



PART 27 MEASUREMENT REPORT

Applicant Name:

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

Date of Testing:

6/2/2021 - 8/21/2021

Test Site/Location:

PCTEST Lab. Morgan Hill, CA, USA

Test Report Serial No.:

1C2106080049-03.BCG

FCC ID:	BCGA2568
APPLICANT:	Apple Inc.

Application Type:

Certification

Model:

A2568(A2569)

EUT Type:

Tablet Device

FCC Classification:

PCS Licensed Transmitter (PCB)

FCC Rule Part:

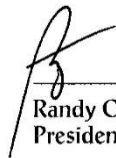
27

Test Procedure(s):

ANSI C63.26-2015, ANSI/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.

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.



Randy Ortanez
President





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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]	
WCDMA1700	5 MHz	Spread Spectrum	1712.4 - 1752.6	4.1796	2.87	0.331	25.20	4M18F9W
LTE Band 4	1.4 MHz	QPSK	1710.7 - 1754.3	1.0964	5.12	0.339	25.30	1M10G7W
		16QAM	1710.7 - 1754.3	1.1075	5.92	0.294	24.69	1M11D7W
		64QAM	1710.7 - 1754.3	1.0894	6.75	0.255	24.07	1M09D7W
		256QAM	1710.7 - 1754.3	1.0952	7.23	0.120	20.79	1M10D7W
	3 MHz	QPSK	1711.5 - 1753.5	2.7247	4.94	0.339	25.30	2M72G7W
		16QAM	1711.5 - 1753.5	2.7099	5.91	0.290	24.63	2M71D7W
		64QAM	1711.5 - 1753.5	2.7230	6.63	0.252	24.01	2M72D7W
		256QAM	1711.5 - 1753.5	2.7132	6.82	0.153	21.85	2M71D7W
	5 MHz	QPSK	1712.5 - 1752.5	4.5696	5.00	0.339	25.30	4M57G7W
		16QAM	1712.5 - 1752.5	4.5230	5.86	0.299	24.76	4M52D7W
		64QAM	1712.5 - 1752.5	4.5293	6.59	0.247	23.93	4M53D7W
		256QAM	1712.5 - 1752.5	4.5225	6.69	0.125	20.96	4M52D7W
	10 MHz	QPSK	1715.0 - 1750.0	9.0189	4.96	0.339	25.30	9M02G7W
		16QAM	1715.0 - 1750.0	9.0238	5.84	0.292	24.65	9M02D7W
		64QAM	1715.0 - 1750.0	9.0139	6.56	0.254	24.05	9M01D7W
		256QAM	1715.0 - 1750.0	9.0031	6.70	0.122	20.85	9M00D7W
	15 MHz	QPSK	1717.5 - 1747.5	13.5384	4.96	0.339	25.30	13M5G7W
		16QAM	1717.5 - 1747.5	13.5197	5.87	0.308	24.88	13M5D7W
		64QAM	1717.5 - 1747.5	13.5261	6.59	0.255	24.07	13M5D7W
		256QAM	1717.5 - 1747.5	13.5085	6.70	0.118	20.71	13M5D7W
	20 MHz	QPSK	1720.0 - 1745.0	18.0447	4.80	0.339	25.30	18M0G7W
		16QAM	1720.0 - 1745.0	17.9952	5.69	0.295	24.70	18M0D7W
		64QAM	1720.0 - 1745.0	17.9740	6.61	0.249	23.96	18M0D7W
		256QAM	1720.0 - 1745.0	17.8444	6.67	0.121	20.84	17M8D7W
LTE Band 66	1.4 MHz	QPSK	1710.7 - 1779.3	1.0964	5.49	0.339	25.30	1M10G7W
		16QAM	1710.7 - 1779.3	1.1075	6.19	0.290	24.63	1M11D7W
		64QAM	1710.7 - 1779.3	1.0894	6.79	0.252	24.01	1M09D7W
		256QAM	1710.7 - 1779.3	1.0952	6.76	0.119	20.74	1M10D7W
	3 MHz	QPSK	1711.5 - 1778.5	2.7247	5.25	0.339	25.30	2M72G7W
		16QAM	1711.5 - 1778.5	2.7099	6.19	0.294	24.68	2M71D7W
		64QAM	1711.5 - 1778.5	2.7230	6.66	0.254	24.04	2M72D7W
		256QAM	1711.5 - 1778.5	2.7132	6.75	0.122	20.85	2M71D7W
	5 MHz	QPSK	1712.5 - 1777.5	4.5696	5.36	0.339	25.30	4M57G7W
		16QAM	1712.5 - 1777.5	4.5230	6.08	0.301	24.79	4M52D7W
		64QAM	1712.5 - 1777.5	4.5293	6.66	0.250	23.98	4M53D7W
		256QAM	1712.5 - 1777.5	4.5225	6.64	0.124	20.94	4M52D7W
	10 MHz	QPSK	1715.0 - 1775.0	9.0189	5.31	0.339	25.30	9M02G7W
		16QAM	1715.0 - 1775.0	9.0238	6.06	0.292	24.66	9M02D7W
		64QAM	1715.0 - 1775.0	9.0139	6.60	0.254	24.04	9M01D7W
		256QAM	1715.0 - 1775.0	9.0031	6.69	0.122	20.88	9M00D7W
	15 MHz	QPSK	1717.5 - 1772.5	13.5384	5.56	0.339	25.30	13M5G7W
		16QAM	1717.5 - 1772.5	13.5197	6.20	0.303	24.81	13M5D7W
		64QAM	1717.5 - 1772.5	13.5261	6.65	0.255	24.07	13M5D7W
		256QAM	1717.5 - 1772.5	13.5085	6.71	0.117	20.68	13M5D7W
	20 MHz	QPSK	1720.0 - 1770.0	18.0447	5.36	0.339	25.30	18M0G7W
		16QAM	1720.0 - 1770.0	17.9952	6.10	0.294	24.69	18M0D7W
		64QAM	1720.0 - 1770.0	17.9740	6.66	0.252	24.01	18M0D7W
		256QAM	1720.0 - 1770.0	17.8444	6.74	0.120	20.80	17M8D7W
ULCA Band 66	20 + 20 MHz	QPSK	1720.0 - 1770.0	37.9200	-	0.361	25.57	37M9G7W
		16QAM	1720.0 - 1770.0	37.8510	-	0.184	22.65	37M9D7W
		64QAM	1720.0 - 1770.0	37.7910	-	0.147	21.66	37M8D7W
		256QAM	1720.0 - 1770.0	37.7470	-	0.115	20.62	37M7D7W
NR Band n66	5 MHz	π/2 BPSK	1712.5 - 1777.5	4.5114	4.49	0.339	25.30	4M51G7W
		QPSK	1712.5 - 1777.5	4.5113	5.37	0.325	25.12	4M51G7W
		16QAM	1712.5 - 1777.5	4.5100	6.45	0.258	24.11	4M51D7W
		64QAM	1712.5 - 1777.5	4.5102	6.52	0.228	23.57	4M51D7W
	10 MHz	QPSK	1712.5 - 1777.5	4.4779	6.41	0.144	21.58	4M48D7W
		π/2 BPSK	1715.0 - 1775.0	9.0036	3.93	0.326	25.13	9M00G7W
		QPSK	1715.0 - 1775.0	9.3307	5.35	0.339	25.30	9M33G7W
		16QAM	1715.0 - 1775.0	9.3409	6.31	0.266	24.25	9M34D7W
	15 MHz	64QAM	1715.0 - 1775.0	9.3439	6.57	0.227	23.57	9M34D7W
		256QAM	1715.0 - 1775.0	9.3099	6.40	0.139	21.43	9M31D7W
		π/2 BPSK	1717.5 - 1772.5	13.4797	4.08	0.339	25.30	13M5G7W
		QPSK	1717.5 - 1772.5	14.1384	5.42	0.333	25.22	14M1G7W
	20 MHz	16QAM	1717.5 - 1772.5	14.1788	6.36	0.263	24.20	14M2D7W
		64QAM	1717.5 - 1772.5	14.1872	6.50	0.229	23.60	14M2D7W
		256QAM	1717.5 - 1772.5	14.1975	6.49	0.141	21.50	14M2D7W
		π/2 BPSK	1720.0 - 1770.0	17.9209	3.92	0.333	25.22	17M9G7W
	30 MHz	QPSK	1720.0 - 1770.0	18.9868	5.36	0.339	25.30	19M0G7W
		16QAM	1720.0 - 1770.0	19.0274	6.38	0.262	24.18	19M0D7W
		64QAM	1720.0 - 1770.0	19.0055	6.53	0.225	23.52	19M0D7W
		256QAM	1720.0 - 1770.0	18.9101	6.46	0.140	21.45	18M9D7W
	40 MHz	π/2 BPSK	1725.0 - 1765.0	28.6415	4.02	0.214	23.30	28M6G7W
		QPSK	1725.0 - 1765.0	28.7363	5.29	0.200	23.01	28M7G7W
		16QAM	1725.0 - 1765.0	28.6799	6.34	0.165	22.16	28M7D7W
		64QAM	1725.0 - 1765.0	28.5761	6.52	0.140	21.45	28M6D7W
40 MHz	256QAM	1725.0 - 1765.0	28.6808	6.55	0.087	19.42	28M7D7W	
	π/2 BPSK	1730.0 - 1760.0	38.6254	4.02	0.214	23.30	38M6G7W	
	QPSK	1730.0 - 1760.0	38.7436	5.32	0.206	23.14	38M7G7W	
	16QAM	1730.0 - 1760.0	38.6419	6.23	0.171	22.32	38M6D7W	
40 MHz	64QAM	1730.0 - 1760.0	38.6179	6.45	0.141	21.49	38M6D7W	
	256QAM	1730.0 - 1760.0	38.6410	6.59	0.086	19.37	38M6D7W	

Overview Table (>1GHz Bands)

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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 PCTEST Test Location

These measurement tests were conducted at the PCTEST 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 PCTEST located in Morgan Hill, CA 95037, U.S.A.

- PCTEST 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.
- PCTEST 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).
- PCTEST facility is a registered (22831) test laboratory with the site description on file with ISED.

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2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Apple Tablet Device FCC ID: BCGA2568**. 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 27.

Test Device Serial No.: DG7QPQX0RY, GL6FX203DX, DLX121200630NC43Y

2.2 Device Capabilities

This device contains the following capabilities:

WCDMA/HSPA, Multi-band LTE, Multi-band 5G NR (FR1), 802.11b/g/n/ax WLAN, 802.11a/n/ax UNII, Bluetooth (1x, EDR, LE1M, LE2M, 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	WLAN	Bluetooth	WCDMA	LTE / FR1 NR			UNII
		802.11 b/g/n/ax	BDR, EDR, HDR4/8, LE1/2M	Mid Band	Mid Band	High Band	Ultra High Band	802.11 a/n/ac/ax
3a	Config 1	✓	✗	✗	✗	✗	✓	✗
3a	Config 2	✗	✓	✗	✗	✗	✓	✗
3b	Config 3	✗	✗	✗	✗	✓	✗	✓
3b	Config 4	✗	✗	✗	✓	✗	✗	✓
3b	Config 5	✗	✗	✓	✗	✗	✗	✓
3a	Config 6	✗	✓	✗	✗	✗	✓	✗
3b	Config 7	✗	✗	✗	✗	✓	✗	✓
3b	Config 8	✗	✗	✗	✓	✗	✗	✓

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 2 and reported in Bluetooth and Part 96 test reports.

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2.3 Antenna Description

Following antenna gains provided by manufacturer were used for testing.

Band	Antennas			
	Antenna 4	Antenna 2	Antenna 1b	Antenna 3b
LTE Band 71	-3.6	-3.7	N/A	N/A
NR Band n71				
LTE Band 12/17	-3	-3.9		
NR Band n12				
LTE Band 13	-1.8	-2.5		
LTE Band 4/66	-2	-1.9	-0.8	0.6
NR Band n66				
WCDMA1700				

Table 2-2. Highest Antenna Gain

2.4 Test Support Equipment

1	Apple MacBook Pro	Model: A2141	S/N: C02DV7VKMD6T
	w/AC/DC Adapter	Model: A2166	S/N: N/A
2	Apple USB-C Cable	Model: Chimp	S/N: 420A57
3	USB-C Cable	Model: A146	S/N: N/A
	w/ AC/DC Adapter	Model: A2305	S/N: N/A
4	Apple Pencil	Model: N/A	S/N: GQXYGSXBJKM9
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.


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2.6 Software and Firmware

The test was conducted with firmware version 19A310b 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.

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3.0 DESCRIPTION OF TESTS

3.1 Evaluation Procedure

The measurement procedures described in the document titled "Land Mobile FM or PM – Communications Equipment – Measurements and Performance Standards" (ANSI C63.26-2015/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.

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:

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


And

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

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.

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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	1.65
Radiated Disturbance (<30MHz)	4.06
Radiated Disturbance (30MHz-1GHz)	4.30
Radiated Disturbance (1-18GHz)	4.78
Radiated Disturbance (>18GHz)	4.79

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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
Agilent Technologies	N9030A	3Hz-44GHz PXA Signal Analyzer	3/31/2021	Annual	3/31/2022	MY49430244
ATM	180-442A-KF	20dB Nominal Gain Horn Antenna	12/1/2020	Annual	12/1/2021	T058701-02
ETS-Lindgren	3142E	BiConiLog Antenna (30MHz - 6GHz)	9/15/2020	Annual	9/15/2021	208204
ETS-Lindgren	3117	Double Ridged Guide Antenna (1-18 GHz)	11/4/2020	Annual	11/4/2021	227597
ESPEC	SU-241	Tabletop Temperature Chamber	9/28/2020	Annual	9/28/2021	92009574
ETS-Lindgren	3142E	BiConiLog Antenna (30MHz - 6GHz)	9/15/2020	Annual	9/15/2021	208204
ETS-Lindgren	3117	Double Ridged Guide Antenna (1-18 GHz)	11/4/2020	Annual	11/4/2021	227597
Keysight Technology	N9040B	UXA Signal Analyzer	12/19/2020	Annual	12/19/2021	MY57212015
Rohde & Schwarz	TS-PR8	Pre-Amplifier (30MHz - 8GHz)	12/3/2020	Annual	12/3/2021	102327
Rohde & Schwarz	TS-PR18	Pre-Amplifier (1GHz - 18GHz)	12/3/2020	Annual	12/3/2021	101648
Rohde & Schwarz	FSV40	Signal Analyzer (10Hz-40GHz)	3/16/2021	Annual	3/16/2022	101619
Rohde & Schwarz	ESW26	EMI Test Receiver	6/11/2021	Annual	6/11/2022	101299
Rohde & Schwarz	ESW44	EMI Test Receiver	12/14/2020	Annual	12/14/2021	101867
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	10/13/2020	Annual	10/13/2021	161616
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	9/24/2020	Annual	9/24/2021	151888
Rohde & Schwarz	TS-PR1840	Pre-Amplifier (18GHz - 40GHz)	4/29/2021	Annual	4/29/2022	100051
Rohde & Schwarz	TC-TA18	Cross Polarized Vivaldi Antenna (400MHz-18GHz)	10/2/2020	Annual	10/2/2021	101063
Rohde & Schwarz	HFH2-Z2	Loop Antenna	4/5/2021	Annual	4/5/2022	100519

Table 5-1. Test Equipment

Notes:

- 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.
- Equipment with a calibration date of "N/A" shown in this list was not used to make direct calibrated measurements.

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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

LTE BW = 8.45 MHz

W = Amplitude/Angle Modulated


7 = Quantized/Digital Info

W = Combination of Any

Spurious Radiated Emission

Example: Middle Channel LTE Mode 2nd Harmonic (1564 MHz)

The average 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 1564 MHz. So 6.1 dB is added to the signal generator reading of -30.9 dBm yielding -24.80 dBm. The fundamental EIRP was 25.501 dBm so this harmonic was 25.501 dBm $-(-24.80)$.

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7.0 TEST RESULTS

7.1 Summary

Company Name: Apple Inc.
 FCC ID: BCGA2568
 FCC Classification: PCS Licensed Transmitter (PCB)
 Mode(s): WCDMA/LTE/NR/UL-CA


Test Condition	Test Description	FCC Part Section(s)	Test Limit	Test Result	Reference
CONDUCTED	Occupied Bandwidth	2.1049	N/A	N/A	Section 7.2
	Conducted Band Edge / Spurious Emissions	2.1051, 27.53	-13 dBm at Band Edge and for all out-of-band emissions	PASS	Sections 7.3, 7.4
	Peak-Average Ratio	27.50(d)(5)	< 13 dB	PASS	Section 7.5
	Transmitter Conducted Output Power	2.1046	N/A	N/A	See RF Exposure Report
	Frequency Stability	2.1055, 27.54	Fundamental emissions stay within authorized frequency block over the temperature and voltage range as tested	PASS	Section 7.8
	Effective Radiated Power / Equivalent Isotropic Radiated Power (LTE Band 71)	27.50(b)(10)	< 3 Watts max. ERP	PASS	Section 7.6
	Effective Radiated Power / Equivalent Isotropic Radiated Power (NR Band n71)			PASS	Section 7.6
	Effective Radiated Power / Equivalent Isotropic Radiated Power (LTE Band 12/17)			PASS	Section 7.6
	Effective Radiated Power / Equivalent Isotropic Radiated Power (NR Band 12)			PASS	Section 7.6
	Effective Radiated Power / Equivalent Isotropic Radiated Power (LTE Band 13)	27.50(c)(10)	< 3 Watts max. ERP	PASS	Section 7.6
	Equivalent Isotropic Radiated Power (WCDMA)	27.50(d)(4)	< 1 Watts max. EIRP	PASS	Section 7.6
	Equivalent Isotropic Radiated Power (NR Band n66)			PASS	Section 7.6
Equivalent Isotropic Radiated Power (LTE Band 4/66)	PASS			Section 7.6	
RADIATED	Radiated Spurious Emissions (LTE Band 13)	2.1053, 27.53(f)	< -70 dBW/MHz (for wideband signals) < -80 dBW (for discrete emissions less than 700Hz BW) For all emissions in the band 1559 - 1610 MHz	PASS	Section 7.7
	Radiated Spurious Emissions	2.1053, 27.53	-13 dBm for all out-of-band emissions	PASS	Section 7.7

Table 7-1. Summary of Test Results

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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 PCTEST EMC Software Tool 1.0.

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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

Test Setup

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

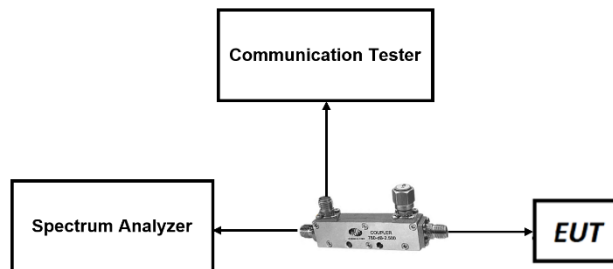



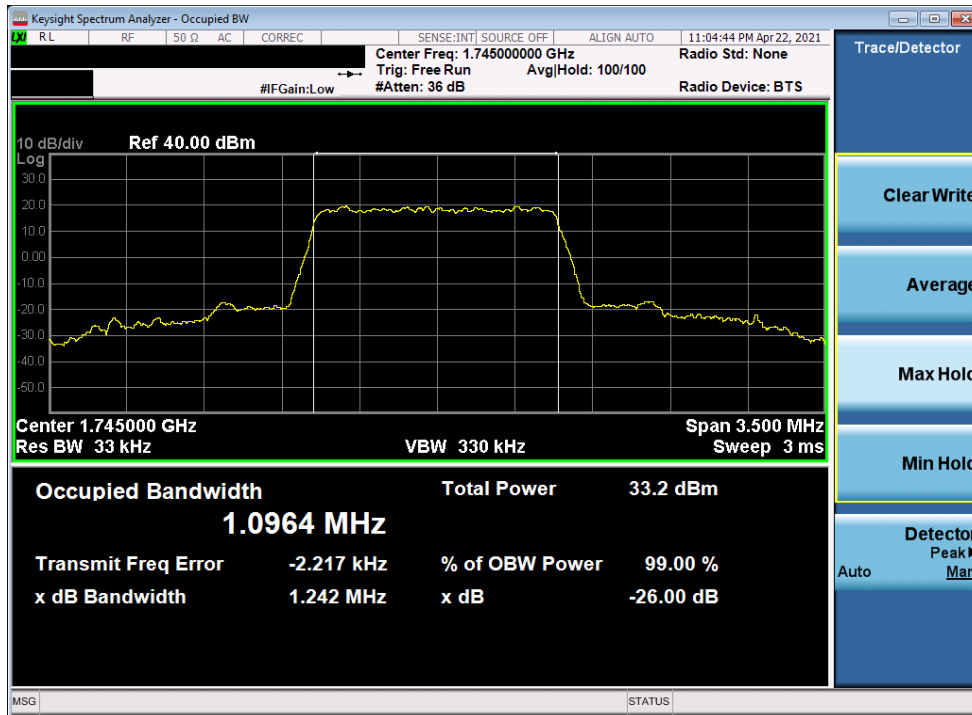
Figure 7-1. Test Instrument & Measurement Setup

Test Notes

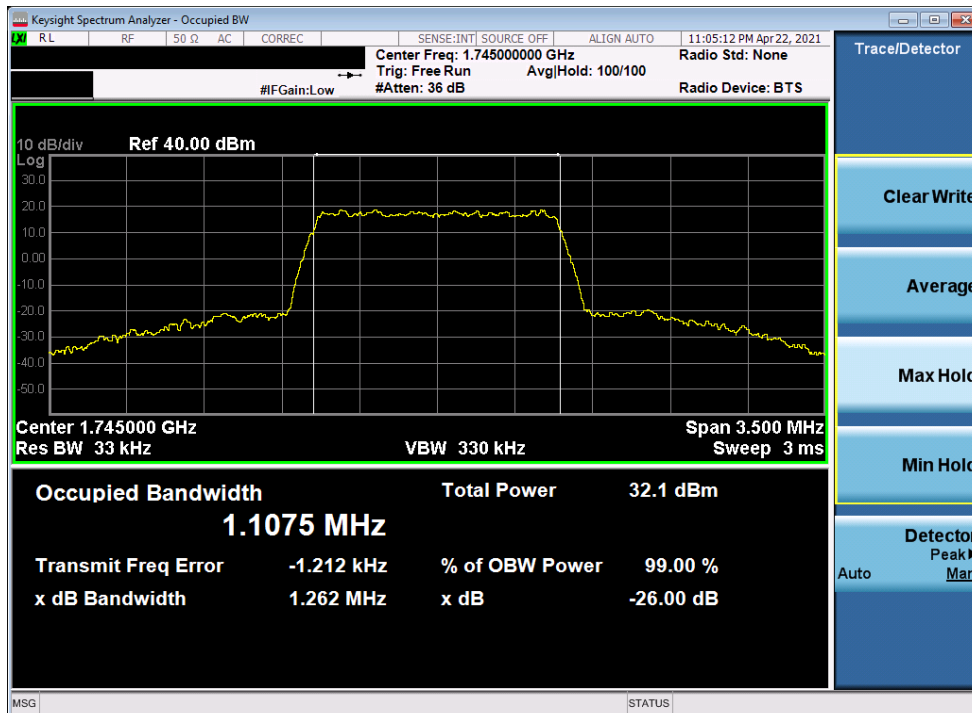
None.

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LTE Band 66/4

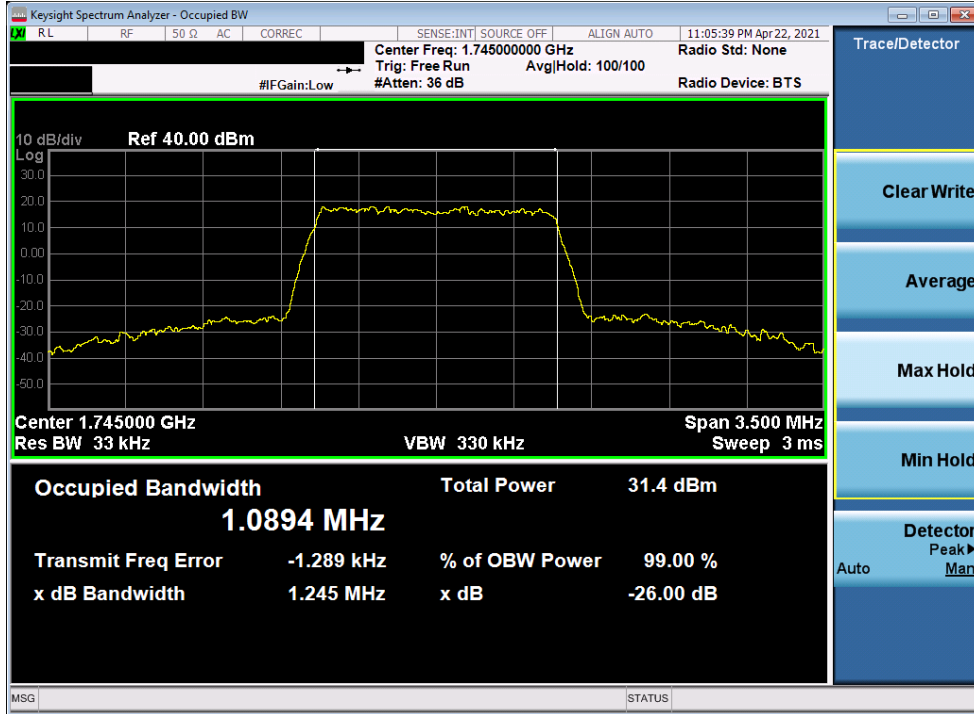


Plot 7-1. Occupied Bandwidth Plot (LTE Band 66/4 - 1.4MHz QPSK - Full RB)

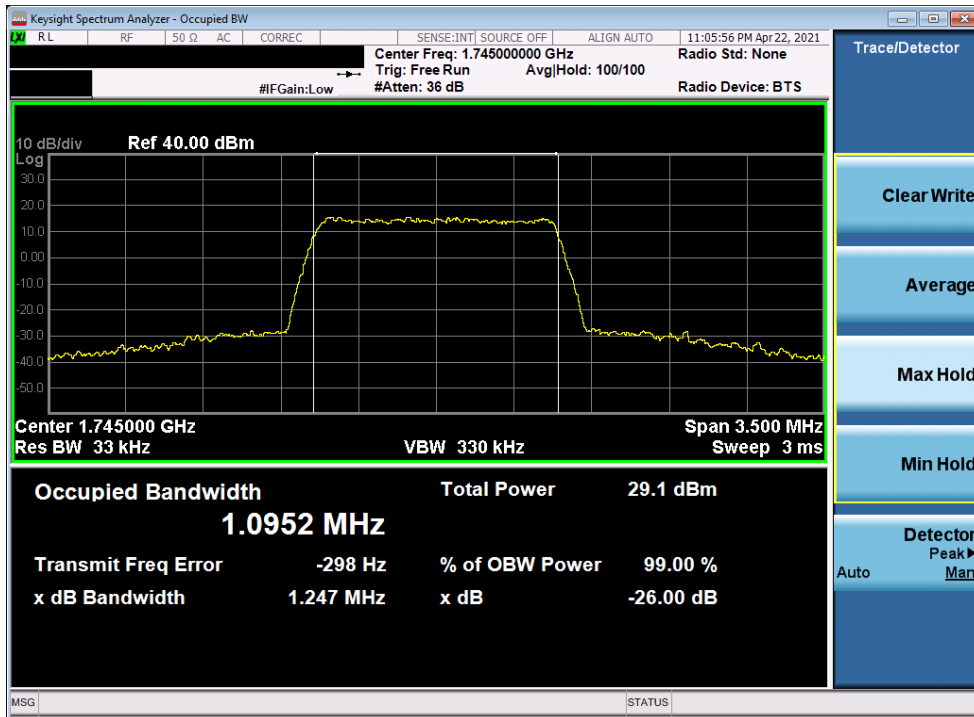


Plot 7-2. Occupied Bandwidth Plot (LTE Band 66/4 - 1.4MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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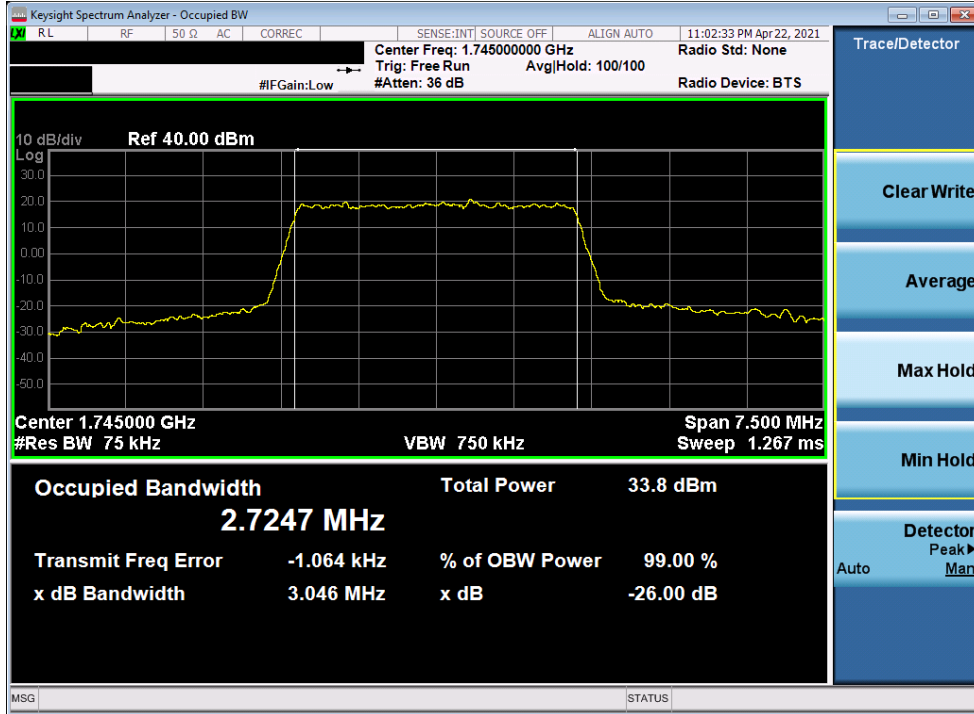


Plot 7-3. Occupied Bandwidth Plot (LTE Band 66/4 - 1.4MHz 64-QAM - Full RB)

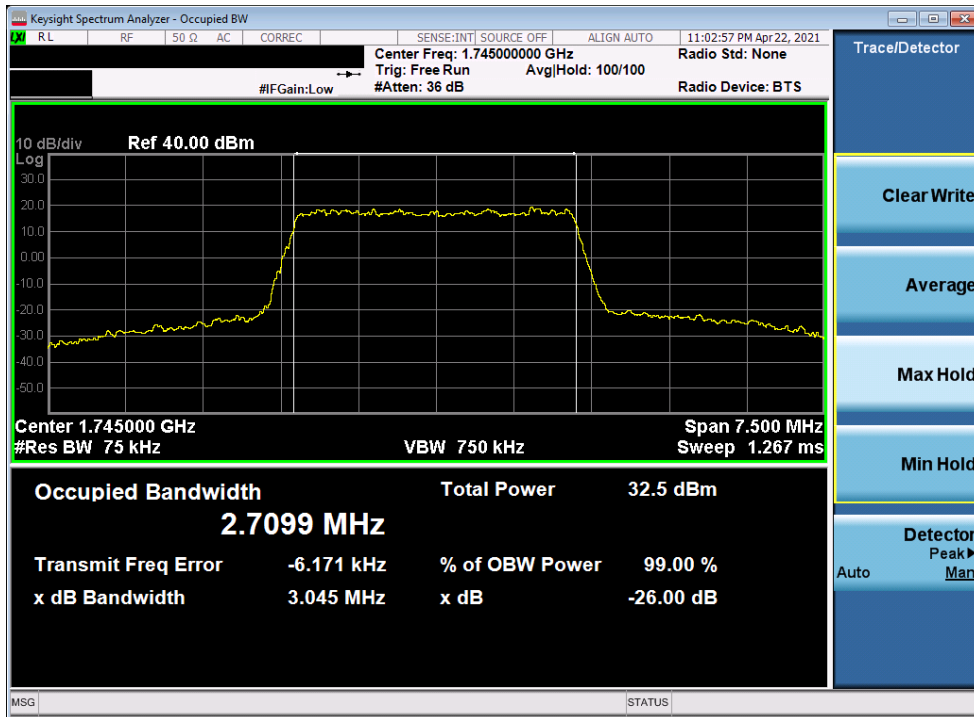


Plot 7-4. Occupied Bandwidth Plot (LTE Band 66/4 - 1.4MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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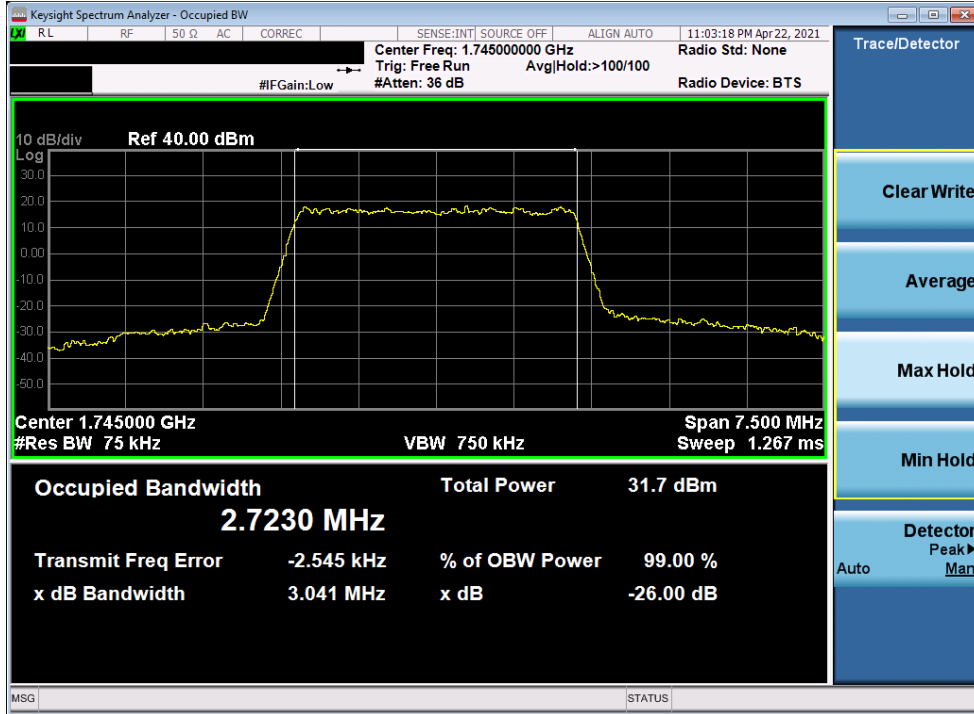


Plot 7-5. Occupied Bandwidth Plot (LTE Band 66/4 - 3MHz QPSK - Full RB)

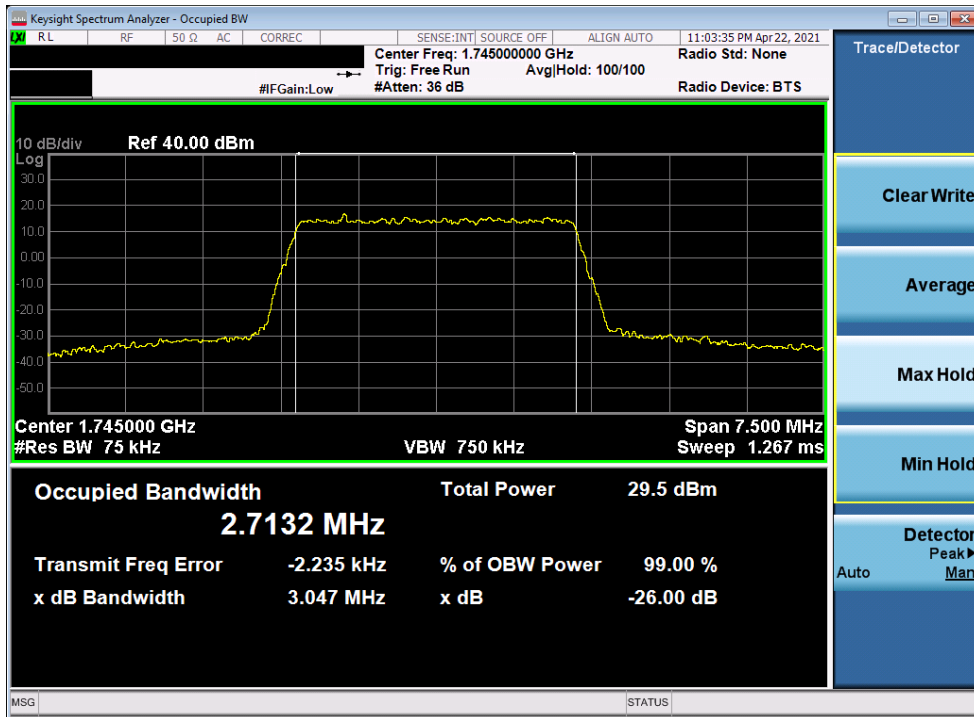


Plot 7-6. Occupied Bandwidth Plot (LTE Band 66/4 - 3MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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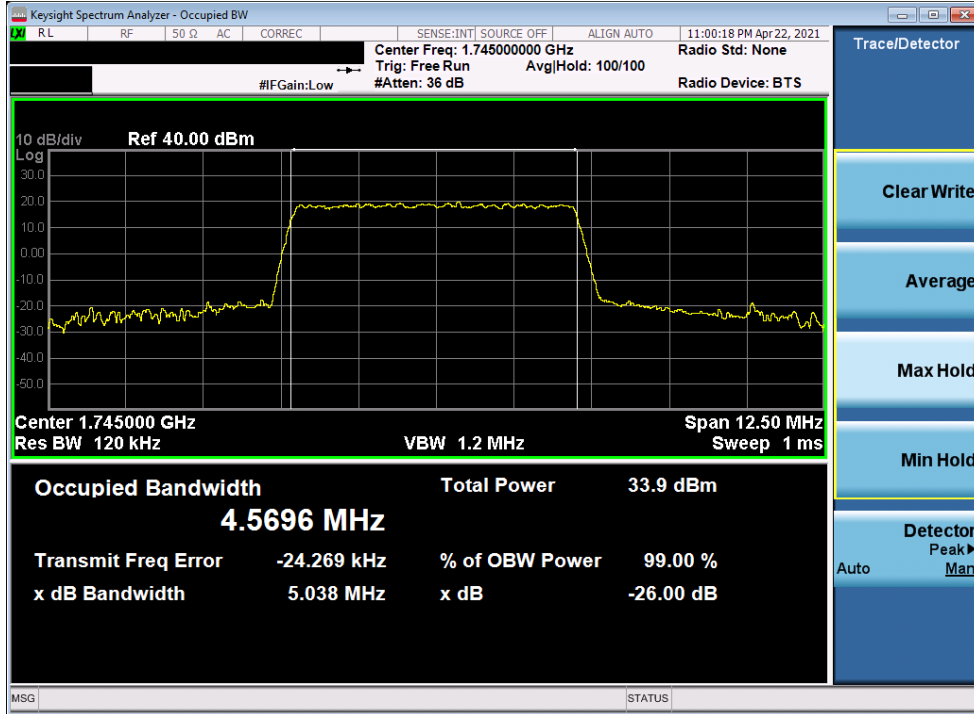


Plot 7-7. Occupied Bandwidth Plot (LTE Band 66/4 - 3MHz 64-QAM - Full RB)

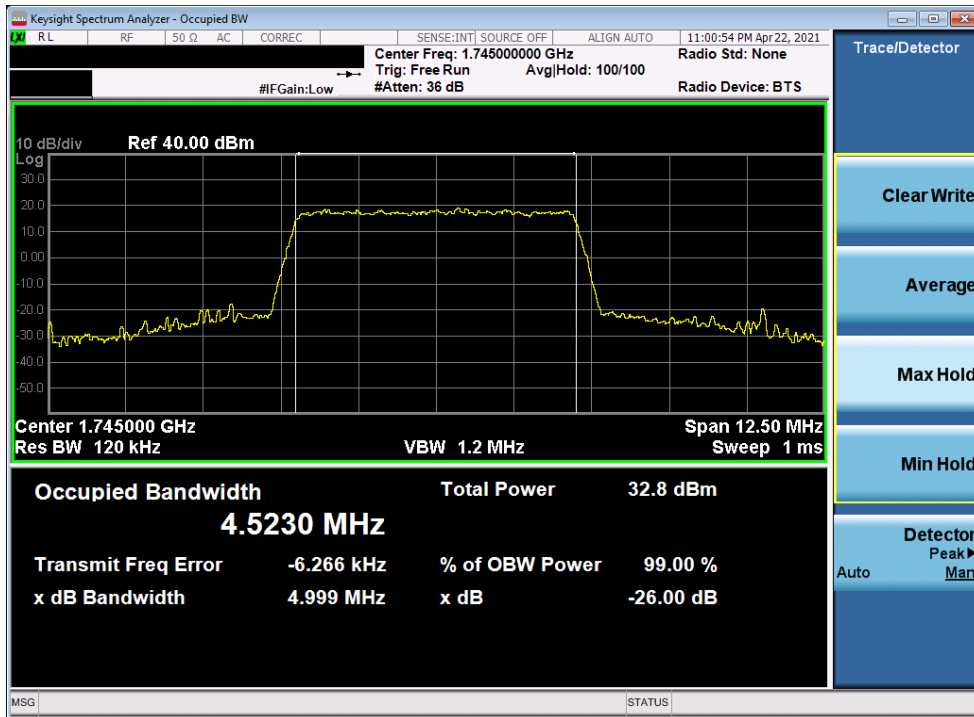


Plot 7-8. Occupied Bandwidth Plot (LTE Band 66/4 - 3MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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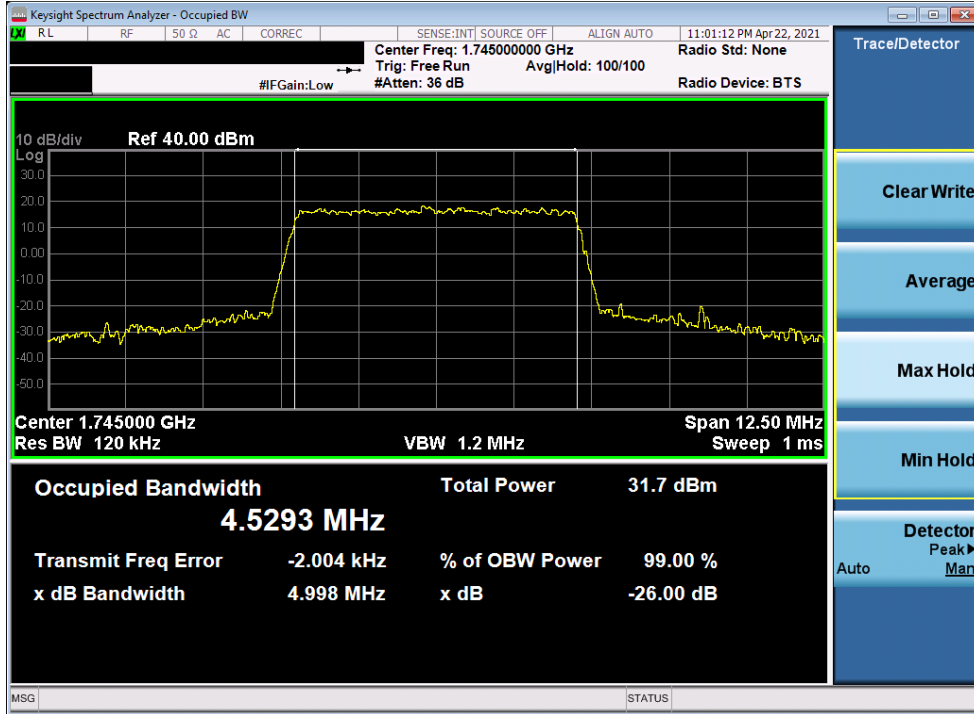


Plot 7-9. Occupied Bandwidth Plot (LTE Band 66/4 - 5MHz QPSK - Full RB)

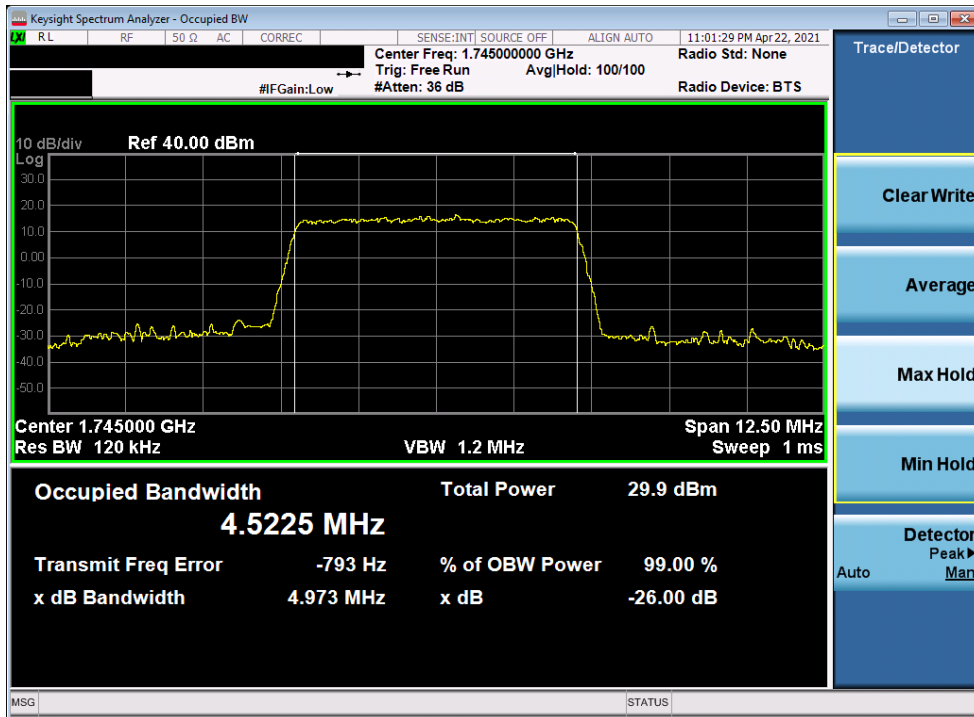


Plot 7-10. Occupied Bandwidth Plot (LTE Band 66/4 - 5MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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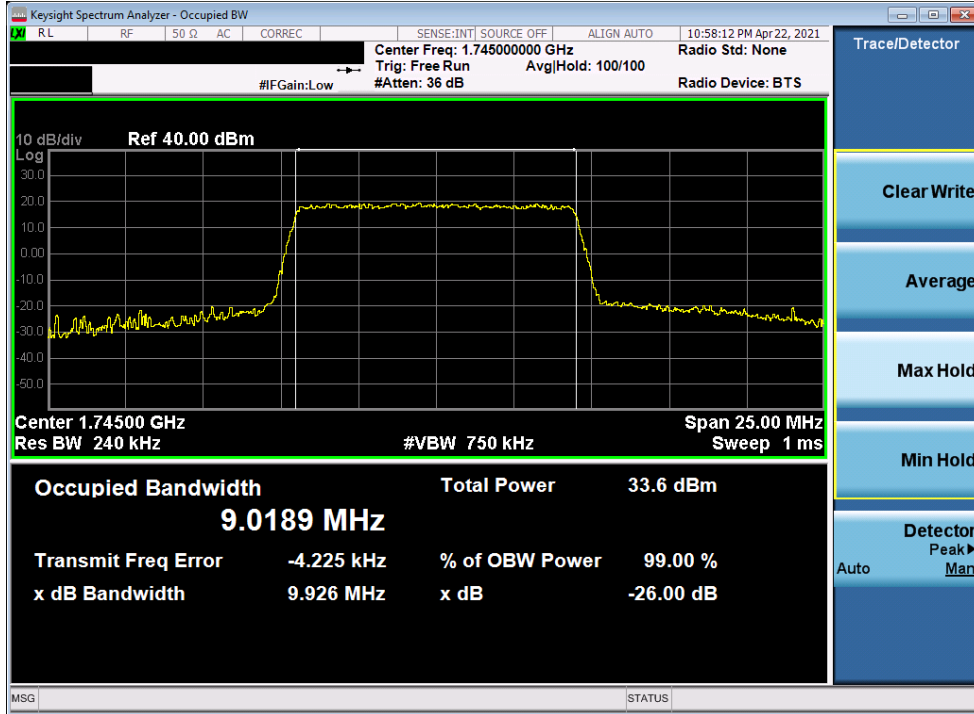


Plot 7-11. Occupied Bandwidth Plot (LTE Band 66/4 - 5MHz 64-QAM - Full RB)

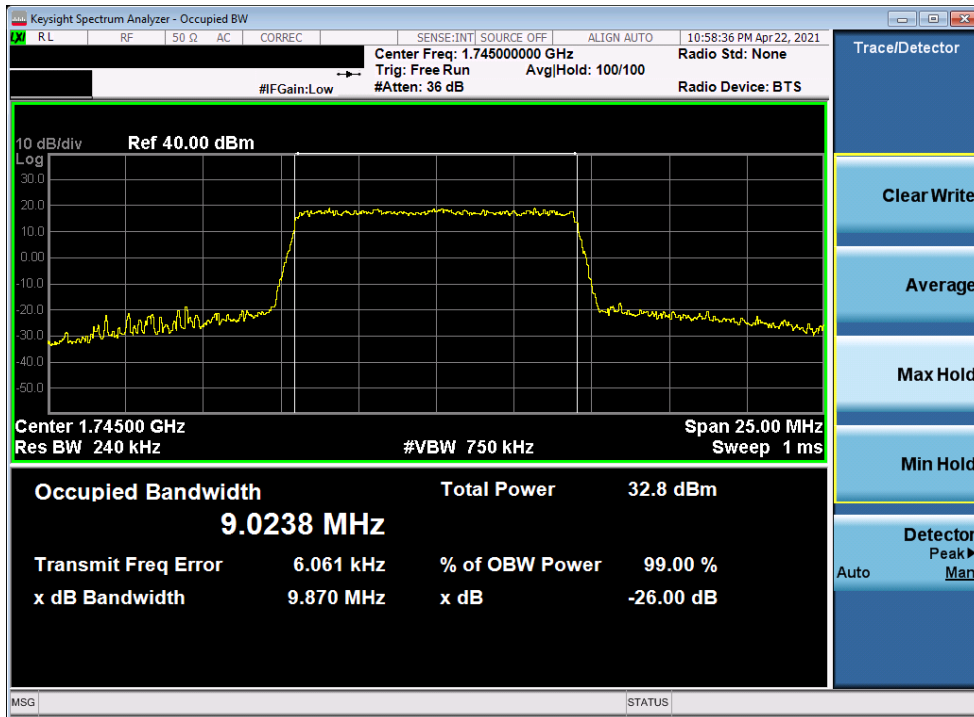


Plot 7-12. Occupied Bandwidth Plot (LTE Band 66/4 - 5MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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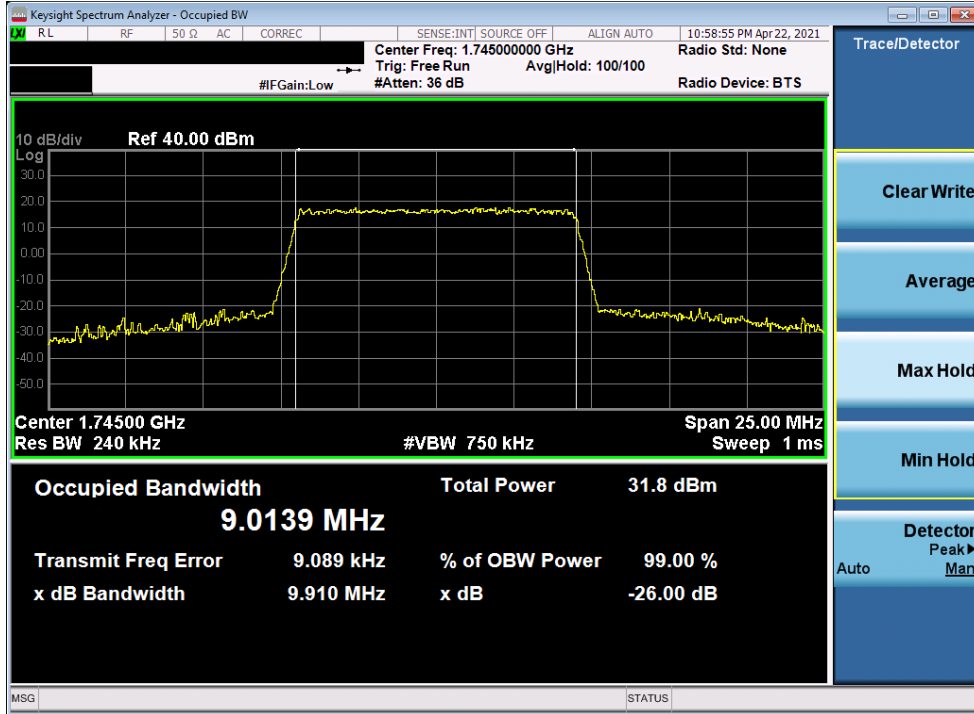


Plot 7-13. Occupied Bandwidth Plot (LTE Band 66/4 - 10MHz QPSK - Full RB)

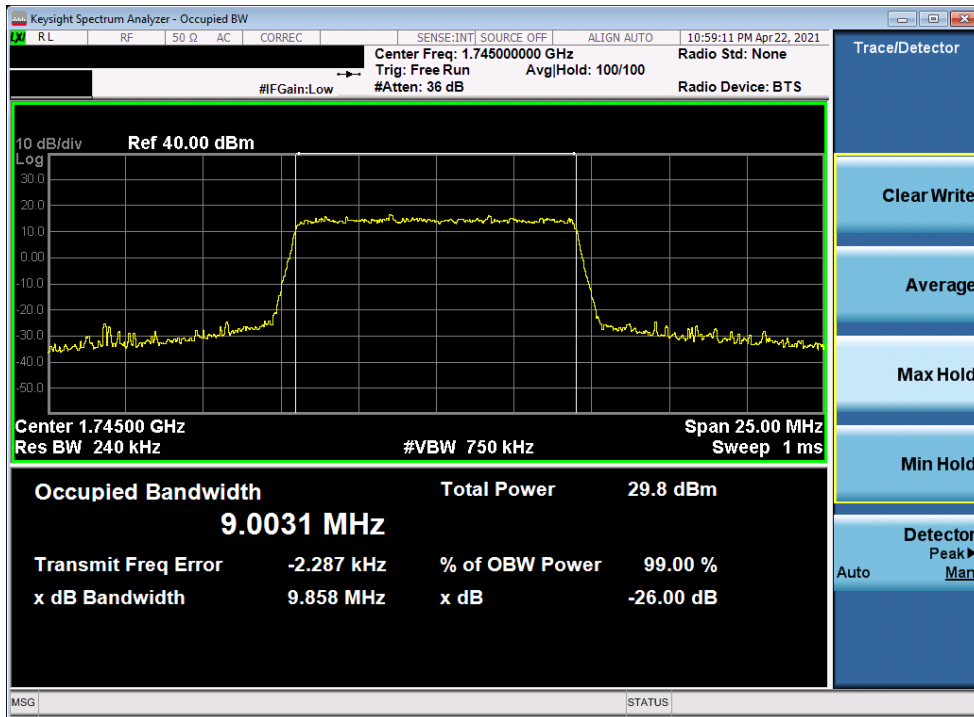


Plot 7-14. Occupied Bandwidth Plot (LTE Band 66/4 - 10MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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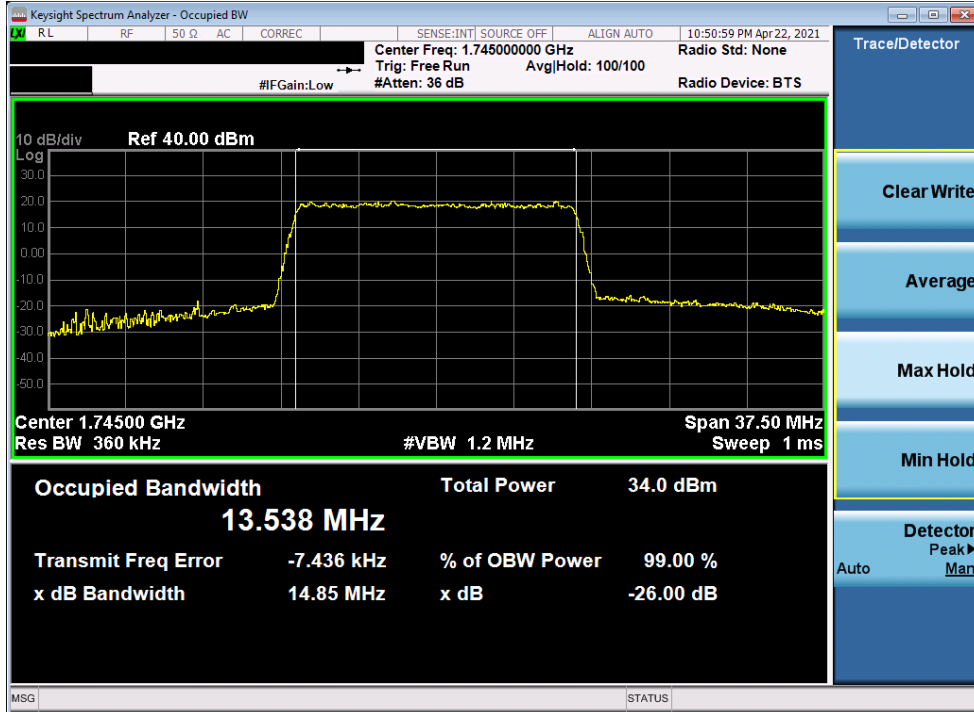


Plot 7-15. Occupied Bandwidth Plot (LTE Band 66/4 - 10MHz 64-QAM - Full RB)

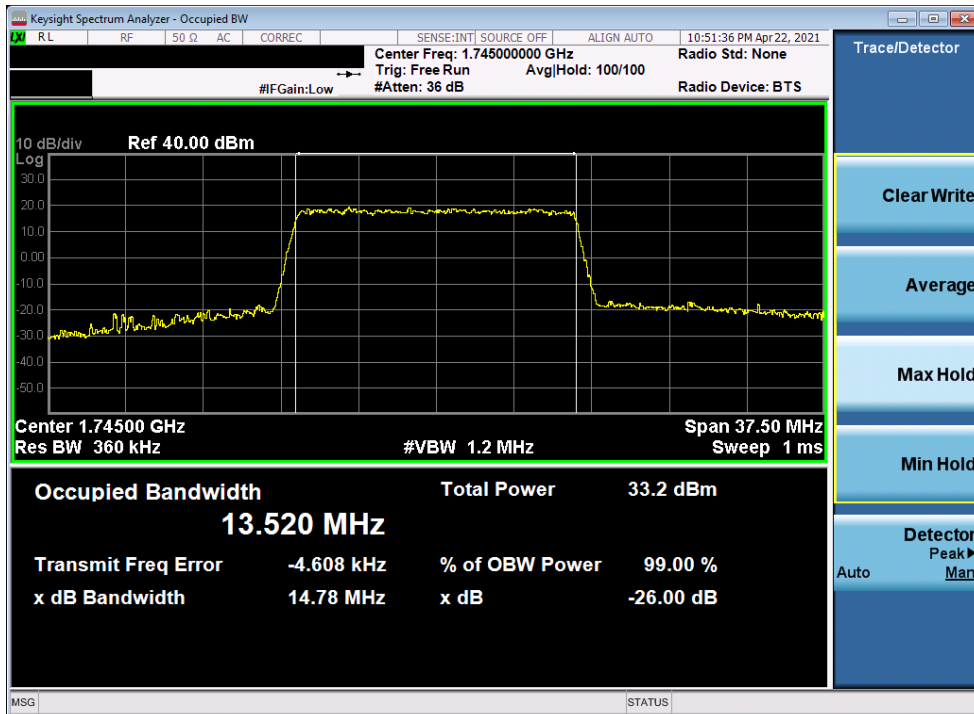


Plot 7-16. Occupied Bandwidth Plot (LTE Band 66/4 - 10MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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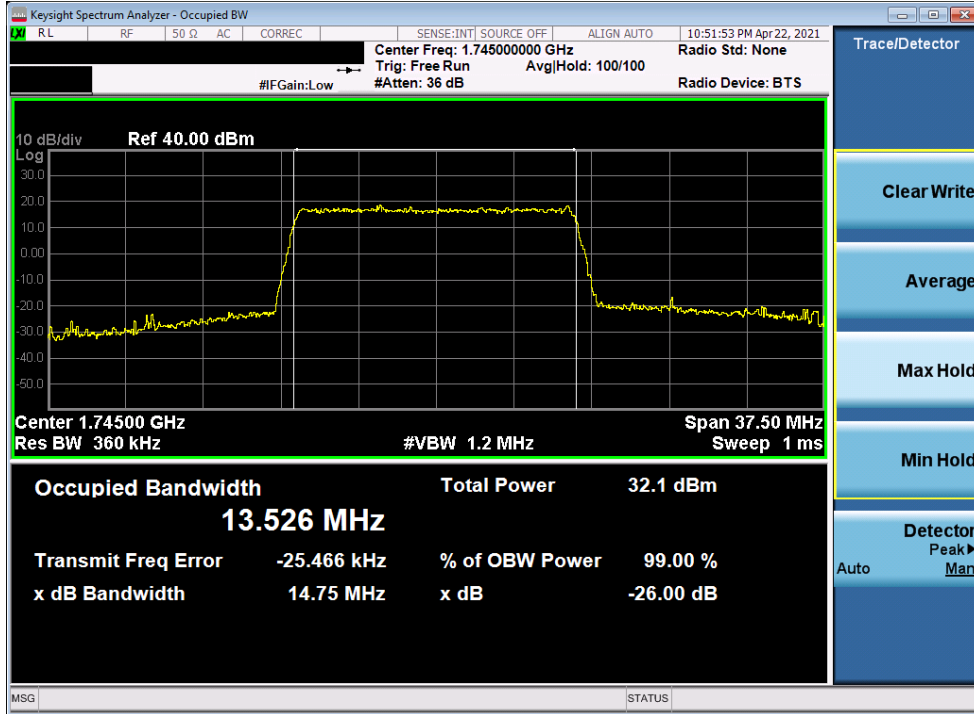


Plot 7-17. Occupied Bandwidth Plot (LTE Band 66/4 - 15MHz QPSK - Full RB)

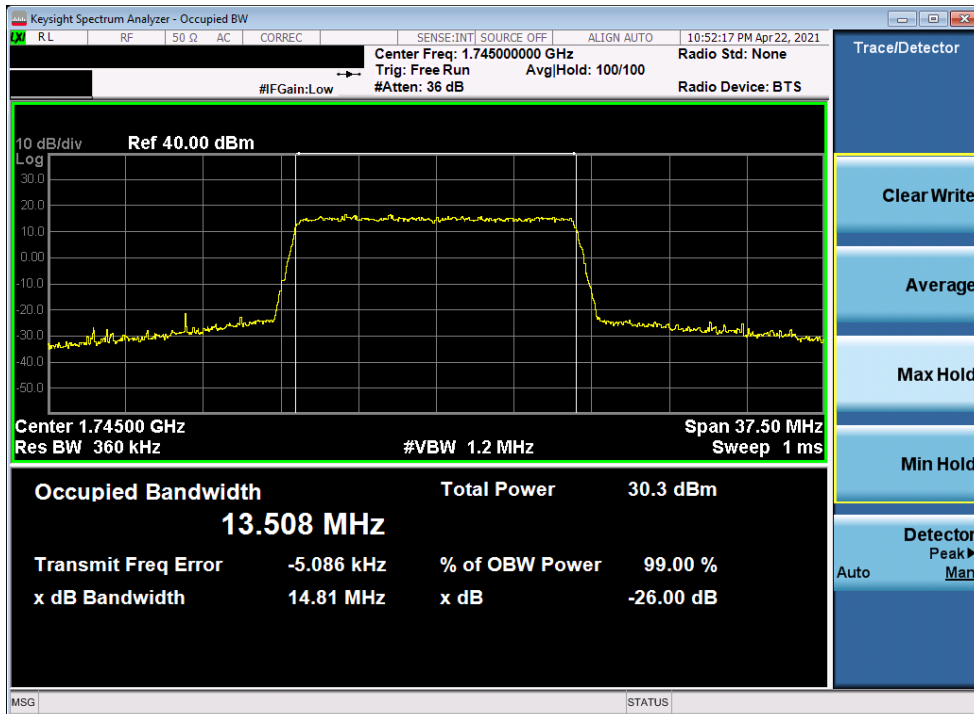


Plot 7-18. Occupied Bandwidth Plot (LTE Band 66/4 - 15MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
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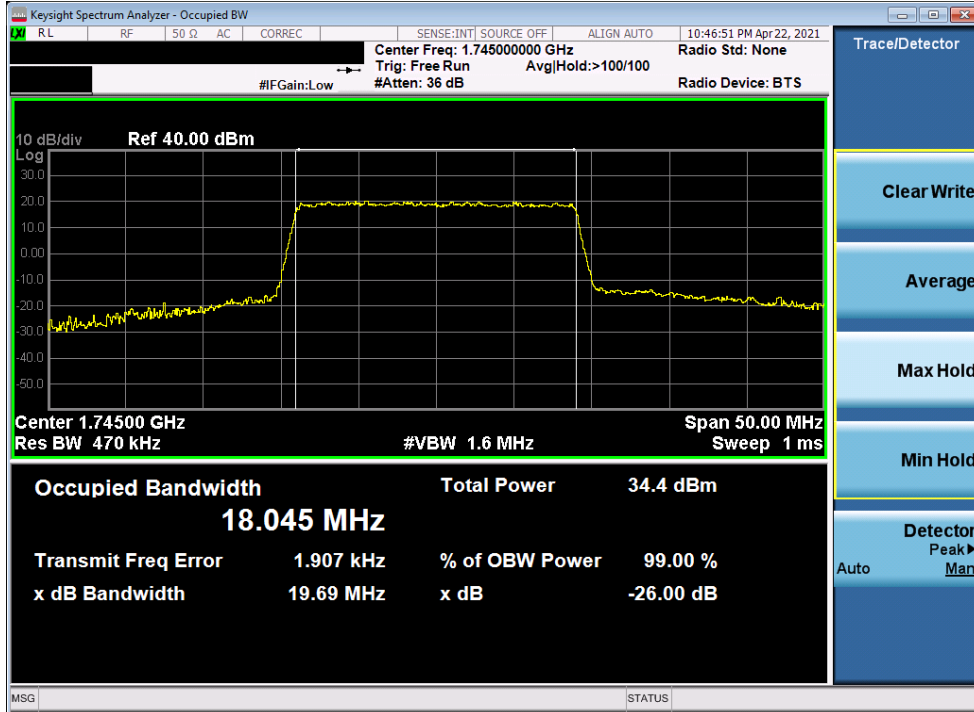


Plot 7-19. Occupied Bandwidth Plot (LTE Band 66/4 - 15MHz 64-QAM - Full RB)

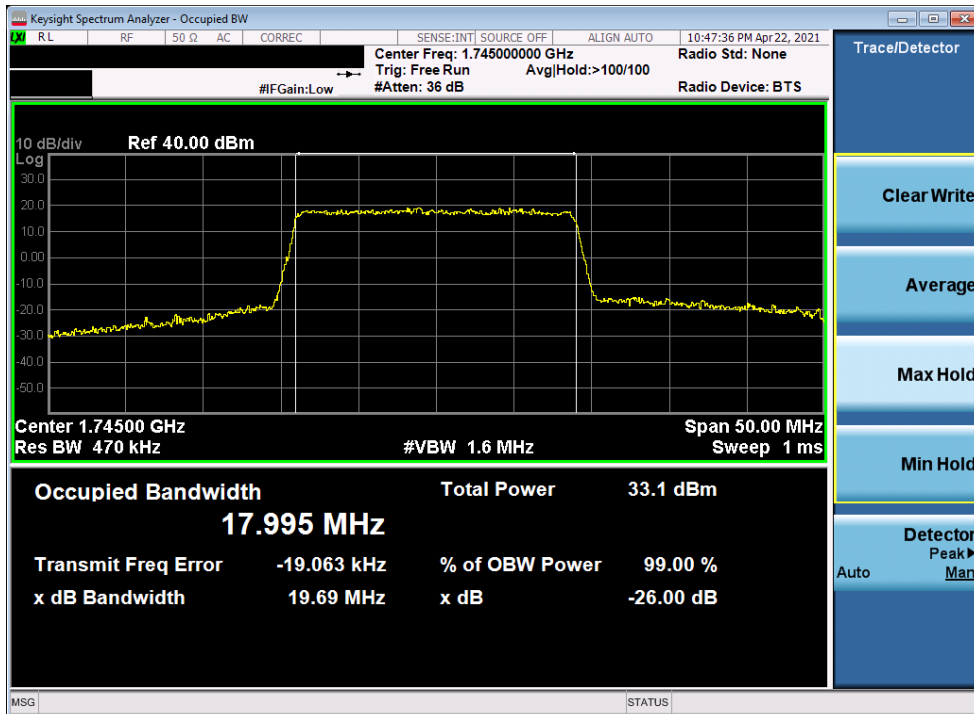


Plot 7-20. Occupied Bandwidth Plot (LTE Band 66/4 - 15MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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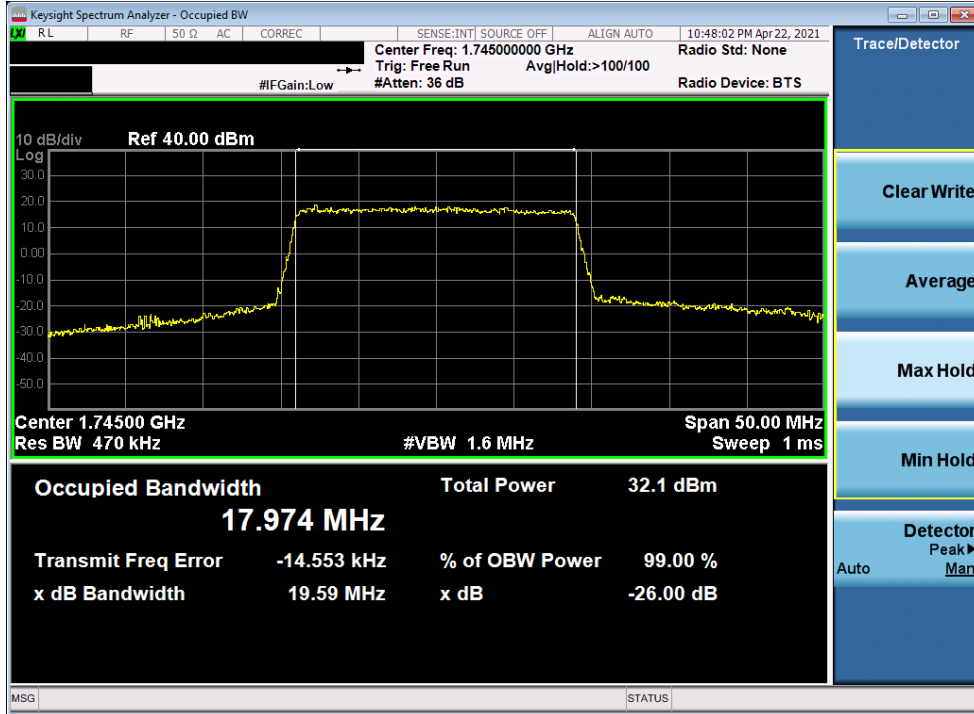


Plot 7-21. Occupied Bandwidth Plot (LTE Band 66/4 - 20MHz QPSK - Full RB)

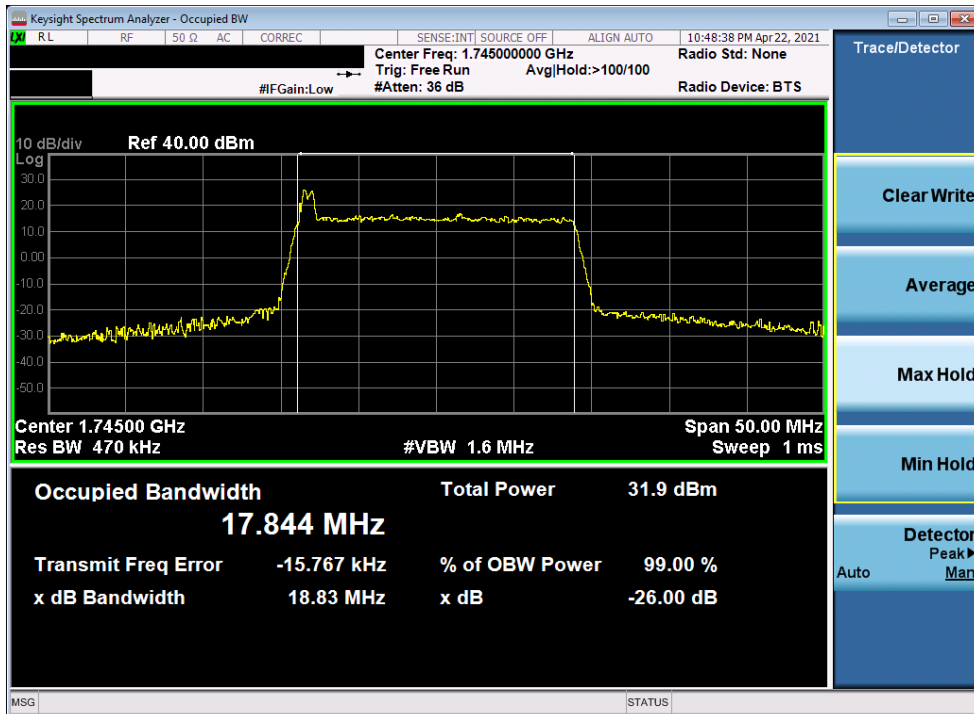


Plot 7-22. Occupied Bandwidth Plot (LTE Band 66/4 - 20MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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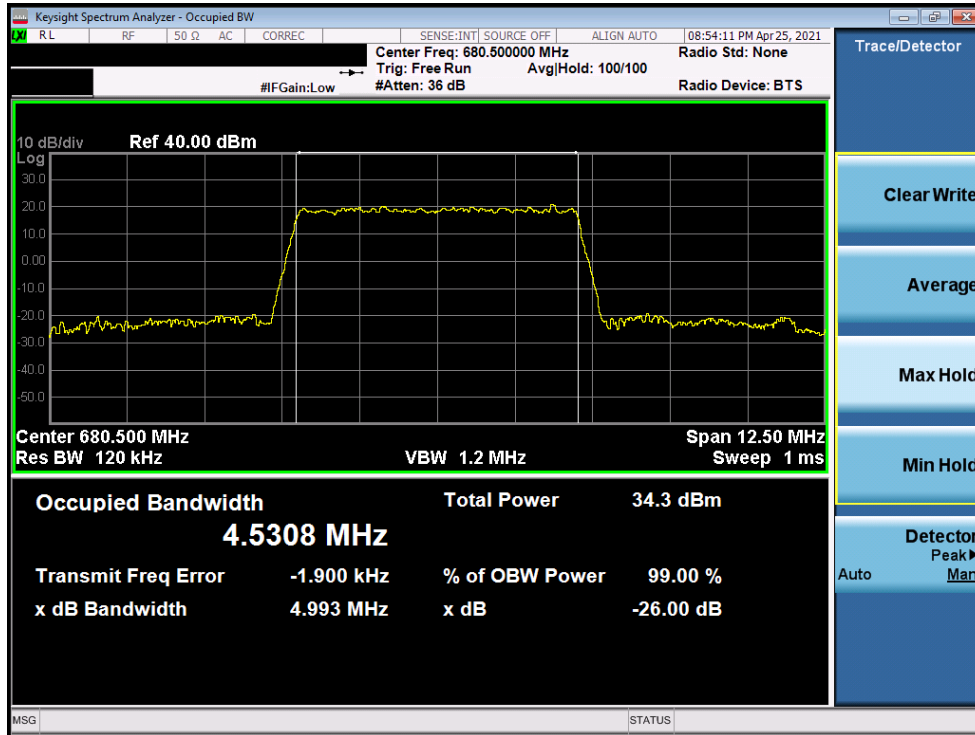
Plot 7-23. Occupied Bandwidth Plot (LTE Band 66/4 - 20MHz 64-QAM - Full RB)



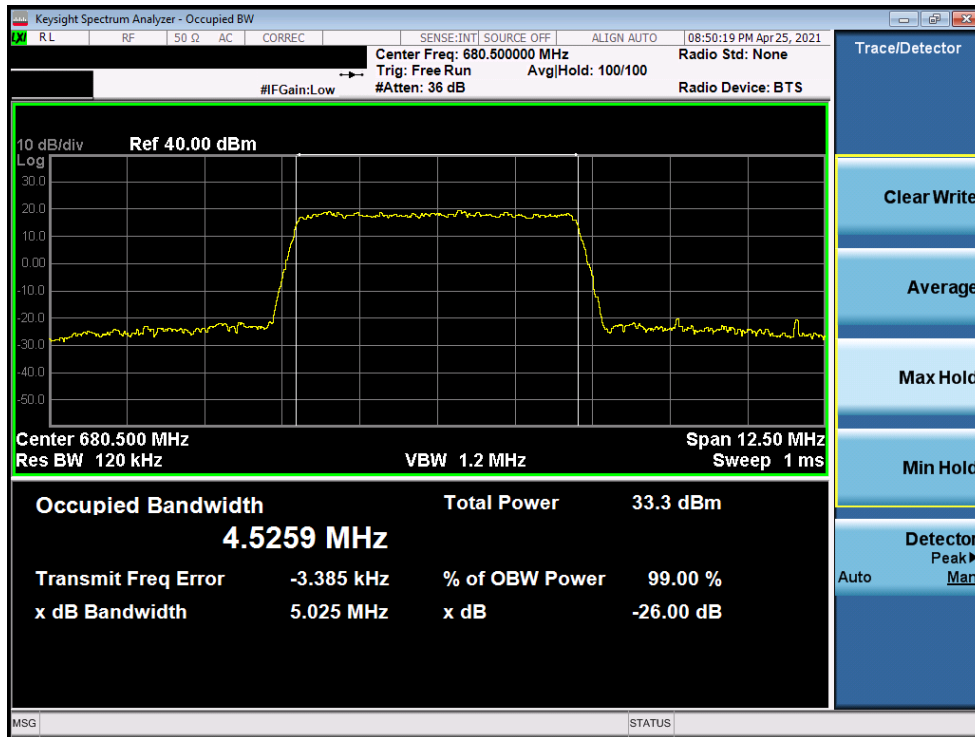
Plot 7-24. Occupied Bandwidth Plot (LTE Band 66/4 - 20MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
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LTE Band 71

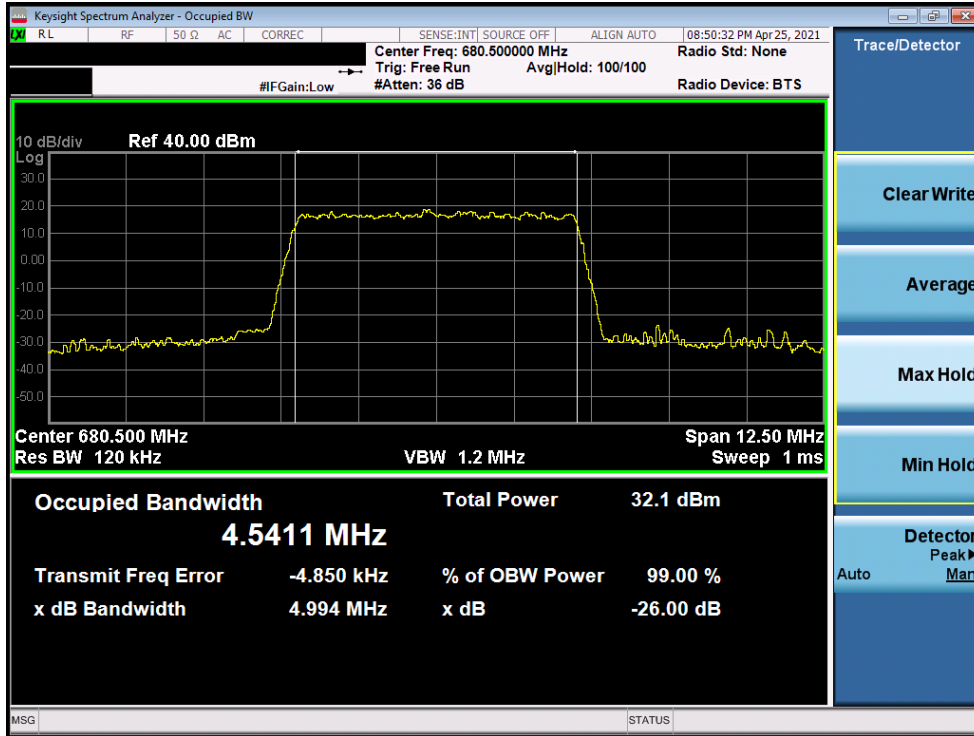


Plot 7-25. Occupied Bandwidth Plot (LTE Band 71 - 5MHz QPSK - Full RB)

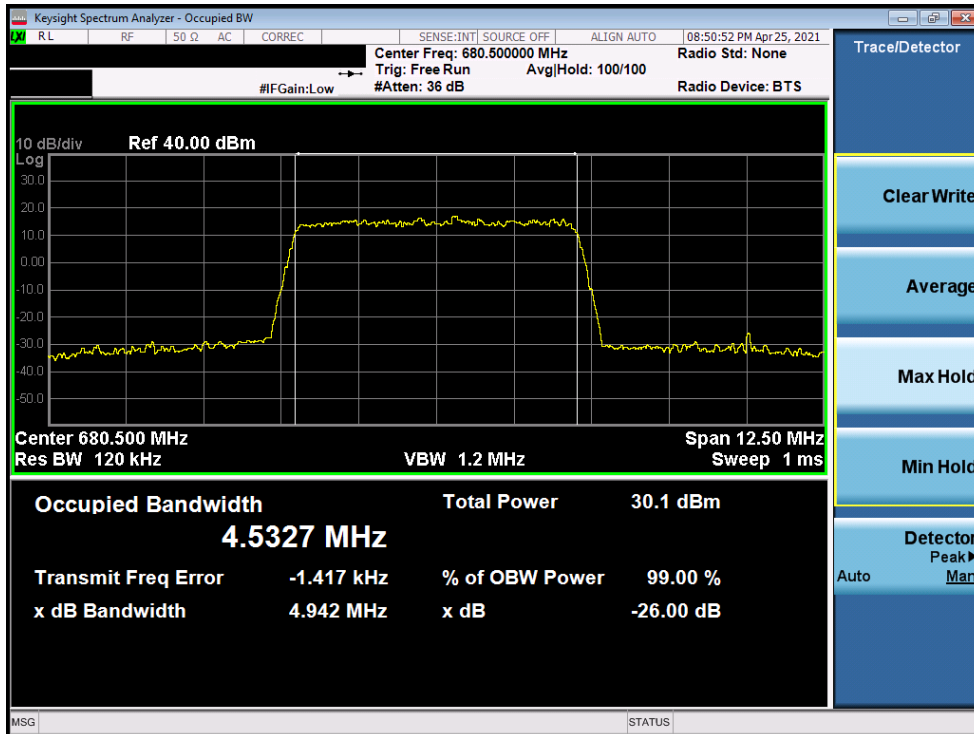


Plot 7-26. Occupied Bandwidth Plot (LTE Band 71 - 5MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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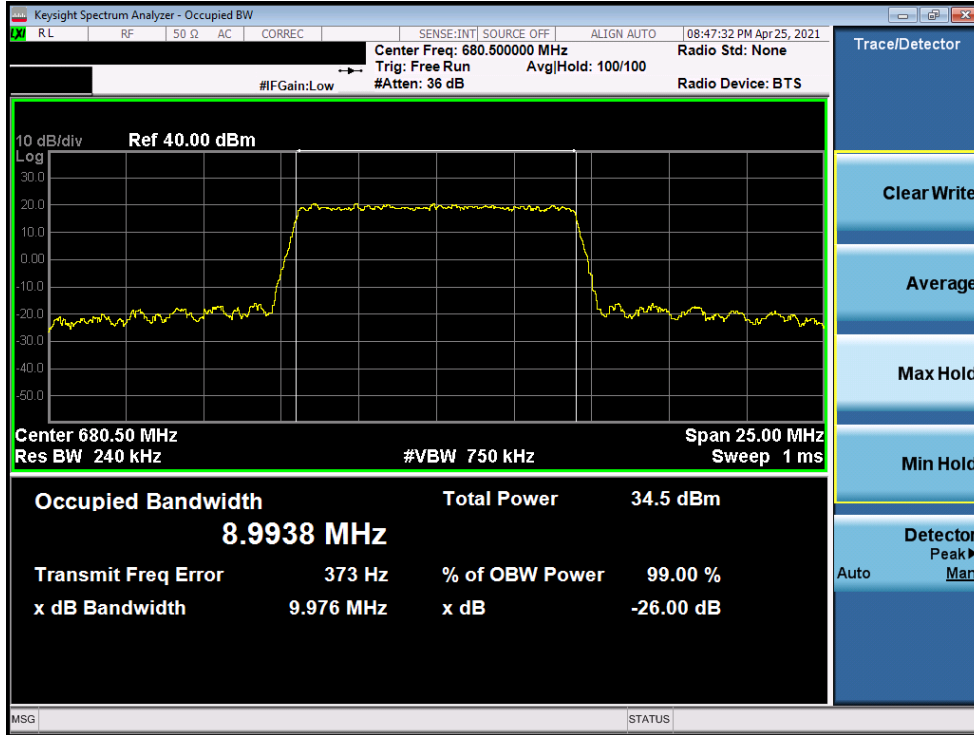


Plot 7-27. Occupied Bandwidth Plot (LTE Band 71 - 5MHz 64-QAM - Full RB)

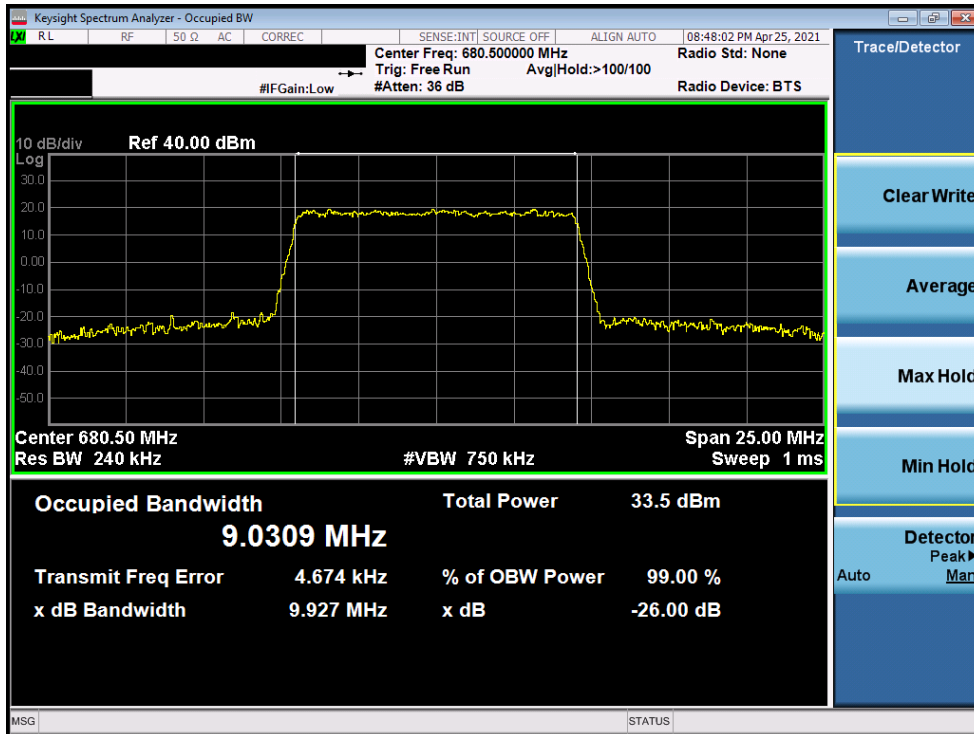


Plot 7-28. Occupied Bandwidth Plot (LTE Band 71 - 5MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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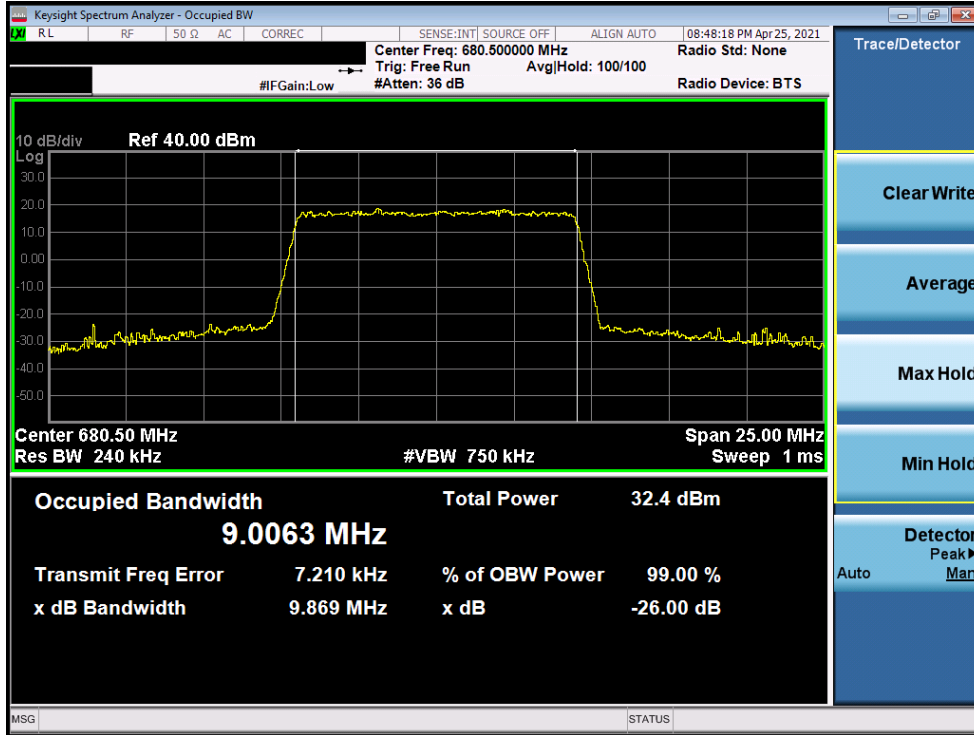


Plot 7-29. Occupied Bandwidth Plot (LTE Band 71 - 10MHz QPSK - Full RB)

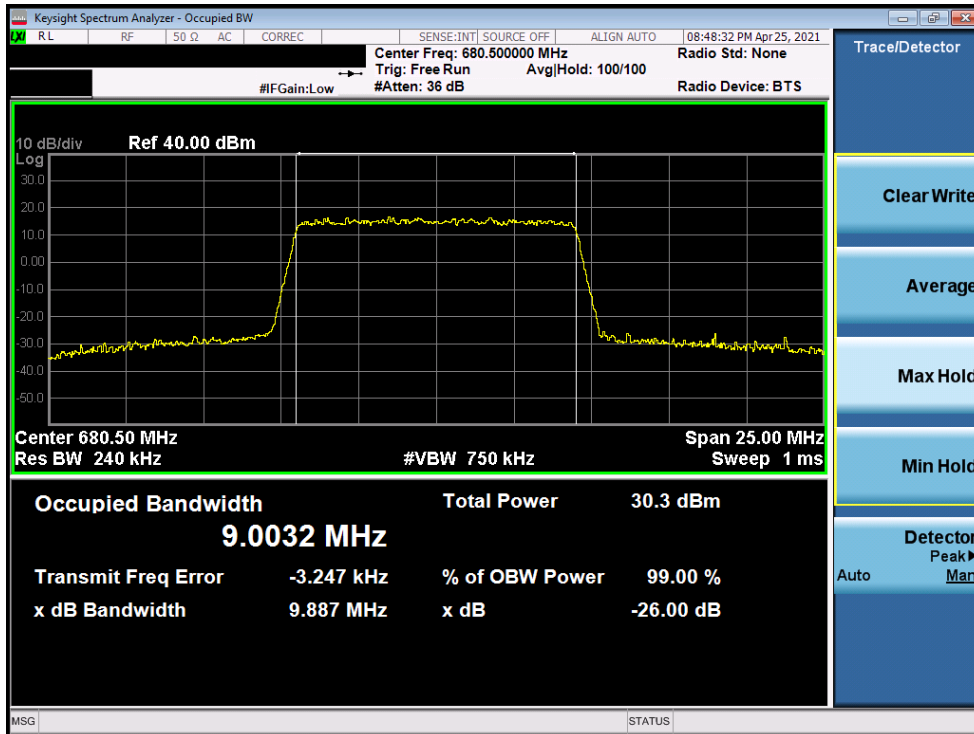


Plot 7-30. Occupied Bandwidth Plot (LTE Band 71 - 10MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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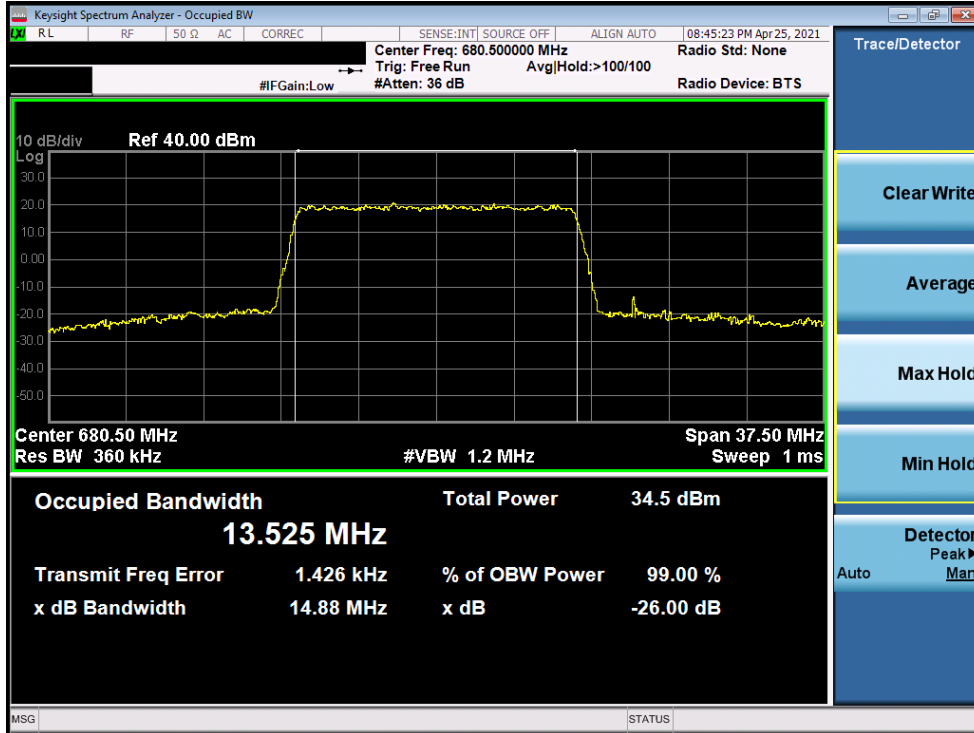


Plot 7-31. Occupied Bandwidth Plot (LTE Band 71 - 10MHz 64-QAM - Full RB)

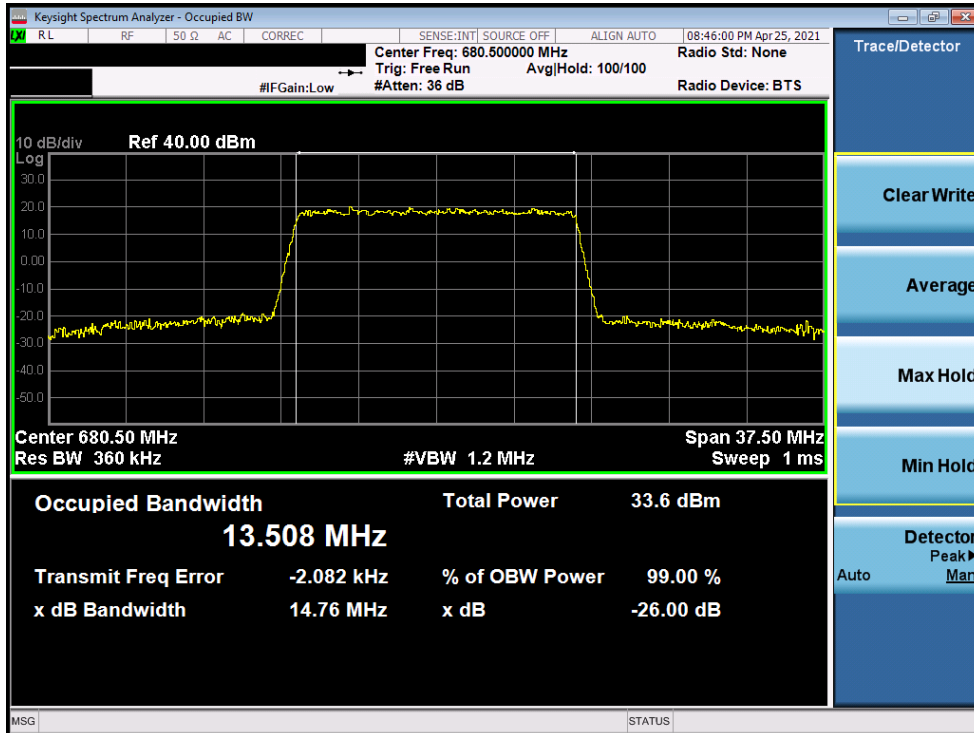


Plot 7-32. Occupied Bandwidth Plot (LTE Band 71 - 10MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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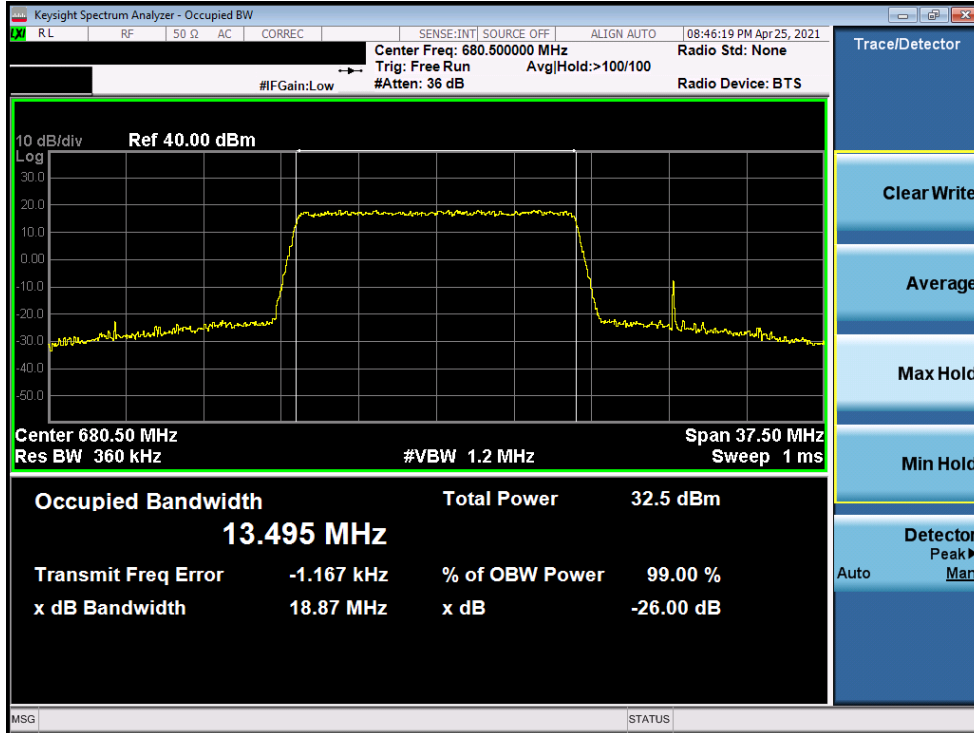


Plot 7-33. Occupied Bandwidth Plot (LTE Band 71 - 15MHz QPSK - Full RB)

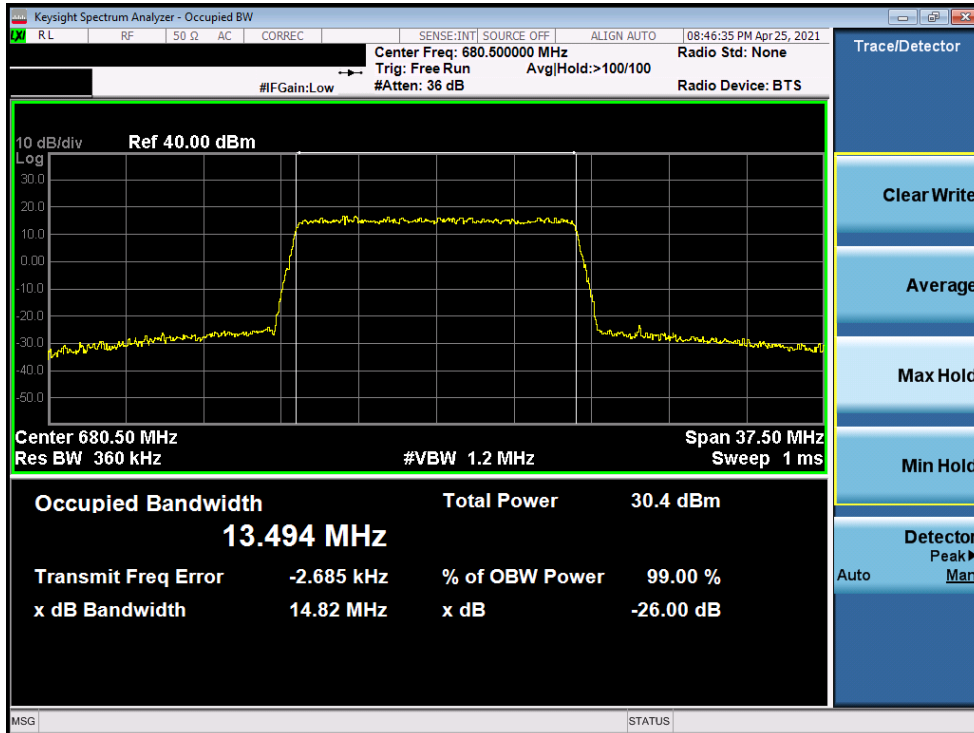


Plot 7-34. Occupied Bandwidth Plot (LTE Band 71 - 15MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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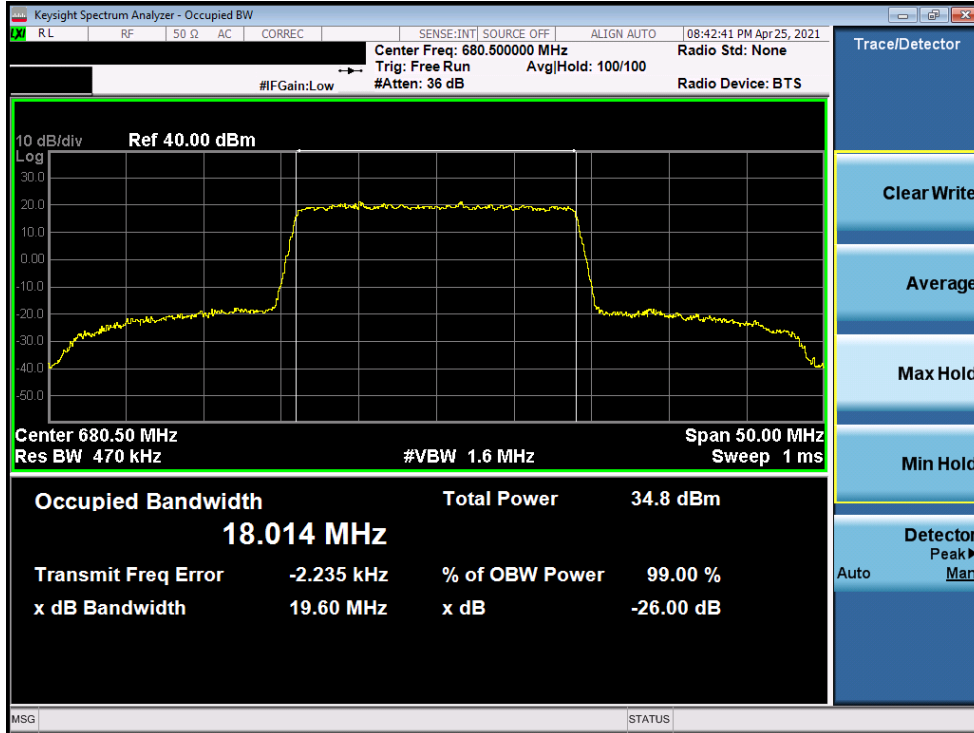


Plot 7-35. Occupied Bandwidth Plot (LTE Band 71 - 15MHz 64-QAM - Full RB)

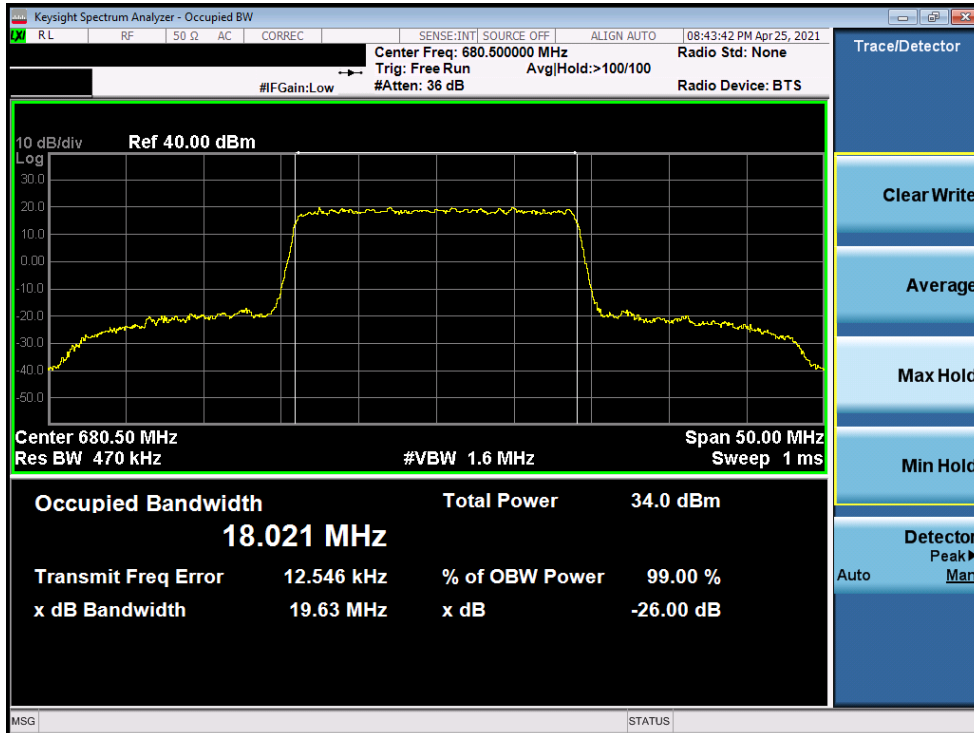


Plot 7-36. Occupied Bandwidth Plot (LTE Band 71 - 15MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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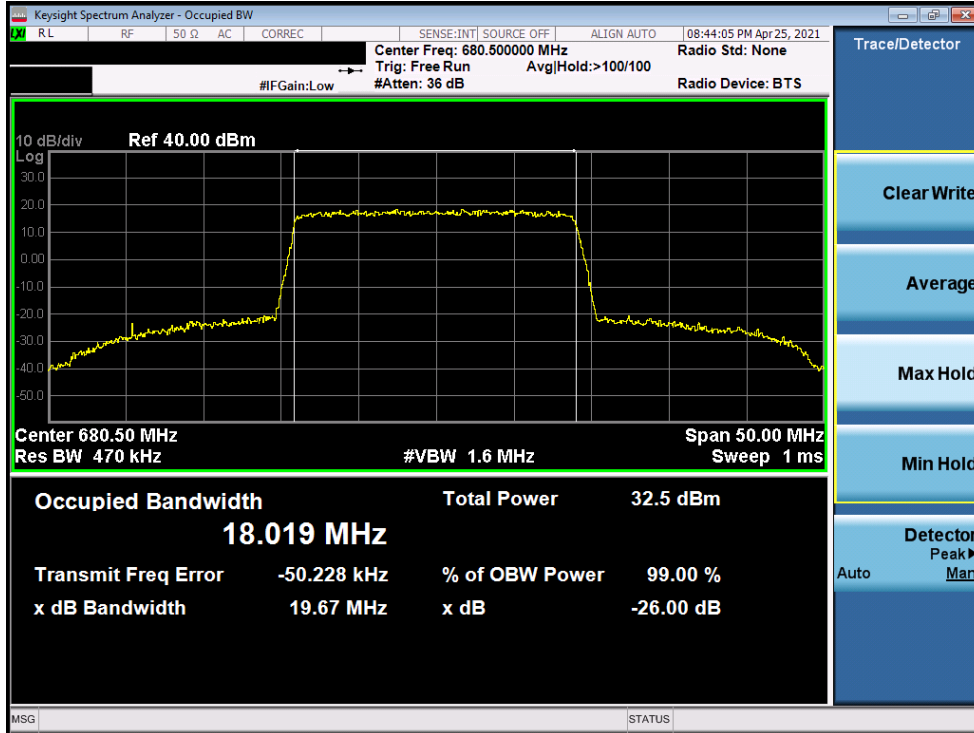


Plot 7-37. Occupied Bandwidth Plot (LTE Band 71 - 20MHz QPSK - Full RB)

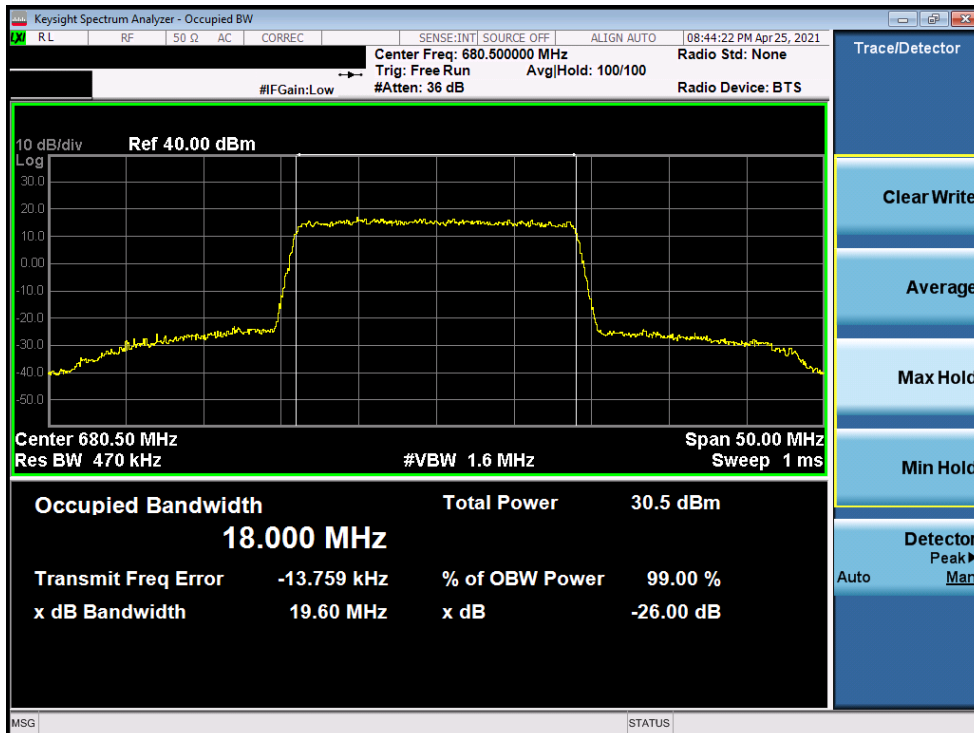


Plot 7-38. Occupied Bandwidth Plot (LTE Band 71 - 20MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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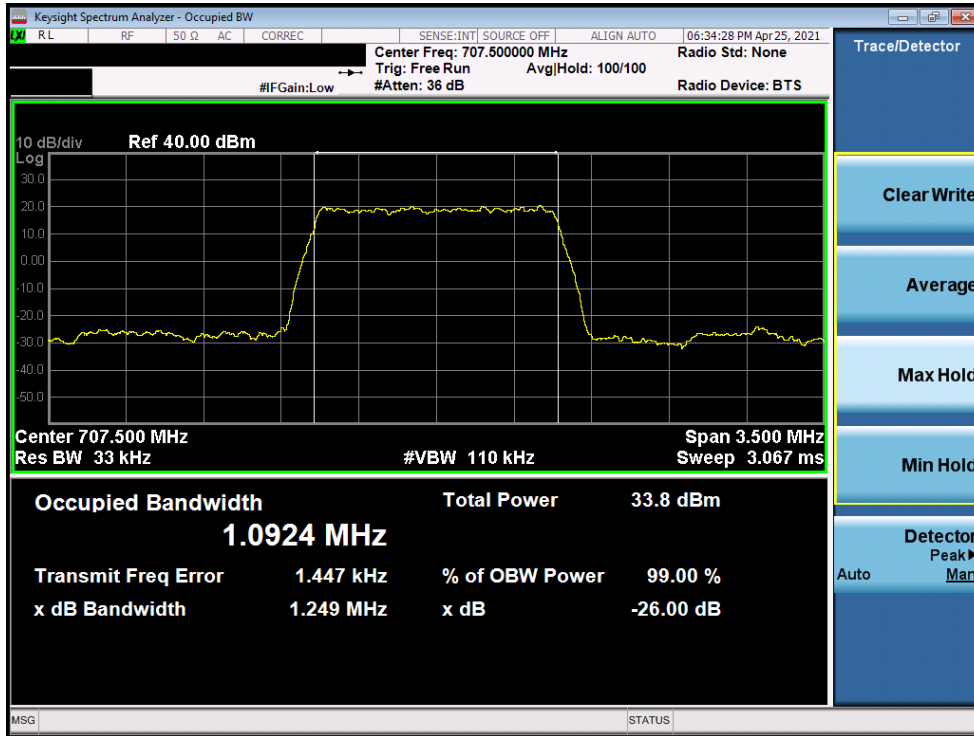
Plot 7-39. Occupied Bandwidth Plot (LTE Band 71 - 20MHz 64-QAM - Full RB)



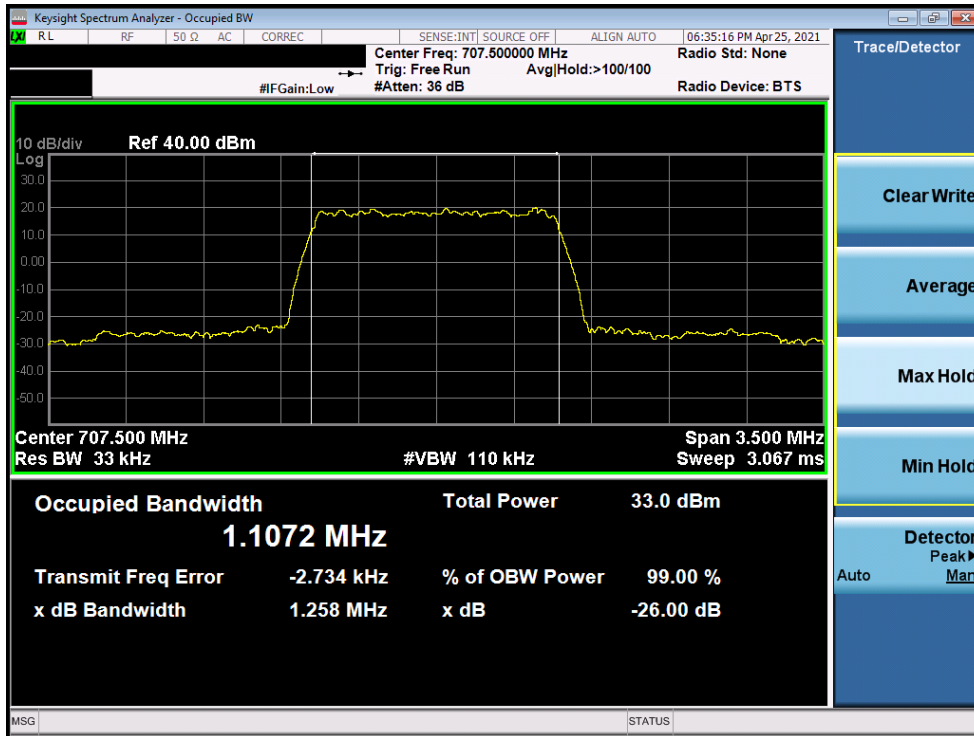
Plot 7-40. Occupied Bandwidth Plot (LTE Band 71 - 20MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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LTE Band 12/17

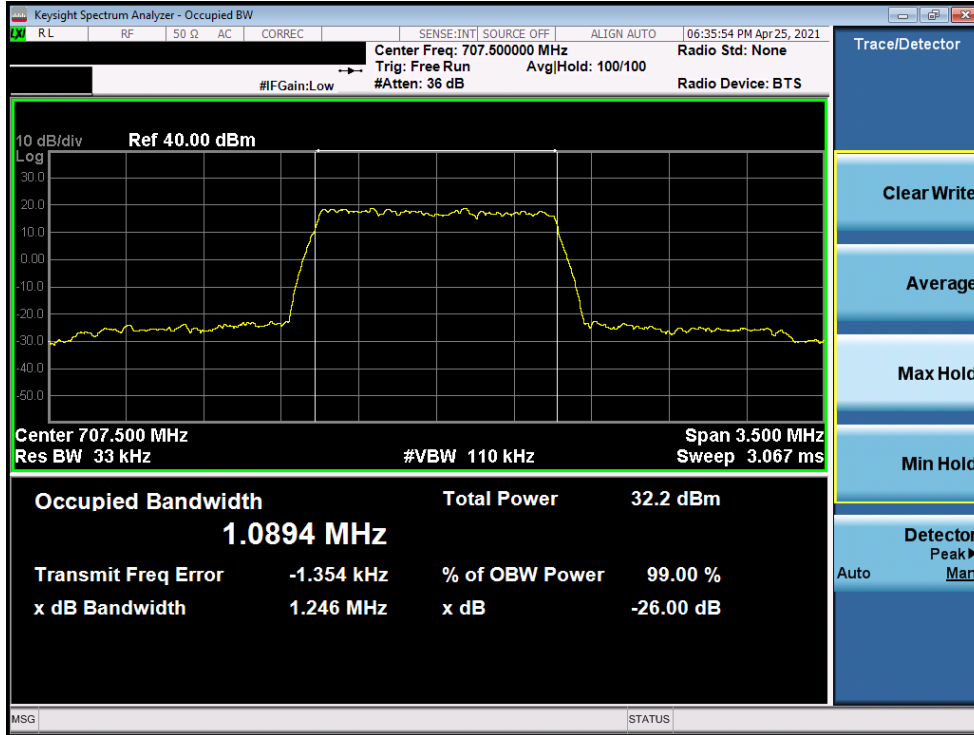


Plot 7-41. Occupied Bandwidth Plot (LTE Band 12 – 1.4MHz QPSK - Full RB)

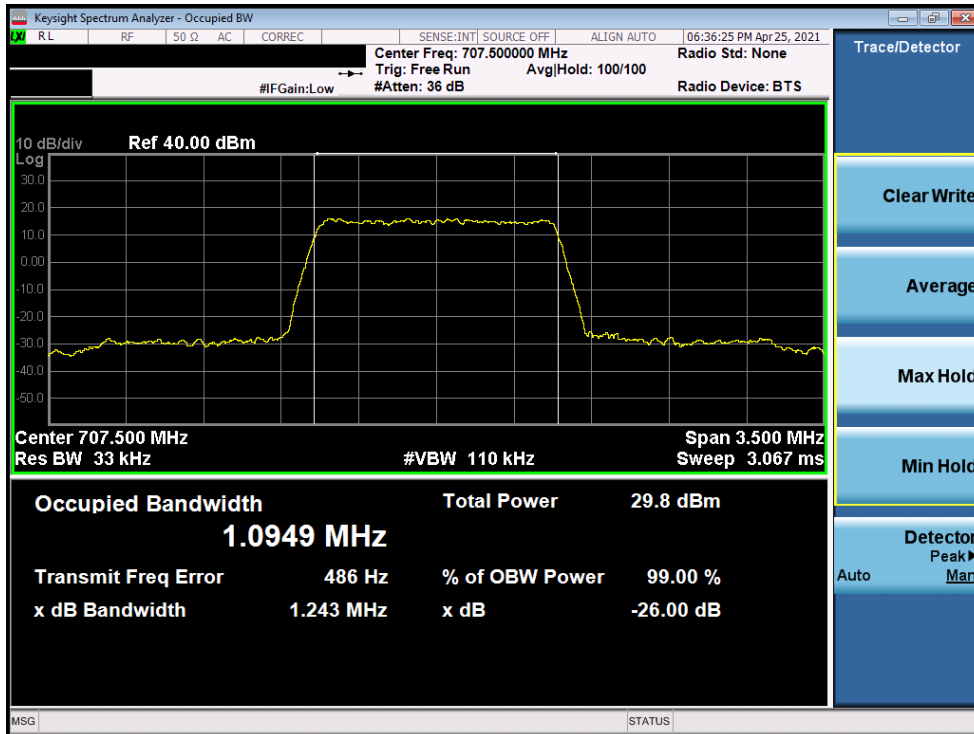


Plot 7-42. Occupied Bandwidth Plot (LTE Band 12 – 1.4MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device	Page 36 of 301

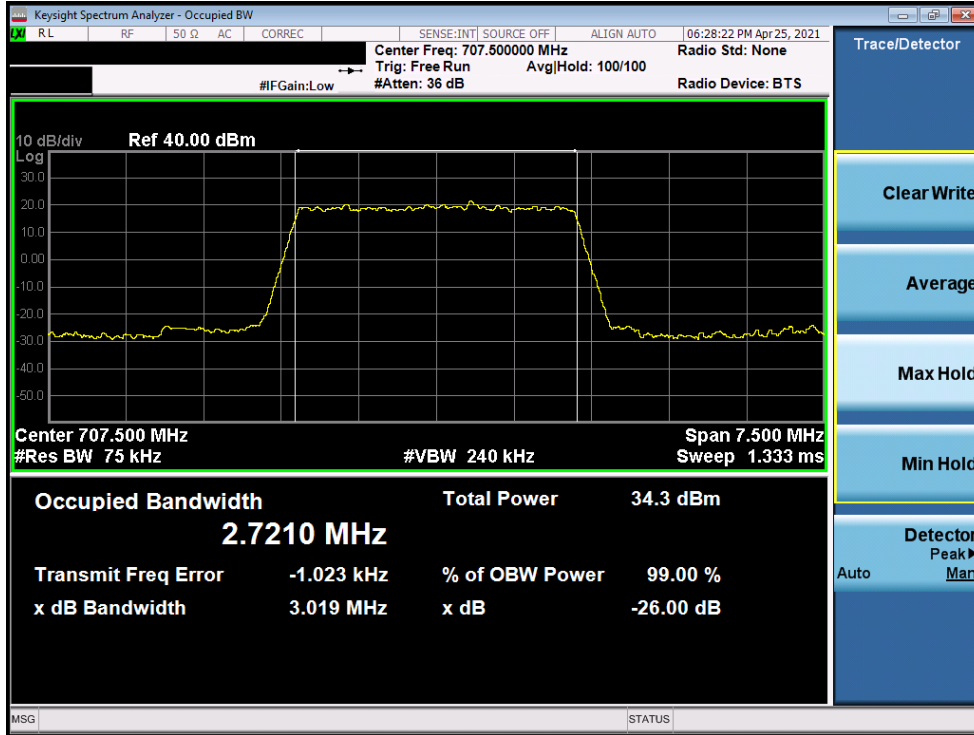


Plot 7-43. Occupied Bandwidth Plot (LTE Band 12 – 1.4MHz 64-QAM - Full RB)

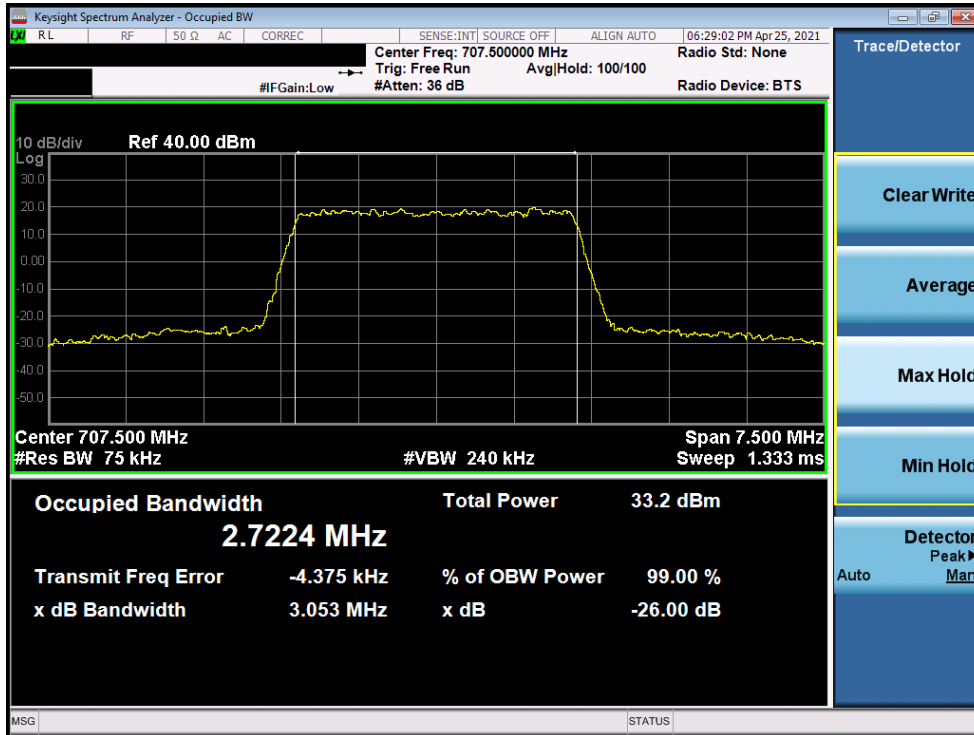


Plot 7-44. Occupied Bandwidth Plot (LTE Band 12 – 1.4MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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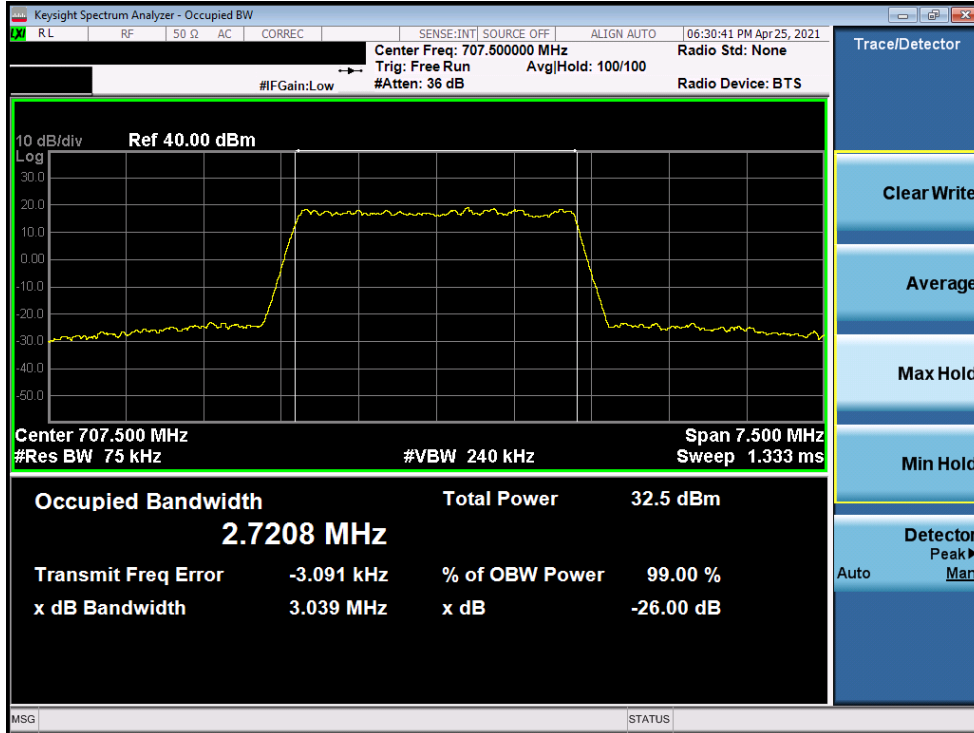


Plot 7-45. Occupied Bandwidth Plot (LTE Band 12 - 3MHz QPSK - Full RB)

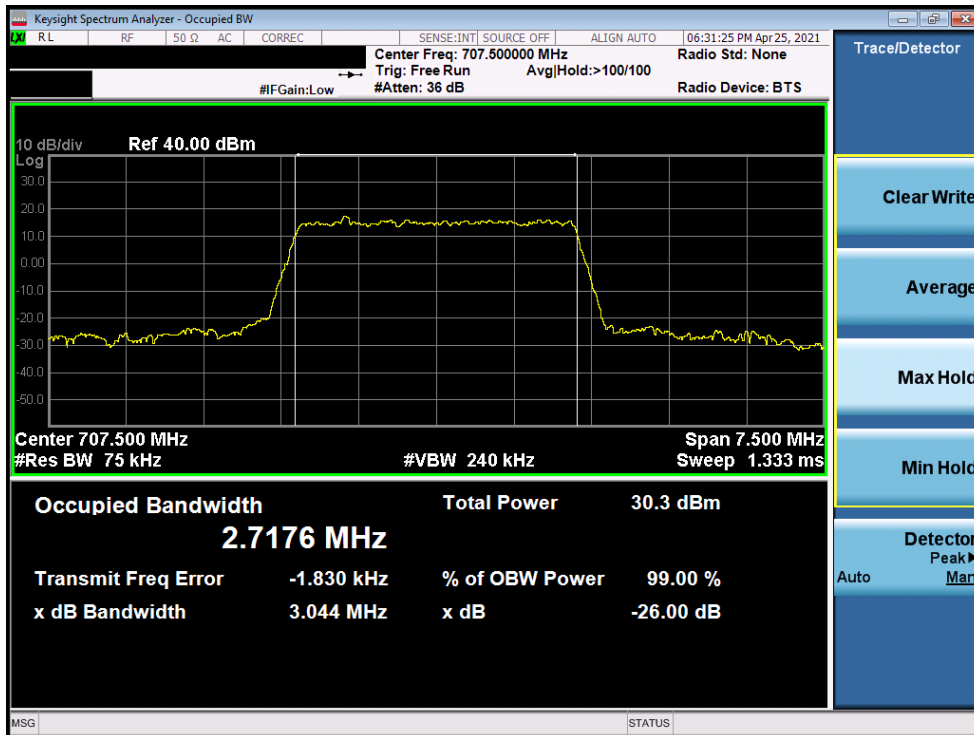


Plot 7-46. Occupied Bandwidth Plot (LTE Band 12 - 3MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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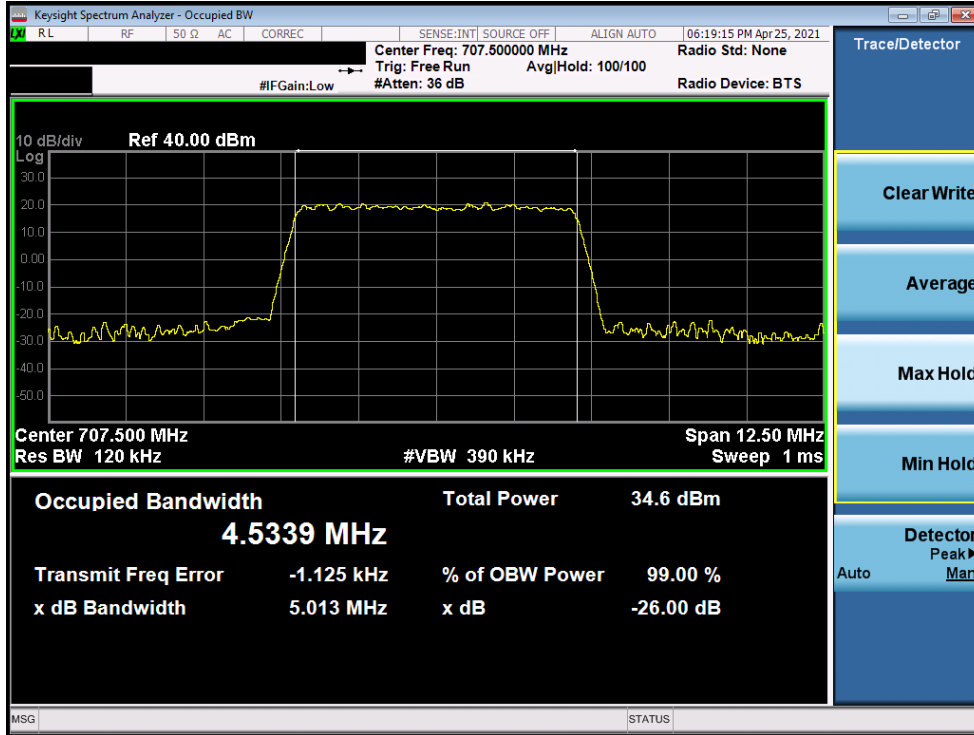


Plot 7-47. Occupied Bandwidth Plot (LTE Band 12 - 3MHz 64-QAM - Full RB)

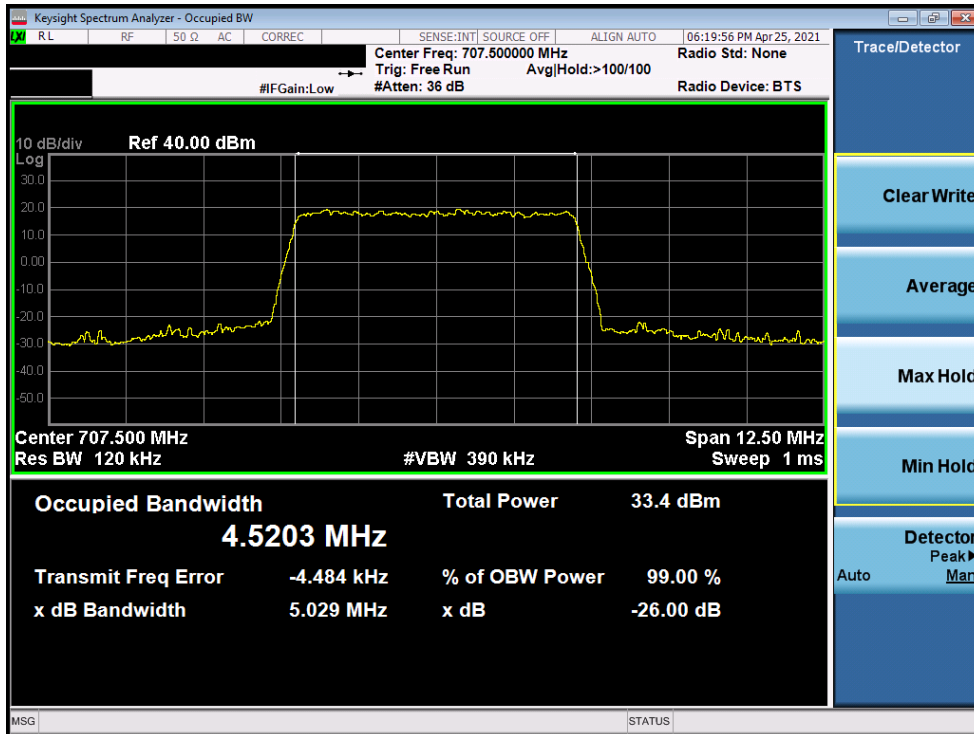


Plot 7-48. Occupied Bandwidth Plot (LTE Band 12 - 3MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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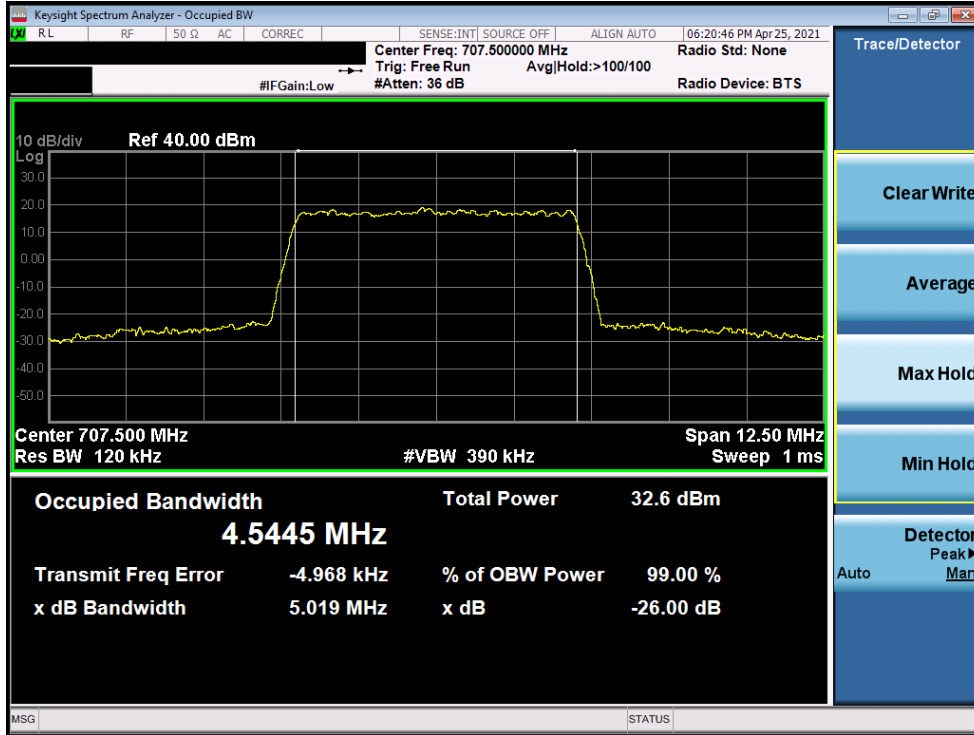


Plot 7-49. Occupied Bandwidth Plot (LTE Band 12/17 - 5MHz QPSK - Full RB)

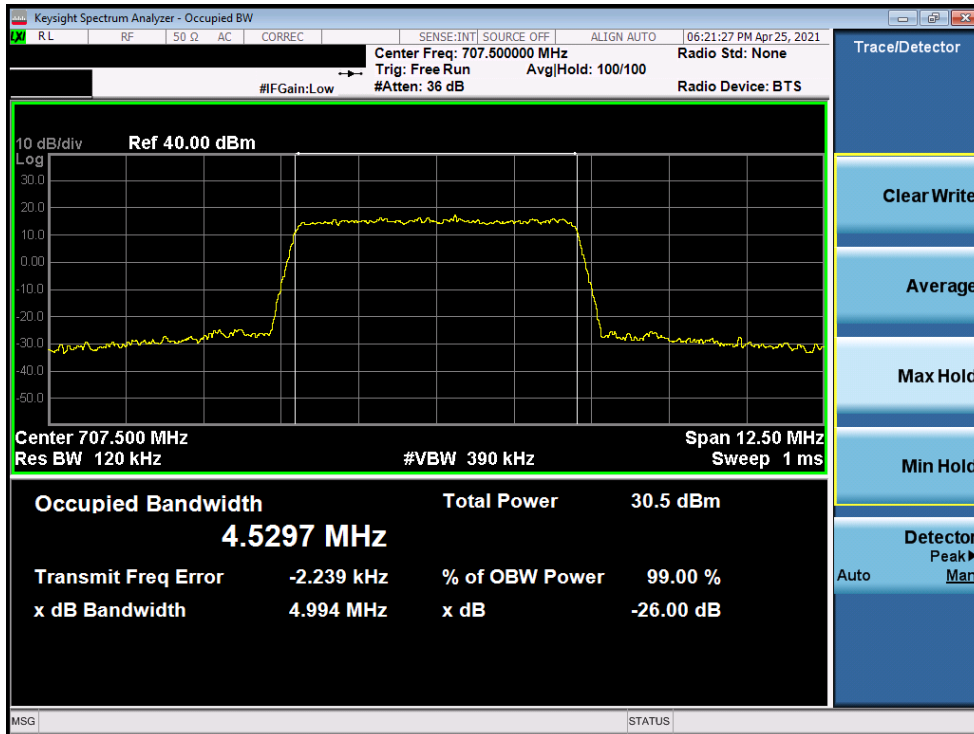


Plot 7-50. Occupied Bandwidth Plot (LTE Band 12/17 - 5MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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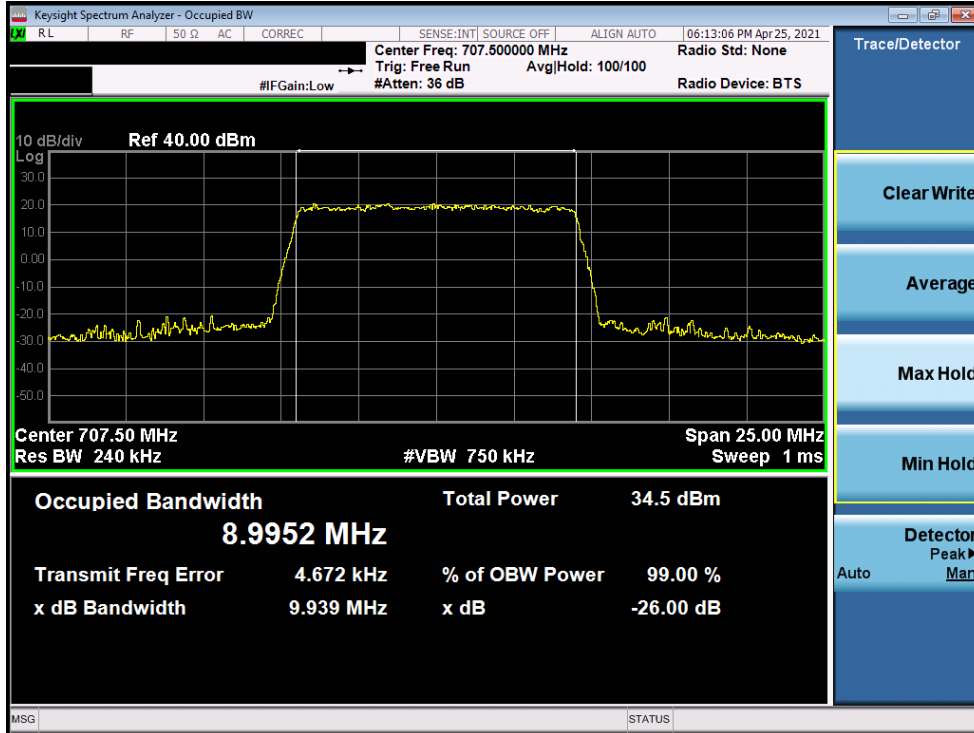


Plot 7-51. Occupied Bandwidth Plot (LTE Band 12/17 - 5MHz 64-QAM - Full RB)

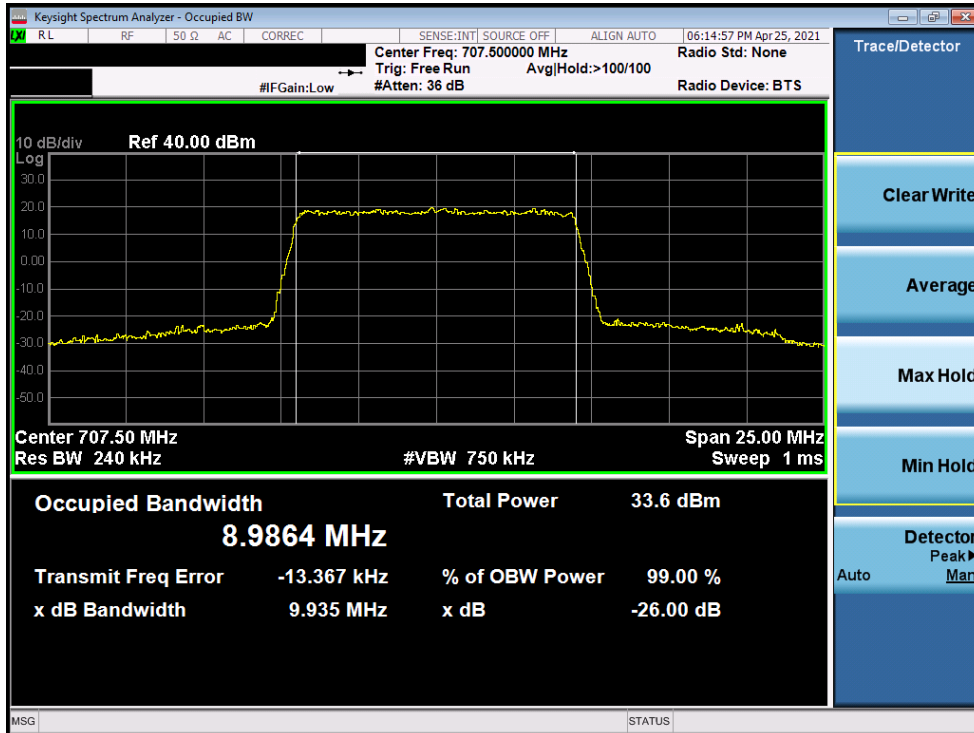


Plot 7-52. Occupied Bandwidth Plot (LTE Band 12/17 - 5MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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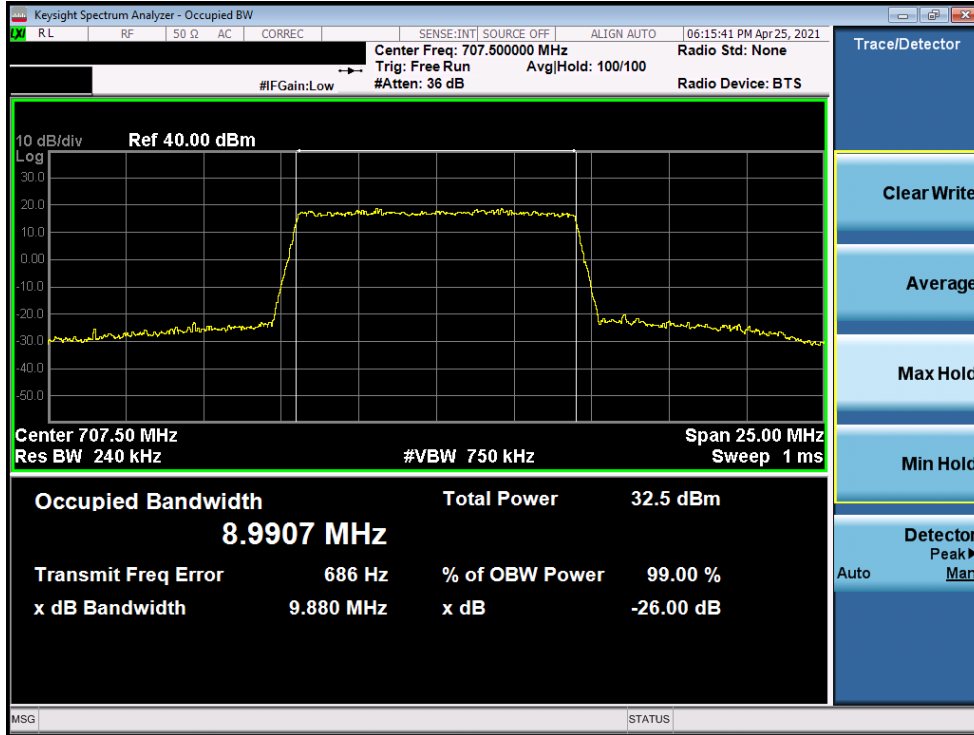


Plot 7-53. Occupied Bandwidth Plot (LTE Band 12/17 - 10MHz QPSK - Full RB)

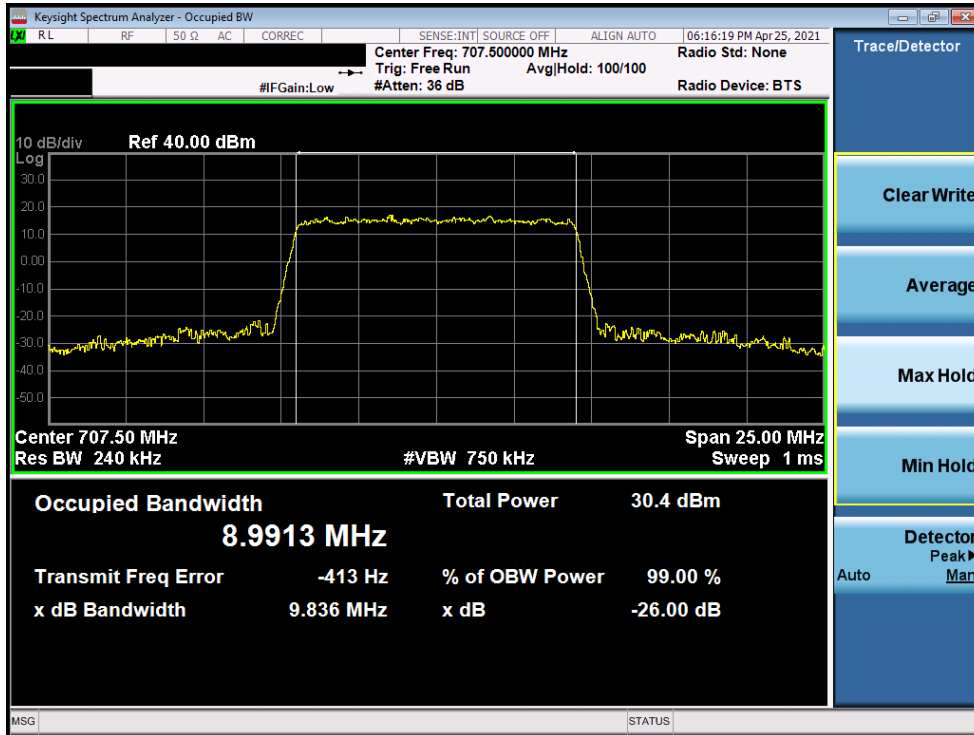


Plot 7-54. Occupied Bandwidth Plot (LTE Band 12/17 - 10MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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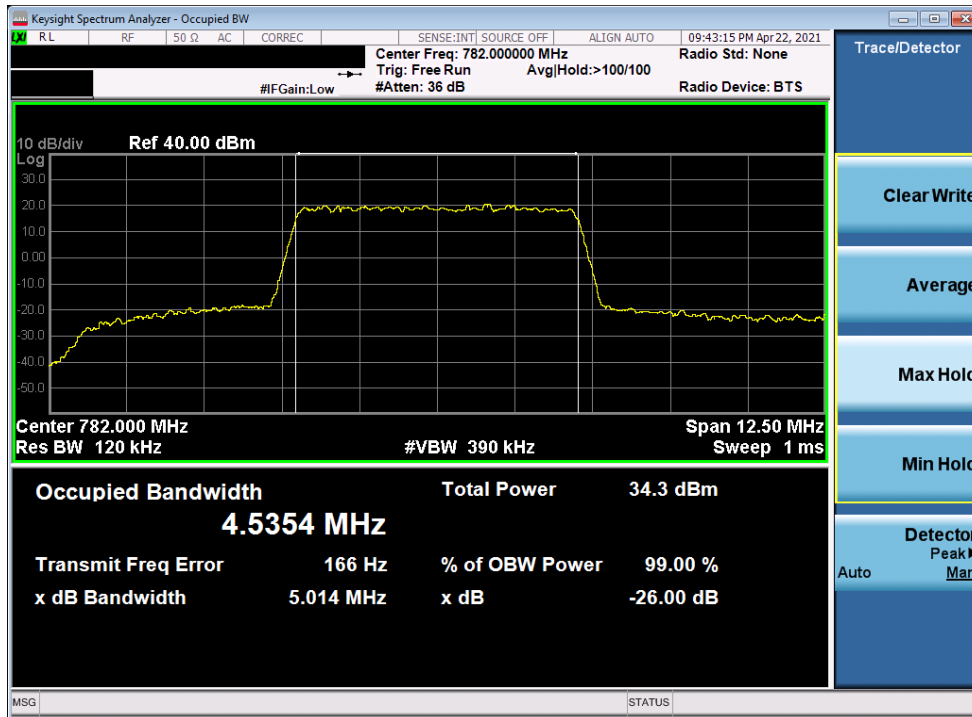
Plot 7-55. Occupied Bandwidth Plot (LTE Band 12/17 - 10MHz 64-QAM - Full RB)



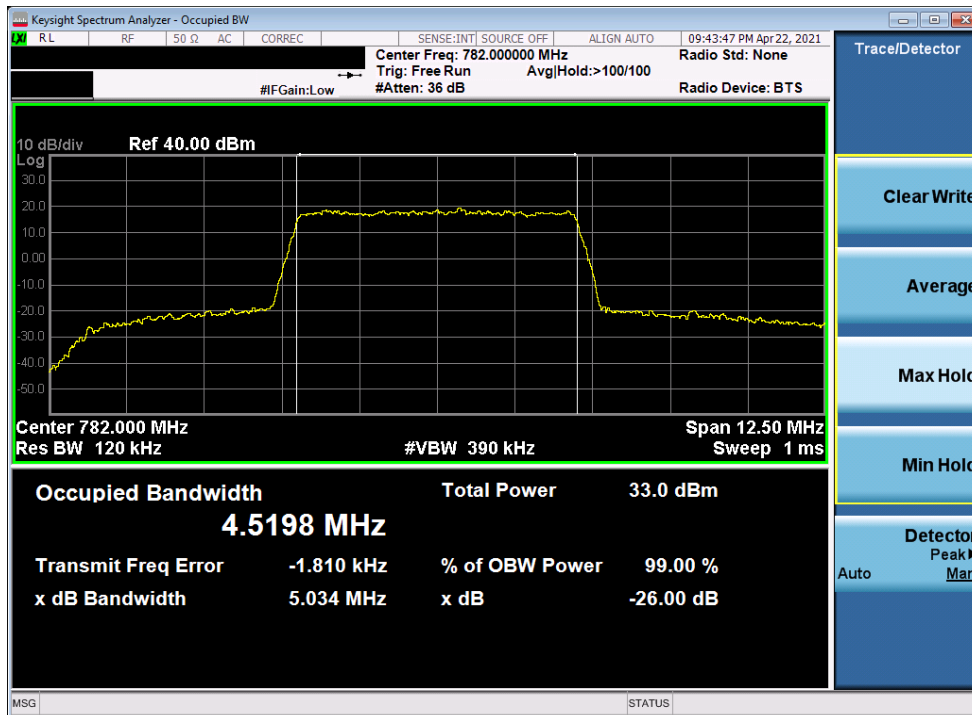
Plot 7-56. Occupied Bandwidth Plot (LTE Band 12/17 - 10MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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LTE Band 13

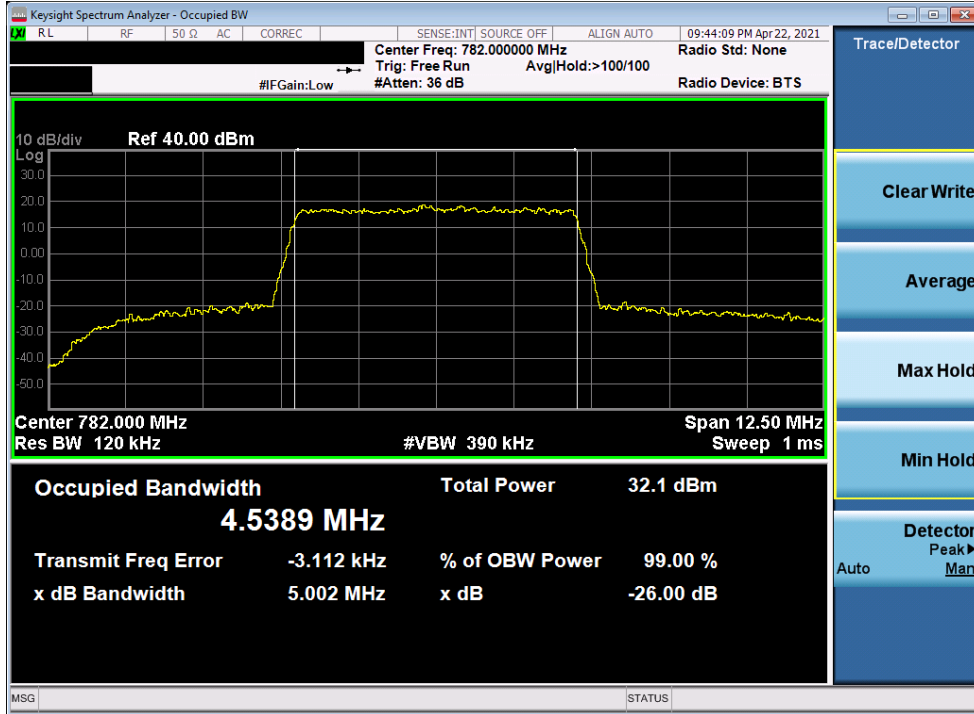


Plot 7-57. Occupied Bandwidth Plot (LTE Band 13 - 5MHz QPSK - Full RB)

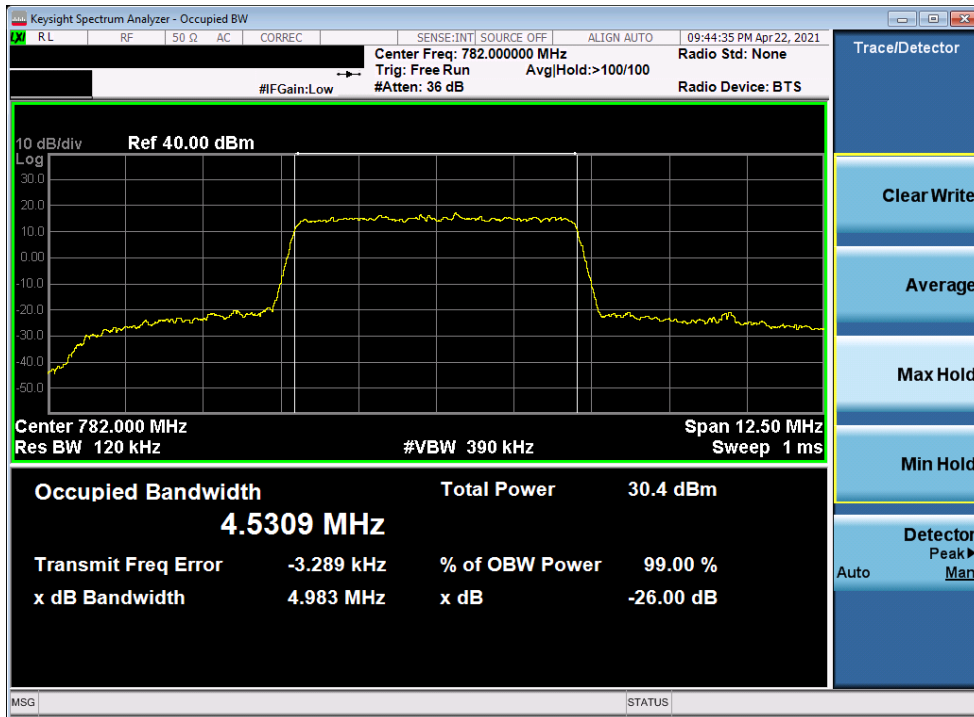


Plot 7-58. Occupied Bandwidth Plot (LTE Band 13 - 5MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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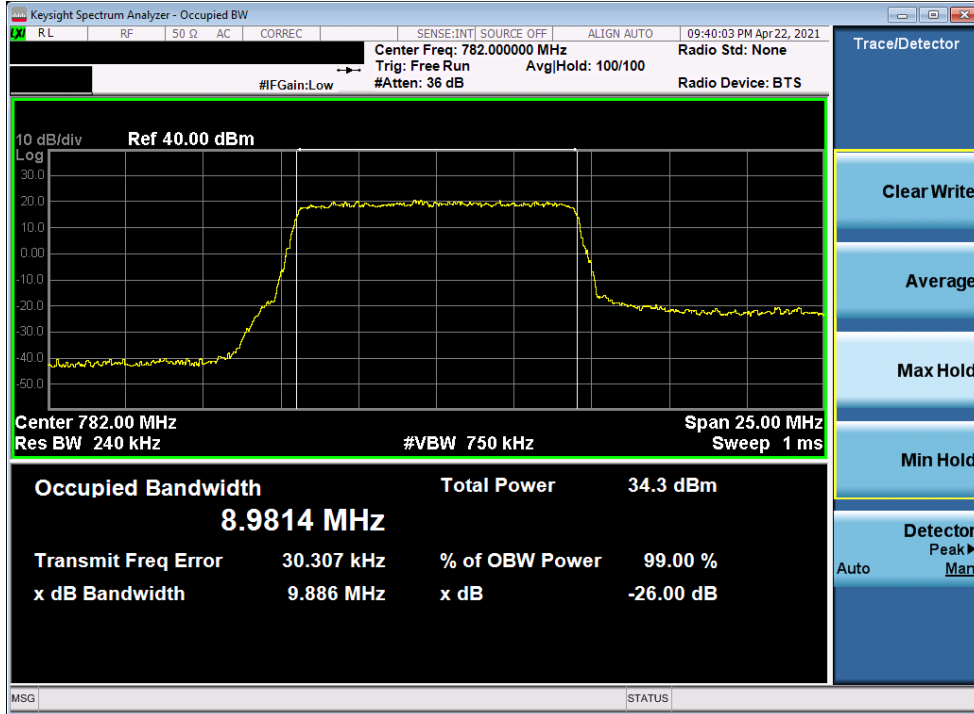


Plot 7-59. Occupied Bandwidth Plot (LTE Band 13 - 5MHz 64-QAM - Full RB)

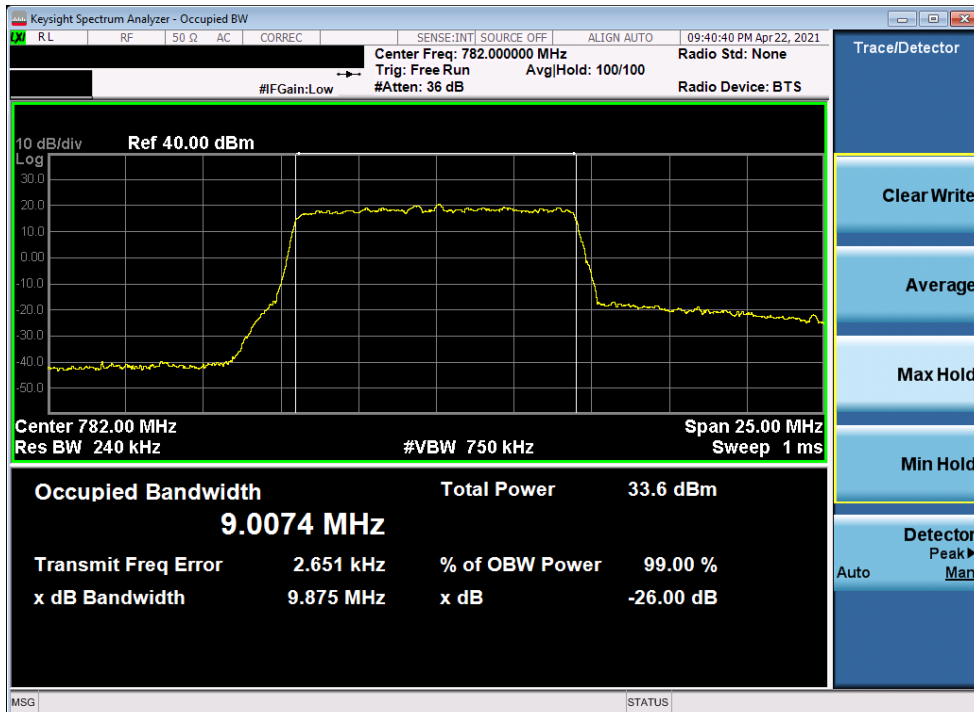


Plot 7-60. Occupied Bandwidth Plot (LTE Band 13 - 5MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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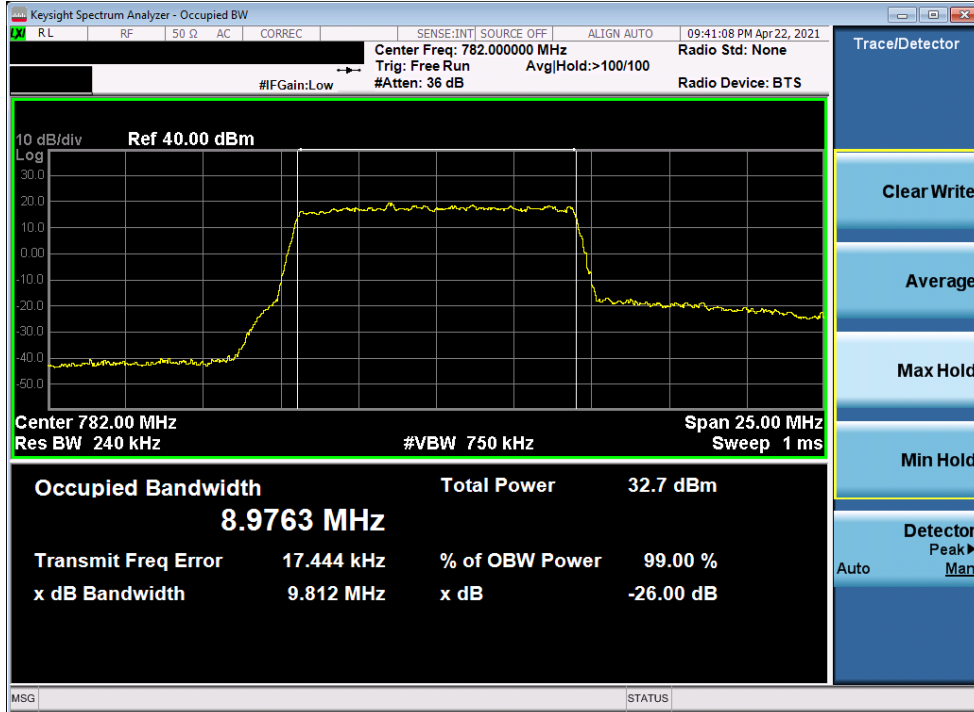


Plot 7-61. Occupied Bandwidth Plot (LTE Band 13 - 10MHz QPSK - Full RB)

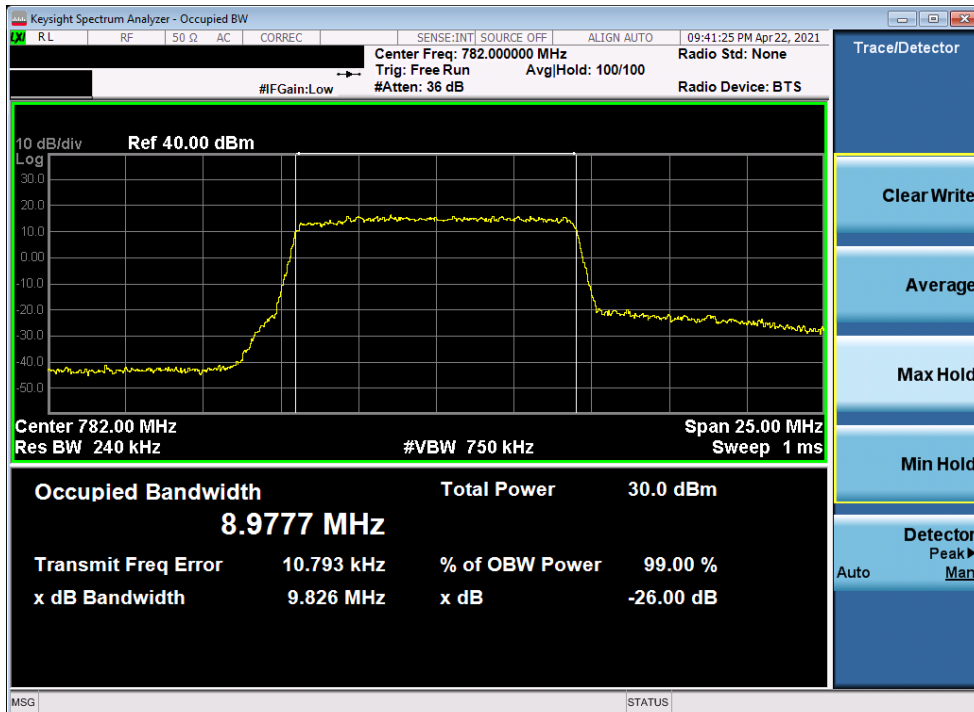


Plot 7-62. Occupied Bandwidth Plot (LTE Band 13 - 10MHz 16-QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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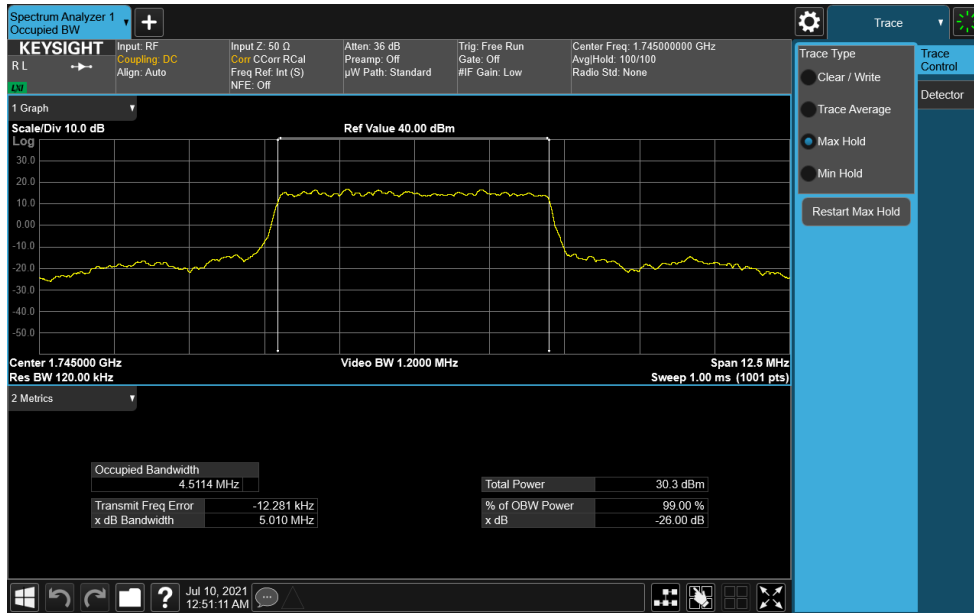
Plot 7-63. Occupied Bandwidth Plot (LTE Band 13 - 10MHz 64-QAM - Full RB)



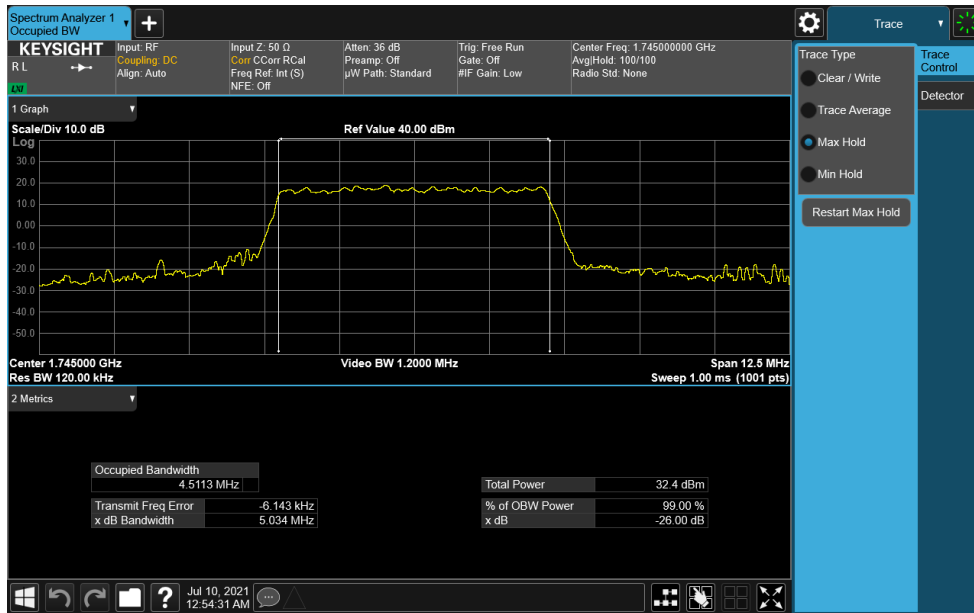
Plot 7-64. Occupied Bandwidth Plot (LTE Band 13 - 10MHz 256-QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device	Page 47 of 301

NR Band n66

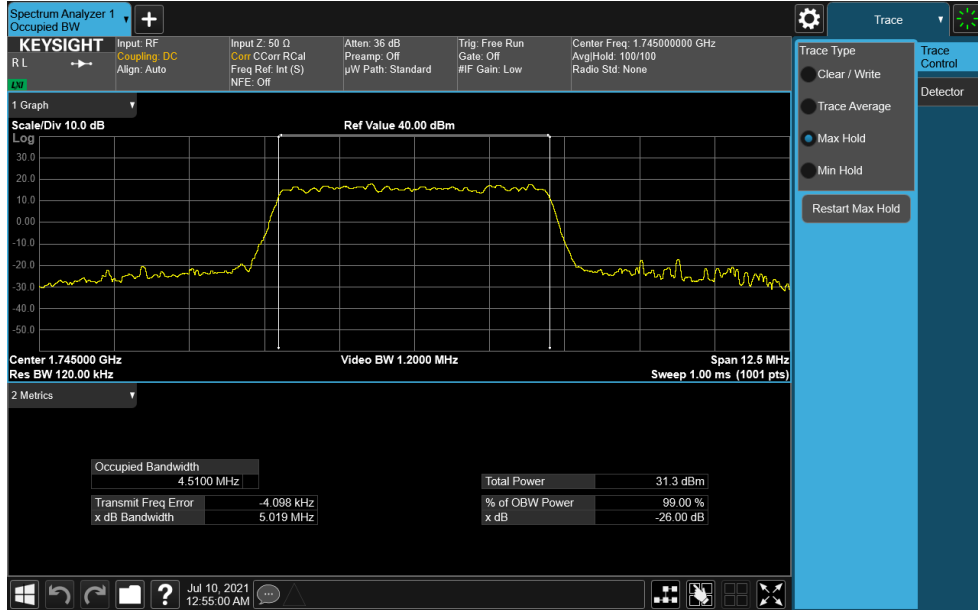


Plot 7-65. Occupied Bandwidth Plot (NR Band n66 - 5.0MHz DFT-s-OFDM $\pi/2$ BPSK - Full RB)

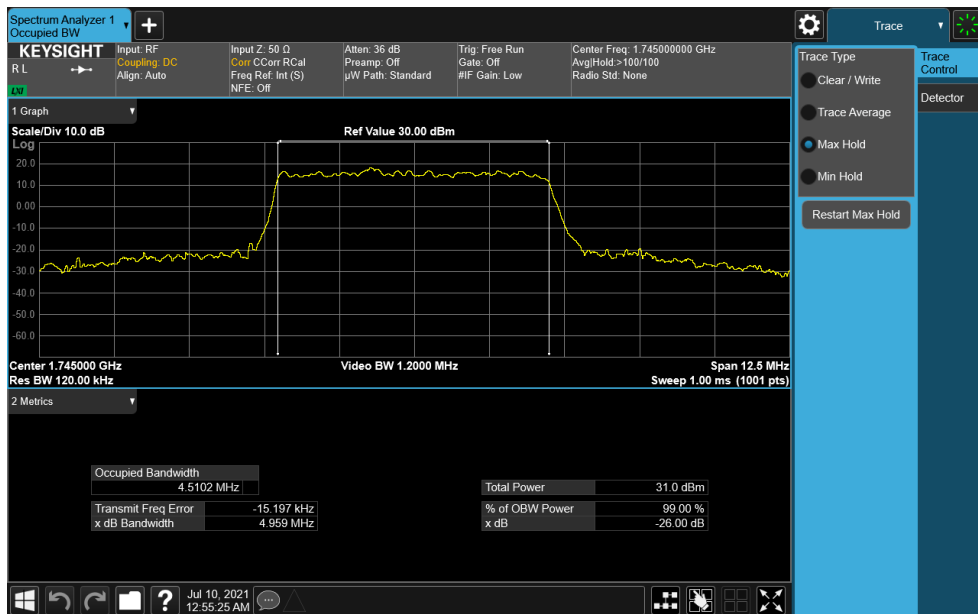


Plot 7-66. Occupied Bandwidth Plot (NR Band n66 - 5.0MHz CP-OFDM QPSK - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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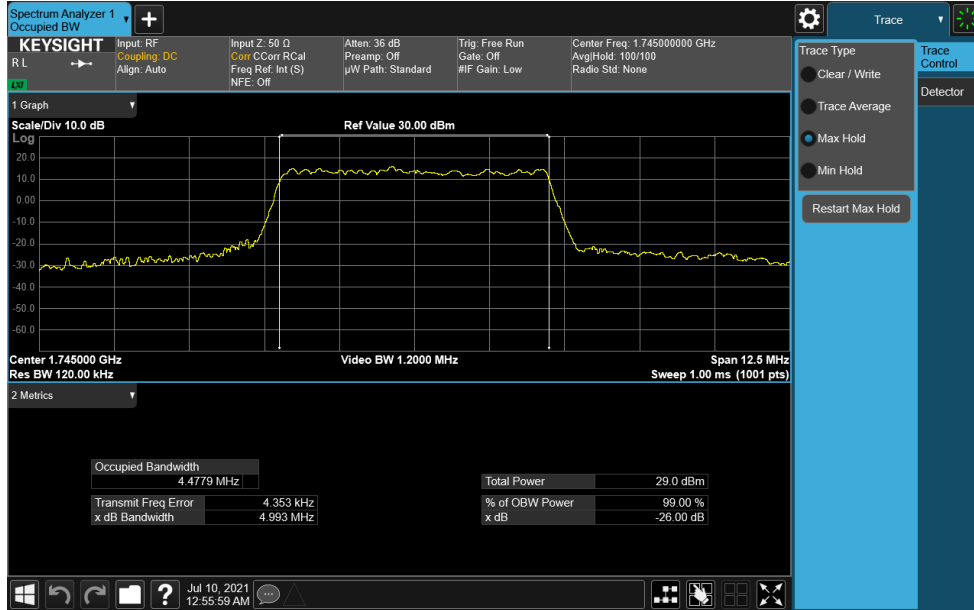


Plot 7-67. Occupied Bandwidth Plot (NR Band n66 - 5.0MHz CP-OFDM 16QAM - Full RB)

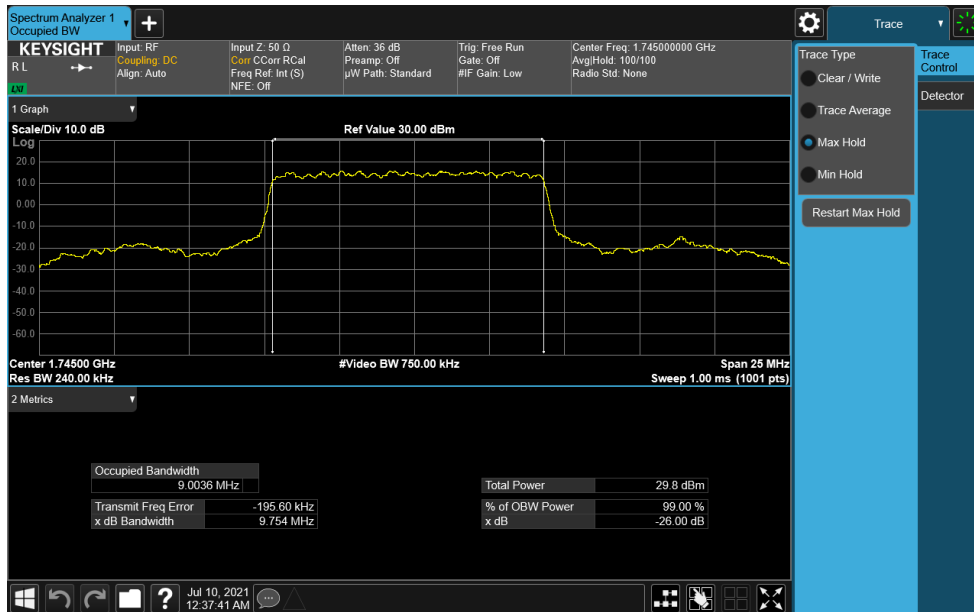


Plot 7-68. Occupied Bandwidth Plot (NR Band n66 - 5.0MHz CP-OFDM 64QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device		Page 49 of 301

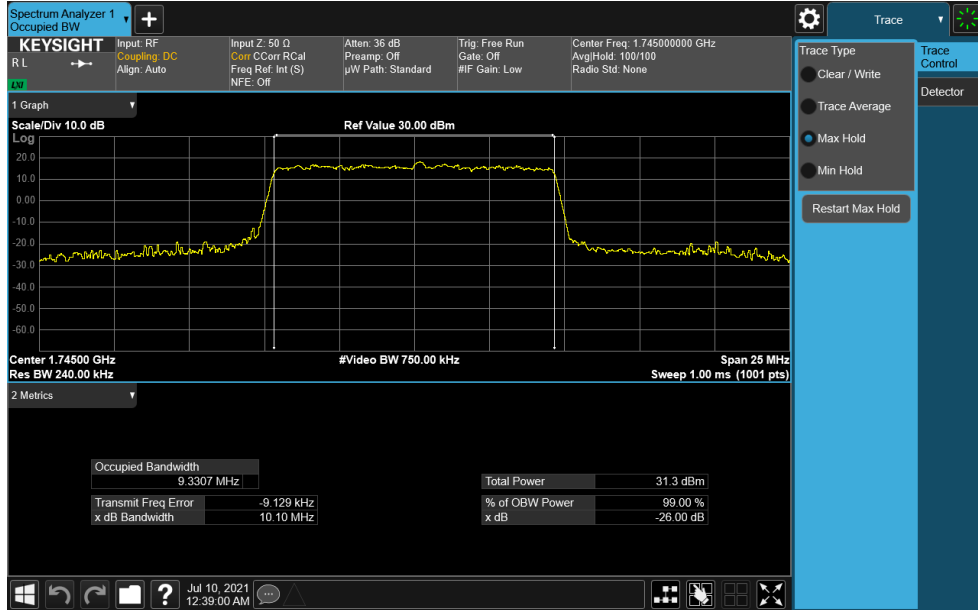


Plot 7-69. Occupied Bandwidth Plot (NR Band n66 - 5.0MHz CP-OFDM 256QAM - Full RB)

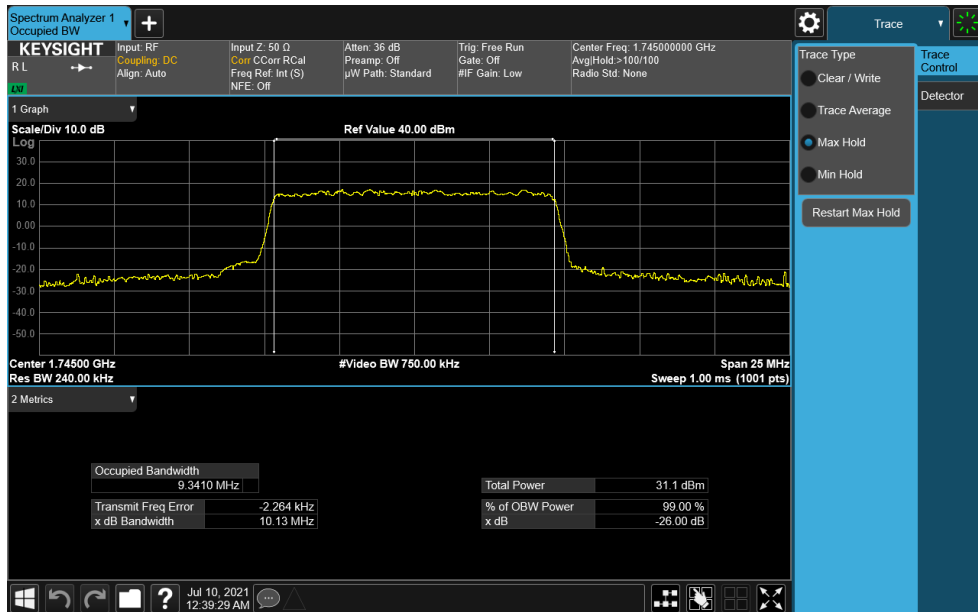


Plot 7-70. Occupied Bandwidth Plot (NR Band n66 - 10.0MHz DFT-s-OFDM π/2 BPSK - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
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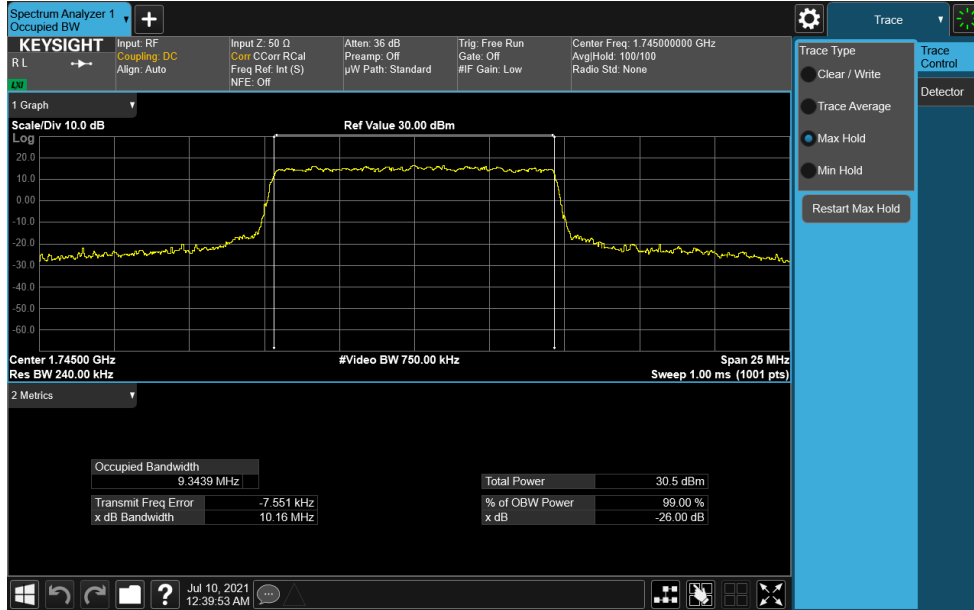


Plot 7-71. Occupied Bandwidth Plot (NR Band n66 - 10.0MHz CP-OFDM QPSK - Full RB)



Plot 7-72. Occupied Bandwidth Plot (NR Band n66 - 10.0MHz CP-OFDM 16QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device		Page 51 of 301

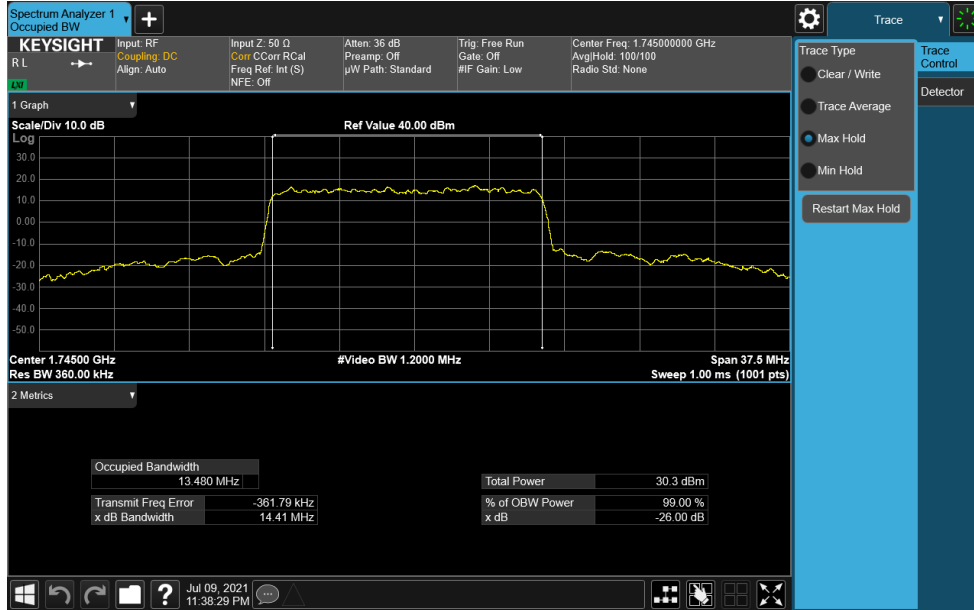


Plot 7-73. Occupied Bandwidth Plot (NR Band n66 - 10.0MHz CP-OFDM 64QAM - Full RB)

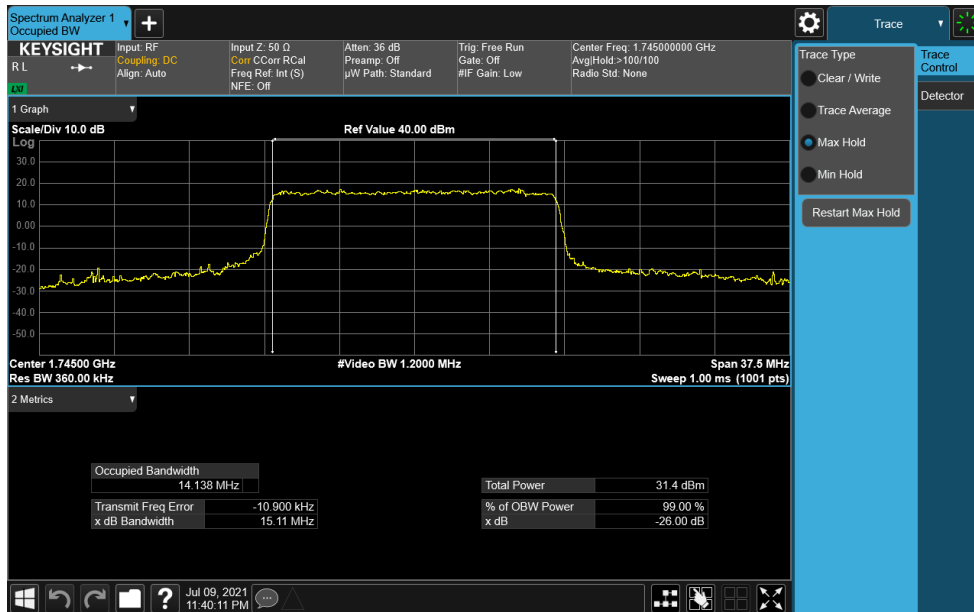


Plot 7-74. Occupied Bandwidth Plot (NR Band n66 - 10.0MHz CP-OFDM 256QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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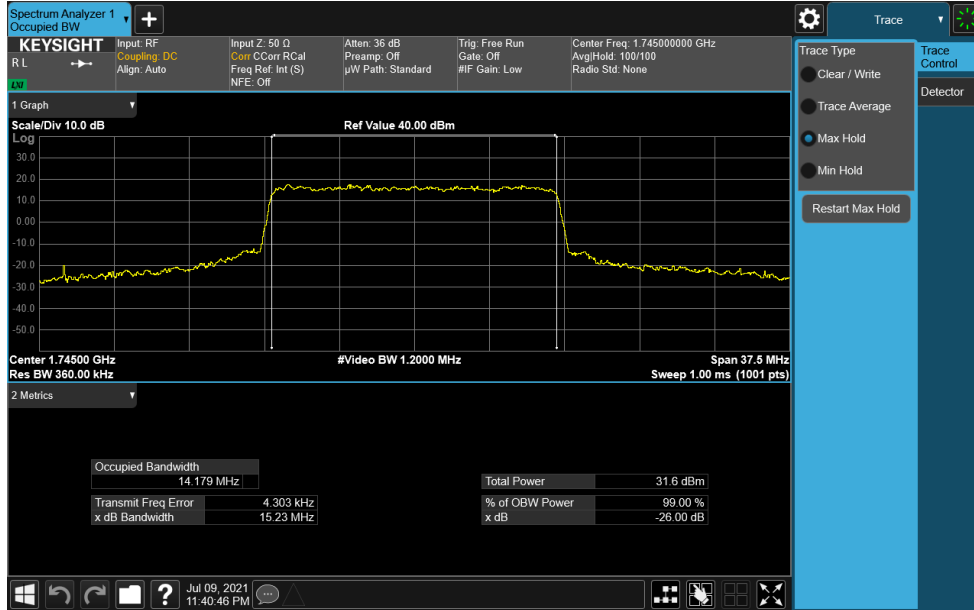


Plot 7-75. Occupied Bandwidth Plot (NR Band n66 - 15.0MHz DFT-s-OFDM $\pi/2$ BPSK - Full RB)

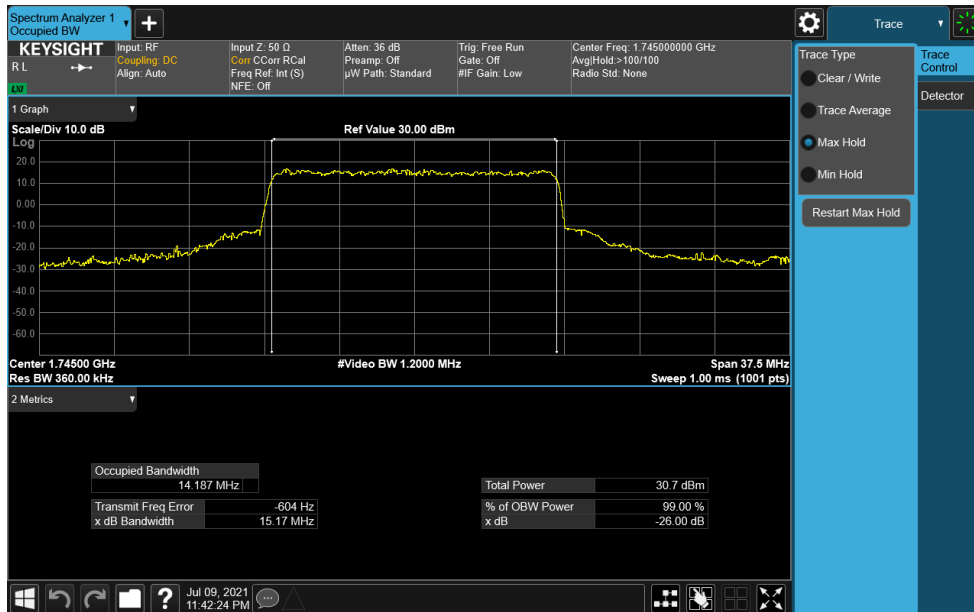


Plot 7-76. Occupied Bandwidth Plot (NR Band n66 - 15.0MHz CP-OFDM QPSK - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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Plot 7-77. Occupied Bandwidth Plot (NR Band n66 - 15.0MHz CP-OFDM 16QAM - Full RB)

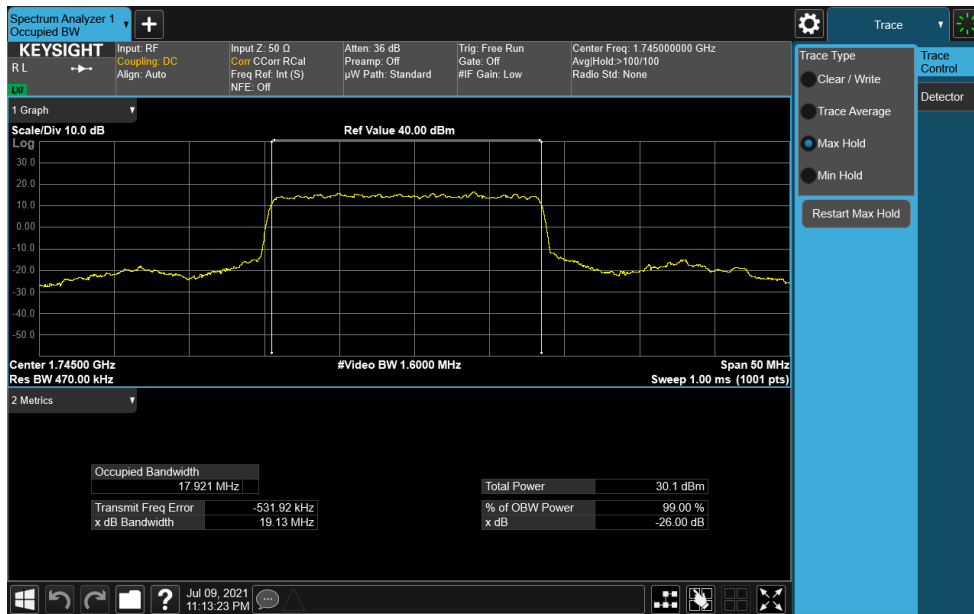


Plot 7-78. Occupied Bandwidth Plot (NR Band n66 - 15.0MHz CP-OFDM 64QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device		Page 54 of 301

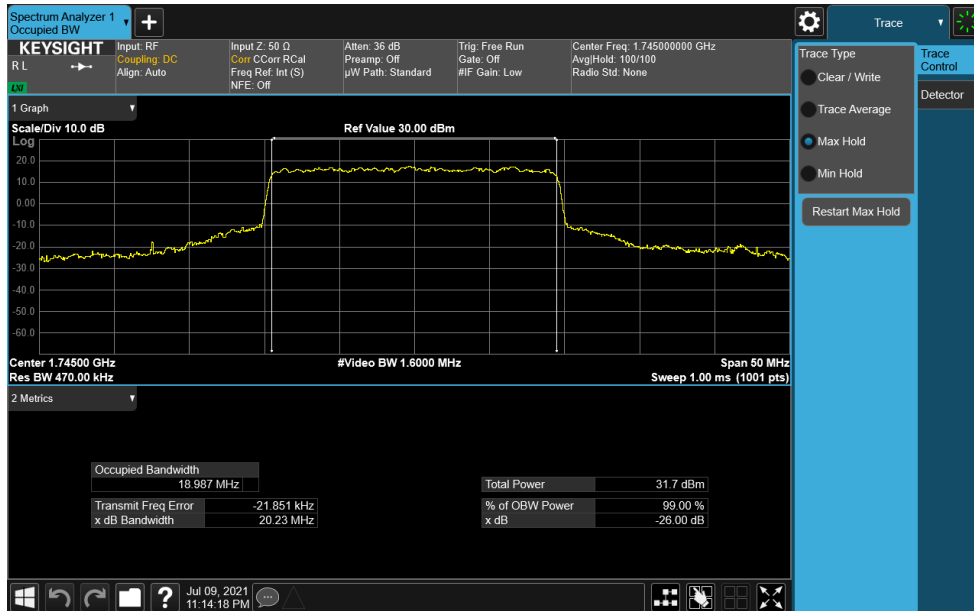


Plot 7-79. Occupied Bandwidth Plot (NR Band n66 - 15.0MHz CP-OFDM 256QAM - Full RB)

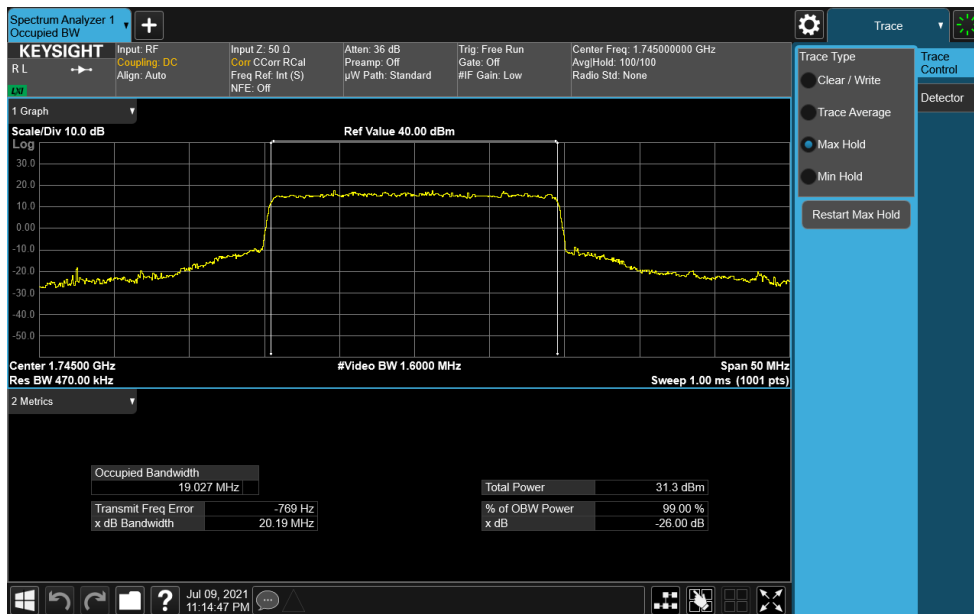


Plot 7-80. Occupied Bandwidth Plot (NR Band n66 - 20.0MHz DFT-s-OFDM π/2 BPSK - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device	Page 55 of 301

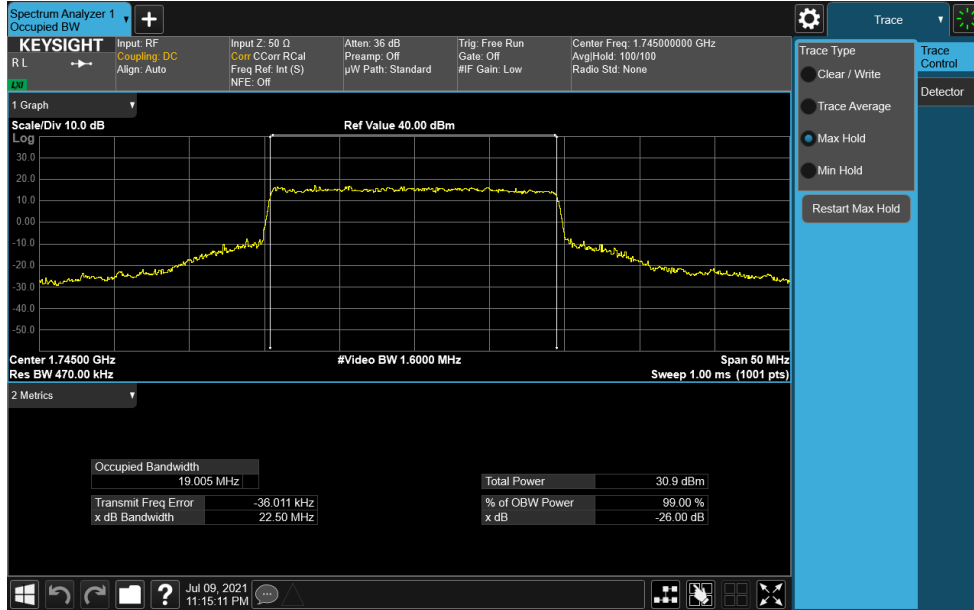


Plot 7-81. Occupied Bandwidth Plot (NR Band n66 - 20.0MHz CP-OFDM QPSK - Full RB)

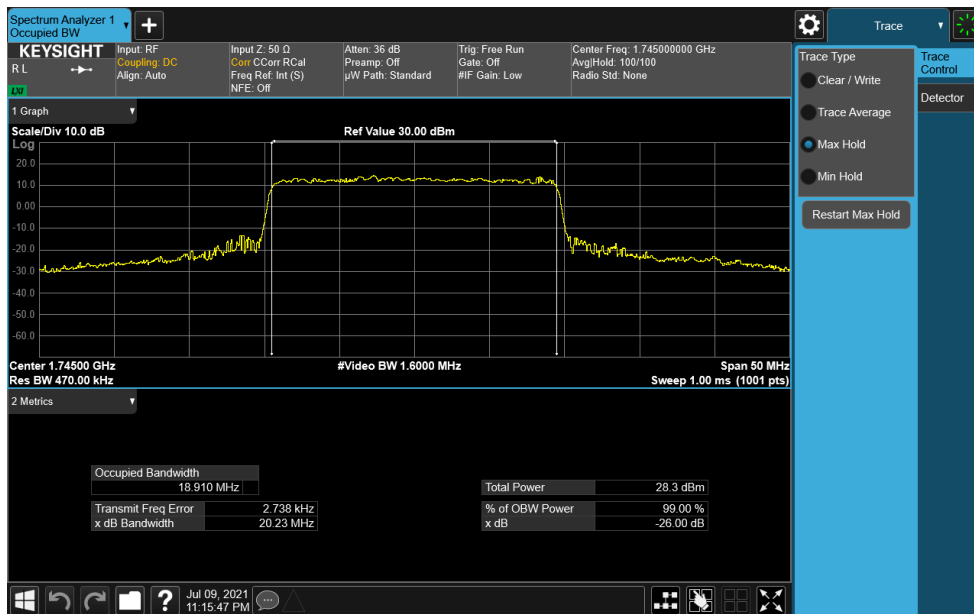


Plot 7-82. Occupied Bandwidth Plot (NR Band n66 - 20.0MHz CP-OFDM 16QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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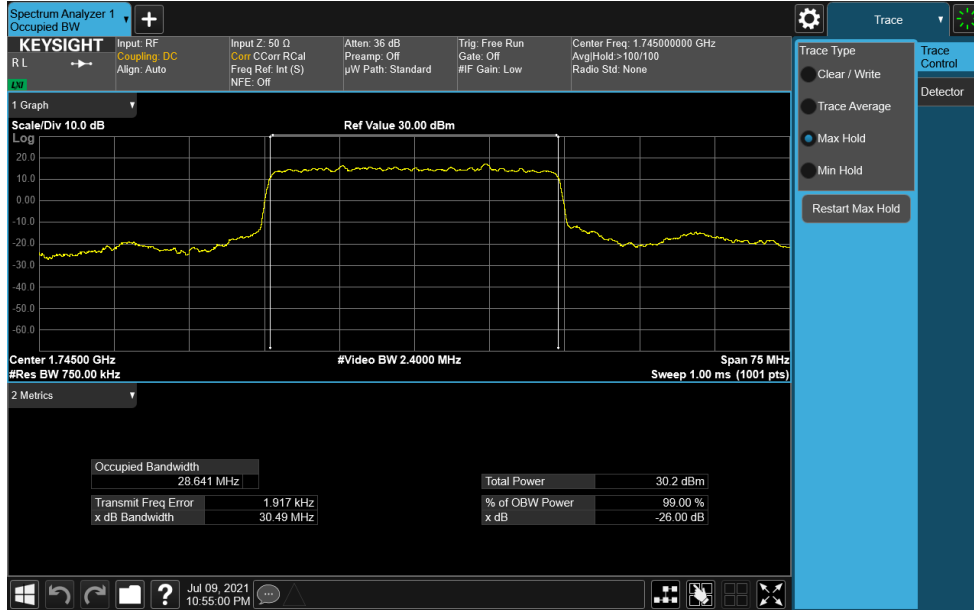


Plot 7-83. Occupied Bandwidth Plot (NR Band n66 - 20.0MHz CP-OFDM 64QAM - Full RB)

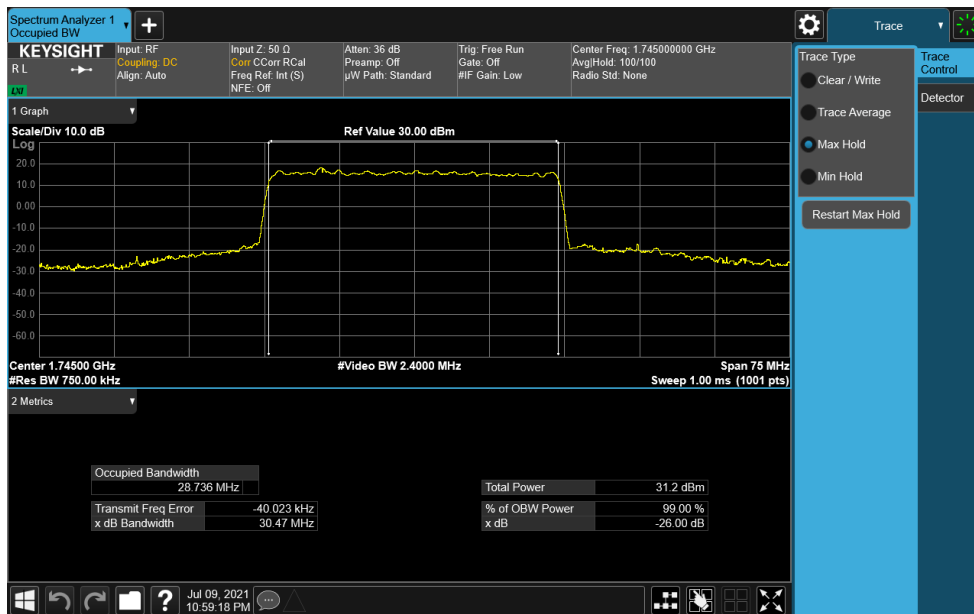


Plot 7-84. Occupied Bandwidth Plot (NR Band n66 - 20.0MHz CP-OFDM 256QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device		Page 57 of 301

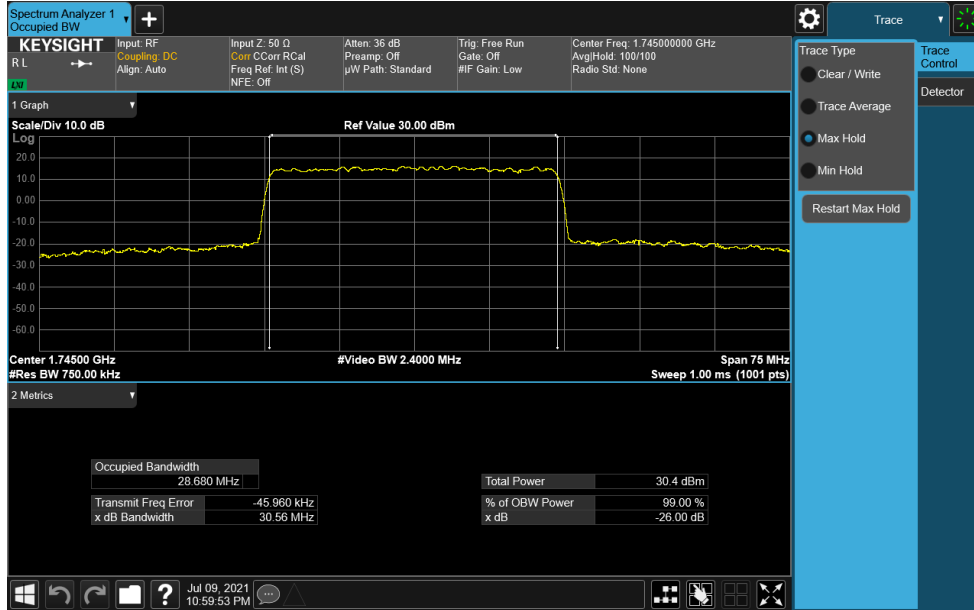


Plot 7-85. Occupied Bandwidth Plot (NR Band n66 - 30.0MHz DFT-s-OFDM $\pi/2$ BPSK - Full RB)

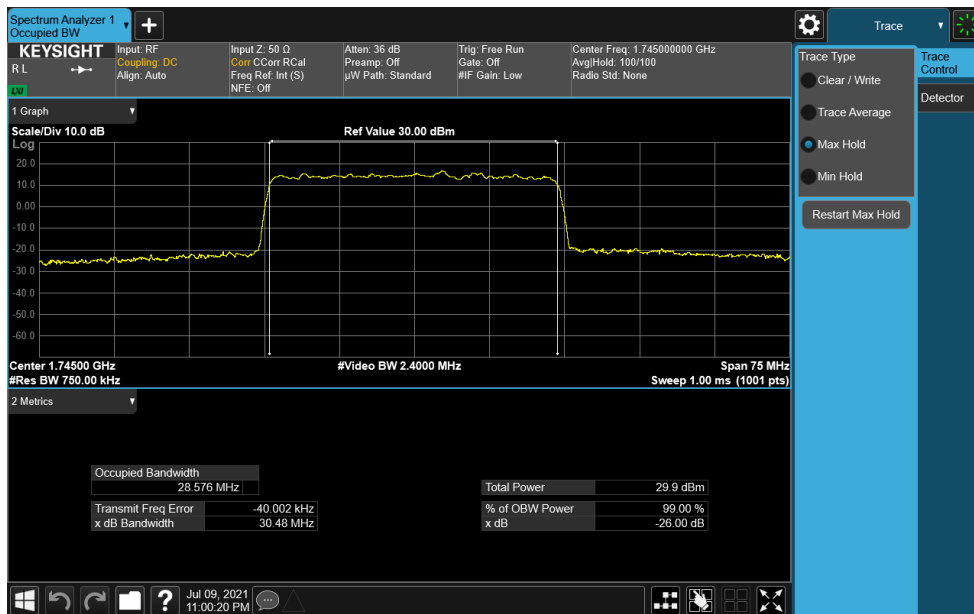


Plot 7-86. Occupied Bandwidth Plot (NR Band n66 - 30.0MHz CP-OFDM QPSK - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
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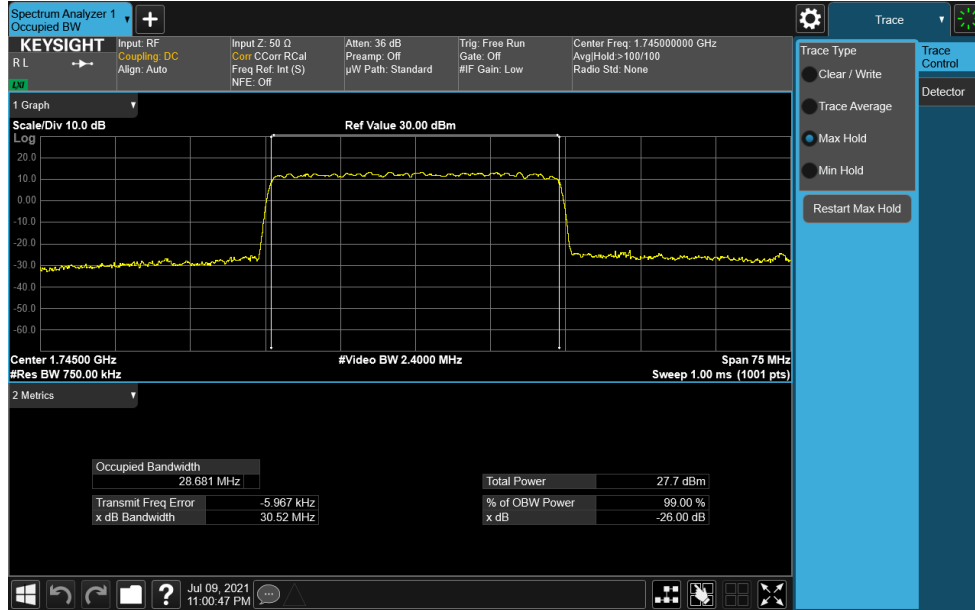


Plot 7-87. Occupied Bandwidth Plot (NR Band n66 - 30.0MHz CP-OFDM 16QAM - Full RB)

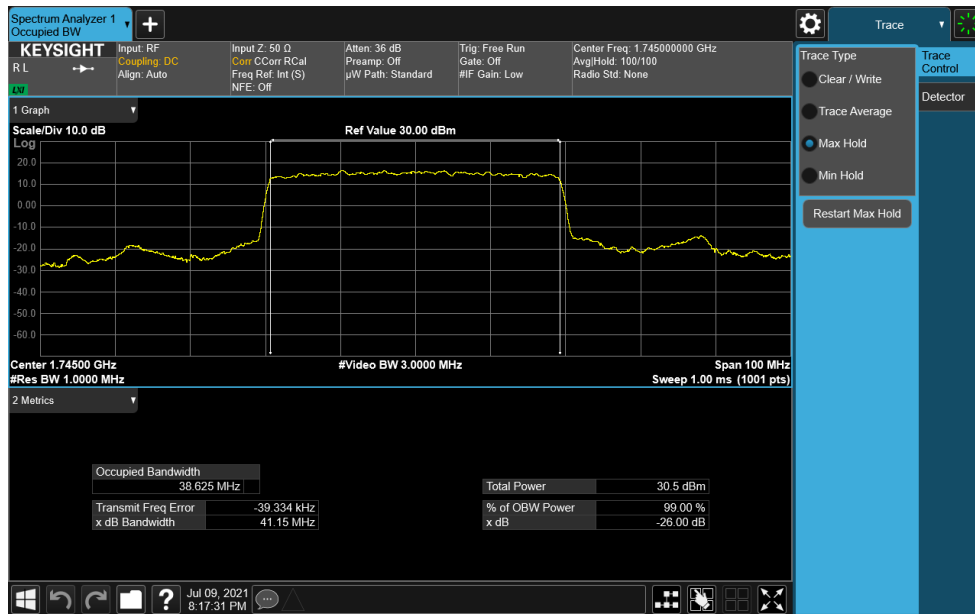


Plot 7-88. Occupied Bandwidth Plot (NR Band n66 - 30.0MHz CP-OFDM 64QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
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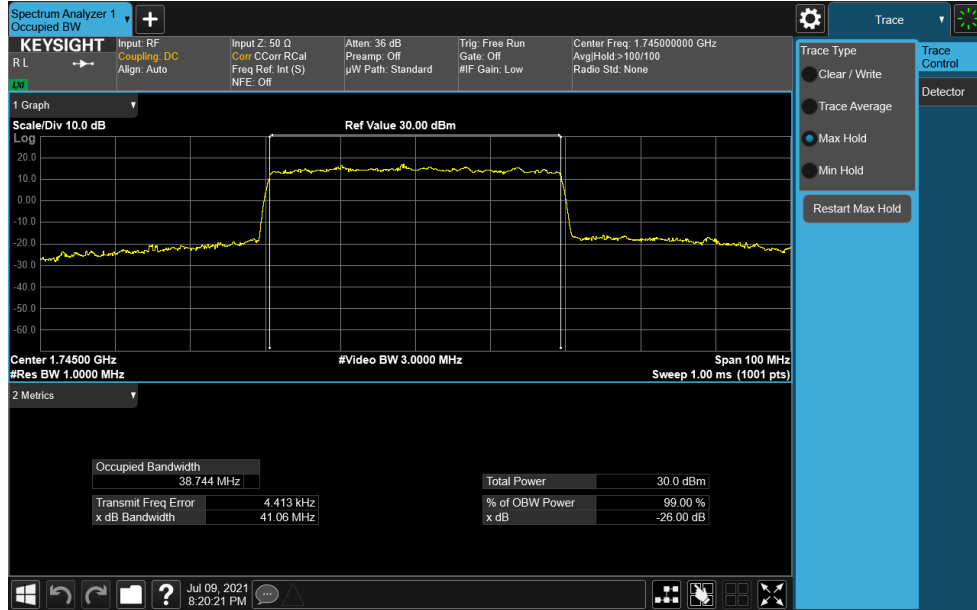


Plot 7-89. Occupied Bandwidth Plot (NR Band n66 - 30.0MHz CP-OFDM 256QAM - Full RB)

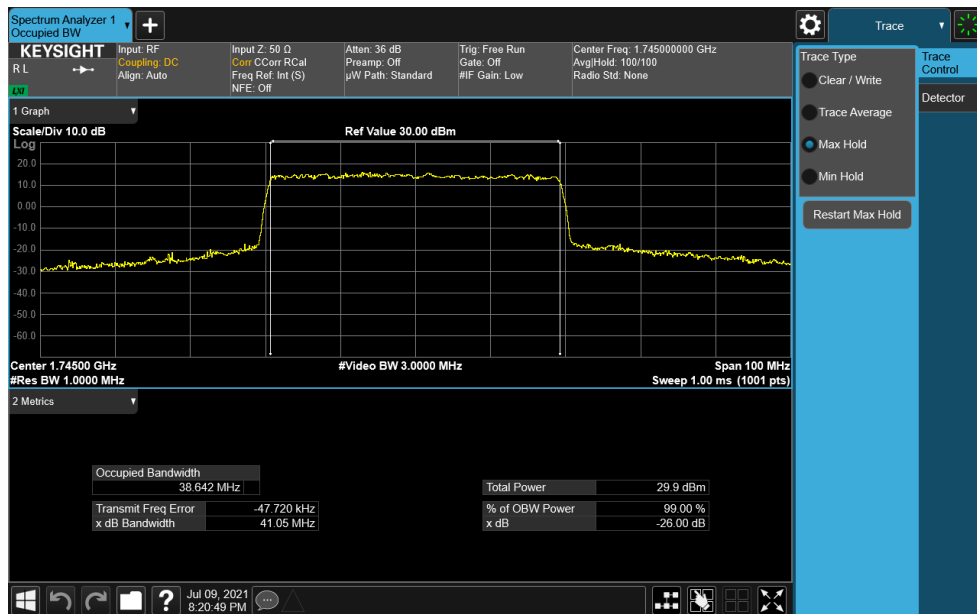


Plot 7-90. Occupied Bandwidth Plot (NR Band n66 - 40.0MHz DFT-s-OFDM π/2 BPSK - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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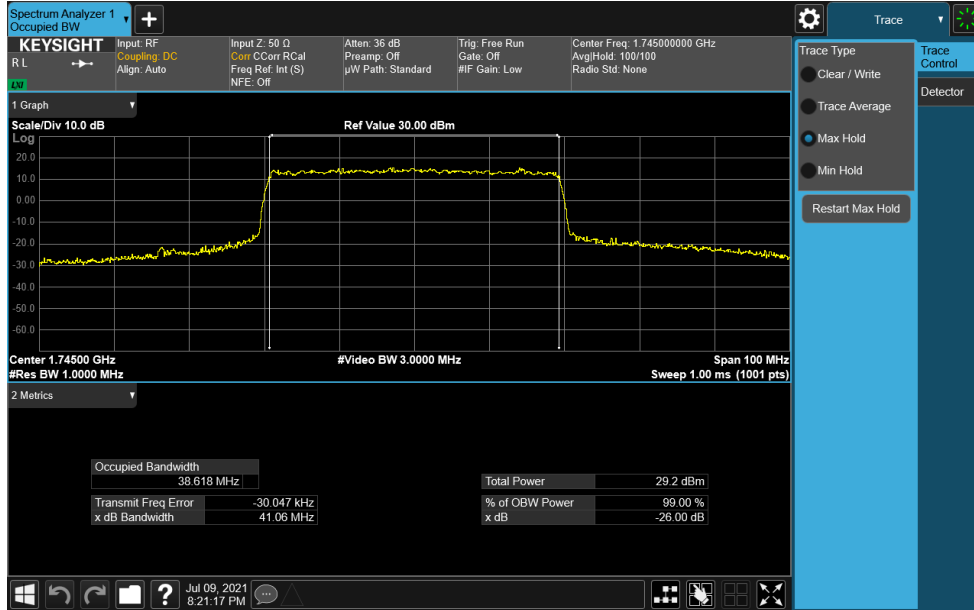


Plot 7-91. Occupied Bandwidth Plot (NR Band n66 - 40.0MHz CP-OFDM QPSK - Full RB)

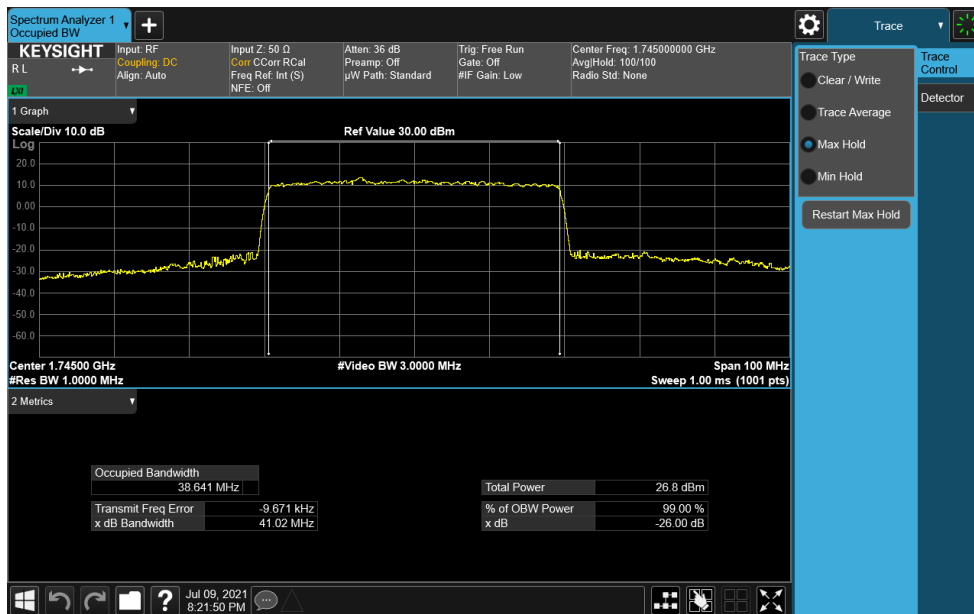


Plot 7-92. Occupied Bandwidth Plot (NR Band n66 - 40.0MHz CP-OFDM 16QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device	Page 61 of 301



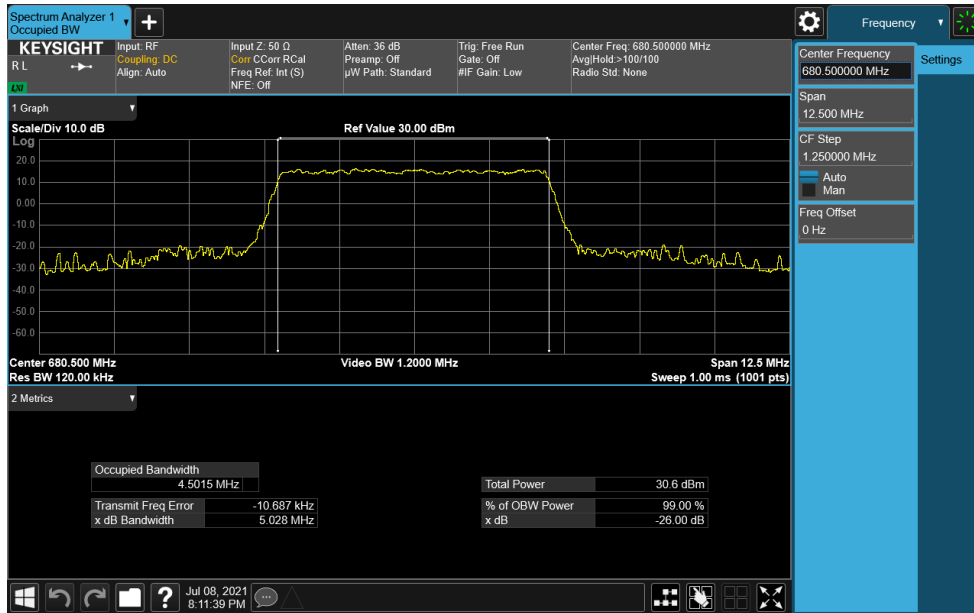
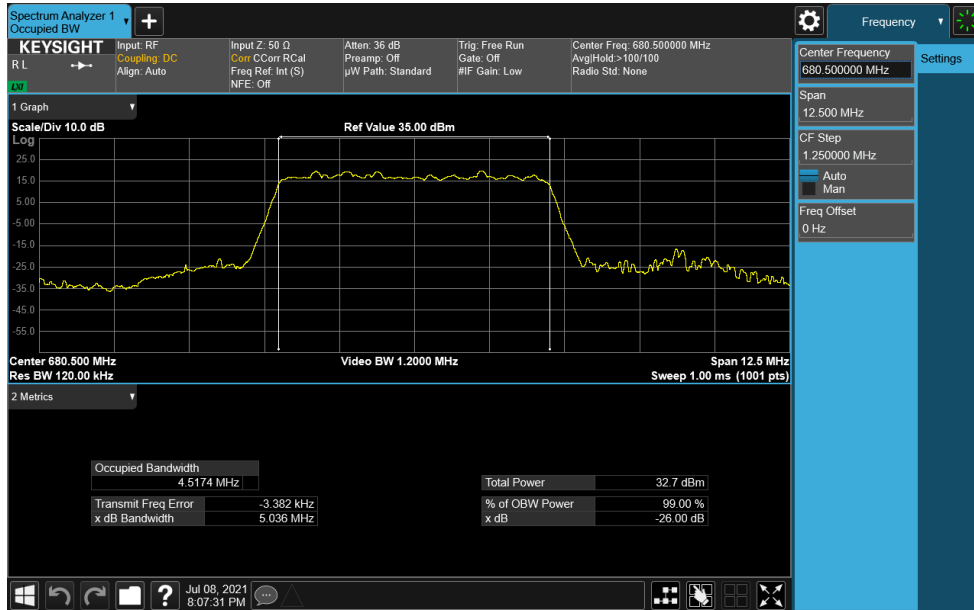
Plot 7-93. Occupied Bandwidth Plot (NR Band n66 - 40.0MHz CP-OFDM 64QAM - Full RB)



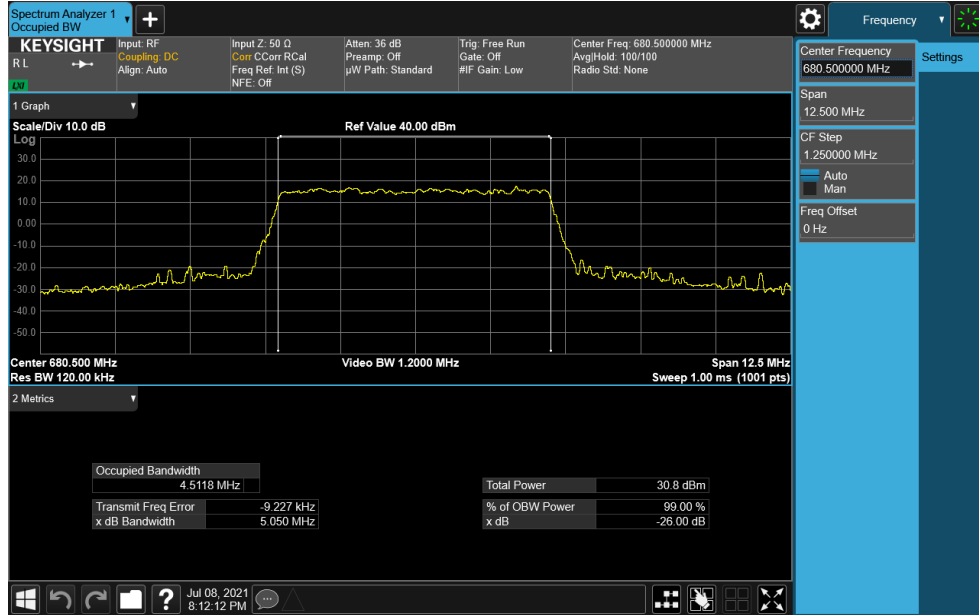
Plot 7-94. Occupied Bandwidth Plot (NR Band n66 - 40.0MHz CP-OFDM 256QAM - Full RB)

FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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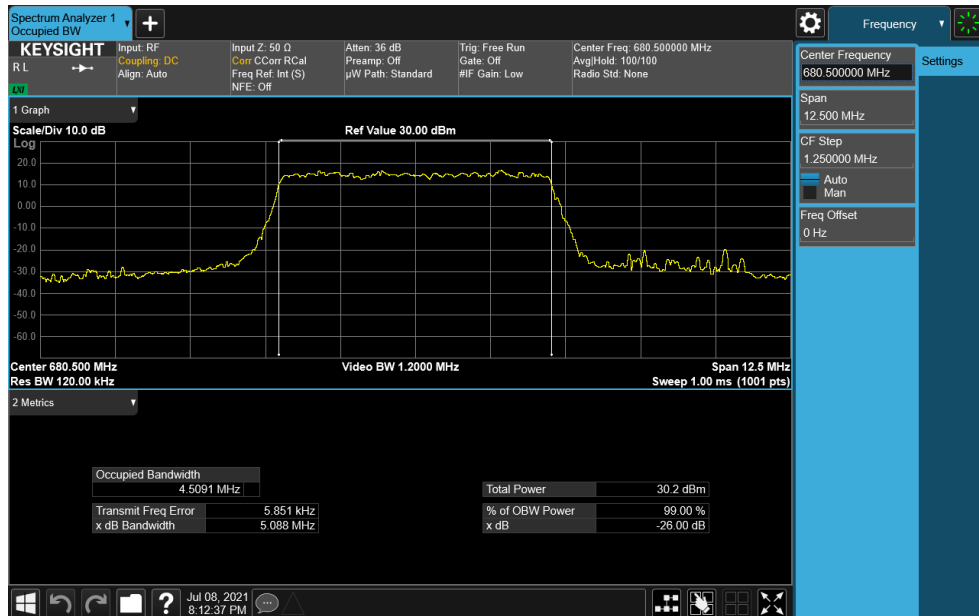
NR Band n71



FCC ID: BCGA2568	PART 27 MEASUREMENT REPORT	Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device
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Plot 7-97. Occupied Bandwidth Plot (NR Band n71 - 5MHz CP-OFDM 16-QAM - Full RB)



Plot 7-98. Occupied Bandwidth Plot (NR Band n71 - 5MHz CP-OFDM 64-QAM - Full RB)

FCC ID: BCGA2568	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
Test Report S/N: 1C2106080049-03.BCG	Test Dates: 6/2/2021 - 8/21/2021	EUT Type: Tablet Device		Page 64 of 301