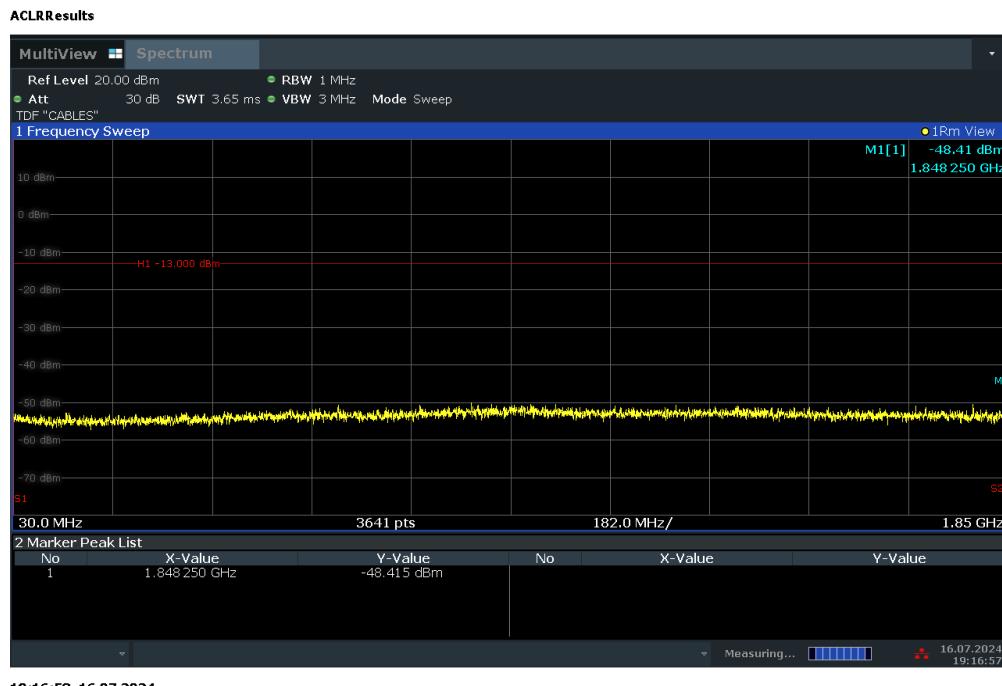
FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 48 of 219

## Test Notes

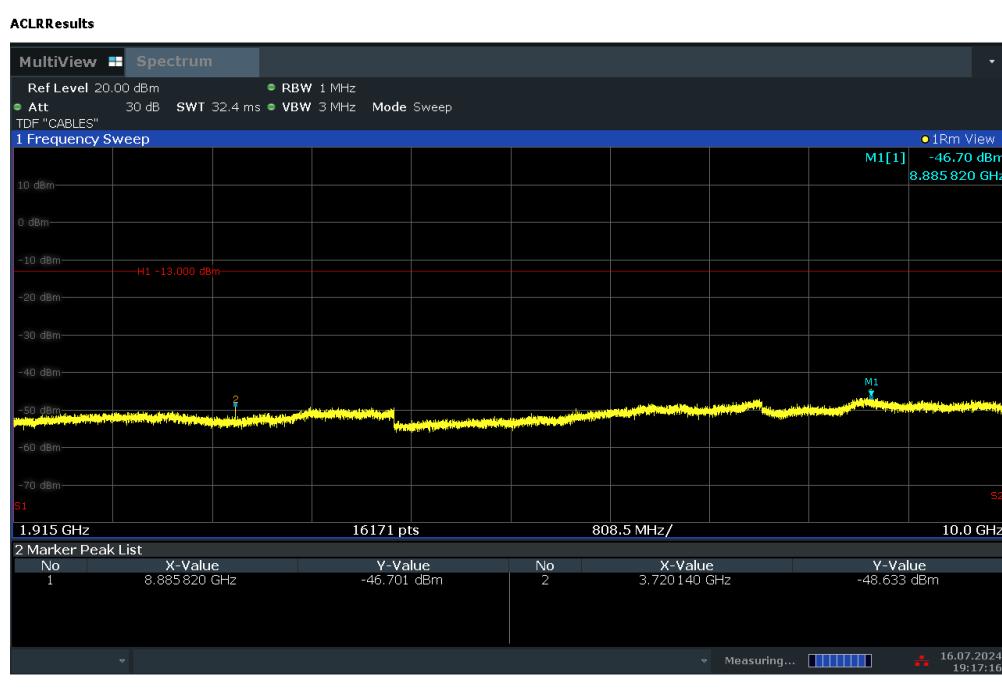
1. Per Part 24, compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth 100 kHz or greater for measurements below 1GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.
2. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) 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.
3. NR band n25 overlaps the entire frequency range of NR band 2. Therefore, the conducted emissions data of NR band n25 provided in this report covers NR band n2.

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 49 of 219

## LTE Band 25/2

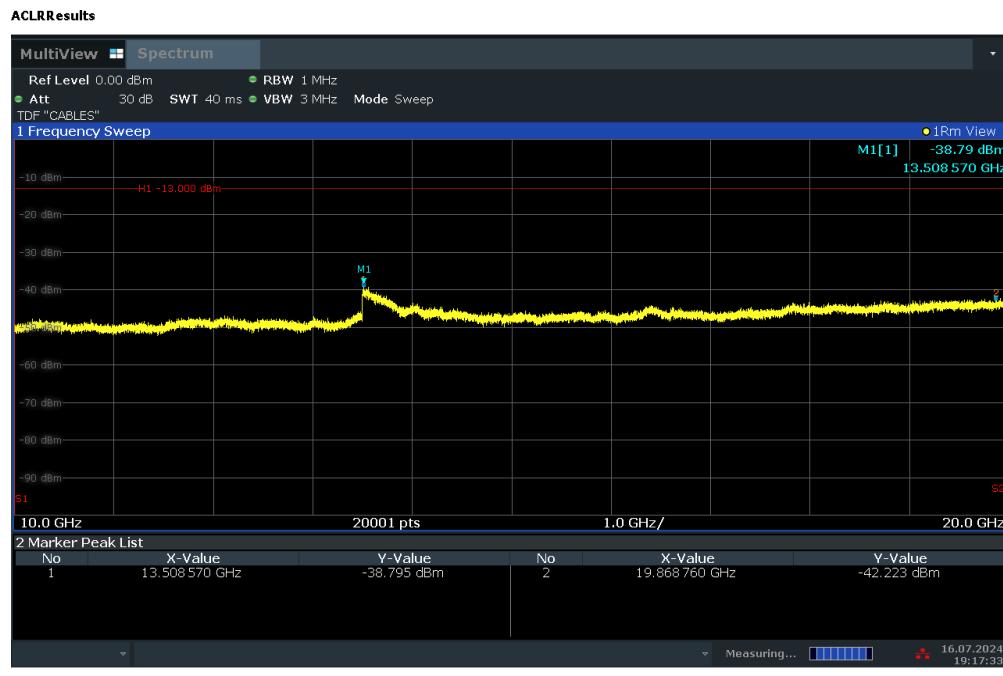


**Plot 7-66. Conducted Spurious Plot (LTE Band 25/2 - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)**

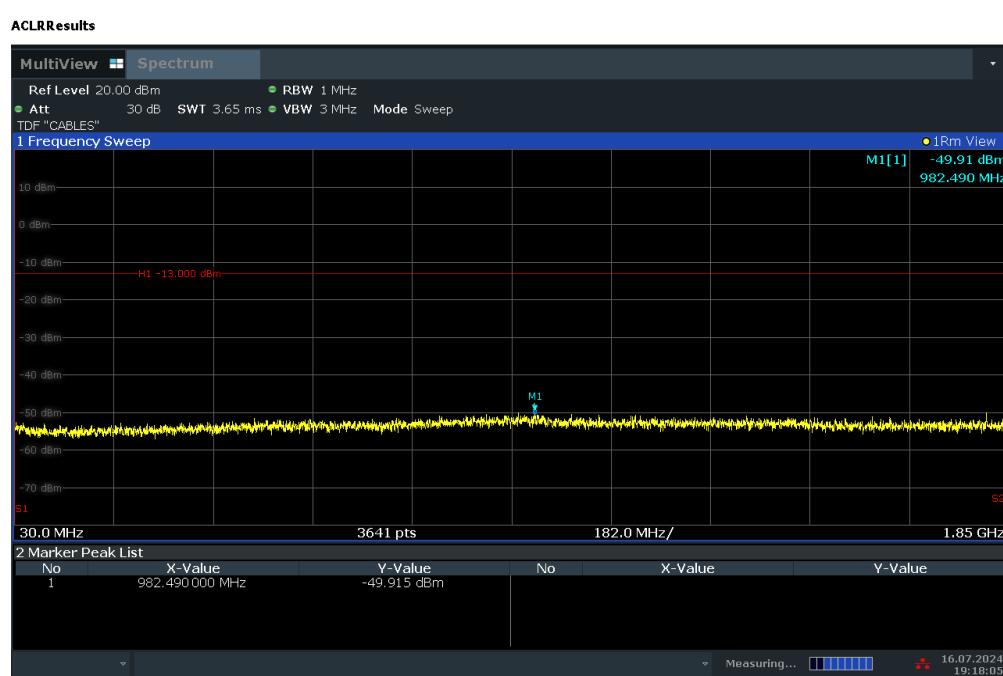


**Plot 7-67. Conducted Spurious Plot (LTE Band 25/2 - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)**

FCC ID: BCGA3267	 <b>element</b> PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 50 of 219

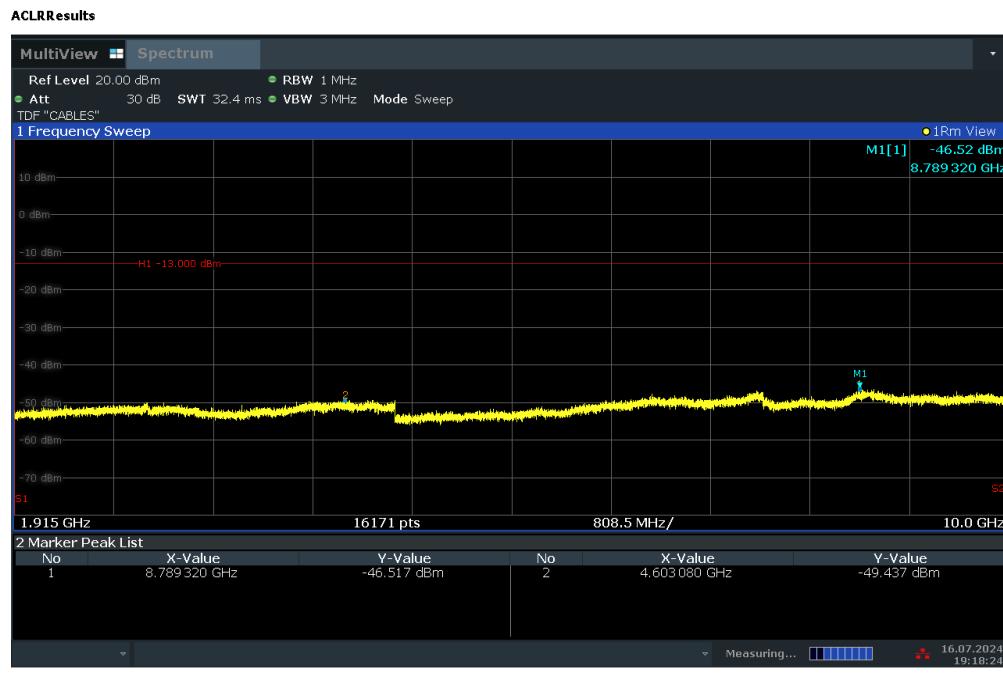


**Plot 7-68. Conducted Spurious Plot (LTE Band 25/2 - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)**

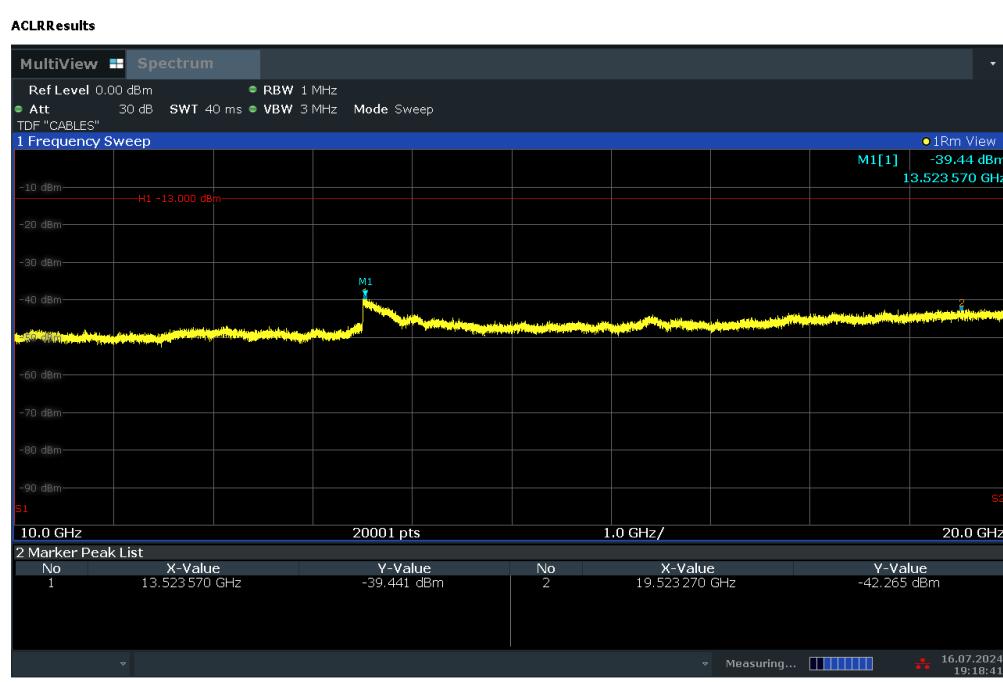


**Plot 7-69. Conducted Spurious Plot (LTE Band 25/2 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)**

FCC ID: BCGA3267	<b>element</b> PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 51 of 219

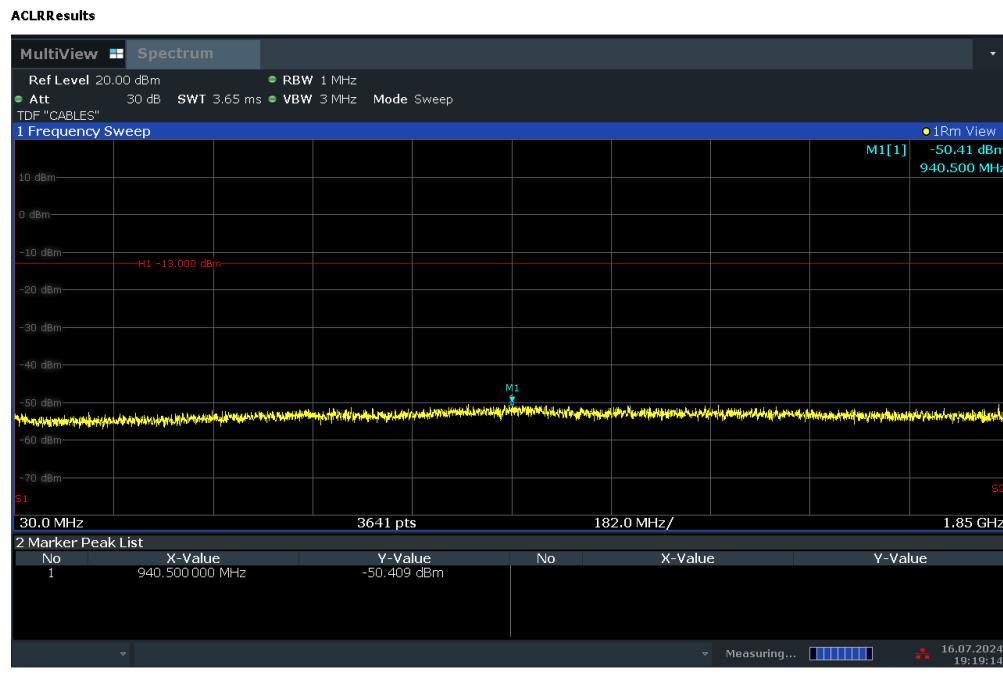


**Plot 7-70. Conducted Spurious Plot (LTE Band 25/2 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)**

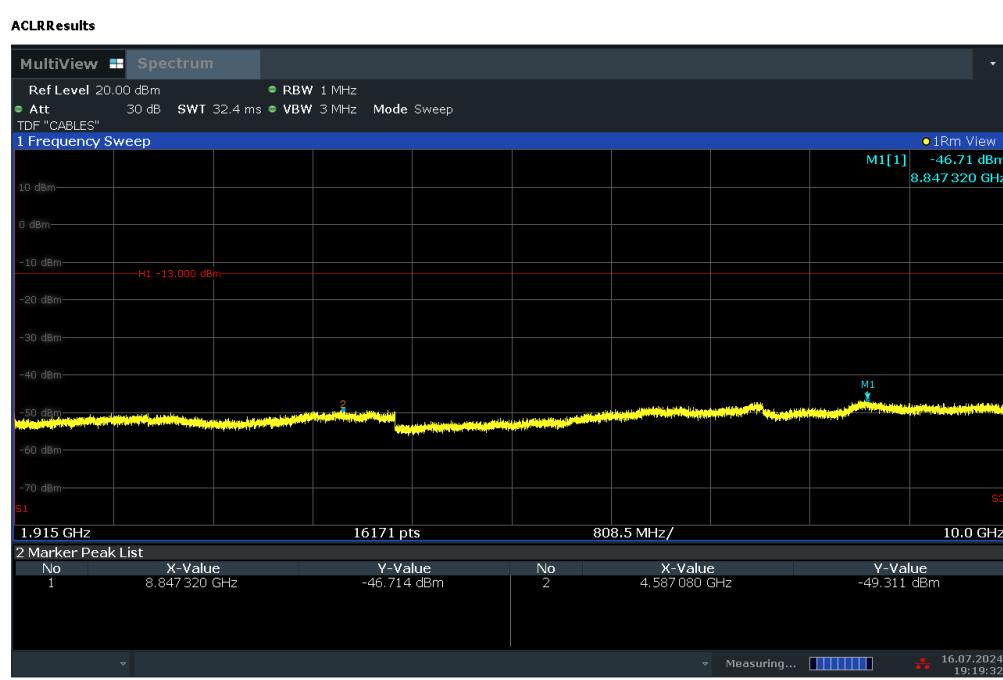


**Plot 7-71. Conducted Spurious Plot (LTE Band 25/2 - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)**

FCC ID: BCGA3267	 <b>element</b> <b>PART 24 MEASUREMENT REPORT</b>			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 52 of 219

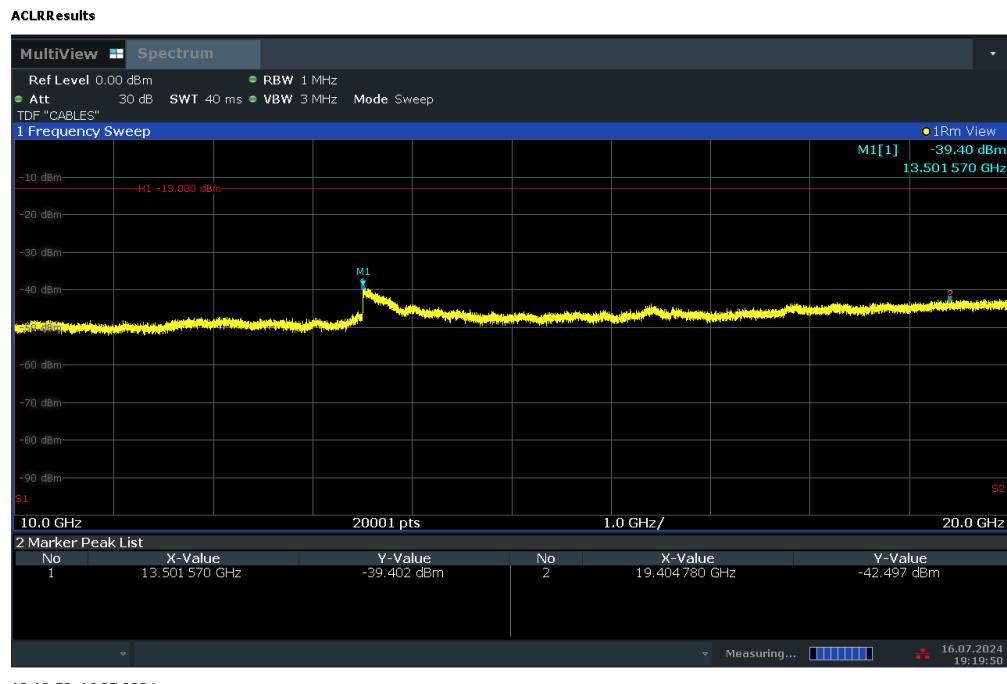


**Plot 7-72. Conducted Spurious Plot (LTE Band 25/2 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)**



**Plot 7-73. Conducted Spurious Plot (LTE Band 25/2 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)**

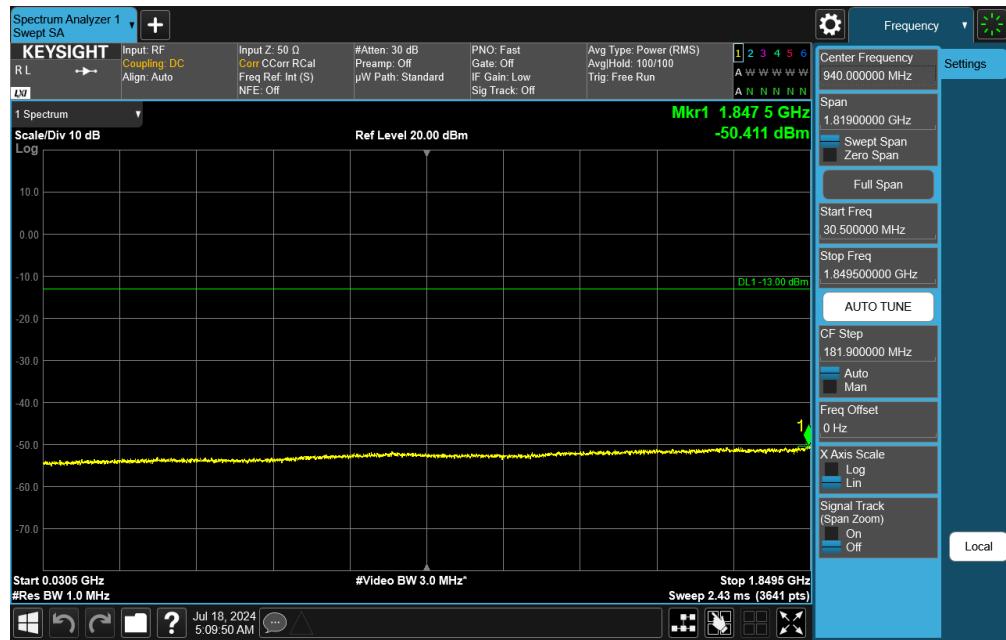
FCC ID: BCGA3267	 <b>element</b> PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 53 of 219



**Plot 7-74. Conducted Spurious Plot (LTE Band 25/2 - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 54 of 219

## NR Band n25/n2

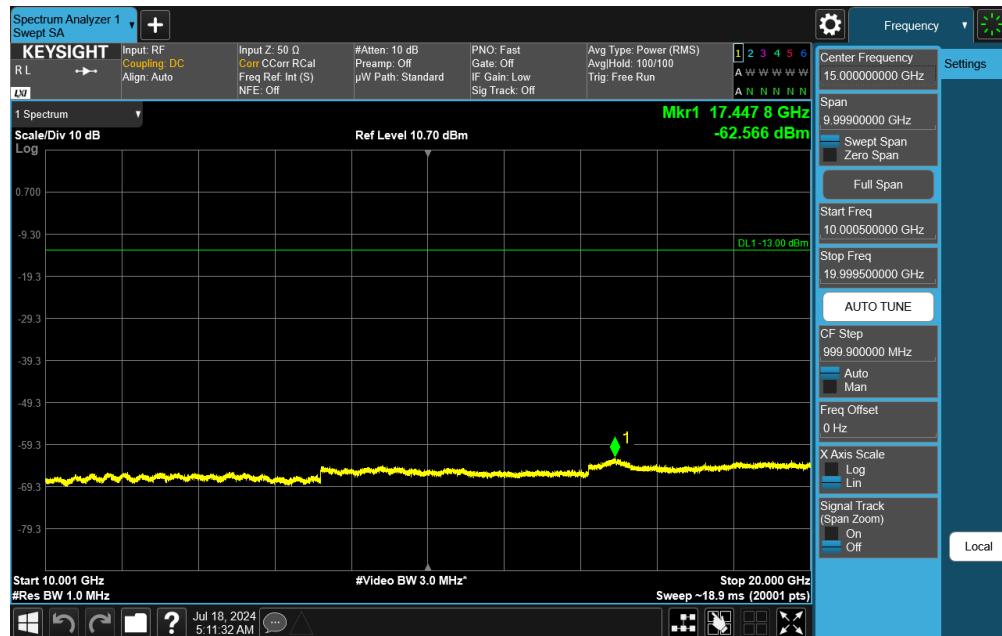


**Plot 7-75. Conducted Spurious Plot (NR Band n25/n2 - 40.0MHz - RB Size 1, RB Offset 0 - Low Channel)**

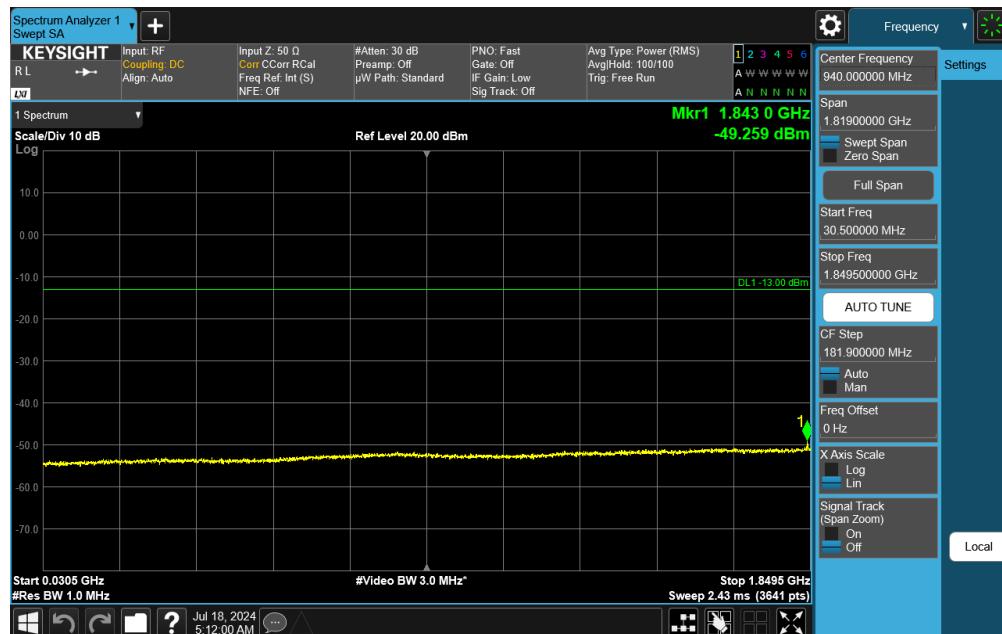


**Plot 7-76. Conducted Spurious Plot (NR Band n25/n2 - 40.0MHz - RB Size 1, RB Offset 0 - Low Channel)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 55 of 219



Plot 7-77. Conducted Spurious Plot (NR Band n25/n2 - 40.0MHz - RB Size 1, RB Offset 0 - Low Channel)

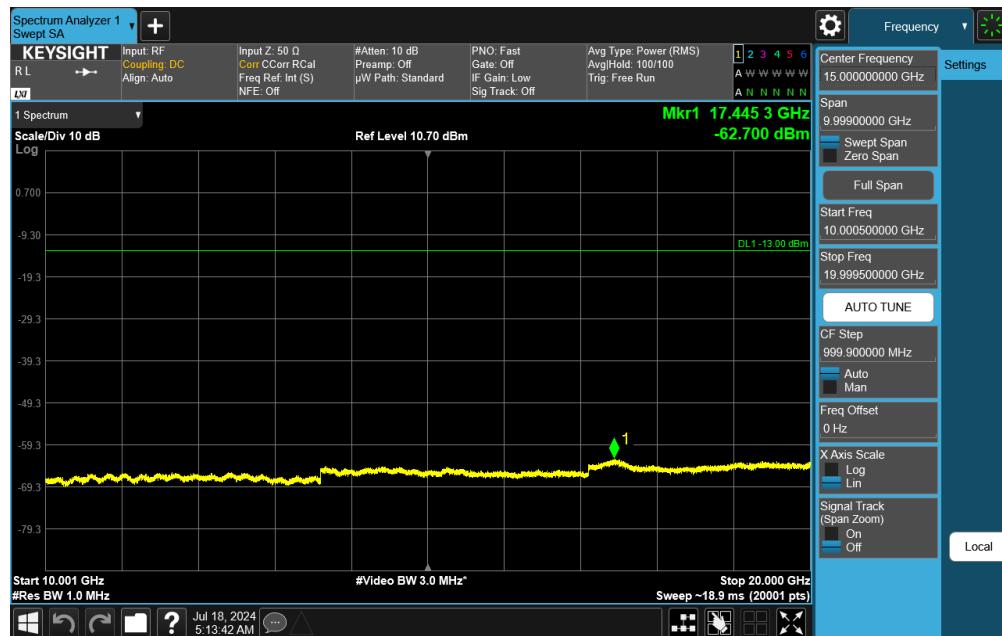


Plot 7-78. Conducted Spurious Plot (NR Band n25/n2 - 40.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 56 of 219

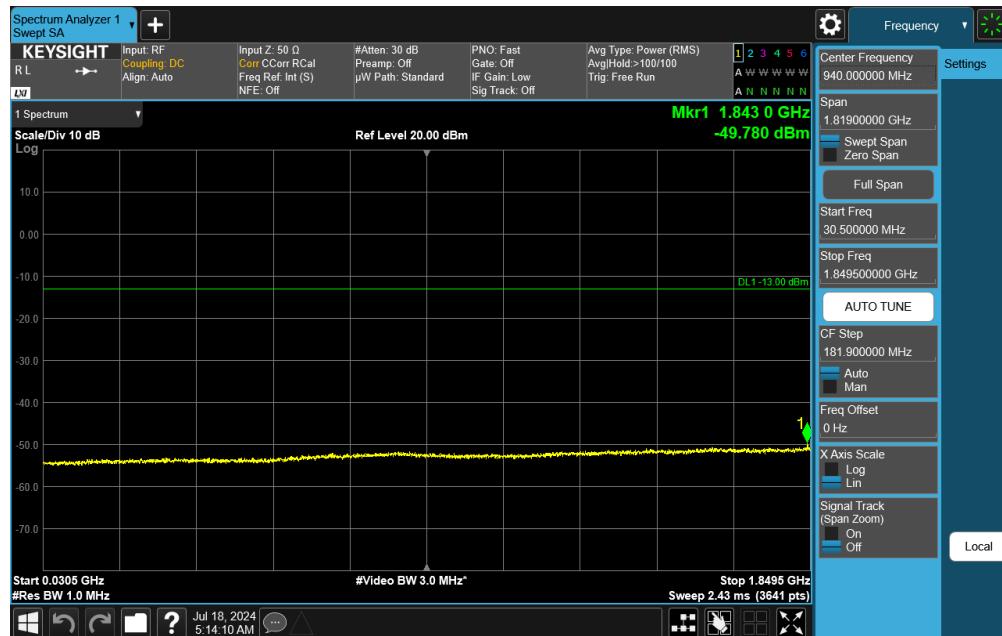


Plot 7-79. Conducted Spurious Plot (NR Band n25/n2 - 40.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

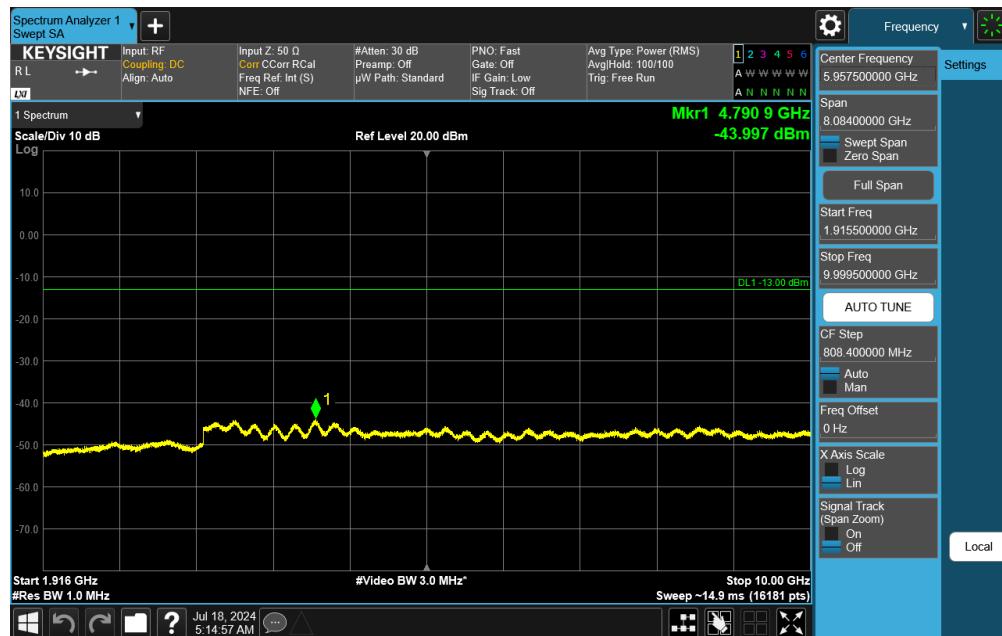


Plot 7-80. Conducted Spurious Plot (NR Band n25/n2 - 40.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 57 of 219

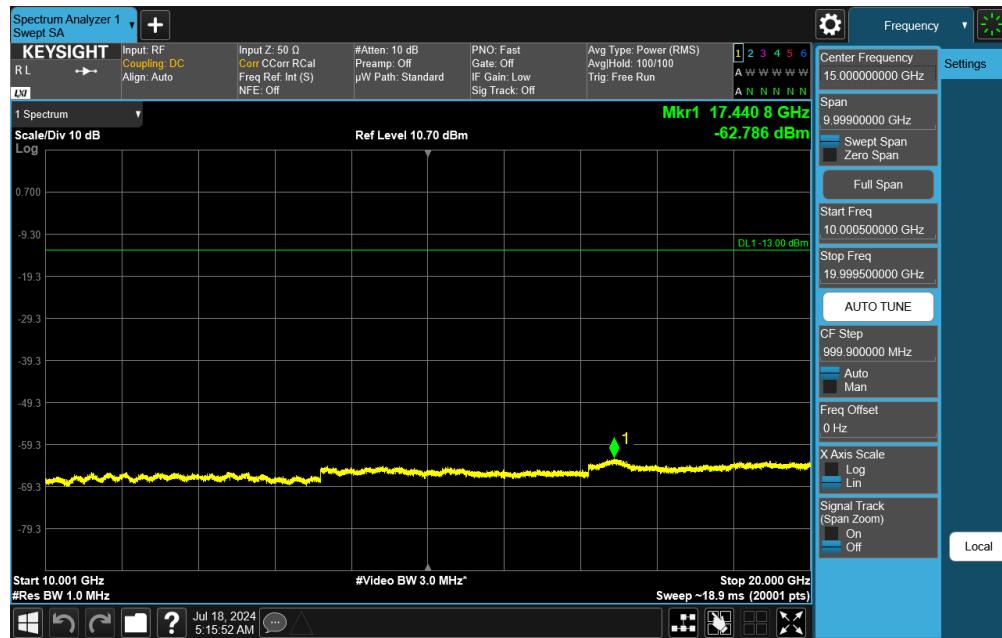


**Plot 7-81. Conducted Spurious Plot (NR Band n25/n2 - 40.0MHz - RB Size 1, RB Offset 0 - High Channel)**



**Plot 7-82. Conducted Spurious Plot (NR Band n25/n2 - 40.0MHz - RB Size 1, RB Offset 0 - High Channel)**

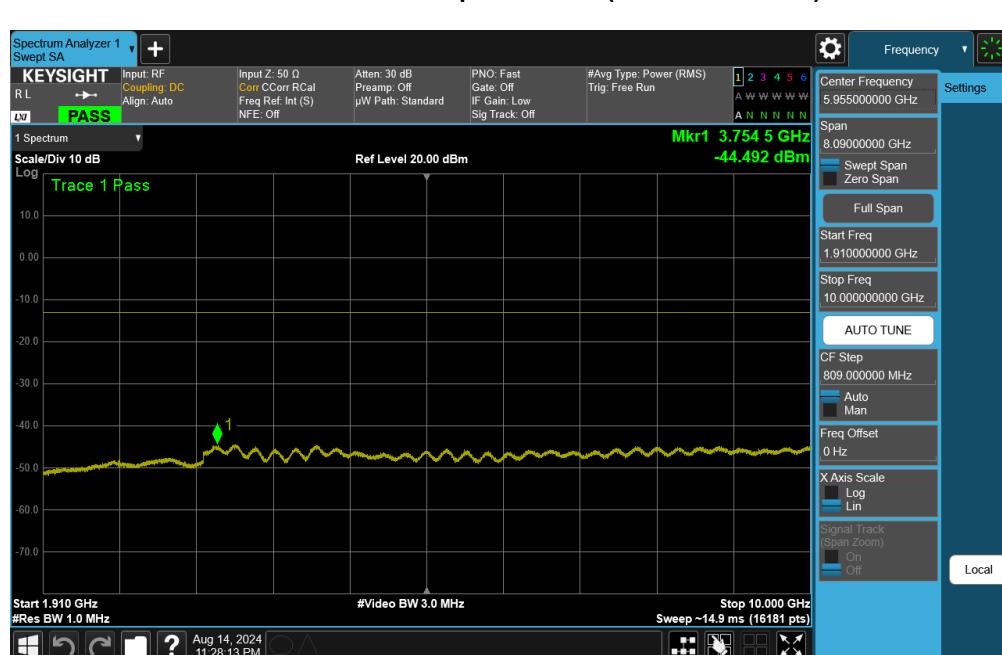
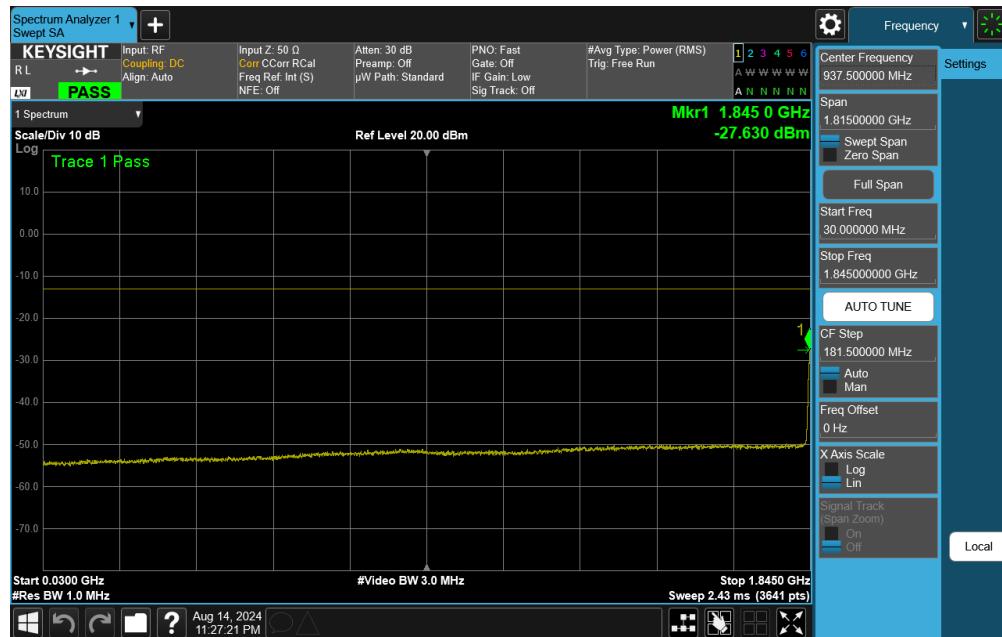
FCC ID: BCGA3267	<b>element</b> PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 58 of 219



**Plot 7-83. Conducted Spurious Plot (NR Band n25/n2 - 40.0MHz - RB Size 1, RB Offset 0 - High Channel)**

FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device		Page 59 of 219

## WCDMA PCS



FCC ID: BCGA3267	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1C2410210073-08-R1.BCG	Test Dates: 7/1/2024 - 12/9/2024	EUT Type: Tablet Device	Page 60 of 219